ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB	
	Q.1 Applicant Type: Specify which of the following describes the applicant. See section 6003(a)(1)(E) of the regulations: • **Public agency** • **Non-profit organization** • **Public utilities** • **Federally recognized Indian tribe** • **State Indian tribe listed on the Native American Heritage Commission's Tribal Consultation list** • **Mutual water company** • **Joint powers authority**
	Q.2 Project Type: Select the most appropriate project type for the application. See section 6003(a)(1)(E) of the regulations: • **Surface Storage Projects Identified in the CALFED ROD** • **Groundwater Storage** • **Groundwater contamination prevention or remediation with storage benefits** • **Conjunctive Use** • **Reservoir Reoperation** • **Local Surface Storage** • **Regional Surface Storage**
	Q.3 Public Benefits: Identify the public benefit categories for which Program funding is requested. For projects with more than one public benefit, hold down the Ctrl key and select all that apply: • **Ecosystem Improvements (must be included)** • **Water Quality Improvements** • **Flood Control Benefit** • **Emergency Response** • **Recreational Purposes**
	Q.4 Explain why the proposed project does not adversely affect any river afforded protection pursuant to the California or Federal Wild and Scenic Rivers Act. See section 6003(a)(1)(I) of the regulations. **The dams for Sites Reservoir would be constructed on Funks and Stone Corral Creeks. Neither watercourse is protected by the California or Federal Wild and Scenic Rivers Act. No protected rivers would be impacted. See Chapter 6 (Section 6.3) in the Draft EIR/EIS (https://www.sitesproject.org/information/FeasibilityReport)for a detailed analysis of impacts to surface water.**
	Q.5 Is the applicant an agricultural or urban water supplier as defined in section 6001 of the Program regulations? If not, enter "Not Applicable"; if so, has the applicant submitted complete Agricultural or Urban Water Management Plans to DWR? Have those plans been verified as complete by DWR? If not, explain how the applicant is working towards compliance with the requirements of Water Code section 10608.56. See section 6003(a)(1)(J) of the regulations. **The Sites Project Authority is composed of representatives of the potentially affected counties, and water management agencies within the Sacramento River watershed. The Sites Project Reservoir Committee participants include both urban and agricultural water suppliers. All participants that are required to submit plans have submitted plans to DWR. Some of the Urban Water Management Plans have already been approved. The remaining plans are currently under review by DWR. All applicants will work with DWR to resolve any future comments on their plans. The status for the plans of each individual agency participating in Sites Reservoir is provided in the Water Management Plan Summary in Sites_A6A Application Index under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.**

ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB	
	Q.6 Does the proposed project affect groundwater basins, as defined by Water Code section 10722 *et seq.*? If not, enter "Not Applicable"; if so, identify the affected groundwater basins and describe how the project would be integrated with future GSP(s). Explain how the project would reduce, eliminate, or have an effect on undesirable results (as defined in regulations section 6001(a)(85)) within the affected groundwater basin(s). Describe how the applicant would work with GSA(s) or adjudicated participants of the basin. See regulations section 6003(a)(1)(K). **Sites Reservoir would help alleviate undesirable conditions in the Colusa Groundwater Basin. Desert Water Agency and the Coachella Valley Water Agency would use water from Sites for groundwater replenishment to address undesirable results in their basins. See Sites_A6C Groundwater Basins under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.**
	A.1 Attach the executive summary (max 20 pages). See regulations section 6003(a)(1)(A). **Attached filename: Sites_A3 Project Description under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.**
	A.2 Attach the Resolution, as required by regulations section 6003(a)(1)(C). See Program website for an example resolution. **Attached filename: Sites_A2 Resolution under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.**
	A.3 Project Description. Attach a description of the project that meets the requirements of section 3.3 of the TR. If a full project description is included in another attachment, identify the attachment name and beginning page number in this attachment. **Attached filename: Sites_A3 Project Description under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.**
	A.4 Attach maps, schematics and engineering design drawings that support the project description, if not already available in other attached documents. See section 6003(a)(1)(B) of the regulations. **Attached filename: Sites_A4_Drawings under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.** **Also See Federal Feasibility Report (https://www.sitesproject.org/information/FeasibilityReport) – Appendix B**
	A.5 Attach a statement, under penalty of perjury pursuant to the laws of the State of California, attesting that the information provided in the full application is true and correct to the best of the applicant's knowledge. Scanned uploaded documents containing a scanned signature are sufficient. See section 6003(a)(1)(Y) of the regulations. **Refer to filename: Sites_A2 Resolution– contains both A.2 and A.5 under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.**
	A.6 OPTIONAL: Attach any other information that would support the application which does not fit easily in another category: for example, other studies or an index of the submitted application documents. • **Attached filename: Sites_A6A Application Index under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB** • **Attached filename: Sites_A6B_WMPs (status of water management plans) under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB** • **Attached filename: Sites_A6C_Groundwater Basins under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB**

APPLICANT INFORMATION TAB	
APPLICANT INFORMATION	
	<u>Organization Name*</u>: Provide the name of the Agency/Organization responsible for submitting the application. Should the application be successful, this Agency/Organization will be the funding recipient. **Sites Project Authority**
	<u>Tax ID</u>: Provide the federal tax ID number of the Agency/Organization submitting the application. **90-0635251**
	Point of Contact*: • Select "Add New User" to add an unregistered user. Please select Division (address will be auto populated) and type the First Name, Last Name, E-mail, and Phone (Direct) of the new user. Please note that the e-mail address will be the new user's login name. • Select "Existing Register Users" to select the registered user associated with the organization specified above. The rest of the contact information (Division, Address, e-mail, etc.) are auto populated once the above registered user is selected. **Jim Watson, PE**
	<u>Point of Contact Position Title*</u>: Provide the title of the point of contact. **General Manager, Sites Project Authority**
	<u>Proposal Name*</u>: Provide the title of the project. **Sites Project**
	<u>Proposal Objective*</u>: Briefly describe the proposed project's objectives. **This application is submitted by the Sites Project Authority to secure investment funding as authorized under voter approved Proposition 1 in exchange for providing the State of California with eligible public benefits.** **The Sites Project will be an offstream reservoir independently owned, constructed, governed, and operated by the Authority under its own water rights and other regulatory requirements; but in cooperation with the U.S. Bureau of Reclamation and California Department of Water Resources in their operation of the Central Valley Project (CVP) and State Water Project (SWP), respectively. The summary objective of the Sites Project is to make California's water system more efficient, flexible, and reliable, which will provide local, statewide, and national benefits. The project helps to achieve the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and enhance the environment, particularly in the face of climate change.** **The public benefits for the Sites Project are to improve the survival of anadromous fish and other aquatic species, provide incremental Level 4 refuge water supply, provide opportunities for recreation, and reduce flood damage reduction. Non-Proposition 1 eligible benefits include water supply and hydropower generation.** **The Authority offers the State of California the first right of refusal for 710,000 AF (40% capacity) for public benefits provided by the project. If the State accepts full responsibility for the public benefits, this would provide a long-term average of 195 TAF of water for public benefits. The submittals in this application assume the State would instead prefer federal participation with shared investment in public benefits at a level that reduces capital costs for the Water Storage Investment Program (WSIP) program. This anticipates future federal funding under the Water Infrastructure for Improvements to the Nation (WIIN) Act.**
BUDGET – all amounts in 2015 dollars	
	<u>Other Contribution</u>: If capital costs are allocated to another State program enter the amount here. If none, enter zero. **$0**
	<u>Local Contribution</u>: Provide the total local funding that will be committed to the project's capital costs exclusive of in-

	kind contributions. **$2,720,000,000**
	Federal Contribution: Enter the portion of total capital costs to be provided from federal funds. If none, enter zero. **$730,000,000**
	In-kind Contribution: Provide the total amount of in-kind services in dollars. In-kind contribution refers to work performed by the funding recipient, the cost of which is considered funding match instead of, or in addition to, actual funds from the funding recipient being used as cost match. If there is no in-kind contribution, enter zero. **$64,000,000**
	Amount Requested*: Provide the amount of total capital costs requested from the Program. **$1,662,000,000**
	Total Proposal Cost*: Total project capital cost is automatically calculated based on the contribution amounts entered above. Total project capital costs must be in 2015 dollars. **$5,176,000,000**
GEOGRAPHIC INFORMATION	
Latitude and longitude in degrees, minutes, and seconds. You may use converters on the Web, such as http://transition.fcc.gov/mb/audio/bickel/DDDMMSS-decimal.html.	
	Latitude*: Enter the latitude that best represents the center of the project or main point of access. **.39.308721 or 39° 18' 31.395"**
	Longitude*: Enter the longitude that best represents the center of the project or main point of access. **-122.338131 or 122° 20' 17.2716"**
	Longitude/Latitude Clarification: Only use if necessary. **The latitude and longitude correspond to the intersection of Sites and Huffmaster Roads, the current point of access to Antelope Valley. Sites Reservoir is a large project with a main reservoir of over 14,000 acres and approx. 13 miles of pipelines.**
	Location: Identify the approximate location. Character Limit: 100 **New reservoir in Colusa and Glenn Counties. New pipeline to the Sacramento River.**
	County*: Provide the county in which the project is located. If the project is located in more than one county, hold down the Ctrl key and select all that apply. **Colusa and Glenn Counties**
	Groundwater Basin: Provide the groundwater basin(s) as listed in the current version of DWR Bulletin 118 (http://www.water.ca.gov/groundwater/bulletin118/gwbasins.cfm), in which your project is located. For projects covering multiple groundwater basins, hold down the Ctrl key and select all that apply. **Sacramento Valley (5-92) and Colusa (5.21-52)**
	Hydrologic Region: Provide the hydrologic region in which your project is located. For projects covering multiple hydrologic regions, hold down the Ctrl key and select all that apply. **Sacramento River**

APPLICANT INFORMATION TAB

	Watershed: Provide the name of the watershed in which the project is located (maximum character limit: 250). A map of California watersheds can be found at the following link: http://www.conservation.ca.gov/dlrp/wp/Documents/CALFED_Watershed_Map[1] .pdf. If your project covers multiple watersheds, you may only provide one "Unique Watershed Number" as listed on the watershed map **Colusa Basin (80)**
LEGISLATIVE INFORMATION	
	Enter the State Assembly*, State Senate*, and U.S. Congressional Districts* in which the project is located (use district numbers only, not the name of the Legislator). For projects that include more than one district, hold the Ctrl key down and select all that apply. **CA Assembly District 03** **CA Senate District 04** **US Congressional District 03**

EARLY FUNDING REQUEST TAB	
	Q.1 Is early funding for completing environmental documentation and/or permits requested? If yes, answer the following question and provide the requested information. See regulations section 6003(a)(1)(X). **Yes**
	Q.2 What is the requested amount? **Requesting 50% of $103,351,000 or $51,675,500.**
	A.1 Attach a schedule, scope of work, and budget. Keep in mind that the applicant must provide a 50 percent cost share and reimbursable costs can only go back to November 4, 2014. Scope of work must include an explanation of why early funding is critical to the project, the viability of the project in the absence of this funding and how the project will proceed once early funding is expended. The scope of work cannot include work performed prior to submittal of the application. The tasks in the schedule, scope of work and budget should match. **See Sites_A1 Scope under the EARLY FUNDING REQUEST TAB**

FEASIBILITY & IMPLEMENTATION RISK TAB	
	A.1 Attach feasibility studies or documentation that demonstrates the proposed project's engineering, environmental, economic, and financial feasibility as described in TR section 3.5. See also regulations section 6003(a)(1)(O). **See Sites_A1 Feasibility under the FEASIBILITY AND IMPLEMENTATION RISK TAB.**
	A.2 Provide a listing and status of all local, state, and federal permits, certifications, and other approval necessary for the construction and operation of the project. See section 6003(a)(1)(W) of the regulations. **See Sites_A2 Permits under the FEASIBILITY AND IMPLEMENTATION RISK TAB.**
	A.3 Attach an estimated schedule for the proposed project until the first year of operation. If the schedule is included in another attachment, identify the location. See section 6003(a)(1)(G) of the regulations. **See Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.**
	A.4 Attach the most recent publicly available environmental document for the proposed project. If the document is available on a website, provide a link to the document(s). See section 6003(a)(1)(S) of the regulations. **Posted at** http://sitesproject.org/information/DraftEIR-EIS
	A.5 Summarize the project's impacts on environmental or cultural resources and how the project will mitigate or minimize impacts to those resources, or identify where in the CEQA document this information can be found. If any environmental or cultural impacts will not be fully mitigated, explain. See regulations section 6003(a)(1)(T). If applicable, identify whether Tribal consultation has been initiated for the project. If it has, provide supporting documentation, or identify the location in the CEQA document. If consultation has not been initiated, state whether consultation is expected and when consultation is expected to be initiated. See regulations section 6003(a)(1)(U). **See Sites_A5 Tribal Impacts under the FEASIBILITY AND IMPLEMENTATION RISK TAB.**

BENEFIT CALCULATION, MONETIZATION, and RESILIENCY TAB	
	Q.1 Did the applicant use the model products and assumptions described in section 6004(a)(1) of the regulations? See regulations section 6003(a)(1)(CC). If no, provide a description of the models and assumptions used to determine the without- project future conditions for years 2030 and 2070. **The analyses conducted for the Sites Reservoir Project utilized the model products and assumptions described in section 6004(a)(1). This includes the 2030 and 2070 future conditions CalSim II and DSM2 models provided by the California Water Commission on November 2, 2016. The models provided by the commission were modified to include the facilities and operation of the Sites Project as described in the Project Description and Assumptions section.** **For the analysis of the Relative Environmental Values, the with- and without-project current conditions analyses were based on the DWR State Water Project Delivery Capability Report 2015 (DCR 2015) – CalSim II base scenario. The DCR 2015 base scenario, provided by DWR, was modified to include the facilities and operation of the Sites Project. The project description and assumptions for the with-project current condition are the same as for the 2030 and 2070 with-project conditions.** **The analyses also included the use of other analytical tools that were updated for future 2030 and 2070 conditions. These tools include:** • **USRDOM – Upper Sacramento River Daily Operations Model** • **Sacramento River HEC5Q model** • **SALMOD** • **American River CE-QUAL-W2 Model** • **CWEST** • **SWAP** • **LTGEN** • **SWP Power** • **NODOS Power**
	A.1 Attach description and assumptions of with-project conditions for years 2030 and 2070, as defined in section 6004(a)(2) of the regulations, as well as a description of the with- and without-project current conditions. See also regulations section 6003(a)(1)(BB). **Attached filename: Sites_A1 Modeling under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.2 Attach the preliminary operations plan for the proposed project. See regulations section 6003(a)(1)(H) for details. If the preliminary operations plan is located in another attachment, identify the attachment and provide the location. **Attached filename: Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.3 Attach the analysis of all public and non-public monetized benefits. Identify at least one Program ecosystem or water quality priority for any ecosystem or water quality public benefit quantified. For each public and non-public benefit, describe the methods used to derive the physical and economic benefits and impacts at a level of detail that allows reviewers to verify your analysis. Description must include: • The physical changes that are being monetized, consistent with information requested in the Physical Public Benefits Tab, and describing linkages between physical benefits and monetized benefits. See regulations sections 6004(a)(3) and 6004(a)(4); and • The monetization method and sources for data used. See regulations section 6004(a)(4). **Attached filename: Sites_A3 Physical Monetized under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.4 For each net public benefit claimed, where applicable, identify any existing environmental mitigation or compliance obligations that are accounted for in each net public benefit as of the date of the CalSim-II model product in section 6004(a)(1). • Applicants that use the CalSim-II and DSM2 models to analyze their projects can indicate “within models” for any existing environmental mitigation and compliance obligations contained in those models. • If applicable to their claimed net public benefit such projects shall also list and account for the non-flow related mitigation and compliance obligations of the State Water Project and Central Valley Project.

BENEFIT CALCULATION, MONETIZATION, and RESILIENCY TAB	
	Attached filename: Sites_A4 Mitigation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
	A.5 Provide additional information that supports the physical and monetary quantification of the public and non-public benefits and impacts of the project as required by subsection 6004(a)(4) of the regulations. This includes data, assumptions, analytical methods and modeling results, calculations and relevant sources of information. For reference documents or studies relied upon, applicants may provide links to an existing website in lieu of attaching those documents to the application. **Attached filename: Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.6 Attach a table displaying each future economic benefit in 2015 dollars for each year of the planning horizon as required by section 6004(a)(4)(A) of the regulations. **Attached filename: Sites_A6 Annual Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.7 If applicable, provide a summary of public benefits that cannot be monetized. Provide the following information for each non-monetized benefit. • Justification why benefit cannot be monetized, • Qualitative description of importance of benefit (who is affected, how and how often), • Evidence to show how the physical change is beneficial and important to Californians. **Attached Filename: Sites_A7 Non Monetized under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.8 Attach an estimate of the total project costs that includes construction cost, interest during construction, land acquisition, monitoring, environmental mitigation or compliance obligations, operations and maintenance, repair, and replacement costs during the planning horizon using methods described in TR section 6. If the project costs are located in another attachment, identify the location. *The project cost estimates must be reviewed, approved and signed by an engineer licensed by the California Board for Professional Engineers, Land Surveyors, and Geologists.* **Attached filename: Sites_A8 Estimate under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.9 Attach the benefit and cost analysis for the proposed project. If the analysis is located in another document, identify the location. See regulations section 6004(a)(6). **Attached filename: Sites_A9 BCA Results under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.10 Provide a proposed allocation of total project costs to all project beneficiaries, including the Program, and an explanation of how the allocation was calculated, consistent with TR section 8 and section 6004(a)(7) of the regulations. If this information is included in another attachment, identify the location. **Attached filename: Sites_A10 Allocation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.11 Attach the Physical and Economic Benefits Summary tables. These tables can be downloaded from the Commission website and uploaded with the application. See regulations section 6003(a)(1)(N). **Attached filename: Sites_A11 Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**
	A.12 Attach the uncertainty analysis. See regulations section 6004(a)(8). **Attached filename: Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB**

PROJECTS TAB This section contains information about the project or projects contained in an application. Budget, Geographic Information and Legislative information can be copied from the Applicant Information Tab.	
PROJECT INFORMATION	
	Project Name*: Provide the same name that was used in the Applicant Information Tab. **Sites Project**
	Implementing Organization: Select the applicant from the drop down list. **Sites Project Authority**
	Secondary Implementing Organization: Leave blank.
	Proposed Start and End Dates: Leave blank.
	Scope of Work, Project Description, and Project Objective: Leave blank.
PROJECT BENEFITS INFORMATION ***Please do not enter any information into GRanTS for the following Project Benefits Questions. The questions are standard GRanTS questions that cannot be removed, and will not be used for the Program benefits analysis.***	
	Benefit Level: Leave blank.
	Benefit Type: Leave blank.
	Benefit: Leave blank.
	Description: Leave blank.
	Measurement: Leave blank.

PHYSICAL PUBLIC BENEFITS TAB

ECOSYSTEM BENEFITS

A.1 Attach completed Ecosystem Priorities worksheets. Be sure to include the general information worksheet as well as worksheets for each priority being claimed for which funds are being requested. Identify at least one Program ecosystem priority for any ecosystem public benefit quantified. See section 6003(a)(1)(Q) of the regulations.

See filename: Sites_A1 Ecosystem General Information under the PHYSICAL PUBLIC BENEFITS TAB.

A.2 Attach supporting documentation requested in Ecosystem Priorities worksheets such as maps or other information not already provided elsewhere in the application.

See filename: Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB.

WATER QUALITY BENEFITS

A.1 Attach completed Water Quality Priorities table(s). If the project is claiming water quality benefits that meet the water quality priorities, be sure to include the general application questions table as well as tables for each priority being claimed for which funds are being requested. Identify at least one Program water quality priority for any water quality public benefit quantified See section 6003(a)(1)(Q) of the regulations.

See filename: Sites_A1 Ecosystem Priority under the PHYSICAL PUBLIC BENEFITS TAB.

A.2 Attach supporting documentation requested in Water Quality Priorities tables such as maps or other information not already provided elsewhere in the application.

See filename: Sites_A2_Documentation WQ Priority under the PHYSICAL PUBLIC BENEFITS TAB.

FLOOD CONTROL BENEFITS If the proposed project is not claiming flood control benefits, leave the following questions blank

Q.1 If applicable, how will the project provide flood control benefits? If some project operations will be for flood control purposes, explain. Are the flood control benefits realized locally and/or throughout the larger flood control system? (TR section 4.9.2.1) Describe any negative impacts of providing the flood control benefit. (TR section 4.9.2.4)

The proposed project is located in the Colusa Basin watershed in Colusa and Glenn counties. It consists of constructing two main dams, Golden State Dam on Funks Creek and Sites Dam on Stone Corral Creek, and nine saddle dams on the northern end of the reservoir between the Funks Creek and Hunter Creek watersheds along the Glenn-Colusa county line. The existing Funks Dam is located on Funks Creek would be replaced with a new, larger Holthouse Reservoir.

As an offstream reservoir, Sites Reservoir does not have a large, upstream watershed. Sites Reservoir can, nevertheless, be operated to provide local flood control benefits by capturing and attenuating flood flows associated with Stone Corral and Funks Creeks and the other local ephemeral watersheds. By capturing flows from extreme storm events, the project will reduce flood damages, such as the February 18, 2017 event that flooded the community of Maxwell and temporarily closed Interstate 5.

What methods were used to calculate flood damage reduction? Identify which of the following methods was used to quantify physical flood control benefits:

1. Modeling provided with feasibility study
2. New modeling using historical flood events or historical hydrology
3. New modeling using the climate change hydrology data set provided

If 1 or 2 is used, explain how benefits might be different under the provided future climate and sea levels projections. Provide justification for any methods not identified in section 5.4.3 of the TR. See also regulations section 6004(a)(1)(F).

New modeling using historical flood events or historical hydrology was used to determine physical flood damage reduction benefits. Flooding in the watershed currently occurs between October and April due to rainfall-runoff. If rainfall run-off timing and duration are affected by climate change, it is anticipated that the project will provide additional flood damage reduction benefits. Additional information is provided in Attachment A1 (Sites_A1 Flood Control under the PHYSICAL PUBLIC BENEFITS TAB).

A.1 Attach any relevant flood damage reduction supporting documentation, such as hydraulic and hydrologic modeling studies, and property flood damage analysis (TR section 4.9.4). If information to support this question is located in another attachment, provide the location.

See filename: Sites_A1 Flood Control under the PHYSICAL PUBLIC BENEFITS TAB.

PHYSICAL PUBLIC BENEFITS TAB

EMERGENCY RESPONSE BENEFITS If the proposed project is not claiming emergency response benefits, leave the following questions blank.	
	Q.1 If applicable, how will the project be operated to provide emergency response benefits? Identify the types of emergency benefits the proposed project could provide. (TR section 4.11.1). If additional information to support this question is located in another attachment, provide the location. **The Authority is committed to working with the state and federal water managers and emergency personnel to provide water to support emergency events such as, but not limited to, firefighting, drought relief, and Delta levee failures. Instead of dedicating a volume of water that may not be called upon by the state until at least a one-in-ten year event (or longer) occurs, the Authority proposes that should water from Sites Reservoir be used to aid in responding to or recovery from an emergency, that repayment would occur through a mutually-acceptable exchange or transfer of water. As such, this benefit was not monetized and the Authority is not requesting Proposition 1 funding for this purpose.** **Should the Water Commission be interested in acquiring water to reserve storage for a qualifying Proposition-1 emergency event, the Sites Project Authority will work with the Water Commission to evaluate the concept and, if appropriate, prepare an amendment to this application for the Water Commission's consideration.**
	A.1 Attach a description of the amount or share of stored water to be provided for the emergency benefits and define the conditions under which water would be made available. Describe how the applicant can commit to the conditions under which the emergency benefits would be made available. (TR section 4.11.2) **Not Applicable**
RECREATION BENEFITS If the proposed project is not claiming recreation benefits, leave the following questions blank.	
	Q.1 If applicable, how will the project be operated to provide recreation benefits? If additional information to support this question is located in another attachment, provide the location. **Sites Reservoir will provide new opportunities for surface-water recreation, such as boating, fishing, and swimming. New shoreline facilities at the reservoir will be constructed to support camping, hiking, horseback riding, mountain biking, picnicking, and sightseeing. The project includes two new recreation areas, Stone Corral and Peninsula Hills. Two boat ramps would provide access to the reservoir. Day-use and overnight camping facilities would be constructed on the shore.** **Sites Reservoir operations would also support the maintenance of higher water levels at Shasta and Folsom Lakes. Beneficial effects were noted in some instances where additional storage in existing facilities resulting from the operation of Sites Reservoir would provide more frequent access to boat ramps at these facilities.** **Additional recreational benefits will be provided for fishermen in the Sacramento and American River watersheds as a result of increased populations of Chinook salmon and steelhead. Additional information is provided in Sites_A2 Recreation under the PHYSICAL PUBLIC BENEFITS TAB.**
	Q.2 By providing new recreation benefits, does the proposed project negatively affect any existing recreation activities either at the proposed project site, at another facility, or nearby recreation area? (TR section 4.10.1.1) **Recreational impacts are evaluated in Chapter 21 of the Draft EIR/EIS (Posted at http://sitesproject.org/information/DraftEIR-EIS). No potentially significant impacts were identified. There are no existing recreational activities in the project footprint. Beneficial effects were noted in some instances where additional storage at nearby recreation areas (e.g., Shasta Lake) will result from the operation of Sites Reservoir, providing more frequent access to boat ramps at these facilities.**
	Q.3 Attach an assessment of the proposed recreation physical benefits. Include the size of the facility, recreation activities allowed, recreation facilities associated with these activities, and their capacities and seasonal closures and conditions in which facilities are not usable or activities cannot occur. (TR section 4.10.1.2). **Sites_A2 Recreation under the PHYSICAL PUBLIC BENEFITS TAB contains a description of the proposed recreation facilities.**
	A.1 Attach recreation visitation estimates including documentation of estimation methodology. **See filename: Sites_A1 Recreation Visitation under the PHYSICAL PUBLIC BENEFITS TAB**
	A.2 Attach or provide links to any relevant recreation studies associated with the proposed project. **See filename: Sites_A2 Recreation under the PHYSICAL PUBLIC BENEFITS TAB**

PROGRAM REQUIREMENTS TAB

Q.1 Describe how the project improves the operation of the state water system. See regulations section 6003(a)(1)(M).

Sites Reservoir would improve operational flexibility and reliability of the state water system, especially within the service areas of both the SWP and CVP, in addition to allowing California resource agencies to purposely allocate water for the benefit of environmental uses. CALSIM modeling results indicate that average long-term end of May storage in Lake Oroville would increase by 26 TAF in 2030 and further increase by an additional 31 TAF in 2070 through exchanges with Sites Reservoir. This demonstrates the resiliency of the improvement in the SWP. Likewise, long-term average storage in CVP reservoirs would also increase. End-of-May storage in Shasta Lake would increase by 59 TAF in 2030 and then increase by an additional 80 TAF in 2070. Storage in existing reservoirs that are cooperatively managed with the Sites Project would increase in all year types. This additional storage would provide the state water system greater flexibility in operating the overall system without negative impacts to water supplies and providing California resource agencies with a water supply dedicated to the environment.

Sites Reservoir would be operated collaboratively with the SWP and CVP. The SWP and CVP would make their annual allocations and deliveries as normal. Exchanges with water stored in Sites Reservoir would help to maintain supplies in the existing reservoirs and produce the public benefits described for the project. Sites Reservoir would provide supplemental water that is much needed when allocations are low.

Sites Reservoir Project would provide augment deliveries for both water supply and public benefits, especially during drought years. Sites Reservoir is beneficially located where it can support the operations of existing reservoirs north of the Delta, provide water to the Yolo Bypass for ecosystem restoration, deliver water to be picked up at the North Bay Aqueduct, and export water to the San Joaquin Valley and Southern California. In addition to preserving water in existing SWP and CVP reservoirs through exchange, Sites Reservoir would facilitate water transfers, one of the initiatives in the California Water Action Plan. Water from Sites could be moved south of the Delta to fill Diamond Valley Reservoir or provided for groundwater recharge to Coachella Valley Water District and Desert Water Agency.

This topic is further discussed in the Executive Summary (Sites_A1 ExecSum under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB).

Q.2 Describe how the project provides a net improvement in ecosystem and water quality conditions required by Water Code section 79750.

Sites Reservoir would deliver an average of 125 TAF/yr from 2030 to 2070 for improving ecosystem and water quality conditions. This is an unprecedented amount of water that the State resources agencies will be able to directly manage for environmental benefit. Furthermore, cooperatively managing the operation of Sites Reservoir with State and Federal facilities will preserve higher water levels in the existing reservoirs and thereby protect the coldwater pools, improve temperature conditions downstream for existing reservoirs, and provide flows to support the migration of aquatic species in a variety of life stages.

The potential benefits of the project for fish were modeled using SALMOD. Modeling results predict net improvements in fish populations for Chinook salmon (including endangered winter-run) under 2015, 2030, and 2070 conditions. By providing releases to the Yolo Bypass, Sites Reservoir Project can also benefit Delta smelt, however, there are insufficient studies to characterize the magnitude of this benefit at this time.

Sites Reservoir Project would excel in providing opportunities for in lieu use of surface water, thereby reducing the chronic lowering of groundwater levels, an undesirable result under SGMA. Sites Reservoir will also support the delivery of water for basic human needs to disadvantaged communities.

See Sites_A4 Mitigation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB and Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB for further analysis.

Q.3 If applicable, summarize how the applicant is coordinating with the owners and operators of water system facilities not owned or operated by the applicant or project partners that may be affected by the project. See regulations section 6003(a)(1)(P).

The Authority is coordinating the development of operations with the Department of Water Resources and the U.S. Bureau of Reclamation. This coordination includes the future development of Principles of Agreement governing operations. See Sites_A6 Annual Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. A list of project partners is provided in Sites_A1 Feasibility under the FEASIBILITY AND IMPLEMENTATION RISK TAB.

PROGRAM REQUIREMENTS TAB	
	Q.4 Describe how the project advances the long-term objectives of restoring the ecological health and improving water management for beneficial uses of the Delta. See regulations section 6003(a)(1)(R). **The operations proposed for Sites Reservoir Project were developed with the intent of contributing to the attainment of the co-equal goals for the Delta of ecological health and improving water management for beneficial use. As a result, the annual yield from the Sites Project is divided between environmental and water supply purposes.** **The Sites Project would provide a unique opportunity to allocate reservoir storage and establish the first firm asset Ecosystem Enhancement Account in California. Based on the operations assumptions included in this application, the allocated storage would deliver approximately 125 TAF/yr (in 2030 through 2070 (with deliveries of up to 200 TAF/yr in critically dry years) that would be managed by the State (CDFW, SWRCB, and DWR) and Federal government to perform restoration actions beyond existing regulatory requirements. Conceptually, this account would use Sites Reservoir project assets to support modified operations that facilitate habitat enhancement actions. A Sites Reservoir Ecosystem Enhancement Governance Board would be created to manage the water account. The water account would be managed to adaptively support operational actions and respond to changing future conditions throughout the Sacramento River watershed and Delta.** **Sites Reservoir would also provide water for beneficial uses throughout the State, including water for agriculture and M&I purposes, and State and Federal wildlife refuges. Project participants include agencies in the Sacramento River Valley, Bay Area, San Joaquin Valley, Southern Desert, and South Coast regions of California.**
	Q.5 Describe how the applicant will ensure that the proposed project will comply with and be consistent with all applicable local, state, and federal laws and regulations, including existing environmental mitigation or compliance obligation requirements. See regulations section 6003(a)(1)(V). **The Authority has initiated pre-applications discussions with several of the critical resource management and regulatory agencies in order to expedite compliance with all required laws and regulations. This early and diligent effort to understand the evolving concerns for regulatory compliance will reduce the overall compliance schedule and help ensure compliance with all applicable local, state, and federal laws in the planning, construction, and operation of Sites Reservoir, including mitigation requirements. The EIR/EIS (attached at http://sitesproject.org/information/DraftEIR-EIS) describes the impacts and mitigation measures that when implemented would reduce or avoid impacts and support compliance with all applicable laws, regulations, and statutes. This includes all applicable regulations regarding water operations on the Sacramento River. Regulations are identified in Sites_A2 Permits under the FEASIBILITY AND IMPLEMENTATION RISK TAB. The Authority's commitment to mitigation is further described under Sites_A4 Mitigation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.**
	A.1 What measurable improvements to the Delta ecosystem or tributary to the Delta does the project provide? Where is the location of the improvement? If the project is not within the watershed of the Delta, what specific water rights or water contracts would be created or amended to ensure public benefits to the Delta ecosystem? Provide supporting documentation of the willingness of these water right or water contract holders to enter into such contracts or amendments. Explain how these changes would assure measurable improvements to the Delta ecosystem. See regulations section 6003(a)(1)(L). **See Sites_A1 Measurable Benefits under the PROGRAM REQUIREMENTS TAB.**
	A.2 Provide documentation indicating the proposed project is cost-effective. If there is at least one feasible alternative means of providing the same amount or more of the total public and non-public physical benefits as provided by the proposed project, calculate, display and document the least-cost of these alternative means and justify the proposed project by comparison. **See Sites_A2 Cost Effectiveness under the PROGRAM REQUIREMENTS TAB.**

BEFORE THE BOARD OF DIRECTORS OF THE

SITES PROJECT AUTHORITY

Resolution No. 2017-001

In the Matter of:

Authorizing Filing Application to California Water Commission under Water Storage Investment Program for the Sites Project.

WHEREAS, the Water Storage Investment Program ("WSIP") is provided for at Chapter 8 (commencing at Section 79750) of Division 26.7, of the California Water Code, which is part of the November 2014 voter-approved Proposition 1, the process for which is specified in regulations promulgated by the California Water Commission at California Code of Regulations, Title 23, Division 7, Chapter 1 ("WSIP Regulation"); and

WHEREAS, the Sites Project Authority ("Authority") is a joint powers authority formed by and existing among various irrigation districts and other local water districts and local governments within the Sacramento River hydrologic region pursuant to a Joint Exercise of Powers Agreement as last amended February 13, 2017, and through a Reservoir Committee established by the Authority has partners that are not located within said hydrologic region, participating with development of the Sites Project, all as authorized by Water Code Section 79759 of the WSIP authorizing act; and

WHEREAS, the Sites Project, very generally and as described in detail in the application authorize to be filed by this Resolution and its attachments, is a proposed off-stream reservoir to store unregulated water within the Sacramento River watershed when this outflow is not meeting critical environmental, water quality and water supply needs, and to subsequently release such store water from the reservoir for beneficial uses for consumptive and in-stream flow purposes; and

WHEREAS, the Sites Project is among the surface storage projects identified in the CALFED Bay-Delta Program Record of Decision, date August 28, 2000, and is therefore eligible for funding under Water Code Section 79751(a); and

WHEREAS, this Board is familiar with and concurs in the draft of the application authorized to be filed by this Resolution;

NOW, THEREFORE, BE IT RESOLVED by this Board of Directors as follows:

1. The foregoing recitals are true and correct;
2. The General Manager is authorized and directed to timely file an application for the Sites Project with the California Water Commission pursuant to WSIP and its implementing regulations referenced above; and

3. The Authority's officers and General Manager are authorized to do all things necessary and proper to carry out and implement filing the above referenced application with the California Water Commission.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the Sites Project Authority this 31st day of July, 2017, by the following vote:

Ayes:	Colusa County, Reclamation District 108, Westside Water District, Glenn-Colusa Irrigation District, Tehama-Colusa Canal Authority, Maxwell Irrigation District, Colusa County Water District, Orland Artois Water District, Placer County Water Agency/City of Roseville, Proberta Water District/TC 6 Districts and Western Canal Water District.
Nays:	None.
Absent:	Glenn County.
Abstain:	None.

Kim Dolbow Vann

Kim Dolbow Vann, Chair
Sites Project Authority Board

ATTEST: Ann Nordyke
Clerk to the Board of Directors

Ann Nordyke

Ann Nordyke, Clerk

APPROVED AS TO FORM:

Ernest A. Conant, Counsel

Secretary's Certificate

I, Jamie Traynham, Secretary of the Sites Project Authority Board, do hereby certify that the resolution set forth above, is a true and accurate copy of a resolution adopted by the board of directors of the Sites Project Authority at a duly called meeting of the board on July 31, 2017. I further certify that said resolution has not been rescinded, amended, or modified and is in full force and effect as of the date hereof.

In witness whereof, I have executed this certificate this 2nd day of August 2017.

Jamie Traynham

Jamie Traynham, Secretary
Sites Project Authority

Physical Public Benefits Tab

Attachment 1: Ecosystem Priorities Worksheets

Table of Contents

Attachment 1: Ecosystem Priorities Worksheets 1
General Information 5
Ecosystem Priority 1.. 9
Ecosystem Priority 2.. 15
Ecosystem Priority 3.. 20
Ecosystem Priority 4.. 25
Ecosystem Priority 5.. 31
Ecosystem Priority 10 36
Ecosystem Priority 11 40
Ecosystem Priority 14 45
Ecosystem Priority 15 53
Ecosystem Priority 16 56

Acronyms and Abbreviations

°F	Farheinheit
af	acre feet
CDFA	California Department of Food an Agriculture
CDFW	California Department of Fish and Wildlife
cfs	cubic feet per second
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
DPM	Delta Passage Modeling
DPS	distinct population segment
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESU	evolutionarily significant unit
ft^2	square feet
IEP	Interagency Ecological Program
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NWRs	National Wildlife Refuges
O&M	Operations and Maintenance
PPIC	Public Policy Institute of California
RM	River Mile
RWSP	Refuge Water Supply Program
SWP	State Water Project
TAF	thousand acre feet
TMDLs	Total Maximum Daily Loads
USACE	U.S. Fish and Wildlife Service
USBR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USRDOM	Upper Sacramento River Daily Operations Model
USRWQM	Upper Sacramento River Water Quality Model

WHEP	Waterbird Habitat Enhancement Program
WUA	Weighted Usable Area

General Information

General Info: Ecosystem Priorities and Relative Environmental Value Criteria	
Ecosystem Priorities	
P 1	Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
P 2	Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
P 3	Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat
P 4	Improve ecosystem water quality
P 5	Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage
P 6	Increase attraction flows during upstream migration to reduce straying of anadromous species into non-natal tributaries
P 7	Increase Delta outflow to provide low salinity habitat for Delta smelt, longfin smelt, and other estuarine fishes in the Delta, Suisun Bay, and Suisun Marsh
P 8	Maintain or restore groundwater and surface water interconnection to support instream benefits and groundwater dependent ecosystems.
P 9	Enhance flow regimes or groundwater conditions to improve the quantity and quality of riparian and floodplain habitats for aquatic and terrestrial species.
P 10	Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish
P 11	Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species
P 12	Enhance access to fish spawning, rearing, and holding habitat by eliminating barriers to migration
P 13	Remediate unscreened or poorly screened diversions to reduce entrainment of fish
P 14	Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands
P 15	Develop and implement invasive species management plans utilizing techniques that are supported by best available science to enhance habitat and increase the survival of native species
P 16	Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
Relative Environmental Value Criteria (REVs)	
REV 1	Number of different ecosystem priorities, for which corresponding public benefits are, provided by the project.
REV 2	Magnitude of ecosystem improvements.
REV 3	Spatial and temporal scale of ecosystem improvements.
REV 4	Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers for managing ecosystem benefits.
REV 5	Immediacy of ecosystem improvement actions and realization of benefits
REV 6	Duration of ecosystem improvements.
REV 7	Consistency with species recovery plans and strategies, initiatives, and conservation plans
REV 8	Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
REV 9	Efficient use of water to achieve multiple ecosystem benefits
REV 10	Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Project Information	
Project Name	
Sites Reservoir Project	

General Info: Ecosystem Priorities and Relative Environmental Value Criteria
Project Description (Summary)
The Sites Reservoir Project is composed of a new off-stream reservoir, new diversion, pumping and conveyance facilities and modification to existing facilities and operations to increase the flexibility and reliability of the California water management system. Sites Reservoir, located approximately 10 miles west of the town of Maxwell, would be filled by diversion of water from the Sacramento River from the existing diversions facilities in Red Bluff and Hamilton City, and the new diversion near Delevan when Sacramento River flows that originate from unregulated tributaries to the Sacramento River downstream from Keswick Dam meet specific regulatory and water rights criteria. The operation of Sites Reservoir Project would allow for the development and administration of an ecosystem enhancement storage account (EESA) that could be managed by the State to provide water for ecosystem and water quality purposes of its choosing. As described elsewhere in this application, such an account could provide a pool of dedicated storage to manage in cooperation with existing operations to improve coldwater conservation storage, stabilize river flows during critical fisheries periods, increase flows through certain watercourses and/or facilities (such as, Yolo Bypass), increase availability of wetlands in wildlife refuges, and/or enhance habitat conditions or other ecosystem enhancement actions. Sites Reservoir Project is most beneficial when it is operated in cooperation with CVP and SWP operations to coordinate releases from Shasta Lake, Lake Oroville, and Folsom Lake. Releases from Sites Reservoir would allow the preservation of storage in these other reservoirs while still meeting requirements for minimum instream flow objectives, Sacramento River temperature requirements, and Delta salinity control assigned to the CVP and SWP. Through the use of water stored in Sites Reservoir in substitution for releases from these other reservoirs, storage could be conserved in Shasta Lake, Lake Oroville, and Folsom Lake to significantly increase operational flexibility to improve river water temperatures for fish survival, and Delta ecosystem food-web enhancement. The Sites Reservoir would also provide independent flood control and recreation benefits.
Identify the current conditions date (i.e., year) that will be used within the application.
2015 using CALSIM model furnished by the CWC
Ecosystem improvement application instructions:
To complete the ecosystem improvement section of the Water Storage Investment Program application review the 16 ecosystem priorities listed above, determine which priorities will be addressed by your project's ecosystem improvements, and answer all questions for each priority you will address. In addition to answering the priority-specific questions, answer the general questions listed on this worksheet which apply to all priorities addressed by your project. The final relative environmental value of each project will be based on a technical review of each ecosystem priority using relative environmental criteria (REV) 2-10 and the total number of priorities claimed by a project (REV 1).
For the purpose of this application the Current Conditions date will be based on the existing conditions of an applicant's CEQA document. If specific data requested in this application is not available in the CEQA document, the applicant will use the demarcation date of the existing conditions in the CEQA document. An applicant must use the demarcation date of the existing conditions from their CEQA document consistently within the application when identifying current conditions.
REV 1: Number of ecosystem priorities targeted by the project
Briefly explain which ecosystem priorities will be met by this project.
Ecosystem priorities 1, 2, 3, 4, 5, 10, 11, 14, 15, and 16
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Describe the process through which an adaptive management and monitoring program will be developed for approval by the responsible agency.
The adaptive management program would be developed by the Sites Project Authority in partnership with the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFW) as well as concerned and knowledgeable non-governmental organizations. Specific adaptive management investigations will be developed to build on the best available science on the range of issues listed above. Adaptive management would be implemented within a framework that is transparent, collaborative, and responsive to changes in scientific understanding. The Sites Project monitoring plan will be developed in coordination with other similar efforts in the Sacramento River watershed, including studies by the Interagency Ecological Program and ongoing studies by USFW, NMFS and CDFW in the Sacramento River Watershed. Design and implementation of Sites Project monitoring will also be coordinated with ongoing and proposed survey and monitoring efforts along the Sacramento River and within the Delta to share and build on available data.

General Info: Ecosystem Priorities and Relative Environmental Value Criteria
Describe the framework you will use to develop measurable objectives, performance measures, thresholds, and triggers for your adaptive management and monitoring program.
Monitoring efforts would be guided by the specific Sites Project objectives and desired outcomes for ecosystem priorities. The Project's objectives are to meet its primary goal to improve environmental conditions in the Sacramento River and Delta system and improve water supply reliability in the State water supply system. What is measured (indicator), how well it is measured, and how often it is measured are design features that would be defined by the members of the development team who are a part of the Water Operations Committee (refer to Operations Plan). Examples of measurable objectives and performance measures for selected ecosystem priorities are provided under Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Performance measures would be elements of a monitoring framework which would provide data to assess progress towards achieving Sites project objectives and ecosystem priorities, and which would inform adaptive management decision-making for operations. The proposed operations prioritize certain ecosystem priorities listed for the Water Storage Investment Program. Key scientific information for further monitoring and adaptive management activities related to those prioritized operations is: • Quantification of the improvement in temperature for salmonids above that which would have been available absent Sites. • Benefits provided by river flow stabilization using Sites Reservoir Project water • The amount of productivity increase in the Cache Slough area and increases in Delta smelt abundance in this area and Lower Sacramento River • The amount of additional water provided to Level 4 refuges.
How will operational decisions be made if physical parameters and biological responses fall outside the range of anticipated benefits?
The Authority Board of Directors holds the final decision-making authority for all actions pertaining to the Sites Reservoir Project. The Authority Board has, and expects to continue to delegated certain responsibilities to standing committees that do (or will) report to the Board. This Adaptive Management Plan, and its annual updates, will be approved by the Board following public comment. Recognizing the many sources of uncertainty in predicting future environmental conditions, particularly in light of climate change and sea level rise, and knowledge gaps regarding factors controlling fish population dynamics and abundance, an adaptive management approach will be required to make informed decisions about operation management for the Sites Project. The adaptive management concept will be implemented to reduce operational uncertainty, enhance scientific knowledge, comply with the permit requirements of the Sites Project, and improve project performance in a constantly changing natural system. As with other adaptive management plans associated with major water management facilities in California, adaptive management will provide recommended operations intended to test operational hypotheses and provide input to the periodic operational reviews of the Sites Project, and will be developed with the best available science in collaboration with CDFW, NMFS, USFWS, and others. It is expected that all agencies and organizations participating in the Sites Reservoir Project will adopt an adaptive management approach to reduce operational uncertainty associated with the operation of the Sites Project. At this time the participating agencies include the Authority, Reclamation, and the California Resources Agency (as the coordinating agency for the State with regard to WSIP participation). As the Site Project proceeds through WSIP, water right acquisition, and permitting processes, it is anticipated that other agencies (including DWR, CDFW, NMFS and USFWS) will be active participants in the adaptive management process. Together, this adaptive management organization will identify investments in related research, monitoring and other endeavors to support the Sites Project. Additional groups may be added to the adaptive management organization to support the decision-making process.
What funding sources and financial commitments do you intend to utilize for the formation and implementation of an adaptive management and monitoring program over the duration of the claimed benefits?
Funding sources include revenue generated from water delivery contracts to all who contract and receive water from the Sites Project. The formation and implementation of an adaptive management and monitoring program is one of several administrative requirements of the Sites Reservoir Project. The Sites Project is founded on a beneficiary pays basis. Funding sources to support the ESSA deliveries could include funds generated from recaptured water used for environmental benefits when those environmental services are complete. A portion of water released from Shasta to provide Proposition-1 eligible benefits could be recaptured (when Delta outflow is greater than 5,000 cfs and all other operational conditions are met), stored in Sites (or directly delivered downstream to a water user) and later released for non-Proposition-1 eligible benefits (i.e.; water supply) to raise funds to cover O,M&R costs. Other potential funding sources for ESSA deliveries include revenue from hydropower generation associated with releases of water for Proposition-1 eligible environmental purposes (such

General Info: Ecosystem Priorities and Relative Environmental Value Criteria
as releases to the Yolo Bypass).
Explain what environmental uncertainties are relevant to your claimed benefit(s) and will be included in your adaptive management and monitoring program (i.e. climate change, sea level rise, earthquakes, variation in snow pack, forest fires, landslides/erosion etc.).
Uncertainties are described in detail under the Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. The WSIP model for project performance included specific climate change and sea level rise assumptions. These assumptions are detailed in Sites_A1 Modeling under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Earthquake, forest fire, landslides/erosion are not expected to have significant effects on the project benefits. The benefits described for the Sites Project are generally not subject to other environmental uncertainties (earthquakes, variation in snow pack, forest fires, landslides/erosion, land subsidence).
REV 9: Efficient use of water to achieve multiple ecosystem benefits
Will the same unit of water benefit multiple priorities? If so, explain which priorities will benefit, and the anticipated differences in project water availability between priorities.
Water stored in Shasta Lake or Lake Oroville for coldwater purposes is released over time for flow augmentation to benefit redds and juvenile salmonids. This water addresses multiple ecosystem priorities to provide an interrelated benefit to anadromous fish. Some of the water released from Shasta Lake for environmental benefits can be recaptured downstream and used again to provide further environmental benefits. It is intended that this water (after it has been used to provide at least one Proposition-1 eligible benefit) be recaptured and used to provide funding for the O&M share for public benefits.
How will hydrologic connections among priorities be measured and guaranteed?
The Sites Project operations will be based on operations agreements with Reclamation and DWR for the use and coordinated operations of facilities and on detailed written agreements with project participants for Proposition 1-eligible public benefits and non- Proposition 1-eligible benefits (generally water supply augmentation contracts). These agreements will define the amount of Sites Reservoir storage allocated to the organization seeking the specific benefits, the associated deliveries, and the cost associated with those deliveries. Water delivery contracts will also define the delivery request process, facilities repayment and OM&R charges (pro-rated by acre-foot of delivery). Since the WSIP contributions would cover facilities construction cost, costs associated with Proposition-1 eligible public benefit water delivery contracts would not include facilities repayment costs. Hydrologic connection to the Sacramento River will be maintained by the Tehama Colusa Canal, Glenn-Colusa Canal and the new Delevan pipeline and other new Project facilities (e.g.; turnout to the Colusa Basin Drain). The connection to each of the existing facilities would be part of the operation agreement described above (see Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB).

Ecosystem Priority 1

Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
Species Information
What salmonid species are you targeting?
Winter-run Chinook Salmon (*Oncorhynchus tshawytscha*; Sacramento River evolutionarily significant unit [ESU]); Spring-run Chinook Salmon (*O. tshawytscha*; Central Valley ESU); Fall-run and late Fall-run Chinook Salmon (*O. tshawytscha*; Central Valley ESU); Steelhead (*O. mykiss*; Central Valley distinct population segment [DPS]); and resident native Rainbow Trout (*O. mykiss*).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the temperature needs of each species are described.
Draft EIR/EIS (https://www.sitesproject.org/information/DraftEIR-EIS) Appendix 12A: Aquatic Species Life Histories: • *Sacramento River Winter-run Chinook salmon*: page numbers: 12A-2 to 12A-9 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-1 Current and historical distribution, and critical habitat designation. • *Central Valley Spring-run Chinook salmon*: page numbers: 12A-9 to 12A-14 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-2 Current and historical distribution, and critical habitat designation. • *Central Valley fall-run and Late fall-run Chinook salmon*: page numbers: 12A-15 to 12A-18 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-3 Current and historical distribution. • *Central Valley steelhead*: page numbers: 12A-19 to 12A-24 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River; Figure 12A-4 Current and historical distribution, and critical habitat designation. The Draft EIR/EIS has a different without Project condition and operation than was used for Water Storage Investment Program (WSIP); however, there is discussion in the Draft EIR/EIS Appendix 12C: Fisheries Impacts Summary concerning thermal and flow-related benefits to fish: Sacramento River Winter-run Chinook salmon, pages 12C-116 to 12C-117; Spring-run Chinook salmon, pages 12C-117 to 12C-118; Fall-run Chinook salmon, pages 12C-118 to 12C-119; Late fall-run Chinook salmon, pages 12C-119 to 12C-120; and Steelhead, pages 12C-120 to 12C-121.
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value? If the ecosystem improvement will benefit multiple salmonid species or runs, provide the magnitude of the ecosystem improvement for each species or run separately.
Temperature improvements are the result of the conservation of water (primarily in Shasta Lake) facilitated by cooperative operations with Sites Reservoir. Under current conditions, end-of-September carryover storage in Shasta is increased by 4.7% on average and up to 16.3% in Critical water years. Temperature improvements were estimated using Upper Sacramento River HEC5 model, the American River CE QUAL-W2 Model and SALMOD results (see Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB). The Project would increase coldwater pool conservation in Shasta Lake, Lake Oroville, and Folsom Lake and improve temperatures in the Sacramento and American Rivers during certain months at specific compliance points, particularly in Below Normal, Dry, and Critical water years. The areas of temperature improvement for these waterways are shown on Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB. Approximately 59 river miles of the Sacramento River would be improved with the implementation of the Sites Reservoir Project downstream from Keswick Dam (River Mile [RM] 302.0) to the Red Bluff Pumping Plant (RM 243.0; Figure 1). Sites Project operations emphasize providing Sacramento River cold water releases during the months of July through September

Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
when it's most difficult to achieve temperatures targets. Temperature modeling results for current and 2030 conditions are provided Table A2-1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB. The temperature reduction with the Project at Bend Bridge is 0.6°F in July through September for Critical water years in 2030, but improves to 1.4°F in 2070. The reason these results fluctuate is primarily due to an increase in Shasta storage assumed in the 2070 WSIP model than to the effects of climate change (there is no indication that Reclamation will actually operate Shasta differently in 2070). This suggests that the temperature reduction benefits are relatively sustainable in this portion of the Sacramento River. Fall-run, late fall-run, and winter-run Chinook salmon would greatly benefit from more suitable water temperatures in the Sacramento River below Keswick Dam and at Bonnyview Bridge, specifically during the egg incubation period in the month of September in critical water years.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
"Sacramento River Flows for Temperature Control," page 4 of the Performance Scorecard in Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g., river miles, acres) of the ecosystem improvement that will address this priority?
The spawning distribution of winter-run Chinook Salmon in the mainstem Sacramento River defines the spatial distribution of incubating eggs, alevins, and swim-up fry. Historical spawning data indicate that winter-run spawning occurred from Keswick Dam (RM 302.0) downstream to the site of Red Bluff Diversion Dam (RM 243.0), a distance of 59 river miles. More recent data, however, indicate that the spawning distribution has substantially changed. Aerial redd survey data on winter-run Chinook Salmon in-river spawning from 2003 to 2015 indicate that virtually all spawning occurs from Keswick Dam downstream to Clear Creek (RM 289.3), a short distance of only 12.7 miles (U.S. Bureau of Reclamation 2016, page 7). Over the 12-year monitoring period, 88.7 percent of redds were observed upstream of the State Route 44 Bridge (RM 296.5), only 5.5 miles downstream of Keswick Dam, and 11.3 percent were observed between the State Route 44 Bridge and Clear Creek. No redds were observed downstream of Clear Creek. These data indicate that approximately 12.7 miles (rounded to 13 miles) of the Sacramento River downstream of Keswick Dam are used by winter-run Chinook Salmon for spawning and most spawning is concentrated in the uppermost approximately 5.5 miles (rounded to 6 miles) of the river downstream of Keswick Dam. Therefore, cold water is required for successful egg incubation and alevin rearing in approximately 13 miles of the Sacramento River downstream of Keswick Dam. Water temperatures with and without the Project were modeled and analyzed for this 13-mile river reach. Egg incubation typically occurs between late April and mid-October and alevin rearing in spawning redds occurs between mid-June through November for winter-run Chinook Salmon (Draft EIR/EIS, Appendix 12A, Table 12A-1, page 12A-3; National Marine Fisheries Service 2014, page 15). Incubation of pre-emergent fry (alevins) occurs from mid-June through November. The upper limit of the optimal range for water temperature during egg incubation is 56°F and for pre-emergent fry is 58°F. At higher water temperatures, mortality of eggs and alevins begins to increase (Draft EIR/EIS, Appendix 12D, Table 12D-2, page 12D-5; Vogel 2015, Table 3, page 10). Mean monthly modeled water temperatures in 2030 with and without the Project, using data from an 82-year simulation period, were examined within the mainstem Sacramento River from April through October for different water year types for various locations within the 26-mile reach downstream of Keswick Dam to the Balls Ferry (RM 276), given the optimum water temperature of 56°F for eggs and 58°F for alevins (CH2MHill River Temperature and Modeling Summary Tables and Bar Charts 2030). Note that the water temperature model used was the Upper Sacramento River HEC5 model. The estimated percent reduction in mortality due to thermal benefits of the Project to salmonid eggs and fry are reported and discussed in Sites_A2 Ecosystem Documentation.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
"Sacramento River Flows for Temperature Control," page 4 of the Performance Scorecard in Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB; Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
When during the year will the project provide cold water for salmonid eggs and fry? How is the amount of cold water provided

Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
to salmonid eggs and fry likely to vary with hydrologic conditions (i.e., among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project? If the ecosystem improvement will benefit multiple salmonid species or runs, provide the timing of ecosystem improvements for each species or run separately.
For the mainstem Sacramento River from Keswick Dam to Balls Ferry, the Project in 2030 will reduce the percentage of winter-run Chinook salmon egg and fry mortality in September and October of critically dry water years from 7 to 25 percent. The greatest temperature improvements to increase survival of salmonid eggs and fry will occur in dry and critical years, specifically. Temperature conditions are relatively unchanged in wet and above normal precipitation years.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of ecosystem improvements that address this priority are described and quantified.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB Bell, M. C. 1991. Fisheries handbook of engineering requirements and biological criteria. Third edition. U.S., Army Corps of Engineers, Office of the Chief of Engineers, Fish Passage Development and Evaluation Program, North Pacific Division, Portland Oregon. Carter, K. 2005. The Effects of Temperature on Steelhead Trout, Coho Salmon, and Chinook salmon Biology and Function by Life Stage. Implications for Klamath Basin TMDLs. California Regional Water Quality Control Board, North Coast Region August 2005. Available online at : http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/shasta_river/060707/28appendixaetheeffectsoftemperatureonsteelheadtroutcohosalmonandchinooksalmonbiologyandfunction.pdf CDFW (California Department of Fish and Wildlife). 1998. A Status Review of the Spring-run Chinook salmon (*Oncorhynchus tshawytscha*) in the Sacramento River Drainage. Report to the Fish and Game Commission. Candidate Species Status Report 98-01. June 1998. Available online at: http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/exhibits/nmfs/spprt_docs/nmfs_exh4_dfg_report_98_1.pdf CDFW (California Department of Fish and Wildlife). 2004. Sacramento River Spring-run Chinook Salmon. 2002-2003 Biennial Report, Prepared for the Fish and Game Commission by CDFW Habitat Conservation Division, Native Anadromous Fish and Watershed Branch, June 2004. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3502&inline CDFW (California Department of Fish and Wildlife). 2015. Chinook Salmon Populations of the Upper Sacramento River Basin in 2015. Red Bluff Fisheries Office Technical Report No. 03-2016. Available online at: http://www.calfish.org/ProgramsData/ConservationandManagement/CDFWUpperSacRiverBasinSalmonidMonitoring.aspx CDFW (California Department of Fish and Wildlife). 2017. GrandTab: California Central Valley Chinook Population Database Report. CDFW, Fisheries Branch, Anadromous Resources Assessment, California Central Valley, Sacramento and San Joaquin River Systems, Chinook Salmon Escapement, Hatcheries and Natural Areas. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84381&inline=1 CDFW (California Department of Fish and Wildlife). 2017. Central Valley Steelhead Monitoring. Information about the monitoring can be found at: https://www.wildlife.ca.gov/Drought/Projects/Central-Valley-Steelhead McEwan, D. and T. A. Jackson. 1996. Steelhead Restoration and management Plan for California. State of California, The Resources Agency Department of Fish and Game. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3490 Moyle, P. B. 2002. Salmon and Trout, Salmonidae – Chinook Salmon (*Oncorhynchus tshawytscha*) *in* Inland Fishes of California University of California Press, Berkeley California.
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
After completion of Sites Reservoir, winter-run, spring-run, fall-run, and late fall-run Chinook salmon and steelhead are expected to begin rebuilding with the assumption that the environment stays constant. Measurable objectives include temperatures in the upper reaches of the Sacramento River. Temperature data could be

Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
provided through monitoring programs (*e.g.,* Mainstem Sacramento River Mark-recapture Program, Upper Sacramento River Tributary Escapement Monitoring, Sacramento River Tributary Mark-Recapture Monitoring, Hatchery Broodstock and Angler Harvest Sampling) currently proposed by the California Department of Fish and Wildlife in the Sacramento River as well as existing Delta monitoring programs (*e.g.,* Interagency Ecological Program, Delta Juvenile Fish Monitoring Program, Anadromous Fish Restoration Program). The Sites Project adaptive management program will leverage existing data and collaborate with established monitoring programs, where possible, to secure monitoring results to inform operational decisions. Performance measures will include the development of carryover storage targets, flow release schedules, and real-time adjustment of temperature control points.
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e., the expected timeframe until the improvement is implemented or construction is completed).
Initial benefits are expected in year 2028 (6 years after investment encumbrance for construction) at a lower level than when the Project is complete. Full benefits are expected in 2030 (8 years after investment encumbrance).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
Providing cooler water temperatures for steelhead spawning and improvements in all four runs of Chinook salmon in the Sacramento River could potentially be quantified approximately three to four years later (2033 to 2034) when 2030 cohort return to spawn. Improvement should be readily apparent by 2036 to 2038.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
NA
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
Anticipated duration is 100 years. The magnitude is expected to change over time. The flows that will result in cooler water temperatures were determined using CALSIM modeling and HEC5 temperature model results provided for years 2030 and 2070.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the National Oceanic and Atmospheric Administration (NOAA) Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
The Project will address the following recovery plan action directly: Action SAR 1.4 Develop and implement a river flow management plan for the Sacramento River downstream of Shasta and Keswick dams that considers the effects of climate change and balances beneficial uses with the flow and water temperature needs of winter-run Chinook salmon, spring-run

Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
Chinook salmon, and steelhead. The ecosystem improvement is also consistent with three of the proposed actions listed in the Sacramento Valley Salmon Resiliency Strategy. These actions are: (1) increase productivity by improving spawning and incubation conditions (habitat and water quality); (2) increase productivity by increasing juvenile salmonid survival; and (3) support the full range of juvenile and adult migration conditions to maintain life history diversity. The Project will meet these actions by providing a more suitable temperature regime as well as increased flows and management of intake diversions to benefit salmonids in the Sacramento River below Keswick Dam. The Project will also enhance and improve the quality of Essential Fish Habitat (EFH) for Pacific Coast Salmon (all four runs of Chinook included; however steelhead is not part of EFH).
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will be address by this priority (e.g., river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e., describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB show the area of temperature improvement for the Sacramento River and the American River, respectively.
Explain why this location was selected. How is the location beneficial to the targeted species in the context of local environmental conditions and the target species' needs?
Locations are downstream from dams that have known salmonid populations downstream (Shasta, Oroville, and Folsom). Water from Sites Reservoir can be exchanged to develop more cold water storage behind these reservoirs. Downstream from each of these dams are salmonid species natal habitat.
Is the ecosystem improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
The Project-related ecosystem improvements are adjacent or hydrologically-connected to Turtle Bay Exploration Park East – Bechelli and Anderson River Park.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the spatial extent of the ecosystem improvement, the proximity of the ecosystem improvement to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between the ecosystem improvement and areas already being protected or managed for conservation value.
NA
REV 9: Efficient use of water to achieve multiple ecosystem benefits
How will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.
Water released for this priority will be subsequently contributed to Delta outflow requirements or will be recaptured using the Delevan Intake Pumping Plant and re-stored in Sites Ecosystem Enhancement Storage Account (EESA) storage. The re-stored water could also be marketed to provide funds for operation and maintenance associated with the public benefits.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
NA

Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry.
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
The primary uncertainty is climate change. Results for years 2030 and 2070 were developed using the California Water Commission climate assumptions.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
Draft EIR/EIS – posted at (https://www.sitesproject.org/information/DraftEIR-EIS) Null, S. E., and J. H. Viers. 2013. In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 2

Priority 2: Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
Species Information
What salmonid species are you targeting?
Winter-run Chinook salmon (*Oncorhynchus tshawytscha*; Sacramento River evolutionarily significant unit [ESU]); Spring-run Chinook salmon (*O. tshawytscha*; Central Valley ESU); Fall-run and Late fall-run Chinook salmon (*O. tshawytscha*; Central Valley ESU); steelhead (*O. mykiss*; Central Valley distinct population segment); and resident native rainbow trout (*O. mykiss*).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the flow related habitat needs of each species are described.
Draft EIR/EIS – posted at (https://www.sitesproject.org/information/DraftEIR-EIS) Appendix 12A: Aquatic Species Life Histories: • *Sacramento River Winter-run Chinook salmon*: page numbers: 12A-2 to 12A-9 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-1 Current and historical distribution, and critical habitat designation. • *Central Valley Spring-run Chinook salmon*: page numbers: 12A-9 to 12A-14 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-2 Current and historical distribution, and critical habitat designation. • *Central Valley Fall-run and Late fall-run Chinook salmon*: page numbers: 12A-15 to 12A-18 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-3 Current and historical distribution. • *Central Valley steelhead*: page numbers: 12A-19 to 12A-24 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River; Figure 12A-4 Current and historical distribution, and critical habitat designation. The Draft EIR/EIS has a different without Project conditions and operation than was used for WSIP; however, there is discussion in the Draft EIR/EIS Appendix 12C: Fisheries Impacts Summary concerning thermal and flow-related benefits to fish: Sacramento River Winter-run Chinook salmon, pages 12C-116 to 12C-117; Spring-run Chinook salmon, pages 12C-117 to 12C-118; Fall-run Chinook salmon, pages 12C-118 to 12C-119; Late fall-run Chinook salmon, pages 12C-119 to 12C-120; and Steelhead, pages 12C-120 to 12C-121.
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value? If the ecosystem improvement will benefit multiple salmonid species or runs, provide the magnitude of the ecosystem improvement for each species or run separately.
Water conserved in Shasta Lake would be released to augment flows in the Sacramento River between Keswick Dam and the Red Bluff Pumping Plant. More suitable flow would result in improved conditions for rearing juvenile salmonid species, particularly Fall-run and Late fall-run Chinook salmon. The increase in flows downstream from Keswick Dam (November through February) over the without Project conditions range from an average of 338 cubic feet per second (cfs) under current conditions to 209 cfs in 2030 to 93 cfs in 2070. The greatest benefits occur during dry years (Table A2-4 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB). This flow augmentation was estimated using the WSIP-provided CALSIM model. SALMOD results show principal benefits to Fall and Late-fall run Chinook salmon (Table A2-5 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB). Although not included in the SALMOD model runs, juvenile winter-run Chinook salmon also rear in and migrate through the Sacramento River system between July and March (Draft EIR/EIS: Appendix 12A: Aquatic Species Life Histories: Table 12A-1 Life stage occurrence in the Sacramento River) and would therefore benefit from the flow augmentation associated with the Project.
Additional locations in the application, supporting documentation or attachments (document name, page number, table

Priority 2: Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
number, other) where the magnitude of the ecosystem improvement is described and quantified.
Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB; Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB; Stabilize Sacramento River Fall Flows and Mitigation Measure Fish-1 in the Draft EIR/EIS Appendix 12C: Fisheries Impacts Summary.
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g., river miles, acres) of the ecosystem improvement that will address this priority?
Approximately 59 river-miles (RM) of the Sacramento River from Keswick Dam (RM 302.0) down to Red Bluff (RM 243.0) was modeled for current (2015) and 2030 conditions using SALMOD with and without the Project to identify and predict spatial and temporal improvements to habitat that can be quantified for suitability for in-river rearing and downstream migration of salmonids. The benefit to salmonid redds would occur in the uppermost part of mainstem Sacramento River since greater than 90 percent of spawning (specifically winter-run Chinook Salmon) occurs approximately 10.2 river miles between Keswick Dam and Bonnyview Bridge. There could be additional benefits to salmonids that may occur downstream of Red Bluff but this was not modeled; similarly, benefits are also expected in the Feather River downstream from Oroville Dam but this was also not modeled.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB; Increased Juvenile Production Compared to Without Project (SALMOD 2030)
When during the year will the project provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids? How are flows likely to vary with hydrologic conditions (i.e., among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project? If the ecosystem improvement will benefit multiple salmonid species or runs, provide the timing of ecosystem improvements for each species or run separately.
Improved flows below Keswick Dam are provided from November through March with the greatest increase in November through February. Improved flows and additional water would improve habitat conditions for in-river rearing of Fall- and Late fall-runs of juvenile Chinook salmon and steelhead. Table A2-4 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB shows how flows would vary with water year types.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of ecosystem improvements that address this priority are described and quantified.
Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
Chinook salmon are anadromous species that spend the majority of their adult life in the ocean before returning to their natal streams in 2 to 5 years (typical average of returning adult is 3 years). Monitoring for 12 years is recommended to assess increase in spawning by quantifying increasing trends of the first four consecutive cohorts. Monitoring would begin immediately after completion of Sites Reservoir. Winter-run, Spring-run, Fall-run, and Late fall-run Chinook salmon and steelhead are expected to begin rebuilding with the assumption that the environment stays constant. Measurable objectives include flows delivered and outmigrant numbers. These objectives could be monitored using programs currently proposed by the California Department of Fish and Wildlife (*e.g.,* Mainstem Sacramento River Mark-recapture Program, Upper Sacramento River Tributary Escapement Monitoring, Sacramento River Tributary Mark-Recapture Monitoring, Hatchery Broodstock and Angler Harvest Sampling). Existing Delta monitoring programs (*e.g.,* Interagency Ecological Program, Delta Juvenile Fish Monitoring Program, Anadromous Fish Restoration Program) can also be incorporated in the adaptive management program for the Project. Performance measures include the timing of water releases from Shasta, Oroville, and Folsom to maximize benefits of the Project to salmonid fish species. The Sites Project adaptive management program will leverage existing data and collaborate with established monitoring programs, where possible, to secure monitoring results to

Priority 2: Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
inform operational decisions. Performance measures will include the development flow release schedules and real-time adjustment of flow control points.
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e., the expected timeframe until the improvement is implemented or construction is completed).
Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the Project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
Providing cooler water temperatures for steelhead spawning, improvements in Fall- and Late fall-runs of Chinook salmon in the Sacramento River could potentially be quantified approximately three to four years later (2033 to 2034) when 2030 cohort return to spawn. Improvement should be readily apparent by 2036 to 2038.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
NA
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
Anticipated duration is 100 years. The magnitude of flow augmentation is expected to change over time. The flows were determined using CALSIM modeling. Compared to current conditions, the long-term average flow will increase by 228 thousand acre feet (TAF) by 2030 and by 157 TAF by 2070.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the NOAA Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
The Project will address the following recovery plan action directly: Action SAR 1.4 Develop and implement a river flow management plan for the Sacramento River downstream of Shasta and Keswick dams that considers the effects of climate change and balances beneficial uses with the flow and water temperature needs of winter-run Chinook salmon, spring-run Chinook salmon, and steelhead. The ecosystem improvement is also consistent with three of the proposed actions listed in the Sacramento Valley Salmon Resiliency Strategy. These actions are: (1) increase productivity by improving spawning and incubation conditions (habitat and water quality); (2) increase productivity by increasing juvenile salmonid survival; and (3) support the full range of juvenile and adult migration conditions to maintain life history diversity. The Project will meet these actions by providing increased flows

Priority 2: Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
and management of intake diversions to benefit salmonids in the Sacramento River below Keswick Dam. The Project will also enhance and improve the quality of Essential Fish Habitat (EFH) for Pacific Coast Salmon (all four runs of Chinook included; however steelhead is not part of EFH).
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB NMFS. 2014. California Central Valley Salmon & Steelhead Recovery Plan. Available online at: http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/california_central_valley/california_central_valley_recovery_plan_documents.html 58 FR 33212. Endangered and Threatened Species: Winter-run Chinook Salmon. Final Rule, Vol. 58, No. 114. Federal Register 33212. Wednesday, June 16, 1993, Rules and Regulations. Available online at: http://ecos.fws.gov/docs/federal_register/fr2311.pdf 70 FR 52488. Endangered and Threatened Species: Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California. Final Rule, Vol. 70, No. 170. Federal Register 52488. Friday, September 2, 2005, Rules and Regulations. Available online at: http://www.fws.gov/carlsbad/SpeciesStatusList/CH/20050902_fch_SCSH.pdf
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g. river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e. describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB show the area of temperature improvement for the Sacramento River and the American River, respectively.
Explain why this location was selected. How is the location beneficial to the targeted species in the context of local environmental conditions and the target species' needs?
Locations are downstream from dams that have known salmonid populations downstream (Shasta, Oroville, and Folsom). Water from Sites Reservoir can be exchanged to develop more storage behind these reservoirs. Downstream from each of these dams are salmonid species natal habitat.
Is the ecosystem improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
Rivers below Dams (Keswick, Oroville, Folsom) are managed to maintain habitat for fish populations. Water from the Sites Project can be exchanged with water in the reservoir to enhance the reservoir operators' ability to provide quality habitat. Location of the ecosystem improvement are adjacent to conservation areas or are hydrologically connected to Sacramento River Wildlife Area, Nimbus and American River Hatcheries, American River Parkway, and Colusa-Sacramento River State Recreation Area.
Are the flows provided physically accessible by the targeted species in all year types? If not, explain barriers that may exist between the targeted species and ecosystem improvements.
Flows would be physically accessible in all water year types (greater in above normal, below normal, and dry years). There would be no barriers between the targeted species and ecosystem improvements.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the spatial extent of the ecosystem improvement, the proximity of the ecosystem improvement to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between the ecosystem improvement and areas already being protected or managed for conservation value.
Draft EIR/EIS Appendix 12A; Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS

Priority 2: Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids.
TAB
REV 9: Efficient use of water to achieve multiple ecosystem benefits
How will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.
Water released for this purpose will be subsequently released as Delta outflow or be recaptured using the Delevan Intake Pumping Plant and stored in Sites Ecosystem Enhancement Storage Account (EESA) storage. It could also be marketed to cover long-term operations and maintenance costs associated with public benefits.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
NA
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
The primary uncertainty is climate change. Results for years 2030 and 2070 were developed using the California Water Commission climate assumptions.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
Draft EIR/EIS – posted at (https://www.sitesproject.org/information/DraftEIR-EIS) Null, S. E., and J. H. Viers. 2013. In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 3

Priority 3: Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat
Species Information
What salmonid species are you targeting?
Winter-run Chinook salmon (*O. tshawytscha*; Sacramento River evolutionarily significant unit [ESU]); Spring-run Chinook salmon (*O. tshawytscha*; Central Valley ESU); Fall-run and Late fall-run Chinook salmon (*O. tshawytscha*; Central Valley ESU); steelhead (*O. mykiss*; Central Valley distinct population segment); and resident native rainbow trout (*O. mykiss*).
Exact location (document name, page number, table number, other) where the flow and ramping rates needed for this species are described.
Draft EIR/EIS (https://www.sitesproject.org/information/DraftEIR-EIS) Appendix 12A: Aquatic Species Life Histories: • *Sacramento River Winter-run Chinook salmon*: page numbers: 12A-2 to 12A-9 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-1 Current and historical distribution, and critical habitat designation. • *Central Valley Spring-run Chinook salmon*: page numbers: 12A-9 to 12A-14 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-2 Current and historical distribution, and critical habitat designation. • *Central Valley Fall-run and Late fall-run Chinook salmon*: page numbers: 12A-15 to 12A-18 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-3 Current and historical distribution. • *Central Valley steelhead*: page numbers: 12A-19 to 12A-24 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River; Figure 12A-4 Current and historical distribution, and critical habitat designation. The Draft EIR/EIS has a different without Project condition and operation than was used for Water Storage Investment Program (WSIP); however, there is discussion in the Draft EIR/EIS Appendix 12C: Fisheries Impacts Summary concerning thermal and flow-related benefits to fish: Sacramento River Winter-run Chinook salmon, pages 12C-116 to 12C-117; Spring-run Chinook salmon, pages 12C-117 to 12C-118; Fall-run Chinook salmon, pages 12C-118 to 12C-119; Late fall-run Chinook salmon, pages 12C-119 to 12C-120; and Steelhead, pages 12C-120 to 12C-121.
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value? If the ecosystem improvement will benefit multiple salmonid species or runs, provide the magnitude of the ecosystem improvement for each species or run separately.
Flow releases of coldwater stored in Shasta Reservoir would provide an overall benefit to Chinook salmon eggs in redds and juveniles rearing in side channel habitats in the Sacramento River between Keswick Dam and Battle Creek. These increased flow releases will be beneficial during egg incubation by preventing dewatering of redds and juvenile stranding while rearing in side channel habitats. Water conserved in Shasta Lake (by exchange for deliveries made from water stored in Sites Reservoir) would be released to augment flows in the Sacramento River between Keswick Dam and the Red Bluff Pumping Plant. More suitable flow would result in improved conditions for rearing juvenile salmonid species, particularly Fall-run and Late fall-run Chinook salmon. The increase in flows downstream from Keswick Dam (November through February) over the without Project conditions range from an average of 338 cubic feet per second (cfs) under current conditions to 209 cfs in 2030 to 93 cfs in 2070. The greatest benefits occur during dry years (Table A2-4 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB). This flow augmentation was estimated using the WSIP provided CALSIM model. SALMOD results show principal benefits to Fall and Late-fall run Chinook salmon (Table A2-5 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB).

Priority 3: Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat
Although not included in the SALMOD model runs, juvenile winter-run Chinook salmon also rear in and migrate through the Sacramento River system between July and March (Draft EIR/EIS: Appendix 12A: Aquatic Species Life Histories: Table 12A-1 Life stage occurrence in the Sacramento River) and would therefore benefit from the flow augmentation associated with the Project. Similar to Shasta Reservoir operations, water conserved in Lake Oroville and Folsom Lake by exchange for deliveries from Sites Reservoir will also be released to benefit side channel habitat conditions for juvenile salmon in the Feather and American rivers.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g. river miles, acres) of the ecosystem improvement that will address this priority?
Approximately 59 river-miles (RM) of the Sacramento River from Keswick Dam (RM 302.0) down to Red Bluff (RM 243.0) was modeled for current (2015) and 2030 conditions using SALMOD with and without the Project to identify and predict spatial and temporal improvements to habitat that can be quantified for suitability for in-river rearing and downstream migration of salmonids. The benefit to salmonid redds would occur in the uppermost part of mainstem Sacramento River since greater than 90 percent of spawning (specifically winter-run Chinook Salmon) occurs approximately 10.2 river miles between Keswick Dam and Bonnyview Bridge. There could potentially be additional benefits to salmonids that may occur downstream of Red Bluff but this was not modeled; similarly, benefits are also expected in the Feather River downstream from Oroville Dam but this was also not modeled.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
When during the year will the project maintain flows and appropriate ramping rates to minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat? How are flows and ramping rates likely to vary with hydrological conditions (i.e., among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project? If the ecosystem improvement will benefit multiple salmonid species or runs, provide the timing of ecosystem improvements for each species or run separately.
Improved flows below Keswick Dam are provided from November through March with the greatest increase in November through February. The average flows for dry years are higher than the long-term average, with increases of 9% under current conditions and 11.9% in 2030. These improved flows and additional water in 2030 would provide the greatest value by preventing redd dewatering during egg incubation of Fall-run, Late-fall-run, and Spring-run Chinook salmon and steelhead; and prevention of side channel ponding that could potentially strand all four runs of juvenile Chinook salmon and steelhead.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of ecosystem improvements that address this priority are described and quantified.
Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
Chinook salmon are anadromous species that spend the majority of their adult life in the ocean before returning to their natal streams in 2 to 5 years (typical average of returning adult is 3 years). Monitoring for 12 years is recommended to assess increase in spawning by quantifying increasing trends of the first four consecutive cohorts. Monitoring would begin immediately after completion of Sites Reservoir. Winter-run, Spring-run, Fall-run, and Late fall-run Chinook salmon and

Priority 3: Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat
steelhead are expected to begin rebuilding with the assumption that the environment stays constant. Measurable objectives include flows delivered in the Upper Reaches of the Sacramento River. This objective could be monitored using programs currently proposed by the California Department of Fish and Wildlife (*e.g.,* Mainstem Sacramento River Mark-recapture Program, Upper Sacramento River Tributary Escapement Monitoring, Sacramento River Tributary Mark-Recapture Monitoring, Hatchery Broodstock and Angler Harvest Sampling). Existing Delta monitoring programs (*e.g.,* Interagency Ecological Program, Delta Juvenile Fish Monitoring Program, Anadromous Fish Restoration Program) can also be incorporated in the adaptive management program for the Project. Performance measures include the timing water releases from Shasta, Oroville, and Folsom to maximize benefits of the Project to salmonid fish species.
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e. the expected timeframe until the improvement is implemented or construction is completed).
Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the Project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
Ecosystem improvement would occur after the first full spawning season (2030). The improvement in returning adult population of all four runs of Chinook salmon and steelhead would be seen approximately three to four years later (2033 to 2034) when 2030 cohort return to spawn.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
NA
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
Anticipated duration is 100 years. The magnitude of flow augmentation is expected to change over time. The flows were determined using CALSIM modeling. Compared to current conditions, the long-term average flow will increase by 228 thousand acre feet (TAF) by 2030 and by 157 TAF by 2070.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the NOAA Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
The Project will address the following recovery plan action directly: Action SAR 1.4 Develop and implement a river flow

Priority 3: Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat
management plan for the Sacramento River downstream of Shasta and Keswick dams that considers the effects of climate change and balances beneficial uses with the flow and water temperature needs of winter-run Chinook salmon, spring-run Chinook salmon, and steelhead. The ecosystem improvement is also consistent with three of the proposed actions listed in the Sacramento Valley Salmon Resiliency Strategy. These actions are: (1) increase productivity by improving spawning and incubation conditions (habitat and water quality); (2) increase productivity by increasing juvenile salmonid survival; and (3) support the full range of juvenile and adult migration conditions to maintain life history diversity. The Project will meet these actions by providing increased flows and management of intake diversions to benefit salmonids in the Sacramento River below Keswick Dam. The Project will also enhance and improve the quality of Essential Fish Habitat (EFH) for Pacific Coast Salmon (all four runs of Chinook included; however steelhead is not part of EFH).
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB NMFS. 2014a. California Central Valley Salmon & Steelhead Recovery Plan. Available online at: http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/california_central_valley/california_central_valley_recovery_plan_documents.html 58 FR 33212. Endangered and Threatened Species: Winter-run Chinook Salmon. Final Rule, Vol. 58, No. 114. Federal Register 33212. Wednesday, June 16, 1993, Rules and Regulations. Available online at: http://ecos.fws.gov/docs/federal_register/fr2311.pdf 70 FR 52488. Endangered and Threatened Species: Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California. Final Rule, Vol. 70, No. 170. Federal Register 52488. Friday, September 2, 2005, Rules and Regulations. Available online at: http://www.fws.gov/carlsbad/SpeciesStatusList/CH/20050902_fch_SCSH.pdf
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g. river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e. describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB show the area of temperature improvement for the Sacramento River and the American River, respectively.
Explain why this location was selected. How is the location beneficial to the targeted species in the context of local environmental conditions and the target species' needs?
Locations are downstream from dams that have known salmonid populations downstream (Shasta, Oroville, and Folsom). Water from Sites Reservoir can be exchanged to develop more storage behind these reservoirs. Downstream from each of these dams are salmonid species natal habitat.
Is the ecosystem improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
Rivers below Dams (Keswick, Oroville, Folsom) are managed to maintain habitat for fish populations. Water from the Sites Project can be exchanged with water in the reservoir to enhance the reservoir operators' ability to provide quality habitat. Locations of the ecosystem improvements are adjacent to conservation areas or are hydrologically connected to Sacramento River Wildlife Area, Nimbus and American River Hatcheries, and Colusa-Sacramento River State Recreation Area.
Are the flows provided physically accessible by the targeted species in all year types? If not, explain barriers that may exist between the targeted species and ecosystem improvements.
The augmented flows provided by the Project would be physically accessible in all water year types (greater in above normal, below normal, and dry years). There would be no barriers between the targeted species and ecosystem improvements.

Priority 3: Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the spatial extent of the ecosystem improvement, the proximity of the ecosystem improvement to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between the ecosystem improvement and areas already being protected or managed for conservation value.
Draft EIR/EIS Appendix 12A; Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 9: Efficient use of water to achieve multiple ecosystem benefits
How will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.
Water released for this purpose will be subsequently released as Delta outflow or will be recaptured using the Delevan Intake Pumping and stored in Ecosystem Enhancement Storage Account (EESA) storage in Sites. It could also be marketed to cover long-term operations and maintenance costs associated with public benefits.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
NA
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
The primary uncertainty is climate change. Results for years 2030 and 2070 were developed using the California Water Commission climate assumptions.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
Draft EIR/EIS – posted at (https://www.sitesproject.org/information/DraftEIR-EIS) Null, S. E., and J. H. Viers. 2013. In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 4

Priority 4: Improve ecosystem water quality
Constituent Information
What ecosystem water quality constituent(s) are you targeting?
Temperature: A physical water quality parameter important to survival of salmonid species. See Sites_A1 Water Quality Priority 1 under the PHYSICAL PUBLIC BENEFITS TAB for additional information on water quality targets for temperature.
Summarize how the proposed actions will improve the ecosystem water quality in relation to the target constituent.
The proposed action will provide more suitable temperatures during rearing and spawning months for targeted fish species in the mainstem of the Sacramento River below Keswick Dam by increasing storage and preserving the coldwater pool at Shasta Lake. For a summary of the benefits to salmonid eggs and fry due to thermal improvements of this project, see Table A2-3 in Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB.
Does the proposed ecosystem water quality improvement benefit habitats or species life stages? How?
The proposed ecosystem water quality improvement (*i.e.,* temperature) increases the quality of habitat for winter-run Chinook Salmon spawning adults to yield an increased percentage of egg and fry survival below Keswick Dam as described in Ecosystem Priority 1.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the chemistry, toxicity, and negative effects constituents are described (i.e. Material Safety Data Sheets).
EIR/EIS Appendix 12C: Fisheries Impact Summary; Figures A2-1 and A2-2 in Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB; Sites_A1 Water Quality Priority 1 under the PHYSICAL PUBLIC BENEFITS TAB; Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value? If the project intends to benefit multiple constituents, the magnitude of the change in each constituent needs to be provided.
Temperature improvements are the result of the conservation of water (primarily in Shasta Lake). Under current conditions, end-of-September carryover storage in Shasta is increased by 4.7% on average and up to 16.3% in critical years. Temperature improvements were estimated using the Upper Sacramento River HEC5Q model and the American River CE QUAL-W2 Model (see Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB). The project would increase coldwater pool conservation in Shasta Lake, Lake Oroville, and Folsom Lake and improve temperatures in the Sacramento and American Rivers during certain months at specific compliance points, particularly in Below Normal, Dry, and Critical water years. The areas of temperature improvement for these waterways are shown on Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB. Approximately 59 river miles of the Sacramento River would be improved with the implementation of the Sites Reservoir Project downstream from Keswick Dam (River Mile 302) to the Red Bluff Pumping Plant (River Mile 243). Figure A2-1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB shows the improvement area for the Sacramento River. Sites Project operations emphasize providing Sacramento River cold water releases during the months of July through September when it's most difficult to achieve temperatures targets. Temperature modeling results show improvement for current conditions and 2030 (see Table A2-1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB). The temperature reduction with the Project at Bend Bridge is 0.6^{o}F in July through September for critical years) in 2030, but improves to 1.4^{o}F in 2070. The reason these results fluctuate is more due to an increase in Shasta storage assumed in the 2030 WSIP model than to the effects of climate change (there is no indication that Reclamation will actually operate Shasta differently in 2030). This suggests that the temperature reduction benefits are relatively sustainable in this portion of the Sacramento River. Fall-run, late fall-run, and winter-run Chinook salmon would greatly benefit from more suitable water temperatures in the

Priority 4: Improve ecosystem water quality
Sacramento River below Keswick Dam and at Bonnyview Bridge specifically during egg incubation period in the month of September in critical years.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g. river miles, acres) of the ecosystem improvement that will address this priority?
The spawning distribution of winter-run Chinook Salmon in the mainstem Sacramento River defines the spatial distribution of incubating eggs, alevins, and swim-up fry. Historical spawning data indicate that winter-run spawning occurred from Keswick Dam (River Mile [RM] 302.0) downstream to the site of Red Bluff Diversion Dam (RM 243.0), a distance of 59 miles. More recent data, however, indicate that the spawning distribution has substantially changed. Aerial redd survey data on winter-run Chinook Salmon in-river spawning from 2003 to 2015 indicate that virtually all spawning occurs from Keswick Dam downstream to Clear Creek (RM 289.3), a short distance of only 12.7 miles (U.S. Bureau of Reclamation 2016, page 7). Over the 12-year monitoring period 88.7 percent of redds were observed upstream of the State Route 44 Bridge (RM 296.5), only 5.5 miles downstream of Keswick Dam, and 11.3 percent were observed between the State Route 44 Bridge and Clear Creek. No redds were observed downstream of Clear Creek. These data indicate that approximately 12.7 miles (rounded to 13 miles) of the Sacramento River downstream of Keswick Dam are used by winter-run for spawning and most spawning is concentrated in the uppermost approximately 5.5 miles (rounded to 6 miles) of the river downstream of Keswick Dam. Therefore, cold water is required for successful egg incubation and alevin rearing in approximately 13 miles of the Sacramento River downstream of Keswick Dam. Water temperatures with and without the proposed project can be modeled and analyzed for this 13-mile river reach. Egg incubation typically occurs between late April and mid-October and alevin rearing in spawning redds occurs between mid-June through November for winter run (Draft EIR/EIS, Appendix 12A, Table 12A-1, page 12A-3; National Marine Fisheries Service 2014, page 15). Incubation of pre-emergent fry (alevins) occurs from mid-June through November. The upper limit of the optimal range for water temperature during egg incubation is 56°F and for pre-emergent fry is 58°F. At higher water temperatures mortality of eggs and alevins begins to increase (Draft EIR/EIS, Appendix 12D, Table 12D-2, page 12D-5; Vogel 2015, Table 3, page 10). Mean monthly modeled water temperatures in 2030 with and without the project, using data from an 82-year simulation period, were examined within the mainstem Sacramento River from April through November for different water year types for various locations within the 26-mile reach downstream of Keswick Dam to the Balls Ferry (RM 276), given the optimum water temperature of 56°F for eggs and 58°F for alevins (CH2MHill River Temperature and Modeling Summary Tables and Bar Charts 2030).
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB show the area of temperature improvement for the Sacramento River and the American River, respectively and River Temperature Modeling Summary Tables and Bar Charts
When during the year will ecosystem water quality improvements be provided? How is ecosystem water quality likely to vary with hydrologic conditions (i.e. among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project? If the project intends to benefit multiple constituents, provide the timing of water quality improvements for each constituent separately.
For the mainstem Sacramento River from Keswick Dam to Clear Creek, the proposed project in 2030 will reduce the percentage of winter-run Chinook salmon egg and fry mortality in September and October of critically dry water years from 7 to 25 percent depending on location.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of ecosystem water quality improvements are documented.
EIR/EIS Appendix 12C: Fisheries Impact Summary

Priority 4: Improve ecosystem water quality
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB Bell, M.C. 1991. Fisheries handbook of engineering requirements and biological criteria. Third edition. U.S., Army Corps of Engineers, Office of the Chief of Engineers, Fish Passage Development and Evaluation Program, North Pacific Division, Portland Oregon. Carter, K. 2005. The Effects of Temperature on Steelhead Trout, Coho Salmon, and Chinook salmon Biology and Function by Life Stage. Implications for Klamath Basin TMDLs. California Regional Water Quality Control Board, North Coast Region August 2005. Available online at : http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/shasta_river/060707/28appendixaetheeffectsoftemperatureonsteelheadtroutcohosalmonandchinooksalmonbiologyandfunction.pdf CDFW (California Department of Fish and Wildlife). 1998. A Status Review of the Spring-run Chinook Salmon (*Oncorhynchus tshawytscha*) in the Sacramento River Drainage. Report to the Fish and Game Commission. Candidate Species Status Report 98-01. June 1998. Available online at: http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/exhibits/nmfs/spprt_docs/nmfs_exh4_dfg_report_98_1.pdf CDFW (California Department of Fish and Wildlife). 2004. Sacramento River Spring-run Chinook Salmon. 2002-2003 Biennial Report, Prepared for the Fish and Game Commission by CDFW Habitat Conservation Division, Native Anadromous Fish and Watershed Branch, June 2004. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3502&inline CDFW (California Department of Fish and Wildlife). 2015. Chinook Salmon Populations of the Upper Sacramento River Basin in 2015. Red Bluff Fisheries Office Technical Report No. 03-2016. Available online at: http://www.calfish.org/ProgramsData/ConservationandManagement/CDFWUpperSacRiverBasinSalmonidMonitoring.aspx CDFW (California Department of Fish and Wildlife). 2017. GrandTab: California Central Valley Chinook Population Database Report. CDFW, Fisheries Branch, Anadromous Resources Assessment, California Central Valley, Sacramento and San Joaquin River Systems, Chinook Salmon Escapement, Hatcheries and Natural Areas. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84381&inline=1 CDFW (California Department of Fish and Wildlife). 2017. Central Valley Steelhead Monitoring. Information about the monitoring can be found at: https://www.wildlife.ca.gov/Drought/Projects/Central-Valley-Steelhead McEwan, D. and T.A. Jackson. 1996. Steelhead Restoration and management Plan for California. State of California, The Resources Agency Department of Fish and Game. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3490 Moyle, P.B. 2002. Salmon and Trout, Salmonidae – Chinook Salmon (*Oncorhynchus tshawytscha*) *in* Inland Fishes of California University of California Press, Berkeley California.
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
Since water temperatures have direct effects on salmon egg and fry survival; temperature monitoring between Keswick and Red Bluff would begin immediately after completion of Sites Reservoir as a measurable objective and performance measure. After completion of Sites Reservoir, winter-run, spring-run, fall-run, and late fall-run Chinook salmon; and steelhead are expected to begin rebuilding with the assumption that the environment stays constant. Other measurable objectives include temperatures delivered and the use of information developed by the California Department of Fish and Wildlife monitoring programs in the Sacramento River (*e.g.,* Mainstem Sacramento River Mark-recapture Program, Upper Sacramento River Tributary Escapement Monitoring, Sacramento River Tributary Mark-Recapture Monitoring, Hatchery Broodstock and Angler Harvest Sampling). Existing Delta monitoring programs (*e.g.,* Interagency Ecological Program, Delta Juvenile Fish Monitoring Program, Anadromous Fish Restoration Program). The Sites Project adaptive management program will leverage existing data and collaborate with established monitoring programs, where possible, to secure monitoring results to inform operational decisions. Performance measures will include the development of carryover storage targets, flow release schedules, and real-time adjustment of temperature control points.
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem

Priority 4: Improve ecosystem water quality
improvement is completed (i.e. the expected timeframe until the improvement is implemented or construction is completed).
Initial benefits are expected in year 2028 (6 years after investment encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after investment encumbrance).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
NA
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
NA
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
Anticipated duration is 100 years. The magnitude is expected to change over time. The flows were determined using CALSIM modeling and results are provided for years 2030 and 2070.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the NOAA Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
It addresses the following recovery plan action directly: Action SAR 1.4 Develop and implement a river flow management plan for the Sacramento River downstream of Shasta and Keswick dams that considers the effects of climate change and balances beneficial uses with the flow and water temperature needs of winter-run Chinook salmon, spring-run Chinook salmon, and steelhead. The ecosystem improvement is also consistent with three of the proposed actions listed in the Sacramento Valley Salmon Resiliency Strategy. These actions are: (1) increase productivity by improving spawning and incubation conditions (habitat and water quality); (2) increase productivity by increasing juvenile salmonid survival; and (3) support the full range of juvenile and adult migration conditions to maintain life history diversity. The project will meet these actions by providing increased flows and management of intake diversions to benefit salmonids in the Sacramento River below Keswick Dam. The project will also enhance and improve the quality of Essential Fish Habitat (EFH) for Pacific Coast Salmon (all four runs of Chinook included; however steelhead is not part of EFH).
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB

Priority 4: Improve ecosystem water quality
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g. river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e. describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB show the area of temperature improvement for the Sacramento River and the American River, respectively.
Explain why this location was selected in the context of local environmental conditions and the target constituent(s). Why was this location selected over other potential locations?
Locations are downstream from dams that have known salmonid populations downstream (Shasta, Oroville, and Folsom). Water from Sites Reservoir can be exchanged to develop more storage behind these reservoirs. Downstream from each of these dams are salmonid species natal habitat.
Is the ecosystem water quality improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem water quality improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
The Project-related ecosystem improvements are adjacent or hydrologically-connected to Turtle Bay Exploration Park East – Bechelli and Anderson River Park. Location of the ecosystem improvement are adjacent to conservation areas or are hydrologically connected to Sacramento River Wildlife Area, Nimbus and American River Hatcheries, American River Parkway Effie Yeaw Nature Center, and Colusa-Sacramento River State Recreation Area.
Additional locations in the application (document name, page number, figure name or number, other) that describe the extent of the ecosystem water quality improvements, the proximity of claimed improvements to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between claimed improvements and areas already being protected or managed for conservation value.
NA
REV 9: Efficient use of water to achieve multiple ecosystem benefits
If applicable, how will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.
Water released for this purpose will be subsequently released out the Delta or will be recaptured using the Delevan Intake Pumping Plant and stored in Sites EESA storage. It could also be marketed to provide funds for operation and maintenance associated with the public benefits.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
Ecosystem Priority 1 in Sites_A2_Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
The primary uncertainty is climate change. Results for years 2030 and 2070 using the California Water Commission climate assumptions.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and

Priority 4: Improve ecosystem water quality
operation.
Draft EIR/EIS – posted at (https://www.sitesproject.org/information/DraftEIR-EIS) Null, S. E., and J. H. Viers. 2013. In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 5

Priority 5: Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage
Species Information
What anadromous fish species are you targeting?
Winter-run Chinook salmon (*O. tshawytscha*; Sacramento River evolutionarily significant unit [ESU]); Spring-run Chinook salmon (*O. tshawytscha*; Central Valley ESU); Fall-run and Late fall-run Chinook salmon (*O. tshawytscha*; Central Valley ESU); steelhead (*O. mykiss*; Central Valley distinct population segment); resident native rainbow trout (*O. mykiss*), and other California native fish species.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the flow and dissolved oxygen needs of this species are described.
Draft EIR/EIS (http://www.sitesproject.org/information/DraftEIR-EIS) Appendix 12A: Aquatic Species Life Histories: • *Sacramento River Winter-run Chinook salmon*: page numbers: 12A-2 to 12A-9 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-1 Current and historical distribution, and critical habitat designation. • *Central Valley Spring-run Chinook salmon*: page numbers: 12A-9 to 12A-14 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-2 Current and historical distribution, and critical habitat designation. • *Central Valley Fall-run and Late fall-run Chinook salmon*: page numbers: 12A-15 to 12A-18 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River and Table 12A-2 Migration and timing at monitoring stations on the Sacramento River; Figure 12A-3 Current and historical distribution. • *Central Valley steelhead*: page numbers: 12A-19 to 12A-24 Status, adult migration and holding, spawning and egg incubation, juvenile rearing and migration, and Delta and estuarine rearing; Table 12A-1 Life stage occurrence in the Sacramento River; Figure 12A-4 Current and historical distribution, and critical habitat designation. The Draft EIR/EIS has a different without Project conditions and operation than was used for WSIP; however, there is discussion in the Draft EIR/EIS Appendix 12C: Fisheries Impacts Summary concerning thermal and flow-related benefits to fish: Sacramento River Winter-run Chinook salmon, pages 12C-116 to 12C-117; Spring-run Chinook salmon, pages 12C-117 to 12C-118; Fall-run Chinook salmon, pages 12C-118 to 12C-119; Late fall-run Chinook salmon, pages 12C-119 to 12C-120; and Steelhead, pages 12C-120 to 12C-121.
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value? If the project will benefit multiple anadromous fish species, the magnitude of the ecosystem improvement for each species needs to be provided.
Temperature improvements were estimated using Upper Sacramento River HEC5Q model and the American RiverCE QUAL-W2 Model, Long-term average temperatures generally dropped from 0.1°F to 0.5°F between Keswick Dam and Bend Bridge. The proposed project's improved flow management will promote more suitable water temperatures and provide an increased dissolved oxygen levels for rearing juvenile Winter-run, Fall-run, and Late fall-run Chinook salmon in the mainstem of the Sacramento River below Keswick Dam by increasing the coldwater pool at Shasta Lake.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB

Priority 5: Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g., river miles, acres) of the ecosystem improvement that will address this priority?
An approximately 59 river-miles (RM) of the Sacramento River from Keswick Dam (RM 302.0) down to Red Bluff (RM 243.0) was modeled for current (2015) and 2030 conditions using SALMOD with and without the project to identify and predict spatial and temporal improvements to habitat that can be quantified for suitability for in-river rearing and downstream migration of salmonids. The benefit to salmonid redds would occur in the uppermost part of mainstem Sacramento River since greater than 90 percent of spawning (specifically winter-run Chinook Salmon) occurs approximately 10.2 river miles between Keswick Dam and Bonnyview Bridge. There could potentially be additional benefits to salmonids that may occur downstream of Red Bluff but this was not modeled; similarly, benefits are also expected in the Feather River downstream from Oroville Dam but this was also not modeled.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Ecosystem Priority 1 and 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
When during the year will flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage be provided? How are dissolved oxygen and water temperature likely to vary with hydrologic conditions (i.e. among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project? If the ecosystem improvement will benefit multiple anadromous species, provide the timing of ecosystem improvements for each species separately.
Chemical composition of water varies greatly depending on season, time of day, location and depth (Dowling and Wiley 1986). Dissolved oxygen in streams is closely correlated with temperature fluctuations and varying flow conditions. Studies of large rivers and small streams show that high temperature and slow flowing water holds less oxygen. Based on results of these studies, the Project's improved flow management will promote more suitable water temperatures and provide increased dissolved oxygen levels for rearing juvenile Winter-run, Fall-run, and Late fall-run Chinook salmon in the mainstem of the Sacramento River below Keswick Dam by releasing the increased coldwater from Shasta Lake in the mainstem Sacramento River used by spawning winter-run Chinook Salmon from Keswick Dam to Clear Creek. By 2030, the Project will increase flows from October through March with the greatest increase in the fall. The average flows for dry years are higher than the long-term average, with increases of 9% under current conditions and 11.9% in 2030. Dowling, D.C. and M.J. Wiley. 1986. The effects of dissolved oxygen, temperature, and low stream flow on fishes: A literature review. Aquatic Biological Section Technical Report. Springfield City Water, Light, and Power Company.
Additional locations in the application (document name, page number, table number, other) where the timing of flow releases associated with this benefit are documented.
Draft EIR/EIS Appendix 12C: Fisheries Impacts Summary
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
After completion of Sites Reservoir, Winter-run, Spring-run, Fall-run, and Late fall-run Chinook salmon and steelhead are expected to begin rebuilding with the assumption that the environment stays constant. Measurable objectives include reduced temperatures, increased dissolved oxygen levels, and increased numbers of eggs and rearing juveniles in the Upper Reaches of the Sacramento River. Temperature and dissolved oxygen level data from monitoring programs (*e.g.,* Mainstem Sacramento River Mark-recapture Program, Upper Sacramento River Tributary Escapement Monitoring, Sacramento River Tributary Mark-Recapture Monitoring, Hatchery Broodstock and Angler Harvest Sampling) currently proposed by the California Department of Fish and Wildlife in the Sacramento River as well as existing Delta monitoring programs (*e.g.,* Interagency Ecological Program, Delta Juvenile Fish Monitoring Program, Anadromous Fish Restoration Program) can also be incorporated in the adaptive management program for the Project. Performance measures include the timing water releases from Shasta, Oroville, and Folsom to maximize benefits of the project to salmonid fish species.

Priority 5: Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e. the expected timeframe until the improvement is implemented or construction is completed).
Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
After the first full spawning season (2030), a quantifiable improvement in the Sacramento River from Keswick to Battle Creek would benefit all four runs of Chinook salmon and steelhead approximately three to four years later (2033 to 2034) when the 2030 cohort returns to spawn.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
NA
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
Anticipated duration is 100 years. The magnitude of flow augmentation is expected to change over time. The flows were determined using CALSIM modeling and Upper Sacramento River HEC5 temperature model. Compared to current conditions, the long-term average flow will increase by 228 thousand acre feet (TAF) by 2030 and by 157 TAF by 2070.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the NOAA Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
The Project will address the following recovery plan action directly: Action SAR 1.4 Develop and implement a river flow management plan for the Sacramento River downstream of Shasta and Keswick dams that considers the effects of climate change and balances beneficial uses with the flow and water temperature needs of winter-run Chinook salmon, spring-run Chinook salmon, and steelhead. The ecosystem improvement is also consistent with three of the proposed actions listed in the Sacramento Valley Salmon Resiliency Strategy. These actions are: • increase productivity by improving spawning and incubation conditions (habitat and water quality) • increase productivity by increasing juvenile salmonid survival • support the full range of juvenile and adult migration conditions to maintain life history diversity.

Priority 5: Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage
The Project will meet these actions by providing increased flows and management of intake diversions to benefit salmonids in the Sacramento River below Keswick Dam. The Project will also enhance and improve the quality of Essential Fish Habitat (EFH) for Pacific Coast Salmon (all four runs of Chinook).
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB NMFS. 2014a. California Central Valley Salmon & Steelhead Recovery Plan. Available online at: http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/california_central_valley/california_central_valley_recovery_plan_documents.html 58 FR 33212. Endangered and Threatened Species: Winter-run Chinook Salmon. Final Rule, Vol. 58, No. 114. Federal Register 33212. Wednesday, June 16, 1993, Rules and Regulations. Available online at: http://ecos.fws.gov/docs/federal_register/fr2311.pdf 70 FR 52488. Endangered and Threatened Species: Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California. Final Rule, Vol. 70, No. 170. Federal Register 52488. Friday, September 2, 2005, Rules and Regulations. Available online at: http://www.fws.gov/carlsbad/SpeciesStatusList/CH/20050902_fch_SCSH.pdf
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g. river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e. describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
Figures A2-1 and A2-2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB show the area of temperature improvement for the Sacramento River and the American River, respectively.
Explain why this location was selected. How is the location beneficial to the targeted species in the context of local environmental conditions and the target species' needs?
Locations are downstream from dams that have known salmonid populations downstream (Shasta, Oroville, and Folsom). Water from Sites Reservoir can be exchanged to develop more storage behind these reservoirs. Downstream from each of these dams are salmonid species natal habitat.
Does the improvement location occur adjacent to or near any other areas already being protected or managed for conservation values? Explain the proximity of improvements to other areas already being protected or managed for conservation values and the distance between them and your claimed improvements. Explain any hydrologic connectivity that may occur between these locations (if any).
Location of the ecosystem improvement are adjacent to conservation areas or are hydrologically connected to Sacramento River Wildlife Area, Nimbus and American River Hatcheries, American River Parkway, Stone Lakes National Wildlife Refuge, Vic Fazio Yolo Wildlife Area, Bidwell-Sacramento River State Park, Colusa-Sacramento River State Recreation Area, Brannan Island State Recreation Area and Delta Meadows.
Will flows provided allow full passage to the targeted species in all year types?
Flows would be physically accessible in all water year types (greater in above normal, below normal, and dry years). There would be no barriers between the targeted species and ecosystem improvements.
Additional locations in the application (document name, page number, figure name or number, other) that describe the extent of the flow benefits, the proximity of claimed improvements to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between claimed improvements and areas already being protected or managed for conservation value.
Draft EIR/EIS Appendix 12A; Ecosystem Priority 2 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB

Priority 5: Provide flows that increase dissolved oxygen and lower water temperatures to support anadromous fish passage
REV 9: Efficient use of water to achieve multiple ecosystem benefits
How will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.
Water released for this purpose will be subsequently released as Delta outflow or will be recaptured using the Delevan Intake Pumping Plant and stored in Sites Ecosystem Enhancement Storage Account (EESA) storage. It may also be marketed to cover long-term operations and maintenance costs associated with public benefits.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
NA
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
The primary uncertainty is climate change. Results for years 2030 and 2070 were developed using the California Water Commission climate assumptions.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
Draft EIR/EIS – posted at (https://www.sitesproject.org/information/DraftEIR-EIS) Null, S. E., and J. H. Viers. 2013. In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 10

Priority 10: Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value?
Benefits would be provided in the Yolo Bypass. In 2030, releases from Sites Reservoir through the Colusa Basin Drain and into the Yolo Bypass would increase the flow by a long-term average of 40 thousand acre-feet, a 163% increase in flows from August through October. Additionally, rearing habitat in the Yolo Bypass represents key habitat areas that allows for better growth rates of native fish due to increased food availability. Furthermore, seasonal hydrology of the floodplain provides a more competitive advantage to native fish thus preventing nonnative fish species to dominate. Enhanced frequency, magnitude, and duration in the Yolo Bypass would also increase primary production and therefore food availability (secondary production) for native fish, leading to better survival rates (Sommer et. al 2001).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
Sommer, T., Harrell, B., Nobriga, M.L., Schemel, L. 2001. California's Yolo Bypass: Evidence that flood control can be compatible with fisheries, wetlands, wildlife, and agriculture. Fisheries 26(8):6-16.
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g. river miles, acres) of the ecosystem improvement that will address this priority?
Benefits to food production would occur in the Yolo Bypass Toe Drain, Cache Slough Complex, Liberty island, and into the Lower Sacramento River a little upstream (tidal effects) and below where it enters the Sacramento. Benefits are anticipated at least to the confluence with the San Joaquin River at the tip of Sherman Island.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Draft EIR/EIS (https://www.sitesproject.org/information/DraftEIR-EIS) Appendix 12N: Yolo Bypass Flow and Fremont Weir Spill Analysis and Appendix 12: Aquatic Biological Resources; Ecosystem Priority 10 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
When during the year will the frequency, magnitude and duration of floodplain inundation be enhanced for primary and secondary productivity and the growth and survival of fish? How is floodplain inundation likely to vary with hydrologic conditions (i.e. among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project?
Releases would be provided in August through October.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of floodplain enhancements are described and quantified.
NA
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
The primary objectives and triggers would be the phytoplankton/zooplankton populations and the Delta smelt population response. Results in August through October time period should be highly reproducible. Monitoring for the amount of water released and phytoplankton/zooplankton. Program would rely on existing Delta smelt monitoring programs to track smelt population including actions consistent with

Priority 10: Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish
Delta Smelt Resiliency Strategy (California Natural Resources Agency, July, 2016) as well as adaptive measures would include changes in the timing of releases, the duration and magnitude of the pulse, and the magnitude of the pulse (in cfs).
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e. the expected timeframe until the improvement is implemented or construction is completed).
Improvement is expected to begin in 2026 with initial pulse through the Colusa Basin Drain (48 months after grant encumbrance). Full scale operations expected in 2030.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
Full realization of phytoplankton and zooplankton population improvements are anticipated in 2030, and then 2031 for improvements of Delta smelt population because of their annual life history strategy.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
Ecosystem Priority 10 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
The duration of the improvement is expected to be 90 years (Operations and Maintenance period for the project per the planning horizon used in the application).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
NA
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the NOAA Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
Action is consistent with Delta Smelt Resiliency Strategy (California Natural Resources Agency, July, 2016), specifically the north Delta foodweb adaptive management projects juvenile and sub-adult Delta Smelt and their habitats including food availability and quantity.
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
California Natural Resources. 2016. Delta Smelt Resiliency Strategy. July 2016.

Priority 10: Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g. river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e. describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
Ecosystem Priority 10 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
Explain why the floodplain inundation location was selected. How is this location beneficial to secondary productivity and the growth and survival of fish in the context of local environmental conditions?
This action was developed to save Delta Smelt, an indicator species of environmental health of the Sacramento-San Joaquin Delta. Floodplain inundation of the Yolo Bypass Wildlife Area would greatly benefit Delta Smelt productivity in the lower Cache Creek and lower Sacramento River, production of desirable food sources within this region in the late-summer and early-fall will be enriched. Stimulating the delta food web and pushing water high in phytoplankton (*e.g.,* chlorophyll, diatoms) and zooplankton (*e.g.,* copepod eggs) directly to Delta Smelt suitable habitats would aid in their growth and condition, thereby potentially increasing abundance over time.
Is the ecosystem improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
Liberty Island Ecological Reserve, Miner Slough Wildlife Area, Prospect Island, Brannan Island State Recreation Area.
Additional locations in the application (document name, page number, figure name or number, other) that describe the extent of the floodplain inundation benefits, the proximity of claimed improvements to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between claimed improvements and areas already being protected or managed for conservation value.
NA
REV 9: Efficient use of water to achieve multiple ecosystem benefits
How will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.
Conceptually, two pulses of flow at a minimum of 400 cubic feet per second each over a 2-3 week period into the Yolo Bypass from the Colusa Basin Drain past the Wallace Weir and Ridge Cut into the Tule Drain and flow through the Yolo Bypass Toe Drain and out to the Sacramento River (Pers. comm. Jerry Robbins, 2017). With losses each flow pulse made into the Colusa Basin Drain would total about 24 thousand acre feet (TAF) over each 2-3 week period for a total flow need of about 50 TAF in any one year. This management strategy may not be able to occur annually due to varying water year types, however most years would be desirable.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
NA
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.

Priority 10: Enhance the frequency, magnitude, and duration of floodplain inundation to enhance primary and secondary productivity and the growth and survival of fish
The primary uncertainty is climate change. Results for years 2030 and 2070 using the California Water Commission climate assumptions.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
Draft EIR/EIS (https://www.sitesproject.org/information/DraftEIR-EIS): Appendices 12G Smelt analysis and 12N Yolo Bypass Flow and Fremont Weir Spill Analysis. Null, S. E., and J. H. Viers. 2013. In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 11

Priority 11: Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value?
Magnitude of temporal and spatial distribution and diversity of habitats will support native fishes in the Sacramento River and Yolo Bypass as described in sections below and throughout this worksheet: In the Sacramento River, temperature improvements were estimated using Upper Sacramento River HEC5Q model and the American River CE QUAL-W2 Model Sites Reservoir would provide a 4.4% (372 cubic feet per second [cfs]) long term average increase in flows in the Sacramento River at the point of diversion near Colusa that will provide habitat diversity to support fish south of the spawning area. Model results using different water year types show that there is a 7.4% (376 cfs) increase in flows in below normal years and 9% (343 cfs) increase in flows in dry years. In 2030, there is a 2.5% (228 cfs) long term average increase in flows and an 11.9% (474 cfs) increase in dry year flows. These increased flows would provide beneficial results such as a more suitable water temperature for egg incubation and fry (alevin) rearing would lead to higher survival rates of eggs and fry. Typically development of flow management standards include establishment of suitable water temperatures for fish; therefore, flow releases are managed and adjusted to improve conditions for salmon and steelhead by maintaining sufficiently low water temperatures suitable for egg incubation and fry development. Fall-run, late fall-run and winter-run Chinook salmon would greatly benefit from more flows and suitable water temperatures in the Sacramento River below Keswick Dam and at Bonnyview Bridge specifically during egg incubation period in the month of September in critical years. Spatial and temporal distribution of habitats in the Yolo Bypass in 2030 will be enhanced from 163% increase in average flows from August through October totaling 40 thousand acre-feet. Additionally, rearing habitat in the Yolo Bypass represents key habitat areas that allows for better growth rates of native fish due to increased food availability. Furthermore, seasonal hydrology of the floodplain provides a more competitive advantage to native fish thus preventing nonnative fish species to dominate. Enhanced frequency, magnitude, and duration in the Yolo Bypass would also increase primary production and therefore food availability (secondary production) for native fish, leading to better survival rates (Sommer et. al 2001).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
Sommer, T., Harrell, B., Nobriga, M. L., Schemel, L. 2001. California's Yolo Bypass: Evidence that flood control can be compatible with fisheries, wetlands, wildlife, and agriculture. Fisheries 26(8):6-16.
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g., river miles, acres) of the ecosystem improvement that will address this priority?
The spawning distribution of winter-run Chinook Salmon in the mainstem Sacramento River defines the spatial distribution of incubating eggs, alevins, and swim-up fry. Historical spawning data indicate that winter-run spawning occurred from Keswick Dam (River Mile [RM] 302.0) downstream to the site of Red Bluff Diversion Dam (RM 243.0), a distance of 59 miles. More recent data, however, indicate that the spawning distribution has substantially changed. Aerial redd survey data on winter-run Chinook Salmon in-river spawning from 2003 to 2015 indicate that virtually all spawning occurs from Keswick Dam downstream to Clear Creek (RM 289.3), a short distance of only 12.7 miles (U.S. Bureau of Reclamation 2016 , page 7). Over the 12-year monitoring period 88.7 percent of redds were observed upstream of the State Route 44 Bridge (RM 296.5), only 5.5 miles downstream of Keswick Dam, and 11.3 percent were observed between the State Route 44 Bridge and Clear Creek. No redds were observed downstream of Clear Creek. These data indicate that approximately 12.7 miles (rounded to 13 miles) of the Sacramento River downstream of Keswick Dam are used by winter-run for spawning and most spawning is concentrated in the uppermost approximately 5.5 miles (rounded to 6 miles) of the river downstream of Keswick Dam. Therefore, cold water is required for successful egg incubation and alevin rearing in approximately 13 miles of the Sacramento River downstream of Keswick Dam. Water temperatures with and without the proposed project can be modeled and analyzed for this 13-mile river reach. Mean monthly modeled water temperatures in 2030 with and without the project, using data from an 82-year simulation period, were examined within the mainstem Sacramento River from April through November for different water year types for various locations within the 26-mile reach downstream of Keswick Dam to the Balls Ferry Bridge (RM 276.2), given the optimum

Priority 11: Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species
water temperature of 56°F for eggs and 58°F for alevins (CH2MHill River Temperature and Modeling Summary Tables and Bar Charts 2030). Note that the water temperature models used were the Upper Sacramento River HEC5 Model. This model has a calculation uncertainty (i.e., precision) of 0.5°F for mean monthly water temperature estimates. In the present analysis, decimals of a degree Fahrenheit are rounded up or down to whole degrees Fahrenheit to match the presentation of results from Richardson and Harrison (1990) presented in Vogel (2015). In the Yolo Bypass Toe Drain, enhancement of frequency, magnitude, and duration of habitat would occur. Benefits to food production would occur in the Cache Slough Complex and into the Lower Sacramento River a little upstream (tidal effects) and below where it enters the Sacramento River. Benefits are anticipated at least to the confluence with the San Joaquin River at the tip of Sherman Island.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Figure A2-1 in Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB; Ecosystem Priority 10 under the PHYSICAL PUBLIC BENEFITS TAB
When during the year will the spatial distribution and diversity of habitats be enhanced to support life stages of fish and wildlife species? How is the temporal and spatial distribution and diversity of habitats likely to vary with hydrologic conditions (i.e. among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project?
For the mainstem Sacramento River from Keswick Dam to Clear Creek, the proposed project in 2030 will reduce the percentage of winter-run Chinook salmon egg and fry mortality in September and October of critically dry water years from 7 to 25 percent. The greatest temperature improvements to increase survival of salmonid eggs and fry will occur in dry and critical years, specifically. Temperature conditions are relatively unchanged in wet and above normal precipitation years. Over the long term, average flows in the Yolo Bypass from August to October would increase compared to long term conditions without the project, this is due to flow releases from Sites Reservoir.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of habitat enhancements are described and quantified.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
After completion of Sites Reservoir, winter-run, spring-run, fall-run, and late fall-run Chinook salmon; and steelhead are expected to begin rebuilding in the Sacramento River with the assumption that the environment stays constant. Measurable objectives include temperatures produced in the Upper Reaches of the Sacramento River. Temperature data from monitoring programs (*e.g.,* Mainstem Sacramento River Mark-recapture Program, Upper Sacramento River Tributary Escapement Monitoring, Sacramento River Tributary Mark-Recapture Monitoring, Hatchery Broodstock and Angler Harvest Sampling) currently proposed by the California Department of Fish and Wildlife in the Sacramento River as well as existing Delta monitoring programs (*e.g.,* Interagency Ecological Program, Delta Juvenile Fish Monitoring Program, Anadromous Fish Restoration Program) can also be incorporated in the adaptive management program for Sites. Performance measures include the timing of coldwater releases from Shasta, Oroville, and Folsom to maximize benefits of the project to salmonid fish species. In the Yolo Bypass, the primary objectives and triggers would be the phytoplankton/zooplankton populations. Results in August through October time period should be highly reproducible. Monitoring for the amount of water released, nutrients, and phytoplankton/zooplankton as well as Delta smelt population. The Program will rely on existing Delta smelt monitoring programs to track smelt population including actions consistent with Delta Smelt Resiliency Strategy (California Natural Resources Agency, July, 2016) as well as adaptive measures that would include changes in the timing of releases, the duration and magnitude of the pulse (in cfs) to enhance overall habitat.
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem

Priority 11: Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species
improvement is completed (i.e., the expected timeframe until the improvement is implemented or construction is completed).
Initial benefits in the Sacramento River are expected in year 2028 (6 years after investment encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after investment encumbrance). Improvement in the Yolo Bypass is expected to begin in 2026 with initial pulse through the Colusa Basin Drain (48 months after grant encumbrance). Full scale operations expected in 2030.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB.
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
In the Yolo Bypass, full realization of phytoplankton and zooplankton population improvements are anticipated in 2030, and 2031 for improvements of Delta smelt population because of their annual life history strategy.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
Anticipated duration is 100 years in the Sacramento River system. The magnitude is expected to change over time. The flows were determined using CALSIM modeling and results are provided for years 2030 and 2070. In the Yolo Bypass, the duration of the improvement is expected to be 90 years (Operations & Maintenance [O&M] period for the project per the planning horizon used in the application).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the National Oceanic and Atmospheric Administration (NOAA) Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
The ecosystem improvement in the Sacramento River is consistent with two recovery actions of NOAA Fisheries Recovery Plan for Winter-run Chinook salmon, Spring-run Chinook salmon, and Central Valley steelhead in the mainstem Sacramento River (NMFS 2014). The actions in the NOAA Fisheries that will be met are: (1) to develop and apply alternative diversion technologies that reduce entrainment, and (2) evaluate and reduce stranding of juvenile chinook salmon in the channels from Keswick Dam to Colusa, due to flow reductions from Keswick Reservoir, by increasing or stabilizing releases from the reservoir. The ecosystem improvement is also consistent with three of the proposed actions listed in the Sacramento Valley Salmon Resiliency Strategy. These actions are: (1) increase productivity by improving spawning and incubation conditions (habitat and water quality); (2) increase productivity by increasing juvenile salmonid survival; and (3) support the full range of juvenile and adult migration conditions to maintain life history diversity. The project will meet these actions by providing increased flows and management of intake diversions to benefit salmonids in the Sacramento River below Keswick Dam. The project will also enhance and improve the quality of Essential Fish Habitat (EFH) for Pacific Coast Salmon (all four runs of Chinook included;

however steelhead is not part of EFH).

In the Yolo Bypass, the action is consistent with Delta Smelt Resiliency Strategy (California Natural Resources Agency, July, 2016), specifically the north Delta foodweb adaptive management projects juvenile and sub-adult Delta Smelt and their habitats including food availability and quantity.

Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.

Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB

California Natural Resources. 2016. Delta Smelt Resiliency Strategy. July 2016.

REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values

Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g., river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e., describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.

Figures A2-1 and A2-2 in Ecosystem Priority 1 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB

Explain why this location was selected. How is this location beneficial to life stages of fish and wildlife species in the context of local environmental conditions?

Locations are downstream from dams that have known salmonid populations downstream (Shasta, Oroville, and Folsom). Water from Sites Reservoir can be exchanged to develop more storage behind these reservoirs. Downstream from each of these dams are salmonid species natal habitat.

Yolo Bypass was selected to save Delta Smelt, an indicator species of environmental health of the Sacramento-San Joaquin Delta. Additional pulse flows in the Yolo Bypass Wildlife Area would greatly benefit Delta Smelt productivity in the lower Cache Creek and lower Sacramento River, production of desirable food sources within this region in the late-summer and early-fall will be enriched. Stimulating the delta food web and pushing water high in phytoplankton (*e.g.,* chlorophyll, diatoms) and zooplankton (*e.g.,* copepod eggs) directly to Delta Smelt suitable habitats would aid in their growth and condition, thereby potentially increasing abundance over time.

Is the ecosystem improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.

Location of the ecosystem improvement are adjacent to conservation areas or are hydrologically connected to Sacramento River Wildlife Area, Nimbus and American River Hatcheries, American River Parkway Effie Yeaw Nature Center, Folsom lake State Recreation Area, Mather Regional Park, Isenberg Crane Service, Cosumnes River Preserve, Stone Lakes National Wildlife Refuge, Laguna Creek Parkway, Vic Fazio Yolo Wildlife Area, Grizzly Island Wildlife Area, Gray Lodge Wildlife Area, Bobelaine Audubon Sanctuary, Bidwell Mansion State Historic Park, Butte City project, Clay Pit State Vehicular Recreation Area, Lake Oroville State Recreation Area, Bidwell-Sacramento River State Park, Colusa-Sacramento River State Recreation Area, Brannan Island State Recreation Area, and Delta Meadows.

Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) that describe and quantify the extent of habitat benefits, the proximity of claimed improvements to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between claimed improvements and areas already being protected or managed for conservation value.

NA

REV 9: Efficient use of water to achieve multiple ecosystem benefits

If applicable, how will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.

Water released for this purpose will be subsequently released as Delta outflow or will be recaptured using the Delevan Intake Pumping Plant and stored in Sites EESA storage.

Priority 11: Enhance the temporal and spatial distribution and diversity of habitats to support all life stages of fish and wildlife species
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
NA
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
The primary uncertainty is climate change. Results for years 2030 and 2070 using the California Water Commission climate assumptions.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
• Null, S. E., and J. H. Viers. 2013. In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 14

Priority 14: Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value?

The Sites Project will provide ecosystem benefits to terrestrial species using State and Federal wildlife refuges and private ricelands of the Central Valley. These benefits are described below.

Refuges

Under current conditions, dry and critically dry years pose significant challenges to managing habitat for terrestrial wildlife dependent on wetlands and riparian habitat in Central Valley refuges within the Central Valley Project Improvement Act (CVPIA) Refuge Water Supply Program (RWSP) The RWSP wetland habitat areas include 12 federal National Wildlife Refuges (NWRs), six State Wildlife Areas, and one privately managed refuge (CDFW 2017). These 19 refuges in the RWSP currently receive approximately 433 thousand acre feet (TAF) Level 2 water supplies, and incremental Level 4 water supplies of an additional 133 TAF (CDFW 2017). From 2005 – 2014 only 43% of Incremental Level 4 allocations were acquired and delivered each year to refuges (CDFW 2017).

Refuges of the Sacramento NWR Complex, including the Sacramento, Colusa, and Delevan NWRs, provide critical managed wetland habitat for many water-dependent wildlife species (USFWS 2009). Drought contingency actions for the Sacramento, Colusa and Delevan NWRs during dry and critically dry years vary depending on the severity of the reduced water allocations, as well as the timing within the water year when the cutback is finalized (USFWS 2011a, 2011b, 2011c). If water allocations are reduced to 25% of normal deliveries at Sacramento, Colusa and Delevan NWRs during dry or critically dry years, the drought contingency plans for all three refuges call for adjustments to wetland management practices, with the substantial impacts on wetland habitat and wetland dependent species (USFWS 2011a, 2011b, 2011c). Attachment A provides details on the impacts of reduced water deliveries on habitat and wildlife at these refuges.

The project would provide additional water in dry and critically dry years to avoid these adverse impacts to seasonal and permanent wetlands and to wetland-dependent wildlife on refuges. The amount of water allocated to the Sacramento, Colusa, and Delevan NWRs and the other refuges in the RWSP is uncertain, but as shown in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB, additional Level 2 and Level 4 water would be available with the highest deliveries in wet, above normal, and below normal years. Attachment 2 summarizes CalSim II Model Runs conducted on June 21, 2017 and shows the net increase in water supply available for all refuges with implementation of the project, and describes how refuges in in the Mendota Pool and the Tulare Basin could also benefit from additional deliveries from the Sites Project.

Deliveries of additional Level 2 and Level 4 water during dry and critically dry years would avoid loss of up to 10,867 acres of wetland habitat on the Sacramento, Colusa, and Delevan NWRs, and the other direct and indirect impacts of reduced water availability described above.

Ricelands

Surface water delivered by the Central Valley Project (CVP) and State Water Project (SWP) provide much of the water for rice and other agricultural uses, and for management of wetlands in the Central Valley; water supply shortages from the CVP and SWP during dry and critically dry years negatively affect waterfowl and waterbird habitats, reduce food resources, and lower the carrying capacity of the Central Valley for wintering waterfowl (Petrie et al. 2016). Attachment A provides additional information about the value of ricelands to waterfowl and waterbirds.

Decisions by rice producers about how many acres to plant in rice are complex and based on a number of variables, but in dry and critical years more water would likely increase acreage of rice planted (Buttner 2017 personal communication). In the drought year of 2014, rice acreage in California was reduced by 133,000 acres, falling 24% from an average of 567,000 acres in 2010–13 to just 434,000 acres in 2014 (PPIC 2015, U.S. Department of Agriculture (USDA), National Agricultural Statistics Service, California Acreage Reports), reducing the acreage of foraging habitat for wintering waterfowl.

The Sites Project would provide additional water in dry and critically dry years to reduce adverse impacts to waterfowl and other waterbirds dependent associated with reduced acreage of ricelands. As shown in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB, additional water would be available to support rice plantings in dry and critically dry years with implementation of the project.

Deliveries of additional agricultural water to rice producers during dry and critically dry years could avoid reductions in acreage of ricelands in the Central Valley. The extent of the increase would depend on many factors, but in dry and critically dry years

Priority 14: Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands
could exceed 100,000 acres, based on the decrease in acreage of rice during the drought year of 2014.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
• CalSim II Model Runs for WSIP 2030 Sites Reservoir Regional_Deliveries_WSIP_2030_With_Project_vs_Without_Project. Updated June 21, 2017 • CDFW 2017. Refuge Water Supply Program Overview. Available at: https://www.wildlife.ca.gov/Conservation/Watersheds/Refuge-Water/Overview. Accessed June 29, 2017 • USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1 • USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan • USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan • USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan • US Department of Agriculture, National Agricultural Statistics Service, California Acreage Reports. USDA Cropland Database https://watershed.ucdavis.edu/files/biblio/Final_Drought%20Report_08182015_Full_Report_WithAppendices.pdf page 13, page 28 • Migratory Bird Partnership 2014 – Waterbird Habitat Enhancement Program, Figure 2, page 6
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g., river miles, acres) of the ecosystem improvement that will address this priority?
Refuges • Sacramento National Wildlife Refuge - 10,819 acres • Colusa National Wildlife Refuge - 4,686 acres • Delevan National Wildlife Refuge - 5,877 acres. **Ricelands** • In 2015 421,000 acres or rice were harvested in California (CDFA 2016), most of which occurred in the Sacramento Valley, with Colusa, Sutter, Butte, and Glenn as the primary rice-producing counties in the state (Geisseler & Horwath 2013). https://www.cdfa.ca.gov/statistics/PDFs/2016Report.pdf.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Refuges USFWS 2009 • Overview map of refuges, page 1 • Table 4. Acreage and habitats of Sacramento National Refuge Complex, page 51 • Figure 6. Sacramento Refuge Habitat Management, page 52 • Figure 7. Delevan Refuge Habitat Management, page 53 • Figure 8. Colusa Refuge Habitat Management, page 54 **Ricelands** • CDFA 2016, p. 13 • Geisseler & Horwath 2013 Fig 2. Page 2 • Migratory Bird Partnership 2014 – Waterbird Habitat Enhancement Program, Figure 2, page 6
When during the year will water be provided for seasonal wetlands, permanent wetlands, and riparian habitat? How are seasonal wetlands, permanent wetlands, and riparian habitat likely to vary with hydrologic conditions (i.e. among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project?

Priority 14: Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands

Refuges

Water is applied to seasonal and permanent wetlands in all months of the year except February, for a total of 12,850 af, 5,987 af, and 5,000 af for Sacramento, Delevan, and Colusa, respectively. Peak seasonal water use for wetlands on the refuges peaks in late fall in dry and critically dry years. Refuge managers and biologists strategize constantly for the optimal use of water to continue to meet the refuges' conservation goals. Typically staff is flexible with water usage so water conserved early in the season can be used later in the season to support migratory bird populations and meet management objectives to the extent possible.

Ricelands

In dry and critically dry years additional water supply from the project would typically be provided in April and May to flood up rice fields.

Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of water releases for seasonal wetlands, permanent wetlands, or riparian habitat improvements are described and quantified.

Refuges

USFWS 2011a – Sacramento National Wildlife Refuge Water Management Plan: Drought Contingency Plan

- Table 3. 50% Anticipated Water Use Schedule
- Table 4. 25% Anticipated Water Use Schedule

USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan: Drought Contingency Plan

- Table 3. 50% Anticipated Water Use Schedule
- Table 4. 25% Anticipated Water Use Schedule

USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan: Drought Contingency Plan

- Table 3. 50% Anticipated Water Use Schedule
- Table 4. 25% Anticipated Water Use Schedule

Ricelands

CalSim II Model Runs for WSIP 2030 Sites Reservoir Regional_Deliveries_WSIP_2030_With_Project_vs_Without_Project. Updated June 21, 2017

REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.

Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.

Refuges

Measurable objectives include an annual assessment of the acreage of seasonal and permanent wetlands and waterfowl numbers at the refuges. The NWR System has a legal mandate to monitor the status and trends of fish, wildlife, and plant populations on refuges. Every year Refuge Managers at the Sacramento NWR Complex review the outcome of the previous year's habitat management plan and compile data on the extent of wetlands and other habitat types on each refuge. This process also involves a planning team visiting each habitat unit on each refuge to document the previous year's accomplishments, establish needs and develop plans for the upcoming year. In addition, waterfowl surveys are usually conducted monthly by refuge biologists from October through February, including counts of birds that may be affected by disease. These findings are compiled to produce the current year's habitat management plan for each refuge.

Ricelands

Measurable objectives include an annual assessment of the acreage of rice planted in the Central Valley in dry and critically dry years.

REV 5: Immediacy of ecosystem improvement actions and realization of benefits

Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e., the expected timeframe until the improvement is implemented or construction is completed).

Initial benefits are expected during dry and critically dry years starting in year 2028 (6 years after grant encumbrance for construction). Full benefits are expected in 2030 (8 years after grant encumbrance).

Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.

Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB

Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)

Benefits of additional water supply will be observed and quantified during dry and critically dry years.

Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.

- CalSim II Model Runs for WSIP 2030 Sites Reservoir Regional_Deliveries_WSIP_2030_With_Project_vs_Without_Project. Updated June 21, 2017
- CDFW 2017. Refuge Water Supply Program Overview. Available at: https://www.wildlife.ca.gov/Conservation/Watersheds/Refuge-Water/Overview. Accessed June 29, 2017
- USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1
- USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan
- USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan
- USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan

REV 6: Duration of ecosystem improvements

How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.

Refuges

Benefits of additional water supply for wetlands and wildlife dependent on wetlands will be observed for the duration of the Sacramento, Colusa, and Delevan NWRs's existence in dry and critically dry years.

Ricelands

Benefits of additional water supply for ricelands, and the waterbirds and waterfowl dependent on them, would be observed for the duration of the project as long as rice production occurs in the Central Valley.

Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.

- CalSim II Model Runs for WSIP 2030 Sites Reservoir Regional_Deliveries_WSIP_2030_With_Project_vs_Without_Project. Updated June 21, 2017
- CDFW 2017. Refuge Water Supply Program Overview. Available at: https://www.wildlife.ca.gov/Conservation/Watersheds/Refuge-Water/Overview. Accessed June 29, 2017
- USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1
- USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan
- USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan
- USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan

REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans

Priority 14: Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the National Oceanic and Atmospheric Administration (NOAA) Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
Improving water supply to refuges during dry years to enhance habitat and support waterfowl, shorebirds, and other wildlife dependent on seasonal and permanent wetlands is consistent with goals and objectives described in the following conservation plans • Migratory Habitat Enhancement Plan - 2014 • North American Waterfowl Management Plan - 2012 • U.S. Shorebird Conservation Plan – 2001 • Central Valley Joint Venture Implementation Plan – Conserving Bird Habitat • California Wildlife Action Plan Improving water supply to refuges during dry years is also consistent with recovery goals described in • Draft Recovery Plan for the Giant Garter Snake • Conservation Plan for the Tricolored Blackbird
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
Refuges Improving water supply to refuges during dry years is also consistent with conservation and recovery goals described in • North American Waterfowl Management Plan - 2012 (page 2) • U.S. Shorebird Conservation Plan – 2001 (page 30) • Central Valley Joint Venture Implementation Plan – Conserving Bird Habitat (Chapter 10) • California Wildlife Action Plan (Executive Summary page 2) • Draft Recovery Plan for the Giant Garter Snake (page 9) • Conservation Plan for the Tricolored Blackbird (page 11) **Ricelands** Improving water supply to ricelands during dry years is also consistent with conservation and recovery goals described in • Migratory Habitat Enhancement Plan 2014 – (Figure 2, page 6) • North American Waterfowl Management Plan – 2012 (page 2) • U.S. Shorebird Conservation Plan – 2001 (page 30) • Central Valley Joint Venture Implementation Plan – Conserving Bird Habitat (Chapter 10) • California Wildlife Action Plan (Executive Summary page 2) • Draft Recovery Plan for the Giant Garter Snake (page 40) • Conservation Plan for the Tricolored Blackbird (page 27)
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g., river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e., describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.

Priority 14: Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands
Refuges USFWS 2009 • Overview map of refuges, page 1 • Table 4. Acreage and habitats of Sacramento National Refuge Complex, page 51 • Figure 6. Sacramento Refuge Habitat Management, page 52 • Figure 7. Delevan Refuge Habitat Management, page 53 • Figure 8. Colusa Refuge Habitat Management, page 54 **Ricelands** • Migratory Habitat Enhancement Plan 2014 – (Figure 2, page 6)
Explain why this location was selected. How does this location enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species in the context of local environmental conditions?
Refuges Seasonal and permanent wetlands in the Sacramento NW are managed specifically for enhancement of seasonal and permanent wetland habitat for the benefit of waterfowl, shorebirds, and special-status wildlife species. **Ricelands** The ricelands of California were selected as a target for ecosystem priority because they provide crucial wintering habitat for waterfowl and waterbirds on the Pacific Flyway, supporting the majority of Flyway population in some years (Migratory Bird Partnership 2014). Ricelands are indispensable components of waterbird habitat; residual rice, weed seeds, and invertebrates provide food for many avian species during fall and winter (Eadie et al. 2008). Ricelands also provide breeding habitat for a variety of birds, and rice fields that are flooded after harvest (i.e., winter flooded) to decompose rice straw provide many of the same habitat values for waterfowl as the wetlands that they replaced.
Is the ecosystem improvement location adjacent to, within, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
Refuges The refuges in the Sacramento NWR complex are all protected and managed by the USFWS for conservation values. **Ricelands** The Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges (collectively, the Sacramento NWFs) are generally surrounded by irrigated rice lands (USFWS 2009) and originally the refuges were established to manage land and provide lure crops for ducks that depredated neighboring rice fields. Migratory birds and a number of other wildlife commonly spend time both on refuges and nearby privately owned rice fields, often on a daily basis. The Sacramento NWR and adjacent ricelands are often hydrologically connected by the networks of canals that supply water to both.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the spatial extent of the ecosystem improvement, the proximity of the ecosystem improvement to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between the ecosystem improvement and areas already being protected or managed for conservation value.
Refuges • USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1 **Ricelands** • Migratory Habitat Enhancement Plan 2014 – (Figure 2, page 6) • North American Waterfowl Management Plan - 2012 (page 2) • U.S. Shorebird Conservation Plan – 2001 (page 30)

Priority 14: Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands

- Central Valley Joint Venture Implementation Plan – Conserving Bird Habitat (Chapter 10)
- California Wildlife Action Plan (Executive Summary page 2)
- Draft Recovery Plan for the Giant Garter Snake (page 40)
- Conservation Plan for the Tricolored Blackbird (page 27)

REV 9: Efficient use of water to achieve multiple ecosystem benefits

How will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.

Refuges

Refuge managers and biologists strategize constantly for the optimal use of water to continue to meet the refuges' conservation goals. Typically staff is flexible with water usage so water conserved early in the season can be used later in the season to support migratory bird populations and meet management objectives to the extent possible.

Ricelands

Funding and agreements to foster ecosystem and wildlife benefits of ricelands is currently available through the US Department of Agriculture's Natural Resources Conservation Service (NRCS) Waterbird Habitat Enhancement Program (WHEP). The goal of WHEP is to enhance habitat on 100,000 acres of California ricelands, and has been supported by $10 million of federal funds (Migratory Bird Conservation Partnership 2014). The WHEP has successfully enrolled nearly 20 percent of California's 550,000 acres of rice in bird-friendly farming practices. WHEP relies on short-term funding sources, and to secure a more sustainable funding source, the California Rice Commission, Audubon California, Point Blue Conservation Science and The Nature Conservancy are working with NRCS and other parties to develop sustainable conservation programs to continue to incentive the kind of bird-friendly farming practices such as those supported by WHEP.

Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.

Refuges

- USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1
- USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan
- USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan
- USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan

Ricelands

- Migratory Habitat Enhancement Plan 2014 – (pages 1 - 6)

REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.

Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.

Climate change and associated increased frequency of dry and critically dry years is the primary source of uncertainty. Long term modeling of climate change suggests that 34–38% of years may be classified as dry and critically dry years in the Sacramento Valley, and 66–69% may be classified as dry and critically dry years in the San Joaquin Valley by the end of the 21st century (Null and Viers 2013).

Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.

- Null, S. E., and J. H. Viers (2013), In bad waters: Water year classification in nonstationary climates, Water Resources

Priority 14: Provide water to enhance seasonal wetlands, permanent wetlands, and riparian habitat for aquatic and terrestrial species on State and Federal wildlife refuges and on other public and private lands
Research, 49, doi:10.1002/wrcr.20097.

Ecosystem Priority 15

Priority 15: Develop and implement invasive species management plans utilizing techniques that are supported by best available science to enhance habitat and increase the survival of native species
Species Information
What invasive species are you targeting?
Yellow star thistle (*Centaurea solstitialis*)
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the biology of the invasive species and their impacts on native fish and wildlife are described and quantified.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 2: Magnitude of ecosystem improvements
When implemented what is the expected magnitude of habitat enhancement and increased survival of native species? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value? If the project intends to target multiple invasive species, the magnitude of the ecosystem improvement for each species needs to be provided.
The approximate acreage of the valley extending from Golden Gate Dam to Funks Reservoir was determined. Except for vegetation on the shore of Funks Creek, this area is covered in star thistle. Habitat enhancement would be accomplished between 2028 and 2030. Once the habitat is established it will be maintained for the 100 year planning horizon. The restoration of native prairie would increase the value to native species, including providing forage habitat for golden eagles.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g., river miles, acres) of the ecosystem improvement that will address this priority?
90 Acres
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
When during the year will the project manage invasive species for the benefit of native species? How is the distribution of invasive species likely to vary with hydrologic conditions (i.e., among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project? If the project intends to target multiple invasive species, provide the timing of management actions for each invasive species separately.
Year round improvement regardless of hydrologic conditions.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of ecosystem improvements that address this priority are described and quantified.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be

Priority 15: Develop and implement invasive species management plans utilizing techniques that are supported by best available science to enhance habitat and increase the survival of native species
used to manage benefits associated with this priority.
The restored area will be surveyed monthly during the initial establishment of native prairie and then surveyed annually. Adaptive management will consist of removing any invasive plants and reseeding with native species.
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e., the expected timeframe until the improvement is implemented or construction is completed).
Approximately 108 months.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e. project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e. when measurable improvements can be observed and quantified)
Once the area is reseeded the benefit is immediate.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
100 years. The Authority has budgeted mitigation funds that can be used for this purpose. Future funding may also be obtained through grants.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the National Oceanic and Atmospheric Administration (NOAA) Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
No
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
NA
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g., river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e., describe the

Priority 15: Develop and implement invasive species management plans utilizing techniques that are supported by best available science to enhance habitat and increase the survival of native species
color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
The map is provided in Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
Explain why the location of invasive species management was selected. How is the location beneficial to the survival of native species in the context of local environmental conditions and species' needs?
The location is on property that will be acquired for construction of project facilities and will remain in the control of the Authority. The property is currently overrun with yellow star thistle.
Is the ecosystem improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
This area is near the proposed Stone Corral recreation area that will be managed for conservation values; however, the area to be restored as prairie will not be accessible to the general public.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the timing of ecosystem improvements that address this priority are described and quantified.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB
REV 9: Efficient use of water to achieve multiple ecosystem benefits
If applicable, how will water be efficiently managed to implement invasive species management?
Water for establishing native vegetation will most likely be taken from Holthouse Reservoir, a project facility.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
NA
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
Affects choice of native species for re-seeding.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
Ecosystem Priority 15 in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB

Ecosystem Priority 16

Priority 16: Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
REV 2: Magnitude of ecosystem improvements
What is the expected magnitude of the ecosystem improvement that will address this priority? Magnitude should be expressed as: a) the change from current conditions without the project to current conditions with the project, and b) the change from 2030 conditions without the project to 2030 conditions with the project. How did you estimate this value?

Under current conditions, dry and critically dry years pose significant challenges to managing habitat for terrestrial wildlife dependent on wetlands and riparian habitat in Central Valley refuges within the Central Valley Project Improvement Act (CVPIA) Refuge Water Supply Program (RWSP) The RWSP wetland habitat areas include 12 federal National Wildlife Refuges (NWRs), six State Wildlife Areas, and one privately managed refuge (CDFW 2017). These 19 refuges in the RWSP currently receive approximately 433 thousand acre feet (TAF) Level 2 water supplies, and incremental Level 4 water supplies of an additional 133 TAF (CDFW 2017). From 2005 – 2014 only 43% of Incremental Level 4 allocations were acquired and delivered each year to refuges (CDFW 2017).

Refuges of the Sacramento NWR Complex , including the Sacramento, Colusa, and Delevan NWRs, provide critical managed wetland habitat for many water-dependent wildlife species, including snow geese, northern pintail, white-faced ibis, sandhill crane, and giant-garter snake (USFWS 2009). Drought contingency actions for the Sacramento, Colusa and Delevan NWRs during dry and critically dry years vary depending on the severity of the reduced water allocations, as well as the timing within the water year when the cutback is finalized (USFWS 2011a, 2011b, 2011c). If water allocations are reduced to 25% of normal deliveries at Sacramento, Colusa and Delevan NWRs during dry or critically dry years, the drought contingency plans for all three refuges call for adjustments to wetland management practices, with the following impacts on wetland habitat and wetland dependent species (USFWS 2011a, 2011b, 2011c):

For 50% of normal deliveries, wetland acreage at the three refuges would be reduced by 30–50%. Composite acreages of seasonal and permanent wetlands at all three refuges totals 15,525 acres (based on 2010 data), which includes 13,722 acres of seasonal wetlands (timothy grass and water grass) and 1,803 acres of permanent and semi-permanent wetland/brood ponds. A 30–50% reduction for permanent and seasonal wetlands would amount to a loss of 4,658 to7,762 acres. For 25% of normal deliveries, total wetland acreage at the three refuges would be reduced by 60–70%, amounting to loss of 9,315 to 10,867 acres. In addition to the direct loss of wetlands, longer term impacts would also occur to future wetland habitat quality throughout the refuges. Loss of permanent pond acreage would be 80% for both the 50% and 25% reductions of normal deliveries. Other impacts on habitat and wildlife of reductions to 50 to 25% of normal deliveries include:

- Very early spring draw-downs of wetlands which severely limits shorebird habitat and results in poor germination for important wildlife and waterfowl plants.
- Loss of permanent pond acreage adversely affects habitat for special-status species such as giant garter snakes, tricolored blackbirds, western pond turtles, and for duck broods.
- Complete elimination of irrigation for annual food plants and control of invasive species such as cocklebur, resulting in increased mowing/diesel fuel consumption to mitigate.
- Flood-ups delayed on remaining acreage, resulting in widespread crop depredation in nearby agricultural lands.
- Extreme waterfowl crowding and disease risk (avian botulism (Type C) and avian cholera).
- Reduced public use on all refuge habitats reduced (or eliminated for 25% of water delivery scenario) other than having the Sacramento NWR visitor center open, and visitor use would decrease to a fraction of normal.

The project would provide additional water, with the highest deliveries in wet, above normal, and below normal years to reduce adverse impacts to seasonal and permanent wetlands and to wetland-dependent wildlife on refuges. The amount of water allocated to the Sacramento, Colusa, and Delevan NWRs and the other refuges in the RWSP is uncertain, but as shown in Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB, additional Level 2 and Level 4 water would be available in dry and critically dry years. Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB summarizes CalSim II Model Runs conducted on June 21, 2017 and shows the net increase in water supply available for all refuges with implementation of the project.

Deliveries of additional Level 2 and Level 4 water during dry and critically dry years would avoid loss of up to 10,867 acres of wetland habitat on the Sacramento, Colusa, and Delevan NWRs, and the other direct and indirect impacts of reduced water availability described above.

Sites_A2 Ecosystem Documentation under the PHYSICAL PUBLIC BENEFITS TAB lists the native species that occur on the Sacramento NWR Complex refuges and which have commercial, recreational, scientific, or educational uses and values, and

Priority 16: Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
would benefit from implementation of the project.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
CalSim II Model Runs for WSIP 2030 Sites Reservoir Regional_Deliveries_WSIP_2030_With_Project_vs_Without_Project. Updated June 21, 2017 CDFW 2017. Refuge Water Supply Program Overview. Available at: https://www.wildlife.ca.gov/Conservation/Watersheds/Refuge-Water/Overview. Accessed June 29, 2017 USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1 USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan
REV 3: Spatial and temporal scale of ecosystem improvements.
What is the geographical extent (e.g., river miles, acres) of the ecosystem improvement that will address this priority?
• Sacramento National Wildlife Refuge - 10,819 acres • Colusa National Wildlife Refuge - 4,686 acres • Delevan National Wildlife Refuge - 5,877 acres.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) where the geographical extent of the ecosystem improvement is documented or mapped.
USFWS 2009 • Overview map of refuges, page 1 • Table 4. Acreage and habitats of Sacramento National Refuge Complex, page 51 • Figure 6. Sacramento Refuge Habitat Management, page 52 • Figure 7. Delevan Refuge Habitat Management, page 53 • Figure 8. Colusa Refuge Habitat Management, page 54
When during the year will the project enhance habitat for native species that have commercial, recreational, scientific or educational uses? How is habitat for native species likely to vary with hydrologic conditions (i.e., among water year types) a) under current conditions with and without the project, and b) in 2030 with and without the project?
In dry years, with 25% of water allocations, water is applied to seasonal and permanent wetlands in all months of the year except February, for a total of 12,850 acre feet (af), 5,987 af, and 5,000 af for Sacramento, Delevan, and Colusa, respectively. Peak seasonal water use for wetlands on the refuges peaks in late fall in dry and critically dry years. Refuge managers and biologists strategize constantly for the optimal use of water to continue to meet the refuges' conservation goals. Typically staff is flexible with water usage so water conserved early in the season can be used later in the season to support migratory bird populations and meet management objectives to the extent possible.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the magnitude of the ecosystem improvement is described and quantified.
USFWS 2011a – Sacramento National Wildlife Refuge Water Management Plan: Drought Contingency Plan • Table 3. 50% Anticipated Water Use Schedule • Table 4. 25% Anticipated Water Use Schedule USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan: Drought Contingency Plan • Table 3. 50% Anticipated Water Use Schedule • Table 4. 25% Anticipated Water Use Schedule

Priority 16: Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan: Drought Contingency Plan • Table 3. 50% Anticipated Water Use Schedule • Table 4. 25% Anticipated Water Use Schedule
REV 4: Inclusion of an adaptive management and monitoring program that includes measurable objectives, performance measures, thresholds, and triggers to achieve ecosystem benefits.
Provide additional information on how this ecosystem improvement will be incorporated into the adaptive management and monitoring program. If available, provide examples of objectives, performance measures, thresholds, or triggers that could be used to manage benefits associated with this priority.
Every year Refuge Managers at the Sacramento NWR Complex review the outcome of the previous year's habitat management plan, a process that involves a planning team visiting each habitat unit on each refuge to document the previous year's accomplishments, establish needs and develop plans for the upcoming year. These findings are compiled to produce the current year's habitat management plan for each refuge. Waterfowl surveys are usually conducted monthly by refuge biologists from October through February.
REV 5: Immediacy of ecosystem improvement actions and realization of benefits
Immediacy of ecosystem improvement: Number of months from grant encumbrance until the proposed ecosystem improvement is completed (i.e., the expected timeframe until the improvement is implemented or construction is completed).
Initial benefits are expected during dry and critically dry years starting in year 2028 (6 years after grant encumbrance for construction). Full benefits are expected in 2030 (8 years after grant encumbrance).
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the immediacy timeframe is described and quantified.
Sites_A3 Schedule under the FEASIBILITY AND IMPLEMENTATION RISK TAB
Realization of ecosystem improvement: Number of months from the time the ecosystem improvement is completed (i.e., project is implemented or construction is complete), until the benefit associated with this priority can be observed (i.e., when measurable improvements can be observed and quantified)
Benefits of additional water supply will be observed and quantified during dry and critically dry years.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the realization timeframe is described and quantified.
CalSim II Model Runs for WSIP 2030 Sites Reservoir Regional_Deliveries_WSIP_2030_With_Project_vs_Without_Project. Updated June 21, 2017 CDFW 2017. Refuge Water Supply Program Overview. Available at: https://www.wildlife.ca.gov/Conservation/Watersheds/Refuge-Water/Overview. Accessed June 29, 2017 USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1 USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan
REV 6: Duration of ecosystem improvements
How long (number of years) after realization (as calculated under REV 5 above) is the ecosystem improvement expected to address this priority? Maximum is 100 years. Explain how this value was determined and whether the magnitude of the ecosystem improvement is anticipated to change over time.
Benefits of additional water supply for wetlands and wildlife dependent on wetlands will be observed for the duration of the refuge's existence in dry and critically dry years.
Additional locations in the application, supporting documentation or attachments (document name, page number, table number, other) where the duration of the ecosystem improvement is described and quantified.

Priority 16: Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
CalSim II Model Runs for WSIP 2030 Sites Reservoir Regional_Deliveries_WSIP_2030_With_Project_vs_Without_Project. Updated June 21, 2017 CDFW 2017. Refuge Water Supply Program Overview. Available at: https://www.wildlife.ca.gov/Conservation/Watersheds/Refuge-Water/Overview. Accessed June 29, 2017 USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1 USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan
REV 7: Consistency with species recovery plans and strategies, initiatives, and conservation plans
Does the ecosystem improvement meet any goals or objectives established in existing species recovery plans, initiatives, or conservation plans including but not limited to the National Oceanic and Atmospheric Administration (NOAA) Fisheries Recovery Plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead; State Wildlife Action Plan; Central Valley Joint Venture Implementation Plan, San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan, Draft Solano Multi-Species Habitat Conservation Plan, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, Draft Recovery Plan for the Giant Garter Snake, and California Water Action Plan? If so which goals, objectives, or actions will be met? Why?
Improving water supply to refuges during dry years to support waterfowl, shorebirds, and other wildlife dependent on seasonal and permanent wetlands is consistent with goals and objectives described in the following conservation plans • North American Waterfowl Management Plan • U.S. Shorebird Conservation Plan • North American Waterbird Conservation Plan • Central Valley Joint Venture Implementation Plan – Conserving Bird Habitat Improving water supply to refuges during dry years is also consistent with recovery goals described in • Draft Recovery Plan for the Giant Garter Snake • Conservation Plan for the Tricolored Blackbird
Additional locations in the application, supporting documentation or attachments (page number, table number, other) where the consistency with goals, objectives, or actions from recovery plans, initiative, or conservation plans are discussed.
• North American Waterfowl Management Plan - 2012 (page 2) • U.S. Shorebird Conservation Plan – 2001 (page 30) • Central Valley Joint Venture Implementation Plan – Conserving Bird Habitat (Chapter 10) • California Wildlife Action Plan (Executive Summary page 2) • Draft Recovery Plan for the Giant Garter Snake (page 9) • Conservation Plan for the Tricolored Blackbird (page 11)
REV 8: Location of ecosystem improvements and connectivity to areas already being protected or managed for conservation values
Provide a map that shows the extent of the ecosystem improvement that will address this priority (e.g., river miles that meet the temperature benefits). Provide additional instructions or clarification to reviewers who will be viewing this map (i.e., describe the color and/or label that identifies the spatial extent of the ecosystem improvement). If available, also submit supporting electronic files such as a .kmz file or ArcGIS layer associated with the maps provided.
USFWS 2009 • Overview map of refuges, page 1 • Table 4. Acreage and habitats of Sacramento National Refuge Complex, page 51 • Figure 6. Sacramento Refuge Habitat Management, page 52

Priority 16: Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
• Figure 7. Delevan Refuge Habitat Management, page 53 • Figure 8. Colusa Refuge Habitat Management, page 54
Explain why this location was selected. How is the location of enhanced habitat beneficial in the context of local environmental conditions?
Seasonal and permanent wetlands in the Sacramento NW are managed specifically for enhancement of seasonal and permanent wetland habitat for the benefit of native species that have commercial, recreational, scientific, or educational uses, including waterfowl, shorebirds, and special-status wildlife species.
Is the ecosystem improvement location adjacent to, or near, other areas already being protected or managed for conservation values? Explain the proximity of the ecosystem improvement to other areas already being protected or managed for conservation values and any hydrologic connectivity that may occur between these locations.
Seasonal and permanent wetlands in the Sacramento NWR are managed specifically for the benefit of native species that have commercial, recreational, scientific, or educational uses enhancement of seasonal and permanent wetland habitat for the benefit of waterfowl, shorebirds, and special-status wildlife species.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe and quantify the spatial extent of the ecosystem improvement, the proximity of the ecosystem improvement to other areas already being protected or managed for conservation value, and the degree to which hydrologic connections (if any) occur between the ecosystem improvement and areas already being protected or managed for conservation value.
• USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1
REV 9: Efficient use of water to achieve multiple ecosystem benefits
If applicable, how will water provided to address this priority be managed? Explain design efficiencies and operational strategies intended to maximize the efficiency of water allocated to ecosystem improvements that address this priority.
Refuge managers and biologists strategize constantly for the optimal use of water to continue to meet the refuges' conservation goals. Typically staff is flexible with water usage so water conserved early in the season can be used later in the season to support migratory bird populations and meet management objectives to the extent possible.
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name or number, other) that describe the design efficiencies and operational strategies used to maximize water efficiency under this priority.
USFWS 2009. Sacramento, Delevan, Colusa, and Sutter National Wildlife Refuges. Final Comprehensive Conservation Plan and Environmental Assessment. Vol. 1 USFWS 2011a. Sacramento National Wildlife Refuge Water Management Plan USFWS 2011b. Colusa National Wildlife Refuge Water Management Plan USFWS 2011c. Delevan National Wildlife Refuge Water Management Plan
REV 10: Resilience of ecosystem improvements to the effects of changing environmental conditions, including hydrologic variability and climate change.
Which environmental uncertainties associated with this priority were considered in the project siting, design, and operation? How were these uncertainties incorporated into project siting, design, or operation? Examples of environmental uncertainties include, but are not limited to: sea level rise, temperature changes, changes in precipitation, landslides, erosion, earthquakes, wildfires, drought events, and flooding events.
Climate change and associated increased frequency of dry and critically dry years is the primary source of uncertainty. Long term modeling of climate change suggests that 34–38% of years may be classified as dry and critically dry years in the Sacramento Valley, and 66–69% may be classified as dry and critically dry years in the San Joaquin Valley by the end of the 21st century (Null and Viers 2013).
Additional locations in the application, supporting documentation or attachments (document name, page number, figure name

Priority 16: Enhance habitat for native species that have commercial, recreational, scientific, or educational uses
or number, other) that describe and quantify the environmental uncertainties considered in the project siting, design, and operation.
Null, S. E., and J. H. Viers (2013), In bad waters: Water year classification in nonstationary climates, Water Resources Research, 49, doi:10.1002/wrcr.20097.

August 14, 2017

Sites Project Executive Summary

FOR CALIFORNIA'S WATER STORAGE INVESTMENT PROGRAM

Providing high-quality water to enhance the environment, the economy and quality of life for Californians

Sites

SITESPROJECT.ORG

Sites is an innovative, environmentally sound solution to California's toughest water challenges.

With broad statewide support, the Sites Project fulfills the clear Proposition 1 mandate from the People of California, who overwhelmingly said the state needs public benefits from new water storage.

Sites Project Executive Summary

This document summarizes how the Sites Project Authority (Authority) has addressed the California Water Commission's requirements of the Water Storage Investment Program (WSIP), to provide water supply and eligible public benefits.

The Sites Project will make California's water system more efficient, flexible and reliable, which will provide local, statewide and national benefits.

The project:

- Helps achieve the objectives of the California Water Action Plan
- Reflects the innovative approach mandated by the people of California under Proposition 1
- Provides a substantial supply of high-quality water to support the economy and enhance the environment, particularly in the face of climate change
- Better captures, stores and provides water for the environment, the economy and quality of life for families, farms and businesses
- Is being developed in accordance with the beneficiary-pays-principle

The Sites Project offers the State of California a significant supply of water to improve conditions for salmon and smelt and to comply with the will of California voters.

The Sites Reservoir

Delivers about **441,000** acre-feet of water per year to California's water system for...

- Drinking Water
- Irrigation
- Climate Change Resiliency
- Enhanced Water Quality
- New Recreational Opportunities
- Flood Management
- Ecosystem Improvements
- Renewable Energy

Stabilize Sacramento River fall flows for salmon

Conserve coldwater pools in existing reservoirs later into the summer months to improve conditions for salmon spawning and rearing

Provide nutrient rich water to the Yolo Bypass to benefit smelt

Increase water supplies for refuges and managed wetlands north and south of the Delta

The time is NOW to implement bold and strategic water storage options, in order to capture and deliver water for use where and when it's needed most for the environment, families, farms and businesses.

By investing in Sites, the California Water Commission has a unique opportunity to invest in the ecological health of the Sacramento River and Sacramento-San Joaquin Delta (Delta) and fulfill the will of California Voters.

Sites Works for California and Goes Above and Beyond California Water Commission Scoring Criteria in Four Essential Ways

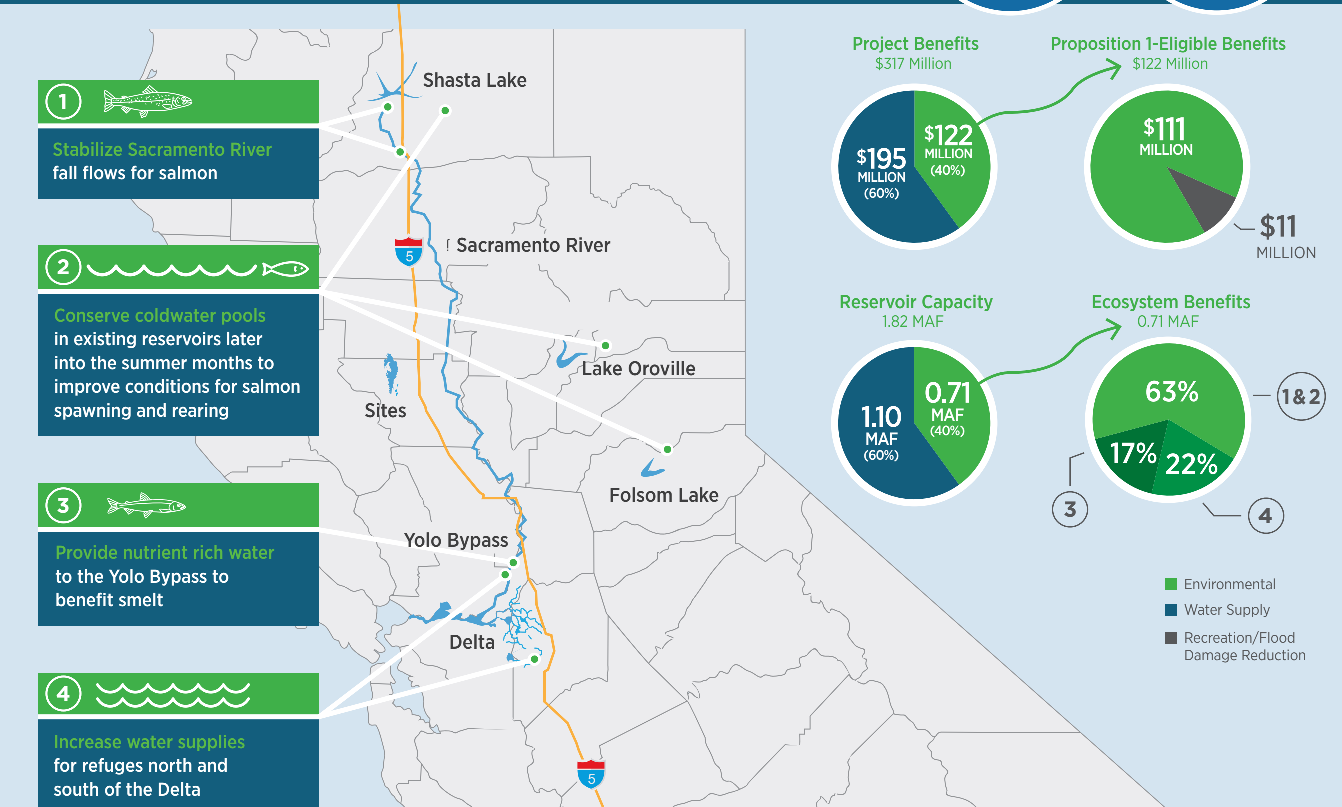
Public Benefit to Cost Ratio and Ecosystem Improvement Benefits

Sites is Cost Effective

Learn more about the project's public benefit to cost ratio on page 14.

$122 MILLION in annual public benefits

2.1 Public **Benefit to Cost** Ratio



Learn more about the project's ecosystem benefits on page 12.

Relative Environmental Values

Sites provides substantial ecosystem benefits.

The project includes several **critical environmental enhancements**

Learn more about the project's Relative Environmental Values on page 15.

Resiliency

Sites is resilient.

Sites provides **dedicated water storage** that can be adaptively managed to meet the **changing needs of the Sacramento watershed and Delta,** constituting significant benefits under anticipated future climate conditions

Learn more about the project's resiliency on page 17.

Implementation Risk

Sites Project is feasible. The real risk lies in not implementing the Sites Project.

The project meets the California Water Commission criteria for **technical, economic, financial,** and **environmental feasibility.**

The Bureau of Reclamation's Feasibility Report independently validates the feasibility of implementing the Sites Project.

Learn more about the project's implementation risk on page 16.

Why Sites?

Sites is a critical surface storage project that combines the public benefits of water storage with the ecosystem benefits of increased environmental flows in the Sacramento River.

California has grappled with serious water supply reliability and ecosystem challenges for decades. Voters overwhelmingly approved Proposition 1 in anticipation of more frequent drought conditions, a smaller snowpack, heavier rain and flashier storms, aging water infrastructure and declining ecosystem conditions. The Sites Project offers the best opportunity for meeting the will of the voters by providing a reliable source of high-quality water to benefit the ecosystem and provide needed water storage.

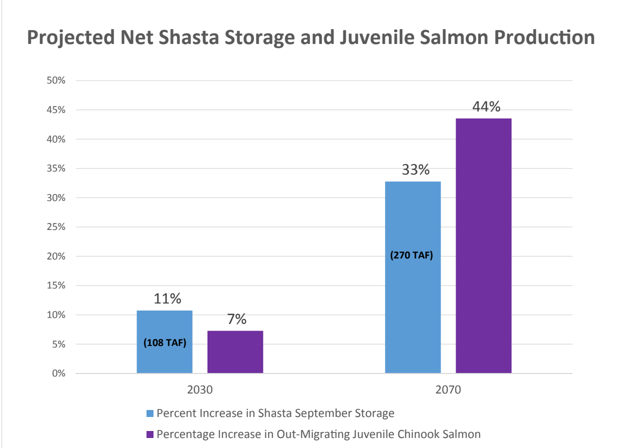
The Sites Project Authority (Authority) proposes to provide the state with 710,000 acre-feet (40%) of the usable capacity in Sites Reservoir for ecosystem benefits. When this water is managed according to California Water Commission requirements, the resulting long-term annualized water deliveries would provide:

Proposed 2030-2070 Average Ecosystem Benefits (Acre-Feet)

Species Benefiting	Drier Years	Average Years
Chinook Salmon	190,000	125,000
Delta Smelt	29,000	39,000
Level 4 Refuge Supplies	19,000	33,000

The proposed operations intentionally provide substantial carry-over storage. This produces larger ecosystem benefits in dry and critical years. Additional benefits for the Water Commission's consideration include:

- **Flexibility:** Should future hydrologic and/or environmental conditions result in a need to provide different benefits than have been assumed in today's Relative Environmental Values (REVs), state's resource managers could reallocate the water to align with new priorities.
- **Partnership:** Through an effective partnership between the Authority and the state resource agencies managing the state's investment, even greater benefits can be achieved.
- **Management:** The Sites Project is being developed in accordance with the beneficiary-pays principle, which enables the state to retain management control over its investment for the life of the Sites Reservoir.
- **Federal Participation:** The Bureau of Reclamation (Reclamation) has been preparing studies to advance the Sites Reservoir. Their congressionally-mandated Draft Feasibility Report demonstrates a strong interest to invest in the Sites Project, which would strengthen and enhance the state's investment. The federal level of participation will only be determined after the Authority has received a decision on the Water Commission's level of investment.



Sites Project Authority

Sites is being developed by several Northern California public agencies who are motivated to sustainably build a local water management project that helps the state meet its overall water system needs. The Authority was formed on August 26, 2010 and is governed by a 12-member Board of Directors representing Sacramento Valley leadership in government and water management.

The Authority's Board of Directors is the lead agency working with regional stakeholders and water agencies statewide to advance the construction of the Sites Project. In January 2017, the Authority assumed lead agency responsibilities for ensuring compliance with the California Environmental Quality Act (CEQA) and is working with Reclamation, the federal lead agency, to ensure compliance with the National Environmental Policy Act (NEPA).

Together, the Authority, Reclamation and the California Department of Water Resources (DWR) are working in partnership to improve the operation of the state's interdependent water system.

Should the state or federal government elect to invest in the project's construction, in exchange for acquiring water which they would manage for environmental benefits, the Authority intends that the appropriate state and/or federal resource agency would become a partner. This agency would then have the same or equivalent status as the water agencies who participate and fund their share of the project's costs to improve their water supplies.

Sites Eligibility for Proposition 1 Funding

The Sites Project complies with all eligibility requirements for WSIP funding and achieves California's co-equal goals of water supply reliability and ecosystem improvement.

WSIP Funding Requirement	Sites Project Compliance
Eligible Applicant Type (CCR 6006(c)(1)(A)1a)	A Joint Powers Authority will own, govern, manage and operate the Sites Project (CWC 79759)
Eligible Project Type (CCR 6006(c)(1)(A)1b))	The Sites Project is one of the surface storage projects identified in the 2000 CALFED Record of Decision (CWC 79751(a))
Not affect a designated Wild and Scenic River (CCR 6006(c)(2)(A))	The Sites Project will not impact designated wild or scenic rivers
Consistent with Agricultural and Urban Water Management Plans (CCR 6013(a)(1)(C))	Sites has submitted plans for all participating water suppliers that meet the size compliance threshold
WSIP Program Cost Share < 50% (CCR 6006(c)(1)(A)2)	The proposed WSIP funding share for Sites is 32% of the total project capital cost
The project's inclusion in an integrated regional water management plan (CWC 6003(a)(1)(A)2)	Sites is identified as a long-term regional priority in the Sacramento Valley Integrated Water Management Plan
Monetized Ecosystem Benefits > 50% (CCR 6006(c)(1)(A)(3)	The value of ecosystem benefits of Sites are > 90% of the total Proposition 1-eligible public benefits
Provides measurable improvements to the Delta ecosystem or to the tributaries to the Delta (CCR 6006(c)(2)(B))	Sites provides measurable temperature and flow benefits for fish in the Sacramento River (the largest tributary to the Delta), many of which migrate through the Delta
State Water System Improvement (CCR 6006(c)(2)(C))	In year 2030, the operation of Sites to release water adds an average 83,000 AF of water in Lake Shasta and 59,000 AF of September storage in Oroville
Cost Effective (benefit cost ratio > 1) (CCR 6006(c)(2)(D))	Depending upon how the state values the public benefits, the Public Benefits Ratio ranges from 2.1 to 4.5 when using WSIP guidelines
Provides net improvement in ecosystem and water quality conditions (CCR (6006(c)(2)(E))	Sites increases Chinook salmon populations, especially when compared to the no project alternative
Advances the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta (CCR 6006(c)(2)(F))	Sites benefits anadromous fish populations in Delta tributaries, provides pulse flows into the Yolo Bypass to increase food sources to improve Delta smelt growth and condition as they mature into adults and provides Delta outflows from June through September to support beneficial uses

"Sites Reservoir offers a remarkable opportunity to reoperate California's longest and largest river, the Sacramento, to provide multiple benefits for fish, farms and cities in an innovative manner. By partnering with the Sites Project Authority in the development of the Reservoir, the state would acquire water storage capacity and have management control over the resulting releases to ensure environmental benefits are achieved."

— Senator Dianne Feinstein

"North and South, rural and urban, Republican and Democrat, California's leaders agree on one thing: our state needs to invest in Sites Reservoir to meet the water supply challenges of today and the future. Sites provides more water per dollar invested than any other proposed project in the state, enough to supply millions of Californians for an entire year, while also creating environmental benefits and allowing smart recapture and reuse of water released from other reservoirs. Investing in Sites will fulfill the will of the 67% of Californians who supported Proposition 1 funding for water storage infrastructure, and I hope the California Water Commission recognizes the project's diverse benefits."

— Congressman LaMalfa

"Sites Reservoir is one of the most useful, cost-effective water infrastructure projects California could build. It is an ideal project that can provide water for agriculture, urban uses and the environment. The support for the Sites Project from a majority of the California Congressional delegation speaks to the statewide benefits of the project."

— Congressman Garamendi

"As water and environmental managers have been forced to operate under a constant regulatory threat, Sites Reservoir will provide a critical tool for them to solve California's toughest water problems collaboratively and productively."

— Senator Nielsen

"Sites is an incredibly important project for the State of California that meets many of the public benefits required by the Water Bond."

— Assemblymember Gallagher

"Building Sites Reservoir is an imperative part of the solution to help California meet our water supply challenges of today and the future. The operational flexibility provided by the unique project offers reliable long-term assistance to California's complex water system."

— Assemblymember Dahle

Project Location

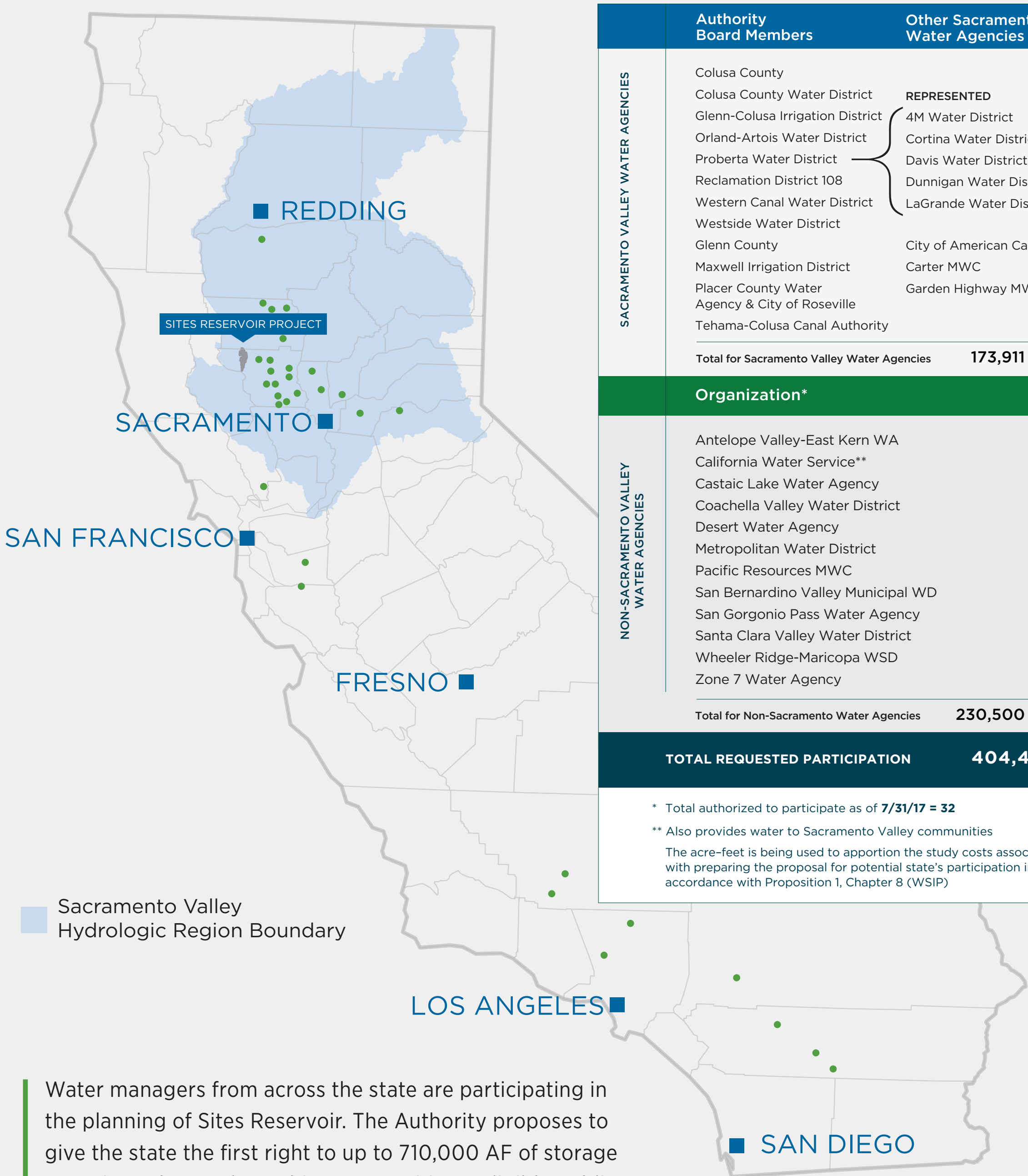
Ideally located in California's largest watershed, Sites includes a new 1.8 million acre-foot (MAF) reservoir offstream of the Sacramento River. The Sites Project will be situated on the west side of the Sacramento Valley, approximately 10 miles west of the rural town of Maxwell, in historic Colusa County. The Sacramento Valley is a unique region, known for it's farming community, rich agricultural benefits, and natural beauty. The region has been considered ideal for offstream water storage since the 1950's. Today, with climate change creating a new normal of changing future conditions (less snow-pack and flashier rainfall), **Sites is ideally located to maximize the diversion and storage of excess storm event flows in the Sacramento River.**

Sites is widely supported by local community leaders, residents, as well as state water managers and agencies from the Bay Area to Southern California. There is bipartisan support for the Sites Project, including the 43 members of California's Congressional Delegation, 12 State Senators and 18 State Assemblymembers who have signed letters of support.

Participants in the Sites Project represent 39 of California's 51 congressional districts. A full list of supporters of the Sites Project can be found in Attachment 6E to the Eligibility Tab of the WSIP application.

Sites Statewide Project Participation

Sites is locally-led in partnership with the state and federal government, and is widely supported by water agencies and stakeholders from across the state.



Organization and Amount of Sites Water Requested

	Authority Board Members	Other Sacramento Water Agencies
SACRAMENTO VALLEY WATER AGENCIES	Colusa County	
	Colusa County Water District	REPRESENTED
	Glenn-Colusa Irrigation District	4M Water District
	Orland-Artois Water District	Cortina Water District
	Proberta Water District	Davis Water District
	Reclamation District 108	Dunnigan Water District
	Western Canal Water District	LaGrande Water District
	Westside Water District	
	Glenn County	City of American Canyon
	Maxwell Irrigation District	Carter MWC
	Placer County Water Agency & City of Roseville	Garden Highway MWC
	Tehama-Colusa Canal Authority	
	Total for Sacramento Valley Water Agencies	173,911 AF
	Organization*	
NON-SACRAMENTO VALLEY WATER AGENCIES	Antelope Valley-East Kern WA	
	California Water Service**	
	Castaic Lake Water Agency	
	Coachella Valley Water District	
	Desert Water Agency	
	Metropolitan Water District	
	Pacific Resources MWC	
	San Bernardino Valley Municipal WD	
	San Gorgonio Pass Water Agency	
	Santa Clara Valley Water District	
	Wheeler Ridge-Maricopa WSD	
	Zone 7 Water Agency	
	Total for Non-Sacramento Water Agencies	230,500 AF
	TOTAL REQUESTED PARTICIPATION	**404,411**

* Total authorized to participate as of **7/31/17 = 32**

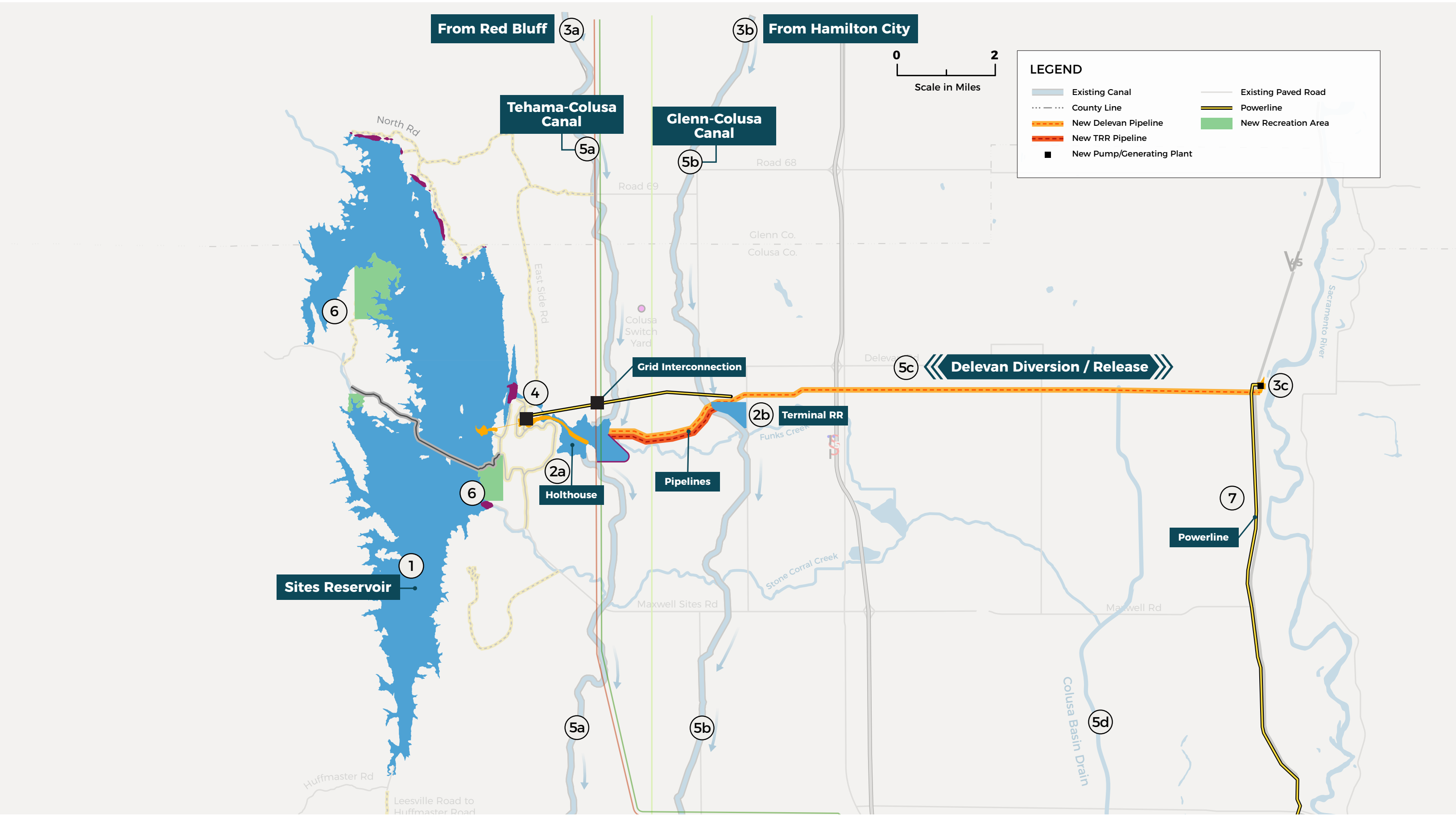
** Also provides water to Sacramento Valley communities

The acre-feet is being used to apportion the study costs associated with preparing the proposal for potential state's participation in accordance with Proposition 1, Chapter 8 (WSIP)

Water managers from across the state are participating in the planning of Sites Reservoir. The Authority proposes to give the state the first right to up to 710,000 AF of storage capacity to be used to achieve Proposition 1-eligible public benefits. The Authority has established a waiting list from its participants which would be used to finance the project should the state and federal investment level be lower than the 40% proposed.

Sites Project Facilities

Sites is the modern infrastructure upgrade California needs to meet 21st century water challenges



Sites Creates Jobs and will Enhance Region-Wide Economic Growth and Stability

Annual Employment	Approximate # of Jobs Added
Short Term Employment	
Direct Jobs: Construction	115
Indirect and Induced Jobs: Construction	390
Total Direct, Indirect, and Induced Employment	**505**
Long-Term Employment: Direct Jobs	
Operations and Maintenance	30
Recreation	15
Total Direct Jobs	45
Long-Term Employment: Indirect and Induced Jobs	
Operations and Maintenance	10
Recreation	2
Total Long-Term Indirect and Induced Jobs	12
Long-Term Total Direct, Indirect and Induced Employment	57

As an offstream reservoir, Sites avoids environmental impacts to aquatic species common with in-stream dam construction. Sites combines the public benefits of water storage with the ecosystem benefits of increased environmental flows in the Sacramento River during droughts, when water for the environment has the highest value. It ensures cold water is available during the late summer months to benefit fish. **With the construction of Sites Reservoir, the combined storage capacity of large reservoirs in the Sacramento Valley increases by about 15%.**

Sites Project Facilities

Water managers have long acknowledged that by creating a new source of water and adding more flexibility in the system, Sites can help California succeed in implementing 21st century water solutions—to meet human AND environmental needs. To achieve this, the project includes the following facilities:

1 Sites Reservoir

The **1.8 MAF** offstream reservoir will require two main dams (Sites and Golden Gate) and nine saddle dams. The resulting reservoir covers **14,200 acres**. This reservoir will also improve local flood protection as witnessed by the February 18, 2017 storm event that flooded part of Maxwell and temporarily closed Interstate 5.

2 Regulating Reservoirs

2a. Holthouse is an expansion of the existing Funks Reservoir, which provides flow equalization for the Tehama-Colusa Canal. Holthouse Reservoir is sized to allow pump-storage operations to generate renewable energy. Water entering Holthouse Reservoir will be pumped into Sites.

2b. The Terminal Regulating Reservoir will be constructed at the Glenn-Colusa Irrigation District Canal for flow equalization with flows pumped into Holthouse.

3 Diversions

Water from the Sacramento River will be diverted for conveyance to Sites Reservoir from three locations:

3a. The existing Red Bluff Pumping Plant will divert water and convey it through the Tehama-Colusa Canal.

3b. The existing Glenn-Colusa Irrigation District Pumping Plant will divert water and convey it through the Glenn-Colusa Canal.

3c. A new Delevan Intake Pumping/Generating Plant will divert water into a new pipeline that will convey water into Holthouse Reservoir.

Both the Glenn-Colusa and Tehama-Colusa diversions currently utilize state-of-the-art fish screens and the Delevan Intake will include state-of-the-art fish screens to ensure fish friendly diversions.

4 Sites Pumping/Generating Plant

This facility will have a capacity of **5,900 cubic-feet per second** to fill Sites Reservoir. Water released from the reservoir will flow in the reverse direction through the plant and generate seasonal **hydropower** and daily pumped-storage to contribute to the state's renewable energy goals.

5 Conveyance

Water from Sites can be delivered throughout much of California. Releases from Sites include the following:

5a. The existing Tehama-Colusa Canal conveys water from the Red Bluff Diversion to Holthouse and deliver releases from Sites to local users south of the reservoir.

5b. The existing Glenn-Colusa Canal conveys water from the Hamilton City Diversion to the Terminal Regulating Reservoir and deliver releases from Sites to local users south of the reservoir.

5c. The new 13.5 mile Delevan Pipeline connects the new Sacramento River intake with Holthouse to convey water in either direction.

5d. To the Colusa Basin Drain and either to the Sacramento River or into the Yolo Bypass through Knights Landing Ridge Cut.

Integrating local infrastructure reduces costs and ensures the project complements the Sacramento Valley water system.

6 Recreation Areas

The project will include the construction of two new recreation areas on the shore of Sites Reservoir for camping, picnicking, hiking, horseback riding, boating and fishing, among other activities. A separate boat ramp will also be included.

7 Powerlines

Overhead powerlines will connect the three pumping/generating plants located at: Holthouse (Sites), the Terminal Regulating Reservoir, and Delevan to the state's electrical grid.

Sites Project Operations

Sites Reservoir will be filled by diverting excess Sacramento River flows originating from unregulated upstream tributaries. Diversions can potentially occur in any month or water year type, but would be greatest in the winter months with an emphasis on capturing flows from storm events. If Sites existed during 2017's rainy spring, and had been completely empty, 1.8 million acre-feet (AF) of water could have been stored as of May 3, 2017 (DWR).

The Sites Project will operate in cooperation with Central Valley Project (CVP) and State Water Project (SWP) system facilities to produce a wide range of public and ecosystem benefits that can be flexibly managed to adapt to future changes, depending on need and priority. Up to 710,000 AF of capacity supports the storage and then release of critical water supplies dedicated to environmental needs.

Sites Reservoir will provide water benefits through two primary mechanisms: (1) water stored in Sites Reservoir can be released directly to the Colusa Basin Drain and Sacramento River, and (2) water stored in Sites Reservoir could be exchanged for water stored in Shasta Lake, Folsom Lake, or Lake Oroville and Clair Engle Lake (Trinity).

> **Had Sites been operational during the 2017 rainy spring season, an additional 1.8 million acre-feet of water could have been stored as of May 3, 2017.**

Sites Reservoir can be used to reduce releases and increase storage in other reservoirs with downstream habitat critical to fish, while still meeting requirements for minimum instream flow objectives, Sacramento River temperature requirements, and Delta salinity control assigned to the SWP and CVP. Through this reduction in releases, storage can be conserved in Trinity Lake, Shasta Lake, Lake Oroville and Folsom Lake to significantly increase regional and system-wide operational flexibility.

> **Sites provides significant environmental benefits during dry and critical water year types, and especially during extended drought periods, to benefit coldwater releases for salmon. This benefit also applies to Folsom and Oroville coldwater pools.**

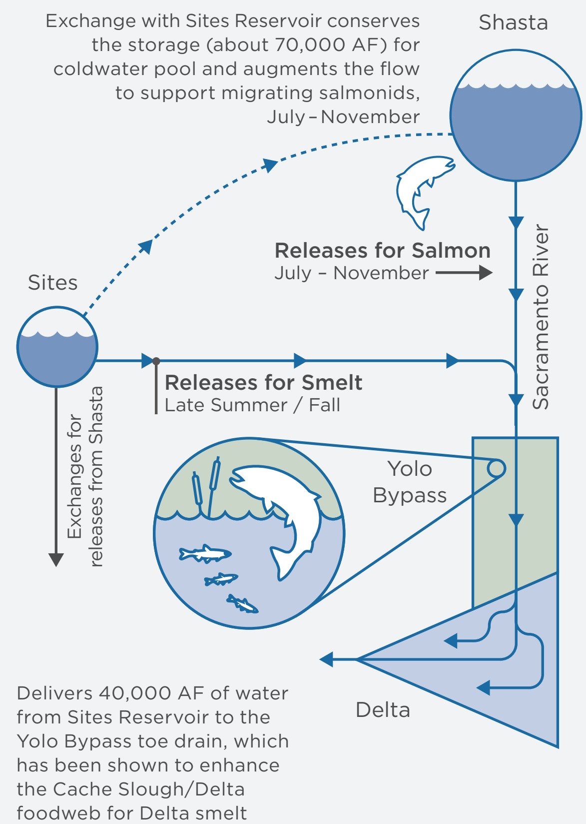
Diversion of excess Sacramento River flows to Sites Reservoir will only take place when flow monitoring indicates that sufficient bypass flows are present in the Sacramento River due to storm event flows.

> **Sites will capture high, excess runoff in a future with less snowpack and higher temperatures. Approximately 210,000 AF of Sites water will be available annually for environmental use as a long-term average supply.**

Sites Benefits to Salmon and Smelt

Sites Ensures Climate Change Resiliency

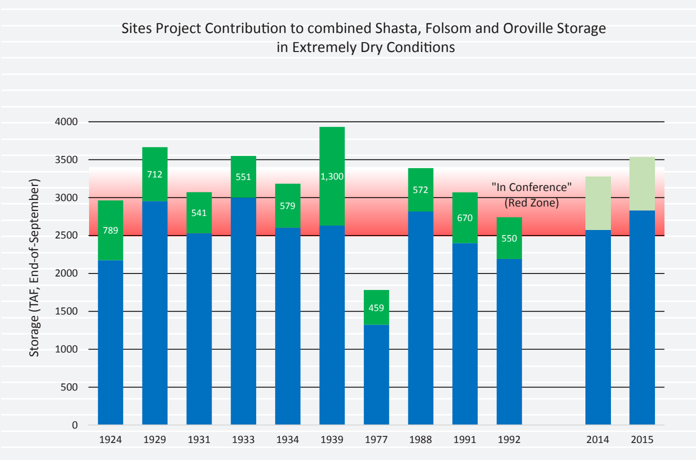
Sites promotes salmon outmigration, enhances habitat, and improves summer/fall water temperatures, as well as water volumes and food for Delta smelt.



Sites will be operated to provide a variety of environmental benefits that will be managed by the state to provide water for ecosystem and water quality purposes. This pool of dedicated water will be managed to improve coldwater conservation storage, augment river flows during critical periods for fish migration, increase flows through certain watercourses and/or facilities (such as the Yolo Bypass), improve water quality and/or enhance habitat restoration. Collectively, the state and the Authority will manage a sizable supply of water to address real-time needs and achieve both intermediate and long-term goals.

Sites Reservoir water will also be used to supplement existing municipal and agricultural supplies for use in the Sacramento Valley and south of the Delta. These operations will be conducted in cooperation with CVP and SWP operations.

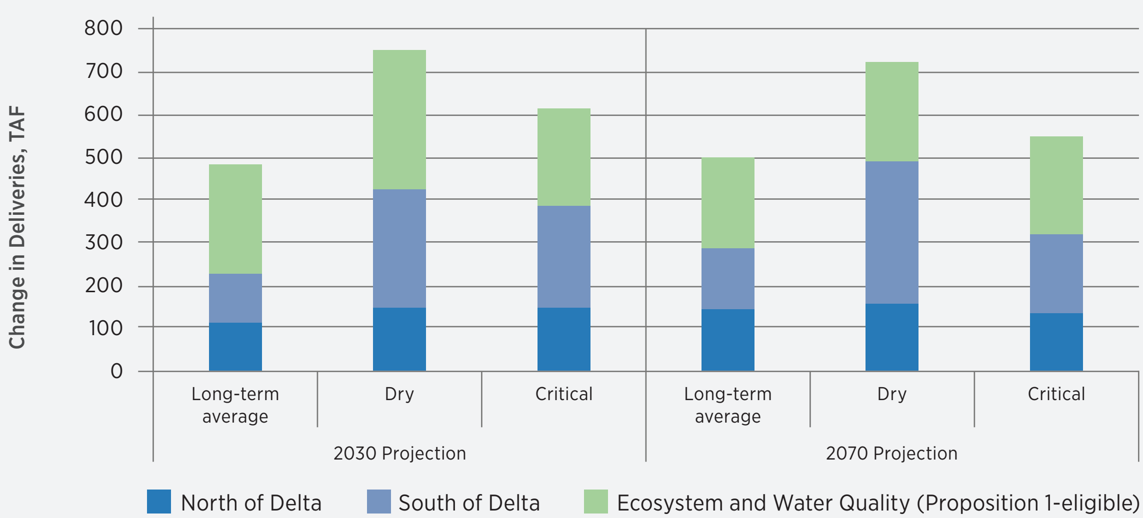
> **Sites is particularly beneficial during dry and critical years and extended drought periods, increasing overall water supplies despite climate change impacts.**



During droughts, Sacramento Valley reservoir operations become severely constrained when combined storage levels of Shasta, Folsom and Oroville are reduced to approximately 3 MAF. The addition of Sites Reservoir adds approximately 15% additional storage for the Sacramento Valley. Using the 2030 WSIP hydrology, when drought conditions occur, Sites Reservoir would provide relief during that year for both listed native fish species and for water agencies. Approximately 700,000 acre-feet of the Sites water would carry over into the next year should drought conditions continue.

Sites Reservoir Provides Water for Public and Non-Proposition 1-Eligible Public Benefits in All Water Year Types

Sites Reservoir Increase in Water Supply



Proposition 1-Eligible Public Benefits

Proposition 1 allows taxpayer resources to be used for specific public benefits the state can invest in. The state's investment in the Sites Reservoir can be used to achieve the following Proposition 1-eligible benefits.

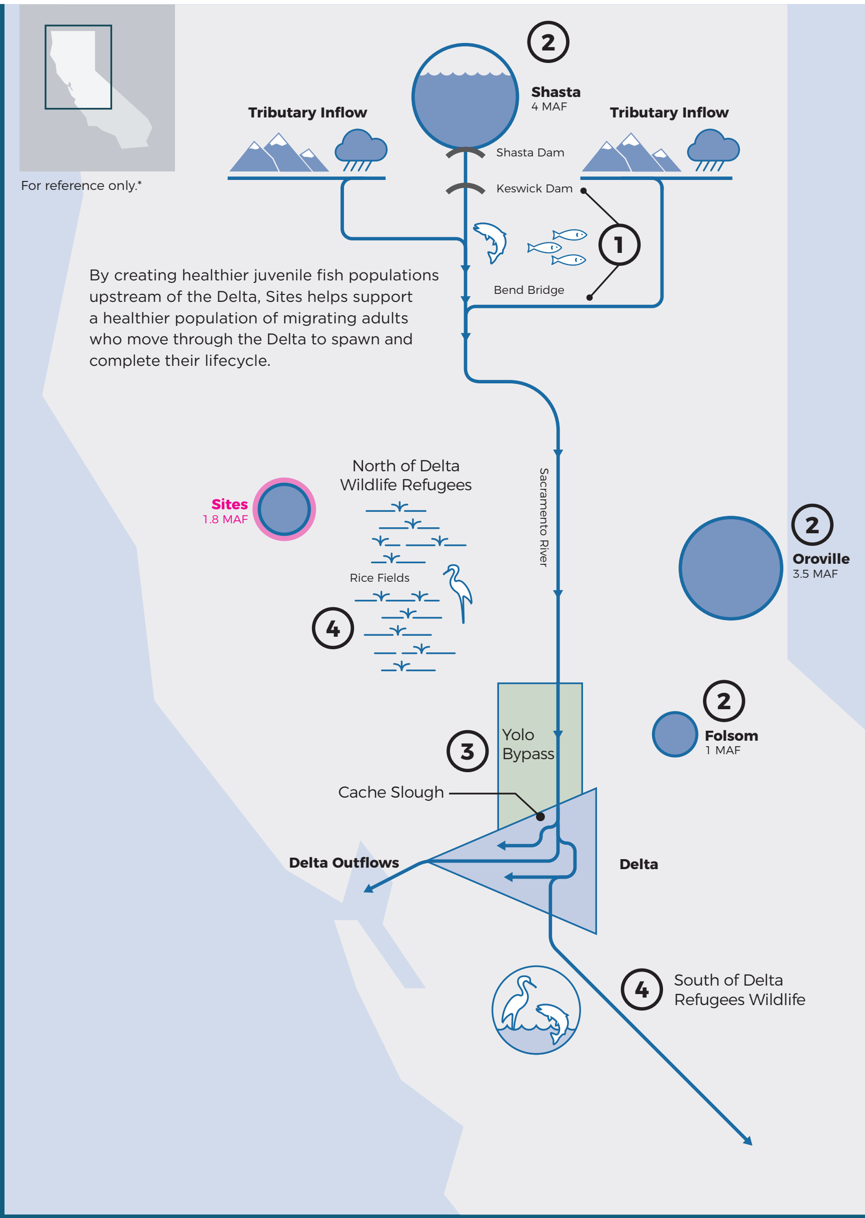
Ecosystem Improvements

The Authority will partner with the California Department of Fish and Wildlife (CDFW) and State Water Resources Control Board (SWRCB) to deliver an annual supply of water that would be directed to meet the highest priority water needs in the state.

1. The greatest ecosystem benefit will be improved temperatures and flows in the Sacramento River between Keswick Dam and Bend Bridge. This portion of the Sacramento River is critical habitat for Chinook salmon (including the endangered Winter Run) and Steelhead. Water released from Sites Reservoir will meet existing SWP and CVP obligations to enable additional coldwater Storage at Shasta and Oroville above critical fish habitat. This storage will provide better temperature control and supplemental flows to support fish migration and reduce egg mortality (i.e. redds).

2. Sites will allow for increased coldwater pool storage levels and more reliable coldwater pool storage in existing reservoirs later into the summer months, improving conditions for native fish in several ways:
   - Increased Shasta Lake storage levels provide additional coldwater pool storage in below normal, dry, and critical water-year types.
   - Improved water temperature suitability in Lake Oroville for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook salmon spawning in the lower Feather River and augmented flows in the lower Feather River to minimize redd dewatering, juvenile stranding and isolation of anadromous salmonids.
   - Additional coldwater pool storage in Folsom Lake benefits juvenile steelhead summer rearing and fall-run Chinook salmon spawning in the lower American River.

3. In a distinctly unique ecosystem action, Sites Reservoir will provide two pulse flows of at least 400 cubic feet per second over a two to three week period into the Yolo Bypass. These pulses will be adaptively managed by the state's designated resource agencies to push water high in phytoplankton and zooplankton directly into the Cache Slough area, the only place in the Delta where the endangered Delta smelt population is increasing. The resulting increase in desirable food sources should improve Delta smelt growth and populations as they mature into adults.



4. Sites water will enhance ecosystems for bird populations utilizing the Pacific Flyway during annual migration periods. Additionally, up to 50,000 AF of water will be provided to assist in meeting incremental Level 4 wildlife refuge water needs north and south of the Delta. This water will improve habitat conditions for a number of species, including giant garter snake, tricolored blackbird, and migrating waterfowl.

Additional Ecosystem Improvements (not monetized)

The Sites Project will provide additional benefits that have not been monetized due to lack of sufficient, tangible data and generally-accepted models that could reasonably estimate benefits to specific species. The benefits for Chinook Salmon in the Sacramento River watershed between Keswick Dam and Red Bluff (the area captured in SALMOD models) were monetized, but benefits to salmonids in the Feather River and American River were not monetized. Coldwater and additional flows made possible by Sites will also benefit other species of fish in the Sacramento River watershed, including steelhead and sturgeon. **Therefore, the net environmental benefits Sites can provide are even greater than those provided in the WSIP application criteria.**

Additional Proposition 1-Eligible Public Benefits

Water Quality (Not Monetized). The Sites Project meets SWRCB water quality priorities by providing improved temperature and groundwater conditions. The project will also provide additional water supply to agencies serving disadvantaged communities. These benefits have not been monetized as water quality benefits. However, the temperature improvements benefit anadromous fish and are included in our analysis of coldwater pool benefits. Further, participants in Sites Reservoir are expected to use their water to address the undesirable effects by complying with the Sustainable Groundwater Management Act (SGMA), but the magnitude of these improvements is still being defined.

Flood. The local area downstream from the project is prone to floods, including portions of Maxwell, Williams and Colusa. Even though these are seasonal streams, the Funks Creek and Stone Corral Creek watersheds are a key source of flooding during major storms. Construction of the Sites and Golden Gate Dams will reduce the frequency of flooding, reduce river levels to avoid flood events and relieve pressure on local levees. Had Sites been operational during the 2017 spring rainy season, runoff from local creeks and streams could have been captured and stored, reducing high flows, preventing overtopping and avoiding flood waters that caused significant economic damage in Colusa County and temporarily closed Interstate 5, which is a critical artery for commerce.

> **The Sites Project advances California's objectives of restoring ecological health in the Delta and improving water management for beneficial uses.**

Emergency Response (not monetized). The Authority is committed to working with state and federal water managers and emergency personnel to provide water to support emergency events such as, but not limited to, firefighting, drought relief and Delta levee failures. Instead of dedicating a volume of water that may not be called upon by the state until at least a one in ten-year event (or longer) occurs, the Authority proposes that should water from Sites Reservoir be used to aid in responding to or recovery from an emergency, that repayment would occur through a mutually-acceptable exchange or transfer of water. As such, this benefit was not monetized and the Authority is not requesting Proposition 1 funding for this purpose.

Recreation. Two new recreation areas and a boat ramp will be created on the shore of Sites Reservoir. These areas will provide opportunities for boating, camping, hiking and equestrian use and have been monetized. Sites Reservoir will also improve water levels in existing reservoirs (e.g. Shasta, Oroville and Folsom) to support water-based recreational activities, but these benefits have not been monetized.

Additional Considerations

Operational Flexibility (not monetized). Sites Reservoir can be operated to achieve a wide variety of environmental and water quality objectives by operating to different strategies or priorities. This application proposes an operational strategy that aligns with the Water Commission's regulations by focusing on specific ecologic improvements in the Delta by providing benefits to native anadromous fish and in-Delta fish species. In the future, this operational strategy may be changed to reflect new or higher priorities.

Further, Sites reservoir will increase today's storage capacity in the largest reservoirs in the Sacramento Valley by 15%. Once the reservoir is operable, the state's water managers have the ability to operate differently – for both environmental and human uses – knowing there is additional capacity in the system. The ability to adaptively manage the reservoir releases to achieve different benefits and the benefits associated with the increase in system-wide storage capacity have not been monetized.

State's Operational Control (not monetized). The Authority proposes that the agencies with delegated authority to manage the state's investment would also have management control. This would be in the planning and also in the day-to-day releases needed to adapt to current and forecast conditions.

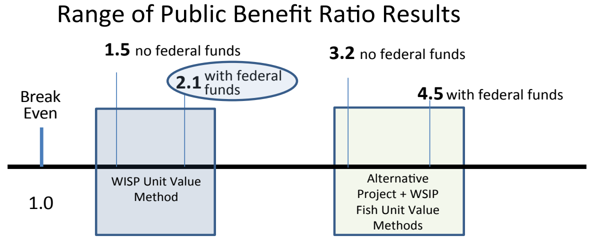
Net Benefits. The resulting ecosystem benefits were developed using the CalSim-II model as provided by the Water Commission for use in preparing this application. This model incorporates environmental, water quality, and water rights compliance obligations. Further, the Authority has added a simulated pulse flow criterion to be more protective of migrating juvenile salmonids and a criterion to ensure in-Delta water quality compliance requirements are achieved. The benefits presented in this application represent the difference between the "with project" from the "without project" to reflect the project's net benefits.

Sites Economic Benefits

Benefit-Cost Ratio: The Sites Project has been evaluated using two different and independent perspectives in conformity with the Water Commission's WSIP regulations and in accordance with Reclamation's federal procedures required for congressional authorizations. Their resulting Benefit-Cost Ratios are 1.52 and 1.72, respectively, which are both well above the minimum 1.0 threshold used as the conventional investment decision-making criterion. The difference is attributable to their different future climate change scenarios and use of different unit benefit values reflecting different value propositions.

Public Benefit Ratio (PBR): The state's investment in the Sites Project has been evaluated using two different WISP regulation approved monetization approaches – the alternative cost method and adjusted WISP provided unit benefit values. Each approach was applied to only the project's readily monetizable benefits under both "with" and "without" federal participation scenarios. Their corresponding resulting PBRs results are provided in the following figure:

Range of Public Benefit Ratio Results



Public Benefit Ratio Using Two Different Benefit Monetization Methods

The higher range PBRs reflects the high cost and scarcity of feasible major infrastructure development projects to obtain new water supplies. The alternative cost method also does not fully account for potential economies of scale benefits that large-scale and multi-purpose storage projects such as Sites can achieve. Using more conservative adjusted WSIP unit benefit values (based on the water transfer market) the resulting PBRs are correspondingly lower. Neither of these methods included the non-monetized benefits, some of which are significant.

Proposition 1 Eligible Benefit (in $M)	Annual Benefits ($M)
Ecosystem Improvement	$111
Water Quality	N/A
Recreation	$7
Flood Damage Reduction	$4
Emergency Response	N/A
Proposition 1 Non-Eligible Benefits (in $M)	
Water Supply	$175
Hydropower	$19
Total Monetized Benefit Annually	**$317**
PUBLIC BENEFIT RATIO: 2.1 to 4.5	

Beneficiary-Pays-Principle: Each participant pays their proportionate cost-share based on their assigned share of the reservoir's capacity over the project's life using their storage. Each participant decides how to use their storage – hold it, release it and/or exchange it – within the parameters established by Agreements. To accomplish this:

> **The benefits of the Sites Project far outweigh the costs. Sites is projected to cost $4.7 billion (2015 dollars), with an estimated $317 million in benefits as an annual return on investment.**

Continues on page 16 »

Relative Environmental Values

Benefits delivered by the Sites Project address the Ecosystem and Water Quality Priorities identified by CDFW and the SWRCB. Summary of Priorities:

Ecosystem	#	Priority	Benefit
	1	**Cold water for salmonid eggs and fry**	**Improved temperature downstream of Shasta, Oroville and Folsom**
	2	**Provide flow for rearing and juvenile migration**	**Additional water from Shasta and Oroville to be released for migrating juveniles**
	3	**Avoid dewatering redds and stranding juveniles**	**Release flows from additional storage in Shasta, Oroville and Folsom to stabilize flows and preserve redds**
	4	**Improve ecosystem water quality**	**Provide colder water temperatures in the Sacramento, Feather and American Rivers**
	5	**Improve dissolved oxygen and colder water**	**Provides colder water in the Sacramento, Feather and American Rivers**
	6	Increase attraction flows during migration	Not included, but operations could be reprioritized for this purpose
	7	Increase Delta outflow	Not monetized. June to October Delta outflow increased by 4% under 2030 conditions.
	8	Maintain or restore groundwater and surface water interconnection	The current groundwater to surface water interconnection will not change with operation of Sites Reservoir
	9	**Enhance flow regimes for riparian and floodplain habitat**	**Release of water to the Yolo Bypass will improve riparian habitat. Augmented flows to preserve redds will lead to seasonal improvement in floodplain habitat.**
	10	**Improve floodplain Inundation**	**Benefits additional flow to Yolo Bypass**
	11	**Enhance diversity of habitat for fish and wildlife**	**Enhanced habitat in the Sacramento River, Delta, and wildlife refuges**
	12	Eliminate barriers to migration	As an offstream reservoir, Sites does not create or remove a barrier to fish migration
	13	Remediate inadequately screened diversions	State-of-the-art fish screens were previously installed on the Sacramento River at the Tehama-Colusa Canal and Glenn-Colusa Canal
	14	**Provide water to State and Federal Wildlife Refuges**	**Up to 50 TAF/yr to refuges and privately managed wetlands**
	15	**Implement invasive species management**	**Not monetized. Mitigation areas will manage/control invasive species.**
	16	**Habitat for commercial, educational, etc. species**	**Enhanced habitat for waterfowl and gamefish (salmon, steelhead, sturgeon)**
	Water Quality Priorities		
F C	1	**Temperature**	**Operation of Sites Reservoir with the CVP/SWP in the Sacramento, Feather, and American Rivers will increase the volume of coldwater that can be released to benefit fish**
	2	Dissolved Oxygen	Operation of Sites Reservoir does not improve dissolved oxygen in water bodies deemed to be impaired by the State Water Resources Control Board
	3	Nutrients	Operation of Sites Reservoir does not change the amounts of nitrogen introduced into the waterways
	4	Mercury	Construction and operation of Sites Reservoir does not change the amount of mercury in the Sacramento, Feather or American Rivers
	5	**Salinity**	**Not monetized. If Sites were operable in 2015, benefits could be provided. However, based on the WSIP requirements, any benefits will erode by 2070 due to effects of climate change.**
	6	**Groundwater**	**Sites Reservoir will reduce undesirable results in groundwater**
	7	**Delta Tributary Flows**	**Operation of Sites Reservoir will not provide flows that resemble natural hydrograph patterns. However, it will provide increased flows, especially in dry and critical water year types, as well as provide pulse flows for benefits in Yolo Bypass.**
	8	Improve required water self-reliance	Sites Reservoir incrementally improves regional water self-reliance by helping reduce demand on the Delta watershed by developing local supplies in the west side of the Sacramento Valley.
	9	**Basic Human Needs**	**Water from Sites will be provided to disadvantaged communities**

Bold type = Public benefits offered by the Sites Project

Beneficiary-Pays-Principle (con't)

- Capital costs: The participating water agencies will finance their proportionate shares of capacity and Proposition 1 funds will cover the state's share of the initial capital.
- Annual Costs (Operations, Maintenance and Replacement): The participating water agencies will pay their proportionate share based on releases either at Holthouse or Delevan as appropriate. The state's share of these costs can be provided from revenues generated from at least two sources: (1) after water has been released from a reservoir to provide at least one Proposition 1-eligible benefit, a small portion of this water could be recaptured and then sold under a long-term contract and/or (2) the state's share of water stored in the reservoir could be used to generate electricity for third annual party sales through the pumped-storage operations. Should the state's revenue exceed the applicable annual costs, the surplus could be used to provide additional public benefits within the Sacramento Valley and/or Delta.

Implementation Risk

The implementation risk of the Sites Project has been characterized in accordance with the WSIP methodology in this application. Further, an independent analysis of the Project's feasibility using federal guidelines is available in the Draft NODOS Feasibility Report. Although the federal methodology differs from the WSIP methodology (e.g., different climate change assumptions), the results of the two studies are generally consistent. This independent analysis of the project by Reclamation found the project to be feasible based on available information.

> **Sites offers essential benefits under future conditions.**

Technical Feasibility: Reclamation, DWR and the Authority have independently reviewed the engineering for the Sites Project facilities and considered them all feasible for construction. The development of cooperative operations that cause "no harm" to SWP or CVP operations or senior water rights is currently underway in a collaborative process. The operations modeled in this application are restricted to the diversion of excess Sacramento River flows. Additional protection for migrating salmonids that restricts diversions during pulse flow periods are also included in the modeling to ensure that the public benefits result in net ecosystem improvement.

Economic Feasibility: The annualized benefits provided by the project significantly exceed the annualized total project costs – even when only those benefits that could be monetized are included and even when conservative estimates of unit values are applied (refer to economics section).

Financial Feasibility: There are currently 32 water agencies throughout the state that are participating in the development of the Sites Project. Of this, 28 agencies have requested to participate at a level that would allow them to receive water supply benefits. For planning purposes, the Authority has been using 500,000 acre-feet as the average long-term annualized volume the Sites Reservoir could produce. To date, these participants have requested 404,411 acre-feet (80%). Should the state elect to participate in the 710,000 acre-feet of reservoir capacity (40%), the participant's requests will be reduced proportionately (i.e. currently, there is a waiting list to receive water supply benefits).

Congress has authorized federal participation in up to 50% of a locally-sponsored water storage project in exchange for acquiring water benefits for the environment and water quality. Reclamation's Draft Feasibility Report, determines there is a federal interest in participation for up to 14% of the project's cost. A water storage project, having local, state, and federal participation demonstrates a strong level of financial backing and solid financial feasibility.

> **Operational flexibility and adaptive management are key components of the Sites Project, contributing to environmental benefits and ecosystem protection.**

Environmental Feasibility: When filled, Sites Reservoir will convert what has predominately been lands used for livestock grazing to create a new aquatic ecosystem. Sites will provide a significant new source of water to support existing and struggling aquatic and riparian ecosystems, conserve coldwater pools in upstream reservoirs for salmon and increase plankton for native estuarine fish. The Sites Project will minimally impact existing rivers and channels and where environmental impacts do exist a scientifically-based adaptive management program and mitigation and monitoring strategy will be implemented to protect the ecosystem.

As the CEQA and NEPA lead agencies, respectively, the Authority and Reclamation released a Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) that describes the impacts to environmental and cultural resources that would be reasonably expected to occur with the development of the Sites Project. Impacts that are significant and unavoidable are described within the EIR/EIS. While the project creates substantial ecosystem benefits, some significant and unavoidable impacts will remain after mitigation. These impacts include impacts to the community of Sites, existing golden eagle habitat, historical and cultural resources, disturbance of a dedicated cemetery, and conversion of prime farmland and native rangeland. The Authority is working with landowners, communities, Tribes, and government agencies to develop relocation and mitigation plans to mitigate these impacts.

> **Sites creates and protects aquatic and riparian habitat, improves ecosystem conditions, provides additional flows during critical periods for fish, and secures water for consumptive use.**

Sustainable Groundwater Management

In the DWR SGMA Program's Water Available for Replenishment Report (2017), it is estimated that 48% of the water that could be used to replenish California's groundwater will need to come out of the Sacramento River. Both the storage and the conveyance systems associated with Sites Reservoir are well suited to staging and conveying water to areas where groundwater depletion is producing undesirable effects. Providing surface water at a controlled rate and in seasons where the opportunity for in lieu of use and infiltration can be maximized is essential to SGMA compliance. In addition, Sites participants include agencies that are deeply invested in groundwater management in the Sacramento Valley, Bay Area, Central Valley, and Southern California. For example, Colusa County is investing in 10 TAF/year specifically to support SGMA compliance.

Resiliency

Because of climate change, some public benefits decline slightly and others increase between 2030 and 2070 for the operations modeled under current WSIP application requirements. One of the most beneficial features of Sites is that it provides dedicated storage of water for environmental purposes that can be repurposed for the highest priority public benefit as future conditions change.

The benefits to anadromous fish from the Sites Project become even more valuable over time. Without Sites, the population of Chinook salmon would decline drastically due to climate change. Modeling results for Sites Reservoir demonstrate the ability of the project to offset some of the decline in population due to rising temperatures, improving the resiliency of salmon populations in the face of climate change.

Integration with the State's Water System

The Authority is working with Reclamation and DWR to develop cooperative operations between Sites Reservoir, the SWP and the CVP that will improve water supply reliability throughout the state's integrated water system.

The operational scenarios are designed to concurrently:

- maximize water supply reliability
- improve Delta water quality
- provide seasonal flexible hydropower storage and daily pumped-storage
- increase survival of anadromous fish that migrate through the Delta. Provide seasonal nutrient-rich food for Delta smelt.

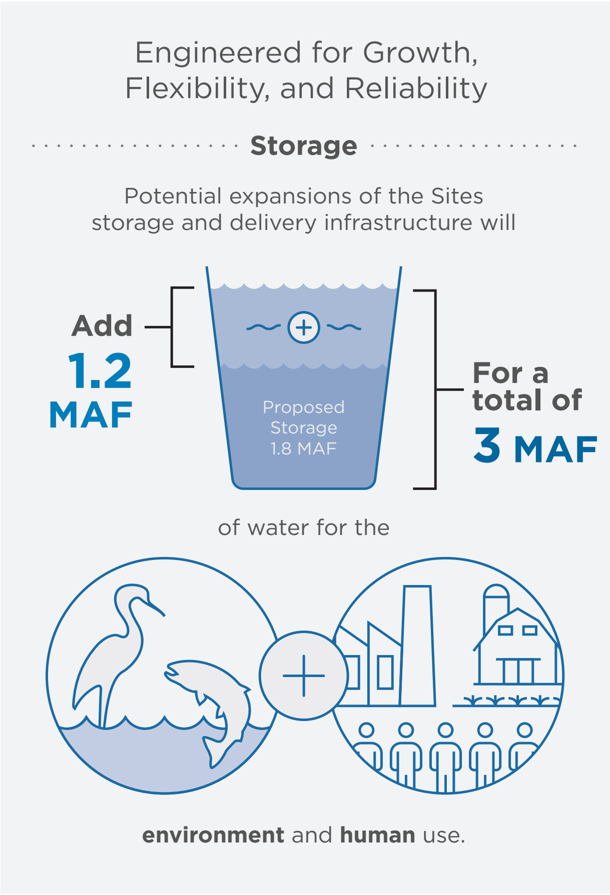
Sites Reservoir is also an important regional initiative and was identified as a long-term regional priority in the Sacramento Valley Integrated Water Management Plan due to its water supply reliability and flood protection benefits.

Finally, the Sites Project will also increase the value of projects that may be implemented in the future. One example is the River Arc Project on the American River under consideration by Authority members Placer County Water Agency and the City of Roseville, in coordination with the Sacramento County Water Agency and City of Sacramento. The River Arc Project will improve water supply reliability and groundwater quality in the lower American River watershed. Constructing Sites Reservoir can considerably enhance the potential benefits of this project and other future groundwater storage projects that improve groundwater sustainability in the Sacramento Valley.

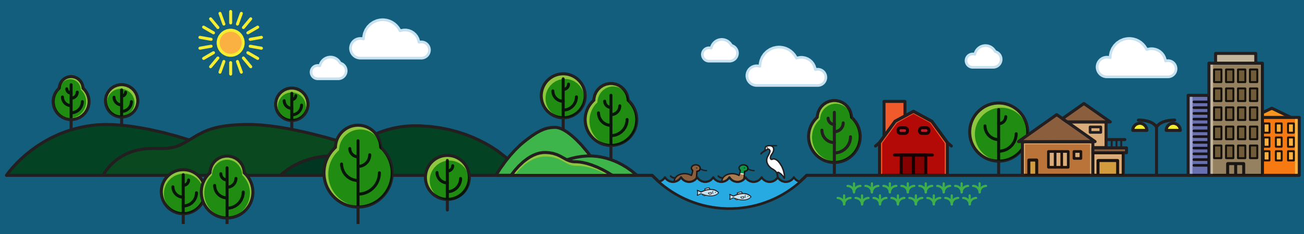
Potential for Expansion

The Sites Project can be expanded to provide additional public and non-Proposition 1 eligible benefits. The most likely near-term expansion includes the ability to divert floodwaters into storage from the Colusa Basin Drain. This will provide water managers with the ability to divert an additional 40 TAF annually of excess river flows.

The Draft NODOS Feasibility Report, which evaluated the development of the "Colusa Basin Complex" could include raising the Sites Reservoir dams and constructing dams with Sites Reservoir to increase storage in existing SWP and CVP reservoirs and also improve the conditions downstream from these reservoirs for fish.



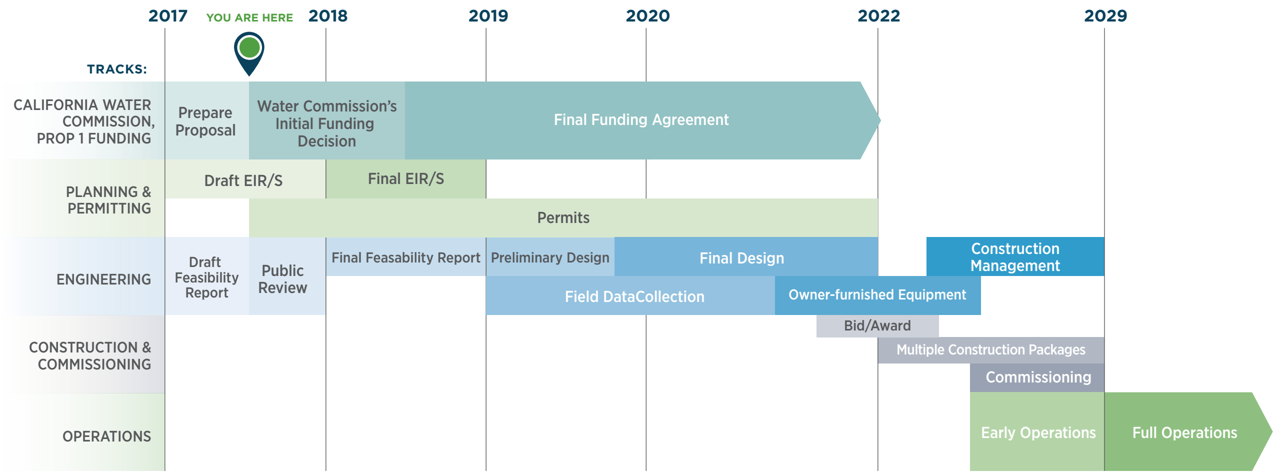
> Sites is a smart water storage investment for California's future. The California Water Commission has an opportunity to improve the Delta ecosystem, enhance the flexible operation of our state's water system and fulfill the will of California voters.



WATER FOR THE ENVIRONMENT, FAMILIES, FARMS AND BUSINESSES

Sites
SITESPROJECT.ORG

Sites Project Schedule



WSIP Application Reference Guide

Executive Summary Section	You Can Find More Information At
Eligibility for Proposition 1 Funding	Eligibility Tab and Program Requirements Tab
Letters of Support	Eligibility Tab – Attachment A6E Support Letters
Project Facilities	Eligibility Tab – Attachment A3 Project Description and Attachment A4 Drawing Package
Project Operations	Benefit Calculation, Monetization and Resiliency Tab – Attachment A2 Operations Plan
Benefits	Benefit Calculation, Monetization and Resiliency Tab – Attachment A3 Physical and Monetized Benefits and Attachment A5 Documentation
Costs	Benefit Calculation, Monetization and Resiliency Tab – Attachment A8 Basis of Estimate Report
Public Benefit Ratio and Benefit Cost Ratio	Benefit Calculation, Monetization and Resiliency Tab – Attachment A9 Benefit Cost Ratio
Ecosystem Improvements	Physical Public Benefits Tab – Attachment A1 and A2 Ecosystem Priorities Benefit Calculation, Monetization and Resiliency Tab – Attachment A3 Physical and Monetized Benefits
Other Proposition 1 Benefits	Physical Public Benefits Tab
Unmonetized Benefits	Benefit Calculation, Monetization and Resiliency Tab – A7 Non-Monetized Benefits
Relative Environmental Values	Physical Public Benefits Tab – Attachment A1 and A2 Ecosystem Priorities, Attachment A1 and A2 Water Quality
Implementation Risk	Feasibility and Implementation Risk Tab Draft Environmental Impact Report/Environmental Impact Statement: http://sitesproject.org/information/DraftEIR-EIS Feasibility Report: https://www.sitesproject.org/information/FeasibilityReport
Sustainable Groundwater Management	Eligibility Tab – Attachment A6C Groundwater
Resiliency	Benefit Calculation, Monetization and Resiliency Tab – Attachment A12 Uncertainty Analysis
Integration with State Water System	Benefit Calculation, Monetization and Resiliency Tab – Attachment A2 Operations Plan
Schedule	Eligibility Tab – Attachment 3 Schedule

Sites Works for California by providing a solid return on the investment of public dollars for both the state to produce environmental benefits beyond what is achievable today and for public water agencies seeking to improve their water supply reliability.

Sites Reservoir will give California its first major reservoir that dedicates a significant capacity (710,000 acre-feet or 40%) to ensure the Proposition 1-eligible benefits that were approved by the voters are achieved. This innovative new partnership will ensure that water for environmental purposes is directed to the most critical needs and highest priorities – both today and into an uncertain future.

Sites:

- Is a feasible and cost-effective project that will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta.
- Is resilient by providing long-term operational flexibility for both environmental and water supply reliability purposes, that will also improve the overall operation of the state's water system.
- Will be operated to provide additional water during droughts by diverting storm-generated runoff in the Sacramento River, when there is minimal impact to the environment, to then provide reservoir releases into the Sacramento, Feather and Lower American Rivers at times that are critical to the survival of native fish species.

Project Benefits

Enhanced water management flexibility

Improved environmental flows

Increased water supply reliability

Ecosystem improvements

Potential new renewable energy resources

New recreation opportunities

Climate change resiliency

Flood management

Enhanced water quality

Sites

SITESPROJECT.ORG

Feasibility and Implementation Risk Tab

Attachment 1: WSIP Feasibility Study for Sites Reservoir

Attach feasibility studies or documentation that demonstrates the proposed project's engineering, environmental, economic, and financial feasibility as described in TR section 3.5. See also regulations section 6003(a)(1)(O).

WSIP Application Instructions, March 2017

Response

This attachment contains the feasibility study for Sites Project specific to the WSIP application in compliance with the *Technical Reference* (TR) Section 3.5 and regulations section 6003(a)(1)(O).

Table of Contents

Attachment 1: WSIP Feasibility Study for Sites Reservoir 1
- Introduction 4
- WSIP Feasibility Requirements 4
  - Project Objectives 4
  - Project Description 4
  - Project Costs 5
  - Project Benefits 5
  - Cost Allocation 5
  - Technical Feasibility 5
  - Environmental Feasibility 6
  - Economic Feasibility 6
  - Financial Feasibility 6
- Constructability 14
  - Appendix 1: Financial Feasibility - Research Foundation Definitions of Water Infrastructure Financing Types 15
  - Appendix 2: Water Balance of CalSim II Simulation Results for Current Conditions, WSIP 2030, and WSIP 2070 17

Tables

Table A1-1. Sites Reservoir Capital Development Sources and Uses (2015$; $Millions) 7
Table A1-2. Current JPA Investors by Type and Class 7
Table A1-3. Annual Bond Repayment and O&M, 40-year Term (2015$; $Millions) 11
Table A1-4. Sites Reservoir Public Benefits Cash Flow (2015$; $Millions, TAF) 12
Table A1-5. Sites Reservoir Water Supply Financial Pro Forma (2015$; $Millions; TAF) 13
Table A1-6. Top 10 Global Investors in Water Infrastructure, North America 16

Acronyms and Abbreviations

AACE	Association for the Advancement of Cost Engineering
AB	Assembly Bill
CVP	Central Valley Project
CWC	California Water Commission
DEC	Design, estimate, and constructability
DSR	Debt Service Reserve
DSRF	debt service reserve fund
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
IDC	interest during construction
JPA	Joint Power Authority
M&I	Municipal and Industrial
NED	National Economic Development
NODOS	North-of-the-Delta Offstream Storage
NOI	Net Operating Income
O&M	operations and maintenance
P3s	public-private partnerships
Reclamation	U.S. Bureau of Reclamation
SRF	State Revolving Loan Fund
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
TAF/yr	thousand acre-feet per year
USBR	U.S. Bureau of Reclamation
WSIP	Water Storage Investment Program

Introduction

This WSIP Feasibility Study responds to the specific requirements of WSIP. Extensive studies have been prepared by the U.S. Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR). Key publications by these agencies include the following:

- *Draft North-of-the-Delta Offstream Storage (NODOS) Investigation Feasibility Report*, Reclamation, 2017.

  https://www.sitesproject.org/information/FeasibilityReport

- *North-of-the-Delta Offstream Storage Investigation Highlights*, DWR, 2014.

  http://www.water.ca.gov/storage/docs/Highlights/NODOS%20Highlights%20Booklet%2028May14.pdf

This WSIP Feasibility Study addresses all requirements of Section 3.5 of the TR (California Water Commission [CWC], 2017); however, there are some fundamental differences between this attachment and the U.S. Bureau of Reclamation (Reclamation) Feasibility Report. The most significant is a different climate change assumption for the evaluation of economic feasibility. The Reclamation Feasibility Report uses current conditions while this application evaluates 2030 and 2070 under changed climate conditions.

WSIP Feasibility Requirements

The WSIP application for Sites Reservoir includes the following information, consistent with Section 3.5 of the *Technical Reference* (CWC, 2017).

Project Objectives

The project objectives, including all public and non-public benefits the proposed project is designed to provide, are as follows:

- Improve water supply and water supply reliability
- Provide Incremental Level 4 water supply
- Improve the survival of anadromous fish and other aquatic species
- Improve Delta environmental and export water quality

The secondary objectives are:

- Provide sustainable hydropower generation
- Provide opportunities for recreation
- Provide flood-damage reduction

Project Description

A description of the proposed project, including facilities, operations, and relationships with existing facilities and operations is provided in Sites_A3 Project Description under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB. A detailed operations plan is provided in Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

Project Costs

The Basis of Estimate Report is in Sites_A8 Estimate under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. It documents all project costs, including construction costs, interest during construction, replacement costs, operations and maintenance costs consistent with the operations plan, and costs of mitigation for adverse environmental consequences identified in the draft environmental documentation.

Project Benefits

Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB describes and quantifies all project benefits, consistent with the operations plan. Public benefits and non-public benefits are quantified using physical metrics and, where possible, monetized. Proposed project benefits are displayed as expected average annual values for each year of the planning horizon is in Sites_A6 Annual Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. The benefits analysis addresses specific water year types (such as dry and critical).

Cost Allocation

A benefits-based cost allocation is provided in Sites_A10 Allocation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

Technical Feasibility

The Modeling Summary and Operations Plan (Sites_A1 Modeling under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB and Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB) demonstrates that the project is technically feasible consistent with the operations plan, including a description of data and analytical methods, the hydrologic period, development conditions, and hydrologic time step. A water balance analysis showing, for the with- and without-project condition, all flows and water supplies relevant to the benefits analysis is provided in Appendix 1 at the end of this attachment.

The ability of the project to achieve the level of benefits identified in this application depends on collaborative operation of Sites Reservoir with the Central Valley Project (CVP) and State Water Project (SWP). The Authority is coordinating an Operations Working Group with participation from Reclamation and DWR to develop Principles of Agreement to coordinate the operations in a way that will deliver the expected benefits. The Authority has coordinated with the California State Water Resources Control Board (SWRCB) staff with regard to water rights and is developing a strategy to secure the water rights required for project implementation.

The engineering design for most facilities has been developed to support a Class 3 (a higher level than is required in the WSIP Technical Reference) estimate (Association for the Advancement of Cost Engineering [AACE] International) of the construction costs; however, some facilities are currently developed to a Class 4 (less rigorous) level. Design, estimate, and constructability (DEC) reviews were performed by Reclamation in July 2007 and May 2014. A special assessment was performed in March 2017.

Sites Reservoir is constructible and can be operated and maintained. The construction would be similar to that of existing CVP and SWP facilities. Construction would result in changes in operations for the CVP and SWP systems. Considerable effort would be needed to cooperatively operate Sites Reservoir with the existing CVP and SWP facilities in a manner that would fully realize the benefits.

Environmental Feasibility

The environmental effects of the project are evaluated in Reclamation and Authority, Sites Project Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) (2017). Constructing Sites Project would affect environmental resources in the Primary, Secondary, and Extended Study Areas. Beneficial effects correspond to the following resource areas: water management, agricultural resources, fisheries and aquatic resources, socioeconomics, power and energy, and recreation. Some adverse effects would be temporary, construction-related effects that would be reduced to less-than-significant levels through mitigation. Other adverse effects would be significant, including the effects on aquatic, botanical, terrestrial, wetlands, cultural/tribal, paleontological, land use, and air quality in Alternative D (the Authority's proposed project). The proposed mitigation is identified in the Mitigation Monitoring Plan (Appendix A1 in the Draft EIR/EIS). The URL for the Draft EIR/EIS is https://www.sitesproject.org/information/DraftEIR-EIS.

Economic Feasibility

The expected benefits of the project exceed the expected costs, considering all benefits and costs related to or caused by the project. This analysis is presented in the Physical Monetized Benefits attachment, Sites_A3 Physical Monetized under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

Financial Feasibility

Pursuant to WSIP Regulation 6003(a)(1)(O) and the Water Storage Investment Program (WSIP) Technical Reference Document (Technical Reference) (California Water Commission, November 2016), the purpose of the Funding Strategy is to demonstrate that the Sites Reservoir project will be able to obtain sufficient funding from public (including the requested WSIP funds) and private sources to cover the construction and operation and maintenance costs of the project over the planning horizon. This section outlines a funding strategy based on the assumption that long-term, tax-exempt bond financing will be utilized to fund the Municipal and Industrial (M&I) and Agricultural Water Supply portions of the project costs.

As described in other sections of this application, the requested WSIP funding in conjunction with separately requested Federal funding will support the provision of significant public benefits that would not otherwise be financeable through conventional means. In addition, the WSIP and Federal funding will help to offset interest carrying costs during the project's construction phase, thus significantly lowering overall development costs and delivering multiple public and water supply benefits to the citizens of California.

Project Costs

As detailed in Section A10 (Allocation of Total Costs) and shown below in Table A1-1, the total development costs for the project are estimated at $5,176 million, including both construction costs and interest during construction (IDC). Assuming Federal funding of $730 million in combination with the requested $1,662 million in funding from WSIP for the public benefits portions of the project, the remaining portion of the project's costs would be approximately $2,784 million, including $509 million for hydropower. The total amount of project's cost attributed to M&I and Agricultural water supply would be $2,276 million. This is the portion of the project for which the Sites Joint Power Authority (JPA) would need to seek financing, either from conventional sources such as tax-exempt revenue bonds, or through alternative project delivery approaches.

Table A1-1. Sites Reservoir Capital Development Sources and Uses (2015$; $Millions)

Sources	Uses (Costs)		*Sources of Funding*					
			Federal Non-Reimbursable		**WSIP**		**Other Public & Private**	
Water Supply	$2,276	44%	$0	0%	$0	0%	$2,276	100%
Hydropower	$509	10%	$0	0%	$0	0%	$509	100%
Public Benefits	$2,392	46%	$730	31%	$1,662	69%	$0	0%
Total Project Costs	**$5,176**	**100%**	**$730**	**14%**	**$1,662**	**32%**	**$2,784**	**54%**

Current Investors and Committed Funding Sources

Current investors for the project include the JPA investors listed below in Table A1-2. In addition to directly funding the preparation of early feasibility analysis, preparation of funding applications and other activities during the first phase of project development, these investors are providing the necessary commitments for purchasing water resources from the project to ensure a stable long-term revenue stream to support the repayment of debt for the construction of the project as well as the long-term payment of water conveyance and operations and maintenance costs.

Although the below listed agencies have invested in the development of the WSIP application, they are not currently under a formal agreement to fund design, construction, or ongoing operations and maintenance (O&M). The initial distribution of investors displayed in Table A1-2 is not final, and water could be allocated differently between these investors or new investors could be added prior to construction. Even if these agencies became the investors responsible for M&I and agricultural water supply, it is unlikely that they would be the sole water users.

Table A1-2. Current JPA Investors by Type and Class

Agency	Class 1 (TAF/yr)	Class 2 (Waiting List) (TAF/yr)	Grand Total
American Canyon, City of	2,000.0	2,000.0	4,000.0
Antelope Valley-East Kern Water Agency	1,427.0	573.0	2,000.0
California Water Service		35,000.0	35,000.0
Carter MWC		1,000.0	1,000.0
Castaic Lake Water Agency	3,567.0	1,433.0	5,000.0
Coachella Valley Water District	18,906.0	7,594.0	26,500.0
Colusa County	10,000.0		10,000.0
Colusa County Water District	32,111.0		32,111.0
Desert Water Agency	4,637.0	1,863.0	6,500.0
Garden Highway MWC		4,000.0	4,000.0
Glenn-Colusa Irrigation District	20,000.0		20,000.0
Metropolitan Water District of S. CA		50,000.0	50,000.0
Orland-Artois Water District	20,000.0		20,000.0
Pacific Resources MWC		20,000.0	20,000.0
Reclamation District 108	20,000.0		20,000.0
San Bernardino Valley Municipal Water District	21,403.0	8,597.0	30,000.0
San Gorgonio Pass Water Agency	9,988.0	4,012.0	14,000.0
Santa Clara Valley Water District	17,123.0	6,877.0	24,000.0
TC6: 4M Water District	500.0		500.0
TC6: Cortina Water District	300.0		300.0
TC6: Davis Water District	2,000.0		2,000.0
TC6: Dunnigan Water District	5,000.0		5,000.0
TC6: LaGrande Water District	1,000.0		1,000.0
TC6: Proberta Water District	3,000.0		3,000.0
Western Canal Water District	3,500.0		3,500.0
Westside Water District	25,000.0		25,000.0
Wheeler Ridge-Maricopa Water Storage District	14,269.0	5,731.0	20,000.0
Zone 7 Water Agency	14,269.0	5,731.0	20,000.0
Grand Total	**250,000.0**	**154,411.0**	**404,411.0**

Key:
TAF/yr = thousand acre-feet per year
— = not applicable

Funding Strategy

Traditional capital financing strategies for major water infrastructure projects like the Sites Reservoir typically include both short- and long-term debt, such as revenue bonds, general obligation bonds, and state revolving loan funds. After an extensive review of the available options, and given the relatively large size of the proposed project, the funding strategy that appears most viable would rely on:

1. a combination of public grant funding (Federal and WSIP) for the project's public benefit purposes;
2. short-term debt during the design and construction phase; and
3. long-term tax exempt revenue bond debt, to be repaid over the course of 40 years from M&I and agricultural water supply revenues.

The funding structure for each project component is discussed below.

Public Benefits

As described in detail in Sites_A10 Allocation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, federal funding in combination with WSIP would fund the project's public benefit purposes (e.g., ecosystem improvements). This funding would also result in significant overall capital cost saving for the project as a result of reduced interest costs during the construction phase of the project. Federal non-reimbursable construction funding of up to $730 million would be provided as funding for Anadromous Fish ($488 million), Incremental Level 4 Refuge ($201 million) and Flood Reduction ($41 million) purposes. The federal government would also provide $1.3 million per year as its 50 percent cost share of the Incremental Level 4 Refuge's allocated $2.6 million annual O&M cost (see Table A10-1).

If granted, the $1,662 million in WSIP funding would provide sufficient matching funds to fully cover the capital cost for all the project's public benefit categories. WSIP would provide 100 percent funding for the capital cost assignments for Oroville Coldwater Pool, Yolo Bypass and recreation. The WSIP funding would also provide the necessary 56 percent remaining capital needed by the other public benefit purposes receiving federal funding (i.e., Incremental Level 4 Refuge, Anadromous Fish and Flood Reduction).

WSIP funding is not available to pay for the future O&M costs assigned to the public benefit purposes. Although these annual O&M costs are relatively minor compared to the public benefits' capital costs, future funding will needed to cover their respective assigned O&M costs. Except for Incremental Level 4 Refuge which could receive a 50% O&M cost-share contribution, it is expected that non-federal partners (e.g. California Fish and Game) and/or the JPA would be responsible for repaying the majority of the public benefits' estimated future O&M costs of $12.2 million per year.

It is expected that some O&M funding may be obtained for recreation from user fees. Preliminary analysis suggests that $1.1 million in fee revenues could potentially be obtained from reservoir visitors. In addition, flood protection beneficiaries could perhaps be willing to contribute some minor share towards the public benefit purpose's future annual O&M expenses.

In addition to its planned water supply deliveries for agricultural and M&I users, Sites Reservoir will collect limited quantities of "recaptured" water that will be assigned for JPA use. The quantity of future recaptured water is expected to average approximately 11 TAF per year. The JPA plans to sell the recaptured water predominantly to south-of-the-Delta water contractors and use the sale revenues to pay the public benefits' cost share of the project's annual O&M expenses. At a $700 to $800 per acre foot water price, the JPA would be able to contribute $7.7 million to $8.8 million annually.

The JPA also proposes to use its hydropower operation's net revenues as another supplemental funding source for the public benefit purpose's O&M costs. In accordance with the JPA's general "beneficiary pays' approach, to the extent possible revenue sharing would be made between purposes based on their corresponding water allocation. As a result, water supply beneficiaries would also receive a commensurate share of the hydropower operation's net benefits as that for the public benefit purposes.

However, in absence of securing any other public agency funding support for the project's ecosystem benefit purposes, future O&M funding shortfall could occur. In which case, any such shortfall would mostly likely be re-assigned to the project's water supply users. Based on an average total water supply deliveries of 275 TAF, a potential $1 million shortfall would correspond to approximately an additional $3.65 per acre foot cost surcharge to the JPA water contractors.

Hydropower Benefits

As discussed in the Cost Allocation analysis (Sites_A10 Allocation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB), the capital costs for the project's Hydropower facilities would be $509 million. This portion of the project would be financed during phases 1 through 3 through short-term debt in the form of loans from commercial banks or other financial institutions.

As with the project's water supply purpose described below, the primary long-term financing for hydropower would be obtained from revenue bonds to be repaid from energy purchasing agreement and sales to utilities. The hydropower revenues would be expected to include compensation for the facility's ancillary and system-wide capacity benefits. Preliminary analysis suggests there is both ample demand for this type of energy resource, and strong financial capacity among relevant California energy utilities to ensure long-term demand for the project's hydropower energy resources.

Sites Reservoir water contractors would also be a potential funding source for the project's hydropower operations. The water contractors provide an additional guarantee of potential O&M funding in the unlikely event of a funding shortfall in any given year since if necessary, the required revenues could be obtained through increased operating cost surcharges. Depending on their future O&M funding sources, there may or may not also be some opportunities for cost recapture from increased operating cost surcharges to some of the project's public benefit purposes.

Water Supply Benefits

A total of $2,276 million in development costs are attributed to water supply. These costs would be funded through short-term debt from commercial banks or other financial institutions during Phase 1 through 3 of the project. After which long-term, tax-exempt revenue bonds would be used for the project's expected 40 year repayment phase. Under this structure, payment of principal and interest on the bonds would be secured by a pledge of gross revenues derived from payment obligations under water supply contracts with JPA participating contractors.

Water Supply for State Water Contractors

As currently planned approximately 44 percent of the water supply quantities from the Sites Reservoir will likely be delivered to California SWP contractors. Based on preliminary discussions with DWR staff, there may be future partnership or cooperative agreements opportunities with DWR to assist the JPA with both future administration and management of the water supply payments but also participate with underwriting and financing assistance for a major portion of the project's water supply capital cost.

DWR could most readily provide this assistance through its SWP program. The SWP has existing legal authority, regulatory mechanisms, contractual agreements and administrative capacity to partner with the JPA's future water supply program. Furthermore DWR's technical expertise and longstanding working relationships with the state water contractors would be major assets for both funding and managing the project's future water supply program.

The JPA and DWR could coordinate future billing, payment and operations through a series of operational and trust agreements. SWP contractors and DWR have several options for reaching agreement that ensure: (1) JPA participating contractors receive their Sites Reservoir entitled deliveries independently from other SWP deliveries; and (2) DWR collects the contractors' payments.

Currently, it is envisioned that new I(h)4(a) agreements would likely be the preferred regulatory approach for establishing the necessary new SWP-contractors agreements. This authorizing regulation allows separate new "side agreements" mutually agreed upon between the SWP and individual water contractors in support of the development of new capital facilities.

Alternatively, amendments or Yuba Accord approaches could be used to develop the necessary agreements and arrangements. However, these approaches will likely involve more extensive and time-consuming negotiation and approvals.

There are numerous potential major benefits for future partnership arrangements between the JPA, DWR and participating SWP contractors. By partnering with the SWP, the JPA and its participating SWP contractors would be able to take advantage of highly favorable administrative and financing mechanisms that allow for the SWP to collect contractor payments, qualify and secure bond financing, and subsequently manage the debt administration and repayment through State Water Project backed bond financing.

Capital funds raised on behalf of the SWP contractors through SWP bond financing would likely be obtained at lower overall interest rates and have more favorable financing terms than capital funding raised by non-SWP contractors.

Water Supply for Other Water Agencies (Non-SWP Contractors)

It is currently expected that other JPA water contractors would be ineligible to participate under the SWP partnership program. As currently planned, these contactors would account for approximately 56 percent of total water supply deliveries and would have to obtain revenue bond financing through other means, including but not limited to traditional municipal bond markets and private placements.

The feasibility of financing all or part of the Sites Reservoir project with revenue bonds was evaluated by Citigroup Municipal Securities in March, 2014 at the request of the Glenn-Colusa irrigation district. The Citigroup analysis found that financing up to $4.2B in total development costs would be feasible through a series of revenue bonds issued with a coupon rate of 5 percent. This analysis has not been subsequently updated, but for the purposes of this application it provides important and external verification that both SWP and non-SWP contractors would be able to access adequate sources of debt financing to underwrite the capital costs to develop Sites Reservoir's future water storage and supply facilities.

For the purposes of the debt repayment capacity analysis which follows below, it is assumed that the interest rate, debt service reserve and other terms reflect a generalized and blended bond financing approach taking into account both SWP and non-SWP financing. Note that this analysis also includes the annual O&M costs that would also have to be paid by the water contractors.

Capacity for Repayment of Debt Plus Operations and Maintenance

Table A1-3 below provides a simplified presentation of one bond repayment scenario. This funding scenario is based on the revenue bond assumptions listed below, and incorporates water supply revenues estimated from other sections of this application.

As shown below in Table A1-3, the anticipated annual water supply revenues would be more than sufficient to cover both the repayment of a 40-year bond of $2,276 million and the future ongoing O&M costs. A full operating pro forma for the water supply portion of the project is included as an attachment to this section.

Project financing, bond amortization and interest cost assumptions are as follows:

1. Coupon interest rate assumed to be 3%, as adjusted to reflect 2015 terms.
2. No interest is paid on bonds during the construction phase.
3. Each bond series is assumed to be issued with a 5 percent debt service reserve fund (“DSRF“).
4. The project bonds are scheduled to amortize over the course of 40 years.
5. Bonds would be issued either by municipal utilities, or under a partnership agreement with a State of California agency.

Table A1-3 shows a “static” or average year pro-forma for the Sites Reservoir’s water supply operations. Under this simplified pro-forma, the JPA’s annual revenue requirements are met by an estimated average water supply price of $422 per acre foot over a 40 year repayment period. The analysis assumes a real (i.e., without inflation) interest repayment rate of 3 percent and is also based on averaged total water supply quantities of 274 TAF per year.

Table A1-3. Annual Bond Repayment and O&M, 40-year Term (2015$; $Millions)

	2030-2069		2070-2122		2030-2122	
Annual Water Supply Expenses	Total Cost $M	$/AF	Total Cost $M	$/AF	Total Cost $M	$/AF
Annual Bond Repayment	$98.4	$374	$0	$0	$42.3	$154
Annual O&M	$12.6	$48	$12.6	$44	$12.6	$46
Total Annual Debt and O&M	**$111.1**	**$422**	**$12.6**	**$44**	**$55.0**	**$200**
JPA Gross Operating Income						
M&I	$77.1	$693	$8.8	$75	$38.2	$333
Agricultural	$33.9	$224	$3.9	$23	$16.8	$105
Water Supply Annual Income	$111.1	***$422***	$12.6	***$44***	$55.0	***$200***
Net Operating Revenue	$0		$0		$0	

Table A1-4 shows the public benefits cash flow on an annual basis over the full study period. This analysis assumes $750 per acre foot for recaptured water supply sales and $1.1 million in recreation fee revenues. These revenues would not fully cover the total WSIP public benefits O&M ($12.2 million per year) and would be expected to result in a $2.8 million per year revenue shortfall. However, it is possible the State government may assist with the public benefits’ O&M costs. Alternatively, the State could potentially reduce its water deliveries (particularly in wetter years) to sell some of its water allocation to generate revenues to cover any remaining or accumulated O&M funding shortfalls.

Table A1-4. Sites Reservoir Public Benefits Cash Flow (2015$; $Millions, TAF)

Factor	Total Period 2030-2122 (93 Yrs)						
	2030	2031	...	...	2122	Total	Average
Recaptured Water Supply	11	11	...	...	11	***1,023***	***11***
Recaptured Water Supply Sales	$8	$8	...	...	$8	*$767*	*$8*
Recreation Fees	$1.1	$1.1	...	...	$1.1	*$103*	*$1*
Subtotal Authority Admin Operations	**$9**	**$9**	...	...	**$9**	***$870***	***$9***
WSIP Public Benefits O&M	($12)	($12)	...	...	($12)	*($1,127)*	*($12)*
Subtotal Authority Admin Operations	**($2.8)**	**($2.8)**	...	...	**($2.8)**	***($257)***	***($2.8)***

Assumptions:

Water Supply Prices	2030-2122
Recaptured Sales Price $/Acre Foot	**$750**

Table A1-5 shows the pro forma on an annual basis over the full study period. This more detailed pro forma includes the projected future annual water supply quantities (which are expected to increase between 2030 and 2070). The base water supply cost has also been adjusted to factor in both: (1) an additional 5 percent cost surcharge for a debt service reserve fund; and (2) a 3 percent net operating income surcharge to provide the additional JPA revenues to ensure that project is net revenue positive (when the debt service reserve fund is included) during its early operating years.

As shown in Table A1-5, at a water supply cost of $456 per acre foot, the project's water supply program would be expected to operate in 2030 with a net operating income deficit of $4.0 million. However, if the $5.7 million debt service reserve contribution is included, the overall net operating income for the JPA's water supply program would be positive at $1.6 million. As future water supply quantities increase, the JPA's water supply program's net operating income would improve to near break-even by 2040 (and would also make its full $5.7 million debt service reserve contribution).

In subsequent years, the JPA water supply program would operate with an increasing net operating income (NOI) surplus. By 2069 its NOI surplus would total $10.3 million per year. Over the 40 year repayment period, the JPA water supply program would be expected to result in a of $125 million cumulative NOI surplus. Although perhaps unlikely, in the absence of any required reserve draw downs, the JPA water supply program would also accumulate debt service reserve funds of $240 million. If unused, both these cumulative funds could be used to pre-pay the remaining principal prior the end of the 40 year repayment period. The size of these cumulative reserves indicates the extent of the financial buffer that the debt reserve fund would provide during the project's repayment period.

Table A1-5 also shows that from 2070 onwards, the annual water supply cost would decrease to only $44 per acre foot in order to cover the JPA water supply program's assigned O&M costs.

Table A1-5. Sites Reservoir Water Supply Financial Pro Forma (2015$; $Millions; TAF)

Factor	Capital Repayment Period 2030-2069 (40 Yrs)																		Post Repayment Period 2070-2122 (53 Yrs)						Total Period 2030-2122 (93 Yrs)	
	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	...	...	2069	*Total*	*Average*	2070	...	...	2122	*Total*	*Average*	Total	Average
Supply (TAF/Year) - Long Term Average Deliveries for Average Water Year Type																										
M&I Water Supply	106	106	107	107	107	107	108	108	108	109	109	109	109	...	...	117	*4,455*	*111*	117	...	...	117	*6,195*	*117*	***10,649***	***115***
Ag Water Supply	137	138	138	139	140	141	141	142	143	144	145	145	146	...	...	167	*6,071*	*152*	167	...	...	167	*8,873*	*167*	***14,944***	***161***
Water Supply Total	243	244	245	246	247	248	249	250	251	252	253	254	255	...	...	283	*10,525*	*263*	284	...	...	284	*15,067*	*284*	***25,593***	***275***
Gross Revenues ($M)																										
M&I Supply	$80	$80	$80	$80	$80	$81	$81	$81	$81	$81	$82	$82	$82	...	...	$87	*$3,339*	*$83*	$9	...	...	$9	*$465*	*$9*	***$3,804***	***$41***
Ag Supply	$33	$33	$34	$34	$34	$34	$34	$34	$35	$35	$35	$35	$35	...	...	$40	*$1,471*	*$37*	$4	...	...	$4	*$205*	*$4*	***$1,676***	***$18***
Total Water Supply Revenues	**$113**	**$113**	**$113**	**$114**	**$114**	**$115**	**$115**	**$115**	**$116**	**$116**	**$117**	**$117**	**$117**	...	...	**$128**	***$4,809***	***$120***	**$13**	...	...	**$13**	***$670***	***$13***	***$5,479***	***$59***
Operating Expenses (Before Debt)																										
O&M	($13)	($13)	($13)	($13)	($13)	($13)	($13)	($13)	($13)	($13)	($13)	($13)	($13)	...	...	($13)	*($506)*	*($13)*	($13)	...	...	($13)	*($670)*	*($13)*	*($1,176)*	*($13)*
Debt Repayment																										
Principal	($30)	($31)	($32)	($33)	($34)	($35)	($36)	($37)	($38)	($39)	($41)	($42)	($43)	...	...	($96)	*($2,275)*	*($57)*		...	...					
Interest	($68)	($67)	($66)	($65)	($64)	($63)	($62)	($61)	($60)	($59)	($58)	($57)	($55)	...	...	($3)	*($1,662)*	*($42)*		...	...					
Annual Fixed Debt Payment	($98)	($98)	($98)	($98)	($98)	($98)	($98)	($98)	($98)	($98)	($98)	($98)	($98)	...	...	($98)	*($3,938)*	*($98)*	$0	...	...	$0	*$0*	*$0*	*($3,938)*	*($42)*
Debt Service Reserve (DSR)	($6)	($6)	($6)	($6)	($6)	($6)	($6)	($6)	($6)	($6)	($6)	($6)	($6)	...	...	($6)	*($240)*	*($6)*		...	...		*$0*	*$0*	*($240)*	*($3)*
Total	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	**($104)**	...	...	**($105)**	***($4,178)***	***($104)***	**$0**	...	...	**$0**	***$0***	***$0***	***($4,178)***	***($45)***
Cumulative Balances																										
Principle Balance	$2,275	$2,245	$2,214	$2,182	$2,149	$2,115	$2,080	$2,044	$2,007	$1,969	$1,930	$1,889	$1,847	...	...	$96	*$0*	*$1,385*	$0	...	...					
Debt Service Reserve Balance	$0	$6	$11	$17	$23	$28	$34	$40	$46	$51	$57	$63	$69			$234	$240	*$6*	$0							
Net Operating Income																										
NOI Water Supply (w/o DSR)	$1.6	$2.0	$2.4	$2.8	$3.2	$3.5	$3.9	$4.3	$4.7	$5.1	$5.5	$5.9	$6.2	...	...	$16.7	*$366*	*$9.1*	$3.9	...	...	$3.9	*$205.0*	*$4*	*$571*	*$6.1*
Total Net Operating Income (w/ DSR)	**($4.0)**	**($3.7)**	**($3.3)**	**($2.9)**	**($2.6)**	**($2.2)**	**($1.8)**	**($1.5)**	**($1.1)**	**($0.7)**	**($0.4)**	**$0.0**	**$0.4**	...	...	**$10.3**	***$125.4***	***$3.1***	**$3.9**	...	...	**$3.9**	***$205.0***	***$4***	***$330***	***$3.6***

Assumptions:

Water Supply Prices	2030-2069			2070+
	Before Adjust	Adjustments NOI (a)	DSR (b)	
M&I $/Acre Foot	$693	$714	$749	$75
AG $/Acre Foot	$224	$231	$242	$23
Supply $/AF	**$422**	**$435**	**$456**	**$44**

Interest Rate (Real - w/o Inflation)	3.0%
(a) Adjust for Net Operating Income (NOI)	3.0%
(b) Adjust for Debt Service Reserve (DSR)	5.0%

Alternative Delivery Financing

Give the large size of the Sites Reservoir Project and the strong existing appetite in the financial markets for stable, long-term investments in major infrastructure assets, there are several “alternative delivery” financing approaches that would also likely prove feasible for this project. These include primarily various forms of public-private partnerships (“P3s“). As defined by the Water Research Foundation, these typically “involve a contractual arrangement whereby the resources, risks and rewards of both the public agency and private entity are combined to provide greater efficiency, better access to capital, and improved compliance with government regulations”.[1] Under Assembly Bill (AB) 2551 adopted in August 2016, California has relatively broad authorizing legislation allowing alternative delivery methods for water storage projects. Additional details on alternative delivery are provided below as Appendix 1 to this Section.

Conclusion

In accordance with the WSIP Technical Guidance, the analysis period for the Site Reservoir project was 93 years from its start of operations in 2030 through to the end of the study period in 2122. Over the course of this period the project will deliver significant new public benefits, clean hydroelectric energy and major new water deliveries for California’s M&I and agricultural water users. The above analysis provides a conservative approach to financing the construction costs for the project over the course of 40-years, assuming relatively low-risk financing approaches that are commonly utilized by water contractors and authorities across the United States, and for which there is currently considered to be ample demand from investors.

Although this low-risk approach would be feasible, there are also other potential approaches that could be leveraged over the long-run to deliver water supply resources at rates lower than those assumed for the purposes of this financing strategy. The full range of options has not been explored here, but will be analyzed in greater detail in the future as public funding commitments for the project, including WSIP, are confirmed.

Constructability

At the current feasibility level of design for the Sites Reservoir Project, detailed construction plans and specifications are not yet available. However, the concepts for all of the major facilities comprising the project are at a level that supports developing a Class 4 cost estimate and a preliminary implementation schedule for construction. The constructability review for the current level of design is a high level review that focuses on identifying design concept and construction schedule issues that could introduce significant cost estimating and planning risk.

The constructability review findings include the following:

1. The conceptual designs represent proven technology. Rapidly evolving, new concepts have not been adopted, although these concepts may allow for improved designs and cost savings based on further evaluation in future design phases for the project.

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[1] Sources: “New and Emerging Capital Providers for Infrastructure Funding,” Water Research Foundation”, 2016 (http://www.waterrf.org/resources/pages/PublicWebTools-detail.aspx?ItemID=34); and “Alternative Water Project Delivery Models”, University of North Carolina Environmental Finance Center, 2017 (https://efc.sog.unc.edu/project/alternative-water-project-delivery-models).

2. Construction easements (permanent and temporary) have been evaluated in sufficient detail to determine that real estate costs are reasonable.
3. Environmental mitigation costs have been evaluated based on current understanding of project permitting needs (based on site environmental assessments) and in preliminary consultation with the various state and federal agencies.
4. A preliminary assessment of the potential for encountering hazardous material was performed; including the presence of abandoned gas well, septic systems, underground tanks, and the like.
5. For major facilities, cost estimates were based on preliminary quantity estimates, equipment and manpower estimates to complete tasks, manufacturer's quotes, and AECOM experience on recent similar projects.
6. The construction schedule is based on manpower and equipment needed to complete construction, and reflects the interdependency of construction tasks between facilities that control the start or finish of construction activities.
7. An adequate labor pool exists in the region to complete the project.
8. Appropriate allowances have been included for mobilization and demobilization, construction contingency, and non-contract (owner) costs.
9. Packaging of contracts can facilitate competition and avoid potential for equipment and material shortages.
10. Traffic handling and detours during construction has been considered.
11. Temporary diversion of water during the winter has been considered.

Appendix 1: Financial Feasibility - Research Foundation Definitions of Water Infrastructure Financing Types [2]

Traditional Financing

Revenue Bonds

Revenue bonds are fixed income, debt obligations issued by local governments or other public agencies where the principal and interest on the bonds are secured by the specific revenues named in the bond documents. Revenue bonds typically include a rate covenant by which the user agrees to set rates sufficient to meet all operating costs and some multiple of debt service, and may include a flow of funds requirement and a cash reserve fund requirement, among others.

General Obligation Bond. General Obligation bonds are debt obligations issued by a government entity that are secured by the entities full faith and credit and pledge of tax revenues. This is the strongest pledge the government can provide and is usually regarded by investors and rating agencies as the strongest form of bond security. General Obligation bond issuances often require a bond referendum and public vote.

State Revolving Fund Loan

The State Revolving Loan Fund (SRF) program provides low-interest loans for water and sanitation infrastructure to municipalities, water/sewer authorities, and utility districts. Each state's SRF programs

[2] From *New and Emerging Capital Providers for Infrastructure Funding,* Water Research Foundation, 2016.

receive its initial capital from federal grants and state contributions, and then "revolves" through the repayment of principal and the payment of interest on outstanding loans. There are two SRF programs, the Clean Water State Revolving Fund created under the Clean Water Act, and the Drinking Water State Revolving Fund created under the Safe Drinking Water Act. Each state administers their own SRF programs and program eligibility, requirements, and benefits differ from state to state.

Alternative Delivery: Public Private Partnerships

"Public-private partnerships ("P3s") are a contractual arrangement whereby the resources, risks and rewards of both the public agency and private company are combined to provide greater efficiency, better access to capital, and improved compliance with government regulations. The public's interests are generally assured through provisions in the contracts that provide on-going monitoring and oversight of the operation of a service or development of a facility. The key distinctions of P3s from other forms of alternative project delivery are (1) the extended duration of the partnership, and (2) the nature of the financing and the sources of revenues. In a P3, the duration of the partnership is a long-term one, lasting 10 to 20 years or more. While private financing is not a pre-requisite for an alternative delivery project, it is commonly accepted that private financing is a key distinguishing feature of a P3 arrangement.

In general, there are at least two types of P3 models; (1) demand risk model, and (2) availability payment model. The demand risk model represents the case where P3 financing is secured with the future revenue streams from user charges, and where the private concessionaire takes on the overall financial risks associated with potential fluctuations in future user demand. This model is typically used where there are sufficient revenue streams from user charges to fund the capital investment. Under the availability payment model, the private concessionaire provides the P3 financing, but it is secured with annual payment commitments from the public sector over the concession term. Table A1-6 shows the major investors in North American water infrastructure with their global ranking.

Table A1-6. Top 10 Global Investors in Water Infrastructure, North America

2016 Global Rank	Company	Country	Funding ($M)
2	Brookfield Asset Management	Canada	$31,985
3	Global Infrastructure Partners	United States	$20,780
4	Borealis Infrastructure	Canada	$19,246
7	ArcLight Capital Partners	United States	$10,675
11	Kohlberg Kravis Roberts	United States	$5,913
12	Energy Capital Partners	United States	$5,882
13	Stonepeak Infrastructure Partners	United States	$5,275
14	JP Morgan Investment Management	United States	$5,171
17	EnerVest	United States	$4,400
20	First Reserve	United States	$3,769

Source: PEI, The Infrastructure Investor 50, 2016 (http://www.infrastructureinvestor.com/uploadedFiles/Infrastructure_Investor/Non-Pagebuilder/Aliased/News_And_Analysis/2016/November/Magazine/II77_II50_Nov16.pdf)

Appendix 2: Water Balance of CalSim II Simulation Results for Current Conditions, WSIP 2030, and WSIP 2070

The following section contains tables that portray the water balance results for the following CalSim II simulations:

1. Current Conditions With Project vs. Current Conditions Without Project
2. WSIP 2030 With Project vs. WSIP 2030 Without Project
3. WSIP 2070 With Project vs WSIP 2070 Without Project

As defined in Section 4.3.1 of the WSIP Technical Reference Document, a water balance is an accounting of all the flows of water into and out of an account for a defined period. An account can represent a location or geographic boundary, such as a reservoir, watershed, or region. The following accounts are included in this report:

1. Sites Reservoir
2. Colusa Basin
3. Sacramento Valley
4. Sacramento-San Joaquin Delta

The Sacramento-San Joaquin Delta account consists of the region upstream of Delta outflow and downstream of inflows at Freeport and Vernalis. The Sacramento Valley account includes the region upstream of Freeport and downstream of inflows at Shasta Lake and Trinity Lake, not including the Colusa Basin. The Colusa Basin account consists of the entire Colusa Basin region, not including Sites Reservoir. The Sites Reservoir account provides a water balance for the reservoir itself.

The following tables include inputs, outputs, and changes in reservoir storage for each account. The parameters are presented as water-year (October through September) annual averages based on the full simulation period (82 years; 1922–2003). The mass balance is computed as the total volume of inputs subtracted by the total volume of outputs and the total volume of change in storage. A mass balance value of zero indicates that all water entering the account is equal to all water leaving the account and accumulating in storage. Moreover, a mass balance of zero confirms that there are no net gains or losses within the account that are unaccounted for. As shown in this report, all the CalSim II models achieve mass balance values of zero for each of the four accounts defined above.

Sites Reservoir Mass Balance *(All values are in TAF)*	Annual Average for Full Simulation Period		
	Current Conditions With Project	Current Conditions Without Project	Difference
Sites Reservoir Mass Balance **Inputs**			
Diversion to Sites Reservoir at Red Bluff (TCC)	277	0	277
Diversion to Sites Reservoir at Hamilton City (GCC)	105	0	105
Diversion to Sites Reservoir at Delevan Pipeline	133	0	133
Total Inputs to Sites Reservoir	**514**	**0**	**514**
Outputs			
Release from Sites Reservoir to TCC, GCC, and Colusa Basin Drain	233	0	233
Release from Sites Reservoir to Delevan Pipeline	234	0	234
Sites Reservoir Evaporation & Losses	44	0	44
Total Outputs from Sites Reservoir	**510**	**0**	**510**
Change in Storage			
Sites Reservoir	4	0	4
Mass Balance	0	0	0

*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period.

*Annual Averages for October through September.

Colusa Basin Mass Balance *(All values are in TAF)*	Annual Average for Full Simulation Period Current Conditions With Project	 Current Conditions Without Project	 Difference
Colusa Basin Mass Balance **Inputs**			
Diversion at Red Bluff (TCC & Corning Canal)	428	188	240
Diversion at Hamilton City (GCC)	890	861	29
Release from Sites Reservoir to TCC, GCC, and Coluse Basin Drain	233	0	233
Other Diversions from Sacramento River	507	505	1
Stony Creek and other tributary Inflows	928	928	0
Return Flows	332	332	0
Total Inputs to Colusa Basin	**3,318**	**2,814**	**503**
 Outputs			
Diversion to Corning Canal	23	20	3
Diversion to Orland Unit Agriculture	102	103	0
Diversion to TCCA Agriculture	246	173	73
Diversion from TCC to Sites Reservoir	277	0	277
Diversion to GCID Agriculture	763	759	4
Diversion from GCC to Sites Reservoir	105	0	105
Diversion to Refuges	100	97	3
Diversion to Other Colusa Basin Agriculture (Right Bank)	507	505	1
Stony Creek Outflow to Sacramento River	235	237	-2
Colusa Basin Drain Outflow to Sacramento River	447	427	20
Knights Landing Ridge Cut Outflow	342	320	22
Losses from Canals (TCC, CC, GCC, CBD)	147	149	-2
Stony Creek Reservoirs Evaporation & Losses	24	24	0
Total Outputs from Colusa Basin	**3,317**	**2,814**	**503**
 Change in Storage			
Stony Creek Reservoirs	1	1	0
Mass Balance	**0**	**0**	**0**

*The Colusa Basin mass balance includes parameters within the Colusa Basin, not including Sites Reservoir, Funks Reservoir, and the Sacramento Valley outside of the Colusa Basin. The Delevan Pipeline is not included in this table because it serves as an input and output for the Sites Reservoir Mass Balance and Sacramento Valley Mass Balance reports.
*Other Diversion from Sacramento River include diversions to Colusa Basin, West Bank, and WBA8S
*Stony Creek and other tributary inflows include inflows to East Park Reservoir, Stony Gorge Reservoir, Black Butte Lake and DSA 12 Accretion
*Return flows include those from WBA8NN, WBA7N, WBA7S, WBA8S, WBA8NS, Delevan and Colusa Refuges
*Diversion to TCCA Agriculture includes diversions to WBA4, WBA7N, and WBA7S.
*Diversion to GCID Agriculture includes diversions to WBA8NN and WBA8NS.
*Diversion to Refuges includes diversions from the Sacramento Valley and the Colusa Basin Drain.
*Stony Creek Reservoirs includes East Park Reservoir, Stony Gorge Reservoir, and Black Butte Lake.
*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period
*Annual Averages for October through September.

Sacramento Valley Mass Balance	Annual Average for Full Simulation Period		
(All values are in TAF)	Current Conditions With Project	Current Conditions Without Project	Difference
Sacramento Valley Mass Balance			
Inputs			
Inflow to Shasta Lake and Whiskeytown Reservoir	5,998	5,998	0
Flow through Clear Creek Tunnel	550	542	7
Tributary Inflows upstream of Red Bluff	1,434	1,434	0
Tributary Inflows between Red Bluff and Hamilton City	803	803	0
Stony Creek Inflow	235	237	-2
Big Chico Creek Inflow	97	97	0
Accretions in Upper Sacramento River	1,395	1,395	0
Sites Reservoir Release to river through Delevan Pipeline	234	0	234
Inflow from Colusa Basin Drain	447	427	20
Feather River Inflow to Lake Oroville	3,967	3,967	0
Yuba River and Bear River Inflow to Feather River	2,167	2,167	0
Kelly Ridge and Butte Creek Inflow to Feather River	419	419	0
Accretions in Feather River	460	460	0
American River Inflow to Folsom Lake	2,734	2,734	0
Other American River Inflows	674	674	0
Accretions in Lower Sacramento River	595	595	0
Inflow from Knights Landing Ridge Cut	342	320	22
Groundwater Pumping	1,204	1,204	-1
Return Flows	1,502	1,494	8
Total Inputs to Sacramento Valley	**25,256**	**24,968**	**289**
Outputs			
Diversion to Sutter Refuge	13	11	2
Diversion at Red Bluff (TCC & CC)	428	188	240
Diversion at Hamilton City (GCC)	890	861	29
Diversion to Sites Reservoir through Delevan Pipeline	133	0	133
Diversion to Other Colusa Basin Agriculture (Right Bank)	507	505	1
Diversion to Other Sacramento River Agriculture and M&I	2,875	2,875	0
Diversion to Feather River Agriculture and M&I	2,245	2,226	19
Diversion to Yuba River Agriculture and M&I	63	65	-1
Reservoir Evaporation & Losses	231	227	4
Stream-Groundwater Interaction	139	145	-6
Yolo Bypass	2,129	2,158	-29
Sacramento River below Freeport	15,605	15,709	-104
Total Outputs from Sacramento Valley	**25,257**	**24,970**	**288**
Change in Storage			
Shasta Lake	5	4	1
Lake Oroville	-8	-7	-1
Folsom Lake	1	0	0
Other Reservoirs	1	1	0
Total Change in Reservoir Storage in Sacramento Valley	**-1**	**-2**	**1**
Mass Balance	**0**	**0**	**0**

*The Sacramento Valley Mass Balance includes parameters upstream of Freeport to Shasta Lake and Trinity Lake inflow, not including the Colusa Basin. See "Colusa Basin Mass Balance" for additional detail.
*Other Inflows upstream of Red Bluff include Cow Creek, Cottonwood Creek, Battle Creek, and Payne Creek.
*Inflows between Red Bluff and Hamilton City include Elder Creek, Thomes Creek, Antelope Creek, Mills Creek, Deer Creek, and Red Bank Creek.
*Other American River Inflows include inflows to the Sacramento River and from Lake Natoma.
*Diversion to Other Sacramento River Agriculture and M&I include diversions to West Sacramento Diversion for Davis Municipal Project, EBMUD & CCWD Freeport Regional Water Project, North Fork Dam, DSA12, DSA15, DSA59, DSA70, WBA4, and WBA5.
*Diversion to Feather River Agriculture and M&I includes diversions to Gray Lodge Refuge, Butte Sink Duck Clubs, Western Canal & Joint WD Rice Straw Decomp, DSA69, and diversion to Sites Reservoir at Joint Canal near Thermalito.
*Diversion to Yuba River Agriculture and M&I include transfers for Lower Yuba River Accord and SCWA excess flows.
*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period.
*Other Reservoirs include Whiskeytown Lake, Kesiwck Reservoir, Thermalito Complex, and Lake Natoma.
*Annual Averages for October through September.

Sacramento - San Joaquin Delta Mass Balance *(All values are in TAF)*	Annual Average for Full Simulation Period		
	Current Conditions With Project	Current Conditions Without Project	Difference
Sacramento - San Joaquin Delta Mass Balance **Inputs**			
Sacramento River below Freeport	15,605	15,709	-104
Yolo Bypass	2,129	2,158	-29
San Joaquin River below Vernalis	3,134	3,137	-3
Eastside Streams and other inflows	831	831	0
Total Inputs to Sacramento - San Joaquin Delta	**21,699**	**21,836**	**-136**
Outputs			
Diversion to North Bay Aquaduct	85	85	1
Export at Banks Pumping Plant	2,812	2,708	104
Export at Jones Pumping Plant	2,267	2,233	34
Export to Contra Costa WD/Los Vaqueros Reservoir	168	168	0
Other Delta Diversions	60	59	1
Net Delta Island Consumptive Use	883	883	0
Delta Outflow	15,425	15,700	-276
Total Outputs from Sacramento - San Joaquin Delta	**21,699**	**21,836**	**-136**
Mass Balance	0	0	0

*The Delta Mass Balance includes parameters upstream of Delta Outflow, not including the Sacramento Valley. It is bounded by inflow at Freeport and Vernalis. See "Sacramento Valley Mass Balance" for additional detail.

*Eastside Streams and other inflows includes Marsh Creek, Mokelumne, & Calaveras, Cosumnes River.

*Export to Contra Costa WD/Los Vaqueros Reservoir includes exports to CCWD Old River, Victoria Canal, & Rock Slough Intakes.

*Other Delta Diversions include diversions to Stockton DWSP/COSMA, the City of Antioch (pre-1914 water rights), and Vallejo.

*Net Delta Island Consumptive Use includes diversions and island seepage and drainage.

*Annual Averages for October through September.

Sites Reservoir Mass Balance *(All values are in TAF)*	Annual Average for Full Simulation Period		
	WSIP 2030 With Project	WSIP 2030 Without Project	Difference
Sites Reservoir Mass Balance **Inputs**			
Diversion to Sites Reservoir at Red Bluff (TCC)	299	0	299
Diversion to Sites Reservoir at Hamilton City (GCC)	105	0	105
Diversion to Sites Reservoir at Delevan Pipeline	148	0	148
Total Inputs to Sites Reservoir	**552**	**0**	**552**
Outputs			
Release from Sites Reservoir to TCC, GCC, and Colusa Basin Drain	262	0	262
Release from Sites Reservoir to Delevan Pipeline	242	0	242
Sites Reservoir Evaporation & Losses	44	0	44
Total Outputs from Sites Reservoir	**549**	**0**	**549**
Change in Storage			
Sites Reservoir	3	0	3
Mass Balance	0	0	0

*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period.

*Annual Averages for October through September.

Colusa Basin Mass Balance *(All values are in TAF)*	Annual Average for Full Simulation Period		
	WSIP 2030 With Project	WSIP 2030 Without Project	Difference
Colusa Basin Mass Balance **Inputs**			
Diversion at Red Bluff (TCC & Corning Canal)	416	146	271
Diversion at Hamilton City (GCC)	886	868	18
Release from Sites Reservoir to TCC, GCC, and Coluse Basin Drain	262	0	262
Other Diversions from Sacramento River	510	509	1
Stony Creek and other tributary Inflows	941	941	0
Return Flows	332	332	0
Total Inputs to Colusa Basin	**3,349**	**2,796**	**552**
Outputs			
Diversion to Corning Canal	19	16	3
Diversion to Orland Unit Agriculture	102	103	0
Diversion to TCCA Agriculture	235	136	100
Diversion from TCC to Sites Reservoir	299	0	299
Diversion to GCID Agriculture	763	758	5
Diversion from GCC to Sites Reservoir	105	0	105
Diversion to Refuges	102	99	4
Diversion to Other Colusa Basin Agriculture (Right Bank)	510	509	1
Stony Creek Outflow to Sacramento River	250	252	-2
Colusa Basin Drain Outflow to Sacramento River	445	422	23
Knights Landing Ridge Cut Outflow	348	329	19
Losses from Canals (TCC, CC, GCC, CBD)	145	149	-4
Stony Creek Reservoirs Evaporation & Losses	24	24	0
Total Outputs from Colusa Basin	**3,348**	**2,795**	**552**
Change in Storage			
Stony Creek Reservoirs	1	1	0
Mass Balance	**0**	**0**	**0**

*The Colusa Basin mass balance includes parameters within the Colusa Basin, not including Sites Reservoir, Funks Reservoir, and the Sacramento Valley outside of the Colusa Basin. The Delevan Pipeline is not included in this table because it serves as an input and output for the Sites Reservoir Mass Balance and Sacramento Valley Mass Balance reports.
*Other Diversion from Sacramento River include diversions to Colusa Basin, West Bank, and WBA8S
*Stony Creek and other tributary inflows include inflows to East Park Reservoir, Stony Gorge Reservoir, Black Butte Lake and DSA 12 Accretion
*Return flows include those from WBA8NN, WBA7N, WBA7S, WBA8S, WBA8NS, Delevan and Colusa Refuges
*Diversion to TCCA Agriculture includes diversions to WBA4, WBA7N, and WBA7S.
*Diversion to GCID Agriculture includes diversions to WBA8NN and WBA8NS.
*Diversion to Refuges includes diversions from the Sacramento Valley and the Colusa Basin Drain.
*Stony Creek Reservoirs includes East Park Reservoir, Stony Gorge Reservoir, and Black Butte Lake.
*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period
*Annual Averages for October through September.

Sacramento Valley Mass Balance	Annual Average for Full Simulation Period		
(All values are in TAF)	WSIP 2030 With Project	WSIP 2030 Without Project	Difference
Sacramento Valley Mass Balance			
Inputs			
Inflow to Shasta Lake and Whiskeytown Reservoir	6,209	6,209	0
Flow through Clear Creek Tunnel	540	534	5
Tributary Inflows upstream of Red Bluff	1,484	1,484	0
Tributary Inflows between Red Bluff and Hamilton City	840	840	0
Stony Creek Inflow	250	252	-2
Big Chico Creek Inflow	101	101	0
Accretions in Upper Sacramento River	1,395	1,395	0
Sites Reservoir Release to river through Delevan Pipeline	242	0	242
Inflow from Colusa Basin Drain	445	422	23
Feather River Inflow to Lake Oroville	4,115	4,115	0
Yuba River and Bear River Inflow to Feather River	2,199	2,199	0
Kelly Ridge and Butte Creek Inflow to Feather River	433	433	0
Accretions in Feather River	460	460	0
American River Inflow to Folsom Lake	2,784	2,784	0
Other American River Inflows	674	674	0
Accretions in Lower Sacramento River	595	595	0
Inflow from Knights Landing Ridge Cut	348	329	19
Groundwater Pumping	1,220	1,221	-1
Return Flows	1,490	1,486	4
Total Inputs to Sacramento Valley	**25,823**	**25,533**	**291**
Outputs			
Diversion to Sutter Refuge	13	10	3
Diversion at Red Bluff (TCC & CC)	416	146	271
Diversion at Hamilton City (GCC)	886	868	18
Diversion to Sites Reservoir through Delevan Pipeline	148	0	148
Diversion to Other Colusa Basin Agriculture (Right Bank)	510	509	1
Diversion to Other Sacramento River Agriculture and M&I	2,872	2,872	0
Diversion to Feather River Agriculture and M&I	2,221	2,211	10
Diversion to Yuba River Agriculture and M&I	60	62	-1
Reservoir Evaporation & Losses	224	221	3
Stream-Groundwater Interaction	140	148	-8
Yolo Bypass	2,742	2,827	-85
Sacramento River below Freeport	15,595	15,666	-71
Total Outputs from Sacramento Valley	**25,829**	**25,540**	**289**
Change in Storage			
Shasta Lake	3	3	1
Lake Oroville	-9	-10	1
Folsom Lake	-1	-1	0
Other Reservoirs	1	1	0
Total Change in Reservoir Storage in Sacramento Valley	**-6**	**-7**	**1**
Mass Balance	**0**	**0**	**0**

*The Sacramento Valley Mass Balance includes parameters upstream of Freeport to Shasta Lake and Trinity Lake inflow, not including the Colusa Basin. See "Colusa Basin Mass Balance" for additional detail.

*Other Inflows upstream of Red Bluff include Cow Creek, Cottonwood Creek, Battle Creek, and Payne Creek.

*Inflows between Red Bluff and Hamilton City include Elder Creek, Thomes Creek, Antelope Creek, Mills Creek, Deer Creek, and Red Bank Creek.

*Other American River Inflows include inflows to the Sacramento River and from Lake Natoma.

*Diversion to Other Sacramento River Agriculture and M&I include diversions to West Sacramento Diversion for Davis Municipal Project, EBMUD & CCWD Freeport Regional Water Project, North Fork Dam, DSA12, DSA15, DSA59, DSA70, WBA4, and WBA5.

*Diversion to Feather River Agriculture and M&I includes diversions to Gray Lodge Refuge, Butte Sink Duck Clubs, Western Canal & Joint WD Rice Straw Decomp, DSA69, and diversion to Sites Reservoir at Joint Canal near Thermalito.

*Diversion to Yuba River Agriculture and M&I include transfers for Lower Yuba River Accord and SCWA excess flows.

*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period.

*Other Reservoirs include Whiskeytown Lake, Kesiwck Reservoir, Thermalito Complex, and Lake Natoma.

*Annual Averages for October through September.

Sacramento - San Joaquin Delta Mass Balance	Annual Average for Full Simulation Period		
(All values are in TAF)	WSIP 2030 With Project	WSIP 2030 Without Project	Difference
Sacramento - San Joaquin Delta Mass Balance **Inputs**			
Sacramento River below Freeport	15,595	15,666	-71
Yolo Bypass	2,742	2,827	-85
San Joaquin River below Vernalis	3,349	3,352	-3
Eastside Streams and other inflows	886	886	0
Total Inputs to Sacramento - San Joaquin Delta	**22,573**	**22,731**	**-159**
Outputs			
Diversion to North Bay Aquaduct	86	85	1
Export at Banks Pumping Plant	2,755	2,637	118
Export at Jones Pumping Plant	2,136	2,106	30
Export to Contra Costa WD/Los Vaqueros Reservoir	168	168	0
Other Delta Diversions	60	60	0
Net Delta Island Consumptive Use	875	875	0
Delta Outflow	16,492	16,801	-309
Total Outputs from Sacramento - San Joaquin Delta	**22,573**	**22,731**	**-159**
Mass Balance	0	0	0

*The Delta Mass Balance includes parameters upstream of Delta Outflow, not including the Sacramento Valley. It is bounded by inflow at Freeport and Vernalis. See "Sacramento Valley Mass Balance" for additional detail.

*Eastside Streams and other inflows includes Marsh Creek, Mokelumne, & Calaveras, Cosumnes River.

*Export to Contra Costa WD/Los Vaqueros Reservoir includes exports to CCWD Old River, Victoria Canal, & Rock Slough Intakes.

*Other Delta Diversions include diversions to Stockton DWSP/COSMA, the City of Antioch (pre-1914 water rights), and Vallejo.

*Net Delta Island Consumptive Use includes diversions and island seepage and drainage.

*Annual Averages for October through September.

Sites Reservoir Mass Balance	Annual Average for Full Simulation Period		
(All values are in TAF)	WSIP 2070 With Project	WSIP 2070 Without Project	Difference
Sites Reservoir Mass Balance			
Inputs			
Diversion to Sites Reservoir at Red Bluff (TCC)	306	0	306
Diversion to Sites Reservoir at Hamilton City (GCC)	118	0	118
Diversion to Sites Reservoir at Delevan Pipeline	164	0	164
Total Inputs to Sites Reservoir	**588**	**0**	**588**
Outputs			
Release from Sites Reservoir to TCC, GCC, and Colusa Basin Drain	272	0	272
Release from Sites Reservoir to Delevan Pipeline	268	0	268
Sites Reservoir Evaporation & Losses	45	0	45
Total Outputs from Sites Reservoir	**585**	**0**	**585**
Change in Storage			
Sites Reservoir	3	0	3
Mass Balance	**0**	**0**	**0**

*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period.
*Annual Averages for October through September.

Colusa Basin Mass Balance *(All values are in TAF)*	Annual Average for Full Simulation Period		
	WSIP 2070 With Project	WSIP 2070 Without Project	Difference
Colusa Basin Mass Balance **Inputs**			
Diversion at Red Bluff (TCC & Corning Canal)	388	95	293
Diversion at Hamilton City (GCC)	894	867	27
Release from Sites Reservoir to TCC, GCC, and Coluse Basin Drain	272	0	272
Other Diversions from Sacramento River	509	507	2
Stony Creek and other tributary Inflows	972	972	0
Return Flows	332	332	0
Total Inputs to Colusa Basin	**3,368**	**2,773**	**594**
Outputs			
Diversion to Corning Canal	14	10	4
Diversion to Orland Unit Agriculture	102	103	-1
Diversion to TCCA Agriculture	212	86	126
Diversion from TCC to Sites Reservoir	306	0	306
Diversion to GCID Agriculture	757	757	0
Diversion from GCC to Sites Reservoir	118	0	118
Diversion to Refuges	102	99	4
Diversion to Other Colusa Basin Agriculture (Right Bank)	509	507	2
Stony Creek Outflow to Sacramento River	283	288	-5
Colusa Basin Drain Outflow to Sacramento River	449	427	21
Knights Landing Ridge Cut Outflow	346	324	23
Losses from Canals (TCC, CC, GCC, CBD)	143	147	-4
Stony Creek Reservoirs Evaporation & Losses	24	25	0
Total Outputs from Colusa Basin	**3,367**	**2,773**	**594**
Change in Storage			
Stony Creek Reservoirs	1	1	0
Mass Balance	**0**	**0**	**0**

*The Colusa Basin mass balance includes parameters within the Colusa Basin, not including Sites Reservoir, Funks Reservoir, and the Sacramento Valley outside of the Colusa Basin. The Delevan Pipeline is not included in this table because it serves as an input and output for the Sites Reservoir Mass Balance and Sacramento Valley Mass Balance reports.
*Other Diversion from Sacramento River include diversions to Colusa Basin, West Bank, and WBA8S
*Stony Creek and other tributary inflows include inflows to East Park Reservoir, Stony Gorge Reservoir, Black Butte Lake and DSA 12 Accretion
*Return flows include those from WBA8NN, WBA7N, WBA7S, WBA8S, WBA8NS, Delevan and Colusa Refuges
*Diversion to TCCA Agriculture includes diversions to WBA4, WBA7N, and WBA7S.
*Diversion to GCID Agriculture includes diversions to WBA8NN and WBA8NS.
*Diversion to Refuges includes diversions from the Sacramento Valley and the Colusa Basin Drain.
*Stony Creek Reservoirs includes East Park Reservoir, Stony Gorge Reservoir, and Black Butte Lake.
*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period
*Annual Averages for October through September.

Sacramento Valley Mass Balance	Annual Average for Full Simulation Period		
(All values are in TAF)	WSIP 2070 With Project	WSIP 2070 Without Project	Difference
Sacramento Valley Mass Balance			
Inputs			
Inflow to Shasta Lake and Whiskeytown Reservoir	6,254	6,254	0
Flow through Clear Creek Tunnel	552	546	6
Tributary Inflows upstream of Red Bluff	1,521	1,521	0
Tributary Inflows between Red Bluff and Hamilton City	877	877	0
Stony Creek Inflow	283	288	-5
Big Chico Creek Inflow	106	106	0
Accretions in Upper Sacramento River	1,395	1,395	0
Sites Reservoir Release to river through Delevan Pipeline	268	0	268
Inflow from Colusa Basin Drain	449	427	21
Feather River Inflow to Lake Oroville	4,228	4,228	0
Yuba River and Bear River Inflow to Feather River	2,255	2,255	0
Kelly Ridge and Butte Creek Inflow to Feather River	447	447	0
Accretions in Feather River	460	460	0
American River Inflow to Folsom Lake	2,809	2,809	0
Other American River Inflows	674	674	0
Accretions in Lower Sacramento River	595	595	0
Inflow from Knights Landing Ridge Cut	346	324	23
Groundwater Pumping	1,279	1,286	-7
Return Flows	1,486	1,472	14
Total Inputs to Sacramento Valley	**26,282**	**25,962**	**320**
Outputs			
Diversion to Sutter Refuge	13	10	3
Diversion at Red Bluff (TCC & CC)	388	95	293
Diversion at Hamilton City (GCC)	894	867	27
Diversion to Sites Reservoir through Delevan Pipeline	164	0	164
Diversion to Other Colusa Basin Agriculture (Right Bank)	509	507	2
Diversion to Other Sacramento River Agriculture and M&I	2,869	2,869	0
Diversion to Feather River Agriculture and M&I	2,217	2,186	31
Diversion to Yuba River Agriculture and M&I	57	58	-1
Reservoir Evaporation & Losses	212	208	4
Stream-Groundwater Interaction	174	183	-10
Yolo Bypass	3,308	3,424	-117
Sacramento River below Freeport	15,486	15,565	-79
Total Outputs from Sacramento Valley	**26,291**	**25,972**	**318**
Change in Storage			
Shasta Lake	2	1	1
Lake Oroville	-11	-11	1
Folsom Lake	-1	-1	0
Other Reservoirs	1	1	0
Total Change in Reservoir Storage in Sacramento Valley	**-9**	**-11**	**2**
Mass Balance	0	0	0

*The Delta Mass Balance includes parameters upstream of Delta Outflow, not including the Sacramento Valley. It is bounded by inflow at Freeport and Vernalis. See "Sacramento Valley Mass Balance" for additional detail.
*Other Inflows upstream of Red Bluff include Cow Creek, Cottonwood Creek, Battle Creek, and Payne Creek.
*Inflows between Red Bluff and Hamilton City include Elder Creek, Thomes Creek, Antelope Creek, Mills Creek, Deer Creek, and Red Bank Creek.
*Other American River Inflows include inflows to the Sacramento River and from Lake Natoma.
*Diversion to Other Sacramento River Agriculture and M&I include diversions to West Sacramento Diversion for Davis Municipal Project, EBMUD & CCWD Freeport Regional Water Project, North Fork Dam, DSA12, DSA15, DSA59, DSA70, WBA4, and WBA5.
*Diversion to Feather River Agriculture and M&I includes diversions to Gray Lodge Refuge, Butte Sink Duck Clubs, Western Canal & Joint WD Rice Straw Decomp, DSA69, and diversion to Sites Reservoir at Joint Canal near Thermalito.
*Diversion to Yuba River Agriculture and M&I include transfers for Lower Yuba River Accord and SCWA excess flows.
*Change in Storage is End of Period Volume minus Beginning of Period Volume divided by number of years in the period.
*Other Reservoirs include Whiskeytown Lake, Kesiwck Reservoir, Thermalito Complex, and Lake Natoma.
*Annual Averages for October through September.

Sacramento - San Joaquin Delta Mass Balance	Annual Average for Full Simulation Period		
(All values are in TAF)	WSIP 2070 With Project	WSIP 2070 Without Project	Difference
Sacramento - San Joaquin Delta Mass Balance **Inputs**			
Sacramento River below Freeport	15,486	15,565	-79
Yolo Bypass	3,308	3,424	-117
San Joaquin River below Vernalis	3,493	3,497	-4
Eastside Streams and other inflows	895	895	0
Total Inputs to Sacramento - San Joaquin Delta	**23,182**	**23,381**	**-199**
Outputs			
Diversion to North Bay Aquaduct	85	84	1
Export at Banks Pumping Plant	2,579	2,446	133
Export at Jones Pumping Plant	1,858	1,824	34
Export to Contra Costa WD/Los Vaqueros Reservoir	169	169	0
Other Delta Diversions	60	60	0
Net Delta Island Consumptive Use	865	864	1
Delta Outflow	17,566	17,934	-368
Total Outputs from Sacramento - San Joaquin Delta	**23,182**	**23,381**	**-199**
Mass Balance	0	0	0

*The Delta Mass Balance includes parameters upstream of Delta Outflow, not including the Sacramento Valley. See "Sacramento Valley Mass Balance" for additional detail.
*Eastside Streams and other inflows includes Marsh Creek, Mokelumne, & Calaveras, Cosumnes River.
*Export to Contra Costa WD/Los Vaqueros Reservoir includes exports to CCWD Old River, Victoria Canal, & Rock Slough Intakes.
*Other Delta Diversions include diversions to Stockton DWSP/COSMA, the City of Antioch (pre-1914 water rights), and Vallejo.
*Net Delta Island Consumptive Use includes diversions and island seepage and drainage.
*Annual Averages for October through September.

Physical Benefits Tab

Attachment 1: Flood Control Benefits

Attach any relevant flood damage reduction supporting documentation, such as hydraulic and hydrologic modeling studies, and property flood damage analysis (TR section 4.9.4). If information to support this question is located in another attachment, provide the location.

WSIP Application Instructions, March 2017

Response

This attachment describes the flood control benefits associated with the implementation of Sites Reservoir and all associated facilities, and provides modeling, historical flood and hydrology data, and climate change modeling data to explain localized and overall flood control benefits.

Table of Contents

Attachment 1: Flood Control Benefits **1**
Introduction 4
Without-Project Future Conditions 6
With-Project Future Conditions - Potential Flood Control Physical Benefits 9
Flood Inundation Study 11

Tables

Table 1. Sites Reservoir Changes in Flooding Footprint and Damages for the 100-Year Event 9
Table 2. Hydraulic Model Data Sources 11

Figures

Figure 1. Area Map 5
Figure 2. Existing FEMA 100-year Floodplain (Without-Project Future Conditions) 7
Figure 3. February 2017 Flooding – Town of Maxwell and Vicinity 8
Figure 4. Modeled 100-year Floodplain with Proposed Project (With-Project Future Conditions) 10

Acronyms and Abbreviations

CVFED	Central Valley Floodplain Evaluation and Delineation
FEMA	Federal Emergency Management Agency
NED	National Elevation Dataset
T-C	Tehama-Colusa
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

Introduction

The proposed project is located in the Colusa Basin watershed in Colusa and Glenn. Due to the relatively low elevation, flooding in the watershed typically takes place between October and April due to rainfall-runoff. Flood flows from the foothill streams are prone to sudden surges that flow swiftly into the Colusa Basin Drain. The Colusa Basin Drain is a designated floodway according to the Central Valley Flood Protection Board. The primary cause of flooding is inadequate conveyance capacities in the many ephemeral streams throughout the watershed. In addition, high intensity rainfall will cause localized flooding due to poor drainage facilities.

Funks Creek flows into the existing Funks Reservoir at the Tehama-Colusa (T-C) Canal, with flow contributed from a drainage area of 43 square miles. Stone Corral Creek flows from a drainage area of approximately 38 square miles. The headwaters of Grapevine Creek are on the west side of the proposed Sites Reservoir inundation area and flow into the reservoir inundation area north of Sites-Lodoga Road. Grapevine Creek flows into Funks Creek approximately seven miles upstream of the existing Funks Reservoir. The headwaters of Antelope Creek are also on the west side of the proposed Sites Reservoir inundation area, just south of the headwaters of Grapevine Creek. Antelope Creek flows through the southern portion of the proposed Sites Reservoir inundation area and joins Stone Corral Creek near the town of Sites. To the north of the proposed reservoir inundation area, Hunters Creek flows to the east. Southeast of the proposed inundation area is Lurline Creek, which flows to the east. Both Hunters and Lurline Creeks flow into the Colusa Basin Drain. Figure 1 depicts the proximity of the proposed project features to these ephemeral streams.

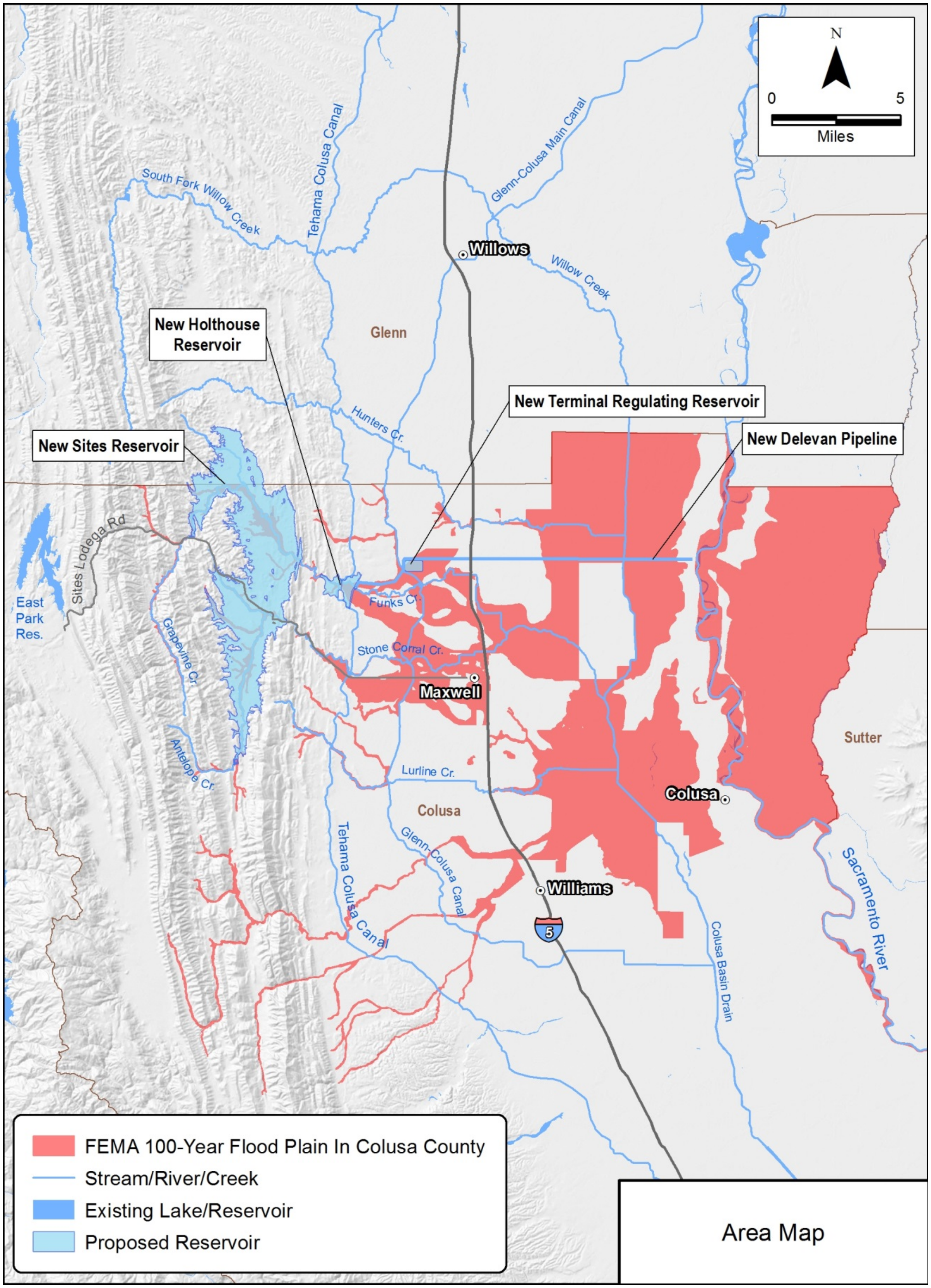


Figure 1. Area Map

Without-Project Future Conditions

The without-project future conditions and existing conditions are assumed to be similar given the rural nature of the area and limited potential for growth and development in Glenn and Colusa counties. Commercial and residential land use is generally limited to the town of Maxwell and areas adjacent to Interstate Highway 5, State Highway 20, and the local roads which traverse this part of Colusa County.

Figure 2 depicts the existing Federal Emergency Management Agency (FEMA 100-year floodplain in western Colusa County. A portion of the area along Funks Creek, downstream of the existing Funks Reservoir, and Stone Corral Creek are in the existing 100-year floodplain. Funks Reservoir is not a flood control reservoir and therefore can be overwhelmed with runoff allowing peak flows to continue downstream in Funks Creek. Of the 76,269 acres located within the existing 100-year floodplain, 75,716 acres are currently agricultural, 64 acres residential, and 489 acres non-residential.

A large portion of the town of Maxwell is located within the existing 100-year floodplain. Maxwell is a farm community with a population of about 1,100 people located west of Interstate Highway 5. The most recent census information (2015 American Community Survey) reports that the town of Maxwell has 370 housing units. No census information is provided on the number of businesses in town, although the Colusa County Assessor’s parcel records indicate 14 commercial properties with structures present in Maxwell. In addition, the town of Maxwell has one governmental parcel as well as six institutional parcels with an even split of churches and schools.

In February 2017, the Sacramento Valley experienced heavy rainfall. In Colusa County, the rainfall run-off caused flooding along Stone Corral Creek inundating the town of Maxwell and the surrounding areas including a portion of Interstate Highway 5 and the Sites Project Authority office. Photos of the flooding are included as Figure 3.

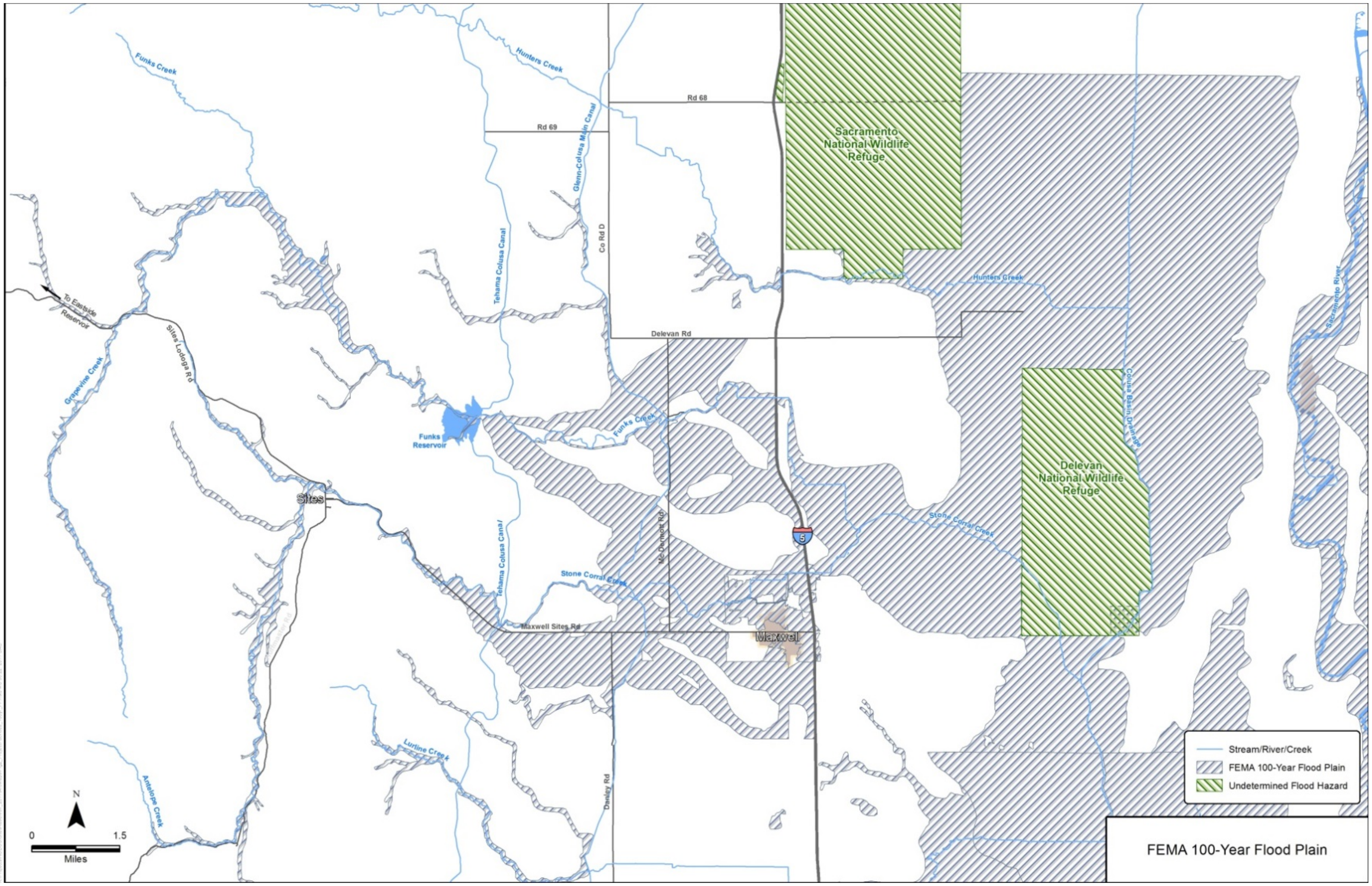


Figure 2. Existing FEMA 100-year Floodplain (Without-Project Future Conditions)

STATUS:	FINAL	PREPARER:	D RUARK	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFITS:	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	FLOOD CONTROL BENEFITS			PAGE:	7	OF	11

Figure 3. February 2017 Flooding: Town of Maxwell and Vicinity

With-Project Future Conditions - Potential Flood Control Physical Benefits

Direct flood control benefits would be provided by the proposed project within the Stone Corral Creek and Funks Creek watersheds including the town of Maxwell by reducing the size of the floodplain within the region. It is estimated that the proposed project would reduce the 100-year floodplain by about 10,000 acres, a 9% reduction. In addition to increasing the level of protection in the Funks Creek and Stone Corral Creek watersheds, 100-year level of protection would also be achieved for approximately 4,025 acres in the Colusa Basin located east of Interstate Highway 5. Table 1 provides a summary of the change in 100-year floodplain area by land use type. Figure 3 depicts the With-Project Future Conditions 100-year floodplain.

Table 1. Sites Reservoir Changes in Flooding Footprint and Damages for the 100-Year Event

	100-Year Existing (Acres)	100-Year With Project (Acres)	Net Change (Acres)
Agriculture	75,716	65,874	9,842
Residential	64	44	20
Non-Residential	489	349	140
Total	**76,269**	**66,267**	**10,002**

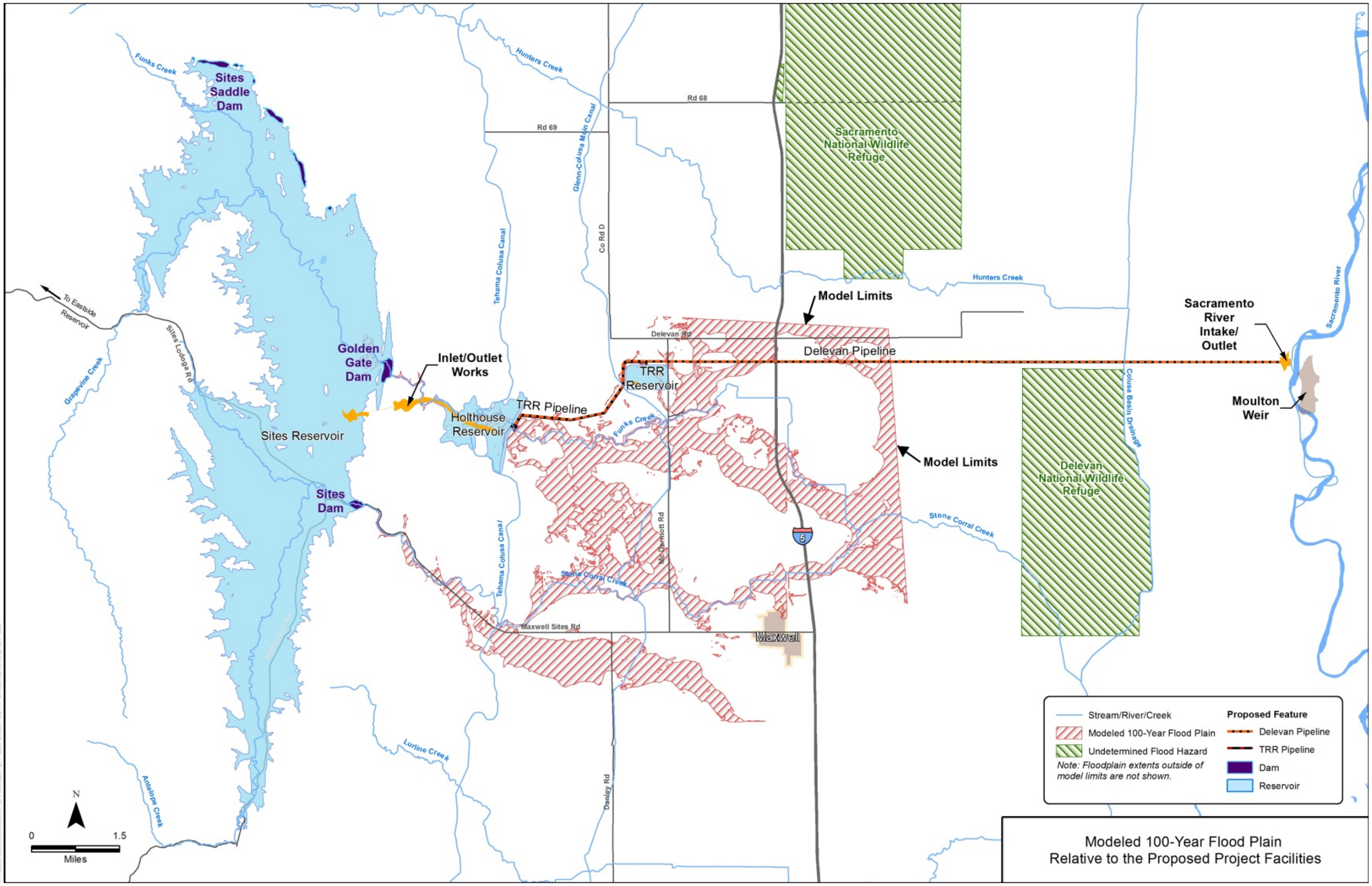


Figure 4. Modeled 100-year Floodplain with Proposed Project (With-Project Future Conditions)

STATUS:	FINAL	PREPARER:	D RUARK	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFITS:	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	FLOOD CONTROL BENEFITS			PAGE:	10	OF	11

Flood Inundation Study

A flood inundation study was conducted to better understand the extent of existing flooding along Funks Creek and Stone Corral Creek downstream of the proposed project area and to analyze changes in the floodplain with the proposed Sites Reservoir project in place.

Existing information from FEMA's Flood Insurance Study for Colusa County (May 2003) and Letter of Map Revision for town of Maxwell (effective July 2015) were reviewed. FEMA's model was not readily available; therefore, a new numerical model was developed to analyze the future with-project conditions for the 5-, 10-, 25-, 50-, 100-, and 500-year flood events. Table 2 summarizes the elements of the new hydraulic model developed for this analysis. The modeling results compared to FEMA's results are similar especially near the town of Maxwell.

Table 2. Hydraulic Model Data Sources

Item	FEMA Studies	Sites Reservoir Flood Inundation Study
Hydraulic model software	U.S. Army Corps of Engineers (USACE) Model HEC-2 and HEC-RAS version 4.1 (1-D) and FLO-2D (2-D) (https://www.flo-2d.com/)	USACE Model HEC-RAS version 5.0.3 (1-D/2-D) (http://www.hec.usace.army.mil/software/hec-ras/)
Topography / Digital Terrain Model	USGS quadrangles and LiDAR from Central Valley Floodplain Evaluation and Delineation (CVFED) program	USGS National Elevation Dataset (NED) (https://nationalmap.gov/elevation.html)
Hydrology	HEC-1 and HEC-HMS (from Preliminary Hydrologic Analysis for Colusa County; Maxwell, Williams, and Arbuckle Study areas (supported Colusa County Letter of Map revision); May 2013)	Preliminary Hydrologic Analysis for Colusa County; Maxwell, Williams, and Arbuckle Study areas (May 2013) and USGS Regression Equations

Program Requirements Tab

Attachment A.1: Measurable Benefits

A.1 What measurable improvements to the Delta ecosystem or tributary to the Delta does the project provide? Where is the location of the improvement? If the project is not within the watershed of the Delta, what specific water rights or water contracts would be created or amended to ensure public benefits to the Delta ecosystem? Provide supporting documentation of the willingness of these water right or water contract holders to enter into such contracts or amendments. Explain how these changes would assure measurable improvements to the Delta ecosystem. See regulations section 6003(a)(1)(L).

WSIP Application Instructions, March, 2017

Response

Table A.1-1 provides some of the key benefits (public and non-public) from the modeling results for Sites Reservoir. Public benefits are highlighted in yellow.

The most significant measurable improvement to a tributary to the Delta is the improvement in Sacramento River water temperatures that result from Sites Reservoir. The modeled temperature improvements are shown at multiple locations in the river in Table A.1-1 (see under EEA-2).

Measurable improvements to the Delta ecosystem would be provided through releases to the Yolo Bypass for ecosystem enhancement (see EEA-5 on Table A.1-1). Benefits in the Sacramento, Feather, and American River watersheds (tributaries to the Delta) are also provided (see EEA-1 through EEA-4 and EEA-6 through EEA-8). The locations of the improvements are specified in the table.

The project is within the watershed contributing to the Delta and can make releases to the Delta for public benefits.

Table A1-1 Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries (non-economic measures)

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project: Difference	DCR 2015 with Project Reservoir minus DCR 2015 without Project: Relative Difference	WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project: Difference	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project: Relative Difference	WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project: Difference	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project: Relative Difference
Primary Objective - Ecosystem Enhancement Account (EEA) Actions												
EEA-1. Shasta Lake Cold Water Pool												
Improve the reliability of coldwater pool storage in Shasta Reservoir to increase the U.S. Bureau of Reclamation's operational flexibility to provide suitable water temperatures in the Sacramento River. This action would operationally translate into the increase of Shasta Reservoir May storage levels, and increased coldwater pool in storage, with particular emphasis on Below Normal, Dry and Critical water year types.												
Trinity Lake												
End-of-Month Storage (SW-01)												
May (TAF)												
Full Simulation Period	1,835	1,845	10	0.6%	1,826	1,827	1	0.1%	1,689	1,693	5	0.3%
Dry	1,646	1,649	3	0.2%	1,636	1,626	-11	-0.6%	1,453	1,471	17	1.2%
Critical	1,119	1,135	16	**1.4%**	1,201	1,217	16	**1.3%**	1,016	1,024	9	**0.9%**
September (TAF)												
Full Simulation Period	1,401	1,397	-4	-0.3%	1,320	1,312	-8	-0.6%	1,152	1,149	-3	-0.3%
Dry	1,150	1,146	-4	-0.3%	1,104	1,093	-11	-1.0%	903	913	10	1.1%
Critical	741	749	8	**1.1%**	800	807	7	**0.9%**	627	673	47	**7.5%**
Shasta Lake												
End-of-Month Storage (SW-07)												
May (TAF)												
Full Simulation Period	3,952	4,023	71	1.8%	3,950	4,009	59	1.5%	3,681	3,761	80	2.2%
Dry	3,730	3,822	92	2.5%	3,663	3,765	101	2.8%	3,386	3,478	92	2.7%
Critical	2,486	2,744	258	**10.4%**	2,787	2,953	166	**6.0%**	2,157	2,428	271	**12.6%**
September (TAF)												
Full Simulation Period	2,655	2,779	124	4.7%	2,544	2,627	83	3.3%	2,262	2,321	59	2.6%
Dry	2,490	2,630	140	5.6%	2,457	2,514	57	2.3%	2,167	2,224	56	2.6%
Critical	1,343	1,562	219	**16.3%**	1,515	1,696	181	**12.0%**	971	1,219	247	**25.5%**
EEA-2. Sacramento River Flows for Temperature Control												
Provide releases from Shasta Dam of appropriate water temperatures, and subsequently from Keswick Dam, to maintain mean daily water temperatures year-round at levels suitable for all species and life stages of anadromous salmonids in the Sacramento River between Keswick Dam and Red Bluff Diversion Dam, with particular emphasis on the months of highest potential water temperature-related impacts (i.e., July through November) during Below Normal, Dry and Critical water year types.												
Trinity River below Lewiston												
Monthly Temperature (SQ-33)												
Jul-Sep (Deg-F)												
Full Simulation Period	51.3	51.2	-0.1	-0.2%	51.1	51.1	0.0	-0.1%	51.9	51.8	-0.2	-0.3%
Dry	51.6	51.4	-0.1	-0.3%	51.5	51.7	0.2	0.3%	52.7	52.4	-0.2	-0.4%
Critical	53.9	53.7	-0.1	**-0.3%**	53.8	53.5	-0.2	**-0.4%**	55.4	54.8	-0.5	**-1.0%**
Clear Creek at Igo												
Monthly Temperature (SQ-37)												
Jul-Sep (Deg-F)												
Full Simulation Period	54.4	54.3	-0.1	-0.1%	54.8	54.7	-0.1	-0.2%	55.7	55.7	0.1	0.1%
Dry	54.4	54.5	0.0	0.0%	55.0	54.9	-0.1	-0.2%	56.0	56.1	0.0	0.1%
Critical	55.7	55.6	-0.1	**-0.2%**	56.6	56.5	-0.1	**-0.2%**	58.1	57.9	-0.3	**-0.4%**
Sacramento River at Bonnyview												
Monthly Temperature (SQ-03)												
Jul-Sep (Deg-F)												
Full Simulation Period	53.0	52.5	-0.5	-0.9%	53.6	53.6	0.0	0.0%	54.8	54.3	-0.5	-0.8%
Dry	53.5	52.9	-0.6	-1.1%	54.3	54.1	-0.1	-0.3%	55.1	54.6	-0.5	-0.9%
Critical	56.5	55.1	-1.4	**-2.5%**	56.5	55.9	-0.6	**-1.1%**	60.5	58.6	-1.8	**-3.0%**
Sacramento River at Balls Ferry												
Monthly Temperature (SQ-04)												
Jul-Sep (Deg-F)												
Full Simulation Period	54.6	54.1	-0.5	-0.9%	55.2	55.2	-0.1	-0.1%	56.5	56.0	-0.5	-0.9%
Dry	55.1	54.5	-0.6	-1.1%	56.0	55.7	-0.2	-0.4%	56.9	56.3	-0.6	-1.0%

Table A1-1 Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries (non-economic measures)

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project		WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project		WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project	
			Difference	Relative Difference			Difference	Relative Difference			Difference	Relative Difference
Critical	58.0	56.6	-1.4	**-2.3%**	58.1	57.5	-0.6	**-1.1%**	61.9	60.2	-1.7	**-2.7%**
Sacramento River at Jellys Ferry												
Monthly Temperature (SQ-05)												
Jul-Sep (Deg-F)												
Full Simulation Period	55.9	55.4	-0.5	-0.8%	56.6	56.5	-0.1	-0.1%	57.9	57.4	-0.5	-0.9%
Dry	56.4	55.8	-0.6	-1.1%	57.3	57.0	-0.3	-0.5%	58.4	57.7	-0.6	-1.1%
Critical	59.2	57.9	-1.3	**-2.2%**	59.4	58.8	-0.6	**-1.0%**	63.0	61.5	-1.5	**-2.5%**
Sacramento River at Bend Bridge												
Monthly Temperature (SQ-06)												
Jul-Sep (Deg-F)												
Full Simulation Period	56.9	56.5	-0.4	-0.8%	57.6	57.6	-0.1	-0.2%	59.0	58.5	-0.5	-0.9%
Dry	57.5	56.9	-0.6	-1.1%	58.5	58.1	-0.3	-0.6%	59.5	58.8	-0.7	-1.1%
Critical	60.1	58.9	-1.2	**-2.1%**	60.3	59.7	-0.6	**-1.0%**	63.8	62.4	-1.4	**-2.3%**
EEA-3. Folsom Lake Cold Water Pool												
Increase the availability of coldwater pool storage in Folsom Reservoir, by increasing May storage and coldwater pool storage, to allow the U.S. Bureau of Reclamation additional operational flexibility to provide suitable water temperatures in the lower American River. This action would utilize additional coldwater pool storage by providing releases from Folsom Dam (and subsequently from Nimbus Dam) to maintain mean daily water temperatures at levels suitable for juvenile steelhead over-summer rearing and fall-run Chinook salmon spawning in the lower American River from May through November during all water year types.												
Folsom Lake												
End-of-Month Storage (SW-24)												
May (TAF)												
Full Simulation Period	838	841	3	0.4%	769	764	-4	-0.5%	679	677	-2	-0.3%
Dry	765	775	10	1.3%	699	692	-8	-1.1%	601	607	6	1.0%
Critical	480	489	9	**1.9%**	476	473	-3	-0.6%	407	401	-5	**-1.3%**
September (TAF)												
Full Simulation Period	505	532	27	5.3%	428	447	19	4.5%	377	396	19	5.2%
Dry	426	465	39	**9.1%**	371	410	38	10.4%	349	373	24	6.7%
Critical	265	278	13	4.7%	293	289	-4	**-1.4%**	235	246	11	**4.8%**
American River at Watt Ave												
Monthly Temperature (SQ-19)												
Jul-Sep (Deg-F)												
Full Simulation Period	66.7	65.8	-0.9	-1.3%	70.6	69.9	-0.6	-0.9%	71.9	71.2	-0.7	-0.9%
Dry	68.0	67.2	-0.8	-1.2%	70.7	70.5	-0.2	-0.4%	72.2	71.9	-0.3	-0.4%
Critical	71.6	70.2	-1.4	**-2.0%**	73.6	73.1	-0.5	**-0.7%**	75.6	74.7	-0.9	**-1.2%**
EEA-4. Stabilize American River Flows												
Stabilize flows in the lower American River to minimize dewatering of fall-run Chinook salmon redds (i.e., October through March) and steelhead redds (i.e., January through May), and reduce isolation events (specifically, flow increases to 4,000 cfs with subsequent reduction to < 4,000 cfs) of juvenile anadromous salmonids, particularly from October through June. Reduce the reliance upon Folsom Reservoir as a "real-time, first response facility" to meet Delta objectives and demands, particularly from January through August, to reduce flow fluctuation and water temperature-related impacts to fall-run Chinook salmon and steelhead in the lower American River.												
N/A - Reporting Metrics require daily timestep modeling of flow operations to demonstrate how flexibility in storage operations supports stabilization of flows throughout late Fall through Spring.												
EEA-5. Yolo Bypass Flow Improvement												
Increase flows in the Yolo Bypass by 400 cfs in August, September, and October to promote food production for Delta Smelt												
Yolo Bypass Flow												
Increase in Volume (SW-31)												
Aug-Oct (TAF)												
Full Simulation Period	15	58	42	**273.7%**	24	64	40	**163.2%**	20	58	38	**188.3%**
Dry	14	47	33	241.6%	60	100	40	66.4%	37	59	22	58.4%
Critical	14	23	9	64.2%	13	18	5	33.5%	9	22	13	150.4%
EEA-6. Lake Oroville Cold Water Pool												
Improve the reliability of coldwater pool storage in Oroville Reservoir to improve water temperature suitability for juvenile steelhead and spring-run Chinook salmon over-summer rearing, and fall-run Chinook salmon spawning in the lower Feather River from May through November during all water year types. (Improve storage conditions for:) Provide releases from Oroville Dam to maintain mean daily water temperatures at levels suitable for juvenile steelhead and spring-run Chinook salmon over-summer rearing, and fall-run Chinook salmon spawning in the lower Feather River. Stabilize flows in the lower Feather River to minimize redd dewatering, juvenile stranding and isolation of anadromous salmonids.												

Table A1-1 Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries (non-economic measures)

	DCR 2015 without Project	**DCR 2015 with Project**	**DCR 2015 with Project Reservoir minus DCR 2015 without Project**		**WSIP 2030 without Project**	**WSIP 2030 with Project**	**WSIP 2030 with Project Reservoir minus WSIP 2030 without Project**		**WSIP 2070 without Project**	**WSIP 2070 with Project**	**WSIP 2070 with Project Reservoir minus WSIP 2070 without Project**	
			Difference	**Relative Difference**			**Difference**	**Relative Difference**			**Difference**	**Relative Difference**
Lake Oroville												
End-of-Month Storage (SW-18)												
May (TAF)												
Full Simulation Period	2,814	2,849	35	1.2%	2,760	2,786	26	0.9%	2,620	2,651	31	1.2%
Dry	2,204	2,304	100	4.5%	2,294	2,332	38	1.7%	2,167	2,206	39	1.8%
Critical	1,444	1,502	58	**4.0%**	1,527	1,611	83	**5.5%**	1,507	1,618	111	**7.4%**
September (TAF)												
Full Simulation Period	1,677	1,763	86	5.1%	1,469	1,528	59	4.0%	1,287	1,383	96	7.4%
Dry	1,153	1,258	104	9.0%	1,146	1,195	49	4.3%	1,140	1,147	7	0.6%
Critical	898	967	69	**7.7%**	901	924	23	**2.6%**	903	979	76	**8.4%**
EEA-7. Stabilize Sacramento River Fall Flows												
Stabilize flows in the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam to minimize dewatering of fall-run Chinook salmon redds (for the spawning and embryo incubation lifestage periods extending from October through March), particularly during fall months. (avoid abrupt changes; operation limited to not greatly impact cold water pool operations in D and C years)												
Sacramento River below Keswick												
Monthly Flow (SW-10)												
Dec-Feb (cfs)												
Full Simulation Period	8,349	8,720	372	4.4%	9,028	9,256	228	2.5%	9,459	9,617	157	1.7%
Below Normal	5,071	5,448	376	**7.4%**	4,711	4,889	177	**3.8%**	5,479	5,693	214	**3.9%**
Dry	3,829	4,173	343	**9.0%**	3,969	4,442	474	**11.9%**	3,736	3,964	228	**6.1%**
Critical	3,763	3,666	-97	-2.6%	3,532	3,679	147	4.2%	3,531	3,810	279	7.9%

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 1: Model Assumptions

Attach description and assumptions of with-project conditions for years 2030 and 2070, as defined in section 6004(a)(2) of the regulations, as well as a description of the with- and without-project current conditions. See also regulations section 6003(a)(1)(BB).

WSIP Application Instructions, March 2017

Sites Reservoir Project Description and Assumptions of with-Project Conditions for Years 2030 and 2070 plus with and without-Project Current Conditions

August 9, 2017

Table of Contents

Attachment 1: Model Assumptions **1**
- Introduction 5
- Approach 5
- Project Description and Assumptions 7
- Project Infrastructure 8
  - Tehama-Colusa Canal and Red Bluff Pumping Plant Facilities and Capacity 9
  - Glenn-Colusa Irrigation District Main Canal and Hamilton City Pumping Facilities and Capacity 9
  - Proposed Delevan Pipeline and Intake Diversion and Release Capacities 9
  - Existing Tehama-Colusa Canal and Glenn-Colusa Irrigation District Main Canal Intertie. 10
  - Williams Outlet 10
  - Holthouse (Funks) Reservoir 10
  - Terminal Regulating Reservoir and Pipeline 10
- Diversions to Sites Reservoir 10
  - Sites Reservoir Diversion Bypass Flow Protection 11
  - Pulse Flow Protection Diversion Assumptions 11
  - Diversions to Fill Sites Reservoir Storage 13
  - Sites Reservoir Evaporation 13
- Reservoir Operations Assumptions 14
  - Public Benefits 14
  - Shasta Lake Coldwater Pool and Sacramento River Temperature Control 15
  - Stabilize Upper Sacramento River Fall Flows 15
  - Sacramento River Diversion Reductions at Red Bluff and Hamilton City 15
  - Folsom Lake Coldwater Pool Improvement and Supply Reliability 16
  - Yolo Bypass and Delta Outflow Improvement 16
  - Lake Oroville Coldwater Pool Improvement 16
- Water Supply 16
- Works Cited 16

Figures

Figure 1. Modeling Analytical Framework 7
Figure 2. Sites Reservoir and Proposed Facilities 8
Figure 3. Pulse Flow Protection for Sites Diversions 13

Acronyms and Abbreviations

Authority	Sites Project Authority
CALFED	CALFED Bay-Delta Program
cfs	cubic feet per second
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
DCR	Delivery Capability Report
Delta	Sacramento-San Joaquin River Delta
DSM2	Delta Simulation Model
DWR	California Department of Water Resources
Funks Reservoir	Holthouse Reservoir
GCID	Glenn-Colusa Irrigation District
M&I	municipal and industrial
MAF	million acre-foot (feet)
NODOS	North-of-Delta Offstream Storage
Reclamation	Bureau of Reclamation
SRSC	Sacramento River Settlement Contractor
SVI	Sacramento Valley 40-30-30 water year type index
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
T-C Canal	Tehama-Colusa Canal
TCCA	Tehama-Colusa Canal Authority
TRR	Terminal Regulating Reservoir
USACE	U.S. Army Corps of Engineers
USRDOM	Upper Sacramento River Daily Operations Model
VIC	Variable Infiltration Capacity

Introduction

This document provides descriptions and assumptions of the with-project conditions for the Sites Reservoir Project for years 2030 and 2070 as proposed by the Sites Project Authority (Authority). In addition, this document includes a description of the with- and without-project current conditions.

The with-project conditions include a 1.81-million-acre-foot (MAF) reservoir, which would be located in the Sacramento Valley west of the town of Maxwell, and associated conveyance facilities including use of existing Tehama-Colusa Canal (T-C Canal) and Glenn-Colusa Irrigation District (GCID) Main Canal diversion and conveyance facilities, plus a proposed new diversion and discharge pipeline. The proposed reservoir would be filled by diversion of excess Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam. These flows are "excess" to those needed to meet current regulatory requirements or other water demands. Operation of the proposed reservoir would be in cooperation with the operations of existing Central Valley Project (CVP) and State Water Project (SWP) system facilities to facilitate and maximize the potential for a wide range of benefits. Detailed operating agreements would need to be developed that define a framework and procedures for cooperative operations among the Sites Project Authority (Authority), Central Valley Project (CVP), and State Water Project (SWP).

Approach

The with-project assumptions were developed through a series of meetings and coordination with Authority representatives including participating water district managers and county representatives, California Department of Water Resources (DWR), and Bureau of Reclamation (Reclamation). The with-project condition builds on previous work conducted under the CALFED Bay-Delta Program (CALFED) by DWR and Reclamation. Subsequent to CALFED, DWR has been the lead on technical studies in coordination with the Authority as part of the North-of-Delta Offstream Storage (NODOS) Project and associated investigations.

The analyses conducted for the Sites Reservoir Project utilized the model products and assumptions described in section 6004(a)(1) of the code of regulations. This includes the 2030 and 2070 future conditions CALSIM II and DSM2 models provided by the California Water Commission on November 2, 2016. The models provided by the commission were modified to include the facilities and operation of the Sites Project as described below in the Project Description and Assumptions section. There were no modifications to existing CVP and SWP operating criteria.

The with- and without-project Current Conditions analyses were based on the DWR State Water Project Final Delivery Capability Report 2015 (DWR 2015) – base scenario. Similar to above, the DCR 2015 base scenario, provided by DWR, was modified to include the facilities and operation of the Sites Project. The project description and assumptions for the with-project current condition is the same as described for the 2030 and 2070 with-project conditions.

The CALSIM II model is based on a monthly time step and, therefore, does not incorporate all the detailed decision processes that occur in actual daily operations of the CVP and SWP systems. To evaluate naturally occurring storm event flows, supplemental modeling was conducted on a daily time step to assess availability of excess Sacramento River flows.

Table 1 (located at the end of this document) shows the range of potential beneficiary operations under drought and other hydrologic conditions, and priorities assumed for various seasonal operations. It is intended that storage and associated releases could be adaptively managed to support operational actions found to produce the greatest benefits over time.

The analyses included the use of other analytical tools that were updated for future 2030 and 2070 conditions. These tools include:

- USRDOM – Upper Sacramento River Daily Operations Model
- Sacramento River HEC5Q model
- SALMOD
- American River CE-QUAL Model
- CWEST
- SWAP
- LTGEN
- SWP Power
- NODOS Power

The analytical framework, tools, and analyses were formulated for evaluating the benefits and impacts of the Project. The framework provides for iteratively refining operations criteria to minimize both the systemwide and localized impacts on various resources while maximizing the benefits.

The primary model in the framework is CALSIM II with inputs describing the hydrology, facilities, water management, regulatory standards, and operational criteria assumptions. CALSIM II outputs regarding system operation decisions including deliveries, flows and storages are then used by every other model in the analytical framework. CALSIM II operations were informed based on the reporting metrics from various models that simulate river temperatures, anadromous fish survival, Delta water quality, hydropower generation and economics.

Upper Sacramento River Daily Operations Model (USRDOM) uses the CALSIM II outputs regarding the operational controls and reservoir releases to simulate daily reservoir operations and daily river flows for the upper Sacramento River from Shasta Dam to Knights Landing. For evaluating Project operations, CALSIM II and USRDOM were simulated iteratively to determine potential Reservoir diversions based on flow conditions in Sacramento River.

Delta Simulation Model (DSM2) was used to simulate hydrodynamics (flow, velocity and water levels) and water quality (salinity) in the Sacramento-San Joaquin Delta. The Upper Sacramento River HEC5Q model was used to simulate reservoir and river temperatures in the upper Sacramento River, from Shasta Lake to Knights Landing. The Folsom CE-QUAL-W2 model was used to simulate reservoir and river temperatures on the American River. The SALMOD model was used to simulate benefits to anadromous fish in the Sacramento River. The LTGEN, SWP Power, and NODOS Power were used to study the power production and use. The SWAP and CWEST economic modeling tools were used to study the benefits to agricultural water supply and urban water supply. The interrelationships between the models are shown in the analytical framework in Figure 1.

Descriptions of the models used in the analytical framework are included in the following attachments.

- CALSIM II and DSM2 Modeling Assumptions
- HEC5Q Modeling for the Sites Project
- SALMOD Salmon Modeling of the Sacramento River
- Upper Sacramento River Daily Flow and Operations Modeling
- Power Modeling of the Sites Reservoir Project
- Economic Modeling of the Sites Reservoir Project
- Folsom Reservoir CE-QUAL-W2 Temperature Modeling

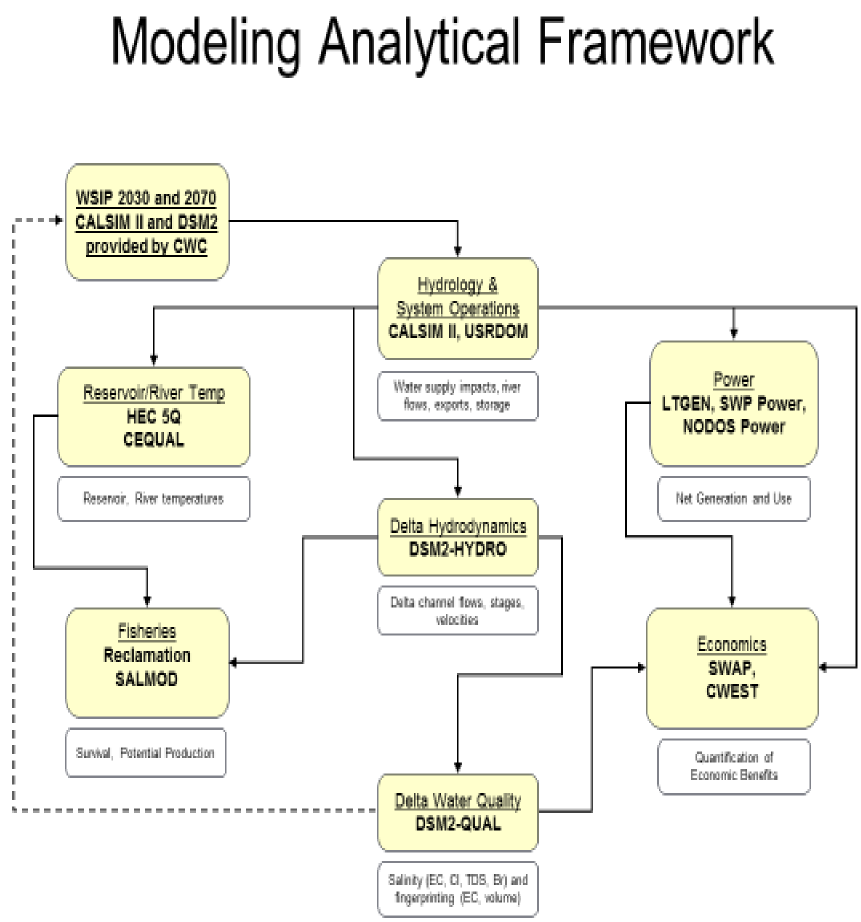


Figure 1. Modeling Analytical Framework

Project Description and Assumptions

Sites Reservoir would be filled by diversion of excess Sacramento River flows that originate from unregulated tributaries to the Sacramento River downstream from Keswick Dam. As described below, diversions are assumed to potentially occur in any month or water year type, but would likely be greatest in the winter months with wetter conditions (depending on storage conditions and annual flows and events). The Sites Reservoir Project could operate in cooperation with CVP and SWP system facilities to facilitate a wide range of benefits. Sites Reservoir would provide water through four primary mechanisms:

- Water stored in Sites Reservoir could be released directly to Colusa Basin users,
- Water could be released to the Sacramento River
- Water could be released through the Colusa-Basin Drain and Knights Landing Ridge Cut
- Water stored in Sites Reservoir could be exchanged for water stored in Shasta Lake or other CVP and SWP system reservoirs.

This last mechanism could be used to significantly increase upstream north-of-Delta storage and operational flexibility to support multiple water supply and ecosystem benefits.

The project employs a strategy to maximize the potential benefits of Sites Reservoir while not adversely affecting the CVP and SWP’s ability to meet existing system regulatory requirements including the following:

- Water rights
- Instream flow requirements
- Biological opinions
- Delta water quality requirements
- CVP and SWP requirements
- Central Valley Project Improvement Act (CVPIA)

The following sections describe the proposed Sites Reservoir Project infrastructure, Sacramento River diversion criteria and assumptions, public benefits, and water supply benefits.

Project Infrastructure

The primary facilities include a 1.81-MAF Sites Reservoir that would rely on the existing T-C Canal and GCID Main Canal for diversion and conveyance purposes, as well as a new proposed Delevan Pipeline and intake to divert and convey water to and from the reservoir. Figure 1 shows the location of the proposed reservoir and associated conveyance facilities. A description of existing and proposed new conveyance facilities and their proposed operation follows.

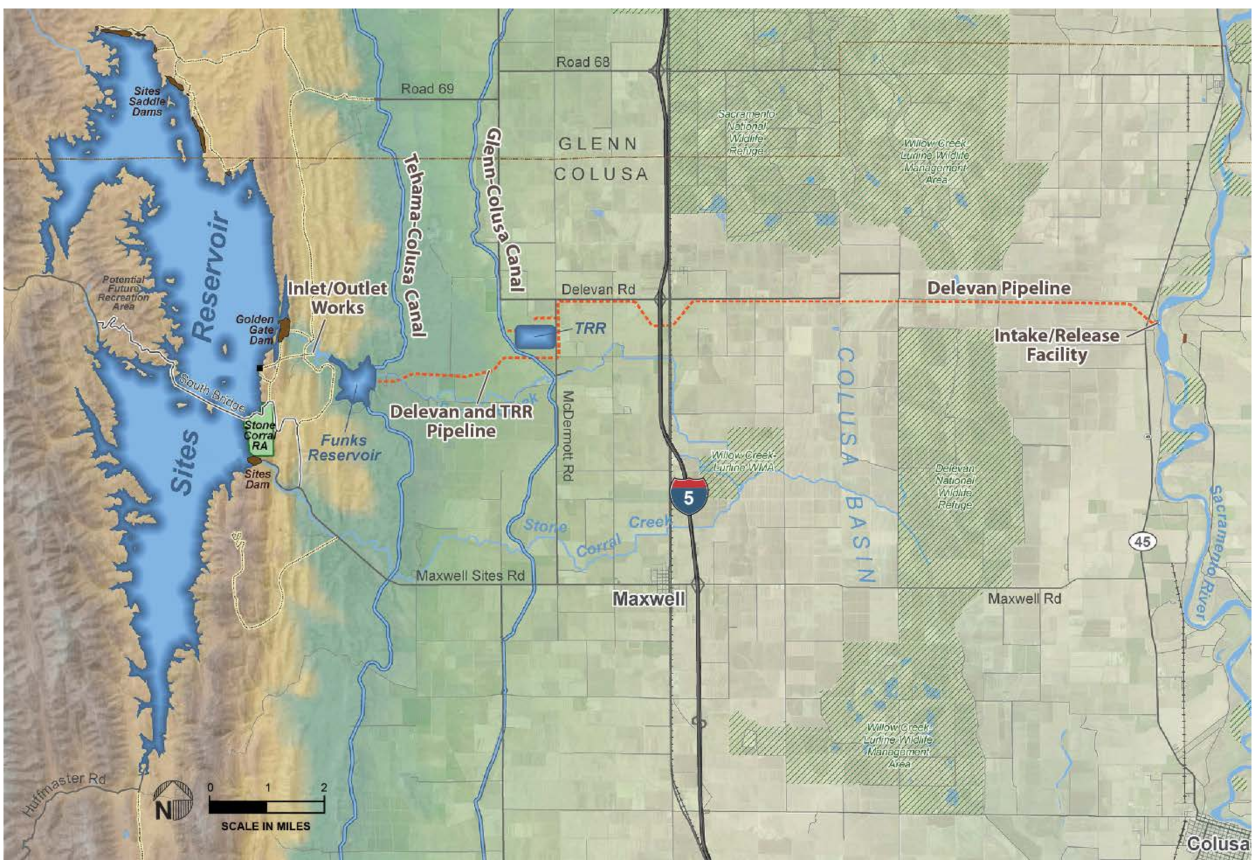


Figure 2. Sites Reservoir and Proposed Facilities

Tehama-Colusa Canal and Red Bluff Pumping Plant Facilities and Capacity

The existing Tehama-Colusa Canal Authority's (TCCA) T-C Canal through the TCCA service area and Red Bluff Pumping Plant located on the Sacramento River near Red Bluff would be used to divert and convey water to the proposed Sites Reservoir. Operating agreements among the Authority, TCCA, and Reclamation would need to be developed to define Sites Reservoir Project operations and cooperation among the parties.

Red Bluff Pumping Plant has an existing pumping capacity of 2,000 cubic feet per second (cfs), which is used to meet current agricultural water demand. The project would include installation of one additional pump (250 cfs) to the existing pump grouping, which would increase the overall pumping capacity to 2,250 cfs to fully use the 2,100-cfs capacity for diversion of water through T-C Canal to Sites Reservoir. The total conveyance capacity of T-C Canal is assumed to be 2,250 cfs at the upstream end of the canal and 2,100 cfs at Holthouse Reservoir. Any unused capacity remaining after meeting existing agricultural demands could be used as necessary to convey water to fill Sites Reservoir. Approximately 50 to 60 cfs of the T-C Canal capacity is assumed to be used for existing winter operations, based on communication with TCCA representatives.

No dedicated period for maintenance was assumed for T-C Canal on the basis of current canal capacity and projected Sites Reservoir diversion amounts. Discussions with TCCA representatives revealed operations and maintenance could be scheduled around proposed Sites Reservoir Project operations.

Glenn-Colusa Irrigation District Main Canal and Hamilton City Pumping Facilities and Capacity

Similar to T-C Canal, GCID Main Canal would be used to convey water pumped from the existing Hamilton City pumping facility to divert and convey Sacramento River water to the proposed Sites Reservoir. Operating agreements between the Authority and GCID would need to be developed to define Sites Reservoir Project operations and cooperation between the parties. The Hamilton City pumping facility has a 3,000 cfs diversion capacity at the Sacramento River intake, and the capacity of GCID Main Canal is 1,800 cfs at TRR. Any unused capacity remaining after existing agricultural operations could be used to convey water to the proposed Sites Reservoir. The following flows are assumed to occupy capacity in the canal during existing winter operations of GCID Main Canal (values in cfs).

October	November	December	January	February	March
513	534	389	235	56	48

A dedicated annual maintenance shutdown period was assumed from January 7 through February 21.

Proposed Delevan Pipeline and Intake Diversion and Release Capacities

The proposed Delevan Pipeline would extend east/west across the GCID service area located west of the existing Maxwell Irrigation District intake facility. The proposed intake and discharge facility would include a fish screen and pump station intake to divert up to 2,000 cfs from the Sacramento River to Sites Reservoir when excess Sacramento River water is available for diversion. The pipeline would also have the ability to convey up to 2,500 cfs by gravity from the Sites Reservoir back to the Sacramento River for downstream uses.

A dedicated annual maintenance shutdown period sometime between April 1 and May 31 is assumed for the pipeline, intake, and fish screen facility in wet, above-normal, and below-normal water year types in accordance with the Sacramento Valley 40-30-30 index. During the maintenance, both diversion and release operations at Delevan would be shut down. No maintenance would be scheduled in dry and critical water year types.

Existing Tehama-Colusa Canal and Glenn-Colusa Irrigation District Main Canal Intertie

The existing T-C Canal and GCID Main Canal intertie provides flexibility in routing flows of up to 285 cfs from the T-C Canal to the GCID Main Canal.

Williams Outlet

The Williams Outlet provides flexibility in routing water of up to 65 cfs from the T-C Canal to the GCID Main Canal.

Holthouse (Funks) Reservoir

The existing Funks Reservoir includes a storage capacity of 2,250 acre-feet and serves as a re-regulating reservoir to stabilize flows in T-C Canal as diverters come on line and off line. The existing Funks Reservoir would be expanded to form Holthouse Reservoir by constructing a new dam (Holthouse Dam) and reservoir to the east of Funks Reservoir, with an enlarged active storage capacity of approximately 6,500 acre-feet and a surface area of approximately 450 acres.

Terminal Regulating Reservoir and Pipeline

TRR would be a 1,200-acre-foot regulating reservoir constructed adjacent to GCID Main Canal, approximately 3 miles northeast of Holthouse Reservoir. TRR would be composed of an earthen embankment dam, concrete emergency overflow weir, outfall standpipe, and an approximate 4,000-foot-long underground 60-inch-diameter overflow outlet pipe to Funks Creek.

Water conveyed down GCID Main Canal would be directed into the proposed TRR. A new pump station (the proposed TRR pumping and generating plant) would then convey the water from TRR via the proposed TRR pipeline to the proposed Holthouse Reservoir. TRR would be required to provide operational storage for the TRR pumping and generating plant to balance normal and emergency flow variations between the upstream GCID Main Canal pump station, the 40 miles of connecting canal, and the TRR pumping and generating plant.

The proposed TRR pipeline would be bidirectional, allowing water to be pumped from TRR to Holthouse (Funks) Reservoir for storage, and allowing water to flow by gravity from Holthouse Reservoir for release to TRR and GCID Main Canal. The pipeline would have a capacity of 1,800 cfs to convey water pumped from TRR to Holthouse Reservoir. The capacity of the pipeline to convey water by gravity flow from Holthouse Reservoir to TRR would be 900 cfs.

Diversions to Sites Reservoir

The proposed Sites Reservoir would be filled through the diversion of excess Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam. Less than 1 percent of diversions to Sites Reservoir are assumed to be provided by flood releases or spills that flow through Lake Shasta. Sacramento River water would be diverted at the three locations on the river as described above. Excess flows are defined as river flows in addition to those required to meet the following:

- Senior downstream water rights, existing CVP and SWP and other water rights diversions including SWP Article 21 (interruptible supply), and other more senior excess flow priorities (diversions associated with Freeport Regional Water Project and existing Los Vaqueros Reservoir)
- Existing regulatory requirements including State Water Resources Control Board (SWRCB) D-1641, CVPIA 3406(b)(2), the 2008 U.S. Fish and Wildlife Service biological opinion, and the 2009 National Marine Fisheries Service biological opinion and other instream flow requirements
- Bypass flow conditions needed to maintain and protect anadromous fish survival and Delta water quality

The Authority would need to obtain a water right permit to allow the intended operations. Operations would be consistent with the terms and conditions contained in the water right permit approved by SWRCB. The permit would describe the points and methods of diversion, diversion season, purposes of use, and places of use.

A description of proposed minimum bypass flow requirements and pulse flow criteria to protect existing and future water uses are provided below.

Sites Reservoir Diversion Bypass Flow Protection

Excess Sacramento River flow diversions to Sites Reservoir would only take place when flow monitoring indicates that bypass flows are present in the river due to storm event flows. Several existing and additional proposed bypass flow criteria were assumed at specified locations. These flow criteria are designed to make certain only excess water would be diverted into Sites Reservoir to maintain and protect existing downstream water uses, as follows.

- A bypass flow of 3,250 cfs downstream from Red Bluff Diversion Dam must be present to maintain flows in the upper Sacramento River that are required in SWRCB WR 90-5 to prevent dewatering salmonid redds and maintain water temperatures. Diversions at Red Bluff Pumping Plant for filling Sites Reservoir would only be allowed when flows in the river were above the 3,250-cfs bypass flow criteria.
- Diversions at the Hamilton City intake for GCID Main Canal currently require a bypass flow of 4,000 cfs to prevent fish entrainment. Diversions at Red Bluff Pumping Plant and GCID Main Canal intake for filling Sites Reservoir would only be allowed when flows in the river were above the 4,000-cfs bypass flow requirement downstream from Hamilton City.
- Diversions for filling Sites Reservoir would only be allowed when flows below Wilkins Slough were above 5,000 cfs given the current minimum flow requirements. Wilkins Slough Navigation Control Point minimum flows currently range from 3,250 to 5,000 cfs depending on hydrologic conditions.
- Diversions for filling Sites Reservoir would only be allowed when a Sacramento River flow of 15,000 cfs is present at Freeport in January, 13,000 cfs in December and February through June, and 11,000 cfs in all other months. This flow threshold was designed to protect and maintain existing downstream water uses and water quality in the Delta.

Pulse Flow Protection Diversion Assumptions

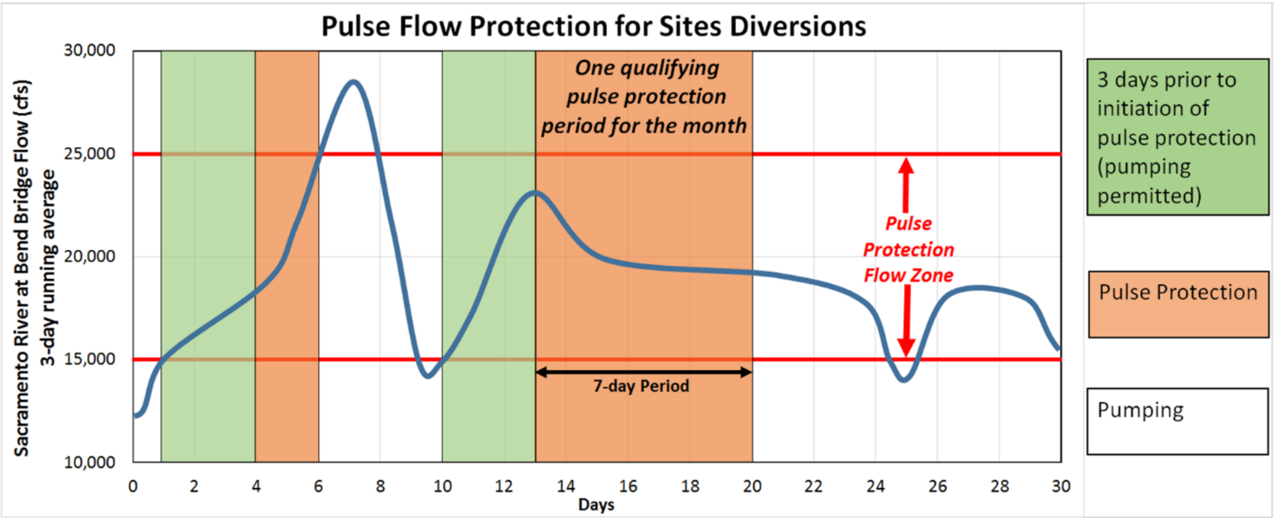
Operations modeling of the proposed Project included restrictions on diversions to limit impacts on out-migrating juvenile fish as a “surrogate” for likely permit conditions. Based on recent literature and the proposed permit conditions for other diversion projects, operations modeling for the proposed Project diversions were assumed to be restricted to minimize impacts to fish passage associated with pulse flow events that stimulate the observed spike in juvenile salmon outmigration. Actual operations are anticipated to be informed by real-time monitoring of fish movement.

The assumed limits on diversions during naturally occurring, storm-induced pulse flow events in the Sacramento River were based on a recent study by del Rosario et al. (2013), which found an abrupt and substantial spike in winter-run Chinook salmon arrivals at Knights Landing in association with the first storm event producing a flow of 400 cubic meters per second (14,126 cfs) at Wilkins Slough. This spike was followed shortly by passage of up to the 50th percentile of cumulative migration. This relationship was apparent for a wide range of water year types based on catch data collected between 1999 and 2007.

Accordingly, an assumed pulse protection period was developed that would extend from October through May to address out-migration of juvenile winter-, spring-, fall- and late-fall-run Chinook salmon, as well as steelhead. Pulse flows during this period would provide flow continuity between the upper and lower Sacramento River to support fish migration. It is recognized that research regarding the benefits of pulse flows is ongoing, and further research and adaptive management would be required to develop and refine a pulse flow protection strategy for fish migration and, as such, this assumption was used for modeling and informational purposes only.

For proposed Sites Reservoir operations, pulse flows are defined by extended peak river flows at Bend Bridge that originate primarily from storm event tributary inflows downstream from Keswick Dam. For the purposes of operations modeling, a naturally occurring pulse event was considered initiated when the 3-day running average flow below Bend Bridge exceeded 15,000 cfs. Such an event would need to continue for at least a 7-day duration to be considered a qualified storm event for the simulation process. Diversions to Sites Reservoir would not be allowed during the 7-day period that flow was greater than 15,000 cfs. The duration of a pulse flow event would be considered terminated under the following conditions: 1) the 3-day running average discharge flow remained greater than 15,000 cfs for 7 days after initiation, 2) the 3-day running average discharge flow dropped below 15,000 cfs before reaching the 7-day duration, or 3) the 3-day running average discharge flow exceeded 25,000 cfs before reaching the 7-day duration.

Given that del Rosario et al. (2013) indicate that the first storm event was associated with a spike in salmon arrivals at Knights Landing, diversions to Sites Reservoir would not be allowed during the first 7-day qualified pulse period, when flows reach 15,000 cfs during the out-migration season. For evaluation of Sites Project Reservoir operations, it was assumed that up to one qualified 7-day pulse event would occur each month during the pulse protection period from October through May, to encourage and support salmonid out-migration and minimize potential diversion impacts. Therefore, for operations modeling, diversions to Sites Reservoir storage would be restricted under the following conditions: 1) if pulse conditions exist at Bend Bridge, and a qualified pulse event has not already occurred within the given month, and 2) if Bend Bridge flows are less than 25,000 cfs during the pulse event. Diversions are allowed when flows exceed 25,000 cfs because flows of this magnitude are considered to provide lesser benefits to fish migration, as shown in Figure 2.



Pulse flow protection period is October through May

Figure 3. Pulse Flow Protection for Sites Diversions

Diversions to Fill Sites Reservoir Storage

Diversions of excess Sacramento River water to Sites Reservoir using existing T-C Canal and GCID Main Canal conveyance facilities could occur at any time during the year, given the flow conditions described above are present in the river. Deliveries for TCCA and GCID service areas have first priority at the existing T-C Canal and GCID intakes, with diversions to Sites Reservoir using the unused capacities of the two canals.

Diversions through the proposed Delevan Pipeline could also occur at any time of the year assuming Sacramento River flow conditions are above the bypass and pulse flow criteria described above. In summer months, preference would generally be given to Sites Reservoir releases to the river, resulting in limited diversions to storage because the pipeline could only convey flows in one direction at a time.

Sites Reservoir Evaporation

In the absence of available evaporation data, Sites Reservoir "net-evaporation" rates were estimated using evaporation and precipitation data from existing nearby reservoirs. Net-evaporation is the difference between evaporation and precipitation. Positive values indicate higher rates of evaporation than precipitation while negative values indicate lower rates of evaporation than precipitation. Evaporation and precipitation data have been collected for three nearby reservoirs along Stony Creek including: (1) East Park Reservoir, (2) Stony Gorge Reservoir, and (3) Black Butte Lake.

The evaporation data was taken from Reclamation's Stony Creek model (Yaworsky, 2006), which makes monthly estimates based on historical data from DWR, Reclamation, and U.S. Army Corps of Engineers (USACE). These evaporation rates are consistent with the data used as inputs in the DCR 2015, WSIP 2030, and WSIP 2070 CALSIM II models.

The data consists of six historical time series ranging from October 1922 to September 2003 at a monthly time-step. The average annual evaporation rates at East Park Reservoir, Stony Gorge Reservoir, and Black Butte Lake are 6.5 TAF, 4.7 TAF, and 12.2 TAF, respectively. The precipitation data has been provided by the Variable Infiltration Capacity (VIC) model (Liang et al., 1994), a large-scale, semi-distributed hydrologic model originally developed by Xu Liang at the University of Washington.

The net-evaporation rates for East Park Reservoir, Stony Gorge Reservoir, and Black Butte Reservoir were computed by subtracting each reservoir's precipitation rates from its evaporation rates. The monthly net-evaporation of the three reservoirs was averaged and used as the input for Sites Reservoir net-evaporation. Using this method, the average annual net-evaporation for Sites Reservoir equates to 33.3 TAF.

Consistent with all other evaporation inputs in CALSIM II, the Sites Reservoir net-evaporation rates are unchanged under 2030 and 2070 future climate conditions.

Reservoir Operations Assumptions

The primary operational criteria include the following:

- A defined ecosystem enhancement storage account would be established in Sites Reservoir to be managed by the State to provide water for ecosystem and water quality purposes.
- Each of the participating Authority members would be allocated a defined storage account in the Sites Reservoir Project to manage their water, as well as store water from other potential sources of supply.
- It is assumed that a water market of some form would be facilitated by the Authority to promote efficient use and exchange of water in Sites Reservoir storage.
- All storage accounts would receive an equal proportional share of new water diversions into Sites Reservoir storage.
- Any water in storage beyond designated member account volumes would be "at risk" and would be "spilled" if the reservoir fills to capacity.
- A set of operating guidelines and rules would be developed to promote efficient water management for operations of Sites Reservoir and associated facilities.
- All water stored in Sites Reservoir storage accounts are subject to evaporation and other losses.

Public Benefits

The operation of Sites Reservoir Project would allow for the development and administration of an ecosystem enhancement storage account that could be managed by the State to provide water for ecosystem and water quality purposes. Such an account would provide a pool of dedicated storage to manage in cooperation with existing operations to improve coldwater conservation storage, stabilize river flows during critical fisheries periods, increase flows through certain watercourses and/or facilities (such as, Yolo Bypass), improve water quality, and/or enhance habitat restoration.

Sites Reservoir Project would be operated in cooperation with CVP and SWP operations to coordinate releases from Trinity Lake, Shasta Lake, Lake Oroville, and Folsom Lake. Releases from Sites Reservoir would allow reduced releases from other reservoirs while still meeting requirements for minimum instream flow objectives, Sacramento River temperature requirements, and Delta salinity control assigned to CVP and SWP. Through this reduction in releases, storage could be conserved in Trinity Lake, Shasta Lake, Lake Oroville, and Folsom Lake to significantly increase operational flexibility to improve river water temperatures for fish survival, Delta water quality, flood control, and recreation.

The following summarizes the anticipated primary benefits that could be realized through the provision of Sites Reservoir Project water beyond that required to meet Authority member needs. The priorities and amount of water potentially allocated to achieving the benefits listed below will be subject to the participation of the California Water Commission Water Storage Investment Program. Sites Reservoir Project operations would achieve multiple benefits over a wide range of hydrologic conditions.

In drought conditions, Sites Reservoir Project could:

- Increase coldwater pool conservation in Trinity Lake, Shasta Lake, Lake Oroville, and Folsom Lake
- Help regulate Sacramento River summer flows for best use of cold water for control of temperature conditions adverse to anadromous fish

In non-drought hydrologic conditions, Sites Reservoir Project water could:

- Stabilize Sacramento River fall flows for improving spawning and rearing success of anadromous fish
- Provide water to the Yolo Bypass to support salmon migration and summer food production for delta smelt
- Provide water for Incremental Level 4 refuge deliveries per CVPIA
- Provide (via upstream actions) incidental Delta water quality improvements in the summer and fall

More detailed descriptions of potential actions that could be implemented in cooperation with the CVP and SWP operations are provided below.

Shasta Lake Coldwater Pool and Sacramento River Temperature Control

Maximum benefits could be realized assuming Sites Reservoir and Shasta Lake were operated in cooperation to increase Shasta Lake storage and preserve a greater volume of coldwater pool storage. This additional cold water would improve operational flexibility to provide releases to maintain appropriate water temperatures in the Sacramento River during summer months and in drought years.

Through releases from Sites Reservoir to meet TCCA and GCID irrigation diversions and equivalent reductions in CVP Shasta Lake releases, demands on Shasta Lake storage could be reduced and the coldwater pool maintained for a longer time at higher levels than are currently achievable. Shasta Lake release patterns could be shifted in season and between adjacent years to improve coldwater storage and flow management for salmon and other species using the portion of the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam as habitat.

Stabilize Upper Sacramento River Fall Flows

Additional storage in Shasta Lake could be used to stabilize fall flows between Keswick Dam and Red Bluff to avoid abrupt flow reductions due to changes in local tributary inflows as a results of storm events. This would reduce adverse conditions for spawning fall-run Chinook salmon (such as, dewatering of redds and scour damage).

Sacramento River Diversion Reductions at Red Bluff and Hamilton City

The Sites Reservoir Project could allow Shasta Lake to provide increased Sacramento River flows in spring through fall by reducing Sacramento River diversions into T-C Canal and GCID Main Canal during the irrigation season. This would be achieved through exchange with releases from Sites Reservoir to meet CVP T-C Canal and GCID Main Canal contract demands, and could provide multiple benefits to anadromous fish and estuarine-dependent species by providing or augmenting transport flows, increasing habitat availability, increasing productivity, and improving nutrient transport and food availability.

Folsom Lake Coldwater Pool Improvement and Supply Reliability

Sites Reservoir Project operations in cooperation with Folsom Lake could improve the reliability of coldwater carryover storage at Folsom Lake, stabilize flows in the American River, and help maintain suitable water temperatures in the lower American River. Additional summer releases from Sites Reservoir could reduce the need for releases from Folsom Lake, resulting in increased carryover storage. Sites Reservoir releases could also provide additional Delta outflow and reduce short-term emergency flow reliance on Folsom Lake releases to maintain Delta water quality.

Yolo Bypass and Delta Outflow Improvement

Sites Reservoir releases through the Colusa Basin Drain and Knights Landing Ridge Cut into the Yolo Bypass would help increase productivity in in the lower Cache Slough and lower Sacramento River areas to increase desirable food sources for Delta smelt and other key fish species in the late summer and early fall.

Lake Oroville Coldwater Pool Improvement

Sites Reservoir releases could increase the reliability of coldwater pool storage in Lake Oroville to reduce lower Feather River water temperatures for juvenile steelhead and spring-run Chinook salmon over-summer rearing, and fall-run Chinook salmon. Higher and more stables flows in the lower Feather River at critical times could also minimize redd dewatering, juvenile stranding, and isolation of anadromous salmonids.

Water Supply

The Sites Reservoir Project could provide a substantial amount of water to potential Sites Reservoir Project participants including agricultural and municipal and industrial (M&I) users. Sites Reservoir water would be released to meet demands and supplement existing allocations to CVP contractors in the Colusa Basin and released for other water users in the Sacramento Valley.

The South-of-Delta CVP and SWP contractors that receive water from the Sites Reservoir Project have contract provisions for the conveyance of extra water through SWP of CVP facilities above their SWP or CVP allocations. These water users may opt to have their Sites Reservoir Project water conveyed as either “project” water or “non-project” depending on the conveyance agreements they develop with DWR or Reclamation. If the water is conveyed as project water, then it has a more flexible timeframe for its conveyance and the releases of their water from Sites via the Delevan Pipeline. If the water is conveyed as non-project water, then the water would likely be released from Sites Reservoir and conveyed south or west of the Delta during the “water transfer window” in the biological opinions for the operation on the CVP/SWP in the Delta, provided there is capacity to convey this non-project water.

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CALSIM II and DSM2 Modeling Assumptions

CALSIM II and DSM2 Modeling Assumptions

Introduction

This attachment provides a description of the assumptions for the CALSIM II and DSM2 modeling of the Current Conditions, WSIP 2030, and WSIP 2070 without project scenarios.

The with- and without-project Current Conditions analyses were based on the DWR State Water Project Delivery Capability Report 2015 (DCR 2015) – base scenario. The DCR 2015 base scenario was modified to include the facilities and operation of the Sites Project.

The 2030 and 2070 future conditions CALSIM II and DSM2 models provided by the California Water Commission on November 2, 2016 were modified to include the facilities and operation of the Sites Project.

Assumptions for DCR 2015, WSIP 2030, and WSIP 2070 Model Without Project Simulations

This section documents the assumptions used in the CALSIM II and DSM2 model simulations for the baseline model (Without Project) simulations used in the Sites Reservoir Project evaluation. The DCR 2015, WSIP 2030 Without Project, and WSIP 2070 Without Project models are identical except for hydrologic inflows and sea level rise due to climate change.

The Without Project assumptions include implementation of water operations components of the Reasonable and Prudent Alternatives (RPA) specified in the 2008 Fish and Wildlife Service (FWS) and 2009 National Marine Fisheries Service (NMFS) Biological Opinions (BiOps). The specific assumptions and implementation in the CALSIM II and DSM2 models were developed by a multiagency team comprised of fisheries and modeling experts from the DWR, Department of Fish and Game (DFG), Reclamation, USFWS, and NMFS.

The description of CALSIM II assumptions refers to the DCR 2015 scenario. However, these assumptions are applicable to the WSIP 2030 Without Project and WSIP 2070 Without Project scenarios also. A summary of the CALSIM II model assumptions in the DWR State Water Project Delivery Capability Report 2015 – base scenario is provided in Table 1.

CALSIM II Assumptions for Current Conditions (DCR 2015)

<u>Hydrology</u>

Inflows/Supplies

CALSIM II model includes the historical hydrology with projected 2030 modifications for the operations upstream of the rim reservoirs. Reservoir inflows, stream gains, diversion requirements, irrigation efficiencies, return flows and groundwater operation are all components of the hydrology for CALSIM II.

Level of Development

CALSIM II input hydrology is based on an analysis of agricultural and urban land use and population estimates. The assumptions used for Sacramento Valley land use result from aggregation of historical survey and projected data developed for the California Water Plan Update (Bulletin 160-98). Generally, land use projections are based on Year 2020 estimates (hydrology serial number 2020D09E). However, the San Joaquin Valley hydrology reflects draft 2030 land use assumptions developed by Reclamation. Where appropriate Year 2030 projections of demands associated with water rights and SWP and CVP water service contracts have been included. Specifically, projections of full build out are used to describe the American River region demands for water rights and CVP contract supplies and California Aqueduct and the Delta Mendota Canal SWP/CVP contractor demands are set to full contract amounts.

Demands, Water Rights, CVP/SWP Contracts

CALSIM II demand inputs are preprocessed monthly time series for a specified level of development (e.g. 2030) and per hydrologic conditions. Demands are classified as CVP project, SWP project, local project or non-project (e.g. pre-1914 water rights, in-Delta consumptive use etc.). CVP and SWP demands are separated into different classes based on the contract type. A description of various demands and classifications included in CALSIM II is provided in the 2008 OCAP Biological Assessment Appendix D (Reclamation 2008a). Non-project demands within each Depletion Study Area (DSA) are based on the proportion of the acreage served by the projects versus the total acreage, for each land-use type. Non-project demands are satisfied from sources other than project storage and project conveyance facilities and are reduced as a function of water availability in the absence of project operations.

DCR 2015 assumes demands north of the Delta at the future level of development assuming full build-out of facilities and increases associated with water rights and CVP and SWP service contracts. This is primarily an increase in CVP M&I service contracts (253 TAF/Yr) and water rights (184 TAF/Yr) related to urban municipal and industrial (M&I) use, especially in the communities in El Dorado, Placer, and Sacramento counties.

DCR 2015 also assumes full contract amounts for demands associated with SWP contracts, south of the Delta at the future level of development, in all hydrologic conditions.

Facilities

CALSIM II includes representation of all the existing CVP and SWP storage and conveyance facilities. Key storage facilities including Shasta Lake, Trinity Lake, Whiskeytown Lake, Lake Oroville, Folsom Lake, Los Vaqueros Reservoir, San Luis Reservoir and Millerton Lake are represented in CALSIM II. Regulating reservoirs such as Lewiston, Keswick, Thermalito and Nimbus are also included in CALSIM II.

CALSIM II also represents existing conveyance facilities in the Colusa Basin region. Red Bluff Diversion Dam, Tehama-Colusa Canal (TCC) and its intake on the Sacramento River, Corning Canal, Glenn Colusa Canal (GCC) and its intake on the Sacramento River, Stony Creek – TCC intertie, TCC – GCC intertie, and Colusa Basin Drain are some of the key facilities included in the model.

CALSIM II also represents the flood control weirs along the Sacramento River such as Ord Ferry, Moulton Weir, Colusa Weir and Tisdale Weir, which bypass flood flows into Sutter Bypass. USRDOM was used to model the weir spills into the Sutter Bypass for the simulations. In addition, CALSIM II also represents the flood control weirs such as Fremont Weir and Sacramento Weir, which spill flood flows from the Sacramento River into Yolo Bypass.

Freeport Regional Water Project, located along the Sacramento River near Freeport, is assumed to be operational under the DCR 2015. Similarly, 30 mgd capacity, City of Stockton Delta Water Supply Project is assumed to be operational under the DCR 2015. Delta-Mendota Canal–California Aqueduct Intertie is assumed to be operational under the DCR 2015. Contra Costa Water District Alternative Intake Project and Los Vaqueros expanded storage capacity of 160 TAF, are included in the DCR 2015 along with the South Bay Aqueduct rehabilitation, to 430 cfs capacity, from junction with California Aqueduct to Alameda County FC&WSD Zone 7.

Red Bluff Pumping Plant

The permanent TCC Pumping Plant and intake facilities are in place and the Red Bluff Diversion Dam is operated with gates out of the water all year as required in the NMFS BO Action I.3.1 providing unimpeded upstream and downstream fish passage.

Tehama Colusa Canal Capacity

Fish Passage Improvements at Red Bluff Pumping Plant and Fish Screen are included in the DCR 2015 allowing for a pumping capacity of 2,000 cfs into TCC.

Glenn Colusa Canal Capacity

3,000 cfs of total diversion capacity is assumed at the Sacramento River intake near Hamilton City into GCC.

Existing TCC-GCC Intertie

The existing TCC-GCC intertie provides flexibility in routing flows of up to 285 cfs, between TCC and GCC.

Williams Outlet

The Williams Outlet provides flexibility in routing flows of up to 65 cfs, between TCC and GCC.

Funks Reservoir

The existing Funks Reservoir includes a storage capacity of 2,250 acre-foot and is part of the TCC system. Funks Reservoir serves as a re-regulating reservoir to stabilize flows in the TCC downstream of Funks Reservoir as diverters come on line and off line. Funks Reservoir is not modeled explicitly in CALSIM II.

The Delta serves as a natural system of channels to transport river flows and reservoir storage to the CVP and SWP facilities in the south Delta, which export water to the projects' contractors through two pumping plants: SWP's Harvey O. Banks Pumping Plant and CVP's C.W. Jones Pumping Plant. Banks and Jones Pumping Plants supply water to agricultural and urban users throughout parts of the San Joaquin Valley, South Lahontan, Southern California, Central Coast, and South San Francisco Bay Area regions.

The Contra Costa Canal and the North Bay Aqueduct supply water to users in the northeastern San Francisco Bay and Napa Valley areas.

SWP Banks Pumping Plant Capacity

SWP Banks pumping plant has an installed capacity of about 10,668 cfs (two units of 375 cfs, five units of 1,130 cfs, and four units of 1,067 cfs). The SWP water rights for diversions specify a maximum of 10,350 cfs, but the U. S. Army Corps' of Engineers (ACOE) permit for SWP Banks Pumping Plant allows a maximum pumping of 6680 cfs. With additional diversions depending on Vernalis flows the total diversion can go up to 8,500 cfs during December 15th – March 15th. Additional capacity of 500 cfs (pumping limit up to 7,180 cfs) is allowed to reduce impact of NMFS BO Action 4.2.1 on SWP.

CVP C.W. Bill Jones Pumping Plant (Tracy PP) Capacity

The Jones Pumping Plant consists of six pumps including one rated at 800 cfs, two at 850 cfs, and three at 950 cfs. DMC-California Aqueduct Intertie that allows 400 cfs additional DMC capacity is assumed to be in place; therefore, pumping capacity is 4,600 cfs in all months.

CCWD Intakes

The Contra Costa Canal originates at Rock Slough, about four miles southeast of Oakley, and terminates after 47.7 miles at Martinez Reservoir. The canal and associated facilities are part of the CVP, but are operated and maintained by the Contra Costa Water District (CCWD). CCWD also operates a diversion on Old River. CCWD can divert water to the Los Vaqueros Reservoir to store good quality water when available and supply to its customers. In addition to the Rock Slough and Old River diversions, CCWD's Middle River Intake and Pump Station (previously known as the Alternative Intake Project) is included in the DCR 2015. The Alternative Intake Project is a new drinking water intake at Victoria Canal, about 2.5 miles east of Contra Costa Water District's (CCWD) existing intake on the Old River.

Regulatory Standards

Major regulatory standards that govern the operations of the CVP and SWP facilities are briefly described below. Specific assumptions related to key regulatory standards are also outlined below.

D-1641 Operations

The SWRCB Water Quality Control Plan (WQCP) and other applicable water rights decisions, as well as other agreements are important factors in determining the operations of both the Central Valley Project (CVP) and the State Water Project (SWP).

The December 1994 Accord committed the CVP and SWP to a set of Delta habitat protective objectives that were incorporated into the 1995 WQCP and later, were implemented by D-1641. Significant elements in the D-1641 standards include X2 standards, export/inflow (E/I) ratios, Delta water quality standards, real-time Delta Cross Channel operation, and San Joaquin flow standards.

Coordinated Operations Agreement (COA)

The CVP and SWP use a common water supply in the Central Valley of California. The DWR and Reclamation have built water conservation and water delivery facilities in the Central Valley in order to deliver water supplies to project contractors. The water rights of the projects are conditioned by the SWRCB to protect the beneficial uses of water within each respective project and jointly for the protection of beneficial uses in the Sacramento Valley and the Sacramento-San Joaquin Delta Estuary. The agencies coordinate and operate the CVP and SWP to meet the joint water right requirements in the Delta.

The Coordinated Operations Agreement (COA), signed in 1986, defines the project facilities and their water supplies, sets forth procedures for coordination of operations, identifies formulas for sharing joint responsibilities for meeting Delta standards, as the standards existed in SWRCB Decision 1485 (D-1485), and other legal uses of water, identifies how unstored flow will be shared, sets up a framework for exchange of water and services between the Projects, and provides for periodic review of the agreement.

CVPIA (b)(2) Assumptions

The previous 2008 Operations Criteria and Plan (OCAP) Biological Assessment (BA) modeling included a dynamic representation of Central Valley Project Improvement Act (CVPIA) 3406(b)(2) water allocation, management and related actions (B2). The selection of discretionary actions for use of B2 water in each year was based on a May 2003 Department of the Interior policy decision. The use of B2 water is assumed to continue in conjunction with the USFWS and NMFS BO RPA actions. The CALSIM II implementation does not explicitly account for the use of (b)(2) water, but rather assumes pre-determined USFWS BO upstream fish objectives for Clear Creek and Sacramento River below Keswick Dam in addition to USFWS and NMFS BO RPA actions for the American River, Stanislaus River, and Delta export restrictions.

USFWS Delta Smelt BO Actions

The USFWS Delta Smelt BO was released on December 15, 2008, in response to Reclamation's request for formal consultation with the USFWS on the coordinated operations of the Central Valley Project (CVP) and State Water Project (SWP) in California. To develop CALSIM II modeling assumptions for the RPA documented in this BO, the Department led a series of meetings that involved members of fisheries and project agencies. This group has prepared the assumptions and CALSIM II implementations to represent the RPA in DCR 2015 CALSIM II simulation. The following actions of the USFWS BO RPA have been included in the DCR 2015 CALSIM II simulations:

- Action 1: Adult Delta smelt migration and entrainment (RPA Component 1, Action 1 – First Flush)
- Action 2: Adult Delta smelt migration and entrainment (RPA Component 1, Action 2)
- Action 3: Entrainment protection of larval and juvenile Delta smelt (RPA Component 2)
- Action 4: Estuarine habitat during Fall (RPA Component 3)
- Action 5: Temporary spring head of Old River barrier and the Temporary Barrier Project (RPA Component 2)

NMFS BO Salmon Actions

The NMFS Salmon BO on long-term actions of the CVP and SWP was released on June 4, 2009. To develop CALSIM II modeling assumptions for the RPA documented in this BO, the Department led a series of meetings that involved members of fisheries and project agencies. The following NMFS BO RPA have been included in the DCR 2015 CALSIM II simulations:

- Action I.1.1: Clear Creek spring attraction flows
- Action I.3.1: Operations after May 14, 2012: Operate RBDD with Gates Out
- Action I.4: Wilkins Slough operations
- Action II.1: Lower American River flow management
- Action III.1.3: Stanislaus River flows below Goodwin Dam
- Action IV.1.2: Delta Cross Channel gate operations
- Action IV.2.1: San Joaquin River flow requirements at Vernalis and Delta export restrictions
- Action IV.2.3: Old and Middle River flow management

For Action I.2.1, which calls for a percentage of years that meet certain specified end-of-September and end-of-April storage and temperature criteria resulting from the operation of Lake Shasta, no specific CALSIM II modeling code is implemented to simulate the performance measures identified.

Water Transfers

Lower Yuba River Accord (LYRA)

Lower Yuba River Accord (LYRA) Component 1 water is assumed to be transferred to South of Delta (SOD) State Water Project (SWP) contractors to help mitigate the impact of the NMFS BO on SWP exports during April and May. An additional 500 cfs of capacity is permitted at Banks Pumping Plant from July through September to export this water.

Phase 8 transfers

Phase 8 transfers are not included.

Short-term or Temporary Water Transfers

Short term or temporary transfers such as Sacramento Valley acquisitions conveyed through Banks PP are not included.

Specific Regulatory Assumptions

Upstream Reservoir Operations

Minimum flow below Lewiston Dam

The volume of the Trinity River instream flow requirement below Lewiston Dam ranges from 369 – 815 TAF/year, based on the Trinity EIS Preferred Alternative. The minimum flow volume is determined based on the Trinity River water year classification. The flow schedules from the Trinity Sites Reservoir Project were assumed for each water year type.

Trinity Lake End-of-September Minimum Storage

Based on the Trinity EIS Preferred Alternative, a minimum end-of-September carryover storage objective of 600 TAF at Trinity Reservoir was assumed to help provide coldwater resource protection. This objective may not be fully accomplished in extended drought periods.

Minimum flow below Whiskeytown Dam

Whiskeytown Dam is operated to meet the downstream water rights in the Clear Creek and 1963 Reclamation Proposal to USFWS and National Park Service (NPS). It is also operated to meet the predetermined CVPIA 3406(b)(2) flows, and the flow requirements identified under NMFS BO Action I.1.1.

Shasta Lake End-of-September Minimum Storage

Shasta Lake is operated such that the end-of-September carryover storage is 1900 TAF in non-critically dry years per the NMFS 2004 Winter-run Biological Opinion.

2009 NMFS BO Action 1.2.1 requires certain storage to be met at certain percentile of all years. A post-process of operations is used to determine whether or not these requirements are met.

Minimum flow below Keswick Dam

Keswick Dam is operated to meet the release schedule under SWRCB WR 90-5, which maintains 3,250 cfs in the Sacramento River. It is also operated to meet predetermined CVPIA 3406(b)(2) flows. NMFS BO Action I.2.2 includes actions that call for minimum flows to protect temperatures.

Flow Objective for Navigation at Wilkins Slough

NMFS BO Action 1.4 requires that to conserve cold water pool in Shasta Lake, Wilkins Slough is operated at a flow ranging from 3,500 cfs to 5,000 cfs based on the CVP water supply condition.

Minimum flow below Thermalito Diversion Dam

Thermalito diversion dam is operated to meet a minimum flow requirement of 700 cfs or 800 cfs in the Feather River low flow channel based on the 2006 Oroville Relicensing Settlement Agreement.

Minimum flow below Thermalito Afterbay Outlet

1983 DWR – DFG Agreement requires a minimum flow in the Feather River below Thermalito Afterbay Outlet to be between 750 cfs and 1,700 cfs, depending on the Oroville storage condition and the forecasted Feather River runoff condition.

Flow at Mouth of the Feather River

During the Feather River Service Area (FRSA) diversion season from April through September, a minimum flow of 2,800 cfs is maintained at the mouth of the Feather River depending on Lake Oroville inflow and FRSA allocation.

Minimum flow below Nimbus Dam

Nimbus Dam is operated to meet a minimum flow requirement based on the American River Flow Management under the NMFS BO Action II.1. Minimum release requirements range from 800 to 2,000 cfs based on a sequence of seasonal indices and adjustments.

American River Minimum flow at H Street Bridge

The minimum allowable flows in the Lower American River are defined by SWRCB Decision 893 (D-893) which states that, in the interest of fish conservation, releases should not ordinarily fall below 250 cfs between January 1 and September 15 or below 500 cfs at other times.

Minimum flow near Rio Vista

The minimum flow required on the Sacramento River at Rio Vista under the WQCP, SWRCB D-1641 is included. During September through December months, the flow requirement ranges from 3,000 cfs to 4,500 cfs, depending on the month and D-1641 40-30-30 index water year type.

Delta Outflow Index (Flow and Salinity)

SWRCB D-1641:

All flow based Delta outflow requirements per SWRCB D-1641 are included in the DCR 2015 simulation. Similarly, for the February through June period X2 standard is included.

USFWS BO (December, 2008) Action 4:

USFWS BO Action 4 requires additional Delta outflow to manage X2 in the fall months following the wet and above normal years to maintain average X2 for September and October no greater (more eastward) than 74 kilometers in the fall following wet years and 81 kilometers in the fall following above normal years.

Combined Old and Middle River Flows

USFWS BO restricts south Delta pumping to preserve certain OMR flows in three of its Actions: Action 1 to protect pre-spawning adult Delta smelt from entrainment during the first flush, Action 2 to protect pre-spawning adults from entrainment and from adverse hydrodynamic conditions, and Action 3 to protect larval Delta smelt from entrainment. CALSIM II simulates these actions to a limited extent.

Brief description of USFWS BO Actions 1-3 implementations in CALSIM is as follows: Action 1 is onset based on a turbidity trigger that takes place during or after December. This action requires limit on exports so that the average daily OMR flow is no more negative than -2,000 cfs for a total duration of 14 days, with a 5-day running average no more negative than 2,500 cfs (within 25 percent of the monthly criteria). Action 1 ends after 14 days of duration or when Action 3 is triggered based on a temperature criterion. Action 2 starts immediately after Action 1 and requires range of net daily OMR flows to be no more negative than -1,250 to -5,000 cfs (with a 5-day running average within 25 percent of the monthly criteria). The Action continues until Action 3 is triggered. Action 3 also requires net daily OMR flow to be no more negative than -1,250 to -5,000 cfs based on a 14 day running average (with a simultaneous 5-day running average within 25 percent). Although the range is similar to Action 2, the Action implementation is different. Action 3 continues until June 30 or when water temperature reaches a certain threshold.

NMFS BO Action 4.2.3 requires OMR flow management to protect emigrating juvenile winter-run, yearling spring-run, and Central Valley steelhead within the lower Sacramento and San Joaquin rivers from entrainment into south Delta channels and at the export facilities in the south Delta. This action requires reducing exports from January 1 through June 15 to limit negative OMR flows to -2,500 to -5,000 cfs. CALSIM II assumes OMR flows required in NMFS BO are covered by OMR flow requirements developed for actions 1 through 3 of the USFWS BO.

South Delta Export-San Joaquin River Inflow Ratio

NMFS BO Action 4.2.1 requires exports to be capped at a certain fraction of San Joaquin River flow at Vernalis during April and May while maintaining a health and safety pumping of 1,500 cfs. This export constraint is included.

Exports at the South Delta Intakes

Exports at Jones and Banks Pumping Plant are restricted to their permitted capacities per SWRCB D-1641 requirements. In addition, the south Delta exports are subjected Vernalis flow based export limits during April and May as required Action 4.2.1. Additional 500 cfs pumping is allowed to reduce impact of NMFS BO Action 4.2.1 on SWP during July through September period.

D-1641 1:1 CVP/SWP export limit based on the Vernalis flow from April 15 – May 15, is also included.

Under D-1641 the combined export of the CVP Tracy Pumping Plant and SWP Banks Pumping Plant is limited to a percentage of Delta inflow. The percentages range from 35% to 45% during February depending on the January eight river index and 35% during March through June months. For rest of the months 65% of the Delta inflow is allowed to be exported.

Delta Water Quality

The DCR 2015 simulation includes compliance with the SWRCB D-1641 salinity requirements. However, not all salinity requirements are included as CALSIM II is not capable of predicting salinities in the Delta. Instead, empirically based equations and models are used to relate interior salinity conditions with the flow conditions. DWR's Artificial Neural Network (ANN) trained for salinity is used to predict and interpret salinity conditions at Emmaton, Jersey Point, Rock Slough and Collinsville stations. Emmaton and Jersey Point standards are for protecting water quality conditions for agricultural use in the western Delta and they are in effect from April 1st to August 15th. The EC requirement at Emmaton varies from 0.45 mmhos/cm to 2.78 mmhos/cm, depending on the water year type. The EC requirement at Jersey Point varies from 0.45 mmhos/cm to 2.20 mmhos/cm, depending on the water year type. Rock Slough standard of 250 mg/L chloride is for protecting water quality conditions for M&I use for water through the Contra Costa Canal. It is a year-round standard. D-1641 also requires a certain number of days in a year with chloride concentration less than 150 mg/L. The number of days required is dependent upon the water year type. A pre-processed fixed number of days is used as input to CALSIM II to comply with 150 mg/L chloride standard at Rock Slough. Collinsville standard is applied during October through May months to protect the water quality conditions for the migrating fish species, and it varies between 12.5 mmhos/cm in May and 19.0 mmhos/cm in October.

Operations Criteria

Delta Cross Channel Gate Operations

SWRCB D-1641 DCC standards provide for closure of the DCC gates for fisheries protection at certain times of the year. From November through January, the DCC may be closed for up to 45 days for fishery protection purposes. From February 1 through May 20, the gates are closed for fishery protection purposes. The gates may also be closed for 14 days for fishery protection purposes during the May 21 through June 15 time period. Reclamation determines the timing and duration of the closures after discussion with USFWS, DFG, and NMFS.

NMFS BO Action 4.1.2 requires gates to be operated as described in the BO based on presence of salmonids and water quality from October 1 through December 14; and gates to be closed from

December 15 to January 31, except short-term operations to maintain water quality. CALSIM II includes NMFS BO DCC gate operations in addition to the D-1641 gate operations. When the daily flows in the Sacramento River at Wilkins Slough exceeds 7,500 cfs (flow assumed to flush salmon into the Delta), DCC is closed for a certain number of days per month.

Allocation Decisions

CALSIM II includes allocation logic for determining deliveries to north-of-Delta and south-of-Delta CVP and SWP contractors. The delivery logic uses runoff forecast information, which incorporates uncertainty in the hydrology and standardized rule curves (i.e. Water Supply Index versus Demand Index Curve). The rule curves relate forecasted water supplies to deliverable “demand,” and then use deliverable “demand” to assign subsequent delivery levels to estimate the water available for delivery and carryover storage. Updates of delivery levels occur monthly from January 1 through May 1 for the SWP and March 1 through May 1 for the CVP as runoff forecasts become more certain. The south-of-Delta SWP delivery is determined based on water supply parameters and operational constraints. The CVP system wide delivery and south-of-Delta delivery are determined similarly upon water supply parameters and operational constraints with specific consideration for export constraints.

San Luis Operations

CALSIM II sets targets for San Luis storage each month that are dependent on the current South-of-Delta allocation and upstream reservoir storage. When upstream reservoir storage is high, allocations and San Luis fill targets are increased. During a prolonged drought when upstream storage is low, allocations and fill targets are correspondingly low. The San Luis rule curve is managed to minimize situations in which shortages may occur due to lack of storage or exports.

CALSIM II Assumptions for WSIP 2030

The WSIP 2030 without project CALSIM II model was provided by the CWC. The assumptions and operating criteria are identical to DCR 2015 assumptions except for hydrologic inflows and sea level rise due to climate change.

CALSIM II Assumptions for WSIP 2070

The WSIP 2070 without project CALSIM II model was provided by the CWC. The assumptions and operating criteria are identical to DCR 2015 except for hydrologic inflows and sea level rise due to climate change.

DSM2 Assumptions for Current Conditions

The Current Conditions DSM2 model was developed from the baseline WSIP 2030 study. The boundary conditions and dispersion factors in the CWC model representing 2030 conditions were removed to create the current conditions DSM2 study. Model input data from DWR’s Bay Delta Office Modeling Support Branch Delta Modeling Section was incorporated to represent Current Conditions. All other data used in the Current Conditions study is consistent with the CWC 2030 DSM2 model.

River Flows

For the Current Conditions (DCR 2015) DSM2 simulation, the river flows at the DSM2 boundaries are based on the monthly flow time series from DWR CALSIM II DCR 2015 model results.

Tidal Boundary

The tidal boundary condition at Martinez is provided by an adjusted astronomical tide normalized for sea level rise (Ateljevich and Yu, 2007).

Water Quality

Martinez EC

Martinez EC boundary condition is estimated using the G-model based on the net Delta outflow simulated in CALSIM II and the pure astronomical tide (Ateljevich, 2001).

Vernalis EC

For the Current Condition DSM2 simulation, the Vernalis EC boundary condition is based on the monthly San Joaquin EC time series estimated in the DWR DCR 2015 CALSIM II model results.

Morphological Changes

No additional morphological changes were assumed as part of the Current Condition simulation. DSM2 model and grid developed as part of the 2009 recalibration effort (CH2M HILL, 2009) was used as part of the modeling.

DSM2 Assumptions for WSIP 2030 and WSIP 2070

The WSIP Baseline DSM2 without project models for 2030 and 2070 conditions were provided by the CWC.

Table 1
CALSIM II Model Assumptions

CALSIM II Modeling Assumptions from DWR State Water Project Delivery Capability Report 2015

	Existing Condition[1]
Planning Horizon	2015
Period of Simulation	82 years (1922-2003)
HYDROLOGY	
Level of Development (land use)	2030 Level[2]
DEMANDS	
North of Delta (excluding the American River)	
CVP	Land-use based, full build-out of contract amounts[3]
SWP (FRSA)	Land-use based, limited by contract amounts[4, 7]
Non-project	Land-use based, limited by water rights and SWRCB Decisions for Existing Facilities
Antioch Water Works	Pre-1914 water right
Federal refuges	Firm Level 2 water needs[5]
American River Basin	
Water rights	Year 2025, full water rights[6]
CVP	Year 2025, full contracts, including Freeport Regional Water Project[6]
San Joaquin River Basin[8]	
Friant Unit	Limited by contract amounts, based on current allocation policy
Lower basin	Land-use based, based on district level operations and constraints
Stanislaus River basin[9, 17]	Land-use based, based on New Melones Interim Operations Plan, up to full CVP Contractor deliveries (155 TAF/yr) depending on New Melones Index
South of Delta	
CVP	Demand based on contract amounts[3]
Federal refuges	Firm Level 2 water needs[5]
CCWD	195 TAF/yr CVP contract supply and water rights[10]
SWP [4, 11]	Demand based on full Table A amounts (4.13 MAF/yr)
Article 56	Based on 2001-2008 contractor requests
Article 21	MWD demand up to 200 TAF/month (December-March) subject to conveyance capacity, KCWA demand up to 180 TAF/month, and other contractor demands up to 34 TAF/month, subject to conveyance capacity
North Bay Aqueduct	77 TAF/yr demand under SWP contracts, up to 43.7 cfs of excess flow under Fairfield, Vacaville and Benicia Settlement Agreement NOD Allocation Settlement Agreement terms for Napa and Solano [15]

	Existing Condition[1]
FACILITIES	
System-wide	Existing facilities
Sacramento Valley	
Shasta Lake	Existing, 4,552 TAF capacity
Red Bluff Diversion Dam	Diversion dam operated with gates out all year, NMFS BO (Jun 2009) Action I.3.1[17];assume permanent facilities in place
Colusa Basin	Existing conveyance and storage facilities
Lower American River	Hodge criteria for diversion at Fairbairn
Upper American River	PCWA American River pump station
Lower Sacramento River	Freeport Regional Water Project
Fremont Weir	Existing Weir
Delta Export Conveyance	
SWP Banks Pumping Plant (South Delta)	Physical capacity is 10,300 cfs, permitted capacity is 6,680 cfs in all months and up to 8,500 cfs during Dec 15th - Mar 15th depending on Vernalis flow conditions[18]; additional capacity of 500 cfs (up to 7,180 cfs) allowed Jul–Sep for reducing impact of NMFS BO (Jun 2009) Action IV.2.1[17] on SWP[19]
CVP C.W. "Bill" Jones Pumping Plant (formerly Tracy PP)	Permit capacity is 4,600 cfs in all months (allowed for by the Delta-Mendota Canal- California Aqueduct Intertie)
Upper Delta-Mendota Canal Capacity	Exports limited to 4,200 cfs plus diversion upstream from DMC constriction plus 400 cfs Delta-Mendota Canal-California Aqueduct Intertie
Los Vaqueros Reservoir	Enlarged storage capacity (160 TAF), existing pump location, Alternate Intake Project included[13]
San Joaquin River	
Millerton Lake (Friant Dam)	Existing, 520 TAF capacity
Lower San Joaquin River	City of Stockton Delta Water Supply Project, 30 mgd capacity
South of Delta (CVP/SWP project facilities)	
South Bay Aqueduct	SBA rehabilitation, 430 cfs capacity from junction with California Aqueduct to Alameda County FC&WSD Zone 7 point
California Aqueduct East Branch	Existing capacity
REGULATORY STANDARDS	
Trinity River	
Minimum Flow below Lewiston Dam	Trinity EIS Preferred Alternative (369-815 TAF/yr)
Trinity Reservoir end-of-September minimum storage	Trinity EIS Preferred Alternative (600 TAF/yr as able)

	Existing Condition[1]
Clear Creek	
Minimum flow below Whiskeytown Dam	Downstream water rights, 1963 Reclamation proposal to USFWS and NPS, predetermined Central Valley Protection Improvement Act 3406(b)(2) flows[20], and NMFS BO (Jun 2009) Action I.1.1[17]
Upper Sacramento River	
Shasta Lake end-of-September minimum storage	NMFS 2004 Winter-run Biological Opinion (1,900 TAF in non-critical dry years), and NMFS BO (Jun 2009) Action I.2.1[17]
Minimum flow below Keswick Dam	Flows for the SWRCB Water Rights Order 90-5, predetermined Central Valley Protection Improvement Act 3406(b)(2) flows, and NMFS BO (Jun 2009) Action I.2.2[17]
Feather River	
Minimum flow below Thermalito Diversion Dam	2006 Settlement Agreement (700 / 800 cfs)
Minimum flow below Thermalito Afterbay outlet	1983 DWR, DFG agreement (750 – 1,700 cfs)
Yuba River	
Minimum flow below Daguerre Point Dam	D-1644 Operations (Lower Yuba River Accord)[14]
American River	
Minimum flow below Nimbus Dam	American River Flow Management as required by NMFS BO (Jun 2009) Action II.1[17]
Minimum flow at H Street Bridge	SWRCB D-893
Lower Sacramento River	
Minimum flow near Rio Vista	SWRCB D-1641
Mokelumne River	
Minimum flow below Camanche Dam	Federal Energy Regulatory Commission 2916-029[12], 1996 (Joint Settlement Agreement) (100 – 325 cfs)
Minimum flow below Woodbridge Diversion Dam	Federal Energy Regulatory Commission 2916-029, 1996 (Joint Settlement Agreement) (25 – 300 cfs)
Stanislaus River	
Minimum flow below Goodwin Dam	1987 Reclamation, DFG agreement, and flows required for NMFS BO (Jun 2009) Action III.1.2 and III.1.3[17]
Minimum dissolved oxygen	SWRCB D-1422

	Existing Condition1
Merced River	
Minimum flow below Crocker- Huffman Diversion Dam	Davis-Grunsky (180 – 220 cfs, Nov – Mar), and Cowell Agreement
Minimum flow at Shaffer Bridge	Federal Energy Regulatory Commission 2179 (25 – 100 cfs)
Tuolumne River	
Minimum flow at Lagrange Bridge	Federal Energy Regulatory Commission 2299-024, 1995 (Settlement Agreement) (94 – 301 TAF/yr)
Updated Tuolumne River	New Don Pedro operations
San Joaquin River	
San Joaquin River below Friant Dam/Mendota Pool	Full San Joaquin River Restoration flows
Maximum salinity near Vernalis	SWRCB D-1641
Minimum flow near Vernalis	SWRCB D1641. VAMP is turned off since the San Joaquin River Agreement has expired.[16] NMFS BO (Jun 2009) Action IV.2.1 Phase II flows not provided due to lack of agreement for purchasing water
Sacramento-San Joaquin Delta	
Delta Outflow Index (flow and salinity)	SWRCB D-1641 and FWS BO (Dec 2008) Action 4[17]
Delta Cross Channel gate operation	SWRCB D-1641 with additional days closed from Oct 1-Jan 31 based on NMFS BO (Jun 2009) Action IV.1.2[17] (closed during flushing flows from Oct 1-Dec 14 unless adverse water quality conditions)
South Delta exports (Jones PP and Banks PP)	SWRCB D-1641 export limits as required by NMFS BO (June 2009) Action IV.2.1 Phase II[17] (additional 500 cfs allowed for Jul-Sep for reducing impact on SWP)[19]
Combined Flow in Old and Middle River (OMR)	FWS BO (Dec 2008) Actions 1-3 and NMFS BO (Jun 2009) Action IV.2.3[17]
OPERATIONS CRITERIA: RIVER-SPECIFIC	
Upper Sacramento River	
Flow objective for navigation (Wilkins Slough)	NMFS BO (Jun 2009) Action I.4[17]; 3,250 – 5,000 cfs based on CVP water supply condition
American River	
Folsom Dam flood control	Variable 400/670 flood control diagram (without outlet modifications)
Feather River	
Flow at mouth of Feather River (above Verona)	Maintain the DFG/DWR flow target of 2,800 cfs for Apr - Sep dependent on Oroville inflow and FRSA allocation
Stanislaus River	
Flow below Goodwin Dam	Revised Operations Plan and NMFS BO (Jun 2009) Action III.1.2 and III.1.3[17]

	Existing Condition[1]
San Joaquin River	
Salinity at Vernalis	Grasslands Bypass Project (full implementation)
OPERATIONS CRITERIA: SYSTEMWIDE	
CVP Water Allocation	
CVP settlement and exchange	100% (75% in Shasta critical years)
CVP refuges	100% (75% in Shasta critical years)
CVP agriculture	100% - 0% based on supply. South-of-Delta allocations are additionally limited due to D-1641, FWS BO (Dec 2008), and NMFS BO (Jun 2009) export restrictions[17]
CVP municipal & industrial	100% - 50% based on supply. South-of-Delta allocations are additionally limited due to D-1641, FWS BO (Dec 2008), and NMFS BO (Jun 2009) export restrictions[17]
SWP Water Allocation	
North of Delta (FRSA)	Contract-specific NOD Allocation Settlement Agreement terms for Butte and Yuba [15]
South of Delta (including North Bay Aqueduct)	Based on supply; equal prioritization between Ag and M&I based on Monterey Agreement; allocations are limited due to D-1641, FWS BO (Dec 2008), and NMFS BO (Jun 2009) export restrictions[17] NOD Allocation Settlement Agreement terms for Napa and Solano [15]
CVP/SWP Coordinated Operations	
Sharing of responsibility for in-basin use	1986 Coordinated Operations Agreement (FRWP and EBMUD 2/3 of the North Bay Aqueduct diversions are considered as Delta export, 1/3 of the North Bay Aqueduct diversion is considered as in-basin use)
Sharing of surplus flows	1986 Coordinated Operations Agreement
Sharing of restricted export capacity for project-specific priority pumping	Equal sharing of export capacity under SWRCB D-1641, FWS BO (Dec 2008), and NMFS BO (Jun 2009) export restrictions[17]
Water transfers	Acquisitions by SWP contractors are wheeled at priority in Banks Pumping Plant over non-SWP users; LYRA included for SWP contractors[19]
Sharing of export capacity for lesser priority and wheeling-related pumping	Cross Valley Canal wheeling (max of 128 TAF/yr), CALFED ROD defined Joint Point of Diversion (JPOD)
San Luis Reservoir	San Luis Reservoir is allowed to operate to a minimum storage of 100 TAF
CVPIA 3406(b)(2)	
Policy decision	Per May 2003 Department of Interior decision
Allocation	800 TAF/yr, 700 TAF/yr in 40-30-30 dry years, and 600 TAF/yr in 40-30-30 critical years
Actions	Pre-determined non-discretionary FWS BO (Dec 2008) upstream fish flow objectives (Oct-Jan) for Clear Creek and Keswick Dam, non-discretionary NMFS BO

	Existing Condition[1]
	(Jun 2009) actions for the American and Stanislaus Rivers, and NMFS BO (Jun 2009) actions leading to export restrictions[17]
Accounting adjustments	No discretion assumed under FWS BO (Dec 2008) and NMFS BO (Jun 2009)[17], no accounting
WATER MANAGEMENT ACTIONS	
Water Transfer Supplies (long term programs)	
Lower Yuba River Accord[19]	Yuba River acquisitions for reducing impact of NMFS BO export restrictions[17] on SWP
Phase 8	None
Water Transfers (short term or temporary programs)	
Sacramento Valley acquisitions conveyed through Banks PP[21]	Post analysis of available capacity

Notes:

[1] These assumptions have been developed under the direction of the Department of Water Resources and Bureau of Reclamation management team for the BDCP HCP and EIR/EIS. Additional modifications were made by Reclamation for its October 2014 NEPA NAA baselines and by DWR for the 2015 DCR.

[2] The Sacramento Valley hydrology used in the Existing Condition CALSIM II model reflects 2020 land-use assumptions associated with Bulletin 160-98. The San Joaquin Valley hydrology reflects draft 2030 land-use assumptions developed by Reclamation to support Reclamation studies.

[3] CVP contract amounts have been reviewed and updated according to existing and amended contracts, as appropriate. Assumptions regarding CVP agricultural and M&I service contracts and Settlement Contract amounts are documented in the Delivery Specifications attachments to the BDCP CALSIM assumptions document.

[4] SWP contract amounts have been updated as appropriate based on recent Table A transfers/agreements. Assumptions regarding SWP agricultural and M&I contract amounts are documented in the Delivery Specifications attachments to the BDCP CALSIM assumptions document.

[5] Water needs for Federal refuges have been reviewed and updated, as appropriate. Assumptions regarding firm Level 2 refuge water needs are documented in the Delivery Specifications attachments to the BDCP CALSIM assumptions document. Refuge Level 4 (and incremental Level 4) water is not included.

[6] Assumptions regarding American River water rights and CVP contracts are documented in the Delivery Specifications attachments to the BDCP CALSIM assumptions document. The Sacramento Area Water Forum agreement, its dry year diversion reductions, Middle Fork Project operations and “mitigation” water is not included.

[7] Demand for rice straw decomposition water from Thermalito Afterbay was added to the model and updated to reflect historical diversion from Thermalito in the October through January period.

[8] The new CALSIM II representation of the San Joaquin River has been included in this model package (CALSIM II San Joaquin River Model, Reclamation, 2005). Updates to the San Joaquin River have been included since the preliminary model release in August 2005. The model reflects the difficulties of on-going groundwater overdraft problems. The 2030 level of development representation of the San Joaquin River Basin does not make any attempt to offer solutions to groundwater overdraft problems. In addition, a dynamic groundwater simulation is not yet developed for the San

Joaquin River Valley. Groundwater extraction/ recharge and stream-groundwater interaction are static assumptions and may not accurately reflect a response to simulated actions. These limitations should be considered in the analysis of result

[9] The CALSIM II model representation for the Stanislaus River does not necessarily represent Reclamation's current or future operational policies. A suitable plan for supporting flows has not been developed for NMFS BO (Jun 2009) Action III.1.3.

[10] The actual amount diverted is reduced because of supplies from the Los Vaqueros project. The existing Los Vaqueros storage capacity is 100 TAF, and future storage capacity is 160 TAF. Associated water rights for Delta excess flows are included.

[11] Under DCR 2015 and the Future No Action baseline, it is assumed that SWP Contractors can take delivery of all Table A allocations and Article 21 supplies. Article 56 provisions are assumed and allow for SWP Contractors to manage storage and delivery conditions such that full Table A allocations can be delivered. Article 21 deliveries are limited in wet years under the assumption that demand is decreased in these conditions. Article 21 deliveries for the NBA are dependent on excess conditions only, all other Article 21 deliveries also require that San Luis Reservoir be at capacity and that Banks PP and the California Aqueduct have available capacity to divert from the Delta for direct delivery.

[12] Mokelumne River flows reflect EBMUD supplies associated with the Freeport Regional Water Project.

[13] The CCWD Alternate Intake Project, an intake at Victoria Canal, which operates as an alternate Delta diversion for Los Vaqueros Reservoir.

[14] D-1644 and the Lower Yuba River Accord are assumed to be implemented for Existing baselines. The Yuba River is not dynamically modeled in CALSIM II. Yuba River hydrology and availability of water acquisitions under the Lower Yuba River Accord are based on modeling performed and provided by the Lower Yuba River Accord EIS/EIR study team.

[15] This includes draft logic for the updated Allocation Settlement Agreement for four NOD contractors: Butte, Yuba, Napa and Solano.

[16] It is assumed that D-1641 requirements will be in place in 2030, and VAMP is turned off.

[17] In cooperation with Reclamation, National Marine Fisheries Service, Fish and Wildlife Service, and CA Department of Fish and Game, the CA Department of Water Resources has developed assumptions for implementation of the FWS BO (Dec 15th 2008) and NMFS BO (June 4th 2009) in CALSIM II.

[18] Current ACOE permit for Banks PP allows for an average diversion rate of 6,680 cfs in all months. Diversion rate can increase up to 1/3 of the rate of San Joaquin River flow at Vernalis during Dec 15th – Mar 15th up to a maximum diversion of 8,500 cfs, if Vernalis flow exceeds 1,000 cfs.

[19] Acquisitions of Component 1 water under the Lower Yuba River Accord, and use of 500 cfs dedicated capacity at Banks PP during Jul-Sep, are assumed to be used to reduce as much of the impact of the Apr-May Delta export actions on SWP contractors as possible.

[20] Delta actions, under USFWS discretionary use of CVPIA 3406(b)(2) allocations, are no longer dynamically operated and accounted for in the CALSIM II model. The Combined Old and Middle River Flow and Delta Export restrictions under the FWS BO (Dec 15th 2008) and the NMFS BO (June 4th 2009) severely limit any discretion that would have been otherwise assumed in selecting Delta actions under the CVPIA 3406(b)(2) accounting criteria. Therefore, it is anticipated that CVPIA 3406(b)(2) account availability for upstream river flows below Whiskeytown, Keswick and Nimbus Dams would be very limited. It appears the integration of BO RPA actions will likely exceed the 3406(b)(2) allocation in all water year types. For these baseline simulations, upstream flows on the Clear Creek and Sacramento River are pre-determined

based on CVPIA 3406(b)(2) based operations from the Aug 2008 BA Study 7.0 and Study 8.0 for Existing and Future No Action baselines respectively. The procedures for dynamic operation and accounting of CVPIA 3406(b)(2) are not included in the CALSIM II model.

[21] Only acquisitions of Lower Yuba River Accord Component 1 water are included.

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HEC5Q Modeling for the Sites Reservoir Project

Development of WSIP Climate Scenarios for Use in HEC5Q

The section describes the updates to HEC5Q that were necessary for performing temperature benefits analysis to support the Water Storage Investment Program (WSIP) application.

Background

HEC5Q Model Background and Limitations

Over the last 15 years, the US Bureau of Reclamation (Reclamation) has developed applications of the US Army Corps of Engineers HEC5Q model for evaluation of water temperatures on the Sacramento River, American River, and Stanislaus Rivers. Reclamation made substantial revisions to these models for use in their NEPA EIS analysis of the Coordinate Long-Term Operations of the Central Valley Project and State Water Project (LTO EIS) (Reclamation, 2015). The HEC5Q model was designed to work with the model results of the CALSIM II model and was calibrated for historical meteorological conditions. For the LTO EIS analysis, procedures were established to incorporate operational assumptions related to selective withdrawal features at Shasta Lake (temperature control device). HEC5Q is listed in Table 4-14 of the WSIP Technical Reference document as one of the applicable water quality models that can be used to quantify physical changes in water temperatures.

The regulations for the WSIP require that the models used in the evaluation of the Project incorporate changes associated with the WSIP 2030 and 2070 climate conditions. This required establishing Without Project versions of the HEC5Q models that reflected the change in temperatures associated with the WSIP 2030 and 2070 climate conditions. The LTO EIS HEC5Q model for the Sacramento River was modified to adjust for increases in temperature associated with each climate condition. Further, the operational assumptions related to selective withdrawal features at Shasta Lake were adjusted to consider the effects of each climate condition on the management of reservoir release temperatures and the extent to which water temperature objectives could be achieved within the critical reaches downstream of these reservoirs.

The HEC5Q models calculate the change over time in water temperatures in reservoirs and rivers based on estimates of equilibrium water temperature and the rate at which heat exchange in the water will change as it approaches equilibrium. These estimates are based on meteorological and environmental information associate with the geographic location being studied. Based on temperature information included in the WSIP statewide gridded monthly data products (CWC, 2016) model inputs for equilibrium temperatures were adjusted for the WSIP climate scenarios.

In applying the HEC5Q models, water temperature objectives downstream of Shasta Lake are required for the model to select what elevation to withdrawal releases from. The temperature of water varies with depth in a reservoir depending on the degree to which the profile is stratified (due to temperature and density variation). Warmer water is less dense than cooler water and will move to the top of the reservoir. Much of the warming of a reservoir over the spring and early summer months comes from solar radiation through the surface of the lake. To meet temperature objectives downstream of the reservoir, water is selectively withdrawn at an elevation that provides water cool enough to meet the downstream objective. The Shasta Lake schedule is varied each year of simulation based on reservoir storage and inflow conditions and expected changes in water temperature that occur between the reservoirs and the objective locations in the rivers. Based on reiterative analysis, schedules of temperature objectives are modified to reflect the effects of the WSIP climate conditions.

The HEC5Q model provides a projection of how the water temperature trends with changes in storage and flows in the water resources system. The model does not provide a prediction of what future water temperatures will be. This model is intended for use in comparative analysis and demonstration of potential effects in the setting of hydrologic information considering historical variability and the effects of climate change. It should be recognized that the HEC5Q model is a simplified and generalized representation of complex hydrodynamic and thermodynamic processes in the riverine environment. While the HEC5Q model can provide 6-hour to daily timestep information at any location within the model domain, evaluation of the model results should consider the limitations of the information used to calibrate the model and the inputs to the model for the specific conditions being evaluated. Because the CALSIM II model results used are subject to specific location and monthly timestep limitations, care must be used in drawing any conclusion from the HEC5Q model results that is finer in spatial and temporal resolution than the CALSIM II model used. Nevertheless, HEC5Q is the best available tool for this evaluation of system effects related to the Project.

Approach

HEC5Q Changes

Updates were made to the Trinity-Sacramento River Reclamation HEC5Q models used for the Coordinated Long-Term Operations of the Central Valley Project and State Water Project Environmental Impact Study (LTO EIS) to support temperature modeling for the WSIP Application process. The following changes were made to better simulate water temperatures at Current Conditions, and in the 2030 and 2070 climate scenarios developed by the California Water Commission (CWC) for the WSIP Application process: 1) increasing the equilibrium temperatures based on the calculated increase in air temperature for the WSIP 2030 and 2070 climate scenarios, and 2) adjusting the Shasta release temperature schedule assumptions in the Trinity-Sacramento HEC5Q model.

Equilibrium Temperature Adjustment

Changes in climate can have a myriad of potential and unpredictable effects on water temperatures. However, several studies indicate that increasing air temperatures result in increased water temperatures, regardless of climate scenario (Webb and Walsh 2004, Cushing 1997, Isaak et al. 2012). Since air temperatures are predicted to increase under the WSIP 2030 and 2070 climate scenarios, an increase in water temperature is assumed.

With the limited data provided, equilibrium temperatures were increased based on the increased air temperature in the WSIP 2030 and 2070 climate scenarios. This approach was supported with an analysis between observed air temperature data from the Gerber and Nicolaus CIMIS stations and the calculated equilibrium temperatures at those two stations. The equilibrium temperatures were developed as part of the Sacramento River Water Quality Extension effort conducted by Reclamation (Smith et al. 2013). The period of record of the observed air temperature data was 01Jan2001 to 31Dec2011. The observed air temperature was averaged by month and then plotted against the calculated current climate equilibrium temperature as shown in Figures 1 and 2. Two linear regressions were performed on the data, one regression for the fall and winter months (October-March) and one regression for the spring and summer months (April-September). Regressions at Gerber indicate a 1:1 ratio of air temperature to equilibrium temperature during fall and winter months and 1:0.8 ratio of air temperature to equilibrium temperature in spring and summer months. Regressions at Nicolaus indicate a 1:1 ratio, year-round. The calculation of the climate adjusted equilibrium temperature, based on these regressions, is described in the next section.

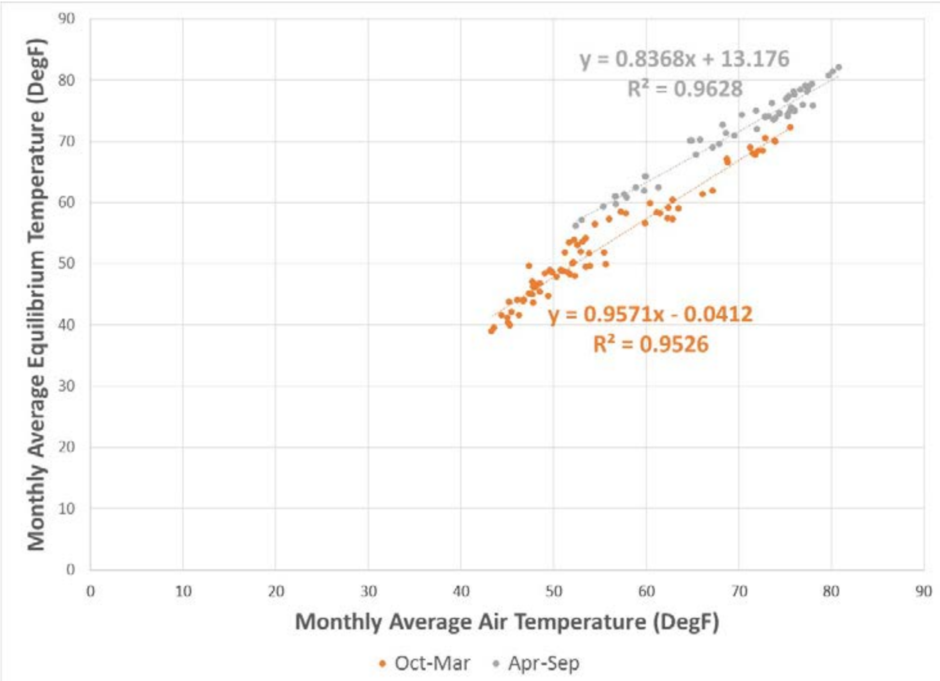

Figure 1: Gerber CIMIS Station Monthly Average Observed Air Temperature vs. Monthly Average Calculated Equilibrium Temperature

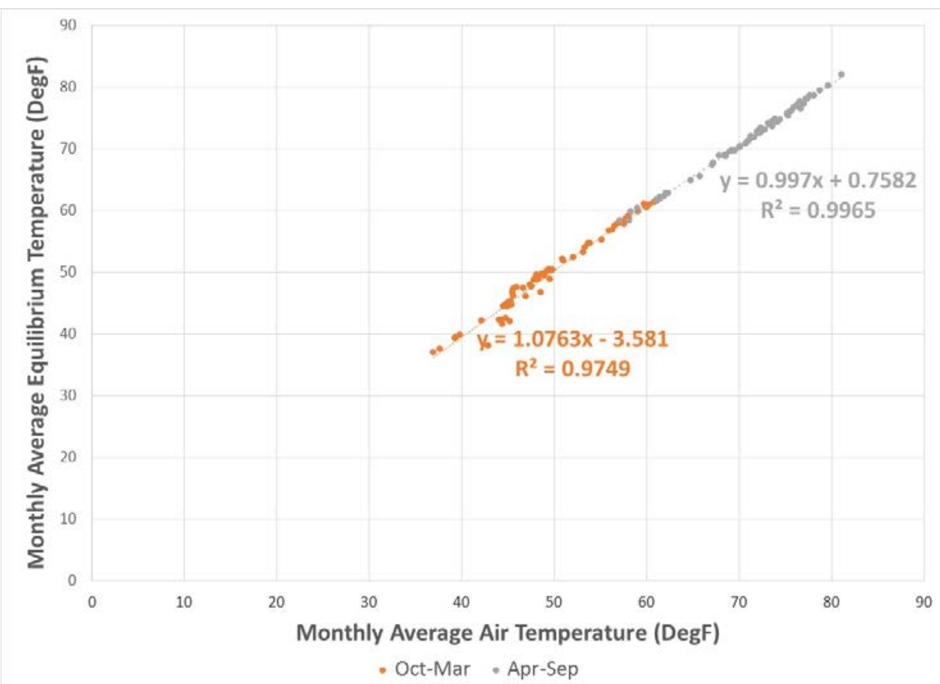

Figure 2: Nicolaus CIMIS Station Monthly Average Observed Air Temperature vs. Monthly Average Calculated Equilibrium Temperature

After performing the regressions to determine the seasonal adjustment factor, the following process was used to calculate the climate scenario adjusted equilibrium temperatures. The WSIP climate scenario data was obtained from the CWC website (Water Commission 2016). The data comes in files that correspond to grid cells with different latitude and longitudes. In order to perform the equilibrium temperature adjustments, the latitude and longitude coordinates of the Gerber and Nicolaus California Irrigation Management Information System (CIMIS) stations the meteorology data is based from were obtained and then matched with the closest WSIP climate scenario grid cell (Table 1). The climate scenario data that corresponded to that grid cell was then retrieved for the two CIMIS stations.

Table 1: CIMIS Station Latitude and Longitude coordinates and the corresponding WSIP grid cell coordinates

Station	**CIMIS**		**WSIP**	
	Latitude	*Longitude*	*Latitude*	*Longitude*
Gerber	40.05	122.16	40.03125	122.15625
Nicolaus	38.87	121.55	38.84375	121.53125

After retrieving the data, the maximum and minimum monthly air temperatures (Tmax & Tmin) in the WSIP climate scenario data were converted to Fahrenheit from Celsius to match the units of the HEC5Q model. For each WSIP climate scenario, the average monthly air temperature (Tavg) was calculated by averaging the maximum and minimum monthly air temperatures (Tmax + Tmin)/2. Then, the monthly average temperature shifts from Current Climate to WSIP 2030 and 2070 were calculated by subtracting the WSIP Current Climate Tavg from the 2030 Tavg and the 2070 Tavg, respectively. Gerber temperature shifts for April to September were multiplied by 0.8 to reflect the equilibrium temperature ratio described earlier. This difference was added to the existing HEC5Q Current Climate Equilibrium Temperature time series (described earlier) to calculate the climate adjusted equilibrium temperature for 2030 and 2070. Figures A1 to A6 in Appendix A show the 2030 and 2070 temperature shifts for each of the Gerber and Nicolaus CIMIS stations.

It should be noted that the WSIP Current Climate and the LTO EIS HEC5Q Current Climate are based on different climate analyses that do not reflect the same set of assumptions. However, for the WSIP climate updates, it was assumed that both represent the same current climate. In addition, the California Department of Water Resources 2015 Delivery Capability Report (DCR 2015) CALSIM II model was used to analyze the benefits of Sites reservoir under current climate conditions. The WaterFix HEC5Q Current Climate inputs are used for DCR 2015. See Figure 3 for a schematic of the climate adjustment process and climate scenarios used. With project and without project refer to without or with Sites Reservoir.

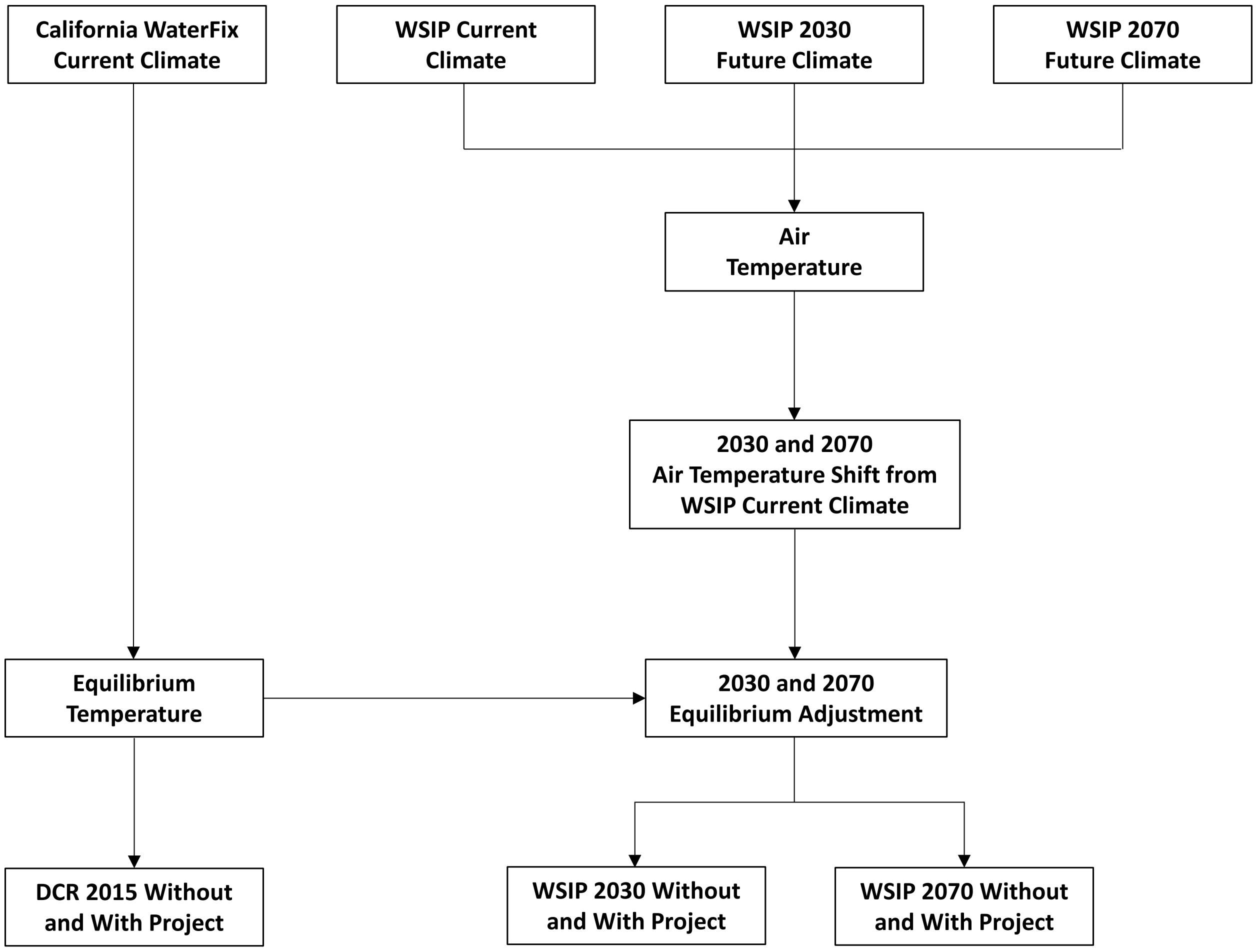

Figure 3: Climate scenarios and climate update process used to update equilibrium temperature for the Sites Reservoir WSIP Application.

Shasta Release Temperature Targeting Adjustments

The HEC5Q model simulates the Shasta Temperature Control Device (Shasta TCD) to manage temperature downstream at the following four temperature compliance locations: Clear Creek at Bonnyview Bridge, Balls Ferry, Jelly's Ferry, and Bend Bridge. The Shasta TCD modeling code requires a temperature release target for Shasta to operate to. These temperature target schedules are developed as a series of annual temperature target schedules in a pre-processing spreadsheet tool for each temperature compliance location. For the Sites WSIP Application, two adjustments were made to the assumptions of the temperature target spreadsheet tool to demonstrate the Sacramento River temperature benefits of the changed operations at Shasta due to the operational flexibility provided by Sites Reservoir. These adjustments are described below.

Storage Tier Adjustments

For the Sites WSIP Application, the maximum of April and May end-of-month storage was used to specify that year's compliance location. This adjustment was made because End-of-May is greater than End-of-April storage in some years. Allowing flexibility between End-of-April and End-of-May storage gives a more complete picture of how much cold water pool is available for the temperature management season than if just End-of-April storage was used as the indicator of available cold water pool.

Second, the storage tiers were adjusted due to the change in inflows and air temperatures in the WSIP 2030 and 2070 climate scenarios. The changes in climate variables requires a greater volume of water to meet temperature compliance at the targeted compliance location (e.g. it will take more storage volume to meet temperature compliance at Balls Ferry throughout the year).

An iterative approach was used to adjust the storage levels for both the WSIP 2030 and 2070 climate scenarios. An initial HEC5Q run was completed that utilizes the Maximum End-of-April or May Shasta Storage levels (see Table 2). After the run was completed, temperature outputs for the four compliance locations were loaded into the spreadsheet along with Shasta storage data from CALSIM II. The average of July and August temperature for each year of the 81 year period of record was calculated for each compliance location. The average between July and August was used because it represents the two months with the highest expected temperatures. The furthest downstream location that had a July-August temperature below 56 degrees was the compliance location that was met for that year. For example, if the July-August temperature is 54.5, 55, 55.8, and 56.2 for Bonnyview, Balls Ferry, Jellys Ferry, and Bend Bridge respectively, then the compliance location that was met was Jellys Ferry, since it is the most downstream location that is below 56 degrees. The compliance location based on the Maximum End-of-April or May Shasta storage was also calculated. The number of years where the compliance location was different between the July-August average temperature and the Maximum End-of-April or May Shasta storage was tabulated. The Maximum End-of-April or May Shasta storage levels were then adjusted until the smallest difference was achieved.

The Shasta temperature target schedules were then recomputed for each year and the HEC5Q model was then rerun. The new temperature results at the compliance locations were loaded into the spreadsheet and the same process of changing the Maximum End-of-April or May Shasta storage levels was performed. The final Maximum End-of-April or May Shasta storage levels were settled upon after the third iteration for the WSIP 2030 and WSIP 2070 climate scenarios, as shown in Table 2 below. The values in the table show the maximum storage necessary for each compliance location.

Table 2: Adjusted End-of-April Shasta Storage Levels

Compliance Location	**Maximum End-of-April or May Shasta Storage**		
	Current Conditions	*2030*	*2070*
Bend Bridge	9999	9999	9999
Jelly's Ferry	4425	4500	4500
Balls Ferry	4000	4300	4400
Below Clear Creek	3600	3600	4000
None	2000	2000	2000

Temperature Target Adjustments

A temperature schedule was developed for each temperature compliance location. These temperature schedules are Shasta release temperatures that are calculated based on the amount of warming that will occur between Shasta and the four compliance locations. The amount of warming that occurs was calculated using an exceedance based approach. With the change in operations to Shasta with Sites Reservoir in place, these exceedance percentages were adjusted in order to demonstrate the potential amount of temperature benefit Sites Reservoir can provide. The June to October exceedance percentages were lowered, which calculates a higher warming that occurs between Shasta and the compliance locations for which Shasta has to adjust to by lowering its release temperature target. Lowering the release temperature targets means Shasta uses more of the cold water pool that is available. The exceedance percentages were adjusted to save cold water in the cold water pool for August and September. See Table 3 for the June to September exceedance percentages used for the without project scenarios and the adjusted exceedance percentages used to characterize warming in the river for the with-project scenarios in the Sites WSIP Application.

Table 3: June to October exceedance percentages used to characterize warming between Shasta and the temperature compliance locations on the Sacramento River

Compliance Location	Exceedance Percentages							
	June		*July*		*August*		*September*	
	W/O Sites	W Sites	W/O Sites	W Sites	W/O Sites	W Sites	W/O Sites	W Sites
Clear Creek	75%	5%	50%	5%	15%	5%	5%	5%
Balls Ferry	75%	10%	50%	10%	15%	5%	5%	5%
Jellys Ferry	75%	15%	50%	15%	15%	5%	5%	5%
Bend Bridge	75%	25%	50%	25%	15%	5%	5%	5%

After setting the exceedance percentages, the HEC5Q model was run three times in order to settle in on the Shasta release temperatures based on these new exceedances. This process was done for the three climate scenarios. See Attachment B for the final Shasta Release temperature schedules for the three climate scenarios.

Results

After making the necessary adjustments to the climate updates described above, the Without-Project CALSIM II models for each of the three climate scenarios provided by the California Water Commission were run through the updated Trinity-Sacramento River HEC5Q models to quantify the river temperatures on the Sacramento River under the Without Project condition. This established the river temperature baselines for the three climate scenarios that river temperature benefits of the With-Project conditions would be quantified from. Attachment D shows river temperature results on the Sacramento River at Jellys Ferry. The results for both the Sacramento River show that river temperatures increase between the Current Conditions climate, the WSIP 2030 climate scenario, and the WSIP 2070 climate scenario. There are two major factors for this change, the shift in equilibrium temperature based on the increased air temperature and the change in operations based on the change in hydrologic conditions between the climate scenarios.

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Attachment A – Equilibrium Temperature Shifts

This attachment shows the results of the equilibrium temperature shifts for the Gerber, and Nicolaus CIMIS stations described in the Equilibrium Temperature Adjustment section.

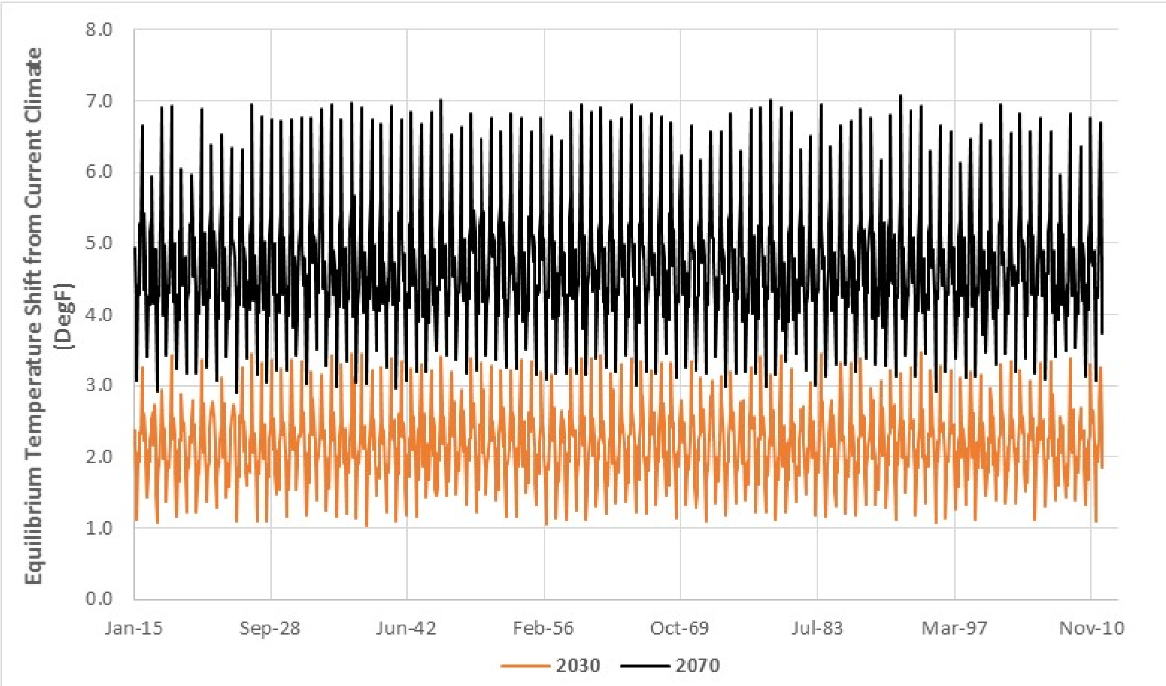


Figure A1: Gerber CIMIS station equilibrium temperature shifts for 2030 and 2070 climate scenarios.

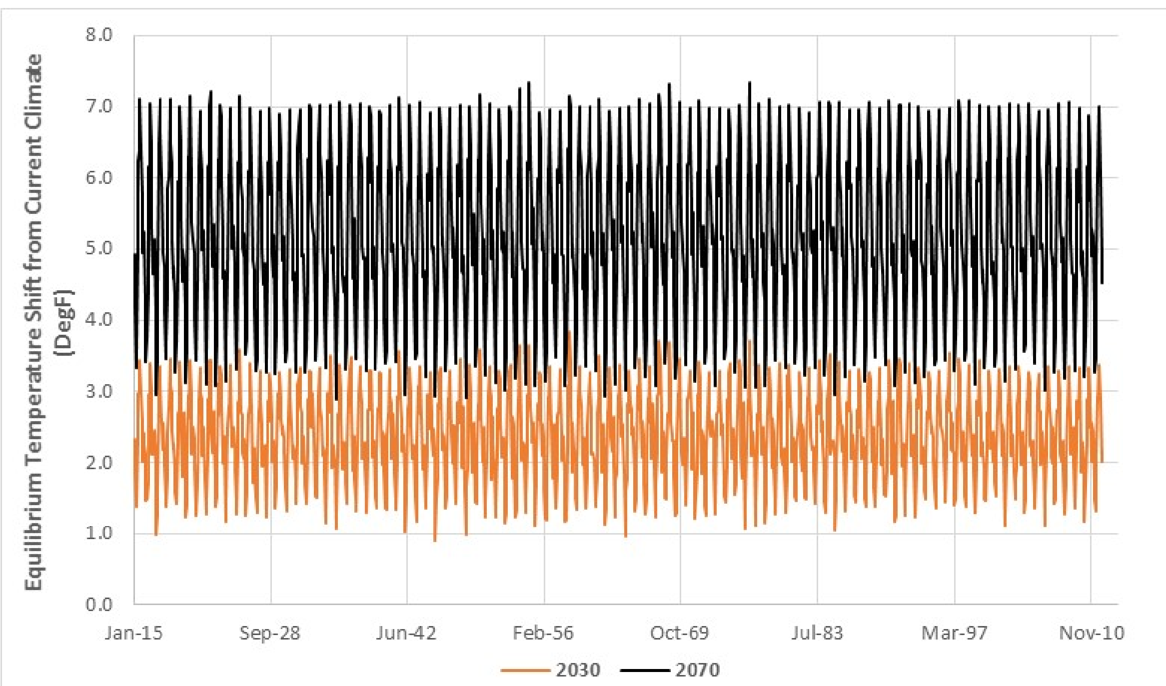


Figure A2: Nicolaus CIMIS station equilibrium temperature shifts for 2030 and 2070 climate scenarios.

Attachment B – Shasta Release Temperature Schedules

This attachment shows the final Shasta release temperature schedules that were developed for the Sacramento River HEC5Q model for Current Conditions, WSIP 2030, and WSIP 2070 climate scenarios.

Table B1: Shasta Release Temperature Schedules for Current Conditions.

Location	Max EO-Apr or May Storage	Temperature (F) Schedules for Shasta Dam Release *This table is for temperature target with Percent Exceedances*											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	0	*60.8*	*60.8*	*60.8*	*53.6*	*53.6*	*52.0*	*51.6*	*51.2*	*49.9*	*55.0*	*56.2*	*56.4*
None	2000	60.8	60.8	60.8	53.6	53.6	52.0	51.6	51.2	49.9	55.0	56.2	56.4
Clear Creek	3600	60.8	60.8	60.8	53.6	53.6	52.0	51.6	51.2	49.9	55.0	56.2	56.4
Balls Ferry	4000	60.8	60.8	60.8	53.6	53.6	50.1	50.5	49.8	48.4	54.5	56.6	57.2
Jellys Ferry	4425	60.8	60.8	60.8	53.6	53.6	47.9	48.8	48.2	46.7	54.1	56.9	58.0
Bend Bridge	9999	60.8	60.8	60.8	53.6	53.6	47.5	47.9	47.0	45.5	53.7	57.2	58.5

Table B2: Shasta Release Temperature Schedules for WSIP 2030.

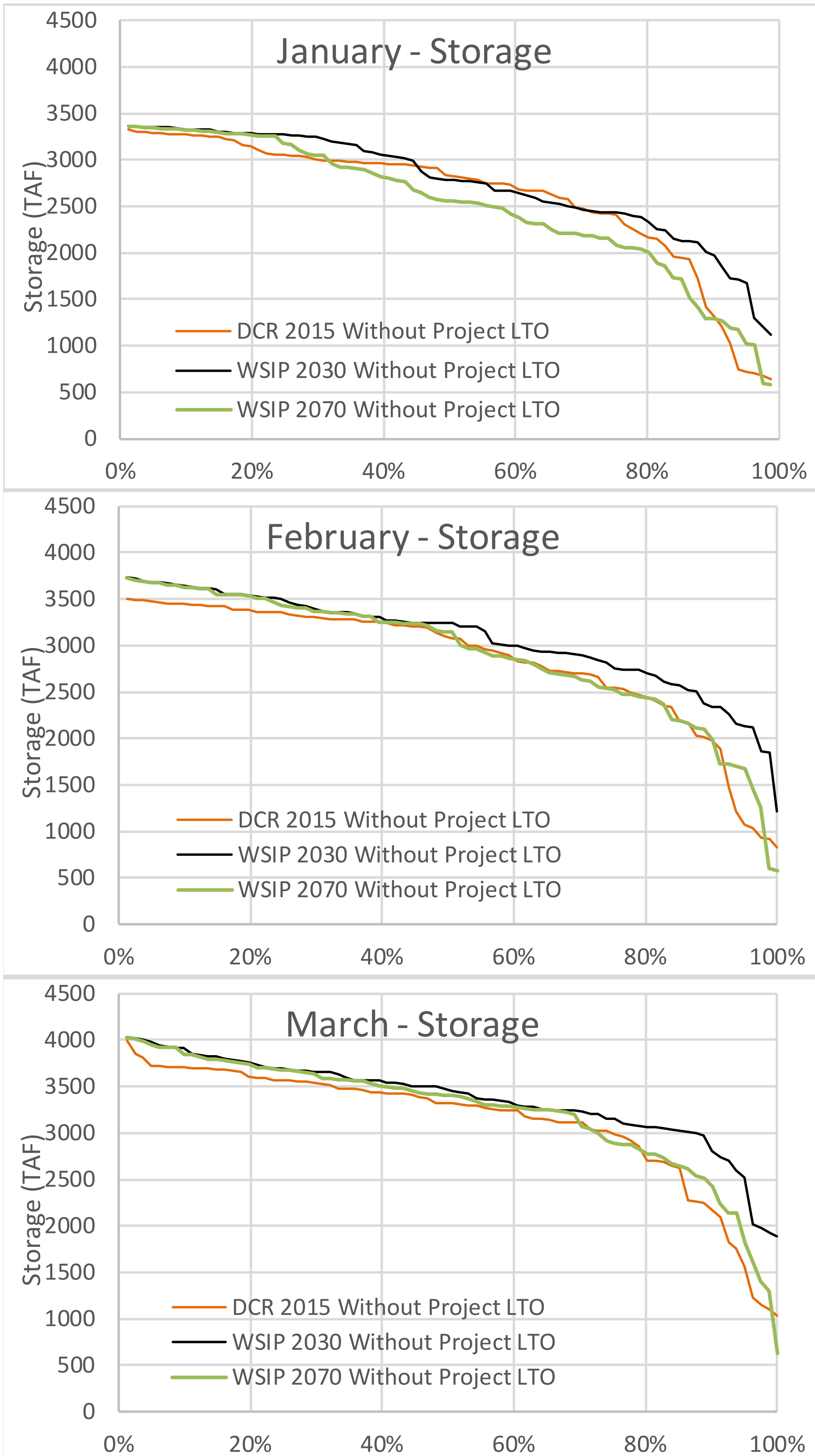
Location	Max EO-Apr or May Storage	Temperature (F) Schedules for Shasta Dam Release *This table is for temperature target with Percent Exceedances*											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	0	*60.8*	*60.8*	*60.8*	*53.6*	*53.6*	*52.5*	*52.6*	*51.6*	*50.9*	*54.8*	*56.2*	*56.2*
None	2000	60.8	60.8	60.8	53.6	53.6	52.5	52.6	51.6	50.9	54.8	56.2	56.2
Clear Creek	3600	60.8	60.8	60.8	53.6	53.6	52.5	52.6	51.6	50.9	54.8	56.2	56.2
Balls Ferry	4300	60.8	60.8	60.8	53.6	53.6	50.2	50.9	49.6	48.9	54.1	56.7	57.5
Jellys Ferry	4500	60.8	60.8	60.8	53.6	53.6	48.4	49.3	48.0	47.2	53.5	57.1	58.4
Bend Bridge	9999	60.8	60.8	60.8	53.6	53.6	47.7	48.8	46.7	46.0	53.2	57.4	58.9

Table B3: Shasta Release Temperature Schedules for WSIP 2070.

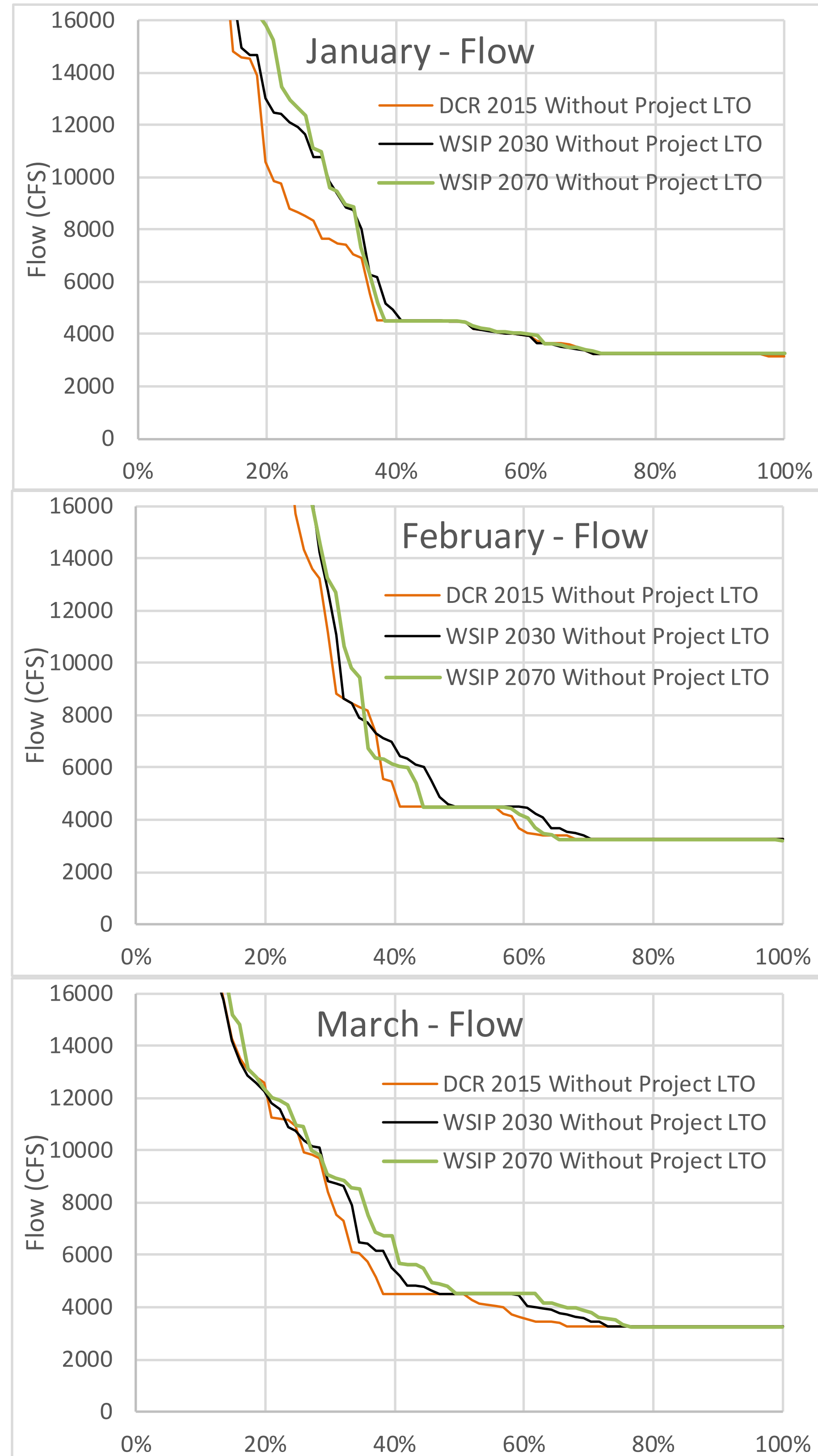
Location	Max EO-Apr or May Storage	Temperature (F) Schedules for Shasta Dam Release *This table is for temperature target with Percent Exceedances*											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	0	60.8	60.8	60.8	53.6	53.6	*51.4*	*51.4*	*50.5*	*49.4*	*54.1*	*56.1*	*56.5*
None	2000	60.8	60.8	60.8	53.6	53.6	51.4	51.4	50.5	49.4	54.1	56.1	56.5
Clear Creek	4000	60.8	60.8	60.8	53.6	53.6	51.4	51.4	50.5	49.4	54.1	56.1	56.5
Balls Ferry	4400	60.8	60.8	60.8	53.6	53.6	50.0	50.4	48.8	47.8	53.4	56.5	57.6
Jellys Ferry	4500	60.8	60.8	60.8	53.6	53.6	48.4	49.0	46.8	45.9	52.8	56.8	58.6
Bend Bridge	9999	60.8	60.8	60.8	53.6	53.6	47.7	48.3	45.5	44.4	52.4	57.2	59.2

Attachment C – Sacramento River at Jellys Ferry Without Project Climate Scenario Temperature Comparisons

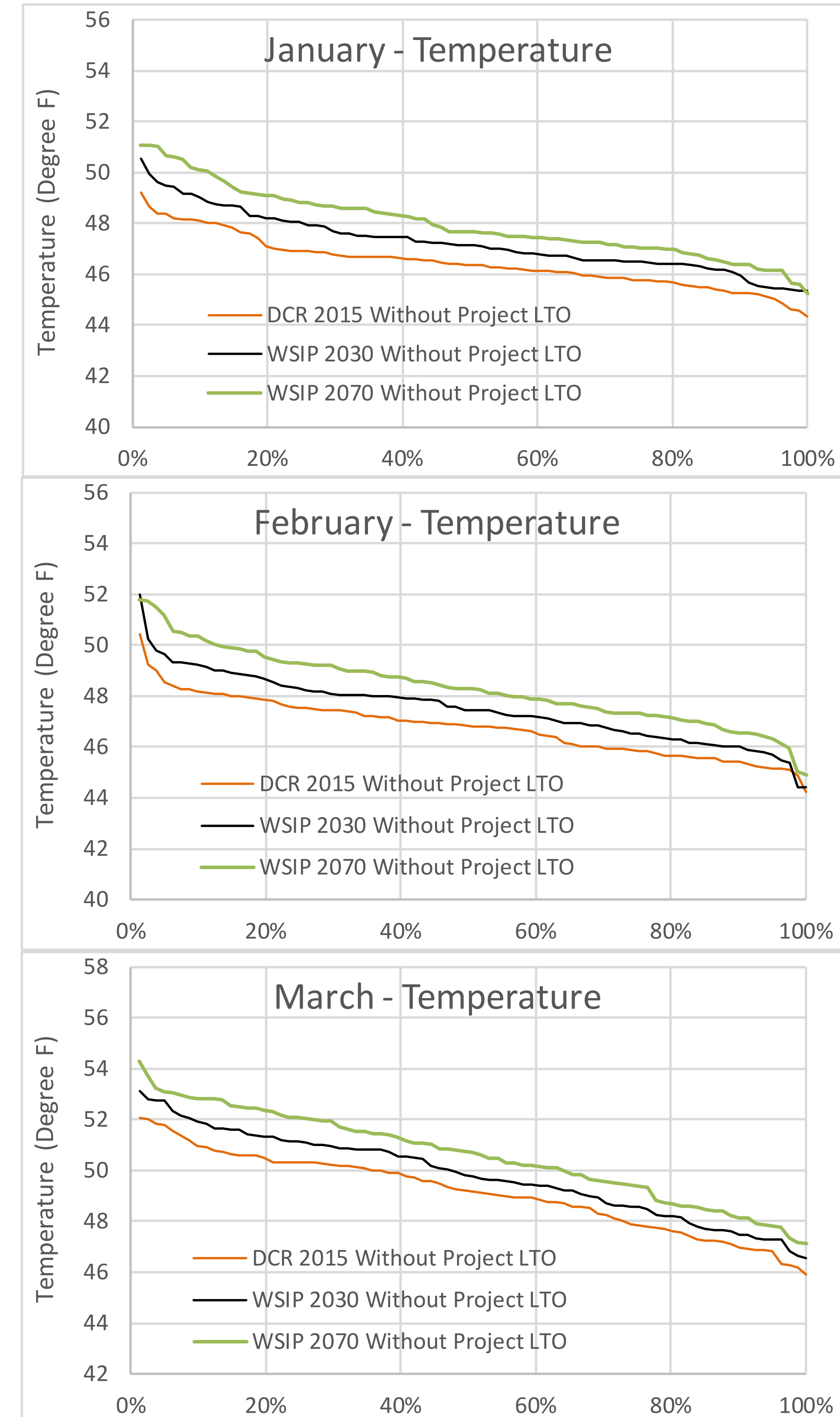
Shasta Lake Storage (Beginning of Month)



Keswick Dam Flow



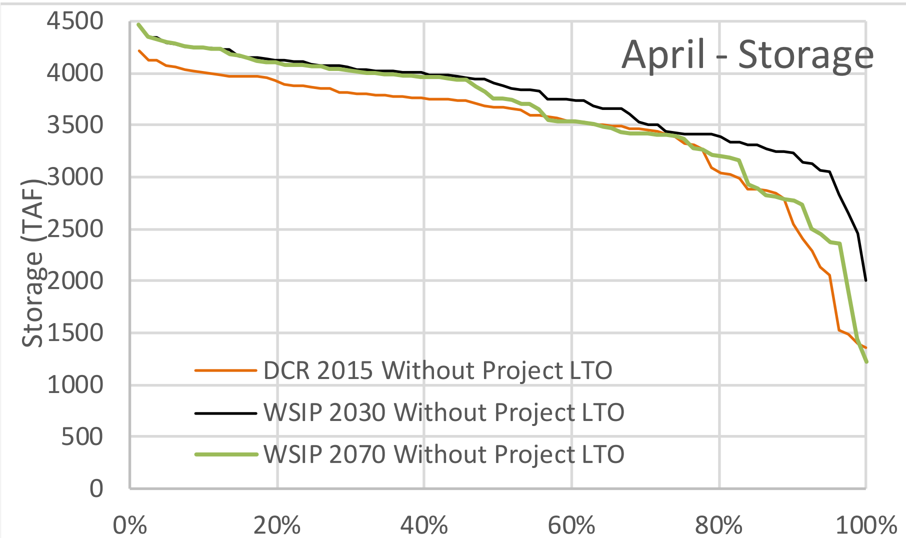
Jelly's Ferry Temperature

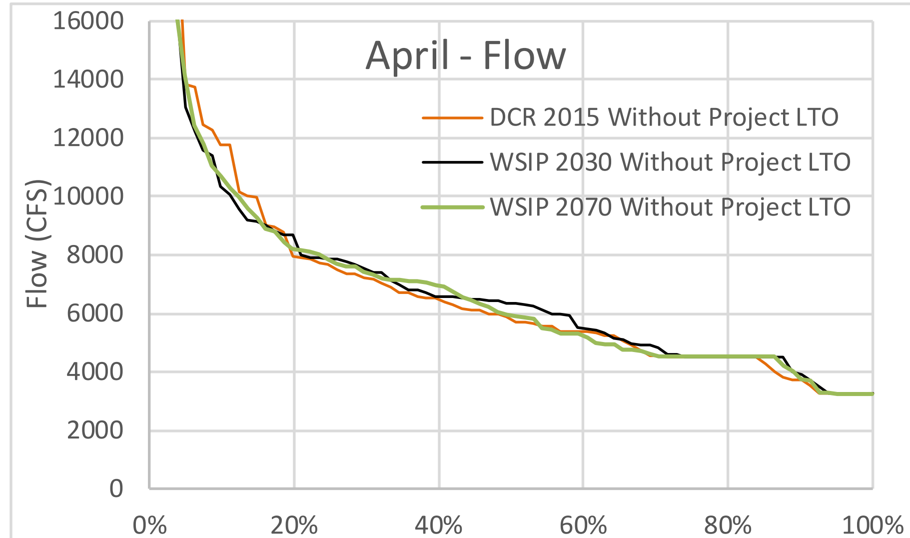


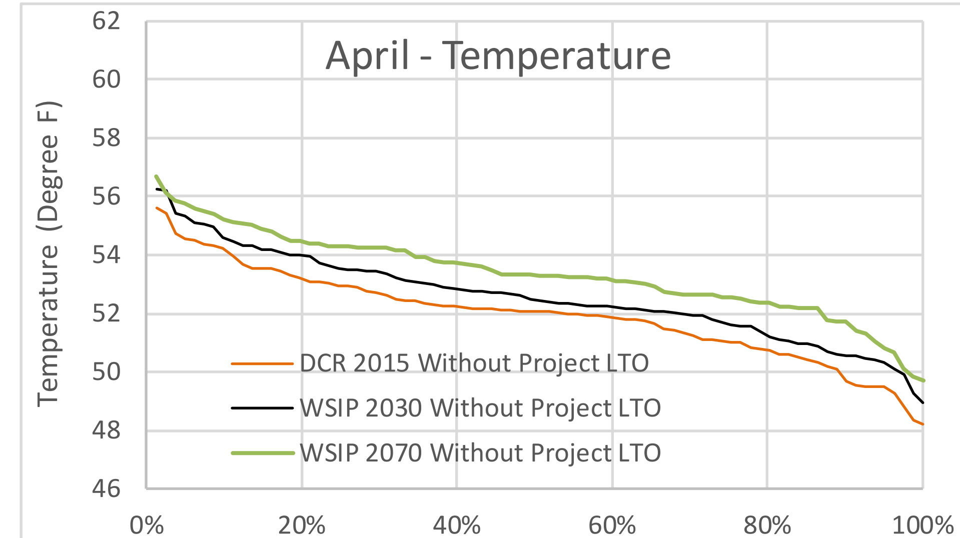
Shasta Lake Storage (Beginning of Month)

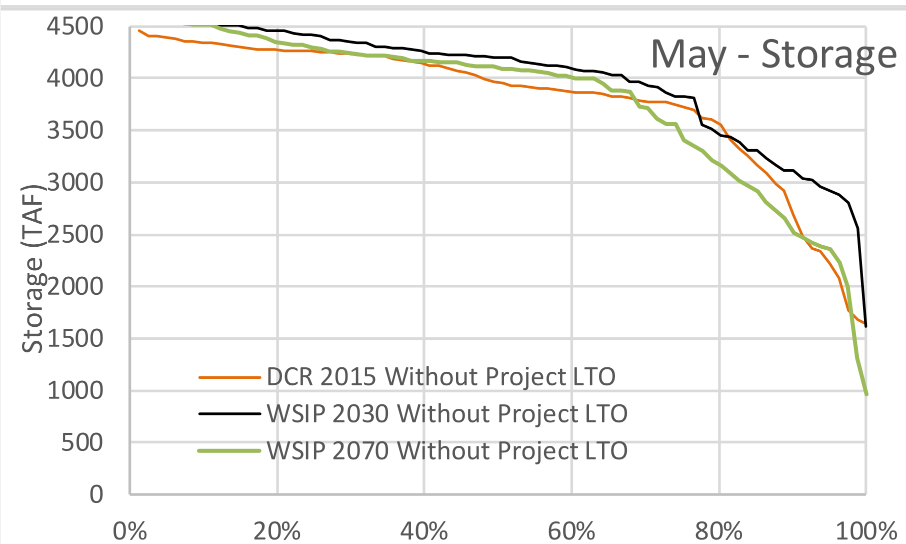
Keswick Dam Flow

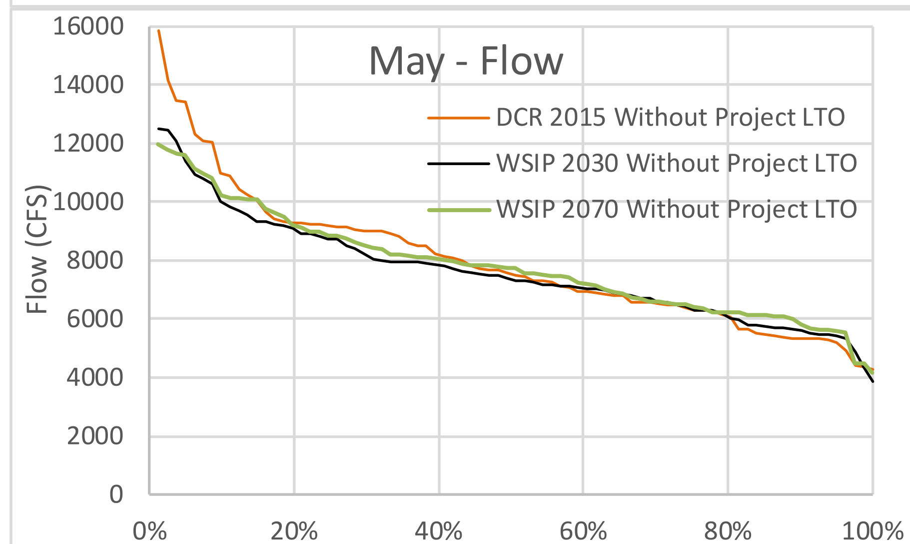
Jelly's Ferry Temperature

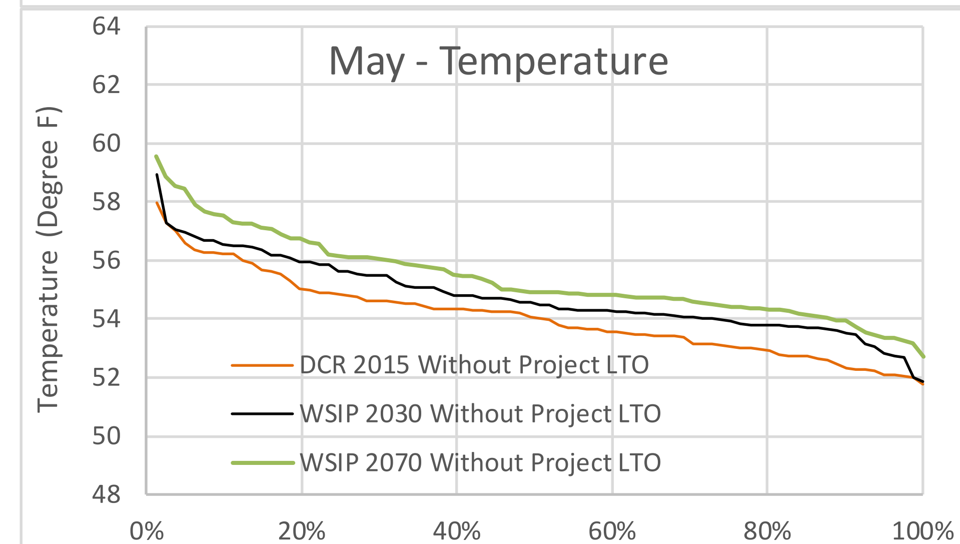


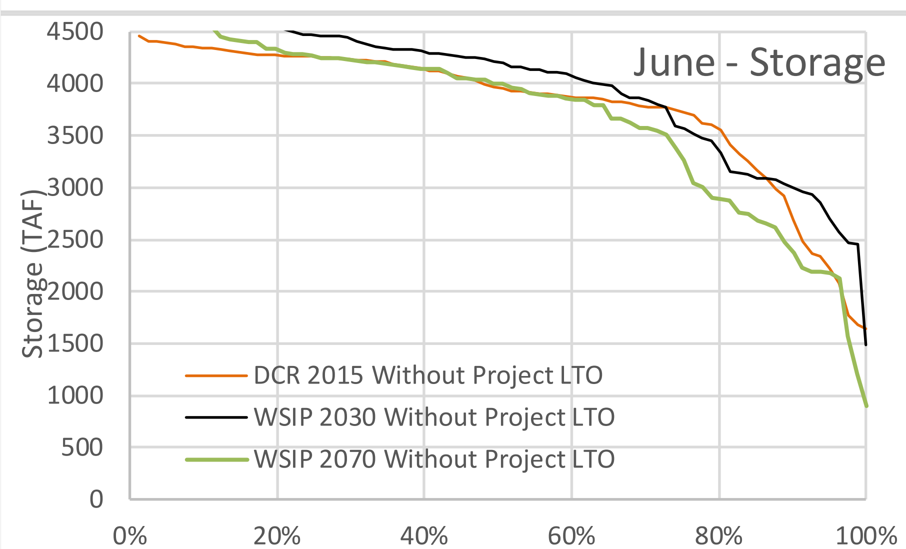


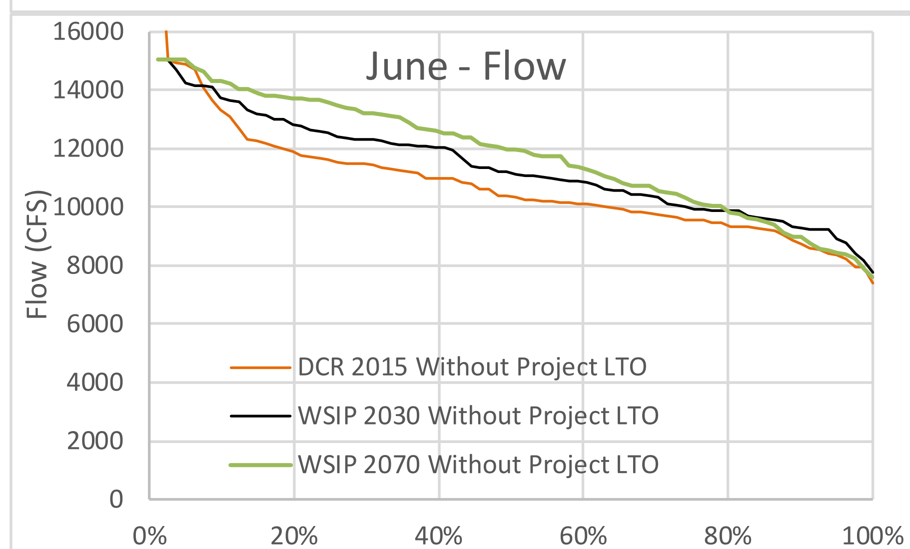


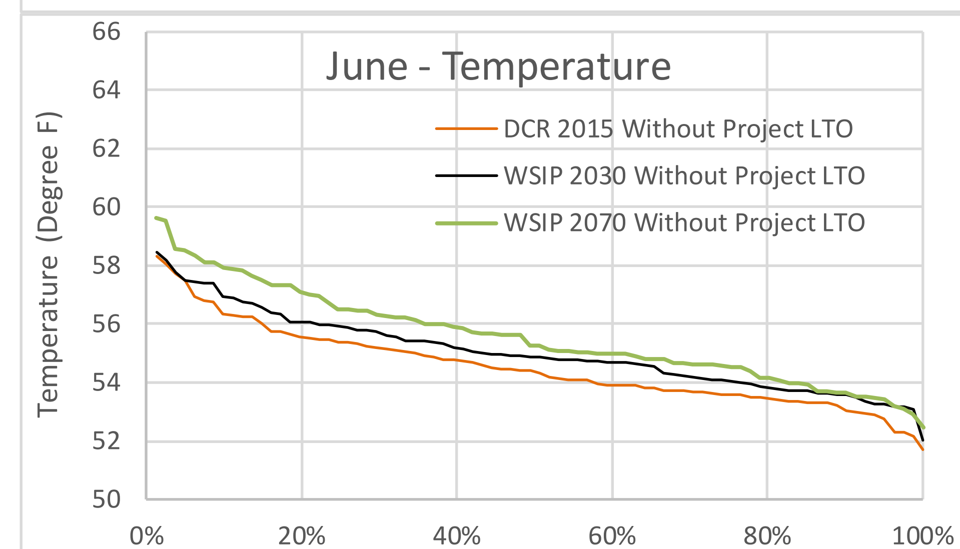




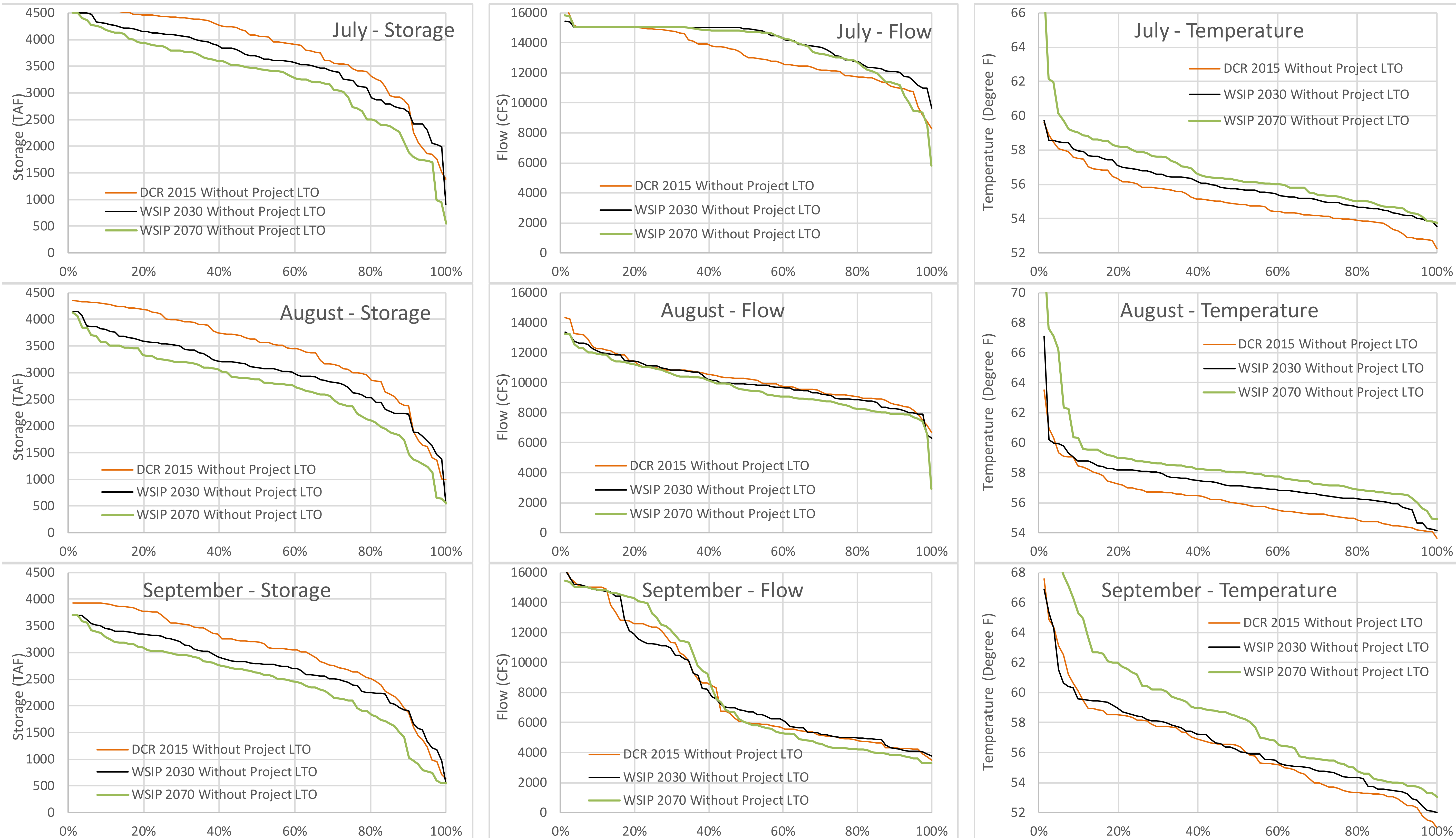








Shasta Lake Storage (Beginning of Month) | **Keswick Dam Flow** | **Jelly's Ferry Temperature**



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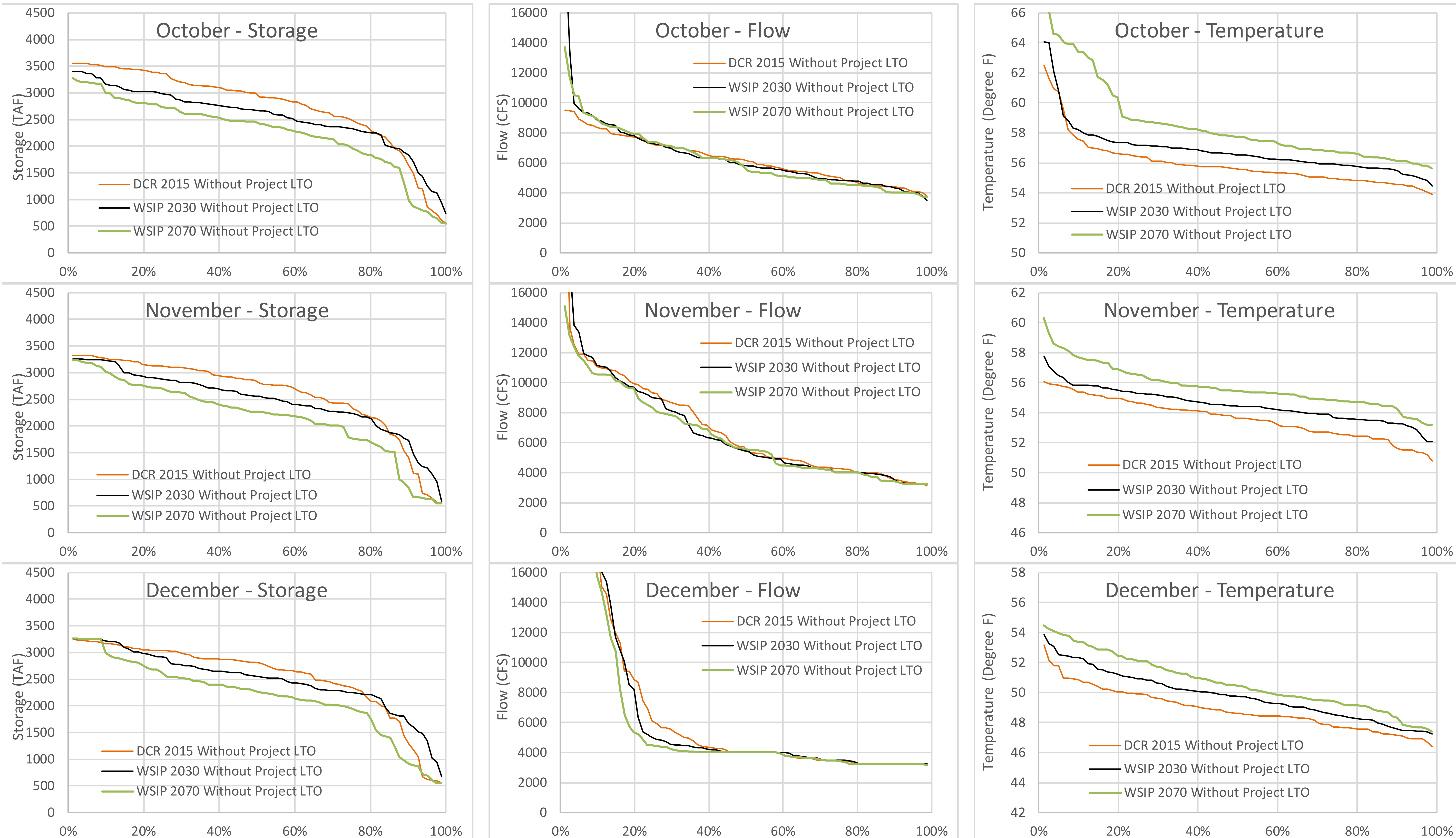
NOTES:
PREPARER: R LEAF
CHECKER: R TULL
QA/QC:
PHASE: 1 VERSION: C
DATE: 2017 AUGUST
REF/FILE #: WSIP APPLICATION

Shasta Lake Storage (Beginning of Month) **Keswick Dam Flow** **Jelly's Ferry Temperature**



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CAVEAT: | QA/QC: | REF/FILE #: WSIP APPLICATION
NOTES: | PAGE: 54 OF 84

SALMOD Salmon Modeling of the Sacramento River

SALMOD Salmon Modeling of the Sacramento River for the Sites Reservoir Project

This attachment provides a summary of the SALMOD model used to simulate the annual production potential for each run of Chinook salmon in the Sacramento River for the Sites Reservoir Water Storage Investment Program Application. It includes a description of the SALMOD model and assumptions.

SALMOD Overview

SALMOD simulates the population dynamics of the freshwater life stages of anadromous Chinook salmon. Model processes include spawning (egg deposition), egg and alevin development and growth, mortality, and movement (due to habitat limitation, freshets, and seasonal stimuli). Pre-smolts do not graduate to the smolt stage within the model. Instead, they exit the study area and the population is reinitialized with survey estimates of spawning adults each biological year. SALMOD is a spatially explicit model in which habitat quality and carrying capacity are characterized by the hydraulic and thermal properties of individual mesohabitats, which serve as spatial computational units in the model. SALMOD is organized around events occurring during a biological year beginning with spawning and typically concluding with fish that are physiologically "ready" (e.g., pre-smolts), swimming downstream toward the ocean. It operates on a weekly timestep for one or more biological years. Input variables (e.g., streamflow, water temperature, number and distribution of adult spawners) are represented by their weekly average values. SALMOD tracks a population of spatially distinct cohorts that originate as eggs and grow from one life stage to another as a function of local water temperature. The biological characteristics of fish within a cohort are the same. Fish cohorts are tracked by life stage and size class within the spatial computational units. SALMOD uses the weekly averages of the daily flow outputs from the CALSIM II model and the daily temperature outputs from the Trinity-Sacramento HEC5Q model.

The 2008 Central Valley Project and State Water Project Operations Criteria and Plan Biological Assessment (OCAP BA) Technical Appendix P (Reclamation, 2008) describes the SALMOD model in detail including the development history, model formulation, input assumptions, use of outputs, and limitations of the model.

SALMOD Assumptions for Returning Chinook Salmon Spawners

This section presents the assumptions used for returning Chinook salmon spawners used in SALMOD modeling for evaluation of the alternatives. The Chinook salmon runs considered in SALMOD include winter, spring, fall, and late fall.

Based on spatial distribution of surveyed redds on various segments of the Sacramento River, a distribution of spawners is assumed for the reach segments in the SALMOD model. Assumptions of the spawning distributions were based on average 2003–2014 redd survey data, provided by David Swank at NMFS in April 2015.

The total number of returning adults assumed for each of the four runs is shown in Table 1. The numbers of returning adults assumed for each run summarized in Table 1 are approximate maximums of values assumed in recent applications of the SALMOD model. The ratios of spawning females to total number of returning adults are also included in Table 1. References are unavailable for these ratios. The fractional distribution of returning adults, for each reach segment, for each salmon run, are summarized in Table 2. Each segment is identified by locations along the Sacramento River. Using the fractional distribution of spawners shown in Table 2, the number of returning adults was apportioned to the reach segments in the model.

SALMOD modeled production potential is assumed to vary across alternatives and within each alternative across each biological year according to variations in water temperatures, flows, and the resultant habitat available for Chinook salmon. The assumed number and distribution of returning female spawners is not varied by biological year. The high value was assumed for the number of returning female spawners so as to describe the potential available habitat under a wide range of flow and temperature conditions (value based on maximums of values assumed in recent applications of the SALMOD model). Therefore, the SALMOD results are not intended to estimate a specific number of Chinook salmon produced, but rather to provide an index of available habitat assuming that the number of returning female spawners is not limited.

Table 1: Number of Returning Chinook Salmon Adults, and Ratio of Spawning Females to All Returning Adults, on the Sacramento River

Chinook Salmon Run	Returning Adults (High Curve)	Ratio of Spawning Adults to Non-spawning Adults
Winter	8,500	0.48
Spring	999	0.48
Fall	65,000	0.48
Late Fall	14,000	0.48

Table 2: Distribution of Returning Chinook Salmon Adults in Eight Spawning Segments of the Sacramento River

Cumulative Distance from Keswick Dam (meters)	Location of Sacramento River Segment	Fraction of Returning Chinook Salmon Adults (percentage)			
		Winter-Run	Spring-Run	Fall-Run	Late Fall-Run
5791	Keswick Dam to Anderson-Cottonwood Irrigation District (ACID) Dam	45.10	12.83	19.50	71.30
9025	ACID Dam to Highway 44 Bridge	42.10	33.97	6.60	5.20
28810	Highway 44 Bridge to Airport Road Bridge	12.20	29.76	14.70	3.90
41411	Airport Road Bridge to Balls Ferry Bridge	0.30	11.12	19.40	8.90
49207	Balls Ferry Bridge to Battle Creek	0.10	7.41	12.50	5.90
56538	Battle Creek to Jellys Ferry	0.10	1.50	15.20	3.10
71413	Jellys Ferry Bridge to Bend Bridge	0.10	2.61	8.00	1.20
84828	Bend Bridge to just upstream of the Red Bluff Diversion Dam	0.00	0.80	4.20	0.60

References

U.S. Bureau of Reclamation (Reclamation). 2008. 2008 Central Valley Project and State Water Project Operations Criteria and Plan Biological Assessment. Technical Appendix P SALMOD Model. May 2008. U.S. Bureau of Reclamation, Mid-Pacific Region, Sacramento, California. Accessible at http://www.usbr.gov/mp/cvo/OCAP/sep08_docs/Appendix_P.pdf

Upper Sacramento River Daily River Flow and Operations Modeling

Upper Sacramento River Daily River Flow and Operations Modeling

This attachment provides the summary of modeling performed to simulate daily flow and operations in the reservoirs, rivers and other conveyance features that are part of the Central Valley Project (CVP) and the Sites Reservoir Project (Project). It includes a description of the Upper Sacramento River Daily Operations Model (USRDOM) and results used in the detailed evaluation of alternatives.

USRDOM Overview

USRDOM simulates daily flow and storage conditions in the upper Sacramento River including Trinity basin, Sacramento River from Shasta Lake to Knights Landing and Colusa Basin including the Project conveyance and storage features. USRDOM utilizes results from CALSIM II to evaluate the impacts of changing diversion, in-basin use and Delta operations under projected conditions within current or future regulatory and operational regimes. It couples the downstream monthly operational decisions in CALSIM II to a simulation of the associated sub-monthly operational response at Lake Shasta depending on the inflows. It is particularly useful in verifying the CALSIM II simulated river conditions and the availability of excess flows to fill the Sites Reservoir under the capacity and operational constraints of the three intakes at the Red Bluff, Hamilton City and Delevan locations.

Development of the USRDOM, calibration and verification, its use in planning simulations and its application to the Sites Reservoir Project is documented in detail in the final USRDOM Development, Calibration, and Application report prepared by CH2M HILL for Reclamation (CH2M HILL, 2011).

Objective

USRDOM is used in several ways as part of modeling of the operations of the Sites Reservoir Project. It was used to test and finalize the CALSIM II operations for the Project alternatives. The main objective of using USRDOM was to simulate daily flows to inform CALSIM II (monthly) about the potential restrictions on the diversions due to pulse flow conditions. It was also used to evaluate storage conditions in Lake Shasta and Sites Reservoir, flow conditions on a daily-weekly time scale along the Sacramento River from Keswick Dam to Knights Landing and in the Colusa Basin conveyance. The results from USRDOM are used for input into temperature, biological and flow regime models to evaluate the Project.

Project Intake Operations Assumptions

This section briefly describes the key operational assumptions used in the USRDOM model for evaluating the Project.

The operational assumptions governing the diversions at the three Project intakes, namely existing Tehama Colusa Canal (TCC) Intake, Glenn Colusa Canal (GCC) Intake and the Delevan Pipeline Intake include:

- Restrictions based on the available channel conveyance capacities at various locations along the TCC and GCC. Further, restrictions based on the dedicated annual maintenance periods for TCC, GCC, and Delevan pipeline.
- Restrictions based on meeting the specified bypass flow requirements downstream of each of the three intakes. In addition, diversions are restricted based on the seasonal bypass flow requirements specified for Sacramento River near Hood.

- Restrictions based on the occurrence of pulse flows in the Sacramento River, which provide key biological cues for the outmigrating juvenile winter-, spring-, fall, and late fall-run Chinook salmon, as well as a portion of the steelhead juvenile fish. Therefore, diversions are restricted for up to one pulse event recognized in each month of the October through May period. Bend Bridge flow was used to identify pulse signals as part of the modeling.

Overview of the Planning Analysis

CALSIM II simulates CVP and State Water Project (SWP) operations on a monthly timestep from WY 1922 through WY 2003. Therefore, for the USRDOM projected conditions simulation, the inputs are taken from CALSIM II for a consistent analysis. Because USRDOM requires inputs on a daily timestep, the monthly inputs and outputs of the CALSIM II model are downscaled to a daily timestep using the CAL2DOM utility. CAL2DOM utility translates monthly CALSIM II operations data to a daily time step. It uses the inputs and outputs from CALSIM II, USRDOM hydrology inputs, and other datasets to compute inflows, diversions, and evaporation rates for using as inputs in the USRDOM.

Analysis of the Project

CALSIM II was the core model used to simulate Project operations. However, the assumptions related to the intake operations require daily flow data in determining the diversions allowed at the intakes, in turn affecting the system-wide operations. Since CALSIM II is a monthly timestep model, USRDOM results were used to enforce the intake operations on a sub-monthly scale. Due to the complexity in the intake operational rules, a spreadsheet tool was developed to implement the operational constraints using the daily results from the USRDOM. Further, the models were iterated to ensure all the intake operations assumptions were simulated accurately. Figure 1 shows the schematic of the modeling process used to simulate Project operations.

In the first iteration, CALSIM II and USRDOM models are simulated for the Project to determine the days requiring the pulse protection. A draft CALSIM II simulation was run with all the physical, regulatory and operational assumptions for the Project alternative. The results from this “draft” CALSIM II simulation were used to run the USRDOM model. The USRDOM setup included Project assumptions consistent with the draft CALSIM II. Since this USRDOM run is used to estimate daily flows in the river to determine the days requiring pulse protection, the diversions at the TCC, GCC, and Delevan intakes are restricted to meet the agricultural demands and other local uses in Colusa Basin region. The CAL2DOM logic was altered to estimate the diversions at the three intake locations without including the diversions for filling Sites Reservoir in this USRDOM run (called as, draft USRDOM No Fills Run). The results from the draft USRDOM No Fills run are used in a spreadsheet tool to determine the number of days under pulse protection in each month, over the 82-year period.

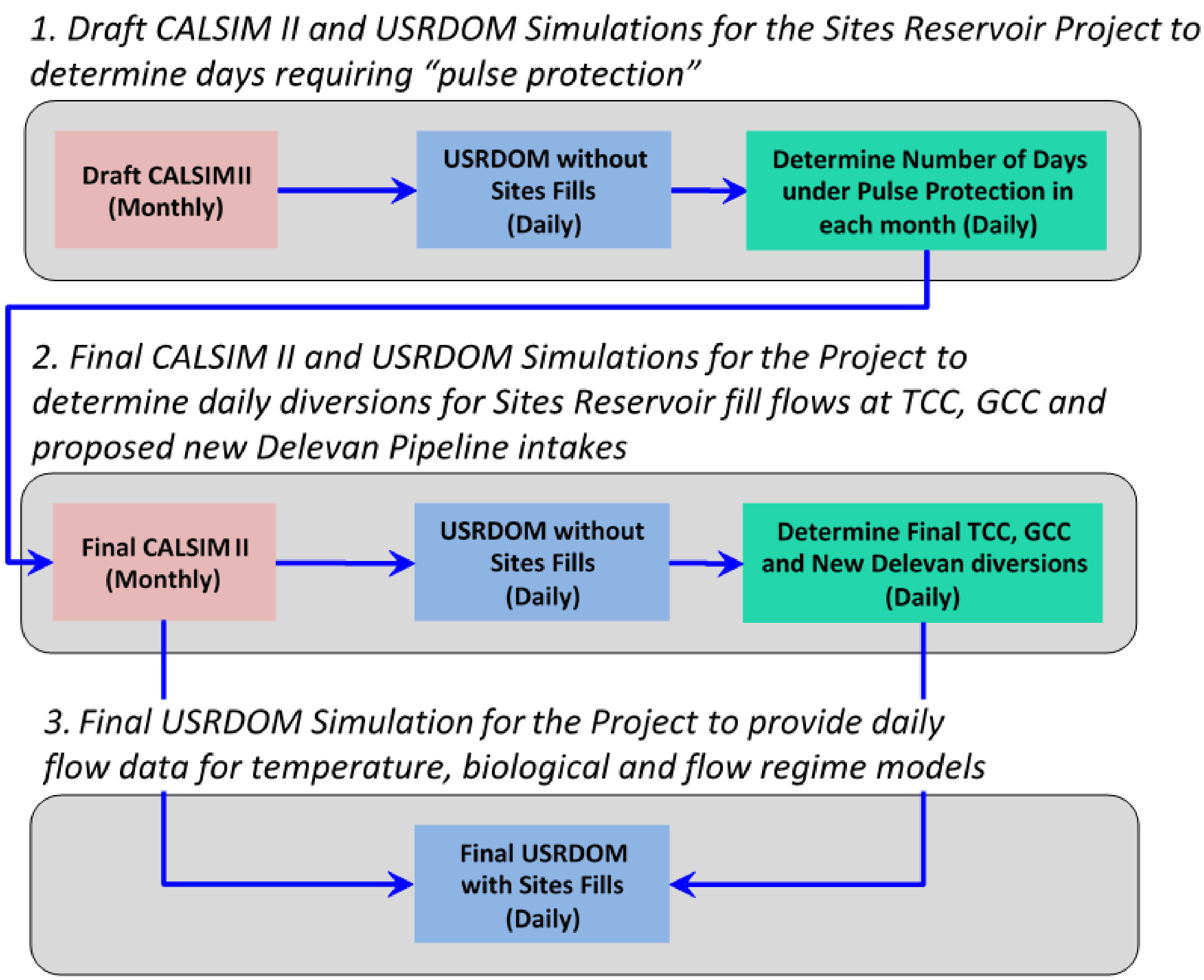


Figure 1 - Operations Modeling Process used for the Project Alternatives Evaluation

In the second iteration, the draft CALSIM II from the first iteration is re-run with the pulse protection data, to simulate the final monthly operations for the Project. The goal of this iteration is to determine the daily diversion amounts at the TCC, GCC, and Delevan pipeline intakes. Since the complexity involved in simulating capacity and maintenance constraints, bypass flow requirements and pulse protection restrictions simultaneously, the existing CAL2DOM logic to determine the daily diversions at the three intakes is insufficient. Therefore, the results from the final CALSIM II simulation are used to run another USRDOM simulation without including the diversions needed to fill the Sites Reservoir at the three intake locations (called as, final USRDOM No Fills Run). The purpose of this final USRDOM No Fills run is to determine the daily flows in the Sacramento River at key control points. This data is used in a spreadsheet tool to determine the daily diversions required to fill Sites Reservoir at the three intakes while complying with all the operational rules.

The daily diversions for the Sites fills at the three intakes are determined in three steps in the spreadsheet tool. In the first step the available diversion capacity is determined based on the capacity and maintenance constraints described above. In addition, based on the daily USRDOM flow the available flow to meet the monthly average diversion for fill (from CALSIM II) is determined at each intake, while meeting the bypass flow requirements. If there are no pulse flow restrictions for a given day, then the diversion at each intake is estimated as the minimum of available capacity and the available flow for diversion.

If the total diversion volumes at each intake from the first step for each month are less than the amount determined in CALSIM II, additional diversions needed to make up the difference are estimated in the second step. In this step, the additional diversions are made up at any of the three intakes depending on the available diversion capacity and the available flow for the diversion. First TCC intake is checked, then the GCC intake and finally the Delevan pipeline intake for any available diversion capacity for each month.

Based on the diversions from the second step, the months with volumes continue to be short of the CALSIM II values are flagged in the third and final step. These shortages are carried forward to the next months in which the diversion capacity and the flow for the diversion are available. This carrying forward of the shortages is only allowed in November through May months, which generally is the Sites Reservoir filling period. The availability of the flow for the diversion is estimated as the Wilkins Slough flow in excess of the minimum flow requirement at Knights Landing (estimated in CAL2DOM).

In this process, a few reasonable simplifying assumptions were made for modeling purposes, mainly because CALSIM II determines the diversions at the three intakes on a monthly timestep without knowing the daily constraints due to the intake operations assumptions and the daily variability in the unregulated flows. It is assumed that based on the available real-time monitoring, there is enough flexibility in TCC, GCC, and Delevan pipeline operations and in the interoperability among the three conveyance systems such that the diversions to fill Sites Reservoir can be made up through the following:

- Diversions at any of the three intake locations while meeting all the intake operations assumptions at each intake
- Diversions in any of the months during the fill season of November through May if usable diversion capacity and divertible flow is available

In the third iteration a final USRDOM run is simulated using the final CALSIM II results and the daily diversions for fills from the final step of the spreadsheet tool. CAL2DOM is modified to combine the diversions for the fills and the diversions for meeting local Colusa Basin demands to determine the total daily diversions at each of the three intakes.

Limitations

In using the USRDOM results for the Sites Reservoir Project evaluation following limitations should be noted:

The USRDOM calibration for Clear Creek flows below Whiskeytown Dam is significantly weaker than for other flows in the Trinity and Sacramento River systems. It is recommended that the CALSIM II model alone be used as the basis for impact assessment on Clear Creek flows.

In the downscaling of CALSIM II boundary condition flows for use in the USRDOM simulations, diversions at Red Bluff, Hamilton City and the Delevan Pipeline (Project alternatives) are smoothed from monthly to daily timestep. In this smoothing operation, in order to conserve volume and have a gradual change in diversion flows (as opposed to sharp changes at monthly or other time scale boundaries), there are some days in which diversions are represented in the model at flow rates that may exceed the sustainable rate of the physical capacity of these facilities. It is recommended that any assessment of flows or other parameters linked to the peak flow rate of these diversions use monthly average values rather than daily or other sub-monthly average values.

The CALSIM II model is used to establish system operational conditions and USRDOM is used to interpret these on a daily time-step; all residuals and inconsistencies between the CALSIM II and USRDOM models accumulate in storage facilities modeled, including Sites Reservoir; the Sites Reservoir storage in the USRDOM sometimes exceeds physical capacity slightly due to this inconsistency between the models.

References

CH2M HILL. 2011. Final USRDOM Development, Calibration, and Application. Prepared for Bureau of Reclamation, Mid-Pacific Region.

Power Modeling of the Sites Reservoir Project

Sites Reservoir Power Analysis – Planning Level Assumptions and Modeling Approach

This section describes the planning level modeling approach to estimate power impacts of proposed Sites Reservoir facilities.

Sites Reservoir Power Model Overview

The Sites Reservoir power analysis tool is a spreadsheet post-processor that evaluates power impacts of flow scenarios from CALSIM II operations studies. The tool estimates average annual energy generation and use at proposed Sites Reservoir generation and pumping facilities, including existing facilities that would be operated differently if Sites Reservoir is built. For generation facilities, the tool estimates average annual energy generation and average annual peaking power capacity. For pumping facilities, the tool estimates average annual power requirements. The tool also checks to determine whether off-peak energy use targets are being met. Transmission losses are estimated for both pumping and generation facilities.

In addition, the tool estimates the economic benefits and costs of power generation and use at the proposed Sites Reservoir generation and pumping facilities.

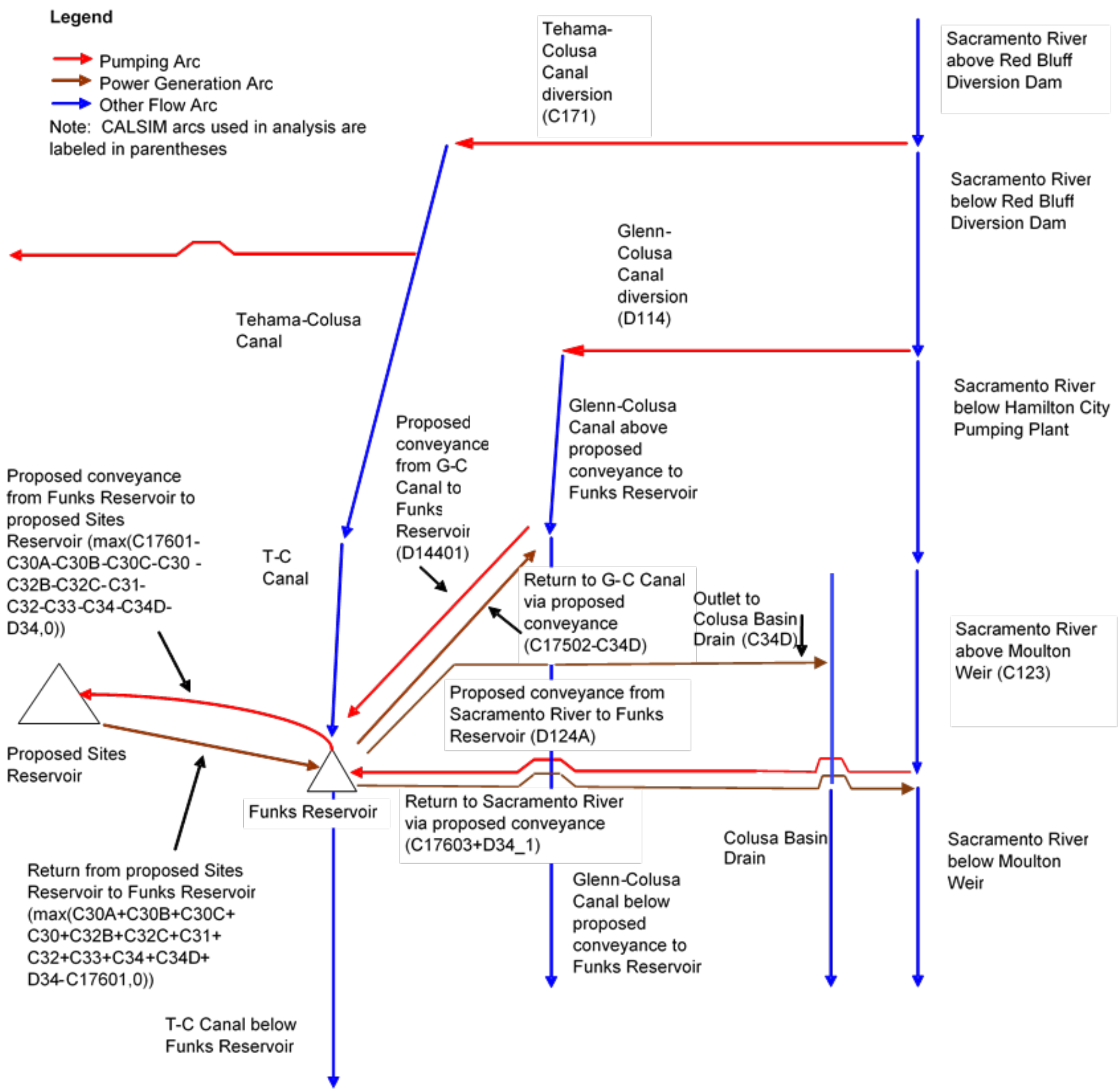
Flow and storage levels used in the power analysis tool are taken from CALSIM II studies. The analysis period is for 82 years, based on the projected level hydrologic and land use assumptions associated with the CALSIM II analysis used.

Figure 1 shows pumping and power generation facilities that are included in the power analysis tool (CALSIM II output parameter names are included in the figure).

A total of five pumping facilities and three generation facilities are included in the analysis.

- Pumping facilities:
    - Sacramento River diversion to Tehama-Colusa Canal (existing pumping facility)
    - Sacramento River diversion to Glenn-Colusa Canal (existing pumping facility)
    - Conveyance from Glenn-Colusa Canal Terminal Regulating Reservoir to Funks Reservoir (proposed conveyance with pumping facilities)
    - Conveyance from Sacramento River to Funks Reservoir (proposed conveyance with pumping facilities)
    - Conveyance from Funks Reservoir to Sites Reservoir (proposed conveyance with pumping facilities)

FIGURE 1
Facilities Included in the Sites Reservoir Power Analysis



Generation facilities:

- Conveyance from Sites Reservoir to Funks Reservoir (proposed conveyance with power generation facilities)
- Conveyance from Funks Reservoir to the Sacramento River (proposed conveyance with power generation facilities)
- Conveyance from Funks Reservoir to Glenn-Colusa Canal Terminal Regulating Reservoir (proposed conveyance with power generation facilities)

Approach

This section documents the approach that is used to estimate energy use, generation, peaking power capacity, and transmission losses.

Energy Use at Pumping Facilities

The approach used to estimate energy use at pumping facilities assumes that pumping plant energy use is a function of flow and total head. Energy use is estimated using the following equation:

Energy Use (MWh) =

$$0.7457\frac{kW}{hp}*62.4\frac{lbs}{ft\text{^}3}*\frac{1MW}{1000kW}*\frac{1hp}{550\frac{lb*ft}{s}}*t\frac{hrs}{month}*\frac{1}{\eta}*\text{head}(ft)*\text{Q}\frac{ft\text{^}3}{s}$$

The tool also estimates whether user-defined off-peak energy use targets can be met. For example, if it is desired that 90% of required pumping energy use during a particular month occur during off-peak hours, the tool determines whether this is feasible given power and flow capacity limits.

Energy Generation

The approach used to estimate energy generation at power facilities assumes that power plant generation is a function of flow and total head. Energy generation is estimated using the following equation:

Energy Generation (MWh) =

$$0.7457\frac{kW}{hp}*62.4\frac{lbs}{ft\text{^}3}*\frac{1MW}{1000kW}*\frac{1hp}{550\frac{lb*ft}{s}}*t\frac{hrs}{month}*\eta*\text{head}(ft)*\text{Q}\frac{ft\text{^}3}{s}$$

Power Capacity

The approach used to estimate power capacity assumes that peak capacity is a function of total head and average power plant flow. Power capacity is estimated using the following equation:

Power Capacity (MW) =

$$0.7457\frac{kW}{hp}*62.4\frac{lbs}{ft\text{^}3}*\frac{1MW}{1000kW}*\frac{1hp}{550\frac{lb*ft}{s}}*\eta*\text{head}(ft)*$$

$$\text{Avg. power plant flow rate}(\frac{ft\text{^}3}{s})$$

The above approach may underestimate peak power capacity. The approach uses average monthly power plant flows, while generation facilities may release at levels considerable higher than average monthly flows during peak demand periods. This approach should be revised if the use of average monthly flows is determined to be too conservative.

Transmission Losses

Transmission losses are estimated to estimate energy use and generation at load center. Transmission losses are estimated as a percentage of energy use or generation.

Economic Benefits and Costs

The economic benefits and costs of power generation and use at each facility is estimated using year 2025 forecasted monthly on-peak and off-peak power prices for Northern California.

Assumptions

Tables 1-A through 1-E list assumptions that are used to estimate energy use and transmission losses at proposed Sites Reservoir pumping facilities.

Tables 2-A through 2-C list assumptions that are used to estimate energy generation, power capacity, and transmission losses at proposed Sites Reservoir generation facilities.

Table 3 shows the 2025 forecasted on-peak and off-peak power prices that are used to estimate economic costs and benefits.

TABLE 1-A
Assumptions for Tehama-Colusa Canal Diversion Pumping Facility

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Max Q Plant	cfs	2,000	Fish Passage Improvement Project at the Red Bluff Diversion Dam: Design Development Report, November 2009, CH2M HILL
Efficiency		85%	Based on conversation with Dinh Nguyen, Design Engineer, DWR
Transmission Losses		2%	Discussion with DWR staff, 2/8/07
Percent Eng Off Peak			No off-peak pumping target
Dynamic Head	ft	12	Discussion with DWR staff, 2/8/07
Power Rating	MW	6.00	Red Bluff Pumping Plant and Fish Screen October 2009 - Contract #4 Conformed Drawings USBR and CH2M HILL

TABLE 1-B
Assumptions for Pumping from GC Canal Terminal Regulating Reservoir (TRR) to Funks Reservoir

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Max Q Plant	cfs	1,800	From pg 17 of DWR Conveyance Report
Num Pipes		2	From pg 17 of DWR Conveyance Report
Max Q Pipe	cfs	900	From pg 17 of DWR Conveyance Report
Roughness	ft	0.003	Based on pre-cast concrete pipe (pg 20, DWR Conveyance Report)
Diameter	ft	12	Based on pre-cast concrete pipe (pg 20, DWR Conveyance Report)
Length	ft	14,400	From Alternative 3, Appendix D of DWR Conveyance Report
Efficiency		82%	March 15, 2011 project team meeting
Off-/on-peak objective			No off-peak pumping target
Transmission Losses		2%	Discussion with DWR staff, 2/8/07
Elevation 1	ft	111.5	Assumes TRR WS is constant; from pg 17 of DWR Conveyance Report
Elevation 2	ft	203	Assumes Funks WS is constant; from pg 6 of Appurtenant Facilities report
Power Rating	MW	19.68	Table A, NODOS Feasibility Study (DWR, Sep 2010)

TABLE 1-C
Assumptions for Pumping from Sacramento River to Funks Reservoir

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Max Q Plant	cfs	2,000	Discussion with DWR staff, 2/8/07
Num Pipes/Pumps		2	Discussion with DWR staff, 2/8/07
Max Q Pipe	cfs	1,000	Discussion with DWR staff, 2/8/07
Roughness	ft	0.003	Based on pre-cast concrete pipe (pg 20, DWR Conveyance Report)
Diameter	ft	12	From pg 16 of DWR Conveyance Report
Length	ft	70,000	From pg 9 of DWR Conveyance Report
Efficiency		82%	March 15, 2011 project team meeting
Off-/on-peak objective			No off-peak pumping target
Transmission Losses		0.02	Discussion with DWR staff, 2/8/07
Elevation 1	ft	Sac Stage	From Sac Rating Curve
Elevation 2	ft	203	Assumes Funks WS is constant; from pg 6 of Appurtenant Facilities report
Power Rating	MW	65.65	Table A, NODOS Feasibility Study (DWR, Sep 2010)

TABLE 1-D
Assumptions for Pumping from Funks Reservoir to Sites Reservoir

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Tunnel		1	From DWR Appurtenant Facilities report
Max Q Pipe	cfs	5,900	March 15, 2011 project team meeting
$Roughness_{concrete}$	ft	0.003	Based on concrete lining (pg 23, DWR Appurtenant Facilities report)
$Roughness_{steel}$	ft	0.0002	Discussion with DWR staff, 2/8/07
Diameter	ft	30	From Appendix A (pg 23) of DWR Appurtenant Facilities report
$Length_{concrete}$	ft	3,031	From Figures 4-1 & 4-2 of DWR Appurtenant Facilities report
$Length_{steel}$	ft	1,000	From Figures 4-1 & 4-2 of DWR Appurtenant Facilities report
Efficiency		82%	March 15, 2011 project team meeting
Off-/on-peak objective			Maximize off-peak pumping
Transmission Losses		0.02	Discussion with DWR staff, 2/8/07
Elevation 1	ft	203	Assumes Funks WS is constant; from pg 6 of Appurtenant Facilities report
Elevation 2	ft	Sites WS	From Sites Elevation-Capacity curve
Power Rating	MW	181.35	Table A, NODOS Feasibility Study (DWR, Sep 2010)

TABLE 1-E
Assumptions for Glenn-Colusa Canal Diversion Pumping Plant

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Max Q Plant	cfs	3,000	CALSIM II maximum flow for GC Canal
Efficiency		85%	Based on conversation with Dinh Nguyen, Design Engineer, DWR
Transmission Losses		2%	Discussion with DWR staff, 2/8/07
Off-/on-peak objective			No off-peak pumping target
Dynamic Head	ft	10	Discussion with DWR staff, 2/8/07
Power Rating	MW	3.39	Derived from Table 2-3 (pg 2-6) in GCID Feasibility Report.

TABLE 2-A
Assumptions for Funks Reservoir Generating Plant

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Tunnel		1	Same as Funks (P) above
Max Q Pipe	cfs	5,100	March 15, 2011 project team meeting
$Roughness_{concrete}$	ft	0.003	Same as Funks (P) above
$Roughness_{steel}$	ft	0.0002	Same as Funks (P) above
Diameter	ft	30	Same as Funks (P) above
$Length_{concrete}$	ft	3,031	Same as Funks (P) above
$Length_{steel}$	ft	1,000	Same as Funks (P) above
Efficiency		85%	March 15, 2011 project team meeting
Off-/on-peak objective			Maximize on-peak generation
Transmission Losses		0.02	Discussion with DWR staff, 2/8/07
Elevation 1	ft	Sites WS	From Sites Elevation-Capacity curve
Elevation 2	ft	203	Assumes Funks WS is constant; from pg 6 of Appurtenant Facilities report
Power Rating	MW	123.0	Table A, NODOS Feasibility Study (DWR, Sep 2010)

TABLE 2-B

Assumptions for Glenn-Colusa Canal Terminal Regulating Reservoir Generating Plant

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Max Q Plant	cfs	1,500	March 15, 2011 project team meeting
Num Pipes		2	From pg 17 of DWR Conveyance Report
Max Q Pipe	cfs	750	March 15, 2011 project team meeting
Roughness	ft	0.003	Based on pre-cast concrete pipe (pg 20, DWR Conveyance Report)
Diameter	ft	12	Based on pre-cast concrete pipe (pg 20, DWR Conveyance Report)
Length	ft	14,400	From Alternative 3, Appendix D of DWR Conveyance Report
Efficiency		85%	March 15, 2011 project team meeting
Off-/on-peak objective			No on-peak generation target
Transmission Losses		2%	Discussion with DWR staff, 2/8/07
Elevation 1	ft	203	Assumes Funks WS is constant; from pg 6 of Appurtenant Facilities report
Elevation 2	ft	111.5	Assumes TRR WS is constant; from pg 17 of DWR Conveyance Report
Power Rating	MW	9.8	Table A, Sites Feasibility Study (DWR, Sep 2010)

TABLE 2-C

Assumptions for Sacramento River Generating Plant

Plant Characteristics	Units	Modeling Assumptions	Basis for Assumption
Max Q Plant	cfs	1,500	Pg. 3, DWR Pumping-Generating Plants Feasibility Study
Num Pipes/Pumps		2	Discussion with DWR staff, 2/8/07
Max Q Pipe	cfs	750	Pg. 3, DWR Pumping-Generating Plants Feasibility Study
Roughness	ft	0.003	Based on pre-cast concrete pipe (pg 20, DWR Conveyance Report)
Diameter	ft	12	From pg 16 of DWR Conveyance Report
Length	ft	70,000	From pg 9 of DWR Conveyance Report
Efficiency		85%	March 15, 2011 project team meeting
Off-/on-peak objective			Maximize on-peak generation
Transmission Losses		2%	Discussion with DWR staff, 2/8/07
Elevation 1	ft	203	Assumes Funks WS is constant; from pg 6 of Appurtenant Facilities report
Elevation 2	ft	Sac Stage	From Sac Rating Curve
Power Rating	MW	10.8	Table A, NODOS Feasibility Study (DWR, Sep 2010)

TABLE 3

Forecasted Year 2025 On-Peak and Off-Peak Power Prices

Source: Prices are forward prices developed by DWR power portfolio section; date of forecast: 08/25/09

Month	On-Peak	Off-Peak
October	$82.81	$67.87
November	$83.69	$69.89
December	$86.29	$72.33
January	$83.25	$70.59
February	$82.22	$71.67
March	$79.50	$67.48
April	$75.45	$61.76
May	$76.95	$57.78
June	$79.19	$58.07
July	$92.57	$65.79
August	$87.50	$66.90
September	$84.59	$66.31

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Economic Modeling

Economic Modeling of the Sites Reservoir Project

This attachment includes the assumptions and approaches used to estimate hydropower benefits from the Sites Reservoir Project. The California Water Commission (CWC) requirements and recommendations for water supply and Hydropower benefits estimation provided in the Technical Reference document are incorporated and detailed in this document. Section 1 covers two approaches that provide M&I water supply benefits at 2030 and 2070 conditions in average annual value (2015 dollars):

1. Unit Value Approach using California Water Commission (CWC) provided $/Acre-Foot benefit of water supply cited in the Technical Reference Document
2. Economic Model Approach:
    a. M&I Water Supply: California Water Economics Spreadsheet Tool (CWEST)
    b. Agricultural Water Supply: Statewide Agricultural Production Model (SWAP)

Section 2 covers the estimation of hydropower benefits and conveyance costs using Long Term Generation (LTGen), State Water Project (SWP) Power, and North of Delta Off-Stream Storage (NODOS) Power.

Section 3 provides additional comments on the CWC Water Storage Investment Program (WSIP) Technical Reference document (CWC, 2016).

Section 1. Water Supply Benefits Estimation

Quantifying Private Water Availability and Uses

Sites Project Participants are both agricultural (Ag) and municipal and industrial (M&I) agencies. Table X1 provides a list of Sites Project Participants and beneficial use of Sites water supply. Figure X1 maps the location of the Sites Project Participants.

Table X1. Sites Project Participants (Ag/M&I)

Sacramento Valley Sites Project Participants (Ag)	
Colusa County	Glenn-Colusa Irrigation District
Colusa County Water District	Orland-Artois Water District
Cortina Water District	Proberta Water District
Davis Water District	Reclamation District 108
Dunnigan Water District	Westside Water District
La Grande Water District	
South of Delta Sites Project Participants (M&I)	
American Canyon, City of	San Bernardino Valley Municipal Water District
Antelope Valley-East Kern Water Agency	San Gorgonio Pass Water Agency
Castaic Lake Water Agency	Santa Clara Valley Water District
Coachella Valley Water District	Zone 7 Water Agency
Desert Water Agency	
South of Delta Sites Project Participants (Ag)	
Wheeler Ridge-Maricopa Water Storage District	

Figure X1 Sites Project Participants

The WSIP 2030 and 2070 without Project CALSIM II model runs were compared to the WSIP 2030 and 2070 with Project CALSIM II model runs to quantify the annual deliveries to Sites Project Participants. Table X2 provides the annual delivery by water year type and long-term average that were used in the water supply and hydropower benefit estimation. Delivery is the calculated quantity at the location of each Sites Project Participant after accounting for conveyance losses, consistent with section 4.12.3 Location at Which Supply is Measured of the CWC Technical Reference document (CWC, 2016).

Table X2. Delivery[1] by Water Year Types[2] (TAF/year)

	Year of Analysis - 2030	Year of Analysis -2070
Sacramento Valley Sites Project Participants (Ag)		
Long-Term Average	111	137

Wet	62	110
Above Normal	86	146
Below Normal	125	152
Dry	157	161
Critical	153	133
South of Delta Sites Project Participants (M&I)		
Long-Term Average	107	117
Wet	15	15
Above Normal	52	72
Below Normal	121	116
Dry	213	257
Critical	185	145
South of Delta Sites Project Participants (Ag)		
Long-Term Average	27	30
Wet	5	5
Above Normal	6	12
Below Normal	28	26
Dry	56	69
Critical	53	41
Sites Project Participants Total		
Long-Term Average	244	285
Wet	82	130
Above Normal	144	230
Below Normal	273	294
Dry	426	488
Critical	391	319

[1] Increases from the No Action Alternative. Accounts for 18% deduction for carriage water for Delta Export

[2] Water Year types are the 2030 and 2070 Sacramento Valley 40-30-30 index and the 2030 and 2070 San Joaquin Valley 60-20-20 index

Approach 1 Unit Values Estimation

Approach 1 applies a dollar value per acre-foot ($/AF) values for water by region, water year type, and future condition. Table D-6 "Unit Values of Water for WSIP, by Year Type, Future Condition, and Region" of the WSIP Technical Reference (CWC, 2016) unit values were applied to deliveries by region and water year type for 2030 and 2070 conditions. Conveyance costs were included in the benefit calculation. For more information on estimated conveyance costs, see Section 2 Hydropower and Conveyance Cost Estimation.

Approach 2 Economics Models

M&I Water Supply Benefit: CWEST

CWEST was developed for the US Bureau of Reclamation's Coordinated Long Term Operation of the Central Valley Project and State Water Project Environmental Impact Statement (LTO EIS) Environmental Consequences analysis. Appendix 19A of the LTO EIS details the history, methodology, and assumptions (Reclamation, 2015). CWEST was selected to estimate M&I water supply benefits in the WSIP application through the list of criteria in Technical Reference document Section 4.12 Water Supply Analysis (CWC, 2016). CWEST was updated for the Sites WSIP analysis to evaluate nine M&I Sites Project Participants. The updates to CWEST include 2030 and 2070 analysis using 2015 UWMP data, inclusion of only Sites Project Participants, and all relevant assumptions outlined in the CWC Technical Reference document.

Methodology

CWEST quantifies M&I water supply benefit by simulating the decisions made at the district or agency level. The model's objective is to select each Sites Project Participant's set of management actions that meet the annual water demand at the lowest cost. The difference in cost between the water supply conditions with and without Sites delivery provides the M&I water supply benefit.

Data Update for Prop 1 WSIP Application

The major update to CWEST was removing non- Sites Project Participants from the model and including any Sites Project Participants that were not including in the existing version on the model. CWEST updates for the WSIP application allows for analysis at 2030 and 2070 and is in 2015 dollars. The main data source for the update was individual Sites Project Participants Urban Water Management Plans (UWMPs). Table X3 lists the major model updates relevant Technical Reference document requirements and data sources.

Table X3. CWEST Key Assumptions, Updates, and Sources

Variables	Notes	Sources
Retail Water Price	Retail water prices are in 2015 dollars and were provided by the Raftelis 2015 California-Nevada Water and Wastewater Rate Survey. For Sites Project Participants not included in this study, retail water rates were gathered from individual Site Project Participant documents. Retail water prices were escalated to 2030 based on a retail water price escalation within CWEST (USBR, 2015).	(American Canyon, 2017), (AVEK, 2015), (City of Banning, 2010), (Desert Water Agency, 2017), (Raftelis, 2015), (USBR, 2015)
Conveyance Costs	Conveyance Costs calculations are described in Section 2	
Groundwater Pumping Costs	The existing CWEST Groundwater pumping cost estimates (USBR, 2015) are applicable to only Sites Project Participants with groundwater as a supply in their 2015 UWMP. The cost ($/AF) is the sum of a representative cost by region plus a groundwater replenishment charge assumed to be the same as the conveyance cost. Inclusion of the groundwater replenishment charge is consistent with Section 5.4.1.1 of the Technical reference document.	(USBR, 2015), UWMPs for each Sites Project Participant (See reference list)
Shortage Cost	The default M&I demand elasticity in CWEST is -0.1 as published in the LTO EIS (USBR, 2015) and is determined applicable for the WSIP application. In CWEST, long-term conservation is a decision variable for M&I Sites Project Participants. With adoption of additional long-term conservation by Sites Project Participants in our analysis, a shortage caused welfare loss needs to be measured under this heightened level of conservation. The CWEST update for the WSIP application relies on 2030	(USBR, 2015), (MCubed and RMann, 2016)

Table X3. CWEST Key Assumptions, Updates, and Sources		
Variables	**Notes**	**Sources**
	conservation and demand levels for the nine M&I Sites Project Participants provided in their 2015 UWMPs. Calculating welfare loss at a level of conservation greater than the UWMP stated conservation and demand levels supports the use of a more inelastic response. The default M&I demand elasticity in CWEST results in a welfare loss per AF similar in magnitude to the values provided in previous studies. Across the nine M&I Sites Project Participants, 2030 welfare loss per AF is in a range of $300 to $2,300 with an average value of $1,100 per AF. MCubed and RMann Economics, 2016 study calculated welfare loss per AF across California in a range of $500 to $2,600 with an average value of $1,500 per AF. Therefore, the use of the default M&I demand elasticity in CWEST is reasonable.	
Transfer Quantities and Costs	Annual transfers were available for the Sites Project Participants with transfers as a 2030 supply in their UWMP. The stated quantity is the annual limit for below normal or above or dry/critical water year types if that information was available. The $/AF cost of transfer water is based on the Technical Reference document provided unit values by region and water year type plus the conveyance charge.	(CWC, 2016), UWMPs for each Sites Project Participant (See reference list)
2030, 2070 Water Demands	2030 water demands were gathered from 2015 UWMPs. 2070 followed Technical reference document provided methods in section 2.7.1 Future Population Levels and Section 2.7.3 Future M&I Water Demand Levels using Department of Finance population projections and gallons per capita per day estimates from 2015 UWMPs	Technical Reference document (CWC, 2016) section 2.7.1 Future Population Levels method using Department of Finance population projects and UWMPs for each Sites Project Participant (See reference list)
2030, 2070 Water Supplies	2030 water supply data for preliminary Sites M&I participants was gathered from 2015 UWMPs. 2030 water supplies were held consistent through 2070, with no modifications based on future climate, environmental, or physical conditions due to data availability.	UWMPs for each Sites Project Participant (See reference list)
Alternative Supply Costs	Alternative Supply costs and available quantities were extrapolated from LCPSIM v97 input values. The four categories of alternative supply costs are: Indoor Conservation, Outdoor Conservation, Recycling, and Desalination. Costs were converted to 2015 dollars and escalated to 2024 based on the Technical Reference document section 5.2.7 Real	(DWR, 2010)

Table X3. CWEST Key Assumptions, Updates, and Sources		
Variables	**Notes**	**Sources**
	Energy Price Escalation.	
Accounting for Potential Reuse	Section 4.12.7 Accounting for Potential Reuse discusses reuse of new supply. This analysis does not include additional benefit from the reuse of Sites deliveries	

Other Relevant Information

M&I groundwater pumping is modeled in CWEST for Sites Project Participants if their 2015 UWMP includes groundwater as a water supply in 2030. M&I groundwater pumping is used to meet annual demand under variable surface water deliveries. When available, annual put and take limits, storage capacity, losses, and pumping costs are modeled in CWEST as managed storage facilities. Otherwise, the UWMP stated 2030 groundwater pumping quantity constrains the maximum annual pumping quantity. For more information on groundwater in CWEST see Reclamation, 2015. Potential SGMA pumping limits were not incorporated into 2030 or 2070 conditions due to data availability. M&I groundwater basins are generally adjudicated or not identified as medium to high priority. Therefore, groundwater use stated in UWMPs is likely to be consistent with future Groundwater Sustainability Plans. Nevertheless, CWEST does not allow annual groundwater pumping to exceed UWMP stated 2030 quantities, annual take limits, or cumulative take greater than the UWMP stated groundwater storage capacity.

The distinction between wholesale and retail electricity prices is relevant to private water supply and hydropower benefits estimation. The Technical Reference document did not make this distinction in section 5.2.7 Real Energy Prices for Future Project Costs. For the Hydropower benefits estimation, proprietary wholesale electricity prices were used. In the M&I water supply benefits estimation, the Technical Reference document provided escalation rates to 2024 were used where applicable. This included the escalation of alternative supply costs and groundwater pumping costs. Retail water price escalation used a retail water price escalation to 2030. Following the Technical Reference document section 5.2.7, 2024 or 2030 were held constant thereafter for the 2070 analysis.

Agricultural Water Supply Benefit: SWAP

The CWC provided a SWAP model to estimate the benefit to ag Sites Project Participants. This CWC version of SWAP was applied to ensure consistency between the Sites agricultural benefit analysis and the CWC unit value analysis (CWC, 2016).

Methodology

See *Statewide Agricultural Production (SWAP) Model Update and Application to Federal Feasibility Analysis* (Reclamation, 2012) for a comprehensive report on the SWAP model.

Data Update for Prop 1 WSIP Application

The Sites SWAP analysis used the CWC provided SWAP model without any modifications to the model code or baseline data.

Section 2. Hydropower and Conveyance Cost Estimation

Methodology

Hydropower benefits estimation follows the requirements of section 4.13 Hydropower Analysis in the Technical Reference document (CWC, 2016). Pumping costs and generation revenue for all major SWP, CVP, and Sites facilities is calculated based on three hydropower models: SWP Power, LTgen, and NODOS Power, respectively. SWP Power and LTgen are publicly available models and are referenced in Section 4.13.3.1 Energy Generation of the CWC Technical Reference document (CWC, 2016).

Data Update for Prop 1 WSIP Application

Electricity prices provided by CA DWR in an email correspondence were used to updated all three of the hydropower models. The DWR provided data is proprietary and will not be published in this documentation. The 2030 NP-15 wholesale electricity prices were used in both 2030 and 2070 conditions. Forecasts are not available for 2070 and per the direction of the CWC Technical Reference document, 2030 prices were applied to the 2070 analysis. No changes were made to SWP Power and LTgen from the Sites EIR/EIS or feasibility study. NODOS power was updated to be consistent with the project proposal.

Conveyance Cost Estimation

Technical Reference document Section 6.5.1 requires all water "be assigned a water delivery cost per acre-foot be based on variable costs" (CWC, 2016). Conveyance costs for each Sites Project Participant were twofold – A north of delta operations power cost plus the conveyance charge to respective location and delivery quantity after conveyance losses.

1. North of Delta Operations Hydropower Cost: A $/AF north of delta operations hydropower cost was calculated by dividing the total long-term average annual net costs north of delta by the total long-term average annual AF through Holthouse. Annual net cost is the total hydropower generation revenue minus the total pumping costs over one year. The water balance accounting at Holthouse can be used to allocate the north of delta operations hydropower cost across the private and public accounts. The net north of delta operations hydropower cost includes Sites net pumping/generation costs and any other with-project effects measured in other north of delta facilities. The SWP/CVP facilities included in the calculation had net effects measured between the No Action and With-Project CALSIM runs. The effects on these facilities were generally reductions in pumping costs or increases in generation revenue. The net north of delta operations hydropower cost was calculated at $16/AF.

2. A unique $/AF conveyance cost for each Sites Project Participant is added to the $16/AF cost from #1. The unique $/AF conveyance cost is the sum of representative unit costs of facilities (pumping and generation) used to get the delivered water to each Site Project Participant location. The unit cost for each facility was calculated from LTgen and SWP power model analyzed with the WSIP 2030 and 2070 with Project CALSIM II runs. This $/AF was applied to the delivered water to estimate the total hydropower cost. The calculated conveyance costs are similar to the SWP conveyance charges provided in Bulletin 132-10 (DWR, 2013).

Section 3. Additional Comments on Private Water Supply Benefit and Hydropower Costs Estimation

Comments	
2030 and 2070 With and Without-project Future Conditions for M&I, Ag, and Hydropower benefits estimation	2030 and 2070 With and without-project future conditions are identical in these benefit estimation categories. With and without-project hydrology is the only difference in future conditions. Future hydrology used in these analyses were the CWC provided WSIP 2030 without Project CALSIM II modelling runs were compared to the Sites WSIP 2030 with Project modelling runs.
Consistency with existing Sites Feasibility study and EIR/EIS for M&I benefits estimation	The M&I benefits estimation in the Feasibility Study and EIR/EIS use LCPSIM and OMWEM. Due to the difference in participant beneficiaries in the WSIP application, CWEST was determined to be a more suitable model. The evaluation methods of M&I benefits in CWEST is generally consistent with LCPSIM and OMWEM
Consistency with existing Sites Feasibility study and EIR/EIS for Ag benefits estimation	The Ag benefits estimation in the Feasibility Study and EIR/EIS use SWAP, albeit a previous version. Due to the availability of a newer version through the CWC for the WSIP application, the CWC model was selected to evaluate ag benefits in the WSIP application. In addition, use of the CWC SWAP model in the Sites WSIP application provides consistent analysis with the CWC unit values estimation in the Technical Reference document.
Consistency with existing Sites Feasibility study and EIR/EIS for Hyrdopower benefits estimation	The Hydropower benefits estimation in the Feasibility Study and EIR/EIS use LTgen, SWP power, and NODOS power models, albeit with different future wholesale electricity prices. Due to the availability of a newer forecasted future wholesale electricity prices, these models were updated for the WSIP application.

References

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San Gorgonio Pass Water Agency. (2017). 2015 Urban Water Management Plan for San Gorgonio Pass Water Agency. Beaumont, CA.

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U.S. Bureau of Reclamation (Reclamation). (2012). Statewide Agricultural Production (SWAP) Model Update and Application to Federal Feasibility Analysis. Sacramento, CA.

U.S. Bureau of Reclamation (Reclamation). (2015). Draft Coordinated Long Term Operation of the CVP and SWP Environmental Impact Statement (LTO EIS) Environmental Consequence Analysis, Appendix 19A – California Water Economics Spreadsheet Tool (CWEST) Documentation. Sacramento, CA.

Zone 7 Water Agency. (2016). 2015 Urban Water Management Plan. Livermore, CA.

Folsom Reservoir
CE-QUAL-W2 Temperature Model

Folsom Reservoir CE-QUAL-W2 Temperature Modeling

This attachment discusses the CE-QUAL-W2 water temperature modeling tool (PCWA 2015), which was applied to evaluate temperature benefits on the American River. The model was developed for Placer County Water Agency's (PCWA) American River Water Rights Extension (ARWRE) Project (PCWA 2015).

CE-QUAL-W2 Overview

The CE-QUAL-W2 model was developed to test the ability of alternative hydrology and reservoir operations scenarios to meet regulatory water temperature requirements (or targets if the requirement cannot be met) in the lower American River at Watt Avenue. The water temperature targets are based on the Automated Temperature Selection Procedure (ATSP) schedules developed as part of the Water Forum Flow Management Standard (FMS). The primary water temperature management objective for the lower American River is to meet the best possible temperature schedule each year for Central Valley steelhead (summer rearing) and fall-run Chinook salmon spawning (fall months) given Folsom Reservoir inflows, available reservoir volume, and Folsom Reservoir outflows. The model simulates temperatures in Folsom Lake and temperatures on the American River downstream of Folsom to the confluence with the Sacramento River. The model has the capability of simulating the City of Folsom Temperature Control Device and the Folsom Dam Shutters For planning analyses, the CE-QUAL-W2 temperature model represents the best available planning model for the American River.

Similar to the Sacramento River HEC5Q model, the input climate data to the CE-QUAL-W2 model was updated to incorporate the WSIP 2030 and 2070 climate scenarios. The process for updating climate in the CE-QUAL-W2 model was different than the climate updates that were performed for HEC5Q.

The CE-QUAL-W2 model uses climate data based on the Folsom/Fair Oaks CIMIS station. As described in the HEC5Q climate updates section, the WSIP climate change data is based on grid cells and the closest grid cell to the Folsom/Fair Oaks CIMIS station was 38.65625 degrees latitude and -121.15625 degrees longitude. Climate data for 1995, 2030, and 2070 were downloaded from the data file corresponding to that grid cell. The monthly average air temperature was then calculated by summing the min and max air temperature and dividing by two. The difference between the 1995 average air temperature and the 2030 and 2070 air temperatures was then calculated. The air temperature difference calculated was then added to the original hourly climate data of the model. The difference was added at the midpoint of each month and then difference to each subsequent hour was added based on linear interpolation between the midpoints of each month. For instance, if the difference for June was 2 degrees and for July was 3 degrees, the difference for 6/25 was interpolated between 6/15 and 7/15. In addition to updating the air temperature, the relative humidity was also adjusted using a formula that links air temperature, dew point, and relative humidity based on the adjusted 2030 and 2070 air temperatures.

References

Placer County Water Agency (PCWA) American River Water Rights Extension Project (ARWRE). 2015. Folsom Reservoir CE-QUAL-W2 Temperature Model Report. November.

Physical Benefits Tab

Attachment 1: Recreation Visitation Estimates

Attach or provide links to any relevant recreation studies associated with the proposed project.

WSIP Application Instructions, March 2017

Response

This attachment contains analyses of benefits associated with Stone Corral Recreation Area and Peninsula Hills Recreation Area.

Table of Contents

Attachment 1: Recreation Visitation Estimates 1
Introduction 3
References 4

Tables

Table 1. Estimated Annual Recreation Visitation at Sites by Primary Activity.. 4

Acronyms and Abbreviations

NODOS	North-of-the-Delta Offstream Storage
USBR	U.S. Bureau of Reclamation

Introduction

Recreation benefits are informed in part with visitor use projections for the recreational areas planned for the Sites Project (i.e., Stone Corral, Peninsula Hills). Annual visitation was estimated using a comparable demand and/or facilities-based estimation approach that accounts for Sites planned facilities, carrying capacity, the regional population of potential users, surface acreage of the reservoir and fluctuations in storage throughout the year, as well as the amenities and visitation levels of substitute reservoirs in the region. Additional information and recreation analysis is available in Appendix C of the North-of-the-Delta Offstream Storage (NODOS) Draft Feasibility Study (USBR 2017). These variables for consideration are consistent with those outlined in the WSIP Technical Reference (TR Section 5.4.5). Annual visitation was calculated as a measure of total visitor days, which represents one person visiting for any part or all of a calendar day. This metric is commonly used to inform recreational benefits, and should not be confused with a recreational visit, which could last for more than one calendar day (e.g., camping).

Visitation projections for Sites, including proportion of visitor use by primary activity type were informed with previous planning estimates (CALFED 2000) and subsequent collaboration with the U.S. Bureau of Reclamation (USBR 2006 & 2017). The visitation estimates draw upon recreational assessments of regional reservoirs using a comparable demand and/or facilities-based estimation approach; these techniques are founded on the assumption that use at a new reservoir would be similar to use at an existing reservoir that is nearby and hosts similar types and levels of amenities.

Black Butte Reservoir is considered the most similar nearby reservoir to the planned Sites project to form a comparable attendance estimate. To estimate the number of visitors by type of primary activity at Sites, historical visitation estimates tallied from traffic counters and assumptions on the number of persons per vehicle were applied to data from a visitor characteristic survey at Black Butte. Initial estimates of approximately 400,000 annual recreation user days for Sites were conservatively scaled down to a *maximum* of 200,000 annual visitor days. This downward adjustment was made in response to ongoing conversations with the Bureau of Reclamation and other project partners as well as additional refinements to Sites planned recreational facilities. In addition, the 200,000 annual visitor days were further adjusted to account for operations that would reduce the reservoir’s surface area available to visitors during the peak recreation months, resulting in an annual estimate of approximately 187,000 visitor days.

The table below illustrates the estimated annual attendance at Sites by primary activity type. As discussed, the breakdowns by activity type follow typical patterns of recreational activity in the region and have been matched with planned recreational facilities to ensure that the projected recreational use could be supported at Sites. Appendix E of the NODOS Draft Feasibility Study (USBR 2017) provides a more detailed discussion of the recreation facilities currently planned and budgeted for development at Sites.

Table 1. Estimated Annual Recreation Visitation at Sites by Primary Activity

Activities	Annual Visitor Days	Percent of Total
Shore fishing	16,254	8.7%
Boat fishing	8,407	4.5%
Picnicking	17,188	9.2%
Camping	27,514	14.7%
Sightseeing	36,992	19.8%
Swimming / beach use	40,492	21.7%
Walking	5,418	2.9%
Bicycling/Motorcycling	2,429	1.3%
Off-road vehicle	187	0.1%
Horseback riding	747	0.4%
Boating / water-skiing	29,145	15.6%
Hunting	560	0.3%
Other	1,495	0.8%
Total	**186,829**	**100%**

References

CALFED (CALFED Bay-Delta Program). 2000. North of the Delta Offstream Storage Investigation Progress Report, Appendix J: Recreation Requirements and Opportunities: Sites Reservoir Alternative. Report prepared by Douglas Rischbieter and David Elkins, California Department of Water Resources. April.

USBR (U.S. Bureau of Reclamation). 2006. Sites Reservoir Visitation Analysis and Excess Capacity/Demand Substitution Analysis. Prepared by Jon Platt, Technical Service Center, Denver, Colorado.

USBR. 2017. Draft North-of-the-Delta Offstream Storage Investigation Feasibility Report. Available: https://www.sitesproject.org/information/FeasibilityReport.

Early Funding Tab

Attachment A1: Scope of Work

Attach a schedule, scope of work, and budget.

Keep in mind that the applicant must provide a 50 percent cost share and reimbursable costs can only go back to November 4, 2014.

Scope of work must include an explanation of why early funding is critical to the project, the viability of the project in the absence of this funding and how the project will proceed once early funding is expended.

The scope of work cannot include work performed prior to submittal of the application.

The tasks in the schedule, scope of work and budget should match.

WSIP Application Instructions, March 2017

Table of Contents

Attachment 1A: Scope of Work 1
Introduction 4
Acquisition of Required Permits and Authorizations.. 4
Anticipated Field Evaluations Requiring Substantial Level of Effort.................................... 9
Anticipated Permit Application Preparation/Acquisition Schedule 9
Completion of Final EIR/EIS 10

Tables

Table A1-1. Primary Anticipated Permits, Approvals, and Authorizations for the Sites Reservoir Project.. 5
Table A1-2. Applicable Federal, State, and Local Permits and Approvals and Estimated Costs................. 11
Table A1-3. Applicable Federal, State, and Local Permits and Approvals Acquisition Timeframes/Schedule (June 2018 Start Date Assumed) 18

Acronyms and Abbreviations

CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act

Introduction

The primary activities requiring early funding to support implementation of the Sites Reservoir Project (Project) are associated with federal, state, and local environmental compliance and approvals. The Authority and Reclamation will be releasing the joint public draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) in August 2017. In addition to needing to complete the final EIR/EIS and related decision documents per the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), several permits and authorizations will be required prior to Project construction. Many of these permit applications require a sufficient level of engineering design, field surveys (some multiple year), public review, and agency input and review to obtain which can in many cases require multiple years to complete. As such, multiple activities need to be initiated to maintain project schedules including continued engineering design to finalize all facility locations, permit application development and required surveys, and review of anticipated impacts and proposed/required impacts minimization and mitigation measures.

Early and consistent coordination with federal, state, and local permitting entities throughout the permitting process will be critical to successful project implementation. Anticipated permits and authorizations are identified below, as well as anticipated level of effort to obtain each approval. Given the scale of the proposed project, the effort anticipated to obtain all permits will be substantial and is proposed to continue to be in part funded by Project participants, as well as the State given the projected benefits to the State that will be provided by the Project. Early funding from the State to support the approval acquisition effort is critical to ensure all approvals are obtained in a timely manner to meet the required project implementation schedule.

Acquisition of Required Permits and Authorizations

A variety of federal, state, and local agencies permits and approvals will be required to allow for Project implementation, including approvals under the federal and California Endangered Species Acts, issuance of permits under the Clean Water Act, and agency approvals under other federal, state, and local laws and regulations. Table A1-1 identifies the approvals/jurisdiction and authorizations that are anticipated for the Project.

Table A1-1. Primary Anticipated Permits, Approvals, and Authorizations for the Sites Reservoir Project

Jurisdiction	Responsibility
Federal Agency Permits, Approvals, and Authorizations	
United States Department of the Interior, Bureau of Reclamation	• Complete Final EIS) and issue the Record of Decision (ROD) as the representative NEPA lead agency for the Department of the Interior. • Prepare and submit biological assessment to U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) for consideration of issuance of biological opinions • National Historic Preservation Act of 1966, Sections 106 and 110 • American Indian Religious Freedom Act • Native American Graves Protection and Repatriation Act
United States Department of the Interior, USFWS	• Issue biological opinion to Reclamation in accordance with ESA Section 7 consultation and incidental take authorization • Determine compliance with the following legislation: – Fish and Wildlife Coordination Act – Bald and Golden Eagle Protection Act – Migratory Bird Treaty Act – Wild and Scenic Rivers Act
National Oceanic and Atmospheric Administration, NMFS	• Issue a biological opinion to Reclamation in accordance with Endangered Species Act (ESA) Section 7 consultation and incidental take authorization • Determine compliance with the following legislation: – Fish and Wildlife Coordination Act – Magnuson-Stevens Fishery Conservation and Management Act
United States Army Corps of Engineers (USACE)	• Issue permits and approvals related to the following legislation and Executive Order: – Rivers and Harbors Act Section 9 (construction of dikes), Section 10 (alteration of navigable waters), and Section 408 (levee modification) – Clean Water Act Section 404 (discharge of dredge/fill) permitting and Section 401 water quality certification – Emergency Flood Control Fund Act of 1955 – Executive Order 11988 (floodplain management) – Executive Order 11990 (protection of wetlands)
United States Environmental Protection Agency (USEPA)	• Provide compliance with the following legislation (and through agreements with the State of California to implement requirements through CalEPA associated with air quality): – Clean Water Act in coordination with USACE (including evaluation of Least Environmentally Damaging Practicable Alternative [LEDPA]) – Spill Prevention Control and Countermeasures Plan (SPCCP) developed in accordance with 40 Code of Federal Regulations (CFR) 112 – Clean Air Act and State Implementation Plan, including the National Ambient Air Quality Standards (NAAQS), as well as Section 309 evaluation of draft EIS – Safe Drinking Water Act
Federal Energy Regulating Commission (FERC)	• Potentially provide a license for the Project hydropower component
State Agency Permits, Approvals, and Authorizations	
California Air Resources Board	• Administer the air quality policy to achieve the California Ambient Air Quality Standards (including the NAAQS for USEPA) and State Air Quality Designations

Jurisdiction	Responsibility
California Department of Boating and Waterways	• California Harbors and Navigation Code compliance
California Department of Fish and Wildlife	• Lake and Streambed Alteration Agreement permitting (pursuant to Section 1602 of the California Fish and Game Code) • Compliance with Fish and Game Code related to fully protected species, birds of prey, native plant protection, invasive species, sufficient fisheries flows below dams, and fish screening • California Endangered Species Act consultation and incidental take authorization (Section 2081) • California Native Plant Protection Act • Salmon, Steelhead Trout, and Anadromous Fisheries Program Act • Marine Invasive Species Act
California Department of Toxic Substances Control	• Compliance with generation, transportation, treatment, storage, and disposal of hazardous waste regulations
California Department of Transportation	• Issuance of encroachment/transportation in coordination with the Federal Highway Administration for federal highways • Approval of transportation management plans
California Office of Historic Preservation	• Coordinate with implementation of the California Register of Historical Resources under CEQA • Coordinate with federal agencies implementation of National Historic Preservation Act Section 106 consultation
California State Lands Commission (CSLC)	• Issue leases for work in areas under CSLC jurisdiction (e.g., along Sacramento River)
California State Water Resources Control Board	• Issue water rights • Administer Clean Water Act for USEPA in coordination with Central Valley Regional Water Quality Board (CVRWQCB)
California Department of Water Resources, Division of Safety of Dams	• Approval of plans and specifications for the construction or enlargement of a dam or reservoir
Central Valley Regional Water Quality Control Board	• Clean Water Act Section 401 certification Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) permitting (including requirements for construction Stormwater Pollution Prevention Plan [SWPPP])
Central Valley Flood Protection Board	• Responsible for controlling flooding along the Sacramento and San Joaquin rivers and their tributaries in cooperation with USACE • Maintain integrity of existing flood control system/designated floodways through permits for encroachments
Native American Heritage Commission	• Identify sacred sites and Most Likely Descendants for Native American burials and provision of Native American contact information
Regional and Local Agency Permits, Approvals, and Authorizations	
Colusa, Glenn, and Tehama Counties	
Planning Departments	• Issuance of Conditional Use Permit • Rezoning of parcels in both counties • Conformance with State Surface Mining and Reclamation Act (SMARA) permitting or exemption if borrow is required from borrow site(s) not previously permitted • Conformance with CEQA environmental review requirements

Jurisdiction	Responsibility
Engineering and Surveying Services Departments	• Plan approval for county road or bridge crossings at creeks or grading for structures drainage plan; and grading permit • Erosion control plan development and permitting • Building and electrical permitting • Development of blasting plan for foundation/roadway installation
Environmental Health Services Departments	• Septic and water system permitting, including well installations
Roads Departments	• Encroachment permitting • Construction traffic control plan development for county roads • Assessment of fees for increases in peak-hour trips, if required • Heavy haul permitting • Roadway damage and repair bonds
Fire Departments	• Permitting for the use and storage of hazardous and flammable materials/wastes • Hazardous materials business plan development • Fire protection plan development
Colusa County APCD and Glenn County APCD	• Administer local air quality plans and coordinate with the California Air Resources Board

Notes:
APCD = Air Pollution Control District
CalEPA = California Environmental Protection Agency
CFR = Code of Federal Regulations
CSLC = California State Lands Commission
CVRWQCB = Central Valley Regional Water Quality Control Board
FERC = Federal Energy Regulating Commission
EIS = Environmental Impact Statement
ESA = Endangered Species Act
LEDPA = Least Environmentally Damaging Practicable Alternative
NAAQS = National Ambient Air Quality Standard
NMFS = National Marine Fisheries Service
NPDES = National Pollutant Discharge Elimination System
ROD = Record of Decision
SMARA = Surface Mining and Reclamation Act
SPCCP = spill prevention control and countermeasure plan
SWPPP = stormwater pollution prevention plan
USACE = United States Army Corps of Engineers
USEPA = U.S. Environmental Protection Agency
USFWS = U.S. Fish and Wildlife Service

The final EIR/EIS (FEIR/EIS), when finalized, will be used by the Authority and Reclamation when considering approval of the Project. All cooperating agencies and other federal, State, and local agencies with permitting or approval authority over any aspect of the proposed Project are expected to use the information contained in the FEIR/EIS to meet most, if not all, of their information needs to make decisions and/or issue permits.

Acquisition of the permits and approvals identified above in Table A1-1 above and by permits/anticipated level of effort/cost in Table A1-2 will require a variety of activities (depending on permit/approval) including:

- Initial project meetings and application review and input
- Interagency and lead permitting agency coordination and negotiation
- Field reviews (including resource delineations), evaluations, data collection and evaluation

- Biological resource surveys
- Application preparation and refinement
- GIS-based mapping
- Project facility pre-design and design
- Mitigation refinement and identification
- Hydraulic evaluation

Table A1-2 identifies the primary federal, state, and local permits and approvals and key activities anticipated associated with each. Anticipated level of effort/cost varies depending on the application requirements, necessary surveys and/or design evaluations/studies, and coordination. Level of effort and time required can vary substantially depending on agency jurisdiction, concerns, and policy. Costs for permit acquisition could in turn vary based on these factors and related agency information and survey/engineering information requests. As shown on Table A1-2, the anticipated required actions, documentation, and surveys (as appropriate) for each permit/approval are identified as separate tasks. Tasks include:

Permit Application and Fee

This task will include all activities required to develop the actual permit applications including specific information required by a given agency according to their jurisdiction. This task will also include the required filing and processing fees.

Project Description, Design Drawings, Maps and Figures

Activities under this task will include development of the overall project description specific to a given permit application and agency jurisdiction, as well as specifically required design drawings, maps, and figures. It is the Authority's intent to develop a generalized detailed project description (which will be in part taken from the EIR/EIS) as a "template" that will be used for all applications and amended/revised as necessary to eliminate redundant effort and make the most efficient use of Project funds. Specific information and/or drawings will be included as required by a given agency.

Surveys and Resources Reports

Required field reviews, surveys per specific agency protocols (e.g., wetland delineations per USACE requirements), and associated resource reports will be prepared as part of this task. Such surveys will be conducted in close coordination with the appropriate agency(s) and will be structured to address as many separate agency protocols and/or specific concerns as possible to minimize the need for additional field review and surveys. Similarly, resource reports indicating likely/observed species presence will be prepared, and will include all species and habitat observed, and acreage of impact anticipated to be impacted (temporary and permanent). Proposed minimization and mitigation measures including construction timing (both seasonal and time of day) as appropriate based on specific agency requirements and mitigation ratios will be identified.

Pre-application Meeting Coordination, Preparation, and Participation; Follow-up Requests and On-going Communication

This task will include all required coordination effort from the initial pre-application meeting to all meetings (including phone/on-line sessions) required during the review of the specific permit applications to support obtaining final approvals. This task will also include anticipated additional information development and clarification of project activities, operations, and potential impacts within the context of a given agency's jurisdiction.

Anticipated Field Evaluations Requiring Substantial Level of Effort

Among the primary activities required to gain a required approval is the necessary field excavation and evaluation to support the implementation of the anticipated activities likely to be specified by the Programmatic Agreement required per Section 106 of the National Historic Preservation Act. Table A1-2 identifies the level of effort/cost anticipated to conduct anticipated excavations/evaluations that will likely be required prior to initiation of construction within the entire project area. In addition, completing the necessary activities to support the federal and state ESA consultation process will require extensive coordination, review, studies, and mitigation plan development as indicated in Table A1-2. The potential for discovery of significant resources or sites during construction is addressed separately as part of the mitigation costs assumed as part of overall project implementation.

Anticipated Permit Application Preparation/Acquisition Schedule

Preparation of permit applications will occur concurrently with Project design. Those applications requiring sufficient project details, such as the California Department of Water Resources, Division of Safety of Dams approval of plans and specifications for the construction or enlargement of a dam or reservoir and the Central Valley Flood Protection Board encroachment permit for the proposed Delevan diversion/discharge facility. Permit application development and negotiation/acquisition is anticipated to range from a few months to over two years depending on the need for design detail as well as required information development (including surveys for some approvals) for a given permit/approval. Permit application development is anticipated to range from one month to up to one year for more complex applications. Those processes which are anticipated to potentially require multiple years of surveys (e.g., Section 106 and Section 7/Bald Eagle Preservation Act approvals) would involve longer timeframes. Permits with longer lead times due to required design detail or anticipated negotiation complexity are anticipated to take up to 2 years+ and include:

- SWRCB Water Rights
- USACE Section 404/10 Permit (and involvement in LEDPA evaluation and Section 408 approval)
- DWR Division of Safety of Dams Approval
- USFWS/NMFS/Reclamation Section 7 Endangered Species Act (ESA) Consultation (including Bald Eagle Preservation Act approval)
- CDFW California Endangered Species Act (CESA) Consultation
- Federal Energy Regulatory Commission License
- Advisory Council on Historic Preservation/State Office of Historic Preservation/Reclamation Section 106 Compliance

Permits/approvals with shorter lead times are anticipated to be those required by local counties, as well as approvals required from Caltrans and the Air Resources Board (including county approvals). Table A1-3 shows the anticipated key milestones associated with the required permitting effort.

Completion of Final EIR/EIS

Completion of the EIR/EIS will require the review of and response to federal, state, local agency and public comments on the document, the development of final draft, and the development of the state Notice of Determination and federal Record of Decision. It is anticipated given the scale of the proposed project, a wide range of comments from a variety of stakeholders will likely be received, some of which will likely require additional evaluation (within the bounds of the analyses included within the public draft EIR/EIS including potentially further evaluation of the proposed WSIP project operational approach).

Key tasks will include:

- Continued project team meetings and coordination with project participants
- Comment review and categorization
- Development of thematic and master responses
- Evaluation and refinement of analysis as required by comments (including operations associated with the proposed project)
- Figure and graphics revisions
- Development of administrative, pre-release, and final EIR/EIS
- Development of Notice of Determination and Findings and assistance in preparation of Record of Decision

All written and oral comments received during the public draft EIR/EIS review period will be identified, compiled, and responded to as appropriate. Comments will be categorized by similar issue area and comments requiring individual responses identified, including where thematic responses are necessary to respond to over-arching comments (if determined necessary). Responses to each comment category will be prepared with public and agency comments and responses assembled into a package clearly defining each comment and the corresponding response. All commenters and comments will be indexed according to the categorization process and tracked accordingly. An administrative final EIR/EIS will be developed that will include findings and conclusions, revisions, and clarification to the public draft EIR/EIS, the public and agency's comments and corresponding responses, and other information that may be required to adequately present technical information and data. A pre-release final EIR/EIS will be prepared in response to Authority team and participant review which will be subsequently revised as necessary to allow for issuance of the final EIR/EIS. It is assumed that the final EIR/EIS will be prepared in an errata format to the Public Draft EIR/EIS. The document will be used to support (and will be appropriately referenced) in the development of the CEQA Notice of Determination, and Findings, as well as the NEPA Record of Decision. The anticipated level of effort is estimated to be approximately $3 million. Actual costs depend on comments, and will be less if comments are less extensive and complex than expected (or greater if a larger number of complex comments are received than expected).

Table A1-2. Applicable Federal, State, and Local Permits and Approvals and Estimated Costs

Agency	Type of Permit or Approval	Regulated Activity	Authority	Required Actions, Documentation, and Surveys	Total Level of Effort
Federal Agency Permits and Approvals					
U.S. Army Corps of Engineers	Department of the Army Permit (Section 404 and 10)	Discharge of dredged or fill material into waters of the U.S. (including wetlands) - Section 404; Construction of any structure in or over navigable waters of the U.S., the excavation/ dredging or deposition of material in these waters, or any obstruction or alteration in navigable water - Section 10	Section 404 Clean Water Act (33 U.S.C. 1344); Section 10 of the Rivers and Harbor Act (33 U.S.C. 403)	Section 404/10 Pre-Construction Notification application package	**$3,000,000**
				Project description; engineering design drawings; maps and figures	
				Aquatic resources (wetlands and waters of the U.S.) delineation, CRAM evaluation, and aquatic resources delineation report	
				Section 401 Water Quality Certification application package	
				Pre-application meeting coordination, preparation, and participation; follow-up and ongoing communication	
U.S. Army Corps of Engineers	Department of the Army Permit (Section 408)	Any proposed project that may affect any existing USACE (and/or State Plan of Flood Control levee in the Central Valley and Delta)	Section 408 of the Rivers and Harbors Act (33 U.S.C. 408)	Section 408 Permit application package	**$2,500,000**
				Project description; design drawings; maps and figures	
				Hydrologic and Hydraulics System Performance Analysis	
				Geotechnical Analysis	
				Pre-application meeting coordination, preparation, and participation; follow-up and ongoing communication	
				Sediment Transport Modeling & Bathymetric Surveys	
U.S. Army Corps of Engineers/U.S. Environmental Protection Agency	LEDPA review	Review of LEDPA for issuance of an Individual Permit (Section 404) if required. Project could be relieved of LEDPA analysis if water-dependent determination is upheld.	Section 404(b)(1)	Section 404(b)(1) application package	**$1,100,000**
				Project description; design drawings; maps and figures	
				Alternatives Analysis	
				Pre-application meeting coordination, preparation, and participation; follow-up and ongoing communication	
Advisory Council on Historic Preservation/ State Office of Historic Preservation	Section 106 Review and Compliance	Federal undertaking and as part of consideration of a Section 404 permit by USACE	NHPA (36 CFR 800)	Consultation meeting coordination, preparation, and participation; follow-up and ongoing communication (includes review of USBR-prepared programmatic agreement and research design)	**$40,000,000**
		Complete cultural resources inventory for archaeological and built environment resources	in support of Section 106 compliance (and state regs)	record search; complete field survey; DPRs; technical reports	
		Tribal member involvement (compensation)		Tribal review and input	

Agency	Type of Permit or Approval	Regulated Activity	Authority	Required Actions, Documentation, and Surveys	Total Level of Effort
		Tribal remains repatriation			
		Other human remains/cemetery treatment, fees, etc.			
		Evaluation of archeological and tribal cultural resources that must be addressed prior to construction (potentially NHRP-eligible resources); ethnographic studies		Evaluation excavations and ethnographic study for entire project area and proposed features	
Reclamation/ U.S. Fish and Wildlife Service/National Marine Fisheries Service	Section 7 Consultation	Required for all approvals and funding provided by Reclamation Federal undertaking and as part of consideration of a Section 404 permit by USACE Essential Fish Habitat under Magnuson-Stevens Fisheries Conservation and Management Act Fish and Wildlife Coordination Act, 16 USC 661-667e	16 U.S.C. 1531 et seq.: 50 CFR 17, Sections 17.94-17.96 ESA	Section 404 Permit application package Consultation meeting coordination, preparation, and participation; follow-up requests and ongoing communication; necessary surveys (in addition to those required by USACE 404/10 and CDFW 2081 approval processes) Aquatic studies to support consultation. BA development assistance	**$7,300,000**
U.S. Fish and Wildlife Service	Bald Eagle Protection Act (typically addressed through Section 7 consultation)	Federal undertaking potentially impacting bald or golden eagle	16 U.S.C. 668-668d, 54 Stat. 250	Consultation meeting coordination, preparation, and participation; follow-up requests and ongoing communication; necessary surveys Golden eagle satellite telemetry studies	**$1,000,000**
U.S. Coast Guard	Navigability determination	Determination if proposed activities potentially affect river navigation	33 CFR 2.40	Consultation meeting coordination, preparation, and participation; follow-up requests and ongoing communication	**$50,000**
Bureau of Reclamation	Warren Act Contract	Storage and transportation of non-CVP water supplies through CVP water facilities	42 CFR 523	Consultation meeting coordination, modeling, preparation, and participation; follow-up requests and ongoing communication	**$400,000**
Federal Energy Regulatory Commission	Hydropower License	Authorizes the construction and operation of a hydroelectric project for a term of up to 50 years	Federal Power Act – 16 U.S.C. 791(a)-825r	FERC Pre-Application Document FERC Hydropower License (ILP) application package Project description; design drawings; maps and figures Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	**$8,000,000**

Agency	Type of Permit or Approval	Regulated Activity	Authority	Required Actions, Documentation, and Surveys	Total Level of Effort
State Agency Permits and Approvals					
California Department of Transportation	Encroachment Permits	Use of California rights-of-way for installation of pipelines along State freeways and roads	21 CCR 14.11.1–14.11.6	CalTrans Encroachment Permit application package and fee	**$400,000**
				Project description; design drawings; maps and figures	
				Biological resources reconnaissance survey and biological assessment	
				Aquatic resources (wetlands and waters of the U.S.) delineation and aquatic resources delineation report	
				Cultural resources literature search, pedestrian survey, and archaeological reconnaissance report	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
California Department of Transportation	Transportation Permit	Transport of heavy or oversized loads on State roads during construction	California Vehicle Code Section 35780; California Streets and Highway Code 117, 660–711	CalTrans Annual Transportation Permit application package (9 required throughout duration of construction) and fee	**$250,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
California State Lands Commission	Land Use Lease	Placement of fill or structures in navigable waterways or Section 16 or 36 lands (Water intake structures are typically exempt from this process but outfall may require approval)	California Public Resources Code Section 6000 et. seq.	State Lands Commission Lease application package (including survey information) and fee	**$300,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
				Following acquisition of lease: as-built drawings; surveys; internal and external inspection program, including structural evaluation and integrity assessment.	
Central Valley Flood Protection Board	Encroachment Permit	Encroachment onto/through state flood control facilities.	23 CCR encroachment permit	CVFPB Encroachment Permit 3615 and 3615a application package (including required mapping and deeds) and fee	**$900,000**
				Project description; design drawings; maps and figures	
				Hydrologic and Hydraulics System Performance Analysis	
				Section 408 Permit application package	
				Local Maintaining Agency endorsement and concurrence with USACE	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	

Agency	Type of Permit or Approval	Regulated Activity	Authority	Required Actions, Documentation, and Surveys	Total Level of Effort
State Water Resources Control Board	Water Rights Permit	Diversion of water from existing streamflow	California Water Code § 5101	Water Rights Permit application package (including fee)	**$6,000,000**
				Water Availability Analysis	
				Project description; design drawings; maps and figures; operations modeling; cooperative operations coordination	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
				Water Rights Hearings	
State Water Resources Control Board and Regional Water Quality Control Boards	General Construction Stormwater National Pollution Discharge Elimination System Permit	All stormwater discharges when clearing, grading, and excavation result in a land disturbance of 5 or more acres	CWA	Construction General Permit application package and fee	**$800,000**
				Project description; design drawings; maps and figures	
				Stormwater Pollution Prevention Plan	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
State Water Resources Control Board and Regional Water Quality Control Boards	Waste Discharge Requirements	Discharge of reclaimed water on land and to groundwater	Porter-Cologne Water Quality Act	Waste Discharge application package and fee	**$250,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
State Water Resources Control Board and Regional Water Quality Control Boards	Section 401 Water Quality Certification	Discharge of fill materials to waters of the U.S.	CWA	Section 401 Water Quality Certification application package and fee	**$1,000,000**
				Project description; design drawings; maps and figures	
				Biological resources reconnaissance survey and biological assessment	
				Aquatic resources (wetlands and waters of the U.S.) delineation and aquatic resources delineation report	
				Section 404 Pre-Construction Notification application package	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
California Department of Water Resources, Division of Safety	Approval of Plans and Specifications for the Construction or Enlargement of a	Dam or reservoir construction or enlargement	California Water Code Division 3, Dams and Reservoirs Parts 1 and 2	Approval of Plans and Specifications for the Construction or Enlargement of a Dam or Reservoir application package and fee ($5 million fee) - total of 14 structures subject to DSOD requirements	**$6,600,000**
				Project description; design drawings; maps and figures	

Agency	Type of Permit or Approval	Regulated Activity	Authority	Required Actions, Documentation, and Surveys	Total Level of Effort
of Dams	Dam or Reservoir			Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
California Occupational Safety and Health Administration	Permit for Buildings/ Structures, Scaffolding/ Falsework, Demolition, Trenches/ Excavations	Construction of trenches or excavations 5 feet or deeper and into which a person is required to descend. Construction or demolition of any building, structure, scaffolding, or falsework more than 3 stories high. The underground use of diesel engines in working mines and tunnels.	California Labor Code Section 6500	Buildings/Structures, Scaffolding/Falsework, Demolition, Trenches/Excavations Permit application package and fee	**$250,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
California Department of Fish and Wildlife	Streambed Alteration Agreement	Crossing of streams, rivers, or lakes (also for reservoirs, which interrupt streams)	Sections 1601–1603 of the California Fish and Game Code	Lake and Streambed Alteration Agreement Notification Package and fee	**$800,000**
				Project description; design drawings; maps and figures	
				Biological resources reconnaissance survey and biological assessment	
				Aquatic resources (wetlands and waters of the U.S.) delineation and aquatic resources delineation report	
				Hydrologic and Hydraulics System Performance Analysis	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
California Department of Fish and Wildlife	Section 2081 Incidental Take Permit	Potential adverse effects on State-listed endangered or threatened species or species proposed for State listing. Incidental take of State-protected species by a non-state entity.	Section 2081 California Fish and Game Code	Sections 2081 (b) and (c) Incidental Take Permit application package and fee	**$2,700,000**
				Project description; design drawings; maps and figures (Separate GIS maps assumed	
				Biological resources reconnaissance survey (assume CDFW protocol)	
				Mitigation Monitoring and Reporting Plan	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
NAHC/Local Tribes	AB 52 Consultations	Effects on tribal cultural resources	PRC 21080.3.1	Consultation meetings; coordination; development of mitigation measures	**$500,000**

Agency	Type of Permit or Approval	Regulated Activity	Authority	Required Actions, Documentation, and Surveys	Total Level of Effort
State Office of Historic Preservation	See Advisory Council on Historic Preservation under USACE	Potential adverse effects on State unique archaeological sites and historical resources	PRC 21083.2 & PRC 21084.1	Consultation meeting coordination, preparation, and participation; follow-up and ongoing communication	**$300,000**
Local Agency Permits and Approvals					
Colusa and Glenn County Air Pollution Control Districts	Authority to Construct, Permit to Operate, and Notification of Operation	Construction or operation of any non-exempt source of air contaminants; typically limited to stationary sources.	New Source Review regulations; Clean Air Act; New Source Review regulations; Clean Air Act; Glenn County Air Pollution Control District Article III, Sections 50 to 57; Colusa County Air Pollution Control District Regulation III, Rules 3.1 to 3.18.	Authority to Construct, Permit to Operate, and Notification of Operation application packages and fees (for each county)	**$200,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication, including annual inspection approach follow-up requests and communication	
Colusa and Glenn County Public Works Departments	Encroachment Permit	Use of local jurisdictions right-of-way to install pipeline across roadways	County ordinances	Encroachment Permit application packages and fees (for each county)	**$125,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
Colusa and Glenn County Public Works Departments	Transportation Permit	Transport of heavy or oversized loads on county roads	County ordinances	Transportation Permit application packages and fees (for each county)	**$150,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
Colusa and Glenn County Public Works Departments	Building Permit, Street Improvement Permit, and Grading Permit	Construction activities within the county	Uniform Building Codes, as adopted	Building Permit, Street Improvement Permit, and Grading Permit application packages and fees (for each county)	**$200,000**
				Project description; design drawings; maps and figures	
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
Colusa County Planning Department	General Plan Amendments, and/or Zoning Amendments	Changes to zoning or General Plan designations	County Zoning Code and General Plan	Major Use Permits, Tentative Parcel Maps, Tentative Subdivision Maps, General Plan Amendments, and/or Zoning Amendments application package and fee	**$100,000**
				Project description; design drawings; maps and figures	

Agency	Type of Permit or Approval	Regulated Activity	Authority	Required Actions, Documentation, and Surveys	Total Level of Effort
				Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
Estimated Cost for Permits and Approvals (includes associated required engineering drawings/information)					**$85,175,000**
Project Management/Oversight/Review (assume 15%)					**$12,776,000**
SUBTOTAL					**$97,951,000**
Sites Project Authority/U.S. Bureau of Reclamation	*Completion of Final EIR/EIS*	*Potential impacts to the environment associated with a state, local, or federal action/project*	*PRC Section 21000 et seq./Public Law 91-190, 42 U.S.C. 4321-4347 as amended*	*Review and respond to comments*	**$3,000,000**
				Conduct quantitative analysis (e.g., modeling)	
				Prepare final EIS/EIR, meeting coordination, preparation, and participation; follow-up requests and ongoing communication	
Sunk Costs (Draft EIR/S – excludes all WSIP application support)					**$2,400,000**
TOTAL					**$103,351,000**

Table A1-3. Applicable Federal, State, and Local Permits and Approvals Acquisition Timeframes/Schedule (June 2018 Start Date Assumed)

Agency	Type of Permit or Approval	Required Actions, Documentation, and Surveys	Duration (Months)	Total Task Duration (Months/ Anticipated Completion Date)
Federal Agency Permits and Approvals				
U.S. Army Corps of Engineers	Department of the Army Permit (Section 404 and 10)	Section 404/10 Pre-Construction Notification application package	3	24 (June 2020)
		Project description; engineering design drawings; maps and figures	6	
		Aquatic resources (wetlands and waters of the U.S.) delineation, CRAM evaluation, and aquatic resources delineation report	9	
		Section 401 Water Quality Certification application package	0	
		Pre-application meeting coordination, preparation, and participation; follow-up and ongoing communication	24	
U.S. Army Corps of Engineers	Department of the Army Permit (Section 408)	Section 408 Permit application package	9	24 (June 2020)
		Project description; design drawings; maps and figures	8	
		Hydrologic and Hydraulics System Performance Analysis	9	
		Geotechnical Analysis	9	
		Pre-application meeting coordination, preparation, and participation; follow-up and ongoing communication	24	
		Sediment Transport Modeling & Bathymetric Surveys	9	
U.S. Army Corps of Engineers/U.S. Environmental Protection Agency	LEDPA review	Section 404(b)(1) application package	6	18 (January 2020)
		Project description; design drawings; maps and figures	6	
		Alternatives Analysis	6	
		Pre-application meeting coordination, preparation, and participation; follow-up and ongoing communication	18	
Advisory Council on Historic Preservation/ State Office of Historic Preservation	Section 106 Review and Compliance	Consultation meeting coordination, preparation, and participation; follow-up and ongoing communication (includes review of USBR-prepared Programmatic Agreement [PA] and research design)	36	36 (June 2021 receive final PA; necessary excavations continue based on approved research design in PA)
		Record search; complete initial field survey; DPRs; technical reports	24	
		Tribal review and input	36	
		Evaluation excavations and ethnographic study for entire project area and proposed features	36	
Reclamation/U.S. Fish and Wildlife Service/National Marine Fisheries Service	Section 7 Consultation	Section 404 Permit application package	0	24 (June 2020)
		Consultation meeting coordination, preparation, and participation; follow-up requests and ongoing communication; necessary surveys (in addition to those required by USACE 404/10 and CDFW 2081 approval processes)	24	
		BA development assistance	12	
U.S. Fish and Wildlife Service	Bald Eagle Protection Act (typically addressed through Section 7 consultation)	Consultation meeting coordination, preparation, and participation; follow-up requests and ongoing communication; necessary surveys	24	24 (June 2020)
		Golden eagle satellite telemetry studies	24	
U.S. Coast Guard	Navigability	Consultation meeting coordination, preparation, and participation; follow-up requests	9	9 (March 2019)

Agency	Type of Permit or Approval	Required Actions, Documentation, and Surveys	Duration (Months)	Total Task Duration (Months/ Anticipated Completion Date)
	determination	and ongoing communication		
Bureau of Reclamation	Warren Act Contract	Consultation meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	18 (January 2020)
Federal Energy Regulatory Commission	Hydropower License	FERC Pre-Application Document	4	120 (June 2028)
		FERC Hydropower License (ILP) application package	12	
		Project description; design drawings; maps and figures	12	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	12	
State Agency Permits and Approvals				
California Department of Transportation	Encroachment Permits	CalTrans Encroachment Permit application package and fee	0	18 (January 2020)
		Project description; design drawings; maps and figures	6	
		Biological resources reconnaissance survey and biological assessment	0	
		Aquatic resources (wetlands and waters of the U.S.) delineation and aquatic resources delineation report	0	
		Cultural resources literature search, pedestrian survey, and archaeological reconnaissance report	0	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
California Department of Transportation	Transportation Permit	CalTrans Annual Transportation Permit application package (9 required throughout duration of construction) and fee	9	18 (January 2020)
		Project description; design drawings; maps and figures	9	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
California State Lands Commission	Land Use Lease	State Lands Commission Lease application package (including survey information) and fee	9	18 (January 2020)
		Project description; design drawings; maps and figures	9	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	12	
		Following acquisition of lease: as-built drawings; surveys; internal and external inspection program, including structural evaluation and integrity assessment.	18	
Central Valley Flood Protection Board	Encroachment Permit	CVFPB Encroachment Permit 3615 and 3615a application package (including required mapping and deeds) and fee	9	24 (June 2020)
		Project description; design drawings; maps and figures	9	
		Hydrologic and Hydraulics System Performance Analysis	12	
		Section 408 Permit application package	12	
		Local Maintaining Agency endorsement and concurrence with USACE	12	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	24	

Agency	Type of Permit or Approval	Required Actions, Documentation, and Surveys	Duration (Months)	Total Task Duration (Months/ Anticipated Completion Date)
State Water Resources Control Board	Water Rights Permit	Water Rights Permit application package (including fee)	12	36 (June 2021)
		Water Availability Analysis	12	
		Project description; design drawings; maps and figures; operations modeling; cooperative operations coordination	12	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	24	
		Water Rights Hearings	12	
State Water Resources Control Board and Regional Water Quality Control Boards	General Construction Stormwater National Pollution Discharge Elimination System Permit	Construction General Permit application package and fee	9	18 (January 2020)
		Project description; design drawings; maps and figures	9	
		Stormwater Pollution Prevention Plan	12	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
State Water Resources Control Board and Regional Water Quality Control Boards	Waste Discharge Requirements	Waste Discharge application package and fee	9	18 (January 2020)
		Project description; design drawings; maps and figures	9	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
State Water Resources Control Board and Regional Water Quality Control Boards	Section 401 Water Quality Certification	Section 401 Water Quality Certification application package and fee	9	18 (January 2020)
		Project description; design drawings; maps and figures	9	
		Biological resources reconnaissance survey and biological assessment	0	
		Aquatic resources (wetlands and waters of the U.S.) delineation and aquatic resources delineation report	0	
		Section 404 Pre-Construction Notification application package	0	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
California Department of Water Resources, Division of Safety of Dams	Approval of Plans and Specifications for the Construction or Enlargement of a Dam or Reservoir	Approval of Plans and Specifications for the Construction or Enlargement of a Dam or Reservoir application package and fee ($5 million fee)	48	48 (August 2021)
		Project description; design drawings; maps and figures	18	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	36	
California Occupational Safety and Health Administration	Permit for Buildings/ Structures, Scaffolding/ Falsework, Demolition, Trenches/ Excavations	Buildings/Structures, Scaffolding/Falsework, Demolition, Trenches/Excavations Permit application package and fee	9	18 (January 2020)
		Project description; design drawings; maps and figures	9	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
California Department of Fish and Wildlife	Streambed Alteration Agreement	Lake and Streambed Alteration Agreement Notification Package and fee	9	24 (June 2020)
		Project description; design drawings; maps and figures	9	
		Biological resources reconnaissance survey and biological assessment	18	
		Aquatic resources (wetlands and waters of the U.S.) delineation and aquatic resources	18	

Agency	Type of Permit or Approval	Required Actions, Documentation, and Surveys	Duration (Months)	Total Task Duration (Months/ Anticipated Completion Date)
		delineation report		
		Hydrologic and Hydraulics System Performance Analysis	0	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	24	
California Department of Fish and Wildlife	Section 2081 Incidental Take Permit	Sections 2081 (b) and (c) Incidental Take Permit application package and fee	12	24 (June 2020)
		Project description; design drawings; maps and figures (Separate GIS maps assumed	12	
		Biological resources reconnaissance survey (assume CDFW protocol)	18	
		Mitigation Monitoring and Reporting Plan	18	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	24	
NAHC/Local Tribes	AB 52 Consultations	Consultation meetings; coordination; development of mitigation measures	24	24 (June 2020)
State Office of Historic Preservation	See Advisory Council on Historic Preservation under USACE	Consultation meeting coordination, preparation, and participation; follow-up and ongoing communication	24	24 (June 2020)
Local Agency Permits and Approvals				
Colusa and Glenn County Air Pollution Control Districts	Authority to Construct, Permit to Operate, and Notification of Operation	Authority to Construct, Permit to Operate, and Notification of Operation application packages and fees (for each county)	12	18 (January 2020)
		Project description; design drawings; maps and figures	12	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication, including annual inspection approach follow-up requests and communication	18	
Colusa and Glenn County Public Works Departments	Encroachment Permit	Encroachment Permit application packages and fees (for each county)	6	12 (June 2019)
		Project description; design drawings; maps and figures	6	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	12	
Colusa and Glenn County Public Works Departments	Transportation Permit	Transpiration Permit application packages and fees (for each county)	12	18 (January 2020)
		Project description; design drawings; maps and figures	12	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
Colusa and Glenn County Public Works Departments	Building Permit, Street Improvement Permit, and Grading Permit	Building Permit, Street Improvement Permit, and Grading Permit application packages and fees (for each county)	12	18 (January 2020)
		Project description; design drawings; maps and figures	12	
		Pre-application meeting coordination, preparation, and participation; follow-up requests and ongoing communication	18	
Colusa County Planning Department	General Plan Amendments, and/or Zoning Amendments	Major Use Permits, Tentative Parcel Maps, Tentative Subdivision Maps, General Plan Amendments, and/or Zoning Amendments application package and fee	12	18 (January 2020)
		Project description; design drawings; maps and figures	12	
		Pre-application meeting coordination, preparation, and participation; follow-up	18	

Agency	Type of Permit or Approval	Required Actions, Documentation, and Surveys	Duration (Months)	Total Task Duration (Months/ Anticipated Completion Date)
		requests and ongoing communication		
Sites Project Authority/U.S. Bureau of Reclamation	Completion of Final EIR/EIS	Review and respond to comments	5	10 months (from receipt of public comments)
		Conduct quantitative analysis (e.g., modeling - concurrent with response to comments))	5	
		Prepare final EIS/EIR, meeting coordination, preparation, and participation; follow-up requests and ongoing communication	5	

Notes:
AB = Assembly Bill
BA = Biological Assessment
CCR = California Code of Regulations
CDFW = California Department of Fish and Wildlife
CFR = Code of Federal Regulations
CRAM = California Rapid Assessment Method
CVFPB = Central Valley Flood Protection Board
CWA = Clean Water Act
DPR = Department of Parks and Recreation
DSOD = Divisions of Safety of Dam
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
FERC = Federal Energy Regulating Commission
GIS = Geographic Information System
ILP = Integrated Licensing Process
LEDPA = Least Environmentally Damaging Practicable Alternative
NAHC = Native American Heritage Commission
NHPA = National Historic Preservation Act
NHRP = National Register of Historic Places
PRC = Public Resources Code
U.S.C. = United States Code
USACE = United States Army Corps of Engineers
USBR = U.S. Bureau of Reclamation
WSIP = Water Storage Investment Program

<table>
<tr><th colspan="9">WSIP Data and Information Summary Table: General Application Questions for Water Quality Priorities</th></tr>
<tr><td colspan="9">Instructions: This table must be used (only once) for each project. Please provide responses below, regardless of priorities claimed, for the overall project. If the information varies based on the claimed priority(ies), explain the variations. Attach up to three (3) additional pages if more space is needed.</td></tr>
<tr><td colspan="9">Check (x) all priorities that the project would address and realize (i.e., check all claimed priorities):</td></tr>
<tr><td>Priority 1: Temperature</td><td>Priority 2: Dissolved Oxygen</td><td>Priority 3: Nutrients</td><td>Priority 4: Mercury</td><td>Priority 5: Salinity</td><td>Priority 6: Groundwater</td><td>Priority 7: Delta Tributary Flows</td><td>Priority 8: Demand on Delta</td><td>Priority 9: Basic Human Needs</td></tr>
<tr><td>X</td><td></td><td></td><td></td><td></td><td>X</td><td>X</td><td></td><td>X</td></tr>
<tr><td colspan="9">1. Identify the current conditions date (i.e., year) that is used within the application. Current conditions must be based on the date (year) of the CEQA Notice of Preparation for the project or subsequently revised information used to describe existing conditions. The current condition date must be used consistently throughout the water quality priorities application section.</td></tr>
<tr><td colspan="9">An updated CEQA Notice of Preparation for the Sites Reservoir Project was released in February 2017. The current conditions date used in the analyses for the application was based on the DWR Delivery Capability Report and base scenario model released in July 2015. The year 2015 was used for current conditions because the Delivery Capability Report and base scenario model the most recent and best data available for the analysis.</td></tr>
<tr><td colspan="9">2. Briefly describe where the project would occur. Attach a map that shows the project area.</td></tr>
<tr><td colspan="9">The Sites Reservoir would be constructed in Antelope Valley, approximately 10 miles west of the town of Maxwell. Figure 2-1 in in Sites_A3 Project Description uploaded under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB shows the Sites Reservoir footprint. Operation of the proposed reservoir would be in cooperation with the operations of the existing water management system in California, especially the existing Central Valley Project (CVP) and State Water Project (SWP) system facilities, to facilitate delivery and maximize the potential for a wide range of benefits. Water provided by the project would be used and managed within Sites Participant’s service areas. Figures A.6-1 through A.6-3 provided in Sites_ A6C Groundwater Basins depict the general service areas for Sites Participants under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.</td></tr>
<tr><td colspan="6">Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, map number, etc.).</td><td colspan="3">Application Reference:
See Figure 2-1 in Sites_A3 Project Description uploaded as an attachment under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.

See Figures 6-1A, 6-1B and 6-1C on pages 6-2 through 6-4 in Chapter 6, “Surface Water Resources” of the EIR/EIS located online here: [http://sitesproject.org/information/DraftEIR-EIS]

Figures A.6-1 through A.6-3 provided in Sites_A6C Groundwater Basins under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.</td></tr>
<tr><td colspan="9">3. Briefly describe the area that the project would improve. Attach a map that shows the improvement area.</td></tr>
<tr><td colspan="9">The improvement areas for the project vary depending on the type of water quality benefit provided. A description of the improvement area by the priorities the project would address is further discussed below:

• Priority 1: Temperature. With cooperative operations with Reclamation and DWR, the project would increase coldwater pool storage in Shasta Lake, Lake Oroville, and Folsom Lake and improve temperatures in the Sacramento and American Rivers during certain months at specific compliance points, particularly in Below Normal, Dry, and Critical water years. The areas of temperature improvement for these waterways are shown on Figures Water Quality P – 1a and P – 1b.

• Priority 6: Groundwater. The project would assist with improving chronic lowering of water levels and reduction of groundwater storage within the groundwater basins associated with Sites Participants. Incidental water quality and subsidence improvements may also result with increases in storage and water levels. Figure Water Quality P – 6a show areas that would receive surface water deliveries as a result of the project and the potential groundwater improvement area. Benefits could be identified in areas where surface water would be replacing, or substantially supplementing, groundwater as a source of water supply in areas with groundwater basins in overdraft. It is anticipated that the groundwater basins located within the Sacramento Valley Hydrologic Region would receive the greatest benefits from the project as a result of the volume of water that would be delivered as part of the project.

• Priority 7: Delta Tributary Flows. Loss of connection to floodplain habitat on the Sacramento River has affected the food web in the Delta. By making late summer releases to the toe drain for the Yolo Bypass, Sites Reservoir can support phytoplankton/zooplankton populations in the Lower Sacramento River. This would provide additional food for Delta smelt and other Delta species.</td></tr>
</table>

WSIP Data and Information Summary Table: General Application Questions for Water Quality Priorities	
• **Priority 9: Basic Human Needs.** The project would provide supplemental surface water supplies to Municipal and Industrial (M&I) water providers with disadvantaged communities located within their service areas. Incidental water quality and subsidence improvements may also result with increases in storage and water levels. Figure Water Quality P – 6a show the potential groundwater improvement area. It is anticipated that the groundwater basins located within the Sacramento Valley Hydrologic Region would receive the greatest benefits from the project.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, map number, etc.).	Application Reference: Figures Water Quality P – 1a and P – 1b. (Sites_A2 WQ Maps) Figure Water Quality P – 6a (Sites_A2 WQ Maps) Figures Water Quality P – 9a, through P– 9c, (Sites_A2 WQ Maps)
4. Briefly describe the existing and potential beneficial uses for the waters affected by the project (cite the appropriate water quality control plan(s) adopted by the California State and Regional Water Boards, or other applicable and reliable sources).	
Water quality objectives for waters affected by the project are specified in the basin plans for the North Coast, Central Valley, Tulare Lake, and the San Francisco Bay regions. Water quality objectives for water temperature are also specified in the SWRCB Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California. SWRCB Water Rights Orders 90-05 and 91 and the 2009 NMFS biological opinion also include requirements related to storage and conveyance facility operations in order to achieve temperature compliance objectives. The water quality objectives and beneficial uses are further described in Table 7.1 on pages 7-1 to 7-3 in Chapter 7, “Surface Water Quality” of the EIR/EIS.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Table 7.1 pages 7-1 to 7-3 in Chapter 7, “Surface Water Quality” of the EIR/EIS located online here: [http://sitesproject.org/information/DraftEIR-EIS]
5. Briefly describe any significant adverse water quality impacts and mitigation measures associated with the project.	
In general, the water quality impacts associated with the Sites Reservoir Project would be similar to those analyses for Alternative D in Chapter 7, “Surface Water Quality” of the EIR/EIS. Sites Reservoir operations would involve the diversion of Sacramento River water only when flow monitoring indicates that excess bypass flows are present in the river due to storm event flows. Sites Reservoir Project operations would also be coordinated with SWP and CVP operations. Consequently, all water quality compliance obligations would be met as part of operations associated with the CVP and SWP facilities. In general, the Sites Reservoir operational strategy is to maximize the potential benefits of Sites Reservoir while not adversely affecting the CVP and SWP’s ability to meet existing system regulatory requirements including established water quality objectives, biological opinions, water right orders, and instream flow requirements. Several existing and additional proposed Sacramento River bypass flow criteria were assumed at specified locations. These flow criteria are designed to make certain only excess water would be diverted into Sites Reservoir to maintain and protect existing water quality compliance and downstream water uses. As a mitigation measure to more fully avoid and minimize entrainment and impingement of juvenile salmonids and other poor-swimming aquatic species, Sacramento River diversions to Sites Reservoir would also be restricted to protect fish migration during naturally occurring, storm-induced, pulse flow events in the Sacramento River. The proposed pulse protection period would extend from October through May to address outmigration of juvenile winter-, spring-, fall- and late-fall-run Chinook salmon, as well as steelhead. Pulse flows during this period would provide flow continuity between the upper and lower Sacramento River to support fish migration. It is recognized that research regarding the benefits of pulse flows is ongoing, and further research and adaptive management will be required to develop and refine a pulse flow protection strategy for fish migration. No other significant adverse water quality impacts were identified associated with Sites Reservoir operations. Under the proposed WSIP application operations plan, enhanced flows to Yolo Bypass would be released through the Colusa Basin Drain and Knights Landing Ridge Cut during summer and fall months to help increase productivity in the Yolo Bypass in the lower Cache Slough and Sacramento River. Adaptive management and monitoring strategies to minimize adversely affect water quality impacts associated with enhanced flows within the Yolo Bypass and its receiving waters in the Sacramento-San Joaquin Delta would also be implemented.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Chapter 7, “Surface Water Quality” of the EIR/EIS. [http://sitesproject.org/information/DraftEIR-EIS]

WSIP Data and Information Summary Table: General Application Questions for Water Quality Priorities	
6. Identify any impediments or circumstances that may reduce the project's claimed improvements. Include a description of how those impediments or circumstances may reduce the improvement as evaluated by the applicable REVs. Impediments may include: waste or wastewater discharges, water rights/overdiversion, or other potential factors.	
Initial water quality improvements are expected in year 2028 and full benefits are expected by 2030 depending on hydrologic condition. Achieving full benefits would require water supplies from one or more of the following: • State of California Water Rights for "Sites Reservoir" • Riparian Water Rights in the Inundation Area Further coordination between the Authority, the State Water Resources Control Board and other cooperating agencies will be required to determine the applicability and feasibility of using any of these water rights approaches. Water rights issues could potentially delay the immediacy of the realization of full benefits (REV 7) of the project by 2030. Projected groundwater basin benefits are currently an approximation based on interested JPA investors (also referred to as Sites Participants). The actual distribution of water supplies would vary based on the final investors for the project. In addition, each investor may manage supplemental water supplies differently, which may result in greater than expected magnitude and spatial scale of benefits (REV 2 and REV 3, respectively) in one region over another region. Projected benefits provided by Sites Reservoir are largely dependent on the capability to divert excess Sacramento River water into the reservoir, which is influenced by changing climate conditions. The operational flexibility of Sites Reservoir allows for the delivery of water for public benefits where and when it is needed most, dependent on changing climate conditions and adaptation to future conditions to provide sustained public benefits. For further information refer to the Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Chapter 6 of the Federal Feasibility Report [https://www.sitesproject.org/information/FeasibilityReport] Sites_A1 Feasibility under the FEASIBILITY AND IMPLEMENTATION RISK TAB Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
7. Does the project improve conditions in a groundwater basin where undesirable results (as defined in Water Code 10721(x)(1-6)) caused by extraction have occurred? If yes, describe in applicable priority tables.	
The project would improve groundwater levels and storage in adjudicated basins as well as designated medium and high priority basins under SGMA, including those in critical overdraft. Supplemental water supplies delivered during certain times of the year could result in reduction in decreased use of groundwater through conjunctive use operations by its participants. These operations would increase surface water deliveries and change the timing of available surface and groundwater supplies by providing Sites participants with surface water for storage, use or replenishment (typically in above normal and wet year conditions) and then recovering a portion of the water during periods of water supply shortages (in dry and critical year conditions). These improvements are further discussed under Sites_A1 WQ Priority 6 under the PHYSICAL PUBLIC BENEFITS TAB.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
8a. Is there an adaptive management and monitoring plan for the project? □ None X Draft □ Final	
8b. Briefly describe the adaptive management and monitoring program framework for the project.	
The Adaptive Management and Monitoring Framework for the project has been developed to identify measurable objectives, performance measures, thresholds, and triggers to meet operational objectives and desired ecosystem benefits. Because uncertainties remain about natural hydrologic variations, project operations, and ecological responses, the Sites Project is being designed with a range of operational scenarios to evaluate the effectiveness of different management actions and evaluate strategies for resilience to climate change. These are further described in the Operations Plan. A monitoring program would also be implemented to collect data necessary to operate and evaluate the Project's success. Key data monitoring elements would include the following: • Physical Habitat – diversion (inflow) and release flow rates, reservoir depth, snags, submerged vegetation, and other habitat elements; • Water Quality – salinity, temperature, dissolved oxygen, nutrients; • Aquatic Biota – algae, plankton, invertebrates, fish community (species, distribution, abundance);	

WSIP Data and Information Summary Table: General Application Questions for Water Quality Priorities	
• Birds – species, abundance and distribution, use of habitat features, breeding and nesting, sick or dead birds; and • Contaminants – contaminants of concern concentrations in water, sediment, terrestrial or avian biota. Monitoring efforts would be guided by the specific Sites Project objectives and desired outcomes and would focus on the most informative, efficient, and cost-effective indicators and methods. Types of potential indicators include: • Triggers for real-time diversion and release operations – flow rates, anticipated water year type, storage in Sites and other reservoirs, storm events, fish migration data. • Performance measures – attributes of target species and their habitat, such as physical habitat conditions, water quality in Sites and elsewhere in the Sacramento River/Delta system, and distribution, abundance and composition of aquatic invertebrates, fish and birds; and • Threat indicators – potential for floods or droughts, contaminants of concern, mosquitoes and other vectors, disease outbreaks on Sites Reservoir or elsewhere. A preliminary Adaptive Management Framework is included as part of Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. A more detailed plan and decision-making process will be developed in future phases of the Sites Project.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Emphasis on the Adaptive Management Framework section.

9. Check (x) the climate change risk factor(s) below that were considered in the project siting and design, and identify any that are not applicable (N/A).

Sea level rise and storm surge	Temperature changes	Changing precipitation and runoff	Ocean acidification	Low oxygen waters	Wildfires	Hydrologic variability and extreme events	
						Drought	Flooding
N/A	X	X	N/A	N/A	N/A	X	X

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

WSIP Data and Information Summary Table: Water Quality Priorities 1-5 (Water Bodies Not Meeting Standards)

Priorities 1-5 (summarized): Improve conditions in surface water bodies that are not meeting water quality standards for: (1) temperature; (2) dissolved oxygen; (3) nutrients; (4) mercury; and/or (5) salinity conditions (as described in Priority 5).

Instructions: This table must be used for projects claiming water quality priorities 1-5 (identified below). Please check the claimed priority and provide REV responses (data and information) below, as appropriate. Descriptions and clarifying information should provide the rationale for the claimed improvements (e.g., how the values were determined, etc.).

If the project claims more than one of the priorities below, please complete this table separately for each claimed priority.

Check (x) the claimed priority being addressed by this table (check only one per table):

Priority 1: Temperature	Priority 2: Dissolved Oxygen	Priority 3: Nutrients	Priority 4: Mercury	Priority 5: Salinity
X				

For the priority checked above, please respond to the following requests for data and information by filling in the fields below. Attach up to three (3) additional pages if more space is needed.

Describe how the project would improve conditions in surface water bodies or surface water body segments that are not meeting water quality standards for the parameter or constituent selected above.

The project would increase coldwater pool storage in Shasta Lake, Lake Oroville, and Folsom Lake and improve temperatures in the Sacramento and American Rivers during certain months at specific compliance points, particularly in Below Normal, Dry, and Critical water years. Temperature benefits provided with the project would assist to achieve compliance with 56°F water quality standard in September during critical water years for the Sacramento River below Keswick and Sacramento River at Red Bluff, in August during critical water years in the Sacramento River at Bonny view, and in August during dry water years at Balls Ferry.

Refer to Sites_A2 Documentation WQ Priority 1 “WSIP Data and Information Summary Table: Water Quality Priorities 1 – Temperature” for a summary of temperatures modeling results, uploaded under the PHYSICAL PUBLIC BENEFITS TAB.

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Documentation WQ Priority 1, “WSIP Data and Information Summary Table: Water Quality Priorities 1 – Temperature” uploaded under the PHYSICAL PUBLIC BENEFITS TAB.

Applicable water quality standards* for surface water bodies that would be improved by the project:

Surface Water Body Name (by segment as applicable)	Time Period (days/months in year when standard applies)	Water Quality Standard Value and Unit	Source Citation
Sacramento River – Shasta Dam	Daily	56°F	SWRCB Orders 90-5 and 91-1
Keswick Dam to Hamilton City	Daily	56°F	Central Valley Regional Water Quality Control Board Basin Plan
Hamilton City to the I Street Bridge	Daily	68°F	Central Valley Regional Water Quality Control Board Basin Plan
Sacramento River at Clear Creek		57°F	2015 Final Sacramento River Temperature Management Plan
Sacramento River - Balls Ferry Bridge to Bend Bridge	May 15 – October 31	56°F	2009 NMFS BO
Sacramento River – Red Bluff Diversion Dam	-	56°F	SWRCB Orders 90-5 and 91-1
Trinity River – Lewiston Dam to Douglas City Bridge	July 1 – September 14	60°F	North Coast Regional Water Quality Control Board Basin Plan
Trinity River – Lewiston Dam to Douglas City Bridge	September 15 – October 1	56°F	North Coast Regional Water Quality Control Board Basin Plan
Trinity River – Lewiston Dam to Douglas City Bridge	October 1 – December 31	56°F	North Coast Regional Water Quality Control Board Basin Plan
American River – Watt Ave	Daily	68°F	2009 NMFS BO

*For the purpose of this table, water quality standards means numeric or narrative water quality objectives in water quality control plans adopted by the California State and Regional Water Boards, and water quality criteria promulgated by the USEPA for California under Clean Water Act section 303(c) (e.g., California Toxics Rule).

WSIP Data and Information Summary Table: Water Quality Priorities 1-5 (Water Bodies Not Meeting Standards)			
REV 2: Magnitude			
Provide the parameter or constituent values (including units) for each surface water body or surface water body segment that would be improved by the project in the following table. Indicate any time periods associated with applicable water quality standards.			
Surface Water Body Name (by segment as applicable)	Current Condition**	Expected Without-Project Condition 2030	Expected With-Project Condition 2030
Trinity River below Lewiston (July-Sept Avg.) - Critical	53.7°F	53.8°F	53.5°F
Sacramento River – Below Keswick (July-Sept Avg.) - Dry	52.0°F	53.3°F	53.2°F
Sacramento River – Below Keswick (July-Sept Avg.) - Critical	54.1°F	55.6°F	54.9°F
Sacramento River – Bonnyview (July-Sept Avg.)***	52.5°F	53.6°F	53.6°F
Sacramento River – Bonnyview (July-Sept Avg.) - Dry	52.9°F	54.3°F	54.1°F
Sacramento River – Bonnyview (July-Sept Avg.) - Critical	55.1°F	56.5°F	55.9°F
Sacramento River – Balls Ferry (July-Sept Avg.)***	54.1°F	55.2°F	55.2°F
Sacramento River – Balls Ferry (July-Sept Avg.) - Dry	54.5°F	56.0°F	55.7°F
Sacramento River – Balls Ferry (July-Sept Avg.) - Critical	56.6°F	58.1°F	57.5°F
Sacramento River – Jelly's Ferry (July-Sept Avg.)***	55.4°F	56.6°F	56.5°F
Sacramento River – Jelly's Ferry (July-Sept Avg.) - Dry	55.8°F	57.3°F	57.0°F
Sacramento River – Jelly's Ferry (July-Sept Avg.) - Critical	57.9°F	59.4°F	58.8°F
Sacramento River – Bend Bridge (July-Sept Avg.)***	56.5°F	57.6°F	57.6°F
Sacramento River – Bend Bridge (July-Sept Avg.) - Dry	56.9°F	58.5°F	58.1°F
Sacramento River – Bend Bridge (July-Sept Avg.) - Critical	58.9°F	60.3°F	59.7°F
Sacramento River – Red Bluff (July-Sept Avg.)***	58.1°F	59.3°F	59.1°F
Sacramento River – Red Bluff (July-Sept Avg.) - Dry	58.5°F	59.3°F	59.1°F
Sacramento River – Red Bluff (July-Sept Avg.) - Critical	60.5°F	60.2°F	59.8°F
American River at Nimbus (July-Sept Avg.)***	62.4°F	67.1°F	66.3°F
American River at Nimbus (July-Sept Avg.) - Dry	63.6°F	67.0°F	66.6°F
American River at Nimbus (July-Sept Avg.) - Critical	65.8°F	68.9°F	68.5°F
American River at Watt Ave (July-Sept Avg.)***	68.0°F	70.6°F	69.9°F
American River at Watt Ave (July-Sept Avg.) - Dry	68.1°F	70.7°F	69.9°F
American River at Watt Ave (July-Sept Avg.) - Critical	70.7°F	73.6°F	73.1°F
American River at Mouth (July-Sept Avg.)***	68.4°F	73.1°F	72.6°F
American River at Mouth (July-Sept Avg.) - Dry	70.0°F	73.5°F	73.4°F
American River at Mouth (July-Sept Avg.) - Critical	73.3°F	77.0°F	76.5°F
**For the purpose of this table, "current condition" means conditions measured or estimated at the year of the CEQA Notice of Preparation (NOP) for the project or subsequently revised information used to describe existing conditions. ***Results presented are a long-term average over the full 82-year simulation period for all water year types.			
Provide additional clarifying information below, as needed.			
See Sites_A1 WQ Priority 1, "WSIP Data and Information Summary Table: Water Quality Priorities 1 –Temperature" for a summary of temperatures modeling results.			
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A1 WQ Priority 1, "WSIP Data and Information Summary for Water Quality Priorities 1 – Temperature" uploaded under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB. Sites_A6.D Modeling Results Compendium, "Temperature Results WSIP 2030 with Project vs without Project" uploaded under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB. Sites_A6.D Modeling Results Compendium, "Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries" uploaded under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB. Sites_A6.D Modeling Results Compendium, "Temperature Results DCR 2015 with Project vs DCR 2015 without Project" uploaded under ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.		

WSIP Data and Information Summary Table: Water Quality Priorities 1-5 (Water Bodies Not Meeting Standards)	
REV 3: Spatial Scale	
Provide the geographical extent of the improvement for each surface water body or water body segment that would be improved by the project. Attach a map of the improvement area.	
Surface Water Body Name (by segment as applicable)	Geographical Extent Improved in 2030 (e.g., number of river miles improved)
Sacramento River	Approximately 59 river miles of the Sacramento River would be improved with the implementation of the Sites Reservoir Project downstream from Keswick Dam (River Mile 302) to the Red Bluff Diversion Dam (River Mile 243). Figure Water Quality P-1a shows the improvement area for the Sacramento River.
American River	Approximately 30 river miles of the American River would be improved with the implementation of the Sites Reservoir Project downstream from Folsom Dam to the mouth of the American River. Figure Water Quality P-1c shows the improvement area for the American River.
Provide additional clarifying information below, as needed.	
See Sites_A2 WQ Maps, Figures P-1a and P-1b for temperature maps depicting the potential area of improvement.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, map number, etc.).	Application Reference: See Sites_A1 WQ Priority 1, "WSIP Data and Information Summary Table: Water Quality Priorities 1 –Temperature" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.
REV 4: Temporal Scale	
Provide the time period(s) during the year (days or months) when the water quality improvement would occur for each surface water body or water body segment that would be improved by the project:	
Surface Water Body Name (by segment as applicable)	Expected Time Period Provided by Project in 2030
Sacramento River – Below Keswick	July through September
Sacramento River – Bonnyview	July through November
Sacramento River – Balls Ferry	July through November
Sacramento River – Jelly's Ferry	July through November
Sacramento River – Bend Bridge	July through November
Sacramento River – Red Bluff	August through November
Trinity River below Lewiston	July through September
American River at Nimbus	April through September
American River at Watt Ave	April through September
American River at Mouth	April through September
The expected time period provided by Project in 2030 is dependent upon water year type. See Sites_A1 WQ Priority 1, "WSIP Data and Information Summary Table: Water Quality Priorities 1 –Temperature" for a summary of temperatures modeling results.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: See Sites_A1 WQ Priority 1, "WSIP Data and Information Summary Table: Water Quality Priorities 1 –Temperature" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.
REV 5: Adaptive Management	
Describe the adaptive management and monitoring strategies for the claimed priority (e.g., potential management or corrective actions that could be taken if monitoring results fall outside of the range of expected values or if claimed improvements are not being achieved by the project). Include the potential measurable objectives, performance measures, thresholds, and triggers to monitor project performance and achievement of improvements.	
The Adaptive Management and Monitoring Framework for the project has been developed to identify measurable objectives, performance measures, thresholds, and triggers to meet operational objectives and desired ecosystem benefits. A monitoring program would also be implemented to collect data necessary to operate and evaluate the Project's success. As part of proposed monitoring, temperature data would be collected. Monitoring efforts would be guided by the specific Sites Project objectives and desired outcomes and would focus on the most informative, efficient, and cost-effective indicators and methods. Temperature operational triggers would be developed to assist with real-time diversion and release operations. A preliminary Adaptive Management Framework is included as part of Sites_A6.D Modeling Results Compendium uploaded under the ELEGIBILITY AND GENERAL PROJECT INFORMATION TAB. A more detailed plan and decision-making process, including the establishment of temperature specific operational triggers, and performance standards will be developed in future phases of the Sites Project.	
Additional locations in the application where data and relevant supporting	Application Reference:

WSIP Data and Information Summary Table: Water Quality Priorities 1-5 (Water Bodies Not Meeting Standards)	
information, including attachments, are documented (document name, page number, table number, etc.).	Operations Plan provided in Sites_A2 Operations, uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Adaptive Management Framework provided in Sites_A2 Operations uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.
REV 6: Immediacy of Improvement Action	
Describe when the project would begin implementing actions toward achieving the improvement(s) associated with the claimed priority. Include the number of months expected to elapse between grant encumbrance and project implementation (i.e., completed projected construction and start-up of project element(s) that are expected to achieve the claimed priority). Include specifics by surface water body or water body segment, as appropriate.	
Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance). See Sites_A6.D Modeling Results Compendium, “Temperature Results WSIP 2030 With Project vs Without Project” uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB for temperature modeling results.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: See Sites_A6.D Modeling Results Compendium, “Temperature Results WSIP 2030 With Project vs Without Project” uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.
REV 7: Immediacy of the Realization of Benefits	
Describe when the improvement(s) associated with the claimed priority would be realized by the project. Include the number of months expected to elapse from grant encumbrance to full realization of the improvement (i.e., improvement achieves the claimed magnitude at 2030). Include specifics by surface water body or water body segment, as appropriate.	
Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance). See Sites_A6.D Modeling Results Compendium, “Temperature Results WSIP 2030 With Project vs Without Project” uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB for temperature modeling results.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: See Sites_A6.D Modeling Results Compendium, “Temperature Results WSIP 2030 With Project vs Without Project” uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.
REV 8: Duration	
Describe the duration of the improvement(s) associated with the claimed priority. Include the number of years that the project would deliver the full realization of the improvement (i.e., the claimed magnitude at 2030). Include specifics by surface water body or water body segment, as appropriate.	
The anticipated duration of the improvements is 100 years. Full benefits are expected in 2030. To determine the duration of potential benefits, additional temperatures modeling with and without the project for 2070 was performed. In most instances, the same magnitude and duration of benefits would be provided by the project in 2070; however, without the project temperatures would continue to warm thereby creating a need for increased coldwater releases to meet temperature water quality objectives The temporal scale of benefits in the Sacramento River shifts to June through October in critical water years. In some instances, the temperature benefits provided by coldwater pool conservation increase by 2070. For example, there are additional temperature benefits provided in 2070 for the reach of the Sacramento River above Keswick during August and September in below normal years and in the American River reach from Nimbus to the mouth in November. Additional incidental temperature benefits on the Trinity River below Lewiston would also be realized by 2070. See Sites_A6.D Modeling Results Compendium, “Temperature Results WSIP 2070 With Project vs Without Project” uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB for temperature modeling results.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: See Sites_A6.D Modeling Results Compendium, “Temperature Results WSIP 2070 With Project vs Without Project” uploaded under the BENEFIT CALCULATION,

WSIP Data and Information Summary Table: Water Quality Priorities 1-5 (Water Bodies Not Meeting Standards)	
	MONETIZATION, AND RESILIENCY TAB.
REV 9: Consistency	
Describe how the improvement(s) associated with the claimed priority would be consistent with water quality control plans and water quality control policies. Include specifics by surface water body or water body segment, as appropriate.	
Sites Project reservoir operations providing temperature benefits would be consistent with applicable water quality control plans and policies. In certain months and water year types, Sites operations would also assist in achieving with water quality temperature standards in reaches of the Sacramento River that currently exceed standards in summer months during dry and critically dry water years. As discussed in the Operations Plan, the Sites JPA will work with Reclamation and DWR to account for its water within the CVP and SWP conveyance systems and coordinate its releases from reservoirs to meet Sites water user allocations while providing claimed benefits. Reclamation in cooperation with the Sites JPA will also work with the NMFS, USFWS and CDFW to allow Sites project water to be conveyed in the later summer and fall to Sites project customers, potentially across the Delta, under the current Biological Opinions as has been done for early summer water held for cold water pool purposes in the past. The effects of the conveyance of Sites water across the Delta would also be included in the project description in any SWP/CVP re-consultation process under the Federal Endangered Species Act.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Operations Plan provided in See Sites_A2 Operations, uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
REV 10: Connectivity	
Describe, if applicable, how the project would restore or create a hydrologic connection, as a result of water quality improvement(s), to areas that support beneficial uses of water or are being managed for water quality. If multiple connections are restored or created, include specifics by location.	
N/A	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 11: Resilience to Climate Change at 2030	
Describe how the climate risk factors, identified in the General Application Questions for water quality priorities, were considered as part of the project siting and design for the claimed priority. Explain why any identified risk factors are not applicable.	
Various modeling scenarios were run to allow evaluation of how the benefits of the project can be sustained under potential future climate risk factors, including temperature changes. Results demonstrate that Sites Reservoir will provide operational flexibility to sustain both public and private temperature benefits under a range of climate change scenarios, including severe extended droughts. See Sites_A1 WQ Priority 1, “WSIP Data and Information Summary Table: Water Quality Priorities 1 – Temperature” and “Sites Reservoir Project Sources of Uncertainty Analysis,” Sites_A12 Uncertainty, uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: See Sites_A1 WQ Priority 1, “WSIP Data and Information Summary for Water Quality Priorities 1 –Temperature” uploaded under the PHYSICAL PUBLIC BENEFITS TAB.
REV 12: Undesirable Groundwater Results Corrected	
Not applicable because Priorities 1-5 only apply to surface water bodies.	

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)

Priority 6: Protect, clean up, or restore groundwater resources in high- and medium-priority basins designated by the Department.

Instructions: This table must be used for projects claiming water quality priority 6. This priority can only be claimed by projects that are expected to achieve improvements in high- or medium-priority basins designated by the Department. There are three sections to this table. Provide information below in those sections that apply to the project. Descriptions and clarifying information should provide the rationale for the claimed improvements (e.g., how the values were determined, etc.). Attach up to three (3) additional pages if more space is needed.

For the purpose of this table, the following definitions apply:

- "Protect" means to maintain the current groundwater quality condition or prevent further degradation.
- "Clean up" means to improve upon the current groundwater quality condition through remediation (contaminant removal) or other methods.
- "Restore" means a return to, or closely achieve, a prior, improved groundwater level (elevation) condition (when compared to the current condition) that improves water quality.
- "Basin" means a groundwater basin or subbasin identified and defined in "California's Groundwater: Bulletin 118" (updated in 2003) or modified pursuant to Chapter 3 (commencing at section 10722) of the Water Code.

Describe how the project would protect, clean up, or restore groundwater resources.

The Sites Reservoir project would improve groundwater sustainability by supplying surface water to facilitate increased conjunctive use practices and for replenishment to enhance aquifer storage recovery.

Refer to Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

List the basin(s) and subbasin(s) to be improved by the project. Include the name and basin/subbasin number, and indicate the basin/subbasin priority level designated by the Department (high or medium). Cite the source.

NA

Select the benefit(s) (protect, clean up, or restore) that the project would achieve. For the selected benefit(s), respond to the following requests for data and information by filling in the sections below.

The project would □ Protect □ Clean up **X** Restore (groundwater resources)

Section 1: Protect

Provide the applicable water quality standards* for parameters/constituents that would be protected by the project:

Parameter/Constituent	Water Quality Standard Value and Unit	Source Citation
NA		

*For the purpose of this table, water quality standards means numeric or narrative water quality objectives in water quality control plans adopted by the California State and Regional Water Boards.

REV 2: Magnitude (Protect)

Provide the parameter/constituent values (including units) in the table below:

Groundwater Basin/ Subbasin Name & Number	Parameter/ Constituent	Current Condition**	Without-Project Condition in 2030	With-Project Condition in 2030
NA				

**For the purpose of this table, "current condition" means conditions measured or estimated at the year of the CEQA Notice of Preparation (NOP) for the project or subsequently revised information used to describe existing conditions.

Provide additional clarifying information below, as needed.

NA

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

<table>
<tr><th colspan="3">WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)</th></tr>
<tr><td colspan="3">REV 3: Spatial Scale (Protect)</td></tr>
<tr><td colspan="3">Provide the geographical extent (e.g., dimensions in acres, depth in feet, acre-feet) of the improvement in 2030 claimed by the project for each groundwater basin/subbasin that would be protected. Attach a map of the improvement area.</td></tr>
<tr><td>Groundwater Basin/Subbasin Name & Number</td><td colspan="2">Unit Value
(e.g., acres, acre-feet, feet)</td></tr>
<tr><td>NA</td><td colspan="2"></td></tr>
<tr><td colspan="3">Provide additional clarifying information below, as needed.</td></tr>
<tr><td colspan="3">NA</td></tr>
<tr><td colspan="2">Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, map number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="3">REV 4: Temporal Scale (Protect)</td></tr>
<tr><td colspan="3">Provide the time period(s) during the year (days or months) when the improvement would occur for each groundwater basin/subbasin protected by the project.</td></tr>
<tr><td>Groundwater Basin/Subbasin Name & Number</td><td colspan="2">Expected Time Period Provided by Project in 2030</td></tr>
<tr><td>NA</td><td colspan="2"></td></tr>
<tr><td colspan="3">Provide additional clarifying information below, as needed.</td></tr>
<tr><td colspan="3">NA</td></tr>
<tr><td colspan="2">Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="3">REV 5: Adaptive Management (Protect)</td></tr>
<tr><td colspan="3">Describe the adaptive management and monitoring strategies for the claimed priority (e.g., potential management or corrective actions that could be taken if monitoring results fall outside of the range of expected values or if claimed improvements are not being achieved by the project). Include the potential measurable objectives, performance measures, thresholds, and triggers to monitor project performance and achievement of improvements.</td></tr>
<tr><td colspan="3">NA</td></tr>
<tr><td colspan="2">Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="3">REV 6: Immediacy of Improvement Action (Protect)</td></tr>
<tr><td colspan="3">Describe when the project would begin implementing actions toward achieving the improvement(s) associated with the claimed priority. Include the number of months expected to elapse between grant encumbrance and project implementation (i.e., completed projected construction and start-up of project element(s) that are expected to achieve the claimed priority). Include specifics by groundwater basin or subbasin, as appropriate.</td></tr>
<tr><td colspan="3">NA</td></tr>
<tr><td colspan="2">Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="3">REV 7: Immediacy of the Realization of Benefits (Protect)</td></tr>
<tr><td colspan="3">Describe when the improvement(s) associated with the claimed priority would be realized by the project. Include the number of months expected to elapse from grant encumbrance to full realization of the improvement (i.e., improvement achieves the claimed magnitude at 2030). Include specifics by groundwater basin or subbasin, as appropriate.</td></tr>
<tr><td colspan="3">NA</td></tr>
<tr><td colspan="2">Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="3">REV 8: Duration (Protect)</td></tr>
</table>

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)	
Describe the duration of the improvement(s) associated with the claimed priority. Include the number of years that the project would deliver the full realization of the improvement (i.e., the claimed magnitude at 2030). Include specifics by groundwater basin or subbasin, as appropriate.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 9: Consistency (Protect)	
Describe how the improvement(s) associated with the claimed priority would be consistent with water quality control plans, water quality control policies, and/or the Sustainable Groundwater Management Act. Include specifics by groundwater basin or subbasin, as appropriate.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 10: Connectivity (Protect)	
Describe, if applicable, how the project would restore or create a hydrologic connection, as a result of water quality improvement(s), to areas that support beneficial uses of water or are being managed for water quality. If multiple connections are restored or created, include specifics by location.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 11: Resilience to Climate Change at 2030 (Protect)	
Describe how the climate risk factors, identified in the General Application Questions for water quality priorities, were considered as part of the project siting and design for the claimed priority. Explain why any identified risk factors are not applicable.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 12: Undesirable Groundwater Results Corrected (Protect)	
Describe the current groundwater conditions within the claimed project improvement area(s), including, but not limited to: the estimated number of wells present, total pumping values for the basin, current land use, potential and existing beneficial uses, existing water quality values, soil information, geology of the area, and any applicable undesirable results listed at Water Code section 10721(x)(1-6).	
NA	
Describe the expected without-project groundwater conditions in 2030 within the claimed project improvement area, including the factors addressed for current conditions (above).	
NA	
Describe the expected with-project groundwater conditions (after project implementation) in 2030 within the claimed project improvement area, including: the factors addressed for current conditions (above); how the project would coordinate with the appropriate GSA; how the project complies with SGMA if a GSA has not yet been assigned; and how the project would improve conditions in a groundwater basin/subbasin where undesirable results (as defined in Water Code 10721(x)(1-6)) caused by extraction have occurred.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
Section 2: Clean Up	

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)
Provide the applicable water quality standards* for parameters/constituents that would be cleaned up by the project:

Parameter/Constituent	Water Quality Standard Value and Unit	Source Citation
NA		

*For the purpose of this table, water quality standards means numeric or narrative water quality objectives found in water quality control plans adopted by the California State and Regional Water Boards.
REV 2: Magnitude (Clean Up)
Provide the parameter/constituent values (including units) in the table below:

Groundwater Basin/ Subbasin Name & Number	Parameter/ Constituent	Current Condition**	Without-Project Condition in 2030	With-Project Condition in 2030
NA				

**For the purpose of this table, "current condition" means conditions measured or estimated at the year of the CEQA Notice of Preparation (NOP) for the project or subsequently revised information used to describe existing conditions.
Provide additional clarifying information below, as needed.

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

REV 3: Spatial Scale (Clean Up)
Provide the geographical extent (e.g., dimensions in acres, depth in feet, acre-feet) of the improvement in 2030 claimed by the project for each groundwater basin/subbasin that would be cleaned up. Attach a map of the improvement area.

Groundwater Basin/Subbasin Name & Number	Unit Value (e.g., acres, acre-feet, feet)
NA	

Provide additional clarifying information below, as needed.
NA

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, map number, etc.).	Application Reference:

REV 4: Temporal Scale (Clean Up)
Provide the time period(s) during the year (days or months) when the improvement would occur for each groundwater basin/subbasin cleaned up by the project.

Groundwater Basin/Subbasin Name & Number	Expected Time Period Provided by Project in 2030
NA	

Provide additional clarifying information below, as needed.
NA

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

REV 5: Adaptive Management (Clean Up)
Describe the adaptive management and monitoring strategies for the claimed priority (e.g., potential management or corrective actions that could be taken if monitoring results fall outside of the range of expected values or if claimed improvements are not being achieved by the project). Include the potential measurable objectives, performance measures, thresholds, and triggers to monitor project performance and achievement of improvements.
NA

Additional locations in the application where data and relevant supporting information, including attachments, are documented	Application Reference:

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)	
(document name, page number, table number, etc.).	
REV 6: Immediacy of Improvement Action (Clean Up)	
Describe when the project would begin implementing actions toward achieving the improvement(s) associated with the claimed priority. Include the number of months expected to elapse between grant encumbrance and project implementation (i.e., completed projected construction and start-up of project element(s) that are expected to achieve the claimed priority). Include specifics by groundwater basin or subbasin, as appropriate.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 7: Immediacy of the Realization of Benefits (Clean Up)	
Describe when the improvement(s) associated with the claimed priority would be realized by the project. Include the number of months expected to elapse from grant encumbrance to full realization of the improvement (i.e., improvement achieves the claimed magnitude at 2030). Include specifics by groundwater basin or subbasin, as appropriate.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 8: Duration (Clean Up)	
Describe the duration of the improvement(s) associated with the claimed priority. Include the number of years that the project would deliver the full realization of the improvement (i.e., the claimed magnitude at 2030). Include specifics by groundwater basin or subbasin, as appropriate.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 9: Consistency (Clean Up)	
Describe how the improvement(s) associated with the claimed priority would be consistent with water quality control plans, water quality control policies, and/or the Sustainable Groundwater Management Act. Include specifics by groundwater basin or subbasin, as appropriate.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 10: Connectivity (Clean Up)	
Describe, if applicable, how the project would restore or create a hydrologic connection, as a result of water quality improvement(s), to areas that support beneficial uses of water or are being managed for water quality. If multiple connections are restored or created, include specifics by location.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 11: Resilience to Climate Change at 2030 (Clean Up)	
Describe how the climate risk factors, identified in the General Application Questions for water quality priorities, were considered as part of the project siting and design for the claimed priority. Explain why any identified risk factors are not applicable.	
NA	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)

REV 12: Undesirable Groundwater Results Corrected (Clean Up)

Describe the current groundwater conditions within the claimed project improvement area(s), including, but not limited to: the estimated number of wells present, total pumping values for the basin, current land use, potential and existing beneficial uses, existing water quality values, soil information, geology of the area, and any applicable undesirable results listed at Water Code section 10721(x)(1-6).

NA

Describe the expected without-project groundwater conditions in 2030 within the claimed project improvement area, including the factors addressed for current conditions (above).

NA

Describe the expected with-project groundwater conditions (after project implementation) in 2030 within the claimed project improvement area, including: the factors addressed for current conditions (above); how the project would coordinate with the appropriate GSA; how the project complies with SGMA if a GSA has not yet been assigned; and how the project would improve conditions in a groundwater basin/subbasin where undesirable results (as defined in Water Code 10721(x)(1-6)) caused by extraction have occurred.

NA

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

Section 3: Restore

REV 2: Magnitude (Restore)

Provide the groundwater elevation and volume (include units) for each groundwater basin/subbasin that would be restored by the project.

Groundwater Basin/Subbasin Name & Number	Current Condition**	Without-Project Condition in 2030	With-Project Condition in 2030
Sacramento Valley Hydrologic Region	Refer to Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 –Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.		
San Joaquin Valley Hydrologic Region			
San Francisco Bay Hydrologic Region			
Central Coast Hydrologic Region			
Tulare Lake Hydrologic Region			
South Lahontan Hydrologic Region			
South Coast Hydrologic Region			

**For the purpose of this table, “current condition” means conditions measured or estimated at the year of the CEQA Notice of Preparation (NOP) for the project or subsequently revised information used to describe existing conditions.

Provide additional clarifying information below, as needed.

Describe the expected quality of water used to restore groundwater levels.

The quality of the water used for replenishment of groundwater would come from surface water deliveries, and direct or in-lieu recharge. The quality of the source water would depend on the location of the Sites Participant and the conveyance system used to deliver the water. A detailed description of the water quality associated with the major waterways and conveyance systems is provided in Chapter 7, Surface Water Quality” of the EIR/EIS. In-lieu recharge activities would not alter the natural composition of the underlying aquifer water quality. In the Sacramento Valley Hydrologic Basin, conjunctive use and direct recharge water that would be used to restore groundwater levels would be similar to Sacramento River water quality. Sacramento River water is generally considered to be of good quality with low concentrations of salts when compared to underlying groundwater. Utilization of supplemental surface water supplies from the Sacramento River in areas of agricultural production in-lieu of groundwater would support salt management practices and assist to reduce groundwater quality degradation.

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Chapter 7, Surface Water Quality” of the EIR/EIS [http://sitesproject.org/information/DraftEIR-EIS].

REV 3: Spatial Scale (Restore)

Provide the geographical extent (e.g., dimensions in acres, depth in feet, acre-feet) of the improvement in 2030 claimed by the

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)	
project for each groundwater basin/subbasin that would be restored. Attach a map of the improvement area.	
Groundwater Basin/Subbasin Name & Number	Unit Value (e.g., acres, acre-feet, feet)
Sacramento Valley Hydrologic Basin (Long-term Average)	111,000 acre-ft
Sacramento Valley Hydrologic Basin (Dry and Critical Water Years)	155,000 acre-ft
San Joaquin Valley Hydrologic Basin (Long-term Average)	28,000 acre-ft
San Joaquin Valley Hydrologic Basin (Dry and Critical Water Years)	10,000 acre-ft
San Francisco Bay Hydrologic Basin (Long-term Average)	38,000 acre-ft
San Francisco Bay Hydrologic Basin (Dry and Critical Water Years)	72,000 acre-ft
Tulare Lake Hydrologic Basin (Long-term Average)	33,000 acre-ft
Tulare Lake Hydrologic Basin (Dry and Critical Water Years)	57,000 acre-ft
South Lahontan Hydrologic Basin (Long-term Average)	3,000 acre-ft
South Lahontan Hydrologic Basin (Dry and Critical Water Years)	3,000 acre-ft
South Coast Hydrologic Basin (Long-term Average)	67,000 acre-ft
South Coast Hydrologic Basin (Dry and Critical Water Years)	126,000 acre-ft
Provide additional clarifying information below, as needed.	
Refer to Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.
REV 4: Temporal Scale (Restore)	
Provide the time period(s) during the year (days or months) when the improvement would occur for each groundwater basin/subbasin restored by the project.	
Groundwater Basin/Subbasin Name & Number	Expected Time Period Provided by Project in 2030
Sacramento Valley Hydrologic Region	Annually
San Joaquin Valley Hydrologic Region	Annually
San Francisco Bay Hydrologic Region	Annually
Tulare Lake Hydrologic Region	Annually
South Lahontan Hydrologic Region	Annually
South Coast Hydrologic Region	Annually
Provide additional clarifying information below, as needed.	
Refer to Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Refer to Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.
REV 5: Adaptive Management (Restore)	
Describe the adaptive management and monitoring strategies for the claimed priority (e.g., potential management or corrective actions that could be taken if monitoring results fall outside of the range of expected values or if claimed improvements are not being achieved by the project). Include the potential measurable objectives, performance measures, thresholds, and triggers to monitor project performance and achievement of improvements.	

<table>
<tr><th colspan="2">WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)</th></tr>
<tr><td colspan="2">Adaptive management and monitoring strategies for improved groundwater level and storage conditions would be incorporated into existing Sites Participant groundwater monitoring programs or those which will be developed as part of SGMA requirements. Groundwater Sustainably Agencies (GSAs) with jurisdiction over high-priority and medium-priority basins must adopt groundwater management plans (GSP) by 2020 or 2022, depending upon whether the basin is in critical overdraft. GSAs will then have until 2040 or 2042 to achieve groundwater sustainability. Minimum thresholds, measureable objectives and interim milestones will need to be established in the GSP, along with project and management actions to address chronic lowering of groundwater levels and reduced groundwater storage.</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:
Refer to Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB.
Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Emphasis on the Adaptive Management Framework section.</td></tr>
<tr><td colspan="2">REV 6: Immediacy of Improvement Action (Restore)</td></tr>
<tr><td colspan="2">Describe when the project would begin implementing actions toward achieving the improvement(s) associated with the claimed priority. Include the number of months expected to elapse between grant encumbrance and project implementation (i.e., completed projected construction and start-up of project element(s) that are expected to achieve the claimed priority). Include specifics by groundwater basin or subbasin, as appropriate.</td></tr>
<tr><td colspan="2">Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance).</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="2">REV 7: Immediacy of the Realization of Benefits (Restore)</td></tr>
<tr><td colspan="2">Describe when the improvement(s) associated with the claimed priority would be realized by the project. Include the number of months expected to elapse from grant encumbrance to full realization of the improvement (i.e., improvement achieves the claimed magnitude at 2030). Include specifics by groundwater basin or subbasin, as appropriate.</td></tr>
<tr><td colspan="2">Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance).</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="2">REV 8: Duration (Restore)</td></tr>
<tr><td colspan="2">Describe the duration of the improvement(s) associated with the claimed priority. Include the number of years that the project would deliver the full realization of the improvement (i.e., the claimed magnitude at 2030). Include specifics by groundwater basin or subbasin, as appropriate.</td></tr>
<tr><td colspan="2">The anticipated duration of the improvements is 100 years. Full benefits are expected in 2030. To determine the duration of potential benefits, additional regional deliveries modeling with and without the project for 2070 was performed. As shown in Table 1 of Sites_A2 WQ Priority 6, “WSIP Data and Information Summary for Water Quality Priorities 6 –Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB, regional deliveries in dry and critical years increase in 2070 due to changing climate conditions; therefore, overtime potential groundwater benefits could increase due to increases in water supply availability.
Refer to Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB.</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:
Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB.</td></tr>
</table>

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)	
REV 9: Consistency (Restore)	
Describe how the improvement(s) associated with the claimed priority would be consistent with water quality control plans, water quality control policies, and/or the Sustainable Groundwater Management Act. Include specifics by groundwater basin or subbasin, as appropriate.	
The Site project could potentially assist Participants achieve compliance under SGMA, requirements for adjudicated basins and/or applicable groundwater management ordinances. Consistency determinations and compliance would be the responsibility of individual Site Participants.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 10: Connectivity (Restore)	
Describe, if applicable, how the project would restore or create a hydrologic connection, as a result of water quality improvement(s), to areas that support beneficial uses of water or are being managed for water quality. If multiple connections are restored or created, include specifics by location.	
The Sites Reservoir project would allow for greater operational flexibility to support maintaining hydrologic connection between surface and groundwater. Conjunctive use practices by Sites participants could reduce surface water diversions and improve surface water flows by using stored groundwater during dry and critical periods. In addition, supplemental water supplies from the Sites Reservoir project would assist with improving aquifer storage and groundwater levels. Refer to Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.
REV 11: Resilience to Climate Change at 2030 (Restore)	
Describe how the climate risk factors, identified in the General Application Questions for water quality priorities, were considered as part of the project siting and design for the claimed priority. Explain why any identified risk factors are not applicable.	
Various modeling scenarios were run to allow evaluation of how the benefits of the project can be sustained under potential future climate risk factors, including water quality changes, changing participation and runoff and extreme hydrologic variability. Sea-level rise, ocean acidification and wildfire risk factors are not applicable to the Sites Reservoir project. Operations modeling results demonstrate that Sites Reservoir will provide operational flexibility to sustain both public and private benefits under a range of climate change scenarios, including severe extended droughts. Refer to Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB and Attachment A.12, "Sites Reservoir Project Sources of Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.
REV 12: Undesirable Groundwater Results Corrected (Restore)	
Describe the current groundwater conditions within the claimed project improvement area(s), including, but not limited to: the estimated number of wells present, total pumping values for the basin, current land use, potential and existing beneficial uses, existing water quality values, soil information, geology of the area, and any applicable undesirable results listed at Water Code section 10721(x)(1-6).	
Refer to Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB	
Describe the expected without-project groundwater conditions in 2030 within the claimed project improvement area, including	

WSIP Data and Information Summary Table: Water Quality Priority 6 (Groundwater)	
the factors addressed for current conditions (above).	
Refer to Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB	
Describe the expected with-project groundwater conditions (after project implementation) in 2030 within the claimed project improvement area, including: the factors addressed for current conditions (above); how the project would coordinate with the appropriate GSA; how the project complies with SGMA if a GSA has not yet been assigned; and how the project would improve conditions in a groundwater basin/subbasin where undesirable results (as defined in Water Code 10721(x)(1-6)) caused by extraction have occurred.	
The Site project could potentially assist Participants achieve compliance under SGMA. Some of the participants are designated as a Groundwater Sustainability Agency (GSA) for affected groundwater basins, including but not limited to Colusa County, Colusa County Water District, Santa Clara Valley Water District, and Zone 7. Many other agencies participating in the Sites Project also participate in GSAs. These member agencies will be involved in the future integration of the Sites Project into their respective Ground Water Sustainability Plans (GSPs). In addition, Sites participants: Desert Water Agency, California Water Service, San Bernardino Valley Municipal Water District, Metropolitan Water District and San Gorgonio Pass Water Agency are affiliated with adjudicated groundwater basins. Antelope Valley - East Kern Water Agency is affiliated with a groundwater basin that is pending adjudication. The associated operations by participating agencies with adjudicated basins would be included in annual monitoring and reporting activities. Coachella Valley Water District, Desert Water Agency, Santa Clara Valley Water Agency, and Zone 7 Water Agency have submitted requests for an Alternative strategy to the GSP. The Alternative strategy could consist of a groundwater management plan or law authorizing ground water management within a specific basin. The Sites project could also be incorporated into the overall groundwater management strategy for the groundwater basins associated with these Participants.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB

WSIP Data and Information Summary Table: Water Quality Priority 7 (Delta Tributary Flows)

Priority 7: Achieve Delta tributary stream flows that resemble natural hydrograph patterns or other flow regimes that have been demonstrated to improve conditions for aquatic life.

Instructions: This table must be used for projects claiming water quality priority 7. Descriptions and clarifying information should provide the rationale for the claimed improvements (e.g., how the values were determined, etc.). Attach up to three (3) additional pages if more space is needed.

Describe how the project would be designed and operated in a manner that resembles natural (unimpaired) hydrograph~~s~~ patterns or other flow regimes that have been demonstrated to improve conditions for aquatic life (e.g., native species and their habitats).

The Cache Slough area receives water from the Yolo Bypass. It is the only place in the Delta estuary where the Delta smelt population has recently increased. The goal for this operation of the Sites Reservoir Project is to benefit Delta smelt in the lower Cache Slough and lower Sacramento River areas by delivering water through the Yolo Bypass in the late summer and early fall. This flow regime is intended to increase the desirable food sources which should help improve Delta smelt growth and condition as they mature into adults, thereby increasing Delta smelt abundance over time. The key is to push water with a high population of phytoplankton and zooplankton directly into an area of good Delta smelt habitat, where additional production may occur.

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB

Applicable water quality standards* for Delta tributary flows that would be improved by the project:

Tributary to the Delta (by segment as appropriate)	Time Period (days/months in year when standard applies)	Water Quality Standard Value and Unit	Source Citation
Rio Vista	September – December (minimum monthly average)	3,000 – 4,500 cfs	

*For the purpose of this table, water quality standards means the water quality objectives for river flows and Delta outflow in the California State Water Board's Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (2006).

REV 2: Magnitude

Provide flow values (cfs) for each tributary to the Delta that would be improved by the project:

Tributary to the Delta (by segment as appropriate)	Current Condition**	Without-Project Flow Condition in 2030	With-Project Flow Condition in 2030
Yolo Bypass (August – October)	15 TAF	24 TAF	64 TAF

**For the purpose of this table, "current condition" means conditions measured or estimated at the year of the CEQA Notice of Preparation (NOP) for the project or subsequently revised information used to describe existing conditions.

Provide additional clarifying information below, as needed.

The concept is that 2 pulses of flow of at least 400 cfs each over a 2–3 week period would be made into the Yolo Bypass via the Colusa basin drain past the Wallace Weir and Ridge Cut into the Tule Drain and flow through the Toe drain and out to the Sacramento River. With losses, each flow pulse made into the Colusa basin Drain would total about 24 TAF over each 2–3 week period. The flow pulses would be adaptively managed, but it is initially projected as a late summer and early fall release, perhaps in August and September. The release would not occur every year, but in most years a release would be desirable.

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB

REV 3: Spatial Scale

Provide the geographical extent of the improvement for each tributary to the Delta that would be improved by the project. Attach a map of the improvement area.

Tributary to the Delta	Geographical Extent Improved in 2030

WSIP Data and Information Summary Table: Water Quality Priority 7 (Delta Tributary Flows)	
(by segment as appropriate)	(e.g., number of river miles improved)
Lower Sacramento River	
Provide additional clarifying information below, as needed.	
Benefits to food production would occur in the Cache Slough Complex and into the Lower Sacramento River a little upstream (tidal effects) and below where it enters the Sacramento. Benefits are anticipated at least to the confluence with the San Joaquin River at the tip of Sherman Island.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, map number, etc.).	Application Reference:
REV 4: Temporal Scale	
Provide the time period(s) during the year (days or months) when the improvement would occur for each tributary to the Delta improved by the project:	
Tributary to the Delta (by segment as appropriate)	Expected Time Period Provided by Project in 2030
Lower Sacramento River Lower Sacramento River	August through October
Provide additional clarifying information below, as needed.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 5: Adaptive Management	
Describe the adaptive management and monitoring strategies for the claimed priority (e.g., potential management or corrective actions that could be taken if monitoring results fall outside of the range of expected values or if claimed improvements are not being achieved by the project). Include the potential measurable objectives, performance measures, thresholds, and triggers to monitor project performance and achievement of improvements.	
Would monitor the amount of water released, nutrients, and phytoplankton/zooplankton. Would rely on existing Delta smelt monitoring programs to track smelt benefits. The primary objectives and triggers would be the phytoplankton/zooplankton populations and the Delta smelt population response. Results in August through October time period should be highly reproducible. Adaptive measures would include changes in the timing of releases, the duration and magnitude of the pulse, and the magnitude of the pulse (in cfs).	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Emphasis on the Adaptive Management Framework section.
REV 6: Immediacy of Improvement Action	
Describe when the project would begin implementing actions toward achieving the improvement(s) associated with the claimed priority. Include the number of months expected to elapse between grant encumbrance and project implementation (i.e., completed projected construction and start-up of project element(s) that are expected to achieve the claimed priority). Include specifics by Delta tributary, as appropriate.	
Improvement is expected to begin in 2026 with initial pulse through the Colusa Basin Drain (48 months after grant encumbrance). Full scale operations expected in 2030.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

WSIP Data and Information Summary Table: Water Quality Priority 7 (Delta Tributary Flows)	
REV 7: Immediacy of the Realization of Benefits	
Describe when the improvement(s) associated with the claimed priority would be realized by the project. Include the number of months expected to elapse from grant encumbrance to full realization of the improvement (i.e., improvement achieves the claimed magnitude at 2030). Include specifics by Delta tributary, as appropriate.	
Baseline monitoring should begin in 2025. Full realization of improvement (as measured by phytoplankton/zooplankton populations) anticipated in 2030. Benefit occurring in Lower Sacramento River.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 8: Duration	
Describe the duration of the improvement(s) associated with the claimed priority. Include the number of years that the project would deliver the full realization of the improvement (i.e., the claimed magnitude at 2030). Include specifics by Delta tributary, as appropriate.	
The duration of the improvement is expected to be 90 years (O&M period for the project per the planning horizon used in the application).	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 9: Consistency	
Describe how the improvement(s) associated with the claimed priority would be consistent with water quality control plans, water quality control policies, and the Sustainable Groundwater Management Act. Include specifics by Delta tributary, as appropriate.	
Action is consistent with *Delta Smelt Resiliency Strategy* (California Natural Resources Agency, July, 2016)	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 10: Connectivity	
Describe, if applicable, how the project would restore or create a hydrologic connection, as a result of water quality improvement(s), to areas that support beneficial uses of water or are being managed for water quality. If multiple connections are restored or created, include specifics by location.	
Not applicable	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:
REV 11: Resilience to Climate Change at 2030	
Describe how the climate risk factors, identified in the General Application Questions for water quality priorities, were considered as part of the project siting and design for the claimed priority. Explain why any identified risk factors are not applicable.	
The CalSim II model considered temperature change, sea level rise, and changing precipitation. The long-term average increase in flow is estimated at 42 TAF under current conditions, 40 TAF under 2030 conditions, and 38 TAF under 2070 conditions. Flows provided into the Yolo Bypass toe drain would be greatly reduced in critical years with flows of 9 TAF under current conditions, 5 TAF under 2030 conditions, and 13 TAF under 2070 conditions. Deliveries into the toe drain are proposed for above normal, below normal, and dry years.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB
REV 12: Undesirable Groundwater Results Corrected	
Describe, if applicable, the current groundwater conditions within the claimed project improvement area(s), including, but not limited to: the number of wells present, total pumping values for the basin, current land use, potential and existing beneficial uses, existing water quality values, soil information, geology of the area, and any applicable undesirable results listed at Water	

WSIP Data and Information Summary Table: Water Quality Priority 7 (Delta Tributary Flows)	
Code section 10721(x)(1-6).	
Not applicable	
Describe, if applicable, the expected without-project groundwater conditions in 2030 within the claimed project improvement area, including the factors addressed for current conditions (above).	
Describe, if applicable, the expected with-project groundwater conditions (after project implementation) in 2030 within the claimed project improvement area, including: the factors addressed for current conditions (above); how the project would coordinate with the appropriate GSA; how the project complies with SGMA if a GSA has not yet been assigned; and how the project would improve conditions in a groundwater basin/subbasin where undesirable results (as defined in Water Code 10721(x)(1-6)) caused by extraction have occurred.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference:

WSIP Data and Information Summary Table: Water Quality Priority 9 (Basic Human Needs)

Priority 9: Provide water for basic human needs, such as drinking, cooking, and bathing, in disadvantaged communities, where those needs are not being met.

Instructions: This table must be used for projects claiming water quality priority 9 that improve conditions in a non-public water system that serves a disadvantaged community (DAC). Descriptions and clarifying information should provide the rationale for the claimed improvements (e.g., how the values were determined, etc.). Attach up to three (3) additional pages if more space is needed. (Projects that provide water for public water systems, serve DACs, and that are not meeting their existing obligations to provide safe drinking water are not eligible for this priority due to those existing compliance obligations. However, projects that would, as an incidental benefit, provide higher quality water, while not specifically creating new drinking water projects, may be eligible and should describe this scenario where appropriate, below).

Describe how the project would provide water for basic human needs, such as drinking, cooking, and bathing, in DACs, where those needs are not being met. Include the additional expected volume (acre-feet per year) of suitable water that would be made available for a non-public water system(s) that serves DACs and the additional DAC population that would be served by the improved water supply. If incidental improvements to regional water quality are achieved, highlight the public water system(s) and non-public water system(s) that would benefit from that incidental improvement.

The project would provide supplemental surface water supplies to Sites Participants Municipal and Industrial (M&I) water providers located within disadvantaged communities (DACs) that have drinking water supplies that exceed California maximum contaminant levels for various naturally occurring and human-caused contaminants including arsenic, nitrates, hexavalent chromium, bacteria, radionuclides, and disinfection by-products. The primary source for drinking water in the majority of the DACs is groundwater. Supplemental high quality surface water supplies generated from the project could be made available to DACs with unsafe drinking water supplies. In some DACs, chronic lowering of groundwater has resulted in wells reportedly going dry during periods of drought. Groundwater level benefits from increased conjunctive use by Sites participants could also Refer to Sites_A2 WQ Priority 9, "Documentation for Water Quality Priority 9 –Basic Human Needs" uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.

Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Refer to Sites_A2 WQ Priority 9, "Documentation for Water Quality Priority 9 –Basic Human Needs" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.

Identify the DAC(s) addressed by the project using the Department of Water Resources Disadvantaged Communities Mapping Tool or other DAC identifier. Cite the source.

Refer to Sites_A2 WQ Priority 9, "Documentation for Water Quality Priority 9 –Basic Human Needs" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.

Provide the population levels for the DACs benefited by the project:

DAC Location	Current DAC Population with Unmet Needs	2030 DAC Population Benefited by the Project
See Sites_A2 WQ Priority 9, "Documentation for Water Quality Priority 9 –Basic Human Needs" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.		

Applicable water quality standards* for parameters/constituents that would be improved by the project:

Parameter/ Constituent	**Water Quality Standard Value and Unit**	**Source Citation**
Arsenic	0.01 mg/L	California MCL (22 CCR §64431)
Nitrate	10 mg/L as N	California MCL (22 CCR §64431)
Nitrate-Nitrite	10 mg/L as N	California MCL (22 CCR §64431)
Hexavalent Chromium	0.01 mg/L	California MCL (22 CCR §64431)
Coliform	<40 samples/month - More than 1 Total Coliform-positive sample in a month >40 samples/month - More than 5.0% Total Coliform -positive samples in a month	Acute Total Coliform MCL (22 CCR § 64426.1)
E. Coli	E.coli-positive repeat sample following Total Coliform -positive routine sample; or Total Coliform -positive repeat sample following an E.coli positive routine sample	E.coli MCL (Federal Revised Total Coliform Rule)
Radionuclides/Gross Alpha Particle Activity	Gross Alpha Particle Activity - 15 pCi/L Radium-226 + Radium-228 - 5 pCi/L	California MCLs (22 CCR §64441 and §64443—Radioactivity)

*For the purpose of this table, water quality standards means numeric or narrative water quality objectives, including maximum contaminant levels (MCLs), in water quality control plans adopted by the California State and Regional Water Boards.
mg/L = milligrams per liter

WSIP Data and Information Summary Table: Water Quality Priority 9 (Basic Human Needs)				
MCL = maximum contaminant level pCi/L = picocuries per liter				
REV 2: Magnitude				
Provide the parameter/constituent values (including units) for each surface water body or groundwater basin/subbasin that would be improved by the project and be available to a non-public water system that serves a DAC, or be available to DAC(s) that might receive incidental benefits.				
Water Body Name (including stream segment or groundwater basin/subbasin number, as applicable)	Parameter/ Constituent	Current Condition**	Without-Project Condition in 2030	With-Project Condition in 2030
Water quality improvements to surface water bodies or groundwater basins that would serve DAC would vary depending on where supplemental surface supplies would be delivered. Refer to Sites_A2 WQ Priority 9, “Documentation for Water Quality Priority 9 –Basic Human Needs” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.				
**For the purpose of this table, “current condition” means conditions measured or estimated at the year of the CEQA Notice of Preparation (NOP) for the project or subsequently revised information used to describe existing conditions.				
Provide additional clarifying information below, as needed.				
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).			Application Reference: Refer to Sites_A2 WQ Priority 9, “Documentation for Water Quality Priority 9 –Basic Human Needs” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.	

REV 3: Spatial Scale	
Provide the geographical extent of the improvement claimed by the project for each location. Attach a map of the improvement area.	
Water Body Name (including stream segment or groundwater basin/subbasin number, as applicable)	Geographical Extent Improved in 2030 (e.g., river miles or acre-feet improved)
The geographical extent of water quality improvements to surface water bodies or groundwater basins that would serve DAC would vary depending on where supplemental surface supplies would be delivered. Refer to Sites_A2 WQ Priority 9, “Documentation for Water Quality Priority 9 –Basic Human Needs” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.	
Provide additional clarifying information below, as needed.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, map number, etc.).	Application Reference: Refer to Sites_A2 WQ Priority 9, “Documentation for Water Quality Priority 9 –Basic Human Needs” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.

REV 4: Temporal Scale	
Provide the time period(s) during the year (days or months) when the improvement would occur for each location improved by the project:	
Water Body Name (including stream segment or groundwater basin/subbasin number, as applicable)	Expected Time Period Provided by Project in 2030
Water quality improvements to surface water bodies or groundwater basins that would serve DAC would vary depending on where supplemental surface supplies would be delivered. Refer to Sites_A2 WQ Priority 9, “Documentation for Water Quality Priority 9 –Basic Human Needs” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.	
Provide additional clarifying information below, as needed.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Refer to Sites_A2 WQ Priority 9, “Documentation for Water Quality Priority 9 –Basic Human Needs” uploaded under the PHYSICAL PUBLIC BENEFITS TAB for further information.

<table>
<tr><th colspan="2">WSIP Data and Information Summary Table: Water Quality Priority 9 (Basic Human Needs)</th></tr>
<tr><td colspan="2">REV 5: Adaptive Management</td></tr>
<tr><td colspan="2">Describe the adaptive management and monitoring strategies for the claimed priority (e.g., potential management or corrective actions that could be taken if monitoring results fall outside of the range of expected values or if claimed improvements are not being achieved by the project). Include the potential measurable objectives, performance measures, thresholds, and triggers to monitor project performance and achievement of improvements.</td></tr>
<tr><td colspan="2">The Adaptive Management and Monitoring Framework for the project has been developed to identify measurable objectives, performance measures, thresholds, and triggers to meet operational objectives and desired ecosystem benefits. Because uncertainties remain about natural hydrologic variations, project operations, and ecological responses, the Sites Project is being designed with a range of operational scenarios to evaluate the effectiveness of different management actions and evaluate strategies for resilience to climate change. These are further described in the Operations Plan. A monitoring program would also be implemented to collect data necessary to operate and evaluate the Project’s success. Monitoring efforts would be guided by the specific Sites Project objectives and desired outcomes and would focus on the most informative, efficient, and cost-effective indicators and methods. A preliminary Adaptive Management Framework is included as part of Sites A2 Operations uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. A more detailed plan and decision-making process will be developed in future phases of the Sites Project.</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:
See Sites_A2 Operations, “Operations Plan” uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB

Adaptive Management Framework provided in Sites A2 Operations uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.</td></tr>
<tr><td colspan="2">REV 6: Immediacy of Improvement Action</td></tr>
<tr><td colspan="2">Describe when the project would begin implementing actions toward achieving the improvement(s) associated with the claimed priority. Include the number of months expected to elapse between grant encumbrance and project implementation (i.e., completed projected construction and start-up of project element(s) that are expected to achieve the claimed priority). Include specifics by location, as appropriate.</td></tr>
<tr><td colspan="2">Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance).</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="2">REV 7: Immediacy of the Realization of Benefits</td></tr>
<tr><td colspan="2">Describe when the improvement(s) associated with the claimed priority would be realized by the project. Include the number of months expected to elapse from grant encumbrance to full realization of the improvement (i.e., improvement achieves the claimed magnitude at 2030). Include specifics by location, as appropriate.</td></tr>
<tr><td colspan="2">Initial benefits are expected in year 2028 (6 years after grant encumbrance for construction) at a lower level than when the project is complete. Full benefits are expected in 2030 (8 years after grant encumbrance).</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:</td></tr>
<tr><td colspan="2">REV 8: Duration</td></tr>
<tr><td colspan="2">Describe the duration of the improvement(s) associated with the claimed priority. Include the number of years that the project would deliver the full realization of the improvement (i.e., the claimed magnitude at 2030). Include specifics by location, as appropriate.</td></tr>
<tr><td colspan="2">The anticipated duration of the improvements is 100 years. Full benefits are expected in 2030. To determine the duration of potential benefits, additional regional deliveries modeling with and without the project for 2070 was performed. As shown in Table 1 see Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 –Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB, regional deliveries in dry and critical years increase in 2070 due to changing climate conditions; therefore, overtime potential groundwater benefits could increase due to increases in water supply availability. See Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 –Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB.</td></tr>
<tr><td>Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).</td><td>Application Reference:
Sites_A2 Documentation WQ Priority 6 “WSIP Data and Information Summary for Water Quality Priorities 6 –Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB.</td></tr>
</table>

WSIP Data and Information Summary Table: Water Quality Priority 9 (Basic Human Needs)	
REV 9: Consistency	
Describe how the improvement(s) associated with the claimed priority would be consistent with water quality control plans, water quality control policies, and the Sustainable Groundwater Management Act. Include specifics by location, as appropriate.	
Water quality objectives for waters affected by the project are specified in the basin plans for the North Coast, Central Valley, Tulare Lake, and the San Francisco Bay regions. The water quality objectives and beneficial uses are further described in Table 7.1 on pages 7-1 to 7-3 in Chapter 7, "Surface Water Quality" of the EIR/EIS.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Table 7.1 pages 7-1 to 7-3 in Chapter 7, "Surface Water Quality" of the EIR/EIS located online here: [http://sitesproject.org/information/DraftEIR-EIS]
REV 10: Connectivity	
Describe, if applicable, how the project would restore or create a hydrologic connection, as a result of water quality improvement(s), to areas that support beneficial uses of water or are being managed for water quality. If multiple connections are restored or created, include specifics by location.	
The Sites Reservoir project would allow for greater operational flexibility to support maintaining hydrologic connection between surface and groundwater. Conjunctive use practices by Sites participants could reduce surface water diversions and improve surface water flows by using stored groundwater during dry and critical periods. In addition, supplemental water supplies from the Sites Reservoir project would assist with improving aquifer storage and groundwater levels. Refer to Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Refer to Sites_A2 Documentation WQ Priority 6 "WSIP Data and Information Summary for Water Quality Priorities 6 – Groundwater" uploaded under the PHYSICAL PUBLIC BENEFITS TAB.
REV 11: Resilience to Climate Change at 2030	
Describe how the climate risk factors, identified in the General Application Questions for water quality priorities, were considered as part of the project siting and design for the claimed priority. Explain why any identified risk factors are not applicable.	
Various modeling scenarios were run to allow evaluation of how the benefits of the project can be sustained under potential future climate risk factors, including water quality changes, changing participation and runoff and extreme hydrologic variability. Sea-level rise, ocean acidification and wildfire risk factors are not applicable to the Sites Reservoir project. Operations modeling results demonstrate that Sites Reservoir will provide operational flexibility to sustain both public and private benefits under a range of climate change scenarios, including severe extended droughts. See Sites_A12 Uncertainty, "Uncertainty Analysis" uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: See Sites_A12 Uncertainty, "Uncertainty Analysis" uploaded under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.
REV 12: Undesirable Groundwater Results Corrected	
Describe, if applicable, the current groundwater conditions within the claimed project improvement area(s), including, but not limited to: the estimated number of wells present, total pumping values for the basin, current land use, potential and existing beneficial uses, existing water quality values, soil information, geology of the area, and any applicable undesirable results listed at Water Code section 10721(x)(1-6).	
The Sites Reservoir project would improve groundwater sustainability by supplying surface water to facilitate increased conjunctive use practices and for replenishment to enhance aquifer storage recovery. The Sites Reservoir project would improve groundwater in adjudicated groundwater basins, and medium and high priority basins defined under SGMA, including those in critical overdraft. Sites_A6C, "Groundwater Basins Affected by the Sites Reservoir Project:" uploaded under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB provided a listing of potential groundwater basins that could be improved by the project. Improvements would occur by supplying supplemental surface water that could be used to facilitate increased conjunctive use practices and replenishment to enhance aquifer storage recovery. Sites operations would change the timing of available surface and groundwater supplies by providing Sites participants with supplemental surface water for storage, use or replenishment (typically in above normal and wet year conditions) and then recovering a portion of the water during periods of water supply shortages (in dry and critical year conditions) by groundwater pumping. Increased conjunctive use and replenishment operations	

WSIP Data and Information Summary Table: Water Quality Priority 9 (Basic Human Needs)	
would assist with improving chronic lowering of water levels and reduction of groundwater storage within the groundwater basins associated with Sites Participants. Incidental water quality, salt water intrusion and subsidence improvements may also result with increases in storage and water levels.	
Describe, if applicable, the expected without-project groundwater conditions in 2030 within the claimed project improvement area, including the factors addressed for current conditions (above).	
Generally speaking, in areas that rely wholly or predominantly on groundwater, only a portion of the water pumped percolates back to the groundwater system, resulting in net extraction of groundwater where groundwater pumping (in part due to recent dry conditions) has exceeded recharge. Sustainability of groundwater supplies depends largely on the amount of surface water available for use and groundwater replenish. The project would provide supplemental surface water supplies that would help to balance groundwater supplies. Without the project, it is anticipated that groundwater pumping would continue to exceed recharge during dry period that would result in increased groundwater storage deficits.	
Describe, if applicable, the expected with-project groundwater conditions (after project implementation) in 2030 within the claimed project improvement area, including: the factors addressed for current conditions (above); how the project would coordinate with the appropriate GSA; how the project complies with SGMA if a GSA has not yet been assigned; and how the project would improve conditions in a groundwater basin/subbasin where undesirable results (as defined in Water Code 10721(x)(1-6)) caused by extraction have occurred.	
The Site project could potentially assist Participants achieve compliance under SGMA. Some of the participants are designated as a Groundwater Sustainability Agency (GSA) for affected groundwater basins, including but not limited to Colusa County, Colusa County Water District, Santa Clara Valley Water District, and Zone 7. Many other agencies participating in the Sites Project also participate in GSAs. These member agencies will be involved in the future integration of the Sites Project into their respective Ground Water Sustainability Plans (GSPs). In addition, Sites participants: Desert Water Agency, California Water Service, San Bernardino Valley Municipal Water District, Metropolitan Water District and San Gorgonio Pass Water Agency are affiliated with adjudicated groundwater basins. Antelope Valley - East Kern Water Agency is affiliated with a groundwater basin that is pending adjudication. The associated operations by participating agencies with adjudicated basins would be included in annual monitoring and reporting activities. Coachella Valley Water District, Desert Water Agency, Santa Clara Valley Water Agency, and Zone 7 Water Agency have submitted requests for an Alternative strategy to the GSP. The Alternative strategy could consist of a groundwater management plan or law authorizing ground water management within a specific basin. The Sites project could also be incorporated into the overall groundwater management strategy for the groundwater basins associated with these Participants.	
Additional locations in the application where data and relevant supporting information, including attachments, are documented (document name, page number, table number, etc.).	Application Reference: Sites_A1 WQ Priority 6, “WSIP Data and Information Summary Table: Water Quality Priority 6 –Groundwater” uploaded under the PHYSICAL PUBLIC BENEFITS TAB. Sites_A6C, “Groundwater Basins Affected by the Sites Reservoir Project” uploaded under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB

Program Requirements Tab

Attachment A.2: Cost Effectiveness

Provide documentation indicating the proposed project is cost-effective. If there is at least one feasible alternative means of providing the same amount or more of the total public and non-public physical benefits as provided by the proposed project, calculate, display and document the least-cost of these alternative means and justify the proposed project by comparison.

WSIP Application Instructions, March, 2017

Response

The proposed project has a benefit cost ratio of 1.5 as discussed in Sites_A9 BCA Results under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. The Federal Feasibility Report (see https://www.sitesproject.org/information/FeasibilityReport) independently analyzed the project using somewhat different economic methodologies and also concluded that the project was cost effective with a benefit to cost ratio of 1.45 (see Chapter 7 of the Federal Feasibility Report).

Feasible alternatives were evaluated. The NODOS Investigation by DWR and Reclamation identified three primary alternative locations for surface storage as potential alternatives to Sites Reservoir (Colusa Complex, Newville Reservoir, and Red Bank Reservoir). These alternatives are discussed in Chapter 4 of the Federal Feasibility Report (see) and in Chapter 2 of the Draft EIR/EIS (see https://www.sitesproject.org/information/DraftEIR-EIS). Red Bank Reservoir was screened out due to less suitable diversion locations and environmental impacts.

To provide a preliminary economic assessment for the three surface storage measures, costs for the construction of the reservoirs and the associated conveyance were compared with yield and unit costs. These costs are presented in Table 1. The estimated average annual cost per yield is similar in magnitude for Sites and Newville Reservoirs. The construction cost of Colusa Reservoir Complex would be approximately 4.4 times that of Sites Reservoir, and six times that of Newville Reservoir, while the increase in yield over what would be produced by the Sites and Newville Reservoirs is approximately 10 to 25 percent.

Table 1. Comparison of Total Construction and Yield Cost in 2015 Dollars

Attribute	Measure		
	Colusa Reservoir Complex	Sites Reservoir	Newville Reservoir
Gross Storage (acre-feet)	3,000,000	1,810,000	1,900,000
Dead Storage (acre-feet)	100,000	40,000	50,000
Construction Cost	$20.1B	$4.5B	$4.8B
Average Annual Cost [a]	$708M	$159M	$169M
Estimated Average Annual Yield (acre-feet)	328,000	274,000	275,000
Average Annual Cost/Yield (acre-feet)	$2,160/acre-foot	$579/acre-foot	$615/acre-foot

Note: [a] Per WSIP guidance, annual costs were based on a 93-year operating period and a 3.5 percent discount rate. Annual cost shown does not include any allowance for interest during construction or future O&M costs

Auburn Dam was also considered as a potential alternative to Sites Reservoir. Reclamation estimated the cost for Auburn Dam at $9.9 billion (compared to $4.7 billion for Sites Reservoir) with an average annual yield of 229 TAF (compared to 450 TAF for Sites Reservoir) (*Folsom Auburn South Unit: Special Report: Benefits and Costs Update*, Reclamation, 2006).

As a result, the Newville Reservoir was determined to be the least cost alternative project that would result in comparable total overall benefits. Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB includes a Least Cost Alternative that provides the same total physical benefits. No project specific estimates for Newville Reservoir non-construction costs were available. Therefore, a rough approximation of Newville Reservoir future full cost (i.e., including interest during construction, mitigation and future O&M costs) was estimated based on the corresponding Sites Reservoir costs and proportionally adjusted based on Newville's higher construction cost.

Consequently, assuming an eight year construction period and similar scheduling, the IDC cost for Newville Reservoir was estimated to be $820 million based on the WSIP required 3.5 percent discount rate. Environmental mitigation costs of $388 million were also assumed for the project. The present value of Newville Reservoir's total O&M expenses was estimated to be $838 million. Altogether, Newville Reservoir's estimated total project cost was estimated be $6,926 million in present value terms.

Throughout the analysis of benefits, the alternative project cost approach was used in monetization of several benefit categories (see Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB). However, as discussed in the section, Shasta Lake Dam raise was determined to be a more appropriate alternative project for the benefit valuation of the Sites Reservoir's future ecosystem improvements.

Attachment 1 - WSIP Data and Information Summary for Water Quality Priorities 1 – Temperature

Methods

The 2015 current conditions data used in the analyses for the application was based on the DWR Delivery Capability Report and base scenario model released in July 2015 with project operations. The year 2015 was used for current conditions because the Delivery Capability Report and base scenario model the most recent and best data available for the analysis. Current conditions temperature modeling data for the WSIP application is presented in Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.

The 2030 expected with- and without-project conditions analyses for the Sites Reservoir Project WSIP Application utilized the model products and assumptions described in section 6004(a)(1) of the code of regulations, including the 2030 and 2070 future conditions CalSim-II models provided by the California Water Commission on November 2, 2016. Temperature models for the primary river systems used the CalSim II reservoir storage, reservoir releases, river flows, and meteorological conditions to estimate reservoir and river temperatures. Water temperature models used were the Upper Sacramento River Water Quality Model (USRWQM) and U.S. Bureau of Reclamation Temperature Model (RECTEMP). A further description of the modeling used for the analysis is provided in Sites_A1 Modeling under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Temperature modeling data "Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries", "Temperature Results DCR 2015 with Project vs DCR 2015 without Project", and "Temperature Results WSIP 2030 with Project vs without Project" are presented in Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.

Water Quality Objectives and Beneficial Uses

Water quality objectives for waters affected by the project are specified in the basin plans for the North Coast, Central Valley, Tulare Lake, and the San Francisco Bay regions. Water quality objectives for water temperature are also specified in the SWRCB Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California. SWRCB Water Rights Orders 90-05 and 91 and the 2009 National Marine Fisheries Service (NMFS) biological opinion (BO) also include requirements related to storage and conveyance facility operations in order to achieve temperature compliance objectives.

The water bodies within the Project area support warm and cold fresh water habitat and other aquatic beneficial uses. Water bodies in these areas must maintain water temperatures supportive of resident and seasonal fish species habitats, particularly for endangered species. State Water Resources Control Board Order 90-5 compliance. Order 90-5 establishes water right requirements on the U.S. Bureau of Reclamation operations of Keswick Dam, Shasta Dam, the Spring Creek Power Plant and the Trinity River Division related to temperature control in the Upper Sacramento River for the protection of fishery resources and requires monitoring and reporting to evaluate compliance with those requirements.

As part of the requirements of the 2009 NMFS BO, the preparation of an annual temperature management plans by Reclamation are required to determine NMFS approved management strategies to protect the cold water pool of Trinity, Shasta, Folsom Reservoirs and acceptable temperatures at select compliance points within the river systems downstream of the reservoirs. State Water Project operations at Lake Oroville are also factored into the temperature management plans. The water quality objectives and beneficial uses are further described in Table 7.1 on pages 7-1 to 7-3 in Chapter 7, "Surface Water Quality" of the EIR/EIS. Water quality objectives specific to temperature for the Trinity River system and the Sacramento River are presented on Tables 7-2, 7-3 and 7-4.

Areas of Temperature Improvements

The project would increase coldwater pool conservation in Shasta Lake, Lake Oroville, and Folsom Lake and improve temperatures in the Sacramento and American Rivers during certain months at specific compliance points, particularly in Below Normal, Dry, and Critical water years. The areas of temperature improvement for these waterways are shown on Figures Water Quality P – 1a and P – 1b.

As discussed in the Operations Plan, Sites_A2 Operations under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, it is thought that maximum temperature benefits in the Sacramento and American Rivers could be realized by emphasizing cold water releases during the months of highest potential water temperature related impacts (i.e., July through November). Adaptive management and monitoring would also be implemented to ensure that these benefits are achieved to the maximum extent possible. The areas of greatest temperature improvement are summarized in the "Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries" are presented in Sites_A1 Modeling under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Temperature modeling data. All temperature modeling data is presented in "Temperature Results WSIP 2030 with Project vs without Project" are presented in" are presented in Sites_A1 Modeling under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB

Sacramento River

Approximately 59 river miles of the Sacramento River would be improved with the implementation of the Sites Reservoir Project downstream from Keswick Dam (River Mile 302) to the Red Bluff Diversion Dam (River Mile 243). Figure Water Quality P-1a shows the improvement area for the Sacramento River. Site project operations emphasize providing Sacramento River cold water releases during the months of July through November when it's most difficult to achieve temperatures water quality standards; therefore, the main focus of discussion regarding temperatures benefits is limited to this time of the year. Incidental benefits during other times of the year can also be seen, including January through February in most water year types in the Sacramento from below Keswick to Bend Bridge.

Sacramento River – Below Keswick

Long-term and water year type monthly temperature averages with and without the project in 2030 for the Sacramento River below Keswick Dam are presented in Table SQ2-1a. With the operation of Sites Reservoir project, temperatures would improve in August and September of dry water years and July through November in critical water years. Temperature benefits provided with the project in September during critical water years would assist to achieve compliance with 56◦F water quality standard; without the project temperatures would exceed 56◦F.

Sacramento River – Bonny view

Temperatures in the Sacramento River at Bonnyview would improve in August for all water year types, in September during dry water years, and July through November in critical water years. Temperature benefits provided with the project in August during critical water years would assist to achieve compliance with 56◦F water quality standard; without the project temperatures would exceed 56◦F. Long-term and water year type monthly temperature averages with and without the project in 2030 for the Sacramento River at Bonnyview are presented in Table SQ3-1a.

Sacramento River – Balls Ferry

In the Sacramento River at Balls Ferry, the project would improve temperatures in August for all water year types, in September during below normal and dry water years, and July through November in critical water years. Temperature benefits provided with the project in August during dry water years would assist to achieve compliance with 56◦F water quality standard; without the project temperatures would exceed 56◦F. Long-term and water year type monthly temperature averages with and without the project in 2030 for the Sacramento River at Balls Ferry are presented in Table SQ4-1a.

Sacramento River – Jelly's Ferry

Temperatures in the Sacramento River at Jelly's Ferry would improve in August for all water year types, in September during below normal and dry water years, and July through November in critical water years. Long-term and water year type monthly temperature averages with and without the project in 2030 for the Sacramento River at Jelly's Ferry are presented in Table SQ5-1a.

Sacramento River – Bend Bridge

Temperatures in the Sacramento River at Bed Bridge would improve in August for all water year types, in September during below normal and dry water years, and July through November in critical water years. Long-term and water year type monthly temperature averages with and without the project in 2030 for the Sacramento River at Bend Bridge are presented in Table SQ6-1a.

Sacramento River – Red Bluff

Long-term and water year type monthly temperature averages with and without the project in 2030 for the Sacramento River below Red Bluff are presented in Table SQ8-1a. With the operation of Sites Reservoir project, temperatures would improve in August and September of during below normal and dry years and August through November in critical water years. Temperature benefits provided with the project in September during critical water years would assist to achieve compliance with 56◦F water quality standard; without the project temperatures would exceed 56˚F.

American River

Cold water releases from Folsom Reservoir to the American River as part of site project operations are targeted during the months of July through November. During these months, it's most difficult to achieve temperatures water quality standards. The greatest benefits are seen between April and October during all water year types. Approximately 30 river miles of the American River would be improved with the implementation of the Sites Reservoir Project downstream from Folsom Dam to the mouth of the American River. Figure Water Quality P-1c shows the improvement area for the American River.

American River at Nimbus

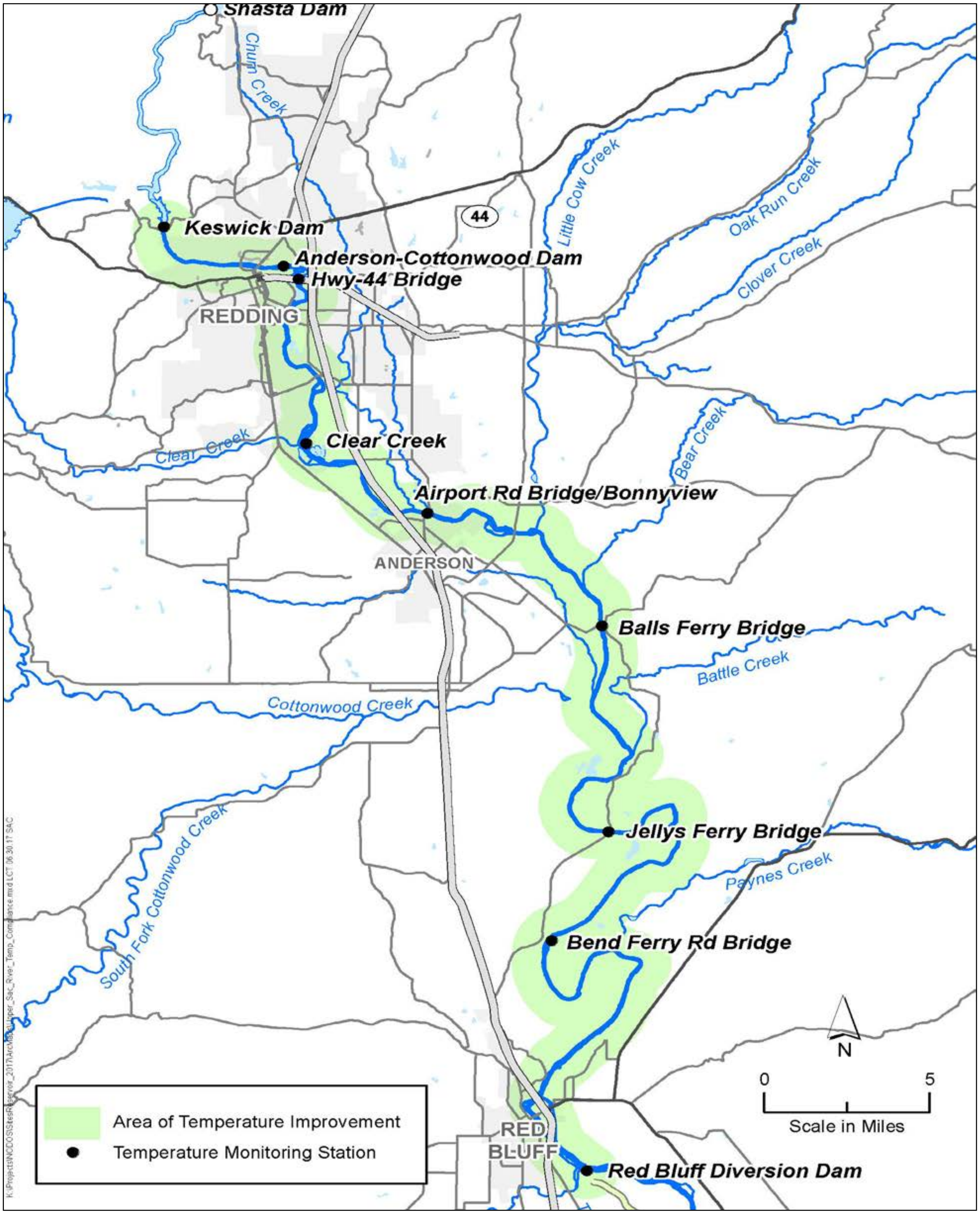
Long-term and water year type monthly temperature averages with and without the project in 2030 for the American River at Nimbus Dam are presented in Table SQ9-1a. Modeling results indicate that temperatures in the American River at Nimbus would improve April through September during most water year types. The greatest benefits can be seen during the month of September.

American River at Watt Ave

Temperatures in the American River at Watt would improve during April through September in most water year types. The greatest benefits can be seen during the month of September. Long-term and water year type monthly temperature averages with and without the project in 2030 for the American River at Watt are presented in Table SQ10-1a.

American River at Mouth

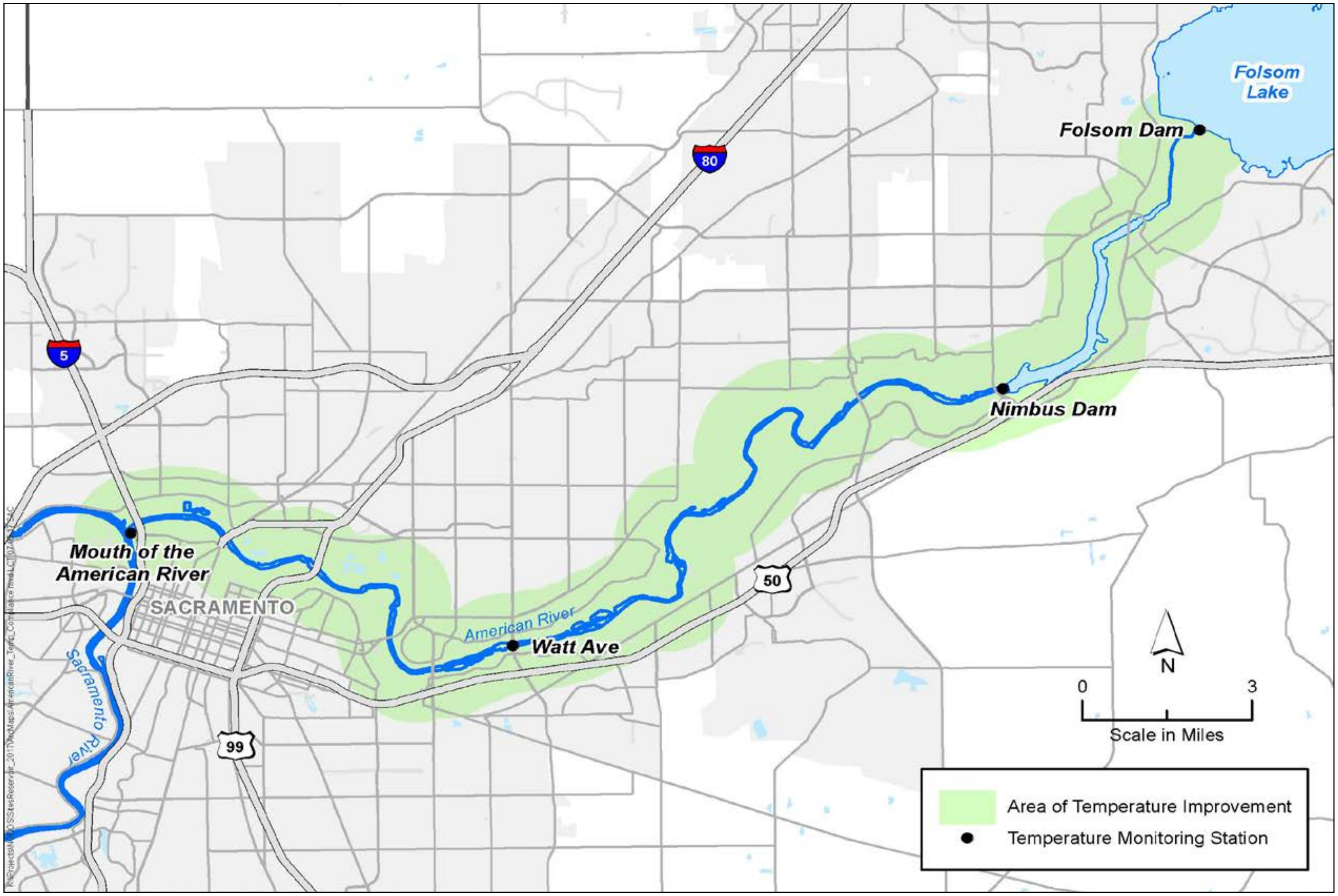
At the mouth of the American River, temperatures would improve April during most water year types. The greatest temperature benefits provided with the project are July through September during critical water years. Long-term and water year type monthly temperature averages with and without the project in 2030 for the American River at the mouth are presented in Table SQ11-1a.



Source: Prepared by AECOM 2017

Figure Water Quality P – 1a Area of Temperature Improvement for the Sacramento River

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFIT	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	WATER QUALITY PRIORITIES 1			PAGE:	5	OF	6



Source: Prepared by AECOM 2017

Figure Water Quality P – 1b. Area of Temperature Improvement for the American River

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFIT	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	WATER QUALITY PRIORITIES 1			PAGE:	6	OF	6

Attachment 1 - WSIP Data and Information Summary for Water Quality Priorities 6 –Groundwater

Methods

The 2015 current conditions data used in the analyses for the application was based on the DWR Delivery Capability Report and base scenario model released in July 2015 with project operations. The year 2015 was used for current conditions because the Delivery Capability Report and base scenario model the most recent and best data available for the analysis. Regional deliveries modeling data for the WSIP application is presented in Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.

The 2030 expected with- and without-project estimated deliveries for the Sites Reservoir Project WSIP Application utilized the model products and assumptions described in section 6004(a)(1) of the code of regulations, including the 2030 and 2070 future conditions CalSim-II models provided by the California Water Commission on November 2, 2016. A further description of the modeling used for the analysis is provided in Sites_A1 Modeling under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. Regional deliveries modeling data for the WSIP application “Regional Deliveries DCR 2015 with Project vs without Project” “Regional Deliveries WSIP 2030 with Project vs without Project” and “Regional Deliveries WSIP 2070 with Project vs without Project” are presented in Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.

Regional Groundwater Improvements

The Sites Reservoir project would improve groundwater in adjudicated groundwater basins, and medium and high priority basins defined under SGMA, including those in critical overdraft. Sites_A6C Groundwater Basins under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB provided a listing of potential groundwater basins that could be affected by the project. Improvements would occur by supplying supplemental surface water that could be used to facilitate increased conjunctive use practices and replenishment to enhance aquifer storage recovery. Sites operations would change the timing of available surface and groundwater supplies by providing Sites participants with supplemental surface water for storage, use or replenishment (typically in above normal and wet year conditions) and then recovering a portion of the water during periods of water supply shortages (in dry and critical year conditions) by groundwater pumping. Increased conjunctive use and replenishment operations would assist with improving chronic lowering of water levels and reduction of groundwater storage within the groundwater basins associated with Sites Participants. Incidental water quality, salt water intrusion and subsidence improvements may also result with increases in storage and water levels.

Conjunctive Use Management by Sites Participants

Several Sites Participants have already implemented or are in the process of implemented groundwater replenishment and conjunctive use programs in order to improve groundwater conditions. For example, Santa Clara Water District manages approximately 300 acres of groundwater recharge ponds and more than 90 miles of creeks that recharge approximately 156,000 acre-feet of groundwater each year (2013 California Water Plan Update). There are also several projects considered in the North Sacramento Valley and Sacramento Valley Integrated Regional Water Management Plans (IRWMP) that could potentially use water from Sites Reservoir to support sustainable groundwater management. These projects include:

- Stony Creek Fan Partnership Conjunctive Management Program
- Foothill stream restoration and recharge enhancement project;
- In-lieu recharge project in north-eastern Glenn County; and

- Glenn County surface and groundwater quality improvement project.
- Cooperative Program for Groundwater Studies between the County of Glenn and the Colusa Basin Drainage District

Increases in Regional Surface Water Deliveries

Table 1 shows the total annual increase in deliveries with the implementation of the project for averages over the long-term and for Dry and Critical water years. An annual breakdown for all water year types is presented in 'Regional Deliveries WSIP 2030 with Project vs without Project" are presented in Sites_A6D Modeling Results Compendium under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB.

Table 1: Increases in Deliveries by Hydrologic Region with the Sites Project

CalSim II Modeled Beneficiaries	**Average Increase in Deliveries (TAF/yr)**	**Dry and Critical Increase in Deliveries (TAF/yr)**	**Average Increase in Deliveries (TAF/yr)**	**Dry and Critical Increase in Deliveries (TAF/yr)**	**Average Increase in Deliveries (TAF/yr)**	**Dry and Critical Increase in Deliveries (TAF/yr)**
Sacramento River Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water to CVP Settlement Contractors	2	6	2	5	1	4
Supplemental Water for CVP Service Area Ag	67	119	96	137	121	132
Supplemental Water for CVP Service Area M&I	0	0	0	0	0	0
Supplemental Water for SWP Service Area M&I	0	0	0	0	0	0
Supplemental Water for SWP Service Area Feather River Service Area	3	2	4	5	4	4
Supplemental Water for County of Colusa	7	8	8	9	8	8
Colusa Basin (Incremental Level 4 Refuge Water Supply)	1	0	1	0	1	0
Total	***80***	***136***	***111***	***155***	***136***	***148***
San Joaquin River Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for CVP Service Area Ag	0	0	0	0	0	0
Mendota Pool (Incremental Level 4 Refuge Water Supply)	29	13	28	10	25	8
San Francisco Bay Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for CVP Service Area Ag	0	0	0	0	0	0
Supplemental Water for SWP Service Area M&I	35	72	38	72	42	77
Central Coast Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for SWP Service Area M&I	0	0	0	0	0	0
Tulare Lake Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for CVP Service Area Ag	12	28	13	27	15	29
Supplemental Water for SWP Service Area M&I	0	0	0	0	0	0
Supplemental Water for SWP Service Area Ag	12	28	13	27	15	29
Tulare Basin (Incremental Level 4 Refuge Water Supply)	7	3	6	2	6	2
Total	***31***	***58***	***33***	***57***	***36***	***61***
South Lahontan Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for SWP Service Area M&I	1	3	2	3	2	3
South Coast Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for SWP Service Area M&I	60	126	67	126	73	134
Supplemental Water for SWP Service Area Ag	0	0	0	0	0	0
Delta Environmental Water Quality	**2015**		**2030**		**2070**	
Upstream and Delta Inflow	73	72	73	78	68	79

Hydrologic Region and Groundwater Basin Information

The Sites project has the potential to provide improvements to groundwater basins located within the Participant's service area, within Colusa County and near refuges when increases in Incremental Level 4 Refuge Water Supply would be delivered (Table 1). A description of the hydrologic regions is presented in Chapter 6, "Surface Water Resources" of the EIR/EIS. Detailed information regarding groundwater elevation and water wells data for these hydrologic regions can be found on DWR's Groundwater Level Monitoring Website (http://www.water.ca.gov/groundwater/data_and_monitoring/levels.cfm).

The greatest benefits from the Sites Project to groundwater are expected in the Sacramento Valley Hydrologic Region. Sites Reservoir would alter the regional water balance in the Sacramento Valley, thereby protecting the region from the long-term overdraft conditions that have come to characterize the San Joaquin Valley.

Sites Reservoir is an important component of regional water planning for Colusa and Glenn Counties. In 2014 and 2015, the Tehama Colusa Canal received no allocation of water from the Bureau of Reclamation due to the severity of the drought. At the same time, the Colusa subbasin was in an overdraft condition and NASA reported subsidence in the vicinity of Arbuckle, CA (approximately 30 miles south of the proposed location for Sites Reservoir). A recent study concluded that drought, not cropping patterns, is having the dominant effect on declining groundwater levels in this area (Davids Engineering, Inc., *Analysis of Land and Water Use in Relation to Groundwater Conditions in Colusa County*, 2016). The Sacramento Valley consists of fresh water aquifer systems underlain by larger saline water aquifer systems. Groundwater management must prevent mixing of the fresh and saline aquifer systems. Overpumping of groundwater without adequate recharge could result mixing of these system and degradation of water quality. Recharge throughout the area depends strongly on the availability of supplemental surface water. The reservoir would provide a much more stable water supply of surface water throughout the service areas of Sites participants in the Sacramento Valley (i.e., TCCA, RD 108, County of Colusa and Western Canal WD).

Climate Change Risks

Climate change projections indicate that California will experience more extreme weather, such as floods and droughts. At the same time, warming temperatures are expected to raise the snowfall elevation, causing more winter precipitation in the Sierra Nevada to occur as rainfall. This will lead to larger and earlier runoff events. As a result of these changes, several million acre-feet of natural snowpack storage could be lost annually, reducing available water supply. In addition, the increasing severity of storms and increased runoff could overwhelm existing reservoir flood protection capacity and increase flood risks downstream.

By expanding surface storage capacity, water supply systems would have greater flexibility to capture the increased winter runoff and help control larger anticipated flood flows. Additional reserve storage would also allow water to be held over for all uses in dry years and droughts.

Expansion of surface storage capacity can be an effective climate change adaptation strategy because increasing local and regional surface storage can provide greater flexibility for capturing runoff and managing supplies to meet increasingly variable future conditions. The ability to store water from wet years for use in dry years is critical to addressing increasing climate variability. Additional surface storage allows water to be held over from year to year as a hedge against dry years and droughts.

Surface storage provides ability to capture flood flows to protect downstream assets and quickly release large quantities of water when demands increase, or to meet instream temperature requirements.

Reservoirs also allow storage of water that can be released slowly at rates that match groundwater basin percolation rates and facilitate recharge of downstream groundwater basins.

The operational flexibility of Sites Reservoir allows for the delivery of water for public benefits where and when it is needed most while adapting to future conditions to provide sustained public benefits. For further information refer to the Sites_A12 Uncertainty under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

Source: Prepared by AECOM 2017

Figure Water Quality P – 6a. Hydrologic regions receiving surface water supplies and potential aea of Groundwater Improvement

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFIT	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	WATER QUALITY PRIORITIES 6			PAGE:	5	OF	5

Attachment A2 – Documentation for Water Quality Priority 9 –Basic Human Needs

The Sites Project would provide supplemental surface water supplies to Municipal and Industrial (M&I) water providers whose service areas include disadvantaged communities (DACs) that have drinking water supplies that exceed California maximum contaminant levels for various naturally occurring and human-caused contaminants including arsenic, nitrates, hexavalent chromium, bacteria, radionuclides, and disinfection by-products. The primary source for drinking water in the majority of the DACs is groundwater. Supplemental high quality surface water supplies generated from the project could be made available to DACs with unsafe drinking water supplies.

In addition, the Sites Reservoir Project water deliveries could augment groundwater storage and water level benefited that could also provide water quality improvements. In some DACs, chronic lowering of groundwater has resulted in wells reportedly going dry during periods of drought. Groundwater level benefits from increased conjunctive use by Sites participants could also improve access to drinking water supplies in DACs with wells going dry, particularly in the Sacramento River Colusa Subbasins.

Methods

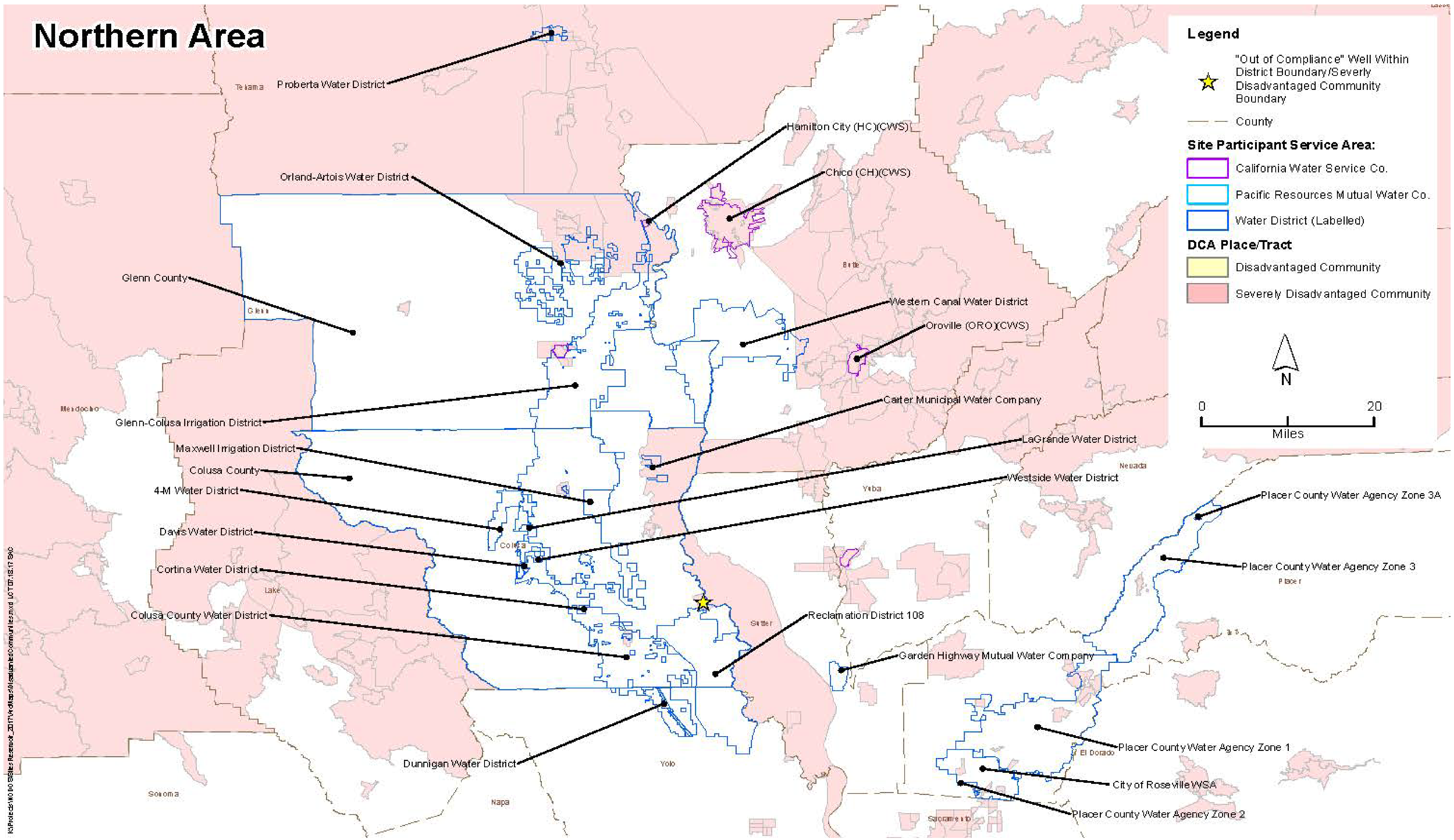
An evaluation of water supplies and public water systems within the hydrologic regions that will receive Sites Reservoir M&I water supplies and DACs was performed to identify potential disadvantaged communities where those basic human water needs, such as drinking, cooking, and bathing, are not currently being met. The State Water Resources Control Board (SWRCB) Human Right to Water Portal was used to identify water systems that currently do not meet drinking water standards. Water system details were obtained using the SWRCB's Safe Drinking Water Information System. DACs were identified using DWR's web-based Disadvantaged Communities Mapping Tool (DWR, 2015b). An overlay of the Sites Participant's service areas and DAC in areas with drinking water systems not currently meeting standards was performed.

Results

Table 1 presents the drinking water systems that are currently not meeting drinking water Standards in Participant Service Areas. These areas are also shown on Figures Water Quality P – 9a through Figures Water Quality P – 9c. The allocation of deliveries within each service area will be defined by each M&I participant and could vary from year-to-year depending on the needs of water users in that service area and specific timing and amount of deliveries from the Sites project.

Table 1: Disadvantaged Community Drinking Water Systems Not Meeting Drinking Water Standards in Participant Service Areas								
Drinking Water System ID	Population Served	System Violations	Site Participant Service Area	Groundwater Basin ID	Groundwater Basin Name	Hydro Region	Disadvantaged Community	Disadvantaged Community Population (2014)
CA3900579	50	Arsenic	CA Water Service Co.	5-22.01	San Joaquin Valley	San Francisco Bay	Garden Acres CDP	6,559
CA3901213	30	Arsenic, Coliform	CA Water Service Co.	5-22.01	San Joaquin Valley	San Francisco Bay	Stockton City CDP	5,677
CA4310013	29,635	Disinfection by-products	Santa Clara Valley Water District	2-9.02	Santa Clara Valley	San Francisco Bay	Census Tract 5130	7,450
CA1500493	200	Arsenic	CA Water Service Co.	5-22.14	San Joaquin Valley	Tulare Lake	Census Tract 31.22	8,612
CA1500585	100	Arsenic	CA Water Service Co.	5-22.14	San Joaquin Valley	Tulare Lake	Census Tract 31.22	8,612
CA1502699	35	Nitrate-Nitrite, Coliform	CA Water Service Co.	5-22.14	San Joaquin Valley	Tulare Lake	Census Tract 31.22	8,612
CA1510024	8,500	Arsenic, E. Coli	CA Water Service Co.	5-22.14	San Joaquin Valley	Tulare Lake	Census Tract 31.22	8,612
CA1500575	165	Nitrate, Nitrate-Nitrite	CA Water Service Co.	5-22.14	San Joaquin Valley	Tulare Lake	Census Tract 23.02	3,444
CA1500494	66	Nitrate, Nitrate-Nitrite	CA Water Service Co.	5-22.14	San Joaquin Valley	Tulare Lake	Census Tract 9.05	2,553
CA1500455	56	Arsenic	Antelope Valley - East Kern Water Agency	6-46	Fremont Valley	Tulare Lake	Census Tract 59	3,678
CA1510002	2,253	Arsenic, Disinfection by-products	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 56	2,241
CA1500424	190	Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 58.02	7,877
CA1500485	60	Hexavalent Chromium, Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 58.02	7,877
CA1500571	73	Arsenic, Nitrate	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 58.02	7,877
CA1502231	940	Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 58.02	7,877
CA1502569	35	Hexavalent Chromium, Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 58.02	7,877
CA1502744	44	Hexavalent Chromium, Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 58.02	7,877
CA1900038	61	Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 9005.06	5,020
CA1900785	24	Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 9008.06	3,883
CA1900100	135	Arsenic	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 9010.10	6,271
CA1900520	50	Arsenic, Coliform	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 9010.10	6,271
CA1900961	56	Arsenic, Coliform	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 9010.10	6,271
CA1910246	1,500	Arsenic, Coliform, Radionuclides	Antelope Valley - East Kern Water Agency	6-44	Antelope Valley	Tulare Lake	Census Tract 9010.10	6,271
CA3710707	489	Disinfection by-products	Metropolitan Water District	9-14	Mission Valley	South Coast	Census Tract 62	26
CA3301380	300	Arsenic, Nitrate	Coachella Valley Water District	7-31	Orocopia Valley	Colorado	Census Tract 456.04	13,677
CA3303100	314	Hexavalent Chromium, Arsenic	Coachella Valley Water District	7-21.01	Coachella Valley	Colorado	Census Tract 456.09	5,671
CA0600008	500	Arsenic	Colusa County	5-21.52	Sacramento Valley	Sacramento	Grimes CDP	5-21.52
CA3610064	87,000	Disinfection by-products, Gross Alpha Particle Activity	San Bernardino Valley Municipal Water District	8-02.06	Upper Santa Ana Valley	South Coast	San Bernardino CDP	8-02.06

Sources: Prepared by AECOM 2017; https://waterboards.maps.arcgis.com/apps/webappviewer/index.html?id=573c97635cc747b8bb73cf1c8706fc22&mobileBreakPoint=480\; https://gis.water.ca.gov/app/dacs/; https://sdwis.waterboards.ca.gov/PDWW/
CDP = Census designated place



Source: Prepared by AECOM 2017

Figure Water Quality P – 9a. Disadvantaged Community Block Groups within Site Participant's Service Area (Northern California)

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFIT	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	WATER QUALITY PRIORITIES 9			PAGE:	3	OF	5

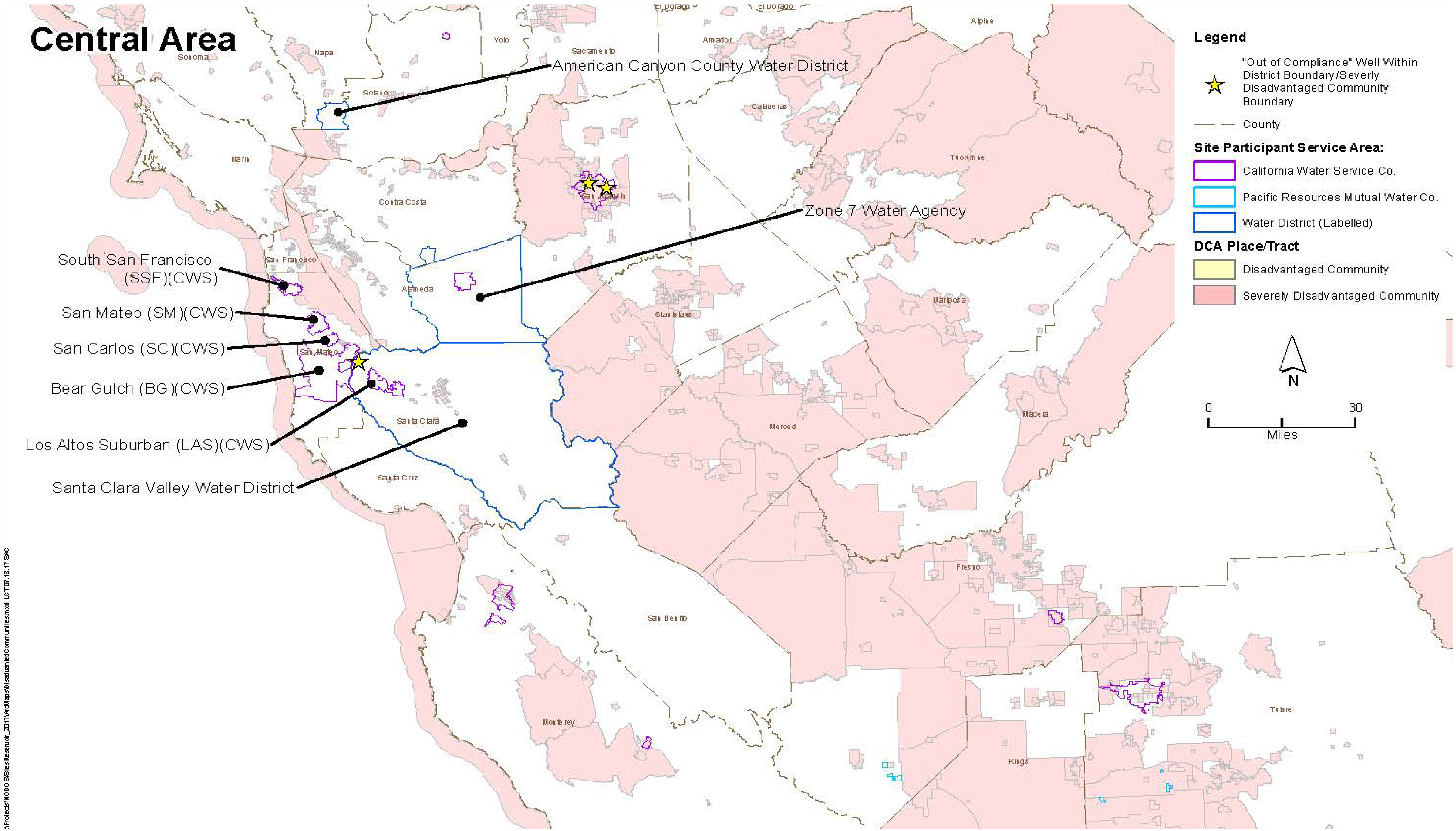


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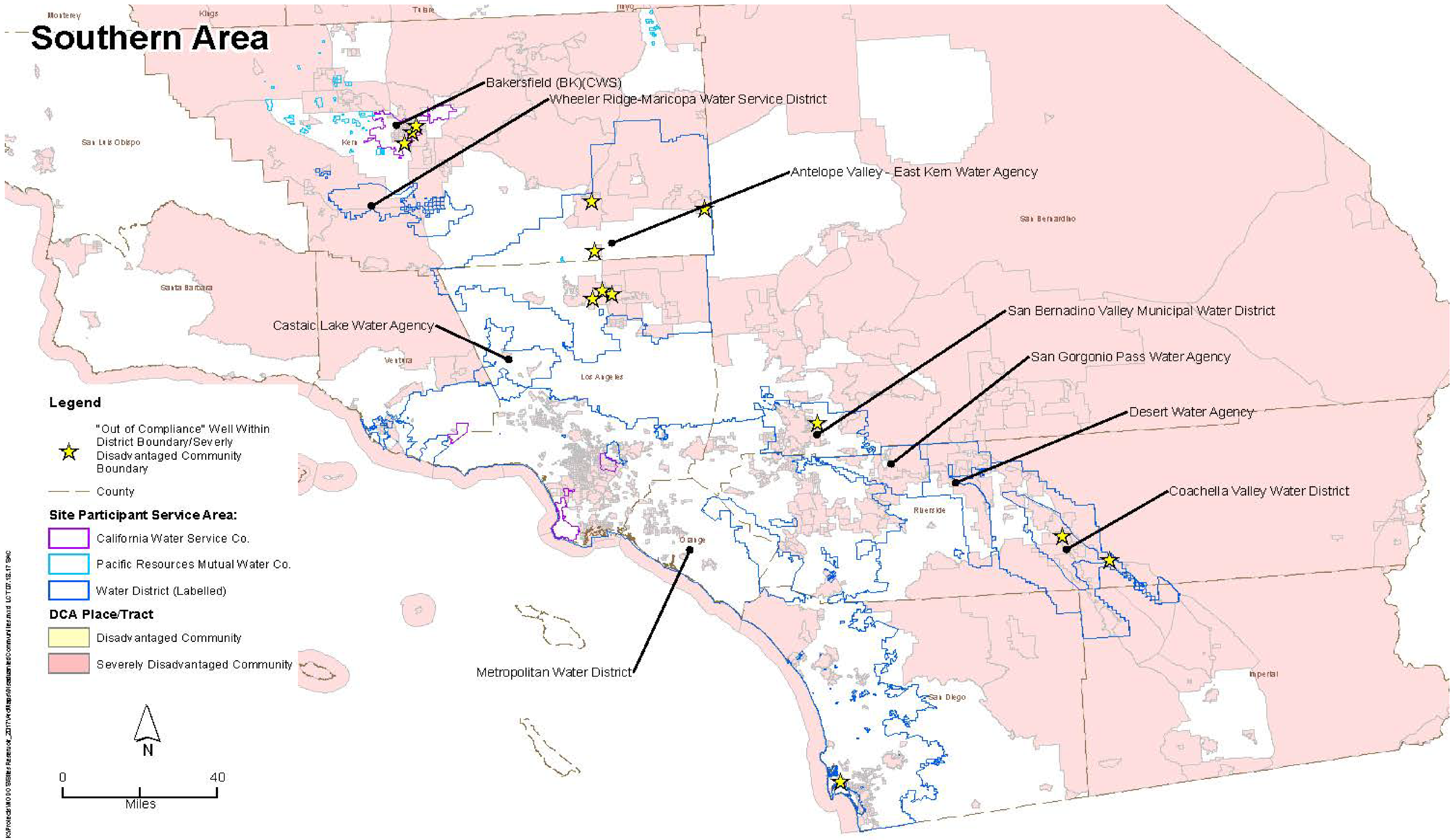
Figure Water Quality P – 9b. Disadvantaged Community Block Groups within Site Participant's Service Area (Central California)

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFIT	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	WATER QUALITY PRIORITIES 9			PAGE:	4	OF	5



Source: Prepared by AECOM 2017

Figure Water Quality P – 9c. Disadvantaged Community Block Groups within Site Participant's Service Area (Southern California)

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFIT	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	WATER QUALITY PRIORITIES 9			PAGE:	5	OF	5

Physical Public Benefits Tab

Attachment 2: Ecosystem Documentation Priorities 1, 2, 10, 14, 15, and 16

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Table of Contents

Attachment 2: Ecosystem Documentation Priorities 1, 2, 10, 14, 15, and 16 1
Ecosystem Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry 7
Improved Temperatures 7
Reduction in Sacramento River Winter-run Chinook Salmon Mortality 10
Species Conservation Plans.. 13
Ecosystem Priority 2: Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids 14
Ecosystem Priority 10: North Delta Food Web Study 15
Ecosystem Priority 14: Ecosystem Priorities Application Worksheet– Terrestrial 34
Effects of Water Reductions at Refuges: 34
Ecosystem Priority 15: Develop and Implement Invasive Species Management Plans 37
Central Valley Prairie 37
Central Valley Prairie Importance.. 39
Central Valley Prairie Creation Approach 39
Ecosystem Priority 16: Ecosystem Priorities Application Worksheet– Terrestrial 40
CalSim Model Runs - Refuges 40
Native Species Benefiting from Implementation of the Project...................................... 41
References: 43

Tables

Table A2-1. Temperature (°F) Improvements in Critical Water Years (July through September Period) 7
Table A2-2. American River Temperature (°F) Improvement at Watt Avenue (July to September) 7
Table A2-3. Estimated Percent Reduction in Mortality Due to Thermal Benefits of Project to Salmonid Eggs and Fry 10
Table A2-4. Stabilize Sacramento River Fall Flows 14
Table A2-5. Increased Juvenile Production Compared to Without Project (SALMOD 2030) 14
Table A2-6. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project, Refuge Water Supplies (Central Valley Project [CVP] Contract, Sites and Acquisitions Supplies), Long-term Average and Average by Water Year Type 35
Table A2-7. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project for Sites Deliveries of Incremental Level 4 Refuge 35
Table A2-8. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project Sites Deliveries to Sacramento Valley Members: Long-term Average and Average by Water Year Types 36
Table A2-9. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project Sites Deliveries to South of Delta Members for Agriculture: Long-term Average and Average by Water Year Types 36
Table A2-10. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project, Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies), Long-term Average and Average by Water Year Type 40
Table A2-11. Waterfowl 41
Table A2-12. Shorebirds/Egrets/Other Wetland-Dependent Species 42
Table A2-13. Special-Status Species 42

Figures

Figure A2-1: Area of Temperature Improvement for the Sacramento River 8
Figure A2-2: Area of Temperature Improvement for the American River 9
Figure A2-3: Virgate tarplant 37
Figure A2-4 California Grassland Habitats mapped in 1995 by the GAP Analysis Project 38

Acronyms and Abbreviations

°F	Fahrenheit
CDFW	California Department of Fish and Wildlife
cfs	cubic feet per second
CV	Central Valley
CVP	Central Valley Project
DCH	Designated Critical Habitat
EFH	Essential Fish Habitat
GCID	Glenn Colusa Irrigation District
IEP	Interagency Ecological Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NWR	National Wildlife Refuge
PCE	primary constituent elements
PFMC	Pacific Fishery Management Council
RECTEMP	U.S. Bureau of Reclamation Temperature Model
RM	River Mile
SWRCB	State Water Resources Control Board
TCCA	Tehama-Colusa Canal Authority
USRWQM	Upper Sacramento River Water Quality Model

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Ecosystem Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry

Improved Temperatures

Cold water benefits will be realized by operating Sites Reservoir and Shasta Lake in cooperation to preserve a greater volume of coldwater pool storage in Shasta Lake. This will be accomplished by substituting water from Sites Reservoir to meet a portion of the CVP water demand from Shasta (especially in the lower GCID and TCCA service areas) thus allowing cold water to be conserved in storage in Shasta Reservoir to benefit anadromous fish. This water will be released to maintain appropriate water temperatures in the Sacramento River, with particular emphasis on the months of highest potential water temperature related impacts. The area of temperature improvement for the Sacramento River resulting from the Project is shown in Figure A2-1 below and temperature improvements in Critical water years are shown in Table A2-1. Shasta Lake average end-of-month storage in May under simulated current, 2030, and 2070 dry water year conditions increases by 90 thousand acre feet (TAF) to 100 TAF above the respective without-project conditions.

Table A2-1. Temperature (°F) Improvements in Critical Water Years (July through September Period)

Sacramento River Location	Current Condition without Project (°F)	Current Condition with Project (°F)	Difference (°F)	WSIP 2030 without Project (°F)	WSIP 2030 with Project (°F)	Difference (°F)
Bonnyview	56.5	55.1	-1.4	56.5	55.9	-0.6
Balls Ferry	58.0	56.6	-1.4	58.1	57.5	-0.6
Jellys Ferry	59.2	57.9	-1.3	59.4	58.8	-0.6
Bend Bridge	60.1	58.9	-1.2	60.3	59.7	-0.6

Through releases from Sites Reservoir to meet TCCA and GCID irrigation diversions and equivalent reductions in CVP Shasta Lake releases, demands on Shasta Lake storage could be reduced and the coldwater pool maintained for a longer time at higher levels than are currently achievable. Shasta Lake release patterns could be shifted in season and between adjacent years to improve coldwater storage and flow management for salmon and other species using the portion of the Sacramento River between Keswick Dam and the Red Bluff Pumping Plant as habitat. Similar increases in storage can be achieved in Lake Oroville (average end-of-May increases of 25 to 35 TAF).

The operation of Sites Reservoir also provides opportunity for improved temperature conditions in the American River. Results for the American River at Watt Avenue are provided in Table A2-2 and the area of temperature improvement for the American River is shown in Figure A2-2.

Table A2-2. American River Temperature (°F) Improvement at Watt Avenue (July to September)

Year Type	2015 without Project	2015 with Project	Difference	WSIP 2030 without Project	WSIP 2030 with Project	Difference
Average	66.7	65.8	-0.9	70.6	69.9	-0.6
Dry	68.0	67.2	-0.8	70.7	70.5	-0.2
Critical	71.6	70.2	-1.4	73.6	73.1	-0.5

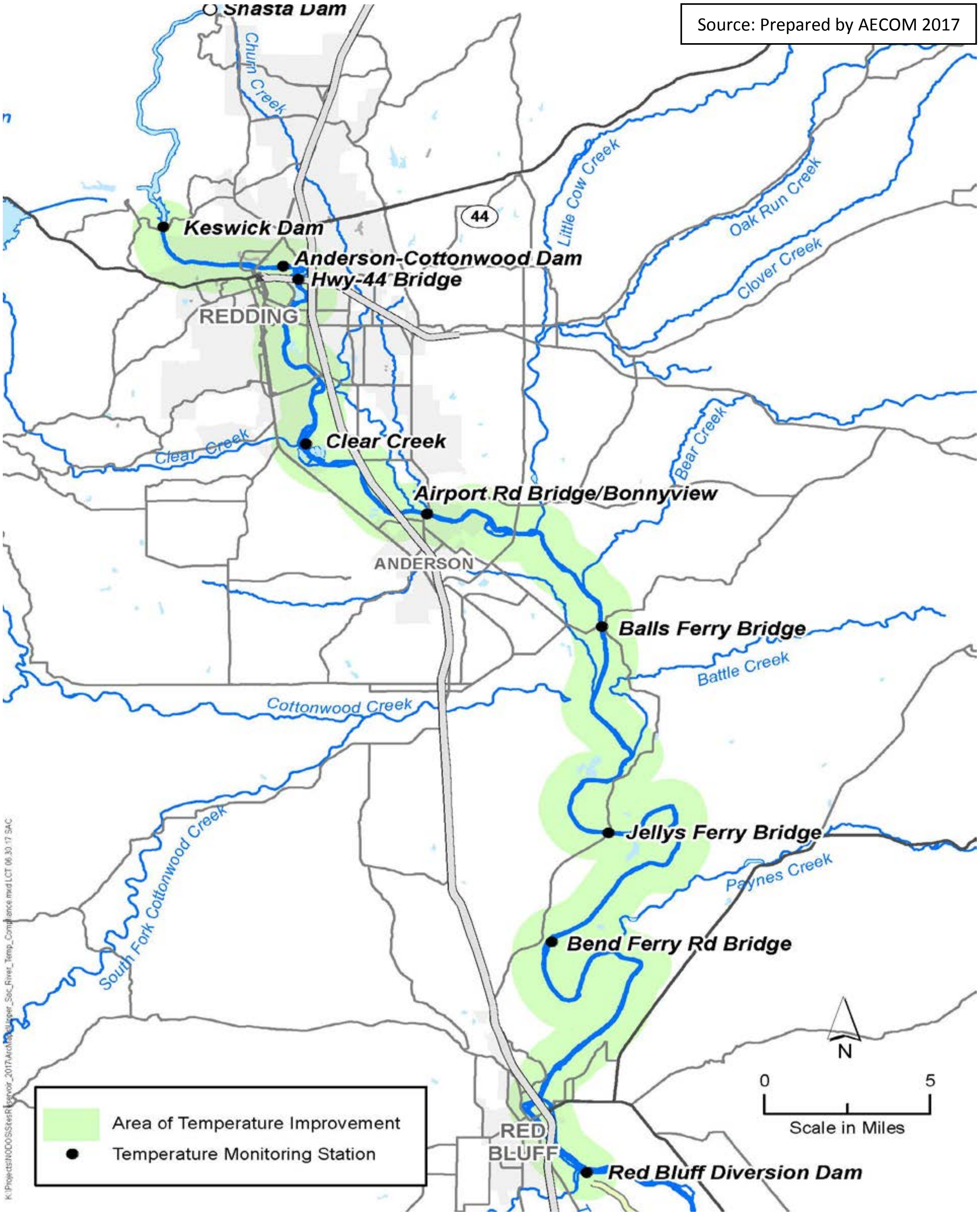


Figure A2-1: Area of Temperature Improvement for the Sacramento River

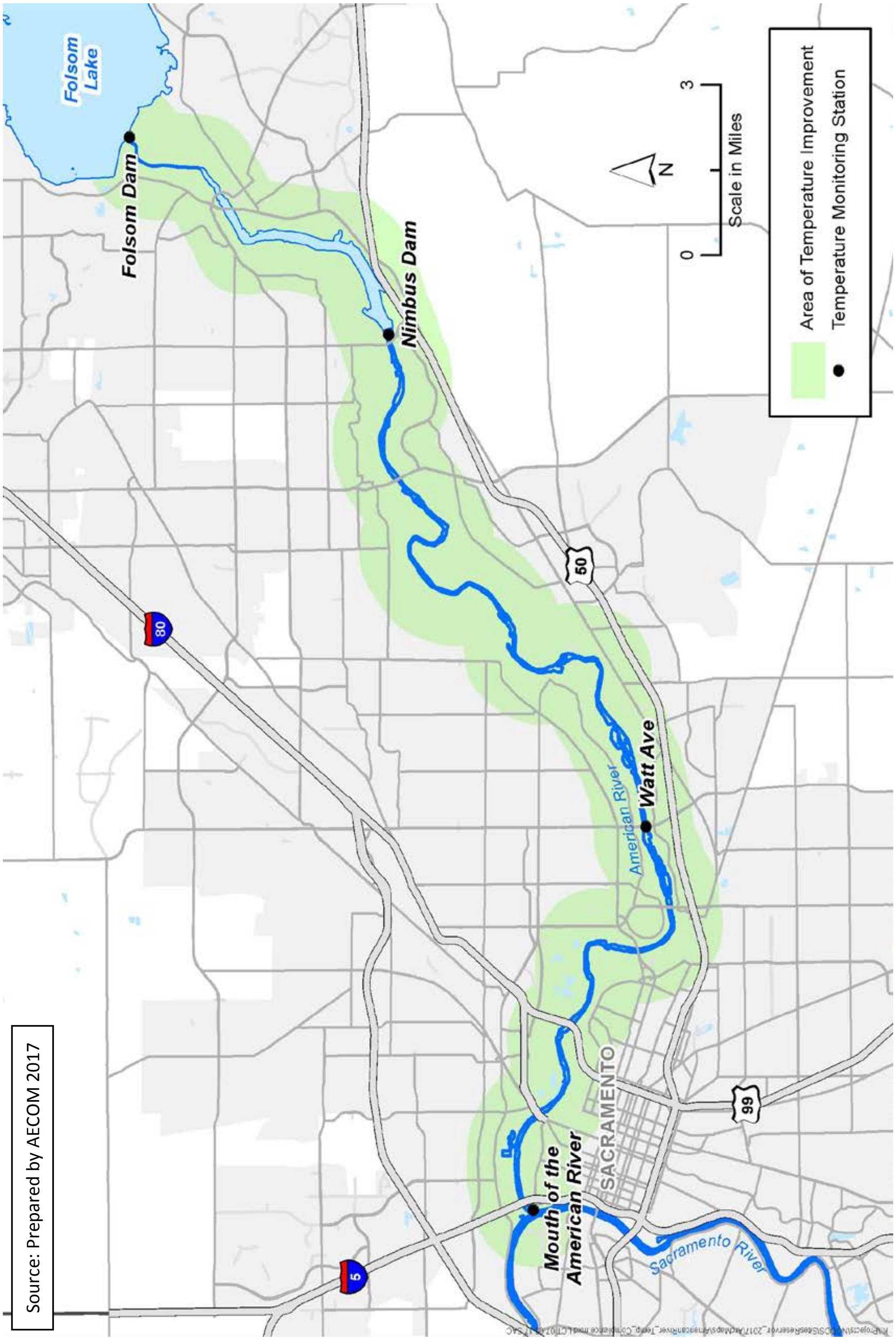


Figure A2-2: Area of Temperature Improvement for the American River

Reduction in Sacramento River Winter-run Chinook Salmon Mortality

The estimated percent reduction in mortality to Winter-run Chinook salmon eggs and fry due to thermal benefits of the project are summarized in Table A2-3, separated by location and water year type.

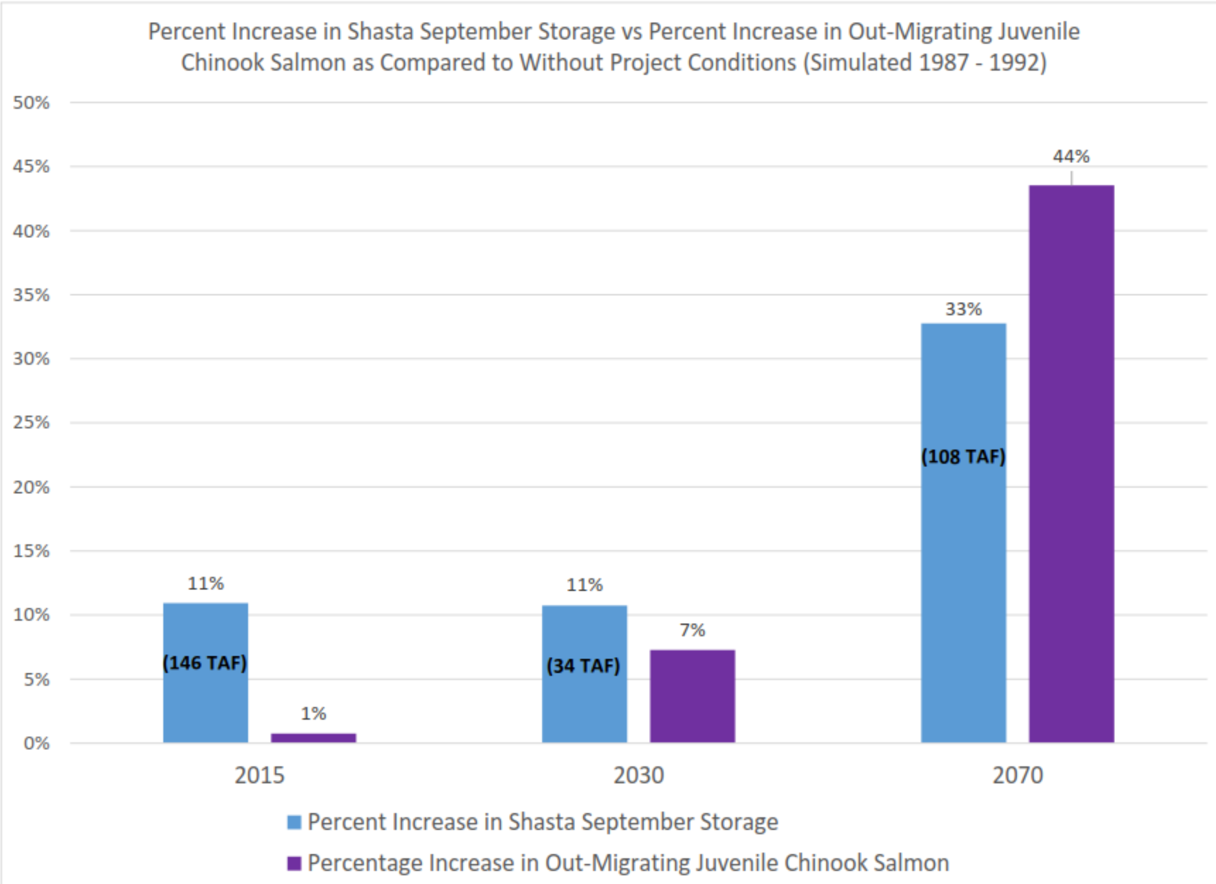
Table A2-3. Estimated Percent Reduction in Mortality Due to Thermal Benefits of Project to Salmonid Eggs and Fry

Winter-run Chinook							
Locations along the Sacramento River	**Keswick**	**Bonnyview Bridge**	**Balls Ferry**	**Jellys Ferry**	**Bend Bridge**	**Red Bluff**	**Below Red Bluff**
Eggs							
Dry Water Years							
August	-	-	-	-	-	-	-
September	-	-	**8%**	-	-	-	-
October	-	-	-	-	-	-	-
Critical Water Years (15% of total water years)							
August	-	-	**15%**	-	-	-	-
September	**8%**	**7%**	**25%**	-	-	-	-
October	-	-	-	-	-	-	-
Fry (Alevins)							
Dry Water Years							
August	-	-	-	-	-	-	-
September	-	-	**25%**	-	-	-	-
October	-	-	-	-	-	-	-
Critical Water Years (15% of total water years)							
August	-	-	-	-	-	-	-
September	-	-	**15%**	-	-	-	-
October	-	-	-	-	-	-	-

Beginning at Keswick Dam and continuing in a downstream direction the results were:

Sacramento River Below Keswick Dam (RM 302.0) (Table SQ2-1a)

Critical water years only (15% of total water years): During September 2030 without the project the mean monthly water temperature is projected to be 57°F, thus exceeding the upper water temperature optimum of 56°F for egg incubation, but less than the upper water temperature of 58°F for pre-emergent alevins. At this temperature it is expected that egg mortality will increase by 8 percent after 24 days of exposure. No increase in mortality for pre-emergent alevins will occur (Vogel 2015, Table 3, page 10). With the project in place 56°F will not be exceeded in September, and egg and alevin mortality will not increase over natural levels. Therefore, the project would reduce egg mortality during September by approximately 8 percent for those eggs remaining in redds. In October 2030 both with and without the project the mean monthly water temperature will rise to 58°F, thereby increasing egg mortality by 15 percent over 22 days of exposure for any remaining incubating eggs. The number of incubating eggs in October is expected to be small. There would be no increase in alevin mortality with or without the project (Vogel 2015, Table 3, page 10). Both operating scenarios would have similar results by increasing egg mortality during October. During November only pre-emergent fry remain in the spawning gravels and water temperatures with and without the project remain less than 58°F, indicating no increase in mortality with or without the project over natural levels.



*Values presented in TAF represent increases in Shasta September Storage as Compared to Without Project Conditions

Sacramento River at Bonnyview Bridge, Redding (RM 291.8) (Table SQ3-1a)

Note that most Winter-run spawning occurs (greater than 90 percent) upstream of this location which is 10.2 miles downstream of Keswick Dam.

Critical water years only (15% of total water years): During September 2030 the mean monthly water temperature without the project is projected to be 58°F, thus exceeding the upper water temperature optimum of 56°F for egg incubation, but not exceeding the thermal optimum of 58°F for pre-emergent alevins. The 58°F water temperature would result in an estimated 15 percent increase in egg mortality over a 22 day period for those eggs still incubating. With the project in place, egg mortality would decline to 8 percent over a 24-day exposure period (Vogel 2015, Table 3, page 10). Thus, the project would reduce egg mortality during September by approximately 7 percent. Pre-emergent alevins would not be exposed to greater mortality than natural levels with or without the project during September. During October 2030 egg mortality without the project is projected to be 59°F, thus exceeding the upper water temperature optimum of 56°F for egg incubation. This temperature would result in an estimated 25 percent increase in mortality over natural levels if exposed for 20 days for those eggs remaining. The number of incubating eggs in October is expected to be small. During October 2030 with the project the mean monthly water temperature is projected to be 58°F which would result in a 15 percent increase in egg mortality over natural levels if exposed for 22 days for those eggs remaining. Therefore, the project would reduce egg mortality by 10 percent at this location during October. Without the project pre-emergent alevins would be exposed to a 10 percent higher mortality rate if exposed for 14 days. With the project, no increase in mortality would occur. Therefore, the project would reduce pre-emergent alevin mortality by 10 percent over the without project scenario. During November only pre-emergent fry remain in the spawning gravels and water temperatures with and without the project remain less than 58°F, indicating no increase in mortality with or without the project.

Sacramento River at Balls Ferry (RM 276.0) (Table SQ4-1a)

Note that all Winter-run spawning occurs 13 miles or further upstream of this location. Balls Ferry is 26 miles downstream of Keswick Dam. No redds with incubation eggs and pre-emergent alevins would be located at Balls Ferry. Balls Ferry is a water temperature compliance point with a target water mean daily water temperature of 56°F (State Water Resources Control Board WR 90-5 [1990]).

Dry water years only (22% of total water years): During September of 2030 mean monthly water temperature is projected to reach 57°F, thus exceeding the upper water temperature optimum of 56°F for egg incubation, but not exceeding the thermal optimum of 58°F for pre-emergent alevins. At this temperature it is expected that egg mortality would increase by 8 percent after 24 days of exposure, if eggs were actually present at this location. No increase in mortality for pre-emergent alevins would occur if alevins were actually present (Vogel 2015, Table 3, page 10). With the project in place 56°F would not be exceeded in September, and egg and alevin mortality would not increase over natural levels were eggs and alevins actually present at this location. Therefore, the project would reduce egg mortality during September by approximately 8 percent for those eggs remaining in redds if eggs were actually present at Balls Ferry. In October 2030 the opposite is true, with the project resulting in a mean monthly water temperature of 57°F and without the project a projected 56°F. Therefore, the theoretical increase in egg mortality would be 8 percent with the project and no increase without the project. No impact to pre-emergent alevins would occur with and without the project if alevins were actually present at this location.

Critical water years only (15% of total water years): The mean monthly water temperature index of 56°F for egg incubation is exceeded from July through October 2030 both with and without the project. In July the mean monthly water temperature with and without the project is 57°F which would result in an 8 percent increase in mortality over natural levels if exposed for 24 days (Vogel 2015, Table 3, page 10). In August this value would increase to 58°F without the project, but remain at 57°F with the project. Therefore, in August, the project would reduce egg mortality by 15 percent if exposed for 22 days. During September the mean monthly water temperature would increase to 60°F without the project and 59°F with the project. Thus, egg mortality would increase by 50 percent without the project over a 12-day exposure and 25 percent with the project over a 20 day exposure. Therefore the project would reduce egg mortality by 25% in September. During October the mean monthly water temperature both with and without the project is 59°F, resulting in an increase in egg mortality of 25 percent for a 20 day exposure for those few eggs still incubating. Pre-emergent alevins would not be exposed to increased mortality until September 2030. During September the mean monthly water temperature is projected to reach 60°F without the project and 59°F with the project. The respective increases in alevin mortality greater than natural levels are 25 percent over a 14-day exposure period and 10 percent over the same period (Vogel 2015, Table 3, page 10). Therefore the project would reduce alevin mortality by 15% in September. During October 2030, the mean monthly water temperature is 59°F with and without the project resulting in a 10 percent increase in mortality over a 14-day period for remaining alevins had they actually been present at Balls Ferry. Alevin mortality would not increase above natural levels during November 2030 for any fish remaining in redds.

In summary, in the reach of the Sacramento River used by spawning Winter-run Chinook salmon from Keswick Dam to Clear Creek, the proposed project in 2030 will reduce the percentage of egg mortality in September and October of critically dry water years from 7 to 10 percent depending on location. In the spawning reach pre-emergent fry (alevins) would not be impacted adversely by water temperature with or without the project.

Species Conservation Plans

The ecosystem improvement is consistent with two recovery actions of National Oceanic and Atmospheric Administration (NOAA) Fisheries Recovery Plan for Winter-run Chinook salmon, Spring-run Chinook salmon, and Central Valley steelhead in the mainstem Sacramento River (National Marine Fisheries Service [NMFS] 2014). The actions in the NOAA Fisheries that will be met are: (1) to develop and apply alternative diversion technologies that reduce entrainment, and (2) evaluate and reduce stranding of juvenile chinook salmon in the channels from Keswick Dam to Colusa, due to flow reductions from Keswick Reservoir, by increasing or stabilizing releases from the reservoir. The ecosystem improvement is also consistent with three of the proposed actions listed in the Sacramento Valley Salmon Resiliency Strategy. These actions are: (1) increase productivity by improving spawning and incubation conditions (habitat and water quality); (2) increase productivity by increasing juvenile salmonid survival; and (3) support the full range of juvenile and adult migration conditions to maintain life history diversity. The project will meet these actions by providing increased flows and management of intake diversions to benefit salmonids in the Sacramento River below Keswick Dam. With improved flows, the project will also enhance and improve the quality of Essential Fish Habitat (EFH) and Designated Critical Habitat (DCH). Essential Fish Habitat is defined in the Magnuson-Stevens Act (MSA) as the waters and substrate necessary for fish spawning, breeding, feeding, or growth until maturity (MSA § 3(10)). The project will improve EFH for Pacific Coast Salmon (all four runs of Chinook included) by providing enhanced thermal refugia, floodplain habitats, and spawning habitat which included in the habitat areas of particular concern for Pacific Coast Salmon (Pacific Fishery Management Council [PFMC] and NMFS 2014). The US Fish and Wildlife Service defines DCH by considering those physical or biological features that are essential to the conservation of a given species, and designating specific areas within the geographic area occupied by the species at the time of listing. The project will provide enhanced DCH’s primary constituent elements (PCE) as defined in 70 FR 52488 for steelhead. These PCEs are as follow: more suitable flow conditions, additional rearing sites, and increase in downstream passage.

Ecosystem Priority 2: Provide flows to improve habitat conditions for in-river rearing and downstream migration of juvenile salmonids

The additional water stored in Shasta Reservoir will be released to augment Sacramento River flows downstream from Keswick Dam. These flows will simulate punctuated high flow events that would trigger increased activity in downstream movement of juvenile Chinook Salmon. The greatest value in providing increase in flows in the Sacramento River below Keswick Dam is to emigrating juvenile Winter-run, Fall-run, and Late fall-run Chinook salmon. Similarly, increased water stored from Lake Oroville and Folsom Lake will also be released to benefit habitat conditions for in-river rearing and downstream emigration of juvenile Chinook salmon in the Feather and American rivers.

Sites Reservoir would provide a 4.2% (338 cubic feet per second [cfs]) long term average increase in flows in the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam (Table A2-4). Model results using different water year types show that there is a 7.0% (380 cfs) increase in flows in below normal water years and a 7.6% (334 cfs) increase in flows in dry water years. In 2030, there is a 2.5% (209 cfs) long term average increase in flows, a 3.4% (169 cfs) increase in below normal water years, and a 10.8% (495 cfs) increase in dry water year flows.

Table A2-4. Stabilize Sacramento River Fall Flows

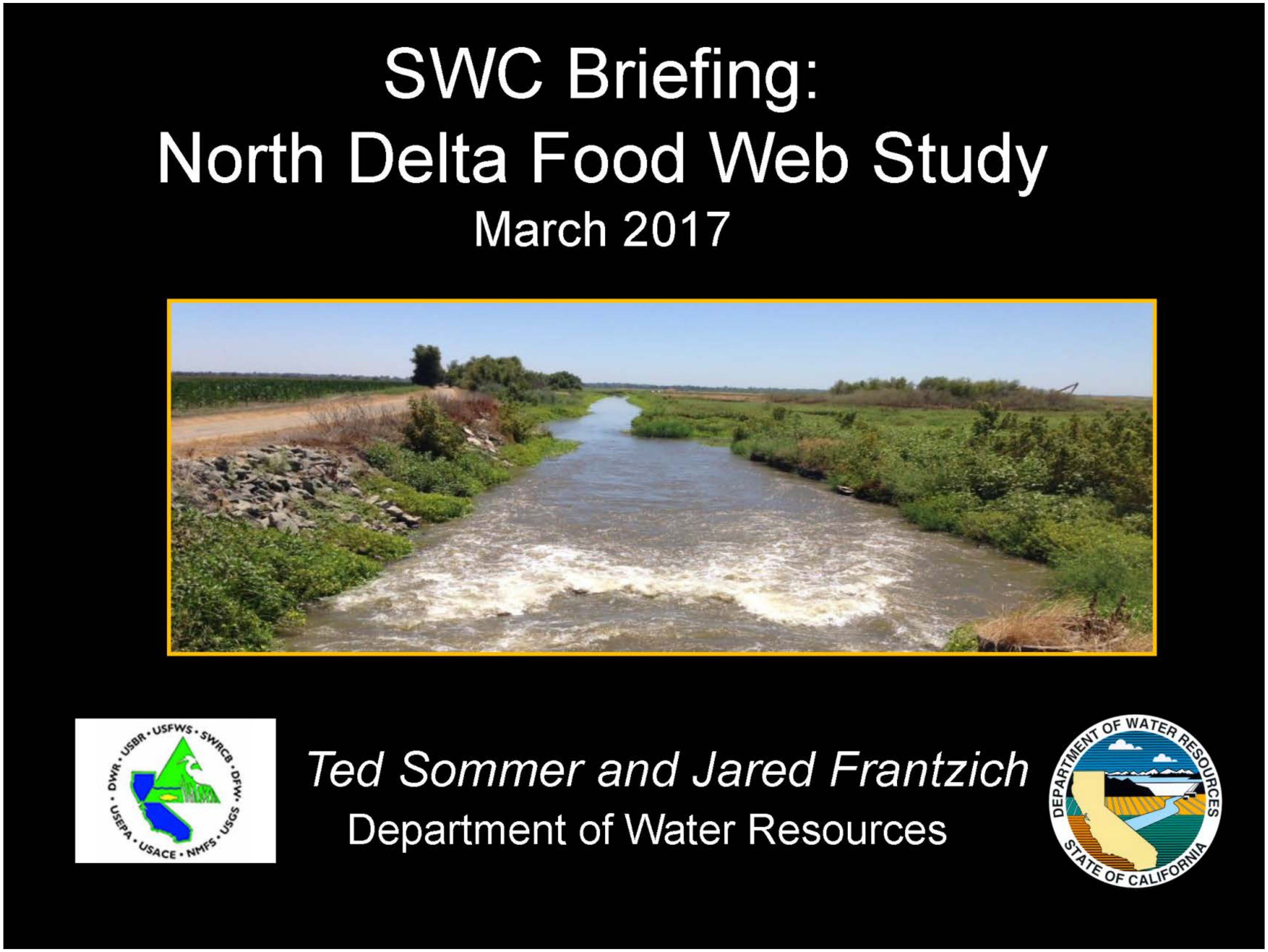
Flow Increase (Nov-Feb)	Current Condition Increase (cfs)	Current Condition Increase (%)	2030 Increase (cfs)	2030 Increase (%)	2070 Increase (cfs)	2070 Increase (%)
Long Term Avg	338	4.2	209	2.5	93	1.1
Below Normal	380	7.0	169	3.4	127	2.2
Dry	334	7.6	495	10.8	163	3.8

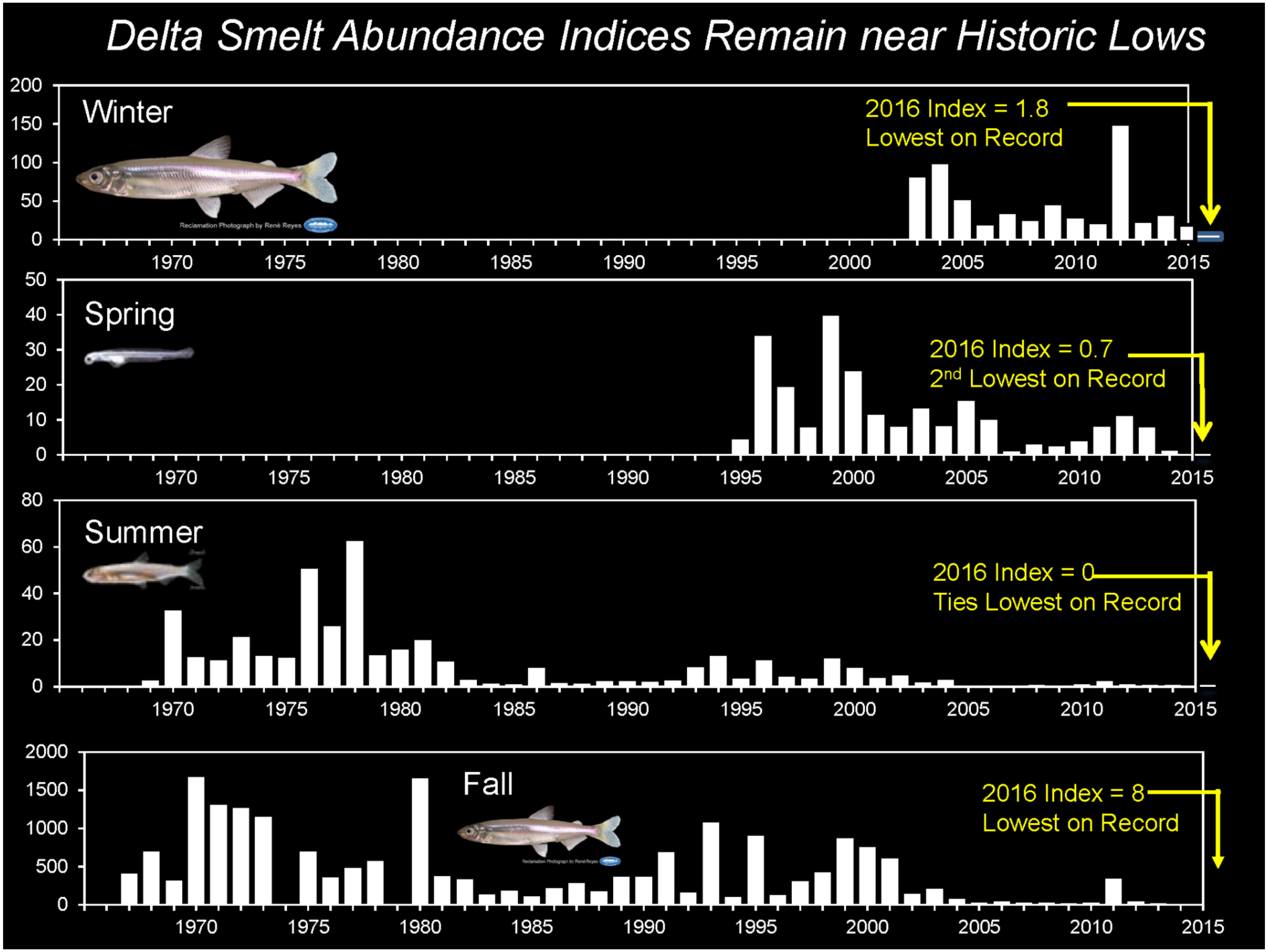
Flow augmentation in the Sacramento River was estimated using the WSIP and provided CALSIM model that showed benefits to fall-run and late fall-run Chinook salmon productions (Table A2-5).

Table A2-5. Increased Juvenile Production Compared to Without Project (SALMOD 2030)

Year Type	Fall-run	Late fall-run
Long Term Avg	435,000	70,188
Wet	28,401	37,827
Above Normal	1,338,057	61,484
Below Normal	118,225	37,207
Dry	19,886	57,277
Critical	1,493,425	208,800

Ecosystem Priority 10: North Delta Food Web Study





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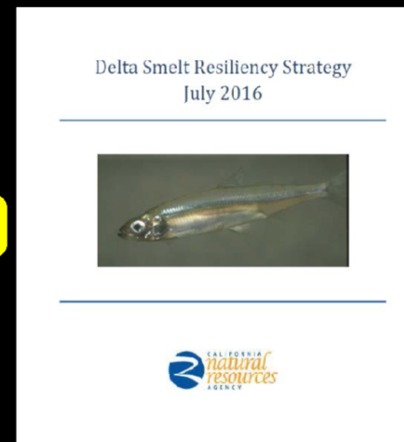
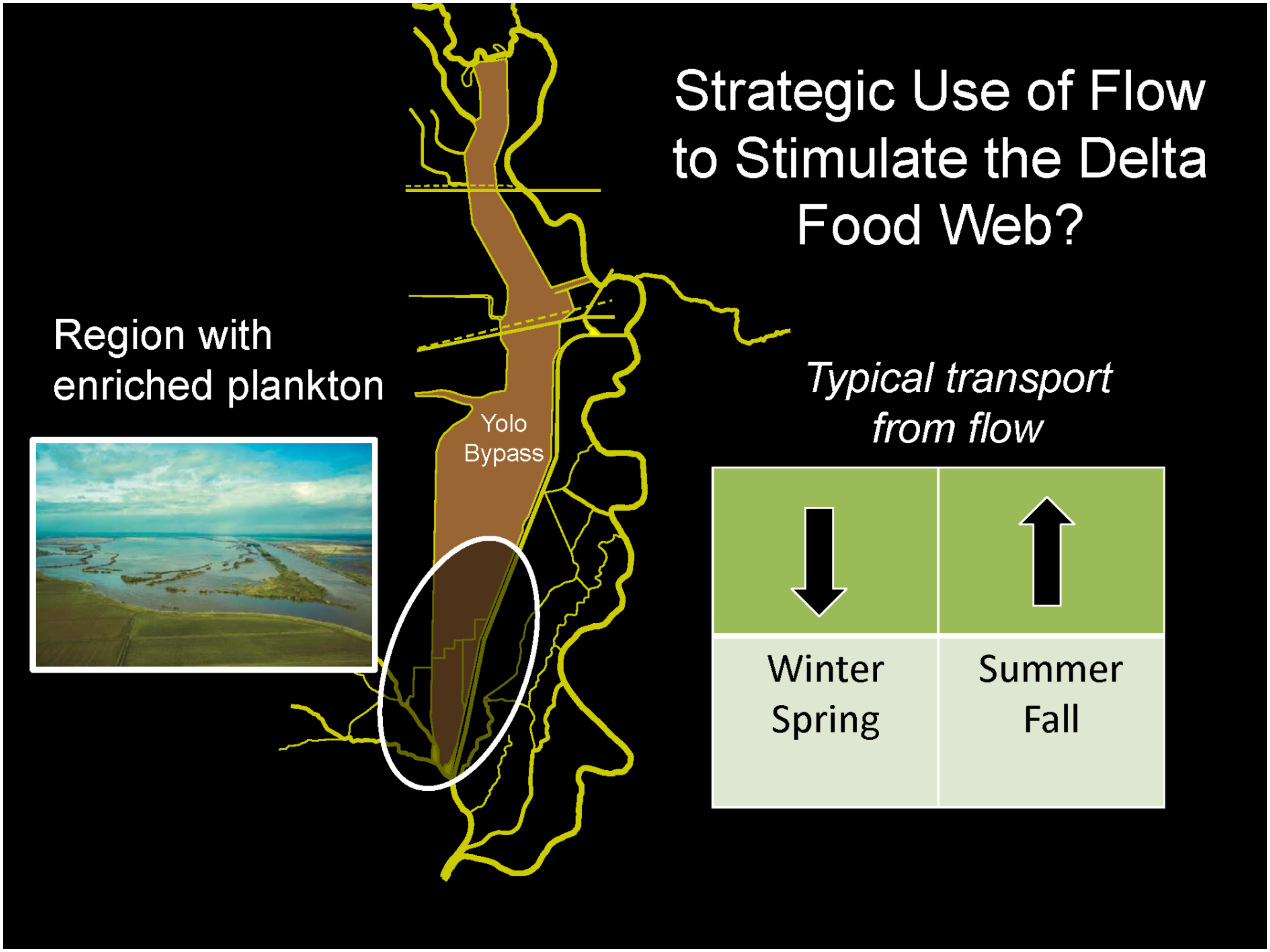
NOTES:				PAGE:	16 OF 44

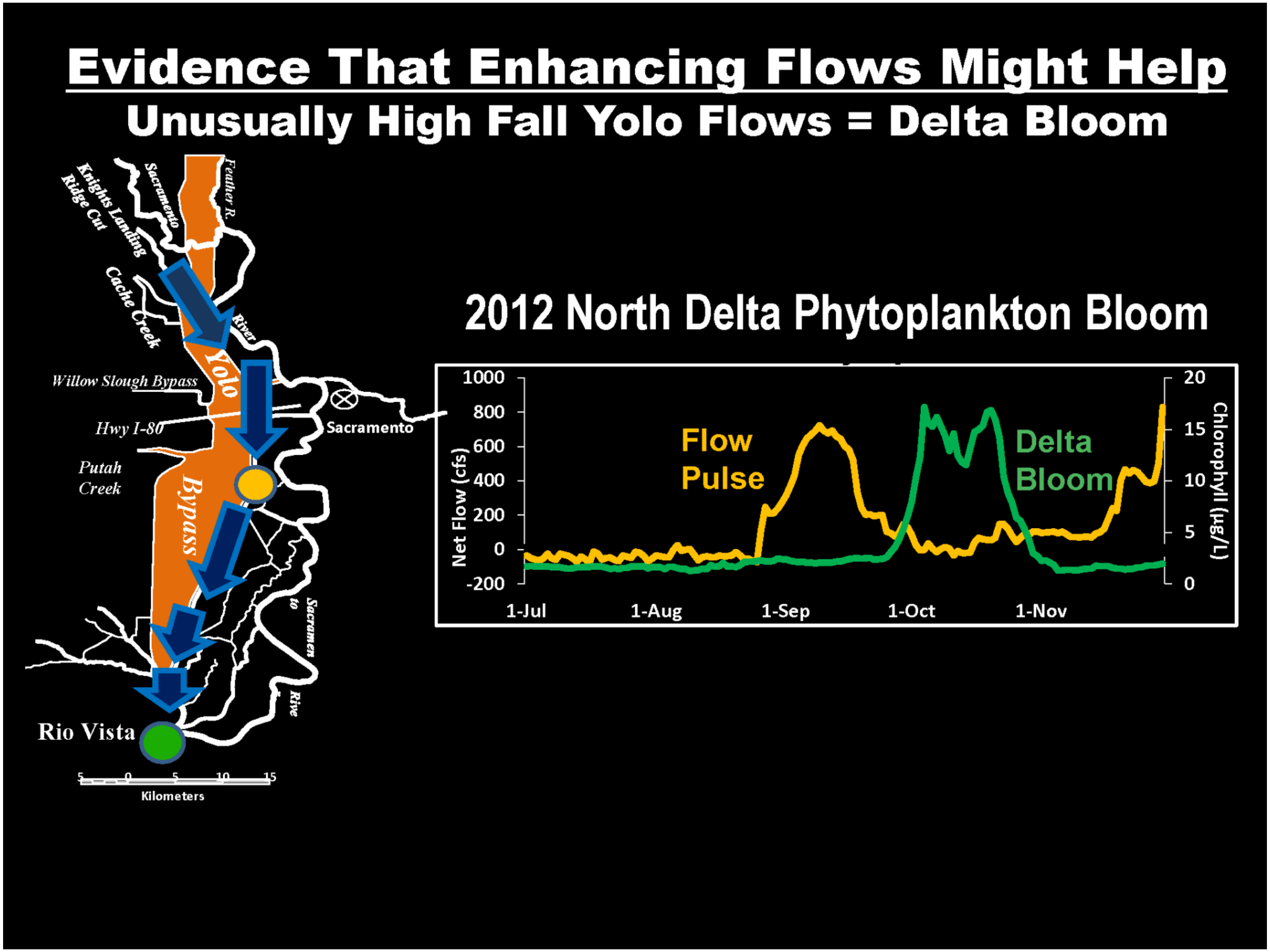
Delta Smelt Resilience Strategy

13 Proposed Actions

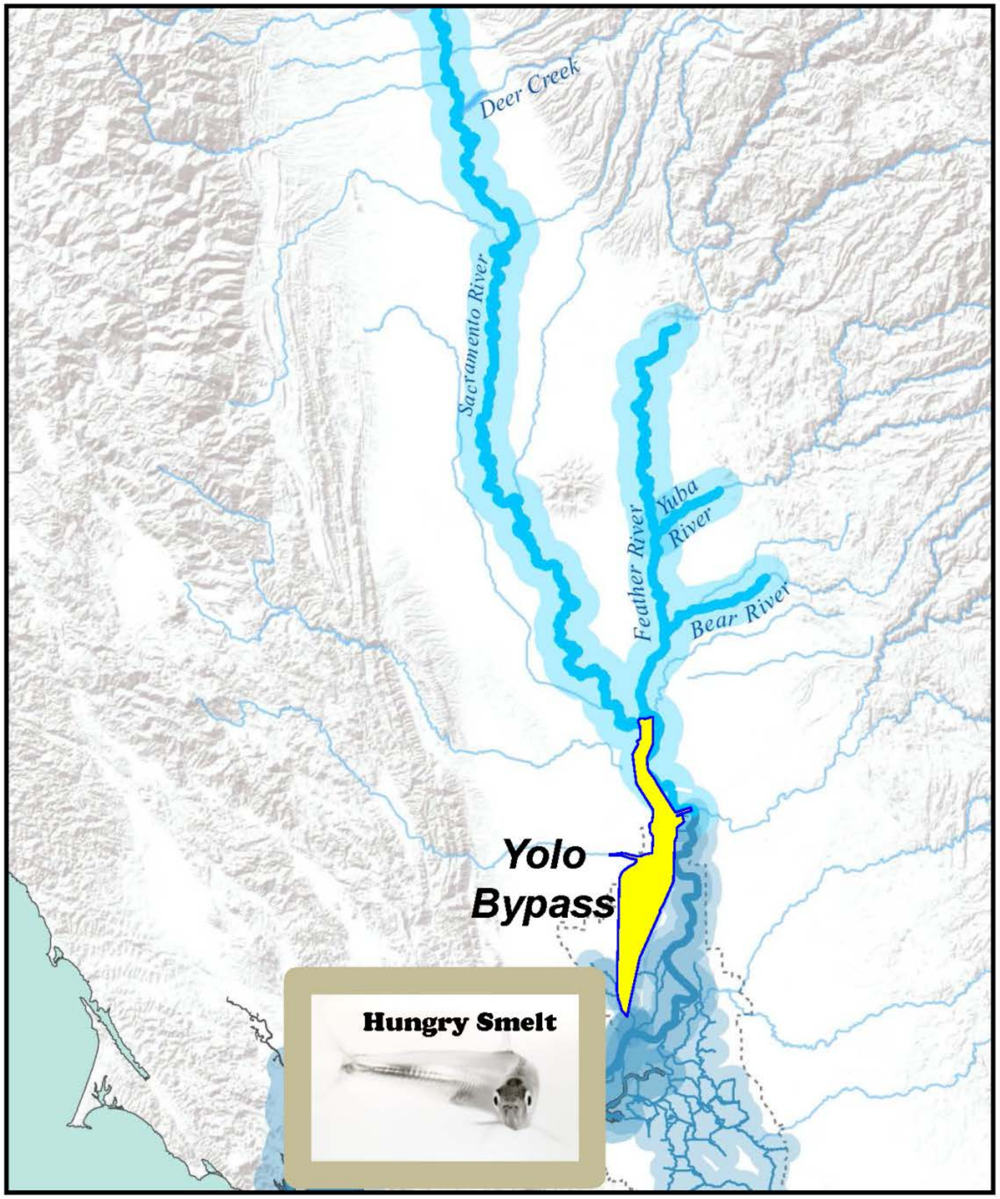
- Aquatic Weed Control
- North Delta Food Web Adaptive Management Projects
- Outflow Augmentation
- Reoperation of the Suisun Marsh Salinity Control Gates
- Sediment Supplementation in the Low Salinity Zone
- Spawning Habitat Augmentation
- Roaring River Distribution System Food Production
- Coordinate Managed Wetland Flood and Drain Operations in Suisun Marsh
- Adjust Fish Salvage Operations during Summer and Fall
- Storm water Discharge Management
- Rio Vista Research Station and Fish Technology Center
- Near-term Delta Smelt Habitat Restoration
- Franks Tract Restoration Feasibility Study




Strategic Use of Flow to Stimulate the Delta Food Web?
Region with enriched plankton
Yolo Bypass
Typical transport from flow
Winter Spring
Summer Fall



Evidence That Enhancing Flows Might Help
Unusually High Fall Yolo Flows = Delta Bloom
Knights Landing Ridge Cut
Sacramento
Feather R.
Cache Creek
River
Yolo
Willow Slough Bypass
Hwy I-80
Sacramento
Putah Creek
Bypass
Sacramento
River
Rio Vista
Kilometers
2012 North Delta Phytoplankton Bloom
Flow Pulse
Delta Bloom
Net Flow (cfs)
Chlorophyll (µg/L)
1-Jul
1-Aug
1-Sep
1-Oct
1-Nov



Delta Smelt Food Web Flow Action – Summer 2016

Project Coordination

Base map courtesy of NOAA Fisheries

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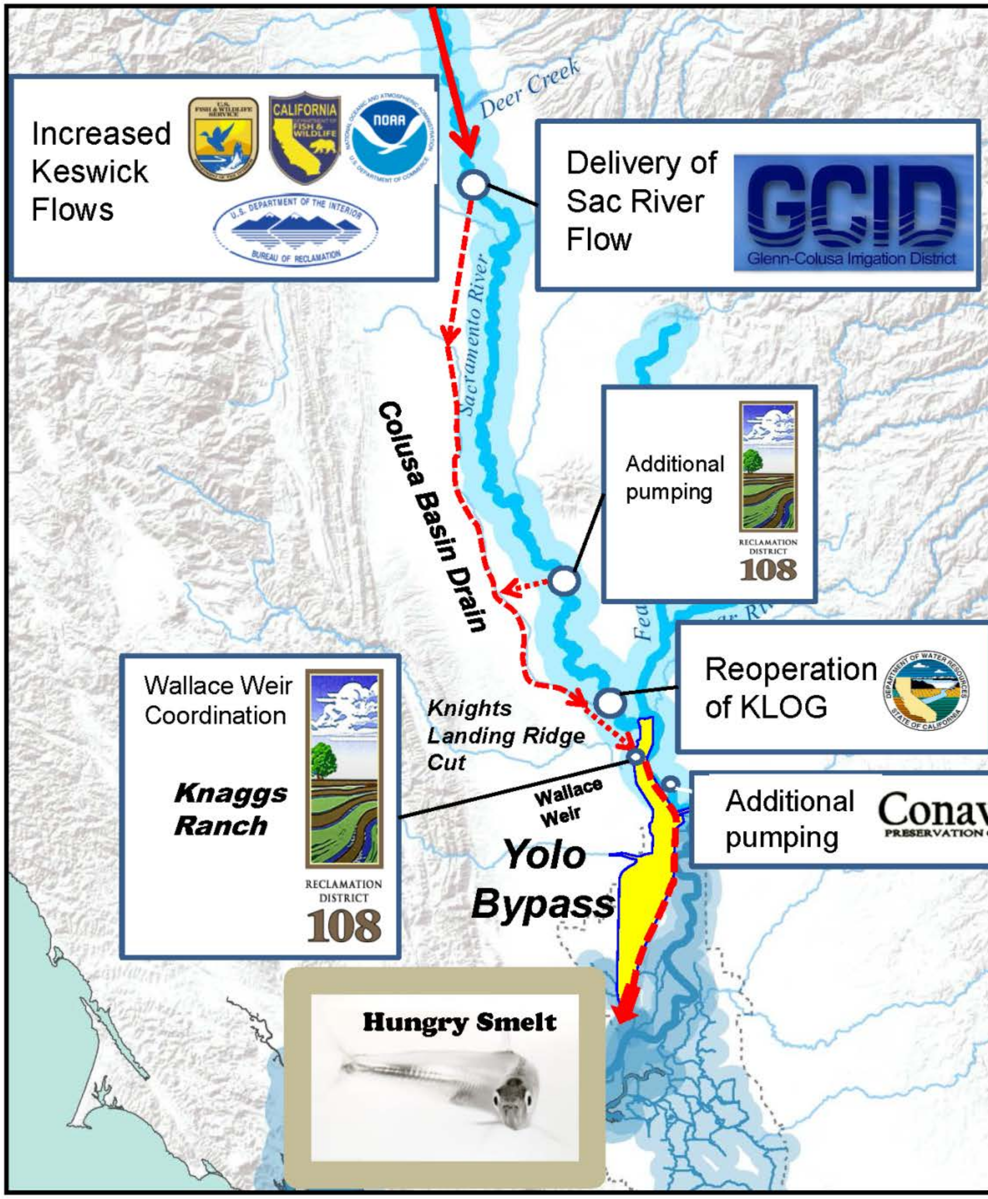
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:				PAGE:	20	OF	44



Delta Smelt Food Web Flow Action – Summer 2016

Project Coordination

Base map courtesy of NOAA Fisheries

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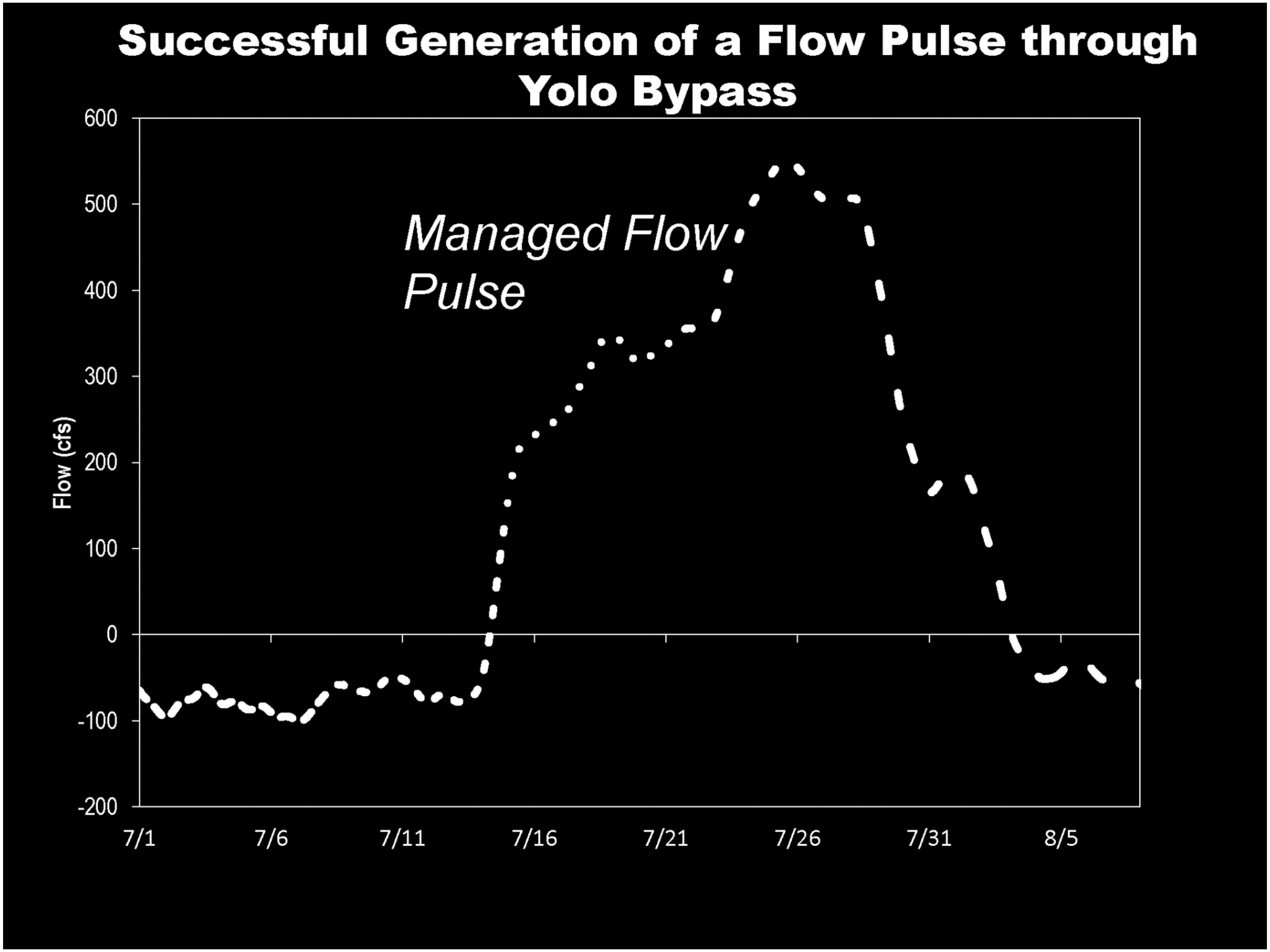
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:				PAGE:	21	OF	44


Successful Generation of a Flow Pulse through Yolo Bypass
Managed Flow Pulse
Flow (cfs)
600
500
400
300
200
100
0
-100
-200
7/1
7/6
7/11
7/16
7/21
7/26
7/31
8/5

Delta Smelt Flow Action: Study Team

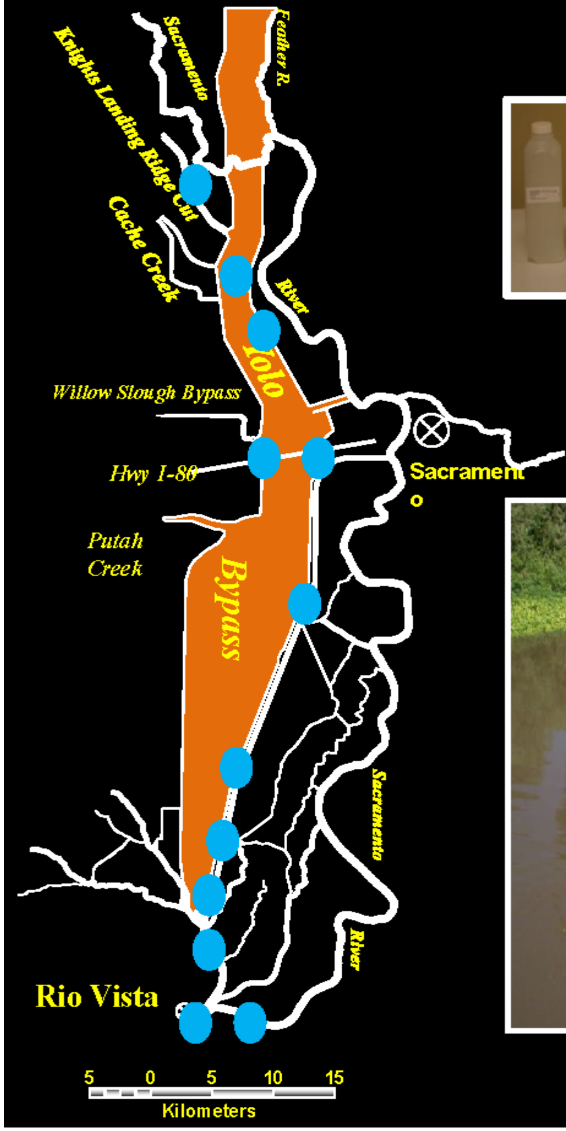
Zooplankton: Kimmerer

Field Coordination: Jared Frantzich
Flow
Water quality
Plankton

Water quality: Bergamaschi, Downing
Invertebrates: Feyrer
Contaminants: Orlando
Benthos: Thompson

Funding
Dept Fish and Wildlife
Dept Water Resources
US Bureau of Reclamation
State and Federal Water Contractors Association

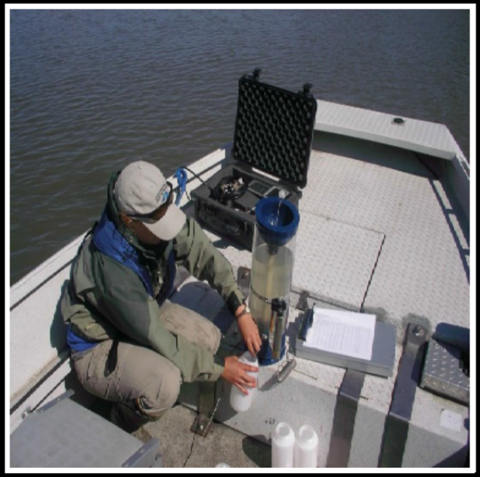
Extensive Sampling to Evaluate Flow Pulse



Nutrients

WQ Monitoring

Phyto/Zoop



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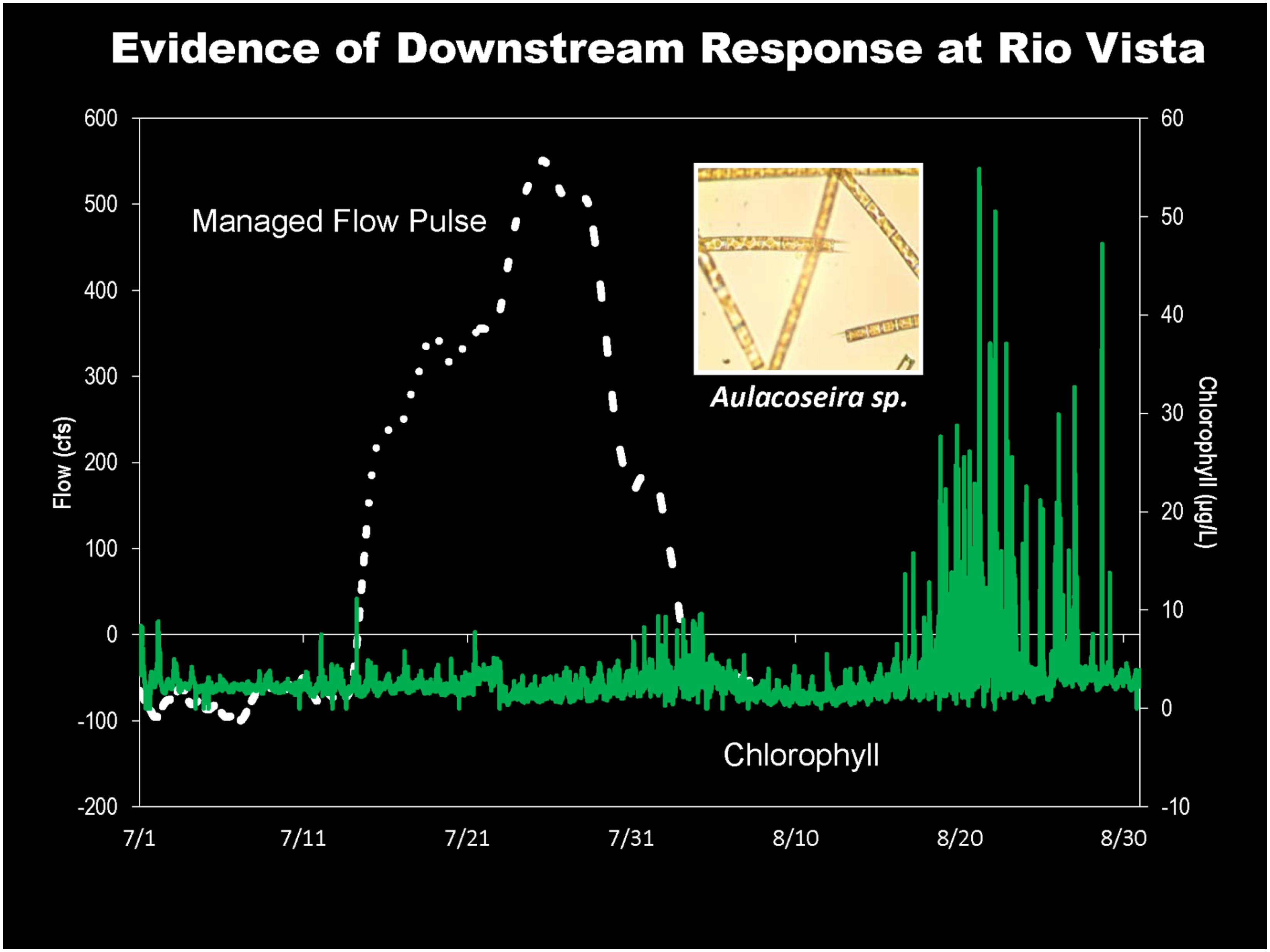
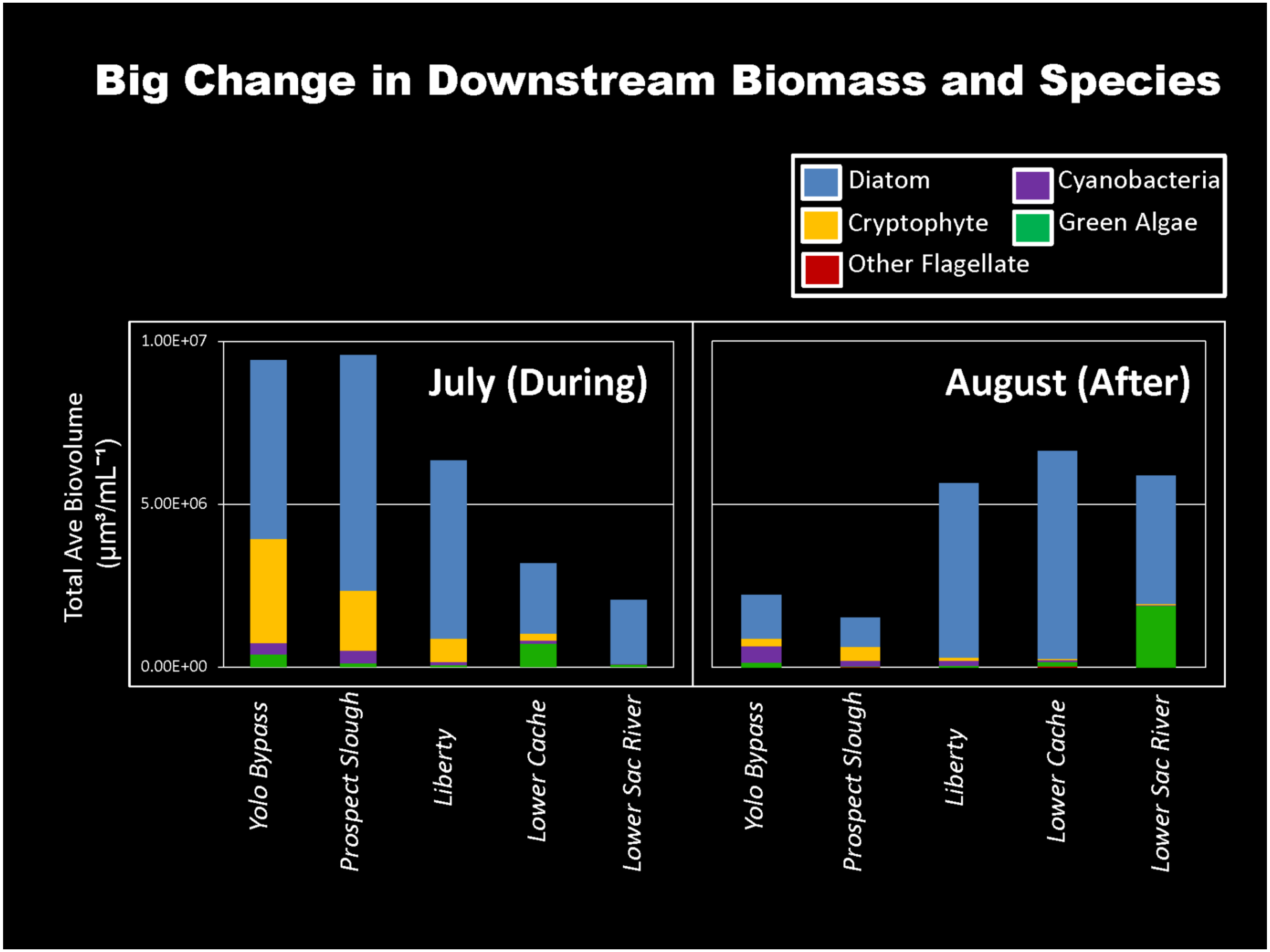
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:				PAGE:	24	OF	44

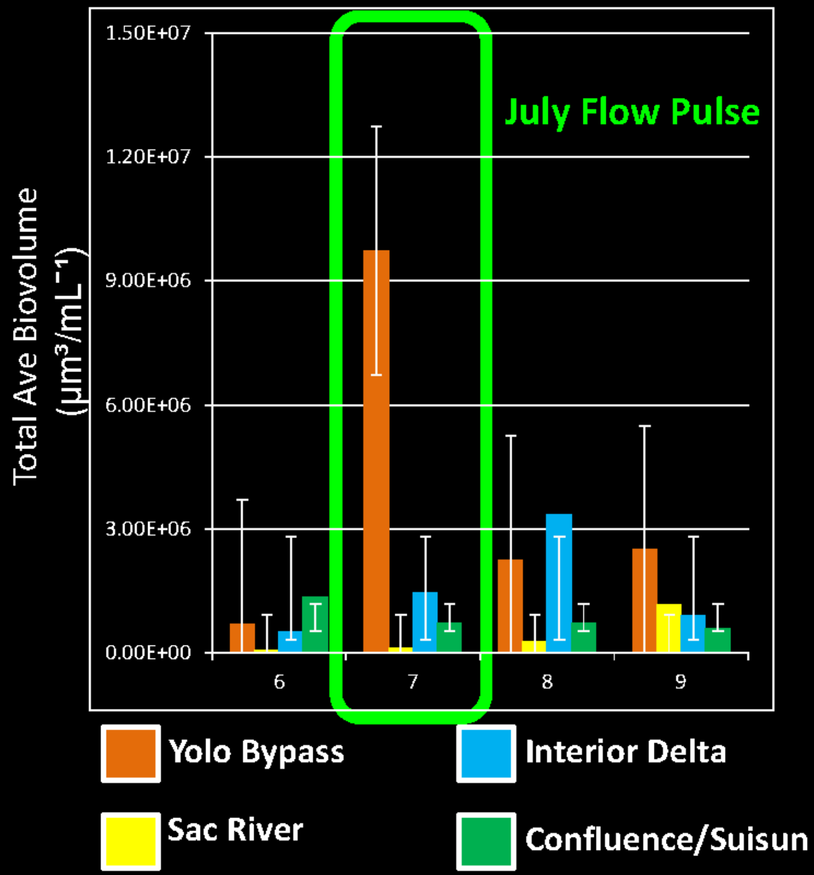


Evidence of Downstream Response at Rio Vista
Managed Flow Pulse
Aulacoseira sp.
Chlorophyll
Flow (cfs)
Chlorophyll (µg/L)
600
500
400
300
200
100
0
-100
-200
60
50
40
30
20
10
0
-10
7/1
7/11
7/21
7/31
8/10
8/20
8/30

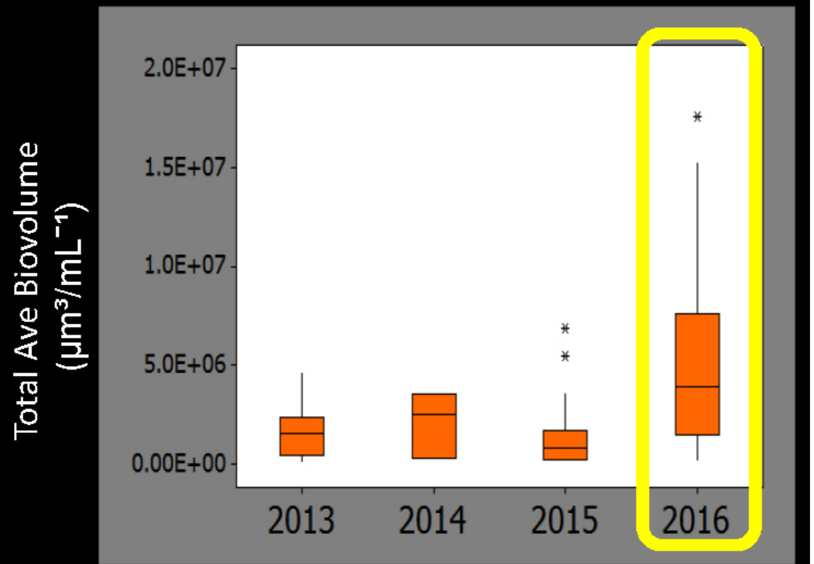

Big Change in Downstream Biomass and Species
Diatom
Cyanobacteria
Cryptophyte
Green Algae
Other Flagellate
Total Ave Biovolume
(µm³/mL⁻¹)
1.00E+07
5.00E+06
0.00E+00
July (During)
August (After)
Yolo Bypass
Prospect Slough
Liberty
Lower Cache
Lower Sac River
Yolo Bypass
Prospect Slough
Liberty
Lower Cache
Lower Sac River

Response in Yolo Bypass Was Impressive

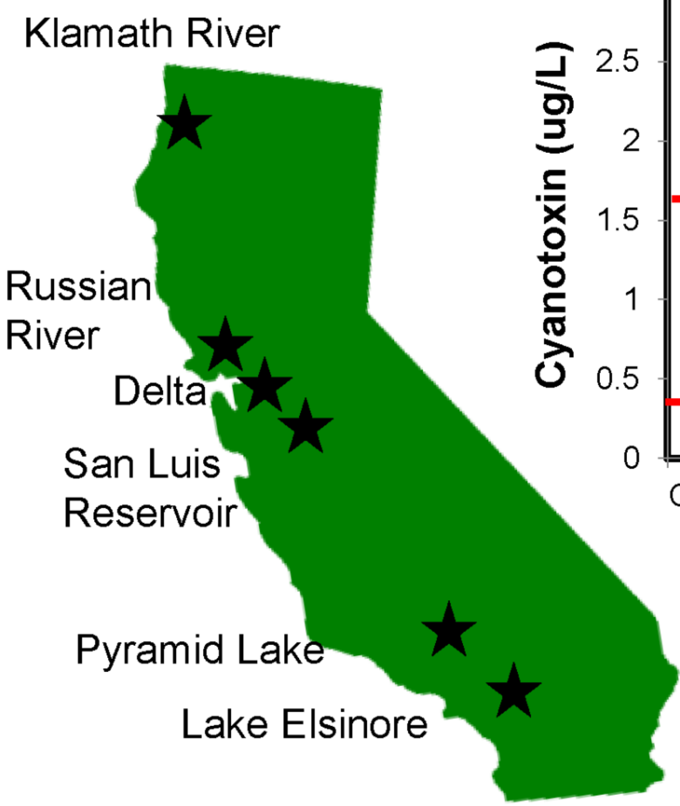
Higher than other Delta Regions

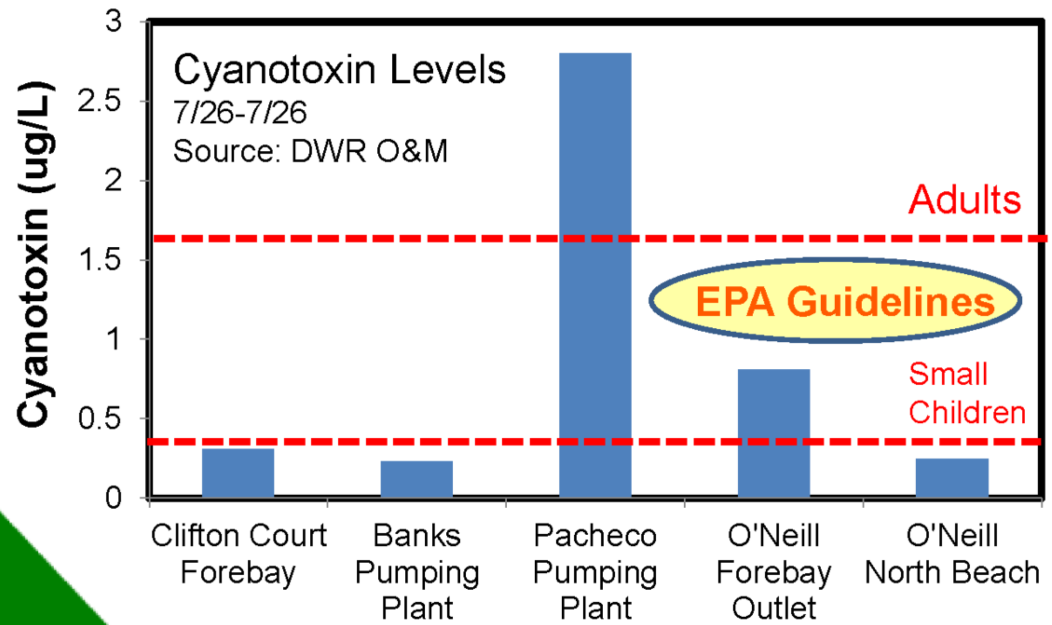


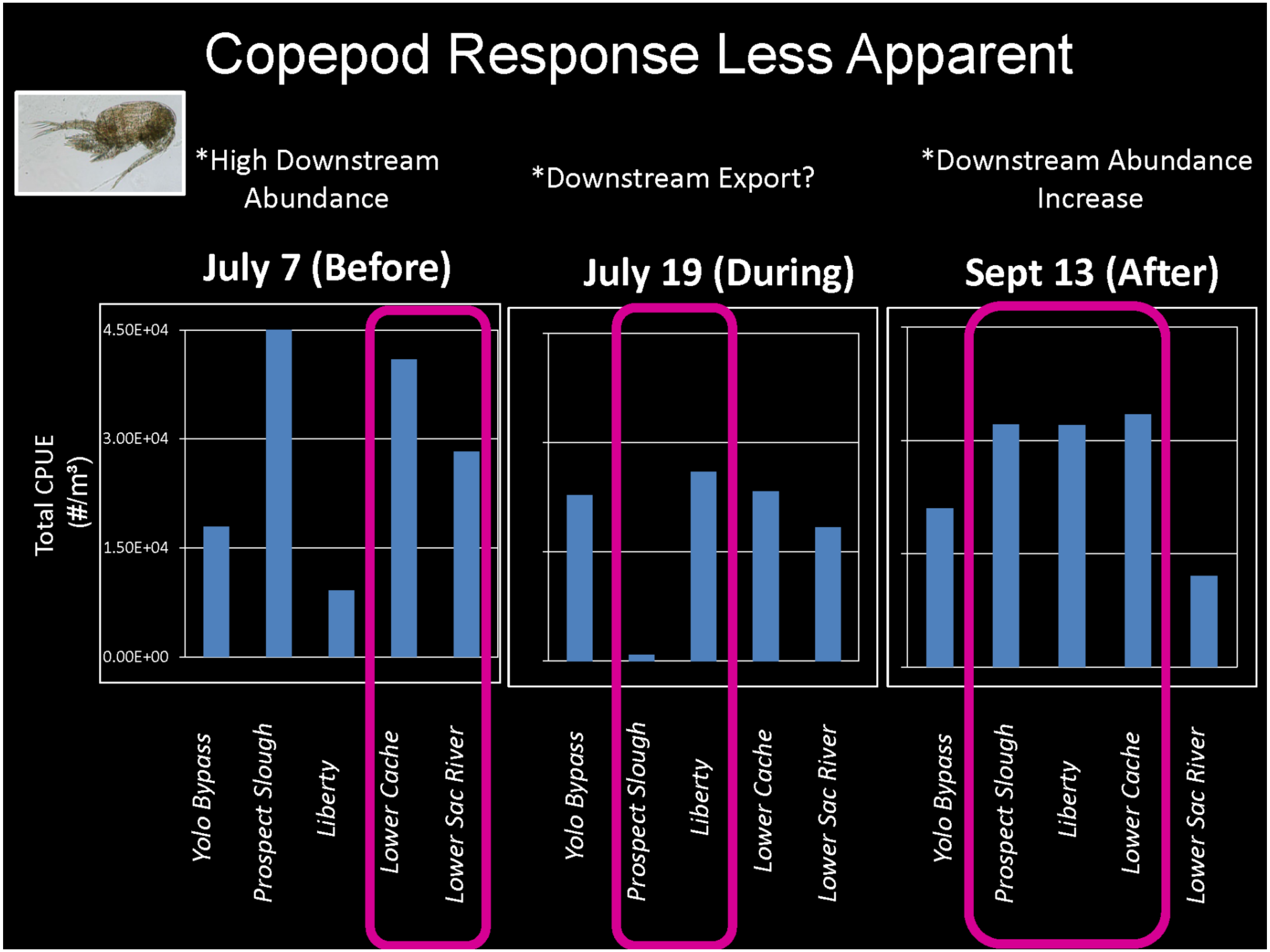
Higher Than Prior Years



Contrast With Harmful Algal Blooms Elsewhere

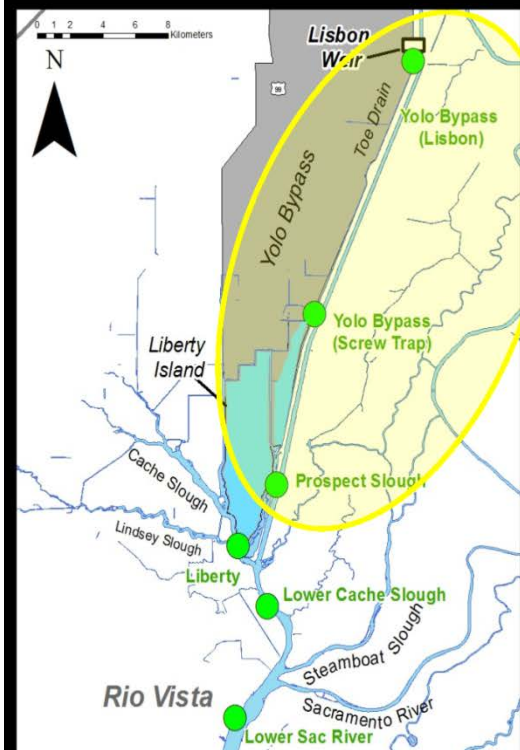


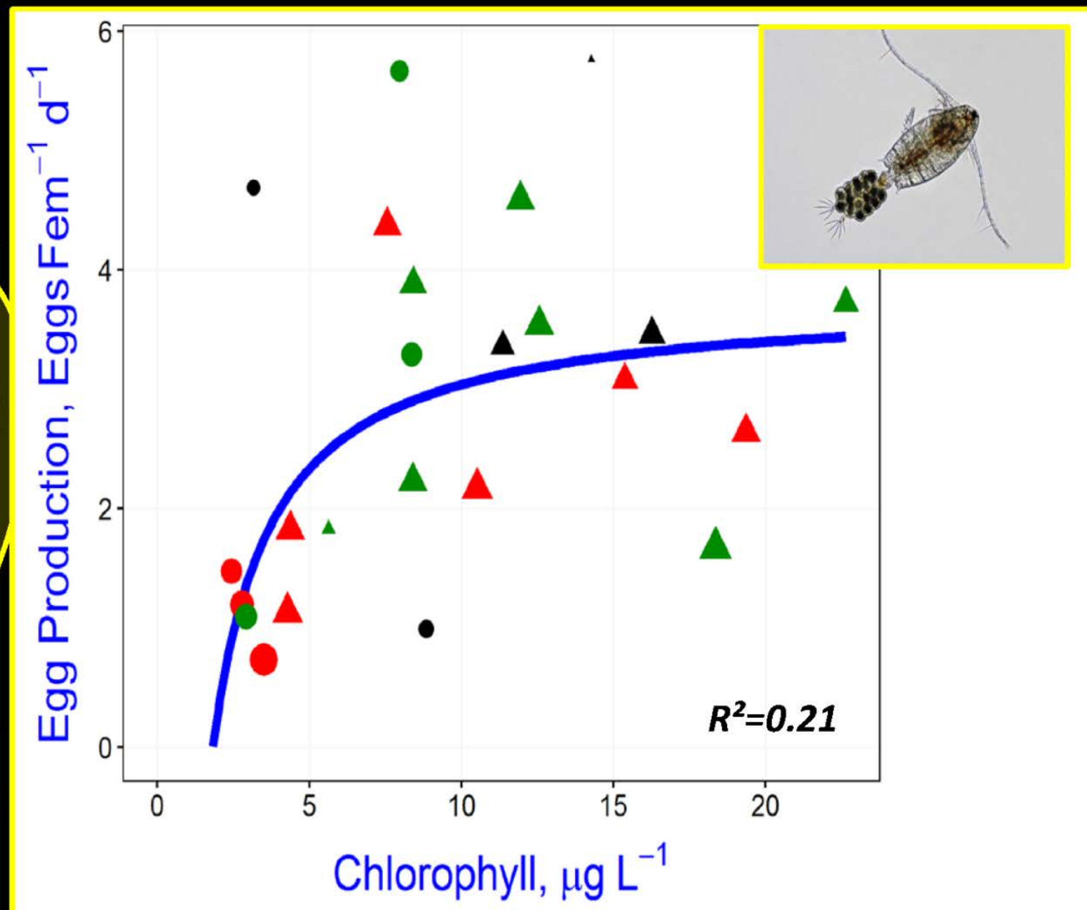



Copepod Response Less Apparent
*High Downstream Abundance
*Downstream Export?
*Downstream Abundance Increase
July 7 (Before)
July 19 (During)
Sept 13 (After)
Total CPUE (#/m³)
4.50E+04
3.00E+04
1.50E+04
0.00E+00
Yolo Bypass
Prospect Slough
Liberty
Lower Cache
Lower Sac River

But…Evidence That Food Increased Copepod Egg Production

SF STATE
ROMBERG TIBURON CENTER for ENVIRONMENTAL STUDIES





2015 & 2016 Results

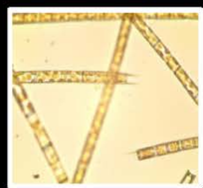
Good Media Coverage of the Action

Future Plans

- Planning Efforts for 2017 Summer/Fall Flow Pulse
- Increased Project Funds for FY 2017 and 2018

Summary

-Positive downstream plankton response



-Solid relationships for the future

-Successful Adaptive Management

Science → Managed Action → Future Management Strategy

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CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:				PAGE:	33	OF	44

Ecosystem Priority 14: Ecosystem Priorities Application Worksheet– Terrestrial

Effects of Water Reductions at Refuges:

Reduction in water allocations of 50% to 25% of normal deliveries at Sacramento, Colusa and Delevan NWRs during dry or critically dry years would have the following impacts on wetland habitat and wetland dependent species (source: Drought Contingency Plans for Sacramento, Colusa and Delevan NWRs - USFWS 2011a, 2011b, 2011c).

For 50% of normal deliveries, wetland acreage at the three refuges would be reduced by 30–50%. Composite acreages of seasonal and permanent wetlands at all three refuges totals 15,525 acres (based on 2010 data), which includes 13,722 acres of seasonal wetlands (timothy grass and water grass) and 1,803 acres of permanent and semi-permanent wetland/brood ponds. A 30–50% reduction for permanent and seasonal wetlands would amount to a loss of 4,658 to7,762 acres. For 25% of normal deliveries, total wetland acreage at the three refuges would be reduced by 60-70%, amounting to loss of 9,315 to 10,867 acres. In addition to the direct loss of wetlands, longer term impacts would also occur to future wetland habitat quality throughout the refuges. Loss of permanent pond acreage would be 80% for both the 50% and 25% reductions of normal deliveries. Other impacts on wildlife of reductions to 50 to 25% of normal deliveries include:

- Very early spring draw-downs of wetlands which severely limits shorebird habitat and results in poor germination for important wildlife and waterfowl plants.
- Loss of permanent pond acreage adversely affects habitat for special-status species such as giant garter snakes, tricolored blackbirds, western pond turtles, and for duck broods.
- Complete elimination of irrigation for annual food plants and control of invasive species such as cocklebur, resulting in increased mowing/diesel fuel consumption to mitigate.
- Flood-ups delayed on remaining acreage, resulting in widespread crop depredation in nearby agricultural lands.
- Extreme waterfowl crowding and disease risk (avian botulism (Type C) and avian cholera).
- Reduced public use on all refuge habitats reduced (or eliminated for 25% of water delivery scenario) other than having the Sacramento National Wildlife Refuge (NWR) visitor center open, and visitor use would decrease to a fraction of normal.

Value of Ricelands to Wildlife

The Central Valley of California supports one of the largest concentrations of wintering waterfowl in the world, despite loss of 90% of its historic wetlands. The 6–7 million waterfowl that winter annually in the Central Valley rely upon a mix of wetland and agricultural food resources to meet their energetic needs (Eadie et al. 2008, Petrie et al. 2016). Flooded rice fields and surrounding refuge wetlands in the Sacramento-San Joaquin Valley function as some of the most important waterfowl wintering habitat on the Pacific Flyway, supporting the majority of Flyway population in some years (Migratory Bird Conservation Partnership 2014). Ricelands are indispensable components of waterbird habitat; residual rice, weed seeds, and invertebrates provide food for many avian species during fall and winter (Eadie et al. 2008). Ricelands also provide breeding habitat for a variety of birds, and rice fields that are flooded after harvest (i.e., winter flooded) to decompose rice straw provide many of the same habitat values for waterfowl as the wetlands that they replaced. Droughts adversely affect foraging habitat for wildlife that depend on Central Valley seasonal wetlands and ricelands. An analysis by Petrie et al. (2016) found that in droughts food supplies could be exhausted for ducks by mid- to late winter and by late winter or early spring for geese. For ducks, these results were strongly related to projected declines in winter-flooded rice fields that provide 45% of all the food energy available to ducks in the Central Valley in non-drought water years (Petrie et al. 2016).

CalSim Model Runs - Refuges

Table A2-6 summarizes CalSim II Model Runs conducted on June 21, 2017 and show the net increase in water supply available for all refuges with implementation of the project.

Table A2-6. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project, Refuge Water Supplies (Central Valley Project [CVP] Contract, Sites and Acquisitions Supplies), Long-term Average and Average by Water Year Type

	Total Refuge L2 (Mar–Feb TAF)	Total Refuge L4 (Mar–Feb TAF)
Long-term		
Full Simulation Period[1]	8	35
Water Year Types[2]		
Wet (30%)	3	53
Above Normal 15%	3	47
Below Normal 21%	9	38
Dry 20%	14	21
Critical 15%	11	1

[1] Based on the 82-year simulation period
[2] As defined by the Sacramento Valley 40-30-30 Index Water Year

Deliveries of additional Level 2 and Level 4 water during dry and critically dry years would avoid loss of up to 10,867 acres of wetland habitat on the Sacramento, Colusa, and Delevan NWRs, and the other direct and indirect impacts of reduced water availability described above.

Refuges in the Mendota Pool and the Tulare Basin could also benefit from additional deliveries from the Sites Project. Refuges in these areas include the Kern and Pixley NWR and the CDFW Mendota Wildlife Area. Additional water supply is needed to meet the goals and objectives outlined in the Comprehensive Conservation Plan for Kern and Pixley National Wildlife Refuges (USFWS 2005) and also to improve management of seasonal and permanent wetlands in the Mendota Wildlife Area. Table A2-7 summarizes the results of CalSim II Model Runs that shows the average increased availability of water for refuges and other beneficiaries in the Mendota Pool and Tulare Basin in 2030 with the project, and also the increased water supply available during dry and critically dry years.

Table A2-7. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project for Sites Deliveries of Incremental Level 4 Refuge

Modeled Beneficiaries	Average Increase in Deliveries (TAF/yr)	Dry and Critical Increase in Deliveries (TAF/yr)
Mendota Pool	28	10
Tulare Basin	6	2

CalSim Model Runs - Ricelands

As shown in Table A2-8 and Table A2-9, additional water would be available to support rice plantings in dry and critically dry years with the project. Table A2-8 and Table A2-9 summarize CalSim II Model Runs conducted on June 21, 2017 and show the net increase in water supply available for agricultural users in the Central Valley with implementation of the project.

Table A2-8. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project Sites Deliveries to Sacramento Valley Members: Long-term Average and Average by Water Year Types

Analysis Period[1]	**Sacramento Valley (Mar–Feb TAF)**
Long Term	
Full Simulation Period	129
Water Year Type	
Wet (30%)	62
Above Normal 15%	118
Below Normal 21%	155
Dry 20%	186
Critical 15%	165

Table A2-9. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project Sites Deliveries to South of Delta Members for Agriculture: Long-term Average and Average by Water Year Types

Analysis Period[1]	**Jan-Dec, TAF)**
Long Term	
Full Simulation Period	23
Water Year Type	
Wet (30%)	2
Above Normal 15%	-1
Below Normal 21%	23
Dry 20%	52
Critical 15%	50

[1] Based on the 82-year simulation period
[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (State Water Resources Control Board [SWRCB] D-1641, 1999)
[3] Includes Sites delivery to Tehama-Colusa Canal Authority (TCCA) members, Glenn Colusa Irrigation District (GCID), RD108, County of Colusa, and Western Canal Water District

Ecosystem Priority 15: Develop and Implement Invasive Species Management Plans

Consistent with this priority, the Authority will create habitat in the vicinity of reservoir on lands that are not accessible to the public. This area is currently covered with yellow star thistle (*Centaurea solstitialis*) and goatgrass (*Aegilops triuncialis*). The yellow star thistle will be eliminated and replaced with species characteristic of native California prairie.

Figure A2-3: Virgate tarplant

Central Valley Prairie

Plant Composition: Burcham (1957) mapped most of "pristine California Prairie" in the Central Valley before agriculture had converted most of this habitat to cropland. His mapping matches the early Valley's accounts by John Muir who described the California Central Valley (CV) Prairie as a sea of wildflowers with little grass. He identified numerous colorful forbs from the genera of Layia, Lasthenia, Lupinus, and Eschscholzia dominating the prairie in spring, and a second late summer domination by flowering forbs like virgate tarplant (*Holocarpha virgata*) and its other Asteraceae relatives. Additionally, there are summer blooming perennials like narrow-leaved mule's ears (*Wyethia angustifolia*) and perennial lupine (*Lupinus formosus*) that survive in CV Prairie relic areas where purple needlegrass (*Stipa pulchra*) would be expected.

Extent: Since Burcham's mapping, much of the CV Prairie habitat was lost to urbanization and cultivation. The CV Prairie closely corresponds with the extent of California Grassland habitat in the Central Valley.

Soils: Prairie soils do not support trees and shrubs because their hardpans and clay horizons keep most water too close the soil surface. Some believe California prairie was once covered by bunchgrasses (which are now uncommon), but there is little documentation or evidence for this belief. In fact annual wildflowers covered the floor of the Valley. California Central Valley Prairie typically occurs on alluvial valley soils that favor herbaceous vegetation because of their fine texture and often abundant clay. Before urbanization and cultivation, CV Prairie primarily occurred on "*recent alluvium*", so named by geologists because it was deposited during the 10,000 years since the last Ice Age. However, because of the high fertility and low relief, this soil type became the prime land for agriculture and development. Currently the last extant areas of CV Prairie are now found on "*older alluvium*" that was formed from 10,000 to 2 million years ago. Soils in these areas are coarser, less fertile, hillier, and farther from the Valley center. As a result of that, these areas are less often cultivated or urbanized and are very often used for grazing, a land use that in some cases preserves native prairie plants.

The CV Prairie fine and clayey soils are a great substrate for rhizomatous grasses and shallow rooted annual species because they can densely cover its moist and fertile surface. In contrast, coarse and sandy soils favor deep and wide extending roots of bunch grasses, trees and shrubs because water and air can penetrate freely, however, water and nutrients are scarce near the surface.

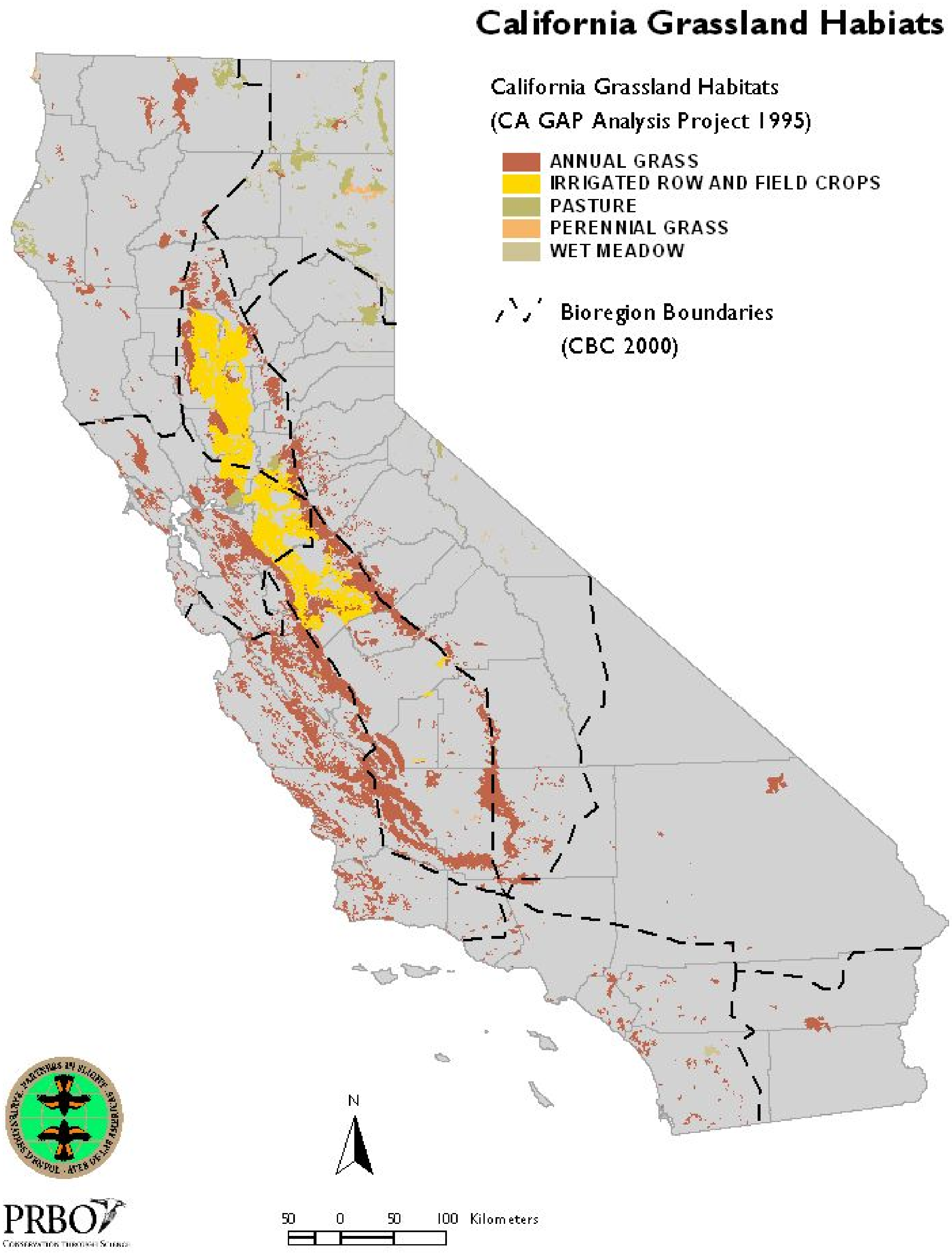

Figure A2-4 California Grassland Habitats mapped in 1995 by the GAP Analysis Project

Plants: The CV Prairie differs from other prairies of the world in both identity of the perennial species and the larger number and the importance of annuals (Beetle 1947). Typical fine clayey soils of the CV Prairie would have the creeping wildrye (*Leymus triticoides*) as a dominant grass species along with large number of annual forbs such as California poppy (*Eschscholzia californica*), purple owl clover (*Orthocarpus purpurascens*), virgate tarplant, tidytips (*Layia platyglossa*), narrowleaved mule's ears (*Wyethia angustifolia*), perennial lupine (*Lupinus formosus*), Ithuriel's spear (*Triteleia laxa*), tomcat clover (*Trifolium willdenovii*), gilia (Gilia tricolor), (*Orthocarpus erianthus*), blue-eyed grass (*Sisyrinchium bellum*), and various other species of the genera *Layia*, *Brodiaea*, *Calandrinia*, *Nemophila*, *Castilleja*, and *Lupinus*. On the marginal coarse soils along the edges of the valley, bunchgrasses such as purple needlegrass (*Stipa pulchra*), and nodding needlegrass (*Stipa cernua*), were dominant along with important associates such as blue wildrye (*Elymus glaucus*), pine bluegrass (*Poa scabrella*), and deergrass (*Muhlenbergia rigens*).

Central Valley Prairie Importance

Despite the fact that the CV Prairie provides critical foraging habitat for the golden eagle, nesting and feeding habitat for native bees, refuge borrows for amphibians, and habitat for rich native flora and fauna, CV Prairie does not receive as much attention as the often adjacent vernal pool and riparian habitats for which it serves as an important buffer.

Habitat for Native Plant Diversity: The CV Prairie provides the optimal habitat for hundreds of native plant species that have adapted to the fine clayey soils and high water table in these areas.

Golden Eagle Foraging Habitat: Golden Eagles live in open and semi-open country featuring native vegetation across most of the Northern Hemisphere.

Plant Pollinator Habitat: The spring growth of native forbs represents a tremendous food resource for pollinators. Bees, bumblebees, beetles, hummingbirds, bats, butterflies, moths, and flies are some of the pollinators needed by 90% of flowering plants and over 30% of food crops (Pollinator Partnership 2010). CV Prairie provides food and shelter for bees and other insects that pollinate our food crops. The importance of these native pollinators, especially ground and twig nesting bees, is increasing due to the current collapse of populations of the European honeybee.

Central Valley Prairie Creation Approach

Site Preparation: In areas where residual native species cover is present, it will be preserved. At the same time invasive species will be controlled and additional native species seeded. However, very often, there are virtually no residual native plants at heavily grazed sites and the "blank slate" restoration approach will be adopted if that is the case at the Sites Reservoir restoration areas. The soil texture, compaction, profile and chemistry, as well as hydrology will be closely analyzed during this phase to determine the best composition of native plant species to be seeded.

Existing Weed and Weed Seedbank Removal: Non-native vegetation eradication involves removal of the existing exotic species to the greatest extent possible (including the seed bank) and installing a native plant community from seed. Typically, existing vegetation eradication consists of three to four times repeated shallow tilling and irrigation cycles to exhaust the seed bank followed by re-seeding with native vegetation. Hard to eradicate weed species such as the yellow star thistle (*Centaurea solstitialis*) and goatgrass (*Aegilops triuncialis*) a more intense eradication methods such as burning, solarization and as a last resort herbicide spraying may be used. It will be also very important to control these invasive species in weed infested areas adjacent to and up-wind of the project. Increasing the cover and diversity of native forbs - either by actively planting them or by removing the invasive species with which they compete— will greatly contribute to the restoration success. As one example, hayfield tarplant (*Hemizonia congesta*) is often added to a native bunchgrass seed mix specifically to armor restored grasslands against re-invasion by yellow star thistle because it is the greatest impediment to successful grass establishment. Annual applications of a broadleaf herbicide are also often necessary to keep it at bay. While herbicides are effective, an ecosystem that depends on regular herbicide application does not meet the definition of self-sustaining. A promising technique for providing natural invasion resistance to restored grasslands is to select native species that compete strongly for the same resources as likely invaders (Young et al. 2009). Native tarplants are among the grassland species most analogous to yellow star thistle in the timing of growth and seed set. These late-season annual forbs germinate with the first fall rains and spend the winter and spring developing a tap root. Doing so allows them to take advantage of deep soil moisture in the summer and to flower and set seed long after the majority of annuals have completed their life cycle. Yellow star thistle is more effectively eliminated if a diversity of native late season forbs is planted that compete for resources with the thistle in slightly different ways. As another example, effective control of the invasive annual barbed goatgrass (*Aegilops triuncialis*) with analogous native species results in a natural resurgence of native forbs and a corresponding increase in the activity of native bees.

Seed Collection and Seeding: Because disturbed CV Prairie usually lacks any significant native seed bank, restoring prairie will require the reseeding of native species. Native species should be collected from the nearest vicinity around Sites Reservoir and can be seeded either manually with belly grinders, by the hydro-mulching method or with seed-drillers if the amounts of seed are small. Seed collection should be initiated immediately after project start so that sufficient seed amounts and diversity are available at the time of installation. The traditional approach to prairie restoration emphasizes the establishment of native bunch grasses. Following site preparation, a seed mix of up to seven native grass species is applied.

Ecosystem Priority 16: Ecosystem Priorities Application Worksheet– Terrestrial

CalSim Model Runs - Refuges

Table A2-10 summarizes CalSim II Model Runs conducted on June 21, 2017 and show the net increase in water supply available for all refuges with implementation of the project.

Table A2-10. Difference: WSIP 2030 With Project minus WSIP 2030 Without Project, Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies), Long-term Average and Average by Water Year Type

	Total Refuge L2 (Mar–Feb TAF)	Total Refuge L4 (Mar–Feb TAF)
Long-term		
Full Simulation Period[1]	8	35
Water Year Types[2]		
Wet (30%)	3	53
Above Normal 15%	3	47
Below Normal 21%	9	38
Dry 20%	14	21
Critical 15%	11	1

[1] Based on the 82-year simulation period
[2] As defined by the Sacramento Valley 40-30-30 Index Water Year

Native Species Benefiting from Implementation of the Project

The following native species occur on the Sacramento NWR Complex refuges and have commercial, recreational, scientific, or educational uses and values, and would benefit from implementation of the project:

Table A2-11. Waterfowl

Common Name	Scientific Name
Ross's Goose	*Chen rossii*
Snow Goose	*Chen caerulescens*
Green-winged Teal	*Anas crecca*
Gadwall	*Anas strepera*
Cinnamon Teal	*Anas cyanoptera*
Northern Shoveler	*Anas clypeata*
Greater White-fronted Goose	*Anser albifrons*
Northern Pintail	*Anas acuta*
Western Meadowlark	*Sturnella neglecta*
Ruddy Duck	*Oxyura jamaicensis*
American Wigeon	*Anas americana*
Mallard	*Anas platyrhynchos*
Ring-necked Duck	*Aythya collaris*
Lesser Scaup	*Aythya affinis*
Bufflehead	*Bucephala albeola*
Common Goldeneye	*Bucephala clangula*
American Green-winged Teal	*Anas crecca carolinensis*
Canada Goose	*Branta canadensis*
Blue-winged Teal	*Anas discors*

Table A2-12. Shorebirds/Egrets/Other Wetland-Dependent Species

Common Name	***Scientific Name***
American Bittern	*Botaurus lentiginosus*
Common Snipe	*Gallinago gallinago*
Eared Grebe	*Podiceps nigricollis*
Great Egret	*Ardea alba*
American White Pelican	*Pelecanus erythrorhynchos*
Black-necked Stilt	*Himantopus mexicanus*
White-faced Ibis	*Plegadis chihi*
Double-crested Cormorant	*Phalacrocorax auritus*
Great Blue Heron	*Ardea herodias*
Marsh Wren	*Cistothorus palustris*
Western Pond Turtle	*Actinemys marmorata*
Snowy Egret	*Egretta thula*
American Avocet	*Recurvirostra americana*
Killdeer	*Charadrius vociferus*
Common Gallinule	*Gallinula galeata*
Pied-billed Grebe	*Podilymbus podiceps*
Ring-billed Gull	*Larus delawarensis*
Long-billed Curlew	*Numenius americanus*
North American River Otter	*Lontra canadensis*
Greater Yellowlegs	*Tringa melanoleuca*
Virginia Rail	*Rallus limicola*
Clark’s Grebe	*Aechmophorus clarkii*
Caspian Tern	*Hydroprogne caspia*
Wilson’s Snipe	*Gallinago delicata*
American Herring Gull	*Larus argentatus smithsonianus*

Table A2-13. Special-Status Species

Common Name	***Scientific Name***
Peregrine Falcon	*Falco peregrinus*
Northern Harrier	*Circus cyaneus*
American White Pelican	*Pelecanus erythrorhynchos*
White-faced Ibis	*Plegadis chihi*
Greater Sandhill Crane	*Grus canadensis*
Bald Eagle	*Haliaeetus leucocephalus*
Double-crested Cormorant	*Phalacrocorax auritus*
Tricolored Blackbird	*Agelaius tricolor*
Loggerhead Shrike	*Lanius ludovicianus*
Cooper’s Hawk	*Accipiter cooperii*
White-tailed Kite	*Elanus leucurus*
Western Pond Turtle	*Actinemys marmorata*
Giant garter snake	*Thamnophis gigas*

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Benefit Calculation, Monetization, and Resiliency Tab

Attachment 2: Operations Plan

Attach the preliminary operations plan for the proposed project. See regulations section 6003(a)(1)(H) for details. If the preliminary operations plan is located in another attachment, identify the attachment and provide the location.

WSIP Application Instructions, March 2017

<u>Response</u>

This attachment describes the Site Reservoir preliminary operations plan under varying hydrologic conditions, from wettest to driest years and multiple dry year periods.

Sites Reservoir Project Preliminary Operations Plan Under a Range of Hydrologic Conditions

August 9, 2017

Table of Contents

Attachment 2: Operations Plan **1**
Introduction 6
Operations Assumptions and Criteria 8
Operations Overview 9
Operations over a Range of Hydrologic Conditions 11
Wet Hydrologic Conditions 11
Yolo Bypass and Delta Outflow Improvement 12
Water Supply for Wildlife Refuges 12
Above Normal to Dry Hydrologic Conditions 12
Shasta Lake Coldwater Pool and Sacramento River Temperature Control 13
Upper Sacramento River Fall Flow Enhancement 13
Folsom Lake Coldwater Pool Improvement 13
American River Flow Enhancement 13
Lake Oroville Coldwater Pool Improvement and Feather River Flow Enhancement 14
Yolo Bypass and Delta Outflow Improvement 14
Water Supply for Wildlife Refuges 14
Critical Hydrologic Conditions 14
Shasta Lake Coldwater Pool and Sacramento River Temperature Control 15
Folsom Lake Coldwater Pool Improvement 15
American River Flow Enhancement 15
Lake Oroville Coldwater Pool Improvement and Feather River Flow Enhancement 16
Yolo Bypass and Delta Outflow Improvement 16
Water Supply for Wildlife Refuges 16
Multiple Dry and Critical Year Drought Conditions 16
Shasta Lake Coldwater Pool and Sacramento River Temperature Control 16
Yolo Bypass and Delta Outflow Improvement 17
Water Supply for Wildlife Refuges 17
Adaptive Management Framework 17
Adaptive Management Process 18
Objective-based Monitoring 18
Sites Project Monitoring Plan Development 20
Monitoring Plan Elements 20
Data Management and Assessment 21
Adaptive Management and Operational Decision-Making Process 21
General Operational Objectives 22
References 24

Tables

Table ADF-1. Example of Sites Project Objective-Based Monitoring Framework 19
Table ADF-2. Description of Proposed Sites Project Authority Seasonal Operations 25

Acronyms and Abbreviations

Authority	Sites Project Authority
BiOp	Biological Opinions
BIOS	Biogeographic Information and Observation System
CALFED	CALFED Bay-Delta Program
CDFW	California Department of Fish and Game
cfs	cubic feet per second
COA	Coordinated Operation Agreement
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWC	California Water Commission
Delta	Sacramento-San Joaquin River Delta
DWR	California Department of Water Resources
EESA	ecosystem enhancement storage account
FGDC	Federal Geographic Data Committee
GCID	Glenn-Colusa Irrigation District
GPS	global positioning system
M&I	municipal and industrial
MAF	million acre-foot (feet)
NMFS	National Marine Fisheries Service
NODOS	North-of-Delta Offstream Storage
O&M	operations and maintenance
OM&R	operations maintenance and repair
RD 108	Reclamation District 108
Reclamation	United States Bureau of Reclamation
SRSC	Sacramento River Settlement Contractor
SVI	Sacramento Valley 40-30-30 water year type index
SWA	Sites Water Account
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
T-C Canal	Tehama-Colusa Canal
TCCA	Tehama-Colusa Canal Authority

TRR	Terminal Regulating Reservoir
USFWS	U.S. Fish and Wildlife Service
WIIN	Water Infrastructure and Investment for the Nation
WSIP	Water Supply Investment Program
WUA	Weighted Usable Area

Introduction

Flexible and Adaptable Operations: This document provides a summary description of the operations plan proposed by the Sites Project Authority (Authority) for the Sites Reservoir Project for its application to the California Water Commission for the Water Supply Investment Program (WSIP). Operations of the Sites Reservoir Project facilities are flexible and adaptable to meet a wide range of water supply and environmental needs. For the purposes of this application, the operations deemed to be most-responsive in providing water to the highest priorities as established by the Water Commission is provided. This operations strategy presents a prioritization of water-based public benefits in the upper Sacramento River and northern Delta. However, the Authority recognizes that over the life of the Sites Reservoir, these priorities may need to change and the Sites Project has the flexibility to adapt to a changing future. Consistent with other portions of this application, the Authority proposes to form a partnership with the State and Federal government resource agencies, so that the full potential of the Sites Project can be incorporated into the prerequisite operational permits.

Role of the Authority: Pursuant to California Water Code 79759(c), the Authority will own, govern, manage, and operate the Sites Project; which will be accomplished by working in partnership with the agencies participating in the project for both water supply and Proposition 1-eligible public benefits. As such, the Authority will, in addition to other responsibilities, be the holder of the water right, enter into water delivery contracts for both water supply and Proposition 1-eligible public benefits, coordination with the Central Valley Project (CVP) and State Water Project (SWP) operators, and be responsible for environmental compliance obligations, operations and maintenance, and dam safety. Organizationally, the Authority plans to establish a governing body, which is conceptually referred to as the Water Operations Committee. The Water Operations Committee's responsibility is to develop, in partnership, both long-term and annual operational plans that would be implemented by the Authority in cooperation with the operators of the State and Federal projects. As such, the Water Operations Committee will be comprised of investors and stakeholders in the project's development:

- the water agencies participating in the project's development; which is currently referred to as the Reservoir Committee;
- the state and federal resource agencies delegated the responsibility to have management control over the investment by the state and/or Federal government, respectively;
- the operators of the Central Valley Project and State Water Project, respectively; and
- operators of other facilities needed to move water to where it has been contracted for (i.e., both Proposition 1-eligible and non-Proposition 1-eligible benefits).
- Other stakeholders as deemed appropriate.

Additional details regarding how this process is proposed to work is provided as follows. However, the Authority anticipates that the concept presented in this document will evolve as the project evolves and information and insight from the other participants and stakeholders gets incorporated.

<u>Participation Agreements</u>: Agreements will be developed for Proposition 1-eligible and non- Proposition 1-eligible benefits (generally water supply augmentation contracts). These agreements will define the amount of Sites Reservoir storage allocated to the organization seeking the specific benefits and maximum and range of deliveries as well as cost associated with those deliveries. Water delivery contracts will also define the delivery request process, facilities repayment and OM&R charges (pro-rated by acre-foot of delivery). Since the WSIP contributions would cover facilities construction cost, costs associated with Proposition 1-eligible public benefit water delivery contracts would not include facilities repayment costs.

Water Operations Planning: The Water Operations Committee's leadership will manage the development of the 5-year and annual operating plans. The 5-year plan is intended to provide a guide to the overall operations of the Sites Reservoir Project, delineate the goals of the Sites Project operations for those years, provide linkage between the water operations consistent with the water delivery contracts, contracts with the State of California to support the development of public benefits, agreements with the federal government for WIIN Act benefits and the use of federal facilities (Shasta, Red Bluff diversion and Tehama-Colusa Canal, and potentially Folsom Dam), and any adaptive management activities. The 5-year plan will be subject to revision when required. Development of the subsequent 5-yr plan will be initiated in the spring of the 4th year to allow for adequate review, coordination and approvals. It is anticipated that the subsequent 5-year plan will be approved during the summer of the 5th year.

The annual operating plans will provide specific guidance regarding the operations of the Project for that year. These plans will be initiated in the spring of the prior year and completed and approved no later than the Authority Board meeting in August of the prior year. These plans will include the following:

- A summary of operations (including adaptive management actions and results) from the previous year
- A listing of any carry-over storage amount and location for public and non-public benefit contract holders
- Anticipated annual requests for each public and non-public benefit holder
- Projected operations by water year type, by month and
- Adaptive management activities planned and natural and Sites Projects conditions necessary to initiate those activities

Sites Project annual operating plans will also interface with the preparation of the annual Temperature Management Plan for the Sacramento River, consistent with WR 90-5 and applicable RPAs.

Through detailed coordination with the United States Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR), the Sites Project will develop and implement detailed operational agreements with these agencies to address issues related to operations of the Sites Project that optimize the use of existing facilities. Though the implementation of these agreements it is expected that the Sites Project will cooperatively interface with the existing ongoing real-time decision-making process and work groups (as identified in the California Water Fix 2017 Project Description) to avoid and minimize adverse effects to Central Valley Project and State Water Project facilities, operational plans, listed species, public health, safety and water supply reliability.

Cooperative Agreement with CVP & SWP: Water management agreements will be developed with Reclamation and DWR to support the use of existing facilities (e.g.; Shasta Dam and Reservoir, Tehama Colusa Canal and associated facilities, Oroville Dam and Reservoir, Folsom Dam and Reservoir). Initial Draft principles of agreements relating to the detailed water management agreement have been developed and circulated among the participants. Sample details of the contents of the detailed water management agreements are included in the adaptive management portion of this operations plan.

The Authority will also be responsible for general facility maintenance and upkeep, Authority accounting including payments to the following:

- Reclamation consistent with the Warren Act contracts for the use of Reclamation facility,
- Glenn-Colusa Irrigation District (GCID) for use of facilities
- Power supply for pumping and other power needs.

Authority accounting will also be responsible for receipt of funds from all contract deliveries and other arrangements for O&M cost associated with deliveries for public benefits.

Operations Assumptions and Criteria

This operations plan includes a description of project operations and public benefits under a range of hydrologic conditions, from wettest to driest years and multiple dry year periods. Water year types for this operations plan are classified based on the Sacramento Valley 40-30-30 Index per the SWRCB Water year Hydrologic Classification presented in D-1641. The primary actions that will be taken to meet desired public benefit objectives are described for the range of hydrologic conditions. In addition, monitoring of operations to ensure public benefits outcomes is described.

The with-project conditions include a 1.81-million-acre-foot (MAF) reservoir, which will be located in the Sacramento Valley west of the town of Maxwell, and associated conveyance facilities including use of existing Tehama-Colusa Canal (T-C Canal) and GCID Main Canal diversion and conveyance facilities, plus a proposed new diversion and discharge pipeline (see Sites_A3 Project Description under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB for a more detailed description of the project).[1] The proposed reservoir will be filled by diversion of excess Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam. These flows are “excess” to those needed to meet current regulatory requirements or other water demands. Operation of the proposed reservoir will be in cooperation with the operations of existing CVP and SWP system facilities to facilitate and maximize the potential for a wide range of benefits. Detailed operating agreements would need to be developed that define a framework and procedures for cooperative operations among the Authority, CVP, and SWP.

With-project operations are designed to improve the ability to meet the following primary objectives:

- Enhance overall system wide water management flexibility
- Provide increasing cold water conservation in Shasta, Oroville and Folsom to assist in temperature control downstream at critical times for salmonids.
- Increase reliability of water supplies
- Provide storage and operational benefits for programs to improve Sacramento-San Joaquin River Delta (Delta) and upstream ecosystems

The preliminary operations assumptions and criteria for the Sites Reservoir Project were developed through a series of meetings and coordination with Authority representatives including water district managers and county representatives, DWR, and Reclamation. The with-project condition builds on previous work conducted under the CALFED Bay-Delta Program (CALFED) by DWR and Reclamation. Subsequent to CALFED, DWR was the lead on technical studies in coordination with the Authority as part of the North-of-Delta Offstream Storage (NODOS) Project and associated investigations. Since 2014 the Authority has taken the lead role in these studies.

[1] With a 60 TAF hard dead storage, the operable storage for Sites Reservoir as 1.75 MAF

As noted in the description and assumptions response to A.1, the operations analyses conducted for the Sites Reservoir Project utilized the model products and assumptions described in section 6004(a)(1) of the California Code of Regulations. The models provided by the Commission were modified to include the facilities and operation of the Sites Project.

Operations Overview

Sites Reservoir will be filled by diversion of excess Sacramento River flows that originate from unregulated tributaries to the Sacramento River downstream from Keswick Dam. As described below, diversions are assumed to potentially occur in any month or water year type, but would likely be greatest in the winter months with wetter conditions (depending on storage conditions and flow events).

The primary operational criteria include the following:

- A defined ecosystem enhancement storage account will be established in Sites Reservoir to be managed by the State to provide water for ecosystem and water quality purposes.
- Each of the participating Authority members will be allocated a defined storage account in the Sites Reservoir Project to manage their water, as well as store water from other potential sources of supply
- It is assumed that a water market of some form would be facilitated by the Authority to promote efficient use and exchange of water in Sites Reservoir storage.
- All storage accounts would receive an equal proportional share of new water diversions into Sites Reservoir storage.
- Any water in storage beyond designated member account volumes would be “at risk” and would be “spilled” if the reservoir fills to capacity.
- A set of operating guidelines and rules will be developed to promote efficient water management for operations of Sites Reservoir and associated facilities.
- All water stored in Sites Reservoir storage accounts are subject to evaporation and other losses.

The Sites Reservoir Project could operate in cooperation with CVP and SWP system facilities to facilitate a wide range of benefits. Sites Reservoir will provide water through four primary mechanisms:

- Water stored in Sites Reservoir could be released directly to Colusa Basin users,
- Water could be released to the Sacramento River
- Water could be released through the Colusa-Basin Drain and Knights Landing Ridge Cut
- Water stored in Sites Reservoir could be exchanged for water stored in Shasta Lake or other CVP and SWP system reservoirs.

This last mechanism could be used to significantly increase upstream north-of-Delta storage and operational flexibility to support multiple water supply and ecosystem benefits.

The project employs a strategy to maximize the potential benefits of Sites Reservoir while not adversely affecting the CVP and SWP’s ability to meet existing system regulatory requirements including the following:

- Water rights
- Instream flow requirements

- Biological opinions
- Delta water quality requirements
- CVP and SWP requirements
- Central Valley Project Improvement Act (CVPIA)

Sacramento River water will be diverted at the three locations on the river as described above. Excess Sacramento River flow diversions to Sites Reservoir will only take place when flow monitoring indicates that bypass flows are present in the river due to storm event flows. Several existing and additional proposed bypass flow criteria were assumed at specified locations. These flow criteria are designed to make certain only excess water will be diverted into Sites Reservoir to maintain and protect existing downstream water uses.

As a mitigation measure to more fully avoid and minimize entrainment and impingement of juvenile salmonids and other poor-swimming aquatic species, diversions to Sites Reservoir will also be restricted to protect fish migration during naturally occurring, storm-induced, pulse flow events in the Sacramento River. The proposed pulse protection period will extend from October through May to address outmigration of juvenile winter-, spring-, fall- and late-fall-run Chinook salmon, as well as steelhead. Pulse flows during this period will provide flow continuity between the upper and lower Sacramento River to support fish migration. It is recognized that research regarding the benefits of pulse flows is ongoing, and further research and adaptive management will be required to develop and refine a pulse flow protection strategy for fish migration.

Diversions of excess Sacramento River water to Sites Reservoir using existing T-C Canal and GCID Main Canal conveyance facilities could occur at any time during the year, given the flow conditions described above are present in the river. Deliveries for Tehama-Colusa Canal Authority (TCCA) and GCID service areas have first priority at the existing T-C Canal and GCID intakes, with diversions to Sites Reservoir using the unused capacities of the two canals. Diversions through the proposed Delevan Pipeline could also occur at any time of the year assuming Sacramento River flow conditions are above the bypass and pulse flow criteria described above. In summer months, preference would generally be given to Sites Reservoir releases to the river, resulting in limited diversions to storage because the pipeline could only convey flows in one direction at a time.

The operation of Sites Reservoir Project will allow for the development and administration of an ecosystem enhancement storage account (EESA) that could be actively managed by the State to provide water for ecosystem and water quality purposes. Such an account would provide a pool of dedicated storage to manage in cooperation with existing operations to improve coldwater conservation storage, stabilize river flows during critical fisheries periods, increase flows through certain watercourses and/or facilities (such as, Yolo Bypass), increase availability of wetlands in wildlife refuges, and/or enhance habitat conditions.

Sites Reservoir Project will be operated in cooperation with CVP and SWP operations to coordinate releases from Shasta Lake, Lake Oroville, and Folsom Lake. Releases from Sites Reservoir will allow reduced releases from other reservoirs while still meeting requirements for minimum instream flow objectives, Sacramento River temperature requirements, and Delta salinity control assigned to CVP and SWP. Through this reduction in releases, storage could be conserved in Shasta Lake, Lake Oroville, and Folsom Lake to significantly increase operational flexibility to improve river water temperatures for fish survival, Delta ecosystem food-web enhancement, flood control, and recreation.

Sites Reservoir Project EESA operations will achieve multiple public benefits over a wide range of hydrologic conditions.

In drought conditions, Sites Reservoir Project could:

- Increase coldwater pool conservation in Shasta Lake, Lake Oroville, and Folsom Lake
- Help regulate Sacramento River summer flows for best use of cold water for control of temperature conditions adverse to anadromous fish

In non-drought hydrologic conditions, Sites Reservoir Project water could:

- Increase coldwater pool conservation in Trinity Lake, Shasta Lake, Lake Oroville, and Folsom Lake
- Help regulate Sacramento River summer flows for best use of cold water for control of temperature conditions adverse to anadromous fish
- Provide (via upstream actions) incidental Delta water quality improvements in the summer and fall
- Stabilize Sacramento River fall flows for improving spawning and rearing success of anadromous fish
- Provide water to the Yolo Bypass to support salmon migration and summer food production for delta smelt
- Provide water for Incremental Level 4 refuge deliveries per CVPIA

Operations over a Range of Hydrologic Conditions

This section provides a detailed description of proposed Sites Reservoir Project operations for a range of hydrologic conditions, including the actions that will provide public benefits under each of these differing hydrologic conditions.

The operations actions described below are an example of how the EESA could be used to meet public benefit objectives over a range of hydrologic conditions. Operations in any given year will be a function of the current year hydrology, as well as a function of the system conditions resulting from the previous year's hydrology and operations. The EESA provides the state with the operational flexibility to manage the water in Sites Reservoir storage to the highest priority needs on an adaptive management basis. Implementation of actions to provide public benefits will need to be evaluated on a continuing basis in response to changing system parameters (such as reservoir storage), ecological needs, forecasts of future hydrologic and atmospheric conditions, and system operations.

Total average annual diversions of excess Sacramento River flow to Sites Reservoir, based on CalSim-II model results, for current, 2030, and 2070 conditions are 514 TAF, 552 TAF, and 588 TAF, respectively. These results indicate that the Sites Project has the ability to adapt to predicted future hydrologic conditions provided by the CWC). The increase in average annual diversions of excess flow is a function of the reduction in spring snowmelt and increase in winter precipitation under the future climate conditions. Increased precipitation and resulting stream flow in the tributaries contributing to the Sacramento River between Keswick and Red Bluff Pumping Plant, in months of November through March, allow additional diversions of excess flow to Sites Reservoir storage. These increased diversions provide additional operational flexibility under future conditions to provide a wide range of public benefits such as critical ecosystem objectives.

Wet Hydrologic Conditions

Under wet year conditions, the primary EESA operations goal will be to maximize the diversion of excess water from the Sacramento River into Sites Reservoir storage during high flow winter months, subject to the proposed bypass flow criteria. The maximum diversions will occur between the months of November and March to minimize potential impacts to the riverine ecosystem. Monitoring will be conducted at Bend Bridge and other locations near Red Bluff Pumping Plant, Hamilton City Pumping

Facility, and proposed Delevan Pipeline Intake to identify when fish are present in the river so diversions to storage could be curtailed to promote pulse flow bypass protection to support salmonid out-migration to the lower Sacramento River.

Total average annual diversions of excess Sacramento River flow to Sites Reservoir for wet year types for current, 2030, and 2070 conditions are 574, 672, and 715 TAF, respectively. Sites Reservoir average end-of-month storage in May of wet years under simulated current, 2030, and 2070 conditions ranges from 1.77 to 1.71 MAF.

Proposed Sites Reservoir operations under wet year conditions will be largely a function of current system wide reservoir storage conditions and the need for water to support public benefit objectives. Generally, there is minimal demand for water from storage in wet years depending on the geographic variation and timing of late spring storm events and snow melt conditions. Actions that could be taken in wet years to provide public benefits include:

Yolo Bypass and Delta Outflow Improvement

Release of Sites water flow through the Colusa Basin Drain and Knights Landing Ridge Cut during summer and fall months (i.e., August through October) to help increase productivity in the lower Cache Slough and lower Sacramento River areas to increase desirable food sources for Delta smelt and other key fish species in the late summer and early fall.

Water Supply for Wildlife Refuges

Provide water toward meeting Incremental Level 4 wildlife refuge water needs north of the Delta and south of the Delta to supplement refuges supplies up to Level 4 criteria (CVPIA).

Above Normal to Dry Hydrologic Conditions

This range of hydrologic conditions includes Sacramento Valley 40-30-30 water year types for above normal, below normal, and dry year types. Under these hydrologic conditions, diversions of excess water from the Sacramento River into Sites Reservoir storage will occur during high flow winter months, subject to the proposed bypass flow criteria. Similar to wet years, the majority of diversions will occur between the months of November and March to minimize potential impacts to the riverine ecosystem. Monitoring will be conducted at Bend Bridge and other locations near Red Bluff Pumping Plant, Hamilton City Pumping Facility, and proposed Delevan Pipeline Intake to identify when fish are present in the river so diversions to storage could be curtailed to promote pulse flow bypass protection to support salmonid out-migration. Total average annual diversions of excess Sacramento River flow to Sites Reservoir for above normal water year types for current, 2030, and 2070 conditions range from 572 to 770 TAF. Total average annual diversions of excess Sacramento River flow to Sites Reservoir for dry water year types for current, 2030, and 2070 conditions range from 429 to 578 TAF. Sites Reservoir average end-of-month storage in May under simulated current, 2030, and 2070 conditions ranges from 1.2 to 1.7 MAF for above normal and dry hydrologic conditions.

Under these water year type conditions, EESA water in Sites Reservoir could provide operational flexibility to support a wide range of potential public benefits and ecosystem objectives. Operational actions to meet these objectives will be determined on an annual basis depending on the geographic variation and timing of late spring storm events, snow melt conditions, system wide reservoir storage, and ecological water needs.

Actions that could be taken in these years to provide public benefits will include:

Shasta Lake Coldwater Pool and Sacramento River Temperature Control

Maximum benefits will be realized with Sites Reservoir and Shasta Lake being operated in cooperation to preserve a greater volume of coldwater pool storage in Shasta Lake. This will be accomplished by substituting water from Sites Reservoir to meet a portion of an otherwise CVP water demand from Shasta (especially in the lower GCID and TCCA service areas) thus allowing water to be retained in storage in Shasta Reservoir. This allows additional cold water to be retained and will improve operational flexibility to provide releases to maintain appropriate water temperatures in the Sacramento River, with particular emphasis on the months of highest potential water temperature related impacts (i.e., July through November). Shasta Lake average end-of-month storage in May under simulated current, 2030, and 2070 dry water year conditions increases by 90 TAF to 100 TAF above the respective without-project conditions.

Through releases from Sites Reservoir to meet TCCA and GCID irrigation diversions and equivalent reductions in CVP Shasta Lake releases, demands on Shasta Lake storage could be reduced and the coldwater pool maintained for a longer time at higher levels than are currently achievable. Shasta Lake release patterns could be shifted in season and between adjacent years to improve coldwater storage and flow management for salmon and other species using the portion of the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam as habitat.

EESA water released from Shasta Lake for temperature purposes could provide multiple benefits as it will increase lower Sacramento River flows, Delta inflow, and outflow. Some of the Shasta Lake EESA releases could also be recaptured downstream at the Delevan Intake and diverted back into EESA storage in Sites Reservoir to meet additional public benefit objectives. Increased flows in the Sacramento River could also reduce the need for releases and help maintain the coldwater pool from Folsom Lake. These types of multi-benefit operations provide a range options for managing EESA water to achieve maximum benefits.

Upper Sacramento River Fall Flow Enhancement

Additional storage in Shasta Lake could be used to stabilize fall flows in the Sacramento River between Keswick Dam and Red Bluff to avoid abrupt flow reductions due to changes in local tributary inflows as a result of storm events. This will reduce adverse conditions for spawning fall-run Chinook salmon (such as, dewatering of redds and scour damage).

Folsom Lake Coldwater Pool Improvement

Sites Reservoir Project operations in cooperation with Folsom Lake could improve the reliability of coldwater carryover storage at Folsom Lake, by increasing May storage and retaining coldwater pool storage, to allow additional operational flexibility to provide suitable water temperatures in the lower American River. This action will use additional coldwater pool storage by providing releases from Folsom Dam (and subsequently from Nimbus Dam) to help provide water temperatures at levels suitable for juvenile steelhead over summer rearing and fall run Chinook salmon spawning in the lower American River from May through November. The proposed operations have not been prioritized to maximize this benefit. Other cooperative operations could expand this benefit at the expense of other environmental benefits.

American River Flow Enhancement

Summer releases from Sites Reservoir could reduce the need for releases from Folsom Lake, resulting in increased carryover storage. Sites Reservoir releases could also provide additional Delta outflow and reduce short-term emergency flow reliance on Folsom Lake releases to improve Delta water quality.

Additional storage in Folsom Lake could be released to stabilize flows in the lower American River to minimize dewatering of fall run Chinook salmon redds (i.e., October through March) and steelhead redds (i.e., January through May), and reduce juvenile anadromous salmonids isolation events, particularly from October through June.

Reduction of the reliance upon Folsom Lake as a "real time first response facility" to meet Delta objectives and demands of the CVP, particularly from January through August, will reduce flow fluctuations and water temperature related impacts to fall run Chinook salmon and steelhead in the lower American River.

Lake Oroville Coldwater Pool Improvement and Feather River Flow Enhancement

Sites Reservoir releases in coordination with SWP operations could increase Lake Oroville carry over storage and operational flexibility. Additional storage will increase the reliability of the coldwater pool in Lake Oroville and provide flows to reduce lower Feather River water temperatures for juvenile steelhead and spring-run Chinook salmon over-summer rearing, and fall-run Chinook salmon. Additional storage will also provide opportunities to release higher and more stable flows in the lower Feather River at critical times to minimize redd dewatering, juvenile stranding, and isolation of anadromous salmonids. The proposed operations have not been prioritized to maximize this benefit. Other cooperative operations could expand this benefit at the expense of other environmental benefits.

Yolo Bypass and Delta Outflow Improvement

Release of Sites water flow through the Colusa Basin Drain and Knights Landing Ridge Cut during summer and fall months (i.e., August through October) is proposed to help increase productivity in the Yolo Bypass in the lower Cache Slough and lower Sacramento River areas to increase desirable food sources for Delta smelt and other key fish species in the late summer and early fall. Proposed operation will provide a long-term average delivery of about 56 TAF into the Yolo Bypass, with average dry year type deliveries ranging from 47 to 56 TAF.

Water Supply for Wildlife Refuges

A portion of the EESA supply is dedicated to provide water toward meeting Incremental Level 4 wildlife refuge water needs north of the Delta and south of the Delta to supplement refuges supplies up to Level 4 criteria (CVPIA). The proposed operations long-term average amount of water available North of the Delta for this purpose will be about 40 TAF (with averages ranges from about 20 to 70 TAF depending on year types) Proposed operation will provide a long-term average annual delivery of about 37 TAF to wildlife refuges, with average dry year type deliveries of up to 22 TAF.

Critical Hydrologic Conditions

Critical water years are the most extreme drought years per the Sacramento Valley 40-30-30 water year classification. Under Critical hydrologic conditions, diversions of excess water from the Sacramento River into Sites Reservoir storage could potentially occur during isolated high flow storm events in winter months, subject to the proposed bypass flow criteria.

Monitoring will be conducted at Bend Bridge and other locations near Red Bluff Pumping Plant, Hamilton City Pumping Facility, and proposed Delevan Pipeline Intake to identify when fish are present in the river so diversions to storage could be curtailed to promote pulse flow bypass protection to support salmonid out-migration. Diversions to Sites Reservoir storage will be very limited in Critical water year types.

The proposed operations for Sites Reservoir Project focused on retaining water from wetter years for use in Dry and Critical years. Under critical water year type conditions, Sites Reservoir EESA could provide water and operational flexibility to support a wide range of potential public benefits and ecosystem objectives. Sites Reservoir average end-of-month storage in May under simulated current, 2030, and 2070 conditions range from 836 TAF to 637 TAF.

Operational actions to meet these objectives would be determined on an annual basis depending on the geographic variation and timing of late spring storm events, snow melt conditions, system wide reservoir storage, and water demands. In critical water years it is assumed that EESA water in Sites Reservoir will be used to support Shasta Lake coldwater pool and Sacramento River temperature control to the greatest extent possible, as well as maintenance of cold water in Lake Oroville and Folsom Lake. If additional EESA water was available it could be used to support a number of other ecosystem objectives including Yolo Bypass flow enhancement and supplies to wildlife refuges. Actions that could be taken in these years to provide public benefits are described below:

Shasta Lake Coldwater Pool and Sacramento River Temperature Control

Maximum benefits could be realized assuming Sites Reservoir and Shasta Lake were operated in cooperation to increase Shasta Lake storage and preserve a greater volume of coldwater pool storage. This additional cold water will improve operational flexibility to provide releases to maintain appropriate water temperatures in the Sacramento River, with particular emphasis on the months of highest potential water temperature related impacts (i.e., July through November). Shasta Lake average end-of-month storage in May under simulated current, 2030, and 2070 dry water year conditions increases by 180 TAF to 247 TAF compared to without-project conditions.

Through releases from Sites Reservoir to meet TCCA and GCID irrigation diversions and equivalent reductions in CVP Shasta Lake releases, demands on Shasta Lake storage could be reduced and the coldwater pool maintained for a longer time at higher levels than are currently achievable. Shasta Lake release patterns could be shifted in season and between adjacent years to improve coldwater storage and flow management for salmon and other species using the portion of the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam as habitat.

Folsom Lake Coldwater Pool Improvement

Sites Reservoir Project operations in cooperation with Folsom Lake could improve the reliability of coldwater carryover storage at Folsom Lake, by increasing May storage and retaining coldwater pool storage, to allow additional operational flexibility to provide suitable water temperatures in the lower American River. This action will use additional coldwater pool storage by providing releases from Folsom Dam (and subsequently from Nimbus Dam) to help provide water temperatures at levels suitable for juvenile steelhead over summer rearing and fall run Chinook salmon spawning in the lower American River from May through November. The proposed operations have not been prioritized to maximize this benefit. Other cooperative operations could expand this benefit at the expense of the other environmental benefits.

American River Flow Enhancement

Summer releases from Sites Reservoir could reduce the need for releases from Folsom Lake, resulting in increased carryover storage. Sites Reservoir releases could also provide additional Delta outflow and reduce short-term emergency flow reliance on Folsom Lake releases to improve Delta water quality.

Lake Oroville Coldwater Pool Improvement and Feather River Flow Enhancement

Sites Reservoir releases in coordination with SWP operations could increase Lake Oroville carry over storage and operational flexibility. Additional storage will increase the reliability of the coldwater pool in Lake Oroville and provide flows to reduce lower Feather River water temperatures for juvenile steelhead and spring-run Chinook salmon over-summer rearing, and fall-run Chinook salmon. The proposed operations have not been prioritized to maximize this benefit. Other cooperative operations could expand this benefit at the expense of other environmental benefits.

Yolo Bypass and Delta Outflow Improvement

Release of Sites water flow through the Colusa Basin Drain and Knights Landing Ridge Cut during summer and fall months (i.e., August through October) to help increase productivity in the Yolo Bypass in the lower Cache Slough and lower Sacramento River areas to increase desirable food sources for Delta smelt and other key fish species in the late summer and early fall. The ability to provide flow into the Yolo Bypass under critical year type conditions will be a function of ecosystem priorities based on the current year hydrology, as well as a function of the system storage conditions resulting from the previous year’s hydrology and operations.

Water Supply for Wildlife Refuges

Provide water toward meeting Incremental Level 4 wildlife refuge water needs north of the Delta and south of the Delta to supplement refuges supplies up to Level 4 criteria (CVPIA). The ability to provide deliveries to wildlife refuges under critical year type conditions will be a function ecosystem priorities based on the current year hydrology, as well as a function of the system storage conditions resulting from the previous year’s hydrology and operations.

Multiple Dry and Critical Year Drought Conditions

Under multiple dry and critical year drought conditions, diversions of excess water from the Sacramento River into Sites Reservoir storage will likely be very limited and carryover storage from previous years will be very important to meeting public benefits and ecosystem objectives.

Operational actions for use of EESA carry over storage in Sites Reservoir will be determined on an year to year basis depending on the severity of drought conditions, geographic variation and timing of late spring storm events, snow melt conditions, status of system wide reservoir storage, and ecosystem water needs. During extended drought periods, it is assumed that EESA water in Sites Reservoir will be used to support Shasta Lake coldwater pool and Sacramento River temperature control as the highest priority action. If additional EESA water was available it could be used to support a number of other ecosystem objectives including coldwater storage in Lake Oroville and Folsom Lake, Yolo Bypass flow enhancement and supplies to wildlife refuges. Primary actions that could be taken during extended drought periods to provide public benefits are described below:

Shasta Lake Coldwater Pool and Sacramento River Temperature Control

Maximum public (environmental) benefits are realized assuming Sites Reservoir and Shasta Lake are operated in cooperation to increase Shasta Lake storage and preserve a greater volume of coldwater pool storage. This additional cold water will improve operational flexibility to provide releases to maintain appropriate water temperatures in the Sacramento River, with particular emphasis on the months of highest potential water temperature related impacts (i.e., July through November).

Through releases from Sites Reservoir to meet TCCA and GCID irrigation diversions and equivalent reductions in CVP Shasta Lake releases, demands on Shasta Lake storage could be reduced and the coldwater pool maintained for a longer time at higher levels than are currently achievable. Shasta Lake release patterns could be shifted in season and between adjacent years to improve coldwater storage and flow management for salmon and other species using the portion of the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam as habitat.

Yolo Bypass and Delta Outflow Improvement

Release of Sites water flow through the Colusa Basin Drain and Knights Landing Ridge Cut during summer and fall months (i.e., August through October) to help increase productivity in the Yolo Bypass in the lower Cache Slough and lower Sacramento River areas to increase desirable food sources for Delta smelt and other key fish species in the late summer and early fall. The ability to provide flow into the Yolo Bypass under drought conditions will be a function of ecosystem priorities based on current year hydrology, as well as a function of the system storage conditions resulting from the previous year's hydrology and operations.

Water Supply for Wildlife Refuges

Provide water toward meeting Incremental Level 4 wildlife refuge water needs north of the Delta and south of the Delta to supplement refuges supplies up to Level 4 criteria (CVPIA). The ability to provide deliveries to wildlife refuges under drought conditions will be a function of ecosystem priorities based on current year hydrology, as well as a function of the system storage conditions resulting from the previous year's hydrology and operations.

Adaptive Management Framework

This section presents a monitoring and adaptive management framework to guide the evaluation and improvement of the operations of the Sites Project – as well as assist in the operations of other water management facilities interacting with the Sites Project. Because the Sites Project has not reach final design, construction or operation, this document does not include the detailed protocols and site-specific, year-type specific sampling design necessary for implementation of a Monitoring and Adaptive Management Plan. A more detailed plan and decision-making process will be developed in future phases of the Sites Project.

The Adaptive Management Framework is intended to support the investigation of alternative operations of the Sites Project and test these operations regarding their ability to improve environmental conditions in the Sacramento River and Delta system and improve water supply reliability in the State water supply system. The environmental conditions of primary concern in the Sacramento River and Delta system include:

- Water temperature conditions necessary to support salmonid fish life-cycles in upstream tributaries (recruitment to spawning)
- Sediment supply and management (suspended material supply during winter flush events and spawning gravel supply and management)
- Habitat for juvenile salmonid development (floodplain management) for the development of smolts
- Nutrients chemistry (ammonia levels and its oxidation products)
- Food availability and the adverse effects of other non-native species
- Salinity in regard to habitat suitability for native estuarine species in tributaries to the Bay and Delta.
- Predation

- Entrainment

The water supply reliability concerns include:

- Water supply availability (particularly in dry and critically dry years)
- Regulatory and policy constraints on water delivery capability
- Water quality constraints (salinity related chloride and bromine)

Adaptive Management Process

Adaptive management is a process that promotes flexible decision-making that can be adjusted as new and improved information becomes available about outcomes of management actions and other events (Williams et. al 2007). Adaptive management provides the necessary flexibility and feedback to manage complex natural resources in the face of considerable uncertainty about the effectiveness of specific management actions. It is an iterative process with the following steps:

a. **Plan –** Define/redefine the problem, establish goals and objectives, develop restoration alternatives;

b. **Design –** Develop designs and operational scenarios for habitat ponds, develop monitoring framework;

c. **Implement –** Design, construct, and operate the project;

d. **Monitor –** Conduct monitoring to detect change and determine status of resources;

e. **Evaluate –** Analyze, synthesize, and manage data; and

f. **Adapt and Learn –** Make any necessary adjustments to management, share information.

Because uncertainties remain about natural hydrologic variations, project operations, and ecological responses, the Sites Project is being designed with a range of operational scenarios (Appendix YY, Project Operations) to evaluate the effectiveness of different management actions. A monitoring program will be implemented to collect data necessary to operate and evaluate the Project's success.

The adaptive management program will be developed in close coordination with the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFW). Specific adaptive management investigations will be developed to build on the best available science on the range of issues listed above. Adaptive management will be implemented within a framework that is transparent, collaborative, and responsive to changes in scientific understanding.

Objective-based Monitoring

Monitoring is a fundamental element of adaptive management because effective evaluation and management requires information about the status of target resources and their response to management activities. The information obtained will be used to measure Project effectiveness, to refine operation and management of the Sites Project, to reduce uncertainties about key issues, and to inform subsequent stages of actions to improve environmental conditions in the Sacramento River and Delta system and improve water supply reliability in the State water supply system.

Monitoring can be defined as the collection and analysis of repeated observations or measurements to evaluate changes in condition and progress toward meeting a management objective (Elzinga et al. 1998). Inherent in defining monitoring as part of the adaptive management cycle are two key concepts (Elzinga et al. 1998). The first is that monitoring is driven by objectives. The objective describes the desired condition. Management is designed to meet the objective and monitoring is designed to determine if the objective is met. Objectives form the foundation of the entire monitoring project. The second concept is that monitoring is only initiated if opportunities for management change exist.

Monitoring efforts will be guided by the specific Sites Project objectives and desired outcomes for ecosystem priorities. The Project's objectives are to meet its primary goal to improve environmental conditions in the Sacramento River and Delta system and improve water supply reliability in the State water supply system. What is measured (indicator), how well it is measured, and how often it is measured are design features that will be defined by how an objective is articulated (Elzinga et al. 1998). Table ADF-1 provides examples of measurable objectives and performance measures for selected ecosystem priorities. Measures like these will be elements of a monitoring framework which will provide data to assess progress towards achieving Sites project objectives and ecosystem priorities, and which will inform adaptive management decision-making for operations. The proposed operations prioritize certain ecosystem priorities listed for the Water Storage Investment Program. Key scientific information for further monitoring and adaptive management activities related to those prioritized operations is:

Table ADF-1. Example of Sites Project Objective-Based Monitoring Framework

Objectives and Ecosystem Priorities	Measurable Objectives	Performance Measures and Monitoring
Ecosystem Priority 1: Provide cold water at times and locations to increase the survival of salmonid eggs and fry. Ecosystem Priority 2: Provide flows into the Yolo Bypass to flush nutrient laden water into the Cache Slough complex to improve food availability for Delta smelt and other pelagic fish in the Cache Slough complex and lower Sacramento River Ecosystem Priority 3: Maintain flows and appropriate ramping rates at times and locations that will minimize dewatering of salmonid redds and prevent stranding of juvenile salmonids in side channel habitat. Ecosystem Priority 4: Provide additional water for level 4 wildlife refuges. *NOTE: Need to Add Sites Reservoir Monitoring for Water Quality, Temperature and Phytoplankton species (need to look out for and control Blue Green algae)*	Measurable objectives include flows and temperatures of delivered water . Improvement in WUA is based on habitat for steelhead spawning, but improvements in all four runs of Chinook salmon in the Sacramento River will also be seen and could potentially be quantified approximately three to four years later (2033 to 2034) when 2030 cohort return to spawn.	Performance measures include the timing of releases from Shasta, Oroville, and Folsom to maximize benefits of the project to salmonid fish species, and estimates of salmonid out-migrants. Monitoring data sources include: CDFW Sacramento River monitoring: • Main stem Sacramento River Mark-recapture Program; • Upper Sacramento River Tributary Escapement Monitoring; • Sacramento River Tributary Mark-Recapture Monitoring; • Hatchery Brood stock and Angler Harvest Sampling. Existing Delta monitoring programs: • Interagency Ecological Program; • Delta Juvenile Fish Monitoring Program; • Anadromous Fish Restoration Program Monitoring for 12 years is recommended to assess increase in spawning by quantifying increasing trends of the first four consecutive cohorts. Monitoring will begin immediately after completion of Sites Reservoir.

- Quantification of the improvement in temperature for salmonids above that would have been available absent Sites.
- Benefits provided by river flow stabilization using Sites Reservoir Project water

- The amount of productivity increase in the Cache Slough area and increases in Delta smelt abundance in this area and Lower Sacramento River
- The amount of additional water provide to Level 4 refuges.

The next step will be to define, quantitatively or qualitatively, the specific desired outcomes for each objective and to identify appropriate indicators for measurement. Monitoring should focus on the most informative, efficient, and cost-effective indicators and methods. Types of potential indicators include:

a. Triggers for real-time diversion and release operations **–** flow rates, anticipated water year type, storage in Sites and other reservoirs, storm events, and salmonid out-migrant numbers, …;
b. Performance measures **–** attributes of target species and their habitat, such as physical habitat conditions, water quality in Sites and elsewhere in the Sacramento River/Delta system, extent of wetland acreage at refuges, and distribution, abundance and composition of aquatic invertebrates, fish, waterfowl, and other wetland-dependent wildlife; and
c. Threat indicators – potential for floods or droughts, contaminants of concern, mosquitoes and other vectors, disease outbreaks on Sites Reservoir or elsewhere

Sites Project Monitoring Plan Development

A detailed monitoring plan will be developed during the permitting phase of the final Sites Project and final designs and operations are approved. The actions identified in the monitoring plan will be based on the regulatory requirements and other information needed to operate the Sites Project facilities, to evaluate success and threats, and to help resolve remaining uncertainties, as well as available funding and monitoring requirements for compliance.

The Sites Project monitoring plan will be developed in coordination with other similar efforts in the Sacramento River watershed, including studies by the Interagency Ecological Program and ongoing studies by USFWS, NMFS, and CDFW in the Sacramento River Watershed. Design and implementation of Sites Project monitoring will also be coordinated with ongoing and proposed survey and monitoring efforts along the Sacramento River and within the Delta to share and build on available data. This coordination will be especially valuable for evaluating Sites Project performance relative to other reference sites and for understanding regional patterns of physical and biological change.

Monitoring Plan Elements

The Sites Project monitoring plan will include several monitoring elements, modeled on other similar plans for water management facilities (e.g., Delta Independent Science Board 2016) and acceptable to the permitting and operating organizations. Each monitoring element will include a description of the purpose and justification for the monitoring activity, location(s), time period(s) and frequency of monitoring, protocol(s) for data collection, a description of the data to be collected and the anticipated use of the data, proposed quality assurance measures, reporting, and an overview of similar monitoring activities and opportunities for integration. The frequency of data collection and evaluation will be guided by the purpose of monitoring. For example, operational triggers such as water supply flow rates would be measured daily or weekly, while status of target resources would be monitored seasonally or annually. A detailed monitoring protocol will be developed prior to initiating monitoring activities in the field. This protocol will include a description of the measures that will be taken to ensure the quality of the data collected and how those measures will be implemented. The data quality assurance measures may include, but will not be limited to, procedures for calibrating or ensuring the accuracy of any instruments (e.g., GPS) employed in the field, procedures for recording and transferring electronic data, methods for ensuring proper operation of field equipment during surveys, and methods for avoiding double counting or insufficient coverage of survey areas.

Key monitoring elements will include the following:

a. Physical Habitat in Sites Reservoir– diversions (inflow) and release flow rates, reservoir depth, snags, submerged vegetation, and other habitat elements;
    a. Water Quality – temperature, dissolved oxygen, nutrients;
    b. Aquatic Biota – algae, plankton, invertebrates, fish community (species, distribution, abundance);
b. Birds around the Sites Reservoir– species, abundance and distribution, use of habitat features, breeding and nesting, sick or dead birds; and
c. Contaminants in Sites Reservoir**–** contaminants of concern concentrations in water, sediment, terrestrial or avian biota.

Data Management and Assessment

Data collected, stored, or made accessible from the data management system will be available to the Sites Project team for the application of statistical and other analytical techniques. Data assessment will be used to foster the integration, consolidation, and review of data, updating of conceptual models, answering of key questions, reporting, and providing management recommendations. Consistent review and assessment of the data would be needed to assure that performance objectives are being met and that funding for data collection is effectively utilized. In addition to program-level data assessment and analysis, data assessment should take place at the individual monitoring activity level through regular evaluation and assessment of data collected over time. This individual monitoring would help ensure data quality and usefulness relative to meeting monitoring objectives.

An annual report would be generated for each year that surveys are conducted that summarizes the data collected during that year and updates prior reports in a cumulative fashion. A synthesis report would be periodically prepared (each 5 or 10-year period) with long-term observations and recommendations.

Data, analyses, and publications developed from this monitoring plan will be organized, stored, and made publicly accessible through a common distributed data management system, in coordination with the broader Sacramento River and Delta management efforts. Common protocols will be developed and applied when possible, and all geospatial data will include full metadata and will be compliant with the Federal Geographic Data Committee (FGDC) standards. Sites Project staff will establish and maintain the data management system. The data collected as part of the Sites Project will be transmitted to the California Department of Fish and Wildlife and stored in their Biogeographic Information and Observation System (BIOS) map viewer and all documentation including metadata will be accessible to the public via metadata clearinghouses and document library.

Adaptive Management and Operational Decision-Making Process

The Sites Reservoir Authority (Authority) is a Joint Powers Authority form within the laws of the State of California. The Authority Board of Directors holds the final decision-making authority for all actions pertaining to the Sites Reservoir Project. The Authority Board has delegated certain responsibilities to standing committees that do (or will) report to the Board. The Board and the Reservoir Committee have developed specific work groups to develop and refine specific products and information for consideration by standing committees and the Board. This Adaptive Management Framework, when approved by the Board, will be a chartering document for the Operations Committee and its staff.

Recognizing the many sources of uncertainty in predicting future environmental conditions, particularly in light of climate change, and knowledge gaps regarding factors controlling fish population dynamics and abundance, an adaptive management approach will be required to make informed decisions about operation management for the Sites Project. The adaptive management concept will be implemented to reduce operational uncertainty, enhance scientific knowledge, comply with the permit requirements of the Sites Project, and improve project performance in a constantly changing natural system. As with other adaptive management plans associated with major water management facilities in California, adaptive management will provide recommended operations intended to test operational hypotheses and provide input to the periodic operational reviews of the Sites Project, and will be developed with the best available science in collaboration with CDFW, USFWS, and NMFS.

It is expected that all agencies participating in the Sites Reservoir Project will adopt an adaptive management approach to reduce operational uncertainty associated with the operation of the Sites Project. At this time the participating agencies include the Authority, Reclamation, and the California Resources Agency (as the coordinating agency for the State with regard to WSIP participation). As the Site Project proceeds through WSIP, water right acquisition, and permitting processes, it is anticipated that other agencies (including the California Department of Fish and Wildlife, Department of Water Resources, the U.S. National Marine Fisheries Service and Fish and Wildlife Service) will be active participants in the adaptive management process. Together, this adaptive management organization will identify investments in related research, monitoring and other endeavors to support the Sites Project. Additional groups may be added to the adaptive management organization to support the decision-making process.

General Operational Objectives

The Sites Reservoir Project will include a large, off-stream reservoir that is independently owned, constructed, governed, managed and operated by the Authority under its own water rights and other regulatory requirements but in cooperation with both Reclamation and DWR in their operation of the CVP and SWP respectively.

The operation of Sites Reservoir is predicated on the acquisition of permits consistent with the operational assumptions, the assignment of water rights by the State of California, and the completion of agreements with the Bureau of Reclamation and DWR for the use of existing facilities. Each of these is necessary to obtaining most of the public benefits described in this application. While the implementation of the Sites Project may further the detailed evaluation of the management and allocation of water supplies in California, participation by Reclamation is allowed for by Water Infrastructure and Investment for the Nation (WIIN) Act. Likewise, the California natural resource agencies may participate in the Sites Reservoir Project under terms of Proposition 1, (2014). Both statues allow water acquired for environmental and water quality purposes to be used to improve ecologic conditions in the Sacramento-San Joaquin River Delta (Delta) relative to current conditions.

The ongoing permit acquisition, water right determinations, environmental analysis activities and the development of detailed water management agreements are all required to be complete in order to meet the following objectives of the Sites Reservoir Project.

a. The Sites Reservoir Project will be independently constructed, operated and managed by the Site Project Authority (Authority) under its own water rights and other regulatory requirements but in cooperation with both Reclamation operating the Federal Central Valley Project (CVP) and

DWR operating the State Water Project (SWP) according to separate cooperation agreements between the Authority, the United States and the State of California. The above agencies are also known as cooperating parties.

b. The operation of Sites Reservoir Project is planned to include State of California and/or accommodate federal participation in exchange for obtaining eligible public benefits; specifically, for environmental and water quality purposes. Such participation is allowed for by Water Infrastructure and Investment for the Nation (WIIN) Act and November 2014, Proposition 1, specifically chapter 8: "Statewide Water System Operational Improvement and Drought Preparedness (aka the California Water Commission's Water Storage Investment Program). Both allow water acquired for environmental and water quality purposes to be used to improve ecologic conditions in the Delta relative to current conditions.

c. The CVP operated by the Reclamation and the SWP operated by DWR have their own separate water rights and are regulated jointly by both the State Water Resources Control Board and the State and Federal Fishery Agencies under the Endangered Species Acts, and other applicable laws with regard to their respective operations including those in the Sacramento-San Joaquin Delta (Delta). The Sites Reservoir Project operations will not conflict with nor be contractually integrated into those separate water projects or regulatory requirements of the CVP or SWP.

d. The filling of water into Sites Reservoir will only occur when by-pass requirements at the diversion points and other key locations are met and the Delta is declared to be in "excess conditions" related to Delta Outflow or Delta salinity standards affected by inflow from the Sacramento River. Excess conditions as it is related to Sites Reservoir Project operations will be determined by the methods developed according to the Coordinated Operation Agreement (COA)[2] and agreed to by the cooperating parties.

e. Water deliveries from Sites Reservoir to water users, or for environmental purposes will be done in cooperation with the SWP and CVP operations in such a manner so that they will not conflict with or otherwise adversely affect the operations of the SWP or CVP but will instead provide new benefits to water users and the environment.

f. One of the major environmental benefits of the operations of the Sites Reservoir Project is the ability to allow a portion of the water demand within significant parts of the CVP service area along the Tehama Colusa Canal and Glen Colusa Canal south of Sites Reservoir to be met from Sites Reservoir in the summer and allow a like amount of water to be retained in Shasta Reservoir (via exchange) to assist in cold water pool management. As Sites water is stored via exchange with CVP obligations, it will create a Sites Water Account (SWA) in the Shasta Reservoir. The Authority, working on behalf of its member agencies, will manage this account in cooperation with Reclamation.

g. The same cooperative operations may be possible at times as it relates to the SWP or CVP in the meeting in-basin water demand obligation. The Authority, on behalf of its member agencies, may want to work with Reclamation and DWR to have some of the Sites water allocations of its customers managed in cooperation with the operations of the SWP and CVP.

h. When dealing with the SWA discussed above, the Authority will work with Reclamation and DWR to account for this water and its release latter in the summer or early fall to first meet Sites

[2] Agreement between the United States of America and the State of California for Coordinated Operation of the Central Valley Project and the State Water Project - November 24, 1986, which agreement is currently being renegotiated and updated.

water users' allocations while secondly assisting with temperature or flow control downstream of the above reservoirs. This SWA will be accounted for separately, but when needed, moved across the Delta as either project water or non-project under the conveyance agreements obtained separately between the organizations that obtain Sites water south or west of the Delta and Reclamation or DWR. Also, Reclamation, in cooperation with the Authority, will work with the NMFS, USFWS and CDFW to allow the SWA to be conveyed in the later summer and fall to Authority customers, potentially across the Delta, under current Biological Opinions as has been done for early summer water held for cold water pool purposes in the past. Also, the effects of the conveyance of Sites water across the Delta will be included in the project description in any SWP/CVP re-consultation process under the Federal Endangered Species Act.

i. Sites water users south or west of the Delta will be responsible for obtaining conveyance agreements with Reclamation or DWR to receive their allocation of the SWA and any Delta pumping costs and any losses associated with this moving the SWA from the release point and across the Delta including any Carriage Water losses.

j. The SWA held in Shasta, Oroville or Folsom reservoirs will be accounted for and subject to standard calculation of project losses as with other water held is storage in those reservoirs. At the Sites Authority discretion, some of the SWA held in storage may be carried over to other years but will be subject to "spill" when the reservoir in which it is held enters flood control operations.

k. Exchanges, Conveyance, and Purchases of Water Supply – Either cooperating party may make use of its facilities available to the other party for pumping and conveyance of water by written agreement. This includes the Authority use of both the Tehama Colusa and Glen Colusa Canals in order to fill Sites Reservoir and to deliver water to CVP customers as agreed to by the parties.

References

Elzinga et al. 1998.

Williams et. al 2007.

Table ADF-2. Description of Proposed Sites Project Authority Seasonal Operations

Sites Reservoir Project Operations Plan

Objective	Detail of Operation	Priority of Operation[a]	Year Type Most Suitable for Operation[b]	Months Most Suitable for Operation[c]											
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
General Operation															
Diversions to storage	Conduct diversions through the T-C Canal, GCID Canal, and the proposed Delevan Pipeline (diversions could occur in any month). Diversions would only occur once the D-1641, CVPIA 3406(b)(2), 2008 USFWS BiOp, and 2009 NMFS BiOp requirements have been met and existing authorized Delta diversions (e.g., Freeport Regional Water Project, Los Vaqueros Reservoir, cities of Fairfield, Vacaville, and Benicia) have been satisfied. Diversions to Sites Reservoir would be restricted by Sacramento River bypass criteria at Red Bluff, Hamilton City, Wilkins Slough, and Freeport, and mitigation restrictions for protecting fish outmigration pulse flows. Shading indicates the period in which diversion operations would occur, with the highest diversions during November through March. Diversions could also be limited by future regulatory requirements which may be placed on California and the United States.	n/a	n/a												
Seasonal Reservoir Operations	Fill Sites Reservoir by pumping water diverted and stored pursuant to Water Right Application A025517 throughout the winter and spring and drain during peak release periods throughout the summer and fall.	n/a	n/a	Fill Cycle High Point			Drain Cycle Low Point							Fill Cycle	
Water Supply Operations															
Sites Project Authority	Provide storage releases to participating TCCA districts on an as-needed basis to supplement CVP Agricultural Water Service Contract deliveries. Provide storage releases to GCID and RD 108 to supplement CVP Settlement Contract deliveries. Provide supplemental water supplies to project participants in the Sacramento Valley and south-of-the Delta to improve water supply reliability. Export would require new contracts for conveyance with Reclamation and DWR.	SPA-1	AN,BN,D,C												
Hydropower Operation															
Dispatchable Hydropower Generation	Provide more than 30 hours per week of uninterrupted operation, with dedicated afterbay/forebay (Holthouse Reservoir) with 6,500–acre-foot capacity.	n/a	ALL												
Ecosystem Enhancement Storage Account (EESA) Actions/Operation															
EESA-1: Shasta Coldwater Pool	Increase Shasta Lake storage levels to preserve additional coldwater pool storage. This action would have particular emphasis in Below Normal, Dry, and Critical water-year types. This benefit would be achieved by (1) exchanging environmental water from Sites Reservoir for environmental water storage in Shasta, and then releasing water from Sites Reservoir to meet CVP contract requirements for GCID, Reclamation District 108, and the Member Units of the TCCA; (2) releasing water from Sites Reservoir to meet CVP south-of-the-Delta needs instead of releasing water from Shasta; and (3) releasing water from Sites Reservoir to meet a portion of the CVP commitment for Delta outflow.	DP-1	BN, D, C												
EESA-2: Sacramento River Flows for Temperature Control	Maintain water temperatures year-round at levels suitable for all species and life stages of anadromous salmonids in the Sacramento River between Keswick Dam and Bend Bridge, and during the July through September period for Below Normal, Dry, and Critical water-year types. This objective would be achieved by releasing water from increased storage in Shasta.	DP-2	BN, D, C												
EESA-3: Folsom Lake Coldwater Pool	Increase Folsom Lake storage levels to preserve additional coldwater pool to achieve temperatures that are more suitable for juvenile steelhead summer rearing and fall-run Chinook salmon spawning in the lower American River from May through November during dry and critical water-year types. The additional storage would be achieved by releasing Sites Reservoir water to assist with meeting Delta objectives that are currently met through releases from Folsom, particularly from January through August.	DP-2	D, C												

Table ADF-2. Description of Proposed Sites Project Authority Seasonal Operations

Objective	Detail of Operation	Priority of Operation[a]	Year Type Most Suitable for Operation[b]	Months Most Suitable for Operation[c]
EESA-4: Augment American River Flows	Augment flows in the lower American River to reduce dewatering of fall-run Chinook salmon redds (i.e., October through March) and steelhead redds (i.e., January through May). This action would also reduce juvenile anadromous salmonid isolation events (through avoiding extreme fluctuations in flow), particularly from October through June. This objective would be accomplished by releasing a portion of the additional water stored at Folsom Reservoir resulting from Sites Reservoir releases to meet Delta objectives.	DP-2	ALL	
EESA-5: Yolo Bypass Flow Enhancement	Release flow through the Colusa Basin Drain and Knights Landing Ridge cut during summer and fall months (i.e., August through October) to help increase productivity in the Yolo Bypass in the lower Cache Slough and lower Sacramento River areas to increase desirable food sources for Delta smelt and other key fish species in the late summer and early fall.	AVG-1	AN,BN,D	
EESA-6: Lake Oroville Coldwater Pool	Improve the reliability of coldwater pool storage in Lake Oroville to improve water temperature suitability for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook salmon spawning in the lower Feather River from May through November during all water-year types. Additional storage would be accomplished through releases from Sites Reservoir to meet Lake Oroville compliance obligations. Provide releases from Oroville Dam to maintain water temperatures at levels suitable for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook salmon spawning in the lower Feather River. Augment flows in the lower Feather River to minimize redd dewatering, juvenile stranding, and isolation of anadromous salmonids.	DP-2	BN,D,C	
EESA-7: Incremental Level 4 Water Supply for Wildlife Refuges	Provide water toward meeting incremental Level 4 wildlife refuge water needs north-of-the-Delta and south-of-the-Delta to supplement refuges supplies up to Level 4 criteria (CVPIA).	AVG-2	AN,BN,D	
EESA-8: Augment Sacramento River Fall Flows	Augment flows in the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam to minimize dewatering of fall-run Chinook salmon redds (for the spawning and embryo incubation life-stage periods extending from October through March), particularly during fall months. Avoid abrupt changes. Operations would avoid adverse impacts to coldwater pool operations in Dry and Critical water-year types.	AVG-3	AN,BN,D	

[a]Priority of operation "DP" indicates that the operational priority has a driest period's emphasis and "AVG" indicates an average-to-wet hydrologic emphasis. The number 1-4 indicates priority within the associated hydrologic emphasis. "n/a" indicates that operations are not or cannot be easily defined within the priority structure of the scenario. "SPA" indicates Sites Project Authority operation on an as-needed basis subject to storage availability.

[b]Year type most suitable for operation is the D1641 40-30-30 year types that are reflected in operations studies; operations in these year types occur when supplies would be available in Sites Reservoir to support the operation, when the operations criteria in the scenario allow for prioritization of the operations, and when conditions are suitable for developing the benefit associated with the operation.

[c]The heavier shaded parts of each bar highlight the months in which conditions would be most suitable to the operations; the lighter shaded parts of each bar highlight the months that would be less suitable to the operations; operations in these months would occur when supplies are available in Sites Reservoir to support the operation, when the operations criteria in the scenario allow for prioritization of the operations, and when conditions are suitable for developing the benefit associated with the operation.

Notes:

AN = Above Normal
AVG = Average
BN = Below Normal
C = Critical
D = Dry
DP = Driest periods
NMFS = National Marine Fisheries Service
USFWS = U.S. Fish and Wildlife Service

Feasibility and Implementation Risk Tab

Attachment 2: Permits

Provide a listing and status of all local, state, and federal permits, certifications, and other approval necessary for the construction and operation of the project. See section 6003(a)(1)(W) of the regulations.

WSIP Application Instructions, March 2017

<u>Response</u>

This attachment describes the anticipated local, state, and federal permits, certifications, and other approval required construction and the time required to obtain each approval for construction and operation of the Sites Project.

Table of Contents

Attachment 2: Permits 1

Tables

Table 1. Applicable Federal, State, and Local Permits and Approvals 3

Acronyms and Abbreviations

BA	Biological Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
LEDPA	Least Environmentally Damaging Practicable Alternative
NEPA	National Environmental Policy Act
SMARA	Surface Mining and Reclamation Act
USACE	U.S. Army Corps of Engineers

Table 1 summarizes the anticipated local, state, and federal permits, certifications, and other approval necessary for the construction and operation of the Sites Reservoir Project and the time required to obtain each approval. Additional information related to policies and regulations applicable to the Project is located in Chapter 4, "Environmental Compliance and Permit Summary," and Appendix 4A, "Environmental Compliance," of the Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) (http://sitesproject.org/information/DraftEIR-EIS).

The project is currently in preliminary engineering and planning stages. To date, no formal permitting or approval processes have been initiated.

Table 1. Applicable Federal, State, and Local Permits and Approvals

Agency	Type of Permit or Approval	Timing
Federal Agency Permits and Approvals		
U.S. Army Corps of Engineers	Department of the Army permit (Section 404)	10 to 12 months after application submittal
U.S. Army Corps of Engineers	Department of the Army permit (Section 10)	10 to 12 months after application submittal
U.S. Army Corps of Engineers	Department of the Army permit (Section 408)	10 to 12 months after application submittal
U.S. Environmental Protection Agency	Least Environmentally Damaging Practicable Alternative (LEDPA) review	Up to 1 year depending on National Environmental Policy Act (NEPA) status
Advisory Council on Historic Preservation/ State Office of Historic Preservation	Section 106 review and compliance	Up to 6 months after Section 106 study result submittal
U.S. Fish and Wildlife Service/National Marine Fisheries Service	Section 7 consultation	4 to 6 months after biological assessment permit application and Biological Assessment (BA) submittal
U.S. Fish and Wildlife Service	Bald Eagle Protection Act (typically addressed through Section 7 consultation)	(typically included as part of Section 7 consultation)
U.S. Coast Guard	Navigability determination	6 months
U.S. Coast Guard	Private Aids to Navigation Permit	3 months after application submittal
Bureau of Reclamation	Warren Act Contract	1 year
Federal Energy Regulatory Commission	Hydropower license	5–10 years
State Agency Permits and Approvals		
California Department of Transportation	Encroachment permits	2 months after application submittal
California Department of Transportation	Transportation permit	Same day as applied for
State Lands Commission	Land use lease	6 months after application submittal
California Department of Conservation	Williamson Act Certification of Final Cancellation	3 to 6 months after application submittal
Central Valley Flood Protection Board	Encroachment permit	6 to 12 months after application submittal
State Water Resources Control Board	Water rights permit	3 – 5 years
California Department of Water Resources, Division of Safety of Dams	Approval of plans and specifications for the construction or enlargement of a dam or reservoir	6 months after application submittal
California Occupational Safety and Health Administration	Permits for construction, trench excavations, and demolition	1 week after application submittal

Agency	Type of Permit or Approval	Timing
California Department of Fish and Wildlife	Streambed Alteration Agreement	1 month after application submittal based on 50 percent design
California Department of Fish and Wildlife	Incidental Take Permit	7 months after application submittal based on 50 percent design
State Office of Historic Preservation	See Advisory Council on Historic Preservation under U.S. Army Corps of Engineers (USACE)	
California Department of Conservation	Approval of Reclamation Plans & Financial Assurance for Surface Mining and Reclamation Act (SMARA) Permit	1 to 2 months
Regional Agency Permits and Approvals		
Central Valley Regional Water Quality Control Board	General Construction Stormwater National Pollution Discharge Elimination System permit	Prior to construction
Central Valley Regional Water Quality Control Board	Waste discharge requirements	6 months to 1 year after application submittal
Central Valley Regional Water Quality Control Board	Section 401 Water Quality Certification	6 months after application submittal
Union Pacific Railroad	Rail Crossing Encroachment Permit	6 months after application submittal
Local Agency Permits and Approvals		
Colusa and Glenn County Air Pollution Control Districts	Authority to construct and permit to operate	6 months after application submittal
Colusa and Glenn County Public Works Departments	Encroachment permit	1 to 2 months
Colusa and Glenn County Public Works Departments	Transportation permit	1 day
Colusa and Glenn County Public Works Departments	Building permit, street improvement permit, grading permit	Approximately 1 month after final design
Colusa County Planning Department	Zoning/General Plan amendment	6 months
Colusa and Glenn Counties	Surface Mining and Reclamation Act Permit	1 to 2 months

Physical Benefits Tab

Attachment 2: Recreation Benefits

Attach or provide links to any relevant recreation studies associated with the proposed project.

WSIP Application Instructions, March 2017

Response

This attachment contains analyses of benefits associated with Stone Corral Recreation Area and Peninsula Hills Recreation Area.

Table of Contents

Attachment 2: Recreation Benefits 1
Introduction 3

Tables

Table 1. Summary of Recreation Facilities.. 4

Figures

Figure 1. Proposed Sites Reservoir including Recreation Areas 5
Figure 2. Stone Corral Recreation Area 6
Figure 3. Peninsula Hills Recreation Area 7

Acronyms and Abbreviations

MAF	million acre-feet
msl	mean sea level
NODOS	North-of-the Delta Offstream Storage

Introduction

The proposed Sites Reservoir would be located in the Antelope Valley in Colusa and Glenn Counties. At maximum capacity, the reservoir would be the seventh largest reservoir in California, with a storage volume of approximately 1.81 million acre-feet (MAF) and surface area of approximately 14,000 acres. Sites Reservoir would provide new opportunities for surface-water recreation, such as boating, fishing, and swimming. In addition, new facilities would be developed to support other recreation activities like camping, hiking, picnicking, and sightseeing.

The suitability of lands to support reservoir-based recreation is determined by several factors, including topography, access, physical/aesthetic setting, projected reservoir operations, anticipated use, and competing uses. The following assumptions were made to characterize the potential recreational opportunities and benefits at Sites Reservoir:

- The maximum design water-surface elevation of Sites Reservoir, 520 feet above mean sea level (msl), is associated with a 1.81 MAF storage capacity and is considered to be the baseline scenario.
- The reservoir's water level would fluctuate considerably during normal operations. The maintained portion of the proposed recreation area would be limited to a designated footprint above the maximum designed reservoir water elevation, and access would be provided to the reservoir.
- General recreational activities include those common to the region, and that are usually of normal quality. Normal quality refers to experiences and activities that could be found in a more common setting, such as a regular city park, but are not an extraordinary recreational experience. These activities include picnicking, camping, day-use visits, hiking, horseback riding, cycling, fishing, boating, and passive recreation.
- Likelihood of success at fishing and wildlife viewing enhance the value of a recreation site.
- Overuse may adversely affect the quality of recreational values. Major aesthetic qualities to be considered in assessing recreational opportunities include wildlife, geology and topography, water, and vegetation.
- It is assumed that recreational development and types of recreational opportunities would be comparable to those available at Black Butte Reservoir located north of Sites Reservoir in Glenn and Tehama counties.

The location of the proposed recreation areas are shown on Figure 1 and described as follows:

- **Stone Corral Recreation Area** – The Stone Corral Recreation Area (see Figure 2) would be located on the east side of the reservoir, north of the existing Maxwell-Sites Road and the proposed Sites Dam. The maximum proposed size of the Stone Corral Recreation Area is 235 acres.
- **Peninsula Hills Recreation Area** – The Peninsula Hills Recreation Area (see Figure 3) would occupy approximately 516 acres on the northwest side of Sites Reservoir. The Authority is considering the installation of a separate boat launch facility approximately 2 miles south of this recreation area, with access to the reservoir south of Sites-Lodoga Road.

The facilities for each recreation area are summarized in Table 1 below.

Table 1. Summary of Recreation Facilities

Feature	Stone Corral	Peninsula Hills
Size	235 acres	516 acres
Location	East side of Sites Reservoir	West side of Sites Reservoir
Access	New Stone Corral Road	Existing Sites-Lodoga Road and new bridge and new Peninsula Road
Camp sites	50 (car and recreational vehicle)	100 (car and recreational vehicle) and 1 group camp area (group camp area can accommodate up to 24 people)
Picnic sites	10 (with parking at each site)	10 (with parking at each site)
Hiking trails	Yes	Yes
Vault toilets	10	10
Kiosk	1	1
Boat launch	Two lane ramp and parking area	Nearby two lane ramp and parking area approximately two miles from recreation area
Utilities	Electricity and water	Electricity and water
Other	35-acre overlook/interpretive (sightseeing) and additional parking areas	Equestrian trails and horse trailer parking area; vista point/sightseeing; additional parking areas

The design for these recreation areas was developed with input from Colusa County, a Sites Project Authority member. They would most likely be the operator/maintainer for the recreation facilities. These recreation areas could potentially be developed and commissioned in a phased approach to match recreational interest at Sites Reservoir. The Stone Corral Recreation Area and the west-side boat ramp would be constructed initially, followed by the remainder of Peninsula Hills Recreation Area, if warranted.

The Feasibility Report Appendix E Recreation supporting the North-of-the Delta Offstream Storage (NODOS) Investigation prepared for the Bureau of Reclamation provides more detailed discussion of the recreation facilities currently planned and budgeted for development (Found at https://www.sitesproject.org/information/FeasibilityReport).

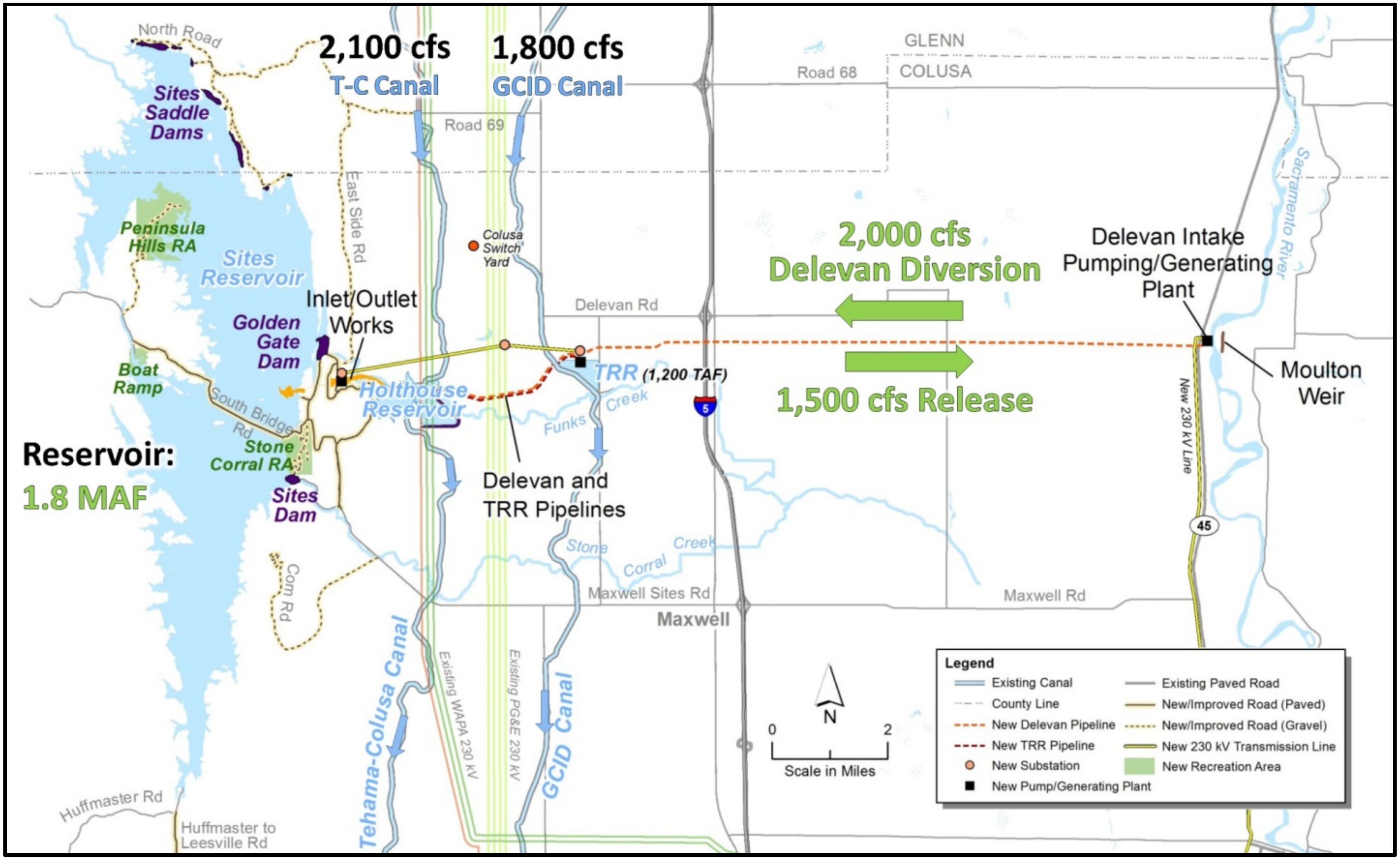


Figure 1. Proposed Sites Reservoir including Recreation Areas

STATUS:	FINAL	PREPARER:	D RUARK	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFIT	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	RECREATION BENEFITS			PAGE:	5	OF	7

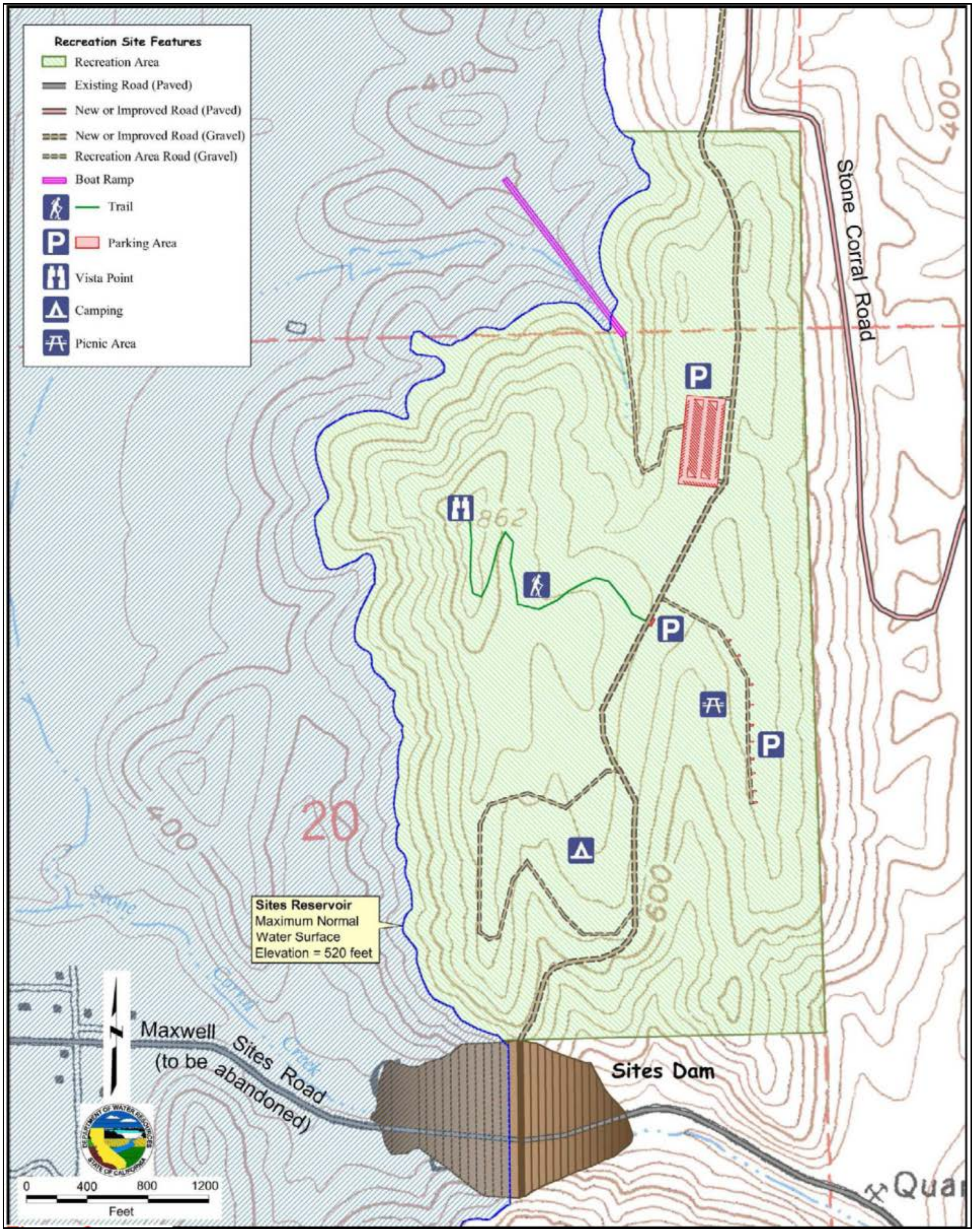


Figure 2. Stone Corral Recreation Area

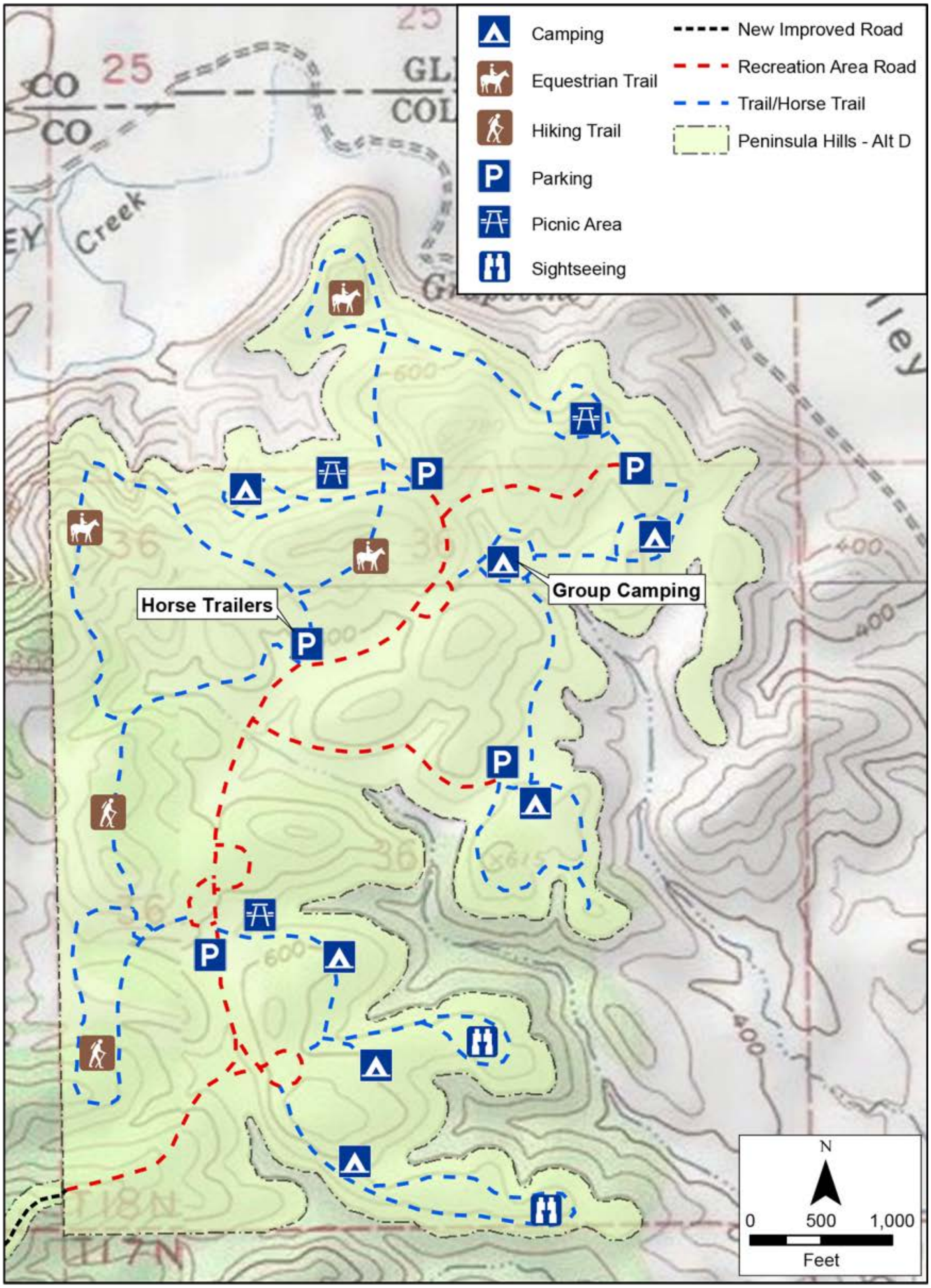


Figure 3. Peninsula Hills Recreation Area

BEFORE THE BOARD OF DIRECTORS OF THE

SITES PROJECT AUTHORITY

Resolution No. 2017-001

In the Matter of:

Authorizing Filing Application to California Water Commission under Water Storage Investment Program for the Sites Project.

WHEREAS, the Water Storage Investment Program ("WSIP") is provided for at Chapter 8 (commencing at Section 79750) of Division 26.7, of the California Water Code, which is part of the November 2014 voter-approved Proposition 1, the process for which is specified in regulations promulgated by the California Water Commission at California Code of Regulations, Title 23, Division 7, Chapter 1 ("WSIP Regulation"); and

WHEREAS, the Sites Project Authority ("Authority") is a joint powers authority formed by and existing among various irrigation districts and other local water districts and local governments within the Sacramento River hydrologic region pursuant to a Joint Exercise of Powers Agreement as last amended February 13, 2017, and through a Reservoir Committee established by the Authority has partners that are not located within said hydrologic region, participating with development of the Sites Project, all as authorized by Water Code Section 79759 of the WSIP authorizing act; and

WHEREAS, the Sites Project, very generally and as described in detail in the application authorize to be filed by this Resolution and its attachments, is a proposed off-stream reservoir to store unregulated water within the Sacramento River watershed when this outflow is not meeting critical environmental, water quality and water supply needs, and to subsequently release such store water from the reservoir for beneficial uses for consumptive and in-stream flow purposes; and

WHEREAS, the Sites Project is among the surface storage projects identified in the CALFED Bay-Delta Program Record of Decision, date August 28, 2000, and is therefore eligible for funding under Water Code Section 79751(a); and

WHEREAS, this Board is familiar with and concurs in the draft of the application authorized to be filed by this Resolution;

NOW, THEREFORE, BE IT RESOLVED by this Board of Directors as follows:

1. The foregoing recitals are true and correct;
2. The General Manager is authorized and directed to timely file an application for the Sites Project with the California Water Commission pursuant to WSIP and its implementing regulations referenced above; and

3. The Authority's officers and General Manager are authorized to do all things necessary and proper to carry out and implement filing the above referenced application with the California Water Commission.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the Sites Project Authority this 31st day of July, 2017, by the following vote:

Ayes:	Colusa County, Reclamation District 108, Westside Water District, Glenn-Colusa Irrigation District, Tehama-Colusa Canal Authority, Maxwell Irrigation District, Colusa County Water District, Orland Artois Water District, Placer County Water Agency/City of Roseville, Proberta Water District/TC 6 Districts and Western Canal Water District.
Nays:	None.
Absent:	Glenn County.
Abstain:	None.

Kim Dolbow Vann
Kim Dolbow Vann, Chair
Sites Project Authority Board

ATTEST: Ann Nordyke
Clerk to the Board of Directors

Ann Nordyke
Ann Nordyke, Clerk

APPROVED AS TO FORM:

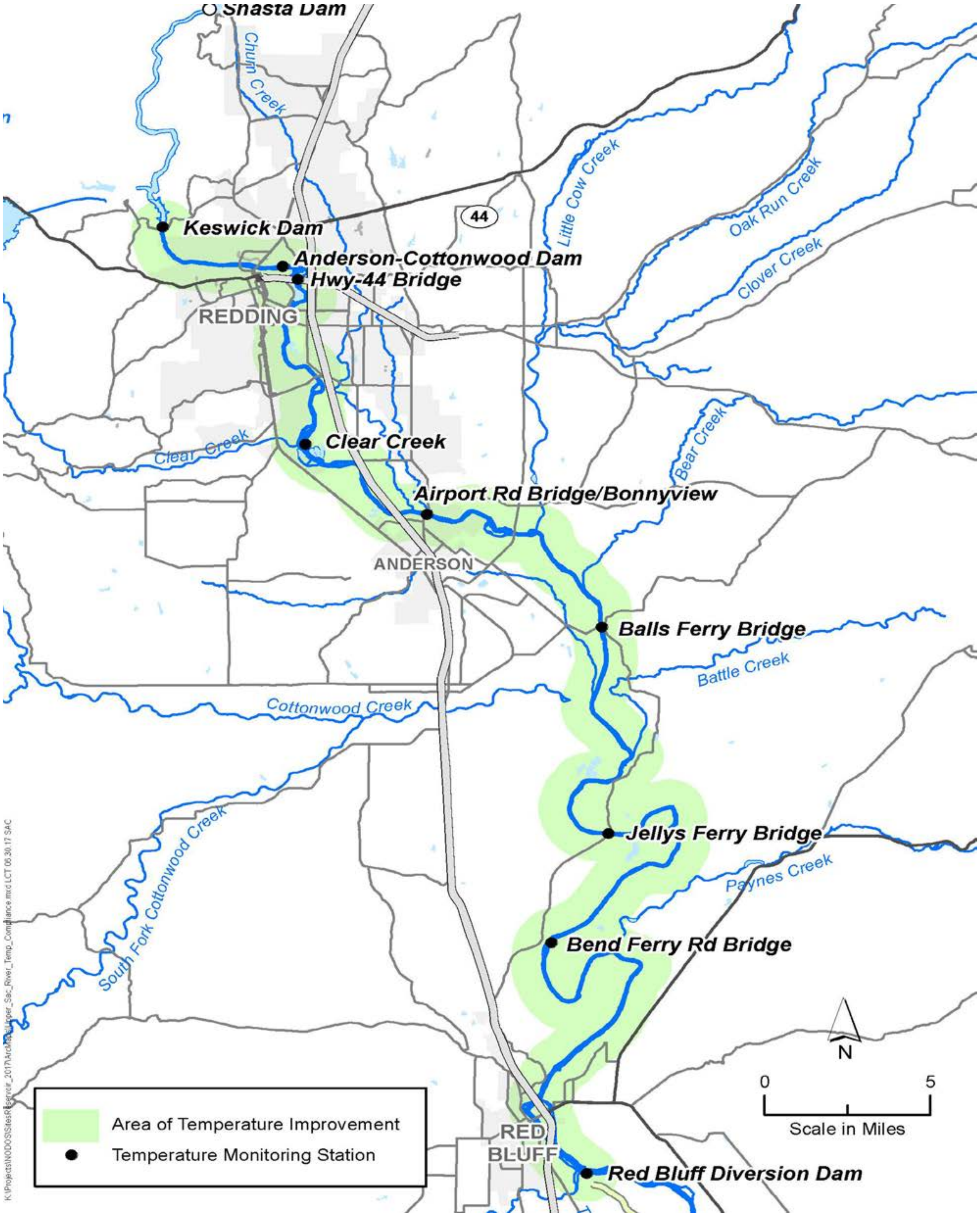
Ernest A. Conant, Counsel

Secretary's Certificate

I, Jamie Traynham, Secretary of the Sites Project Authority Board, do hereby certify that the resolution set forth above, is a true and accurate copy of a resolution adopted by the board of directors of the Sites Project Authority at a duly called meeting of the board on July 31, 2017. I further certify that said resolution has not been rescinded, amended, or modified and is in full force and effect as of the date hereof.

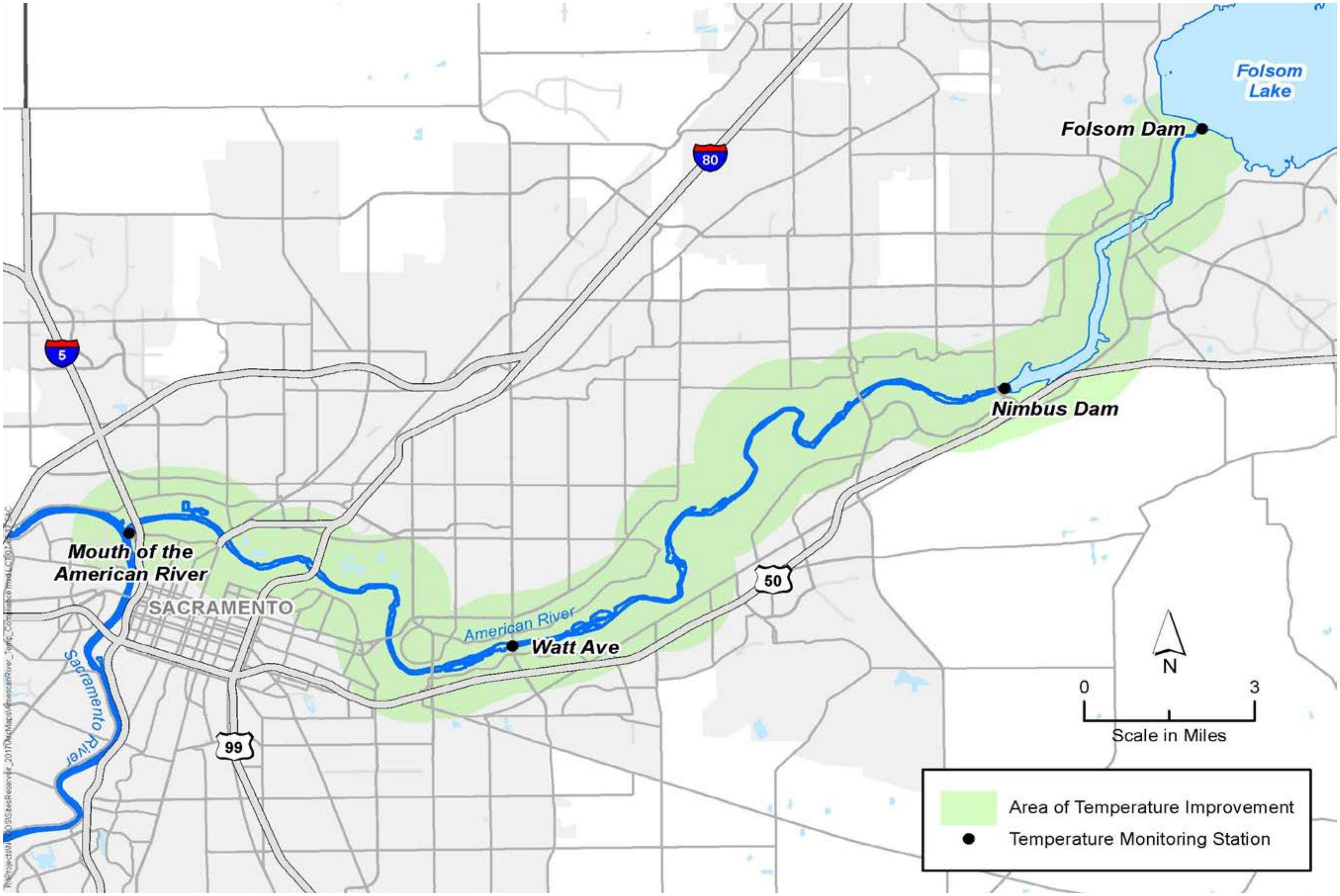
In witness whereof, I have executed this certificate this 2nd day of August 2017.

Jamie Traynham
Jamie Traynham, Secretary
Sites Project Authority



Source: Prepared by AECOM 2017

Figure Water Quality P – 1a. Area of Temperature Improvement for the Sacramento River



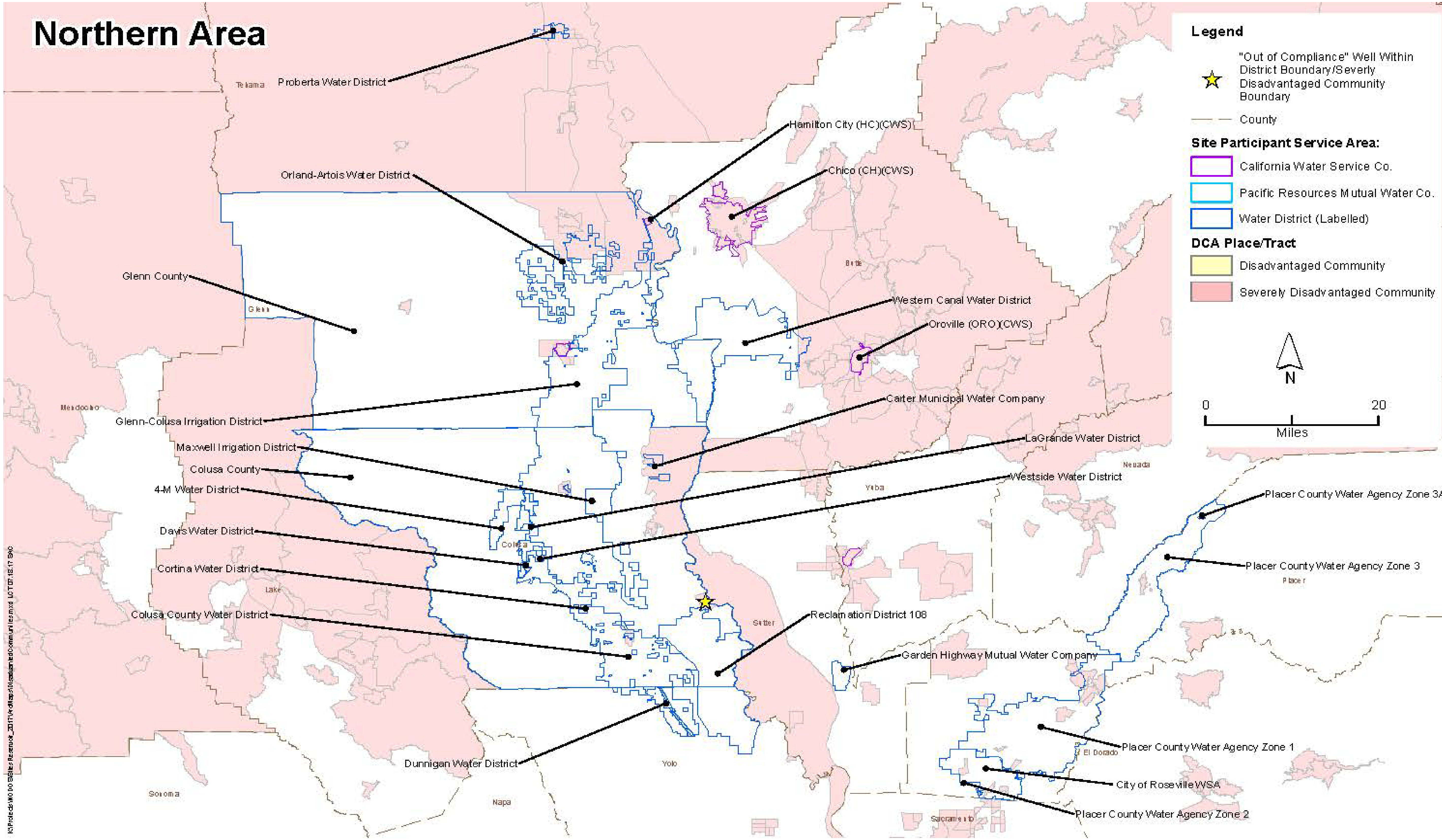
Source: Prepared by AECOM 2017

Figure Water Quality P – 1b. Area of Temperature Improvement for the American River

STATUS:	FINAL	PREPARER:	L TRUMBULL	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFITS A2	CHECKER:	N SMITH	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:				PAGE:	2	OF	6

Source: Prepared by AECOM 2017

Figure Water Quality P – 6a. Hydrologic regions receiving surface water supplies and potential area of Groundwater Improvement



Source: Prepared by AECOM 2017

Figure Water Quality P – 9a. Disadvantaged Community Block Groups within Site Participant's Service Area (Northern California)

STATUS:	FINAL	PREPARER:	L TRUMBULL	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFITS A2	CHECKER:	N SMITH	DATE:	2017 AUGUST		
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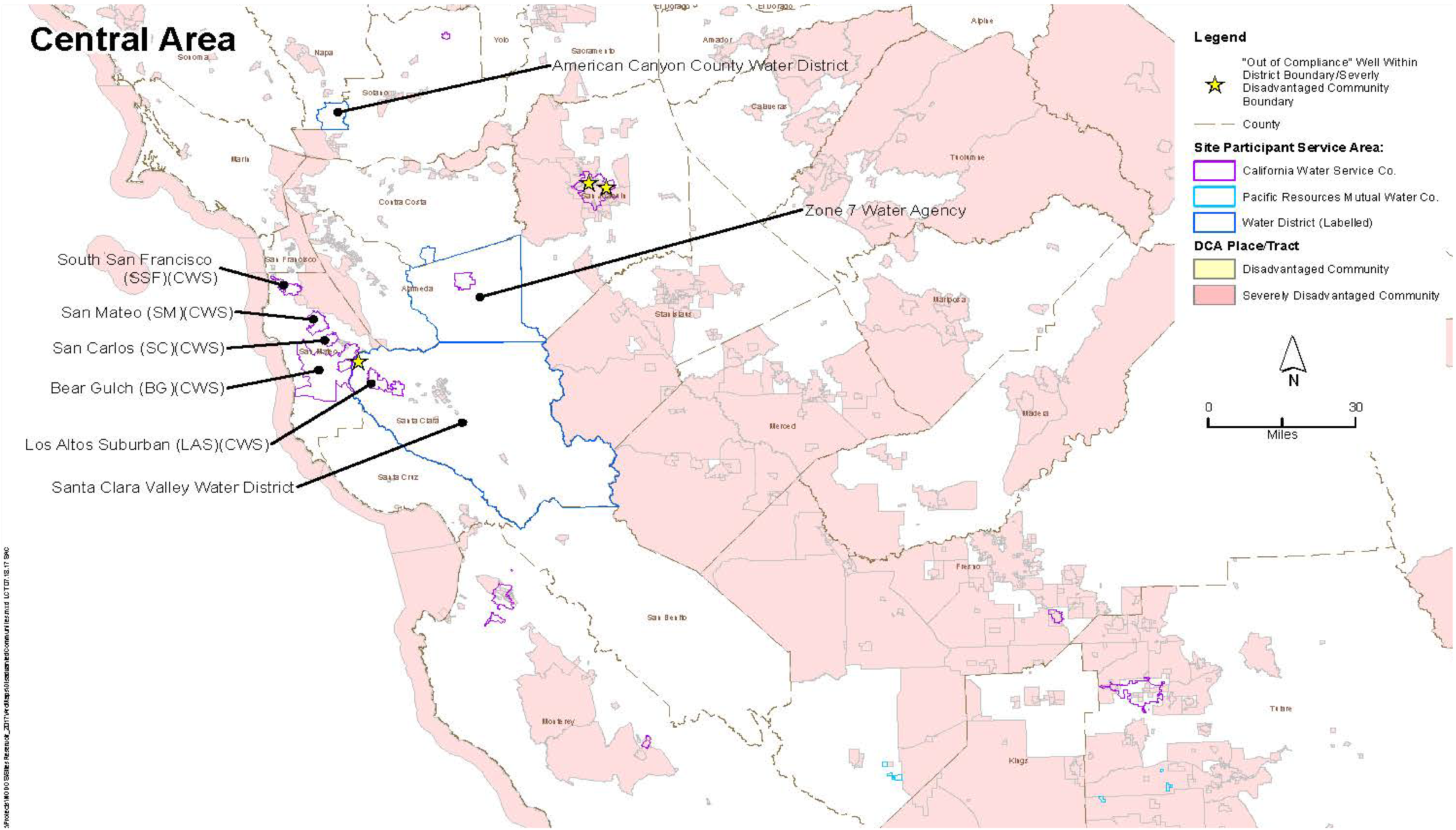

Source: Prepared by AECOM 2017

Figure Water Quality P – 9b. Disadvantaged Community Block Groups within Site Participant's Service Area (Central California)

STATUS:	FINAL	PREPARER:	L TRUMBULL	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFITS A2	CHECKER:	N SMITH	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
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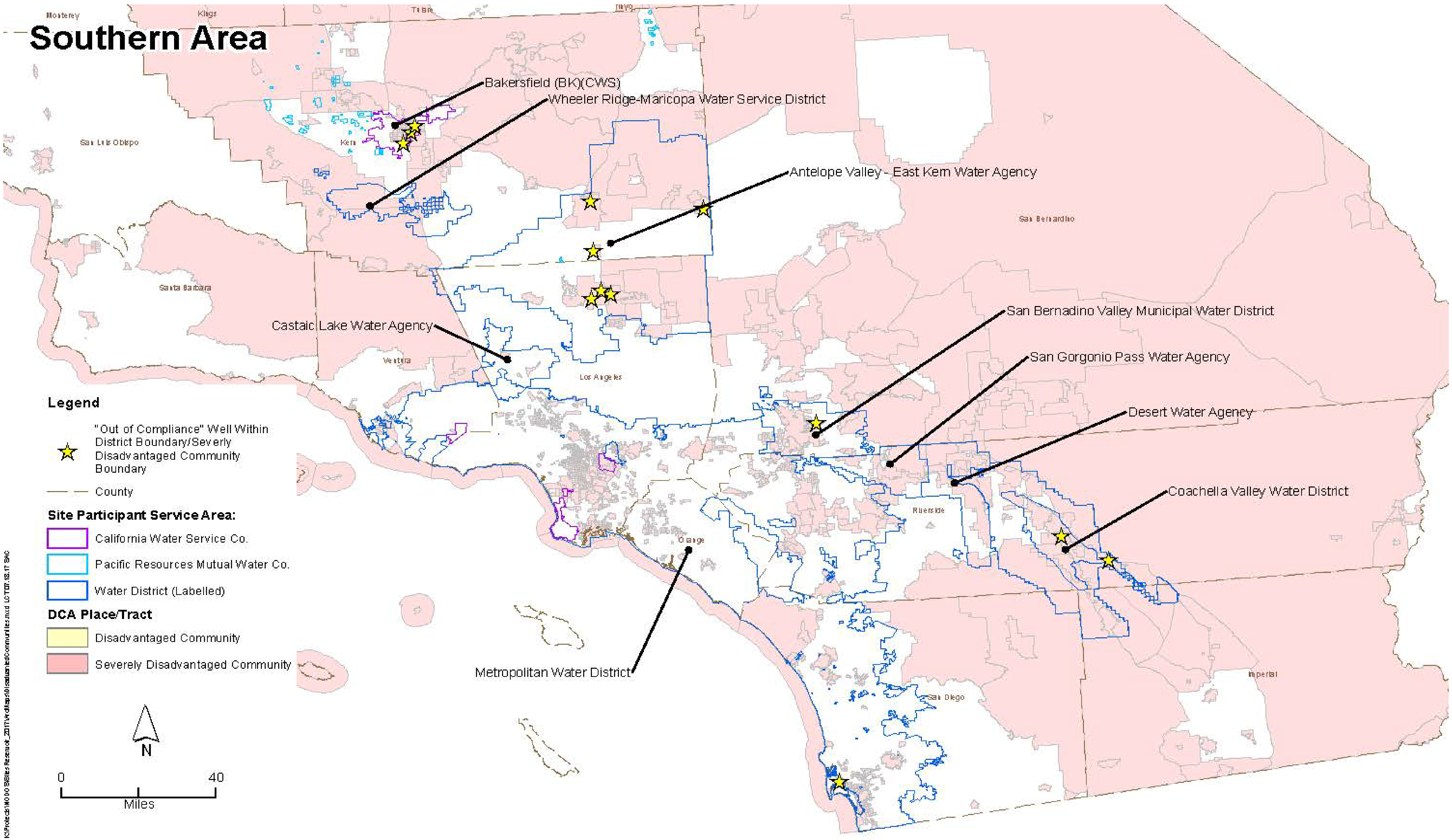

Source: Prepared by AECOM 2017

Figure Water Quality P – 9c. Disadvantaged Community Block Groups within Site Participant's Service Area (Southern California)

STATUS:	FINAL	PREPARER:	L TRUMBULL	PHASE:	1	VERSION:	A
PURPOSE:	PHYSICAL PUBLIC BENEFITS A2	CHECKER:	N SMITH	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:				PAGE:	6	OF	6

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 3: Physical and Monetized Benefits

Attach the analysis of all public and non-public monetized benefits. Identify at least one Program ecosystem or water quality priority for any ecosystem or water quality public benefit quantified. For each public and non-public benefit, describe the methods used to derive the physical and economic benefits and impacts at a level of detail that allows reviewers to verify your analysis.
Description must include:

- *The physical changes that are being monetized, consistent with information requested in the Physical Public Benefits Tab, and describing linkages between physical benefits and monetized benefits. See regulations sections 6004(a)(3) and 6004(a)(4); and*
- *The monetization method and sources for data used. See regulations section 6004(a)(4).*

WSIP Application Instructions, March 2017

Response

Table of Contents

Attachment 3: Physical and Monetized Benefits 1
Benefits Summary 4
Ecosystem Improvement (WSIP Public Benefits) 7
Anadromous Fish 7
Incremental Level 4 Refuge Water Supply 9
Lake Oroville Coldwater Pool 11
Yolo Bypass Flows 12
Recreation (WSIP Public Benefit) 14
Physical Quantification 14
Monetized Benefits 14
Flood Damage Reduction (WSIP Public Benefit) 15
Physical Quantification 15
Monetized Benefits 15
Water Supply (Non-Proposition 1 Eligible Benefit) 16
Physical Quantification 16
Monetized Benefits 17
Hydropower (Non-Proposition 1 Eligible Benefit) 17
Physical Quantification 17
Monetized Benefits 17

Tables

Table A3-1. Summary of Quantified Physical Benefits and Monetization Approaches 4
Table A3-2. Summary of Quantified Water Use by Purpose (TAF/year) 5
Table A3-3. Summary of Monetized Benefits by Purpose (2015$; $1,000s) 6
Table A3-4. Ecosystem Physical Benefits Quantified and Monetized 7
Table A3-5. SALMOD Results for 2030 and 2070 (TAF/year) 8
Table A3-6. Anadromous Fish Benefits: Least-Cost Alternative (2015$; $1,000s) 9
Table A3-7. Incremental Level 4 Refuge Water Supply Increases (2030 and 2070) (TAF/year) 10
Table A3-8. Incremental Level 4 Refuge Benefits: WSIP Unit Water Values (2015$; $1,000s) 10
Table A3-9. Lake Oroville Storage Increases for 2030 and 2070 (TAF/year) 11
Table A3-10. Lake Oroville Coldwater Pool Benefits: WSIP Unit Water Values (2015$; $1,000s) 12
Table A3-11. Yolo Bypass Flow Increases for 2030 and 2070 (TAF/year) 13
Table A3-12. Yolo Bypass Supply Benefits: WSIP Unit Water Values (2015$; $1,000s) 13
Table A3-13. Annual Recreation Visitation by Primary Activity 14
Table A3-14. Estimated Annual Recreation Benefits (2015$; $1,000s) 15
Table A3-15. Flood Reduction Benefits (2015$; $1,000s) 16
Table A3-16. Increase in Water Supply Deliveries (TAF/year) 16
Table A3-17. Total Water Supply Benefits: CWEST Results and WSIP Unit Water Values (2015$; $1,000s) 17
Table A3-18. Hydropower Benefits (2015$; $1,000s) 18

Figures

Figure A3-1.Percentage Increase in Fish Species Average Production for 2030 and 2070 8

Acronyms and Abbreviations

AS	ancillary services
cfs	cubic feet per second
CVP	Central Valley Project
DWR	California Department of Water Resources
GIS	geographic information system
JPA	Joint Powers Authority
M&I	municipal and industrial
NED	National Economic Development
NODOS	North-of-the-Delta Offstream Storage
O&M	operations and maintenance
PARO	Power and Risk Office (DWR)
PLEXOS	PLEXOS® Integrated Energy Model
project	Sites Reservoir Project
RPS	Renewable Portfolio Standard
RUVD	Recreation Use Values Database
SWP	State Water Project
TAF	thousand acre-feet
TR	Technical Report
WSIP	Water Storage Investment Program

Benefits Summary

In accordance with the Water Storage Investment Program (WSIP) Technical Report (TR) recommendations, CALSIM II modeling was used to determine the Sites Reservoir Project's (project) future water supply deliveries for 2030 and 2070 for each water-delivery-dependent purpose (e.g., municipal and industrial [M&I] deliveries, Incremental Level 4 deliveries) (CWC 2016). Other purposes were monetized based on other quantifications of their future operational performance (e.g., increased visitation for Recreation, supported habitat units for anadromous fish).

Table A3-1 shows the benefits quantified and monetized for the WSIP Application.

Table A3-1. Summary of Quantified Physical Benefits and Monetization Approaches

Benefit Type	Quantified Use	Physical Benefit Quantified	Monetization Method
WSIP Public Benefits	Ecosystem Improvement – Anadromous Fish	Habitat Units	Alternative Cost
	Ecosystem Improvement – Incremental Level 4 Refuge Water	Increased Deliveries	WSIP Unit Water Values
	Ecosystem Improvement – Oroville Coldwater Pool	Stored Water	WSIP Unit Water Values
	Ecosystem Improvement – Yolo Bypass	Delivered Water	WSIP Unit Water Values
	Recreation	Visitation	Facilities Assessment and Unit Day Values
	Flood Control	Flood Damage Reduction	Avoided Cost Savings
Non-Proposition 1 Eligible Benefits	Water Supply – M&I, Agricultural and Recaptured	Increased Deliveries	CWEST Modeling (M&I and Recaptured); WSIP Unit Water Values (Agricultural)
	Hydropower	Generated Power	PARO/PLEXOS Modeling

M&I = municipal and industrial
PARO = Power and Risk Office (DWR)
PLEXOS = PLEXOS® Integrated Energy Model
WSIP = Water Storage Investment Program

For each applicable project purpose, the CALSIM II operational analysis quantified its future water deliveries by water-year type and location. Corresponding physical benefits were estimated on an annual basis for the interim 2031 to 2069 period by interpolating individually (i.e., for each specific purpose by location, water-year type, and incidence rate). The 2070 physical benefit quantities were applied for the post-2070 study period (2071 to 2122). Each year's individual quantified water values were then used to determine a corresponding average expected water use amount. An average annual quantification was then estimated for the entire period of operations (2030 to 2122).

The majority of the benefits from the project purposes are expected to start producing their full benefits at the beginning of the project operations in 2030. The project's hydropower and recreation operations are the only facilities expected not to attain their full operating levels in 2030. Instead, a short initial ramp-up period is expected for those facilities before they achieve their full operating and benefit levels, in 2032. In a few other cases, the project facilities are expected to generate additional limited benefits before 2030. As a result, partial anadromous fish, Yolo Bypass, and flood damage reduction benefits are expected to be obtained before the end of construction.

The annualized benefit values for the 2030 to 2122 operating period were included the reduced benefits during the initial hydropower and recreation facilities' 2030 to 2031 ramp-up period. The project's pre-2030 additional benefits were not included in the annualized (2030 to 2122) values. However, the additional pre-2030 benefits are incorporated into the project's total net benefit value, benefit-cost ratio, and public benefit ratio calculations.

When applicable for the other project purposes, annual quantifications were similarly interpolated for the interim 2031 to 2069 period. The 2070 physical benefit quantities were also applied for the post-2070 study period (2071 to 2122).

Table A3-2 shows the estimated water supply deliveries and other quantified physical benefits by project purpose for 2030 and 2070, with the annualized average for the entire 2030 to 2122 operating period. More detailed information and discussion of each purpose's physical benefit quantification is provided in Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

Table A3-2. Summary of Quantified Water Use by Purpose (TAF/year)

	WSIP Public Benefits			Non-Proposition 1 Eligible Benefits			
Period	**Coldwater Pool** [a]	**Yolo Bypass**	**Incremental Level 4 Refuge**	**Agricultural Water Supply**	**M&I Water Supply**	**Recaptured Water Supply**	**Total Water**
2030	109	39	35	137	106	11	437
2045	102	39	33	148	110	11	443
2070	90	39	31	167	117	11	455
Average (2030–2122)	**94**	**39**	**32**	**161**	**114**	**11**	**451**

[a] Includes coldwater pool improvements for both Shasta Lake and Lake Oroville.
M&I = municipal and industrial
TAF = thousand acre-feet
WSIP = Water Storage Investment Program

Each project purpose benefit was monetized based on its quantified physical benefits. As shown in Table A3-1, a variety of monetization approaches were used to estimate the economic benefit values for the project's purposes. The benefit monetizations for each project purpose are summarized below in Table A3-3. More detailed information and discussion of each purpose's physical benefit quantification is provided in Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

Table A3-3 shows the estimated monetized benefits by purpose in 2030, 2045, 2070, and the annual average for the entire 2030 to 2122 study period. More detailed information and discussion of each purpose's physical benefit quantification is provided in Section A.5.

Table A3-3. Summary of Monetized Benefits by Purpose (2015$; $1,000s)

Year	WSIP Public Benefits									Non-Prop. 1 Eligible Benefits			Total Benefits
		Total Ecosystem Improvement											
	Total WSIP Public Benefits	Total Ecosystem Improvement	Anadromous Fish & Other Aquatic	Incremental Level 4 Refuge	Lake Oroville Coldwater Pool	Yolo Bypass	Recreation	Flood Control	Total Non-Prop.1 Eligible Benefits	Total Water Supply	Hydropower (System)		
2030	$73,717	$62,343	$25,637	$16,047	$11,814	$8,845	$6,997	$4,377	$109,207	$89,024	$20,183		$182,925
2045	$119,700	$108,325	$48,505	$27,644	$22,986	$9,190	$6,997	$4,377	$177,417	$157,234	$20,183		$297,116
2070	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$20,183		$428,527
Annualized (2030-2122) [a]	**$122,033**	**$110,900**	**$56,985**	**$23,811**	**$20,987**	**$9,117**	**$6,755**	**$4,377**	**$194,902**	**$175,418**	**$19,483**		**$316,934**

[a] Annualized benefit value was calculated using net present value over 93 years at a 3.5% discount rate. Annualized benefits assume interpolated annual physical benefits between 2030 and 2070, and then constant annual benefits after 2070. WSIP unit water values were interpolated between 2030 and 2045, after which 2045 unit water values were used.

Ecosystem Improvement (WSIP Public Benefits)

Sites Reservoir would provide a variety of ecosystem benefits. Four distinct ecosystem benefits were analyzed. Table A3-4 summarizes the physical benefits that were quantified and monetarized for the WSIP Application.

Table A3-4. Ecosystem Physical Benefits Quantified and Monetized

Benefit Category	Location	Physical Benefit Monetized
Anadromous Fish	Sacramento River watershed between Keswick Dam and Red Bluff	Increase in habitat units as determined by SALMOD
Incremental Level 4 Refuge Water Supply	National Wildlife Refuges, State Wildlife Areas, and privately managed wetlands	Increase in Incremental Level 4 refuge water supplies to achieve optimum habitat management
Lake Oroville Coldwater Pool	Lake Oroville	Additional water stored in Lake Oroville provides temperature and flow improvements for anadromous fish
Yolo Bypass Flows	Yolo Bypass discharging to the Sacramento River	August through October releases from Sites Reservoir to Yolo Bypass

Anadromous Fish

Physical Quantification

Sites Reservoir provides a variety of benefits to anadromous fish. SALMOD modeling results were used to evaluate the cost of an alternative project to raise the dam at Shasta Lake to estimate the benefits to anadromous fish. The SALMOD model combines flow and temperature information to forecast the population of Chinook salmon in the Sacramento River watershed between Keswick Dam and Red Bluff. Table A3-5 presents the projected increases in future fish population and habitat units by type of fish for 2030, 2070, and the annual average in the 2030 to 2122 study period.

Table A3-5. SALMOD Results for 2030 and 2070 (TAF/year)

Run	No Action (# of fish/yr)	Average Increase (# of fish/yr)	Habitat Units	Dry Year Increase (# of fish/yr)	Critical Year Increase (# of fish/yr)	Dry & Critical Year Increase (# of fish/yr)
2030 SALMOD Results						
Fall-Run Chinook	32,275,104	435,138	435	19,893	1,493,430	609,308
Late Fall-Run Chinook	7,911,118	70,188	70	57,277	208,800	117,886
Winter-Run Chinook	3,892,177	20,627	21	-62,557	207,285	45,380
Spring-Run Chinook	866,601	13,331	13	14,088	40,324	24,582
Total All Runs	—	**539,284**	**539**	**28,701**	**1,949,839**	**797,156**
2070 SALMOD Results						
Fall-Run Chinook	27,506,156	1,454,968	1,455	2,574,746	3,427,234	2,915,741
Late Fall-Run Chinook	7,525,505	235,595	236	169,866	1,137,267	556,826
Winter-Run Chinook	3,711,513	84,433	84	-12,471	673,467	261,904
Spring-Run Chinook	688,048	47,068	47	69,601	42,975	58,951
Total All Runs	—	**1,822,604**	**1,822**	**2,801,742**	**5,280,943**	**3,793,422**
Average (2030–2122)						
Long-Term Average	—	1,539,301	1,539	2,190,480	4,546,667	3,132,955

Figure A3-1 shows the percentage growth in population increase projected for each fish type population in both 2030 and 2070.

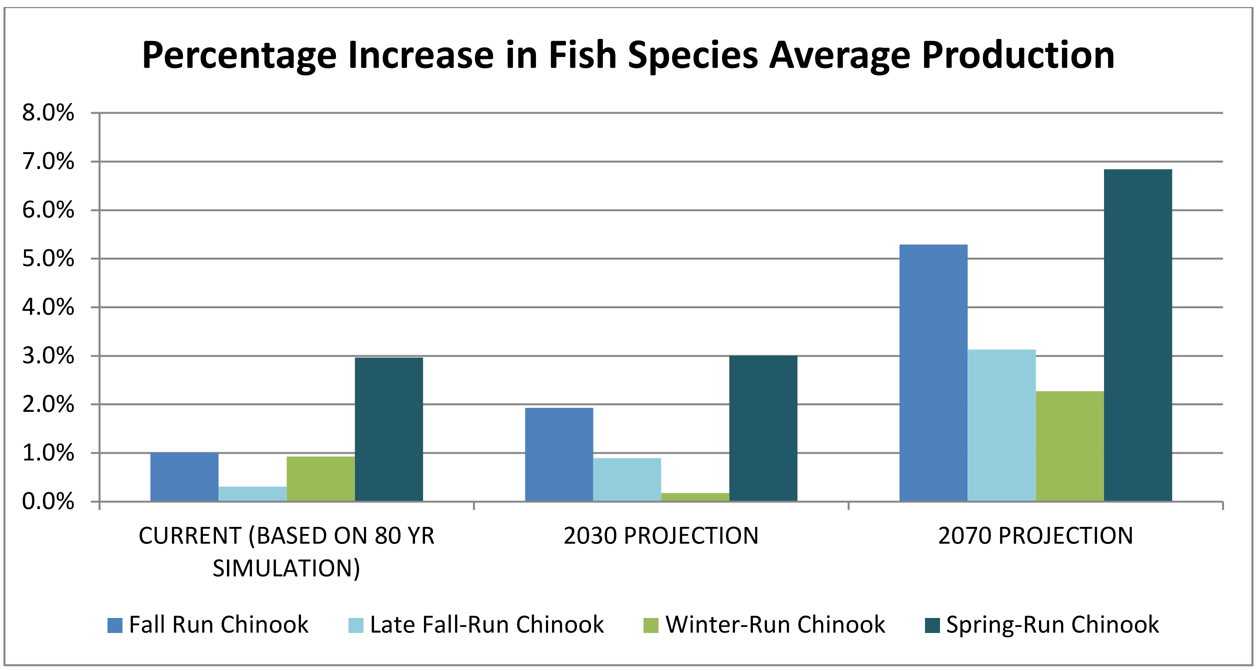

Figure A3-1.Percentage Increase in Fish Species Average Production for 2030 and 2070

Monetized Benefits

Sites Reservoir would enhance future water temperature and flow conditions in the Sacramento River as a means of improving the riverine ecosystem. The economic benefits of the project's contributions to anadromous fish survival were estimated based on the alternative cost approach. The cost of the most likely alternative is based on various Shasta Dam raises operated solely for the purpose of increasing the number of salmon smolt in the Sacramento River.

The Shasta Lake dam raise is considered a reasonable and feasible alternative source due to not only its potential capability to provide the necessary quantities of new water supplies but also its location, which ensures that it can benefit the same anadromous fish population locations and therefore result in the same ecosystem improvement outcomes. Furthermore, recent extensive planning and analysis has been completed for the Shasta Dam raise, which provides more confidence in the accuracy of both its construction cost estimate and its potential implementation viability.

Table A3-6 shows that Sites Reservoir's anadromous water supply benefits were estimated based on the least-cost alternative of expanding Shasta Lake's storage with a 12.5-foot raise of Shasta Dam as a single-purpose water storage project that would result in increased future habitat units. The base construction cost for the Shasta Lake Raise was obtained from the 2015 Shasta Lake Water Resource Investigation Feasibility Study. The costs were adjusted into current dollar terms and annualized using a 3.5 percent discount rate in accordance with the WSIP TR requirements.

Analysis of the numerous Shasta Dam Raise alternatives determined that the 12.5-foot dam raise was not only the most productive alternative, with 988 new habitat units, but also the most cost-effective alternative, with a unit cost of $47,539 per habitat unit. From this finding, the $47,539 per habitat unit benefit value was applied to the project's expected future habitat improvement to estimate Sites Reservoir's anadromous fish benefits. This estimate is conservative because it does not account for deteriorating river conditions that would likely result from the longer timeframe required to implement a raise of the Shasta Dam.

Table A3-6. Anadromous Fish Benefits: Least-Cost Alternative (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$25,637	$86,619	**$56,985[a]**

[a] Based on 12.5-foot raise of Shasta Dam as the alternative cost for achieving the ecosystem improvement.
[b] Annualized benefits interpolated annual physical benefits between 2030 and 2070 and were then constant after 2070. Net present value over 93 years at a 3.5% discount rate.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's anadromous fish benefits were estimated to increase from $25.6 million in 2030 to approximately $86.6 million in 2070. The corresponding average annual benefit for the future 2030 to 2122 operating period was estimated to be $57.0 million.

Incremental Level 4 Refuge Water Supply

Physical Quantification

Table A3-7 shows improved deliveries to National Wildlife Refuges, State Wildlife Areas, and privately managed wetlands projected in 2030, 2070, and the annual average in the 2030 to 2122 study period. The distribution of water between north and south of Delta refuges was assumed and can be modified; however, additional infrastructure would be needed to significantly increase deliveries to north of Delta refuges.

Table A3-7. Incremental Level 4 Refuge Water Supply Increases
(2030 and 2070) (TAF/year)

Period	North-of-the-Delta	South-of-the-Delta	Total
2030 Results			
Long-Term Average	1	34	35
Wet	1	52	53
Above Normal	1	46	47
Below Normal	1	38	38
Dry	0	20	21
Critical	0	1	1
2070 Results			
Long-Term Average	1	30	31
Wet	1	50	51
Above Normal	1	40	41
Below Normal	1	29	30
Dry	0	16	17
Critical	0	1	1
2030–2122 Results			
Long-Term Average	**1**	**31**	**32**

Source: CALSIM II.

The changes in incremental Level 4 refuge supply deliveries were interpolated between 2030 and 2070 to project the future refuge water supplies on an annual basis. In accordance with WSIP TR guidance, post-2070 deliveries were assumed to remain at 2070 levels.

Monetized Benefits

Sites Reservoir would increase water deliveries for incremental Level 4 refuge needs. The economic benefits of the project's contributions to incremental Level 4 refuge needs were estimated using the WSIP unit water values to determine the value of its supplied water. It was also assumed that the incremental Level 4 refuge water would otherwise likely be used for south-of-the-Delta deliveries.

Therefore, the estimated total benefit value is estimated based on the expected future average hydrological year type and the expected use location of the water supplies. Furthermore, the WSIP unit water values were adjusted to include the additional conveyance energy cost associated with its future use. Table A3-8 presents the estimated benefit values for the projected future increases in incremental Level 4 refuge water.

Table A3-8. Incremental Level 4 Refuge Benefits: WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$16,047	$24,634	$23,811

[a] Based on WSIP unit water values adjusted by water-year type, expected delivery location, and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP unit water values interpolated between 2030 and 2045, after which 2045 unit water values were used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's incremental Level 4 refuge water supply benefits were estimated to increase from $16.0 million in 2030 to approximately $24.6 million in 2070. The corresponding average annual benefit for the future 2030 to 2122 operating period was estimated to be $23.8 million, which is equal to an estimated average unit benefit value of $781 per acre foot for the incremental Level 4 refuge benefits. This valuation reflects the comparatively high benefit values for future south-of-the-Delta water uses.

Lake Oroville Coldwater Pool

Physical Quantification

Improvements to the coldwater pool and downstream releases to assist migrating fish would be beneficial to salmon, steelhead, and other fish in the lower Feather River. The benefits were anticipated to be less than the benefits downstream from Shasta Lake, but nevertheless significant. The SALMOD model does not include the Feather River area. The improvements in fish habitat in the Feather River watershed were therefore evaluated using an opportunity cost to secure an equivalent amount of storage in Lake Oroville. The storage increase based on CALSIM modeling is characterized below.

Table A3-9 shows the projected future increase in annual water storage for Lake Oroville.

Table A3-9. Lake Oroville Storage Increases for 2030 and 2070 (TAF/year)

Water-Year Type	Quantity
2030 Results	
Full	26
Dry	38
Critical	83
2070 Results	
Full	31
Dry	39
Critical	111
Average (2031–2122)	
Long-Term	30

Source: CALSIM II.
TAF = thousand acre-feet

Monetized Benefits

Sites Reservoir would enhance future water temperature and flow conditions in the American River as a means of improving the riverine ecosystem. Sites would achieve these ecosystem improvements by enabling Lake Oroville to delay some of its water deliveries, which would increase its coldwater pool conditions and lower the water temperatures of its subsequent water releases.

The economic benefits of the project's contributions to anadromous fish survival were estimated based on use of the WSIP unit water values to determine the value of the water that would otherwise be needed to be withheld in Lake Oroville to improve its coldwater pool and the temperature conditions of its water releases. Based on Lake Oroville general water supplies, for the purposes of the benefit valuation it is assumed that the water supply that would otherwise need to be retained (and therefore not delivered) would be south-of-the-Delta deliveries.

Therefore, the estimated total benefit value is estimated based on the expected future average hydrological year type and the expected use location of the water supplies. Furthermore, the WSIP unit water values were also adjusted to include the additional conveyance energy cost associated with its future use. Table A3-10 presents the estimated benefit values for the projected future increases in the coldwater pool at Lake Oroville.

Table A3-10. Lake Oroville Coldwater Pool Benefits: WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$11,814	$24,976	$20,987

[a] Based on WSIP unit water values adjusted by water-year type, expected delivery location, and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP unit water values interpolated between 2030 and 2045, after which 2045 unit water values were used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The Lake Oroville coldwater benefits of the project were estimated to increase from approximately $11.8 million in 2030 to nearly $25.0 million in 2070. The corresponding average annual benefit for the future 2030 to 2122 operating period was estimated to be $21.0 million, which is equal to an estimated average unit benefit value of $781 per acre-foot.

Yolo Bypass Flows

Physical Quantification

In 2016, the California Department of Water Resources (DWR) performed a North Delta Food Web Study in collaboration with Federal and local water agencies. The study addressed the *Delta Smelt Resiliency Strategy* (DWR July 2016) recommendation for North Delta food web adaptive management projects. The resulting fall flows in the Yolo Bypass successfully produced a phytoplankton bloom, the major food source for endangered Delta smelt.

The Cache Slough area that receives water from the Yolo Bypass is the only place in the Delta estuary where the Delta smelt population is increasing. The purpose of this action is to help increase desirable food sources for Delta smelt in the lower Cache Slough and lower Sacramento River areas. This increase in food sources should improve Delta smelt growth and condition as they mature into adults, thereby increasing Delta smelt abundance.

The Sites Reservoir Project would provide two pulses of flow of at least 400 cubic feet per second (cfs) each over a two- to three-week period into the Yolo Bypass (via the Colusa Basin Drain, past the Wallace Weir and Ridge Cut, and into the Tule Drain) that will flow through the toe drain and out to the Sacramento River. Each flow pulse made into the Colusa Basin Drain would total about 20 thousand acre-feet (TAF) in each of the two- to three-week periods, resulting in an average total flow of 39 TAF per year. The flow pulses would be adaptively managed, but are currently thought to occur in late summer and early fall (e.g., August and September). The water deliveries would not have to occur every year, but would be desirable in most years.

Table A3-11 shows the projected future increase in annual water flows for Yolo Bypass for 2030, 2070, and the annual average in the 2030 to 2122 study period.

Table A3-11. Yolo Bypass Flow Increases for 2030 and 2070 (TAF/year)

Water-Year Type	Quantity
2030 Results	
Full	39
Dry	33
Critical	5
2070 Results	
Full	39
Dry	33
Critical	8
Average (2031–2122)	
Long-Term	**39**

TAF = thousand acre-feet

Monetized Benefits

Sites Reservoir would increase water deliveries to the Yolo Bypass. The economic benefits of the project's contributions to Yolo Bypass needs were estimated using the WSIP unit water values to determine the value of its supplied water. The Sacramento Valley WSIP unit water values were used to determine the benefit values of the water supplies used for the Yolo Bypass. These values do not include any conveyance cost benefit adjustment and were used because it was presumed that the necessary water supplies would otherwise be obtained from Sacramento Valley agricultural water users. Therefore, the estimated total benefit value is estimated based on the expected future average hydrologic year type and the expected use location of the supplies.

Table A3-12 presents the estimated benefit values for the projected future increases in Yolo Bypass deliveries.

Table A3-12. Yolo Bypass Supply Benefits: WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$8,845	$9,220	$9,117

[a] Based on WSIP unit water values adjusted by water-year type and expected delivery location.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP unit water values interpolated between 2030 and 2045, after which 2045 unit water values were used.
[c] Average over the entire hydrologic sequence (1922 to 2003).

The project's Yolo Bypass supply benefits were estimated to increase from $8.8 million in 2030 to $9.2 million in 2070. The corresponding average annual benefit for the future 2030 to 2122 operating period was estimated to be $9.1 million, which is equal to an estimated average unit benefit value of $237 per acre-foot for the future ecosystem benefits from Yolo Bypass. This valuation reflects the comparatively lower benefit values for future north-of-the-Delta water uses.

Recreation (WSIP Public Benefit)

Physical Quantification

Recreation benefits were valued using visitation estimates for the new recreational areas planned for the Sites project. Annual visitation was estimated using a facilities-based approach that accounts for Sites planned facilities, carrying capacity, the regional population of potential users, the surface acreage of the reservoir, fluctuations in storage throughout the year, and the amenities and visitation levels of substitute reservoirs in the region.

Table A3-13 presents the annual visitor-day estimates and unit day values by activity type. The estimated total annual visitor-days assumed in this analysis was approximately 187,000.

Table A3-13. Annual Recreation Visitation by Primary Activity

Activities	Annual Visitor-Days
Shore fishing	16,254
Boat fishing	8,407
Picnicking	15,457
Sightseeing	27,514
Swimming / beach use	36,992
Walking	42,223
Bicycling/Motorcycling	5,418
Horseback riding	2,429
Boating / water-skiing	29,145
Hunting	560
Other	2,429
Total	186,829

Monetized Benefits

Recreation benefits were quantified using unit day values from Rosenberger, Recreation Use Values Database (RUVD) for North America (2016) and from Loomis, Updated Outdoor Recreation Use Values on National Forests and Other Public Lands for U.S. Forest Service (2005). These values were applied to the visitation projections for Sites Reservoir. It was also determined that 80 percent of the visitor-days at Sites Reservoir would represent new recreational visits, and that the remaining 20 percent of visits would reflect recreational visitor-days that, in the absence of Site Reservoir's development, would otherwise have occurred at nearby reservoirs. Table A3-14 presents the results of the recreation benefits analysis.

Table A3-14. Estimated Annual Recreation Benefits (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$6,997	$6,997	$6,754

[a] Annual benefits reflect consumer surplus value for various recreational activities supported by Sites Reservoir and water operation scenarios under year 2030 and year 2070 levels of development. Benefits were attributed for only 75 percent of future visitation expected as new recreational use after accounting for potential substitution effects on other reservoirs in the region.
[b] Annualized benefits represent avoided costs relative to the Future No Project conditions over the planning horizon (2030 to 2122). Annual average is less than 2030 and 2070 values due to initial short ramp-up period before full benefits are generated.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's future recreation benefits were estimated to be approximately $7.0 million in 2030. Although future population growth might be expected to increase future recreation demand and visitation, it was conservatively assumed that the 2030 level of benefits would remain constant throughout the future 2030 to 2122 operating period. As a result, the average annual benefit for the future 2030 to 2122 operating period was estimated to be $6.8 million (slightly reduced due to an assumed 50 percent operation during its first two operating years).

Flood Damage Reduction (WSIP Public Benefit)

Physical Quantification

Development of the Sites project would reduce the magnitude of flood events in the area along Funks Creek and Stone Corral Creek, specifically for the town of Maxwell's residential, commercial, and public structures and contents. In addition, the project would reduce flood damage to adjacent agricultural lands and flood-related closures to Interstate 5 and State Route 20.

Hydraulic analysis (HEC-RAS 2-D) was used to quantify the project-related reduction in flood-impacted areas and flooding severity for six different flood event types (ranging from 5-year to 500-year flood events). Geographic information system (GIS) land use analysis inventoried the impacted areas. Flood reduction benefits were estimated for current hydraulic conditions to represent the expected 2030 conditions. No adjustments in the hydraulic modeling or other analytic methods were used to project 2070 conditions (including climate change) because the flood damage benefits are relatively limited and due to difficulty in quantifying the magnitude of changes in future flood events.

Additional details on flood damage reduction benefits are provided under the Sites_A1 Flood Control under the PHYSICAL PUBLIC BENEFITS TAB.

Monetized Benefits

The value of flood damage reduction benefits was estimated based on the average annual cost of flood damages under No Action conditions and the projected reduction in flooded area and damage costs for "with Project" conditions. The resulting Expected Annual Damages savings from the project-related reduction in flood impact incidence and severity were calculated for a comprehensive range of different flood event types (5 year to 500 year) and adjusted for their expected incidence rate. This approach corresponds to the "avoided cost" approach described in the WSIP TR report.

Table A3-15 presents the estimated benefit value of the project-related flood damage reduction.

Table A3-15. Flood Reduction Benefits (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$4,377	$4,377	$4,377

[a] Based on the project-related reduction in expected annual damages from future flood events.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's future flood reduction benefits were estimated to be approximately $4.4 million in 2030. It was conservatively assumed that 2030 benefit values would remain constant throughout the future 2030 to 2122 operating period. As a result, the average annual benefit for the future 2030 to 2122 operating period was estimated to be $4.4 million.

Water Supply (Non-Proposition 1 Eligible Benefit)

Physical Quantification

Increases in water supply were monetized based on the increase in deliveries. Increases in deliveries for 2030 and 2070 were estimated using CALSIM II. CALSIM II determined future water deliveries for each applicable project purpose by water-year type and location. Corresponding physical benefits were estimated on an annual basis for the interim 2031 to 2069 period by interpolating individually (i.e., for each specific purpose, location, water-year type, and incidence rate). Each year's individual quantified values were then used to determine a corresponding average expected water use amount. Table A3-16 shows the estimated water supply deliveries by water-year type projected in 2030, 2070, and the annual average in the 2030 to 2122 study period. Sites is expected to reduce the flood area by 9,570 acres. Additional details on flood damage reduction benefits are provided in Sites_A1 Flood Control under the PHYSICAL PUBLIC BENEFITS TAB.

Table A3-16. Increase in Water Supply Deliveries (TAF/year)

Period	NOD Agriculture	SOD Agriculture	SOD M&I	SOD Recaptured	Total
2030 Results					
Long-Term Average	110	25	106	11	254
Wet	62	5	15		82
Above Normal	86	68	52		144
Below Normal	125	28	121		273
Dry	157	56	213		426
Critical	153	53	185		391
2070 Results					
Long-Term Average	137	30	117	11	295
Wet	110	5	15		130
Above Normal	146	12	72		230
Below Normal	152	26	116		294
Dry	161	69	257		488
Critical	133	41	145		319
Average (2030–2122)					
Long-Term Average	**131**	**29**	**114**	**11**	**286**

Source: CALSIM II.
M&I = municipal and industrial
NOD = north-of-the-Delta
SOD = south-of-the-Delta

Monetized Benefits

Sites Reservoir would improve water supply reliability to both M&I water users (primarily south of the Delta) and agricultural waters (both north and south of the Delta). CWEST modeling was used to estimate the project's future M&I water supply benefits. The CWEST values were also applied to the small quantity of recaptured water that the Sites Joint Powers Authority (JPA) intends to use as a revenue source to cover the future operations and maintenance (O&M) cost-share for the project's agricultural water supply benefits for ecosystem and other public benefit purposes based on the WSIP-recommended unit water values. The total benefit value was estimated based on the expected future average hydrological year type and the expected use location of the water supplies. The WSIP unit water values were also adjusted to include the additional conveyance energy cost associated with its future use.

Table A3-17 shows the project's total water supply reliability benefits.

Table A3-17. Total Water Supply Benefits: CWEST Results and WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$89,024	$251,521	$175,418

[a] Based on CWEST and WSIP unit water values adjusted by water-year type, expected delivery location, and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP unit water values interpolated between 2030 and 2045, after which 2045 unit water values were used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

Based on the assumed water use split between agricultural, M&I, and recaptured water deliveries and their use location, the project's future water supply benefits are estimated to increase from $89.0 million in 2030 to approximately $251.5 million in 2070. The corresponding average annual benefit for the future 2030 to 2122 operating period is estimated to be $175.4 million, which is equal to an estimated average unit benefit value of $760 per acre-foot for water supply use.

Hydropower (Non-Proposition 1 Eligible Benefit)

Physical Quantification

Hydropower benefits were modeled by both DWR's Power and Risk Office (PARO) and United States Bureau of Reclamation contractors. These non-public benefits are difficult to forecast due to a rapidly changing market for valuing ancillary and systemwide capacity benefits due to the rapid and extensive new development of wind and solar resources. The fluctuation in revenue from hydropower generation over the last decade can be seen by looking at the variability in revenue from generation that has occurred for the State Water Project (SWP).

Hydropower analysis performed by Toolson and Zhang (2013) generally corroborated PARO's direct net energy benefits. Toolson and Zhang's PLEXOS modeling analysis also evaluated Sites Reservoir ancillary services (AS) and systemwide capacity performance and benefits. Sites is expected to increase the hydropower (system) by 215,542 MWh per year.

Monetized Benefits

The proposed Sites Reservoir Project includes new hydropower capacity and the ability to provide AS at Shasta Dam and other hydropower facilities throughout the Central Valley Project (CVP) and SWP systems. Estimates of net changes in hydropower capacity, generation, and AS in western interconnection electrical power grid were estimated using both DWR's PARO modeling and the PLEXOS® Integrated Energy Model (PLEXOS).

The PARO model is used to estimate the costs and revenues of hydropower facilities' operations. Power benefits were also valued by PLEXOS, a power market simulation model, to forecast energy and AS power market prices for the year 2022, when the 33 percent Renewable Portfolio Standard (RPS), mandated by California law, will have been implemented. The assumption is that power market prices stabilize once the RPS is achieved.

DWR's PARO analysis modeled future optimized pumping, generation, and pump-back operations to estimate the future energy use cost and power generation benefits optimized between peak and off-peak periods. The PARO analysis determined that the estimated net energy cost for Sites Reservoir operations would be $1.7 million, which was assigned to the facility's O&M costs.

The PLEXOS hydropower analysis confirmed DWR's direct net energy benefits and costs. The PLEXOS analysis also estimated annual AS benefits of approximately $2.4 million and systemwide capacity benefits of $17.8 million per year. As a result, the combined AS and systemwide capacity National Economic Development (NED) benefits potentially attributable to the hydropower facilities would be $20.2 million per year. Table A3-18 shows the projected future AS and systemwide capacity benefits projected for Sites Reservoir's hydropower operations. As discussed above, the reservoir's projected energy costs are recognized in its O&M cost and therefore were not included in hydropower system benefits shown in Table A3-18.

Table A3-18. Hydropower Benefits (2015$; $1,000s)

Alternative	Annual Benefits a		Annualized Benefit b
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$20,183	$20,183	$19,483

[a] Based on projected ancillary service and systemwide capacity benefits. Facility pumping costs and generation revenues are included in the facilities' annual O&M costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant benefits after 2070. Annual average is less than 2030 and 2070 values due to initial short ramp-up period before full benefits are generated.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

Combined AS and systemwide capacity benefits of $20.2 million were determined for the project's hydropower operations in 2030. It was conservatively assumed that the project's 2030 level of benefits would remain constant throughout the future 2030 to 2122 operating period. As a result, the average annual hydropower benefit for the future 2030 to 2122 operating period was estimated to be $19.5 million (slightly reduced due to an assumed 50 percent operation during its first two operating years).

Sites Reservoir Project Description

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Table of Contents

Section **Pages**

Acronyms and Abbreviations .... **v**
1. Introduction **1-1**
2. Sites Reservoir Project Features and Facilities **2-1**
2.1 Project 2-1
2.1.1 Sites Reservoir Complex 2-1
2.1.2 Holthouse Reservoir Complex 2-27
2.1.3 Terminal Regulating Reservoir Complex 2-33
2.1.4 Delevan Pipeline Complex 2-41
2.1.5 Overhead Power Lines and Substations 2-48
2.1.6 Project Buffer 2-50
3. Construction and Operation/Maintenance **3-1**
3.1 Construction 3-1
3.1.1 Access Routes 3-1
3.2 Facility Operation and Maintenance 3-5
4. Diversion and Reservoir Operations **4-1**
4.1 Operational Scenario 4-1
4.1.1 Diversions to Sites Reservoir 4-2
4.1.2 Sites Reservoir Diversion Bypass Flow Protection 4-2
4.1.3 Diversions to Fill Sites Reservoir Storage 4-7
4.1.4 Releases from Sites Reservoir 4-8
4.1.5 Hydropower Generation 4-8
4.2 Ecosystem Enhancement Storage Account 4-9
5. Environmental Commitments Included as Part of the Project **5-1**
5.1 Worker Environmental Awareness Program 5-1
5.2 Environmental Site Assessment 5-1
5.3 Construction Management Procedures 5-1
5.3.1 Fire Safety and Suppression 5-2
5.3.2 Construction Equipment, Truck, and Traffic Management 5-2
5.4 Stormwater Pollution Prevention Plan, Erosion Control, Management, and Dewatering 5-3
5.4.1 Compliance with the Requirements of RWQCB Order No. 5-00-175 5-4
5.4.2 Spill Prevention and Hazardous Materials Management 5-4
5.5 Mosquito and Vector Control 5-5
5.6 Groundwater/Dewatering Water Supply 5-5
5.7 Visual and Aesthetic Design, Construction, and Operation Practices 5-5
5.8 Emergency Action Plan 5-6

Tables

2-1 New Project Facilities and Features and Existing Facilities Relied Upon 2-2
2-2 Permanent Facility Footprint 2-5
2-3 Characteristics of Proposed 1.8-MAF Sites Reservoir Dams 2-7
2-4 Sites Reservoir Project Onsite or Nearby Dam Materials 2-7
2-5 Sites Reservoir Inlet/Outlet Structure Tower Details 2-14
2-6 Sites Pumping-generating Plant Configuration 2-15
2-7 Characteristics of Project Roadways and South Bridge Approaches 2-20
2-8 Proposed South Bridge Characteristics 2-23

2-9 Characteristics of Proposed Minor Structures 2-23
2-10 Approximate Number of Facilities at the Proposed Recreation Areas 2-25
2-11 Aboveground Features Associated with the Proposed Delevan Pipeline 2-46
3-1 Estimated Construction Durations and Equipment Days for Construction of Sites Reservoir Project 3-3
3-2 Expected Roadway Access Routes to Project Facilities 3-5
3-3 Project-related Construction Personnel and Highway Truck Trips 3-8
3-4 Estimated Equipment Hours for Operation and Maintenance of Sites Reservoir Project 3-11
4-1 Proposed Seasonal Schedule for Project Operations 4-5

Figures

2-1 Project Facilities 2-52
2-2 Golden Gate Dam Cross Section Showing Grouting 2-53
2-3 Sites Dam Cross Section Showing Grouting 2-54
2-4 Saddle Dams 1, 2, 4 and 9 Cross Sections Showing Grouting (Typical) 2-55
2-5 Saddle Dams 3, 5, 6, 7, and 8 Cross Sections Showing Grouting (Typical) 2-56
2-6 Potential Quarry Locations Within and Near the Proposed Sites Reservoir Inundation Area 2-57
2-7 Proposed Sites Reservoir Inlet/Outlet Structure, Holthouse Reservoir, and Associated Facilities 2-58
2-8A Proposed Access Routes to Project Facilities 2-59
2-8B Proposed Access Routes to Project Facilities 2-60
2-9A Proposed Stone Corral Recreation Area and Facilities 2-61
2-9B Proposed Peninsula Hills Recreation Area and Facilities 2-62
2-9C Proposed Boat Ramp Recreation Area and Facilities 2-63
2-10 Location of the Proposed Pump Installation at Red Bluff Pumping Plant 2-64
2-11 Proposed TRR and Associated Facilities 2-65
2-12 Proposed Delevan Pipeline Intake/Discharge Facilities 2-67

Acronyms and Abbreviations

4WS	four-wheel drive
AASHTO	American Association of State Highway and Transportation Officials
ac-ft	acre-feet
Authority	Sites Project Authority
BMP	best management practice
Caltrans	California Department of Transportation
cfs	cubic feet per second
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
Delta	Sacramento-San Joaquin Delta
DFW	California Department of Fish and Wildlife
DSOD	California Department of Water Resources, Division of Safety of Dams
ESA	Environmental Site Assessment
fps	feet per second
GCID	Glenn-Colusa Irrigation District
I-5	Interstate 5
kVA	kilovolt-ampere
MAF	million acre-feet
msl	mean sea level
NMFS	National Marine Fisheries Service
PG&E	Pacific Gas & Electric
PMF	probable maximum flood
Project	Sites Reservoir Project
RBPP	Red Bluff Pumping Plant
Reclamation	Bureau of Reclamation
RTS	reservoir-triggered seismicity
RWQCB	Central Valley Regional Water Quality Control Board
SCADA	supervisory control and data acquisition

SR	State Route
State	State of California
SWP	State Water Project
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
TCCA	Tehama-Colusa Canal Authority
Technical	Sacramento River Flow Regime Technical Advisory Group
TRR	Terminal Regulating Reservoir
USFWS	U.S. Fish and Wildlife Service
WAPA	Western Area Power Authority
WEAP	Worker Environmental Awareness Program

1. Introduction

This report describes the proposed Sites Reservoir Project (Project) and associated construction, operation, and maintenance of necessary facilities. This report is organized in the following manner:

- Description of Project features and facilities, including construction, operation, and maintenance descriptions specific to Project features (Section 2 Sites Reservoir Project Features and Facilities)
- Proposed construction, operations/maintenance activities required to construct, operate, and maintain all Project facilities (Section 3 Construction Operation/Maintenance)
- Proposed project operations (including diversions, releases, ecosystem enhancement actions, hydropower generation, and other benefits) (Section 4 Diversion and Reservoir Operations)
- Environmental commitments, including preventive measures, plans, and best management practices (BMPs) included as part of the Project (Section 5 Environmental Commitments Included as Part of the Project)

The operations of the Project are intended to be flexible and vary from year to year in response to the needs of the California water supply system to provide high-quality water to enhance the environment, the economy, and quality of life for Californians.

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2. Sites Reservoir Project Features and Facilities

This section identifies and describes the primary facilities as well as construction, operation, and maintenance specific to each Project facility. Facilities are grouped into "complexes," based on related function and location. The proposed complexes include the following:

- Sites Reservoir Complex
- Holthouse Reservoir Complex
- Terminal Regulating Reservoir (TRR) Complex
- Delevan Pipeline Complex
- Overhead Power Lines and Substations
- Project Buffer

Table 2-1 summarizes key Project features, by complex.

2.1 Project

The proposed Sites Reservoir Project would include the following primary features and facilities (Figure 2-1); associated Project-related storage, diversion rates, and power generation capabilities are shown in parentheses:

- Sites Reservoir capacity: 1.8 million acre-feet (MAF)
- Sacramento River diversions: Existing Tehama-Colusa Canal (Red Bluff) (2,100 cubic feet per second [cfs]) and GCID Main Canal (Hamilton City) (1,800 cfs) pumping plants and proposed Delevan Pipeline Intake/Discharge Facilities (2,000 cfs).
- Delevan Pipeline operation: 2,000-cfs intake and 1,500-cfs release
- Hydropower generation capability: Approximately 118 megawatts

Approximate permanent facility footprint sizes by complex are provided in Table 2-2.

2.1.1 Sites Reservoir Complex

The Sites Reservoir Complex includes the features and facilities that are geographically or functionally associated with the Sites Reservoir. This complex includes the Sites Reservoir Inundation Area, the dams that would form the reservoir, proposed borrow locations for materials required to construct the dams, the inlet/outlet facilities for the pumping/generating plant and associated electrical switchyards, the tunnel that would connect the pumping/generating plant to the inlet/outlet structure, and the bridge, roads, recreation areas, and office/maintenance area. Design, construction, and operation of all facilities would comply with applicable Division of Safety of Dams requirements regarding anticipated seismic activity, including fault rupture, ground shaking, ground failure, and liquefaction.

Table 2-1
New Project Facilities and Features and Existing Facilities Relied Upon[a]

Project Features/Facilities	Main Elements of the Project Features/Facilities
Sites Reservoir Complex	
Sites Reservoir Inundation Area	1.8-MAF capacity (14,200 acres)
Golden Gate Dam, Sites Dam, and Saddle Dams	Golden Gate Dam; Sites Dam; Saddle Dams 1, 2, 3, 4, 5, 6, 7, 8, and 9 (11 dams)
Borrow Areas (onsite)[b]	Approximately 920 acres in inundation area 200 acres northeast and east of the inundation area
Sites Reservoir Inlet/Outlet Structure and Associated Facilities	Multi-level valved tower, 4,000-foot tunnel; 260-foot-high structure; intake openings at nine levels; trash racks, fish screens; bridge; 15,200-cfs emergency release outlet capacity
Sites Pumping/ Generating Plant and Electrical Switchyard	5,900-cfs pumping capacity 5,100-cfs generating capacity
South Bridge and Roads	Temporary construction roads, several access roads to new facilities, and new roads to replace those currently in the Inundation Area. South Bridge to provide access between Maxwell and Ladoga.
Recreation Areas [c]	Stone Corral Peninsula Hills Boat Ramp Day Use Area
Field Office Maintenance Yard	Administration, maintenance buildings, and parking (also serves Holthouse and TRR reservoirs)
Holthouse Reservoir Complex	
Holthouse Reservoir	6,250 ac-ft active storage capacity
Holthouse Spillway and Stilling Basin and Spillway Bridge	15,200 cfs capacity
WAPA Transmission Line Relocation	Eight transmission line towers moved to the west
Sites Pumping/Generating Plant Approach Channel	6,300 feet long
Tehama-Colusa Canal Construction Bypass Pipeline/Operation and Maintenance Siphon to Tehama-Colusa Canal	12-foot-diameter approximately 2,600-foot-long siphon pipeline would divert Tehama-Colusa Canal water around Holthouse Reservoir during construction; during operation it would pass water to the canal downstream of the reservoir without pumping
Additional Pump at the Red Bluff Pumping Plant (in Secondary Study Area)	Install two additional 250-cfs capacity pumps

Table 2-1
New Project Facilities and Features and Existing Facilities Relied Upon[a]

Project Features/Facilities	Main Elements of the Project Features/Facilities
TRR Complex	
TRR	1,200 acre-feet capacity 120 acres Only a minimal drain would be required because of the close proximity of the TRR to Funks Creek.
TRR Pumping/ Generating Plant and Electrical Switchyard	1,800-cfs pumping capacity 900-cfs generating capacity 4-acre electrical switchyard
GCID Main Canal Connection to TRR	GCID Main Canal energy dissipation bay/check structure TRR inlet channel and inlet control structure
TRR Pipeline and TRR Pipeline Road	1,800-cfs pumped capacity 900-cfs gravity flow capacity 2.5-mile road
GCID Main Canal Modifications	Refurbished existing gates; canal lining immediately upstream and downstream of the TRR.
Delevan Pipeline Complex	
Delevan Pipeline Intake/Discharge Facilities	250-foot-long by 80-foot-wide facilities building with multiple stories; four 500-cfs capacity pumping/generating units; two 750 cfs turbines
• Flat Plate Fish Screen Structure and Forebay	560-foot-long structure; 13-foot-high by 15-foot-wide flat plate screens (32 total); 2,000 cfs capacity; forebay would be constructed between fish screen and pump turbine station
• Pumping/Generating Plant	2,000-cfs pumping capacity/ 1,500-cfs generating capacity
• Electrical Switchyard	4-breaker ring bus with poles 15 to 60 feet tall
• Maintenance and Electrical Buildings	Mechanical control building; electrical building; (each approximately 5,000 square feet)
Delevan Pipeline	West-east alignment from Delevan Pipeline Intake/Discharge Facilities to Holthouse Reservoir 2,000-cfs capacity pumping / 1,500-cfs capacity release
Overhead Power Lines and Substations	
Substations	Stepdown power from the existing WAPA 500 kV and 230 kV and the PG&E 230 kV lines near Funks/Holthouse Reservoir; Stepdown power from the existing WAPA 230 kV lines approximately 1 mile southwest of Colusa, north of Highway 20; Up to 6 acres each including multiple electrical components and related structures, concrete pad, overhead power line tower/pole, fencing
Electrical Connection for Sites Pumping/Generating Plant	New 1- to 4-mile-long, 230 kV or 115 kV, overhead power line from the proposed substation west to Sites Pumping/Generating Plant

Table 2-1
New Project Facilities and Features and Existing Facilities Relied Upon[a]

Project Features/Facilities	Main Elements of the Project Features/Facilities
Electrical Connection for TRR Pumping/Generating Plant	New 230 kV or 115 kV overhead power line from the proposed substation, east to TRR Pumping/Generating Plant
Electrical Connection for Delevan Pumping/Generating Plant	New 115 kV overhead power line along SR 45 from the proposed substation west of Colusa to the Delevan Pumping/Generating Plant; line will cross SR 45
Project Buffer	
	Total land acquired for the Project beyond the facility footprints, out to the nearest existing parcel boundaries[d]; applies to Sites Reservoir Complex, Holthouse Reservoir Complex, TRR Complex, Delevan Pipeline Complex (excluding the pipelines)

[a] The table is meant to provide an overview of the main components of each complex; not all facilities or features of the project are included in this table but are further detailed in Section 2 Sites Reservoir Project Features and Facilities.

[b] Offsite sources for filter, drain, and transition materials, and concrete aggregate would be required if the onsite sources of these materials are found to be unsuitable or if additional material is required. It is anticipated that approximately 80 percent of materials would come from onsite sources and 20 percent from existing, offsite, commercial sources

[c] Per discussions with Glenn and Colusa counties, not all recreation areas would be constructed; all five are included to provide flexibility and a conservative analysis. Development of recreation areas will be phased based on public demand.

[d] Where the parcel boundary is less than 100 feet from the facility, the Project Buffer will extend beyond the parcel boundary to result in a minimum 100-foot-wide buffer. Acquisition or establishment of temporary or permanent easements of private properties, either through voluntary or eminent domain processes, would be required prior to initiation of construction activities.

Notes:

ac-ft = acre-feet
PG&E = Pacific Gas and Electric
WAPA = Western Area Power Authority
SR = State Route

Table 2-2
Permanent Facility Footprint

Complex Name	Size (acres)
Sites Reservoir Complex	17,000
Holthouse Reservoir Complex	600
TRR Complex	300
Delevan Pipeline Complex	25
Overhead Power Lines and Substations	20
Project Buffer	10,000

Note: Acreages are based on permanent footprint; overlap of facilities (e.g., the Sites Pumping/Generating Plant located within the footprint for the Sites Pumping/Generating Plant Approach Channel) occurs in some cases. Construction footprint estimates are conservative and are described in resource analysis chapters, where applicable.

2.1.1.1 Sites Reservoir Inundation Area

The Sites Reservoir would be located in Antelope Valley, approximately 10 miles west of the town of Maxwell. The Inundation Area would be created by construction of eleven dams. The 1.8-MAF Sites Reservoir would have a maximum normal water surface elevation of 520 feet above mean sea level (msl) (the minimum operating water surface would be at elevation 340 feet) and an inundation area of approximately 14,200 acres. The dams would include Golden Gate Dam on Funks Creek, Sites Dam on Stone Corral Creek, and nine saddle dams (dams are discussed in Section 2.1.1.2 Golden Gate Dam, Sites Dam, and Saddle Dams).

Many areas within the Sites Reservoir Inundation Area would be used for staging materials and equipment prior to and during construction of the Sites Reservoir dams.

Construction

The majority of the total construction disturbance for this complex would occur within the Inundation Area. Anticipated ground-disturbing activities during construction include the following:

- **Clearing and grubbing:** Approximately 90 percent of the Sites Reservoir Inundation Area footprint is annual grassland, and clearing and grubbing would not be needed in these areas. The remaining areas consist of blue oak woodland, agricultural crops, and other vegetation, which would be cleared. Cleared vegetation materials would be disposed of at an appropriate landfill/green waste facility or on-site as appropriate and necessary.
- **Demolition of existing structures:** Acquisition or establishment of temporary or permanent easements of private properties, either through voluntary or eminent domain processes would be required prior to initiation of construction activities. Within the Sites Reservoir Inundation Area, approximately 20 houses, 25 barns, and 40 other structures (e.g., sheds, silos, and pump houses) would be demolished once all property owner negotiations were completed. Existing septic tanks and other underground storage tanks would also be removed. In addition, many miles of fencing and asphalt would be removed, as necessary. Demolition debris would be transported and disposed of at an approved landfill(s).
- **Cemetery relocation:** Two private cemeteries would be relocated.

- **Salt Lake:** Saline water has been observed to seep from underground salt springs near the Salt Lake Fault within the proposed Sites Reservoir Inundation Area. To avoid potential reservoir water quality issues, pressure grouting of seeps and/or concrete caps would be constructed where saline water seeps from the salt springs within the Inundation Area (Salt Lake). The existing salt deposits and highly saline soils in and surrounding Salt Lake will be capped with clay materials from construction of the dams and other project facilities. Subsurface investigations would be conducted to confirm the nature and extent of the springs and appropriate treatment. Saline seeps observed outside of the reservoir or changed conditions of the springs once the reservoir is filled would be addressed by regular reservoir and facilities maintenance procedures. Pressure grouting and capping would also be applied to new seeps surface in other areas. Grout and concrete caps would be designed using standard engineering practices to prevent seepage.[1]

Operations

Water from the Sacramento River would be pumped into Sites Reservoir each year during times and years that water is available for diversion in accordance with the criteria in Section 4 Diversion and Reservoir Operations. In wetter years, the facility would be anticipated to reach maximum storage levels; in drier years, storage would not likely be at full capacity. Given that the Sites Reservoir would be an “offstream” storage facility, it would receive little natural runoff (approximately 1 percent of the 1.8-MAF reservoir storage capacity) from its own 83-square-mile watershed. Releases would occur throughout the year to assist in meeting demands, depending on time of year and year type, in accordance with water user agreements. As such, it is anticipated that the reservoir level would fluctuate approximately 140 feet throughout the season, based on demands and the ability to divert water. Specific reservoir operations are discussed in Section 4 Diversion and Reservoir Operations.

Maintenance

Maintenance activities for the proposed Sites Reservoir Inundation Area and adjacent land are anticipated to include law enforcement (including enforcement activities associated with boating); garbage removal; and maintenance of signs, culverts, and buoys.

2.1.1.2 Golden Gate Dam, Sites Dam, and Saddle Dams

Eleven dams would be needed to create the proposed 1.8-MAF Sites Reservoir (Figure 2-1): Golden Gate Dam, Sites Dam, and nine saddle dams. The saddle dams would be located along the northern perimeter of the reservoir between the Funks Creek and Hunters Creek watersheds, near the Glenn-Colusa county line. The proposed Golden Gate Dam would be constructed on Funks Creek, approximately 1 mile west of the existing Funks Reservoir. The proposed Sites Dam would be constructed on Stone Corral Creek, approximately 0.25 mile east of the town of Sites and 10 miles west of the town of Maxwell.

Saddle Dams 1, 2, 4, and 9 would be small-sized dams, with heights ranging from approximately 40 to 50 feet. Saddle Dams 3, 5, 6, 7, and 8 would be medium-sized dams, with heights ranging from approximately 70 to 130 feet. Saddle Dams 3, 5, and 8 would be the tallest and largest of the nine proposed saddle dams, with embankment volumes of approximately 3.6, 1.5, and 1.9 million cubic yards, respectively. Table 2-3 lists the proposed height and length of the main and saddle dams, as well as the total volume of materials needed to construct the dam embankments. The nine proposed saddle dams are

[1] As detailed in 1.5 Section 5.4.2 Spill Prevention and Hazardous Materials Management, all hazardous materials and wastes, including contaminated soils, will be handled and disposed of in accordance with applicable policies, laws, and regulations.

anticipated to be earthfill embankment dams and would be constructed primarily of materials from borrow areas within the Sites Reservoir Inundation Area (Table 2-4 and Figure 2-1). Site topography, geology, seismicity, and foundation features were considered when selecting the dam alignments, design, and dam cross sections.

Table 2-3
Characteristics of Proposed 1.8-MAF Sites Reservoir Dams

Dam	Maximum Height Above Base[a] (feet)	Crest Length (feet)	Total Embankment Volume (cubic yards)
Sites Dam	290	850	3,836,000
Golden Gate Dam	310	2,250	10,590,000
Saddle Dam 1	50	490	93,000
Saddle Dam 2	80	420	86,000
Saddle Dam 3	130	3,810	3,577,000
Saddle Dam 4	40	270	18,000
Saddle Dam 5	100	2,290	1,505,000
Saddle Dam 6	70	530	144,000
Saddle Dam 7	75	1,040	196,000
Saddle Dam 8	105	2,990	1,915,000
Saddle Dam 9	45	340	49,000
Total			**22,009,000 cubic yards**

[a] Base is defined as ground surface elevation.

Table 2-4
Sites Reservoir Project Onsite or Nearby Dam Materials

Material	Facilities	Approximate Size (acres)
Sandstone[a]	Saddle Dams	80
Impervious	Saddle Dams 6 through 9	400
Conglomerate	Multiple	200
Impervious	Saddle Dam 3	80
Impervious	Saddle Dams 1 and 2	40
Sandstone[a]	Golden Gate Dam	70
Sandstone	Golden Gate Dam	60
Impervious	Golden Gate Dam	60
Impervious	Sites Dam	80
Sandstone[a]	Sites Dam	50

[a] Located east of the Sites Reservoir Inundation Area

The crest elevation of all 11 dams would be 540 feet, providing 20 feet of freeboard above the normal maximum operating level. Sites and Golden Gate dams would have crest widths of 30 feet and embankment slopes of 2.25:1 upstream and 2:1 downstream. The saddle dams would have crest widths of 20 feet and embankment slopes of 3:1 upstream and 2.5:1 downstream.

Saddle Dams 2, 3, and 5 would have fairly flat slopes on the left abutments,[2] which require low dam heights (less than approximately 10 feet high). At these locations, the dam embankments would be strictly providing residual freeboard. Therefore, the typical saddle dam sections would be replaced at these locations with a small homogenous impervious embankment with a bentonite slurry wall for foundation seepage control. The crest elevation and width and slopes of the homogeneous embankment would match that of the saddle dams. Construction of the slurry wall configuration is a more economical option than construction of the typical embankment and excavation section. The slurry wall would be excavated to a depth corresponding to the moderately weathered bedrock surface, with average dimensions estimated at 20 feet deep by 5 feet wide. At the left abutment of Saddle Dam 2, the slurry wall section would also provide a defensive measure to control foundation seepage if displacement occurs along the Salt Lake Fault. At this location, the slurry wall would be extended to a depth of 40 feet to minimize the potential of foundation seepage along the fault zone.

The 11 dams would be constructed as zoned, earthen embankments of soil and rock with clay cores. Earthen embankment zones are shown on Figures 2-2 through 2-5. All dams would be constructed under the jurisdiction of the California Department of Water Resources, Division of Safety of Dams (DSOD).

As part of project design, an updated deterministic and probabilistic seismic hazard analysis would be conducted to account for the anticipated estimated level of ground shaking due to regional earthquakes. Suitable dam zoning and materials would be included as part of project design to accommodate anticipated seismic activity, including fault rupture, ground shaking, ground failure, and liquefaction, in coordination with DSOD. In addition, a seismic monitoring array will be designed and implemented as part of the Project to monitor site seismic activity, including identifying increases in seismicity rate that could be attributed to potential reservoir-triggered seismicity (RTS). Although not anticipated to be a substantial concern, the potential for RTS will be monitored through the deployment of strong motion instruments at center crests, abutments, and toes of the two primary dams (the Golden Gate Dam and the Sites Reservoir Dam) before, during, and a minimum of 2 years after the reservoir first reaches the maximum normal storage level. As part of the initial impoundment/filling of the reservoir, the rate of impoundment will be monitored in conjunction with seismic monitoring and adjusted as needed in the event of increases in seismicity potentially attributable to RTS. The seismic monitors would remain in service over the life of the Project and would also be part of the dam safety monitoring program.

Material requirements for the Sites Reservoir dams constitute a major component of the overall Project. A construction materials investigation identified and evaluated material sources for construction of the proposed dams. The construction materials investigation program examined materials available in or near the proposed Sites Reservoir, including alluvial deposits (recent and older alluvium), Venado sandstone of the Cortina Formation (fresh and weathered), and mudstone of the Boxer Formation. Table 2-4 and Figure 2-6 present the results of the investigation of materials potentially available within the Sites Reservoir Inundation Area or nearby. Offsite sources for filter, drain, and transition materials, and concrete aggregate would be required if the onsite sources of these materials are unsuitable (i.e., preliminary testing indicates that it does not meet concrete aggregate durability criteria) or if additional material is required. Several existing commercial locations (over 30), ranging in distance from approximately 35 to 80 miles, are available to meet materials needs for high quality aggregates.

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[2] Abutment direction is oriented looking downstream. For example, the dam’s left abutment would be the abutment on the left side of the dam when looking downstream.

It is anticipated that all earth and rockfill (approximately 80 percent of materials required) would come from onsite sources, and all aggregate (approximately 20 percent of material required) would come from existing, offsite, commercial sources.

The following material requirements and sources were investigated, and suitability was evaluated for construction of the dams:

- **Impervious core** – A large amount of impervious material exists within the Project area or nearby. The locations of potential borrow areas are illustrated on Figure 2-6. Previous studies by the Bureau of Reclamation (Reclamation) identified four main areas of alluvial deposits in the reservoir area that could provide approximately 36 million cubic yards of material. Additional impervious materials are located within required excavation and construction areas for the associated structures and the proposed Holthouse Reservoir Complex. Suitable material from the required excavation and construction areas would be used to the maximum extent practicable. The impervious materials are suitable for use in the proposed embankment dams and are generally classified as low to medium plasticity clays, with lesser amounts of high plasticity clays and clayey sand.

- **Filter, drain, and transition materials** – Filter, drain, and transition materials for the proposed embankment dams would be imported from the closest offsite sand and gravel deposits.

- **Rockfill and riprap –** The best available source of rockfill material for riprap within the Project area is fresh Venado sandstone. Sandstone quarry areas are located within the Sites Reservoir Inundation Area and are shown on Figure 2-6. Sufficient quantities of fresh sandstone for rockfill material could be obtained from these quarries to construct the proposed embankment dams. It is possible that one centrally located quarry would be developed for Golden Gate and Sites dams instead of developing a quarry for each dam. Note that fresh Venado sandstone was used as riprap for the existing Funks Dam and has performed well.

  Figure 2-6 also shows a proposed sandstone quarry location outside of the Inundation Area for construction of the saddle dams. The haul distance from this proposed quarry is approximately 3 to 4 miles from the saddle dam sites. A potential alternate source of rockfill and riprap material for construction of the saddle dams is a ridge of conglomerate within the reservoir area, near Saddle Dam 3 (Figure 2-6). This potential rockfill source offers a shorter haul distance to the saddle dams (1 to 2 miles). Development of the Venado sandstone quarry would be required for construction of the saddle dams, unless further testing of the conglomerate determines that it is a suitable material.

- **Random fill** – Random fill can include various types of soil or rock that do not necessarily have the defined physical characteristics of the other categories of materials used for construction. Random fill would be required for construction of all proposed dams. It is anticipated that two general types of random materials would be required for construction. One type of material would be composed of predominately weathered sandstone from the Cortina Formation; the other type would be predominately mudstone from the Boxer Formation. Mudstone from the Boxer Formation would tend to be “soil like” after excavation and compaction operations, because it is low-strength rock. The weathered Cortina Formation tends to have more fine materials and less well-graded rockfill.

  Random fill material needed for the dams will come from two sources: (1) excavations that are required for the dam foundations and excavations for other nearby structures and (2) onsite quarries in the Sites Reservoir Inundation Area, including suitable byproducts from processing sandstone for other construction needs. Random materials generated during construction of the dams would have haul distances of less than 1 mile.

Although the Boxer Formation material would function more as an upstream and downstream shell zone in the saddle dams, the term *random* is used for this material zone to be consistent with the terminology used for the design of Sites and Golden Gate dams.

- **Concrete aggregate** – Crushed Venado sandstone and offsite sand and gravel deposits were examined as potential sources of concrete aggregate. Preliminary small scale testing performed on crushed samples of Venado sandstone indicates that it does not meet concrete aggregate suitability criteria. Verification of the suitability of the Venado sandstone for use as a concrete aggregate would be further investigated in the future when large bulk fresh samples come available for testing. Potential sources of concrete aggregate borrow areas would be imported from the closest offsite aggregate deposit

The Project would be designed in accordance with DSOD requirements.[3]

A signal spillway would be located at Saddle Dam No. 6. The purpose of the signal spillway would be to release water in the event that water is still being pumped into the reservoir after the probable maximum flood (PMF)[4] has been stored (an unlikely occurrence). If the PMF were to occur when the reservoir is at the normal maximum pool elevation (520 feet), the water surface elevation would rise to 525.2 feet (with full PMF retention). The dam crest elevation would be 540.0 feet, leaving almost 15 feet of freeboard. This “morning glory” spillway[5] would be provided on a cut bench on the left abutment of the saddle dam. The outlet pipe would be installed under the dam on a cut bench on the dam abutment foundation. On the downstream side of the dam, the pipe would be installed downslope to the creek. An energy-dissipating structure would be located at the end of the pipeline to control the discharge of water to the creek. The spillway would consist of one 7-foot-diameter concrete pipe sized primarily for inspection and maintenance activities. The spillway pipe inflow elevation would be set at 526.0 feet, just above the estimated pool level with full PMF containment.

The potential for such an event and necessary actions would be addressed as part of an emergency action plan (Section 5.8 Emergency Action Plan).

To meet DSOD requirements, an emergency release outlet would be constructed to allow water levels in the reservoir to be lowered quickly if the integrity of a dam is at risk. The 30-foot-diameter tunnel with a release capacity of approximately 15,200 cfs is designed to meet DSOD’s emergency drawdown release criteria (10 percent drawdown of reservoir depth in 10 days). The emergency release capability is provided by a system of piping and energy dissipating valves located adjacent to the Sites Pumping/Generating Plant. The emergency release bypass outlet would be a 26-foot-diameter pipe that splits off from the tunnel/main inlet/outlet manifold. The 26-foot-diameter pipe would then split and reduce in size several more times to join four 8.5-foot dispersion valves located in a reinforced concrete and steel lined dissipation chamber adjacent to the Sites Pumping/Generating Plant. Emergency release

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[3] Detailed seismic and geotechnical evaluations will be conducted as part of final design.

[4] The probable maximum flood is the flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that is reasonably possible in the drainage basin being studied. Estimated based on Hydro Meteorological Report 58/59.

[5] A morning glory spillway is an uncontrolled spillway with a funnel-shaped outlet that allows water to spill into the funnel rather than spilling over the dam.

flows would flow down the channel from the Sites Pumping/Generating Plant into Holthouse Reservoir. The spillway structure in the Holthouse Dam is sized to pass the emergency flow. Spills downstream of Holthouse Reservoir associated with a significant event could lead to potential downstream impacts. This would be addressed in an emergency action plan. The plan would include emergency notification flowcharts, notification procedures, inundation maps, and a variety of other important emergency response protocols if an emergency release is anticipated. The emergency action plan would address potential and actual emergency conditions and any uncontrolled release of water, including release of water through the signal spillway, and it would incorporate lessons learned from the recent Oroville Spillway and Oroville Emergency Spillway incident. These plans are typically reviewed annually and periodically tested through tabletop and functional exercises and drills.

Construction

The total construction disturbance area for the 11 proposed dams would be approximately 160 acres. The total construction disturbance area would include the footprint of the facilities, materials and equipment staging areas, areas needed to construct the facilities, borrow areas, and access roads. The construction disturbance area for the dams would be within the construction disturbance area for the Sites Reservoir Inundation Area. Temporary easements may be required for construction. Anticipated ground-disturbing activities during construction include the following:

- Surveying
- Setting up staging areas within the Sites Reservoir footprint
- Constructing access roads
- Transporting equipment to the Project site and setting up offices and batch plants
- Clearing, demolition of existing structures, and grubbing
- Diverting streams within the reservoir Inundation Area
- Excavating and stockpiling activities
- Grouting of dam foundations and the ridge
- Constructing of dam embankments
- Installing monitoring equipment
- Constructing roads and buildings for facility operation and maintenance
- Cleaning up the Project area, removing equipment, and restoring the area

The following key activities are discussed in greater detail below:

- **Funks Creek and Stone Corral Creek Diversion Construction** – Diversion of Funks and Stone Corral creeks during construction of the proposed Golden Gate Dam and Sites Dam and for the proposed facilities downstream, is anticipated to be accomplished by passing storm flows through an 18-inch-diameter diversion tunnel through the ridge at Sites Dam. A channel would be excavated within the reservoir to join the two creeks. Coffer dams at the upstream toes of Sites Dam and Golden Gate Dam would protect the work areas from flows being diverted to the Diversion Tunnel.

  The upstream random zone of Golden Gate and Sites dams would function as the coffer dam and upstream toe berm, provides a convenient place to put waste materials from foundation excavation work during the initial stages of construction and would be used to divert Funks and Stone Corral creeks from the dam footprint.

Sites and Golden Gate dams would have low-level outlet works capable of releasing stream maintenance flows of up to 10 cfs from October through May into Stone Corral and Funks creeks after construction is completed to mimic the ephemeral nature of these streams.

- **Obtaining and Stockpiling Borrow Materials** – Materials would be stockpiled near temporary rock-processing plants that would be constructed for the Project. It is anticipated that at least one rock-processing plant would be located within the reservoir footprint to service the impervious material borrow areas and the sandstone quarries.

  The rock processing operation would consist of rock crushers to produce required sizes, shakers, screens to sort material sizes, and conveyor belts to transport sorted material to stockpiles. Stockpiled materials would be loaded by bulldozers, loaders, and possibly conveyors into large dump trucks and transported to the dam construction sites. Material excavation, processing, and stockpiling are anticipated to occur throughout the dam construction period.

- **Foundation excavation** – Recent and older alluvium and decomposed and intensely weathered bedrock would be excavated from the entire footprint of the dam sites to obtain a moderately weathered bedrock surface. In addition, moderately weathered bedrock would be excavated from the impervious core footprint down to the top of slightly weathered and/or fresh bedrock surface. Additional shaping of the foundations would be done to meet requirements that: (1) no excavation slopes should be steeper than 1:1 and (2) the core foundation should be approximately level in sections transverse to the dam alignment. Excavation depths would average approximately 20 feet. Excavation would be performed by heavy equipment but may require blasting in the harder sandstone.

- **Foundation treatment grouting** – The foundation grouting for the proposed Golden Gate and Sites dams would consist of a two-row grout curtain, with one row of consolidation holes upstream and one row downstream of the curtain holes. The rows would parallel the dam centerline and would be spaced 10 feet apart. In addition, a 40-foot-wide by 3-foot-thick grout cap was included in the design to prevent grout surface leakage during grouting of the upper stage. Foundation grouting for the proposed saddle dams would consist of a two-row vertical grout curtain spaced 10 feet apart parallel to the dam centerline. The saddle dam foundation grouting would also include a 20-foot-wide by 3-foot-thick grout cap to prevent surface leakage of grout during grouting of the upper stage. Each row of consolidation and curtain grout holes for all dams would consist of mandatory primary and secondary holes spaced at 10-foot centers. Figures 2-2 through 2-5 show typical grouting at the proposed Golden Gate Dam, Sites Dam, and the saddle dams.

  The grout curtains would be constructed by drilling vertical holes into the bedrock and filling the holes with grout pumped in under pressure.

- **Additional grouting** – Additional grouting will be performed along the east ridge of the reservoir north of Golden Gate Dam. Grouting will be in narrow ridge areas and is intended to minimize any seepage through the ridge when the reservoir is full. Grouting would extend from ground surface down into fresh rock.

- **Dam embankment construction** – All proposed dams composing the Sites Reservoir would be constructed as zoned earth rockfill embankment dams and would be constructed of four types of fill materials. The impervious core materials (finer material known as Zone 1), Zone 3 materials (rockfill and riprap), and Zone 4 materials (random materials) would be hauled in large dump trucks from the borrow sites that would be located within the reservoir footprint, spread by graders or bulldozers, moisture-conditioned with water trucks, and compacted with sheepsfoot rollers or compactors. Zone 2 materials (filter, drain, and transition materials) potentially would be hauled in large dump trucks from offsite commercial sources to be spread, watered, and compacted.

- **Monitoring equipment installation** – Monitoring equipment, including strong motion seismic detectors, piezometers, settlement points, and seepage weirs would be permanently installed at each proposed dam site.

Operations

Once the proposed dams are constructed and Sites Reservoir is filled, there would be few dam operations required other than release of water from the reservoir during normal or emergency operations.

Maintenance

Typical ongoing dam maintenance would consist of debris and vegetation removal from the embankment slopes, and periodic monitoring and evaluation of all instrumentation. Cleared debris and vegetation materials would be disposed of at an appropriate landfill/green waste facility or on-site as appropriate and necessary. Dam security and/or law enforcement staff would patrol the dams and other facilities. Additional security measures may include fences to prevent automobiles and pedestrians from accessing the dams and other Project features, booms to prevent boats from approaching the dams, security gates, 24-hour security patrols, and security cameras.

2.1.1.3 Sites Reservoir Inlet/Outlet Structure

The purpose of the proposed Sites Reservoir Inlet/Outlet Structure would be to regulate proposed Sites Reservoir inflows and releases through the proposed tunnel to the proposed Sites Pumping/Generating Plant. The structure would be located on the west end of the tunnel and southwest of the proposed Golden Gate Dam (Figure 2-7). As previously discussed, the structure would consist of a low-level inlet/outlet structure for emergency drawdown releases, a multi-level inlet/outlet tower, two fixed wheel gates to isolate the tunnel, a tower access bridge, and various valves and operators to regulate flows into and out of the reservoir.

The low-level inlet/outlet structure would be approximately 120 feet high from bottom of foundation to the top of trash racks. The rectangular structure dimensions would be approximately 100 feet by 120 feet. The three 30-foot by 30-foot intake openings would be covered by trash racks; the primary function is emergency release only.

The multi-level inlet/outlet tower would have multiple inlet ports with the capability of drawing water at different levels in the reservoir and trash racks with port valves (butterfly valves) embedded in the inlet tower tiers with four valves around each tier. The tower would also contain movable fish screens around two tiers for varied operational purposes (6,000 cfs for two tiers). Each port valve could be operated independently, or all valves could be operated together in each tier. The tiers would be spaced approximately 20 feet apart down the tower beginning approximately 30 feet below the maximum reservoir water level. The high inlet tower/shaft would also contain two 9-foot by 35-foot fixed wheel gates at the base of the tower to isolate the tower from the main tunnel for inspection and maintenance. The main tower shaft would have an inner diameter of 32 feet and an outer diameter of 39 feet. Cranes would be used to hoist the fish screens, port valves, and gates for necessary inspection and maintenance. Table 2-5 provides details regarding the proposed Sites Reservoir Inlet/Outlet Structure tower.

An approximately 440-foot-long bridge would provide access to the multi-level tower from the nearby access road. The bridge deck elevation would be approximately equal to the dam crest heights (approximately 500 feet). The bridge is expected to be a simple welded-plate girder system with a lightweight concrete deck. The girders would be supported by the multi-level inlet/outlet tower, cast-in-place reinforced concrete piers, and a reinforced concrete abutment.

Construction

The total construction disturbance area would be approximately 100 acres, mostly within the Sites Reservoir Inundation Area. It would include the footprint of the proposed facilities, the materials and equipment staging area, the area needed to construct the facilities, and access roads.

Table 2-5
Sites Reservoir Inlet/Outlet Structure Tower Details

Detail	Unit
Top elevation	540 feet
Bottom elevation (top of bench)	320 feet
Inside diameter	32 feet
Outside diameter	39 feet
Number of ports	28 (4 each at 9 levels)
Functional reservoir release elevations	480 feet to 340 feet

Anticipated ground-disturbing activities during construction include surveying and marking, clearing and grading, building access roads, installing temporary power to the site, preparing materials laydown and equipment staging areas, transporting construction materials and equipment to the site, hillside excavation and tower shaft excavation (separate from tunnel excavation), dewatering, building the multi-level tower base and deck, building the access bridge to the multi-level tower, installing cranes on the tower deck, building the low-level intake structure, finished grading, and site clearing.

Operations

The proposed multi-level inlet/outlet tower and low-level intake structure would be operated remotely. The multi-level tower port valves could be operated independently or by tier. Port valve operations could be adjusted locally or remotely via a supervisory control and data acquisition (SCADA) system. Port valve operations would be changed by adjusting the hydraulic operators.

Maintenance

Typical maintenance of the proposed inlet/outlet structure is expected to occur annually and would consist of servicing the hydraulic equipment (hoist cranes and control motors) and the fish screen lift mechanism. Hydraulic equipment maintenance service would primarily involve lube and filter replacements.

The fixed wheel gate maintenance would be performed annually. Maintenance would involve moving both gates through a full stroke (open and closed) position. Annual inspections for corrosion and wear would also be performed. As part of emergency preparedness checks, the gate operation electrical control panel would be tested every 6 months.

The port valve hydraulic operations would require a relatively higher level of maintenance including quarterly inspection and maintenance. Typical port valve maintenance would involve lube and filter replacements and inspections for hydraulic line damage.

The concrete low-level intake structure is considered a low-maintenance structure because it has no mechanical components, and it would be underwater. It is assumed that the stop logs that can be installed in the low-level intake at the upstream end of the tunnel would only be installed in the event of a problem with downstream wheel gate operation. The wheel gates would normally be down so that normal inflows to and from the reservoir would occur through the vertical Inlet/Outlet Tower, not through the low-level inlet. The low-level inlet provides the emergency release capability and permits removal of water from the reservoir between the lowest normal operating level for the tower and the dead storage level.

During the first few years of operation, it is anticipated that the Inlet/Outlet tower and tunnel downstream of the fixed wheel gates would be dewatered for inspection and maintenance. After this initial period of inspection demonstrates proper performance, the inspection period would be increased.

2.1.1.4 Sites Pumping/Generating Plant and Electrical Switchyard

The purpose of the proposed Sites Pumping/Generating Plant would be to pump water from the proposed Holthouse Reservoir into the proposed Sites Reservoir and to generate electricity during the release of water from Sites Reservoir to Holthouse Reservoir. The Sites Pumping/Generating Plant would be located approximately 3,300 feet southeast of the proposed Golden Gate Dam (Figure 2-7).

The Sites Pumping/Generating Plant would have a total pumping capacity of approximately 5,900 cfs and a release capacity of 5,100 cfs. Table 2-6 summarizes the pump and pump/turbine configuration for the 5,900-cfs plant. The pumping/generating plant would lift water from Holthouse Reservoir into Sites Reservoir and would be connected to Holthouse Reservoir by an approximately 6,300-foot-long excavated approach channel, as described in Section 2.1.2 Holthouse Reservoir Complex. The existing Funks Reservoir, which would be incorporated into the proposed Holthouse Reservoir, currently operates in coordination with the Tehama-Colusa Canal between elevations of 203 and 205 feet. The Sites Pumping/Generating Plant would operate with tailwater elevations down to elevation 190 feet during pumping to take advantage of the full 6,500 ac-ft of active capacity of the proposed Holthouse Reservoir. A 30-foot-diameter, 4,000-foot-long tunnel would be located on the inlet side of the Sites Pumping/Generating Plant connection to Sites Reservoir (the tunnel is discussed below).

Table 2-6
Sites Pumping-generating Plant Configuration

Unit Type	Number of Units	Net Head (feet)	Pumping Capacity (cfs)	Generating Capacity (cfs)	Total Pumping Capacity (cfs)	Total Generating Capacity (cfs)
Pump - Francis Vane (dual speed)	2 (+1 standby)	330	870	-	5,926	5,100
		202	870	-		
Pump - Francis Vane (dual speed)	2	330	435	-		
		202	435	-		
Pump/Turbine - Reversible Francis (dual speed)	4 (+1 standby)	330/310	663	1,020		
		202/182	663	1,020		
Pump/Turbine - Reversible Francis (dual speed)	2	330/310	332	510		
		202/182	332	510		

Water from Holthouse Reservoir would be drawn into the Sites Pumping/Generating Plant by the pumping and pumping-generating units. The number of units operating would be selected to be capable of providing the approximate pumping capacity needed to deliver all water stored in the Holthouse Reservoir on a daily basis during the off-peak pumping period. The Sites Pumping/Generating Plant would be a conventional, indoor-type pumping-generating plant with an inline arrangement of vertical pumping units, a reinforced concrete substructure, and a steel superstructure. The size of each unit bay was determined based on the minimum required spacing between each unit. Two service bays have been incorporated on both sides of the Sites Pumping/Generating Plant and have been sized to allow for two units to be serviced simultaneously while the remainder of the Sites Pumping/Generating Plant continues operation.

The pumps would be connected to a complex intake/outflow manifold. When water is drawn out of Holthouse Reservoir and pumped up to Sites Reservoir, the pumped water would flow through successive pipe connections until all 12 pipes coming from the pump units combine into a single 26-foot-diameter pipe. This pipe would then join the 26-foot-diameter pipe coming from the emergency bypass outlet, and the two pipes would connect to the 30-foot-diameter tunnel.

The 230-kilovolt-ampere (kVA) Sites Electrical Switchyard would handle pumping and generating power to the Sites Pumping/Generating Plant. Power would be supplied to the switchyard from a proposed substation near one of two existing 230 kVA transmission lines northeast of the proposed Holthouse Reservoir (substations are described further in Section 2.1.5 Overhead Power Lines and Substations). The Sites Electrical Switchyard would be approximately 3.5 acres and would be graded flat. Electrical equipment would be housed in the switchyard on concrete pads. An overhead power line tower/pole (approximately 50 feet tall) would receive the electrical line entering the site. (Note: While poles are anticipated for all overhead power lines, towers were included in the acreage assessment to provide a conservative estimate. The relocation of the WAPA transmission lines described under the Holthouse Reservoir Complex will include towers.) The switchyard would be approximately 500 feet by 300 feet, and would have multiple metallic poles with heights varying between 15 and 60 feet. The switchyard would be surrounded by a 6- to 8-foot-high chain-link fence with barbed wire or serpentine wire along the top.

The switchyard and overhead power lines connecting the pumping/generating plant to the substation at the grid would provide all the electricity needed by the pumping/generating plant. The switchyard and overhead power lines would also allow the pumping/generating plant to feed electricity back into the electrical grid during periods of generation.

Construction

The total site footprint of the proposed Sites Pumping/Generating Plant and approach channel would be approximately 75 acres. An additional 20 acres adjacent to the plant would likely be disrupted during construction.

Anticipated ground-disturbing activities include the following:

- Transporting materials to the construction site (including contractor’s temporary office and utility hookup)
- Clearing and grading the construction workspace
- Placing construction materials at staging areas
- Excavating the approach channel and pumping plant and hauling excavated material

- Dewatering
- Constructing the forebay, pump house, and pump bay
- Performing site restoration after construction is complete

The total construction disturbance area for the Sites Pumping/Generating Plant includes the footprint of the proposed switchyard, the materials and equipment staging area, electrical transformer area, and temporary access roads.

Anticipated major construction activities include clearing and grading the construction workspace, placing necessary construction materials at staging areas, and preparing the switchyard pad.

Operations

A SCADA system would control all proposed operational modes. The system would be located onsite and would broadcast status information to a manned location in the Operation and Maintenance Building. Plant operators would require continuous communication with the TRR Pumping/Generating Plant, Delevan Pipeline Intake/Discharge Facilities, and Tehama-Colusa Canal operators to coordinate flows into and out of the proposed Holthouse Reservoir and Sites Reservoir. The proposed switchyard would be operated remotely or by onsite operations/maintenance staff.

Hazardous materials and hazardous wastes including fuels, oils, grease, and lubricants would likely be used and stored for operation of the Sites Pumping/Generating Plant. These materials would be used, stored, and disposed of in accordance with applicable regulations (Section 5 Environmental Commitments Included as Part of the Project).

Maintenance

Routine maintenance and monitoring of the proposed Sites Pumping/Generating Plant would likely be required daily by onsite personnel. Regular maintenance and inspections would be required for each pump and pump turbine unit and the related equipment, such as gates, valves, electrical equipment, and other mechanical systems. The Sites Pumping/Generating Plant would be equipped with cranes to facilitate operation and maintenance. There would be a 100-ton capacity indoor bridge crane for assembly and maintenance of pumping/generating units and associated equipment. A 50-ton capacity outdoor traveling gantry crane would be installed for assembly and maintenance of butterfly valves. In addition, a 10-ton capacity outdoor traveling gantry crane would be installed to aid in the installation and removal of inlet gates and trash racks.

The proposed switchyard would require maintenance once or twice a year. Maintenance activities may include annual washing and cleaning of insulating equipment, preventive maintenance, scans of the switchyard under full load, and routinely scheduled testing to meet Western Electricity Coordinating Council (WECC) requirements. Regular maintenance activities would include inspections for damage by animals and landscape maintenance.

2.1.1.5 Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure

The purpose of the proposed tunnel is to transport water between the proposed Sites Pumping/Generating Plant and the proposed Sites Reservoir Inlet/Outlet Structure. The tunnel alignment would be located west of the existing Funks Reservoir and south of the proposed Golden Gate Dam on Funks Creek. The tunnel alignment would fall between the proposed Sites Pumping/Generating Plant location and the proposed Sites Reservoir Inlet/Outlet Structure location and would be approximately 4,000 feet long (Figure 2-7).

The proposed 30-foot-inside diameter tunnel was designed to meet DSOD emergency drawdown release criteria. The tunnel would have a maximum discharge capacity of 15,200 cfs with a corresponding tunnel velocity of 21.5 feet per second (fps). Pumping velocities through the tunnel would be approximately 8.20 fps for the 5,900-cfs pumping plant.

The full tunnel length between portals would be concrete-lined to prevent rock fallout and to provide a smooth interior surface, thus reducing head loss and minimizing seepage into the surrounding rock. The tunnel concrete liner would include an additional steel liner in the lower 1,000 feet adjacent to the pumping plant where rock cover over the tunnel is too shallow to confine the internal pressure.

Construction

The total construction disturbance area would be approximately 3 acres. It would include the footprint of the proposed facilities, the materials and equipment staging area, the area needed to construct the facilities, and access roads. There would be no permanent aboveground disturbance area for this facility.

Anticipated ground-disturbing and related activities during construction include the following:

- Surveying and marking
- Clearing and grading
- Building access roads
- Installing temporary power to site
- Developing staging and material laydown areas
- Transporting construction materials and equipment to the site, upstream cofferdam, and diversion facilities
- Excavating Portal at both ends
- Constructing Portal
- Tunnel blasting/excavating
- Dewatering and removing excavated material
- Installing concrete and steel liner
- Performing site restoration and cleanup

Operations

The typical operation scenario for the proposed tunnel would be 24 hours per day, 7 days per week. The tunnel would transport flows between the proposed multi-level Sites Reservoir Inlet/Outlet Structure upstream and the Sites Pumping/Generating Plant downstream. During emergency release operations, the tunnel could discharge a maximum flow rate of approximately 15,200 cfs.

Maintenance

Maintenance would likely occur on an annual basis in coordination with maintenance and inspection of the proposed Sites Reservoir Inlet/Outlet Structure and multi-level intake tower upstream and the proposed Sites Pumping/Generating Plant downstream.

The Inlet/Outlet tower wheel gates would be closed off to completely isolate the tunnel from the reservoir below the inlet/outlet structure for inspection and maintenance; to allow tunnel inspection and maintenance upstream of the wheel gates, stop logs would be used to shut off flow from the low-level inlet structure to the downstream tunnel section. The stop logs would be lowered from a barge above and dropped into the low-level inlet structure.

Typical tunnel inspection and maintenance may consist of checking for concrete cracks and leaks at joints between lining sections and around connections with the Sites Pumping/Generating Plant, Sites Reservoir Inlet/Outlet Structure tower gates, and low-level intake structure.

2.1.1.6 South Bridge and Roads

The proposed Sites Reservoir would inundate several existing roads within Colusa County's jurisdiction. Travel between the towns of Maxwell and Lodoga along the existing Maxwell Sites Road and Sites Lodoga Road would be blocked by the new reservoir. Approximately 6 miles of the existing Huffmaster Road, a gravel county road, would also be inundated. Huffmaster Road provides access to private properties primarily within the proposed Sites Reservoir footprint and the community of Leesville, southwest of the proposed reservoir. Peterson Road, which is also a gravel county road that provides access to private property, is located entirely within the proposed reservoir footprint. Existing roads would be rerouted, as necessary, to provide alternate access routes.

Approximately 50 miles of new paved and unpaved roads would provide construction and maintenance access to the proposed facilities, as well as provide public access to the proposed recreation areas. The locations of proposed roads, the proposed South Bridge, and existing roads near the proposed Sites Reservoir that would be affected by Project construction and/or operation are shown on Figures 2-8A and 2-8B.

Six road alternatives were evaluated to determine the best method of connecting the towns of Maxwell and Lodoga. To determine the best road alternative available, weighted criteria were independently assessed for shortest travel time, least total cost, least annual operations and maintenance cost, shortest emergency response time, least impact on wildlife habitat, least impact on wetlands and riparian areas, and least impact on public safety. Of the road alternatives, the South Bridge Alternative was selected as the Project alternative. The portions of Maxwell Sites and Sites Lodoga roads that would be inundated by the proposed reservoir would be replaced by the proposed South Bridge. The proposed road (including new bridge) would start approximately 1 mile east of the proposed Sites Dam on Maxwell Sites Road. The new route would consist of the proposed Eastside Road, Stone Corral Road, the South Bridge, and an approach road west to Sites Lodoga Road. This route would also provide access to the proposed Stone Corral and Peninsula Hills Recreation Areas.

The proposed South Bridge would be a two-lane concrete bridge, 35.5 feet wide and approximately 1.6 miles long. The top deck elevation would be 45 feet above the Sites Reservoir's maximum normal water surface elevation. For the roads leading up to and away from the bridge, the proposed road right-of-way would be 60 feet wide with a 4 percent maximum grade. Culverts and minor bridges would be constructed to provide passage for streams and drainage of surrounding areas, including the construction of a culvert where the proposed Eastside Road would cross Funks Creek. Guardrails, signs, striping, and lighting would be installed after the roads are completed pursuant to applicable county, California Department of Transportation (Caltrans), and American Association of State Highway and Transportation Officials (AASHTO) design specifications. Permanent fencing would be installed along both sides of the 60-foot-wide right-of-way.

The proposed North Road and Saddle Dam Road (both new gravel roads) would provide access to northern portions of the Sites Reservoir and saddle dams. The new Eastside Road would be gravel from the existing County Road 69 to near the proposed Sites Pumping/Generating Plant and paved south of the plant. Eastside Road would connect the proposed Stone Corral Road to County Road 69, providing access to the northern portions of the Sites Reservoir, Holthouse Reservoir Complex, Golden Gate Dam, and associated structures and to properties northeast of the Sites Reservoir. Along the west side of the Sites Reservoir, the proposed Peninsula Road would provide access from Sites Lodoga Road to the proposed Peninsula Hills Recreation Area. The proposed Sulphur Gap Road would provide access to southern portions of the Sites Reservoir, and private property adjacent to the proposed Com Road and would connect to Huffmaster Road.

Permanent facility access roads constructed from gravel and asphalt would facilitate operation and maintenance. These proposed access roads would require new construction or the relocation of existing County roads and bridges; these activities would follow Caltrans and AASHTO design standards as applicable. During construction, gravel roads would be constructed on the following detour and construction roads: the proposed Sulphur Gap and Lurline roads and an existing dirt road west of the proposed Lurline Headwaters Recreation Area to Huffmaster Road.

A new temporary bypass road at the north end of Sites Reservoir is provided to help expedite the closure of Sites Lodoga Road in the project area and the start of construction in borrow areas and for the main dams. The new bypass road would begin on the east where existing County Road 69 intersects the Tehama-Colusa Canal. Access to County Road 69 would be from Highway 5 at the County Road 68 interchange, then west along County Road 68 to County Road D and County Road 69. From the Tehama-Colusa Canal crossing, the planned access road would follow existing ranch roads and trails that are planned for use as the saddle dam access road. From the saddle dam access road near Saddle Dams 5, existing ranch roads and trails would also be followed to cross the bottom of the reservoir to the southwest and connect back to Sites Lodoga Road on the west side of the proposed reservoir, just above the planned Inundation Area for the reservoir. The bypass road would meet applicable County standards and would be paved along its full length for public use. Characteristics of the Project roadways and South Bridge approaches, the South Bridge, and the proposed minor structures are listed in Tables 2-7, 2-8, and 2-9, respectively.

Table 2-7
Characteristics of Project Roadways and South Bridge Approaches

Road or Segment Name	New or Existing	Permanent (P) or Temporary (T)	Gravel Road (miles)	Paved Road (miles)	Total (miles)
Public Access Roads					
Com Road					
Dam Crown Access Road to Communication Tower	New	P	2.95		2.95

Table 2-7
Characteristics of Project Roadways and South Bridge Approaches

Road or Segment Name	New or Existing	Permanent (P) or Temporary (T)	Gravel Road (miles)	Paved Road (miles)	Total (miles)
Eastside Road					
Field Office Maintenance Yard Access to Sites Pumping/Generating Plant Access	New	P		0.93	0.93
Golden Gate Dam/Electrical Switchyard Access Roads to Property North of Golden Gate Dam	New	P	1.52		1.52
Maxwell Sites Road to Stone Corral Road	New	P		1.30	1.30
Property North of Golden Gate Dam to North Road	New	P	3.63		3.63
Sites Pumping/Generating Plant Access to Golden Gate Dam/Electrical Switchyard Access Roads	New	P		0.95	0.95
Stone Corral Road to Field Office Maintenance Yard	New	P		1.09	1.09
North Road					
County Road 69 at Tehama-Colusa Canal to Saddle Dam Road	Existing (dirt road to be improved)	P		4.69	4.69
Saddle Dam Road to Saddle Dam 9	New	P	1.84		1.84
Peninsula Road					
Sites Lodoga Road to Peninsula Hills Recreation Area (East Segment)	New	P	0.90		0.90
Sites Ladoga Road to Peninsula Hills Recreation Area (West Segment)	New	P	1.00		1.00
Saddle Dam Road					
North Road to Saddle Dam 1	New	P	3.10		3.10
Temporary North Bypass Road					
Saddle Dam Road to Sites Lodoga Road West[a]	New	T		4.90	4.90
South Bridge					
South Bridge	New	P		1.48	1.48
South Bridge East Approach					
Included with Stone Corral Road (below)	NA	NA	NA	NA	NA
South Bridge West Approach					
South Bridge to Sites Lodoga Road	New	P		2.16	2.16

Table 2-7
Characteristics of Project Roadways and South Bridge Approaches

Road or Segment Name	New or Existing	Permanent (P) or Temporary (T)	Gravel Road (miles)	Paved Road (miles)	Total (miles)
Stone Corral Road					
Eastside Road to Stone Corral Recreation Area	New	P		1.6	1.6
South Bridge East Approach to Stone Corral Recreation Area	New	P	0.21		0.21
Sulphur Gap Road					
Maxwell Sites Road to Huffmaster Road (optional; not shown on figures)	New	P	7.61		7.61
Private Access Roads					
Golden Gate Access Roads					
Eastside Road to bottom of Golden Gate Dam	New	P		0.26	0.26
Eastside Road to Sites Pumping/Generating Plant Electrical Switchyard	New	P		0.12	0.12
Eastside Road to Field Office Maintenance Yard	New	P		0.04	0.04
Eastside Road to Sites Pumping/Generating Plant	New	P		0.18	0.18
South Bridge East Approach to Inlet/Outlet Tower	New	P		0.50	0.50
South Bridge East Approach to top of Golden Gate Dam	New	P		1.2	1.2
Saddle Dam Access Roads					
North Road to Saddle Dam 6	New	P	0.28		0.28
Saddle Dam Road to Saddle Dam 2	New	P	0.03		0.03
Saddle Dam Road to Saddle Dam 3	New	P	0.16		0.16
Saddle Dam Road to Saddle Dam 5	New	P	0.11		0.11
Leesville Road					
Huffmaster Road south to Leesville Road	New	P	5.20		5.20
Total			**28.54**	**21.4**	**49.94**

[a] Assumes no upgrades to Roads 68 and 69.

Table 2-8
Proposed South Bridge Characteristics

Item	Dimension
Bridge length	Approximately 8,000 feet (1.5 miles)
Bridge width	35.5 feet
Bridge height[a]	Approximately 45 feet above maximum water surface elevation
Bridge depth[b]	20 feet maximum, 8 feet minimum
Spans	400 feet maximum, 260 feet minimum, 22 spans total
Columns – 1.3-MAF dimensions	22 feet by 14 feet square, hollow, maximum height approximately 260 feet, 24 columns total
Foundations	Large mat foundations under columns with 4-foot-diameter, cast-in-place, drilled shafts

[a] The bridge height is the distance from the top of the bridge deck to the maximum water surface elevation.
[b] The bridge depth is the distance from the top of the bridge deck to the bottom of the bridge structure that sits atop the columns.

Table 2-9
Characteristics of Proposed Minor Structures

Item	Typical Dimensions
Culverts (over unnamed streams), 17 total	6-foot diameter by 100-foot length
Minor bridge (over named streams), 1 total	40-foot width by 80-foot length

Note: Minor structures would be built using steel pipe or precast pieces.

Construction

The construction disturbance area would include the footprint of the proposed South Bridge structure and proposed roads and stream crossings, the materials and equipment staging areas, the area needed to construct the facilities, and access roads. Traffic that is not construction-related would be diverted around construction disturbance areas in accordance with a traffic control plan.

If necessary, a temporary asphalt batch plant would be built onsite and outside of the Sites Reservoir footprint. One possible location could be adjacent to the footprint of the proposed Field Office Maintenance Yard. This location would be centrally located to the Project’s paving needs, is relatively flat, and has shallow soil and impervious subsoil that should allow for easy spill containment and site cleanup. Alternatively, the construction contractor may obtain asphalt from regional commercial sources. Concrete bridge construction would include excavation for foundations and abutments; installing cast-in-place concrete formwork; placing reinforcing steel; installing bridge deck expansion joints; pouring and curing concrete; removing concrete forms; installing bridge barriers, bridge railings, bridge lighting, approach roadway guardrails, fences, signs, and reflectors; and painting approach and bridge deck striping.

Anticipated ground-disturbing and related activities during construction include the following:

- Surveying and marking
- Clearing and grading the construction workspace
- Preparing the construction materials laydown and equipment staging areas
- Transporting materials and equipment to the Project site
- Building concrete and/or asphalt batch plant

- Creating road cuts and fills; hauling excess cut materials
- Constructing bridge foundation, including drilled pier installation for foundations
- Constructing bridge columns
- Constructing bridge spans
- Installing culverts and minor bridges
- Laying aggregate road base and asphalt
- Installing fences, guardrails, and signs
- Installing roadway striping and reflectors
- Performing erosion and stormwater management
- Implementing BMPs
- Performing site restoration and cleanup

Operations

Standard nighttime bridge safety lighting would be provided in accordance with County requirements. Electricity would likely come from an existing overhead distribution line that currently parallels exiting Sites Lodoga Road. Daily management of the right of way (e.g., speed restrictions and closures) would be conducted by County and State law enforcement agencies.

Maintenance

Procedures will be incorporated to reduce impacts from lighting (e.g., directional lighting and non-reflective materials). Typical road maintenance would consist of chip sealing; patching; grading; crack filling; asphalt overlays; guardrail, fencing, and signage repairs; embankment erosion repair; and vegetation control. Typical culvert and minor bridge maintenance would consist of debris removal, cleaning, and repair of steel pipe corrosion and precast concrete cracks.

Typical bridge maintenance would consist of debris clearing from bridge deck and deck drainage outlets; barrier, railing, and light repairs; concrete deck and expansion joint repairs; occasional resurfacing; approach slab and guardrail repairs; and abutment erosion maintenance and repair. In addition, annual safety and maintenance inspections would be conducted pursuant to County, Caltrans, and AASHTO requirements as applicable to maintain a bridge condition monitoring record.

2.1.1.7 Recreation Areas

Construction of the recreation areas would be phased, based on public demand. The Project would include the development of two recreation areas (Stone Corral Recreation Area and Peninsula Hills Recreation Area). The Project would also include a boat ramp at the western end of the reservoir where the existing Sites Lodoga Road would be inundated. Development of the recreation areas would be phased, likely starting with Stone Corral. Development of additional recreation areas would be initiated based on public demand. The development of new recreation areas at the Sites Reservoir could meet public demand for recreation opportunities. The potential recreation areas at Sites Reservoir were evaluated based on the site topography, environmental considerations, and the effect of potentially large fluctuations in the water surface levels due to normal reservoir operations.

The Stone Corral Recreation Area (Figure 2-9A) would be located on the eastern shore of the Sites Reservoir, north of the existing Maxwell Sites Road and proposed Sites Dam. Access would be provided by either the proposed South Bridge or Eastside Road. The maximum proposed size of the Stone Corral Recreation Area would be 235 acres.

The Peninsula Hills Recreation Area (Figure 2-9B) would be located on the northwest shore of the Sites Reservoir, to the north of the existing Sites Lodoga Road. Access would be provided from the proposed Peninsula Road via the existing Sites Lodoga Road. The maximum proposed size of the Peninsula Hills Recreation Area would be 373 acres.

In addition to the Stone Corral and Peninsula Hills recreation areas, a boat ramp would be provided on the western side of the reservoir where the existing Sites-Lodoga Road intersects with the proposed Inundation Area for the reservoir (Figure 2-9C). The maximum proposed size of the boat ramp area would be 10 acres.

Potential recreation opportunities could include boating, camping, picnicking, fishing, swimming, and hiking. Facilities may include boat launch sites, trails, designated swimming and fishing access, picnic tables, shaded canopies, campfire rings/barbeques, vault toilets, and dumpsters. In addition, gravel parking areas would be provided for camp sites, day-use areas, and boat launch facilities. The approximate number of facilities at each proposed recreation area is listed in Table 2-10.

Table 2-10
Approximate Number of Facilities at the Proposed Recreation Areas

Recreation Areas	Features
Stone Corral Recreation Area	50 campsites (car and recreational vehicle) 10 picnic sites (with parking at each site) 6-lane boat launch[a] site Hiking trails Electricity Potable water[b] 1 kiosk 10 vault toilets
Peninsula Hills Recreation Area	200 campsites (car and recreational vehicle) 1 group camp area 10 picnic sites (with parking at each site) Hiking trails Electricity Potable water[b] 1 kiosk 19 vault toilets
Boat ramp on western side of the reservoir where Sites-Lodoga Road ends	Potable water[b] 1 kiosk 1 vault toilet

[a] Reducing the number of boat lanes with increasing water depth.

[b] Treated water from the reservoir would be the source of potable water.

Construction

It is anticipated that all construction activities associated with Stone Corral and Peninsula Hills recreation areas and the proposed boat ramp would occur within the proposed footprint of the recreation areas and the temporary and permanent access road areas. The total construction disturbance area would be approximately 620 acres. However, construction disturbance could be much less because recreational facilities would be designed and constructed to minimize vegetative disturbance, including tree removal. Anticipated ground-disturbing activities during construction include the following:

- Surveying

- Clearing and grubbing
- Excavating
- Backfilling
- Constructing road and parking lot
- Addressing potable water and power connections where they are planned to be provided
- Installing amenities
- Constructing boat ramp
- Performing site revegetation

Operations

It is anticipated that the proposed recreation areas would not have onsite staff. A fee collection box and camping information would likely be available at the kiosk near each recreation area's entrance. It is expected that the greatest use at the facilities would occur between Memorial Day (the end of May) and Labor Day (the beginning of September) of each year, but activities such as hiking and fishing may occur year-round. Regular boat inspections will be conducted to help address the potential for invasive mussels in the reservoir.

Maintenance

Maintenance activities would include collection of overnight and day-use fees at the fee collection boxes, road grading, water system maintenance, trash removal at picnic sites and overnight campsites, vegetation maintenance, restroom/vault toilet cleaning and restocking of paper goods, boat ramp debris removal, lake debris control, lake hazard marking, lake boom and barrier maintenance, signage, fence maintenance, fuels management, and law enforcement. During peak recreation use periods, these activities would likely occur daily, except for road grading, which is expected to occur once per year before the recreation season. During the non-peak seasons, the activities other than road grading would likely occur on a weekly basis.

2.1.1.8 Field Office Maintenance Yard

Because of the size of the Project area and the number of facilities, a staffed operation and maintenance complex (i.e., the Field Office Maintenance Yard) would be built onsite (Figure 2-7) to service Project facilities, as needed. Construction of the Project would be phased, and details regarding the Field Office Maintenance Yard would be based on Project needs. Assumptions discussed in the following sections are conservative to provide flexibility. An administration building and parking area would be constructed to meet Project needs.

Construction

The total construction disturbance area would be approximately 20 acres, with approximately 12 acres of permanent space for the proposed footprints of the administration and maintenance buildings. Buildings may include an administration/operation building, plant maintenance warehouse, service and supply warehouse, utility craft office, vehicle shop, heavy equipment shop, Project operations building, general maintenance headquarters, septic system, aboveground fuel and waste oil storage tanks. Oil/water separators will be provided in maintenance areas as necessary. A temporary asphalt batch plant may be located in this area but also could be located within the construction footprint for other facilities. Construction of the proposed Field Office Maintenance Yard would include the following:

- Transporting materials to the Project site
- Clearing and grading the site for construction, including demolition of existing structures

- Placing construction materials at staging areas
- Constructing administrative and maintenance buildings
- Constructing ancillary facilities (e.g., leach-field, water treatment, lighting, concrete pad for refueling island, aboveground fuel tanks, perimeter fencing)
- Performing site restoration after construction is complete

Operations

The typical operations scenario for the proposed Field Office Maintenance Yard would be 24 hours per day, 7 days per week. The facility would be fully staffed during normal business hours, when scheduled maintenance of Project facilities would occur. Minimum personnel staffing would occur during off-peak hours to respond to emergency situations. Spare parts for mechanical and electrical equipment would be stored in the warehouse along with lubricants, oils, and greases to maintain equipment. Daily operations could include personnel traveling from the Field Office Maintenance Yard to Project facilities and performing scheduled repairs, inspection, and maintenance of Project equipment, observing Project facilities and operations, and as-needed emergency repairs. Minor equipment repairs and overhauls (e.g., pumps and turbines) may take place onsite, but major repairs and overhauls would be offsite. The SCADA system would be operated and monitored remotely from the operations area of the administration building.

Daily operations are anticipated to include fueling and washing vehicles and equipment, gathering technical data on water quality and Project facilities conditions, and maintaining and repairing mechanical equipment.

Maintenance

Periodic maintenance would likely be performed on an as-needed basis including road, building, vegetation, fence maintenance, and debris removal. Procedures will be implemented to reduce impacts caused by lighting (e.g., by using directional lighting and non-reflective materials).

2.1.2 Holthouse Reservoir Complex

The Holthouse Reservoir Complex includes the features and facilities that are geographically or functionally associated with the Holthouse Reservoir. This complex would include the Holthouse Reservoir Inundation Area and dam including spillway and stilling basin and spillway bridge; a relocated WAPA transmission line; the approach channel for the Sites Pumping/Generating Plant; existing Tehama-Colusa Canal connections, the Tehama-Colusa Canal Construction Bypass Pipeline, and installation of two additional pumps at the Red Bluff Pumping Plant (RBPP).

2.1.2.1 Holthouse Dam and Reservoir

The existing 3,372-ac-ft Funks Reservoir is located 1 mile downstream of the proposed Golden Gate Dam site. This reservoir was constructed by Reclamation and is part of the Tehama-Colusa Canal system. Funks Reservoir serves as a re-regulating reservoir to stabilize flows in the canal downstream of Funks Reservoir as diverters come online and offline. The existing Funks Reservoir would be expanded to form the proposed Holthouse Reservoir (Figure 2-7) by constructing a new dam (Holthouse Dam) and reservoir east of Funks Reservoir, and breaching the existing Funks Dam so that the new and existing reservoirs would act as one unit, with an increased active storage capacity of approximately 6,500 ac-ft and a surface area of approximately 450 acres. The proposed Holthouse Reservoir would regulate Sites

Reservoir inflows and outflows through the proposed Sites Pumping/Generating Plant and provide sufficient supplemental storage to allow simultaneous pump back power generation during on-peak periods.

The 6,500-acre-foot Holthouse Reservoir would allow the Sites Pumping/Generating Plant to perform a pumped-storage function for up to 6 hours per day while simultaneously collecting and storing inflows from the Sacramento River through the Tehama-Colusa Canal, GCID Main Canal, and the proposed Delevan Pipeline. All water would be pumped into Sites Reservoir from Holthouse Reservoir during off-peak power periods on a daily basis.

The proposed Holthouse Dam would be constructed as a zoned earthen embankment for most of its required length. However, a concrete gravity section would be provided in a rock cut on the left abutment to accommodate the inlet/outlet structure for the TRR and Delevan Pipelines and a flood control spillway. Except for the left abutment, Holthouse Dam would be a zoned embankment dam similar to the existing Funks Dam. The total length of the dam would be approximately 8,500 feet with a height of approximately 48 feet. The crest elevation of the dam would be at elevation 214 feet to match the crest of the existing Funks Dam. Because a deep soil layer could potentially exist along the dam alignment, the central core zone would extend down to suitable foundation in dense soils. A slurry cutoff wall would be constructed to control seepage. A grout curtain, a barrier that would protect the foundation of the dam from seepage as well as minimize seepage to local agricultural lands, would be installed under the dam. A similar such curtain is in place at the existing Funks Reservoir, which has not experienced seepage issues to date. A downstream seepage collection drain system would also be installed to limit the potential for seepage in addition to a series of piezometers to monitor performance, several of which would be downstream of the dam section and foundation to monitor seepage.

A concrete gravity dam section on the left abutment would incorporate the inlet/outlet facilities for the four 12-foot-diameter Delevan and TRR pipelines (two pipes each) and the emergency spillway for Holthouse Reservoir. The spillway would be a multi-gate structure similar to the existing spillway at Funks Dam. The spillway capacity would be sized to pass the emergency drawdown flow for Sites Reservoir. A chute section and stilling basin would be provided for the spillway to dissipate energy before release flows enter Funks Creek. A gated low-level outlet pipe through the gravity dam section would also be provided to make environmental releases to Funks Creek and to help drain Holthouse Reservoir for inspection and maintenance.

Operating levels within Holthouse Reservoir would vary between elevation 206.0 and 190.0 feet, which would provide the required active storage capacity of approximately 6,500 ac-ft. Elevation 206.0 feet corresponds to the 2011 normal operating level in existing Funks Reservoir. There would be approximately 1,000 ac-ft of dead storage in Holthouse Reservoir because of topographic elevations near the new Holthouse Dam. This space could be allocated to sediment accumulation, disposal of excess excavated material from the Project, or disposal of existing sediment in Funks Reservoir.

Pump-back operations would involve the daily procurement of relatively inexpensive power sources (i.e., renewable energy) to pump water from the proposed Holthouse Reservoir up to the Sites Reservoir during off-peak hours of power usage and release of that pumped water from Sites Reservoir to Holthouse Reservoir during peak hours of power usage. Pump-back power production provides flexible generation that would be used to compensate for rapid changes in electric power demand, such as from increased air conditioning use on hot days, and to compensate for changes in power production from variable renewable power sources, such as wind and solar power projects. Although water delivery and power production are given equal weight in the planning goals for the Project, pump-back power operations would be secondary to water delivery operations because of water contracts and environmental restrictions. These operations would be optimized within those restrictions to produce the greatest value to users. Pump-back operations would be most beneficial at the Sites Pumping/Generating Plant. Pump-back operations at the other Project pumping/generating facilities is not justifiable because of the limited storage potential for water and limited power generation capability compared to the Sites Pumping/Generating Plant.

2.1.2.2 Western Area Power Authority Transmission Line Relocation

Eight WAPA transmission line towers are located within the footprint of the proposed Holthouse Reservoir. Based upon preliminary contacts with WAPA, the Project alternative would move a segment of the line to the west so that it would cross at a narrow spot in the existing Funks Reservoir at the existing dam.

2.1.2.3 Sites Pumping/Generating Plant Approach Channel

The Sites Pumping/Generating Plant would be connected to Holthouse Reservoir by an earthen approach channel approximately 6,300 feet long. The channel is expected to have relatively flat slope toward the Sites Pumping/Generating Plant and would be constructed at an elevation below the operating range of the reservoir. The channel would have a trapezoidal geometry with a bottom width of approximately 200 feet and a top width of 400 to 700 feet. When Holthouse Reservoir is full, the channel would be nearly entirely submerged. This channel would allow water from Holthouse Reservoir to flow by gravity to or from the pumping/generating plant and would allow upstream Funks Creek flows to enter Holthouse Reservoir via an approach channel spillway.

2.1.2.4 Existing Tehama-Colusa Canal Connections

The Tehama-Colusa Canal would continue to discharge into the reservoir at its current location on the north side.

2.1.2.5 Tehama-Colusa Canal Construction Bypass Pipeline

Installation of a bypass would be required during construction to divert Tehama-Colusa Canal flow before starting modifications to the existing Funks Reservoir. The Tehama-Colusa Canal Bypass Pipeline would be maintained as a permanent feature following modification of Funks Reservoir and construction of Holthouse Reservoir, as requested by Reclamation and the Tehama-Colusa Canal Authority (TCCA). The permanent bypass would provide operational flexibility to pass water to the canal segment below the reservoir without pumping when gravity flow is not possible. The proposed bypass would consist of a 12-foot-diameter pipeline starting approximately 2,600 feet upstream of the Tehama-Colusa Canal inlet into Funks Reservoir. The bypass would route the required flows around Funks Reservoir during construction of reservoir modifications. The bypass construction would require installation of two cofferdams on the upstream portions of the Tehama-Colusa Canal to isolate the area of embankment cut and pipe installation. The Funks Reservoir would be dewatered, and the existing check structure would be dismantled and reconstructed approximately 3,000 feet upstream. The check structure would consist of two 18-foot by 15.5-foot gates, electrical controls, hoists, and concrete supports and reinforcement. The facility would be relocated slightly downstream of the bypass. The bypass would be gated or valve-controlled to regulate releases downstream, as required by Reclamation and the TCCA.

Construction

The total construction disturbance area would include the proposed footprints of Holthouse Reservoir, Holthouse Dam, Holthouse Spillway and Stilling Basin, Tehama-Colusa Canal Construction Bypass Pipeline, and Project Buffer adequate for construction staging.

Construction materials for the earthen dam would come from required excavations for the Sites Pumping/Generating Plant and the channel connecting the enlarged reservoir with the Sites Pumping/Generating Plant. The material in the existing Funks Dam could also be reused to construct the new dam. Approximately 883,500 cubic yards of core material and 2,000,000 cubic yards of earth and rockfill would be required to construct the earthen dam section. Approximately 41,000 cubic yards of concrete would be required for the concrete gravity dam section on the left abutment.

Construction materials for the proposed Holthouse Dam would include imported sand and gravel. Processed rock from Project excavations could also be used if it is suitable for that use.

Because the existing Funks Reservoir is an onstream reservoir, a significant portion of the reservoir's active storage has been displaced because of sediment accumulation from Funks Creek. Although topographic data are available for the reservoir from the original construction drawings, there are no current bathymetric data to support an estimate of the amount of sedimentation that has actually accumulated. However, it is believed that the current active capacity could be as low as 1,500 ac-ft. This would mean that approximately 750 ac-ft (1.2 million loose cubic yards) of sediment have accumulated. A bathymetric survey of the existing reservoir would be performed as part of future design phases of the Project to establish the volume and physical characteristics of the sediment so the material can be properly managed during design and construction.

A portion of the accumulated sediment would be removed and relocated to construct the new Holthouse Reservoir, particularly the low-level flow channel connecting the reservoir with the Sites Pumping/Generating Plant. However, it may not be necessary to remove all sediment below the minimum normal operating level that does not affect the active storage of the reservoir. Once a diversion system is installed to route Funks Creek flows around the Holthouse Reservoir worksite, the sediment to be removed would be dewatered over a period of time by ditching and sumping. Once it is dry enough to be excavated and moved, the sediment would be disposed of in the lower elevations of the new Holthouse Reservoir, in a dead storage area, or in backwater areas around the perimeter of the existing reservoir. The construction schedule for the Project would allow adequate time to dewater and remove the material without affecting the new dam construction (which is outside the limits of sediment accumulation).

As described above, a grout curtain would be installed under the dam to minimize seepage to local agricultural lands. A downstream seepage collection drain system would also be installed to limit the potential for impacts on adjacent lands in addition to a series of piezometers to monitor potential seepage during the operation of the facility. Seismic instrumentation, piezometers, and settlement points would also be installed for long-term monitoring of dam performance.

Typical summer releases from Funks Reservoir to the Tehama-Colusa Canal range from 500 to 800 cfs. Total flows of 50 to 200 cfs for off-peak limited agricultural releases would be needed between November and February, and possibly to March, depending on the weather. The proposed Tehama-Colusa Canal Construction Bypass Pipeline is a 12-foot-diameter pipeline that would route the required flows around Funks Reservoir during construction of reservoir modifications.

Operations

Funks Reservoir is operated by TCCA pursuant to a contract with Reclamation. Operation of the proposed Holthouse Reservoir would be coordinated with TCCA, but it would be operated by the designated operator of the proposed Sites Reservoir. During fall and winter, inflows from the conveyance system and water for power generation would be stored during on-peak power periods. The stored water plus ongoing off-peak inflows from the conveyance systems would then be pumped to Sites Reservoir during the partial-peak/off-peak power period on a daily basis. During spring and summer, when releases are made from Sites Reservoir, released water would go through the Sites Pumping/Generating Plant to generate power. Holthouse Dam would maintain releases to Funks Creek of up to 10 cfs year-round, based on a recommendation by the California Department of Fish and Wildlife (CDFW). This flow is intended to replace the existing seepage flow on Funks Creek below Funks Dam.

Maintenance

Currently, periodic maintenance required for Funks Reservoir includes road, vegetation, and fence maintenance, and debris removal on an as-needed basis. The current Funks Reservoir is also drained annually. While annual draining would not be necessary for the larger Holthouse Reservoir, periodic drawdown may be conducted as needed. Periodic maintenance and inspection of Holthouse Reservoir would be coordinated with Tehama-Colusa Canal operators or could be conducted at a centralized maintenance and operation office for the Sites Reservoir.

2.1.2.6 Additional Pumps at the Red Bluff Pumping Plant

The RBGPP, which is located in the Secondary Study Area, is adjacent to Reclamation's Red Bluff Diversion Dam and was completed in 2012. The plant, which was constructed as part of the Fish Passage Improvement Project (Figure 2-10), included a fish screen, a pumping plant at the Mill Site (i.e., the RBPP), canal, siphon, a forebay, switchyard, and a bridge across Red Bank Creek. The fish screen structure was designed to meet National Marine Fisheries Service (NMFS) and CDFW criteria for diversion flows of 80 to 2,500 cfs. The 2,500-cfs RBPP includes 11 vertical axial-flow pumps. Of the 11 pumps, 9 pumps (seven 250-cfs and two 125-cfs pumps) were installed to provide a total capacity of 2,000 cfs.

The Project would require a pumping capacity that exceeds the current capacity of the RBPP. The pumping plant includes two additional pump bays designed for the future installation of two 250-cfs vertical axial-flow pumps. Installation of two additional 250-cfs vertical axial-flow pumps into an existing concrete pump bay at the pumping plant would be required (Figure 2-10).

The Project also includes the operation and maintenance of the proposed additional pumps. Only one pump would be used for operations, the second would provide redundancy if needed. The proposed additional pumps at the pumping plant would allow for a total diversion up to 2,160 cfs in winter and spring, including up to 2,100 cfs for diversion to the proposed Sites Reservoir, and an additional 50 to 60 cfs for maintaining existing winter and spring flow operations of the Tehama-Colusa Canal.

Construction

Because the RBPP was designed for the future installation of additional pumps, construction activities would be minor and would include the following:[6]

- Removing the existing blind flange on the afterbay side of the pumping plant and replacing it with an 84-inch butterfly valve. A new 84-inch-diameter flanged steel pipe spool (approximately 3 feet long) would be connected to the new butterfly valve. Permanent supports would be required beneath the butterfly valve and flap gate.
- Installing the pump during the non-irrigation season to minimize interruptions to the irrigation delivery system. A mobile crane would be required to install the piping and appurtenances.
- Installing pumping plant unit bay stop logs, using a mobile crane if afterbay dewatering is necessary.
- Inspecting the pump bay and removing all sediment. Access to the bottom floor of the pumping plant would be provided at each bay via 4.5-foot by 7-foot access hatches and ladders.
- Removing roof hatches over the pump unit bay by using a mobile crane.
- Installing the pump in accordance with the pump manufacturer's written installation instructions, including constructing the pump pedestal and connecting the pump discharge nozzle to the discharge pipe via a new flexible coupling.
- Installing motor control centers, electrical equipment, electrical conductors, and SCADA system to integrate the pumps into plant operation.

Operations

The RBPP includes a control system to provide remote manual and remote auto control of pumps and associated appurtenances. The pumping plant and associated gravity conveyance system are designed to deliver water to the existing 17-acre settling basin located west of the Red Bluff Diversion Dam. Once in the settling basin, water would flow to Check No. 1 on the Tehama-Colusa Canal and the Corning Pumping Plant.

Maintenance

It is anticipated that the following preventive maintenance would be performed regularly for the vertical axial-flow pumps and appurtenances installed at the RBPP as part of the Project:

- Washing down or pressure washing, as necessary
- Checking for rust and corrosion, annually; maintaining all coatings
- Visually inspecting for damage or wear, monthly
- Assessing fluids and lubrication; address as necessary
- Inspecting pumping plant trash racks daily and removing debris as necessary
- Visually inspecting butterfly valves and flap gates, monthly

The additional pumps would neither increase the frequency of maintenance activities required at the RBPP nor require additional personnel to perform pump maintenance. However, the volume and timing of non-TCCA water diversions, through any of the pumps, could affect the sediment load distributed to

[6] A formal work plan that describes all construction activities would be required prior to the start of construction.

the TCCA system (i.e., the pumping plant forebay and settling basin). Increased sedimentation associated with non-TCCA water diversions may require more frequent dredging within the pumping plant forebay and settling basin.

2.1.3 Terminal Regulating Reservoir Complex

The TRR Complex includes the Project features and facilities that are geographically or functionally associated with the TRR. This complex would include the TRR Inundation Area, the dam that would form the reservoir, the TRR Pumping/Generating Plant and electrical switchyard, the GCID Main Canal Connection to TRR, the TRR Pipeline, TRR Pipeline Road, and the GCID Main Canal facilities modifications.

2.1.3.1 Terminal Regulating Reservoir

Water conveyed down the GCID Main Canal would be directed into the proposed TRR (Figure 2-11). A new pump station (the proposed TRR Pumping/Generating Plant) would then convey the water from the TRR via the proposed TRR Pipeline to the proposed Holthouse Reservoir. The TRR would be required to provide operational storage for the TRR Pumping/Generating Plant to balance normal and emergency flow variations between the upstream GCID Main Canal Pump Station, the 40 miles of connecting canal, and the TRR Pumping/Generating Plant.

The TRR would be located approximately 3 miles northeast of Holthouse Reservoir, adjacent to the GCID Main Canal. It would be constructed by a combination of excavation and embankment. The TRR would be composed of an earth embankment dam, concrete emergency overflow weir, an outfall standpipe, and a drain/spillway to Funks Creek to allow the reservoir to be drained for operation and maintenance and for emergency purposes. A 15-foot-wide gravel road (the proposed TRR Pipeline Road) would be constructed on top of the embankment to provide access to the TRR for operation and maintenance.

The embankment materials would be impervious earthen material compacted to DSOD specifications. The facility would be lined with plastic to limit the potential for seepage to adjacent agricultural lands. The TRR would be approximately 15 feet deep, with a maximum water depth of 12 feet, leaving 3 feet of freeboard. The maximum excavation depth of the TRR would be approximately 9 feet, and the maximum embankment height would be approximately 6 feet above existing grade. The total storage volume in the TRR would be divided into three operational components: (1) 2 feet of dead storage beneath the lower operating limit of the pump station; (2) 5 feet of normal operational storage; and (3) 5 feet of emergency storage. The maximum water surface elevation in the TRR could not exceed the water surface elevation in the GCID Main Canal because it is a gravity flow system. The plan area of the TRR would be approximately 150 acres (including the pond and embankments), and the reservoir would have a maximum storage capacity of 1,200 ac-ft. The TRR capacity is designed to provide normal operating and emergency storage as well as a forebay for the proposed TRR Pumping/Generating Plant.

Major associated features would include a GCID Main Canal transition bay, a connecting channel from the GCID Main Canal to the TRR, and a flow control inlet structure.

Construction

The total construction disturbance area would be approximately 150 acres. The proposed TRR site is currently in agricultural production (rice crops, annual row crops, and orchards). The total construction disturbance area would include the footprint of the facilities, the materials and equipment staging area, the area needed to construct the facilities, and access roads. This staging area could be the same as or near the

GCID Main Canal Connection staging area because the construction sites are adjacent to each other. In addition, the portion of the proposed Delevan Pipeline construction disturbance area adjacent to the TRR would also be used for the TRR staging area. As previously described, the TRR would be lined with plastic to limit the potential for seepage to adjacent agricultural lands.

Anticipated major construction activities include transportation of materials to the proposed worksite, clearing and grading the construction work area, staging of construction materials, dewatering, constructing fencing around the perimeter, constructing lighting, and excavation and embankment construction.

Operations

In coordination with GCID Main Canal operations, water would be diverted to the proposed TRR by gravity. Flow into the TRR would be controlled by the TRR inlet control gates. An integrated SCADA and communication system would coordinate operation between the Main Pump Station, GCID Main Canal, and the proposed TRR, TRR Pumping/Generating Plant, and Holthouse Reservoir. Flow to Holthouse Reservoir and the water surface in the TRR would be regulated by the TRR Pumping/Generating Plant. TRR pump operators would need continuous communication with GCID Main Canal and Pump Station operators to coordinate water allocations for irrigation demands and Sites Reservoir deliveries. TRR operation would likely be controlled remotely and would not require daily onsite personnel. The reservoir would be designed to allow emergency releases during operation first to the GCID Main Canal via the GCID Main Canal Connection to the TRR (when hydrologically feasible), and then to Funks Creek via the proposed drain/spillway. Release flows would be controlled by an energy dissipater and small concrete structure at the terminal end of the pipeline.

Maintenance

Typical maintenance of the proposed TRR would include dredging to remove sediment when it is drained, clearing vegetation from the slopes of the embankments, and maintaining the gravel service road atop the embankment. Draining the TRR for maintenance would be accomplished by a standpipe and drain structure at the invert of the reservoir. Drained water would be conveyed to Funks Creek via the proposed TRR to Funks Creek Pipeline. Draining/dredging of the TRR would likely be required every 7 to 10 years, depending on variable sediment transport conditions in the Sacramento River and the surrounding areas. Sediment removed during the dredging activities would be placed on the surrounding levees' embankments.

Procedures will be incorporated to reduce impacts from lighting (e.g., directional lighting and non-reflective materials).

2.1.3.2 Terminal Regulating Reservoir Pumping/Generating Plant and Electrical Switchyard

The purpose of the proposed TRR Pumping/Generating Plant would be to pump water from the proposed TRR to the proposed TRR Pipeline, which would convey water to the proposed Holthouse Reservoir. Return flows from the proposed Holthouse Reservoir to the proposed TRR would flow through the TRR Pumping/Generating Plant to generate power.

The TRR Pumping/Generating Plant would pump 1,800 cfs of water from the TRR to Holthouse Reservoir. The TRR Pumping/Generating Plant would generate power from flows released through it, with a maximum return flow of 900 cfs. The return flow would provide up to 800 cfs for the GCID Main Canal west of Funks Creek (the canal capacity) plus an additional 100 cfs that would be released from

TRR directly to other local irrigation ditches or to Funks Creek to meet water supply demands. The minimum water elevation in Holthouse Reservoir for operation of the TRR Pumping/Generating Plant would be 112 feet, and the maximum water elevation for operation would be 121.5 feet.

The TRR Pumping/Generating Plant would be located adjacent to the north side of the TRR (Figure 2-11), approximately 3 miles northeast of Holthouse Reservoir. The TRR Pipeline would begin on the north side of the TRR. The TRR Pumping/Generating Plant would include two 620-cfs and two 325-cfs Francis Vane pumps for pumping and one 750-cfs Kaplan turbine for generating during release flows.

Structures associated with the TRR Pumping/Generating Plant would include the following features:

- Mechanical features:
  - 84-inch online spherical valve on each discharge line
  - Air chambers and butterfly valves with hydraulic power units
  - Compressors
  - Generators
  - Gantry crane – 100 tons
  - Service air and water system
  - Acoustical flowmeter on each discharge line
- Electrical features:
  - Switchyard transformers
  - Control system
  - Switchgears
  - Grounding grids
  - Control cabinets
- Refilling of pump units

The discharge lines may periodically need to be dewatered for inspection and maintenance. These lines would need to be filled at a slow rate to allow the release of air through air and vacuum valves. To accomplish this, one or two 100-cfs pump units would be installed or filling bypass pipelines can be provided around isolation valves.

The proposed TRR Electrical Switchyard would be located within the footprint of the TRR Pumping/Generating Plant (Figure 2-11) and would be approximately 100 feet long by 50 feet wide.

Construction

The total construction disturbance area would be approximately 1 acre and would include the footprint of the facilities, the materials and equipment staging area, the area needed to construct the facilities, and access roads. The construction disturbance area would fall within the construction disturbance area of the proposed TRR Pipeline (discussed below).

Excavation would be conducted using temporary slopes of 1.5:1 for the 25-foot-deep trench along the pipelines and a temporary slope of 2:1 for the 40-foot-deep foundation of the pump stations. Tied back sheet pile walls can also be used for the pump station excavation. The pump station foundations would be excavated in in situ materials, and no major improvements to the foundations would be required. During construction, the topsoil material would be excavated, stockpiled separately, and replaced to support native grass and plant growth.

The total construction disturbance area for the switchyard would include the footprint of the proposed switchyard, the materials and equipment staging area, electrical transformer area, and temporary access roads. The construction disturbance area for the TRR Electrical Switchyard would be located within the Delevan Pipeline construction disturbance area.

Anticipated major construction activities include clearing and grading the construction workspace, placing necessary construction materials at staging areas, and preparing the switchyard pad. Anticipated ground-disturbing activities during construction include the following:

- Transporting materials to the Project site
- Clearing and grading the construction workspace
- Placing construction materials at staging areas
- Dewatering
- Excavating the forebay (approach channel) and pumping plant
- Pile driving if required
- Constructing the forebay, pump house, and pump bay
- Installing the pond liner
- Performing site restoration after construction is complete

Operations

An integrated SCADA and communication system would be used for the proposed TRR Pumping/Generating Plant. Flows to the proposed Holthouse Reservoir and the water surface in the proposed TRR would be regulated by the TRR Pumping/Generating Plant. TRR pump operators would need continuous communication with GCID Main Canal and Pump Station operators to coordinate water allocation for irrigation delivery and for proposed Sites Reservoir filling. The proposed switchyard would be operated remotely.

Maintenance

Daily maintenance and monitoring would likely be required. Regular maintenance and inspections would be required for each pump unit and the related equipment, such as gates, valves, and electrical equipment, with possible additional inspections and maintenance needed after earthquakes, storms, or floods.

The proposed switchyard and associated overhead power lines would require maintenance once or twice a year. Maintenance activities may include annual washing and cleaning of insulating equipment, preventive maintenance, scans of the switchyard under full load, and routinely scheduled testing to meet WECC requirements. Regular maintenance activities would include landscape maintenance and inspections for damage by animals.

2.1.3.3 GCID Main Canal Connection to Terminal Regulating Reservoir

The purpose of the proposed connection from the GCID Main Canal to the TRR would be to allow water from the canal to enter the TRR.

The connection from the GCID Main Canal to the TRR would be located in the east bank of the canal north of Funks Creek (Figure 2-11). An inlet control structure with multiple radial control gates would be provided to regulate flows into and out of TRR. On the main canal, the existing Funks Check at Funks Creek can be refurbished to help balance and regulate flows in and out of the TRR, or a new check structure could be constructed based on future condition assessments. The benefit to keeping the existing

Funks Check operational is that it would minimize impacts to GCID Canal operations during TRR construction.

Construction

The total construction disturbance area would be approximately 1 acre and would include the footprint of the facilities, the materials and equipment staging area, the area needed to construct the facilities, and access roads. This construction disturbance area would be within the larger construction disturbance area for the proposed TRR. Anticipated ground-disturbing activities during construction include the following:

- Transporting materials to the Project site
- Clearing and grading the construction workspace
- Placing construction materials at staging areas
- Dewatering and building a temporary bypass channel
- Excavating canal energy dissipation bay
- Performing reservoir inlet excavation and embankment construction
- Constructing check structure

It is anticipated that the proposed reservoir inlet from the GCID Main Canal to the proposed TRR would be constructed by first building a temporary bypass channel to the west of the existing canal alignment. The temporary bypass channel would be approximately 1,000 feet long and would connect into the GCID Main Canal upstream and downstream of the construction zone to supply water to the remaining reach of the canal downstream of the TRR area. The temporary bypass channel would be constructed using a combination of excavation, earth embankment, and sheetpile walls to isolate the construction site from the diversion canal. Following completion of the new check structure, the temporary bypass channel would be filled in, earth embankments and sheetpile walls would be removed, and the area would be restored to preconstruction conditions.

Operations

Gate operation of the new GCID Main Canal check structure would normally be controlled automatically, with an option for local or remote manual control. Gate operation would be established using either upstream or downstream water-level controls, depending on the overall operating regime for the future canal system.

Flow into the reservoir would be controlled by the proposed TRR inlet control gates. An integrated SCADA and communication system would be required to coordinate operations between the GCID Pump Station, GCID Main Canal, and the proposed TRR, TRR Pumping/Generating Plant, and Holthouse Reservoir. SCADA operation and monitoring would be conducted remotely and would not require daily onsite personnel. Instead, daily operation and monitoring would be managed from a central location.

Maintenance

Maintenance activities would include: (1) removing debris that could collect upstream of check structures, (2) maintaining gate operators to provide adequate control of gates, (3) periodically repairing and repainting the connection, and (4) dredging the dissipation bay and inlet channel for sediment concurrently with the proposed TRR dredging.

2.1.3.4 Terminal Regulating Reservoir Pipeline and Terminal Regulating Reservoir Pipeline Road

The proposed 3.5-mile-long TRR Pipeline would convey water from the proposed TRR to the proposed Holthouse Reservoir (Figure 2-11). The TRR Pipeline would be bi-directional, allowing water to be pumped from the TRR to Holthouse Reservoir for storage and allowing water to flow by gravity from Holthouse Reservoir for release to the TRR/GCID Main Canal and other canals. Water released from Holthouse Reservoir would flow through the turbine at the proposed TRR Pumping/Generating Plant at the end of the TRR Pipeline to generate electricity.

The proposed TRR Pipeline would have a capacity of 1,800 cfs to convey water that is pumped from the TRR to Holthouse Reservoir. The capacity of the TRR Pipeline to convey water by gravity flow from Holthouse Reservoir to the TRR would also be 1,800 cfs, but the demand would only be approximately 900 cfs based on the GCID Canal capacity west of the TRR and other local irrigation ditch demands to be met by the TRR. The TRR Pipeline would consist of two 12-foot-diameter reinforced concrete pipes to convey the pumping flow. It would be buried a minimum of 10 feet (to top of pipe) below the ground surface. Facilities associated with the TRR Pipeline would include blowoff and air valve structures.

The proposed alignment of the TRR Pipeline would cross the existing GCID Main Canal and a primary PG&E natural gas transmission line. At these locations, the bore-and jack-construction method would be used. Bore-and-jack construction would entail excavating a large pit on each side of the existing infrastructure (highway, railroad, or canal) and then tunneling horizontally under the structure. Because of the high water table in the area, this construction method would require that the area be dewatered. All additional work required for bore-and-jack construction would be conducted within the construction disturbance area and would not require the disturbance of additional land.

The TRR Pipeline would also cross the easement of an existing PG&E 230 kV line. It is expected that the pipeline can be trenched across the utility easement and that boring and jacking will not be required. No permanent aboveground structures associated with the pipeline would be constructed, other than a 16-foot-wide, 2.1-mile-long gravel maintenance road (the proposed TRR Pipeline Road), from the GCID Main Canal to the proposed Holthouse Reservoir Spillway and Stilling Basin.

Crossing of other existing facilities such as gas lines, water lines, sewer lines, and communications lines would be accomplished using the bore-and-jack or tunneling method or existing facilities would be relocated as determined most appropriate. Disruptions to these utilities would be minimized to the extent possible, and the ground surface would be restored to preconstruction conditions after installation of the TRR Pipeline. Construction activities for the proposed TRR Pipeline would occur within the identified construction disturbance area and would require only slightly more excavation than is required for the pipeline.

<u>**Construction**</u>

The construction disturbance area for the proposed TRR Pipeline would be approximately 335 feet wide from the TRR to the proposed Holthouse Reservoir (3.5 miles). The Delevan and TRR Pipelines would be in a common trench excavation in the disturbance area. The total construction disturbance area, which would also include a temporary concrete batch plant, would be within the construction disturbance area for the proposed Delevan Pipeline (discussed below). Anticipated major construction activities include the following:

- Clearing and grading the construction workspace

- Stockpiling topsoil
- Placing necessary construction materials at staging areas
- Transporting materials to the Project site
- Trenching/excavation of pipeline route
- Dewatering
- Performing bedding preparation
- Performing onsite fabrication of pipe
- Installing pipe and valves
- Addressing crossings of roads and utilities
- Backfilling and compacting trench
- Replacing topsoil
- Revegetating and restoring pipeline route
- Constructing a gravel maintenance road

Operations

Operation of the proposed TRR Pipeline would not require daily workers at the site.

Maintenance

Periodic inspection and maintenance of the proposed TRR Pipeline facilities would likely occur once per year, with possible additional inspections and maintenance needed after storm or flood events. Annual inspections would not necessarily include dewatering of the pipelines. Dewatering for inspection may occur on a 5-year cycle, or when a pipeline problem is expected. Permanent rights-of-way for the land overlying the pipeline would be maintained to provide future access. The proposed gravel maintenance road would be graded, as needed.

2.1.3.5 GCID Main Canal Facilities Modifications

The GCID Main Canal delivers water from the Sacramento River to water users along its route from its diversion point northwest of Hamilton City to southeast of the city of Williams. The canal is an unlined earthen channel, with capacity varying from 3,000 cfs at the upstream end to 300 cfs at the southern terminus.

Water is pumped by the Hamilton City Main Pump Station into the GCID Main Canal. The existing canal facilities include the intake and bypass channels, fish screens, main pump station and forebay, headgates, and the gradient facility. These facilities are located approximately 5 miles northwest of Hamilton City. Project improvements in this area include a new headgate structure and canal lining. A railroad siphon replacement is also proposed near Willows.

For the Project, the existing headgate structure would be left in place and continue to serve as a bridge between County Road 203 and County Road 205. The existing headgate structure would continue to operate during construction of the new headgate structure, and diversion activities would continue throughout construction. The existing headgate would not be adequate for proposed winter operation during high river flows, because of the large head-drop (decrease of water elevation) across the structure during high river levels. A new headgate structure would be constructed upstream of the existing structure. The new headgate structure would include three automated gates (two vertical roller gates and one radial gate).

The water level and flow control functions would involve operating conditions that would result in water surface drops across the headgate of between 3 and 15 feet, which would require a set of energy dissipater blocks immediately below the gates to slow down and stabilize the water discharging under each gate.

The canal reach immediately downstream of the new headgate structure would be lined with concrete for approximately 200 feet to prevent erosion due to the turbulent flow conditions.

The Union Pacific Railroad siphon at Mile 26.6 does not meet design and operation criteria for the Project and would need to be replaced. The existing railroad siphon structure was built in the early 1900s and includes two 6-foot-diameter barrels and five 7.25-foot by 6-foot barrels. At the existing maximum flows of approximately 2,000 cfs, the head loss across the railroad siphon due to high flow velocities and poor entrance and exit transitions reduces upstream canal freeboard to marginal conditions. Because of the structure’s age, hydraulic capacity restrictions, and use as a major transportation link, it should be replaced. The new structure would consist of three prefabricated box culverts. Typical future maximum velocity and head losses would be approximately 4 fps and 0.2 foot, respectively.

The proposed replacement of the railroad siphon would require coordination and planning with railroad operators. Construction restrictions may exist regarding minimizing interference with regular railroad operations. To the extent possible, replacement of the railroad siphon would take place during periods of lowest train traffic, and railroad shutdown time would be minimized.

Construction

The total construction disturbance area would consist of the existing canal prism, existing operation and maintenance roads, and an additional 50 feet on both sides. The total construction disturbance area would include the footprint of the facilities (new headgate structure, canal lining, and replacement of railroad siphon), the materials and equipment staging area, the area needed to construct the facilities, and access roads. All the construction activities for the new facilities would occur within the existing GCID right-of-way.

Water delivery to the GCID service area would be maintained during the primary irrigation season (early April through mid-October). The GCID Main Canal is typically out of service each year between early January and late February for maintenance. Construction activities would be scheduled during this maintenance period whenever possible. If construction activities are required outside of the maintenance period, a temporary bypass channel would be built around the construction site to allow diversion water to flow past and maintain regular canal operation. The temporary bypass channel would be constructed within the existing GCID right-of-way by using a combination of excavation, earth embankment, and sheetpile walls to isolate the construction site from the canal. After completion of construction, the temporary bypass channel would be filled in, earth embankments and sheetpile walls would be removed, and the area would be restored to preconstruction conditions.

Operations

The intake and fish screen facility would operate year-round and would be similar to existing operations. Use of the canal for conveyance to the Sites Reservoir would require increased automation between the GCID facilities and other Project conveyance systems. The available capacity for winter operation (October through March) of Project conveyance would range from a minimum of approximately 1,270 cfs during an average November to a maximum of approximately 1,750 cfs during an average March. There is currently little to no available capacity from April through September. To accommodate the Project, flows need to be monitored and controlled consistently. SCADA operations and monitoring could be conducted remotely and would not require daily onsite personnel. Instead, daily operation and monitoring would be managed from a central location and would not require additional staff beyond existing personnel.

Maintenance

Required maintenance activities would be similar to current maintenance. Periodic inspection and maintenance of mechanical systems, such as the screen cleaning system, would be required. Water levels would continue to be monitored automatically. Additional sediment and debris removal activities may also be required because of increased diversions during high river water levels.

Debris that enters the intake channel can block flows in the channel, get entangled at the face of the fish screen, block the water control structure, or cause other disruptions to proper operating conditions. Typically, debris builds up during winter flood flows and is removed at the beginning of the irrigation season in late March to early April. Because of winter diversions, a larger debris load is expected at the intake channel, screen structure, and bypass channel. It is expected that debris removal would be required during the winter to maintain proper operating conditions. It may be necessary to retrofit the mouth of the intake channel with a floating log boom to deflect larger debris and increase protection to the fish screens.

The upper one-third of the intake channel is typically dredged once every 3 years, and the entire channel is dredged once every 10 years. The volume of the dredged materials varies from approximately 30,000 to 130,000 cubic yards. The future volume of sediment in the intake channel is expected to increase with increased Project-related winter operation, and the following assumptions were made regarding future dredging operations:

- A larger dredge with increased capacity and working depth than is currently used would be required. Supporting equipment, such as a high-capacity crane equipped with a grappling hook and clamshell, would be required to assist in debris removal.
- Dredging operation would occur year-round.

Dredged materials would continue to be placed on the 11-acre offsite disposal location southwest of the pump station, at sites on Montgomery Island, and along the canal banks. The new headgate structure would require annual inspection and maintenance including painting and motor control unit inspections, similar to typical check structures along the canal. Expected periodic maintenance activities for the canal that would require onsite personnel include the following:

- Maintaining canal banks to repair sloughing and erosion damage
- Filling in animal burrow holes
- Removing vegetation
- Removing debris from upstream of the check structures
- Maintaining gate operators
- Repairing and repainting gates

2.1.4 Delevan Pipeline Complex

The Delevan Pipeline Complex includes the Project features and facilities that are geographically or functionally associated with the Delevan Pipeline. This complex would include the Delevan Pipeline and the Delevan Pipeline Intake/Discharge Facilities (flat plate fish screen structure, forebay, pumping/generating plant and switchyard, maintenance and electrical buildings, and other electrical and mechanical features).

2.1.4.1 Delevan Pipeline Intake/Discharge Facilities

The proposed Delevan Pipeline Intake/Discharge Facilities were designed to divert water from the Sacramento River to the proposed Holthouse Reservoir for storage in the Sites Reservoir (Figure 2-12). The facilities would be used to release water from Sites Reservoir to the Sacramento River for downstream uses and to generate electricity.

The proposed Delevan Pipeline Intake/Discharge Facilities would be located on the Sacramento River at River Mile 158.5 in Colusa County. The river intake/outlet would be located immediately downstream of the existing Maxwell Irrigation District intake and across the river from Moulton Weir, approximately 10 miles northeast of the town of Maxwell. The total footprint of the site would be approximately 20 acres including the pumping/generating plant buildings, fish screen, and forebay.

Water that passes through the fish screen would be pumped up approximately 150 feet vertically through two 12-foot-diameter concrete pipes to Holthouse Reservoir. Water would also be able to flow by gravity back from Holthouse Reservoir to the Sacramento River. Reverse-flow water would flow through the turbines to generate electricity. The water would then flow through the forebay and fish screen at a velocity of 1 fps into the Sacramento River. The 1-fps exit velocity is based on NMFS criteria for adult salmon diffusers to allow the water to exit the screen without extending a false attraction flow to the salmon.

The proposed pumping capacity of the Delevan Pipeline Intake/Discharge Facilities would be 2,000 cfs when diverting water from the Sacramento River and 1,500 cfs when releasing water to the Sacramento River (and generating electricity). Total lift capacity of the facility would be approximately 150 feet.

The facilities at this site would include the following:

- **Flat plate fish screen structure –** The fish screen structure would prevent fish in the Sacramento River from entering the pump station. The fish screen would also function as an outlet structure, dissipating the energy of the water being released to the river.

  The fish screen structure would consist of thirty-two 13-foot-tall by 15-foot-wide flat plate screens. The structure would be approximately 560 feet long (the distance created by the 32 screens bays, the additional two blowout bays, and room for the screen cleaning equipment). Panels would be positioned with minimum protrusion into the river channel parallel to river flow. This facility would be designed in compliance with NMFS and CDFW fish screen criteria.

- **Forebay –** After water passes through the fish screen, it would flow into the forebay for the pump station. The forebay would allow fine sediment that is carried in the water to settle out. The forebay would store water before it is pumped out by the pumping/generating plant. The forebay would be lined with a generally impervious layer of material to limit the potential for seepage to adjacent agricultural lands.

  A sediment spoil area would be provided on the northeastern end of the forebay for sediment removal. To remove sediment, a long-arm excavator would be required in combination with a suction dredge or a clamshell. The suction dredge or clamshell would be used to remove the additional sediment in the area where the excavator could not reach.

- **Pumping/generating plant and electrical switchyard –** The Delevan Pipeline Intake/Discharge Facilities would pump water from the afterbay to Holthouse Reservoir and would release water from

Holthouse Reservoir. The Delevan Pipeline Intake/Discharge Facilities building would be approximately 250 feet long by 80 feet wide and would have multiple stories to accommodate mechanical and electrical equipment. The pumping/generating plant would consist of four 500-cfs pumping/generating units (plus one standby unit) to provide a total pumping capacity of 2,000 cfs. Water would be pumped by the pumping/generating plant 150 feet up through the 13.5-mile-long Delevan Pipeline. When water is released from Sites Reservoir and through Holthouse Reservoir, the intake facilities would function in reverse, capturing the energy and generating electricity. Release flows of up to 1,500 cfs could be passed through two 750 cfs turbines in the pumping/generating plant.

An electrical switchyard would be required adjacent to the pumping/generating plant that would step down the electrical voltage from high-voltage lines to a lower voltage that can be used by the pumps and other machinery in the plant. A four-breaker ring bus would be required at the switchyard. The ring bus would have multiple metallic poles with heights varying between 15 and 60 feet. The switchyard would be surrounded by a 6- to 8-foot-high chain-link fence with barbed wire or concertina wire along the top.

- **Mechanical and electrical buildings –** Mechanical and electrical buildings would be constructed on the site to house equipment needed for the operation of the pumping/generating plant. The mechanical and electrical buildings would each be approximately 5,000 square feet. Facilities would be sited and designed such that electrical equipment would be sealed or installed at an elevation above the 100-year flood stage plus 2 feet of freeboard (elevation 82 feet).
- **Other mechanical and electrical features –** Miscellaneous features may include the following:
  - Spherical valves
  - Air chambers and butterfly valves
  - Compressors, generators, and cranes
  - Service air and water systems
  - Acoustical flowmeters
  - Governors and other control devices
  - Transformers
  - Switchgears
  - Grounding grids
  - Controls cabinets

The proposed Delevan Pipeline Intake/Discharge Facilities site would be protected from flood conditions by installing all mechanical and electrical equipment above the 100-year flood elevation (82 feet above msl). The forebay would be submerged during extreme flood events and would be designed to withstand these conditions. The site naturally slopes upward away from the river, and a flood protection levee with a height of 90 feet above msl exists along the river approximately 275 feet west of the river. A wide berm or ring levee would be constructed behind the flood protection levee to provide additional protection for the equipment and facilities. The berm would encircle the afterbay; the Delevan Pipeline Intake/Discharge Facilities and the mechanical and electrical buildings would be constructed on top of the berm.

Construction

The total construction disturbance area would be approximately 20 acres. An additional disturbance area around the construction site would be required for staging of materials, equipment, and construction offices. This staging area would be within the construction disturbance area for the proposed Delevan

Pipeline; the area is estimated to be 1,700 feet by 1,000 feet (a total of 40 acres) and would be located north of and adjacent to the facility site.

To isolate the proposed construction area from the Sacramento River, a cellular sheetpile coffer dam would be installed in the river at the location of the fish screen. Approximately 1,200 feet of sheet piles would be required to build the cofferdam. From the river bank at the upstream and downstream ends of the fish screen structure, the cofferdam would extend approximately 40 feet into the water from the river bank. Installation of the coffer dam would involve driving interlocking metal sheet piles into the ground one section after another until the entire length of the intake structure is isolated from the river. The height of the coffer dam would match the height of the surrounding levees. The fish screen structure would be constructed within the coffer dam. This will include driving foundation piles, placing a bottom seal mat, dewatering the cofferdam, and constructing the fish screen structure. These features would be removed after the fish screen structure is complete. The area behind the fish screen structure would be dewatered prior to construction of the pumping plant.

Anticipated major construction activities include the following:

- Transporting materials to the construction site
- Clearing and grading the construction workspace
- Placing necessary construction materials at staging areas
- Constructing a coffer dam within the Sacramento River
- Driving foundation piles for fish screen structure within the coffer dam
- Placing seal mat within the cofferdam
- Constructing the fish screen structure
- Dewatering the work area within the river
- Excavating the forebay and pumping plant site
- Constructing electrical switchyard
- Constructing the berm/ring levee
- Constructing the pump house and pump bays
- Constructing the forebay structure
- Constructing the fish screens
- Removing the coffer dam
- Filling and regrading where needed at site
- Restoring disturbed areas following the completion of construction

As previously discussed, the forebay would be constructed with a generally impermeable material to minimize or eliminate seepage to adjacent properties. Construction of the proposed Delevan Pipeline Intake/Discharge Facilities would require relocation of sections of the Maxwell Irrigation District and Tuttle Ranch pipelines located within the construction disturbance area. To minimize impacts on the operations of the Maxwell Irrigation District facilities during construction, either a temporary bypass pipeline would be constructed to provide water to Maxwell Irrigation District users, or arrangements would be made for supplemental water to be conveyed into the Colusa Basin Drain for the Maxwell Irrigation District to deliver to its users. A temporary bypass pipeline would be constructed to provide water to Tuttle Ranch to irrigate its orchards.

Operations

Proposed diversion operations would be such that a minimum of 4,000 cfs would remain in the river channel immediately downstream of the diversion point. The assumed associated minimum water surface elevation at this design condition is 51 feet. The invert of the screen structure would be set at 38 feet, 4 feet above the invert of the river, to reduce sediment deposition in front of the screen panels.

Operation intake and discharge modes are summarized as follows:

- **Intake mode** – Intake mode refers to the proposed operation of pumping Sacramento River water to the Sites Reservoir when suitable flows and velocities occur in accordance with pre-established diversion criteria (see Section 4.1 Operational Scenario). Water would move through the proposed fish screen and into the forebay, through the proposed Delevan Pipeline to the proposed Holthouse Reservoir, and then to Sites Reservoir. During this operation, the screen cleaning mechanism would be working continuously to prevent buildup on the screen panels, the sediment removal system would be operating, the pumps would be operating, and the SCADA system would be monitoring water levels and pressures across the screen.

- **Discharge mode** – Discharge mode refers to the operation when water from Sites Reservoir would be released through the pumping plant into Holthouse Reservoir to generate electricity, into the Delevan Pipeline to discharge to the forebay, and then released through the fish screen into the Sacramento River.

As is customary for any large-scale diversion on a river, if a pressure differential greater than 1.5 feet across the fish screen occurs, an “emergency mode” would be activated. The pumps would stop operating, and the sluice gates would close to allow the forebay to fill up to match the water surface of the Sacramento River. If the pressure differential increases to above 3 feet, the two blowout panels would trigger and release to allow an inflow of river water so that the water levels equalize.

A SCADA system would control all operational modes for the diversion without the need for onsite staffing. The system would be located onsite and would broadcast status information to a manned remote location. A sediment removal system would be installed within the fish screen bays, moving sediment back into the river channel or into the forebay. Sediment in the forebay would be mechanically removed annually to maintain optimal operational hydraulics.

Maintenance

The proposed Delevan Pipeline Intake/Discharge Facilities would likely be staffed daily to maintain, operate, and monitor the facility. It is anticipated that employees would be onsite during diversions (predominantly in winter) and releases (predominantly in summer). Activities would include:

- Periodic checking and adjustment of flow distribution through fish screens
- Inspection and periodic maintenance of fish screen cleaning system, debris removal as needed
- Periodic removal of accumulated sediment
- Inspection and periodic maintenance (including lubrication) of operating equipment
- Periodic testing of standby equipment

2.1.4.2 Delevan Pipeline

The proposed Delevan Pipeline would convey water approximately 13.5 miles from the Sacramento River to the proposed Holthouse Reservoir to fill the Sites Reservoir and to release water from Holthouse Reservoir to the Sacramento River (Figure 2-1). The Delevan Pipeline would parallel the proposed TRR Pipeline at its western end and would share a common trench and outlet structure into Holthouse Reservoir (Figure 2-1).

The Delevan Pipeline would have a 2,000-cfs capacity to convey water from the proposed Delevan Pipeline Intake/Discharge Facilities (on the Sacramento River) to Holthouse Reservoir. The capacity of the Delevan Pipeline to convey water from Holthouse Reservoir to the Sacramento River would be 1,500 cfs. Because of the available head elevation, releases through the Delevan Pipeline could be made to the river by gravity without the need for pumping. The Delevan Pipeline would consist of two 12-foot-diameter reinforced concrete steel cylinder pipes with gasketed bell and spigot joints. The pipeline would begin at the Delevan Pipeline Intake/Discharge Facilities near the Sacramento River and would be aligned to the west until reaching the GCID Main Canal. At the GCID Main Canal, the Delevan Pipeline would be aligned southwesterly and would parallel the TRR Pipeline in a shared trench until it reaches the Holthouse Reservoir Complex.

Facilities associated with the Delevan Pipeline would include blowoff structures, air valve structures, and an outlet and energy dissipater structure. Blowoff structures would clean low points in the pipeline and allow dewatering. Blowoff valves would release water from the pipeline. These valves are located at major water conveyances so that water can be drained directly into the river or canal and carried downstream. Air and vacuum valves would be needed to evacuate air within the pipeline during filling and to supply air during normal dewatering, as well as to release accumulated air. Manholes would be used to access the pipeline for future maintenance or inspections. Aboveground features associated with the Delevan Pipeline are listed in Table 2-11.

Table 2-11
Aboveground Features Associated with the Proposed Delevan Pipeline

Aboveground Feature	Height Above Ground	Color	Appearance	Feature Locations
Manhole and air valve	4 feet maximum, 108-inch-diameter	Gray	Concrete box	At high points and at a minimum of every 2,500 feet along the pipeline
Manhole and blowoff valve	1 foot maximum, 108-inch-diameter	Gray	Concrete box	At low points and at the Sacramento River and the GCID Main Canal crossing

The proposed alignment of the Delevan Pipeline would require five major crossings: SR 45, SR 99, Interstate 5 (I-5), Union Pacific Railroad, and the GCID Main Canal. The proposed pipeline route would also cross easements of the existing PG&E 230 kVA transmission line and a major PG&E natural gas pipeline. Other than a gravel maintenance road (i.e., the TRR Pipeline Road), no permanent aboveground structures would be constructed where electric utility easements and the pipeline easements would intersect. Other existing infrastructure that the pipeline could cross include gas lines, water lines, sewer lines, and communications lines. The pipeline would also cross the Colusa Basin Drain and Hunter's Creek (also called Logan Creek). These major crossings would be accomplished by using bore-and-jack construction techniques or the facilities would be relocated within the construction corridor.

The Colusa Basin Drain and Hunter's Creek crossing locations would be at the northern end of the drain. The crossing will be made by boring and jacking the pipes under the drain.

Construction

Assuming open-trench construction methods, the construction disturbance area to install the proposed Delevan Pipeline would be large enough to accommodate temporary stockpiling of the trenching spoils. Because of the large volume of spoils and the linear construction process (the entire length would not be constructed at the same time), the area would also be used for construction staging associated with other facilities, such as a temporary concrete batch plant (the same plant as used for the proposed TRR Pipeline).

The Delevan Pipeline would likely be constructed in three independent and concurrent sections. Two of the sections would likely begin from the same point and move in opposite directions. As pipelines are installed and tested, the trench would be backfilled to minimize the amount of open trenching. The construction disturbance area for the Delevan Pipeline would be a linear area, 13.5 miles long and approximately 300 feet wide from the Sacramento River to the proposed TRR (10 miles), and approximately 335 feet wide from the TRR to the proposed Holthouse Reservoir (3.5 miles). The additional width of the construction disturbance area would accommodate the TRR Pipeline from the TRR to Holthouse Reservoir. An additional construction disturbance area of 20 acres would be required for a concrete batch plant. Construction disturbance area boundaries would be marked with tape, flagging, or fencing. The construction disturbance area would pass through multiple areas close to residences and would intersect with several roads. The entire Delevan Pipeline construction disturbance area would not be fenced. In high-visibility areas or where the construction site requires a higher level of protection for security or safety, a temporary 6-foot-high chain-link fence would be installed around the worksite.

Anticipated major construction activities include the following:

- **Trenching/excavation approach** – Approximately 6.3 million cubic yards of material would need to be excavated for the Delevan Pipeline trench. Topsoil would be stockpiled separately from other excavated materials and backfilled to pre-Project soil profiles. Trench excavation would be approximately 23 feet deep. For the portion of the Delevan Pipeline that would be installed between the Sacramento River and the TRR, the trench would be approximately 120 feet wide. Two 12-foot-diameter pipelines would be installed from the Sacramento River to the TRR. Trench excavation for the 3.5 miles from the TRR to Holthouse Reservoir would be approximately 165 feet wide to accommodate both the Delevan and the TRR pipelines. Four 12-foot-diameter pipes would be installed from the TRR to Holthouse Reservoir. Trench side slopes would be approximately 1:1.5. No shoring would be installed under normal excavation conditions. Special conditions at some locations (unknown at this time) may require additional depth or width, steeper or flatter side slopes, or shoring to accommodate localized soil conditions.

  The Delevan Pipeline trench would be excavated using trenchers and tracked and/ or wheeled excavators and backhoes, or pushed up using bulldozers. The type of soils encountered would determine the type of equipment used for trenching. Harder soils, such as caliche, would require larger trenchers. In specific areas, vacuum excavation, "pot-holing" with a backhoe, or manual digging may be necessary to locate buried utilities. Excavation activities similar to the Delevan Pipeline excavation would also be conducted for electrical transmission pole footings that would be installed within the pipeline right-of-way. The following activities would occur simultaneously with the pipeline excavation:

- **Dewatering** – Dewatering of the trench would be necessary in many locations and could be permitted to discharge into local irrigation ditches and drainage canals and/or the Colusa Basin Drain after settling of silt. Silt would be disposed of with excavated material. Dewatering would be in accordance with Central Valley Regional Water Quality Control Board (RWQCB) requirements and California Storm Water Quality Association BMPs for dewatering.

- **Onsite fabrication of pipes** – It is possible that all pipes would be fabricated onsite with a concrete batch plant. A fabrication and curing area for the pipes would be located within the 20-acre batch plant footprint. Pipes would be fabricated onsite using imported steel cylinder and straight lengths of reinforcing steel. It is also possible that pipe would be manufactured off site and shipped to the site by truck or rail.
- **Bedding preparation** – Bedding material would be installed in the trench before installation of the pipeline. Bedding material would likely be sand, or cemented, controlled density fill. The bedding material would be poured into the trench by dump truck and spread along the bottom of the trench by a small grader or similar equipment.
- **Installation of pipe and valves** – The finished sections of the pipes would be transported from the fabrication and curing area to the installation location primarily along the pipeline route on flatbed trucks traveling along the construction access roadway (within the construction disturbance area). These trucks would cross public roadways. Pipe sections would be offloaded from flatbed trucks and placed in the excavated pipeline trench by a 50-ton capacity crane. Once in place, the joint would be covered with a cement-based sealing compound. At valve locations, prefabricated valves would be delivered to the site on flatbed trucks and installed into previously constructed structures within the trench using the same crane.
- **Backfill of trench** – Approximately 5 million cubic yards of material would be needed to backfill the trench after the pipes are installed. Excavated material would be reused to backfill the trench or moved to other Project locations for use, to the extent possible, after placement of pipes. Topsoil would be returned to approximate pre-Project soil profiles. Excess spoils from the excavation (estimated 1.3 million cubic yards) would be spread on adjacent agricultural lands of willing landowners within the 800-yard-wide corridor along the pipeline (outside of potential flood inundation areas), used as backfill at the proposed Delevan Pipeline Intake/Discharge Facilities, or placed in the Sites Reservoir footprint. Excess spoils may also be used to reinforce existing levees in the area as part of a separate program, which would be subject to a separate environmental analysis. Reuse of excavated material may be limited by water content of excavated material and soil compaction requirements. Spreading or stockpiling of excess soils would only occur outside of potential flood inundation areas in accordance with U.S. Army Corps of Engineers and local flood control district requirements.

Operations

Operation of the proposed Delevan Pipeline would not require daily workers at the site.

Maintenance

Periodic inspection and maintenance of the proposed Delevan Pipeline would likely occur once per year, typically in April and May, with possible additional inspections and maintenance needed after earthquakes or storm or flood events. Permanent 50-foot rights-of-way for the land overlying the pipeline would be maintained for future access. Disturbed lands would be returned to agricultural production after pipeline construction.

2.1.5 Overhead Power Lines and Substations

Power for the Delevan Pipeline Intake/Discharge Facilities would be provided from the south to avoid placement of new overhead power line corridor next to residences and agricultural operations adjacent to

Delevan Road. An approximately 6-acre substation would be constructed west of the City of Colusa and would tie into an existing WAPA lines. The new 115 kV Delevan Overhead Power Line would run north from the proposed substation, adjacent to and in parallel with the existing PG&E 65 kV transmission lines along Highway 45 to the proposed intake/discharge facility on the Sacramento River. Approximately 114 towers/poles would be required for the north-south alignment.

In addition, a proposed substation associated with an overhead line tie-in to the existing WAPA transmission line (500 or 230 kV) or PG&E transmission line (230 kV) (two possible options), would be constructed in the general vicinity of the existing Funks Reservoir. The substation would be approximately 6 acres and would serve the Sites Reservoir Pumping/Generating Plant, the TRR Pumping/Generating Plant, the Delevan Pipeline Intake/Discharge, and the Delevan Pumping/Generating Plant. The proposed electrical substations, switchyards, and overhead power lines that would connect the pumping/generating plants to the grid would provide the electricity needed by the pumping plants, as well as back to the grid from the generating process. Switchyards were described in Section 2.1.1.4 Sites Pumping/Generating Plant and Electrical Switchyard, Section 2.1.3.2 Terminal Regulating Reservoir Pumping/Generating Plant and Electrical Switchyard, and Section 2.1.4.1 Delevan Pipeline Intake/Discharge Facilities.

The west-east aligned Delevan Overhead Power Line would be constructed within a 150-foot-wide permanent overhead power line easement, approximately 150 feet north of the permanent easement for the proposed Delevan and TRR pipelines[7] from the TRR to the Sites Pumping/Generating Plant. At about the GCID Main Canal crossing, the proposed Delevan Overhead Power Line would travel southwesterly for approximately 9,600 feet, then northwesterly for approximately 3,600 feet, and, finally, west for approximately 5,300 feet, where the overhead power line would cross the proposed Eastside Road. From Eastside Road, the Delevan Overhead Power Line would travel southwesterly for approximately 1,700 feet to connect to the proposed Sites Electrical Switchyard.

Lower voltage overhead power lines would be connected to the proposed Golden Gate Dam, Sites Dam, South Bridge, and Stone Corral Recreation Area. Electricity to Golden Gate Dam would likely come from the Sites Pumping/Generating Plant through an easement along Funks Creek. Electricity to Sites Dam, South Bridge, and the two recreation areas would likely come from an existing overhead distribution line that parallels Sites Lodoga Road. The power line would be extended to Sites Dam along the canyon walls, through the Stone Corral Recreation Area (following roads when available), along the new Stone Corral Road to the South Bridge. Power on the west side of the Sites Reservoir Inundation Area would be extended across the proposed South Bridge from the proposed substation if needed.

Construction

As previously described, the proposed north-south aligned Delevan Overhead Power Line would run north from the proposed substation, parallel to the existing PG&E 65 kV transmission line along Highway 45 to the proposed intake/discharge facility on the Sacramento River. Approximately 114 towers/poles would be required, for a total of approximately 4 acres of permanent disturbance. An additional 40 towers/poles would be constructed west of the TRR, for a total of approximately 1 acre of permanent disturbance. The construction disturbance area would be completely contained within a new permanent easement. The permanent easement would be approximately 150 feet wide along the entire alignment and

[7] The overhead power line cannot be constructed within the same permanent easement as the pipeline because the footprint of the transmission tower footings would impede access to the pipeline during future maintenance activities.

would accommodate construction activities, staging areas, and stockpile areas. A portion of the existing agricultural fields within the overhead power line alignment would need to be fallowed and not watered during construction of tower footings and placement of towers. Anticipated major construction activities include clearing and grading the construction workspace, placing necessary construction materials at staging areas, excavating and constructing tower footings, erecting transmission towers, and stringing the conductor.

Construction of the overhead power lines would comply with requirements and precautions for construction near other utilities and would meet design and utility requirements. Power towers/poles are anticipated to be approximately 100 feet tall.

Operations

Operation of the proposed Delevan Overhead Power Line and associated distribution lines would be an unmanned activity.

Maintenance

The proposed Delevan Overhead Power Line and associated distribution lines would require periodic maintenance (once or twice a year), which would include equipment inspections and vegetation maintenance. Permanent easements and limitations on uses (row crops only) would be maintained to provide future access.

2.1.6 Project Buffer

The Project Buffer (Figure 2-1) would consist of the land acquired for the Project beyond the facility footprints, out to the nearest existing parcel boundaries. If the nearest parcel boundary is less than 100 feet beyond the facility footprint, the Project Buffer would extend beyond the parcel boundary to result in at least a 100-foot buffer. The Project Buffer would surround the proposed Sites Reservoir Complex, Holthouse Reservoir Complex, and all facilities between these two complexes; the proposed TRR and associated facilities; and the proposed Delevan Pipeline Intake/Discharge Facilities.[8] The intent of the Project Buffer is to create a "buffer" around Project facilities; while following existing parcel boundaries, the area and width of the buffer around Project facilities would vary. The Project Buffer would serve several purposes:

- Avoiding splitting parcels and rendering parcel remnants unusable by existing landowners
- Providing a buffer between Project facilities and adjacent existing land uses to avoid potential conflicts in land uses
- Preventing shoreline development around the proposed Sites Reservoir
- Preventing livestock access to the reservoirs, and prevent livestock wastes from entering the proposed reservoirs

[8]The proposed Delevan Overhead Power Line, Delevan Pipeline, TRR Pipeline, and TRR Pipeline Road would not have an associated buffer. These Project facilities would not require additional lands for long-term operation and maintenance. The Delevan and TRR pipelines would be underground features that would have periodic aboveground structures that include access structures, blowoff structures, air valve structures, and an outlet and energy dissipater structure. The TRR Pipeline Road would be located above the TRR Pipeline. The Sites/Delevan Overhead Power Line would result in aboveground development only at each transmission tower.

Construction

Land within the Project Buffer would remain undeveloped; the existing vegetation would be maintained as wildlife habitat and protected from fuelwood harvest, grazing, and other environmental degradation. Existing structures would be demolished, and the remaining land would be managed as wildlife habitat. Existing agricultural lands would not be maintained as agriculture but would be converted and managed as wildlife habitat.

The Project Buffer boundary would be fenced using standard three-strand barb wire fences with posts in areas where the parcels are not already fenced, so that the entire Project Buffer boundary would be fenced. A fuel break would be constructed around the perimeter of the Project Buffer.

Operations

Not applicable.

Maintenance

Maintenance activities that are proposed to be undertaken within the Project Buffer boundary include fence maintenance and periodic boundary fuel break maintenance.

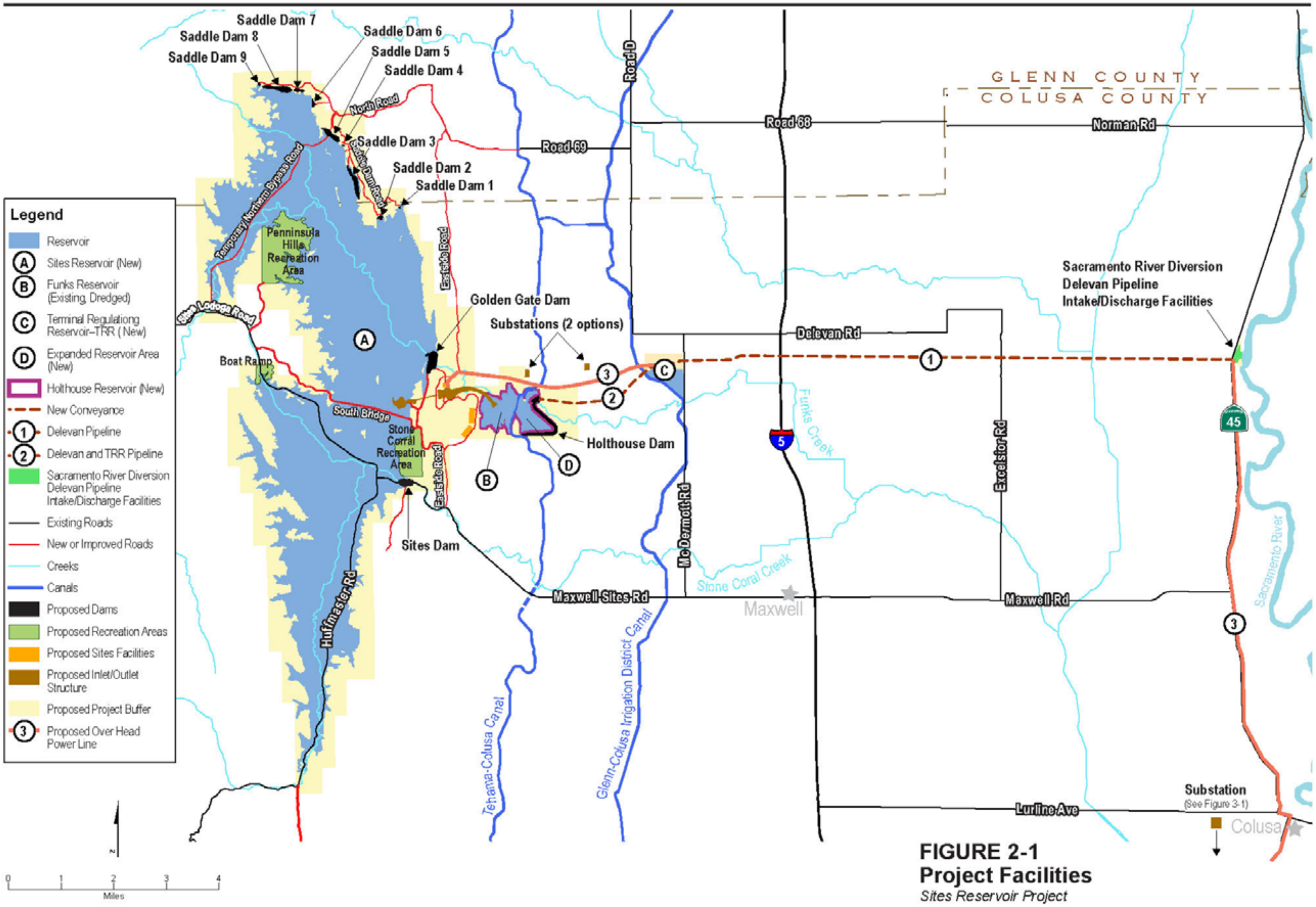

FIGURE 2-1
Project Facilities
Sites Reservoir Project

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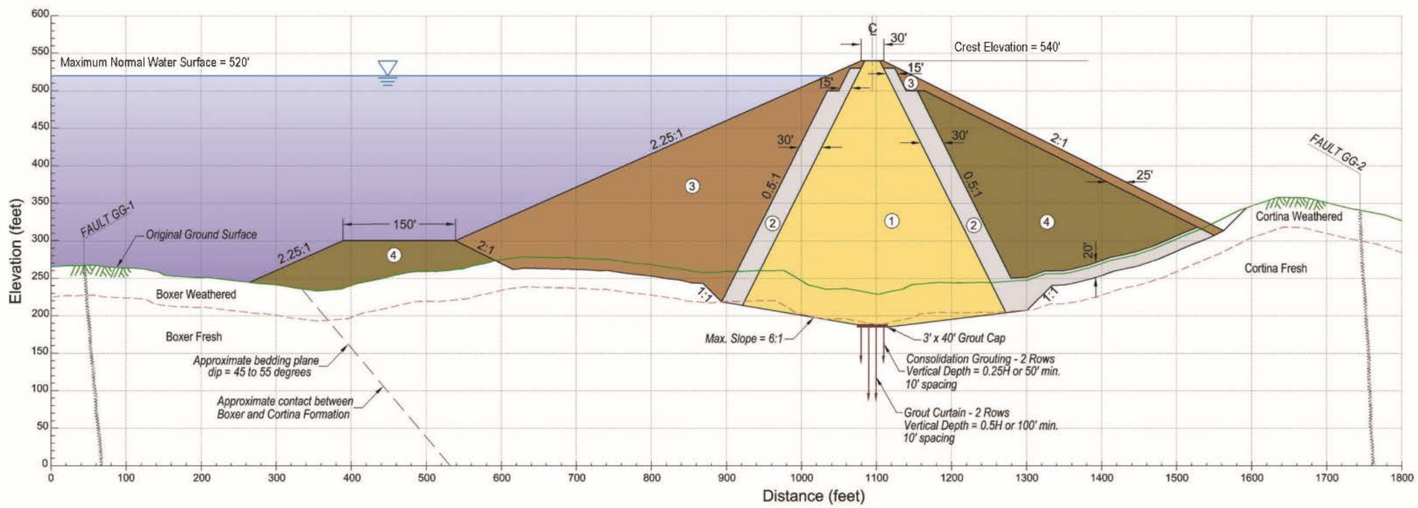

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing, and evaluation programs.
2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Upstream and Downstream Filter, Drain, and Transition
   - ZONE ③ Rockfill and Riprap - Shell material
   - ZONE ④ Random - Shell material
3. H = Height of Dam
4. ℄: Centerline
5. GG: Informal name of fault

FIGURE 2-2
Golden Gate Dam Cross Section Showing Grouting
Sites Reservoir Project

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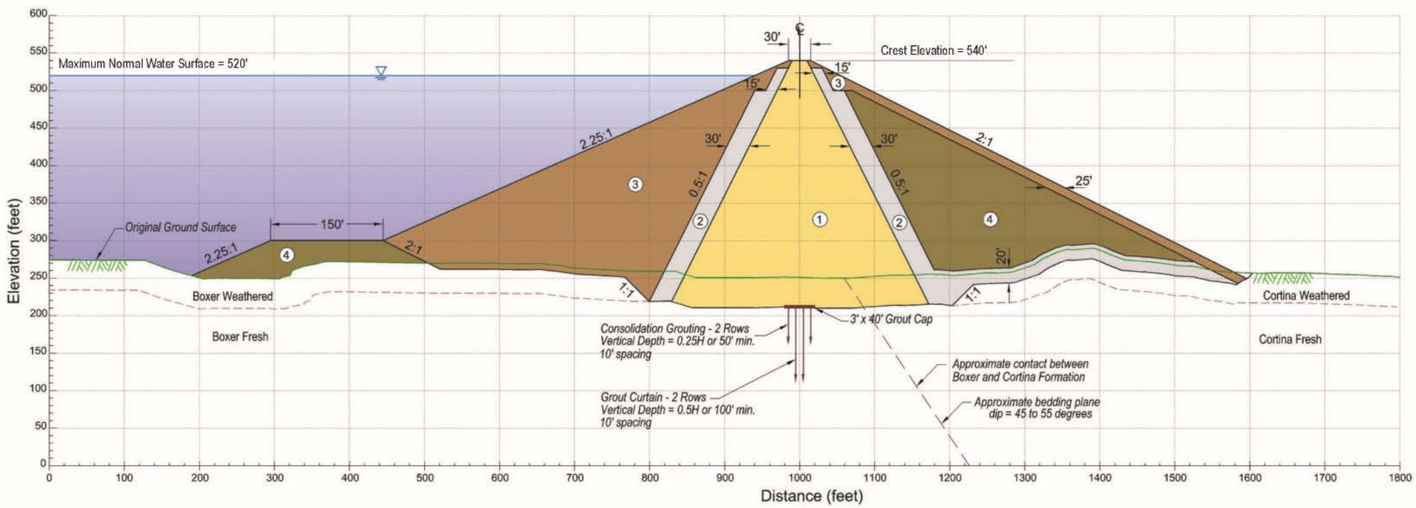

NOTES

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   - ZONE ① Core
   - ZONE ② Upstream and Downstream Filter, Drain, and Transition
   - ZONE ③ Rockfill and Riprap - Shell material
   - ZONE ④ Random - Shell material

3. H = Height of Dam

4. ℄: Centerline

FIGURE 2-3
Sites Dam Cross Section Showing Grouting
Sites Reservoir Project

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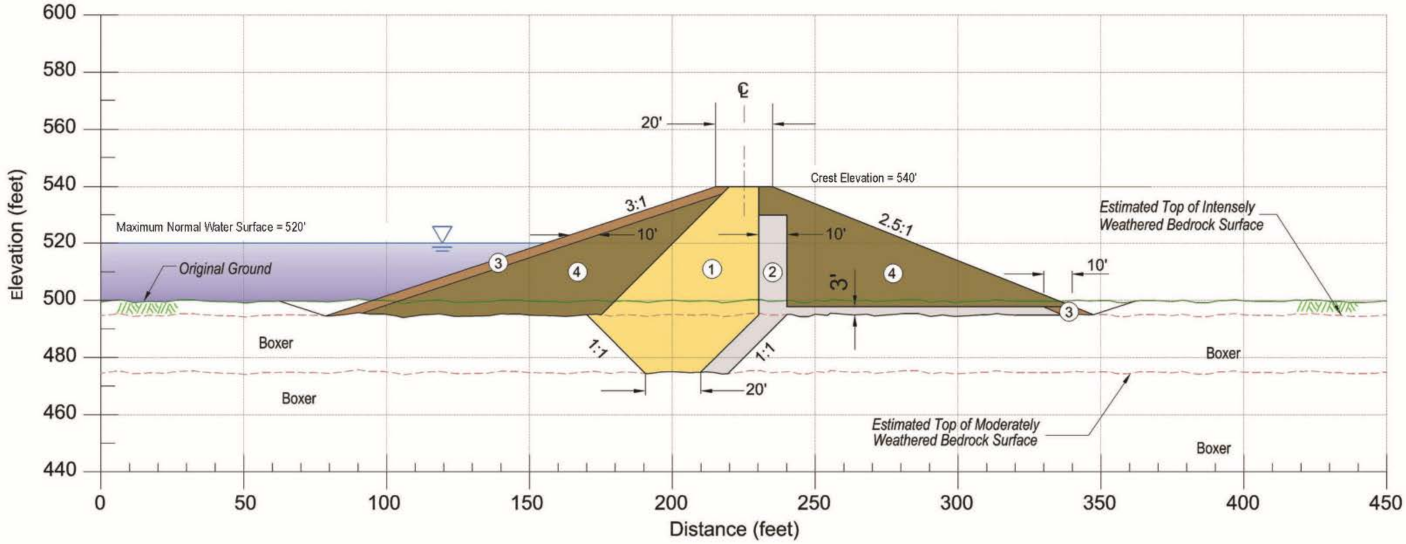

NOTES

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2. Embankment zones are as follows:
   ZONE ① Core
   ZONE ② Upstream and Downstream Filter, Drain, and Transition
   ZONE ③ Rockfill and Riprap - Shell material
   ZONE ④ Random - Shell material

3. H = Height of Dam

4. ℄: Centerline

FIGURE 2-4
Saddle Dams 1, 2, 4, and 9 Cross Sections Showing Grouting (Typical)
Sites Reservoir Project

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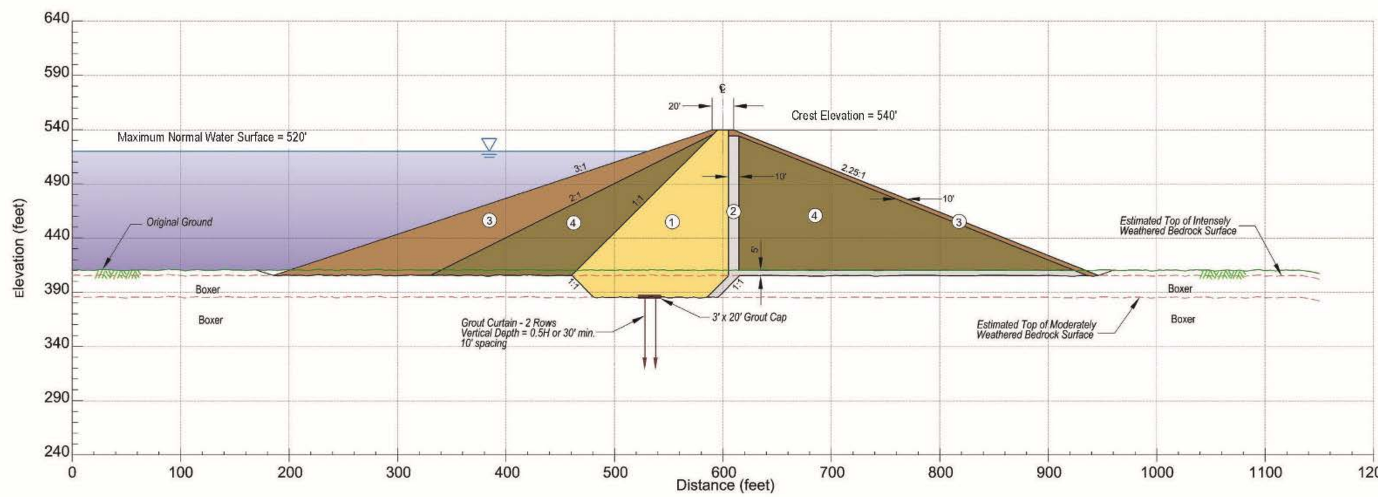

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing, and evaluation programs.

2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Upstream and Downstream Filter, Drain, and Transition
   - ZONE ③ Rockfill and Riprap - Shell material
   - ZONE ④ Random - Shell material

3. H = Height of Dam

4. ℄: Centerline

FIGURE 2-5
Saddle Dams 3, 5, 6, 7, and 8 Cross Sections Showing Grouting (Typical)
Sites Reservoir Project

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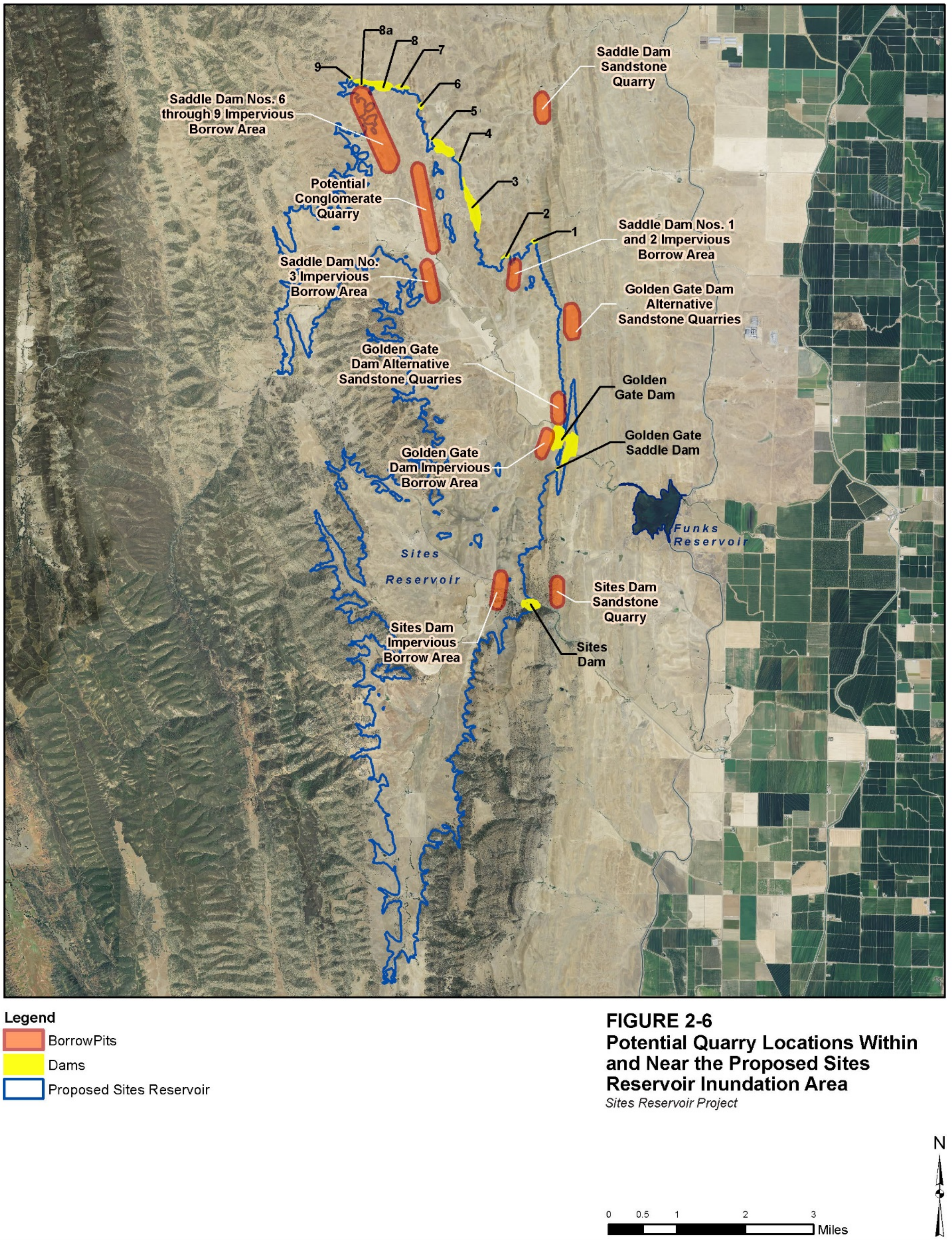


FIGURE 2-6
Potential Quarry Locations Within and Near the Proposed Sites Reservoir Inundation Area
Sites Reservoir Project

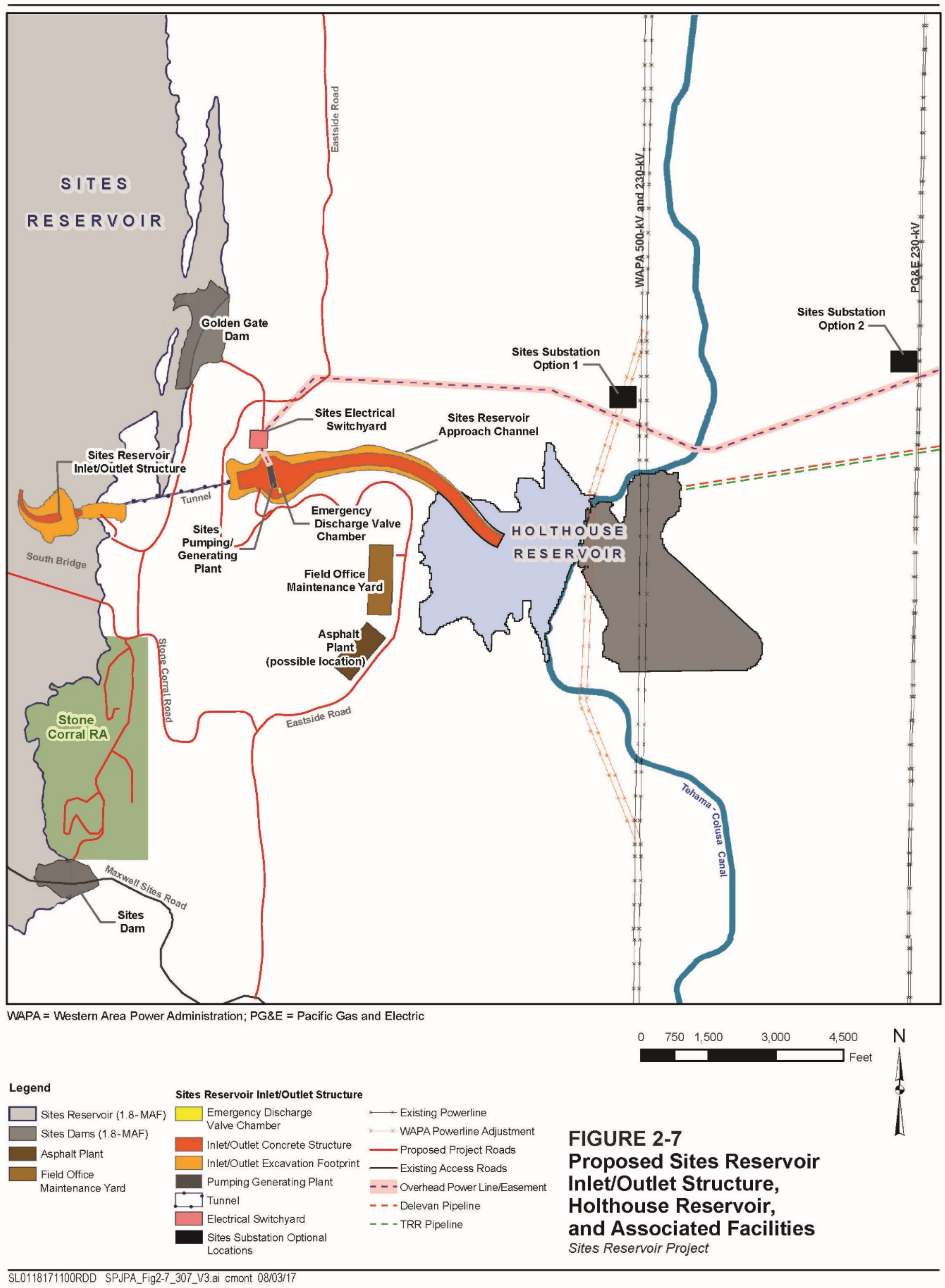
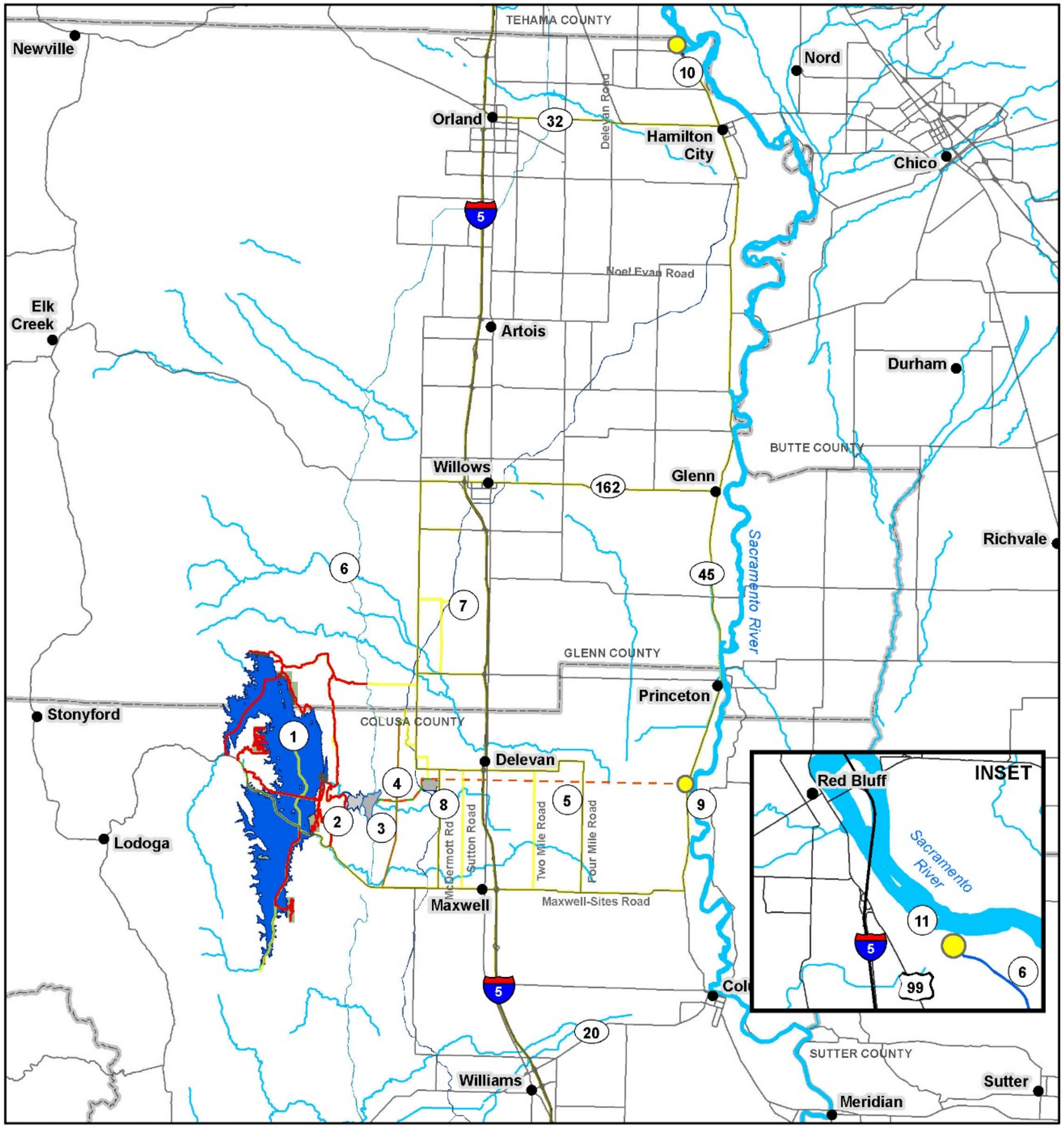


FIGURE 2-7
Proposed Sites Reservoir Inlet/Outlet Structure, Holthouse Reservoir, and Associated Facilities
Sites Reservoir Project



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Legend

- Cities and Towns
- Pumping Plant
- Dams
- New or Improved Roads
- Existing Roads
- Access Routes
- Recreation Areas
- Interstates
- Rivers/Creeks
- Counties

1. Sites Reservoir (New)
2. Funks Reservoir (Existing; Dredged)
3. Holthouse Reservoir (New)
4. TRR Pipeline (New)
5. Delevan Pipeline (New)
6. Tehama-Colusa Canal (Existing)
7. Glenn-Colusa Irrigation District (GCID) Canal (Existing)
8. Terminal Regulating Reservoir (New)
9. Delevan Pipeline Intake/Discharge Facilities (New)
10. GCID Pumping Plant (Existing)
11. Red Bluff Pumping Plant (Existing; Add Pump)

FIGURE 2-8A
Proposed Access Routes to Project Facilities
Sites Reservoir Project

0 2 4 8 12 Miles

N

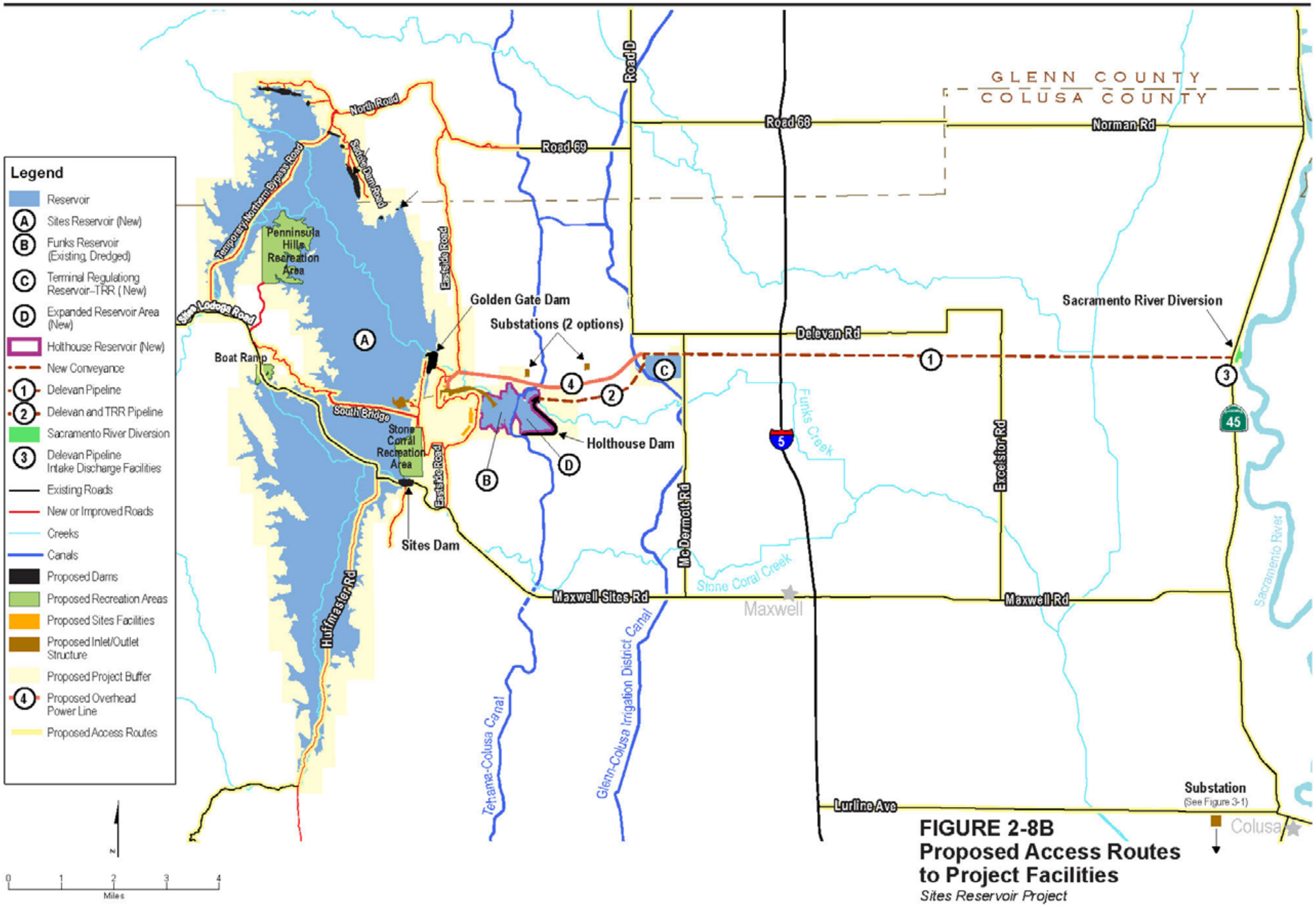

FIGURE 2-8B
Proposed Access Routes to Project Facilities
Sites Reservoir Project

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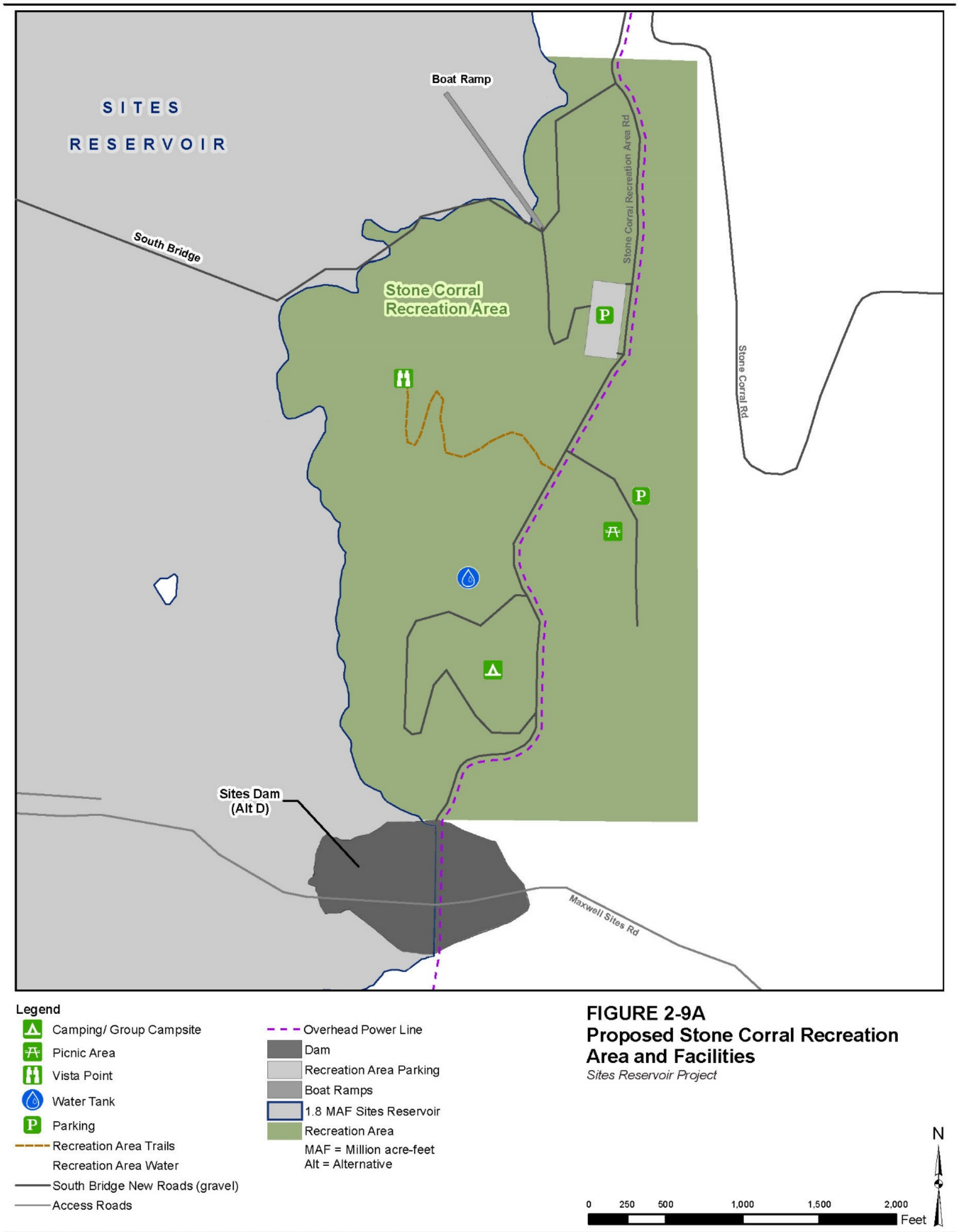

FIGURE 2-9A
Proposed Stone Corral Recreation Area and Facilities
Sites Reservoir Project

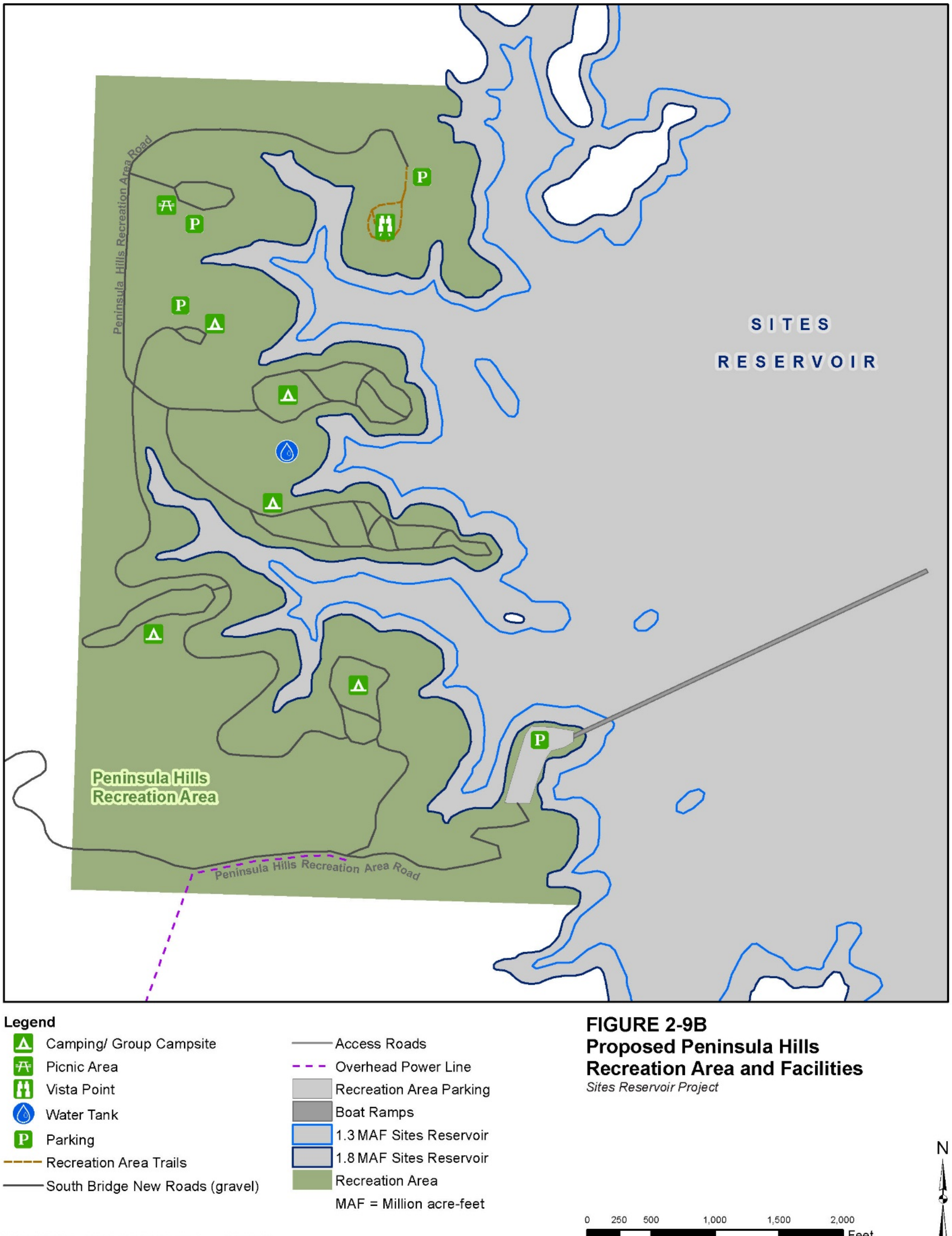

FIGURE 2-9B
Proposed Peninsula Hills Recreation Area and Facilities
Sites Reservoir Project

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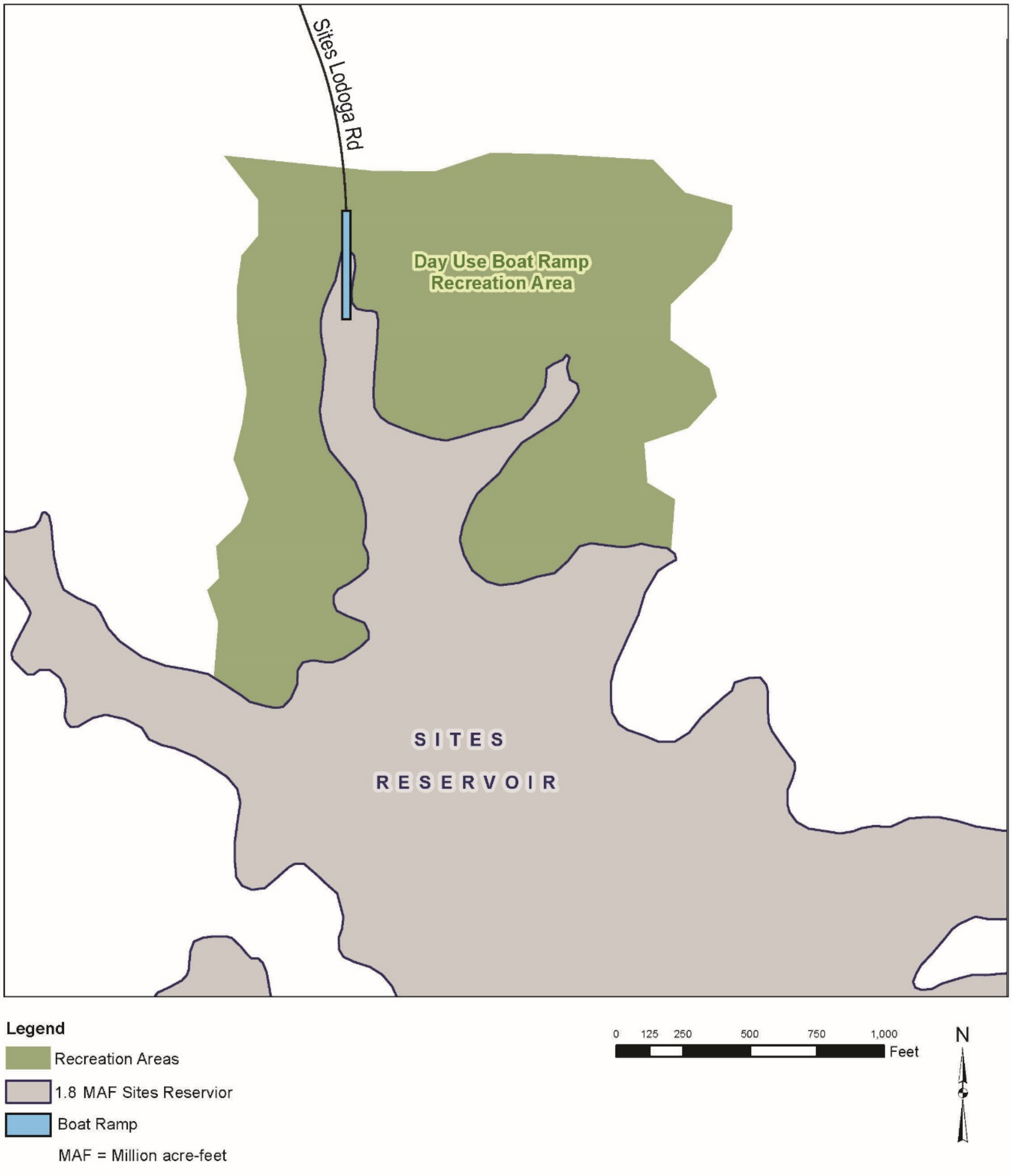

FIGURE 2-9C
Proposed Boat Ramp Recreation Area and Facilities
Sites Reservoir Project

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FIGURE 2-10
Location of the Proposed Pump Installation at Red Bluff Pumping Plant
Sites Reservoir Project

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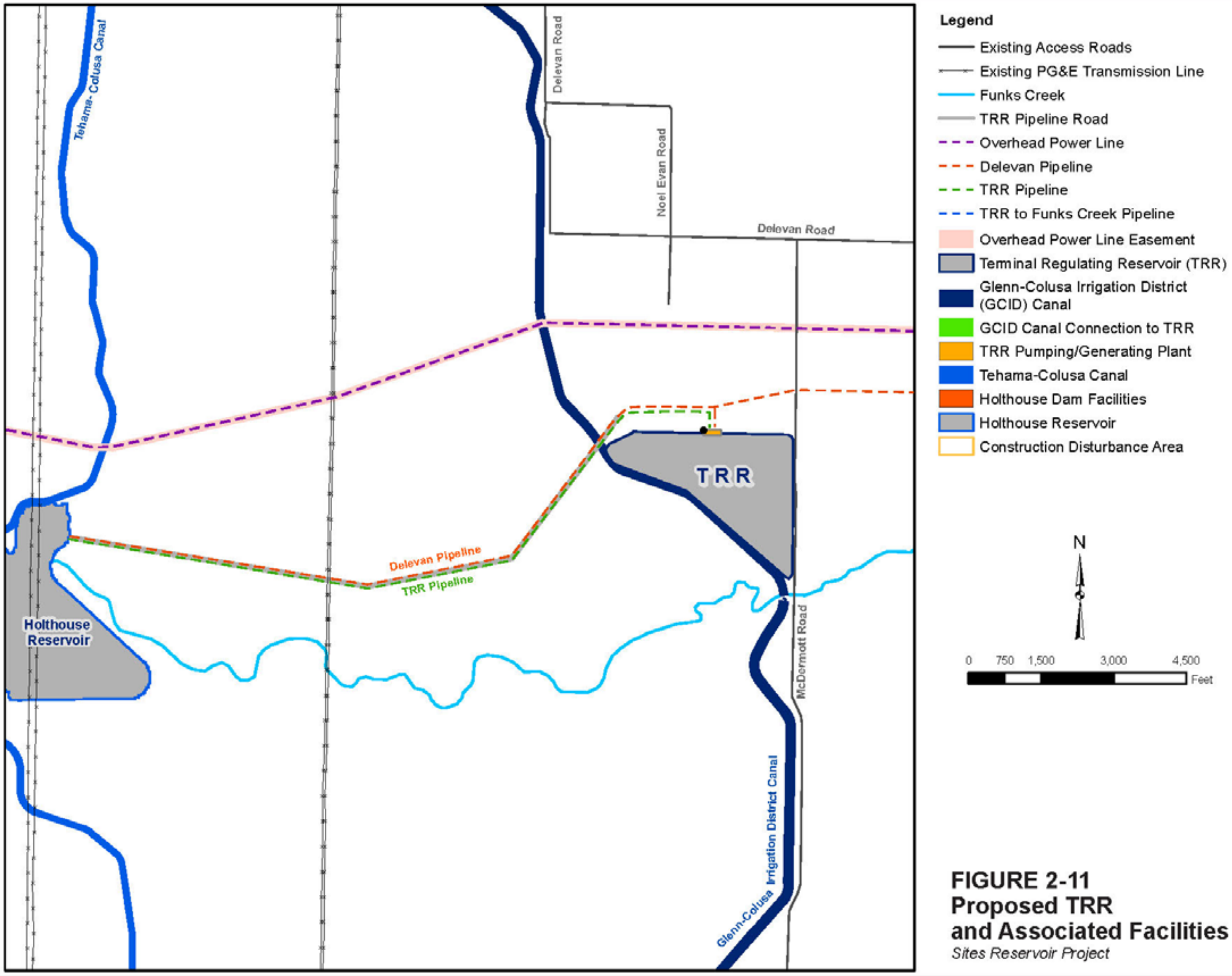

FIGURE 2-11
Proposed TRR and Associated Facilities
Sites Reservoir Project

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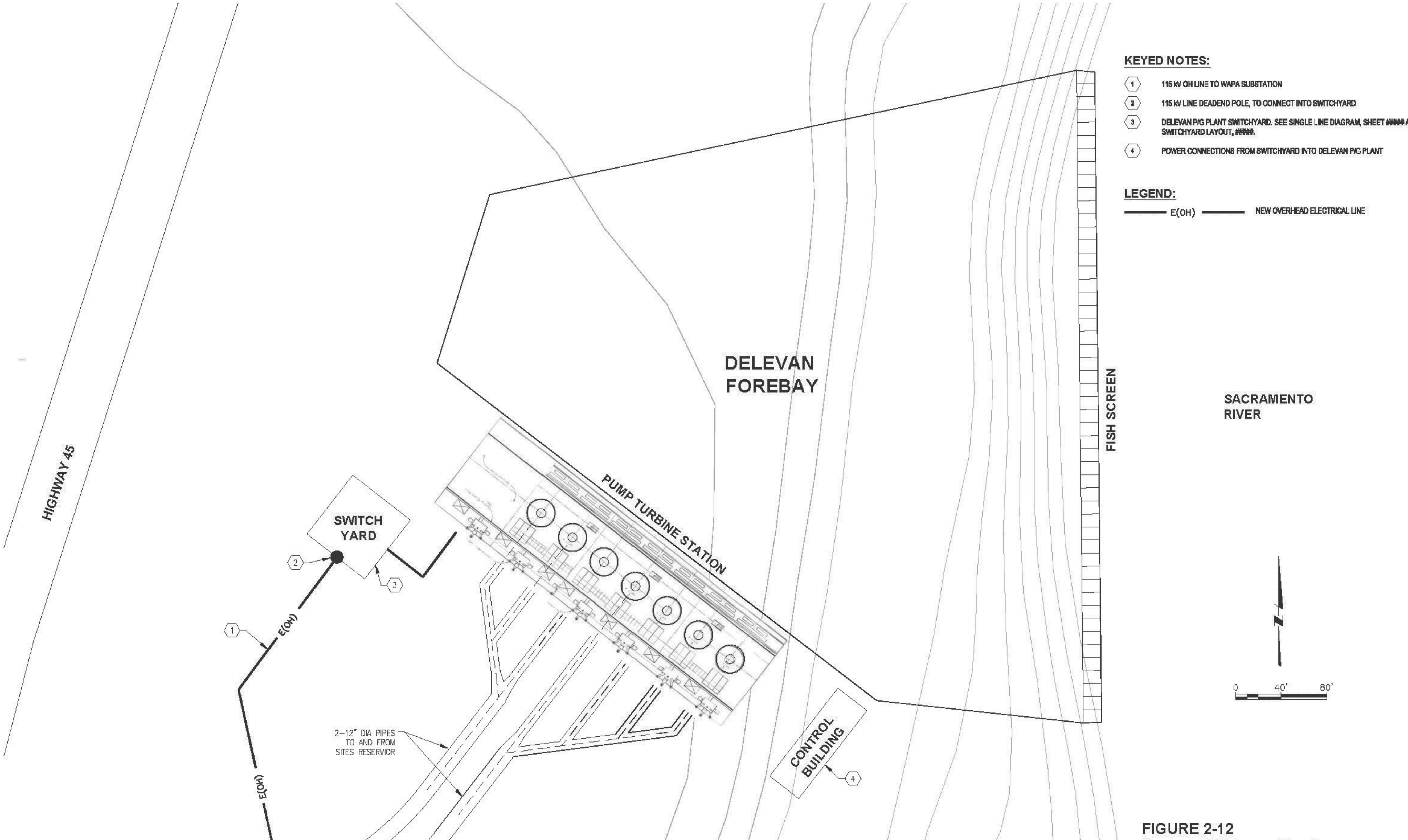

Source: Sites

FIGURE 2-12
Proposed Delevan Pipeline Intake/Discharge Facilities
Sites Reservoir Project

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3. Construction and Operation/Maintenance

Construction, operation, and maintenance activities specific to each Project facility are described under the associated facilities, starting with Section 2.1.1 Sites Reservoir Complex. Operations related to Sacramento River diversions and operation of Sites Reservoir to assist in meeting agricultural, municipal and industrial, and environmental needs are described in Section 4 Diversion and Reservoir Operations.

3.1 Construction

Prior to initiation of construction activities, acquisition or establishment of temporary or permanent easements of private properties, either through voluntary or eminent domain processes, would be required. Overall, construction of the Project is expected require approximately 8 years to complete all necessary facilities. Several factors affect this anticipated schedule, including funding, the implementing agency, environmental compliance, contracting methods and strategies, materials and construction equipment availability, lead time for fabrication of major pumping and generating equipment, labor force constraints, weather, and access road capacity limitations. Additional adjustments to the schedule would be addressed during Project development and implementation.

At the peak of Project construction, the labor force is expected to be approximately 400 workers. Table 3-1 provides a list of the typical construction equipment expected to be onsite during construction of the major facilities and estimated equipment days. The information provided in Table 3-1 may vary as the design of the project is further refined and depending on how the various facilities comprising the project are packaged for construction.

Construction activities are anticipated to occur between 7:00 a.m. and 7:00 p.m. Nighttime and weekend construction may occur on an as-needed basis and would be coordinated with residents. If nighttime construction is necessary, construction lighting and noise constraints consistent with applicable federal, State, and local requirements would be used. Nighttime construction would not be conducted between 10:00 p.m. and 7:00 a.m. within 1,000 feet of occupied residences. Haul times through residential communities would be limited to 7:00 a.m. to 10:00 p.m. There would be air brake restrictions in residential communities.

Construction activities associated with the Project would be confined to designated construction disturbance areas. Construction vehicles and equipment would also be parked within these construction disturbance areas. In addition, construction materials would be stored within the construction disturbance areas. Construction bid specifications and design packages would include site designation regarding special or sensitive sites. Special or sensitive sites within the construction disturbance areas where construction equipment and materials would not be allowed would be clearly marked and fenced with orange barrier fencing before any construction or surface-disturbing activity begins. Construction personnel would be trained to recognize these markers and understand the equipment movement restrictions involved. Lath, fencing, or flags would be maintained until final cleanup and/or site restoration is completed, after which they would be removed.

3.1.1 Access Routes

Traffic-generating construction activities associated with the Project would include trucks hauling equipment and materials to and from the worksites and the daily arrival and departure of the construction workers. Construction traffic on local roadways would include dump trucks, bottom dump trucks, concrete trucks, flatbed trucks for delivering construction equipment and permanent project equipment, pickup trucks, water trucks, equipment maintenance vehicles, and other delivery trucks. Dump trucks and bottom-dump trucks would be used for earth-moving and clearing, removing excavated material, and importing other structural and paving materials. Other delivery trucks would deliver heavy construction equipment, job trailer items, concrete forming materials, reinforcing steel and structural steel, piping materials, foundation piles and sheet piling, sand and gravel from offsite sources, new facility equipment, and other miscellaneous deliveries.

Table 3-1
Estimated Construction Durations and Equipment Days for Construction of Sites Reservoir Project

	Sites Reservoir and Dams	Recreation Areas	Gravel Roads	Paved Roads and Bridges	Sites P/G Plant, Tunnel, and Sites Inlet/Outlet Structure	Funks Reservoir Sediment Removal	Funks Reservoir and Holthouse Reservoir Complex	Pump Installation at the Red Bluff Pumping Plant	GCID Canal Facilities Modifications	TRR Reservoir	TRR P/G Plant	TRR and Delevan Pipelines	Overhead Power Lines and Electrical Switchyards	Delevan Pipeline Intake/Discharge Facilities and P/G Plant
Construction Duration in Days – Alt D	1,410	390	1,403	1,403	1180	167	950	-	650	530	1,525	800	1,445	1,175
Equipment														
Backfill loader	-	-	-	-	-	-	149	-	-	-	-	934	-	-
Backhoe				1,470										
Bobcat	-	316	-	-	-	-	-	-	-	-	-	-	-	-
Bulldozer	17,740	116	279	9,770	1,760	1,336	13,650	-	32	852	1,165	3,086	8	1,165
Compactor	15,350	-	156	-	-	-	796	-	159	66	200	934	-	200
Concrete Material Trucks	1,720	-	-	-	-	-	472	-	-	-	-	224	-	-
Concrete Pumper	2033	-	-	280	306	-	22	-	-	-	104	-	29	104
Concrete Trucks	648	66	-	2,246	1,030	-	176	-	156	-	416	83	154	416
Crane	-	-	-	1,000	350	-	-	40	-	-	200	1,500	474	200
Pile Driver/Drill Rig	1,952	-	-	105	-	-	85	-	-	-	-	-	95	-
Dump Truck	830	474	123	6,775	600	-	8	-	768	-	1,250	8,670	14	1,250
Excavator Loader	-	-	-	-	-	-	-	-	-	152	-		-	-
Excavator	-	-	-	26	-	-	-	-	-	-	-	400		-
Fork lift	89	121	-	-	510	-	59	40	-	140	400	1,500	82	400
Fuel truck	3,548	312	93	1,126	552	167	570	-	335	185	333	967	57	333
Grader	7,675	28	104	2,104	572	-	398	-	-	33	200	467	40	200
Generator	81	33		500	200		22	80	156		104	583		104
Grout Pump		-	-	-	-	-	170	-	-	-	-	-	-	-
Highway Trucks	45,328	282	-	5,011	1,172	16	4,036	30	680	700	1,760	5,190	810	1,760
Jacking Equipment	-	-	-	-	-	-	-	-	-	-	-	600	-	-
Loader	3,563	158	41	1,235	400	-	4	-	192	-	125	-	103	125
Material Trucks	-	-	-	-	2,736	-	-	-	-	-	-	-	-	-
Off-road Trucks	27,840	-	-	4,560	-	-	1,490	-	-	1,520	-	-	-	-
Paving Machine	-	22	5	80	-	-	-	-	33	20	-	-	-	-
Pipe Fabrication Equipment	-	-	-	-	-	-	-	-	-	-	-	1,000	-	-
Pipe Transport Truck	-	-	-	-	-	-	-	-	-	-	-	1,100	-	-
Pull Truck	-	-	-	-	-	-	-	-	-	-	-	-	192	-
Roller	-	50	10	925	-	-	-	-	66	-	-	-	-	-
Scissor Lift	-	-	-	-	100	-	-	-	-	-	-	-	-	-
Scraper	6,800	-	147	8,736	3,090	2,672	11,460	-	138	652	1,165	13,734	-	1,165
Water Trucks	7,096	144	191	2,252	352	334	2,280	-	205	215	466	967	101	466
Welding Truck	-	-	-	-	294	-	-	-	-	-	-	-	-	-

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Table 1-21 lists the anticipated typical construction access routes to be used for access in the construction to some of the major Project features (routes are illustrated on Figures 1-7A and 1-7B):

Project-related construction personnel and highway truck trips are identified in Tables 3-2 and 3-3. Of the Project construction-related trips, construction worker trips would compose the majority. Construction workers would likely commute to construction sites from regional population centers, including Maxwell, Willows, Orland, Williams, and Colusa, and from other places in northern California when specialty trades or skillsets are not available locally.

3.2 Facility Operation and Maintenance

Project facility operations and maintenance would include any activities that must occur at each facility. Operation activities include those related to the movement of water (such as proposed Sites Reservoir level fluctuations, or the intake or release of water through the proposed Delevan Pipeline Intake/Discharge Facilities), the generation/transmission of electricity, the use of roads during operations and maintenance activities, and recreation activities associated with Sites Reservoir.

Table 3-2
Expected Roadway Access Routes to Project Facilities

Project Feature	Access Route
Sites Reservoir Inundation Area (northern area)	From I-5, travel west on County Road 68, turn south on County Road D, turn west on County Road 69, and continue straight
Sites Reservoir Inundation Area (central area)	From I-5, travel west on Maxwell Sites Road
Sites Reservoir Inundation Area (southern area)	From I-5, travel west on Maxwell Sites Road, turn left on Sulphur Gap Road (new permanent), and turn right on Huffmaster Road
Sites Dam	From I-5, travel west on Maxwell Sites Road
Golden Gate Dam	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, turn left on Eastside Road (new permanent), and turn right on new permanent O&M road From I-5, travel west on Maxwell Sites Road, turn right on Eastside Road, and turn left on new permanent O&M road
Saddle Dams	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, continue straight on North Road (new permanent) for Saddle Dams 7, 8, and 9, or turn left from North Road onto Saddle Dam Road (new permanent) for Saddle Dams 1, 2, 3, 4, and 5, or turn left from North Road onto new permanent O&M road for Saddle Dam 6, or turn left from County Road 69 onto Eastside Road (new permanent) and turn right on new permanent O&M road for the Golden Gate Saddle Dam (Saddle Dam 10) From I-5, travel west on Maxwell Sites Road, turn right on Eastside Road and turn left on new permanent O&M road
Saddle Dam Recreation Area Saddle Dam Road	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, continue straight on North Road (new permanent), and turn left on Saddle Dam Road (new permanent)

Table 3-2
Expected Roadway Access Routes to Project Facilities

Project Feature	Access Route
Temporary North Bypass Road	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, continue straight on North Road to the vicinity of Saddle Dam No. 5, continue west and south-west on the paved temporary bypass road to the intersection with Sites Lodoga Road on the west side of the reservoir.
Antelope Island Recreation Area	From I-5, travel west on Maxwell Sites Road, turn left on Sulphur Gap Road (new permanent), turn right on Huffmaster Road, and turn left on new temporary construction road
Stone Corral Recreation Area Stone Corral Road	From I-5, travel west on Maxwell Sites Road, turn right on Eastside Road (new permanent), turn left on Stone Corral Road (new permanent), and turn left on Stone Corral Recreation Area Road (new permanent)
Peninsula Hills Recreation Area Peninsula Road	From I-5, travel west on Maxwell Sites Road to Sites Lodoga Road, and turn right on Peninsula Road (new permanent campground spur road) From I-5, travel west on Maxwell Sites Road, turn right on Eastside Road (new permanent), turn left on Stone Corral Road (new permanent), across the South Bridge (new permanent) onto Sites Lodoga Road, and turn right on Peninsula Road (new permanent campground spur road)
South Bridge	From I-5, travel west on Maxwell Sites Road, and turn right on Peterson Road to reach central footings (this route is only available if the bridge is constructed before Sites Dam, which will block access on Maxwell Sites Road) From I-5, travel west on Maxwell Sites Road and continue straight on Sites Lodoga Road to reach the western approach/footings From I-5, travel west on Maxwell Sites Road, turn right on Eastside Road (new permanent), and turn left on Stone Corral Road to reach the eastern approach/footings
Com Road	From I-5, travel west on Maxwell Sites Road, turn left on Com Road (new permanent) at the crest road of Sites Dam. From I-5, travel west on Maxwell Sites Road, turn left on Sulphur Gap Road (new permanent), and turn right on Com Road (new permanent) (if Sulphur Gap Road option is constructed)
Eastside Road Sites Pumping/Generating Plant Field Office Maintenance Yard	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, and turn left on Eastside Road (new permanent) From I-5, travel west on Maxwell Sites Road and turn right on Eastside Road (new permanent)
Sulphur Gap Road	From I-5, travel west on Maxwell Sites Road, and turn left on Sulphur Gap Road (new permanent)
North Road	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, continue straight on North Road (new permanent) From I-5, travel west on Maxwell Sites Road, and turn right on Eastside Road (new permanent) and follow to North Road
Holthouse Reservoir Complex	

Table 3-2
Expected Roadway Access Routes to Project Facilities

Project Feature	Access Route
Holthouse Reservoir Electrical Switchyard	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, turn left on Eastside Road (new permanent), turn left on access road on south side of Funks Reservoir From I-5, travel west on Maxwell Sites Road and turn right on Eastside Road (new permanent), turn right on access road on south side of Funks Reservoir
Sites Electrical Switchyard Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, turn left on Eastside Road (new permanent), and turn left on new permanent O&M road From I-5, travel west on Maxwell Sites Road, turn right on Eastside Road (new permanent), turn right on new permanent O&M road
Sites Reservoir Inlet/Outlet Structure	From I-5, travel west on Maxwell Sites Road, turn left onto Sulphur Gap Road, to Huffmaster Road, to Peterson Road
GCID Canal Facilities Modifications Headgate Modifications Railroad Siphon Modifications	From I-5, travel east on SR 32 and turn left on Canal Road From I-5 northbound, exit County Road 53, immediately turn left onto SR 99, and proceed 1.1 miles north to the intersection with the GCID Main Canal. Turn right at GCID Main Canal; the railroad siphon is approximately 200 feet east of SR 99
GCID Canal Connection to the TRR TRR TRR Pumping/Generating Plant TRR Electrical Switchyard GCID Canal Connection to the TRR	From I-5, travel west on Delevan Road, and turn left on McDermott Road or turn left on Noel Evan Road
TRR Pipeline TRR Pipeline Road Delevan Pipeline Electrical Switchyard	From I-5, travel west on Delevan Road, turn left on McDermott Road, turn right on temporary construction access road
Delevan Pipeline (western portion) Delevan Overhead Power (western portion)	From I-5, travel west on Delevan Road, then turn left on Sutton Road, McDermott Road, or County Road D
Delevan Pipeline Intake Facility Delevan Pipeline Discharge Facility Delevan Pipeline (eastern portion) Delevan Overhead Power Line (eastern end) Delevan Overhead Power Line (northern portion of north-south alignment on SR 45)	From I-5, travel east on Maxwell Road, and turn left on SR 45 From I-5, travel east on SR 162, and turn right on SR 45
Delevan Pipeline (central portion) Delevan Overhead Power Line (central portion)	From I-5, travel east on Maxwell Road, and turn left on Four Mile Road or Two Mile Road From I-5, travel east on Delevan Road, and turn right on Four Mile Road or Two Mile Road
Delevan Overhead Power Line (northern portion of north-south alignment on SR 45)	From I-5, travel east on Maxwell Road, and turn left on SR 45

Table 3-2
Expected Roadway Access Routes to Project Facilities

Project Feature	Access Route
Delevan Overhead Power Line (southern portion of north-south alignment on SR 45)	From I-5, travel east on Maxwell road and turn right on SR 45
Delevan Pipeline (far western portion)	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, and turn left on Eastside Road (new permanent) From I-5, travel west on Maxwell Sites Road, and turn right on Eastside Road (new permanent)
Borrow Areas (generally within the Inundation Area or adjacent on Logan Ridge)	From I-5, travel west on County Road 68, turn left on County Road D, turn right on County Road 69, and turn left on Eastside Road (new permanent) From I-5, travel west on Maxwell Sites Road, turn left on right on Eastside Road (new permanent) From I-5, travel west on Maxwell Sites Road, turn left on Sulphur Gap Road (new permanent), turn right on Lurline Road (new permanent, detour during construction), turn right on Huffmaster Road, and travel straight on Peterson Road From I-5, travel west on Maxwell Sites Road

Note:
O&M = operations and maintenance

Table 3-3
Project-related Construction Personnel and Highway Truck Trips

Facility	Total Highway Truck Trips[a]	Construction Days[b]	Highway Truck Trips per Day	Total Personnel Trips[c]	Personnel Trips per Day	Construction Trips per Day
Sites Reservoir Inundation Area and Dams	235,240	1,523	154	969,664	637	**868**
Recreation Facilities	2,290	501	5	33,626	67	**74**
South Bridge, Gravel Roads, and Paved Roads	25,055	961	26	297,436	310	**349**
Inlet/Outlet Structure, Tunnel, and Sites P/G Plant	19,540	332	59	56,260	169	**258**
Holthouse Reservoirs Sediment Removal	80	114	1	12,358	108	**109**
Holthouse Reservoir Modification	22,540	566	40	295,708	522	**582**
GCID Canal and Headworks Modifications	3,400	509	7	41,608	82	**92**
TRR	3,500	334	10	54,544	163	**179**
TRR Pumping Plant	8,800	874	10	255,200	292	**307**
TRR and Delevan Pipelines	37,910	376	101	55,080	146	**298**
Delevan Pipeline Intake/Discharge Facilities and Delevan Pipeline P/G Plant	8,800	874	10	257,752	295	**310**
Substations, Switchyards, and Overhead Power Lines	6,810	251	27	49,712	198	**239**

Table 3-3
Project-related Construction Personnel and Highway Truck Trips

Facility	Total Highway Truck Trips[a]	Construction Days[b]	Highway Truck Trips per Day	Total Personnel Trips[c]	Personnel Trips per Day	Construction Trips per Day
Total Peak Construction Trips per Day						**3,665**

[a] Average of five highway trips per equipment day
[b] Construction work would be conducted during 5-day work weeks, excluding holidays
[c] One incoming and one outgoing trip per worker per day
Note:
P/G = pumping and generating

Maintenance for the Project facilities would include activities such as debris removal, dredging, vegetation control, rodent control, erosion control and protection, routine inspections (dams, tunnels, pipelines, pumping/generating plants, inlet/outlet works, fence, signs, gates), painting, cleaning, repairs, and other routine tasks to maintain facilities in accordance with design standards after construction and commissioning. Routine visual inspection of the facilities would be conducted to monitor performance and prevent mechanical and structural failures of Project elements. Maintenance activities associated with proposed river intakes could include cleaning, removal of sediments, debris, and biofouling materials. These maintenance actions could require suction dredging or mechanical excavation around intake structures; dewatering; or use of underwater diving crews, boom trucks or rubber wheel cranes, and raft- or barge-mounted equipment.

Proposed operations and maintenance activities could occur daily, annually, periodically (as needed), and on a long-term basis. Approximately 45 operations and maintenance workers would be needed to perform operations and maintenance activities (based on three shifts per day). Table 3-4 shows the estimated equipment and hours of operation for operations and maintenance at Project facilities.

Table 3-4
Estimated Equipment Hours for Operation and Maintenance of Sites Reservoir Project

Equipment	Reservoirs, Recreation Facilities, Dams, Roads, Bridges		Intake and Outlet Facilities, Pumping and Generating Plants		Electrical Switchyards and Overhead Power Lines		Tunnels and Pipelines		Estimated Total Hours/Year of Use per Type of Equipment
	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	
Backhoe	4	520	1	520	1	20	1	10	2,630
Bobcat	1	520	1	520	1	20	1	10	1,070
Bulldozer	2	520	1	520	1	20	1	10	1,590
Dump Truck	1	1040	1	260	-	-	1	10	1,310
Excavator	1	24	-	-	-	-	-	-	24
Portable Generator	4	100	4	100	-	-	4	100	1,200
Grader	1	16	1	16	-	-	-	-	32
4WD Vehicle	2	5,050	2	3650	2	20	2	20	17,480
Tractor Mower	2	520	2	520	1	20	1	10	2,110
Motor Boat	2	780	1	520	-	-	1	10	2,090
All-terrain Vehicle	4	200	-	-	-	-	-	-	800
Sedans/Pickups (onsite)	4	1000	-	-	-	-	-	-	4,000
Pump Truck	1	150	-	-	-	-	-	-	150
Fork Lift	3	500	-	-	-	-	-	-	1,500
Front End Loader	1	300	-	-	-	-	-	-	300
Air Compressor	2	50	1	50	-	-	-	-	150
Water Truck	1	250	-	-	-	-	-	-	250
Flatbed/Boom Truck	2	250	1	250	-	-	-	-	750

Table 3-4
Estimated Equipment Hours for Operation and Maintenance of Sites Reservoir Project

Equipment	Reservoirs, Recreation Facilities, Dams, Roads, Bridges		Intake and Outlet Facilities, Pumping and Generating Plants		Electrical Switchyards and Overhead Power Lines		Tunnels and Pipelines		Estimated Total Hours/Year of Use per Type of Equipment
	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	Average Number of Piece of Equipment	Estimated Hours/Year of Use per Piece of Equipment	
Portable Welders	2	200	1	100	-	-	1	100	600
Scissor Lift	1	150	1	50	-	-	-	-	200
Longer-term Maintenance	One boat-operated dredge and 1 dump truck for 60 hours every 7 to 10 years	One boat-operated dredge, 1 crane, and 1 dump truck for 250 hours every year	-	-	-	-	-	-	Variable

Note:
4WD = four-wheel drive

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4. Diversion and Reservoir Operations

The operations evaluated in this report are designed to provide a range of statewide benefits including ecosystem enhancement actions, water supply reliability improvement for statewide agricultural, urban, and environmental uses (including increasing the survival of anadromous and endemic fish); and Sacramento-San Joaquin Delta (Delta) water quality improvement. The Project would also provide flexibility in hydropower generation to support integration of renewable energy sources. The Project is intended to improve overall system reliability by making more water available at any given time, for release and use for a variety of potential benefits (see Benefit Calculation, Monetization, and Resiliency tab and attachments, A.1 and A.2).

The proposed Project is intended to be operated in a cooperative manner with Central Valley Project (CVP) and State Water Project (SWP) facilities to assist in providing additional storage and release capability to support improving stream temperatures, in-stream habitat, supply deliveries (including refuges), instream flows, and water quality requirements to the extent possible each year as determined most needed. Among existing system constraints, the maintenance of the cold-water pool in various existing reservoirs to support suitable (and improved) in-river fishery habitat conditions is a key operational concern that today is increasingly difficult to meet, particularly during dryer years. In addition, providing water to support improved habitat in the Yolo and Sutter bypasses is also increasingly becoming a potential priority.

Providing water to improve storage conditions in CVP and SWP facilities is a primary objective of the proposed Project. The Project would be operated to make releases from Sites Reservoir in a cooperative manner with CVP/SWP releases from Trinity Lake, Shasta Lake, Lake Oroville, and Folsom Lake. Often, and especially in drought (driest periods) hydrologic conditions, proposed releases from Sites Reservoir would be made to meet an otherwise CVP or SWP obligation. Sites Reservoir releases would allow an equivalent amount of water to be retained in CVP or SWP storage while meeting requirements for minimum instream flow objectives and Delta salinity control objectives. Through this reduction in SWP and CVP facility releases, storage could be conserved in Trinity Lake, Shasta Lake, Lake Oroville, and Folsom Lake. This increase in storage conditions would substantially improve operational flexibility to provide water for the environment and meeting the Project’s primary objectives.

The Project incorporates the ability to achieve multiple objectives over a range of hydrologic and operational conditions. Operations in any given year would be a function of the current year hydrology, as well as a function of the system conditions resulting from the previous year’s hydrology and operations. The Project provides the operational flexibility to manage the water in Sites Reservoir storage to the highest priority needs on an adaptive management basis. Implementation of actions to meet the various objectives would be evaluated on a continuing basis in response to changing system parameters (such as reservoir storage), ecological needs, forecasts of future hydrologic and atmospheric conditions, and system operations.

4.1 Operational Scenario

The proposed operational scenario incorporates three primary components:

1. Operating criteria for diversion of water when all other regulatory criteria are met (including diversion rate in cfs, duration of the diversion, the season of diversion and the water year type of the diversion) from the Sacramento River to fill the Sites Reservoir

2. Operating criteria for timing and rate of releases of water to achieve the primary objectives of the Project (and associated benefits) in specific year types (such as drought or driest periods) and other hydrologic conditions
3. Project cooperative operations[9] with the CVP and SWP operations and facilities

The operation scenario incorporates operation flexibility to adapt to a range of hydrologic conditions, to address various future uncertainties, and to allow for consideration of a range of future water management actions.

4.1.1 Diversions to Sites Reservoir

The proposed Sites Reservoir would be filled through the diversion of Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam. These unregulated tributaries contribute over 3 MAF of flow to the Sacramento River on an average annual basis. Less than 1 percent of diversions to Sites Reservoir are assumed to be provided by flood releases or spills that flow through Lake Shasta. Sacramento River water would be diverted at the existing Hamilton City and Red Bluff diversion locations, described in detail above; Sacramento River water would also be diverted via a new Delevan intake and pipeline. Flows available for diversion are considered river flows in addition to those required to meet the following:

- Senior downstream water rights, existing CVP and SWP and other water rights diversions including SWP Article 21 (interruptible supply), and other more senior flow priorities (diversions associated with Freeport Regional Water Project and Los Vaqueros Reservoir)
- Existing regulatory requirements including State Water Resources Control Board D-1641, CVPIA 3406(b)(2), the 2008 U.S. Fish and Wildlife Service biological opinion, and the 2009 National Marine Fisheries Service biological opinion and other instream flow requirements
- Specific bypass requirements that may be placed on Project operations to protect fish migration and avoid possible Delta water quality effects associated with Sites storage operations

A description of proposed minimum bypass flow requirements to protect existing and future water uses are provided below.

4.1.2 Sites Reservoir Diversion Bypass Flow Protection

Sacramento River flow diversions to Sites Reservoir would only take place when flow monitoring indicates that bypass flows are present in the river because of storm event flows. Several existing and additional proposed bypass flow criteria were assumed at specified locations, as part of the Project. These flow criteria are designed to make certain that available water would be diverted into Sites Reservoir to maintain and protect existing downstream water uses, as follows:

- A bypass flow of 3,250 cfs downstream from Red Bluff Diversion Dam must be present to maintain flows in the upper Sacramento River that are required in State Water Resources Control Board WR 90-5 to prevent dewatering salmonid redds and maintain water temperatures. Diversions at RBPP

[9] The term “cooperative operations” means that water from Sites Reservoir can be used, in some cases, as a substitute for water from these other reservoirs. The needs and uses of the CVP and SWP systems could be enhanced by operating Sites Reservoir (a new source of water storage) in cooperation with the other reservoirs.

for filling Sites Reservoir would only be allowed when flows in the river are above the 3,250 cfs bypass flow criteria.

- Diversions at the Hamilton City intake for Glenn-Colusa Canal currently require a bypass flow of 4,000 cfs to prevent fish entrainment. Diversions at RBPP and Glenn-Colusa Canal intake for filling Sites Reservoir would only be allowed when flows in the river are above the 4,000-cfs bypass flow requirement downstream from Hamilton City.
- Diversions for filling Sites Reservoir would only be allowed when flows below Wilkins Slough were above 5,000 cfs, given the current minimum flow requirements. Wilkins Slough Navigation Control Point minimum flows currently range from 3,250 to 5,000 cfs, depending on hydrologic conditions.
- Diversions for filling Sites Reservoir would only be allowed when a Sacramento River flow of 15,000 cfs is present at Freeport in January; 13,000 cfs in December and February through June; and 11,000 cfs in all other months. This flow threshold protects and maintains existing downstream water uses and water quality in the Delta.

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Table 4-1
Proposed Seasonal Schedule for Project Operations

Objective	Detail of Operation	Priority of Operation[a]	Year Type Most Suitable for Operation[b]	Months Most Suitable for Operation[c]											
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
General Operation															
Conveyance	Diversions at Red Bluff (Tehama-Colusa Canal), at Hamilton City (GCID Main Canal) and at the proposed Delevan Pipeline could occur in any month. Diversions of excess flows would only be allowed once SWRCB D-1641, CVPIA 3406(b)(2), 2008 USFWS BO and 2009 NMFS BO requirements were met and SWP Article 21 demands were satisfied, and other excess Delta flow diversions (e.g., Freeport Regional Water Project, Los Vaqueros Reservoir, cities of Fairfield, Vacaville, and Benicia) were satisfied. Diversions would be restricted by Sacramento River bypass criteria at Red Bluff, Hamilton City, Wilkins Slough, and Freeport. Shading highlights the period in which diversion operations would occur, with the November through March period shaded the heaviest.	N/A	N/A												
Seasonal Storage Operation	Fill Sites Reservoir during excess flow events throughout the winter and spring and drain during peak release periods throughout the summer and fall. The months in which the high and low storage points would occur in the typical seasonal cycle are indicated.	N/A	N/A		Fill Cycle High Point					Drain Cycle Low Point				Fill Cycle	
Water Supply Operations															
Sites Project Authority	Provide storage releases to participating TCCA districts on an as-needed basis to supplement CVP Agricultural Water Service Contract deliveries. Provide storage to GCID and Reclamation District 108 to supplement CVP Settlement Contract deliveries. Provide supplemental water supplied to project participants outside the Sacramento Valley to improve water supply reliability	Authority-1	AN, BN, D, C												
Incremental Level 4 Water Supply for Wildlife Refuges	Provide water to meet Incremental Level 4 wildlife refuge water needs north-of-the-Delta and south-of-the-Delta to supplement refuge supplies up to Level 4 criteria (CVPIA). Shading highlights period in which transfer operations would occur.	AVG-3	AN, BN, D												
Water Quality Operation															
Water Quality	Upstream release actions would improve water quality conditions by augmenting Delta inflow and outflow. Operations could augment Delta flows above base D-1641 operations for up to 6 months. Shading highlights period in which Delta benefits could be augmented.	AVG-1	AN, BN, D												
Hydropower Operation															
Flexible Hydropower Generation	Include dedicated pump/generation facilities with a dedicated afterbay/forebay of 6,500 ac-ft to allow more than 30 hours per week of uninterrupted operation and generation.	N/A	ALL												
Ecosystem Enhancement Storage Account (EESA) Actions/Operation															
EESA-1: Shasta Coldwater Pool	Improve the reliability of cold-water pool storage in Shasta Lake to increase operational flexibility to provide suitable water temperatures in the Sacramento River. This action would operationally translate into the increase of Shasta Lake's May storage levels and improved retention of cold-water pool storage with particular emphasis on Below Normal, Dry, and Critical water year types.	DP-1	BN, D, C												
EESA-2: Sacramento River Flows for Temperature Control	Provide releases from Shasta Dam at appropriate water temperatures, and subsequently from Keswick Dam, to improve water temperatures year-round at levels suitable for all species and life stages of anadromous salmonids in the Sacramento River between Keswick Dam and Red Bluff Pumping Plant, with particular emphasis on the months of highest potential water temperature-related impacts (i.e., July through November) during Below Normal, Dry, and Critical water year types.	DP-2	BN, D, C												
EESA-3: Folsom Lake Cold Water Pool	Increase the availability of cold-water pool storage in Folsom Lake by increasing May storage and retaining cold-water pool storage to allow additional operational flexibility to provide suitable water temperatures in the lower American River. This action would use additional cold-water pool storage by providing releases from Folsom Dam (and subsequently from Nimbus Dam) to help provide water temperatures at levels suitable for juvenile steelhead over-summer rearing and fall-run Chinook salmon spawning in the lower American River from May through November during all water year types.	DP-2	D, C												
EESA-4: Stabilize American River Flows	Stabilize flows in the lower American River to minimize dewatering of fall-run Chinook salmon redds (i.e., October through March) and steelhead redds (i.e., January through May), and reduce juvenile anadromous salmonid isolation events, particularly from October through June. Reduce the reliance upon Folsom Lake as a "real-time first response facility" to meet Delta objectives and demands, particularly from January through August, to reduce flow fluctuation and water temperature-related impacts to fall-run Chinook salmon and steelhead in the lower American River.	DP-2	ALL												

Table 4-1
Proposed Seasonal Schedule for Project Operations

Objective	Detail of Operation	Priority of Operation[a]	Year Type Most Suitable for Operation[b]	Months Most Suitable for Operation[c]											
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EESA-5: Habitat Improvement (Summer/Fall)[e]	Upstream release actions could provide supplemental flow during summer and fall months (i.e., May through December) to improve X2 position and increase estuarine habitat, reduce entrainment, and improve food availability for anadromous fishes and other estuarine-dependent species (e.g., delta smelt, longfin smelt, Sacramento splittail, starry flounder, and *Crangon franciscorum*). Shading highlights period in which flow would be augmented (operation coordinated with Water Quality action).	AVG-2	ALL												
EESA-6: Lake Oroville Coldwater Pool	Improve the reliability of cold-water pool storage in Lake Oroville to improve water temperature suitability for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook salmon spawning in the lower Feather River from May through November during all water year types. Provide releases from Oroville Dam to maintain water temperatures at levels suitable for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook salmon spawning in the lower Feather River. Stabilize flows in the lower Feather River to minimize redd dewatering, juvenile stranding, and isolation of anadromous salmonids.	DP-2	BN, D, C												
EESA-7: Stabilize Sacramento River Fall Flows	Stabilize flows in the Sacramento River between Keswick Dam and the Red Bluff Pumping Plant to minimize dewatering of fall-run Chinook salmon redds (for the spawning and embryo incubation life stage periods extending from October through March), particularly during fall months. Avoid abrupt changes. Operations would be limited to not adversely impacting cold-water pool operations in dry and critical years. Shading highlights period of greatest effect on stabilization or flows on a daily basis.	AVG-1	AN, BN, D												

[a] Priority of operation "DP" indicates that the operational priority has a driest period's emphasis and "AVG" indicates an average-to-wet hydrologic emphasis. The numbers 1 through 4 indicate the priority within the associated hydrologic emphasis. "N/A" indicates that operations are not or cannot be easily defined within the priority structure of the scenario. "Authority" indicates Sites Project Authority operation on an as-needed basis subject to storage availability.

[b] Year type most suitable for operation is the D-1641 40-30-30 year types that are reflected in operations studies; operations in these year types occur when supplies would be available in Sites Reservoir to support the operation, when the operations criteria in the scenario allow for prioritization of the operations, and when conditions are suitable for developing the benefit associated with the operation.

[c] The heavier shaded parts of each bar highlight the months in which conditions would be most suitable to the operations; the lighter shaded parts of each bar highlight the months that would be less suitable to the operations; operations in these months would occur when supplies are available in Sites Reservoir to support the operation, when the operations criteria in the scenario allow for prioritization of the operations, and when conditions are suitable for developing the benefit associated with the operation.

[d] Implementation of this action would include increasing the reliability of floodplain inundation in the Sutter and Yolo bypasses. In coordination with the operation of proposed bypass water control devices (e.g., the proposed Fremont Weir Adult Fish Passage Modification Project), this action would make water available to facilitate better management of the frequency, duration, and timing of inundation within the floodplain of the Sacramento River and the Sutter and Yolo bypasses. This action could provide flow to create floodplain inundation, extend the duration of floodplain inundation, or influence the timing of floodplain inundation. Water made available through Sites Reservoir releases could be used to temporarily increase or continue the flow of water through the weirs for the purpose of incrementally improving floodplain rearing for juvenile salmonids, spawning Sacramento splittail, and other sensitive aquatic species.

[e] Implementation of this action is anticipated to be lower priority and would likely not be implemented in lieu of other actions such as increasing the reliability of floodplain inundation in the Sutter and Yolo bypasses.

Notes:

ALL = All year types

AN = Above normal

Authority = Sites Project Authority
AVG = Average
BN = Below normal

BO = biological opinion
C = Critical

CVPIA = Central Valley Project Improvement Act
D = Dry
DP = Driest periods
Authority = Sites Project Authority

GCID = Glenn-Colusa Irrigation District

N/A = Operations are not or cannot be easily defined within the priority structure of the scenario.
NMFS = National Marine Fisheries Service

SWRCB = State Water Resources Control Board
TAF = thousand ac-ft
USFWS = U.S. Fish and Wildlife Service

X2 = The location of the 2 percent [parts per thousand] salinity isohaline – as measured in kilometers from the Golden Gate Bridge.

4.1.3 Diversions to Fill Sites Reservoir Storage

Diversions of available Sacramento River water to Sites Reservoir via existing Tehama-Colusa Canal and Glenn-Colusa Canal conveyance facilities could occur at any time during the year if flow conditions described above are present in the river. Deliveries for TCCA and GCID service areas would have first priority at the existing Tehama-Colusa Canal and GCID intakes; diversions to Sites Reservoir would come from the unused capacity of the two canals.

Diversions through the proposed Delevan Pipeline could also occur at any time of the year assuming Sacramento River flow conditions are above the previously described bypass flow criteria. In summer months, preference would generally be given to Sites Reservoir releases to the river, which would result in limited diversions to storage because the pipeline could only convey flows in one direction at a time.

The annual diversion amount would range between zero in critical and dry years to more than 1,000 TAF in wetter years. Based on modeling results, the average annual diversions for Sites Reservoir would range from 480 to more than 540 TAF of available Sacramento River flow. Most diversions would occur from December through March during wet and above normal water years but could occur at any time during the year if the flow criteria can be met and capacity exists within the diversion facilities described below.

The existing TCCA and GCID diversion facilities and main canals would be used for the Project, and a new proposed Delevan Pipeline and inlet/outlet would be used to divert and convey water to the proposed reservoir. Total river diversions would be no greater than 5,900 cfs at any given time, in total for the three diversion points. Deliveries for TCCA and GCID service areas would have first priority; diversions to Sites Reservoir would come from the unused capacity of the two canals. Water provided for local uses would be conveyed through existing or proposed upland facilities. The TCCA and GCID diversion facilities have state-of-the-art fish screens and would divert during months when water is available, in accordance with the criteria identified above, depending on year type and Sites Reservoir levels. The proposed Delevan Pipeline diversion facility would be constructed with a similar fish screen that would meet federal and State criteria and divert water in a similar manner, in prescribed operational approach that complies with the criteria identified above.

Tehama-Colusa Canal Authority's Red Bluff Pumping Plant and Canal. The RBPP, located on the Sacramento River near Red Bluff, would be used as the primary diversion point and would have a total conveyance capacity to divert up to 2,100 cfs after the installation of an additional 250 cfs pump to the existing pump grouping at RBPP. Any unused capacity remaining after meeting existing agricultural demands would be used, as necessary, to convey water to fill Sites Reservoir by conveying water via the Tehama-Colusa Main Canal. Approximately 50 to 60 cfs of the Tehama-Colusa Main Canal capacity is assumed to be used for existing winter operations.

Glenn-Colusa Irrigation District's Hamilton City Pumping Plant and Main Canal. The GCID Hamilton City Pumping Plant would be used to divert water from the Sacramento River and the GCID Main Canal used to convey water to Sites Reservoir. This facility has a 3,000 cfs diversion capacity at the Sacramento River intake and the GCID Main Canal capacity at the TRR is 1,800 cfs. Diversions at the GCID diversion facility would be made to supplement those made at the RBPP and the Delevan Pipeline facility described below. Unused Main Canal capacity, remaining after existing agricultural operations, would be used as necessary to convey water to the Sites Reservoir.

Delevan Pipeline Intake/Discharge Facilities. The proposed Delevan Pipeline Intake/Discharge Facilities would divert up to 2,000 cfs from the Sacramento River and convey water through the Delevan

Pipeline to Sites Reservoir when flows were available. Diversions through the proposed Delevan Pipeline would occur at any time of the year, as needed, in conjunction with the two existing diversions previously described and in accordance with the same criteria. It is anticipated in summer the pipeline would often be used to release flows to the river. Preference would generally be given to release operations resulting in limiting diversions to storage in the summer because the pipeline could only convey flows in one direction at a time.

4.1.4 Releases from Sites Reservoir

Operation of the Delevan Pipeline Intake/Discharge Facilities would include releases from Sites Reservoir to the Sacramento River. As is common to all larger reservoirs throughout the Central Valley, Sites Reservoir is expected to become stratified because of warming within the upper layer of the reservoir in the summer.

The Project would be operated to achieve a variety of benefits associated with the Project's primary objectives in specific year types and times of year as determined most needed. A maximum of up to 2,500 cfs could be released from the Delevan Pipeline to meet downstream needs. Typical releases would be 1,500 cfs. Additional releases could also be made at Funks Creek, Stone Corral Creek, the TCCA Canal, and the GCID Main Canal to support other downstream uses. In drought conditions, priority operations would include:

- Support improved cold-water pool conservation and stabilize Sacramento River fall flows for improving spawning and rearing success of anadromous fish
- Provide water to the Cache Slough area via the Yolo Bypass in summer
- Provide water for Incremental Level 4 refuge deliveries per CVPIA
- Provide water to Sites water users North and South of the Delta
- Potentially improve flows to stabilize river flows in the fall to help protect fish habitat

The reservoir outlet structures included in the Project would allow withdrawal of water from the reservoir over a range of depths to manage release temperatures to match Sacramento River temperatures to the extent possible; and, as such, releases would be managed to limit potential temperature effects.

4.1.5 Hydropower Generation

Hydropower generation would be an incidental benefit of conveying water through specific Project facilities and would be influenced by the timing of releases and movement of water and seasonal operational decisions. Four categories of hydropower operations are anticipated:

- Seasonal hydropower as produced by the normal water operations of the Project. As the Project pumps or releases water for its normal operation, power would be consumed or generated by Project hydropower facilities.
- Daily pump-back hydropower operation would be determined by the leftover capacity in the proposed Sites Pumping/Generating Plant and Holthouse Reservoir. When those facilities have enough capacity, the Sites Reservoir would release water through the Sites Pumping/Generating Plant into Holthouse Reservoir during on-peak electrical times to generate high revenue power. During off-peak times, water would be pumped back into Sites Reservoir.
- The Project could release water through the Sites Pumping/Generating Plant to generate power to supplement other renewable power sources (such as wind and solar) in times when those sources typically produce less power. Similarly, power could be consumed by pumping water into Sites

Reservoir from Holthouse Reservoir when renewable sources peak and the grid has a surplus of power that can be “saved” for later generation when the renewable peak has diminished.

- Hydropower could also reduce greenhouse gas emissions when paired with solar and wind energy. To ensure that the greenhouse gas emissions from construction activities are mitigated within the first 15 years of operation, the Project would: (1) obtain at least 20 percent of the power used for pumping water from the Sacramento River and the proposed Holthouse Reservoir into the Sites Reservoir from wind and/or solar energy and (2) use at least 20 percent of the Project’s generated power and/or served pump load to provide integration services needed to firm up highly variable wind and/or solar generation. The 20 percent integration with wind and/or solar energy goal will be achieved by using variable-speed, pumping-generating units installed at Project pumping/generating plants.

4.2 Ecosystem Enhancement Storage Account

Sites Reservoir would be operated in a cooperative manner with other state and federal reservoirs to support ecosystem benefits and enhancements, including actions to increase survival of anadromous and endemic fish populations. Operational actions would include improving conditions related to water temperatures, river flows, and releases to improve Delta water quality.

The operation of Sites Reservoir to provide a variety of ecosystem benefits would allow for the potential development and administration of an ecosystem enhancement storage account, which could be managed by either the Authority or the State to provide water for ecosystem and water quality purposes. Such an account could provide a pool of dedicated storage to manage in cooperation with existing operations to improve cold-water conservation storage, stabilize river flows during critical fisheries periods, increase flows through certain watercourses and/or facilities (e.g., Yolo Bypass), improve water quality, and/or enhance habitat restoration.

During early development of this Project, meetings were held with the Sacramento River Flow Regime Technical Advisory Group (Technical Advisory Group), which comprises environmental advocacy groups, academics, and representatives from federal and California water resource and wildlife agencies (the Technical Advisory Group is described in more detail in Chapter 36 Consultation and Coordination). The Technical Advisory Group convened in 2007 to identify benefits and potential impacts of the Project to the flow regime of the Sacramento River and related ecosystem processes. Through meetings that continued for more than 2 years, the group and proponents of Sites Reservoir identified a list of potential operational strategies for the Project that could be used to improve ecosystem conditions related to increased survival of anadromous and endemic fish populations. These operational strategies include cooperation with the Authority and Reclamation for the Project to divert, store, and release water to meet obligations that would otherwise be met through the operations of Shasta Lake, Trinity Lake, Folsom Lake, or Lake Oroville. In this manner, cooperative operational strategies could improve ecosystem conditions by:

- Improving the reliability of cold-water pool storage in Shasta Lake in May to increase operational flexibility to provide flows in late summer and fall to maintain suitable water temperatures in the Sacramento River, with particular emphasis on Below Normal, Dry, and Critical water year types.

- Increasing available water in Shasta Lake to increase operational flexibility to release flows from Keswick Reservoir to maintain appropriate mean daily water temperatures year-round at levels suitable for all species, races, runs, and life stages of anadromous salmonids in the Sacramento River between Keswick Dam and Red Bluff, with particular emphasis on the months of highest potential water temperature-related impacts (i.e., July through November) during Below Normal, Dry, and Critical water year types.

- Increasing available water in Shasta Lake to increase operational flexibility to release flows from Keswick Reservoir in a manner to stabilize flows in the Sacramento River between Keswick Dam and the Red Bluff to minimize dewatering of fall-run Chinook salmon redds, especially during spawning and embryo incubation life stage periods from October through March.
- Improving the reliability of cold-water pool storage in Folsom Lake in May to increase operational flexibility to provide appropriate flows with suitable water temperatures in the lower American River for juvenile steelhead over-summer rearing and fall-run Chinook salmon spawning from May through November during all water year types.
- Increasing available water in Folsom Lake to improve operational flexibility to release flows from Lake Natoma in a manner that stabilizes flows in the lower American River to: (1) minimize dewatering of fall-run Chinook salmon redds from October through March; (2) minimize dewatering of steelhead redds from January through May; and (3) reduce the occurrence of stranding of juvenile anadromous salmonids due to isolation events that occur when flows of 4,000 cfs or greater are reduced to less than 4,000 cfs, particularly from October through June.
- Improving the reliability of cold-water pool storage in Lake Oroville in the spring to increase operational flexibility to provide appropriate flows with suitable water temperatures in the lower Feather River for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook Salmon spawning from May through November during all water year types.
- Increasing available water in Lake Oroville and Thermalito Reservoir to increase operational flexibility to release flows in a manner to stabilize flows in the lower Feather River to: (1) minimize redd dewatering, (2) minimize juvenile stranding, and (3) reduce the occurrence of isolation or stranding of anadromous salmonids.
- Providing water to meet Incremental Level 4 wildlife refuge water needs north of the Delta and south of the Delta to supplement refuge supplies up to Level 4 criteria (CVPIA)
- Operating in a flexible manner to support storage and associated releases that could be adaptively managed to support operational actions found to produce the greatest benefits over time. Ecosystem-specific objectives could include the release of water through the Colusa Basin Drain into the Yolo Bypass to deliver nutrient-laden water into the Cache Slough area to increase delta smelt productivity.
- Operating Sites Reservoir diversions and releases to increase the reliability of floodplain inundation in the Sutter and Yolo bypasses. In coordination with the operation of proposed bypass water control devices (e.g., the proposed Fremont Weir Adult Fish Passage Modification Project), this action would make water available to facilitate better management of the frequency, duration, and timing of inundation within the floodplain of the Sacramento River and the Sutter and Yolo bypasses.

5. Environmental Commitments Included as Part of the Project

The following standardized environmental measures, plans, protocols, and BMPs would be incorporated into the Project, including construction contract specifications, as appropriate, to avoid or minimize potential impacts during construction, operations, and maintenance. These commitments are generally based on current adopted rules and regulations; established regulatory agency plans, policies, and programs; and accepted industry standards.

5.1 Worker Environmental Awareness Program

A Worker Environmental Awareness Program (WEAP) would be prepared, and all construction crews and contractors will be required to participate in WEAP training prior to starting work on the Project. The WEAP training will include a review of the special-status species, cultural, archaeological, paleontological, and other sensitive resources and areas that could exist in the Project area; the locations of sensitive biological resources, their legal status, and protections; measures to be implemented for avoidance of these sensitive resources; and other required environmentally related resources. A record of all personnel trained will be maintained.

5.2 Environmental Site Assessment

Federal and State regulations and policies, including the Comprehensive Environmental Response, Compensation and Liability Act, All Appropriate Inquiry, California Public Resources Code 21151.4, and the Certified Unified Program administered by the respective county agencies, would require environmental site assessment procedures (due diligence) for future development on or near any potentially hazardous or contaminated sites. A Phase I Environmental Site Assessment (ESA) would be conducted as appropriate for property considered for purchase, transfer, retirement, or sale in fee or easement for the Project. The evaluation would assess the potential for hazardous substance contamination in accordance with all applicable federal, State, and local statutes and regulations. Subsequent actions, such as Phase II ESA and III ESA, would be taken as necessary and appropriate. A Phase II ESA would involve sample collection and analysis to identify and characterize contamination as needed. A Phase III ESA would provide a plan for design and implementation of mitigation or remediation (including, but not limited to, removal of underground storage tanks, drums, buried waste, or other items potentially associated with contamination) and would identify the proper storage, handling, transport, and disposal of designated and hazardous waste if so required.

5.3 Construction Management Procedures

Required construction management procedures would be incorporated into all construction contractor specifications to avoid or minimize construction-related impacts, including those on public health and safety, in accordance with applicable federal, State, and local laws and regulations. All adjacent property owners would be notified of project construction activities prior to initiation of construction. The plan would include the following standard requirements and would be incorporated into the construction specifications for all contractors:

- Informing contractors and subcontractors of work hours, modes and locations of transportation, and parking for construction workers
- Locating overhead and underground utilities

- Obtaining all necessary utilities excavation or encroachment permits
- Staging utility line modifications and relocations in a manner that minimizes interruption of service
- Requiring worker health and safety provisions
- Identifying all approved truck routes, access roads, and management
- Providing stockpiling and staging procedures
- Issuing terms and conditions of all Project permits and approvals
- Providing local and regional emergency response services contact information
- Providing construction notification procedures for Glenn, Colusa, and Tehama county police, public works, fire departments, and other public service providers
- Making all required lighting during construction be directional in nature to minimize glare impacts to humans and wildlife

5.3.1 Fire Safety and Suppression

The Authority would incorporate into contract specifications that all contractors would be required to implement onsite BMPs to reduce the potential for accidental fires, including the following:

- Making sure all motorized equipment used during construction has an approved spark arrestor.
- Preparing a fire safety plan for Glenn and Colusa county review. This plan would include precautions during times of high-fire danger, a list of fire-suppression equipment and tools to have available, a description of available communications, specifications for the supply of water to have available, and descriptions of other actions that would reduce the risk of ignition and facilitate immediate control of an accidental fire.
- Having easily accessible fire-suppression equipment available at all work locations.

5.3.2 Construction Equipment, Truck, and Traffic Management

The following measures would be implemented as part of all applicable contractor specifications to minimize potential road and traffic impacts in and near the project area, related to facility construction, access to all work sites, and hauling of necessary materials:

- Identifying specific haul and access routes with all contractors when multiple facility sites are under construction concurrently, so that project-generated construction traffic is dispersed to the extent practicable and necessary.
- Installing traffic control devices, as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones, where needed to maintain safe driving conditions, including use of signage to alert motorists of construction activities, potential hazards, and travel detours, as well as the use of flaggers when appropriate.
- Ensuring that the Authority or its contractors would survey and describe the preconstruction roadway conditions of all existing roads to be used for access to Project facilities prior to construction. Within 30 days after construction is completed, the Authority would survey the same roadways to identify

any damage that has occurred. Roads damaged by construction would be repaired to a structural condition equal to the condition that existed prior to construction activity.

During operations and maintenance, truck and other maintenance equipment will be used in a manner to limit impacts and use per applicable federal, State, and local regulations.

5.4 Stormwater Pollution Prevention Plan, Erosion Control, Management, and Dewatering

The Project is subject to construction-related stormwater permit and dewatering requirements of the federal Clean Water Act, National Pollutant Discharge Elimination System. The Authority and Reclamation would obtain required permits through the RWQCB before any Project-related ground-disturbing construction activity occurs. As required by the State Water Resources Control Board Construction General Permit, a stormwater pollution prevention plan (SWPPP) would be prepared and implemented before construction starts and throughout the Project construction period. The SWPPP would identify BMPs to prevent and minimize the introduction of contaminants into surface waters. In addition, all BMPs identified below would be employed as necessary during all Project operation and maintenance activities anticipated to require ground disturbance.

The objectives of the SWPPP would be to: (1) identify pollutants, and their sources, associated with Project construction activities that may affect stormwater quality, (2) identify BMPs to reduce pollutants in stormwater discharges during and after construction and (3) identify non-stormwater discharges and develop a plan to eliminate, control, or treat all non-stormwater discharges. BMPs (which would also be employed during operation and maintenance activities as necessary) would include site management/BMP installation; non-stormwater management; erosion and sediment controls; and an inspection, monitoring, and maintenance program, including the following:

- Temporary erosion control measures (e.g., silt fencing, weed-free straw bale barriers, fiber rolls, storm drain inlet protection, hydraulic mulch, and stabilized construction entrances) would be employed for all disturbed areas. The SWPPP would also include development of site-specific structural and operational BMPs to prevent and control impacts on runoff water quality, measures to be implemented before each storm event, inspection and maintenance of BMPs, and monitoring of runoff quality by visual and/or analytical means.
- No disturbed surfaces would be left without erosion control measures in place during the winter and spring.
- Sediment would be retained onsite by a system of sediment basins, traps, or other appropriate measures.
- Post-construction erosion control measures would be implemented (including silt fencing, weed-free straw bale barriers, fiber rolls, hydraulic mulch/seeding, and vegetative plantings) and monitored to ensure minimization of water quality and associated impacts. Revegetation treatments would be integrated into grading plans to create favorable planting environments that would aid plant establishment and natural regeneration. Whenever feasible, local native plant species would be used.
- Groundwater/dewatering would be handled in a manner that would not impact non-stormwater discharges.

During operations and maintenance, Project facilities including, but not limited to, roads (including access roads), other paved and unpaved surfaces, structures, and equipment, will be properly maintained to avoid the potential for erosion and sediment/siltation into local waterbodies and in compliance with all applicable federal, State, and local regulations. Project operation and maintenance erosion and sediment control plans will be prepared and implemented as determined necessary depending on the specific activity and potential for erosion or other impacts.

5.4.1 Compliance with the Requirements of RWQCB Order No. 5-00-175

Groundwater pumped as part of construction-related dewatering will be contained onsite within bermed areas adjacent to the construction areas to avoid impacts to surface waters. As necessary, the Authority will ensure that the water is pumped into Baker tanks or an approved equivalent with either a filter or gel coagulant system or other containment to remove sediment, as required. Remaining water will be discharged to a designated receiving water body or applied to land in accordance with the requirements of RWQCB Order No. 5-00-175. On upland areas, sprinkler systems may be used to disperse the water in support of revegetation efforts. BMPs described in the SWPPP will also be implemented to retain, treat, and dispose of groundwater. Measures will include, but are not limited to the following:

- Directly conveying pumped groundwater to a suitable land disposal area capable of percolating flows
- Retaining pumped groundwater in surface facilities to reduce turbidity and suspended sediment concentrations
- Testing water collected during dewatering for contamination prior to disposal if contamination is suspected
- Treating (i.e., flocculating) pumped groundwater to reduce turbidity and concentrations of suspended sediments if turbidity exceeds RWQCB effluent limitations as defined in General Order 5-00-175.

5.4.2 Spill Prevention and Hazardous Materials Management

Hazardous materials and hazardous wastes including fuels, oils, grease, and lubricants would be used and stored for construction, operation, and maintenance of the proposed Project. These materials would be used, stored, and disposed according to applicable regulations (Chapter 4 Regulatory Requirements and Permit Summary and Chapter 28 Public Health and Environmental Hazards). As part of the SWPPP, a spill prevention and control plan would be developed and implemented to minimize effects from spills of hazardous or petroleum substances during construction and operation/maintenance of the Project. The spill prevention and control plan would include measures to avoid the accidental release of chemicals, fuels, lubricants, and non-stormwater into channels and account for all applicable federal, State, and local laws and regulations, including the Resource Conservation and Recovery Act. Spill prevention kits would always be in close proximity when hazardous materials are used (e.g., crew trucks and other logical locations). Feasible measures would be implemented so that hazardous materials would be properly handled by all reasonable means when working in or near any waterway. No fueling would be done within the ordinary high water mark, immediate floodplain, or full pool Inundation Area unless equipment would be provided so that any accidental fuel spill would not be able to enter the water, contaminate sediments that may come into contact with water, or damage wetland or riparian vegetation. Any equipment that can readily moved out of the channel would not be fueled in the channel or immediate floodplain. For all fueling of stationary equipment at the construction sites, containments would be provided to the degree that any spill would not enter the channel or damage wetland or riparian vegetation. Equipment would not be serviced within the ordinary high water mark or immediate floodplain, unless the equipment stationed in these locations cannot be readily relocated (e.g., pumps and generators).

Additional BMPs designed to avoid spills from construction equipment and equipment used for the operation and maintenance of Project facilities would also be implemented, including the following:

- Storing hazardous materials in double containment
- Disposing all hazardous and nonhazardous products in a proper manner
- Monitoring onsite vehicles for fluid leaks and regular maintenance to reduce the chance of leakage
- Providing containment (e.g., a prefabricated temporary containment mat, a temporary earthen berm, or other measure) of bulk storage tanks having a capacity of more than 55 gallons

In addition, existing federal, State, and local worker safety and emergency response regulations require that if any unforeseen hazardous conditions are discovered during construction, the contractor must coordinate with the appropriate agencies, including Colusa and Glenn counties, for the safe handling, sampling, transportation, and disposal of encountered materials. The contractor will also be required to comply with California Occupational Safety and Health Administration standards that ensure worker health and safety.

5.5 Mosquito and Vector Control

All Project contractors shall coordinate with Glenn County Mosquito and Vector Control District, the Colusa County Environmental Health Department, and the Colusa County Mosquito Abatement District regarding implementation of federal, State, and local vector control requirements during construction of all Project facilities. The Authority will work with Glenn and Colusa counties to ensure appropriate vector control for the operation and maintenance of all project facilities, including recreation areas, to minimize potential impacts to human health.

5.6 Groundwater/Dewatering Water Supply

In the unlikely event that adjacent existing groundwater well users experience temporary, localized impacts to groundwater availability during construction of Project facilities because of construction dewatering (rather than climatic conditions or an increase in non-project groundwater production) such that an existing local well no longer temporarily supports its current use, an alternate water supply will be provided to the landowner during the construction dewatering period.

5.7 Visual and Aesthetic Design, Construction, and Operation Practices

Standard and best practice approaches will be implemented during the design, construction, and operation phases to minimize visual and aesthetic impacts to potential residents and other viewers caused by the construction and operation of all Project facilities, including the following:

- Using native trees, bushes, and shrubs, in a manner that does not compromise facility safety, and access, to screen Project facilities that may substantially degrade the existing visual character of the site(s)
- Incorporating high-quality site design and architecture that does not detract from the rural nature of the surroundings

- Locating, designing, and constructing retaining walls and erosion control devices or structures to avoid detracting from the scenic quality of surrounding areas to the extent possible

5.8 Emergency Action Plan

An emergency action plan would be implemented for Project construction and operation. The plan would include emergency notification flowcharts, notification procedures, inundation maps, and a variety of other important emergency response protocols for notifying downstream entities if an emergency release was anticipated to occur. The emergency action plan would address potential and actual emergency conditions and any uncontrolled release of water, including release of water through the signal spillway. These plans are typically reviewed annually and periodically tested through tabletop and functional exercises and drills.

Feasibility and Implementation Risk Tab Attachment 3: Schedule

Attach an estimated schedule for the proposed project until the first year of operation. If the schedule is included in another attachment, identify the location. See section 6003(a)(1)(G) of the regulations.

Sites Reservoir: Implementation Schedule – 2017 to 2021

CWC-WSIP

WSIP Application Complete (Aug 14, 2017)

Public Benefit Ratios (Jan 2018)

Scoring and Ranking (May 2018)

Conditional Eligibility Determination (Jun 2018)

Early Funding Agreement June 2018

Funding Agreement

CEQA/NEPA

Draft EIR/S

Public Review Draft EIR/S (Aug 14, 2017 to Nov 14, 2017)

Prelim Final EIR/S (Fall 2019)

Final EIR/S

NOD/ ROD

Federal Feasibility Report

Draft Feasibility Report

Public Review Draft Feasibility Report (Aug 14, 2017 to Nov 14, 2017)

Updated Feasibility Report Fall 2018

Final Feasibility Report

2017 | 2018 | 2019 | 2020 | 2021

Sites Reservoir: Implementation Schedule – 2017 to 2021

Permits and Water Rights

Draft EIR/S

Draft EIR/S Review (Aug 14, 2017 to Nov 14, 2017)

Pre Permit Application Discussions (Aug 14, 2017 to Spring 2018)

Permit Application Development (Summer 2018)

Permit Review and Negotiation (Fall 2018 – Fall 2021)

Receive Permits (NLT Dec 2021)

Designs, Operations, Analyses

Operations Plan Updates (Summer 2018 to Spring 2019)

Operational Agreements (Spring 2021 to Fall 2021)

Project Designs (Summer 2018 to Fall 2021)

Designs Complete (Fall 2021)

Adaptive Management Plans (Spring 2021 to Fall 2021)

Sites Project Authority

WSIP Comment Reviews (Aug 15, 2017 to Spring 2018)

Agreement Term Review (Sep 2017)

Preliminary Adaptive Management Plan Review (Oct 2017)

Public Benefit Review (Jan 2018)

Scoring Ranking Review (May 2018)

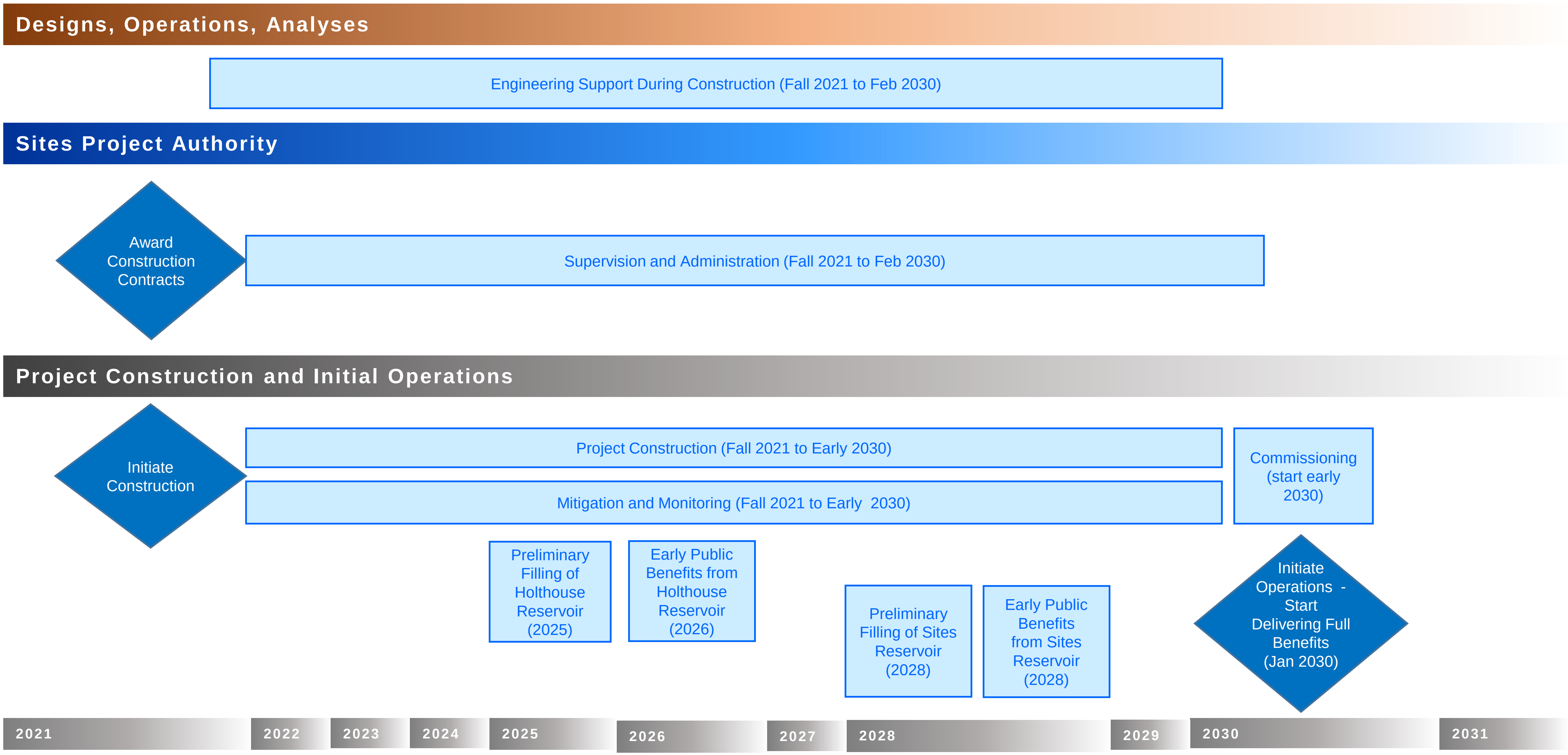
JPA Board Funding Agreement (Fall 2018)

Reservoir Committee Funding Agreement (Fall 2018)

Sites JPA Board Approval (2020)

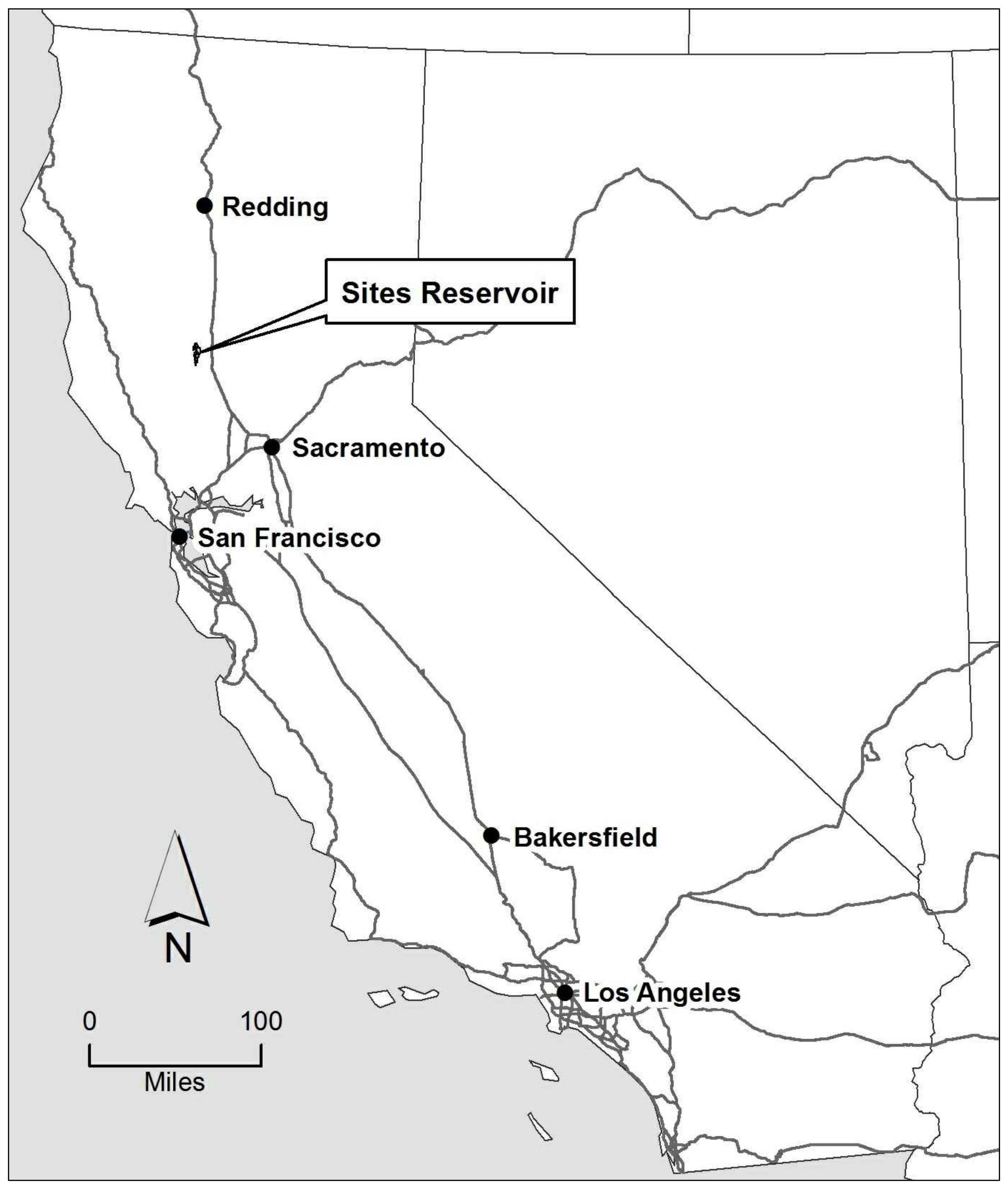
2017 | 2018 | 2019 | 2020 | 2021

Sites Reservoir: Implementation Schedule – 2021 to 2031

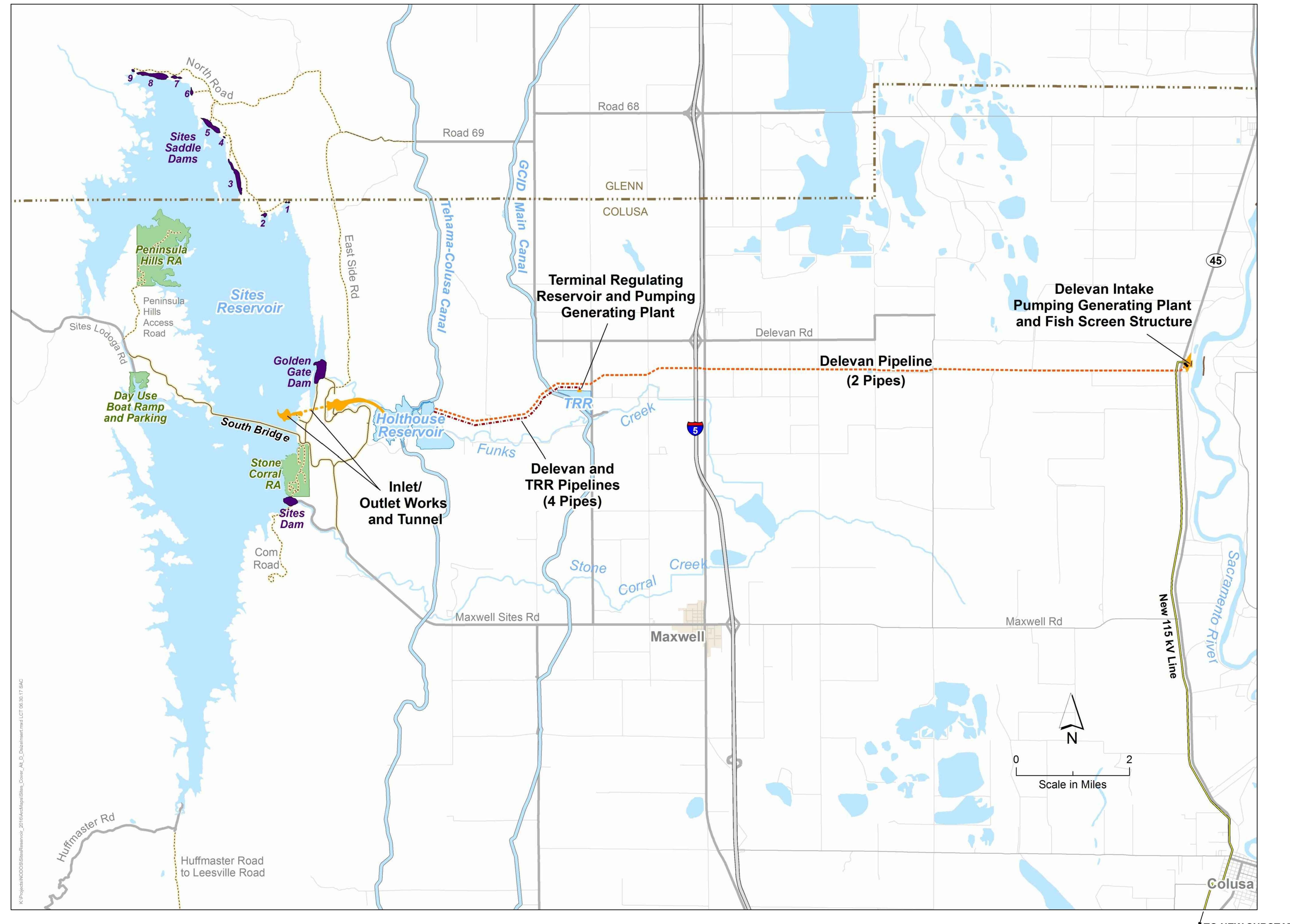


SITES PROJECT

SITES RESERVOIR ENGINEERING DESIGN



PROJECT LOCATION PLAN



PROJECT SITE PLAN

NOTES:

1. THIS SET OF PLANS PRESENTS FEASIBILITY-LEVEL DETAILS FOR ALTERNATIVE D FOR THE SITES RESERVOIR PROJECT AND SUPPORTS THE FEASIBILITY COST ESTIMATE.
2. THESE PLANS ARE NOT TO BE USED FOR CONSTRUCTING ANY FACILITY OR COMPONENT REPRESENTED HEREIN.

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM

DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\00-GENERAL\G-0001.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: J. BARNES
DRAWN:
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

AECOM

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855
DATE: 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

COVER SHEET

SPEC NO.:
DRAWING NO.: G-0001
REV.:
SHEET NO.: 1

SHEET LIST TABLE

SHEET NUMBER	DRAWING NUMBER	SHEET TITLE
		GENERAL
1	G-0001	COVER SHEET
2	G-0002	SHEET INDEX AND NOTES
		SITES RESERVOIR CIVIL
3	CS-0701	RESERVIOR CLEARING AND DEMOLITION PLAN
4	CS-0702	GAS WELL PLUG
5	CS-0801	POTENTIAL BORROW SOURCES
		ROADS & BRIDGES
6	CR-101	ROAD MODIFICATION PLAN
7	CR-102	PROPOSED NORTHERN TEMPORARY BYPASS ROAD
8	CR-200	SITES LODOGA ROAD RELOCATION SHEET INDEX
9	CR-201	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 10+00 TO STA. 36+00
10	CR-202	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 36+00 TO STA. 62+00
11	CR-203	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 62+00 TO STA. 90+00
12	CR-204	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 90+00 TO STA. 118+00
13	CR-205	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 118+00 TO STA. 146+00
14	CR-206	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 146+00 TO STA. 174+00
15	CR-207	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 174+00 TO STA. 202+00
16	CR-208	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 202+00 TO STA. 230+00
17	CR-209	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 230+00 TO STA. 258+00
18	CR-210	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 258+00 TO STA. 286+00
19	CR-211	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 286+00 TO STA. 314+00
20	CR-212	SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 314+00 TO STA. 331+96
21	CR-301	TYPICAL ROAD CROSS SECTIONS
22	CR-302	SOUTH BRIDGE NO. 1 AND 2 TYPICAL SECTION
23	CR-401	SOUTH BRIDGE NO. 1 GENERAL PLAN AND ELEVATION
24	CR-402	SOUTH BRIDGE NO. 2 GENERAL PLAN AND ELEVATION
		PARKS AND RECREATIONAL AREAS
25	PR-101	PARKS AND RECREATIONAL AREAS OVERVIEW
		DAMS
26	CM-100	EMBANKMENTS AND SADDLE DAMS LOCATION PLAN
27	CM-101	SITES DAM PLAN
28	CM-301	SITES DAM SECTION A-A
29	CM-302	SITES DAM SECTION B-B
30	CM-303	SITES DAM SECION C-C
31	CM-501	SITES DAM GROUTING DETAILS
32	CM-502	SITES DAM FOUNDATION SURFACE TREATMENT
33	CG-101	GOLDEN GATE DAM PLAN
34	CG-301	GOLDEN GATE DAM SECTION A-A
35	CG-302	GOLDEN GATE DAM SECTION B-B
36	CG-303	GOLDEN GATE DAM SECTION C-C
37	CG-304	GOLDEN GATE DAM SECTION D-D
38	CG-501	GOLDEN GATE DAM GROUTING DETAIL
39	CS-101	SADDLE DAMS PLAN
40	CS-102	SADDLE DAMS PLAN, DAM NO. 1 AND 2
41	CS-103	SADDLE DAMS PLAN, DAM NO. 3
42	CS-104	SADDLE DAMS PLAN, DAM NO. 4, 5, AND 6
43	CS-105	SADDLE DAMS PLAN, DAM NO. 7, 8, AND 9
44	CS-301	SADDLE DAMS TYPICAL SECTIONS, DAM NO. 1, 2, 4, AND 9
45	CS-302	SADDLE DAMS TYPICAL SECTIONS, DAM NO. 3, 5, 6, 7, AND 8
46	CS-501	SIGNAL SPILLWAY DETAILS, SADDLE DAM NO. 6
47	CH-101	HOLTHOUSE RESERVOIR PLAN
48	CH-102	HOLTHOUSE RESERVOIR PLAN INLET OUTLET STRUCTURE PLAN
49	CH-301	FUNKS CREEK AND ABUTMENT AREA EMBANKMENT CROSS SECTIONS
50	CH-501	HOLTHOUSE RESERVOIR ELEVATION AND DETAILS
		DELEVAN & TRR PIPELINE
51	CP-100	DELEVAN AND TRR OVERALL PLAN AND PROFILE
52	CP-101	DELEVAN AND TRR PIPELINE INDEX SHEET
53	CP-201	DELEVAN PIPELINE PLAN AND PROFILE STA. 167+36 TO STA. 208+00
54	CP-202	DELEVAN PIPELINE PLAN AND PROFILE STA. 208+00 TO STA. 256+00
55	CP-203	DELEVAN PIPELINE PLAN AND PROFILE STA. 256+00 TO STA. 300+00
56	CP-204	DELEVAN PIPELINE PLAN AND PROFILE STA. 300+00 TO STA. 356+00
57	CP-205	DELEVAN PIPELINE PLAN AND PROFILE STA. 356+00 TO STA. 414+00
58	CP-206	DELEVAN PIPELINE PLAN AND PROFILE STA. 414+00 TO STA. 472+00
59	CP-207	DELEVAN PIPELINE PLAN AND PROFILE STA. 472+00 TO STA. 532+00
60	CP-208	DELEVAN PIPELINE PLAN AND PROFILE STA. 532+00 TO STA. 592+00
61	CP-209	DELEVAN PIPELINE PLAN AND PROFILE STA. 592+00 TO STA. 652+00
62	CP-210	DELEVAN PIPELINE PLAN AND PROFILE STA. 652+00 TO STA. 712+00
63	CP-211	DELEVAN PIPELINE PLAN AND PROFILE STA. 712+00 TO STA. 772+00
64	CP-212	DELEVAN PIPELINE PLAN AND PROFILE STA. 772+00 TO STA. 832+00
65	CP-213	DELEVAN PIPELINE PLAN AND PROFILE STA. 832+00 TO STA. 892+00
66	CP-301	DELEVAN AND TRR TYPICAL PIPE CROSS SECTIONS
67	CP-501	DELEVAN PIPELINE BORE AND JACK DETAILS
68	CP-502	DELEVAN PIPELINE MANHOLE AND BLOWOFF STRUCTURE DETAILS
69	CP-503	DELEVAN AND TRR TYPICAL MANHOLE AND AIR VALVE DETAILS
70	CP-504	DELEVAN AND TRR PIPELINE TYPICAL CROSS CANAL DETAILS
71	CP-505	DELEVAN AND TRR PIPELINE NATURAL GAS PIPELINE RE-CONSTRUCTION
72	CP-506	DELEVAN AND TRR PIPELINE PIPE DETAILS
73	CP-507	DELEVAN AND TRR PIPELINE CATHODIC PROTECTION
74	CP-508	DELEVAN AND TRR PIPELINE CATHODIC PROTECTION INSTALLATION
75	CP-701	DELEVAN AND TRR PIPELINE DEWATERING
		TERMINAL REGULATING RESERVOIR (TRR)
76	CT-101	TERMINAL REGULATING RESERVOIR PLAN
77	CT-301	TRR PUMP-GENERATION FACILITY FLOOR PLAN
78	CT-302	TRR PUMP-GENERATION FACILITY TRANSVERSE SECTION 620 CFS UNIT
79	CT-303	TRR INLET AND GCID FLOW CONTROL DIVERSION STRUCTURES
80	CT-304	TRR 200-CFS SPILLWAY AND 150-CFS OUTLET WORKS
81	CT-305	TRR BASIN TYPICAL SECTIONS
82	CT-306	TRR 200 CFS SPILLWAY
		SITES INLET OUTLET STRUCTURE
83	CI-101	INLET-OUTLET TUNNEL PLAN
84	CI-201	INLET-OUTLET TUNNEL PROFILE
85	CI-501	MULTI-LEVEL INLET-OUTLET TOWER STRUCTURE DETAILS
86	CI-502	MULTI-LEVEL INLET-OUTLET TOWER STRUCTURE AND TUNNEL DETAILS
		PUMP GENERATING PLANTS
87	CF-101	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE SITE PLAN
88	CF-102	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE TOP PLAN
89	CF-103	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE LOWER LEVEL PLAN
90	CF-301	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE ACCESS ROAD PILE PLAN AND SECTION
91	CF-302	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE TYPICAL FISH SCREEN BAY SECTION
92	CF-303	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE FISH SCREEN SIDE ELEVATION
93	CF-304	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE SEDIMENT REMOVAL PIPING SECTIONS
94	CF-305	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE SEDIMENT REMOVAL PIPING SECTIONS
95	CF-306	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE LONGITUDINAL SECTION
96	CF-307	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE CENTRIFUGAL PUMPS
97	CF-308	DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE AIR CHAMBER PLANT AND ELEVATION
98	CN-101	SITES PUMPING-GENERATING PLANT SITE PLAN
99	CN-201	SITES PUMPING-GENERATING PLANT SITE PLAN
100	CN-202	SITES PUMPING-GENERATING PLANT SITE PLAN
101	CN-301	SITES PUMPING-GENERATING PLANT PLAN AND SECTION
102	CN-302	SITES PUMPING-GENERATING PLANT CROSS SECTION
		ELECTRICAL
103	E-101	SITES TRANSMISSION LINE PLAN
104	E-102	SITES-TRR AND DELEVAN TRANSMISSION PLAN DETAILS
105	E-103	SITES PUMPING-GENERATING PLANT ELECTRICAL SITE PLAN
106	E-104	SITES PUMPING-GENERATING PLANT SWITCHYARD PLAN
107	E-105	DELEVAN PUMPING-GENERATING PLANT SWITCHYARD PLAN
108	E-106	DELEVAN PUMPING-GENERATING PLANT FLOOR PLAN
109	E-107	DELEVAN PUMPING-GENERATING PLANT SITE PLAN
110	E-501	TRANSMISSION TOWER, POLES TYPICAL DETAILS
111	E-601	SITES SWITCHYARD SINGLE LINE DIAGRAM
112	E-602	DELEVAN SWITCHYARD SINGLE LINE DIAGRAM
113	E-603	TRR SWITCHYARD SINGLE LINE DIAGRAM
		APPENDIX AND REFERENCES
114	B-100	APPENDIX
115	B-101	DELEVAN & TRR PIPELINE BORING LOCATION MAP
116	B-301	DELEVAN & TRR PIPELINE BORING LOGS 1 OF 4
117	B-302	DELEVAN & TRR PIPELINE BORING LOGS 2 OF 4
118	B-303	DELEVAN & TRR PIPELINE BORING LOGS 3 OF 4
119	B-304	DELEVAN & TRR PIPELINE BORING LOGS 4 OF 4
120	B-305	DELEVAN- TRR PIPELINE GEOLOGIC CROSS SECTION
121	B-1101	SITES DAM EXPLORATION AND GEOLOGIC MAP 1 OF 2
122	B-1102	SITES DAM EXPLORATION AND GEOLOGIC MAP 2 OF 2
123	B-1301	SITES DAM GEOLOGIC SECTION 1 OF 2
124	B-1302	SITES DAM GEOLOGIC SECTION 2 OF 2
125	B-2101	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 1 OF 10
126	B-2102	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 2 OF 10
127	B-2103	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 3 OF 10
128	B-2105	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 5 OF 10
129	B-2104	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 4 OF 10
130	B-2106	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 6 OF 10
131	B-2107	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 7 OF 10
132	B-2108	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 8 OF 10
133	B-2109	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 9 OF 10
134	B-2110	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 10 OF 10
135	B-2301	GOLDEN GATE DAM GEOLOGIC CROSS SECTION 1 OF 1
136	B-2302	GOLDEN GATE DAM GEOLOGIC CROSS SECTION 1 OF 2
137	B-2303	GOLDEN GATE DAM GEOLOGIC CROSS SECTION 2 OF 2
138	B-2304	GOLDEN GATE DAM GEOLOGIC CROSS SECTION OUTLET TUNNEL 1 OF 2
139	B-2305	GOLDEN GATE DAM GEOLOGIC CROSS SECTION OUTLET TUNNEL 2 OF 2
140	B-3101	SADDLE DAMS 1 & 2 GEOLOGIC MAP
141	B-3102	SADDLE DAM 3 PLAN AND PROFILE
142	B-3103	SADDLE DAMS 4, 5 & 6 GEOLOGIC MAP
143	B-3104	SADDLE DAMS 7, 8 & 9 GEOLOGIC MAP
144	B-3301	SADDLE DAMS 1 & 2 GEOLOGIC SECTIONS
145	B-3302	SADDLE DAMS 4, 5 & 6 GEOLOGIC SECTIONS
146	B-4301	INLET-OUTLET GEOLOGIC SECTIONS

REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED
DRAWN
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVED JOE BARNES REG. CE. NO. 40105

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SHEET INDEX AND AND NOTES

SPEC NO.
DRAWING NO. G-0002
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SHEET NO. 2

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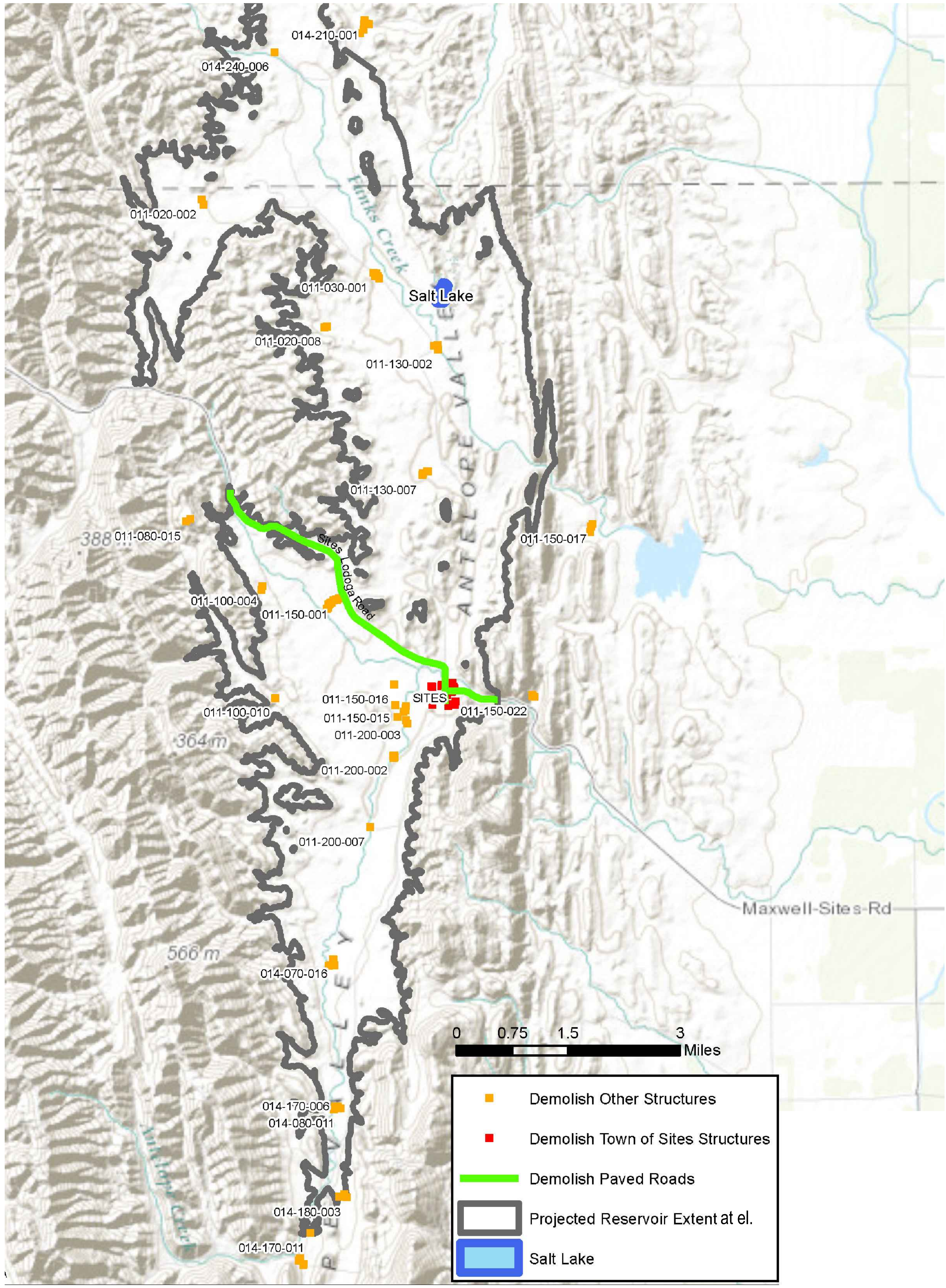

STRUCTURES TO BE DEMOLISHED

APN	HOUSE	MOBILE HOME	SEPTIC SYSTEM	GROUNDWATER WELL	BARN	GARAGE/ SHOP	SHED	SILO	WATER TOWER	OTHER*
TOWN OF SITES	12	1	13	13	2	3	9			1
011-020-002				1	1		1			
011-020-008				1	2					
011-030-001	1		1	1	1	1	1	1		
011-080-015	1		1	1	1					
011-100-004	1		1	1	5			5		
011-100-010				1	1					
011-130-002				1	2		1			
011-130-007	1		1	1	1		2			
011-150-001	1		1	1	2			1		
011-150-015	1		1	1	2		2			
011-150-016				1				1		
011-150-017				1	1		1			1
011-150-022		1	1	1	1		1			
011-200-002	1		1	1			3			
011-200-003				1	3					
011-200-007				1	1					
014-070-016	1		1	1			3	3		
014-080-011	1		1	1						
014-170-006				1	1		1		1	
014-170-011	2		2	2	1	1	1			
014-180-003	1		1	1	1	1				
014-210-001	2		2	2	1	2	1			
014-240-006				1	1					
TOTAL	**26**	**2**	**28**	**38**	**31**	**8**	**27**	**11**	**1**	**2**

* UNIDENTIFIED STRUCTURES AND WELL PUMP ENCLOSURES

OTHER ITEMS TO BE DEMOLISHED

ITEM	COUNT	UNIT
MAXWELL SITES & SITES LOGODA ROADS, ASPHALT PAVED	20,840	FEET
HUFFMASTER ROAD, ASPHALT PAVED	740	FEET
STANDING TIMBER	700	ACRES
METAL FENCING, WITH AND WITHOUT BARBED WIRE	40	MILES
UNDERGROUND STORAGE TANKS (UST), OIL-FILLED	15	UST
NATURAL SPRING CAPS AT SALT LAKE (ONE IN LAKE; TWO UPSTREAM)	3	CAPS

NOTES:

1. ASPHALT CONCRETE PAVEMENT TO BE REMOVED WITHIN THE LIMITS OF THE RESERVOIR BELOW EL.540.
2. ALL METAL FENCING (WITH AND WITHOUT BARBED WIRE) AND FENCE POSTS TO BE REMOVED WITHIN THE LIMITS OF THE RESERVOIR BELOW EL.540.
3. TABULATED STRUCTURES HAVE NOT BEEN VISUALLY INSPECTED.
4. STRUCTURES IDENTIFIED FROM 2013 GROUND SURVEY BY DWR.
5. STRUCTURES AND OTHER FACILITIES AND ITEMS TO BE DEMOLISHED SHALL BE REMOVED AND PROPERLY DISPOSED OF AT LANDFILLS LICENSED TO RECEIVE THE DEMOLITION WASTE. BURNING OR BURIAL ON SITE WILL NOT BE PERMITTED.
6. ONE SEPTIC SYSTEM ASSUMED TO EXIST FOR EVERY HOUSE AND MOBILE HOME. SEPTIC SYSTEMS TO BE ABANDONED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
7. ONE GROUNDWATER WELL ASSUMED TO EXIST FOR EVERY OCCUPIED PARCEL OR HABITABLE DWELLING ON AN OCCUPIED PARCEL. GROUNDWATER WELLS TO BE PLUGGED AND ABANDONED IN ACCORDANCE WITH DWR WATER WELL STANDARDS SECTION 23, BULLETIN 74-90.
8. STANDING TIMBER QUANTITY BASED ON DWR ESTIMATE OF REMAINING TIMBER.
9. ONE UNDERGROUND STORAGE TANK (UST) ASSUMED FOR EVERY TWO BARN STRUCTURES. UST TO BE REMOVED OR ABANDONED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
10. EACH NATURAL SPRING AT SALT LAKE TO BE CAPPED AND GROUTED WITH 4' X 4', 1-FOOT THICK CONCRETE SLAB.

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REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: J. BARNES
DRAWN: S. QAZI
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

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WSIP APPLICATION ATTACHMENT A4.A

RESERVOIR CLEARING AND DEMOLITION PLAN

SPEC NO.
DRAWING NO. CS-701
REV.
SHEET NO. 3

NOTES:

1. WELLS TOTAL LENGTH ARE 70,000. ASSUME 20 PERCENT WILL REQUIRE TO BE RE-DRILLED AND RE-GROUTED.
2. MINIMUM ABANDONMENT PROCEDURE INCLUDES UNEARTHING THE WELL HEAD, CUTTING OFF CLOSURE PLATE, AND LEAK CHECKING THE SURFACE PLUG.

	Well #	API	Sec	Twn	Rge	Drilled	Abandoned	TD	Casing Size	Shoe	Zone Plug	BFW Plug	Shoe Plug	Sfc Plug
Rservoir Wells	64	021-00064	19	18N	4W	1964	1967	6057'	11.75"	516'			570'-365'	10'-0'
	63	021-00063	30	18N	4W	1964	1978	4004'	5.5"	3995'				2561'-0'
	57	021-20057	30	18N	4W	1972	1974	6066'	5.5"	5897'				1910'-0'
	359	011-00359	19	17N	4W	1942	1948	1400'4921'	13.375"	632'			642'-540'	none
	366	011-00366	31	18N	4W	1961	1961	3518'	9.625"	494'			510'-372'	10'-0'
	367	011-00367	32	18N	4W	1949	1949	6243'	11.75"	1442'			1462'-1290'	10'-0'
	368	011-00368	31	18N	4W	1928	1976	4277'	8.625"	3445'			3811'-3256'	60'-0'
	369	011-00369	31	18N	4W	1923	1976	1891'	10.75"	1871'				421'-0'
	374	011-00374	6	17N	4W	1950	1978	3317'	5.5"	3317'				2037'-0'
	10	011-20010	31	18N	4W	1968	1974	3177'	7"	1605'			1725'-1508'	30'-5'
Conveyence Wells	354	011-00354	8	17N	3W	1931		855	6.25	756'				
	286	011-20286	7	17N	2W	1984	1984	6242'	8.625	2303'	6180'-6010'	1667'-1420'	2363'-2150'	30'-5'
	346	011-00346	10	17N	2W	1961	1961	8810'	9.625	4149	6296'-6076		4199'-3979'	19'-4'
	107	011-00107	12	17N	2W	1955	1955	4000'	9.625	628		1600'-1374'	648'-513'	10'-4
	670	011-20670	12	17N	2W	2002		2596'	4.5	2514'				
	96	011-00096	12	17N	2W	1965	1966	3700'	4.5	2562'	2390'-2194'			10'-0

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DRAWN S. QAZI
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APPROVAL RECOMMENDED
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AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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WSIP APPLICATION ATTACHMENT A4.A

GAS WELL PLUGGING

SPEC NO.
DRAWING NO. CS-702
REV.
SHEET NO. 4

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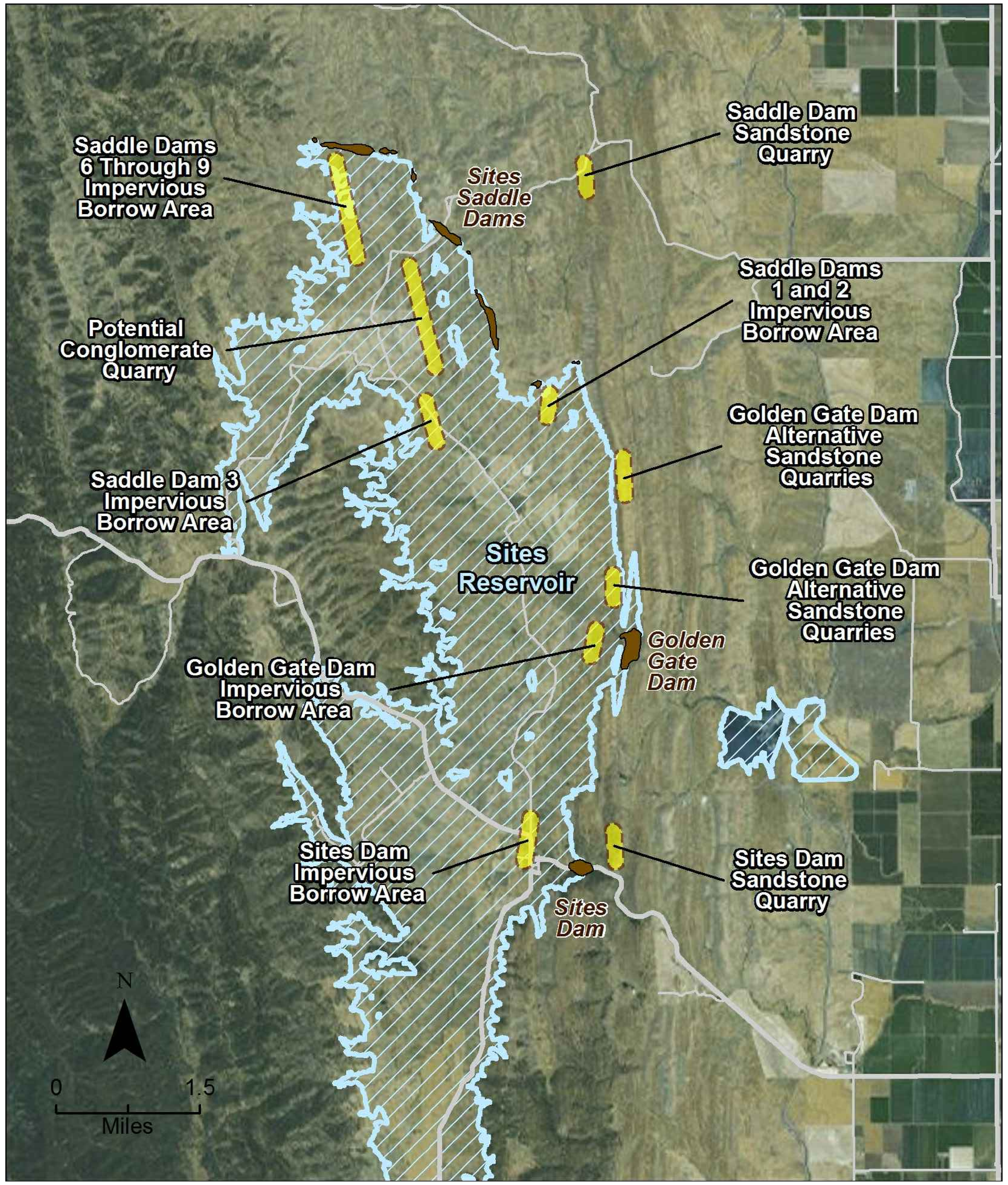
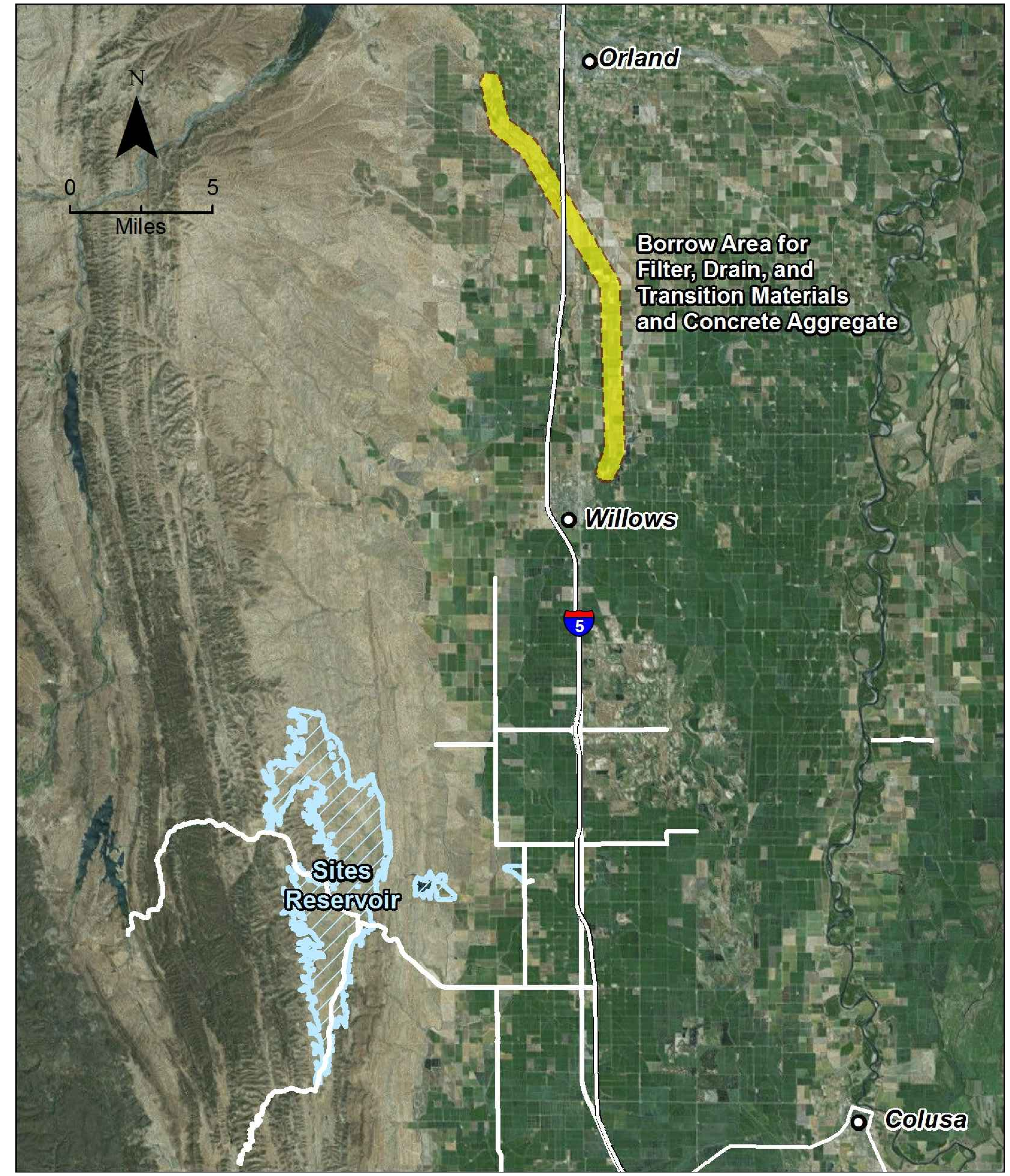
NOTES:

1. SEE EMBANKMENT AND SADDLE DAM PLAN DRAWINGS FOR CONSTRUCTION QUANTITY ESTIMATES.



INTERNAL PROJECT BORROW SITES



EXTERNAL PROJECT BORROW SITES

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

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DRAWN S. QAZI
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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2020 L Street, Suite 300
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T 916-414-5800 F 916-414-1557
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WSIP APPLICATION ATTACHMENT A4.A

POTENTIAL BORROW SOURCES

SPEC NO.
DRAWING NO. CS-801
REV.
SHEET NO. 5

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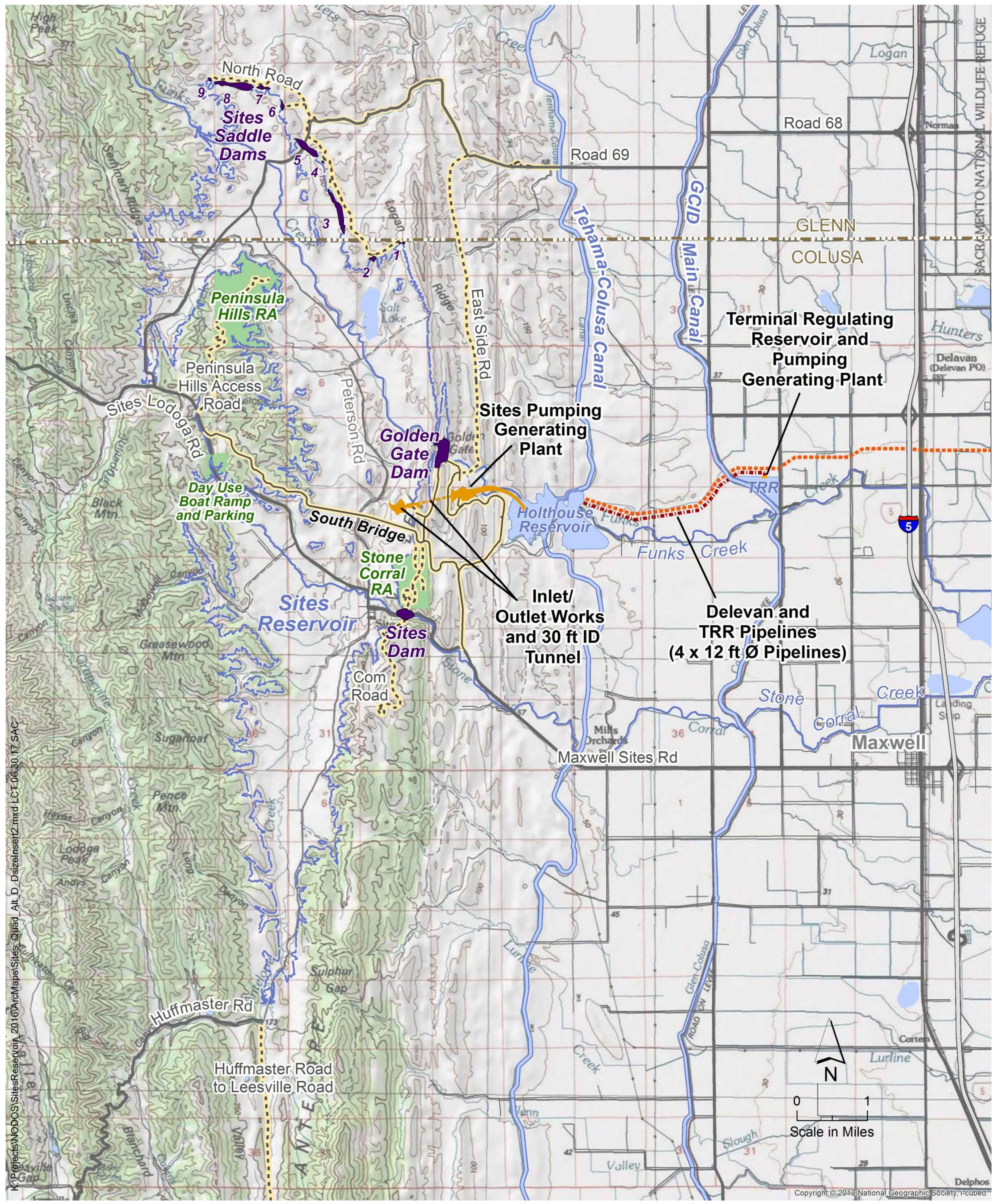
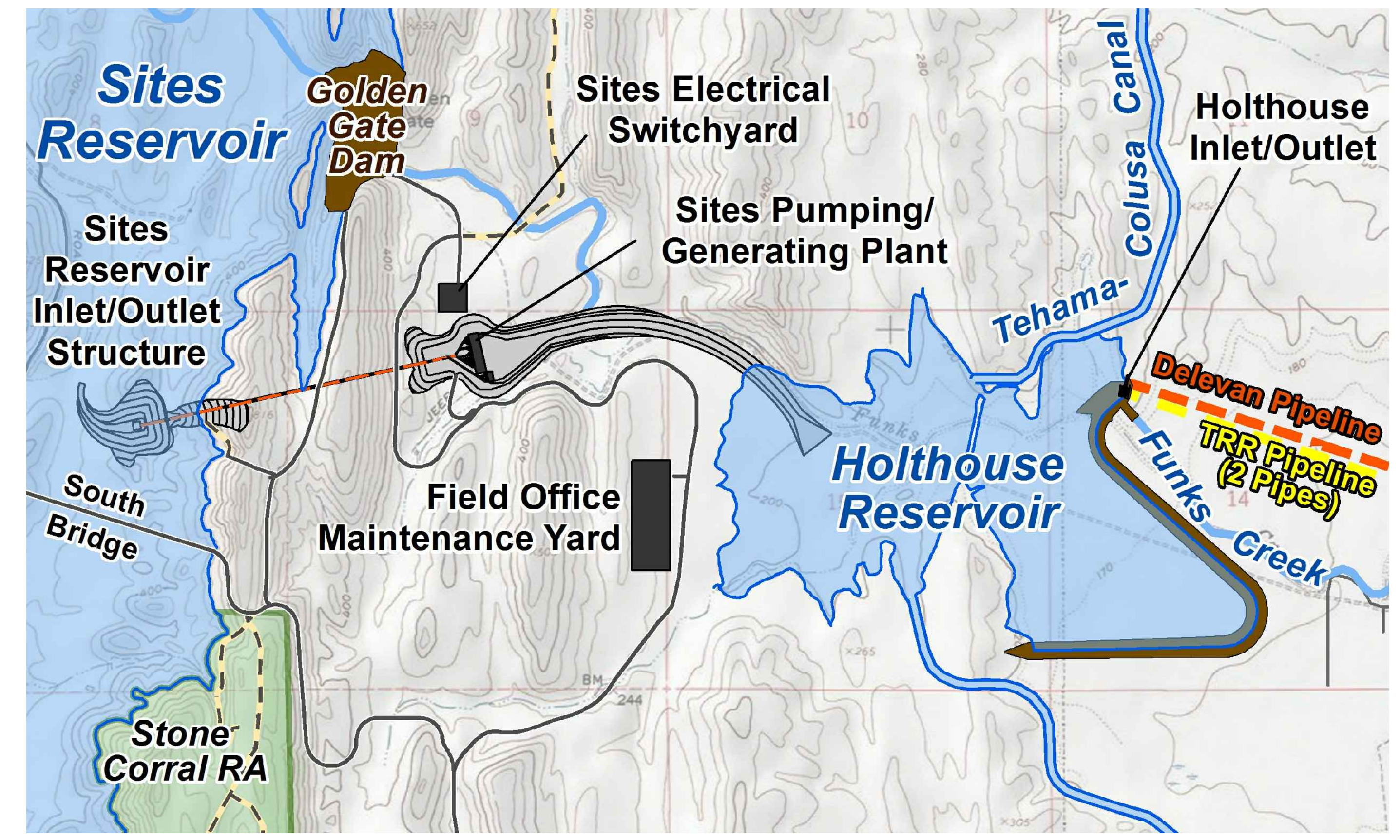


PLAN - ROADS
NTS



PLAN - DETAIL
NTS

NOTES:
1. ROAD ARRANGEMENTS SHOWN ASSUME THE SOUTH BRIDGE WILL BE CONSTRUCTED EARLY. IF SOUTH BRIDGE CONSTRUCTION IS SCHEDULED LATER IN THE PROJECT, ADDITIONAL TEMPORARY ROADS AND PAVING MAY BE NEEDED TO MAINTAIN ACCESS ALONG SITES LODOGA ROAD.
2. SEE DRAWING CR-0601 AND CR0602 FOR ESTIMATED PUBLIC AND PRIVATE ROAD CONSTRUCTION QUANTITIES.
3. SEE DRAWING CR-0201 FOR AVAILABLE ROAD PROFILES.
4. SEE DRAWING CR-0301 FOR TYPICAL ROAD CROSS SECTIONS.

ROAD SEGMENT DESCRIPTION

	SUM OF LENGTH (MILES)			
	GRAVEL	ASPHALT	BRIDGE	TOTAL
PUBLIC ACCESS	**19.73**	**11.46**	**1.57**	**32.76**
Com Road				
Sites Dam to Communication Tower	1.00			1.00
Eastside Road				
Field Office and Maintenance Yard Access to Pump/Gen Access		0.93		0.93
Golden Gate Dam/Electrical Substation Access Roads to Property North of Golden Gate Dam	1.52			1.52
Maxwell Sites Road to Stone Corral Road		1.12		1.12
Property North of Golden Gate Dam to North Road	3.63			3.63
Pump/Gen Access to Golden Gate Dam/Electrical Substation Access Roads		0.95		0.95
Stone Corral Road to Field Office and Maintenance Yard		1.09		1.09
North Road				
Road 69 at TCC to Saddle Dam Road	4.69			4.69
Saddle Dam Road to Saddle Dam 9	1.84			1.84
Peninsula Road				
Sites Lodoga Road to Peninsula Hills Recreation Area	0.94			0.94
Peninsula Hills Recreation Area Roads	1.00			1.00
South Bridge				
South Bridge			1.57	1.57
South Bridge East Approach				
Stone Corral Rec Road to South Bridge		0.28		0.28
South Bridge West Approach				
South Bridge to Sites Lodoga Road		2.25		2.25
Stone Corral Road				
Eastside Road to South Bridge East Approach		1.39		1.39
South Bridge East Approach to Stone Corral Recreation Area	0.26			0.26
Sulphur Gap Road				
Huffmastek to Leesville Road	4.85			4.85
Maxwell Sites Road to Lurline Road		3.45		3.45
PRIVATE ACCESS	**0.58**	**1.47**	**0.00**	**16.85**
Golden Gate Access Roads				
Eastside Road to bottom of Golden Gate Dam		0.26		0.26
Eastside Road to Electrical Substation		0.12		0.12
Eastside Road to Field Office and Maintenance Yard		0.04		0.04
Eastside Road to Pump/Gen Plant		0.18		0.18
South Bridge East Approach to Inlet/Outlet Tower		0.11		0.11
South Bridge East Approach to top of Golden Gate Dam		0.75		0.75
Saddle Dam Access Roads				
North Road to Saddle Dam 6	0.28			0.28
Saddle Dam Road to Saddle Dam 2	0.03			0.03
Saddle Dam Road to Saddle Dam 3	0.16			0.16
Saddle Dam Road to Saddle Dam 5	0.11			0.11
Temporary Northern Access				
Saddle Dam Road to Sites Lodoga				14.80
GRAND TOTALS	**20.30**	**12.93**	**1.57**	**49.61**

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DESIGNED J. BARNES
DRAWN S. QAZI
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED JOE BARNES REG. CE. NO. 40105

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WSIP APPLICATION ATTACHMENT A4.A

ROAD MODIFICATION PLAN

SPEC NO.
DRAWING NO. CR-101
REV.
SHEET NO. 6

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DESIGNED: S. QAZI
DRAWN: S. QAZI
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

AECOM

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVED: JOE BARNES, REG. CE. NO. 40105

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WSIP APPLICATION ATTACHMENT A4.A

PROPOSED NORTHERN TEMPORARY BYPASS ROAD

SPEC NO.
DRAWING NO. CR-102
REV.
SHEET NO. 7

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
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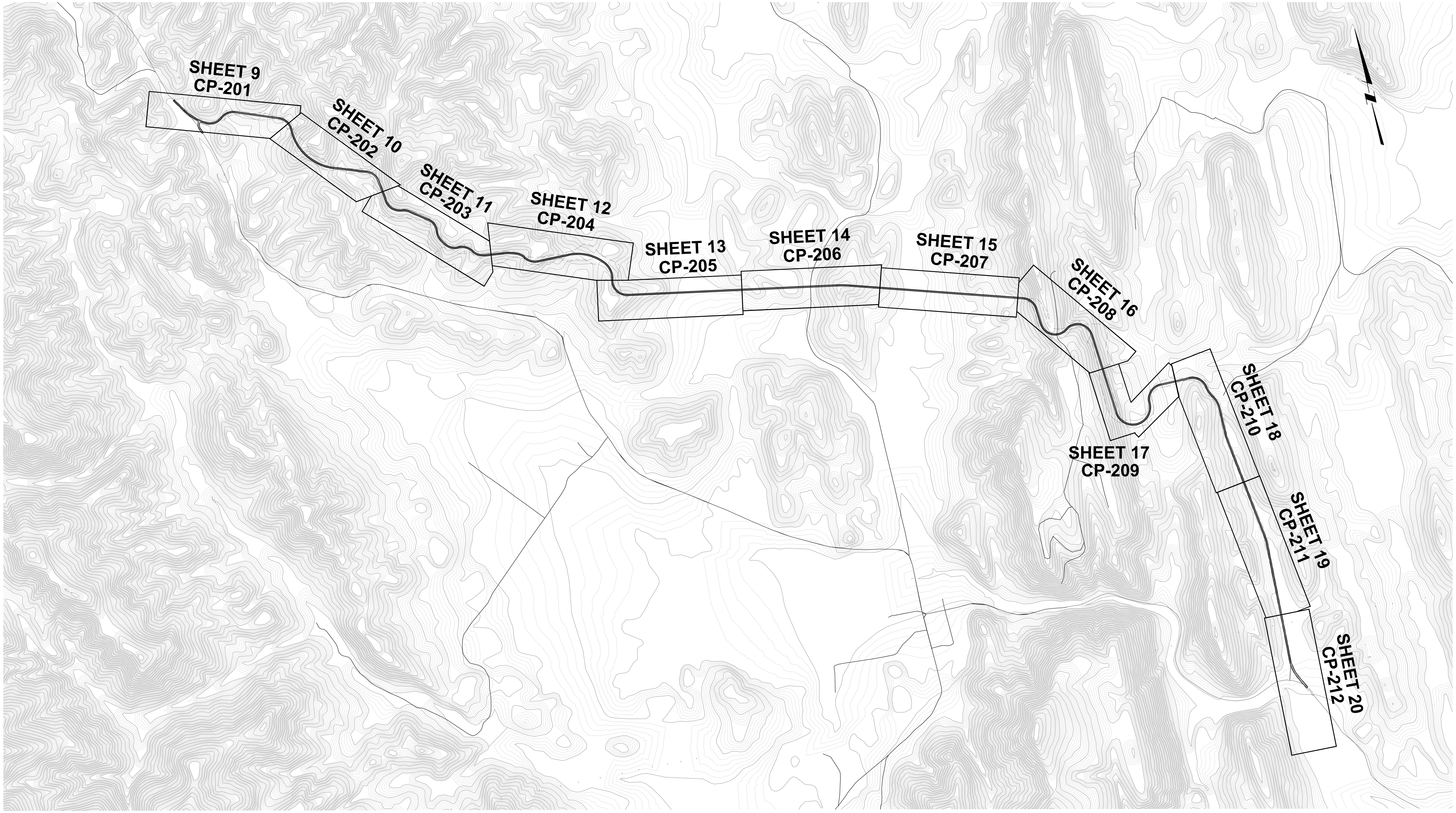

PLAN

SCALE: 1" = 1000'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED S. KALANTARI

DRAWN N. KARUNATILAKA

CHECKED M. FORREST

APPROVAL RECOMMENDED

APPROVAL BY

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AECOM

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION
SHEET INDEX

SPEC NO.

DRAWING NO. CR-200

REV. SHEET NO. 8

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PLAN
SCALE: 1" = 100'

PROFILE
HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
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DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
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2020 L Street, Suite 300
Sacramento, Ca 95811
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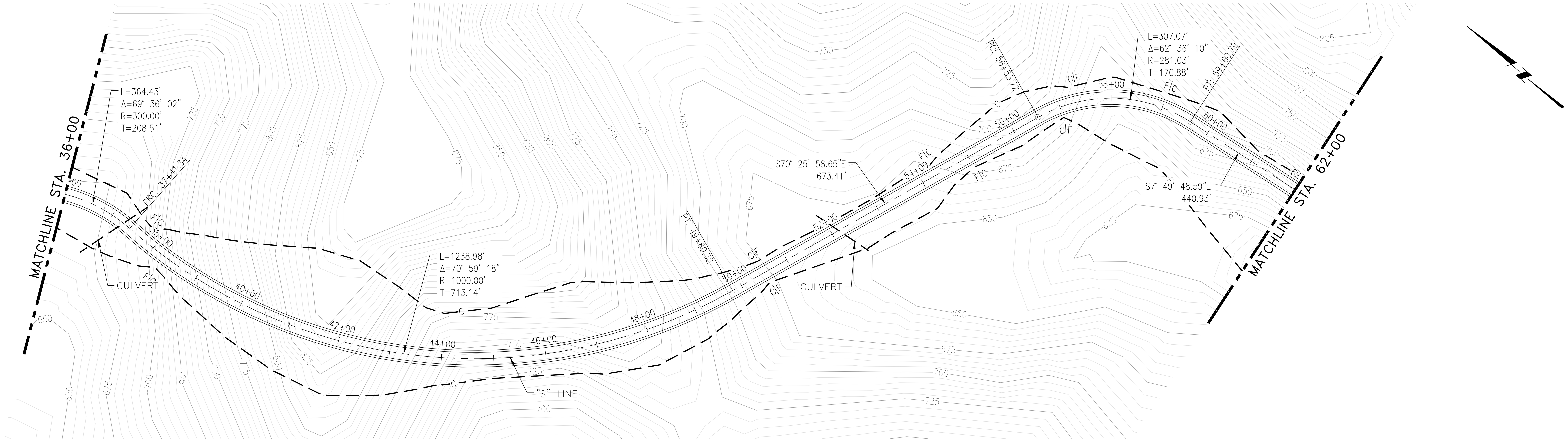
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
SITES LODOGA ROAD RELOCATION
PLAN AND PROFILE
STA. 10+00 TO STA. 36+00

SPEC NO.
DRAWING NO. CR-201
REV.
SHEET NO. 9



PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 36+00 TO STA. 62+00

SPEC NO.
DRAWING NO. CR-202
REV.
SHEET NO. 10

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-202.DWG

PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

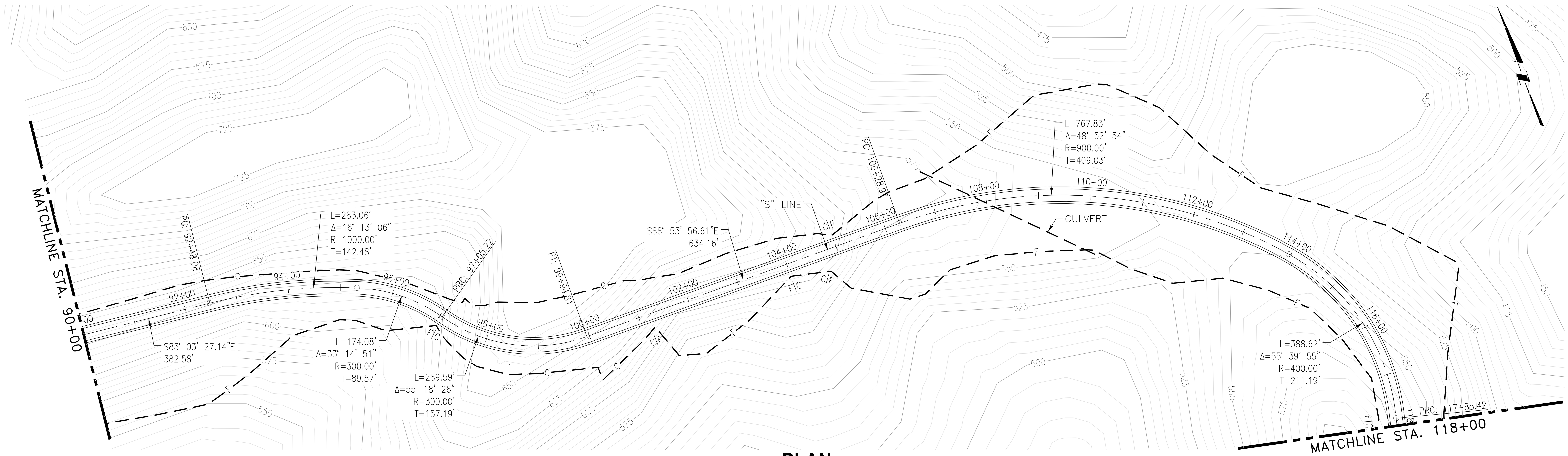
Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION
PLAN AND PROFILE
STA. 62+00 TO STA. 90+00

SPEC NO.
DRAWING NO. CR-203
REV.
SHEET NO. 11

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-203.DWG



PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 90+00 TO STA. 118+00

SPEC NO.
DRAWING NO. CR-204
REV.
SHEET NO. 12

PLOTTED BY:BARNHART, DENNIS -August 7, 2017-3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-204.DWG

PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED S. KALANTARI
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED SAMI KALANTARI REG. CE. NO. 63891
APPROVED JOE BARNES REG. CE. NO. 40105

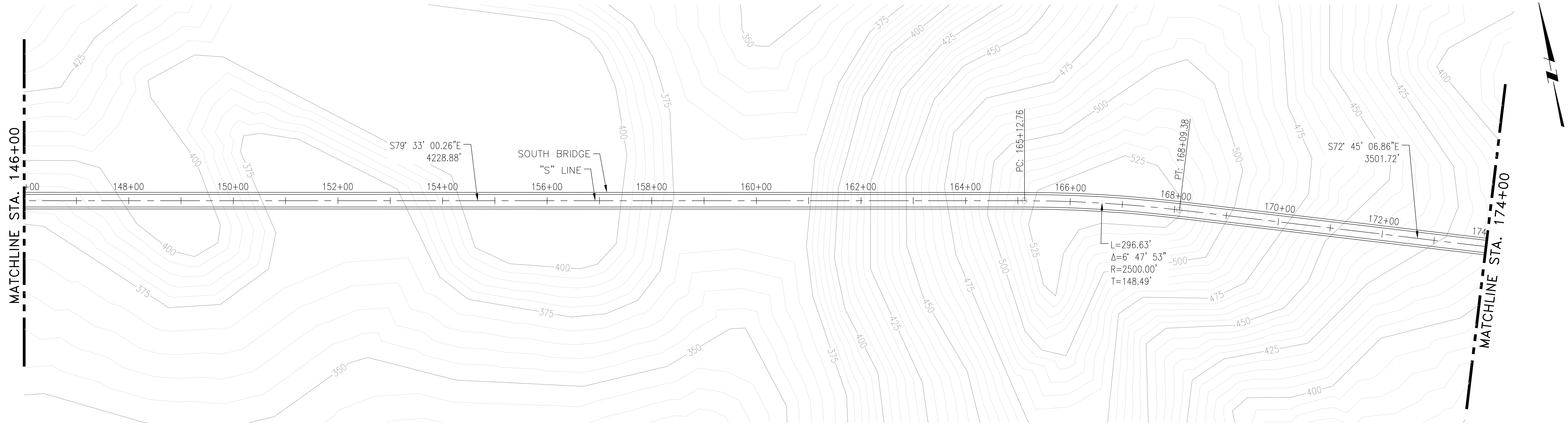
Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION
PLAN AND PROFILE
STA. 118+00 TO STA. 146+00

SPEC NO.
DRAWING NO. CR-205
REV.
SHEET NO. 13

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-205.DWG



PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

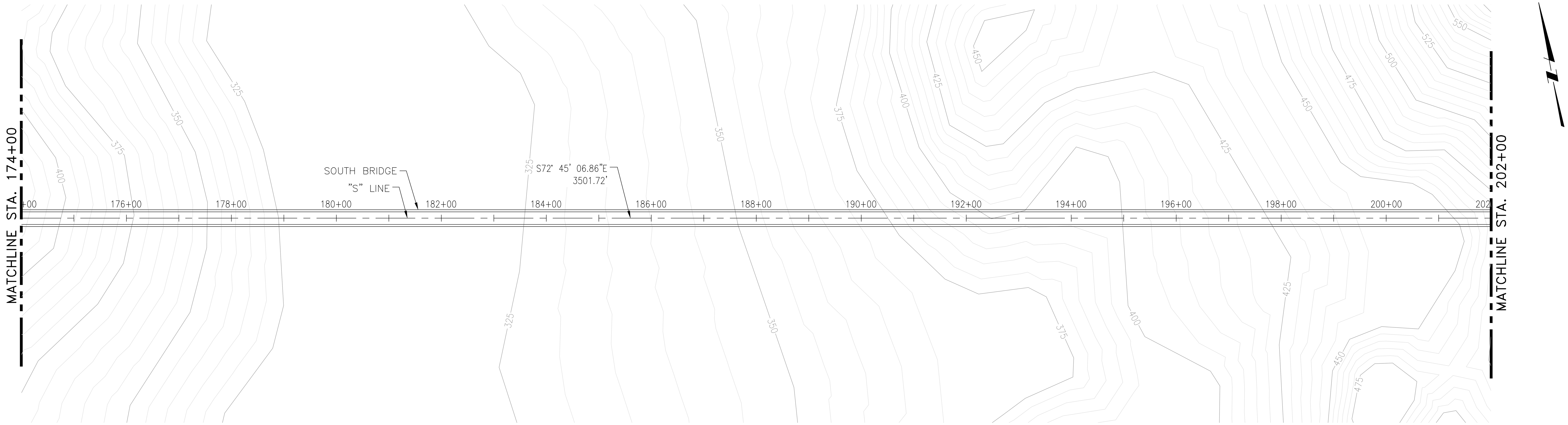
Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 146+00 TO STA. 174+00

SPEC NO.
DRAWING NO. CR-206
REV.
SHEET NO. 14

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-206.DWG



PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 174+00 TO STA. 202+00

SPEC NO.
DRAWING NO. CR-207
REV.
SHEET NO. 15

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-207.DWG

PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

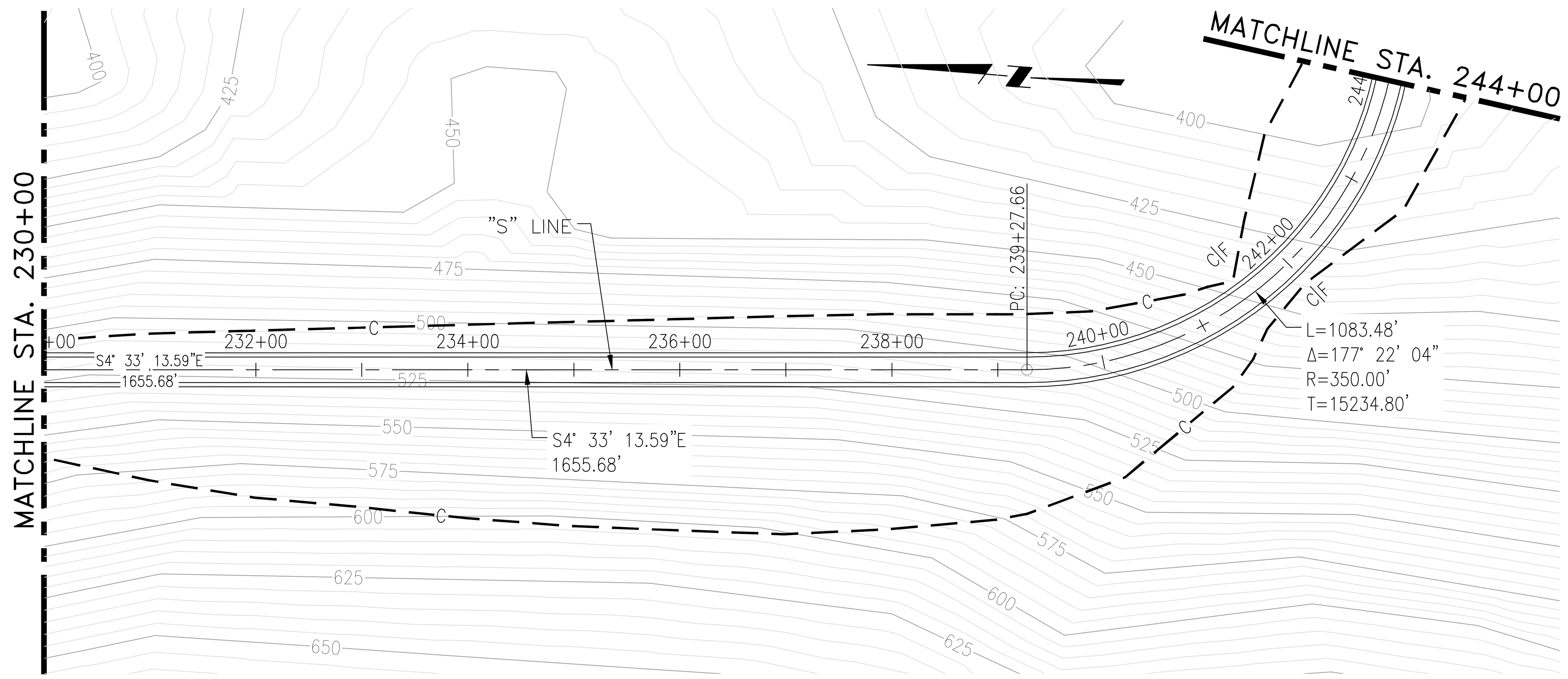
Sites

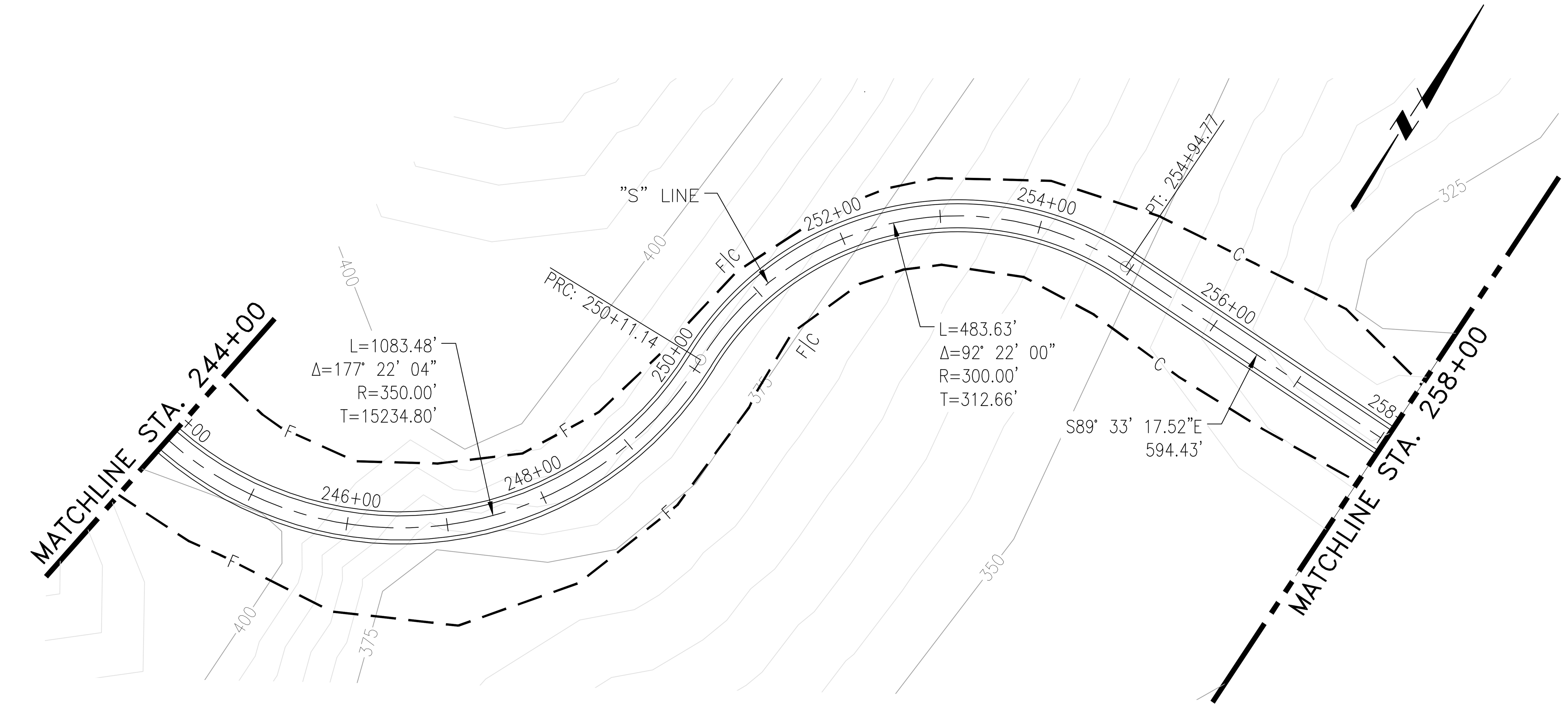
WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 202+00 TO STA. 230+00

SPEC NO.
DRAWING NO. CR-208
REV.
SHEET NO. 16

PLOTTED BY:BARNHART, DENNIS –August 7, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910–CAD\006–CIVIL\20–SHEETS\10–SOUTH BRIDGE\CR–208.DWG





PLAN
SCALE: 1" = 100'

PLAN
SCALE: 1" = 100'

PROFILE
HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED	S. KALANTARI
DRAWN	N. KARUNATILAKA
CHECKED	M. FORREST
APPROVAL RECOMMENDED	
APPROVAL BY	
ESTIMATE LEVEL	FEASIBILITY
REVIEWED	MIKE FORREST, REG. CE. NO. 27855
DATE	08/04/2017
APPROVAL RECOMMENDED	SAMI KALANTARI, REG. CE. NO. 63891
APPROVED	JOE BARNES, REG. CE. NO. 40105

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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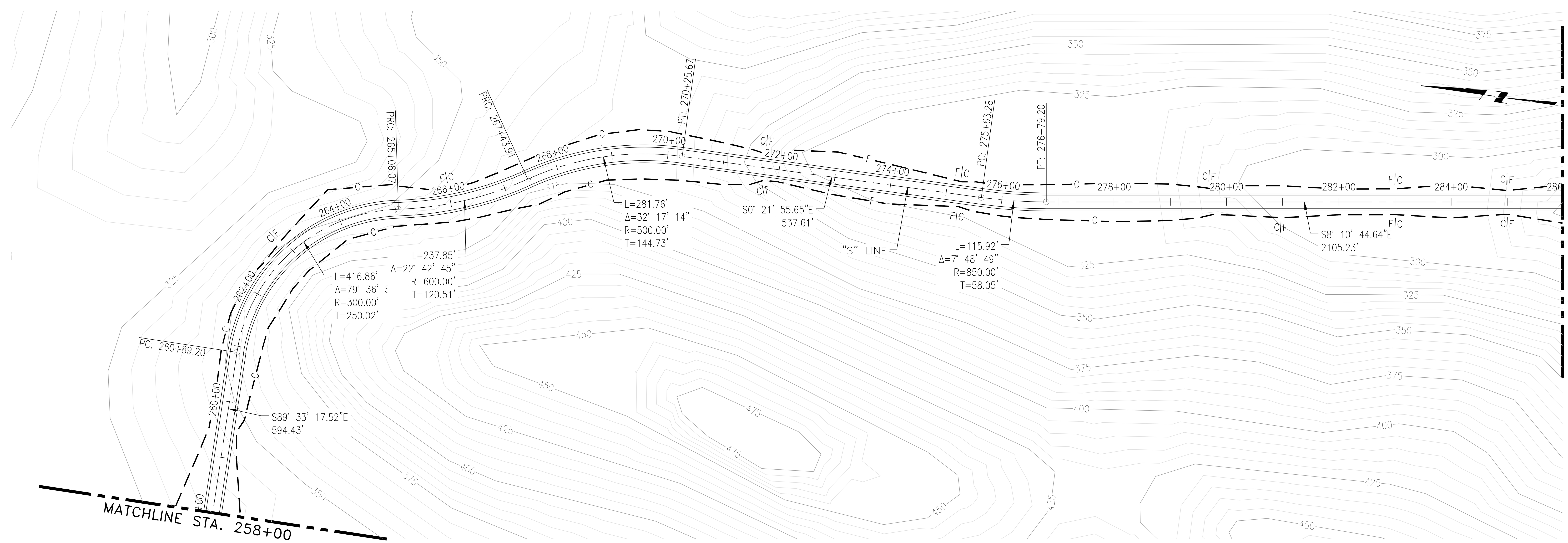
Sites

WSIP APPLICATION ATTACHMENT A4.A
SITES LODOGA ROAD RELOCATION PLAN AND PROFILE STA. 230+00 TO STA. 258+00

SPEC NO.
DRAWING NO. CR-209
REV.
SHEET NO. 17

PLOTTED BY:BARNHART, DENNIS -August 7, 2017-3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-209.DWG



PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION
PLAN AND PROFILE
STA. 258+00 TO STA. 286+00

SPEC NO.
DRAWING NO. CR-210
REV.
SHEET NO. 18

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-210.DWG

PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION
PLAN AND PROFILE
STA. 286+00 TO STA. 314+00

SPEC NO.
DRAWING NO. CR-211
REV.
SHEET NO. 19

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-211.DWG

PLAN

SCALE: 1" = 100'

PROFILE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 100'

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SR\PA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-212.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KALANTARI
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

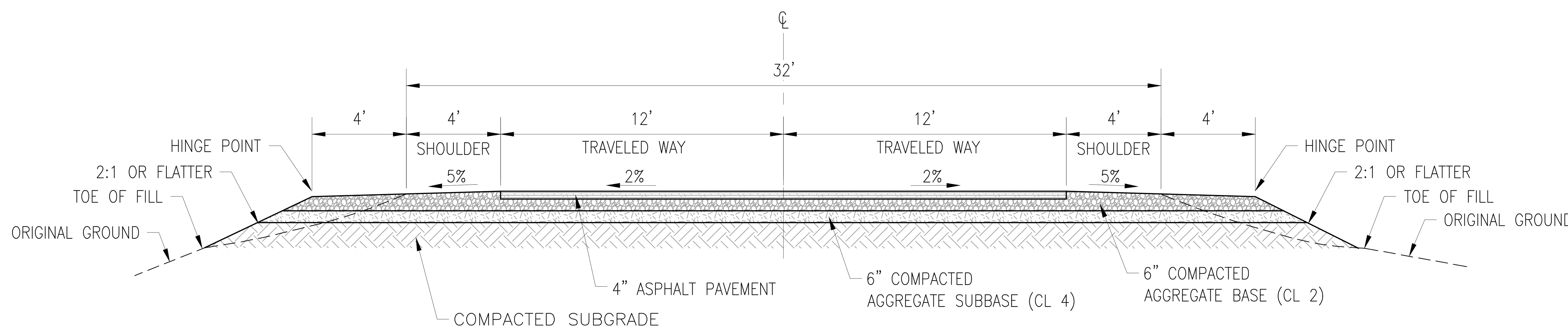
REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: SAMI KALANTARI, REG. CE. NO. 63891
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

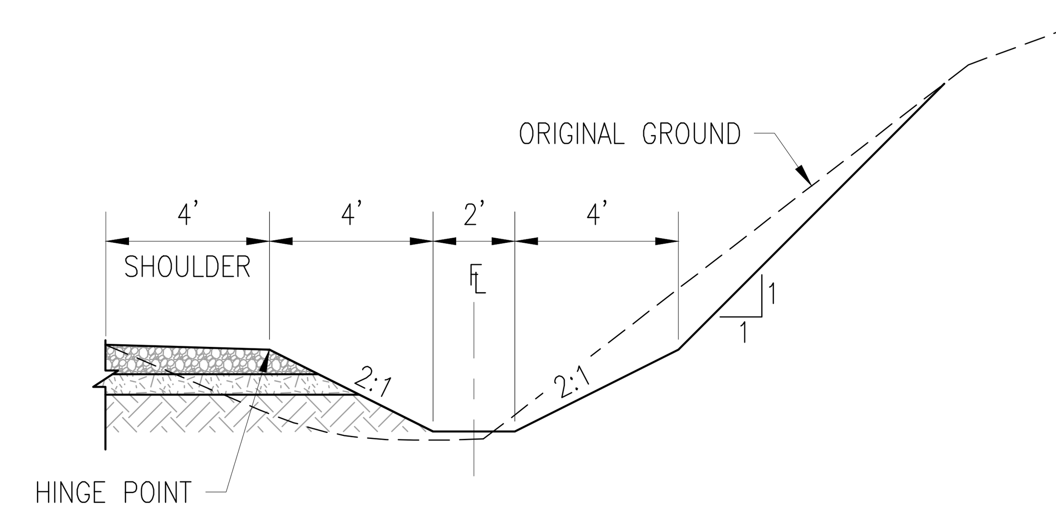
WSIP APPLICATION ATTACHMENT A4.A

SITES LODOGA ROAD RELOCATION
PLAN AND PROFILE
STA. 314+00 TO STA. 331+96

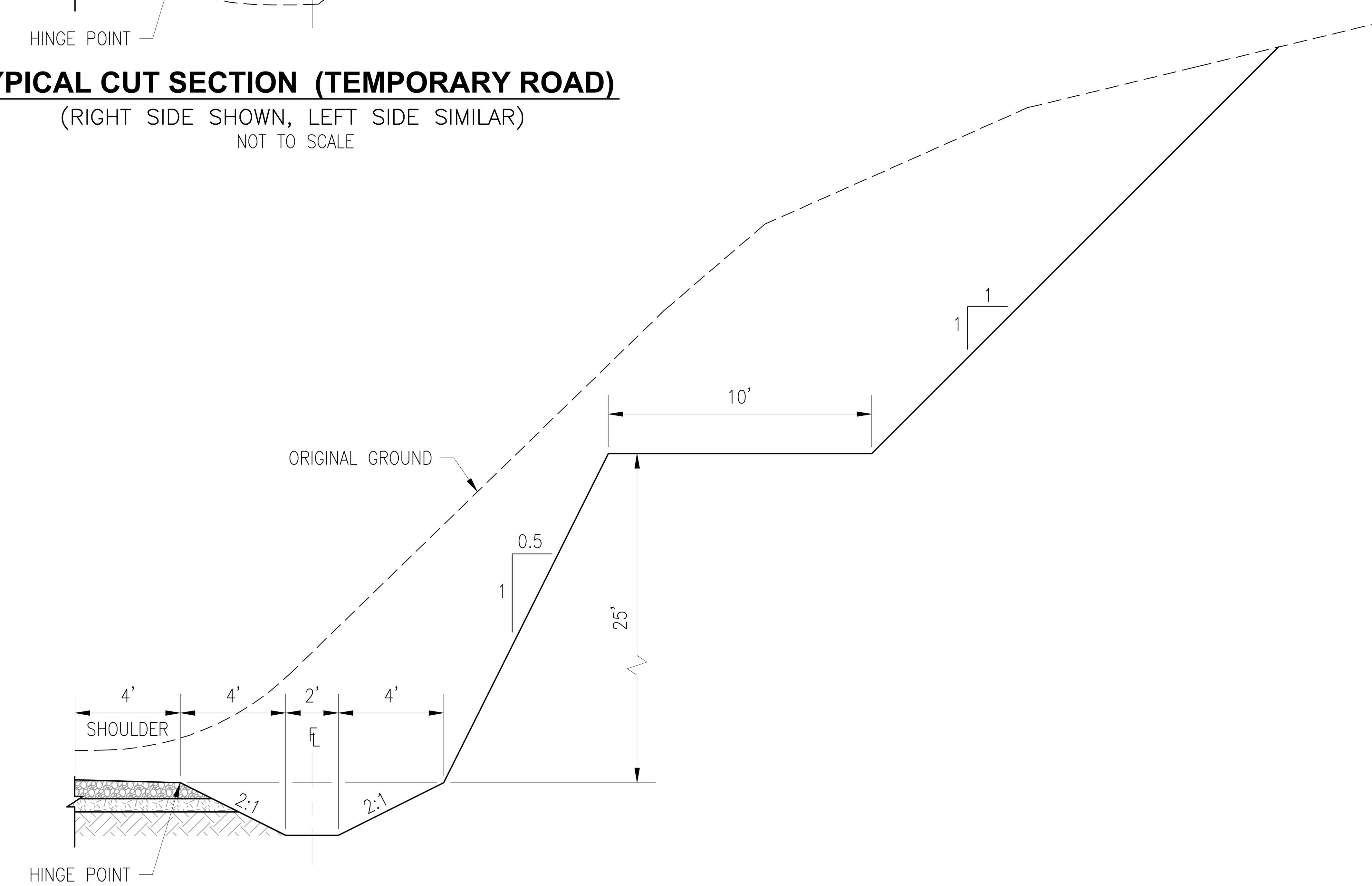
SPEC NO.
DRAWING NO. CR-212
REV.
SHEET NO. 20



TYPICAL ROAD SECTION
NOT TO SCALE



TYPICAL CUT SECTION (TEMPORARY ROAD)
(RIGHT SIDE SHOWN, LEFT SIDE SIMILAR)
NOT TO SCALE



TYPICAL CUT SECTION (SITES LODOGA ROAD)
(RIGHT SIDE SHOWN, LEFT SIDE SIMILAR)
NOT TO SCALE

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED S. KALANTARI
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED SAMI KALANTARI REG. CE. NO. 63891
APPROVED JOE BARNES REG. CE. NO. 40105

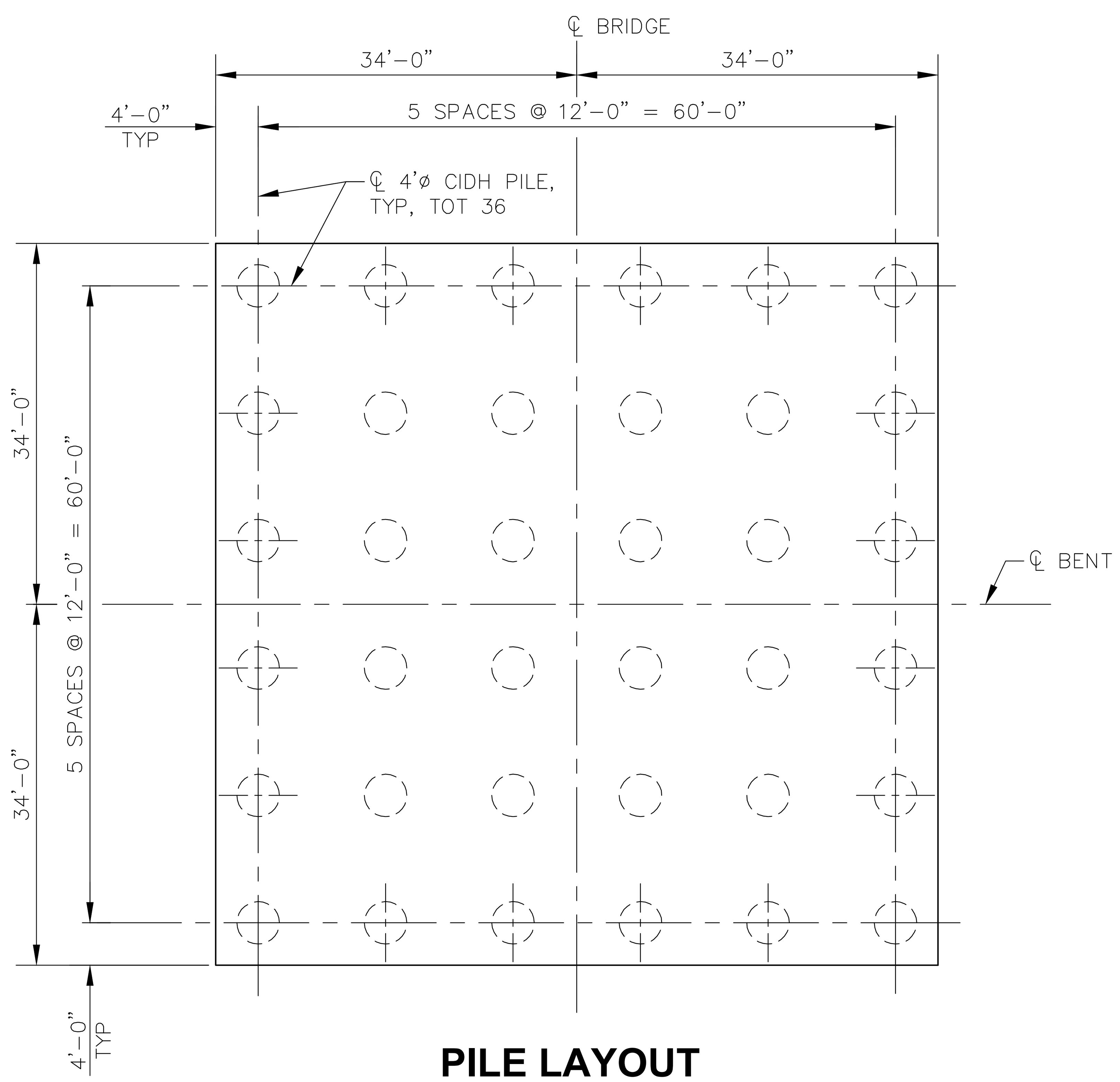
Sites

WSIP APPLICATION ATTACHMENT A4.A

TYPICAL ROAD CROSS SECTIONS

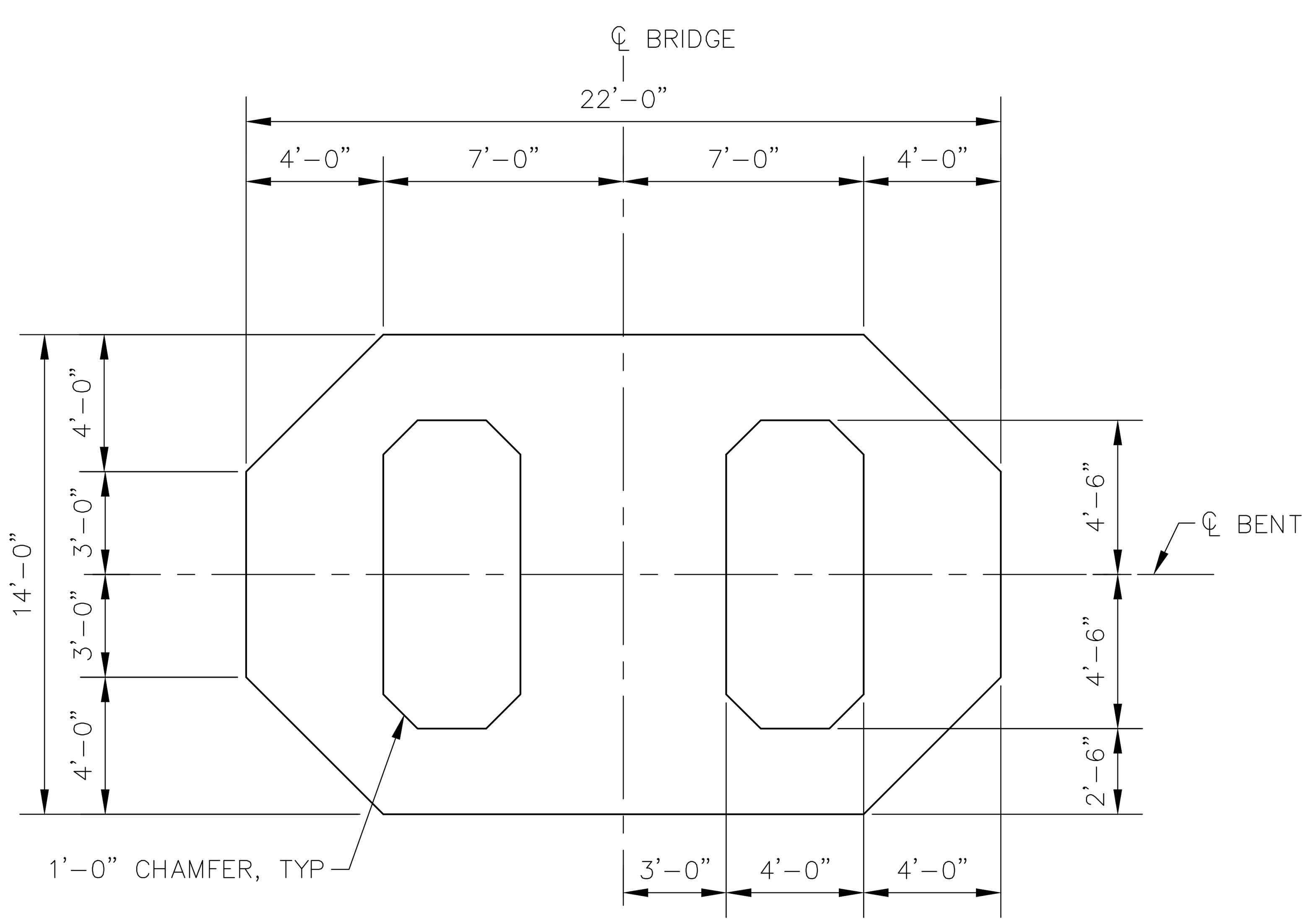
SPEC NO.
DRAWING NO. CR-301
REV.
SHEET NO. 21

PLOTTED BY:BARNHART, DENNIS –August 7, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910–CAD\006–CIVIL\20–SHEETS\10–SOUTH BRIDGE\CR–301.DWG



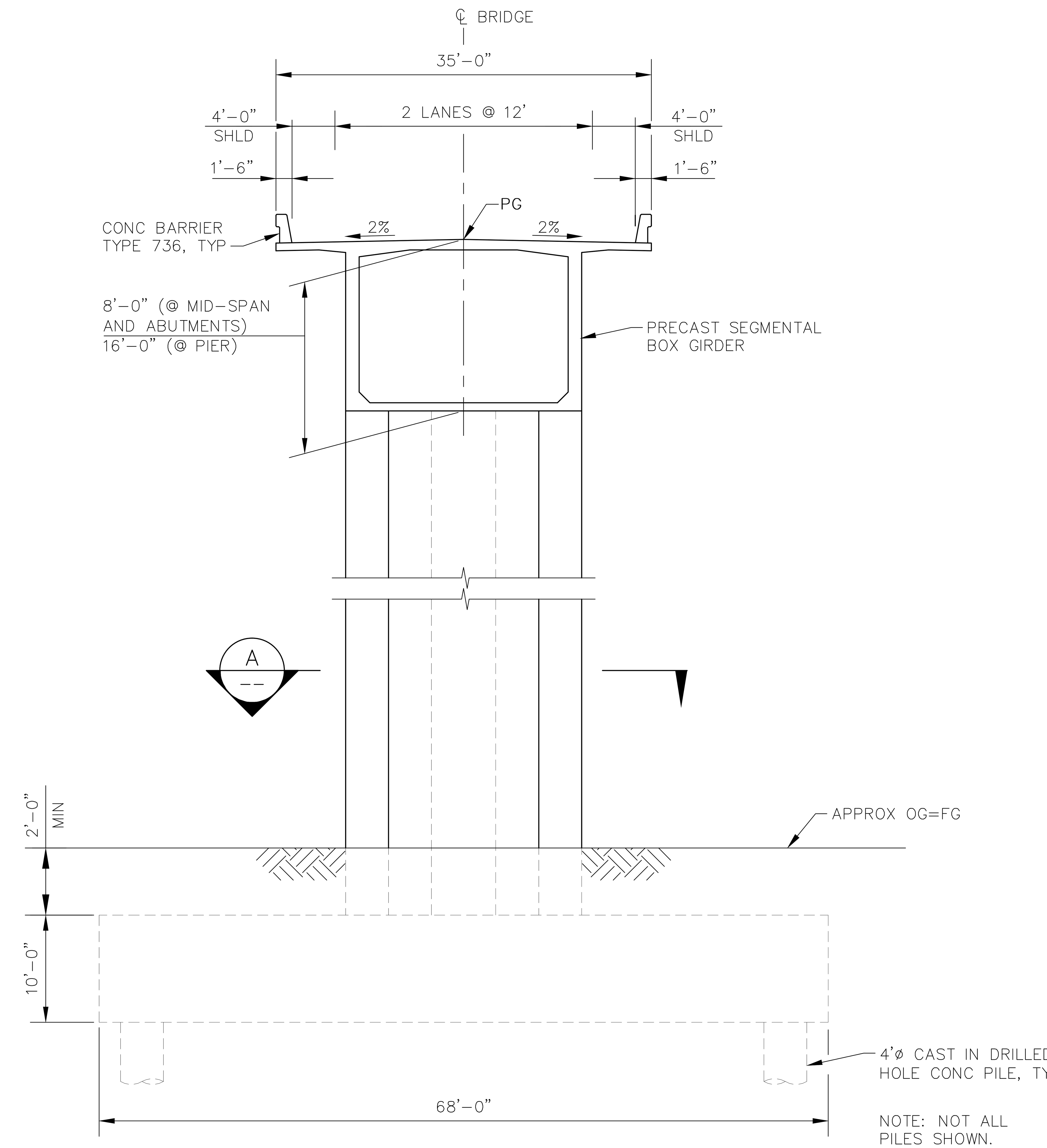
PILE LAYOUT

NO SCALE



SECTION A

NO SCALE



TYPICAL SECTION

1/8" = 1'–0"

PLOTTED BY:BARNHART, DENNIS –August 7, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910–CAD\006–CIVIL\20–SHEETS\10–SOUTH BRIDGE\CR–302.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: B. CARTER
DRAWN: T. WALTZ
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

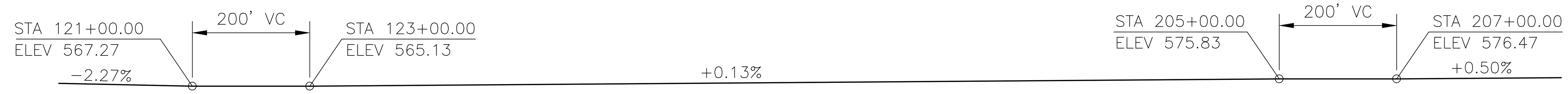
REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: SYED KAZMI, REG. CE. NO. 48356
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SOUTH BRIDGE NO.1 AND 2
TYPICAL SECTION

SPEC NO.
DRAWING NO. CR-302
REV.
SHEET NO. 22



PROFILE

NO SCALE

ELEVATION

1"=150'

PLAN

1" = 150'

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\006-CIVIL\20-SHEETS\10-SOUTH BRIDGE\CR-401.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED B. CARTER
DRAWN T. WALTZ
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

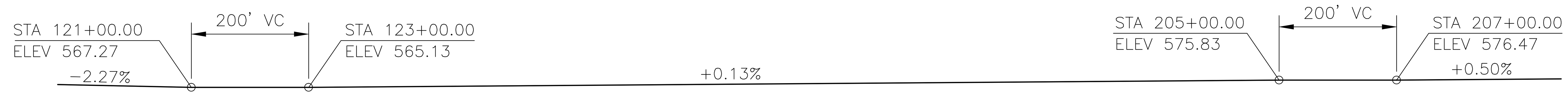
REVIEWED MIKE FORREST REG. CE. NO. 27855 DATE 08/04/2017
APPROVAL RECOMMENDED SYED KAZMI REG. CE. NO. 48356
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

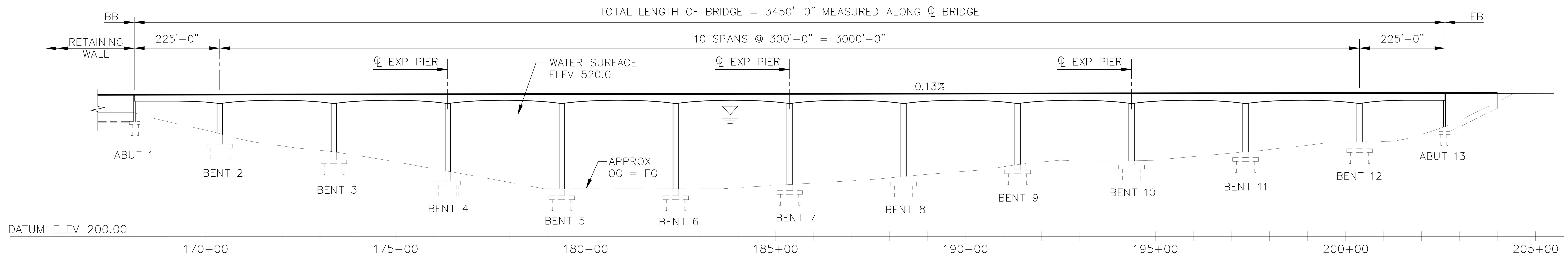
WSIP APPLICATION ATTACHMENT A4.A

SOUTH BRIDGE NO. 1
GENERAL PLAN AND ELEVATION

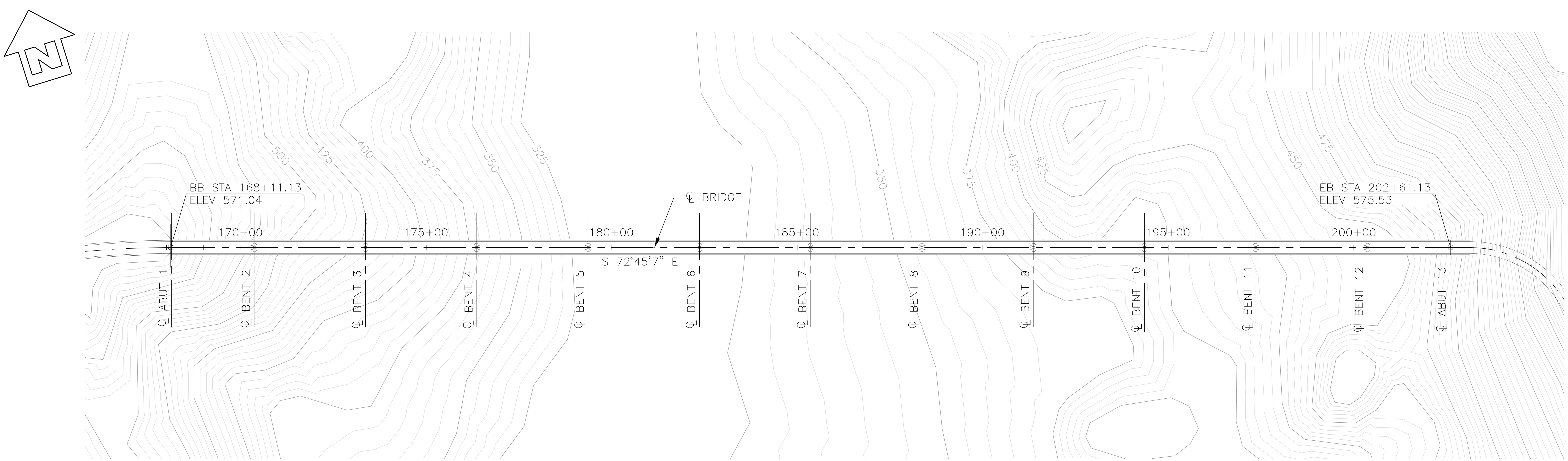
SPEC NO.
DRAWING NO. CR-401
REV.
SHEET NO. 23



PROFILE
NO SCALE



ELEVATION
1"=150'



PLAN
1" = 150'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: B. CARTER
DRAWN: T. WALTZ
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

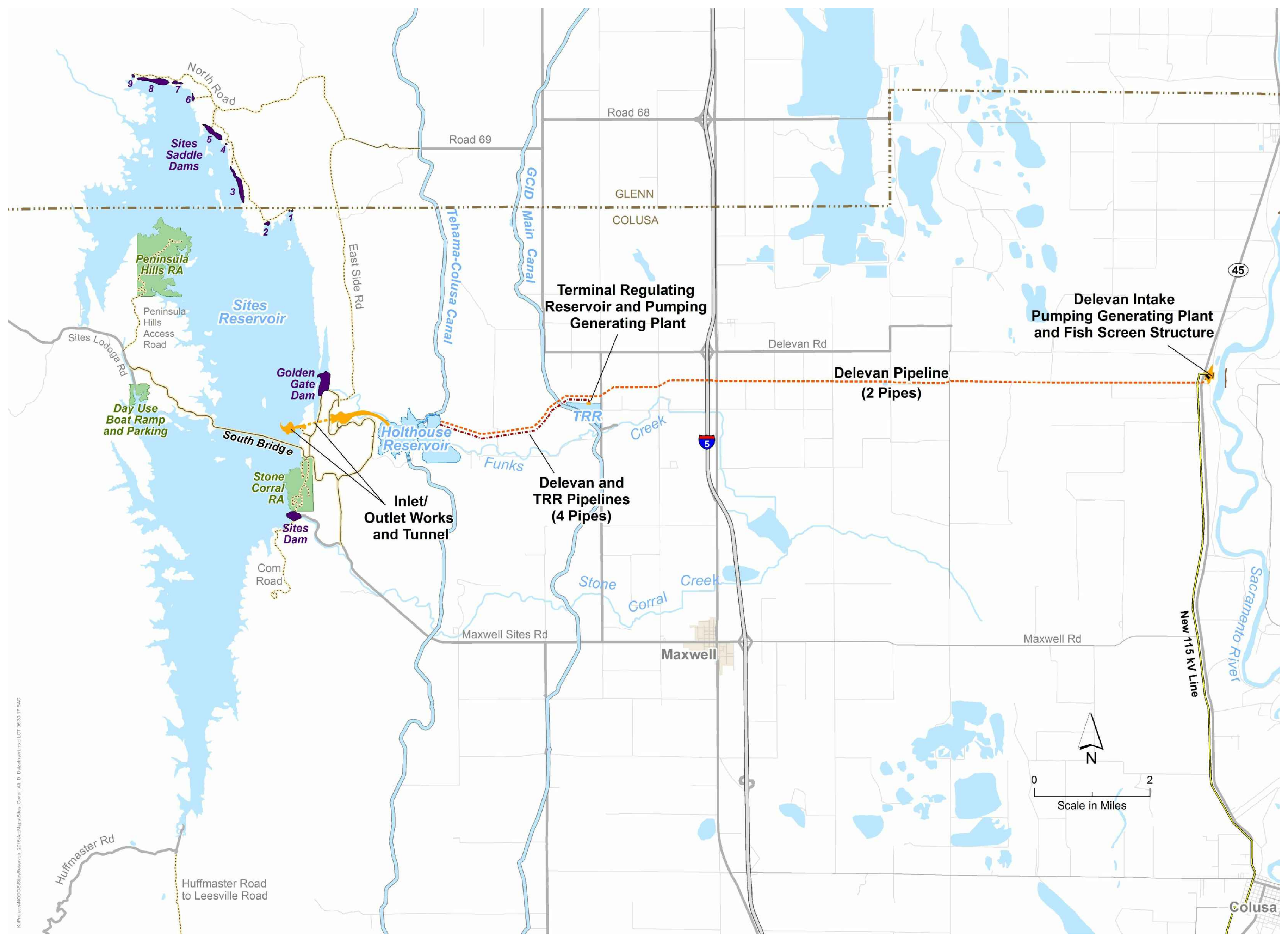
REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: SYED KAZMI, REG. CE. NO. 48356
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

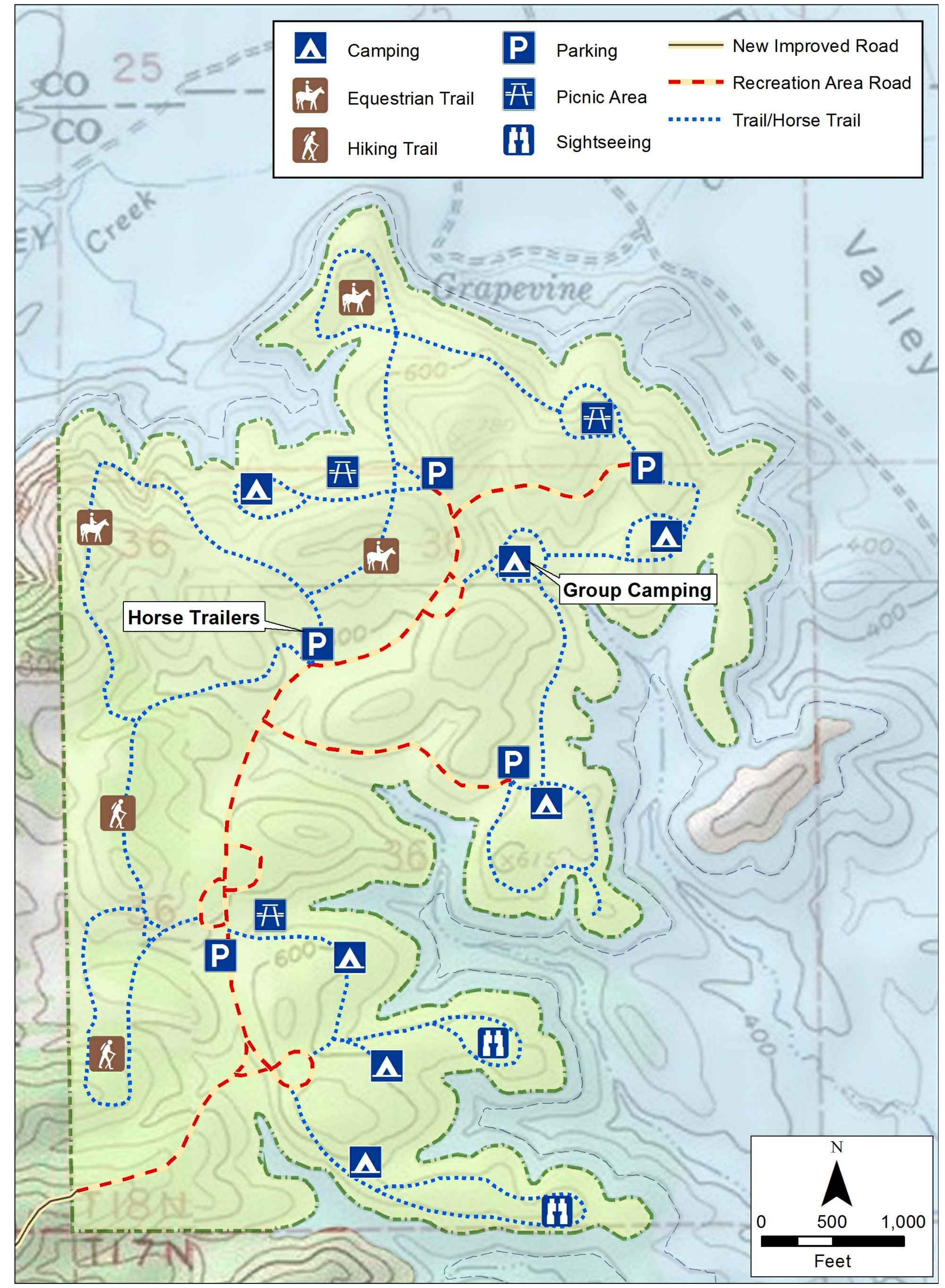
WSIP APPLICATION ATTACHMENT A4.A

SOUTH BRIDGE NO. 2
GENERAL PLAN AND ELEVATION

SPEC NO.
DRAWING NO. CR-402
REV.
SHEET NO. 24



RECREATIONAL AREA OVERVIEW



PENINSULA HILLS RECREATIONAL AREA

STONE CORRAL RECREATIONAL AREA

PLOTTED BY:BARNHART, DENNIS –August 7, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20–CAD\006–CIVIL\20–SHEETS\04–PARKS & RECREATIONAL AREAS\PR–101.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED L. MURRAY
DRAWN L. MURRAY
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED LOREN MURRAY REG. CE. NO. 42663
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
PARK AND RECREATIONAL AREAS OVERVIEW

SPEC NO.
DRAWING NO. PR-101
REV.
SHEET NO. 25

GENERAL NOTES:

MATERIALS FOR DAM CONSTRUCTION

THE MATERIAL DESCRIPTIONS PROVIDED BELOW ARE SUMMARIZED FROM DWR MATERIAL INVESTIGATION AND DAM DESIGN REPORTS. NOTE THAT THE ZONE DESIGNATIONS FOR THE SADDLE DAMS DIFFER IN SOME RESPECTS FROM THE ZONE DESIGNATIONS FOR SITES AND GOLDEN GATE DAMS. WHILE ZONE DESIGNATIONS DIFFER, MATERIALS ARE GENERALLY THE SAME. MATERIAL ZONES ARE INDICATED ON THE VARIOUS DAM SECTION DRAWINGS.

SITES AND GOLDEN GATE DAMS.

1. ZONE 1 – IMPERVIOUS CORE MATERIAL WILL BE COMPRISED OF LOW TO MEDIUM PLASTICITY CLAYS (CL), WITH LESSER AMOUNTS OF HIGH PLASTICITY CLAYS (CH) AND CLAYEY SANDS (SC). THE IMPERVIOUS MATERIAL WILL BE OBTAINED FROM A DESIGNATED BORROW AREA UPSTREAM OF THE DAM IN THE RESERVOIR AND FROM REQUIRED EXCAVATION AREAS FOR THE DAM EMBANKMENT, APPURTENANT STRUCTURES, AND FUNKS RESERVOIR ENLARGEMENT. HAUL DISTANCES WILL BE LESS THAN 1 MILE. PROCESSING OF THE IMPERVIOUS MATERIAL, BEYOND NORMAL DISKING AND MOISTURE CONDITIONING IN THE DESIGNATED BORROW AREAS, WILL NOT BE REQUIRED.
2. ZONE 2 – FILTER, DRAIN, AND TRANSITION MATERIALS CONSISTING OF FRESH ROCK PROCESSED TO VARIOUS SIZES TO MEET FILTER COMPATIBILITY AND HYDRAULIC CONDUCTIVITY REQUIREMENTS. ON-SITE VENADO SANDSTONE OF THE CORTINA FORMATION MAY NOT BE SUITABLE FOR USE AS THESE EMBANKMENT MATERIALS. THEREFORE, IT IS ASSUMED THAT THE FILTER, DRAIN, AND TRANSITION MATERIALS WILL BE IMPORTED FROM THE CLOSEST OFF-SITE SAND AND GRAVEL SOURCE. THE CLOSEST SOURCE IS AN OLD ABANDONED CHANNEL ON STONY CREEK BETWEEN ORLAND AND WILLOWS, APPROXIMATELY 35 ROAD MILES FROM THE GOLDEN GATE DAM SITE. THE SOURCE HAS AN ESTIMATED MATERIAL AVAILABILITY OF 160 MILLION CUBIC YARDS THAT FAR EXCEEDS THE CONSTRUCTION REQUIREMENT. IT IS ASSUMED THE QUARRY IS UNDEVELOPED AND DEVELOPMENT OF THE QUARRY AND SUPPLY AND SETUP OF ALL CRUSHING, SCREENING, AND WASHING FACILITIES WILL BE NECESSARY. QUARRY DEVELOPMENT COST SHOULD BE A PART OF THE MATERIAL SUPPLY COST ESTIMATE FOR PROVIDING ZONE 2 AND OTHER PROCESSED MATERIAL.
3. ZONE 3 – SHELL MATERIAL WILL BE COMPRISED OF PROCESSED CLEAN ROCKFILL WITH MAXIMUM PARTICLE SIZE UP TO 30-INCH. THE SHELL MATERIAL WILL BE OBTAINED FROM FRESH VENADO SANDSTONE OF THE CORTINA FORMATION FROM A QUARRY DEVELOPED IN THE RIDGE ON THE EAST SIDE OF THE RESERVOIR IN NEAR VICINITY OF THE DAM SITE WITH HAUL DISTANCES OF LESS THAN 1 MILE. QUARRY OPERATIONS WILL REQUIRE DRILLING AND BLASTING WITH SELECTIVE PROCESSING TO PRODUCE THE REQUIRED PARTICLE SIZES AND GRADATION.
4. ZONE 4 – RANDOM MATERIAL COMPRISED OF MATERIALS UNSUITABLE FOR USE AS CLEAN ROCKFILL. RANDOM MATERIAL WILL CONSIST OF WEATHERED SANDSTONE, MUDSTONE, SLOPEWASH, ETC. OBTAINED FROM EXCAVATION FOR THE DAM FOUNDATION, APPURTENANT STRUCTURES, AND THE ROCKFILL QUARRY. HAUL DISTANCES WILL BE LESS THAN 1 MILE AND PROCESSING WILL NOT BE REQUIRED.

SADDLE DAMS

1. ZONE 1 – IMPERVIOUS CORE MATERIAL COMPRISED OF LOW TO MEDIUM PLASTICITY CLAYS (CL), WITH LESSER AMOUNTS OF HIGH PLASTICITY CLAYS (CH) AND CLAYEY SANDS (SC). THE IMPERVIOUS MATERIAL WILL BE OBTAINED FROM DESIGNATED BORROW AREAS UPSTREAM OF THE DAMS IN THE RESERVOIR WITH HAUL DISTANCES OF LESS THAN 1 MILE. PROCESSING OF THE IMPERVIOUS MATERIAL, BEYOND NORMAL DISKING AND MOISTURE CONDITIONING IN THE DESIGNATED BORROW AREAS, WILL NOT BE REQUIRED.
2. ZONE 2 – RANDOM SHELL MATERIAL COMPRISED PREDOMINATELY OF MUDSTONE FROM THE BOXER FORMATION. RANDOM MATERIAL WILL BE OBTAINED FROM DESIGNATED BORROW AREAS UPSTREAM OF THE DAMS IN THE RESERVOIR AND FROM REQUIRED FOUNDATION EXCAVATION FOR THE DAM EMBANKMENTS WITH HAUL DISTANCES OF LESS THAN 1 MILE. PROCESSING OF THE RANDOM SHELL MATERIALS WILL NOT BE REQUIRED.
3. ZONE 3 – UPSTREAM SHELL MATERIAL AND RIPRAP CONSISTING OF PROCESSED CLEAN ROCKFILL UP TO 30-INCH MAXIMUM PARTICLE SIZE. THE ROCKFILL AND RIPRAP WILL BE OBTAINED FROM FRESH VENADO SANDSTONE OF THE CORTINA FORMATION FROM A QUARRY DEVELOPED IN THE RIDGE ON THE EAST SIDE OF THE RESERVOIR APPROXIMATELY 3 TO 4 MILES FROM THE SADDLE DAM SITES. QUARRY OPERATIONS WILL REQUIRE DRILLING AND BLASTING WITH SELECTIVE PROCESSING TO PRODUCE THE REQUIRED PARTICLE SIZES AND GRADATION.
4. ZONE 4 – FILTER AND DRAIN MATERIALS CONSISTING OF SAND AND GRAVEL PROCESSED TO VARIOUS SIZES TO MEET FILTER COMPATIBILITY AND HYDRAULIC CONDUCTIVITY REQUIREMENTS.IT IS ASSUMED THAT THE FILTER AND DRAIN MATERIALS WILL BE IMPORTED FROM THE CLOSEST OFF-SITE SAND AND GRAVEL SOURCE TO ENSURE CONSERVATIVE ESTIMATION OF MATERIAL COSTS. THE CLOSEST OFF-SITE SOURCE IS AN OLD ABANDONED CHANNEL ON STONY CREEK BETWEEN ORLAND AND WILLOWS, APPROXIMATELY 30 ROAD MILES FROM THE SADDLE DAM SITES.THE SOURCE HAS AN ESTIMATED MATERIAL AVAILABILITY OF 160 MILLION CUBIC YARDS THAT FAR EXCEEDS THE CONSTRUCTION REQUIREMENT. IT IS ASSUMED THE QUARRY IS UNDEVELOPED AND DEVELOPMENT OF THE QUARRY AND SUPPLY AND SETUP OF ALL CRUSHING, SCREENING, AND WASHING FACILITIES WILL BE NECESSARY. QUARRY DEVELOPMENT COST SHOULD BE A PART OF THE MATERIAL SUPPLY COST ESTIMATE FOR PROVIDING ZONE 4 AND OTHER PROCESSED MATERIAL.

FOUNDATION OBJECTIVES AND FOUNDATION GROUTING

GOLDEN GATE DAM

1. TO MEET THE FOUNDATION OBJECTIVES, RECENT AND OLDER ALLUVIUM, DECOMPOSED, AND INTENSELY WEATHERED BEDROCK WILL BE EXCAVATED FROM THE ENTIRE FOOTPRINT OF GOLDEN GATE DAM TO OBTAIN A MODERATELY WEATHERED BEDROCK SURFACE. IN ADDITION, MODERATELY WEATHERED BEDROCK WILL BE EXCAVATED FROM THE IMPERVIOUS CORE FOOTPRINT DOWN TO THE TOP OF SLIGHTLY WEATHERED AND/OR FRESH BEDROCK SURFACE. EXCAVATION WILL BE PERFORMED BY THE USE OF HEAVY EQUIPMENT BUT MAY REQUIRE SOME BLASTING IN THE HARDER SANDSTONE.
2. WATER PRESSURE TEST DATA INDICATES SOME AREAS OF HIGHER HYDRAULIC CONDUCTIVITY IN THE UPPER PORTION OF THE DAM FOUNDATION. CONSOLIDATION AND CURTAIN GROUTING WAS INCLUDED IN THE DAM DESIGN TO REDUCE SEEPAGE THROUGH THE DAM FOUNDATION. THE GROUT PROGRAM WILL CONSIST OF A 2-ROW GROUT CURTAIN WITH 1-ROW OF CONSOLIDATION HOLES UPSTREAM AND ONE ROW DOWNSTREAM OF THE CURTAIN HOLES. THE ROWS WILL PARALLEL THE DAM CENTERLINE AND BE SPACED 10 FEET APART. IN ADDITION, A 40-FOOT WIDE BY 3-FEET THICK GROUT CAP IS INCLUDED TO PREVENT SURFACE LEAKAGE OF GROUT DURING GROUTING OF THE UPPER STAGE.
3. EACH ROW OF CONSOLIDATION AND CURTAIN GROUT HOLES WILL CONSIST OF MANDATORY PRIMARY AND SECONDARY HOLES SPACED AT 10-FOOT CENTERS. IN ADDITION, IT WAS ASSUMED THAT TERTIARY HOLES, SPLIT SPACED BETWEEN THE PRIMARY AND SECONDARY HOLES, WILL BE REQUIRED OVER HALF THE LENGTH OF THE DAM TO MEET GROUT CLOSURE CRITERIA. CONSISTENT WITH DAM FOUNDATION GROUTING PRACTICES, THE DRILLING DEPTH OF CONSOLIDATION HOLES WAS ESTIMATED TO BE ONE QUARTER THE HEIGHT OF THE DAM, TOGETHER WITH A MINIMUM DEPTH OF 50 FEET. ADDITIONALLY, THE DRILLING DEPTH OF CURTAIN HOLES WAS ESTIMATED TO BE ONE HALF THE HEIGHT OF THE DAM, TOGETHER WITH A MINIMUM DEPTH OF 100 FEET.
4. VERIFICATION TESTING WILL BE CONDUCTED TO A DEPTH EQUIVALENT TO THE CURTAIN GROUT HOLES. VERIFICATION HOLES WILL BE DRILLED BETWEEN THE CURTAIN GROUT ROWS, ALONG THE DAM CENTERLINE. THESE HOLES ARE ASSUMED TO HAVE AN AVERAGE HOLE SPACING OF 75 FEET.
5. IN ADDITION TO THE GROUTING PROGRAM DESCRIBED HERE, ADDITIONAL GROUTING AND/OR TREATMENT OF SPECIAL FEATURES SUCH AS THE GG-2 FAULT WILL LIKELY BE REQUIRED. COST ESTIMATE FOR GROUTING TO INCLUDE APPROPRIATE ALLOWANCE FOR SUCH TREATMENT.

SITES DAM

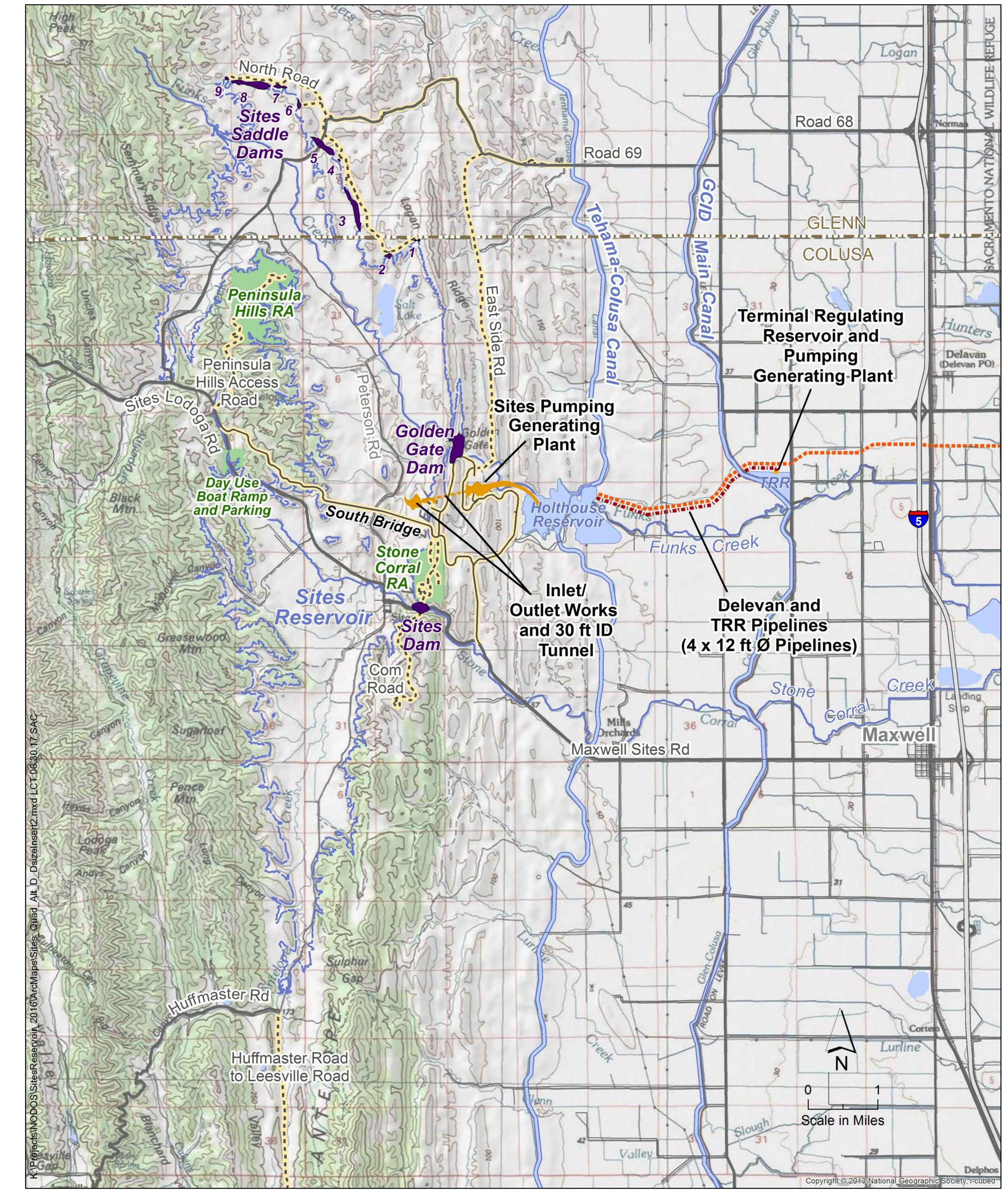
1. SIMILAR TO GOLDEN GATE DAM, MODERATELY WEATHERED BEDROCK IS CONSIDERED TO BE A SUITABLE FOUNDATION SURFACE FOR THE SHELL, TRANSITION, FILTER, AND DRAIN MATERIALS FOR SITES DAM. IN ADDITION, SLIGHTLY WEATHERED TO FRESH BEDROCK IS CONSIDERED TO BE A SUITABLE FOUNDATION SURFACE FOR THE CENTRAL IMPERVIOUS CORE MATERIAL.
2. THE GROUTING PROGRAM FOR SITES DAM IS ASSUMED TO BE THE SAME AS PRESENTED ABOVE FOR GOLDEN GATE DAM.
3. ADDITIONAL GROUTING AND/OR TREATMENT OF SPECIAL FEATURES SUCH AS THE S-2 FAULT WILL LIKELY BE REQUIRED. COST ESTIMATE FOR GROUTING TO INCLUDE APPROPRIATE ALLOWANCE FOR SUCH TREATMENT.

SADDLE DAMS

1. BEDROCK UNDERLYING THE SADDLE DAM FOOTPRINTS IS THE BOXER FORMATION THAT IS PREDOMINATELY MUDSTONE WITH SILTSTONE, SANDSTONE, AND CONGLOMERATE.
2. BASED UPON GEOLOGIC CHARACTERIZATION AND VISUAL OBSERVATION OF LIMITED AMOUNTS OF DRILL CORE, INTENSELY WEATHERED BEDROCK IS CONSIDERED TO BE A SUITABLE FOUNDATION SURFACE FOR THE SHELL (ZONE 3), RANDOM (ZONE 2), FILTER (ZONE 4), AND DRAIN MATERIALS (ZONE 4). IN ADDITION, MODERATELY WEATHERED BEDROCK IS CONSIDERED TO BE A SUITABLE FOUNDATION SURFACE FOR THE CENTRAL IMPERVIOUS CORE MATERIAL (ZONE 1).
3. COLLUVIUM AND DECOMPOSED BEDROCK WILL BE EXCAVATED FROM THE ENTIRE FOOTPRINT OF THE SADDLE DAMS TO OBTAIN AN INTENSELY WEATHERED BEDROCK SURFACE. IN ADDITION, INTENSELY WEATHERED BEDROCK WILL BE EXCAVATED FROM THE IMPERVIOUS CORE FOOTPRINT TO OBTAIN A MODERATELY WEATHERED BEDROCK SURFACE.
4. EXCAVATION AND FOUNDATION SHAPING CAN BE PERFORMED FAIRLY EASILY WITH THE USE OF HEAVY EQUIPMENT DUE TO THE RELATIVELY LOW STRENGTH OF THE BOXER FORMATION BEDROCK.
6. GROUTING WAS NOT INCLUDED IN THE FOUNDATION DESIGN OF THE SMALL SADDLE DAMS (NOS. 1, 2, 4, AND 9) SINCE A RELATIVELY LARGE PORTION OF THESE DAMS IS FREEBOARD. FOUNDATION SEEPAGE WAS NOT CONSIDERED TO BE SIGNIFICANT FOR THE SMALL SADDLE DAMS DUE TO THE RELATIVELY LOW HEAD AND LONG FLOW PATH BELOW THE CORE TRENCH.
7. SINCE DWR WATER PRESSURE TEST DATA INDICATES THAT SOME AREAS OF HIGHER HYDRAULIC CONDUCTIVITY OCCUR IN THE DAM FOUNDATIONS, CURTAIN GROUTING WAS INCLUDED IN THE DESIGN OF THE LARGE SADDLE DAMS (NO. 3, 5, 6, 7, AND 8) TO REDUCE SEEPAGE THROUGH THE DAM FOUNDATIONS.
8. THE GROUT PROGRAM WILL ALSO INCLUDE A 20-FOOT WIDE BY 3-FEET THICK GROUT CAP TO PREVENT SURFACE LEAKAGE OF GROUT DURING GROUTING OF THE UPPER STAGE. FOUNDATION GROUTING WILL CONSIST OF A 2 ROW VERTICAL GROUT CURTAIN SPACED 10 FEET APART PARALLEL TO THE DAM CENTERLINE. EACH ROW OF CURTAIN GROUT HOLES WILL CONSIST OF MANDATORY PRIMARY AND SECONDARY HOLES SPACED AT 10-FOOT CENTERS. IN ADDITION, IT WAS ASSUMED THAT TERTIARY HOLES, SPLIT SPACED BETWEEN THE PRIMARY AND SECONDARY HOLES, WILL BE REQUIRED OVER HALF THE LENGTH OF THE DAMS TO MEET GROUT CLOSURE CRITERIA. THE DRILLING DEPTH OF CURTAIN HOLES WAS ESTIMATED TO BE ONE HALF THE HEIGHT OF THE DAM, OR A MINIMUM DEPTH OF 30 FEET.
9. SINCE WATER PRESSURE TESTING IN THE EXPLORATION HOLES INDICATES THAT THE ROCK VARIES FROM FAIRLY TIGHT TO HAVING A RELATIVELY HIGH HYDRAULIC CONDUCTIVITY, GROUT TAKES IN THE CURTAIN HOLES WERE ESTIMATED AT 0.2 SACKS OF CEMENT PER LINEAR FOOT OF GROUT HOLE. THIS ESTIMATE CORRESPONDS TO TYPICAL GROUT TAKES OBSERVED DURING CONSTRUCTION OF OTHER DAM PROJECTS WITH SIMILAR FOUNDATION CONDITIONS.
10. THE GROUTING QUANTITY ESTIMATES ALSO INCLUDED VERIFICATION TESTING AS PART OF THE GROUTING PROGRAM. VERIFICATION HOLES WILL BE DRILLED BETWEEN THE CURTAIN GROUT ROWS, ALONG THE DAM CENTERLINE WITH AN AVERAGE HOLE SPACING OF 75 FEET COMMENSURATE WITH TYPICAL SPACING USED FOR OTHER DAM FOUNDATION GROUTING PROGRAMS. VERIFICATION TESTING WILL BE CONDUCTED TO A DEPTH EQUIVALENT TO THE CURTAIN GROUT HOLES.
11. ADDITIONAL GROUTING AND/OR TREATMENT OF SPECIAL FEATURES WILL LIKELY BE REQUIRED

SADDLE DAM SPECIAL FOUNDATION TREATMENT (SOIL-BENTONITE SLURRY CUTOFF WALLS)

1. NOTE THAT SADDLE DAMS 2, 3, AND 5 INCORPORATE A SOIL-BENTONITE SLURRY CUTOFF WALL AS PART OF THE FOUNDATION TREATMENT AT ABUTMENTS. SEE SADDLE DAM PLAN DRAWINGS FOR NOTES REGARDING CUTOFF WALL CONSTRUCTION REQUIREMENTS.



PLAN - EMBANKMENT AND SADDLE DAMS

NTS

REFERENCE NOTES:

FOR SITES DAM SEE DWG CM-101.
FOR GOLDEN GATE DAM PLAN SEE DWG CG-101.
FOR SADDLE DAMS SEE DWG CS-401.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

EMBANKMENTS AND SADDLE DAMS LOCATION PLAN

SPEC NO.
DRAWING NO. CM-100
REV.
SHEET NO. 26

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
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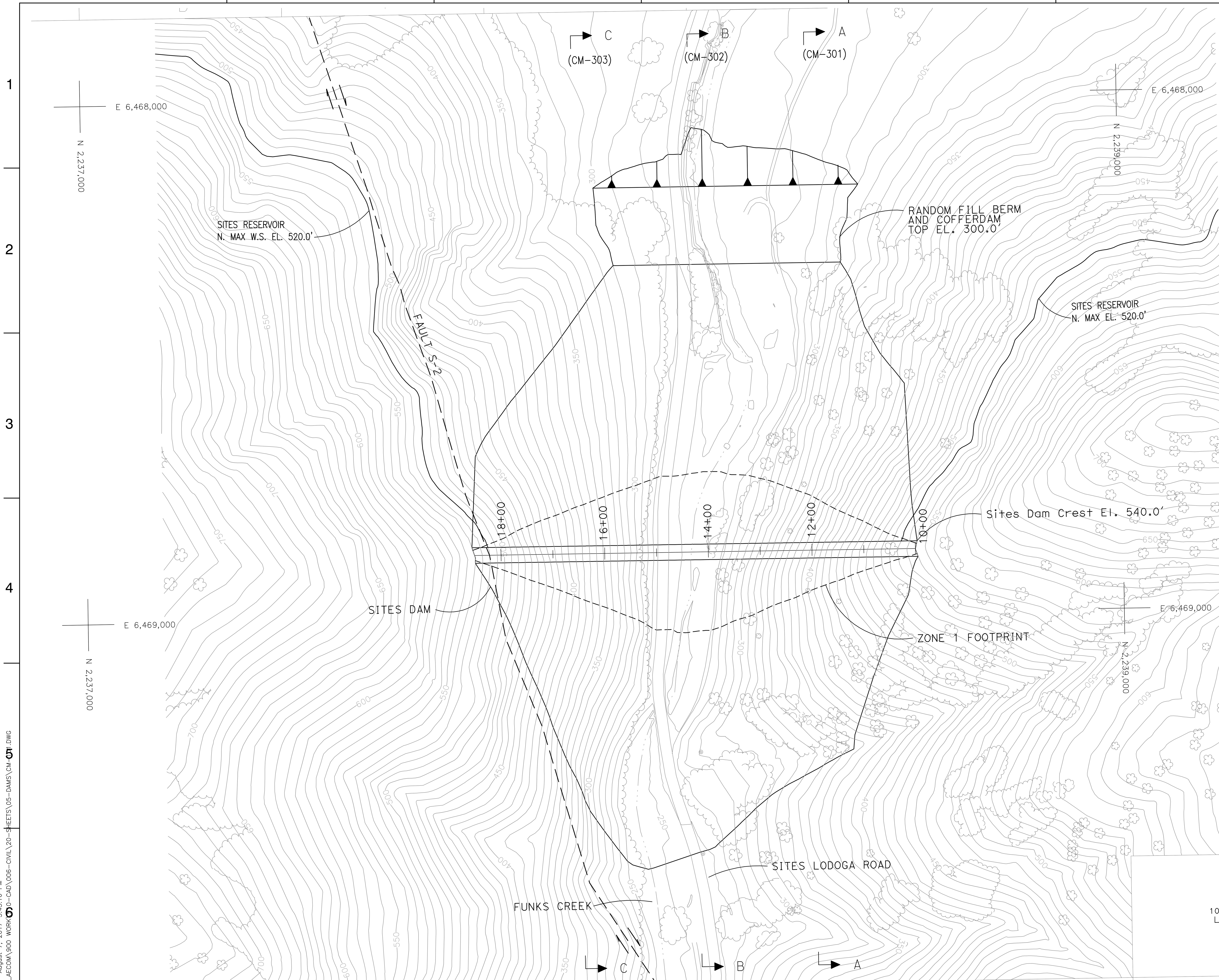

QUANTITY ESTIMATES – SITES DAM						
DAM	CLEAR AND GRUB (AC)	FOUNDATION EXCAVATION (CY)	ZONE 1 CORE (CY)	ZONE 2 FILTER/ DRAIN (TON)	ZONE 3 ROCKFILL (CY)	ZONE 4 RANDOM (CY)
SITES	30	793,500	1,070,000	852,400	1,180,500	1,085,000
QUANTITIES FOR 1.8 MAF RESERVOIR SIZE						
ZONE DESIGNATIONS DIFFER BETWEEN SADDLE DAMS AND MAIN DAMS (SITES AND GOLDEN GATE)						

STATISTICAL SUMMARY FOR DAMS			
DAM	MAXIMUM HEIGHT ABOVE STREAMBED (FT)	APPROXIMATE CREST LENGTH (FT)	APPROXIMATE TOTAL EMBANKMENT VOLUME (CY)
SITES	290	850	3,836,000

100 0 100 200 300 400
SCALE: 1"=100'

SPEC. No.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES DAM PLAN

SPEC NO.
DRAWING NO. CM-101
REV.
SHEET NO. 27

SECTION A-A - STA. 12+00

Scale: 1" = 60'

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing and evaluation programs.

2. Embankment zones are as follows:
   - ZONE 1 Core
   - ZONE 2 Upstream and Downstream Filter, Drain, and Transition
   - ZONE 3 Rockfill and Riprap
   - ZONE 4 Random

3. H = Height of Dam

NOTES

1. FOR GROUTING QUANTITY ESTIMATE SEE SHEET CM-501.
2. FOUNDATION TREATMENT – CLEAN AND SLUSH GROUT FOUNDATION SURFACES UNDER CORE ZONE 1 AND FILTER/DRAIN ZONE 2. STITCH GROUT AT FAULTS.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES DAM

SECTION A-A

SPEC NO.
DRAWING NO. CM-301
REV.
SHEET NO. 28

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A B C D E F G H

SECTION B-B - STA. 14+25

Scale: 1" = 60'

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing and evaluation programs.

2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Upstream and Downstream Filter, Drain, and Transition
   - Transition ZONE ③ Rockfill and Riprap
   - ZONE ④ Random Rockfill and Riprap
   - ZONE Random

3. H = Height of Dam

3. H = Height of Dam

NOTES

1. FOR GROUTING QUANTITY ESTIMATE SEE SHEET CM-501.
2. FOUNDATION TREATMENT - CLEAN AND SLUSH GROUT FOUNDATION SURFACES UNDER CORE ZONE 1 AND FILTER/DRAIN ZONE 2. STITCH GROUT AT FAULTS.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
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ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
SITES DAM
SECTION B-B

SPEC NO.
DRAWING NO. CM-302
REV.
SHEET NO. 29

A B C D E F G H

SECTION C-C STA. 16+50

Scale: 1" = 60'

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing and evaluation programs.

2. Embankment zones are as follows:
   ZONE ① Core
   ZONE ② Upstream and Downstream Filter, Drain, and
   Transition
   ③
   ZONE ④ Rockfill and Riprap
   ZONE Random

3. H = Height of Dam

NOTES

1. FOR GROUTING QUANTITY ESTIMATE SEE SHEET CM-501.
2. FOUNDATION TREATMENT – CLEAN AND SLUSH GROUT FOUNDATION SURFACES UNDER CORE ZONE 1 AND FILTER/DRAIN ZONE 2. STITCH GROUT AT FAULTS.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
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AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
SITES DAM
SECTION C-C

SPEC NO.
DRAWING NO. CM-303
REV.
SHEET NO. 30

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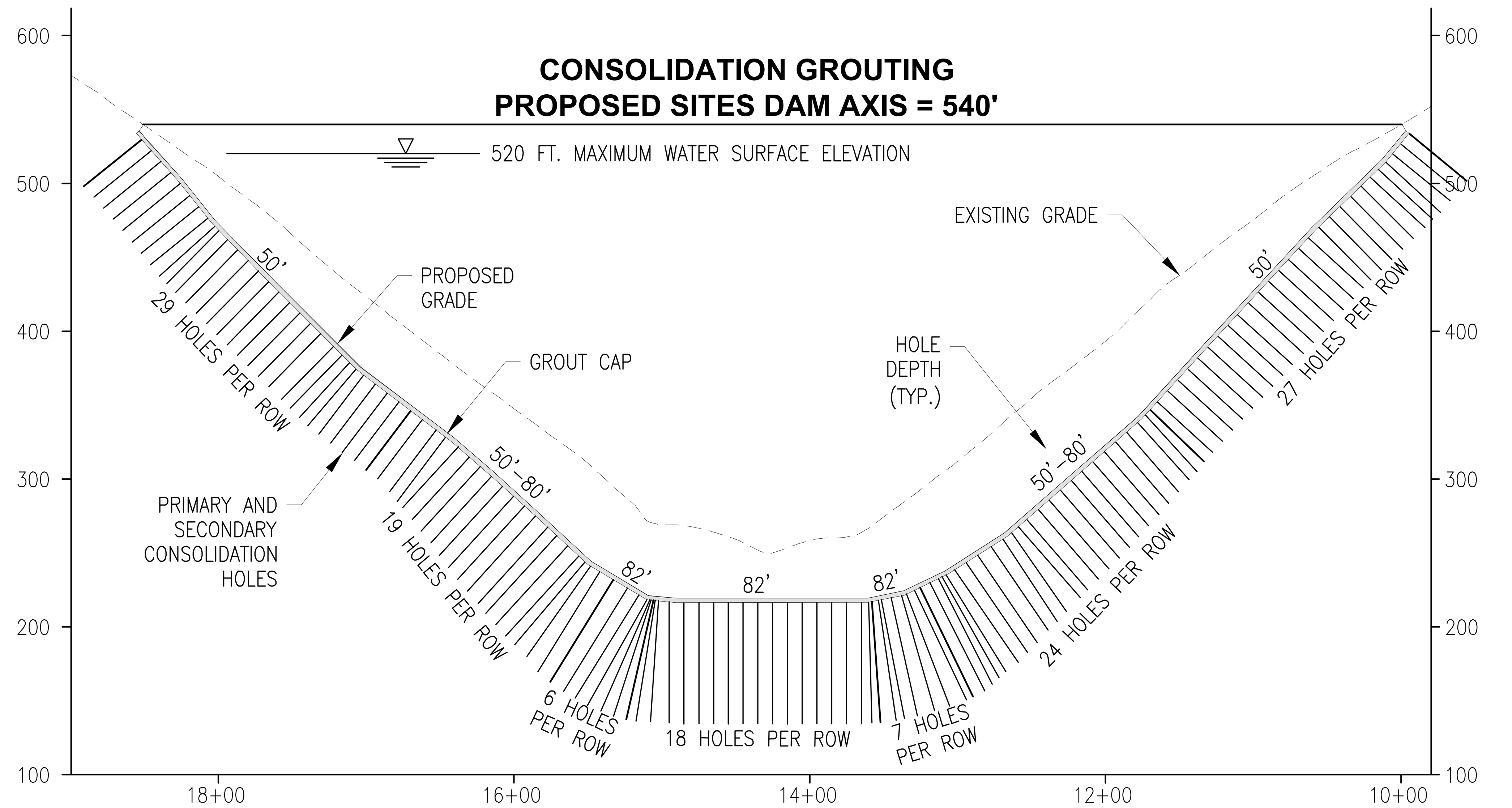
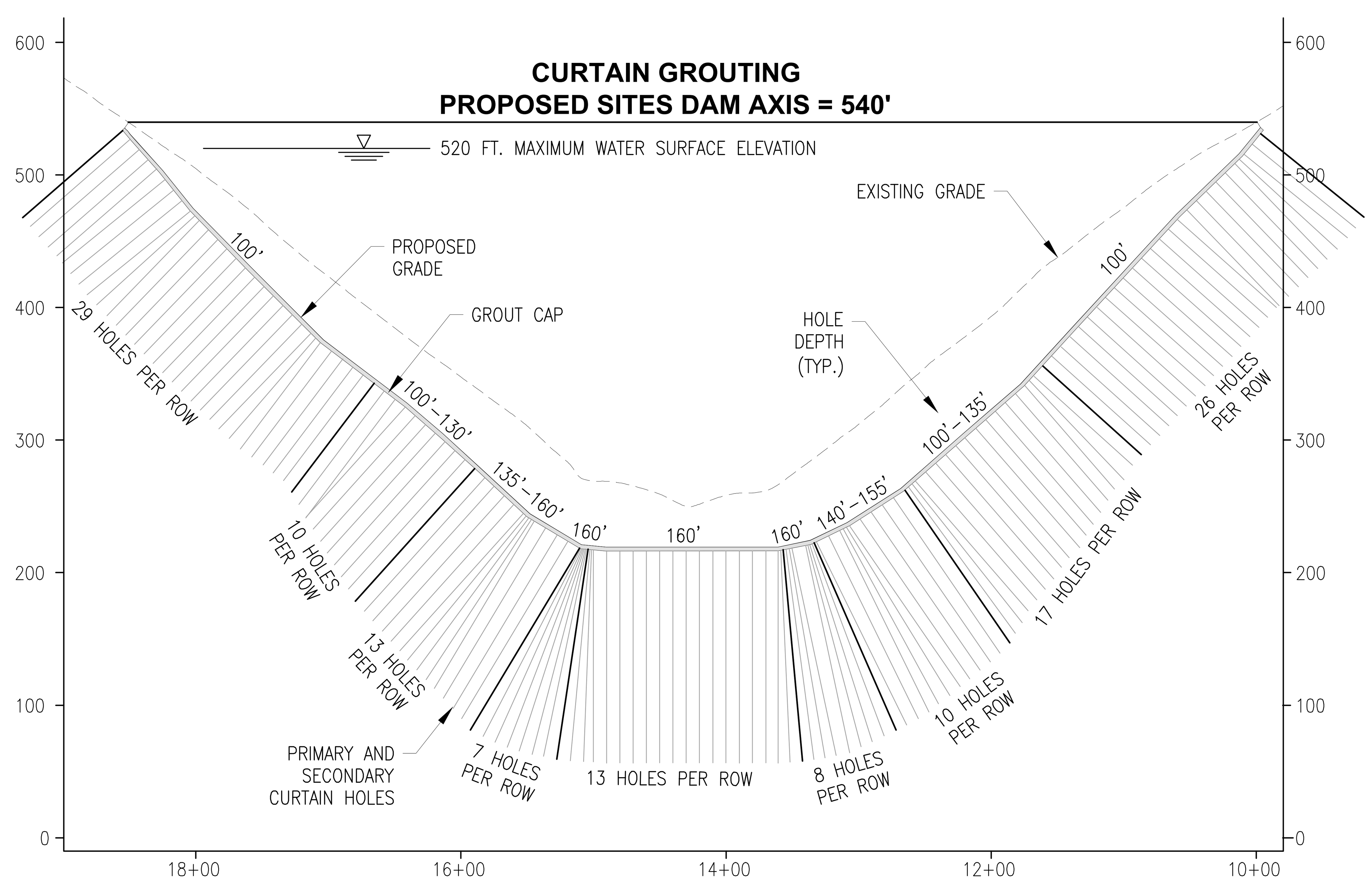


CONSOLIDATION GROUTING

1"=80'

1
–



CURTAIN GROUTING

1"=80'

2
–

NOTES: SITES DAM AND GOLDEN GATE DAM

1. 2 ROWS CONSOLIDATED GROUTING EACH DAM.
2. 2 ROWS CURTAIN GROUTING EACH DAM.
3. 10 FEET SPACING CONSOLIDATION AND CURTAIN GROUTING HOLES.
4. DRILLING DEPTH OF CURTAIN HOLES IS ESTIMATED TO BE HALF THE HEIGHT OF THE DAM OR 100 FEET, WHICH EVER IS GREATER.
5. DRILLING DEPTH OF CONSOLIDATION HOLES IS ESTIMATED TO BE ONE–QUARTER OF THE HEIGHT OF THE DAME OR 50 FEET, WHICHEVER IS GREATER.
6. CONTINGENCY INCLUDED ALLOWANCE FOR GROUTING ABOVE NORMAL MAX. W.S. EL. 520'.
7. TERTIARY GROUTING HOLES ARE ASSUMED ONE–HALF THE LENGTH OF FOUNDATION.
8. VERIFICATION TESTING WILL BE CONDUCTED ALONG THE CENTERLINE EVERY 75 FEET TO A DEPTH EQUIVALENT TO CURTAIN HOLES.
9. CEMENT QUANTITIES BASED ON 0.75 SACKS PER LINEAR FOOT.

SITES DAM GROUT TABLE

CALCULATED PER PLAN							TOTAL WITH 25% CONTINGENCY		
CONCRETE CAP VOLUME (CU. YD.)	LENGTH OF PRIMARY AND SECONDARY CURTAIN HOLES (FT)	LENGTH OF TERTIARY CURTAIN HOLES (FT)	LENGTH OF PRIMARY AND SECONDARY CONSOLIDATION HOLES	VERIFICATION GROUTING HOLES (FEET)	GROUTING CEMENT QUANTITY (BAGS)	NUMBER OF HOOKUPS FOR ALL HOLES	HOOKUPS FOR ALL HOLES	TOTAL LENGTH FOR ALL HOLES (FEET)	TOTAL GROUTING CEMENT QUANTITY (BAGS)
4,955	33,080	16,540	16,274	1,950	50,883	674	843	84,805	63,604

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DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST REG. CE. NO. 27855 DATE 08/04/2017
APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES DAM
GROUTING DETAILS

SPEC NO.
DRAWING NO. CM-501
REV.
SHEET NO. 31

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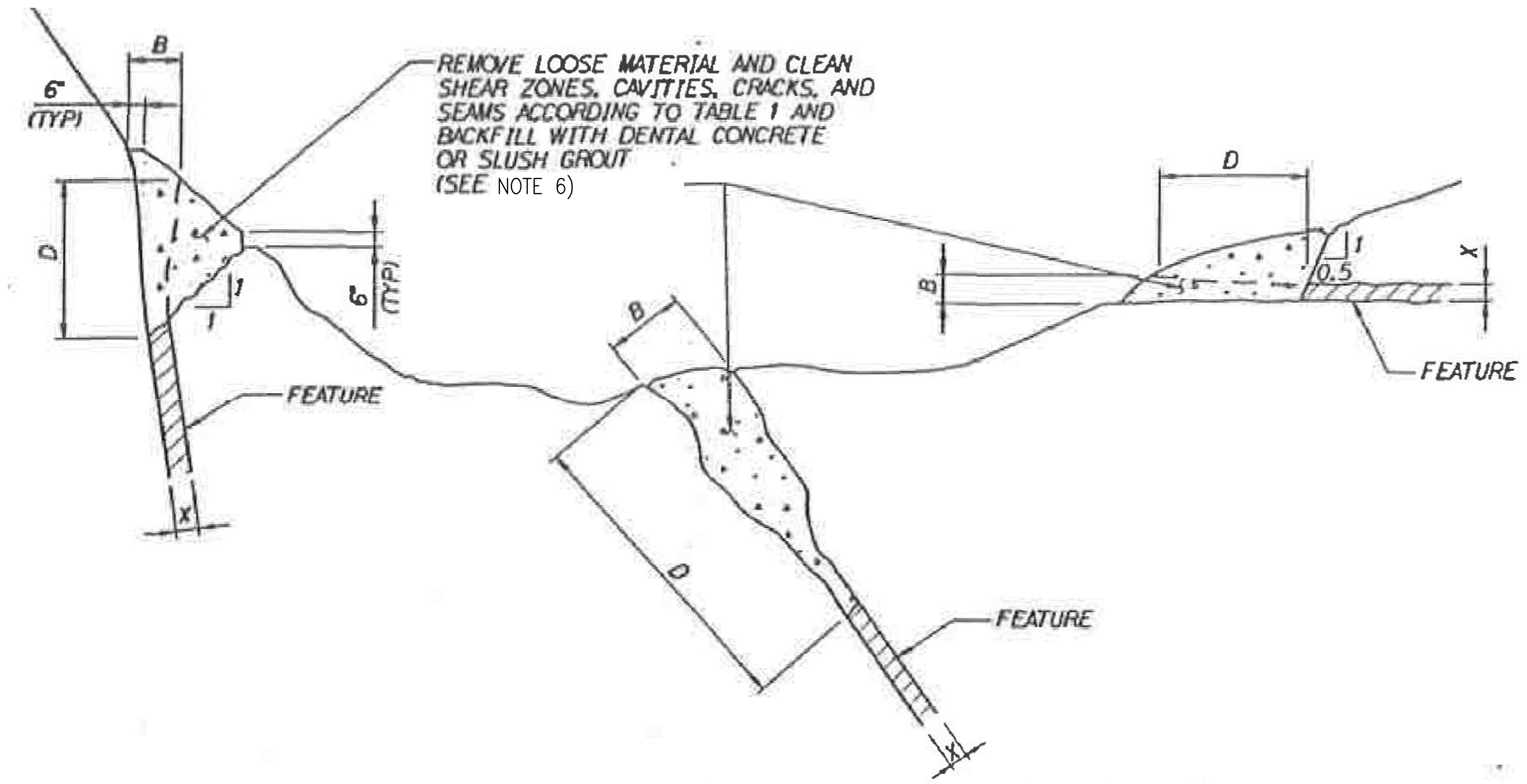
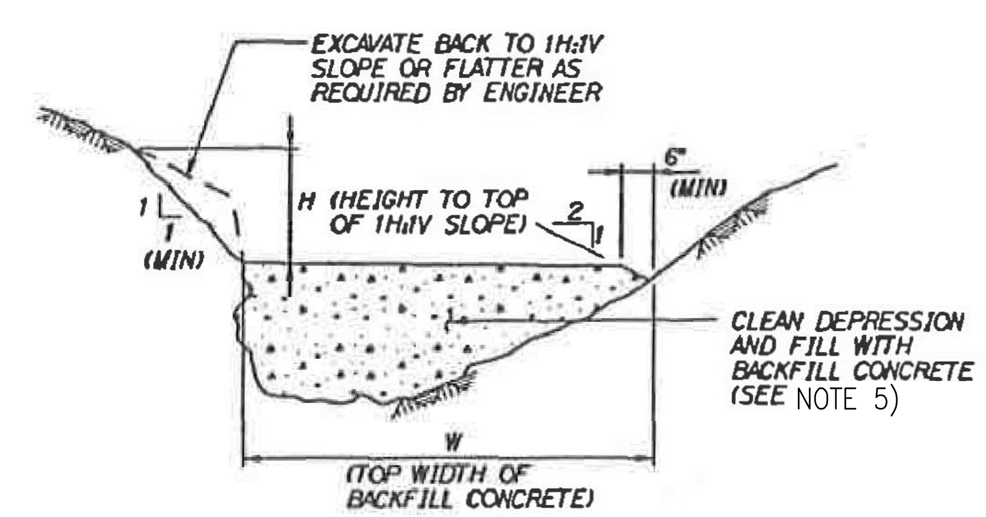
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20–CAD\006–CIVIL\20–SHEETS\05–DAMS\CM–501.DWG



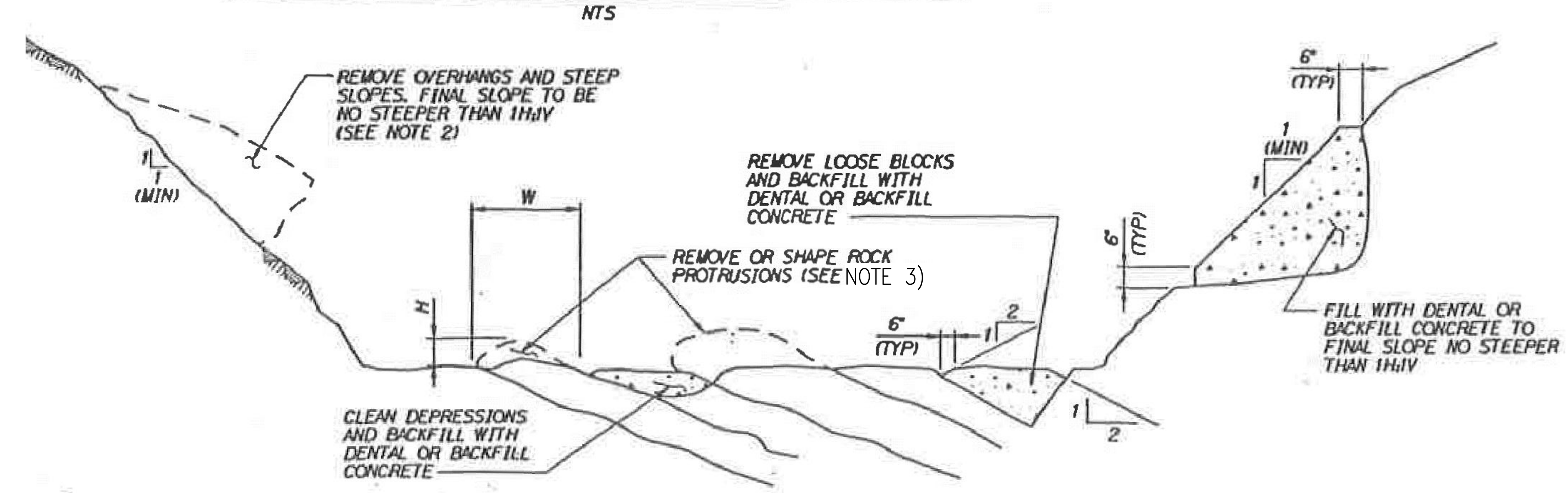
DENTAL TREATMENT OF SHEAR ZONES, CAVITIES, CRACKS, AND SEAMS IN CORE TRENCH

NTS



BACKFILL CONCRETING AND SHAPING IN CORE TRENCH

NTS



LOCAL SURFACE TREATMENT AND SHAPING IN CORE TRENCH

NOTES:

1. THE TREATMENT AND SHAPING DETAILS SHOWN ARE GUIDELINES. CONTRACTOR SHALL PERFORM UNRIPPABLE ROCK EXCAVATION, SHAPING, TREATMENT AND CLEANUP. THE DAM FOUNDATION WILL BE GEOLOGICALLY MAPPED BY THE ENGINEER.
2. REMOVE OVERHANGS AND STEEP SLOPES IN BOTH LONGITUDINAL AND TRANSVERSE DIRECTIONS, SO THAT THE FINAL SLOPE IS NO STEEPER THAN 1H:1V.
3. REMOVE OR SHAPE LOCAL ROCK PROTRUSIONS, IN BOTH LONGITUDINAL AND TRANSVERSE DIRECTIONS, WITH HEIGHT (H) GREATER THAN 2-FEET, SO THAT THE RATIO OF WIDTH (W) TO HEIGHT (H) IS GREATER THAN 2.
4. THE BASE OF THE CORE TRENCH SHALL BE EXCAVATED BELOW THE LIMITS OF COMMON EXCAVATION TO REDUCE EXCESSIVE UPSTREAM-TO-DOWNSTREAM DOWNWARD SLOPE. IN THOSE AREAS WHERE THE UNRIPPABLE ROCK EXCAVATION SURFACE OR THE COMMON EXCAVATION II SURFACE SLOPES DOWNWARD IN THE DOWNSTREAM DIRECTION, THE MAXIMUM ELEVATION DIFFERENCE IN ANY TRANSVERSE SECTION SHALL NOT EXCEED 10 FEET.

   THE BASE OF THE CORE TRENCH SHALL BE EXCAVATED SO THAT THE SLOPES ARE NOT STEEPER THAN THE FOLLOWING REQUIREMENTS:
   TRANSVERSE SLOPES: 4:1 DOWNWARD IN UPTREAM-TO-DOWNSTREAM DIRECTION
   2:1 UPWARD IN UPSTREAM-TO-DOWNSTREAM DIRECTION.
   LONGITUDINAL SLOPES: 2:1
5. FILL WITH BACKFILL CONCRETE UNTIL RATIO OF W TO H IS GREATER THAN 3 AND W IS AT LEAST 6 FEET, OR AS OTHERWISE REQUIRED BY ENGINEER.
6. EXTEND DENTAL TREATMENT OF SHEAR ZONES 20 FEET UPSTREAM AND DOWNSTREAM OF THE CORE TRENCH WHERE SHEAR ZONES, CAVITIES, CRACKS AND SEAMS EXTEND BEYOND THE CORE TRENCH.

REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES DAM
FOUNDATION SURFACE TREATMENT

SPEC NO.
DRAWING NO. CM-502
REV.
SHEET NO. 32

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A B C D E F G H

QUANTITY ESTIMATES – GOLDEN GATE DAM

DAM	CLEAR AND GRUB (AC)	FOUNDATION EXCAVATION (CY)	ZONE 1 CORE (CY)	ZONE 2 FILTER/DRAIN (TON)	ZONE 3 ROCKFILL (CY)	ZONE 4 RANDOM (CY)
GOLDEN GATE	50	2,910,000	3,460,000	2,494,000	2,870,000	1,470,000
QUANTITIES FOR 1.8 MAF RESERVOIR SIZE						
ZONE DESIGNATIONS DIFFER BETWEEN SADDLE DAMS AND MAIN DAMS (SITES AND GOLDEN GATE)						

STATISTICAL SUMMARY FOR DAMS

DAM	MAXIMUM HEIGHT ABOVE STREAMBED (FT)	APPROXIMATE CREST LENGTH (FT)	APPROXIMATE TOTAL EMBANKMENT VOLUME (CY)
GOLDEN GATE	310	2,250	10,590,000

NOTES

1. Between stations 29+00 to 32+50 flatten upstream slope of core to 1H:1V to provide increased base width of impervious core material in contact with fault GG-2.

1" = 200' 200 0 200 400 600 800 SCALE OF FEET

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REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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Sites

WSIP APPLICATION ATTACHMENT A4.A

GOLDEN GATE DAM

PLAN

SPEC NO.
DRAWING NO. CG-101
REV.
SHEET NO. 33

A B C D E F G H

SECTION A-A STA 12+00

Scale: 1" = 60'

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing and evaluation programs.
2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Upstream and Downstream Filter, Drain, and Transition
   - ZONE ③ Rockfill and Riprap
   - ZONE ④ Random
3. H = Height of Dam

NOTES:
1. FOR GROUTING QUANTITY ESTIMATE SEE DRAWING CG-501.
2. CLEAN AND SLUSH GROUT FOUNDATION SURFACES UNDER CORE ZONE 1 AND FILTER/DRAIN ZONE 2. STITCH GROUT AT FAULTS.
3. FOUNDATION TREATMENTS AS NEEDED IN ACCORDANCE WITH DRAWING CM-502.

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REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED D. HUGHES
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CHECKED M. FORREST
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2020 L Street, Suite 300
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T 916-414-5800 F 916-414-1557
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Sites

WSIP APPLICATION ATTACHMENT A4.A

GOLDEN GATE DAM

SECTION A-A

SPEC NO.
DRAWING NO. CG-301
REV.
SHEET NO. 34

SECTION B-B STA 16+40

Scale: 1" = 60′

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing and evaluation programs.
2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Upstream and Downstream Filter, Drain, and Transition
   - ZONE ③ Rockfill and Riprap
   - ZONE ④ Random
3. H = Height of Dam

NOTES:

1. FOR GROUTING QUANTITY ESTIMATE SEE DRAWING CG-501.
2. CLEAN AND SLUSH GROUT FOUNDATION SURFACES UNDER CORE ZONE 1 AND FILTER/DRAIN ZONE 2. STITCH GROUT AT FAULTS.
3. FOUNDATION TREATMENTS AS NEEDED IN ACCORDANCE WITH DRAWING CM-502.

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REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
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Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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Sites

WSIP APPLICATION ATTACHMENT A4.A
GOLDEN GATE DAM
SECTION B-B

SPEC NO.
DRAWING NO. CG-302
REV.
SHEET NO. 35

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing and evaluation programs.

2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Upstream and Downstream Filter, Drain, and Transition
   - ZONE ③ Rockfill and Riprap
   - ZONE ④ Random

3. H = Height of Dam

SECTION C-C - STA. 25+00

Scale: 1" = 60'

NOTES:
1. FOR GROUTING QUANTITY ESTIMATE SEE DRAWING CG-501.
2. CLEAN AND SLUSH GROUT FOUNDATION SURFACES UNDER CORE ZONE 1 AND FILTER/DRAIN ZONE 2. STITCH GROUT AT FAULTS.
3. FOUNDATION TREATMENTS AS NEEDED IN ACCORDANCE WITH DRAWING CM-502.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
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APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
GOLDEN GATE DAM
SECTION C-C

SPEC NO.
DRAWING NO. CG-303
REV.
SHEET NO. 36

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NOTES
1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing and evaluation programs.

2. Embankment zones are as follows:
   ZONE ① Core
   ZONE ② Upstream and Downstream Filter, Drain, and Transition
   ZONE ③ Rockfill and Riprap
   ZONE ④ Random

3. H = Height of Dam

4. Between Stations 29+00 to 32+50 flatten upstream slope of core to 1H:1V to provide increased base width of impervious core material in contact with fault GG-2.

SECTION D-D - STA 30+00

Scale:1" = 60′

NOTES:
1. FOR GROUTING QUANTITY ESTIMATE SEE DRAWING CG-501.
2. CLEAN AND SLUSH GROUT FOUNDATION SURFACES UNDER CORE ZONE 1 AND FILTER/DRAIN ZONE 2. STITCH GROUT AT FAULTS.
3. FOUNDATION TREATMENTS AS NEEDED IN ACCORDANCE WITH DRAWING CM-502.

REV	DATE	DESCRIPTION	SUB.	APPD
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DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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Sites

WSIP APPLICATION ATTACHMENT A4.A
GOLDEN GATE DAM
SECTION D-D

SPEC NO.
DRAWING NO. CG-304
REV.
SHEET NO. 37

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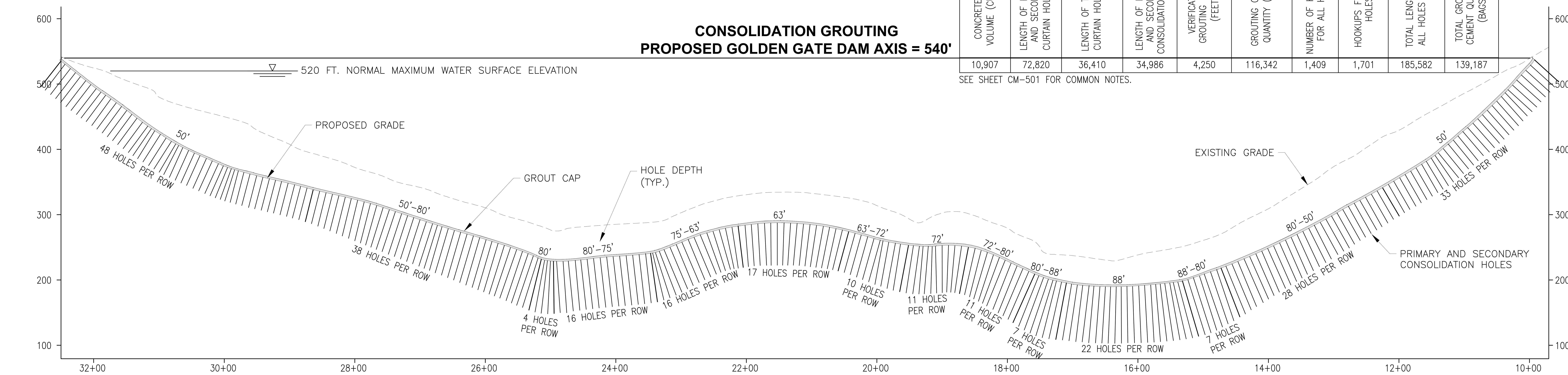
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\05-DAMS\CG-304.DWG

NOTES:
1. SEE SHEET G-003 FOR GROUTING NOTES.

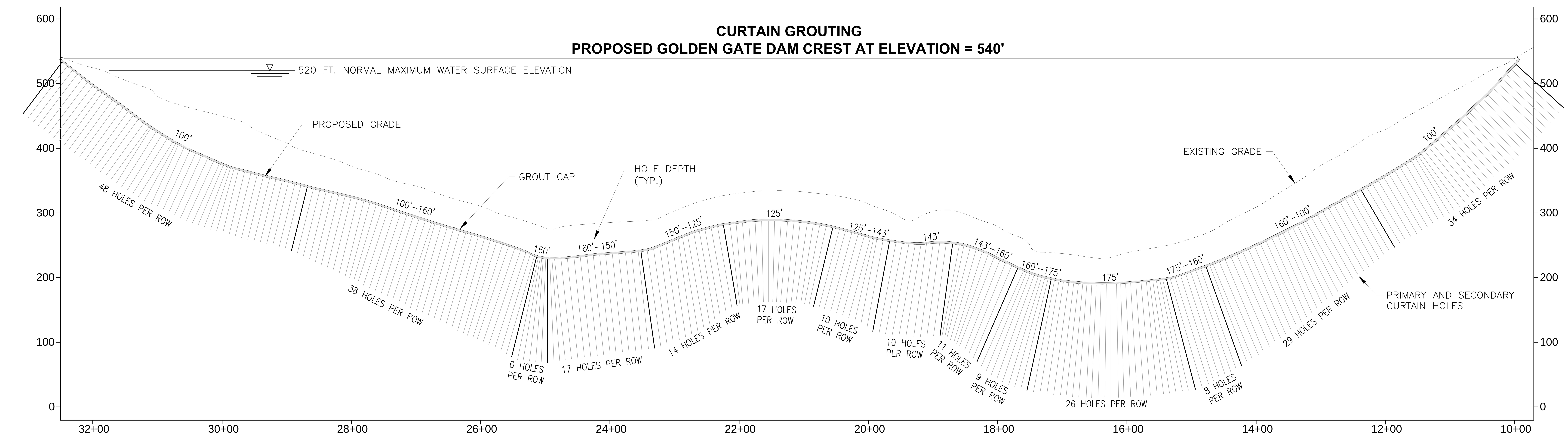
GOLDEN GATE DAM GROUT TABLE

CALCULATED PER PLAN							TOTAL WITH 25% CONTINGENCY		
CONCRETE CAP VOLUME (CU. YD.)	LENGTH OF PRIMARY AND SECONDARY CURTAIN HOLES (FT)	LENGTH OF TERTIARY CURTAIN HOLES (FT)	LENGTH OF PRIMARY AND SECONDARY CONSOLIDATION HOLES	VERIFICATION GROUTING HOLES (FEET)	GROUTING CEMENT QUANTITY (BAGS)	NUMBER OF HOOKUPS FOR ALL HOLES	HOOKUPS FOR ALL HOLES	TOTAL LENGTH FOR ALL HOLES (FEET)	TOTAL GROUTING CEMENT QUANTITY (BAGS)
10,907	72,820	36,410	34,986	4,250	116,342	1,409	1,701	185,582	139,187

SEE SHEET CM-501 FOR COMMON NOTES.



CONSOLIDATION GROUTING (1)
1"=80'



CURTAIN GROUTING (2)
1"=80'

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DESIGNED: D. HUGHES
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APPROVAL BY:
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2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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Sites

WSIP APPLICATION ATTACHMENT A4.A

GOLDEN GATE DAM
GROUTING DETAIL

SPEC NO.:
DRAWING NO.: CG-501
REV.:
SHEET NO.: 38

NOTES – SADDLE DAMS 2, 3 AND 5

1. AT SADDLE DAMS 2, 3 AND 5, THE ABUTMENT SLOPES ARE FAIRLY FLAT RESULTING IN AREAS WITH DAM HEIGHTS LESS THAN ABOUT 10 FEET OVER LENGTHS OF UP TO 620 FEET. AT THESE LOCATIONS THE DAM EMBANKMENTS ARE PROVIDING RESIDUAL FREEBOARD ONLY AND THE TYPICAL SADDLE DAM SECTIONS WILL BE REPLACED WITH A SMALL HOMOGENOUS IMPERVIOUS EMBANKMENT WITH A BENTONITE SLURRY WALL FOR FOUNDATION SEEPAGE CONTROL. CONSTRUCTION OF THE SLURRY WALL CONFIGURATION IS A MORE ECONOMICAL OPTION THAN CONSTRUCTION OF THE TYPICAL SECTION. THE SLURRY WALL WILL BE EXCAVATED TO A DEPTH CORRESPONDING TO THE MODERATELY WEATHERED BEDROCK SURFACE, WITH AVERAGE DIMENSIONS ESTIMATED AT 20-FEET DEEP BY 5-FEET WIDE.
2. AT THE LEFT ABUTMENT OF SADDLE DAM NO. 2, THE SLURRY WALL SECTION ALSO PROVIDES A DEFENSIVE MEASURE TO CONTROL FOUNDATION SEEPAGE IN THE EVENT THAT DISPLACEMENT OCCURS ALONG THE SALT LAKE FAULT. ALTHOUGH THE EXACT LOCATION OF THIS FAULT HAS NOT BEEN IDENTIFIED AT THIS TIME, IT IS BELIEVED TO TRANSVERSE THE LEFT ABUTMENT OF SADDLE DAM NO. 2. AT THIS LOCATION THE SLURRY WALL WAS EXTENDED TO A DEPTH OF 40-FEET TO MINIMIZE THE POTENTIAL OF FOUNDATION SEEPAGE ALONG THE FAULT ZONE.

1" = 200' — 200 0 200 400 600 800 SCALE_OF_FEET

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Sites

WSIP APPLICATION ATTACHMENT A4.A

SADDLE DAMS PLAN,
DAMS NO. 1 AND 2

SPEC NO.
DRAWING NO. CS-102
REV.
SHEET NO. 40

STATISTICAL SUMMARY FOR DAMS

DAM	MAXIMUM HEIGHT ABOVE STREAMBED (FT)	APPROXIMATE CREST LENGTH (FT)	APPROXIMATE TOTAL EMBANKMENT VOLUME (CY)
SADLE DAM NO. 1	50	490	93,000
SADLE DAM NO. 2	80	420	86,000
SADLE DAM NO. 3	130	3,810	3,577,000
SADLE DAM NO. 4	40	270	18,000
SADLE DAM NO. 5	100	2,290	1,505,000
SADLE DAM NO. 6	70	530	144,000
SADLE DAM NO. 7	75	1,040	196,000
SADLE DAM NO. 8	105	2,990	1,915,000
SADLE DAM NO. 9	45	340	49,000

SOURCE:
SITES RESERVOIR ENGINEERING FEASIBILITY STUDY, GOLDEN GATE, SITES, AND SADDLE DAMS.PDF
PAGE 92, FIGURE 21.
PDF SCALE AT 22X34 IS 1" = 800'

QUANTITY ESTIMATES – SADDLE DAMS

DAM	CLEAR AND GRUB (CY)	FOUNDATION EXCAVATION (CY)	ZONE 1 CORE (CY)	ZONE 2 RANDOM (CY)	ZONE 3 ROCKFILL (CY)	ZONE 4 FILTER (TON)
SADLE DAM NO. 1	2	27,600	27,600	44,300	7,000	13,900
SADLE DAM NO. 2	2	26,300	25,300	39,200	10,000	11,300
SADLE DAM NO. 3	40	512,000	832,000	1,532,000	1,014,000	340,000
SADLE DAM NO. 4	1	7,100	7,700	6,700	900	3,000
SADLE DAM NO. 5	20	270,000	378,000	557,000	445,000	214,200
SADLE DAM NO. 6	3	36,000	40,200	39,000	50,000	13,100
SADLE DAM NO. 7	5	67,000	60,500	41,000	61,000	57,800
SADLE DAM NO. 8	30	373,000	542,000	706,000	504,000	282,200
SADLE DAM NO. 9	2	19,000	16,600	20,500	3,500	8,200
QUANTITIES FOR 1.8 MAF RESERVOIR SIZE						
ZONE DESIGNATIONS DIFFER BETWEEN SADDLE DAMS AND MAIN DAMS (SITES AND GOLDEN GATE)						

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

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WSIP APPLICATION ATTACHMENT A4.A

SADDLE DAMS
PLAN

SPEC NO.
DRAWING NO. CS-101
REV.
SHEET NO. 39

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DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED MIKE FORREST REG. CE. NO. 27855 DATE 08/04/2017
APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SADDLE DAMS PLAN,
DAM NO. 3

SPEC NO.
DRAWING NO. CS-103
REV.
SHEET NO. 41

SOURCE:
SITES RESERVOIR ENGINEERING FEASIBILITY STUDY, GOLDEN GATE, SITES, AND SADDLE DAMS.PDF PAGE 95, FIGURE 24.
PDF SCALE AT 22X34 IS 1" = 200'

1" = 200' — 200 0 200 400 600 800 SCALE OF FEET

REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

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T 916-414-5800 F 916-414-1557
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APPROVED: JOE BARNES, REG. CE. NO. 40105

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WSIP APPLICATION ATTACHMENT A4.A

SADDLE DAMS PLAN, DAM NO. 4, 5, AND 6

SPEC NO.
DRAWING NO. CS-104
REV.
SHEET NO. 42

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DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
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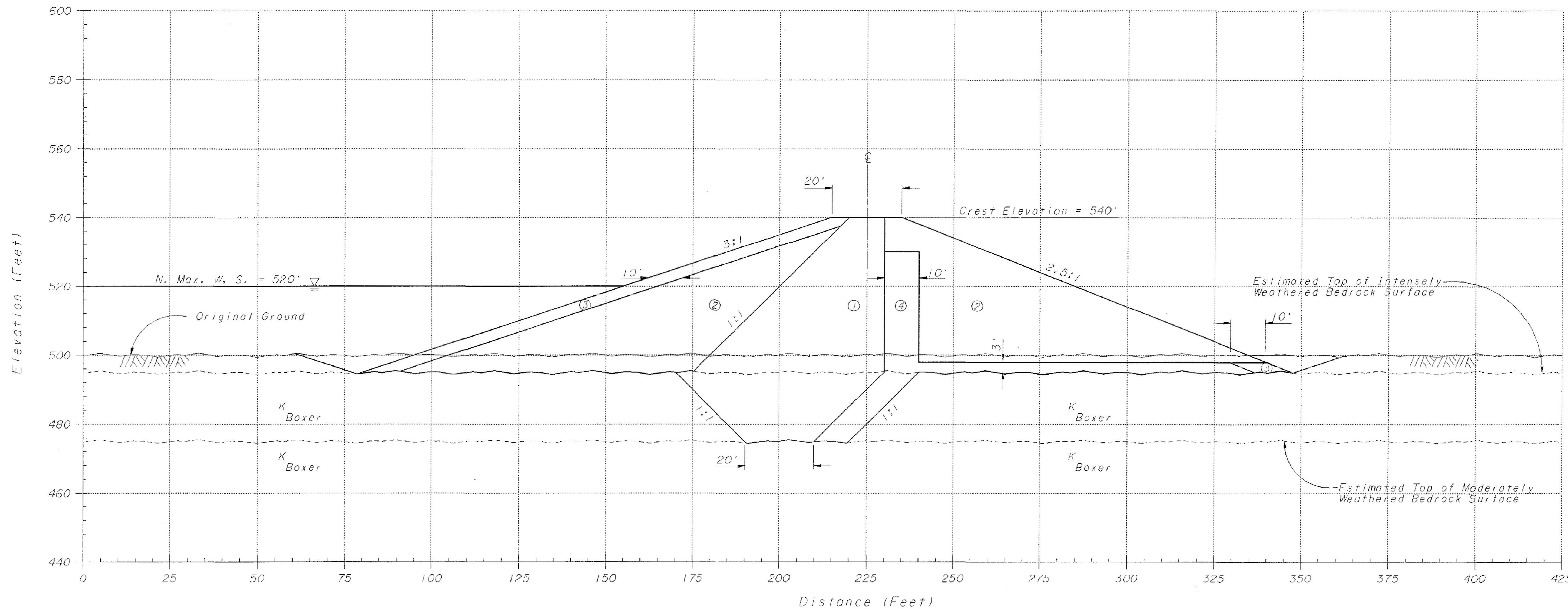
WSIP APPLICATION ATTACHMENT A4.A

SADDLE DAMS PLAN, DAM NO. 7, 8, AND 9

SPEC NO.
DRAWING NO. CS-105
REV.
SHEET NO. 43



NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing, and evaluation programs.

2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Random, Predominately Mudstone
   - ZONE ③ Riprap
   - ZONE ④ Filter

TYPICAL SECTION
SADDLE DAM NOS. 1, 2, 4, AND 9

Scale: 1" = 15'

REDUCED HALF SIZE PLANS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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WSIP APPLICATION ATTACHMENT A4.A

SADDLE DAMS TYPICAL SECTIONS, DAM NO. 1, 2, 4, AND 9

SPEC NO.
DRAWING NO. CS-301
REV.
SHEET NO. 44

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TYPICAL SECTION
SADDLE DAM NOS. 3, 5, 6, 7, AND 8

Scale: 1" = 40'

NOTES

1. Embankment section presented is preliminary and is based upon feasibility level geologic exploration and materials investigation, testing, and evaluation programs.
2. Embankment zones are as follows:
   - ZONE ① Core
   - ZONE ② Random, Predominately Mudstone
   - ZONE ③ Rockfill
   - ZONE ④ Filter and Drain
3. H = Height of Dam

SADDLE DAMS GROUT TABLE

DAM	GROUT CAP VOLUME (CYD)	CURTAIN HOLES HOOKUPS	DRILL HOLE DEPTHS (FT)	FURNISH/HANDLE TYPE III CEMENT (SACKS)
SADLE DAM NO. 3	8,500	3,100	86,500	64,875
SADLE DAM NO. 5	5,100	1,400	42,390	31,793
SADLE DAM NO. 6	1,200	370	5,500	4,125
SADLE DAM NO. 7	2,300	670	10,100	7,575
SADLE DAM NO. 8	6,700	1,800	49,200	36,900

CEMENT QUANTITIES BASED ON 0.75 SACKS/FOOT FOR CURTAIN, CONSOLIDATION, AND VERIFICATION HOLES

REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED: D. HUGHES
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CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
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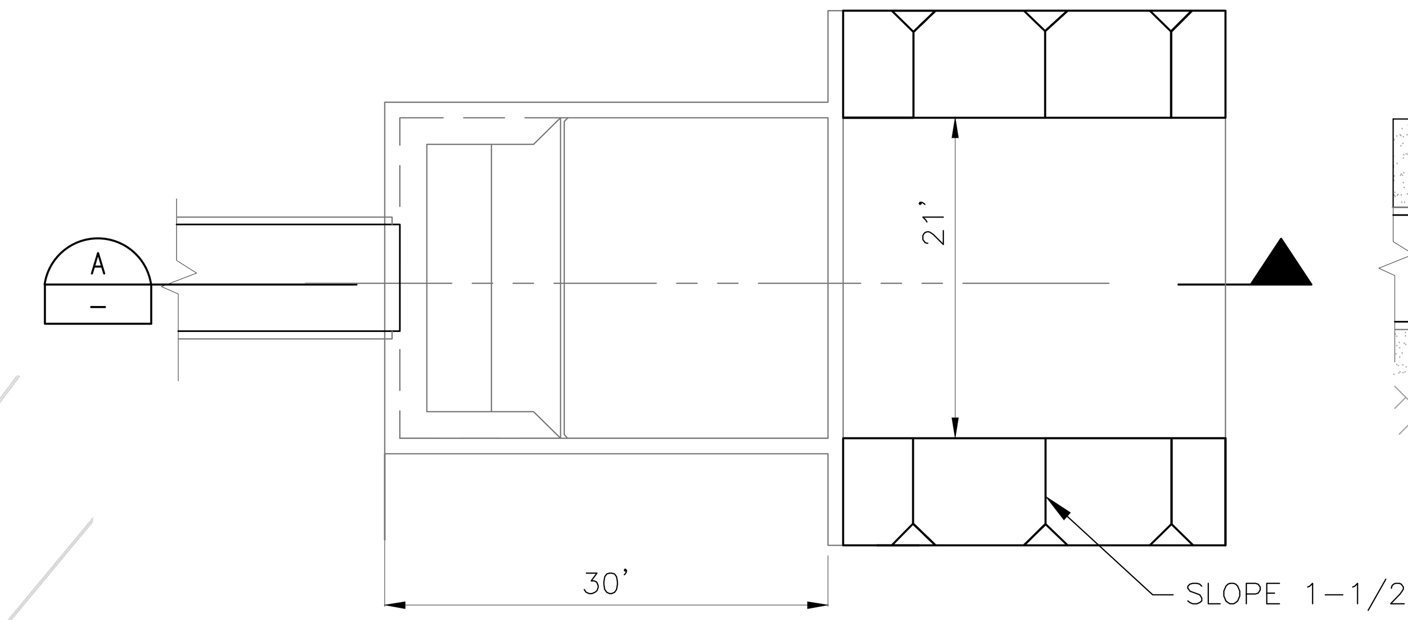
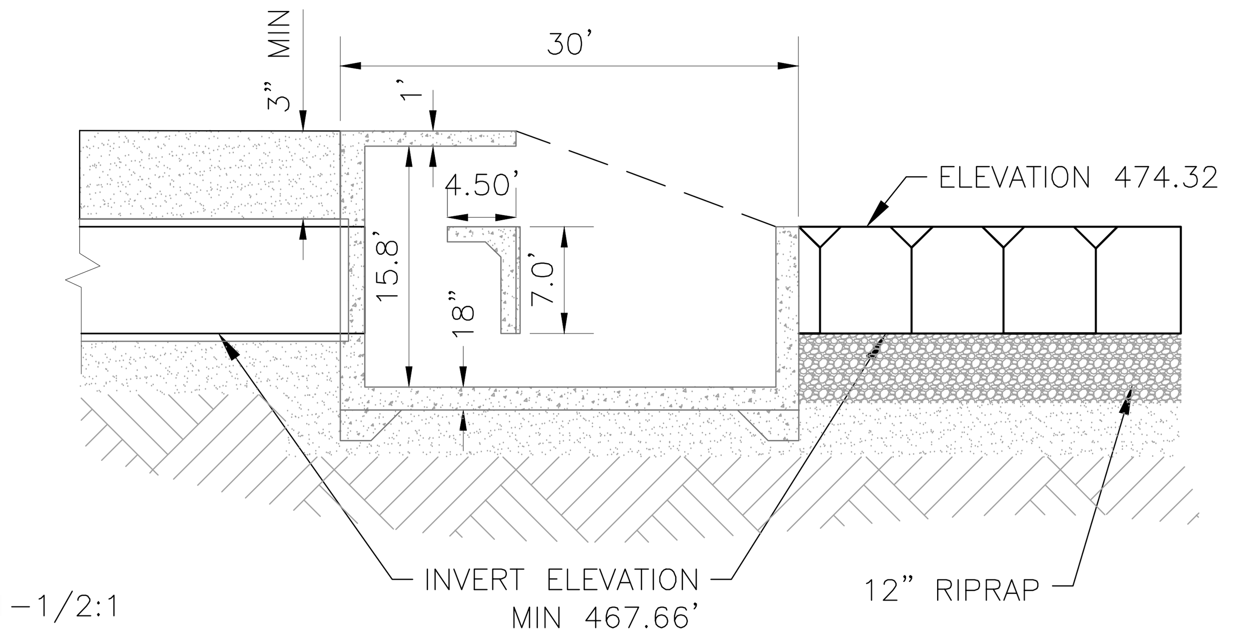
WSIP APPLICATION ATTACHMENT A4.A

SADDLE DAMS TYPICAL SECTIONS, DAM NO. 3, 5, 6, 7, AND 8

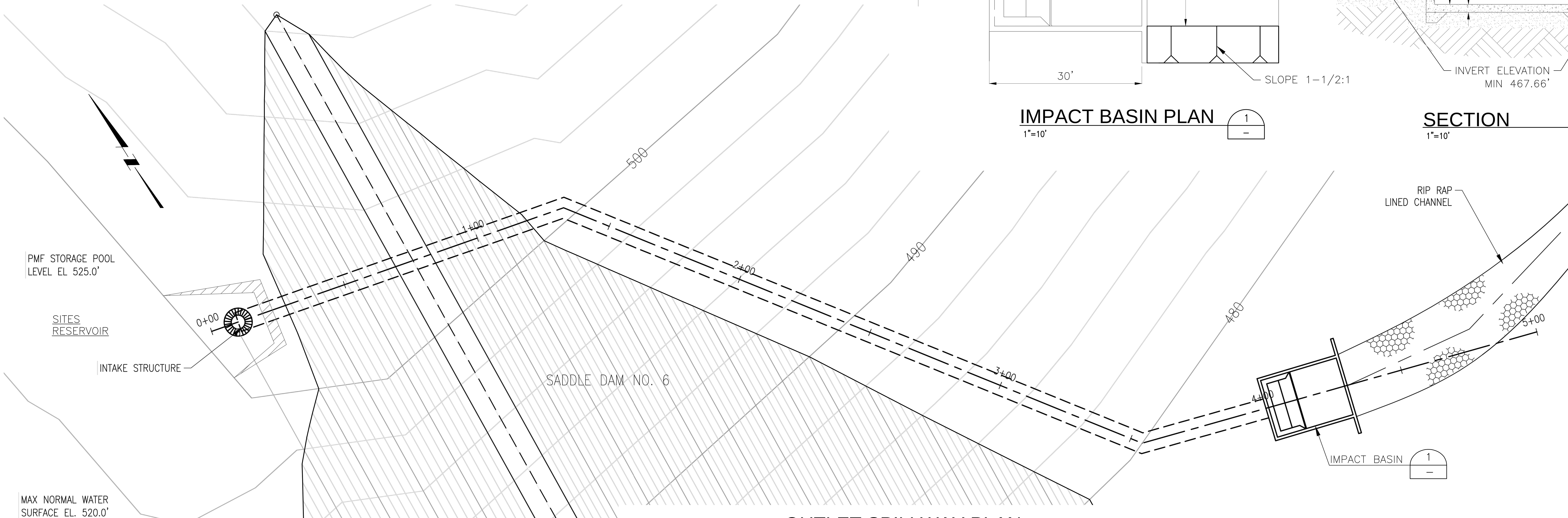
SPEC NO.
DRAWING NO. CS-302
REV.
SHEET NO. 45



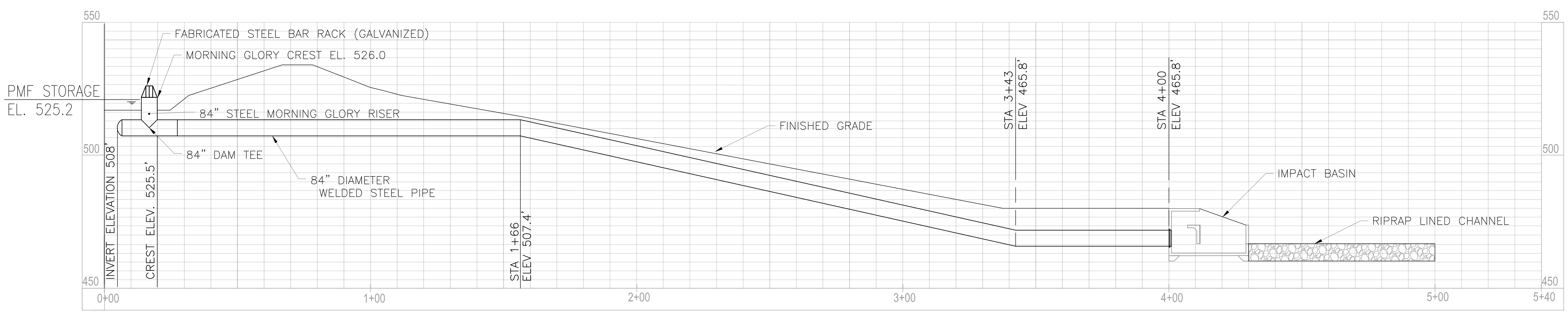
IMPACT BASIN PLAN 1
1"=10'



SECTION A
1"=10'



OUTLET SPILLWAY PLAN
1"=20'



OUTLET SPILLWAY PROFILE
HORIZONAL:1"=20'
VERTICAL:1"=40'

SCALE: 1" = 10' (0, 10', 20')
SCALE: 1" = 20' (0, 20', 40')
SCALE: 1" = 40' (0, 40', 80')

REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED	D. HUGHES
DRAWN	N. KARUNATILAKA
CHECKED	M. FORREST
APPROVAL RECOMMENDED	
APPROVAL BY	
ESTIMATE LEVEL	FEASIBILITY
REVIEWED	MIKE FORREST REG. CE. NO. 27855
DATE	08/04/2017
APPROVAL RECOMMENDED	MIKE FORREST REG. CE. NO. 27855
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SIGNAL SPILLWAY DETAILS
SADDLE DAM NO. 6

SPEC NO.
DRAWING NO. CS-501
REV.
SHEET NO. 46

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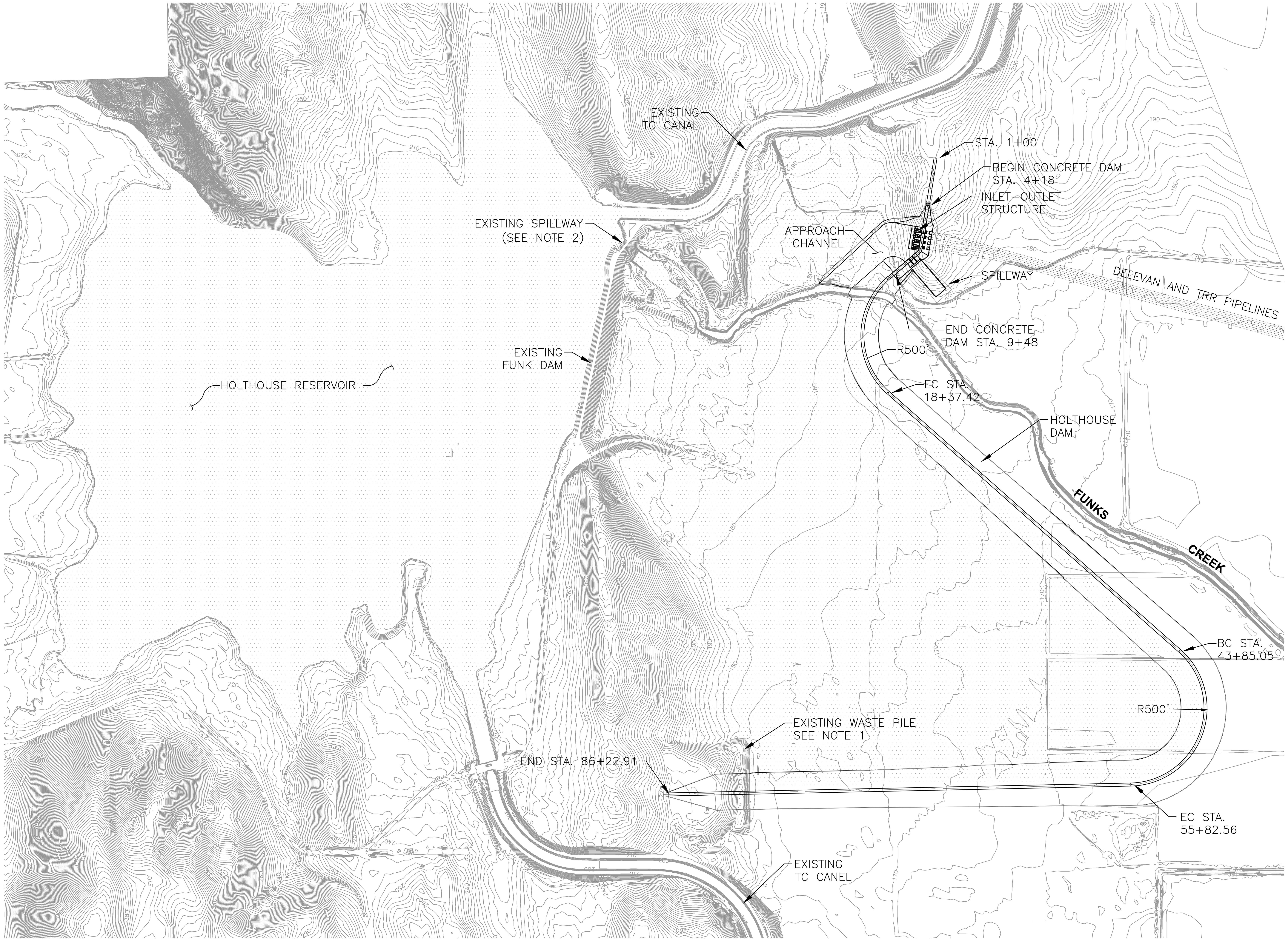

PLAN - HOLTHOUSE RESERVOIR

SCALE: 1" = 400'

HOLTHOUSE RESERVOIR

MAXIMUM WATER ELEVATION 206.0 FEET
MINIMUM WATER ELEVATION 190.0 FEET
APPROXIMATE ACTIVE STORAGE 6,250 AF

HOLTHOUSE DAM

CREST LEVEL AT ELEVATION 214.0 FEET
CREST WIDTH 20 FEET
TOTAL LENGTH APPROXIMATELY 8,500 FEET
LENGTH OF CONCRETE DAM 530 FEET
LENGTH OF EMBANKMENT 7,970 FEET
MAXIMUM EMBANKMENT HEIGHT 48 FEET

NOTES:
1. REMOVE EXISTING WASTE PILE PRIOR TO CONSTRUCTING EMBANKMENT.
2. REMOVE THREE EXISTING SPILLWAY GATES AND ASSOCIATED MECHANICAL AND ELECTRICAL EQUIPMENT. STRUCTURE DEMOLITION NOT REQUIRED.

REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED D. HUGHES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
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T 916-414-5800 F 916-414-1557
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WSIP APPLICATION ATTACHMENT A4.A

HOLTHOUSE RESERVOIR
PLAN

SPEC NO.
DRAWING NO. CH-101
REV.
SHEET NO. 47

PLAN
1"=20'

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REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
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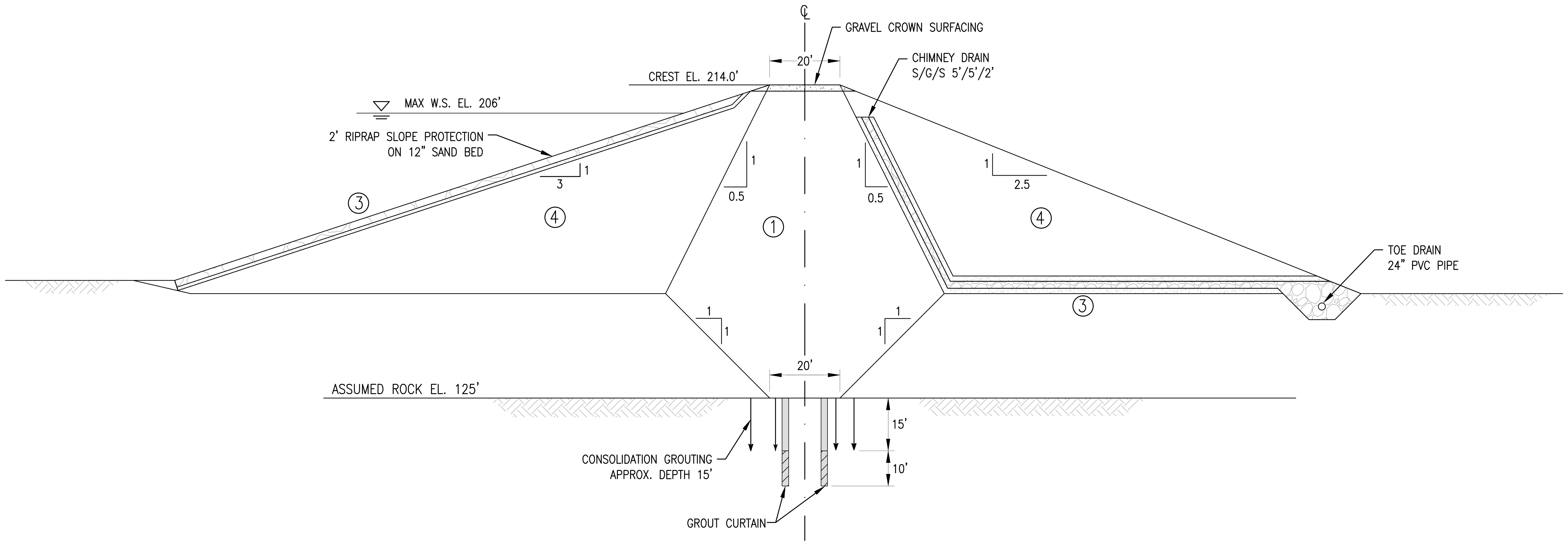
WSIP APPLICATION ATTACHMENT A4.A

HOLTHOUSE RESERVOIR
INLET OUTLET STRUCTURE PLAN

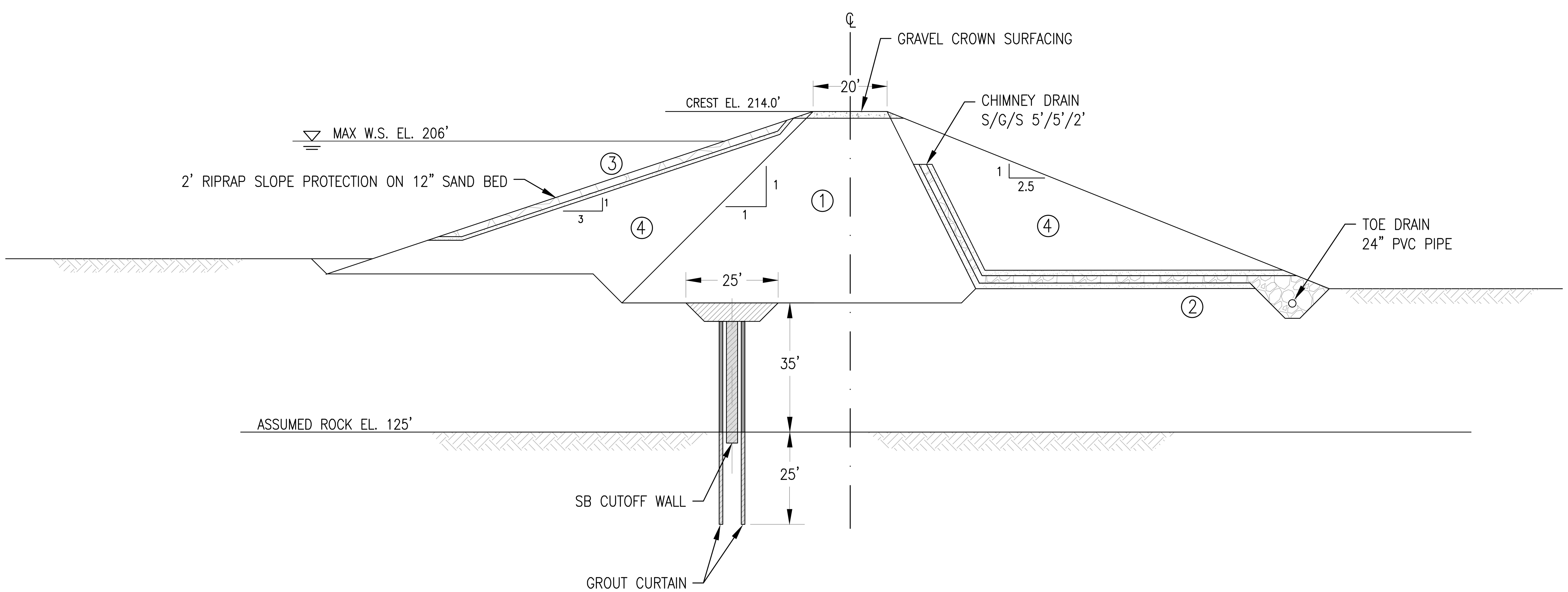
SPEC NO.
DRAWING NO.: CH-102
REV.
SHEET NO.: 48



TYPICAL SECTION ON SHALLOW ROCK
NTS

NOTES:

1. EMBANKMENT ZONES ARE AS FOLLOWS:
   - ZONE 1 CLAY CORE
   - ZONE 2 UPSTREAM AND DOWNSTREAM FILTER, DRAIN AND TRANSITION
   - ZONE 3 SAND BED AND RIPRAP
   - ZONE 4 SHELL, LOCAL BORROW SM, SC
2. BORROW FROM DELEVAN AND TRR PIPELINE EXCAVATION, REUSE, OF EXISTING EMBANKMENT MATERIAL.
3. LOCAL BORROW SM, SC, REUSE OF EXISTING EMBANKMENT MATERIAL.
4. TWO ROWS OF GROUT CURTAIN AS DETAILED, X-PATTERN, HOLES INCLINED AT OPPOSING 15 DEGREE ANGLES, EXTENDING TO APPROXIMATELY 25' BELOW ROCK SURFACE.



TYPICAL SECTION ON DEEP ROCK
NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. HUGHES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
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WSIP APPLICATION ATTACHMENT A4.A

FUNKS CREEK AND ABUTMENT AREA
EMBANKMENT CROSS SECTIONS

SPEC NO.
DRAWING NO. CH-301
REV.
SHEET NO. 49

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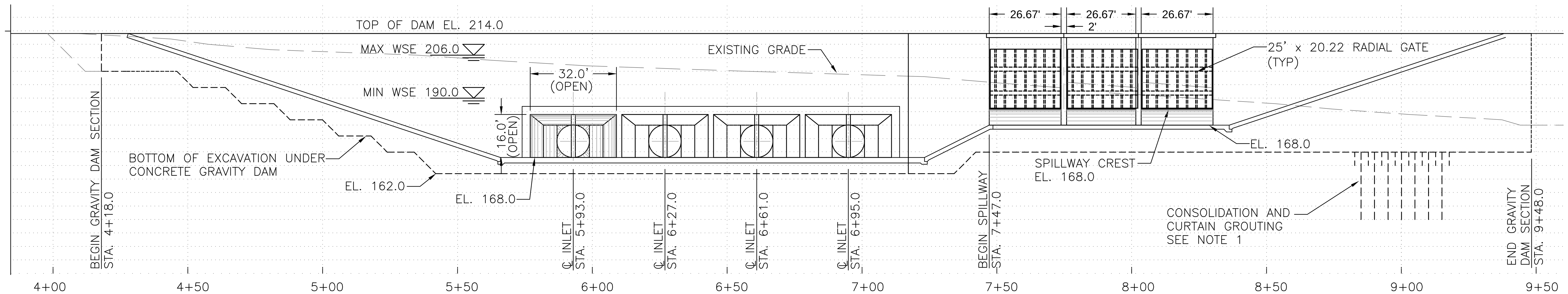
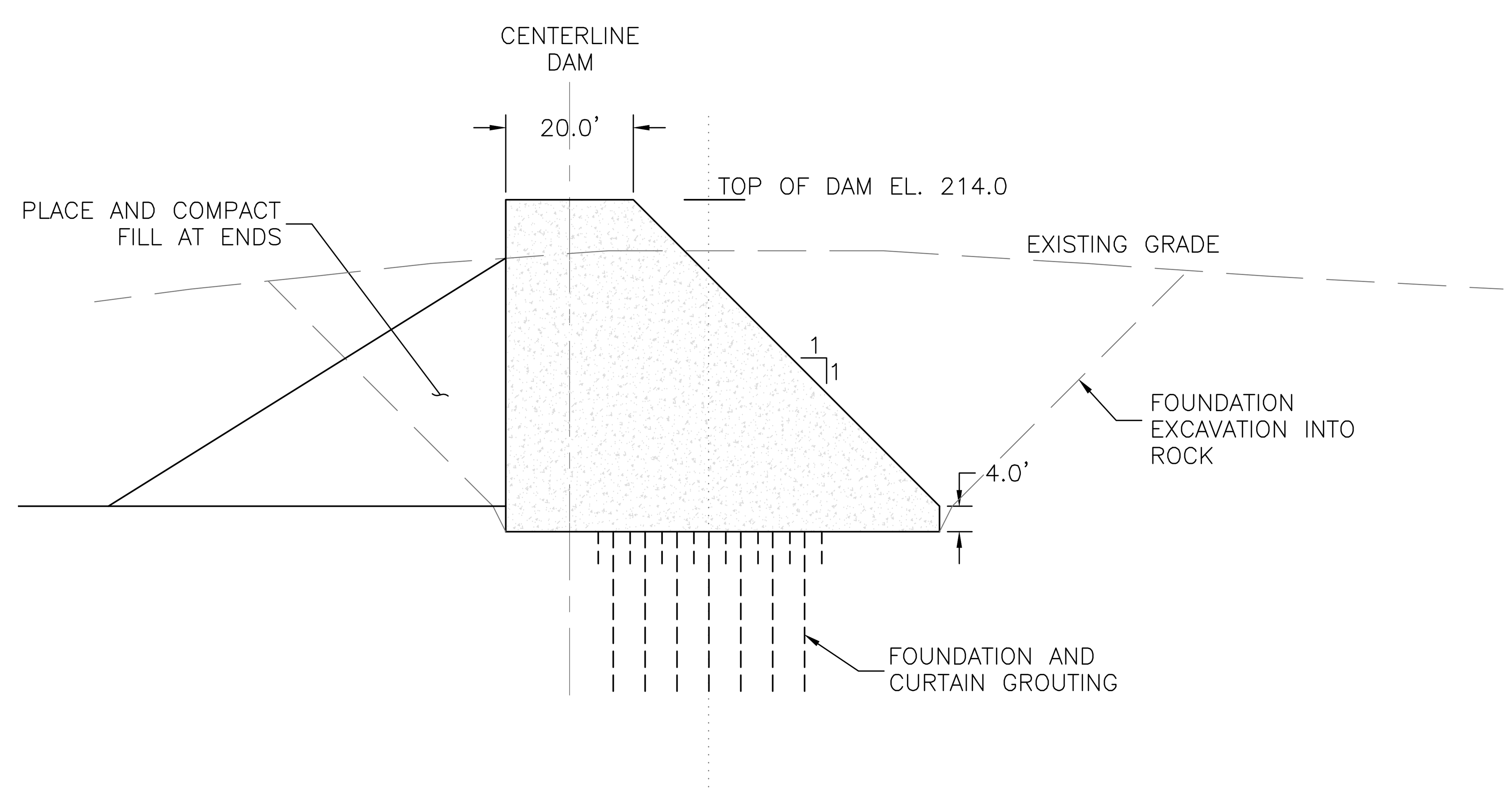


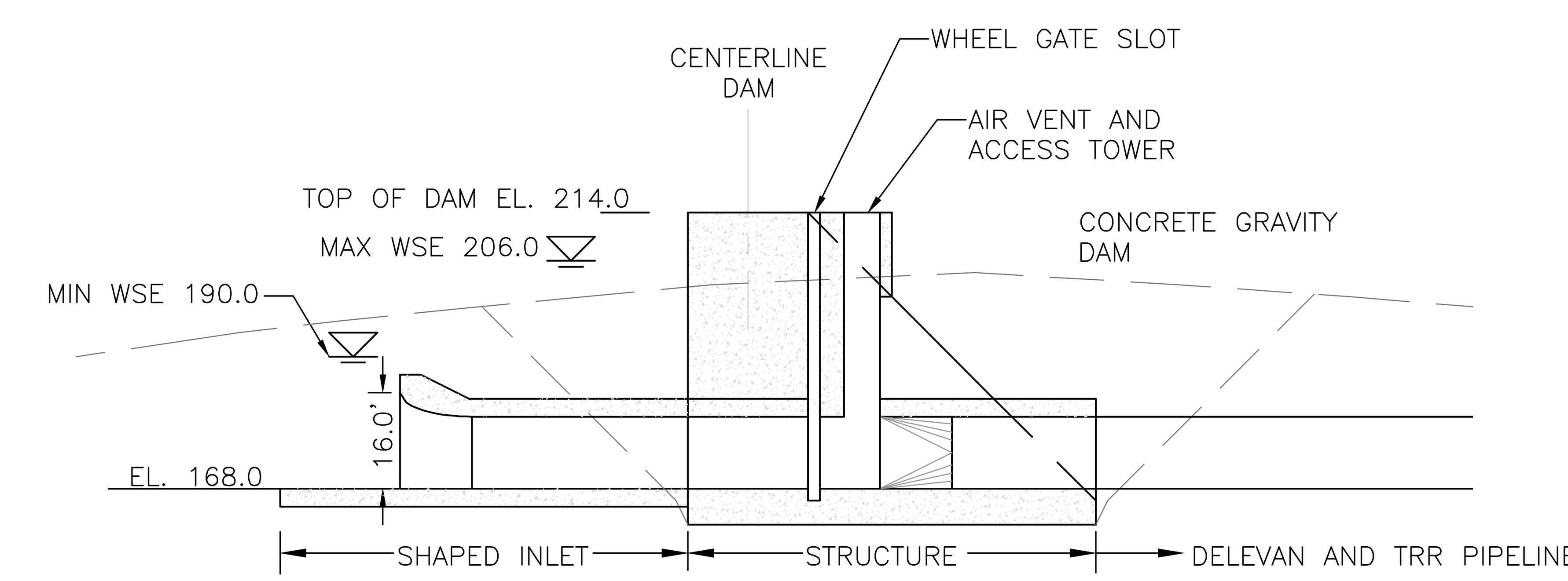
ELEVATION - INLET-OUTLET STRUCTURE

NTS



TYPICAL GRAVITY DAM SECTION

NTS



TYPICAL PIPE ENTRANCE

NTS

NOTES:
1. CURTAIN AND CONSOLIDATION GROUTING REQUIRED UNDER FULL LENGTH OF GRAVITY DAM SECTION. MATCH GRAVITY DAM GROUTING WITH GROUTING IN ADJACENT EARTH EMBANKMENTS UNDEER CORE ZONE FOR CONTINUITY.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED	D. HUGHES
DRAWN	N. KARUNATILAKA
CHECKED	M. FORREST
APPROVAL RECOMMENDED	
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WSIP APPLICATION ATTACHMENT A4.A

HOLTHOUSE RESERVOIR
ELEVATION AND DETAILS

SPEC NO.
DRAWING NO. CH-501
REV.
SHEET NO. 50

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NOTE: THERE ARE FOUR (4) PARALLEL PIPELINES FROM HOLTHOUSE RESERVOIR TO TRR AND TWO (2) PARALLEL PIPELINES FROM TRR TO THE SACRAMENTO RIVER PUMPING PLANT. SEE SHEET CP301 FOR SPACING.

PLAN

HORIZONTAL SCALE: 1" = 2500'

PROFILE

HORIZONTAL SCALE: 1" = 2500'
VERTICAL SCALE: 1" = 50'

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
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APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

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WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE OVERALL PLAN AND PROFILE

SPEC NO.
DRAWING NO. CP-100
REV.
SHEET NO. 51

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PLAN

HORIZONTAL SCALE: 1" = 2500'

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DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

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2020 L Street, Suite 300
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APPROVED: JOE BARNES, REG. CE. NO. 40105

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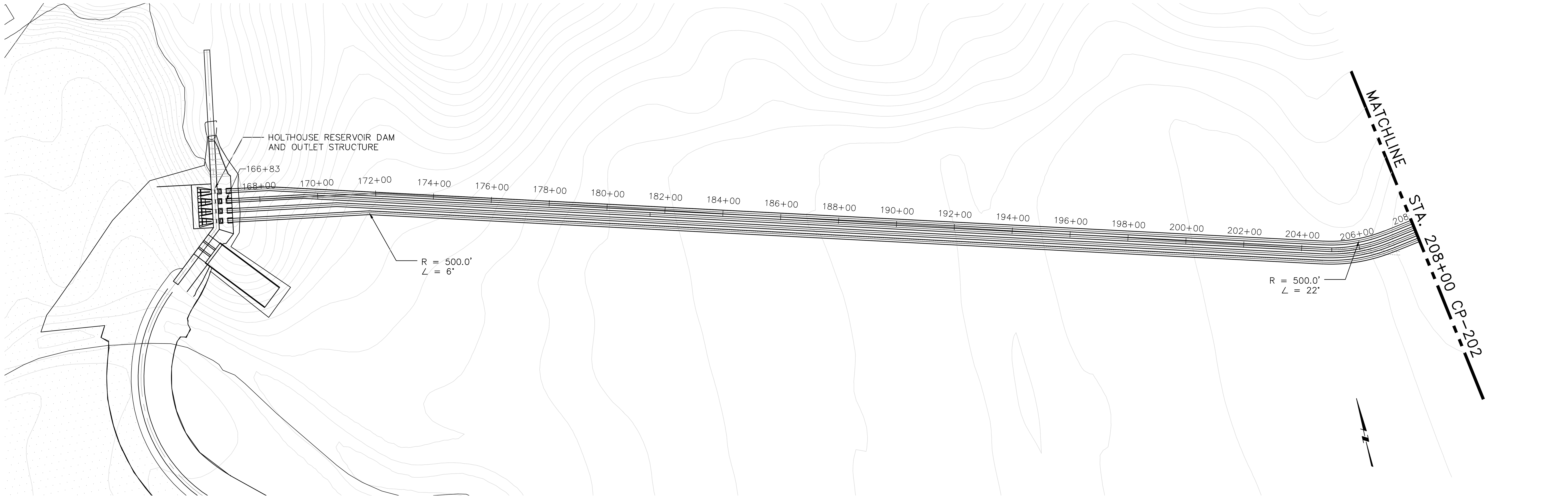
WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE INDEX SHEET

SPEC NO.
DRAWING NO. CP-101
REV.
SHEET NO. 52

A B C D E F G H



NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PLAN

HORIZONTAL SCALE: 1" = 200'

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
CHECKED M. FORREST
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WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE
STA. 167+36 TO STA. 208+00

SPEC NO.
DRAWING NO. CP-201
REV.
SHEET NO. 53

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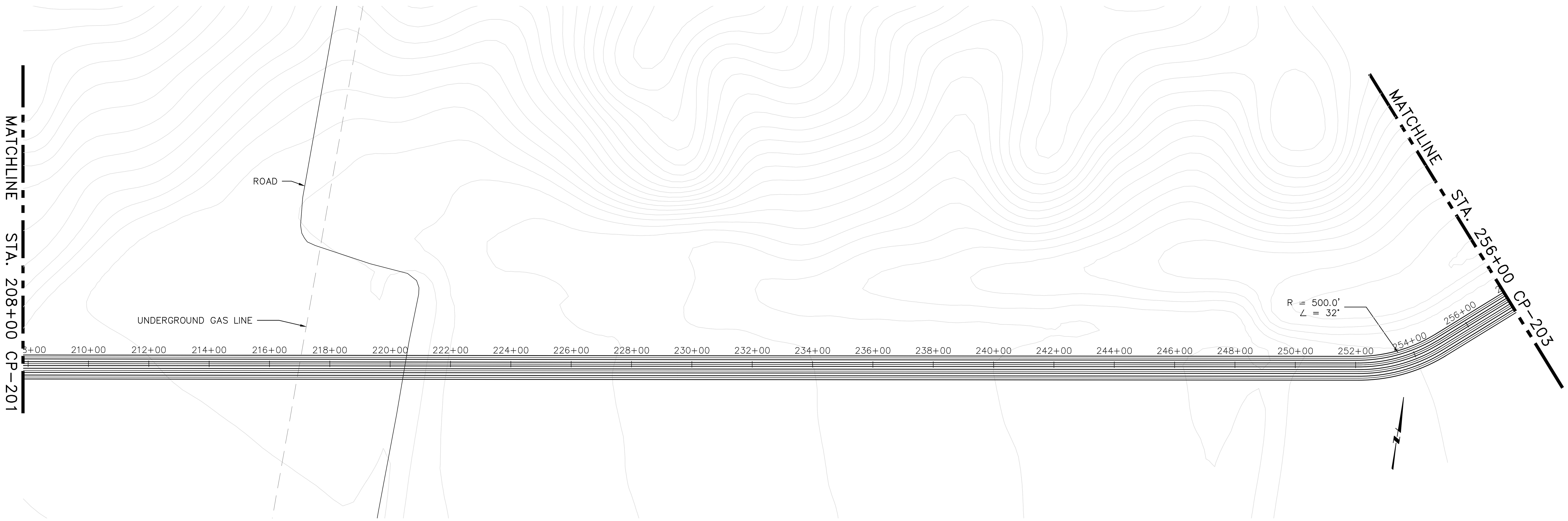
PLAN



NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PLAN
HORIZONTAL SCALE: 1" = 200'

PROFILE
HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

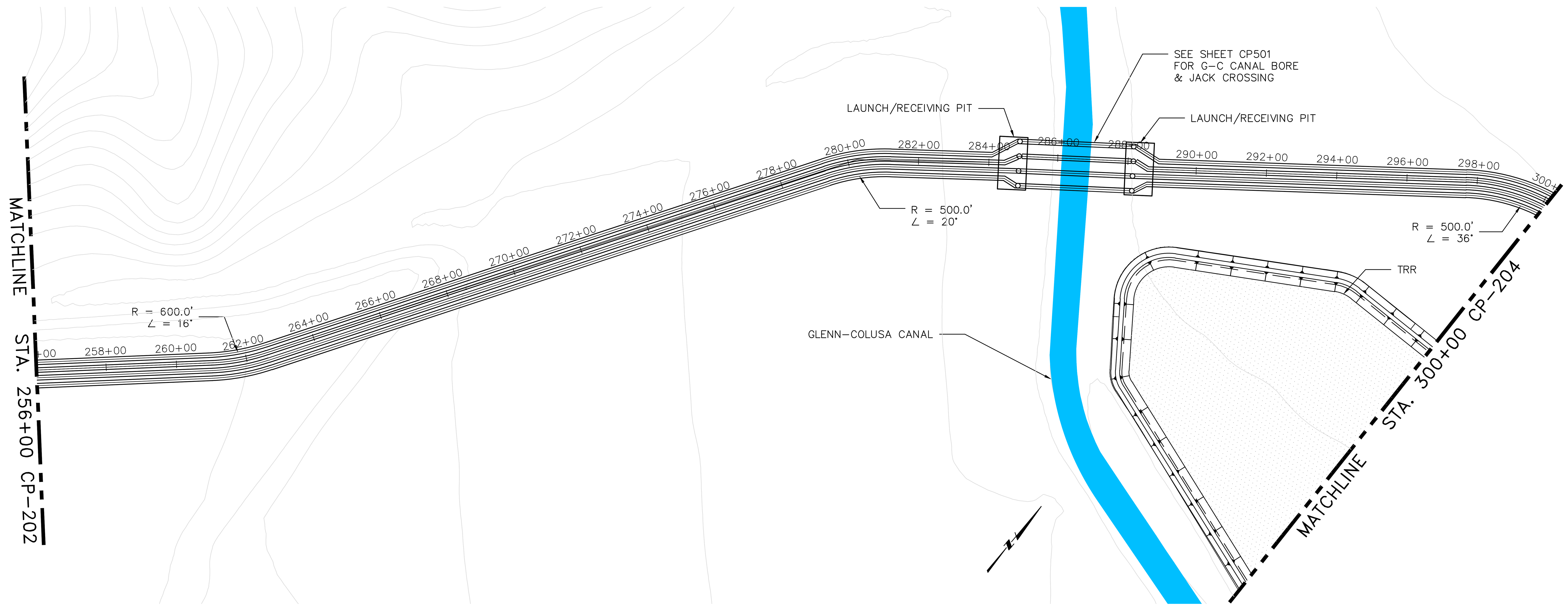
REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE PLAN AND PROFILE STA. 208+00 TO STA. 256+00

SPEC NO.
DRAWING NO. CP-202
REV.
SHEET NO. 54



PLAN
HORIZONTAL SCALE: 1" = 200'

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PROFILE
HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED DWAYNE DEUTSCHER REG. CE. NO. 34557
APPROVED JOE BARNES REG. CE. NO. 40105

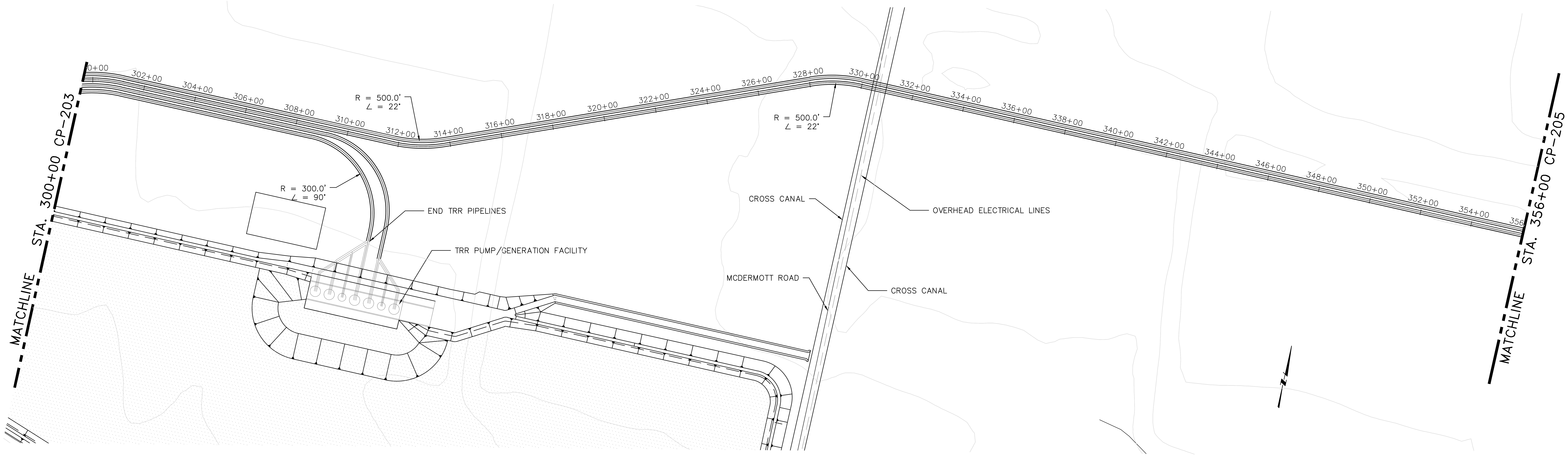
Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE PLAN AND PROFILE STA. 256+00 TO STA. 300+00

SPEC NO.
DRAWING NO. CP-203
REV.
SHEET NO. 55

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-203.DWG



NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PLAN

HORIZONTAL SCALE: 1" = 200'

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE PLAN AND PROFILE STA. 300+00 TO STA. 356+00

SPEC NO.
DRAWING NO. CP-204
REV.
SHEET NO. 56

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-204.DWG

PLAN

HORIZONTAL SCALE: 1" = 200'

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE STA. 356+00 TO STA. 414+00

SPEC NO.
DRAWING NO. CP-205
REV.
SHEET NO. 57

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-205.DWG

PLAN

HORIZONTAL SCALE: 1" = 200'

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED: MIKE FORREST, REG. CE. NO. 27855
DATE: 08/04/2017
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APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE
STA. 414+00 TO STA. 472+00

SPEC NO.
DRAWING NO. CP-206
REV.
SHEET NO. 58

PLOTTED BY:BARNHART, DENNIS -August 7, 2017-3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-206.DWG

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PLAN

HORIZONTAL SCALE: 1" = 200'

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
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T 916-414-5800 F 916-414-1557
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DATE: 08/04/2017
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE
STA. 472+00 TO STA. 532+00

SPEC NO.
DRAWING NO. CP-207
REV.
SHEET NO. 59

PLOTTED BY:BARNHART, DENNIS -August 7, 2017-3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-207.DWG

PLAN

HORIZONTAL SCALE: 1" = 200'

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE STA. 532+00 TO STA. 592+00

SPEC NO.
DRAWING NO. CP-208
REV.
SHEET NO. 60

PLOTTED BY:BARNHART, DENNIS –August 7, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\00-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-208.DWG

PLAN

HORIZONTAL SCALE: 1" = 200'

NOTE: SEE DWG CP301 FOR PIPELINE SPACING

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APP'D
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855
DATE: 08/04/2017
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE STA. 592+00 TO STA. 652+00

SPEC NO.
DRAWING NO. CP-209
REV.
SHEET NO. 61

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-209.DWG

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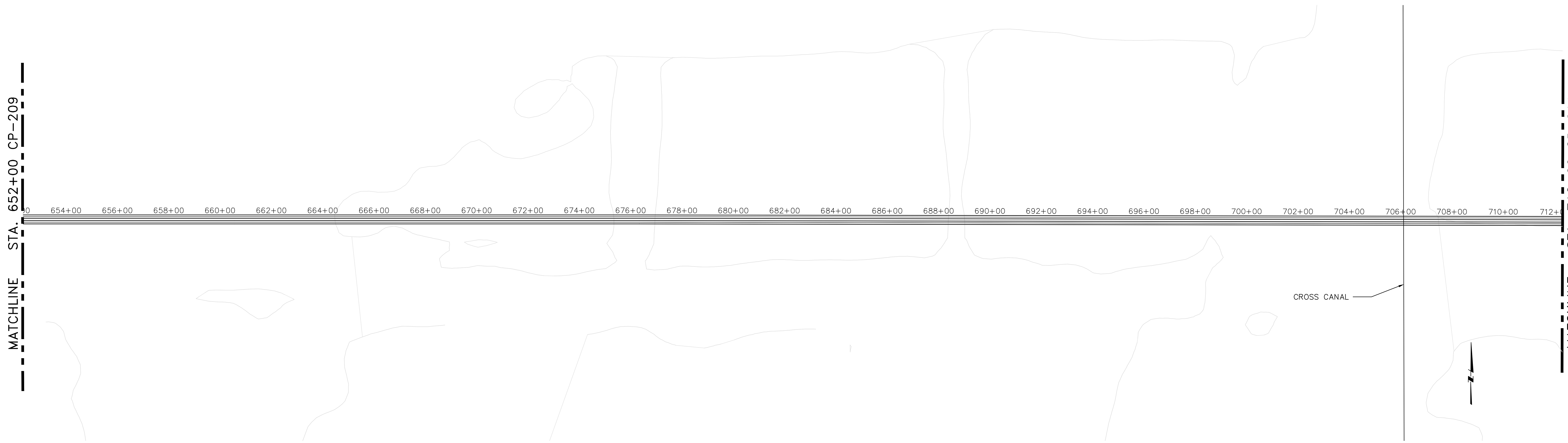

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PLAN

HORIZONTAL SCALE: 1" = 200'

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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DATE 08/04/2017
APPROVAL RECOMMENDED DWAYNE DEUTSCHER REG. CE. NO. 34557
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE
STA. 652+00 TO STA. 712+00

SPEC NO.
DRAWING NO. CP-210
REV.
SHEET NO. 62

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-210.DWG

A B C D E F G H

PLAN

HORIZONTAL SCALE: 1" = 200'

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

AECOM

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED: JOE BARNES, REG. CE. NO. 40105

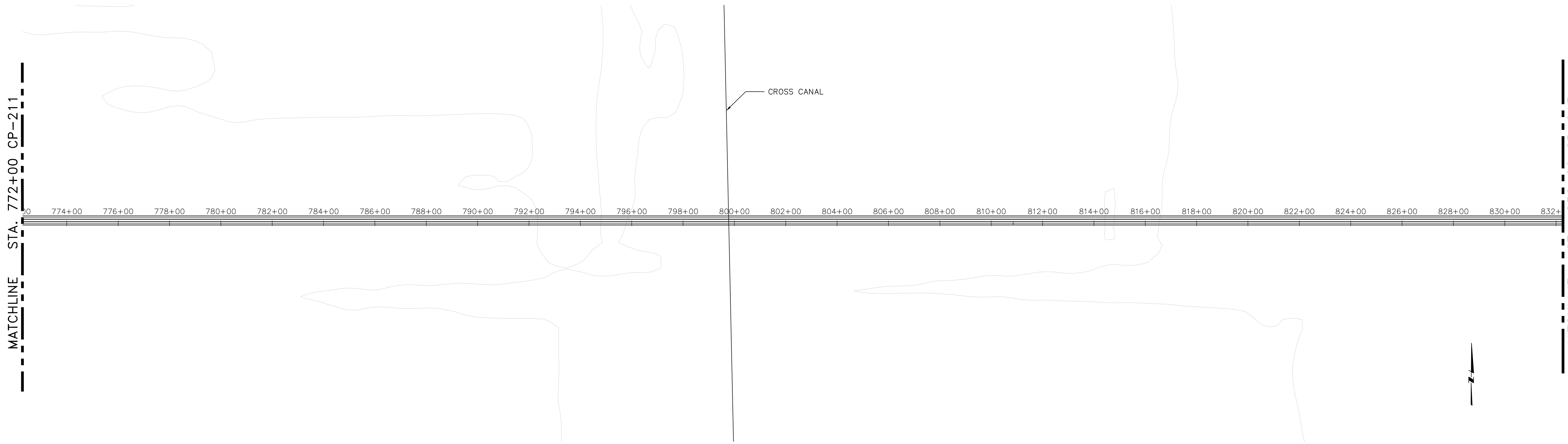
Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE
STA. 712+00 TO STA. 772+00

SPEC NO.
DRAWING NO. CP-211
REV.
SHEET NO. 63

PLOTTED BY:BARNHART, DENNIS -August 7, 2017-3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\SHEETS\CP-211.DWG



PLAN

HORIZONTAL SCALE: 1" = 200'

NOTE: SEE SHEET CP301 FOR PIPELINE SPACING.

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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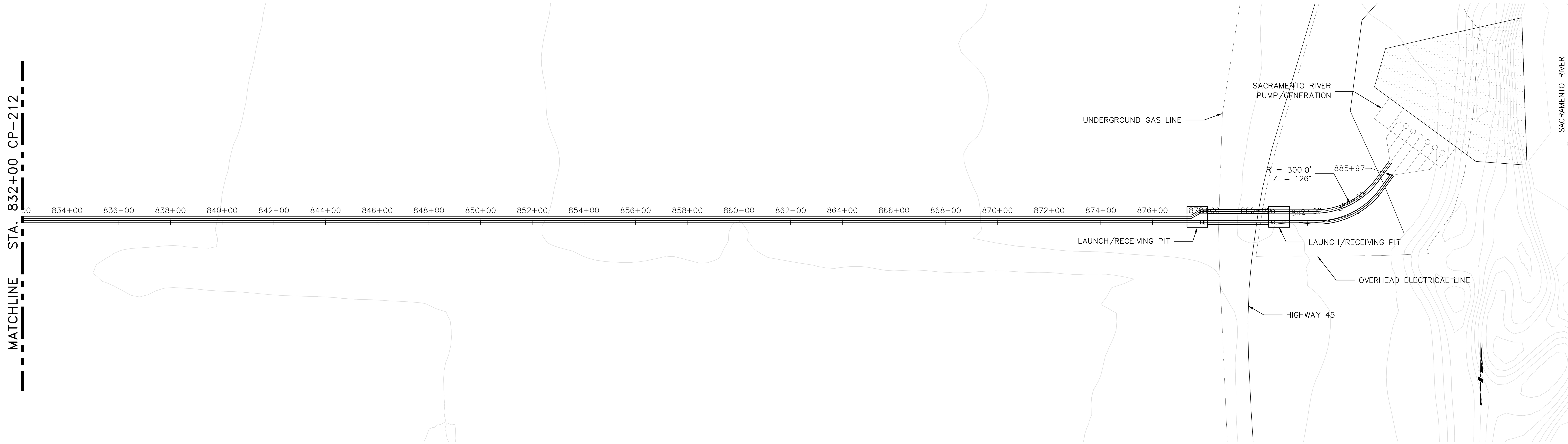
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE PLAN AND PROFILE STA. 772+00 TO STA. 832+00

SPEC NO.:
DRAWING NO.: CP-212
REV.:
SHEET NO.: 64



NOTE: SEE SHEET CP501 FOR PIPELINE SPACING.

PLAN

HORIZONTAL SCALE: 1" = 200'

PROFILE

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 20'

PLOTTED BY:BARNHART, DENNIS –August 7, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20–CAD\006–CIVIL\20–SHEETS\07–DELEVAN PIPELINE\SHEETS\CP–213.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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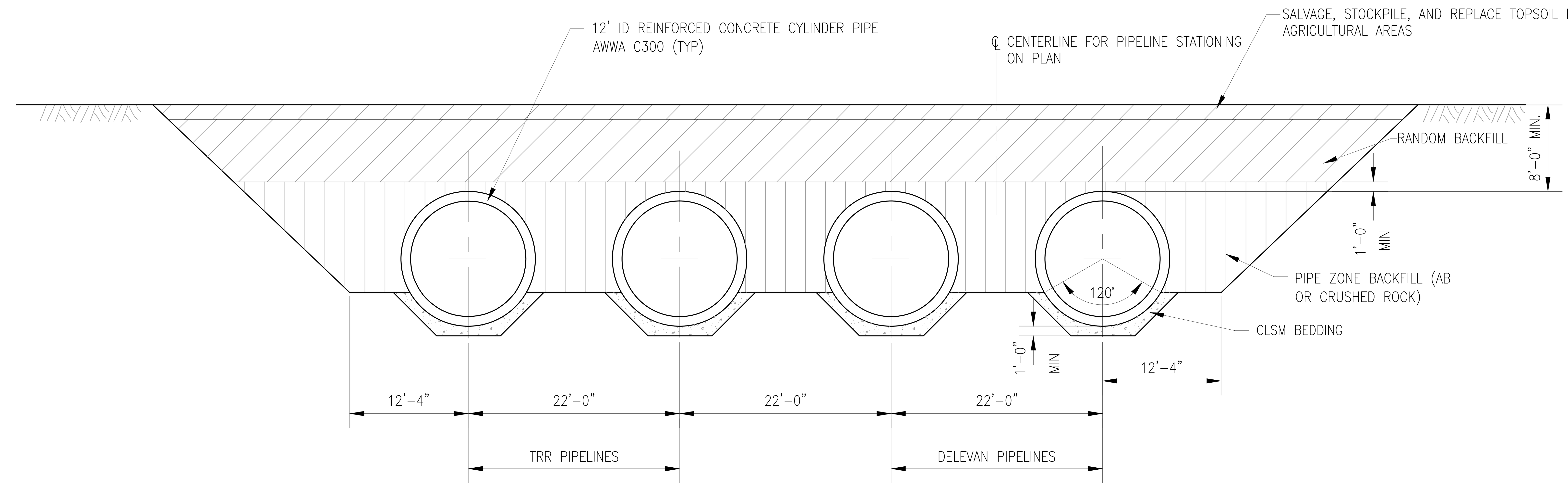
DATE: 08/04/2017
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

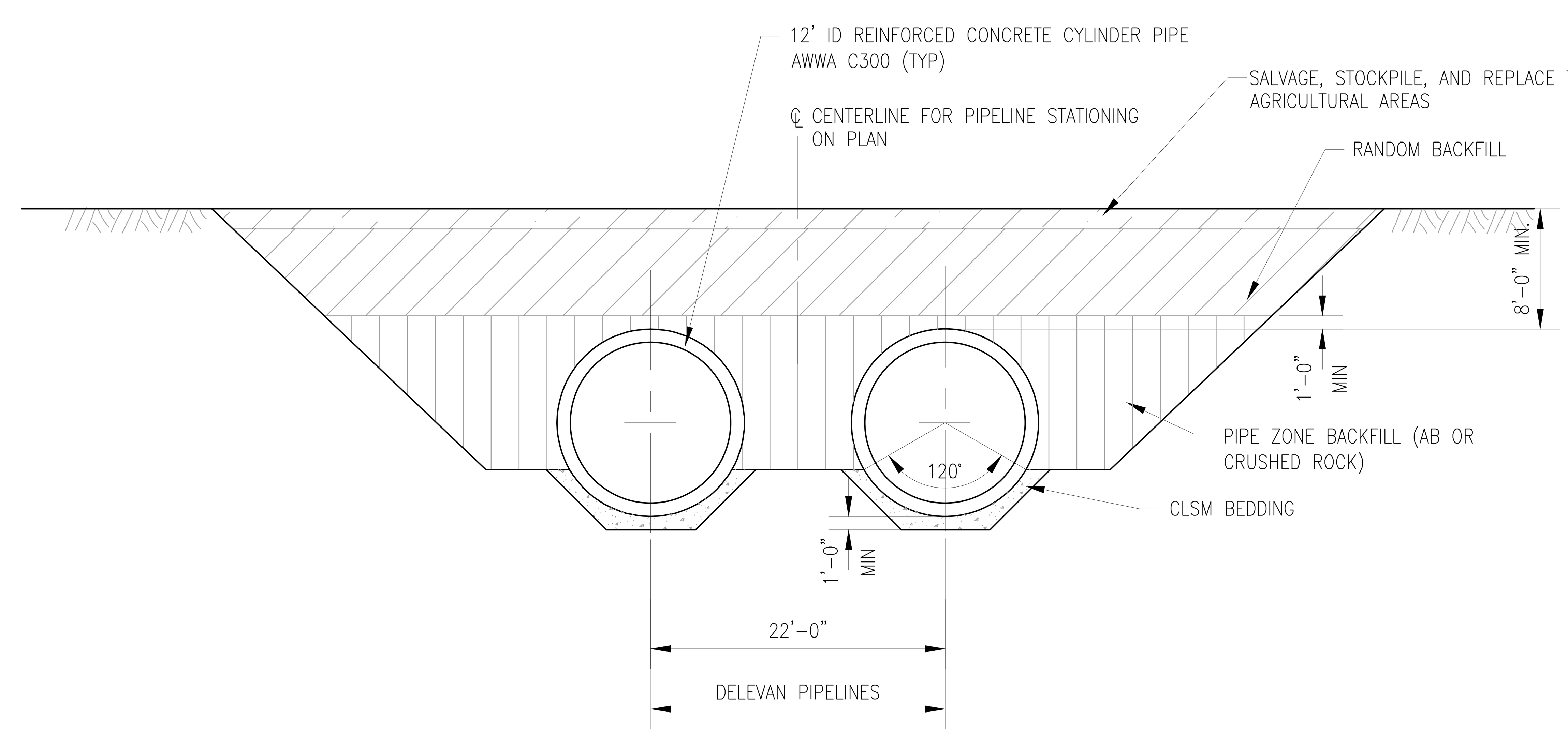
DELEVAN PIPELINE PLAN AND PROFILE
STA. 832+00 TO STA. 892+00

SPEC NO.
DRAWING NO. CP-213
REV.
SHEET NO. 65



(A) TYPICAL TRR AND DELEVAN PIPELINE CROSS SECTION

NTS



(B) TYPICAL DELEVAN PIPELINE CROSS SECTION

NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED: JOE BARNES, REG. CE. NO. 40105

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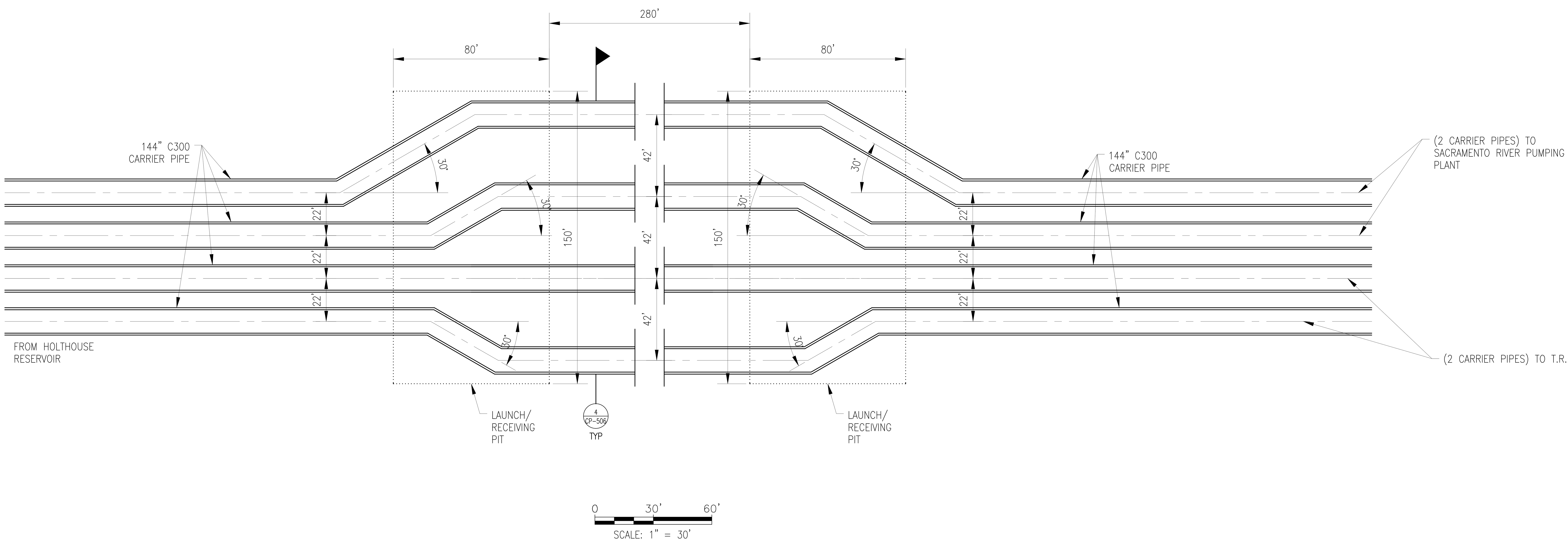
WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE TYPICAL PIPE CROSS SECTIONS

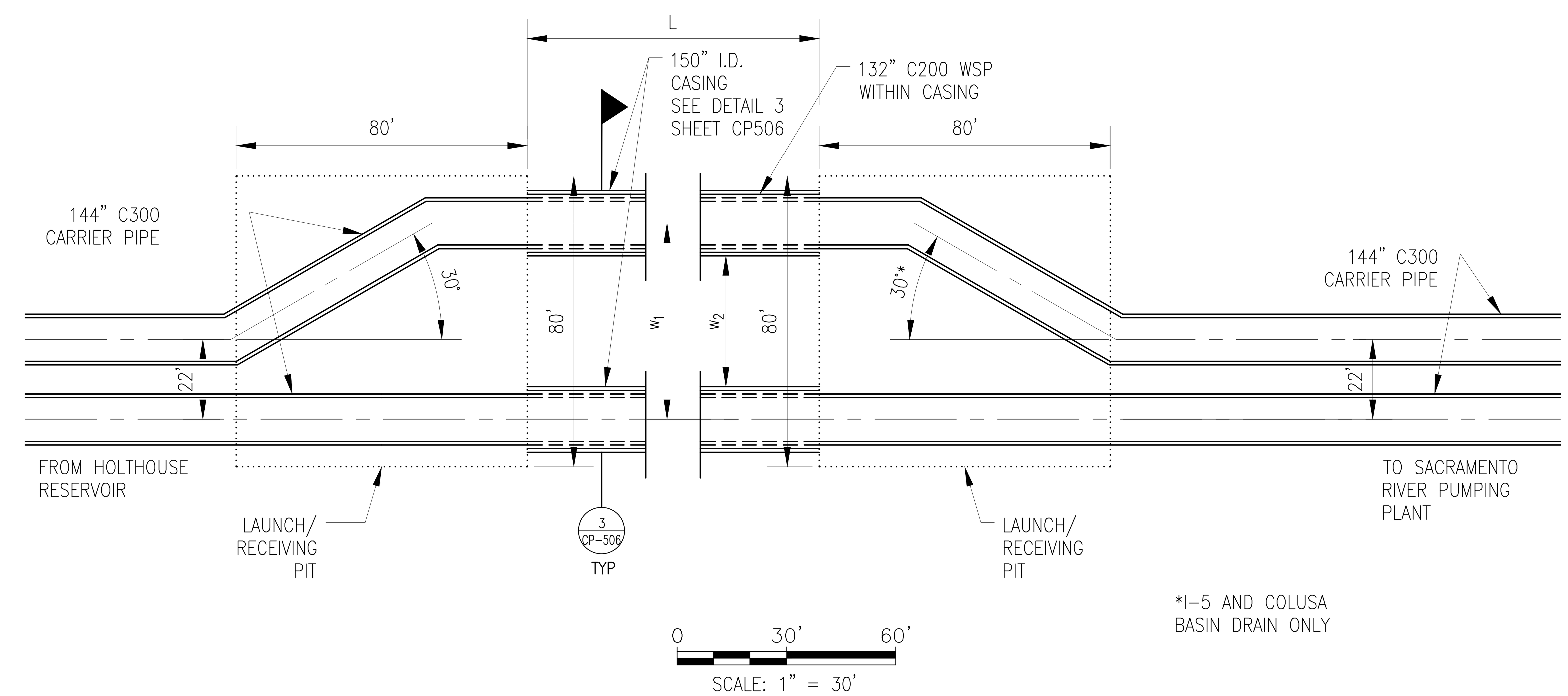
SPEC NO.
DRAWING NO. CP-301
REV.
SHEET NO. 66

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017-3:45:16 PM
DRAWING: G:\SR_PA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\DETAILS\CP-301.DWG



GLENN-COLUSA CANAL BORE & JACK CROSSING
STA. 285+66 TO STA. 287+43

CROSSING	BEGIN STA.	END STA.	L	w_1	w_2	DEPTH BENEATH INVERT OR SURFACE	CASING	CASING DIA.
I-5 & RAILROAD	427+14	439+40	1,226'	38.5'	26'	26'	YES	150"
COLUSA BASIN DRAIN	738+92	742+49	357'	42'	28'	28'	NO	NA
HIGHWAY 45	878+12	880+48	236'	38.5'	26'	26'	YES	150"



TYPICAL BORE & JACK CROSSING

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED DWAYNE DEUTSCHER REG. CE. NO. 34557
APPROVED JOE BARNES REG. CE. NO. 40105

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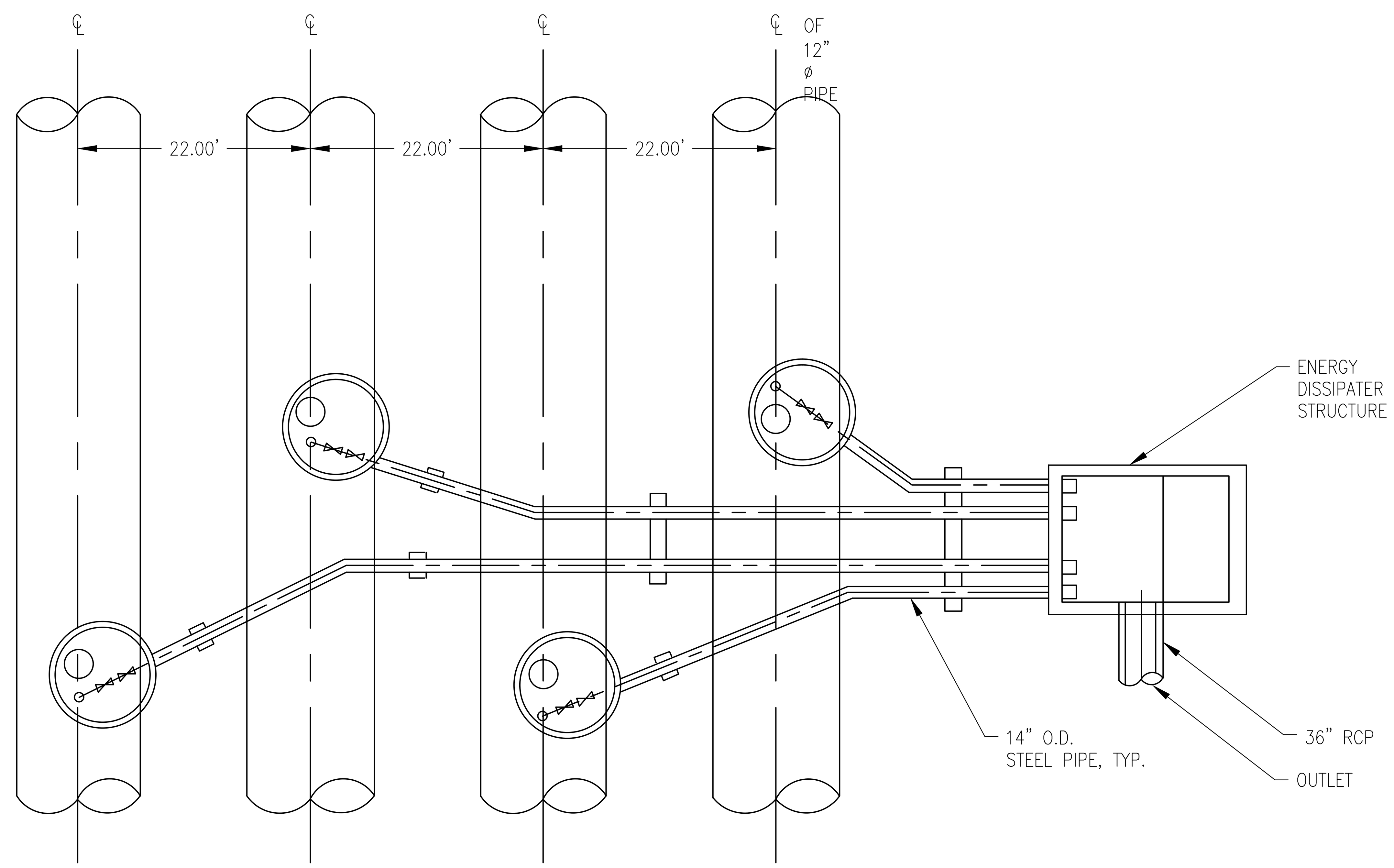
WSIP APPLICATION ATTACHMENT A4.A

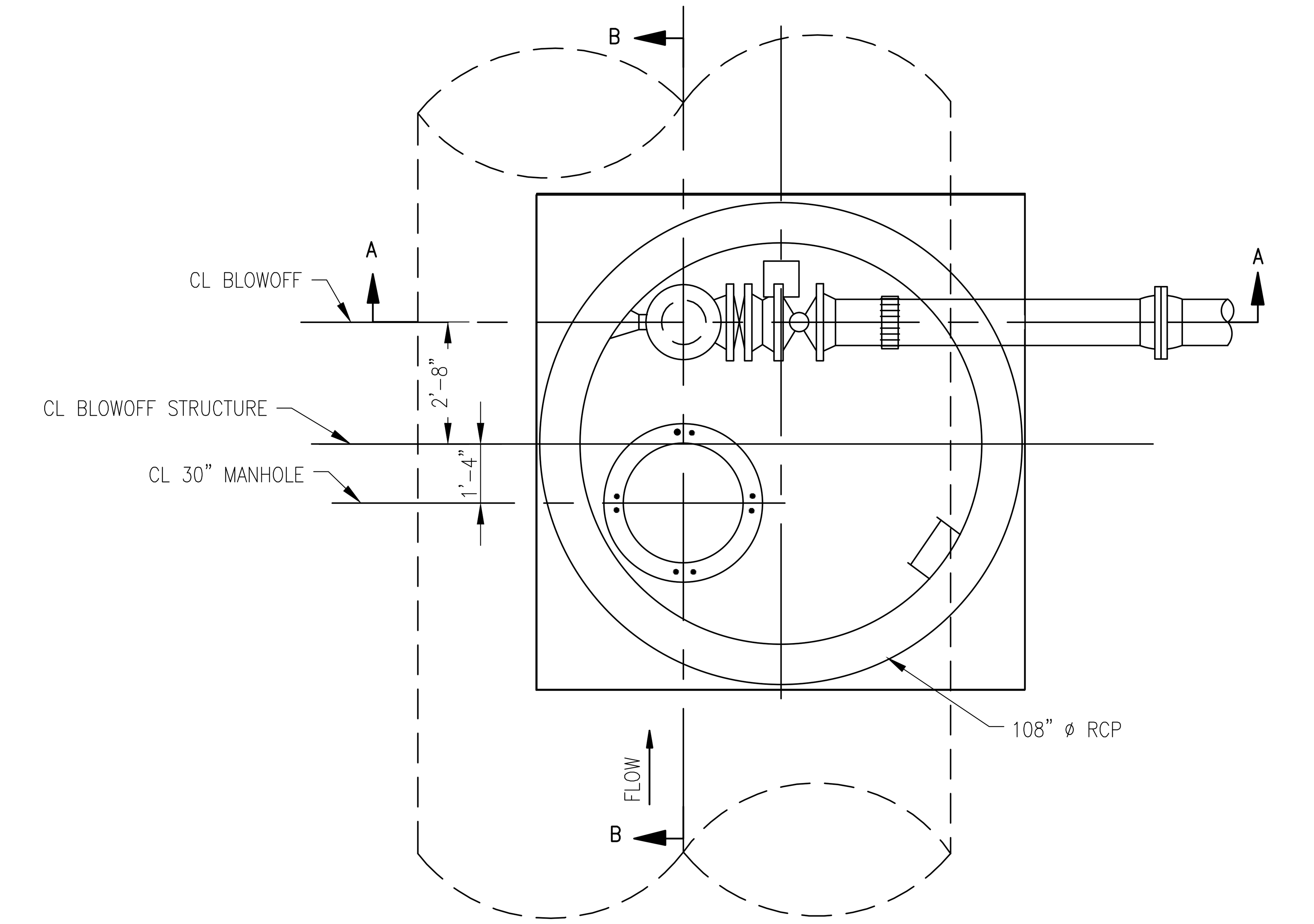
DELEVAN PIPELINE
BORE AND JACK DETAILS

SPEC NO.
DRAWING NO. CP-501
REV.
SHEET NO. 67

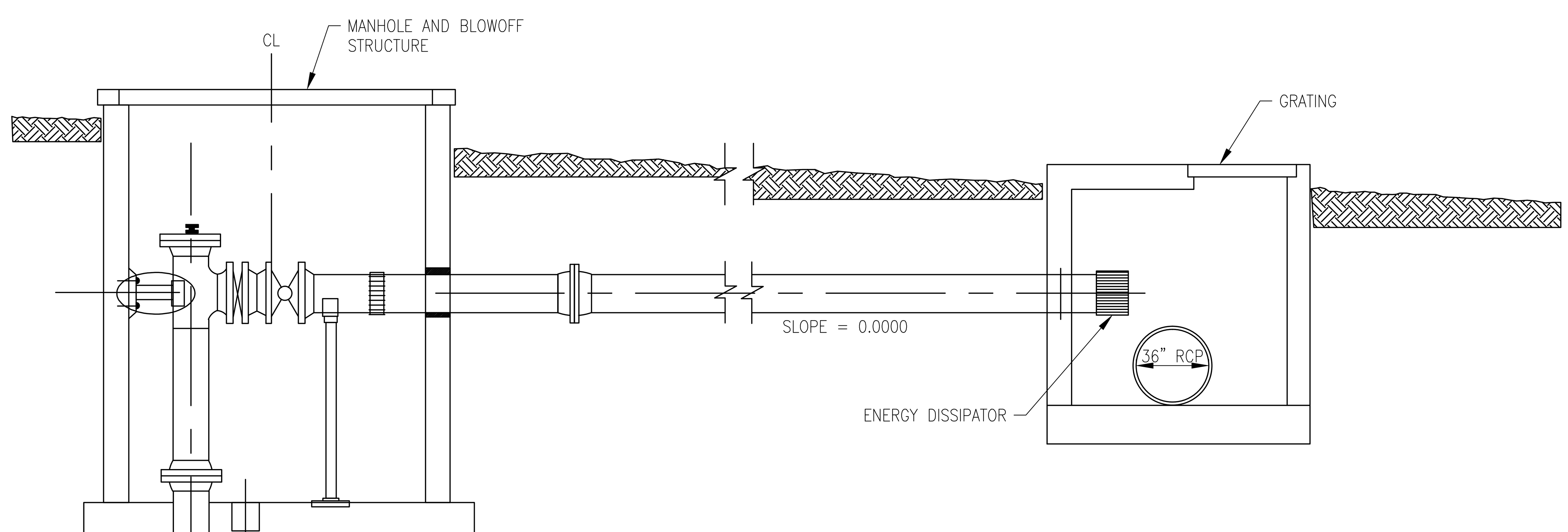
PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\DETAILS\CP-501.DWG



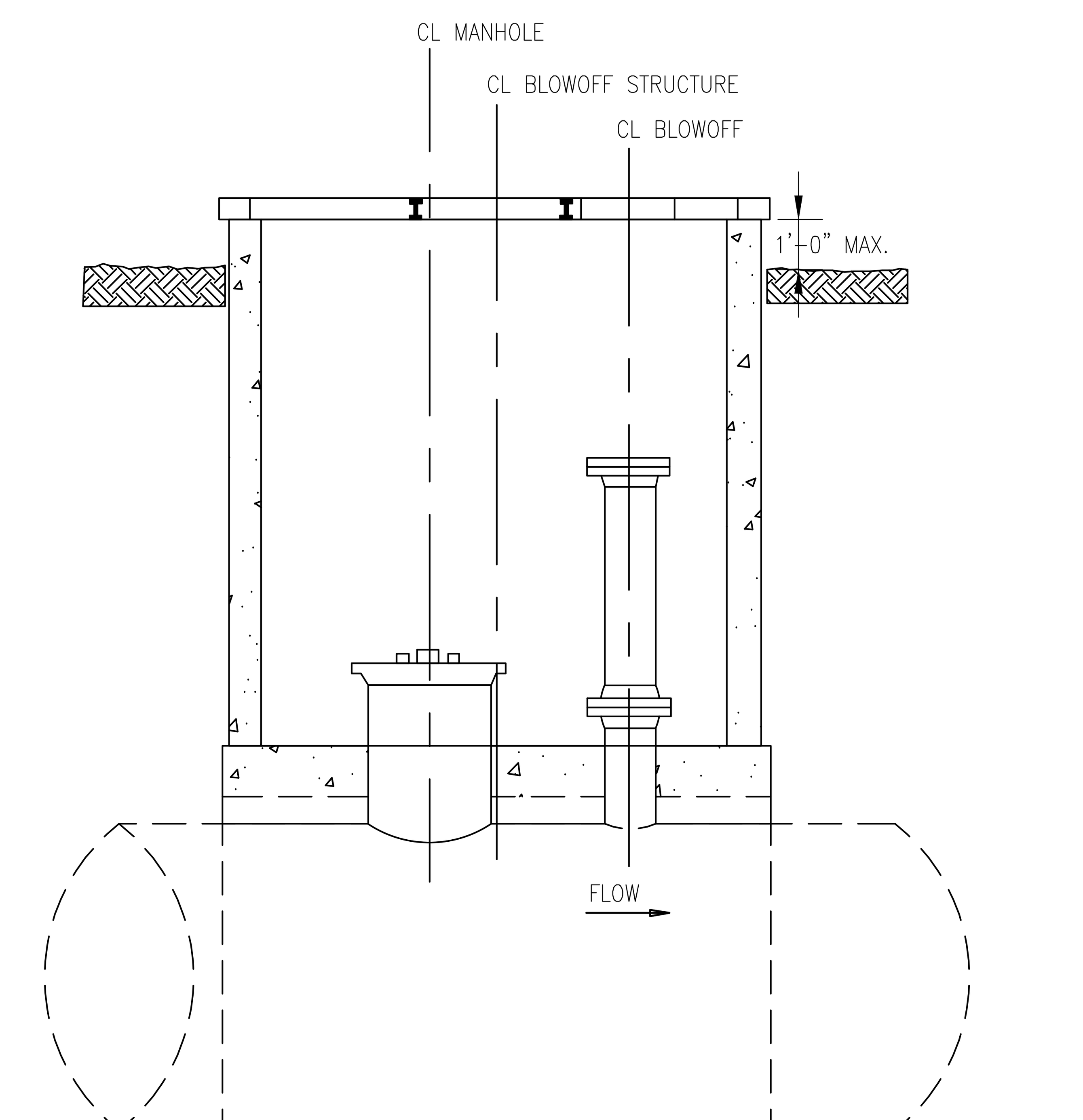
PLAN
SCALE: 1" = 10'



PLAN
SCALE: ⅜" = 1'



SECTION A–A
SCALE: N.T.S.



SECTION B–B
SCALE: ⅜" = 1'-0"

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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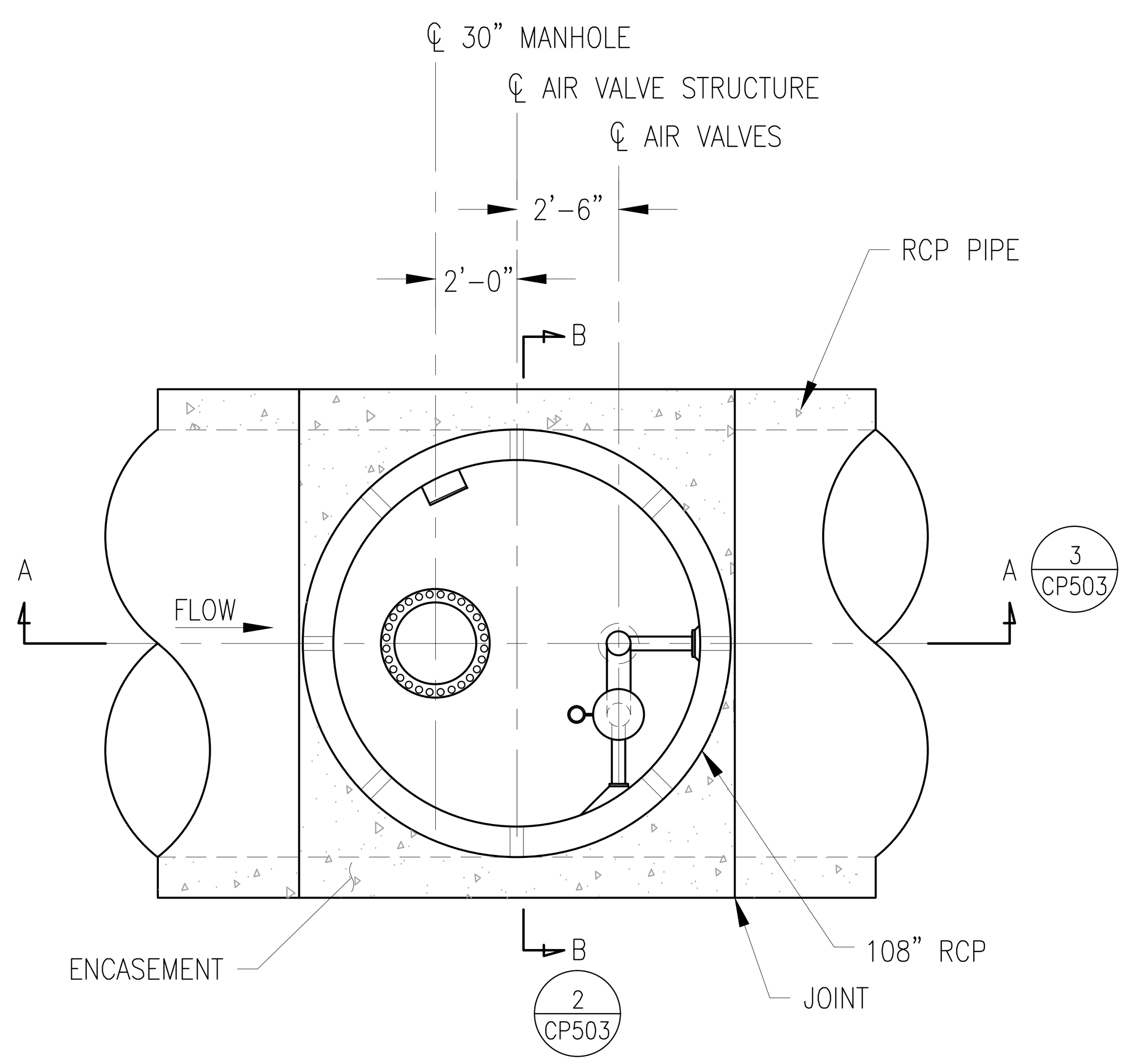
REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

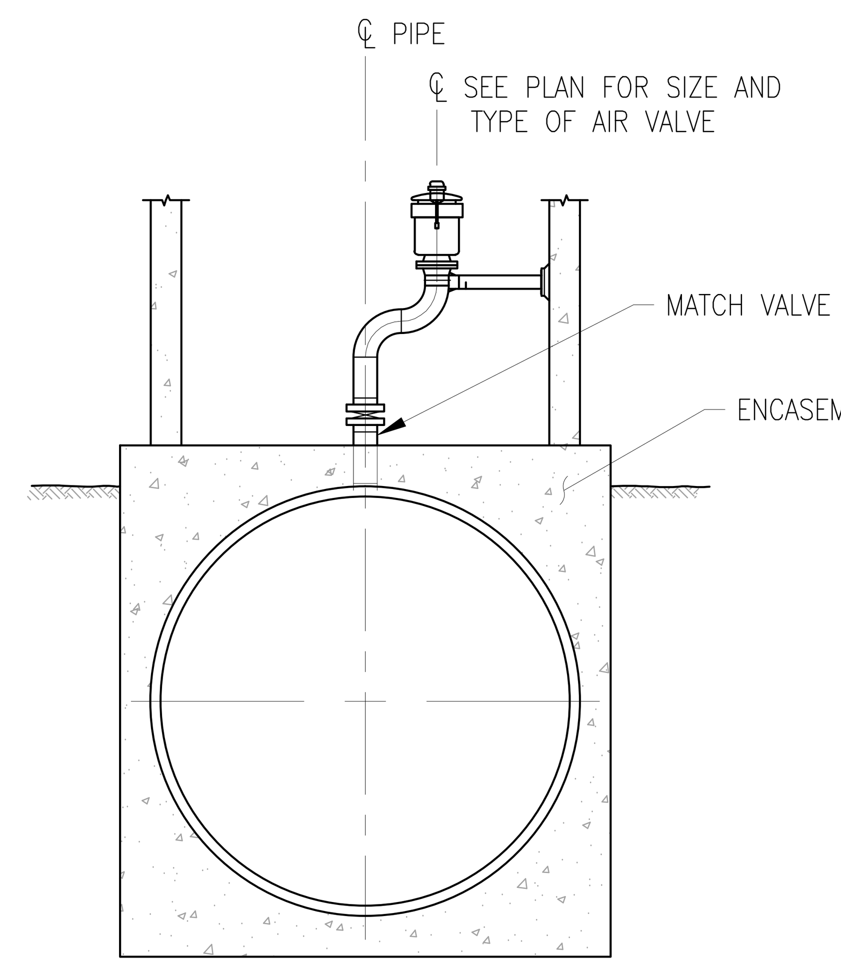
WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PIPELINE
MANHOLE AND BLOWOFF STRUCTURE DETAILS

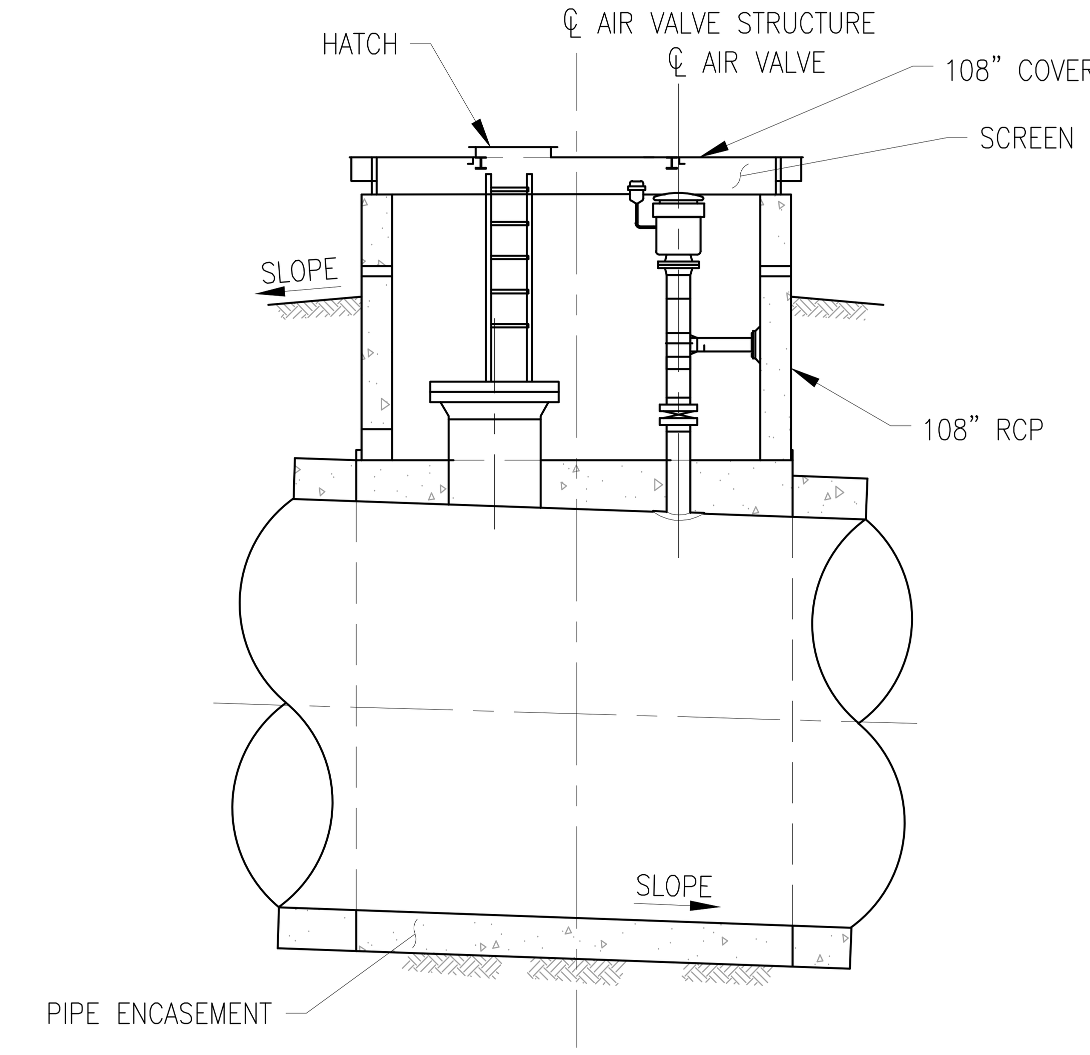
SPEC NO.
DRAWING NO. CP-502
REV.
SHEET NO. 68



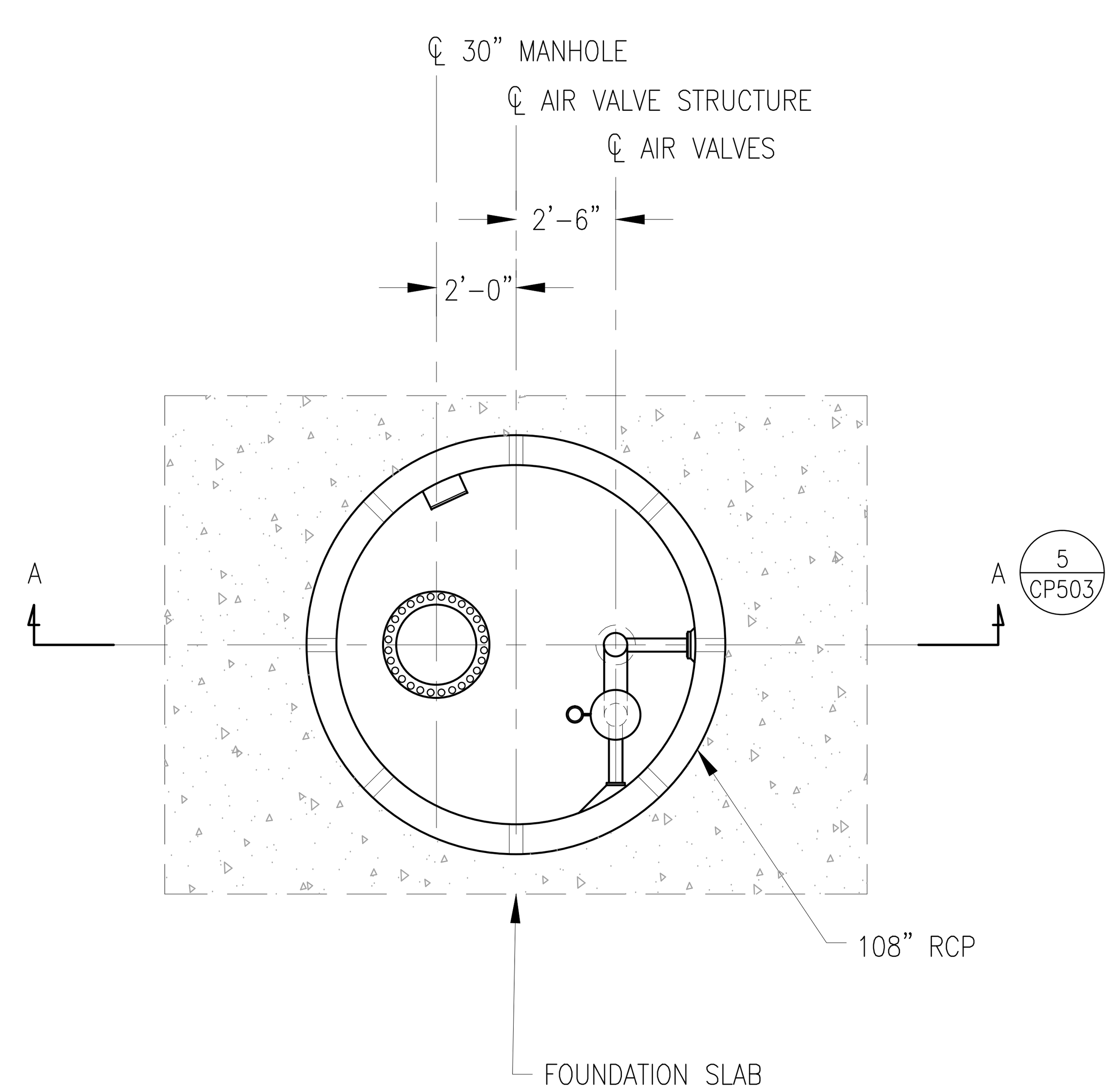
1 MANHOLE AND AIR VALVE
NTS



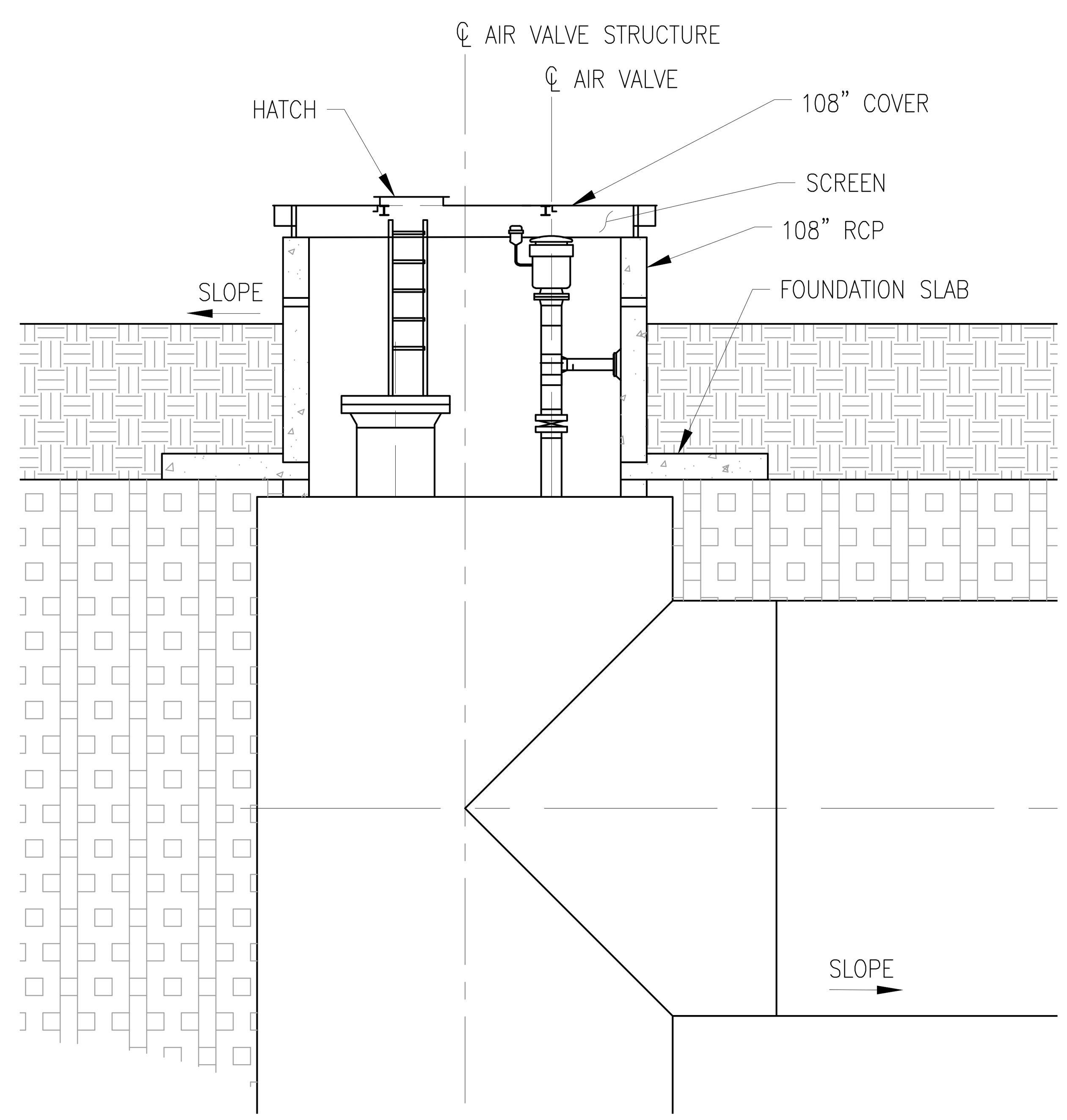
2 SECTION B-B
NTS



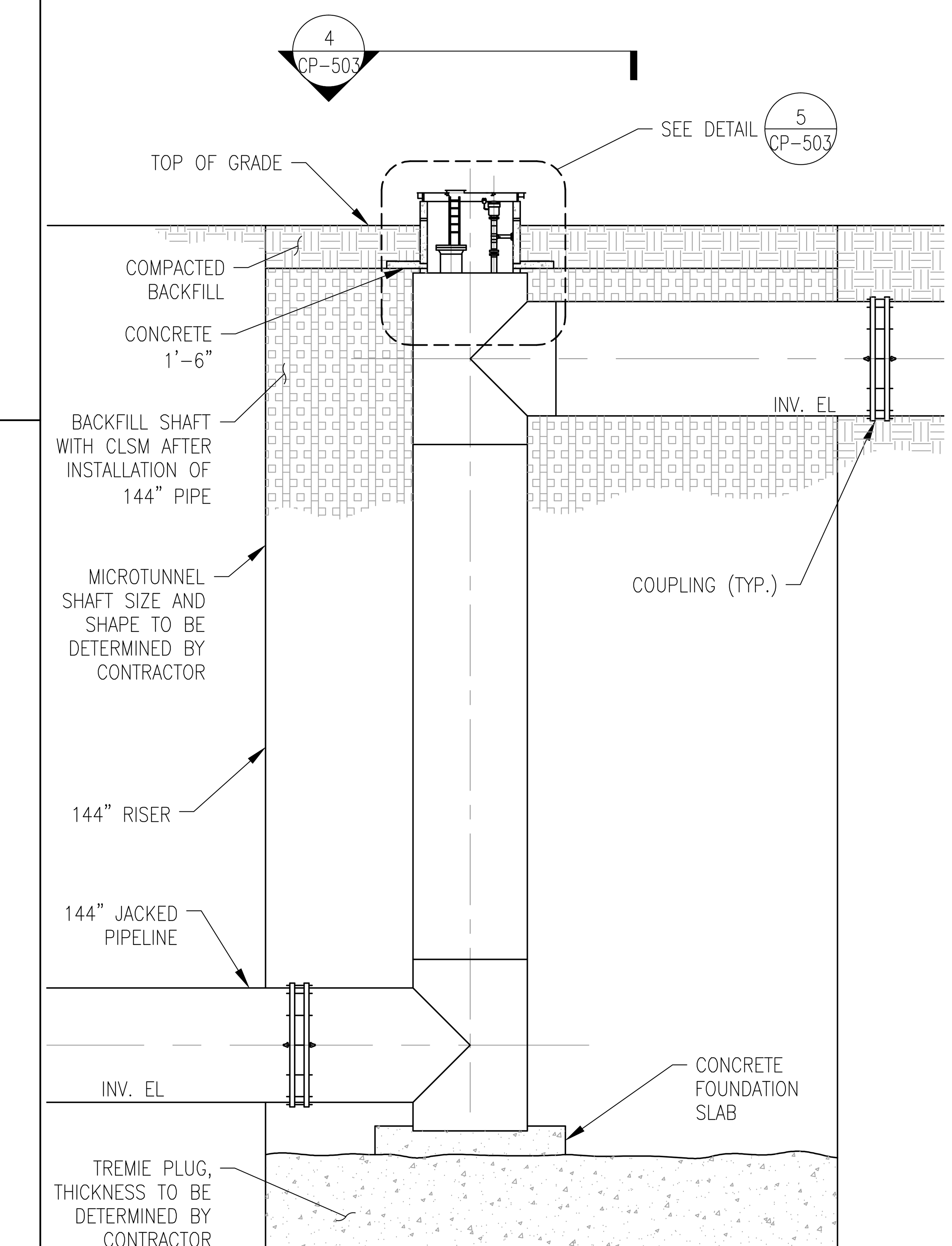
3 SECTION A-A
NTS



4 PLAN
NTS



5 SECTION A-A
NTS



6 TYPICAL TUNNEL SHAFT WITH VERTICAL RISER
NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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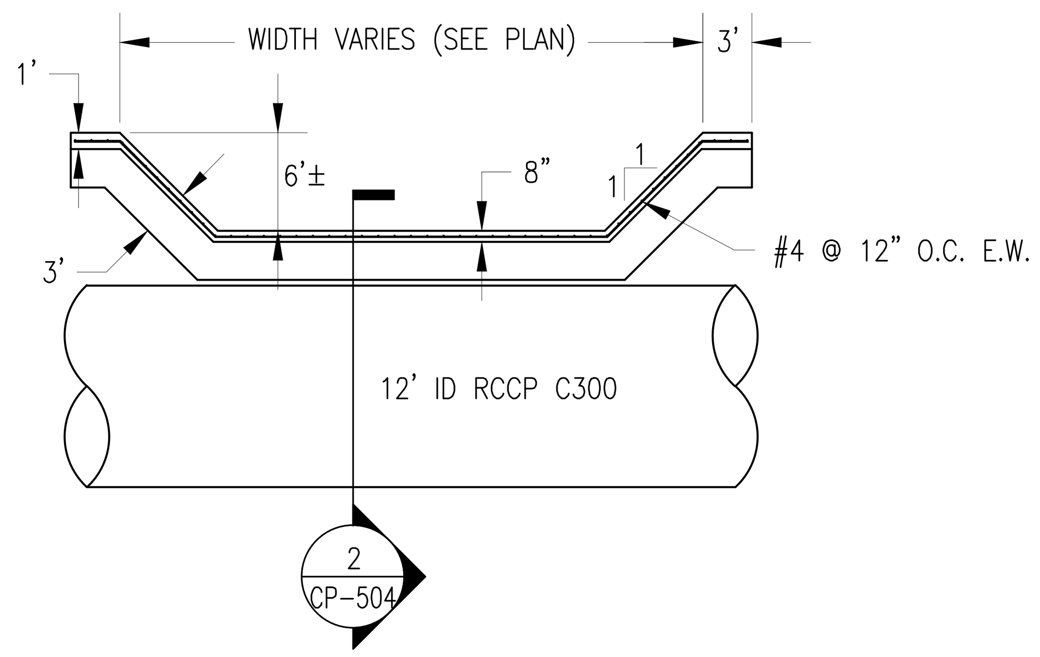
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

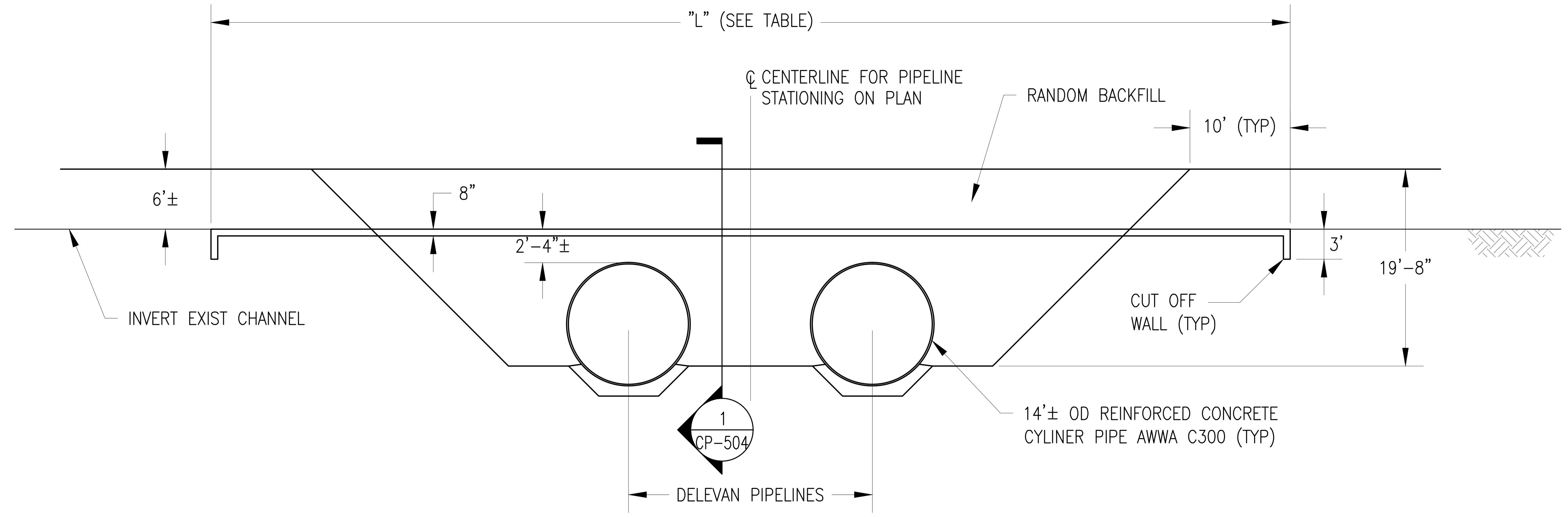
WSIP APPLICATION ATTACHMENT A4.A
DELEVAN AND TRR TYPICAL MANHOLE AND AIR VALVE DETAILS

SPEC NO.
DRAWING NO. CP-503
REV.
SHEET NO. 69

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SR\PA\FEASIBILITY_AECOM\900 WORK\0-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\DETAILS\CP-503.DWG



1 **SECTION**
1" = 10'



CONFIGURATION	L
2 PIPES	84'
4 PIPES	N/A

2 **CANAL CROSSING**
1" = 10'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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DATE 08/04/2017
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APPROVED JOE BARNES REG. CE. NO. 40105

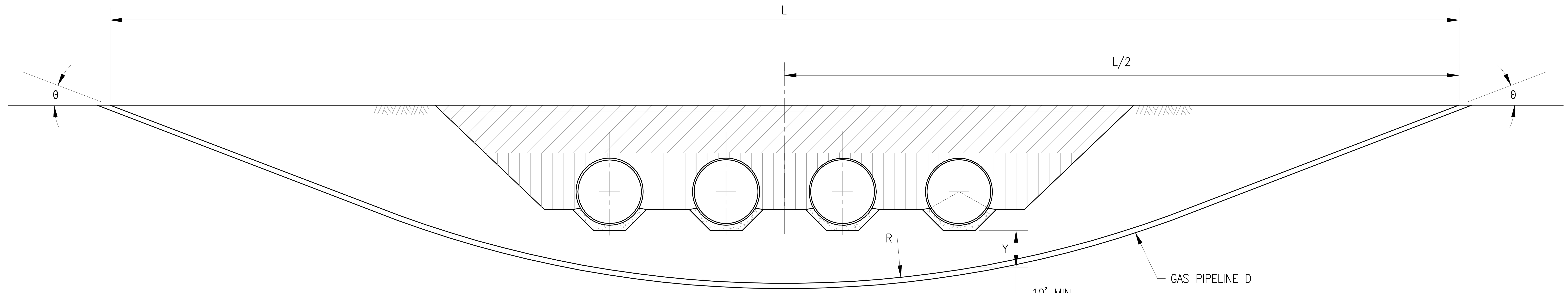
Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE
TYPICAL CROSS CANAL DETAILS

SPEC NO.
DRAWING NO. CP-504
REV.
SHEET NO. 70

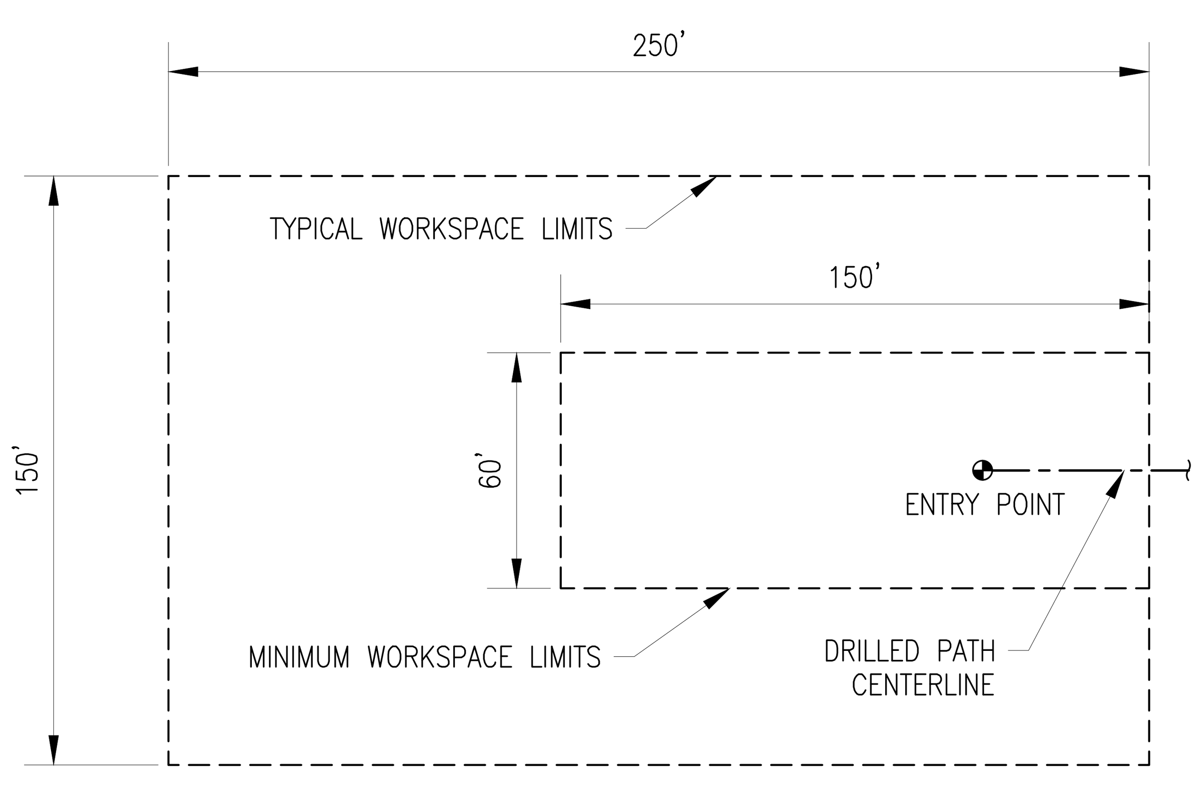
PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\DETAILS\CP-504.DWG



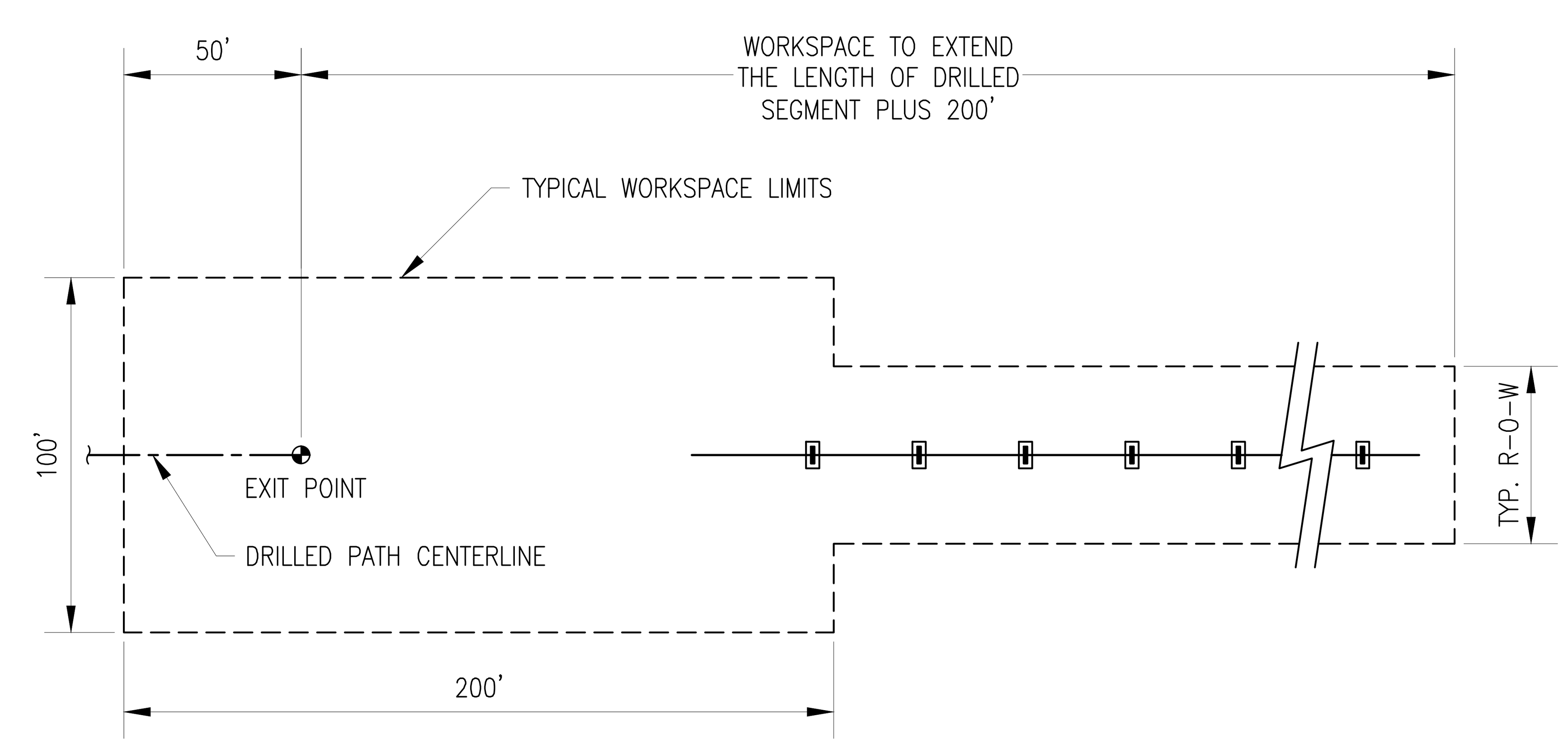
θ = ENTRY/EXIT ANGLE = 10°
R = 100'/INCH D

GAS PIPE D (INCHES)	R (FEET)	L (FEET)	Y (FEET)
36	3,600	1,510	47
24	2,400	1,150	28
12	1,200	675	10

(A) GAS LINE, HDD PROFILE
NTS



(A) DRILL ENTRY WORKSPACE
NTS



(A) DRILL EXIT WORKSPACE
NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
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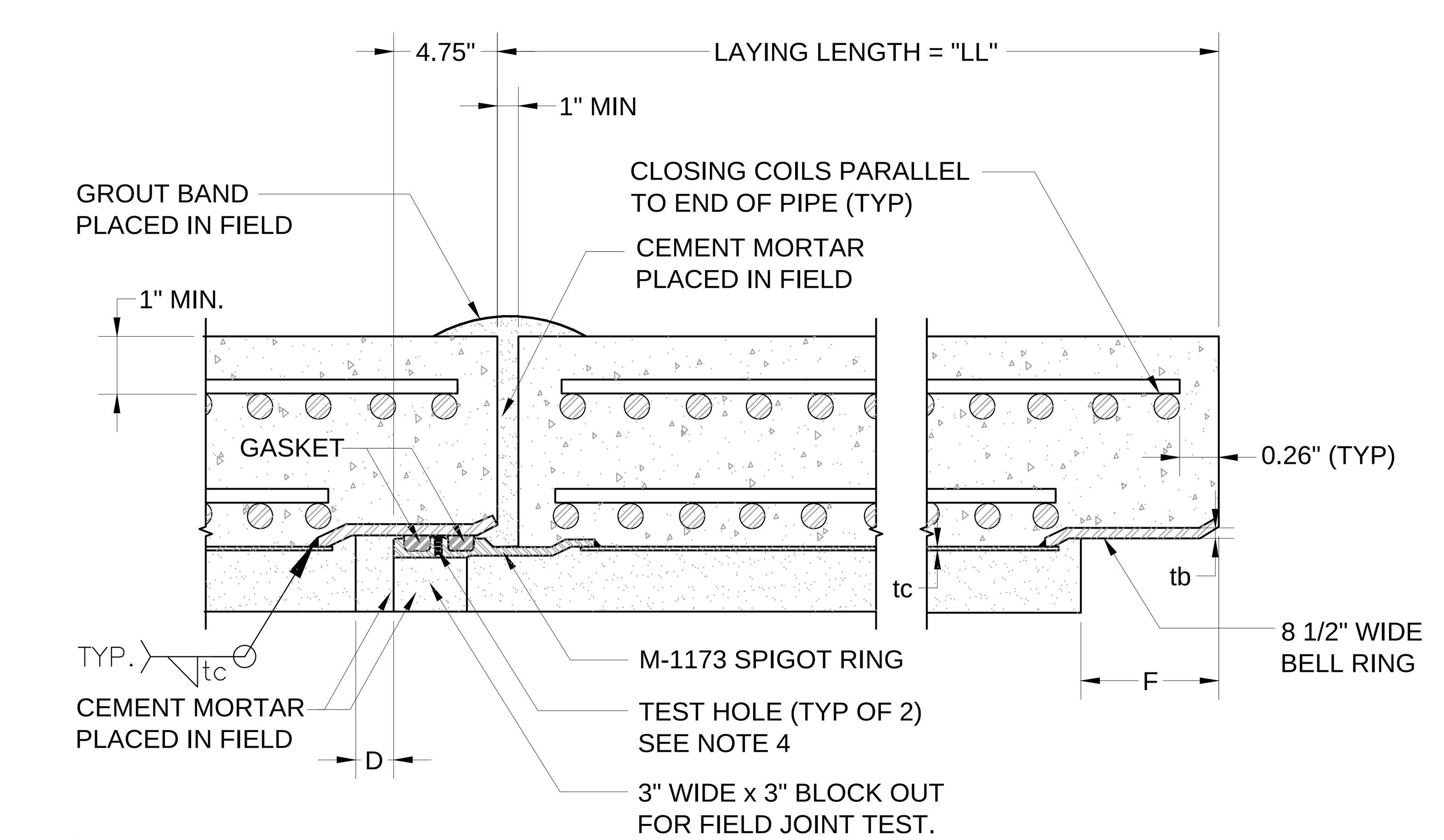
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN AND TRR PIPELINE
NATURAL GAS PIPELINE
RE-CONSTRUCTION

SPEC NO.
DRAWING NO. CP-505
REV.
SHEET NO. 71

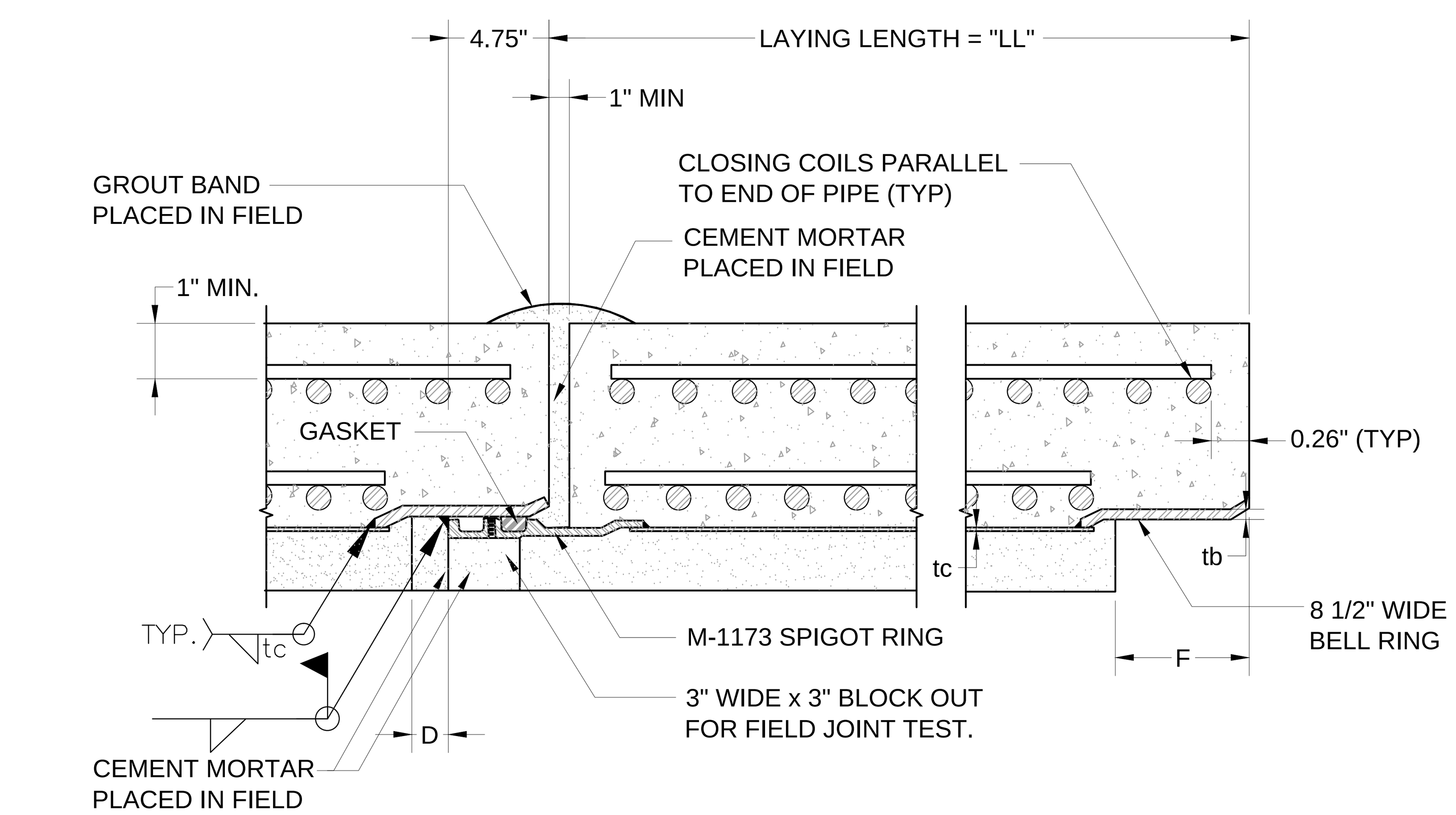
PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SR_PA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\DETAILS\CP-505.DWG



NOTES:

1. ALL DIMENSIONS SHALL BE CONFIRMED BY PIPE MANUFACTURER. ALTERNATE DIMENSIONS AND SPACING MAY BE REQUIRED PER AWWA C300, AWWA MANUAL M9, AND SPEC. SEC. 02558.
2. COAT EXPOSED SURFACES OF STEEL JOINT RINGS WITH ONE COAT OF AMERLOCK 400 HIGH-SOLIDS EPOXY TO A TOTAL OF 4 MILS (MDFT). PREPARE SURFACES PER SSPC SP-10 (NEAR WHITE METAL BLAST).
3. SUBMIT METHODS TO ENGINEER FOR APPROVAL OF REPAIR METHODS FOR CEMENT MORTAR LINING (CML) AND CEMENT MORTAR ROCK SHIELD COATING (CMC).
4. DRILL AND TAP TWO 1/8" NPT HOLES FOR FIELD FOR FIELD ACCEPTANCE (AIR) TEST. LOCATE TEST HOLES AT FIELD TOP (CROWN) AND FIELD BOTTOM (INVERT). PLUG HOLES WITH THREADED STEEL PLUGS (NOT SHOWN).
5. MAXIMUM JOINT DEFLECTION = 0.57°. MAXIMUM JOINT DEFLECTION WITH BEVELED PIPE = 6.86°.

1 REINFORCED CONCRETE CYLINDER PIPE UNRESTRAINED JOINT

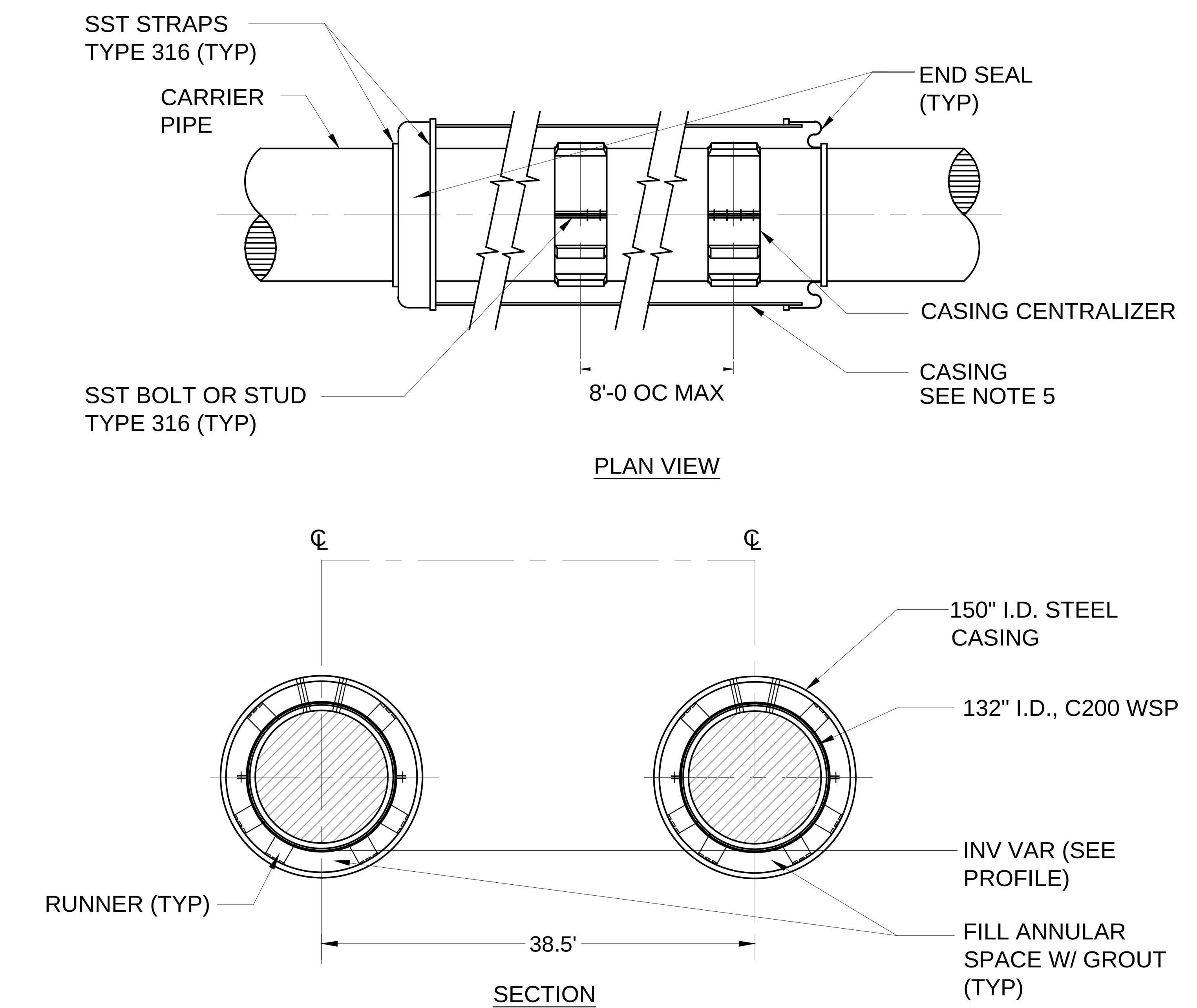


NOTES:

1. ALL DIMENSIONS SHALL BE CONFIRMED BY PIPE MANUFACTURER. ALTERNATE DIMENSIONS AND SPACING MAY BE REQUIRED PER AWWA C300, AWWA MANUAL M9, AND SPEC. SEC. 02558.
2. COAT EXPOSED SURFACES OF STEEL JOINT RINGS WITH ONE COAT OF AMERLOCK 400 HIGH-SOLIDS EPOXY TO A TOTAL OF 4 MILS (MDFT). PREPARE SURFACES PER SSPC SP-10 (NEAR WHITE METAL BLAST).
3. SUBMIT METHODS TO ENGINEER FOR APPROVAL OF REPAIR METHODS FOR CEMENT MORTAR LINING (CML) AND CEMENT MORTAR ROCK SHIELD COATING (CMC).
4. DRILL AND TAP TWO 1/8" NPT HOLES FOR FIELD FOR FIELD ACCEPTANCE (AIR) TEST. LOCATE TEST HOLES AT FIELD TOP (CROWN) AND FIELD BOTTOM (INVERT). PLUG HOLES WITH THREADED STEEL PLUGS (NOT SHOWN).
5. MAXIMUM JOINT DEFLECTION = 0.57°. MAXIMUM JOINT DEFLECTION WITH BEVELED PIPE = 6.86°.

2 REINFORCED CONCRETE CYLINDER PIPE RESTRAINED JOINT

SCALE: NTS

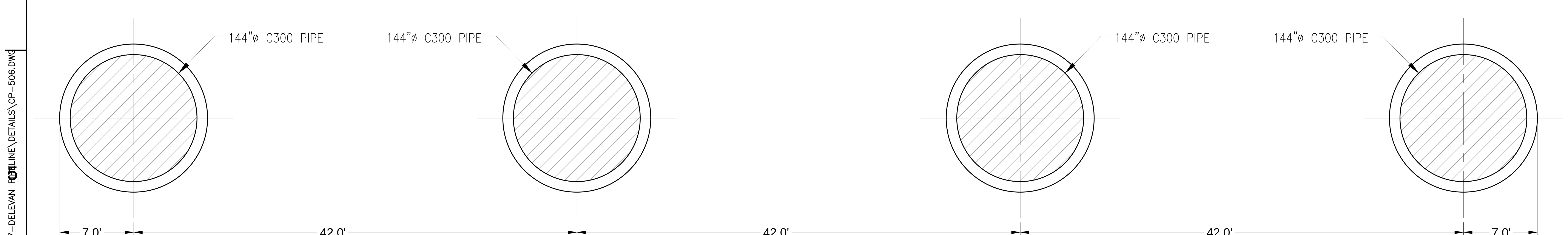


NOTES:

1. THE JOINTS OF THE CASING SHALL BE WATERTIGHT.
2. CARRIER PIPE SHALL BE TESTED BEFORE INSTALLATION OF END SEALS ON CASING AND FILLING OF ANNULAR SPACE. FLOATATION CALCULATION SHALL BE PROVIDED PRIOR TO FILLING OF ANNULAR SPACE. CONTRACTOR SHALL BLOCK THE TOP OF THE CARRIER PIPE TO PREVENT FLOATATION WHEN ANNULAR SPACE BACKFILL IS INSTALLED.
3. CASING SPACERS SHALL BE BOLTED AROUND THE PIPE SUCH THAT THE RUNNERS ARE LOCATED SYMMETRICALLY ABOUT THE LONGITUDINAL AXIS OF PIPE.
4. PROVIDE GROUT PORTS TO ENABLE FILLING VOIDS OUTSIDE OF THE CASING.
5. SUBMIT CALCULATIONS THAT DEMONSTRATE THAT THE YIELD STRENGTH OF THE CASING IS SUFFICIENT TO CARRY ANTICIPATED JACKING LOADS.
6. THE SEPARATION BETWEEN CASING PIPES 2xO.D. (26 FEET)
7. THE DEPTH BELOW INTERSTATE 5 AND THE RAIL ROAD IS 2 x O.D. (26 FEET)

3 CASING PIPE CROSSING

SCALE: NTS



NOTES:

1. THE SEPARATION BETWEEN JACKED CARRIER PIPES 2xO.D. (28 FEET)
2. THE DEPTH OF COVER BELOW THE CANAL IS 2xO.D. (28 FEET)

4 CROSSING AT GLENN-COLUSA CANAL

SCALE: NTS

REV	DATE	DESCRIPTION	SUB.	APPD
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DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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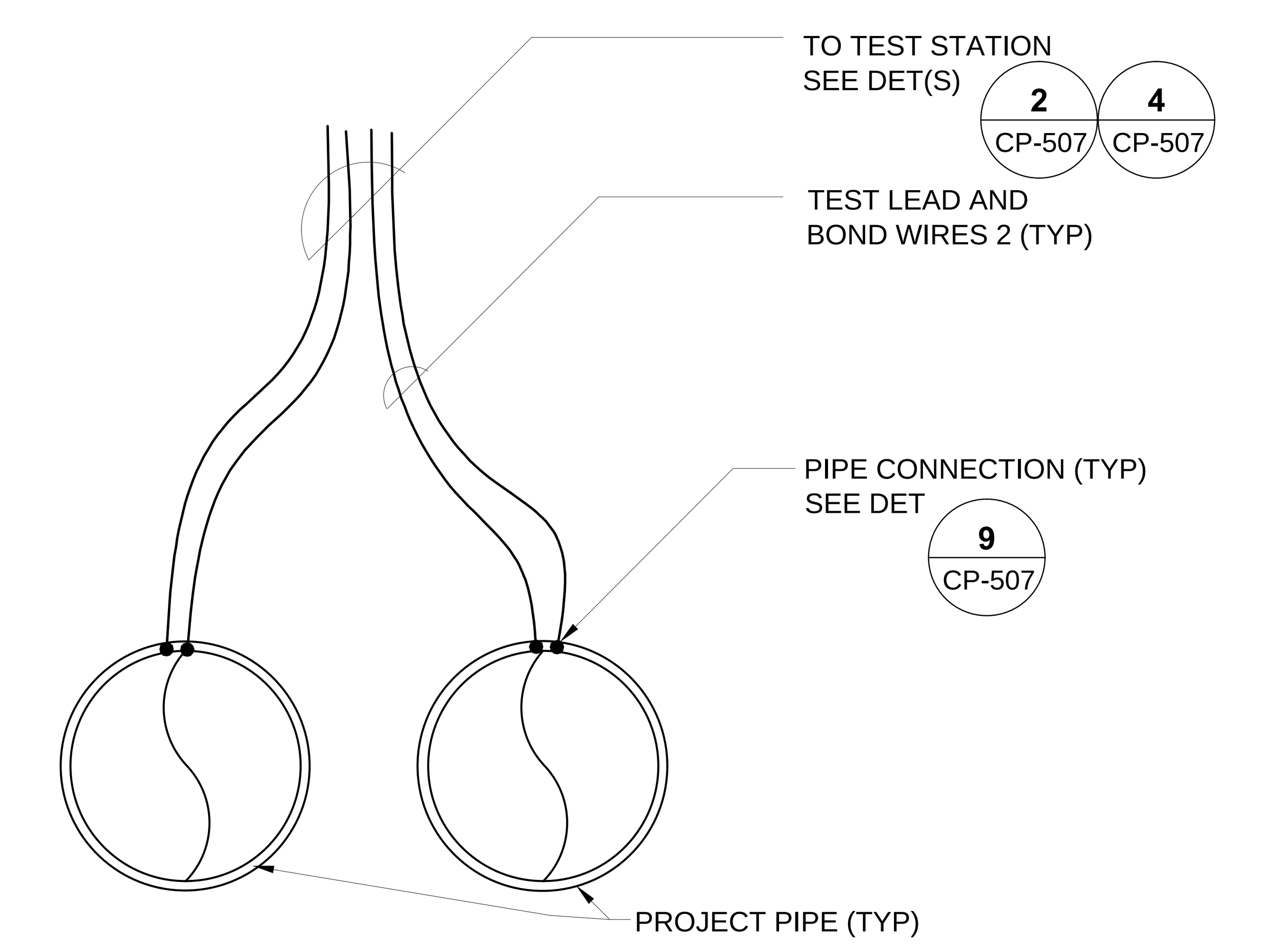
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

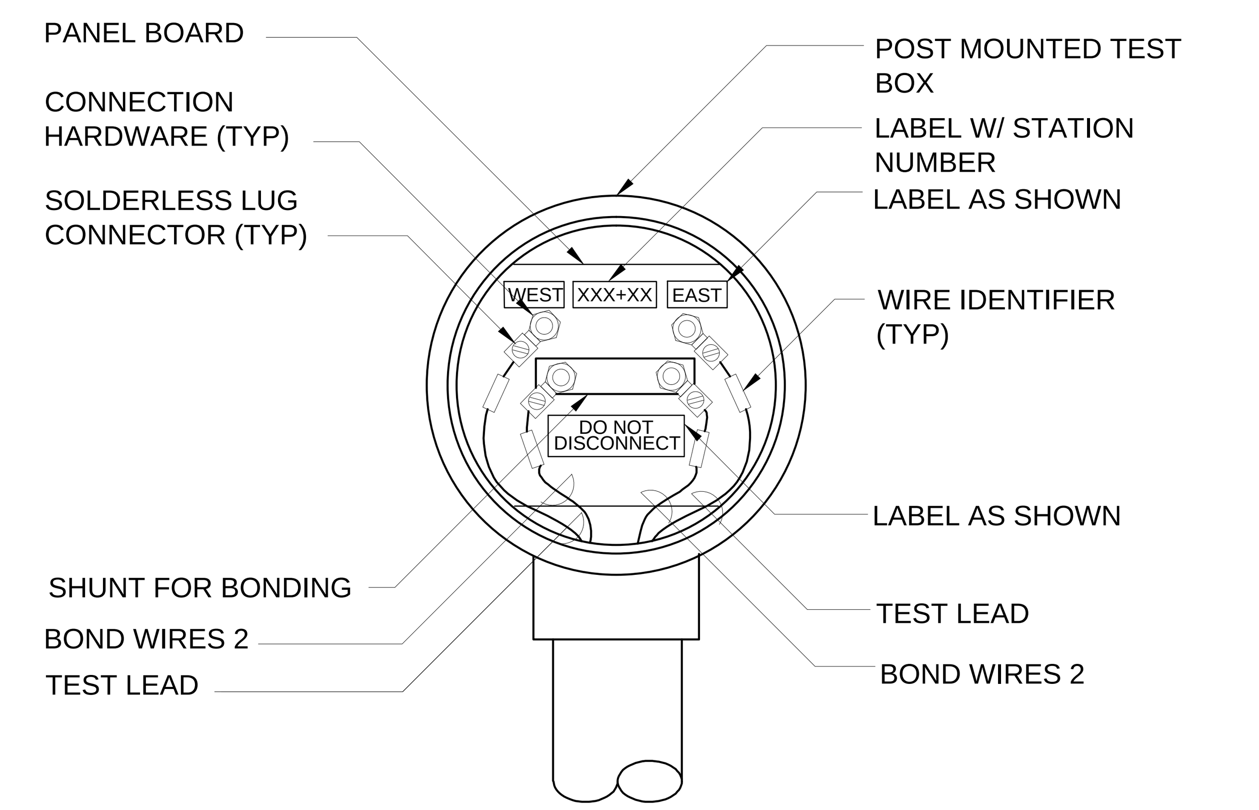
WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE PIPE DETAILS

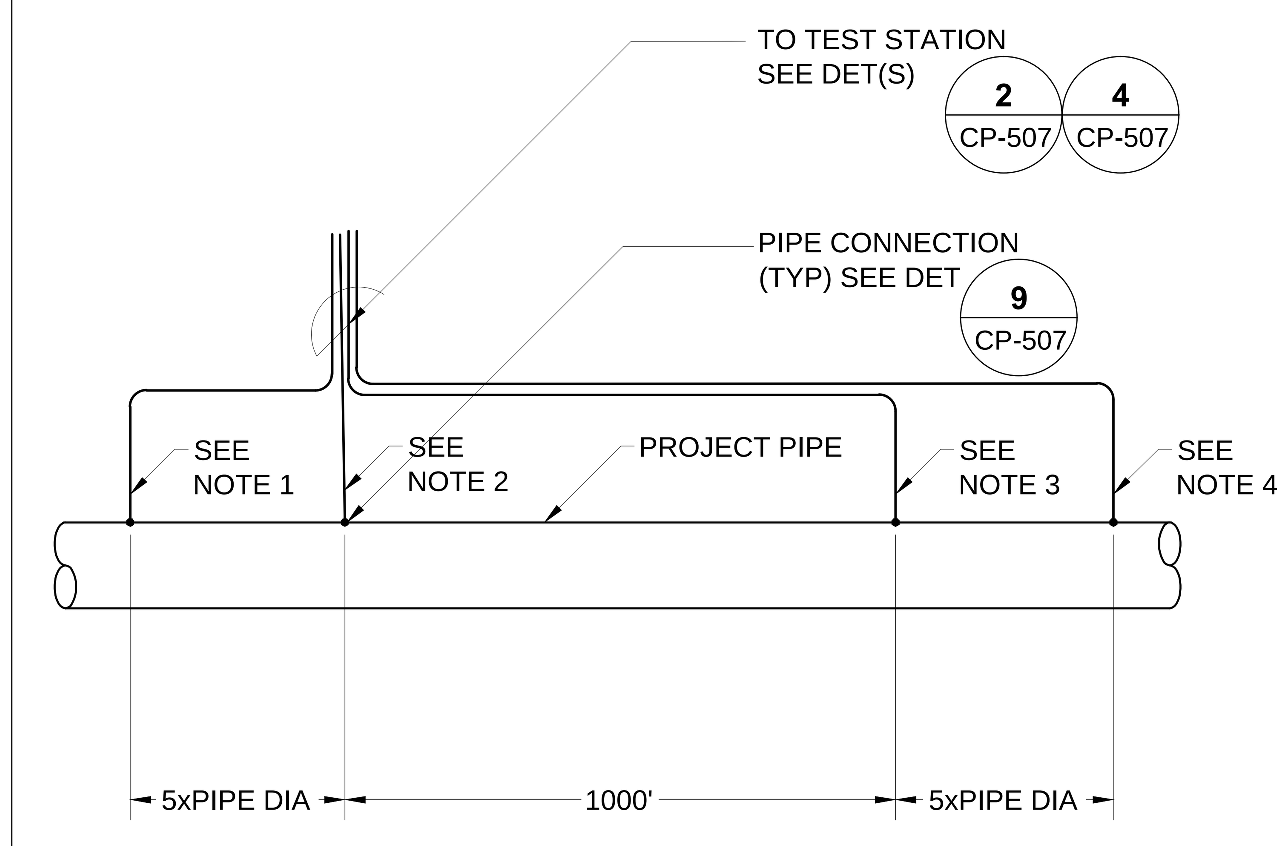
SPEC NO.
DRAWING NO. CP-506
REV.
SHEET NO. 72



1 MONITORING TEST STATION SCALE: NTS



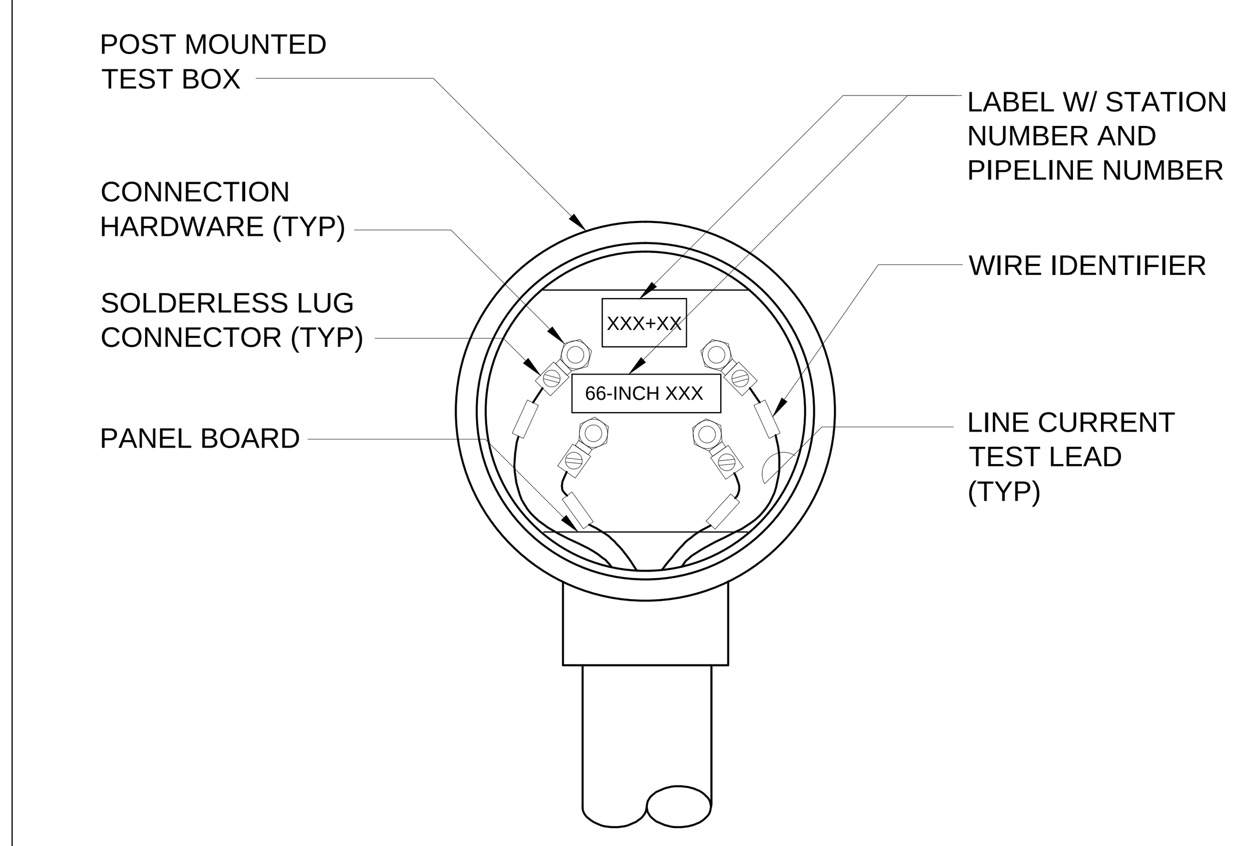
2 POST MOUNTED MONITORING TEST BOX SCALE: NTS



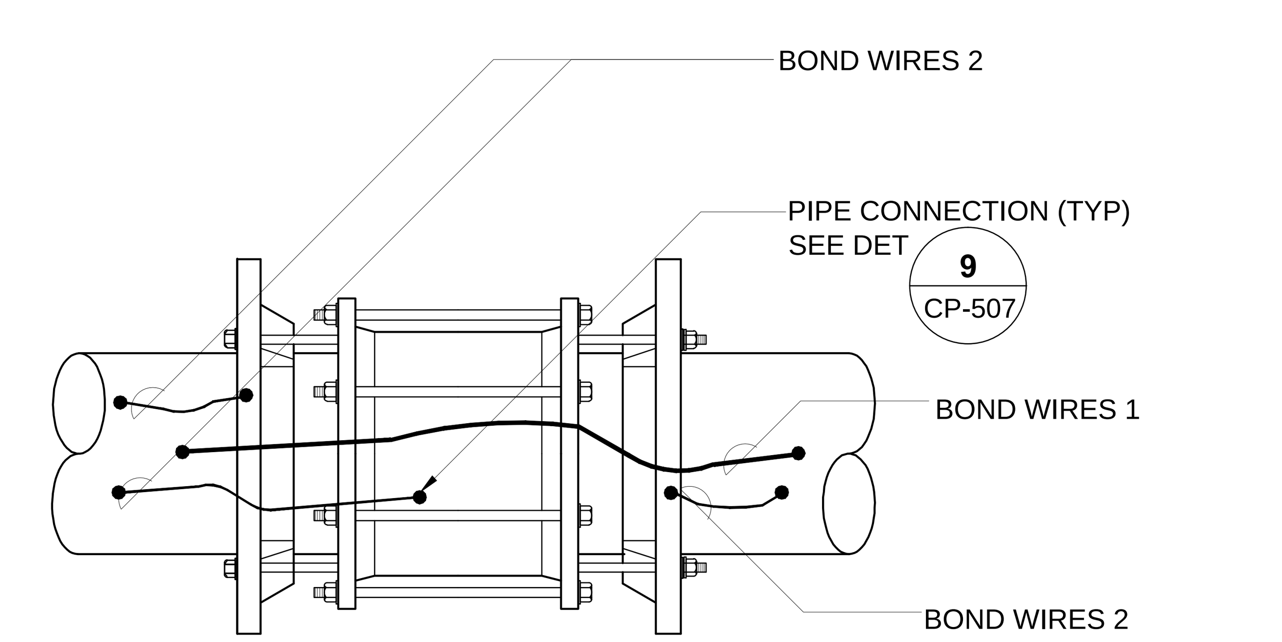
NOTES:

1. LINE CURRENT TEST LEAD #1
2. LINE CURRENT TEST LEAD #2
3. LINE CURRENT TEST LEAD #3
4. LINE CURRENT TEST LEAD #4

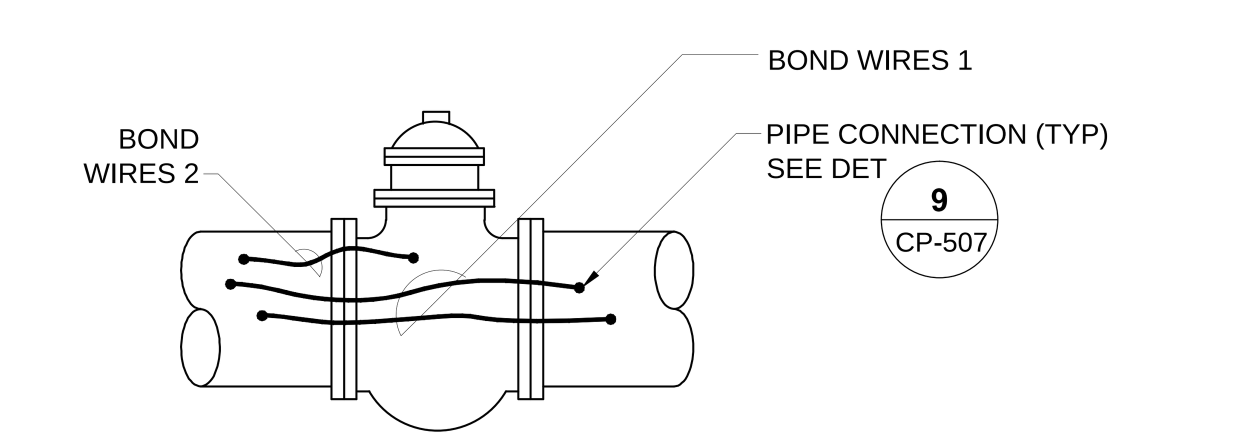
3 LINE CURRENT TEST STATION SCALE: NTS



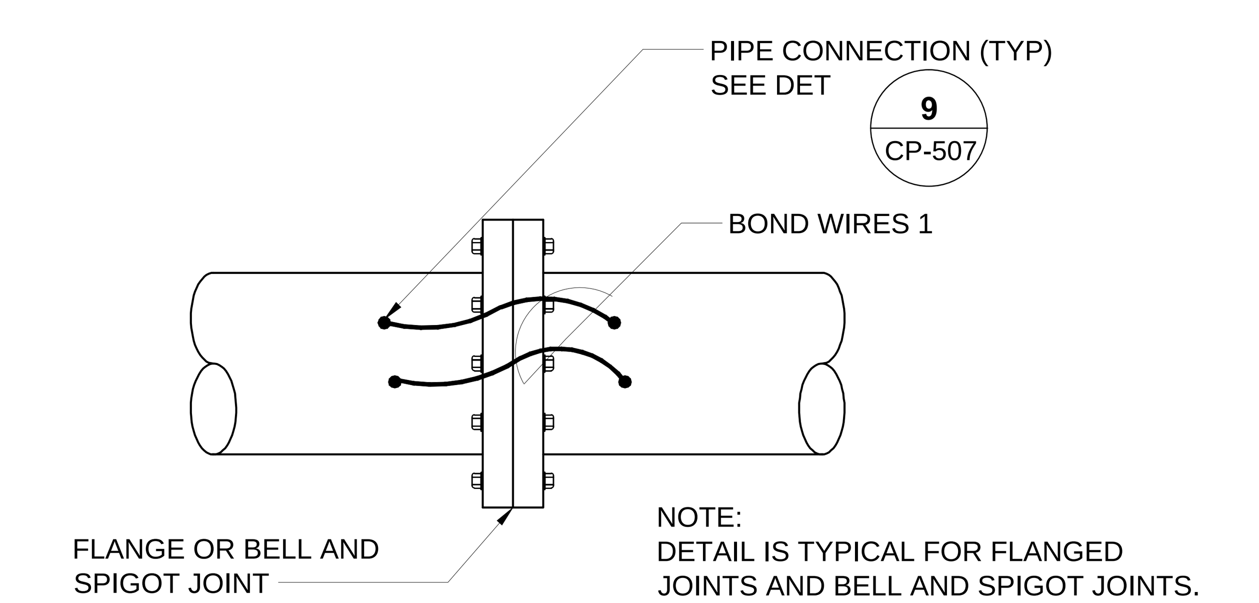
4 POST MOUNTED LINE CURRENT TEST BOX SCALE: NTS



5 FLEX COUPLING JOINT BOND SCALE: NTS

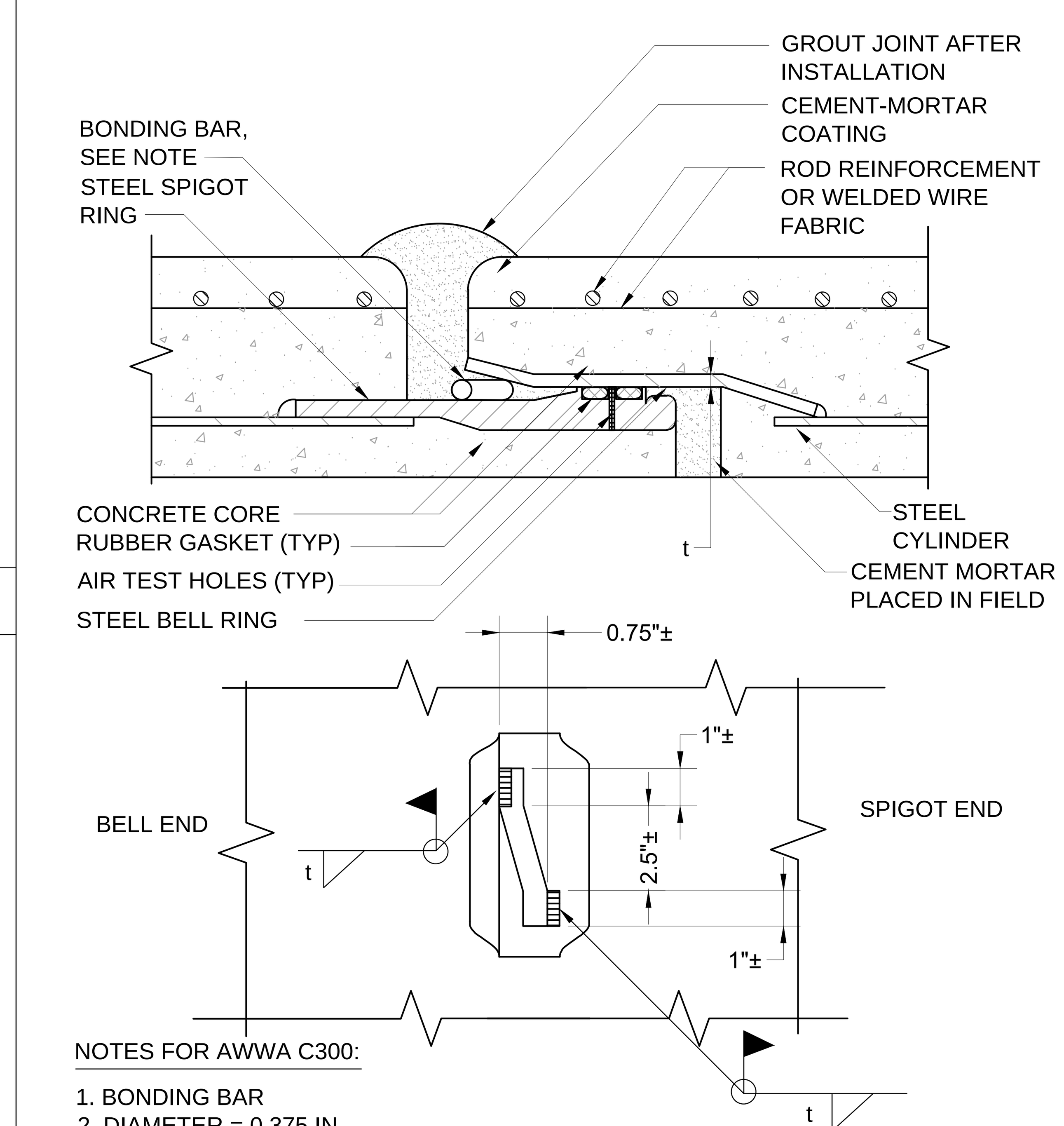


6 VALVE BOND SCALE: NTS



NOTE:
DETAIL IS TYPICAL FOR FLANGED JOINTS AND BELL AND SPIGOT JOINTS.

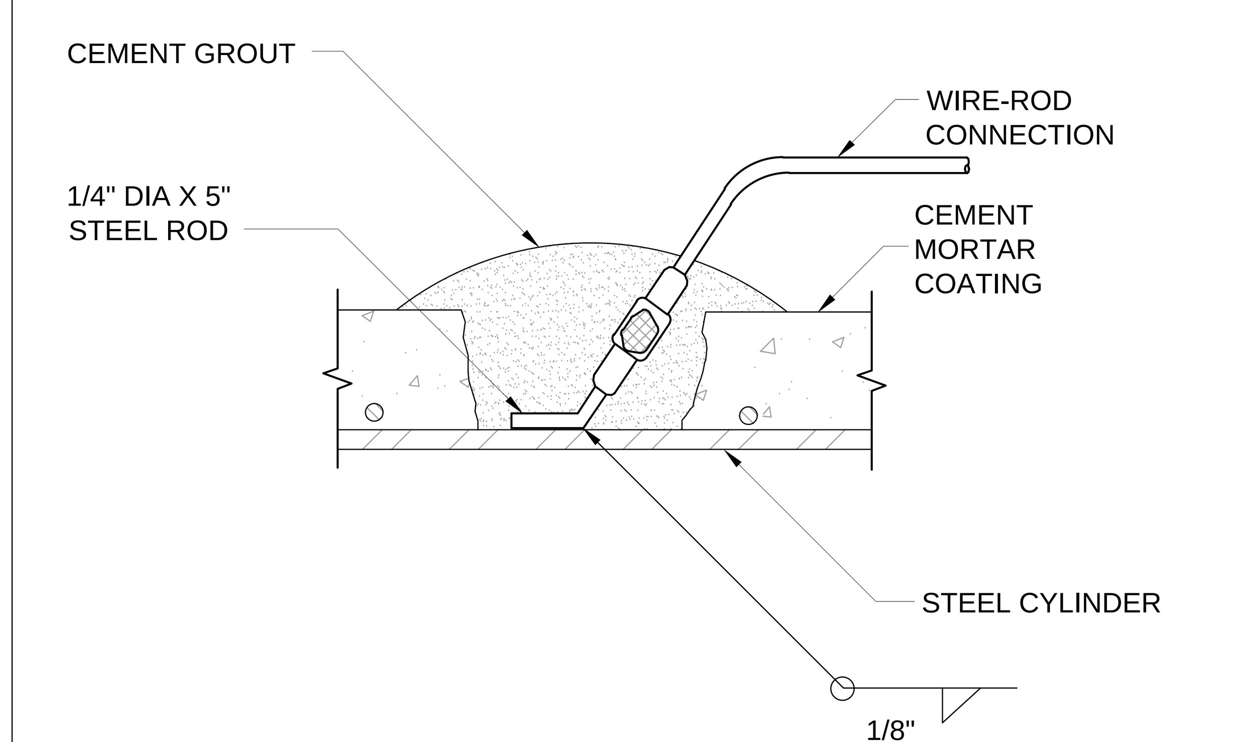
7 JOINT BOND SCALE: NTS



NOTES FOR AWWA C300:

1. BONDING BAR
2. DIAMETER = 0.375 IN
3. LENGTH = 4.25 IN ±

8 CONCRETE CYLINDER PIPE JOINT BOND SCALE: NTS



9 TEST LEAD CONNECTION SCALE: NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: D. DEUTSCHER
DRAWN: M. WONG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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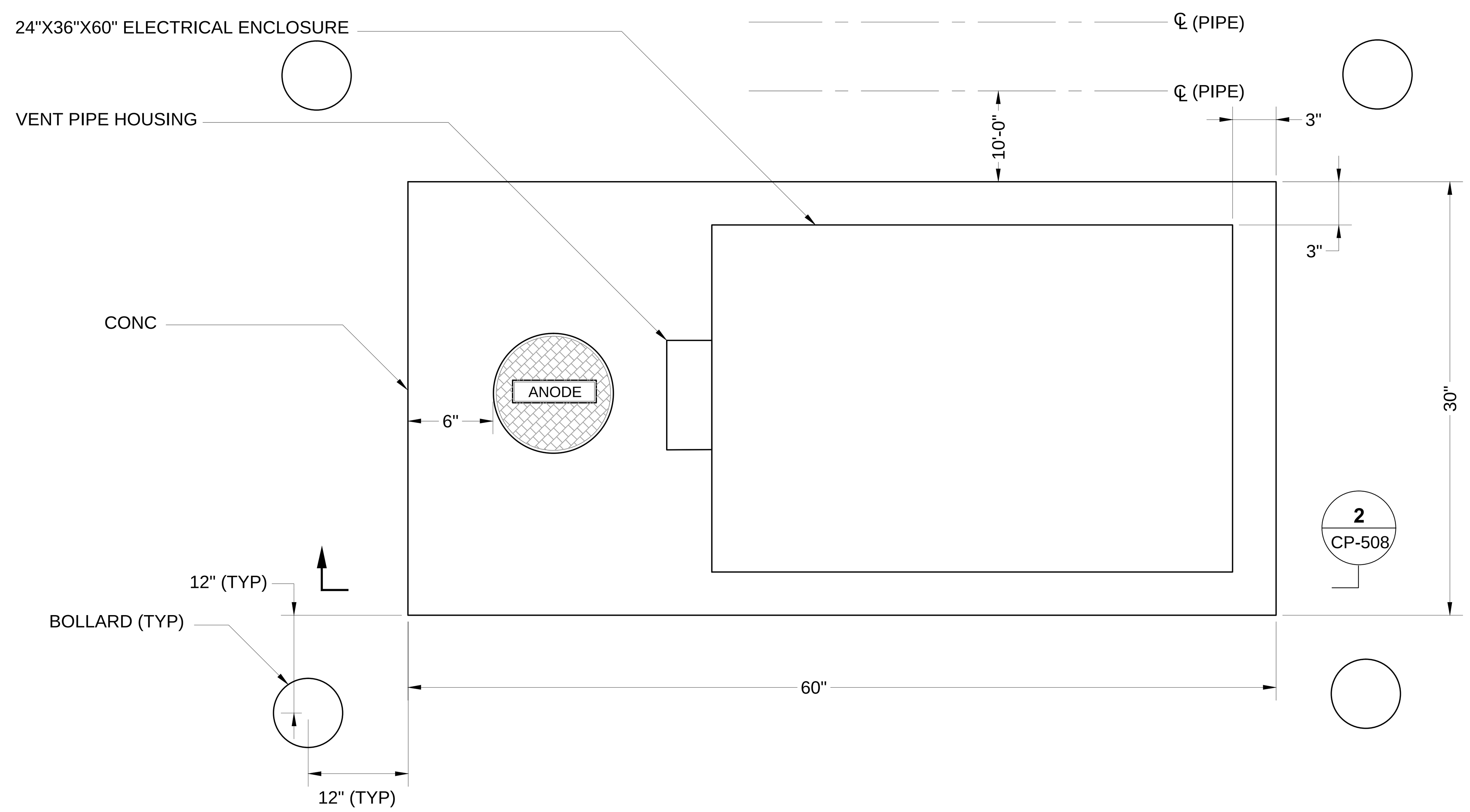
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

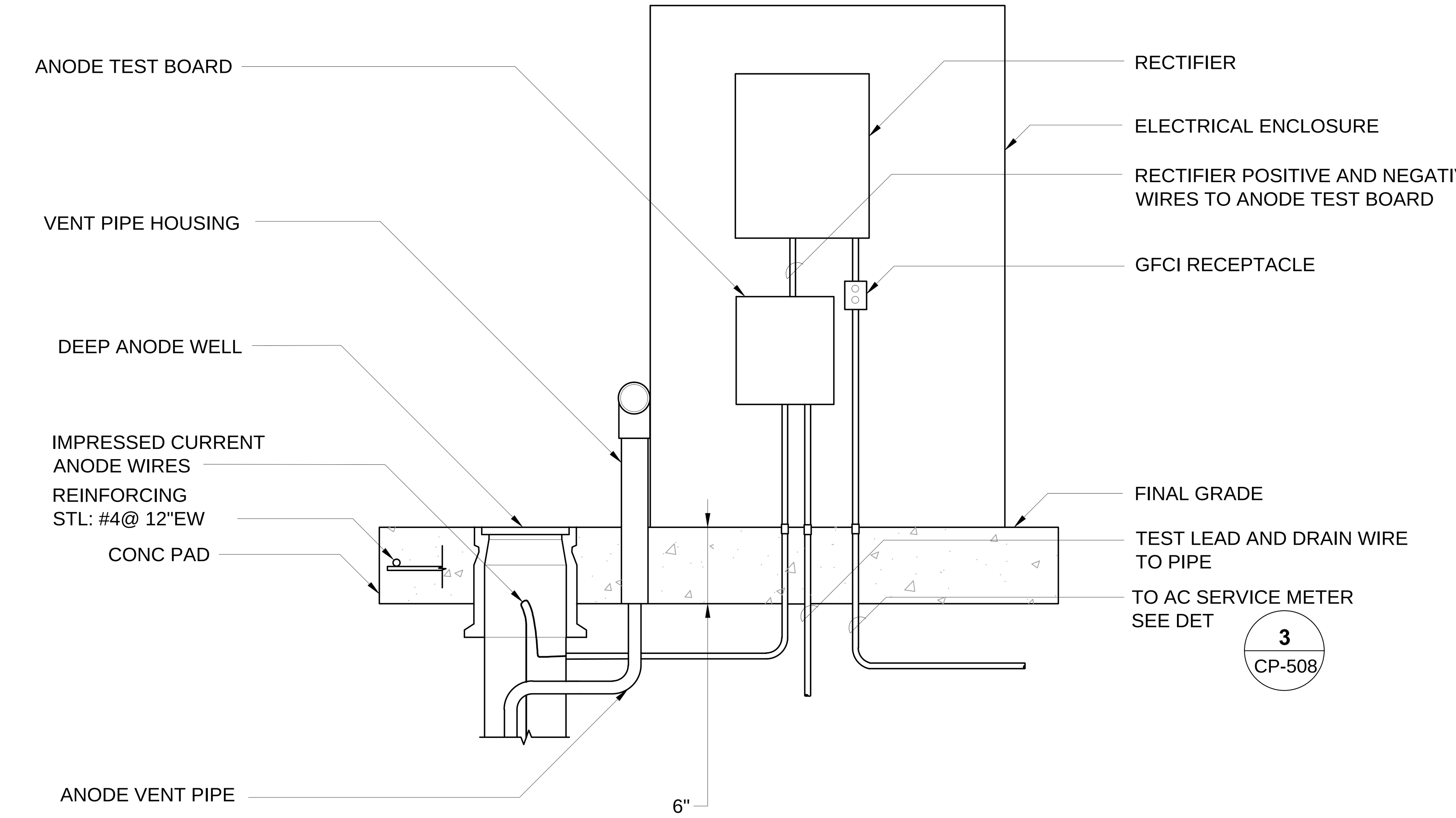
WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE
CATHODIC PROTECTION

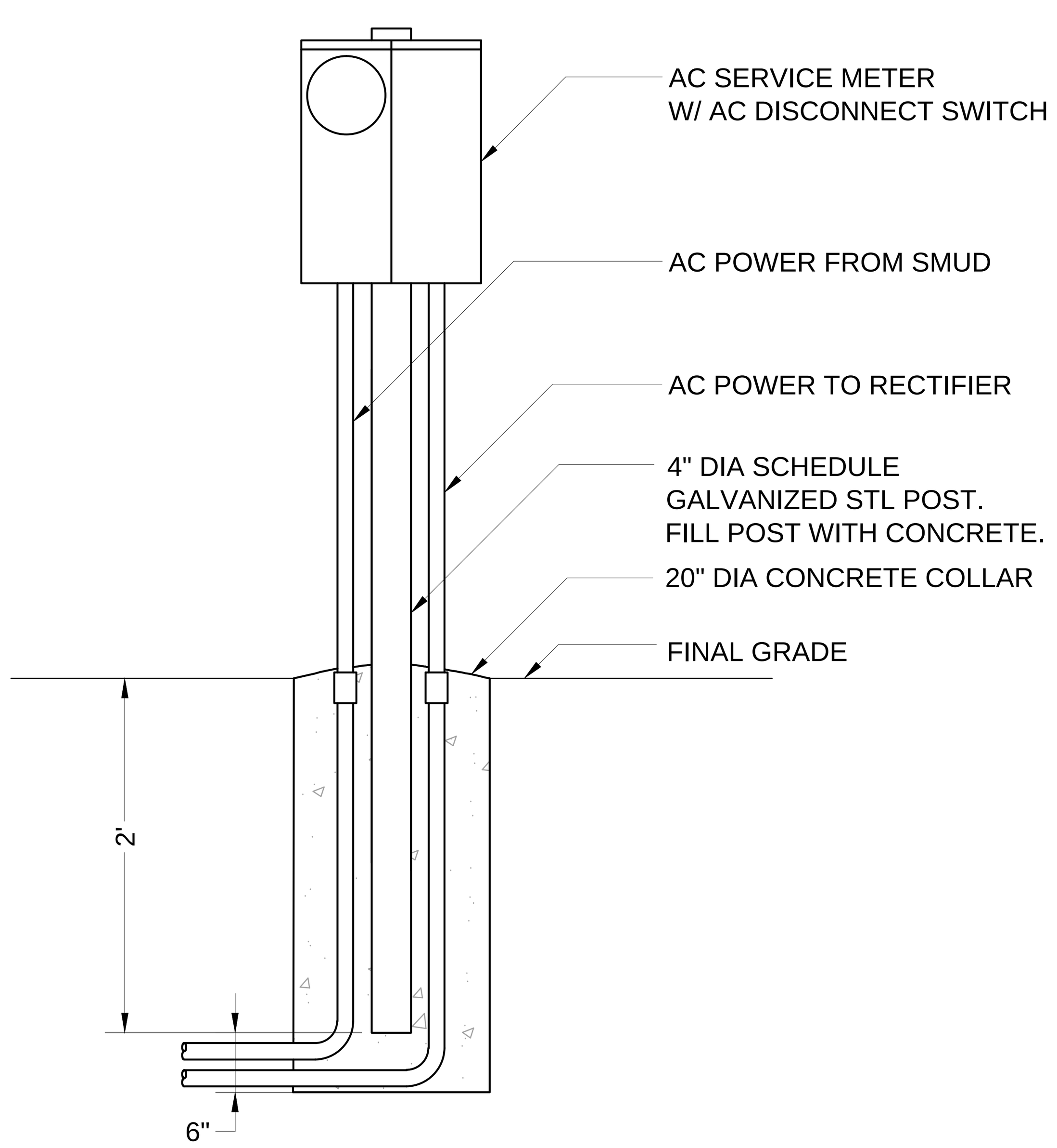
SPEC NO.
DRAWING NO. CP-507
REV.
SHEET NO. 73



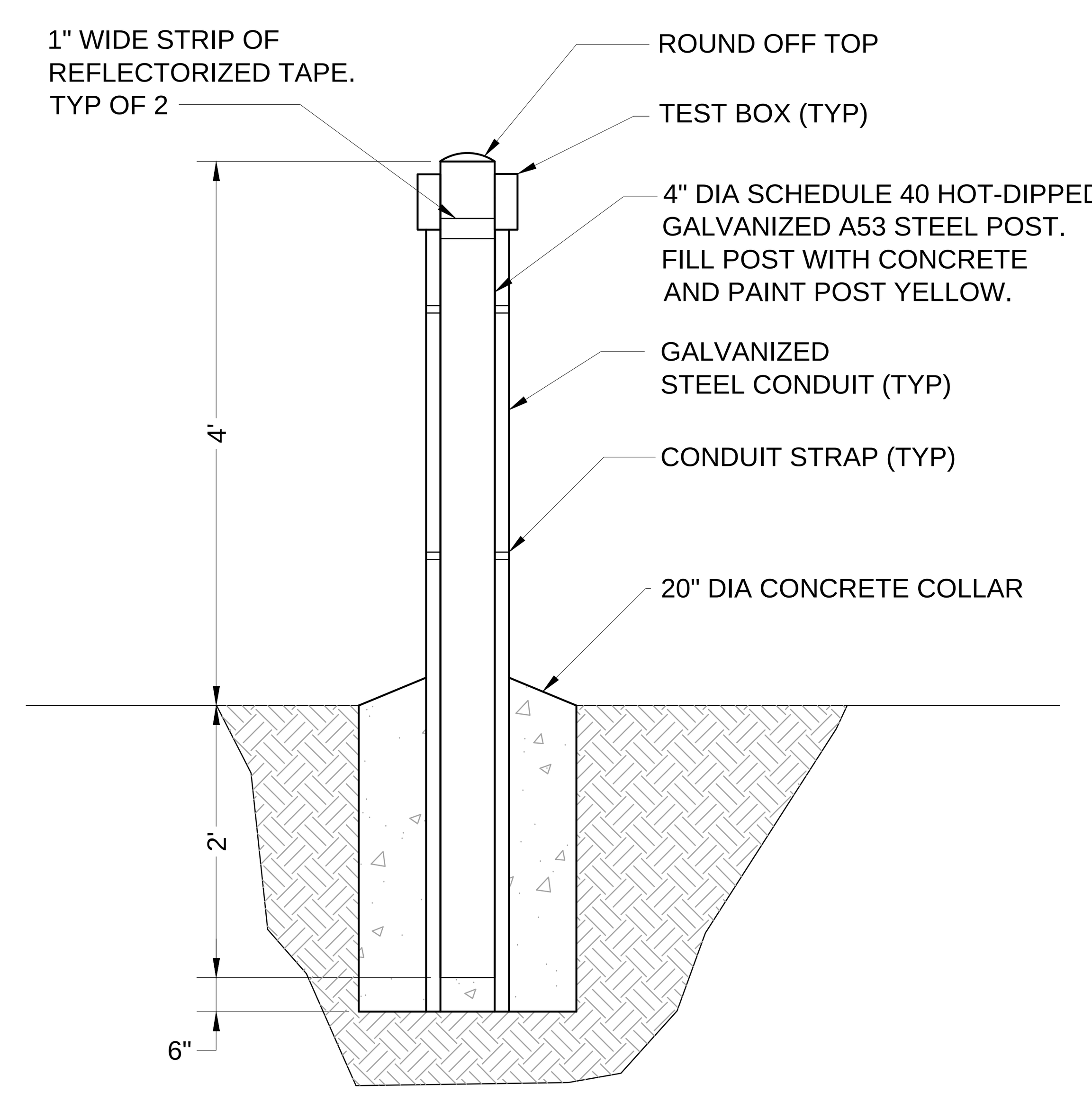
1 **PAD MOUNTED RECTIFIER INSTALLATION PLAN VIEW** SCALE: NTS



2 **PAD MOUNTED RECTIFIER INSTALLATION SECTION** SCALE: NTS



3 **AC SERVICE METER** SCALE: NTS



4 **DUAL HEAD POST MOUNTED TEST STATION** SCALE: NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED MIKE FORREST REG. CE. NO. 27855 DATE 08/04/2017
APPROVAL RECOMMENDED DWAYNE DEUTSCHER REG. CE. NO. 34557
APPROVED JOE BARNES REG. CE. NO. 40105

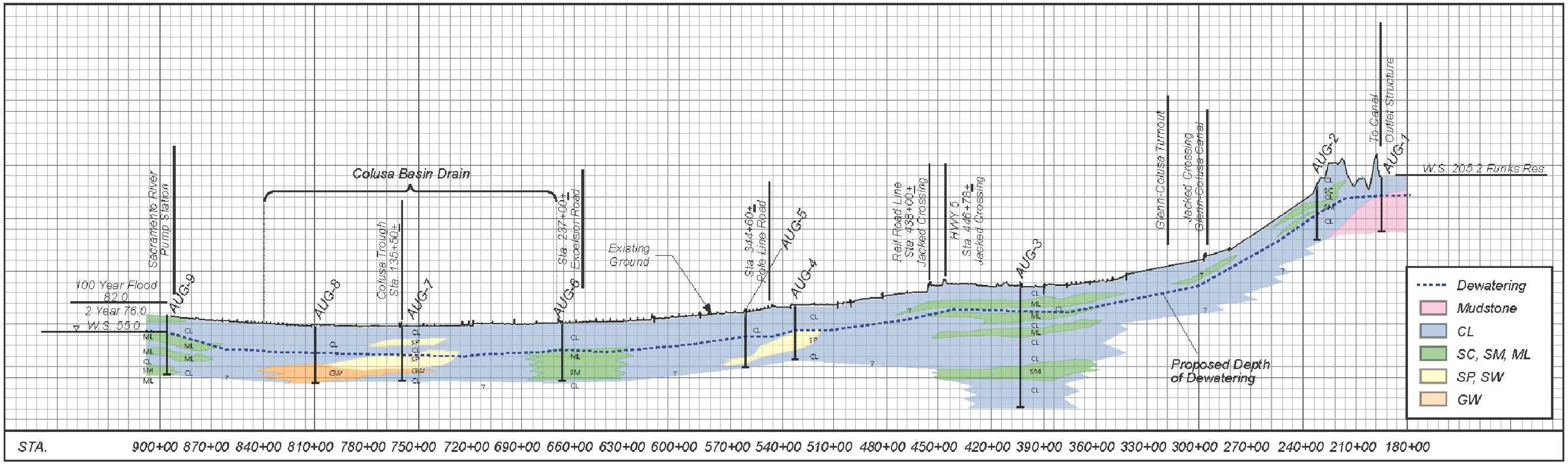
Sites

WSIP APPLICATION ATTACHMENT A4.A

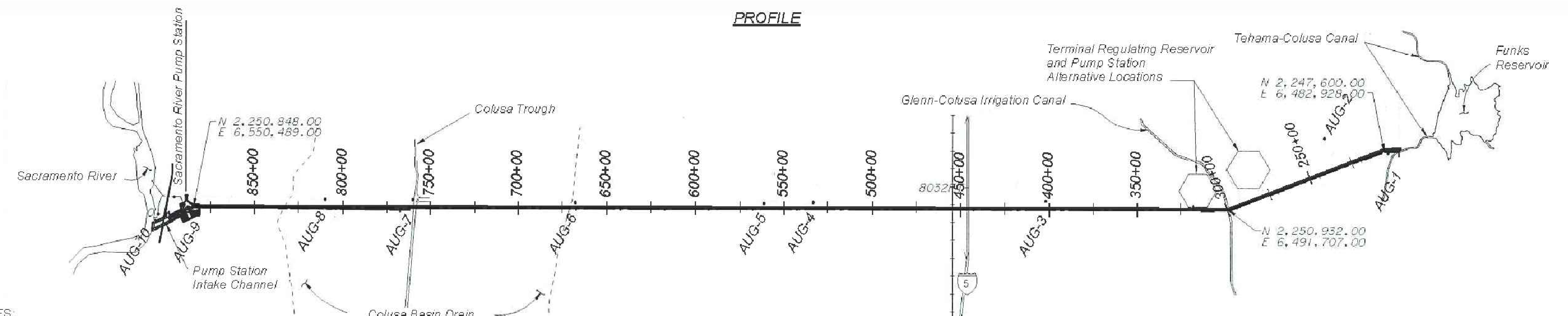
DELEVAN AND TRR PIPELINE CATHODIC PROTECTION INSTALLATION

SPEC NO.
DRAWING NO. CP-508
REV.
SHEET NO. 74

PLOTTED BY:BARNHART, DENNIS ~August 7, 2017~3:45:16 PM
DRAWING: G:\SR\PA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\07-DELEVAN PIPELINE\DETAILS\CP-508.DWG



PROFILE

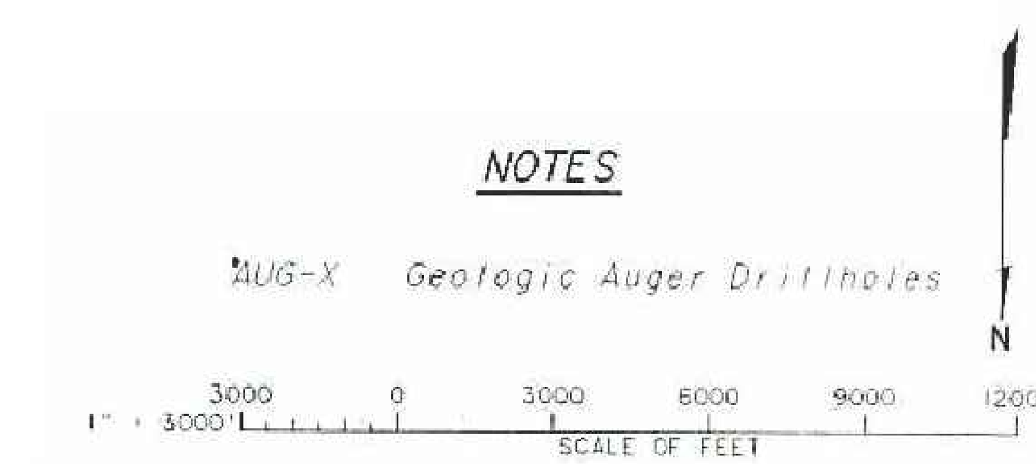


NOTES:
1. Existing boring log data (Sheets B-0801 – B-0805) was used to construct a preliminary cross-section of the hydrostratigraphy along the proposed alignment
2. Dewatering wells are fully penetrating wells in a water table aquifer
3. Required depth of dewatering is 3-feet below the center line of the excavation, which is approximately 25 feet below existing ground surface
4. Dewatering wells will be spaced on 100-foot centers, both sides of the excavation
5. Dewatering wells will be 75-foot deep in sections characterized as clay or clay and silt and 100-feet in sections characterized as sand or gravel
6. Dewatering wells are assumed to be 6-inch diameter

Source:

Start Station	End Station	Excavation Length (ft)	Excavation Width (ft)	Depth to Water Table (H) (ft BGS)	Well Drawdown (hw) (ft BGS)	Material	Q (gpm/well)	Q (gpd/ft trench)	Total Q (gpd/section)
192+50	220+00	2,750	120	10	40	CL	0.0	0	0
220+00	350+00	13,000	120	7	50	CL-ML	0.1	4	51,103
350+00	470+00	12,000	120	5	50	CL-ML	0.2	4	50,428
470+00	515+00	4,500	120	5	40	CL	0.0	0	0
515+00	545+00	3,000	120	10	60	SP	22.2	639	1,916,858
545+00	720+00	17,500	120	10	40	CL	0.0	0	0
720+00	790+00	7,000	120	10	60	SP	13.7	393	2,752,412
790+00	890+00	10,000	120	5	50	CL-ML	0.2	4	42,023

NOTES



REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED D. DEUTSCHER
DRAWN M. WONG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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DATE 08/04/2017
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APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN AND TRR PIPELINE DEWATERING

SPEC NO.
DRAWING NO. CP-701
REV.
SHEET NO. 75

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910 CAD\006-CIVIL\20-SHEETS\11-TRR\DWGS\CT-101

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: L. MURRAY
DRAWN: L. MURRAY
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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2020 L Street, Suite 300
Sacramento, Ca 95811
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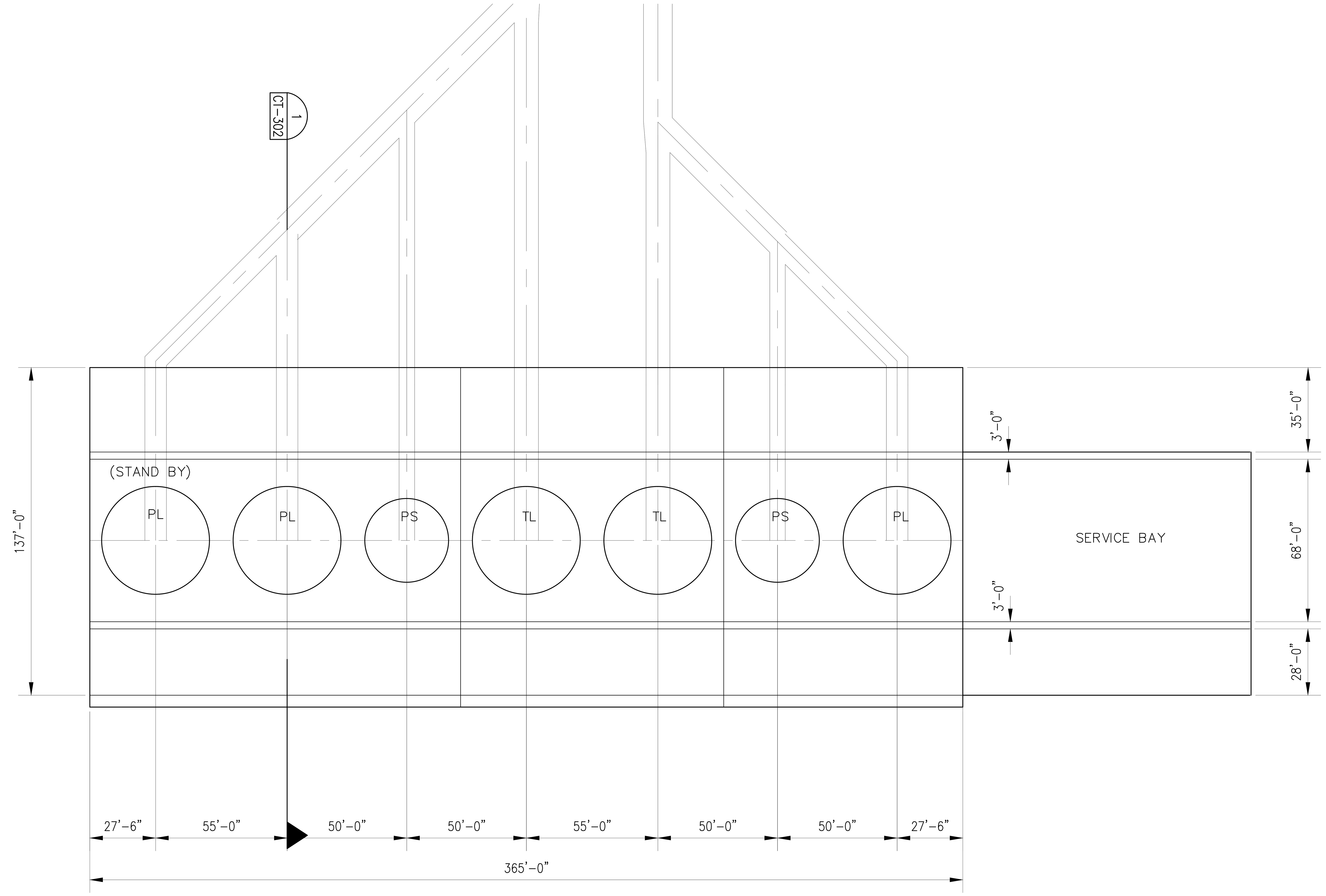
REVIEWED: MIKE FORREST, REG. CE. NO. 27855
DATE: 08/04/2017
APPROVAL RECOMMENDED: LOREN MURRAY, REG. CE. NO. 42663
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

TERMINAL REGULATING RESERVOIR PLAN

SPEC NO.
DRAWING NO. CT-101
REV.
SHEET NO. 76



PUMPING UNITS DATA		
UNITS	CAPACITY	VALVE DIAMETER
PL	620 cfs	7.5 ft (90 in)
PS	325 cfs	5.0 ft (60 in)
TL	750 cfs	8.5 ft (102 in)

FLOOR PLAN 1 CT-101

NORTH

30' 15' 0 30'
SCALE IN FEET

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED L. MURRAY
DRAWN L. MURRAY
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVAL RECOMMENDED LOREN MURRAY REG. CE. NO. 42663
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

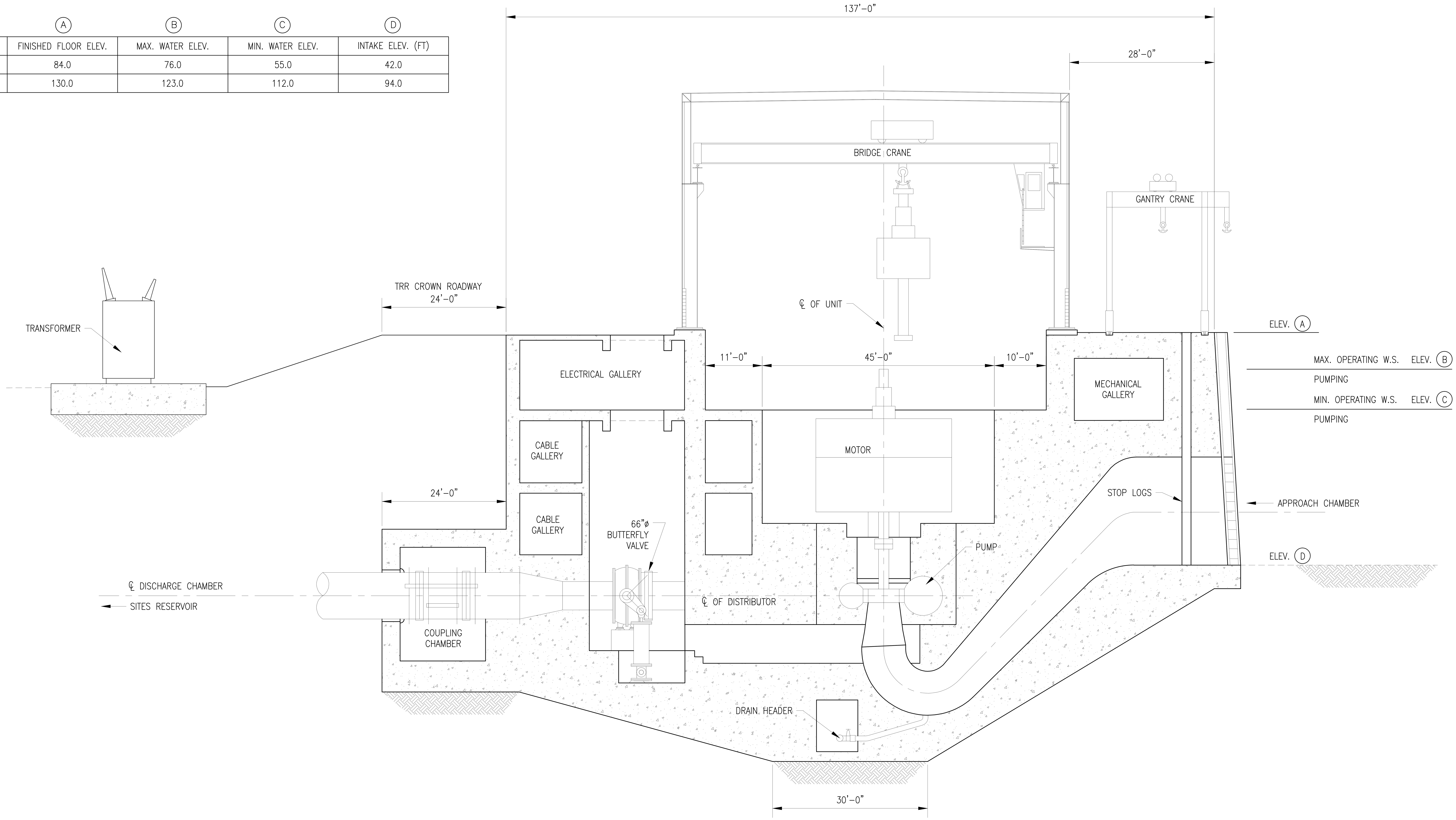
WSIP APPLICATION ATTACHMENT A4.A

TRR PUMP/GENERATION FACILITY
FLOOR PLAN

SPEC NO.
DRAWING NO. CT-301
REV.
SHEET NO. 77

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\11-TRR\DWGS\CT-301.DWG

PROPOSED P/G PLANT	(A) FINISHED FLOOR ELEV.	(B) MAX. WATER ELEV.	(C) MIN. WATER ELEV.	(D) INTAKE ELEV. (FT)
SACRAMENTO RIVER	84.0	76.0	55.0	42.0
TRR	130.0	123.0	112.0	94.0



TRANSVERSE SECTION 620-CFS PUMP UNIT (1 / CT–301)

10 5 0 10
SCALE IN FEET

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20–CAD\006–CIVIL\20–SHEETS\11–TRR\DWGS\CT–302.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: L. MURRAY
DRAWN: L. MURRAY
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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2020 L Street, Suite 300
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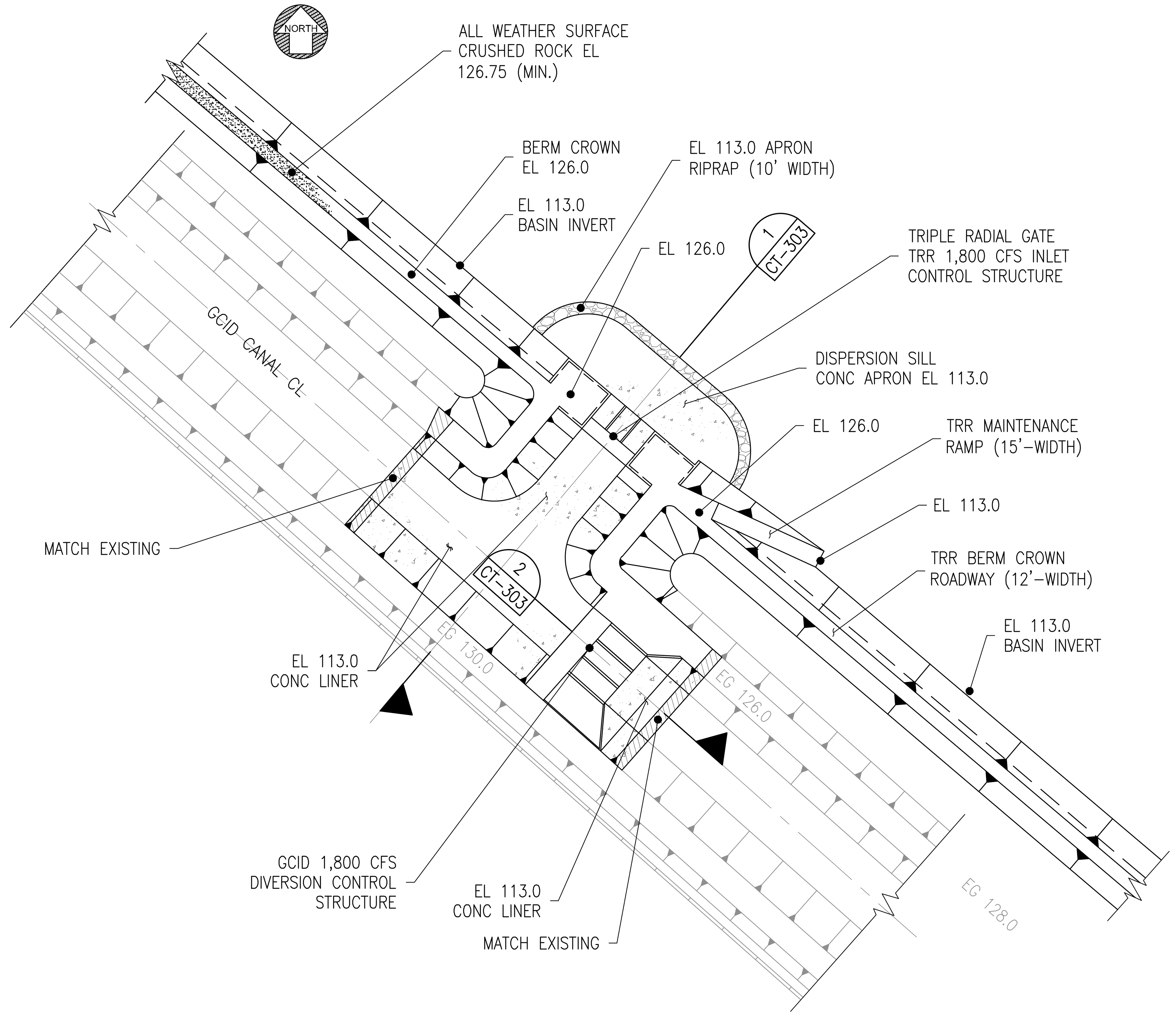
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

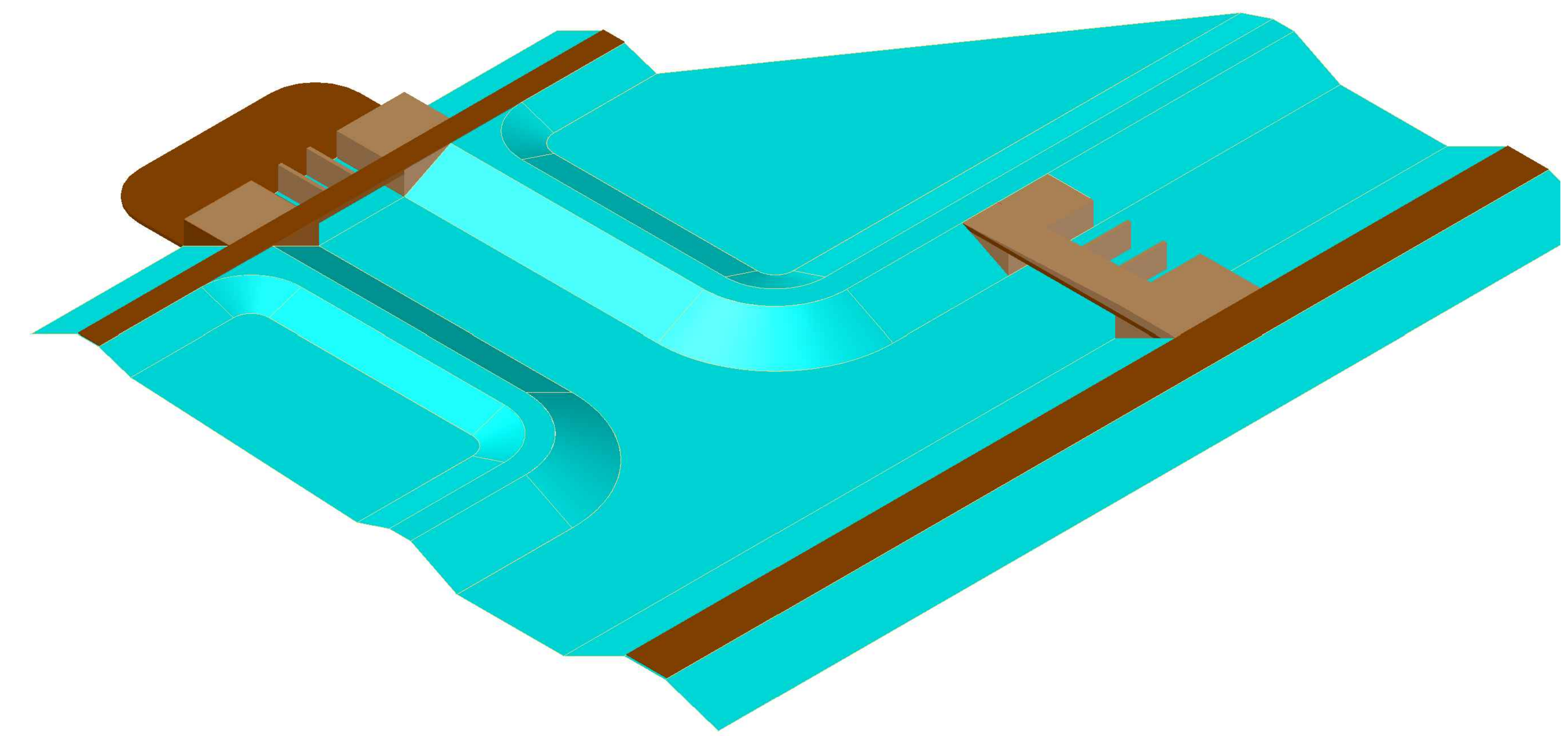
TRR PUMP/GENERATION FACILITY
TRANSVERSE SECTION 620-CFS UNIT

SPEC NO.
DRAWING NO. CT-302
REV.
SHEET NO. 78



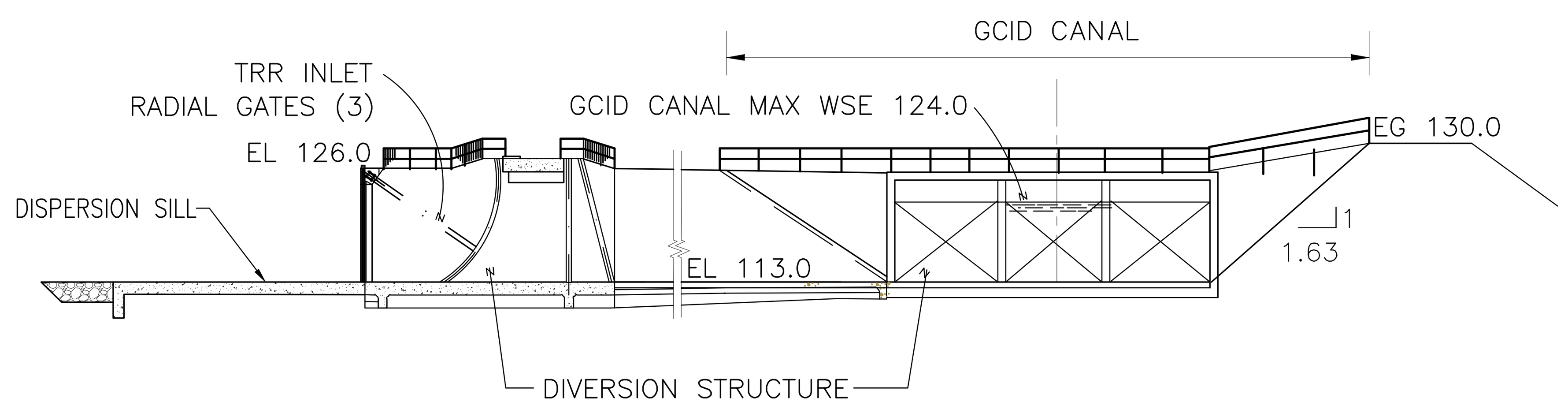
PLAN - TRR INLET AND DIVERSION STRUCTURES
– CT-101

1"=80.0'



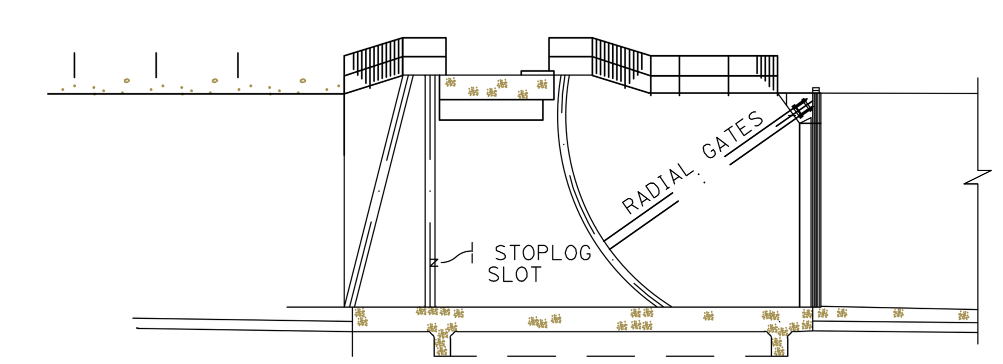
CONCEPTUAL OBLIQUE VIEW

NTS



TRR INLET AND DIVERSION STRUCTURES
1 CT-303

NTS



GCID 1,800 CFS CONTROL STRUCTURE
2 CT-303

NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED L. MURRAY
DRAWN L. MURRAY
CHECKED M. FORREST
APPROVAL RECOMMENDED
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ESTIMATE LEVEL FEASIBILITY

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T 916-414-5800 F 916-414-1557
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DATE 08/04/2017
APPROVAL RECOMMENDED LOREN MURRAY REG. CE. NO. 42663
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

TRR INLET AND GCID FLOW CONTROL DIVERSION STRUCTURES

SPEC NO.
DRAWING NO. CT-303
REV.
SHEET NO. 79

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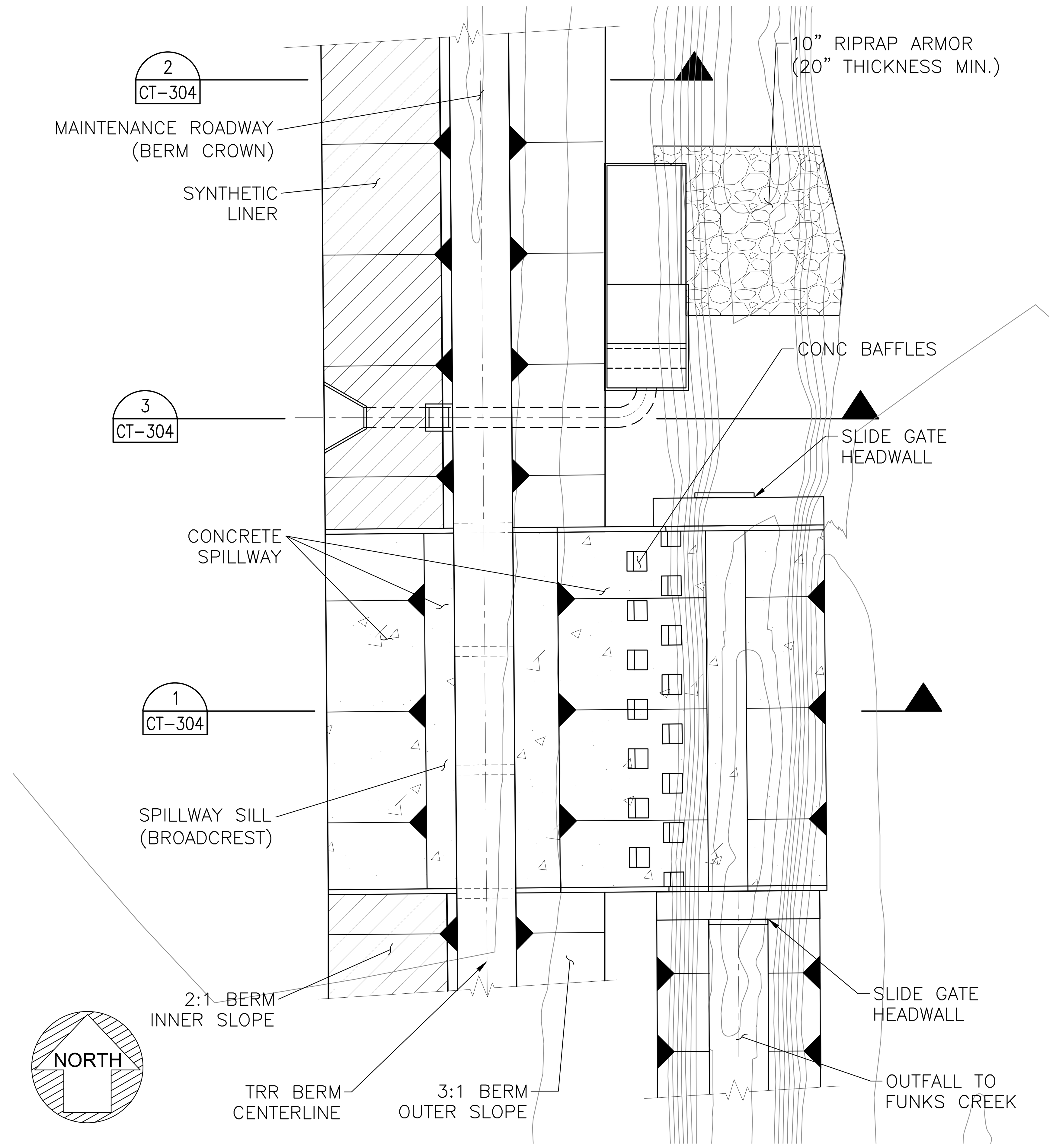
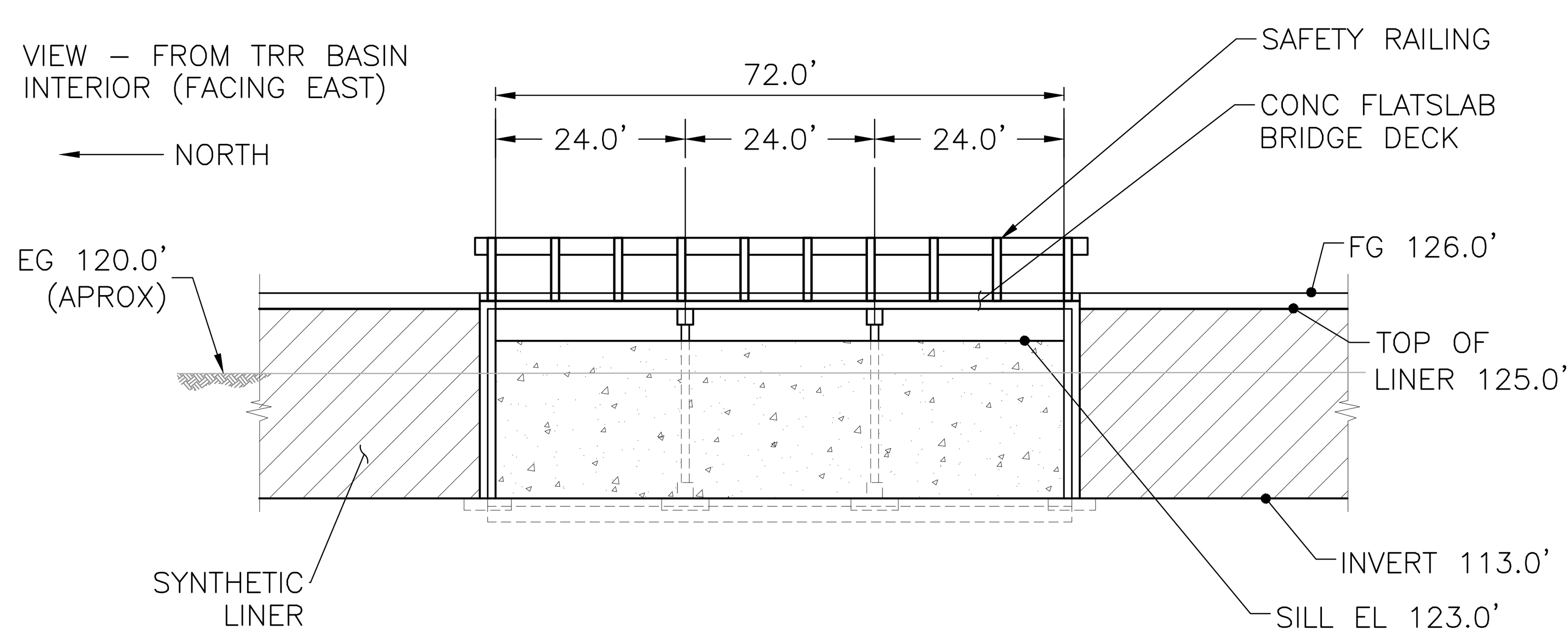
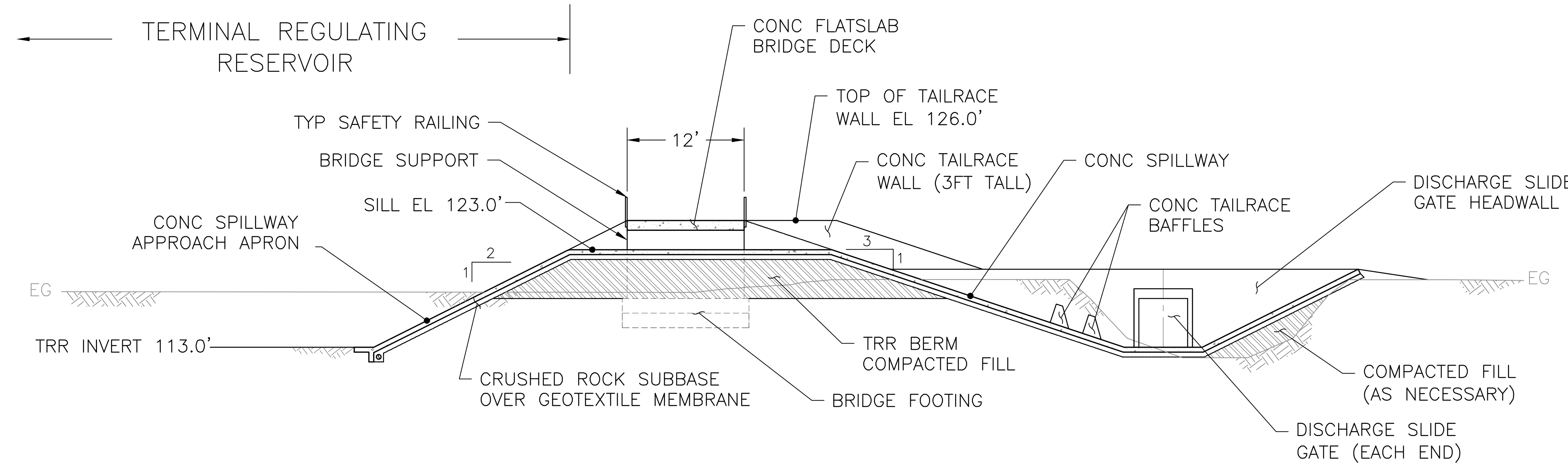
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\CIVIL\20-SHEETS\11-TRR\DWGS\CT-303.DWG



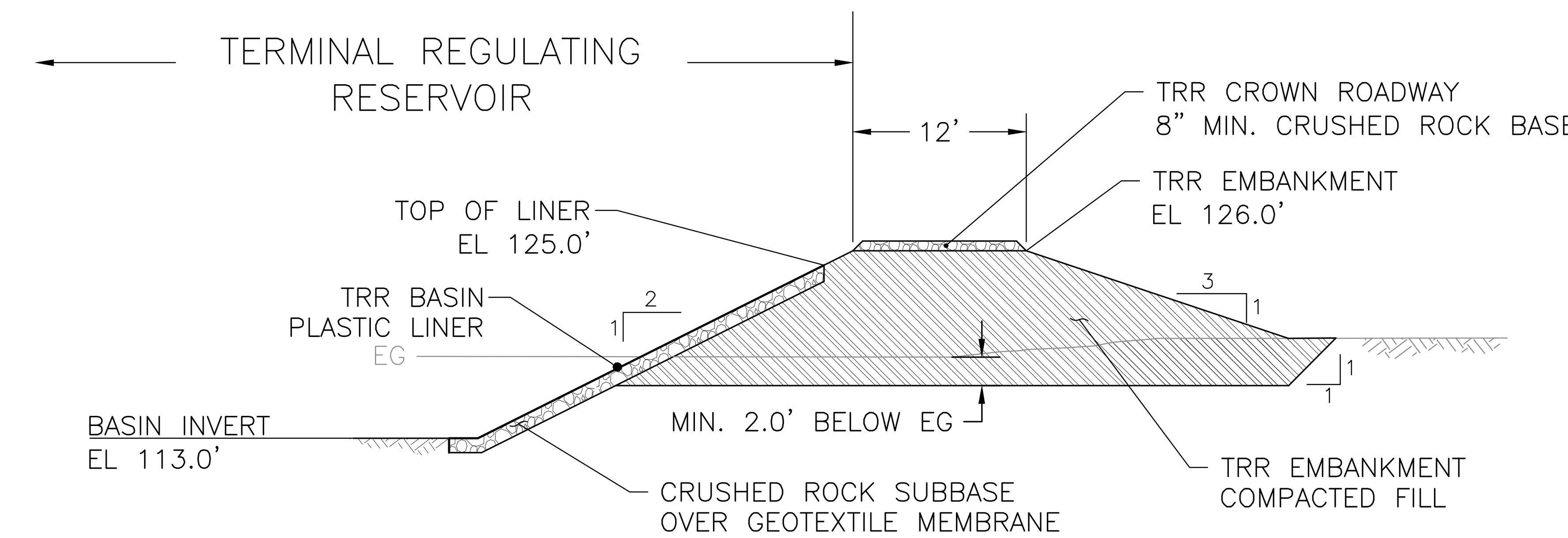
PLAN - TRR 200-CFS SPILLWAY
1"=20.0'
CT-101



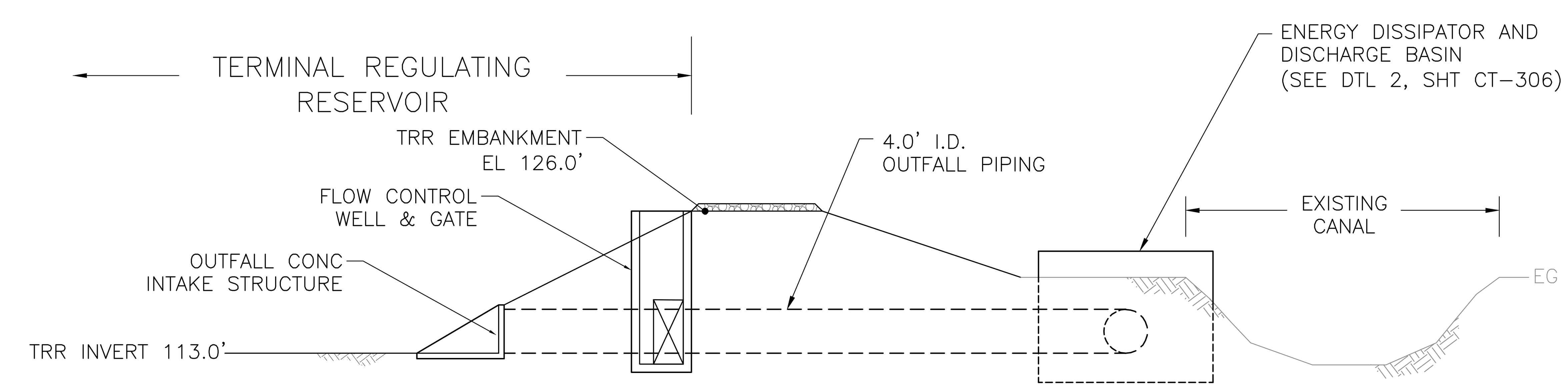
PROFILE - TRR 200-CFS SPILLWAY
NTS



CROSS SECTION - TRR 200-CFS SPILLWAY
1"=10'
1
CT-304



CROSS SECTION - EMBANKMENT
1"=10'
2
CT-304



CROSS SECTION - 150-CFS OUTFALL
1"=10'
3
CT-304

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: L. MURRAY
DRAWN: L. MURRAY
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVAL RECOMMENDED: LOREN MURRAY, REG. CE. NO. 42663
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

TRR 200-CFS SPILLWAY
150-CFS OUTLET WORKS

SPEC NO.
DRAWING NO. CT-304
REV.
SHEET NO. 80

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DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910-CAD\00-CIVIL\20-SHEETS\11-TRR\DWGS\CT-304.DWG

TYP SECTION 1 CT-101
NTS

TYP SECTION 2 CT-101
NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED L. MURRAY
DRAWN L. MURRAY
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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AECOM Technical Services, Inc.
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Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED LOREN MURRAY
REG. CE. NO. 42663
APPROVED JOE BARNES
REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

TRR BASIN
TYPICAL SECTIONS

SPEC NO.
DRAWING NO. CT-305
REV.
SHEET NO. 81

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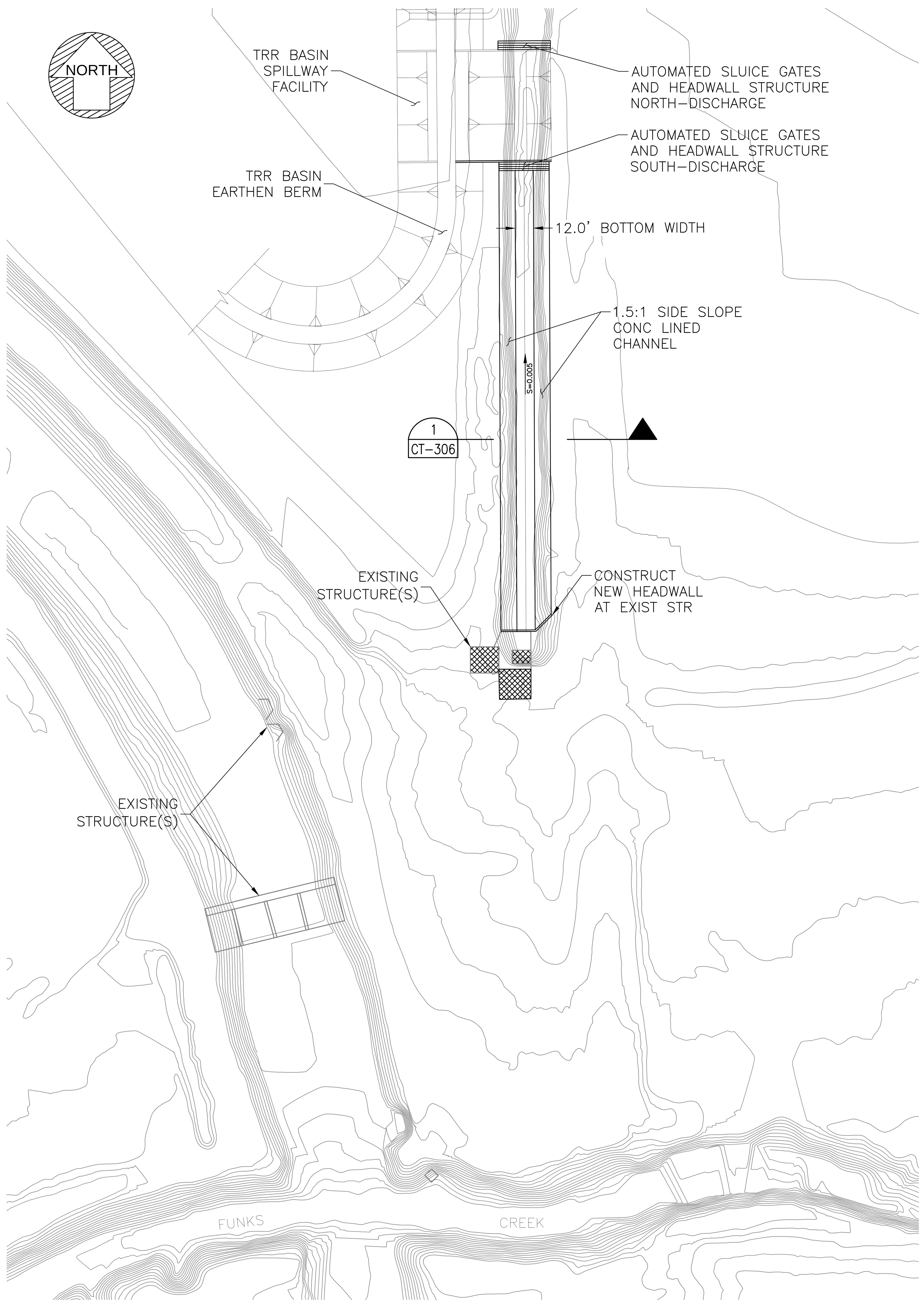
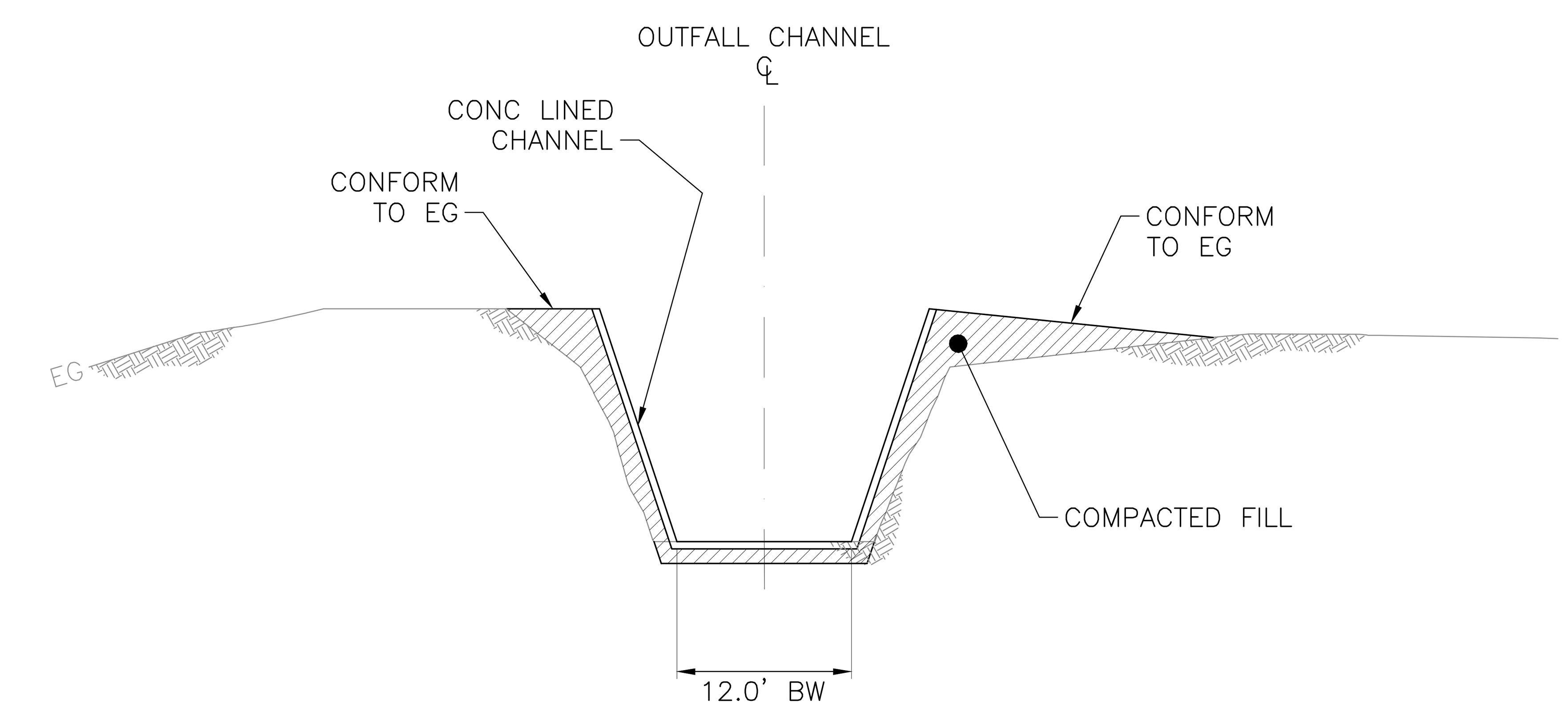
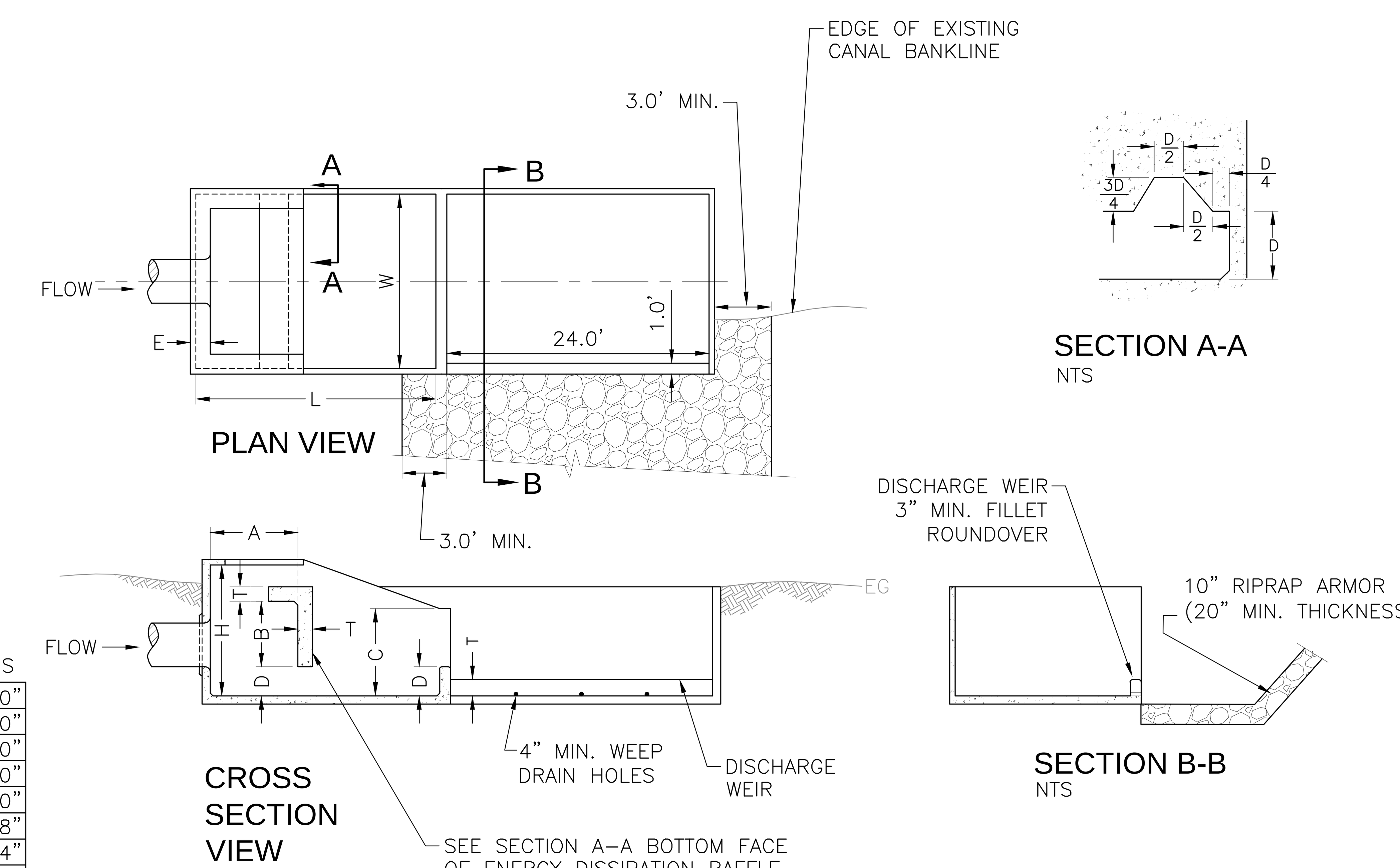
FUNKS CREEK OUTFALL CHANNEL



PLAN - FUNKS CREEK OUTFALL CHANNEL – CT–101
1"=50.0'



TYP SECTION 1 CT–306
1"=10'



DIMENSIONS	
H	12'–0"
L	21'–0"
A	8'–0"
B	6'–0"
C	8'–0"
D	2'–8"
E	1'–4"
T	1'–4"
W	16'–0"

DETAIL 150-CFS ENERGY DISSIPATOR/DISCHARGE BASIN 2 CT–304
NTS

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: L. MURRAY
DRAWN: L. MURRAY
CHECKED: M. FORRSET
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED: MIKE FORREST, REG. CE. NO. 27855
DATE: 08/04/2017
APPROVAL RECOMMENDED: LOREN MURRAY, REG. CE. NO. 42663
APPROVED: JOE BARNES, REG. CE. NO. 40105

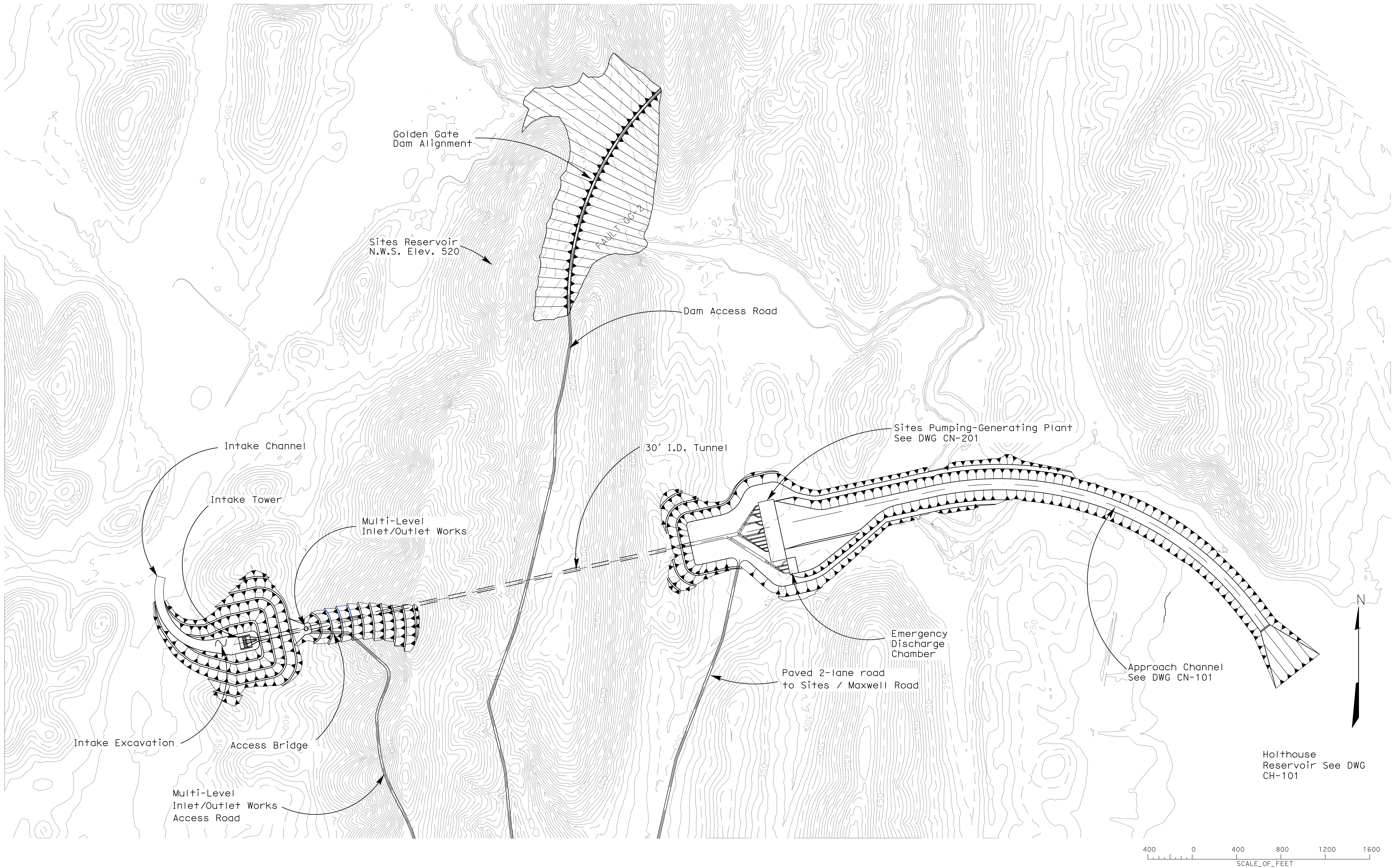
Sites

WSIP APPLICATION ATTACHMENT A4.A

TRR 200-CFS SPILLWAY

SPEC NO.
DRAWING NO. CT-306
REV.
SHEET NO. 82

PLOTTED BY: BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\910–CAD\006–CIVIL\20–SHEETS\11–TRR\DWG\CT–306.DWG



REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: J. BARNES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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APPROVED: JOE BARNES, REG. CE. NO. 40105

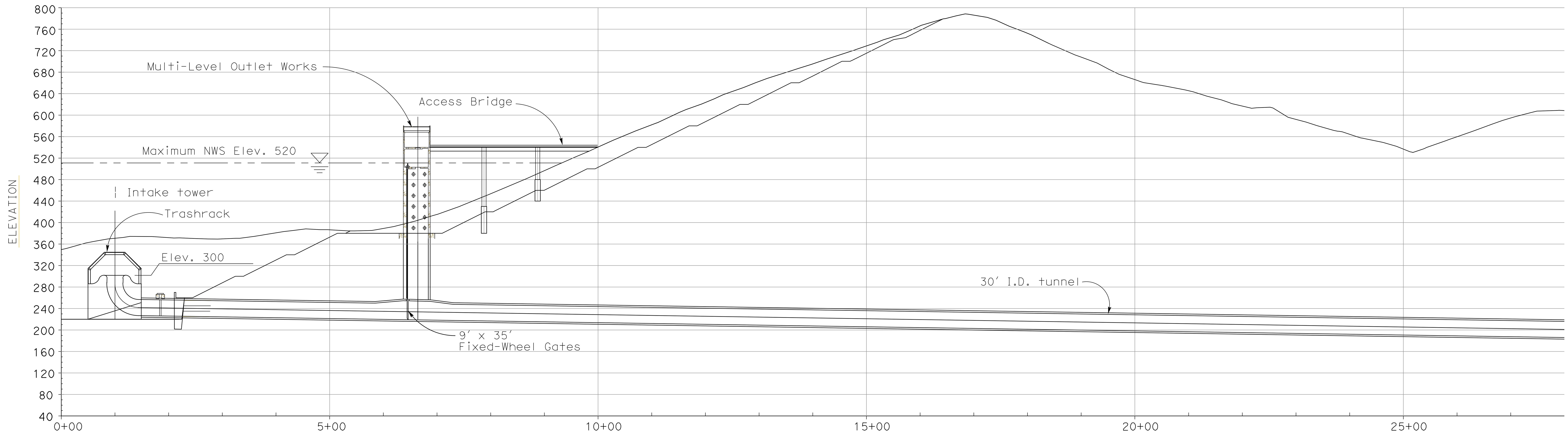
Sites

WSIP APPLICATION ATTACHMENT A4.A

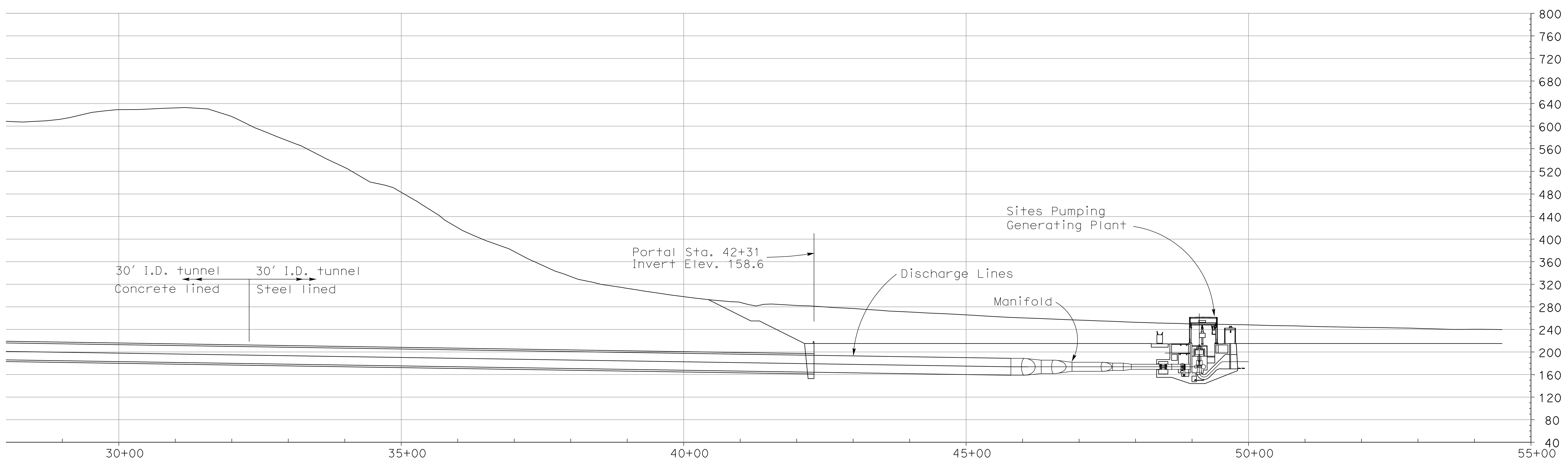
INLET/OUTLET TUNNEL PLAN

SPEC NO.
DRAWING NO. CI-101
REV.
SHEET NO. 83

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\60-CAD\006-CIVIL\20-SHEETS\06-SITES INLET OUTLET STRUCTURE\CI-101.DWG



PROFILE
STA 00+00 to STA 27+00
Scale: 1"=100'



PROFILE
STA 27+00 to STA 55+00
Scale: 1"=100'

1" = 100' 100 0 100 200 300 400
SCALE_OF_FEET

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED J. BARNES
DRAWN N. KARUNATILAKA
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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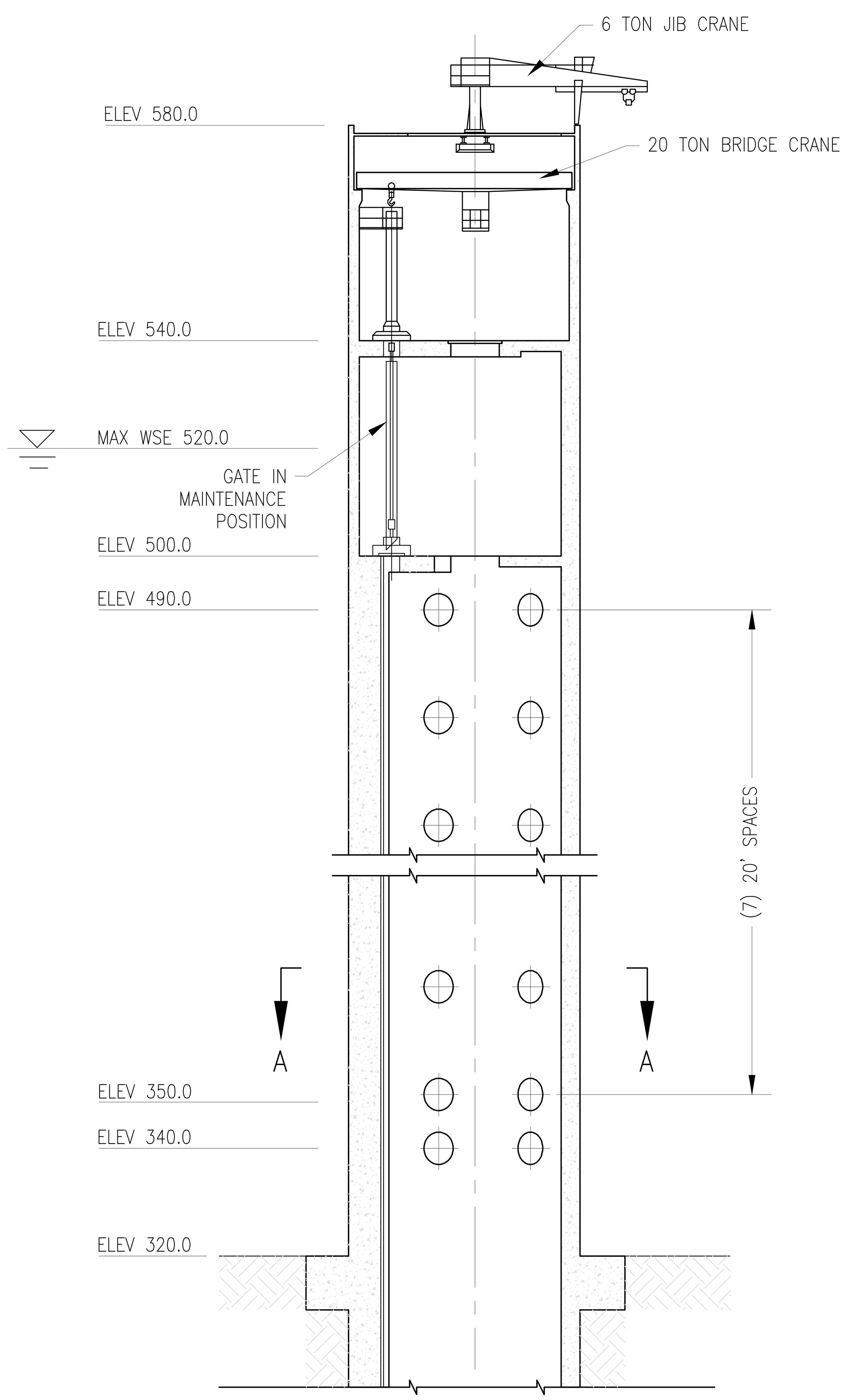
DATE 08/04/2017
APPROVAL RECOMMENDED LOREN MURRAY REG. CE. NO. 42663
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
INLET/OUTLET TUNNEL
PROFILE

SPEC NO.
DRAWING NO. CI-201
REV.
SHEET NO. 84

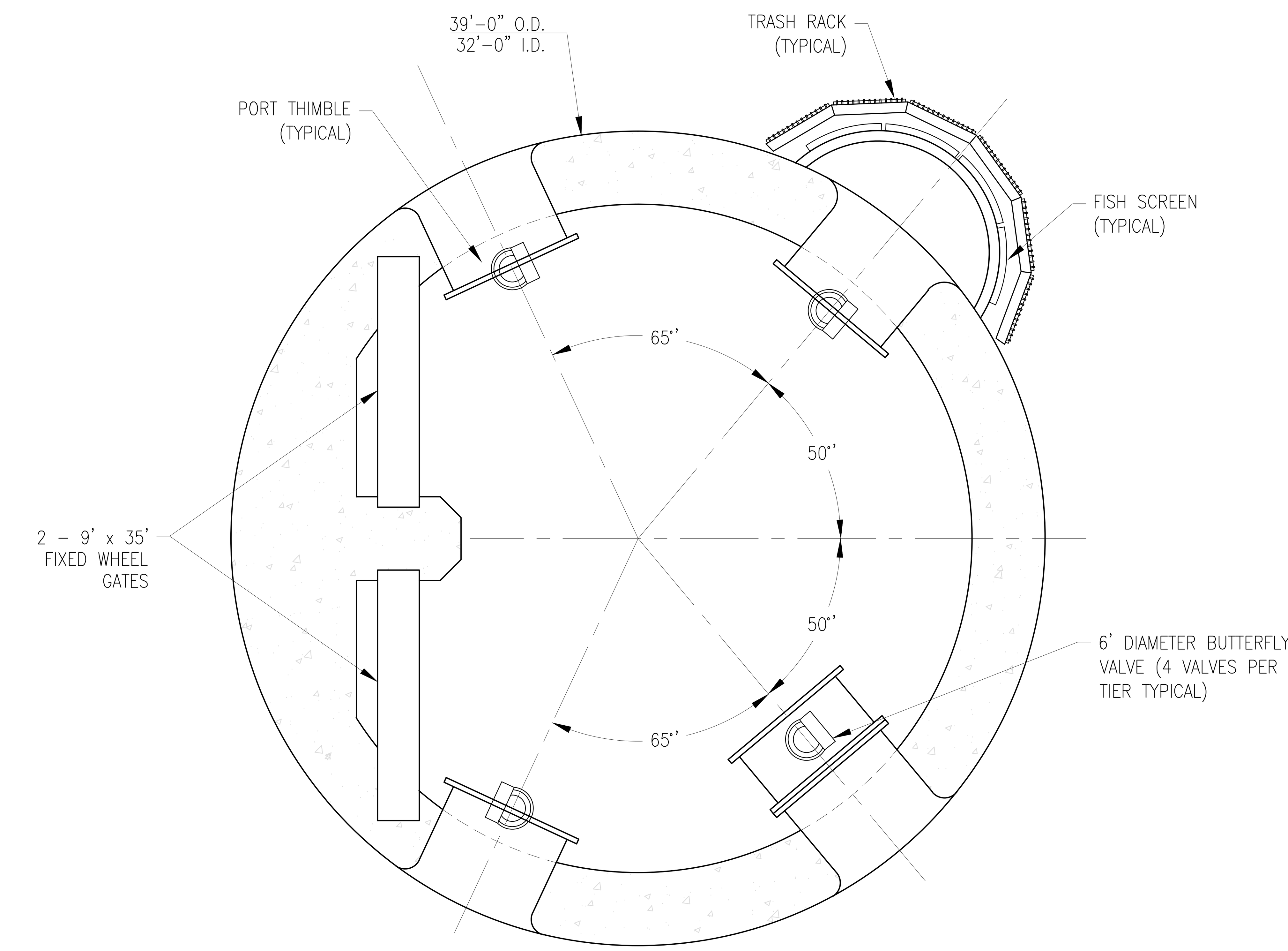
PLOTTED BY:BARNHART, DENNIS -August 8, 2017-3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\0-CAD\006-CIVIL\20-SHEETS\06-SITES INLET-OUTLET STRUCTURE\CI-201.DWG



VERTICAL SECTION

20' 0 20' 40'

SCALE: 1" = 20'



SECTION A–A

5' 0 5' 10' 15' 20'

SCALE: 1" = 5'

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: J. BARNES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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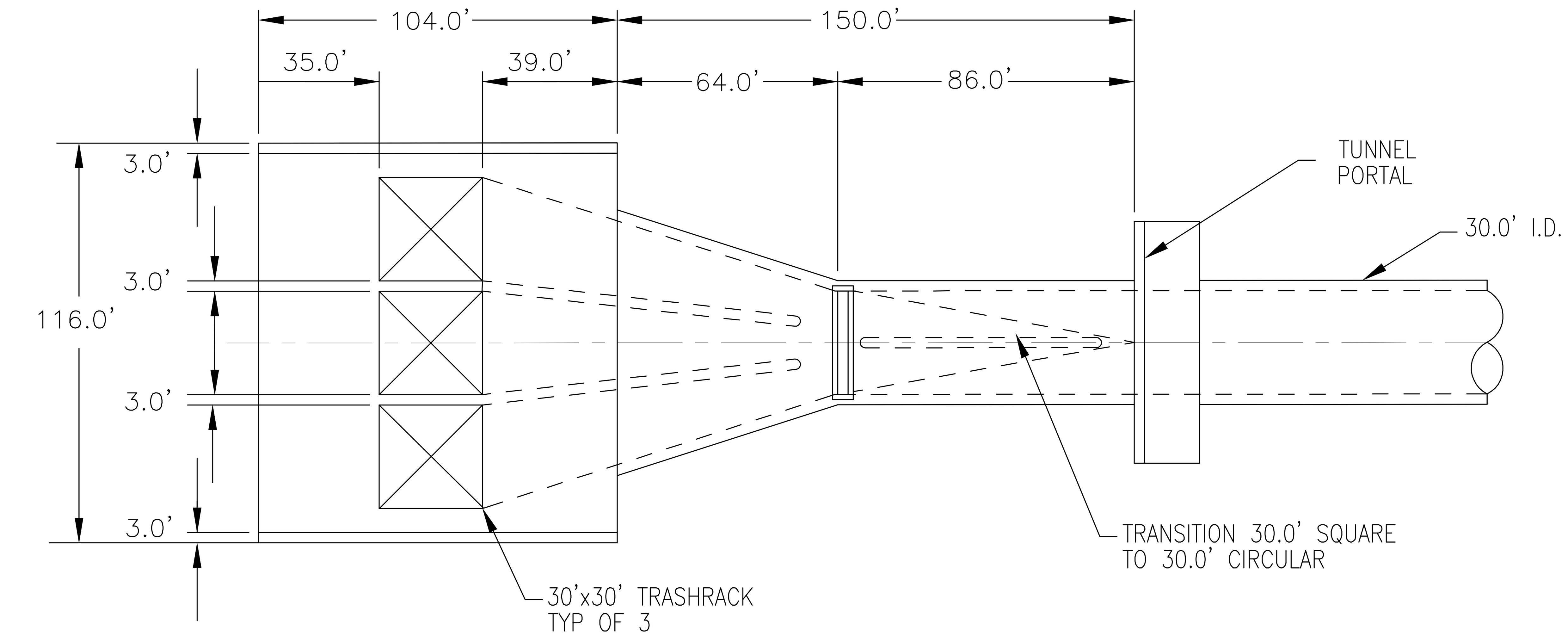
APPROVAL RECOMMENDED: LOREN MURRAY, REG. CE. NO. 42663
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

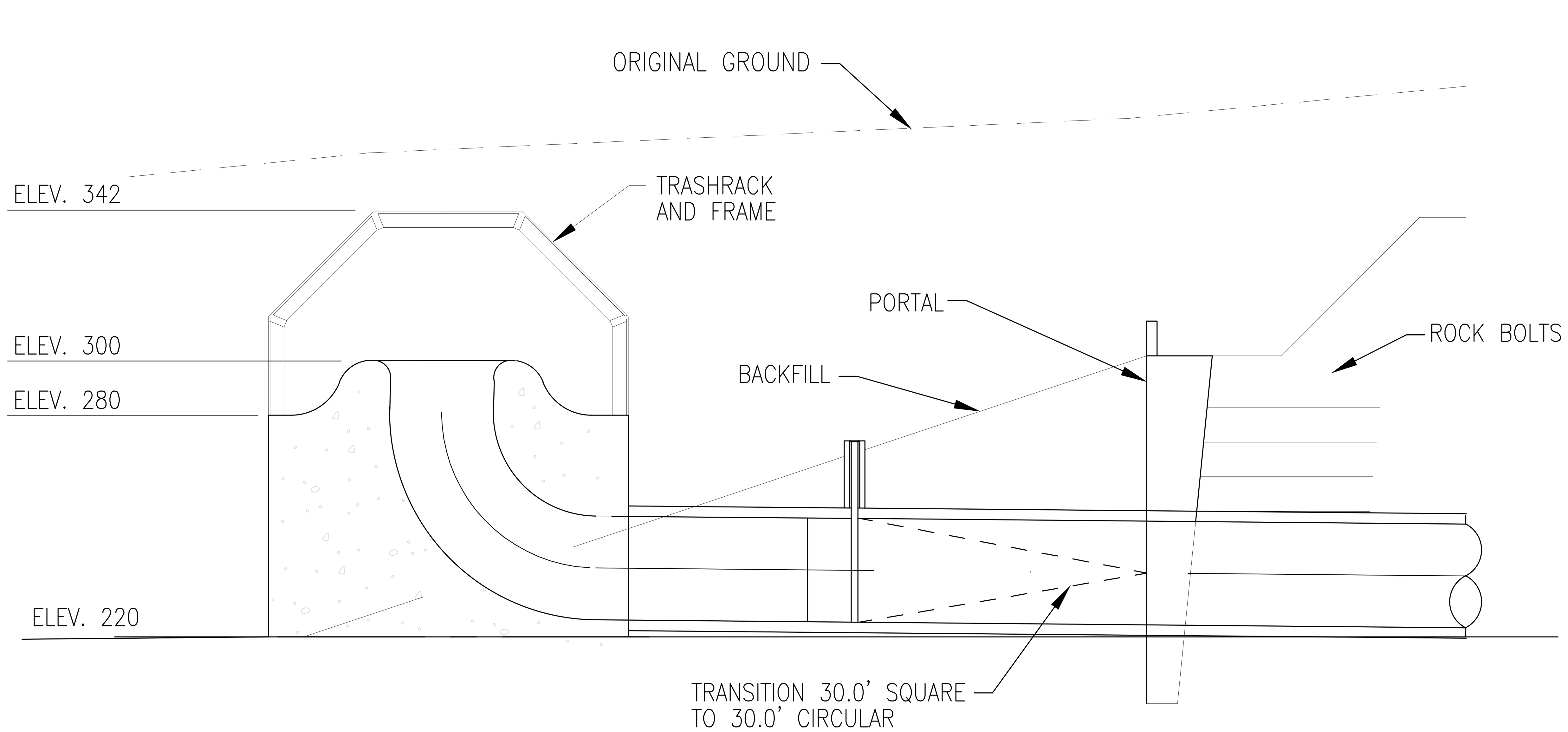
WSIP APPLICATION ATTACHMENT A4.A

MULTI-LEVEL INLET/OUTLET TOWER STRUCTURE DETAILS

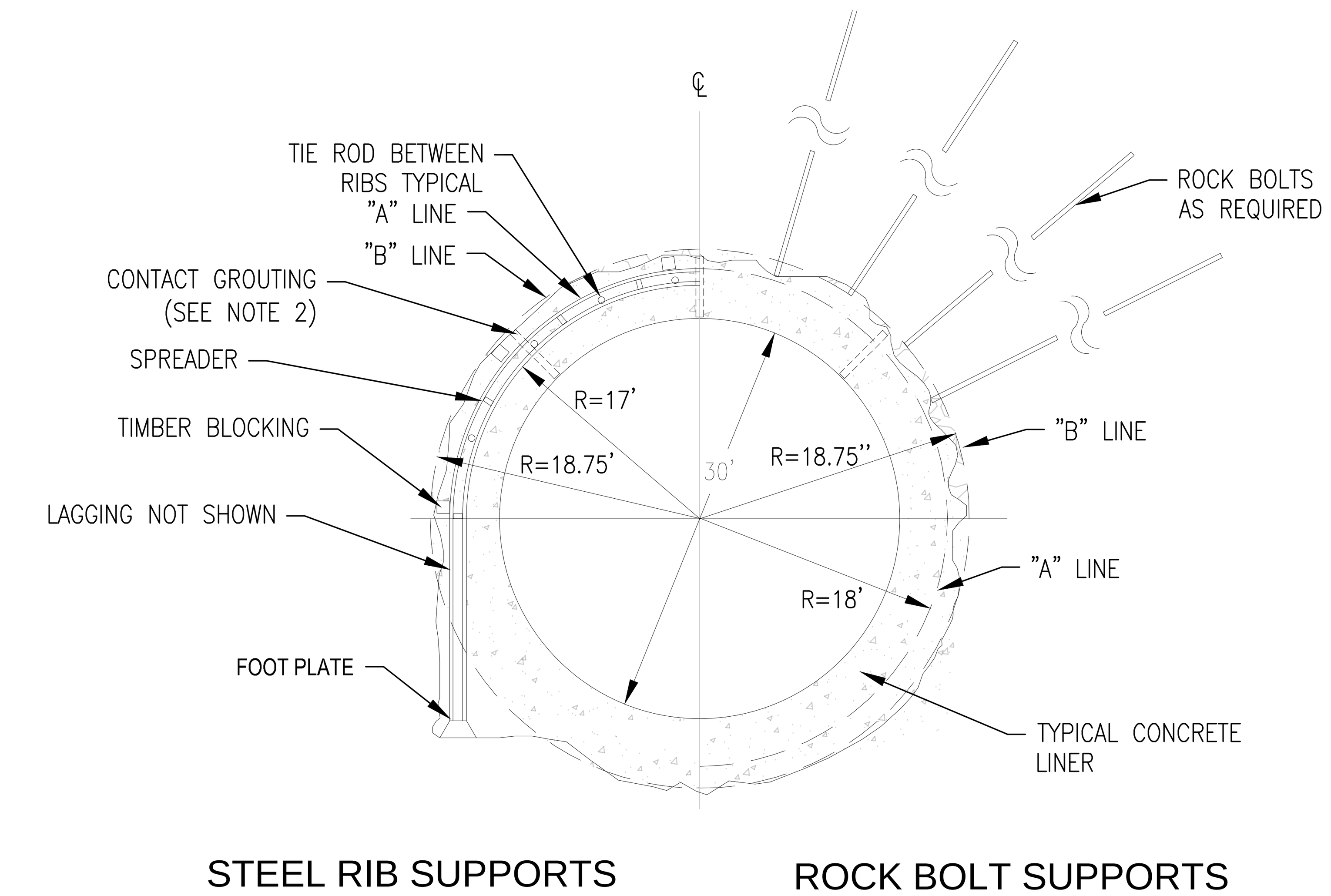
SPEC NO.
DRAWING NO. CI-501
REV.
SHEET NO. 85



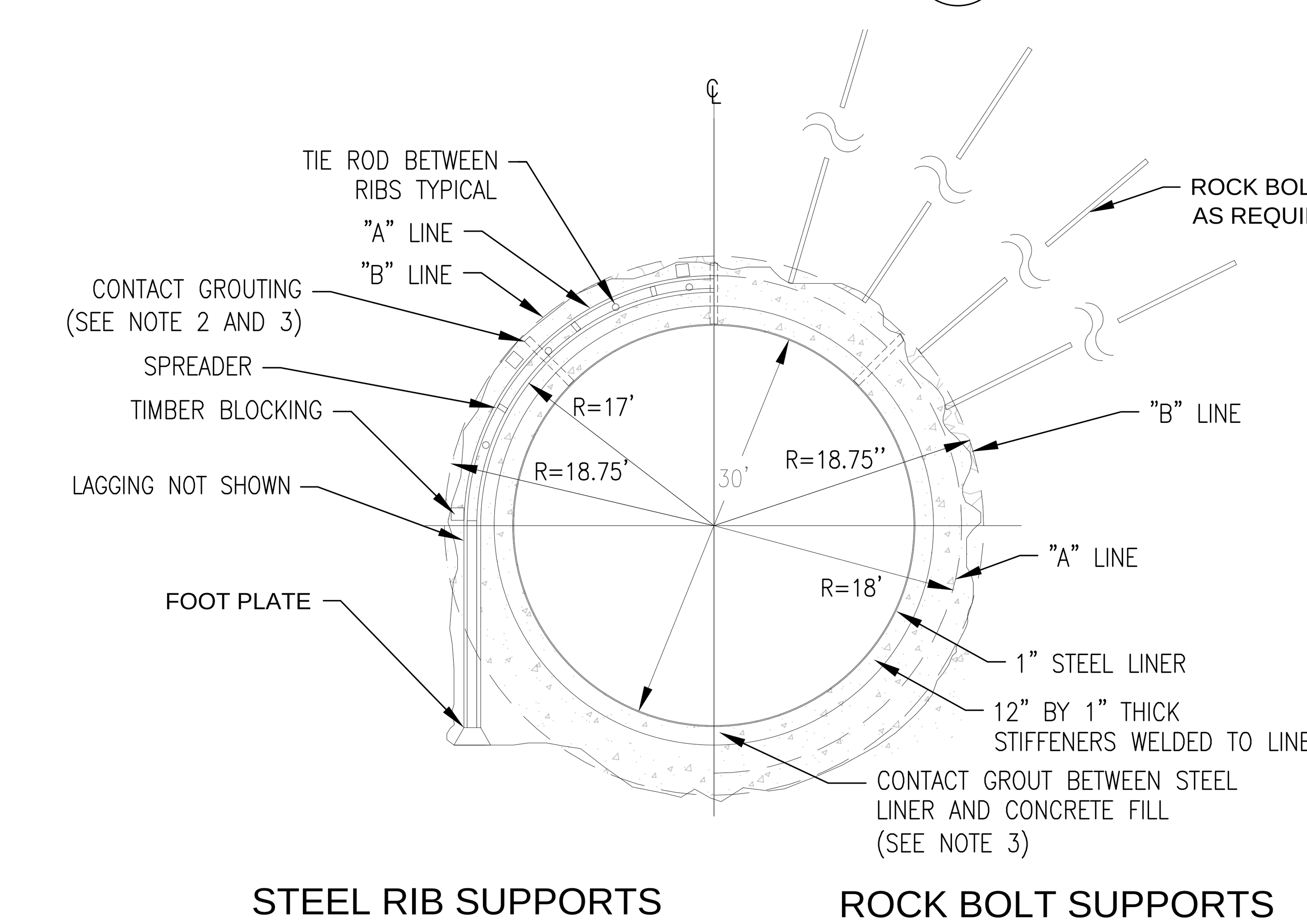
PLAN
N.T.S.



PROFILE
N.T.S.



CONCRETE LINED TUNNEL (A / -)
SCALE: NTS



CONCRETE LINED TUNNEL WITH STEEL LINER (B / -)
SCALE: NTS

NOTES:

1. CONCRETE AND STEEL LINED TUNNEL SECTIONS BASED UPON ANGELES TUNNEL DETAILS.
2. FOR CONTACT GROUTING, DRILL AND GROUT 8 GROUT HOLES AROUND PERIMETER RADIALLY SPACED AT 45°. CONTACT GROUT AT 10' INTERVALS ALONG THE TUNNEL.
3. FOR CONTACT GROUTING AROUND STEEL LINED SECTION, DRILL AND TAP LINER FOR GROUTING NIPPLE. REMOVE NIPPLE AND PLUG WELD LINER AFTER GROUTING.
4. GROUT CONTACT BETWEEN THE STEEL LINER AND CONCRETE BACKFILL AT INVERT AND SOFFIT AT 10' INTERVALS ALONG THE STEEL LINED SECTION OF TUNNEL.
5. CONCRETE FOR CONCRETE LINER SHALL BE 4,000 PSI.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: J. BARNES
DRAWN: N. KARUNATILAKA
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
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REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: LOREN MURRAY, REG. CE. NO. 42663
APPROVED: JOE BARNES, REG. CE. NO. 40105

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WSIP APPLICATION ATTACHMENT A4.A

MULTI-LEVEL INLET/OUTLET TOWER STRUCTURE AND TUNNEL DETAILS

SPEC NO.
DRAWING NO. CI-502
REV.
SHEET NO. 86

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\06-SITES INLET-OUTLET STRUCTURE\CI-502.DWG

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DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-101.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: L. CHAUHAN
DRAWN: J. TANG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE: 08/04/2017
APPROVAL RECOMMENDED: DWAYNE DEUTSCHER, REG. CE. NO. 34557
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE SITE PLAN

SPEC NO.
DRAWING NO. CF-101
REV.
SHEET NO. 87

FEASIBILITY-LEVEL FINAL
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: CH2MHILL
DRAWN: CH2MHILL
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

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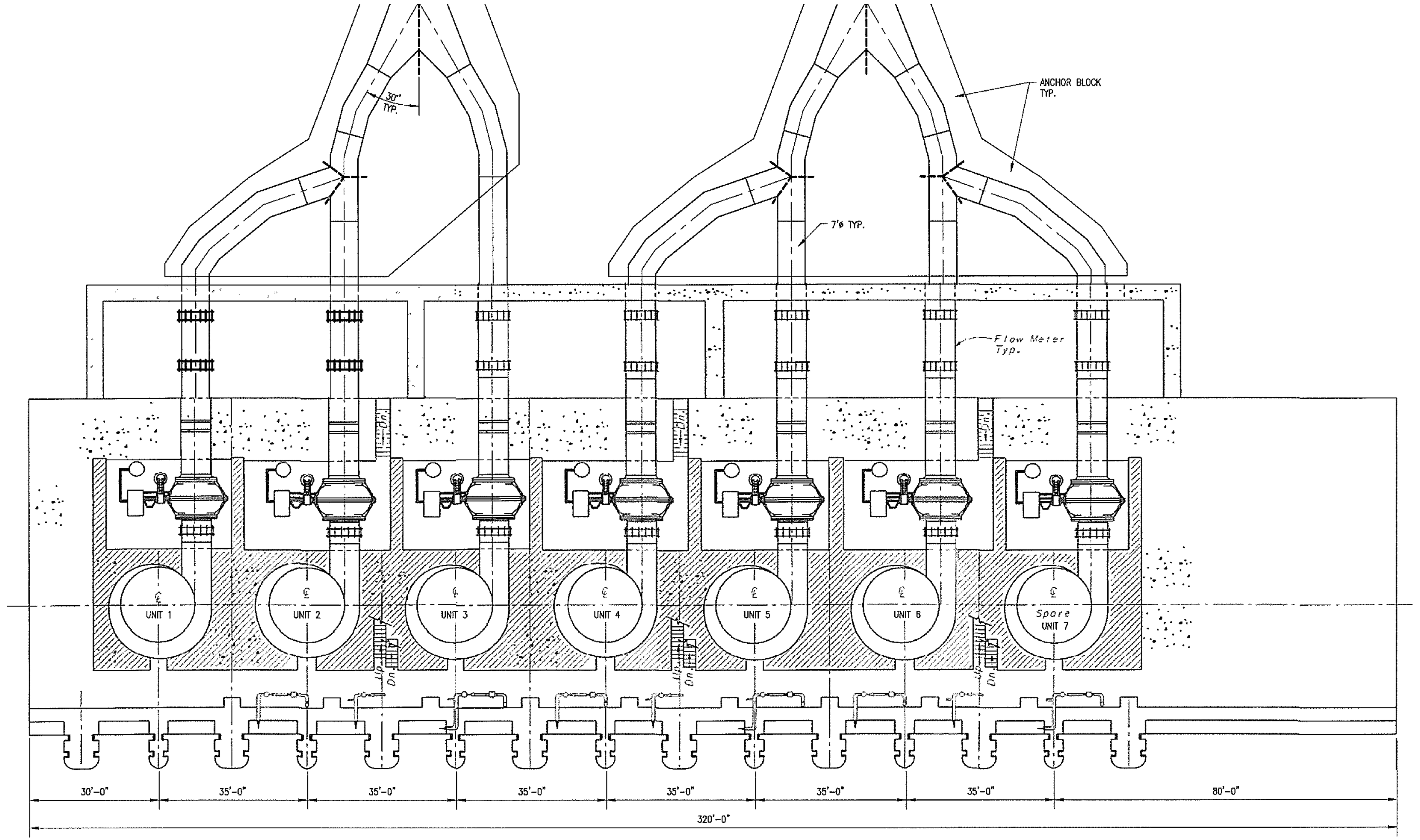
REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
TOP PLAN

SPEC NO.
DRAWING NO. CF-102
REV.
SHEET NO. 88

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\10-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-102.DWG



PUMPING - GENERATING PLANT - GENERAL ARRANGEMENT
LOWER ELEVATION PLAN

Not to Scale

NOTES

1. Floor plan shown with 4 - 500 cfs units. and 1 - 500 cfs spare unit.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED CH2MHILL
DRAWN CH2MHILL
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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T 916-414-5800 F 916-414-1557
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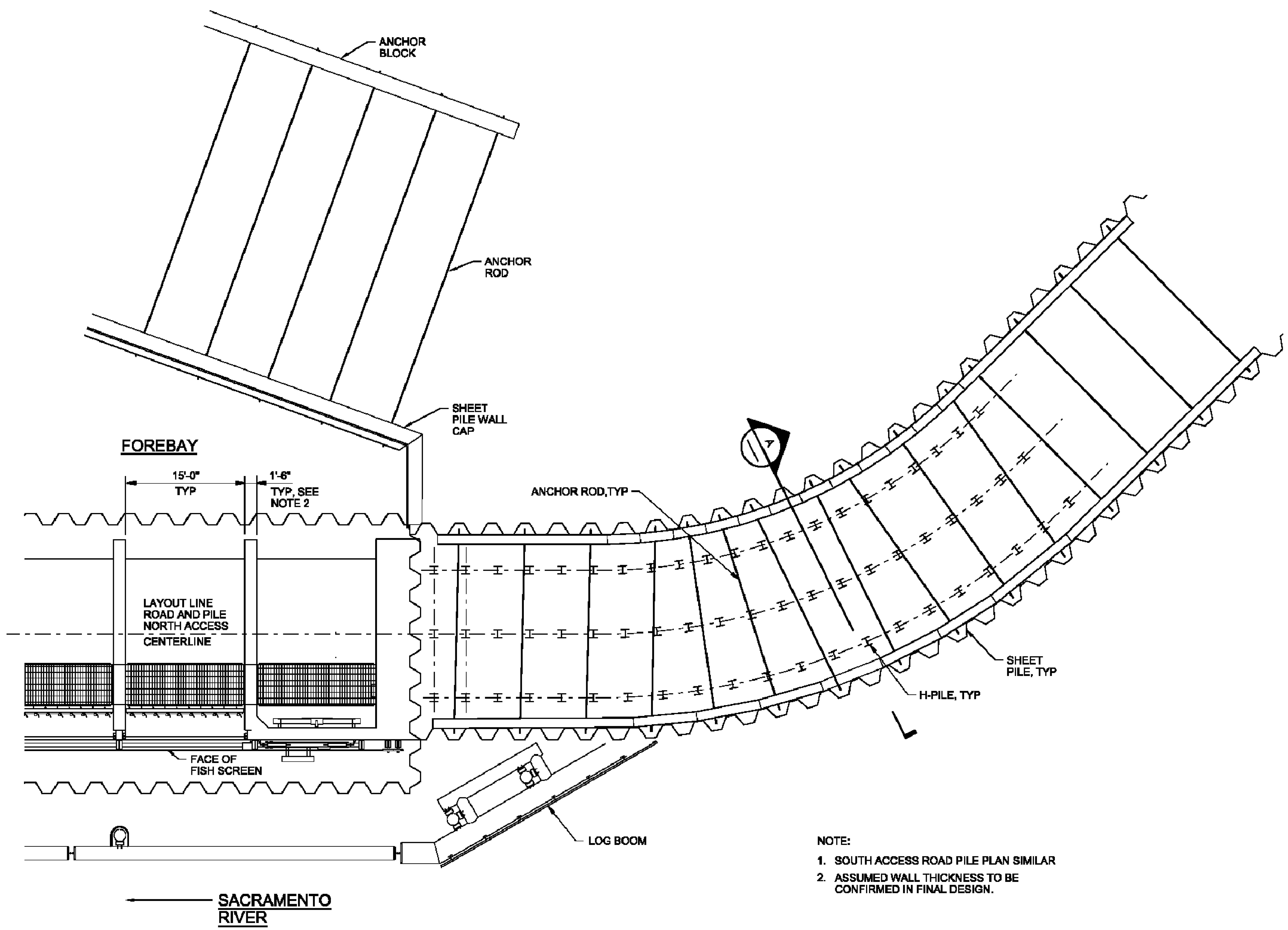
REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
LOWER LEVEL PLAN

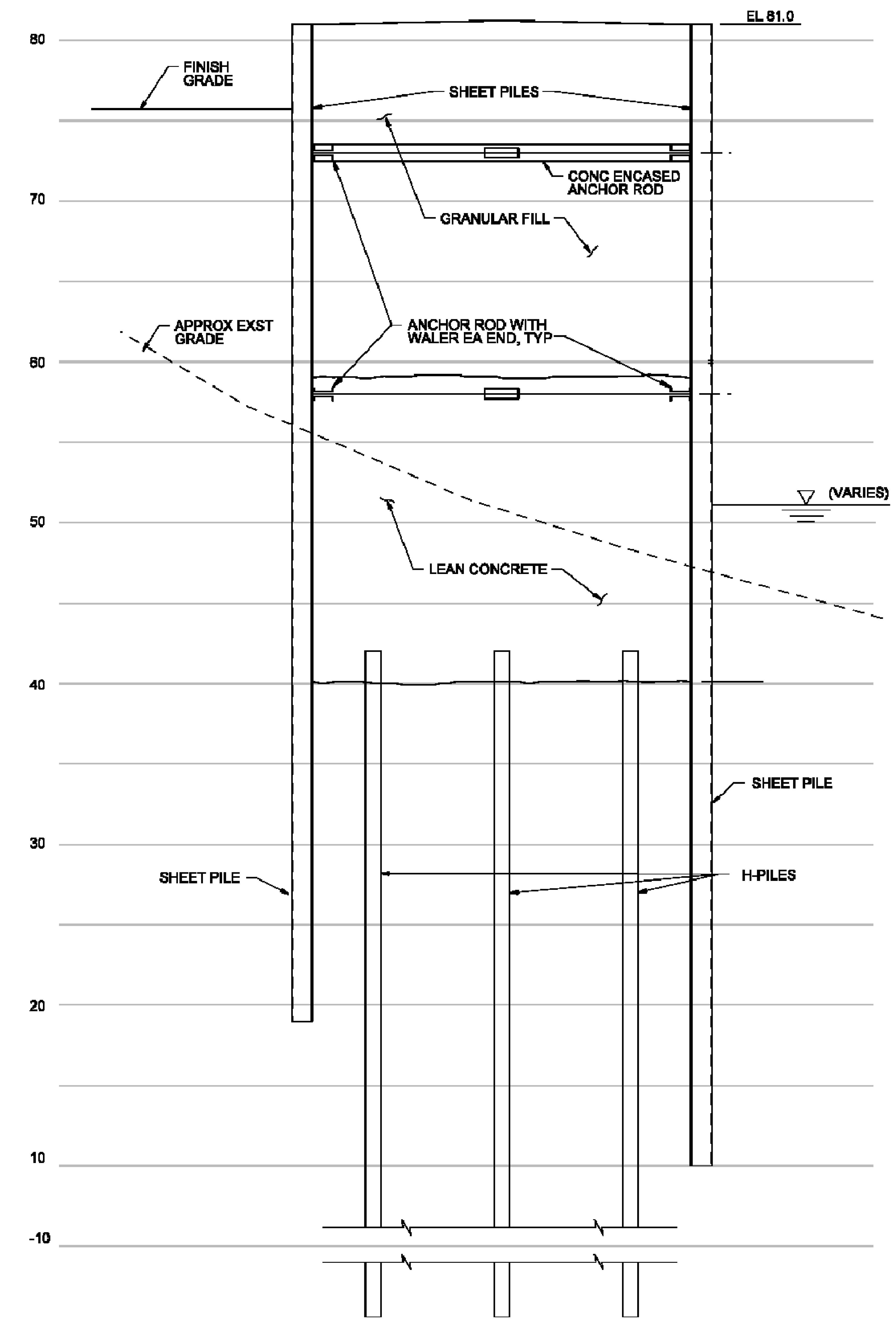
SPEC NO.
DRAWING NO. CF-103
REV.
SHEET NO. 89

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20–CAD\006–CIVIL\20–SHEETS\09–PUMPING GENERATING PLANTS\CF–103.DWG



NOTE:
1. SOUTH ACCESS ROAD PILE PLAN SIMILAR
2. ASSUMED WALL THICKNESS TO BE CONFIRMED IN FINAL DESIGN.

NORTH ACCESS ROAD - PILE PLAN
1/8"=1'-0"



NORTH ACCESS ROAD

A SECTION
3/16"=1'-0"

FEASIBILITY-LEVEL FINAL NOT FOR CONSTRUCTION

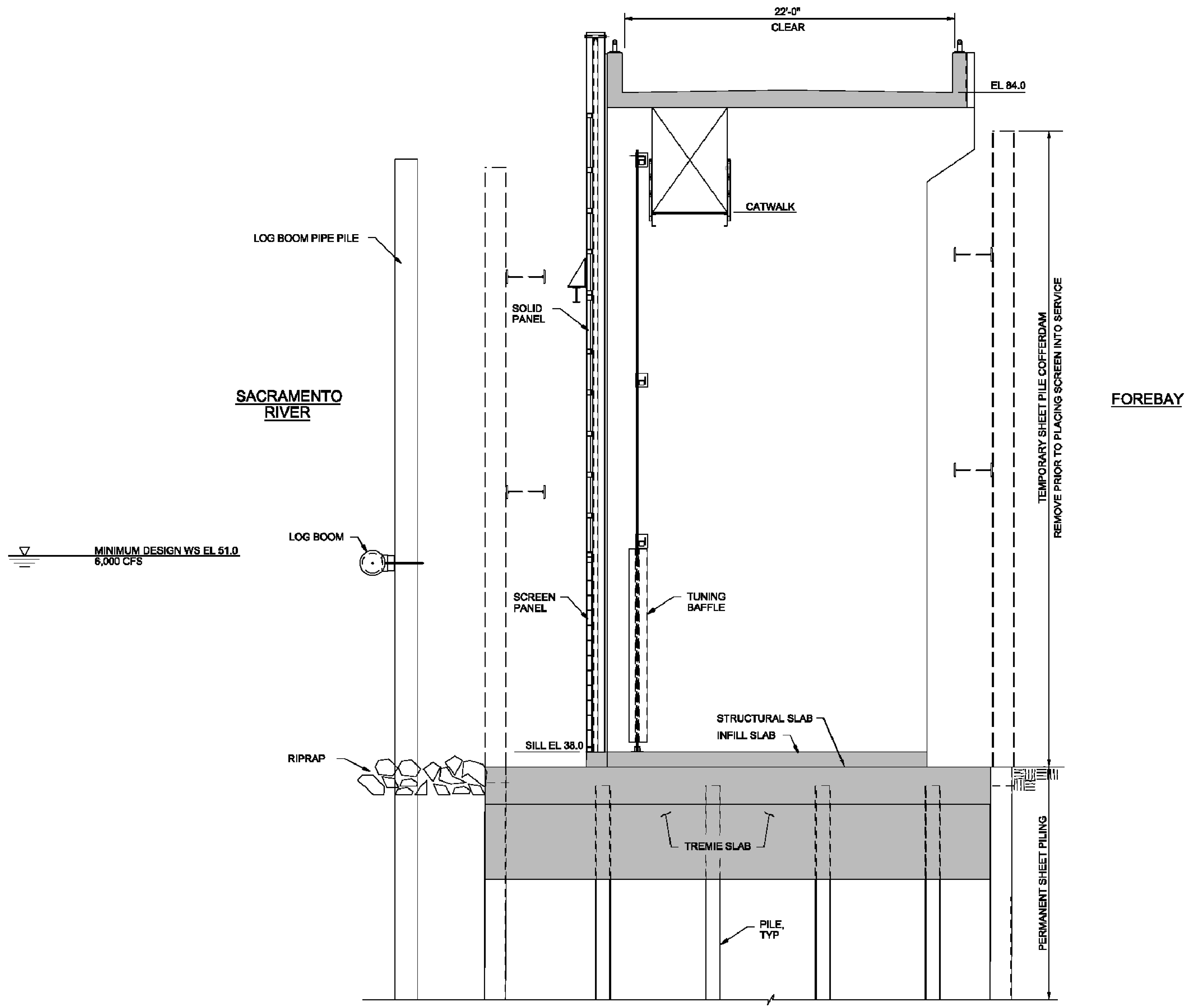
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(e)(5)(D)	WSIP	JB
REV	DATE	DESCRIPTION	SUB.	APPD

DESIGNED CH2MHILL	APPROVAL RECOMMENDED	AECOM	REVIEWED MIKE FORREST REG. CE. NO. 27855 — DATE 08/04/2017
DRAWN CH2MHILL	APPROVAL BY	AECOM Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, Ca 95811 T 916-414-5800 F 916-414-1557 www.aecom.com	APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
CHECKED M. FORREST	ESTIMATE LEVEL FEASIBILITY		APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
ACCESS ROAD PILE PLAN AND SECTION

SPEC NO.
DRAWING NO. CF-301
REV.
SHEET NO. 90



TYPICAL SCREEN BAY

A SECTION
1/4"=1'-0"
EXHIBIT 4

FEASIBILITY-LEVEL FINAL
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: CH2MHILL
DRAWN: CH2MHILL
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
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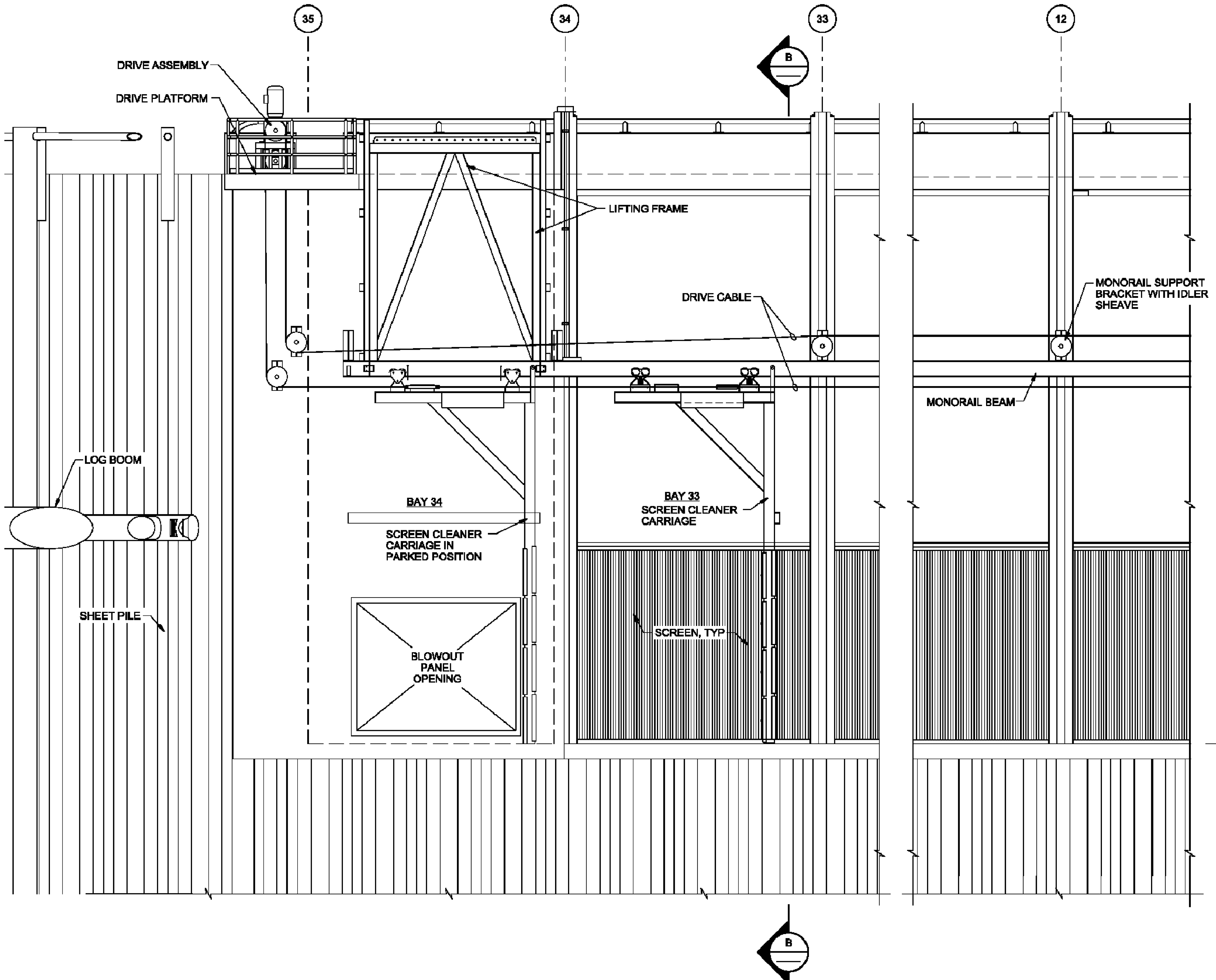
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

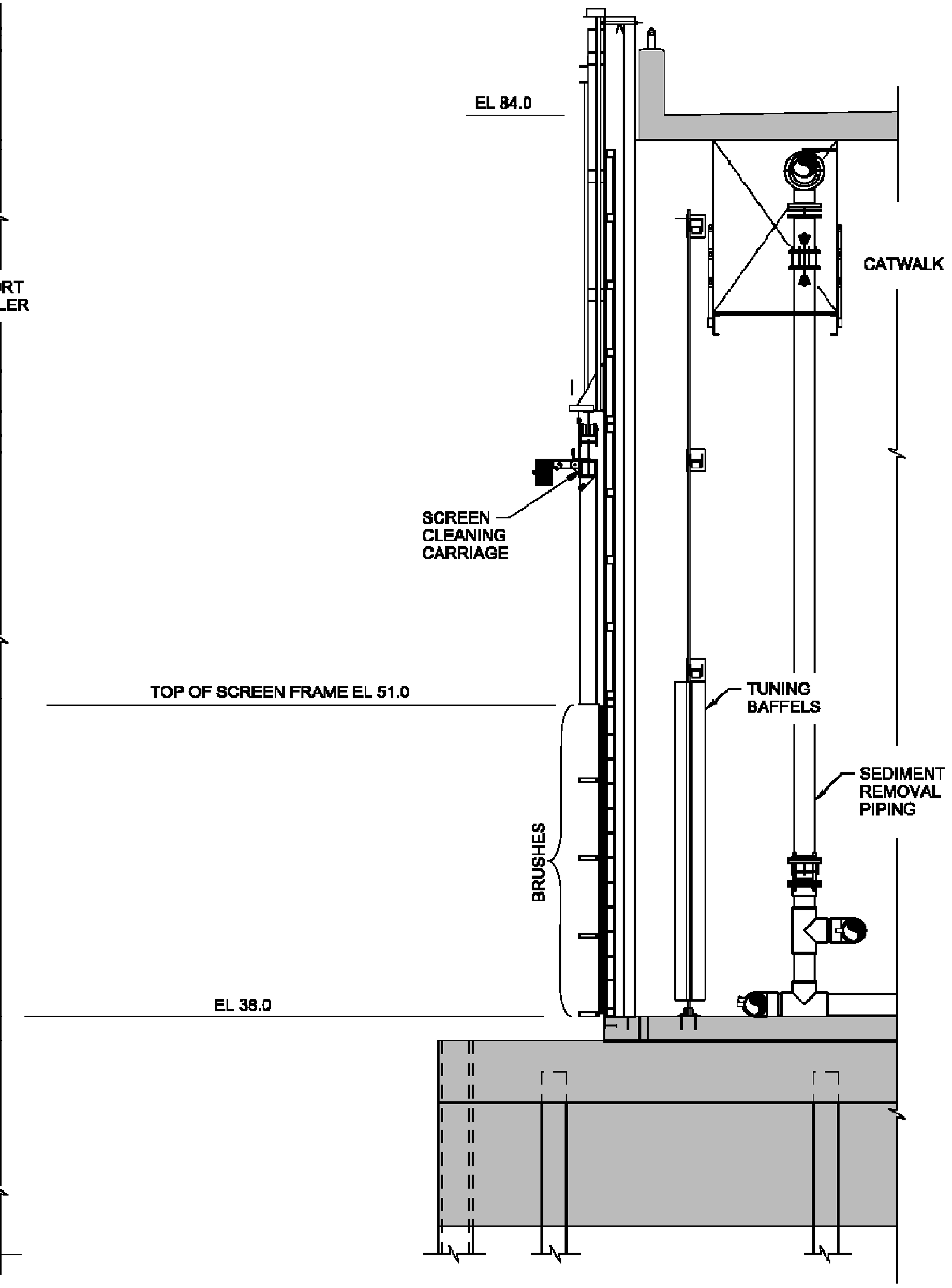
WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
TYPICAL FISH SCREEN BAY SECTION

SPEC NO.
DRAWING NO. CF-302
REV.
SHEET NO. 91

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-302.DWG



ELEVATION
1/4"=1'-0"



SECTION B
1/4"=1'-0"

FEASIBILITY-LEVEL FINAL
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: CH2MHILL
DRAWN: CH2MHILL
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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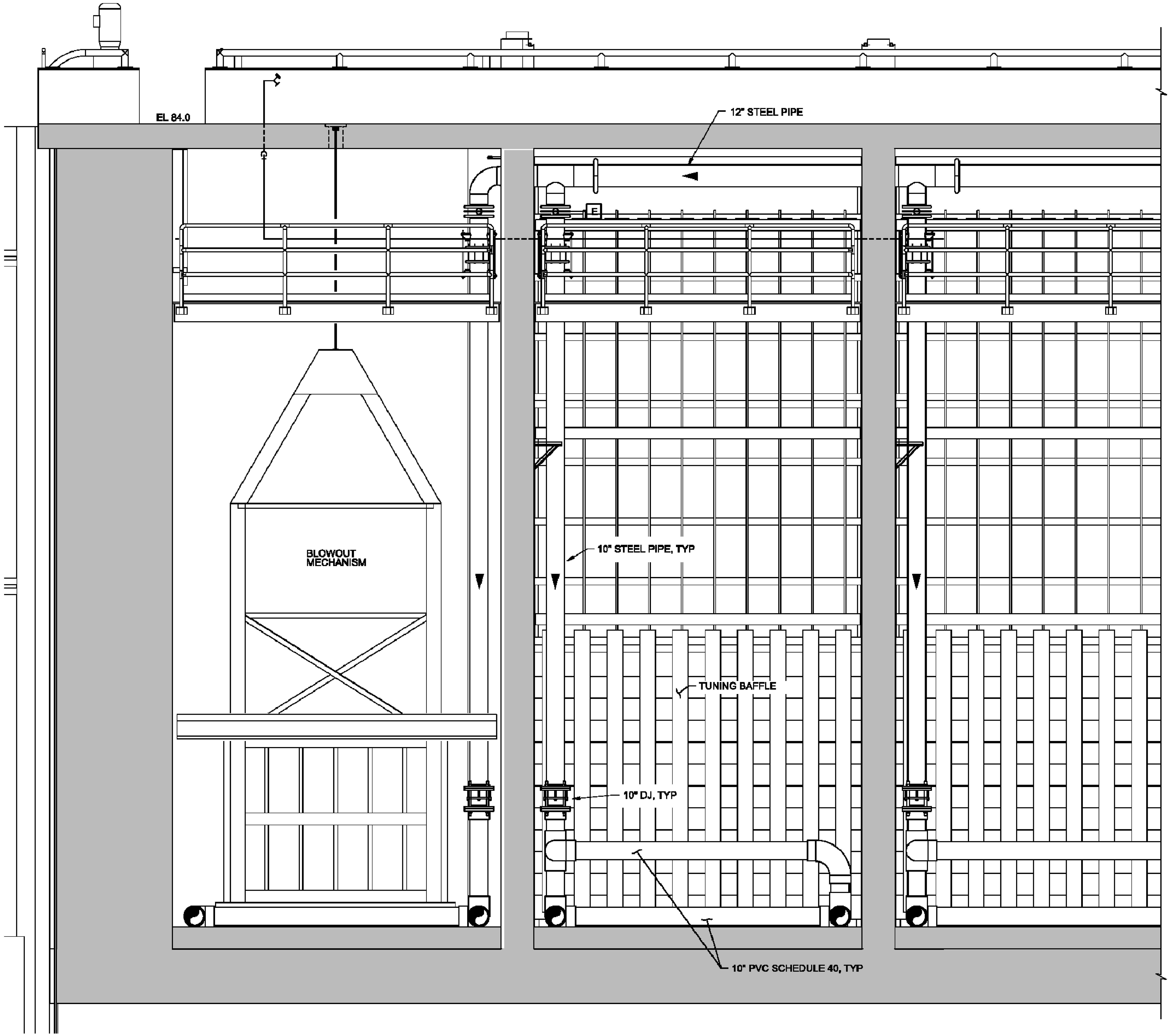
REVIEWED: MIKE FORREST, REG. CE. NO. 27855
DATE: 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
FISH SCREEN SIDE ELEVATION

SPEC NO.
DRAWING NO. CF-303
REV.
SHEET NO. 92

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-303.DWG



A SECTION
NTS
EXHIBIT 4

FEASIBILITY-LEVEL FINAL
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: CH2MHILL
DRAWN: CH2MHILL
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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DATE: 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
SEDIMENT REMOVAL PIPING SECTIONS

SPEC NO.
DRAWING NO. CF-304
REV.
SHEET NO. 93

FEASIBILITY-LEVEL FINAL
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED CH2MHILL
DRAWN CH2MHILL
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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DATE 08/04/2017
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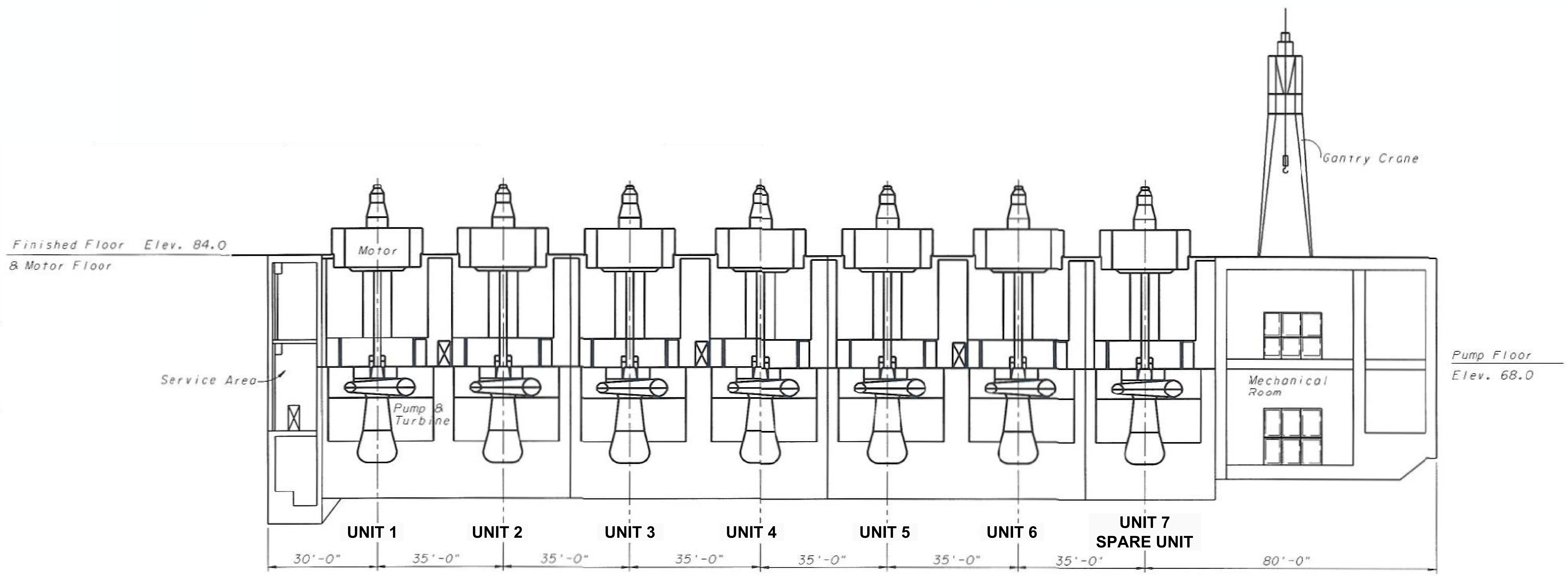
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
SEDIMENT REMOVAL PIPING SECTIONS

SPEC NO.
DRAWING NO. CF-305
REV.
SHEET NO. 94

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-305.DWG



LONGITUDINAL SECTION

N.T.S.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: CH2MHILL
DRAWN: CH2MHILL
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

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REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

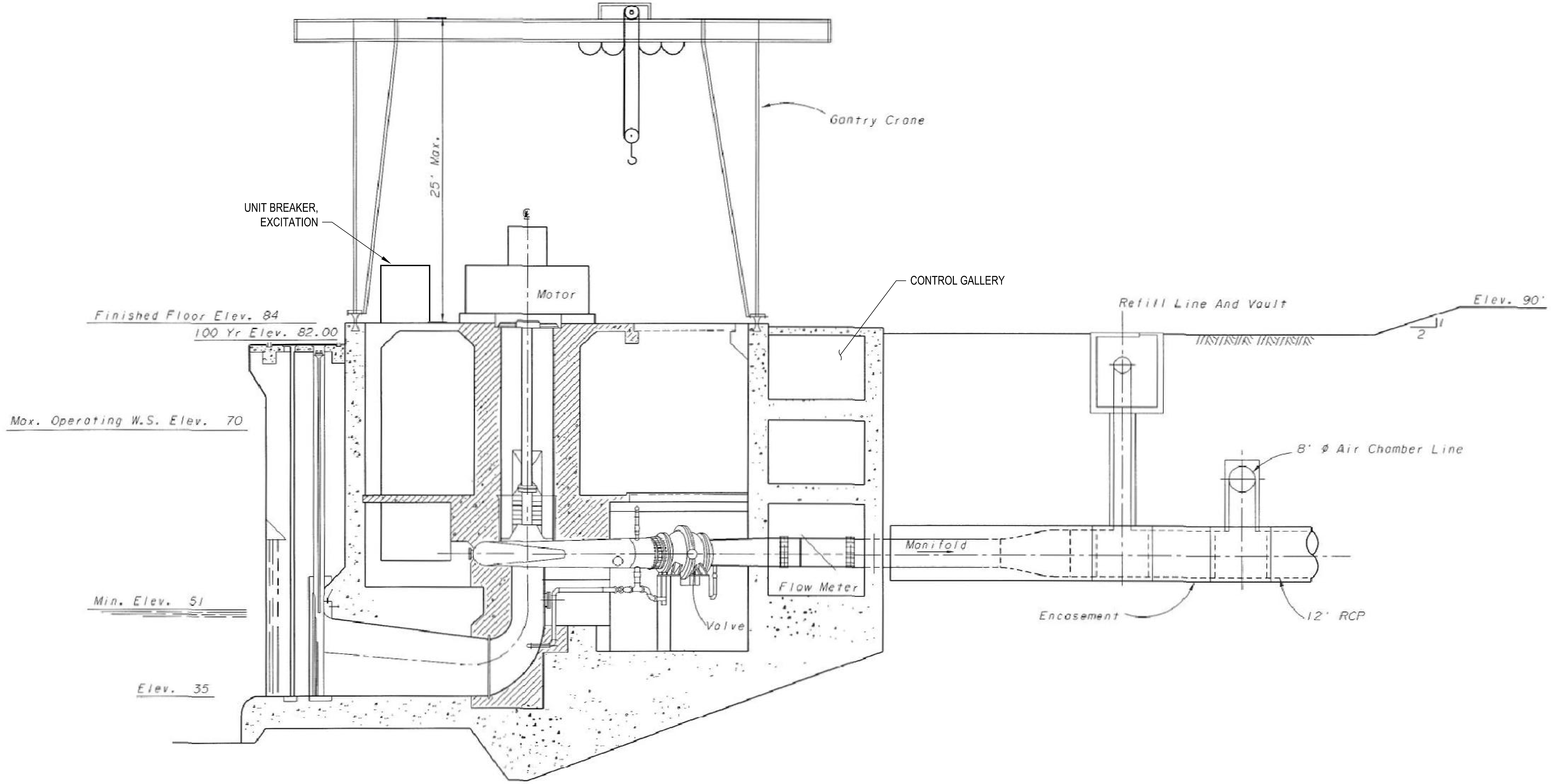
Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE LONGITUDINNAL SECTION

SPEC NO.
DRAWING NO. CF-306
REV.
SHEET NO. 95

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SR\PA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-306.DWG



TYPICAL TRANSVERSE SECTION

Not to Scale

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED CH2MHILL
DRAWN CH2MHILL
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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T 916-414-5800 F 916-414-1557
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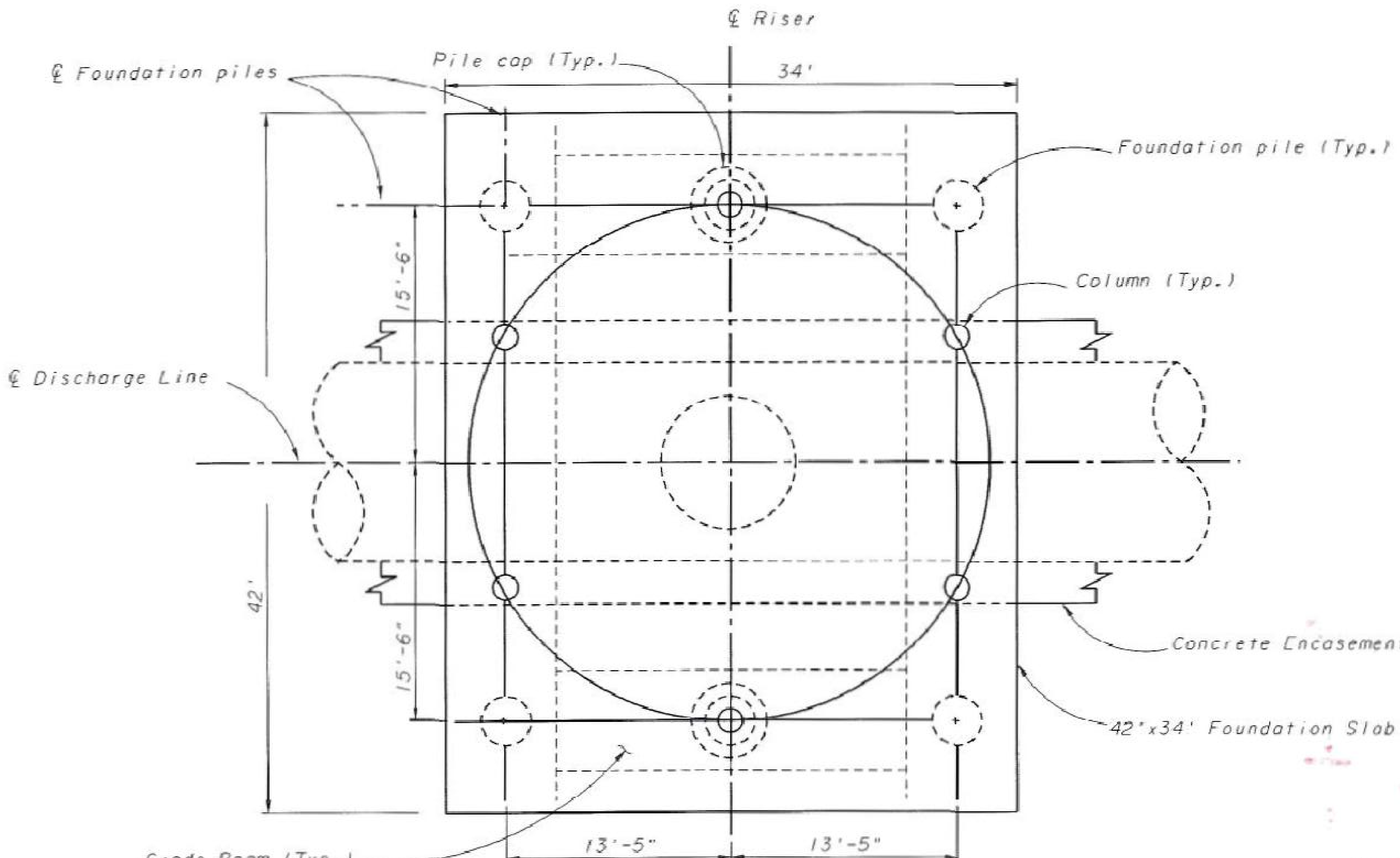
REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
CENTRIFUGAL PUMPS

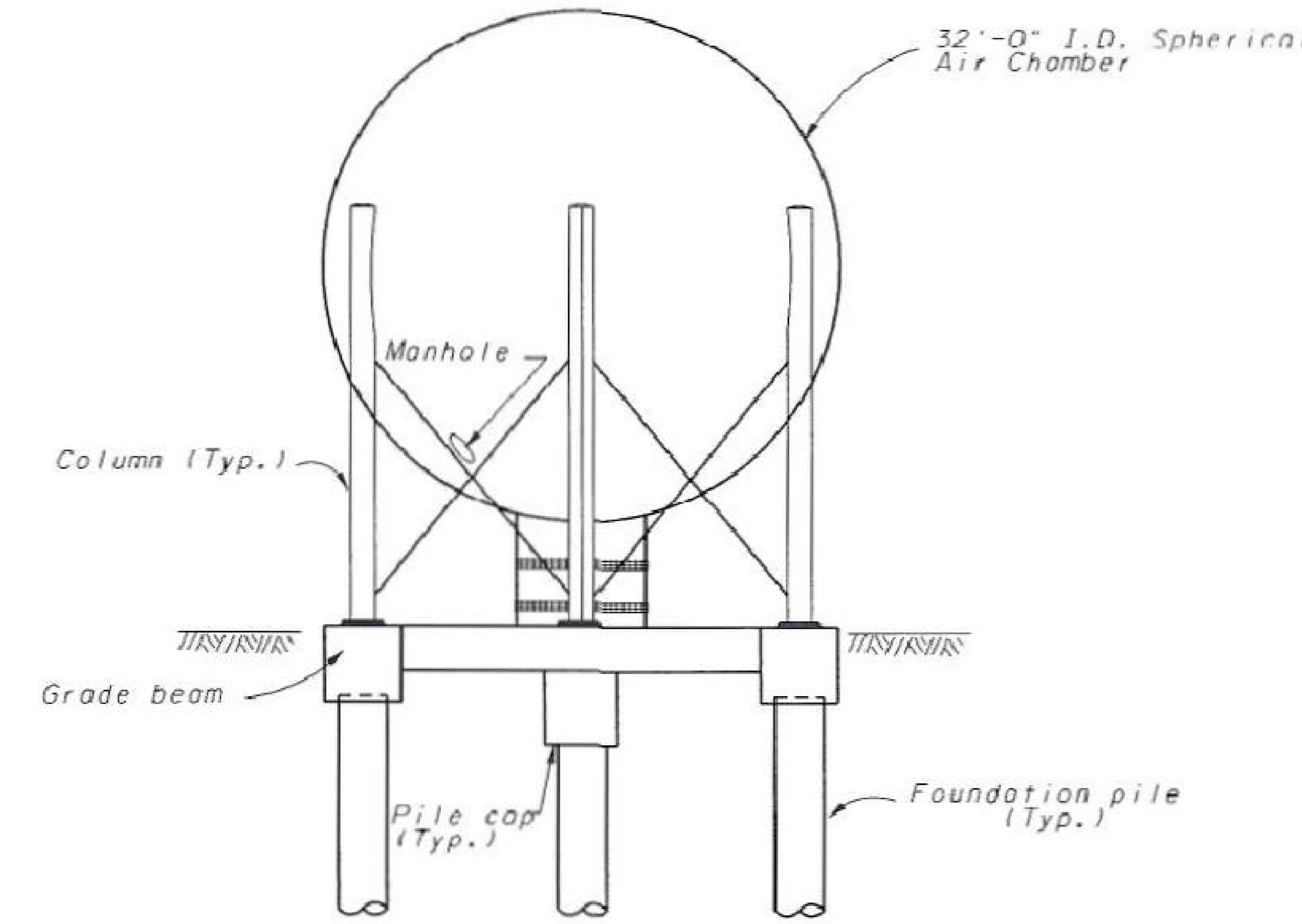
SPEC NO.
DRAWING NO. CF-307
REV.
SHEET NO. 96

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-307.DWG



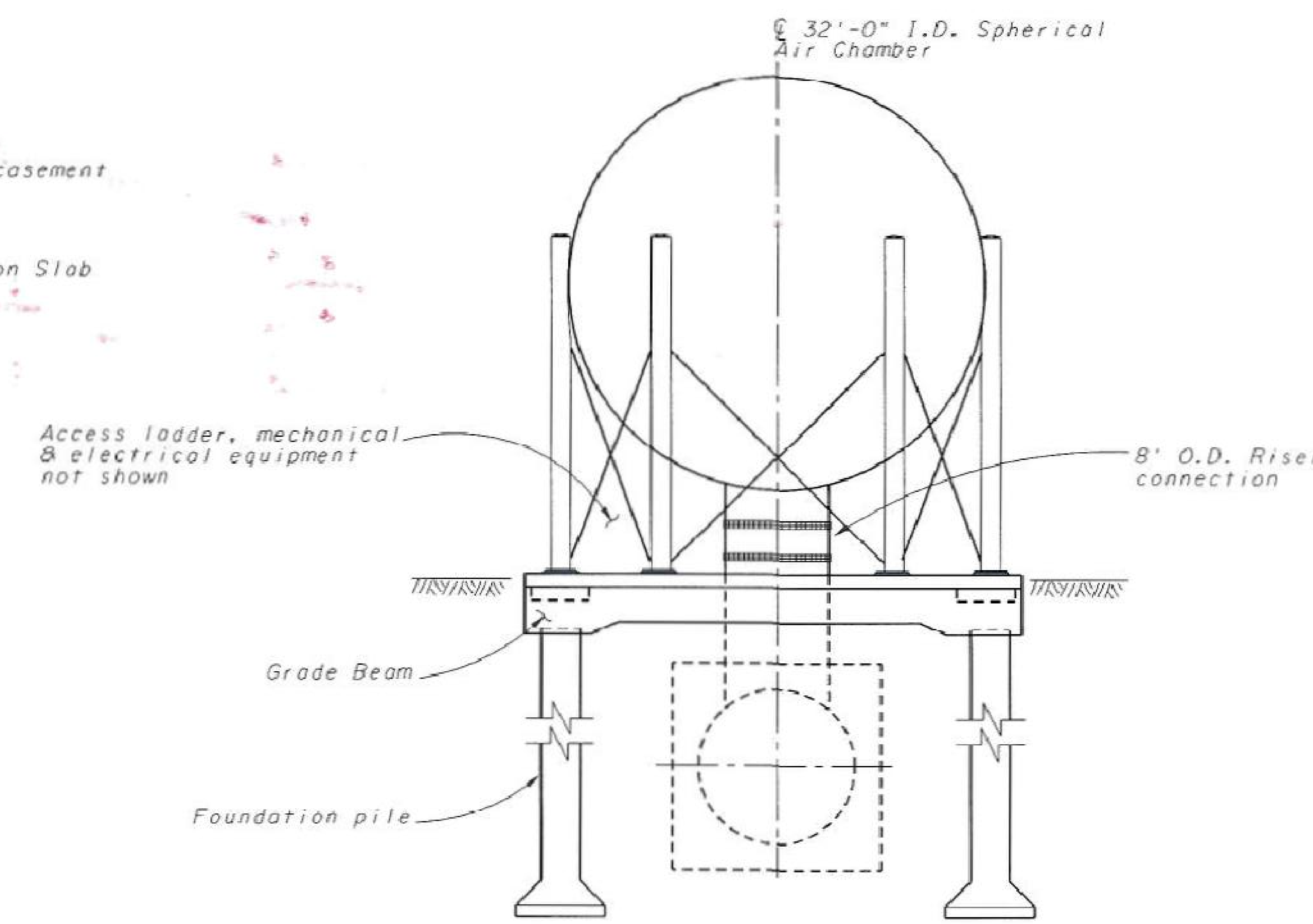
PLAN

Scale: 3/16" = 1' - 0"



ELEVATION

Scale: 1/8" = 1' - 0"



SOUTH ELEVATION

Scale: 1/8" = 1' - 0"

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED CH2MHILL
DRAWN CH2MHILL
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
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APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A
DELEVAN INTAKE PUMPING-GENERATING PLANT AND FISH SCREEN STRUCTURE
AIR CHAMBER PLANT AND ELEVATION

SPEC NO.
DRAWING NO. CF-308
REV.
SHEET NO. 97

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CF-308.DWG

PLOTTED BY:BARNHART, DENNIS -August 8, 2017-3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\90-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CN-101.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: C. LAKHBIR
DRAWN: T. L. PENG
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

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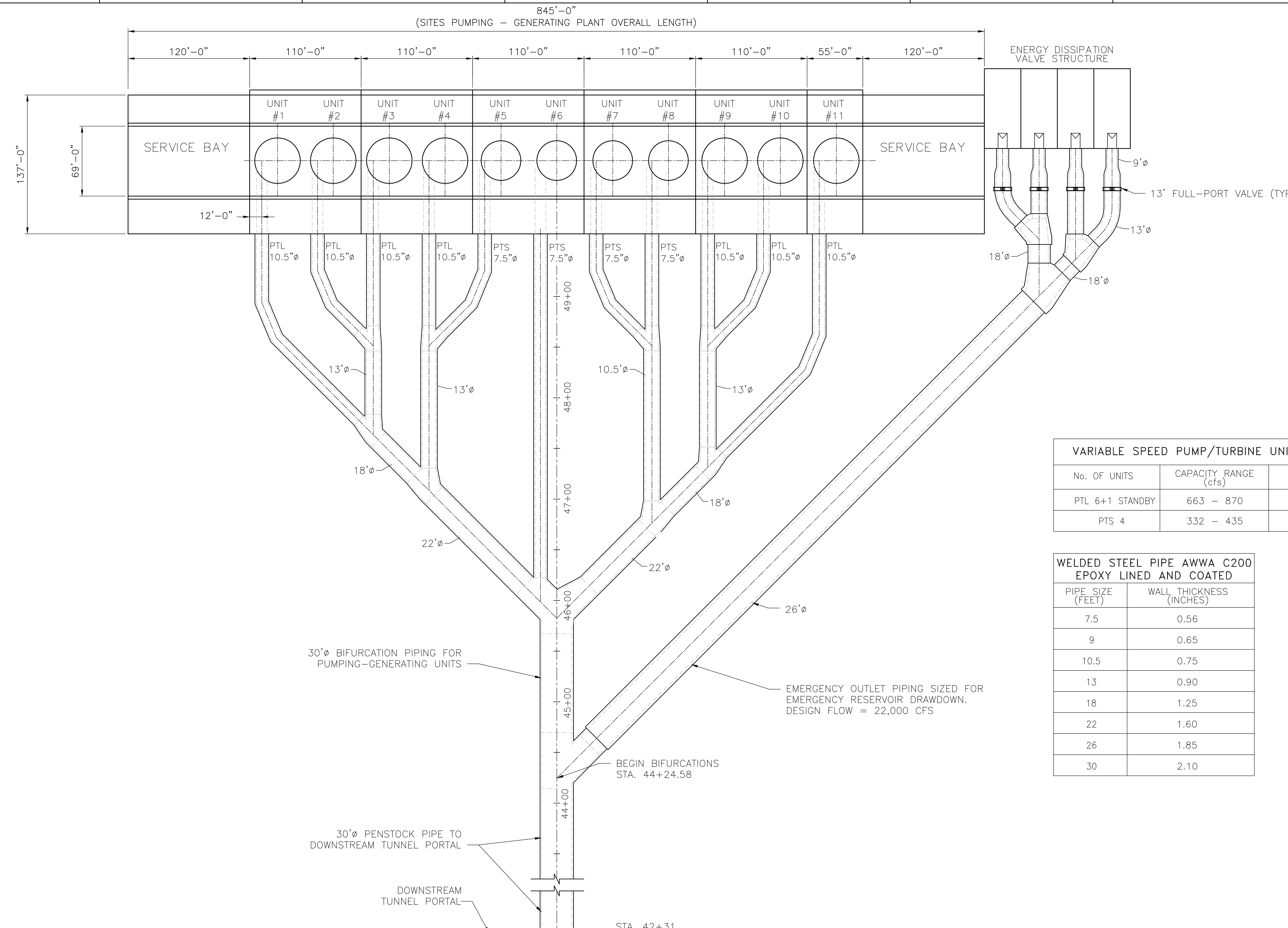
REVIEWED: MIKE FORREST, REG. CE. NO. 27855
DATE: 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES PUMPING-GENERATING PLANT
SITE PLAN

SPEC NO.
DRAWING NO. CN-101
REV.
SHEET NO. 98



VARIABLE SPEED PUMP/TURBINE UNITS DATA		
No. OF UNITS	CAPACITY RANGE (cfs)	DISCHARGE PIPE DIA. (FT.)
PTL 6+1 STANDBY	663 – 870	10.5
PTS 4	332 – 435	7.5

WELDED STEEL PIPE AWWA C200 EPOXY LINED AND COATED	
PIPE SIZE (FEET)	WALL THICKNESS (INCHES)
7.5	0.56
9	0.65
10.5	0.75
13	0.90
18	1.25
22	1.60
26	1.85
30	2.10

NORTH

50' 25' 0 50'
SCALE IN FEET

SEE DWG. CM–113 AND CM–114 FOR PLAN OF PUMP HOUSE

REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED C. LAKHBIR
DRAWN T. L. PENG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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REVIEWED MIKE FORREST REG. CE. NO. 27855 DATE 08/04/2017
APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
APPROVED JOE BARNES REG. CE. NO. 40105

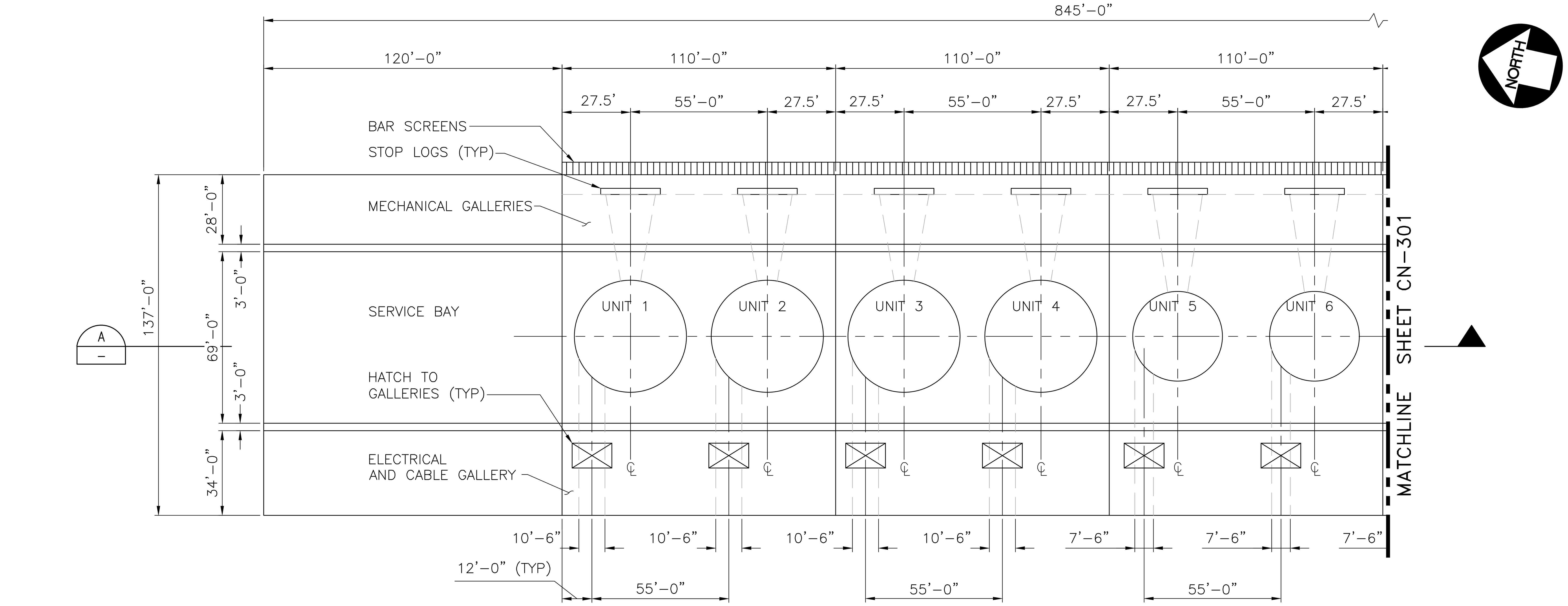
Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES PUMPING-GENERATING PLANT
SITE PLAN

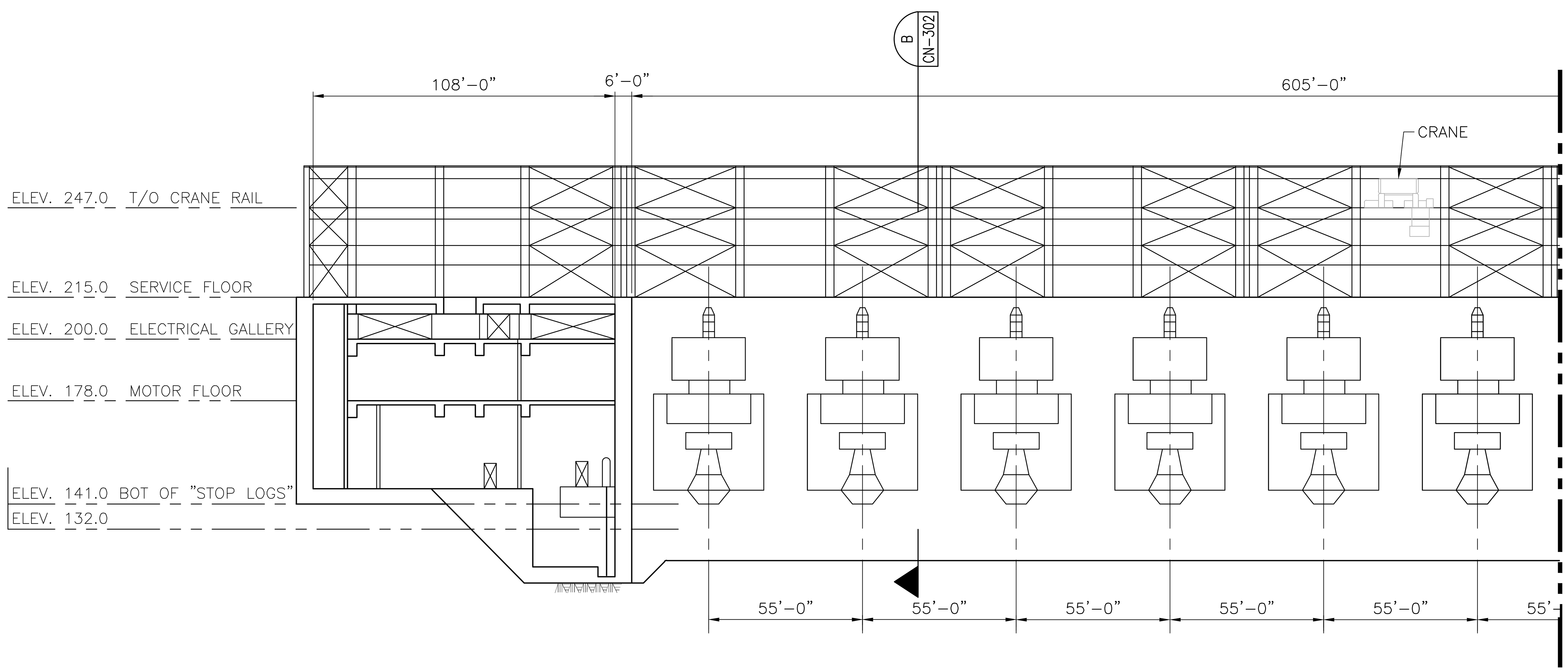
SPEC NO.
DRAWING NO. CN-201
REV.
SHEET NO. 99

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SR\PA\FEASIBILITY_AECOM\900 WORK\20–CAD\006–CIVIL\20–SHEETS\09–PUMPING GENERATING PLANTS\CN–201.DWG



PLAN - SERVICE FLOOR @ ELEV. 215.0

SCALE: 1"=30'



SECTION A

1"=30'

30' 15' 0 30'
SCALE IN FEET

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: C. LAKHBIR
DRAWN: T. L. PENG
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
ESTIMATE LEVEL: FEASIBILITY

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DATE: 08/04/2017
APPROVAL RECOMMENDED: MIKE FORREST, REG. CE. NO. 27855
APPROVED: JOE BARNES, REG. CE. NO. 40105

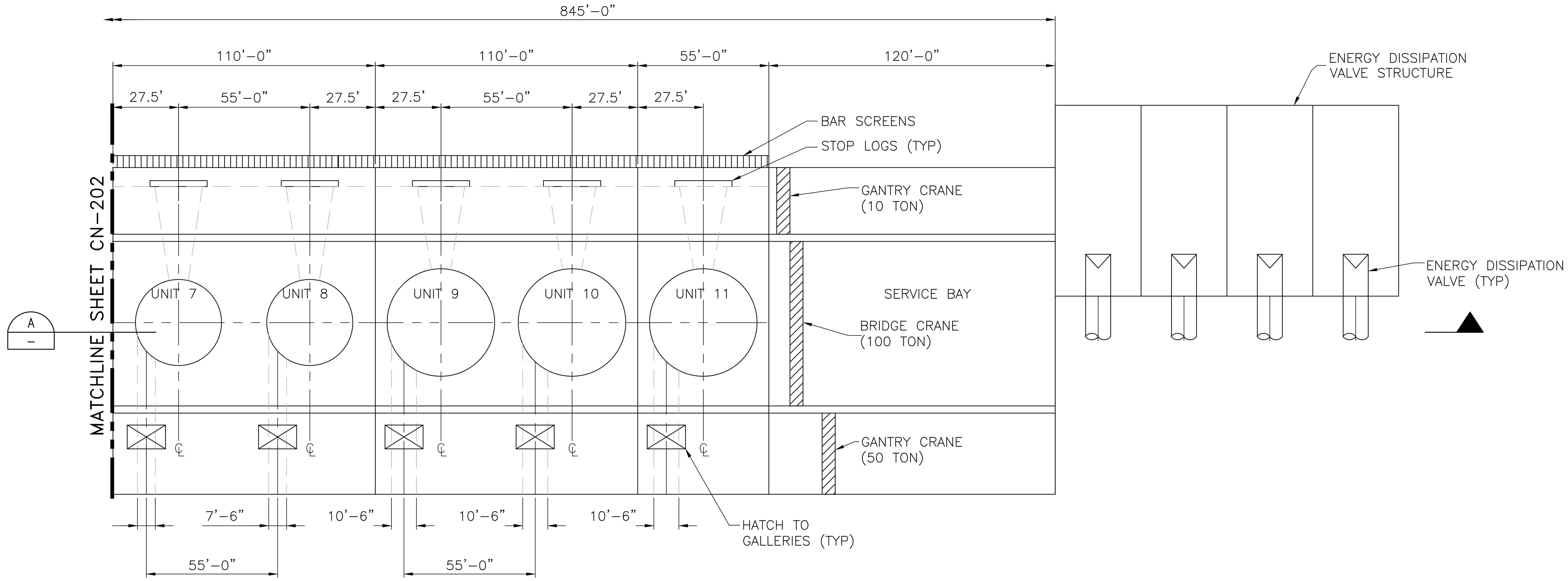
Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES PUMPING-GENERATING PLANT
SITE PLAN

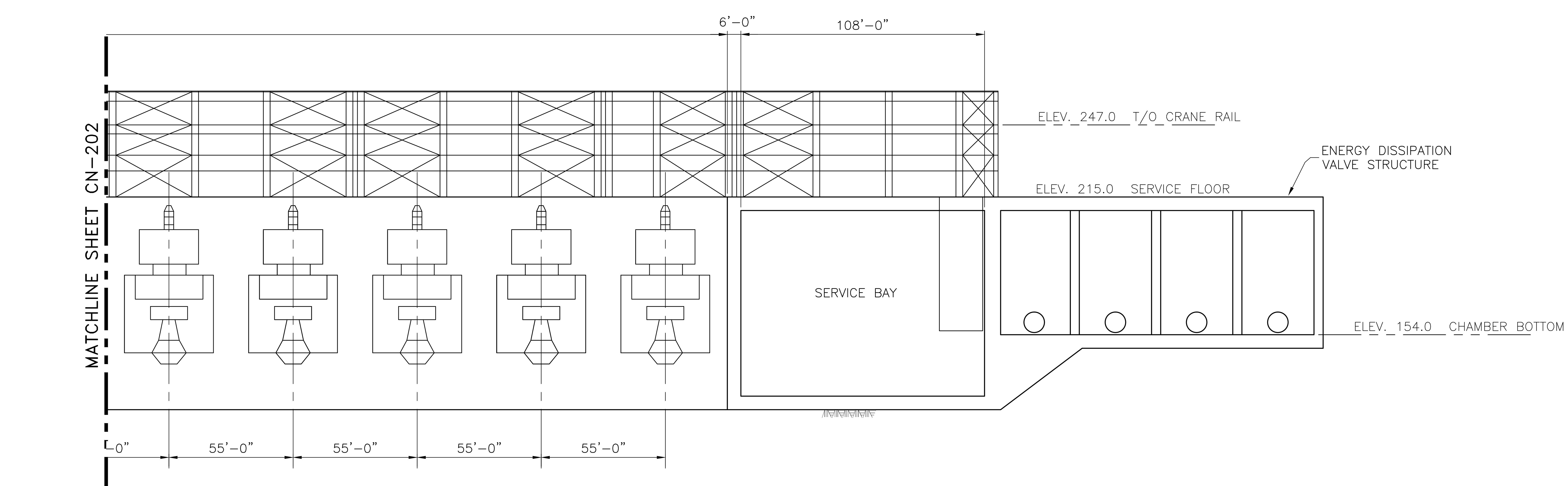
SPEC NO.
DRAWING NO. CN-202
REV.
SHEET NO. 100

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CADD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CN-202.DWG



PLAN (CONT.) - SERVICE FLOOR @ ELEV. 215.0

SCALE: 1"=30'



SECTION (CONT.) A –

1"=30'

30' 15' 0 30'
SCALE IN FEET

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\09-PUMPING GENERATING PLANTS\CN-301.DWG

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: C. LAKHBIR
DRAWN: T. L. PENG
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM

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APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES PUMPING-GENERATING PLANT
PLAN AND SECTION

SPEC NO.
DRAWING NO. CN-301
REV.
SHEET NO. 101

SECTION B
1"=10'
B CN-202

OPERATNG LEVEL	MAXIMUM	MINIMUM
PUMPING	207.8	193.0
AT HOLTHOUSE RESERVOIR	208.8	194.0

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REV	DATE	DESCRIPTION	SUB.	APPD
A3–A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED C. LAKHBIR
DRAWN T. L. PENG
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

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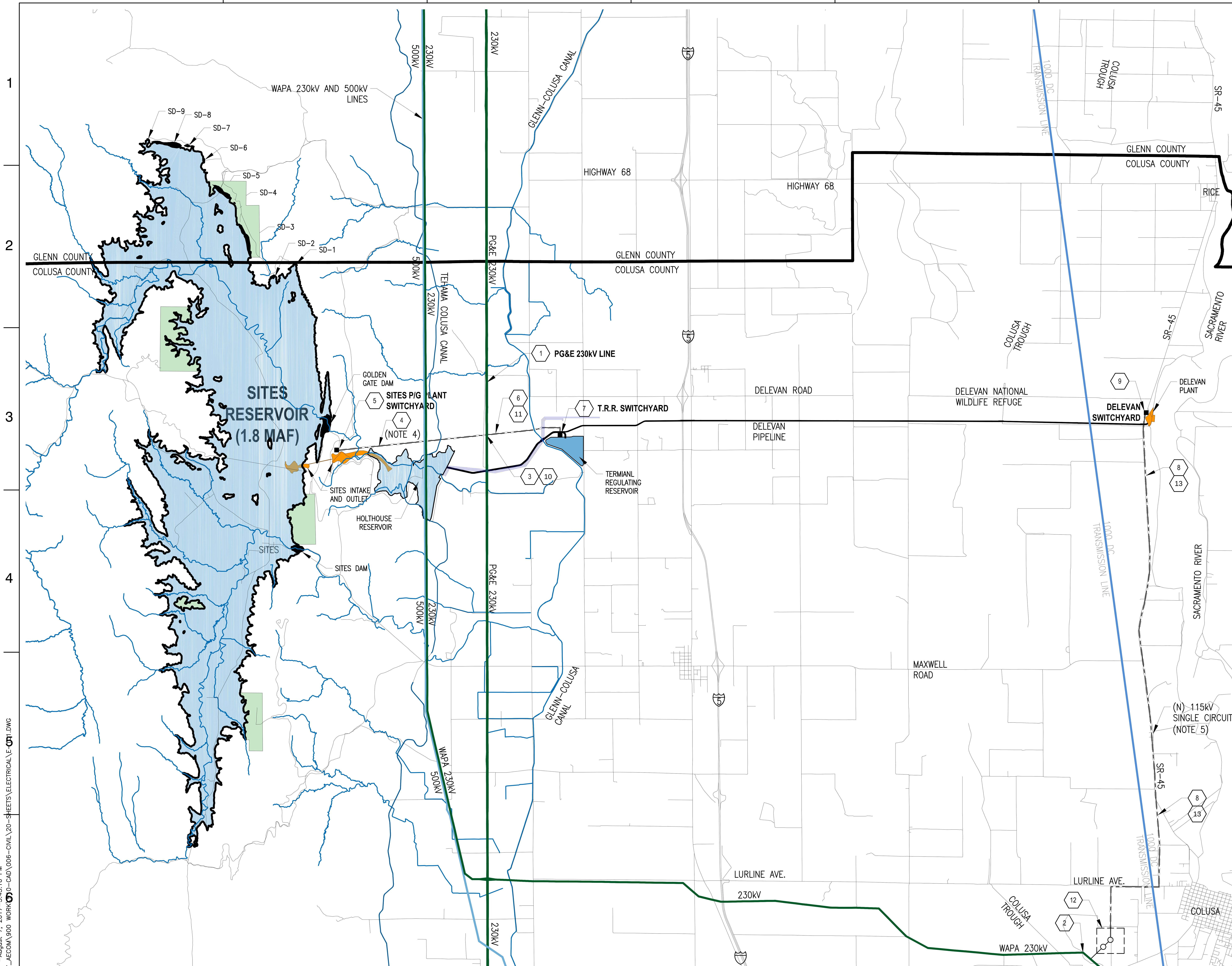
REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED MIKE FORREST REG. CE. NO. 27855
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES PUMPING-GENERATING PLANT CROSS SECTION

SPEC NO.
DRAWING NO. CN-302
REV.
SHEET NO. 102



SHEET NOTES:

1. BEFORE WORK IS STARTED, CONTRACTOR SHALL VERIFY SITE CONDITIONS. COORDINATE ALL ELECTRICAL WORK WITH OTHER DISCIPLINES AND GOVERNMENT PROJECT PERSONNEL.
2. ELECTRICAL WORK SHALL BE PROVIDED IN ACCORDANCE WITH ANSI/IEEE STANDARDS, WESTERN (WAPA) REQUIREMENTS, FERC/WECC, AND THE NATIONAL ELECTRICAL SAFETY CODE (ANSI C2-2017), AS APPLICABLE. ANY CONFLICTS WITH THE DESIGNS AS SHOWN SHALL BE RESOLVED BY THE ENGINEER.
3. POLE LOCATION, ELECTRICAL CONDUIT, AND EQUIPMENT SHOWN ARE DIAGRAMMATIC. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY FINAL LOCATION AND ROUTING SO AS NOT TO DISTURB EXISTING UTILITIES. MINOR CHANGES IN WORK DUE TO EXISTING CONDITIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
4. 230KV LINE SHALL BE ROUTED INTO NEW SITES PLANT SUBSTATION. OUTAGE SHALL BE PLANNED AND COORDINATED WITH UTILITY DURING A SCHEDULED OUTAGE. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL REPAIR OR REPLACE ALL UTILITIES DAMAGED DURING CONSTRUCTION TO THE OWNER'S SATISFACTION.
5. CONTRACTOR SHALL PROVIDE 230KV CONSTRUCTION IN ACCORDANCE WITH CA GENERAL ORDER NO. 95 AND UTILITY STANDARD CONSTRUCTION DRAWINGS.
6. TRANSMISSION LINE COST ESTIMATE IS BASED ON THE FOLLOWING DESIGN BASIS AND QUANTITIES: 700 FT RULING SPAN; 128-120' TANGENT LATTICE TOWERS; 6-120' DEADEND LATTICE TOWERS; 4-120' LARGE ANGLE LATTICE TOWERS; AND , 2-160' DEADEND TUBULAR STRUCTURES (MONPOPOLES).

KEYED NOTES:

1. EXISTING PG&E 230KV LINES. LINES MAY BE ROUTED INTO NEW SITES SUBSTATION AND THEN RETURN TO SOUTHERN PORTION OF EXISTING LINE.
2. EXISTING WAPA 230KV KESWICK-O'BANION LINE, SOUTHERN PART. LINE WILL ROUTE INTO NEW DELEVAN SUBSTATION AND THEN CONTINUE TO SOUTHERN PORTION OF EXISTING LINE.
3. LOCATION OF 230KV LINE TAKEOFF TO SITES SUBSTATION. NEW 230KV DEADEND STRUCTURES WILL BE REQUIRED. START OF DOUBLE CIRCUIT 230KV LINE TO SITES SUBSTATION. LINES WILL CROSS EXISTING WAPA 500KV AND 230KV LINES.
4. ONE DOUBLE CIRCUIT AND ONE SINGLE CIRCUIT 230KV LINES TO/FROM SITES SUBSTATION. ONE DOUBLE CIRCUIT IS THE UTILITY, AND SINGLE CIRCUIT IS THE TRR PLANT 230KV LINE. LATTICE TOWER CONSTRUCTION.
5. SITES SUBSTATION AND P/G PLANT. SEE DWG E-104 FOR SITE PLAN. SEE SHEET E-601 FOR SINGLE LINE DIAGRAM.
6. ONE SINGLE CIRCUIT 230KV LINE FOR THE TRR PLANT, ORIGINATING FROM SITES SWITCHYARD. LATTICE TOWER CONSTRUCTION. LINE WILL CROSS UNDER 500KV LINE. LINE WILL ALSO CROSS EXISTING PG&E 230KV LINE. COST SHALL ASSUME UNDERBUILD OF EXISTING PG&E LINE.
7. TRR SWITCHYARD AND P/G PLANT. 230 KV LINE PROVIDES RADIAL FEED TO SUBSTATION. SEE DWG E-108 FOR SITE PLAN. SEE DWG E-603 FOR SINGLE LINE DIAGRAM.
8. SINGLE CIRCUIT 115KV LINE FROM WAPA TO DELEVAN PLANT. MONOPOLE STEEL TOWER CONSTRUCTION. LINE SHALL CROSS SR-45 AND WILL REQUIRE FULL COORDINATION WITH CALTRANS.
9. DELEVAN SWITCHYARD AND P/G PLANT. 115 KV LINE PROVIDES FEED FROM SUBSTATION. SEE DWG E-107 FOR SITE PLAN. SEE DWG E-602 FOR SINGLE LINE DIAGRAM.
10. 230KV LINE ESTIMATE IS BASED ON SINGLE 2156 ACSR "BLUEBIRD" FOR EACH CIRCUIT WITH LINE CONSTRUCTION CONSISTING OF DOUBLE CIRCUIT LATTICE TOWERS.
11. TRANSMISSION LINE ESTIMATE IS BASED ON A SINGLE CURCUIT CONSTRUCTION FROM SITES SWITCHYARD TO TRR SWITCHYARD (3.5 MILES).
12. NEW SUBSTATION FOR DELEVAN PUMP STATION. INCOMING 230KV FROM WAPA, 230KV TO 115KV POWER TRANSFORMER, WITH 115KV TO DELEVAN.
13. OH LINE ROUTING IS PRELIMINARY.

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REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KHALSA
DRAWN: D. LARSON
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
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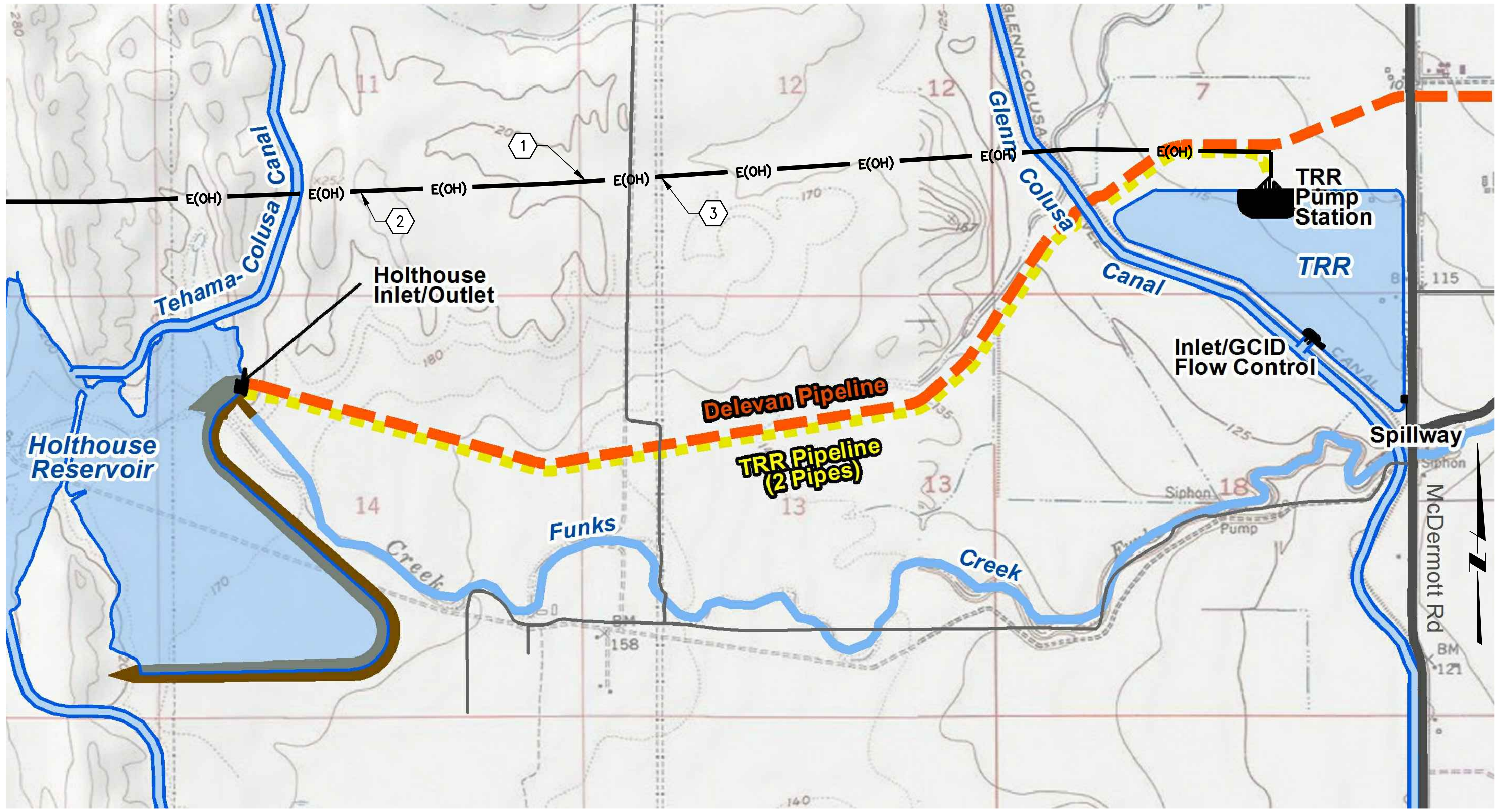
APPROVAL RECOMMENDED: SHABAD KHALSA, REG. CE. NO. 11185
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES TRANSMISSION LINE PLAN

SPEC NO.
DRAWING NO. E-101
REV.
SHEET NO. 103



NOTE:

1. SEE ELECTRICAL TRANSMISSION SITE PLAN, SHEET ##### FOR NOTES ON 230kV LINE REVISIONS. PG&E 230 KV LINE SHALL BE TAPPED AND ROUTED TO SITES SUBSTATION
2. SEE ADDITIONAL ELECTRICAL DESIGN INFORMATION FOR THE TRR SWITCHYARD AND PLANT ON SHEETS ##### AND #####.

KEYED NOTES:

1. POSSIBLE LOCATION OF INTERCONNECTION TO PG&E 230KV LINES. ROUTE TO SITES P/G PLANT.
2. ONE DOUBLE CIRCUIT AND ONE SINGLE CIRCUIT 230KV LINES.
3. SINGLE CIRCUIT 230KV LINE FROM SITES SWITCHYARD TO TRR SWITCHYARD.
4. POSSIBLE LOCATION OF INTERCONNECTION TO WAPA 230KV LINES. ROUTE TO NEW SUBSTATION.
5. NEW WAPA SUBSTATION. TRANSFORMER FOR 230KV TO 115KV CIRCUIT TO DELEVAN PLANT.
6. WOOD OR STEEL POLES, SINGLE CIRCUIT 115KV OH LINE TO DELEVAN P/G PLANT.
7. DELEVAN SWITCHYARD. SEE SINGLE LINE DIAGRAM E-5601.

LEGEND:

E(OH) — NEW OVERHEAD ELECTRICAL LINE

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WSIP APPLICATION ATTACHMENT A4.A

SITES/ TRR AND DELEVAN TRANSMISSION PLAN DETAILS

SPEC NO.
DRAWING NO. E-102
REV.
SHEET NO. 104

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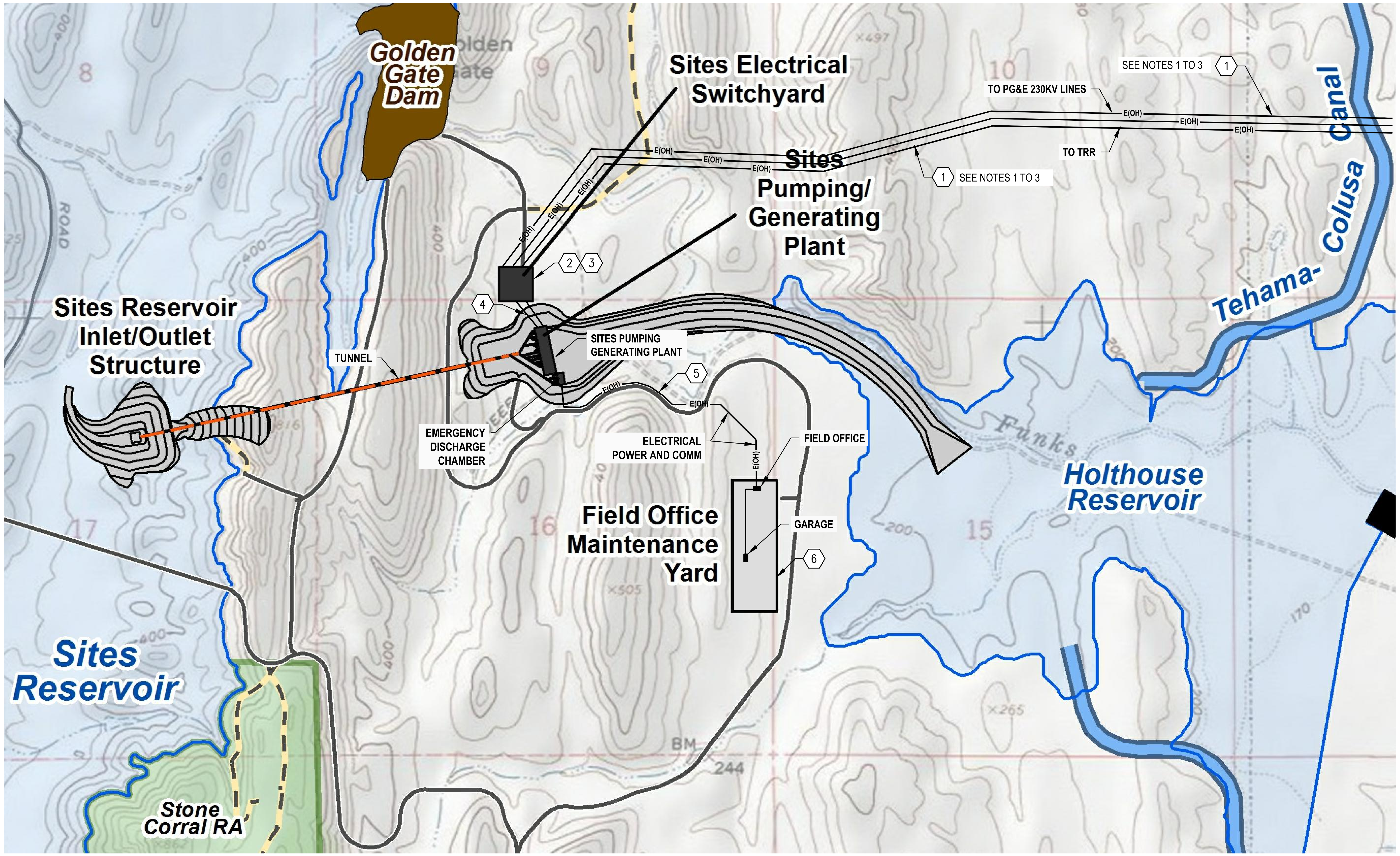

ELECTRICAL SITE PLAN

SHEET NOTES:

1. SEE SHEET E-0101 FOR GENERAL ELECTRICAL NOTES.
2. UTILITY 230KV LINES SHALL BE ROUTED INTO NEW SITES PLANT SUBSTATION ON DOUBLE CIRCUIT LATTICE STRUCTURES. 230KV LINE TO TTR PLANT SHALL LEAVE SITES SUBSTATION IN SAME EASEMENT.
3. ASSUME POWER LINE DIFFICULTY OF INSTALLATION TO BE SIMILAR TO PARTIALLY WOODED ROLLING HILL CONSTRUCTION.
4. SWITCHYARD LAYOUT SHALL PROVIDE BREAKER AND A HALF SCHEME, WITH THREE OUTGOING OVERHEAD CIRCUITS, AND FOUR UNDERGROUND CIRCUITS TO THE PLANT. SEE SINGLE LINE DIAGRAM, SHEET #####

NUMBERED NOTES:

1. REROUTED UTILITY 230KV LINE, DOUBLE CIRCUIT, AND SINGLE CIRCUIT FROM SITES TO TRR PLANT.
2. SITES 230KV SWITCHYARD. SEE SINGLE LINE DIAGRAM ON E-1601. UTILITY LINE ROUTED INTO AND OUT OF SITES SUBSTATION. TRR 230KV LINE WILL ORIGINATE AT SITES SWITCHYARD.
3. SITES P/G PLANT SHALL INCLUDE ALL SWITCHYARD MONITORING AND CONTROLS, INCLUDING UTILITY REMOTE TRANSFER TRIP CONTROL SCHEMES. SEE SITES P/G PLAN VIEW, SHEET EP-5102.
4. FOUR 13.8kV UNDERGROUND CIRCUITS TO SITES P/G AT PLANT. SUBSTATION CIRCUIT BREAKER WIRING SHALL BE ROUTED TO MAIN CONTROL ROOM IN THE PLANT.
5. SITES FIELD OFFICE TO BE SUPPLIED WITH 480V CIRCUITS FOR BUILDING POWER AND COMMUNICATION CIRCUITS.
6. FIELD OFFICE AND MAINTENANCE FACILITIES TO BE PROVIDED WITH TYPICAL BUILDING AMENITIES, YARD LIGHTING, WATER, SEPTIC, AND SECURITY SYSTEMS.

LEGEND:

E(OH) NEW OVERHEAD ELECTRICAL LINE

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A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED: S. KHALSA
DRAWN: D. LARSON
CHECKED: M. FORREST
APPROVAL RECOMMENDED:
APPROVAL BY:
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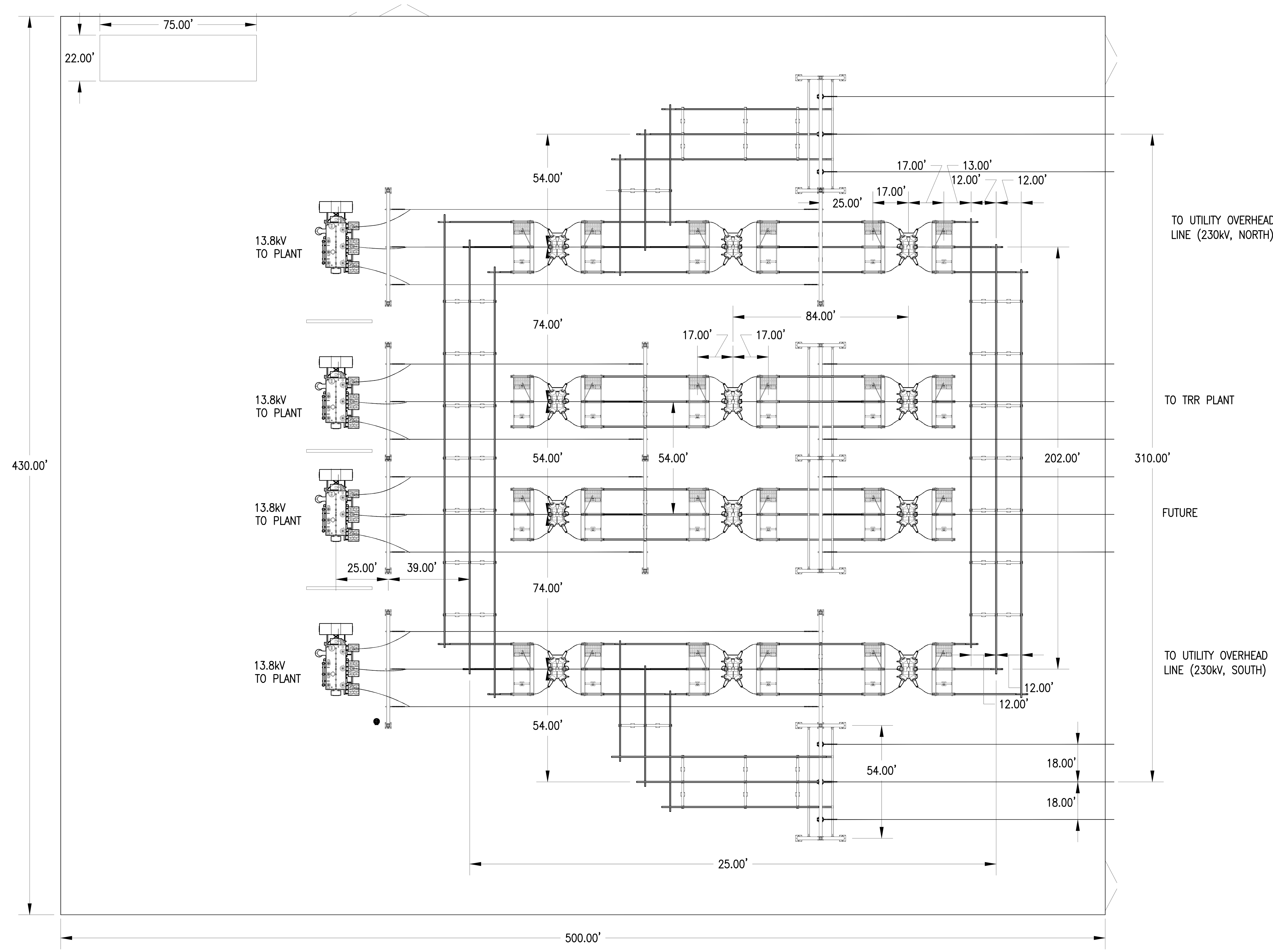
Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES PUMPING/ GENERATING PLANT
ELECTRICAL SITE PLAN

SPEC NO.
DRAWING NO. E-103
REV.
SHEET NO. 105



SWITCHYARD PLAN

REV	DATE	DESCRIPTION	SUB.	APPD
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DRAWN D. LARSON
CHECKED M. FORREST
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Sites

WSIP APPLICATION ATTACHMENT A4.A

SITES PUMPING/ GENERATING PLANT
SWITCHYARD PLAN

SPEC NO.
DRAWING NO. E-104
REV.
SHEET NO. 106

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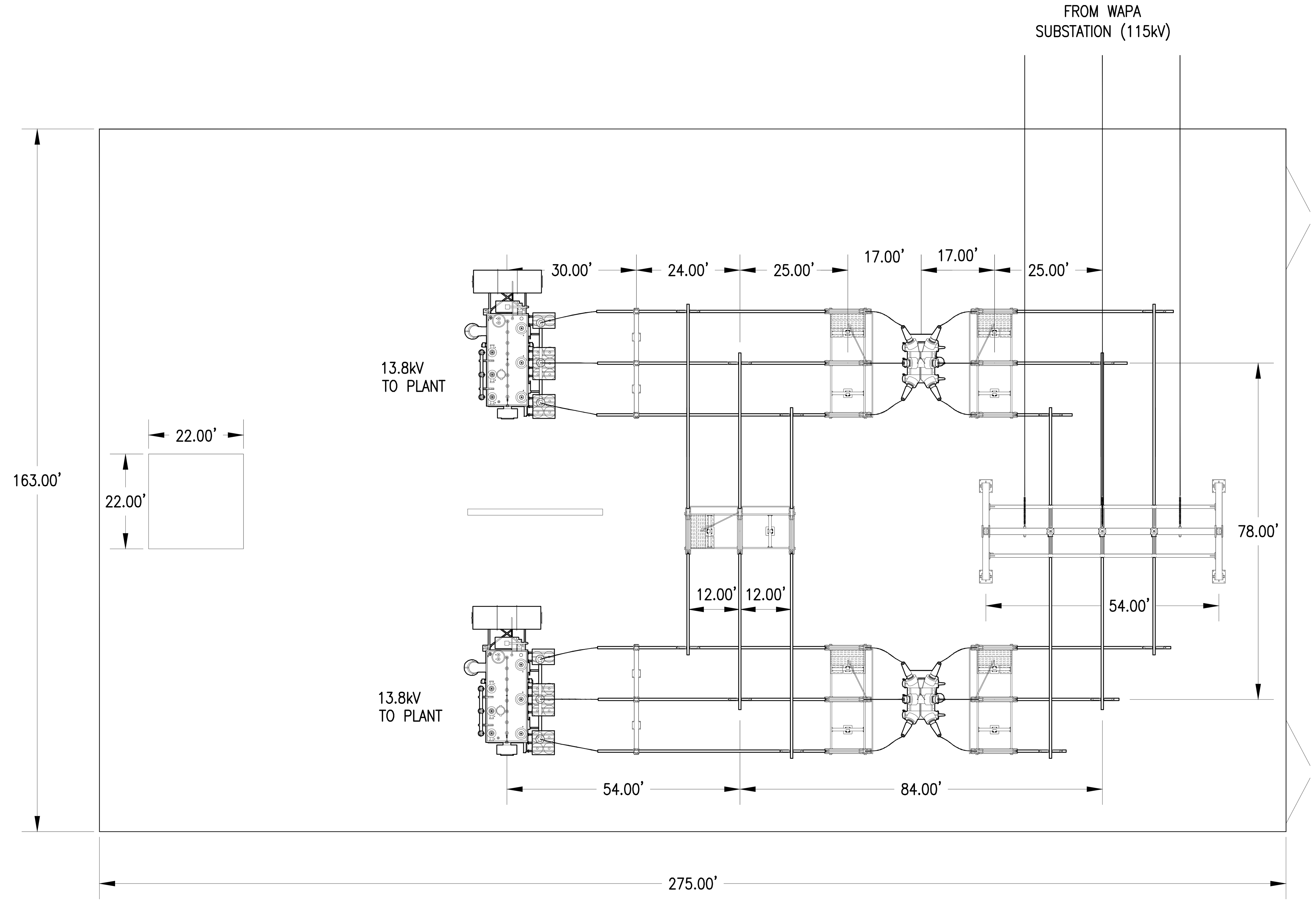

SWITCHYARD PLAN

REV	DATE	DESCRIPTION	SUB.	APPD
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DELEVAN PUMPING/ GENERATING PLANT
SWITCHYARD PLAN

SPEC NO.
DRAWING NO. E-105
REV.
SHEET NO. 107

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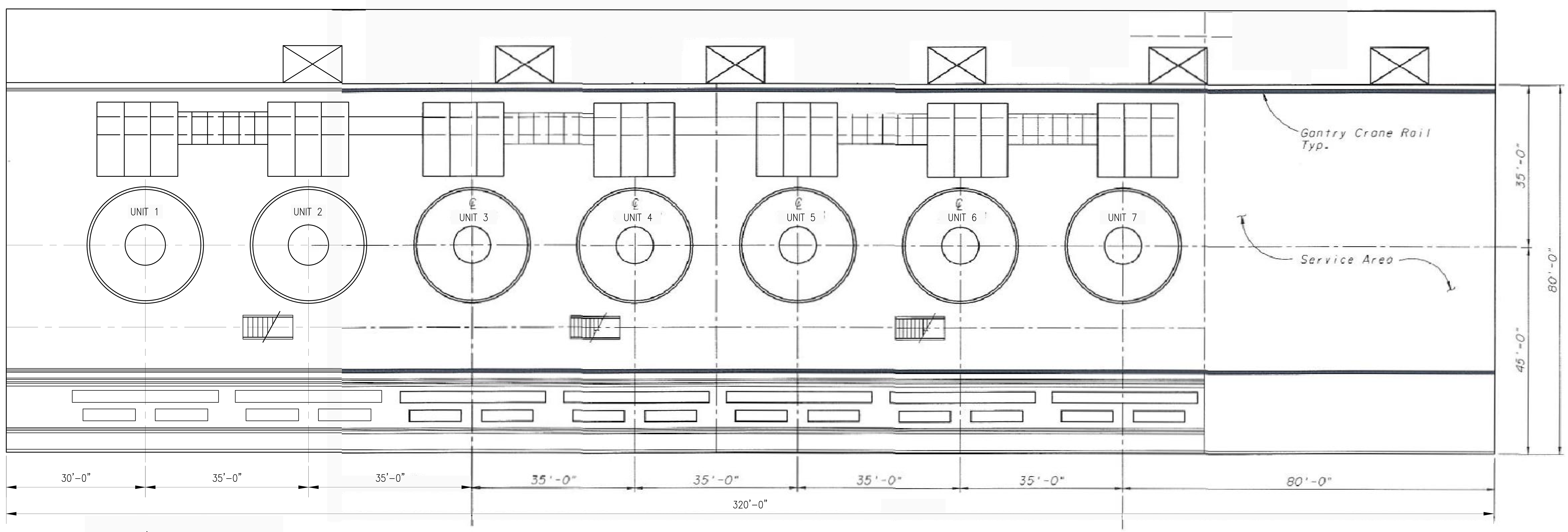
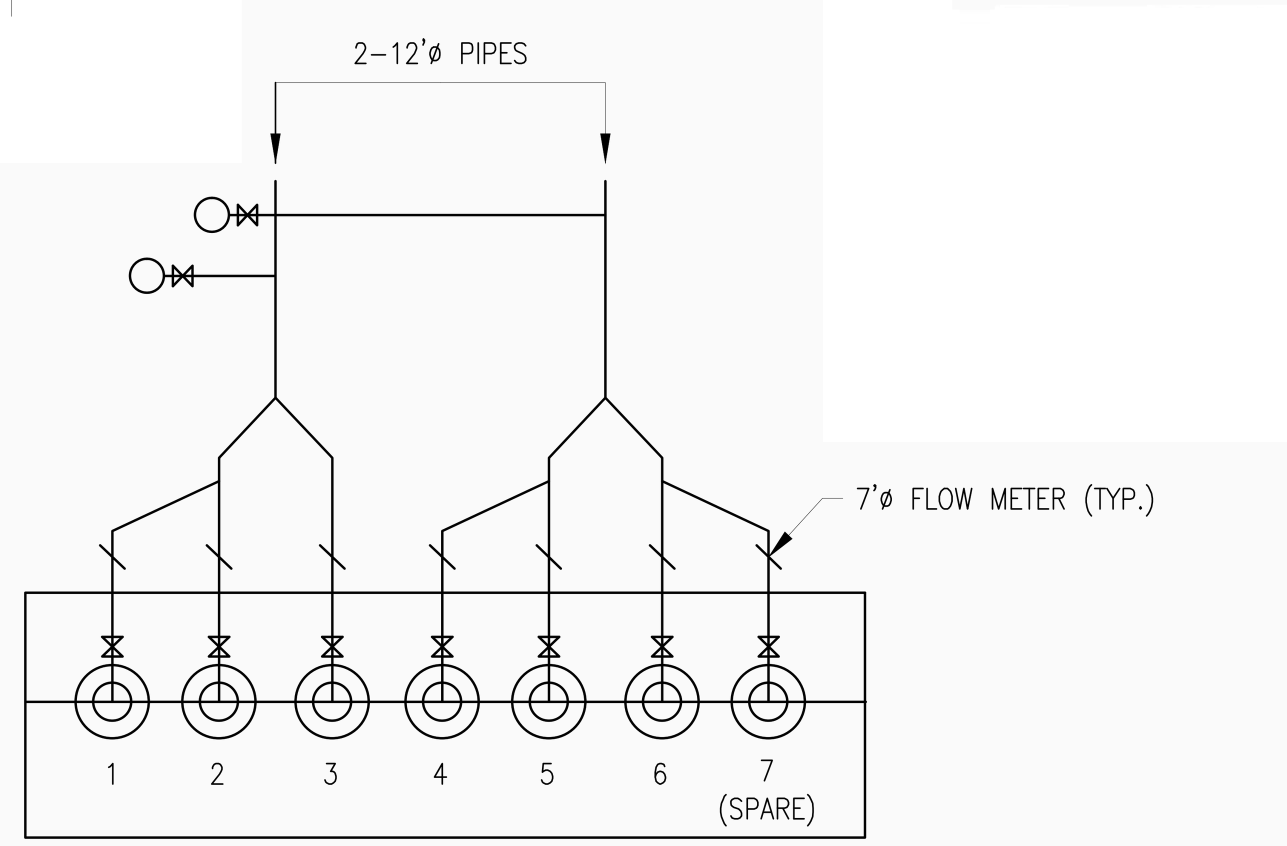


PUMPING - GENERATING PLANT - GENERAL ARRANGEMENT

FLOOR PLAN

Not to Scale



DIAGRAM

SACRAMENTO RIVER PUMPING - GENERATING PLANT

NOTES

1. Floor plan shown with 4 - 500 cfs units and 1 - 500 cfs spare unit.

LEGEND

Air Chamber w/96" BFV

500 cfs Pump/Turbine Motor Unit

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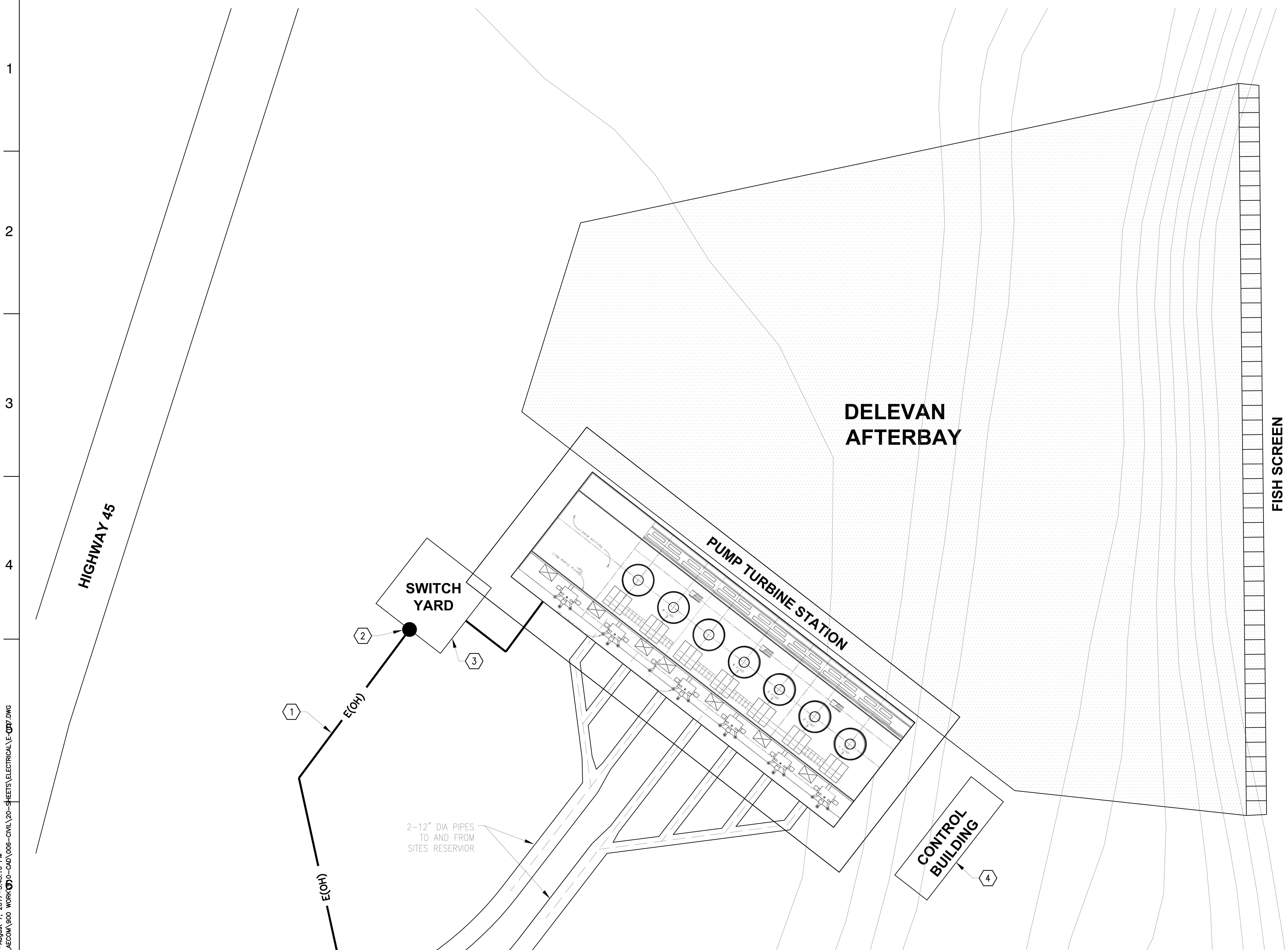
Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PUMPING/ GENERATING PLANT FLOOR PLAN

SPEC NO.
DRAWING NO. E-106
REV.
SHEET NO. 108



KEYED NOTES:

1. 115 kV OH LINE TO WAPA SUBSTATION
2. 115 kV LINE DEADEND POLE, TO CONNECT INTO SWITCHYARD
3. DELEVAN P/G PLANT SWITCHYARD. SEE SINGLE LINE DIAGRAM, SHEET ##### AND SWITCHYARD LAYOUT, #####.
4. POWER CONNECTIONS FROM SWITCHYARD INTO DELEVAN P/G PLANT

LEGEND:

E(OH) — NEW OVERHEAD ELECTRICAL LINE

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DESIGNED: S. KHALSA
DRAWN: D. LARSON
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
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APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN PUMPING/ GENERATING PLANT SITE PLAN

SPEC NO.
DRAWING NO. E-107
REV.
SHEET NO. 109

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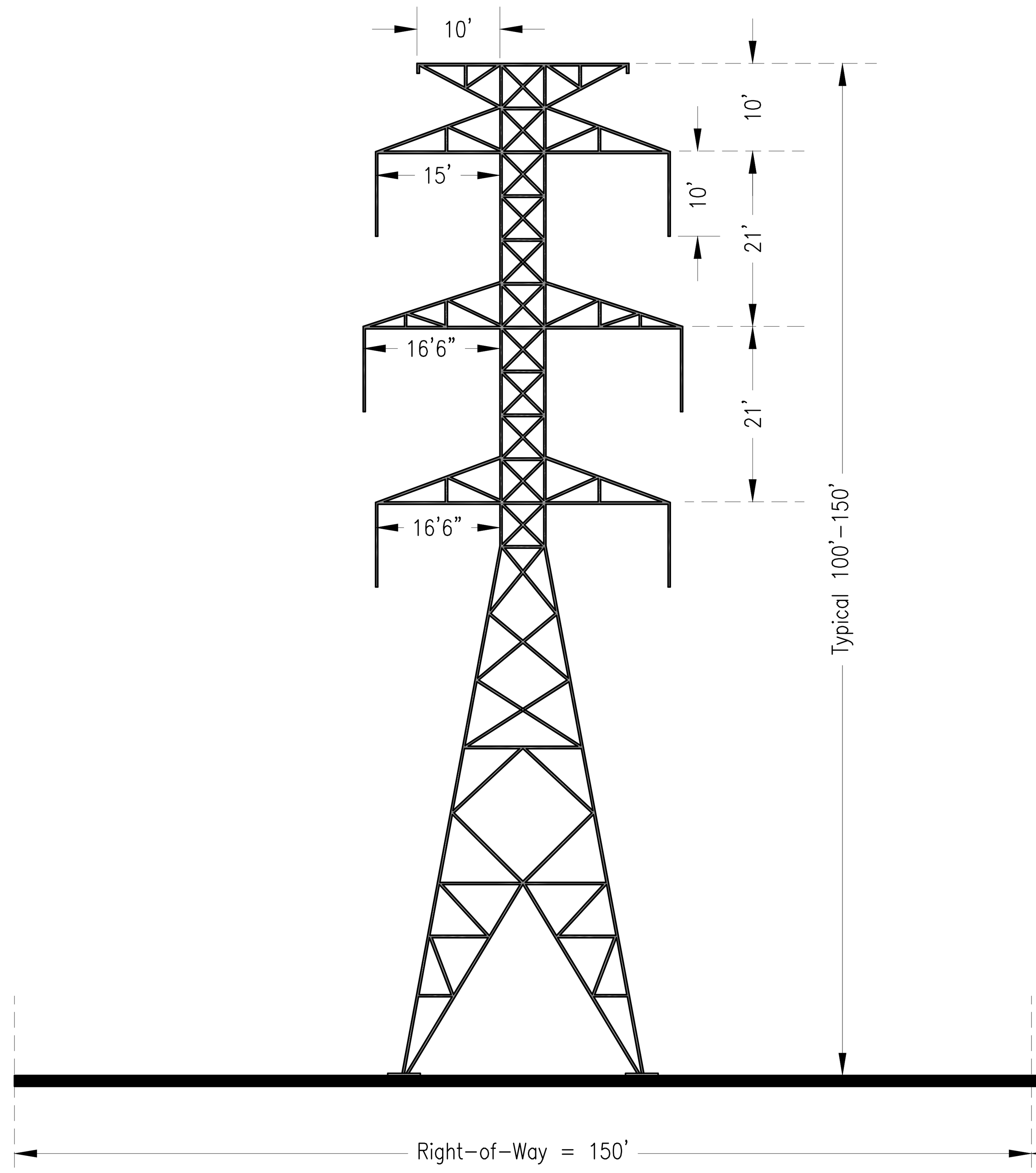
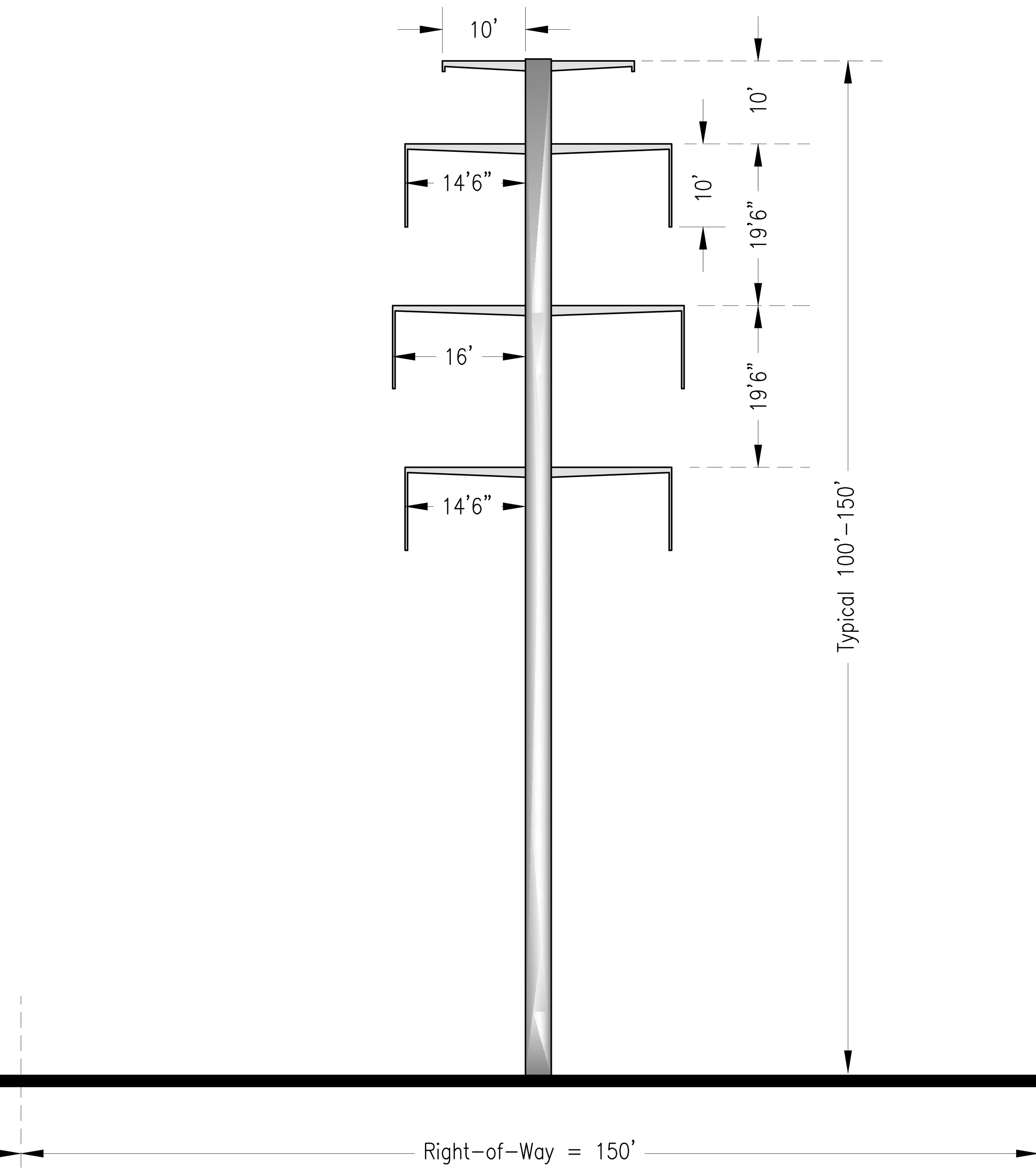


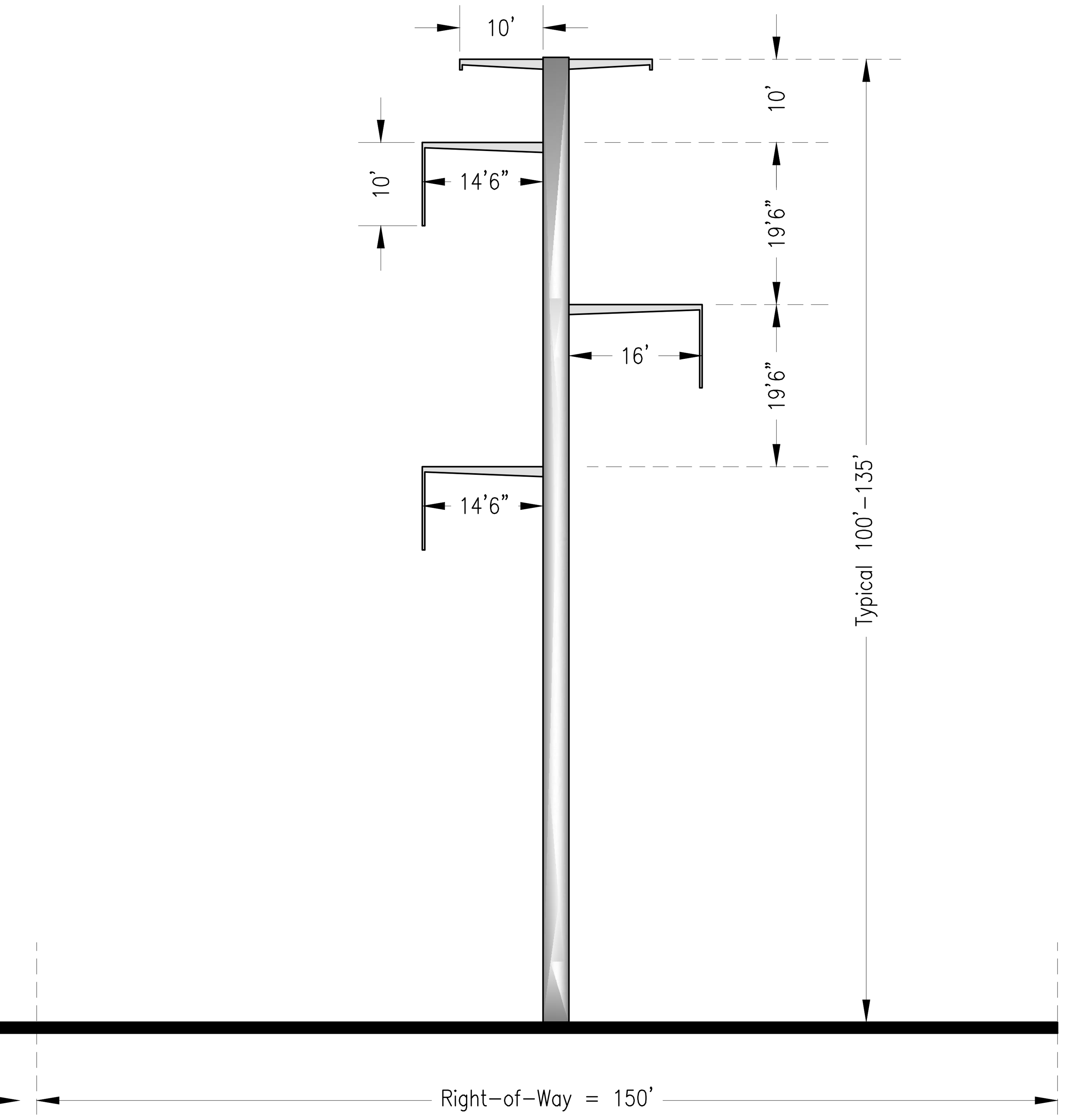
230kV DOUBLE CIRCUIT LATTICE STRUCTURE

SCALE: NTS



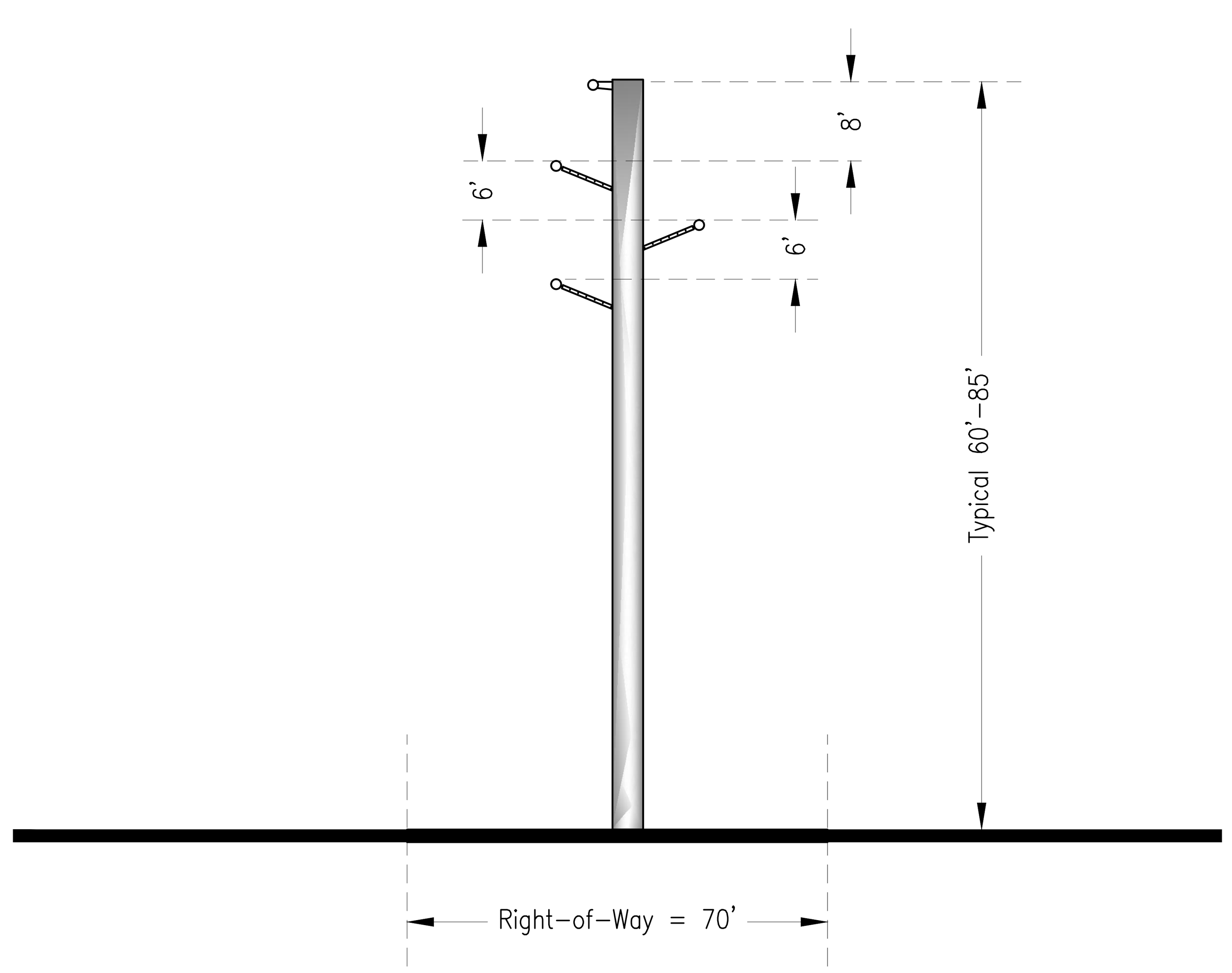
230kV DOUBLE CIRCUIT STEEL MONO-POLE

SCALE: NTS



230kV SINGLE CIRCUIT STEEL MONO-POLE
(FUTURE DOUBLE CIRCUIT STEEL MONO-POLE)

SCALE: NTS



115kV SINGLE CIRCUIT STEEL MONO-POLE

SCALE: NTS

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WSIP APPLICATION ATTACHMENT A4.A

TRANSMISSION TOWER/ POLES
TYPICAL DETAILS

SPEC NO.
DRAWING NO. E-501
REV.
SHEET NO. 110

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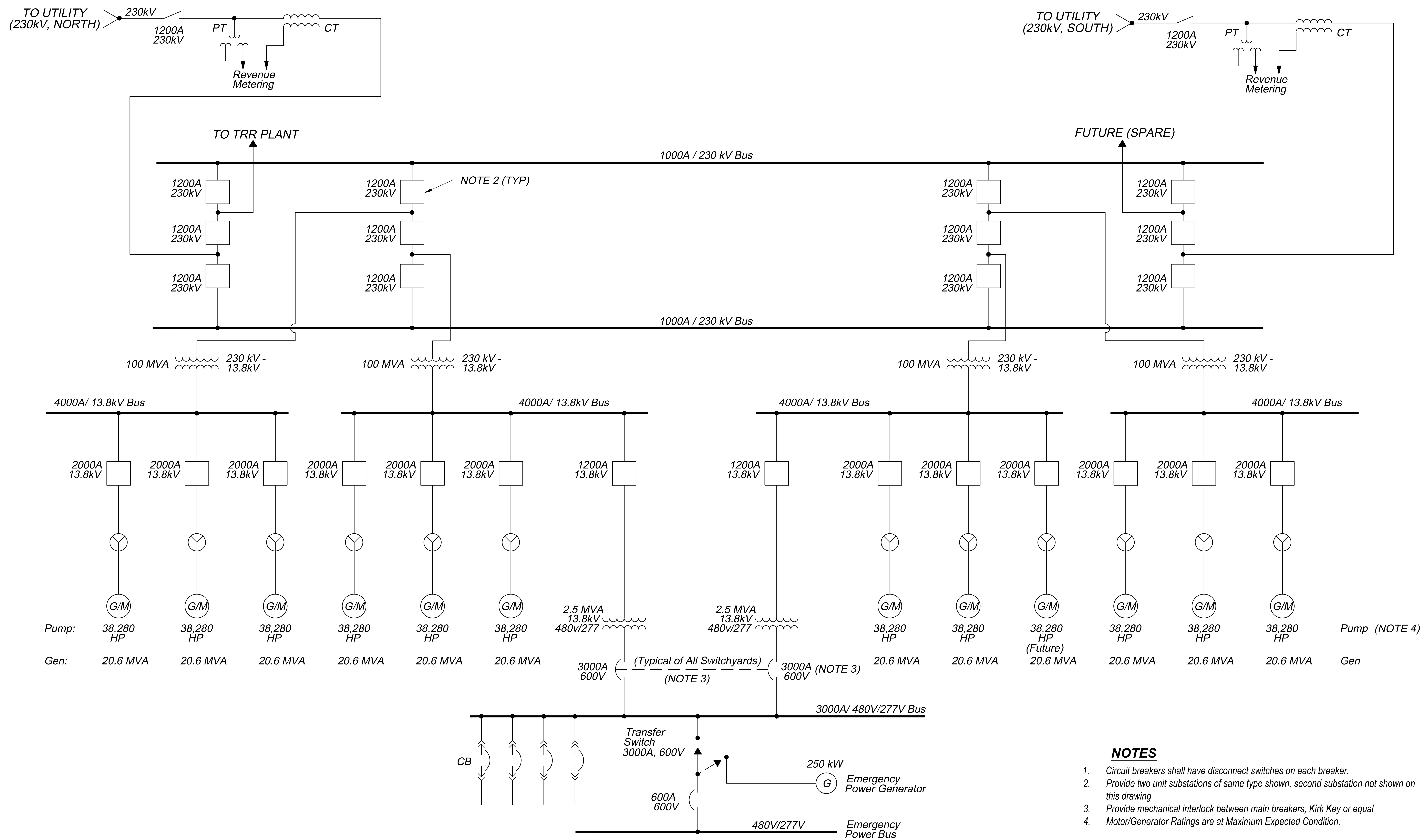

NOTES

1. Circuit breakers shall have disconnect switches on each breaker.
2. Provide two unit substations of same type shown. second substation not shown on this drawing
3. Provide mechanical interlock between main breakers, Kirk Key or equal
4. Motor/Generator Ratings are at Maximum Expected Condition.

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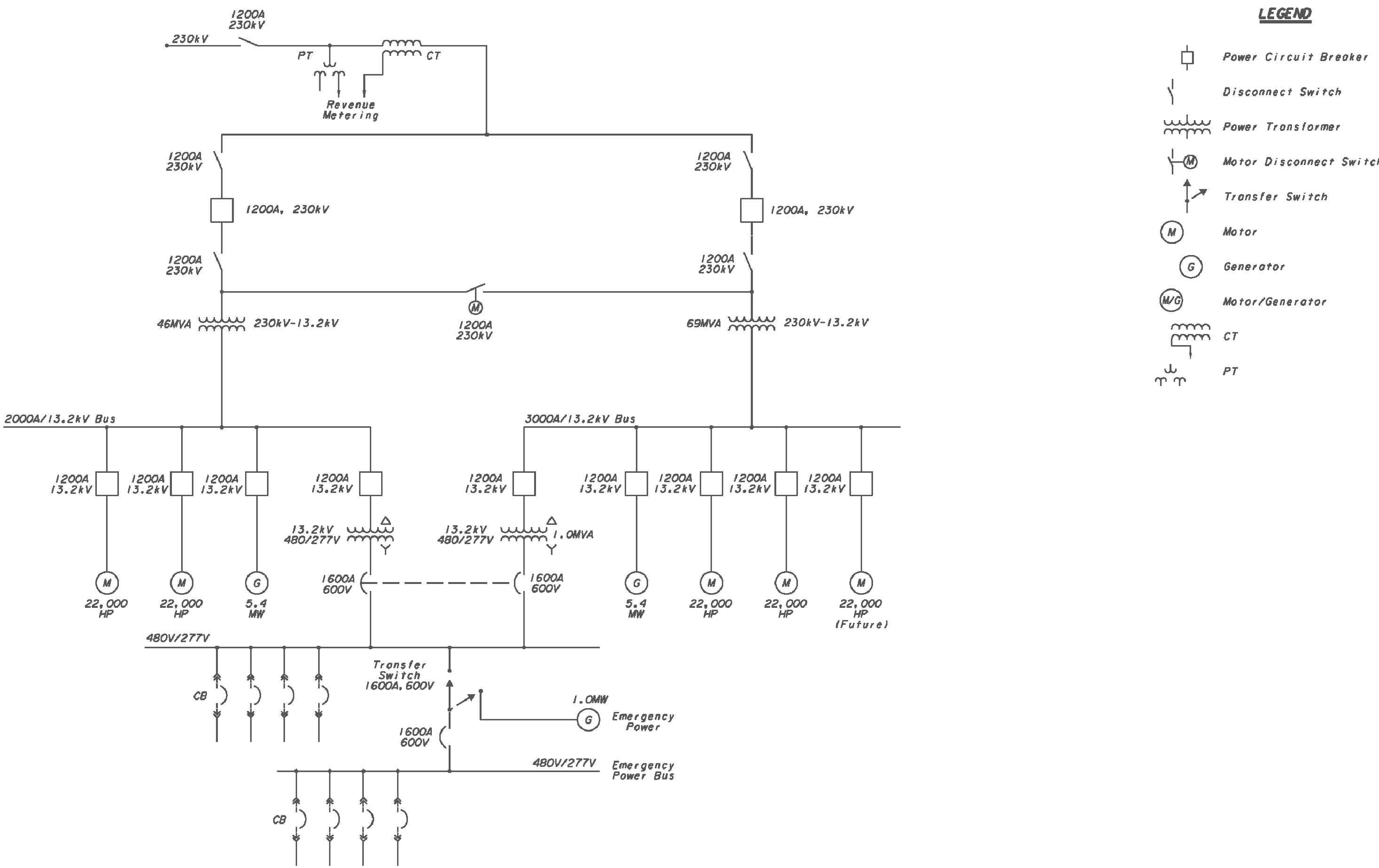
WSIP APPLICATION ATTACHMENT A4.A

SITES SWITCHYARD
SINGLE LINE DIAGRAM

SPEC NO.
DRAWING NO. E-601
REV.
SHEET NO. 111



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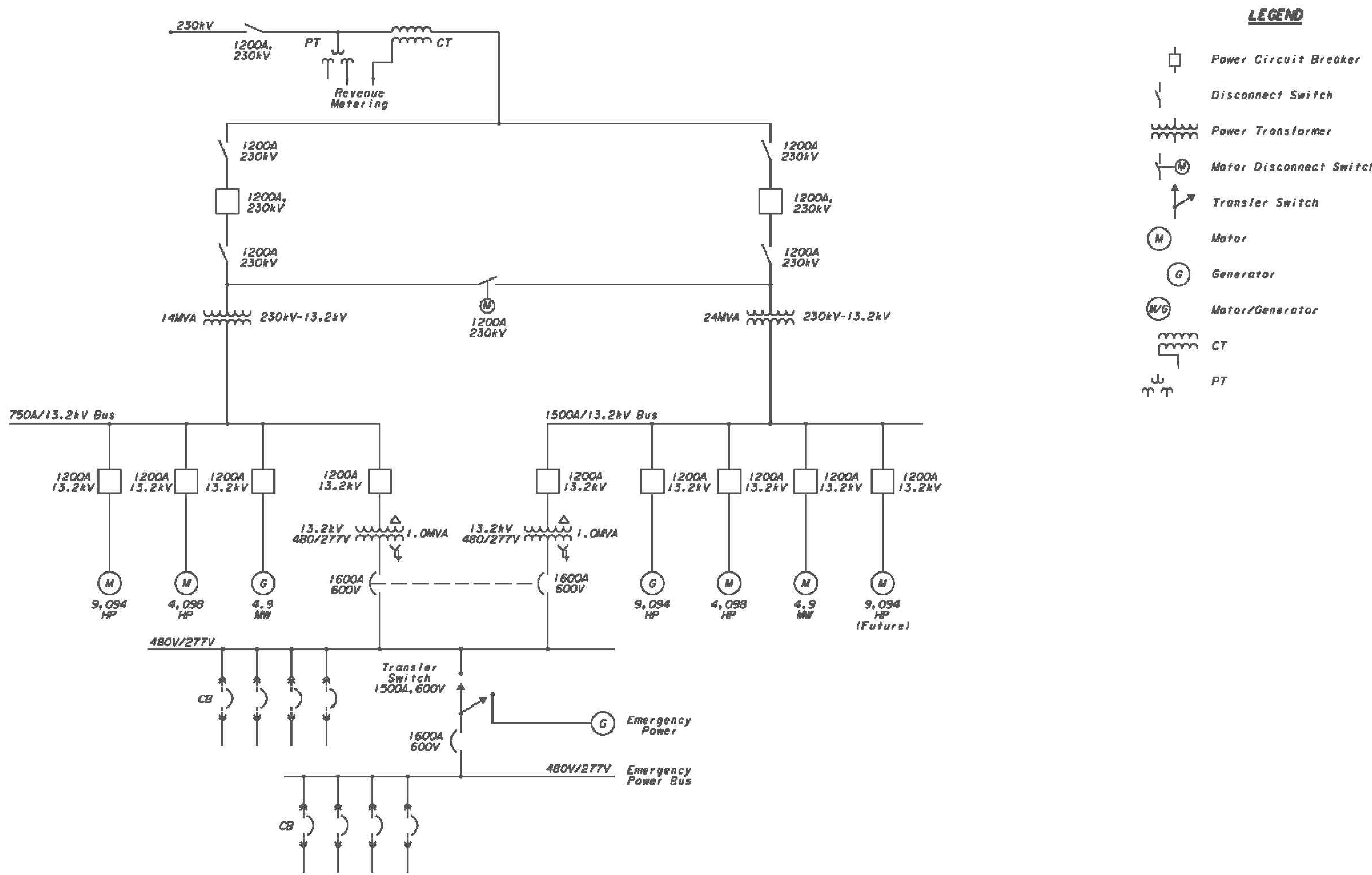
REVIEWED: MIKE FORREST, REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED: SHABAD KHALSA, REG. CE. NO. 11185
APPROVED: JOE BARNES, REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

DELEVAN SWITCHYARD
SINGLE LINE DIAGRAM

SPEC NO.
DRAWING NO. E-602
REV.
SHEET NO. 112



REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED S. KHALSA
DRAWN D. LARSON
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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DATE 08/04/2017
APPROVAL RECOMMENDED SHABAD KHALSA REG. CE. NO. 11185
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

TRR SWITCHYARD SINGLE LINE DIAGRAM

SPEC NO.
DRAWING NO. E-603
REV.
SHEET NO. 113

PLOTTED BY:BARNHART, DENNIS –August 7, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20–CAD\006–CIVIL\20–SHEETS\ELECTRICAL\E-603.DWG

APPENDIX A	
GEOTECHNICAL REFERENCES	
B-101	DELEVAN & TRR PIPELINE BORING LOCATION MAP
B-301	DELEVAN & TRR PIPELINE BORING LOGS 1 OF 4
B-302	DELEVAN & TRR PIPELINE BORING LOGS 2 OF 4
B-303	DELEVAN & TRR PIPELINE BORING LOGS 3 OF 4
B-304	DELEVAN & TRR PIPELINE BORING LOGS 4 OF 4
B-305	DELEVAN- TRR PIPELINE GEOLOGIC CROSS SECTION
B-1101	SITES DAM EXPLORATION AND GEOLOGIC MAP 1 OF 2
B-1102	SITES DAM EXPLORATION AND GEOLOGIC MAP 2 OF 2
B-1301	SITES DAM GEOLOGIC SECTION 1 OF 2
B-1302	SITES DAM GEOLOGIC SECTION 2 OF 2
B-2101	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 1 OF 10
B-2102	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 2 OF 10
B-2103	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 3 OF 10
B-2105	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 5 OF 10
B-2104	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 4 OF 10
B-2106	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 6 OF 10
B-2107	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 7 OF 10
B-2108	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 8 OF 10
B-2109	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 9 OF 10
B-2110	GOLDEN GATE DAM EXPLORATION & GEOLOGIC MAP 10 OF 10
B-2301	GOLDEN GATE DAM GEOLOGIC CROSS SECTION 1 OF 1
B-2302	GOLDEN GATE DAM GEOLOGIC CROSS SECTION 1 OF 2
B-2303	GOLDEN GATE DAM GEOLOGIC CROSS SECTION 2 OF 2
B-2304	GOLDEN GATE DAM GEOLOGIC CROSS SECTION OUTLET TUNNEL 1 OF 2
B-2305	GOLDEN GATE DAM GEOLOGIC CROSS SECTION OUTLET TUNNEL 2 OF 2
B-3101	SADDLE DAMS 1 & 2 GEOLOGIC MAP
B-3102	SADDLE DAM 3 PLAN AND PROFILE
B-3103	SADDLE DAMS 4, 5 & 6 GEOLOGIC MAP
B-3104	SADDLE DAMS 7, 8 & 9 GEOLOGIC MAP
B-3301	SADDLE DAMS 1 & 2 GEOLOGIC SECTIONS
B-3302	SADDLE DAMS 4, 5 & 6 GEOLOGIC SECTIONS
B-4301	INLET-OUTLET GEOLOGIC SECTIONS

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED T. QUINTRAIL
DRAWN C. JIMENEZ
CHECKED T. QUINTRAIL / M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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DATE 08/04/2017
APPROVAL RECOMMENDED REG. CE. NO.
APPROVED JOE BARNES REG. CE. NO. 40105

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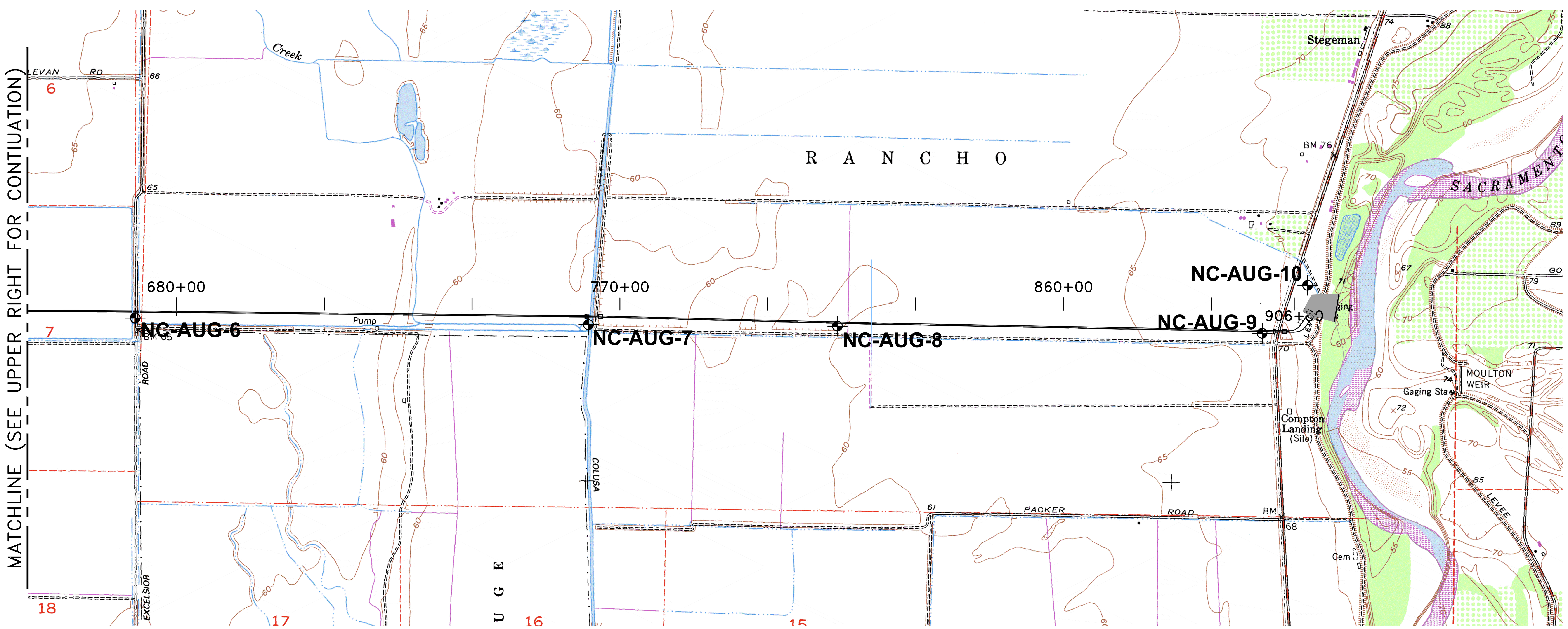
GEOTECHNICAL APPENDIX

SPEC NO.
DRAWING NO. B-100
REV.
SHEET NO. 114

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\01-GEOTECHNICAL\B-100.DWG



SOURCE:
Sites Project, Feasibility Study for Conveyance, Colusa Basin Drain, and Funks Reservoir Modification-Aug-03.pdf

PLAN

HORIZONTAL SCALE: 1" = 1500'

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSP	JB

DESIGNED: DWR
DRAWN: D. LARSON
CHECKED: M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL: FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVAL RECOMMENDED: REG. CE. NO.
APPROVED: JOE BARNES, REG. CE. NO. 40105

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WSIP APPLICATION ATTACHMENT A4.A

GEOTECHNICAL DELEVAN AND TRR PIPELINE BORING LOGS

SPEC NO.
DRAWING NO. B-101
REV.
SHEET NO. 115

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 1 of 3 — HOLE NO. NC-AUG-1 — ELEV. 200* FEET — DEPTH 51.5 FEET

PROJECT SITES RESERVOIR PROJECT — DATE DRILLED 05/05/01
FEATURE NEW CANAL ALIGNMENT — ATTITUDE VERTICAL
LOCATION CAL COORDS: N- 2247683; E- 6482710 — LOGGED BY D. FOREWALTER, G. GORDON
CONTR LAYNE-CHRISTENSEN — DRILL RIG CME-850 — DEPTH TO WATER NOT DETERMINED
*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (200)	CL	PLIOCENE TEHAMA FORMATION 0.0 to ~16.0'		AD	8" hollow stem auger used for drilling.
2.0		2.0 to 4.5' Clay (CL); silty; light yellowish-brown (10YR 6/4); dry, high plasticity; medium toughness; very high dry strength.	1	PS	Shelby Tube 800 psi Shear Strength = N/A Unconfined Strength = >4.5 tons/ft²
4.0				AD	
6.0		5.0 to 7.5' Clay (CL); silty; olive brown (2.5Y 6/6); dry, high plasticity; very high dry strength.	2	PS	Shelby Tube 1000 psi Shear Strength = 4.25 kg/cm² Unconfined Strength = >4.5 tons/ft²
8.0 (192)				AD	
10.0		10.0 to 11.5' Clay (CL); silty; yellowish-brown (10YR 5/6); dry; very stiff to hard; low to medium plasticity; very high dry strength.	3	DR	California Modified Blow Count- 16,42,50 for 5" Shear Strength = 5.0 kg/cm² Unconfined Strength = >4.5 tons/ft²
12.0				AD	
14.0		15.0 to 16.5' Clay (CL); silty; yellowish-brown (10YR5/6); dry, very stiff to hard; medium plasticity; very high dry strength; severely weathered bedrock; remaining bedrock, mudstone; light olive brown (2.5Y5/3).	4	DR	California Modified Blow Count- 18,50,50+ cont. next page

State of California
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DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 2 of 3 — HOLE NO. NC-AUG-1

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
16.0 (184)					Shear Strength = 5.25 kg/cm² Unconfined Strength = >4.5 tons/ft²
18.0		GREAT VALLEY SEQUENCE CRETACEOUS CORTINA FORMATION ~16.0 to 51.5'		AD	
20.0		20.0 to 51.5' Weathered mudstone.	5	DR	California Modified Blow Count- 12,29,45 Shear Strength = 8.125 kg/cm² Unconfined Strength = >4.5 tons/ft²
22.0				AD	
24.0 (176)			6	DR	California Modified Blow Count- 27,50 for 5" Shear Strength = N/A Unconfined Strength = >4.5 tons/ft²
28.0				AD	
30.0			7	DR	California Modified Blow Count- 46,50 for 3" Shear Strength = N/A Unconfined Strength = >4.5 tons/ft²
32.0				AD	
34.0			8	DR	California Modified Blow Count- 46,50 for 3"

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DRILL HOLE LOG

SHEET 3 of 3 — HOLE NO. NC-AUG-1

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (164)					Shear Strength = N/A Unconfined Strength = >4.5 tons/ft²
38.0				AD	
40.0			9	DR	California Modified Blow Count- 30,50 for 3" Shear Strength = N/A Unconfined Strength = >4.5 tons/ft²
42.0				AD	
44.0 (156)			10	DR	California Modified Blow Count- 50,50 for 3" Shear Strength = N/A Unconfined Strength = >4.5 tons/ft²
48.0				AD	
50.0		BOH = 51.5'	11	DR	California Modified Blow Count- 100 for 5" Shear Strength = N/A Unconfined Strength = >4.5 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

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DRILL HOLE LOG

SHEET 1 of 3 — HOLE NO. NC-AUG-2 — ELEV. 170* FEET — DEPTH 51.5 FEET

PROJECT SITES RESERVOIR PROJECT — DATE DRILLED 05/05/01
FEATURE NEW CANAL ALIGNMENT — ATTITUDE VERTICAL
LOCATION CAL COORDS: N- 2246895; E- 6486288 — LOGGED BY D. FOREWALTER, G. GORDON
CONTR LAYNE-CHRISTENSEN — DRILL RIG CME-850 — DEPTH TO WATER 6.0'
*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (170)		PLIOCENE TEHAMA FORMATION 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0	CL	2.0' Clay (CL); silty; dark brown (10YR 3/3); hard, dry; medium to high plasticity; high dry strength; few grass rootlets.	1	PS	Shelby Tube 500 psi Shear Strength = N/A Unconfined Strength = N/A
4.0	SC	4.5' Sand (SC); very fine sand; clayey; silty; yellowish brown (10YR 5/4); dry, very dense; low to medium plasticity, low toughness; high dry strength; some calcareous blebs (white 2.5 Y 8/2).		AD	
6.0		5.0' Clay (CL); sandy, silty; yellowish brown (10YR 5/4); dry, hard; high plasticity; high toughness; high dry strength.	2	PS	Shelby Tube 1200 psi Shear Strength = 13.75 kg/cm² Unconfined Strength = 4.6 tons/ft²
8.0 (162)	CL	7.5' Clay (CL); sandy, silty; yellow (2.5YR 7/6); dry; hard; medium plasticity; medium toughness; high dry strength.		AD	
10.0		10.0 to 11.5' Sand (SM); silty; light yellowish-brown (10YR 6/4); fine sand, sub-angular to sub-rounded; medium dense to dense, dry; nonplastic; low toughness.	3	DR	California Modified Blow Count- 10,19,42 Shear Strength = 2.5 kg/cm² Unconfined Strength = >4.5 tons/ft²
12.0				AD	
14.0	CL	15.0 to 16.5' Clay (CL); silty; yellowish brown (10YR 5/4), stiff to hard, dry; high plasticity; medium toughness; high dry strength.	4	DR	California Modified Blow Count- 13,20,33 cont. next page.

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DRILL HOLE LOG

SHEET 2 of 3 — HOLE NO. NC-AUG-2

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
16.0 (154)					Shear Strength = 2.5 kg/cm² Unconfined Strength = >4.5 tons/ft²
18.0				AD	
20.0		20.0 to 21.5' Clay (CL); silty; light olive brown (2.5 Y 5/4); stiff to very stiff, slightly moist; high plasticity; low dry strength.	5	DR	California Modified Blow Count- 9,13,28 Shear Strength = 1.25 kg/cm² Unconfined Strength = >4.5 tons/ft²
22.0				AD	
24.0 (146)		25.0 to 26.5' Clay (CL); sandy, silty; brownish-yellow (10YR 6/6); minor fine sand, moist.	6	DR	California Modified Blow Count- 11,18,24 Shear Strength = 11.25 kg/cm² Unconfined Strength = >4.5 tons/ft²
26.0	CL				
28.0				AD	
30.0		30.0 to 31.5' Clay (CL); silty, sandy; yellowish-brown (10 YR 5/4); fine sand; stiff, slightly moist; low plasticity; low toughness; minor iron staining.	7	DR	California Modified Blow Count- 8,15,19 Shear Strength = 10.625 kg/cm² Unconfined Strength = >4.5 tons/ft²
32.0				AD	
34.0		35.0 to 36.5' Clay (CL); sandy, silty; brownish-yellow (10YR 6/6); fine to medium sand; stiff to hard, slightly moist; low plasticity; low toughness; abundant iron staining.	8	DR	California Modified Blow Count- 6,9,43

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DRILL HOLE LOG

SHEET 3 of 3 — HOLE NO. NC-AUG-2

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (134)					Shear Strength = 1.25 kg/cm² Unconfined Strength = >4.5 tons/ft²
38.0				AD	
40.0		40.0 to 41.5' Clay (CL); gravelly, silty; olive brown (2.5Y4/3); fine gravel; firm to very stiff, slightly moist; high plasticity; medium toughness; nodules of greenish-brown clay.	9	DR	California Modified Blow Count- 8,17,22 Shear Strength = 9.375 kg/cm² Unconfined Strength = 3.0 tons/ft²
42.0				AD	
44.0 (126)	CL	45.0 to 46.5' Clay (CL); silty; light olive brown (2.5Y 5/4); stiff to hard, slightly moist; high plasticity; low to medium toughness.	10	DR	California Modified Blow Count- 11,17,31 Shear Strength = 8.75 kg/cm² Unconfined Strength = >4.5 tons/ft²
48.0				AD	
50.0		50.0 to 51.5' Clay (CL); silty; olive brown (2.5Y 4/3); firm to very stiff, slightly moist; high plasticity; medium to high toughness; iron staining and mottling. BOH = 51.5'	11	DR	California Modified Blow Count- 8,15,28 Shear Strength = 11.25 kg/cm² Unconfined Strength = >4.5 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

State of California
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DRILL HOLE LOG

SHEET 1 of 3 — HOLE NO. NC-AUG-3 — ELEV. 95* FEET — DEPTH 51.5 FEET

PROJECT SITES RESERVOIR PROJECT — DATE DRILLED 05/06/01
FEATURE NEW CANAL ALIGNMENT — ATTITUDE VERTICAL
LOCATION CAL COORDS: N- 2250486; E- 6502080 — LOGGED BY D. FOREWALTER, G. GORDON
CONTR LAYNE-CHRISTENSEN — DRILL RIG CME-850 — DEPTH TO WATER 5.5'
*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (95)		PLEISTOCENE LOWER RIVER BANK FORMATION 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0		2.0 to 4.5' Clay (CL); silty; dark brown (10YR 3/3); firm, slightly moist; medium plasticity, medium toughness; high dry strength.	1	PS	Shelby Tube 400 psi Shear Strength = 8.0 kg/cm² Unconfined Strength = 1.25 tons/ft²
4.0				AD	
6.0	CL	5.0 to 7.5' Clay (CL); silty; dark yellowish-brown (10YR 4/4); soft, wet; medium plasticity, low toughness; medium dry strength.	2	PS	Shelby Tube 400 psi Shear Strength = 1.0 kg/cm² Unconfined Strength = ~0.0 tons/ft²
8.0 (87)				AD	
10.0		10.0 to 11.5' Clay (CL); silty; dark yellowish-brown (10YR 4/4); soft to firm, moist to very moist; high plasticity; medium toughness; high dry strength.	3	DR	California Modified Blow Count- 3,3,5 Shear Strength = 4.5 kg/cm² Unconfined Strength = 0.5 tons/ft²
12.0				AD	
14.0	ML	15.0 to 16.5' Silt (ML); clayey, minor coarse sand and fine gravels; dark yellowish-brown (10YR3/6), very soft, wet; low toughness; high dry strength.	4	DR	California Modified Blow Count- 2,2,3 cont. next page.

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DRILL HOLE LOG

SHEET 2 of 3 — HOLE NO. NC-AUG-3

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
16.0 (79)	ML				Shear Strength = 6.0 kg/cm² Unconfined Strength = 1.25 tons/ft²
18.0				AD	
20.0	CL	20.0 to 21.5' Clay (CL); silty; dark yellowish-brown (10YR 4/6); firm, slightly moist; high dry strength.	5	DR	California Modified Blow Count- 7,10,10 Shear Strength = 3.0 kg/cm² Unconfined Strength = 1.0 tons/ft²
22.0				AD	
24.0 (71)	ML	25.0 to 26.5' Silt (ML); clayey; dark yellowish-brown (10YR 4/6); very stiff, slightly moist; medium plasticity, high toughness; high dry strength.	6	DR	California Modified Blow Count- 12,17,20 Shear Strength = 8.75 kg/cm² Unconfined Strength = 3.1 tons/ft²
28.0				AD	
30.0	CL	30.0 to 31.5' Clay (CL); silty; dark yellowish-brown (10YR 4/4); firm, moist to slightly moist; medium plasticity; medium toughness; high dry strength.	7	DR	California Modified Blow Count- 6,7,10 Shear Strength = 5.725 kg/cm² Unconfined Strength = 2.2 tons/ft²
32.0				AD	
34.0		35.0 to 36.5' Clay (CL); silty; strong brown (7.5YR 4/6); firm to stiff, slightly moist; medium to high plasticity; medium toughness; high dry strength.	8	DR	California Modified Blow Count- 6,7,10

SOURCE:
Sites Project, Feasibility Study for Conveyance, Colusa Basin Drain, and Funks Reservoir Modification-Aug-03.pdf

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED DWR — DRAWN D. LARSON — CHECKED M. BARNES
APPROVAL RECOMMENDED — APPROVAL BY — ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST REG. CE. NO. 27855 — DATE 08/04/2017
APPROVAL RECOMMENDED REG. CE. NO.
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

GEOTECHNICAL DELEVAN AND TRR PIPELINE BORING LOGS

SPEC NO. — DRAWING NO. B-301 — REV. — SHEET NO. 116

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\01-GEOTECHNICAL\B-301.DWG

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SHEET 3 of 3
HOLE NO. NC-AUG-3

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (59)					Shear Strength =4.5 kg/cm² Unconfined Strength = 1.25 tons/ft²
38.0				AD	
40.0	CL	40.0 to 41.5' Clay (CL); silty; dark yellowish-brown (10YR 4/6); firm to stiff, slightly moist; medium plasticity; medium toughness; high dry strength.	9	DR	California Modified Blow Count-7,10,11 Shear Strength = 9.0 kg/cm² Unconfined Strength = 2.5 tons/ft²
42.0				AD	
44.0 (51)					
46.0	ML	45.0 to 46.5' Silt (ML); clayey; dark yellowish-brown (10YR 4/4); firm, slightly moist; medium plasticity; medium toughness.	10	DR	California Modified Blow Count- no count taken Shear Strength = 8.25 kg/cm² Unconfined Strength = 2.7 ton/ft²
48.0				AD	
50.0	CL	50.0 to 51.5' Clay (CL); silty; dark yellowish-brown (10YR 4/6); stiff to very stiff, slightly moist; high plasticity; low to medium toughness; high dry strength. BOH = 51.5'	11	DR	California Modified Blow Count- 6,12,22 Shear Strength = 8.75 kg/cm² Unconfined Strength = 1.5 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

State of California
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DEPARTMENT OF WATER RESOURCES

SHEET 1 of 3
HOLE NO. NC-AUG-4
ELEV. 80* FEET
DEPTH 51.5 FEET

DRILL HOLE LOG

PROJECT SITES RESERVOIR PROJECT
FEATURE NEW CANAL ALIGNMENT
LOCATION CAL COORDS: N- 2250560; E-6515287
CONTR. LAYNE-CHRISTENSEN DRILL RIG CME-850
DATE DRILLED 05/04/01
ATTITUDE VERTICAL
LOGGED BY B. ROSS, C. GOLSH
DEPTH TO WATER 6.9'

*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (80)		PLEISTOCENE LOWER RIVER BANK FORMATION 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0		2.0 to 4.5' Clay (CL), silty; very dark grayish-brown (10YR 3/2); soft, moist; medium plasticity; high dry strength; low toughness.	1	PS	Shelby Tube 400 psi
4.0				AD	
6.0		5.0 to 7.5' Clay (CL), slightly silty; dark grayish-brown (10YR 4/2); soft, slightly moist; medium plasticity; high dry strength; low toughness; some gray mottling and minor calcium carbonate nodules.	2	PS	Shelby Tube 450 psi Shear Strength = 8.2 kg/cm² Unconfined Strength = .75 tons/ft²
8.0 (72)	CL			AD	
10.0		10.0 to 11.5' Clay (CL); slightly silty; brown (10YR 4/3); soft, slightly moist; medium plasticity; medium toughnes; high dry strength; minor calcium carbonate nodules and some rootlets.	3	DR	California Modified Blow Count-5,6,9 Shear Strength = 6.0 kg/cm² Unconfined Strength =1.5 tons/ft²
12.0				AD	
14.0		15.0 to 16.5' Clay (CL); slightly silty; dark yellowish-brown (10YR 4/4); firm, slightly moist; medium plasticity; medium toughnes; high dry strength; minor organics and some calcium carbonate nodules.	4	DR	California Modified Blow Count-6,8,12

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SHEET 2 of 3
HOLE NO. NC-AUG-4

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
16.0 (64)					Shear Strength =12.5 kg/cm² Unconfined Strength =3.5 tons/ft²
18.0	CL			AD	
20.0		20.0 to 21.5' Clay (CL); silty; dark yellowish-brown (10YR 4/4); soft, slightly moist; medium plasticity; low toughness; high dry strength;some dark mottling and calcium carbonate.	5	DR	California Modified Blow Count-4,7,11 Shear Strength =10+ kg/cm² Unconfined Strength = 3.0 tons/ft²
22.0				AD	
24.0 (58)					
26.0	SP	25.0 to 26.5' Sand (SP); very fine-grained, angular to sub-angular; minor silt, minor clay; very dark grayish-brown (2.5Y 3/2); loose, wet; unconsolidated.	6	DR	California Modified Blow Count-6,8,9 Shear Strength =8.0 kg/cm² Unconfined Strength = 1.25 tons/ft²
28.0				AD	
30.0		30.0'-31.5' No Recovery.	7	DR	California Modified Blow Count-9,22,23 Shear Strength =N/A Unconfined Strength = N/A
32.0				AD	
34.0		35.0'-36.5' No Recovery.	8	DR	California Modified Blow Count-11,15,18

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DEPARTMENT OF WATER RESOURCES

SHEET 3 of 3
HOLE NO. NC-AUG-4

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (44)					Shear Strength =N/A Unconfined Strength = N/A
38.0				AD	
40.0		40.0 to 41.5' Clay (CL); silty; dark yellowish-brown (10YR 4/4); firm, moist; medium plasticity; medium toughness; minor organics, some mottling and calcium carbonate.	9	DR	California Modified Blow Count- 4,7,9 Unconfined Strength = 3.2tons/ft² *Only one tube recovered.
42.0				AD	
44.0 (36)					
46.0	CL	45.0 to 46.5' Clay (CL); slightly silty; brown (10YR 5/3); firm, slightly moist; medium plasticity; medium toughness; minor organics, some mottling.	10	DR	California Modified Blow Count-10,15,22 Shear Strength =N/A Unconfined Strength = 1.75 tons/ft²
48.0				AD	
50.0		50.0 to 51.5' Clay (CL); slighty silty; brown (7.5YR 4/3); firm, slightly moist; medium plasticity; medium toughness; some calcium carbonate. BOH = 51.5'	11	DR	California Modified Blow Count- 9,16,19 Shear Strength = 9.0 kg/cm² Unconfined Strength = 3.0 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

SHEET 1 of 3
HOLE NO. NC-AUG-5
ELEV. 75* FEET
DEPTH 51.5 FEET

DRILL HOLE LOG

PROJECT SITES RESERVOIR PROJECT
FEATURE NEW CANAL ALIGNMENT
LOCATION CAL COORDS; N- 2250611; E- 6518092
CONTR. LAYNE-CHRISTENSEN DRILL RIG CME-850
DATE DRILLED 05/03/01
ATTITUDE VERTICAL
LOGGED BY B. ROSS
DEPTH TO WATER 6.5'

*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO	MODE	REMARKS
0.0 (75)		HOLOCENE BASIN DEPOSITS 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0		2.0 to 4.5' Clay (CL), slightly silty; very dark grayish-brown (10YR 3/2); firm to stiff, slightly moist; medium plasticity.	1	PS	Shelby Tube 500 psi Shear Strength = 13.5 kg/cm² Unconfined Strength = 2.0 tons/ft²
4.0				AD	
6.0		5.0 to 7.5' Clay (CL); slightly silty; brown (10YR 4/3); firm, slightly moist; medium plasticity.	2	PS	Shelby Tube psi = N/A Shear Strength = 12.5 kg/cm² Unconfined Strength = 2.0 tons/ft²
8.0 (67)	CL			AD	
10.0		10.0 to 11.5' Clay (CL); silty; brown (10YR 4/3), siltier toward bottom; firm, moist; medium plasticity; minor calcium carbonate and carbonaceous material.	3	DR	California Modified Blow Count-5,6,8 Shear Strength = 4.5 kg/cm² Unconfined Strength = 1.0 tons/ft²
12.0				AD	
14.0		15.0 to 16.5' Clay (CL); silty; brown (10YR 4/3); firm, slightly moist; medium plasticity; low toughness, high dry strength; abundant carbonaceous material, minor calcium carbonate.	4	DR	California Modified Blow Count-7,9,14 cont. next page.

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SHEET 2 of 3
HOLE NO. NC-AUG-5

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO	MODE	REMARKS
16.0 (59)					Shear Strength = 6.2 kg/cm² Unconfined Strength = 1.5 tons/ft²
18.0				AD	
20.0		20.0 to 21.5' Clay (CL); slightly silty; dark yellowish-brown (10YR 4/4); firm, slightly moist; medium plasticity, high dry strength; minor calcium carbonate and carbonaceous material.	5	DR	California Modified Blow Count-7,12,17 Shear Strength =5.0 kg/cm² Unconfined Strength = 1.0 tons/ft²
22.0				AD	
24.0 (51)					
26.0	CL	25.0 to 26.5' Clay (CL); slightly silty; dark yellowish-brown (10YR 4/4); stiff, slightly moist; medium plasticity; medium toughness; high dry strength; some calcium carbonate and carbonaceous material.	6	DR	California Modified Blow Count-6,14,19 Shear Strength =22.5 kg/cm² Unconfined Strength = 3.0 tons/ft²
28.0				AD	
30.0		30.0 to 31.5' Clay (CL); very slightly silty; dark yellowish-brown (10YR 4/4); stiff, slightly moist; medium plasticity; medium toughness; high dry strength; minor carbonaceous material and calcium carbonate.	7	DR	California Modified Blow Count-9,13,15 Shear Strength =22.5 kg/cm² Unconfined Strength = 2.0 tons/ft²
32.0				AD	
34.0		35.0 to 36.5' Clay (CL); very slightly silty; dark yellowish-brown (10YR 4/4); stiff, slightly moist; medium plasticity; high toughness; high dry strength; minor calcium carbonate and carbonaceous material.	8	DR	California Modified Blow Count-10,14,18

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SHEET 3 of 3
HOLE NO. NC-AUG-5

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (39)					Shear Strength = 25 kg/cm² Unconfined Strength = 4.2 tons/ft²
38.0				AD	
40.0	CL	40.0 to 41.5' Clay (CL); very slightly silty; brown (10YR 5/3); firm, slightly moist; medium plasticity; medium toughness; very mottled, light yellowish brown (2.5Y 6/4), 1 volcanic clast 1" in diameter.	9	DR	California Modified Blow Count-10,12,14 Shear Strength =10 kg/cm² Unconfined Strength = 2.8 tons/ft²
42.0				AD	
44.0 (31)					
46.0		45.0 to 46.5' No sample recovered.	10	DR	California Modified Blow Count-6,12,16 Shear Strength = N/A Unconfined Strength = N/A
48.0				AD	
50.0	CL	50.0 to 51.5' Clay (CL); very slightly silty; brown (10YR 5/3) to dark brown (7.5YR 4/4); firm, moist; medium plasticity; medium toughness; trace iron staining and minor calcium carbonate. BOH = 51.5'	11	DR	California Modified Blow Count-12,17,20 Shear Strength = 10.0 kg/cm² Unconfined Strength = 2.5 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

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DEPARTMENT OF WATER RESOURCES

SHEET 1 of 3
HOLE NO. NC-AUG-6
ELEV. 65* FEET
DEPTH 51.5 FEET

DRILL HOLE LOG

PROJECT SITES RESERVOIR PROJECT
FEATURE NEW CANAL ALIGNMENT
LOCATION CAL COORDS; N- 2250581; E- 6528771
CONTR. LAYNE-CHRISTENSEN DRILL RIG CME-850
DATE DRILLED 05/03/01
ATTITUDE VERTICAL
LOGGED BY B. ROSS, J. WEDDLE
DEPTH TO WATER 13.0'

*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (65)		HOLOCENE BASIN DEPOSITS 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0		2.0 to 4.5' No sample recovered. Hit a piece of concrete fill.	1	PS	Shelby Tube 600 Psi
4.0				AD	
6.0		5.0 to 7.5' Clay (CL), slightly silty; dark grayish-brown (10YR 4/2); firm, slightly moist; high plasticity; medium toughness.	2	PS	Shelby Tube psi = N/A Shear Strength = 8.0 kg/cm² Unconfined Strength = 1.5 tons/ft²
8.0 (57)	CL			AD	
10.0		10.0 to 11.5' Clay (CL); slightly silty; olive brown (2.5Y 4/4); firm, slightly moist; high plasticity; medium toughnes; some organics and mottling.	3	DR	California Modified Blow Count-3,4,6 Shear Strength = 7.0 kg/cm² Unconfined Strength =0.75 tons/ft²
12.0 ∇				AD	
14.0		15.0 to 16.5' Clay (CL); slightly silty; yellowish-brown (10YR 5/4); firm, slightly moist; medium plasticity; high toughness; high dry strength;some calcium carbonate, mottling and carbonaceous material.	4	DR	California Modified Blow Count-8,13,7

SOURCE:
Sites Project, Feasibility Study for Conveyance, Colusa Basin Drain, and Funks Reservoir Modification-Aug-03.pdf

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED DWR
DRAWN D. LARSON
CHECKED M. BARNES M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST
REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED
REG. CE. NO.
APPROVED JOE BARNES
REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

GEOTECHNICAL DELEVAN AND TRR PIPELINE BORING LOGS

SPEC NO.
DRAWING NO. B-302
REV.
SHEET NO. 117

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\00-CAD\006-CIVIL\20-SHEETS\01-GEOTECHNICAL\B-302.DWG

State of California
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SHEET 2 of 3
HOLE NO. NC-AUG-6

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
16.0 (49)					Shear Strength =1.0 kg/cm² Unconfined Strength =0.25 tons/ft²
18.0				AD	
20.0		20.0 to 21.5' Clay (CL); very silty; brown (10YR 5/3); stiff, slightly moist; high plasticity; high toughness; some calcium carbonate, mottling and carbonaceous material.	5	DR	California Modified Blow Count-7,11,13 Shear Strength =12.5 kg/cm² Unconfined Strength = 3.75 tons/ft²
22.0	CL			AD	
24.0 (41)		25.0 to 26.5' Clay (CL); slightly silty; brown (7.5Y 5/4); stiff, slightly moist; medium plasticity; high toughness; slightly mottled, some calcium carbonate and minor carbonaceous material.	6	DR	California Modified Blow Count-10,15,17 Shear Strength = 13.0 kg/cm² Unconfined Strength = 3.0 tons/ft²
26.0					
28.0				AD	
30.0		30.0 to 31.5' Silt (ML); clayey; brown (10YR 4/3); soft, moist; low plasticity; low toughness.	7	DR	California Modified Blow Count-6,8,8 Shear Strength =2.0 kg/cm² Unconfined Strength = 1.0 tons/ft²
32.0	ML			AD	
34.0		35.0 to 36.5' Silt (ML); very slightly clayey; dark brown (10YR 3/3); soft, loose, vey moist; nonplastic; low toughness.	8	DR	California Modified Blow Count-8,13,7

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SHEET 3 of 3
HOLE NO. NC-AUG-6

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO	MODE	REMARKS
36.0 (29)					Shear Strength =1.0 kg/cm² Unconfined Strength = 0.25 tons/ft²
38.0				AD	
40.0		40.0 to 41.5' Sand (SM); slightly silty; very dark grayish-brown (10YR 3/2); fine-grained, loose, wet, subangular, unconsolidated.	9	DR	California Modified Blow Count-5,9,15 Shear Strength =N/A Unconfined Strength = N/A
42.0	SM			AD	
44.0 (21)		45.0 to 46.5' Sand (SM); dark brown (10YR 3/2); clean, fine-grained, loose, very moist to wet, unconsolidated, subangular black chert and quartz clasts.	10	DR	California Modified Blow Count-10,18,31 Shear Strength =0.25 kg/cm² Unconfined Strength = 0.25 tons/ft²
46.0					
48.0				AD	
50.0	CL	50.0 to 51.5' Clay (CL); brown (10YR 5/3); soft to firm, moist; high plasticity; low toughness; iron staining and mottling. BOH = 51.5'	11	DR	California Modified Blow Count-4,16,8 Shear Strength =4.0 kg/cm² Unconfined Strength = 1.0 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

State of California
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DEPARTMENT OF WATER RESOURCES

SHEET 1 of 3
HOLE NO. NC-AUG-7
ELEV. 60* FEET
DEPTH 51.5 FEET

DRILL HOLE LOG

PROJECT SITES RESERVOIR PROJECT
FEATURE NEW CANAL ALIGNMENT
LOCATION CAL COORDS: N- 2250444; E-6537985
CONTR. LAYNE-CHRISTENSEN DRILL RIG CME-850
DATE DRILLED 05/01/01
ATTITUDE VERTICAL
LOGGED BY B. ROSS, J. WEDDLE
DEPTH TO WATER 12.0'

*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (60)		HOLOCENE BASIN DEPOSITS 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0		3.0 to 4.5' Clay (CL), minor silt; dark gray (2.5Y 4/1); soft, moist; high plasticity; high dry strength; low toughness; some mottling.	1	DR	California Modified Blow Count-4,5,7 Shear Strength = 6.4 kg/cm² Unconfined Strength = 0.75 tons/ft²
4.0	CL			AD	
		5.0 to 6.5' Clay (CL), minor silt; dark gray (5Y 4/1); soft, moist; high plasticity; high dry strength; low toughness; few rootlets.	2	DR	California Modified Blow Count-3,4,6 Shear Strength = 5.3 kg/cm² Unconfined Strength = 1.0 tons/ft²
6.0					
8.0 (52)				AD	
10.0	SP	10.0 to 11.5' Sand (SP); very fine-grained, minor silt and clay; light yellowish brown (2.5Y6/3); loose, wet; sub-angular to sub-rounded; unconsolidated.	3	DR	California Modified Blow Count-5,6,7 Shear Strength = 4.3 kg/cm² Unconfined Strength = .75tons/ft²
12.0				AD	
14.0		15.0 to 16.5' No sample recovered.	4	DR	California Modified Blow Count-4,14,22

State of California
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DEPARTMENT OF WATER RESOURCES

SHEET 2 of 3
HOLE NO. NC-AUG-7

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
16.0 (44)					
18.0				AD	
20.0		20.0 to 21.5' Clay (CL); light olive brown (2.5Y 5/4); stiff, moist; high plasticity; medium toughness; some dark mottling.	5	DR	California Modified Blow Count-4,7,11 Shear Strength =10+ kg/cm² Unconfined Strength = 3.0tons/ft²
22.0	CL			AD	
24.0 (36)			6	DR	California Modified Blow Count-3,5,9 Shear Strength =1.4 kg/cm² Unconfined Strength = 0.7 tons/ft²
26.0	SP	25.5 to 26.5' Sand (SP); very fine-grained, minor silt, minor clay;very dark grayish brown (2.5 Y3/2); loose, wet; low plasticity; angular to sub-angular; unconsolidated.			
28.0				AD	
30.0		30.0 to 31.5' Sand (SW); gravelly, fine sand to fine gravel; very dark grayish-brown (2.5Y 3/2); wet, medium density; sub-angular to sub-rounded; unconsolidated.	7	DR	California Modified Blow Count-7,24,29 Shear Strength =0.4 kg/cm² Unconfined Strength = 0.75 tons/ft²
32.0	SW			AD	
34.0		35.0 to 36.5' Sand (SW); gravelly, fine sand to fine gravel; dark grayish-brown (2.5Y 4/2); wet, medium density; sub-rounded; unconsolidated.	8	DR	California Modified Blow Count-21,26,29

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SHEET 3 of 3
HOLE NO. NC-AUG-7

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO	MODE	REMARKS
36.0 (24)					Shear Strength =1.5kg/cm2 Unconfined Strength = N/A
38.0	GW			AD	
40.0		40.0 to 40.7' Gravel (GW); fine to medium gravel with minor silt and clay; light olive brown (2.5Y 5/4); wet, loose; sub-rounded to rounded; unconsolidated.	9	DR	California Modified Blow Count-7,9,13 Shear Strength =10+ kg/cm² Unconfined Strength = 1.8 tons/ft²
		40.7 to 41.5' Clay (CL); minor silt; light olive brown (2.5Y 5/3); stiff, moist; medium plasticity; high dry strength; medium toughness; some mottling.			
42.0				AD	
44.0 (16)		45.0 to 46.5' Clay (CL); minor silt; light olive brown (2.5Y 5/4); firm, moist; medium plasticity; high dry strength; medium toughness.	10	DR	California Modified Blow Count-5,7,10 Shear Strength =10+ kg/cm² Unconfined Strength = 2.7tons/ft²
46.0	CL				
48.0				AD	
50.0		50.0 to 51.5' Clay (CL); minor silt; brown (10YR 5/3); firm, moist; medium plasticity; high dry strength; medium toughness. BOH = 51.5'	11	DR	California Modified Blow Count-5,7,11 Shear Strength =9.5 kg/cm² Unconfined Strength = 1.5 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

State of California
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SHEET 1 of 3
HOLE NO. NC-AUG-8
ELEV. 60* FEET
DEPTH 51.5 FEET

DRILL HOLE LOG

PROJECT SITES RESERVOIR PROJECT
FEATURE NEW CANAL ALIGNMENT
LOCATION CAL COORDS: N- 2250416; E- 6543015
CONTR. LAYNE-CHRISTENSEN DRILL RIG CME-850
DATE DRILLED 05/01/01
ATTITUDE VERTICAL
LOGGED BY B. ROSS, J. WEDDLE
DEPTH TO WATER 6.0'

*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO	MODE	REMARKS
0.0 (60)		PLEISTOCENE LOWER MODESTO FORMATION 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0		2.0 to 4.5' Clay (CL); very dark grayish-brown (10YR 3/2); firm, moist; medium plasticity; low toughness.	1	PS	Shelby Tube 400 psi Shear Strength = 6.4 kg/cm² Unconfined Strength = 1.2 tons/ft²
4.0				AD	
		5.0 to 7.5' Clay (CL); silty; dark yellowish-brown (10YR 4/4); firm, moist; low plasticity; medium toughness.	2	PS	Shelby Tube 1000 psi Shear Strength = 3.2 kg/cm² Unconfined Strength = 3.5 tons/ft²
6.0	CL				
8.0 (52)				AD	
10.0		10.0 to 11.5' Clay (CL); silty; grayish-brown (10YR 5/2); soft, moist; medium plasticity; low toughnes; high dry strength.	3	DR	California Modified Blow Count- 4,6,7 Shear Strength = 4.9 kg/cm² Unconfined Streng.0th = 1.0 tons/ft²
12.0				AD	
14.0		15.0 to 16.5' Clay (CL); minor silt; grayish-brown (10YR 5/2); firm, moist; medium plasticity; medium toughnes; high dry strength; some mottling.	4	DR	California Modified Blow Count- 3,7,14

State of California
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DEPARTMENT OF WATER RESOURCES

SHEET 2 of 3
HOLE NO. NC-AUG-8

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO	MODE	REMARKS
16.0 (44)					Shear Strength = 12.5 kg/cm² Unconfined Strength = 3.5 tons/ft²
18.0				AD	
20.0		20.0 to 21.5' Clay (CL); silty, minor fine sand; dark grayish-brown (2.5Y 4/2); firm, moist; medium plasticity; low toughness; medium dry strength; some gray mottling and organics.	5	DR	California Modified Blow Count- 5,6,7 Shear Strength = 9.0 kg/cm² Unconfined Strength = 1.0 tons/ft²
22.0				AD	
24.0 (36)	CL	25.0 to 26.5' Clay (CL); silty; dark grayish-brown (10YR 4/2); soft, moist; low plasticity; low toughness; low dry strength; mottling.	6	DR	California Modified Blow Count- 4,5,6 Shear Strength = 2.4 kg/cm² Unconfined Strength = 0.5 tons/ft²
26.0					
28.0				AD	
30.0		30.0 to 31.5' Clay (CL); very silty; dark grayish-brown (10YR 4/2); firm, moist; low plasticity; low toughness; low dry strength; iron staining; mottling; possible bioturbation.	7	DR	California Modified Blow Count- 11,12,15 Shear Strength = 3.2 kg/cm² Unconfined Strength = 1.0 tons/ft²
32.0				AD	
34.0	GC	35.25 to 35.75' Gravel (GC); clayey, silty, coarse gravel; brown (10YR5/3) to dark grayish-brown	8	DR	California Modified Blow Count- 48,50 for 3"

State of California
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DEPARTMENT OF WATER RESOURCES

SHEET 3 of 3
HOLE NO. NC-AUG-8

DRILL HOLE LOG

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (24)		(10YR 4/2); loose, moist; low plasticity; low toughness; mottled.			
38.0				AD	
40.0		40.0 to 40.9' Gravel (GW); sandy; greenish-black (Gley 5GY); medium gravel to fine sand; dense, wet; subrounded to rounded; unconsolidated.	9	DR	California Modified Blow Count- 42,50 for 5" Shear Strength =N/A Unconfined Strength = N/A
42.0				AD	
44.0 (16)	GW	45.0 to 46.5' Gravel (GW); sandy, minor silt; very dark gray (Gley 3/N); dense, wet, subrounded to rounded, unconsolidated.	10	DR	California Modified Blow Count-19,25,29 Shear Strength = N/A Unconfined Strength = N/A
46.0					
48.0				AD	
50.0		50.0 to 51.5' Gravel (GW); sandy, minor silt; dark greenish-gray (Gley 3/10Y); dense, wet; subrounded to rounded; unconsolidated. BOH = 51.5'	11	DR	California Modified Blow Count-12,29,48 Shear Strength =N/A Unconfined Strength =N/A
52.0					Hole completed by back filling with cuttings.
54.0					

SOURCE:
Sites Project, Feasibility Study for Conveyance, Colusa Basin Drain, and Funks Reservoir Modification-Aug-03.pdf

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED DWR
DRAWN D. LARSON
CHECKED M. BARNES
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-5557
www.aecom.com

REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED REG. CE. NO.
APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

GEOTECHNICAL DELEVAN AND TRR PIPELINE BORING LOGS

SPEC NO.
DRAWING NO. B-303
REV.
SHEET NO. 118

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 1 of 3
HOLE NO. NC-AUG-9
ELEV. 70* FEET
DEPTH 51.5 FEET

PROJECT SITES RESERVOIR PROJECT
FEATURE NEW CANAL ALIGNMENT
LOCATION CAL COORDS: N- 2250270; E- 6551632
CONTR. LAYNE-CHRISTENSEN DRILL RIG CME-850
DATE DRILLED 05/02/01
ATTITUDE VERTICAL
LOGGED BY B. ROSS, C. BOURNE
DEPTH TO WATER 9.0'

*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (70)	CL	PLEISTOCENE LOWER MODESTO FORMATION 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0		2.0 to 4.5' Clay (CL); silty; very dark grayish-brown (10YR 3/2); soft, slightly moist; low plasticity; low toughness.	1	PS	Shelby Tube 500 psi Shear Strength = 8.4 kg/cm² Unconfined Strength = 3.0 tons/ft²
4.0				AD	
		5.0 to 7.5' Clay (CL); silty; very dark grayish-brown (10YR 3/2); soft, moist; low plasticity, low toughness.	2	PS	Shelby Tube 300 psi Shear Strength = 4.6 kg/cm² Unconfined Strength = 1.0 tons/ft²
6.0					
8.0 (62)				AD	
10.0		10.0 to 11.5' Clay (CL); minor silt; brown (10YR 4/3); soft, moist; medium plasticity; low toughness; high dry strength.	3	DR	California Modified Blow Count-4,4,5 Shear Strength = 3.4 kg/cm² Unconfined Strength = 1.0 tons/ft²
12.0				AD	
14.0					
		15.0 to 16.5' Clay (CL); minor silt; brown (10YR 4/3), soft, wet; high plasticity; low toughness; high dry strength.	4	DR	California Modified Blow Count-3,4,4 cont. next page.

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 2 of 3
HOLE NO. NC-AUG-9

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO	MODE	REMARKS
16.0 (54)	CL				Shear Strength = 2.5 kg/cm² Unconfined Strength = 0.75 tons/ft²
18.0				AD	
20.0		20.0 to 21.5' Clay (CL); silty; brown (10YR 5/3); stiff, moist; low plasticity; medium toughness; medium dry strength.	5	DR	California Modified Blow Count-9,21,28 Shear Strength =10.0 kg/cm² Unconfined Strength = 3.5tons/ft²
22.0				AD	
24.0 (46)					
		25.0 to 26.5' Clay (CL); minor silt; light olive brown (2.5Y 5/3); firm, moist; medium plasticity; medium toughness; high dry strength; some mottling and calcium carbonate blebs, trace organics.	6	DR	California Modified Blow Count-5,7,11 Shear Strength =10.0 kg/cm² Unconfined Strength = 2.0 tons/ft²
26.0					
28.0	ML			AD	
30.0		30.0 to 31.5' Silt (ML); clayey; yellowish-brown (10 YR 5/4); firm, moist; low plasticity; medium toughness; some organics.	7	DR	California Modified Blow Count-8,15,18 Shear Strength = 3.8 kg/cm² Unconfined Strength = 3.5 tons/ft²
32.0				AD	
34.0	CL	35.0 to 36.5' Clay (CL); silty; light olive brown (2.5Y 5/4); very stiff, slightly moist; low plasticity; high toughness; minor calcium carbonate blebs and organics.	8	DR	California Modified Blow Count-10,19,24

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 3 of 3
HOLE NO. NC-AUG-9

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (34)					Shear Strength =11.0kg/cm² Unconfined Strength = 4.5 tons/ft²
38.0				AD	
40.0	ML	40.0 to 41.5' Silt (ML); clayey; light olive brown (2.5Y 5/4); firm, moist; low plasticity; low toughness; some calcium carbonate, minor carbonaceous material.	9	DR	California Modified Blow Count-7,9,12 Shear Strength =4.6 kg/cm² Unconfined Strength = 2.0 tons/ft²
42.0				AD	
44.0 (26)	CL				
		45.0 to 46.5' Clay (CL); silty; light olive brown (2.5Y 5/4); firm, moist; low plasticity; medium toughness; minor calcium carbonate, organics and mottling.	10	DR	California Modified Blow Count-6,12,18 Shear Strength = 10.0kg/cm² Unconfined Strength = 3.5 ton/ft²
46.0					
48.0				AD	
50.0		50.0 to 51.5' Clay (CL); minor silt; light olive brown (2.5Y 5/3); soft, moist; medium plasticity; low toughness; minor calcium carbonate, mottling and organics. BOH = 51.5'	11	DR	California Modified Blow Count-9,13,17 Shear Strength = 4.2 kg/cm² Unconfined Strength = 1.0 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 1 of 3
HOLE NO. NC-AUG-10
ELEV. 65* FEET
DEPTH 51.5 FEET

PROJECT SITES RESERVOIR PROJECT
FEATURE NEW CANAL ALIGNMENT
LOCATION CAL COORDS: N- 2251244; E- 6552553
CONTR. LAYNE-CHRISTENSEN DRILL RIG CME-850
DATE DRILLED 05/02/01
ATTITUDE VERTICAL
LOGGED BY B. ROSS, C. BOURNE
DEPTH TO WATER 9.0'

*As measured off of contour maps prepared by DWR (contour interval=10 feet).

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
0.0 (65)		PLEISTOCENE LOWER MODESTO FORMATION 0.0 to 51.5'		AD	8" hollow stem auger used for drilling.
2.0	ML	2.0 to 4.5' Silt (ML); clayey; dark grayish-brown (10YR 4/2); soft, slightly moist; low plasticity; low toughness.	1	PS	Shelby Tube 600 psi Shear Strength = 5.0 kg/cm² Unconfined Strength = 4.5+ tons/ft²
4.0				AD	
	CL	5.0 to 7.5' Clay (CL); silty; dark grayish-brown (10YR 4/2); firm, slightly moist; medium plasticity; medium toughness.	2	PS	Shelby Tube 600 psi Shear Strength = 6.3 kg/cm² Unconfined Strength = 4.5+ tons/ft²
6.0					
8.0 (57)				AD	
∇					
10.0	ML	10.0 to 11.5' Silt (ML); clayey; dark grayish-brown (10YR 4/2); firm, slightly moist; low plasticity; low toughness; high dry strength.	3	DR	California Modified Blow Count- 5,7,10 Shear Strength = N/A Unconfined Strength = N/A
12.0				AD	
14.0	CL				
		15.0 to 16.5' Clay (CL); silty; brown (10YR 4/3); firm, slightly moist; medium plasticity; medium toughness; some rootlets.	4	DR	California Modified Blow Count- 4,5,6 cont. next page.

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 2 of 3
HOLE NO. NC-AUG-10

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
16.0 (49)	CL				Shear Strength = 6.2 kg/cm² Unconfined Strength = 2.2 tons/ft²
18.0				AD	
20.0		20.0 to 21.5' Clay (CL); slightly silty; brown (10YR 4/3); soft, moist; high plasticity; low toughness; medium dry strength.	5	DR	California Modified Blow Count- 3,3,4 Shear Strength =1.5 kg/cm² Unconfined Strength = 0.25 tons/ft²
22.0				AD	
24.0 (41)					
		25.0 to 26.5' Clay (CL); minor silt; light olive brown (2.5Y 5/3); firm, moist; medium plasticity; medium toughness; high dry strength; some mottling and calcium carbonate blebs, trace organics.	6	DR	California Modified Blow Count- 5,7,11 Shear Strength =10.0 kg/cm² Unconfined Strength = 2.0 tons/ft²
26.0					
28.0	ML			AD	
30.0		30.0 to 31.5' Silt (ML); clayey; brown (10YR5/3); firm, slightly moist; low plasticity; medium toughness; medium dry strength; abundant charcoal, minor calcium carbonate.	7	DR	California Modified Blow Count- 7,13,16 Shear Strength = 6.0 kg/cm² Unconfined Strength = 4.5+ tons/ft²
32.0				AD	
34.0	CL	35.0 to 36.5' Clay (CL); silty; light olive brown (2.5Y 5/4); very stiff, slightly moist; low plasticity; high toughness, minor calcium carbonate blebs and organics.	8	DR	California Modified Blow Count-7,16,20

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

DRILL HOLE LOG

SHEET 3 of 3
HOLE NO. NC-AUG-10

PROJECT & FEATURE SITES RESERVOIR PROJECT; New Canal Alignment

DEPTH (ELEV.)	LOG	FIELD CLASSIFICATION AND DESCRIPTION	SAMPLE NO.	MODE	REMARKS
36.0 (29)					Shear Strength =2.5 kg/cm² Unconfined Strength = 4.25 tons/ft²
38.0				AD	
40.0	SM	40.0 to 41.5' Sand (SM); slightly silty; brown (2.5Y 5/4); fine-grained, medium dense, moist, sub-angular to sub-rounded, unconsolidated; some mottling and calcium carbonate.	9	DR	California Modified Blow Count- 7,14,22 Shear Strength =0.5 kg/cm² Unconfined Strength = 1.0 tons/ft²
42.0				AD	
44.0 (21)	CL				
46.0		45.0 to 46.5' Clay (CL); silty; grayish-brown (10YR 5/2); firm, slightly moist; medium plasticity; low toughness; mottling, bioturbation, minor calcium carbonate and organics.	10	DR	California Modified Blow Count- 6,8,10 Shear Strength = 3.7 kg/cm² Unconfined Strength = 1.5 ton/ft²
48.0				AD	
50.0	ML	50.0 to 51.5' Silt (ML); clayey; dark grayish-brown (10YR 4/2); firm, moist; low plasticity; medium toughness, some calcium carbonate, organics and charcoal. BOH = 51.5'	11	DR	California Modified Blow Count-7,17,22 Shear Strength = 5.2 kg/cm² Unconfined Strength = 2.5 tons/ft²
52.0					Hole completed by back filling with cuttings.
54.0					

SOURCE:
Sites Project, Feasibility Study for Conveyance, Colusa Basin Drain, and Funks Reservoir Modification-Aug-03.pdf

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED DWR
DRAWN D. LARSON
CHECKED M. BARNES
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED
REG. CE. NO.
APPROVED JOE BARNES REG. CE. NO. 40105

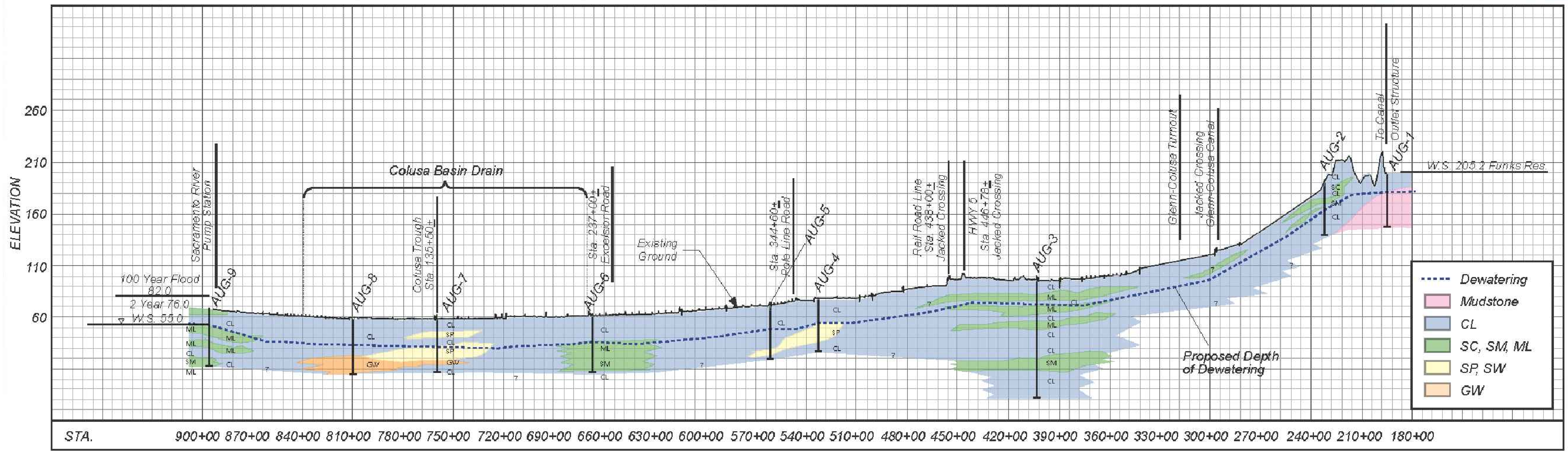
Sites

WSIP APPLICATION ATTACHMENT A4.A

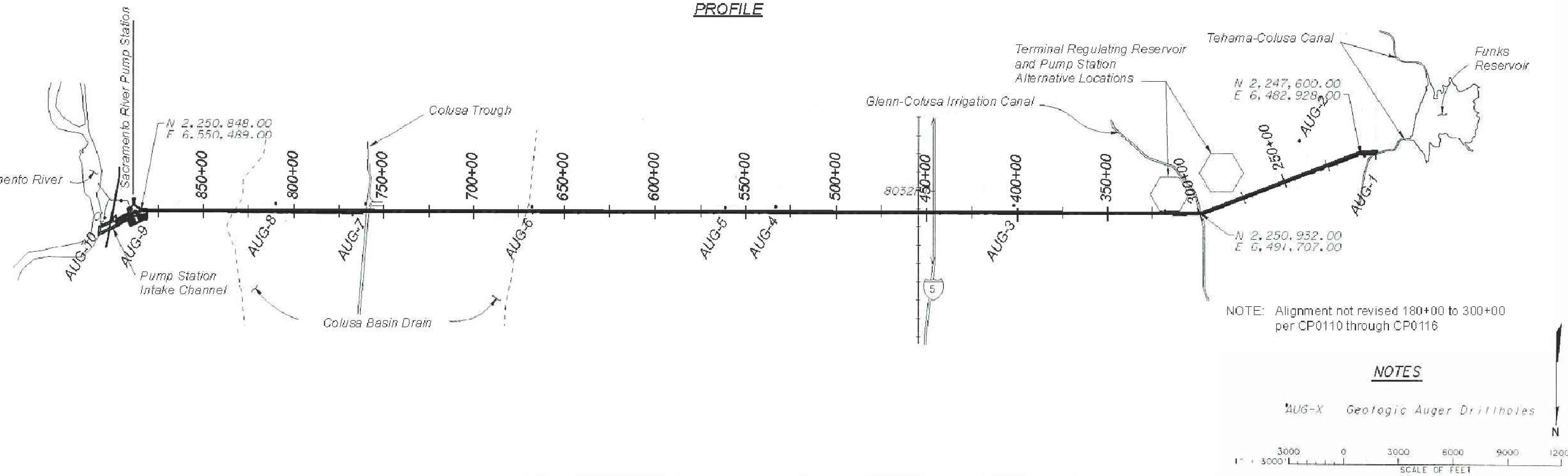
GEOTECHNICAL DELEVAN AND TRR PIPELINE BORING LOGS

SPEC NO.
DRAWING NO. B-304
REV.
SHEET NO. 119

PLOTTED BY:BARNHART, DENNIS –August 8, 2017–3:45:16 PM
DRAWING: G:\SRJPA\FEASIBILITY_AECOM\900 WORK\20-CAD\006-CIVIL\20-SHEETS\01-GEOTECHNICAL\B-304.DWG



PROFILE



Source:

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

DESIGNED DWR
DRAWN D. LARSON
CHECKED M. FORREST
APPROVAL RECOMMENDED
APPROVAL BY
ESTIMATE LEVEL FEASIBILITY

AECOM
AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

REVIEWED MIKE FORREST
REG. CE. NO. 27855
DATE 08/04/2017
APPROVAL RECOMMENDED
REG. CE. NO.
APPROVED JOE BARNES
REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

GEOTECHNICAL DELEVAN-TRR
PIPELINE GEOLOGIC CROSS SECTION

SPEC NO.
DRAWING NO. B-305
REV.
SHEET NO. 120

PLOTTED BY:BARNHART, DENNIS ~August 8, 2017~3:45:16 PM
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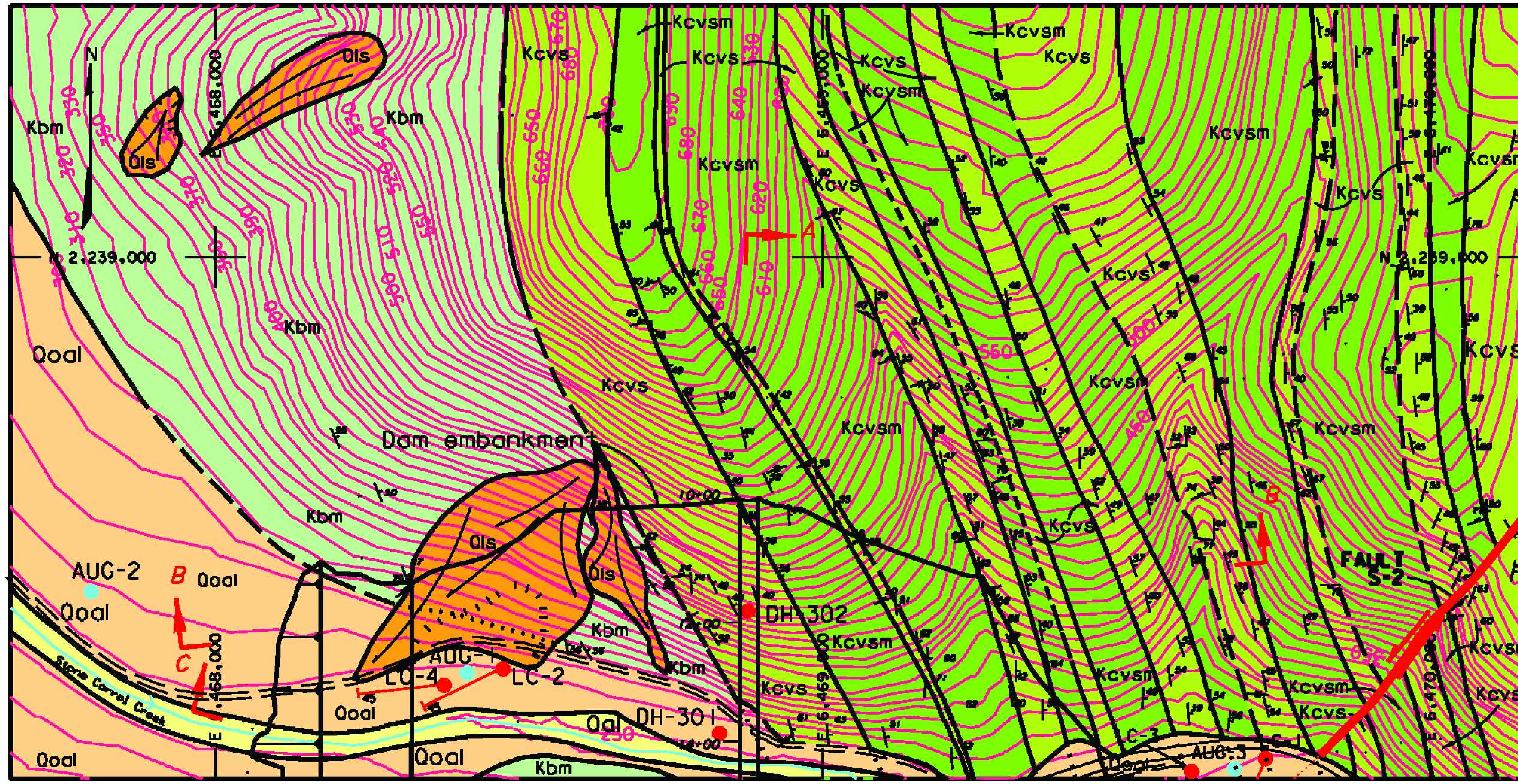
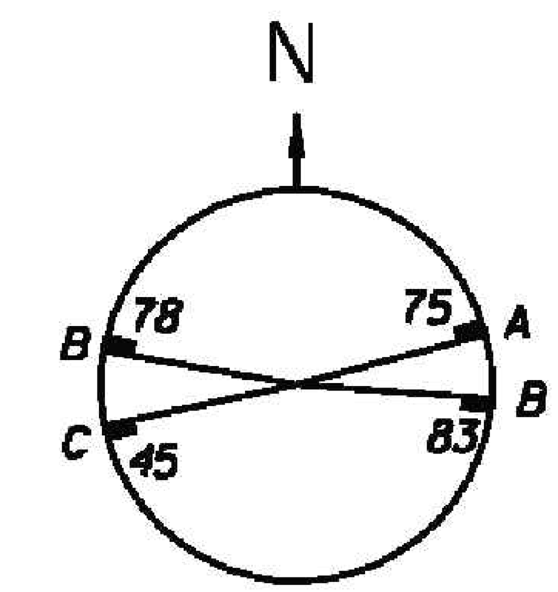


Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

SHEET 121
B-1101

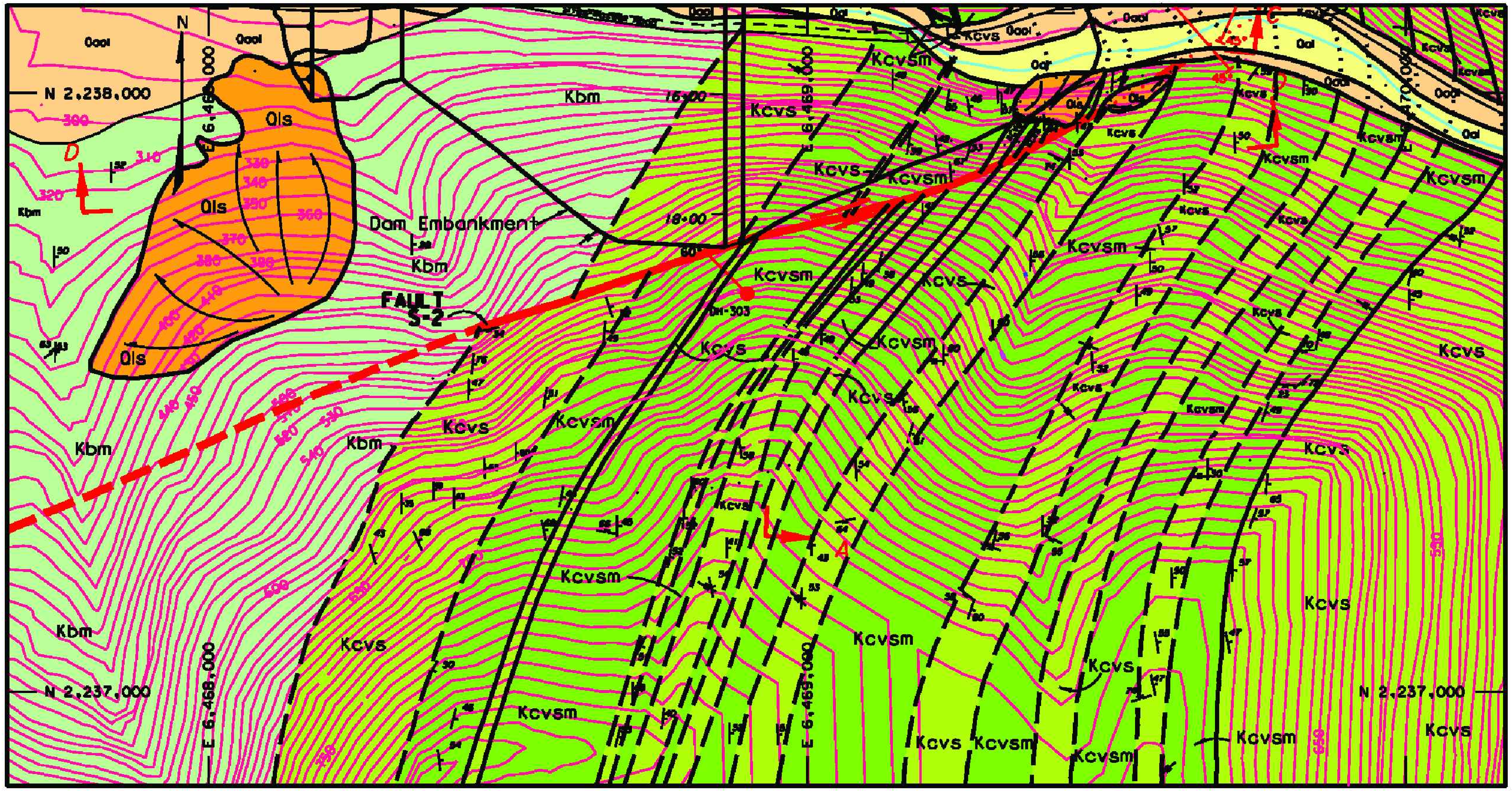
DRAWING SCALES

FULL SIZE 1" = 100'

100 0 100 200 300 400

SCALE OF FEET

94-30-02	[1] Northern District Geol.	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT SITES DAM SITE EXPLORATION AND GEOLOGIC MAP	7-31-03
	[2] Project Geology Section			1 OF 2
PG-SRP-18				PLATE 7

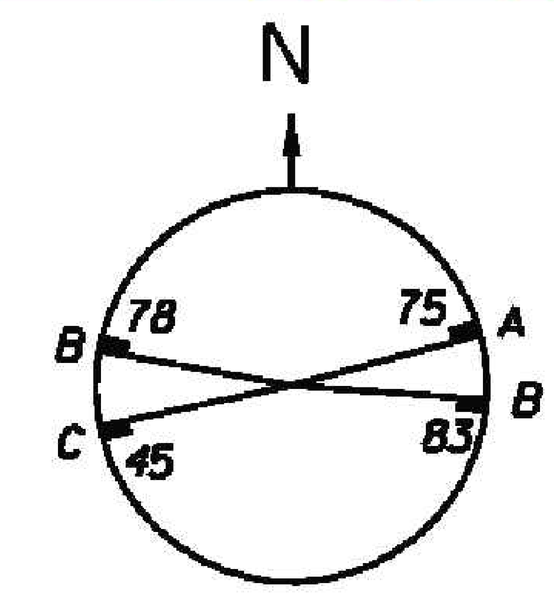


Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

SHEET 122
B-1102

DRAWING SCALES
FULL SIZE 1" = 100'
100 0 100 200 300 400
SCALE OF FEET

94-0-02

[1] Northern District Geol.
[2] Project Geology Section

PG-SRP-19

CONOVER/NASIRIAN 6/18/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

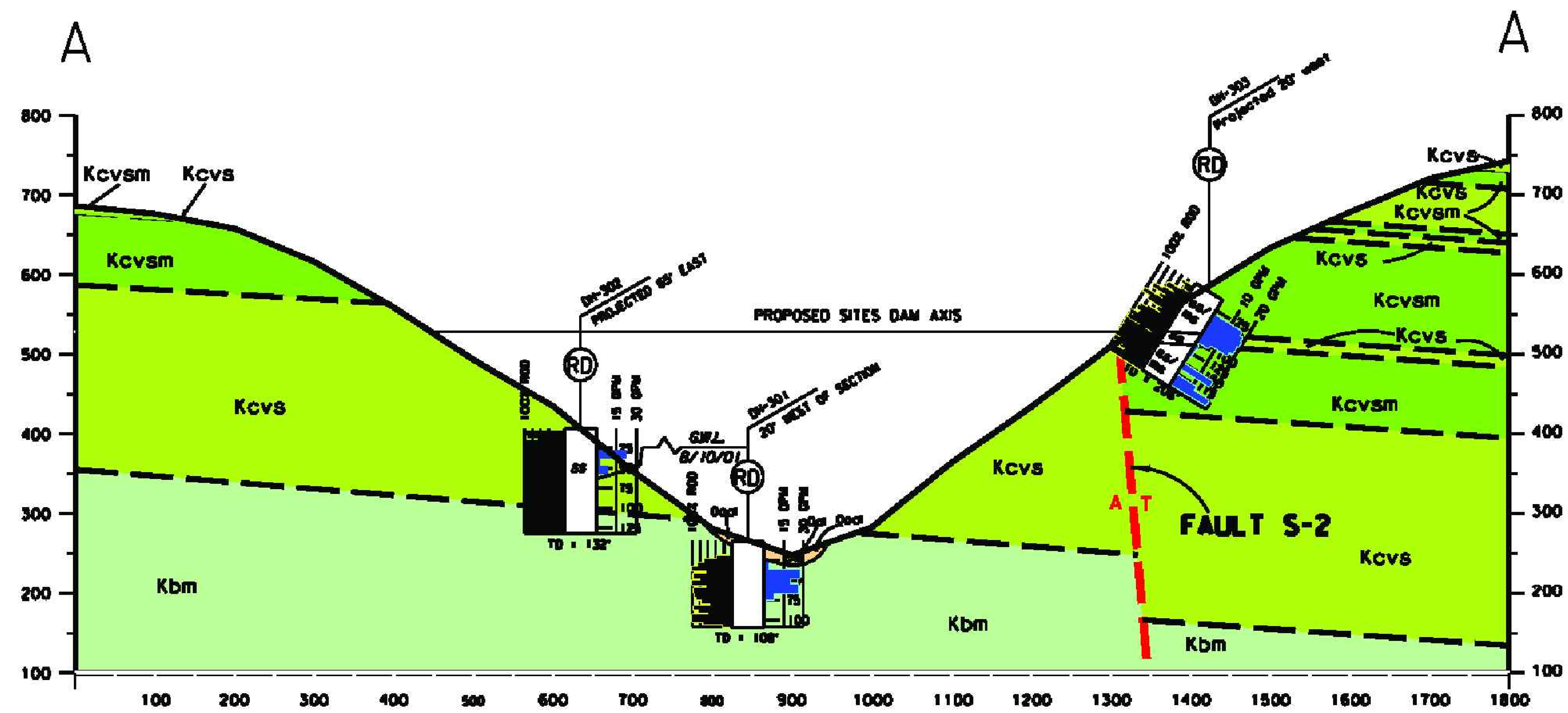
INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
SITES DAM SITE

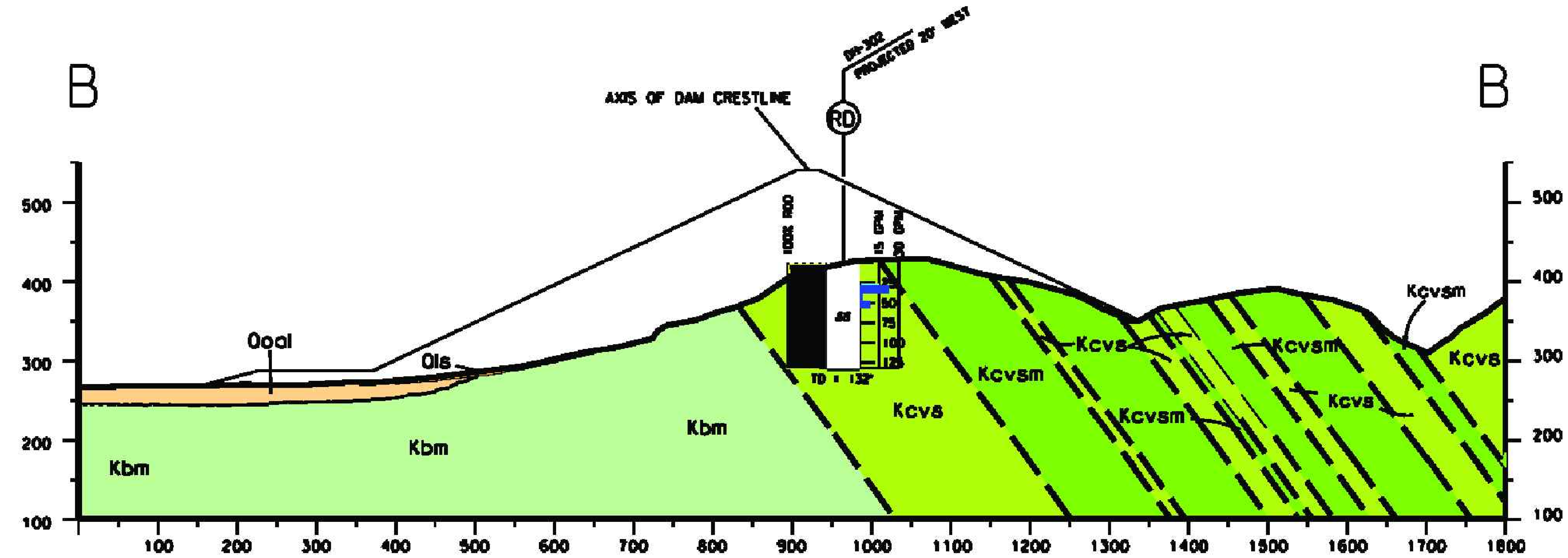
EXPLORATION AND GEOLOGIC MAP

7-31-03

2 OF 2

PLATE 7





SHEET 123
B-1301

DRAWING SCALES

FULL SIZE

1" = 100'

SCALE OF FEET

94-30-02

PG-SRP-20

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
SITES GATE DAM SITE

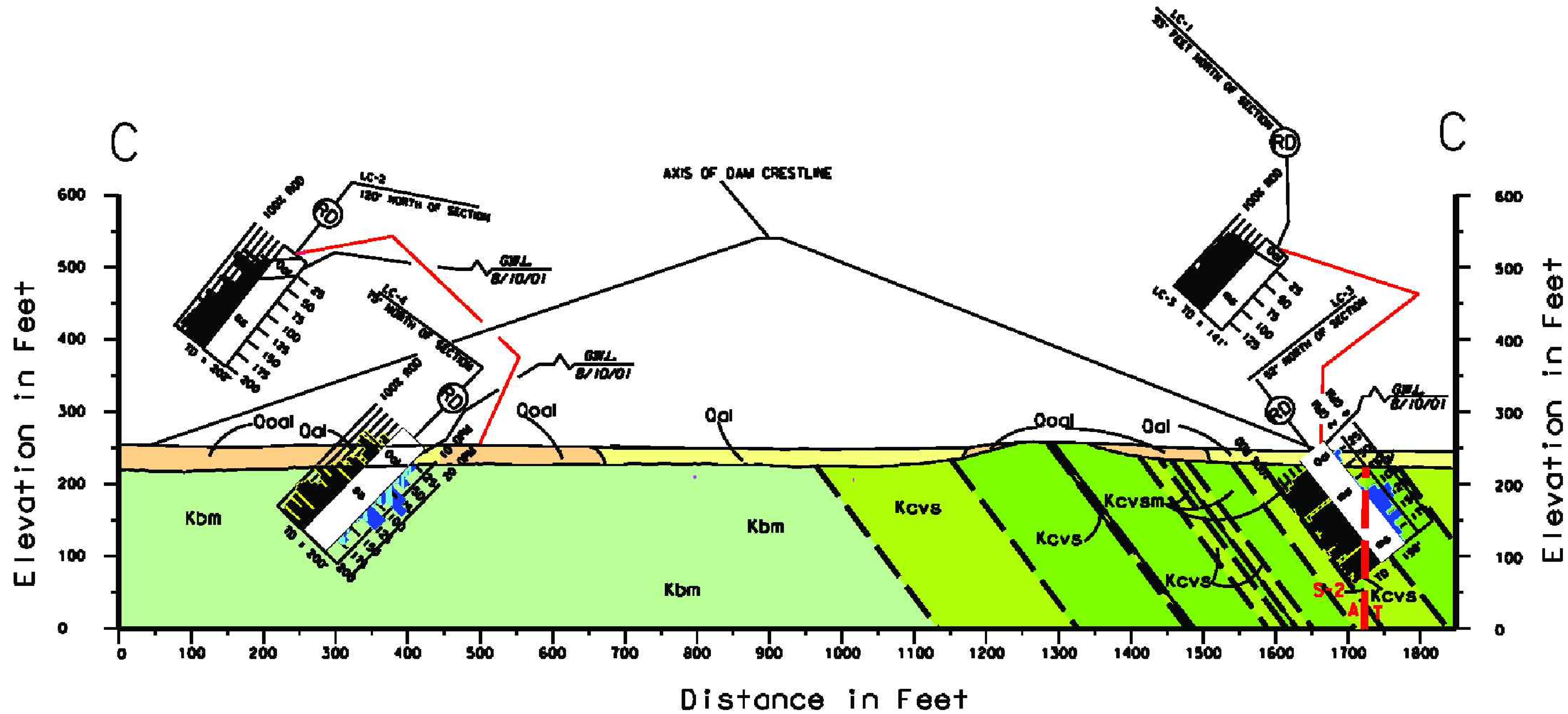
GEOLOGIC SECTIONS

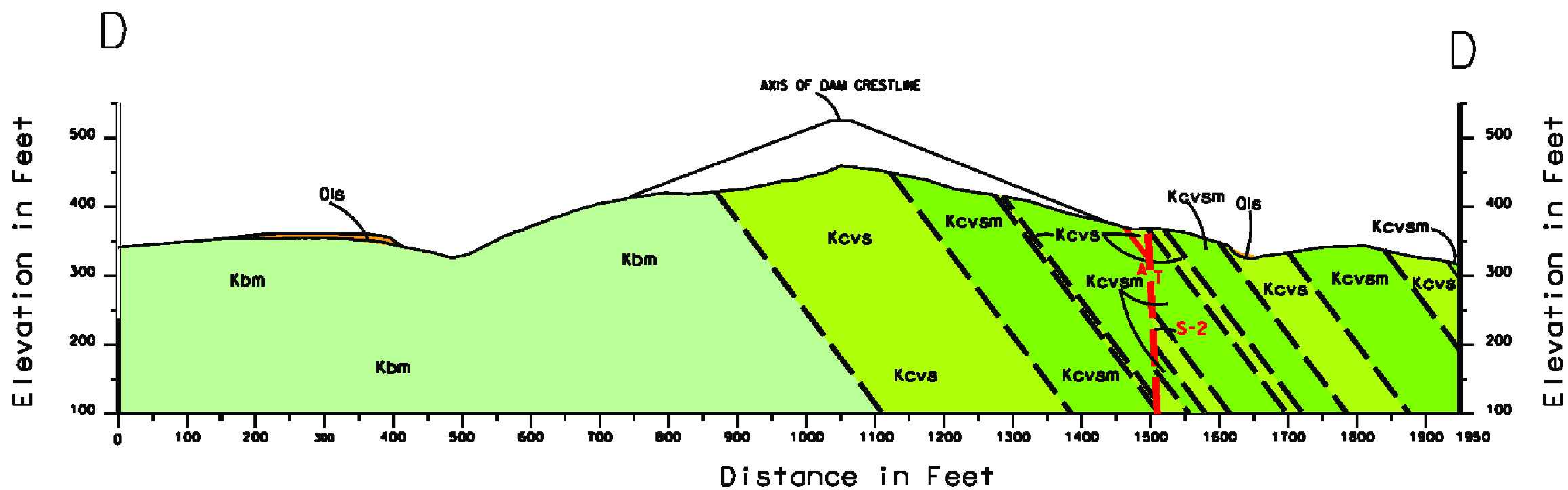
SECTIONS A – A AND B – B

7-31-03

1 OF 2

PLATE 8





SHEET 124
B-1302

DRAWING SCALES

FULL SIZE 1" = 100'

SCALE OF FEET

94-30-02

PG-SRP-21

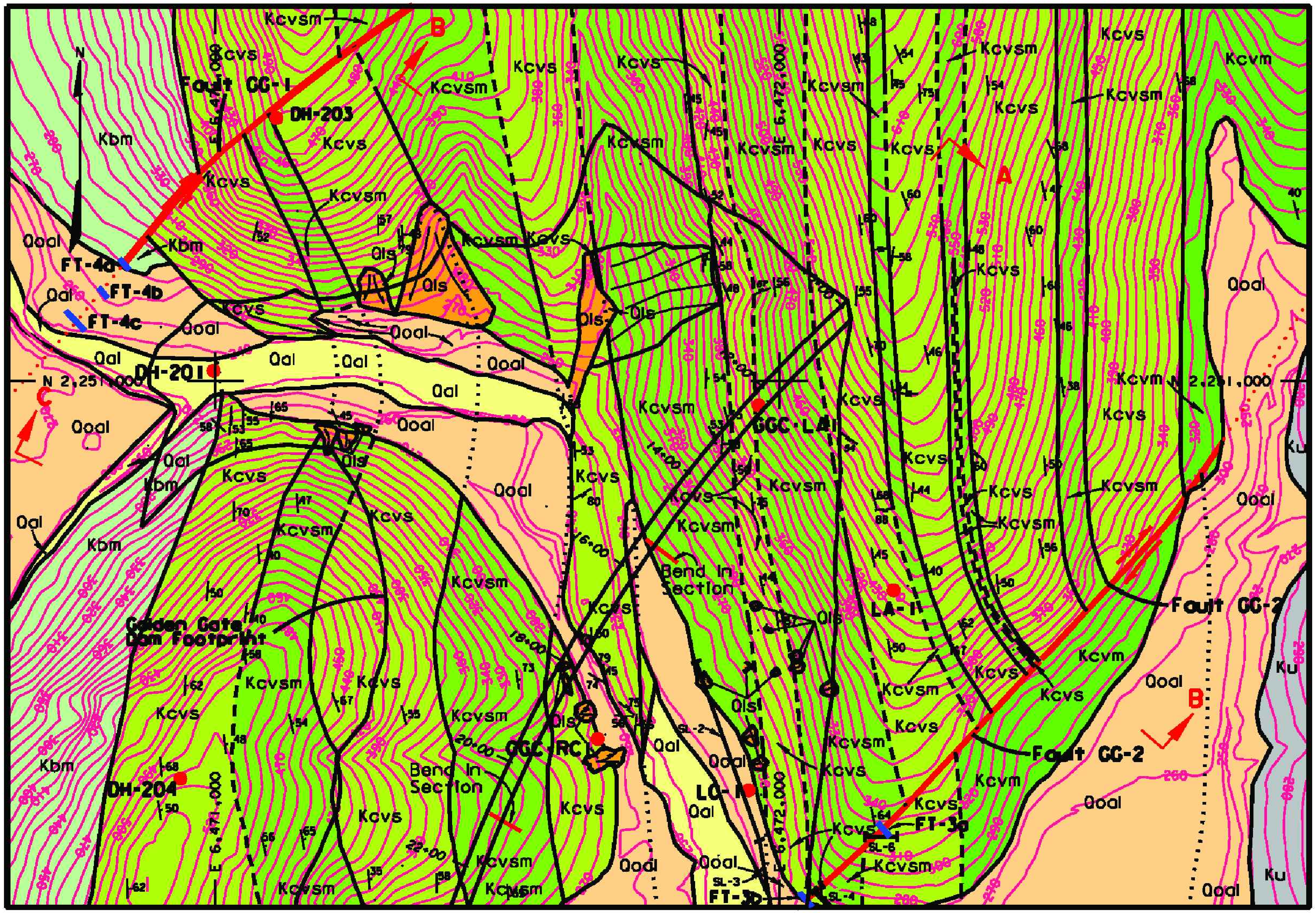
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
SITES DAM SITE
GEOLOGIC SECTIONS
SECTIONS C – C AND D – D

7-31-03

2 OF 2

PLATE 8



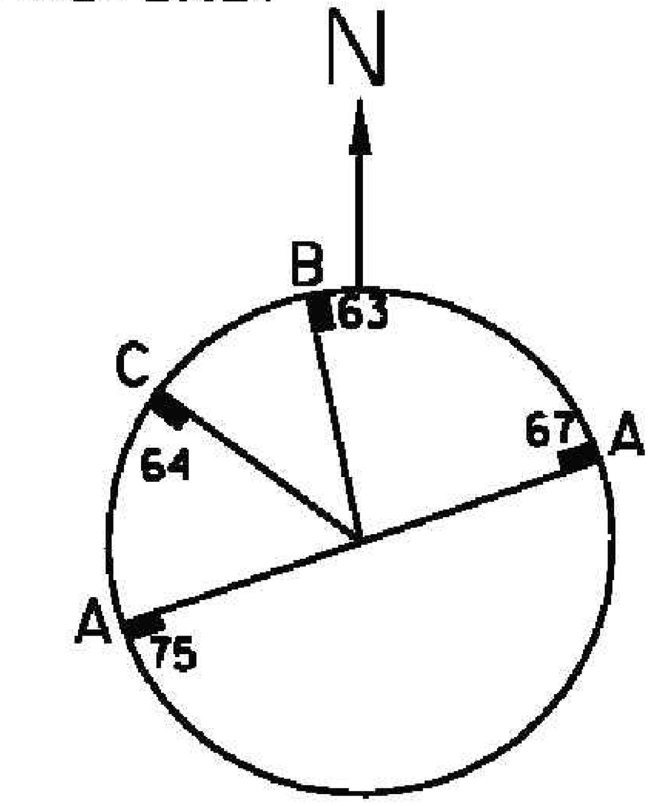
Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

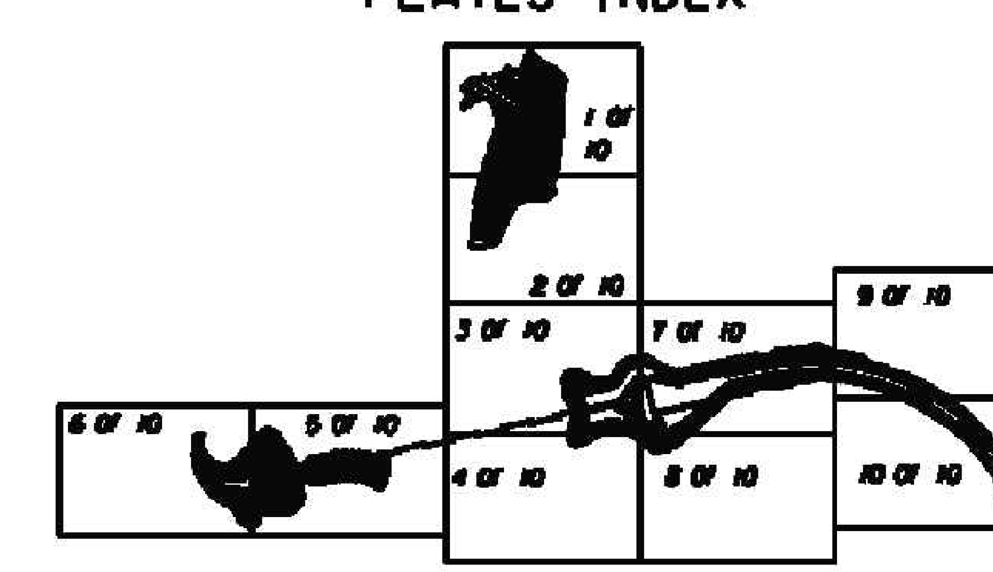
Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.

Fault trench locations have been transposed visually from William Lettis & Associates fault maps (WLA 2002).



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

PLATES INDEX



SHEET 125
B-2101

DRAWING SCALES

FULL SIZE 1" = 100' — 100 0 100 200 300 400 SCALE OF FEET

94-30-02

PG-SRP-03

1 Northern District Geol.
2 Project Geology Section

DATE: 6/13/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE

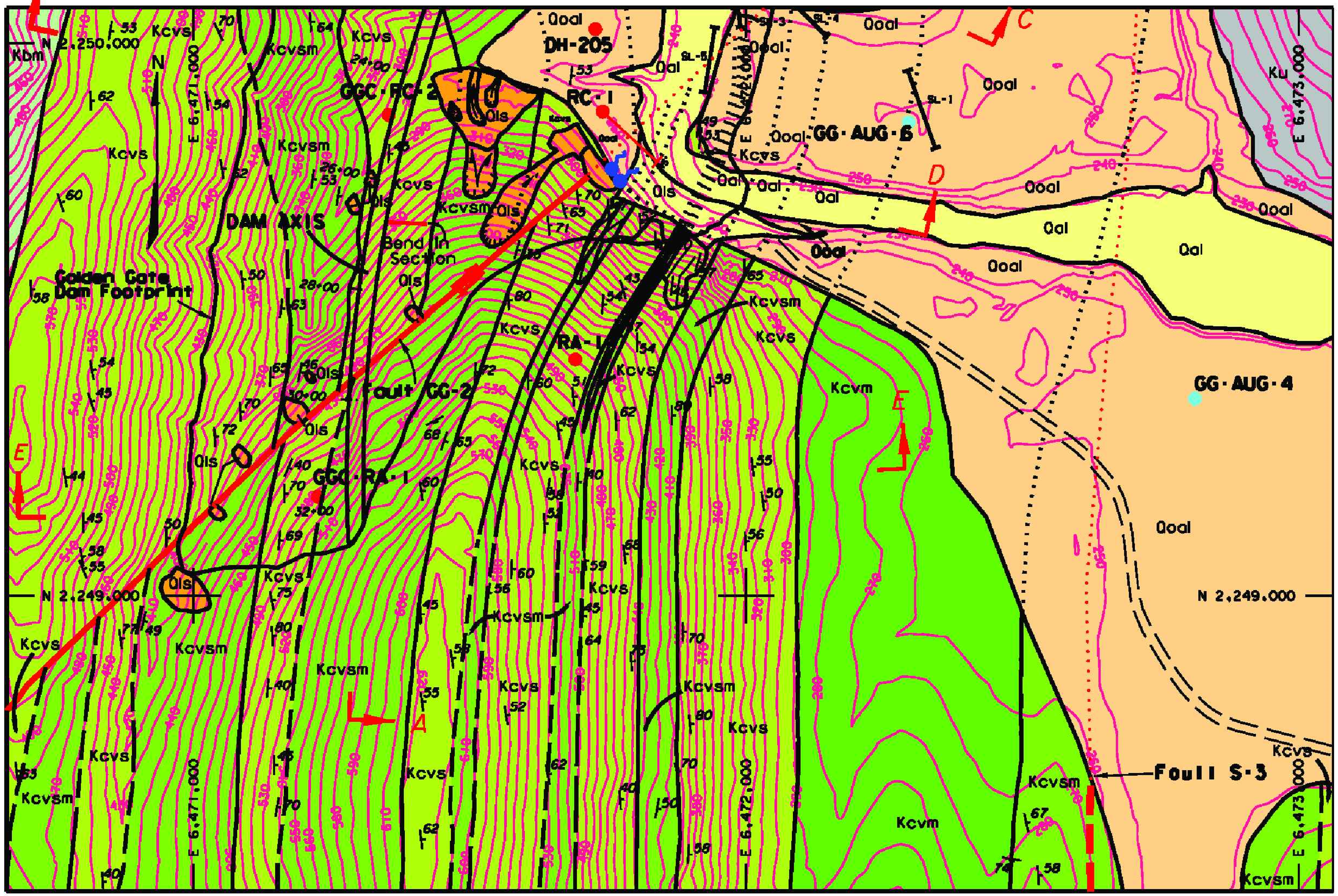
EXPLORATION AND GEOLOGIC MAP

7-31-03

1 of 10

PLATE 3

REV.	DATE	DESCRIPTION



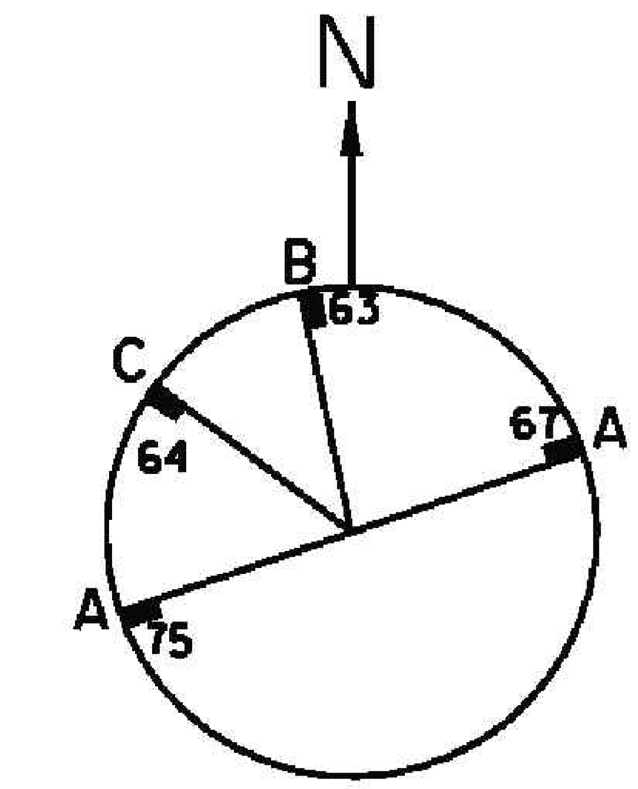
Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

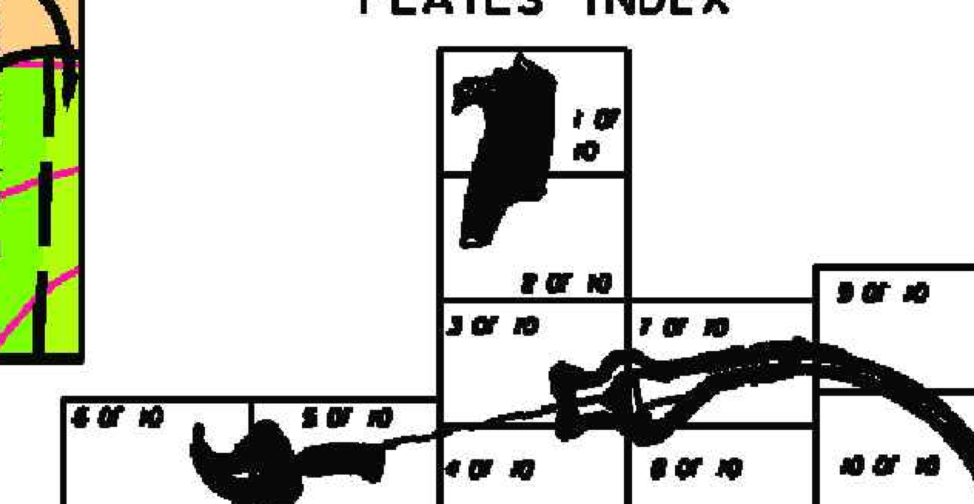
Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.

Fault trench locations have been transposed visually from William Lettis & Associates fault maps (WLA 2002).



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

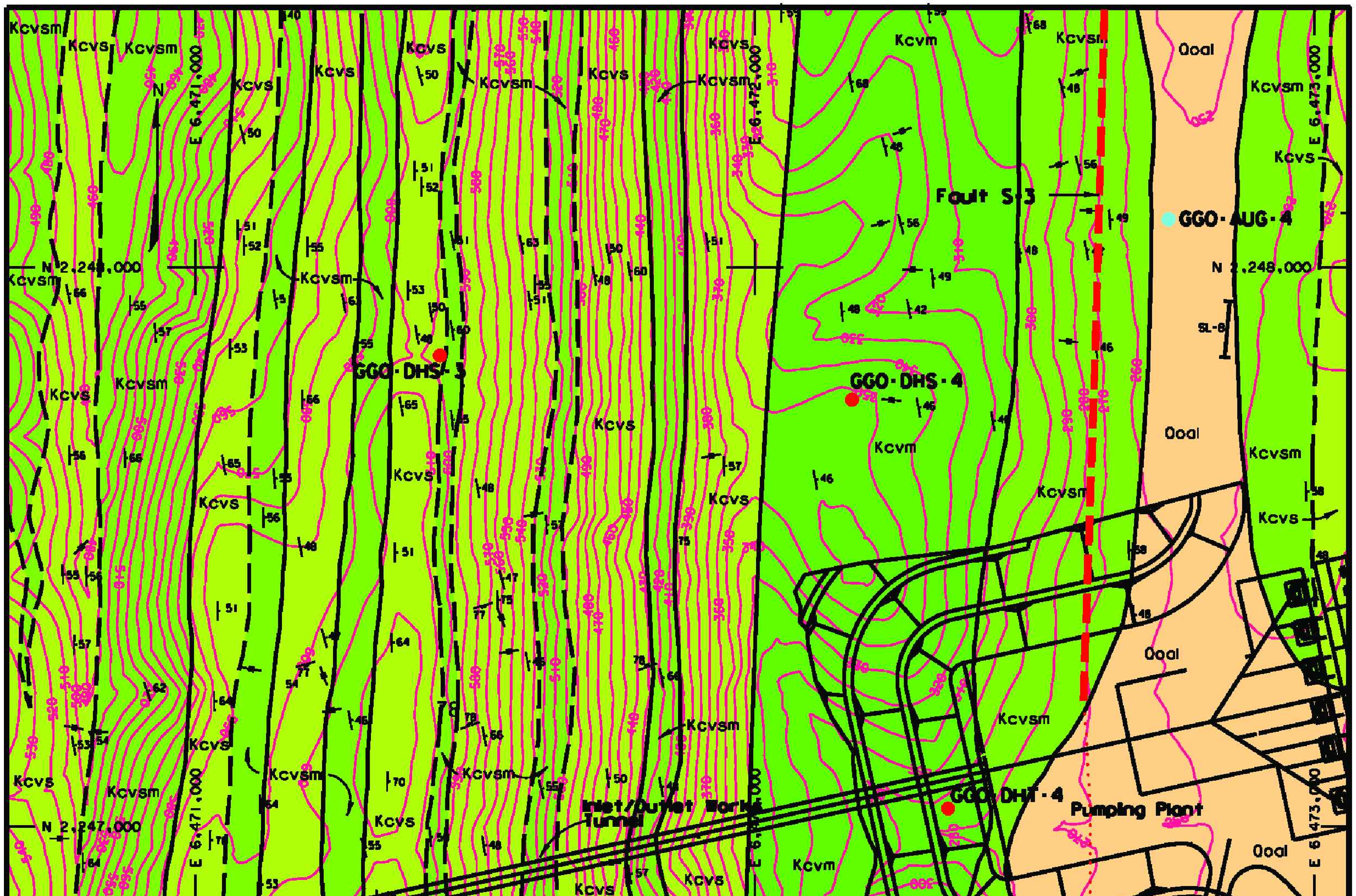
PLATES INDEX



SHEET 126
B-2102

DRAWING SCALES
FULL - SIZE
1" = 100'
100 0 100 200 300 400
SCALE OF FEET

94-30-02	[1] Northern District Geol.	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT GOLDEN GATE DAM SITE EXPLORATION AND GEOLOGIC MAP
	[2] Project Geology Section		7-31-03
PG-SRP-04	DATE: 6/15/03		2 OF 10
			PLATE 3



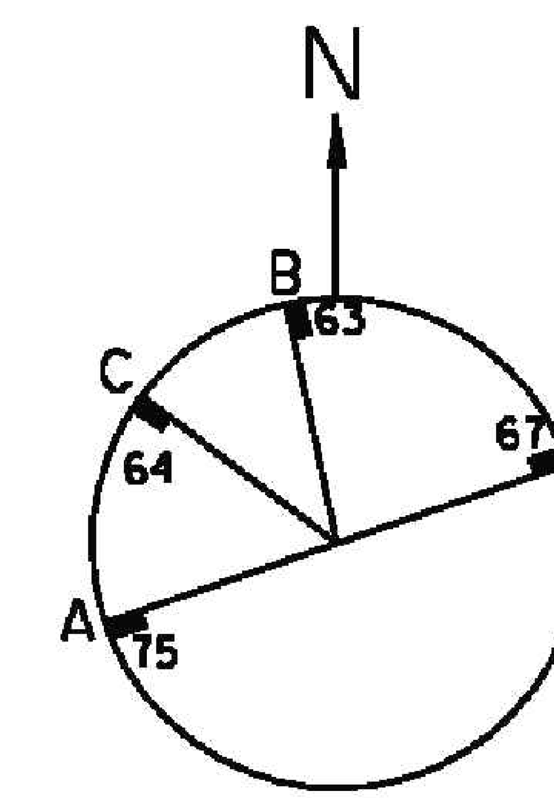
Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

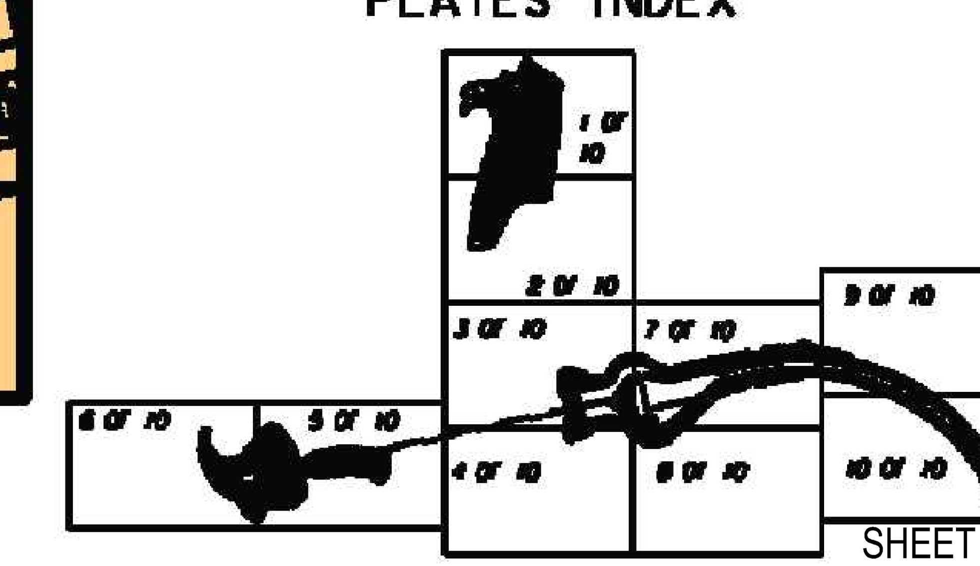
Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.

The geologic investigation was conducted along one of four design tunnel options. The design option presented here is the Long Tunnel with a Gate Shaft.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

PLATES INDEX



SHEET 127
B-2103

DRAWING SCALES

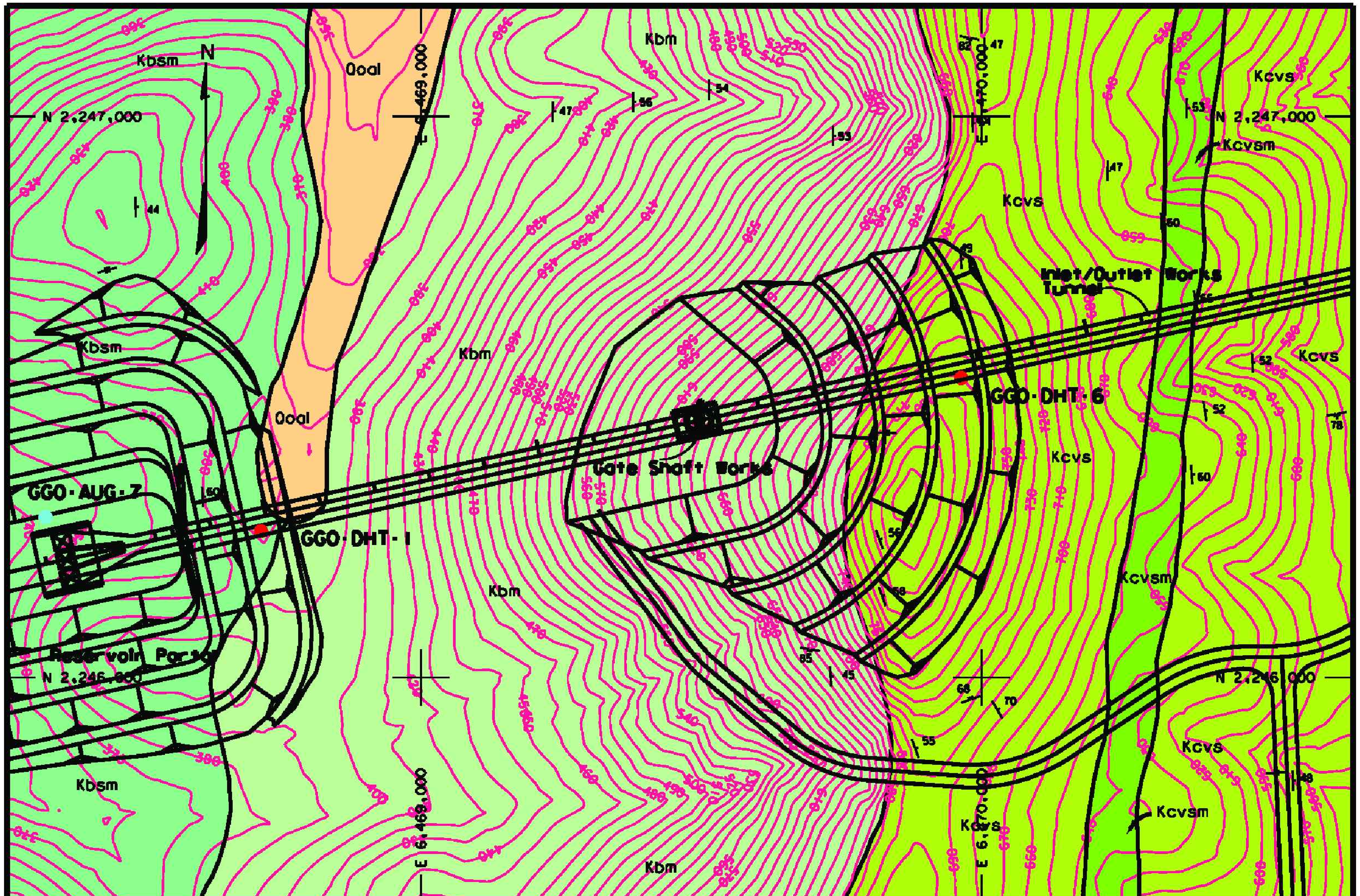
FULL SIZE

1" = 100' — 100 0 100 200 300 400 SCALE OF FEET

REV. | DATE | DESCRIPTION

GEOLOGY REPORT No. 94-30-02	GEOLOGIC MAPPING AND/OR LOGGING BY: [1] Northern District Geol. [2] Project Geology Section	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT GOLDEN GATE DAM SITE EXPLORATION AND GEOLOGIC MAP
CONSTRUCTION SPEC. No.			
GEOLOGY DRAWING No. PG-SRP-05	DRAWING PREPARED BY: CONCHETA/MASIRIAN DATE: 6/15/03		

RELEASE DATE: 7-31-03
SHEET No. 3 OF 10
PLATE 3



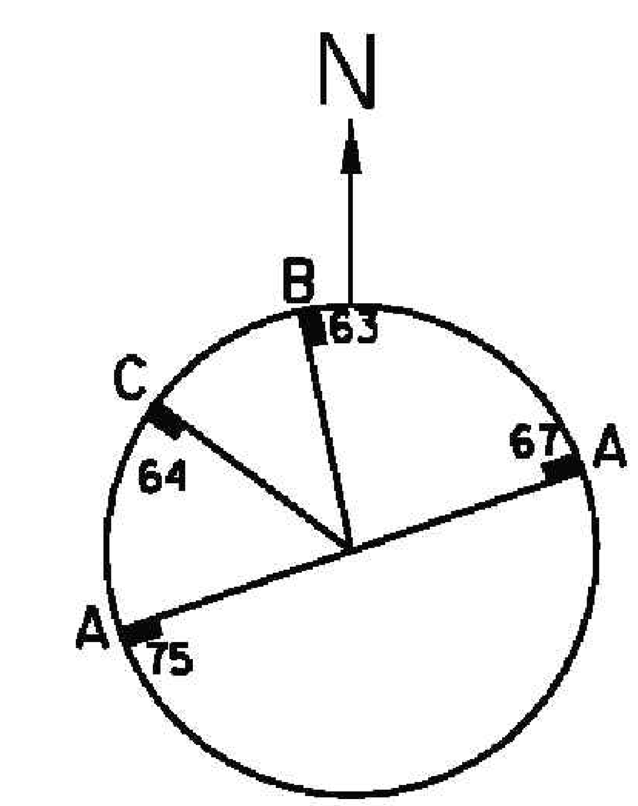
Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

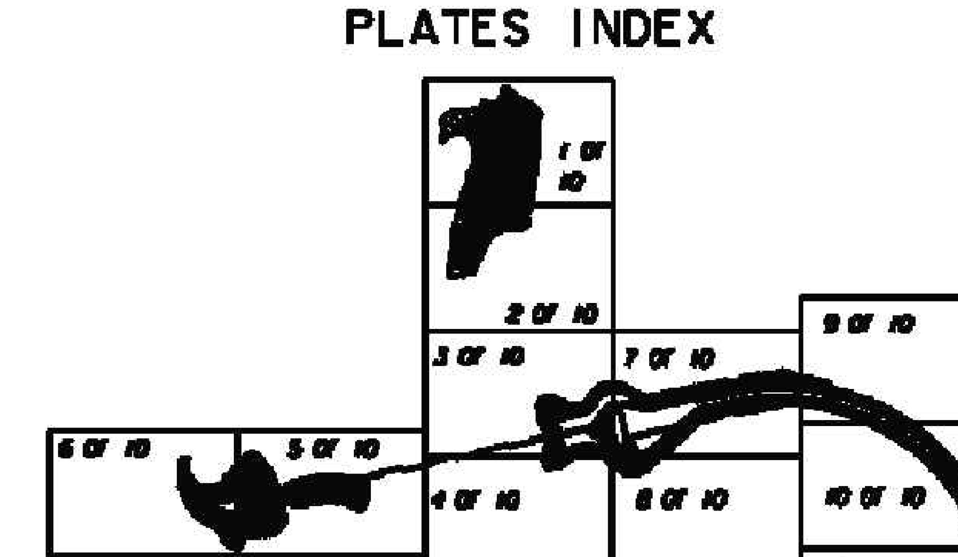
Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.

The geologic investigation was conducted along one of four design tunnel options. The design option presented here is the Long Tunnel with a Gate Shaft.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

PLATES INDEX



SHEET 128
B-2105

DRAWING SCALES

FULL SIZE 1" = 100'

100 0 100 200 300 400
SCALE OF FEET

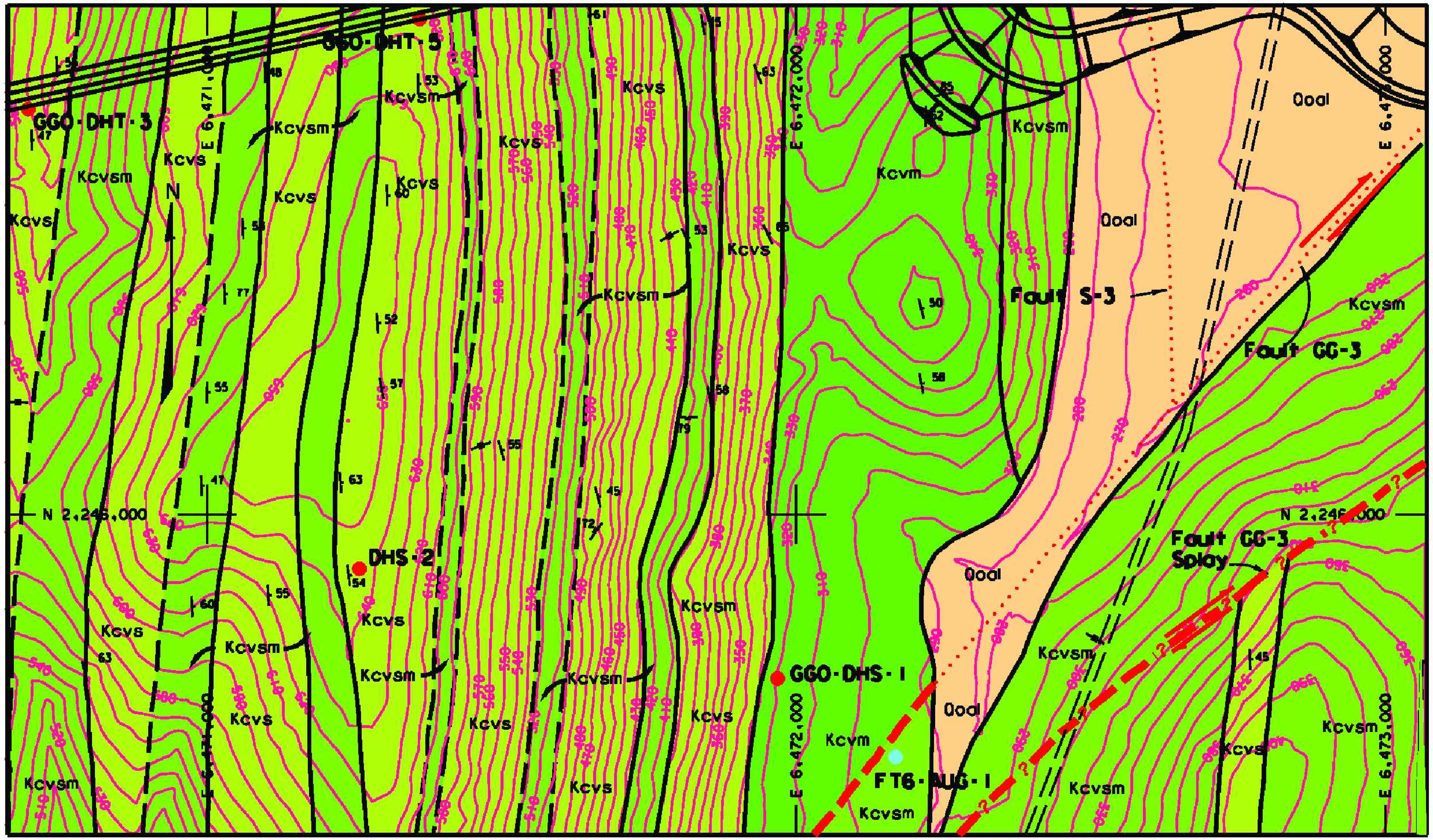
GEOLOGY REPORT No.	94-30-02
CONSTRUCTION SPEC. No.	
GEOLOGY DRAWING No.	PG-SRP-07
GEOLOGIC MAPPING AND/OR LOGGING BY	1 Northern District Geol. 2 Project Geology Section
DRAWING PREPARED BY / DATE: 6/15/03	Cannon/Musiring

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE
EXPLORATION AND GEOLOGIC MAP

RELEASE DATE	7-31-03
SHEET No.	5 OF 10
PLATE	3

REV. | DATE | DESCRIPTION



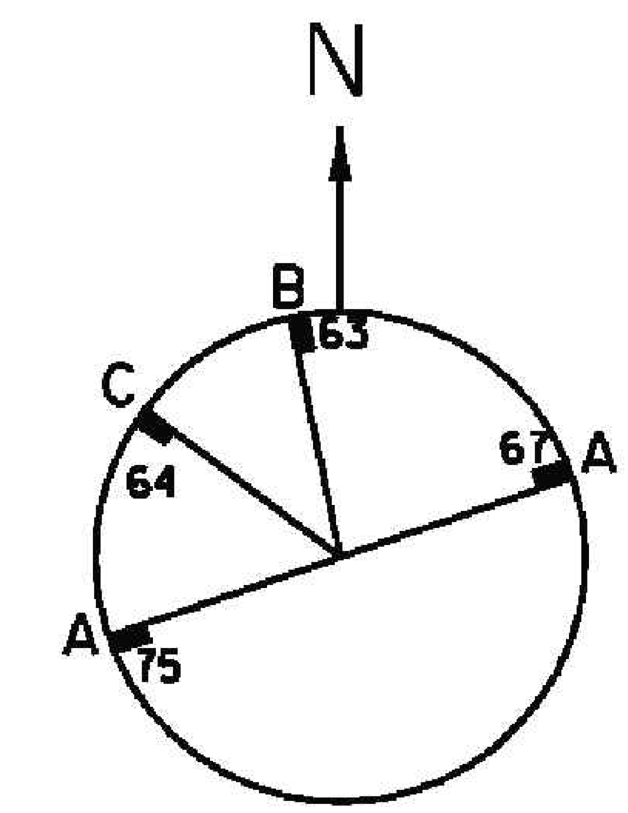
Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

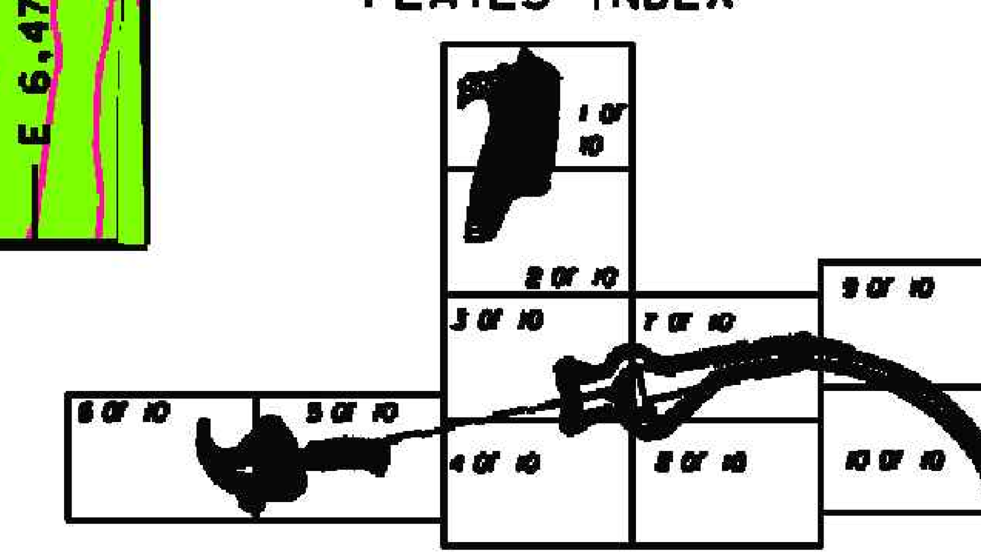
Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.

The geologic investigation was conducted along one of four design tunnel options. The design option presented here is the Long Tunnel with a Gate Shaft.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

PLATES INDEX



SHEET 129

B-2104

DRAWING SCALES

FULL SIZE

1" = 100'   100   0   100   200   300   400

SCALE OF FEET

94-30-02

PG-SRP-06

1 Northern District Geol.

2 Project Geology Section

DATE 5/15/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

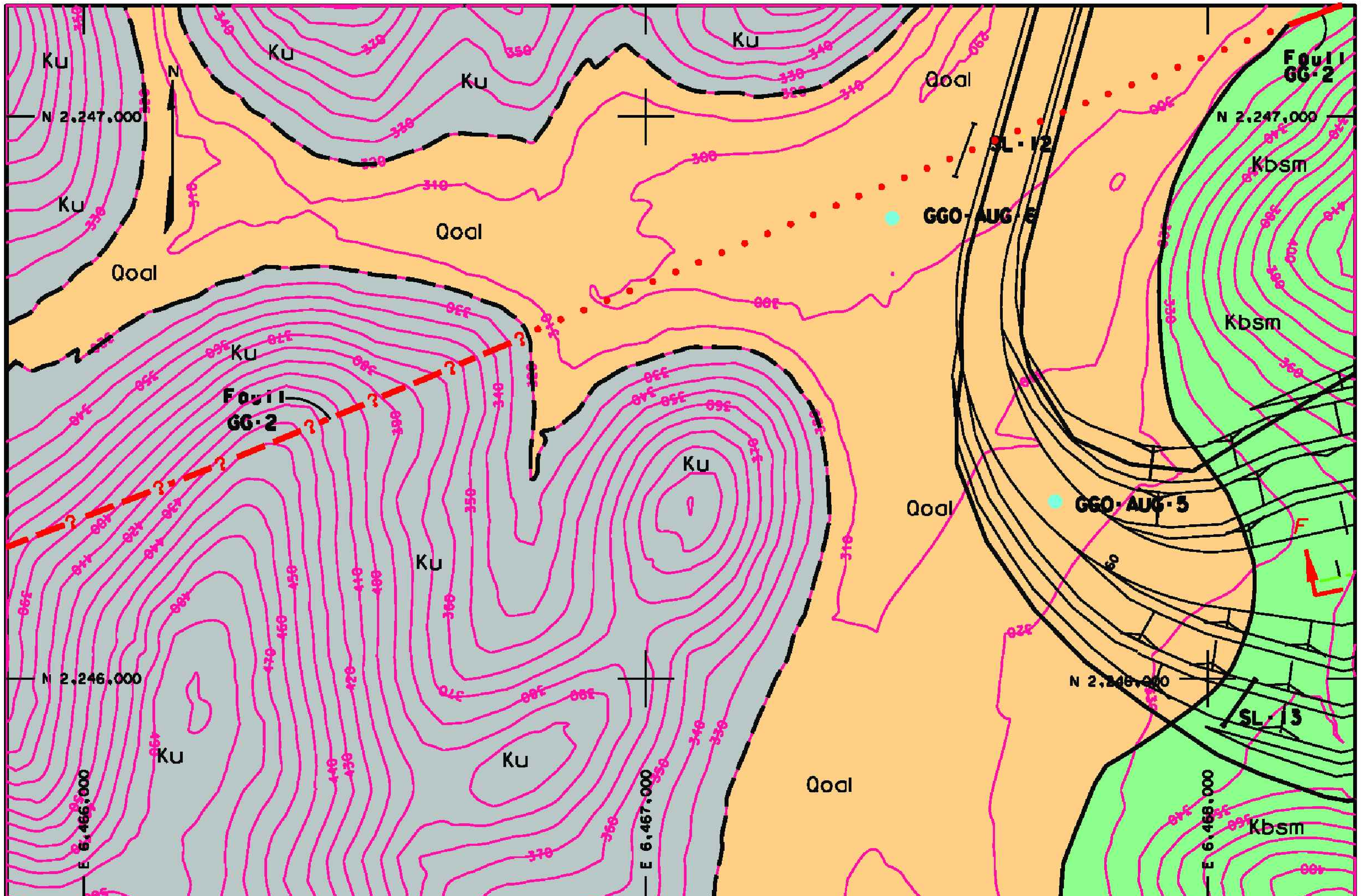
INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE

EXPLORATION AND GEOLOGIC MAP

7-31-03

4 OF 10

PLATE 3

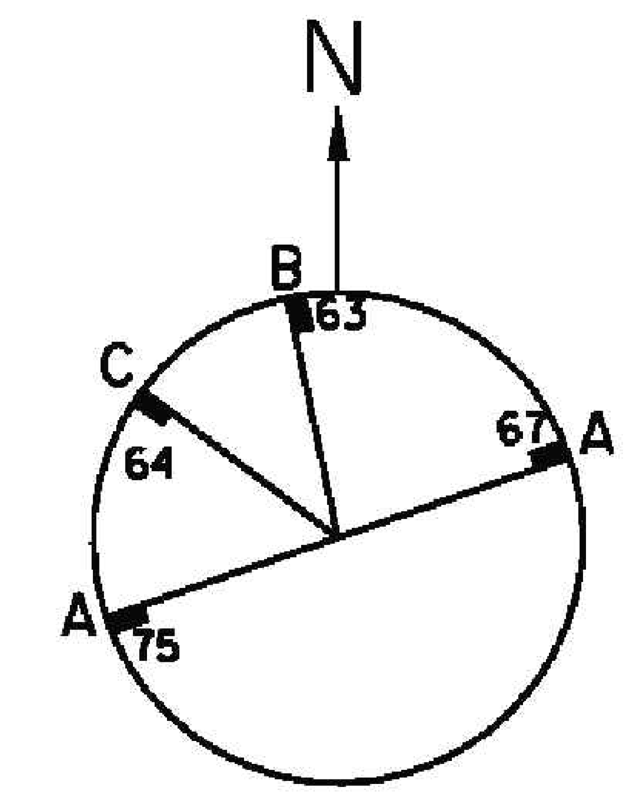


Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

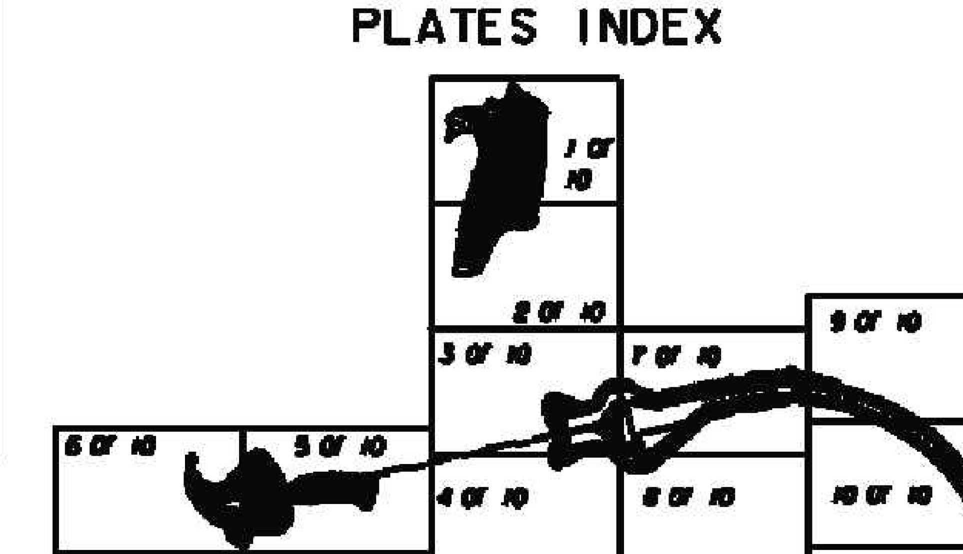
Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

PLATES INDEX



SHEET 130
B-2106

DRAWING SCALES

FULL SIZE 1" = 100'

100 0 100 200 300 400

SCALE OF FEET

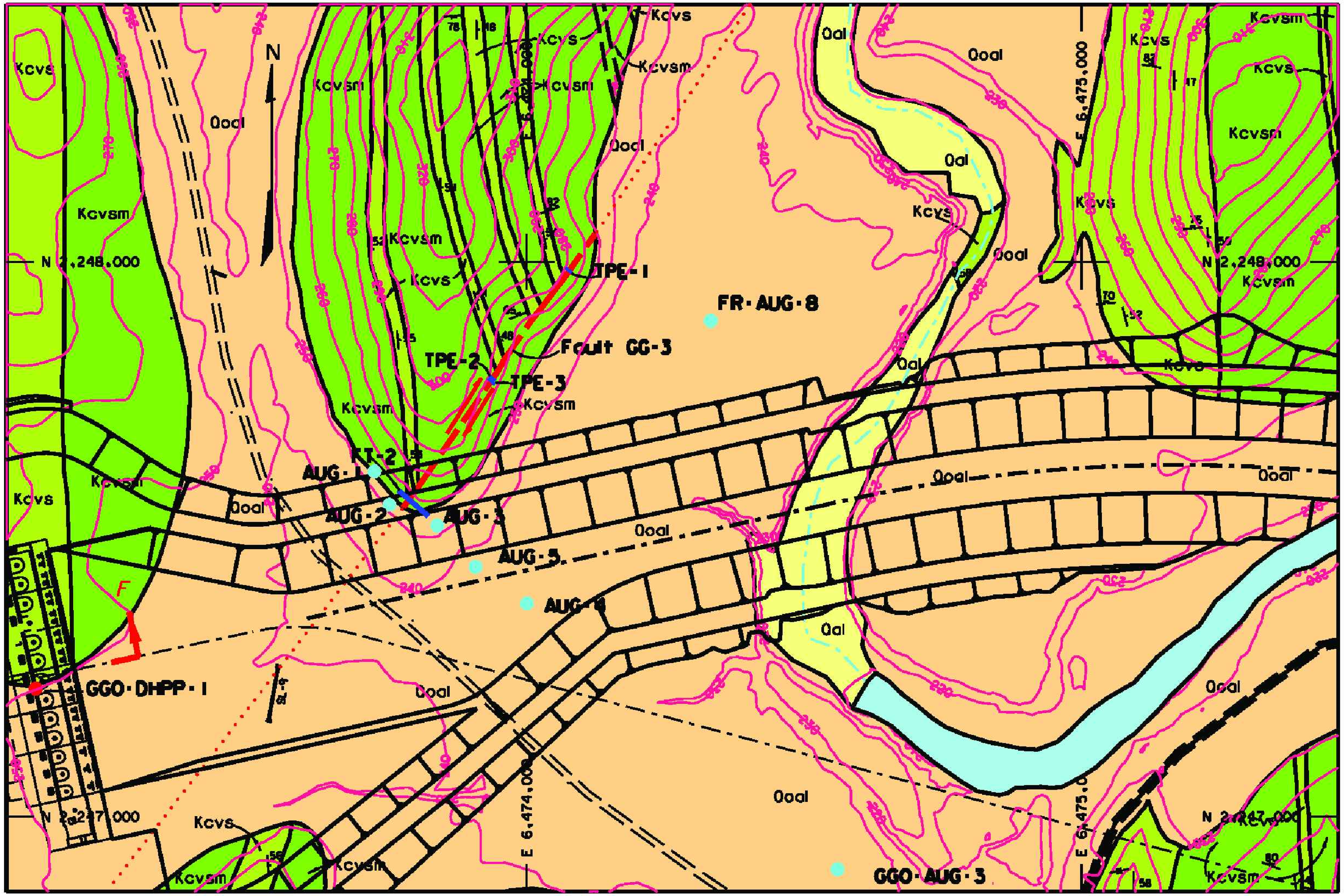
GEOLOGY REPORT No.	94-30-02
GEOLOGY DRAWING No.	PG-SRP-11
	[1] Northern District Geol.
	[2] Project Geology Section
DRAWING PREPARED BY: F. Mansirian	DATE: 6/17/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE

EXPLORATION AND GEOLOGIC MAP

RELEASE DATE: 7-31-03
SHEET No. 6 of 10
PLATE 3



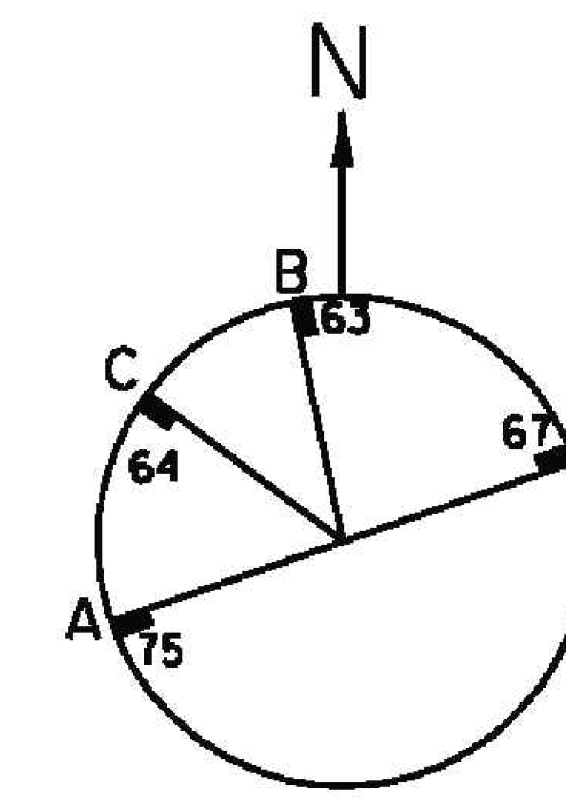
Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

Intervals but that level is turned off to avoid masking the geology.

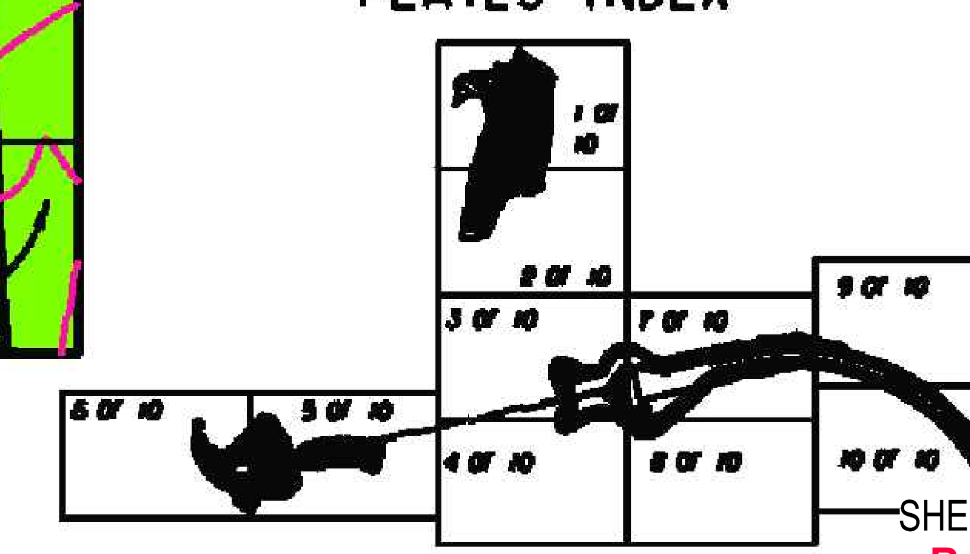
Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.

Fault trench locations have been transposed visually from William Lettis & Associates fault maps (WLA 2002).



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

PLATES INDEX



SHEET 131

B-2107

DRAWING SCALES

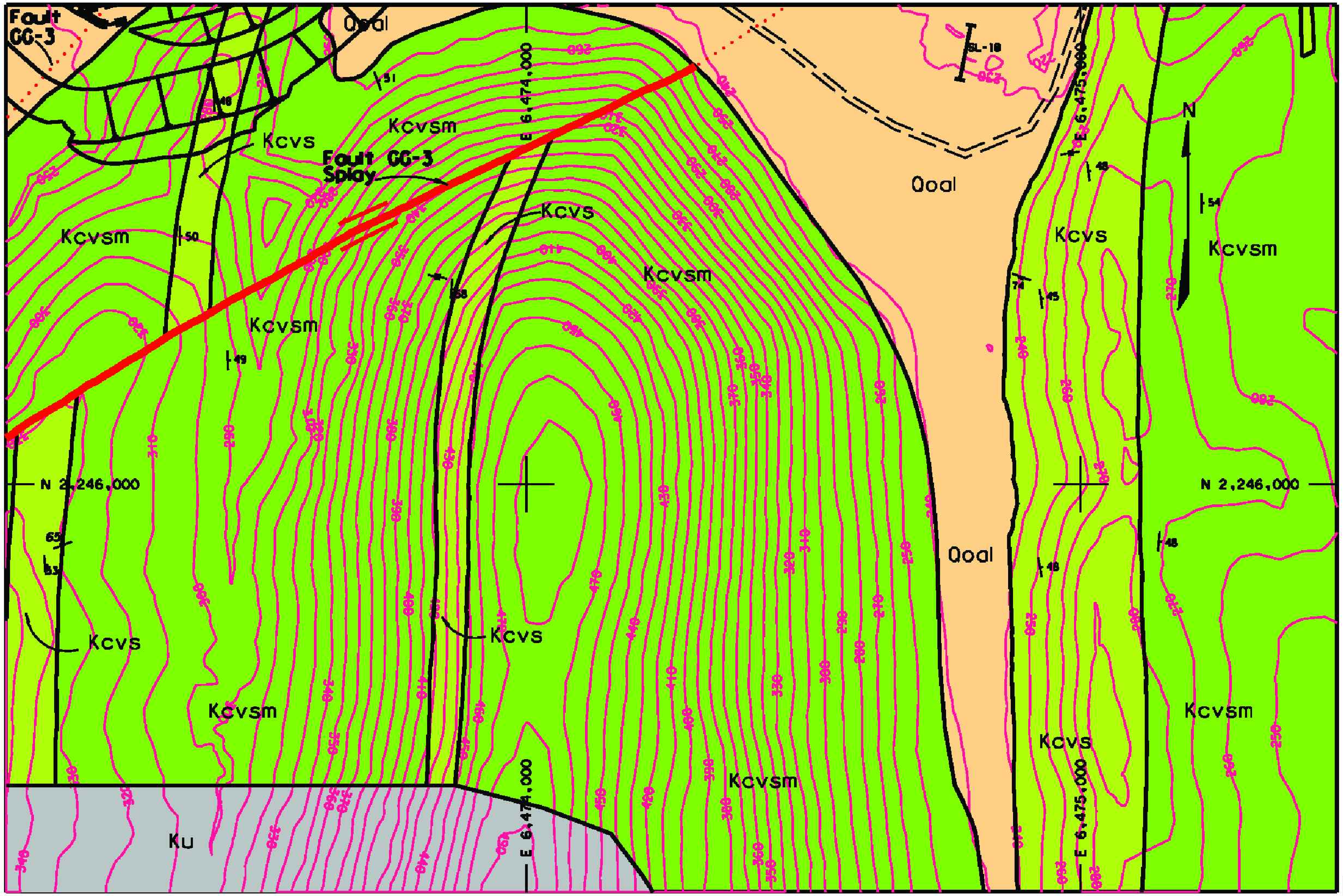
FULL SIZE 1" = 100'

100 0 100 200 300 400

SCALE OF FEET

94-30-02	[1] Northern District Geol.	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT GOLDEN GATE DAME SITE EXPLORATION AND GEOLOGIC MAP
	[2] Project Geology Section		7-31-03
PG-SRP-08	Gansner/Wasiring 5/16/03		7 OF 10 PLATE 3

REV. DATE DESCRIPTION

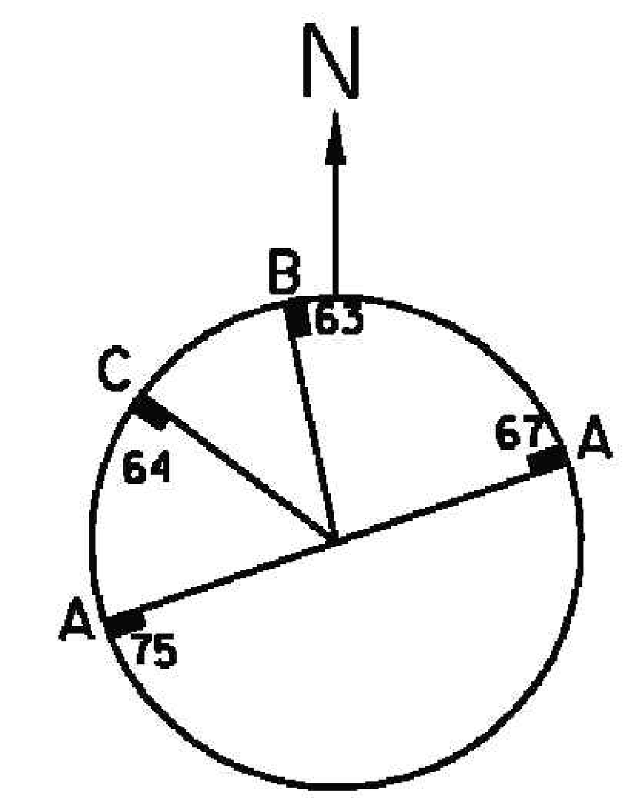


Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

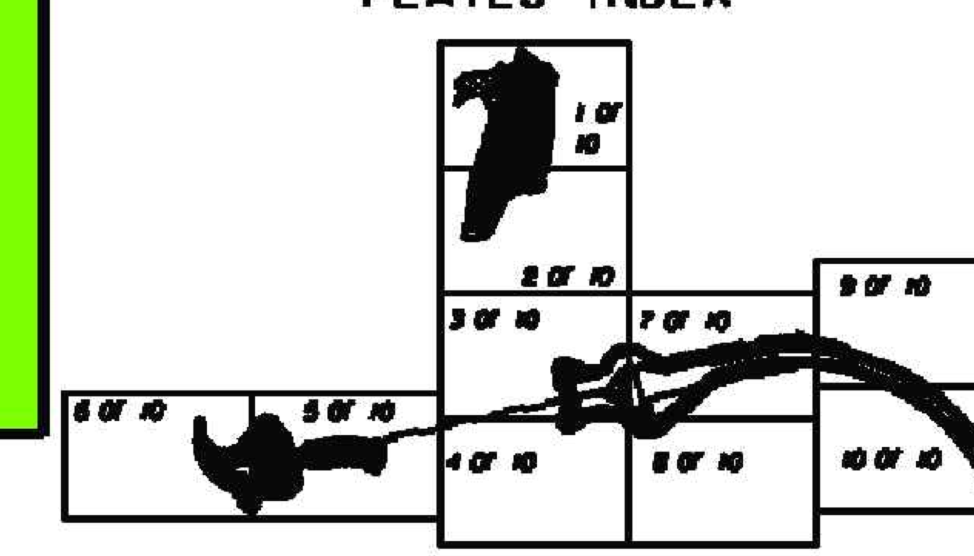
Intervals but that level is turned off to avoid masking the geology.

Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

PLATES INDEX



SHEET 132
B-2108

DRAWING SCALES

FULL SIZE
1" = 100'
100 0 100 200 300 400
SCALE OF FEET

94-30-02

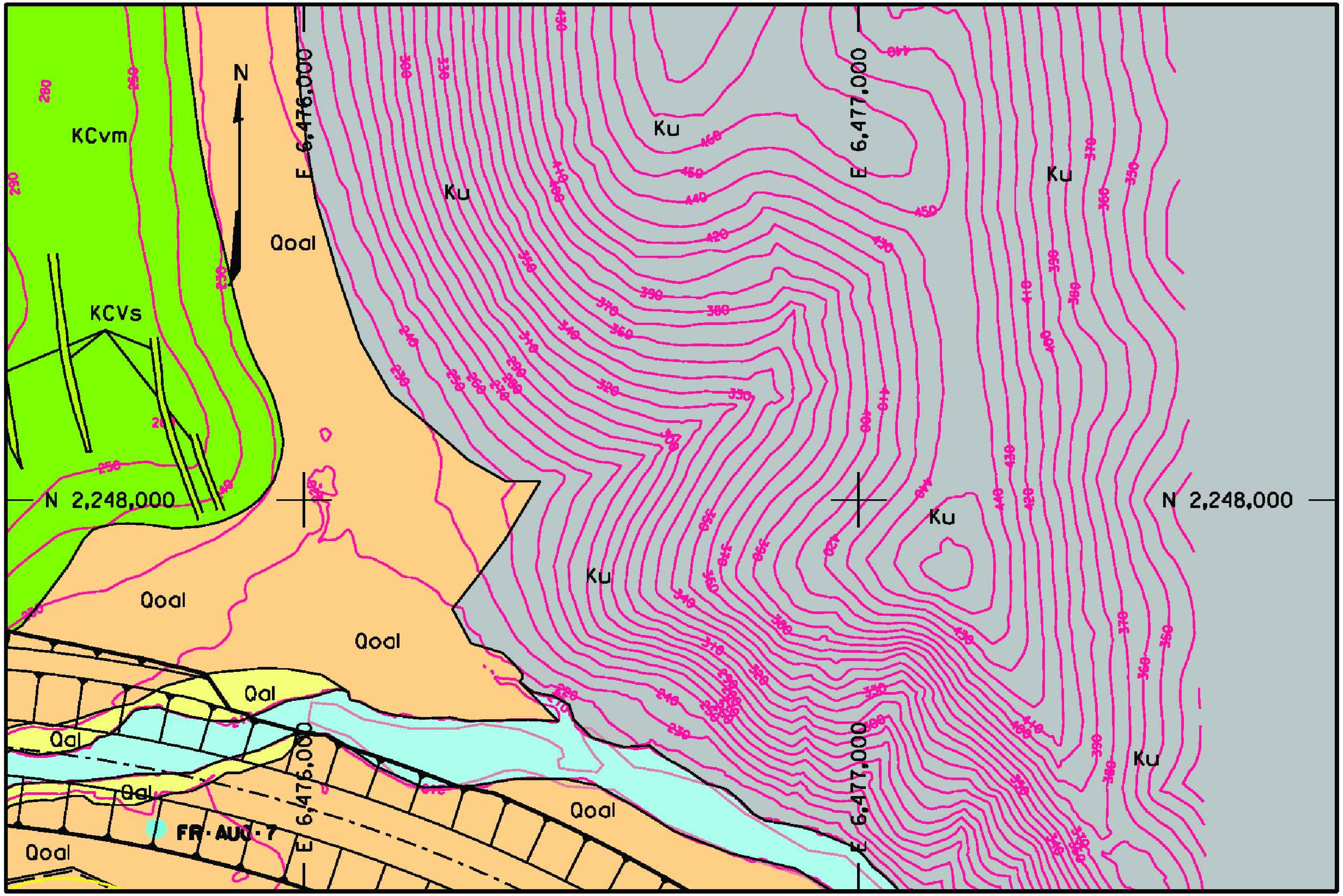
PG-SRP-09

Northern District Geol.
Project Geology Section
Conover/Musirine 5/17/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE
EXPLORATION AND GEOLOGIC MAP

7-31-03
8 OF 10
PLATE
3

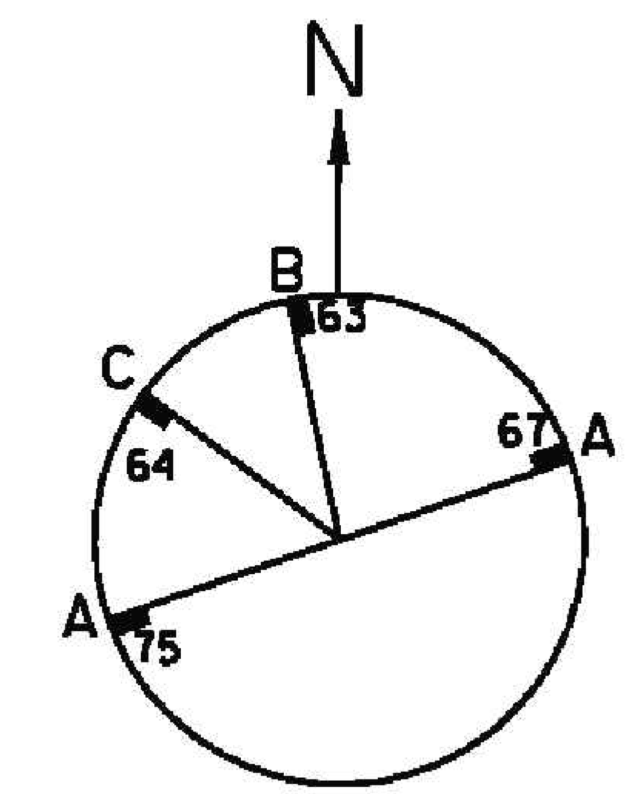


Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

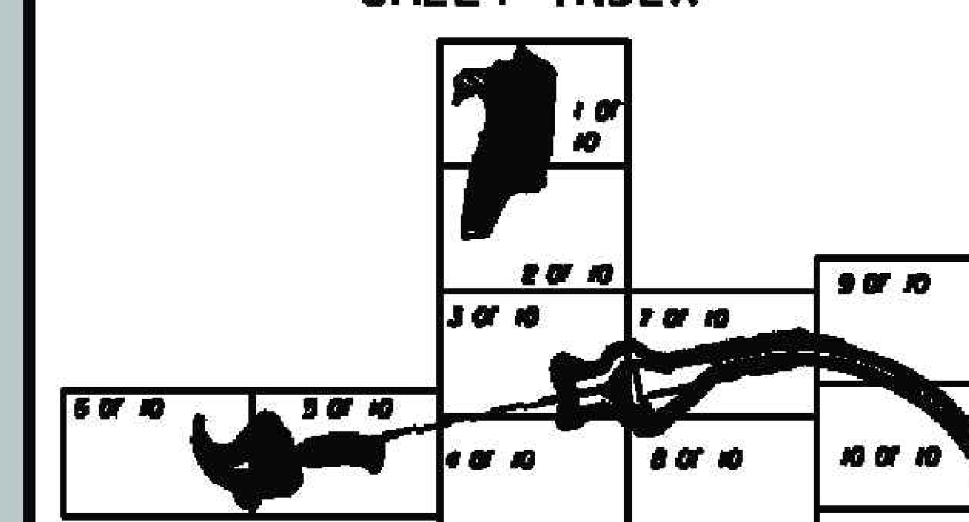
Contour interval shown on this map is 10 feet. The current topography includes 2 foot contour intervals but that level is turned off to avoid masking the geology.

Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.

SHEET INDEX



SHEET 133
B-2109

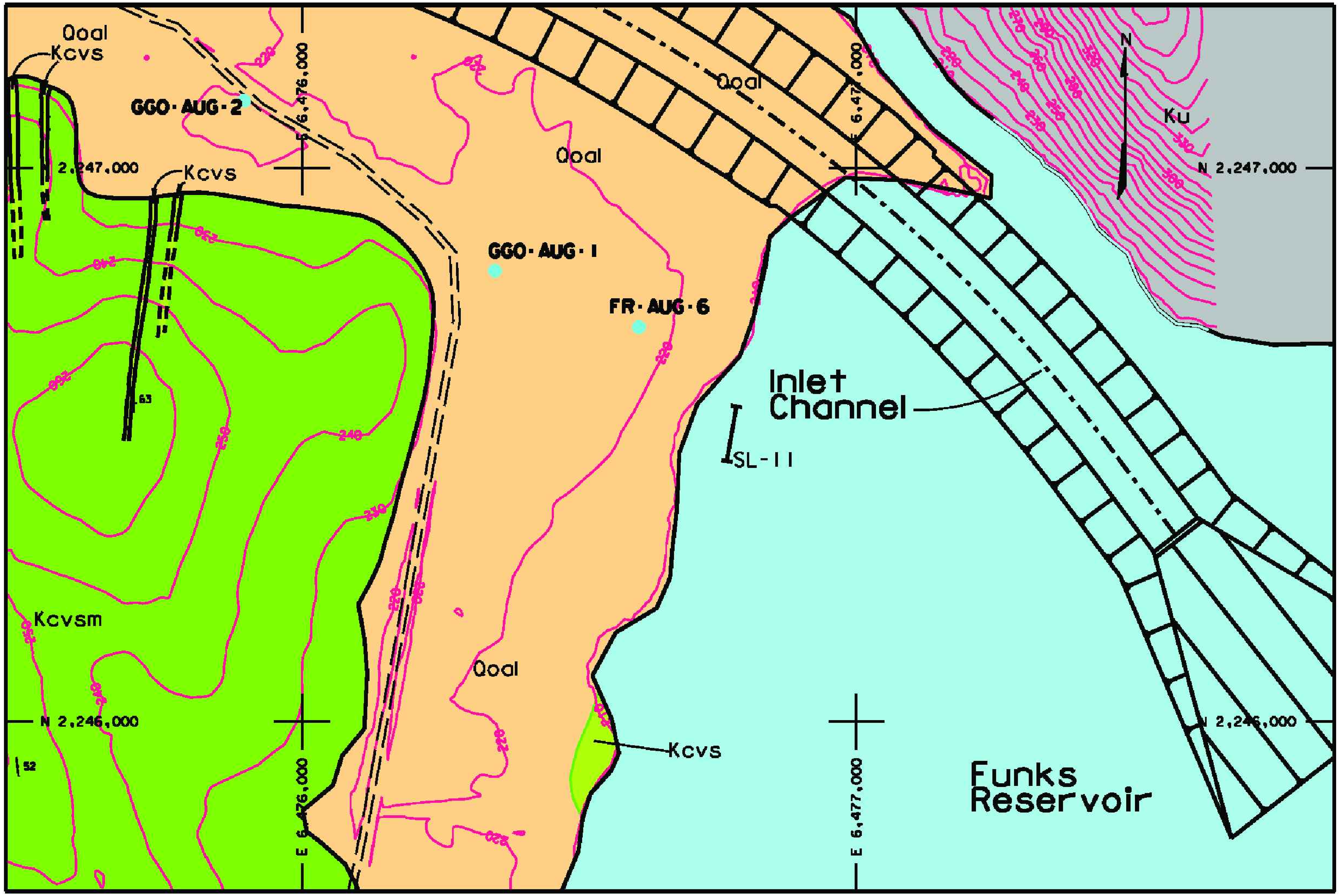
DRAWING SCALES	FULL SIZE 1" = 100' — 100 0 100 200 300 400 SCALE OF FEET
GEOLOGY REPORT No.	94-30-02
DRAWING No.	PG-SRP-12
GEOLOGIC MAPPING	1 Northern District Geol. 2 Project Geology Section
DRAWING PREPARED BY	F. Mastrian — DATE 5/11/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE

EXPLORATION AND GEOLOGIC MAP

7-31-03
SHEET 9 of 10
PLATE 3



Notes

Contour maps prepared by Mapping and Photogrammetry Section, Division of Land and Right of Way, DWR, from 1:7200 Photography WR-BMV-C-3, November 12 and 19, 1998. Mapping Projection is NAD-83, CA Zone 2 NAVD 88.

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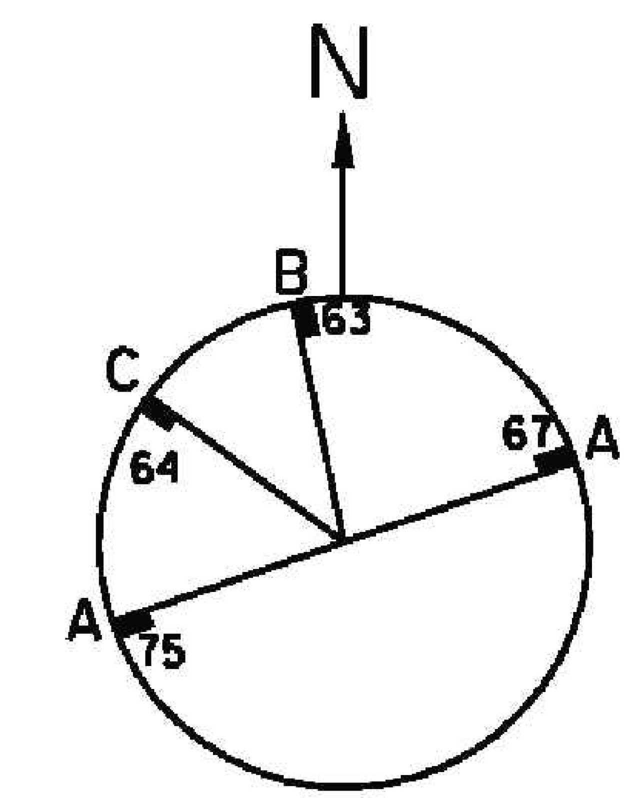
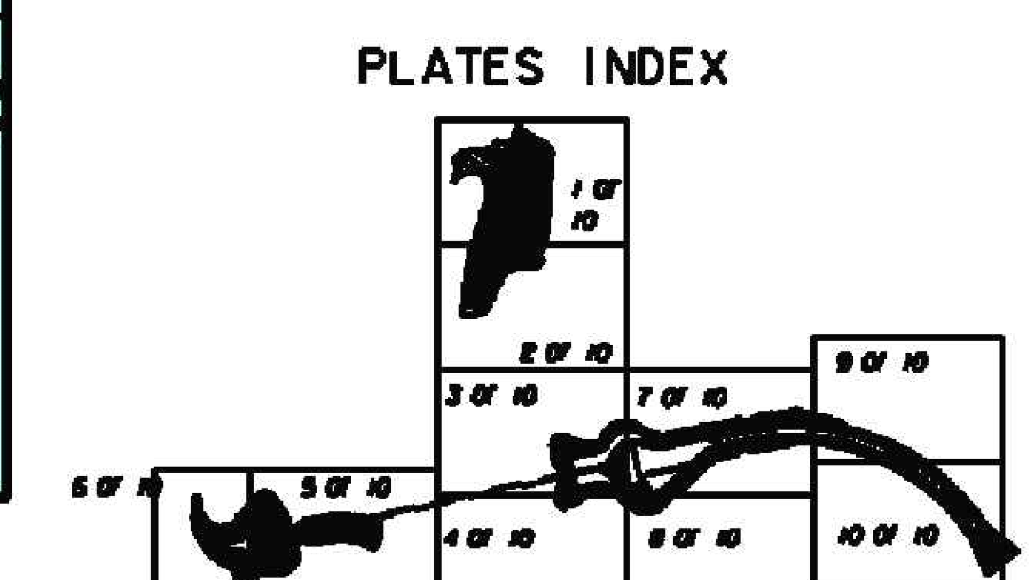
Geologic mapping and exploration performed by Division of Planning and Local Assistance, Northern District. Division of Engineering, Project Geology Section assisted.



JOINT ROSE. Average strike and dip of various indicated joint sets present within the immediate dam site area.



SHEET 134
B-2110

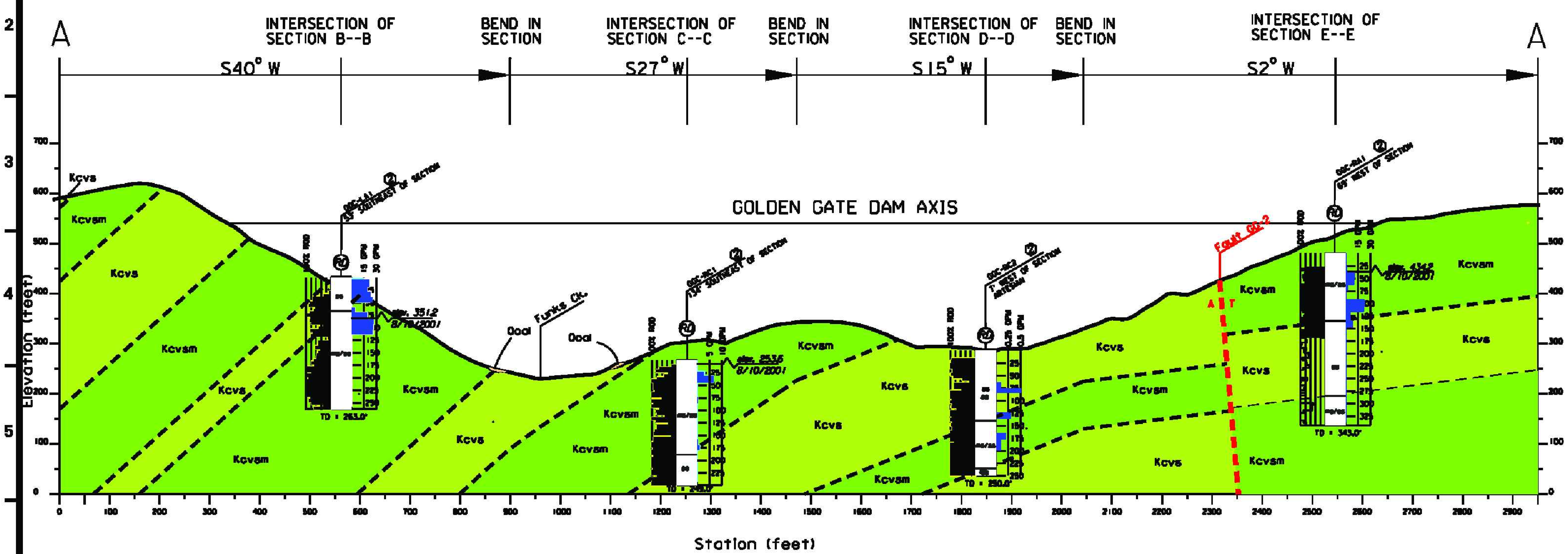
DRAWING SCALES

FULL SIZE

100 0 100 200 300 400
SCALE OF FEET

94-30-02	Northern District Geol.	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STROAGE INVESTIGATION SITES RESERVOIR PROJECT GOLDEN GATE DAM SITE EXPLORATION AND GEOLOGIC MAP	7-31-03
	Project Geology Section			10 OF 10
PG=SRP-10	6/17/03			PLATE 3

REV. DATE DESCRIPTION



SHEET 135
B-2301

DRAWING SCALES

FULL SIZE 1" = 100'

100 0 100 200 300 400 SCALE OF FEET

94-30-02

PG-SRP-13

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE

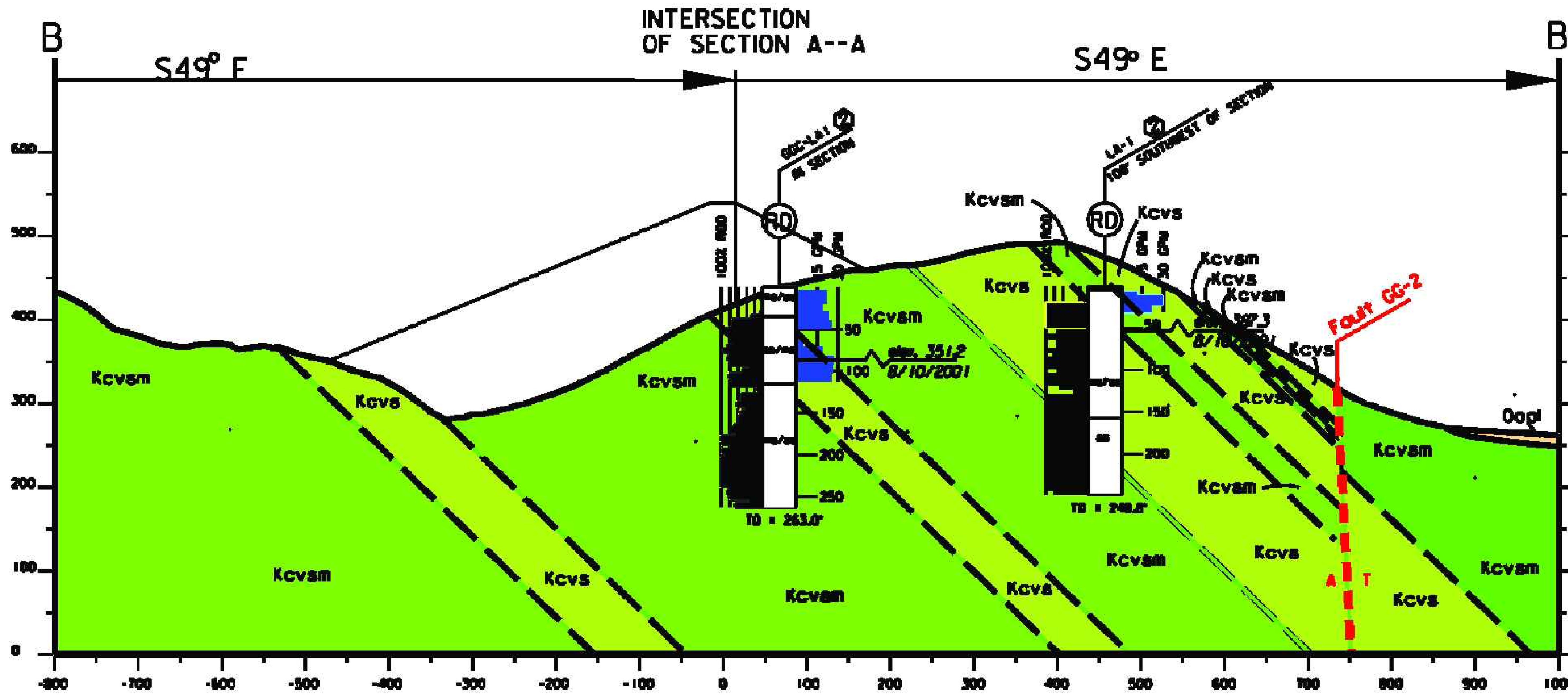
GEOLOGIC CROSS SECTIONS

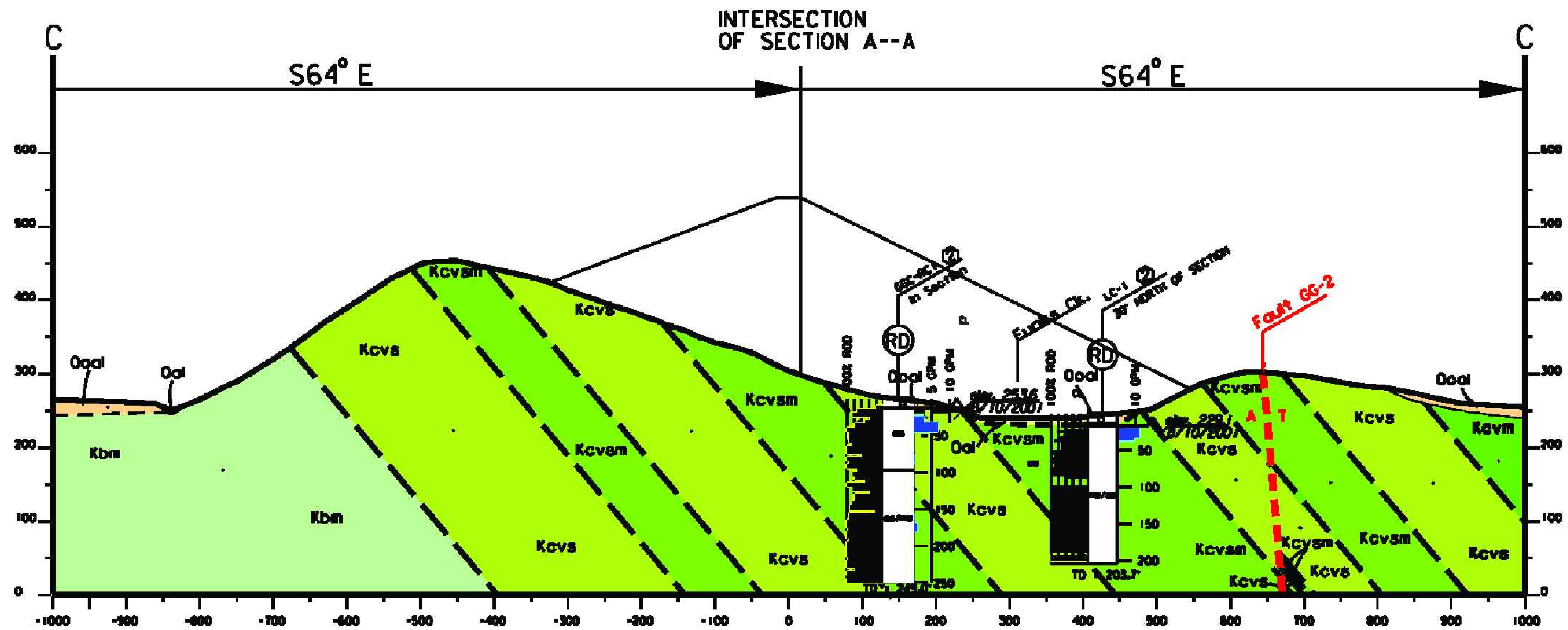
AXIAL PROFILE A - A

7-31-03

1 OF 1

PLATE 4





SHEET 136
B-2302

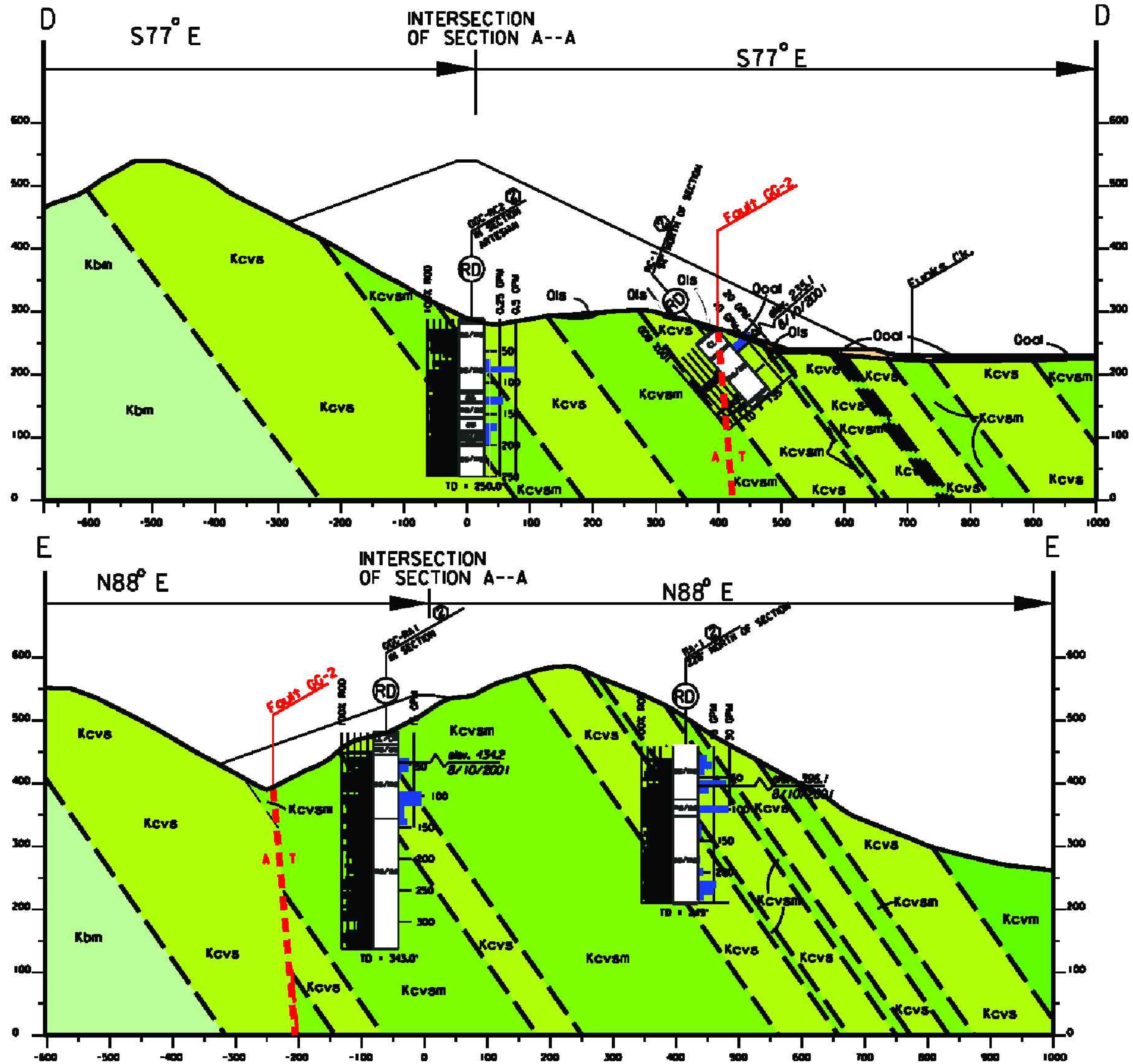
DRAWING SCALES

FULL SIZE 1" = 100'

SCALE OF FEET

94–30–02	1 Northern District Geol.	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT GOLDEN GATE DAM SITE GEOLOGIC SECTIONS SECTIONS B – B AND C – C
	2 Project Geology Section		7–31–03 1 OF 2
PG–SRP–14	Conover/Nasirian		PLATE 5

REV. | DATE | DESCRIPTION



SHEET 137
B-2303

DRAWING SCALES	FULL SIZE 1" = 100' — SCALE OF FEET
94-30-02	PG-SRP-15
[1] Northern District Geol.	[2] Project Geology Section
Conover/Hosklon	6/17/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GOLDEN GATE DAM SITE

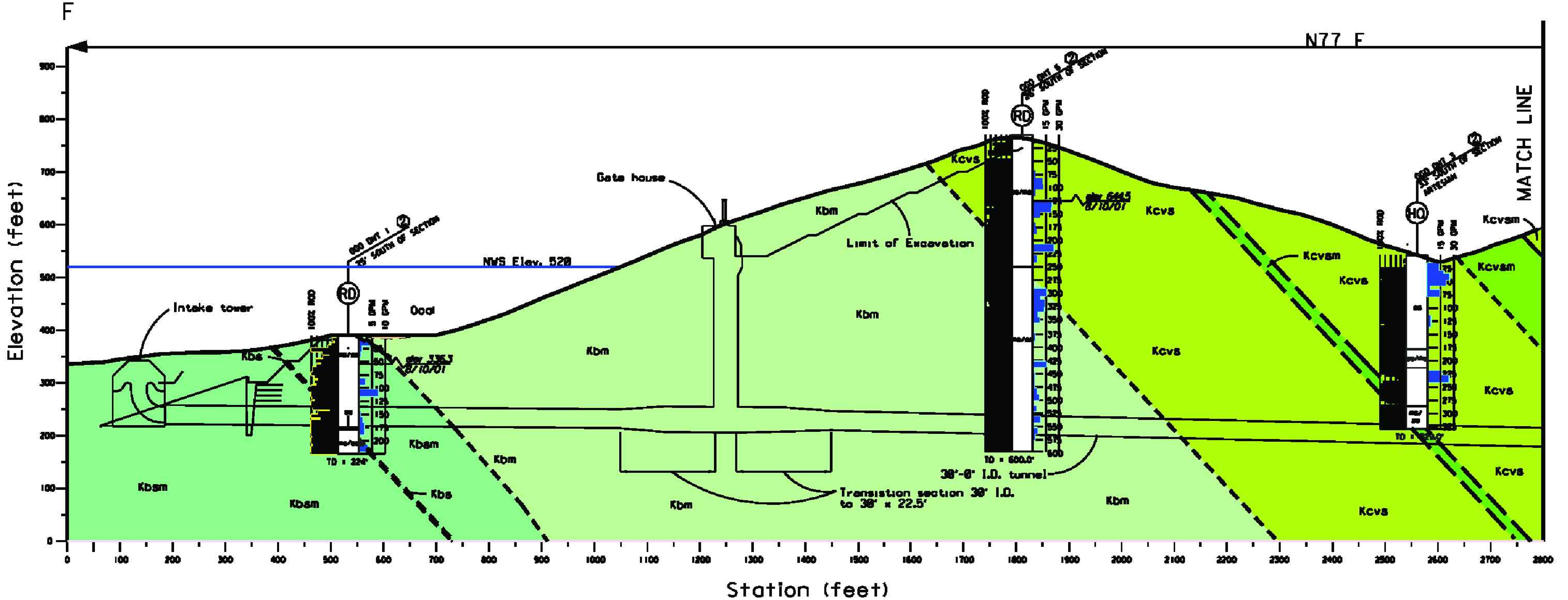
GEOLOGIC CROSS SECTIONS

SECTIONS D – D AND E – E

7-31-03

2 OF 2

PLATE 5

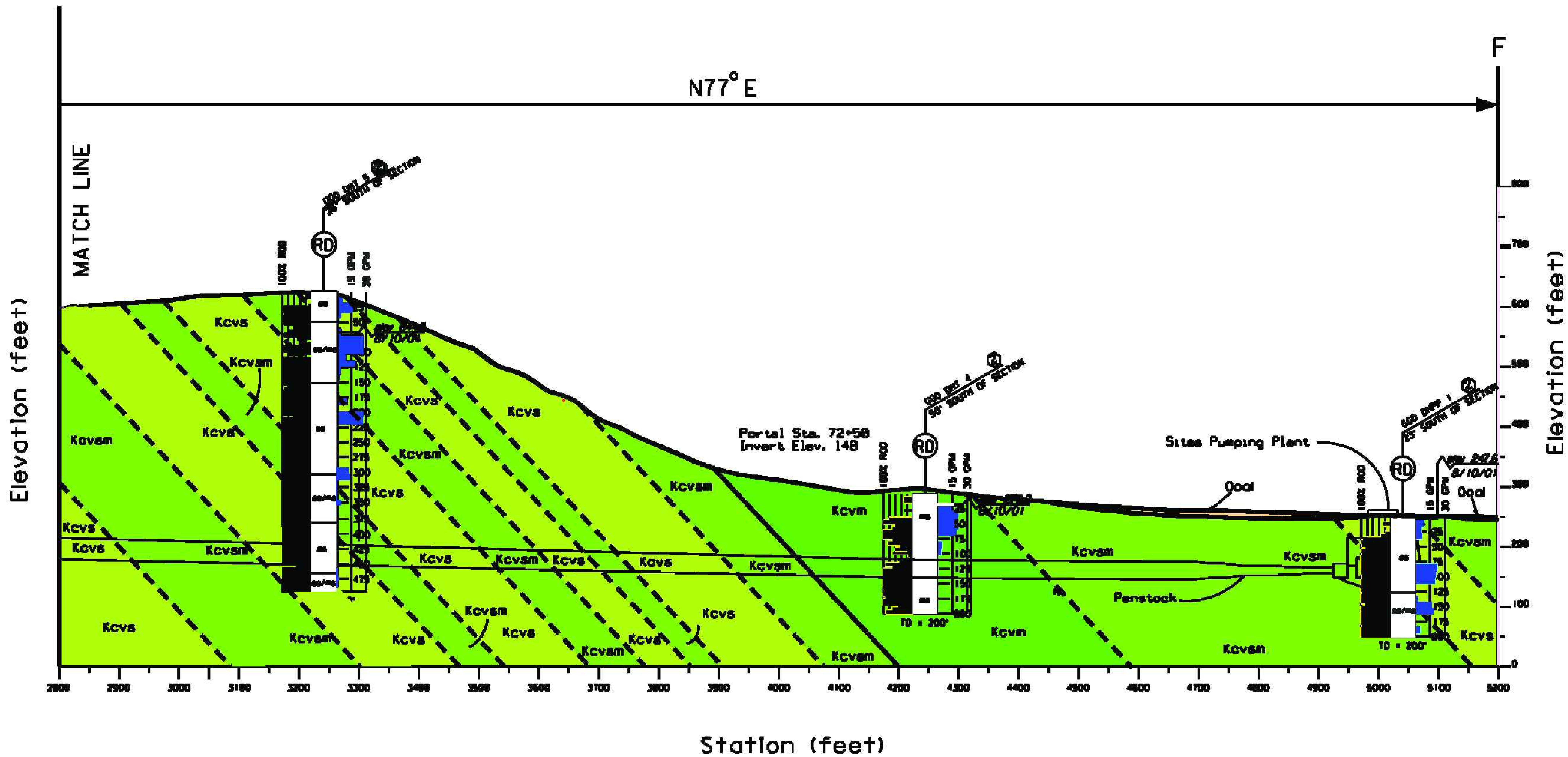


NOTE

Geologic investigations were conducted only along the initial design of a Long Tunnel alignment with the gate shaft option.

SHEET 138
B-2304

DRAWING SCALES FULL SIZE 1" = 100' SCALE OF FEET	94-30-02 PG-SRP-16	Northern District Geol. Project Geology Section Cannon/Rosirios 5/17/03	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT GOLDEN GATE DAM SITE GEOLOGIC SECTIONS OUTLET TUNNEL SECTION F - F
				7-31-03 1 OF 2 PLATE 6



NOTE

Geologic investigations were conducted only along the initial design of a Long Tunnel alignment with the gate shaft option.

SHEET 139
B-2305

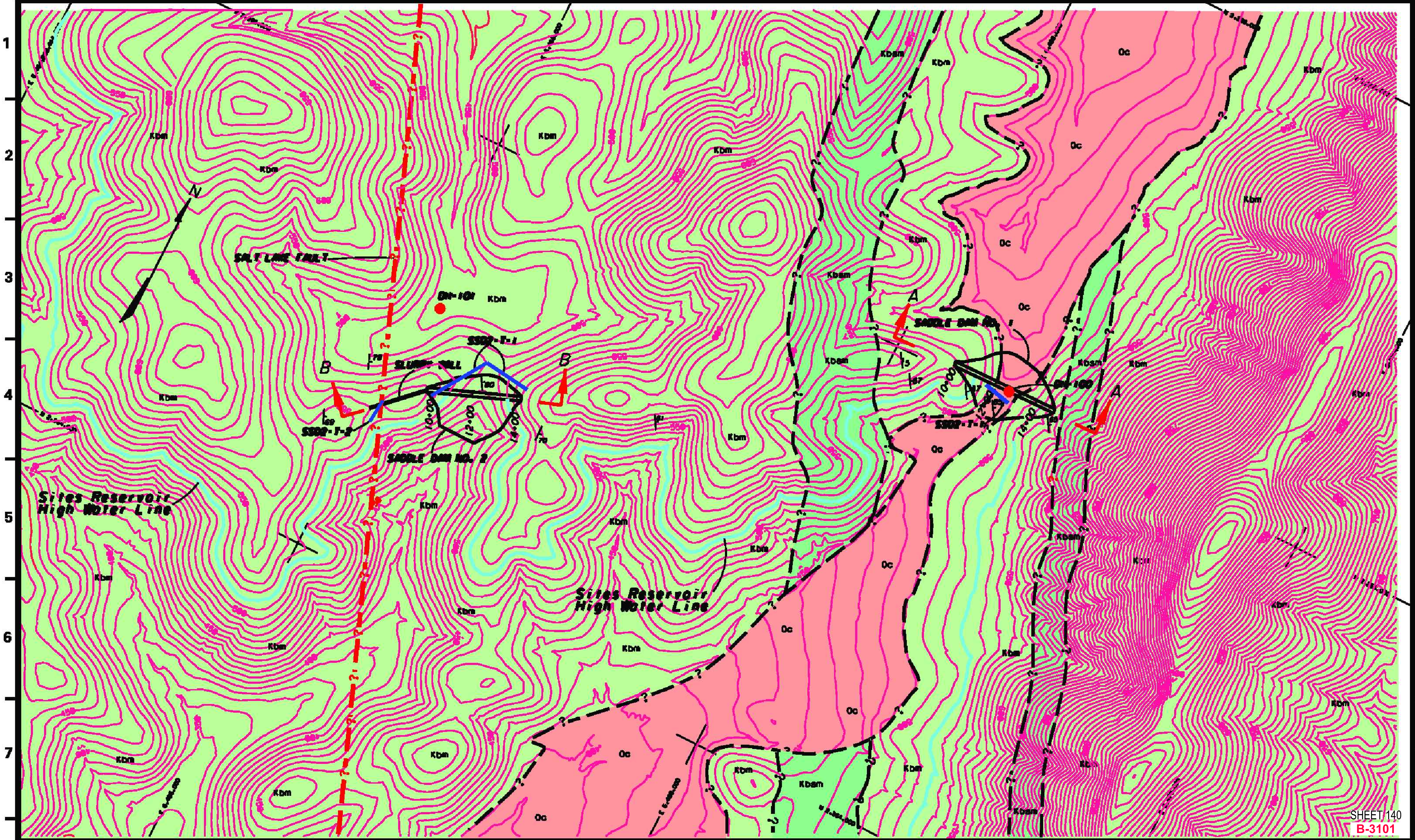
94-30-02	Northern District Geol.	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY SECTION STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT GOLDEN GATE DAM SITE GEOLOGIC SECTIONS OUTLET TUNNEL SECTION F - F
	Project Geology Section		7-31-03
PG-SRP-17	6/17/03		2 OF 2
			PLATE 6

DRAWING SCALES

FULL SIZE

1" = 100' 100 0 100 200 300 400

SCALE OF FEET



SHEET 140
B-3101

DRAWING SCALES

FULL SIZE 1" = 200'

SCALE OF FEET

94-30-02

PG-SRP-22

STEELE, SJO

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

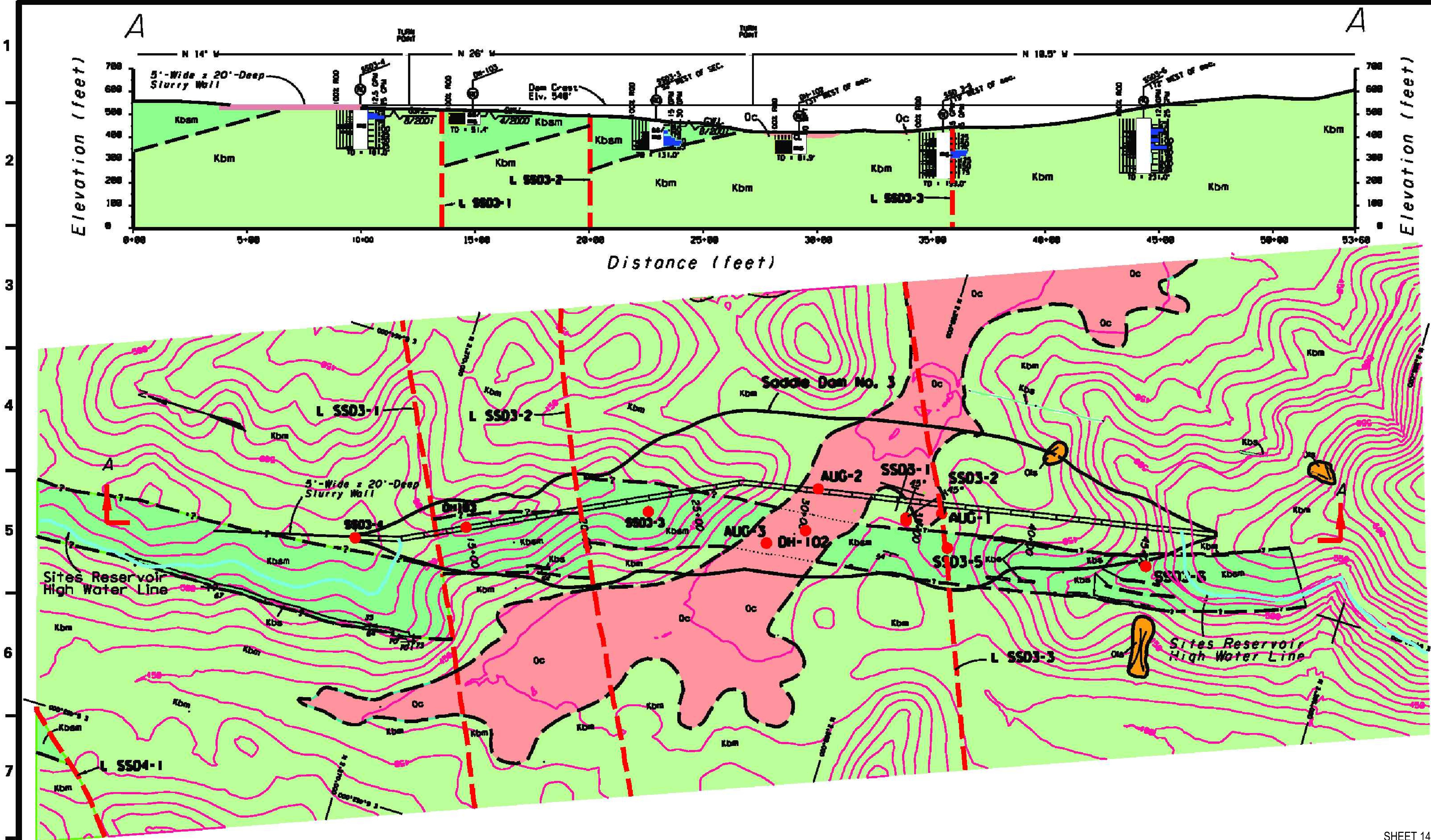
INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT
GEOLOGIC MAP

GEOLOGIC MAP
SITES SADDLE DAMS 1 AND 2

7-31-03

1 OF 4

PLATE 9



SHEET 141

B-3102

DRAWING SCALES

FULL SIZE

1" = 200'

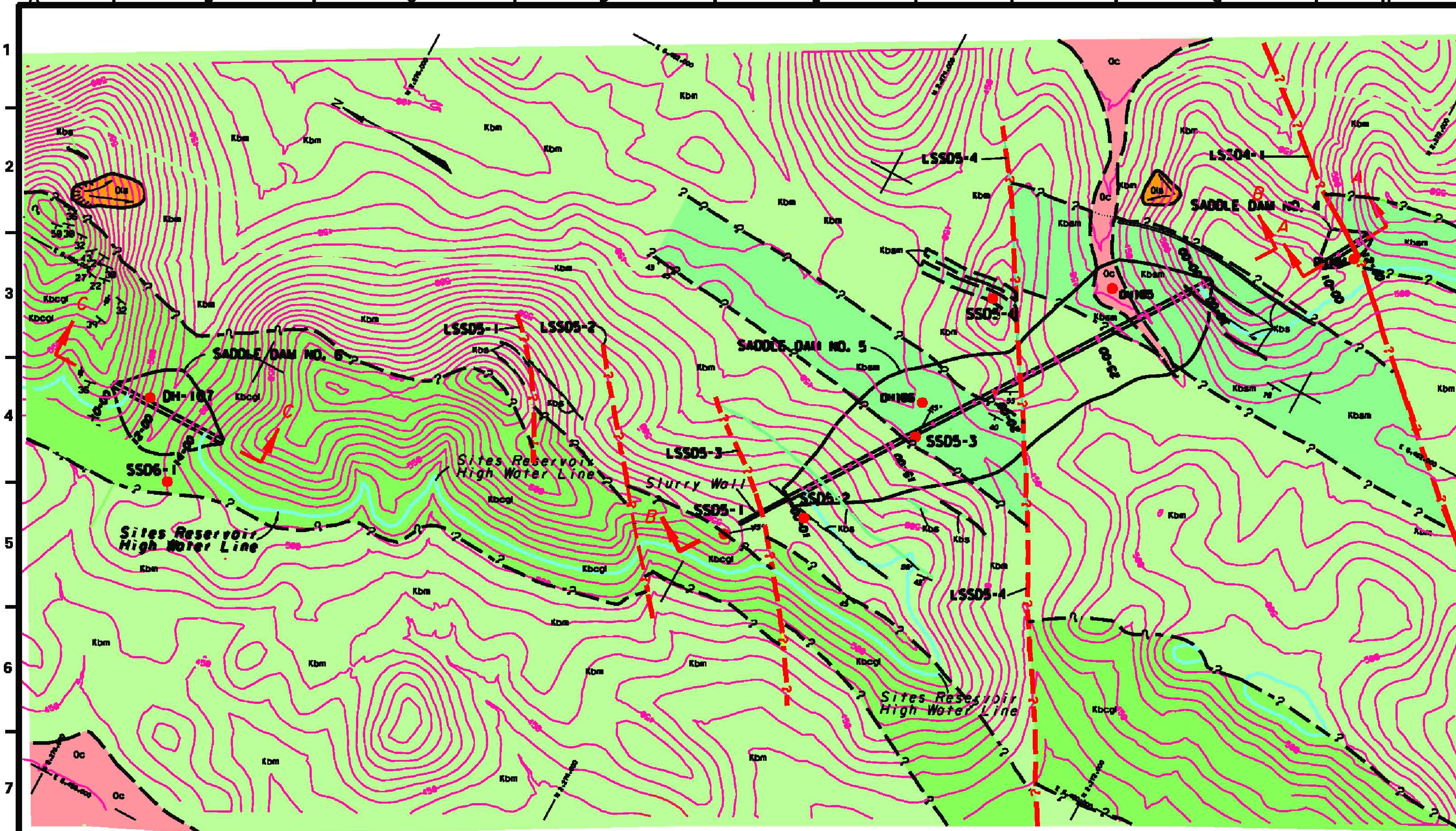
SCALE OF FEET

94–30–02	1 STEELE, SJD	STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING PROJECT GEOLOGY sec. STATE WATER FACILITIES	INTEGRATED STORAGE INVESTIGATION SITES RESERVOIR PROJECT GEOLOGIC PLAN AND PROFILE SITES SADDLE DAM 3
	2ND GEOL. STAFF		
PG–SRP–23	FARHAD NASIRIAN 5/20/03		

7–31–03

2 OF 4

PLATE 9



SHEET 142
B-3103

DRAWING SCALES
FULL SIZE
1" = 200'
200 0 200 400 600 800
SCALE OF FEET

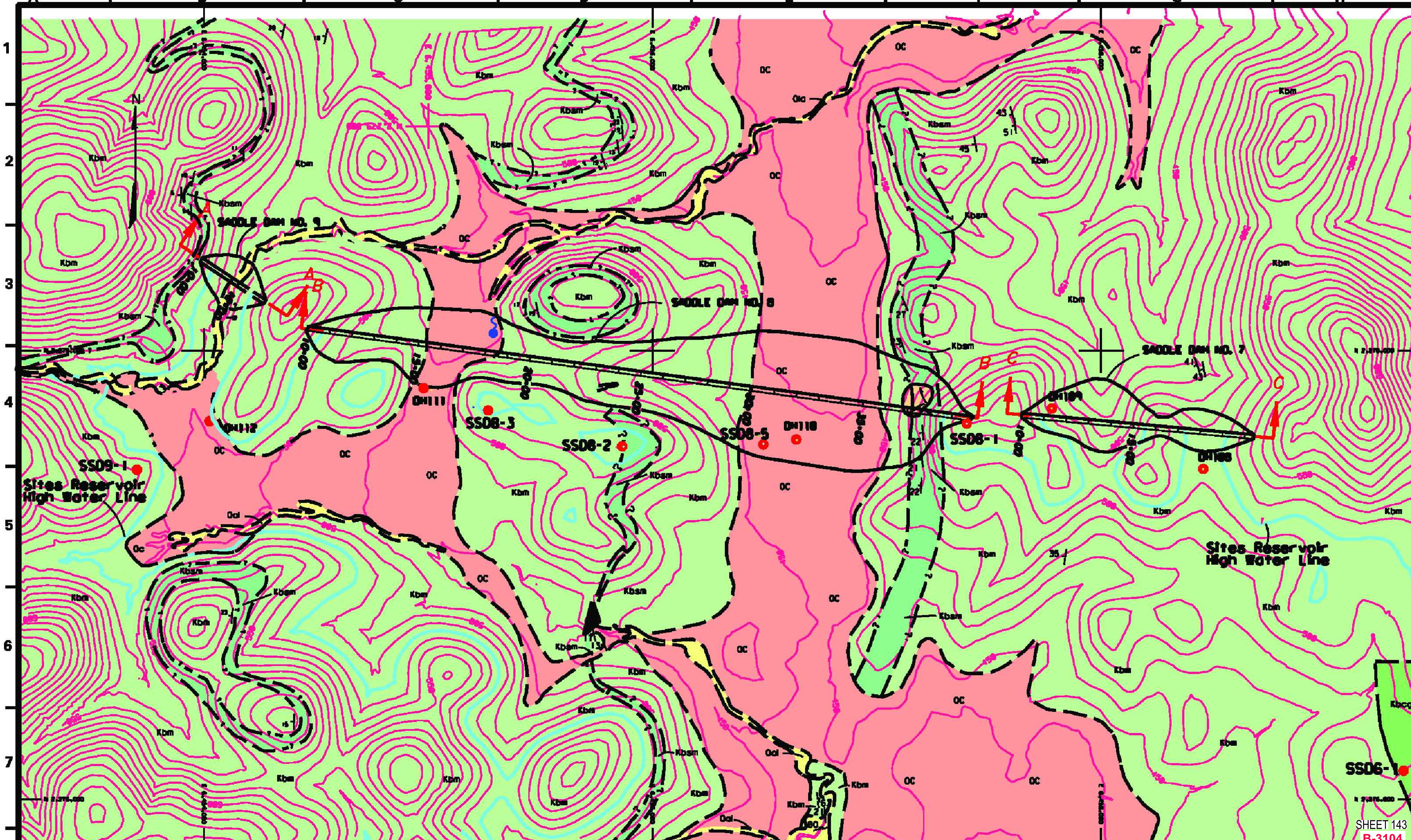
94-30-02	STEELE, SJO
	2ND GEOL. STAFF
PG-SRP-24	DATE: 6/23/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT

GEOLOGIC MAP
SITES SADDLE DAMS 4, 5, AND 6

7-31-03
3 OF 4
PLATE
9



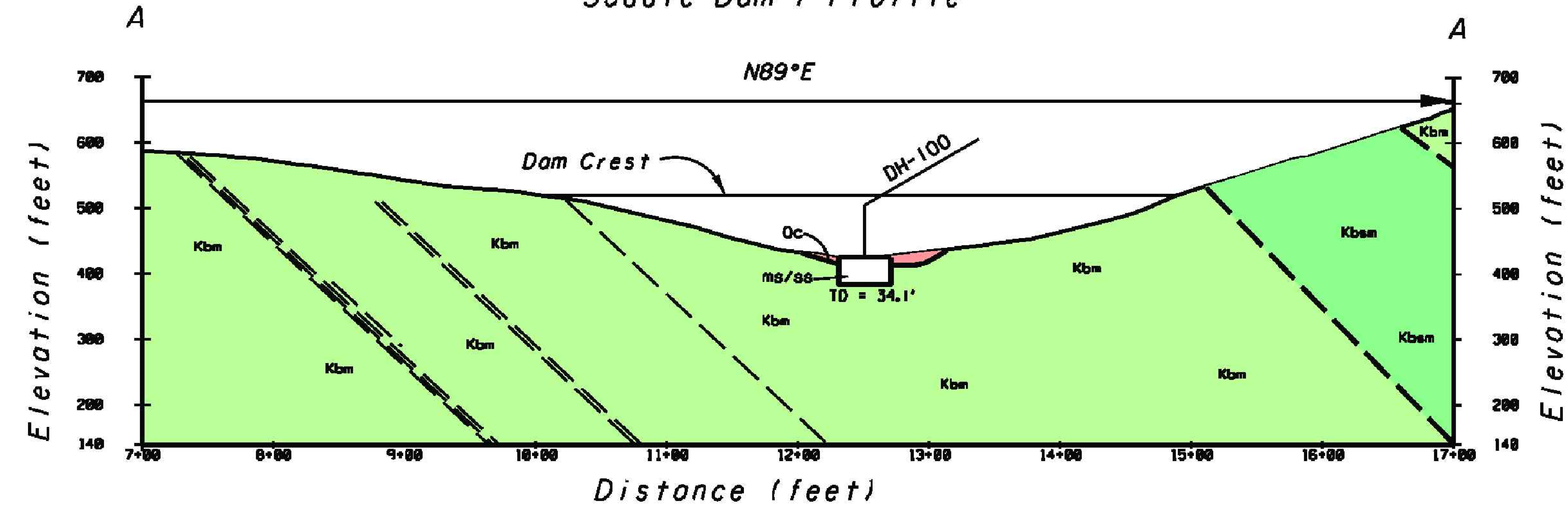
DRAWING SCALES	FULL SIZE 1" = 200' ; 200 0 200 400 600 800 SCALE OF FEET
GEOLOGY REPORT No.	94–30–02
GEOLOGY DRAWING No.	PG–SRP–25
GEOLOGIC MAPPING	1 STEELE, SJD; 2 VAN GILDER, DOE
DRAWING PREPARED BY	FARHAD NASIRIAN
DATE	7/7/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

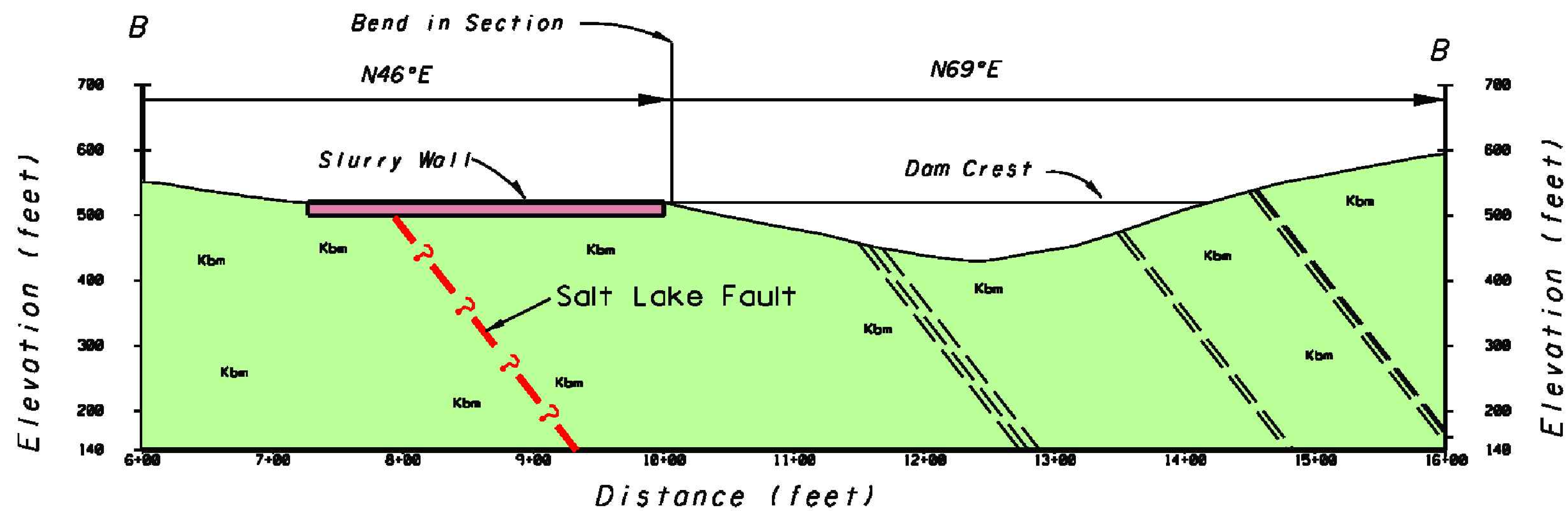
SITES RESERVOIR PROJECT
GEOLOGIC MAP
SITES SADDLE DAM 7, 8 AND 9

RELEASE DATE	7-31-03
SHEET No.	4 OF 4
PLATE	9

Saddle Dam 1 Profile



Saddle Dam 2 Profile



SHEET 144

B-3301

DRAWING SCALES

FULL SIZE 1" = 50' — VERTICAL SCALE OF FEET: 50, 0, 50, 100, 150, 200

1" = 100' — HORIZONTAL SCALE OF FEET: 100, 0, 100, 200, 300, 400

90-30-02

PG-SRP-26

STEELE, NGJ

BROWN & RICH, USBR

FARHAD ANSIRIAN — 1/1/03

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

INTEGRATED STORAGE INVESTIGATION
SITES RESERVIOR PROJECT

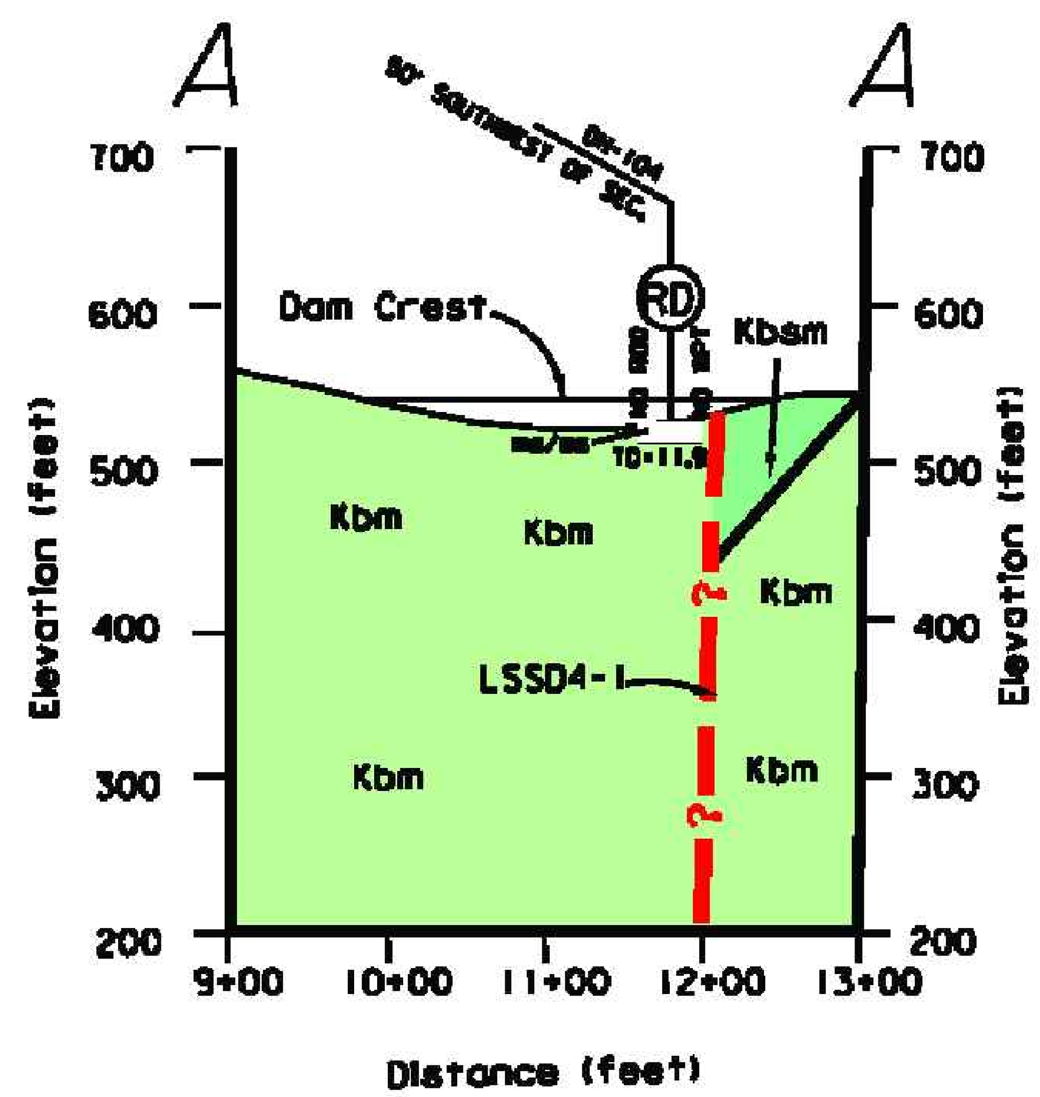
GEOLOGIC SECTION
SITES SADDLE DAM 1 AND 2
SECTION A-A AND B-B

7-31-03

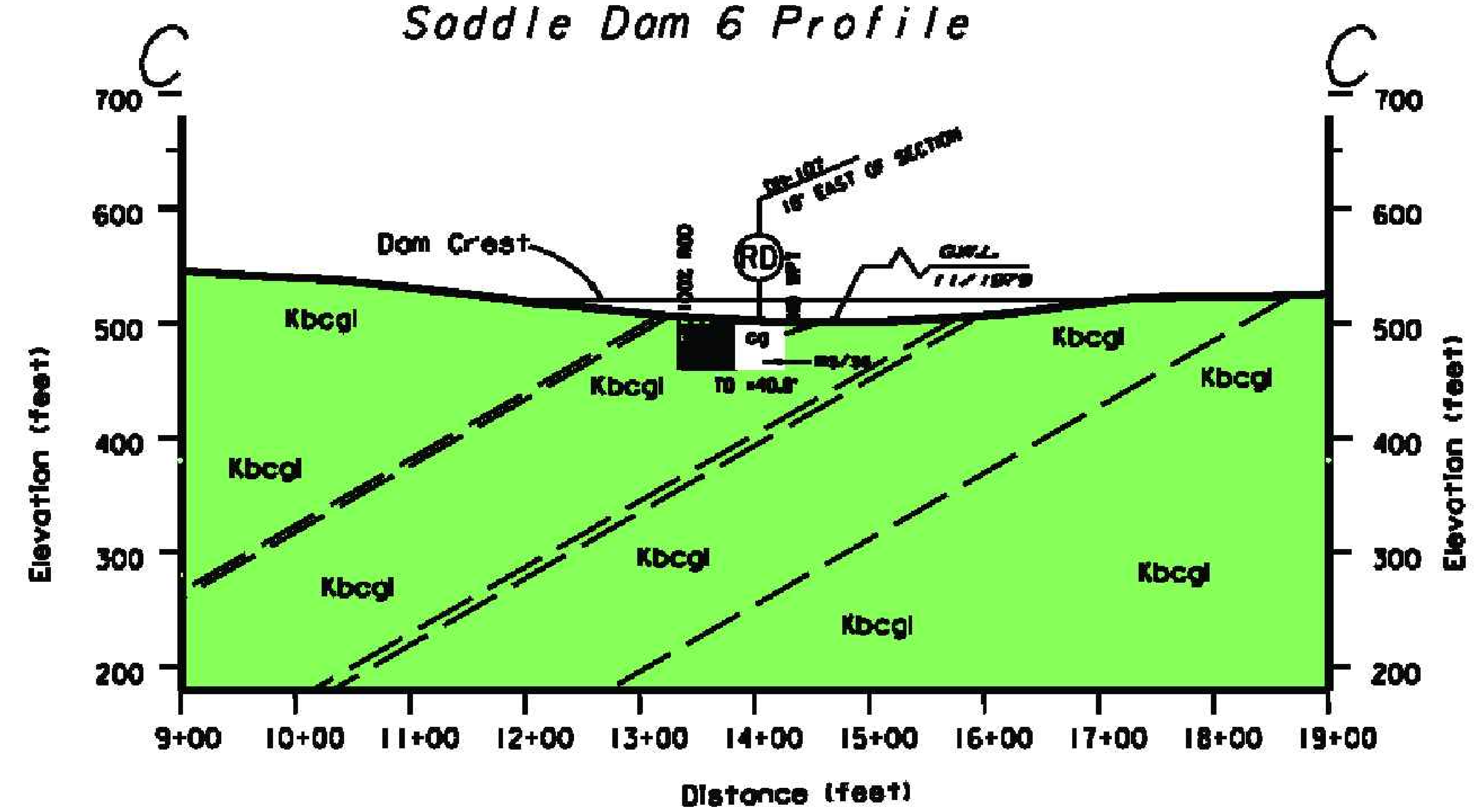
1 OF 1

PLATE 10

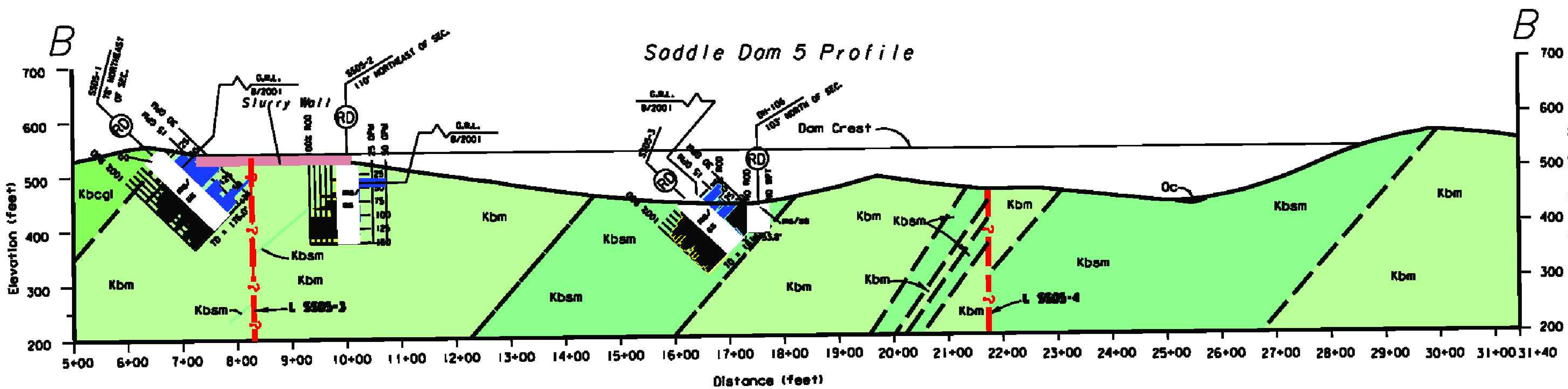
Saddle Dam 4 Profile



Saddle Dam 6 Profile



Saddle Dam 5 Profile



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DRAWING SCALES

FULL SIZE

1" = 100'

100 0 100 200 300 400

SCALE OF FEET

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STEELE, SJO

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THE RESOURCES AGENCY
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PROJECT GEOLOGY SECTION
STATE WATER FACILITIES

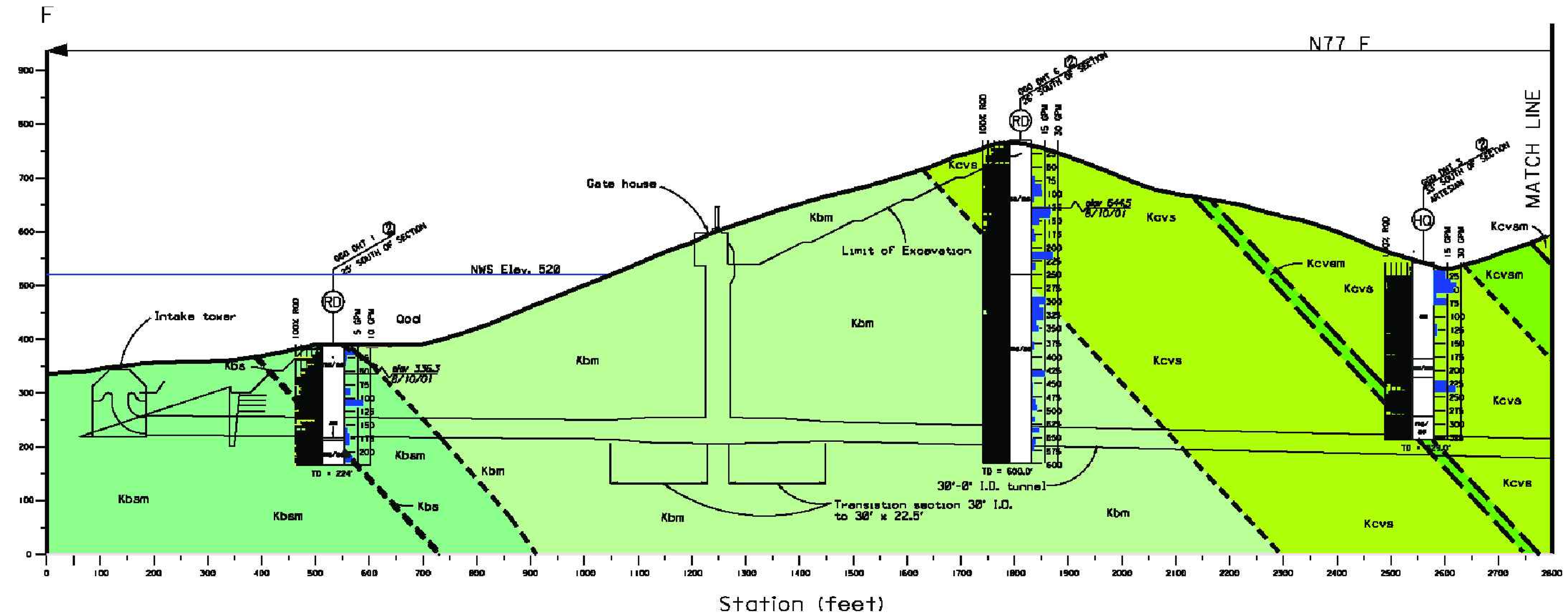
INTEGRATED STORAGE INVESTIGATION
SITES RESERVOIR PROJECT

GEOLOGIC SECTION
SITES SADDLE DAMS 4, 5 AND 6
SECTION A-A, B-B, AND C-C

7-31-03

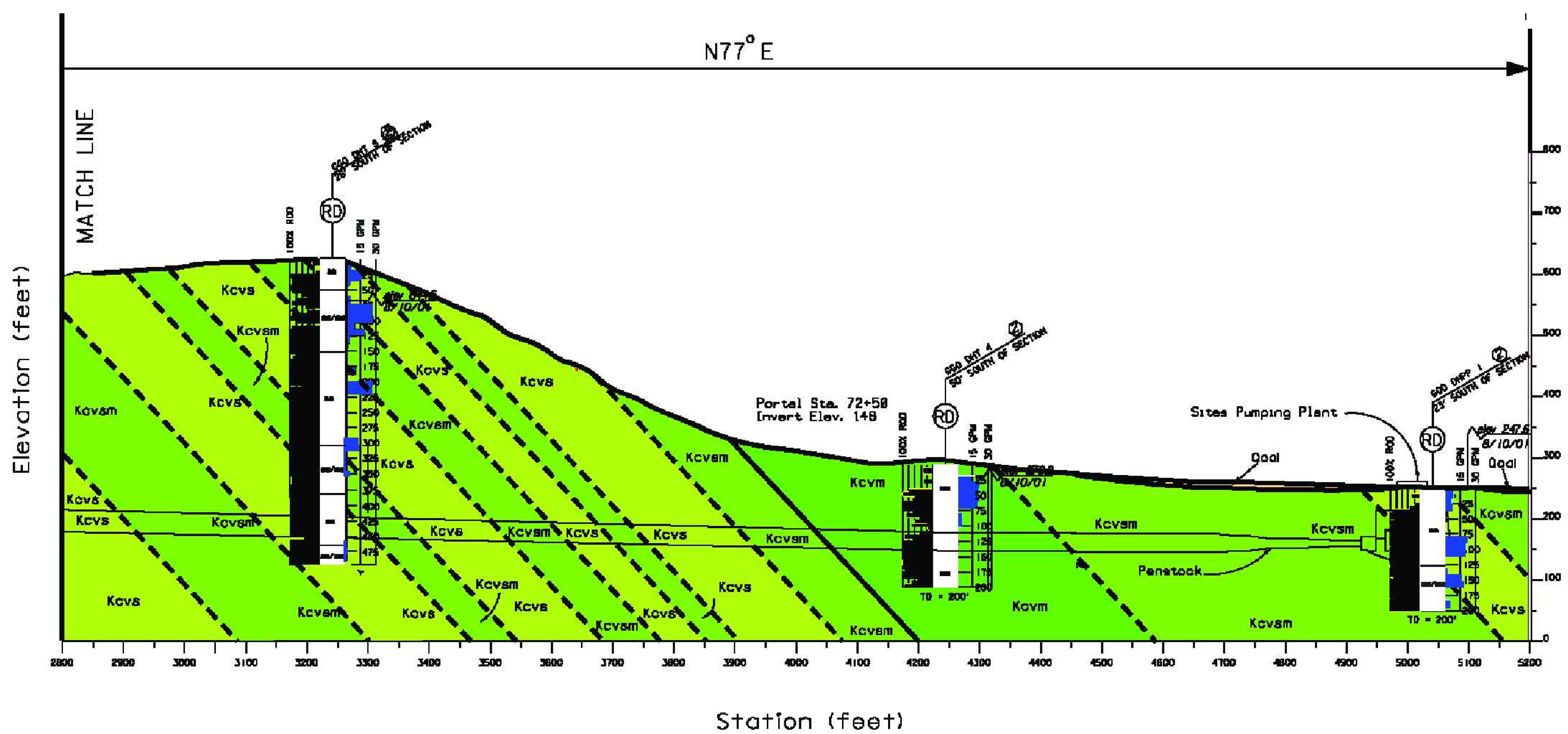
1 OF 1

PLATE
11



NOTE

Geologic investigations were conducted only along the initial design of a Long Tunnel alignment with the gate shaft option.



NOTE

Geologic investigations were conducted only along the initial design of a Long Tunnel alignment with the gate shaft option.

REV	DATE	DESCRIPTION	SUB.	APPD
A3-A	08/01/2017	COMPLIANCE WITH CCR TITLE 23, DIV. 7, CH. 1, §6003(a)(5)(D)	WSIP	JB

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CHECKED M. FORREST

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AECOM

AECOM Technical Services, Inc.
2020 L Street, Suite 300
Sacramento, Ca 95811
T 916-414-5800 F 916-414-1557
www.aecom.com

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APPROVAL RECOMMENDED REG. CE. NO.

APPROVED JOE BARNES REG. CE. NO. 40105

Sites

WSIP APPLICATION ATTACHMENT A4.A

INLET-OUTLET GEOLOGIC SECTIONS

SPEC NO.

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Please see attached Table of Contents from the Sites Reservoir Project Draft EIR/EIS. The full Draft EIR/EIS can be found at http://sitesproject.org/information/DraftEIR-EIS

Table of Contents

Chapters **Pages**

Executive Summary ES-1
Acronyms and Abbreviations xxv
1. Introduction 1-1
  1.1 Project Description 1-2
  1.2 Project Operations 1-6
  1.3 Project Background 1-7
  1.4 Project Objectives, and Purpose and Need 1-11
  1.5 Summary of CEQA and NEPA Requirements 1-12
  1.6 Existing Conditions/No Project/No Action Condition 1-14
  1.7 Intended Use of this Draft EIR/EIS 1-15
  1.8 Study Areas 1-22
  1.9 Areas of Controversy/Issues to be Resolved 1-26
  1.10 Public Involvement 1-33
  1.11 Organization of the Draft EIR/EIS 1-33
  1.12 Preparers of the Draft EIR/EIS 1-35
2. Alternatives Analysis 2-1
  2.1 Introduction 2-1
  2.2 Approach to Alternatives Analysis 2-2
  2.3 Existing Conditions, No Project Alternative, and No Action Alternative (Existing Conditions/No Project/No Action Condition) 2-8
  2.4 Sites Reservoir Alternatives 2-12
3. Description of the Sites Reservoir Project Alternatives 3-1
  3.1 Sites Reservoir Project Features and Facilities 3-2
  3.2 Construction and Operation/Maintenance Common to All Alternatives 3-92
  3.3 Diversion and Reservoir Operations Common to All Action Alternatives 3-102
  3.4 Proposed Operations by Alternative 3-110
  3.5 Environmental Commitments Included as Part of the Project and Alternatives 3-113
4. Environmental Compliance and Permit Summary 4-1
  4.1 Federal Policies or Approvals 4-1
  4.2 State Policies or Approvals 4-14
  4.3 Local/Regional Policies or Approvals 4-21
  4.4 Primary Permits and Authorizations 4-22
5. Guide to the Resource Analyses 5-1
  5.1 Introduction 5-1
  5.2 Establishment of the Base Condition for the Environmental Setting/Affected Environment 5-2
  5.3 Project Facilities Evaluated 5-3
  5.4 Alternatives Analysis 5-4
  5.5 Types of Impacts 5-6
  5.6 Determination of Significance of Impacts 5-7
  5.7 Mitigation Measure Development and Implementation 5-7
  5.8 Topics Eliminated from Further Analytical Consideration 5-8
  5.9 Tools, Analytical Methods, and Applications 5-8
  5.10 Limitations of the Modeling Tools and Analytical Methods 5-18
6. Surface Water Resources 6-1
  6.1 Introduction 6-1

Chapters **Pages**

6.2 Environmental Setting/Affected Environment....6-1
6.3 Environmental Impacts/Environmental Consequences 6-33
6.4 Evaluation of Changes to CVP/SWP Operational Flexibility 6-54
7. Surface Water Quality....7-1
7.1 Introduction....7-1
7.2 Environmental Setting/Affected Environment....7-2
7.3 Environmental Impacts/Environmental Consequences 7-29
7.4 Mitigation Measures 7-84
8. Fluvial Geomorphology and Riparian Habitat....8-1
8.1 Introduction....8-1
8.2 Environmental Setting/Affected Environment....8-1
8.3 Environmental Impacts/Environmental Consequences 8-15
8.4 Mitigation Measures 8-30
9. Flood Control and Management 9-1
9.1 Introduction....9-1
9.2 Environmental Setting/Affected Environment....9-1
9.3 Environmental Impacts/Environmental Consequences 9-14
9.4 Mitigation Measures 9-41
10. Groundwater Resources....10-1
10.1 Introduction....10-1
10.2 Environmental Setting/Affected Environment....10-1
10.3 Environmental Impacts/Environmental Consequences 10-26
10.4 Mitigation Measures 10-55
11. Groundwater Quality 11-1
11.1 Introduction....11-1
11.2 Environmental Setting/Affected Environment....11-1
11.3 Environmental Impacts/Environmental Consequences 11-14
11.4 Mitigation Measures 11-35
12. Aquatic Biological Resources....12-1
12.1 Introduction....12-1
12.2 Environmental Setting/Affected Environment....12-1
12.3 Environmental Impacts/Environmental Consequences 12-51
12.4 Mitigation Measures 12-114
13. Botanical Resources....13-1
13.1 Introduction....13-1
13.2 Environmental Setting/Affected Environment....13-1
13.3 Environmental Impacts/Environmental Consequences 13-44
13.4 Mitigation Measures 13-112
14. Terrestrial Biological Resources....14-1
14.1 Introduction....14-1
14.2 Environmental Setting/Affected Environment....14-1
14.3 Environmental Impacts/Environmental Consequences 14-44
14.4 Mitigation Measures 14-126
15. Wetlands and Other Waters 15-1
15.1 Introduction....15-1
15.2 Environmental Setting/Affected Environment....15-1
15.3 Environmental Impacts/Environmental Consequences 15-13
15.4 Mitigation Measures 15-53
16. Geology, Minerals, Soils, and Paleontology....16-1
16.1 Introduction....16-1

Chapters **Pages**

16.2 Environmental Setting/Affected Environment....16-1
16.3 Environmental Impacts/Environmental Consequences 16-28
16.4 Mitigation Measures 16-62
17. Faults and Seismicity....17-1
17.1 Introduction....17-1
17.2 Environmental Setting/Affected Environment....17-1
17.3 Environmental Impacts/Environmental Consequences 17-24
17.4 Mitigation Measures 17-31
18. Cultural/Tribal Cultural Resources....18-1
18.1 Introduction....18-1
18.2 Affected Environment....18-1
18.3 Environmental Impacts/Environmental Consequences 18-36
18.4 Mitigation Measures 18-56
19. Indian Trust Assets 19-1
19.1 Introduction....19-1
19.2 Regulatory Background for ITAs 19-1
19.3 Environmental Setting/Affected Environment....19-2
19.4 Environmental Impacts/Environmental Consequences 19-7
19.5 Mitigation Measures 19-9
20. Land Use....20-1
20.1 Introduction....20-1
20.2 Environmental Setting/Affected Environment....20-1
20.3 Environmental Impacts/Environmental Consequences 20-18
20.4 Mitigation Measures 20-39
21. Recreation Resources....21-1
21.1 Introduction....21-1
21.2 Environmental Setting/Affected Environment....21-1
21.3 Environmental Impacts/Environmental Consequences 21-23
21.4 Mitigation Measures 21-59
22. Socioeconomics 22-1
22.1 Introduction....22-1
22.2 Environmental Setting/Affected Environment....22-1
22.3 Environmental Impacts/Environmental Consequences 22-14
22.4 Mitigation Measures 22-68
23. Environmental Justice....23-1
23.1 Introduction....23-1
23.2 Environmental Setting/Affected Environment....23-1
23.3 Environmental Impacts/Environmental Consequences 23-7
23.4 Mitigation Measures 23-19
24. Air Quality 24-1
24.1 Introduction....24-1
24.2 Environmental Setting/Affected Environment....24-1
24.3 Environmental Impacts/Environmental Consequences 24-12
24.4 Mitigation Measures 24-30
25. Climate Change and Greenhouse Gas Emissions 25-1
25.1 Introduction....25-1
25.2 Background....25-2
25.3 Greenhouse Gas Emissions....25-6
25.4 Climate Change....25-25

Chapters **Pages**

26. Navigation, Transportation, and Traffic 26-1
 26.1 Introduction....26-1
 26.2 Environmental Setting/Affected Environment....26-1
 26.3 Environmental Impacts/Environmental Consequences 26-18
 26.4 Mitigation Measures 26-40
27. Noise 27-1
 27.1 Introduction....27-1
 27.2 Environmental Setting/Affected Environment....27-1
 27.3 Environmental Impacts/Environmental Consequences 27-7
 27.4 Mitigation Measures 27-35
28. Public Health and Environmental Hazards 28-1
 28.1 Introduction....28-1
 28.2 Environmental Setting/Affected Environment....28-1
 28.3 Environmental Impacts/Environmental Consequences 28-18
 28.4 Mitigation Measures 28-34
29. Public Services and Utilities 29-1
 29.1 Introduction....29-1
 29.2 Environmental Setting/Affected Environment....29-1
 29.3 Environmental Impacts/Environmental Consequences 29-15
 29.4 Mitigation Measures 29-34
30. Visual Resources....30-1
 30.1 Introduction....30-1
 30.2 Environmental Setting/Affected Environment....30-1
 30.3 Environmental Impacts/Environmental Consequences 30-15
 30.4 Mitigation Measures 30-39
31. Power Production and Energy 31-1
 31.1 Introduction....31-1
 31.2 Environmental Impacts/Environmental Consequences 31-20
 31.3 Mitigation Measures 31-49
32. Relationship Between Short-term Uses and Long-term Productivity....32-1
 32.1 Introduction....32-1
 32.2 Short-term and Long-term Effects of the Alternatives 32-1
 32.3 Conclusion 32-5
33. Irreversible or Irretrievable Resource Commitments....33-1
 33.1 Introduction....33-1
 33.2 Commitments of Resources by the Project's Action Alternatives....33-1
 33.3 Potential Environmental Accidents....33-3
 33.4 Commitment of Future Generations to Similar Uses....33-4
34. Growth-inducing Impacts 34-1
 34.1 Introduction....34-1
 34.2 Environmental Impacts/Environmental Consequences and Growth-inducement Potential 34-2
 34.3 Mitigation Measures 34-26
35. Cumulative Impacts 35-1
 35.1 Introduction....35-1
 35.2 Cumulative Project Selection....35-2
 35.3 Cumulative Effects Analysis by Resource....35-15
36. Consultation and Coordination 36-1
 36.1 Introduction....36-1
 36.2 Notice of Preparation and Notice of Intent 36-1

Chapters **Pages**

36.3 Public Scoping 36-1
36.4 Consultation 36-3
36.5 Coordination 36-6
36.6 Draft EIR/EIS and Project/Action Approval Process 36-10
37. References 37-1
37.1 Chapter 1 Introduction 37-1
37.2 Chapter 2 Alternatives Analysis 37-2
37.3 Chapter 3 Description of the Sites Reservoir Project Alternatives 37-3
37.4 Chapter 4 Environmental Compliance and Permit Summary 37-3
37.5 Chapter 5 Guide to the Resource Analyses 37-3
37.6 Chapter 6 Surface Water Resources 37-4
37.7 Chapter 7 Surface Water Quality 37-7
37.8 Chapter 8 Fluvial Geomorphology and Riparian Habitat 37-13
37.9 Chapter 9 Flood Control and Management 37-13
37.10 Chapter 10 Groundwater Resources 37-14
37.11 Chapter 11 Groundwater Quality 37-15
37.12 Chapter 12 Aquatic Biological Resources 37-17
37.13 Chapter 13 Botanical Resources 37-36
37.14 Chapter 14 Terrestrial Biological Resources 37-38
37.15 Chapter 15 Wetlands and Other Waters 37-43
37.16 Chapter 16 Geology, Minerals, Soils, and Paleontology 37-44
37.17 Chapter 17 Faults and Seismicity 37-46
37.18 Chapter 18 Cultural/Tribal Cultural Resources 37-50
37.19 Chapter 19 Indian Trust Assets 37-54
37.20 Chapter 20 Land Use 37-54
37.21 Chapter 21 Recreation Resources 37-55
37.22 Chapter 22 Socioeconomics 37-59
37.23 Chapter 23 Environmental Justice 37-61
37.24 Chapter 24 Air Quality 37-62
37.25 Chapter 25 Climate Change and Greenhouse Gas Emissions 37-64
37.26 Chapter 26 Navigation, Transportation, and Traffic 37-69
37.27 Chapter 27 Noise 37-70
37.28 Chapter 28 Public Health and Environmental Hazards 37-71
37.29 Chapter 29 Public Services and Utilities 37-73
37.30 Chapter 30 Visual Resources 37-77
37.31 Chapter 31 Power Production and Energy 37-77
37.32 Chapter 32 Relationship Between Short-term Uses and Long-term Productivity 37-80
37.33 Chapter 33 Irreversible or Irretrievable Commitments 37-80
37.34 Chapter 34 Growth-inducing Impacts 37-80
37.35 Chapter 35 Cumulative Impacts 37-81
37.36 Chapter 36 Consultation and Coordination 37-82
38. List of Preparers and Contributors 38-1
38.1 Introduction 38-1
38.2 Contributors to the Draft EIR/EIS 38-1
38.3 Contributors to the Preliminary Administrative Draft EIR/EIS 38-11
39. EIR/EIS Document Distribution 39-1

Glossary

Appendixes

Appendix 1 Introduction
- 1A Mitigation Monitoring Plan

Appendix 2 Alternatives Analysis
- 2A Alternatives Screening Process

Appendix 4 Environmental Compliance and Permit Summary
- 4A Environmental Compliance

Appendix 6 Surface Water Resources
- 6A Modeling of Alternatives
- 6B Water Resources System Modeling
- 6B1 Project Operations
- 6B2 River Operations
- 6B3 Delta Operations
- 6B4 Regional Deliveries
- 6C Upper Sacramento River Daily River Flow and Operations Modeling
- 6D Sensitivity Analysis Using the Latest CALSIM II Model

Appendix 7 Surface Water Quality
- 7A California State Water Resources Control Board Constituents of Concern of Water Bodies in the Study Area
- 7B Central Valley Regional Water Quality Control Board Basin Plan Criteria
- 7C Surface Water Quality Analysis for Electrical Conductivity at Proposed Intakes
- 7D Sacramento-San Joaquin Delta Modeling
- 7E River Temperature Modeling
- 7F Sites Reservoir Discharge Temperature Modeling

Appendix 8 Fluvial Geomorphology and Riparian Habitat
- 8A Sedimentation and River Hydraulics Modeling
- 8B Sacramento River Ecological Flows Tool

Appendix 10 Groundwater Resources
- 10A Groundwater Modeling

Appendix 11 Groundwater Quality
- 11A Groundwater Study Results 2007

Appendix 12 Aquatic Biological Resources
- 12A Aquatic Species Life Histories
- 12B Fisheries Impact Assessment Methodology
- 12C Fisheries Impact Summary
- 12D Water Temperature Index Value Selection Rationale
- 12E Fisheries Water Temperature Assessment Summary Tables
- 12F Reservoir Water Surface Elevation Summary Tables
- 12G Smelt Analysis
- 12H Early Life-Stage Salmon Mortality Modeling
- 12I Salmonid Population Modeling
- 12J Winter Run Chinook Salmon Life Cycle Modeling

12K Delta Passage Modeling
12L Weighted Useable Area Analysis
12M Sturgeon Analysis
12N Yolo and Sutter Bypass Flow and Weir Spill Analysis
Appendix 13 Botanical Resources
13A Special-Status Plant Species Potentially Occurring in Secondary Study Area Aquatic Habitats
Appendix 16 Geology, Minerals, Soils, and Paleontology
16A Soil Types within the Primary Study Area
16B Colusa County Fossil Sites
16C Results of the Paleontological Resources Literature Review
Appendix 21 Recreation Resources
21A Impact of Sites Reservoir Project Operations on Recreation-Day Benefit Values
21B Impact of Sites Reservoir Project Operations on Usability of Reservoir Boat Ramps
Appendix 22 Socioeconomics
22A Economics Analytical Framework
22B Reporting Metrics Tool
22C Regional Economics Modeling
22D Urban Water Supply Economics Modeling
22E Urban Water Quality Economics Modeling
22F Agricultural Supply Economics Modeling
Appendix 24 Air Quality
24A Methodology for Air Quality and GHG Emissions Calculations
Appendix 25 Climate Change and Greenhouse Gas Emissions
25A Climate Change and Sea Level Rise Sensitivity Analysis
25B Climate Change Sensitivity Analysis using WSIP Climate Change Projections
Appendix 28 Public Health and Environmental Hazards
28A California Superfund and Brownfield Sites
28B Mosquitoes and Other Vectors
28C Environmental Records Searches
Appendix 31 Power Production and Energy
31A Power Planning Study (PARO)
31B CVP-SWP Power Modeling
Appendix 34 Growth Inducing Impacts
34A Growth-Inducing Considerations for Municipal and Industrial Water Users
Appendix 36 Consultation and Coordination
36A Supplemental Scoping Report
36B Scoping Report

Tables

Pages

1-1 Primary Anticipated Permits, Approvals, and Authorizations for the Sites Reservoir Project...1-17
2-1 Summary of Dams and Embankment Volume of Potential Sites Reservoir Storage Sizes........2-15
2-2 Conveyance Facilities Alternatives Considered for Sites Reservoir..2-16
2-3 Sacramento River Direct Release Potential for the Sites Reservoir Conveyance Options.........2-18
2-4 Sites Reservoir Storage and Conveyance Options Combinations...2-20
2-5 Preliminary Sites Reservoir Storage and Conveyance Options Combinations..........................2-21
3-1 Comparison of New Project Facilities and Features and Existing Facilities Relied Upon...........3-3
3-2 Permanent Facility Footprint – Alternative A...3-9
3-3 Characteristics of Proposed 1.3-MAF Sites Reservoir Dams for Alternative A........................3-13
3-4 Sites Reservoir Project Onsite or Nearby Dam Materials...3-14
3-5 Sites Reservoir Inlet/Outlet Structure Tower Details 3-26
3-6 Sites Pumping-generating Plant Configuration for Alternative A 3-28
3-7 Characteristics of Project Roadways and South Bridge Approaches..3-35
3-8 Proposed South Bridge Characteristics...3-37
3-9 Characteristics of Proposed Minor Structures 3-37
3-10 Approximate Number of Facilities at the Recreation Areas..3-46
3-11 Aboveground Features Associated with the Proposed Delevan Pipeline 3-73
3-12 Permanent Facility Footprint − Alternative B..3-77
3-13 Characteristics of the Proposed Sites Reservoir Dams for Alternative B (and Alternatives C and D) 3-79
3-14 Proposed Sites Pumping-generating Plant Configuration for Alternative B 3-81
3-15 Permanent Facility Footprint – Alternative C..3-83
3-16 Sites Pumping-generating Plant Configuration for Alternative C 3-84
3-17 Permanent Facility Footprint − Alternative C_1 3-84
3-18 Permanent Facility Footprint − Alternative D 3-87
3-19 Approximate Number of Facilities at the Proposed Recreation Areas 3-88
3-20 Estimated Construction Durations and Equipment Days for Construction of Sites Reservoir Project...3-93
3-21 Expected Roadway Access Routes to Project Facilities 3-95
3-22 Project-related Construction Personnel and Highway Truck Trips 3-98
3-23 Estimated Equipment Hours for Operation and Maintenance of Sites Reservoir Project 3-100
3-24 Description of Proposed Seasonal Schedule for Project Operations 3-103
3-25 Comparison of Project Operations by Alternative..3-111
4-1 Applicable Federal, State, and Local Permits and Approvals...4-24
5-1 Impact Naming Convention for each of the Resources Evaluated 5-5
5-2 Overview of Sites Reservoir Project EIR/EIS Modeling Tools, Analytical Methods, and Applications 5-9
6-1 Summary of CVP and SWP Existing Conditions/No Project/No Action Condition Demands (TAF/Year) 6-12
6-2 Trinity River Record of Decision Annual Flow Volumes and Peak Flows...............................6-15
6-3 Stone Corral Creek Daily and Monthly Flows Near Sites, USGS 11390672 Period of Record 4/1/1958 – 9/30/1964 and 10/1/1965 – 9/30/1985 Drainage Area = 38.2 Square Miles 6-32
6-4 Colusa Basin Drain Daily and Monthly Flows at Highway 20 Period of Record 11/1/1944 - 9/30/1994 Drainage Area = 973 square miles..6-33

Tables **Pages**

6-5 Annual CVP Deliveries (TAF) Alternatives A, B, C, and D Compared to the Existing Conditions/No Project/No Action Condition 6-39
6-6 Annual SWP Regional Deliveries (TAF) Alternatives A, B, C, and D Compared to the Existing Conditions/No Project/No Action Condition 6-41
6-7 Sites Reservoir End of Month Storage (TAF) Alternatives A, B, C, and D Compared to the Existing Conditions/No Project/No Action Condition 6-52
6-8 Delevan Pipeline Intake/Discharge Facilities Monthly Flow (cfs) Alternatives A, B, C, and D Compared to the Existing Conditions/No Project/No Action Condition 6-53
6-9 Total Annual North-of-the-Delta Storage (TAF) 6-55
7-1 Designated Beneficial Uses within the Extended, Secondary, and Primary Study Areas 7-3
7-2 Water Quality Objectives for Temperature in the Trinity River 7-11
7-3 Trinity River Temperature Criteria for the Hoopa Valley Indian Reservation 7-12
7-4 Water Quality Objectives for Temperature in the Sacramento River 7-14
9-1 Sacramento River Basin Multi-Purpose Flood Management Reservoirs 9-3
9-2 Sacramento River Leveed Capacity 9-9
9-3 Feather River Leveed Capacity 9-9
10-1 Major Lithologic Units of the Sacramento Valley 10-9
10-2 Wells Located within a 1-mile Radius of the Proposed Sites Reservoir Footprint 10-18
10-3 Summary of Well Data by Well Type for Wells Located within a 1-mile Radius of the Sites Reservoir Footprint 10-19
10-4 Wells Located within a 1-mile Radius of the Proposed Holthouse Reservoir Complex and Terminal Regulating Reservoir Pipeline 10-20
10-5 Wells Located within 1 Mile of the Delevan Pipeline and Associated Facilities 10-21
10-6 Wells Located within a 1-mile Radius of the Terminal Regulating Reservoir Complex 10-25
12-1 Fish Species of Management Concern in Export Service Area Reservoirs in the Extended Study Area 12-4
12-2 Species of Management Concern in the Secondary Study Area 12-6
12-3 Fish Species of Management Concern in the Primary Study Area 12-45
12-4 Project Facilities in the Primary Study Area and the Potentially Affected Waterways 12-46
12-5 Fish Species Observed by CDFW during Sampling Efforts in the Proposed Sites Reservoir Inundation Area 12-49
12-6 Fish Species Observed by CDFW during Sampling Efforts in the Colusa Basin Drain 12-50
12-7 Construction- and Operation-related Impact Indicators 12-66
12-8 Summary of Mitigation Measures for Sites Reservoir Project Impacts on Aquatic Biological Resources 12-114
13-1 Invasive Weed Species Potentially Present in Wildlife Refuges Receiving Level 4 Water Supply in the Extended Study Area 13-3
13-2 Special-status Species Potentially Present in the Extended Study Area 13-6
13-3 Manual of California Vegetation Alliances in the Secondary Study Area 13-9
13-4 Number of Special-status Plant Species by Rank in the Secondary Study Area 13-10
13-5 Number of Special-status Plant Species by Region and Status 13-13
13-6 Vegetation Types within the Primary Study Area 13-31
13-7 Vegetation Types at Each Project Facility Location 13-35
13-8 Noxious Weed Species Known or Likely to Occur in the Primary Study Area 13-36
13-9 Federal- and State-listed Plant Species with Potential to Occur in the Primary Study Area 13-40
13-10 CNPS Rare Plant Rank 1, 2, and 3 Plant Species with Potential to Occur in the Primary Study Area 13-41
13-11 Special-status Plant Species and Occurrences Found during Field Surveys by Species for Surveyed Primary Study Area 13-43

Tables **Pages**

13-12 Permanent Vegetation Loss Due to the Construction of the 1.3-MAF Sites Reservoir and Associated Dams: Alternative A 13-65
13-13 Permanent Vegetation Loss and Temporary Disturbance Due to the Construction of Recreation Areas and Associated Electrical Distribution Lines: Alternative A 13-70
13-14 Permanent Vegetation Loss and Temporary Disturbance Due to the Construction of the Road Relocations and South Bridge: Alternative A 13-73
13-15 Permanent Vegetation Loss Due to Construction of the Sites Pumping/Generating Plant, Sites Reservoir Inlet/Outlet Structure, Sites Electrical Switchyard, and the Field Office Maintenance Yard: Alternative A 13-78
13-16 Permanent Vegetation Loss and Temporary Disturbance Due to the Construction of the Holthouse Reservoir Complex: Alternative A 13-81
13-17 Temporary Disturbance of Vegetation Communities Due to Modifications of the Glenn-Colusa Irrigation District Canal Facilities: Alternative A 13-85
13-18 Permanent Vegetation Loss and Temporary Disturbance Due to the Construction of the Terminal Regulating Reservoir Facilities: Alternative A 13-87
13-19 Permanent Vegetation Loss and Temporary Disturbance Due to the Construction of the Delevan and Terminal Regulating Reservoir Pipelines, Terminal Regulating Reservoir Pipeline Road, and Delevan Pipeline Electrical Switchyard: Alternative A........ 13-88
13-20 Temporary Disturbance of Vegetation Due to the Construction of the Sites/Delevan Overhead Power Line: Alternative A 13-92
13-21 Permanent Vegetation Loss Due to the Construction of the Delevan Pipeline Intake/ Discharge Facilities: Alternative A........ 13-95
13-22 Acres of Vegetation Types Within the Project Buffer: Alternative A 13-97
13-23 Acres of Vegetation Types Subject to Alternative A Construction Impacts........ 13-99
13-24 Permanent Vegetation Loss Due to the Construction and Filling of the 1.8-MAF Sites Reservoir and Associated Dams: Alternative B Compared to Alternative A 13-104
13-25 Temporary Disturbance of Vegetation Due to the Construction of the Sites/Delevan Overhead Power Line: Alternative B Compared to Alternative A 13-105
13-26 Permanent Vegetation Loss Due to the Construction of the Delevan Pipeline Discharge Facilities: Alternative B Compared to the Alternative A Delevan Pipeline Intake/ Discharge Facilities........ 13-106
13-27 Acres of Vegetation Subject to Alternative B Construction Impacts 13-107
13-28 Acres of Vegetation Types Subject to Alternative C Construction Impacts........ 13-109
13-29 Acres of Vegetation Types Subject to Alternative D Construction Impacts from Delevan Overhead Power Line and Substation........ 13-111
13-30 Summary of Mitigation Measures for North-of-the-Delta Offstream Storage Project Impacts on Botanical Resources 13-112
14-1 Wildlife Habitat Types within the Primary Study Area........ 14-18
14-2 Wildlife Habitat Types at Each Project Facility Location 14-22
14-3 State- and Federally Listed Terrestrial Wildlife Species that Potentially Occur in the Primary Study Area........ 14-23
14-4 Nearest Bank Swallow Colony Locations to the Delevan Pipeline Intake/Discharge Facilities........ 14-26
14-5 Terrestrial Wildlife Species of Special Concern that Potentially Occur in the Primary Study Area 14-29
14-6 Commercially or Recreationally Important Wildlife Species that May Occur within the Primary Study Area........ 14-42
14-7 Acres of Wildlife Habitat Subject to Direct Permanent Loss from the Construction and Filling of the 1.3-MAF Sites Reservoir and Associated Dams: Alternative A 14-69

Tables **Pages**

14-8 Avian Species Expected to Benefit from an Increase in Open Water Habitat within the Sites Reservoir Inundation Area 14-71
14-9 Permanent Wildlife Habitat Loss and Temporary Disturbance Due to the Construction of the Recreation Areas and Associated Electrical Distribution Lines: Alternative A 14-76
14-10 Permanent Wildlife Habitat Loss and Temporary Disturbance Due to the Construction of the Road Relocations and South Bridge: Alternative A........ 14-79
14-11 Acres of Wildlife Habitat Subject to Direct and Permanent Habitat Loss from Construction of the Sites Pumping/Generating Plant, Sites Reservoir Inlet/Outlet Structure, Sites Electrical Switchyard, and the Field Office Maintenance Yard: Alternative A........ 14-84
14-12 Permanent Wildlife Habitat Loss and Temporary Disturbance Due to the Construction of the Holthouse Reservoir Complex: Alternative A 14-87
14-13 Temporary Disturbance of Wildlife Habitat Due to Modifications of the Glenn-Colusa Irrigation District Canal Facilities: Alternative A........ 14-91
14-14 Permanent Wildlife Habitat Loss and Temporary Disturbance Due to the Construction of the Terminal Regulating Reservoir Facilities: Alternative A 14-93
14-15 Permanent Wildlife Habitat Loss and Temporary Disturbance Due to the Construction of the Delevan and Terminal Regulating Reservoir Pipelines, Terminal Regulating Reservoir Pipeline Road, and Delevan Pipeline Electrical Switchyard: Alternative A........ 14-96
14-16 Temporary Disturbance of Wildlife Habitat from Construction of the Sites/Delevan Overhead Power Line: Alternative A 14-101
14-17 Permanent Wildlife Habitat Loss Due to the Construction of the Delevan Pipeline Intake/Discharge Facilities: Alternative A........ 14-104
14-18 Acres of Wildlife Habitat within the Project Buffer: Alternative A 14-108
14-19 Acres of Wildlife Habitat Subject to Alternative A Construction Impacts........ 14-110
14-20 Permanent Wildlife Habitat Loss Due to the Construction and Filling of the 1.8-MAF Sites Reservoir and Associated Dams: Alternative B Compared to Alternative A 14-116
14-21 Temporary Disturbance of Wildlife Habitat Due to the Construction of the Sites/Delevan Overhead Power Line: Alternative B Compared to Alternative A 14-117
14-22 Direct and Permanent Wildlife Habitat Loss Due to the Construction of the Delevan Pipeline Discharge Facility: Alternative B Compared to the Alternative A Delevan Pipeline Intake/Discharge Facilities........ 14-119
14-23 Acres of Wildlife Habitat Subject to Alternative B Construction Impacts........ 14-120
14-24 Acres of Wildlife Habitat Subject to Alternative C Construction Impacts........ 14-122
14-25 Acres of Wildlife Habitat Subject to Direct Permanent Loss from the Construction and Operational Impacts from the Delevan Overhead Power Line and Substation: Alternative D........ 14-125
14-26 Summary of Mitigation Measures for NODOS Project Impacts to Terrestrial Biological Resources 14-126
14-27 Avoidance Distances and Restrictions for Nesting Species........ 14-130
15-1 Potentially Affected Wetlands and Other Waters in the Extended Study Area (National Wetlands Inventory Types)........ 15-2
15-2 Potentially Affected Waters in the Secondary Study Area: Rivers and Streams........ 15-4
15-3 Potentially Affected Waters in the Secondary Study Area: Lakes and Reservoirs........ 15-5
15-4 Potentially Affected Waters in the Secondary Study Area: Wetlands........ 15-5
15-5 Presence of Wetlands and Other Waters at Each Proposed Project Facility........ 15-7
15-6 Acre Summary of Wetlands and Other Waters in the Primary Study Area........ 15-8
15-7 Direct Loss of Wetlands and Other Waters Due to the Construction of the 1.3-MAF Sites Reservoir Inundation Area and Dams 15-20
15-8 Direct Loss of Wetlands and Other Waters Due to the Construction of the Recreation Areas 15-23

Tables **Pages**

15-9 Direct Loss of Wetlands and Other Waters Due to the Construction of the Road Relocations and South Bridge....15-26
15-10 Direct Loss of Wetlands and Other Waters Due to the Construction of the Sites Reservoir Inlet/Outlet Structure, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard....15-29
15-11 Direct Loss of Wetlands and Other Waters Due to the Construction of the Holthouse Reservoir Complex....15-30
15-12 Direct Loss of Wetlands and Other Waters Due to the Construction of the TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, and the GCID Main Canal Connection to the TRR....15-33
15-13 Direct Loss of Wetlands and Other Waters Due to the Construction of the Sites/Delevan Overhead Power Line East of the Sites Electrical Switchyard....15-34
15-14 Loss of Wetlands and Other Waters Due to the Construction of the Delevan Pipeline, Terminal Regulating Reservoir Pipeline, Terminal Regulating Reservoir Pipeline Road, and Delevan Pipeline Electrical Switchyard....15-36
15-15 Direct Loss of Wetlands and Other Waters Due to the Construction of the Delevan Pipeline Intake/Discharge Facilities....15-39
15-16 Affected Acres of Wetlands and Other Waters for All Project Facilities: Alternative A....15-42
15-17 Direct Loss of Wetlands and Other Waters Due to the Construction of the 1.8-MAF Sites Reservoir Inundation Area and Dams....15-44
15-18 Direct Loss of Wetlands and Other Waters Due to the Construction of the Delevan Pipeline Discharge Facilities....15-47
15-19 Affected Acres of Wetlands and Other Waters for All Project Facilities: Alternative B....15-49
15-20 Affected Acres of Wetlands and Other Waters for All Project Facilities: Alternative C....15-51
15-21 Summary of Mitigation Measures for Sites Reservoir Project Impacts to Wetlands and Other Waters....15-54
16-1 Fossils and Fossil Locations within the Extended Study Area....16-5
16-2 Fossils and Fossil Locations within the Secondary Study Area....16-10
16-3 Coast Range Rock Units in the Primary Study Area....16-13
16-4 Major Soil Types at Sites Reservoir (Alternative A)....16-18
16-5 Major Soil Types at Sites Reservoir (Alternatives B, C, and D)....16-18
16-6 Results of Paleontological Records Search by Geological Unit for the Primary Study Area....16-23
16-7 Great Valley Sequence Units in the Primary Study Area that Yield Megafossils....16-24
16-8 Paleontological Sensitivity of the Rock Units within 1 Mile of Any Proposed Primary Study Area Project Facility....16-27
16-9 Summary of Mitigation Measures for Sites Reservoir Project Impacts to Paleontological Resources....16-62
17-1 Comparison of Fault Activity Classification between the California Geological Survey and Division of Safety of Dams....17-2
17-2 Comparison of Richter Magnitude and Modified Mercalli Intensity....17-3
17-3 Regional Faults in the Secondary Study Area....17-8
17-4 Faults in Proximity to the Proposed Sites Reservoir and Sites and Golden Gate Dam sites....17-13
18-1 Built Environment Resources Identified Outside of the Sites Reservoir Inundation Area in the Primary Study Area....18-21
18-2 Native American Consultation Per AB 52....18-24
18-3 Summary of Mitigation Measures for Project Impacts on Cultural Resources....18-56
19-1 Federally Recognized Tribes in the Vicinity of the Extended, Secondary, and Primary Study Areas Organized by County....19-3

Tables **Pages**

20-1 Glenn County 2012–2014 Land Use Conversion 20-4
20-2 Colusa County 2012–2014 Land Use Conversion 20-6
20-3 Zoning Designations and Acreage of Impacts – Alternative A 20-29
20-4 FMMP Designations and Acreage of Impacts – Alternative A 20-31
20-5 Zoning Designations and Acreage of Impacts – Alternative B 20-33
20-6 FMMP Designations and Acreage of Impacts – Alternative B 20-35
20-7 Zoning Designations and Acreage of Impacts – Alternative D Overhead Power Line and Substation 20-39
20-8 FMMP Designations and Acreage of Impacts – Alternative D Overhead Power Line and Substation 20-39
20-9 Summary of Mitigation Measures for Project Impacts on Land Use 20-40
21-1 Recreation Use and Capacity at Reservoirs in the Extended Study Area 21-3
21-2 San Luis Reservoir State Recreation Area Boat Ramp Bottom Elevations 21-6
21-3 Recreation Use and Capacity at Reservoirs in the Secondary Study Area 21-7
21-4 Trinity Lake Boat Ramp Bottom Elevations 21-10
21-5 Shasta Lake Boat Ramp Bottom Elevations 21-11
21-6A Recreation Sites and Amenities on the Sacramento River from Red Bluff to Colusa 21-13
21-6B Recreation Sites and Amenities on the Sacramento River from Red Bluff to Colusa 21-15
21-7 Lake Oroville Boat Ramp Bottom Elevations 21-18
21-8 Folsom Lake Boat Ramp Bottom Elevations 21-20
22-1 Counties in Water Delivery Regions – Extended Study Area 22-2
22-2 Historical, Current, and Projected Population and Average Annual Growth Rate within the Extended Study Area and California 22-2
22-3 Economic Activity within the Extended Study Area and California in 2015 (2015 Dollars) 22-3
22-4 Average Irrigated Acreage and Annual Value of Production (2008 to 2010) within the Extended Study Area (2010 Dollars) 22-3
22-5 Counties in Water Delivery Regions – Secondary Study Area 22-4
22-6 Historical, Current, and Projected Population and Average Annual Growth Rate within the Secondary Study Area and California 22-4
22-7 Economic Activity within the Secondary Study Area and California in 2015 (2015 Dollars) 22-5
22-8 Historical, Current, and Projected Population and Average Annual Growth Rate within the Primary Study Area and California 22-6
22-9 Age Distribution within the Primary Study Area Counties and California 22-7
22-10 Housing Distribution within the Primary Study Area and California 22-7
22-11 Personal Income and Industry Earnings within the Primary Study Area and California in 2015 (2015 Dollars) 22-8
22-12 Employment within the Primary Study Area and California in 2015 22-9
22-13 Employment by Industry for the Primary Study Area – Glenn County 22-9
22-14 Employment by Industry for the Primary Study Area – Colusa County 22-10
22-15 Demographics of the Primary Study Area 22-10
22-16 Glenn County General Fund Revenues and Expenditures 22-11
22-17 Colusa County General Fund Revenues and Expenditures 22-12
22-18 Glenn County Average Agricultural Production, 2012 to 2015 (2015 Dollars) 22-13
22-19 Colusa County Average Agricultural Production, 2012 to 2015 (2015 Dollars) 22-13
22-20 Permanent Change in Extended Study Area Regional Employment and Income Associated with Implementation of Alternative A when Compared to the Existing Conditions/No Project/No Action Condition 22-21

Tables **Pages**

22-21 Change in Acres and Value of Agricultural Production Associated with Implementation of Alternative A when Compared to the Existing Conditions/No Project/No Action Condition 22-23
22-22 Change in Volume and Cost of Groundwater Pumping Associated with Implementation of Alternative A when Compared to the Existing Conditions/No Project/No Action Condition 22-24
22-23 Change in M&I Water Supply Deliveries and Costs from Alternative A when Compared to the Existing Conditions/No Project/No Action Condition....22-25
22-24 Change in M&I Water Supply Salinity Costs Associated with Implementation of Alternative A when Compared to the Change from the Existing Conditions/No Project/No Action Condition....22-26
22-25 Temporary Change in Regional Employment and Income Associated with Implementation of Alternative A when Compared to the Existing Conditions/No Project/No Action Condition 22-27
22-26 Permanent Change in Regional Employment and Income Associated with Implementation of Alternative A when Compared to the Existing Conditions/No Project/No Action Condition 22-28
22-27 Change in Property Tax Receipts Associated with Implementation of Alternative A when Compared to the Existing Conditions/No Project/No Action Condition 22-30
22-28 Estimated Sites Reservoir Recreation Visitation and Expenditures Associated with Implementation of Alternative A 22-30
22-29 Change in Crop Acres and Value of Agricultural Production Associated with Implementation of Alternative A when Compared to the Existing Conditions/No Project/No Action Condition....22-31
22-30 Change in Extended Study Area Regional Employment and Income Associated with Implementation of Alternative B when Compared to the Existing Conditions/No Project/No Action Condition....22-33
22-31 Change in Acres and Value of Agricultural Production Associated with Implementation of Alternative B when Compared to the Existing Conditions/No Project/No Action Condition 22-35
22-32 Change in Volume and Cost of Groundwater Pumping Associated with Implementation of Alternative B when Compared to the Existing Conditions/No Project/No Action Condition 22-36
22-33 Change in M&I Water Supply Deliveries and Costs from Alternative B when Compared to the Existing Conditions/No Project/No Action Condition....22-37
22-34 Change in M&I Water Supply Salinity Costs Associated with Implementation of Alternative B when Compared to the Change from the Existing Conditions/No Project/No Action Condition....22-38
22-35 Temporary Change in Regional Employment and Income Associated with Implementation of Alternative B when Compared to the Existing Conditions/No Project/No Action Condition 22-40
22-36 Permanent Change in Regional Employment and Income Associated with Implementation of Alternative B when Compared to the Existing Conditions/No Project/No Action Condition 22-41
22-37 Estimated Sites Reservoir Recreation Visitation and Expenditures Associated with Implementation of Alternative B 22-43
22-38 Change in Crop Acres and Value of Agricultural Production Associated with Implementation of Alternative B when Compared to the Existing Conditions/No Project/No Action Condition....22-44

Tables **Pages**

22-39 Change in Extended Study Area Regional Employment and Income Associated with Implementation of Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-45
22-40 Change in Acres and Value of Agricultural Production Associated with Implementation of Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-47
22-41 Change in Volume and Cost of Groundwater Pumping Associated with Implementation of Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-48
22-42 Change in M&I Water Supply Deliveries and Costs from Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-49
22-43 Change in M&I Water Supply Salinity Costs Associated with Implementation of Alternative C when Compared to the Change from the Existing Conditions/No Project/No Action Condition 22-50
22-44 Temporary Change in Regional Employment and Income Associated with Implementation of Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-52
22-45 Permanent Change in Regional Employment and Income Associated with Implementation of Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-52
22-46 Estimated Sites Reservoir Recreation Visitation and Expenditures Associated with Implementation of Alternative C 22-54
22-47 Change in Crop Acres and Value of Agricultural Production Associated with Implementation of Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-55
22-48 Change in Extended Study Area Regional Employment and Income Associated with Implementation of Alternative C when Compared to the Existing Conditions/No Project/No Action Condition 22-57
22-49 Change in Acres and Value of Agricultural Production Associated with Implementation of Alternative D when Compared to the Existing Conditions/No Project/No Action Condition 22-58
22-50 Change in Volume and Cost of Groundwater Pumping Associated with Implementation of Alternative D when Compared to the Existing Conditions/No Project/No Action Condition 22-59
22-51 Change in M&I Water Supply Deliveries and Costs from Alternative D when Compared to the Existing Conditions/No Project/No Action Condition 22-61
22-52 Change in M&I Water Supply Salinity Costs Associated with Implementation of Alternative D when Compared to the Change from the Existing Conditions/No Project/No Action Condition 22-62
22-53 Temporary Change in Regional Employment and Income Associated with Implementation of Alternative D when Compared to the Existing Conditions/No Project/No Action Condition 22-63
22-54 Permanent Change in Regional Employment and Income Associated with Implementation of Alternative D when Compared to the Existing Conditions/No Project/No Action Condition 22-64
22-55 Estimated Sites Reservoir Recreation Visitation and Expenditures Associated with Implementation of Alternative D 22-66
22-56 Change in Crop Acres and Value of Agricultural Production Associated with Implementation of Alternative D when Compared to the Existing Conditions/No Project/No Action Condition 22-67

Tables **Pages**

23-1 Race and Ethnicity of the State of California and the Counties that Are Located within the Extended Study Area 23-3
23-2 Race and Ethnicity of the State of California and the Counties that Are Located within the Secondary Study Area....23-5
23-3 Race and Ethnicity of Glenn and Colusa Counties and the State of California....23-6
23-4 Income and Poverty 2008–2012 Five-year Estimate - Glenn and Colusa Counties and the State of California....23-7
24-1 Ambient Air Quality Standards 24-2
24-2 State Attainment Status for the Two Counties that Compose the Primary Study Area (Glenn and Colusa) 24-4
24-3 2015 Estimated Annual Average Emissions (tons per day) for the Sacramento Valley Air Basin and Glenn and Colusa Counties....24-7
24-4 Number of Days State 1-hour and 8-hour and Federal 8-hour Ozone Standards Were Exceeded, and Maximum Ozone Concentrations Measured, in Glenn and Colusa Counties (2004 to 2015)....24-8
24-5 PM_{10} Concentrations in Glenn and Colusa Counties (2004 to 2015) 24-9
24-6 Tehama County Air Pollution Control District Thresholds of Significance for Criteria Pollutants of Concern....24-14
24-7 Estimated Average Daily Unmitigated Emission Rates for Criteria Pollutants by Year for Construction of Alternative A Within the Primary Study Area 24-20
24-8 Estimated Total Average Daily Unmitigated Emission Rates for Operation and Maintenance of Proposed Facilities Within the Primary Study Area Under All Alternatives (lb/day) 24-21
24-9 Estimated Total Average Daily Unmitigated Emission Rates for Periodic Holthouse Reservoir Sediment Removal Within the Primary Study Area Under All Alternatives (lb/day for 167 days)....24-22
24-10 Estimated Average Daily Unmitigated Emission Rates for Criteria Pollutants by Year for Construction of Alternatives B, C, and C_1 24-26
24-11 Estimated Average Daily Unmitigated Emission Rates for Criteria Pollutants by Year for Construction of Alternative D Within the Primary Study Area 24-30
24-12 Summary of Mitigation Measures for Potential Project Impacts to Air Quality 24-31
25-1 Global, National, and Statewide Annual GHG Emissions Inventories....25-8
25-2 Estimated Total GHG Emissions from Construction of Alternative A (Metric Tons CO_2e)....25-15
25-3 Indirect GHG Emissions from Net Long-Term Electricity Use for the Existing Conditions/ No Project/No Action Condition, and Alternatives A, B, C, C_1, and D....25-16
25-4 Estimated Total GHG Emissions from Construction of Alternative B (Metric Tons CO_2e) 25-19
25-5 Estimated Total GHG Emissions from Construction of Alternative C (Metric Tons CO_2e) 25-20
25-6 Estimated Total GHG Emissions from Construction of Alternative D (Metric Tons CO_2e)....25-22
25-7 Summary of Mitigation Measures for Project Impacts from Greenhouse Gas Emissions....25-25
25-8 Climatic Conditions in Glenn and Colusa Counties 25-26
25-9 Sea Level Rise Projections and Ranges for San Francisco, California 2030, 2050, and 2100....25-30
26-1 Pavement Condition Categories and Criteria....26-2
26-2 Roadway Classifications for Glenn County....26-5
26-3 General LOS Criteria for Roadways....26-6
26-4 Glenn and Colusa County Average Daily Traffic Level of Service Criteria 26-7
26-5 Major Roadways in the Secondary Study Area 26-8
26-6 Characteristics of Roadways in Tehama County that Are Main Access Routes to the Proposed Pump Installation Site at the Red Bluff Pumping Plant....26-8
26-7 ADT for Selected Roads in Tehama County 26-9

Tables **Pages**

26-8 Expected Roadway Access Routes to Project Facilities 26-10
26-9 Characteristics of Roadways in Glenn County that are Main Access Routes to Project Facilities 26-13
26-10 2015 ADT for Selected Roads in Glenn County..26-14
26-11 Characteristics of Roadways in Colusa County that are Main Access Routes to Project Facilities 26-15
26-12 2015 ADT for Selected Roads in Colusa County 26-16
26-13 Peak Daily Construction Trips..26-22
26-14 Alternative A Construction LOS 26-28
26-15 Alternative A Operations and Maintenance LOS 26-29
26-16 Alternative B Construction LOS..26-35
27-1 Typical Sound Levels Measured in the Environment and Industry..27-2
27-2 Construction Equipment Noise Levels 27-11
27-3 Construction Equipment Noise Levels Versus Distance 27-13
28-1 Distribution of Mosquitoes in Counties that Comprise the Extended Study Area.....................28-5
28-2 Distribution of Mosquitoes in Counties that Comprise the Secondary Study Area.................28-13
28-3 Distribution of Mosquitoes in Counties that Comprise the Primary Study Area.....................28-17
29-1 Glenn County Schools 29-4
29-2 Glenn County School Bus Routes..29-5
29-3 Colusa County Schools 29-6
29-4 Colusa County School Bus Routes 29-7
29-5 Glenn County Water Supply Statistics 29-9
29-6 Active Water Systems in Glenn County 29-9
29-7 Colusa County Water Supply Statistics 29-11
29-8 Active Water Systems in Colusa County..29-11
30-1 Visual Character of the Proposed Recreation Areas..30-9
30-2 Visual Impact Significance Summary..30-19
31-1 2016 and 2015 Total System Electric Generation 31-4
31-2 California Energy Demand Update, 2016 Forecasts of Statewide Electricity Demand...........31-13
31-3 Central Valley Project Power Plants, Capacities, and Historical Annual Generation 31-16
31-4 Project Maximum Pumping Demand by Alternative..31-26
31-5 Project Maximum Generating Capacity by Alternative..31-26
31-6 Summary of Project Optimized Hydropower Operations, including Pumped-storage Operations 31-27
31-7 CVP, SWP, and Proposed Project Facilities Energy Use (in GWh) – Alternative A 31-35
31-8 CVP, SWP, and Proposed Project Facilities Energy Use (in GWh) – Alternative B 31-39
31-9 CVP, SWP, and Proposed Project Facilities Energy Use (in GWh) – Alternative C 31-42
31-10 CVP, SWP, and Proposed Project Facilities Energy Use (in GWh) – Alternative C_1 31-45
31-11 CVP, SWP, and Proposed Project Facilities Energy Use (in GWh) – Alternative D 31-47
32-1 Short-term and Long-term Effects of Alternatives A, B, C, C_1, and D by Environmental Resource..32-2
34-1 Water Supply and Demand Estimates for Currently Participating Municipal and Industrial Water Agencies/Districts 34-3
34-2 Quantity of Sites Reservoir Project Water Requested by M&I Participant 34-4
34-3 Summary of Changes in Water Supplies to Municipal and Industrial Water Users under Alternative A as Compared to the Existing Conditions/No Project/No Action Condition.........34-6
34-4 Projected Difference Between Water Supply and Demand by Agency/District − Alternative A..34-7
34-5 Summary of Changes in Water Supplies to Municipal and Industrial Water Users under Alternative B as Compared to the Existing Conditions/No Project/No Action Condition 34-13

Tables **Pages**

34-6 Projected Difference Between Water Supply and Demand by Agency/District – Alternative B....34-14
34-7 Summary of Changes in Water Supplies to Municipal and Industrial Water Users under Alternative C as Compared to the Existing Conditions/No Project/No Action Condition....34-17
34-8 Projected Difference Between Water Supply and Demand by Agency/District – Alternative C....34-18
34-9 Summary of Changes in Water Supplies to Municipal and Industrial Water Users under Alternative D as Compared to the Existing Conditions/No Project/No Action Condition....34-22
34-10 Projected Difference Between Water Supply and Demand by Agency/District – Alternative D....34-23
35-1 Present and Reasonably Foreseeable Future Actions Included in the Cumulative Impacts Analysis, by Resource Area....35-3
36-1 NODOS Project Public Scoping Meetings....36-2
36-2 Sacramento River Flow Regime Technical Advisory Group Participants....36-4
36-3 Sites Reservoir Project MOU Signatories....36-6
38-1 Sites Project Authority Staff Contributors to the Draft EIR/EIS....38-1
38-2 California Department of Water Resources Staff Contributors to the Draft EIR/EIS....38-2
38-3 Bureau of Reclamation Staff Contributors to the Draft EIR/EIS....38-3
38-4 U.S. Fish and Wildlife Staff Contributors to the Draft EIR/EIS....38-5
38-5 CH2M HILL Staff Contributors to the Draft EIR/EIS....38-5
38-6 AECOM Staff Contributors to the Draft EIR/EIS....38-10
38-7 Horizon Water and Environment Staff Contributor to the Draft EIR/EIS....38-11
38-8 California Department of Water Resources Staff Contributors to the Preliminary Administrative Draft EIR/EIS....38-11
38-9 Bureau of Reclamation Staff Contributors to the Preliminary Administrative Draft EIR/EIS....38-13
38-10 Authority Staff Contributors to the 2013 Preliminary Administrative Draft EIR/EIS....38-16
38-11 Consultant Contributors to the 2013 Draft EIR/EIS....38-17
39-1 Sites Reservoir Project Draft EIR/EIS Locations of Availability for Printed Copies....39-1

Figures

Pages

1-1 Proposed Sites Reservoir Project Location....1-3
1-2 Proposed Sites Reservoir Project Facilities 1-4
1-3 Primary, Secondary, and Extended Study Areas 1-23
1-4 Level 4 Wildlife Refuges in the Extended Study Area....1-25
1-5 Secondary Study Area....1-27
1-6A Alternative A Primary Study Area....1-28
1-6B Alternative B Primary Study Area....1-29
1-6C Alternative C Primary Study Area....1-30
1-6C_1 Alternative C_1 Primary Study Area....1-31
1-6D Alternative D Primary Study Area....1-32
2-1 Location of the Four Potential Reservoir Alternatives 2-5
2-2 Sites Reservoir Alternative Project Features 2-13
2-3 Sites Reservoir Alternative Conveyance Project Features....2-14
2-4 Potential Conveyance Alternatives for Sites Reservoir Alternative 2-17
3-1 Proposed Project/Proposed Action Facilities – All Alternatives 3-11
3-2 Golden Gate Dam Cross Section Showing Grouting....3-15
3-3 Sites Dam Cross Section Showing Grouting 3-16
3-4 Saddle Dams 1, 2, 4 and 9 Cross Sections Showing Grouting (Typical)....3-17
3-5 Saddle Dams 3, 5, 6, 7, and 8 Cross Sections Showing Grouting (Typical)....3-18
3-6 Potential Quarry Locations within and near the Proposed Sites Reservoir Inundation Area 3-19
3-7 Proposed Sites Reservoir Inlet/Outlet Structure, Holthouse Reservoir, and Associated Facilities....3-25
3-8A Proposed Access Routes to Project Facilities 3-32
3-8B Proposed Access Routes to Project Facilities 3-33
3-9A Proposed Saddle Dam Recreation Area and Facilities....3-40
3-9B Proposed Stone Corral Recreation Area and Facilities....3-41
3-9C Proposed Lurline Headwaters Recreation Area and Facilities....3-42
3-9D Proposed Antelope Island Recreation Area and Facilities....3-43
3-9E Proposed Peninsula Hills Recreation Area and Facilities....3-44
3-9F Proposed Boat Ramp Recreation Area....3-45
3-10 Proposed Sites Reservoir Inlet/Outlet Structure, Holthouse Reservoir, and Associated Facilities, Alternatives A, B, C, and D....3-48
3-11 Location of the Proposed Pump Installation at Red Bluff Pumping Plant....3-53
3-12 Proposed Terminal Regulating Reservoir and Associated Facilities Alternatives A, B, C and C_1....3-56
3-13A Delevan Pipeline Intake/Discharge Facilities 3-66
3-13B Proposed Delevan Pipeline Intake/Discharge Facilities – Alternatives A, C, C_1, D....3-67
3-13C Proposed Delevan Pipeline Discharge Facility Alternative B 3-68
3-14 Proposed Sites Reservoir Inlet/Outlet Structure, Holthouse Reservoir, and Associated Facilities, Alternative C_1....3-86
3-15 Proposed Terminal Regulating Reservoir and Associated Facilities 3-90
5-1 Information Flow among Models and General Application and Use of Output for Resource Evaluations....5-16
6-1A Northern California Major Water Supply Facilities 6-2

Figures **Pages**

6-1B San Francisco Bay Area, San Joaquin Valley, and Tulare Lake Major Water Supply Facilities....6-3
6-1C Central Coast and Southern California Major Water Supply Facilities....6-4
7-1 Selected Delta Water Quality Compliance Stations....7-36
8-1 Sacramento River Reaches for Geomorphology Analysis....8-5
8-2 Sacramento River Channel Changes at and near River Mile 158.5....8-14
9-1 Overview of SPFC Project Works....9-2
9-2A Sacramento Valley Flood Control System Estimated Channel Capacity (North)....9-4
9-2B Sacramento Valley Flood Control System Estimated Channel Capacity (South)....9-5
9-3 100-Year Floodplain Delineation Relative to the Project Facilities....9-6
9-4 100-Year Inundation Areas Relative to the Project Facilities....9-11
9-5 Dam Break Inundation Area for the Project Facilities....9-22
10-1 Hydrologic Regions of California....10-3
10-2 Subbasins of the Sacramento Valley Groundwater Basin....10-13
10-3 Spring 2016 Groundwater Elevation Contour Map....10-14
10-4 Fall 2015 Groundwater Elevation Contour Map....10-15
10-5 Change in Groundwater Elevation Spring 2004 to Spring 2014....10-16
10-6A CVHM-Forecast Sacramento River Stages and Groundwater Elevations after 24.8 Years for Alternative A and Existing Conditions/No Project/No Action Condition....10-34
10-6B Groundwater-Surface Water Exchange Differences between Sites Alternative A and Existing Conditions/No Project/No Action Condition....10-35
10-7A CVHM-Forecast Sacramento River Stages and Groundwater Elevations after 24.8 Years for Alternative B and Existing Conditions/No Project/No Action Condition....10-44
10-7B Groundwater-Surface Water Exchange Differences between Sites Alternative B and Existing Conditions/No Project/No Action Condition....10-45
10-8A Simulated Groundwater Elevations Versus Time near the $SACFEM_{2013}$ Model Boundary....10-48
10-8B Simulated Groundwater Elevations Versus Time at the Orchards Southeast of Funks Creek....10-49
10-9A Simulated Increase in Groundwater Level Due to Seepage from Sites and Holthouse Reservoirs, Alternative B Shallow Aquifer, February 1980....10-51
10-9B Simulated Increase in Groundwater Level Due to Seepage from Sites and Holthouse Reservoirs, Alternative B Shallow Aquifer, April 1983....10-52
11-1A Simulated Change in Groundwater Flow Direction Due to Seepage from Sites and Holthouse Reservoirs Alternative B, Shallow Aquifer, February 1980....11-31
11-1B Simulated Change in Groundwater Flow Direction Due to Seepage from Sites and Holthouse Reservoirs Alternative B, Shallow Aquifer, April 1983....11-32
12-1 Sacramento River Watershed....12-5
12-2 Feather River Watershed....12-19
12-3 Trinity River Watershed....12-27
12-4 American River Watershed....12-30
12-5 Waterways within the Primary Study Area....12-48
12-6 Proposed Project Facility Locations....12-85
12-7 Proposed Project Facility Locations....12-87
12-8 Proposed Project Facility Locations....12-98
12-9 Proposed Project Facility Locations....12-99
13-1 Secondary Study Area Regions for Analysis of Potential Special-status Plant Species....13-12
13-2 Vegetation Types near Project Facility Locations....13-29
13-3 Riparian Sites along Funks Creek Impacted by Dams....13-79
13-4 Alkaline Wetland Area Overlapping with Holthouse Reservoir Complex....13-83
13-5 Former Alkaline Wetland in Delevan Pipeline Construction Disturbance Area....13-90

Figures **Pages**

16-1 Geomorphic Provinces of California 16-2
16-2 Generalized Geologic Map and Rock Units Within the Primary Study Area........16-11
17-1 Simplified Fault Activity in California 17-6
17-2 Regional Faults 17-7
17-3 Regional Seismicity 17-11
17-4 Faults in the Vicinity of Project Dam Sites........17-15
17-5 Faults near Golden Gate Dam Site........17-16
17-6 Faults near Sites Dam Site 17-17
17-7 Median and 84th Percentile Deterministic Response Spectra........17-19
17-8 DSOD Consequence-hazard Matrix........17-20
18-1 Archeological Region and Subregion Boundaries 18-3
18-2 Native American Tribal Land Boundaries 18-7
20-1 Glenn and Colusa County Zoning Designations within Construction Footprint 20-9
20-2 Glenn and Colusa County Zoning Designations within Permanent Footprint........20-10
20-3 Agricultural Land Designations within Construction Footprint 20-11
20-4 Agricultural Land Designations within Permanent Footprint........20-12
20-5 Colusa County Zoning Designations within Overhead Power Line Alignment (Alternative D) 20-16
20-6 Agricultural Land Designations within Overhead Power Line Alignment (Alternative D) 20-17
21-1 Existing Lakes and Reservoirs in the Extended Study Area........21-4
21-2 Existing Lakes and Reservoirs in the Secondary Study Area 21-9
21-3 Project Operations – Reservoir Point Rating Graph 21-27
23-1 Primary Study Area Minority Population Distribution........23-13
23-2 Primary Study Area Low-income Population Distribution........23-17
24-1 Project Location Relative to Air Basins and Air Districts 24-5
25-1 The Greenhouse Gas Effect 25-3
25-2 Graphical Depiction of the Analytical Process for Incorporating Climate Change into the CALSIM II Model for Water Resources Planning Purposes 25-37
26-1 Construction and Maintenance Access Routes to Project Facilities 26-3
30-1A Sites Reservoir Photo Locations 30-41
30-1B Holthouse Reservoir Complex and TRR Complex Photo Locations........30-42
30-1C Delevan Overhead Power Line, Delevan Pipeline, and Delevan Pipeline Intake/Discharge Facilities Photo Locations........30-43
30-1D RBPP and GCID Facilities Photo Locations........30-44
30-2A Northern Portion of Sites Reservoir Inundation Area and Saddle Dam Recreation Area Landscape Character Photo........30-45
30-2B Sites Reservoir Inundation Area Landscape Character Photos........30-47
30-2C Sites Reservoir Inundation Area Landscape Character Photos........30-48
30-2D Golden Gate Dam Landscape Character Photos 30-49
30-2E Golden Gate Dam and Sites Dam Landscape Character Photos........30-50
30-2F Sites Dam and Saddle Dams 1 and 2 Landscape Character Photos........30-51
30-2G Saddle Dam 3 Landscape Character Photo 30-52
30-2H Stone Corral Recreation Area Landscape Character Photo 30-53
30-2I Peninsula Hills Recreation Area Landscape Character Photo 30-54
30-2J Peninsula Hills and Antelope Island Recreation Areas Landscape Character Photos 30-55
30-2K Lurline Headwaters Recreation Area and South Bridge Landscape Character Photos........30-56
30-2L Sites Reservoir Pumping/Generating Plant and Inlet/Outlet Structure Landscape Character Photos........30-57
30-2M Field Office Maintenance Yard and Existing Funks Reservoir Landscape Character Photo ...30-59
30-2N Holthouse Reservoir Complex Landscape Character Photo 30-60

Figures **Pages**

30-2O Proposed GCID Canal Headgate Structure and Canal Lining Location Landscape Character Photo....30-61
30-2P GCID Canal Railroad Siphon Replacement Landscape Character Photos....30-63
30-2Q Red Bluff Pumping Plant and TRR Facilities Landscape Character Photos....30-64
30-2R Terminal Regulating Reservoir Landscape Character Photos....30-65
30-2S Sites/Delevan Overhead Power Line and Delevan Pipeline Landscape Character Photo....30-67
30-2T Delevan Overhead Power Line and Delevan Pipeline Landscape Character Photo....30-68
30-2U Delevan Pipeline Intake/Discharge Facilities and Communication Towers Landscape Character Photos....30-69
30-2V Overhead Power Line (Alternate Alignment) Landscape Character Photo....30-71
30-2W Boat Ramp Landscape Character Photo....30-72
31-1 Western Electricity Coordinating Council, 2015 Non-coincident Peak Demand by Balancing Authority Area....31-3
31-2 Installed In-State Electric Generation Capacity by Fuel Type....31-6
31-3 California Electric Transmission System....31-11
31-4 Regional Transmission Lines and Substations....31-21

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 4: Existing Mitigation and Compliance

For each net public benefit claimed, where applicable, identify any existing environmental mitigation or compliance obligations that are accounted for in each net public benefit as of the date of the CalSim-II model product in section 6004(a)(1).

- *Applicants that use the CalSim-II and DSM2 models to analyze their projects can indicate "within models" for any existing environmental mitigation and compliance obligations contained in those models.*
- *If applicable to their claimed net public benefit such projects shall also list and account for the non-flow related mitigation and compliance obligations of the State Water Project and Central Valley Project.*

WSIP Application Instructions, March 2017

Table of Contents

Attachment 4: Existing Mitigation and Compliance 1
Operations to Avoid and Mitigate Impacts.. 4

Acronyms and Abbreviations

CDFW	California Department of Fish and Wildlife
cfs	cubic feet per second
NMFS	National Marine Fisheries Service
RBPP	Red Bluff Pumping Plant

Introduction

This attachment describes how existing environmental mitigation and compliance obligations were handled in the WSIP application for Sites Reservoir.

All modeling for current, 2030, and 2070 with-project and without-project conditions presented in this application used the CalSim-II and DSM2 model products provided by the Commission for the WSIP application. The Sites Project does not modify, or in any other manner change the existing environmental mitigation and compliance obligations included within in these models.

Net public benefits were monetized for the following purposes:

- Ecosystem enhancement
- Recreation
- Flood Damage Reduction

Costs for all mitigation actions (flow-related and non-flow related obligations) identified in the draft environmental document, are included in the Basis of Estimate Report (see Sites_A8 Estimate under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB). The Mitigation Monitoring Plan is Appendix 1A in the Draft EIR/EIS (Posted at http://sitesproject.org/information/DraftEIR-EIS).

There are no additional mitigation or compliance obligations for recreation and flood control benefits. Potential ecological impacts are addressed through both operational constraints and mitigation actions. These are further elaborated on below.

Operations to Avoid and Mitigate Ecosystem Impacts

The proposed operation of the Sites Project incorporates additional mitigation and operational constraints to flexibly to adapt to a range of hydrologic conditions, to minimize impacts to prior right holders and the environment, to address various future uncertainties, and to allow for consideration of a range of future water management actions. The proposed operations include compliance with existing criteria and the addition of constraints that are not included in existing regulations. The proposed operational scenario incorporates three primary components:

1. Operating criteria for diversion of water when all other regulatory criteria are met (including diversion rate, duration of the diversion, the season of diversion and the water year type of the diversion) from the Sacramento River to fill the Sites Reservoir
2. Operating criteria for timing and rate of releases of water to achieve the primary objectives of the Project (and associated benefits) in specific year types (such as drought or driest periods) and other hydrologic conditions
3. Project cooperative operations with the CVP and SWP operations and facilities

The proposed Sites Reservoir would be filled through the diversion of Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam. Sacramento River water would be diverted at the existing Hamilton City and Red Bluff diversion locations. Sacramento River water would also be diverted via a new Delevan intake and pipeline. Flows available for diversion are considered river flows in addition to those required to meet the following:

- Senior downstream water rights, existing CVP and SWP and other water rights diversions including SWP Article 21 (interruptible supply), and other more senior flow priorities (diversions associated with Freeport Regional Water Project and Los Vaqueros Reservoir)

- Existing regulatory requirements including State Water Resources Control Board D-1641, VPIA 3406(b)(2), the 2008 U.S. Fish and Wildlife Service biological opinion, and the 2009 National Marine Fisheries Service biological opinion and other instream flow requirements
- Flow conditions needed to maintain and protect anadromous fish survival and Delta water quality

Sacramento River flow diversions to Sites Reservoir would only take place when flow monitoring indicates that bypass flows are present in the river because of storm event flows. Several existing and additional proposed bypass flow criteria were assumed at specified locations, as part of the Project. These flow criteria are designed to make certain that available water would be diverted into Sites Reservoir to maintain and protect existing downstream water uses and environmental resources, as follows.

- A bypass flow of 3,250 cfs downstream from Red Bluff Diversion Dam must be present to maintain lows in the upper Sacramento River that are required in State Water Resources Control Board WR 90-5 to prevent dewatering salmonid redds and maintain water temperatures. Diversions at RBPP for filling Sites Reservoir would only be allowed when flows in the river are above the 3,250 cfs bypass flow criteria.
- Diversions at the Hamilton City intake for Glenn-Colusa Canal currently require a bypass flow of 4,000 cfs to prevent fish entrainment. Diversions at RBPP and Glenn-Colusa Canal intake for filling Sites Reservoir would only be allowed when flows in the river are above the 4,000-cfs bypass flow requirement downstream from Hamilton City.
- Diversions for filling Sites Reservoir would only be allowed when flows below Wilkins Slough were above 5,000 cfs, given the current minimum flow requirements. Wilkins Slough Navigation Control Point minimum flows currently range from 3,250 to 5,000 cfs, depending on hydrologic conditions.
- Diversions for filling Sites Reservoir would only be allowed when a Sacramento River flow of 15,000 cfs is present at Freeport in January; 13,000 cfs in December and February through June; and 11,000 cfs in all other months. This flow threshold protects and maintains existing downstream water uses and water quality in the Delta.

This operating strategy greatly reduces the impact associated with diversions.

To further address the potential for impacts to anadromous fish migration and impacts resulting from fish exposure to the proposed diversion facilities, the Project shall establish and fund an ongoing juvenile salmon trapping program and data collection network to collect real-time data to inform the operation of Sites diversions on behalf of minimizing potential fish impacts. The program shall be developed in coordination with CDFW and NMFS, and designed to augment and draw from other ongoing fish and environmental data collection efforts in the Sacramento River. The data collection and monitoring program is intended to inform the ongoing refinement of fish protection operations.

Based on proposed ongoing monitoring for fish presence, the Project shall protect naturally occurring, storm-induced pulse flows in the Sacramento River from October through May to minimize mortality of out-migrating juvenile winter-, spring-, fall- and late fall-run Chinook salmon, and steelhead. Fish protection shall be accomplished by managing diversions at the three Project diversion points during those pulse flow events that stimulate an important spike in juvenile salmon out-migration.

When a pulse in flow is followed by a rapid increase in juvenile salmon downstream migration, as detected by the monitoring program, the Sites Project will do the following:

- Manage diversions to limit potential impacts to juvenile salmon in the Sacramento River. The allowable level of diversion will be determined based on the results of fish monitoring and flow conditions, and different diversion rates may be assigned to operations during daylight and nighttime hours.

- The above limitations will apply to each diversion, and operations at each facility will be managed independently to fine-tune fish protection, to the extent possible. The limitations on diversion will remain in effect until real-time monitoring associated with that facility indicates that the out-migration pulse in juvenile salmon has past.

Pulse flows during periods of peak out-migration are expected to provide flow continuity between the upper and lower Sacramento River that will help support fish migration. It is recognized that research regarding the benefits of pulse flows is ongoing, and results of the Project monitoring program as well as further research and adaptive management will be needed to refine the pulse flow protection strategy.

This measure is expected to reduce potential mortality of juvenile salmon from the Sites Project during their peak out-migration periods by accomplishing the following: (1) minimizing the effects on fish exposed to the diversion facilities, (2) minimizing diversion-related effects on survival, and (3) minimizing reductions in migration travel time.

For impact analysis and simulation modeling purposes, pulse flow events are assumed to be initiated when the 3-day trailing average Bend Bridge flow exceeds 15,000 cfs. Such an event would be considered a “qualified” event limiting diversion if the pulse flow was greater than 15,000 cfs for 7 to 10 days. A pulse flow event would be considered terminated under the following conditions: (1) the 3-day trailing average flow remained greater than 15,000 cfs for 7 to 10 days after initiation (constituting a qualified pulse event), or (2) the 3-day trailing average flow dropped below 15,000 cfs before reaching the 7-day duration (not a qualified event). Up to one qualified pulse event would be recognized in each month during the pulse protection period to minimize potential impacts on fish migration. Diversions to Sites Reservoir storage would be restricted under the following conditions: (1) pulse conditions exist at Bend Bridge, and a qualified pulse event has not already occurred within the given month, and (2) Bend Bridge flows were less than 25,000 cfs during the pulse event (flows above 25,000 cfs are considered to provide lesser benefits to fish migration).

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 5: Physical and Monetized Benefits

Provide additional information that supports the physical and monetary quantification of the public and non-public benefits and impacts of the project as required by subsection 6004(a)(4) of the regulations. This includes data, assumptions, analytical methods and modeling results, calculations and relevant sources of information. For reference documents or studies relied upon, applicants may provide links to an existing website in lieu of attaching those documents to the application.

WSIP Application Instructions, March 2017

Table of Contents

Benefit Calculation, Monetization, and Resiliency Tab 1

Attachment 5: Physical and Monetized Benefits 1

Acronyms and Abbreviations...5

A5.1 All Benefits 7
A5.1.1.a Analytic Methods.. 7
A5.1.1.b Data and Assumptions.. 11
A5.1.1.c Calculations.. 15
A5.1.1.d Modeling Results 18
A5.2 Ecosystem Improvement (WSIP Eligible Benefits)... 18
A5.2.1 Anadromous Fish 19
A5.2.2 Incremental Level 4 Refuge Water Supply.. 25
A5.2.3 Lake Oroville Coldwater Pool 29
A5.2.4 Yolo Bypass 32
A5.3 Recreation (WSIP Eligible Benefit) 35
A5.3.1.a Analytic Methods.. 35
A5.3.1.b Data and Assumptions.. 36
A5.3.1.c Calculations.. 37
A5.3.1.d Modeling Results (Selected Monetization Approach)................................ 38
A5.4 Flood Reduction (WSIP Eligible Benefit) 38
A5.4.1.a Analytic Methods.. 39
A5.4.1.b Data and Assumptions.. 40
A5.4.1.c Calculations.. 42
A5.4.1.d Modeling Results (Selected Monetization Approach)................................ 42
A5.5 Water Supply (Non-Proposition 1 Eligible Benefit) 43
A5.5.1 M&I Water Supply 43
A5.5.2 Agricultural Water Supply... 50
A5.5.3 Recaptured Water Supply.. 54
A5.5.4 Total Water Supply 56
A5.6 Hydropower – System-wide (Non-Proposition 1 Benefit) 57
A5.6.1.a Analytic Methods.. 57
A5.6.1.b Data and Assumptions.. 58
A5.6.1.c Calculations.. 59
A5.6.1.d Modeling Results (Selected Monetization Approach)................................ 60

Tables

Table A5-1. Summary of Quantified Physical Benefits and Monetization Approaches 8
Table A5-2. Water-Year Type Incidence Rates by Hydrologic Region: 2030 and 2070 12
Table A5-3. WSIP Unit Water Values by Water Year and Location ($/AF) 12
Table A5-4. Benefit Start Dates with Percentage of 2030 Benefits 14
Table A5-5. Water-Year Type Incidence Rates: Sacramento River Hydrologic Region 15
Table A5-6. North-of-the-Delta Agricultural Water Deliveries (TAF/year) 16
Table A5-7. Adjusted WSIP Unit Water Values ($/AF) 17
Table A5-8. Summary of Quantified Water Use by Purpose (TAF/year) 18
Table A5-9. Ecosystem Physical Benefits Quantified and Monetized 18
Table A5-10. SALMOD Results for 2030 and 2070 (TAF/year) 22
Table A5-11. Salmon Production and Annual Costs for Shasta Lake Dam Raise Scenarios 23
Table A5-12. Estimated Anadromous Fish Benefits: Alternative Cost (2015$) 23
Table A5-13. Estimated Anadromous Fish Benefits: WSIP Unit Water Values (2015$) 24
Table A5-14. Estimated Anadromous Fish Benefits: WSIP Unit Fish Values (2015$) 25
Table A5-15. Anadromous Fish Benefits: Least-Cost Alternative (2015$; $1,000s) 25
Table A5-16. Incremental Level 4 Refuge Water Supply Increases (2030 and 2070) (TAF/year) 26
Table A5-17. Incremental Level 4 Refuge Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s) 27
Table A5-18. Annual Benefits and Cost for Enlargement of Shasta Lake: CP4A (2014$; $millions) 28
Table A5-19. Single Purpose Cost for Enlargement of Shasta Lake: CP4A ($1,000s) 28
Table A5-20. Incremental Level 4 Refuge Supply Benefit Valuation: Alternative Cost Approach (2015$; $1,000s) 29
Table A5-21. Incremental Level 4 Refuge Benefits: WSIP Unit Water Values (2015$; $1,000s) 29
Table A5-22. Lake Oroville Storage Increases for 2030 and 2070 (TAF/year) 31
Table A5-23. Lake Oroville Coldwater Pool Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s) 31
Table A5-24. Lake Oroville Coldwater Pool Benefit Valuation: Alternative Cost Approach (2015$; $1,000s) 32
Table A5-25. Lake Oroville Coldwater Pool Benefits: WSIP Unit Water Values (2015$; $1,000s) 32
Table A5-26. Yolo Bypass Flow Increases for 2030 and 2070 (TAF/year) 34
Table A5-27. Yolo Bypass Flows Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s) 34
Table A5-28. Yolo Bypass Flows Benefit Valuation: Alternative Cost Approach (2015$; $1,000s) 35
Table A5-29. Yolo Bypass Supply Benefits: WSIP Unit Water Values (2015$; $1,000s) 35
Table A5-30. Annual Recreation Visitation by Primary Activity 37
Table A5-31. Annual Recreation Benefits (2015$; $1,000s) 38
Table A5-32. Estimated Annual Recreation Benefits (2015$; $1,000s) 38
Table A5-33. Projected Damages per Acre: 100-Year Flood Event (2015$; $1,000s) 40
Table A5-34. Avoided Cost Assumptions and Estimates: 100-Year Flood Event (2015$; $1,000s) 41
Table A5-35. Flood Benefits by Event and Impact Category (2015$; $1,000s) 42
Table A5-36. EAD Calculation (2015$; $1,000s) 42
Table A5-37. Flood Reduction Benefits (2015$; $1,000s) 42
Table A5-38. Increase in Water Supply Deliveries (TAF/year) 46
Table A5-39. M&I Water Supply Benefits: 2030 CWEST Modeling Detailed Model Results (2015$; $1,000s) 47
Table A5-40. M&I Water Supply Benefits: 2070 CWEST Modeling Detailed Model Results (2015$; $1,000s) 47
Table A5-41. M&I Water Supply Benefit Valuation: CWEST Water Values (2015$; $1,000s) 49

Table A5-42. M&I Water Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s) 49
Table A5-43. M&I Water Supply Benefits: CWEST Modeling (2015$; $1,000s) 50
Table A5-44. Agricultural Water Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s).... 52
Table A5-45. Agricultural Water Supply Benefit Valuation: 2030 SWAP Values (2010$; $1,000s) 52
Table A5-46. Agricultural Water Supply Benefit Valuation: 2070 SWAP Values (2010$; $1,000s) 53
Table A5-47. Incremental Agricultural Water Supply Benefit Valuation: SWAP (SGMA) Values (2015$; $1,000s) 53
Table A5-48. Agricultural Water Supply Benefits: WSIP Unit Water Values (2015$; $1,000s) 54
Table A5-49. Recaptured Water Supply Benefit Valuation: CWEST Water Values (2015$; $1,000s)......... 55
Table A5-50. Recaptured Water Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s).... 55
Table A5-51. Recaptured Water Supply Benefits: CWEST Modeling (2015$; $1,000s)............................. 56
Table A5-52. Total Water Supply Benefits: CWEST Results and WSIP Unit Water Values (2015$; $1,000s) 56
Table A5-53. Sites Reservoir Pumping Use and Power Generation... 59
Table A5-54. Sites Reservoir Power Costs and Generation Revenues (2015$; $1,000s)............................ 59
Table A5-55. Hydropower Benefits (2015$; $1,000s).. 60

Figures

Figure A5-1. Percentage Increase in Fish Species Average Production for 2030 and 2070........................ 22

Acronyms and Abbreviations

$/AF	dollar value per acre-foot
AS	Ancillary Services
AS WSIP	Water Storage Investment Program
CEC	California Energy Commission
CP4A	Comprehensive Plan 4A
CPI-U	consumer price index for California
CPUC	California Public Utilities Commission
CVP	Central Valley Project
CWC	California Water Commission
CWEST	California Water Economics Spreadsheet Tool
DWR	California Department of Water Resources
EAD	Expected Annual Damages
EPM	Energy Portfolio Model
EPRI	Electric Power Research Institute's
F-RAM	Flood Rapid Assessment Model
I-5	Interstate 5
IEPR	Integrated Energy Policy Report
LRS	Loads and Resources Subcommittee
LTO EIS	Coordinated Long Term Operation of the Central Valley Project and State Water Project Environmental Impact Statement
LTPP	Long Term Procurement Plan
M&I	municipal and industrial
NOD	north of the Delta
O&M	operation and maintenance
PARO	Power and Risk Office (DWR)
PLEXOS	PLEXOS® Integrated Energy Model
project	Sites Reservoir Project
Reclamation	United States Bureau of Reclamation
RPS	Renewable Portfolio Standard
RUVD	Recreation Use Values Database
SALMOD	Salmon Population Model
SGMA	Sustainable Groundwater Management Act

SLWRI	Shasta Lake Water Resource Investigation
SOD	south of the Delta
SWAP	Statewide Agricultural Production
SWP	State Water Project
TAF	thousand acre-feet
TEPPC	Transmission Expansion Planning Policy Committee
TM	Technical Memorandum
TR	Technical Reference
UWMP	Urban Water Management Plan

A5.1 All Benefits

This section provides an overview of the analytic approaches, data, and calculations used for two or more of the benefit purposes to quantify their economic benefits. Subsequent sections discuss the analyses specific to the individual benefit purposes in more detail.

Table A5-1 shows the Sites Reservoir Project (project) purposes and benefits quantified and monetized for the Water Storage Investment Program (WSIP) Application. The key data, assumptions and analytical methods used to determine each project purpose's physical and monetary benefits are provided below. The following methodology discussion also describes the modeling results, calculations, and relevant information sources for the benefit analysis.

A5.1.1.a Analytic Methods

Table A5-1 shows (1) the analytic methods used to determine the monetized economic benefits for the WSIP Application and (2) the alternate methodologies considered for use for the economic benefit valuation analysis. In most cases, analyses using the alternate methodologies were also performed to evaluate their suitability for the WSIP Application's final benefit determination and to estimate the findings with their use.

The discussion of analytic methods in the following sections identifies and describes the analytic methods selected for use in the WSIP benefit value determination and those that were not selected.

Similarly, the discussion of the data, calculations, and modeling results below identifies and describes benefit valuation approaches that were selected and those that were not.

CALSIM II

The economic benefit analyses for project-provided water supply relied on CALSIM II modeling to quantify the project's expected future water deliveries under different water-year conditions. The California Water Commission's WSIP Technical Reference (November 2016) (TR) recognizes CALSIM II as "the model most capable of providing inter-regional or statewide analysis of water operations in the Central Valley of California." The WSIP TR also provides a detailed description of the CALSIM II model approach and use (TR, Section 4.3.8.9 and Appendix B).

Per WSIP TR recommendations, CALSIM II modeling was used to determine the project's future water supply deliveries under different water-year conditions to its expected water users and locations. The CALSIM II operational studies determined future water deliveries for both 2030 and 2070 conditions. The CALSIM II analysis also incorporated the WSIP TR required future climate change assumptions to determine its 2070 future water system operations and deliveries.

The CALSIM II analysis both accounts for water conveyance losses and recognizes water system operating constraints (both infrastructure and scheduling) to determine the water quantities that can be delivered to water users (whether municipal and industrial [M&I], agricultural, or for environmental improvement purposes).

Unless otherwise noted, CALSIM II was used to determine the water quantities that support the benefit valuation of the project purposes.

Table A5-1. Summary of Quantified Physical Benefits and Monetization Approaches

Benefit Type	Quantified Use	Physical Benefit Quantified	Selected Monetization Approach	Alternative Monetization Approaches
WSIP Public Benefits	Ecosystem Improvement – Anadromous Fish	Habitat Units	Alternative Cost	WSIP Unit Water Values; WSIP Unit Fish Values
	Ecosystem Improvement – Incremental Level 4 Refuge Water	Increased Deliveries	WSIP Unit Water Values	Alternative Cost
	Ecosystem Improvement – Oroville Coldwater	Stored Water	WSIP Unit Water Values	Alternative Cost
	Ecosystem Improvement – Yolo Bypass	Delivered Water	WSIP Unit Water Values	Alternative Cost
	Recreation	Visitation	Facilities Assessment and Unit Day Values	WSIP Recreational Visitation Model
	Flood Control	Flood Damage Reduction	Avoided Cost Savings	HEC-FDA
Non-WSIP Benefits	Water Supply – M&I, Agricultural, and Recaptured	Increased Deliveries	CWEST Modeling (M&I and Recaptured); WSIP Unit Water Values (Agricultural)	WSIP Unit Water Values (M&I and recaptured); SWAP (Agricultural)
	Hydropower	Generated Power	PARO/PLEXOS Modeling	—

CWEST = California Water Economics Spreadsheet Tool
HEC-FDA = Hydrologic Engineering Center Flood Damage Reduction Analysis
M&I = municipal and industrial
PARO = Power and Risk Office (DWR)
PLEXOS = PLEXOS® Integrated Energy Model
WSIP = Water Storage Investment Program

Alternative Cost

The WSIP TR identified the Alternative Cost approach as an acceptable monetization approach for determining the economic benefit value for both WSIP public benefits and non-WSIP benefits. The Alternative Cost-benefit value for a project benefit is “the cost of the least-cost means of providing at least the same amount of physical benefit” (TR, Section 5.3).

In accordance with WSIP TR guidance, two alternative projects were identified and analyzed to provide comparable physical benefits as those that would be produced by Sites Reservoir: Shasta Lake Water Resource Investigation (SLWRI or “Shasta Raise”) and the proposed Auburn Dam Project. Due to its location on the Sacramento River upstream of Sites Reservoir, Shasta could readily provide water to the same end users as Sites Reservoir. The Auburn Dam would be on the American River, which is a tributary to the Sacramento River and therefore could also serve most of the benefit purposes of the Sites Reservoir. In addition, both alternative projects are large water storage projects that would provide major quantities of new water supplies. Given the large magnitude of the necessary water supplies for the project’s benefit purposes, it is highly unlikely that they could be obtained from existing water users, and if such long-term water transfers occurred, they would result in major adverse economic externalities (e.g., major reductions in agricultural-sector activity).

The United States Bureau of Reclamation (Reclamation) previously analyzed both alternative projects and determined them to be technically and economically feasible. Of the two, Shasta Raise has been most recently analyzed with its final feasibility study completed in 2015. Raising Shasta Lake Dam is projected to be substantially less costly to construct than Auburn Dam. In addition, there are major environmental concerns and other constraints to future construction of Auburn Dam. These concerns and constraints greatly reduce the likelihood that Auburn Dam would be authorized, funded, and constructed.

Consequently, Shasta Raise was determined to be the lower-cost and more-feasible alternative project. Enlargement of Lake Shasta was also determined to be the least-cost means to obtain similar ecosystem improvement and water supply outcomes. Therefore, the Shasta Raise was used as the basis for all Alternative Cost analyses for Sites Reservoir.

WISP Unit Water Values

The California Water Commission (CWC) provided unit values for water were used to estimate the willingness to pay for several of the project’s ecosystem improvement benefit purposes in accordance with the Technical Memorandum (TM) guidance (TR, Appendix D). WSIP Unit Water Values were also used to determine the economic benefits from the project’s future agricultural water supply increases. The unit values were then adjusted as appropriate to account for the delivered water’s additional benefit value to its users represented by the conveyance costs expected to be incurred in addition to the water transfer cost. This approach is consistent with the benefit valuation methodologies recently used by the feasibility analyses for Reclamation’s Draft Upper San Joaquin River Basin Storage Investigation (2015) and Shasta Lake Water Resource Investigation (2015). Both these analyses used a similar water transfer data set and model to develop base Unit Water Values that were then adjusted to include applicable conveyance costs and carriage losses to determine the full benefit value of the project’s water supplies to its water users.

However, the Sites Reservoir benefits valuation analysis conservatively only increased the WSIP unit water benefit values to account for the additional conveyance energy costs. As discussed below, a majority of the project's expected water users are likely to be SWP water contractors that may be able to obtain their future deliveries through the SWP with minimal non-energy conveyance costs. The Cal-Sim 2 water modeling incorporates allowance for water system losses in its calculation of the delivery quantities. It was unclear from the WSIP TM whether and to what extent its unit water values (i.e. its transfer transactions) implicitly included any allowances for significant delivery water losses in their transactions and in the absence if information on the general nature of the transfers it was considered potentially speculative to apply any such adjustment. Consequently, the Sites Reservoir made no delivery water loss adjustment to increase the WSIP unit benefit value as a conservative assumption.

However, if a 25 percent adjustment to the unit water benefit value (similar to that used by the Shasta Lake Water Resource Water Investigation Feasibility Analysis), was applied the corresponding benefit values for the benefit-purpose would be similarly increased. This would result in higher benefit values for the project and increased benefit cost and public benefit ratio findings for the project.

The WSIP TM guidance also notes an important limitation to the use of its unit values:

> "(U)nit water values are appropriate for relatively small incremental amounts of water supply relative to the existing water uses available as feasible alternative sources. If an action or water supply will provide a large amount of water relative to available alternative sources, then the unit values in Table 5-5 may not be appropriate."

As the WSIP TM acknowledges, there are several reasons why, under certain circumstances, the WSIP unit values would undervalue the benefits for specific water uses. The WSIP unit values implicitly assume that there would be a sufficient number of willing sellers for the price and quantity of water that could supply the water being valued. This assumption may be difficult to meet for large quantities of water (especially those quantities required for the project's anadromous fish or M&I deliveries).

The project would provide long-term, reliable deliveries. Such deliveries would contrast with the current water transfer market, which predominantly consists of limited-term contracts and where the demand, supply, and prices vary considerably depending on the recent and projected water-year type. The Sites Reservoir has been designed to add more than 340 thousand acre-feet (TAF) in new long-term water supplies to California's water supply for ecosystem improvements and water users through the state. Consequently, the project's total quantity of new water and that provided for its individual benefit purposes generally exceed past water transfer quantities. Therefore, it is highly unlikely that the water transfers implicit in the WSIP unit water values could actually occur—or be achieved—in a manner that would result in comparable water quantities and reliability as that provided by the project.

Furthermore, as the WSIP TM also notes, there may be major third-party effects (e.g., externalities or related adverse effects on employees and other businesses in related economic sectors) that are not represented in the unit water values, which focus on the compensation to water sellers. Major and/or long-term reallocations of water use resulting from water transfers can be expected to potentially result in direct and indirect economic impacts to the region's workers, supporting businesses, and consumers. The WSIP unit water values are predominantly derived from past water transfers and are therefore solely based on the financial relationship between the water buyer and sellers. As a result, these values incorporate costs or losses to third-party entities or the larger economy. Inclusion of any additional third-party costs would be expected to increase the unit values and hence the benefit values of other water sources. As a result, the WSIP unit water values are considered conservative benefit valuations for the project's new water supply.

As discussed below, Alternative Cost analysis for benefit monetization reported considerably higher benefit water use benefit values. Nonetheless, to be conservative in its analysis and findings, the WSIP benefit value analysis has selected WSIP unit water values to monetize the benefits of several of its ecosystem improvement purposes and future increased agricultural water deliveries.

LTGEN/SWP

Conveyance energy costs for the majority of locations expected to receive water supply deliveries were calculated by using the LTGen/SWP power with the Sites CALSIM II operations model. Conveyance cost information from the California Department of Water Resources (DWR), as reported in 2016 unit costs for State Water Project (SWP) system deliveries, was also evaluated.

WSIP Technical Reference Guidelines

Generally, the Sites Reservoir benefit valuation analysis closely follows the WSIP TR guidelines. As shown in Table A5-1, WSIP unit water values were used to estimate the economic benefit values for several project purposes. As permitted by the guidelines, alternate benefit valuation approaches can also be used, provided they are technically sound and adequately justified.

The rationale for each selected benefit monetization approach is provided below. Generally, additional analyses using the alternate methodologies were also performed to better understand the sensitivity of the findings of each benefit analysis. Consequently, the findings for both the selected and the alternate benefit monetization approaches are presented and discussed below.

Other key WSIP requirements generally applied to the benefit analysis include:

- A planning horizon totaling 100 years (including the project construction period) (Consequently, future project benefits were determined for the 93-year operating period of 2030 to 2122.)
- A discount rate of 3.5 percent to determine annualized average benefit values, net present values, and applicable interest during construction costs (TR, Section 5.2.4)
- Analysis of benefits and costs in constant 2015 dollars and adjusted to 2015 price levels (TR, Section 5.2.5)
- Escalation of pre-2015 cost and benefit values into constant 2015 dollars using the yearly average consumer price index for California (CPI-U) (TR, Section 5.2.6)

Whenever possible, future real energy costs were escalated 1.7 percent annually to 2024 (TR, Section 5.2.7). In cases where this energy price escalation could not be incorporated into the model analysis, additional analysis was performed to determine adjustments to the analysis results to approximate the expected effects of the prescribed future escalation in real energy prices.

A5.1.1.b Data and Assumptions

Water Supply Quantities

The CALSIM II modeling analysis accounts for water conveyance losses in its quantification of delivered water supplies. Consequently, no water loss adjustments were applied to WSIP Unit Water Values. Table A5-2 shows the 2030 and 2070 water-year incidence rates for both the Sacramento River and the San Joaquin River Hydrologic Regions. The 2070 water-year frequencies have been adjusted to account for the WSIP-required climate change assumptions (TR, Section 2.12 and Appendix A).

Table A5-2. Water-Year Type Incidence Rates by Hydrologic Region: 2030 and 2070

Year Type	Hydrologic Region			
	Sacramento River		San Joaquin River	
	2030	2070	2030	2070
Wet	30%	32%	26%	18%
Above Normal	15%	13%	20%	21%
Below Normal	21%	16%	15%	11%
Dry	20%	24%	18%	16%
Critical	15%	15%	22%	34%
Total	100%	100%	100%	100%

Source: Calculated from historical hydrologic year type information.
Note: Total may not sum exactly due to rounding.

The Sacramento River Hydrologic Region water-year incidence rates were used in the CALSIM II modeling to determine the Sites Reservoir water delivery quantities.

Water Supply Benefit Values

Table A5-3 provides the WSIP-recommended unit water values, as discussed in Section 5.3.3 (and more extensively in Appendix D) of the WSIP TR. The WSIP Unit Water Values shown below were based for statistical analysis of past water transfers and application of the Statewide Agricultural Production Model (SWAP), including assumptions to account for the effects of future implementation of the Sustainable Groundwater Management Act (SGMA).

As discussed in the WSIP TR, the unit water values are also based on actual past water transfer transactions and sale prices, which generally require the buyer to also cover the conveyance costs for the deliveries. As a result, the full water price paid by the water buyer will be the combined sales price and the conveyance costs. This combined price also more accurately represents the water user's full willingness to pay for the supplied water.

Table A5-3. WSIP Unit Water Values by Water Year and Location ($/AF)

Water-Year Type	Sacramento Valley	Delta Export
2030 – Unit Water Values ($/AF)		
Wet	$145	$205
Above Normal	$190	$255
Below Normal	$255	$265
Dry	$275	$285
Critical	$345	$360
2045 – Unit Water Values ($/AF)		
Wet	$150	$415
Above Normal	$200	$520
Below Normal	$265	$635
Dry	$285	$675
Critical	$355	$1,055

Source: WSIP TR, Appendix D, Table D6, Page D-11.

The CALSIM II analysis also accounts for the ability of the state's water system to deliver the water supplies to the expected users. The majority of the project's water supply deliveries will be for either north-of-the-Delta (NOD) users or south-of-the-Delta (SOD) users through the SWP to its water contractors. The conveyance costs for NOD users will be minor, both in terms of wheeling costs and energy use. To be conservative in the attributed benefits, they were assumed to be zero and the WSIP values for Sacramento Valley users were not adjusted. However, as discussed in more detail below, the energy necessary to convey water to SOD users will be a significant expense and will indicate additional willingness-to-pay value to the WSIP Unit Water Values. As a result, to represent the full value of water supplied to end users, the expected conveyance energy costs to those end users are added to the WSIP Unit Water Values to represent their actual willingness to pay and full benefit value.

The SWP generally has considerable unused service capacity (which CALSIM II has accounted for in its operational modeling). The current annual fees and charges for SWP water contractors are determined to ensure full recovery of the SWP system's annual capital and operating costs. For a variety of reasons, the SWP generally cannot provide its contractors with their full Table A allocation. As a result, SWP water contractors are expected to incur only the marginal cost of their system use to convey deliveries because they already fully meet their annual required capital share. The marginal cost for SWP users will be predominantly the additional energy use because cost increases for other system operation and maintenance (O&M) components would be minor. As a result, the benefit analysis conservatively limits its adjustments of WSIP Unit Water Values to SOD users' expected energy costs for conveyance. The actual values are discussed further in Section A5.1.1.c.

Table A5-4 provides the expected benefit start date and the percentage of their 2030 levels. The majority of benefits are expected to start in 2030, except for anadromous fish, Yolo Bypass, and flood damage reduction, as partial benefits will begin before the end of construction. In the case of hydropower (system) and recreation, a short initial ramp-up period is expected before their operations reach their full 2030 benefit levels in 2032.

The additional benefits occurring before the project operations begin in 2030 are not included in the annualized (2030 to 2122) values calculated for each benefit category below and are not reported in their modeling result. Consequently, the pre-operation benefits are also not included in the Sites_A3 Physical Monetized under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, results. This approach was used to facilitate comparisons both between the study-year results (i.e., 2030 and 2070) with the annualized value and between different benefit categories.

Although the pre-construction benefits are relatively minor, they nonetheless should be included when determining the project's total benefits. Consequently, the pre-construction benefits are shown in Future Economic Benefit in Sites_A6 Annual Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, and factored into the project's total net benefit value, benefit-cost ratio, and public benefit ratio calculations in Sites_A10 Allocation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, and Physical and Economic Benefits Summary in Sites_A11 Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

Table A5-4. Benefit Start Dates with Percentage of 2030 Benefits

Year	Anadromous Fish	Incremental Level 4 Refuge	Oroville Coldwater Pool	Yolo Bypass	Recreation	Flood Control	Water Supply	Hydropower (System)	Total Benefits
2024	—	—	—	—	—	—	—	—	—
2025	—	—	—	—	—	—	—	—	—
2026	10%	—	—	10%	—	50%	—	—	10%
2027	15%	—	—	15%	—	50%	—	—	10%
2028	20%	—	—	30%	—	100%	—	—	24%
2029	30%	—	—	50%	—	100%	—	—	24%
2030	100%	100%	100%	100%	50%	100%	100%	50%	97%
2031	100%	100%	100%	100%	50%	100%	100%	50%	97%
2032	100%	100%	100%	100%	100%	100%	100%	100%	100%
2033	100%	100%	100%	100%	100%	100%	100%	100%	100%

A5.1.1.c Calculations

Water Supply Projections

The CALSIM II model results for 2030 and 2070 were used as the basis for determining both future annual water use quantities during the interim period (i.e., 2031 to 2069) and the subsequent post-2070 period.

For the interim period, straight-line interpolation between the 2030 and 2070 model results was used to determine the expected 2031 to 2069 annual values for applicable project purposes.

Annual averages for each intervening year were calculated based on appropriate weighting of the water-year type for the Sacramento River Hydrologic Region (Table A5-5). The weightings for the interim period are determined as straight-line interpolations between the 2030 and the 2070 model results. The 2070 water quantities are used for all years after 2070. The 2070 water-year frequencies have been adjusted to account for the WSIP-required climate change assumptions (TR, Section 2.12; Appendix A).

Table A5-5. Water-Year Type Incidence Rates: Sacramento River Hydrologic Region

Year	Wet	Above Normal	Below Normal	Dry	Critical	Avg. Water Year
2030	30%	15%	21%	20%	15%	100%
2031	31%	15%	21%	20%	15%	100%
2032	31%	15%	20%	20%	15%	100%
2033	31%	15%	20%	20%	15%	100%
2034	31%	15%	20%	20%	15%	100%
…	…	…	…	…	…	…
…	…	…	…	…	…	…
2066	32%	14%	16%	24%	15%	100%
2067	32%	14%	16%	24%	15%	100%
2068	32%	13%	16%	24%	15%	100%
2069	32%	13%	16%	24%	15%	100%
2070	32%	13%	16%	24%	15%	100%
2071	32%	13%	16%	24%	15%	100%
2072	32%	13%	16%	24%	15%	100%

Source: Based on historical hydrologic year type information.

Table A5-6 provides a representative calculation of the annual average based on the interpolation of the CALSIM II 2030 and 2070 water quantity projections for north-of-the-Delta agriculture water supplies.

Table A5-6. North-of-the-Delta Agricultural Water Deliveries (TAF/year)

Year	Wet	Above Normal	Below Normal	Dry	Critical	Avg. Water Year
2030	62	86	125	157	153	110
2031	63	87	125	157	152	111
2032	64	89	126	158	152	112
2033	65	90	127	158	151	112
2034	66	92	127	158	151	113
…	…	…	…	…	…	…
…	…	…	…	…	…	…
2066	105	140	149	161	135	135
2067	106	141	150	161	134	135
2068	107	143	151	161	134	136
2069	109	144	151	161	133	137
2070	110	146	152	161	133	137
2071	110	146	152	161	133	137
2072	110	146	152	161	133	137

Estimated Annual WSIP Unit Water Values

Unit Water Values were interpolated on a straight-line basis between 2030 and 2045 to derive water annual unit estimates for each year between 2031 and 2044. The 2030 unit values were used for all years before 2030. The 2045 unit values were used for all years after 2045.

The average water-year value is calculated based on hydrologic regions, with Sacramento Valley prices based on the Sacramento River Hydrologic Region and the Delta Export value based on the San Joaquin River Hydrologic Region. As the relative weightings during the interim period are determined by straight-line interpolation between the 2030 and the 2070 model results, the average annual value can vary through 2070. Table A5-7 provides a representative selection of these values.

Water sold to south-of-the-Delta water users will also necessarily incur the conveyance energy cost. This cost is in addition to the WSIP Unit Water Values, which were largely determined based on past water transfer transactions. Buyers typically negotiate purchase of the water from the seller's location. As a result, the buyer then incurs the wheeling and energy cost to convey the water to its location. As discussed previously, the conveyance energy costs estimates were based almost entirely on LTGEN/SWP energy use modeling. DWR data were used to project the conveyance energy cost only for American Canyon water district deliveries, which was not estimated by the LTGEN/SWP energy use models.

Table A5-7. Adjusted WSIP Unit Water Values ($/AF)

Year	WSIP Unit Water Value		Average Conveyance Energy Cost [a]	Adjusted WSIP Unit Water Value	
	Sacramento Valley	Delta Export		Sacramento Valley	Delta Export
2028	$229	$272	$185	$229	$457
2029	$230	$298	$185	$230	$483
2030	$229	$272	$185	$229	$457
2031	$230	$298	$185	$230	$483
2032	$230	$323	$185	$230	$508
2033	$231	$348	$185	$231	$533
2034	$231	$373	$185	$231	$558
…	…	…	…	…	…
…	…	…	…	…	…
2043	$235	$546	$185	$235	$731
2042	$236	$570	$185	$236	$755
2043	$236	$594	$185	$236	$779
2044	$237	$619	$185	$237	$804
2045	$238	$643	$185	$238	$828
2046	$238	$642	$185	$238	$827
2047	$238	$641	$185	$238	$826
…	…	…	…	…	…
…	…	…	…	…	…
2066	$238	$625	$185	$238	$810
2067	$238	$624	$185	$238	$809
2068	$238	$623	$185	$238	$808
2069	$238	$622	$185	$238	$807
2070	$238	$621	$185	$238	$806
2071	$238	$621	$185	$238	$806
2072	$238	$621	$185	$238	$806

Source: WSIP TR, Table D6, Page D-11 and LTGEN/SWP energy use modeling.
[a] Average conveyance cost for deliveries to south-of-the-Delta water contractors based on LTGEN/SWP energy use modeling.

- No conveyance adjustment was applied to north-of-the-Delta deliveries because the energy use for those water quantities would be limited.
- No conveyance cost adjustment was made for agricultural water supplied to north-of-the-Delta users (per discussion in Section A5.1.1.b, above).
- The estimated average conveyance energy cost for south-of-the-Delta agricultural water users was $185/AF.
- Unit Water Values were interpolated on a straight-line basis between 2030 and 2045. Constant Unit Water Values were applied after 2045. Note that average water values still change between 2045 and 2070 based on changing water supply quantities due to climate change.
- San Joaquin River Hydrologic Region water-year incidence rates are used to determine applicable unit values for Delta export deliveries.

The WISP Unit Water Values (see Table A5-3) were applied to the CALSIM II projected future water supply quantities (interpolated between 2030 and 2070). The WISP unit water values were also applied based on (1) expected water-year type frequencies and (2) use location. Based on these factors, weighted average unit prices were calculated specifically for each year in the study period. The WSIP Unit Water Values were also adjusted to include the additional conveyance energy cost required for its future use, as shown in Table A5-7.

A5.1.1.d Modeling Results

Table A5-8 shows the summary results of the average water quantities used by each project purpose. Several purposes are water non-consumptive and/or indirectly rely on project-related water (e.g., hydropower, recreation); consequently, they do not have any applicable assigned water use quantities.

Table A5-8. Summary of Quantified Water Use by Purpose (TAF/year)

Period	WSIP Public Benefits			Non-WSIP Benefits			Total Water
	Coldwater Pool [a]	Yolo Bypass	Incremental Level 4 Refuge	Agricultural Water Supply	M&I Water Supply	Recaptured Water Supply	
2030	109	39	35	137	106	11	437
2045	102	39	33	148	110	11	443
2070	90	39	31	167	117	11	455
Average (2030-2122)	**94**	**39**	**32**	**161**	**114**	**11**	**451**

[a] Includes coldwater pool improvements for both Shasta Lake and Lake Oroville

The modeling results for each specific project purpose are reported and discussed under their corresponding section below.

A5.2 Ecosystem Improvement (WSIP Eligible Benefits)

Sites Reservoir would provide a variety of ecosystem benefits. Four distinct ecosystem benefits were quantified and monetized. Table A5-9 summarizes the physical benefits that were quantified and monetarized for the WSIP Application.

Table A5-9. Ecosystem Physical Benefits Quantified and Monetized

Benefit Category	Location	Physical Benefit Monetized
Anadromous Fish	Sacramento River watershed between Keswick Dam and Red Bluff	Increase in habitat units as determined by SALMOD
Incremental Level 4 Refuge Water Supply	National Wildlife Refuges, State Wildlife Areas, and privately managed wetlands	Increase in Incremental Level 4 refuge water supplies to achieve optimum habitat management
Lake Oroville Coldwater Pool	Lake Oroville	Additional water stored in Lake Oroville to provide temperature and flow improvements for anadromous fish
Yolo Bypass Flows	Yolo Bypass discharging to the Sacramento River	August through October releases from Sites Reservoir to Yolo Bypass

The specific analysis approach and results for each ecosystem improvement purpose are provided below.

A5.2.1 Anadromous Fish

Sites Reservoir provides a variety of benefits to anadromous fish. The Salmon Population Model (SALMOD) results were used to determine the cost of an alternative project to raise the dam at Shasta Lake to estimate the benefits to anadromous fish.

A5.2.1.a Analytic Methods

Salmon Population Model (SALMOD)

SALMOD simulates the dynamics of the freshwater life history of anadromous and resident salmonid populations using streamflow, water temperature, and habitat type. SALMOD combines flow and temperature information to forecast the population of Chinook salmon in the Sacramento River watershed between Keswick Dam and Bend Bridge, near Red Bluff. It provides potential fish production values reflecting the suitability of riverine habitat for Winter-run, Spring-run, Fall-run, and Late-Fall-run Chinook salmon. The model simulates salmon habitat conditions in the Sacramento River between Keswick Dam and Bend Bridge.

Alternative Cost – Shasta Lake Dam Raise (WSIP Benefit Monetization Approach)

Sites Reservoir would enhance future water temperature and flow conditions in the Sacramento River as a means of improving the riverine ecosystem. The economic benefits of the project's contributions to anadromous fish survival were estimated based on the Alternative Cost approach. As discussed in Section A5.1.1.a, this approach involves identifying the next-best (i.e., least-cost) alternative project to achieve the same outcomes (i.e., increasing salmon habitat) and using its development cost to represent the project's benefits.

Unlike other possible benefit valuation approaches (e.g., use of WSIP Unit Water Values), the Alternative Cost approach relies on direct comparisons of the two projects' expected fishery benefits for the Sacramento River as modeled by SALMOD. The Alternative Cost approach also represents a more permanent and reliable basis for the fish habitat improvement than that represented by reliance on future water transfers and changes in future water use.

Consequently, it was considered that the Alternative Cost of the Shasta Lake Dam raise would provide the most direct and reliable benefit valuation, and therefore this method was selected for use in the WSIP benefit valuation of the project's anadromous fish benefits.

WSIP Unit Water Values (Alternate Monetization Approach)

As previously discussed in Section A5.1.1.a, WSIP Unit Water Values modeling can also be used to determine the project's ecosystem benefits. However, to represent the project's anadromous fish benefits, the project's expected habitat unit improvements were not determined directly but instead were based on an estimated equivalent water quantity that would allow Shasta Lake to maintain its coldwater pool sufficiently and deliver the water supplies necessary to improve the fishery habitat conditions along the Sacramento River.

Based on the estimated water supply quantities, adjusted WSIP Unit Water Values can be applied to derive a corresponding anadromous fish benefit valuation. The appropriate Unit Water Values for the benefit valuation should be based on the expected likely source of the water to be "transferred" to replace the reduced Shasta deliveries.

WSIP Unit Fish Values (Alternate Monetization Approach)

The WSIP TR also provides guidance on benefit valuations for fishery recovery benefits based on escapement projections for winter-run and spring-run Chinook salmon (TR, Section 5.4.2.2; Appendix E). The WSIP TR indicates that a benefit of $100,000 per fish-year (one fish escaping one year) is reasonable. The TR recommended value for non-listed fall-run Chinook salmon is $2,500 per fish-year.

Although SALMOD and other fish models can be used to project future increases in smolt and juvenile salmon populations, no fish models are available to project the project-related future improvement in escapement for the Sacramento River. However, general estimates of expected juvenile fish survival rates were used to derive preliminary anadromous fish benefit values based on the WSIP Unit Fish Values.

A5.2.1.b Data and Assumptions

The cost of the most likely feasible alternative to the Sites Reservoir was based on various Shasta Lake Dam raises operated solely for the purpose of increasing the number of salmon smolt in the Sacramento River. As discussed in Section A5.1.1.a, the Shasta Lake Dam raise is considered a feasible alternate source based on the key factor that its additional surface storage could ensure the availability of a greater and new supply of coldwater to reduce downstream water temperatures on the Sacramento River. The Shasta Lake Dam raise would benefit the same anadromous fish populations' locations and therefore result in the same ecosystem improvement outcomes. The Shasta Lake Dam raise could thereby also achieve the same benefits as Sites Reservoir would. Furthermore, recent extensive planning and analysis for the Shasta Lake Dam raise provides greater confidence in both the accuracy of its construction cost estimates and its potential implementation viability.

Nevertheless, the Shasta Lake Dam raise cost estimates are expected to result in conservative Alternative Cost-benefit valuations because the 2015 Final Feasibility Report construction cost estimates likely underestimate the actual full construction cost for its future storage expansion. Higher construction costs (or reduced ecosystem improvement outcomes) for the Shasta Lake Dam raise alternative would increase the Alternative Cost benefit values attributable for the Sites Reservoir project.

Key factors contributing to the Alternative Cost approach's underestimate of the project's benefit values include:

- The 2015 construction cost estimates do not factor in the full costs that would be necessary for project development. Given the project's unavoidable adverse wild and scenic river impacts and the current level of known opposition to the project, actual development of the project may be expected to be more costly and time-consuming than anticipated by the Feasibility Study analysis. The costs for overcoming the likely environmental and legal challenges to the project could significantly increase its overall future development cost.
- The schedule necessary to complete any expansion of Shasta Lake would be expected to be considerably longer than the schedule to complete Sites Reservoir not only because of the previously discussed environmental and legal challenges expected for a Shasta Lake Dam raise, but also because of the need to rely on Federal appropriations. On a present value basis, all else being equal, a 10-year delay in construction completion would result in nearly a 30 percent comparative reduction in the project's first year of benefits.

- Salmon populations within the Sacramento River and other related water systems are in decline and their future viability threatened by deterioration in river and habit conditions. Delayed development would result in further declines in fishery habitat and Chinook populations before any project-related ecosystem improvements would occur. The resulting habitat and population losses would reduce the comparative effectiveness of the eventual Shasta Lake expansion. In this case, the unit benefit cost of the Shasta Lake alternative would increase and result in a higher Alternative Cost benefit valuation for the project.
- The WSIP 2030 baseline scenario presumes overly optimistic Shasta Lake storage levels and coldwater conditions. It is equally probable that the future 2030 conditions at Lake Shasta will in fact have lower storage conditions. Past and current Federal government operation and management of the Central Valley Project (CVP) suggest that actual future 2030 conditions for Shasta Lake would be expected to have lower storage levels and reduced coldwater conditions. As a result, the project's comparative ecosystem improvement is underestimated, which reduces its quantified physical improvements and related benefit values. Furthermore, the near-term occurrence of this benefit diminishment results in a greater underestimate in the benefit valuation because the present value calculations give greater weight to the project's early-year benefits.

These factors indicate that the benefit value for Sites Reservoir as derived from the Alternative Cost approach applied to the Shasta Lake Dam raise should be recognized as conservative benefit valuations that likely understate the actual full benefit values of the ecosystem improvements resulting from Sites Reservoir.

A5.2.1.c Calculations

Fish Population Projections

Table A5-10 presents the projected increases in future fish population and habitat units by type of fish for 2030, 2070, and the annual average in the 2030 to 2122 study period. The SALMOD results show that the project would result in greatly increased future anadromous fish habitat improvements. This outcome is largely attributable to the projected deterioration in future water conditions for salmon species as a result of future climate change effects.

Table A5-10. SALMOD Results for 2030 and 2070 (TAF/year)

Run	No Action (# of fish/yr)	Average Increase (# of fish/yr)	Habitat Units	Dry Yr Increase (# of fish/yr)	Critical Yr Increase (# of fish/yr)	Dry & Critical Yr Increase (# of fish/yr)
2030 SALMOD Results						
Fall-Run Chinook	32,275,104	435,138	435	19,893	1,493,430	609,308
Late Fall-Run Chinook	7,911,118	70,188	70	57,277	208,800	117,886
Winter-Run Chinook	3,892,177	20,627	21	-62,557	207,285	45,380
Spring-Run Chinook	866,601	13,331	13	14,088	40,324	24,582
Total All Runs		**539,284**	**539**	**28,701**	**1,949,839**	**797,156**
2070 SALMOD Results						
Fall-Run Chinook	27,506,156	1,454,968	1,455	2,574,746	3,427,234	2,915,741
Late Fall-Run Chinook	7,525,505	235,595	236	169,866	1,137,267	556,826
Winter-Run Chinook	3,711,513	84,433	84	-12,471	673,467	261,904
Spring-Run Chinook	688,048	47,068	47	69,601	42,975	58,951
Total All Runs		**1,822,064**	**1,822**	**2,801,742**	**5,280,943**	**3,793,422**
Average (2030–2122)						
Long-Term Average		**1,539,301**	**1,539**	**2,190,480**	**4,546,667**	**3,132,955**

Figure A5-1 shows the percentage growth in population increase projected for each fish-type population in both 2030 and 2070.

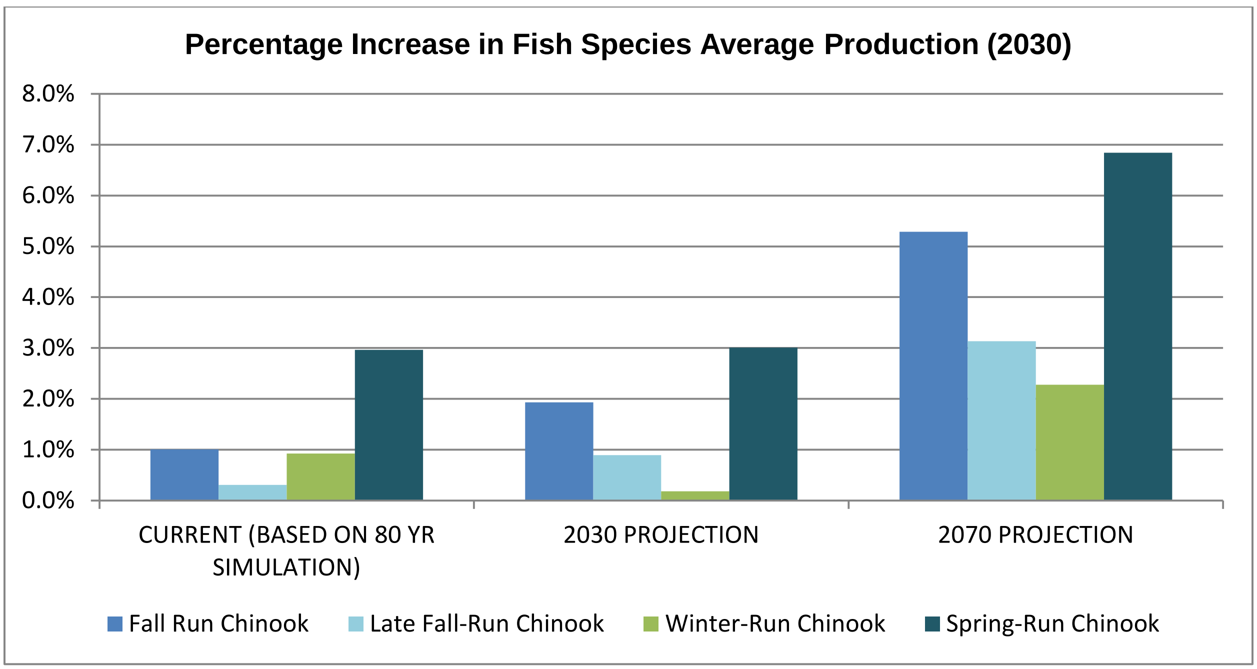

Figure A5-1. Percentage Increase in Fish Species Average Production for 2030 and 2070

As shown in Table A5-10, in 2030, 6.3 percent of the fish population increase would be composed of the Federal-protected Winter- and Spring-run Chinook, increasing to 7.2 percent in 2070. For the purposes of the WSIP Unit Fish Value approach, it was assumed 1 percent of the increased fish population would subsequently return as adults to spawn.

Alternative Cost (Selected Monetization Approach)

Sites Reservoir's anadromous fish benefits were estimated based on the least-cost alternative of expanding Shasta Lake's future storage with a 12.5-foot raise of Shasta Dam as a single-purpose water storage project that would provide increased habitat units.

The base construction cost for the Shasta Lake Dam raise was obtained from the 2015 Shasta Lake Water Resource Investigation Feasibility Study. The costs were adjusted into 2015 dollar terms and annualized using a 3.5 percent discount rate in accordance with the WSIP TR requirements. Table A5-11 shows the estimated single-purpose cost for six Shasta Lake Dam raise alternatives with their projected habitat unit improvement and the corresponding unit cost per habitat unit.

Table A5-11. Salmon Production and Annual Costs for Shasta Lake Dam Raise Scenarios

Dam Raise (feet)	Habitat Units (HU) [a]	2014$		2015$	
		Annual Cost ($1,000s)	Cost per Habitat Unit ($/HU)	Annual Cost ($1,000s) [b]	Cost per Habitat Unit ($/HU)
0.5	63	$35,585	$564,840	$36,103	$573,059
1.7	212	$36,407	$171,729	$36,936	$174,228
3.2	381	$37,771	$99,137	$38,321	$100,580
6.5	684	$40,831	$59,694	$41,425	$60,563
12.5	988	$46,295	$46,857	$46,968	$47,539
18.5	975	$51,761	$53,088	$52,514	$53,860

Source: Reclamation, Shasta Lake Water Resource Investigation Feasibility Study (2015).
[a] Each habitat unit equals 1,000 additional salmon produced.
[b] Costs have been adjusted into 2015 dollars and are based on a 3.5 percent annual discount rate.

Table A5-11 indicates that the 12.5-foot dam raise at Shasta Lake Dam is both the most-productive alternative, with 988 new habitat units, and the most cost-effective, with a unit cost of $47,539 per habitat unit. This unit value was applied as a conservative benefit value estimate for Sites Reservoir's anadromous fish benefit.

Table A5-12 shows the project's 2030, 2045, 2070, and annualized average over the project's entire 2030 to 2122 study period based on their corresponding SALMOD-projected increase in future habitat units. As shown in Table A5-12, the project's future increase in habitat units is projected to be up to 1,822 in 2070 and average 1,539 habitat units over the 93-year study period for the project.

Table A5-12. Estimated Anadromous Fish Benefits: Alternative Cost (2015$)

Year	Fishery Improvement Habitat Unit	Benefit Value	
		Unit Value $/Habitat Unit	Total ($1,000s)
2030	539	$47,539	$25,637
2045	1020	$47,539	$48,505
2070	1,822	$47,539	$86,619
Annualized (2030–2122) [a]	**1,539**	-	**$56,985**

[a] Annualized average benefit value is calculated using net present value over 93 years and a 3.5 percent discount rate.

The project's future habitat conditions would average 551 habitat units (56 percent increase) more than those provided by the 12.5-foot Shasta Lake Dam raise. The 2070 habitat conditions would be nearly 834 habitat units (84 percent increase) higher than the Shasta Lake Dam raise would achieve.

Nonetheless, the 12.5-foot Shasta Lake Dam raise benefit value was used because (1) no other alternative projects could be identified that would result in comparable higher habitat improvements for the Sacramento River; and (2) no other suitable project could be developed in conjunction with the 12.5-foot Shasta Lake Dam raise to provide the additional 834 habitat units in 2070. Furthermore, the fish habitat improvement results for the 18.5-foot raise suggest that any further economies of scale are unlikely to occur with higher raises of the Shasta Lake Dam.

As a result, it was considered reasonable and conservative to use the unit benefit value from the Shasta Lake Dam raise to estimate future anadromous fish benefits at Sites Reservoir.

WSIP Unit Water Values (Alternative Monetization Method)

Preliminary operational analysis determined that for 2030 conditions an approximately 83 TAF increase in end-of-September storage at Shasta Lake should be sufficient to result in the coldwater improvements necessary to achieve the corresponding 539 habitat unit increase. Under 2070 conditions, approximately a 59 TAF increase in end-of-September storage at Shasta Lake should be sufficient to result in the coldwater improvements necessary to achieve the corresponding 1,822 habitat unit increase. As discussed in Section A5.2.1.b, above, these values are expected to be conservative.

The economic benefits of the increase in anadromous fish were also estimated using the adjusted WSIP unit water values (see Table A5-7) applied to the projected average annual delivery quantities on a year-by-year basis over the project's entire 2030 to 2122 study period. WSIP unit water values are for Delta export and include conveyance energy adjustment because the water would otherwise be used in the south-of-the-Delta area. Table A5-13 shows the estimated annual benefit values of future anadromous fish in 2030, 2045, 2070 and as an annualized average over the project's entire 2030 to 2122 study period.

Table A5-13. Estimated Anadromous Fish Benefits: WSIP Unit Water Values (2015$)

Year	Fishery Improvement (Supply Equivalent) TAF	Benefit Value: WSIP Unit Water Value $/AF	Benefit Value: Total ($1,000s)
2030	83	$457	$38,042
2045	74	$828	$61,408
2070 [b]	59	$806	$47,684
Annualized (2030–2122) [a]	**65**	**—**	**$51,069**

[a] Annualized average benefit value is calculated using net present value over 93 years and a 3.5 percent discount rate.
[b] The 2070 unit value is lower than the 2045 unit value because of the change in the hydrological year type incidence result in a wetter average year.

However, these benefit values do not account for any adverse economic effects of such a permanent and major shift in water use (e.g., for agricultural-dependent businesses and workers) that would increase the societal value of the continued use of the water for agricultural production. Allowances for that and other factors (e.g., difficulty and limited options for increasing habitat units) can be expected to explain the differential between the WSIP unit and Alternative Cost benefit value estimates.

WSIP Unit Fish Values (Alternative Monetization Method)

The project's anadromous fish economic benefits were also estimated using the WSIP Unit Fish Values (Section A5.2.1.a). Unit fish values for Fall-run, Winter-run, and Spring-run Chinook salmon were applied to their expected project-related increases in their 2030 and 2070 populations. Table A5-14 shows the estimated annual benefit values of future anadromous fish increases in 2030, 2045, 2070, and as an annualized average over the project's entire 2030 to 2122 study period.

Table A5-14. Estimated Anadromous Fish Benefits: WSIP Unit Fish Values (2015$)

			Benefit Value	
	Fishery Improvement		WSIP Unit Fish Value	Total
Year	**Fall-Run Chinook**	**Winter- & Spring-Run Chinook**	**$1,000/Fish**	**($1,000s)**
2030	5,053	340	$2.5/$100	$46,591
2045	9,498	705	$2.5/$100	$94,281
2070	16,906	1,315	$2.5/$100	$173,765
Annualized (2030–2122) [a]	**14,293**	**1,100**	**—**	**$111,966**

[a] Annualized average benefit value is calculated using net present value over 93 years at a 3.5 percent discount rate.

The WSIP Unit Fish Value approach resulted in much higher benefit value estimates than those obtained from the Alternative Cost approach. Therefore, as a conservative assumption and in accordance with WSIP TM guidance, WSIP Unit Fish Value approach was not used to estimate Sites Reservoir's anadromous fish benefits.

A5.2.1.d Modeling Results (Selected Monetization Approach)

Table A5-15 shows Sites Reservoir's anadromous water supply benefits as estimated based on the 12.5-foot raise of Shasta Dam as the least-cost alternative to the project.

Table A5-15. Anadromous Fish Benefits: Least-Cost Alternative (2015$; $1,000s)

	Annual Benefits [a]		
Alternative	**2030**	**2070**	**Annualized Benefit** [b]
Average Conditions [c]			
Sites Reservoir	$25,637	$86,619	**$56,985**[a]

[a] Based on 12.5-foot raise of Shasta Dam as the Alternative Cost for achieving the ecosystem improvement.
[b] Annualized benefits are interpolated annual physical benefits between 2030 and 2070 and then constant after 2070. Annualized benefits calculated as net present value over 93 years at a 3.5 percent discount rate.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's Anadromous Fish benefits were estimated to increase from $25.6 million in 2030 to approximately $86.6 million in 2070. The corresponding annualized benefit for the future 2031 to 2132 operating period was estimated to be $57.0 million. As discussed above this was based on an estimated average unit benefit value of $47,539 per habitat unit.

A5.2.2 Incremental Level 4 Refuge Water Supply

Sites Reservoir will increase water deliveries for Incremental Level 4 Refuge needs located south-of-the-Delta.

A5.2.2.a Analytic Methods

CALSIM II

As previously discussed in Section A5.1, CALSIM II modeling was used to determine the project's 2030 and 2070 Incremental Level 4 water supply deliveries by location under different water-year conditions.

WISP Unit Water Values (Selected Monetization Approach)

As previously discussed in Section A5.1 All Benefits, WSIP Unit Water Value modeling is an approved benefit monetization approach and it was used to determine the project's 2030 and 2070 Incremental Level 4 Refuge water supply benefit values under different water-year conditions.

Alternative Cost (Alternate Monetization Approach)

As previously discussed in Section A5.1 All Benefits, the Alternative Cost method can be used to determine the project's 2030 and 2070 ecosystem improvement benefits of increased Incremental Level 4 Refuge deliveries under different water-year conditions. Shasta Lake Dam raise has been determined to be the least cost alternative for the project.

A5.2.2.b Data and Assumptions

Future increase in Incremental Level 4 Refuge supplies are not associated with any existing mitigation or compliance requirements per WSIP requirements (TR Section 8.1). Consequently, the project's ecosystem improvements represent new environmental benefits that would not otherwise be achieved.

A5.2.2.c Calculations

Project Water Use

Table A5-16 shows improved deliveries to National Wildlife Refuges, State Wildlife Areas, and privately managed wetlands projected in 2030, 2070, and the annual average in the 2030 to 2122 study period.

Table A5-16. Incremental Level 4 Refuge Water Supply Increases (2030 and 2070) (TAF/year)

Period	North-of-the-Delta	South-of-the-Delta	Total
2030 Results			
Long-Term Average	1	34	35
Wet	1	52	53
Above Normal	1	46	47
Below Normal	1	38	38
Dry	0	20	21
Critical	0	1	1
2070 Results			
Long-Term Average	1	30	31
Wet	1	50	51
Above Normal	1	40	41
Below Normal	1	29	30
Dry	0	16	17
Critical	0	1	1
2030-2122 Results			
Long-Term Average	**1**	**31**	**32**

Source: CALSIM II.

The changes in the Incremental Level 4 Refuge supply deliveries were interpolated between 2030 and 2070 to project the future refuge water supplies on an annual basis. In accordance with WSIP Technical Reference guidance, post 2070 deliveries were assumed to occur at 2070 levels.

Consistent with the approach used to determine the benefit values for Yolo Bypass supply, the annual average water quantities were based on use of the Sacramento River Hydrologic Region's water-year incidence rates during the 2030 to 2070 study period.

WISP Water Unit Values (Selected Monetization Approach)

The economic benefits of the increase future water deliveries for Incremental Level 4 Refuges were estimated using the adjusted WSIP Unit Water Values (see Table A5-7) applied to the projected average annual delivery quantities on a year by year basis over the project's entire 2030 to 2122 study period. The Delta Export adjusted WSIP Unit Water Values were used for the Incremental Level 4 Water Refuge benefit because the majority of the Refuges are located south-of-the-Delta and the project supplied water would otherwise be used for south-of-the-Delta deliveries.

Table A5-17 shows the estimated annual benefit values of future Incremental Level 4 Refuge deliveries in 2030, 2045, 2070 and as an annualized average over the project's entire 2030 to 2122 study period.

Table A5-17. Incremental Level 4 Refuge Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s)

	Incremental Level 4 Refuge Deliveries	Benefit Value	
		WSIP Unit Water Value [b]	Total
Year	TAF	$/AF	($1,000s)
2030	35	$457	$16,047
2045	33	$828	$27,644
2070 [c]	31	$806	$24,634
Annualized (2030–2122) [a]	**32**	**-**	**$23,811**

[a] Annualized benefit value is calculated using net present value for 93 years at a 3.5 percent discount rate.
[b] Adjusted WSIP Unit Water Values for Delta export supplies.
[c] The 2070 unit value is lower than the 2045 unit value because of the change in the hydrological year type incidence result in a wetter average year.

Alternative Cost (Alternate Monetization Approach)

The economic benefits of the increase water deliveries to Incremental Level 4 Refuge were also estimated on an Alternative Cost basis. The Alternative Cost for achieving the Incremental Level 4 Refuge deliveries' ecosystem benefits is based on the cost of a Shasta Lake Dam raise developed and operated solely for the purpose of providing the water quantities necessary for the Incremental Level 4 Refuge supply purpose.

As discussed in Section A5.1.1.a, the Shasta Lake Dam raise was determined to be a reasonable and feasible alternate source due both to its potential ability to provide the necessary large quantities of new water supplies and its location which ensures that it could provide the same Incremental Level 4 Refuge supply deliveries and therefore result in the same ecosystem improvement outcomes. Furthermore, recent extensive planning and analysis has been completed for the Shasta Lake Raise which provides more confidence in both the accuracy of its construction cost estimates and its potential implementation viability.

The Alternative Cost was estimated on a per acre-foot unit basis using the 2015 Shasta Lake Water Resource Investigation Feasibility Study (2015) dam raise alternatives and cost estimates. The feasibility study evaluated six different dam raise alternatives and the Comprehensive Plan 4A (CP4A) alternative was selected as the National Economic Development Plan.

The CP4A alternative would construct an 18.5 foot Shasta Lake dam raise to provide 634,000 TAF in additional reservoir storage capacity, augmented spawning gravel and reserve 30 percent of the new storage capacity to increase its coldwater pool.

The per acre cost for both M&I and agricultural water supply purposes were determined by dividing each's single purpose cost estimated full annualized cost (i.e., including both O&M and construction) by its expected average water-year supply quantity.

The CP4A alternative's $9.4 million total annual O&M cost was allocated between its numerous benefit purposes proportionally based on their relative benefit values as shown in Table A5-18.

Table A5-18. Annual Benefits and Cost for Enlargement of Shasta Lake: CP4A (2014$; $millions)

CP4A	Anadromous Fish	Water Supply	Hydropower	Recreation	Total
Benefits	$33	$27	$14	$14	**$89**
O&M	$4	$3	$2	$2	**$9.4**

Source: Tables 4-7 and 4-8, SLWRI 2015.

The $3 million water supply O&M cost was further split proportionally between the agricultural and M&I uses based on their average annual water supply quantities. The resulting O&M costs were then added to the single purpose annualized construction costs. The resulting annual water supply cost estimates were then converted from their reported 2014 dollar cost estimates into 2015 dollar terms. No adjustment to the annualized costs was necessary since the Shasta Feasibility Study used the same 3.5 percent discount rate as that required by the WSIP TR guidelines.

Table A5-19 shows the annualized single purpose costs, the average year water deliveries, and the unit benefit value estimated for both agricultural and M&I water supply for the CP4A Shasta Lake 18.5 foot dam raise alternative. To be conservative, the Alternative Cost approach selected for Sites Reservoir was based on the lower water supply unit cost for Shasta Lake's agricultural supply. This alternate cost was used to value the economic benefits of Sites Reservoir's future 32 TAF of increased average annual Incremental Level 4 Refuge supply deliveries.

Table A5-19. Single Purpose Cost for Enlargement of Shasta Lake: CP4A ($1,000s)

Water Use	Deliveries (Average Year) (TAF/yr)	Annualized Cost (2014$)		Total Annualized Cost (2015$)	Alternative Cost: Unit Benefit Value ($/AF)
		Construction	O&M		
Agricultural	31.4	$43,600	$1,741	$46,001	$1,465
M&I	19.9	$44,500	$1,103	$46,267	$2,325

Source: Tables ES-7 and 4-5, SLWRI 2015.

The estimated annualized unit cost for the enlargement of Shasta Lake was determined to be $1,465 per acre foot. This annual cost represents the Alternative Cost for the Sites Reservoir and was then used to estimate the total benefit value for the future Incremental Level 4 Refuge deliveries in 2030, 2045, 2070 and the annualized average over the project's full 2030 to 2122 study period. Table A5-20 shows the resulting estimated benefit values of Sites Reservoir's future Incremental Level 4 Refuge deliveries using this Alternative Cost approach. The Alternative Cost approach resulted in much higher benefit value estimates than those obtained from the WSIP Unit Water Value approach. Therefore, as a conservative assumption and in accordance with WSIP TM guidance, the Alternative Cost approach was not used to estimate Sites Reservoir's Incremental Level 4 Refuge and similar Ecosystem Improvements.

Table A5-20. Incremental Level 4 Refuge Supply Benefit Valuation: Alternative Cost Approach (2015$; $1,000s)

Year	Incremental Level 4 Refuge Deliveries TAF	Benefit Value: Alternate Cost – Unit Value $/AF	Benefit Value: Total ($1,000s)
2030	35	$1,465	$51,418
2045	33	$1,465	$48,927
2070	31	$1,465	$44,774
Annualized (2030–2122) [a]	**32**	**—**	**$48,055**

[a] Annualized benefit value was calculated using net present value over 93 years at a 3.5 percent discount rate.

A5.2.2.d Modeling Results (Selected Monetization Approach)

Table A5-21 shows Sites Reservoir's Incremental Level 4 refuge water supply benefits as estimated based on WSIP Unit Water Values.

Table A5-21. Incremental Level 4 Refuge Benefits: WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a] 2030	Annual Benefits [a] 2070	Annualized Benefit [b]
Average Conditions [c]			
Sites Reservoir	$16,047	$24,634	$23,811

[a] Based on WSIP Unit Water Values adjusted by water-year type, expected delivery location and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070, and then constant annual benefits after 2070. WSIP Unit Water Values interpolated between 2030 and 2045, after which 2045 unit values are used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's Incremental Level 4 Refuge water supply benefits were estimated to increase from $16.0 million in 2030 to approximately $24.6 million in 2070. The corresponding annualized benefit for the future 2030 to 2132 operating period was estimated to be $23.8 million. This is equal to an estimated average unit benefit value of $781 per acre foot for the Incremental Level 4 refuge benefits. This valuation reflects the comparatively high benefit values for future south-of-the-Delta water uses.

A5.2.3 Lake Oroville Coldwater Pool

Improvements to the coldwater pool and downstream releases to assist migrating fish would be beneficial to salmon, steelhead, and other fish in the lower Feather River. The benefits to Anadromous Fish were anticipated to be less than the benefits downstream from Shasta Lake, but nevertheless significant. The storage increase based on CALSIM II modeling is characterized below.

Sites Reservoir will enhance future water temperature and flow conditions in the American River as a means of improving the riverine ecosystem. Sites will achieve these ecosystem improvements by enabling Lake Oroville to delay some of its water deliveries which will increase its coldwater pool conditions and subsequently improve water temperatures of its water releases.

A5.2.3.a Analytic Methods

CALSIM II

As previously discussed in Section A5.1, CALSIM II modeling was used to determine the project's 2030 and 2070 water quantity increases to improve Lake Oroville Coldwater Pool conditions.

WSIP Unit Water Values (Selected Monetization Approach)

The SALMOD model does not include the Feather River area. No other fishery models for American River exist and therefore the habitat or fish population increase from future improvements in Lake Oroville's coldwater pool improvements cannot be directly evaluated. Consequently, the benefit value of fishery improvements within the Feather River watershed were evaluated based on an opportunity cost to secure an equivalent amount of storage in Lake Oroville.

The economic benefits of the project's contributions to anadromous fish survival were estimated based on use of the WSIP Unit Water Values to determine the value of the water that would otherwise be needed to be withheld in Lake Oroville to improve its coldwater pool and temperature conditions of its water releases.

As previously discussed in Section A5.1 All Benefits, WSIP Unit Water Values modeling was used to determine the project's 2030 and 2070 water benefit values for the Lake Oroville Coldwater Pool under different water-year conditions.

The WISP unit value benefit method used to value the water supply necessary for the projected Lake Oroville coldwater pool improvements was the same as that used for the Incremental Level 4 Refuge supplies benefits (Section A5.2.2). The Lake Oroville benefit valuation analysis also similarly used the adjusted Unit Water Values for south-of-the-Delta supplies applied to the CALSIM II determined water quantities determined specifically necessary to achieve Lake Oroville's coldwater benefits.

Alternative Cost (Alternate Monetization Approach)

As previously discussed in Section A5.1 All Benefits and for Incremental Level 4 Refuge purposes (Section A5.2.2), an Alternative Cost method can be used to determine the project's 2030 and 2070 ecosystem improvement benefits under different water-year conditions. Furthermore, given the comparability of their estimated future water quantity needs (annual averages of 30 TAF for Oroville Coldwater Pool and 32 TAF for Incremental Level 4 Refuges); the Alternative Cost analysis for the Oroville Coldwater Pool benefits was very similar to that performed for the Incremental Level 4 Refuge supply increases.

A5.2.3.b Data and Assumptions

Lake Oroville's late spring and early summer water deliveries that would instead be met Sites Reservoir water releases would generally be for south-of-the-Delta water users. Consequently, south-of-the-Delta WSIP Unit Water Values were used to represent the benefit value of those releases which would otherwise need to be cancelled.

Similarly, based on Lake Oroville current water supplies, for the purposes of the benefit valuation it is assumed that the water supply that would otherwise need to be retained (and therefore not delivered) would be south-of-the-Delta deliveries. Consequently, south-of-the-Delta WSIP Unit Water Values were used to represent the benefit value of those releases which would otherwise need to be retained.

A5.2.3.c Calculations

Projected Water Use

Table A5-22 shows the projected future increase in annual end of May water storage for Lake Oroville projected by CALSIM II.

Table A5-22. Lake Oroville Storage Increases for 2030 and 2070 (TAF/year)

Water-Year Type	Quantity
2030 Results	
Full	26
Dry	38
Critical	83
2070 Results	
Full	31
Dry	39
Critical	111
Average (2030–2122)	
Long-Term	30

Source: CALSIM II.

WISP Unit Water Values (Selected Monetization Approach)

The economic benefits of the increase future water deliveries for Lake Oroville coldwater pool were estimated using the adjusted WSIP Unit Water Values (see Table A5-7) applied to the projected average annual delivery quantities on a year by year basis over the project's entire 2030 to 2122 study period. Table A5-23 shows the estimated annual benefit values of future Lake Oroville coldwater pool improvements in 2030, 2045, 2070 and the annualized average over the project's full 2030 to 2122 study period.

Table A5-23. Lake Oroville Coldwater Pool Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s)

Year	Lake Oroville Coldwater Pool Deliveries TAF	Benefit Value: WSIP Unit Water Value $/AF	Benefit Value: Total ($1,000s)
2030	26	$457	$11,814
2045	28	$828	$22,986
2070 [b]	31	$806	$24,976
Annualized (2030–2122) [a]	**30**	-	**$20,987**

[a] Annualized benefit value was calculated using net present value over 93 years at a 3.5 percent discount rate.
[b] The 2070 unit value is lower than the 2045 unit value because of the change in the hydrological year type incidence result in a wetter average year.

Alternative Cost (Alternate Monetization Approach)

As discussed above, the Alternative Cost approach for monetization of the project's future Incremental Lake Oroville Coldwater Pool deliveries was the same as that used for the project's Incremental Level 4 Refuge deliveries in Section A5.2.2. As a result, an estimated annualized per acre foot unit cost for the enlargement of Shasta Lake of $1,465/AF was used to estimate the total benefit value for the Lake Oroville coldwater pool deliveries in 2030, 2045, 2070 and the annualized average over the project's full 2030 to 2122 study period.

Table A5-24 shows the estimate the benefit values of Sites Reservoir's future Lake Oroville coldwater pool deliveries using the Alternative Cost approach.

Table A5-24. Lake Oroville Coldwater Pool Benefit Valuation: Alternative Cost Approach (2015$; $1,000s)

Year	Lake Oroville Coldwater Pool Deliveries TAF	Benefit Value: Alternate Cost – Unit Value $/AF	Benefit Value: Total ($1,000s)
2030	26	$1,465	$37,857
2045	28	$1,465	$40,683
2070	31	$1,465	$45,394
Annualized (2030–2122) [a]	**30**	**—**	**$41,731**

[a] Annualized benefit value is calculated using net present value over 93 years and 3.5 percent discount rate.

A5.2.3.d Modeling Results (Selected Monetization Approach)

Table A5-25 presents the estimate benefits values for the projected future increases in Lake Oroville's coldwater pool.

Table A5-25. Lake Oroville Coldwater Pool Benefits: WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a] 2030	Annual Benefits [a] 2070	Annualized Benefit [b]
Average Conditions [c]			
Sites Reservoir	$11,814	$24,976	$20,987

[a] Based on WSIP Unit Water Values adjusted by water-year type, expected delivery location, and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP Unit Water Values interpolated between 2030 and 2045, after which 2045 unit values are used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's Lake Oroville coldwater pool benefits were estimated to increase from $11.8 million in 2030 to $25.0 million in 2070. The corresponding annualized benefit for the future 2030 to 2132 operating period was estimated to be $21.0 million. This is equal to an estimated average unit benefit value of $1,465 per acre foot. This valuation reflects the comparatively high benefit values for future south-of-the-Delta water uses.

A5.2.4 Yolo Bypass

Sites Reservoir will increase water deliveries to the Yolo Bypass which are expected to result in ecosystem improvements.

In 2016, DWR performed a North Delta Food Web Study in 2016 in collaboration with Federal and local water agencies. The study addressed the *Delta Smelt Resiliency Strategy* (California Department of Natural Resources, July 2016) recommendation for North Delta food web adaptive management projects. The resulting fall flows in the Yolo Bypass successfully produced a phytoplankton bloom, the major food source for endangered Delta smelt.

The Cache Slough area that receives water from the Yolo Bypass is the only place in the Delta estuary where the Delta smelt population is increasing. The purpose of this action is to help increase desirable food sources for Delta smelt in the lower Cache Slough and lower Sacramento River areas. This should improve Delta smelt growth and condition as they mature into adults, thereby increasing Delta smelt abundance.

The Sites Reservoir Project will provide two pulses of flow of at least 400 cfs each over a two to three week period into the Yolo Bypass (via the Colusa basin drain past the Wallace Weir and Ridge Cut into the Tule Drain) that will flow through the Toe drain and out to the Sacramento River. Each flow pulse made into the Colusa basin Drain would total about 20 TAF in each two to three week period resulting in an average total flow of 39 TAF per year. The flow pulses would be adaptively managed but are currently thought to occur in late summer and early fall (e.g., August and September). The water deliveries would not have to occur every year but would be desirable in most years.

A5.2.4.a Analytic Methods

CALSIM II

As previously discussed (see Section A5.1 All Benefits), CALSIM II modeling was used to determine the project's 2030 and 2070 water quantities for Yolo Bypass deliveries and ecosystem improvement under different water-year conditions.

WSIP Unit Water Values (Selected Monetization Approach)

The WISP unit value benefit method used to value the water supply necessary for the Yolo Bypass water supplies was the same as that used for both the Incremental Level 4 Refuge supplies benefits (Section A5.2.2) and Lake Oroville coldwater pool improvements. However, the Yolo Bypass benefit valuation analysis instead used the lower Unit Water Values for Sacramento Valley water supplies applied to the CALSIM II determined water delivery quantities.

Alternative Cost (Alternate Monetization Approach)

As previously discussed and applied to both the project's Incremental Level 4 Refuge supply and Lake Oroville coldwater purposes, an Alternative Cost method can be used to determine the project's 2030 and 2070 ecosystem improvement benefits from increased Yolo Bypass deliveries under different water-year conditions. Shasta Lake Dam raise has been determined to be least cost alternative. Furthermore, given the comparability of their estimated future water quantity needs (annual averages of 39 TAF for Yolo Bypass and 32 TAF for Incremental Level 4 Refuges), the Alternative Cost analysis for the Yolo Bypass benefits was very similar to that performed for the Incremental Level 4 Refuge supply increases.

A5.2.4.b Data and Assumptions

It was assumed that the water provided for the purpose of increasing Yolo Bypass flows would otherwise likely be delivered to south-of-the-Delta water contractors. Consequently, south-of-the-Delta unit values were used for the benefit valuation of the Yolo Bypass flows.

A5.2.4.c Calculations

Projected Water Supply Requirements

Table A5-26 shows the projected future increase in annual water flows for Yolo Bypass for 2030, 2070, and the annual average for the 2030 to 2122 study period.

Table A5-26. Yolo Bypass Flow Increases for 2030 and 2070 (TAF/year)

Water Year Type	Quantity
2030 Results	
Full (All Water Years)	39
Dry	33
Critical	5
2070 Results	
Full (All Water Years)	39
Dry	33
Critical	8
Average (2030–2122)	
Long-Term	39

WSIP Unit Water Values (Selected Monetization Approach)

The economic benefits of the increase future water deliveries to the Yolo Bypass were estimated using the unadjusted WSIP Unit Water Values (see Table A5-7) applied to the projected average annual delivery quantities on a year by year basis over the project's entire 2030 to 2122 study period. The Sacramento Valley WSIP Unit Water Values are used. These values do not include any conveyance cost benefit adjustment and were used since it was presumed that the necessary water supplies would otherwise be expected to be obtained from Sacramento Valley agricultural water users.

Table A5-27 shows the estimated annual benefit values of future Yolo Bypass deliveries in 2030, 2045, 2070 and their annualized average quantity and benefit value over the project's entire 2030 to 2122 study period.

Table A5-27. Yolo Bypass Flows Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s)

		Benefit Value	
	Yolo Bypass Deliveries	WSIP Unit Water Value	Total
Year	TAF	$/AF	($1,000s)
2030	39	$229	$8,845
2045	39	$238	$9,190
2070	39	$238	$9,220
Annualized (2030–2122) [a]	**39**	—	**$9,117**

[a] Annualized benefit value was calculated using net present value over 93 years at a 3.5 percent discount rate.

Alternative Cost (Alternate Monetization Approach)

The Alternative Cost approach for monetization of the project's future Incremental Level 4 Refuge deliveries was also performed. As a result, an estimated annualized per acre foot unit cost for the enlargement of Shasta Lake of $1,465/AF was used to estimate the total benefit value for the Incremental Level 4 Refuge deliveries in 2030, 2045, 2070 and the annualized average over the project's entire 2030 to 2122 study period. Table A5-28 shows the results from use of the Alternative Cost approach to estimate the benefit values of Sites Reservoir's future Yolo Bypass deliveries.

Table A5-28. Yolo Bypass Flows Benefit Valuation: Alternative Cost Approach (2015$; $1,000s)

Year	Yolo Bypass Deliveries TAF	Benefit Value: Alternate Cost – Unit Value $/AF	Benefit Value: Total ($1,000s)
2030	39	$1,465	$56,577
2045	39	$1,465	$56,654
2070	39	$1,465	$56,783
Average (2030–2122) [a]	**39**	**—**	**$56,683**

[a] Annualized benefit value is calculated using net present value over 93 years at a 3.5% discount rate.

A5.2.4.d Modeling Results (Selected Monetization Approach)

Table A5-29 shows Sites Reservoir's Yolo Bypass water supply benefits as estimated based on the use of the applicable adjusted WSIP Unit Water Values (see Table A5-7).

Table A5-29. Yolo Bypass Supply Benefits: WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a] 2030	Annual Benefits [a] 2070	Annualized Benefit [b]
Average Conditions [c]			
Sites Reservoir	$8,845	$9,220	$9,117

[a] Based on WSIP Unit Water Values adjusted by water-year type, expected delivery location, and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP Unit Water Values interpolated between 2030 and 2045, after which 2045 unit values are used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's Yolo Bypass supply benefits were estimated to remain relatively unchanged between 2030 ($8.8 million) and 2070 ($9.2 million). The corresponding annualized benefit for the future 2030 to 2132 operating period was estimated to be $9.1 million. This is equal to an estimated average unit benefit value of $237 per acre foot for the future ecosystem benefits from the Yolo Bypass. This valuation reflects the comparatively lower benefit values for future north-of-the-Delta water uses.

A5.3 Recreation (WSIP Eligible Benefit)

Development of the Sites Reservoir would provide new recreational facilities and opportunities.

A5.3.1.a Analytic Methods

Facilities-Based Visitation Model

Recreation benefits were valued using visitation estimates for the new recreational areas planned for the Sites Project. Annual visitation was estimated using a facilities-based approach that accounts for Sites planned facilities, carrying capacity, the regional population of potential users, surface acreage of the reservoir and fluctuations in storage throughout the year, as well as the amenities and visitation levels of substitute reservoirs in the region. Additional information and recreation analysis is available in Appendix C of the NODOS Draft Feasibility Study (USBR 2017). These variables for consideration are consistent with those outlined in the WSIP Technical Reference (TR Section 5.4.5). Annual visitation was calculated as a measure of total visitor days, which represents one person visiting for any part or all of a calendar day. This metric is commonly used to inform recreational benefits, and should not be confused with a recreational *visit*, which could last for more than one calendar day (e.g., camping).

WSIP Recreational Visitation Model

A sample WSIP Visitation Model was obtained from CWC and considerable efforts was made to apply the model in accordance with the technical guidance provided by the WSIP Technical Appendix (TR Section 5.4.5). The required inputs were obtained and run through the model, but the model results did not fall within the expected range. The WSIP Recreational Visitation model's visitation estimates were highly sensitive to a few of the model variables including; the number of boat lanes, the regional population of potential users, and the reservoir's surface acreage. Collectively, these factors indicated that Sites was too dissimilar from the other recreation facilities that were used to construct and benchmark the WSIP Visitation Model to permit the model's use. As a result, the facilities-based approach was instead used to project Sites Reservoir's future visitation levels.

User Day Values (Selected Monetization Approach)

Recreation benefits were quantified using unit day values from the Recreation Use Values Database (RUVD) for North America (Rosenberger 2016) and the U.S. Forest Service (Loomis 2005). Both of these resources provided a meta-analysis of hundreds of studies that estimated the use value of recreation activities in the U.S. over the past half-century. These recreation use value estimates reflect the average net willingness-to-pay or consumer surplus, in per person per activity day units for different activities and regions in the U.S. This benefit measure was considered to be consistent with the WSIP Technical Reference guidance (TR Section 5.4.5).

The WSIP Technical Report also suggests possible use of USACE Unit Day Values (TR Section 5.4.5.7) as unit day values for recreation. However, these unit values are national recreation use value estimates while the U.S. Forest Service values are for recreation use within the Western Pacific region. In addition, the USACE data identifies only four general recreational use categories while the U.S. Forest Service data provides specific use values for more than a dozen different recreation categories applicable to the project. Consequently, it was determined that the U.S. Forest would provide a more accurate estimate of Sites Reservoir's future recreation use benefits and were therefore used for the recreation benefit value analysis.

The selected U.S. Forest Service unit values were then applied to the visitation projections to determine the total annual user benefits for recreation at Sites Reservoir. The net recreational benefit for the project was then calculated by accounting for the potential substitution of recreational use from nearby reservoirs.

A5.3.1.b Data and Assumptions

Table A5-30 presents the annual visitor day estimates and unit day values by activity-type.

Table A5-30. Annual Recreation Visitation by Primary Activity

Activity	Annual Visitor-Days	Unit Day Values
Shore fishing	16,254	$86.23
Boat fishing	8,407	$86.23
Picnicking	15,457	$42.96
Camping	27,514	$47.51
Sightseeing	36,992	$51.29
Swimming / beach use	42,223	$44.11
Walking	5,418	$72.33
Bicycling/Motorcycling	2,429	$94.26
Boating / water-skiing	29,145	$52.48
Hunting	560	$72.29
Other	2,429	$40.77
Total	**186,829**	**$46.81** (avg.)

A majority of the unit day estimates that were incorporated in this analysis come from the most recent 2016 study (Rosenberger 2016), using Western Region values (as defined by U.S. Census regions). Only in a few cases the 2005 activity values (Loomis 2005) used, as the reported activity types more accurately reflected the planned recreational uses at Sites (e.g., horseback riding).

The databases informing the unit day value estimates do not contain information on marginal values for changes in site quality, condition or other factors that would allow for adjusting the net willingness to pay estimates with consideration of the unique attributes of Sites. However, these are average values, and have been endorsed for use by Federal actors such as the U.S. Bureau of Reclamation for estimating recreational benefits at reservoirs in California.

It is assumed that 80 percent of visitor days at Sites represent new recreational visits, and that the remaining 20 percent of visits reflect existing recreational visitor days that would have occurred at nearby reservoirs. This substitution factor is considered conservative given the limited number of reservoirs in the area, as well as results from the WSIP Visitation. As detailed in the WSIP Technical Reference (Appendix F), the acreage of nearby reservoirs did not significantly affect day visitation, except for a small, but measurable contribution in the fall months. In addition, even for those people who have recreated elsewhere (particularly at overcrowded facilities) and shift their trip to Sites, the quality of the recreational experience at Sites Reservoir may be higher, thereby generating additional recreation benefits that are not captured in this analysis.

A5.3.1.c Calculations

Table A5-31 presents the results of the recreation benefits analysis for both a scenario with no substitution and the assumed substitution level of 20 percent. The estimated annual visitor days assumed in this analysis is approximately 187,000.

Table A5-31. Annual Recreation Benefits (2015$; $1,000s)

Activity	Annual Visitor Days	Unit Day Values ($/day)	Annual Benefits ($1,000s)	
			0% Substitution	**20% Substitution**
Shore fishing	16,254	$86.23	$1,402	$1,121
Boat fishing	8,407	$86.23	$725	$580
Picnicking	15,457	$42.96	$664	$531
Camping	27,514	$47.51	$1,307	$1,046
Sightseeing	36,992	$51.29	$1,897	$1,518
Swimming / beach use	42,223	$44.11	$1,863	$1,490
Walking	5,418	$72.33	$392	$314
Bicycling/Motorcycling	2,429	$94.26	$229	$183
Boating / water-skiing	29,145	$52.48	$1,530	$1,224
Hunting	560	$72.29	$41	$32
Other	2,429	$40.77	$99	$79
Total	**186,829**	**$46.81** (avg.)	$8,746	$6,997

A5.3.1.d Modeling Results (Selected Monetization Approach)

Table A5-32 presents the results of the recreation benefits analysis.

Table A5-32. Estimated Annual Recreation Benefits (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	**2070**	
Average Conditions [c]			
Sites Reservoir	$6,997	$6,997	$6,754

[a] Annual benefits reflect consumer surplus value for various recreational activities supported by Sites Reservoir and water operation scenarios under year 2030 and year 2070 levels of development. Benefits were attributed for only 75 percent of future visitation expected as new recreational use after accounting for potential substitution effects on other reservoirs in the region.

[b] Annualized benefits represent avoided costs relative to the Future No Project conditions over the planning horizon (2030 to 2122). Annual average is less than 2030 and 2070 values due to initial short ramp-up period before full benefits are generated.

[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's future recreation benefits were estimated to be approximately $7.1 million in 2030. Although future population growth might be expected increase future recreation demand and visitation, it was conservatively assumed that 2030 level of benefits would remain constant throughout the future 2030 to 2132 operating period. As a result, the annualized benefit over the 2030 to 2132 operating period was estimated to be $6.9 million (slightly reduced due to an assumed 50 percent operation during its first two operating years).

A5.4 Flood Reduction (WSIP Eligible Benefit)

Development of the Sites project would reduce the magnitude of flood events in the area along Funks Creek and Stone Corral Creek, providing a direct public benefit. Flood damage reduction benefits were estimated based on avoided costs. In the case of the Sites project, flood damage costs would be reduced for the Town of Maxwell's residential, commercial and public structures and contents. In addition, the project would reduce flood damages to adjacent agricultural lands and flood-related closures to

Interstate 5 (I-5) and State Route (SR) 20. Other flood damage savings include avoided clean-up, emergency response, and disruption costs for workers and businesses.

A5.4.1.a Analytic Methods

The benefit value of the project-related flood damage reduction was estimated based on the annualized net cost savings of flood damages for the future "with Project" conditions compared to the existing "No Action" conditions. The resulting Expected Annual Damages (EAD) savings was estimated based on hydraulic analysis that quantified the project-related reduction in flood impacted areas and flooding severity for six different flood event types (ranging from 5-year to 500-year flood events). GIS land use analysis inventoried the impacted areas. This approach corresponds to the "avoided cost" approach described in the WSIP Technical Reference report (TR Section 5.4.3).

Flood reduction benefits were estimated for current hydraulic conditions to represent the expected 2030 conditions. No adjustments in the hydraulic modeling or other analytic methods were used to project 2070 conditions (including Climate Change) since the flood damage benefits are relatively limited and difficulty in quantifying the changes in future flood events' magnitude.

As a result, the 2030 flood reduction benefits are applied for 2070. This was considered a conservation assumption since the WSIP's future climate changes conditions project more frequent and severe wet water years. This can be expected to result in more frequent flood events of greater magnitude.

Hydraulic Analysis

A HEC-RAS 2-D hydraulic model was used develop with and with-out project floodplains for the 5-, 10-, 25-, 50-, 100-, and 500-year flood events. A 50 percent capture scenario of runoff was used to inform the benefit analysis. While the HEC-RAS model was geographically constrained to lands west of I-5 (location of Maxwell), additional hydraulic modeling was conducted for the primarily agriculturally zoned lands east of the I-5.

Land Use Analysis

HEC-RAS floodplains were imported into GIS and overlaid on parcel data from Colusa County to identify lands, structures, and infrastructure exposed to flooding under with-project and without-project conditions. The acreage exposed to flooding was calculated for each event, and summarized by primary land use type. Further analysis was done to identify parcels and their respective land use characteristics to estimate avoided costs for each event.

Expected Annual Damages (Selected Monetization Approach)

The damage costs for each flood event were determined using cost-estimating approaches and data from USACE, FEMA and DWR's Flood Rapid Assessment Model (F-RAM). Expected annual damages were estimated by calculating total avoided costs (i.e., without project damages minus with project damages) for each of the six events modeled, then multiplying the sum of each interval probability by the average damage in that interval, followed by summing over all interval probabilities. This approach is consistent with the WSIP Technical Reference guidance (TR Section 5.4.3).

HEC-FDA and Other Flood Damage Models (Alternative Monetization Approach)

More detailed and extensive flood analysis and modeling (such as HEC-FDA or similar models outlined in the WSIP Technical Reference Section 5.4.3) was not performed because: (1) there is not a substantial urban flood reduction and (2) the flood benefits are a relatively small proportion of the project's total benefits. These more extensive and probabilistic analysis offered by these other models are generally used for more densely populated and urban areas and was not expected they would substantially change the benefit valuation for the project.

A5.4.1.b Data and Assumptions

Figure A5-2 shows the expected area of flooding for a 100-Year Flood Event. Three primary categories of avoided flood damage costs were analyzed: (1) agriculture; (2) structures and contents; and (3) transportation.

Agriculture

Agricultural damages were modeled based on crop loss estimates. Values were estimated for representative crop types in the Central Valley and account for both short-duration and long-duration flood events. The short duration (i.e., less than 5 days of inundation) per acre estimates, which include both weighted average crop income losses and land cleanup and rehabilitation costs, were applied to the equivalent crop types and acreage across the modeled flood events. The primary crop types in modeled floodplains include rice, pasture, tomatoes, and alfalfa.

Table A5-33 shows the acres at risk by crop type for a 100-yr flood event with their corresponding crop damage estimates used to estimate the agricultural flood damages.

Table A5-33. Projected Damages per Acre: 100-Year Flood Event (2015$; $1,000s)

Crop Type	Average Annual Damages ($/ac) [a]	Land Cleanup and Rehabilitation ($/ac)	Total Damage per Acre ($/ac) [b]	Reduced Flood Area (ac)	Total Damages ($1,000s)
Rice	$245	$262	$508	6,035	$3,066
Almonds	$1,746	$262	$2,008	266	$534
Tomatoes	$1,096	$253	$1,349	731	$986
Wine Grapes	$3,498	$253	$3,751	15	$55
Alfalfa	$269	$262	$532	731	$389
Pasture	-$16	$293	$277	1,779	$493
Other	$0	$265	$265	15	$4
Total				**9,570**	**$5,526**

Sources: DWR, *Flood Rapid Assessment Model (F-RAM)*. Developed by URS (November 2008); USACE, *National Economic Development Manual Series* (2010); USACE, *Sutter Basin Feasibility Report (*2013).
[a] Weight averages calculated based on expected crop income losses, variable costs not expended, and probability of flooding on a monthly basis.
[b] Represents a short-term flood event, which typically results in only limited damages to perennial crops.

Structures and Contents

Structures and content damages were modeled according to principles and guidelines prescribed by the USACE (USACE 2010). All structures intersecting with a floodplain in the Town of Maxwell were categorized as either residential or non-residential, based on the attribute data embedded in the Colusa County parcel file, and are assumed to have only one story. This taxonomy was used to assign specific damage functions to estimate both structures and content losses. Structure value was estimated by applying regional construction cost per square foot factors developed by Marshall & Swift to the reported structure size(s). The extent of damage (in this case, estimated replacement costs), were determined by multiplying the estimated structure value by depth damage curves and content-to-structure ratios used by USACE economists in the Sacramento District (USACE 2013). A constant flood depth of 5 feet above the first floor's elevation was assumed across all event types.

Indirect damages to account for cleanup costs, temporary housing, relocation assistance and other potential emergency costs were modeled as a proportion of direct damages, in this case 25 percent, according to estimates provided in the F-RAM model documentation.

It should be noted that damages to structures and contents represent full replacement value, not the depreciated value. This approach, used by FEMA, more accurately reflects the true cost to replace the damaged asset.

Only structures in the Town of Maxwell were included in this assessment of flood damages. There are additional structures scattered across the agriculturally zoned parcels outside of the Town center that would also be subject to damage but are not included to be conservative.

Table A5-34 shows the depth damage functions, indirect cost assumption, square footage of residential and non-residential structures that would avoid damage during a 100-year flood event from the without-project conditions compared to the with-project conditions. The damage estimates also include estimated avoided secondary damages (e.g., emergency response).

Table A5-34. Avoided Cost Assumptions and Estimates: 100-Year Flood Event (2015$; $1,000s)

Structure Type	Structure [a]	Content [a]	Indirect [b]	Square Feet [c]	Avoided Damage
Residential (1-story)	53%	29%	25%	76,584	$11,701
Non-Residential (1-story)	31%	100%	25%	52,666	$12,470
Total Avoided Costs					**$24,171**

Sources: DWR, *Flood Rapid Assessment Model (F-RAM)*. Developed by URS (November 2008); USACE, *National Economic Development Manual Series* (2010); USACE, *Sutter Basin Feasibility Report (*2013).
[a] Assumes 5-foot flood depth based on Sutter Basin Feasibility Report (USACE 2013).
[b] F-RAM indirect cost factor.
[c] The difference in building square feet impacted by the 100-year flood event between without-project and with-project conditions.

Transportation

The roads I-5, adjacent to the Town of Maxwell, and SR 20, between I5 and the City of Colusa, are subject to flood related closures. The damages stemming from transportation disruptions were modeled according to USACE guidance (USACE 1991), accounting for the value (i.e., opportunity cost) of time. Data on average daily trips at the identified transportation corridors, vehicle mileage costs, and median household income for adjacent counties were applied to assumptions on trip type (i.e., work, social, recreation, personal business, vacation) distributions by weekday and weekend, distance to reroute, and duration of delay. Collectively this information informed a daily weighted average damage estimate for both the I-5 and State Route 20. A one-day closure was assumed for all six flood events modeled.

Additional roadway repair damages were estimated using assumptions of the amount of roadway exposed, and cost-per-mile factors for different roadway classifications. Indirect damages to account for cleanup costs, emergency costs, and losses from disruption to employment and commerce were modeled as a proportion of direct damages, in this case 50 percent. Both repair and indirect damages were informed according to estimates provided in the F-RAM model documentation.

A5.4.1.c Calculations

Table A5-35 presents the estimated avoided costs across the primary damage categories for the six flood events modeled.

Table A5-35. Flood Benefits by Event and Impact Category (2015$; $1,000s)

Flood Type	Agriculture	Structure and Contents	Transportation	Total
500-Year	$4,856	$10,199	$1,365	$16,420
100-Year [a]	$5,526	$24,171	$1,552	$31,249
50-Year	$5,959	$23,337	$1,690	$30,986
25-Year	$6,323	$11,472	$1,767	$19,562
10-Year	$5,829	$7,912	$1,570	$15,311
5-Year	$5,211	$24,546	$1,410	$31,167

Sources DWR, *Flood Rapid Assessment Model (F-RAM)*. Developed by URS (November 2008); USACE, *National Economic Development Manual Series* (2010); USACE, *Sutter Basin Feasibility Report (*2013).
[a] Values shown in Tables A5-33 and A5-34.

Table A5-36 presents the steps that were taken to calculate the EAD (described above), integrating the damages across the six flood events modeled.

Table A5-36. EAD Calculation (2015$; $1,000s)

Frequency	Interval	Damages at Stage	Average	Interval	Summation
					EAD
0.002 →		$16,420			$4,377
	0.008		$23,835	$191	
0.01 →		$31,249			$4,187
	0.010		$31,118	$311	
0.02 →		$30,986			$3,876
	0.020		$25,274	$505	
0.04 →		$19,562			$3,370
	0.060		$17,437	$1,046	
0.1 →		$15,311			$2,324
	0.100		$23,239	$2,324	
0.2 →		$31,167			

A5.4.1.d Modeling Results (Selected Monetization Approach)

Table A5-37 presents the estimated benefit value of the project-related flood damage reduction.

Table A5-37. Flood Reduction Benefits (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$4,377	$4,377	$4,377

[a] Based on the project-related reduction in expected annual damages from future flood events.
[b] Annualized benefits interpolated annual physical benefits between 2030 and 2070, and then constant annual benefits after 2070.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The project's future flood reduction benefits were estimated to be $4.4 million in 2030. It was conservative assumed that 2030 benefit values would remain constant throughout the future 2030 to 2132 operating period. As a result, the annualized benefit for the future 2030 to 2132 operating period was estimated to be $4.4 million.

A5.5 Water Supply (Non-Proposition 1 Eligible Benefit)

Increased future water deliveries and improved water supply reliability are expected to be the project's largest non-public benefit. The project's water supply improvements are expected to ultimately serve both agricultural producers (located both north- and south-of-the-Delta) and south-of-the-Delta M&I users. The benefit valuation analysis assumes that the majority (approximately 58 percent) of the project water deliveries will be for agricultural use. This was considered a realistic characterization of the JPA current partnering water contractors and conservative assumption given the far higher value placed on M&I water supplies.

In addition, it is expected that Sites Reservoir will be able to recapture some quantities of the Shasta's future deliveries that are scheduled as a result of the project's coldwater pool benefits. It is currently envisioned that the reclaimed would be allocated to JPA and used to provide supplementary water deliveries for south-of-the-Delta M&I users. The sales revenues from the reclaimed water supplies would then be used to cover the O&M costs assigned to the project's various public benefits. The water supply benefit analysis therefore accordingly analyzed the project's future water deliveries separately and then combined the findings to report a single overall water supply benefit value.

A5.5.1 M&I Water Supply

Sites Reservoir will improve future water supply reliability for M&I water users predominantly located south of the Delta.

A5.5.1.a Analytic Methods

Two approaches that provide M&I water supply benefits at 2030 and 2070 conditions in average annual value (2015 dollars): Economic Model Approach: California Water Economics Spreadsheet Tool (CWEST) and Unit Value Approach using WISP provided Unit Water Values as dollar value per acre-foot.

The M&I water supply benefit analysis relies on CALSIM II modeling to quantify the project's expected future M&I deliveries under different water-year conditions. CWEST modelling to determine the project's future M&I water supply benefits. Consequently, the economic benefits of increased future M&I water deliveries were estimated on a "willingness to pay" basis.

CALSIM II

As previously discussed in Section A5.1, CALSIM II modeling was used to determine the project's 2030 and 2070 M&I water supply deliveries by location under different water-year conditions. The water quantities for the intervening years were interpolated individually by purpose, water-year type and location.

The WSIP 2030 and 2070 without Project CALSIM II model runs were compared to the WSIP 2030 and 2070 with Project CALSIM II model runs to quantify the annual deliveries to Sites Project Participants. Delivery is the calculated quantity at the location of each Sites Project Participant after accounting for conveyance losses, consistent with WSIP TR Guidelines (TM Section 4.12.3).

CWEST (California Water Economics Spreadsheet Tool) (Selected Monetization Approach)

CWEST was developed for the US Bureau of Reclamation's Coordinated Long Term Operation of the Central Valley Project and State Water Project Environmental Impact Statement (LTO EIS) Environmental Consequences analysis.

CWEST is an economic benefit valuation tool developed to provide consistent and transparent analysis of economic benefits of M&I water supplies for CVP contractors and SWP Table A contract holders. CWEST is an economic simulation and optimization tool that represents each individual CVP and SWP M&I water user's decision making under 2030 and 2070 conditions based on publicly available information. CWEST determines how CVP and SWP M&I water users will meet their 2030 and 2070 water demand levels at their minimum economic cost given their supply constraints and alternatives. Detailed technical discussion of the CWEST model is available from the Appendix 19A of the Draft Long Term Operation EIS (USBR 2015).

CWEST quantifies M&I water supply benefit by simulating the water management decisions made at the district or agency level. The model's objective is to select each Sites Project participant's set of management actions that meet their annual water demand at the lowest cost. The estimated cost difference between the with and without Sites Reservoir scenarios determines the project's M&I water supply benefit. Similar to the other existing California M&I water economics tools, CWEST minimizes the total costs of meeting annual M&I water demands subject to applicable operational and supply constraints. These costs include:

- Conveyance and operations costs;
- Existing and new permanent supplies, transfer or other option costs;
- Local surface and groundwater operations;
- Lost water sales revenues; and
- End-user shortage costs.

CWEST incorporates level of demand, quantity and type of local water supplies, and costs for both 2030 and 2070 development conditions into its benefit value estimates.

CWEST was selected to estimate M&I water supply benefits in the WSIP application based on the criteria in Technical Reference document Section 4.12 Water Supply Analysis (CWC, 2016). CWEST was updated for the WSIP benefit valuation analysis to evaluate nine representative participants for the M&I Sites Project. The updates to CWEST include 2030 and 2070 analysis using 2015 UWMP data, inclusion of only Sites Project participants, and all relevant assumptions outlined in the CWC Technical Reference document. Appendix 19A of the LTO EIS details the economic tool's development history, methodology, and assumptions (Reclamation, 2015).

WSIP Unit Water Values (Alternate Benefit Monetization Approach)

As previously discussed in Section A5.1 All Benefits, WSIP Unit Water Values modeling is an approved benefit monetization approach and it was used to determine the project's 2030 and 2070 M&I water supply benefit values under different water-year conditions.

This approach applies a dollar value per acre-foot ($/AF) values for water by region, water-year type, and future condition. Conveyance costs were included in the benefit calculation to better represent the full willingness to pay by south-of-the-Delta water contractors.

As the WSIP TM acknowledges, there are several reasons and factors that may ensure that the WSIP unit values would undervalue the M&I benefits. As previously discussed in Section A5.1.1.a, the WSIP unit values implicitly assume that there would be a sufficient number of willing sellers for the price and quantity of water that could supply the water being valued. This assumption may be difficult to meet for large quantities water (especially such as those required for the project's M&I deliveries).

The project would provide long-term and reliable deliveries. This contrasts with the current water transfer market which predominantly consists of limited term contracts and where the demand, supply and prices vary considerably depending on the recent and projected water-year type.

The third-party costs of water transfers are not included in the Unit Water Values. Major and/or long-term reallocations of water use resulting from water transfers can be expected to potentially result in direct and indirect economic impacts to the region's workers, supporting businesses and consumers. The WSIP Unit Water Values are predominantly derived from past water transfer and therefore based on the financial relationship solely between the water buyer and sellers. As a result, it does incorporate any costs or losses to third-party entities or the larger economy. Inclusion of any additional third-party costs would be expected to increase the unit values and hence the benefit values or other water sources.

A5.5.1.b Data and Assumptions

The major update to CWEST was removing non- Sites Project Participants from the model and including any Sites Project Participants that were not including in the existing version on the model. CWEST updates for the WSIP application allows for analysis at 2030 and 2070 and is in 2015 dollars. The main data source for the update was individual Sites Project participants Urban Water Management Plans (UWMPs).

A5.5.1.c Calculations

Water Supply Projections

Table A5-38 shows the estimated water deliveries by water-year type projected in 2030, 2070, and the annual average in the 2030 to 2122 operating period.

Table A5-38. Increase in Water Supply Deliveries (TAF/year)

Period	NOD Agriculture	SOD Agriculture	SOD M&I	SOD Recaptured	Total
2030 Results					
Long-Term Average	110	25	106	11	254
Wet	62	5	15		82
Above Normal	86	68	52		144
Below Normal	125	28	121		273
Dry	157	56	213		426
Critical	153	53	185		391
2070 Results					
Long-Term Average	137	30	117	11	295
Wet	110	5	15		130
Above Normal	146	12	72		230
Below Normal	152	26	116		294
Dry	161	69	257		488
Critical	133	41	145		319
2030-2122 Results					
Long-Term Average	**131**	**29**	**114**	**11**	**286**

Source: CALSIM II.
Note: Values may not sum due to rounding.

CWEST Model Results (Selected Monetization Approach)

Tables A5-39 and A5-40 show the detailed CWEST modeling results for the project under the future 2030 and 2070 without Project CALSIM II model runs and the WSIP 2030 and 2070 with Project CALSIM II model runs. Similar to many impact models, CWEST generally evaluates the conditions and estimates outcomes for both a “with project” and “without project” scenarios. The project’s impacts are then determined by the differences between the two scenarios.

Both tables show the average annual delivery and conveyance cost for each of the representative M&I water users. The delivery cost is subtracted from the total estimated benefit for each M&I water user from their expected cost savings gained by using the project water supply rather than other alternate sources. The tables also show potential water supply quantity from their alternate water sources (e.g.,

Table A5-39. M&I Water Supply Benefits: 2030 CWEST Modeling Detailed Model Results (2015$; $1,000s)

Benefit Factor	Representative Water Districts and Agencies									Total
	Castaic Lake	Zone 7	Santa Clara Valley	Antelope Valley-East Kern	San Gorgonio Pass	Desert	Coachella Valley	San Bernardino Valley	City of American Canyon	
Average Deliveries (TAF/Yr)	4.0	16.2	19.4	1.6	11.3	5.3	21.4	24.3	2.6	106
Delivery Cost	-$602	-$1,041	-$1,219	-$300	-$2,097	-$974	-$3,969	-$4,494	-$197	-$14,892
New Supply (TAF/Yr)	0	-4.7	-3.4	0	-1.6	-0.5	-2.1	-1.5	0	-14
Annualized New Supply Costs	$0	$4,090	$1,106	$0	$1,469	$223	$981	$575	$2	$8,446
Surface/GW Storage Costs	$0	$81	$563	$0	$0	$0	$0	$0	$0	$644
Lost Water Sales Revenues	$221	$2,193	$1,469	$102	$335	$219	$900	$1,302	$112	$6,852
Transfer Costs	$359	$1,143	$175	$0	$926	$0	$0	$0	$223	$2,827
Shortage Costs	$300	$9,784	$7,175	$1,834	$1,553	$1,480	$3,467	$518	$53	$26,165
GW pumping savings	$665	$304	$0	$114	$0	$411	$5,336	$7,285	$0	$14,115
Excess Water Savings	$13	$48	$485	$105	$1,265	$517	$0	$0	$147	$2,580
Average Annual Cost	$957	$16,601	$9,754	$1,856	$3,451	$1,876	$6,715	$5,187	$340	$46,737

Table A5-40. M&I Water Supply Benefits: 2070 CWEST Modeling Detailed Model Results (2015$; $1,000s)

Benefit Factor	Representative Water Districts and Agencies									Total
	Castaic Lake	Zone 7	Santa Clara Valley	Antelope Valley-East Kern	San Gorgonio Pass	Desert	Coachella Valley	San Bernardino Valley	City of American Canyon	
Average Deliveries (TAF/Yr)	4.5	17.8	21.4	1.8	12.5	5.8	23.6	26.7	2.8	117
Delivery Cost	-$663	-$1,147	-$1,348	-$330	-$2,308	-$1,072	-$4,369	-$4,946	-$217	-$16,400
New Supply (TAF/Yr)	0	-3.9	-20.5	0	-2.8	-2.0	-18.1	-22.3	0	-70
Annualized New Supply Costs	$179	$5,344	$41,092	$0	$5,228	$1,924	$23,414	$30,178	$18	$107,376
Surface/GW Storage Costs	$0	-$119	$213	$0	$0	$0	$0	$0	$0	$94
Lost Water Sales Revenues	$350	$2,277	-$786	$85	$299	$141	$438	$2,738	$126	$5,668
Transfer Costs	$976	$3,445	-$225	$0	$810	$0	$0	$0	$903	$5,909
Shortage Costs	$127	$21,652	$7,085	$3,474	$1,460	$6,421	$17,818	$14,263	$177	$72,476
GW pumping savings	$626	$312	$0	$95	$0	$442	-$129	-$433	$0	$914
Excess Water Savings	$0	$0	$0	$20	$1,489	$110	$0	$0	$136	$1,756
Average Annual Cost	$1,596	$31,763	$46,031	$3,345	$6,978	$7,967	$37,171	$41,799	$1,143	$177,793

conservation, recycling, and desalination). These are the alternate supplies that can be adopted as management actions to reduce their future water shortage costs. The new supply quantity is a key decision variable in the CWEST model analysis.

As shown in Tables A5-39 and A5-40, the CWEST analysis projects that between 2030 and 2070, Sites Reservoir's annual M&I net supply benefits would increase from $46.7 million to $177.8 million. Unsurprisingly the majority of the M&I benefits would be gained by the four water agencies that would receive the largest M&I deliveries.

The largest share of the Sites Reservoir's projected 2030 M&I benefits would be expected to result from its avoided shortage costs which would total $26.2 million and would account for 42.5 percent of the total benefits. The other important sources of M&I benefits in 2030 would be savings in groundwater pumping costs ($14.1 million), avoided development costs for other new supply sources ($8.4 million) and reduced water purchase costs ($6.9 million). Together these additional three cost savings categories would account for 47.7 percent of the project's total M&I benefits.

In 2070 the project's benefits from avoided shortage costs are projected to increase to approximately $72.5 million but would account for only 37.3 percent of the $177.8 million in total benefits. Instead the avoided development of other new supply sources would result in $107.4 million cost savings and the largest share (55.3 percent) of the project's 2070 M&I benefits.

Table A5-41 summarizes M&I Water Supply benefit values from the CWEST modeling. The equivalent Unit Water Values for M&I are estimated to be $440 per acre foot in 2030 and $1,521 in 2070.

Table A5-41. M&I Water Supply Benefit Valuation: CWEST Water Values (2015$; $1,000s)

Year	M&I TAF	Benefit Value CWEST $/AF	Total ($1,000s)
2030	106	$440	$46,737
2045	110	$874	$95,883
2070	117	$1521	$177,793
Annualized (2030 - 2122) [a]	**114**	-	**$114,107**

Note:
[a] Annualized benefit value is calculated using net present value over 93 years and 3.5% discount rate.

WSIP Unit Water Values (Alterative Monetization Approach)

The economic benefits of the increase future water deliveries for M&I were estimated using the adjusted WSIP Unit Water Values (see Table A5-7) applied to the projected average annual delivery quantities on a year by year basis over the project's entire 2030 to 2122 study period. Table A5-42 shows the estimated annual benefit values of future M&I water supply in 2030, 2045, 2070 and the annualized average over the project's full 2030 to 2122 study period.

Table A5-42. M&I Water Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s)

Year	M&I Water Supply TAF	Benefit Value WSIP Unit Water Value $/AF	Total ($1,000s)
2030	106	$457	$48,517
2045	110	$828	$90,761
2070 [b]	117	$806	$94,208
Annualized (2030–2122) [a]	**114**	-	**$81,742**

[a] Annualized benefit value is calculated using net present value over 93 years and 3.5 percent discount rate.

[b] The 2070 unit value is lower than the 2045 unit value because of the change in the hydrological year type incidence result in a wetter average year.

A5.5.1.d Modeling Results (Selected Monetization Approach)

Table A5-43 shows the estimated future M&I water supply benefit values obtained from the CWEST for 2030 and 2070.

Table A5-43. M&I Water Supply Benefits: CWEST Modeling (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$46,737	$177,793	$114,107

Source: CWEST

[a] Based on CWEST Modeling adjusted by water-year type, expected delivery location and conveyance energy costs.

[b] Annualized benefits represent avoided costs relative to the Future No Project conditions over the planning horizon (2030 to 2122), and are adjusted for expected variations in surface area conditions.

[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The model results indicate an increase in M&I benefits from $46.7 million in 2030 to $177.8 million in 2070. The corresponding annualized benefit for the future 2030 to 2132 operating period is estimated to be $114.1 million. This is equal to an estimated average unit benefit value for M&I of $1,302 per acre foot.

The major increase in future M&I benefits is only partly the result of the 11 TAF (10.4 percent) increase in 2070 average annual M&I deliveries that are projected to occur as a result of future climate change conditions enabling greater diversions of Sacramento River flows.

Instead major factors driving the M&I benefit increase are increased water demand, reduced water availability from other water supplies (including groundwater depletion and climate change reductions in future Sierra snowpack levels) and the limited availability of alternate water sources.

A5.5.2 Agricultural Water Supply

Sites Reservoir will improve water supply reliability to agricultural water users, particularly during dry years. Over 80 percent of the future agricultural water deliveries are current expected to be for water contractors located within the Sacramento Valley. The remaining agricultural deliveries are expected to be for south-of-the-Delta agricultural water users.

A5.5.2.a Analytic Methods

CALSIM II

As previously discussed in Section A5.1 All Benefits, CALSIM II modeling was used to determine the project's 2030 and 2070 agricultural water supply deliveries by location under different water-year conditions.

WISP Unit Water Values (Selected Monetization Approach)

WSIP Unit Water Value modeling was used to determine the project's 2030 and 2070 agricultural water supply prices under different water-year conditions. The WISP unit value benefit approach used to value the project's future increases in agricultural water supplies was the same as that used for the Incremental Level 4 refuge, Lake Oroville coldwater pool and Yolo Bypass supply benefits (Sections A5.2.2-4). The agricultural benefit valuation analysis also similarly used the adjusted Unit Water Values (for the south-of-the-Delta deliveries) and the Sacramento Valley values (its future north-of-the-Delta deliveries) correspondingly applied to the CALSIM II determined future agricultural water supply quantities.

LTGEN/SWP

As previously discussed in Section A5.1 All Benefits, LTGEN/SWP was used to determine the project's 2030 and 2070 average conveyance energy costs and when appropriate adjust the water benefit values for south-of-the-Delta deliveries.

SWAP Model (Alternate Monetization Approach)

The SWAP model is a regional agricultural production and economic optimization model that simulates the decisions of farmers across 93 percent of agricultural land in California. The model assumes that farmers maximize profits (revenue minus cost) by choosing total input use (e.g., total crop acres) and input use intensity (e.g., applied water per acre) subject to market, resource, and technical constraints.

Although the SWAP model is not specifically recommended in the WSIP TM Section 5 – Monetizing the Value of Project Benefits, the CWC discussed the SWAP model in Appendix D – Unit Values for Water. The CWC also provided the SWAP version 6.1 model for public use. The Sites Reservoir his version of the SWAP model was used to provide an alternative benefit value of the project's agricultural benefits. As discussed in the WSIP TM (Appendix D), the model was calibrated using 2010 crop acreage and water use information. Crop prices and cost data from 2011 and 2012 were used to calibrate it is economic factors.

However, for reasons discussed below, it was determined that the SWAP Model majorly misrepresented and underestimated the project's future agricultural benefit values. As a result, the SWAP model was not selected as the monetization approach to determine Sites Reservoir's agricultural benefits for the WSIP application.

A5.5.2.b Data and Assumptions

In addition to the Appendix D discussion of the SWAP model and its relationship to the WSIP Unit Water Values, extensive discussion of the SWAP model's methodology, data sources and assumptions are available in agency technical reports and the technical appendices of several recent federal feasibility studies of proposed water storage project and water management programs in California. The SWAP Model Update and Application to Federal Feasibility Analysis provides a comprehensive overview of the SWAP model and its application (USBR/DWR 2012). The Final Modeling Appendix to the Shasta Lake Water Resources Investigation also provides extensive discussion of the SWAP Model and its use for economic valuation of agricultural water supply increases (USBR 2014).

A5.5.2.c Calculations

Water Quantities

Table A5-38 shows the estimated agricultural water deliveries by water-year type projected in 2030, 2070, and the annual average in the 2030 to 2122 operating period.

WSIP Unit Water Values

Future adjusted WSIP Unit Water Values by water-year type and location are previously shown in Table A5-7. As previously discussed in Section A5.1, future annual agricultural water supply quantities were interpolated based on water-year type and location.

The adjusted WSIP Unit Water Values were used for south-of-the-Delta use (i.e. including expected conveyance energy cost necessary to deliver the agricultural water) (Table A5-44). No conveyance energy cost adjustments were applied to the locally supplied agricultural water (i.e. for north-of-the-Delta agricultural water users) since the energy need for their deliveries will be minor.

Table A5-44. Agricultural Water Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s)

Year	Agricultural Supply		Benefit Value	
	NOD (TAF)	SOD (TAF)	WSIP Unit Water Value [b] $/AF	Total ($1,000s)
2030	110	27	$229 / $457	$37,443
2045	121	28	$238 / $828	$51,732
2070 [b]	137	30	$238 / $806	$56,995
Annualized (2030–2122) [a]	**131**	**29**	**—**	**$50,188**

[a] Annualized benefit value is calculated using net present value over 93 years at a 3.5 percent discount rate.
[b] The 2070 unit value is lower than the 2045 unit value because of the change in the hydrological year type incidence result in a wetter average year.

SWAP Model (Alternate Monetization Approach)

The Sites Reservoir SWAP analysis used the CWC provided SWAP version 6.1 model without any modifications to its model code or baseline data. Review of the CWC SWAP model concluded that the water supply portfolios in the Sacramento Valley, especially Tehama and Colusa Counties, were not consistent with their actual current and future conditions. The CWC SWAP model was not updated to more accurately quantify existing or future Sacramento Valley baseline water supply portfolios due to time constraints, data limitations, and fundamental concerns about SWAP's applicability for determining the project's agricultural supply benefits.

The uncorrected CWC SWAP model was nonetheless run to estimate the project's agricultural supply benefits. Tables A5-45 and A5-46 show the SWAP model results for 2030 and 2070 conditions.

Table A5-45. Agricultural Water Supply Benefit Valuation: 2030 SWAP Values (2010$; $1,000s)

Benefit Factor	2030 Conditions (Average Water Year)		
	Without Project	With Project	Difference
Total Surface Water Use (TAF)	14,099	14,127	27.9
Income Over Expenses	$12,337,876	$12,339,675	$1,799
Groundwater Total Cost [a]	$462,889	$462,889	$0
Groundwater Pumped (TAF)	4,384	4,384	0
Acres Irrigated (1,000s)	6,148	6,154	6.9
Variable Fallow Expenses [b]	na	na	($263)
Consumer Surplus Change			$7,451
NODOS NED Benefits			**$9,513**

[a] Decreased groundwater use and costs represent avoided cost benefits for the project.
[b] Decreased variable fallow expenses represent avoided cost benefits for the project.

Table A5-46. Agricultural Water Supply Benefit Valuation: 2070 SWAP Values (2010$; $1,000s)

Benefit Factor	2070 Conditions (Average Water Year)		
	Without Project	**With Project**	**Difference**
Total Surface Water Use (TAF)	13,532	13,661	129
Income Over Expenses	$13,250,159	$13,257,471	$7,312
Groundwater Total Cost [a]	$599,805	$598,563	($1,242)
Groundwater Pumped (TAF)	4,356	4,346	(10.3)
Acres Irrigated (1,000s)	5,946	5,973	27.5
Variable Fallow Expenses [b]	na	Na	($1,046)
Consumer Surplus Change			$22,211
NODOS NED Benefits			**$31,811**

[a] Decreased groundwater use and costs represent avoided cost benefits for the project.
[b] Decreased variable fallow expenses represent avoided cost benefits for the project.

Total surface water use reported in the tables were solved within the model and may not represent the total surface water available to agriculture calculated in CALSIM II. Therefore, the difference in total surface water use between the without project and with project does not match with the reported Sites water deliveries in Table A5-44. There are multiple influences on the quantity of surface water use within SWAP such as technology, crop prices, groundwater pumping constraints from SGMA, and the price of surface water deliveries. These results further resigned the use the CWC provided SWAP model to estimate the benefits of agricultural water supply.

The largest share of the agricultural water benefit estimated by SWAP is expected from the consumer surplus benefits from the increased agricultural production enabled by the project's water deliveries. This corresponds to the total net value for food consumers obtain from the increased food production (and includes the value above the market price that many consumers may possess).

The other major source of agricultural benefit results from gains in the "income over expenses" (or producer surplus) generated by the increase and/or change in the agricultural activity enabled by the additional agricultural water supplies.

The SWAP agricultural supply benefit estimates in Tables A5-45 and A5-46 are shown in 2010 dollar terms. These values were adjusted into 2015 dollar terms using the Consumer Price Index and their results are summarized in Table A5-47. Table A5-47 also shows the corresponding annualized average benefit value of the agricultural benefits based on the SWAP analysis.

Table A5-47. Incremental Agricultural Water Supply Benefit Valuation: SWAP (SGMA) Values (2015$; $1,000s)

Year	Agricultural Supply TAF	Benefit Value	
		SWAP (SGMA) Water Value $/AF [b]	**Total ($1,000s)**
2030	137	$76	$10,465
2045	148	$132	$19,664
2070	167	$209	$34,996
Annualized (2030–2122) [a]	**161**	**—**	**$23,075**

Note:
[a] Annualized benefit value is calculated using net present value over 93 years and 3.5 percent discount.
[b] Water value is based on total TAF; SWAP underestimates north-of-the-Delta water use.

The CWC SWAP model was determined inadequate to quantify agricultural water supply benefits largely due to its incorrect baseline Sacramento Valley water supply, use and pricing assumptions.

A5.5.2.d Modeling Results (Selected Monetization Approach)

The estimated total benefit value was estimated based on the expected future average hydrological year type and the WSIP Unit Water Values applicable based on the use location of the delivered agricultural water. Table A5-48 shows the estimated future agricultural water supply benefit values.

Table A5-48. Agricultural Water Supply Benefits: WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit ($) [b]
	2030	2070	
Average Water Conditions [c]			
Sites Reservoir	$37,443	$56,995	$50,188

[a] Based on WSIP Unit Water Values adjusted by water-year type, expected delivery location, and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP Unit Water Values interpolated between 2030 and 2045, after which 2045 unit values are used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The agricultural supply analysis estimates that future agricultural benefits will increase from $37.4 million in 2030 to approximately $57.0 million in 2070. The corresponding annualized benefit for the future 2030 to 2132 operating period is estimated to be $50.2 million. This is equal to an estimated average unit benefit value of $337 per acre foot for agricultural water use. This benefit valuation reflects the high proportion of future north-of-the-Delta agricultural use envisioned by the project.

A5.5.3 Recaptured Water Supply

Sites Reservoir will also collect limited quantities of additional “Recaptured” water related to its releases supporting its anadromous fish deliveries. Rescheduled Shasta Lake deliveries that occur when Sacramento River flows exceed its required “maintenance” levels would add “surplus” supplies that Sites Reservoir would be entitled and able to divert without adversely affect the downstream river conditions or deliveries.

These recaptured water quantities are expected to average approximately 10 TAF per year and would be assigned to the JPA. The JPA would sell the recaptured water predominantly to south-of-the-Delta M&I water contractors. The recaptured water’s sales revenues will then be used to cover the future annual O&M expenses assigned to the public benefit uses.

A5.5.3.a Analytic Methods

CALSIM II

As previously discussed in Section A5.1 All Benefits, CALSIM II modeling was used to determine the project’s 2030 and 2070 recaptured water quantities and its supply deliveries by location under different water-year conditions.

CWEST Model Results (Selected Monetization Approach)

The recaptured water is expected to be predominantly delivered to south-of-the-Delta water contractors and will therefore represent supplemental M&I deliveries. Therefore, the M&I analyses and findings (Section A5.5.1) are similarly applicable to the recaptured water supplies.

WSIP Unit Water Values (Alternate Benefit Monetization Approach)

As previously discussed above, WSIP Unit Water Values modeling for the M&I analysis (Section A5.5.1) are similarly applicable to the recaptured water supplies.

A5.5.3.b Data and Assumptions

The data and assumptions for the M&I analysis (Section A5.5.1) are similarly applicable to the recaptured water supplies.

A5.5.3.c Calculations

Water Supply Projections

The future recaptured water supply quantities determined by CALSIM II are shown above in Table A5-44.

CWEST Model Results (Selected Monetization Approach)

Unit benefit values for the project's M&I deliveries were estimated based on the M&I supply's average quantities and CWEST benefit value estimates under future 2030, 2045 and 2070 conditions.
Table A5-49 shows the estimated unit values. These unit M&I benefit values were applied to their corresponding project future water delivery quantity to determine benefit value estimates for the project's recapture water supplies under future 2030, 2045 and 2070 conditions. Table A5-49 shows the estimated benefit values for the project's future recaptured water supply.

Table A5-49. Recaptured Water Supply Benefit Valuation: CWEST Water Values (2015$; $1,000s)

Year	Recaptured Water Supply TAF	Benefit Value CWEST $/AF	Total ($1,000s)
2030	11	$440	$4,845
2045	11	$874	$9,619
2070	11	$1521	$16,733
Annualized (2030–2122) [a]	**11**	**-**	**$11,123**

[a] Annualized benefit value is calculated using net present value over 93 years at a 3.5 percent discount rate.

WSIP Unit Water Values (Alternative Monetization Approach)

The WSIP Unit Water Value analysis for the recaptured water supplies was the same as that applied to the project's M&I supplies. The recaptured water supply's economic benefits were estimated using the adjusted WSIP Unit Water Values (see Table A5-7) applied to the projected average annual delivery quantities on a year by year basis over the project's entire 2030 to 2122 study period.

Table A5-50 shows the estimated annual benefit values of future recaptured water supply in 2030, 2045, 2070 and the annualized average over the project's full 2030 to 2122 study period.

Table A5-50. Recaptured Water Supply Benefit Valuation: WSIP Unit Water Values (2015$; $1,000s)

Year	Recaptured Water Supply TAF	Benefit Value WSIP Unit Water Value $/AF	Total ($1,000s)
2030	11	$457	$5,029
2045	11	$828	$9,619
2070 [b]	11	$806	$8,866
Annualized (2030–2122) [a]	**11**	**—**	**$8,038**

[a] Annualized benefit value is calculated using net present value over 93 years at a 3.5 percent discount rate.
[b] The 2070 unit value is lower than the 2045 unit value because of the change in the hydrological year type incidence result in a wetter average year.

A5.5.3.d Modeling Results (Selected Monetization Approach)

Table A5-51 shows the estimated future recaptured water supply benefit values obtained based on the CWEST values for 2030 and 2070.

Table A5-51. Recaptured Water Supply Benefits: CWEST Modeling (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$4,845	$16,733	$11,123

Source: CWEST.
[a] Based on CWEST modeling adjusted by water-year type, expected delivery location, and conveyance energy costs.
[b] Annualized benefits represent avoided costs relative to the Future No Project conditions over the planning horizon (2030 to 2122) and are adjusted for expected variations in surface area conditions.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The model results indicate an increase in recaptured water supply benefits from $4.8 million in 2030 to $16.7 million in 2070. The corresponding annualized benefit for the future 2030 to 2132 operating period is estimated to be $11.1 million. This is equal to an estimated average unit benefit value for Recaptured Water Supply of $1,302 per acre foot.

Same as it is for M&I, the major increase in recaptured water supply benefits is driven by increased water demand, reduced deliveries from other water supplies (including groundwater depletion and climate change reductions in future Sierra snowpack levels) and the limited availability of alternate water sources.

A5.5.4 Total Water Supply

The project's total water supply reliability benefits are shown in Table A5-52. The total water supply benefit is the project's combined agricultural water supply benefits (estimated using adjusted WSIP Unit Water Values) and its M&I and recaptured water supply benefits (estimated by the CWEST model).

Table A5-52. Total Water Supply Benefits: CWEST Results and WSIP Unit Water Values (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$89,024	$251,521	$175,418

[a] Based on CWEST model results and WSIP Unit Water Values adjusted by water-year type, expected delivery locations, and conveyance energy costs.
[b] Annualized benefits assume interpolated annual physical benefits between 2030 and 2070 and then constant annual benefits after 2070. WSIP Unit Water Values interpolated between 2030 and 2045, after which 2045 unit values are used.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

Based on the assumed water use split between agricultural, M&I and recapture water use and their use location, the water supply analysis estimate that the project's future water supply benefits will increase from $89.0 million to $251.5 million in between 2030 and 2070. The corresponding annualized benefit over the entire future 2030 to 2132 operating period is estimated to be $175.4 million. This is equivalent to a $760 per acre foot average water supply unit benefit value.

Based on the benefit value differentials, the water supply analysis also indicates the project's total water supply benefits could be increased under different water use allocation that increase south-of-the-Delta and/or M&I water deliveries.

A5.6 Hydropower – System-wide (Non-Proposition 1 Benefit)

The proposed Sites Reservoir project will include new hydropower capacity, generation and pump-back facilities. The seasonal water diversions for the reservoir require power while subsequent water releases would generate power. A pump-back component of the project operations was also modeled and pump-back operations would occur throughout the year as conditions allow.

The hydropower facilities will enable the Sites Reservoir to generate power from its water releases to offset its pumping costs. The pump-back operations were designed to enhance the project's economic performance by capturing opportunities offered by the energy market (energy price differentials between on-peak and off-peak hours). The pump-back facilities also provide the support and products needed to integrate renewable energy (e.g., wind and solar) and thereby potential result in ancillary service[1] and system-wide capacity[2] benefits for the state's power system.

A5.6.1.a Analytic Methods

Future hydropower benefits were modeled by both DWR's Power and Risk Office (PARO) and by Bureau of Reclamation Contractors using the PLEXOS model. These non-public benefits are very difficult to forecast due to a rapidly changing market for valuing ancillary and system-wide capacity benefits due to the rapid and extensive new development of wind and solar resources. The revenue variability for hydropower generation over the last decade can be seen by looking at the fluctuations in the State Water Project past hydropower revenues (add source).

DWR PARO Analysis:

DWR's PARO analysis modeled Sites Reservoir's future incidental and optimized hydropower operation strategies. The incidental scenario that assumes that pumping and generation are scheduled according to expected demand for water deliveries. The optimization scheme maintains the alternatives' operations, constraints, and assumptions as envisioned by the water operations modeling team, but optimizes operations to maximize the Power Portfolio value of the assets.

PARO used two power portfolio models to estimate the costs and revenues from hydropower facilities' operations: Electric Power Research Institute's (EPRI) Energy Portfolio Model (EPM), Version 5; and the EPRI's Fast Fit model, Version 2.5.

Energy Portfolio Model (Selected Monetization Approach)

PARO used the EPRI (EPM, Version 5, as a power portfolio model to project the Reservoir future power costs and revenues. EPM is a computer software model designed to help businesses manage value and risk in the power and energy markets.

The EPM translates the facility operations and underlying commodity prices into a representative set of financial instruments and incorporated into the EPM to determine the probabilistic monetary value of the power portfolio under the study's operational scenario. The EPM provides a set of templates to facilitate describing and evaluating common types of power and fuel contracts (supply contracts,

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1 Ancillary services benefits are power facility functions that support the power system's generating capacity, energy supply, and delivery. Ancillary services include improved capabilities for the power "grid" to respond to electricity demand, supply, or other market imbalances.

2 System-wide capacity benefits include improvements to the energy planning capacity market that ensure better power system performance. These improvements include improved resource adequacy, renewable energy integration services and renewable energy generation.

standard and customized forward, and option contracts). The model characterizes each commodity market by a forward price curve and a term volatility structure. The model also uses a correlation matrix to characterize the behavior of pairs of commodity markets.

EPRI's Fast Fit Model

EPRI's Fast Fit Model (Version 2.5) was used to characterize the needed power, fuel price volatilities, pricing structures, and the correlations between the different energy markets in which the hydropower facility would participate, or would compete with.

PLEXOS (Selected Monetization Approach)

Toolson and Zhang's PLEXOS® Integrated Energy Model (PLEXOS) analysis also evaluated the project's expected net changes in hydropower capacity, generation, and ancillary services in Western Interconnection electrical power grid. PLEXOS is a power market simulation model that was used to estimate Sites Reservoir's future Ancillary Services (AS) and system-wide capacity performance and benefits.

In addition to projecting Sites Reservoir's future hydropower operations and benefits, PLEXOS also forecast energy and ancillary service power market prices for the year 2022 when the 33 percent Renewable Portfolio Standard (RPS), mandated by California law, will have been implemented.

A5.6.1.b Data and Assumptions

The PLEXOS hydropower benefit study used findings from the California Public Utilities Commission (CPUC) 2012 Long Term Procurement Plan (LTPP) proceedings as the basis for the majority of the assumptions. This study reflects the inputs from multiple resources and has been reviewed by multiple stakeholders in the California power sector. WECC's Transmission Expansion Planning Policy Committee (TEPPC) oversees and maintains a public database for production cost and related analysis. In the LTPP study the latest TEPPC 2022 base case, along with the 2012 WECC Loads and Resources Subcommittee (LRS)'s report, were used for the majority of the assumptions.

The assumptions for the California energy market were further updated with CPUC's inputs from 2010 LTPP assumptions, RPS, and scenario selection tool; with California Energy Commission (CEC)'s inputs on load forecast from Integrated Energy Policy Report (IEPR) and natural gas price forecast; with California ISO's inputs on generator data and operation data, etc.

The PLEXOS analysis used the 2012 LTPP Base Case's 2022 base energy monthly price projections. Their energy prices varied from $32.85 per MWh to $51.07 per MWh (in 2015 dollars) with a mean value of $41.60 per MWh.

The WSIP hydropower benefit analysis assumed that:

- The PLEXOS AS and Capacity values for 2025 can be applied as a conservative estimate of Sites Reservoir's future annual values
- PLEXOS assumes that future power market prices will stabilize once the RPS is achieved.
- Increases in future real energy prices (per WSIP energy escalation requirement) would be expected to increase ancillary service and system-wide value capacity benefit values.

A5.6.1.c Calculations

Energy Use and Hydropower Generation

Table A5-53 shows the PARO analysis estimates of Sites Reservoir's annualized average future pumping costs and hydropower revenues.

Table A5-53. Sites Reservoir Pumping Use and Power Generation

	Total Pumping (MWh)			Generation (MWh)	
	On-Peak	**Off-Peak**	**Pump-Back**	**On-Peak**	**Off-Peak**
Q1 Average	21,285	113,368	21,441	17,814	0
Q2 Average	5,296	15,650	56,563	71,244	351
Q3 Average	3,147	3,275	27,391	77,496	526
Q4 Average	8,957	22,982	31,323	48,111	0
Annual Average	38,685	155,275	136,718	214,665	877

Power Costs and Hydropower Revenues

Table A5-54 shows the PARO analysis estimates of Sites Reservoir's annualized average future pumping costs and hydropower revenues. The PARO analysis determined that the estimated net energy cost for the Site Reservoir future operations would average $1.7 million per year.

Table A5-54. Sites Reservoir Power Costs and Generation Revenues (2015$; $1,000s)

	Hydropower Operations	
Facility	**Incidental**	**Optimized**
Pumping Operations – Revenues (Costs)		
T-C Canal Pumping	($303)	($303)
GCID Pumping	($486)	($486)
Delevan Pipeline Intake Facilities	($1,628)	($1,628)
TRR Pumping	($603)	($603)
Sites Pumping	($8,675)	($7,975)
Subtotal	**($11,695)**	**($10,995)**
Generation – Revenues (Costs)		
Sites Generation	$5,960	$6,434
TRR Generation	$464	$464
Sacramento River Generation	$2,017	$2,017
Subtotal	**$8,442**	**$8,916**
Pump-Back Operations – Revenues (Costs)		
Pump-Back during Diversion Cycle	N/A	$127
Pump-Back during Release Cycle	N/A	$66
Pure Pump-Back Operations Cycle	N/A	$156
Subtotal		$349
Total Net Revenues (Costs)	**($3,253)**	**($1,730)**

GCID = Glenn-Colusa Irrigation District
N/A = not applicable
T-C = Tehama-Colusa
TRR = Terminal Regulating Reservoir

The reservoir's projected energy costs are recognized in its operating and maintenance cost, and were consequently not included in the hydropower system benefit values shown in Table A5-55.

A5.6.1.d Modeling Results (Selected Monetization Approach)

PLEXOS hydropower analysis confirmed DWR's direct energy benefit and cost results. The PLEXOS modeling also determined that the proposed hydropower facilities could be expected to result in substantial ancillary service and system-wide capacity benefits. Table A5-55 shows the estimated future combined ancillary service and system-wide capacity benefits from Sites Reservoir's hydropower operations.

Table A5-55. Hydropower Benefits (2015$; $1,000s)

Alternative	Annual Benefits [a]		Annualized Benefit [b]
	2030	2070	
Average Conditions [c]			
Sites Reservoir	$20,183	$20,183	$19,483

[a] Based on projected ancillary service and system-wide capacity benefits. Note that facility pumping costs and generation revenues are included in the facilities' annual O&M costs.
[b] Annualized benefit is interpolated annual physical benefits between 2030 and 2070 and held constant after 2070. Annual average is less than 2030 and 2070 values due to the initial short ramp-up period before full benefits are generated.
[c] Averaged over the entire hydrologic sequence (1922 to 2003).

The PLEXOS analysis also estimated annual ancillary service benefits of approximately $2.4 million and system-wide capacity benefits of $17.8 million per year. As a result, combined ancillary services and system-wide capacity benefits of $20.2 million are potentially attributable to the project's hydropower operations.

Feasibility and Implementation Risk Tab

Attachment 5: Summary of Environmental Impacts and Tribal Consultation

Summarize the project's impacts on environmental or cultural resources and how the project will mitigate or minimize impacts to those resources, or identify where in the CEQA document this information can be found. If any environmental or cultural impacts will not be fully mitigated, explain. See regulations section 6003(a)(1)(T).

If applicable, identify whether Tribal consultation has been initiated for the project. If it has, provide supporting documentation, or identify the location in the CEQA document. If consultation has not been initiated, state whether consultation is expected and when consultation is expected to be initiated. See regulations section 6003(a)(1)(U).

WSIP Application Instructions, March 2017

Response

This attachment describes the environmental (**see Section A.5 on Page 2**) and cultural impacts (**see Tribal Consultation on Page 34**) associated with Sites Project, as well as the initiated tribal consultations with tribes affected by the implementation of Sites Reservoir and its associated facilities.

Table of Contents

Attachment 5: Summary of Environmental Impacts and Tribal Consultation 1
Summary of Environmental Impacts and Tribal Consultation 4
Environmental Commitments Included as Part of the Project 4
Identified Significant and Unavoidable Impacts 5
Growth-inducing Impacts 6
Cumulative Impacts 6
References 33

Tables

Table 1. Summary of Environmental Effects by Resource 8
Table 1. Native American Consultation 32

Acronyms and Abbreviations

BMP	best management practices
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CO	carbon monoxide
CRHR	California Register of Historical Resources
CVP	Central Valley Project
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
GCID	Glenn-Colusa Irrigation District
GHG	greenhouse gas
M&I	municipal and industrial
NAHC	California Native American Heritage Commission
NEPA	National Environmental Policy Act
NO_X	nitrogen oxide
NRHP	National Register of Historic Places
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter with an aerodynamic diameter of 2.5 microns or less
PRC	Public Resources Code
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SO_X	sulfur oxide
SWP	State Water Project
TRR	Terminal Regulating Reservoir
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WEAP	Worker Environmental Awareness Program

Summary of Environmental Impacts and Tribal Consultation

(Relevant Excerpts from the Executive Summary of the Draft Environmental Impact Report [EIR]/Environmental Impact Statement [EIS])

Environmental Commitments Included as Part of the Project

The Authority and Reclamation would incorporate a number of standardized environmental measures, plans, protocols, and best management practices as environmental commitments as part of the Project. The Authority and Reclamation would also coordinate planning, engineering, design and construction, operation, and maintenance phases of the Project with applicable resource agencies. The following environmental commitments would be incorporated for any Project-related construction as well as operations/maintenance (as appropriate) activities:

- Worker Environmental Awareness Program (WEAP)
- Environmental Site Assessment (ESA)
- Construction Management Procedures
  - Fire Safety and Suppression
  - Construction Equipment, Truck, and Traffic Management
- Stormwater Pollution Prevention Plan, Erosion Control, Management, and Dewatering
  - Compliance with the Requirements of Regional Water Quality Control Board (RWQCB) Order No. 5-00-175
  - Spill Prevention and Hazardous Materials Management
- Mosquito and Vector Control
- Groundwater/Dewatering Water Supply
- Visual/Aesthetic Design, Construction, and Operation Practices
- Emergency Action Plan

Summary of Potential Environmental Effects and Mitigation Commitments

The Project would affect environmental resources in all three study areas to varying degrees, with most impacts potentially occurring in the Primary Study Area. Anticipated impacts would vary from construction-related effects that would be less than significant or would be reduced to less-than-significant levels through mitigation to those that would remain significant and unavoidable despite proposed mitigation measures. In addition, many effects of the Project would be beneficial, particularly related to improved water supply reliability in drier years and potential ecosystem benefits.

Table 1 (provided at the end of this attachment) summarizes the impacts by environmental resource, the level of significance of the impact prior to mitigation, the proposed mitigation measure (as applicable), and the level of significance of the impact after mitigation. The proposed Project Mitigation Monitoring Plan is included as Appendix 1A of the Draft EIR/EIS.

Identified Significant and Unavoidable Impacts

As shown in Table 1, the proposed Project would likely result in the following potentially significant and unavoidable direct and indirect impacts.

Terrestrial Biological Resources (Golden Eagle)

Construction and filling of the proposed Sites Reservoir Inundation Area, as well as construction of the proposed Recreation Areas, would result in the permanent loss of foraging and nesting habitat for the golden eagle. Although implementation of compensatory mitigation including land preservation and/or acquisition is proposed, these measures would not reduce this loss of habitat to less-than-significant levels.

Cultural Resources (Historical and Tribal Resources, Human Remains)

Construction of the proposed Project facilities would affect built historical and tribal resources, as well as human remains associated with a designated cemetery and adjacent areas. If these resources and/or areas are determined to be eligible for listing in the California Register of Historical Resources or National Register of Historic Places, mitigation measures would not reduce the impact to less-than-significant levels.

Land Use (Community of Sites, Existing Land Uses, Zoning, and Designations)

Construction and filling of the proposed Sites Reservoir Inundation Area would result in the physical division of the community of Sites, resulting in a significant and unavoidable impact. Construction of the proposed Project facilities would result in conflicts or incompatibilities with existing and designated land uses and existing zoning for agricultural, as well as the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use, resulting in significant and unavoidable impacts. Implementation of mitigation measures would not reduce these impacts to less-than-significant levels.

Air Quality (PM_{10}, ROG, and NO_X)

Construction activities associated with all proposed Primary Study Area Project facilities, as well as activities (such as use of roads, recreation, electricity generation and consumption, and sediment dredging) associated with the long-term operation and maintenance of the Project, would result in significant and unavoidable emissions of particulate matter less than 10 microns in diameter (PM_{10}), reactive organic gas (ROG), and nitrogen oxide (NO_X).

Climate Change and Greenhouse Gas Emissions

The greenhouse gas (GHG) emissions estimated for construction, operation, and maintenance of the Project when compared to applicable county standards would contribute to a cumulatively considerable effect that would be significant and unavoidable.

Visual Resources (Terminal Regulating Reservoir)

The proposed Terminal Regulating Reservoir (TRR) and associated TRR facilities would be visually dominant and in high contrast to the surrounding landscape, resulting in a significant and unavoidable impact on a scenic vista.

Growth-inducing Impacts

Implementation of the Project would improve water supply reliability for agricultural, urban, and environmental uses; provide more options for water management; increase recreational opportunities; and increase temporary and permanent employment opportunities. These Project-related changes would not be expected to result in growth-inducing effects as described below.

Improved Water Supply Reliability for Urban, Agricultural, and Refuge Uses

The expected increase in water deliveries in Dry and Critical years (to primarily State Water Project (SWP) municipal and industrial water users) associated with Project implementation would be anticipated to result in the decreased need for water transfers and/or decreased groundwater pumping in dryer years. Such dry year actions are generally identified in Urban Water Management Plans and would be expected to be required relatively less often with the implementation of the Project. Given long-term average water supplies (including normal and wetter years) are not projected to increase as part of Project implementation, increased dry year water supply reliability is not expected to be growth inducing.

The expected increase in water deliveries to agricultural water users in the Primary and Extended Study Areas in Dry and Critical years is anticipated to decrease the need for water transfers and groundwater pumping and associated land idling. Improved dry year water supply reliability is not expected to be growth inducing, and would not promote conversion of agricultural lands to urban uses.

Refuge water supplies would be similar to the Existing Conditions/No Project/No Action Condition, with the source potentially changing to some degree to be provided by the Project and to a lesser degree through water transfers. Regardless, such changes would not result in growth inducement.

Increased Temporary and Permanent Employment Opportunities

The expected magnitude of Project-related increased employment opportunities in the agricultural sector would be less than 1 percent, when compared to the regional economy of the Extended Study Area, and is therefore not anticipated to result in growth-inducing impacts. Although the expected increased water supply deliveries could result in increased employment and other economic benefits, the effects on housing and population are expected to be minor in the Extended Study Area, when compared to the total housing and population.

Project construction and operation would be expected to result in a minor increase in jobs and population in the Primary Study Area, which could be accommodated within available housing units. An adequate housing supply exists to accommodate the change in population; thus, this expected increase associated with Project implementation is not anticipated to be growth inducing.

Improved Recreational Opportunities

Expected Project-related increased recreation expenditures would represent less than 0.2 percent of total industrial expenditures in the Primary Study Area and are, therefore, not anticipated to increase growth within the entire Primary Study Area.

Cumulative Impacts

The California Code of Regulations' Guidelines for the Implementation of the California Environmental Quality Act (CEQA Guidelines) and federal National Environmental Policy Act (NEPA) regulations require that the cumulative impacts of a proposed project be addressed in an Environmental Impact

Report/Environmental Impact Statement (EIR/EIS). Cumulative impacts are impacts on the environment that result from the incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions.

The cumulative impact assessment for the Project considered projects and programs identified under Existing Conditions (which includes the current effects of past projects) and reasonably foreseeable and probable future projects. The criterion for considering whether a project was reasonably foreseeable and probable in this EIR/EIS was whether the project had been defined in adequate detail, either through the completion of publicly available preliminary evaluations, feasibility studies, or draft environmental and engineering documents, to estimate potential impacts.

Projects considered in the cumulative impacts analysis included 7 multi-region projects and actions; 7 water supply, water quality, and hydropower projects and actions in the vicinity of the proposed Project facilities and/or potentially affected by Central Valley Project (CVP) and SWP operations; and 5 ecosystem improvement projects and actions in the vicinity of the proposed Project facilities and/or potentially affected by CVP and SWP operations (refer to Chapter 35 Cumulative Impacts in the Draft EIR/EIS for the names and descriptions of each of project considered).

Implementation of the Project would not result in the cumulatively considerable incremental contribution to an overall significant cumulative adverse effects.

Table 1. Summary of Environmental Effects by Resource

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
6. Surface Water Resources							
Impact Water Supply-1: A Substantial Decrease in Average Annual CVP or SWP Deliveries Compared to Deliveries Associated with the Existing Conditions/No Project/No Action Condition							
Extended, Secondary, and Primary Study Areas							
CVP Contract Deliveries							
Annual Long-term Averages	NI	NI	NI	NI	NI	N/A	N/A
Annual Dry- and Critical-year Averages	NI	NI	NI	Beneficial	NI	N/A	N/A
SWP Contract Deliveries							
Annual Long-term Averages	NI	NI	NI	NI	NI	N/A	N/A
Annual Dry- and Critical-years Averages	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
CVP/SWP Operational Flexibility	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
7. Surface Water Quality							
Impact SW Qual-1: A Violation of any Water Quality Standard, Waste Discharge Requirement, or Temperature Criteria; a Change in Surface Water Quality Resulting in Adverse Effects to Designated Beneficial Uses of Surface Water; or Otherwise Substantially Degrade Surface Water Quality							
Extended Study Area	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity Lake, Trinity River Downstream of Trinity Lake and Lewiston Reservoir, Klamath River Downstream from Trinity River, Clear Creek Downstream of Whiskeytown Lake, Lake Oroville, Thermalito Complex, Feather River, Folsom Lake, Lake Natoma, and American River, Shasta Lake and Sacramento River from Shasta Lake and Keswick Reservoir to Freeport							
Water Temperatures	LS	LS	LS	LS	LS	N/A	N/A
Mercury, Nutrients, Salinity, and Dissolved Oxygen	NI	NI	NI	NI	NI	N/A	N/A
Yolo Bypass	LS	LS	LS	LS	LS	N/A	N/A
Sacramento-San Joaquin Delta, Suisun Bay, and Suisun Marsh							
Salinity and Dissolved Oxygen Concentrations	LS	LS	LS	LS	LS	N/A	N/A
Mercury and Selenium	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Construction within Natural Surface Waters (Golden Gate and Sites Dams and Delevan Intake/Discharge Facility)	LS	LS	LS	LS	LS	N/A	N/A
Construction within Man-made Surface Waters (Funks/Holthouse Reservoir and GCID Canal)	LS	LS	LS	LS	LS	N/A	N/A
Construction on Currently Dry Land and Other General Construction Activities	LS	LS	LS	LS	LS	N/A	N/A
Operations of Facilities with Open Water Surfaces (Sites, Holthouse, and Terminal Regulating Reservoirs and the GCID and Tehama-Colusa)	LS	LS	LS	LS	LS	N/A	N/A
Operations of Delevan Intake/Discharge Facility	LS	LS	LS	LS	LS	N/A	N/A
Operations of Facilities on Dry Land	LS	LS	LS	LS	LS	N/A	N/A
8. Fluvial Geomorphology and Riparian Habitat							
Impact Geom-1: Substantial Alteration of Natural River Geomorphic Processes							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Geom-2: Substantial Alteration of Natural River Meandering, Bank Erosion, and Deposition, and Substantial Alteration of Riparian Vegetation and Habitat Complexity							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
Impact Geom-3: Substantial Alteration of the Amount of Large Woody Debris, Boulders, Shaded Riverine Aquatic Habitat, or Spawning Gravel in Rivers, with Effects on Fish Habitat							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
9. Flood Control							
Impact Flood-1: Substantially Alter the Existing Drainage Pattern of the Site or Project Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner which Would Result in Flooding On- or Off-site							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Flood-2: Place within a 100-year Flood Hazard Area Structures which Could Impede or Redirect Flood Flows							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams, Recreation Areas	NI	NI	NI	NI	NI	N/A	N/A
Sites Pumping/Generating Plant, Tunnel, Sites Reservoir Inlet/Outlet Structure, Sites Electrical Switchyard, Field Office Maintenance Yard, Road Relocations and South Bridge, GCID Canal Facilities Modifications, Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR, TRR Pipeline, TRR Pipeline Road, Sites/Delevan Overhead Power Line, Delevan Pipeline Electrical Switchyard, Delevan Pipeline, Delevan Pipeline Intake/Discharge Facility	LS	LS	LS	LS	LS	N/A	N/A
Project Buffer	NI	NI	NI	NI	NI	N/A	N/A
Impact Flood-3: Expose People or Structures to a Significant Risk of Loss, Injury, or Death from Flooding, Including Flooding as a Result of the Failure of a Levee or Dam							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams, Delevan Pipeline Electrical Switchyard, Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR, TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Discharge/Intake Facilities	LS	LS	LS	LS	LS	N/A	N/A
Sites Pumping/Generating Plant, Tunnel, Sites Reservoir Inlet/Outlet Structure, Sites Electrical Switchyard, Field Office Maintenance Yard, Recreation Areas, Road Relocations and South Bridge, GCID Canal Facilities Modifications, Sites/Delevan Overhead Power Line, Delevan Pipeline, Project Buffer	NI	NI	NI	NI	NI	N/A	N/A
10. Groundwater Resources							
Impact GW Res-1: Substantial Depletion of Groundwater Supplies or Substantial Interference with Groundwater Recharge Resulting in a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level, Causing Effects on Existing Land Uses or Planned Uses							
Extended Study Area	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Secondary Study Area							
Reservoir Storage/Flow Regime Changes/Surface Water Use	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Recreation Areas, Project Buffer, GCID Canal Facilities Modifications	NI	NI	NI	NI	NI	N/A	N/A
Sites Reservoir Inundation Area, Sites Reservoir Dams, Road Relocations and South Bridge, Holthouse Reservoir Complex, TRR Electrical Switchyard, GCID Canal Connection to the TRR,	LS	LS	LS	LS	LS	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
TRR Pipeline, TRR Pipeline Road; Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, Holthouse Reservoir Electrical Switchyard, TRR, TRR Pumping/Generating Plant, Delevan Pipeline, Delevan Pipeline Electrical Switchyard, Sites/Delevan Overhead Powerline, Delevan Pipeline Discharge/Intake Facility							
Impact GW Res-2: Increases in Groundwater Levels Resulting in Adverse Effects to Environmental Conditions and/or Existing Land Uses or Planned Uses							
Extended Study Area	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Secondary Study Area							
Reservoir Storage/Flow Regime Changes/Surface Water Use	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams, Delevan Pipeline Discharge/Intake Facility, Holthouse Reservoir Electrical Switchyard, Project Buffer, Holthouse Reservoir Complex. TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Intake/Discharge Facilities, TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR, Delevan Pipeline, Delevan Pipeline Electrical Switchyard, Sites/Delevan Overhead Power Line	LS	LS	LS	LS	LS	N/A	N/A
Recreation Areas, Road Relocations and South Bridge, Sites Pumping/Generating Plant, GCID Canal Facilities Modifications	NI	NI	NI	NI	NI	N/A	N/A
11. Groundwater Quality							
Impact GW Qual-1: A Violation of any Water Quality Standards or Waste Discharge Requirements, a Change in Groundwater Quality Resulting in Adverse Effects to Designated Beneficial Uses of Groundwater, or Otherwise Substantially Degrade Groundwater Quality							
Extended Study Area							
Groundwater Use- Construction, San Luis Reservoir	NI	NI	NI	NI	NI	N/A	N/A
Level 4 Wildlife Refuge Water Use	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Secondary Study Area							
Changes in Groundwater Flow Directions	LS	LS	LS	LS	LS	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	NI	NI	NI	NI	NI	N/A	N/A
Hazardous Materials	NI	NI	LS	LS	LS	N/A	N/A
Primary Study Area							
Holthouse Reservoir Complex and Holthouse Reservoir Electrical Switchyard, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard, Recreation Areas, Glenn Colusa Irrigation District Canal Facilities Modifications, Sites Reservoir Dams, Sites Reservoir Inundation Area, Project Buffer	LS	LS	LS	LS	LS	N/A	N/A
Road Relocations and South Bridge, Terminal Regulating Reservoir, Terminal Regulating Reservoir Pipeline, Terminal Regulating Reservoir Pipeline Road, Terminal Regulating Reservoir Pumping/Generating Plant, Terminal Regulating Reservoir Electrical Switchyard, and Glenn Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Sites/Delevan Overhead Power Line, Delevan Pipeline and Delevan Pipeline Electrical Switchyard, Delevan Pipeline Intake Facilities	NI	NI	NI	NI	NI	N/A	N/A
12. Aquatic Biological Resources							
Impact Fish-1: A Substantial Adverse Effect (Either Directly, through Habitat Modifications, by Interfering with the Movement of Native Fish Species, or by Impeding the Use of Native Fish Nursery/Rearing Sites) on Any Fish Species of Management Concern, Including Species Identified as a Candidate, Sensitive, or Special-status Species in Local or Regional Plans, Policies, or Regulations, or by CDFG, NMFS, or USFWS							
Extended and Secondary Study Area							
Wildlife Refuges-Refuge Water Supply	NI	NI	NI	NI	NI	N/A	N/A
Reservoir Coldwater Fish Species, Reservoir Warmwater Fish Species, Southern	LS	LS	LS	LS	LS	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Oregon/Northern California Coho Salmon; Upper Klamath-Trinity River Fall-Run and Spring-Run Chinook Salmon; and Klamath Mountains Province Steelhead; Sacramento River Winter-Run Chinook Salmon, Central Valley Fall-run and Late Fall-Run Chinook Salmon, Central Valley Steelhead, Green Sturgeon, White Sturgeon, Pacific Lamprey, and Striped Bass, Delta Smelt and Longfin Smelt,. River Lamprey; Hardhead; American Shad; Sacramento Splittail; and Largemouth Bass, Southern Resident Killer Whale							
Sacramento River Winter-run Chinook Salmon, Spring-run Chinook Salmon	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams, Sites Reservoir Inlet/Outlet Structure. Sites Pumping/Generating Plant, Holthouse Reservoir Complex	S	S	S	S	S	**Fish-1a:** Implement Habitat Restoration Actions – Stone Corral and Funks creeks	LS
Road Relocations and South Bridge, TRR to Funks Creek Pipeline, Delevan Pipeline	LS	LS	LS	LS	LS	N/A	N/A
Delevan Pipeline Intake/Discharge Facility	S	S	S	S	S	**Fish-1b:** Implement Habitat Restoration Actions – Sacramento River **Fish-1c:** Perform In-water Pile Driving July through September during Daylight Hours – Sacramento River. **Fish-1d:** Design Fish Screen in Compliance with NMFS and CDFW Criteria – Sacramento River. **Fish-1e:** Prepare and Implement a Fish Salvage and Rescue Plan – Sacramento River	LS
13. Botanical Resources							
Impact Bot-1: A Substantial Adverse Effect, Including Conversion to Non-native Vegetation, on any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations, or by CDFW or USFWS, or any Native Plant Community Known to be Rare, Unusual, or Becoming Uncommon in the Biogeographic Region of the Project							
Extended Study Area							
Wildlife Refuge Water Use	NI	NI	NI	NI	NI	N/A	N/A
San Luis Reservoir	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity Lake, Shasta Lake, Lake Oroville; Folsom Lake	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Trinity River, Klamath River downstream of Trinity River, Spring Creek, Lewiston Lake, Whiskeytown Lake, Keswick Reservoir, Lake Natoma, Thermalito Complex, Clear Creek, San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Sacramento River, Sacramento-San Joaquin Delta, Suisun Bay, Feather River and American River, Sutter Bypass and Yolo Bypass	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams							
Annual Grassland Valley Edges; Salt Lake Wetlands, Construction Staging Area; Blue Oak Woodland; Valley Oak Woodland; Riparian Vegetation	S	S	S	S	S	**Bot-1a:** Implement Compensatory Mitigation Measures for Vegetation Community Impacts in Coordination with USFWS, CDFW, CNPS, and USACE	LS
Valley Floor; Other Land Cover	LS	LS	LS	LS	LS	N/A	N/A
Recreation Areas							
Annual Grassland; Blue Oak Woodland	S	S	S	S	S	**Bot-1a**	LS

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Chamise; Other Land Cover	LS	LS	LS	LS	LS	N/A	N/A
Road Relocations and South Bridge							
Annual Grassland; Blue Oak Woodland; Riparian Vegetation	S	S	S	S	S	Bot-1a	LS
Chamise; Mixed Chaparral; Other Land Cover	LS	LS	LS	LS	LS	N/A	N/A
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard							
Annual Grassland; Riparian Vegetation; Other Land Cover	LS	LS	LS	LS	LS	N/A	N/A
Holthouse Reservoir Complex and Holthouse Reservoir Electrical Switchyard							
Annual Grassland, Alkaline Wetland, Riparian Vegetation	S	S	S	S	S	**Bot-1a; Bot-1b:** Conduct Groundwater Hydrological Studies	LS
Other Land Cover	LS	LS	LS	LS	LS	N/A	N/A
GCID Canal Facilities Modifications	LS	LS	LS	LS	LS	N/A	N/A
TRR, TRR Pimping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR	NI	NI	NI	NI	NI	N/A	N/A
Delevan Pipeline, TRR Pipeline, TRR Pipeline Road, and Delevan Pipeline Electrical Switchyard							
Alkaline Wetland; Other Land Cover	LS	LS	LS	LS	LS	N/A	N/A
Freshwater Emergent Marsh	S	S	S	S	S	**Bot-1a**	LS
Sites/Delevan Transmission Line							
Annual Grassland	LS	LS	LS	LS	LS	N/A	N/A
Riparian Veg	S	S	S	S	S	**Bot-1a**	LS
Delevan Pipeline Intake/Discharge Facilities							
Riparian Scrub	LS	LS	LS	LS	LS	N/A	N/A
Fremont Cottonwood Forest	S	S	S	S	S	**Bot-1a**	LS
Project Buffer							
Annual Grassland, Blue Oak Woodland, Canal, Chamise, Ponds and Valley-Foothill Riparian	S	S	S	S	S	**Bot-1a**	LS
Agriculture; Urban/Disturbed Land	NI	NI	NI	NI	NI	N/A	N/A
Impact Bot-2: A Substantial Adverse Effect, Either Directly or Through Habitat Modifications, on any Species Identified as a Candidate, Sensitive, or Special-status Species in Local or Regional Plans, Policies, or Regulations, or by CDFW or USFWS							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams, Recreation Areas, Road Relocations and South Bridge, Sites Pumping/Generating Plant; Sites Electrical Switchyard; Sites Reservoir Inlet/ Outlet Structure; Field Office Maintenance Yard, Delevan Pipeline, TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Electrical Switchyard, Sites/Delevan Overhead Power Line, Project Buffer	S	S	S	S	S	**Bot 2:** Conduct Preconstruction Surveys for Special-status Plants; if Found, Compensate According to USFWS, CDFW, and CNPS Guidelines	LS
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard	S	S	S	S	S	**Bot-1b; Bot 2**	LS
GCID Canal Facilities Modifications	NI	NI	NI	NI	NI	N/A	N/A
TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to TRR	LS	LS	LS	LS	LS	N/A	
Delevan Pipeline Intake/Discharge Facilities	LS	LS	LS	LS	LS	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Impact Bot-3: An Increase in Potential for the Invasion or Spread of Noxious Weed Species							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake, Trinity River, Klamath downstream of Trinity River, Spring Creek, Lewiston Lake; Whiskeytown Lake, Clear Creek, Keswick Reservoir; Lake Natoma; Thermalito Complex, San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Sacramento River, Sacramento-San Joaquin Delta, Suisun Bay, Feather River; American River, Sutter Bypass; Yolo Bypass	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams, Recreation Areas, Road Relocations and South Bridge, Sites Pumping/Generating Plant; Sites Electrical Switchyard; Sites Reservoir Inlet/ Outlet Structure; Field Office Maintenance Yard, Holthouse Reservoir Complex and Holthouse Reservoir Electrical Switchyard, Delevan Pipeline Intake/Discharge Facilities, TRR Pipeline, TRR Pipeline Road, Project Buffer	S	S	S	S	S	**Bot-3a:** Implement Preventive Actions by Following Weed Control BMPs; Minimize Exposed Ground; Reduce Weed Seed by Removal of On-site and Off-site weeds	LS
GCID Canal Facilities Modifications, TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR	NI	NI	NI	NI	NI	N/A	N/A
Delevan Pipeline, Sites/Delevan Overhead Power Line	S	S	S	S	S	**Bot-3b:** Implement Avoidance Measures in Areas Adjacent to the Delevan National Wildlife	LS
Impact Bot-4: Indirect Impacts to Native Plants from Human Disturbance							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams, Recreation Areas, Road Relocations and South Bridge, Holthouse Reservoir Complex and Holthouse Reservoir Electrical Switchyard; Delevan Pipeline, TRR Pipeline, TRR Pipeline Road, and Delevan Pipeline Electrical Switchyard, Project Buffer	S	S	S	S	S	**Bot-2**	LS
Sites Pumping/Generating Plant; Sites Electrical Switchyard; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard, Sites/Delevan Overhead Transmission Line, Delevan Pipeline Intake/Discharge Facilities	LS	LS	LS	LS	LS	N/A	N/A
GCID Canal Facilities Modifications, TRR, TRR Pimping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR	NI	NI	NI	NI	NI	N/A	N/A
Impact Bot-5: Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local or Regional Habitat Conservation Plan, or Conflict with any Local Policies or Ordinances Protecting Biological Resources, such as a Tree Preservation Policy or Ordinance							
Extended Study Area, Secondary Study Area, and Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
14. Terrestrial Biological Resources							
Impact Wild-1: A Substantial Adverse Effect, Including Alteration of Habitat Suitability, on any Wildlife Habitat, Especially Riparian Habitat or Other Sensitive Natural Communities Identified in Local or Regional Plans, Policies, Regulations, or by CDFW or USFWS.							
Extended Study Area							
Agricultural, Municipal, and Industrial Water Use	LS	LS	LS	LS	LS	N/A	N/A
Wildlife Refuge Water Use	NI	NI	NI	NI	NI	N/A	N/A
San Luis Reservoir	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake, Lewiston Lake, Whiskeytown Lake, Keswick Reservoir, Clear Creek, Lake Natoma, and the Thermalito Complex; Spring Creek, San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Trinity River; Klamath River downstream of the Trinity River; Sacramento River; Sutter Bypass; Yolo Bypass; Feather River; American River; Sacramento-San Joaquin Delta; and Suisun Bay;	LS	LS	LS	LS	LS	N/A	N/A
Sacramento River	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams							
Annual Grassland; Blue Oak Woodland; Dryland Grain and Seed Crops; Pasture, Valley Foothill Riparian; and Valley Oak Woodland	S	S	S	S	S	**Wild-1a:** Confirm Species/Habitat Presence through Appropriately Timed Surveys Per Protocols Identified in Coordination with USFWS and CDFW **Wild 1b:** Identify and Implement a Combination of Habitat Protection, Enhancement, Restoration, or Conservation Easement Measures, in Consultation with USFWS, CDFW, and USACE	LS
Lacustrine – Inundation and Water Level Fluctuations	LS	LS	LS	LS	LS	N/A	N/A
Urban/Disturbed	LS	LS	LS	LS	LS	N/A	N/A
Valley Oak Woodland Habitat	S	S	S	S	S	**Wild-1a**	LS
Recreation Areas and Associated Electrical Distribution Lines							
Annual Grassland; Blue Oak Woodland	S	S	S	S	S	**Wild-1a; Wild-1b**	LS
Chamise-Redshank Chaparral; Lacustrine	LS	LS	LS	LS	LS	N/A	N/A
Road Relocations and South Bridge							
Annual Grassland; Blue Oak Woodland; Chamise-Redshank Chaparral; Dryland Grain and Seed Crops; Mixed Chaparral; Valley Foothill Riparian	S	S	S	S	S	**Wild-1a; Wild-1b**	LS
Canal	NI	NI	NI	NI	NI	N/A	N/A
Lacustrine; Urban/Disturbed	LS	LS	LS	LS	LS	N/A	N/A
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard							
Annual Grassland; Valley Foothill Riparian	S	S	S	S	S	**Wild-1a; Wild-1b**	LS
Lacustrine; Urban/Disturbed	LS	LS	LS	LS	LS	N/A	N/A
Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure	NI	NI	NI	NI	NI	N/A	N/A
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard							
Annual Grassland; Dryland Grain and Seed Crops; Fresh Emergent Wetland; Irrigated Row and Field Crops; Valley Foothill Riparian	S	S	S	S	S	**Wild-1a; Wild-1b**	LS
Canal; Lacustrine; Urban/Disturbed	LS	LS	LS	LS	LS	N/A	N/A
GCID Canal Facilities Modifications	LS	LS	LS	LS	LS	N/A	N/A
TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR							N/A
Canal	NI	NI	NI	NI	NI	N/A	N/A
Urban/Disturbed, Deciduous Orchard	LS	LS	LS	LS	LS	N/A	N/A
Dryland Grain and Seed Crops; Pasture; Rice	S	S	S	S	S	**Wild-1a; Wild-1b**	LS
Delevan Pipeline, TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Electrical Switchyard							
Canal	NI	NI	NI	NI	NI	N/A	N/A
Barren; Dryland Grain and Seed Crops; Eucalyptus; Fresh Emergent Wetland; Lacustrine; Irrigated Row and Field Crops; Pasture; Rice	S	S	S	S	S	**Wild-1a; Wild-1b**	LS

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Deciduous Orchard; Urban/Disturbed	LS	LS	LS	LS	LS	N/A	N/A
Sites/Delevan Overhead Power Line							
Annual Grassland; Barren; Dryland Grain and Seed Crops; Valley Foothill Riparian	S	S	S	S	S	**Wild-1a; Wild-1b**	LS
Canal	NI	NI	NI	NI	NI	N/A	N/A
Delevan Pipeline Intake Facilities							
Canal; Urban/Disturbed	LS	N/A	LS	LS	LS	N/A	N/A
Deciduous Orchard; Riverine: Valley Foothill Riparian	S	N/A	S		S	**Wild-1a**	LS
Project Buffer							
Annual Grassland, Barren, Blue Oak Woodland, Canal, Chamise-Redshank Chaparral, Lacustrine, Valley Foothill Riparian; Deciduous Orchard, Dryland Grain and Seed Crops, Irrigated Row and Field Crops, Pasture, Rice;	S	S	S	S	S	**Wild-1a; Wild-1b**	LS
Urban/Disturbed	LS	LS	LS	LS	LS	N/A	N/A
Delevan Pipeline Discharge Facility							
Canal; Urban/Disturbed	LS	LS	LS	LS	LS	N/A	N/A
Deciduous Orchard; Riverine: Valley Foothill Riparian	S	S	S	S	S	**Wild-1a**	LS
Impact Wild-2: A Substantial Adverse Effect, Including Mortality, Either Directly or through Habitat Modifications, on any Species Identified as a Candidate, Sensitive, or Special-status Species in Local or Regional Plans, Policies, or Regulations, or by CDFW or USFWS							
Extended Study Area							
Agricultural, Municipal, and Industrial Water Use, San Luis Reservoir	LS	LS	LS	LS	LS	N/A	N/A
Wildlife Refuge Water Use	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake, Lewiston Lake, Whiskeytown Lake, Keswick Reservoir, Spring Creek, Clear Creek, Lake Natoma, Thermalito Complex, San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Trinity River; Klamath River downstream of the Trinity River; Sacramento River; Sutter Bypass; Yolo Bypass; Feather River; American River; Sacramento-San Joaquin Delta, and Suisun Bay	LS	LS	LS	LS	LS	N/A	N/A
Sacramento River							
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Operation	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams							
Migratory Birds and Roosting Bats	S	S	S	S	S	**Wild-2a:** Prepare and Implement a Bird and Bat Conservation Strategy	LS
Bald Eagle	S	S	S	S	S	**Wild-2b:** Obtain Permit for Bald Eagle Nest Tree Removal, Remove Nest Tree Outside of Breeding Season, and Create Habitat	LS
Golden Eagle	S	S	S	S	S	**Wild-2e:** Implement Avoidance and Minimization Measures at Historical or Active Golden Eagle Nest Sites. Conduct Satellite Telemetry Studies Pre and Post Construction to Determine Territory Size. Prepare a Golden Eagle Protection and Monitoring Plan. Mitigate for Loss of Annual Grassland Foraging	SU

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
						Habitat.	
Valley Elderberry Longhorn Beetle	S	S	S	S	S	**Wild-2g:** Implement Protective Actions to Avoid or Minimize Impacts to Elderberry Plants. Where Avoidance is not Possible, Transplant or Replace Plants, According to USFWS Guidelines.	LS
Western Burrowing Owl	S	S	S	S	S	**Wild-2g:** Conduct Preconstruction Surveys for Western Burrowing Owls. If Owls are Found, Implement Protective Actions.	LS
Western Pond Turtle	S	S	S	S	S	**Wild 2i:** Conduct Preconstruction Surveys and Provide a Biological Monitor During Project Construction for the Western Pond Turtle. If Found, Turtles shall be Captured and Relocated by a Qualified Biologist.	LS
Recreation Areas and Associated Electrical Distribution Lines							
Golden Eagle	S	S	S	S	S	**Wild-2e**	SU
Road Relocations and South Bridge							
Migratory Birds and Roosting Bats	S	S	S	S	S	**Wild-2a**	LS
Valley Elderberry Longhorn Beetle	S	S	S	S	S	**Wild-2g**	LS
Western Burrowing Owl	S	S	S	S	S	**Wild-2h**	LS
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard							
Migratory Birds and Roosting Bats	S	S	S	S	S	**Wild-2a**	LS
Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure	NI	NI	NI	NI	NI	N/A	N/A
Holthouse Reservoir Complex and Holthouse Reservoir Electrical Switchyard							
Water-Dependent Bird Species	LS	LS	LS	LS	LS	N/A	N/A
Western Pond Turtle	S	S	S	S	S	**Wild-2i**	LS
GCID Canal Facilities Modifications							
Giant Garter Snake	S	S	S	S	S	**Wild-2d:** Conduct Preconstruction Surveys for Giant Garter Snakes and Implement Protective Actions. Conduct Project Construction Activity Between May 1 and October 1 in Giant Garter Snake Habitat. Compensate for Temporary Disturbance of Habitat According to USFWS Guidelines.	LS
Delevan Pipeline, Terminal Regulating Reservoir Pipeline, Terminal Regulating Reservoir Pipeline Road, and Delevan Pipeline Electrical Switchyard							
Migratory Birds and Roosting Bats	S	S	S	S	S	**Wild-2a**	LS
Bank Swallow	S	S	S	S	S	**Wild-2c:** Implement Protective Actions to Prevent Bank Swallows from Nesting in the Cut Banks of Construction Trenches	LS
Giant Garter Snake	S	S	S	S	S	**Wild-2d**	LS

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Western Pond Turtle	S	S	S	S	S	**Wild-2i**	LS
Western Yellow-Billed Cuckoo	NI	NI	NI	NI	NI	N/A	N/A
Sites/Delevan Overhead Power Line	LS	LS	LS	LS	LS	NA	N/A
Delevan Pipeline Intake Facilities							
Bank Swallow	NI	N/A	NI	NI	NI	N/A	N/A
Ringtail	S	N/A	S	S	S	**Wild-2f:** Implement Protective Actions to Minimize Impacts to the Ringtail, and Restore Connectivity of Riparian Corridor **Wild-3c:** Restore Riparian Habitat Connectivity	LS
Valley Elderberry Longhorn Beetle	S	N/A	S	S	S	**Wild-2g**	LS
Western Yellow-billed Cuckoo	S	N/A	S	S	S	**Wild 2j:** Conduct Preconstruction Surveys for the Western Yellow-billed Cuckoo and Schedule Construction Activities to Avoid Impacts to Nest Sites	LS
Project Buffer	S	S	S	S	S	**Wild-1a; Wild-1b; Wild-2a**	LS
Delevan Pipeline Discharge Facility							
Bank Swallow	NI	NI	NI	NI	NI	N/A	N/A
Ringtail	S	S	S	S	S	**Wild-2e; Wild-3c**	LS
Valley Elderberry Longhorn Beetle	S	S	S	S	S	**Wild-2f**	LS
Western Yellow-billed Cuckoo	S	S	S	S	S	**Wild-2i**	LS
Impact Wild-3: Substantial Interference with the Movement of any Native Resident or Migratory Wildlife Species, or with Established Native Resident or Migratory Wildlife Corridors, or Impede the Use of Native Wildlife Nursery Sites							
Extended Study Area							
Agricultural, Municipal, and Industrial Water Use, San Luis Reservoir	LS	LS	LS	LS	LS	N/A	N/A
Wildlife Refuge Water Use	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake, Lewiston Lake, Whiskeytown Lake, Keswick Reservoir, Spring Creek, Clear Creek, Lake Natoma, Thermalito Complex, San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Trinity River; Klamath River downstream of the Trinity River; Sacramento River; Sutter Bypass; Yolo Bypass; Feather River; American River; Sacramento-San Joaquin Delta, and Suisun Bay	LS	LS	LS	LS	LS	N/A	N/A
Sacramento River							
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Operation	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams	LS	LS	LS	LS	LS	N/A	N/A
Recreation Areas	LS	LS	LS	LS	LS	N/A	N/A
Road Relocations and South Bridge	LS	LS	LS	LS	LS	N/A	N/A
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard	LS	LS	LS	LS	LS	N/A	N/A
Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure	NI	NI	NI		NI	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Holthouse Reservoir Complex	LS	LS	LS	LS	LS	N/A	N/A
GCID Canal Facilities Modifications	LS	LS	LS	LS	LS	N/A	N/A
TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR	LS	LS	LS	LS	LS	N/A	N/A
Delevan Pipeline, Terminal Regulating Reservoir Pipeline, Terminal Regulating Reservoir Pipeline Road, and Delevan Pipeline Electrical Switchyard	S	S	S	S	S	**Wild-3a:** During Project Construction, Backfill Trenches within 72 hours of Pipeline Installation and Provide an Escape Ramp for Trapped Wildlife	LS
Sites/Delevan Overhead Power Line	S	S	S	LS	S	**Wild-3b:** Construct Transmission Lines and Associated Equipment Following Suggested Practices for Avian Protection on Power Lines	LS
Delevan Pipeline Intake Facilities	S	N/A	S	S	S	**Wild-3c:** Restore Riparian Habitat Connectivity	LS
Project Buffer	LS	LS	LS	LS	LS	N/A	N/A
Delevan Pipeline Discharge Facilities	S	S	S	S	S	**Wild-3c**	LS
Impact Wild-4: Indirect Effects on Common Wildlife from Human Disturbance							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Wild-5: Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local or Regional Habitat Conservation Plan, or Conflict with any Local Policies or Ordinances Protecting Biological Resources, such as a Tree Preservation Policy or Ordinance							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
15. Wetlands and Other Waters							
Impact Wet-1: A Permanent Change in the Use or Quality (Extent in Acres or Miles) of "Other Waters", (Including, but not Limited to, Lakes, Rivers, Streams Tributary to Navigable Rivers, Natural Ponds, Canals, or Ditches) that are Determined by the USACE to be Jurisdictional, through Direct Removal, Filling, Obstruction, Hydrological Interruption, or other Means							
Extended Study Area							
Wildlife Refuge Water Use	NI	NI	NI	NI	NI	N/A	N/A
San Luis Reservoir	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake, Lewiston Lake, Whiskeytown Lake, Keswick Reservoir, Thermalito Complex, Lake Natoma, Sacramento River, Spring Creek, Clear Creek, Sacramento-San Joaquin Delta, Suisun Bay, Pump Installation at the Red Bluff Pumping Plant, Trinity River and Klamath River Downstream of the Trinity River; Feather River; Sutter Bypass	LS	LS	LS	LS	LS	N/A	N/A
San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams							
Streams	S	S	S	S	S	**Wet-1a:** Implement Compensatory Mitigation Measures for Streams pursuant to USACE and State Determination within the Watershed in which the Impacts	LS

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
						Occur	
Stock Ponds	S	S	S	S	S	**Wet-1c:** Restore Ponds to Original Condition, or Implement Other Compensatory Mitigation Measures pursuant to USACE Determination within the Same Hydrologic Unit in which the Ponds Occur	N/A
Recreation Areas							
Streams	S	S	S	S	S	**Wet-1a**	LS
Ponds	LS	LS	LS	LS	LS	N/A	N/A
Road Relocations and South Bridge							
Streams	S	S	S	S	S	**Wet-1a**	LS
Ponds	LS	LS	LS	LS	LS	N/A	N/A
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Maintenance Office							
Streams	S	S	S	S	S	**Wet-1a**	LS
Ponds	LS	NI	LS	LS	LS	N/A	N/A
Holthouse Reservoir Complex							
Streams	S	S	S	S	S	**Wet-1a**	LS
Funks Reservoir	S	S	S	S	S	**Wet-1c**	LS
Holthouse Reservoir Electrical Switchyard	S	NI	S	S	S	N/A	N/A
TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR							
Ditches and Canals	LS	NI	LS	LS	LS	N/A	N/A
Sites/Delevan Overhead Power Line							
Streams	LS	LS	LS	LS	LS	N/A	N/A
Ponds	LS	LS	LS	LS	LS	N/A	N/A
TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Electrical Switchyard, Delevan Pipeline							
Streams	LS	LS	LS	LS	LS	N/A	N/A
Ponds	S	S	S	S	S	**Wet-1c**	LS
Ditches and Canals	S	S	S	S	S	**Wet-1b:** Reroute Drainage Ditches and Canals to Ensure Continued Hydrological Connection, or Implement Other Compensatory Mitigation Measures per USACE Determination	LS
Delevan Pipeline Intake Facilities							
Streams	S	N/A	S	S	S	**Wet-1a**	LS
Project Buffer	LS	LS	LS	LS	LS	N/A	LS
Delevan Pipeline Discharge Facilities							
Streams	N/A	S	N/A	N/A	N/A	**Wet-1a**	LS
Impact Wet-2: A Permanent Adverse Effect to Federally Protected Wetlands (as Defined by Section 404 of the Clean Water Act [Including, but not Limited to, Marsh, Vernal Pool, Coastal]) through Direct Removal, Filling, Hydrological Interruption, Discharge of Pollutants, or Other Means							
Extended Study Area							
Wildlife Refuge Water Use, San Luis Reservoir	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Trinity River, Klamath River Downstream of the Trinity River, Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake, Lewiston Lake, Whiskeytown Lake, Keswick Reservoir, Feather River; Thermalito Complex, Lake Natoma, Sacramento River; Spring Creek; Clear Creek; Sacramento-San Joaquin Delta, Suisun Bay	LS	LS	LS	LS	LS	N/A	N/A
Sutter Bypass; Yolo Bypass; American River	LS	LS	LS	LS	LS	N/A	N/A
San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams							
Seasonal Wetlands	S	S	S	S	S	**Wet-2a:** Conserve, Enhance, Restore, or Create Seasonal Wetlands, or Implement Other Compensatory Mitigation Measures Pursuant to USACE Determination within the Watershed in which the Impacts Occur	LS
Alkaline Wetlands and Salt Lake Pond	S	S	S	S	S	**Wet-2b:** Conserve, Enhance, Restore, or Create Alkaline Wetlands, or Implement Other Compensatory Mitigation Measures Pursuant to USACE Determination within the Watershed in which the Impacts Occur	LS
Vernal Pools	S	S	S	S	S	**Wet-2c:** Conserve, Enhance, Restore, or Create Vernal Pools Equivalent to the Type of Vernal Pools Adversely Impacted, or Implement Other Compensatory Mitigation Measures Pursuant to USACE Determination	LS
Emergent Wetlands	S	S	S	S	S	**Wet-2d:** Conserve, Enhance, Restore, or Create Emergent Wetlands, or Implement Other Compensatory Mitigation Measures Pursuant to USACE Determination within the Watershed in which the Impacts Occur	LS
Riparian Wetlands	S	S	S	S	S	**Wet-2e:** Conserve, Enhance, Restore, or Create Comparable Riparian Wetlands in the Inner Coast Range Foothills, or Implement Other Compensatory Mitigation Measures Pursuant to USACE Determination	LS
Recreation Areas							
Seasonal Wetlands	S	S	S	S	S	**Wet-2a**	LS
Road Relocations and South Bridge							
Seasonal Wetlands	LS	LS	LS	LS	LS	N/A	N/A
Alkaline Wetlands	LS	LS	LS	LS	LS	N/A	N/A
Vernal Pools	LS	LS	LS	LS	LS	N/A	N/A
Emergent Wetlands	LS	LS	LS	LS	LS	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure, Field Office Maintenance Yard, Holthouse Reservoir Electrical Switchyard, TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR,	NI	NI	NI	NI	NI	N/A	N/A
Holthouse Reservoir Complex							
Alkaline Wetlands	S	S	S	S	S	**Wet-2b**	LS
Seasonal Wetlands	S	S	S	S	S	**Wet-2a**	LS
Sites/Delevan Overhead Power Line							
Alkaline Wetlands; Vernal Pools	LS	NI	LS	LS	LS	N/A	N/A
Delevan Pipeline, TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Electrical Switchyard							
Alkaline Wetlands	S	S	S	S	S	**Wet-2b**	LS
Vernal Pools	S	S	S	S	S	**Wet-2c**	LS
Delevan Pipeline Intake Facilities							
Emergent Wetlands	LS	N/A	LS	LS	LS	N/A	N/A
Project Buffer	LS	LS	LS	LS	LS	N/A	N/A
Delevan Pipeline Discharge Facilities	LS	LS	LS	LS	LS	N/A	N/A
16. Geology, Minerals, Soils, and Paleontology							
Geology and Soils							
Impact Geo/Soils-1: Effects on a Geologic Unit or Soil Unit from Project Construction, Operation, and Maintenance							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Geo/Soils-2: Project Construction, Operation, and Maintenance Effects on Soil Erosion and Loss of Topsoil							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Geo/Soils-3: Risks to Life and Property from Project Construction, Operation, and Maintenance on Expansive Soil							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Geo/Soils-4: Project Construction, Operation, and Maintenance Effects on Soils that are Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems where Sewers are not Available for the Wastewater Disposal							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Minerals							
Impact Min-1: Loss of Availability of a Known Mineral Resource that would be of Value to the Region and the Residents of the State							
Extended, Secondary, and Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Min-2: Loss of Availability of a Locally Important Mineral Resource Recovery Site Delineated on a Local General Plan, Specific Plan, or Other Land Use Plan							
Extended, Secondary, and Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Min-3: Expose People to Naturally Occurring Asbestos during Project Construction, Operation, or Maintenance							
Extended, Secondary, and Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Paleontology							
Impact Paleo-1: Project Construction, Operation, and Maintenance Effects on Paleontological Resources							
Extended and Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
Primary Study Area							
Site Reservoir Inundation Area; Sites Reservoir Dams; Recreation Areas; Road Relocations and South Bridge; Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard, GCID Canal Facilities Modifications; GCID Canal Connection to the TRR; TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, TRR Pipeline; TRR Pipeline Road, Delevan Pipeline Electrical Switchyard, Delevan Transmission Line; Delevan Pipeline	S	S	S	S	S	**Paleo-1a:** Retain a Qualified Paleontological Resource Specialist Prior to the Start of Construction **Paleo-1b:** Consultation with the Paleontological Resource Specialist Prior to and During Project Construction **Paleo-1c:** Prepare and Implement a Paleontological Resources Monitoring and Mitigation Plan **Paleo-1d:** Conduct Paleontological Resources Awareness Training **Paleo-1e:** Conduct Monitoring During Project Construction and Prepare Monthly Reports **Paleo-1f:** Ensure Implementation of the Paleontological Resources Monitoring and Mitigation Plan	LS
Delevan Pipeline Intake Facilities	S	N/A	S	S	S	**Paleo-1a through Paleo-1f**	LS
Delevan Pipeline Discharge Facility	S	S	S	S	S	**Paleo-1a through Paleo-1f**	LS
Project Buffer	S	S	S	S	S	**Paleo-1a through Paleo-1f**	LS
17. Faults and Seismicity							
Impact Seis-1: Exposure of People or Structures to Fault Rupture, Seismic Ground Shaking, Seismic-related Ground Failure, Liquefaction, or Landslides							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Seis-2: Inundation by Seiches or Tsunamis							
Extended, Secondary, and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Impact Seis-3: Reservoir-induced Seismicity							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
18. Cultural/Tribal Cultural Resources							
Impact Cul-1: A Substantial Adverse Change in the Significance of an Archaeological Resource							
Extended Study Area	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	S	S	S	S	S	**Cul-1a:** Avoid Impacts on Historical Resources/Historic Properties **Cul-1b:** Conduct Archaeological Data Recovery **Cul-1c:** Conduct Archaeological Construction Monitoring **Cul-1d:** Immediately Halt Construction if Cultural Resources Are Discovered and Implement a Post Review Discovery Plan **Cul-1e:** Protection of Archaeological	LS

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
						Sites by Capping	
Impact Cul-2: A Substantial Adverse Change in the Significance of a Historical Resource of the Built Environment							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams; TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR, Delevan Transmission Line, Delevan Pipeline, TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Electrical Switchyard, Delevan Pipeline Intake Facilities; Project Buffer; Overhead Power Lines and Substations, Holthouse Reservoir Complex and Holthouse Reservoir Electrical Switchyard	S	S	S	S	S	**Cul-1a** **Cul-2a:** Follow the Secretary of the Interior's Standards for the Treatment of Historical Resources/Historic Properties **Cul-2b:** Record Built Environment Resources	SU (if eligible for CRHR or NRHP listing)
Impact Cul-3: Disturb a Traditional Cultural Property or a Tribal Cultural Resource as defined in PCR section 21074							
Extended Study Area	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area, Sites Reservoir Dams; TRR, TRR Pumping/Generating Plant, TRR Electrical Switchyard, GCID Canal Connection to the TRR, Delevan Transmission Line, Delevan Pipeline, TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Electrical Switchyard, Delevan Pipeline Intake Facilities; Project Buffer; Overhead Power Lines and Substations, GCID Canal Facilities Modifications	S	S	S	S	S	**Cul-1a** **Cul-3:** Consult with Affected Communities Regarding How to Mitigate for Impacts on TCPs/TCRs	SU (if eligible for CRHR or NRHP listing)
Impact Cul-4: Disturb Human Remains, including those Interred Outside of Dedicated Cemeteries							
Extended Study Area	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	S	S	S	S	S	**Cul-1a** **Cul-4a:** Relocation of Dedicated or Known Cemeteries **Cul-4b:** Immediately Halt Construction if Human Remains Are Discovered and Implement a Burial Treatment Plan	SU (if eligible for CRHR or NRHP listing)
19. Indian Trust Assets							
Extended, Secondary, and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
20. Land Use – CONFIRMING IMPACT CALLS WITH COUNTIES							
Impact Land-1: Physical Division of an Established Community							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area and Sites Reservoir Dams (construction, operation, and maintenance effects on the town of Sites)	S	S	S	S	S	No Feasible Mitigation	SU
Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations; South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; TRR; TRR Pumping/Generating Plant; GCID Canal Connection to the TRR; TRR Electrical Switchyard; Delevan Pipeline Intake Facilities; Delevan Pipeline Discharge Facility (construction, operation, and maintenance)	S	S	S	S	S	**Land-2:** Work with Glenn and Colusa Counties to Modify or Amend Counties General Plans and/or Zoning Ordinances to Bring lands into Consistency with the Proposed Project Land Uses	SU
Impact Land-3: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as Defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as Defined by Government Code Section 51104(g))							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Impact Land-4: Involve Other Changes in the Existing Environment which, Because of their Location or Nature, could Result in Conversion of Farmland to Non-agricultural Use or Conversion of Forest Land to Non-forest Use							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	LS
Impact Land-5: Changes in Land Use that are Considered to be Incompatible with the Existing Land Uses Adjacent to the Project Facilities							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Impact Land-6: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as Shown on the Maps Prepared Pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to Non-agricultural Use							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	S	S	S	NI	S	No Feasible Mitigation	SU
Impact Land-7: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations; South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard; Delevan Pipeline Electrical Switchyard; TRR; TRR Pumping/Generating Plant; GCID Canal Connection to the TRR; TRR Electrical Switchyard; Delevan Pipeline Intake Facilities; Delevan Pipeline Discharge Facility (construction, operation, and maintenance)	S	S	S	S	S	**Land-7a:** Acquire Lands through Eminent Domain or Work with Land Owners to Acquire Properties and Pay Any Cancellation Fees Associated with Removing Lands from Williamson Act Contracts **Land-7b:** For Land Permanently Acquired other than by Eminent Domain, Seek County Approvals to Rescind Williamson Act Contracts and Enter in Open Space Contracts or Open Space Easements	LS
21. Recreation Resources							
Impact Rec-1: Increase the Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities such that Substantial Physical Deterioration of the Facility would Occur or be Accelerated							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
Primary Study Area							
All Primary Study Area Project Facilities except for the Delevan Pipeline Intake/Discharge Facilities	NI	NI	NI	NI	NI	N/A	N/A
Delevan Pipeline Intake Facilities	LS	N/A	LS	LS	LS	N/A	N/A
Delevan Pipeline Discharge Facility	LS	LS	LS	LS	LS	N/A	N/A
Impact Rec-2: Include Recreational Facilities or Require the Construction or Expansion of Recreational Facilities which might Have an Adverse Physical Effect on the Environment							
Extended Study Area							
Wildlife Refuge Water Use, San Luis Reservoir, Other Reservoirs	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Complex	LS	LS	LS	LS	LS	N/A	N/A
Impact Rec-3: Reduce Recreation Use Levels at Existing Nearby Recreation Facilities by Providing an Alternative New Site for Recreation Visitors							
Extended Study Area							
Wildlife Refuge Water Use, San Luis Reservoir, Other Reservoirs	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Trinity River, Klamath River downstream of the Trinity River, Shasta Lake, Sacramento River, Clear Creek, Feather River, American River, Sutter Bypass, Yolo Bypass, Sacramento-San Joaquin Delta, Suisun Bay, San Pablo Bay, San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Lake Oroville, Folsom Lake, Other Reservoirs	LS	LS	LS	LS	LS	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Impact Rec-4: Affect Recreation Use Levels and/or Recreation Benefits at Existing Reservoirs or Rivers due to Changes in Operating Criteria							
Extended Study Area							
San Luis Reservoir, Other Reservoirs	NI	NI	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Clear Creek, Sacramento-San Joaquin Delta; Suisun Bay, San Pablo Bay, San Francisco Bay, Other Reservoirs, Sacramento River, Feather River	NI	NI	NI	NI	NI	N/A	N/A
Trinity River, Sutter Bypass, Yolo Bypass, American River	LS	LS	LS	LS	LS	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Impact Rec-5: Reduce Recreation Use Levels at Existing Recreation Facilities During the Period of Construction							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Sites Reservoir Inundation Areas, Sites Reservoir Dams; Recreation Areas, Road Relocations and South Bridge; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Holthouse Reservoir Complex; Holthouse Reservoir Electrical Switchyard, GCID Canal Facilities Modifications; GCID Canal Connection to the TRR; TRR; TRR Pumping/Generating Plant; TRR Electrical Switchyard, TRR Pipeline; TRR Pipeline Road, Delevan Pipeline Electrical Switchyard, Project Buffer	NI	NI	NI	NI	NI	N/A	N/A
Delevan Pipeline	LS	LS	LS	LS	LS	N/A	N/A
Sites/Delevan Overhead Power Line	LS	LS	LS	LS	LS	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
Delevan Pipeline Intake Facilities	LS	N/A	LS	LS	LS	N/A	N/A
Delevan Pipeline Discharge Facility	LS	LS	LS	LS	LS	N/A	N/A
Impact Rec 6: Create Hazardous Conditions for Water Based Activities due to Changes in Operating Criteria							
Extended Study Area							
Wildlife Refuge Water Use, San Luis Reservoir, Other Reservoirs	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity River, Sacramento River, Lake Oroville, Sutter Bypass, Yolo Bypass, American River	LS	LS	LS	LS	LS	N/A	N/A
Trinity Lake, Klamath River downstream of the Trinity River, Clear Creek, Feather River, Folsom Lake, Sacramento-San Joaquin Delta, Suisun Bay, San Pablo Bay, San Francisco Bay, Other Reservoirs	NI	NI	NI	NI	NI	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
22. Socioeconomics – TO BE COMPLETED							
Impact Socio-1: Substantial Adverse Effects on Regional Economics							
Extended, Secondary, and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Impact Socio-2: Substantial Adverse Effects on Population and Housing							
Extended, Secondary, and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Impact Socio-3: Substantial Adverse Effects on Local Government Fiscal Conditions							
Extended, Secondary, and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Impact Socio-4: Substantial Adverse Effects on Recreation Economics							
Extended, Secondary, and Primary Study Areas	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	N/A	N/A
Impact Socio-5: Substantial Adverse Effects on Agricultural Economics							
Extended, Secondary, and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Impact Socio-6: Substantial Adverse Effects on M&I Water Use Economics							
Extended and Secondary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
23. Environmental Justice							
Impact Env Jus-1: A Disproportionate Share of an Adverse Impact (such as Traffic, Noise, Dust, Hazards, and/or Socioeconomic Effects) on a Minority or Low-income Population, Including the Potential for Minority or Low-income Populations to be Disproportionately Affected by Multiple Adverse Exposures Impacts							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area							
Minority and Low-income Populations	NI	NI	NI	NI	NI	N/A	N/A
Job and Recreational Opportunities	NI	NI	NI	NI	NI	N/A	N/A
24. Air Quality							
Impact Air Qual-1: Conflict with an Applicable Air Quality Plan, Contribute Substantially to an Air Quality Violation, and/or Result in a Cumulatively Considerable Net Increase of Nonattainment Pollutants							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	S	S	S	S	S	**Air Qual-1a:** Develop a Fugitive Dust Control Plan	SU (for Emissions of PM_{10})
						Air Qual-1b: Implement Measures to Reduce Equipment and Vehicle	SU (for Emissions of NO_x, PM_{10}, and

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
						Exhaust Emissions	ROG) LS (for Emissions of SO_x, CO, and $PM_{2.5}$)
Impact Air Qual-2: Expose Sensitive Receptors to Substantial Pollutant Concentrations							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Air Qual-3: Create Objectionable Odors Affecting a Substantial Number of People							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
25. Climate Change and Greenhouse Gas Emissions – TO BE COMPLETED							
Impact GHG-1: Generation of Cumulative GHG Emissions							
Extended, Secondary, and Primary Study Areas							
Construction, Operation, and Maintenance of the Proposed Project	S	S	S	S	S	No Feasible Mitigation	SU
Open Water Surfaces and Tailraces	LS	LS	LS	LS	LS	N/A	N/A
26. Navigation, Transportation, and Traffic							
Impact Nav-1: Conflict with Navigation Along any of the Navigable Waterways within the Extended, Secondary, and Primary Study Areas							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area (Delevan Complex)	LS	LS	LS	LS	LS	N/A	N/A
Impact Trans-1: Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, Considering all Modes of Transportation							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Trans-2: Conflict with an Applicable Congestion Management Program, Including, but not Limited to, Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency for Designated Roads or Highways							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Trans-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Trans-4: Result in Inadequate Emergency Access							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Trans-5: Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Facilities							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
27. Noise							
Impact Noise-1: Expose Persons to or Generation of Noise Levels in Excess of Established Standards							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Clear Creek, Lake Oroville, Thermalito Complex; Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Noise-2: Expose Persons to or Generation of Excessive Ground-borne Vibration or Ground-borne Noise Levels							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Clear Creek, Lake Oroville, Thermalito Complex; Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Noise-3: Result in a Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Clear Creek, Lake Oroville, Thermalito Complex; Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; San Francisco Ba	NI	NI	NI	NI	NI	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Noise-4: Result in a Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Clear Creek, Lake Oroville, Thermalito Complex; Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Noise-5: Expose People Residing or Working in the Project Area to Excessive Noise Levels (when the Project is Located within an Airport Land Use Plan or within 2 Miles of a Public Airport)							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Noise 6: Expose People Residing or Working in the Project Area to Excessive Noise Levels (for a Project within the Vicinity of a Private Airstrip)							
Extended, Secondary, and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
28. Public Health and Environmental Hazards							
Impact Pub Health-1: Create a Significant Public or Environmental Hazard from the Routine Transport, Use, or Disposal of Hazardous Materials							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Impact Pub Health-2: Create a Significant Public or Environmental Hazard from the Release of Hazardous Materials into the Environment							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Pub Health-3: Effects from Hazardous Emissions or Hazardous Materials, Substances, or Wastes within 0.25 Mile of an Existing or Proposed School							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation A	B	C	C_1	D	Recommended Mitigation Measure	Level of Significance after Mitigation
Secondary and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Impact Pub Health-4: Create a Significant Hazard to the Public or the Environment from the Project being Located on a Listed Hazardous Materials Site							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Pub Health-5: Effects on Adopted Emergency Response Plan or Emergency Evacuation Plan Implementation							
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary and Primary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Impact Pub Health-6: Expose People or Structures to a Significant Risk of Loss, Injury, or Death from Wildland Fires							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Pub Health-7: Create a Safety Hazard for People Residing or Working in the Project Area (if Located within an Airport Land Use Plan or within 2 Miles of a Public Airport or Public Use Airport if no Plan has been Adopted)							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Impact Pub Health-8: Creation of a safety hazard for people residing or working in the Project area (if located within the vicinity of a private airstrip).							
Extended, Secondary, and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Impact Pub Health-9: Expose People to an Increased Risk of Mosquito-borne or Other Vector-borne Illnesses, or Increased Exposure to Nuisance Problems							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
29. Public Services and Utilities							
Impact Services-1: A Substantial Adverse Physical Impact Associated with the Provision of New or Physically Altered Governmental Facilities or the Need for New or Physically Altered Governmental Facilities (the Construction of which Could Cause Significant Environmental Impacts) in Order to Maintain Acceptable Service Ratios, Response Times, or Other Performance Objectives for the Following Public Services: Fire Protection, Police Protection, Schools, Parks, and/or Other Public Facilities, and Disruptions to Local or Regional Utility Services							
Extended, Secondary, and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Impact Services-2: A Decline in Property Tax or Fee Revenues that Would Lead to a Substantial Decrease in Public Services							
Extended and Secondary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Services-3: Exceed the Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board							
Extended, Secondary, and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Impact Services-4: The Need for Expansion of Existing Wastewater Treatment, Water Treatment, Stormwater, and/or Landfill Facilities							
Extended, Secondary, and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Impact Services-5: Require New or Expanded Water Supply Entitlements and Resources							
Extended and Secondary Study Areas	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area	LS	LS	LS	LS	LS	N/A	N/A
Impact Services-6: Non-compliance with Federal, State, and Local Statutes and Regulations Related to Solid Waste							
Extended, Secondary, and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
30. Visual Resources							
Impact Vis-1: A Substantial Adverse Effect on a Scenic Vista							
Extended, Secondary, and Primary Study Areas	NI	NI	NI	NI	NI	N/A	N/A
Impact Vis-2: Substantial Damage to Scenic Resources, Including, but not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway							
Extended Study Area							
Agricultural Water Use, Municipal and Industrial Water Use, and Wildlife Refuge Water Use	NI	NI	NI	NI	NI	N/A	N/A

Impact	Anticipated Impact in Comparison to Existing Conditions/No Action/No Project Condition Prior to Mitigation					Recommended Mitigation Measure	Level of Significance after Mitigation
	A	B	C	C_1	D		
San Luis Reservoir and Other Reservoirs	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Clear Creek, Lake Oroville, Thermalito Complex; Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; San Francisco Bay	LS	LS	LS	LS	LS	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	NI	NI	NI	NI	NI	N/A	N/A
Primary Study Area	NI	NI	NI	NI	NI	N/A	N/A
Impact Visual-3: Substantial Degradation of the Existing Visual Character or Quality of the Site and its Surroundings							
Extended Study Area							
Agricultural Water Use, Municipal and Industrial Water Use, and Wildlife Refuge Water Use	NI	NI	NI	NI	NI	N/A	N/A
San Luis Reservoir and Other Reservoirs	LS	LS	LS	LS	LS	N/A	N/A
Secondary Study Area							
Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Clear Creek, Lake Oroville, Thermalito Complex; Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Complex; Holthouse Reservoir Complex; Delevan Complex; Transmission Lines; and Project Buffer	LS	LS	LS	LS	LS	N/A	N/A
TRR; TRR Pumping/Generating Plant, TRR Electrical Switchyard, TRR Pipeline, TRR Pipeline Road, Delevan Pipeline Electrical Switchyard, GCID Canal Connection to the TRR	S	S	S	S	S	No Mitigation Available	SU
Extended Study Area	NI	NI	NI	NI	NI	N/A	N/A
Secondary Study Area							
Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Clear Creek, Lake Oroville, Thermalito Complex; Feather River; Sutter Bypass; Yolo Bypass; Folsom Lake; Lake Natoma; American River; Sacramento-San Joaquin Delta; Suisun Bay; San Pablo Bay; San Francisco Bay	NI	NI	NI	NI	NI	N/A	N/A
Pump Installation at the Red Bluff Pumping Plant	LS	LS	LS	LS	LS	N/A	N/A
Primary Study Area							
Sites Reservoir Complex; Holthouse Reservoir Complex; TRR Complex; Delevan Complex; Transmission Lines; and Project Buffer	LS	LS	LS	LS	LS	N/A	N/A
31. Power Production and Energy – TO BE COMPLETED							
Impact Power-1: Inefficient, Wasteful, or Unnecessary Consumption of Energy during Construction, Maintenance, and Recreation Activities							
Extended Study Area	?	?	?	?	?	?	?
Secondary Study Area	?	?	?	?	?	?	?
Primary Study Area	?	?	?	?	?	?	?
Impact Power-2: Inefficient, Wasteful, or Unnecessary Consumption of Energy during Operational Activities							
Extended Study Area	?	?	?	?	?	?	?
Secondary and Primary Study Areas	?	?	?	?	?	?	?
Impact Power-3: A Substantial Reduction in the Generation of Renewable Energy							
Extended, Secondary, and Primary Study Areas	?	?	?	?	?	?	?

Notes:

LS = less than significant
N/A = not applicable
NI = no impact
S = significant
SU = significant and unavoidable

BMP = best management practices
CDFW = California Department of Fish and Wildlife
CNPS = California Native Plant Society
CO = carbon monoxide
CRHR = California Register of Historical Resources
CVP = Central Valley Project
GCID = Glenn-Colusa Irrigation District
GHG = greenhouse gas
M&I = municipal and industrial
NO_x = nitrogen oxides
NRHP = National Register of Historic Places
PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 microns or less
SOX = sulfur oxide
SWP = State Water Project
TRR = Terminal Regulating Reservoir
USACE = U.S. Army Corps of Engineers
USFWS = U.S. Fish and Wildlife Service

Tribal Consultation

Consultation with Native American tribes was initiated. The Authority contacted the California Native American Heritage Commission (NAHC) on January 27, 2017, with a request for a list of tribes that have a traditional and cultural affiliation with the Primary Study Area. Table 2 summarizes the information NAHC provided on February 8, 2017, under Public Resources Code (PRC) Section 21080.3.1.

Table 2. Native American Consultation

Tribe	Contact	Notification Letter	Tribal Response	Consultation Actions to Date
Colusa Indian Community Council (Cachil Dehe Band of Wintun Indians)	Oscar Serrano, Principal Engineer	February 10, 2017	Letter requesting consultation was received by the Authority on February 6, 2017.	The Authority sent a letter in preparation for an initial meeting on March 6, 2017.
Cortina Indian Rancheria of Wintun Indians	Charlie Wright, Chairperson	February 10, 2017	No response, to date.	
Estom Yumeka Maidu Tribe of the Enterprise Rancheria	Glenda Nelson, Chairperson	February 10, 2017	No response, to date.	
Grindstone Indian Rancheria of Wintun-Wailaki	Ronald Kirk, Chairperson	February 10, 2017	No response, to date.	
Mechoopda Indian Tribe	Denis. E. Ramirez, Chairperson	February 10, 2017	No response, to date.	
Paskenta Band of Nomlaki Indians	Andrew Alejandre Chairperson	February 10, 2017	No response, to date.	
Yoche Dehe Wintun Nation	Leland Kinter, Chairperson	February 10, 2017	No response, to date.	

The Colusa Indian Community Council, the governing body of the Cachil Dehe Band of Wintun Indians, had previously notified the Authority that they wished to be notified of projects, pursuant to PRC Section 21080.3 in a letter dated January 3, 2017. Furthermore, the tribe contacted the Authority by letter dated February 6, 2017, in which they expressed their desire to consult on the Project. The Authority responded, by letter on March 6, 2017, acknowledging receipt of the request for consultation letter and informing the tribe that they would be in contact soon to set up a meeting date.

Although not prepared for PRC Section 21080.3.1 consultation, the Cortina Band of Wintun Indians prepared a report in 2010 (Cortina, 2010) to outline their concerns about the Project. In addition to expressing concerns about fish and water associated with the Project, the tribe provided recommendations regarding cultural resources, including, among other recommendations, the following (Cortina, 2010):

- "The Cortina Band wishes to be consulted at all phases of planning and build out to ensure that impacts on cultural resources are mitigated or avoided. When impacts are unavoidable, the Cortina Band wishes to be involved in determining the best course of action. In particular, the Site's [sic] Reservoir has a need for site testing, borings, and soil column sampling to ensure that cultural resources are not adversely impacted."
- "There is the potential for the project to increase the availability of crafts materials, medicines and foods from riparian and wetland areas. Cortina would like to be consulted on the biological mitigations and enhancements to ensure the tribal perspective is considered in these processes."

The Authority will continue to consult with tribes that have a traditional and cultural affiliation with the Primary Study Area throughout development and construction of the Project.

ADD AB52

References

Cortina. 2010

Benefit Calculation, Monetization, and Resiliency Tab

Attachment A6: Future Economic Benefit

Attach a table displaying each future economic benefit in 2015 dollars for each year of the planning horizon as required by section 6004(a)(4)(A) of the regulations.

WSIP Application Instructions, March 2017

Table A6-1. Annualized Average Benefit Value Summary by Beneficiary (2015$; $1000s)

	WSIP Public Benefits								Non-Proposition 1 Eligible Benefits						
		Total Ecosystem Improvement								Water Supply					
	Total WSIP Public Benefits	**Total Ecosystem Improvement**	**Anadromous Fish & Other Aquatic**	**Incremental Level 4 Refuge**	**Oroville Coldwater Pool**	**Yolo Bypass**	**Recreation**	**Flood Control**	**Total Non-Prop. 1 Benefits**	**Total Water Supply**	**M&I Water Supply**	**Agricultural Water Supply**	**Recaptured Water**	**Hydropower (System)**	**Total Benefits**
2030	**$73,717**	**$62,343**	**$25,637**	**$16,047**	**$11,814**	**$8,845**	**$6,997**	**$4,377**	**$109,207**	**$89,024**	**$46,737**	**$37,443**	**$4,845**	**$20,183**	**$182,925**
2045	**$119,700**	**$108,325**	**$48,505**	**$27,644**	**$22,986**	**$9,190**	**$6,997**	**$4,377**	**$177,417**	**$157,234**	**$95,883**	**$51,732**	**$9,619**	**$20,183**	**$297,116**
2070	**$156,824**	**$145,449**	**$86,619**	**$24,634**	**$24,976**	**$9,220**	**$6,997**	**$4,377**	**$271,704**	**$251,521**	**$177,793**	**$56,995**	**$16,733**	**$20,183**	**$428,527**
PV Benefit (2030–2122)	$3,461,487	$3,145,717	$1,616,392	$675,417	$595,293	$258,615	$191,604	$124,167	$5,528,427	$4,975,773	$3,236,668	$1,423,594	$315,512	$552,653	$8,989,914
Annualized Average (2030–2122)	$122,033	$110,900	$56,985	$23,811	$20,987	$9,117	$6,755	$4,377	$194,902	$175,418	$114,107	$50,188	$11,123	$19,483	$316,934
PV - Early Operations Benefits (2026–2029)	$44,722	$30,564	$20,658	$0	$0	$9,905	$0	$14,158	$0	$0	$0	$0	$0	$0	$44,722
Adjusted Annualized Average (2030–2122) [a]	$123,609	$111,978	$57,713	$23,811	$20,987	$9,467	$6,755	$4,877	$194,902	$175,418	$114,107	$50,188	$11,123	$19,483	$318,511
Total PV Benefit Adjusted (2030-2122) [a]	**$3,506,198**	**$3,176,280**	**$1,637,050**	**$675,417**	**$595,293**	**$268,520**	**$191,592**	**$138,325**	**$5,528,380**	**$4,975,727**	**$3,236,668**	**$1,424,238**	**$314,821**	**$552,653**	**$9,034,577**

Notes:
[a] Adjustment incorporates early operational benefits (2026–2029) into annualized averages (2030–2122).
M&I =- municipal and industrial
PV = present value
WSIP = Water Storage Investment Program

Table A6-2. Annual Economic Benefits by Beneficiary: 2023 to 2122 (2015$; $1000s)

	Year	PV Factor (2030)	Total WSIP Public Benefits	Total Ecosystem Improvement	Anadromous Fish & Other Aquatic	Incremental Level 4 Refuge	Oroville Coldwater Pool	Yolo Bypass	Recreation	Flood Control	Total Non-Prop. 1 Benefits	Total Water Supply	M&I Water Supply	Agricultural Water Supply	Recaptured Water	Hydropower (System)	Total Benefits
Construction Starts	2023	1.272	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	2024	1.229	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	2025	1.188	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	2026	1.148	$5,637	$3,448	$2,564	$0	$0	$884	$0	$2,189	$0	$0	$0	$0	$0	$0	$5,637
	2027	1.109	$7,361	$5,172	$3,846	$0	$0	$1,327	$0	$2,189	$0	$0	$0	$0	$0	$0	$7,361
	2028	1.071	$12,158	$7,781	$5,127	$0	$0	$2,653	$0	$4,377	$0	$0	$0	$0	$0	$0	$12,158
Construction Ends	2029	1.035	$16,491	$12,113	$7,691	$0	$0	$4,422	$0	$4,377	$0	$0	$0	$0	$0	$0	$16,491
WSIP Analysis Year	2030	1.000	$70,219	$62,343	$25,637	$16,047	$11,814	$8,845	$3,499	$4,377	$99,116	$89,024	$46,737	$37,443	$4,845	$10,091	$169,334
	2031	0.966	$73,371	$65,494	$27,161	$16,935	$12,530	$8,868	$3,499	$4,377	$103,657	$93,566	$50,013	$38,379	$5,174	$10,091	$177,028
	2032	0.934	$80,022	$68,647	$28,686	$17,820	$13,251	$8,891	$6,997	$4,377	$118,291	$98,108	$53,289	$39,318	$5,501	$20,183	$198,314
	2033	0.902	$83,176	$71,802	$30,211	$18,702	$13,975	$8,914	$6,997	$4,377	$122,834	$102,651	$56,566	$40,258	$5,827	$20,183	$206,011
	2034	0.871	$86,332	$74,957	$31,735	$19,581	$14,704	$8,937	$6,997	$4,377	$127,378	$107,195	$59,842	$41,201	$6,152	$20,183	$213,710
	2035	0.842	$89,158	$77,783	$33,260	$20,127	$15,437	$8,960	$6,997	$4,377	$131,923	$111,740	$63,119	$42,146	$6,475	$20,183	$221,081
	2036	0.814	$92,232	$80,858	$34,784	$20,917	$16,174	$8,983	$6,997	$4,377	$136,468	$116,285	$66,395	$43,094	$6,796	$20,183	$228,701
	2037	0.786	$95,302	$83,928	$36,309	$21,698	$16,915	$9,006	$6,997	$4,377	$141,015	$120,832	$69,671	$44,044	$7,116	$20,183	$236,317
	2038	0.759	$98,368	$86,993	$37,833	$22,471	$17,660	$9,029	$6,997	$4,377	$145,562	$125,379	$72,948	$44,996	$7,435	$20,183	$243,930
	2039	0.734	$101,429	$90,054	$39,358	$23,236	$18,409	$9,052	$6,997	$4,377	$150,110	$129,927	$76,224	$45,951	$7,752	$20,183	$251,539
	2040	0.709	$104,485	$93,111	$40,882	$23,991	$19,162	$9,075	$6,997	$4,377	$154,659	$134,476	$79,501	$46,908	$8,067	$20,183	$259,144
	2041	0.685	$107,537	$96,162	$42,407	$24,739	$19,919	$9,098	$6,997	$4,377	$159,208	$139,025	$82,777	$47,868	$8,381	$20,183	$266,746
	2042	0.662	$110,585	$99,210	$43,931	$25,477	$20,680	$9,121	$6,997	$4,377	$163,759	$143,576	$86,054	$48,830	$8,693	$20,183	$274,344
	2043	0.639	$113,627	$102,253	$45,456	$26,208	$21,445	$9,144	$6,997	$4,377	$168,311	$148,128	$89,330	$49,795	$9,003	$20,183	$281,938
	2044	0.618	$116,666	$105,291	$46,981	$26,930	$22,214	$9,167	$6,997	$4,377	$172,863	$152,680	$92,606	$50,762	$9,312	$20,183	$289,529
	2045	0.597	$119,700	$108,325	$48,505	$27,644	$22,986	$9,190	$6,997	$4,377	$177,417	$157,234	$95,883	$51,732	$9,619	$20,183	$297,116
	2046	0.577	$121,185	$109,810	$50,030	$27,521	$23,068	$9,191	$6,997	$4,377	$181,207	$161,024	$99,159	$51,941	$9,924	$20,183	$302,392
	2047	0.557	$122,670	$111,295	$51,554	$27,398	$23,150	$9,192	$6,997	$4,377	$184,997	$164,814	$102,436	$52,150	$10,228	$20,183	$307,667
	2048	0.538	$124,155	$112,780	$53,079	$27,276	$23,232	$9,193	$6,997	$4,377	$188,784	$168,601	$105,712	$52,360	$10,530	$20,183	$312,940
	2049	0.520	$125,640	$114,266	$54,603	$27,154	$23,314	$9,195	$6,997	$4,377	$192,571	$172,388	$108,988	$52,569	$10,830	$20,183	$318,211
	2050	0.503	$127,126	$115,751	$56,128	$27,032	$23,395	$9,196	$6,997	$4,377	$196,355	$176,172	$112,265	$52,778	$11,129	$20,183	$323,481
	2051	0.486	$128,611	$117,236	$57,652	$26,910	$23,476	$9,197	$6,997	$4,377	$200,138	$179,955	$115,541	$52,988	$11,426	$20,183	$328,749
	2052	0.469	$130,096	$118,721	$59,177	$26,789	$23,557	$9,198	$6,997	$4,377	$203,920	$183,737	$118,818	$53,198	$11,721	$20,183	$334,016
	2053	0.453	$131,581	$120,206	$60,701	$26,667	$23,638	$9,199	$6,997	$4,377	$207,700	$187,517	$122,094	$53,408	$12,015	$20,183	$339,281
	2054	0.438	$133,066	$121,691	$62,226	$26,546	$23,718	$9,201	$6,997	$4,377	$211,478	$191,295	$125,370	$53,618	$12,306	$20,183	$344,544
	2055	0.423	$134,551	$123,176	$63,751	$26,425	$23,799	$9,202	$6,997	$4,377	$215,254	$195,071	$128,647	$53,828	$12,596	$20,183	$349,806
	2056	0.409	$136,036	$124,661	$65,275	$26,304	$23,879	$9,203	$6,997	$4,377	$219,029	$198,846	$131,923	$54,038	$12,885	$20,183	$355,066
	2057	0.395	$137,521	$126,146	$66,800	$26,184	$23,959	$9,204	$6,997	$4,377	$222,803	$202,620	$135,200	$54,249	$13,171	$20,183	$360,324
	2058	0.382	$139,006	$127,631	$68,324	$26,063	$24,038	$9,205	$6,997	$4,377	$226,575	$206,392	$138,476	$54,459	$13,456	$20,183	$365,581
	2059	0.369	$140,491	$129,116	$69,849	$25,943	$24,118	$9,207	$6,997	$4,377	$230,345	$210,162	$141,753	$54,670	$13,739	$20,183	$370,836
	2060	0.356	$141,976	$130,601	$71,373	$25,823	$24,197	$9,208	$6,997	$4,377	$234,113	$213,930	$145,029	$54,881	$14,020	$20,183	$376,089
	2061	0.344	$143,461	$132,086	$72,898	$25,704	$24,276	$9,209	$6,997	$4,377	$237,880	$217,697	$148,305	$55,092	$14,300	$20,183	$381,341
	2062	0.333	$144,946	$133,571	$74,422	$25,584	$24,354	$9,210	$6,997	$4,377	$241,645	$221,462	$151,582	$55,303	$14,577	$20,183	$386,590
	2063	0.321	$146,431	$135,056	$75,947	$25,465	$24,433	$9,211	$6,997	$4,377	$245,408	$225,225	$154,858	$55,514	$14,853	$20,183	$391,839
	2064	0.310	$147,915	$136,541	$77,472	$25,345	$24,511	$9,213	$6,997	$4,377	$249,170	$228,987	$158,135	$55,725	$15,127	$20,183	$397,085
	2065	0.300	$149,400	$138,025	$78,996	$25,226	$24,589	$9,214	$6,997	$4,377	$252,930	$232,747	$161,411	$55,937	$15,399	$20,183	$402,330
	2066	0.290	$150,885	$139,510	$80,521	$25,108	$24,667	$9,215	$6,997	$4,377	$256,688	$236,505	$164,687	$56,148	$15,670	$20,183	$407,573
	2067	0.280	$152,370	$140,995	$82,045	$24,989	$24,744	$9,216	$6,997	$4,377	$260,445	$240,262	$167,964	$56,360	$15,938	$20,183	$412,814
	2068	0.271	$153,854	$142,479	$83,570	$24,871	$24,822	$9,217	$6,997	$4,377	$264,199	$244,016	$171,240	$56,571	$16,205	$20,183	$418,054
	2069	0.261	$155,339	$143,964	$85,094	$24,752	$24,899	$9,218	$6,997	$4,377	$267,952	$247,769	$174,517	$56,783	$16,470	$20,183	$423,291
WSIP Analysis Year	2070	0.253	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
Post-2070	2071	0.244	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
Benefits at	2072	0.236	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
2070 levels	2073	0.228	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2074	0.220	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527

	Year	PV Factor (2030)	Total WSIP Public Benefits	Total Ecosystem Improvement	Anadromous Fish & Other Aquatic	Incremental Level 4 Refuge	Oroville Coldwater Pool	Yolo Bypass	Recreation	Flood Control	Total Non-Prop. 1 Benefits	Total Water Supply	M&I Water Supply	Agricultural Water Supply	Recaptured Water	Hydropower (System)	Total Benefits
	2075	0.213	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2076	0.205	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2077	0.199	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2078	0.192	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2079	0.185	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2080	0.179	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2081	0.173	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2082	0.167	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2083	0.161	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2084	0.156	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2085	0.151	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2086	0.146	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2087	0.141	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2088	0.136	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2089	0.131	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2090	0.127	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2091	0.123	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2092	0.118	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2093	0.114	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2094	0.111	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2095	0.107	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2096	0.103	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2097	0.100	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2098	0.096	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2099	0.093	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2100	0.090	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2101	0.087	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2102	0.084	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2103	0.081	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2104	0.078	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2105	0.076	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2106	0.073	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2107	0.071	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2108	0.068	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2109	0.066	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2110	0.064	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2111	0.062	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2112	0.060	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2113	0.058	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2114	0.056	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2115	0.054	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2116	0.052	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2117	0.050	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2118	0.048	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2119	0.047	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2120	0.045	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
	2121	0.044	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527
End of 100-Year Study Period	2122	0.042	$156,824	$145,449	$86,619	$24,634	$24,976	$9,220	$6,997	$4,377	$271,704	$251,521	$177,793	$56,995	$16,733	$20,183	$428,527

M&I =- municipal and industrial
PV = present value
WSIP = Water Storage Investment Program

This file was submitted to the California Water Commission as a Microsoft Excel file. It has been converted to a PDF format for ease of access on our website.
A copy of the Excel file can be obtained by submitting a request to CWC@water.ca.gov.

TAB	ATTACHMENTS	FILE NAME
Applicant Information Tab	None	**00_Sites Applicant Information TAB**
Projects Tab	None	**00_Sites Project TAB**
Eligibility and General Project Information Tab		**00_Sites Eligibility TAB**
	A1 Executive Summary	Sites_A1 ExecSum
	A2 Resolution	Sites_A2 Resolution
	A3 Project Description	Sites_A3 Project Description
	A4.A Drawing Package	Sites_A4 Drawings
	A5 Correctness and Truthfulness	Sites_A2 Resolution
	A6.A Application Index	Sites_A6A Application Index
	A6.B Water Management Plans	Sites_A6B WMPs
	A6.C Groundwater Management	Sites_A6C Groundwater Basins
	A6.D Modeling Results Compendium	Sites_A6D Modeling
	A6.E Support Letters	Sites_A6E Letters
Physical Public Benefits Tab		**00_Sites Physical Benefits TAB**
	A1 Ecosystem Priorities	
	A1 Ecosystem Priorites Worksheets	Sites_A1 Ecosystem Priorities
	A2 Ecosystem Documentation	
	A2 Ecosystem Documentation Priorities	Sites_A2 Ecosystem Documentation
	A1 Water Quality Priorities	
	A1 Water Quality General Questions	Sites_A1 WQ General Questions
	A1 Water Quality Priority 1	Sites_A1 WQ Priority 1
	A1 Water Quality Priority 6	Sites_A1 WQ Priority 6
	A1 Water Quality Priority 7	Sites_A1 WQ Priority 7
	A1 Water Quality Priority 9	Sites_A1 WQ Priority 9
	A2 Water Quality Documentation	
	A2 Water Quality Documentation Priority 1	Sites_A2 Documentation WQ Priority 1
	A2 Water Quality Documentation Priority 6	Sites_A2 Documentation WQ Priority 6
	A2 Water Quality Documentation Priority 9	Sites_A2 Documentation WQ Priority 9
	A2 Water Quality Maps	Sites_A2 WQ Maps
	A1 Flood Control	Sites_A1 Flood Control
	A1 Recreation Visitation	Sites_A1 Recreation Visitation
	A2 Recreation	Sites_A2 Recreation
Feasibility and Implementation Risk Tab		**00_Sites Feasibility TAB**
	A1 Feasibility Studies	Sites_A1 Feasibility
	A2 List of Permits	Sites_A2 Permits
	A3 Schedule	Sites_A3 Schedule
	A4 Environmental Document	Sites_A4 Environmental
	A5 Impact Summary and Tribal Coordinatio	Sites_A5 Impacts and Tribal
Benefit Calculation, Monetization, and Resiliency Tab		**00_Sites Monetization TAB**
	A1 Model Assumptions	Sites_A1 Modeling
	A2 Operations Plan	Sites_A2 Operations
	A3 Physical and Monetized Benefits	Sites_A3 Physical Monetized
	A4 Mitigation and Compliance	Sites_A4 Mitigation
	A5 Economics Documentation	Sites_A5 Documentation
	A6 Future Economic Benefits	Sites_A6 Annual Benefits Table
	A7 Non Monetized Benefits	Sites_A7 Non_Monetized
	A8 Cost Estimate	Sites_A8 Estimate
	A9 Benefit Cost Analysis	Sites_A9 BCA Results
	A10 Cost Allocation	Sites_A10 Allocation
	A11 Physical and Economic Benefits Summa	Sites_A11 Benefits Table
	A12 Uncertainty Analysis	Sites_A12 Uncertainty
Program Requirements Tab		**00_Sites Program TAB**
	A1 Measurable Improvements	Sites_A1 Measurable Benefits
	A2 Cost Effectiveness	Site_ A2 Cost Effectiveness
Early Funding Request Tab		**00_Sites Early Funding TAB**
	A1 Schedule, Scope of Work, Budget	Sites_A1 Scope

Status of Urban and Agricultural Water Management Plans for Sites Participating Agencies
(ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB Question 5)

Agencies	Urban or Ag?	Posted on DWR Website?	Date Submitted	Status
Combined TC-6 (4-M Water District, Cortina Water District, Dunnigan Water District, LaGrande Water District, Maxwell Irrigation District, Proberta Water District)	N/A (Exception Dunningan and Maxwell)	N/A	N/A	N/A
American Canyon	Urban	Yes	6/28/2016	Under Review
Antelope Valley - East Kern Water Agency	Urban	Yes	6/28/2016	Under Review
California Water Service	Urban	Yes	6/16/2016, 6/27/2016, 6/28/2016	Under Review or Review Completed
Carter Municipal Water Company	N/A	N/A	N/A	N/A
Castaic Lake Water Agency	Urban	Yes	6/29/2016	Under Review
Colusa County Water District	Ag	Yes	5/2/2017	Under Review
Colusa County	Ag	N/A		
Coachella Valley Water District	Urban	Yes	7/1/2016	Review Completed
Desert Water Agency	Urban	Yes	6/29/2016	Not approved
Glenn-Colusa Irrigation District	Ag	Yes	12/16/2016	Under Review
Garden Highway Mutual Water Company	Ag	Yes	Aug-14	
Glenn County	N/A	N/A	N/A	N/A
Metropolitan Water District	Urban	Yes	5/24/2016	Review Completed
Orland-Artois Water District	Ag	Yes	4/25/2017	Under Review
Pacific Resources Mutual Water Company	N/A	N/A	N/A	N/A
Placer County Water Agency and the City of Roseville	Urban	Yes	5/25/2016 (Rosevile), 06/15/2016 (PCWA	Review Completed (Roseville), Under Review (PCWA)
Davis Water District	Urban	Yes	6/13/2016	Review Completed
Reclamation District 108	Ag	Yes	1/6/2017	Under Review
San Bernadino Valley Municipal Water District	Urban	Yes	7/1/2016	Under Review
San Gorgonio Pass Water Agency	Urban	Yes	3/21/2017	Under Review
Santa Clara Valley Water District	Urban	Yes	6/20/2016	Review Completed
Tehama-Colusa Canal Authority	N/A	N/A	N/A	N/A
Western Canal Water District	Ag	Yes	2/26/2016	Review Completed
Westside Water District	Urban	Yes	9/21/2016	Review Completed
Wheeler Ridge-Maricopa Water Service District	Ag	Yes	4/6/2016	Review Completed
Zone 7 Water Agency	Urban	Yes	4/1/2016	Review Completed

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Eligibility and Project Information Tab

Attachment 6: Groundwater Basins Affected by the Sites Reservoir Project

Q.6 - Does the proposed project affect groundwater basins, as defined by Water Code section 10722 *et seq*.? If not, enter "Not Applicable"; if so, identify the affected groundwater basins and describe how the project would be integrated with future GSP(s). Explain how the project would reduce, eliminate, or have an effect on undesirable results (as defined in regulations section 6001(a)(85)) within the affected groundwater basin(s). Describe how the applicant would work with GSA(s) or adjudicated participants of the basin. See regulations section 6003(a)(1)(K).

No groundwater benefits have been monetized; however, the Sites Reservoir project would potentially beneficially affect groundwater basins within service areas of project participants, particularly those within the Sacramento River Hydrologic Region. Some of the participants are designated as a Groundwater Sustainability Agency (GSA) for affected groundwater basins, including but not limited to Colusa County, Colusa County Water District, Santa Clara Valley Water District, and Zone 7 Water Agency. Many other agencies participating in the Sites Project also participate in Groundwater Sustainability Agencies. These member agencies will be involved in the future integration of the Sites Project into their respective Groundwater Sustainability Plans (GSPs). Coachella Valley Water District, Desert Water Agency, Santa Clara Valley Water District, and Zone 7 Water Agency have each submitted prescribed Alternatives to a GSP, consisting of groundwater management plans or an analysis of basin conditions. The Sites Reservoir Project could be incorporated into future updates of these Alternatives.

In addition, Sites participants: Desert Water Agency, California Water Service, San Bernardino Valley Municipal Water District, Metropolitan Water District of Southern California and San Gorgonio Pass Water Agency are affiliated with adjudicated groundwater basins. Antelope Valley - East Kern Water Agency is affiliated with a groundwater basin that is pending adjudication. Water deliveries from the Sites Reservoir Project could be incorporated into the management strategy for these basins. The associated operations by participating agencies with adjudicated basins would be included in annual monitoring and reporting activities.

Undesirable conditions include chronic lowering of groundwater levels; reduction of groundwater storage, seawater intrusion; degraded water quality; land subsidence; and depletions of interconnected surface water. The Sites Reservoir project has the potential to improve these undesirable results within groundwater basins associated with its participants.

Table A.6-1 presents a listing of groundwater basins that could be beneficially affected by the project, depending on the exact application of the Sites Project deliveries to those regions. In order to retain water management flexibility at a local level, Sites Project deliveries are not specifically designated for a specific use. **Figures A.6-1 through A.6-3** show the location these groundwater basins in relation to service areas of the current Sites Project participants. A further discussion how the project would reduce undesirable results within the affected groundwater basins is presented below.

Reduction of groundwater storage and chronic lowering of groundwater levels

As shown in **Table A.6-1**, significant decline in groundwater levels or overdraft has been reported in many groundwater basins overlaid by the service areas of Sites Project participants. In general, the Sites Reservoir project would result in an increased use of surface water and could decrease use of groundwater through conjunctive use and management operations by its participants. These operations would increase surface water deliveries and change the timing of available surface and groundwater supplies by providing Sites participants with surface water for storage, use or replenishment (typically in above normal and wet year conditions) and then recovering a portion of the water during periods of water supply shortages (in dry and critical year conditions). These changes would improve operational flexibility on a regional basis while providing a water supply benefit that could increase groundwater storage and reduce chronic lowering of groundwater levels.

Table A.6-2 presents the average annual increase in water deliveries by hydrologic region based on the current Sites Project participants and their water delivery requests. The Sacramento River Hydrologic Region would receive the greatest water supply benefits, primarily for agricultural uses. It should be noted that the modeled allocation of water to each hydrologic region is an approximation of how the flows would be distributed. The actual distribution would vary based on the final participants of the project and their level of participation. The project would improve groundwater sustainability by supplying surface water for replenishment to enhance aquifer storage recovery. Replenishment of groundwater can be accomplished using direct recharge and in-lieu recharge. Replenishment occurs when a groundwater basin is managed so that recharge is increased when compared with existing or baseline conditions, and ultimately groundwater levels are either maintained or improved. Direct recharge includes direct spreading of water on land surfaces and aquifer injection. In-lieu recharge may also be accomplished by providing an alternative source to users who would normally use groundwater, thereby leaving groundwater in place for later use and increasing the potential to improve groundwater levels.

Recent research by the University of California on the flooding of agricultural lands to increase groundwater replenishment has led to the development of a Soil Agricultural Groundwater Banking Index (SAGBI) and an associated map application (available at http://casoilresource.lawr.ucdavis.edu/sagbi/). The SAGBI identifies the suitability of soils for additional on-farm groundwater recharge in California. Much of the service areas of Sites participants within the Sacramento Valley are identified as having excellent or good potential for groundwater recharge (**Figure A.6-4**). Should a local groundwater bank be created, Sites Reservoir has the potential to provide water at rates and times to improve its effectiveness and include the banking of water within the aquifer system for future use, which can improve various undesirable aquifer conditions.

Seawater intrusion and degraded water quality

There are several groundwater basins within and overlain by the Sites Project participant's service area that are experiencing salt water intrusion and other water quality degradation issues (See Table A.6-1). Over-pumping may result in inversion of the groundwater flow causing expanded saltwater intrusion. Supplemental surface supplies provided by the project and conjunctive use management practices by project participants may result in reduced groundwater pumping that can assist with reducing the potential for seawater intrusion and water quality degradation. Conjunctive use could enable blending of surface and groundwater which could result in higher quality supply of water. Utilizing better quality surface water for direct recharge of groundwater may also result in groundwater quality improvements.

Land subsidence

Recent drought conditions have led to relatively large declines in groundwater levels throughout the state and within groundwater basins affiliated with Sites participants. Conjunctive use operations by Sites participants to increase water levels would also reduce inelastic (permanent) land subsidence.

Depletions of interconnected surface water

The interconnection of surface water features and groundwater are important for maintaining ecosystems and wetland habitat, particularly in the Sacramento Valley. Chronic lowering of water levels due to over pumping and stream diversions result in depletions of interconnected surface water and groundwater in some areas. Groundwater basins potentially affected by the project that provide important connections to surface water are identified in Table A.6-1. The Sites Reservoir project would allow for greater operational flexibility to support maintaining hydrologic connection between surface water and groundwater. Conjunctive use practices by Sites participants could reduce surface water diversions and improve surface water flows by using stored groundwater during dry and critical periods. In addition, supplemental water supplies from the Sites Reservoir project would assist with improving aquifer storage and groundwater levels.

Table A.6-1. Groundwater Basins Potentially Affected by the Sites Reservoir Project

Hydrologic Region	Basin Number	Basin/Sub Basin Name	Groundwater Basin Rating	Sites Participant	Comments/Existing Undesirable Groundwater Conditions
San Francisco Bay	2-02.03	NAPA-SONOMA VALLEY	Very Low	American Canyon County WSA	--
San Francisco Bay	2-10	LIVERMORE VALLEY	Medium	California Water Service Co. Zone 7 Water Agency	Some areas have boron concentrations exceeding 2 mg/L (Bulletin 118).
San Francisco Bay	2-11	SUNOL VALLEY	Very Low	Zone 7 Water Agency	--
San Francisco Bay	2-32	VISITACION VALLEY	Very Low	California Water Service Co.	--
San Francisco Bay	2-35	WESTSIDE	Very Low	California Water Service Co.	--
San Francisco Bay	2-9.02	SANTA CLARA VALLEY - SANTA CLARA	Medium	California Water Service Co. Santa Clara Valley Water District	Elevated nitrate in some wells in the southern portion of the Basin.
San Francisco Bay	2-9.03	SANTA CLARA VALLEY - SAN MATEO PLAIN	Very Low	California Water Service Co.	--
Central Coast	3-03.01	GILROY-HOLLISTER VALLEY - LLAGAS AREA	High	Santa Clara Valley Water District	Nitrate has impacted a significant number of private domestic wells across the Llagas Subbasin due to historic and ongoing sources including agricultural activities and septic systems.
Central Coast	3-03.03	GILROY-HOLLISTER VALLEY - HOLLISTER AREA	Medium	Santa Clara Valley Water District	West portion of the basin has an impermeable barrier to groundwater flow. Salinity, nitrate, boron, hardness, and trace elements.
Central Coast	3-03.04	GILROY-HOLLISTER VALLEY - SAN JUAN BAUTISTA AREA	Medium	Santa Clara Valley Water District	Salinity, nitrate, boron, hardness, and trace elements occasionally exceed drinking water standards.
Central Coast	3-04.01	SALINAS VALLEY - 180/400 FOOT AQUIFER	High	California Water Service Co.	Critically overdrafted basin.
Central Coast	3-04.02	SALINAS VALLEY - EAST SIDE AQUIFER	High	California Water Service Co.	Coastal basin with saline intrusion in both 180-Foot and 400-Foot aquifers due to excessive groundwater pumping.
Central Coast	3-04.05	SALINAS VALLEY - FOREBAY AQUIFER	Medium	California Water Service Co.	Poor quality water along the eastern side of subbasin. Water system above MCL for inorganics and nitrates (Bulletin 118).
Central Coast	3-04.09	SALINAS VALLEY - LANGLEY AREA	Medium	California Water Service Co.	Portion of the subbasin has been affected by elevated nitrate levels in shallow aquifers
Central Coast	3-04.10	SALINAS VALLEY - CORRAL DE TIERRA AREA	Medium	California Water Service Co.	Lowering of water levels, TDS, hardness
South Coast	4-05	ACTON VALLEY	Very Low	Antelope Valley - East Kern Water Agency	--
South Coast	4-06	PLEASANT VALLEY	High	Metropolitan Water District	Critically over drafted basin; Discharge of poor quality groundwater from dewatering wells and effluent discharge from the wastewater treatment facility into the Arroyo Simi have led to rising water levels in the basin along with higher TDS and Chloride levels.
South Coast	4-07	ARROYO SANTA ROSA VALLEY	Medium	Metropolitan Water District	Elevated sulfates, nitrates, and TDS in the basin.(Bulletin 118)
South Coast	4-08	LAS POSAS VALLEY	High	Metropolitan Water District	TDS is generally high in this basin. REH - Pubic Comment includes reports of subsidence, overdraft and saline intrusion (chloride from adjacent basin).
South Coast	4-09	SIMI VALLEY	Low	Metropolitan Water District	--
South Coast	4-10	CONEJO	Low	California Water Service Co.	--
South Coast	4-10	CONEJO	Low	Metropolitan Water District	--
South Coast	4-11.01	COASTAL PLAIN OF LOS ANGELES - SANTA MONICA	Medium	Metropolitan Water District	MTBE contamination has led to significant reduction in groundwater production and locally high TDS.
South Coast	4-11.02	COASTAL PLAIN OF LOS ANGELES	Very Low	Metropolitan Water District	--
South Coast	4-11.03	COASTAL PLAIN OF LOS ANGELES - WEST COAST	Medium	California Water Service Co. Metropolitan Water District	Adjudicated basin. Basin in overdraft since 1960's. Saline intrusion problems. A seawater barrier project is in effect to reduce seawater intrusion.
South Coast	4-11.04	COASTAL PLAIN OF LOS ANGELES - CENTRAL	High	California Water Service Co. Metropolitan Water District	Adjudicated basin. Basin was adjudicated in the early 1960's due to overdraft. Several public supply wells are known to be impacted by various water quality issues.
South Coast	4-12	SAN FERNANDO VALLEY	Medium	Metropolitan Water District	Adjudicated basin. Several public supply wells have shown contamination (Bulletin 118)
South Coast	4-13	SAN GABRIEL VALLEY	High	Metropolitan Water District	Superfund sites are present within the basin and other areas with water quality impacts are known.
South Coast	4-15	TIERRA REJADA	Very Low	Metropolitan Water District	--
South Coast	4-16	HIDDEN VALLEY	Very Low	California Water Service Co. Metropolitan Water District	--
South Coast	4-18	HUNGRY VALLEY	Very Low	Antelope Valley - East Kern Water Agency	--
South Coast	4-19	THOUSAND OAKS AREA	Very Low	California Water Service Co. Metropolitan Water District	--
South Coast	4-20	RUSSELL VALLEY	Very Low	California Water Service Co.	--
South Coast	4-22	MALIBU VALLEY	Very Low	Metropolitan Water District	--
South Coast	4-23	RAYMOND	Medium	Metropolitan Water District	Water quality impacts and a superfund site.
South Coast	4-4.02	SANTA CLARA RIVER VALLEY - OXNARD	High	Metropolitan Water District	Saline intrusion, nitrates, pesticides, and PCBs have impacted some water wells per (Bulletin 118).
South Coast	4-4.03	SANTA CLARA RIVER VALLEY - MOUND	Medium	Metropolitan Water District	Some primary and secondary inorganic contaminants above the MCL (Bulletin 118).
South Coast	4-4.06	SANTA CLARA RIVER VALLEY - PIRU	High	Castaic Lake Water Agency	Groundwater quality impacts: nitrates, storm runoff, leaking tanks, etc. (Bulletin 118). High Selenium and other inorganics, average TDS was 1450 mg/L/

Table A.6-1. Groundwater Basins Potentially Affected by the Sites Reservoir Project

Hydrologic Region	Basin Number	Basin/Sub Basin Name	Groundwater Basin Rating	Sites Participant	Comments/Existing Undesirable Groundwater Conditions
South Coast	4-4.07	SANTA CLARA RIVER VALLEY - SANTA CLARA RIVER VALLEY EAST	High	Castaic Lake Water Agency	Groundwater quality impacts: Nitrates, TCE, TDS, perchlorates, etc. (Bulletin 118)
Sacramento River	5-21.50	SACRAMENTO VALLEY - RED BLUFF	Medium	Proberta Water District	Some groundwater quality impairments as per B-118, declining groundwater levels in west-side subdivision, and very high number of domestic groundwater use wells.
Sacramento River	5-21.51	SACRAMENTO VALLEY - CORNING	Medium	Glenn County California Water Service Co. Glenn-Colusa Irrigation District	Continued groundwater level decline over most of the basin. This basin is becoming increasing dependent on groundwater due to uncertain reliability of CVP TCCA surface water supply.
Sacramento River	5-21.52	SACRAMENTO VALLEY - COLUSA	Medium	4-M Water District California Water Service Co. Colusa County Colusa County Water District Cortina Water District Davis Water District Glenn County Glenn-Colusa Irrigation District LaGrande Water District Maxwell Irrigation District Orland-Artois Water District Reclamation District 108 Westside Water District	Severely declining groundwater levels along the west-side of Glenn Co. Moderately declining groundwater levels in the Capay area. High TDS shallow aquifer in Maxwell-Williams area. Increase in housing development along I5. Groundwater-surface water interaction is important to maintaining waterfowl refuges. Area is being highlighted as solution area for Delta outflow issues and area of increased conjunctive use.
Sacramento River	5-21.57	SACRAMENTO VALLEY - VINA	High	California Water Service Co. Glenn County Glenn-Colusa Irrigation District	Groundwater from this basin is a key source of surface water inflow and serves eastside creeks which have endangered spring run.
Sacramento River	5-21.58	SACRAMENTO VALLEY - WEST BUTTE	High	California Water Service Co. California Water Service Co. California Water Service Co. Colusa County California Water Service Co.	Declining groundwater levels within the City of Chico and Durham areas (30-40' decline in mid-aquifer groundwater levels since 1998. High nitrates in north and west Chico area. High density of groundwater contamination plumes surrounding City of Chico. Groundwater serves as a source of underflow to Butte Creek, which has endangered spring-run salmon.
Sacramento River	5-21.59	SACRAMENTO VALLEY - EAST BUTTE	Medium	California Water Service Co. Western Canal Water District	Groundwater basin provides underflow to Butte Creek which supports endangered spring-run salmon.
Sacramento River	5-21.60	SACRAMENTO VALLEY - NORTH YUBA	Medium	California Water Service Co.	Strong surface water-groundwater interaction with Feather and Yuba River
Sacramento River	5-21.61	SACRAMENTO VALLEY - SOUTH YUBA	Medium	California Water Service Co.	Lowering of water levels.
Sacramento River	5-21.62	SACRAMENTO VALLEY - SUTTER	Medium	Garden Highway Mutual Water Company Reclamation District 108	Lowering of water levels, high concentrations of naturally occurring levels of minerals.
Sacramento River	5-21.64	SACRAMENTO VALLEY - NORTH AMERICAN	High	City of Roseville WSA Placer County Water Agency Zone 1 Placer County Water Agency Zone 2	Elevated levels of TDS, chloride, sodium, bicarbonate, boron, fluoride, nitrate, iron manganese, and arsenic may be of concern in some locations. There are 3 sites with significant groundwater contamination in the basin (B118). Groundwater levels in southwestern Placer County and northern Sacramento County have generally declined with many wells declining at a rate of about one and one-half feet per year for the last 40 years or more (Bulletin 118).
Sacramento River	5-21.66	SACRAMENTO VALLEY - SOLANO	Medium	California Water Service Co.	Overdraft. Documented impacts of nitrates and sulfates. (Bulletin 118)
Sacramento River	5-21.67	SACRAMENTO VALLEY - YOLO	High	Colusa County Water District Dunnigan Water District Reclamation District 108	Localized TDS problems preclude using groundwater for some M&I uses without treatment. Some subsidence in northeast of Davis and in northern Yolo.
Sacramento River	5-21.69	SACRAMENTO VALLEY - WYANDOTTE CREEK BASIN	--	California Water Service Co.	Proposed basin boundary revision request.
San Joaquin	5-22.01	SAN JOAQUIN VALLEY - EASTERN SAN JOAQUIN	High	California Water Service Co.	Critically overdrafted basin. Estimated that 70,000 af/year of overdraft occurs in northeastern San Joaquin County and about 35,000 af/year of overdraft occurs in the Stockton East Water District. Basin experiencing long term groundwater overdraft 160,000AF/yr as a result of overdraft, poor quality groundwater has been moving east along a 16- mile front on the east side of the Delta and has continued to migrate eastward. Large areas of nitrate contamination are located in the subbasin. (Bulletin 118).
San Joaquin	5-22.08	SAN JOAQUIN VALLEY - KINGS	High	California Water Service Co.	Critically overdrafted basin
San Joaquin	5-22.10	SAN JOAQUIN VALLEY - PLESANT VALLEY	Low	Pacific Resources MWC	--
Tulare Lake	5-22.11	SAN JOAQUIN VALLEY - KAWEAH	High	California Water Service Co.	Critically overdrafted basin; overdraft, water quality issues.

Table A.6-1. Groundwater Basins Potentially Affected by the Sites Reservoir Project

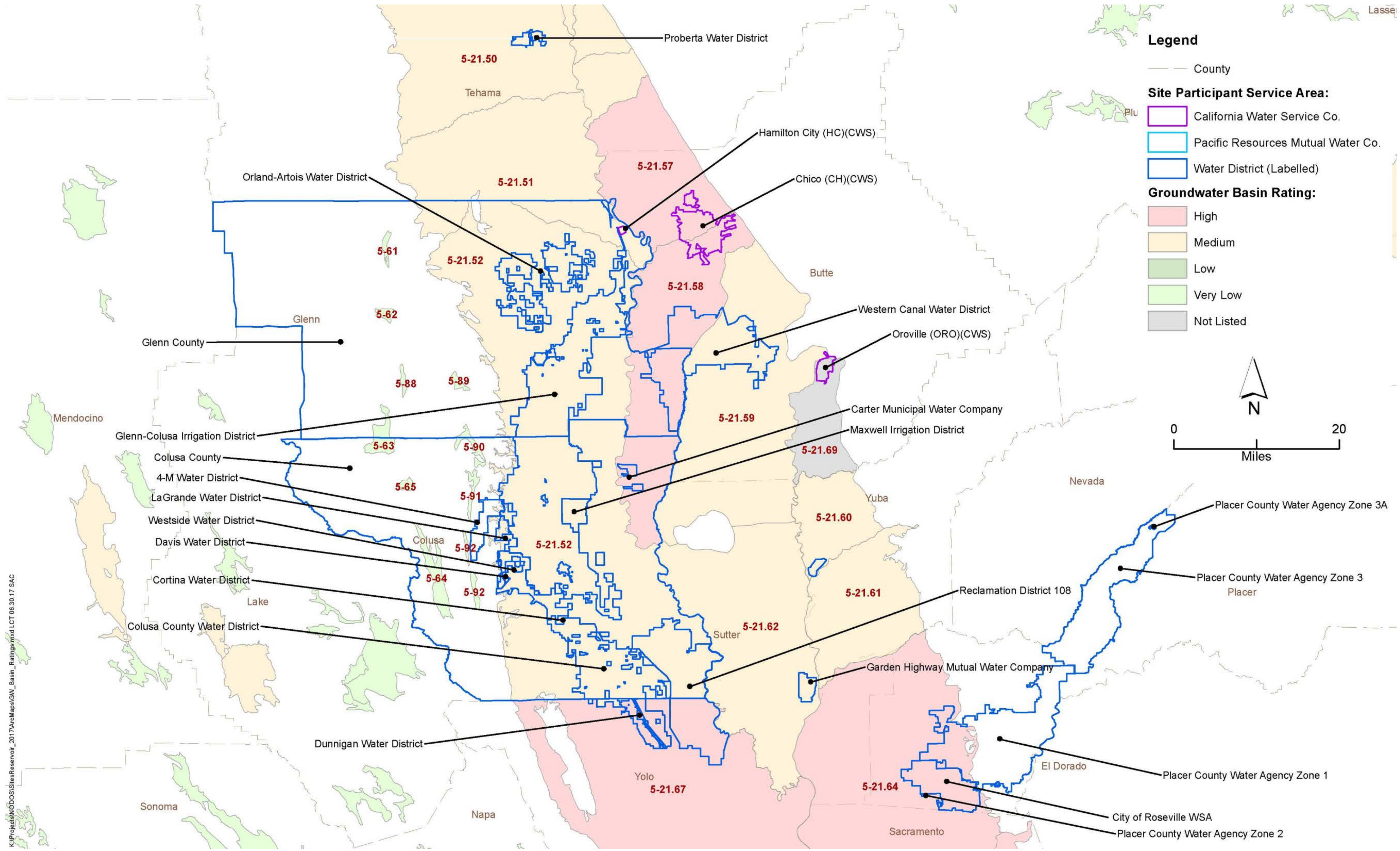
Hydrologic Region	Basin Number	Basin/Sub Basin Name	Groundwater Basin Rating	Sites Participant	Comments/Existing Undesirable Groundwater Conditions
Tulare Lake	5-22.13	SAN JOAQUIN VALLEY - TULE	High	Pacific Resources MWC	Critically overdrafted basin; High Nitrate and TDS in some locations and some inorganic contamination issues.
Tulare Lake	5-22.14	SAN JOAQUIN VALLEY - KERN COUNTY	High	California Water Service Co. Pacific Resources MWC Wheeler Ridge-Maricopa Water Service District	Critically overdrafted basin; Important agricultural region. Subsidence, overdraft, water quality degradation
San Joaquin	5-22.15	SAN JOAQUIN VALLEY - TRACY	Medium	Zone 7 Water Agency	Poor water quality throughout the subbasin.(Bulletin 118)
Tulare Lake	5-22.18	SAN JOAQUIN VALLEY - WHITE WOLF	--	Wheeler Ridge-Maricopa Water Service District	Proposed basin boundary revision request.
Sacramento River	5-61	CHROME TOWN AREA	Very Low	Glenn County	--
Sacramento River	5-62	ELK CREEK AREA	Very Low	Glenn County	--
Sacramento River	5-63	STONYFORD TOWN AREA	Very Low	Glenn County	--
Tulare Lake	5-82	CUDDY CANYON VALLEY	Very Low	Antelope Valley - East Kern Water Agency	--
Sacramento River	5-88	STONY GORGE RESERVOIR	Very Low	Glenn County	--
Sacramento River	5-89	SQUAW FLAT	Very Low	Glenn County	--
Sacramento River	5-90	FUNKS CREEK	Very Low	Glenn County	--
South Lahontan	6-41	MIDDLE MOJAVE RIVER VALLEY	Low	Antelope Valley - East Kern Water Agency	--
South Lahontan	6-43	EL MIRAGE VALLEY	Medium	Antelope Valley - East Kern Water Agency	Groundwater levels have declined significantly in parts of the basin, some have recovered. Water is rated marginal to inferior for domestic and irrigation purposes. (Bulletin 118). Some documented VOCs issues also.
South Lahontan	6-44	ANTELOPE VALLEY	High	Antelope Valley - East Kern Water Agency Pacific Resources MWC	Pending Adjudication. Water reliability issues, and renewed subsidence. Closed basin. Water quality impacts per IRWMP, DWR B-118, and other sources. Extractions likely exceed natural recharge.
South Lahontan	6-46	FREMONT VALLEY	Low	Antelope Valley - East Kern Water Agency	--
South Lahontan	6-47	HARPER VALLEY	Low	Antelope Valley - East Kern Water Agency	--
South Lahontan	6-54	INDIAN WELLS VALLEY	Medium	Pacific Resources MWC Antelope Valley - East Kern Water Agency	Critically overdrafted basin. Overdraft has been documented since the 1960's. Water quality issues with respect to overdraft and mixing of aquifers.
Colorado River	7-21.01	COACHELLA VALLEY - INDIO	Medium	Coachella Valley Water District Desert Water Agency	Nitrates and addition of salts due to Colorado River imported water. Local areas of elevated fluoride.
Colorado River	7-21.02	COACHELLA VALLEY - MISSION CREEK	Medium	Coachella Valley Water District Desert Water Agency	Radiological and nitrate issues in the basin (Bulletin 118). Mission Creek groundwater also supplies drinking water to Desert Hot Springs and part of Indio subbasins.
Colorado River	7-21.03	COACHELLA VALLEY	Low	Coachella Valley Water District Desert Water Agency	--
Colorado River	7-21.04	COACHELLA VALLEY - SAN GORGONIO PASS	Medium	Desert Water Agency San Gorgonio Pass Water Agency	Adjudicated basin. Overdraft.
Colorado River	7-22	WEST SALTON SEA	Very Low	Coachella Valley Water District	--
Colorado River	7-31	OROCOPIA VALLEY	Very Low	Coachella Valley Water District	--
Colorado River	7-32	CHOCOLATE VALLEY	Very Low	Coachella Valley Water District	--
Colorado River	7-33	EAST SALTON SEA	Very Low	Coachella Valley Water District	--
Colorado River	7-63	VANDEVENTER FLAT	Very Low	Desert Water Agency	--
South Coast	8-01	COASTAL PLAIN OF ORANGE COUNTY	Medium	Metropolitan Water District	Saline intrusion issues.
South Coast	8-02.01	UPPER SANTA ANA VALLEY - CHINO	High	Metropolitan Water District San Bernardino Valley Municipal Water District	Adjudicated basin. Locally high nitrates and TDS. REH, per Pub Com, to include subsidence, historic overdraft, ground fissuring, problems mitigated with OBMP. REH Pub Com, program of controlled overdraft of 400,000 AF from the Chino Basin through 2030 to control the outflow of poor-quality rising groundwater.
South Coast	8-02.02	UPPER SANTA ANA VALLEY - CUCAMONGA	Medium	Metropolitan Water District	High nitrates reported in 14 of 24 wells tested (Bulletin 118)
South Coast	8-02.03	UPPER SANTA ANA VALLEY - RIVERSIDE-ARLINGTON	High	Metropolitan Water District San Bernardino Valley Municipal Water District	Water quality degradation issues known in several public supply wells (Bulletin 118).
South Coast	8-02.04	UPPER SANTA ANA VALLEY - RIALTO-COLTON	Medium	Metropolitan Water District San Bernardino Valley Municipal Water District	Extensive perchlorate contamination in basin.
South Coast	8-02.05	UPPER SANTA ANA VALLEY	Very Low	San Bernardino Valley Municipal Water District	--

Table A.6-1. Groundwater Basins Potentially Affected by the Sites Reservoir Project

Hydrologic Region	Basin Number	Basin/Sub Basin Name	Groundwater Basin Rating	Sites Participant	Comments/Existing Undesirable Groundwater Conditions
South Coast	8-02.06	UPPER SANTA ANA VALLEY - BUNKER HILL	High	San Bernardino Valley Municipal Water District	Adjudicated basin (Western San Bernardino). The Bunker Hill sub-basin is impacted with PCE and TCE from the Newmark Superfund site and with perchlorate from the Crafton-Redlands plume.
South Coast	8-02.07	UPPER SANTA ANA VALLEY - YUCAIPA	Medium	San Bernardino Valley Municipal Water District San Gorgonio Pass Water Agency	Overdraft. Documented impacts of nitrates and sulfates. (Bulletin 118)
South Coast	8-02.08	UPPER SANTA ANA VALLEY - SAN TIMOTEO	Medium	Metropolitan Water District San Bernardino Valley Municipal Water District San Gorgonio Pass Water Agency	Parts of the subbasin are adjudicated. Locally high nitrates and salinity (Bulletin 118). GAMA reported upper basin water quality issues.
South Coast	8-02.09	UPPER SANTA ANA VALLEY - TEMESCAL	Medium	Metropolitan Water District	Groundwater quality impaired by nitrates and inorganics in some wells (Bulletin 118).
South Coast	8-04	ELSINORE	High	Metropolitan Water District	High TDS due to Nitrate and Sulfate in some portions of the basin. Some fluoride impacts to groundwater (Bulletin 118). Study done for Elsinore Basin groundwater Advisory Committee (Nov. 2012) indicates an average annual groundwater budget deficit of 1,800 af/yr for the last 11 years. Between 1990 and 2000 cumulative deficit was 19,000 af.
South Coast	8-05	SAN JACINTO	High	Metropolitan Water District San Bernardino Valley Municipal Water District	Adjudicated basin. Basin is in overdraft (MWD). Groundwater quality issues documented in DWR B-118. Pumping has increased some contaminant distribution in the basin.
South Coast	8-06	HEMET LAKE VALLEY	Very Low	Desert Water Agency Metropolitan Water District	--
South Coast	8-08	SEVEN OAKS VALLEY	Very Low	San Bernardino Valley Municipal Water District	--
South Coast	9-01	SAN JUAN VALLEY	Low	Metropolitan Water District	--
South Coast	9-02	SAN MATEO VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-03	SAN ONOFRE VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-04	SANTA MARGARITA VALLEY	Medium	Metropolitan Water District	Adjudicated basin (Federal). Groundwater in surface water part of basin is marginal to inferior for domestic and agricultural uses (Bulletin 118). Mg, SO4, Cl, NO3, and TDS concentrations are locally high for domestic. Use; Cl, B, and TDS are locally high for ag use (Bulletin 118).
South Coast	9-05	TEMECULA VALLEY	High	Metropolitan Water District	Adjudicated basin (Federal). Groundwater source is impaired in various parts of the basin due to elevated nitrates, fluoride, sulfates, TDS, and VOCs (Bulletin 118).
South Coast	9-07	SAN LUIS REY VALLEY	Medium	Metropolitan Water District	TDS is a concern according to MWD. B-118 indicates problems with nitrates, inorganics, radiologicals, and VOCs. Desalination generally required in all areas of the basin.
South Coast	9-09	ESCONDIDO VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-10	SAN PASQUAL VALLEY	Medium	Metropolitan Water District	Nitrate problems are widespread (Bulletin 118). TDS is also known to be high in places. During dry years, the basin has experienced water level declines up to 20 feet in one year.
South Coast	9-11	SANTA MARIA VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-12	SAN DIEGUITO CREEK	Very Low	Metropolitan Water District	--
South Coast	9-13	POWAY VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-14	MISSION VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-15	SAN DIEGO RIVER VALLEY	Medium	Metropolitan Water District	High Nitrates, Iron and Manganese treatment is required, high TDS (>3,000 mg/l) in western portion of basin
South Coast	9-16	EL CAJON VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-22	BATIQUITOS LAGOON VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-23	SAN ELIJO VALLEY	Very Low	Metropolitan Water District	--
South Coast	9-32	SAN MARCOS AREA	Very Low	Metropolitan Water District	--
South Coast	9-33	COASTAL PLAIN OF SAN DIEGO	Low	Metropolitan Water District	--

Table A.6-2. Increases in Deliveries by Hydrologic Region with the Sites Project

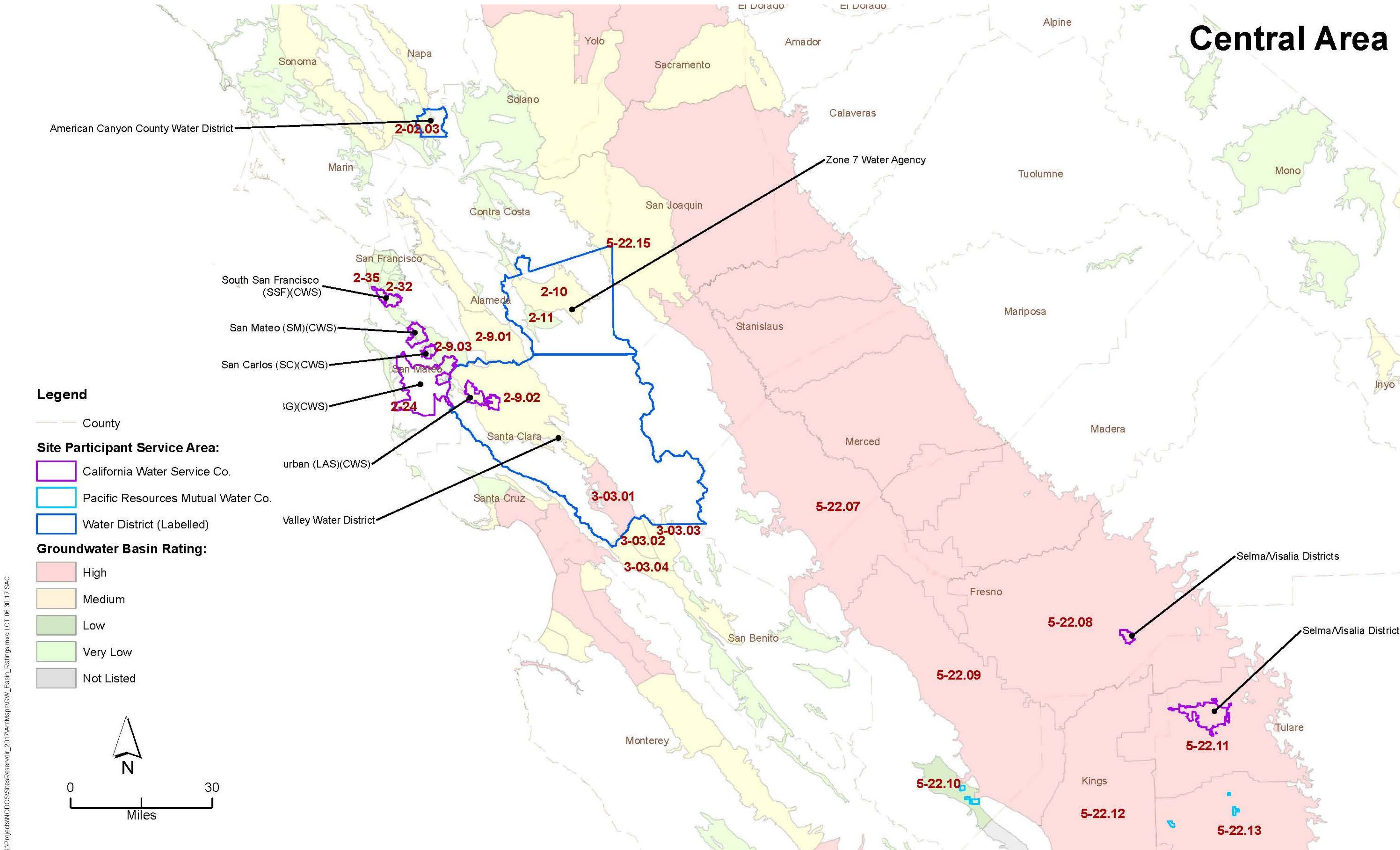
CalSim II Modeled Beneficiaries	Average Increase in Deliveries (TAF/yr)	Dry and Critical Increase in Deliveries (TAF/yr)	Average Increase in Deliveries (TAF/yr)	Dry and Critical Increase in Deliveries (TAF/yr)	Average Increase in Deliveries (TAF/yr)	Dry and Critical Increase in Deliveries (TAF/yr)
Sacramento River Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water to CVP Settlement Contractors	2	6	2	5	1	4
Supplemental Water for CVP Service Area Ag	67	119	96	137	121	132
Supplemental Water for CVP Service Area M&I	0	0	0	0	0	0
Supplemental Water for SWP Service Area M&I	0	0	0	0	0	0
Supplemental Water for SWP Service Area Feather River Service Area	3	2	4	5	4	4
Supplemental Water for County of Colusa	7	8	8	9	8	8
Colusa Basin (Incremental Level 4 Refuge Water Supply)	1	0	1	0	1	0
Total	***80***	***136***	***111***	***155***	***136***	***148***
San Joaquin River Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for CVP Service Area Ag	0	0	0	0	0	0
Mendota Pool (Incremental Level 4 Refuge Water Supply)	29	13	28	10	25	8
San Francisco Bay Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for CVP Service Area Ag	0	0	0	0	0	0
Supplemental Water for SWP Service Area M&I	35	72	38	72	42	77
Central Coast Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for SWP Service Area M&I	0	0	0	0	0	0
Tulare Lake Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for CVP Service Area Ag	12	28	13	27	15	29
Supplemental Water for SWP Service Area M&I	0	0	0	0	0	0
Supplemental Water for SWP Service Area Ag	12	28	13	27	15	29
Tulare Basin (Incremental Level 4 Refuge Water Supply)	7	3	6	2	6	2
Total	***31***	***58***	***33***	***57***	***36***	***61***
South Lahontan Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for SWP Service Area M&I	1	3	2	3	2	3
South Coast Hydrologic Region	**2015**		**2030**		**2070**	
Supplemental Water for SWP Service Area M&I	60	126	67	126	73	134
Supplemental Water for SWP Service Area Ag	0	0	0	0	0	0
Delta Environmental Water Quality	**2015**		**2030**		**2070**	
Upstream and Delta Inflow	73	72	73	78	68	79



Source: Prepared by AECOM 2017

Figure A6-1. Potentially Affected Groundwater Basins in Sites Participants Service Areas – Northern California

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	SITES_A6C			PAGE:	9	OF	12



Source: Prepared by AECOM 2017

Figure A6-2. Potentially Affected Groundwater Basins in Sites Participants Service Areas – Central California

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
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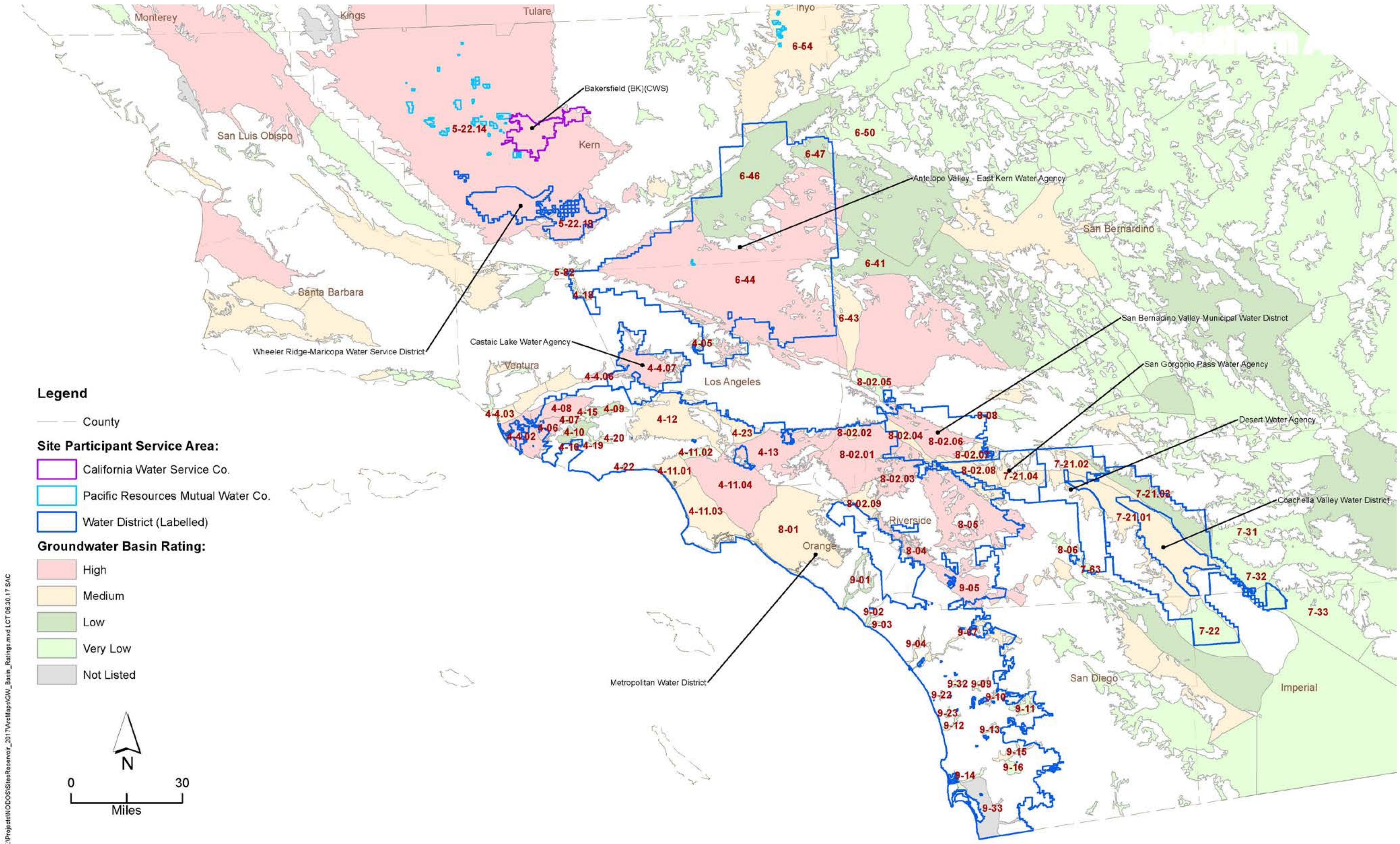
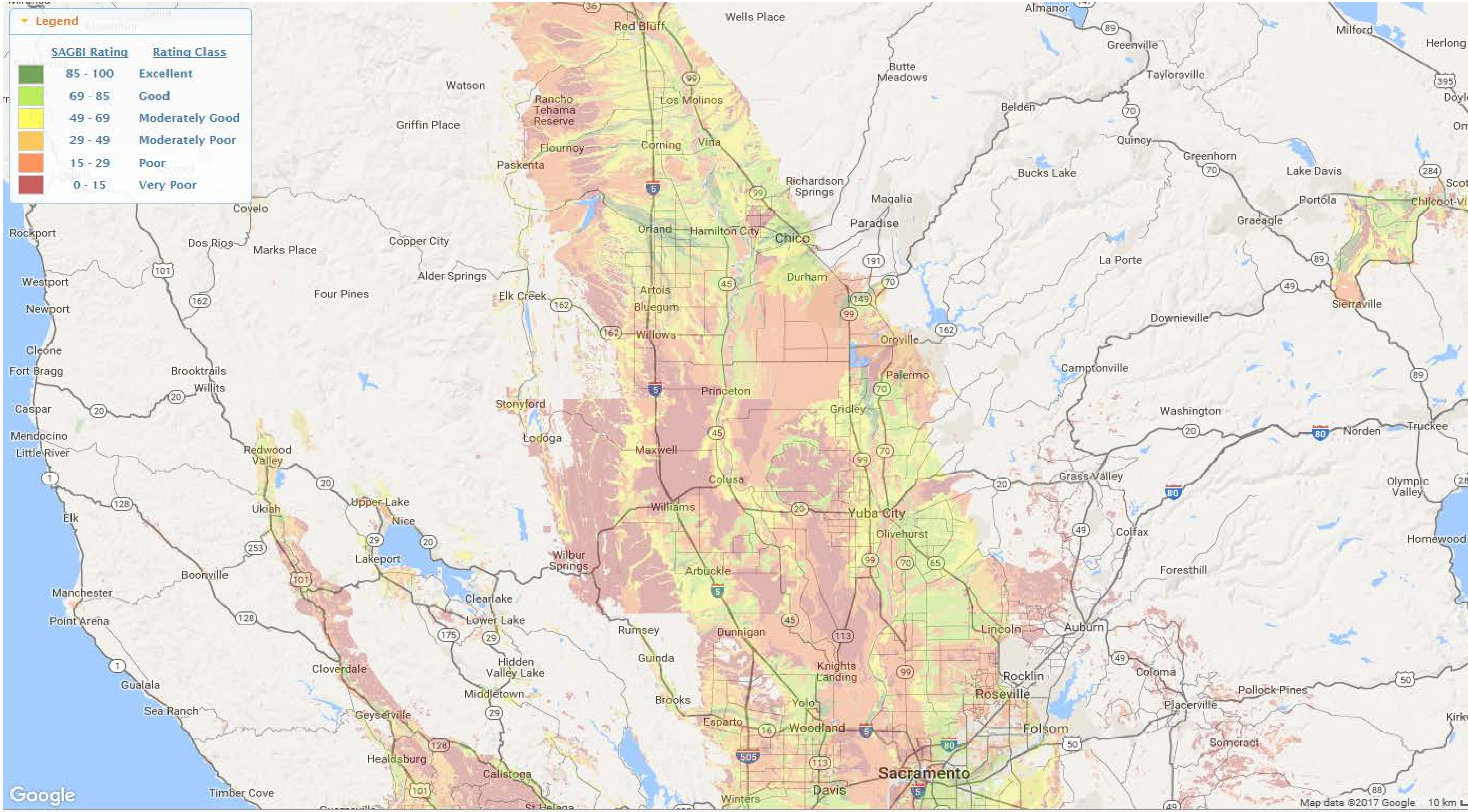
NOTES:	SITES_A6C			PAGE:	10	OF	12



Source: Prepared by AECOM 2017

Figure A6-3. Potentially Affected Groundwater Basins in Sites Participants Service Areas – Southern California

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	SITES_A6C			PAGE:	11	OF	12



Source: https://casoilresource.lawr.ucdavis.edu/sagbi/

Figure A6-4. Soil Agricultural Groundwater Banking Index Map

STATUS:	FINAL	PREPARER:	N SMITH	PHASE:	1	VERSION:	A
PURPOSE:	ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB	CHECKER:	J HERRIN	DATE:	2017 AUGUST		
CAVEAT:		QA/QC:		REF/FILE #:	WSIP APPLICATION		
NOTES:	SITES_A6C			PAGE:	12	OF	12

Sites_A6.D. Modeling Results Compendium

Table of Contents Page

Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries 1

Salmonid Population Modeling (SALMOD) 2015 38

Salmonid Population Modeling (SALMOD) 2030 51

Salmonid Population Modeling (SALMOD) 2070 64

Delta Modeling DCR with Project vs DCR 2015 without Project 77

Delta Modeling WSIP 2030 with Project vs WSIP 2030 without Project 139

Delta Modeling WSIP 2070 with Project vs WSIP 2070 without Project 201

Delta Operations DCR 2015 with Project vs DCR 2015 without Project 263

Delta Operations WSIP 2030 with Project vs WSIP 2030 without Project 345

Delta Operations WSIP 2070 with Project vs WSIP 2070 without Project 427

Regional Deliveries DCR 2015 with Project vs without Project 509

Regional Deliveries WSIP 2030 with Project vs without Project 517

Regional Deliveries WSIP 2070 with Project vs without Project 525

Project Operations DCR 2015 with Project vs DCR 2015 without Project 533

Project Operations WSIP 2030 with Project vs without Project 589

Project Operations WSIP 2070 with Project vs without Project 646

River Operations DCR 2015 with Project vs DCR 2015 without Project 703

River Operations WSIP 2030 with Project vs without Project 885

River Operations WSIP 2070 with Project vs without Project 1,067

Temperature Results DCR 2015 with Project vs DCR 2015 without Project...................................... 1,249

Temperature Results WSIP 2030 with Project vs without Project.. 1,329

Temperature Results WSIP 2070 with Project vs without Project.. 1,409

Note that the Delta Modeling DCR with Project vs DCR 2015 without Project (pg 77) is the basis of the Current Conditions Analysis.

Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries (non-economic measures)

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project		WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project		WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project	
			Difference	Relative Difference			Difference	Relative Difference			Difference	Relative Difference
Sites Facilities - Operations												
Conveyance Capacity												
Diversions to Sites Reservoir from the Sacramento River at Red Bluff (TCC), at Hamilton City (GCC) and at the New Delevan Pipeline												
Sites Reservoir Fill from Sacramento River												
Diversions (OP-04)												
Annual (TAF/yr)												
Full Simulation Period	0	514	514	N/A	0	552	552	N/A	0	588	588	N/A
Dry	0	429	429	N/A	0	578	578	N/A	0	551	551	N/A
Critical	0	238	238	N/A	0	281	281	N/A	0	236	236	N/A
Storage Capacity												
Sites Resevoir storage fills during excess flow events throughout the winter and spring and drains during peak release periods throughout the summer and fall to achieve the benefits associated with the primary objectives of Water Supply, Water Quality and Ecosystem Enhancement												
Sites Reservoir												
End-of-Month Storage (OP-09)												
May (TAF)												
Full Simulation Period	0	1,444	1,444	N/A	0	1,459	1,459	N/A	0	1,390	1,390	N/A
Dry	0	1,226	1,226	N/A	0	1,309	1,309	N/A	0	1,276	1,276	N/A
Critical	0	836	836	N/A	0	810	810	N/A	0	637	637	N/A
September (TAF)												
Full Simulation Period	0	1,092	1,092	N/A	0	1,093	1,093	N/A	0	1,013	1,013	N/A
Dry	0	897	897	N/A	0	845	845	N/A	0	862	862	N/A
Critical	0	605	605	N/A	0	464	464	N/A	0	332	332	N/A

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project		WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project		WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project	
			Difference	Relative Difference			Difference	Relative Difference			Difference	Relative Difference
Benefit - Water Supply												
SWP Contractors												
State Water Project (SWP) water supply reliability												
SWP Contractors												
Deliveries (WS-SWP)												
Annual (TAF/yr)												
Full Simulation Period	2,638	2,638	0	0.0%	2,573	2,573	0	0.0%	2,398	2,398	0	0.0%
Dry	2,023	2,023	0	0.0%	1,881	1,881	0	0.0%	1,737	1,737	0	0.0%
Critical	1,209	1,209	0	**0.0%**	1,105	1,105	0	**0.0%**	861	861	0	**0.0%**
SWP SOD M&I Service Contractors												
Allocations (WS-SWP)												
Annual (fraction)												
Full Simulation Period	0.63	0.63	0.00	0.0%	0.62	0.62	0.00	0.0%	0.57	0.57	0.00	0.0%
Dry	0.48	0.48	0.00	0.0%	0.44	0.44	0.00	0.0%	0.40	0.40	0.00	0.0%
Critical	0.28	0.28	0.00	**0.0%**	0.25	0.25	0.00	**0.0%**	0.20	0.20	0.00	**0.0%**
CVP Contractors												
Central Valley Project (CVP) water supply reliability												
CVP Ag and M&I Service, Settlement, and Exchange Contractors												
Deliveries (WS-CVP)												
Annual (TAF/yr)												
Full Simulation Period	4,461	4,467	6	0.1%	4,286	4,280	-6	-0.1%	3,914	3,916	2	0.1%
Dry	4,107	4,120	13	**0.3%**	3,855	3,863	8	**0.2%**	3,683	3,657	-25	**-0.7%**
Critical	3,356	3,364	8	0.2%	3,385	3,412	27	0.8%	3,135	3,161	26	0.8%
CVP SOD Ag Service Contractors												
Allocations (WS-CVP)												
Annual (fraction)												
Full Simulation Period	0.50	0.50	0.00	0.5%	0.44	0.44	0.00	-0.6%	0.29	0.29	0.00	0.4%
Dry	0.33	0.34	0.00	**1.5%**	0.23	0.23	0.01	**2.8%**	0.16	0.16	-0.01	**-4.0%**
Critical	0.13	0.13	0.00	1.9%	0.11	0.12	0.00	1.7%	0.04	0.04	0.00	1.5%
Sites deliveries to Project Participants												
Deliveries from Sites Reservoir to project participants												
Sites deliveries to Sacramento Valley Sites Project Participants (TCCA, GCID, RD 108, County of Colusa, and Western Canal WD)												
Delivery (WS-NDS)												
Annual (TAF/yr)												
Full Simulation Period	0	79	79	N/A	0	110	110	N/A	0	137	137	N/A
Dry	0	135	135	**N/A**	0	157	157	**N/A**	0	161	161	**N/A**
Critical	0	136	136	N/A	0	153	153	N/A	0	133	133	N/A
Sites deliveries to South of Delta Sites Project Participants												
Delivery (WS-NDS)												
Annual (TAF/yr)												
Full Simulation Period	0	120	120	N/A	0	134	134	N/A	0	148	148	N/A
Dry	0	306	306	**N/A**	0	269	269	**N/A**	0	326	326	**N/A**
Critical	0	181	181	N/A	0	238	238	N/A	0	186	186	N/A
Total Water Supply												
Total deliveries from Sites Reservoir, SWP, and CVP												
Total Deliveries from Sites Reservoir, SWP, and CVP												
Delivery (WS-NDS)												
Annual (TAF/yr)												
Full Simulation Period	7,099	7,304	205	2.9%	6,859	7,097	238	3.5%	6,312	6,599	287	4.6%
Dry	6,130	6,584	454	**7.4%**	5,736	6,171	435	**7.6%**	5,420	5,882	462	**8.5%**
Critical	4,565	4,891	326	7.1%	4,489	4,908	418	9.3%	3,996	4,341	346	8.7%

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project		WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project		WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project	
			Difference	Relative Difference			Difference	Relative Difference			Difference	Relative Difference
Benefit - Ecosystem Enhancement Storage Account (EESA) Actions												
Shasta Lake Cold Water Pool												
Improve the reliability of coldwater pool storage in Shasta Reservoir to increase the operational flexibility to provide suitable water temperatures in the Sacramento River. This action would operationally translate into the increase of Shasta Reservoir May storage levels, and increased coldwater pool in storage, with particular emphasis on Below Normal, Dry and Critical water year types.												
Trinity Lake												
End-of-Month Storage (SW-01)												
May (TAF)												
Full Simulation Period	1,835	1,845	10	0.6%	1,826	1,827	1	0.1%	1,689	1,693	5	0.3%
Dry	1,646	1,649	3	0.2%	1,636	1,626	-11	-0.6%	1,453	1,471	17	1.2%
Critical	1,119	1,135	16	**1.4%**	1,201	1,217	16	**1.3%**	1,016	1,024	9	**0.9%**
September (TAF)												
Full Simulation Period	1,401	1,397	-4	-0.3%	1,320	1,312	-8	-0.6%	1,152	1,149	-3	-0.3%
Dry	1,150	1,146	-4	-0.3%	1,104	1,093	-11	-1.0%	903	913	10	1.1%
Critical	741	749	8	**1.1%**	800	807	7	**0.9%**	627	673	47	**7.5%**
Shasta Lake												
End-of-Month Storage (SW-07)												
May (TAF)												
Full Simulation Period	3,952	4,023	71	1.8%	3,950	4,009	59	1.5%	3,681	3,761	80	2.2%
Dry	3,730	3,822	92	2.5%	3,663	3,765	101	2.8%	3,386	3,478	92	2.7%
Critical	2,486	2,744	258	**10.4%**	2,787	2,953	166	**6.0%**	2,157	2,428	271	**12.6%**
September (TAF)												
Full Simulation Period	2,655	2,779	124	4.7%	2,544	2,627	83	3.3%	2,262	2,321	59	2.6%
Dry	2,490	2,630	140	5.6%	2,457	2,514	57	2.3%	2,167	2,224	56	2.6%
Critical	1,343	1,562	219	**16.3%**	1,515	1,696	181	**12.0%**	971	1,219	247	**25.5%**

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project		WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project		WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project	
			Difference	Relative Difference			Difference	Relative Difference			Difference	Relative Difference
Sacramento River Flows for Temperature Control												
Provide releases from Shasta Dam of appropriate water temperatures, and subsequently from Keswick Dam, to maintain mean daily water temperatures year-round at levels suitable for all species and lifestages of anadromous salmonids in the Sacramento River between Keswick Dam and Red Bluff Diversion Dam.												
Trinity River below Lewiston												
Monthly Temperature (SQ-33)												
Jul-Sep (Deg-F)												
Full Simulation Period	51.3	51.2	-0.1	-0.2%	51.1	51.1	0.0	-0.1%	51.9	51.8	-0.2	-0.3%
Dry	51.6	51.4	-0.1	-0.3%	51.5	51.7	0.2	0.3%	52.7	52.4	-0.2	-0.4%
Critical	53.9	53.7	-0.1	**-0.3%**	53.8	53.5	-0.2	**-0.4%**	55.4	54.8	-0.5	**-1.0%**
Clear Creek at Igo												
Monthly Temperature (SQ-37)												
Jul-Sep (Deg-F)												
Full Simulation Period	54.4	54.3	-0.1	-0.1%	54.8	54.7	-0.1	-0.2%	55.7	55.7	0.1	0.1%
Dry	54.4	54.5	0.0	0.0%	55.0	54.9	-0.1	-0.2%	56.0	56.1	0.0	0.1%
Critical	55.7	55.6	-0.1	**-0.2%**	56.6	56.5	-0.1	**-0.2%**	58.1	57.9	-0.3	**-0.4%**
Sacramento River at Bonnyview												
Monthly Temperature (SQ-03)												
Jul-Sep (Deg-F)												
Full Simulation Period	53.0	52.5	-0.5	-0.9%	53.6	53.6	0.0	0.0%	54.8	54.3	-0.5	-0.8%
Dry	53.5	52.9	-0.6	-1.1%	54.3	54.1	-0.1	-0.3%	55.1	54.6	-0.5	-0.9%
Critical	56.5	55.1	-1.4	**-2.5%**	56.5	55.9	-0.6	**-1.1%**	60.5	58.6	-1.8	**-3.0%**
Sacramento River at Balls Ferry												
Monthly Temperature (SQ-04)												
Jul-Sep (Deg-F)												
Full Simulation Period	54.6	54.1	-0.5	-0.9%	55.2	55.2	-0.1	-0.1%	56.5	56.0	-0.5	-0.9%
Dry	55.1	54.5	-0.6	-1.1%	56.0	55.7	-0.2	-0.4%	56.9	56.3	-0.6	-1.0%
Critical	58.0	56.6	-1.4	**-2.3%**	58.1	57.5	-0.6	**-1.1%**	61.9	60.2	-1.7	**-2.7%**
Sacramento River at Jellys Ferry												
Monthly Temperature (SQ-05)												
Jul-Sep (Deg-F)												
Full Simulation Period	55.9	55.4	-0.5	-0.8%	56.6	56.5	-0.1	-0.1%	57.9	57.4	-0.5	-0.9%
Dry	56.4	55.8	-0.6	-1.1%	57.3	57.0	-0.3	-0.5%	58.4	57.7	-0.6	-1.1%
Critical	59.2	57.9	-1.3	**-2.2%**	59.4	58.8	-0.6	**-1.0%**	63.0	61.5	-1.5	**-2.5%**
Sacramento River at Bend Bridge												
Monthly Temperature (SQ-06)												
Jul-Sep (Deg-F)												
Full Simulation Period	56.9	56.5	-0.4	-0.8%	57.6	57.6	-0.1	-0.2%	59.0	58.5	-0.5	-0.9%
Dry	57.5	56.9	-0.6	-1.1%	58.5	58.1	-0.3	-0.6%	59.5	58.8	-0.7	-1.1%
Critical	60.1	58.9	-1.2	**-2.1%**	60.3	59.7	-0.6	**-1.0%**	63.8	62.4	-1.4	**-2.3%**

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project		WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project		WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project	
			Difference	Relative Difference			Difference	Relative Difference			Difference	Relative Difference
Folsom Lake Cold Water Pool												
Increase the availability of coldwater pool storage in Folsom Reservoir, by increasing May storage and coldwater pool storage, to allow for additional operational flexibility to provide suitable water temperatures in the lower American River.												
Folsom Lake												
End-of-Month Storage (SW-24)												
May (TAF)												
Full Simulation Period	838	841	3	0.4%	769	764	-4	-0.5%	679	677	-2	-0.3%
Dry	765	775	10	1.3%	699	692	-8	-1.1%	601	607	6	1.0%
Critical	480	489	9	**1.9%**	476	473	-3	-0.6%	407	401	-5	**-1.3%**
September (TAF)												
Full Simulation Period	505	532	27	5.3%	428	447	19	4.5%	377	396	19	5.2%
Dry	426	465	39	**9.1%**	371	410	38	10.4%	349	373	24	6.7%
Critical	265	278	13	4.7%	293	289	-4	**-1.4%**	235	246	11	**4.8%**
American River at Watt Ave												
Monthly Temperature (SQ-19)												
Jul-Sep (Deg-F)												
Full Simulation Period	66.7	65.8	-0.9	-1.3%	70.6	69.9	-0.6	-0.9%	71.9	71.2	-0.7	-0.9%
Dry	68.0	67.2	-0.8	-1.2%	70.7	70.5	-0.2	-0.4%	72.2	71.9	-0.3	-0.4%
Critical	71.6	70.2	-1.4	**-2.0%**	73.6	73.1	-0.5	**-0.7%**	75.6	74.7	-0.9	**-1.2%**
Yolo Bypass Flow Improvement												
Increase flows in the Yolo Bypass by 400 cfs in August, September, and October to promote food production for Delta Smelt												
Yolo Bypass Flow												
Increase in Volume (SW-31)												
Aug-Oct (TAF)												
Full Simulation Period	15	56	41	**263.4%**	17	56	39	**222.4%**	18	57	39	**211.6%**
Dry	14	47	33	241.6%	24	57	33	139.2%	22	56	33	148.3%
Critical	14	23	9	64.2%	13	18	5	33.5%	14	22	8	55.1%

	DCR 2015 without Project	DCR 2015 with Project	DCR 2015 with Project Reservoir minus DCR 2015 without Project		WSIP 2030 without Project	WSIP 2030 with Project	WSIP 2030 with Project Reservoir minus WSIP 2030 without Project		WSIP 2070 without Project	WSIP 2070 with Project	WSIP 2070 with Project Reservoir minus WSIP 2070 without Project	
			Difference	Relative Difference			Difference	Relative Difference			Difference	Relative Difference
Lake Oroville Cold Water Pool												
Improve the reliability of coldwater pool storage in Oroville Reservoir to improve water temperature suitability for juvenile steelhead and spring-run Chinook salmon over-summer rearing, and fall-run Chinook salmon spawning in the lower Feather River from May through November.												
Lake Oroville												
End-of-Month Storage (SW-18)												
May (TAF)												
Full Simulation Period	2,814	2,849	35	1.2%	2,760	2,786	26	0.9%	2,620	2,651	31	1.2%
Dry	2,204	2,304	100	4.5%	2,294	2,332	38	1.7%	2,167	2,206	39	1.8%
Critical	1,444	1,502	58	**4.0%**	1,527	1,611	83	**5.5%**	1,507	1,618	111	**7.4%**
September (TAF)												
Full Simulation Period	1,677	1,763	86	5.1%	1,469	1,528	59	4.0%	1,287	1,383	96	7.4%
Dry	1,153	1,258	104	9.0%	1,146	1,195	49	4.3%	1,140	1,147	7	0.6%
Critical	898	967	69	**7.7%**	901	924	23	**2.6%**	903	979	76	**8.4%**
Stabilize Sacramento River Fall Flows												
Stabilize flows in the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam to minimize dewatering of fall-run Chinook salmon redds.												
Sacramento River below Keswick												
Monthly Flow (SW-10)												
Nov-Feb (cfs)												
Full Simulation Period	7,998	8,336	338	4.2%	8,454	8,663	209	2.5%	8,704	8,797	93	1.1%
Below Normal	5,429	5,809	380	**7.0%**	5,020	5,189	169	**3.4%**	5,764	5,891	127	**2.2%**
Dry	4,412	4,747	334	**7.6%**	4,603	5,098	495	**10.8%**	4,253	4,417	163	**3.8%**
Critical	4,190	4,027	-163	-3.9%	3,893	3,939	46	1.2%	3,944	4,152	208	5.3%
Level 4 Water Supply for Wildlife Refuges												
Refuge level 4 water supply needs												
Federal Wildlife Refuges												
Level 4 Water Supplies from Sites (WS-CVP)												
Annual (TAF/yr)												
Full Simulation Period	0	37	**37**	N/A	0	35	**35**	N/A	0	31	**31**	N/A
Dry	0	22	22	N/A	0	21	21	N/A	0	16	16	N/A
Critical	0	9	9	N/A	0	1	1	N/A	0	1	1	N/A
Additional Water Storage												
Additonal Water Storage												
Provide additional surface storage across the Sacramento Valley water resources system												
Trinity Lake, Shasta Lake, Lake Oroville and Folsom Lake and Sites Reservoir												
Total Combined End-of-Month Storage (SW-01, 07, 18, 24 and OP-09)												
May (TAF)												
Full Simulation Period	9,439	11,007	1,568	**16.6%**	9,304	10,845	1,541	**16.6%**	8,670	10,173	1,503	**17.3%**
Dry	8,346	9,857	1,511	18.1%	8,293	9,723	1,430	17.2%	7,607	9,037	1,430	18.8%
Critical	5,529	6,618	1,089	19.7%	5,991	7,063	1,072	17.9%	5,087	6,109	1,022	20.1%
September (TAF)												
Full Simulation Period	6,238	7,566	1,329	**21.3%**	5,761	7,007	1,246	**21.6%**	5,077	6,262	1,185	**23.3%**
Dry	5,218	6,287	1,068	20.5%	5,078	6,057	978	19.3%	4,560	5,519	959	21.0%
Critical	3,247	3,958	712	21.9%	3,509	4,179	670	19.1%	2,736	3,449	713	26.1%

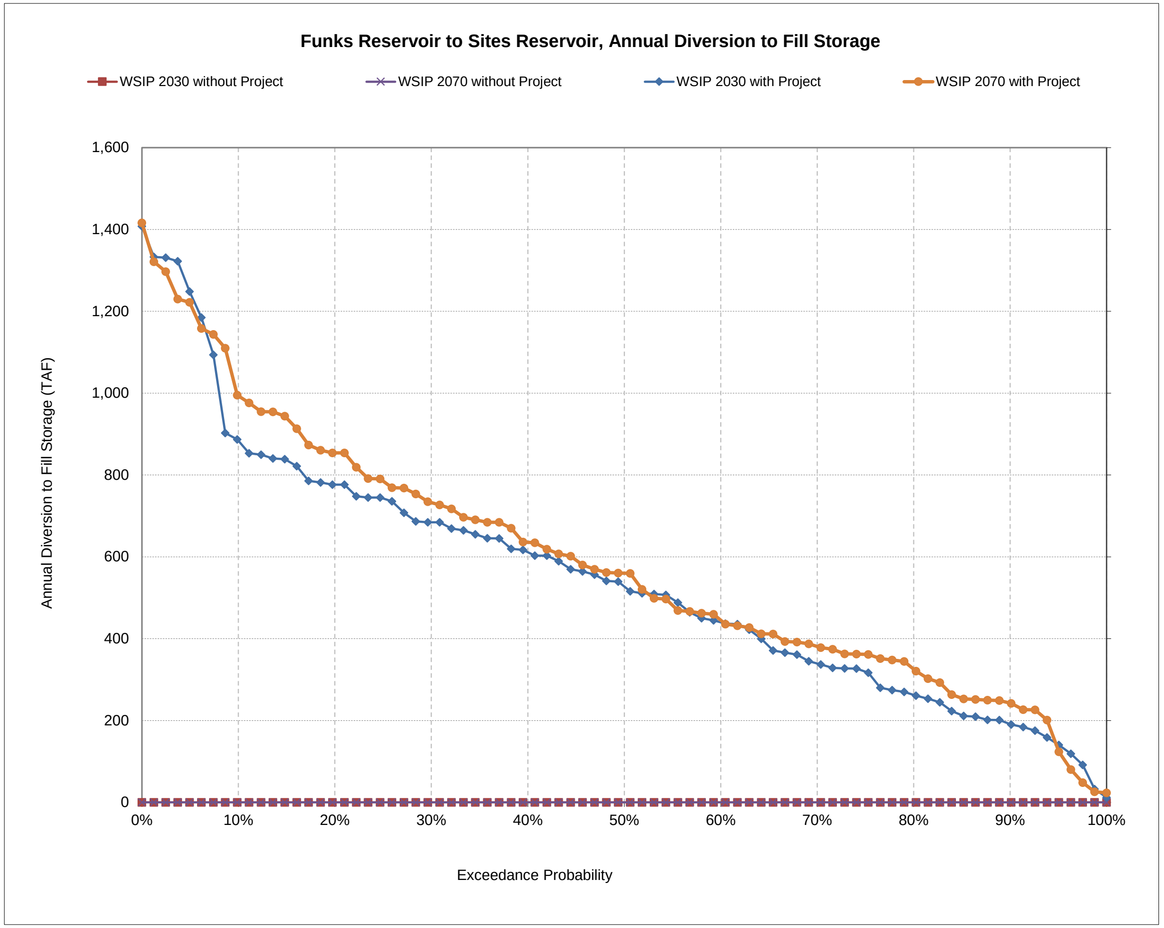
Funks Reservoir to Sites Reservoir, Annual Diversion to Fill Storage
Long-term Average and Average by Water Year Type

	Annual Diversion to Fill Storage (TAF)		
Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	0	0
Alternative	--	552	588
Difference	--	552	588
Percent Difference[3]	--		
Water Year Types[2]			
Wet			
Basis of Comparison	0	0	0
Alternative	0	672	715
Difference	0	672	715
Percent Difference			
Above Normal			
Basis of Comparison	0	0	0
Alternative	0	572	717
Difference	0	572	717
Percent Difference			
Below Normal			
Basis of Comparison	0	0	0
Alternative	0	528	607
Difference	0	528	607
Percent Difference			
Dry			
Basis of Comparison	0	0	0
Alternative	0	578	551
Difference	0	578	551
Percent Difference			
Critical			
Basis of Comparison	0	0	0
Alternative	0	281	236
Difference	0	281	236
Percent Difference			

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

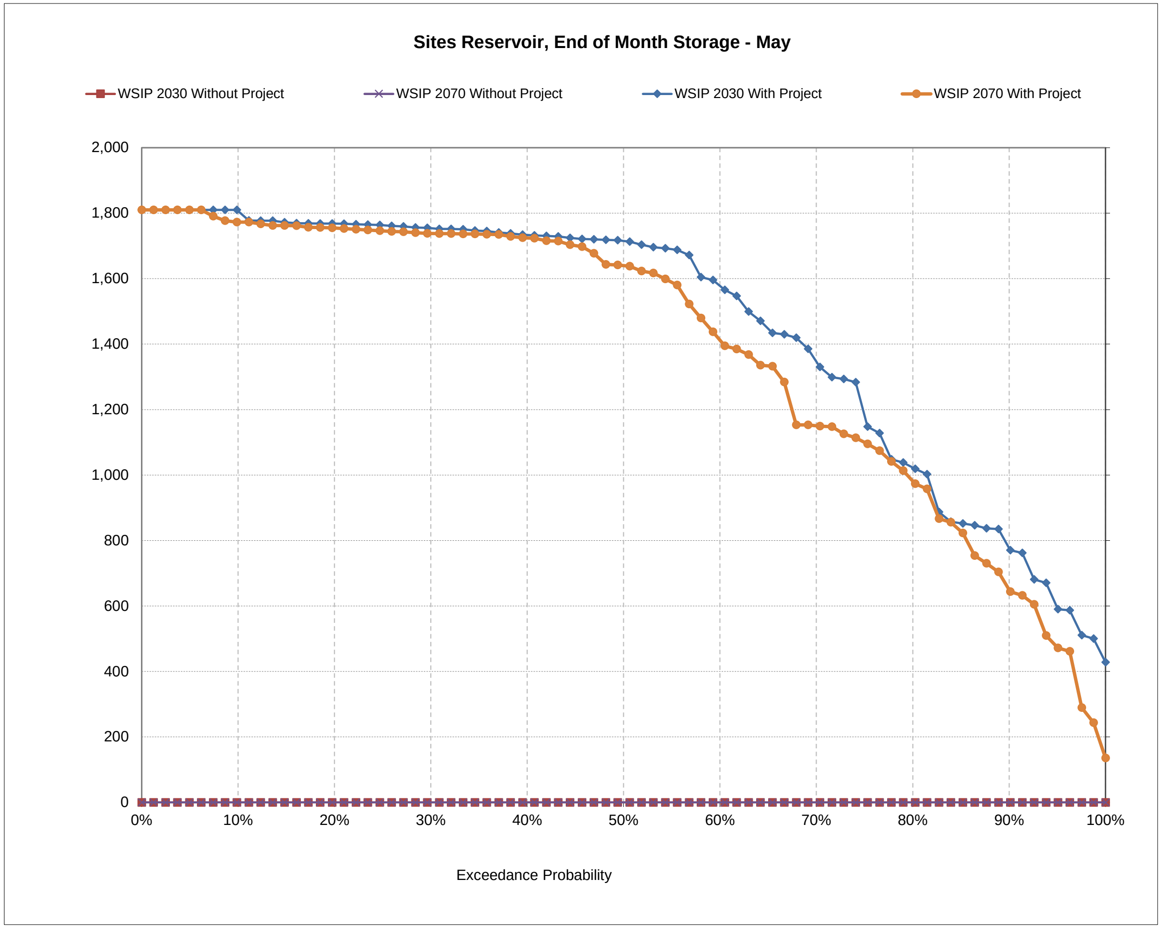


1 Based on the 82-year simulation period

Sites Reservoir, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	0	0
Alternative	--	1,459	1,390
Difference	--	1,459	1,390
Percent Difference[3]	--		
Water Year Types[2]			
Wet			
Basis of Comparison	0	0	0
Alternative	0	1,730	1,710
Difference	0	1,730	1,710
Percent Difference			
Above Normal			
Basis of Comparison	0	0	0
Alternative	0	1,680	1,622
Difference	0	1,680	1,622
Percent Difference			
Below Normal			
Basis of Comparison	0	0	0
Alternative	0	1,504	1,423
Difference	0	1,504	1,423
Percent Difference			
Dry			
Basis of Comparison	0	0	0
Alternative	0	1,309	1,276
Difference	0	1,309	1,276
Percent Difference			
Critical			
Basis of Comparison	0	0	0
Alternative	0	810	637
Difference	0	810	637
Percent Difference			

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average



1 Based on the 82-year simulation period

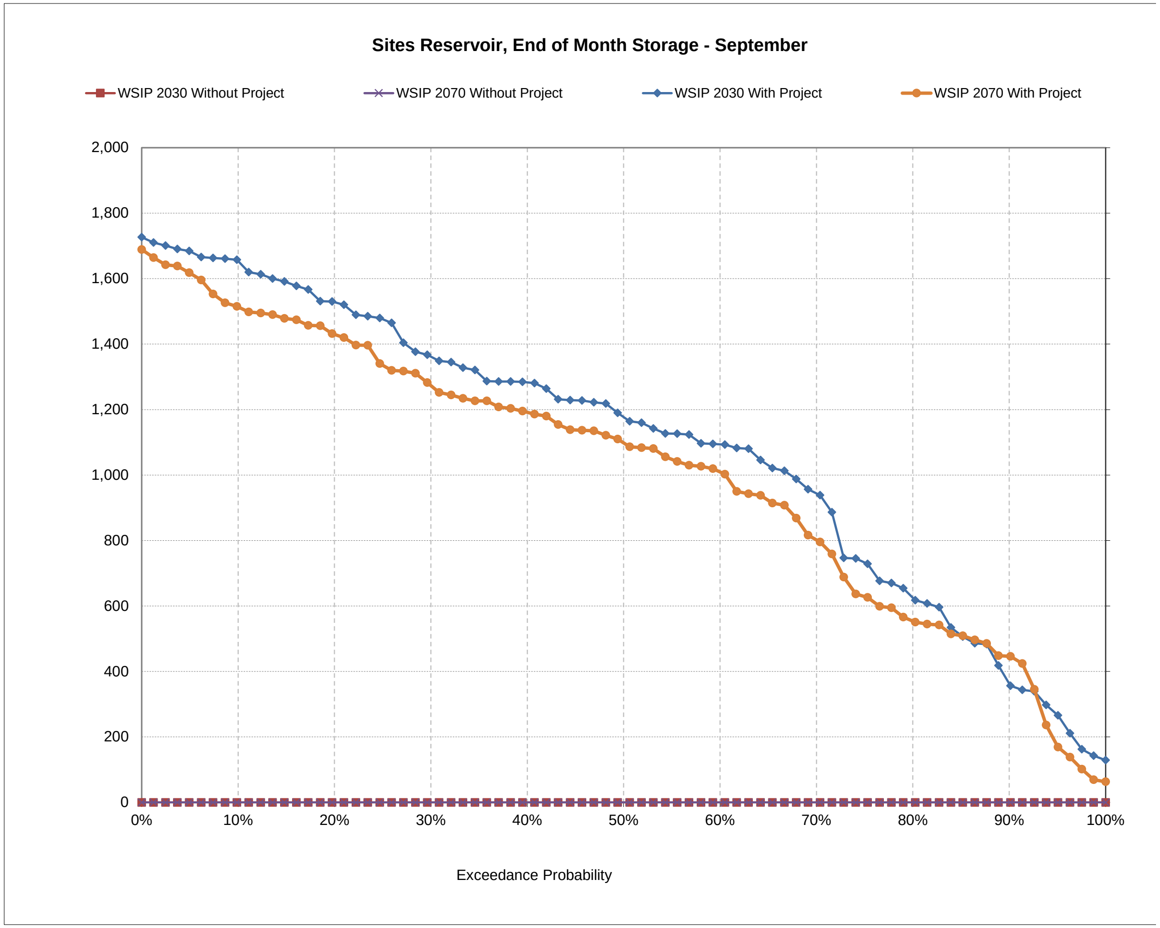
Sites Reservoir, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	0	0
Alternative	--	1,093	1,013
Difference	--	1,093	1,013
Percent Difference[3]	--		
Water Year Types[2]			
Wet			
Basis of Comparison	0	0	0
Alternative	0	1,552	1,436
Difference	0	1,552	1,436
Percent Difference			
Above Normal			
Basis of Comparison	0	0	0
Alternative	0	1,200	1,107
Difference	0	1,200	1,107
Percent Difference			
Below Normal			
Basis of Comparison	0	0	0
Alternative	0	1,019	948
Difference	0	1,019	948
Percent Difference			
Dry			
Basis of Comparison	0	0	0
Alternative	0	845	862
Difference	0	845	862
Percent Difference			
Critical			
Basis of Comparison	0	0	0
Alternative	0	464	332
Difference	0	464	332
Percent Difference			

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

X2, Monthly Position

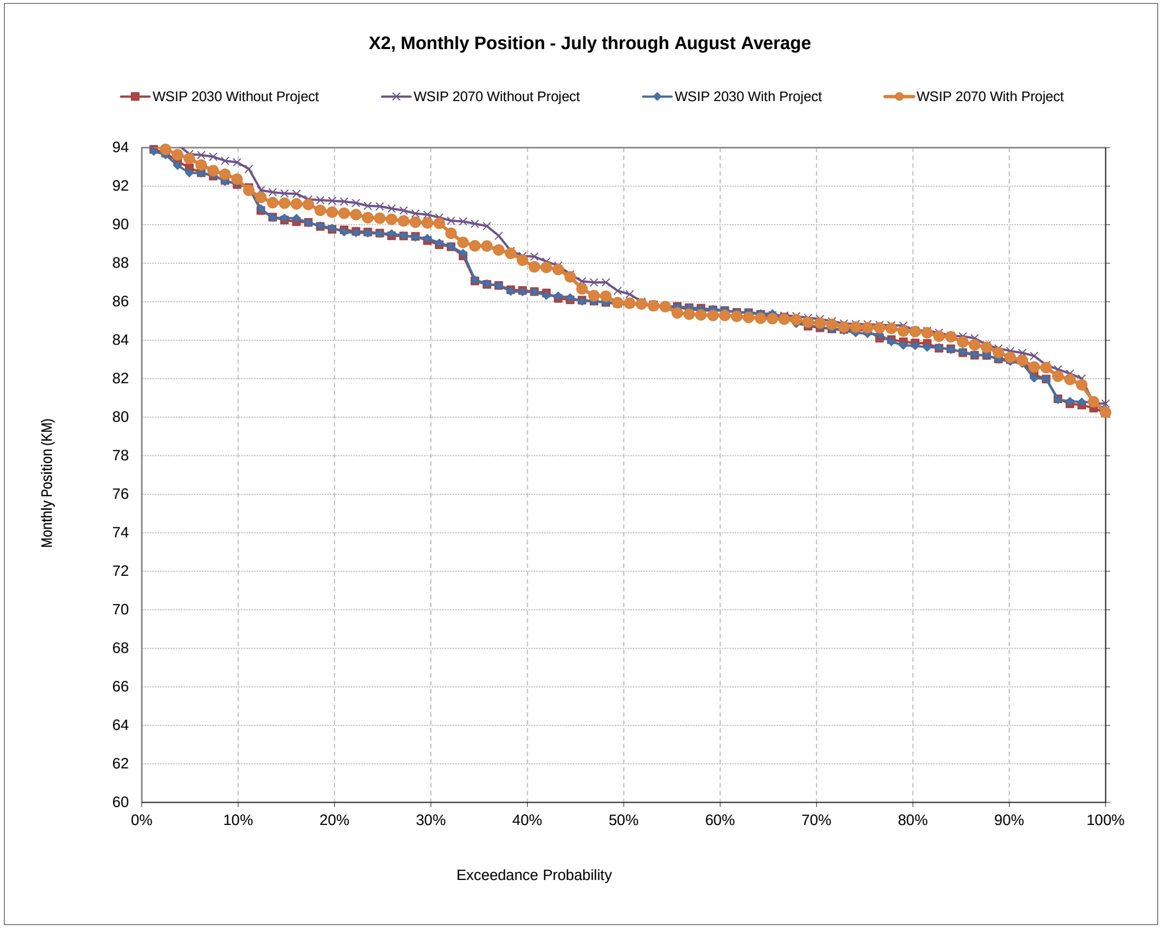
Long-term Average and Average by Water Year Type

	July through August Average Monthly Position (KM)		
Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	87	88
Alternative	--	87	87
Difference	--	0	0
Percent Difference[3]	--	0.0%	-0.4%
Water Year Types[2]			
Wet			
Basis of Comparison	--	84	85
Alternative	--	84	84
Difference	--	0	0
Percent Difference	--	0.0%	-0.2%
Above Normal			
Basis of Comparison	--	84	84
Alternative	--	84	84
Difference	--	0	0
Percent Difference	--	-0.1%	-0.5%
Below Normal			
Basis of Comparison	--	86	87
Alternative	--	86	86
Difference	--	0	0
Percent Difference	--	0.0%	-0.3%
Dry			
Basis of Comparison	--	90	91
Alternative	--	90	90
Difference	--	0	-1
Percent Difference	--	0.0%	-0.7%
Critical			
Basis of Comparison	--	93	93
Alternative	--	92	93
Difference	--	0	0
Percent Difference	--	0.0%	-0.5%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

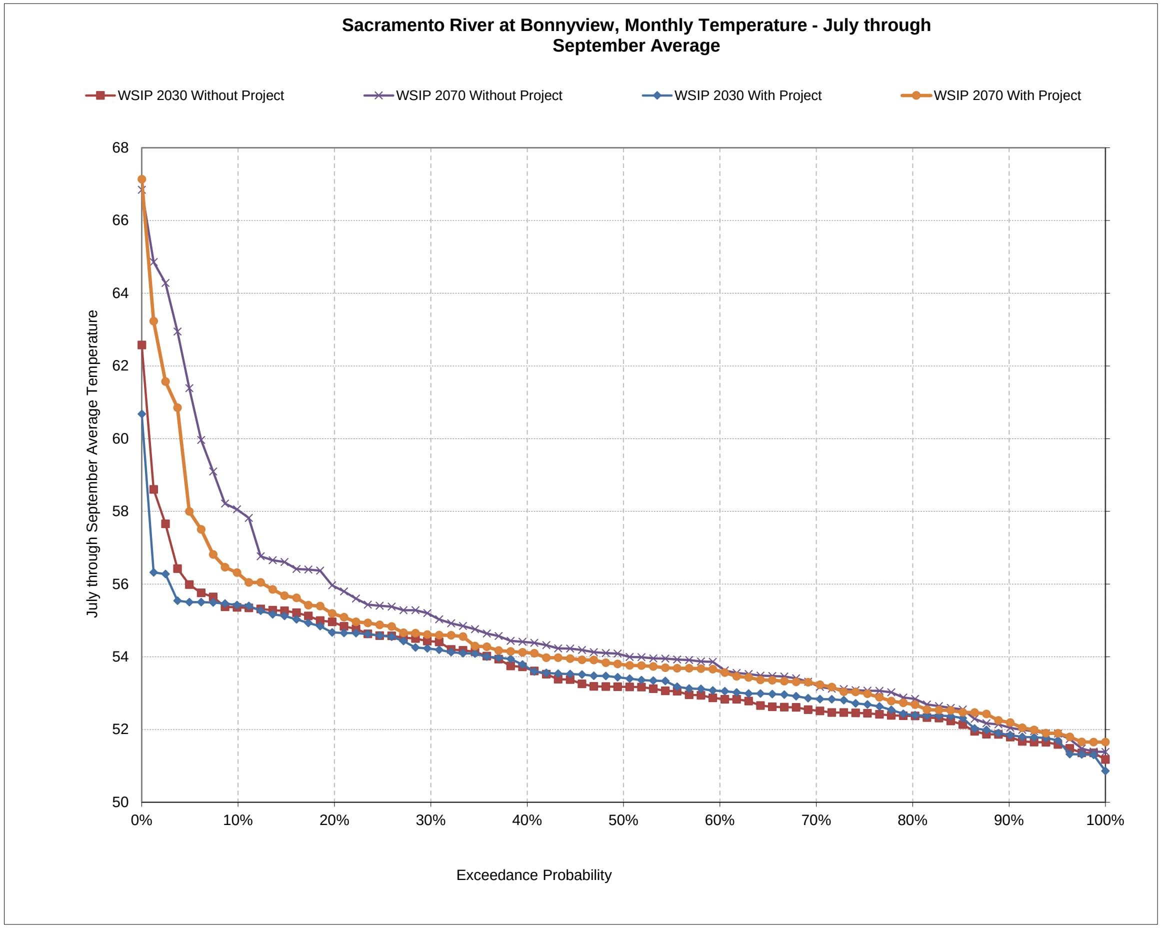
Sacramento River at Bonnyview Bridge, July through September Average Temperature
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	July through September Average Temperature DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	54	55
Alternative	--	54	54
Difference	--	0	0
Percent Difference[3]	--	0.0%	-0.8%
Water Year Types[2]			
Wet			
Basis of Comparison	0	52	53
Alternative	0	53	53
Difference	0	0	0
Percent Difference		0.5%	-0.1%
Above Normal			
Basis of Comparison	0	53	53
Alternative	0	53	53
Difference	0	0	0
Percent Difference		0.2%	0.1%
Below Normal			
Basis of Comparison	0	53	54
Alternative	0	53	54
Difference	0	0	0
Percent Difference		0.1%	-0.8%
Dry			
Basis of Comparison	0	54	55
Alternative	0	54	55
Difference	0	0	0
Percent Difference		-0.3%	-0.9%
Critical			
Basis of Comparison	0	57	60
Alternative	0	56	59
Difference	0	-1	-2
Percent Difference		-1.1%	-3.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

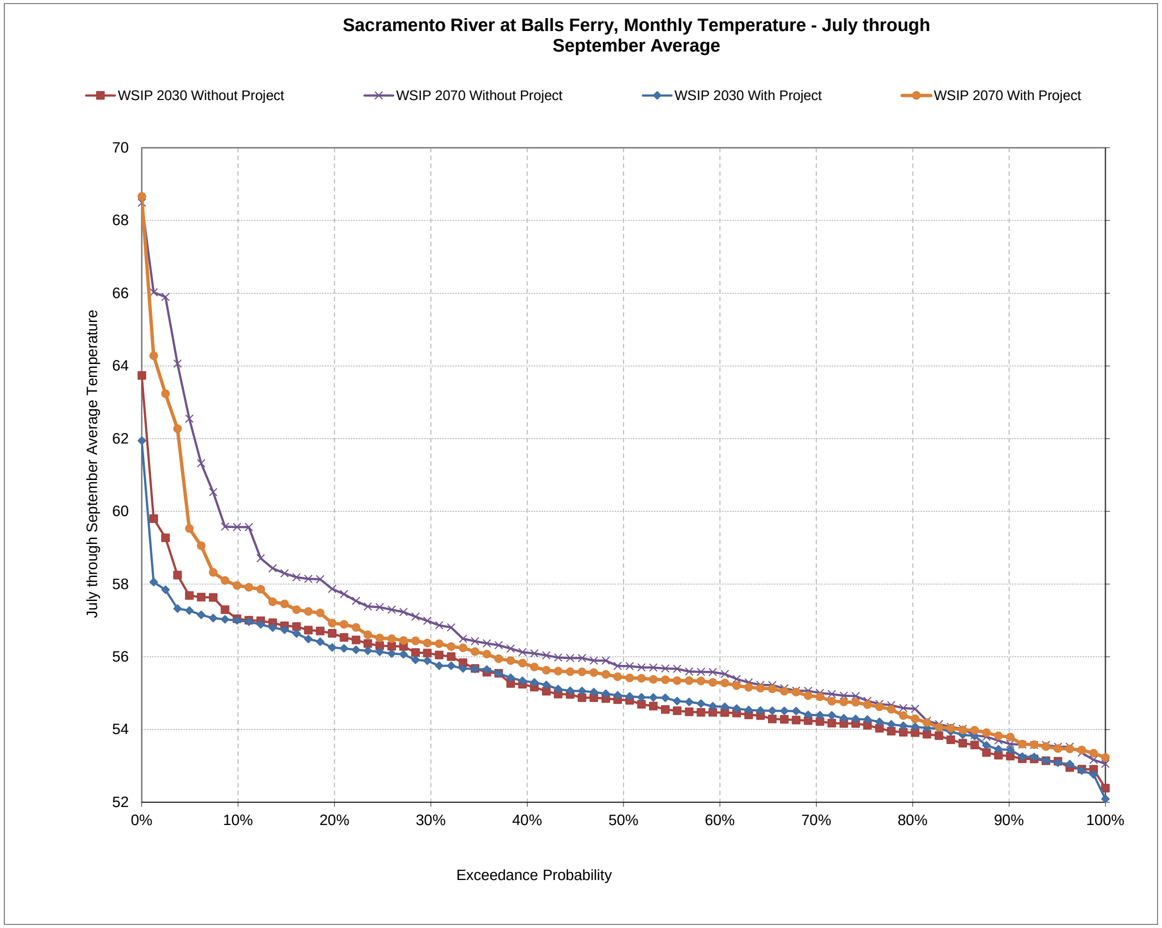
Sacramento River at Balls Ferry, July through September Average Temperature
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	July through September Average Temperature: DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	55	56
Alternative	--	55	56
Difference	--	0	0
Percent Difference[3]	--	-0.1%	-0.9%
Water Year Types[2]			
Wet			
Basis of Comparison	0	54	55
Alternative	0	54	55
Difference	0	0	0
Percent Difference		0.4%	-0.1%
Above Normal			
Basis of Comparison	0	54	55
Alternative	0	54	55
Difference	0	0	0
Percent Difference		0.3%	0.1%
Below Normal			
Basis of Comparison	0	55	56
Alternative	0	55	56
Difference	0	0	-1
Percent Difference		0.0%	-1.0%
Dry			
Basis of Comparison	0	56	57
Alternative	0	56	56
Difference	0	0	-1
Percent Difference		-0.4%	-1.0%
Critical			
Basis of Comparison	0	58	62
Alternative	0	57	60
Difference	0	-1	-2
Percent Difference		-1.1%	-2.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

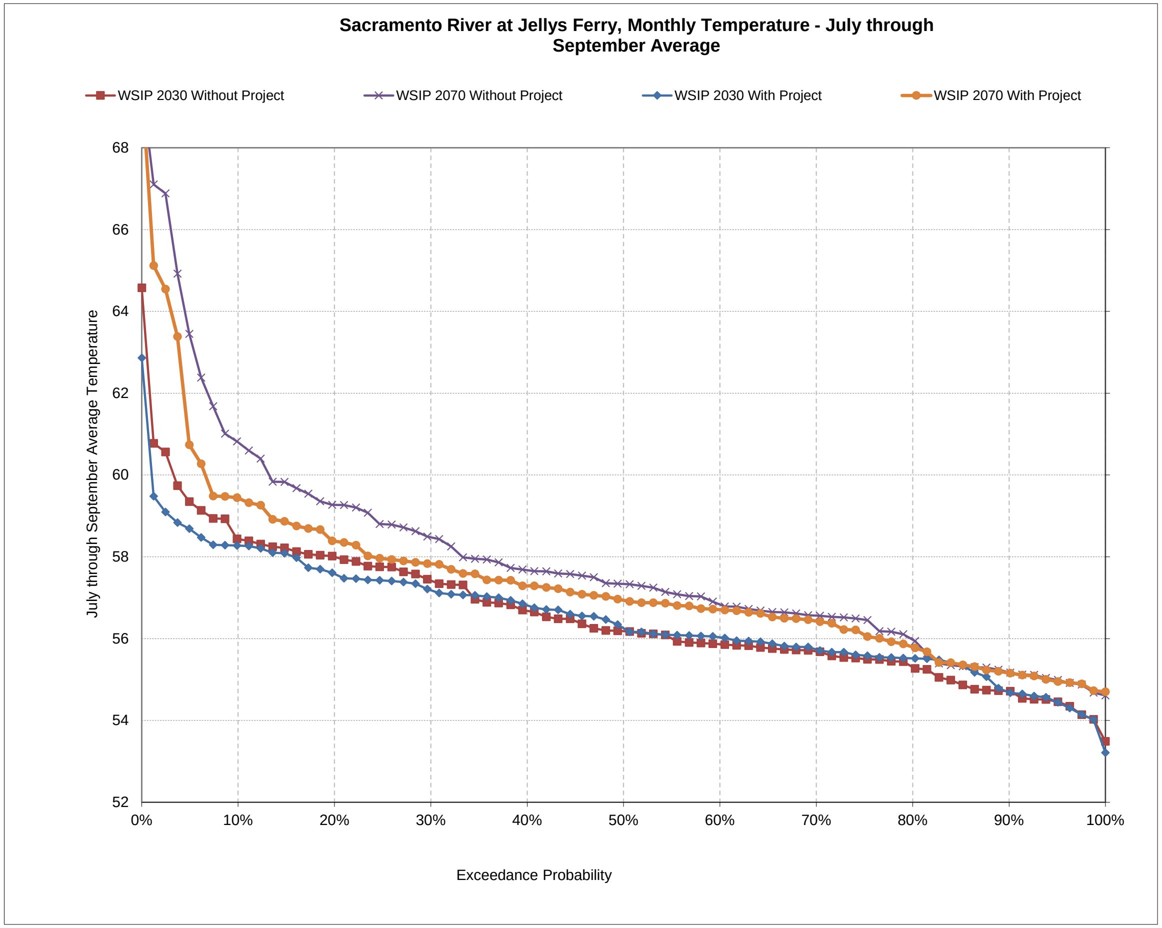
Sacramento River at Jellys Ferry, July through September Average Temperature
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	July through September Average Temperature		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	57	58
Alternative	--	57	57
Difference	--	0	-1
Percent Difference[3]	--	-0.1%	-0.9%
Water Year Types[2]			
Wet			
Basis of Comparison	0	55	56
Alternative	0	56	56
Difference	0	0	0
Percent Difference		0.3%	-0.2%
Above Normal			
Basis of Comparison	0	55	56
Alternative	0	56	56
Difference	0	0	0
Percent Difference		0.3%	0.1%
Below Normal			
Basis of Comparison	0	56	58
Alternative	0	56	57
Difference	0	0	-1
Percent Difference		-0.1%	-1.2%
Dry			
Basis of Comparison	0	57	58
Alternative	0	57	58
Difference	0	0	-1
Percent Difference		-0.5%	-1.1%
Critical			
Basis of Comparison	0	59	63
Alternative	0	59	61
Difference	0	-1	-2
Percent Difference		-1.0%	-2.5%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

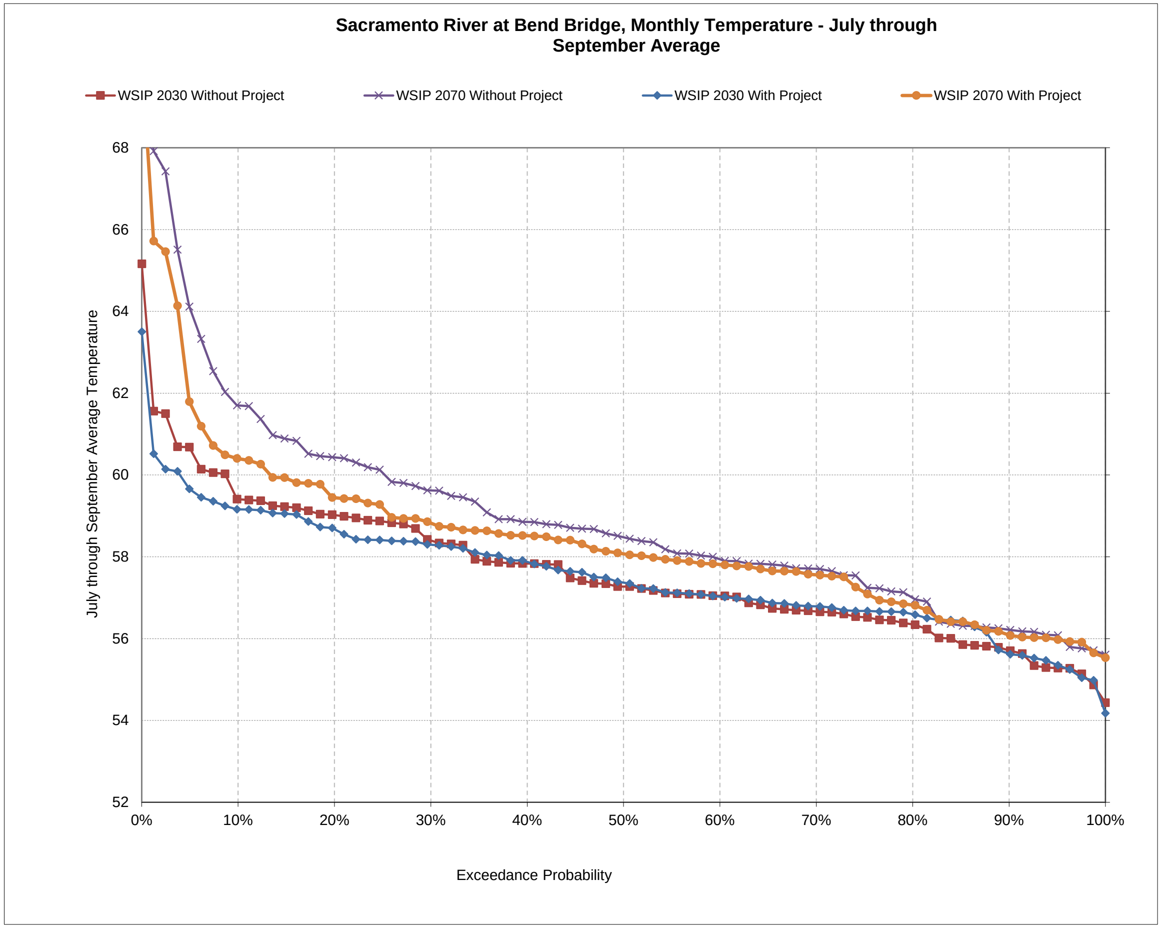
Sacramento River at Bend Bridge, July through September Average Temperature
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	July through September Average Temperature		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	58	59
Alternative	--	58	58
Difference	--	0	-1
Percent Difference[3]	--	-0.2%	-0.9%
Water Year Types[2]			
Wet			
Basis of Comparison	0	56	57
Alternative	0	57	57
Difference	0	0	0
Percent Difference		0.3%	-0.3%
Above Normal			
Basis of Comparison	0	56	57
Alternative	0	57	57
Difference	0	0	0
Percent Difference		0.4%	0.1%
Below Normal			
Basis of Comparison	0	57	59
Alternative	0	57	58
Difference	0	0	-1
Percent Difference		-0.1%	-1.2%
Dry			
Basis of Comparison	0	58	59
Alternative	0	58	59
Difference	0	0	-1
Percent Difference		-0.6%	-1.1%
Critical			
Basis of Comparison	0	60	64
Alternative	0	60	62
Difference	0	-1	-1
Percent Difference		-1.0%	-2.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

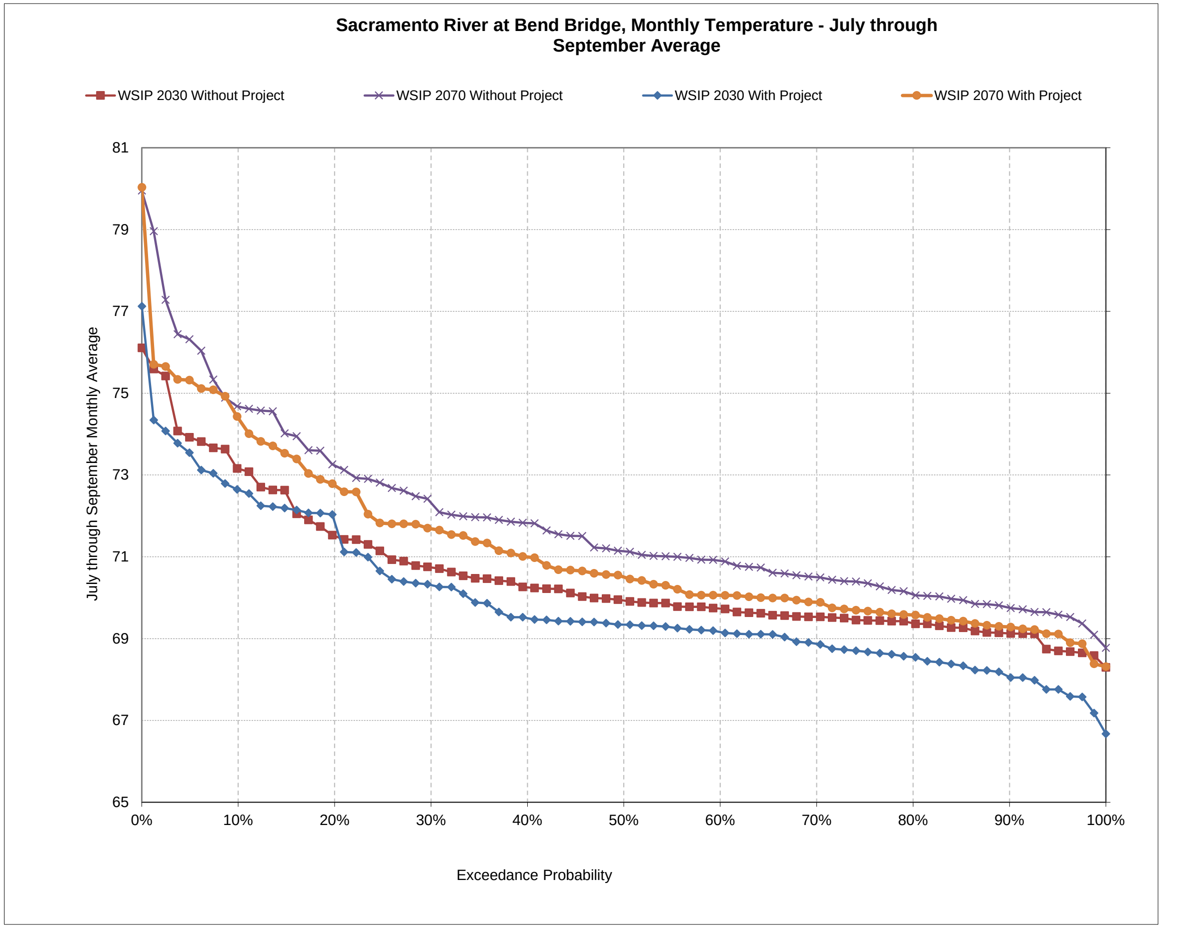
American River at Watt Avenue, July through September Average Temperature
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	July through September Monthly Average		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	71	72
Alternative	--	70	71
Difference	--	-1	-1
Percent Difference[3]	--	-0.9%	-0.9%
Water Year Types[2]			
Wet			
Basis of Comparison	--	70	71
Alternative	--	69	70
Difference	--	-1	-1
Percent Difference	--	-1.4%	-1.2%
Above Normal			
Basis of Comparison	--	70	71
Alternative	--	69	70
Difference	--	-1	-1
Percent Difference	--	-0.7%	-1.0%
Below Normal			
Basis of Comparison	--	70	71
Alternative	--	70	71
Difference	--	-1	-1
Percent Difference	--	-1.0%	-0.9%
Dry			
Basis of Comparison	--	71	72
Alternative	--	70	72
Difference	--	0	0
Percent Difference	--	-0.4%	-0.4%
Critical			
Basis of Comparison	--	74	76
Alternative	--	73	75
Difference	--	0	-1
Percent Difference	--	-0.7%	-1.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

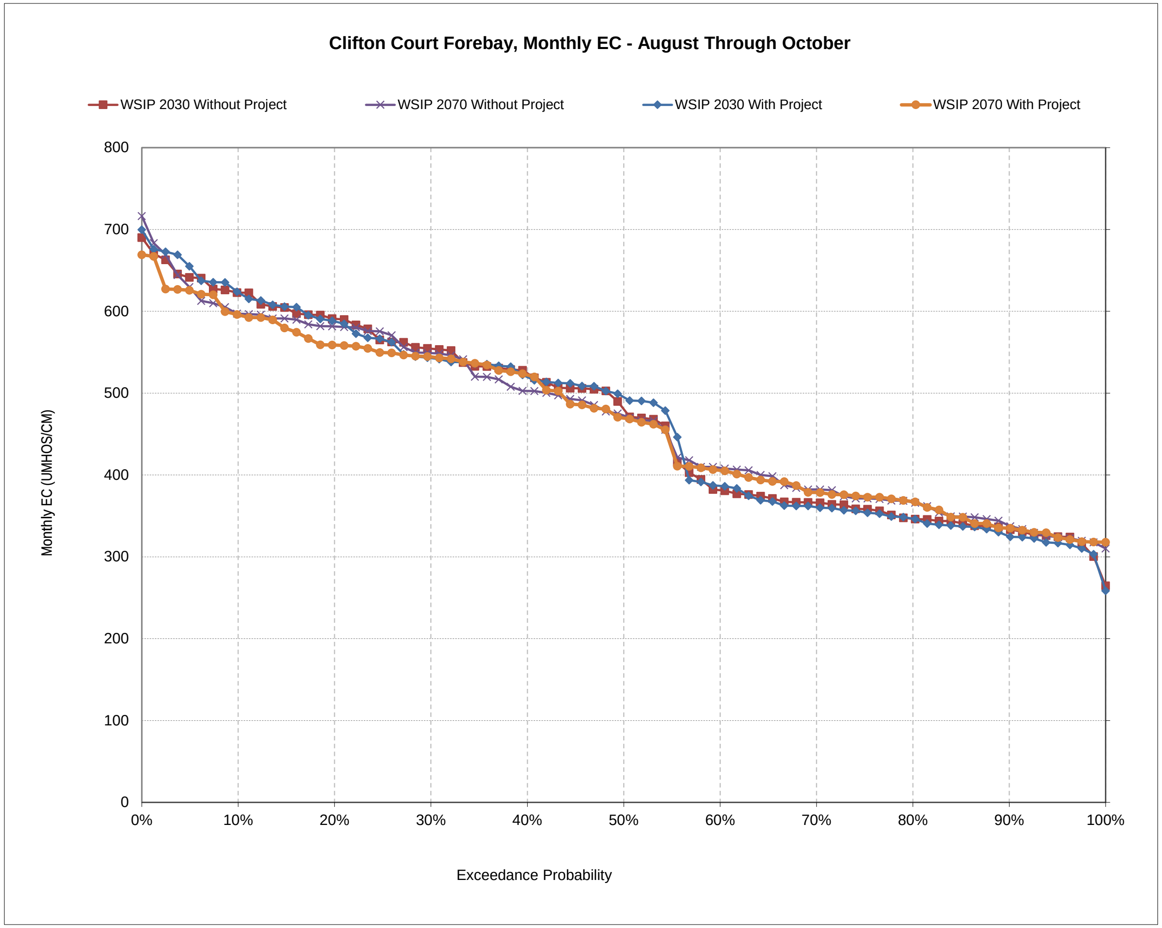
Clifton Court Forebay, Monthly EC
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	August Through October Monthly EC (UMHOS/CM) DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	378	384
Alternative	--	379	382
Difference	--	1	-2
Percent Difference[3]	--	0.2%	-0.5%
Water Year Types[2]			
Wet			
Basis of Comparison	--	260	261
Alternative	--	260	261
Difference	--	0	0
Percent Difference	--	0.1%	0.0%
Above Normal			
Basis of Comparison	--	336	329
Alternative	--	336	329
Difference	--	0	0
Percent Difference	--	0.1%	0.0%
Below Normal			
Basis of Comparison	--	382	382
Alternative	--	382	379
Difference	--	0	-3
Percent Difference	--	0.0%	-0.8%
Dry			
Basis of Comparison	--	464	467
Alternative	--	466	465
Difference	--	3	-3
Percent Difference	--	0.5%	-0.6%
Critical			
Basis of Comparison	--	543	563
Alternative	--	545	558
Difference	--	2	-5
Percent Difference	--	0.3%	-0.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

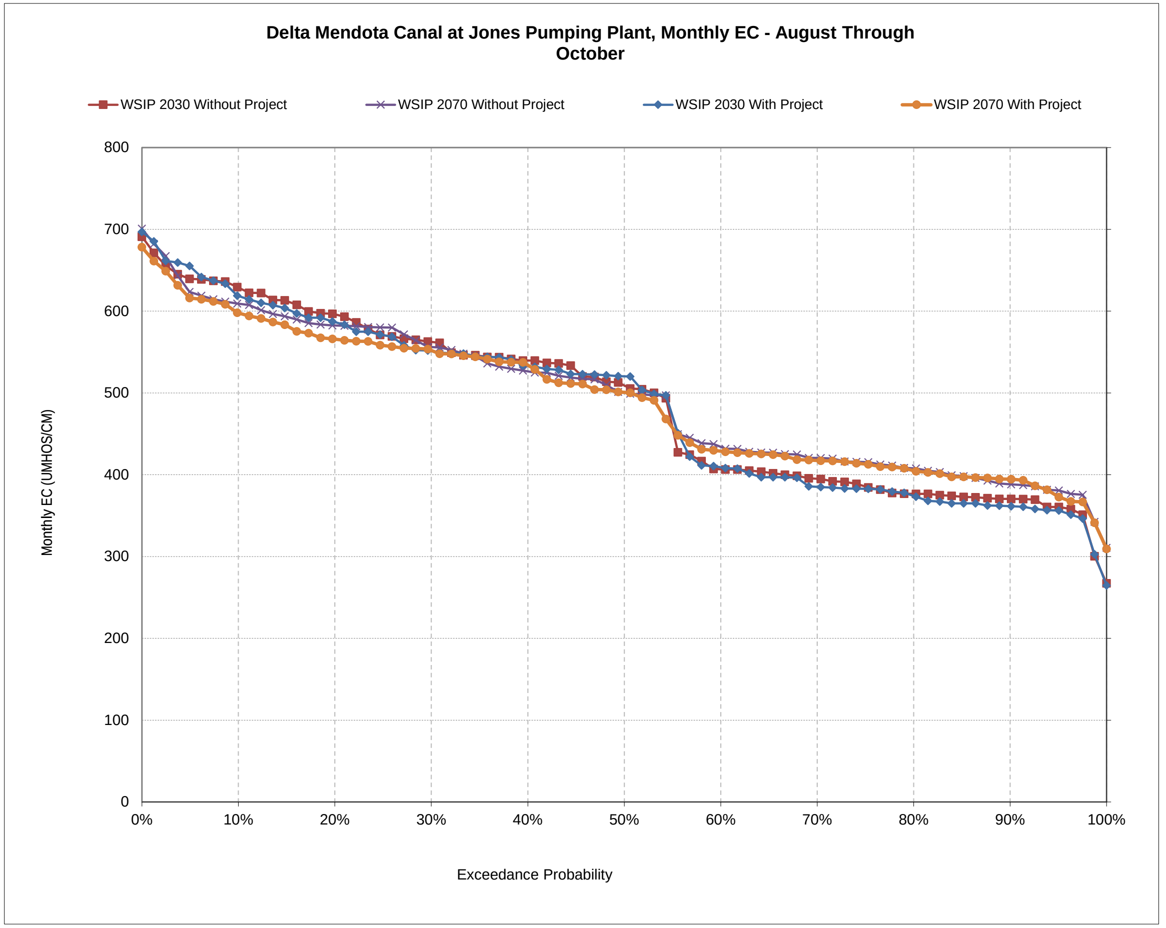
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Long-term Average and Average by Water Year Type

	August Through October Monthly EC (UMHOS/CM)		
Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	403	410
Alternative	--	403	411
Difference	--	1	1
Percent Difference[3]	--	0.2%	0.2%
Water Year Types[2]			
Wet			
Basis of Comparison	--	274	285
Alternative	--	274	285
Difference	--	0	0
Percent Difference	--	0.1%	0.1%
Above Normal			
Basis of Comparison	--	364	368
Alternative	--	364	368
Difference	--	0	0
Percent Difference	--	0.1%	0.0%
Below Normal			
Basis of Comparison	--	410	412
Alternative	--	410	412
Difference	--	0	0
Percent Difference	--	0.0%	0.0%
Dry			
Basis of Comparison	--	505	497
Alternative	--	506	499
Difference	--	1	2
Percent Difference	--	0.3%	0.5%
Critical			
Basis of Comparison	--	563	574
Alternative	--	566	574
Difference	--	3	1
Percent Difference	--	0.6%	0.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

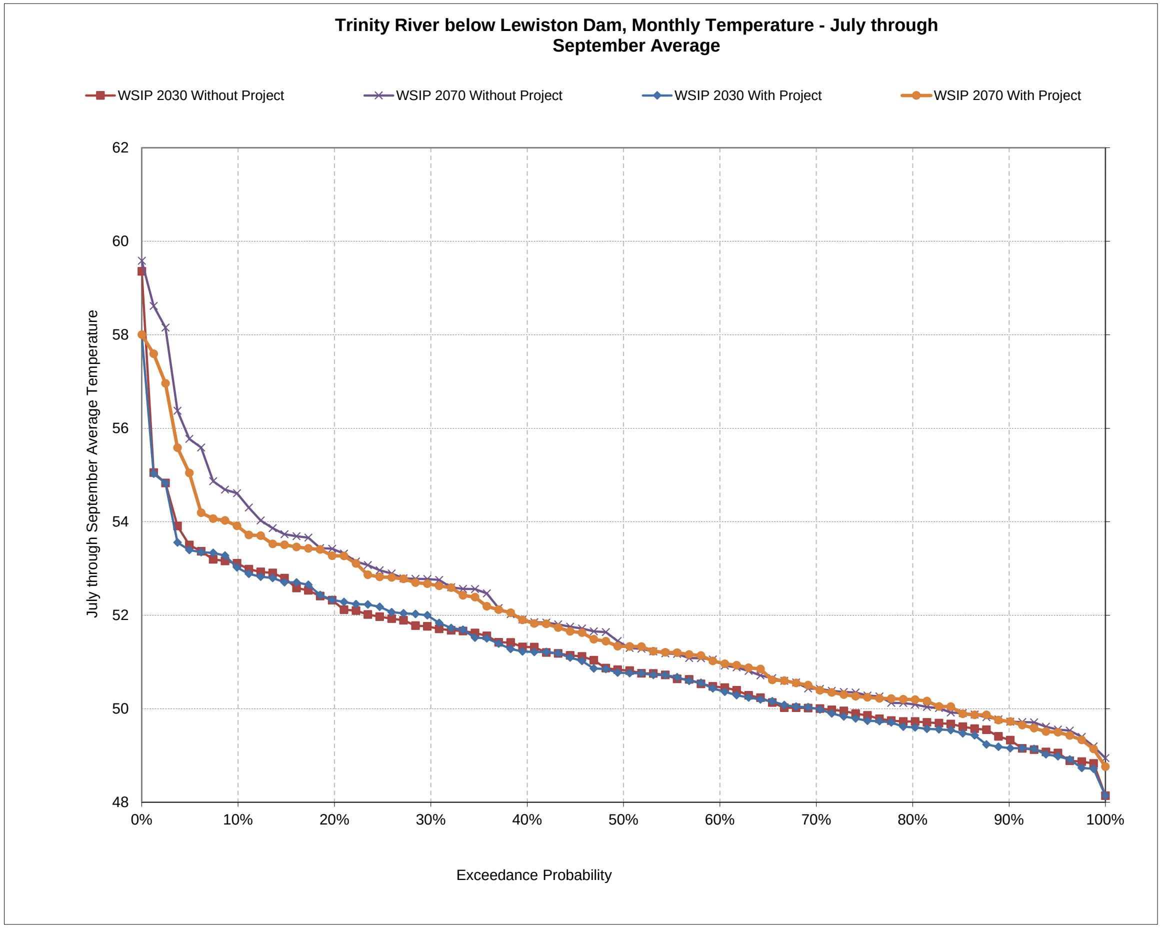
Trinity River below Lewiston Dam, July through September Average Temperature
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	July through September Average Temperature		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	51	52
Alternative	--	51	52
Difference	--	0	0
Percent Difference[3]	--	-0.1%	-0.3%
Water Year Types[2]			
Wet			
Basis of Comparison	0	50	50
Alternative	0	50	50
Difference	0	0	0
Percent Difference		-0.3%	0.0%
Above Normal			
Basis of Comparison	0	50	51
Alternative	0	50	51
Difference	0	0	0
Percent Difference		0.0%	-0.5%
Below Normal			
Basis of Comparison	0	51	51
Alternative	0	51	51
Difference	0	0	0
Percent Difference		0.0%	0.0%
Dry			
Basis of Comparison	0	52	53
Alternative	0	52	52
Difference	0	0	0
Percent Difference		0.3%	-0.4%
Critical			
Basis of Comparison	0	54	55
Alternative	0	54	55
Difference	0	0	-1
Percent Difference		-0.4%	-1.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

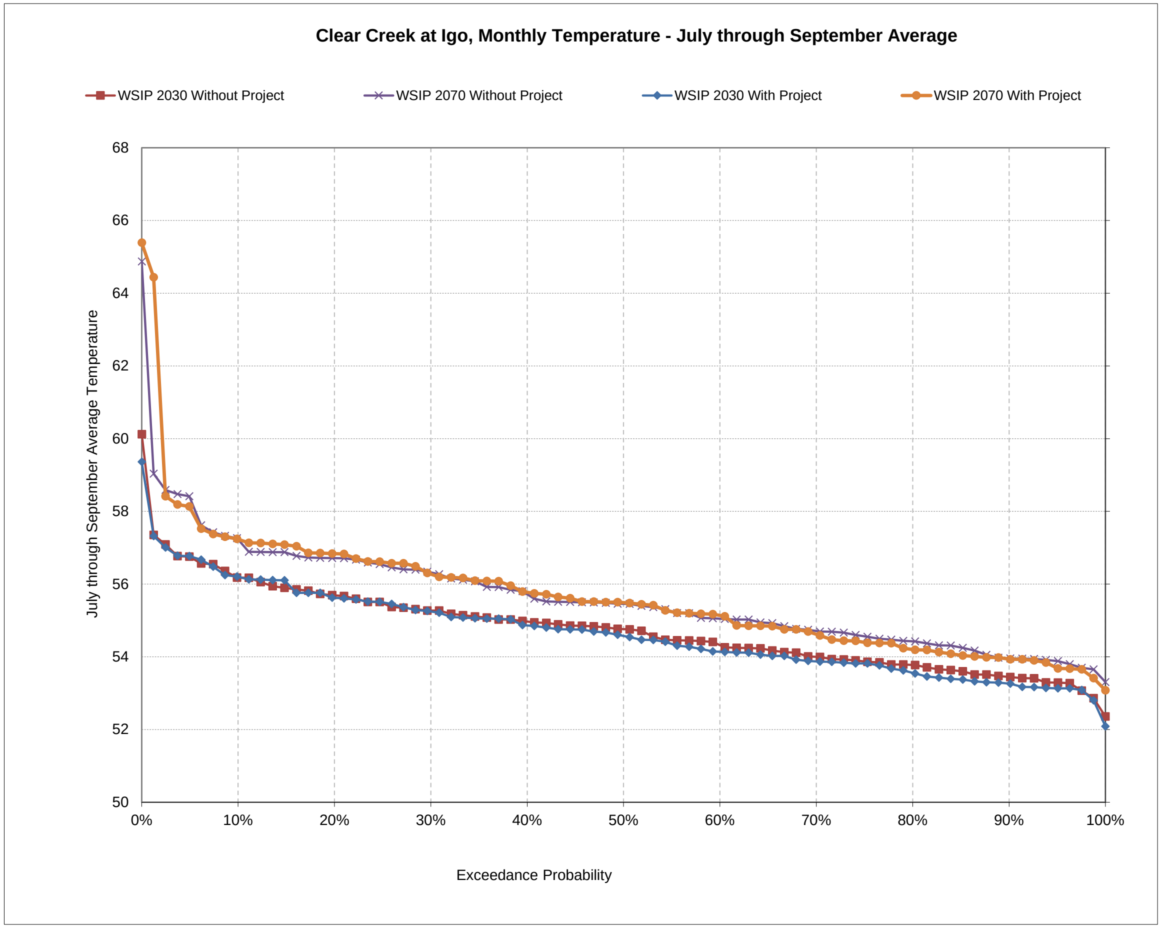
Clear Creek at Igo, July through September Average Temperature
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	July through September Average Temperature		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	55	56
Alternative	--	55	56
Difference	--	0	0
Percent Difference[3]	--	-0.2%	0.1%
Water Year Types[2]			
Wet			
Basis of Comparison	0	54	55
Alternative	0	54	55
Difference	0	0	0
Percent Difference		-0.2%	0.7%
Above Normal			
Basis of Comparison	0	54	55
Alternative	0	54	55
Difference	0	0	0
Percent Difference		-0.2%	-0.4%
Below Normal			
Basis of Comparison	0	55	55
Alternative	0	54	55
Difference	0	0	0
Percent Difference		-0.2%	0.4%
Dry			
Basis of Comparison	0	55	56
Alternative	0	55	56
Difference	0	0	0
Percent Difference		-0.2%	0.1%
Critical			
Basis of Comparison	0	57	58
Alternative	0	57	58
Difference	0	0	0
Percent Difference		-0.2%	-0.4%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

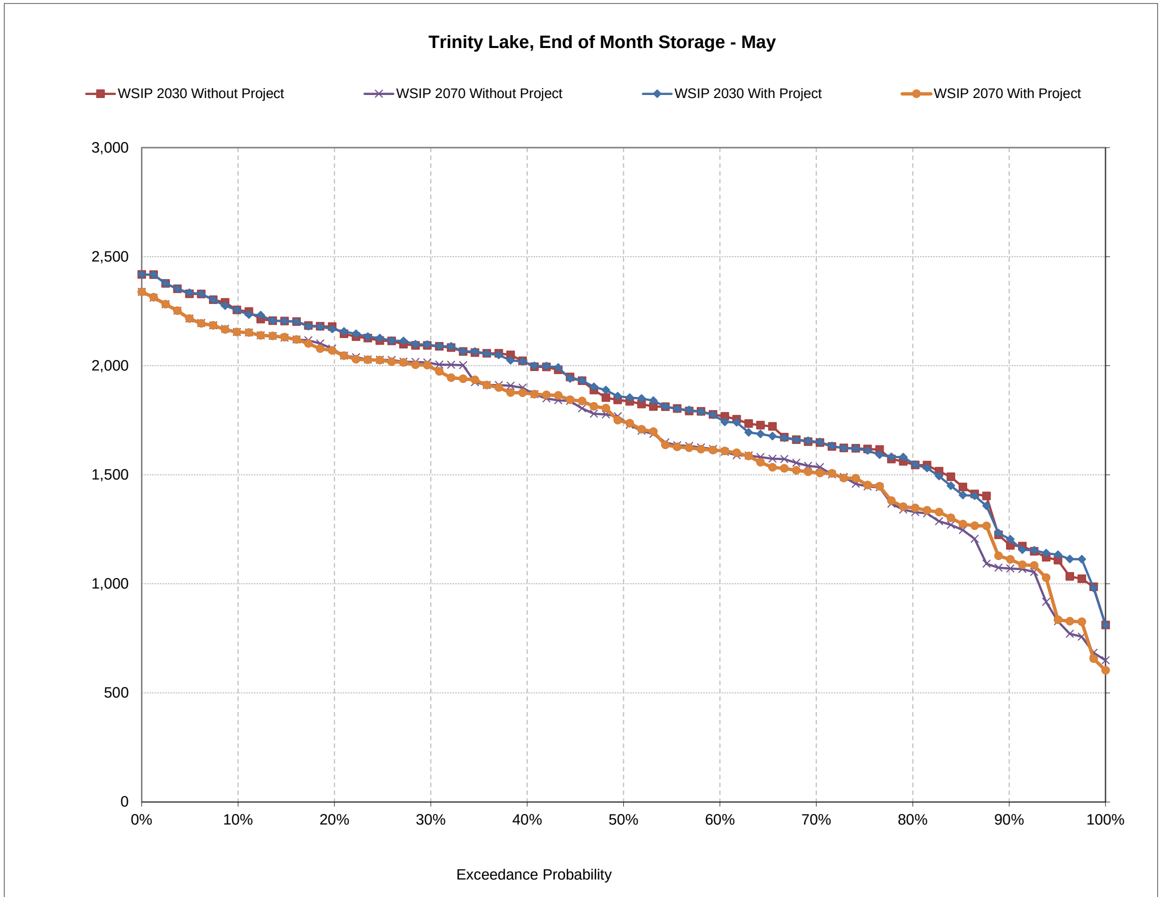
Trinity Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	1,826	1,689
Alternative	--	1,827	1,693
Difference	--	1	5
Percent Difference[3]	--	0.1%	0.3%
Water Year Types[2]			
Wet			
Basis of Comparison	0	2,167	2,058
Alternative	0	2,172	2,056
Difference	0	5	-3
Percent Difference		0.2%	-0.1%
Above Normal			
Basis of Comparison	0	2,057	1,968
Alternative	0	2,067	1,975
Difference	0	9	8
Percent Difference		0.5%	0.4%
Below Normal			
Basis of Comparison	0	1,781	1,697
Alternative	0	1,770	1,691
Difference	0	-11	-7
Percent Difference		-0.6%	-0.4%
Dry			
Basis of Comparison	0	1,636	1,453
Alternative	0	1,626	1,471
Difference	0	-11	17
Percent Difference		-0.6%	1.2%
Critical			
Basis of Comparison	0	1,201	1,016
Alternative	0	1,217	1,024
Difference	0	16	9
Percent Difference		1.3%	0.9%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

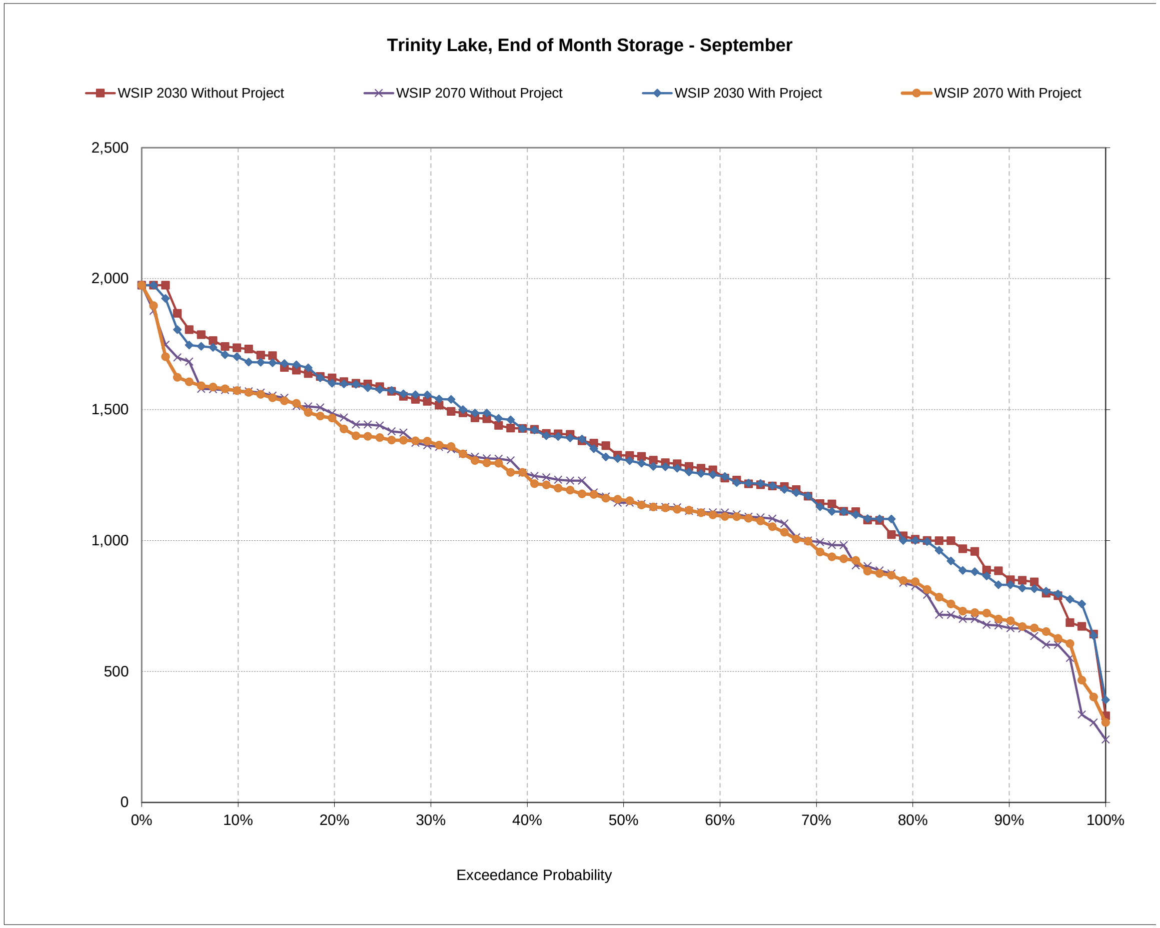
Trinity Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	1,320	1,152
Alternative	--	1,312	1,149
Difference	--	-8	-3
Percent Difference[3]	--	-0.6%	-0.3%
Water Year Types[2]			
Wet			
Basis of Comparison	0	1,626	1,456
Alternative	0	1,608	1,434
Difference	0	-18	-22
Percent Difference		-1.1%	-1.5%
Above Normal			
Basis of Comparison	0	1,511	1,420
Alternative	0	1,527	1,395
Difference	0	16	-25
Percent Difference		1.0%	-1.8%
Below Normal			
Basis of Comparison	0	1,306	1,181
Alternative	0	1,289	1,170
Difference	0	-17	-11
Percent Difference		-1.3%	-0.9%
Dry			
Basis of Comparison	0	1,104	903
Alternative	0	1,093	913
Difference	0	-11	10
Percent Difference		-1.0%	1.1%
Critical			
Basis of Comparison	0	800	627
Alternative	0	807	673
Difference	0	7	47
Percent Difference		0.9%	7.5%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake and Sites Reservoir, End of Month Storage

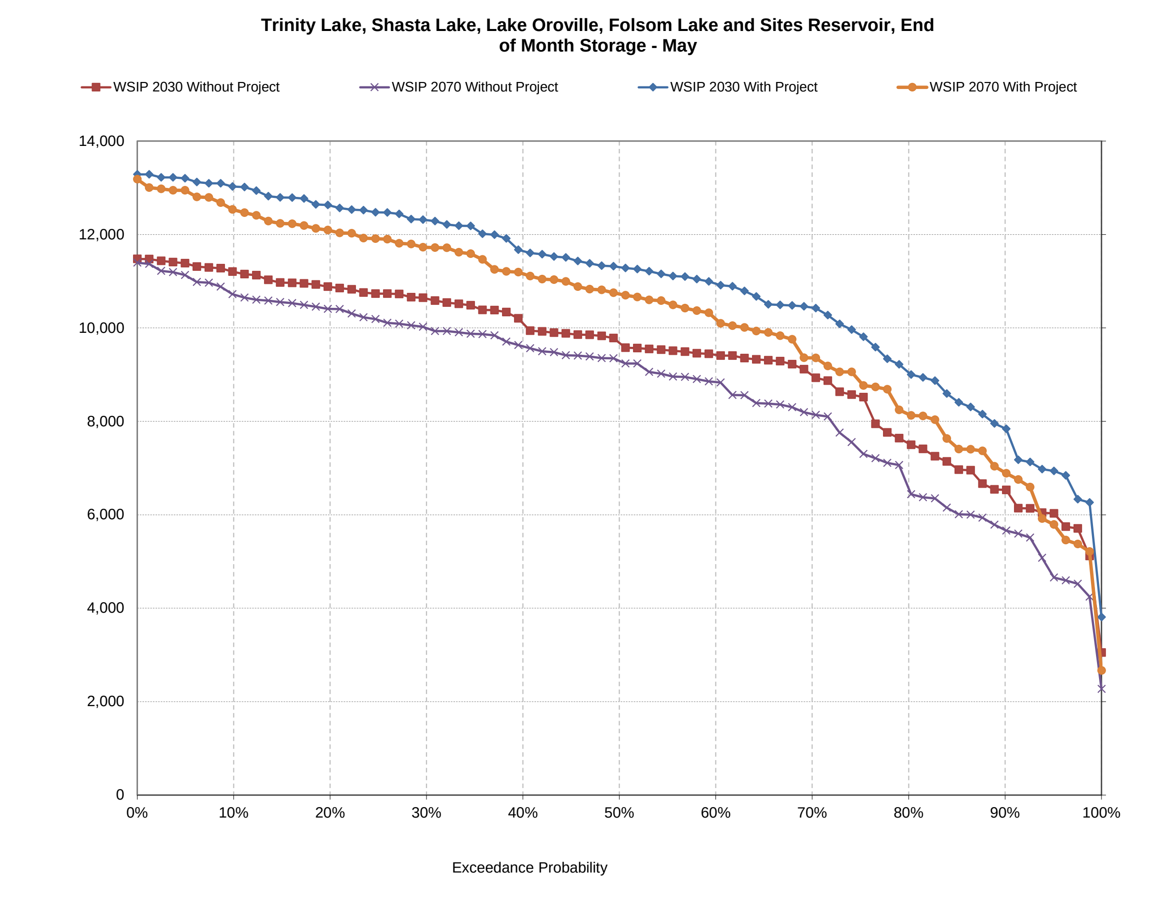
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	9,304	8,670
Alternative	--	10,845	10,173
Difference	--	1,541	1,503
Percent Difference[3]	--	16.6%	17.3%
Water Year Types[2]			
Wet			
Basis of Comparison	0	10,835	10,353
Alternative	0	12,585	12,070
Difference	0	1,750	1,718
Percent Difference		16.1%	16.6%
Above Normal			
Basis of Comparison	0	10,537	10,173
Alternative	0	12,266	11,815
Difference	0	1,729	1,642
Percent Difference		16.4%	16.1%
Below Normal			
Basis of Comparison	0	9,474	8,974
Alternative	0	11,011	10,488
Difference	0	1,538	1,514
Percent Difference		16.2%	16.9%
Dry			
Basis of Comparison	0	8,293	7,607
Alternative	0	9,723	9,037
Difference	0	1,430	1,430
Percent Difference		17.2%	18.8%
Critical			
Basis of Comparison	0	5,991	5,087
Alternative	0	7,063	6,109
Difference	0	1,072	1,022
Percent Difference		17.9%	20.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

Trinity Lake, Shasta Lake, Lake Oroville, Folsom Lake and Sites Reservoir, End of Month Storage

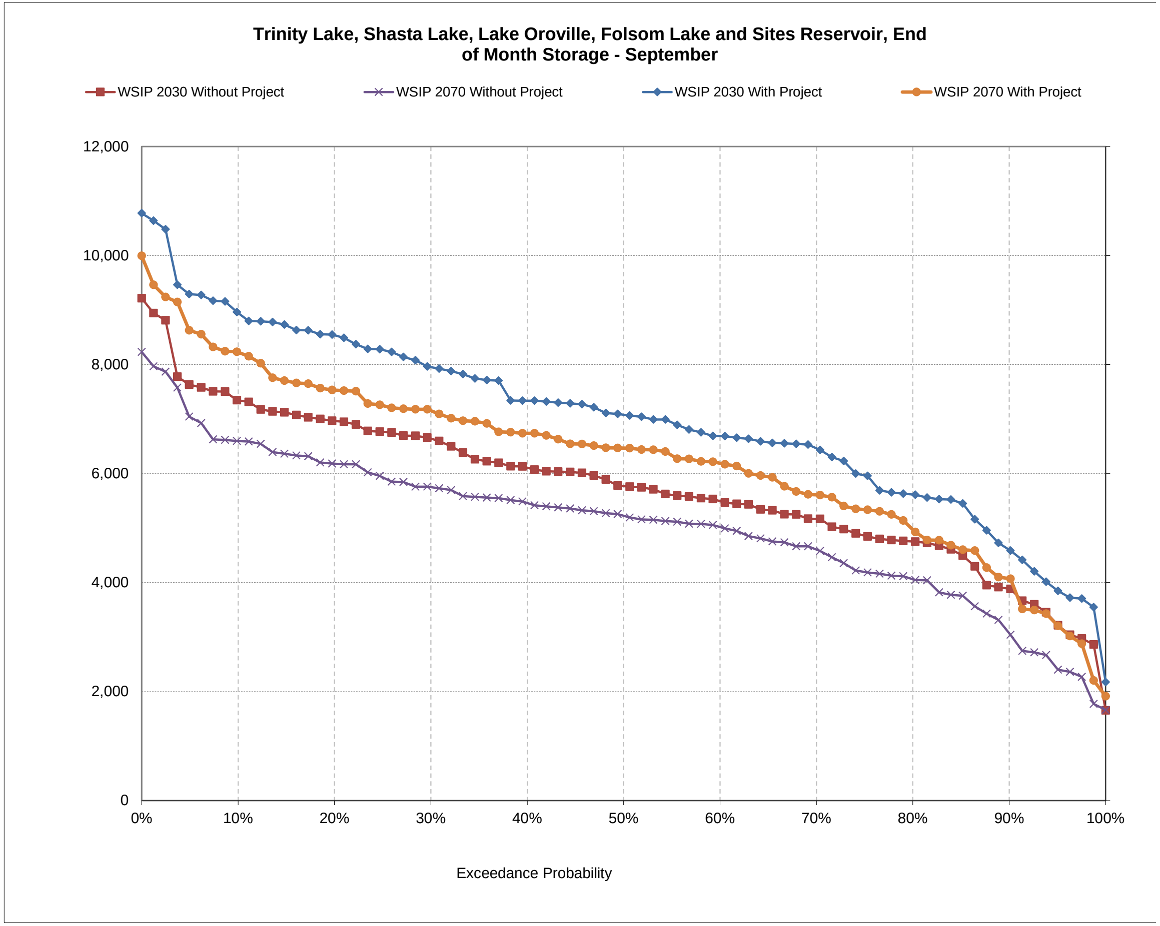
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	5,761	5,077
Alternative	--	7,007	6,262
Difference	--	1,246	1,185
Percent Difference[3]	--	21.6%	23.3%
Water Year Types[2]			
Wet			
Basis of Comparison	0	6,910	6,019
Alternative	0	8,505	7,541
Difference	0	1,596	1,522
Percent Difference		23.1%	25.3%
Above Normal			
Basis of Comparison	0	6,424	5,917
Alternative	0	7,931	7,299
Difference	0	1,507	1,381
Percent Difference		23.5%	23.3%
Below Normal			
Basis of Comparison	0	5,837	5,440
Alternative	0	7,042	6,565
Difference	0	1,205	1,125
Percent Difference		20.6%	20.7%
Dry			
Basis of Comparison	0	5,078	4,560
Alternative	0	6,057	5,519
Difference	0	978	959
Percent Difference		19.3%	21.0%
Critical			
Basis of Comparison	0	3,509	2,736
Alternative	0	4,179	3,449
Difference	0	670	713
Percent Difference		19.1%	26.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

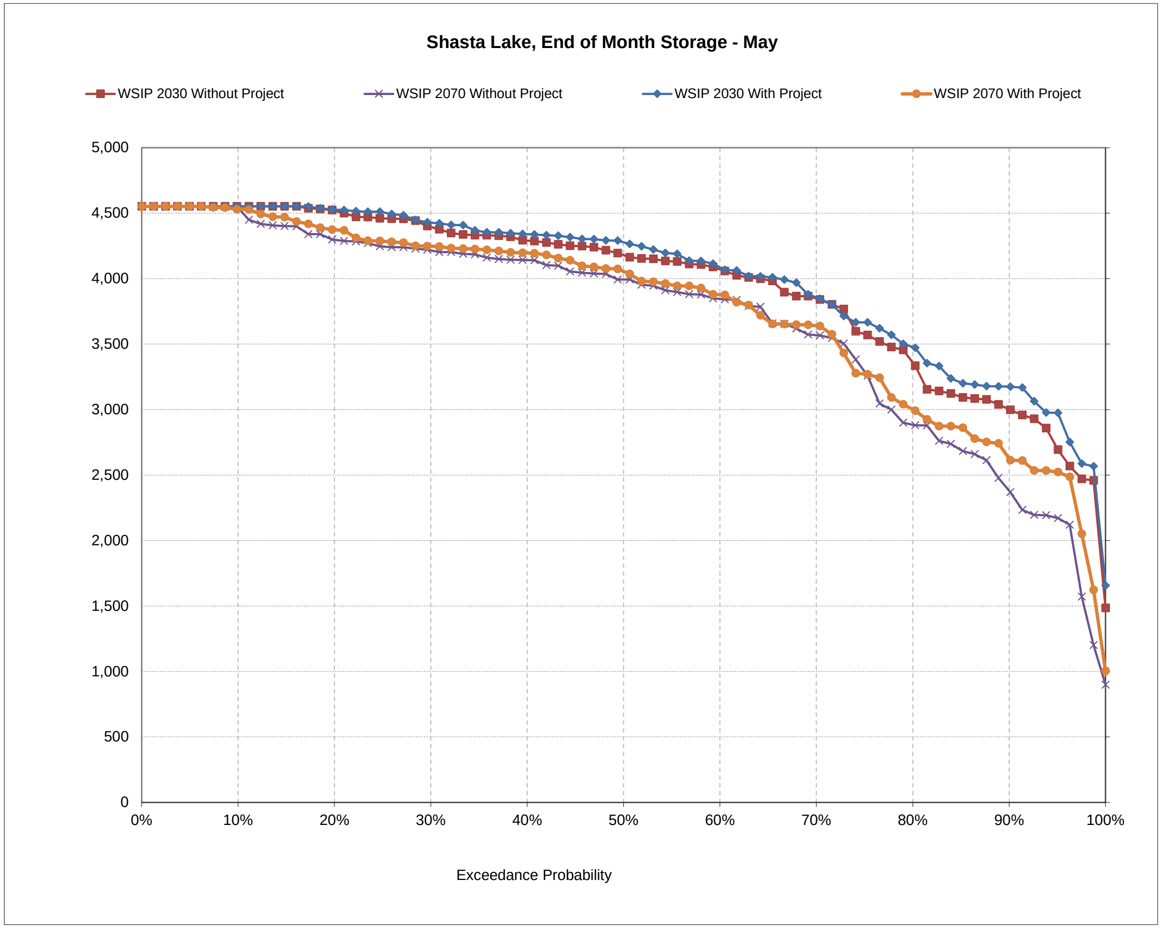
Shasta Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	3,950	3,681
Alternative	--	4,009	3,761
Difference	--	59	80
Percent Difference[3]	--	1.5%	2.2%
Water Year Types[2]			
Wet			
Basis of Comparison	0	4,387	4,228
Alternative	0	4,405	4,242
Difference	0	18	14
Percent Difference		0.4%	0.3%
Above Normal			
Basis of Comparison	0	4,322	4,271
Alternative	0	4,359	4,289
Difference	0	37	18
Percent Difference		0.9%	0.4%
Below Normal			
Basis of Comparison	0	4,133	3,949
Alternative	0	4,155	4,018
Difference	0	22	69
Percent Difference		0.5%	1.8%
Dry			
Basis of Comparison	0	3,663	3,386
Alternative	0	3,765	3,478
Difference	0	101	92
Percent Difference		2.8%	2.7%
Critical			
Basis of Comparison	0	2,787	2,157
Alternative	0	2,953	2,428
Difference	0	166	271
Percent Difference		6.0%	12.6%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

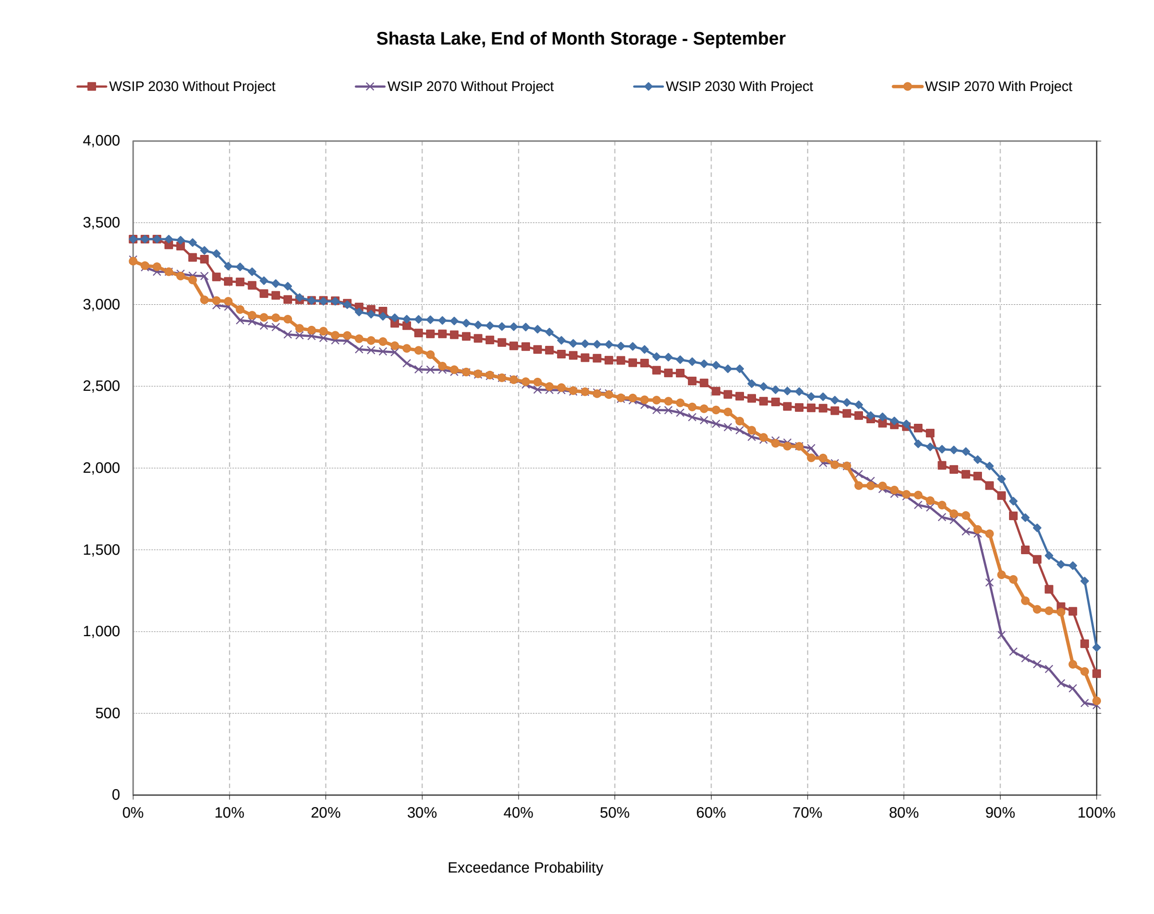
Shasta Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	2,544	2,262
Alternative	--	2,627	2,321
Difference	--	83	59
Percent Difference[3]	--	3.3%	2.6%
Water Year Types[2]			
Wet			
Basis of Comparison	0	2,837	2,552
Alternative	0	2,855	2,544
Difference	0	18	-8
Percent Difference		0.6%	-0.3%
Above Normal			
Basis of Comparison	0	2,758	2,686
Alternative	0	2,940	2,789
Difference	0	182	104
Percent Difference		6.6%	3.9%
Below Normal			
Basis of Comparison	0	2,771	2,658
Alternative	0	2,836	2,646
Difference	0	65	-13
Percent Difference		2.3%	-0.5%
Dry			
Basis of Comparison	0	2,457	2,167
Alternative	0	2,514	2,224
Difference	0	57	56
Percent Difference		2.3%	2.6%
Critical			
Basis of Comparison	0	1,515	971
Alternative	0	1,696	1,219
Difference	0	181	247
Percent Difference		12.0%	25.5%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

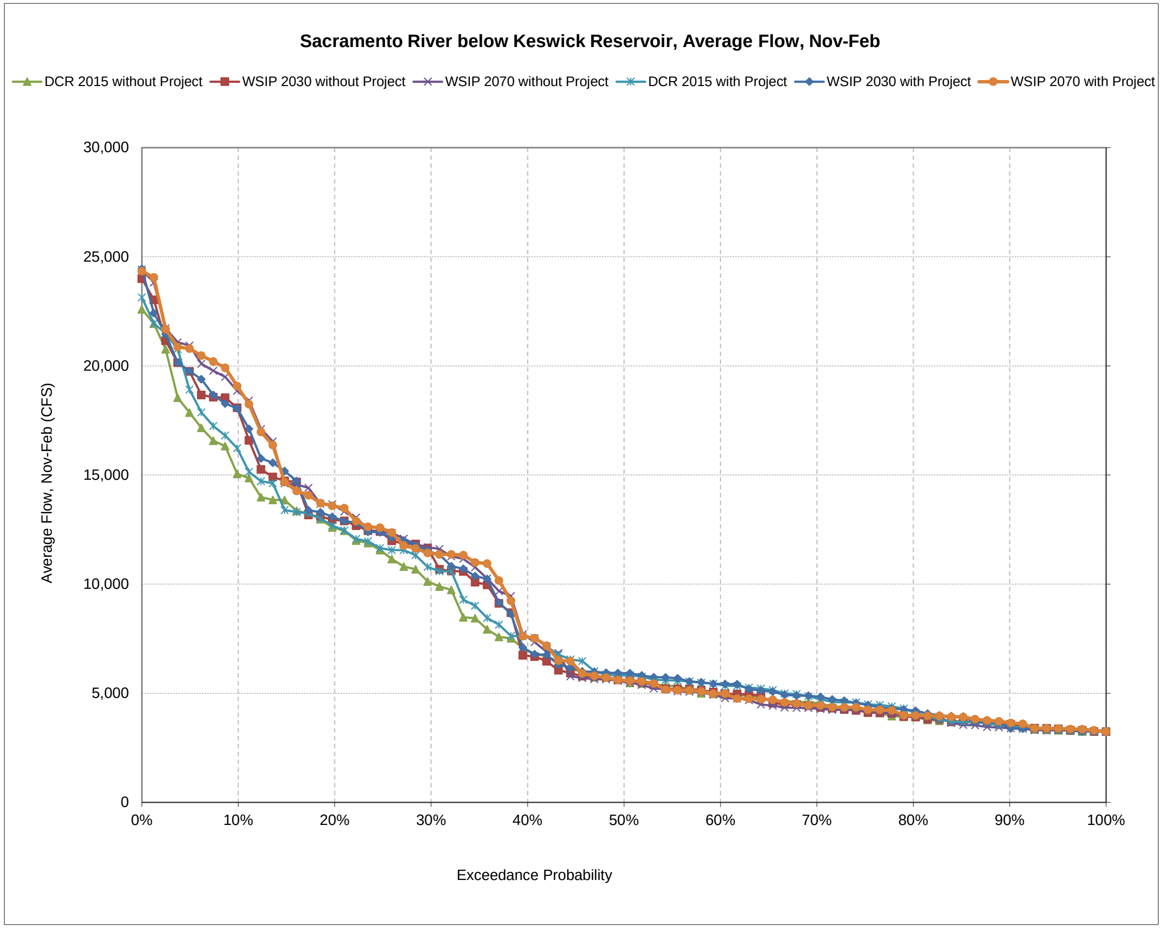
Sacramento River below Keswick Reservoir, Average Flow, Nov-Feb
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	Average Flow, Nov-Feb (CFS)		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	7,998	8,454	8,704
Alternative	8,336	8,663	8,797
Difference	338	209	93
Percent Difference[3]	4.2%	2.5%	1.1%
Water Year Types[2]			
Wet			
Basis of Comparison	13,323	15,060	15,391
Alternative	13,911	15,293	15,366
Difference	588	233	-25
Percent Difference	4.4%	1.5%	-0.2%
Above Normal			
Basis of Comparison	8,641	9,252	9,662
Alternative	8,895	9,247	9,737
Difference	254	-5	75
Percent Difference	2.9%	-0.1%	0.8%
Below Normal			
Basis of Comparison	5,429	5,020	5,764
Alternative	5,809	5,189	5,891
Difference	380	169	127
Percent Difference	7.0%	3.4%	2.2%
Dry			
Basis of Comparison	4,412	4,603	4,253
Alternative	4,747	5,098	4,417
Difference	334	495	163
Percent Difference	7.6%	10.8%	3.8%
Critical			
Basis of Comparison	4,190	3,893	3,944
Alternative	4,027	3,939	4,152
Difference	-163	46	208
Percent Difference	-3.9%	1.2%	5.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

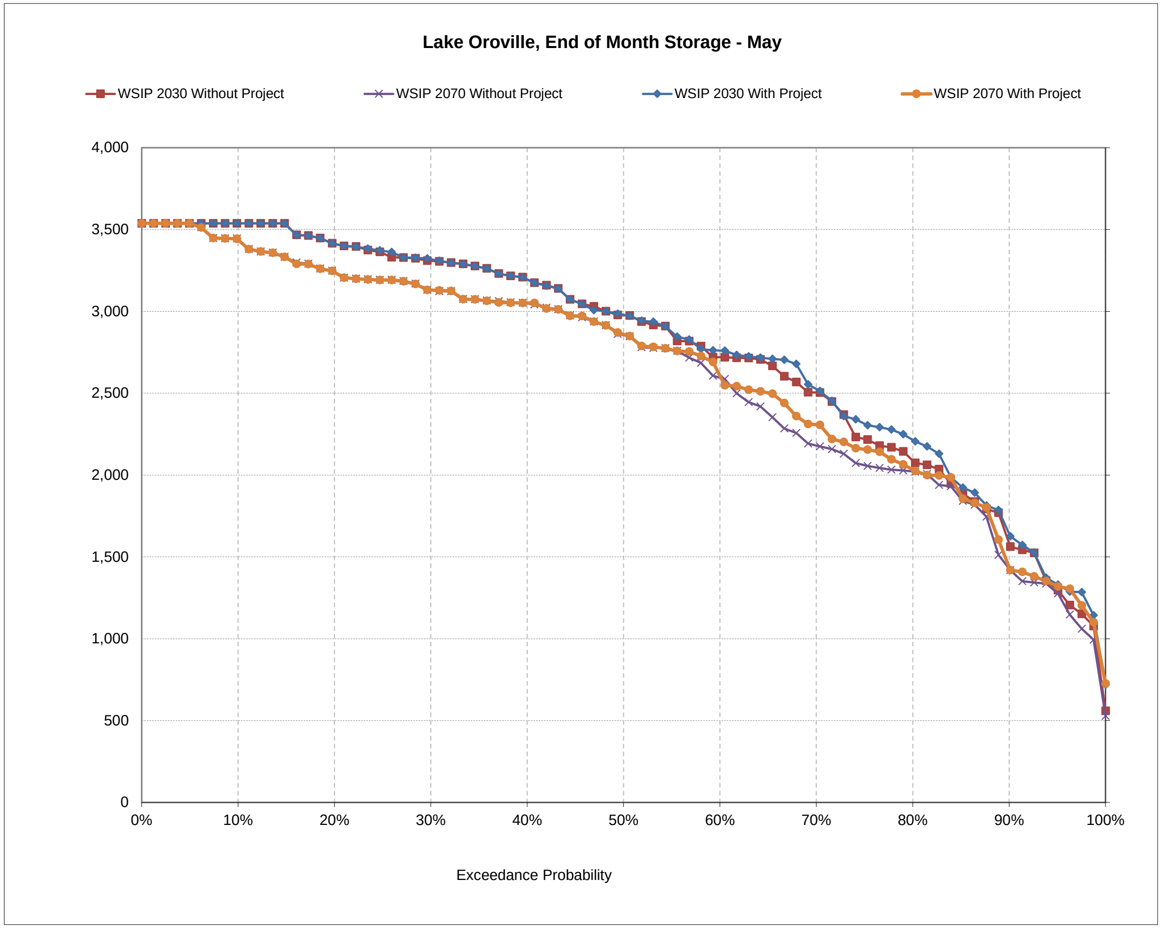
Lake Oroville, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	2,760	2,620
Alternative	--	2,786	2,651
Difference	--	26	31
Percent Difference[3]	--	0.9%	1.2%
Water Year Types[2]			
Wet			
Basis of Comparison	0	3,383	3,258
Alternative	0	3,381	3,258
Difference	0	-1	0
Percent Difference		0.0%	0.0%
Above Normal			
Basis of Comparison	0	3,313	3,166
Alternative	0	3,318	3,165
Difference	0	6	-1
Percent Difference		0.2%	0.0%
Below Normal			
Basis of Comparison	0	2,764	2,609
Alternative	0	2,792	2,644
Difference	0	28	35
Percent Difference		1.0%	1.3%
Dry			
Basis of Comparison	0	2,294	2,167
Alternative	0	2,332	2,206
Difference	0	38	39
Percent Difference		1.7%	1.8%
Critical			
Basis of Comparison	0	1,527	1,507
Alternative	0	1,611	1,618
Difference	0	83	111
Percent Difference		5.5%	7.4%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

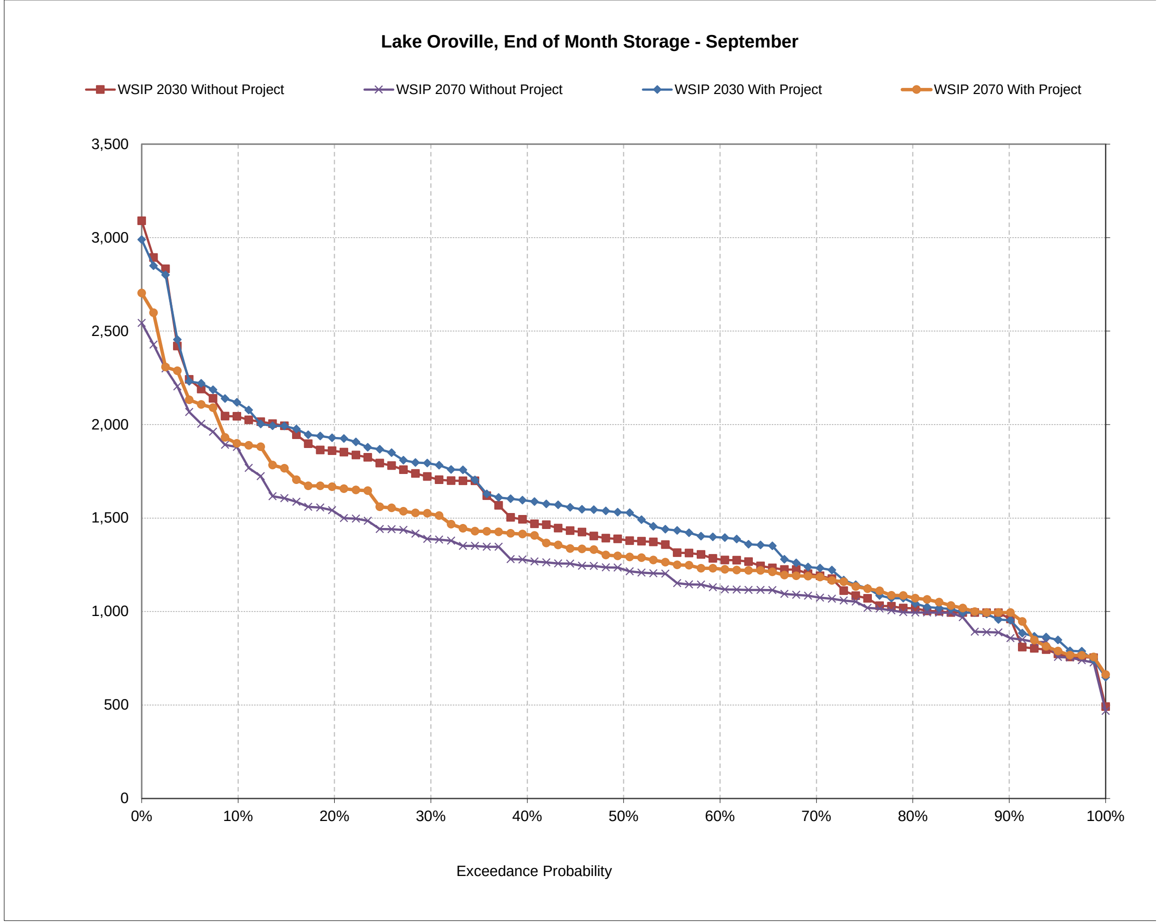
Lake Oroville, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	1,469	1,287
Alternative	--	1,528	1,383
Difference	--	59	96
Percent Difference[3]	--	4.0%	7.4%
Water Year Types[2]			
Wet			
Basis of Comparison	0	1,938	1,585
Alternative	0	1,974	1,695
Difference	0	36	110
Percent Difference		1.8%	6.9%
Above Normal			
Basis of Comparison	0	1,697	1,392
Alternative	0	1,778	1,549
Difference	0	81	157
Percent Difference		4.8%	11.3%
Below Normal			
Basis of Comparison	0	1,323	1,184
Alternative	0	1,435	1,353
Difference	0	112	170
Percent Difference		8.4%	14.3%
Dry			
Basis of Comparison	0	1,146	1,140
Alternative	0	1,195	1,147
Difference	0	49	7
Percent Difference		4.3%	0.6%
Critical			
Basis of Comparison	0	901	903
Alternative	0	924	979
Difference	0	23	76
Percent Difference		2.6%	8.4%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

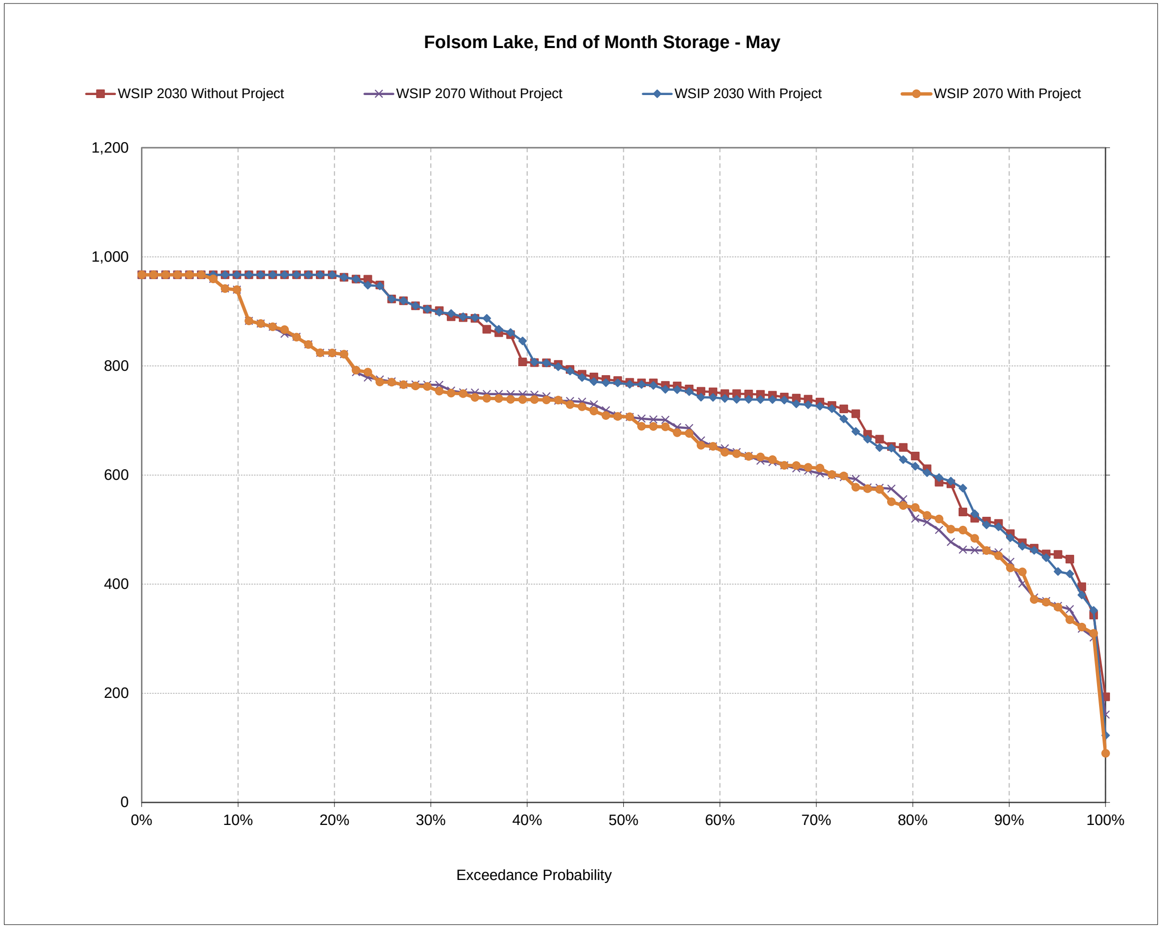
Folsom Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	769	679
Alternative	--	764	677
Difference	--	-4	-2
Percent Difference[3]	--	-0.5%	-0.3%
Water Year Types[2]			
Wet			
Basis of Comparison	0	898	808
Alternative	0	896	805
Difference	0	-2	-3
Percent Difference		-0.2%	-0.4%
Above Normal			
Basis of Comparison	0	844	768
Alternative	0	841	764
Difference	0	-3	-4
Percent Difference		-0.4%	-0.6%
Below Normal			
Basis of Comparison	0	796	719
Alternative	0	790	713
Difference	0	-6	-6
Percent Difference		-0.7%	-0.9%
Dry			
Basis of Comparison	0	699	601
Alternative	0	692	607
Difference	0	-8	6
Percent Difference		-1.1%	1.0%
Critical			
Basis of Comparison	0	476	407
Alternative	0	473	401
Difference	0	-3	-5
Percent Difference		-0.6%	-1.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

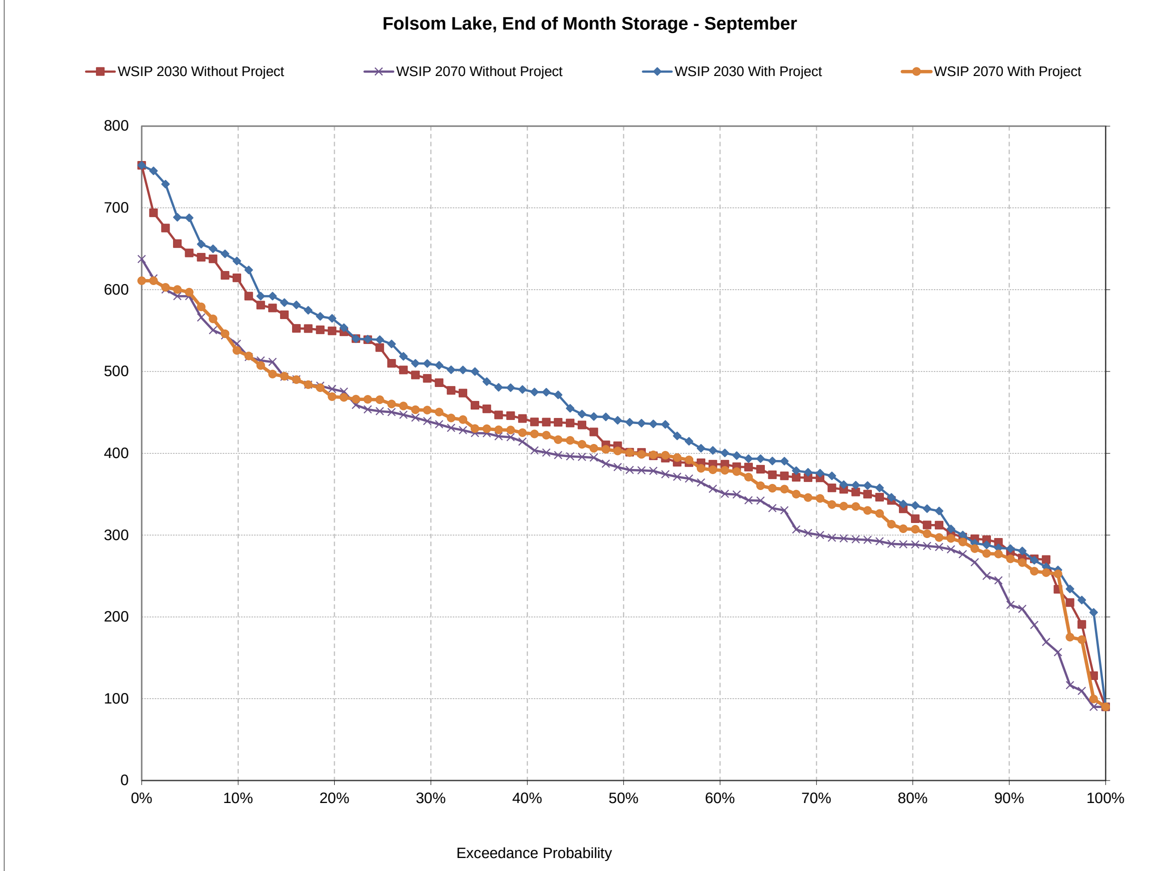
Folsom Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	428	377
Alternative	--	447	396
Difference	--	19	19
Percent Difference[3]	--	4.5%	5.2%
Water Year Types[2]			
Wet			
Basis of Comparison	0	508	425
Alternative	0	516	431
Difference	0	9	6
Percent Difference		1.7%	1.5%
Above Normal			
Basis of Comparison	0	459	420
Alternative	0	487	459
Difference	0	28	39
Percent Difference		6.2%	9.3%
Below Normal			
Basis of Comparison	0	437	417
Alternative	0	464	448
Difference	0	27	31
Percent Difference		6.1%	7.4%
Dry			
Basis of Comparison	0	371	349
Alternative	0	410	373
Difference	0	38	24
Percent Difference		10.4%	6.7%
Critical			
Basis of Comparison	0	293	235
Alternative	0	289	246
Difference	0	-4	11
Percent Difference		-1.4%	4.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

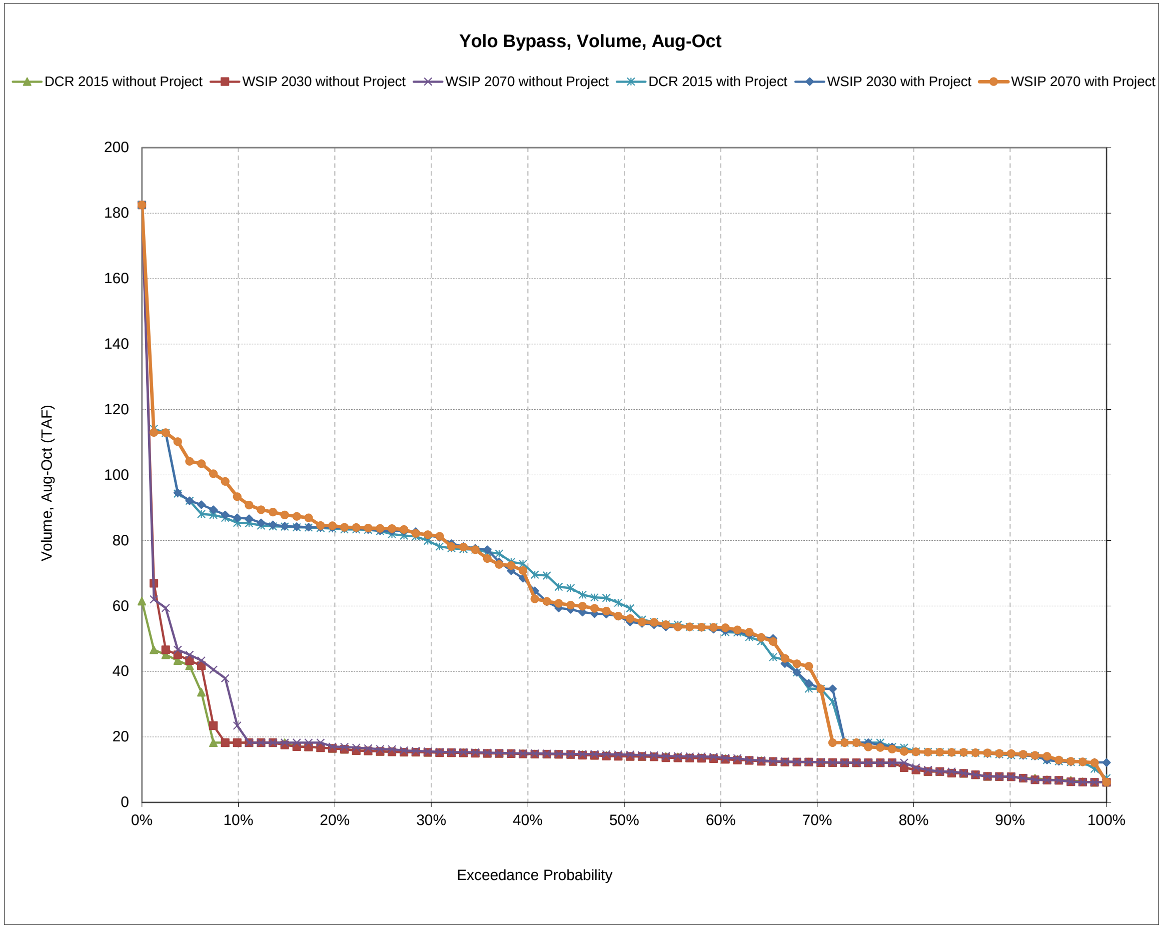
Yolo Bypass, Volume, Aug-Oct
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	Volume, Aug-Oct (TAF)		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	15	17	18
Alternative	56	56	57
Difference	41	39	39
Percent Difference[3]			
Water Year Types[2]			
Wet			
Basis of Comparison	19	20	22
Alternative	66	65	76
Difference	46	46	54
Percent Difference			
Above Normal			
Basis of Comparison	14	13	14
Alternative	68	72	56
Difference	55	58	42
Percent Difference			
Below Normal			
Basis of Comparison	14	14	13
Alternative	69	57	55
Difference	56	43	42
Percent Difference			
Dry			
Basis of Comparison	14	24	22
Alternative	47	57	56
Difference	33	33	33
Percent Difference		139.2%	148.3%
Critical			
Basis of Comparison	14	13	14
Alternative	23	18	22
Difference	9	5	8
Percent Difference	64.2%	33.5%	55.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

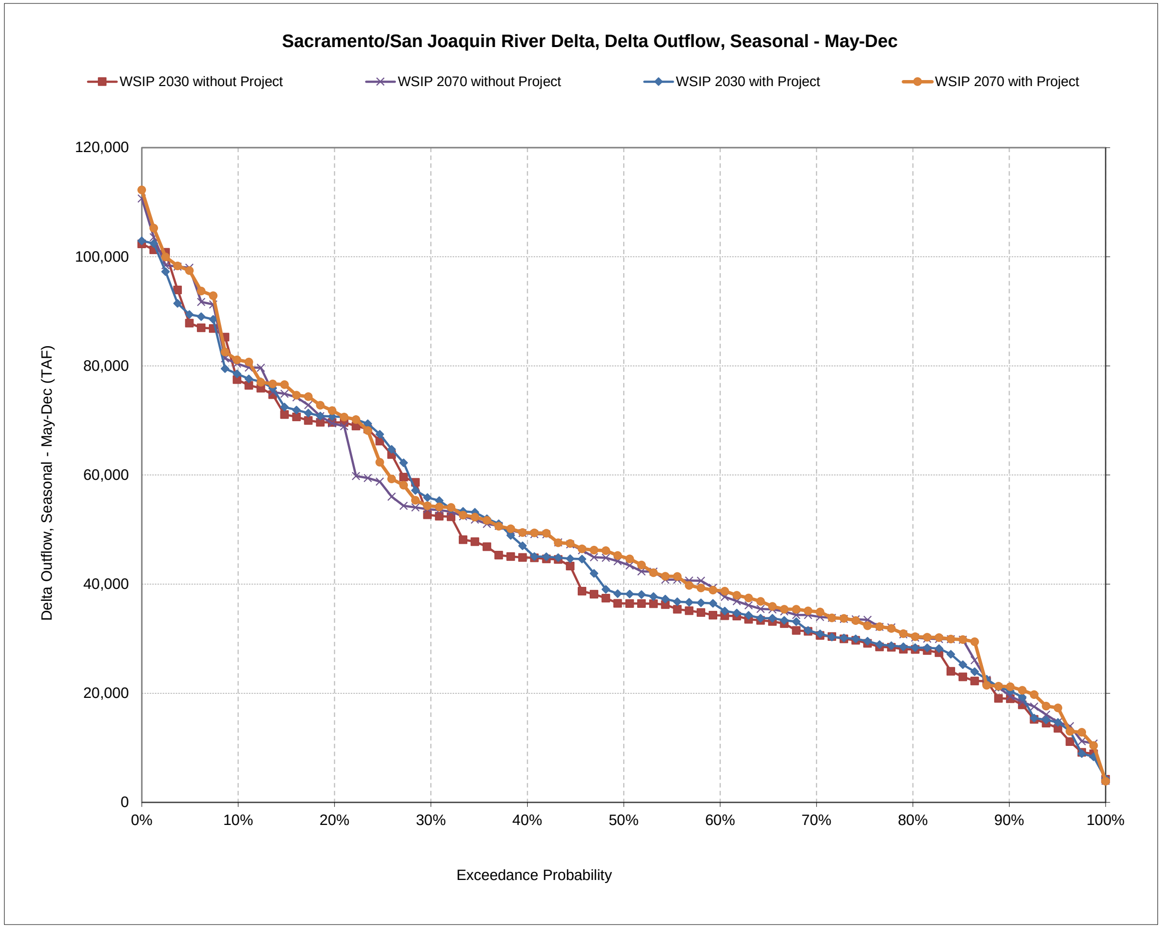
Sacramento/San Joaquin River Delta, Delta Outflow, Seasonal - May-Dec
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	Delta Outflow, Seasonal - May-Dec (TAF) DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	45,268	47,876
Alternative	--	46,488	48,858
Difference	--	1,221	982
Percent Difference[3]	--	2.7%	2.1%
Water Year Types[2]			
Wet			
Basis of Comparison	0	59,723	59,858
Alternative	0	59,936	60,115
Difference	0	214	257
Percent Difference		0.4%	0.4%
Above Normal			
Basis of Comparison	0	59,917	63,973
Alternative	0	61,099	64,846
Difference	0	1,182	874
Percent Difference		2.0%	1.4%
Below Normal			
Basis of Comparison	0	30,669	36,025
Alternative	0	33,007	38,649
Difference	0	2,337	2,624
Percent Difference		7.6%	7.3%
Dry			
Basis of Comparison	0	40,898	39,615
Alternative	0	43,289	39,772
Difference	0	2,391	156
Percent Difference		5.8%	0.4%
Critical			
Basis of Comparison	0	27,011	33,765
Alternative	0	27,225	36,013
Difference	0	214	2,248
Percent Difference		0.8%	6.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



1 Based on the 82-year simulation period

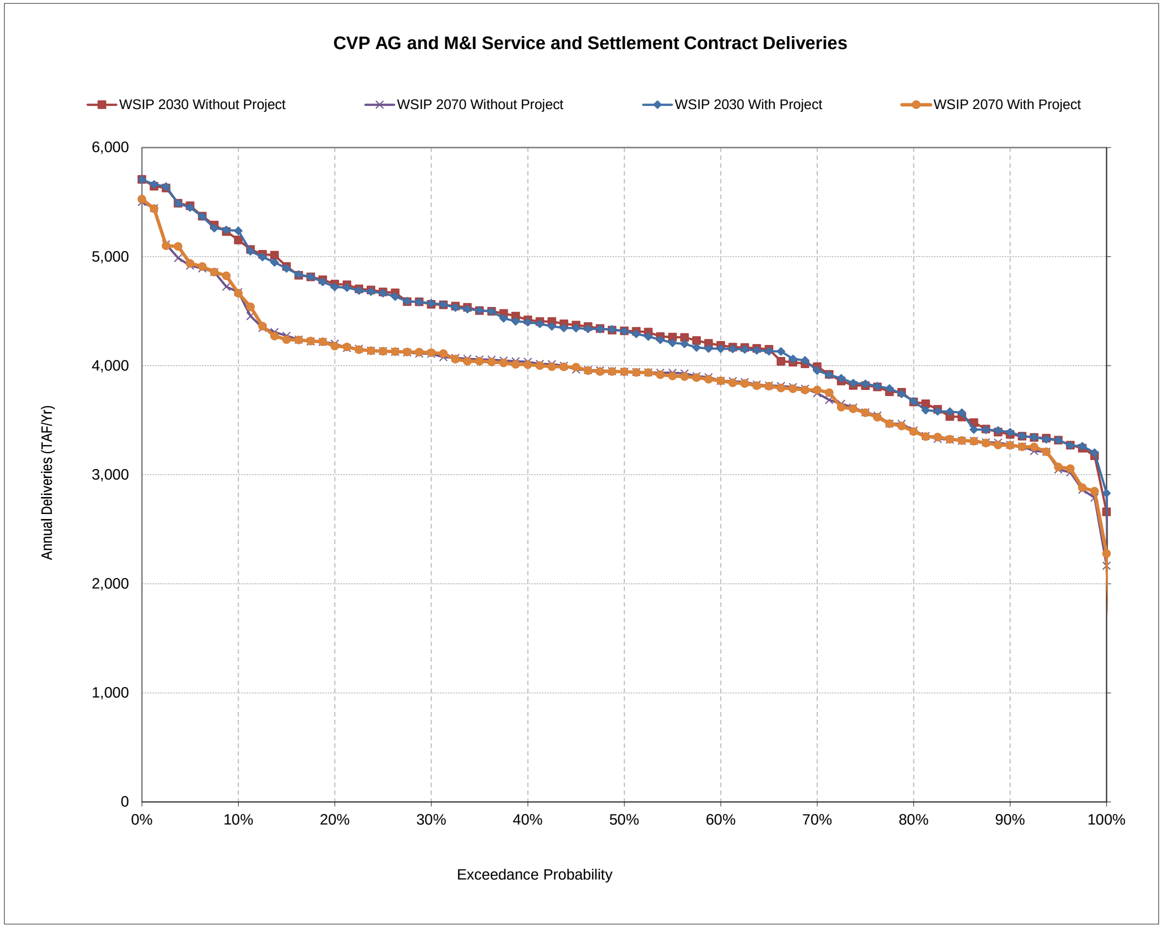
CVP AG and M&I Service and Settlement Contract Deliveries
Long-term Average and Average by Water Year Type

	Annual Deliveries (TAF/Yr)		
Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	4,286	3,914
Alternative	--	4,280	3,916
Difference	--	-6	2
Percent Difference[3]	--	-0.1%	0.1%
Water Year Types[2]			
Wet			
Basis of Comparison	--	4,908	4,423
Alternative	--	4,897	4,434
Difference	--	-11	11
Percent Difference	--	-0.2%	0.3%
Above Normal			
Basis of Comparison	--	4,234	3,753
Alternative	--	4,217	3,743
Difference	--	-17	-10
Percent Difference	--	-0.4%	-0.3%
Below Normal			
Basis of Comparison	--	4,197	3,808
Alternative	--	4,168	3,823
Difference	--	-28	15
Percent Difference	--	-0.7%	0.4%
Dry			
Basis of Comparison	--	3,855	3,683
Alternative	--	3,863	3,657
Difference	--	8	-25
Percent Difference	--	0.2%	-0.7%
Critical			
Basis of Comparison	--	3,385	3,135
Alternative	--	3,412	3,161
Difference	--	27	26
Percent Difference	--	0.8%	0.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



CVP SOD Ag Allocation

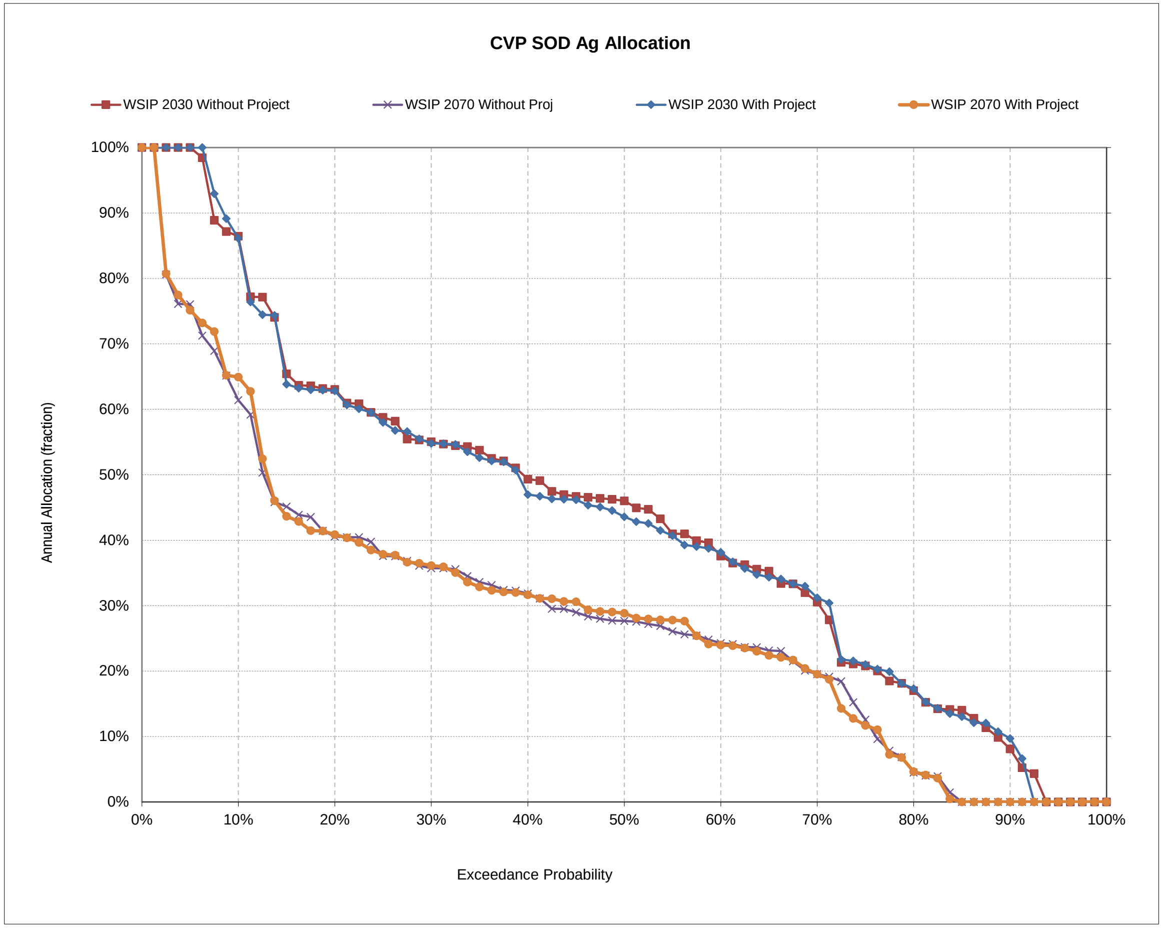
Long-term Average and Average by Water Year Type

	Annual Allocation (fraction)		
Alternative:	DCR 2015 without Project	WSIP 2030 without Project	WSIP 2070 without Project
vs.	vs.	vs.	vs.
Basis of Comparison:	DCR 2015 with Project	WSIP 2030 with Project	WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	0.44	0.29
Alternative	--	0.44	0.29
Difference	--	0.00	0.00
Percent Difference[3]	--	-0.6%	0.4%
Water Year Types[2]			
Wet			
Basis of Comparison	--	0.71	0.51
Alternative	--	0.71	0.51
Difference	--	0.00	0.01
Percent Difference	--	-0.3%	1.1%
Above Normal			
Basis of Comparison	--	0.52	0.34
Alternative	--	0.51	0.34
Difference	--	-0.01	0.00
Percent Difference	--	-1.9%	-0.9%
Below Normal			
Basis of Comparison	--	0.39	0.23
Alternative	--	0.37	0.23
Difference	--	-0.01	0.01
Percent Difference	--	-2.8%	3.5%
Dry			
Basis of Comparison	--	0.23	0.16
Alternative	--	0.23	0.16
Difference	--	0.01	-0.01
Percent Difference	--	2.8%	-4.0%
Critical			
Basis of Comparison	--	0.11	0.04
Alternative	--	0.12	0.04
Difference	--	0.00	0.00
Percent Difference	--	1.7%	1.5%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

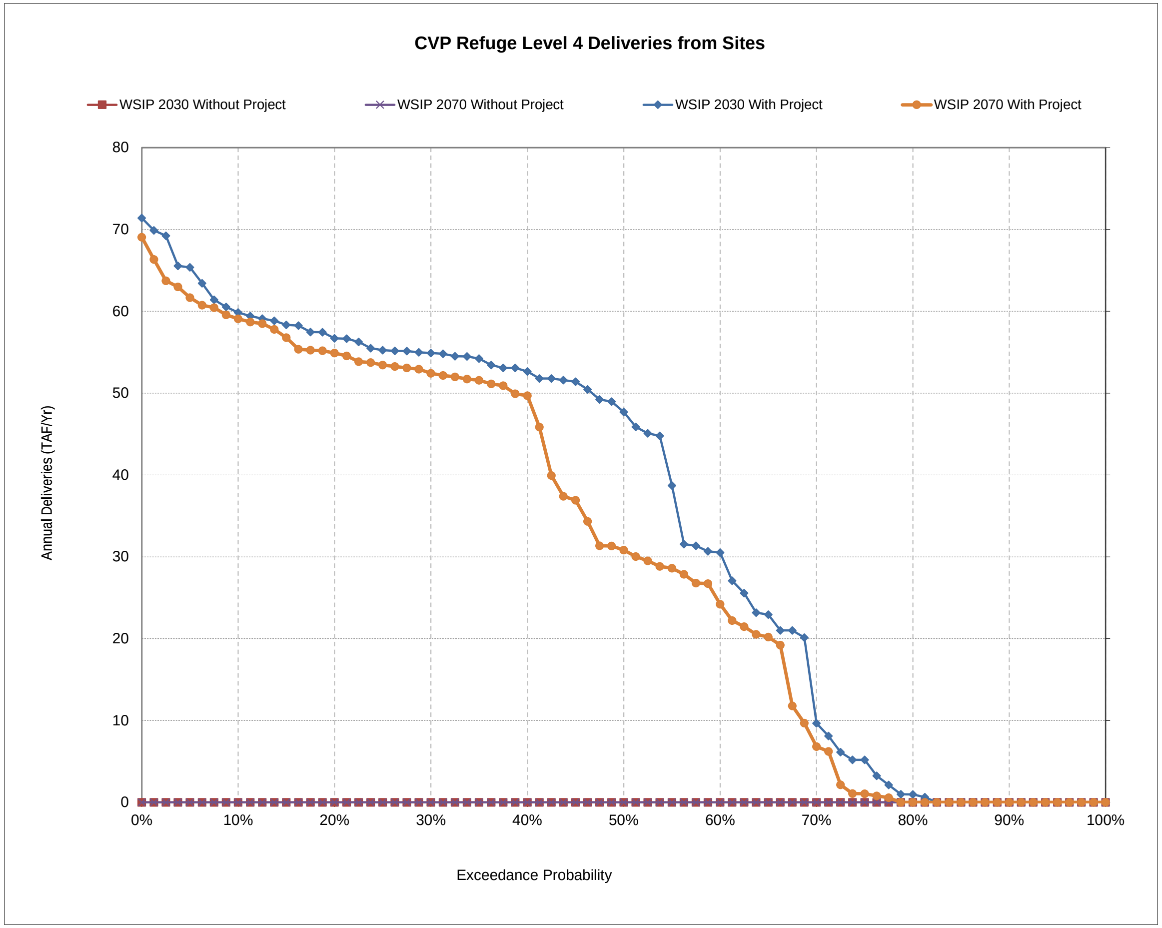
3 Relative difference of the monthly average



CVP Refuge Level 4 Deliveries from Sites
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	Annual Deliveries (TAF/Yr)		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	0	0
Alternative	--	35	31
Difference	--	35	31
Percent Difference[3]	--		
Water Year Types[2]			
Wet			
Basis of Comparison	--	0	0
Alternative	--	53	51
Difference	--	53	51
Percent Difference	--		
Above Normal			
Basis of Comparison	--	0	0
Alternative	--	43	37
Difference	--	43	37
Percent Difference	--		
Below Normal			
Basis of Comparison	--	0	0
Alternative	--	38	34
Difference	--	38	34
Percent Difference	--		
Dry			
Basis of Comparison	--	0	0
Alternative	--	21	16
Difference	--	21	16
Percent Difference	--		
Critical			
Basis of Comparison	--	0	0
Alternative	--	1	1
Difference	--	1	1
Percent Difference	--		

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average



SWP Contract Deliveries

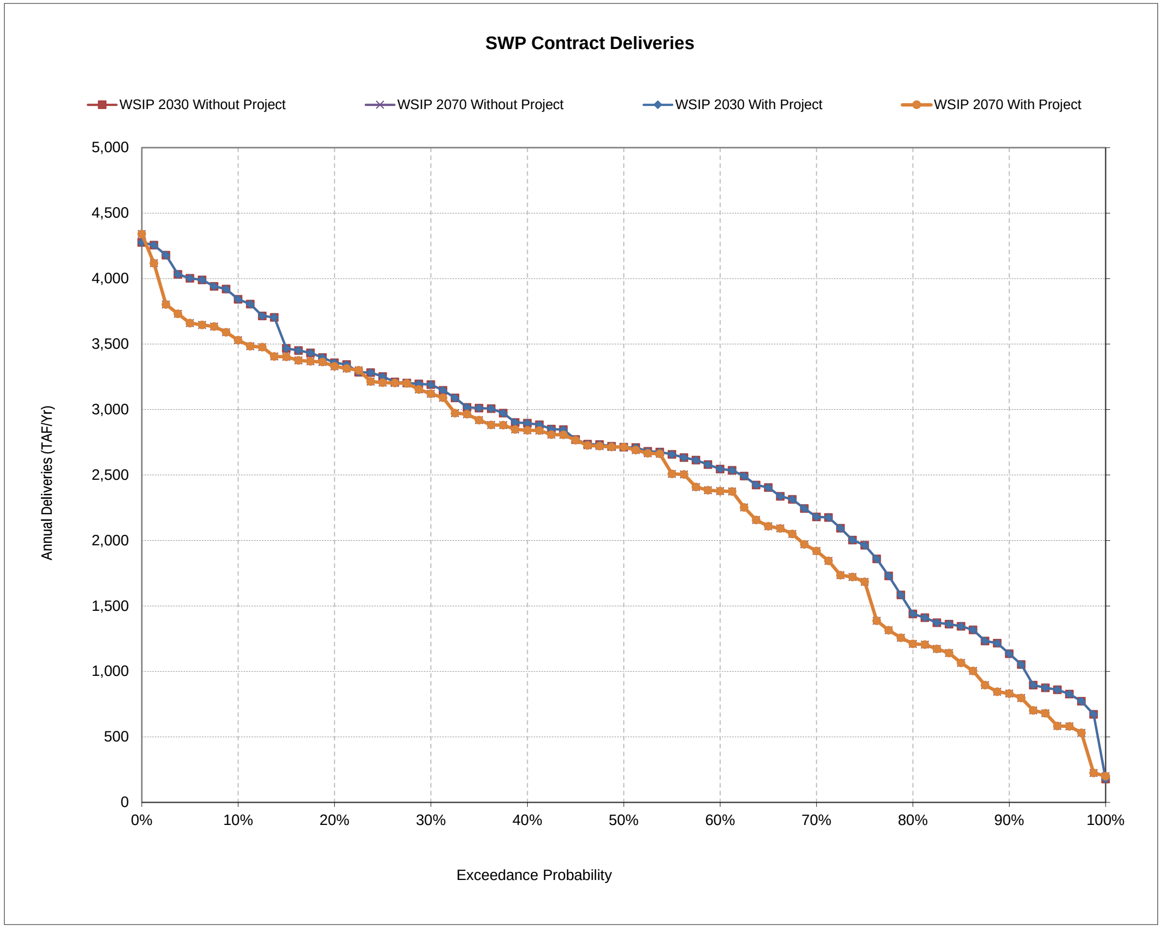
Long-term Average and Average by Water Year Type

Alternative: vs. Basis of Comparison:	DCR 2015 without Project vs. DCR 2015 with Project	WSIP 2030 without Project vs. WSIP 2030 with Project	WSIP 2070 without Project vs. WSIP 2070 with Project
	Annual Deliveries (TAF/Yr)		
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	2,573	2,398
Alternative	--	2,573	2,398
Difference	--	0	0
Percent Difference[3]	--	0.0%	0.0%
Water Year Types[2]			
Wet			
Basis of Comparison	--	3,500	3,391
Alternative	--	3,500	3,391
Difference	--	0	0
Percent Difference	--	0.0%	0.0%
Above Normal			
Basis of Comparison	--	2,813	2,691
Alternative	--	2,813	2,691
Difference	--	0	0
Percent Difference	--	0.0%	0.0%
Below Normal			
Basis of Comparison	--	2,579	2,414
Alternative	--	2,579	2,414
Difference	--	0	0
Percent Difference	--	0.0%	0.0%
Dry			
Basis of Comparison	--	1,881	1,737
Alternative	--	1,881	1,737
Difference	--	0	0
Percent Difference	--	0.0%	0.0%
Critical			
Basis of Comparison	--	1,105	861
Alternative	--	1,105	861
Difference	--	0	0
Percent Difference	--	0.0%	0.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



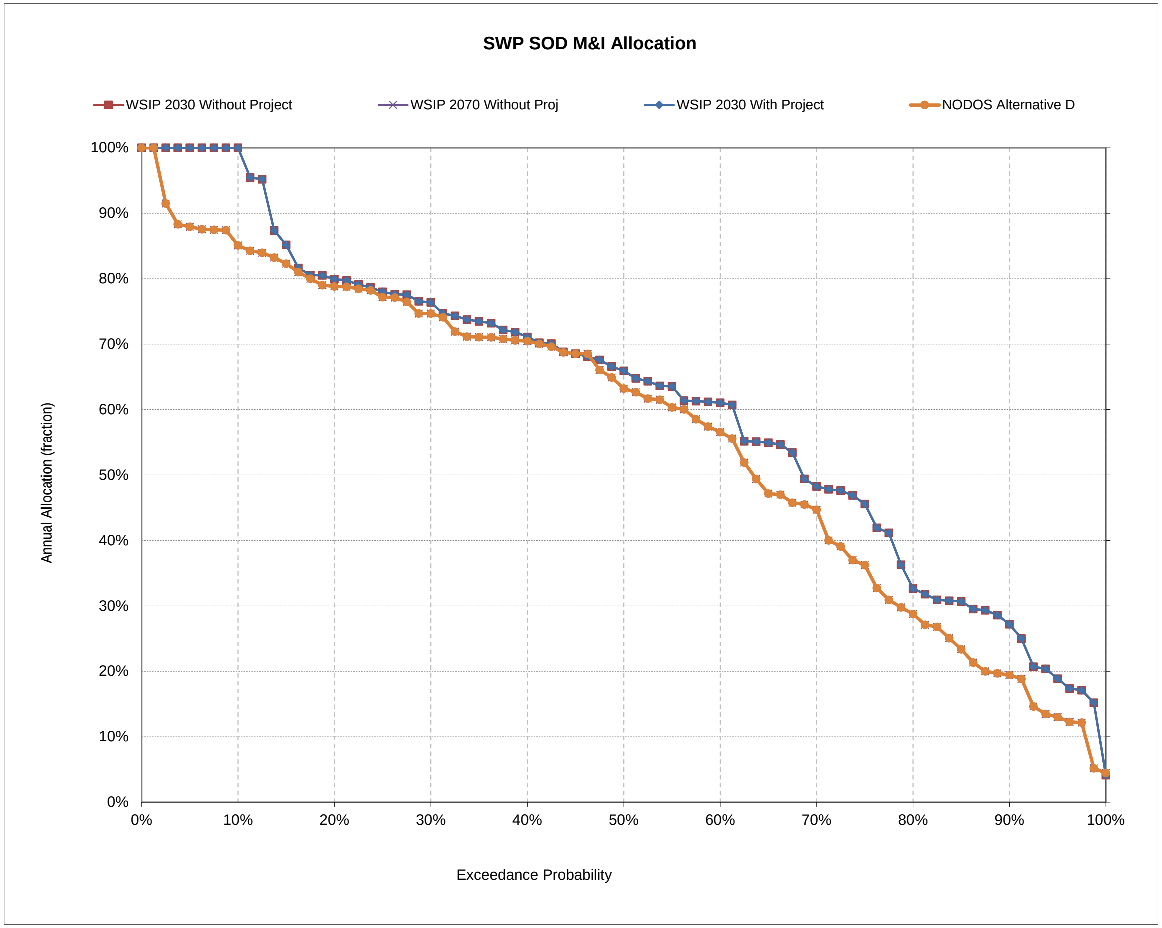
SWP SOD M&I Allocation
Long-term Average and Average by Water Year Type

	Annual Allocation (fraction)		
Alternative:	DCR 2015 without Project	WSIP 2030 without Project	WSIP 2070 without Project
vs.	vs.	vs.	vs.
Basis of Comparison:	DCR 2015 with Project	WSIP 2030 with Project	WSIP 2070 with Project
Long-term			
Full Simulation Period[1]			
Basis of Comparison	--	0.62	0.57
Alternative	--	0.62	0.57
Difference	--	0.00	0.00
Percent Difference[3]	--	0.0%	0.0%
Water Year Types[2]			
Wet			
Basis of Comparison	--	0.86	0.81
Alternative	--	0.86	0.81
Difference	--	0.00	0.00
Percent Difference	--	0.0%	0.0%
Above Normal			
Basis of Comparison	--	0.68	0.65
Alternative	--	0.68	0.65
Difference	--	0.00	0.00
Percent Difference	--	0.0%	0.0%
Below Normal			
Basis of Comparison	--	0.60	0.57
Alternative	--	0.60	0.57
Difference	--	0.00	0.00
Percent Difference	--	0.0%	0.0%
Dry			
Basis of Comparison	--	0.44	0.40
Alternative	--	0.44	0.40
Difference	--	0.00	0.00
Percent Difference	--	0.0%	0.0%
Critical			
Basis of Comparison	--	0.25	0.20
Alternative	--	0.25	0.20
Difference	--	0.00	0.00
Percent Difference	--	0.0%	0.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



Salmonid Population Modeling (SALMOD)

2015

Table AQ-02-8a-1

Annual Potential Production for Fall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
DCR 2015 Without Project	32,663,737
DCR 2015 With Project (051617)	32,993,352
Difference	329,615
Percent Difference[3]	1.0
Water Year Types[2]	
Wet (31.7%)	
DCR 2015 Without Project	30,343,621
DCR 2015 With Project (051617)	29,765,437
Difference	-578,184
Percent Difference	-1.9
Above Normal (14.6%)	
DCR 2015 Without Project	29,239,706
DCR 2015 With Project (051617)	30,110,663
Difference	870,957
Percent Difference	3.0
Below Normal (17.1%)	
DCR 2015 Without Project	33,465,942
DCR 2015 With Project (051617)	33,740,108
Difference	274,166
Percent Difference	0.8
Dry (22%)	
DCR 2015 Without Project	35,657,446
DCR 2015 With Project (051617)	36,072,396
Difference	414,949
Percent Difference	1.2
Critical (14.6%)	
DCR 2015 Without Project	35,117,542
DCR 2015 With Project (051617)	36,899,624
Difference	1,782,083
Percent Difference	5.1

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8a-2

Annual Production of Listed Life-stages for Fall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year)				
	Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
DCR 2015 Without Project	77,803,237	44,618,403	33,910,911	32,663,916	66,574,827
DCR 2015 With Project (051617)	78,274,991	45,025,504	34,310,885	32,993,417	67,304,302
Difference	471,754	407,101	399,973	329,501	729,475
Percent Difference[3]	0.6	0.9	1.2	1.0	1.1
Water Year Types[2]					
Wet (31.7%)					
DCR 2015 Without Project	69,760,561	40,620,329	31,119,264	30,344,171	61,463,435
DCR 2015 With Project (051617)	67,239,504	39,927,226	30,551,537	29,765,635	60,317,171
Difference	-2,521,057	-693,103	-567,728	-578,536	-1,146,264
Percent Difference	-3.6	-1.7	-1.8	-1.9	-1.9
Above Normal (14.6%)					
DCR 2015 Without Project	70,896,206	39,563,140	30,196,996	29,239,704	59,436,700
DCR 2015 With Project (051617)	72,634,504	40,782,910	31,119,507	30,110,661	61,230,168
Difference	1,738,298	1,219,770	922,511	870,957	1,793,468
Percent Difference	2.5	3.1	3.1	3.0	3.0
Below Normal (17.1%)					
DCR 2015 Without Project	80,421,879	45,569,435	34,684,481	33,465,943	68,150,425
DCR 2015 With Project (051617)	81,458,792	45,739,124	34,992,476	33,740,114	68,732,590
Difference	1,036,912	169,689	307,995	274,170	582,165
Percent Difference	1.3	0.4	0.9	0.8	0.9
Dry (22%)					
DCR 2015 Without Project	86,974,532	49,173,977	37,172,370	35,657,449	72,829,819
DCR 2015 With Project (051617)	88,670,223	49,677,709	37,677,322	36,072,397	73,749,718
Difference	1,695,690	503,732	504,952	414,948	919,899
Percent Difference	1.9	1.0	1.4	1.2	1.3
Critical (14.6%)					
DCR 2015 Without Project	84,172,870	49,550,716	37,259,723	35,117,539	72,377,262
DCR 2015 With Project (051617)	87,578,337	51,796,403	39,270,774	36,899,626	76,170,400
Difference	3,405,467	2,245,687	2,011,051	1,782,086	3,793,138
Percent Difference	4.0	4.5	5.4	5.1	5.2

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

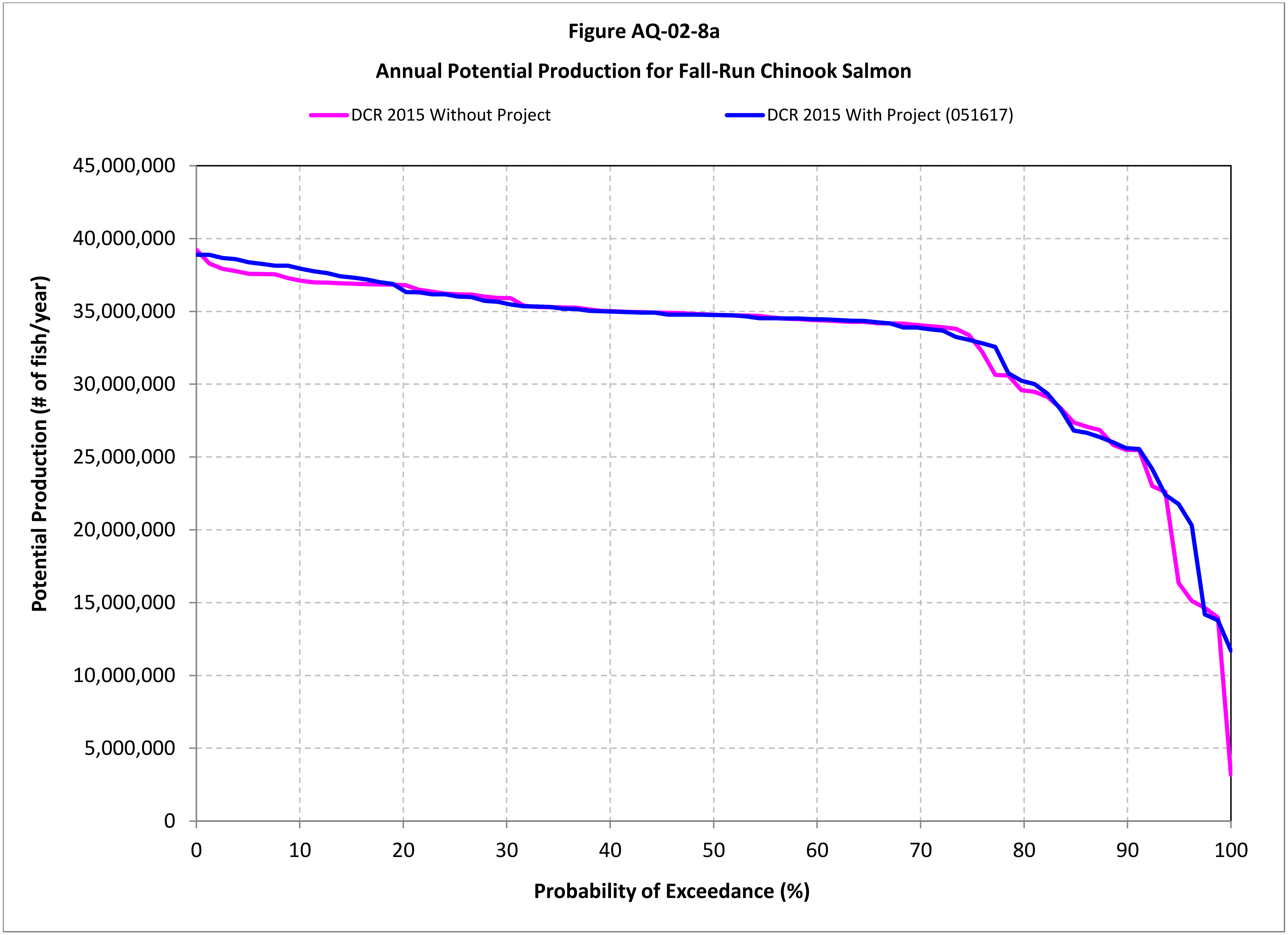


Figure AQ-02-8a
Annual Potential Production for Fall-Run Chinook Salmon
DCR 2015 Without Project
DCR 2015 With Project (051617)
Potential Production (# of fish/year)
45,000,000
40,000,000
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Table AQ-02-8b-1

Annual Potential Production for LateFall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
DCR 2015 Without Project	7,942,822
DCR 2015 With Project (051617)	7,967,398
Difference	24,576
Percent Difference[3]	0.3
Water Year Types[2]	
Wet (31.7%)	
DCR 2015 Without Project	7,653,405
DCR 2015 With Project (051617)	7,531,757
Difference	-121,648
Percent Difference	-1.6
Above Normal (14.6%)	
DCR 2015 Without Project	7,862,673
DCR 2015 With Project (051617)	7,926,092
Difference	63,419
Percent Difference	0.8
Below Normal (17.1%)	
DCR 2015 Without Project	8,186,535
DCR 2015 With Project (051617)	8,120,262
Difference	-66,273
Percent Difference	-0.8
Dry (22%)	
DCR 2015 Without Project	8,275,816
DCR 2015 With Project (051617)	8,323,874
Difference	48,059
Percent Difference	0.6
Critical (14.6%)	
DCR 2015 Without Project	7,852,860
DCR 2015 With Project (051617)	8,232,653
Difference	379,793
Percent Difference	4.8

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8b-2

Annual Production of Listed Life-stages for LateFall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
DCR 2015 Without Project	16,882,193	11,167,565	8,408,372	7,942,822	16,351,194
DCR 2015 With Project (051617)	16,876,915	11,164,400	8,419,651	7,967,398	16,387,049
Difference	-5,277	-3,165	11,280	24,576	35,856
Percent Difference[3]	0.0	0.0	0.1	0.3	0.2
Water Year Types[2]					
Wet (31.7%)					
DCR 2015 Without Project	15,135,984	10,503,544	7,898,711	7,653,405	15,552,115
DCR 2015 With Project (051617)	14,938,880	10,340,398	7,769,106	7,531,757	15,300,863
Difference	-197,103	-163,146	-129,605	-121,648	-251,253
Percent Difference	-1.3	-1.6	-1.6	-1.6	-1.6
Above Normal (14.6%)					
DCR 2015 Without Project	16,366,102	10,860,637	8,167,582	7,862,673	16,030,255
DCR 2015 With Project (051617)	16,374,603	10,983,392	8,235,093	7,926,092	16,161,185
Difference	8,501	122,755	67,511	63,419	130,930
Percent Difference	0.1	1.1	0.8	0.8	0.8
Below Normal (17.1%)					
DCR 2015 Without Project	17,644,235	11,381,473	8,606,333	8,186,535	16,792,868
DCR 2015 With Project (051617)	17,699,742	11,331,703	8,546,025	8,120,262	16,666,287
Difference	55,507	-49,770	-60,308	-66,273	-126,581
Percent Difference	0.3	-0.4	-0.7	-0.8	-0.8
Dry (22%)					
DCR 2015 Without Project	18,077,008	11,615,538	8,826,684	8,275,816	17,102,499
DCR 2015 With Project (051617)	18,155,236	11,705,190	8,869,482	8,323,874	17,193,356
Difference	78,228	89,651	42,798	48,059	90,857
Percent Difference	0.4	0.8	0.5	0.6	0.5
Critical (14.6%)					
DCR 2015 Without Project	18,414,449	11,940,527	8,854,873	7,852,860	16,707,733
DCR 2015 With Project (051617)	18,617,141	12,094,206	9,160,784	8,232,653	17,393,437
Difference	202,691	153,679	305,911	379,793	685,704
Percent Difference	1.1	1.3	3.5	4.8	4.1

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

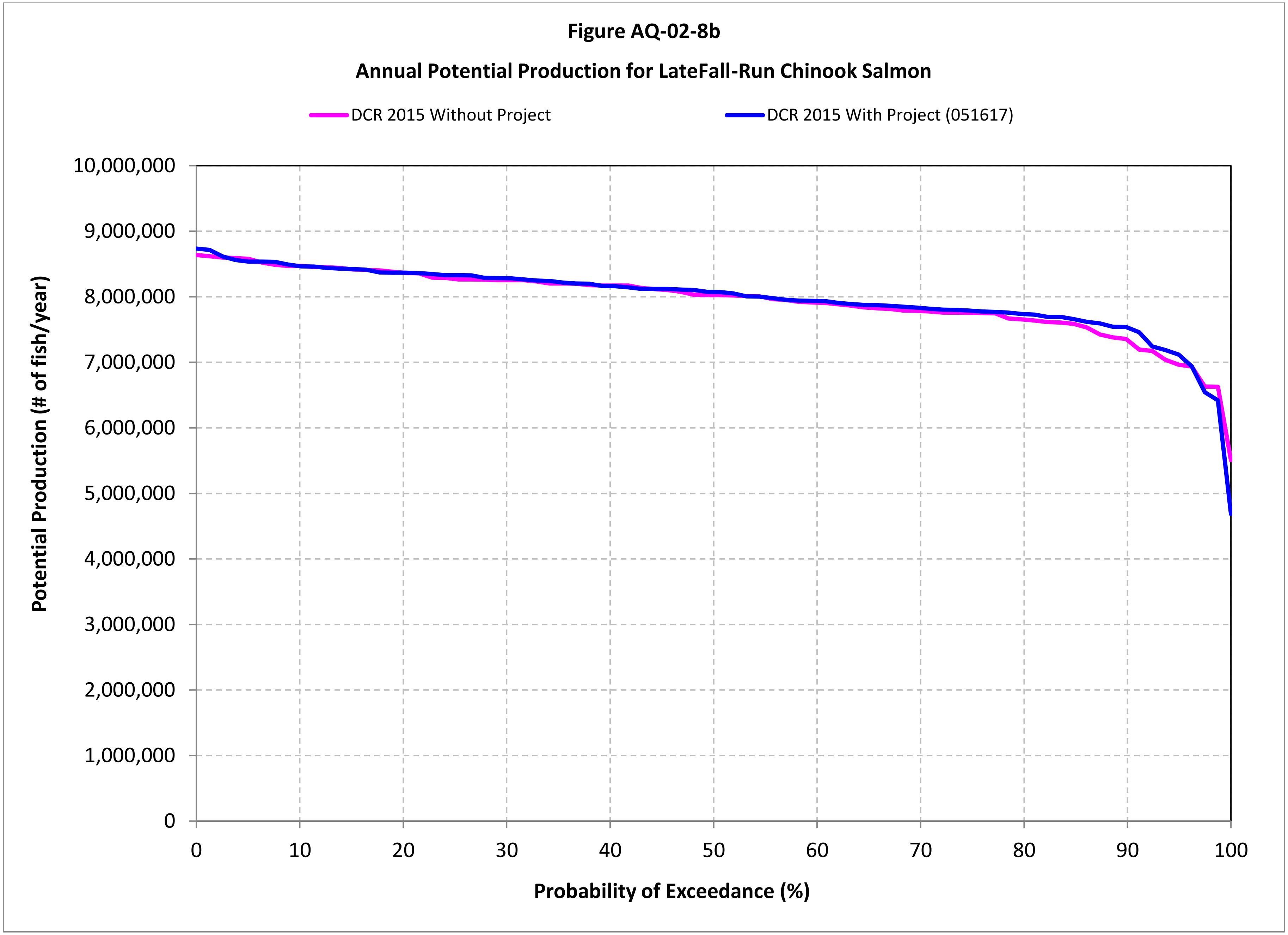


Figure AQ-02-8b
Annual Potential Production for LateFall-Run Chinook Salmon
DCR 2015 Without Project
DCR 2015 With Project (051617)
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Potential Production (# of fish/year)
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Table AQ-02-8d-1

Annual Potential Production for Spring-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
DCR 2015 Without Project	858,364
DCR 2015 With Project (051617)	883,808
Difference	25,445
Percent Difference[3]	3.0
Water Year Types[2]	
Wet (31.7%)	
DCR 2015 Without Project	943,293
DCR 2015 With Project (051617)	943,286
Difference	-7
Percent Difference	0.0
Above Normal (14.6%)	
DCR 2015 Without Project	942,215
DCR 2015 With Project (051617)	939,371
Difference	-2,844
Percent Difference	-0.3
Below Normal (17.1%)	
DCR 2015 Without Project	917,698
DCR 2015 With Project (051617)	924,965
Difference	7,267
Percent Difference	0.8
Dry (22%)	
DCR 2015 Without Project	894,594
DCR 2015 With Project (051617)	922,840
Difference	28,246
Percent Difference	3.2
Critical (14.6%)	
DCR 2015 Without Project	476,936
DCR 2015 With Project (051617)	600,697
Difference	123,761
Percent Difference	25.9

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8d-2

Annual Production of Listed Life-stages for Spring-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
DCR 2015 Without Project	1,391,233	1,158,474	860,081	858,364	1,718,445
DCR 2015 With Project (051617)	1,430,076	1,190,255	885,303	883,808	1,769,111
Difference	38,843	31,782	25,221	25,445	50,666
Percent Difference[3]	2.8	2.7	2.9	3.0	2.9
Water Year Types[2]					
Wet (31.7%)					
DCR 2015 Without Project	1,516,434	1,265,416	944,328	943,293	1,887,621
DCR 2015 With Project (051617)	1,515,484	1,265,639	944,443	943,286	1,887,730
Difference	-950	223	115	-7	108
Percent Difference	-0.1	0.0	0.0	0.0	0.0
Above Normal (14.6%)					
DCR 2015 Without Project	1,525,966	1,265,682	943,484	942,215	1,885,699
DCR 2015 With Project (051617)	1,515,791	1,258,335	940,686	939,371	1,880,056
Difference	-10,175	-7,347	-2,798	-2,844	-5,642
Percent Difference	-0.7	-0.6	-0.3	-0.3	-0.3
Below Normal (17.1%)					
DCR 2015 Without Project	1,495,139	1,238,148	918,956	917,698	1,836,654
DCR 2015 With Project (051617)	1,504,900	1,243,144	925,893	924,965	1,850,858
Difference	9,761	4,997	6,937	7,267	14,204
Percent Difference	0.7	0.4	0.8	0.8	0.8
Dry (22%)					
DCR 2015 Without Project	1,462,556	1,217,483	896,539	894,594	1,791,133
DCR 2015 With Project (051617)	1,505,090	1,250,245	924,201	922,840	1,847,041
Difference	42,533	32,762	27,662	28,246	55,908
Percent Difference	2.9	2.7	3.1	3.2	3.1
Critical (14.6%)					
DCR 2015 Without Project	774,196	651,941	480,759	476,936	957,695
DCR 2015 With Project (051617)	972,892	817,828	603,937	600,697	1,204,634
Difference	198,696	165,887	123,177	123,761	246,938
Percent Difference	25.7	25.4	25.6	25.9	25.8

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

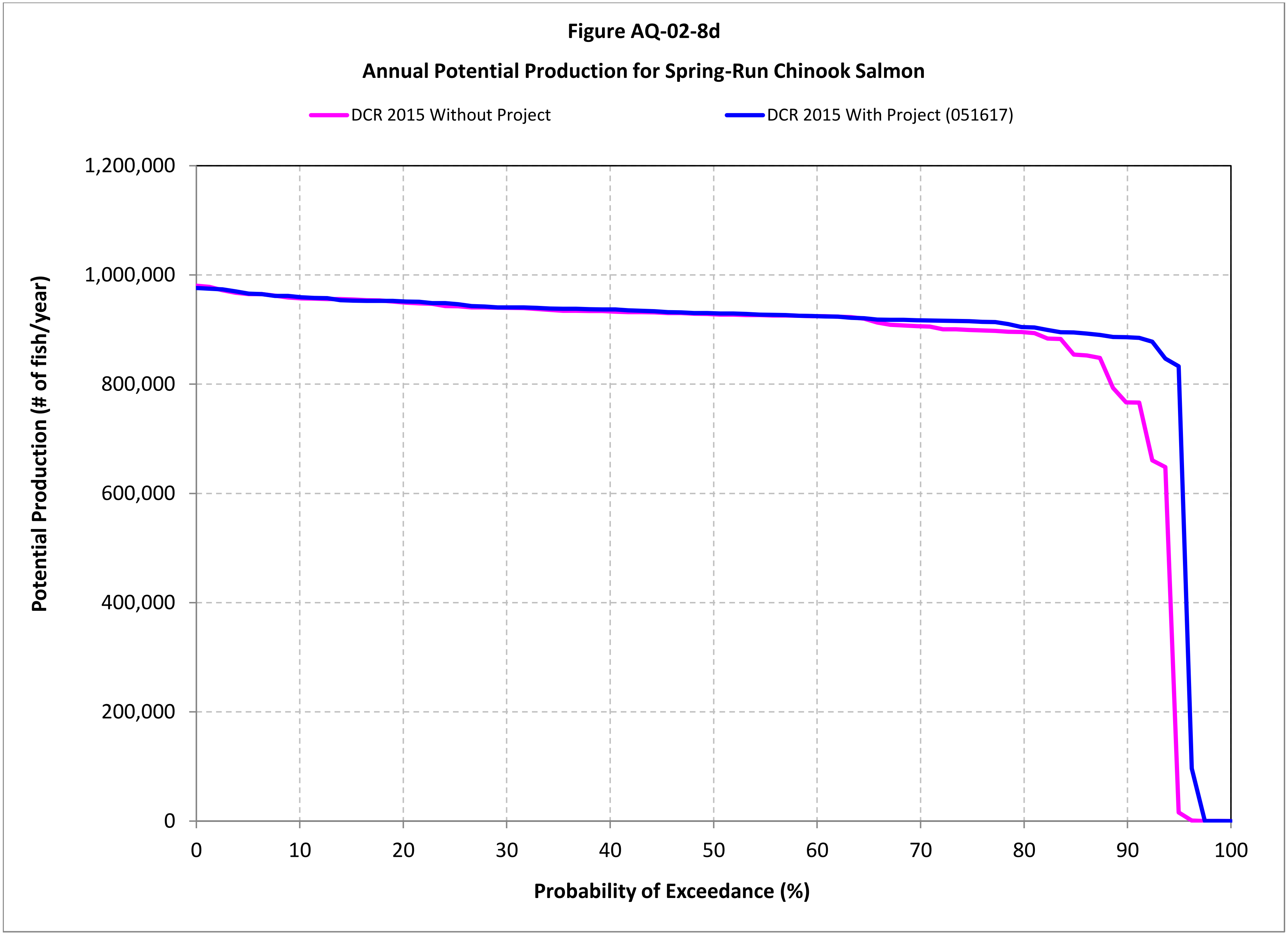


Figure AQ-02-8d
Annual Potential Production for Spring-Run Chinook Salmon
DCR 2015 Without Project
DCR 2015 With Project (051617)
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Potential Production (# of fish/year)
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Table AQ-02-8c-1

Annual Potential Production for Winter-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
DCR 2015 Without Project	3,838,180
DCR 2015 With Project (051617)	3,873,715
Difference	35,535
Percent Difference[3]	0.9
Water Year Types[2]	
Wet (31.7%)	
DCR 2015 Without Project	3,722,904
DCR 2015 With Project (051617)	3,739,101
Difference	16,197
Percent Difference	0.4
Above Normal (14.6%)	
DCR 2015 Without Project	3,819,400
DCR 2015 With Project (051617)	3,869,508
Difference	50,109
Percent Difference	1.3
Below Normal (17.1%)	
DCR 2015 Without Project	3,931,343
DCR 2015 With Project (051617)	3,921,616
Difference	-9,728
Percent Difference	-0.2
Dry (22%)	
DCR 2015 Without Project	4,031,025
DCR 2015 With Project (051617)	3,983,576
Difference	-47,449
Percent Difference	-1.2
Critical (14.6%)	
DCR 2015 Without Project	3,723,269
DCR 2015 With Project (051617)	3,957,714
Difference	234,445
Percent Difference	6.3

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8c-2

Annual Production of Listed Life-stages for Winter-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
DCR 2015 Without Project	7,050,825	5,283,327	3,956,560	3,838,180	7,794,740
DCR 2015 With Project (051617)	7,124,753	5,317,736	3,987,282	3,873,715	7,860,997
Difference	73,928	34,410	30,721	35,535	66,257
Percent Difference[3]	1.0	0.7	0.8	0.9	0.9
Water Year Types[2]					
Wet (31.7%)					
DCR 2015 Without Project	7,021,895	5,045,600	3,788,572	3,722,904	7,511,476
DCR 2015 With Project (051617)	7,034,337	5,061,366	3,806,329	3,739,101	7,545,430
Difference	12,443	15,766	17,757	16,197	33,954
Percent Difference	0.2	0.3	0.5	0.4	0.5
Above Normal (14.6%)					
DCR 2015 Without Project	7,032,327	5,218,753	3,903,816	3,819,400	7,723,215
DCR 2015 With Project (051617)	7,048,226	5,281,173	3,949,989	3,869,508	7,819,497
Difference	15,899	62,420	46,173	50,109	96,281
Percent Difference	0.2	1.2	1.2	1.3	1.2
Below Normal (17.1%)					
DCR 2015 Without Project	6,979,442	5,383,720	4,021,036	3,931,343	7,952,380
DCR 2015 With Project (051617)	7,042,296	5,371,137	4,007,215	3,921,616	7,928,831
Difference	62,854	-12,583	-13,821	-9,728	-23,549
Percent Difference	0.9	-0.2	-0.3	-0.2	-0.3
Dry (22%)					
DCR 2015 Without Project	7,111,812	5,542,021	4,172,395	4,031,025	8,203,420
DCR 2015 With Project (051617)	7,179,382	5,472,533	4,110,099	3,983,576	8,093,675
Difference	67,570	-69,487	-62,296	-47,449	-109,745
Percent Difference	1.0	-1.3	-1.5	-1.2	-1.3
Critical (14.6%)					
DCR 2015 Without Project	7,127,344	5,373,983	3,987,898	3,723,269	7,711,167
DCR 2015 With Project (051617)	7,409,610	5,625,125	4,216,285	3,957,714	8,173,999
Difference	282,267	251,142	228,388	234,445	462,832
Percent Difference	4.0	4.7	5.7	6.3	6.0

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

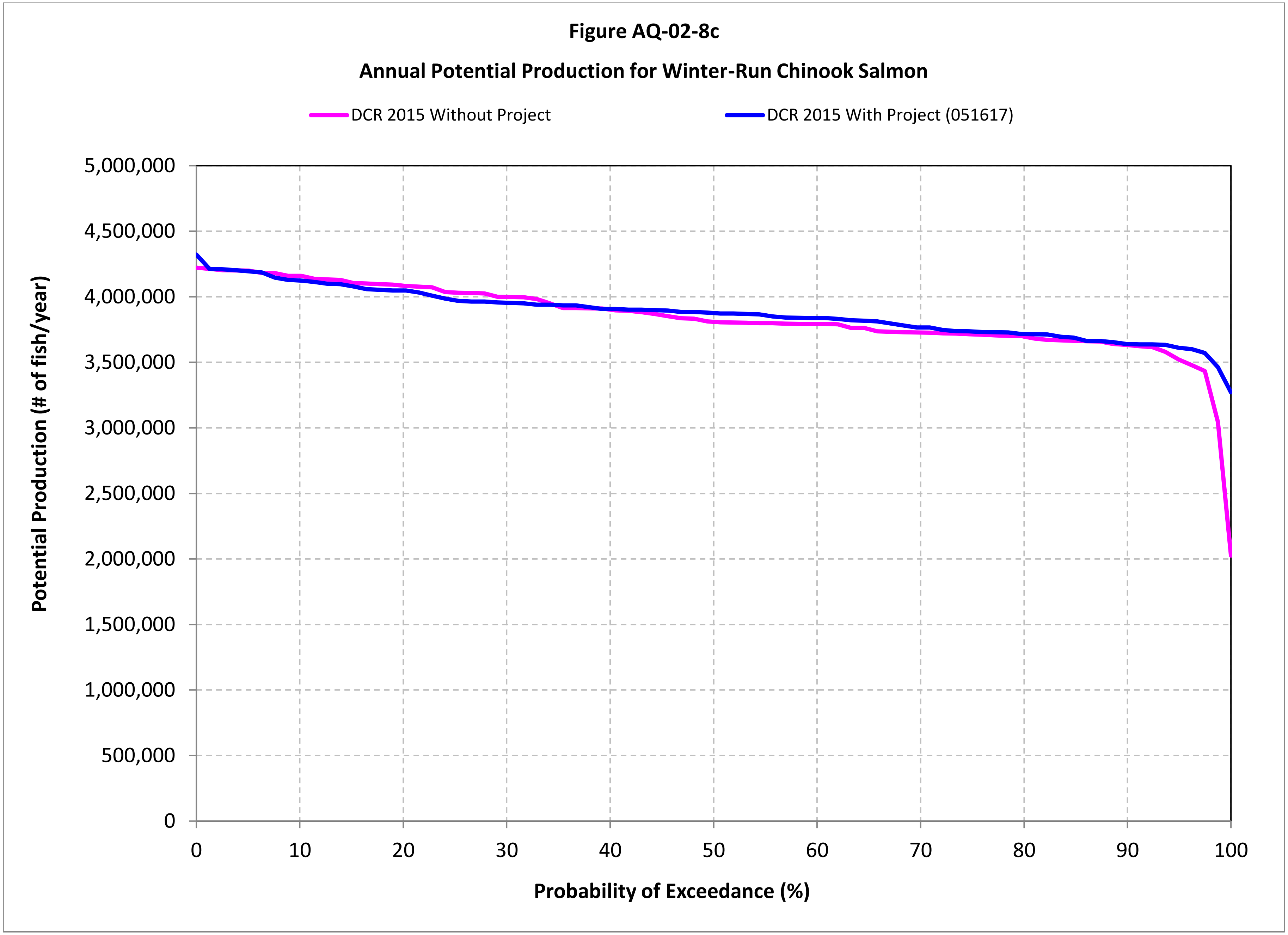


Figure AQ-02-8c
Annual Potential Production for Winter-Run Chinook Salmon
DCR 2015 Without Project
DCR 2015 With Project (051617)
Potential Production (# of fish/year)
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Salmonid Population Modeling (SALMOD)
2030

Table AQ-02-8a-1

Annual Potential Production for Fall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2030 Without Project	32,275,104
WSIP 2030 With Project (051217)	32,710,242
Difference	435,138
Percent Difference[3]	1.3
Water Year Types[2]	
Wet (30.5%)	
WSIP 2030 Without Project	28,240,499
WSIP 2030 With Project (051217)	28,267,749
Difference	27,250
Percent Difference	0.1
Above Normal (14.6%)	
WSIP 2030 Without Project	30,240,037
WSIP 2030 With Project (051217)	31,628,088
Difference	1,388,051
Percent Difference	4.6
Below Normal (20.7%)	
WSIP 2030 Without Project	35,133,596
WSIP 2030 With Project (051217)	35,251,822
Difference	118,227
Percent Difference	0.3
Dry (19.5%)	
WSIP 2030 Without Project	35,836,178
WSIP 2030 With Project (051217)	35,856,071
Difference	19,893
Percent Difference	0.1
Critical (14.6%)	
WSIP 2030 Without Project	33,578,791
WSIP 2030 With Project (051217)	35,072,220
Difference	1,493,430
Percent Difference	4.4

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8a-2

Annual Production of Listed Life-stages for Fall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2030 Without Project	79,443,619	45,269,976	34,083,716	32,275,187	66,358,903
WSIP 2030 With Project (051217)	80,356,973	45,708,740	34,568,671	32,710,684	67,279,354
Difference	913,354	438,764	484,955	435,496	920,451
Percent Difference[3]	1.1	1.0	1.4	1.3	1.4
Water Year Types[2]					
Wet (30.5%)					
WSIP 2030 Without Project	65,156,412	38,640,096	29,378,681	28,240,761	57,619,442
WSIP 2030 With Project (051217)	64,804,116	38,596,966	29,408,073	28,269,163	57,677,236
Difference	-352,296	-43,130	29,392	28,401	57,793
Percent Difference	-0.5	-0.1	0.1	0.1	0.1
Above Normal (14.6%)					
WSIP 2030 Without Project	76,295,161	41,391,963	31,487,320	30,240,037	61,727,357
WSIP 2030 With Project (051217)	78,894,198	43,074,418	32,948,145	31,628,094	64,576,239
Difference	2,599,038	1,682,456	1,460,825	1,388,057	2,848,882
Percent Difference	3.4	4.1	4.6	4.6	4.6
Below Normal (20.7%)					
WSIP 2030 Without Project	88,610,179	49,393,005	37,095,083	35,133,600	72,228,683
WSIP 2030 With Project (051217)	88,908,284	49,465,647	37,261,624	35,251,825	72,513,450
Difference	298,105	72,642	166,542	118,225	284,767
Percent Difference	0.3	0.1	0.4	0.3	0.4
Dry (19.5%)					
WSIP 2030 Without Project	91,054,630	50,877,217	38,096,724	35,836,180	73,932,904
WSIP 2030 With Project (051217)	92,093,730	50,600,466	38,104,695	35,856,066	73,960,761
Difference	1,039,100	-276,750	7,971	19,886	27,857
Percent Difference	1.1	-0.5	0.0	0.1	0.0
Critical (14.6%)					
WSIP 2030 Without Project	83,365,039	48,996,628	36,432,754	33,578,792	70,011,546
WSIP 2030 With Project (051217)	86,214,369	50,875,619	38,140,636	35,072,217	73,212,853
Difference	2,849,331	1,878,991	1,707,882	1,493,425	3,201,307
Percent Difference	3.4	3.8	4.7	4.4	4.6

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

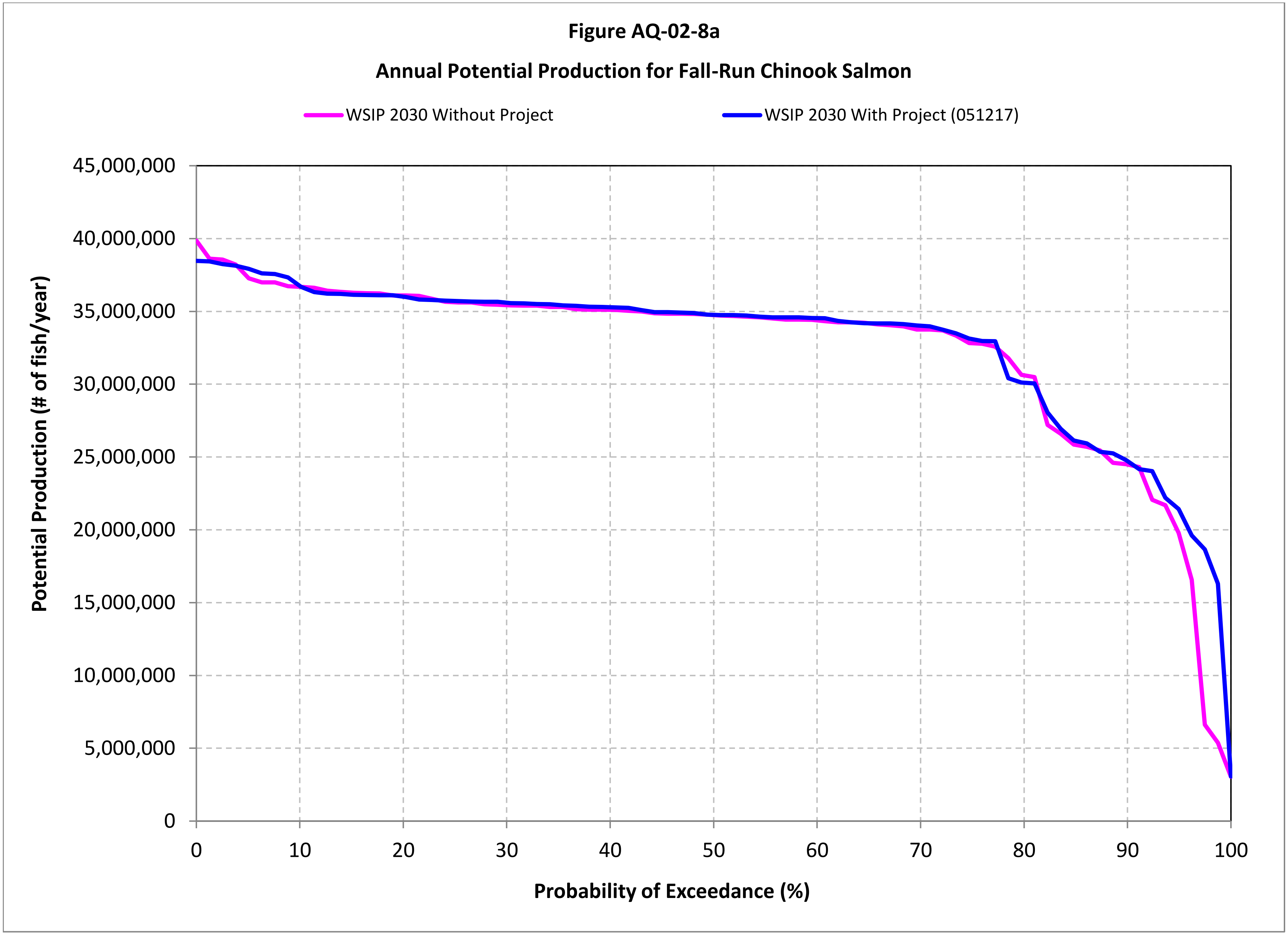


Figure AQ-02-8a
Annual Potential Production for Fall-Run Chinook Salmon
WSIP 2030 Without Project
WSIP 2030 With Project (051217)
Potential Production (# of fish/year)
45,000,000
40,000,000
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Table AQ-02-8b-1

Annual Potential Production for LateFall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2030 Without Project	7,911,118
WSIP 2030 With Project (051217)	7,981,306
Difference	70,188
Percent Difference[3]	0.9
Water Year Types[2]	
Wet (30.5%)	
WSIP 2030 Without Project	7,230,840
WSIP 2030 With Project (051217)	7,268,667
Difference	37,827
Percent Difference	0.5
Above Normal (14.6%)	
WSIP 2030 Without Project	7,931,158
WSIP 2030 With Project (051217)	7,992,643
Difference	61,484
Percent Difference	0.8
Below Normal (20.7%)	
WSIP 2030 Without Project	8,308,688
WSIP 2030 With Project (051217)	8,345,895
Difference	37,207
Percent Difference	0.4
Dry (19.5%)	
WSIP 2030 Without Project	8,426,092
WSIP 2030 With Project (051217)	8,483,369
Difference	57,277
Percent Difference	0.7
Critical (14.6%)	
WSIP 2030 Without Project	8,061,806
WSIP 2030 With Project (051217)	8,270,606
Difference	208,800
Percent Difference	2.6

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8b-2

Annual Production of Listed Life-stages for LateFall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2030 Without Project	17,100,672	11,311,933	8,564,206	7,911,118	16,475,324
WSIP 2030 With Project (051217)	17,130,007	11,366,687	8,641,303	7,981,306	16,622,609
Difference	29,335	54,754	77,097	70,188	147,285
Percent Difference[3]	0.2	0.5	0.9	0.9	0.9
Water Year Types[2]					
Wet (30.5%)					
WSIP 2030 Without Project	14,539,487	10,027,004	7,587,635	7,230,840	14,818,475
WSIP 2030 With Project (051217)	14,588,326	10,089,136	7,643,073	7,268,667	14,911,741
Difference	48,839	62,132	55,438	37,827	93,265
Percent Difference	0.3	0.6	0.7	0.5	0.6
Above Normal (14.6%)					
WSIP 2030 Without Project	16,536,550	11,042,596	8,350,149	7,931,158	16,281,307
WSIP 2030 With Project (051217)	16,481,666	11,157,058	8,443,774	7,992,643	16,436,416
Difference	-54,884	114,462	93,625	61,484	155,109
Percent Difference	-0.3	1.0	1.1	0.8	1.0
Below Normal (20.7%)					
WSIP 2030 Without Project	18,375,255	11,788,247	8,964,110	8,308,688	17,272,798
WSIP 2030 With Project (051217)	18,384,341	11,836,729	9,014,607	8,345,895	17,360,502
Difference	9,086	48,482	50,497	37,207	87,704
Percent Difference	0.0	0.4	0.6	0.4	0.5
Dry (19.5%)					
WSIP 2030 Without Project	18,593,504	12,073,512	9,202,716	8,426,092	17,628,808
WSIP 2030 With Project (051217)	18,618,506	12,144,904	9,264,072	8,483,369	17,747,441
Difference	25,003	71,393	61,356	57,277	118,633
Percent Difference	0.1	0.6	0.7	0.7	0.7
Critical (14.6%)					
WSIP 2030 Without Project	19,110,476	12,523,101	9,359,231	8,061,806	17,421,037
WSIP 2030 With Project (051217)	19,203,824	12,499,430	9,526,348	8,270,606	17,796,954
Difference	93,348	-23,671	167,118	208,800	375,918
Percent Difference	0.5	-0.2	1.8	2.6	2.2

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Figure AQ-02-8b

Annual Potential Production for LateFall-Run Chinook Salmon

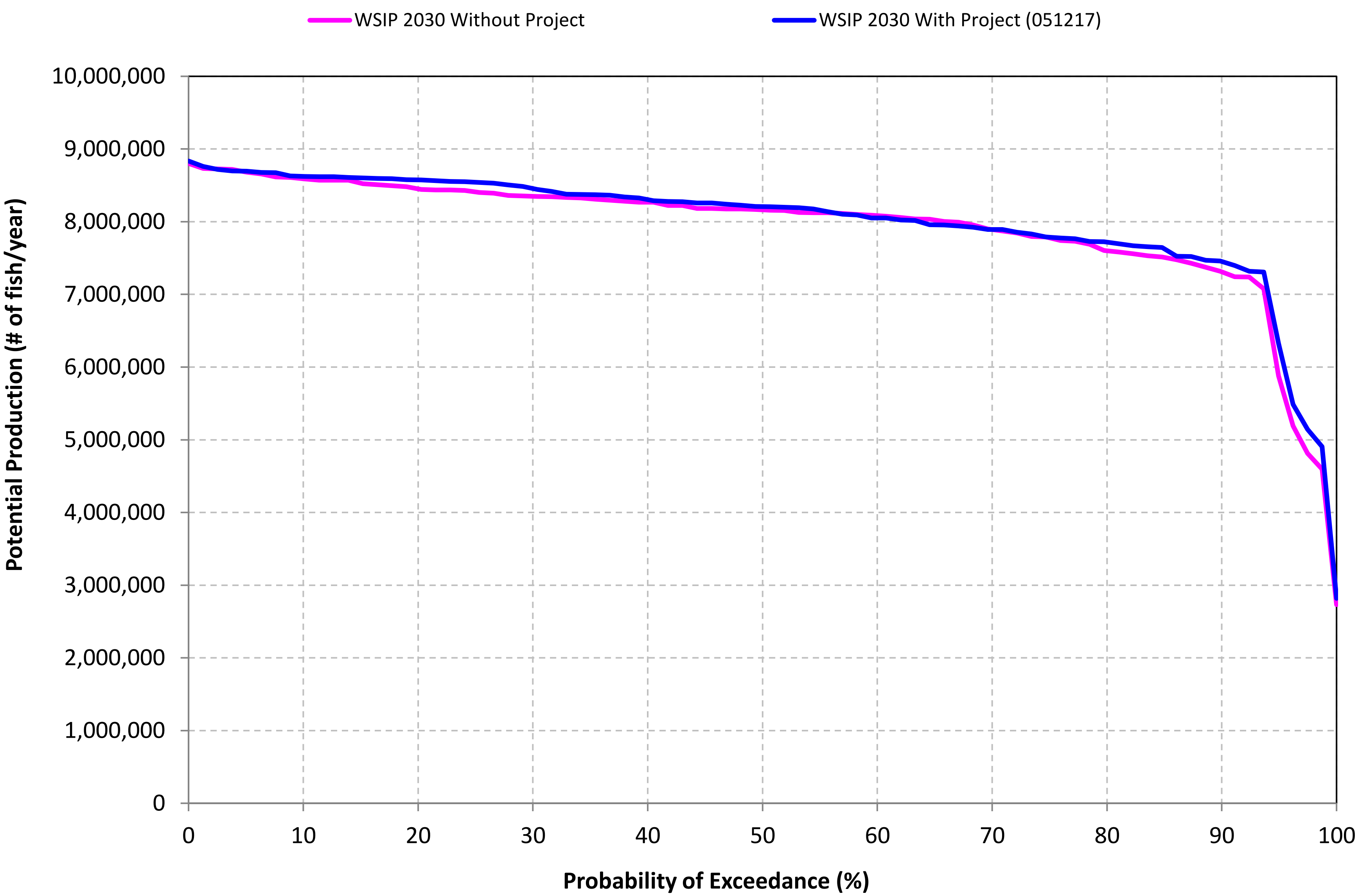


Table AQ-02-8d-1

Annual Potential Production for Spring-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2030 Without Project	866,601
WSIP 2030 With Project (051217)	879,932
Difference	13,331
Percent Difference[3]	1.5
Water Year Types[2]	
Wet (30.5%)	
WSIP 2030 Without Project	951,527
WSIP 2030 With Project (051217)	952,634
Difference	1,108
Percent Difference	0.1
Above Normal (14.6%)	
WSIP 2030 Without Project	955,109
WSIP 2030 With Project (051217)	958,285
Difference	3,175
Percent Difference	0.3
Below Normal (20.7%)	
WSIP 2030 Without Project	918,215
WSIP 2030 With Project (051217)	936,626
Difference	18,412
Percent Difference	2.0
Dry (19.5%)	
WSIP 2030 Without Project	882,511
WSIP 2030 With Project (051217)	896,598
Difference	14,088
Percent Difference	1.6
Critical (14.6%)	
WSIP 2030 Without Project	518,507
WSIP 2030 With Project (051217)	558,831
Difference	40,324
Percent Difference	7.8

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8d-2

Annual Production of Listed Life-stages for Spring-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2030 Without Project	1,394,544	1,173,437	870,789	866,601	1,737,390
WSIP 2030 With Project (051217)	1,416,061	1,191,964	884,155	879,932	1,764,087
Difference	21,517	18,527	13,366	13,331	26,697
Percent Difference[3]	1.5	1.6	1.5	1.5	1.5
Water Year Types[2]					
Wet (30.5%)					
WSIP 2030 Without Project	1,523,144	1,280,774	954,638	951,527	1,906,164
WSIP 2030 With Project (051217)	1,526,975	1,284,280	956,006	952,634	1,908,640
Difference	3,831	3,506	1,368	1,108	2,476
Percent Difference	0.3	0.3	0.1	0.1	0.1
Above Normal (14.6%)					
WSIP 2030 Without Project	1,528,094	1,284,734	958,939	955,109	1,914,048
WSIP 2030 With Project (051217)	1,534,466	1,290,182	962,187	958,285	1,920,471
Difference	6,372	5,448	3,248	3,175	6,423
Percent Difference	0.4	0.4	0.3	0.3	0.3
Below Normal (20.7%)					
WSIP 2030 Without Project	1,479,117	1,244,509	922,737	918,215	1,840,951
WSIP 2030 With Project (051217)	1,508,118	1,269,834	941,086	936,626	1,877,712
Difference	29,001	25,325	18,349	18,412	36,761
Percent Difference	2.0	2.0	2.0	2.0	2.0
Dry (19.5%)					
WSIP 2030 Without Project	1,432,080	1,203,993	886,742	882,511	1,769,253
WSIP 2030 With Project (051217)	1,453,038	1,221,996	900,574	896,598	1,797,172
Difference	20,958	18,003	13,832	14,088	27,920
Percent Difference	1.5	1.5	1.6	1.6	1.6
Critical (14.6%)					
WSIP 2030 Without Project	841,392	712,289	524,766	518,507	1,043,273
WSIP 2030 With Project (051217)	904,407	765,737	565,136	558,831	1,123,966
Difference	63,015	53,448	40,369	40,324	80,693
Percent Difference	7.5	7.5	7.7	7.8	7.7

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

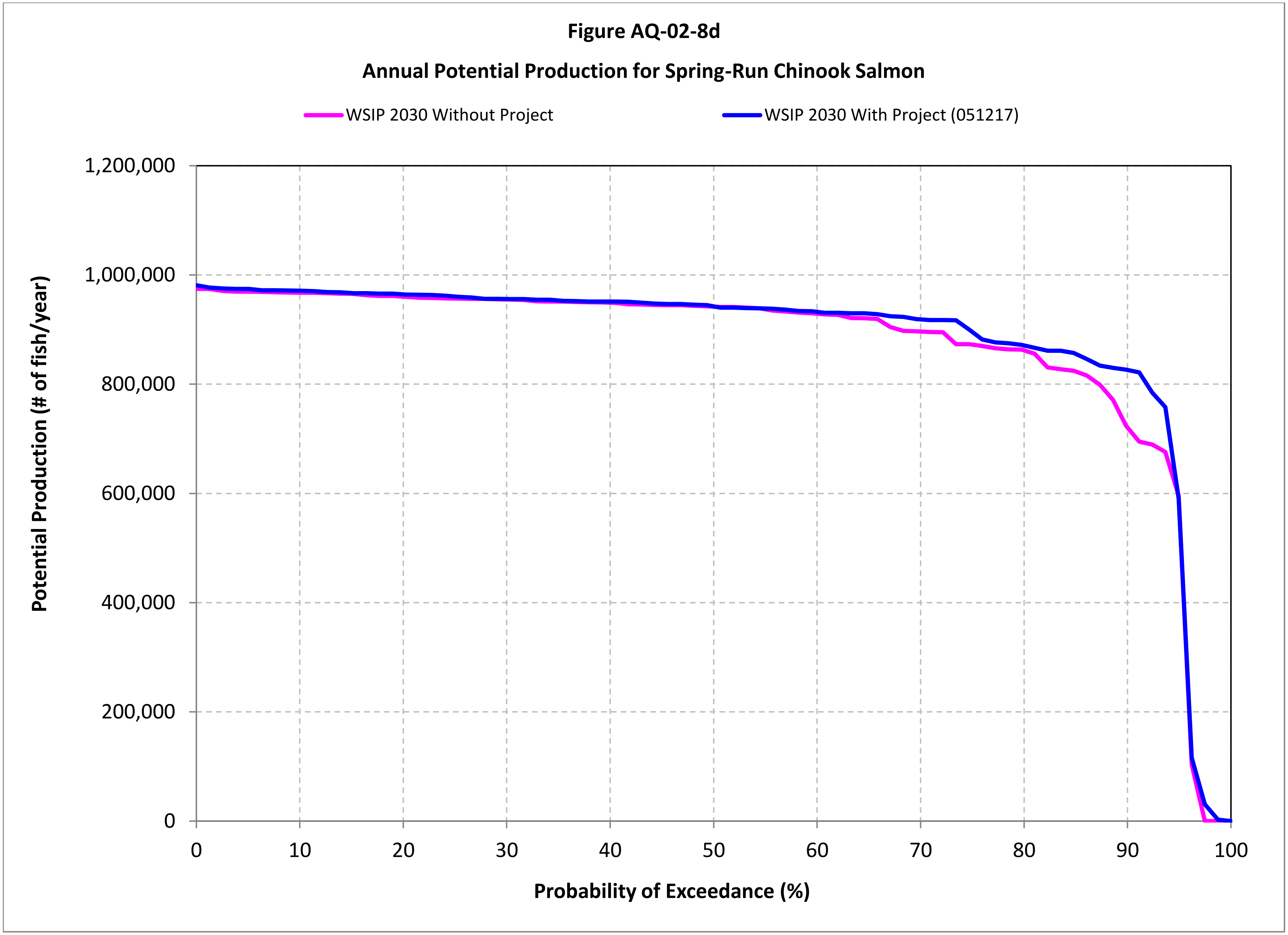


Figure AQ-02-8d
Annual Potential Production for Spring-Run Chinook Salmon
WSIP 2030 Without Project
WSIP 2030 With Project (051217)
Potential Production (# of fish/year)
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Table AQ-02-8c-1

Annual Potential Production for Winter-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2030 Without Project	3,892,177
WSIP 2030 With Project (051217)	3,912,804
Difference	20,627
Percent Difference[3]	0.5
Water Year Types[2]	
Wet (30.5%)	
WSIP 2030 Without Project	3,797,669
WSIP 2030 With Project (051217)	3,801,471
Difference	3,802
Percent Difference	0.1
Above Normal (14.6%)	
WSIP 2030 Without Project	3,880,737
WSIP 2030 With Project (051217)	3,924,831
Difference	44,094
Percent Difference	1.1
Below Normal (20.7%)	
WSIP 2030 Without Project	4,024,236
WSIP 2030 With Project (051217)	3,998,208
Difference	-26,028
Percent Difference	-0.6
Dry (19.5%)	
WSIP 2030 Without Project	4,058,132
WSIP 2030 With Project (051217)	3,995,575
Difference	-62,557
Percent Difference	-1.5
Critical (14.6%)	
WSIP 2030 Without Project	3,702,206
WSIP 2030 With Project (051217)	3,909,491
Difference	207,285
Percent Difference	5.6

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8c-2

Annual Production of Listed Life-stages for Winter-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

	Annual Production (# of Fish/year)				
Analysis Period	Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2030 Without Project	7,225,619	5,388,310	4,063,626	3,892,177	7,955,803
WSIP 2030 With Project (051217)	7,325,431	5,413,423	4,093,700	3,912,804	8,006,504
Difference	99,811	25,113	30,075	20,627	50,701
Percent Difference[3]	1.4	0.5	0.7	0.5	0.6
Water Year Types[2]					
Wet (30.5%)					
WSIP 2030 Without Project	7,168,230	5,184,032	3,905,606	3,797,669	7,703,274
WSIP 2030 With Project (051217)	7,201,365	5,198,627	3,921,946	3,801,471	7,723,417
Difference	33,135	14,595	16,340	3,802	20,143
Percent Difference	0.5	0.3	0.4	0.1	0.3
Above Normal (14.6%)					
WSIP 2030 Without Project	7,227,275	5,317,833	4,006,276	3,880,737	7,887,013
WSIP 2030 With Project (051217)	7,267,864	5,389,827	4,062,984	3,924,831	7,987,815
Difference	40,590	71,994	56,708	44,094	100,801
Percent Difference	0.6	1.4	1.4	1.1	1.3
Below Normal (20.7%)					
WSIP 2030 Without Project	7,277,585	5,543,564	4,191,000	4,024,236	8,215,236
WSIP 2030 With Project (051217)	7,360,459	5,513,254	4,172,051	3,998,208	8,170,258
Difference	82,875	-30,309	-18,949	-26,028	-44,977
Percent Difference	1.1	-0.5	-0.5	-0.6	-0.5
Dry (19.5%)					
WSIP 2030 Without Project	7,330,627	5,619,760	4,272,463	4,058,132	8,330,595
WSIP 2030 With Project (051217)	7,411,917	5,535,073	4,208,187	3,995,575	8,203,763
Difference	81,291	-84,687	-64,275	-62,557	-126,832
Percent Difference	1.1	-1.5	-1.5	-1.5	-1.5
Critical (14.6%)					
WSIP 2030 Without Project	7,134,367	5,362,891	3,997,123	3,702,206	7,699,328
WSIP 2030 With Project (051217)	7,474,651	5,587,237	4,222,561	3,909,491	8,132,052
Difference	340,285	224,347	225,438	207,285	432,723
Percent Difference	4.8	4.2	5.6	5.6	5.6

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

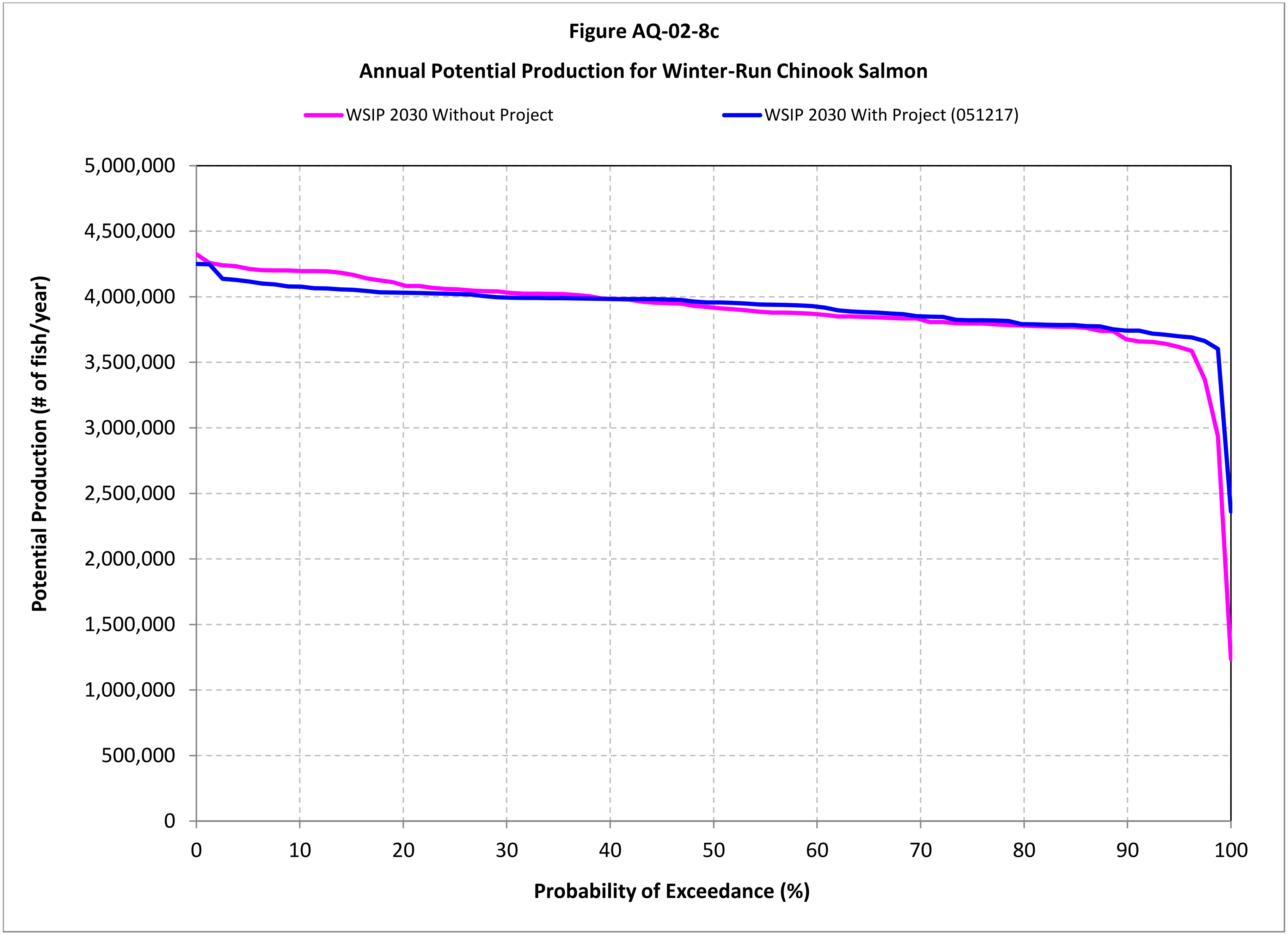


Figure AQ-02-8c
Annual Potential Production for Winter-Run Chinook Salmon
WSIP 2030 Without Project
WSIP 2030 With Project (051217)
Potential Production (# of fish/year)
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Salmonid Population Modeling (SALMOD)

2070

Table AQ-02-8a-1

Annual Potential Production for Fall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2070 Without Project	27,506,156
WSIP 2070 With Project (051617)	28,961,125
Difference	1,454,968
Percent Difference[3]	5.3
Water Year Types[2]	
Wet (31.7%)	
WSIP 2070 Without Project	25,412,923
WSIP 2070 With Project (051617)	25,480,397
Difference	67,474
Percent Difference	0.3
Above Normal (13.4%)	
WSIP 2070 Without Project	29,812,869
WSIP 2070 With Project (051617)	30,256,786
Difference	443,918
Percent Difference	1.5
Below Normal (15.9%)	
WSIP 2070 Without Project	31,245,608
WSIP 2070 With Project (051617)	32,632,236
Difference	1,386,628
Percent Difference	4.4
Dry (24.4%)	
WSIP 2070 Without Project	29,025,341
WSIP 2070 With Project (051617)	31,600,086
Difference	2,574,746
Percent Difference	8.9
Critical (14.6%)	
WSIP 2070 Without Project	23,728,415
WSIP 2070 With Project (051617)	27,155,649
Difference	3,427,234
Percent Difference	14.4

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8a-2

Annual Production of Listed Life-stages for Fall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2070 Without Project	66,802,729	39,745,462	29,738,072	27,506,157	57,244,229
WSIP 2070 With Project (051617)	70,469,314	41,700,760	31,341,021	28,961,123	60,302,144
Difference	3,666,584	1,955,298	1,602,949	1,454,966	3,057,915
Percent Difference[3]	5.5	4.9	5.4	5.3	5.3
Water Year Types[2]					
Wet (31.7%)					
WSIP 2070 Without Project	57,688,581	35,849,822	26,954,465	25,412,922	52,367,387
WSIP 2070 With Project (051617)	57,908,428	35,816,967	27,037,528	25,480,390	52,517,918
Difference	219,847	-32,855	83,063	67,468	150,531
Percent Difference	0.4	-0.1	0.3	0.3	0.3
Above Normal (13.4%)					
WSIP 2070 Without Project	79,133,395	42,164,394	31,719,612	29,812,866	61,532,478
WSIP 2070 With Project (051617)	80,504,051	42,644,584	32,235,112	30,256,787	62,491,899
Difference	1,370,656	480,190	515,501	443,921	959,421
Percent Difference	1.7	1.1	1.6	1.5	1.6
Below Normal (15.9%)					
WSIP 2070 Without Project	80,795,468	45,240,251	33,853,155	31,245,608	65,098,764
WSIP 2070 With Project (051617)	83,952,001	46,680,104	35,174,583	32,632,231	67,806,814
Difference	3,156,533	1,439,853	1,321,428	1,386,623	2,708,051
Percent Difference	3.9	3.2	3.9	4.4	4.2
Dry (24.4%)					
WSIP 2070 Without Project	70,971,933	42,370,664	31,610,881	29,025,347	60,636,228
WSIP 2070 With Project (051617)	77,502,762	46,142,480	34,532,123	31,600,087	66,132,210
Difference	6,530,830	3,771,816	2,921,242	2,574,740	5,495,983
Percent Difference	9.2	8.9	9.2	8.9	9.1
Critical (14.6%)					
WSIP 2070 Without Project	55,194,579	36,043,794	26,703,713	23,728,412	50,432,125
WSIP 2070 With Project (051617)	63,829,854	40,943,956	30,523,160	27,155,656	57,678,816
Difference	8,635,275	4,900,161	3,819,447	3,427,244	7,246,690
Percent Difference	15.6	13.6	14.3	14.4	14.4

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

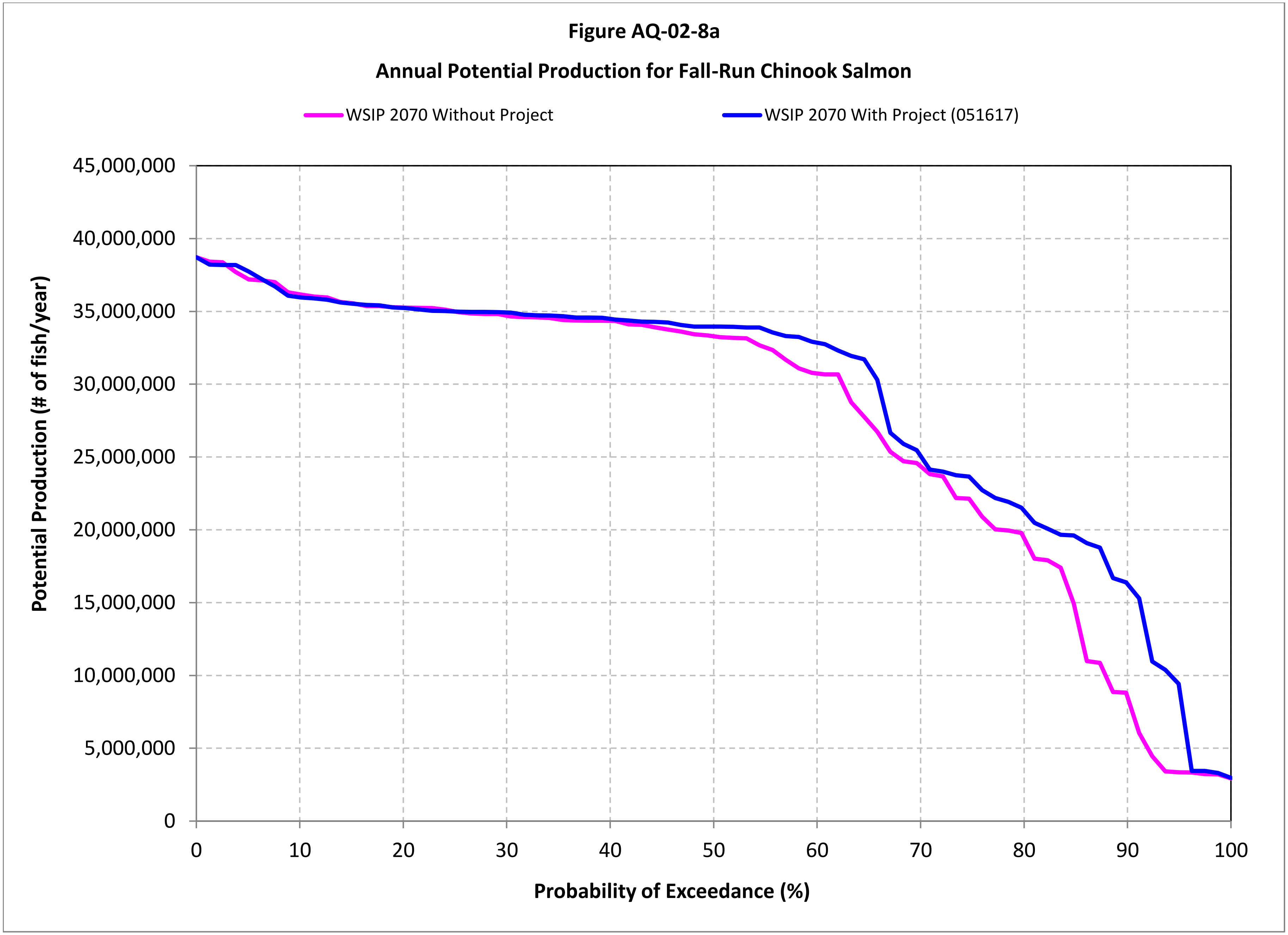


Figure AQ-02-8a
Annual Potential Production for Fall-Run Chinook Salmon
WSIP 2070 Without Project
WSIP 2070 With Project (051617)
Potential Production (# of fish/year)
45,000,000
40,000,000
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Table AQ-02-8b-1

Annual Potential Production for LateFall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2070 Without Project	7,525,505
WSIP 2070 With Project (051617)	7,761,100
Difference	235,595
Percent Difference[3]	3.1
Water Year Types[2]	
Wet (31.7%)	
WSIP 2070 Without Project	7,192,368
WSIP 2070 With Project (051617)	7,198,300
Difference	5,932
Percent Difference	0.1
Above Normal (13.4%)	
WSIP 2070 Without Project	7,907,833
WSIP 2070 With Project (051617)	7,982,971
Difference	75,138
Percent Difference	1.0
Below Normal (15.9%)	
WSIP 2070 Without Project	8,424,622
WSIP 2070 With Project (051617)	8,499,441
Difference	74,820
Percent Difference	0.9
Dry (24.4%)	
WSIP 2070 Without Project	8,391,552
WSIP 2070 With Project (051617)	8,561,417
Difference	169,866
Percent Difference	2.0
Critical (14.6%)	
WSIP 2070 Without Project	5,543,102
WSIP 2070 With Project (051617)	6,680,369
Difference	1,137,267
Percent Difference	20.5

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8b-2

Annual Production of Listed Life-stages for LateFall-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year) Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2070 Without Project	17,320,979	11,552,665	8,525,730	7,525,505	16,051,235
WSIP 2070 With Project (051617)	17,423,148	11,661,940	8,705,389	7,761,100	16,466,489
Difference	102,170	109,275	179,659	235,595	415,254
Percent Difference[3]	0.6	0.9	2.1	3.1	2.6
Water Year Types[2]					
Wet (31.7%)					
WSIP 2070 Without Project	14,468,941	10,106,996	7,663,658	7,192,368	14,856,026
WSIP 2070 With Project (051617)	14,513,491	10,129,672	7,684,042	7,198,300	14,882,341
Difference	44,550	22,677	20,384	5,932	26,315
Percent Difference	0.3	0.2	0.3	0.1	0.2
Above Normal (13.4%)					
WSIP 2070 Without Project	16,294,129	11,178,837	8,480,413	7,907,833	16,388,246
WSIP 2070 With Project (051617)	16,337,543	11,317,107	8,584,625	7,982,971	16,567,596
Difference	43,414	138,270	104,212	75,138	179,350
Percent Difference	0.3	1.2	1.2	1.0	1.1
Below Normal (15.9%)					
WSIP 2070 Without Project	18,895,626	12,234,839	9,314,698	8,424,622	17,739,320
WSIP 2070 With Project (051617)	18,947,648	12,288,131	9,362,074	8,499,441	17,861,515
Difference	52,022	53,292	47,376	74,820	122,195
Percent Difference	0.3	0.4	0.5	0.9	0.7
Dry (24.4%)					
WSIP 2070 Without Project	19,144,710	12,450,690	9,486,442	8,391,552	17,877,994
WSIP 2070 With Project (051617)	19,319,273	12,643,389	9,634,702	8,561,417	18,196,119
Difference	174,564	192,698	148,259	169,866	318,125
Percent Difference	0.9	1.5	1.6	2.0	1.8
Critical (14.6%)					
WSIP 2070 Without Project	19,525,110	12,729,589	7,971,637	5,543,102	13,514,739
WSIP 2070 With Project (051617)	19,729,859	12,926,357	8,748,617	6,680,369	15,428,985
Difference	204,749	196,769	776,980	1,137,267	1,914,247
Percent Difference	1.0	1.5	9.7	20.5	14.2

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

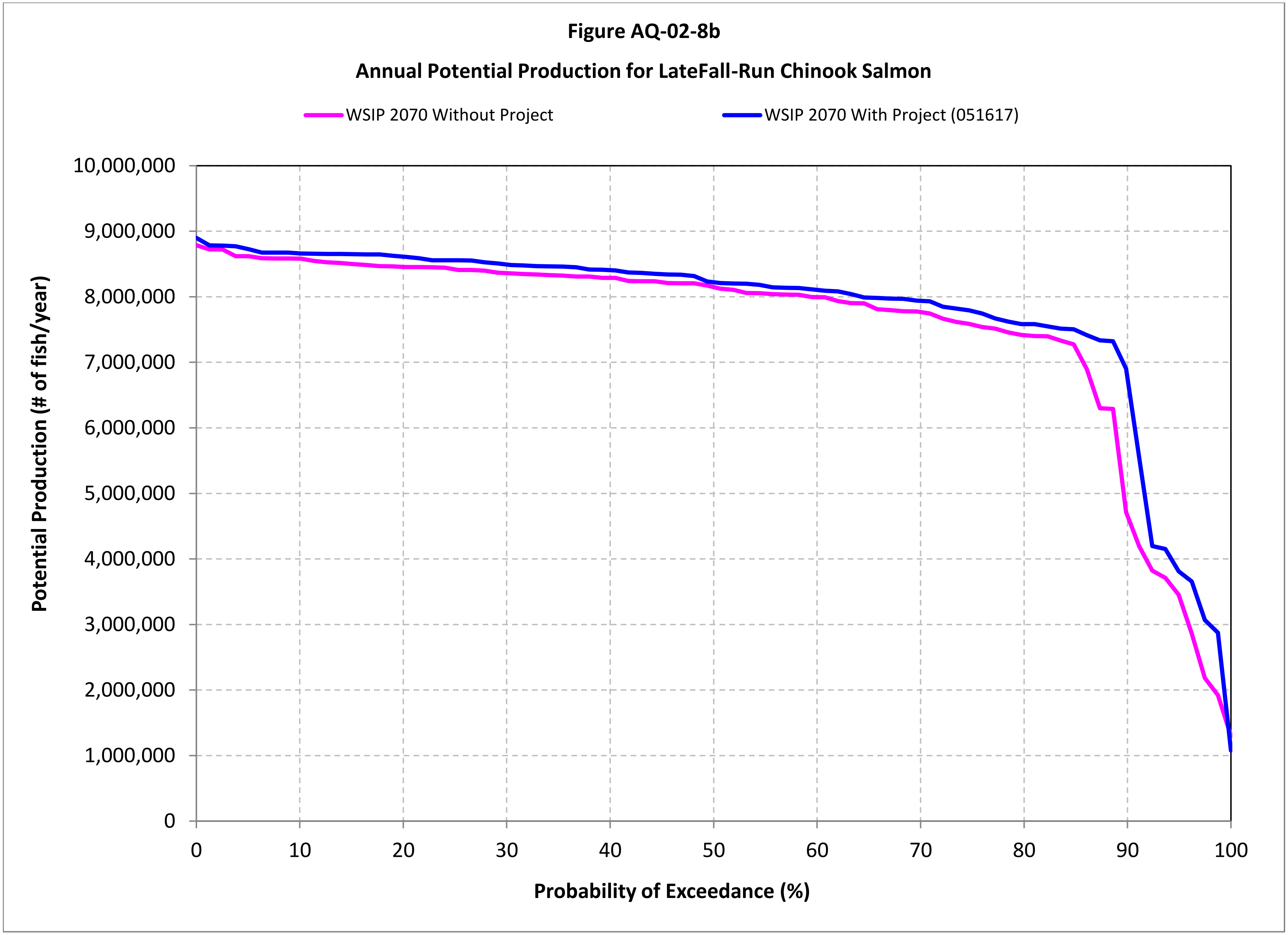


Figure AQ-02-8b
Annual Potential Production for LateFall-Run Chinook Salmon
WSIP 2070 Without Project
WSIP 2070 With Project (051617)
Potential Production (# of fish/year)
10,000,000
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Table AQ-02-8d-1

Annual Potential Production for Spring-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2070 Without Project	688,048
WSIP 2070 With Project (051617)	735,116
Difference	47,068
Percent Difference[3]	6.8
Water Year Types[2]	
Wet (31.7%)	
WSIP 2070 Without Project	841,504
WSIP 2070 With Project (051617)	880,853
Difference	39,348
Percent Difference	4.7
Above Normal (13.4%)	
WSIP 2070 Without Project	940,188
WSIP 2070 With Project (051617)	940,334
Difference	145
Percent Difference	0.0
Below Normal (15.9%)	
WSIP 2070 Without Project	824,432
WSIP 2070 With Project (051617)	893,867
Difference	69,435
Percent Difference	8.4
Dry (24.4%)	
WSIP 2070 Without Project	661,298
WSIP 2070 With Project (051617)	730,899
Difference	69,601
Percent Difference	10.5
Critical (14.6%)	
WSIP 2070 Without Project	53,644
WSIP 2070 With Project (051617)	96,619
Difference	42,975
Percent Difference	80.1

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8d-2

Annual Production of Listed Life-stages for Spring-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year)				
	Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2070 Without Project	1,100,788	934,223	695,287	688,048	1,383,336
WSIP 2070 With Project (051617)	1,172,288	995,815	742,841	735,116	1,477,957
Difference	71,500	61,592	47,554	47,068	94,622
Percent Difference[3]	6.5	6.6	6.8	6.8	6.8
Water Year Types[2]					
Wet (31.7%)					
WSIP 2070 Without Project	1,337,752	1,135,643	848,268	841,504	1,689,772
WSIP 2070 With Project (051617)	1,398,534	1,186,464	887,857	880,853	1,768,710
Difference	60,782	50,822	39,590	39,348	78,938
Percent Difference	4.5	4.5	4.7	4.7	4.7
Above Normal (13.4%)					
WSIP 2070 Without Project	1,492,664	1,266,374	949,214	940,188	1,889,403
WSIP 2070 With Project (051617)	1,491,883	1,268,031	950,507	940,334	1,890,841
Difference	-781	1,657	1,293	145	1,438
Percent Difference	-0.1	0.1	0.1	0.0	0.1
Below Normal (15.9%)					
WSIP 2070 Without Project	1,330,477	1,127,004	833,056	824,432	1,657,488
WSIP 2070 With Project (051617)	1,431,812	1,216,078	902,685	893,867	1,796,553
Difference	101,335	89,074	69,629	69,435	139,065
Percent Difference	7.6	7.9	8.4	8.4	8.4
Dry (24.4%)					
WSIP 2070 Without Project	1,067,309	906,233	670,389	661,298	1,331,687
WSIP 2070 With Project (051617)	1,172,648	996,742	740,234	730,899	1,471,133
Difference	105,338	90,509	69,846	69,601	139,446
Percent Difference	9.9	10.0	10.4	10.5	10.5
Critical (14.6%)					
WSIP 2070 Without Project	86,911	74,891	55,953	53,644	109,597
WSIP 2070 With Project (051617)	155,637	134,086	100,084	96,619	196,703
Difference	68,725	59,195	44,131	42,975	87,106
Percent Difference	79.1	79.0	78.9	80.1	79.5

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Figure AQ-02-8d

Annual Potential Production for Spring-Run Chinook Salmon

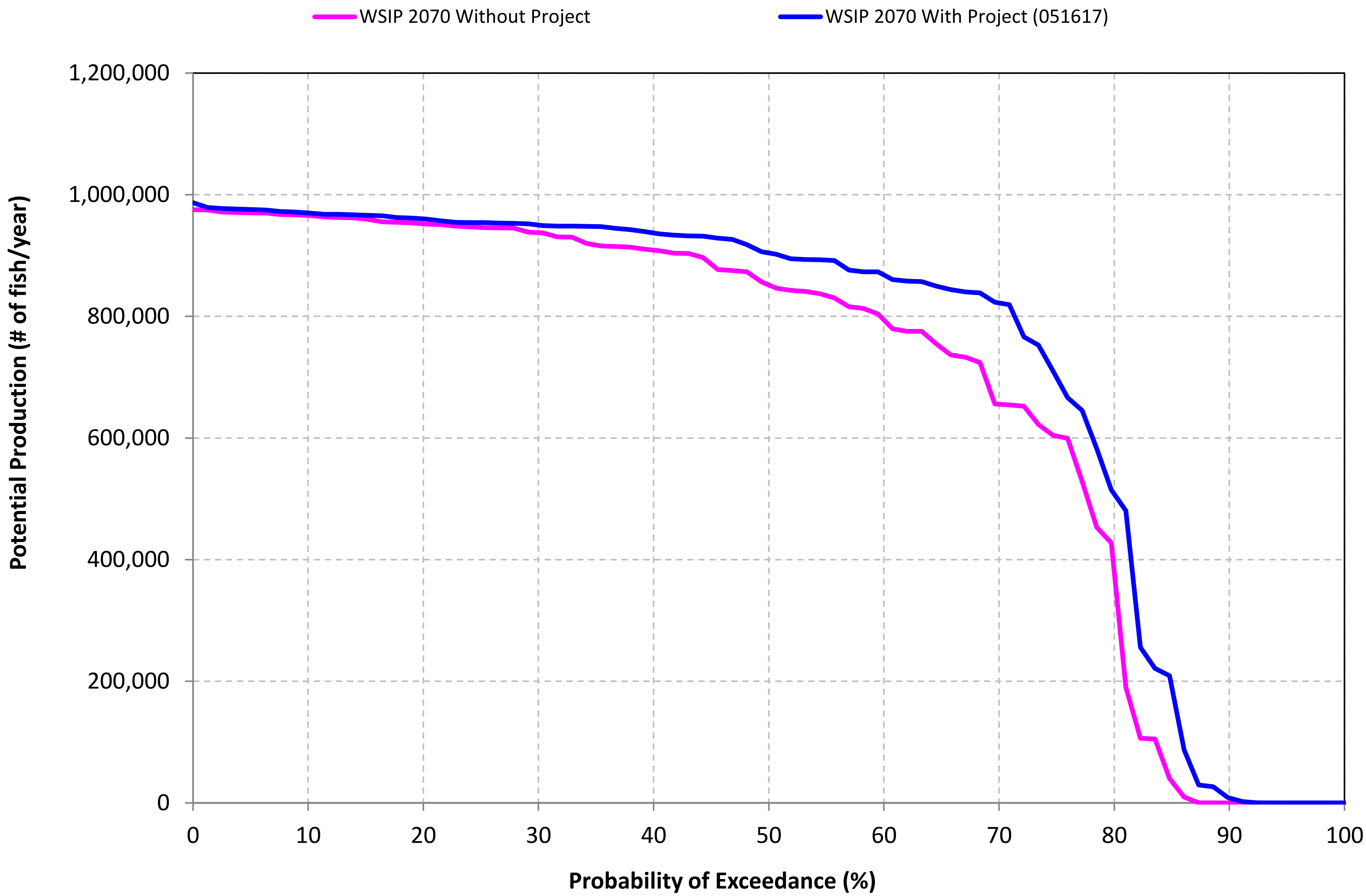


Table AQ-02-8c-1

Annual Potential Production for Winter-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
WSIP 2070 Without Project	3,711,513
WSIP 2070 With Project (051617)	3,795,947
Difference	84,433
Percent Difference[3]	2.3
Water Year Types[2]	
Wet (31.7%)	
WSIP 2070 Without Project	3,797,785
WSIP 2070 With Project (051617)	3,811,750
Difference	13,965
Percent Difference	0.4
Above Normal (13.4%)	
WSIP 2070 Without Project	3,975,686
WSIP 2070 With Project (051617)	3,944,356
Difference	-31,330
Percent Difference	-0.8
Below Normal (15.9%)	
WSIP 2070 Without Project	4,138,983
WSIP 2070 With Project (051617)	4,045,042
Difference	-93,942
Percent Difference	-2.3
Dry (24.4%)	
WSIP 2070 Without Project	4,069,620
WSIP 2070 With Project (051617)	4,057,150
Difference	-12,471
Percent Difference	-0.3
Critical (14.6%)	
WSIP 2070 Without Project	2,280,132
WSIP 2070 With Project (051617)	2,953,599
Difference	673,467
Percent Difference	29.5

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table AQ-02-8c-2

Annual Production of Listed Life-stages for Winter-Run Chinook Salmon

Long-term Average and Average by Water Year Type Annual Production

Analysis Period	Annual Production (# of Fish/year)				
	Eggs	Fry	Pre-Smolt	Immature-Smolt	Juvenile (Pre & Immature Smolt)
Long-term					
Full Simulation Period[1]					
WSIP 2070 Without Project	7,093,004	5,269,738	3,920,296	3,711,513	7,631,810
WSIP 2070 With Project (051617)	7,240,949	5,346,659	4,013,690	3,795,947	7,809,637
Difference	147,945	76,921	93,394	84,433	177,827
Percent Difference[3]	2.1	1.5	2.4	2.3	2.3
Water Year Types[2]					
Wet (31.7%)					
WSIP 2070 Without Project	7,236,467	5,199,552	3,948,294	3,797,785	7,746,079
WSIP 2070 With Project (051617)	7,313,715	5,230,802	3,966,296	3,811,750	7,778,046
Difference	77,248	31,250	18,002	13,965	31,967
Percent Difference	1.1	0.6	0.5	0.4	0.4
Above Normal (13.4%)					
WSIP 2070 Without Project	7,293,631	5,461,924	4,147,176	3,975,686	8,122,862
WSIP 2070 With Project (051617)	7,290,566	5,428,131	4,119,775	3,944,356	8,064,131
Difference	-3,066	-33,794	-27,401	-31,330	-58,731
Percent Difference	0.0	-0.6	-0.7	-0.8	-0.7
Below Normal (15.9%)					
WSIP 2070 Without Project	7,284,193	5,730,207	4,366,245	4,138,983	8,505,228
WSIP 2070 With Project (051617)	7,402,222	5,602,119	4,269,847	4,045,042	8,314,888
Difference	118,029	-128,088	-96,398	-93,942	-190,340
Percent Difference	1.6	-2.2	-2.2	-2.3	-2.2
Dry (24.4%)					
WSIP 2070 Without Project	7,426,183	5,704,789	4,356,553	4,069,620	8,426,173
WSIP 2070 With Project (051617)	7,502,088	5,660,478	4,341,637	4,057,150	8,398,786
Difference	75,905	-44,312	-14,916	-12,471	-27,387
Percent Difference	1.0	-0.8	-0.3	-0.3	-0.3
Critical (14.6%)					
WSIP 2070 Without Project	5,868,493	4,076,098	2,497,526	2,280,132	4,777,658
WSIP 2070 With Project (051617)	6,445,439	4,751,297	3,225,237	2,953,599	6,178,836
Difference	576,946	675,200	727,711	673,467	1,401,178
Percent Difference	9.8	16.6	29.1	29.5	29.3

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

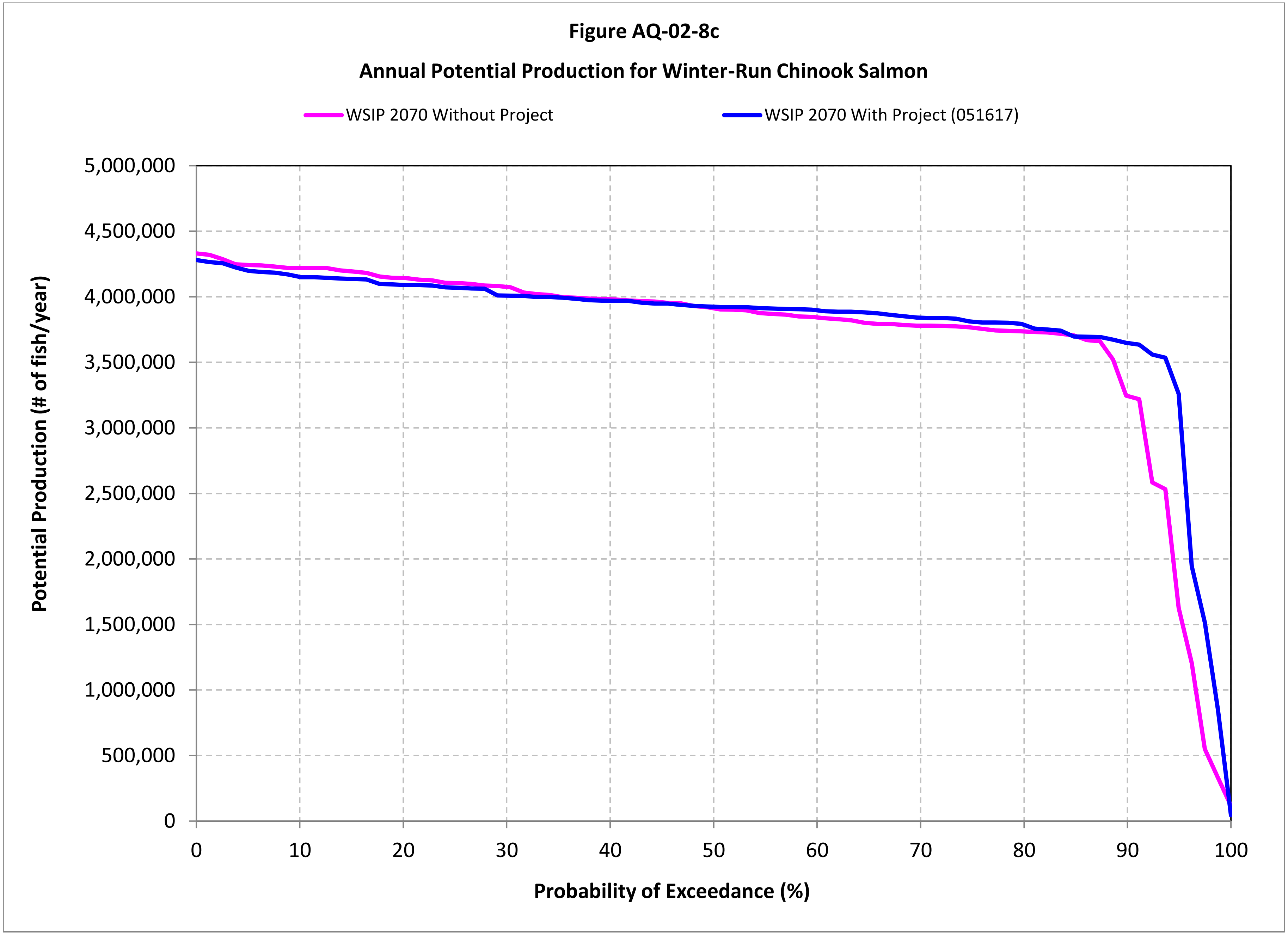


Figure AQ-02-8c
Annual Potential Production for Winter-Run Chinook Salmon
WSIP 2070 Without Project
WSIP 2070 With Project (051617)
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Potential Production (# of fish/year)
0
10
20
30
40
50
60
70
80
90
100
Probability of Exceedance (%)

Sacramento-San Joaquin Delta Modeling

Summary Tables and Bar Charts

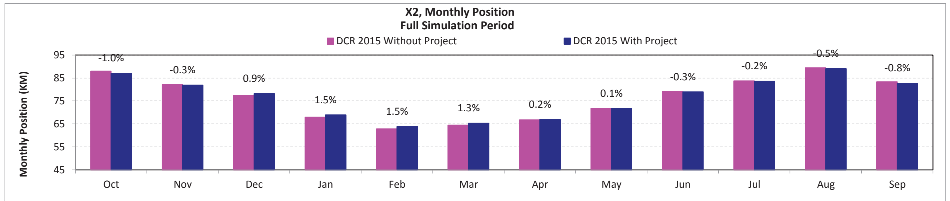
Table SQ-01-a
X2, Monthly Position
Long-term Average and Average by Water Year Type

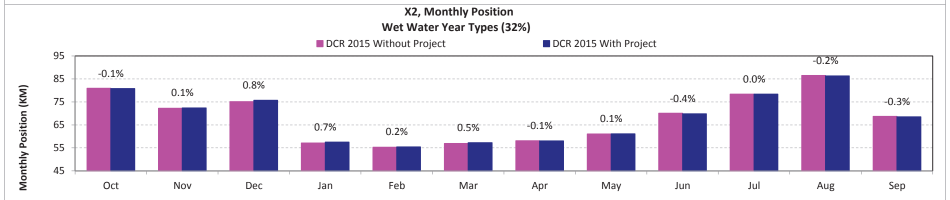
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Position (KM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	88.0	82.2	77.5	68.0	62.9	64.5	66.8	71.7	79.2	83.7	89.5	83.4
DCR 2015 With Project	87.1	81.9	78.1	69.0	63.8	65.3	66.9	71.8	78.9	83.6	89.0	82.7
Difference	-0.9	-0.2	0.7	1.0	0.9	0.9	0.1	0.0	-0.3	-0.1	-0.4	-0.7
Percent Difference[3]	-1.0%	-0.3%	0.9%	1.5%	1.5%	1.3%	0.2%	0.1%	-0.3%	-0.2%	-0.5%	-0.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	80.9	72.2	75.1	57.1	55.3	56.9	58.1	61.1	70.1	78.4	86.5	68.7
DCR 2015 With Project	80.8	72.3	75.7	57.5	55.4	57.3	58.1	61.1	69.8	78.4	86.3	68.5
Difference	-0.1	0.1	0.6	0.4	0.1	0.3	-0.1	0.1	-0.3	0.0	-0.1	-0.2
Percent Difference	-0.1%	0.1%	0.8%	0.7%	0.2%	0.5%	-0.1%	0.1%	-0.4%	0.0%	-0.2%	-0.3%
Above Normal (14.6%)												
DCR 2015 Without Project	86.4	79.7	75.0	61.8	57.1	57.6	61.2	66.8	78.8	81.2	88.7	79.5
DCR 2015 With Project	85.8	79.7	76.5	62.7	57.6	58.5	61.5	66.9	78.7	81.1	88.2	79.1
Difference	-0.6	0.1	1.5	0.9	0.6	1.0	0.3	0.0	-0.1	-0.1	-0.5	-0.4
Percent Difference	-0.7%	0.1%	2.0%	1.4%	1.0%	1.7%	0.4%	0.0%	-0.1%	-0.1%	-0.5%	-0.5%
Below Normal (17.1%)												
DCR 2015 Without Project	90.1	85.2	74.9	70.5	62.3	66.5	67.0	72.7	81.7	83.6	89.5	91.1
DCR 2015 With Project	88.4	83.9	75.2	72.1	62.9	68.1	67.2	73.0	81.4	83.5	89.0	90.2
Difference	-1.6	-1.4	0.3	1.6	0.6	1.7	0.3	0.3	-0.3	-0.1	-0.5	-0.9
Percent Difference	-1.8%	-1.6%	0.4%	2.3%	0.9%	2.5%	0.4%	0.4%	-0.4%	-0.1%	-0.5%	-1.0%
Dry (22%)												
DCR 2015 Without Project	93.2	88.7	78.1	77.1	69.4	69.6	73.5	79.4	84.1	87.8	91.7	93.4
DCR 2015 With Project	91.8	88.5	79.0	78.1	70.9	71.1	73.8	79.2	84.1	87.6	90.8	91.9
Difference	-1.4	-0.2	0.9	1.1	1.6	1.5	0.3	-0.2	0.0	-0.2	-0.9	-1.5
Percent Difference	-1.5%	-0.2%	1.2%	1.4%	2.3%	2.1%	0.4%	-0.2%	0.0%	-0.3%	-1.0%	-1.6%
Critical (14.6%)												
DCR 2015 Without Project	94.8	92.9	87.0	81.0	76.1	77.6	81.0	87.1	88.9	91.8	93.3	94.9
DCR 2015 With Project	93.4	92.7	87.2	82.5	78.6	77.7	81.0	87.2	88.3	91.4	93.0	94.4
Difference	-1.4	-0.2	0.1	1.5	2.6	0.1	0.0	0.1	-0.6	-0.4	-0.3	-0.6
Percent Difference	-1.5%	-0.2%	0.1%	1.9%	3.4%	0.1%	0.0%	0.1%	-0.7%	-0.4%	-0.4%	-0.6%

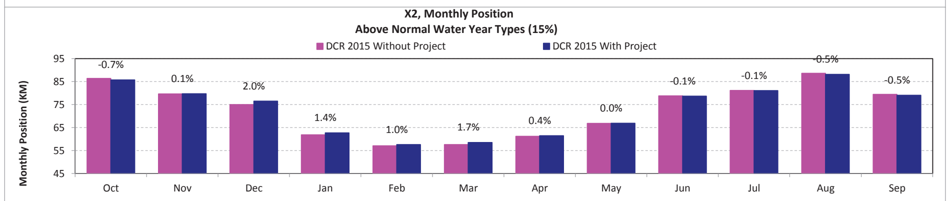
1 Based on the 82-year simulation period

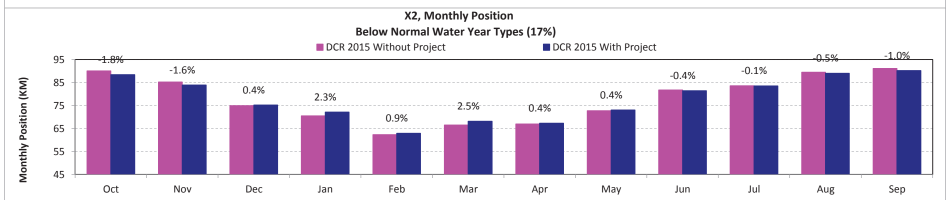
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

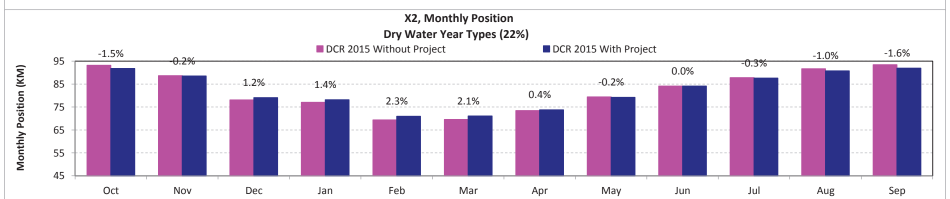
3 Relative difference of the monthly average











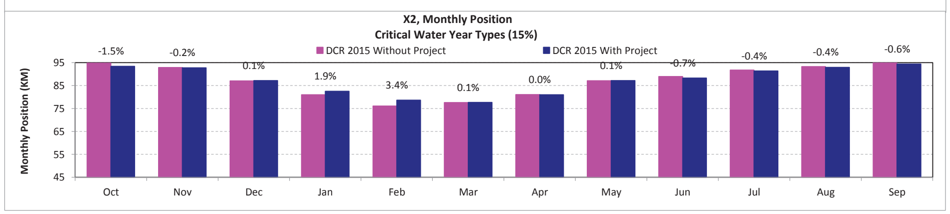


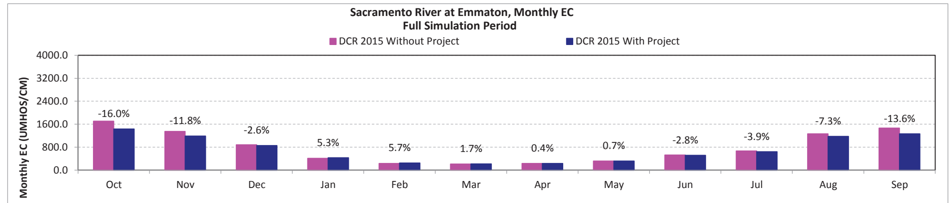
Table SQ-21-a
Sacramento River at Emmaton, Monthly EC
Long-term Average and Average by Water Year Type

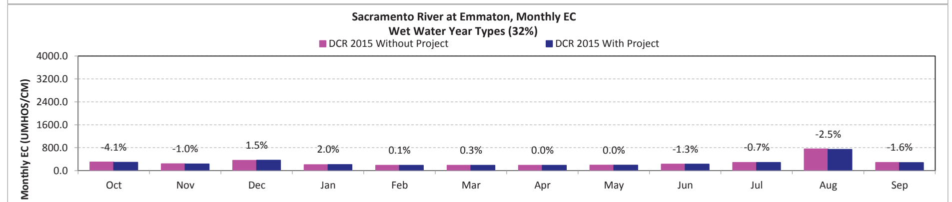
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1704.7	1348.1	882.9	410.8	235.5	216.0	233.3	318.1	529.4	671.4	1267.8	1466.3
DCR 2015 With Project	1432.4	1189.0	859.7	432.4	248.8	219.7	234.2	320.3	514.6	645.3	1175.3	1267.5
Difference	-272.3	-159.0	-23.3	21.7	13.3	3.7	0.9	2.3	-14.8	-26.1	-92.5	-198.8
Percent Difference[3]	-16.0%	-11.8%	-2.6%	5.3%	5.7%	1.7%	0.4%	0.7%	-2.8%	-3.9%	-7.3%	-13.6%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	301.4	235.7	354.6	206.4	184.1	182.9	186.2	188.7	228.0	285.1	755.7	285.3
DCR 2015 With Project	289.0	233.4	359.8	210.4	184.3	183.4	186.2	188.8	225.2	283.1	736.9	280.8
Difference	-12.4	-2.3	5.2	4.1	0.2	0.5	0.0	0.1	-2.9	-2.0	-18.8	-4.6
Percent Difference	-4.1%	-1.0%	1.5%	2.0%	0.1%	0.3%	0.0%	0.0%	-1.3%	-0.7%	-2.5%	-1.6%
Above Normal (14.6%)												
DCR 2015 Without Project	622.5	489.8	467.4	275.7	195.1	184.6	190.7	198.9	316.5	331.0	813.4	473.1
DCR 2015 With Project	556.9	482.6	510.1	295.5	198.1	186.2	191.4	199.0	310.4	325.7	768.9	441.7
Difference	-65.6	-7.2	42.6	19.7	3.0	1.6	0.7	0.0	-6.1	-5.3	-44.5	-31.4
Percent Difference	-10.5%	-1.5%	9.1%	7.1%	1.5%	0.9%	0.4%	0.0%	-1.9%	-1.6%	-5.5%	-6.6%
Below Normal (17.1%)												
DCR 2015 Without Project	2103.6	1540.3	988.5	404.2	210.0	198.1	207.4	233.1	396.9	485.8	1014.7	1704.7
DCR 2015 With Project	1660.5	1265.2	938.0	442.0	211.4	205.0	209.1	234.8	395.0	478.1	952.8	1460.7
Difference	-443.1	-275.1	-50.5	37.8	1.4	6.9	1.6	1.7	-1.9	-7.7	-61.9	-244.0
Percent Difference	-21.1%	-17.9%	-5.1%	9.4%	0.7%	3.5%	0.8%	0.7%	-0.5%	-1.6%	-6.1%	-14.3%
Dry (22%)												
DCR 2015 Without Project	2864.4	2071.1	1204.6	534.3	273.2	224.6	240.1	320.2	582.3	824.3	1715.3	2493.9
DCR 2015 With Project	2341.3	1819.2	1152.5	550.8	289.8	230.4	244.9	315.7	578.6	805.6	1508.6	1975.4
Difference	-523.1	-251.8	-52.2	16.5	16.7	5.7	4.8	-4.5	-3.8	-18.8	-206.7	-518.6
Percent Difference	-18.3%	-12.2%	-4.3%	3.1%	6.1%	2.6%	2.0%	-1.4%	-0.6%	-2.3%	-12.0%	-20.8%
Critical (14.6%)												
DCR 2015 Without Project	3622.2	3307.6	1837.4	811.0	360.6	327.2	397.7	813.5	1470.5	1835.8	2456.0	3198.6
DCR 2015 With Project	3155.3	2931.8	1761.7	861.7	421.4	333.0	394.1	833.5	1389.4	1704.2	2291.3	2944.0
Difference	-466.9	-375.8	-75.7	50.7	60.9	5.8	-3.6	20.0	-81.2	-131.6	-164.7	-254.6
Percent Difference	-12.9%	-11.4%	-4.1%	6.2%	16.9%	1.8%	-0.9%	2.5%	-5.5%	-7.2%	-6.7%	-8.0%

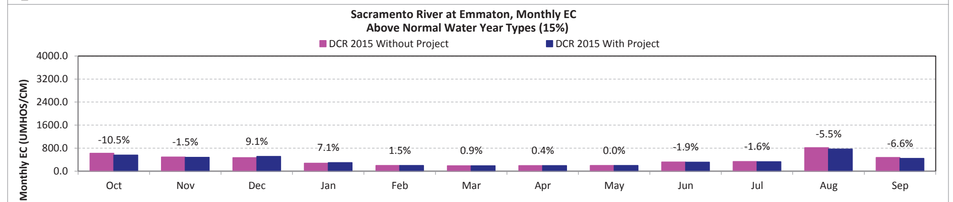
1 Based on the 82-year simulation period

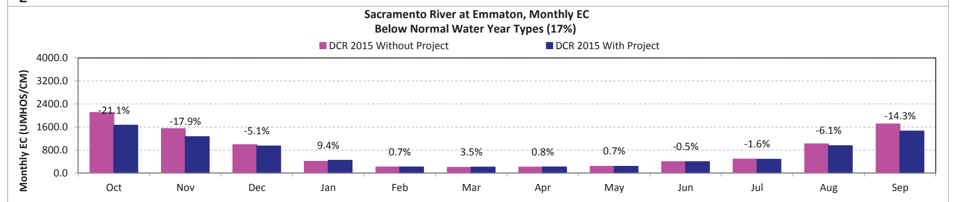
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

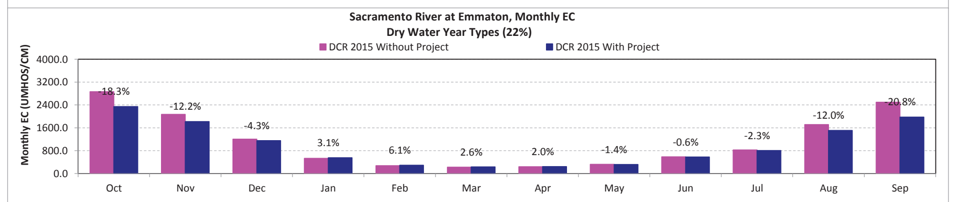
3 Relative difference of the monthly average











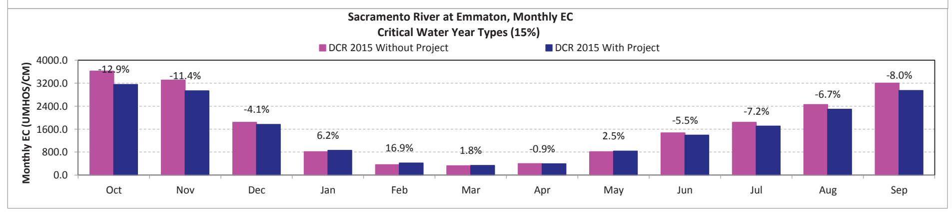


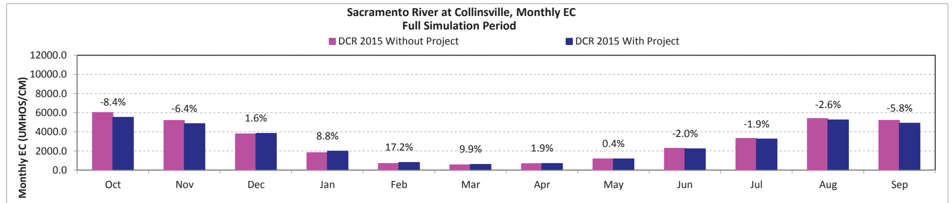
Table SQ-22-a
Sacramento River at Collinsville, Monthly EC
Long-term Average and Average by Water Year Type

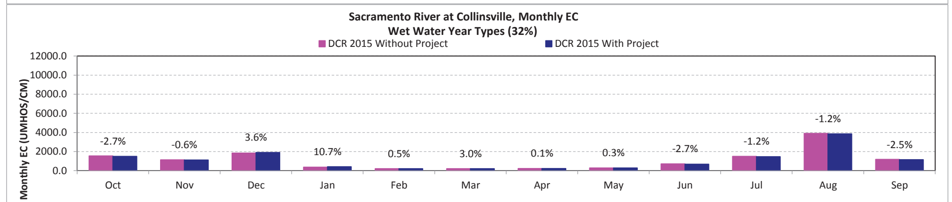
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	6007.8	5181.1	3774.7	1811.2	685.0	539.0	678.3	1169.9	2270.6	3304.4	5382.0	5202.4
DCR 2015 With Project	5505.8	4850.8	3833.4	1970.2	803.0	592.5	691.1	1175.0	2224.2	3242.3	5240.5	4901.6
Difference	-502.0	-330.3	58.6	159.0	118.1	53.4	12.8	5.1	-46.4	-62.1	-141.5	-300.8
Percent Difference[3]	-8.4%	-6.4%	1.6%	8.8%	17.2%	9.9%	1.9%	0.4%	-2.0%	-1.9%	-2.6%	-5.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1543.3	1127.2	1837.5	368.3	200.1	200.8	218.8	278.6	703.3	1487.7	3898.7	1174.2
DCR 2015 With Project	1501.6	1119.9	1902.9	407.7	201.2	206.9	219.0	279.6	684.6	1470.1	3852.7	1145.4
Difference	-41.7	-7.3	65.4	39.3	1.1	6.1	0.2	1.0	-18.7	-17.7	-46.0	-28.8
Percent Difference	-2.7%	-0.6%	3.6%	10.7%	0.5%	3.0%	0.1%	0.3%	-2.7%	-1.2%	-1.2%	-2.5%
Above Normal (14.6%)												
DCR 2015 Without Project	3492.5	2924.6	2431.7	956.9	274.1	205.1	236.7	367.4	1453.9	1984.9	4294.3	2733.0
DCR 2015 With Project	3306.2	2882.7	2704.0	1106.6	305.8	225.9	244.4	367.1	1422.8	1951.2	4147.3	2571.9
Difference	-186.2	-41.9	272.2	149.7	31.7	20.8	7.7	-0.3	-31.1	-33.7	-147.1	-161.1
Percent Difference	-5.3%	-1.4%	11.2%	15.6%	11.6%	10.2%	3.3%	-0.1%	-2.1%	-1.7%	-3.4%	-5.9%
Below Normal (17.1%)												
DCR 2015 Without Project	8001.1	6504.4	4060.2	1895.5	437.6	381.6	438.4	753.1	2035.7	3041.2	5073.6	6989.4
DCR 2015 With Project	7164.3	5684.3	4007.0	2154.0	473.0	462.5	462.9	771.1	2005.9	2992.8	4908.9	6498.5
Difference	-836.7	-820.1	-53.2	258.6	35.4	80.8	24.5	18.0	-29.8	-48.4	-164.6	-491.0
Percent Difference	-10.5%	-12.6%	-1.3%	13.6%	8.1%	21.2%	5.6%	2.4%	-1.5%	-1.6%	-3.2%	-7.0%
Dry (22%)												
DCR 2015 Without Project	9536.5	8034.6	4814.4	2819.3	1080.8	674.0	839.4	1579.1	3074.7	4565.2	6676.4	8476.0
DCR 2015 With Project	8632.2	7636.1	4905.4	2993.9	1245.2	753.2	890.8	1560.7	3055.8	4528.9	6364.4	7713.6
Difference	-904.3	-398.5	91.0	174.6	164.4	79.2	51.3	-18.4	-19.0	-36.3	-312.0	-762.4
Percent Difference	-9.5%	-5.0%	1.9%	6.2%	15.2%	11.7%	6.1%	-1.2%	-0.6%	-0.8%	-4.7%	-9.0%
Critical (14.6%)												
DCR 2015 Without Project	10577.6	10397.3	7422.6	4181.3	1841.2	1586.8	2153.3	3776.0	5550.8	6975.6	8102.0	9403.9
DCR 2015 With Project	9756.9	9752.3	7334.8	4469.3	2326.0	1705.0	2127.3	3815.8	5368.7	6734.4	8041.8	9288.4
Difference	-820.8	-644.9	-87.8	288.1	484.8	118.1	-26.0	39.7	-182.1	-241.1	-60.2	-115.5
Percent Difference	-7.8%	-6.2%	-1.2%	6.9%	26.3%	7.4%	-1.2%	1.1%	-3.3%	-3.5%	-0.7%	-1.2%

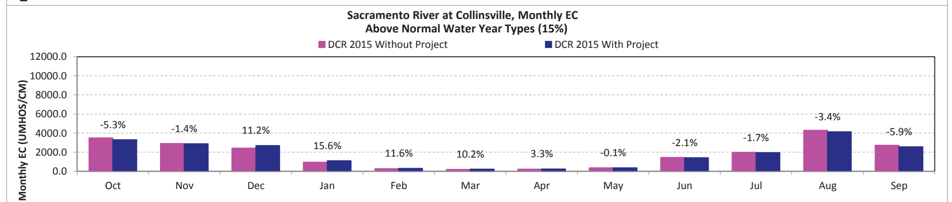
1 Based on the 82-year simulation period

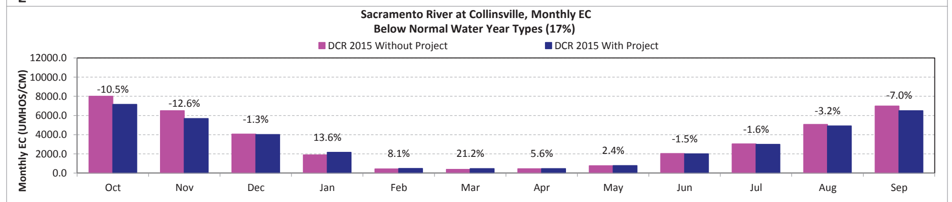
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

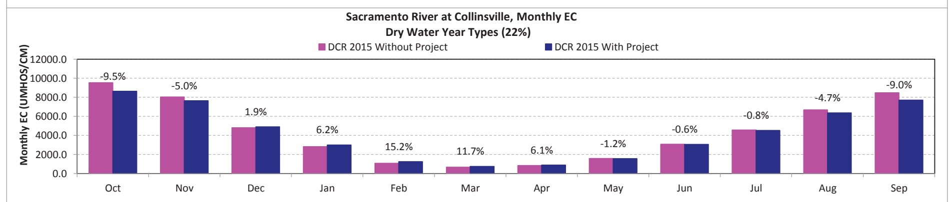
3 Relative difference of the monthly average











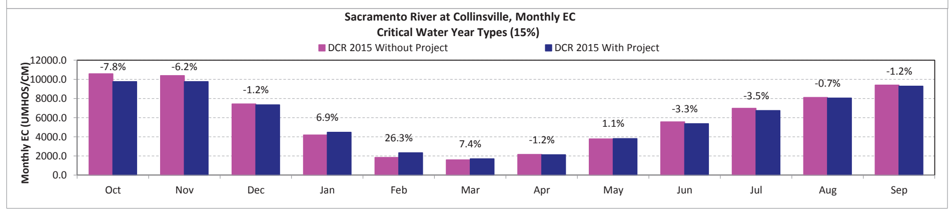


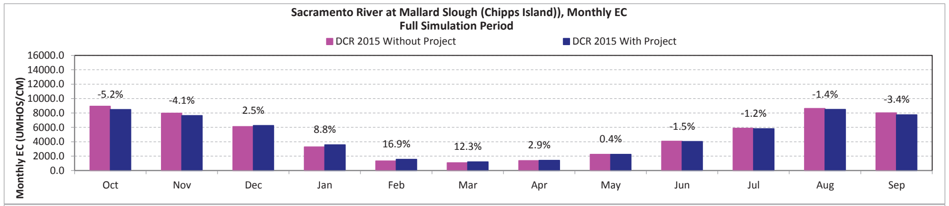
Table SQ-23-a
Sacramento River at Mallard Slough (Chipps Island)), Monthly EC
Long-term Average and Average by Water Year Type

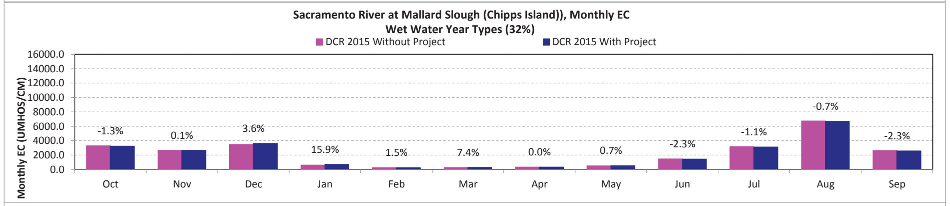
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	8939.7	7972.9	6102.1	3283.0	1339.4	1080.2	1377.1	2251.3	4090.1	5886.2	8627.4	8021.3
DCR 2015 With Project	8475.5	7649.0	6255.8	3571.4	1566.1	1213.1	1416.8	2261.3	4029.1	5812.8	8502.9	7748.2
Difference	-464.2	-323.9	153.8	288.4	226.8	132.9	39.7	10.0	-60.9	-73.4	-124.5	-273.1
Percent Difference[3]	-5.2%	-4.1%	2.5%	8.8%	16.9%	12.3%	2.9%	0.4%	-1.5%	-1.2%	-1.4%	-3.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	3265.2	2641.4	3469.1	597.9	230.7	256.6	312.5	493.4	1450.9	3145.3	6720.5	2611.2
DCR 2015 With Project	3222.1	2645.1	3595.4	692.9	234.2	275.5	312.5	497.0	1417.6	3111.3	6676.6	2551.6
Difference	-43.0	3.7	126.3	94.9	3.6	18.9	0.0	3.6	-33.3	-33.9	-43.9	-59.5
Percent Difference	-1.3%	0.1%	3.6%	15.9%	1.5%	7.4%	0.0%	0.7%	-2.3%	-1.1%	-0.7%	-2.3%
Above Normal (14.6%)												
DCR 2015 Without Project	6281.3	5540.1	4412.5	1841.5	440.7	267.4	383.9	790.0	2925.4	4178.2	7385.1	5386.2
DCR 2015 With Project	6083.7	5488.3	4831.9	2131.6	521.3	337.4	413.3	792.1	2886.1	4130.6	7222.0	5175.9
Difference	-197.6	-51.8	419.4	290.1	80.6	70.1	29.5	2.1	-39.3	-47.7	-163.1	-210.3
Percent Difference	-3.1%	-0.9%	9.5%	15.8%	18.3%	26.2%	7.7%	0.3%	-1.3%	-1.1%	-2.2%	-3.9%
Below Normal (17.1%)												
DCR 2015 Without Project	11591.3	9851.6	6349.2	3594.9	885.0	833.5	961.6	1685.3	4004.1	5854.3	8467.3	10691.4
DCR 2015 With Project	10818.0	8934.4	6370.7	4068.5	986.8	1032.4	1039.3	1728.4	3952.7	5779.7	8301.1	10231.2
Difference	-773.3	-917.2	21.5	473.6	101.8	198.9	77.7	43.1	-51.4	-74.6	-166.1	-460.2
Percent Difference	-6.7%	-9.3%	0.3%	13.2%	11.5%	23.9%	8.1%	2.6%	-1.3%	-1.3%	-2.0%	-4.3%
Dry (22%)												
DCR 2015 Without Project	13286.7	11710.4	7424.0	5228.1	2268.8	1491.5	1927.3	3338.4	5650.7	7901.5	10239.3	12153.3
DCR 2015 With Project	12463.2	11399.6	7687.3	5563.7	2611.2	1698.8	2048.1	3317.2	5621.5	7871.6	9976.7	11505.9
Difference	-823.5	-310.7	263.3	335.6	342.4	207.3	120.8	-21.1	-29.1	-29.9	-262.5	-647.4
Percent Difference	-6.2%	-2.7%	3.5%	6.4%	15.1%	13.9%	6.3%	-0.6%	-0.5%	-0.4%	-2.6%	-5.3%
Critical (14.6%)												
DCR 2015 Without Project	14278.7	14159.1	11225.0	7260.6	3776.2	3348.2	4336.3	6551.0	8732.4	10547.3	11770.4	13064.9
DCR 2015 With Project	13534.8	13526.0	11162.8	7679.7	4605.1	3602.2	4306.3	6590.9	8531.1	10298.5	11765.6	13046.3
Difference	-743.9	-633.1	-62.2	419.1	828.8	254.0	-30.0	39.9	-201.3	-248.7	-4.7	-18.7
Percent Difference	-5.2%	-4.5%	-0.6%	5.8%	21.9%	7.6%	-0.7%	0.6%	-2.3%	-2.4%	0.0%	-0.1%

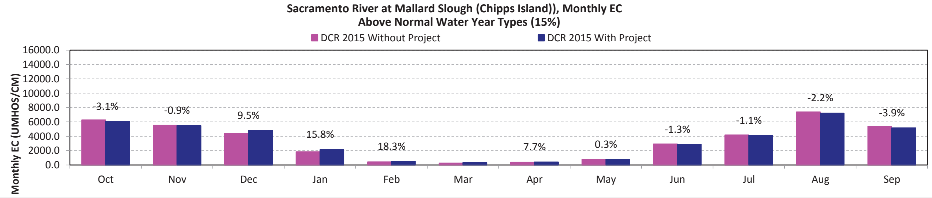
1 Based on the 82-year simulation period

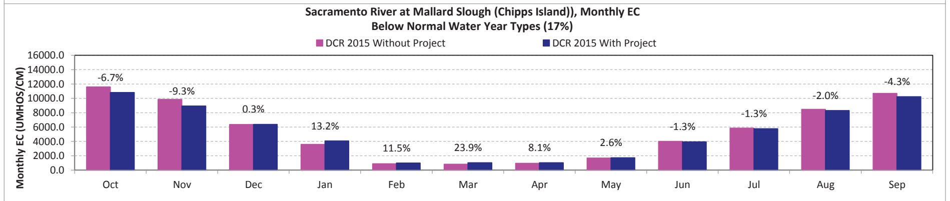
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

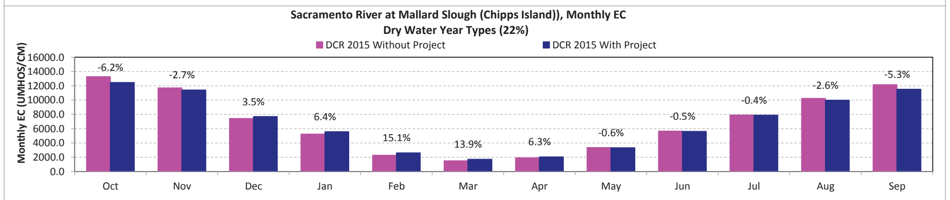
3 Relative difference of the monthly average











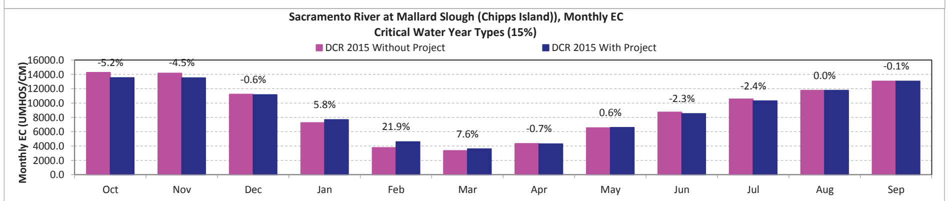


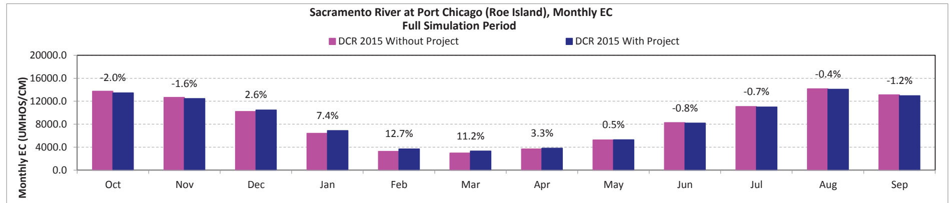
Table SQ-24-a
Sacramento River at Port Chicago (Roe Island), Monthly EC
Long-term Average and Average by Water Year Type

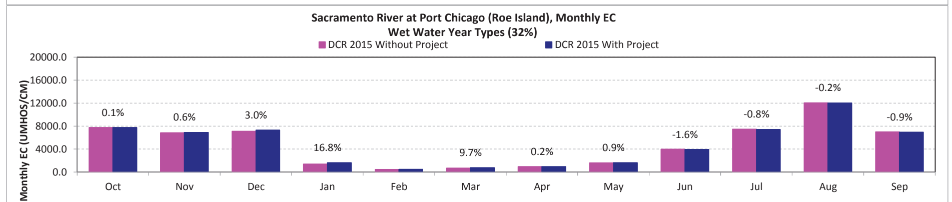
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	13730.9	12657.9	10212.3	6405.0	3263.7	2982.2	3685.9	5262.8	8258.8	11078.0	14157.1	13118.6
DCR 2015 With Project	13454.8	12449.8	10475.9	6880.5	3676.8	3315.1	3806.6	5291.2	8190.3	11002.8	14093.8	12963.1
Difference	-276.1	-208.1	263.6	475.6	413.1	332.8	120.7	28.3	-68.4	-75.2	-63.3	-155.5
Percent Difference[3]	-2.0%	-1.6%	2.6%	7.4%	12.7%	11.2%	3.3%	0.5%	-0.8%	-0.7%	-0.4%	-1.2%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	7745.0	6838.6	7095.7	1382.6	441.5	683.3	956.8	1610.0	3981.9	7466.9	12051.3	7006.5
DCR 2015 With Project	7751.5	6881.3	7307.8	1615.4	466.7	750.0	958.6	1624.3	3919.5	7408.3	12031.2	6943.2
Difference	6.5	42.7	212.1	232.8	25.2	66.6	1.8	14.3	-62.3	-58.6	-20.1	-63.3
Percent Difference	0.1%	0.6%	3.0%	16.8%	5.7%	9.7%	0.2%	0.9%	-1.6%	-0.8%	-0.2%	-0.9%
Above Normal (14.6%)												
DCR 2015 Without Project	11554.9	10547.9	8412.4	4143.1	1224.4	824.0	1501.4	2866.5	6869.1	9395.5	12978.7	11094.1
DCR 2015 With Project	11440.1	10530.0	8961.0	4654.3	1440.1	1084.1	1628.7	2885.5	6845.7	9346.0	12868.4	10951.9
Difference	-114.8	-17.8	548.7	511.3	215.7	260.1	127.3	19.1	-23.3	-49.6	-110.3	-142.2
Percent Difference	-1.0%	-0.2%	6.5%	12.3%	17.6%	31.6%	8.5%	0.7%	-0.3%	-0.5%	-0.8%	-1.3%
Below Normal (17.1%)												
DCR 2015 Without Project	16557.6	14756.7	10174.6	7561.4	2694.8	2989.4	3358.4	4947.3	8771.2	11544.8	14247.8	16279.3
DCR 2015 With Project	16080.2	14031.8	10326.2	8358.5	3019.4	3489.2	3601.5	5056.4	8702.8	11451.3	14144.6	16008.9
Difference	-477.5	-724.9	151.6	797.2	324.6	499.8	243.1	109.1	-68.4	-93.4	-103.2	-270.4
Percent Difference	-2.9%	-4.9%	1.5%	10.5%	12.0%	16.7%	7.2%	2.2%	-0.8%	-0.8%	-0.7%	-1.7%
Dry (22%)												
DCR 2015 Without Project	18158.5	16733.3	11671.6	10093.3	5693.5	4452.7	5548.6	7934.4	11001.2	13724.6	15865.6	17437.6
DCR 2015 With Project	17670.0	16622.2	12109.2	10635.4	6364.6	4987.2	5823.8	7925.1	10963.5	13701.7	15726.2	17074.5
Difference	-488.5	-111.0	437.6	542.1	671.1	534.5	275.2	-9.3	-37.7	-22.9	-139.4	-363.1
Percent Difference	-2.7%	-0.7%	3.7%	5.4%	11.8%	12.0%	5.0%	-0.1%	-0.3%	-0.2%	-0.9%	-2.1%
Critical (14.6%)												
DCR 2015 Without Project	18937.4	18814.5	16620.2	12667.1	8436.8	7907.3	9371.1	11934.5	14203.5	16069.9	17229.4	18220.0
DCR 2015 With Project	18441.2	18330.4	16580.0	13157.9	9604.2	8392.3	9368.4	11964.8	14030.6	15876.2	17280.0	18296.7
Difference	-496.2	-484.1	-40.2	490.8	1167.4	485.0	-2.7	30.3	-172.9	-193.7	50.6	76.7
Percent Difference	-2.6%	-2.6%	-0.2%	3.9%	13.8%	6.1%	0.0%	0.3%	-1.2%	-1.2%	0.3%	0.4%

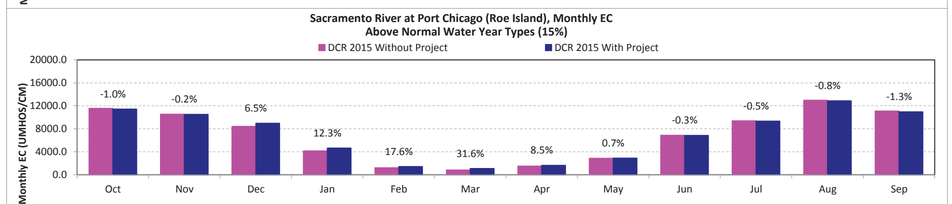
1 Based on the 82-year simulation period

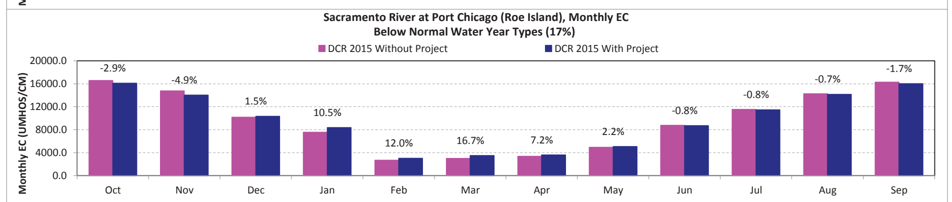
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

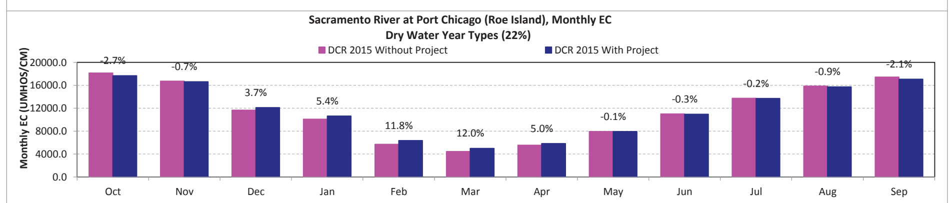
3 Relative difference of the monthly average











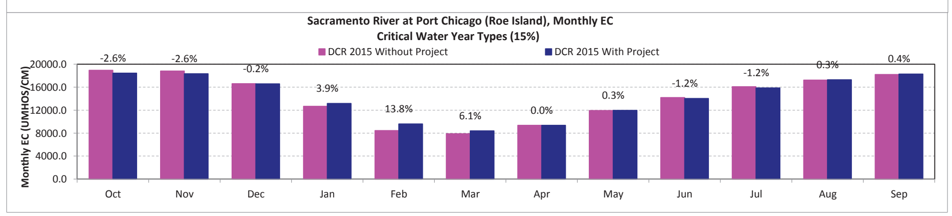


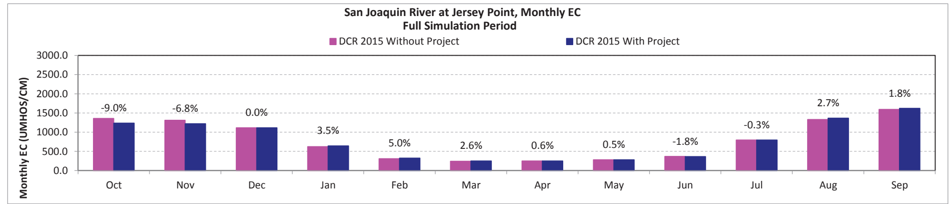
Table SQ-25-a
San Joaquin River at Jersey Point, Monthly EC
Long-term Average and Average by Water Year Type

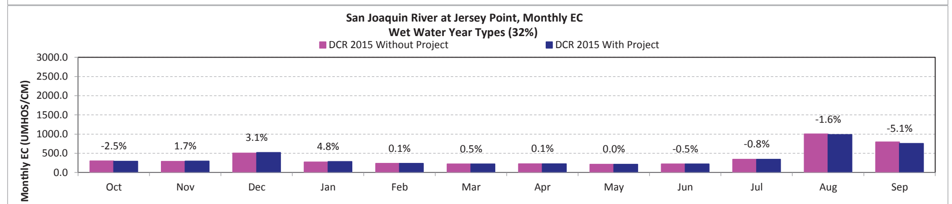
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1359.9	1309.1	1116.5	623.1	310.5	244.5	248.5	281.0	369.0	796.7	1330.4	1591.9
DCR 2015 With Project	1237.4	1220.4	1116.3	644.9	326.1	250.9	250.0	282.3	362.5	794.5	1366.1	1620.6
Difference	-122.5	-88.7	-0.2	21.8	15.5	6.4	1.5	1.3	-6.5	-2.2	35.7	28.7
Percent Difference[3]	-9.0%	-6.8%	0.0%	3.5%	5.0%	2.6%	0.6%	0.5%	-1.8%	-0.3%	2.7%	1.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	299.2	288.5	504.9	272.2	236.0	220.3	223.2	213.6	221.2	343.3	1002.9	795.9
DCR 2015 With Project	291.8	293.4	520.8	285.2	236.1	221.3	223.5	213.7	220.1	340.3	987.1	755.0
Difference	-7.4	5.0	15.8	13.0	0.2	1.0	0.2	0.1	-1.1	-2.9	-15.9	-40.9
Percent Difference	-2.5%	1.7%	3.1%	4.8%	0.1%	0.5%	0.1%	0.0%	-0.5%	-0.8%	-1.6%	-5.1%
Above Normal (14.6%)												
DCR 2015 Without Project	569.9	757.9	805.8	477.1	260.7	223.2	232.6	233.8	276.6	454.7	1168.1	932.3
DCR 2015 With Project	577.8	746.8	854.4	530.6	266.3	225.4	233.5	234.1	273.3	453.3	1114.8	896.8
Difference	7.9	-11.1	48.6	53.5	5.6	2.2	0.9	0.3	-3.3	-1.4	-53.4	-35.5
Percent Difference	1.4%	-1.5%	6.0%	11.2%	2.2%	1.0%	0.4%	0.1%	-1.2%	-0.3%	-4.6%	-3.8%
Below Normal (17.1%)												
DCR 2015 Without Project	2255.1	1938.1	1315.0	695.3	279.3	234.0	242.3	249.3	306.7	780.0	1464.9	2296.1
DCR 2015 With Project	2006.7	1627.0	1282.3	736.2	286.7	238.1	244.2	250.3	305.8	771.2	1438.1	2180.0
Difference	-248.5	-311.2	-32.8	40.9	7.4	4.1	1.9	1.0	-0.9	-8.8	-26.8	-116.1
Percent Difference	-11.0%	-16.1%	-2.5%	5.9%	2.7%	1.8%	0.8%	0.4%	-0.3%	-1.1%	-1.8%	-5.1%
Dry (22%)												
DCR 2015 Without Project	2119.5	1992.2	1376.0	823.5	367.6	251.2	251.0	283.2	397.5	1222.7	1597.0	2305.8
DCR 2015 With Project	1973.6	1988.3	1468.8	841.5	389.9	258.4	254.7	282.7	396.3	1264.1	1696.3	2381.6
Difference	-145.9	-3.9	92.8	17.9	22.3	7.2	3.7	-0.5	-1.3	41.4	99.4	75.7
Percent Difference	-6.9%	-0.2%	6.7%	2.2%	6.1%	2.9%	1.5%	-0.2%	-0.3%	3.4%	6.2%	3.3%
Critical (14.6%)												
DCR 2015 Without Project	2264.2	2313.2	2131.3	1144.2	472.7	320.3	322.6	507.9	811.7	1501.7	1645.1	2083.7
DCR 2015 With Project	1944.0	2076.0	1945.8	1137.2	530.7	344.3	323.5	515.8	775.8	1442.7	1859.1	2425.6
Difference	-320.2	-237.2	-185.5	-7.0	58.0	24.0	0.9	7.9	-35.9	-59.0	214.0	341.8
Percent Difference	-14.1%	-10.3%	-8.7%	-0.6%	12.3%	7.5%	0.3%	1.6%	-4.4%	-3.9%	13.0%	16.4%

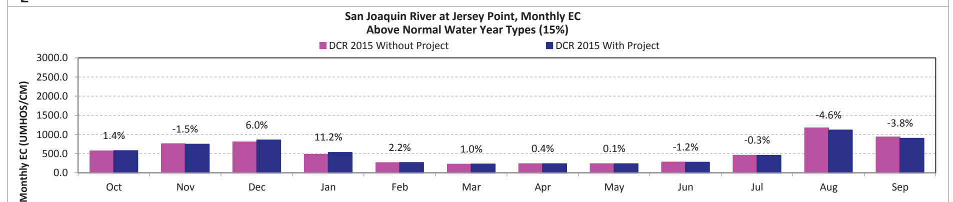
1 Based on the 82-year simulation period

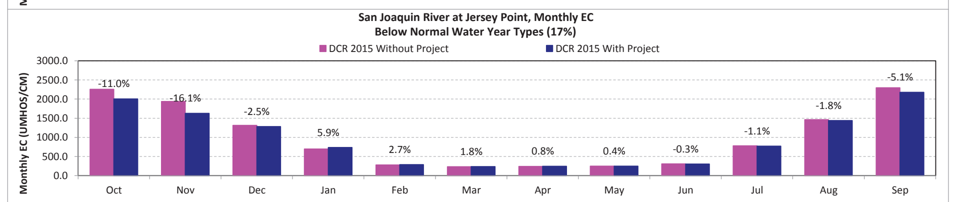
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

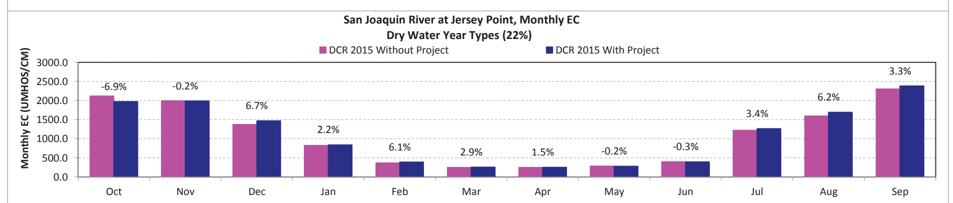
3 Relative difference of the monthly average











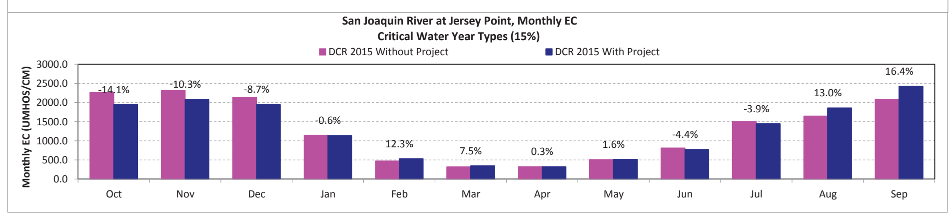


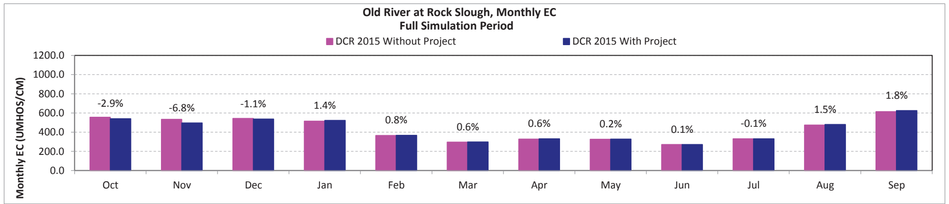
Table SQ-27-a
Old River at Rock Slough, Monthly EC
Long-term Average and Average by Water Year Type

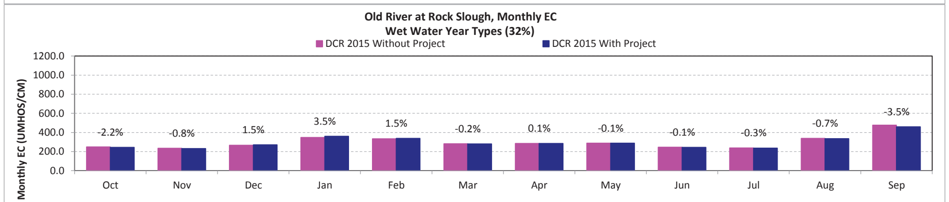
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	556.1	533.3	542.8	515.0	365.0	295.8	328.4	326.5	270.6	331.0	473.8	613.7
DCR 2015 With Project	539.8	496.9	536.7	522.2	368.0	297.5	330.5	327.2	270.9	330.6	481.1	624.8
Difference	-16.3	-36.4	-6.1	7.1	3.0	1.7	2.1	0.7	0.2	-0.3	7.3	11.1
Percent Difference[3]	-2.9%	-6.8%	-1.1%	1.4%	0.8%	0.6%	0.6%	0.2%	0.1%	-0.1%	1.5%	1.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	248.8	233.7	266.4	348.0	333.3	280.9	284.9	287.5	244.5	236.7	338.0	475.8
DCR 2015 With Project	243.3	231.8	270.3	360.1	338.4	280.3	285.1	287.2	244.3	236.1	335.6	459.0
Difference	-5.5	-1.8	3.9	12.1	5.1	-0.6	0.2	-0.3	-0.3	-0.6	-2.5	-16.8
Percent Difference	-2.2%	-0.8%	1.5%	3.5%	1.5%	-0.2%	0.1%	-0.1%	-0.1%	-0.3%	-0.7%	-3.5%
Above Normal (14.6%)												
DCR 2015 Without Project	271.5	348.3	415.2	484.3	356.9	283.5	337.1	348.3	254.4	248.4	377.9	460.1
DCR 2015 With Project	268.4	351.0	417.5	531.3	361.8	284.4	338.3	349.0	254.1	248.2	369.1	442.8
Difference	-3.1	2.6	2.3	47.1	4.9	0.9	1.1	0.7	-0.3	-0.2	-8.8	-17.3
Percent Difference	-1.1%	0.8%	0.6%	9.7%	1.4%	0.3%	0.3%	0.2%	-0.1%	-0.1%	-2.3%	-3.8%
Below Normal (17.1%)												
DCR 2015 Without Project	817.5	758.9	671.1	585.3	360.5	288.7	348.3	353.8	255.6	311.1	501.4	788.3
DCR 2015 With Project	747.4	656.6	623.5	590.3	358.5	286.5	349.4	354.4	257.9	309.5	500.6	762.0
Difference	-70.1	-102.4	-47.6	5.0	-2.0	-2.2	1.1	0.6	2.4	-1.6	-0.8	-26.2
Percent Difference	-8.6%	-13.5%	-7.1%	0.8%	-0.5%	-0.8%	0.3%	0.2%	0.9%	-0.5%	-0.2%	-3.3%
Dry (22%)												
DCR 2015 Without Project	803.5	709.5	679.7	569.0	364.0	300.6	369.4	348.9	271.7	419.8	606.5	727.2
DCR 2015 With Project	785.1	702.4	728.8	575.8	371.3	304.5	372.9	348.9	271.3	431.9	640.6	769.9
Difference	-18.4	-7.0	49.1	6.8	7.4	3.9	3.4	0.0	-0.3	12.1	34.0	42.8
Percent Difference	-2.3%	-1.0%	7.2%	1.2%	2.0%	1.3%	0.9%	0.0%	-0.1%	2.9%	5.6%	5.9%
Critical (14.6%)												
DCR 2015 Without Project	830.5	840.1	914.5	744.6	448.4	341.6	329.1	324.0	359.4	507.6	632.6	692.2
DCR 2015 With Project	843.4	722.4	843.9	704.2	444.1	350.4	335.6	328.2	359.7	490.6	646.3	788.1
Difference	12.8	-117.7	-70.6	-40.5	-4.3	8.8	6.5	4.2	0.3	-17.0	13.7	95.9
Percent Difference	1.5%	-14.0%	-7.7%	-5.4%	-1.0%	2.6%	2.0%	1.3%	0.1%	-3.3%	2.2%	13.9%

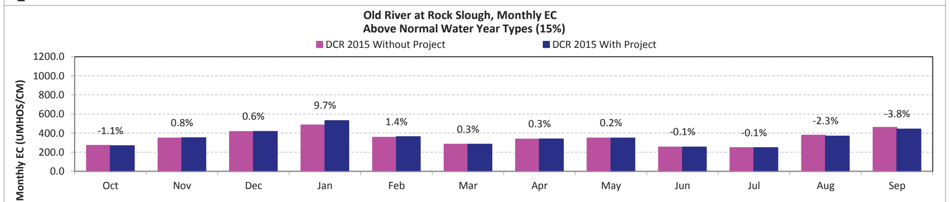
1 Based on the 82-year simulation period

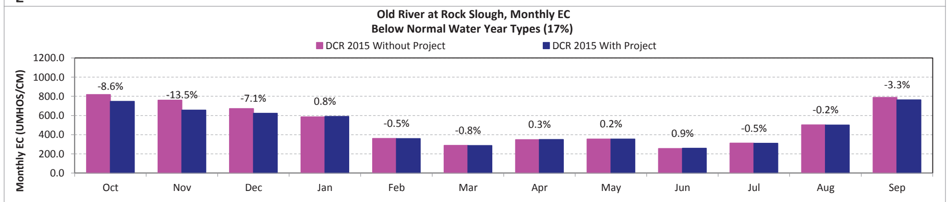
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

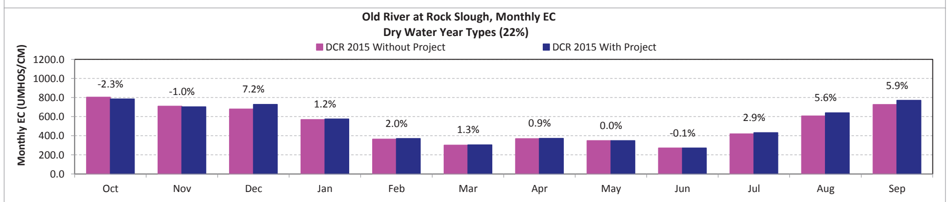
3 Relative difference of the monthly average











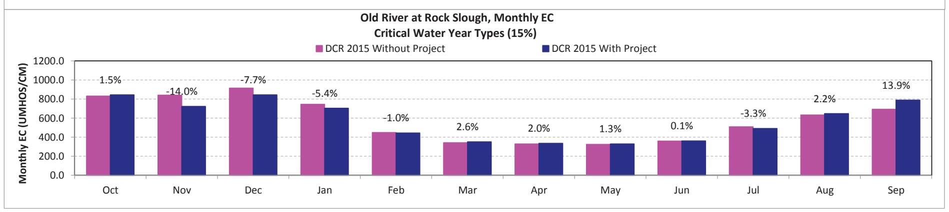
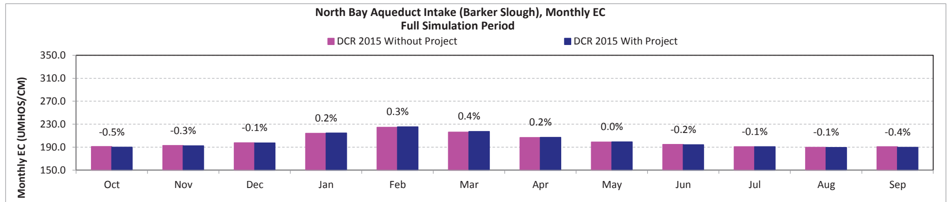
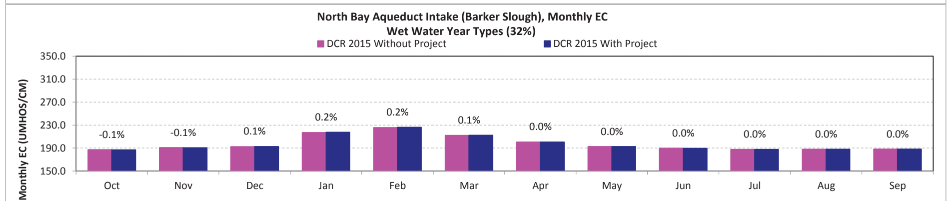


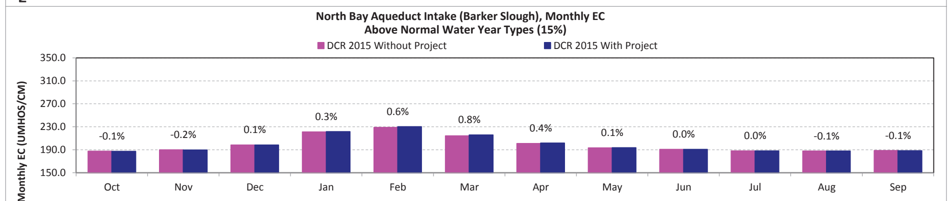
Table SQ-28-a
North Bay Aqueduct Intake (Barker Slough), Monthly EC
Long-term Average and Average by Water Year Type

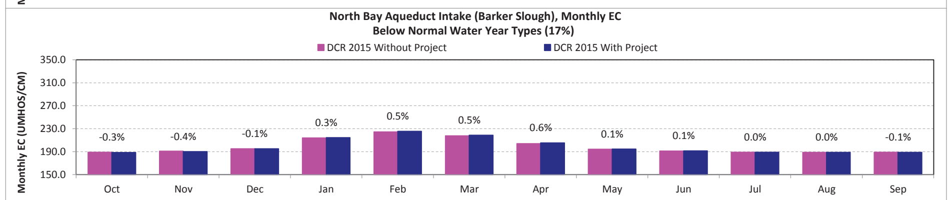
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	190.9	192.9	197.5	214.1	224.5	216.3	206.6	199.0	194.6	190.8	189.7	190.7
DCR 2015 With Project	189.9	192.3	197.4	214.5	225.3	217.2	207.1	199.1	194.3	190.7	189.6	189.8
Difference	-1.0	-0.7	-0.1	0.4	0.7	0.9	0.5	0.1	-0.3	-0.1	-0.1	-0.8
Percent Difference[3]	-0.5%	-0.3%	-0.1%	0.2%	0.3%	0.4%	0.2%	0.0%	-0.2%	-0.1%	-0.1%	-0.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	187.1	190.9	192.6	217.1	225.7	212.1	200.6	192.7	189.7	187.8	188.1	188.3
DCR 2015 With Project	187.0	190.7	192.8	217.6	226.2	212.4	200.7	192.6	189.6	187.8	188.0	188.3
Difference	-0.1	-0.2	0.2	0.5	0.5	0.2	0.1	-0.1	-0.1	-0.1	0.0	-0.1
Percent Difference	-0.1%	-0.1%	0.1%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (14.6%)												
DCR 2015 Without Project	187.7	190.0	198.3	221.1	229.0	214.3	201.0	193.3	190.8	188.1	188.0	188.6
DCR 2015 With Project	187.4	189.7	198.4	221.8	230.3	215.9	201.8	193.5	190.7	188.1	187.9	188.4
Difference	-0.3	-0.4	0.2	0.7	1.3	1.7	0.8	0.2	0.0	-0.1	-0.1	-0.2
Percent Difference	-0.1%	-0.2%	0.1%	0.3%	0.6%	0.8%	0.4%	0.1%	0.0%	0.0%	-0.1%	-0.1%
Below Normal (17.1%)												
DCR 2015 Without Project	189.2	190.9	195.3	214.0	224.6	217.7	204.1	194.4	191.3	189.2	188.8	189.0
DCR 2015 With Project	188.7	190.1	195.1	214.6	225.6	218.8	205.3	194.7	191.4	189.2	188.8	188.8
Difference	-0.5	-0.7	-0.1	0.6	1.0	1.1	1.2	0.3	0.1	0.0	0.0	-0.2
Percent Difference	-0.3%	-0.4%	-0.1%	0.3%	0.5%	0.5%	0.6%	0.1%	0.1%	0.0%	0.0%	-0.1%
Dry (22%)												
DCR 2015 Without Project	194.0	195.7	200.7	209.6	223.1	220.5	212.2	201.9	194.2	190.6	188.7	191.6
DCR 2015 With Project	192.2	194.9	199.8	210.0	223.8	221.6	212.9	202.2	194.1	190.6	188.5	189.8
Difference	-1.8	-0.8	-0.9	0.4	0.7	1.1	0.7	0.3	-0.1	0.0	-0.2	-1.8
Percent Difference	-0.9%	-0.4%	-0.4%	0.2%	0.3%	0.5%	0.3%	0.2%	0.0%	0.0%	-0.1%	-0.9%
Critical (14.6%)												
DCR 2015 Without Project	199.9	198.3	205.5	207.3	219.5	219.5	220.0	219.2	213.5	202.1	197.5	198.2
DCR 2015 With Project	196.8	196.8	205.5	207.2	220.0	220.7	220.0	219.0	211.4	201.3	197.4	195.7
Difference	-3.2	-1.5	0.0	-0.1	0.4	1.1	0.1	-0.2	-2.0	-0.8	-0.1	-2.4
Percent Difference	-1.6%	-0.8%	0.0%	0.0%	0.2%	0.5%	0.0%	-0.1%	-1.0%	-0.4%	-0.1%	-1.2%

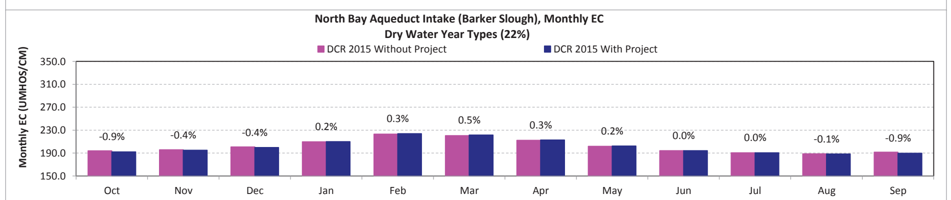
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











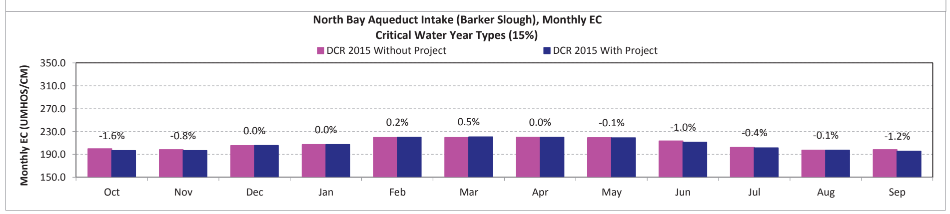


Table SQ-29-a
Old River at Los Vaqueros Intake, Monthly EC
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	517.9	501.9	518.4	554.1	451.2	379.9	366.4	383.9	323.5	329.5	430.9	550.3
DCR 2015 With Project	509.4	474.4	511.2	559.0	449.8	380.4	368.5	385.1	324.7	329.0	436.2	559.2
Difference	-8.5	-27.5	-7.2	4.9	-1.4	0.4	2.1	1.1	1.1	-0.6	5.3	8.9
Percent Difference[3]	-1.7%	-5.5%	-1.4%	0.9%	-0.3%	0.1%	0.6%	0.3%	0.4%	-0.2%	1.2%	1.6%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	287.6	273.0	283.5	426.4	390.3	325.4	264.0	291.6	281.9	264.3	319.3	450.7
DCR 2015 With Project	281.8	269.3	285.5	435.5	394.3	326.0	264.2	291.1	281.9	263.8	317.7	438.0
Difference	-5.8	-3.7	2.0	9.1	4.0	0.6	0.2	-0.6	0.0	-0.5	-1.6	-12.7
Percent Difference	-2.0%	-1.4%	0.7%	2.1%	1.0%	0.2%	0.1%	-0.2%	0.0%	-0.2%	-0.5%	-2.8%
Above Normal (14.6%)												
DCR 2015 Without Project	294.3	351.6	411.7	548.6	459.3	351.0	329.5	370.3	305.0	267.8	344.7	439.2
DCR 2015 With Project	289.5	353.6	410.9	588.7	465.7	352.1	329.9	370.5	304.8	267.2	339.1	424.2
Difference	-4.8	2.0	-0.7	40.1	6.4	1.1	0.4	0.2	-0.3	-0.6	-5.6	-15.0
Percent Difference	-1.6%	0.6%	-0.2%	7.3%	1.4%	0.3%	0.1%	0.1%	-0.1%	-0.2%	-1.6%	-3.4%
Below Normal (17.1%)												
DCR 2015 Without Project	720.9	676.4	635.5	610.9	462.9	381.7	367.3	410.8	313.3	305.4	446.4	680.5
DCR 2015 With Project	668.4	599.8	588.3	613.6	456.2	376.2	367.1	410.4	317.6	304.6	446.0	662.1
Difference	-52.4	-76.6	-47.2	2.7	-6.7	-5.5	-0.2	-0.4	4.2	-0.8	-0.4	-18.4
Percent Difference	-7.3%	-11.3%	-7.4%	0.4%	-1.4%	-1.4%	-0.1%	-0.1%	1.4%	-0.3%	-0.1%	-2.7%
Dry (22%)												
DCR 2015 Without Project	710.0	640.5	640.5	588.2	456.1	415.5	467.5	464.2	343.2	385.8	545.8	631.2
DCR 2015 With Project	704.6	631.7	679.9	593.4	460.6	418.5	471.2	465.5	343.2	393.1	572.6	666.9
Difference	-5.3	-8.7	39.4	5.3	4.5	3.0	3.6	1.4	0.0	7.4	26.8	35.7
Percent Difference	-0.8%	-1.4%	6.1%	0.9%	1.0%	0.7%	0.8%	0.3%	0.0%	1.9%	4.9%	5.7%
Critical (14.6%)												
DCR 2015 Without Project	715.5	736.7	814.3	719.3	554.5	471.8	472.8	446.0	414.5	476.6	568.3	604.3
DCR 2015 With Project	743.6	657.3	757.5	681.8	530.7	474.2	480.9	453.0	417.7	464.3	574.2	675.4
Difference	28.1	-79.4	-56.8	-37.5	-23.8	2.4	8.1	7.0	3.2	-12.3	5.9	71.1
Percent Difference	3.9%	-10.8%	-7.0%	-5.2%	-4.3%	0.5%	1.7%	1.6%	0.8%	-2.6%	1.0%	11.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

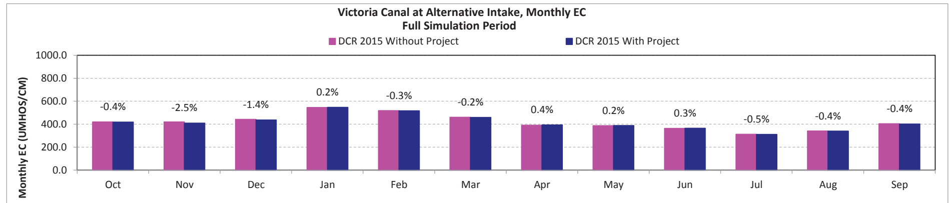
Table SQ-30-a
Victoria Canal at Alternative Intake, Monthly EC
Long-term Average and Average by Water Year Type

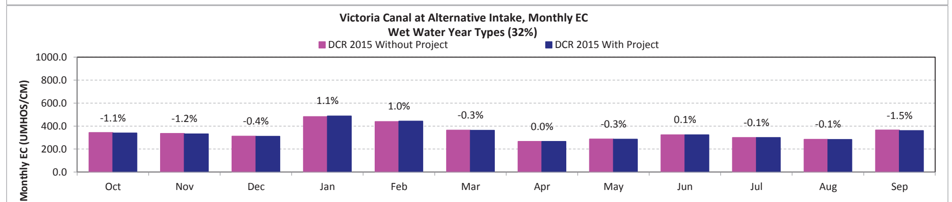
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	420.4	420.2	442.7	545.8	518.6	460.0	391.8	387.3	363.8	313.0	341.2	404.0
DCR 2015 With Project	418.9	409.9	436.5	547.2	517.2	459.1	393.5	387.9	365.0	311.4	339.7	402.2
Difference	-1.5	-10.3	-6.2	1.4	-1.4	-0.9	1.7	0.7	1.2	-1.5	-1.5	-1.8
Percent Difference[3]	-0.4%	-2.5%	-1.4%	0.2%	-0.3%	-0.2%	0.4%	0.2%	0.3%	-0.5%	-0.4%	-0.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	342.9	335.2	311.9	482.3	439.0	363.8	265.8	286.4	323.5	299.8	283.8	365.9
DCR 2015 With Project	338.9	331.3	310.6	487.7	443.2	362.7	265.9	285.4	323.7	299.4	283.4	360.3
Difference	-3.9	-4.0	-1.3	5.4	4.2	-1.0	0.1	-1.0	0.3	-0.4	-0.4	-5.6
Percent Difference	-1.1%	-1.2%	-0.4%	1.1%	1.0%	-0.3%	0.0%	-0.3%	0.1%	-0.1%	-0.1%	-1.5%
Above Normal (14.6%)												
DCR 2015 Without Project	328.2	356.1	388.6	554.0	540.3	432.3	341.6	364.4	356.3	291.3	284.3	349.6
DCR 2015 With Project	323.0	355.6	384.4	571.3	543.0	433.0	342.0	364.5	356.1	290.0	283.2	342.3
Difference	-5.3	-0.5	-4.2	17.3	2.7	0.7	0.4	0.1	-0.2	-1.2	-1.0	-7.3
Percent Difference	-1.6%	-0.1%	-1.1%	3.1%	0.5%	0.2%	0.1%	0.0%	-0.1%	-0.4%	-0.4%	-2.1%
Below Normal (17.1%)												
DCR 2015 Without Project	474.0	466.8	506.8	575.8	541.1	481.2	394.4	407.8	363.1	283.7	330.9	438.6
DCR 2015 With Project	456.2	443.5	479.8	577.1	539.5	478.2	393.2	407.3	366.9	284.2	330.8	432.6
Difference	-17.8	-23.3	-27.1	1.4	-1.5	-3.1	-1.2	-0.5	3.8	0.5	0.0	-6.0
Percent Difference	-3.8%	-5.0%	-5.3%	0.2%	-0.3%	-0.6%	-0.3%	-0.1%	1.0%	0.2%	0.0%	-1.4%
Dry (22%)												
DCR 2015 Without Project	488.4	472.9	516.6	555.8	547.4	539.2	518.1	476.9	386.7	312.4	403.6	432.8
DCR 2015 With Project	489.2	464.3	532.9	559.0	548.3	540.8	521.6	477.9	387.0	311.9	409.8	439.9
Difference	0.8	-8.6	16.4	3.2	0.9	1.6	3.5	0.9	0.3	-0.5	6.1	7.1
Percent Difference	0.2%	-1.8%	3.2%	0.6%	0.2%	0.3%	0.7%	0.2%	0.1%	-0.1%	1.5%	1.6%
Critical (14.6%)												
DCR 2015 Without Project	515.9	535.3	594.2	625.5	599.9	552.4	522.5	470.2	425.0	398.3	440.9	457.2
DCR 2015 With Project	538.8	513.8	566.1	599.5	579.0	549.0	529.9	476.0	428.2	390.0	423.6	460.9
Difference	22.9	-21.4	-28.2	-26.0	-20.9	-3.4	7.4	5.8	3.2	-8.3	-17.4	3.6
Percent Difference	4.4%	-4.0%	-4.7%	-4.2%	-3.5%	-0.6%	1.4%	1.2%	0.7%	-2.1%	-3.9%	0.8%

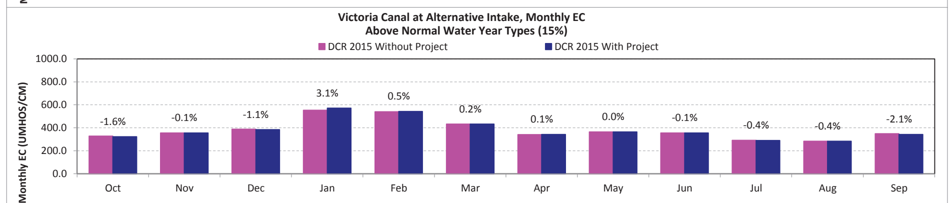
1 Based on the 82-year simulation period

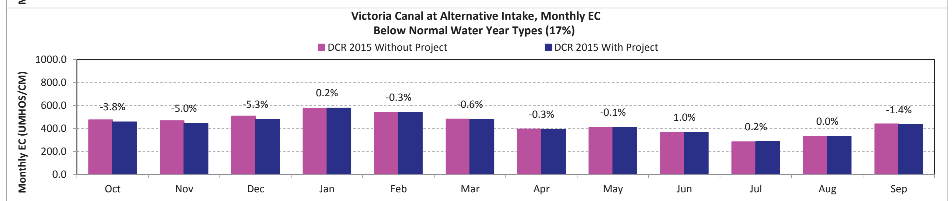
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

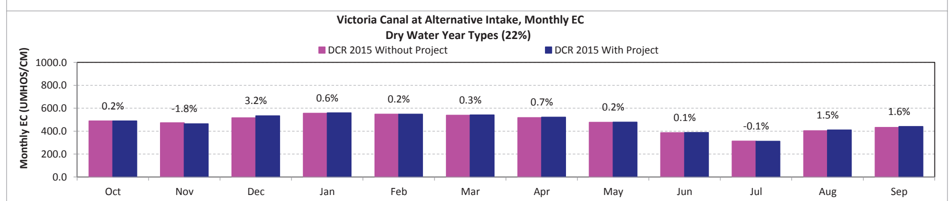
3 Relative difference of the monthly average











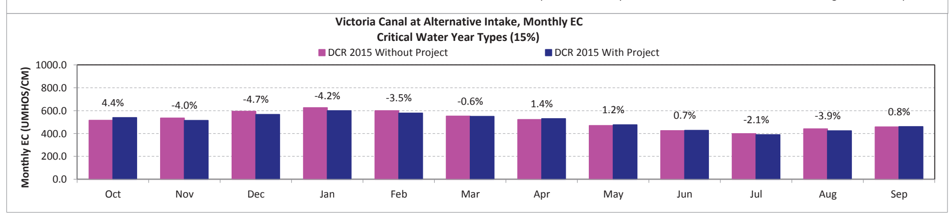


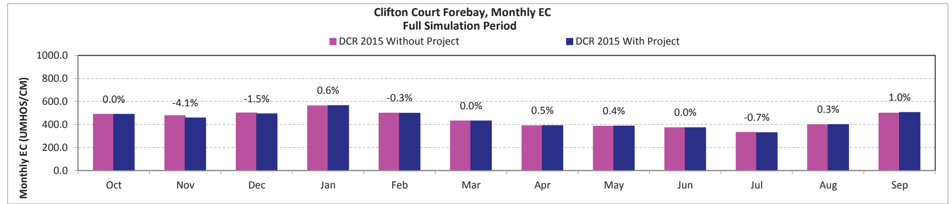
Table SQ-31-a
Clifton Court Forebay, Monthly EC
Long-term Average and Average by Water Year Type

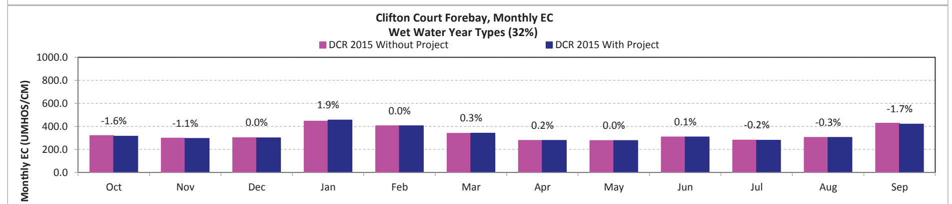
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	487.7	476.3	499.2	560.8	499.0	430.6	388.1	384.1	371.7	331.1	398.2	498.2
DCR 2015 With Project	487.9	457.0	491.5	564.4	497.4	430.5	390.1	385.6	371.7	328.8	399.6	503.3
Difference	0.2	-19.4	-7.6	3.6	-1.6	-0.1	2.0	1.5	0.0	-2.3	1.4	5.1
Percent Difference[3]	0.0%	-4.1%	-1.5%	0.6%	-0.3%	0.0%	0.5%	0.4%	0.0%	-0.7%	0.3%	1.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	319.7	297.5	300.7	446.0	404.7	339.6	277.3	276.1	307.6	279.8	304.3	426.9
DCR 2015 With Project	314.5	294.2	300.6	454.4	404.8	340.8	277.8	276.2	307.8	279.4	303.3	419.5
Difference	-5.2	-3.3	-0.1	8.4	0.0	1.2	0.5	0.1	0.2	-0.4	-1.0	-7.4
Percent Difference	-1.6%	-1.1%	0.0%	1.9%	0.0%	0.3%	0.2%	0.0%	0.1%	-0.2%	-0.3%	-1.7%
Above Normal (14.6%)												
DCR 2015 Without Project	310.0	351.4	412.1	562.9	513.8	403.2	343.4	347.6	344.2	283.7	317.8	419.7
DCR 2015 With Project	304.7	352.5	408.7	593.8	520.7	404.3	343.8	347.7	344.9	283.0	314.6	406.6
Difference	-5.2	1.1	-3.4	30.9	6.9	1.2	0.4	0.1	0.8	-0.7	-3.2	-13.1
Percent Difference	-1.7%	0.3%	-0.8%	5.5%	1.3%	0.3%	0.1%	0.0%	0.2%	-0.2%	-1.0%	-3.1%
Below Normal (17.1%)												
DCR 2015 Without Project	641.1	605.2	603.0	619.1	515.6	436.8	387.3	390.8	366.9	301.3	400.6	589.0
DCR 2015 With Project	602.9	550.0	558.0	620.1	517.1	432.5	386.9	390.7	368.4	300.9	400.4	577.3
Difference	-38.2	-55.2	-44.9	1.0	1.6	-4.3	-0.4	-0.1	1.4	-0.4	-0.2	-11.7
Percent Difference	-6.0%	-9.1%	-7.5%	0.2%	0.3%	-1.0%	-0.1%	0.0%	0.4%	-0.1%	0.0%	-2.0%
Dry (22%)												
DCR 2015 Without Project	638.7	589.3	608.4	594.5	530.3	496.0	480.3	468.9	411.3	361.0	496.5	551.1
DCR 2015 With Project	644.9	575.2	638.8	599.1	532.5	498.9	483.0	472.0	410.5	363.0	515.6	579.3
Difference	6.2	-14.1	30.4	4.6	2.2	2.8	2.7	3.1	-0.8	2.0	19.2	28.2
Percent Difference	1.0%	-2.4%	5.0%	0.8%	0.4%	0.6%	0.6%	0.7%	-0.2%	0.6%	3.9%	5.1%
Critical (14.6%)												
DCR 2015 Without Project	623.9	668.9	731.4	689.1	622.0	549.8	535.6	519.2	484.2	479.5	531.8	546.2
DCR 2015 With Project	677.5	628.1	689.6	656.2	599.0	546.4	544.1	524.8	482.4	462.9	518.0	581.3
Difference	53.5	-40.8	-41.8	-32.9	-23.0	-3.4	8.6	5.5	-1.9	-16.5	-13.8	35.2
Percent Difference	8.6%	-6.1%	-5.7%	-4.8%	-3.7%	-0.6%	1.6%	1.1%	-0.4%	-3.4%	-2.6%	6.4%

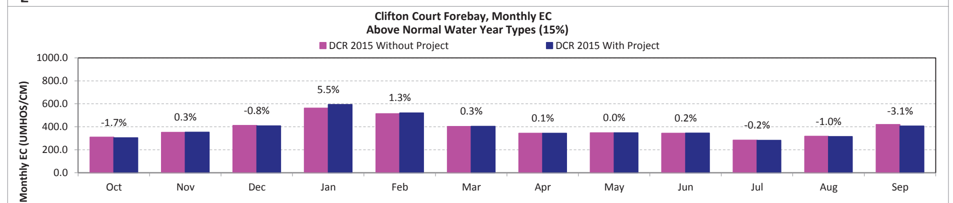
1 Based on the 82-year simulation period

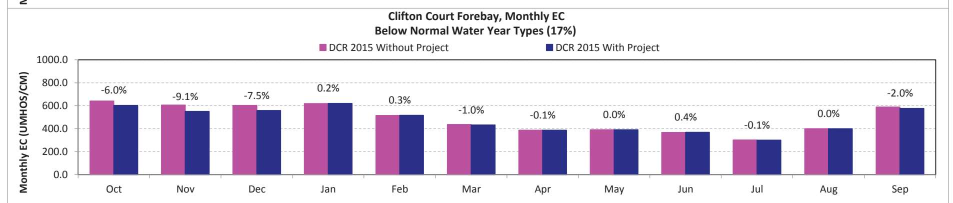
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

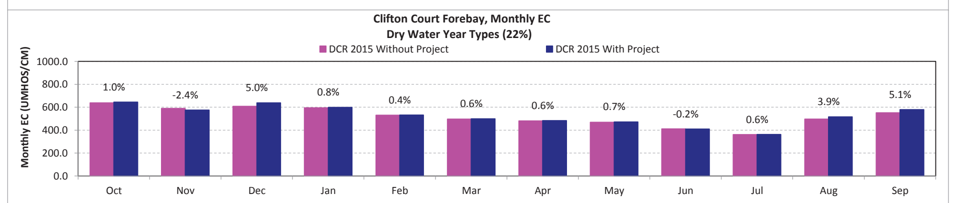
3 Relative difference of the monthly average











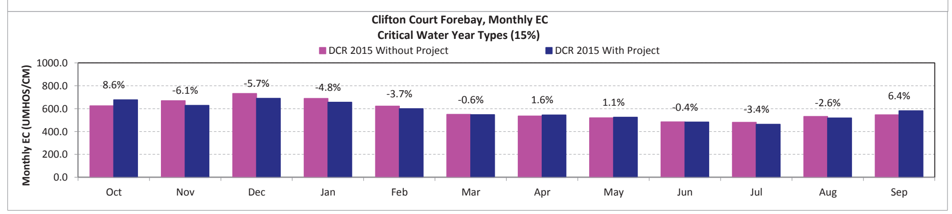


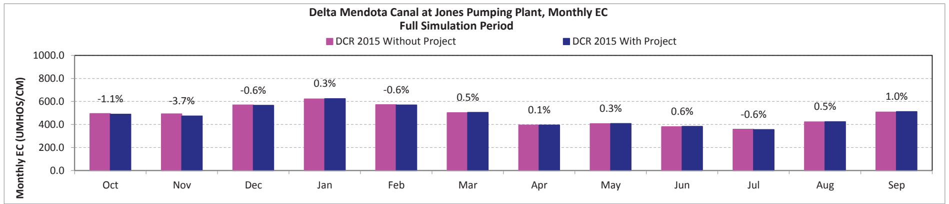
Table SQ-32-a
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Long-term Average and Average by Water Year Type

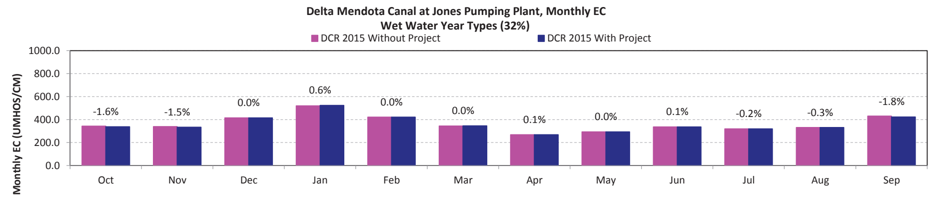
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	495.1	491.8	569.5	622.2	572.4	502.3	394.6	407.0	380.7	358.4	421.9	507.2
DCR 2015 With Project	489.7	473.7	566.2	623.7	568.7	505.0	395.0	408.2	382.8	356.4	423.9	512.1
Difference	-5.4	-18.1	-3.3	1.6	-3.7	2.7	0.4	1.2	2.1	-2.0	2.0	4.9
Percent Difference[3]	-1.1%	-3.7%	-0.6%	0.3%	-0.6%	0.5%	0.1%	0.3%	0.6%	-0.6%	0.5%	1.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	343.8	339.2	415.0	520.4	421.5	345.2	268.9	293.6	336.2	320.3	331.8	430.3
DCR 2015 With Project	338.2	334.1	415.1	523.7	421.5	345.3	269.1	293.8	336.5	319.6	330.9	422.5
Difference	-5.6	-5.1	0.1	3.2	0.0	0.2	0.2	0.1	0.3	-0.7	-0.9	-7.8
Percent Difference	-1.6%	-1.5%	0.0%	0.6%	0.0%	0.0%	0.1%	0.0%	0.1%	-0.2%	-0.3%	-1.8%
Above Normal (14.6%)												
DCR 2015 Without Project	346.5	386.5	517.4	631.3	581.3	426.6	338.3	373.4	371.4	326.4	353.9	431.1
DCR 2015 With Project	338.4	388.0	515.5	644.6	583.5	427.2	338.4	373.4	371.1	322.7	351.1	419.2
Difference	-8.1	1.5	-1.9	13.3	2.2	0.6	0.1	0.0	-0.3	-3.7	-2.8	-11.9
Percent Difference	-2.3%	0.4%	-0.4%	2.1%	0.4%	0.1%	0.0%	0.0%	-0.1%	-1.1%	-0.8%	-2.8%
Below Normal (17.1%)												
DCR 2015 Without Project	617.7	598.7	626.3	655.2	578.6	489.7	380.9	409.0	376.8	334.4	430.2	591.1
DCR 2015 With Project	585.1	551.1	602.5	660.3	574.7	487.8	380.9	409.0	385.0	333.4	428.4	579.8
Difference	-32.6	-47.6	-23.8	5.1	-3.8	-2.0	0.0	0.1	8.2	-1.0	-1.8	-11.3
Percent Difference	-5.3%	-7.9%	-3.8%	0.8%	-0.7%	-0.4%	0.0%	0.0%	2.2%	-0.3%	-0.4%	-1.9%
Dry (22%)												
DCR 2015 Without Project	622.0	585.8	659.6	661.4	659.6	632.4	482.8	489.6	401.7	384.6	516.0	566.1
DCR 2015 With Project	620.6	578.6	678.6	663.3	662.2	633.7	483.1	490.9	402.8	386.5	532.2	589.6
Difference	-1.4	-7.2	19.0	1.9	2.5	1.3	0.3	1.3	1.1	1.9	16.2	23.5
Percent Difference	-0.2%	-1.2%	2.9%	0.3%	0.4%	0.2%	0.1%	0.3%	0.3%	0.5%	3.1%	4.1%
Critical (14.6%)												
DCR 2015 Without Project	637.9	662.0	754.8	736.0	752.2	738.1	607.0	560.3	459.2	462.0	534.3	564.0
DCR 2015 With Project	661.7	614.5	732.9	717.7	725.6	756.1	608.8	566.2	462.1	451.6	530.4	604.0
Difference	23.8	-47.5	-21.9	-18.4	-26.7	18.0	1.8	5.9	3.0	-10.4	-3.9	40.0
Percent Difference	3.7%	-7.2%	-2.9%	-2.5%	-3.5%	2.4%	0.3%	1.1%	0.6%	-2.3%	-0.7%	7.1%

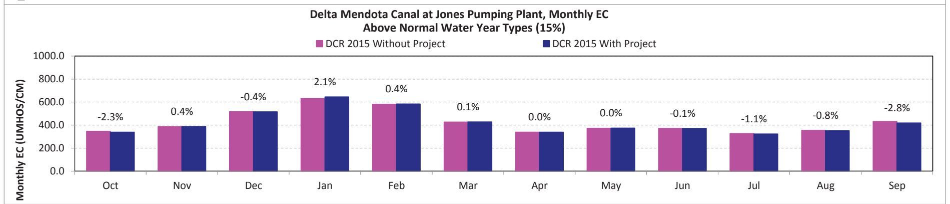
1 Based on the 82-year simulation period

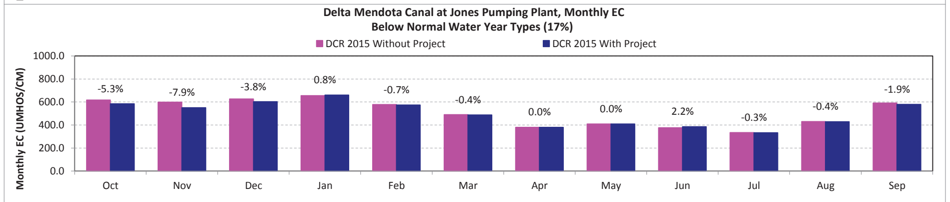
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

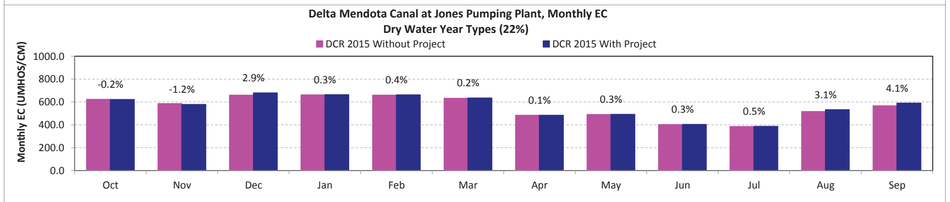
3 Relative difference of the monthly average

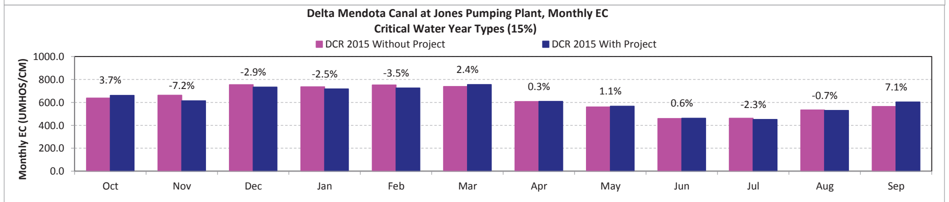












Sacramento-San Joaquin Delta Modeling

Exceedance Probability Charts and Tables

Figure SQ-01-b
X2, Monthly Position
Probability of Exceedance

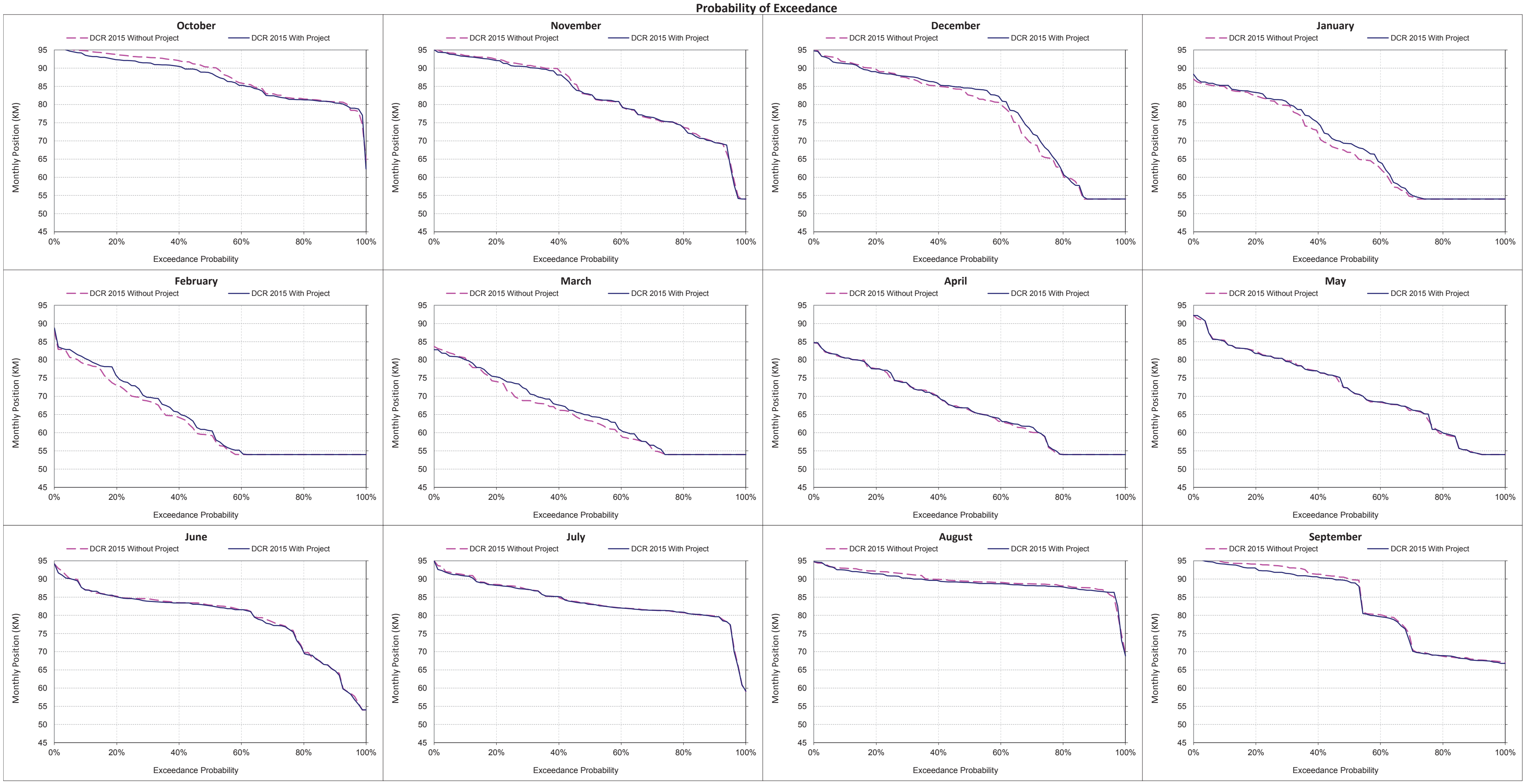


Table SQ-01-b
X2, Monthly Position
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Position (KM)	DCR 2015 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	97.2	96.6	-0.6	-0.7%
1.2%	96.6	96.2	-0.4	-0.4%
2.5%	96.2	95.6	-0.6	-0.7%
3.7%	96.1	95.0	-1.0	-1.1%
4.9%	95.8	94.7	-1.1	-1.2%
6.2%	95.0	94.5	-0.5	-0.5%
7.4%	94.9	94.2	-0.7	-0.7%
8.6%	94.9	94.2	-0.7	-0.7%
9.9%	94.8	93.6	-1.3	-1.3%
11.1%	94.7	93.3	-1.4	-1.5%
12.3%	94.5	93.2	-1.3	-1.4%
13.6%	94.4	93.2	-1.2	-1.3%
14.8%	94.3	93.0	-1.3	-1.4%
16.0%	94.1	93.0	-1.1	-1.2%
17.3%	94.0	92.8	-1.2	-1.3%
18.5%	93.9	92.5	-1.4	-1.5%
19.8%	93.8	92.3	-1.5	-1.6%
21.0%	93.6	92.2	-1.4	-1.5%
22.2%	93.5	92.1	-1.4	-1.5%
23.5%	93.4	92.1	-1.3	-1.4%
24.7%	93.2	92.1	-1.1	-1.2%
25.9%	93.2	92.0	-1.2	-1.3%
27.2%	93.1	91.7	-1.5	-1.6%
28.4%	93.1	91.5	-1.6	-1.7%
29.6%	93.0	91.5	-1.6	-1.7%
30.9%	92.9	91.4	-1.5	-1.6%
32.1%	92.9	91.0	-1.9	-2.0%
33.3%	92.8	91.0	-1.8	-2.0%
34.6%	92.7	90.9	-1.8	-1.9%
35.8%	92.5	90.9	-1.6	-1.8%
37.0%	92.4	90.8	-1.6	-1.7%
38.3%	92.3	90.7	-1.6	-1.8%
39.5%	92.1	90.5	-1.6	-1.7%
40.7%	91.9	90.3	-1.6	-1.7%
42.0%	91.8	89.8	-2.0	-2.2%
43.2%	91.7	89.8	-2.0	-2.2%
44.4%	91.2	89.7	-1.5	-1.6%
45.7%	91.1	89.6	-1.5	-1.7%
46.9%	90.9	88.9	-1.9	-2.1%
48.1%	90.4	88.9	-1.5	-1.6%
49.4%	90.3	88.9	-1.4	-1.6%
50.6%	90.2	88.5	-1.7	-1.9%
51.9%	90.1	87.8	-2.3	-2.5%
53.1%	89.3	87.4	-2.0	-2.2%
54.3%	88.2	87.1	-1.2	-1.3%
55.6%	87.9	86.3	-1.5	-1.7%
56.8%	87.3	86.3	-1.0	-1.2%
58.0%	86.5	86.0	-0.5	-0.6%
59.3%	86.0	85.3	-0.7	-0.9%
60.5%	85.8	85.3	-0.5	-0.6%
61.7%	85.6	85.0	-0.6	-0.8%
63.0%	85.5	84.9	-0.5	-0.6%
64.2%	84.8	84.4	-0.4	-0.4%
65.4%	84.5	84.2	-0.3	-0.4%
66.7%	84.4	83.7	-0.7	-0.8%
67.9%	83.0	82.5	-0.5	-0.5%
69.1%	83.0	82.4	-0.5	-0.6%
70.4%	82.9	82.4	-0.5	-0.6%
71.6%	82.6	82.1	-0.4	-0.5%
72.8%	82.6	81.9	-0.7	-0.8%
74.1%	81.9	81.8	-0.2	-0.2%
75.3%	81.9	81.4	-0.5	-0.6%
76.5%	81.7	81.4	-0.3	-0.4%
77.8%	81.7	81.4	-0.3	-0.4%
79.0%	81.7	81.4	-0.3	-0.4%
80.2%	81.5	81.3	-0.2	-0.3%
81.5%	81.5	81.3	-0.2	-0.3%
82.7%	81.3	81.2	-0.1	-0.1%
84.0%	81.3	81.1	-0.2	-0.3%
85.2%	81.2	81.0	-0.2	-0.3%
86.4%	81.0	80.9	-0.1	-0.1%
87.7%	80.9	80.8	0.0	0.0%
88.9%	80.8	80.7	-0.1	-0.1%
90.1%	80.8	80.5	-0.3	-0.4%
91.4%	80.7	80.4	-0.4	-0.5%
92.6%	80.6	80.2	-0.5	-0.6%
93.8%	80.1	79.7	-0.5	-0.6%
95.1%	78.4	79.0	0.6	0.8%
96.3%	78.4	79.0	0.6	0.8%
97.5%	78.1	78.8	0.7	0.9%
98.8%	74.6	77.1	2.5	3.3%
100.0%	64.6	62.3	-2.3	-3.6%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Position (KM)	DCR 2015 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.2	95.0	-0.2	-0.2%
1.2%	95.0	94.4	-0.6	-0.6%
2.5%	94.6	94.3	-0.3	-0.3%
3.7%	94.5	94.2	-0.2	-0.3%
4.9%	94.2	93.8	-0.3	-0.4%
6.2%	94.1	93.8	-0.4	-0.4%
7.4%	93.9	93.6	-0.3	-0.3%
8.6%	93.8	93.3	-0.5	-0.5%
9.9%	93.5	93.3	-0.2	-0.2%
11.1%	93.4	93.1	-0.3	-0.3%
12.3%	93.3	93.0	-0.3	-0.3%
13.6%	93.1	92.9	-0.2	-0.2%
14.8%	93.0	92.8	-0.3	-0.3%
16.0%	93.0	92.6	-0.4	-0.4%
17.3%	93.0	92.5	-0.4	-0.5%
18.5%	92.8	92.4	-0.4	-0.5%
19.8%	92.5	92.1	-0.3	-0.4%
21.0%	92.4	92.1	-0.4	-0.4%
22.2%	92.1	91.4	-0.8	-0.8%
23.5%	91.7	91.3	-0.4	-0.4%
24.7%	91.5	90.7	-0.8	-0.8%
25.9%	91.4	90.6	-0.8	-0.9%
27.2%	91.2	90.5	-0.7	-0.7%
28.4%	91.0	90.5	-0.6	-0.6%
29.6%	90.7	90.4	-0.3	-0.4%
30.9%	90.7	90.1	-0.6	-0.7%
32.1%	90.5	90.1	-0.4	-0.5%
33.3%	90.5	89.9	-0.5	-0.6%
34.6%	90.2	89.8	-0.4	-0.5%
35.8%	90.0	89.7	-0.3	-0.3%
37.0%	90.0	89.3	-0.6	-0.7%
38.3%	89.9	89.2	-0.7	-0.8%
39.5%	89.9	88.1	-1.8	-2.0%
40.7%	88.8	88.1	-0.7	-0.8%
42.0%	88.5	87.2	-1.3	-1.5%
43.2%	87.6	86.3	-1.4	-1.6%
44.4%	85.9	84.9	-0.9	-1.1%
45.7%	85.5	83.9	-1.5	-1.8%
46.9%	83.1	83.7	0.6	0.7%
48.1%	83.0	83.1	0.1	0.2%
49.4%	82.7	82.9	0.2	0.2%
50.6%	82.5	82.6	0.1	0.2%
51.9%	81.4	81.5	0.1	0.1%
53.1%	81.2	81.4	0.2	0.2%
54.3%	81.0	81.2	0.2	0.3%
55.6%	81.0	81.2	0.2	0.2%
56.8%	80.8	81.2	0.3	0.4%
58.0%	80.8	80.9	0.0	0.1%
59.3%	80.5	80.9	0.3	0.4%
60.5%	79.3	79.1	-0.1	-0.1%
61.7%	78.7	78.9	0.2	0.3%
63.0%	78.6	78.7	0.1	0.2%
64.2%	78.5	78.6	0.1	0.2%
65.4%	77.2	77.2	0.0	0.0%
66.7%	76.7	77.1	0.4	0.5%
67.9%	76.5	76.7	0.2	0.3%
69.1%	76.2	76.6	0.4	0.5%
70.4%	76.0	76.4	0.4	0.6%
71.6%	75.8	76.0	0.2	0.3%
72.8%	75.3	75.6	0.2	0.3%
74.1%	75.3	75.3	0.1	0.1%
75.3%	75.2	75.3	0.1	0.1%
76.5%	75.2	75.2	0.0	0.0%
77.8%	74.8	74.6	-0.2	-0.3%
79.0%	74.3	74.4	0.1	0.1%
80.2%	73.7	73.4	-0.2	-0.3%
81.5%	73.5	72.2	-1.3	-1.8%
82.7%	72.2	71.9	-0.3	-0.4%
84.0%	71.9	71.2	-0.7	-1.0%
85.2%	71.2	70.7	-0.5	-0.7%
86.4%	70.7	70.7	0.0	0.0%
87.7%	70.4	70.2	-0.2	-0.4%
88.9%	70.0	70.0	0.0	0.0%
90.1%	69.5	69.5	0.0	0.0%
91.4%	69.5	69.4	-0.1	-0.1%
92.6%	69.2	69.2	0.0	0.0%
93.8%	66.7	68.8	2.1	3.2%
95.1%	63.9	63.0	-0.9	-1.4%
96.3%	58.9	57.8	-1.0	-1.8%
97.5%	54.7	54.2	-0.5	-1.0%
98.8%	54.0	54.0	0.0	0.1%
100.0%	54.0	54.0	0.0	0.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Position (KM)	DCR 2015 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.2	94.8	-0.4	-0.5%
1.2%	94.8	94.6	-0.2	-0.2%
2.5%	93.4	93.3	-0.2	-0.2%
3.7%	93.4	93.0	-0.3	-0.4%
4.9%	93.2	92.6	-0.6	-0.6%
6.2%	93.0	91.7	-1.3	-1.4%
7.4%	92.9	91.5	-1.4	-1.5%
8.6%	91.9	91.4	-0.5	-0.5%
9.9%	91.8	91.3	-0.5	-0.5%
11.1%	91.7	91.2	-0.5	-0.6%
12.3%	91.4	91.2	-0.2	-0.2%
13.6%	91.0	90.9	-0.2	-0.2%
14.8%	90.9	90.1	-0.7	-0.8%
16.0%	90.2	89.7	-0.5	-0.6%
17.3%	90.1	89.5	-0.6	-0.7%
18.5%	90.0	89.0	-1.0	-1.1%
19.8%	89.8	89.0	-0.8	-0.9%
21.0%	89.1	88.7	-0.4	-0.4%
22.2%	89.0	88.6	-0.5	-0.5%
23.5%	89.0	88.4	-0.6	-0.7%
24.7%	88.6	88.4	-0.3	-0.3%
25.9%	88.5	88.2	-0.3	-0.4%
27.2%	87.6	88.0	0.4	0.5%
28.4%	87.6	87.8	0.3	0.3%
29.6%	87.4	87.8	0.4	0.4%
30.9%	87.0	87.6	0.6	0.7%
32.1%	86.9	87.5	0.7	0.8%
33.3%	86.5	87.3	0.8	1.0%
34.6%	85.8	86.9	1.1	1.2%
35.8%	85.7	86.6	0.9	1.1%
37.0%	85.3	86.3	1.1	1.2%
38.3%	85.2	86.3	1.1	1.3%
39.5%	85.2	86.0	0.8	1.0%
40.7%	84.9	85.3	0.3	0.4%
42.0%	84.9	85.2	0.4	0.4%
43.2%	84.7	85.2	0.5	0.6%
44.4%	84.4	85.0	0.6	0.7%
45.7%	84.3	84.9	0.6	0.7%
46.9%	84.2	84.9	0.6	0.8%
48.1%	83.9	84.6	0.7	0.8%
49.4%	82.7	84.6	1.9	2.3%
50.6%	82.4	84.5	2.0	2.5%
51.9%	82.2	84.2	2.0	2.4%
53.1%	81.5	84.1	2.6	3.2%
54.3%	81.4	84.1	2.6	3.2%
55.6%	81.0	83.9	2.9	3.5%
56.8%	81.0	82.7	1.7	2.1%
58.0%	80.7	82.6	1.9	2.4%
59.3%	80.6	82.3	1.7	2.0%
60.5%	79.6	80.9	1.3	1.6%
61.7%	78.7	80.8	2.1	2.6%
63.0%	77.7	78.4	0.7	0.9%
64.2%	75.1	78.3	3.1	4.2%
65.4%	75.0	77.7	2.7	3.6%
66.7%	72.1	76.1	4.0	5.5%
67.9%	70.9	74.5	3.6	5.1%
69.1%	69.8	73.5	3.7	5.3%
70.4%	69.0	71.8	2.8	4.1%
71.6%	68.8	71.4	2.6	3.8%
72.8%	66.0	69.6	3.7	5.6%
74.1%	65.5	68.2	2.7	4.1%
75.3%	65.3	67.3	2.0	3.1%
76.5%	65.2	65.8	0.6	0.9%
77.8%	62.9	64.5	1.6	2.6%
79.0%	62.7	62.8	0.2	0.2%
80.2%	60.0	60.6	0.6	1.0%
81.5%	59.8	59.8	0.0	0.0%
82.7%	59.6	58.6	-0.9	-1.6%
84.0%	58.8	57.8	-1.0	-1.7%
85.2%	57.2	57.7	0.6	1.0%
86.4%	54.0	54.7	0.7	1.3%
87.7%	54.0	54.0	0.0	0.0%
88.9%	54.0	54.0	0.0	0.0%
90.1%	54.0	54.0	0.0	0.0%
91.4%	54.0	54.0	0.0	0.0%
92.6%	54.0	54.0	0.0	0.0%
93.8%	54.0	54.0	0.0	0.0%
95.1%	54.0	54.0	0.0	0.0%
96.3%	54.0	54.0	0.0	0.0%
97.5%	54.0	54.0	0.0	0.0%
98.8%	54.0	54.0	0.0	0.0%
100.0%	54.0	54.0	0.0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Position (KM)	DCR 2015 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	87.0	88.3	1.4	1.6%
1.2%	86.2	86.9	0.7	0.8%
2.5%	85.9	86.2	0.4	0.4%
3.7%	85.7	86.2	0.5	0.6%
4.9%	85.4	85.8	0.5	0.5%
6.2%	85.2	85.8	0.6	0.7%
7.4%	85.2	85.4	0.2	0.3%
8.6%	85.1	85.3	0.2	0.2%
9.9%	85.0	85.3	0.3	0.3%
11.1%	84.1	85.2	1.1	1.3%
12.3%	83.8	84.2	0.4	0.4%
13.6%	83.6	84.1	0.4	0.5%
14.8%	83.6	83.9	0.3	0.3%
16.0%	83.5	83.8	0.3	0.4%
17.3%	83.4	83.8	0.4	0.5%
18.5%	82.8	83.5	0.6	0.8%
19.8%	82.4	83.4	0.9	1.1%
21.0%	82.1	83.2	1.0	1.3%
22.2%	81.8	82.9	1.1	1.4%
23.5%	81.6	81.7	0.1	0.2%
24.7%	81.0	81.6	0.6	0.7%
25.9%	80.9	81.4	0.5	0.6%
27.2%	80.0	81.4	1.4	1.7%
28.4%	79.8	81.3	1.4	1.8%
29.6%	79.8	80.9	1.1	1.4%
30.9%	79.7	80.0	0.3	0.4%
32.1%	77.9	79.5	1.6	2.1%
33.3%	77.5	78.7	1.2	1.5%
34.6%	76.8	78.7	1.8	2.4%
35.8%	74.1	77.1	2.9	4.0%
37.0%	73.9	76.8	2.9	3.9%
38.3%	73.2	76.0	2.7	3.7%
39.5%	73.0	75.3	2.3	3.2%
40.7%	70.3	74.2	3.9	5.5%
42.0%	69.6	72.1	2.5	3.5%
43.2%	69.4	71.9	2.5	3.6%
44.4%	68.4	70.7	2.3	3.3%
45.7%	68.1	70.2	2.1	3.1%
46.9%	67.7	69.9	2.2	3.3%
48.1%	67.5	69.4	1.9	2.8%
49.4%	66.9	69.3	2.4	3.6%
50.6%	66.8	69.2	2.4	3.6%
51.9%	66.2	68.5	2.4	3.6%
53.1%	65.0	68.1	3.1	4.8%
54.3%	64.7	67.8	3.1	4.8%
55.6%	64.7	67.2	2.5	3.9%
56.8%	64.6	66.5	1.9	2.9%
58.0%	63.7	66.4	2.7	4.2%
59.3%	63.0	64.4	1.4	2.1%
60.5%	61.9	63.8	1.9	3.1%
61.7%	60.9	61.9	1.0	1.7%
63.0%	59.2	60.8	1.7	2.8%
64.2%	57.3	58.6	1.3	2.2%
65.4%	57.2	58.1	1.0	1.7%
66.7%	56.4	57.3	0.9	1.6%
67.9%	56.3	57.0	0.7	1.3%
69.1%	54.8	55.6	0.8	1.5%
70.4%	54.6	54.9	0.4	0.7%
71.6%	54.0	54.6	0.6	1.1%
72.8%	54.0	54.3	0.3	0.6%
74.1%	54.0	54.0	0.0	0.0%
75.3%	54.0	54.0	0.0	0.0%
76.5%	54.0	54.0	0.0	0.0%
77.8%	54.0	54.0	0.0	0.0%
79.0%	54.0	54.0	0.0	0.0%
80.2%	54.0	54.0	0.0	0.0%
81.5%	54.0	54.0	0.0	0.0%
82.7%	54.0	54.0	0.0	0.0%
84.0%	54.0	54.0	0.0	0.0%
85.2%	54.0	54.0	0.0	0.0%
86.4%	54.0	54.0	0.0	0.0%
87.7%	54.0	54.0	0.0	0.0%
88.9%	54.0	54.0	0.0	0.0%
90.1%	54.0	54.0	0.0	0.0%
91.4%	54.0	54.0	0.0	0.0%
92.6%	54.0	54.0	0.0	0.0%
93.8%	54.0	54.0	0.0	0.0%
95.1%	54.0	54.0	0.0	0.0%
96.3%	54.0	54.0	0.0	0.0%
97.5%	54.0	54.0	0.0	0.0%
98.8%	54.0	54.0	0.0	0.0%
100.0%	54.0	54.0	0.0	0.0%

Table SQ-01-b

X2, Monthly Position

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project	DCR 2015 With Project	Absolute Difference (KM)	Relative Difference (%)
	Monthly Position (KM)	Monthly Position (KM)		
0.0%	88.0	88.8	0.8	0.9%
1.2%	82.9	83.6	0.7	0.8%
2.5%	82.9	83.2	0.3	0.3%
3.7%	82.5	82.9	0.4	0.5%
4.9%	80.7	82.9	2.2	2.7%
6.2%	80.5	82.2	1.7	2.1%
7.4%	80.1	81.5	1.4	1.7%
8.6%	79.3	81.1	1.8	2.2%
9.9%	78.8	80.4	1.6	2.0%
11.1%	78.6	79.9	1.3	1.6%
12.3%	78.3	79.3	1.0	1.3%
13.6%	78.1	78.9	0.7	0.9%
14.8%	77.3	78.4	1.1	1.4%
16.0%	75.7	78.2	2.5	3.3%
17.3%	74.7	78.2	3.5	4.7%
18.5%	73.7	78.1	4.4	6.0%
19.8%	73.1	75.8	2.7	3.7%
21.0%	72.8	74.6	1.8	2.5%
22.2%	72.0	74.1	2.0	2.8%
23.5%	71.1	73.8	2.7	3.8%
24.7%	70.1	73.0	2.9	4.2%
25.9%	69.9	72.9	3.0	4.4%
27.2%	69.8	72.1	2.3	3.3%
28.4%	68.9	70.3	1.4	2.0%
29.6%	68.8	69.7	0.9	1.4%
30.9%	68.5	69.7	1.2	1.7%
32.1%	68.1	69.4	1.3	1.9%
33.3%	67.6	69.4	1.8	2.7%
34.6%	65.9	67.8	2.0	3.0%
35.8%	64.8	67.5	2.7	4.2%
37.0%	64.7	67.0	2.3	3.6%
38.3%	64.7	65.9	1.2	1.9%
39.5%	64.4	65.7	1.3	2.0%
40.7%	63.9	64.9	0.9	1.5%
42.0%	63.5	64.6	1.2	1.9%
43.2%	62.3	64.0	1.7	2.7%
44.4%	61.3	63.2	1.9	3.1%
45.7%	59.8	61.4	1.6	2.7%
46.9%	59.6	60.9	1.4	2.3%
48.1%	59.5	60.9	1.4	2.3%
49.4%	59.4	60.6	1.3	2.1%
50.6%	59.2	60.5	1.3	2.2%
51.9%	57.4	58.0	0.6	1.0%
53.1%	56.4	57.4	1.0	1.8%
54.3%	56.3	56.5	0.2	0.4%
55.6%	55.3	55.9	0.6	1.1%
56.8%	54.7	55.5	0.8	1.5%
58.0%	54.0	55.2	1.2	2.2%
59.3%	54.0	55.2	1.2	2.2%
60.5%	54.0	54.2	0.2	0.3%
61.7%	54.0	54.0	0.0	0.0%
63.0%	54.0	54.0	0.0	0.0%
64.2%	54.0	54.0	0.0	0.0%
65.4%	54.0	54.0	0.0	0.0%
66.7%	54.0	54.0	0.0	0.0%
67.9%	54.0	54.0	0.0	0.0%
69.1%	54.0	54.0	0.0	0.0%
70.4%	54.0	54.0	0.0	0.0%
71.6%	54.0	54.0	0.0	0.0%
72.8%	54.0	54.0	0.0	0.0%
74.1%	54.0	54.0	0.0	0.0%
75.3%	54.0	54.0	0.0	0.0%
76.5%	54.0	54.0	0.0	0.0%
77.8%	54.0	54.0	0.0	0.0%
79.0%	54.0	54.0	0.0	0.0%
80.2%	54.0	54.0	0.0	0.0%
81.5%	54.0	54.0	0.0	0.0%
82.7%	54.0	54.0	0.0	0.0%
84.0%	54.0	54.0	0.0	0.0%
85.2%	54.0	54.0	0.0	0.0%
86.4%	54.0	54.0	0.0	0.0%
87.7%	54.0	54.0	0.0	0.0%
88.9%	54.0	54.0	0.0	0.0%
90.1%	54.0	54.0	0.0	0.0%
91.4%	54.0	54.0	0.0	0.0%
92.6%	54.0	54.0	0.0	0.0%
93.8%	54.0	54.0	0.0	0.0%
95.1%	54.0	54.0	0.0	0.0%
96.3%	54.0	54.0	0.0	0.0%
97.5%	54.0	54.0	0.0	0.0%
98.8%	54.0	54.0	0.0	0.0%
100.0%	54.0	54.0	0.0	0.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project	DCR 2015 With Project	Absolute Difference (KM)	Relative Difference (%)
	Monthly Position (KM)	Monthly Position (KM)		
0.0%	83.7	82.8	-0.9	-1.1%
1.2%	83.1	82.8	-0.3	-0.4%
2.5%	82.8	81.9	-0.9	-1.1%
3.7%	82.4	81.8	-0.6	-0.7%
4.9%	81.9	81.0	-0.9	-1.1%
6.2%	81.6	81.0	-0.7	-0.8%
7.4%	81.1	80.9	-0.2	-0.2%
8.6%	80.8	80.6	-0.2	-0.2%
9.9%	80.6	80.1	-0.5	-0.6%
11.1%	79.0	79.7	0.8	1.0%
12.3%	77.9	79.1	1.1	1.5%
13.6%	77.9	77.9	0.1	0.1%
14.8%	77.4	77.9	0.5	0.6%
16.0%	76.3	77.4	1.0	1.3%
17.3%	75.7	76.3	0.6	0.8%
18.5%	74.3	75.5	1.2	1.7%
19.8%	74.1	75.4	1.3	1.7%
21.0%	73.9	75.1	1.3	1.7%
22.2%	73.5	74.6	1.2	1.6%
23.5%	71.4	73.9	2.5	3.5%
24.7%	71.2	73.9	2.7	3.8%
25.9%	69.9	73.5	3.6	5.2%
27.2%	69.3	73.4	4.0	5.8%
28.4%	68.8	72.4	3.6	5.2%
29.6%	68.8	72.0	3.2	4.6%
30.9%	68.8	70.6	1.8	2.6%
32.1%	68.3	70.4	2.1	3.1%
33.3%	68.1	69.8	1.8	2.6%
34.6%	68.0	69.6	1.6	2.4%
35.8%	67.9	69.3	1.3	2.0%
37.0%	67.2	69.2	2.0	3.0%
38.3%	67.2	68.0	0.8	1.2%
39.5%	66.1	67.7	1.6	2.4%
40.7%	66.1	67.5	1.4	2.1%
42.0%	66.1	67.2	1.1	1.7%
43.2%	65.8	66.2	0.4	0.6%
44.4%	65.1	66.1	1.0	1.6%
45.7%	64.3	65.6	1.3	2.0%
46.9%	63.8	65.4	1.6	2.5%
48.1%	63.6	65.0	1.3	2.1%
49.4%	63.3	64.9	1.6	2.5%
50.6%	63.2	64.4	1.2	1.9%
51.9%	62.7	64.3	1.6	2.5%
53.1%	62.4	64.2	1.8	2.9%
54.3%	61.9	63.8	1.9	3.1%
55.6%	61.1	63.6	2.5	4.0%
56.8%	61.0	62.9	1.9	3.1%
58.0%	60.9	62.8	1.9	3.2%
59.3%	59.7	61.1	1.4	2.3%
60.5%	58.7	60.3	1.6	2.7%
61.7%	58.6	60.0	1.4	2.5%
63.0%	58.2	59.7	1.5	2.6%
64.2%	58.2	59.7	1.5	2.6%
65.4%	57.9	58.2	0.3	0.5%
66.7%	57.6	57.6	0.0	0.1%
67.9%	57.6	57.6	0.0	-0.1%
69.1%	56.5	56.6	0.0	0.1%
70.4%	55.0	56.6	1.6	2.9%
71.6%	54.9	55.8	1.0	1.8%
72.8%	54.6	55.4	0.9	1.6%
74.1%	54.0	54.0	0.0	0.0%
75.3%	54.0	54.0	0.0	0.0%
76.5%	54.0	54.0	0.0	0.0%
77.8%	54.0	54.0	0.0	0.0%
79.0%	54.0	54.0	0.0	0.0%
80.2%	54.0	54.0	0.0	0.0%
81.5%	54.0	54.0	0.0	0.0%
82.7%	54.0	54.0	0.0	0.0%
84.0%	54.0	54.0	0.0	0.0%
85.2%	54.0	54.0	0.0	0.0%
86.4%	54.0	54.0	0.0	0.0%
87.7%	54.0	54.0	0.0	0.0%
88.9%	54.0	54.0	0.0	0.0%
90.1%	54.0	54.0	0.0	0.0%
91.4%	54.0	54.0	0.0	0.0%
92.6%	54.0	54.0	0.0	0.0%
93.8%	54.0	54.0	0.0	0.0%
95.1%	54.0	54.0	0.0	0.0%
96.3%	54.0	54.0	0.0	0.0%
97.5%	54.0	54.0	0.0	0.0%
98.8%	54.0	54.0	0.0	0.0%
100.0%	54.0	54.0	0.0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project	DCR 2015 With Project	Absolute Difference (KM)	Relative Difference (%)
	Monthly Position (KM)	Monthly Position (KM)		
0.0%	84.7	84.7	0.0	0.0%
1.2%	84.6	84.7	0.2	0.2%
2.5%	83.2	83.2	0.1	0.1%
3.7%	82.1	82.4	0.3	0.3%
4.9%	82.0	81.8	-0.2	-0.2%
6.2%	81.6	81.6	0.1	0.1%
7.4%	81.1	81.5	0.4	0.5%
8.6%	80.8	80.9	0.1	0.1%
9.9%	80.6	80.6	-0.1	-0.1%
11.1%	80.5	80.5	0.0	0.0%
12.3%	80.1	80.1	0.0	0.0%
13.6%	80.0	80.0	0.0	0.0%
14.8%	80.0	79.9	-0.1	-0.2%
16.0%	80.0	79.6	-0.4	-0.5%
17.3%	78.0	78.7	0.7	0.9%
18.5%	77.8	77.6	-0.2	-0.3%
19.8%	77.6	77.5	-0.1	-0.1%
21.0%	77.5	77.5	0.0	0.0%
22.2%	77.1	77.1	0.0	0.0%
23.5%	76.5	77.1	0.6	0.8%
24.7%	74.9	76.4	1.6	2.1%
25.9%	74.3	74.4	0.1	0.1%
27.2%	74.3	74.1	-0.2	-0.3%
28.4%	74.1	73.8	-0.3	-0.3%
29.6%	73.9	73.8	-0.1	-0.1%
30.9%	72.7	72.8	0.1	0.2%
32.1%	72.3	72.0	-0.3	-0.4%
33.3%	71.7	71.8	0.0	0.0%
34.6%	71.7	71.7	0.0	0.0%
35.8%	71.7	71.1	-0.5	-0.8%
37.0%	71.1	71.1	0.0	0.0%
38.3%	70.8	70.4	-0.4	-0.6%
39.5%	70.1	70.2	0.2	0.3%
40.7%	68.9	69.2	0.2	0.3%
42.0%	68.7	68.8	0.1	0.1%
43.2%	67.7	67.8	0.1	0.2%
44.4%	67.4	67.4	0.0	0.0%
45.7%	67.4	66.9	-0.5	-0.7%
46.9%	66.9	66.9	0.0	0.0%
48.1%	66.8	66.9	0.0	0.1%
49.4%	66.4	66.8	0.4	0.6%
50.6%	65.9	66.0	0.0	0.1%
51.9%	65.4	65.5	0.1	0.2%
53.1%	65.2	65.2	0.0	0.0%
54.3%	65.0	65.0	0.0	0.0%
55.6%	64.9	64.8	0.0	-0.1%
56.8%	64.3	64.4	0.1	0.1%
58.0%	64.0	64.2	0.2	0.2%
59.3%	63.1	64.0	0.9	1.4%
60.5%	63.0	63.0	0.0	0.1%
61.7%	62.6	63.0	0.4	0.6%
63.0%	62.5	62.7	0.2	0.4%
64.2%	61.9	62.4	0.5	0.9%
65.4%	61.4	62.3	0.9	1.4%
66.7%	61.4	61.9	0.5	0.8%
67.9%	61.2	61.8	0.6	1.0%
69.1%	60.3	61.7	1.5	2.4%
70.4%	60.0	61.4	1.4	2.3%
71.6%	60.0	60.3	0.3	0.4%
72.8%	59.8	59.8	0.0	0.0%
74.1%	58.9	59.0	0.0	0.1%
75.3%	55.9	56.3	0.4	0.7%
76.5%	55.3	55.5	0.2	0.4%
77.8%	54.3	55.0	0.7	1.2%
79.0%	54.1	54.1	0.0	0.0%
80.2%	54.0	54.0	0.0	0.0%
81.5%	54.0	54.0	0.0	0.0%
82.7%	54.0	54.0	0.0	0.0%
84.0%	54.0	54.0	0.0	0.0%
85.2%	54.0	54.0	0.0	0.0%
86.4%	54.0	54.0	0.0	0.0%
87.7%	54.0	54.0	0.0	0.0%
88.9%	54.0	54.0	0.0	0.0%
90.1%	54.0	54.0	0.0	0.0%
91.4%	54.0	54.0	0.0	0.0%
92.6%	54.0	54.0	0.0	0.0%
93.8%	54.0	54.0	0.0	0.0%
95.1%	54.0	54.0	0.0	0.0%
96.3%	54.0	54.0	0.0	0.0%
97.5%	54.0	54.0	0.0	0.0%
98.8%	54.0	54.0	0.0	0.0%
100.0%	54.0	54.0	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project	DCR 2015 With Project	Absolute Difference (KM)	Relative Difference (%)
	Monthly Position (KM)	Monthly Position (KM)		
0.0%	92.3	92.3	0.0	0.0%
1.2%	91.4	92.2	0.8	0.9%
2.5%	91.0	91.5	0.5	0.5%
3.7%	90.6	90.7	0.1	0.1%
4.9%	87.5	87.5	-0.1	-0.1%
6.2%	85.8	85.6	-0.2	-0.2%
7.4%	85.6	85.6	0.0	0.0%
8.6%	85.5	85.4	0.0	-0.1%
9.9%	85.4	85.1	-0.3	-0.3%
11.1%	84.1	84.1	0.0	0.0%
12.3%	84.0	84.0	0.0	0.0%
13.6%	83.3	83.3	0.0	0.0%
14.8%	83.2	83.2	0.0	0.0%
16.0%	83.1	83.2	0.0	0.0%
17.3%	83.0	83.1	0.0	0.0%
18.5%	82.8	82.6	-0.2	-0.3%
19.8%	82.5	81.8	-0.7	-0.8%
21.0%	82.0	81.8	-0.2	-0.2%
22.2%	81.4	81.3	-0.1	-0.1%
23.5%	81.2	81.1	-0.1	-0.1%
24.7%	81.1	81.0	-0.1	-0.1%
25.9%	80.5	80.5	0.0	0.0%
27.2%	80.5	80.5	0.0	0.0%
28.4%	80.5	80.5	0.0	0.0%
29.6%	79.8	79.6	-0.2	-0.2%
30.9%	79.7	79.4	-0.3	-0.4%
32.1%	79.6	78.9	-0.7	-0.9%
33.3%	78.5	78.4	-0.2	-0.2%
34.6%	78.4	78.4	0.0	0.0%
35.8%	77.6	77.5	-0.1	-0.2%
37.0%	77.4	77.2	-0.2	-0.3%
38.3%	77.2	77.1	-0.1	-0.2%
39.5%	76.9	77.0	0.1	0.1%
40.7%	76.4	76.5	0.1	0.1%
42.0%	76.3	76.4	0.1	0.1%
43.2%	75.9	75.9	0.0	0.0%
44.4%	75.8	75.8	0.0	0.0%
45.7%	75.4	75.5	0.1	0.1%
46.9%	73.7	75.2	1.4	2.0%
48.1%	72.5	72.5	0.0	0.0%
49.4%	72.3	72.3	0.0	0.0%
50.6%	71.3	71.4	0.0	0.1%
51.9%	70.7	70.7	0.0	0.0%
53.1%	70.5	70.5	0.0	-0.1%
54.3%	70.1	70.1	0.0	0.0%
55.6%	69.0	69.0	0.0	0.0%
56.8%	68.5	68.8	0.3	0.4%
58.0%	68.5	68.5	0.1	0.1%
59.3%	68.4	68.5	0.1	0.1%
60.5%	68.3	68.5	0.2	0.3%
61.7%	68.1	68.1	0.0	0.1%
63.0%	67.8	67.9	0.2	0.3%
64.2%	67.7	67.8	0.1	0.1%
65.4%	67.7	67.8	0.1	0.1%
66.7%	67.3	67.3	0.0	0.1%
67.9%	67.3	67.2	0.0	0.0%
69.1%	66.2	66.8	0.6	0.9%
70.4%	66.0	66.2	0.2	0.4%
71.6%	66.0	66.0	0.1	0.1%
72.8%	65.7	65.9	0.2	0.4%
74.1%	65.1	65.2	0.1	0.1%
75.3%	63.4	65.1	1.7	2.6%
76.5%	61.9	60.9	-1.0	-1.6%
77.8%	60.9	60.9	0.0	0.0%
79.0%	59.8	60.5	0.7	1.2%
80.2%	59.6	59.8	0.2	0.3%
81.5%	59.3	59.6	0.3	0.6%
82.7%	59.1	59.4	0.3	0.5%
84.0%	58.9	59.0	0.1	0.2%
85.2%	55.7	55.7	0.0	0.1%
86.4%	55.3	55.4	0.0	0.1%
87.7%	55.3	55.3	0.0	0.1%
88.9%	54.8	54.6	-0.2	-0.3%
90.1%	54.6	54.5	-0.1	-0.2%
91.4%	54.2	54.3	0.0	0.1%
92.6%	54.0	54.0	0.0	0.0%
93.8%	54.0	54.0	0.0	0.0%
95.1%	54.0	54.0	0.0	0.0%
96.3%	54.0	54.0	0.0	0.0%
97.5%	54.0	54.0	0.0	0.0%
98.8%	54.0	54.0	0.0	0.0%
100.0%	54.0	54.0	0.0	0.0%

Table SQ-01-b
X2, Monthly Position
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project: Monthly Position (KM)	DCR 2015 With Project: Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	94.2	94.2	0.0	0.0%
1.2%	92.9	91.7	-1.2	-1.3%
2.5%	92.2	91.0	-1.2	-1.3%
3.7%	91.1	90.3	-0.8	-0.9%
4.9%	90.1	90.1	0.0	0.0%
6.2%	90.1	89.8	-0.2	-0.3%
7.4%	89.9	89.5	-0.4	-0.4%
8.6%	87.7	87.7	0.0	0.0%
9.9%	87.0	87.0	-0.1	-0.1%
11.1%	86.9	86.9	0.0	0.0%
12.3%	86.3	86.6	0.3	0.4%
13.6%	86.1	86.6	0.5	0.6%
14.8%	86.0	86.0	0.0	0.0%
16.0%	85.9	85.8	-0.1	-0.1%
17.3%	85.6	85.6	0.0	0.0%
18.5%	85.3	85.5	0.2	0.3%
19.8%	85.3	85.1	-0.2	-0.2%
21.0%	85.1	84.9	-0.2	-0.2%
22.2%	84.8	84.7	-0.1	-0.1%
23.5%	84.7	84.6	-0.1	-0.1%
24.7%	84.7	84.6	-0.1	-0.1%
25.9%	84.6	84.5	-0.2	-0.2%
27.2%	84.6	84.4	-0.3	-0.3%
28.4%	84.6	84.1	-0.5	-0.6%
29.6%	84.6	83.9	-0.7	-0.8%
30.9%	84.5	83.8	-0.6	-0.7%
32.1%	84.3	83.7	-0.5	-0.6%
33.3%	84.1	83.7	-0.4	-0.5%
34.6%	83.9	83.6	-0.3	-0.3%
35.8%	83.8	83.6	-0.3	-0.3%
37.0%	83.8	83.5	-0.2	-0.3%
38.3%	83.6	83.4	-0.2	-0.2%
39.5%	83.5	83.4	-0.1	-0.1%
40.7%	83.4	83.4	0.0	0.0%
42.0%	83.4	83.4	0.0	0.0%
43.2%	83.4	83.4	-0.1	-0.1%
44.4%	83.4	83.1	-0.3	-0.4%
45.7%	83.4	83.1	-0.3	-0.4%
46.9%	83.3	83.0	-0.4	-0.5%
48.1%	83.1	82.8	-0.2	-0.3%
49.4%	82.9	82.7	-0.2	-0.2%
50.6%	82.8	82.5	-0.3	-0.3%
51.9%	82.7	82.3	-0.4	-0.5%
53.1%	82.6	82.1	-0.4	-0.5%
54.3%	82.5	82.0	-0.5	-0.6%
55.6%	82.3	81.9	-0.5	-0.6%
56.8%	82.2	81.9	-0.3	-0.4%
58.0%	81.9	81.6	-0.3	-0.4%
59.3%	81.6	81.5	-0.1	-0.1%
60.5%	81.5	81.5	0.0	0.0%
61.7%	81.5	81.3	-0.2	-0.3%
63.0%	81.1	81.1	0.0	0.0%
64.2%	79.6	79.5	-0.1	-0.1%
65.4%	79.4	78.9	-0.4	-0.5%
66.7%	79.4	78.6	-0.7	-0.9%
67.9%	78.9	77.8	-1.1	-1.4%
69.1%	78.5	77.6	-0.9	-1.1%
70.4%	78.0	77.2	-0.8	-1.0%
71.6%	77.6	77.2	-0.4	-0.5%
72.8%	77.4	77.1	-0.3	-0.3%
74.1%	77.0	76.8	-0.2	-0.3%
75.3%	76.0	76.1	0.2	0.2%
76.5%	75.9	75.4	-0.5	-0.6%
77.8%	73.4	73.1	-0.3	-0.5%
79.0%	71.9	71.7	-0.3	-0.4%
80.2%	69.8	69.5	-0.3	-0.4%
81.5%	69.8	69.2	-0.6	-0.8%
82.7%	68.3	69.0	0.7	1.0%
84.0%	68.2	67.9	-0.3	-0.4%
85.2%	67.3	67.4	0.1	0.1%
86.4%	66.5	66.5	0.0	0.0%
87.7%	66.4	66.4	0.0	0.0%
88.9%	65.4	65.4	0.0	0.0%
90.1%	64.7	64.7	0.1	0.1%
91.4%	64.1	63.5	-0.6	-0.9%
92.6%	59.9	59.8	-0.1	-0.1%
93.8%	59.1	59.1	0.0	0.0%
95.1%	58.5	58.3	-0.2	-0.4%
96.3%	57.7	56.8	-0.9	-1.6%
97.5%	55.8	55.5	-0.3	-0.5%
98.8%	54.0	54.0	0.0	0.0%
100.0%	54.0	54.0	0.0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project: Monthly Position (KM)	DCR 2015 With Project: Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.0	94.9	-0.1	-0.1%
1.2%	93.6	92.6	-1.0	-1.1%
2.5%	93.5	92.3	-1.2	-1.2%
3.7%	92.0	91.8	-0.2	-0.2%
4.9%	91.9	91.5	-0.4	-0.4%
6.2%	91.6	91.2	-0.4	-0.4%
7.4%	91.4	91.2	-0.3	-0.3%
8.6%	91.3	91.0	-0.4	-0.4%
9.9%	91.1	90.8	-0.3	-0.3%
11.1%	91.0	90.8	-0.2	-0.2%
12.3%	90.9	90.3	-0.7	-0.8%
13.6%	89.6	89.2	-0.4	-0.5%
14.8%	89.2	89.0	-0.2	-0.2%
16.0%	89.1	89.0	-0.1	-0.2%
17.3%	88.6	88.5	-0.2	-0.2%
18.5%	88.5	88.4	-0.1	-0.2%
19.8%	88.5	88.3	-0.2	-0.3%
21.0%	88.5	88.2	-0.3	-0.3%
22.2%	88.2	88.0	-0.1	-0.2%
23.5%	88.1	88.0	-0.1	-0.2%
24.7%	88.1	87.8	-0.3	-0.4%
25.9%	88.0	87.6	-0.4	-0.5%
27.2%	87.8	87.3	-0.5	-0.6%
28.4%	87.5	87.3	-0.2	-0.3%
29.6%	87.2	87.2	0.0	0.0%
30.9%	87.1	87.0	-0.1	-0.1%
32.1%	86.9	86.8	-0.1	-0.1%
33.3%	86.7	86.7	0.0	0.0%
34.6%	85.8	85.8	0.0	-0.1%
35.8%	85.3	85.3	0.1	0.1%
37.0%	85.3	85.3	0.0	0.0%
38.3%	85.2	85.2	0.0	0.0%
39.5%	85.1	85.2	0.1	0.1%
40.7%	84.6	85.1	0.4	0.5%
42.0%	84.3	84.2	-0.1	-0.1%
43.2%	84.2	83.9	-0.2	-0.3%
44.4%	83.8	83.8	-0.1	-0.1%
45.7%	83.8	83.6	-0.3	-0.3%
46.9%	83.5	83.4	-0.1	-0.1%
48.1%	83.4	83.4	0.0	0.0%
49.4%	83.4	83.0	-0.3	-0.4%
50.6%	83.1	83.0	-0.1	-0.1%
51.9%	83.0	82.9	-0.1	-0.1%
53.1%	82.8	82.6	-0.2	-0.3%
54.3%	82.6	82.6	0.0	0.0%
55.6%	82.5	82.4	-0.1	-0.1%
56.8%	82.3	82.3	0.0	0.0%
58.0%	82.2	82.2	-0.1	-0.1%
59.3%	82.1	82.1	0.0	0.0%
60.5%	82.1	82.0	-0.1	-0.1%
61.7%	82.0	81.9	-0.1	-0.1%
63.0%	81.9	81.8	0.0	0.0%
64.2%	81.8	81.7	-0.1	-0.1%
65.4%	81.8	81.6	-0.2	-0.2%
66.7%	81.6	81.5	-0.1	-0.1%
67.9%	81.5	81.5	0.0	0.0%
69.1%	81.4	81.4	0.0	0.0%
70.4%	81.4	81.4	0.0	0.0%
71.6%	81.4	81.3	0.0	0.0%
72.8%	81.4	81.3	0.0	0.0%
74.1%	81.3	81.3	0.1	0.1%
75.3%	81.3	81.3	0.0	0.0%
76.5%	81.0	81.2	0.2	0.2%
77.8%	81.0	80.9	-0.1	-0.1%
79.0%	80.8	80.9	0.1	0.1%
80.2%	80.8	80.9	0.1	0.1%
81.5%	80.5	80.5	0.0	0.0%
82.7%	80.4	80.3	-0.1	-0.1%
84.0%	80.3	80.3	0.0	0.0%
85.2%	80.1	80.2	0.1	0.2%
86.4%	80.0	80.1	0.1	0.1%
87.7%	80.0	80.0	0.0	0.0%
88.9%	80.0	79.8	-0.2	-0.3%
90.1%	79.8	79.6	-0.1	-0.2%
91.4%	79.6	79.6	0.0	0.0%
92.6%	78.9	78.5	-0.4	-0.5%
93.8%	78.2	78.3	0.1	0.1%
95.1%	77.1	77.4	0.3	0.4%
96.3%	70.6	69.9	-0.7	-1.0%
97.5%	66.0	65.8	-0.3	-0.4%
98.8%	60.8	60.9	0.1	0.1%
100.0%	59.1	59.1	0.1	0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project: Monthly Position (KM)	DCR 2015 With Project: Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	94.7	94.8	0.0	0.1%
1.2%	94.4	94.6	0.2	0.3%
2.5%	94.4	94.5	0.2	0.2%
3.7%	94.1	93.9	-0.2	-0.2%
4.9%	93.5	93.4	-0.1	-0.1%
6.2%	93.2	93.3	0.1	0.1%
7.4%	93.2	92.6	-0.6	-0.6%
8.6%	93.0	92.6	-0.4	-0.5%
9.9%	93.0	92.5	-0.5	-0.5%
11.1%	92.9	92.3	-0.6	-0.6%
12.3%	92.9	92.0	-0.8	-0.9%
13.6%	92.8	92.0	-0.8	-0.9%
14.8%	92.5	91.9	-0.6	-0.7%
16.0%	92.5	91.7	-0.8	-0.8%
17.3%	92.2	91.7	-0.5	-0.6%
18.5%	92.2	91.5	-0.7	-0.8%
19.8%	92.2	91.4	-0.7	-0.8%
21.0%	92.0	91.4	-0.6	-0.7%
22.2%	92.0	91.3	-0.6	-0.7%
23.5%	92.0	90.9	-1.1	-1.2%
24.7%	91.8	90.9	-0.9	-1.0%
25.9%	91.7	90.8	-0.9	-0.9%
27.2%	91.6	90.7	-0.9	-0.9%
28.4%	91.5	90.3	-1.2	-1.3%
29.6%	91.4	90.2	-1.1	-1.2%
30.9%	91.2	90.2	-1.0	-1.1%
32.1%	91.1	90.0	-1.1	-1.2%
33.3%	91.0	89.9	-1.1	-1.2%
34.6%	91.0	89.9	-1.0	-1.1%
35.8%	90.0	89.7	-0.3	-0.3%
37.0%	90.0	89.6	-0.4	-0.4%
38.3%	89.9	89.6	-0.3	-0.4%
39.5%	89.9	89.6	-0.3	-0.4%
40.7%	89.9	89.3	-0.6	-0.6%
42.0%	89.8	89.3	-0.6	-0.6%
43.2%	89.6	89.2	-0.4	-0.5%
44.4%	89.6	89.2	-0.4	-0.4%
45.7%	89.5	89.2	-0.4	-0.4%
46.9%	89.5	89.1	-0.4	-0.4%
48.1%	89.4	89.1	-0.3	-0.4%
49.4%	89.4	89.1	-0.3	-0.4%
50.6%	89.3	89.0	-0.3	-0.4%
51.9%	89.2	88.9	-0.3	-0.4%
53.1%	89.2	88.8	-0.4	-0.5%
54.3%	89.2	88.8	-0.4	-0.5%
55.6%	89.2	88.8	-0.4	-0.5%
56.8%	89.1	88.8	-0.4	-0.4%
58.0%	89.1	88.7	-0.4	-0.4%
59.3%	89.1	88.7	-0.4	-0.4%
60.5%	89.0	88.7	-0.4	-0.4%
61.7%	88.9	88.6	-0.3	-0.4%
63.0%	88.8	88.5	-0.3	-0.4%
64.2%	88.8	88.4	-0.3	-0.4%
65.4%	88.8	88.4	-0.3	-0.4%
66.7%	88.7	88.3	-0.4	-0.5%
67.9%	88.7	88.2	-0.5	-0.6%
69.1%	88.7	88.2	-0.5	-0.6%
70.4%	88.7	88.2	-0.5	-0.6%
71.6%	88.6	88.1	-0.5	-0.5%
72.8%	88.6	88.1	-0.5	-0.5%
74.1%	88.6	88.1	-0.5	-0.5%
75.3%	88.5	88.0	-0.5	-0.5%
76.5%	88.4	88.0	-0.5	-0.5%
77.8%	88.4	87.9	-0.5	-0.6%
79.0%	88.2	87.9	-0.3	-0.3%
80.2%	88.1	87.8	-0.3	-0.4%
81.5%	88.1	87.5	-0.5	-0.6%
82.7%	87.8	87.4	-0.4	-0.4%
84.0%	87.7	87.4	-0.3	-0.3%
85.2%	87.7	87.1	-0.6	-0.6%
86.4%	87.6	87.0	-0.6	-0.7%
87.7%	87.6	86.9	-0.7	-0.8%
88.9%	87.6	86.9	-0.7	-0.8%
90.1%	87.4	86.7	-0.6	-0.7%
91.4%	87.1	86.6	-0.5	-0.6%
92.6%	87.1	86.5	-0.5	-0.6%
93.8%	86.5	86.4	-0.1	-0.1%
95.1%	85.6	86.4	0.8	0.9%
96.3%	85.1	86.3	1.2	1.5%
97.5%	80.2	82.5	2.3	2.8%
98.8%	74.5	73.0	-1.4	-1.9%
100.0%	69.4	68.8	-0.5	-0.8%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project: Monthly Position (KM)	DCR 2015 With Project: Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	96.1	95.7	-0.4	-0.4%
1.2%	95.9	95.6	-0.3	-0.3%
2.5%	95.9	95.3	-0.6	-0.6%
3.7%	95.5	94.9	-0.6	-0.6%
4.9%	95.4	94.7	-0.7	-0.8%
6.2%	95.4	94.7	-0.7	-0.7%
7.4%	94.9	94.3	-0.6	-0.6%
8.6%	94.8	94.2	-0.6	-0.7%
9.9%	94.6	94.1	-0.5	-0.5%
11.1%	94.5	93.9	-0.6	-0.6%
12.3%	94.3	93.9	-0.4	-0.5%
13.6%	94.3	93.8	-0.5	-0.5%
14.8%	94.3	93.5	-0.8	-0.8%
16.0%	94.2	93.2	-1.0	-1.1%
17.3%	94.2	93.1	-1.2	-1.2%
18.5%	94.1	93.1	-1.1	-1.1%
19.8%	94.1	93.0	-1.1	-1.1%
21.0%	94.1	92.3	-1.8	-1.9%
22.2%	93.9	92.3	-1.6	-1.7%
23.5%	93.9	92.2	-1.7	-1.8%
24.7%	93.8	92.1	-1.7	-1.8%
25.9%	93.7	91.9	-1.9	-2.0%
27.2%	93.6	91.8	-1.8	-1.9%
28.4%	93.5	91.8	-1.7	-1.8%
29.6%	93.4	91.5	-1.9	-2.1%
30.9%	93.1	91.5	-1.6	-1.7%
32.1%	93.1	91.2	-1.8	-2.0%
33.3%	93.0	90.9	-2.1	-2.2%
34.6%	92.9	90.9	-2.0	-2.1%
35.8%	92.6	90.9	-1.7	-1.8%
37.0%	91.5	90.8	-0.7	-0.7%
38.3%	91.4	90.7	-0.8	-0.9%
39.5%	91.3	90.6	-0.7	-0.8%
40.7%	91.3	90.3	-1.0	-1.0%
42.0%	91.0	90.3	-0.8	-0.9%
43.2%	90.9	90.2	-0.8	-0.8%
44.4%	90.8	90.1	-0.7	-0.7%
45.7%	90.8	89.8	-1.0	-1.1%
46.9%	90.5	89.8	-0.8	-0.9%
48.1%	90.5	89.7	-0.8	-0.9%
49.4%	90.2	89.5	-0.7	-0.8%
50.6%	89.8	89.0	-0.8	-0.9%
51.9%	89.7	88.9	-0.8	-0.9%
53.1%	89.7	88.0	-1.7	-1.8%
54.3%	81.0	80.5	-0.5	-0.6%
55.6%	80.5	80.3	-0.1	-0.1%
56.8%	80.4	80.0	-0.4	-0.5%
58.0%	80.3	79.9	-0.4	-0.4%
59.3%	80.2	79.7	-0.6	-0.7%
60.5%	80.1	79.6	-0.5	-0.6%
61.7%	79.7	79.4	-0.3	-0.3%
63.0%	79.5	79.2	-0.4	-0.4%
64.2%	79.4	78.8	-0.6	-0.7%
65.4%	78.6	78.2	-0.3	-0.4%
66.7%	77.7	77.1	-0.6	-0.8%
67.9%	76.6	76.3	-0.3	-0.4%
69.1%	75.1	73.2	-1.9	-2.5%
70.4%	70.4	70.1	-0.3	-0.4%
71.6%	69.9	69.8	-0.1	-0.1%
72.8%	69.8	69.6	-0.2	-0.2%
74.1%	69.8	69.4	-0.3	-0.5%
75.3%	69.4	69.4	0.0	0.0%
76.5%	69.1	69.1	0.0	0.0%
77.8%	69.1	69.1	0.0	0.0%
79.0%	68.9	68.9	0.0	0.0%
80.2%	68.7	68.9	0.2	0.3%
81.5%	68.6	68.9	0.3	0.4%
82.7%	68.5	68.8	0.2	0.4%
84.0%	68.4	68.6	0.2	0.3%
85.2%	68.4	68.2	-0.2	-0.2%
86.4%	68.4	68.2	-0.2	-0.3%
87.7%	68.3	68.1	-0.3	-0.4%
88.9%	68.0	67.7	-0.2	-0.3%
90.1%	67.9	67.6	-0.3	-0.5%
91.4%	67.7	67.6	-0.2	-0.2%
92.6%	67.7	67.6	-0.1	-0.2%
93.8%	67.6	67.5	-0.1	-0.2%
95.1%	67.5	67.4	-0.1	-0.1%
96.3%	67.5	67.1	-0.3	-0.5%
97.5%	67.4	67.1	-0.3	-0.5%
98.8%	67.2	66.8	-0.4	-0.6%
100.0%	67.0	66.8	-0.2	-0.3%

Figure SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

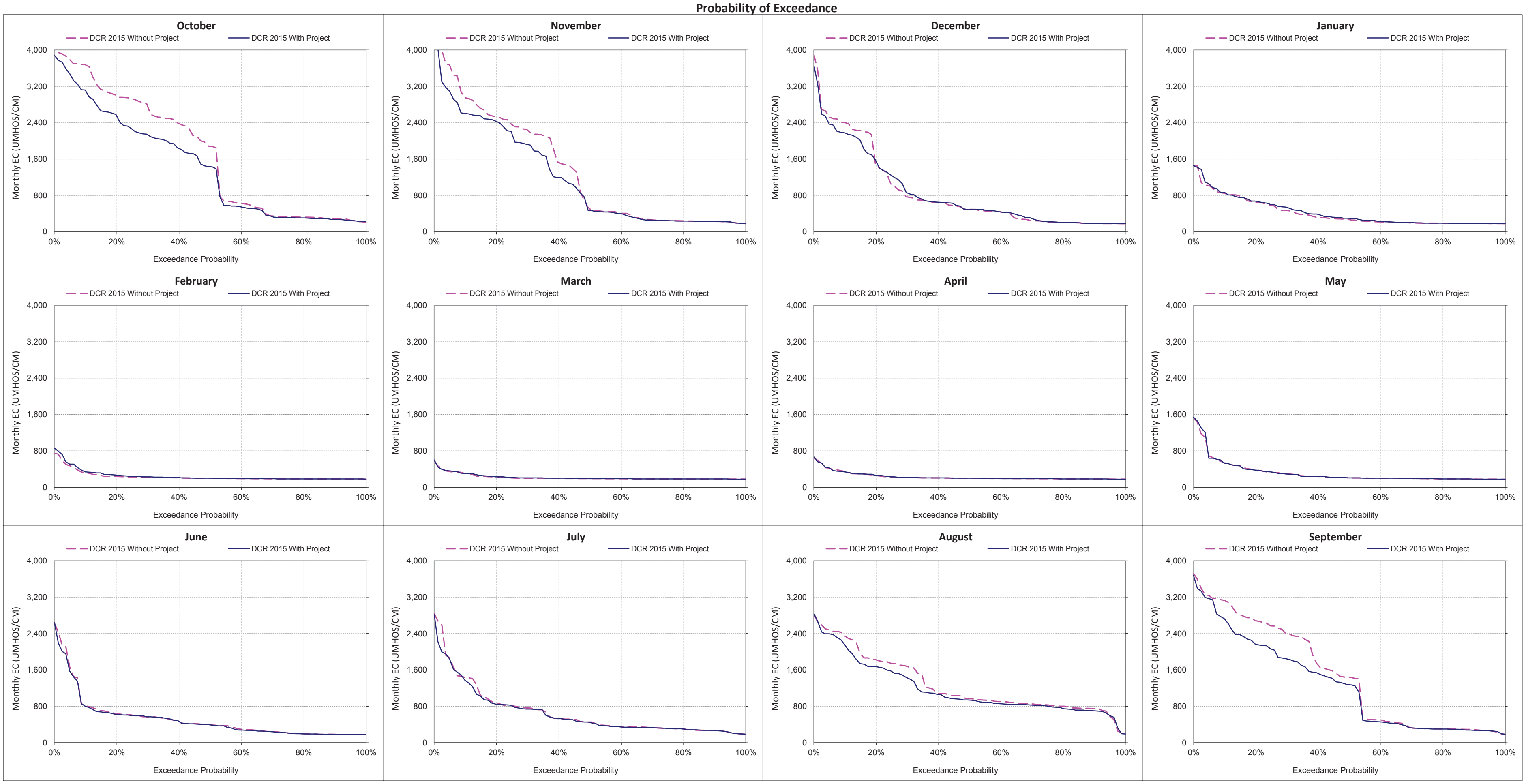


Table SQ-21-b

Sacramento River at Emmaton, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4221.0	3884.5	-336.5	-8.0%
1.2%	3945.6	3773.2	-172.3	-4.4%
2.5%	3917.6	3731.9	-185.7	-4.7%
3.7%	3866.2	3592.3	-274.0	-7.1%
4.9%	3787.1	3476.4	-310.7	-8.2%
6.2%	3697.4	3324.4	-372.9	-10.1%
7.4%	3696.0	3253.0	-442.9	-12.0%
8.6%	3688.5	3127.4	-561.1	-15.2%
9.9%	3676.5	3118.9	-557.6	-15.2%
11.1%	3632.2	2969.4	-662.8	-18.2%
12.3%	3401.6	2922.1	-479.5	-14.1%
13.6%	3241.7	2788.2	-453.5	-14.0%
14.8%	3132.9	2662.1	-470.8	-15.0%
16.0%	3108.4	2645.4	-462.9	-14.9%
17.3%	3065.8	2634.0	-431.9	-14.1%
18.5%	3037.5	2613.2	-424.3	-14.0%
19.8%	3003.6	2583.8	-419.8	-14.0%
21.0%	2958.8	2411.9	-546.9	-18.5%
22.2%	2956.3	2336.2	-620.2	-21.0%
23.5%	2949.8	2326.8	-623.1	-21.1%
24.7%	2930.1	2270.1	-659.9	-22.5%
25.9%	2906.7	2208.6	-698.1	-24.0%
27.2%	2867.0	2176.7	-690.3	-24.1%
28.4%	2843.2	2154.9	-688.3	-24.2%
29.6%	2815.4	2147.0	-668.3	-23.7%
30.9%	2584.7	2094.2	-490.5	-19.0%
32.1%	2548.4	2062.1	-486.3	-19.1%
33.3%	2523.6	2047.2	-476.3	-18.9%
34.6%	2520.1	2035.4	-484.7	-19.2%
35.8%	2495.9	2004.0	-491.8	-19.7%
37.0%	2492.5	1949.6	-542.9	-21.8%
38.3%	2473.6	1939.9	-533.7	-21.6%
39.5%	2396.5	1845.8	-550.8	-23.0%
40.7%	2356.9	1810.1	-546.8	-23.2%
42.0%	2330.6	1746.5	-584.2	-25.1%
43.2%	2271.0	1725.7	-545.4	-24.0%
44.4%	2119.4	1721.1	-398.3	-18.8%
45.7%	2104.7	1673.2	-431.5	-20.5%
46.9%	2005.3	1490.5	-514.8	-25.7%
48.1%	1973.7	1450.0	-523.6	-26.5%
49.4%	1886.4	1436.7	-449.7	-23.8%
50.6%	1878.5	1427.3	-451.2	-24.0%
51.9%	1850.2	1391.0	-459.2	-24.8%
53.1%	771.3	766.3	-5.0	-0.6%
54.3%	683.7	586.5	-97.2	-14.2%
55.6%	674.2	585.6	-88.7	-13.2%
56.8%	663.8	568.6	-95.2	-14.3%
58.0%	637.7	566.0	-71.7	-11.2%
59.3%	629.3	558.6	-70.7	-11.2%
60.5%	621.8	538.5	-83.3	-13.4%
61.7%	609.8	524.3	-85.6	-14.0%
63.0%	585.6	512.1	-73.5	-12.6%
64.2%	547.6	509.5	-38.1	-7.0%
65.4%	526.7	502.1	-24.6	-4.7%
66.7%	518.4	465.1	-53.3	-10.3%
67.9%	392.2	358.9	-33.3	-8.5%
69.1%	352.0	349.0	-3.0	-0.9%
70.4%	344.9	322.7	-22.2	-6.4%
71.6%	342.0	318.7	-23.3	-6.8%
72.8%	337.1	316.3	-20.8	-6.2%
74.1%	335.1	312.6	-22.5	-6.7%
75.3%	332.6	310.4	-22.2	-6.7%
76.5%	332.2	308.4	-23.7	-7.1%
77.8%	325.0	305.7	-19.2	-5.9%
79.0%	322.6	303.9	-18.7	-5.8%
80.2%	321.1	302.9	-18.3	-5.7%
81.5%	320.9	297.8	-23.0	-7.2%
82.7%	320.1	296.4	-23.7	-7.4%
84.0%	318.0	292.6	-25.5	-8.0%
85.2%	313.4	292.1	-21.3	-6.8%
86.4%	297.4	289.4	-8.0	-2.7%
87.7%	296.0	288.4	-7.6	-2.6%
88.9%	289.4	273.6	-15.8	-5.5%
90.1%	284.4	272.1	-12.3	-4.3%
91.4%	281.8	272.0	-9.8	-3.5%
92.6%	281.7	267.7	-14.0	-5.0%
93.8%	277.9	255.3	-22.6	-8.1%
95.1%	252.9	249.1	-3.8	-1.5%
96.3%	238.2	245.1	7.0	2.9%
97.5%	223.4	229.8	6.3	2.8%
98.8%	222.3	228.6	6.3	2.9%
100.0%	200.7	227.2	26.5	13.2%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4136.1	4094.4	-41.7	-1.0%
1.2%	4131.9	4030.7	-101.2	-2.4%
2.5%	3995.6	3301.7	-693.9	-17.4%
3.7%	3700.1	3182.1	-518.0	-14.0%
4.9%	3669.4	3090.5	-578.9	-15.8%
6.2%	3448.2	2917.1	-531.1	-15.4%
7.4%	3427.9	2838.3	-589.7	-17.2%
8.6%	3078.0	2616.5	-461.5	-15.0%
9.9%	2951.1	2607.2	-344.0	-11.7%
11.1%	2933.0	2591.4	-341.6	-11.6%
12.3%	2893.5	2573.2	-320.3	-11.1%
13.6%	2798.9	2559.7	-239.2	-8.5%
14.8%	2718.8	2554.1	-164.6	-6.1%
16.0%	2677.5	2483.8	-193.6	-7.2%
17.3%	2580.4	2480.5	-99.9	-3.9%
18.5%	2552.5	2469.5	-83.0	-3.3%
19.8%	2531.0	2436.5	-94.5	-3.7%
21.0%	2518.1	2394.6	-123.5	-4.9%
22.2%	2475.8	2312.4	-163.4	-6.6%
23.5%	2466.2	2223.2	-243.0	-9.9%
24.7%	2372.3	2214.4	-158.0	-6.7%
25.9%	2311.8	1972.0	-339.8	-14.7%
27.2%	2307.8	1967.3	-340.5	-14.8%
28.4%	2265.1	1946.4	-318.7	-14.1%
29.6%	2255.8	1925.1	-330.7	-14.7%
30.9%	2184.2	1909.4	-274.8	-12.6%
32.1%	2150.3	1779.4	-370.9	-17.3%
33.3%	2145.8	1770.7	-375.1	-17.5%
34.6%	2133.5	1683.9	-449.6	-21.1%
35.8%	2095.7	1662.3	-433.4	-20.7%
37.0%	2073.9	1377.6	-696.4	-33.6%
38.3%	1822.6	1213.7	-608.9	-33.4%
39.5%	1541.8	1197.7	-344.1	-22.3%
40.7%	1499.6	1195.8	-303.8	-20.3%
42.0%	1480.4	1126.6	-353.9	-23.9%
43.2%	1468.2	1063.2	-405.0	-27.6%
44.4%	1391.2	1047.0	-344.1	-24.7%
45.7%	1308.1	959.2	-348.9	-26.7%
46.9%	874.8	852.3	-22.5	-2.6%
48.1%	692.1	766.5	74.4	10.7%
49.4%	537.1	470.0	-67.1	-12.5%
50.6%	468.9	466.5	-2.4	-0.5%
51.9%	460.5	445.2	-15.3	-3.3%
53.1%	459.0	441.2	-17.8	-3.9%
54.3%	450.3	434.6	-15.7	-3.5%
55.6%	446.7	434.3	-12.4	-2.8%
56.8%	444.9	429.0	-16.0	-3.6%
58.0%	440.7	415.9	-24.8	-5.6%
59.3%	416.8	404.8	-12.0	-2.9%
60.5%	406.9	389.1	-17.8	-4.4%
61.7%	406.7	359.7	-47.0	-11.6%
63.0%	368.3	334.5	-33.7	-9.2%
64.2%	319.5	310.9	-8.7	-2.7%
65.4%	308.5	292.2	-16.3	-5.3%
66.7%	282.4	272.4	-10.0	-3.5%
67.9%	274.2	260.8	-13.4	-4.9%
69.1%	272.7	258.9	-13.8	-5.1%
70.4%	258.0	254.4	-3.6	-1.4%
71.6%	257.4	252.3	-5.1	-2.0%
72.8%	253.8	250.8	-3.1	-1.2%
74.1%	245.9	246.9	1.0	0.4%
75.3%	245.4	243.9	-1.5	-0.6%
76.5%	242.8	242.0	-0.9	-0.4%
77.8%	242.5	239.4	-3.1	-1.3%
79.0%	241.4	237.6	-3.8	-1.6%
80.2%	238.7	236.7	-2.1	-0.9%
81.5%	238.0	235.1	-2.9	-1.2%
82.7%	236.0	234.5	-1.5	-0.6%
84.0%	235.1	233.9	-1.1	-0.5%
85.2%	234.4	232.4	-2.0	-0.8%
86.4%	232.4	231.4	-1.0	-0.4%
87.7%	230.6	229.2	-1.4	-0.6%
88.9%	228.3	226.4	-2.0	-0.9%
90.1%	227.1	226.2	-0.9	-0.4%
91.4%	226.0	224.9	-1.1	-0.5%
92.6%	220.9	223.3	2.5	1.1%
93.8%	219.6	220.0	0.4	0.2%
95.1%	209.3	217.1	7.8	3.7%
96.3%	202.6	196.2	-6.4	-3.1%
97.5%	186.1	190.0	3.8	2.1%
98.8%	186.0	188.4	2.3	1.3%
100.0%	179.0	178.9	-0.1	0.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3904.2	3668.2	-236.0	-6.0%
1.2%	3548.5	3235.7	-312.8	-8.8%
2.5%	2691.5	2587.7	-103.8	-3.9%
3.7%	2660.0	2548.3	-111.8	-4.2%
4.9%	2530.9	2372.6	-158.3	-6.3%
6.2%	2487.4	2350.0	-137.4	-5.5%
7.4%	2484.4	2211.4	-272.9	-11.0%
8.6%	2406.2	2188.7	-217.5	-9.0%
9.9%	2404.3	2177.1	-227.3	-9.5%
11.1%	2380.8	2142.9	-237.9	-10.0%
12.3%	2255.3	2124.3	-131.0	-5.8%
13.6%	2235.6	2077.9	-157.7	-7.1%
14.8%	2230.8	2016.4	-214.4	-9.6%
16.0%	2199.8	1818.9	-380.9	-17.3%
17.3%	2192.8	1718.2	-474.6	-21.6%
18.5%	2139.3	1698.6	-440.7	-20.6%
19.8%	1491.5	1585.4	93.9	6.3%
21.0%	1401.0	1407.9	6.9	0.5%
22.2%	1357.1	1348.3	-8.8	-0.6%
23.5%	1277.9	1308.4	30.4	2.4%
24.7%	1054.2	1255.0	200.8	19.0%
25.9%	996.0	1198.6	202.6	20.3%
27.2%	925.6	1141.7	216.2	23.4%
28.4%	896.3	1061.7	165.4	18.5%
29.6%	772.7	862.5	89.8	11.6%
30.9%	757.8	831.0	73.2	9.7%
32.1%	740.3	821.4	81.1	11.0%
33.3%	700.3	755.0	54.7	7.8%
34.6%	698.0	724.1	26.2	3.8%
35.8%	685.0	681.3	-3.7	-0.5%
37.0%	672.5	671.6	-1.0	-0.1%
38.3%	647.8	658.0	10.2	1.6%
39.5%	644.3	656.4	12.1	1.9%
40.7%	642.2	648.4	6.2	1.0%
42.0%	639.5	641.1	1.7	0.3%
43.2%	589.0	633.8	44.8	7.6%
44.4%	583.6	630.2	46.5	8.0%
45.7%	569.0	582.0	13.0	2.3%
46.9%	551.8	565.8	14.0	2.5%
48.1%	504.7	500.2	-4.5	-0.9%
49.4%	497.4	495.1	-2.2	-0.4%
50.6%	495.9	494.5	-1.4	-0.3%
51.9%	494.3	491.0	-3.4	-0.7%
53.1%	469.4	490.2	20.8	4.4%
54.3%	464.2	487.7	23.5	5.1%
55.6%	453.9	466.8	12.9	2.8%
56.8%	453.1	464.0	10.9	2.4%
58.0%	448.1	459.7	11.6	2.6%
59.3%	447.6	443.4	-4.2	-0.9%
60.5%	429.4	433.7	4.3	1.0%
61.7%	424.0	427.7	3.7	0.9%
63.0%	397.0	417.0	20.0	5.0%
64.2%	308.3	398.5	90.2	29.2%
65.4%	289.6	368.1	78.5	27.1%
66.7%	277.9	352.3	74.4	26.8%
67.9%	273.1	318.3	45.1	16.5%
69.1%	256.1	315.0	58.9	23.0%
70.4%	242.8	283.3	40.5	16.7%
71.6%	240.7	252.2	11.5	4.8%
72.8%	238.5	235.1	-3.4	-1.4%
74.1%	217.6	227.1	9.6	4.4%
75.3%	215.9	219.3	3.4	1.6%
76.5%	212.2	219.2	7.0	3.3%
77.8%	210.5	216.1	5.6	2.7%
79.0%	207.5	209.8	2.3	1.1%
80.2%	206.2	209.0	2.8	1.4%
81.5%	204.1	208.2	4.1	2.0%
82.7%	200.7	201.3	0.6	0.3%
84.0%	197.6	200.0	2.4	1.2%
85.2%	197.0	194.9	-2.1	-1.0%
86.4%	185.8	191.3	5.5	2.9%
87.7%	185.1	186.6	1.4	0.8%
88.9%	182.8	185.4	2.5	1.4%
90.1%	182.6	182.6	0.0	0.0%
91.4%	182.3	181.4	-0.9	-0.5%
92.6%	181.3	181.1	-0.2	-0.1%
93.8%	180.9	181.0	0.1	0.1%
95.1%	180.7	181.0	0.3	0.1%
96.3%	180.7	180.8	0.1	0.1%
97.5%	179.8	179.5	-0.3	-0.1%
98.8%	179.0	179.0	0.0	0.0%
100.0%	178.9	178.8	-0.1	-0.1%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1456.2	1456.9	0.7	0.1%
1.2%	1449.2	1417.2	-32.0	-2.2%
2.5%	1083.3	1374.2	290.9	26.9%
3.7%	1024.2	1095.5	71.3	7.0%
4.9%	1021.3	1056.3	35.0	3.4%
6.2%	958.5	973.1	14.6	1.5%
7.4%	886.5	951.6	65.1	7.3%
8.6%	861.9	872.4	10.6	1.2%
9.9%	849.7	872.0	22.3	2.6%
11.1%	813.0	815.7	2.7	0.3%
12.3%	813.0	808.8	-4.2	-0.5%
13.6%	812.4	771.6	-40.8	-5.0%
14.8%	787.3	756.9	-30.4	-3.9%
16.0%	768.3	752.6	-15.7	-2.0%
17.3%	683.2	720.7	37.5	5.5%
18.5%	666.0	677.6	11.5	1.7%
19.8%	641.7	675.3	33.6	5.2%
21.0%	639.7	656.6	17.0	2.7%
22.2%	633.3	642.4	9.1	1.4%
23.5%	605.2	632.2	27.1	4.5%
24.7%	587.4	602.1	14.7	2.5%
25.9%	568.6	599.1	30.5	5.4%
27.2%	490.0	563.5	73.5	15.0%
28.4%	473.2	551.2	78.0	16.5%
29.6%	473.1	547.1	73.9	15.6%
30.9%	460.5	518.9	58.4	12.7%
32.1%	431.5	479.6	48.1	11.1%
33.3%	396.6	468.8	72.2	18.2%
34.6%	380.8	464.8	84.0	22.1%
35.8%	379.3	418.9	39.6	10.4%
37.0%	367.6	397.2	29.6	8.1%
38.3%	341.6	393.7	52.1	15.2%
39.5%	319.3	390.6	71.2	22.3%
40.7%	313.9	369.8	55.9	17.8%
42.0%	310.5	342.5	32.0	10.3%
43.2%	300.1	338.8	38.7	12.9%
44.4%	294.6	324.7	30.1	10.2%
45.7%	287.7	319.3	31.6	11.0%
46.9%	283.6	319.1	35.4	12.5%
48.1%	279.8	298.4	18.6	6.6%
49.4%	279.4	297.7	18.3	6.6%
50.6%	257.6	296.0	38.4	14.9%
51.9%	256.5	291.8	35.3	13.8%
53.1%	246.1	271.1	24.9	10.1%
54.3%	237.1	254.4	17.3	7.3%
55.6%	234.6	253.6	19.0	8.1%
56.8%	228.0	253.1	25.1	11.0%
58.0%	222.6	245.7	23.1	10.4%
59.3%	219.2	230.3	11.2	5.1%
60.5%	218.0	227.0	9.0	4.1%
61.7%	212.1	221.5	9.3	4.4%
63.0%	206.6	219.1	12.5	6.0%
64.2%	205.8	212.0	6.2	3.0%
65.4%	205.3	207.8	2.5	1.2%
66.7%	205.1	206.9	1.8	0.9%
67.9%	204.8	203.3	-1.5	-0.7%
69.1%	197.1	202.8	5.8	2.9%
70.4%	194.9	200.3	5.4	2.8%
71.6%	193.0	196.0	3.0	1.5%
72.8%	191.5	194.3	2.8	1.5%
74.1%	191.4	194.0	2.6	1.3%
75.3%	191.2	193.5	2.2	1.2%
76.5%	190.4	192.2	1.9	1.0%
77.8%	190.4	191.3	1.0	0.5%
79.0%	189.9	190.0	0.1	0.0%
80.2%	188.2	189.4	1.2	0.6%
81.5%	188.2	188.6	0.4	0.2%
82.7%	187.1	187.8	0.7	0.4%
84.0%	187.0	187.7	0.7	0.4%
85.2%	186.4	186.4	0.0	0.0%
86.4%	185.8	185.9	0.1	0.0%
87.7%	184.0	184.0	0.0	0.0%
88.9%	183.3	183.3	0.0	0.0%
90.1%	182.7	183.3	0.5	0.3%
91.4%	182.4	182.8	0.5	0.2%
92.6%	181.8	182.4	0.6	0.3%
93.8%	181.7	181.8	0.0	0.0%
95.1%	181.0	181.2	0.3	0.1%
96.3%	180.5	180.8	0.3	0.2%
97.5%	180.4	180.5	0.1	0.1%
98.8%	180.3	180.3	0.0	0.0%
100.0%	178.9	178.9	0.0	0.0%

Table SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	745.6	859.2	113.6	15.2%
1.2%	729.6	795.3	65.7	9.0%
2.5%	593.6	720.3	126.7	21.3%
3.7%	500.5	556.8	56.3	11.2%
4.9%	472.7	508.5	35.9	7.6%
6.2%	436.9	507.5	70.6	16.2%
7.4%	382.9	432.5	49.5	12.9%
8.6%	335.1	378.5	43.4	13.0%
9.9%	316.8	338.9	22.1	7.0%
11.1%	308.7	331.7	23.0	7.5%
12.3%	282.4	323.3	41.0	14.5%
13.6%	280.1	314.3	34.2	12.2%
14.8%	255.9	314.2	58.3	22.8%
16.0%	243.9	281.5	37.6	15.4%
17.3%	240.9	277.8	36.9	15.3%
18.5%	239.4	276.5	37.2	15.5%
19.8%	237.3	270.3	32.9	13.9%
21.0%	235.5	256.0	20.5	8.7%
22.2%	230.1	249.0	18.8	8.2%
23.5%	229.1	243.3	14.2	6.2%
24.7%	228.0	233.3	5.4	2.4%
25.9%	227.2	232.9	5.7	2.5%
27.2%	225.9	231.7	5.8	2.6%
28.4%	222.9	231.3	8.5	3.8%
29.6%	219.1	228.5	9.5	4.3%
30.9%	218.2	227.2	9.0	4.1%
32.1%	216.2	224.8	8.6	4.0%
33.3%	212.4	222.1	9.7	4.5%
34.6%	212.1	220.3	8.3	3.9%
35.8%	210.8	218.7	7.8	3.7%
37.0%	210.2	218.2	7.9	3.8%
38.3%	208.0	215.6	7.7	3.7%
39.5%	207.8	214.9	7.1	3.4%
40.7%	204.0	206.8	2.7	1.3%
42.0%	202.2	205.5	3.2	1.6%
43.2%	199.3	203.1	3.8	1.9%
44.4%	199.1	202.5	3.4	1.7%
45.7%	198.9	200.8	1.9	0.9%
46.9%	197.6	200.7	3.0	1.5%
48.1%	195.6	200.2	4.6	2.3%
49.4%	194.8	198.9	4.0	2.1%
50.6%	194.3	198.5	4.2	2.1%
51.9%	193.7	195.7	2.0	1.0%
53.1%	193.3	195.2	1.8	0.9%
54.3%	192.4	193.4	1.0	0.5%
55.6%	192.0	193.3	1.3	0.7%
56.8%	191.0	193.1	2.1	1.1%
58.0%	190.0	192.0	2.0	1.1%
59.3%	189.9	191.9	2.0	1.1%
60.5%	189.1	190.1	0.9	0.5%
61.7%	188.9	189.9	1.0	0.5%
63.0%	188.7	189.3	0.6	0.3%
64.2%	187.5	187.7	0.2	0.1%
65.4%	187.1	187.4	0.3	0.2%
66.7%	186.9	187.0	0.0	0.0%
67.9%	186.8	187.0	0.2	0.1%
69.1%	184.9	186.9	2.0	1.1%
70.4%	184.8	186.4	1.6	0.8%
71.6%	184.6	185.0	0.4	0.2%
72.8%	184.5	185.0	0.5	0.3%
74.1%	184.5	184.8	0.3	0.2%
75.3%	184.3	184.7	0.4	0.2%
76.5%	184.3	184.5	0.3	0.1%
77.8%	184.1	184.3	0.2	0.1%
79.0%	183.8	184.2	0.3	0.2%
80.2%	183.8	183.7	-0.1	0.0%
81.5%	183.5	183.4	-0.1	0.0%
82.7%	183.4	183.2	-0.2	-0.1%
84.0%	183.2	183.0	-0.2	-0.1%
85.2%	182.9	182.7	-0.2	-0.1%
86.4%	182.8	182.7	-0.1	0.0%
87.7%	182.6	182.5	-0.1	-0.1%
88.9%	182.4	182.4	-0.1	0.0%
90.1%	182.1	182.1	0.0	0.0%
91.4%	181.8	182.0	0.2	0.1%
92.6%	181.8	181.8	0.0	0.0%
93.8%	181.1	181.6	0.5	0.3%
95.1%	180.9	181.4	0.6	0.3%
96.3%	180.6	181.0	0.4	0.2%
97.5%	180.6	180.6	0.0	0.0%
98.8%	180.2	180.4	0.2	0.1%
100.0%	178.1	178.1	0.0	0.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	584.0	596.8	12.8	2.2%
1.2%	465.8	447.9	-17.8	-3.8%
2.5%	416.1	394.4	-21.7	-5.2%
3.7%	363.1	363.2	0.1	0.0%
4.9%	342.7	360.6	17.9	5.2%
6.2%	335.0	348.8	13.8	4.1%
7.4%	333.7	344.6	10.8	3.2%
8.6%	328.5	309.3	-19.1	-5.8%
9.9%	300.4	303.3	2.9	1.0%
11.1%	288.9	299.7	10.8	3.8%
12.3%	284.9	299.1	14.2	5.0%
13.6%	246.4	274.7	28.3	11.5%
14.8%	239.7	258.6	19.0	7.9%
16.0%	239.5	251.0	11.5	4.8%
17.3%	232.2	245.3	13.1	5.6%
18.5%	229.7	239.8	10.1	4.4%
19.8%	226.4	231.4	5.0	2.2%
21.0%	226.2	230.3	4.1	1.8%
22.2%	221.4	229.7	8.3	3.7%
23.5%	211.6	218.8	7.2	3.4%
24.7%	205.5	213.3	7.8	3.8%
25.9%	201.7	209.5	7.8	3.9%
27.2%	200.2	208.2	8.0	4.0%
28.4%	196.7	206.4	9.7	4.9%
29.6%	196.5	205.4	8.9	4.5%
30.9%	196.3	203.7	7.4	3.8%
32.1%	196.1	203.5	7.4	3.8%
33.3%	195.2	203.3	8.1	4.2%
34.6%	195.0	203.3	8.3	4.3%
35.8%	194.7	202.8	8.2	4.2%
37.0%	193.8	202.7	8.9	4.6%
38.3%	193.7	201.8	8.1	4.2%
39.5%	193.4	199.9	6.6	3.4%
40.7%	192.4	199.2	6.8	3.5%
42.0%	192.2	199.2	7.0	3.6%
43.2%	191.0	196.4	5.4	2.8%
44.4%	190.7	193.7	3.1	1.6%
45.7%	190.2	193.7	3.5	1.8%
46.9%	189.9	193.0	3.2	1.7%
48.1%	189.6	192.4	2.7	1.4%
49.4%	189.4	191.6	2.2	1.2%
50.6%	189.3	191.3	2.0	1.1%
51.9%	189.1	191.3	2.2	1.2%
53.1%	188.9	191.0	2.1	1.1%
54.3%	188.0	190.8	2.8	1.5%
55.6%	187.8	190.7	2.8	1.5%
56.8%	187.3	190.6	3.3	1.8%
58.0%	187.3	189.7	2.4	1.3%
59.3%	186.5	189.4	2.9	1.6%
60.5%	186.4	186.8	0.4	0.2%
61.7%	185.8	186.6	0.7	0.4%
63.0%	185.7	186.1	0.4	0.2%
64.2%	184.7	185.8	1.1	0.6%
65.4%	184.3	185.5	1.2	0.6%
66.7%	184.0	185.5	1.4	0.8%
67.9%	183.8	184.6	0.7	0.4%
69.1%	183.7	184.3	0.6	0.3%
70.4%	183.6	184.0	0.4	0.2%
71.6%	183.1	183.9	0.8	0.4%
72.8%	182.9	183.6	0.8	0.4%
74.1%	182.5	183.6	1.1	0.6%
75.3%	182.2	182.7	0.5	0.3%
76.5%	182.1	182.5	0.4	0.2%
77.8%	181.9	182.3	0.4	0.2%
79.0%	181.7	182.1	0.4	0.2%
80.2%	181.5	182.1	0.6	0.3%
81.5%	181.5	182.0	0.6	0.3%
82.7%	181.4	182.0	0.5	0.3%
84.0%	181.4	181.4	0.0	0.0%
85.2%	181.3	181.3	0.1	0.0%
86.4%	181.0	181.1	0.1	0.1%
87.7%	181.0	181.0	0.0	0.0%
88.9%	181.0	180.6	-0.4	-0.2%
90.1%	180.5	180.5	0.0	0.0%
91.4%	180.4	180.5	0.1	0.1%
92.6%	180.3	180.4	0.1	0.0%
93.8%	180.3	180.3	0.0	0.0%
95.1%	180.2	180.1	-0.1	-0.1%
96.3%	179.9	179.6	-0.3	-0.2%
97.5%	179.6	179.6	0.0	0.0%
98.8%	179.4	179.4	0.0	0.0%
100.0%	179.0	179.1	0.1	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	643.1	678.2	35.1	5.5%
1.2%	589.3	559.2	-30.1	-5.1%
2.5%	524.6	529.2	4.6	0.9%
3.7%	430.9	438.4	7.5	1.7%
4.9%	421.7	430.4	8.7	2.1%
6.2%	383.8	367.4	-16.5	-4.3%
7.4%	382.2	353.5	-28.7	-7.5%
8.6%	366.6	346.4	-20.1	-5.5%
9.9%	345.9	336.1	-9.7	-2.8%
11.1%	325.3	328.5	3.2	1.0%
12.3%	297.0	302.1	5.1	1.7%
13.6%	294.3	296.1	1.8	0.6%
14.8%	292.1	291.1	-1.1	-0.4%
16.0%	290.3	289.4	-0.9	-0.3%
17.3%	279.1	284.9	5.8	2.1%
18.5%	274.5	283.7	9.3	3.4%
19.8%	257.4	264.2	6.9	2.7%
21.0%	250.5	261.9	11.4	4.5%
22.2%	235.6	254.3	18.7	7.9%
23.5%	231.2	239.1	7.9	3.4%
24.7%	228.9	231.3	2.4	1.0%
25.9%	218.0	228.2	10.2	4.7%
27.2%	217.5	217.9	0.4	0.2%
28.4%	215.3	217.5	2.2	1.0%
29.6%	213.3	214.4	1.1	0.5%
30.9%	212.5	211.7	-0.8	-0.4%
32.1%	209.7	211.4	1.7	0.8%
33.3%	209.4	210.4	0.9	0.4%
34.6%	206.5	208.0	1.5	0.7%
35.8%	206.1	207.3	1.1	0.6%
37.0%	205.8	207.0	1.3	0.6%
38.3%	204.8	207.0	2.1	1.0%
39.5%	204.8	206.3	1.5	0.7%
40.7%	203.3	205.2	1.9	0.9%
42.0%	203.0	204.8	1.8	0.9%
43.2%	202.8	203.8	1.1	0.5%
44.4%	202.6	202.0	-0.6	-0.3%
45.7%	201.4	201.4	0.0	0.0%
46.9%	200.2	200.5	0.3	0.1%
48.1%	198.5	198.6	0.1	0.0%
49.4%	198.3	198.5	0.2	0.1%
50.6%	198.2	198.4	0.2	0.1%
51.9%	197.5	198.1	0.6	0.3%
53.1%	194.4	197.7	3.4	1.7%
54.3%	193.5	196.2	2.7	1.4%
55.6%	193.2	195.3	2.0	1.1%
56.8%	191.9	194.1	2.1	1.1%
58.0%	191.9	194.1	2.2	1.2%
59.3%	191.5	193.2	1.8	0.9%
60.5%	191.1	191.5	0.4	0.2%
61.7%	191.0	191.4	0.4	0.2%
63.0%	190.4	191.0	0.6	0.3%
64.2%	190.1	190.4	0.3	0.2%
65.4%	189.8	190.4	0.6	0.3%
66.7%	189.5	190.3	0.9	0.5%
67.9%	189.4	190.3	0.9	0.5%
69.1%	189.1	190.1	1.0	0.5%
70.4%	189.1	189.5	0.4	0.2%
71.6%	188.5	188.6	0.1	0.1%
72.8%	188.0	187.9	-0.1	0.0%
74.1%	187.3	187.7	0.4	0.2%
75.3%	187.2	187.2	0.1	0.0%
76.5%	186.7	187.1	0.4	0.2%
77.8%	185.2	186.7	1.5	0.8%
79.0%	184.8	185.2	0.4	0.2%
80.2%	184.6	184.8	0.2	0.1%
81.5%	183.6	184.4	0.8	0.4%
82.7%	183.1	183.2	0.1	0.1%
84.0%	182.9	183.1	0.2	0.1%
85.2%	182.4	182.5	0.1	0.1%
86.4%	181.8	182.2	0.4	0.2%
87.7%	181.7	182.1	0.4	0.2%
88.9%	181.4	181.8	0.5	0.3%
90.1%	181.2	181.4	0.2	0.1%
91.4%	181.1	181.1	0.0	0.0%
92.6%	180.6	180.6	0.0	0.0%
93.8%	180.5	180.4	-0.1	0.0%
95.1%	179.6	179.6	0.0	0.0%
96.3%	179.3	179.5	0.2	0.1%
97.5%	179.2	179.4	0.2	0.1%
98.8%	179.1	179.1	0.0	0.0%
100.0%	178.4	178.4	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1539.9	1543.7	3.8	0.2%
1.2%	1426.7	1457.9	31.2	2.2%
2.5%	1172.1	1300.0	127.9	10.9%
3.7%	1102.9	1207.7	104.7	9.5%
4.9%	685.1	640.9	-44.2	-6.5%
6.2%	652.3	639.3	-13.0	-2.0%
7.4%	596.7	613.9	17.2	2.9%
8.6%	575.0	598.0	23.0	4.0%
9.9%	533.0	524.3	-8.6	-1.6%
11.1%	527.7	521.3	-6.4	-1.2%
12.3%	490.7	492.8	2.1	0.4%
13.6%	477.4	479.9	2.5	0.5%
14.8%	473.1	475.0	2.0	0.4%
16.0%	431.6	403.9	-27.7	-6.4%
17.3%	409.0	394.5	-14.5	-3.5%
18.5%	397.1	385.7	-11.4	-2.9%
19.8%	392.4	376.7	-15.7	-4.0%
21.0%	371.2	371.2	0.0	0.0%
22.2%	354.2	354.0	-0.2	-0.1%
23.5%	337.1	343.8	6.7	2.0%
24.7%	330.5	337.8	7.3	2.2%
25.9%	319.5	328.5	9.0	2.8%
27.2%	316.9	302.7	-14.3	-4.5%
28.4%	301.2	301.8	0.6	0.2%
29.6%	295.0	291.1	-3.8	-1.3%
30.9%	292.8	288.2	-4.6	-1.6%
32.1%	281.8	282.3	0.5	0.2%
33.3%	280.2	280.3	0.1	0.0%
34.6%	252.3	243.0	-9.3	-3.7%
35.8%	244.6	242.9	-1.7	-0.7%
37.0%	243.0	242.8	-0.3	-0.1%
38.3%	240.6	240.7	0.1	0.0%
39.5%	236.5	237.5	1.0	0.4%
40.7%	234.5	235.5	1.0	0.4%
42.0%	220.5	235.4	14.9	6.7%
43.2%	219.4	220.4	1.0	0.4%
44.4%	217.8	217.9	0.0	0.0%
45.7%	217.7	216.3	-1.4	-0.7%
46.9%	215.2	215.4	0.2	0.1%
48.1%	214.6	214.7	0.0	0.0%
49.4%	208.1	204.8	-3.3	-1.6%
50.6%	204.6	204.6	0.0	0.0%
51.9%	203.6	204.4	0.8	0.4%
53.1%	203.2	203.3	0.0	0.0%
54.3%	203.1	203.0	0.0	0.0%
55.6%	202.2	202.3	0.1	0.1%
56.8%	200.9	201.1	0.1	0.1%
58.0%	200.1	200.2	0.1	0.1%
59.3%	199.8	199.7	-0.1	0.0%
60.5%	199.6	199.7	0.1	0.1%
61.7%	199.6	199.7	0.1	0.1%
63.0%	199.4	199.6	0.2	0.1%
64.2%	197.1	198.5	1.3	0.7%
65.4%	194.9	198.3	3.3	1.7%
66.7%	194.7	195.2	0.5	0.3%
67.9%	194.4	194.5	0.1	0.1%
69.1%	193.7	193.8	0.2	0.1%
70.4%	191.5	192.4	0.9	0.5%
71.6%	190.2	190.3	0.1	0.1%
72.8%	188.7	188.5	-0.2	-0.1%
74.1%	188.0	188.1	0.1	0.1%
75.3%	187.2	187.1	-0.1	-0.1%
76.5%	187.1	186.9	-0.2	-0.1%
77.8%	185.5	186.1	0.6	0.3%
79.0%	184.5	185.3	0.7	0.4%
80.2%	184.2	184.3	0.1	0.0%
81.5%	183.9	184.2	0.3	0.2%
82.7%	183.5	184.0	0.5	0.3%
84.0%	183.0	183.1	0.1	0.0%
85.2%	181.4	181.8	0.3	0.2%
86.4%	181.3	181.4	0.1	0.0%
87.7%	180.8	181.0	0.1	0.1%
88.9%	180.5	180.5	0.0	0.0%
90.1%	180.0	179.9	0.0	0.0%
91.4%	179.1	179.2	0.1	0.0%
92.6%	179.0	178.9	-0.1	-0.1%
93.8%	177.8	177.8	0.0	0.0%
95.1%	177.7	177.7	-0.1	-0.1%
96.3%	177.3	177.3	0.0	0.0%
97.5%	177.3	177.2	0.0	0.0%
98.8%	176.9	176.9	0.0	0.0%
100.0%	176.1	176.1	0.0	0.0%

Table SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2630.5	2646.3	15.7	0.6%
1.2%	2434.4	2196.6	-237.8	-9.8%
2.5%	2155.2	2003.3	-151.9	-7.0%
3.7%	2105.7	1956.4	-149.3	-7.1%
4.9%	1659.8	1573.5	-86.3	-5.2%
6.2%	1454.6	1447.4	-7.2	-0.5%
7.4%	1423.4	1348.8	-74.6	-5.2%
8.6%	857.7	857.5	-0.1	0.0%
9.9%	810.6	799.5	-11.0	-1.4%
11.1%	795.7	772.7	-23.1	-2.9%
12.3%	766.8	727.3	-39.6	-5.2%
13.6%	734.2	679.4	-54.7	-7.5%
14.8%	707.0	674.3	-32.7	-4.6%
16.0%	694.1	664.1	-30.0	-4.3%
17.3%	675.4	661.0	-14.3	-2.1%
18.5%	660.8	644.0	-16.8	-2.5%
19.8%	629.8	617.2	-12.6	-2.0%
21.0%	628.5	611.5	-16.9	-2.7%
22.2%	616.5	608.6	-7.9	-1.3%
23.5%	616.2	607.3	-8.9	-1.4%
24.7%	607.4	595.1	-12.3	-2.0%
25.9%	590.4	591.1	0.8	0.1%
27.2%	582.5	591.0	8.5	1.5%
28.4%	568.8	590.7	21.9	3.8%
29.6%	568.5	568.7	0.2	0.0%
30.9%	568.1	565.3	-2.8	-0.5%
32.1%	566.8	563.3	-3.5	-0.6%
33.3%	554.0	555.4	1.4	0.3%
34.6%	541.6	548.3	6.6	1.2%
35.8%	533.0	533.1	0.0	0.0%
37.0%	508.6	521.3	12.7	2.5%
38.3%	494.8	491.0	-3.8	-0.8%
39.5%	490.8	485.2	-5.6	-1.1%
40.7%	430.8	428.2	-2.6	-0.6%
42.0%	420.4	417.8	-2.5	-0.6%
43.2%	420.0	411.7	-8.4	-2.0%
44.4%	415.6	410.9	-4.6	-1.1%
45.7%	415.4	405.4	-10.0	-2.4%
46.9%	406.5	403.0	-3.5	-0.9%
48.1%	406.2	401.7	-4.5	-1.1%
49.4%	402.6	394.9	-7.7	-1.9%
50.6%	387.2	386.1	-1.1	-0.3%
51.9%	383.8	374.0	-9.8	-2.6%
53.1%	374.0	369.6	-4.4	-1.2%
54.3%	371.1	367.9	-3.3	-0.9%
55.6%	370.9	335.7	-35.2	-9.5%
56.8%	340.0	322.4	-17.6	-5.2%
58.0%	322.2	285.9	-36.3	-11.3%
59.3%	300.0	276.5	-23.4	-7.8%
60.5%	286.7	275.1	-11.6	-4.0%
61.7%	284.7	271.6	-13.1	-4.6%
63.0%	282.9	269.5	-13.5	-4.8%
64.2%	275.4	264.1	-11.3	-4.1%
65.4%	274.9	251.9	-23.0	-8.4%
66.7%	257.6	251.4	-6.2	-2.4%
67.9%	248.1	245.3	-2.8	-1.1%
69.1%	243.1	243.1	0.0	0.0%
70.4%	242.9	233.5	-9.4	-3.9%
71.6%	235.0	226.4	-8.6	-3.6%
72.8%	223.9	225.9	2.0	0.9%
74.1%	220.3	217.7	-2.7	-1.2%
75.3%	210.2	205.0	-5.2	-2.5%
76.5%	200.6	201.9	1.3	0.6%
77.8%	198.5	197.6	-0.9	-0.5%
79.0%	197.4	196.8	-0.6	-0.3%
80.2%	196.2	193.4	-2.8	-1.4%
81.5%	193.4	193.0	-0.4	-0.2%
82.7%	190.2	190.3	0.0	0.0%
84.0%	186.6	188.5	1.9	1.0%
85.2%	186.1	186.9	0.7	0.4%
86.4%	185.9	185.9	-0.1	0.0%
87.7%	185.8	185.6	-0.2	-0.1%
88.9%	185.0	185.2	0.1	0.1%
90.1%	183.8	185.1	1.2	0.7%
91.4%	181.8	181.8	0.0	0.0%
92.6%	180.9	180.8	-0.1	-0.1%
93.8%	180.6	180.5	-0.2	-0.1%
95.1%	180.1	179.9	-0.2	-0.1%
96.3%	179.7	179.2	-0.4	-0.2%
97.5%	179.0	179.1	0.1	0.1%
98.8%	178.1	177.9	-0.2	-0.1%
100.0%	177.5	177.5	0.0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2843.2	2814.9	-28.3	-1.0%
1.2%	2671.8	2221.7	-450.1	-16.8%
2.5%	2584.1	1991.6	-592.5	-22.9%
3.7%	1922.1	1956.1	33.9	1.8%
4.9%	1870.1	1842.7	-27.4	-1.5%
6.2%	1662.6	1609.5	-53.1	-3.2%
7.4%	1471.8	1550.4	78.6	5.3%
8.6%	1462.6	1491.3	28.6	2.0%
9.9%	1434.7	1373.4	-61.3	-4.3%
11.1%	1426.5	1306.9	-119.6	-8.4%
12.3%	1409.6	1228.0	-181.7	-12.9%
13.6%	1269.9	1063.5	-206.3	-16.2%
14.8%	1045.3	1024.9	-20.4	-2.0%
16.0%	1012.5	942.9	-69.6	-6.9%
17.3%	957.0	932.0	-25.0	-2.6%
18.5%	904.1	868.6	-35.5	-3.9%
19.8%	857.4	848.8	-8.7	-1.0%
21.0%	854.6	842.1	-12.5	-1.5%
22.2%	826.2	835.6	9.4	1.1%
23.5%	824.8	831.6	6.8	0.8%
24.7%	816.4	825.0	8.6	1.1%
25.9%	800.4	774.3	-26.1	-3.3%
27.2%	783.4	761.7	-21.7	-2.8%
28.4%	778.5	744.6	-33.8	-4.3%
29.6%	761.5	740.6	-20.9	-2.7%
30.9%	759.2	740.0	-19.2	-2.5%
32.1%	743.9	735.0	-8.9	-1.2%
33.3%	723.2	725.8	2.6	0.4%
34.6%	722.7	725.4	2.8	0.4%
35.8%	666.5	600.9	-65.6	-9.8%
37.0%	570.2	567.2	-3.0	-0.5%
38.3%	539.7	541.7	2.0	0.4%
39.5%	530.2	530.1	-0.2	0.0%
40.7%	525.5	525.3	-0.3	-0.1%
42.0%	517.9	507.8	-10.2	-2.0%
43.2%	516.5	503.5	-13.0	-2.5%
44.4%	505.9	502.0	-3.9	-0.8%
45.7%	503.9	471.1	-32.8	-6.5%
46.9%	463.8	460.6	-3.1	-0.7%
48.1%	461.9	451.5	-10.4	-2.3%
49.4%	451.6	451.3	-0.2	-0.1%
50.6%	451.3	428.5	-22.8	-5.0%
51.9%	414.4	416.9	2.5	0.6%
53.1%	387.3	372.9	-14.3	-3.7%
54.3%	382.4	372.2	-10.3	-2.7%
55.6%	375.5	370.0	-5.5	-1.5%
56.8%	371.6	354.0	-17.6	-4.7%
58.0%	355.7	349.2	-6.5	-1.8%
59.3%	353.2	348.1	-5.1	-1.5%
60.5%	348.1	341.5	-6.6	-1.9%
61.7%	346.9	339.0	-7.8	-2.3%
63.0%	344.8	338.3	-6.5	-1.9%
64.2%	344.7	335.4	-9.3	-2.7%
65.4%	344.5	333.7	-10.9	-3.2%
66.7%	343.7	332.2	-11.5	-3.3%
67.9%	339.3	329.4	-9.9	-2.9%
69.1%	331.9	328.5	-3.4	-1.0%
70.4%	331.7	328.4	-3.3	-1.0%
71.6%	324.2	323.1	-1.1	-0.3%
72.8%	317.4	320.1	2.7	0.8%
74.1%	315.3	317.4	2.1	0.7%
75.3%	308.1	308.9	0.8	0.3%
76.5%	307.5	306.0	-1.5	-0.5%
77.8%	305.8	304.6	-1.2	-0.4%
79.0%	304.8	302.6	-2.3	-0.7%
80.2%	300.5	301.4	0.9	0.3%
81.5%	284.4	283.1	-1.3	-0.5%
82.7%	283.0	279.7	-3.2	-1.1%
84.0%	275.0	279.4	4.4	1.6%
85.2%	272.7	273.7	1.0	0.4%
86.4%	272.4	272.6	0.2	0.1%
87.7%	271.6	271.6	0.0	0.0%
88.9%	269.3	269.6	0.3	0.1%
90.1%	266.4	269.4	3.0	1.1%
91.4%	261.1	258.6	-2.5	-0.9%
92.6%	254.9	255.5	0.5	0.2%
93.8%	239.7	239.7	0.0	0.0%
95.1%	219.7	221.1	1.4	0.6%
96.3%	205.0	201.1	-4.0	-1.9%
97.5%	195.9	195.1	-0.8	-0.4%
98.8%	189.0	189.1	0.2	0.1%
100.0%	187.4	187.5	0.0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2826.6	2842.5	15.9	0.6%
1.2%	2646.3	2662.4	16.1	0.6%
2.5%	2587.8	2435.3	-152.5	-5.9%
3.7%	2503.2	2395.9	-107.3	-4.3%
4.9%	2475.6	2394.7	-80.9	-3.3%
6.2%	2449.4	2377.6	-71.8	-2.9%
7.4%	2444.7	2311.9	-132.8	-5.4%
8.6%	2431.2	2259.9	-171.3	-7.0%
9.9%	2348.5	2152.6	-195.9	-8.3%
11.1%	2290.5	2033.0	-257.5	-11.2%
12.3%	2261.9	1956.8	-305.1	-13.5%
13.6%	2206.4	1833.9	-372.5	-16.9%
14.8%	1966.6	1739.6	-227.1	-11.5%
16.0%	1865.1	1726.3	-138.8	-7.4%
17.3%	1863.5	1682.0	-181.5	-9.7%
18.5%	1847.7	1677.3	-170.5	-9.2%
19.8%	1825.1	1673.1	-152.0	-8.3%
21.0%	1796.6	1656.6	-140.0	-7.8%
22.2%	1783.9	1637.7	-146.2	-8.2%
23.5%	1779.9	1596.7	-183.2	-10.3%
24.7%	1745.4	1579.1	-166.3	-9.5%
25.9%	1741.8	1528.8	-212.9	-12.2%
27.2%	1705.3	1521.0	-184.3	-10.8%
28.4%	1701.3	1488.3	-213.0	-12.5%
29.6%	1683.8	1434.2	-249.6	-14.8%
30.9%	1649.7	1394.5	-255.2	-15.5%
32.1%	1643.9	1347.4	-296.5	-18.0%
33.3%	1526.8	1182.5	-344.3	-22.6%
34.6%	1525.9	1117.6	-408.3	-26.8%
35.8%	1222.5	1109.1	-113.3	-9.3%
37.0%	1203.0	1093.6	-109.4	-9.1%
38.3%	1177.0	1084.7	-92.3	-7.8%
39.5%	1083.3	1065.5	-17.8	-1.6%
40.7%	1083.2	1055.9	-27.2	-2.5%
42.0%	1080.8	1002.2	-78.6	-7.3%
43.2%	1054.7	982.5	-72.2	-6.8%
44.4%	1038.7	965.8	-72.8	-7.0%
45.7%	1037.9	961.0	-76.9	-7.4%
46.9%	1029.0	953.1	-75.9	-7.4%
48.1%	984.3	937.9	-46.3	-4.7%
49.4%	966.3	936.2	-30.1	-3.1%
50.6%	963.4	930.8	-32.6	-3.4%
51.9%	954.0	919.4	-34.6	-3.6%
53.1%	943.4	895.9	-47.4	-5.0%
54.3%	935.7	884.6	-51.2	-5.5%
55.6%	934.3	884.4	-49.9	-5.3%
56.8%	928.8	884.1	-44.7	-4.8%
58.0%	909.0	860.9	-48.2	-5.3%
59.3%	903.5	859.9	-43.6	-4.8%
60.5%	901.8	850.4	-51.4	-5.7%
61.7%	897.7	846.9	-50.7	-5.7%
63.0%	885.2	840.0	-45.2	-5.1%
64.2%	882.1	836.1	-46.0	-5.2%
65.4%	869.4	835.1	-34.3	-3.9%
66.7%	864.5	834.7	-29.8	-3.4%
67.9%	863.9	832.9	-31.0	-3.6%
69.1%	851.2	830.6	-20.6	-2.4%
70.4%	849.2	823.0	-26.3	-3.1%
71.6%	838.3	820.5	-17.8	-2.1%
72.8%	837.8	819.2	-18.6	-2.2%
74.1%	834.9	812.5	-22.4	-2.7%
75.3%	827.4	798.9	-28.5	-3.4%
76.5%	812.1	781.4	-30.7	-3.8%
77.8%	810.8	776.8	-34.1	-4.2%
79.0%	801.5	773.5	-28.0	-3.5%
80.2%	800.6	744.4	-56.2	-7.0%
81.5%	794.5	738.1	-56.3	-7.1%
82.7%	765.6	734.5	-31.1	-4.1%
84.0%	763.3	718.1	-45.2	-5.9%
85.2%	757.0	714.9	-42.1	-5.6%
86.4%	756.7	714.5	-42.2	-5.6%
87.7%	756.7	705.9	-50.8	-6.7%
88.9%	754.0	702.2	-51.8	-6.9%
90.1%	749.7	697.5	-52.2	-7.0%
91.4%	749.5	695.0	-54.6	-7.3%
92.6%	703.1	688.7	-14.5	-2.1%
93.8%	692.3	650.0	-42.3	-6.1%
95.1%	573.3	588.2	14.9	2.6%
96.3%	508.6	554.0	45.4	8.9%
97.5%	255.6	322.8	67.2	26.3%
98.8%	205.4	198.8	-6.6	-3.2%
100.0%	189.7	188.1	-1.7	-0.9%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3720.0	3681.8	-38.2	-1.0%
1.2%	3591.8	3392.5	-199.2	-5.5%
2.5%	3390.2	3331.5	-58.7	-1.7%
3.7%	3251.0	3192.9	-58.0	-1.8%
4.9%	3236.8	3167.8	-69.0	-2.1%
6.2%	3170.2	3143.6	-26.5	-0.8%
7.4%	3169.4	2832.3	-337.1	-10.6%
8.6%	3143.2	2777.3	-365.9	-11.6%
9.9%	3131.0	2725.1	-405.9	-13.0%
11.1%	3087.5	2617.5	-470.0	-15.2%
12.3%	2988.8	2477.7	-511.2	-17.1%
13.6%	2864.7	2378.1	-486.7	-17.0%
14.8%	2814.9	2375.9	-438.9	-15.6%
16.0%	2781.4	2329.5	-451.9	-16.2%
17.3%	2748.0	2279.1	-469.0	-17.1%
18.5%	2743.4	2252.5	-490.9	-17.9%
19.8%	2682.4	2172.1	-510.2	-19.0%
21.0%	2669.3	2146.7	-522.6	-19.6%
22.2%	2642.5	2135.8	-506.7	-19.2%
23.5%	2627.9	2130.6	-497.3	-18.9%
24.7%	2568.4	2065.5	-502.9	-19.6%
25.9%	2565.0	2034.4	-530.7	-20.7%
27.2%	2518.3	1873.1	-645.1	-25.6%
28.4%	2494.1	1865.5	-628.6	-25.2%
29.6%	2392.9	1844.4	-548.5	-22.9%
30.9%	2383.8	1829.6	-554.2	-23.2%
32.1%	2348.6	1793.2	-555.5	-23.7%
33.3%	2335.9	1777.1	-558.8	-23.9%
34.6%	2326.8	1701.0	-625.8	-26.9%
35.8%	2269.9	1667.1	-602.9	-26.6%
37.0%	2225.7	1567.6	-658.1	-29.6%
38.3%	1923.0	1548.2	-374.8	-19.5%
39.5%	1743.6	1537.7	-205.9	-11.8%
40.7%	1646.2	1498.0	-148.2	-9.0%
42.0%	1632.3	1470.0	-162.3	-9.9%
43.2%	1605.9	1438.1	-167.9	-10.5%
44.4%	1583.7	1415.3	-168.5	-10.6%
45.7%	1531.3	1337.3	-194.0	-12.7%
46.9%	1463.6	1326.1	-137.5	-9.4%
48.1%	1445.9	1305.9	-140.0	-9.7%
49.4%	1434.5	1273.6	-160.9	-11.2%
50.6%	1432.3	1271.2	-161.1	-11.2%
51.9%	1413.3	1248.6	-164.7	-11.7%
53.1%	1399.5	1105.2	-294.3	-21.0%
54.3%	523.7	487.8	-35.9	-6.9%
55.6%	516.5	478.5	-38.0	-7.4%
56.8%	504.3	472.6	-31.8	-6.3%
58.0%	502.3	466.8	-35.4	-7.1%
59.3%	501.1	458.4	-42.7	-8.5%
60.5%	494.9	454.0	-40.9	-8.3%
61.7%	461.3	442.2	-19.2	-4.2%
63.0%	459.9	431.9	-28.0	-6.1%
64.2%	455.1	424.2	-30.9	-6.8%
65.4%	435.4	417.3	-18.1	-4.2%
66.7%	426.2	393.8	-32.3	-7.6%
67.9%	396.5	372.6	-23.9	-6.0%
69.1%	340.4	327.4	-13.0	-3.8%
70.4%	320.9	320.9	0.0	0.0%
71.6%	315.6	313.4	-2.2	-0.7%
72.8%	313.8	310.5	-3.2	-1.0%
74.1%	313.1	307.6	-5.5	-1.8%
75.3%	312.4	302.3	-10.1	-3.2%
76.5%	305.8	301.7	-4.1	-1.3%
77.8%	303.8	301.3	-2.5	-0.8%
79.0%	302.8	299.8	-3.0	-1.0%
80.2%	302.5	298.8	-3.7	-1.2%
81.5%	302.5	297.6	-4.8	-1.6%
82.7%	301.3	295.6	-5.7	-1.9%
84.0%	299.1	294.3	-4.8	-1.6%
85.2%	295.0	291.4	-3.6	-1.2%
86.4%	294.0	282.4	-11.6	-3.9%
87.7%	291.7	278.3	-13.4	-4.6%
88.9%	291.1	274.5	-16.6	-5.7%
90.1%	282.1	270.3	-11.9	-4.2%
91.4%	276.0	270.1	-5.9	-2.1%
92.6%	269.9	265.8	-4.1	-1.5%
93.8%	269.1	264.1	-5.0	-1.9%
95.1%	264.4	258.3	-6.0	-2.3%
96.3%	247.2	252.6	5.5	2.2%
97.5%	230.1	244.1	14.0	6.1%
98.8%	192.2	193.9	1.7	0.9%
100.0%	182.2	182.9	0.7	0.4%

Figure SQ-22-b
Sacramento River at Collinsville, Monthly EC
Probability of Exceedance

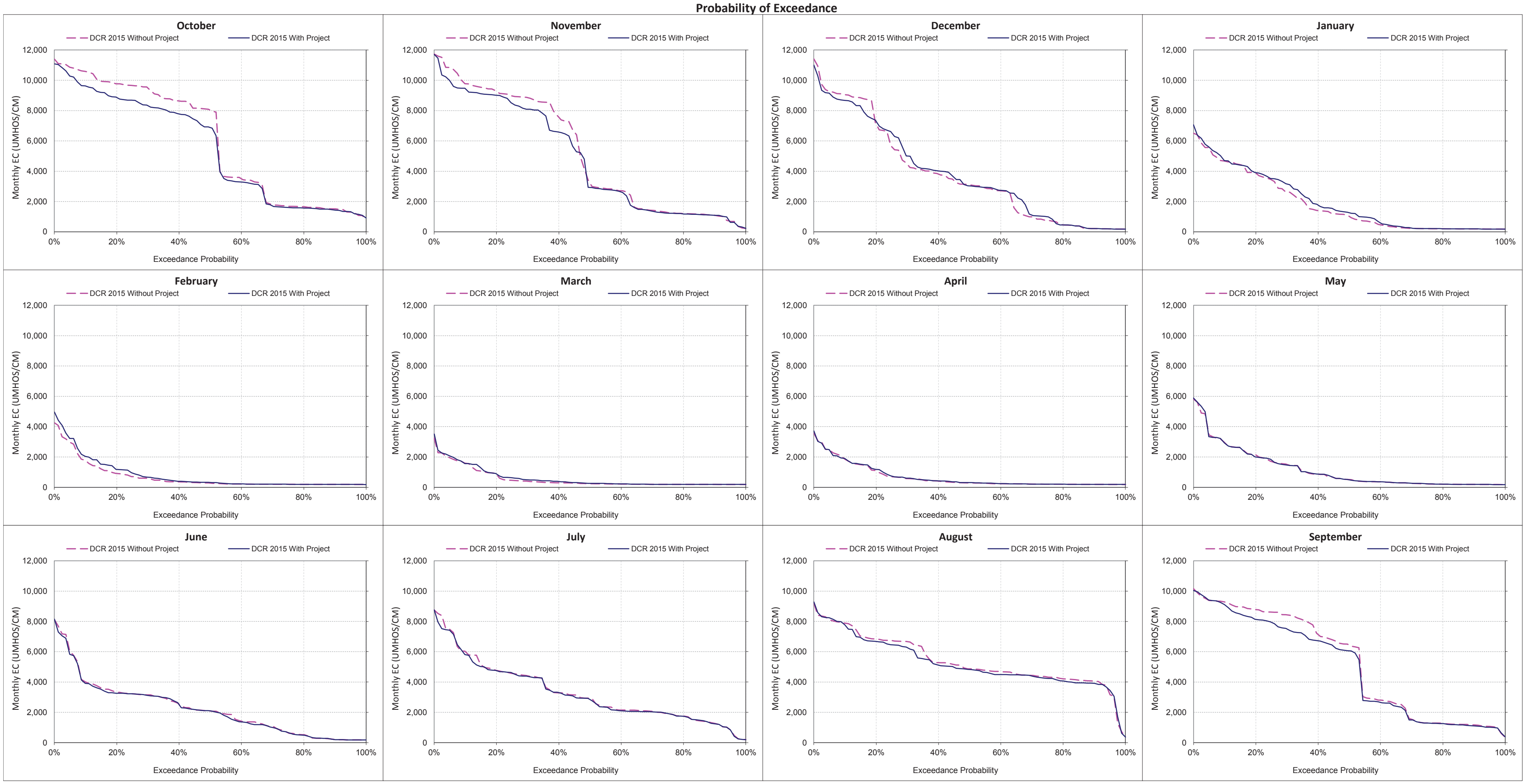


Table SQ-22-b

Sacramento River at Collinsville, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11400.6	11093.5	-307.2	-2.7%
1.2%	11103.4	11028.2	-75.1	-0.7%
2.5%	11081.1	10825.8	-255.3	-2.3%
3.7%	11037.4	10624.2	-413.2	-3.7%
4.9%	10858.1	10286.4	-571.6	-5.3%
6.2%	10802.3	10208.5	-593.8	-5.5%
7.4%	10708.4	9883.4	-824.9	-7.7%
8.6%	10629.7	9640.7	-989.0	-9.3%
9.9%	10590.5	9636.6	-953.9	-9.0%
11.1%	10531.8	9538.4	-993.5	-9.4%
12.3%	10430.9	9490.6	-940.3	-9.0%
13.6%	10065.7	9279.1	-786.6	-7.8%
14.8%	9937.3	9197.7	-739.7	-7.4%
16.0%	9914.9	9178.5	-736.4	-7.4%
17.3%	9907.8	8981.9	-925.9	-9.3%
18.5%	9857.8	8914.3	-943.5	-9.6%
19.8%	9770.6	8900.3	-870.3	-8.9%
21.0%	9769.5	8763.8	-1005.7	-10.3%
22.2%	9718.1	8718.3	-999.8	-10.3%
23.5%	9678.9	8693.7	-985.3	-10.2%
24.7%	9666.2	8682.0	-984.2	-10.2%
25.9%	9638.4	8677.9	-960.5	-10.0%
27.2%	9633.0	8512.8	-1120.3	-11.6%
28.4%	9569.4	8378.0	-1191.4	-12.5%
29.6%	9557.3	8369.7	-1187.7	-12.4%
30.9%	9320.3	8220.3	-1100.0	-11.8%
32.1%	9106.8	8190.6	-916.2	-10.1%
33.3%	9050.6	8183.1	-867.5	-9.6%
34.6%	8815.8	8099.7	-716.1	-8.1%
35.8%	8785.2	8038.5	-746.7	-8.5%
37.0%	8778.1	7895.4	-882.8	-10.1%
38.3%	8673.7	7880.6	-793.2	-9.1%
39.5%	8647.7	7807.7	-840.0	-9.7%
40.7%	8615.9	7750.6	-865.3	-10.0%
42.0%	8614.7	7728.8	-886.0	-10.3%
43.2%	8555.3	7622.3	-933.0	-10.9%
44.4%	8159.3	7464.9	-694.4	-8.5%
45.7%	8158.3	7340.4	-817.9	-10.0%
46.9%	8141.9	7085.0	-1057.0	-13.0%
48.1%	8113.6	6930.5	-1183.1	-14.6%
49.4%	8089.2	6922.0	-1167.1	-14.4%
50.6%	7967.8	6842.5	-1125.2	-14.1%
51.9%	7900.7	6342.8	-1557.8	-19.7%
53.1%	3970.2	3965.8	-4.4	-0.1%
54.3%	3657.1	3519.4	-137.7	-3.8%
55.6%	3621.1	3394.0	-227.1	-6.3%
56.8%	3602.7	3359.0	-243.8	-6.8%
58.0%	3592.9	3307.3	-285.6	-7.9%
59.3%	3591.5	3304.0	-287.6	-8.0%
60.5%	3436.4	3287.2	-149.2	-4.3%
61.7%	3407.4	3242.1	-165.3	-4.9%
63.0%	3401.4	3187.6	-213.8	-6.3%
64.2%	3291.2	3141.2	-149.9	-4.6%
65.4%	3263.7	3121.1	-142.6	-4.4%
66.7%	3074.1	2846.1	-227.9	-7.4%
67.9%	1937.8	1837.0	-100.8	-5.2%
69.1%	1841.3	1795.6	-45.7	-2.5%
70.4%	1771.0	1665.1	-105.9	-6.0%
71.6%	1759.1	1658.9	-100.2	-5.7%
72.8%	1727.1	1628.4	-98.7	-5.7%
74.1%	1718.8	1625.2	-93.6	-5.4%
75.3%	1679.7	1596.6	-83.1	-5.0%
76.5%	1679.3	1591.9	-87.5	-5.2%
77.8%	1671.7	1581.2	-90.5	-5.4%
79.0%	1660.1	1576.7	-83.5	-5.0%
80.2%	1652.6	1569.9	-82.7	-5.0%
81.5%	1615.2	1566.9	-48.2	-3.0%
82.7%	1614.3	1557.0	-57.3	-3.5%
84.0%	1606.3	1531.0	-75.3	-4.7%
85.2%	1591.8	1502.1	-89.7	-5.6%
86.4%	1529.3	1494.8	-34.6	-2.3%
87.7%	1520.9	1494.6	-26.3	-1.7%
88.9%	1520.0	1465.6	-54.4	-3.6%
90.1%	1518.2	1431.8	-86.3	-5.7%
91.4%	1480.8	1410.2	-70.6	-4.8%
92.6%	1466.6	1343.0	-123.6	-8.4%
93.8%	1311.9	1340.9	29.0	2.2%
95.1%	1305.2	1331.3	26.1	2.0%
96.3%	1249.5	1192.5	-57.0	-4.6%
97.5%	1082.3	1161.0	78.7	7.3%
98.8%	1077.2	1091.2	14.0	1.3%
100.0%	786.3	913.0	126.7	16.1%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11735.4	11708.7	-26.7	-0.2%
1.2%	11599.2	11462.0	-137.2	-1.2%
2.5%	11509.9	10347.8	-1162.1	-10.1%
3.7%	10856.7	10230.5	-626.3	-5.8%
4.9%	10847.5	9990.5	-857.1	-7.9%
6.2%	10720.0	9602.0	-1118.0	-10.4%
7.4%	10463.7	9493.7	-970.0	-9.3%
8.6%	10037.8	9476.3	-561.5	-5.6%
9.9%	9775.0	9475.3	-299.7	-3.1%
11.1%	9763.3	9216.2	-547.1	-5.6%
12.3%	9659.6	9198.4	-461.2	-4.8%
13.6%	9597.2	9187.2	-410.0	-4.3%
14.8%	9546.8	9111.6	-435.2	-4.6%
16.0%	9510.6	9080.0	-430.6	-4.5%
17.3%	9435.1	9067.7	-367.4	-3.9%
18.5%	9430.7	9050.6	-380.2	-4.0%
19.8%	9312.5	9020.6	-291.9	-3.1%
21.0%	9136.4	9002.1	-134.3	-1.5%
22.2%	9110.5	8903.2	-207.2	-2.3%
23.5%	9084.2	8806.3	-277.8	-3.1%
24.7%	8977.9	8525.5	-452.5	-5.0%
25.9%	8931.8	8366.4	-565.4	-6.3%
27.2%	8918.0	8303.2	-614.8	-6.9%
28.4%	8895.1	8164.0	-731.1	-8.2%
29.6%	8877.1	8094.7	-782.4	-8.8%
30.9%	8813.5	8086.3	-727.3	-8.3%
32.1%	8703.1	8040.6	-662.5	-7.6%
33.3%	8599.9	8039.9	-560.0	-6.5%
34.6%	8565.8	7857.5	-708.3	-8.3%
35.8%	8549.0	7652.3	-896.7	-10.5%
37.0%	8545.3	6702.3	-1843.0	-21.6%
38.3%	7974.7	6633.2	-1341.6	-16.8%
39.5%	7674.9	6603.0	-1071.9	-14.0%
40.7%	7385.9	6548.2	-837.8	-11.3%
42.0%	7306.6	6466.2	-840.5	-11.5%
43.2%	7278.9	6327.7	-951.1	-13.1%
44.4%	6730.8	5660.1	-1070.7	-15.9%
45.7%	6401.5	5285.6	-1115.9	-17.4%
46.9%	4953.0	5225.4	272.4	5.5%
48.1%	4170.2	4810.0	639.8	15.3%
49.4%	3429.8	2941.0	-488.8	-14.3%
50.6%	2997.3	2923.9	-73.4	-2.4%
51.9%	2940.3	2874.8	-65.4	-2.2%
53.1%	2903.0	2853.5	-49.5	-1.7%
54.3%	2878.3	2796.0	-82.3	-2.9%
55.6%	2830.3	2788.9	-41.4	-1.5%
56.8%	2830.2	2767.1	-63.1	-2.2%
58.0%	2783.2	2731.3	-52.0	-1.9%
59.3%	2712.1	2671.9	-40.2	-1.5%
60.5%	2706.9	2589.3	-117.6	-4.3%
61.7%	2630.1	2378.0	-252.1	-9.6%
63.0%	2424.1	1753.1	-671.0	-27.7%
64.2%	1626.9	1597.7	-29.2	-1.8%
65.4%	1528.1	1486.1	-42.0	-2.7%
66.7%	1519.3	1478.1	-41.2	-2.7%
67.9%	1464.0	1450.7	-13.3	-0.9%
69.1%	1427.2	1397.2	-30.0	-2.1%
70.4%	1415.9	1348.2	-67.8	-4.8%
71.6%	1390.8	1299.7	-91.2	-6.6%
72.8%	1342.2	1272.6	-69.6	-5.2%
74.1%	1311.1	1234.5	-76.6	-5.8%
75.3%	1258.1	1226.3	-31.9	-2.5%
76.5%	1247.8	1225.5	-22.3	-1.8%
77.8%	1218.3	1199.4	-18.8	-1.5%
79.0%	1217.9	1199.3	-18.6	-1.5%
80.2%	1204.8	1168.6	-36.2	-3.0%
81.5%	1189.7	1167.3	-22.4	-1.9%
82.7%	1185.0	1160.0	-25.0	-2.1%
84.0%	1173.8	1159.3	-14.6	-1.2%
85.2%	1164.8	1131.8	-33.0	-2.8%
86.4%	1160.0	1126.3	-33.7	-2.9%
87.7%	1122.4	1123.8	1.3	0.1%
88.9%	1121.7	1104.6	-17.1	-1.5%
90.1%	1087.2	1094.0	6.8	0.6%
91.4%	1037.1	1086.8	49.7	4.8%
92.6%	1019.0	1012.0	-7.0	-0.7%
93.8%	763.1	980.0	216.9	28.4%
95.1%	682.4	629.6	-52.8	-7.7%
96.3%	682.2	619.7	-62.5	-9.2%
97.5%	358.5	363.6	5.1	1.4%
98.8%	258.3	309.8	51.5	
100.0%	223.8	225.1	1.3	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11409.9	10996.7	-413.2	-3.6%
1.2%	10950.1	10300.5	-649.6	-5.9%
2.5%	9740.7	9333.2	-407.4	-4.2%
3.7%	9391.7	9179.4	-212.3	-2.3%
4.9%	9251.3	9151.0	-100.4	-1.1%
6.2%	9219.8	8893.2	-326.6	-3.5%
7.4%	9126.3	8758.8	-367.5	-4.0%
8.6%	9108.3	8700.5	-407.8	-4.5%
9.9%	9055.6	8668.1	-387.5	-4.3%
11.1%	9025.8	8664.2	-361.6	-4.0%
12.3%	8900.2	8577.3	-322.9	-3.6%
13.6%	8879.2	8338.6	-540.6	-6.1%
14.8%	8859.4	8338.5	-521.0	-5.9%
16.0%	8781.0	7896.7	-884.3	-10.1%
17.3%	8725.0	7632.6	-1092.4	-12.5%
18.5%	8646.5	7487.6	-1158.8	-13.4%
19.8%	7198.2	7363.6	165.4	2.3%
21.0%	6727.2	6969.3	242.1	3.6%
22.2%	6692.0	6805.5	113.4	1.7%
23.5%	6624.9	6706.2	81.3	1.2%
24.7%	5679.8	6624.7	944.9	16.6%
25.9%	5412.6	6299.3	886.8	16.4%
27.2%	5389.2	6202.2	813.0	15.1%
28.4%	4734.2	5607.8	873.6	18.5%
29.6%	4550.3	5016.1	465.8	10.2%
30.9%	4243.7	4986.0	742.3	17.5%
32.1%	4213.0	4504.9	291.9	6.9%
33.3%	4104.4	4266.0	161.6	3.9%
34.6%	4098.0	4191.4	93.4	2.3%
35.8%	4016.5	4168.4	151.9	3.8%
37.0%	4010.1	4140.9	130.7	3.3%
38.3%	3886.5	4061.5	175.0	4.5%
39.5%	3850.9	4030.4	179.5	4.7%
40.7%	3749.0	4000.7	251.7	6.7%
42.0%	3736.2	3987.7	251.5	6.7%
43.2%	3518.8	3924.7	405.9	11.5%
44.4%	3482.7	3691.8	209.1	6.0%
45.7%	3241.6	3452.5	211.0	6.5%
46.9%	3150.8	3450.6	299.9	9.5%
48.1%	3144.3	3131.6	-12.8	-0.4%
49.4%	3129.5	3038.7	-90.8	-2.9%
50.6%	3077.2	3015.7	-61.5	-2.0%
51.9%	3041.1	2995.3	-45.9	-1.5%
53.1%	3035.2	2963.1	-72.1	-2.4%
54.3%	2945.4	2944.2	-1.2	0.0%
55.6%	2855.0	2937.1	82.1	2.9%
56.8%	2848.4	2916.5	68.1	2.4%
58.0%	2730.8	2830.3	99.6	3.6%
59.3%	2724.2	2744.7	20.4	0.7%
60.5%	2702.0	2726.0	24.0	0.9%
61.7%	2676.5	2711.4	34.9	1.3%
63.0%	2531.2	2561.7	30.5	1.2%
64.2%	1597.9	2544.9	947.0	59.3%
65.4%	1264.7	2229.5	964.8	76.3%
66.7%	1156.1	2117.5	961.3	83.1%
67.9%	1071.8	1785.2	713.4	66.6%
69.1%	991.0	1174.2	183.2	18.5%
70.4%	988.8	1063.3	74.5	7.5%
71.6%	840.3	1058.2	217.9	25.9%
72.8%	838.5	1030.4	191.8	22.9%
74.1%	768.2	1023.8	255.6	33.3%
75.3%	757.4	987.5	230.1	30.4%
76.5%	707.7	826.0	118.3	16.7%
77.8%	656.1	537.1	-119.0	-18.1%
79.0%	480.1	458.8	-21.3	-4.4%
80.2%	453.8	455.4	1.6	0.3%
81.5%	445.0	450.8	5.8	1.3%
82.7%	439.5	445.2	5.8	1.3%
84.0%	397.7	382.5	-15.2	-3.8%
85.2%	384.8	380.7	-4.1	-1.1%
86.4%	256.3	295.6	39.4	15.4%
87.7%	223.9	228.2	4.3	1.9%
88.9%	219.7	221.2	1.6	0.7%
90.1%	219.5	218.2	-1.2	-0.6%
91.4%	212.8	208.2	-4.6	-2.2%
92.6%	203.6	203.0	-0.7	-0.3%
93.8%	202.3	194.8	-7.5	-3.7%
95.1%	188.4	189.0	0.6	
96.3%	188.2	188.3	0.1	
97.5%	187.1	185.9	-1.1	
98.8%	184.1	184.5	0.4	
100.0%	181.8	181.9	0.1	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	6502.8	7059.5	556.7	8.6%
1.2%	6401.4	6382.1	-19.3	-0.3%
2.5%	5864.6	6172.5	307.9	5.3%
3.7%	5565.6	5783.9	218.4	3.9%
4.9%	5562.7	5613.3	50.6	0.9%
6.2%	5081.8	5371.9	290.1	5.7%
7.4%	4920.7	5226.8	306.1	6.2%
8.6%	4703.1	5032.9	329.7	7.0%
9.9%	4676.3	4707.1	30.8	0.7%
11.1%	4614.5	4685.9	71.4	1.5%
12.3%	4606.9	4470.8	-136.1	-3.0%
13.6%	4483.7	4468.2	-15.4	-0.3%
14.8%	4437.8	4410.3	-27.5	-0.6%
16.0%	4365.9	4380.2	14.4	0.3%
17.3%	3920.5	4302.5	381.9	9.7%
18.5%	3919.9	4026.7	106.8	2.7%
19.8%	3917.1	3914.9	-2.3	-0.1%
21.0%	3702.2	3881.3	179.1	4.8%
22.2%	3618.8	3794.0	175.1	4.8%
23.5%	3555.1	3681.7	126.5	3.6%
24.7%	3471.2	3516.9	45.7	1.3%
25.9%	3321.4	3503.4	182.0	5.5%
27.2%	2877.4	3442.3	564.9	19.6%
28.4%	2842.3	3322.7	480.5	16.9%
29.6%	2625.2	3178.0	552.8	21.1%
30.9%	2620.0	3110.7	490.7	18.7%
32.1%	2428.6	2826.6	398.0	16.4%
33.3%	2219.6	2786.0	566.4	25.5%
34.6%	2187.2	2530.8	343.6	15.7%
35.8%	1914.7	2298.7	383.9	20.1%
37.0%	1532.4	2205.0	672.7	43.9%
38.3%	1484.1	1878.0	393.9	26.5%
39.5%	1414.8	1828.9	414.1	29.3%
40.7%	1390.6	1677.6	287.0	20.6%
42.0%	1367.4	1591.9	224.5	16.4%
43.2%	1342.0	1580.8	238.8	17.8%
44.4%	1198.8	1553.8	355.1	29.6%
45.7%	1187.7	1406.4	218.7	18.4%
46.9%	1158.7	1369.0	210.3	18.2%
48.1%	1152.2	1323.3	171.2	14.9%
49.4%	1101.4	1297.7	196.3	17.8%
50.6%	932.2	1227.7	295.5	31.7%
51.9%	831.1	1202.9	371.8	44.7%
53.1%	780.1	996.6	216.6	27.8%
54.3%	724.4	990.3	266.0	36.7%
55.6%	711.9	973.1	261.2	36.7%
56.8%	659.9	925.2	265.3	40.2%
58.0%	626.5	872.1	245.6	39.2%
59.3%	490.2	676.5	186.4	38.0%
60.5%	445.5	526.7	81.3	18.2%
61.7%	404.8	485.8	80.9	20.0%
63.0%	346.3	440.7	94.4	27.3%
64.2%	333.1	386.8	53.7	16.1%
65.4%	285.9	366.9	81.0	28.3%
66.7%	268.4	325.7	57.3	21.3%
67.9%	252.3	286.9	34.6	13.7%
69.1%	231.1	282.4	51.4	22.2%
70.4%	222.3	237.4	15.1	6.8%
71.6%	221.1	222.1	0.9	0.4%
72.8%	218.9	221.9	3.0	1.4%
74.1%	210.6	217.2	6.5	3.1%
75.3%	209.2	215.4	6.2	3.0%
76.5%	206.5	210.4	3.9	1.9%
77.8%	205.7	209.9	4.1	2.0%
79.0%	203.8	209.0	5.2	2.5%
80.2%	202.4	205.6	3.2	1.6%
81.5%	199.9	204.6	4.7	2.4%
82.7%	198.7	200.1	1.4	0.7%
84.0%	195.9	196.0	0.1	0.1%
85.2%	192.9	193.7	0.8	0.4%
86.4%	192.8	192.8	0.0	0.0%
87.7%	192.7	192.8	0.1	0.0%
88.9%	190.9	191.1	0.2	0.1%
90.1%	190.1	190.9	0.8	0.4%
91.4%	189.9	190.8	0.9	0.5%
92.6%	187.5	187.9	0.4	0.2%
93.8%	185.8	186.7	0.9	0.5%
95.1%	185.3	186.0	0.7	0.4%
96.3%	185.1	185.4	0.3	0.2%
97.5%	184.4	185.0	0.6	0.3%
98.8%	182.3	182.3	0.0	0.0%
100.0%	180.7	180.7	0.0	0.0%

Table SQ-22-b

Sacramento River at Collinsville, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4254.9	4958.1	703.2	16.5%
1.2%	4077.2	4424.6	347.4	8.5%
2.5%	3333.6	4076.1	742.5	22.3%
3.7%	3185.7	3581.3	395.6	12.4%
4.9%	2976.8	3225.6	248.8	8.4%
6.2%	2846.3	3211.4	365.1	12.8%
7.4%	2226.1	2560.8	334.7	15.0%
8.6%	1858.3	2173.7	315.5	17.0%
9.9%	1778.1	2041.1	263.0	14.8%
11.1%	1562.8	1987.3	424.4	27.2%
12.3%	1426.5	1819.1	392.6	27.5%
13.6%	1408.8	1810.9	402.0	28.5%
14.8%	1225.0	1520.6	295.6	24.1%
16.0%	1098.7	1506.8	408.1	37.1%
17.3%	1096.8	1460.2	363.4	33.1%
18.5%	974.3	1419.3	445.0	45.7%
19.8%	912.7	1185.9	273.2	29.9%
21.0%	891.1	1167.5	276.4	31.0%
22.2%	844.5	1148.5	304.0	36.0%
23.5%	808.5	1125.2	316.7	39.2%
24.7%	702.1	955.4	253.4	36.1%
25.9%	700.5	876.0	175.5	25.1%
27.2%	602.6	808.5	205.9	34.2%
28.4%	599.8	710.3	110.4	18.4%
29.6%	591.9	661.7	69.8	11.8%
30.9%	550.8	650.1	99.3	18.0%
32.1%	469.8	604.2	134.4	28.6%
33.3%	466.8	577.3	110.4	23.7%
34.6%	459.4	527.9	68.5	14.9%
35.8%	376.6	489.9	113.3	30.1%
37.0%	365.6	464.2	98.6	27.0%
38.3%	362.6	437.5	74.9	20.7%
39.5%	359.0	393.9	34.9	9.7%
40.7%	351.6	388.1	36.4	10.4%
42.0%	351.3	374.1	22.9	6.5%
43.2%	328.0	358.9	30.9	9.4%
44.4%	311.2	341.8	30.6	9.8%
45.7%	310.3	340.4	30.1	9.7%
46.9%	295.3	327.3	31.9	10.8%
48.1%	287.0	324.7	37.7	13.1%
49.4%	284.7	320.5	35.8	12.6%
50.6%	260.8	315.8	55.0	21.1%
51.9%	246.7	307.8	61.0	24.7%
53.1%	244.4	275.0	30.6	12.5%
54.3%	226.5	254.2	27.7	12.2%
55.6%	217.5	248.7	31.2	14.3%
56.8%	215.5	220.7	5.2	2.4%
58.0%	214.6	218.1	3.5	1.6%
59.3%	213.2	217.6	4.4	2.1%
60.5%	211.9	216.6	4.7	2.2%
61.7%	210.8	214.1	3.3	1.6%
63.0%	209.5	211.0	1.5	0.7%
64.2%	205.1	211.0	5.9	2.9%
65.4%	205.1	206.6	1.5	0.7%
66.7%	204.2	205.4	1.1	0.6%
67.9%	201.4	203.6	2.2	1.1%
69.1%	201.2	202.7	1.6	0.8%
70.4%	198.1	201.2	3.1	1.5%
71.6%	197.8	199.0	1.2	0.6%
72.8%	196.7	198.8	2.1	1.1%
74.1%	196.6	198.6	1.9	1.0%
75.3%	195.3	196.0	0.7	0.3%
76.5%	193.5	195.2	1.7	0.9%
77.8%	193.1	195.2	2.1	1.1%
79.0%	192.7	193.4	0.7	0.3%
80.2%	191.8	193.0	1.2	0.6%
81.5%	191.4	192.3	0.9	0.5%
82.7%	191.0	191.0	0.0	0.0%
84.0%	190.9	190.7	-0.2	-0.1%
85.2%	190.3	190.2	-0.1	0.0%
86.4%	189.8	190.0	0.2	0.1%
87.7%	189.6	189.8	0.2	0.1%
88.9%	188.8	189.7	0.9	0.5%
90.1%	188.8	189.2	0.4	0.2%
91.4%	188.0	188.4	0.4	0.2%
92.6%	187.9	188.0	0.1	0.1%
93.8%	187.4	187.2	-0.3	-0.1%
95.1%	186.9	187.0	0.1	0.1%
96.3%	186.4	186.3	-0.1	0.0%
97.5%	186.3	186.1	-0.1	-0.1%
98.8%	185.4	185.4	0.0	0.0%
100.0%	181.1	181.1	0.0	0.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3234.6	3507.6	273.0	8.4%
1.2%	2279.4	2457.3	177.9	7.8%
2.5%	2269.8	2266.7	-3.1	-0.1%
3.7%	2059.9	2188.1	128.1	6.2%
4.9%	1953.3	2069.0	115.8	5.9%
6.2%	1844.1	1969.1	125.0	6.8%
7.4%	1745.0	1816.2	71.3	4.1%
8.6%	1716.9	1729.7	12.9	0.7%
9.9%	1586.0	1556.1	-30.0	-1.9%
11.1%	1553.0	1551.9	-1.1	-0.1%
12.3%	1297.3	1509.4	212.0	16.3%
13.6%	1108.5	1506.2	397.6	35.9%
14.8%	1075.3	1307.4	232.1	21.6%
16.0%	1009.5	1085.8	76.3	7.6%
17.3%	960.8	975.1	14.2	1.5%
18.5%	945.1	950.4	5.3	0.6%
19.8%	928.0	913.0	-15.0	-1.6%
21.0%	602.7	741.4	138.7	23.0%
22.2%	500.6	659.1	158.5	31.7%
23.5%	460.4	649.0	188.6	41.0%
24.7%	460.3	629.0	168.7	36.7%
25.9%	446.4	603.9	157.5	35.3%
27.2%	429.2	586.1	156.9	36.6%
28.4%	414.3	507.9	93.6	22.6%
29.6%	405.2	502.0	96.8	23.9%
30.9%	377.7	489.3	111.6	29.5%
32.1%	370.3	484.4	114.1	30.8%
33.3%	350.3	470.1	119.7	34.2%
34.6%	333.9	430.8	96.9	29.0%
35.8%	311.9	429.7	117.8	37.8%
37.0%	311.5	424.9	113.4	36.4%
38.3%	298.4	397.0	98.6	33.0%
39.5%	296.4	386.9	90.5	30.5%
40.7%	292.3	360.0	67.7	23.2%
42.0%	288.9	357.7	68.7	23.8%
43.2%	286.0	333.2	47.1	16.5%
44.4%	284.3	313.2	28.9	10.2%
45.7%	284.3	304.1	19.9	7.0%
46.9%	246.6	298.3	51.6	20.9%
48.1%	245.5	283.7	38.2	15.6%
49.4%	238.0	264.9	26.9	11.3%
50.6%	237.5	264.8	27.4	11.5%
51.9%	231.6	263.3	31.7	13.7%
53.1%	231.4	258.0	26.6	11.5%
54.3%	228.1	253.4	25.3	11.1%
55.6%	222.3	244.5	22.2	10.0%
56.8%	217.7	236.0	18.3	8.4%
58.0%	216.0	227.3	11.3	5.2%
59.3%	215.5	219.0	3.5	1.6%
60.5%	207.8	218.4	10.5	5.1%
61.7%	206.5	216.4	9.9	4.8%
63.0%	200.1	207.1	7.0	3.5%
64.2%	200.0	204.3	4.3	2.2%
65.4%	199.2	201.6	2.4	1.2%
66.7%	199.2	200.6	1.5	0.7%
67.9%	196.7	200.3	3.5	1.8%
69.1%	194.0	196.8	2.8	1.4%
70.4%	192.9	192.8	-0.1	-0.1%
71.6%	192.5	192.1	-0.4	-0.2%
72.8%	191.5	192.0	0.5	0.3%
74.1%	191.1	191.6	0.5	0.3%
75.3%	190.6	191.4	0.8	0.4%
76.5%	189.7	191.1	1.4	0.7%
77.8%	189.5	191.0	1.5	0.8%
79.0%	189.4	190.4	1.0	0.5%
80.2%	189.2	189.3	0.1	0.1%
81.5%	189.0	189.1	0.1	0.0%
82.7%	188.5	188.9	0.4	0.2%
84.0%	188.3	188.7	0.4	0.2%
85.2%	187.7	188.6	0.9	0.5%
86.4%	187.5	188.6	1.1	0.6%
87.7%	187.2	188.2	1.0	0.5%
88.9%	187.0	187.7	0.7	0.4%
90.1%	187.0	187.1	0.1	0.0%
91.4%	186.3	187.0	0.7	0.4%
92.6%	186.1	186.2	0.1	0.0%
93.8%	185.7	185.7	0.0	0.0%
95.1%	185.7	185.7	0.0	0.0%
96.3%	184.7	184.2	-0.5	-0.3%
97.5%	183.0	183.0	0.0	0.0%
98.8%	182.1	182.1	0.0	0.0%
100.0%	181.4	181.8	0.4	0.2%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3564.6	3716.2	151.6	4.3%
1.2%	3082.9	3034.7	-48.2	-1.6%
2.5%	3007.2	2909.6	-97.6	-3.2%
3.7%	2507.6	2525.2	17.7	0.7%
4.9%	2464.7	2490.0	25.3	1.0%
6.2%	2270.5	2095.0	-175.5	-7.7%
7.4%	2181.1	2080.2	-100.9	-4.6%
8.6%	2089.5	1935.1	-154.5	-7.4%
9.9%	1863.9	1892.9	29.1	1.6%
11.1%	1717.5	1724.4	6.9	0.4%
12.3%	1586.3	1578.1	-8.2	-0.5%
13.6%	1538.9	1572.8	33.9	2.2%
14.8%	1494.2	1518.0	23.7	1.6%
16.0%	1462.9	1497.8	34.8	2.4%
17.3%	1423.6	1464.9	41.3	2.9%
18.5%	1131.5	1246.5	115.0	10.2%
19.8%	1104.2	1179.9	75.7	6.9%
21.0%	965.7	1173.8	208.1	21.5%
22.2%	861.3	999.1	137.7	16.0%
23.5%	735.3	862.0	126.7	17.2%
24.7%	694.2	747.1	53.0	7.6%
25.9%	684.8	687.8	2.9	0.4%
27.2%	661.1	668.5	7.4	1.1%
28.4%	650.5	661.9	11.4	1.7%
29.6%	571.3	593.8	22.5	3.9%
30.9%	570.0	592.5	22.6	4.0%
32.1%	557.2	562.8	5.7	1.0%
33.3%	551.2	507.8	-43.4	-7.9%
34.6%	504.2	491.6	-12.6	-2.5%
35.8%	437.2	488.7	51.5	11.8%
37.0%	433.8	465.6	31.8	7.3%
38.3%	428.4	437.2	8.8	2.1%
39.5%	414.9	431.1	16.1	3.9%
40.7%	394.1	419.3	25.1	6.4%
42.0%	365.8	414.0	48.2	13.2%
43.2%	347.0	392.9	45.9	13.2%
44.4%	330.4	365.9	35.5	10.8%
45.7%	315.2	355.1	40.0	12.7%
46.9%	301.3	316.6	15.3	5.1%
48.1%	293.8	315.6	21.8	7.4%
49.4%	287.8	312.1	24.3	8.4%
50.6%	286.5	311.3	24.8	8.7%
51.9%	283.4	288.5	5.1	1.8%
53.1%	280.7	286.6	5.9	2.1%
54.3%	271.0	283.3	12.4	4.6%
55.6%	263.9	279.8	15.9	6.0%
56.8%	242.0	274.4	32.4	13.4%
58.0%	237.3	264.3	27.1	11.4%
59.3%	236.8	245.1	8.3	3.5%
60.5%	236.5	242.6	6.1	2.6%
61.7%	228.6	241.0	12.4	5.4%
63.0%	227.7	228.5	0.7	0.3%
64.2%	225.9	228.3	2.3	1.0%
65.4%	219.6	220.2	0.7	0.3%
66.7%	219.4	219.5	0.1	0.1%
67.9%	215.8	218.5	2.7	1.2%
69.1%	215.1	214.8	-0.2	-0.1%
70.4%	212.5	212.2	-0.3	-0.1%
71.6%	212.0	210.5	-1.5	-0.7%
72.8%	209.5	210.2	0.7	0.3%
74.1%	204.9	209.3	4.4	2.1%
75.3%	204.0	208.9	4.9	2.4%
76.5%	201.9	204.0	2.0	1.0%
77.8%	201.6	202.0	0.3	0.2%
79.0%	200.3	200.4	0.1	0.0%
80.2%	197.1	198.4	1.3	0.6%
81.5%	197.0	197.1	0.2	0.1%
82.7%	195.8	196.1	0.3	0.2%
84.0%	193.7	193.9	0.2	0.1%
85.2%	193.0	193.8	0.8	0.4%
86.4%	192.4	193.3	0.8	0.4%
87.7%	192.1	192.7	0.6	0.3%
88.9%	190.6	191.7	1.2	0.6%
90.1%	190.2	190.6	0.4	0.2%
91.4%	188.8	189.0	0.2	0.1%
92.6%	187.9	188.0	0.1	0.0%
93.8%	187.1	187.7	0.6	0.3%
95.1%	186.5	187.3	0.8	0.4%
96.3%	186.4	186.4	0.0	0.0%
97.5%	185.9	186.4	0.6	0.3%
98.8%	185.7	185.8	0.1	0.1%
100.0%	181.8	181.8	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	5817.2	5884.8	67.6	1.2%
1.2%	5616.8	5622.6	5.9	0.1%
2.5%	4901.1	5346.6	445.5	9.1%
3.7%	4856.2	4976.9	120.6	2.5%
4.9%	3455.2	3332.0	-123.2	-3.6%
6.2%	3332.7	3282.3	-50.5	-1.5%
7.4%	3243.3	3282.0	38.6	1.2%
8.6%	3188.7	3216.0	27.3	0.9%
9.9%	2969.7	2921.2	-48.5	-1.6%
11.1%	2708.4	2717.4	9.0	0.3%
12.3%	2673.9	2650.7	-23.2	-0.9%
13.6%	2633.2	2637.6	4.5	0.2%
14.8%	2624.2	2636.5	12.3	0.5%
16.0%	2434.5	2403.8	-30.7	-1.3%
17.3%	2217.8	2191.6	-26.2	-1.2%
18.5%	2177.1	2166.6	-10.4	-0.5%
19.8%	2166.6	2002.7	-163.9	-7.6%
21.0%	1998.5	1971.4	-27.1	-1.4%
22.2%	1939.6	1929.3	-10.3	-0.5%
23.5%	1864.2	1923.5	59.2	3.2%
24.7%	1720.1	1852.1	132.0	7.7%
25.9%	1643.7	1653.1	9.4	0.6%
27.2%	1592.8	1561.3	-31.5	-2.0%
28.4%	1555.2	1500.7	-54.5	-3.5%
29.6%	1530.2	1465.8	-64.4	-4.2%
30.9%	1444.8	1441.6	-3.3	-0.2%
32.1%	1441.3	1427.2	-14.2	-1.0%
33.3%	1423.6	1414.2	-9.5	-0.7%
34.6%	1109.9	1026.9	-83.0	-7.5%
35.8%	1025.9	1020.9	-5.0	-0.5%
37.0%	916.4	952.4	36.0	3.9%
38.3%	882.7	914.9	32.3	3.7%
39.5%	857.0	871.2	14.2	1.7%
40.7%	850.9	861.1	10.2	1.2%
42.0%	846.9	853.4	6.6	0.8%
43.2%	686.4	796.7	110.3	16.1%
44.4%	683.0	682.7	-0.3	0.0%
45.7%	588.8	588.6	-0.2	0.0%
46.9%	582.2	575.0	-7.2	-1.2%
48.1%	535.3	538.4	3.1	0.6%
49.4%	518.2	519.2	1.0	0.2%
50.6%	504.4	465.2	-39.3	-7.8%
51.9%	422.6	424.0	1.4	0.3%
53.1%	398.2	413.1	15.0	3.8%
54.3%	385.3	400.7	15.4	4.0%
55.6%	374.8	375.9	1.1	0.3%
56.8%	374.3	370.5	-3.8	-1.0%
58.0%	367.9	370.1	2.2	0.6%
59.3%	359.7	362.0	2.3	0.6%
60.5%	356.8	360.6	3.7	1.0%
61.7%	336.0	336.3	0.3	0.1%
63.0%	332.5	332.9	0.4	0.1%
64.2%	299.6	303.7	4.1	1.4%
65.4%	294.2	300.3	6.2	2.1%
66.7%	293.8	296.8	3.1	1.0%
67.9%	292.2	292.6	0.4	0.2%
69.1%	266.1	267.4	1.3	0.5%
70.4%	252.5	259.9	7.4	2.9%
71.6%	249.8	251.7	1.9	0.8%
72.8%	234.0	251.4	17.4	7.4%
74.1%	234.0	234.6	0.6	0.3%
75.3%	212.9	221.3	8.4	3.9%
76.5%	211.7	217.7	6.1	2.9%
77.8%	211.5	211.5	0.0	0.0%
79.0%	210.5	208.8	-1.7	-0.8%
80.2%	205.4	206.7	1.4	0.7%
81.5%	203.2	205.8	2.6	1.3%
82.7%	197.4	197.6	0.2	0.1%
84.0%	196.7	196.8	0.1	0.0%
85.2%	192.6	194.0	1.3	0.7%
86.4%	192.2	192.7	0.5	0.3%
87.7%	191.9	191.9	0.0	0.0%
88.9%	189.5	189.7	0.2	0.1%
90.1%	188.1	188.2	0.0	0.0%
91.4%	183.1	183.2	0.1	0.1%
92.6%	181.7	181.5	-0.1	-0.1%
93.8%	181.5	181.4	-0.1	-0.1%
95.1%	181.4	181.4	-0.1	0.0%
96.3%	180.4	180.4	0.0	0.0%
97.5%	180.4	180.4	0.0	0.0%
98.8%	180.3	180.3	0.0	0.0%
100.0%	177.5	177.7	0.2	0.1%

Table SQ-22-b
Sacramento River at Collinsville, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8118.8	8155.5	36.8	0.5%
1.2%	7696.7	7293.1	-403.5	-5.2%
2.5%	7179.3	7045.3	-134.0	-1.9%
3.7%	7140.7	6881.4	-259.3	-3.6%
4.9%	6035.2	5831.9	-203.3	-3.4%
6.2%	5764.4	5745.8	-18.6	-0.3%
7.4%	5352.0	5204.4	-147.7	-2.8%
8.6%	4170.8	4137.4	-33.4	-0.8%
9.9%	4009.3	3915.0	-94.2	-2.4%
11.1%	3911.4	3889.9	-21.5	-0.5%
12.3%	3865.1	3726.3	-138.8	-3.6%
13.6%	3757.0	3623.2	-133.9	-3.6%
14.8%	3623.7	3535.6	-88.1	-2.4%
16.0%	3532.9	3404.4	-128.5	-3.6%
17.3%	3520.2	3288.7	-231.5	-6.6%
18.5%	3425.0	3286.9	-138.1	-4.0%
19.8%	3326.8	3255.7	-71.1	-2.1%
21.0%	3313.4	3254.1	-59.4	-1.8%
22.2%	3265.8	3253.0	-12.8	-0.4%
23.5%	3250.0	3230.1	-19.9	-0.6%
24.7%	3225.4	3226.5	1.1	0.0%
25.9%	3212.7	3215.5	2.8	0.1%
27.2%	3178.3	3199.1	20.8	0.7%
28.4%	3162.4	3173.5	11.2	0.4%
29.6%	3152.1	3127.8	-24.2	-0.8%
30.9%	3151.1	3089.5	-61.6	-2.0%
32.1%	3064.5	3069.1	4.5	0.1%
33.3%	3054.2	3063.0	8.8	0.3%
34.6%	2981.7	2981.7	0.0	0.0%
35.8%	2909.7	2977.3	67.6	2.3%
37.0%	2764.9	2898.0	133.1	4.8%
38.3%	2707.8	2766.3	58.5	2.2%
39.5%	2612.9	2646.4	33.5	1.3%
40.7%	2412.1	2297.6	-114.4	-4.7%
42.0%	2315.8	2284.7	-31.2	-1.3%
43.2%	2304.1	2241.2	-62.9	-2.7%
44.4%	2149.9	2190.7	40.9	1.9%
45.7%	2149.5	2162.5	13.0	0.6%
46.9%	2144.2	2131.1	-13.1	-0.6%
48.1%	2108.8	2110.5	1.7	0.1%
49.4%	2103.8	2105.8	2.0	0.1%
50.6%	2073.4	2074.1	0.6	0.0%
51.9%	2072.8	2012.9	-59.9	-2.9%
53.1%	1965.3	1950.9	-14.4	-0.7%
54.3%	1907.1	1802.7	-104.4	-5.5%
55.6%	1864.2	1698.7	-165.5	-8.9%
56.8%	1857.2	1547.8	-309.4	-16.7%
58.0%	1539.7	1466.1	-73.6	-4.8%
59.3%	1456.3	1377.4	-78.9	-5.4%
60.5%	1388.8	1368.0	-20.8	-1.5%
61.7%	1370.4	1319.6	-50.8	-3.7%
63.0%	1369.1	1231.8	-137.3	-10.0%
64.2%	1367.5	1190.8	-176.7	-12.9%
65.4%	1291.2	1186.8	-104.4	-8.1%
66.7%	1230.2	1184.5	-45.7	-3.7%
67.9%	1127.9	1130.5	2.6	0.2%
69.1%	1066.9	1028.4	-38.5	-3.6%
70.4%	1049.6	984.4	-65.2	-6.2%
71.6%	887.2	911.9	24.7	2.8%
72.8%	839.2	765.6	-73.6	-8.8%
74.1%	742.3	726.7	-15.6	-2.1%
75.3%	612.7	639.2	26.5	4.3%
76.5%	611.5	554.0	-57.5	-9.4%
77.8%	545.2	513.5	-31.7	-5.8%
79.0%	527.8	499.5	-28.3	-5.4%
80.2%	518.9	485.6	-33.3	-6.4%
81.5%	429.7	421.8	-7.9	-1.8%
82.7%	306.3	333.9	27.7	9.0%
84.0%	292.1	292.6	0.4	0.1%
85.2%	282.7	292.2	9.5	3.4%
86.4%	280.6	282.4	1.8	0.6%
87.7%	264.3	282.0	17.7	6.7%
88.9%	235.6	225.1	-10.5	-4.4%
90.1%	198.0	198.2	0.1	0.1%
91.4%	193.4	191.6	-1.8	-0.9%
92.6%	191.6	191.6	0.0	0.0%
93.8%	186.8	186.6	-0.3	-0.1%
95.1%	186.4	185.9	-0.5	-0.2%
96.3%	185.1	185.5	0.4	0.2%
97.5%	185.1	183.9	-1.2	-0.6%
98.8%	181.1	181.0	-0.1	-0.1%
100.0%	181.0	180.7	-0.2	-0.1%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8754.8	8764.5	9.7	0.1%
1.2%	8517.3	7969.3	-548.0	-6.4%
2.5%	8383.0	7516.9	-866.1	-10.3%
3.7%	7538.6	7454.2	-84.3	-1.1%
4.9%	7484.3	7422.2	-62.1	-0.8%
6.2%	7262.4	7140.4	-121.9	-1.7%
7.4%	6354.9	6462.1	107.2	1.7%
8.6%	6047.0	6153.1	106.0	1.8%
9.9%	6031.9	5811.5	-220.4	-3.7%
11.1%	5782.4	5760.5	-21.9	-0.4%
12.3%	5780.9	5332.2	-448.7	-7.8%
13.6%	5769.3	5125.4	-643.9	-11.2%
14.8%	5184.4	5026.4	-158.0	-3.0%
16.0%	4968.6	5000.7	32.2	0.6%
17.3%	4920.3	4817.5	-102.8	-2.1%
18.5%	4881.6	4775.7	-106.0	-2.2%
19.8%	4770.3	4764.3	-6.0	-0.1%
21.0%	4724.6	4687.7	-36.9	-0.8%
22.2%	4659.9	4677.6	17.7	0.4%
23.5%	4644.7	4643.5	-1.2	0.0%
24.7%	4577.2	4634.8	57.6	1.3%
25.9%	4540.8	4514.6	-26.2	-0.6%
27.2%	4498.8	4402.7	-96.1	-2.1%
28.4%	4450.7	4393.8	-56.9	-1.3%
29.6%	4425.8	4383.9	-41.8	-0.9%
30.9%	4371.4	4342.6	-28.8	-0.7%
32.1%	4367.4	4283.0	-84.5	-1.9%
33.3%	4291.2	4280.7	-10.6	-0.2%
34.6%	4258.0	4263.2	5.2	0.1%
35.8%	3637.7	3528.7	-109.0	-3.0%
37.0%	3488.7	3469.8	-18.9	-0.5%
38.3%	3310.9	3325.7	14.8	0.4%
39.5%	3287.6	3325.4	37.8	1.2%
40.7%	3284.5	3259.1	-25.4	-0.8%
42.0%	3270.0	3142.2	-127.8	-3.9%
43.2%	3164.1	3129.3	-34.7	-1.1%
44.4%	3152.7	3088.5	-64.2	-2.0%
45.7%	3138.2	2956.7	-181.5	-5.8%
46.9%	2969.9	2934.2	-35.7	-1.2%
48.1%	2940.6	2933.2	-7.4	-0.3%
49.4%	2935.4	2917.1	-18.3	-0.6%
50.6%	2917.7	2765.5	-152.2	-5.2%
51.9%	2566.7	2590.2	23.4	0.9%
53.1%	2458.3	2370.2	-88.2	-3.6%
54.3%	2373.5	2348.8	-24.7	-1.0%
55.6%	2349.7	2330.0	-19.7	-0.8%
56.8%	2344.6	2168.5	-176.2	-7.5%
58.0%	2196.1	2145.7	-50.4	-2.3%
59.3%	2151.8	2120.5	-31.3	-1.5%
60.5%	2149.7	2091.4	-58.2	-2.7%
61.7%	2148.4	2078.9	-69.6	-3.2%
63.0%	2144.2	2061.7	-82.6	-3.9%
64.2%	2142.2	2061.5	-80.7	-3.8%
65.4%	2124.5	2056.5	-68.0	-3.2%
66.7%	2100.4	2050.5	-49.9	-2.4%
67.9%	2100.0	2044.2	-55.8	-2.7%
69.1%	2079.0	2038.5	-40.5	-1.9%
70.4%	2060.2	2026.1	-34.1	-1.7%
71.6%	2004.2	2010.5	6.3	0.3%
72.8%	1992.8	2010.1	17.4	0.9%
74.1%	1935.5	1950.4	14.9	0.8%
75.3%	1911.3	1902.0	-9.3	-0.5%
76.5%	1855.2	1863.3	8.1	0.4%
77.8%	1772.7	1750.7	-22.0	-1.2%
79.0%	1760.4	1747.0	-13.4	-0.8%
80.2%	1744.0	1744.7	0.6	0.0%
81.5%	1711.1	1660.4	-50.7	-3.0%
82.7%	1507.5	1532.7	25.2	1.7%
84.0%	1470.7	1513.7	43.0	2.9%
85.2%	1443.2	1471.8	28.7	2.0%
86.4%	1411.4	1443.7	32.2	2.3%
87.7%	1381.2	1383.0	1.8	0.1%
88.9%	1320.6	1280.9	-39.7	-3.0%
90.1%	1263.0	1245.1	-17.9	-1.4%
91.4%	1199.1	1200.9	1.8	0.1%
92.6%	1045.3	1044.3	-1.0	-0.1%
93.8%	1025.0	1025.1	0.1	0.0%
95.1%	836.1	844.2	8.1	1.0%
96.3%	465.8	415.2	-50.6	-10.9%
97.5%	256.3	250.1	-6.3	-2.4%
98.8%	211.8	212.6	0.8	0.4%
100.0%	202.4	202.6	0.2	0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	9203.5	9293.9	90.4	1.0%
1.2%	8411.8	8589.6	177.8	2.1%
2.5%	8359.4	8305.1	-54.4	-0.7%
3.7%	8302.6	8266.5	-36.0	-0.4%
4.9%	8102.6	8239.8	137.2	1.7%
6.2%	8032.8	8133.5	100.8	1.3%
7.4%	7973.4	7998.0	24.6	0.3%
8.6%	7951.0	7990.4	39.4	0.5%
9.9%	7889.9	7772.0	-117.9	-1.5%
11.1%	7848.5	7487.0	-361.6	-4.6%
12.3%	7706.8	7464.0	-242.8	-3.2%
13.6%	7442.1	6998.2	-443.9	-6.0%
14.8%	7044.0	6961.8	-82.2	-1.2%
16.0%	6984.2	6784.4	-199.7	-2.9%
17.3%	6906.6	6711.6	-195.0	-2.8%
18.5%	6857.1	6704.5	-152.6	-2.2%
19.8%	6844.2	6687.1	-157.2	-2.3%
21.0%	6815.0	6658.5	-156.5	-2.3%
22.2%	6760.2	6626.6	-133.6	-2.0%
23.5%	6751.4	6514.1	-237.3	-3.5%
24.7%	6748.8	6456.6	-292.2	-4.3%
25.9%	6704.8	6444.0	-260.8	-3.9%
27.2%	6695.1	6426.5	-268.6	-4.0%
28.4%	6683.1	6349.8	-333.3	-5.0%
29.6%	6676.7	6305.5	-371.2	-5.6%
30.9%	6640.7	6170.9	-469.8	-7.1%
32.1%	6464.8	6098.4	-366.4	-5.7%
33.3%	6417.2	5590.1	-827.1	-12.9%
34.6%	6355.9	5557.8	-798.1	-12.6%
35.8%	5826.3	5506.4	-319.9	-5.5%
37.0%	5511.4	5475.2	-36.2	-0.7%
38.3%	5296.1	5209.8	-86.3	-1.6%
39.5%	5278.1	5143.2	-135.0	-2.6%
40.7%	5275.9	5081.6	-194.2	-3.7%
42.0%	5275.2	5049.5	-225.7	-4.3%
43.2%	5242.0	5040.1	-201.9	-3.9%
44.4%	5178.6	5027.4	-151.2	-2.9%
45.7%	5125.7	4901.5	-224.2	-4.4%
46.9%	5119.6	4878.5	-241.1	-4.7%
48.1%	4927.2	4874.0	-53.2	-1.1%
49.4%	4870.3	4840.0	-30.3	-0.6%
50.6%	4869.8	4816.3	-53.5	-1.1%
51.9%	4850.0	4787.2	-62.8	-1.3%
53.1%	4828.5	4756.0	-72.5	-1.5%
54.3%	4785.8	4650.1	-135.7	-2.8%
55.6%	4775.5	4633.8	-141.7	-3.0%
56.8%	4721.5	4557.1	-164.5	-3.5%
58.0%	4702.2	4500.8	-201.4	-4.3%
59.3%	4699.0	4497.8	-201.2	-4.3%
60.5%	4673.5	4494.8	-178.6	-3.8%
61.7%	4669.3	4493.3	-176.0	-3.8%
63.0%	4655.2	4478.5	-176.7	-3.8%
64.2%	4567.1	4474.2	-92.8	-2.0%
65.4%	4498.8	4469.3	-29.5	-0.7%
66.7%	4468.5	4464.7	-3.8	-0.1%
67.9%	4459.2	4464.5	5.3	0.1%
69.1%	4441.8	4441.0	-0.8	0.0%
70.4%	4436.1	4373.2	-62.9	-1.4%
71.6%	4386.7	4323.1	-63.5	-1.4%
72.8%	4373.7	4292.0	-81.7	-1.9%
74.1%	4363.5	4260.5	-103.0	-2.4%
75.3%	4320.0	4235.6	-84.5	-2.0%
76.5%	4310.0	4228.8	-81.2	-1.9%
77.8%	4304.1	4152.4	-151.7	-3.5%
79.0%	4239.2	4084.0	-155.1	-3.7%
80.2%	4205.6	4065.2	-140.4	-3.3%
81.5%	4196.5	4017.5	-179.1	-4.3%
82.7%	4170.9	3990.6	-180.3	-4.3%
84.0%	4155.4	3950.6	-204.8	-4.9%
85.2%	4115.1	3942.5	-172.6	-4.2%
86.4%	4106.0	3938.5	-167.5	-4.1%
87.7%	4081.3	3935.7	-145.6	-3.6%
88.9%	4075.6	3928.7	-146.9	-3.6%
90.1%	4063.5	3908.5	-155.0	-3.8%
91.4%	4030.9	3840.0	-190.9	-4.7%
92.6%	3843.5	3840.0	-3.5	-0.1%
93.8%	3785.1	3669.2	-115.8	-3.1%
95.1%	3160.2	3423.0	262.8	8.3%
96.3%	3065.0	3046.3	-18.6	-0.6%
97.5%	1260.6	1698.7	438.1	34.8%
98.8%	713.8	620.1	-93.8	-13.1%
100.0%	399.8	367.1	-32.7	-8.2%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	10158.5	10045.6	-112.9	-1.1%
1.2%	9897.2	9950.8	53.6	0.5%
2.5%	9654.8	9769.5	114.7	1.2%
3.7%	9530.2	9594.5	64.2	0.7%
4.9%	9384.6	9399.8	15.3	0.2%
6.2%	9367.3	9365.0	-2.3	0.0%
7.4%	9335.9	9348.4	12.5	0.1%
8.6%	9335.5	9245.2	-90.3	-1.0%
9.9%	9288.2	9112.5	-175.7	-1.9%
11.1%	9212.9	8907.9	-305.0	-3.3%
12.3%	9080.9	8680.6	-400.3	-4.4%
13.6%	8976.6	8560.8	-415.8	-4.6%
14.8%	8960.4	8492.0	-468.4	-5.2%
16.0%	8947.3	8400.2	-547.1	-6.1%
17.3%	8853.5	8323.9	-529.6	-6.0%
18.5%	8829.2	8283.0	-546.3	-6.2%
19.8%	8786.4	8143.8	-642.6	-7.3%
21.0%	8760.5	8104.1	-656.4	-7.5%
22.2%	8640.9	8081.8	-559.1	-6.5%
23.5%	8622.9	8041.2	-581.7	-6.7%
24.7%	8619.9	7964.5	-655.4	-7.6%
25.9%	8604.3	7842.0	-762.4	-8.9%
27.2%	8603.2	7650.7	-952.6	-11.1%
28.4%	8445.9	7579.5	-866.4	-10.3%
29.6%	8440.0	7532.7	-907.3	-10.8%
30.9%	8410.9	7407.0	-1003.9	-11.9%
32.1%	8350.0	7303.1	-1046.9	-12.5%
33.3%	8224.5	7264.8	-959.7	-11.7%
34.6%	8140.4	7247.6	-892.8	-11.0%
35.8%	8036.2	7072.7	-963.5	-12.0%
37.0%	7913.7	6821.4	-1092.3	-13.8%
38.3%	7773.1	6765.4	-1007.8	-13.0%
39.5%	7216.9	6733.3	-483.6	-6.7%
40.7%	7005.7	6709.6	-296.1	-4.2%
42.0%	6970.1	6608.8	-361.3	-5.2%
43.2%	6879.2	6530.7	-348.5	-5.1%
44.4%	6793.2	6450.5	-342.8	-5.0%
45.7%	6700.4	6228.3	-472.1	-7.0%
46.9%	6552.5	6139.8	-412.7	-6.3%
48.1%	6510.7	6102.0	-408.6	-6.3%
49.4%	6503.8	6062.2	-441.6	-6.8%
50.6%	6366.3	6042.5	-323.8	-5.1%
51.9%	6320.3	5913.7	-406.5	-6.4%
53.1%	6262.9	5461.8	-801.1	-12.8%
54.3%	3043.6	2781.6	-262.0	-8.6%
55.6%	2942.7	2765.9	-176.8	-6.0%
56.8%	2915.0	2727.5	-187.5	-6.4%
58.0%	2888.0	2725.2	-162.8	-5.6%
59.3%	2810.5	2702.4	-108.1	-3.8%
60.5%	2801.1	2625.9	-175.1	-6.3%
61.7%	2737.4	2615.2	-122.2	-4.5%
63.0%	2715.2	2613.4	-101.8	-3.8%
64.2%	2626.6	2439.4	-187.2	-7.1%
65.4%	2527.0	2393.1	-133.9	-5.3%
66.7%	2517.5	2335.3	-182.3	-7.2%
67.9%	2271.4	2138.1	-133.3	-5.9%
69.1%	1595.8	1502.1	-93.7	-5.9%
70.4%	1511.0	1490.5	-20.5	-1.4%
71.6%	1390.6	1376.1	-14.5	-1.0%
72.8%	1331.0	1329.3	-1.6	-0.1%
74.1%	1298.5	1293.6	-4.9	-0.4%
75.3%	1295.6	1288.5	-7.1	-0.5%
76.5%	1293.7	1279.3	-14.4	-1.1%
77.8%	1291.2	1274.6	-16.6	-1.3%
79.0%	1290.1	1256.8	-33.3	-2.6%
80.2%	1249.0	1253.5	4.5	0.4%
81.5%	1239.7	1209.0	-30.6	-2.5%
82.7%	1217.6	1185.3	-32.3	-2.7%
84.0%	1209.7	1182.1	-27.6	-2.3%
85.2%	1205.3	1170.8	-34.6	-2.9%
86.4%	1200.8	1168.4	-32.4	-2.7%
87.7%	1200.1	1131.2	-68.9	-5.7%
88.9%	1174.6	1123.3	-51.3	-4.4%
90.1%	1167.6	1101.8	-65.7	-5.6%
91.4%	1150.4	1082.5	-67.9	-5.9%
92.6%	1097.2	1068.6	-28.6	-2.6%
93.8%	1075.8	1017.0	-58.8	-5.5%
95.1%	1071.2	1012.7	-58.5	-5.5%
96.3%	1041.7	996.5	-45.3	-4.3%
97.5%	977.6	967.3	-10.3	-1.1%
98.8%	600.3	644.5	44.2	7.4%
100.0%	353.0	375.4	22.3	6.3%

Figure SQ-23-b
Sacramento River at Mallard Slough (Chipps Island)), Monthly EC
Probability of Exceedance

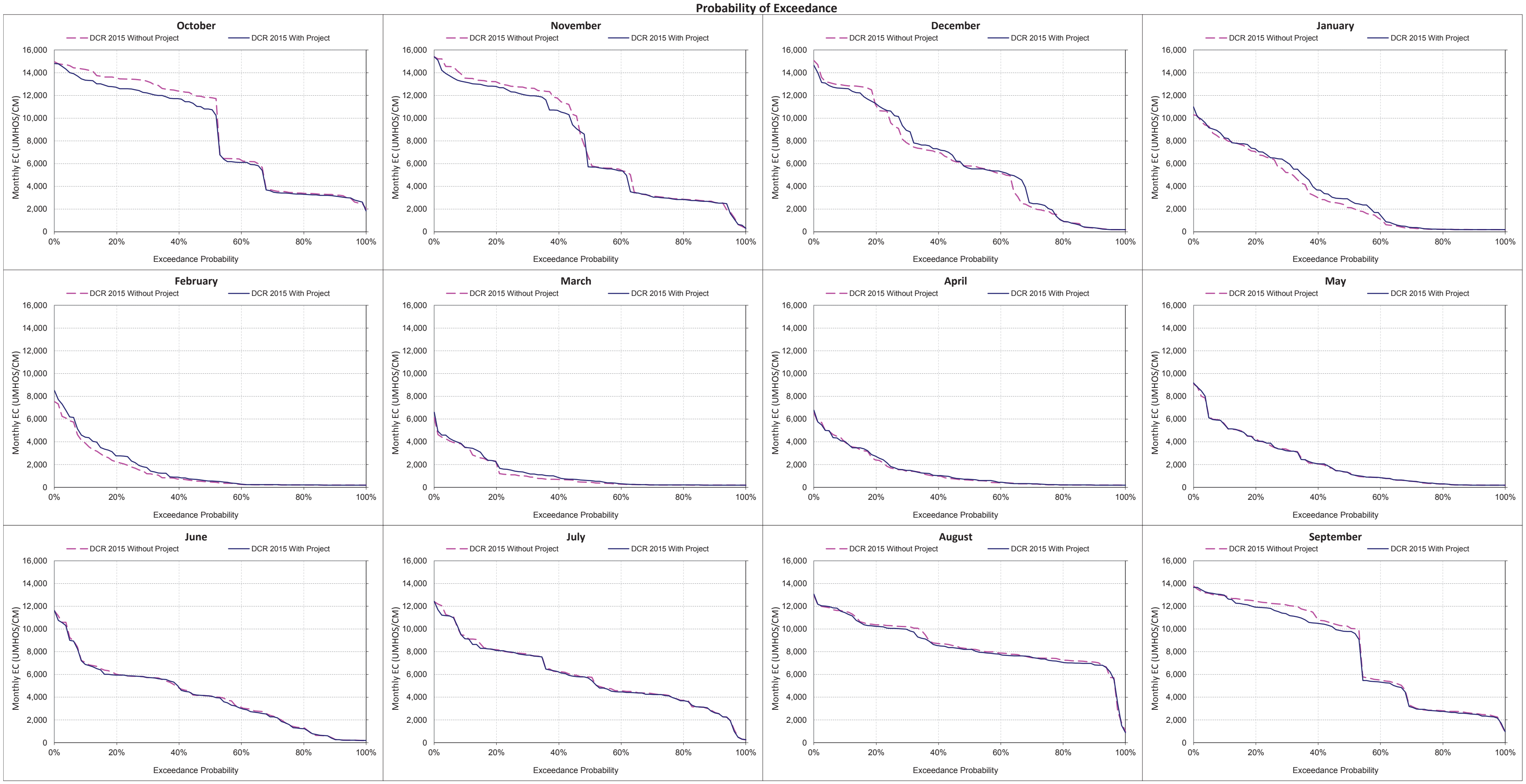


Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	14966.7	14804.5	-162.2	-1.1%
1.2%	14795.9	14784.0	-12.0	-0.1%
2.5%	14734.0	14554.9	-179.1	-1.2%
3.7%	14712.9	14324.4	-388.5	-2.6%
4.9%	14617.0	13997.2	-619.7	-4.2%
6.2%	14431.6	13914.2	-517.4	-3.6%
7.4%	14407.1	13715.8	-691.3	-4.8%
8.6%	14341.0	13450.0	-891.0	-6.2%
9.9%	14290.5	13347.0	-943.5	-6.6%
11.1%	14213.2	13314.4	-898.7	-6.3%
12.3%	14129.5	13295.6	-833.9	-5.9%
13.6%	13743.9	13028.3	-715.6	-5.2%
14.8%	13704.9	13018.6	-686.3	-5.0%
16.0%	13626.3	12909.1	-717.2	-5.3%
17.3%	13626.0	12789.2	-836.8	-6.1%
18.5%	13622.4	12768.2	-854.2	-6.3%
19.8%	13541.5	12735.8	-805.8	-6.0%
21.0%	13457.8	12598.2	-859.6	-6.4%
22.2%	13452.6	12590.2	-862.4	-6.4%
23.5%	13441.5	12587.8	-853.8	-6.4%
24.7%	13434.1	12579.3	-854.8	-6.4%
25.9%	13411.4	12508.5	-902.9	-6.7%
27.2%	13377.1	12435.5	-941.6	-7.0%
28.4%	13356.0	12263.6	-1092.4	-8.2%
29.6%	13258.5	12221.9	-1036.6	-7.8%
30.9%	13141.1	12140.9	-1000.2	-7.6%
32.1%	12933.1	12053.8	-879.3	-6.8%
33.3%	12888.5	11998.4	-890.1	-6.9%
34.6%	12618.2	11992.7	-625.5	-5.0%
35.8%	12554.8	11877.0	-677.8	-5.4%
37.0%	12507.4	11748.4	-759.1	-6.1%
38.3%	12474.2	11728.6	-745.6	-6.0%
39.5%	12399.8	11717.7	-682.1	-5.5%
40.7%	12360.3	11680.3	-680.0	-5.5%
42.0%	12293.4	11460.9	-832.5	-6.8%
43.2%	12266.3	11456.1	-810.2	-6.6%
44.4%	12060.2	11318.0	-742.2	-6.2%
45.7%	11949.3	11048.7	-900.5	-7.5%
46.9%	11927.0	11008.1	-918.8	-7.7%
48.1%	11838.9	10810.1	-1028.8	-8.7%
49.4%	11834.6	10802.8	-1031.8	-8.7%
50.6%	11793.9	10750.5	-1043.4	-8.8%
51.9%	11727.1	10237.6	-1489.5	-12.7%
53.1%	6764.6	6770.0	5.4	0.1%
54.3%	6451.8	6385.8	-66.0	-1.0%
55.6%	6450.4	6175.3	-275.1	-4.3%
56.8%	6436.4	6169.1	-267.3	-4.2%
58.0%	6430.3	6128.1	-302.1	-4.7%
59.3%	6415.6	6113.4	-302.2	-4.7%
60.5%	6222.9	6109.3	-113.6	-1.8%
61.7%	6199.3	6097.6	-101.7	-1.6%
63.0%	6180.7	5936.1	-244.5	-4.0%
64.2%	6171.0	5899.6	-271.4	-4.4%
65.4%	5985.0	5811.7	-173.3	-2.9%
66.7%	5667.9	5408.3	-259.7	-4.6%
67.9%	3792.5	3677.3	-115.2	-3.0%
69.1%	3711.8	3627.8	-83.9	-2.3%
70.4%	3625.2	3485.6	-139.6	-3.9%
71.6%	3561.5	3436.5	-125.0	-3.5%
72.8%	3559.1	3423.1	-136.0	-3.8%
74.1%	3530.0	3417.9	-112.1	-3.2%
75.3%	3466.2	3383.0	-83.2	-2.4%
76.5%	3455.5	3343.2	-112.3	-3.3%
77.8%	3411.5	3332.6	-79.0	-2.3%
79.0%	3409.8	3314.3	-95.4	-2.8%
80.2%	3380.0	3306.2	-73.8	-2.2%
81.5%	3375.1	3285.6	-89.5	-2.7%
82.7%	3371.9	3264.3	-107.6	-3.2%
84.0%	3338.7	3255.8	-82.9	-2.5%
85.2%	3311.2	3219.2	-92.0	-2.8%
86.4%	3306.4	3199.4	-107.0	-3.2%
87.7%	3290.5	3198.4	-92.1	-2.8%
88.9%	3289.3	3175.5	-113.8	-3.5%
90.1%	3230.6	3137.3	-93.3	-2.9%
91.4%	3218.7	3104.3	-114.4	-3.6%
92.6%	3178.8	3054.2	-124.6	-3.9%
93.8%	2984.1	3010.8	26.7	0.9%
95.1%	2945.9	2984.0	38.1	1.3%
96.3%	2619.3	2807.1	187.8	7.2%
97.5%	2536.5	2705.9	169.4	6.7%
98.8%	2521.4	2625.8	104.3	4.1%
100.0%	1,994.4	1,840.6	-153.8	-7.7%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15406.8	15401.3	-5.5	0.0%
1.2%	15214.8	15111.7	-103.1	-0.7%
2.5%	15214.8	14210.1	-1004.7	-6.6%
3.7%	14548.8	13947.8	-601.0	-4.1%
4.9%	14542.4	13740.0	-802.5	-5.5%
6.2%	14529.2	13520.9	-1008.3	-6.9%
7.4%	14171.0	13339.1	-831.9	-5.9%
8.6%	13888.7	13258.7	-630.0	-4.5%
9.9%	13528.9	13179.6	-349.4	-2.6%
11.1%	13502.2	13115.6	-386.6	-2.9%
12.3%	13492.1	13036.3	-455.9	-3.4%
13.6%	13345.7	12995.0	-350.7	-2.6%
14.8%	13329.1	12971.5	-357.6	-2.7%
16.0%	13300.2	12877.0	-423.2	-3.2%
17.3%	13227.6	12824.4	-403.2	-3.0%
18.5%	13227.4	12817.2	-410.1	-3.1%
19.8%	13211.5	12800.0	-411.5	-3.1%
21.0%	13070.4	12676.8	-393.6	-3.0%
22.2%	12954.6	12676.8	-277.8	-2.1%
23.5%	12902.6	12492.6	-410.1	-3.2%
24.7%	12804.6	12323.9	-480.7	-3.8%
25.9%	12786.8	12296.3	-490.5	-3.8%
27.2%	12744.5	12171.0	-573.5	-4.5%
28.4%	12737.9	12099.1	-638.9	-5.0%
29.6%	12646.1	12026.6	-619.4	-4.9%
30.9%	12640.4	11973.7	-666.7	-5.3%
32.1%	12627.7	11968.0	-659.7	-5.2%
33.3%	12428.9	11926.5	-502.4	-4.0%
34.6%	12425.7	11866.0	-559.7	-4.5%
35.8%	12364.6	11605.4	-759.1	-6.1%
37.0%	12336.2	10720.4	-1615.8	-13.1%
38.3%	11850.2	10709.9	-1140.2	-9.6%
39.5%	11771.5	10700.5	-1071.0	-9.1%
40.7%	11434.3	10532.9	-901.4	-7.9%
42.0%	11326.5	10449.3	-877.2	-7.7%
43.2%	11213.9	10308.9	-905.0	-8.1%
44.4%	10332.9	9419.6	-913.3	-8.8%
45.7%	10200.0	9086.1	-1113.9	-10.9%
46.9%	8557.7	8817.0	259.3	3.0%
48.1%	7619.3	8604.8	985.4	12.9%
49.4%	6661.7	5728.5	-933.3	-14.0%
50.6%	5795.8	5694.0	-101.8	-1.8%
51.9%	5722.5	5691.5	-31.0	-0.5%
53.1%	5684.3	5633.0	-51.4	-0.9%
54.3%	5617.9	5589.6	-28.2	-0.5%
55.6%	5608.4	5540.8	-67.6	-1.2%
56.8%	5597.4	5538.8	-58.6	-1.0%
58.0%	5572.7	5457.4	-115.3	-2.1%
59.3%	5521.2	5385.5	-135.7	-2.5%
60.5%	5350.8	5363.5	12.7	0.2%
61.7%	5292.2	4962.4	-329.9	-6.2%
63.0%	5030.8	3525.8	-1505.0	-29.9%
64.2%	3494.6	3426.0	-68.6	-2.0%
65.4%	3372.1	3418.6	46.5	1.4%
66.7%	3314.7	3333.1	18.4	0.6%
67.9%	3263.4	3305.1	41.7	1.3%
69.1%	3192.1	3172.4	-19.7	-0.6%
70.4%	3130.2	3048.7	-81.5	-2.6%
71.6%	3100.8	3039.7	-61.1	-2.0%
72.8%	3064.3	3003.6	-60.6	-2.0%
74.1%	3019.6	2970.8	-48.8	-1.6%
75.3%	2977.6	2961.6	-16.0	-0.5%
76.5%	2915.2	2892.8	-22.4	-0.8%
77.8%	2911.6	2844.1	-67.5	-2.3%
79.0%	2901.2	2838.8	-62.5	-2.2%
80.2%	2850.8	2834.0	-16.9	-0.6%
81.5%	2841.9	2806.2	-35.7	-1.3%
82.7%	2813.6	2749.6	-63.9	-2.3%
84.0%	2806.0	2746.9	-59.1	-2.1%
85.2%	2761.0	2712.5	-48.4	-1.8%
86.4%	2733.6	2688.9	-44.7	-1.6%
87.7%	2698.9	2677.0	-21.9	-0.8%
88.9%	2693.4	2647.9	-45.4	-1.7%
90.1%	2570.8	2571.4	0.6	0.0%
91.4%	2535.6	2526.6	-9.0	-0.4%
92.6%	2533.1	2526.2	-6.9	-0.3%
93.8%	1952.9	2470.4	517.5	26.5%
95.1%	1730.6	1603.7	-126.9	-7.3%
96.3%	1246.8	1132.3	-114.5	-9.2%
97.5%	646.4	659.6	13.1	2.0%
98.8%	476.5	584.8	108.3	22.7%
100.0%	313.4	316.1	2.6	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15075.2	14644.5	-430.8	-2.9%
1.2%	14714.1	14017.6	-696.5	-4.7%
2.5%	13593.4	13129.9	-463.5	-3.4%
3.7%	13216.3	13104.7	-111.6	-0.8%
4.9%	13139.2	12872.3	-266.9	-2.0%
6.2%	13044.7	12733.4	-311.3	-2.4%
7.4%	12967.7	12665.1	-302.6	-2.3%
8.6%	12949.1	12646.2	-302.9	-2.3%
9.9%	12889.6	12623.2	-266.5	-2.1%
11.1%	12841.9	12598.1	-243.8	-1.9%
12.3%	12838.5	12360.0	-478.6	-3.7%
13.6%	12827.3	12240.1	-587.2	-4.6%
14.8%	12785.5	12226.0	-559.5	-4.4%
16.0%	12738.2	11894.3	-844.0	-6.6%
17.3%	12644.7	11674.7	-970.0	-7.7%
18.5%	12491.6	11491.8	-999.9	-8.0%
19.8%	11201.2	11306.2	105.0	0.9%
21.0%	10660.1	11034.6	374.5	3.5%
22.2%	10629.0	10839.3	210.2	2.0%
23.5%	10627.8	10677.2	49.4	0.5%
24.7%	9582.1	10639.0	1056.9	11.0%
25.9%	9264.5	10207.6	943.1	10.2%
27.2%	9105.0	10139.0	1034.0	11.4%
28.4%	8154.7	9346.0	1191.3	14.6%
29.6%	7864.6	8930.0	1065.4	13.5%
30.9%	7653.2	8805.0	1151.8	15.0%
32.1%	7458.2	7829.3	371.1	5.0%
33.3%	7355.9	7749.7	393.8	5.4%
34.6%	7318.1	7641.5	323.4	4.4%
35.8%	7214.2	7630.3	416.1	5.8%
37.0%	7165.6	7577.3	411.8	5.7%
38.3%	7117.9	7309.4	191.5	2.7%
39.5%	6959.7	7307.3	347.6	5.0%
40.7%	6939.1	7181.2	242.1	3.5%
42.0%	6659.9	7144.2	484.3	7.3%
43.2%	6520.6	6996.0	475.4	7.3%
44.4%	6264.0	6746.8	482.8	7.7%
45.7%	6153.5	6225.4	71.9	1.2%
46.9%	6127.3	6202.8	75.5	1.2%
48.1%	5815.6	5787.7	-27.9	-0.5%
49.4%	5795.4	5638.4	-157.0	-2.7%
50.6%	5789.1	5541.0	-248.0	-4.3%
51.9%	5751.0	5536.8	-214.2	-3.7%
53.1%	5639.6	5536.0	-103.6	-1.8%
54.3%	5570.0	5530.5	-39.5	-0.7%
55.6%	5539.1	5447.0	-92.1	-1.7%
56.8%	5387.4	5383.7	-3.6	-0.1%
58.0%	5246.4	5355.6	109.2	2.1%
59.3%	5144.0	5351.5	207.5	4.0%
60.5%	5125.1	5274.0	148.9	2.9%
61.7%	4983.6	5181.8	198.2	4.0%
63.0%	4937.1	5019.1	81.9	1.7%
64.2%	3503.3	4944.1	1440.8	41.1%
65.4%	3083.0	4753.6	1670.5	54.2%
66.7%	2489.4	4561.2	2071.8	83.2%
67.9%	2430.9	3909.1	1478.2	60.8%
69.1%	2247.3	2568.1	320.8	14.3%
70.4%	2110.2	2483.3	373.0	17.7%
71.6%	1970.2	2466.2	495.9	25.2%
72.8%	1932.3	2414.1	481.8	24.9%
74.1%	1842.1	2328.7	486.6	26.4%
75.3%	1808.4	2042.2	233.8	12.9%
76.5%	1571.1	1928.0	356.9	22.7%
77.8%	1550.2	1379.6	-170.6	-11.0%
79.0%	1088.8	1061.7	-27.1	-2.5%
80.2%	900.2	909.9	9.7	1.1%
81.5%	879.3	872.6	-6.7	-0.8%
82.7%	776.9	764.4	-12.6	-1.6%
84.0%	756.0	706.3	-49.7	-6.6%
85.2%	723.4	612.4	-111.0	-15.3%
86.4%	406.9	445.1	38.2	9.4%
87.7%	381.1	402.6	21.5	5.6%
88.9%	356.3	376.4	20.2	5.7%
90.1%	330.3	358.7	28.4	8.6%
91.4%	303.9	313.7	9.9	
92.6%	269.4	234.2	-35.2	
93.8%	232.4	225.5	-6.9	
95.1%	192.8	191.7	-1.1	
96.3%	191.9	191.6	-0.3	
97.5%	191.4	190.6	-0.8	
98.8%	186.4	186.7	0.4	
100.0%	185.9	186.3	0.4	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	10293.2	11000.4	707.2	6.9%
1.2%	10214.9	10132.8	-82.2	-0.8%
2.5%	9694.2	9911.2	217.1	2.2%
3.7%	9396.5	9608.4	211.9	2.3%
4.9%	9283.4	9166.9	-116.5	-1.3%
6.2%	8690.1	9055.2	365.1	4.2%
7.4%	8485.2	8937.5	452.3	5.3%
8.6%	8223.7	8676.2	452.5	5.5%
9.9%	8211.0	8278.2	67.2	0.8%
11.1%	7976.2	8202.7	226.5	2.8%
12.3%	7934.3	7846.2	-88.1	-1.1%
13.6%	7830.1	7794.4	-35.7	-0.5%
14.8%	7709.0	7754.1	45.1	0.6%
16.0%	7605.7	7753.0	147.2	1.9%
17.3%	7326.8	7692.3	365.5	5.0%
18.5%	7116.6	7365.1	248.5	3.5%
19.8%	7077.1	7308.4	231.3	3.3%
21.0%	6761.5	7048.4	286.9	4.2%
22.2%	6720.0	7028.3	308.3	4.6%
23.5%	6564.9	6788.3	223.4	3.4%
24.7%	6477.7	6512.2	34.5	0.5%
25.9%	6346.5	6487.9	141.3	2.2%
27.2%	5659.7	6437.6	777.9	13.7%
28.4%	5593.5	6395.3	801.7	14.3%
29.6%	5222.6	6176.4	953.7	18.3%
30.9%	5197.0	5943.4	746.3	14.4%
32.1%	4936.9	5507.9	571.0	11.6%
33.3%	4589.7	5505.7	916.0	20.0%
34.6%	4276.8	5143.9	867.1	20.3%
35.8%	4148.1	4860.5	712.4	17.2%
37.0%	3394.3	4557.2	1162.8	34.3%
38.3%	3244.5	3974.8	730.3	22.5%
39.5%	3072.2	3696.0	623.8	20.3%
40.7%	2837.2	3661.7	824.5	29.1%
42.0%	2830.7	3366.7	536.0	18.9%
43.2%	2672.7	3324.8	652.2	24.4%
44.4%	2576.0	3059.5	483.5	18.8%
45.7%	2557.4	2953.5	396.2	15.5%
46.9%	2502.3	2928.7	426.4	17.0%
48.1%	2403.1	2921.6	518.4	21.6%
49.4%	2140.2	2913.2	773.0	36.1%
50.6%	2115.4	2683.3	567.9	26.8%
51.9%	1988.3	2497.6	509.3	25.6%
53.1%	1843.5	2449.5	606.0	32.9%
54.3%	1786.7	2369.6	582.9	32.6%
55.6%	1618.1	2360.3	742.2	45.9%
56.8%	1512.1	2038.3	526.2	34.8%
58.0%	1484.7	1696.3	211.6	14.3%
59.3%	1219.8	1696.2	476.4	39.1%
60.5%	1030.2	1291.7	261.5	25.4%
61.7%	625.0	868.4	243.3	38.9%
63.0%	580.2	831.6	251.4	43.3%
64.2%	549.9	691.7	141.7	25.8%
65.4%	506.3	590.5	84.2	16.6%
66.7%	415.2	522.2	106.9	25.7%
67.9%	346.0	494.2	148.2	42.8%
69.1%	338.0	404.6	66.6	19.7%
70.4%	321.8	379.6	57.8	18.0%
71.6%	288.8	369.3	80.5	27.9%
72.8%	287.3	327.2	39.9	13.9%
74.1%	271.5	264.1	-7.4	-2.7%
75.3%	230.9	256.4	25.5	11.1%
76.5%	229.8	239.4	9.6	4.2%
77.8%	228.7	231.3	2.6	1.1%
79.0%	224.6	228.5	3.9	1.7%
80.2%	218.3	228.5	10.1	4.6%
81.5%	217.0	218.1	1.1	0.5%
82.7%	208.5	210.0	1.5	0.7%
84.0%	203.6	204.6	1.0	0.5%
85.2%	203.0	203.0	0.0	0.0%
86.4%	201.0	202.2	1.2	0.6%
87.7%	198.0	198.2	0.2	0.1%
88.9%	196.8	198.2	1.4	0.7%
90.1%	195.3	197.9	2.6	1.3%
91.4%	195.2	197.2	2.0	1.0%
92.6%	194.9	196.0	1.1	0.6%
93.8%	192.5	195.2	2.7	1.4%
95.1%	192.0	195.1	3.0	1.6%
96.3%	190.6	190.6	0.0	0.0%
97.5%	190.0	190.4	0.3	0.2%
98.8%	187.5	188.1	0.6	0.3%
100.0%	184.0	184.0	0.0	0.0%

Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	7537.2	8509.2	972.0	12.9%
1.2%	7326.3	7714.6	388.3	5.3%
2.5%	6233.9	7302.1	1068.1	17.1%
3.7%	6091.9	6781.4	689.6	11.3%
4.9%	5846.4	6180.8	334.4	5.7%
6.2%	5735.9	6146.2	410.3	7.2%
7.4%	4631.4	5144.4	513.0	11.1%
8.6%	4144.8	4595.7	450.9	10.9%
9.9%	3883.6	4410.3	526.7	13.6%
11.1%	3548.9	4351.2	802.4	22.6%
12.3%	3303.0	4033.8	730.9	22.1%
13.6%	3172.4	3964.4	791.9	25.0%
14.8%	2941.2	3492.1	550.8	18.7%
16.0%	2718.3	3349.8	631.5	23.2%
17.3%	2604.2	3276.4	672.2	25.8%
18.5%	2359.6	3119.6	760.0	32.2%
19.8%	2246.3	2772.0	525.7	23.4%
21.0%	2144.0	2771.8	627.8	29.3%
22.2%	2058.9	2751.0	692.0	33.6%
23.5%	1935.6	2702.8	767.1	39.6%
24.7%	1789.8	2305.7	515.9	28.8%
25.9%	1676.9	2170.7	493.8	29.4%
27.2%	1517.6	1922.3	404.6	26.7%
28.4%	1452.3	1808.6	356.3	24.5%
29.6%	1191.4	1727.9	536.4	45.0%
30.9%	1179.8	1407.7	227.9	19.3%
32.1%	1100.9	1337.2	236.3	21.5%
33.3%	1065.7	1256.5	190.9	17.9%
34.6%	837.5	1226.4	388.8	46.4%
35.8%	831.1	1223.5	392.5	47.2%
37.0%	825.7	921.1	95.3	11.5%
38.3%	810.3	897.3	87.0	10.7%
39.5%	726.0	892.5	166.5	22.9%
40.7%	721.9	818.0	96.2	13.3%
42.0%	680.9	812.9	132.1	19.4%
43.2%	623.4	736.8	113.4	18.2%
44.4%	587.0	707.2	120.2	20.5%
45.7%	539.9	696.1	156.2	28.9%
46.9%	530.8	649.9	119.1	22.4%
48.1%	492.3	592.4	100.2	20.3%
49.4%	479.5	554.9	75.3	15.7%
50.6%	456.0	538.7	82.8	18.1%
51.9%	437.2	518.9	81.7	18.7%
53.1%	373.2	513.5	140.3	37.6%
54.3%	354.5	460.7	106.2	29.9%
55.6%	347.4	433.5	86.1	24.8%
56.8%	344.8	374.7	29.9	8.7%
58.0%	334.6	349.5	14.8	4.4%
59.3%	266.0	290.9	24.8	9.3%
60.5%	243.2	261.7	18.6	7.6%
61.7%	225.8	241.5	15.6	6.9%
63.0%	225.1	235.8	10.7	4.7%
64.2%	222.3	230.7	8.3	3.7%
65.4%	221.3	229.4	8.1	3.7%
66.7%	220.5	229.3	8.8	4.0%
67.9%	220.1	225.8	5.7	2.6%
69.1%	218.8	223.6	4.9	2.2%
70.4%	216.8	223.5	6.7	3.1%
71.6%	214.5	220.6	6.1	2.9%
72.8%	213.0	216.7	3.7	1.8%
74.1%	212.0	215.1	3.1	1.4%
75.3%	210.3	211.7	1.4	0.7%
76.5%	210.1	211.6	1.5	0.7%
77.8%	207.7	210.5	2.8	1.4%
79.0%	207.2	210.3	3.1	1.5%
80.2%	203.6	207.1	3.5	1.7%
81.5%	201.9	202.7	0.8	0.4%
82.7%	199.3	201.3	2.1	1.0%
84.0%	198.6	199.0	0.4	0.2%
85.2%	197.0	197.0	0.0	0.0%
86.4%	196.4	194.4	-2.0	-1.0%
87.7%	193.9	194.1	0.2	0.1%
88.9%	193.7	193.7	0.0	0.0%
90.1%	193.6	193.5	-0.1	0.0%
91.4%	193.5	193.3	-0.2	-0.1%
92.6%	192.4	192.6	0.3	0.1%
93.8%	191.5	192.4	0.9	0.5%
95.1%	191.5	192.3	0.9	0.4%
96.3%	191.0	191.9	0.9	0.5%
97.5%	190.7	191.2	0.5	0.3%
98.8%	187.3	187.3	0.0	0.0%
100.0%	185.8	185.8	0.0	0.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	6114.5	6593.2	478.8	7.8%
1.2%	4634.5	4933.4	299.0	6.5%
2.5%	4406.8	4580.2	173.4	3.9%
3.7%	4270.1	4579.9	309.8	7.3%
4.9%	4081.3	4293.1	211.8	5.2%
6.2%	3939.1	4111.2	172.1	4.4%
7.4%	3871.0	3981.3	110.4	2.9%
8.6%	3815.4	3853.4	38.1	1.0%
9.9%	3496.6	3509.6	13.0	0.4%
11.1%	3476.7	3481.1	4.4	0.1%
12.3%	2839.7	3417.0	577.2	20.3%
13.6%	2703.7	3275.5	571.7	21.1%
14.8%	2584.5	3079.5	494.9	19.2%
16.0%	2527.3	2640.5	113.2	4.5%
17.3%	2345.3	2379.0	33.7	1.4%
18.5%	2340.0	2356.7	16.7	0.7%
19.8%	2300.3	2264.4	-35.9	-1.6%
21.0%	1198.9	1678.3	479.5	40.0%
22.2%	1146.6	1592.8	446.2	38.9%
23.5%	1121.7	1572.6	450.9	40.2%
24.7%	1094.2	1503.8	409.6	37.4%
25.9%	1093.1	1420.7	327.6	30.0%
27.2%	1016.8	1372.1	355.2	34.9%
28.4%	1007.2	1340.9	333.7	33.1%
29.6%	980.3	1251.9	271.6	27.7%
30.9%	898.1	1160.1	262.0	29.2%
32.1%	883.6	1156.9	273.3	30.9%
33.3%	771.5	1107.7	336.2	43.6%
34.6%	764.0	1100.3	336.4	44.0%
35.8%	715.5	1039.6	324.1	45.3%
37.0%	707.1	1007.8	300.7	42.5%
38.3%	706.9	999.3	292.4	41.4%
39.5%	699.2	887.9	188.7	27.0%
40.7%	660.9	769.9	109.0	16.5%
42.0%	660.3	735.8	75.6	11.4%
43.2%	652.6	717.5	64.9	9.9%
44.4%	634.5	704.9	70.4	11.1%
45.7%	486.2	683.4	197.2	40.6%
46.9%	458.9	636.2	177.3	38.6%
48.1%	457.2	628.8	171.6	37.5%
49.4%	435.8	597.4	161.6	37.1%
50.6%	435.3	563.5	128.2	29.5%
51.9%	373.2	524.1	150.9	40.4%
53.1%	367.3	521.7	154.4	42.0%
54.3%	356.3	457.8	101.5	28.5%
55.6%	351.3	395.9	44.6	12.7%
56.8%	330.0	385.6	55.6	16.9%
58.0%	291.4	375.2	83.8	28.7%
59.3%	283.8	320.4	36.6	12.9%
60.5%	272.9	307.8	34.9	12.8%
61.7%	250.7	284.2	33.5	13.3%
63.0%	243.0	260.0	16.9	7.0%
64.2%	239.3	246.6	7.3	3.1%
65.4%	232.9	233.8	0.9	0.4%
66.7%	225.6	230.8	5.1	2.3%
67.9%	223.9	226.9	3.0	1.3%
69.1%	208.9	214.8	6.0	2.9%
70.4%	208.1	209.7	1.6	0.8%
71.6%	205.2	209.3	4.1	2.0%
72.8%	202.5	208.5	6.0	3.0%
74.1%	201.7	206.7	4.9	2.4%
75.3%	200.8	204.9	4.0	2.0%
76.5%	200.0	204.7	4.7	2.3%
77.8%	199.1	200.2	1.1	0.5%
79.0%	199.0	200.1	1.1	0.6%
80.2%	198.1	199.1	1.1	0.5%
81.5%	197.9	198.8	0.9	0.4%
82.7%	196.9	198.1	1.3	0.6%
84.0%	195.6	197.5	1.8	0.9%
85.2%	194.4	196.8	2.4	1.2%
86.4%	194.3	194.9	0.6	0.3%
87.7%	193.9	194.0	0.1	0.0%
88.9%	193.4	193.3	-0.1	0.0%
90.1%	193.3	192.6	-0.7	-0.3%
91.4%	192.4	192.0	-0.4	-0.2%
92.6%	191.5	191.9	0.4	0.2%
93.8%	191.4	191.7	0.3	0.2%
95.1%	191.2	191.6	0.4	0.2%
96.3%	190.8	190.8	0.0	0.0%
97.5%	189.6	189.7	0.1	0.0%
98.8%	185.0	185.0	0.0	0.0%
100.0%	184.4	184.4	0.0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	6562.4	6782.4	220.0	3.4%
1.2%	5746.6	5759.9	13.4	0.2%
2.5%	5711.4	5483.4	-228.1	-4.0%
3.7%	4977.4	5001.6	24.2	0.5%
4.9%	4918.6	4982.0	63.4	1.3%
6.2%	4632.5	4369.6	-262.9	-5.7%
7.4%	4484.9	4344.1	-140.9	-3.1%
8.6%	4359.9	4095.3	-264.6	-6.1%
9.9%	3980.4	4038.6	58.3	1.5%
11.1%	3752.7	3767.4	14.8	0.4%
12.3%	3550.1	3481.1	-69.0	-1.9%
13.6%	3499.3	3476.4	-23.0	-0.7%
14.8%	3314.9	3464.0	149.1	4.5%
16.0%	3211.7	3389.8	178.0	5.5%
17.3%	3162.0	3223.1	61.1	1.9%
18.5%	2610.2	2878.7	268.5	10.3%
19.8%	2406.1	2730.4	324.3	13.5%
21.0%	2358.2	2561.8	203.6	8.6%
22.2%	2151.1	2424.8	273.7	12.7%
23.5%	1846.6	2152.6	306.0	16.6%
24.7%	1690.3	1831.3	140.9	8.3%
25.9%	1627.7	1705.5	77.7	4.8%
27.2%	1549.5	1587.5	38.0	2.4%
28.4%	1546.2	1551.4	5.2	0.3%
29.6%	1425.3	1483.2	57.8	4.1%
30.9%	1417.7	1474.1	56.5	4.0%
32.1%	1402.2	1412.9	10.6	0.8%
33.3%	1363.7	1330.6	-33.1	-2.4%
34.6%	1306.3	1263.3	-43.0	-3.3%
35.8%	1130.0	1237.0	107.1	9.5%
37.0%	1057.7	1218.0	160.3	15.2%
38.3%	1001.0	1057.8	56.8	5.7%
39.5%	980.0	1026.0	45.9	4.7%
40.7%	972.9	1023.3	50.4	5.2%
42.0%	844.2	981.3	137.0	16.2%
43.2%	772.0	964.8	192.8	25.0%
44.4%	754.6	847.2	92.6	12.3%
45.7%	719.8	773.5	53.7	7.5%
46.9%	666.0	752.4	86.4	13.0%
48.1%	665.0	719.5	54.5	8.2%
49.4%	642.5	711.0	68.5	10.7%
50.6%	615.1	686.9	71.8	11.7%
51.9%	585.0	666.9	81.9	14.0%
53.1%	583.9	606.2	22.3	3.8%
54.3%	574.3	603.5	29.2	5.1%
55.6%	548.1	602.7	54.7	10.0%
56.8%	430.1	585.2	155.1	36.1%
58.0%	410.8	521.8	110.9	27.0%
59.3%	403.9	432.1	28.1	7.0%
60.5%	390.5	431.5	41.1	10.5%
61.7%	385.3	378.8	-6.5	-1.7%
63.0%	376.1	352.6	-23.5	-6.2%
64.2%	351.9	328.7	-23.2	-6.6%
65.4%	309.5	326.2	16.7	5.4%
66.7%	308.5	321.7	13.2	4.3%
67.9%	306.9	318.0	11.1	3.6%
69.1%	300.0	311.1	11.2	3.7%
70.4%	292.4	291.9	-0.6	-0.2%
71.6%	290.6	290.5	0.0	0.0%
72.8%	244.0	270.9	26.9	11.0%
74.1%	239.4	244.4	5.0	2.1%
75.3%	222.9	234.0	11.1	5.0%
76.5%	221.3	228.6	7.3	3.3%
77.8%	217.2	221.7	4.5	2.1%
79.0%	214.1	217.4	3.3	1.6%
80.2%	210.7	214.1	3.4	1.6%
81.5%	207.6	207.5	-0.1	0.0%
82.7%	203.4	205.3	2.0	1.0%
84.0%	199.9	204.8	4.9	2.5%
85.2%	199.3	201.9	2.6	1.3%
86.4%	198.7	200.3	1.6	0.8%
87.7%	197.7	198.8	1.0	0.5%
88.9%	197.4	198.3	0.9	0.4%
90.1%	195.2	195.3	0.1	0.0%
91.4%	194.5	194.8	0.3	0.2%
92.6%	191.3	191.5	0.1	0.1%
93.8%	190.6	191.4	0.8	0.4%
95.1%	190.0	190.3	0.3	0.2%
96.3%	188.8	189.1	0.4	0.2%
97.5%	188.6	188.8	0.1	0.1%
98.8%	187.8	188.0	0.1	0.1%
100.0%	186.1	186.2	0.1	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	9090.0	9183.7	93.7	1.0%
1.2%	8834.7	8821.4	-13.2	-0.1%
2.5%	8015.8	8501.8	485.9	6.1%
3.7%	7851.4	8013.9	162.5	2.1%
4.9%	6192.7	6114.6	-78.1	-1.3%
6.2%	5985.5	5953.6	-31.8	-0.5%
7.4%	5955.0	5920.7	-34.3	-0.6%
8.6%	5918.7	5888.5	-30.2	-0.5%
9.9%	5590.6	5519.0	-71.6	-1.3%
11.1%	5124.9	5142.2	17.3	0.3%
12.3%	5109.3	5140.4	31.0	0.6%
13.6%	5062.3	5083.1	20.8	0.4%
14.8%	5006.2	4950.1	-56.1	-1.1%
16.0%	4872.7	4831.2	-41.5	-0.9%
17.3%	4491.5	4514.5	23.0	0.5%
18.5%	4481.7	4482.2	0.5	0.0%
19.8%	4341.6	4137.7	-204.0	-4.7%
21.0%	4065.0	4045.4	-19.6	-0.5%
22.2%	3999.3	4032.5	33.2	0.8%
23.5%	3905.0	3892.6	-12.5	-0.3%
24.7%	3661.5	3890.2	228.6	6.2%
25.9%	3495.0	3515.9	20.9	0.6%
27.2%	3400.9	3378.1	-22.8	-0.7%
28.4%	3393.6	3342.8	-50.8	-1.5%
29.6%	3365.7	3221.3	-144.4	-4.3%
30.9%	3220.9	3179.2	-41.7	-1.3%
32.1%	3173.4	3178.2	4.9	0.2%
33.3%	3132.5	3086.6	-45.9	-1.5%
34.6%	2596.9	2444.0	-152.8	-5.9%
35.8%	2442.2	2427.0	-15.2	-0.6%
37.0%	2130.2	2267.2	137.0	6.4%
38.3%	2107.3	2140.0	32.7	1.6%
39.5%	2066.1	2082.3	16.2	0.8%
40.7%	2034.4	2066.8	32.4	1.6%
42.0%	1957.5	2062.6	105.1	5.4%
43.2%	1720.4	1883.6	163.2	9.5%
44.4%	1684.4	1684.0	-0.3	0.0%
45.7%	1459.8	1454.3	-5.5	-0.4%
46.9%	1454.8	1443.0	-11.8	-0.8%
48.1%	1352.3	1361.2	8.9	0.7%
49.4%	1320.6	1323.9	3.2	0.2%
50.6%	1201.9	1113.2	-88.8	-7.4%
51.9%	1050.5	1054.9	4.5	0.4%
53.1%	950.2	995.7	45.5	4.8%
54.3%	923.3	971.0	47.7	5.2%
55.6%	889.2	895.9	6.8	0.8%
56.8%	888.8	882.2	-6.6	-0.7%
58.0%	879.4	874.8	-4.6	-0.5%
59.3%	851.8	862.9	11.1	1.3%
60.5%	825.8	833.3	7.5	0.9%
61.7%	772.1	773.0	0.8	0.1%
63.0%	769.3	770.2	0.9	0.1%
64.2%	647.4	664.0	16.7	2.6%
65.4%	623.5	641.3	17.7	2.8%
66.7%	620.3	632.3	12.0	1.9%
67.9%	598.4	600.1	1.7	0.3%
69.1%	536.1	541.3	5.2	1.0%
70.4%	519.9	526.7	6.8	1.3%
71.6%	483.8	510.8	27.1	5.6%
72.8%	407.1	437.0	29.8	7.3%
74.1%	368.1	410.2	42.1	11.4%
75.3%	338.7	370.9	32.2	9.5%
76.5%	319.9	366.9	47.0	14.7%
77.8%	315.4	323.3	7.9	2.5%
79.0%	292.3	295.1	2.8	1.0%
80.2%	288.4	288.4	-0.1	0.0%
81.5%	285.8	283.2	-2.6	-0.9%
82.7%	220.0	229.6	9.6	4.3%
84.0%	214.9	215.7	0.9	0.4%
85.2%	212.0	212.3	0.3	0.1%
86.4%	199.8	199.9	0.0	0.0%
87.7%	199.4	199.6	0.2	0.1%
88.9%	194.2	194.4	0.2	0.1%
90.1%	191.7	191.9	0.1	0.1%
91.4%	189.2	187.7	-1.5	-0.8%
92.6%	185.4	185.6	0.2	0.1%
93.8%	183.5	183.6	0.1	0.1%
95.1%	182.4	182.3	0.0	0.0%
96.3%	182.0	182.1	0.1	0.0%
97.5%	181.4	181.4	0.0	0.0%
98.8%	181.2	181.3	0.0	0.0%
100.0%	178.3	178.5	0.2	0.1%

Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

June				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11593.3	11637.5	44.3	0.4%
1.2%	11172.7	10770.1	-402.6	-3.6%
2.5%	10589.9	10564.2	-25.7	-0.2%
3.7%	10585.0	10312.1	-272.9	-2.6%
4.9%	9243.2	9008.8	-234.4	-2.5%
6.2%	8956.3	8936.0	-20.3	-0.2%
7.4%	8416.8	8260.7	-156.0	-1.9%
8.6%	7234.6	7197.2	-37.5	-0.5%
9.9%	7066.3	6876.3	-190.0	-2.7%
11.1%	6840.4	6783.1	-57.3	-0.8%
12.3%	6775.8	6665.7	-110.1	-1.6%
13.6%	6709.0	6507.3	-201.7	-3.0%
14.8%	6508.9	6402.5	-106.4	-1.6%
16.0%	6381.8	6023.2	-358.6	-5.6%
17.3%	6325.1	6015.2	-309.9	-4.9%
18.5%	6207.0	5966.3	-240.7	-3.9%
19.8%	6027.7	5949.7	-78.0	-1.3%
21.0%	5955.6	5940.6	-15.1	-0.3%
22.2%	5949.6	5937.3	-12.4	-0.2%
23.5%	5875.9	5880.3	4.4	0.1%
24.7%	5846.0	5878.9	32.9	0.6%
25.9%	5845.3	5849.8	4.4	0.1%
27.2%	5820.3	5836.9	16.6	0.3%
28.4%	5818.6	5804.4	-14.2	-0.2%
29.6%	5726.2	5742.4	16.2	0.3%
30.9%	5722.6	5709.4	-13.3	-0.2%
32.1%	5703.5	5694.6	-9.0	-0.2%
33.3%	5699.6	5618.6	-80.9	-1.4%
34.6%	5561.0	5585.9	24.9	0.4%
35.8%	5430.8	5561.0	130.2	2.4%
37.0%	5315.2	5410.3	95.0	1.8%
38.3%	5121.0	5318.0	197.1	3.8%
39.5%	4880.8	5020.2	139.4	2.9%
40.7%	4709.7	4605.3	-104.4	-2.2%
42.0%	4614.4	4495.3	-119.2	-2.6%
43.2%	4560.5	4471.2	-89.3	-2.0%
44.4%	4195.9	4257.1	61.2	1.5%
45.7%	4163.4	4182.2	18.8	0.5%
46.9%	4158.6	4159.4	0.9	0.0%
48.1%	4133.4	4135.9	2.5	0.1%
49.4%	4114.9	4113.1	-1.8	0.0%
50.6%	4082.0	4071.6	-10.4	-0.3%
51.9%	4009.4	3968.2	-41.2	-1.0%
53.1%	3994.8	3925.2	-69.6	-1.7%
54.3%	3919.5	3597.0	-322.5	-8.2%
55.6%	3721.0	3493.8	-227.2	-6.1%
56.8%	3671.0	3288.0	-383.0	-10.4%
58.0%	3272.1	3229.4	-42.7	-1.3%
59.3%	3210.0	3073.7	-136.3	-4.2%
60.5%	3030.7	2959.8	-70.9	-2.3%
61.7%	2987.8	2886.1	-101.7	-3.4%
63.0%	2948.6	2727.9	-220.7	-7.5%
64.2%	2791.6	2682.9	-108.7	-3.9%
65.4%	2759.7	2628.5	-131.2	-4.8%
66.7%	2735.1	2570.1	-165.0	-6.0%
67.9%	2565.6	2530.7	-35.0	-1.4%
69.1%	2407.8	2274.4	-133.4	-5.5%
70.4%	2311.2	2266.0	-45.1	-2.0%
71.6%	2133.9	2180.9	47.0	2.2%
72.8%	2001.2	1856.9	-144.3	-7.2%
74.1%	1751.1	1741.7	-9.5	-0.5%
75.3%	1517.1	1592.9	75.8	5.0%
76.5%	1426.8	1306.1	-120.7	-8.5%
77.8%	1347.0	1290.7	-56.3	-4.2%
79.0%	1323.4	1242.6	-80.8	-6.1%
80.2%	1284.8	1216.1	-68.6	-5.3%
81.5%	1022.8	1004.1	-18.7	-1.8%
82.7%	753.6	793.2	39.7	5.3%
84.0%	637.6	707.2	69.6	10.9%
85.2%	629.4	639.0	9.6	1.5%
86.4%	608.4	633.2	24.8	4.1%
87.7%	584.7	606.2	21.5	3.7%
88.9%	445.1	401.4	-43.7	-9.8%
90.1%	270.1	258.5	-11.7	-4.3%
91.4%	250.0	251.0	1.0	0.4%
92.6%	220.6	220.7	0.1	0.0%
93.8%	214.3	209.0	-5.3	-2.5%
95.1%	210.0	205.7	-4.2	-2.0%
96.3%	208.8	204.6	-4.2	-2.0%
97.5%	203.6	201.7	-1.9	
98.8%	186.6	187.1	0.5	
100.0%	181.9	182.0	0.0	

July				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12406.7	12426.4	19.8	0.2%
1.2%	12195.1	11688.4	-506.7	-4.2%
2.5%	12043.3	11208.1	-835.2	-6.9%
3.7%	11274.4	11167.7	-106.7	-0.9%
4.9%	11144.3	11160.9	16.6	0.1%
6.2%	11116.9	10985.7	-131.2	-1.2%
7.4%	10168.9	10276.6	107.8	1.1%
8.6%	9485.8	9513.7	27.9	0.3%
9.9%	9432.8	9134.5	-298.3	-3.2%
11.1%	9111.4	9114.4	3.0	0.0%
12.3%	9109.5	8645.5	-464.0	-5.1%
13.6%	9078.4	8627.9	-450.5	-5.0%
14.8%	8709.2	8306.2	-403.0	-4.6%
16.0%	8323.6	8287.2	-36.4	-0.4%
17.3%	8314.3	8260.5	-53.8	-0.6%
18.5%	8202.7	8216.9	14.2	0.2%
19.8%	8181.4	8103.6	-77.8	-1.0%
21.0%	8145.3	8101.0	-44.3	-0.5%
22.2%	8033.2	8080.4	47.3	0.6%
23.5%	7992.8	8004.1	11.3	0.1%
24.7%	7932.0	7982.3	50.3	0.6%
25.9%	7891.1	7899.6	8.5	0.1%
27.2%	7871.6	7794.9	-76.7	-1.0%
28.4%	7836.6	7751.1	-85.5	-1.1%
29.6%	7808.0	7695.2	-112.9	-1.4%
30.9%	7673.0	7692.8	19.8	0.3%
32.1%	7632.3	7604.4	-27.9	-0.4%
33.3%	7606.5	7585.4	-21.0	-0.3%
34.6%	7585.2	7542.4	-42.8	-0.6%
35.8%	6490.8	6460.0	-30.8	-0.5%
37.0%	6488.3	6412.7	-75.6	-1.2%
38.3%	6286.1	6342.1	56.0	0.9%
39.5%	6238.0	6264.2	26.2	0.4%
40.7%	6237.1	6135.7	-101.5	-1.6%
42.0%	6192.8	6076.4	-116.3	-1.9%
43.2%	6048.5	5923.9	-124.7	-2.1%
44.4%	5960.7	5852.3	-108.5	-1.8%
45.7%	5925.9	5802.6	-123.3	-2.1%
46.9%	5804.4	5792.4	-11.9	-0.2%
48.1%	5802.6	5785.0	-17.7	-0.3%
49.4%	5785.9	5694.6	-91.3	-1.6%
50.6%	5750.8	5451.0	-299.7	-5.2%
51.9%	5049.3	5091.4	42.0	0.8%
53.1%	4937.8	4795.0	-142.8	-2.9%
54.3%	4833.3	4795.0	-38.4	-0.8%
55.6%	4796.3	4713.2	-83.0	-1.7%
56.8%	4742.1	4532.5	-209.7	-4.4%
58.0%	4574.1	4489.9	-84.2	-1.8%
59.3%	4557.5	4465.5	-92.0	-2.0%
60.5%	4554.5	4459.6	-94.9	-2.1%
61.7%	4511.0	4426.5	-84.4	-1.9%
63.0%	4509.7	4409.1	-100.6	-2.2%
64.2%	4484.4	4395.8	-88.6	-2.0%
65.4%	4387.7	4374.4	-13.3	-0.3%
66.7%	4369.7	4366.4	-3.3	-0.1%
67.9%	4363.9	4254.0	-109.9	-2.5%
69.1%	4346.8	4244.5	-102.3	-2.4%
70.4%	4300.2	4230.4	-69.7	-1.6%
71.6%	4250.4	4226.2	-24.2	-0.6%
72.8%	4233.1	4224.2	-8.9	-0.2%
74.1%	4209.3	4138.2	-71.0	-1.7%
75.3%	4153.0	4127.6	-25.4	-0.6%
76.5%	3942.9	3958.6	15.7	0.4%
77.8%	3856.2	3855.0	-1.2	0.0%
79.0%	3733.9	3694.3	-39.5	-1.1%
80.2%	3721.6	3693.6	-28.0	-0.8%
81.5%	3718.6	3624.1	-94.5	-2.5%
82.7%	3157.8	3305.1	147.4	4.7%
84.0%	3140.3	3167.9	27.5	0.9%
85.2%	3134.1	3142.7	8.7	0.3%
86.4%	3121.9	3122.8	0.9	0.0%
87.7%	2999.6	3075.6	76.0	2.5%
88.9%	2847.5	2763.1	-84.4	-3.0%
90.1%	2653.6	2614.1	-39.6	-1.5%
91.4%	2548.4	2552.0	3.6	0.1%
92.6%	2270.1	2270.4	0.4	0.0%
93.8%	2251.4	2247.4	-4.0	-0.2%
95.1%	1926.3	1930.5	4.2	0.2%
96.3%	1122.6	997.6	-125.0	-11.1%
97.5%	488.7	465.1	-23.6	-4.8%
98.8%	300.2	303.8	3.6	1.2%
100.0%	252.4	254.0	1.6	

August				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12972.3	13074.0	101.7	0.8%
1.2%	12167.0	12174.2	7.2	0.1%
2.5%	11983.7	12042.1	58.4	0.5%
3.7%	11932.9	12024.9	92.1	0.8%
4.9%	11869.9	11966.7	96.8	0.8%
6.2%	11694.4	11848.7	154.2	1.3%
7.4%	11633.7	11834.5	200.8	1.7%
8.6%	11620.9	11551.5	-69.4	-0.6%
9.9%	11530.4	11456.8	-73.5	-0.6%
11.1%	11484.9	11294.6	-190.3	-1.7%
12.3%	11309.1	11147.3	-161.9	-1.4%
13.6%	11045.0	10772.2	-272.8	-2.5%
14.8%	10643.3	10573.5	-69.8	-0.7%
16.0%	10544.1	10374.7	-169.4	-1.6%
17.3%	10428.9	10306.6	-122.3	-1.2%
18.5%	10421.6	10287.8	-133.8	-1.3%
19.8%	10369.9	10247.9	-122.0	-1.2%
21.0%	10359.7	10222.7	-137.0	-1.3%
22.2%	10357.6	10190.1	-167.5	-1.6%
23.5%	10303.6	10073.2	-230.3	-2.2%
24.7%	10293.5	10049.8	-243.8	-2.4%
25.9%	10260.7	10045.2	-215.5	-2.1%
27.2%	10232.0	10033.4	-198.6	-1.9%
28.4%	10215.0	9999.2	-215.8	-2.1%
29.6%	10210.5	9978.7	-231.8	-2.3%
30.9%	10186.1	9829.1	-357.0	-3.5%
32.1%	10078.5	9742.0	-336.4	-3.3%
33.3%	10065.2	9307.1	-758.1	-7.5%
34.6%	9871.6	9194.4	-677.2	-6.9%
35.8%	9465.0	9125.4	-339.6	-3.6%
37.0%	8945.7	8924.0	-21.6	-0.2%
38.3%	8773.7	8631.0	-142.8	-1.6%
39.5%	8734.9	8538.9	-195.9	-2.2%
40.7%	8690.8	8508.3	-182.5	-2.1%
42.0%	8680.6	8479.8	-200.8	-2.3%
43.2%	8633.4	8371.4	-262.0	-3.0%
44.4%	8551.9	8367.9	-184.0	-2.2%
45.7%	8513.2	8326.3	-187.0	-2.2%
46.9%	8349.4	8279.1	-70.3	-0.8%
48.1%	8307.1	8212.7	-94.4	-1.1%
49.4%	8264.7	8207.7	-57.0	-0.7%
50.6%	8223.3	8194.5	-28.8	-0.4%
51.9%	8203.8	8044.5	-159.3	-1.9%
53.1%	8118.1	7954.4	-163.7	-2.0%
54.3%	8027.7	7939.0	-88.7	-1.1%
55.6%	7996.3	7875.3	-121.1	-1.5%
56.8%	7995.0	7866.5	-128.4	-1.6%
58.0%	7990.9	7817.0	-173.9	-2.2%
59.3%	7886.2	7786.0	-100.1	-1.3%
60.5%	7869.7	7710.5	-159.1	-2.0%
61.7%	7850.0	7681.2	-168.8	-2.1%
63.0%	7776.7	7658.7	-118.0	-1.5%
64.2%	7765.4	7644.4	-121.1	-1.6%
65.4%	7740.3	7625.8	-114.6	-1.5%
66.7%	7631.9	7624.6	-7.3	-0.1%
67.9%	7605.9	7611.0	5.1	0.1%
69.1%	7506.2	7599.9	93.6	1.2%
70.4%	7465.3	7465.0	-0.2	0.0%
71.6%	7451.4	7433.4	-18.0	-0.2%
72.8%	7438.5	7368.4	-70.1	-0.9%
74.1%	7427.5	7349.6	-77.9	-1.0%
75.3%	7425.1	7254.6	-170.5	-2.3%
76.5%	7419.0	7191.5	-227.4	-3.1%
77.8%	7408.6	7183.6	-225.1	-3.0%
79.0%	7312.2	7114.5	-197.7	-2.7%
80.2%	7258.3	7037.7	-220.5	-3.0%
81.5%	7235.6	7019.2	-216.4	-3.0%
82.7%	7203.4	7009.4	-193.9	-2.7%
84.0%	7190.7	6997.3	-193.4	-2.7%
85.2%	7181.8	6983.8	-198.1	-2.8%
86.4%	7160.4	6980.0	-180.3	-2.5%
87.7%	7123.7	6971.3	-152.4	-2.1%
88.9%	7110.6	6966.0	-144.6	-2.0%
90.1%	7085.7	6837.9	-247.8	-3.5%
91.4%	7022.9	6817.8	-205.1	-2.9%
92.6%	6789.0	6814.9	25.9	0.4%
93.8%	6662.1	6602.5	-59.6	-0.9%
95.1%	5742.5	6227.6	485.1	8.4%
96.3%	5703.3	5524.6	-178.7	-3.1%
97.5%	2758.3	3434.5	676.2	24.5%
98.8%	1715.3	1520.9	-194.4	-11.3%
100.0%	973.3	885.8	-87.6	-9.0%

September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13785.4	13657.1	-128.3	-0.9%
1.2%	13513.9	13653.9	140.0	1.0%
2.5%	13311.9	13446.4	134.5	1.0%
3.7%	13181.7	13277.7	96.0	0.7%
4.9%	13146.9	13190.3	43.4	0.3%
6.2%	13028.7	13132.3	103.6	0.8%
7.4%	13016.9	13075.1	58.2	0.4%
8.6%	12974.0	13043.2	69.3	0.5%
9.9%	12942.8	12975.7	32.9	0.3%
11.1%	12832.6	12631.5	-201.1	-1.6%
12.3%	12682.1	12582.8	-99.3	-0.8%
13.6%	12677.6	12265.4	-412.3	-3.3%
14.8%	12627.4	12250.0	-377.4	-3.0%
16.0%	12552.4	12180.1	-372.2	-3.0%
17.3%	12551.3	12136.8	-414.5	-3.3%
18.5%	12517.9	12025.1	-492.9	-3.9%
19.8%	12461.0	11932.4	-528.5	-4.2%
21.0%	12395.7	11900.6	-495.1	-4.0%
22.2%	12344.0	11889.1	-454.9	-3.7%
23.5%	12310.7	11853.3	-457.4	-3.7%
24.7%	12256.2	11804.9	-451.3	-3.7%
25.9%	12224.3	11629.8	-594.5	-4.9%
27.2%	12205.4	11528.1	-677.3	-5.5%
28.4%	12185.6	11395.8	-789.8	-6.5%
29.6%	12130.6	11355.9	-774.7	-6.4%
30.9%	12047.1	11183.4	-863.6	-7.2%
32.1%	12009.8	11120.1	-889.7	-7.4%
33.3%	11987.5	11062.1	-925.4	-7.7%
34.6%	11764.2	10962.9	-801.3	-6.8%
35.8%	11672.6	10798.7	-873.9	-7.5%
37.0%	11608.7	10583.8	-1024.9	-8.8%
38.3%	11482.1	10531.0	-951.0	-8.3%
39.5%	10990.0	10519.3	-470.7	-4.3%
40.7%	10757.2	10464.6	-292.6	-2.7%
42.0%	10722.7	10421.3	-301.5	-2.8%
43.2%	10617.9	10320.0	-297.9	-2.8%
44.4%	10498.6	10223.6	-275.0	-2.6%
45.7%	10409.4	9949.9	-459.4	-4.4%
46.9%	10306.7	9868.7	-438.1	-4.3%
48.1%	10267.5	9813.0	-454.4	-4.4%
49.4%	10248.0	9788.4	-459.6	-4.5%
50.6%	10044.0	9786.6	-257.4	-2.6%
51.9%	10028.4	9604.2	-424.2	-4.2%
53.1%	9899.4	9083.8	-815.7	-8.2%
54.3%	5792.6	5470.3	-322.2	-5.6%
55.6%	5700.6	5462.8	-237.9	-4.2%
56.8%	5650.9	5400.6	-250.3	-4.4%
58.0%	5564.1	5381.1	-182.9	-3.3%
59.3%	5529.7	5354.1	-175.6	-3.2%
60.5%	5482.0	5305.5	-176.5	-3.2%
61.7%	5415.1	5251.2	-163.9	-3.0%
63.0%	5380.9	5243.0	-137.9	-2.6%
64.2%	5274.0	5025.0	-249.0	-4.7%
65.4%	5171.7	4910.6	-261.1	-5.0%
66.7%	5041.0	4853.5	-187.5	-3.7%
67.9%	4632.1	4453.5	-178.6	-3.9%
69.1%	3330.4	3180.6	-149.8	-4.5%
70.4%	3155.3	3094.0	-61.3	-1.9%
71.6%	3003.4	2949.8	-53.6	-1.8%
72.8%	2938.0	2933.6	-4.4	-0.2%
74.1%	2879.0	2933.5	54.5	1.9%
75.3%	2853.4	2840.7	-12.7	-0.4%
76.5%	2847.1	2808.8	-38.3	-1.3%
77.8%	2842.8	2796.5	-46.2	-1.6%
79.0%	2824.1	2756.6	-67.4	-2.4%
80.2%	2793.7	2754.7	-39.1	-1.4%
81.5%	2749.7	2697.3	-52.4	-1.9%
82.7%	2747.0	2650.0	-97.0	-3.5%
84.0%	2742.2	2648.7	-93.4	-3.4%
85.2%	2736.4	2595.1	-141.3	-5.2%
86.4%	2704.8	2589.1	-115.8	-4.3%
87.7%	2635.8	2573.8	-62.0	-2.4%
88.9%	2596.0	2527.9	-68.0	-2.6%
90.1%	2553.8	2488.7	-65.1	-2.5%
91.4%	2529.4	2466.7	-62.7	-2.5%
92.6%	2467.0	2327.9	-139.1	-5.6%
93.8%	2463.2	2326.4	-136.8	-5.6%
95.1%	2429.7	2296.7	-133.0	-5.5%
96.3%	2330.6	2274.1	-56.5	-2.4%
97.5%	2248.3	2160.3	-88.0	-3.9%
98.8%	1579.5	1693.3	113.8	7.2%
100.0%	909.7	978.0	68.3	7.5%

Figure SQ-24-b
Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

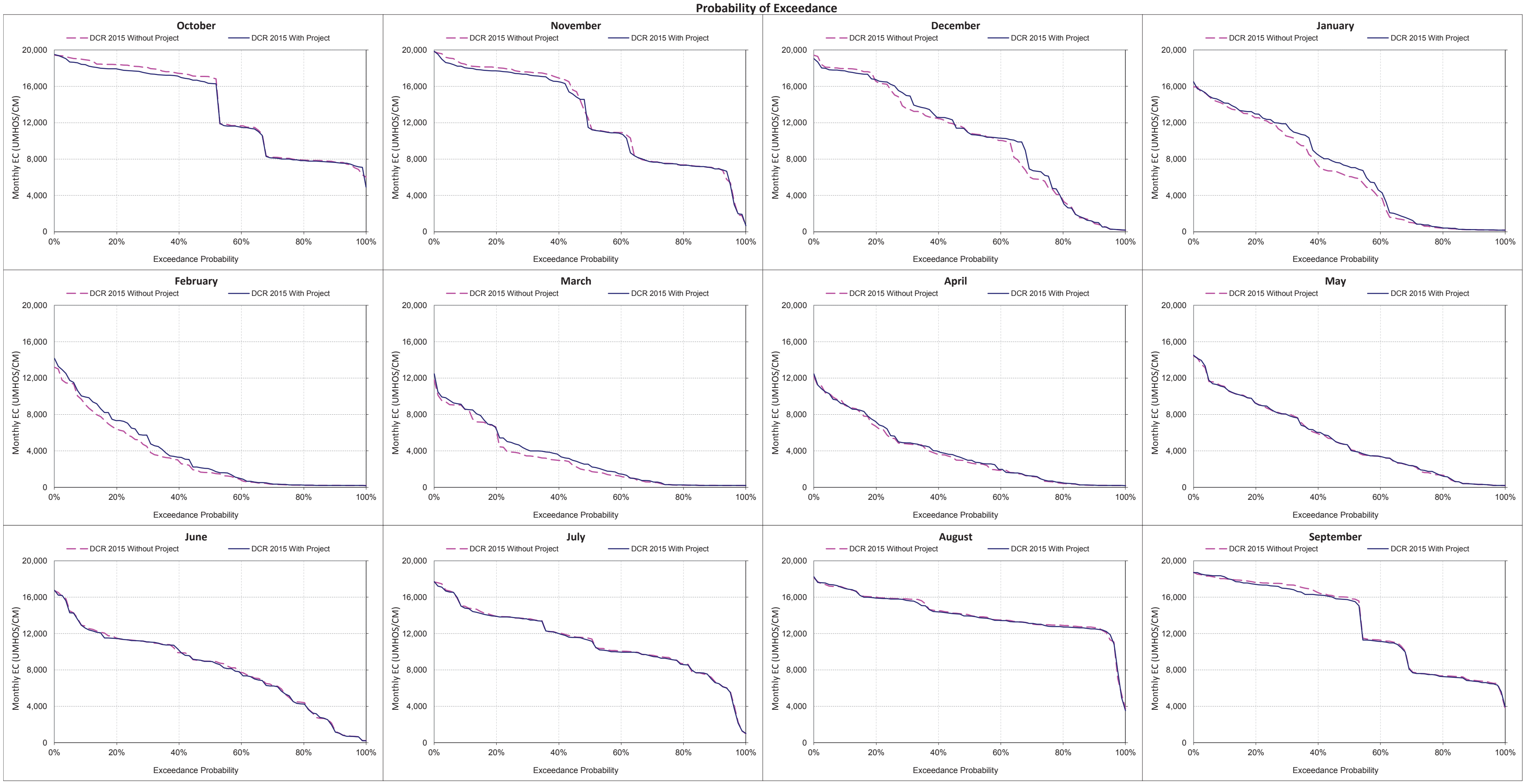


Table SQ-24-b
Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	19438.3	19514.6	76.3	0.4%
1.2%	19378.3	19390.1	11.8	0.1%
2.5%	19355.8	19220.1	-135.7	-0.7%
3.7%	19258.4	19055.9	-202.5	-1.1%
4.9%	19157.7	18677.0	-480.6	-2.5%
6.2%	19072.3	18648.0	-424.3	-2.2%
7.4%	19037.7	18599.4	-438.3	-2.3%
8.6%	18988.8	18421.0	-567.8	-3.0%
9.9%	18921.8	18394.3	-527.5	-2.8%
11.1%	18867.8	18221.4	-646.4	-3.4%
12.3%	18757.8	18125.6	-632.2	-3.4%
13.6%	18446.6	18087.3	-359.3	-1.9%
14.8%	18446.5	17997.0	-449.4	-2.4%
16.0%	18420.6	17973.5	-447.2	-2.4%
17.3%	18415.7	17931.3	-484.4	-2.6%
18.5%	18412.5	17925.0	-487.5	-2.6%
19.8%	18392.0	17923.4	-468.5	-2.5%
21.0%	18379.7	17842.5	-537.2	-2.9%
22.2%	18336.2	17769.7	-566.5	-3.1%
23.5%	18329.8	17745.2	-584.6	-3.2%
24.7%	18232.0	17706.6	-525.3	-2.9%
25.9%	18195.6	17668.8	-526.8	-2.9%
27.2%	18180.7	17656.8	-523.9	-2.9%
28.4%	18111.8	17526.6	-585.2	-3.2%
29.6%	18107.9	17437.2	-670.7	-3.7%
30.9%	17949.4	17366.5	-582.9	-3.2%
32.1%	17921.8	17346.3	-575.5	-3.2%
33.3%	17870.7	17283.5	-587.3	-3.3%
34.6%	17686.9	17247.0	-439.9	-2.5%
35.8%	17614.2	17227.0	-387.3	-2.2%
37.0%	17612.4	17225.7	-386.7	-2.2%
38.3%	17539.8	17191.6	-348.2	-2.0%
39.5%	17451.0	17133.5	-317.5	-1.8%
40.7%	17407.0	16979.6	-427.3	-2.5%
42.0%	17365.6	16886.4	-479.2	-2.8%
43.2%	17291.0	16828.6	-462.3	-2.7%
44.4%	17139.9	16679.8	-460.0	-2.7%
45.7%	17112.2	16673.3	-438.9	-2.6%
46.9%	17098.5	16563.5	-535.0	-3.1%
48.1%	17095.2	16517.7	-577.5	-3.4%
49.4%	17082.1	16331.3	-750.8	-4.4%
50.6%	16938.1	16318.3	-619.8	-3.7%
51.9%	16823.8	16287.7	-536.1	-3.2%
53.1%	11876.0	11910.4	34.4	0.3%
54.3%	11857.9	11700.1	-157.8	-1.3%
55.6%	11806.9	11643.7	-163.2	-1.4%
56.8%	11681.7	11629.9	-51.7	-0.4%
58.0%	11679.3	11625.9	-53.4	-0.5%
59.3%	11664.4	11541.6	-122.8	-1.1%
60.5%	11662.0	11464.9	-197.1	-1.7%
61.7%	11507.5	11459.8	-47.8	-0.4%
63.0%	11497.4	11360.7	-136.7	-1.2%
64.2%	11488.9	11311.2	-177.7	-1.5%
65.4%	11173.2	11039.6	-133.6	-1.2%
66.7%	10763.2	10593.4	-169.8	-1.6%
67.9%	8353.9	8295.4	-58.6	-0.7%
69.1%	8201.2	8140.8	-60.4	-0.7%
70.4%	8197.4	8117.2	-80.2	-1.0%
71.6%	8185.9	8099.6	-86.4	-1.1%
72.8%	8132.2	8012.1	-120.0	-1.5%
74.1%	8091.1	8003.9	-87.2	-1.1%
75.3%	8078.0	7998.4	-79.6	-1.0%
76.5%	7997.4	7922.5	-74.9	-0.9%
77.8%	7924.4	7906.8	-17.5	-0.2%
79.0%	7908.7	7834.2	-74.5	-0.9%
80.2%	7871.8	7831.8	-39.9	-0.5%
81.5%	7868.2	7782.8	-85.4	-1.1%
82.7%	7850.8	7776.4	-74.4	-0.9%
84.0%	7847.4	7768.6	-78.7	-1.0%
85.2%	7846.7	7762.6	-84.1	-1.1%
86.4%	7806.9	7715.2	-91.7	-1.2%
87.7%	7776.9	7686.2	-90.7	-1.2%
88.9%	7754.1	7664.9	-89.3	-1.2%
90.1%	7661.3	7625.7	-35.6	-0.5%
91.4%	7636.7	7568.8	-67.8	-0.9%
92.6%	7621.2	7549.8	-71.4	-0.9%
93.8%	7445.8	7541.0	95.3	1.3%
95.1%	7377.4	7432.7	55.3	0.7%
96.3%	7053.4	7263.0	209.6	3.0%
97.5%	6869.7	7156.4	286.7	4.2%
98.8%	6266.8	7082.4	815.6	13.0%
100.0%	6,011.7	4,930.1	-1,081.6	-18.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	19817.9	19843.1	25.3	0.1%
1.2%	19674.9	19545.1	-129.8	-0.7%
2.5%	19592.4	18990.2	-602.2	-3.1%
3.7%	19194.9	18609.3	-585.6	-3.1%
4.9%	19095.1	18527.8	-567.3	-3.0%
6.2%	19060.3	18388.6	-671.8	-3.5%
7.4%	18765.2	18219.7	-545.6	-2.9%
8.6%	18538.6	18208.4	-330.2	-1.8%
9.9%	18444.5	18061.1	-383.4	-2.1%
11.1%	18265.0	17993.6	-271.4	-1.5%
12.3%	18212.1	17969.4	-242.7	-1.3%
13.6%	18173.2	17855.7	-317.5	-1.7%
14.8%	18142.8	17825.9	-316.8	-1.7%
16.0%	18132.0	17763.3	-368.6	-2.0%
17.3%	18131.5	17728.3	-403.3	-2.2%
18.5%	18131.0	17714.2	-416.9	-2.3%
19.8%	18072.3	17709.8	-362.5	-2.0%
21.0%	18027.1	17683.7	-343.5	-1.9%
22.2%	17995.0	17620.9	-374.1	-2.1%
23.5%	17920.4	17591.9	-328.5	-1.8%
24.7%	17920.2	17529.7	-390.4	-2.2%
25.9%	17723.0	17432.1	-290.8	-1.6%
27.2%	17641.4	17385.5	-255.8	-1.5%
28.4%	17590.8	17337.5	-253.3	-1.4%
29.6%	17589.7	17335.0	-254.6	-1.4%
30.9%	17558.2	17214.1	-344.0	-2.0%
32.1%	17499.0	17159.7	-339.3	-1.9%
33.3%	17490.1	17147.6	-342.5	-2.0%
34.6%	17475.6	17079.4	-396.2	-2.3%
35.8%	17376.3	17065.8	-310.5	-1.8%
37.0%	17290.7	16746.3	-544.5	-3.1%
38.3%	17112.2	16555.5	-556.8	-3.3%
39.5%	16976.4	16529.8	-446.7	-2.6%
40.7%	16832.4	16451.7	-380.7	-2.3%
42.0%	16723.9	16298.4	-425.5	-2.5%
43.2%	16514.4	15404.8	-1109.6	-6.7%
44.4%	15619.0	15180.8	-438.3	-2.8%
45.7%	15416.3	14832.6	-583.7	-3.8%
46.9%	14423.0	14574.7	151.8	1.1%
48.1%	13352.0	14572.4	1220.3	9.1%
49.4%	12518.3	11494.7	-1023.7	-8.2%
50.6%	11229.6	11220.8	-8.8	-0.1%
51.9%	11173.5	11144.3	-29.2	-0.3%
53.1%	11146.3	11094.2	-52.1	-0.5%
54.3%	11050.9	11023.3	-27.6	-0.2%
55.6%	10982.5	10933.0	-49.5	-0.5%
56.8%	10960.9	10882.9	-78.0	-0.7%
58.0%	10933.7	10879.0	-54.7	-0.5%
59.3%	10925.7	10871.2	-54.5	-0.5%
60.5%	10914.4	10707.7	-206.7	-1.9%
61.7%	10655.2	10275.8	-379.4	-3.6%
63.0%	10326.2	8703.4	-1622.7	-15.7%
64.2%	8424.6	8380.8	-43.8	-0.5%
65.4%	8175.8	8156.9	-18.9	-0.2%
66.7%	7946.1	8041.1	95.0	1.2%
67.9%	7855.1	7860.9	5.8	0.1%
69.1%	7778.1	7729.6	-48.5	-0.6%
70.4%	7700.8	7659.6	-41.2	-0.5%
71.6%	7696.0	7649.5	-46.5	-0.6%
72.8%	7546.0	7615.1	69.1	0.9%
74.1%	7544.8	7503.2	-41.6	-0.6%
75.3%	7525.0	7484.2	-40.8	-0.5%
76.5%	7507.9	7481.3	-26.6	-0.4%
77.8%	7375.3	7475.5	100.3	1.4%
79.0%	7368.3	7321.7	-46.6	-0.6%
80.2%	7357.0	7318.4	-38.6	-0.5%
81.5%	7350.0	7311.8	-38.2	-0.5%
82.7%	7282.1	7234.7	-47.4	-0.7%
84.0%	7212.8	7197.7	-15.1	-0.2%
85.2%	7208.8	7176.7	-32.1	-0.4%
86.4%	7167.0	7169.4	2.4	0.0%
87.7%	7105.1	7130.0	24.9	0.4%
88.9%	7093.0	7065.0	-28.0	-0.4%
90.1%	6963.1	6919.7	-43.4	-0.6%
91.4%	6953.8	6908.4	-45.4	-0.7%
92.6%	6733.5	6795.0	61.5	0.9%
93.8%	5787.6	6650.2	862.6	14.9%
95.1%	5382.1	5167.1	-215.1	-4.0%
96.3%	3269.1	2980.6	-288.5	-8.8%
97.5%	1852.4	1997.3	144.9	7.8%
98.8%	1784.8	1922.9	138.2	7.7%
100.0%	671.4	667.4	-4.0	-0.6%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	19425.0	19042.1	-382.9	-2.0%
1.2%	19300.3	18668.6	-631.6	-3.3%
2.5%	18390.2	18022.6	-367.6	-2.0%
3.7%	18108.9	18002.0	-106.9	-0.6%
4.9%	18087.0	17822.3	-264.8	-1.5%
6.2%	18030.3	17802.4	-227.9	-1.3%
7.4%	18028.1	17781.8	-246.3	-1.4%
8.6%	17963.1	17738.5	-224.6	-1.3%
9.9%	17959.2	17695.3	-264.0	-1.5%
11.1%	17954.2	17597.0	-357.2	-2.0%
12.3%	17928.1	17545.4	-382.7	-2.1%
13.6%	17872.3	17463.0	-409.3	-2.3%
14.8%	17778.7	17389.4	-389.3	-2.2%
16.0%	17619.3	17345.8	-273.5	-1.6%
17.3%	17612.2	17326.3	-285.9	-1.6%
18.5%	17513.2	16816.9	-696.3	-4.0%
19.8%	16620.5	16755.4	134.9	0.8%
21.0%	16321.6	16570.0	248.4	1.5%
22.2%	16292.9	16517.7	224.8	1.4%
23.5%	16241.1	16481.2	240.2	1.5%
24.7%	15588.7	16236.5	647.8	4.2%
25.9%	15059.3	16048.9	989.6	6.6%
27.2%	14844.1	15540.5	696.3	4.7%
28.4%	13859.3	15310.9	1451.6	10.5%
29.6%	13579.0	15006.2	1427.2	10.5%
30.9%	13452.9	14933.1	1480.2	11.0%
32.1%	13248.3	13944.6	696.3	5.3%
33.3%	13242.0	13789.1	547.1	4.1%
34.6%	13132.9	13684.8	552.0	4.2%
35.8%	12776.1	13585.4	809.3	6.3%
37.0%	12639.6	13459.0	819.4	6.5%
38.3%	12569.9	13000.3	430.4	3.4%
39.5%	12499.0	12598.5	99.6	0.8%
40.7%	12404.0	12578.8	174.7	1.4%
42.0%	12261.4	12572.0	310.6	2.5%
43.2%	11983.0	12470.8	487.9	4.1%
44.4%	11915.2	12327.4	412.2	3.5%
45.7%	11718.2	11399.9	-318.4	-2.7%
46.9%	11651.4	11388.4	-263.0	-2.3%
48.1%	11437.0	11371.0	-66.1	-0.6%
49.4%	10978.4	10946.0	-32.4	-0.3%
50.6%	10803.8	10700.7	-103.1	-1.0%
51.9%	10741.0	10655.1	-85.9	-0.8%
53.1%	10695.2	10602.6	-92.6	-0.9%
54.3%	10662.4	10545.6	-116.8	-1.1%
55.6%	10445.9	10414.2	-31.7	-0.3%
56.8%	10404.1	10401.9	-2.2	0.0%
58.0%	10274.8	10372.5	97.7	1.0%
59.3%	10050.3	10304.7	254.4	2.5%
60.5%	10028.6	10299.7	271.1	2.7%
61.7%	9932.2	10273.0	340.8	3.4%
63.0%	9850.5	10133.8	283.4	2.9%
64.2%	8186.7	10076.2	1889.5	23.1%
65.4%	7911.5	9879.6	1968.1	24.9%
66.7%	7291.6	9879.5	2587.9	35.5%
67.9%	6777.6	8935.3	2157.8	31.8%
69.1%	6057.3	6916.5	859.2	14.2%
70.4%	5826.9	6716.2	889.3	15.3%
71.6%	5794.4	6665.4	871.0	15.0%
72.8%	5773.6	6604.8	831.1	14.4%
74.1%	5570.4	6197.1	626.7	11.2%
75.3%	4807.4	6130.4	1323.0	27.5%
76.5%	4698.1	4768.5	70.4	1.5%
77.8%	4135.0	4715.8	580.7	14.0%
79.0%	4026.2	3984.0	-42.2	-1.0%
80.2%	3313.0	3034.2	-278.8	-8.4%
81.5%	2991.5	2638.9	-352.7	-11.8%
82.7%	2694.0	2623.4	-70.6	-2.6%
84.0%	1931.2	1913.7	-17.5	-0.9%
85.2%	1558.1	1700.0	141.9	9.1%
86.4%	1519.0	1535.0	16.1	1.1%
87.7%	1405.1	1271.8	-133.3	-9.5%
88.9%	1309.6	1223.3	-86.3	-6.6%
90.1%	899.5	1054.5	155.0	17.2%
91.4%	814.2	1012.0	197.8	24.3%
92.6%	626.8	539.3	-87.5	-14.0%
93.8%	514.8	533.1	18.3	3.6%
95.1%	298.6	311.9	13.3	
96.3%	275.9	260.6	-15.4	
97.5%	240.5	235.8	-4.7	
98.8%	203.5	206.2	2.7	
100.0%	185.3	185.3	-0.1	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15944.0	16512.4	568.4	3.6%
1.2%	15936.0	15747.4	-188.6	-1.2%
2.5%	15355.2	15580.7	225.4	1.5%
3.7%	15285.0	15297.9	13.0	0.1%
4.9%	14898.9	14932.8	33.9	0.2%
6.2%	14496.4	14703.9	207.5	1.4%
7.4%	14351.9	14633.3	281.4	2.0%
8.6%	14205.2	14428.1	222.8	1.6%
9.9%	13998.6	14172.2	173.6	1.2%
11.1%	13690.6	14142.5	452.0	3.3%
12.3%	13487.3	13877.5	390.2	2.9%
13.6%	13407.6	13695.5	287.9	2.1%
14.8%	13342.0	13333.1	-8.9	-0.1%
16.0%	13023.5	13294.4	270.8	2.1%
17.3%	12996.1	13233.3	237.2	1.8%
18.5%	12826.4	13230.7	404.3	3.2%
19.8%	12551.1	12982.8	431.6	3.4%
21.0%	12549.9	12946.5	396.7	3.2%
22.2%	12302.8	12510.1	207.3	1.7%
23.5%	12197.5	12365.1	167.6	1.4%
24.7%	11934.8	12351.3	416.5	3.5%
25.9%	11933.3	12012.1	78.9	0.7%
27.2%	11350.3	11974.6	624.3	5.5%
28.4%	11062.9	11890.6	827.8	7.5%
29.6%	10552.1	11878.1	1326.1	12.6%
30.9%	10449.1	11321.1	872.1	8.3%
32.1%	10311.6	10965.2	653.5	6.3%
33.3%	9788.7	10860.3	1071.6	10.9%
34.6%	9492.6	10704.1	1211.6	12.8%
35.8%	9435.3	10635.9	1200.6	12.7%
37.0%	8506.5	10353.2	1846.7	21.7%
38.3%	8169.2	8976.5	807.4	9.9%
39.5%	7470.7	8574.6	1103.9	14.8%
40.7%	6998.7	8301.5	1302.8	18.6%
42.0%	6819.7	8039.3	1219.6	17.9%
43.2%	6703.3	8022.4	1319.0	19.7%
44.4%	6694.9	7815.3	1120.4	16.7%
45.7%	6655.3	7645.3	990.0	14.9%
46.9%	6480.5	7582.4	1101.8	17.0%
48.1%	6302.8	7342.2	1039.4	16.5%
49.4%	6091.1	7228.3	1137.2	18.7%
50.6%	6068.1	7062.8	994.8	16.4%
51.9%	5936.3	7054.2	1117.9	18.8%
53.1%	5861.3	6869.1	1007.9	17.2%
54.3%	5382.1	6760.9	1378.9	25.6%
55.6%	4892.3	5953.5	1061.2	21.7%
56.8%	4775.9	5476.1	700.2	14.7%
58.0%	4358.6	5417.0	1058.5	24.3%
59.3%	3835.1	4596.9	761.8	19.9%
60.5%	3675.2	4286.2	611.0	16.6%
61.7%	2419.6	3309.7	890.1	36.8%
63.0%	1595.6	2091.4	495.8	31.1%
64.2%	1580.6	2045.3	464.7	29.4%
65.4%	1439.1	1887.6	448.5	31.2%
66.7%	1367.6	1715.0	347.4	25.4%
67.9%	1282.0	1593.6	311.6	24.3%
69.1%	1048.9	1412.4	363.4	34.6%
70.4%	1000.1	1228.0	227.9	22.8%
71.6%	885.9	848.9	-36.9	-4.2%
72.8%	845.6	844.3	-1.3	-0.2%
74.1%	620.1	758.1	138.0	22.3%
75.3%	605.2	743.9	138.7	22.9%
76.5%	496.9	598.3	101.4	20.4%
77.8%	470.3	564.8	94.5	20.1%
79.0%	428.3	501.2	72.8	17.0%
80.2%	405.8	425.0	19.3	4.7%
81.5%	383.3	413.3	30.1	7.8%
82.7%	338.1	389.6	51.5	15.2%
84.0%	326.7	372.0	45.3	13.9%
85.2%	263.9	268.7	4.8	
86.4%	249.2	268.3	19.0	
87.7%	243.2	254.0	10.8	
88.9%	242.9	248.9	6.0	
90.1%	225.5	229.5	4.0	
91.4%	217.5	224.8	7.3	
92.6%	216.9	217.4	0.5	
93.8%	210.6	212.3	1.7	
95.1%	201.7	201.7	0.0	
96.3%	200.8	201.4	0.6	
97.5%	190.6	190.9	0.3	
98.8%	187.8	188.9	1.1	
100.0%	183.7	183.7	0.0	

Table SQ-24-b
Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13193.5	14191.6	998.2	7.6%
1.2%	13015.3	13303.3	288.0	2.2%
2.5%	11780.6	12923.2	1142.6	9.7%
3.7%	11479.5	12516.5	1037.0	9.0%
4.9%	11411.1	11756.2	345.1	3.0%
6.2%	11387.1	11536.2	149.1	1.3%
7.4%	10051.2	10645.0	593.8	5.9%
8.6%	9679.8	10055.1	375.3	3.9%
9.9%	9105.8	9921.5	815.6	9.0%
11.1%	8671.1	9843.6	1172.5	13.5%
12.3%	8343.9	9387.7	1043.7	12.5%
13.6%	7965.8	9193.5	1227.7	15.4%
14.8%	7769.8	8639.5	869.7	11.2%
16.0%	7373.8	8227.0	853.2	11.6%
17.3%	6976.5	8205.6	1229.1	17.6%
18.5%	6667.3	7462.5	795.2	11.9%
19.8%	6414.9	7343.0	928.0	14.5%
21.0%	6271.6	7324.8	1053.2	16.8%
22.2%	6173.4	7259.2	1085.8	17.6%
23.5%	5725.2	7053.7	1328.5	23.2%
24.7%	5573.4	6507.9	934.5	16.8%
25.9%	5245.9	6411.2	1165.3	22.2%
27.2%	5206.1	5786.3	580.3	11.1%
28.4%	4728.2	5742.2	1014.0	21.4%
29.6%	4497.4	5724.0	1226.7	27.3%
30.9%	3813.2	4760.3	947.1	24.8%
32.1%	3582.6	4566.0	983.5	27.5%
33.3%	3487.7	4468.2	980.6	28.1%
34.6%	3348.5	4170.8	822.3	24.6%
35.8%	3264.4	3764.3	499.9	15.3%
37.0%	3220.3	3448.6	228.3	7.1%
38.3%	3045.7	3406.3	360.7	11.8%
39.5%	3031.0	3305.0	274.0	9.0%
40.7%	2567.3	3292.9	725.6	28.3%
42.0%	2526.7	3075.8	549.1	21.7%
43.2%	2420.0	3049.9	629.8	26.0%
44.4%	1919.1	2238.8	319.7	16.7%
45.7%	1890.7	2231.3	340.6	18.0%
46.9%	1658.4	2149.5	491.1	29.6%
48.1%	1627.2	2083.5	456.3	28.0%
49.4%	1617.5	2064.7	447.3	27.7%
50.6%	1583.0	1926.2	343.2	21.7%
51.9%	1499.1	1708.9	209.8	14.0%
53.1%	1464.9	1614.1	149.2	10.2%
54.3%	1262.1	1605.5	343.4	27.2%
55.6%	1241.1	1583.2	342.1	27.6%
56.8%	1172.4	1360.4	188.0	16.0%
58.0%	1009.8	1104.5	94.7	9.4%
59.3%	899.0	992.3	93.2	10.4%
60.5%	669.2	881.7	212.5	31.7%
61.7%	603.4	664.4	61.1	10.1%
63.0%	567.7	649.8	82.1	14.5%
64.2%	539.6	568.0	28.4	5.3%
65.4%	471.2	528.7	57.5	12.2%
66.7%	467.8	527.6	59.8	12.8%
67.9%	419.8	474.8	55.0	13.1%
69.1%	350.8	400.9	50.1	14.3%
70.4%	332.0	344.0	12.0	3.6%
71.6%	308.3	343.1	34.7	11.3%
72.8%	296.1	322.8	26.7	9.0%
74.1%	271.3	314.4	43.1	15.9%
75.3%	263.4	264.2	0.8	0.3%
76.5%	245.7	259.0	13.3	5.4%
77.8%	243.7	256.8	13.1	5.4%
79.0%	229.9	251.0	21.1	9.2%
80.2%	221.3	234.8	13.4	6.1%
81.5%	216.4	222.9	6.4	3.0%
82.7%	215.8	222.8	6.9	3.2%
84.0%	214.5	214.3	-0.2	-0.1%
85.2%	212.7	213.8	1.1	0.5%
86.4%	210.4	210.7	0.3	0.1%
87.7%	208.1	210.0	1.9	0.9%
88.9%	206.7	208.2	1.5	0.7%
90.1%	205.8	205.6	-0.2	-0.1%
91.4%	205.0	205.0	0.0	0.0%
92.6%	201.5	200.0	-1.5	-0.8%
93.8%	197.8	198.2	0.4	0.2%
95.1%	197.0	198.1	1.1	0.6%
96.3%	196.9	197.6	0.7	0.3%
97.5%	196.3	196.4	0.1	0.0%
98.8%	192.8	194.5	1.7	0.9%
100.0%	184.9	184.9	0.0	0.0%

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11794.6	12478.5	683.9	5.8%
1.2%	10112.4	10503.9	391.5	3.9%
2.5%	9521.1	9916.8	395.7	4.2%
3.7%	9401.7	9848.8	447.1	4.8%
4.9%	9090.0	9567.0	477.0	5.2%
6.2%	9058.9	9274.3	215.4	2.4%
7.4%	9051.4	9201.6	150.2	1.7%
8.6%	9034.5	9139.0	104.5	1.2%
9.9%	8566.7	8576.9	10.2	0.1%
11.1%	8527.4	8526.2	-1.2	0.0%
12.3%	7502.9	8501.4	998.5	13.3%
13.6%	7189.6	8072.7	883.1	12.3%
14.8%	7163.1	7914.8	751.7	10.5%
16.0%	7142.1	7376.9	234.8	3.3%
17.3%	6851.7	6924.1	72.5	1.1%
18.5%	6836.0	6873.4	37.4	0.5%
19.8%	6642.5	6568.9	-73.6	-1.1%
21.0%	4450.6	5427.4	976.8	21.9%
22.2%	4408.1	5424.6	1016.5	23.1%
23.5%	3904.7	5010.3	1105.6	28.3%
24.7%	3876.8	4939.1	1062.3	27.4%
25.9%	3837.7	4780.4	942.7	24.6%
27.2%	3762.4	4649.1	886.7	23.6%
28.4%	3588.8	4360.7	772.0	21.5%
29.6%	3450.7	4177.9	727.2	21.1%
30.9%	3440.0	4007.4	567.4	16.5%
32.1%	3380.0	4005.4	625.4	18.5%
33.3%	3322.3	4003.4	681.2	20.5%
34.6%	3224.7	3969.3	744.6	23.1%
35.8%	3197.1	3870.8	673.6	21.1%
37.0%	3057.7	3842.2	784.5	25.7%
38.3%	3015.3	3726.0	710.7	23.6%
39.5%	2968.5	3650.8	682.3	23.0%
40.7%	2934.2	3340.8	406.6	13.9%
42.0%	2922.8	3229.5	306.6	10.5%
43.2%	2826.4	3168.9	342.5	12.1%
44.4%	2433.1	2977.3	544.2	22.4%
45.7%	2240.7	2863.6	622.8	27.8%
46.9%	2007.1	2683.3	676.2	33.7%
48.1%	1909.7	2553.3	643.6	33.7%
49.4%	1905.9	2532.8	626.9	32.9%
50.6%	1717.1	2224.2	507.1	29.5%
51.9%	1663.5	2174.0	510.5	30.7%
53.1%	1633.1	2046.2	413.1	25.3%
54.3%	1553.9	1921.9	368.0	23.7%
55.6%	1406.1	1783.0	377.0	26.8%
56.8%	1326.1	1746.6	420.5	31.7%
58.0%	1313.9	1672.6	358.7	27.3%
59.3%	1257.9	1473.4	215.5	17.1%
60.5%	1138.4	1416.5	278.1	24.4%
61.7%	1103.5	1315.2	211.7	19.2%
63.0%	1026.5	994.0	-32.4	-3.2%
64.2%	965.7	978.3	12.6	1.3%
65.4%	730.9	894.9	164.1	22.5%
66.7%	706.5	734.6	28.1	4.0%
67.9%	586.5	734.3	147.8	25.2%
69.1%	573.6	707.4	133.8	23.3%
70.4%	528.9	586.3	57.4	10.8%
71.6%	515.9	574.5	58.6	11.4%
72.8%	388.5	490.4	102.0	26.3%
74.1%	299.7	301.9	2.3	0.8%
75.3%	295.3	292.2	-3.1	-1.1%
76.5%	267.7	259.8	-7.9	-3.0%
77.8%	242.7	257.4	14.7	6.0%
79.0%	237.2	251.8	14.6	6.1%
80.2%	233.6	246.2	12.6	5.4%
81.5%	229.9	237.6	7.7	3.3%
82.7%	229.6	230.5	0.8	0.4%
84.0%	227.1	221.4	-5.7	-2.5%
85.2%	209.3	209.5	0.1	0.1%
86.4%	207.3	208.1	0.8	0.4%
87.7%	206.2	206.2	0.1	0.0%
88.9%	205.7	205.6	0.0	0.0%
90.1%	203.8	205.6	1.9	0.9%
91.4%	199.1	201.9	2.8	1.4%
92.6%	199.0	198.4	-0.6	-0.3%
93.8%	197.5	197.6	0.1	0.1%
95.1%	194.0	197.6	3.6	1.8%
96.3%	193.7	195.6	1.8	0.9%
97.5%	192.6	194.4	1.8	0.9%
98.8%	192.4	194.2	1.8	0.9%
100.0%	192.2	192.7	0.6	0.3%

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12193.0	12467.4	274.4	2.3%
1.2%	11180.2	11252.8	72.7	0.6%
2.5%	11133.2	10821.7	-311.4	-2.8%
3.7%	10379.6	10487.8	108.1	1.0%
4.9%	10333.3	10298.6	-34.7	-0.3%
6.2%	9911.7	9670.1	-241.6	-2.4%
7.4%	9655.6	9582.7	-72.8	-0.8%
8.6%	9647.7	9219.5	-428.2	-4.4%
9.9%	9030.8	9132.9	102.1	1.1%
11.1%	8847.8	8875.1	27.3	0.3%
12.3%	8716.3	8588.3	-128.0	-1.5%
13.6%	8634.7	8560.2	-74.5	-0.9%
14.8%	8287.2	8484.5	197.3	2.4%
16.0%	7813.9	8332.5	518.6	6.6%
17.3%	7787.2	7842.4	55.3	0.7%
18.5%	6980.8	7515.9	535.1	7.7%
19.8%	6738.9	7239.4	500.5	7.4%
21.0%	6410.5	6850.2	439.7	6.9%
22.2%	6370.2	6697.0	326.9	5.1%
23.5%	5755.7	6413.4	657.7	11.4%
24.7%	5381.7	5685.3	303.6	5.6%
25.9%	5366.3	5630.8	264.5	4.9%
27.2%	4861.8	4996.3	134.5	2.8%
28.4%	4809.0	4915.6	106.5	2.2%
29.6%	4788.0	4873.2	85.3	1.8%
30.9%	4740.3	4867.0	126.8	2.7%
32.1%	4700.9	4795.8	95.0	2.0%
33.3%	4659.7	4737.4	77.7	1.7%
34.6%	4658.8	4578.0	-80.8	-1.7%
35.8%	4266.8	4552.4	285.6	6.7%
37.0%	3977.9	4426.0	448.1	11.3%
38.3%	3822.7	4019.9	197.1	5.2%
39.5%	3651.3	3990.5	339.2	9.3%
40.7%	3567.5	3823.2	255.7	7.2%
42.0%	3563.0	3749.0	186.0	5.2%
43.2%	3416.8	3628.4	211.6	6.2%
44.4%	3305.4	3585.1	279.8	8.5%
45.7%	2980.2	3421.7	441.5	14.8%
46.9%	2973.7	3298.0	324.3	10.9%
48.1%	2950.8	3139.4	188.6	6.4%
49.4%	2740.2	2977.5	237.3	8.7%
50.6%	2648.2	2965.0	316.8	12.0%
51.9%	2572.6	2731.6	159.0	6.2%
53.1%	2569.8	2722.1	152.3	5.9%
54.3%	2525.3	2594.7	69.4	2.7%
55.6%	2381.9	2574.2	192.3	8.1%
56.8%	1957.9	2566.4	608.5	31.1%
58.0%	1933.8	2470.0	536.3	27.7%
59.3%	1870.8	1984.9	114.1	6.1%
60.5%	1860.8	1959.9	99.1	5.3%
61.7%	1854.7	1642.6	-212.0	-11.4%
63.0%	1621.2	1598.3	-22.9	-1.4%
64.2%	1599.4	1580.8	-18.6	-1.2%
65.4%	1475.0	1562.3	87.3	5.9%
66.7%	1463.1	1489.4	26.3	1.8%
67.9%	1281.0	1326.2	45.2	3.5%
69.1%	1227.4	1270.4	43.0	3.5%
70.4%	1177.8	1239.7	62.0	5.3%
71.6%	1140.2	1185.0	44.8	3.9%
72.8%	902.9	906.1	3.2	0.4%
74.1%	667.7	783.3	115.6	17.3%
75.3%	631.5	678.2	46.7	7.4%
76.5%	589.0	672.9	83.8	14.2%
77.8%	535.6	560.7	25.1	4.7%
79.0%	448.8	542.3	93.4	20.8%
80.2%	413.1	449.0	35.9	8.7%
81.5%	379.2	438.0	58.8	15.5%
82.7%	369.9	400.1	30.3	8.2%
84.0%	348.5	369.0	20.5	5.9%
85.2%	273.3	272.4	-0.9	-0.3%
86.4%	257.6	264.1	6.5	2.5%
87.7%	234.7	260.6	25.8	11.0%
88.9%	225.2	233.4	8.2	3.6%
90.1%	222.6	222.7	0.2	0.1%
91.4%	207.6	207.8	0.2	0.1%
92.6%	204.9	205.4	0.4	0.2%
93.8%	203.1	205.3	2.2	1.1%
95.1%	200.9	203.2	2.3	1.1%
96.3%	197.8	198.2	0.4	0.2%
97.5%	194.3	198.1	3.9	2.0%
98.8%	194.3	194.9	0.6	0.3%
100.0%	186.0	186.1	0.1	0.0%

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	14429.1	14534.4	105.3	0.7%
1.2%	14217.9	14185.4	-32.6	-0.2%
2.5%	13533.9	13963.4	429.5	3.2%
3.7%	13148.0	13334.5	186.5	1.4%
4.9%	11624.8	11774.4	149.6	1.3%
6.2%	11586.9	11394.3	-192.6	-1.7%
7.4%	11443.3	11311.1	-132.2	-1.2%
8.6%	11195.4	11126.6	-68.8	-0.6%
9.9%	11094.8	11007.8	-87.0	-0.8%
11.1%	10581.5	10629.2	47.8	0.5%
12.3%	10418.2	10446.8	28.6	0.3%
13.6%	10252.0	10281.5	29.5	0.3%
14.8%	10190.6	10151.9	-38.7	-0.4%
16.0%	10106.9	10035.3	-71.6	-0.7%
17.3%	9850.5	9851.8	1.3	0.0%
18.5%	9753.5	9782.5	29.0	0.3%
19.8%	9285.8	9271.0	-14.9	-0.2%
21.0%	9075.9	9047.4	-28.5	-0.3%
22.2%	8983.1	8973.2	-9.9	-0.1%
23.5%	8722.2	8918.7	196.5	2.3%
24.7%	8535.8	8595.1	59.3	0.7%
25.9%	8284.4	8322.6	38.2	0.5%
27.2%	8230.2	8157.6	-72.6	-0.9%
28.4%	8064.8	8086.5	21.7	0.3%
29.6%	8051.9	8052.4	0.5	0.0%
30.9%	8039.4	7844.2	-195.2	-2.4%
32.1%	7836.5	7709.4	-127.1	-1.6%
33.3%	7659.4	7606.6	-52.8	-0.7%
34.6%	7104.5	6831.6	-272.9	-3.8%
35.8%	6688.0	6690.9	3.0	0.0%
37.0%	6312.0	6375.6	63.6	1.0%
38.3%	6096.5	6336.4	239.9	3.9%
39.5%	5958.6	6045.1	86.5	1.5%
40.7%	5784.1	6023.8	239.7	4.1%
42.0%	5704.1	5775.9	71.8	1.3%
43.2%	5394.8	5669.7	274.9	5.1%
44.4%	5325.2	5324.7	-0.5	0.0%
45.7%	5012.3	4980.5	-31.8	-0.6%
46.9%	4825.3	4848.6	23.3	0.5%
48.1%	4741.4	4740.1	-1.2	0.0%
49.4%	4661.0	4671.6	10.6	0.2%
50.6%	4109.8	4033.1	-76.7	-1.9%
51.9%	4020.5	3938.4	-82.1	-2.0%
53.1%	3740.0	3864.7	124.7	3.3%
54.3%	3553.3	3680.7	127.5	3.6%
55.6%	3512.9	3574.3	61.4	1.7%
56.8%	3497.2	3461.9	-35.4	-1.0%
58.0%	3432.2	3449.9	17.7	0.5%
59.3%	3431.7	3439.3	7.6	0.2%
60.5%	3306.2	3327.8	21.6	0.7%
61.7%	3212.9	3214.8	1.9	0.1%
63.0%	3204.2	3206.0	1.8	0.1%
64.2%	2846.2	2922.8	76.6	2.7%
65.4%	2646.6	2711.5	64.9	2.5%
66.7%	2631.4	2659.0	27.6	1.0%
67.9%	2512.7	2539.7	27.0	1.1%
69.1%	2391.4	2402.3	10.8	0.5%
70.4%	2354.4	2380.0	25.6	1.1%
71.6%	2153.8	2262.1	108.3	5.0%
72.8%	1722.5	1911.0	188.5	10.9%
74.1%	1622.7	1870.4	247.7	15.3%
75.3%	1603.2	1744.8	141.6	8.8%
76.5%	1488.8	1735.6	246.8	16.6%
77.8%	1374.2	1533.3	159.1	11.6%
79.0%	1372.6	1337.1	-35.4	-2.6%
80.2%	1319.1	1187.2	-131.8	-10.0%
81.5%	1145.0	1144.5	-0.5	0.0%
82.7%	788.2	873.5	85.3	10.8%
84.0%	627.5	636.9	9.3	1.5%
85.2%	608.1	612.4	4.3	0.7%
86.4%	407.4	409.6	2.3	0.6%
87.7%	402.6	398.2	-4.4	-1.1%
88.9%	398.5	378.8	-19.8	-5.0%
90.1%	347.2	349.2	2.0	0.6%
91.4%	308.2	310.8	2.6	0.8%
92.6%	305.9	308.4	2.4	0.8%
93.8%	285.4	287.6	2.2	0.8%
95.1%	255.4	255.8	0.4	
96.3%	211.6	212.3	0.6	
97.5%	209.7	210.5	0.8	
98.8%	198.8	199.0	0.2	
100.0%	187.8	190.4	2.6	

Table SQ-24-b

Sacramento River at Port Chicago (Roe Island), Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	16724.6	16769.8	45.2	0.3%
1.2%	16516.2	16227.3	-288.8	-1.7%
2.5%	16104.3	16193.1	88.9	0.6%
3.7%	15828.1	15626.2	-201.9	-1.3%
4.9%	14496.1	14272.2	-223.9	-1.5%
6.2%	14262.7	14244.1	-18.7	-0.1%
7.4%	13700.8	13566.8	-134.0	-1.0%
8.6%	12924.9	12896.5	-28.3	-0.2%
9.9%	12828.4	12590.2	-238.2	-1.9%
11.1%	12546.6	12409.1	-137.6	-1.1%
12.3%	12459.2	12278.9	-180.3	-1.4%
13.6%	12268.8	12140.4	-128.4	-1.0%
14.8%	12142.9	12070.7	-72.2	-0.6%
16.0%	12049.9	11522.5	-527.4	-4.4%
17.3%	11752.2	11501.1	-251.2	-2.1%
18.5%	11741.1	11473.9	-267.3	-2.3%
19.8%	11526.9	11461.6	-65.3	-0.6%
21.0%	11396.5	11419.0	22.6	0.2%
22.2%	11343.2	11350.3	7.1	0.1%
23.5%	11301.5	11319.5	18.0	0.2%
24.7%	11287.9	11238.1	-49.7	-0.4%
25.9%	11231.3	11237.5	6.1	0.1%
27.2%	11189.0	11194.4	5.4	0.0%
28.4%	11171.9	11177.6	5.8	0.1%
29.6%	11066.9	11072.4	5.5	0.0%
30.9%	11064.0	11059.8	-4.2	0.0%
32.1%	10948.7	11033.6	84.9	0.8%
33.3%	10920.7	10948.7	27.9	0.3%
34.6%	10828.9	10800.8	-28.1	-0.3%
35.8%	10796.3	10745.3	-51.0	-0.5%
37.0%	10771.5	10736.7	-34.8	-0.3%
38.3%	10451.7	10726.8	275.1	2.6%
39.5%	9903.1	10312.2	409.1	4.1%
40.7%	9879.6	9892.4	12.8	0.1%
42.0%	9864.1	9608.8	-255.4	-2.6%
43.2%	9670.9	9562.9	-108.0	-1.1%
44.4%	9123.4	9161.0	37.6	0.4%
45.7%	9076.6	9124.1	47.5	0.5%
46.9%	9030.3	9051.8	21.5	0.2%
48.1%	8961.3	8955.2	-6.0	-0.1%
49.4%	8952.6	8950.9	-1.6	0.0%
50.6%	8946.8	8905.8	-41.0	-0.5%
51.9%	8914.1	8702.5	-211.6	-2.4%
53.1%	8749.8	8581.2	-168.6	-1.9%
54.3%	8682.0	8239.8	-442.2	-5.1%
55.6%	8412.5	8157.1	-255.4	-3.0%
56.8%	8225.8	8138.5	-87.3	-1.1%
58.0%	8223.5	7870.0	-353.5	-4.3%
59.3%	7759.1	7797.8	38.7	0.5%
60.5%	7680.0	7354.4	-325.6	-4.2%
61.7%	7461.7	7343.3	-118.4	-1.6%
63.0%	7340.5	7259.7	-80.9	-1.1%
64.2%	7096.2	6988.8	-107.4	-1.5%
65.4%	7070.0	6892.0	-178.0	-2.5%
66.7%	6886.4	6843.3	-43.1	-0.6%
67.9%	6504.1	6290.7	-213.4	-3.3%
69.1%	6450.9	6244.0	-207.0	-3.2%
70.4%	6215.9	6238.3	22.4	0.4%
71.6%	6206.6	6151.2	-55.3	-0.9%
72.8%	5904.0	5663.1	-240.8	-4.1%
74.1%	5308.4	5350.8	42.5	0.8%
75.3%	4972.8	5159.5	186.7	3.8%
76.5%	4572.1	4506.4	-65.7	-1.4%
77.8%	4481.5	4316.9	-164.6	-3.7%
79.0%	4454.1	4275.9	-178.2	-4.0%
80.2%	4402.1	4234.6	-167.4	-3.8%
81.5%	3682.2	3642.2	-39.9	-1.1%
82.7%	3326.9	3253.4	-73.5	-2.2%
84.0%	2772.0	3191.4	419.4	15.1%
85.2%	2675.2	2784.8	109.6	4.1%
86.4%	2666.2	2680.4	14.2	0.5%
87.7%	2550.4	2533.9	-16.5	-0.6%
88.9%	2149.4	1962.2	-187.2	-8.7%
90.1%	1242.0	1163.3	-78.7	-6.3%
91.4%	1032.5	1041.0	8.5	0.8%
92.6%	806.8	807.5	0.7	0.1%
93.8%	805.0	696.9	-108.1	-13.4%
95.1%	698.0	688.6	-9.4	-1.3%
96.3%	689.8	656.4	-33.5	-4.9%
97.5%	649.4	630.9	-18.5	-2.9%
98.8%	229.4	225.3	-4.1	
100.0%	217.3	217.8	0.5	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	17674.7	17696.4	21.6	0.1%
1.2%	17589.1	17210.7	-378.5	-2.2%
2.5%	17469.6	17096.0	-373.7	-2.1%
3.7%	16779.5	16664.0	-115.5	-0.7%
4.9%	16681.6	16552.6	-129.0	-0.8%
6.2%	16535.0	16535.4	0.3	0.0%
7.4%	15875.1	15949.1	74.0	0.5%
8.6%	15046.6	15027.8	-18.8	-0.1%
9.9%	14999.0	14794.0	-205.0	-1.4%
11.1%	14784.0	14730.0	-53.9	-0.4%
12.3%	14732.4	14423.8	-308.5	-2.1%
13.6%	14672.4	14348.1	-324.3	-2.2%
14.8%	14436.8	14233.4	-203.4	-1.4%
16.0%	14243.3	14100.0	-143.3	-1.0%
17.3%	14175.2	14011.3	-163.8	-1.2%
18.5%	14030.0	13948.1	-81.9	-0.6%
19.8%	13894.2	13909.9	15.7	0.1%
21.0%	13880.6	13835.2	-45.4	-0.3%
22.2%	13852.2	13832.5	-19.7	-0.1%
23.5%	13839.1	13826.0	-13.1	-0.1%
24.7%	13837.1	13784.8	-52.3	-0.4%
25.9%	13708.5	13751.0	42.5	0.3%
27.2%	13698.0	13714.4	16.4	0.1%
28.4%	13682.6	13627.1	-55.5	-0.4%
29.6%	13613.8	13624.3	10.5	0.1%
30.9%	13612.5	13483.8	-128.7	-0.9%
32.1%	13497.3	13478.5	-18.8	-0.1%
33.3%	13432.0	13401.2	-30.8	-0.2%
34.6%	13403.9	13381.0	-22.9	-0.2%
35.8%	12253.4	12268.1	14.7	0.1%
37.0%	12205.7	12214.7	9.0	0.1%
38.3%	12204.6	12174.5	-30.1	-0.2%
39.5%	12052.9	12068.3	15.4	0.1%
40.7%	12032.0	11916.0	-116.0	-1.0%
42.0%	11898.1	11808.2	-89.8	-0.8%
43.2%	11784.8	11588.3	-196.5	-1.7%
44.4%	11693.7	11581.9	-111.8	-1.0%
45.7%	11592.7	11555.5	-37.2	-0.3%
46.9%	11589.3	11553.3	-36.0	-0.3%
48.1%	11557.4	11402.0	-155.4	-1.3%
49.4%	11501.2	11291.9	-209.3	-1.8%
50.6%	11395.0	11144.1	-250.9	-2.2%
51.9%	10437.1	10493.6	56.5	0.5%
53.1%	10357.1	10188.7	-168.5	-1.6%
54.3%	10349.2	10168.6	-180.7	-1.7%
55.6%	10203.3	10101.9	-101.4	-1.0%
56.8%	10136.5	10003.2	-133.4	-1.3%
58.0%	10135.9	9994.1	-141.7	-1.4%
59.3%	10095.0	9964.0	-130.9	-1.3%
60.5%	10057.4	9952.6	-104.8	-1.0%
61.7%	10051.5	9942.3	-109.2	-1.1%
63.0%	10013.4	9938.1	-75.3	-0.8%
64.2%	9970.5	9934.9	-35.5	-0.4%
65.4%	9925.4	9871.5	-53.9	-0.5%
66.7%	9707.2	9709.7	2.4	0.0%
67.9%	9653.5	9674.4	20.8	0.2%
69.1%	9634.5	9574.7	-59.8	-0.6%
70.4%	9592.4	9454.2	-138.2	-1.4%
71.6%	9497.1	9432.5	-64.6	-0.7%
72.8%	9451.5	9294.8	-156.7	-1.7%
74.1%	9390.1	9289.0	-101.1	-1.1%
75.3%	9368.2	9187.3	-180.9	-1.9%
76.5%	9091.4	9116.9	25.5	0.3%
77.8%	9071.3	9066.3	-5.1	-0.1%
79.0%	8735.2	8616.5	-118.7	-1.4%
80.2%	8653.3	8578.8	-74.5	-0.9%
81.5%	8619.7	8558.0	-61.7	-0.7%
82.7%	7767.0	7975.3	208.3	2.7%
84.0%	7675.8	7689.9	14.1	0.2%
85.2%	7675.8	7677.7	1.9	0.0%
86.4%	7548.6	7663.5	114.9	1.5%
87.7%	7445.4	7553.4	108.0	1.5%
88.9%	7185.4	7027.2	-158.2	-2.2%
90.1%	6694.0	6611.9	-82.1	-1.2%
91.4%	6495.0	6502.4	7.4	0.1%
92.6%	6152.0	6152.9	0.8	0.0%
93.8%	6024.0	6013.2	-10.8	-0.2%
95.1%	5556.1	5525.6	-30.5	-0.5%
96.3%	4028.4	3743.2	-285.2	-7.1%
97.5%	2241.8	2148.9	-92.9	-4.1%
98.8%	1283.2	1303.1	19.9	1.5%
100.0%	986.4	998.3	11.9	1.2%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	18152.6	18236.1	83.5	0.5%
1.2%	17701.0	17616.9	-84.0	-0.5%
2.5%	17468.1	17580.6	112.5	0.6%
3.7%	17384.4	17552.8	168.3	1.0%
4.9%	17216.0	17389.9	173.9	1.0%
6.2%	17184.9	17353.5	168.6	1.0%
7.4%	17172.0	17267.4	95.4	0.6%
8.6%	17170.2	17091.8	-78.4	-0.5%
9.9%	17006.2	16965.8	-40.4	-0.2%
11.1%	16852.3	16863.7	11.4	0.1%
12.3%	16773.2	16808.9	35.7	0.2%
13.6%	16672.3	16632.7	-39.6	-0.2%
14.8%	16231.7	16179.2	-52.5	-0.3%
16.0%	16083.2	16004.9	-78.3	-0.5%
17.3%	16060.4	15989.6	-70.8	-0.4%
18.5%	16045.3	15963.3	-82.0	-0.5%
19.8%	16034.4	15900.6	-133.8	-0.8%
21.0%	15932.8	15864.6	-68.2	-0.4%
22.2%	15924.0	15860.3	-63.7	-0.4%
23.5%	15883.2	15840.9	-42.3	-0.3%
24.7%	15873.0	15805.7	-67.3	-0.4%
25.9%	15844.3	15785.5	-58.8	-0.4%
27.2%	15839.8	15780.1	-59.6	-0.4%
28.4%	15828.8	15756.9	-72.0	-0.5%
29.6%	15813.7	15656.0	-157.7	-1.0%
30.9%	15770.0	15589.0	-181.0	-1.1%
32.1%	15769.6	15568.9	-200.7	-1.3%
33.3%	15754.2	15376.5	-377.7	-2.4%
34.6%	15614.9	15091.6	-523.2	-3.4%
35.8%	15277.8	15058.4	-219.4	-1.4%
37.0%	14646.0	14609.9	-36.0	-0.2%
38.3%	14574.4	14433.4	-141.0	-1.0%
39.5%	14505.9	14394.0	-111.9	-0.8%
40.7%	14500.1	14366.5	-133.5	-0.9%
42.0%	14408.5	14322.1	-86.4	-0.6%
43.2%	14358.6	14243.6	-115.0	-0.8%
44.4%	14238.6	14182.1	-56.5	-0.4%
45.7%	14232.5	14162.4	-70.1	-0.5%
46.9%	14181.6	14123.9	-57.6	-0.4%
48.1%	14141.2	13948.3	-192.8	-1.4%
49.4%	14091.2	13933.1	-158.1	-1.1%
50.6%	13955.5	13909.6	-45.9	-0.3%
51.9%	13878.6	13850.2	-28.4	-0.2%
53.1%	13846.7	13728.2	-118.5	-0.9%
54.3%	13840.8	13712.9	-127.9	-0.9%
55.6%	13788.8	13667.7	-121.1	-0.9%
56.8%	13548.5	13594.6	46.1	0.3%
58.0%	13524.5	13449.9	-74.6	-0.6%
59.3%	13497.4	13448.5	-48.9	-0.4%
60.5%	13471.1	13434.7	-36.4	-0.3%
61.7%	13458.9	13411.7	-47.2	-0.4%
63.0%	13432.2	13315.0	-117.2	-0.9%
64.2%	13336.0	13291.1	-45.0	-0.3%
65.4%	13299.0	13277.2	-21.7	-0.2%
66.7%	13282.0	13260.9	-21.1	-0.2%
67.9%	13211.8	13214.7	2.9	0.0%
69.1%	13134.9	13113.0	-22.0	-0.2%
70.4%	13015.3	13103.5	88.2	0.7%
71.6%	12990.7	13019.3	28.6	0.2%
72.8%	12974.5	13015.7	41.2	0.3%
74.1%	12973.2	12867.8	-105.4	-0.8%
75.3%	12962.0	12796.4	-165.7	-1.3%
76.5%	12929.3	12777.5	-151.9	-1.2%
77.8%	12926.9	12768.7	-158.2	-1.2%
79.0%	12926.7	12758.3	-168.3	-1.3%
80.2%	12881.6	12712.6	-169.0	-1.3%
81.5%	12872.6	12701.0	-171.6	-1.3%
82.7%	12805.8	12683.9	-121.8	-1.0%
84.0%	12805.1	12646.4	-158.8	-1.2%
85.2%	12743.1	12635.0	-108.1	-0.8%
86.4%	12734.8	12615.9	-118.9	-0.9%
87.7%	12717.4	12563.1	-154.3	-1.2%
88.9%	12713.3	12507.1	-206.2	-1.6%
90.1%	12653.8	12504.7	-149.1	-1.2%
91.4%	12635.3	12452.5	-182.8	-1.4%
92.6%	12334.6	12408.8	74.2	0.6%
93.8%	12111.0	12224.7	113.7	0.9%
95.1%	11314.5	11879.7	565.2	5.0%
96.3%	11067.6	10828.6	-239.0	-2.2%
97.5%	7052.2	7917.0	864.8	12.3%
98.8%	5283.9	4942.4	-341.5	-6.5%
100.0%	3,737.1	3,527.3	-209.8	-5.6%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	18732.9	18713.9	-19.1	-0.1%
1.2%	18527.4	18701.2	173.8	0.9%
2.5%	18475.6	18521.6	46.0	0.2%
3.7%	18325.8	18453.6	127.7	0.7%
4.9%	18325.5	18403.8	78.3	0.4%
6.2%	18247.4	18360.9	113.5	0.6%
7.4%	18167.1	18352.7	185.7	1.0%
8.6%	18044.5	18352.4	307.8	1.7%
9.9%	18044.3	18254.3	210.0	1.2%
11.1%	17984.5	18023.3	38.8	0.2%
12.3%	17952.8	17941.0	-11.8	-0.1%
13.6%	17883.5	17716.4	-167.1	-0.9%
14.8%	17881.7	17666.7	-215.0	-1.2%
16.0%	17835.6	17565.0	-270.6	-1.5%
17.3%	17782.8	17549.5	-233.3	-1.3%
18.5%	17712.9	17482.4	-230.5	-1.3%
19.8%	17628.3	17419.3	-209.0	-1.2%
21.0%	17617.8	17365.2	-252.7	-1.4%
22.2%	17567.5	17337.7	-229.8	-1.3%
23.5%	17562.8	17328.6	-234.1	-1.3%
24.7%	17523.1	17260.4	-262.6	-1.5%
25.9%	17519.4	17209.3	-310.1	-1.8%
27.2%	17515.5	17180.2	-335.3	-1.9%
28.4%	17493.6	16982.1	-511.5	-2.9%
29.6%	17353.6	16954.2	-399.4	-2.3%
30.9%	17348.7	16900.0	-448.8	-2.6%
32.1%	17332.1	16833.0	-499.1	-2.9%
33.3%	17230.7	16615.5	-615.1	-3.6%
34.6%	17085.7	16550.7	-535.0	-3.1%
35.8%	16991.4	16319.2	-672.1	-4.0%
37.0%	16925.5	16301.6	-623.9	-3.7%
38.3%	16791.0	16298.3	-492.7	-2.9%
39.5%	16571.9	16262.8	-309.1	-1.9%
40.7%	16394.7	16216.5	-178.2	-1.1%
42.0%	16378.6	16189.8	-188.8	-1.2%
43.2%	16233.5	16119.2	-114.3	-0.7%
44.4%	16181.1	16024.0	-157.0	-1.0%
45.7%	16034.0	15810.9	-223.1	-1.4%
46.9%	16030.5	15803.5	-227.1	-1.4%
48.1%	16019.6	15777.8	-241.8	-1.5%
49.4%	16001.7	15722.6	-279.2	-1.7%
50.6%	15814.3	15632.6	-181.7	-1.1%
51.9%	15779.9	15509.2	-270.7	-1.7%
53.1%	15577.3	15044.6	-532.7	-3.4%
54.3%	11490.7	11271.6	-219.1	-1.9%
55.6%	11405.2	11270.1	-135.1	-1.2%
56.8%	11333.4	11262.1	-71.4	-0.6%
58.0%	11327.9	11195.4	-132.6	-1.2%
59.3%	11306.9	11128.5	-178.5	-1.6%
60.5%	11236.5	11098.6	-137.9	-1.2%
61.7%	11174.1	11056.2	-117.9	-1.1%
63.0%	11156.9	10983.2	-173.7	-1.6%
64.2%	11040.8	10962.6	-78.2	-0.7%
65.4%	10975.6	10786.7	-188.9	-1.7%
66.7%	10599.5	10432.6	-166.9	-1.6%
67.9%	10081.5	9975.3	-106.2	-1.1%
69.1%	8200.9	8101.3	-99.6	-1.2%
70.4%	7738.8	7701.7	-37.1	-0.5%
71.6%	7674.4	7598.5	-75.9	-1.0%
72.8%	7587.1	7596.9	9.8	0.1%
74.1%	7584.4	7584.3	-0.1	0.0%
75.3%	7532.2	7494.4	-37.9	-0.5%
76.5%	7498.4	7488.1	-10.4	-0.1%
77.8%	7460.8	7435.6	-25.2	-0.3%
79.0%	7349.1	7282.8	-66.3	-0.9%
80.2%	7348.3	7272.0	-76.3	-1.0%
81.5%	7341.7	7218.5	-123.2	-1.7%
82.7%	7310.6	7205.4	-105.2	-1.4%
84.0%	7287.0	7164.3	-122.8	-1.7%
85.2%	7273.6	7136.3	-137.3	-1.9%
86.4%	7225.6	7119.8	-105.8	-1.5%
87.7%	6967.5	6830.7	-136.8	-2.0%
88.9%	6873.1	6792.5	-80.6	-1.2%
90.1%	6846.7	6757.5	-89.3	-1.3%
91.4%	6791.6	6712.4	-79.2	-1.2%
92.6%	6756.6	6615.8	-140.8	-2.1%
93.8%	6753.2	6610.3	-142.9	-2.1%
95.1%	6607.1	6479.7	-127.4	-1.9%
96.3%	6520.0	6455.7	-64.3	-1.0%
97.5%	6518.3	6312.3	-206.0	-3.2%
98.8%	5348.6	5596.2	247.6	4.6%
100.0%	3,772.7	3,959.2	186.4	4.9%

Figure SQ-25-b
San Joaquin River at Jersey Point, Monthly EC
Probability of Exceedance

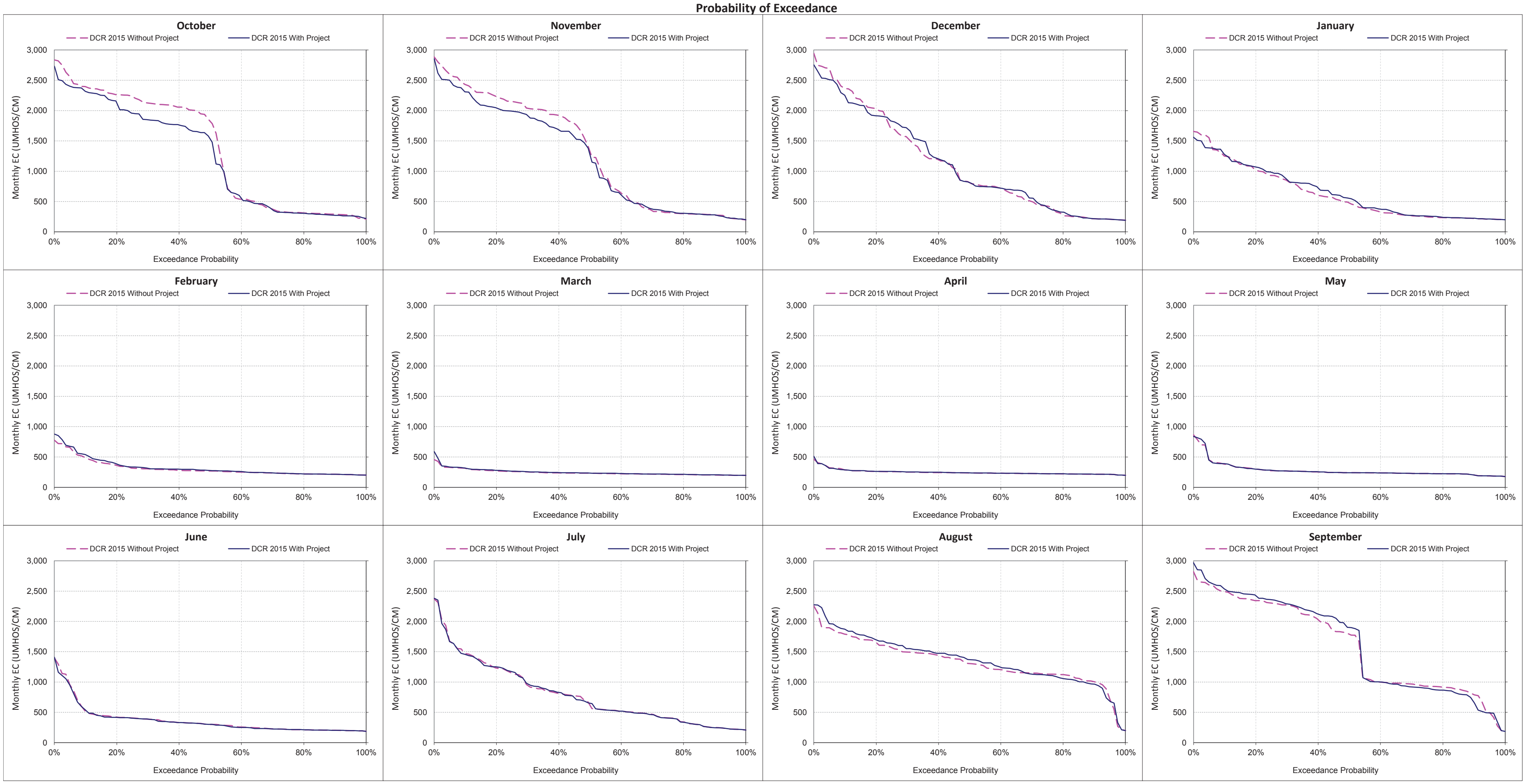


Table SQ-25-b

San Joaquin River at Jersey Point, Monthly EC

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2836.2	2732.2	-104.0	-3.7%
1.2%	2821.0	2510.2	-310.8	-11.0%
2.5%	2750.7	2492.4	-258.3	-9.4%
3.7%	2631.6	2432.7	-198.9	-7.6%
4.9%	2562.7	2402.8	-159.9	-6.2%
6.2%	2444.7	2381.6	-63.1	-2.6%
7.4%	2434.1	2376.5	-57.6	-2.4%
8.6%	2400.2	2374.5	-25.6	-1.1%
9.9%	2397.2	2316.2	-81.0	-3.4%
11.1%	2372.4	2295.3	-77.1	-3.2%
12.3%	2360.9	2289.7	-71.2	-3.0%
13.6%	2359.5	2278.2	-81.2	-3.4%
14.8%	2340.2	2253.5	-86.6	-3.7%
16.0%	2336.2	2247.5	-88.7	-3.8%
17.3%	2291.4	2184.1	-107.4	-4.7%
18.5%	2279.7	2168.3	-111.4	-4.9%
19.8%	2262.6	2159.0	-103.6	-4.6%
21.0%	2262.2	2015.4	-246.8	-10.9%
22.2%	2256.4	2012.9	-243.5	-10.8%
23.5%	2255.2	2000.6	-254.6	-11.3%
24.7%	2241.9	1959.6	-282.2	-12.6%
25.9%	2204.3	1951.2	-253.2	-11.5%
27.2%	2180.6	1945.4	-235.2	-10.8%
28.4%	2141.2	1853.7	-287.6	-13.4%
29.6%	2128.3	1849.7	-278.6	-13.1%
30.9%	2120.6	1841.8	-278.8	-13.1%
32.1%	2111.4	1836.7	-274.7	-13.0%
33.3%	2102.8	1834.1	-268.7	-12.8%
34.6%	2100.8	1799.3	-301.4	-14.3%
35.8%	2095.3	1784.8	-310.5	-14.8%
37.0%	2092.9	1775.7	-317.2	-15.2%
38.3%	2078.4	1770.9	-307.5	-14.8%
39.5%	2058.5	1768.4	-290.1	-14.1%
40.7%	2057.6	1753.1	-304.5	-14.8%
42.0%	2052.9	1739.3	-313.6	-15.3%
43.2%	2012.3	1685.0	-327.3	-16.3%
44.4%	2005.8	1657.2	-348.6	-17.4%
45.7%	2002.4	1652.6	-349.8	-17.5%
46.9%	1948.2	1639.3	-308.9	-15.9%
48.1%	1937.6	1636.3	-301.4	-15.6%
49.4%	1855.7	1581.7	-274.0	-14.8%
50.6%	1784.1	1477.5	-306.5	-17.2%
51.9%	1625.2	1121.5	-503.7	-31.0%
53.1%	1298.7	1107.3	-191.4	-14.7%
54.3%	995.6	996.0	0.4	0.0%
55.6%	714.8	705.8	-9.0	-1.3%
56.8%	639.7	649.8	10.2	1.6%
58.0%	558.7	632.1	73.4	13.1%
59.3%	539.7	601.2	61.5	11.4%
60.5%	535.9	514.0	-21.9	-4.1%
61.7%	535.2	510.6	-24.5	-4.6%
63.0%	511.6	495.0	-16.6	-3.2%
64.2%	502.4	467.4	-35.1	-7.0%
65.4%	456.9	463.7	6.7	1.5%
66.7%	444.3	462.9	18.6	4.2%
67.9%	404.5	435.8	31.4	7.8%
69.1%	391.6	394.3	2.7	0.7%
70.4%	366.7	348.9	-17.8	-4.9%
71.6%	340.9	324.9	-16.1	-4.7%
72.8%	331.5	324.5	-7.0	-2.1%
74.1%	327.4	320.2	-7.2	-2.2%
75.3%	319.2	320.1	0.9	0.3%
76.5%	319.2	312.2	-7.0	-2.2%
77.8%	318.9	311.9	-7.0	-2.2%
79.0%	315.8	306.9	-8.9	-2.8%
80.2%	309.6	306.4	-3.3	-1.1%
81.5%	307.7	296.9	-10.7	-3.5%
82.7%	304.0	295.9	-8.1	-2.7%
84.0%	303.1	288.5	-14.6	-4.8%
85.2%	301.0	287.9	-13.1	-4.4%
86.4%	299.7	284.9	-14.8	-4.9%
87.7%	293.6	281.5	-12.1	-4.1%
88.9%	291.8	278.3	-13.5	-4.6%
90.1%	291.5	273.7	-17.8	-6.1%
91.4%	285.3	270.3	-15.0	-5.3%
92.6%	283.8	265.3	-18.5	-6.5%
93.8%	278.9	263.2	-15.7	-5.6%
95.1%	278.8	263.0	-15.8	-5.7%
96.3%	258.7	257.4	-1.3	-0.5%
97.5%	225.5	255.1	29.6	13.1%
98.8%	224.7	234.7	10.0	4.4%
100.0%	210.0	220.4	10.4	5.0%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2885.5	2853.8	-31.7	-1.1%
1.2%	2799.4	2615.8	-183.5	-6.6%
2.5%	2736.6	2515.6	-221.0	-8.1%
3.7%	2663.9	2511.3	-152.6	-5.7%
4.9%	2602.1	2503.1	-98.9	-3.8%
6.2%	2562.6	2414.7	-147.9	-5.8%
7.4%	2550.6	2387.6	-163.0	-6.4%
8.6%	2474.2	2376.6	-97.5	-3.9%
9.9%	2431.9	2309.5	-122.4	-5.0%
11.1%	2407.8	2306.3	-101.4	-4.2%
12.3%	2356.5	2212.3	-144.2	-6.1%
13.6%	2302.4	2143.7	-158.7	-6.9%
14.8%	2300.6	2093.1	-207.6	-9.0%
16.0%	2295.5	2087.1	-208.3	-9.1%
17.3%	2294.2	2068.6	-225.6	-9.8%
18.5%	2264.7	2061.7	-203.0	-9.0%
19.8%	2237.1	2046.8	-190.3	-8.5%
21.0%	2210.2	2023.0	-187.2	-8.5%
22.2%	2189.7	2000.9	-188.8	-8.6%
23.5%	2156.2	1998.8	-157.3	-7.3%
24.7%	2154.1	1994.3	-159.8	-7.4%
25.9%	2142.4	1982.6	-159.9	-7.5%
27.2%	2129.7	1974.5	-155.2	-7.3%
28.4%	2120.4	1954.7	-165.8	-7.8%
29.6%	2041.6	1935.2	-106.4	-5.2%
30.9%	2029.8	1878.7	-151.1	-7.4%
32.1%	2024.0	1873.5	-150.4	-7.4%
33.3%	2022.6	1840.4	-182.1	-9.0%
34.6%	2016.2	1824.4	-191.9	-9.5%
35.8%	2000.6	1790.8	-209.8	-10.5%
37.0%	1937.4	1736.2	-201.2	-10.4%
38.3%	1936.4	1722.8	-213.6	-11.0%
39.5%	1926.8	1696.3	-230.6	-12.0%
40.7%	1910.6	1659.9	-250.7	-13.1%
42.0%	1878.9	1658.0	-220.9	-11.8%
43.2%	1825.5	1657.4	-168.2	-9.2%
44.4%	1810.8	1596.9	-213.9	-11.8%
45.7%	1757.6	1525.1	-232.5	-13.2%
46.9%	1674.2	1522.9	-151.3	-9.0%
48.1%	1550.0	1468.4	-81.7	-5.3%
49.4%	1414.7	1378.8	-35.9	-2.5%
50.6%	1232.2	1148.5	-83.7	-6.8%
51.9%	1225.2	1133.6	-91.6	-7.5%
53.1%	1067.3	894.3	-173.1	-16.2%
54.3%	911.8	883.0	-28.8	-3.2%
55.6%	895.9	847.8	-48.1	-5.4%
56.8%	739.5	677.2	-62.3	-8.4%
58.0%	708.4	655.1	-53.4	-7.5%
59.3%	672.6	648.1	-24.5	-3.6%
60.5%	616.3	585.6	-30.7	-5.0%
61.7%	594.8	523.4	-71.4	-12.0%
63.0%	503.5	513.2	9.8	1.9%
64.2%	492.2	469.5	-22.8	-4.6%
65.4%	474.3	465.2	-9.1	-1.9%
66.7%	411.9	457.0	45.2	11.0%
67.9%	381.6	415.5	33.9	8.9%
69.1%	373.1	386.7	13.6	3.7%
70.4%	336.2	369.4	33.2	9.9%
71.6%	335.9	366.8	31.0	9.2%
72.8%	333.4	358.3	24.9	7.5%
74.1%	320.0	340.1	20.1	6.3%
75.3%	319.1	336.0	16.9	5.3%
76.5%	308.1	329.6	21.4	7.0%
77.8%	306.6	309.0	2.3	0.8%
79.0%	302.1	304.5	2.4	0.8%
80.2%	300.7	304.5	3.8	1.3%
81.5%	295.7	301.9	6.2	2.1%
82.7%	295.3	301.2	5.9	2.0%
84.0%	293.3	294.8	1.6	0.5%
85.2%	292.4	294.5	2.1	0.7%
86.4%	289.6	282.9	-6.7	-2.3%
87.7%	285.5	282.5	-3.0	-1.1%
88.9%	284.3	280.6	-3.7	-1.3%
90.1%	274.3	278.4	4.1	1.5%
91.4%	274.0	263.8	-10.2	-3.7%
92.6%	270.7	255.1	-15.6	-5.8%
93.8%	243.7	235.0	-8.7	-3.6%
95.1%	224.9	225.9	1.0	0.4%
96.3%	216.4	222.9	6.5	3.0%
97.5%	215.7	213.6	-2.1	-1.0%
98.8%	203.4	211.8	8.4	4.1%
100.0%	198.3	200.1	1.8	0.9%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2944.3	2753.3	-190.9	-6.5%
1.2%	2748.3	2646.0	-102.3	-3.7%
2.5%	2731.6	2535.9	-195.7	-7.2%
3.7%	2704.8	2531.4	-173.4	-6.4%
4.9%	2698.1	2511.9	-186.1	-6.9%
6.2%	2517.1	2502.8	-14.3	-0.6%
7.4%	2512.0	2432.6	-79.5	-3.2%
8.6%	2408.1	2294.7	-113.3	-4.7%
9.9%	2363.8	2253.7	-110.1	-4.7%
11.1%	2358.9	2129.1	-229.8	-9.7%
12.3%	2316.2	2123.6	-192.6	-8.3%
13.6%	2203.5	2109.3	-94.1	-4.3%
14.8%	2188.3	2084.8	-103.5	-4.7%
16.0%	2118.0	2084.3	-33.7	-1.6%
17.3%	2056.8	1971.3	-85.5	-4.2%
18.5%	2045.0	1925.2	-119.7	-5.9%
19.8%	2035.0	1915.5	-119.5	-5.9%
21.0%	1997.3	1913.2	-84.2	-4.2%
22.2%	1986.9	1901.8	-85.1	-4.3%
23.5%	1843.0	1892.1	49.1	2.7%
24.7%	1702.2	1831.4	129.2	7.6%
25.9%	1688.4	1811.6	123.3	7.3%
27.2%	1620.4	1779.6	159.2	9.8%
28.4%	1577.1	1729.3	152.3	9.7%
29.6%	1572.6	1717.7	145.2	9.2%
30.9%	1507.3	1664.7	157.4	10.4%
32.1%	1441.9	1539.0	97.1	6.7%
33.3%	1404.0	1526.1	122.1	8.7%
34.6%	1294.7	1503.7	208.9	16.1%
35.8%	1247.9	1486.8	238.9	19.1%
37.0%	1207.5	1286.5	79.0	6.5%
38.3%	1205.3	1236.1	30.8	2.6%
39.5%	1201.2	1214.2	13.0	1.1%
40.7%	1170.3	1188.2	17.8	1.5%
42.0%	1170.1	1166.3	-3.8	-0.3%
43.2%	1136.7	1114.9	-21.9	-1.9%
44.4%	1058.8	1104.9	46.1	4.3%
45.7%	1034.7	958.2	-76.5	-7.4%
46.9%	851.2	856.1	4.9	0.6%
48.1%	839.4	834.5	-5.0	-0.6%
49.4%	828.0	826.2	-1.8	-0.2%
50.6%	793.0	799.0	6.0	0.8%
51.9%	788.4	753.8	-34.5	-4.4%
53.1%	770.0	746.5	-23.5	-3.1%
54.3%	755.3	746.5	-8.8	-1.2%
55.6%	754.9	744.3	-10.6	-1.4%
56.8%	753.3	743.9	-9.4	-1.3%
58.0%	748.9	734.8	-14.1	-1.9%
59.3%	728.3	724.5	-3.9	-0.5%
60.5%	713.9	715.0	1.1	0.2%
61.7%	675.1	701.1	26.0	3.9%
63.0%	642.5	699.0	56.5	8.8%
64.2%	633.4	688.4	54.9	8.7%
65.4%	584.7	688.0	103.3	17.7%
66.7%	574.4	679.1	104.7	18.2%
67.9%	513.8	649.5	135.7	26.4%
69.1%	513.6	558.6	45.0	8.8%
70.4%	491.1	555.9	64.8	13.2%
71.6%	445.9	484.0	38.1	8.5%
72.8%	436.2	449.0	12.7	2.9%
74.1%	429.5	435.5	6.1	1.4%
75.3%	421.6	389.8	-31.8	-7.5%
76.5%	391.6	362.3	-29.3	-7.5%
77.8%	327.8	350.1	22.3	6.8%
79.0%	310.1	328.0	17.9	5.8%
80.2%	264.6	323.4	58.8	22.2%
81.5%	262.7	291.1	28.4	10.8%
82.7%	252.6	261.4	8.8	3.5%
84.0%	249.1	260.3	11.2	4.5%
85.2%	246.7	252.3	5.6	2.3%
86.4%	243.3	231.0	-12.4	-5.1%
87.7%	231.0	227.8	-3.1	-1.4%
88.9%	216.6	220.1	3.5	1.6%
90.1%	214.8	214.7	-0.1	-0.1%
91.4%	214.3	213.2	-1.1	-0.5%
92.6%	213.1	212.9	-0.2	-0.1%
93.8%	211.7	212.1	0.4	0.2%
95.1%	206.3	205.8	-0.4	-0.2%
96.3%	203.6	205.4	1.9	0.9%
97.5%	199.5	199.6	0.1	0.1%
98.8%	195.8	196.7	1.0	0.5%
100.0%	192.1	190.4	-1.7	-0.9%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1656.5	1559.5	-97.0	-5.9%
1.2%	1644.9	1508.6	-136.4	-8.3%
2.5%	1599.7	1500.8	-98.9	-6.2%
3.7%	1599.0	1388.0	-211.0	-13.2%
4.9%	1553.5	1385.6	-167.9	-10.8%
6.2%	1356.7	1382.3	25.6	1.9%
7.4%	1350.1	1362.0	11.8	0.9%
8.6%	1315.1	1361.9	46.8	3.6%
9.9%	1249.7	1278.5	28.8	2.3%
11.1%	1242.1	1233.5	-8.6	-0.7%
12.3%	1205.7	1163.9	-41.8	-3.5%
13.6%	1170.8	1158.2	-12.7	-1.1%
14.8%	1118.6	1148.0	29.4	2.6%
16.0%	1104.8	1112.3	7.5	0.7%
17.3%	1087.6	1099.7	12.1	1.1%
18.5%	1084.8	1087.0	2.2	0.2%
19.8%	1022.1	1073.3	51.2	5.0%
21.0%	1001.3	1060.7	59.4	5.9%
22.2%	992.4	1033.0	40.6	4.1%
23.5%	955.6	992.4	36.8	3.9%
24.7%	930.6	988.8	58.2	6.3%
25.9%	928.9	965.4	36.6	3.9%
27.2%	908.8	964.0	55.2	6.1%
28.4%	874.9	936.9	61.9	7.1%
29.6%	855.5	879.3	23.8	2.8%
30.9%	814.9	818.2	3.2	0.4%
32.1%	807.1	816.1	9.0	1.1%
33.3%	763.7	812.0	48.3	6.3%
34.6%	701.0	802.8	101.8	14.5%
35.8%	687.2	801.6	114.4	16.7%
37.0%	657.8	797.6	139.7	21.2%
38.3%	647.1	768.7	121.6	18.8%
39.5%	600.2	746.1	145.9	24.3%
40.7%	596.3	686.4	90.1	15.1%
42.0%	583.1	683.7	100.6	17.3%
43.2%	574.7	681.2	106.6	18.5%
44.4%	572.1	614.6	42.5	7.4%
45.7%	537.4	610.8	73.4	13.7%
46.9%	521.3	599.5	78.2	15.0%
48.1%	495.5	566.7	71.2	14.4%
49.4%	492.4	557.1	64.7	13.1%
50.6%	458.6	545.6	87.0	19.0%
51.9%	439.3	515.7	76.4	17.4%
53.1%	403.8	465.2	61.5	15.2%
54.3%	396.8	401.3	4.5	1.1%
55.6%	378.1	397.0	18.9	5.0%
56.8%	369.7	395.2	25.5	6.9%
58.0%	354.7	394.4	39.7	11.2%
59.3%	338.8	377.7	38.9	11.5%
60.5%	315.4	371.1	55.7	17.7%
61.7%	312.5	369.1	56.6	18.1%
63.0%	310.9	353.0	42.1	13.5%
64.2%	302.6	325.7	23.1	7.6%
65.4%	291.6	316.8	25.1	8.6%
66.7%	281.2	294.4	13.2	4.7%
67.9%	275.6	274.4	-1.2	-0.4%
69.1%	274.6	272.8	-1.8	-0.6%
70.4%	261.7	271.5	9.7	3.7%
71.6%	261.1	263.6	2.5	1.0%
72.8%	255.8	262.8	7.0	2.7%
74.1%	254.1	262.6	8.5	3.3%
75.3%	245.2	259.4	14.2	5.8%
76.5%	243.5	255.8	12.3	5.1%
77.8%	243.2	255.0	11.9	4.9%
79.0%	235.0	245.2	10.2	4.3%
80.2%	235.0	236.6	1.6	0.7%
81.5%	233.0	236.3	3.3	1.4%
82.7%	232.0	234.3	2.2	1.0%
84.0%	230.9	233.7	2.8	1.2%
85.2%	229.8	232.3	2.6	1.1%
86.4%	227.4	231.0	3.7	1.6%
87.7%	225.8	225.7	-0.1	-0.1%
88.9%	225.5	225.4	0.0	0.0%
90.1%	220.2	223.2	2.9	1.3%
91.4%	215.0	216.0	1.1	0.5%
92.6%	214.6	216.0	1.4	0.6%
93.8%	210.8	212.4	1.6	0.8%
95.1%	209.2	210.3	1.1	0.5%
96.3%	208.5	208.1	-0.4	-0.2%
97.5%	204.6	204.6	0.0	0.0%
98.8%	203.2	203.1	-0.1	0.0%
100.0%	200.9	201.3	0.4	0.2%

Table SQ-25-b

San Joaquin River at Jersey Point, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	776.4	876.0	99.6	12.8%
1.2%	721.3	852.5	131.1	18.2%
2.5%	718.6	781.7	63.1	8.8%
3.7%	667.6	693.6	26.1	3.9%
4.9%	658.7	675.5	16.8	2.5%
6.2%	585.3	664.3	79.0	13.5%
7.4%	532.4	562.3	29.9	5.6%
8.6%	518.8	554.3	35.5	6.8%
9.9%	489.3	538.6	49.3	10.1%
11.1%	459.9	507.9	48.0	10.4%
12.3%	441.2	472.9	31.8	7.2%
13.6%	411.5	458.3	46.8	11.4%
14.8%	408.0	447.5	39.5	9.7%
16.0%	396.3	443.1	46.8	11.8%
17.3%	388.6	419.4	30.8	7.9%
18.5%	378.5	413.2	34.6	9.1%
19.8%	365.2	390.0	24.8	6.8%
21.0%	344.5	363.2	18.6	5.4%
22.2%	343.4	353.0	9.7	2.8%
23.5%	343.1	336.4	-6.7	-1.9%
24.7%	315.6	332.4	16.8	5.3%
25.9%	312.9	332.1	19.2	6.1%
27.2%	311.3	330.5	19.1	6.1%
28.4%	305.1	326.1	21.0	6.9%
29.6%	304.0	317.1	13.2	4.3%
30.9%	301.5	305.9	4.4	1.4%
32.1%	295.1	305.1	10.1	3.4%
33.3%	294.2	304.2	10.0	3.4%
34.6%	293.4	302.8	9.4	3.2%
35.8%	291.6	301.2	9.5	3.3%
37.0%	287.8	299.9	12.1	4.2%
38.3%	287.5	299.1	11.6	4.0%
39.5%	279.8	298.6	18.8	6.7%
40.7%	277.6	296.2	18.6	6.7%
42.0%	275.9	295.5	19.6	7.1%
43.2%	275.0	294.7	19.7	7.2%
44.4%	274.4	294.5	20.1	7.3%
45.7%	271.1	287.7	16.6	6.1%
46.9%	271.0	284.8	13.8	5.1%
48.1%	270.7	283.2	12.4	4.6%
49.4%	269.3	277.6	8.3	3.1%
50.6%	269.0	272.6	3.7	1.4%
51.9%	268.3	272.4	4.1	1.5%
53.1%	266.1	270.6	4.5	1.7%
54.3%	259.0	270.5	11.5	4.4%
55.6%	258.0	270.3	12.3	4.8%
56.8%	256.8	265.2	8.3	3.2%
58.0%	252.7	263.0	10.4	4.1%
59.3%	250.7	261.8	11.2	4.5%
60.5%	250.6	257.8	7.2	2.9%
61.7%	249.9	250.7	0.7	0.3%
63.0%	246.6	246.4	-0.3	-0.1%
64.2%	242.8	246.1	3.4	1.4%
65.4%	242.4	244.4	2.0	0.8%
66.7%	240.5	243.3	2.8	1.2%
67.9%	238.2	240.8	2.5	1.1%
69.1%	236.5	239.0	2.4	1.0%
70.4%	236.0	236.2	0.2	0.1%
71.6%	233.8	231.5	-2.3	-1.0%
72.8%	229.7	230.7	1.1	0.5%
74.1%	226.8	229.9	3.1	1.4%
75.3%	224.8	229.0	4.3	1.9%
76.5%	224.7	227.9	3.3	1.5%
77.8%	220.8	223.5	2.7	1.2%
79.0%	220.2	221.0	0.8	0.4%
80.2%	219.3	220.5	1.2	0.5%
81.5%	219.1	220.1	0.9	0.4%
82.7%	218.1	220.0	1.9	0.9%
84.0%	218.0	219.1	1.1	0.5%
85.2%	217.6	218.7	1.1	0.5%
86.4%	216.8	218.2	1.4	0.6%
87.7%	215.6	216.0	0.5	0.2%
88.9%	215.3	215.7	0.3	0.2%
90.1%	215.2	215.2	0.0	0.0%
91.4%	211.6	213.1	1.5	0.7%
92.6%	211.5	211.6	0.2	0.1%
93.8%	208.1	208.8	0.6	0.3%
95.1%	207.8	208.1	0.3	0.1%
96.3%	207.6	207.8	0.2	0.1%
97.5%	203.6	203.6	0.0	0.0%
98.8%	201.4	203.5	2.1	1.0%
100.0%	199.8	199.9	0.0	0.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	456.0	585.9	129.8	28.5%
1.2%	427.0	479.8	52.8	12.4%
2.5%	335.9	353.0	17.1	5.1%
3.7%	329.6	348.7	19.1	5.8%
4.9%	329.0	332.4	3.4	1.0%
6.2%	324.7	331.5	6.8	2.1%
7.4%	322.3	328.3	5.9	1.8%
8.6%	317.8	327.6	9.8	3.1%
9.9%	315.8	318.1	2.4	0.7%
11.1%	295.3	304.1	8.8	3.0%
12.3%	291.5	295.8	4.3	1.5%
13.6%	289.5	293.9	4.4	1.5%
14.8%	282.8	293.3	10.5	3.7%
16.0%	282.1	290.0	7.9	2.8%
17.3%	276.0	288.6	12.6	4.6%
18.5%	275.8	285.2	9.5	3.4%
19.8%	271.8	279.3	7.5	2.8%
21.0%	267.4	277.2	9.8	3.6%
22.2%	265.7	276.2	10.5	4.0%
23.5%	262.0	268.7	6.7	2.6%
24.7%	259.9	267.1	7.2	2.8%
25.9%	259.6	264.7	5.0	1.9%
27.2%	259.1	260.8	1.7	0.6%
28.4%	257.5	260.2	2.7	1.0%
29.6%	254.4	256.6	2.3	0.9%
30.9%	250.9	253.6	2.7	1.1%
32.1%	248.4	253.1	4.7	1.9%
33.3%	244.1	250.8	6.8	2.8%
34.6%	244.0	250.2	6.2	2.5%
35.8%	239.5	247.1	7.6	3.2%
37.0%	239.2	245.5	6.3	2.6%
38.3%	237.6	245.0	7.5	3.1%
39.5%	237.0	244.5	7.5	3.2%
40.7%	236.5	242.0	5.6	2.4%
42.0%	235.3	239.8	4.5	1.9%
43.2%	234.9	238.9	4.0	1.7%
44.4%	234.6	238.4	3.8	1.6%
45.7%	233.6	238.1	4.5	1.9%
46.9%	233.4	237.4	3.9	1.7%
48.1%	232.9	234.5	1.5	0.7%
49.4%	232.3	234.3	2.0	0.9%
50.6%	230.8	233.2	2.4	1.0%
51.9%	230.6	232.3	1.7	0.7%
53.1%	227.9	230.7	2.9	1.3%
54.3%	227.7	229.8	2.2	0.9%
55.6%	226.6	229.8	3.2	1.4%
56.8%	226.2	229.4	3.2	1.4%
58.0%	223.3	229.4	6.1	2.7%
59.3%	222.4	225.7	3.3	1.5%
60.5%	222.0	225.5	3.5	1.6%
61.7%	221.7	224.8	3.1	1.4%
63.0%	221.4	224.5	3.1	1.4%
64.2%	220.9	223.3	2.4	1.1%
65.4%	220.3	222.1	1.8	0.8%
66.7%	219.9	220.7	0.9	0.4%
67.9%	219.6	220.5	0.9	0.4%
69.1%	217.7	220.1	2.4	1.1%
70.4%	217.4	220.0	2.6	1.2%
71.6%	215.6	219.2	3.6	1.7%
72.8%	215.3	218.3	3.0	1.4%
74.1%	214.2	217.9	3.6	1.7%
75.3%	212.9	215.2	2.4	1.1%
76.5%	211.2	214.9	3.7	1.7%
77.8%	210.8	214.4	3.7	1.7%
79.0%	210.5	212.9	2.4	1.1%
80.2%	210.1	212.4	2.4	1.1%
81.5%	209.7	210.9	1.2	0.6%
82.7%	208.1	209.9	1.8	0.9%
84.0%	205.0	208.2	3.1	1.5%
85.2%	205.0	206.9	1.9	0.9%
86.4%	203.9	206.2	2.4	1.2%
87.7%	203.6	205.3	1.7	0.8%
88.9%	203.5	205.1	1.6	0.8%
90.1%	202.6	204.7	2.0	1.0%
91.4%	201.1	203.7	2.6	1.3%
92.6%	199.8	201.2	1.4	0.7%
93.8%	199.4	199.8	0.4	0.2%
95.1%	198.9	199.5	0.6	0.3%
96.3%	197.3	197.3	0.0	0.0%
97.5%	196.9	196.9	0.0	0.0%
98.8%	196.8	196.8	0.0	0.0%
100.0%	195.7	195.2	-0.4	-0.2%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	462.6	508.4	45.8	9.9%
1.2%	406.8	390.8	-16.0	-3.9%
2.5%	386.1	389.4	3.3	0.9%
3.7%	361.1	358.6	-2.5	-0.7%
4.9%	322.5	314.7	-7.8	-2.4%
6.2%	316.4	313.1	-3.3	-1.1%
7.4%	314.0	300.5	-13.6	-4.3%
8.6%	306.8	291.9	-14.9	-4.9%
9.9%	287.3	286.3	-1.0	-0.4%
11.1%	283.2	283.9	0.7	0.2%
12.3%	274.2	275.6	1.4	0.5%
13.6%	272.2	274.7	2.6	0.9%
14.8%	271.7	274.1	2.4	0.9%
16.0%	268.0	273.5	5.5	2.0%
17.3%	265.6	267.7	2.0	0.8%
18.5%	262.2	266.6	4.4	1.7%
19.8%	261.9	263.2	1.3	0.5%
21.0%	260.2	262.1	1.9	0.7%
22.2%	259.5	261.9	2.4	0.9%
23.5%	258.0	261.8	3.7	1.4%
24.7%	258.0	261.5	3.5	1.4%
25.9%	257.5	260.3	2.8	1.1%
27.2%	257.1	257.6	0.4	0.2%
28.4%	254.7	257.0	2.3	0.9%
29.6%	251.2	254.7	3.4	1.4%
30.9%	250.7	253.2	2.5	1.0%
32.1%	250.7	252.6	1.9	0.8%
33.3%	246.7	251.1	4.4	1.8%
34.6%	246.4	250.1	3.8	1.5%
35.8%	244.8	249.5	4.8	1.9%
37.0%	243.7	248.8	5.1	2.1%
38.3%	243.1	246.8	3.7	1.5%
39.5%	242.3	246.8	4.4	1.8%
40.7%	242.0	246.6	4.6	1.9%
42.0%	241.9	243.2	1.3	0.5%
43.2%	240.6	242.2	1.6	0.7%
44.4%	240.4	242.1	1.7	0.7%
45.7%	239.4	240.8	1.5	0.6%
46.9%	239.2	240.4	1.2	0.5%
48.1%	238.1	239.2	1.1	0.5%
49.4%	236.4	238.7	2.3	1.0%
50.6%	235.5	237.6	2.1	0.9%
51.9%	234.4	237.4	3.0	1.3%
53.1%	233.5	235.5	2.1	0.9%
54.3%	233.2	235.5	2.2	1.0%
55.6%	233.0	235.0	2.0	0.9%
56.8%	232.6	233.7	1.2	0.5%
58.0%	232.5	233.3	0.8	0.4%
59.3%	232.2	233.1	0.9	0.4%
60.5%	232.1	232.8	0.7	0.3%
61.7%	229.8	232.5	2.7	1.2%
63.0%	229.7	230.8	1.0	0.5%
64.2%	229.5	229.8	0.3	0.1%
65.4%	228.6	229.6	1.0	0.4%
66.7%	228.6	228.7	0.1	0.0%
67.9%	228.5	228.6	0.1	0.0%
69.1%	227.3	228.6	1.3	0.6%
70.4%	225.9	227.3	1.4	0.6%
71.6%	224.8	225.9	1.2	0.5%
72.8%	224.5	224.3	-0.2	-0.1%
74.1%	223.1	223.3	0.2	0.1%
75.3%	222.2	223.2	1.0	0.5%
76.5%	222.1	223.1	1.0	0.4%
77.8%	221.9	222.7	0.8	0.4%
79.0%	220.9	222.4	1.5	0.7%
80.2%	219.5	222.4	2.8	1.3%
81.5%	219.4	220.5	1.0	0.5%
82.7%	219.4	220.5	1.1	0.5%
84.0%	218.0	219.8	1.8	0.8%
85.2%	217.6	219.5	1.9	0.9%
86.4%	216.2	218.0	1.8	0.8%
87.7%	215.8	217.4	1.6	0.7%
88.9%	215.7	216.5	0.8	0.4%
90.1%	214.8	215.8	1.0	0.5%
91.4%	214.5	215.2	0.7	0.3%
92.6%	214.2	214.8	0.6	0.3%
93.8%	214.2	214.7	0.5	0.3%
95.1%	212.5	212.6	0.1	0.0%
96.3%	211.8	211.9	0.0	0.0%
97.5%	202.2	202.3	0.1	0.0%
98.8%	200.5	201.1	0.6	0.3%
100.0%	198.4	198.5	0.1	0.1%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	864.5	837.6	-26.9	-3.1%
1.2%	787.7	817.9	30.2	3.8%
2.5%	699.7	791.7	92.0	13.1%
3.7%	697.3	723.5	26.2	3.8%
4.9%	452.5	451.7	-0.8	-0.2%
6.2%	412.7	403.0	-9.7	-2.4%
7.4%	406.5	394.6	-11.9	-2.9%
8.6%	396.7	389.1	-7.5	-1.9%
9.9%	380.1	388.5	8.3	2.2%
11.1%	378.3	379.8	1.6	0.4%
12.3%	357.2	354.2	-3.0	-0.8%
13.6%	331.4	332.7	1.3	0.4%
14.8%	326.9	328.4	1.6	0.5%
16.0%	325.3	320.7	-4.6	-1.4%
17.3%	319.8	309.1	-10.7	-3.3%
18.5%	310.1	308.2	-1.9	-0.6%
19.8%	303.4	300.0	-3.3	-1.1%
21.0%	295.1	295.3	0.2	0.1%
22.2%	286.0	286.6	0.6	0.2%
23.5%	280.8	282.7	1.9	0.7%
24.7%	273.5	281.0	7.5	2.7%
25.9%	273.2	273.8	0.6	0.2%
27.2%	270.2	270.6	0.4	0.1%
28.4%	269.2	270.4	1.2	0.4%
29.6%	268.8	268.1	-0.7	-0.3%
30.9%	267.8	267.7	-0.1	0.0%
32.1%	266.9	267.3	0.4	0.2%
33.3%	264.9	264.0	-0.9	-0.3%
34.6%	263.7	262.3	-1.3	-0.5%
35.8%	260.9	260.1	-0.8	-0.3%
37.0%	259.9	257.6	-2.3	-0.9%
38.3%	254.4	256.4	2.0	0.8%
39.5%	253.5	255.7	2.2	0.9%
40.7%	251.4	253.6	2.3	0.9%
42.0%	249.9	251.6	1.7	0.7%
43.2%	244.2	244.5	0.3	0.1%
44.4%	244.0	244.2	0.2	0.1%
45.7%	243.0	243.9	1.0	0.4%
46.9%	242.9	242.6	-0.3	-0.1%
48.1%	241.7	241.7	0.0	0.0%
49.4%	241.4	241.7	0.3	0.1%
50.6%	241.2	241.3	0.1	0.0%
51.9%	241.2	241.3	0.1	0.0%
53.1%	240.2	240.4	0.2	0.1%
54.3%	240.0	240.3	0.4	0.2%
55.6%	239.2	240.2	0.9	0.4%
56.8%	238.3	239.0	0.7	0.3%
58.0%	237.1	238.2	1.0	0.4%
59.3%	237.0	237.3	0.3	0.1%
60.5%	236.2	235.7	-0.5	-0.2%
61.7%	235.7	235.1	-0.6	-0.2%
63.0%	235.1	235.1	-0.1	0.0%
64.2%	232.6	233.8	1.2	0.5%
65.4%	232.6	231.9	-0.7	-0.3%
66.7%	231.5	231.4	-0.1	-0.1%
67.9%	231.3	231.3	0.0	0.0%
69.1%	228.8	229.5	0.6	0.3%
70.4%	228.1	228.8	0.7	0.3%
71.6%	228.0	228.2	0.3	0.1%
72.8%	227.0	228.1	1.2	0.5%
74.1%	226.3	227.1	0.8	0.4%
75.3%	226.1	226.3	0.2	0.1%
76.5%	225.6	224.6	-1.1	-0.5%
77.8%	223.1	223.6	0.5	0.2%
79.0%	222.7	223.2	0.4	0.2%
80.2%	222.2	222.5	0.4	0.2%
81.5%	222.0	222.1	0.1	0.0%
82.7%	221.8	221.1	-0.7	-0.3%
84.0%	221.0	221.0	-0.1	0.0%
85.2%	220.9	220.9	0.0	0.0%
86.4%	219.8	220.2	0.4	0.2%
87.7%	218.7	219.9	1.1	0.5%
88.9%	211.3	211.5	0.2	0.1%
90.1%	200.9	201.0	0.2	0.1%
91.4%	190.0	190.1	0.1	0.0%
92.6%	188.2	188.3	0.1	0.0%
93.8%	187.3	187.5	0.1	0.1%
95.1%	186.7	186.8	0.1	0.1%
96.3%	185.3	185.5	0.2	0.1%
97.5%	184.7	184.8	0.2	0.1%
98.8%	182.7	182.7	-0.1	0.0%
100.0%	177.3	177.6	0.3	0.2%

Table SQ-25-b

San Joaquin River at Jersey Point, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1397.4	1410.6	13.2	0.9%
1.2%	1294.8	1163.3	-131.5	-10.2%
2.5%	1140.4	1104.9	-35.5	-3.1%
3.7%	1128.5	1052.8	-75.7	-6.7%
4.9%	956.8	951.4	-5.4	-0.6%
6.2%	856.1	810.6	-45.6	-5.3%
7.4%	705.8	669.3	-36.6	-5.2%
8.6%	603.7	596.1	-7.6	-1.3%
9.9%	518.5	540.0	21.5	4.1%
11.1%	482.8	486.0	3.1	0.6%
12.3%	468.8	483.7	15.0	3.2%
13.6%	457.6	450.8	-6.8	-1.5%
14.8%	449.2	442.5	-6.7	-1.5%
16.0%	442.7	423.2	-19.5	-4.4%
17.3%	440.7	421.4	-19.3	-4.4%
18.5%	428.0	417.9	-10.1	-2.4%
19.8%	422.7	416.3	-6.4	-1.5%
21.0%	415.8	413.5	-2.3	-0.5%
22.2%	415.0	412.6	-2.4	-0.6%
23.5%	412.2	411.8	-0.5	-0.1%
24.7%	407.5	405.4	-2.1	-0.5%
25.9%	404.3	401.2	-3.1	-0.8%
27.2%	397.3	393.8	-3.5	-0.9%
28.4%	391.5	392.5	1.0	0.3%
29.6%	387.7	390.7	3.0	0.8%
30.9%	384.2	384.2	0.0	0.0%
32.1%	381.3	378.0	-3.3	-0.9%
33.3%	376.2	351.4	-24.9	-6.6%
34.6%	355.8	350.2	-5.6	-1.6%
35.8%	352.2	350.0	-2.3	-0.6%
37.0%	341.7	341.4	-0.4	-0.1%
38.3%	341.5	340.5	-1.0	-0.3%
39.5%	333.3	333.2	-0.1	0.0%
40.7%	333.2	330.2	-3.0	-0.9%
42.0%	328.6	328.6	0.0	0.0%
43.2%	323.8	323.5	-0.3	-0.1%
44.4%	322.6	321.9	-0.7	-0.2%
45.7%	319.3	318.7	-0.6	-0.2%
46.9%	316.0	312.2	-3.8	-1.2%
48.1%	306.3	304.4	-1.9	-0.6%
49.4%	300.8	300.2	-0.6	-0.2%
50.6%	300.3	300.1	-0.3	-0.1%
51.9%	299.9	290.6	-9.3	-3.1%
53.1%	293.8	286.4	-7.4	-2.5%
54.3%	285.3	286.1	0.8	0.3%
55.6%	283.6	271.8	-11.9	-4.2%
56.8%	280.8	258.3	-22.5	-8.0%
58.0%	264.5	253.8	-10.7	-4.0%
59.3%	258.4	251.6	-6.8	-2.6%
60.5%	257.0	250.9	-6.1	-2.4%
61.7%	253.3	250.5	-2.8	-1.1%
63.0%	250.3	243.9	-6.4	-2.6%
64.2%	246.8	234.7	-12.0	-4.9%
65.4%	243.5	234.3	-9.1	-3.8%
66.7%	239.2	232.7	-6.4	-2.7%
67.9%	235.6	232.7	-3.0	-1.3%
69.1%	229.4	227.7	-1.7	-0.7%
70.4%	226.9	225.4	-1.5	-0.7%
71.6%	225.2	225.3	0.1	0.0%
72.8%	224.1	223.0	-1.1	-0.5%
74.1%	221.4	221.0	-0.3	-0.1%
75.3%	216.3	214.6	-1.7	-0.8%
76.5%	214.4	214.2	-0.2	-0.1%
77.8%	214.2	214.0	-0.2	-0.1%
79.0%	213.9	213.9	0.0	0.0%
80.2%	210.5	210.2	-0.3	-0.1%
81.5%	210.3	209.8	-0.6	-0.3%
82.7%	208.8	209.1	0.2	0.1%
84.0%	207.6	206.9	-0.7	-0.4%
85.2%	207.0	206.4	-0.6	-0.3%
86.4%	206.2	206.2	0.0	0.0%
87.7%	205.0	205.4	0.4	0.2%
88.9%	204.3	204.7	0.4	0.2%
90.1%	204.2	204.3	0.1	0.0%
91.4%	201.9	201.6	-0.3	-0.2%
92.6%	201.0	200.8	-0.2	-0.1%
93.8%	198.5	199.3	0.8	0.4%
95.1%	198.0	197.8	-0.2	-0.1%
96.3%	198.0	197.5	-0.5	-0.2%
97.5%	195.0	195.0	0.1	0.0%
98.8%	194.8	194.9	0.1	0.0%
100.0%	186.7	186.5	-0.2	-0.1%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2371.1	2380.7	9.6	0.4%
1.2%	2312.1	2352.2	40.1	1.7%
2.5%	2019.4	1968.2	-51.2	-2.5%
3.7%	1934.6	1867.1	-67.4	-3.5%
4.9%	1672.2	1666.1	-6.1	-0.4%
6.2%	1632.9	1637.7	4.8	0.3%
7.4%	1552.5	1547.8	-4.8	-0.3%
8.6%	1545.4	1475.5	-69.9	-4.5%
9.9%	1472.0	1455.1	-16.9	-1.1%
11.1%	1460.3	1437.4	-23.0	-1.6%
12.3%	1430.7	1422.3	-8.4	-0.6%
13.6%	1394.9	1385.1	-9.8	-0.7%
14.8%	1366.0	1338.9	-27.1	-2.0%
16.0%	1318.2	1274.5	-43.6	-3.3%
17.3%	1302.6	1263.4	-39.2	-3.0%
18.5%	1259.5	1253.5	-6.0	-0.5%
19.8%	1232.9	1253.0	20.1	1.6%
21.0%	1221.2	1243.3	22.1	1.8%
22.2%	1215.8	1224.9	9.1	0.7%
23.5%	1183.5	1192.3	8.8	0.7%
24.7%	1151.8	1176.5	24.7	2.1%
25.9%	1126.3	1155.4	29.1	2.6%
27.2%	1119.8	1093.0	-26.9	-2.4%
28.4%	1072.6	1067.7	-4.9	-0.5%
29.6%	959.3	981.3	22.0	2.3%
30.9%	914.8	947.8	33.1	3.6%
32.1%	905.0	930.9	26.0	2.9%
33.3%	889.3	927.8	38.5	4.3%
34.6%	888.4	899.6	11.2	1.3%
35.8%	852.8	888.4	35.6	4.2%
37.0%	845.8	859.3	13.5	1.6%
38.3%	831.9	851.7	19.8	2.4%
39.5%	816.3	831.7	15.4	1.9%
40.7%	804.1	822.4	18.3	2.3%
42.0%	794.6	779.2	-15.4	-1.9%
43.2%	785.1	777.4	-7.7	-1.0%
44.4%	779.9	771.8	-8.1	-1.0%
45.7%	768.9	708.8	-60.1	-7.8%
46.9%	762.8	702.4	-60.5	-7.9%
48.1%	700.4	686.1	-14.3	-2.0%
49.4%	671.5	655.8	-15.7	-2.3%
50.6%	561.4	645.0	83.5	14.9%
51.9%	554.4	558.2	3.9	0.7%
53.1%	550.3	549.6	-0.7	-0.1%
54.3%	546.6	539.8	-6.7	-1.2%
55.6%	539.8	536.9	-2.9	-0.5%
56.8%	533.4	533.5	0.1	0.0%
58.0%	532.5	529.5	-3.0	-0.6%
59.3%	520.0	520.8	0.8	0.2%
60.5%	518.8	519.4	0.6	0.1%
61.7%	508.4	505.9	-2.6	-0.5%
63.0%	504.9	503.2	-1.7	-0.3%
64.2%	501.7	489.9	-11.8	-2.4%
65.4%	490.4	484.6	-5.8	-1.2%
66.7%	488.6	484.2	-4.4	-0.9%
67.9%	481.2	480.2	-1.0	-0.2%
69.1%	475.3	466.0	-9.3	-2.0%
70.4%	462.2	459.9	-2.3	-0.5%
71.6%	433.0	429.5	-3.5	-0.8%
72.8%	417.2	413.3	-3.9	-0.9%
74.1%	410.3	406.3	-3.9	-1.0%
75.3%	407.3	405.2	-2.1	-0.5%
76.5%	403.6	401.4	-2.3	-0.6%
77.8%	403.6	392.4	-11.2	-2.8%
79.0%	343.5	340.1	-3.5	-1.0%
80.2%	340.3	334.8	-5.5	-1.6%
81.5%	311.5	324.4	12.9	4.1%
82.7%	311.5	312.0	0.5	0.2%
84.0%	302.3	301.8	-0.5	-0.2%
85.2%	298.9	297.5	-1.4	-0.5%
86.4%	268.2	268.2	0.0	0.0%
87.7%	259.5	258.1	-1.3	-0.5%
88.9%	251.3	251.8	0.5	0.2%
90.1%	249.8	247.3	-2.5	-1.0%
91.4%	246.4	246.4	0.0	0.0%
92.6%	240.8	240.8	0.0	0.0%
93.8%	232.9	232.3	-0.6	-0.2%
95.1%	223.3	222.9	-0.5	-0.2%
96.3%	223.1	221.8	-1.4	-0.6%
97.5%	218.7	219.0	0.3	0.1%
98.8%	215.8	215.9	0.1	0.0%
100.0%	208.7	208.6	-0.1	-0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2254.3	2272.7	18.4	0.8%
1.2%	2140.0	2271.6	131.6	6.1%
2.5%	1912.9	2227.0	314.1	16.4%
3.7%	1896.1	2084.5	188.3	9.9%
4.9%	1895.8	1962.0	66.2	3.5%
6.2%	1862.1	1957.8	95.7	5.1%
7.4%	1815.5	1913.5	98.0	5.4%
8.6%	1810.9	1885.4	74.6	4.1%
9.9%	1790.5	1873.0	82.5	4.6%
11.1%	1779.6	1839.8	60.2	3.4%
12.3%	1748.2	1837.3	89.1	5.1%
13.6%	1738.2	1796.5	58.2	3.3%
14.8%	1699.5	1779.8	80.3	4.7%
16.0%	1697.7	1774.1	76.4	4.5%
17.3%	1695.5	1746.3	50.8	3.0%
18.5%	1690.2	1729.4	39.3	2.3%
19.8%	1663.2	1702.9	39.7	2.4%
21.0%	1606.1	1677.3	71.2	4.4%
22.2%	1606.1	1673.6	67.5	4.2%
23.5%	1603.2	1645.8	42.6	2.7%
24.7%	1574.0	1642.4	68.4	4.3%
25.9%	1545.6	1627.6	82.0	5.3%
27.2%	1538.6	1603.7	65.1	4.2%
28.4%	1498.4	1601.2	102.8	6.9%
29.6%	1496.4	1552.7	56.3	3.8%
30.9%	1492.1	1551.2	59.1	4.0%
32.1%	1489.5	1539.2	49.6	3.3%
33.3%	1479.8	1534.1	54.3	3.7%
34.6%	1476.8	1526.8	50.0	3.4%
35.8%	1471.0	1512.7	41.8	2.8%
37.0%	1470.2	1512.5	42.3	2.9%
38.3%	1457.9	1487.8	29.9	2.1%
39.5%	1444.6	1473.1	28.5	2.0%
40.7%	1431.3	1472.9	41.6	2.9%
42.0%	1406.8	1472.5	65.8	4.7%
43.2%	1406.0	1448.4	42.4	3.0%
44.4%	1384.7	1446.2	61.5	4.4%
45.7%	1379.8	1445.0	65.2	4.7%
46.9%	1376.5	1419.8	43.3	3.1%
48.1%	1333.0	1405.1	72.2	5.4%
49.4%	1306.4	1371.6	65.2	5.0%
50.6%	1301.6	1367.6	66.0	5.1%
51.9%	1295.2	1363.8	68.6	5.3%
53.1%	1285.5	1344.4	58.9	4.6%
54.3%	1273.5	1317.5	44.0	3.5%
55.6%	1229.7	1315.3	85.6	7.0%
56.8%	1221.3	1314.1	92.8	7.6%
58.0%	1210.2	1274.3	64.2	5.3%
59.3%	1208.5	1255.4	46.9	3.9%
60.5%	1201.5	1235.9	34.5	2.9%
61.7%	1180.9	1231.8	50.9	4.3%
63.0%	1171.3	1225.7	54.4	4.6%
64.2%	1160.4	1210.7	50.4	4.3%
65.4%	1156.4	1203.5	47.1	4.1%
66.7%	1153.8	1178.2	24.4	2.1%
67.9%	1152.0	1150.8	-1.2	-0.1%
69.1%	1151.6	1135.6	-16.0	-1.4%
70.4%	1147.6	1126.5	-21.1	-1.8%
71.6%	1146.1	1124.3	-21.8	-1.9%
72.8%	1135.8	1123.7	-12.1	-1.1%
74.1%	1133.9	1121.0	-12.9	-1.1%
75.3%	1129.8	1108.4	-21.4	-1.9%
76.5%	1129.6	1104.8	-24.8	-2.2%
77.8%	1128.3	1090.7	-37.6	-3.3%
79.0%	1124.0	1066.6	-57.4	-5.1%
80.2%	1122.3	1056.4	-65.9	-5.9%
81.5%	1111.2	1047.3	-63.8	-5.7%
82.7%	1103.5	1040.4	-63.1	-5.7%
84.0%	1065.8	1029.5	-36.3	-3.4%
85.2%	1057.6	1002.4	-55.2	-5.2%
86.4%	1026.2	1001.8	-24.4	-2.4%
87.7%	1018.3	984.0	-34.4	-3.4%
88.9%	1016.7	968.1	-48.6	-4.8%
90.1%	1002.3	963.8	-38.5	-3.8%
91.4%	985.3	937.2	-48.0	-4.9%
92.6%	955.8	895.0	-60.8	-6.4%
93.8%	887.3	736.7	-150.6	-17.0%
95.1%	706.9	679.8	-27.1	-3.8%
96.3%	555.8	650.5	94.7	17.0%
97.5%	267.1	329.7	62.6	23.4%
98.8%	215.4	210.3	-5.1	-2.4%
100.0%	198.2	197.6	-0.6	-0.3%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2819.9	2966.6	146.6	5.2%
1.2%	2680.0	2854.0	174.0	6.5%
2.5%	2648.2	2849.8	201.6	7.6%
3.7%	2641.7	2707.4	65.7	2.5%
4.9%	2602.2	2653.4	51.2	2.0%
6.2%	2596.0	2620.6	24.6	0.9%
7.4%	2536.6	2596.5	59.8	2.4%
8.6%	2503.8	2593.2	89.5	3.6%
9.9%	2493.3	2534.2	40.9	1.6%
11.1%	2481.1	2498.0	16.9	0.7%
12.3%	2441.1	2487.9	46.7	1.9%
13.6%	2419.9	2480.8	60.9	2.5%
14.8%	2378.6	2477.4	98.8	4.2%
16.0%	2375.1	2453.5	78.3	3.3%
17.3%	2373.8	2452.0	78.1	3.3%
18.5%	2358.4	2447.5	89.1	3.8%
19.8%	2343.1	2438.0	94.9	4.1%
21.0%	2342.7	2381.9	39.2	1.7%
22.2%	2340.7	2381.0	40.3	1.7%
23.5%	2312.2	2362.8	50.6	2.2%
24.7%	2304.6	2361.8	57.2	2.5%
25.9%	2296.0	2350.7	54.7	2.4%
27.2%	2288.4	2335.5	47.1	2.1%
28.4%	2273.7	2319.4	45.7	2.0%
29.6%	2271.6	2291.0	19.4	0.9%
30.9%	2266.9	2282.8	16.0	0.7%
32.1%	2248.2	2266.4	18.2	0.8%
33.3%	2226.1	2244.0	18.0	0.8%
34.6%	2128.5	2223.4	94.9	4.5%
35.8%	2111.5	2194.4	83.0	3.9%
37.0%	2106.9	2181.6	74.6	3.5%
38.3%	2084.8	2161.9	77.1	3.7%
39.5%	2050.3	2127.6	77.3	3.8%
40.7%	1993.7	2107.7	114.1	5.7%
42.0%	1988.6	2092.1	103.5	5.2%
43.2%	1961.3	2090.7	129.4	6.6%
44.4%	1860.7	2081.4	220.6	11.9%
45.7%	1832.3	2052.5	220.3	12.0%
46.9%	1831.1	1982.6	151.4	8.3%
48.1%	1821.3	1981.4	160.1	8.8%
49.4%	1803.8	1902.3	98.5	5.5%
50.6%	1773.2	1898.5	125.3	7.1%
51.9%	1772.1	1879.4	107.3	6.1%
53.1%	1671.8	1850.0	178.1	10.7%
54.3%	1071.8	1071.1	-0.7	-0.1%
55.6%	1052.8	1040.1	-12.7	-1.2%
56.8%	1038.5	1008.9	-29.6	-2.8%
58.0%	1006.6	1004.5	-2.1	-0.2%
59.3%	1002.8	1001.6	-1.1	-0.1%
60.5%	996.3	999.4	3.0	0.3%
61.7%	991.9	989.7	-2.2	-0.2%
63.0%	983.7	973.0	-10.7	-1.1%
64.2%	982.4	966.8	-15.5	-1.6%
65.4%	981.5	966.6	-14.9	-1.5%
66.7%	979.7	940.4	-39.3	-4.0%
67.9%	973.2	933.4	-39.8	-4.1%
69.1%	970.7	924.0	-46.7	-4.8%
70.4%	965.3	915.8	-49.6	-5.1%
71.6%	953.0	912.9	-40.1	-4.2%
72.8%	945.7	909.7	-36.0	-3.8%
74.1%	931.7	902.2	-29.5	-3.2%
75.3%	930.8	895.2	-35.6	-3.8%
76.5%	927.6	880.7	-46.9	-5.1%
77.8%	926.6	870.3	-56.2	-6.1%
79.0%	922.0	866.8	-55.2	-6.0%
80.2%	912.1	866.2	-46.0	-5.0%
81.5%	910.3	858.7	-51.7	-5.7%
82.7%	904.9	854.7	-50.3	-5.6%
84.0%	886.5	822.2	-64.2	-7.2%
85.2%	882.8	800.8	-82.0	-9.3%
86.4%	863.4	793.7	-69.7	-8.1%
87.7%	847.9	788.5	-59.3	-7.0%
88.9%	818.7	745.9	-72.8	-8.9%
90.1%	788.2	652.9	-135.3	-17.2%
91.4%	775.0	537.6	-237.4	-30.6%
92.6%	668.9	514.6	-154.3	-23.1%
93.8%	517.5	492.2	-25.3	-4.9%
95.1%	493.8	487.8	-6.0	-1.2%
96.3%	417.5	484.2	66.8	16.0%
97.5%	275.1	335.9	60.8	22.1%
98.8%	198.8	197.4	-1.4	-0.7%
100.0%	184.8	184.9	0.1	0.1%

Figure SQ-27-b
Old River at Rock Slough, Monthly EC
Probability of Exceedance

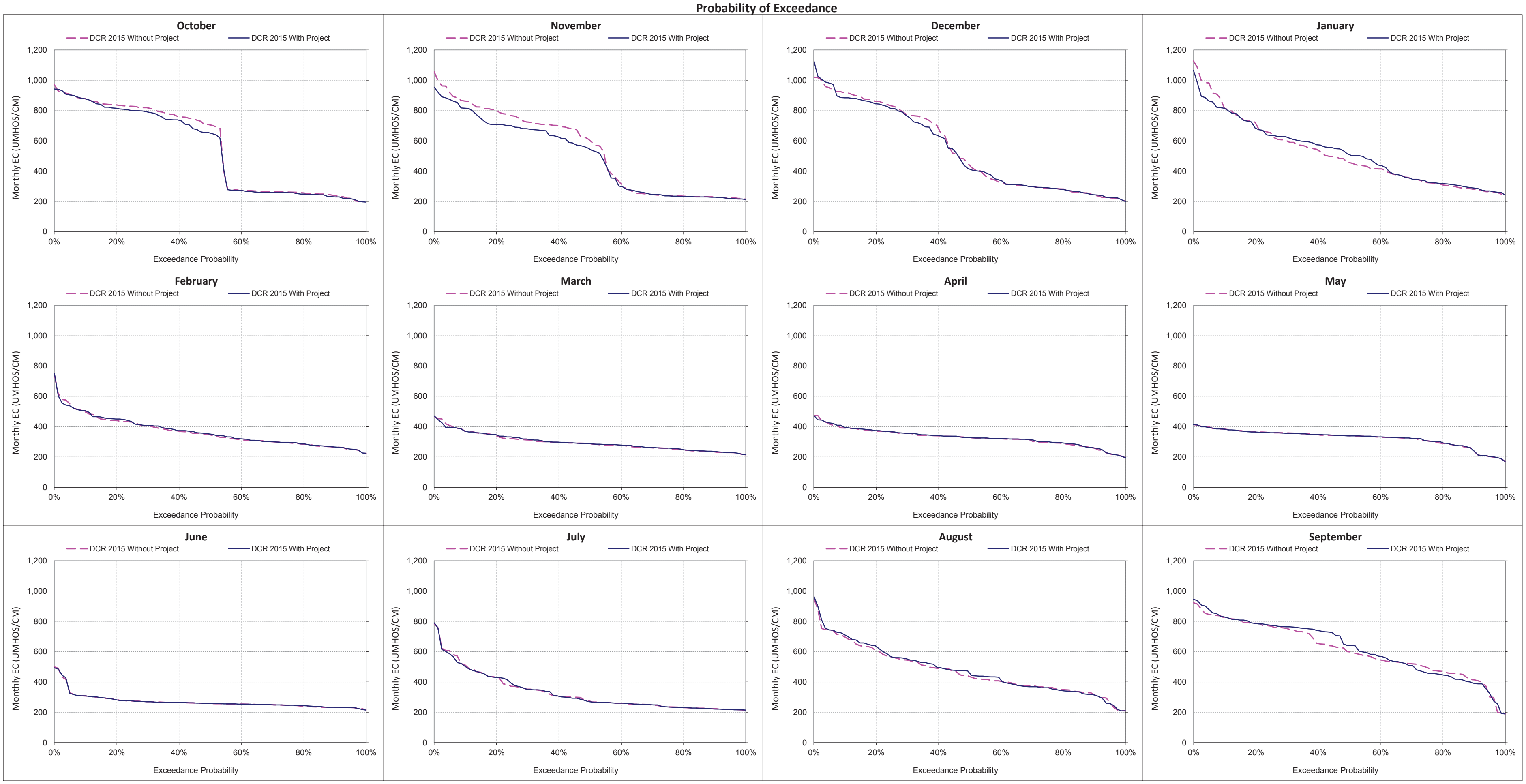


Table SQ-27-b

Old River at Rock Slough, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	970.2	942.9	-27.3	-2.8%
1.2%	929.4	940.1	10.7	1.1%
2.5%	920.8	929.9	9.1	1.0%
3.7%	914.9	908.6	-6.3	-0.7%
4.9%	907.7	903.0	-4.7	-0.5%
6.2%	894.3	900.2	5.9	0.7%
7.4%	885.5	890.0	4.5	0.5%
8.6%	882.1	881.4	-0.7	-0.1%
9.9%	879.5	877.7	-1.8	-0.2%
11.1%	870.3	869.9	-0.4	0.0%
12.3%	859.8	859.1	-0.7	-0.1%
13.6%	858.8	845.6	-13.2	-1.5%
14.8%	845.6	842.1	-3.5	-0.4%
16.0%	843.6	822.8	-20.8	-2.5%
17.3%	841.4	822.2	-19.2	-2.3%
18.5%	839.7	818.2	-21.5	-2.6%
19.8%	838.0	815.5	-22.5	-2.7%
21.0%	834.2	810.8	-23.4	-2.8%
22.2%	832.0	808.5	-23.5	-2.8%
23.5%	829.5	805.4	-24.0	-2.9%
24.7%	829.1	801.0	-28.1	-3.4%
25.9%	827.8	799.0	-28.8	-3.5%
27.2%	820.9	798.4	-22.5	-2.7%
28.4%	819.3	797.7	-21.6	-2.6%
29.6%	819.1	791.8	-27.3	-3.3%
30.9%	814.3	786.5	-27.8	-3.4%
32.1%	805.9	781.6	-24.4	-3.0%
33.3%	794.0	769.5	-24.5	-3.1%
34.6%	791.0	757.7	-33.3	-4.2%
35.8%	782.0	740.2	-41.8	-5.3%
37.0%	777.2	740.1	-37.1	-4.8%
38.3%	773.9	739.3	-34.5	-4.5%
39.5%	761.9	738.1	-23.9	-3.1%
40.7%	758.0	732.5	-25.5	-3.4%
42.0%	756.9	710.2	-46.6	-6.2%
43.2%	749.8	705.5	-44.3	-5.9%
44.4%	749.4	680.1	-69.3	-9.2%
45.7%	737.2	675.8	-61.4	-8.3%
46.9%	730.0	660.2	-69.8	-9.6%
48.1%	708.1	655.4	-52.7	-7.4%
49.4%	707.3	654.8	-52.5	-7.4%
50.6%	702.7	648.9	-53.7	-7.6%
51.9%	692.9	639.6	-53.3	-7.7%
53.1%	688.9	618.4	-70.5	-10.2%
54.3%	401.6	407.3	5.7	1.4%
55.6%	282.0	278.6	-3.5	-1.2%
56.8%	280.1	275.6	-4.5	-1.6%
58.0%	279.8	274.9	-4.8	-1.7%
59.3%	273.7	272.8	-0.9	-0.3%
60.5%	273.6	270.8	-2.8	-1.0%
61.7%	271.5	266.3	-5.2	-1.9%
63.0%	271.4	266.1	-5.3	-1.9%
64.2%	269.8	262.8	-7.0	-2.6%
65.4%	269.0	261.8	-7.1	-2.6%
66.7%	268.5	261.4	-7.1	-2.7%
67.9%	268.2	261.0	-7.2	-2.7%
69.1%	266.5	260.9	-5.7	-2.1%
70.4%	266.0	260.9	-5.2	-1.9%
71.6%	264.9	260.4	-4.5	-1.7%
72.8%	264.1	260.1	-4.0	-1.5%
74.1%	262.9	259.4	-3.6	-1.4%
75.3%	262.5	258.0	-4.5	-1.7%
76.5%	261.5	256.9	-4.6	-1.7%
77.8%	261.1	252.0	-9.0	-3.5%
79.0%	258.2	249.2	-9.0	-3.5%
80.2%	256.0	248.7	-7.3	-2.9%
81.5%	252.2	246.3	-5.9	-2.4%
82.7%	252.0	245.6	-6.4	-2.6%
84.0%	250.5	245.5	-5.1	-2.0%
85.2%	249.5	244.8	-4.7	-1.9%
86.4%	249.2	243.6	-5.6	-2.3%
87.7%	247.5	233.4	-14.1	-5.7%
88.9%	243.0	232.1	-10.8	-4.5%
90.1%	239.0	231.1	-7.9	-3.3%
91.4%	234.1	230.1	-3.9	-1.7%
92.6%	231.6	221.1	-10.5	-4.5%
93.8%	222.3	220.5	-1.7	-0.8%
95.1%	221.5	218.0	-3.5	-1.6%
96.3%	206.4	212.5	6.1	3.0%
97.5%	199.7	201.4	1.7	0.9%
98.8%	199.3	198.6	-0.7	-0.4%
100.0%	196.7	195.4	-1.2	-0.6%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1055.9	955.1	-100.9	-9.6%
1.2%	998.5	921.3	-77.2	-7.7%
2.5%	962.8	890.8	-72.0	-7.5%
3.7%	962.2	884.6	-77.6	-8.1%
4.9%	919.5	873.6	-46.0	-5.0%
6.2%	892.0	861.9	-30.1	-3.4%
7.4%	885.5	853.7	-31.8	-3.6%
8.6%	867.1	816.9	-50.1	-5.8%
9.9%	863.2	815.2	-48.0	-5.6%
11.1%	861.7	813.7	-48.1	-5.6%
12.3%	841.6	796.3	-45.3	-5.4%
13.6%	824.8	772.6	-52.2	-6.3%
14.8%	824.0	750.9	-73.1	-8.9%
16.0%	814.4	730.0	-84.4	-10.4%
17.3%	813.7	714.0	-99.7	-12.3%
18.5%	807.9	708.6	-99.3	-12.3%
19.8%	806.9	707.7	-99.3	-12.3%
21.0%	787.5	707.3	-80.2	-10.2%
22.2%	779.3	705.9	-73.3	-9.4%
23.5%	776.7	701.7	-74.9	-9.6%
24.7%	766.4	701.5	-64.9	-8.5%
25.9%	763.2	691.0	-72.2	-9.5%
27.2%	751.2	689.9	-61.3	-8.2%
28.4%	732.8	680.8	-52.0	-7.1%
29.6%	725.0	680.6	-44.4	-6.1%
30.9%	722.8	676.4	-46.5	-6.4%
32.1%	714.4	673.1	-41.3	-5.8%
33.3%	712.3	672.4	-39.9	-5.6%
34.6%	709.7	669.5	-40.2	-5.7%
35.8%	708.8	667.7	-41.1	-5.8%
37.0%	707.1	633.9	-73.1	-10.3%
38.3%	703.0	633.8	-69.2	-9.8%
39.5%	702.2	629.2	-72.9	-10.4%
40.7%	694.2	616.7	-77.5	-11.2%
42.0%	691.6	616.3	-75.3	-10.9%
43.2%	684.0	590.3	-93.8	-13.7%
44.4%	679.4	586.1	-93.2	-13.7%
45.7%	675.9	572.8	-103.1	-15.3%
46.9%	629.9	569.2	-60.7	-9.6%
48.1%	626.5	562.5	-64.0	-10.2%
49.4%	612.2	552.3	-59.9	-9.8%
50.6%	591.4	537.6	-53.8	-9.1%
51.9%	570.7	530.1	-40.6	-7.1%
53.1%	566.7	518.0	-48.7	-8.6%
54.3%	531.5	473.4	-58.1	-10.9%
55.6%	410.0	419.2	9.2	2.2%
56.8%	386.8	355.3	-31.5	-8.1%
58.0%	363.4	353.3	-10.1	-2.8%
59.3%	331.6	303.0	-28.6	-8.6%
60.5%	305.5	296.5	-9.0	-2.9%
61.7%	281.3	280.8	-0.5	-0.2%
63.0%	276.2	276.1	-0.2	-0.1%
64.2%	255.8	271.7	15.9	6.2%
65.4%	253.9	264.6	10.7	4.2%
66.7%	252.7	262.0	9.3	3.7%
67.9%	250.1	255.3	5.2	2.1%
69.1%	247.2	248.4	1.3	0.5%
70.4%	245.1	246.4	1.3	0.5%
71.6%	242.8	245.2	2.5	1.0%
72.8%	242.0	244.6	2.6	1.1%
74.1%	241.0	237.0	-4.0	-1.7%
75.3%	240.0	236.5	-3.5	-1.5%
76.5%	238.7	235.3	-3.3	-1.4%
77.8%	238.1	235.3	-2.8	-1.2%
79.0%	236.9	233.9	-3.0	-1.3%
80.2%	235.2	233.2	-2.0	-0.8%
81.5%	233.8	232.9	-0.9	-0.4%
82.7%	233.3	232.5	-0.8	-0.3%
84.0%	232.5	230.9	-1.6	-0.7%
85.2%	231.7	230.5	-1.2	-0.5%
86.4%	231.7	230.2	-1.4	-0.6%
87.7%	231.6	229.5	-2.1	-0.9%
88.9%	230.8	229.4	-1.5	-0.6%
90.1%	229.6	229.3	-0.3	-0.1%
91.4%	226.8	226.2	-0.6	-0.3%
92.6%	226.4	225.1	-1.3	-0.6%
93.8%	224.9	221.8	-3.1	-1.4%
95.1%	224.7	220.9	-3.9	-1.7%
96.3%	224.5	218.2	-6.3	-2.8%
97.5%	220.8	217.4	-3.4	-1.5%
98.8%	220.7	216.0	-4.7	-2.1%
100.0%	215.0	212.4	-2.7	-1.2%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1021.4	1128.6	107.3	10.5%
1.2%	1017.0	1029.0	12.0	1.2%
2.5%	1003.4	1006.5	3.0	0.3%
3.7%	958.8	988.2	29.4	3.1%
4.9%	951.9	982.6	30.7	3.2%
6.2%	934.6	974.3	39.7	4.2%
7.4%	925.2	896.9	-28.2	-3.1%
8.6%	923.9	885.4	-38.5	-4.2%
9.9%	918.0	884.5	-33.4	-3.6%
11.1%	916.6	884.3	-32.3	-3.5%
12.3%	905.5	880.2	-25.3	-2.8%
13.6%	897.8	879.5	-18.3	-2.0%
14.8%	894.2	872.4	-21.8	-2.4%
16.0%	876.4	865.6	-10.8	-1.2%
17.3%	875.1	861.5	-13.6	-1.6%
18.5%	870.8	854.9	-15.9	-1.8%
19.8%	861.5	845.3	-16.3	-1.9%
21.0%	861.0	843.3	-17.7	-2.1%
22.2%	850.6	834.5	-16.1	-1.9%
23.5%	840.6	828.0	-12.6	-1.5%
24.7%	832.1	814.4	-17.7	-2.1%
25.9%	826.3	813.6	-12.6	-1.5%
27.2%	811.4	797.3	-14.1	-1.7%
28.4%	792.8	790.3	-2.6	-0.3%
29.6%	776.3	767.2	-9.1	-1.2%
30.9%	769.9	750.4	-19.5	-2.5%
32.1%	765.8	724.8	-41.1	-5.4%
33.3%	764.2	720.8	-43.3	-5.7%
34.6%	756.4	710.1	-46.4	-6.1%
35.8%	747.8	692.7	-55.1	-7.4%
37.0%	735.3	690.4	-44.8	-6.1%
38.3%	712.6	644.3	-68.3	-9.6%
39.5%	702.3	637.1	-65.3	-9.3%
40.7%	651.7	626.3	-25.4	-3.9%
42.0%	636.7	615.3	-21.4	-3.4%
43.2%	570.0	549.4	-20.6	-3.6%
44.4%	520.1	548.6	28.5	5.5%
45.7%	513.7	519.6	5.9	1.1%
46.9%	485.7	483.6	-2.1	-0.4%
48.1%	481.8	441.6	-40.2	-8.4%
49.4%	452.4	418.9	-33.5	-7.4%
50.6%	423.5	408.1	-15.4	-3.6%
51.9%	408.4	403.6	-4.8	-1.2%
53.1%	407.3	400.4	-6.9	-1.7%
54.3%	383.3	397.7	14.5	3.8%
55.6%	359.6	385.5	25.9	7.2%
56.8%	349.8	376.2	26.3	7.5%
58.0%	342.7	350.8	8.1	2.4%
59.3%	329.2	343.1	13.8	4.2%
60.5%	321.2	335.2	13.9	4.3%
61.7%	315.4	312.4	-3.0	-0.9%
63.0%	313.1	311.8	-1.3	-0.4%
64.2%	312.5	311.4	-1.1	-0.4%
65.4%	305.2	310.1	4.9	1.6%
66.7%	303.8	309.7	5.9	1.9%
67.9%	303.1	305.1	2.1	0.7%
69.1%	298.4	299.4	1.0	0.3%
70.4%	298.2	299.4	1.1	0.4%
71.6%	294.1	294.5	0.4	0.1%
72.8%	290.9	294.0	3.1	1.1%
74.1%	288.3	292.5	4.2	1.5%
75.3%	288.0	290.3	2.2	0.8%
76.5%	285.8	287.5	1.7	0.6%
77.8%	284.7	285.1	0.4	0.1%
79.0%	283.3	281.8	-1.5	-0.5%
80.2%	282.3	277.7	-4.6	-1.6%
81.5%	274.3	273.7	-0.6	-0.2%
82.7%	263.4	269.5	6.1	2.3%
84.0%	262.1	266.6	4.5	1.7%
85.2%	261.8	265.0	3.2	1.2%
86.4%	256.6	257.4	0.8	0.3%
87.7%	256.4	253.9	-2.5	-1.0%
88.9%	249.6	244.9	-4.7	-1.9%
90.1%	239.3	244.3	5.0	2.1%
91.4%	236.2	242.0	5.9	2.5%
92.6%	226.3	238.4	12.2	5.4%
93.8%	225.1	226.3	1.2	0.5%
95.1%	223.9	226.0	2.2	1.0%
96.3%	222.6	224.5	1.9	0.9%
97.5%	220.9	223.5	2.6	1.2%
98.8%	211.5	211.3	-0.2	-0.1%
100.0%	201.9	199.9	-2.0	-1.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1127.1	1065.1	-61.9	-5.5%
1.2%	1084.8	984.1	-100.7	-9.3%
2.5%	998.1	894.6	-103.4	-10.4%
3.7%	984.1	886.4	-97.7	-9.9%
4.9%	982.8	863.4	-119.4	-12.1%
6.2%	915.2	856.5	-58.7	-6.4%
7.4%	909.1	823.3	-85.8	-9.4%
8.6%	879.3	819.4	-59.8	-6.8%
9.9%	815.9	816.3	0.4	0.0%
11.1%	807.1	798.1	-8.9	-1.1%
12.3%	795.0	782.8	-12.2	-1.5%
13.6%	772.4	782.4	9.9	1.3%
14.8%	766.7	757.1	-9.6	-1.3%
16.0%	736.9	734.8	-2.1	-0.3%
17.3%	734.5	729.5	-5.0	-0.7%
18.5%	732.2	725.5	-6.7	-0.9%
19.8%	722.8	685.4	-37.3	-5.2%
21.0%	675.9	674.3	-1.6	-0.2%
22.2%	666.0	670.2	4.2	0.6%
23.5%	660.3	639.0	-21.2	-3.2%
24.7%	654.3	636.0	-18.3	-2.8%
25.9%	620.9	634.3	13.3	2.1%
27.2%	609.2	629.8	20.7	3.4%
28.4%	607.5	628.3	20.8	3.4%
29.6%	603.4	627.0	23.6	3.9%
30.9%	590.1	617.8	27.6	4.7%
32.1%	590.0	609.5	19.4	3.3%
33.3%	573.4	602.8	29.4	5.1%
34.6%	571.5	598.7	27.2	4.8%
35.8%	565.3	597.4	32.1	5.7%
37.0%	553.4	593.2	39.8	7.2%
38.3%	549.1	586.4	37.3	6.8%
39.5%	544.5	574.1	29.6	5.4%
40.7%	527.9	572.1	44.2	8.4%
42.0%	506.2	561.6	55.4	10.9%
43.2%	500.0	557.5	57.5	11.5%
44.4%	496.7	555.8	59.1	11.9%
45.7%	496.1	549.0	52.9	10.7%
46.9%	483.4	546.9	63.5	13.1%
48.1%	483.2	535.3	52.1	10.8%
49.4%	458.5	513.9	55.4	12.1%
50.6%	454.0	505.0	51.0	11.2%
51.9%	445.2	504.6	59.5	13.4%
53.1%	437.0	502.7	65.7	15.0%
54.3%	436.7	497.8	61.1	14.0%
55.6%	432.6	481.8	49.2	11.4%
56.8%	418.8	478.4	59.6	14.2%
58.0%	418.5	458.5	40.0	9.6%
59.3%	415.5	440.9	25.4	6.1%
60.5%	415.1	436.5	21.4	5.2%
61.7%	397.1	422.2	25.1	6.3%
63.0%	390.9	395.3	4.5	1.1%
64.2%	378.9	383.2	4.4	1.2%
65.4%	375.5	376.8	1.4	0.4%
66.7%	371.6	373.0	1.4	0.4%
67.9%	361.2	359.2	-2.0	-0.5%
69.1%	358.8	354.6	-4.2	-1.2%
70.4%	346.6	347.4	0.8	0.2%
71.6%	346.5	347.0	0.5	0.2%
72.8%	338.9	341.3	2.5	0.7%
74.1%	325.5	338.5	13.0	4.0%
75.3%	324.4	325.4	1.0	0.3%
76.5%	322.4	325.0	2.7	0.8%
77.8%	319.4	322.6	3.2	1.0%
79.0%	316.1	319.0	2.9	0.9%
80.2%	307.6	317.4	9.8	3.2%
81.5%	306.1	316.5	10.4	3.4%
82.7%	303.1	313.0	9.9	3.3%
84.0%	298.8	309.0	10.2	3.4%
85.2%	291.8	306.2	14.4	4.9%
86.4%	288.6	300.4	11.9	4.1%
87.7%	286.3	295.7	9.4	3.3%
88.9%	284.4	291.7	7.3	2.6%
90.1%	280.7	289.0	8.3	3.0%
91.4%	273.1	285.5	12.4	4.5%
92.6%	272.5	274.1	1.6	0.6%
93.8%	265.0	269.9	4.9	1.8%
95.1%	265.0	269.6	4.6	1.7%
96.3%	261.4	264.4	3.0	1.2%
97.5%	258.9	261.4	2.5	1.0%
98.8%	249.4	259.1	9.7	3.9%
100.0%	241.3	241.9	0.5	0.2%

Table SQ-27-b
Old River at Rock Slough, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	743.1	751.7	8.6	1.2%
1.2%	618.2	603.4	-14.8	-2.4%
2.5%	579.3	554.5	-24.8	-4.3%
3.7%	575.8	543.4	-32.4	-5.6%
4.9%	550.9	537.3	-13.6	-2.5%
6.2%	519.7	522.5	2.8	0.5%
7.4%	514.4	512.4	-2.0	-0.4%
8.6%	514.3	507.2	-7.1	-1.4%
9.9%	498.0	505.1	7.2	1.4%
11.1%	483.4	494.6	11.2	2.3%
12.3%	479.9	466.5	-13.4	-2.8%
13.6%	462.4	465.5	3.1	0.7%
14.8%	450.8	463.8	13.0	2.9%
16.0%	447.6	456.4	8.8	2.0%
17.3%	442.2	453.8	11.6	2.6%
18.5%	441.2	451.8	10.6	2.4%
19.8%	440.9	450.8	10.0	2.3%
21.0%	435.7	450.4	14.7	3.4%
22.2%	433.6	446.7	13.1	3.0%
23.5%	432.8	441.7	8.9	2.0%
24.7%	430.9	433.2	2.3	0.5%
25.9%	425.6	415.9	-9.6	-2.3%
27.2%	413.3	415.1	1.8	0.4%
28.4%	405.2	409.3	4.1	1.0%
29.6%	403.7	408.1	4.5	1.1%
30.9%	403.5	407.9	4.4	1.1%
32.1%	395.5	404.3	8.8	2.2%
33.3%	390.4	403.8	13.4	3.4%
34.6%	386.5	394.1	7.6	2.0%
35.8%	382.3	388.2	5.9	1.5%
37.0%	374.1	387.1	13.0	3.5%
38.3%	373.1	381.9	8.8	2.4%
39.5%	372.0	374.1	2.2	0.6%
40.7%	367.8	373.9	6.1	1.7%
42.0%	366.2	373.3	7.1	1.9%
43.2%	363.8	369.5	5.7	1.6%
44.4%	356.4	368.1	11.8	3.3%
45.7%	356.1	359.9	3.9	1.1%
46.9%	354.4	357.4	3.0	0.9%
48.1%	351.0	357.0	5.9	1.7%
49.4%	348.6	352.5	3.9	1.1%
50.6%	342.8	348.9	6.1	1.8%
51.9%	336.4	341.6	5.2	1.5%
53.1%	330.3	340.8	10.5	3.2%
54.3%	329.6	339.1	9.4	2.9%
55.6%	324.1	333.0	8.9	2.7%
56.8%	321.0	332.2	11.2	3.5%
58.0%	318.7	320.3	1.6	0.5%
59.3%	314.7	319.4	4.7	1.5%
60.5%	311.7	318.3	6.6	2.1%
61.7%	309.7	317.6	8.0	2.6%
63.0%	307.8	310.8	2.9	1.0%
64.2%	307.8	309.8	2.0	0.6%
65.4%	306.7	308.4	1.7	0.6%
66.7%	306.2	303.7	-2.5	-0.8%
67.9%	301.2	303.5	2.4	0.8%
69.1%	300.9	301.0	0.1	0.0%
70.4%	299.6	299.8	0.2	0.1%
71.6%	298.3	298.7	0.4	0.1%
72.8%	296.8	296.8	0.0	0.0%
74.1%	293.7	296.8	3.1	1.1%
75.3%	292.7	296.8	4.1	1.4%
76.5%	290.7	294.3	3.6	1.2%
77.8%	289.0	293.6	4.5	1.6%
79.0%	285.7	286.7	1.0	0.3%
80.2%	283.7	285.2	1.4	0.5%
81.5%	281.8	281.1	-0.7	-0.3%
82.7%	278.2	276.4	-1.8	-0.7%
84.0%	272.6	275.6	3.0	1.1%
85.2%	271.4	274.7	3.4	1.2%
86.4%	271.3	272.9	1.6	0.6%
87.7%	268.3	270.6	2.3	0.8%
88.9%	266.8	267.2	0.4	0.2%
90.1%	265.0	265.1	0.1	0.0%
91.4%	264.0	263.8	-0.2	-0.1%
92.6%	262.5	262.4	-0.1	0.0%
93.8%	251.1	256.0	4.9	1.9%
95.1%	250.4	251.2	0.8	0.3%
96.3%	248.6	250.2	1.5	0.6%
97.5%	244.8	245.3	0.5	0.2%
98.8%	224.1	225.5	1.4	0.6%
100.0%	223.6	223.6	0.0	0.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	467.5	471.4	3.9	0.8%
1.2%	452.9	447.5	-5.5	-1.2%
2.5%	451.2	426.8	-24.3	-5.4%
3.7%	418.8	394.9	-23.9	-5.7%
4.9%	407.3	394.9	-12.5	-3.1%
6.2%	398.6	394.8	-3.8	-0.9%
7.4%	388.9	391.1	2.2	0.6%
8.6%	386.5	385.2	-1.3	-0.3%
9.9%	370.2	370.1	-0.1	0.0%
11.1%	370.0	364.7	-5.3	-1.4%
12.3%	367.4	364.2	-3.1	-0.9%
13.6%	358.9	358.9	-0.1	0.0%
14.8%	356.5	357.4	0.9	0.2%
16.0%	353.1	356.1	3.0	0.8%
17.3%	353.0	349.0	-3.9	-1.1%
18.5%	348.8	347.2	-1.6	-0.5%
19.8%	341.8	347.1	5.4	1.6%
21.0%	330.8	338.1	7.3	2.2%
22.2%	323.1	336.8	13.7	4.3%
23.5%	322.5	332.2	9.7	3.0%
24.7%	321.6	332.1	10.5	3.3%
25.9%	318.6	327.5	8.9	2.8%
27.2%	315.3	327.1	11.8	3.7%
28.4%	314.6	319.2	4.6	1.5%
29.6%	312.5	318.5	6.0	1.9%
30.9%	311.8	315.3	3.5	1.1%
32.1%	304.2	311.9	7.7	2.5%
33.3%	301.7	310.8	9.1	3.0%
34.6%	300.7	305.7	5.0	1.7%
35.8%	300.0	300.1	0.2	0.1%
37.0%	297.1	299.8	2.7	0.9%
38.3%	297.0	298.1	1.2	0.4%
39.5%	296.4	297.6	1.2	0.4%
40.7%	296.0	296.9	0.9	0.3%
42.0%	294.8	296.1	1.3	0.4%
43.2%	292.4	293.0	0.6	0.2%
44.4%	292.0	292.4	0.4	0.1%
45.7%	291.1	292.0	0.9	0.3%
46.9%	290.7	289.8	-0.9	-0.3%
48.1%	290.0	289.7	-0.2	-0.1%
49.4%	285.9	288.9	3.0	1.1%
50.6%	285.9	285.6	-0.2	-0.1%
51.9%	283.4	284.5	1.1	0.4%
53.1%	280.4	284.2	3.8	1.3%
54.3%	279.5	283.4	3.9	1.4%
55.6%	278.4	283.2	4.7	1.7%
56.8%	277.5	282.4	4.9	1.8%
58.0%	276.4	280.0	3.6	1.3%
59.3%	276.4	278.4	2.1	0.7%
60.5%	275.7	278.0	2.3	0.8%
61.7%	272.7	277.8	5.1	1.9%
63.0%	268.3	276.3	8.0	3.0%
64.2%	266.1	270.3	4.2	1.6%
65.4%	263.8	268.8	5.1	1.9%
66.7%	262.4	267.9	5.5	2.1%
67.9%	261.8	263.5	1.7	0.7%
69.1%	261.0	263.3	2.3	0.9%
70.4%	259.8	262.2	2.4	0.9%
71.6%	259.6	259.9	0.3	0.1%
72.8%	258.7	259.3	0.5	0.2%
74.1%	258.0	258.2	0.2	0.1%
75.3%	254.4	258.1	3.7	1.5%
76.5%	252.8	257.4	4.6	1.8%
77.8%	251.6	254.4	2.8	1.1%
79.0%	251.3	251.4	0.1	0.0%
80.2%	245.3	246.4	1.1	0.4%
81.5%	242.9	245.4	2.5	1.0%
82.7%	240.1	243.0	2.8	1.2%
84.0%	239.6	241.4	1.7	0.7%
85.2%	239.2	240.0	0.8	0.3%
86.4%	237.7	239.7	2.0	0.8%
87.7%	237.1	238.8	1.7	0.7%
88.9%	236.6	237.2	0.6	0.3%
90.1%	233.3	236.6	3.3	1.4%
91.4%	229.5	233.5	4.0	1.8%
92.6%	229.3	230.9	1.6	0.7%
93.8%	228.5	230.2	1.8	0.8%
95.1%	228.4	228.8	0.4	0.2%
96.3%	227.7	227.9	0.2	0.1%
97.5%	224.6	224.4	-0.2	-0.1%
98.8%	216.7	216.8	0.1	0.0%
100.0%	214.3	216.4	2.1	1.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	474.4	474.9	0.4	0.1%
1.2%	473.8	444.3	-29.5	-6.2%
2.5%	441.0	443.4	2.4	0.6%
3.7%	430.7	430.8	0.1	0.0%
4.9%	418.6	425.3	6.7	1.6%
6.2%	407.8	420.4	12.5	3.1%
7.4%	407.1	408.8	1.7	0.4%
8.6%	391.9	408.6	16.8	4.3%
9.9%	391.3	393.6	2.3	0.6%
11.1%	390.0	392.3	2.3	0.6%
12.3%	388.2	389.2	0.9	0.2%
13.6%	386.3	387.6	1.3	0.3%
14.8%	380.9	385.6	4.7	1.2%
16.0%	379.4	382.7	3.3	0.9%
17.3%	377.0	380.8	3.8	1.0%
18.5%	371.9	378.4	6.5	1.7%
19.8%	369.8	374.1	4.3	1.2%
21.0%	368.5	373.5	5.0	1.4%
22.2%	368.1	369.7	1.6	0.4%
23.5%	367.1	368.0	0.9	0.2%
24.7%	365.9	366.9	1.0	0.3%
25.9%	363.7	364.4	0.7	0.2%
27.2%	357.0	359.0	2.0	0.5%
28.4%	357.0	357.3	0.4	0.1%
29.6%	355.5	356.3	0.8	0.2%
30.9%	355.4	355.3	-0.1	0.0%
32.1%	351.5	354.0	2.5	0.7%
33.3%	344.4	350.3	5.9	1.7%
34.6%	343.6	346.3	2.7	0.8%
35.8%	342.3	346.0	3.7	1.1%
37.0%	342.1	344.0	1.8	0.5%
38.3%	340.1	342.2	2.1	0.6%
39.5%	340.0	341.7	1.7	0.5%
40.7%	339.0	338.9	-0.1	0.0%
42.0%	337.1	338.0	0.9	0.3%
43.2%	336.5	337.7	1.2	0.3%
44.4%	335.9	336.6	0.7	0.2%
45.7%	335.2	336.5	1.4	0.4%
46.9%	332.5	332.9	0.4	0.1%
48.1%	331.3	329.5	-1.8	-0.6%
49.4%	326.3	328.1	1.8	0.5%
50.6%	326.1	326.2	0.1	0.0%
51.9%	325.4	326.0	0.7	0.2%
53.1%	324.8	325.5	0.7	0.2%
54.3%	322.6	325.2	2.6	0.8%
55.6%	322.2	325.0	2.8	0.9%
56.8%	321.9	322.4	0.6	0.2%
58.0%	321.5	322.4	0.9	0.3%
59.3%	320.2	322.3	2.1	0.7%
60.5%	319.7	321.8	2.1	0.7%
61.7%	318.2	320.3	2.1	0.6%
63.0%	318.1	318.5	0.4	0.1%
64.2%	317.5	318.3	0.8	0.2%
65.4%	317.2	318.0	0.8	0.2%
66.7%	316.3	317.6	1.3	0.4%
67.9%	315.6	316.1	0.5	0.1%
69.1%	314.1	314.0	-0.2	-0.1%
70.4%	301.3	310.8	9.5	3.1%
71.6%	298.2	303.2	5.0	1.7%
72.8%	296.1	302.2	6.1	2.1%
74.1%	295.9	301.3	5.4	1.8%
75.3%	294.8	298.9	4.2	1.4%
76.5%	293.7	295.6	1.9	0.6%
77.8%	291.9	295.6	3.7	1.3%
79.0%	291.2	294.8	3.6	1.2%
80.2%	286.3	291.2	4.9	1.7%
81.5%	284.3	288.6	4.3	1.5%
82.7%	279.8	288.1	8.3	3.0%
84.0%	278.5	283.5	5.0	1.8%
85.2%	273.2	278.6	5.4	2.0%
86.4%	270.8	270.9	0.1	0.0%
87.7%	269.6	264.3	-5.3	-2.0%
88.9%	261.2	263.9	2.6	1.0%
90.1%	258.1	258.4	0.3	0.1%
91.4%	246.1	257.7	11.6	4.7%
92.6%	245.6	246.0	0.5	0.2%
93.8%	227.1	227.6	0.5	0.2%
95.1%	219.3	220.1	0.8	0.4%
96.3%	215.8	215.9	0.1	0.0%
97.5%	212.0	212.4	0.4	0.2%
98.8%	204.9	203.7	-1.2	-0.6%
100.0%	194.7	194.9	0.2	0.1%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	413.6	414.0	0.4	0.1%
1.2%	409.2	411.4	2.2	0.5%
2.5%	401.9	398.8	-3.1	-0.8%
3.7%	400.6	398.8	-1.8	-0.5%
4.9%	398.8	394.2	-4.6	-1.1%
6.2%	387.5	390.5	3.0	0.8%
7.4%	387.1	385.7	-1.4	-0.4%
8.6%	384.6	385.7	1.0	0.3%
9.9%	384.6	384.0	-0.6	-0.2%
11.1%	380.5	379.2	-1.3	-0.3%
12.3%	376.1	377.8	1.7	0.5%
13.6%	373.8	377.5	3.8	1.0%
14.8%	373.3	372.1	-1.2	-0.3%
16.0%	371.7	369.4	-2.3	-0.6%
17.3%	369.7	366.4	-3.3	-0.9%
18.5%	369.3	365.4	-4.0	-1.1%
19.8%	366.6	364.4	-2.2	-0.6%
21.0%	364.4	363.7	-0.7	-0.2%
22.2%	364.2	363.7	-0.5	-0.1%
23.5%	362.8	362.1	-0.7	-0.2%
24.7%	360.2	360.2	0.1	0.0%
25.9%	359.2	359.7	0.5	0.1%
27.2%	359.0	359.2	0.2	0.1%
28.4%	359.0	358.4	-0.6	-0.2%
29.6%	358.9	356.6	-2.4	-0.7%
30.9%	357.9	356.3	-1.6	-0.4%
32.1%	357.1	354.9	-2.3	-0.6%
33.3%	356.1	354.6	-1.4	-0.4%
34.6%	353.6	352.2	-1.3	-0.4%
35.8%	352.9	352.2	-0.7	-0.2%
37.0%	352.6	350.0	-2.6	-0.7%
38.3%	348.2	349.4	1.2	0.4%
39.5%	347.9	348.0	0.1	0.0%
40.7%	344.2	347.9	3.7	1.1%
42.0%	344.1	346.7	2.5	0.7%
43.2%	343.1	346.2	3.1	0.9%
44.4%	342.3	344.4	2.1	0.6%
45.7%	342.2	342.5	0.3	0.1%
46.9%	341.8	341.5	-0.2	-0.1%
48.1%	341.5	340.5	-1.0	-0.3%
49.4%	340.9	339.7	-1.2	-0.3%
50.6%	339.2	339.3	0.1	0.0%
51.9%	338.8	339.1	0.3	0.1%
53.1%	337.1	338.9	1.7	0.5%
54.3%	337.0	338.2	1.2	0.4%
55.6%	336.7	337.0	0.3	0.1%
56.8%	333.7	336.8	3.1	0.9%
58.0%	333.4	333.8	0.4	0.1%
59.3%	331.1	331.6	0.5	0.2%
60.5%	330.6	331.5	0.9	0.3%
61.7%	329.9	331.3	1.4	0.4%
63.0%	329.8	329.9	0.0	0.0%
64.2%	328.5	329.4	0.9	0.3%
65.4%	327.6	327.6	0.0	0.0%
66.7%	325.6	327.5	1.9	0.6%
67.9%	325.6	325.4	-0.2	-0.1%
69.1%	322.2	325.4	3.2	1.0%
70.4%	321.0	322.8	1.8	0.6%
71.6%	319.5	321.8	2.3	0.7%
72.8%	308.6	321.1	12.5	4.1%
74.1%	308.5	308.6	0.1	0.0%
75.3%	305.0	305.5	0.5	0.2%
76.5%	301.9	303.8	1.9	0.6%
77.8%	294.3	302.0	7.7	2.6%
79.0%	292.2	300.6	8.3	2.9%
80.2%	288.0	291.0	3.0	1.0%
81.5%	283.2	289.5	6.3	2.2%
82.7%	281.8	282.4	0.6	0.2%
84.0%	276.9	276.9	0.1	0.0%
85.2%	274.3	273.9	-0.4	-0.1%
86.4%	268.2	273.4	5.2	1.9%
87.7%	262.6	267.3	4.7	1.8%
88.9%	260.2	260.7	0.5	0.2%
90.1%	235.2	236.1	0.9	0.4%
91.4%	211.7	212.0	0.2	0.1%
92.6%	209.2	209.6	0.4	0.2%
93.8%	208.5	209.3	0.7	0.4%
95.1%	202.5	202.6	0.1	0.1%
96.3%	199.2	199.9	0.7	0.4%
97.5%	195.2	195.7	0.5	0.3%
98.8%	188.2	188.5	0.3	0.2%
100.0%	169.9	170.3	0.4	0.2%

Table SQ-27-b

Old River at Rock Slough, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	499.9	493.1	-6.7	-1.3%
1.2%	490.0	484.6	-5.4	-1.1%
2.5%	432.1	444.3	12.2	2.8%
3.7%	418.7	428.4	9.6	2.3%
4.9%	330.4	326.2	-4.2	-1.3%
6.2%	318.8	317.7	-1.1	-0.3%
7.4%	311.6	311.3	-0.3	-0.1%
8.6%	309.4	309.7	0.3	0.1%
9.9%	308.0	308.5	0.5	0.2%
11.1%	307.0	306.0	-1.0	-0.3%
12.3%	305.5	302.2	-3.2	-1.1%
13.6%	298.7	301.4	2.8	0.9%
14.8%	297.7	297.5	-0.1	0.0%
16.0%	294.6	294.5	-0.2	-0.1%
17.3%	290.7	291.7	1.0	0.3%
18.5%	290.5	288.6	-1.9	-0.6%
19.8%	286.9	283.6	-3.3	-1.1%
21.0%	278.6	278.6	0.0	0.0%
22.2%	277.8	277.6	-0.2	-0.1%
23.5%	275.7	276.8	1.2	0.4%
24.7%	274.9	275.7	0.8	0.3%
25.9%	274.8	273.6	-1.1	-0.4%
27.2%	273.5	273.0	-0.5	-0.2%
28.4%	272.2	271.6	-0.6	-0.2%
29.6%	270.3	270.3	0.0	0.0%
30.9%	270.0	270.0	0.0	0.0%
32.1%	269.9	268.2	-1.7	-0.6%
33.3%	268.3	266.8	-1.4	-0.5%
34.6%	267.3	266.7	-0.6	-0.2%
35.8%	265.6	265.8	0.2	0.1%
37.0%	264.5	265.8	1.3	0.5%
38.3%	264.4	264.9	0.5	0.2%
39.5%	263.9	264.5	0.6	0.2%
40.7%	263.7	263.7	0.0	0.0%
42.0%	263.5	263.7	0.2	0.1%
43.2%	262.4	262.4	0.0	0.0%
44.4%	261.9	262.2	0.3	0.1%
45.7%	261.1	261.1	0.0	0.0%
46.9%	259.6	261.1	1.5	0.6%
48.1%	259.4	259.0	-0.4	-0.2%
49.4%	257.9	257.7	-0.2	-0.1%
50.6%	257.2	257.1	-0.1	-0.1%
51.9%	256.7	257.0	0.3	0.1%
53.1%	256.7	256.9	0.2	0.1%
54.3%	256.6	256.7	0.1	0.0%
55.6%	255.6	256.4	0.9	0.3%
56.8%	255.4	255.3	-0.1	0.0%
58.0%	255.4	255.1	-0.2	-0.1%
59.3%	254.8	254.8	0.0	0.0%
60.5%	254.7	254.7	0.0	0.0%
61.7%	254.2	254.6	0.4	0.1%
63.0%	253.7	253.4	-0.4	-0.1%
64.2%	253.3	251.3	-2.1	-0.8%
65.4%	251.6	251.1	-0.5	-0.2%
66.7%	250.8	250.9	0.2	0.1%
67.9%	250.6	250.3	-0.3	-0.1%
69.1%	250.3	250.3	0.0	0.0%
70.4%	249.4	249.7	0.3	0.1%
71.6%	248.1	248.2	0.1	0.0%
72.8%	248.1	248.2	0.1	0.0%
74.1%	247.3	247.5	0.3	0.1%
75.3%	246.8	247.4	0.6	0.3%
76.5%	245.2	246.6	1.5	0.6%
77.8%	244.1	245.1	1.0	0.4%
79.0%	241.7	244.1	2.4	1.0%
80.2%	241.3	243.2	1.9	0.8%
81.5%	238.6	241.9	3.3	1.4%
82.7%	236.6	241.1	4.5	1.9%
84.0%	236.0	238.4	2.4	1.0%
85.2%	234.4	238.0	3.6	1.5%
86.4%	234.2	236.1	1.9	0.8%
87.7%	233.6	234.4	0.8	0.3%
88.9%	233.4	234.3	0.9	0.4%
90.1%	233.1	234.0	0.9	0.4%
91.4%	233.0	233.7	0.8	0.3%
92.6%	231.7	232.4	0.7	0.3%
93.8%	231.6	231.2	-0.4	-0.2%
95.1%	231.4	231.0	-0.3	-0.1%
96.3%	230.0	230.2	0.2	0.1%
97.5%	225.5	225.7	0.2	0.1%
98.8%	223.2	218.7	-4.5	-2.0%
100.0%	215.3	215.2	-0.1	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	785.2	790.4	5.2	0.7%
1.2%	757.7	757.6	-0.2	0.0%
2.5%	622.1	615.1	-7.0	-1.1%
3.7%	607.8	602.3	-5.5	-0.9%
4.9%	606.2	586.2	-20.0	-3.3%
6.2%	580.0	565.7	-14.2	-2.5%
7.4%	571.7	527.4	-44.3	-7.7%
8.6%	523.6	522.4	-1.2	-0.2%
9.9%	513.3	503.9	-9.4	-1.8%
11.1%	490.0	487.4	-2.6	-0.5%
12.3%	489.1	476.6	-12.5	-2.6%
13.6%	468.2	469.9	1.7	0.4%
14.8%	464.9	460.9	-4.1	-0.9%
16.0%	456.6	455.1	-1.5	-0.3%
17.3%	437.8	437.6	-0.1	0.0%
18.5%	436.8	434.0	-2.8	-0.6%
19.8%	431.3	430.7	-0.6	-0.1%
21.0%	424.0	428.4	4.5	1.1%
22.2%	387.8	425.6	37.8	9.7%
23.5%	383.5	414.3	30.9	8.0%
24.7%	371.6	393.3	21.7	5.8%
25.9%	371.5	375.2	3.7	1.0%
27.2%	364.9	370.3	5.3	1.5%
28.4%	362.3	361.2	-1.2	-0.3%
29.6%	353.3	352.9	-0.4	-0.1%
30.9%	352.7	350.0	-2.8	-0.8%
32.1%	348.9	348.9	0.0	0.0%
33.3%	346.8	348.8	2.0	0.6%
34.6%	341.7	346.8	5.2	1.5%
35.8%	330.4	338.0	7.6	2.3%
37.0%	320.7	337.2	16.4	5.1%
38.3%	309.5	312.5	2.9	0.9%
39.5%	308.1	309.7	1.6	0.5%
40.7%	304.8	302.1	-2.7	-0.9%
42.0%	303.4	300.8	-2.6	-0.9%
43.2%	300.8	296.1	-4.6	-1.5%
44.4%	300.3	294.0	-6.3	-2.1%
45.7%	299.7	293.8	-5.9	-2.0%
46.9%	298.3	286.0	-12.3	-4.1%
48.1%	282.1	280.3	-1.9	-0.7%
49.4%	280.3	270.8	-9.5	-3.4%
50.6%	267.8	267.7	-0.1	0.0%
51.9%	267.4	266.7	-0.8	-0.3%
53.1%	265.6	266.1	0.5	0.2%
54.3%	265.2	264.1	-1.1	-0.4%
55.6%	265.0	263.5	-1.5	-0.6%
56.8%	264.5	262.6	-1.8	-0.7%
58.0%	259.4	261.5	2.1	0.8%
59.3%	259.2	260.7	1.5	0.6%
60.5%	258.8	260.4	1.6	0.6%
61.7%	256.1	259.9	3.9	1.5%
63.0%	255.5	257.4	1.8	0.7%
64.2%	254.1	254.4	0.3	0.1%
65.4%	253.6	254.1	0.4	0.2%
66.7%	253.5	253.0	-0.5	-0.2%
67.9%	253.0	251.8	-1.2	-0.5%
69.1%	251.0	250.5	-0.5	-0.2%
70.4%	246.3	248.7	2.4	1.0%
71.6%	244.8	248.7	3.9	1.6%
72.8%	240.6	240.1	-0.5	-0.2%
74.1%	238.0	236.7	-1.3	-0.5%
75.3%	235.7	235.3	-0.4	-0.2%
76.5%	235.0	234.3	-0.7	-0.3%
77.8%	234.9	233.5	-1.4	-0.6%
79.0%	234.0	232.3	-1.7	-0.7%
80.2%	230.6	231.2	0.6	0.3%
81.5%	230.0	230.0	0.1	0.0%
82.7%	228.5	228.4	-0.1	0.0%
84.0%	228.2	228.0	-0.1	-0.1%
85.2%	227.6	227.2	-0.4	-0.2%
86.4%	227.5	227.1	-0.4	-0.2%
87.7%	224.7	224.5	-0.2	-0.1%
88.9%	224.2	224.1	-0.1	-0.1%
90.1%	223.8	222.0	-1.8	-0.8%
91.4%	221.4	221.3	-0.1	0.0%
92.6%	220.8	220.5	-0.3	-0.1%
93.8%	220.2	220.2	0.0	0.0%
95.1%	220.2	219.8	-0.3	-0.2%
96.3%	218.0	217.0	-1.0	-0.4%
97.5%	216.8	216.4	-0.3	-0.2%
98.8%	215.8	216.2	0.5	0.2%
100.0%	211.7	214.0	2.2	1.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	950.6	966.5	15.9	1.7%
1.2%	883.4	901.0	17.7	2.0%
2.5%	753.5	809.3	55.8	7.4%
3.7%	745.3	755.5	10.3	1.4%
4.9%	743.5	744.6	1.2	0.2%
6.2%	739.9	742.4	2.5	0.3%
7.4%	714.0	727.8	13.8	1.9%
8.6%	711.4	724.2	12.8	1.8%
9.9%	698.5	711.1	12.5	1.8%
11.1%	682.5	698.2	15.7	2.3%
12.3%	676.2	681.2	5.0	0.7%
13.6%	650.2	677.5	27.4	4.2%
14.8%	640.2	658.7	18.5	2.9%
16.0%	634.4	658.7	24.2	3.8%
17.3%	634.1	648.9	14.8	2.3%
18.5%	628.0	641.9	13.9	2.2%
19.8%	609.6	640.0	30.4	5.0%
21.0%	600.8	619.1	18.3	3.0%
22.2%	582.3	600.5	18.1	3.1%
23.5%	571.8	586.0	14.2	2.5%
24.7%	561.7	566.7	5.0	0.9%
25.9%	560.5	560.9	0.4	0.1%
27.2%	553.6	559.8	6.2	1.1%
28.4%	546.7	558.9	12.2	2.2%
29.6%	545.4	553.2	7.8	1.4%
30.9%	541.3	544.7	3.4	0.6%
32.1%	529.4	543.2	13.8	2.6%
33.3%	529.0	536.4	7.4	1.4%
34.6%	512.7	528.7	16.0	3.1%
35.8%	508.3	528.7	20.4	4.0%
37.0%	497.8	521.8	24.1	4.8%
38.3%	494.8	518.3	23.5	4.8%
39.5%	490.7	497.0	6.3	1.3%
40.7%	490.2	493.1	2.9	0.6%
42.0%	489.9	487.4	-2.5	-0.5%
43.2%	489.2	481.6	-7.5	-1.5%
44.4%	469.9	478.5	8.5	1.8%
45.7%	468.2	476.1	7.9	1.7%
46.9%	447.2	475.9	28.8	6.4%
48.1%	441.9	475.0	33.1	7.5%
49.4%	440.9	473.0	32.1	7.3%
50.6%	430.8	442.1	11.3	2.6%
51.9%	422.3	441.1	18.8	4.5%
53.1%	420.2	439.2	19.0	4.5%
54.3%	418.0	438.5	20.4	4.9%
55.6%	416.9	436.0	19.1	4.6%
56.8%	411.8	434.3	22.4	5.4%
58.0%	407.7	434.2	26.5	6.5%
59.3%	407.5	432.6	25.0	6.1%
60.5%	403.4	401.5	-1.9	-0.5%
61.7%	401.0	394.0	-6.9	-1.7%
63.0%	396.2	388.7	-7.5	-1.9%
64.2%	389.2	385.0	-4.2	-1.1%
65.4%	378.6	378.1	-0.5	-0.1%
66.7%	377.6	373.2	-4.4	-1.2%
67.9%	376.9	370.3	-6.6	-1.8%
69.1%	376.8	369.2	-7.5	-2.0%
70.4%	376.4	369.2	-7.2	-1.9%
71.6%	370.1	369.2	-0.9	-0.3%
72.8%	369.1	362.0	-7.2	-1.9%
74.1%	365.1	361.7	-3.4	-0.9%
75.3%	364.7	361.7	-3.0	-0.8%
76.5%	362.9	354.0	-8.9	-2.5%
77.8%	353.6	350.2	-3.4	-1.0%
79.0%	352.3	345.6	-6.7	-1.9%
80.2%	349.2	341.5	-7.6	-2.2%
81.5%	347.9	340.3	-7.6	-2.2%
82.7%	345.7	338.0	-7.7	-2.2%
84.0%	338.4	337.1	-1.2	-0.4%
85.2%	335.2	334.8	-0.5	-0.1%
86.4%	331.3	322.9	-8.4	-2.5%
87.7%	329.7	319.8	-9.9	-3.0%
88.9%	328.9	319.8	-9.0	-2.7%
90.1%	315.3	313.6	-1.7	-0.6%
91.4%	301.2	304.8	3.6	1.2%
92.6%	297.2	292.2	-5.1	-1.7%
93.8%	294.6	259.7	-34.9	-11.8%
95.1%	262.3	258.0	-4.3	-1.6%
96.3%	232.3	244.0	11.6	5.0%
97.5%	213.4	218.4	5.0	2.3%
98.8%	210.7	210.1	-0.5	-0.3%
100.0%	209.4	209.1	-0.3	-0.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	922.9	945.8	22.9	2.5%
1.2%	914.3	936.5	22.2	2.4%
2.5%	881.9	908.7	26.8	3.0%
3.7%	853.1	900.5	47.4	5.6%
4.9%	846.2	878.7	32.5	3.8%
6.2%	843.8	856.4	12.6	1.5%
7.4%	839.2	851.6	12.4	1.5%
8.6%	836.2	834.1	-2.1	-0.2%
9.9%	823.4	829.9	6.5	0.8%
11.1%	820.3	822.7	2.4	0.3%
12.3%	816.3	814.4	-1.9	-0.2%
13.6%	814.6	813.5	-1.1	-0.1%
14.8%	814.0	809.3	-4.7	-0.6%
16.0%	792.4	808.3	15.8	2.0%
17.3%	791.8	804.4	12.6	1.6%
18.5%	788.5	789.9	1.5	0.2%
19.8%	788.4	787.4	-1.0	-0.1%
21.0%	787.0	783.5	-3.5	-0.4%
22.2%	772.8	782.8	10.0	1.3%
23.5%	772.8	777.2	4.4	0.6%
24.7%	769.3	775.3	6.0	0.8%
25.9%	761.1	773.7	12.7	1.7%
27.2%	760.8	767.2	6.5	0.8%
28.4%	758.3	765.4	7.1	0.9%
29.6%	755.0	763.9	8.9	1.2%
30.9%	747.2	763.7	16.5	2.2%
32.1%	743.5	762.7	19.3	2.6%
33.3%	732.9	759.1	26.2	3.6%
34.6%	732.7	756.0	23.3	3.2%
35.8%	726.4	754.2	27.7	3.8%
37.0%	718.9	750.6	31.8	4.4%
38.3%	691.6	749.4	57.9	8.4%
39.5%	656.2	740.9	84.7	12.9%
40.7%	651.0	737.4	86.4	13.3%
42.0%	650.0	731.2	81.2	12.5%
43.2%	640.8	729.3	88.5	13.8%
44.4%	638.3	726.1	87.7	13.7%
45.7%	630.6	706.7	76.2	12.1%
46.9%	627.0	703.7	76.6	12.2%
48.1%	624.1	651.6	27.4	4.4%
49.4%	600.2	640.7	40.6	6.8%
50.6%	597.5	640.6	43.1	7.2%
51.9%	589.4	638.5	49.1	8.3%
53.1%	583.3	603.2	20.0	3.4%
54.3%	577.1	597.9	20.8	3.6%
55.6%	574.2	594.6	20.5	3.6%
56.8%	568.1	583.1	15.0	2.6%
58.0%	556.3	582.3	26.0	4.7%
59.3%	547.0	570.5	23.4	4.3%
60.5%	544.6	567.0	22.5	4.1%
61.7%	537.7	558.2	20.5	3.8%
63.0%	536.0	543.8	7.9	1.5%
64.2%	535.1	537.3	2.2	0.4%
65.4%	532.0	534.5	2.5	0.5%
66.7%	530.9	528.3	-2.6	-0.5%
67.9%	527.5	522.5	-5.0	-1.0%
69.1%	521.3	508.2	-13.1	-2.5%
70.4%	519.4	507.4	-12.1	-2.3%
71.6%	517.4	479.8	-37.6	-7.3%
72.8%	508.6	472.5	-36.1	-7.1%
74.1%	501.8	464.1	-37.7	-7.5%
75.3%	492.2	458.1	-34.1	-6.9%
76.5%	474.7	457.2	-17.4	-3.7%
77.8%	474.4	455.1	-19.4	-4.1%
79.0%	471.6	451.6	-20.0	-4.2%
80.2%	470.3	446.7	-23.6	-5.0%
81.5%	460.5	442.1	-18.5	-4.0%
82.7%	457.3	433.4	-23.9	-5.2%
84.0%	457.2	418.6	-38.6	-8.4%
85.2%	453.9	418.1	-35.7	-7.9%
86.4%	450.6	413.9	-36.7	-8.2%
87.7%	430.3	402.9	-27.4	-6.4%
88.9%	415.9	398.9	-17.0	-4.1%
90.1%	413.9	388.7	-25.2	-6.1%
91.4%	407.8	388.4	-19.4	-4.7%
92.6%	396.3	387.2	-9.1	-2.3%
93.8%	372.8	356.4	-16.4	-4.4%
95.1%	300.9	323.3	22.4	7.5%
96.3%	298.1	275.1	-23.0	-7.7%
97.5%	202.1	255.7	53.6	26.5%
98.8%	192.8	192.4	-0.4	-0.2%
100.0%	189.3	189.2	0.0	0.0%

Figure SQ-28-b
North Bay Aqueduct Intake (Barker Slough), Monthly EC
Probability of Exceedance

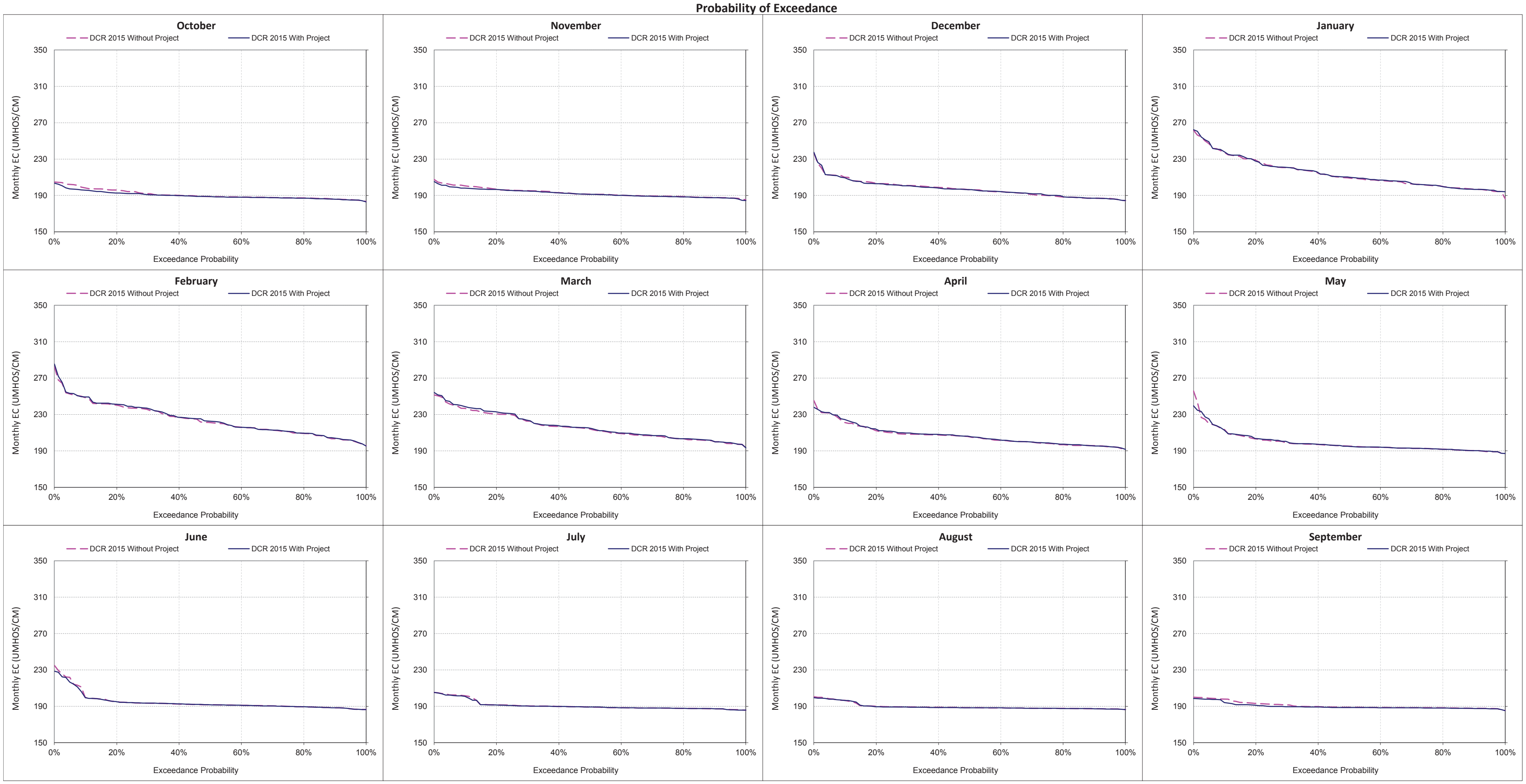


Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	204.8	203.4	-1.3	-0.7%
1.2%	204.5	202.3	-2.2	-1.1%
2.5%	204.1	200.5	-3.6	-1.8%
3.7%	202.4	198.5	-3.9	-1.9%
4.9%	202.2	197.2	-5.0	-2.5%
6.2%	201.9	196.9	-5.0	-2.5%
7.4%	201.2	196.8	-4.4	-2.2%
8.6%	199.2	196.2	-3.0	-1.5%
9.9%	198.3	195.7	-2.7	-1.3%
11.1%	197.4	195.5	-1.9	-1.0%
12.3%	197.3	195.1	-2.3	-1.1%
13.6%	197.2	194.4	-2.8	-1.4%
14.8%	197.2	194.3	-2.8	-1.4%
16.0%	197.0	193.8	-3.2	-1.6%
17.3%	196.2	193.2	-3.0	-1.5%
18.5%	196.0	193.0	-3.1	-1.6%
19.8%	196.0	192.7	-3.3	-1.7%
21.0%	195.6	192.6	-3.0	-1.6%
22.2%	195.2	192.2	-2.9	-1.5%
23.5%	194.3	192.1	-2.2	-1.1%
24.7%	194.3	192.1	-2.2	-1.1%
25.9%	194.1	192.0	-2.1	-1.1%
27.2%	192.9	192.0	-0.9	-0.5%
28.4%	192.3	191.5	-0.8	-0.4%
29.6%	192.0	190.9	-1.2	-0.6%
30.9%	191.9	190.7	-1.2	-0.6%
32.1%	190.9	190.6	-0.3	-0.1%
33.3%	190.6	190.5	-0.1	0.0%
34.6%	190.5	190.3	-0.2	-0.1%
35.8%	190.4	190.0	-0.4	-0.2%
37.0%	190.4	190.0	-0.3	-0.2%
38.3%	190.3	190.0	-0.3	-0.2%
39.5%	190.2	189.9	-0.3	-0.1%
40.7%	190.0	189.8	-0.2	-0.1%
42.0%	189.8	189.6	-0.2	-0.1%
43.2%	189.8	189.5	-0.3	-0.2%
44.4%	189.7	189.2	-0.5	-0.3%
45.7%	189.3	189.0	-0.3	-0.1%
46.9%	189.3	188.9	-0.4	-0.2%
48.1%	188.9	188.9	-0.1	0.0%
49.4%	188.9	188.8	-0.1	0.0%
50.6%	188.9	188.7	-0.2	-0.1%
51.9%	188.8	188.4	-0.4	-0.2%
53.1%	188.6	188.3	-0.3	-0.2%
54.3%	188.6	188.3	-0.3	-0.2%
55.6%	188.5	188.2	-0.3	-0.1%
56.8%	188.4	188.1	-0.3	-0.2%
58.0%	188.4	188.1	-0.4	-0.2%
59.3%	188.3	188.0	-0.3	-0.2%
60.5%	188.2	188.0	-0.2	-0.1%
61.7%	188.2	188.0	-0.2	-0.1%
63.0%	188.1	187.9	-0.2	-0.1%
64.2%	188.1	187.8	-0.3	-0.2%
65.4%	188.0	187.8	-0.2	-0.1%
66.7%	187.9	187.7	-0.2	-0.1%
67.9%	187.8	187.7	-0.2	-0.1%
69.1%	187.7	187.5	-0.2	-0.1%
70.4%	187.6	187.5	-0.2	-0.1%
71.6%	187.5	187.4	-0.1	-0.1%
72.8%	187.5	187.4	-0.2	-0.1%
74.1%	187.4	187.3	-0.2	-0.1%
75.3%	187.4	187.1	-0.3	-0.1%
76.5%	187.4	187.1	-0.2	-0.1%
77.8%	187.4	187.1	-0.3	-0.2%
79.0%	187.3	186.9	-0.4	-0.2%
80.2%	187.2	186.9	-0.4	-0.2%
81.5%	187.2	186.8	-0.4	-0.2%
82.7%	187.0	186.7	-0.4	-0.2%
84.0%	186.8	186.5	-0.3	-0.2%
85.2%	186.7	186.5	-0.2	-0.1%
86.4%	186.7	186.3	-0.3	-0.2%
87.7%	186.6	186.2	-0.4	-0.2%
88.9%	186.1	186.0	0.0	0.0%
90.1%	186.0	185.8	-0.2	-0.1%
91.4%	185.8	185.7	-0.1	-0.1%
92.6%	185.6	185.4	-0.2	-0.1%
93.8%	185.4	185.3	-0.1	-0.1%
95.1%	185.4	184.9	-0.5	-0.3%
96.3%	185.1	184.8	-0.3	-0.1%
97.5%	184.7	184.8	0.1	0.1%
98.8%	184.4	184.0	-0.4	-0.2%
100.0%	183.3	183.1	-0.2	-0.1%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	207.5	205.1	-2.4	-1.2%
1.2%	204.7	202.9	-1.8	-0.9%
2.5%	203.7	201.2	-2.5	-1.3%
3.7%	203.2	201.2	-2.0	-1.0%
4.9%	202.3	199.6	-2.7	-1.3%
6.2%	201.5	199.2	-2.3	-1.1%
7.4%	201.5	198.9	-2.5	-1.2%
8.6%	201.4	198.2	-3.2	-1.6%
9.9%	200.5	198.2	-2.4	-1.2%
11.1%	200.0	197.8	-2.2	-1.1%
12.3%	199.9	197.6	-2.3	-1.1%
13.6%	199.6	197.3	-2.3	-1.1%
14.8%	199.0	196.9	-2.1	-1.1%
16.0%	198.4	196.8	-1.6	-0.8%
17.3%	198.2	196.7	-1.5	-0.7%
18.5%	197.5	196.7	-0.8	-0.4%
19.8%	197.0	196.6	-0.4	-0.2%
21.0%	196.1	196.2	0.2	0.1%
22.2%	196.0	196.1	0.1	0.1%
23.5%	196.0	195.7	-0.3	-0.2%
24.7%	195.9	195.5	-0.4	-0.2%
25.9%	195.6	195.4	-0.3	-0.1%
27.2%	195.5	195.1	-0.4	-0.2%
28.4%	195.4	195.1	-0.3	-0.2%
29.6%	195.3	195.0	-0.3	-0.2%
30.9%	195.1	194.8	-0.3	-0.2%
32.1%	195.0	194.7	-0.3	-0.1%
33.3%	194.9	194.4	-0.5	-0.3%
34.6%	194.7	193.8	-0.9	-0.5%
35.8%	194.5	193.7	-0.8	-0.4%
37.0%	194.4	193.5	-0.9	-0.4%
38.3%	193.1	193.1	0.0	0.0%
39.5%	193.1	192.9	-0.2	-0.1%
40.7%	193.0	192.8	-0.2	-0.1%
42.0%	192.8	192.5	-0.3	-0.1%
43.2%	192.6	192.2	-0.4	-0.2%
44.4%	192.1	192.1	0.0	0.0%
45.7%	191.6	191.8	0.2	0.1%
46.9%	191.5	191.6	0.1	0.0%
48.1%	191.5	191.4	0.0	0.0%
49.4%	191.4	191.3	-0.2	-0.1%
50.6%	191.4	191.1	-0.2	-0.1%
51.9%	191.3	191.1	-0.2	-0.1%
53.1%	191.3	191.0	-0.3	-0.1%
54.3%	191.2	191.0	-0.2	-0.1%
55.6%	191.2	190.7	-0.5	-0.2%
56.8%	190.7	190.7	0.0	0.0%
58.0%	190.5	190.1	-0.3	-0.2%
59.3%	190.4	190.0	-0.4	-0.2%
60.5%	190.3	190.0	-0.3	-0.1%
61.7%	189.9	190.0	0.0	0.0%
63.0%	189.9	189.9	0.1	0.0%
64.2%	189.8	189.6	-0.2	-0.1%
65.4%	189.8	189.4	-0.4	-0.2%
66.7%	189.5	189.3	-0.2	-0.1%
67.9%	189.4	189.3	-0.1	-0.1%
69.1%	189.4	189.1	-0.3	-0.1%
70.4%	189.3	189.0	-0.3	-0.2%
71.6%	189.2	189.0	-0.3	-0.1%
72.8%	189.2	188.9	-0.3	-0.2%
74.1%	189.2	188.8	-0.4	-0.2%
75.3%	189.1	188.8	-0.4	-0.2%
76.5%	189.0	188.7	-0.3	-0.2%
77.8%	189.0	188.6	-0.4	-0.2%
79.0%	188.8	188.5	-0.3	-0.2%
80.2%	188.7	188.4	-0.4	-0.2%
81.5%	188.6	188.3	-0.3	-0.2%
82.7%	188.3	188.1	-0.2	-0.1%
84.0%	188.1	187.7	-0.4	-0.2%
85.2%	188.0	187.7	-0.4	-0.2%
86.4%	188.0	187.7	-0.3	-0.2%
87.7%	187.8	187.6	-0.2	-0.1%
88.9%	187.8	187.5	-0.3	-0.1%
90.1%	187.7	187.5	-0.3	-0.2%
91.4%	187.6	187.4	-0.2	-0.1%
92.6%	187.5	187.4	-0.2	-0.1%
93.8%	187.5	187.2	-0.3	-0.2%
95.1%	187.2	186.8	-0.4	-0.2%
96.3%	187.0	186.8	-0.1	-0.1%
97.5%	186.8	186.2	-0.6	-0.3%
98.8%	186.0	184.7	-1.3	-0.7%
100.0%	185.2	184.5	-0.7	-0.4%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	236.9	237.6	0.7	0.3%
1.2%	225.4	226.5	1.1	0.5%
2.5%	220.1	223.3	3.2	1.5%
3.7%	212.7	212.9	0.2	0.1%
4.9%	212.5	212.6	0.1	0.0%
6.2%	212.4	212.1	-0.3	-0.1%
7.4%	212.1	211.7	-0.4	-0.2%
8.6%	211.9	210.1	-1.8	-0.9%
9.9%	210.1	209.6	-0.4	-0.2%
11.1%	209.9	207.7	-2.2	-1.1%
12.3%	206.1	206.3	0.2	0.1%
13.6%	206.0	205.6	-0.4	-0.2%
14.8%	205.5	205.6	0.1	0.1%
16.0%	205.3	203.6	-1.7	-0.8%
17.3%	205.0	203.4	-1.7	-0.8%
18.5%	204.4	203.2	-1.2	-0.6%
19.8%	203.5	203.0	-0.5	-0.3%
21.0%	203.0	202.9	-0.1	0.0%
22.2%	202.9	202.6	-0.3	-0.2%
23.5%	202.8	201.8	-1.0	-0.5%
24.7%	202.8	201.7	-1.1	-0.5%
25.9%	202.1	201.6	-0.5	-0.2%
27.2%	201.4	201.4	0.0	0.0%
28.4%	201.2	200.7	-0.5	-0.2%
29.6%	201.0	200.6	-0.4	-0.2%
30.9%	200.9	200.6	-0.3	-0.2%
32.1%	200.8	200.2	-0.6	-0.3%
33.3%	200.7	199.7	-1.0	-0.5%
34.6%	200.3	199.2	-1.1	-0.5%
35.8%	199.9	199.1	-0.9	-0.4%
37.0%	199.5	199.0	-0.6	-0.3%
38.3%	199.0	198.6	-0.4	-0.2%
39.5%	198.9	198.4	-0.5	-0.3%
40.7%	198.8	197.9	-0.9	-0.4%
42.0%	198.6	197.1	-1.5	-0.7%
43.2%	198.1	197.1	-1.0	-0.5%
44.4%	197.6	197.0	-0.6	-0.3%
45.7%	197.3	196.9	-0.4	-0.2%
46.9%	197.0	196.9	-0.2	-0.1%
48.1%	197.0	196.7	-0.3	-0.1%
49.4%	196.4	196.5	0.1	0.0%
50.6%	196.4	196.4	0.0	0.0%
51.9%	196.1	195.9	-0.2	-0.1%
53.1%	196.1	195.3	-0.8	-0.4%
54.3%	194.9	194.9	-0.1	0.0%
55.6%	194.6	194.9	0.3	0.2%
56.8%	194.5	194.7	0.2	0.1%
58.0%	194.2	194.7	0.5	0.3%
59.3%	194.1	194.4	0.2	0.1%
60.5%	194.1	194.0	-0.1	0.0%
61.7%	193.7	193.6	-0.1	-0.1%
63.0%	193.4	193.5	0.1	0.0%
64.2%	193.2	193.2	0.0	0.0%
65.4%	192.8	192.9	0.2	0.1%
66.7%	192.6	192.6	0.0	0.0%
67.9%	192.3	192.6	0.3	0.1%
69.1%	191.3	192.0	0.7	0.4%
70.4%	191.1	191.9	0.8	0.4%
71.6%	190.3	191.9	1.6	0.8%
72.8%	190.2	191.8	1.6	0.8%
74.1%	190.2	190.7	0.5	0.2%
75.3%	190.0	190.2	0.2	0.1%
76.5%	190.0	190.2	0.2	0.1%
77.8%	189.1	190.0	0.9	0.5%
79.0%	188.7	189.8	1.1	0.6%
80.2%	188.2	188.3	0.1	0.0%
81.5%	188.2	188.1	-0.1	0.0%
82.7%	188.1	188.1	0.0	0.0%
84.0%	188.0	187.8	-0.1	-0.1%
85.2%	187.4	187.8	0.3	0.2%
86.4%	187.3	187.4	0.2	0.1%
87.7%	187.1	187.1	0.0	0.0%
88.9%	187.0	187.1	0.1	0.1%
90.1%	187.0	187.0	0.1	0.0%
91.4%	186.9	186.8	-0.1	-0.1%
92.6%	186.8	186.8	-0.1	0.0%
93.8%	186.7	186.6	0.0	0.0%
95.1%	186.6	186.0	-0.6	-0.3%
96.3%	186.2	186.0	-0.2	-0.1%
97.5%	185.6	185.5	-0.1	0.0%
98.8%	184.7	184.6	0.0	0.0%
100.0%	184.3	184.3	0.0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	261.7	262.4	0.7	0.3%
1.2%	256.6	260.6	4.1	1.6%
2.5%	254.3	254.3	0.0	0.0%
3.7%	250.0	251.2	1.2	0.5%
4.9%	247.0	249.3	2.3	0.9%
6.2%	241.7	241.8	0.1	0.0%
7.4%	241.4	240.9	-0.5	-0.2%
8.6%	239.4	240.6	1.2	0.5%
9.9%	237.3	238.0	0.6	0.3%
11.1%	234.7	235.3	0.6	0.3%
12.3%	234.2	234.4	0.2	0.1%
13.6%	233.5	234.2	0.7	0.3%
14.8%	233.0	234.2	1.2	0.5%
16.0%	230.4	232.5	2.1	0.9%
17.3%	230.0	230.7	0.7	0.3%
18.5%	230.0	230.3	0.3	0.1%
19.8%	229.0	228.0	-1.0	-0.4%
21.0%	227.0	226.5	-0.4	-0.2%
22.2%	225.6	223.2	-2.4	-1.1%
23.5%	223.5	222.8	-0.7	-0.3%
24.7%	223.1	222.1	-1.0	-0.5%
25.9%	221.8	221.9	0.1	0.0%
27.2%	221.2	221.1	-0.1	0.0%
28.4%	220.7	221.1	0.3	0.2%
29.6%	220.7	220.9	0.2	0.1%
30.9%	220.5	220.7	0.2	0.1%
32.1%	220.4	220.1	-0.3	-0.1%
33.3%	218.4	218.5	0.1	0.1%
34.6%	217.9	218.4	0.4	0.2%
35.8%	217.7	217.7	0.0	0.0%
37.0%	217.1	217.5	0.4	0.2%
38.3%	216.6	217.3	0.8	0.4%
39.5%	215.3	216.0	0.7	0.3%
40.7%	213.5	213.6	0.1	0.0%
42.0%	213.3	213.6	0.3	0.1%
43.2%	212.1	212.5	0.5	0.2%
44.4%	211.4	210.9	-0.5	-0.2%
45.7%	210.5	210.9	0.3	0.2%
46.9%	210.2	210.7	0.5	0.2%
48.1%	209.6	210.4	0.8	0.4%
49.4%	209.4	210.3	0.9	0.4%
50.6%	209.0	209.7	0.7	0.3%
51.9%	208.9	209.4	0.5	0.2%
53.1%	208.3	209.0	0.7	0.3%
54.3%	208.0	208.9	0.9	0.4%
55.6%	207.2	208.4	1.2	0.6%
56.8%	207.2	207.6	0.4	0.2%
58.0%	207.0	207.5	0.5	0.2%
59.3%	206.5	206.9	0.4	0.2%
60.5%	206.4	206.8	0.4	0.2%
61.7%	206.0	206.5	0.5	0.3%
63.0%	205.7	206.1	0.4	0.2%
64.2%	205.4	206.1	0.6	0.3%
65.4%	205.3	205.8	0.5	0.3%
66.7%	204.9	205.6	0.6	0.3%
67.9%	203.1	205.5	2.3	1.2%
69.1%	203.1	204.5	1.4	0.7%
70.4%	202.5	202.5	0.0	0.0%
71.6%	202.3	202.2	-0.1	-0.1%
72.8%	202.0	202.0	0.0	0.0%
74.1%	201.6	201.9	0.3	0.1%
75.3%	201.3	201.6	0.4	0.2%
76.5%	200.9	201.2	0.3	0.1%
77.8%	200.7	201.2	0.5	0.2%
79.0%	200.6	200.5	-0.2	-0.1%
80.2%	199.6	199.6	-0.1	0.0%
81.5%	199.3	199.0	-0.3	-0.2%
82.7%	198.5	198.4	-0.2	-0.1%
84.0%	198.3	198.0	-0.3	-0.1%
85.2%	198.2	197.6	-0.6	-0.3%
86.4%	197.8	197.3	-0.5	-0.3%
87.7%	197.6	197.1	-0.5	-0.2%
88.9%	197.2	196.9	-0.3	-0.2%
90.1%	196.8	196.8	0.0	0.0%
91.4%	196.7	196.8	0.0	0.0%
92.6%	196.5	196.7	0.2	0.1%
93.8%	195.9	196.4	0.5	0.3%
95.1%	195.7	195.9	0.1	0.1%
96.3%	194.5	195.7	1.2	0.6%
97.5%	194.4	194.5	0.0	0.0%
98.8%	194.4	194.4	0.0	0.0%
100.0%	186.4	194.0	7.6	4.1%

Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	282.7	285.6	2.9	1.0%
1.2%	268.1	272.0	3.9	1.5%
2.5%	264.4	265.3	0.9	0.4%
3.7%	253.9	254.7	0.9	0.3%
4.9%	252.7	253.3	0.6	0.2%
6.2%	251.5	253.1	1.6	0.6%
7.4%	250.8	250.6	-0.1	-0.1%
8.6%	250.1	249.6	-0.5	-0.2%
9.9%	248.6	249.4	0.8	0.3%
11.1%	247.0	249.2	2.2	0.9%
12.3%	242.1	243.5	1.4	0.6%
13.6%	242.0	242.5	0.5	0.2%
14.8%	241.8	242.5	0.7	0.3%
16.0%	241.8	242.5	0.7	0.3%
17.3%	241.7	242.4	0.7	0.3%
18.5%	240.8	241.5	0.7	0.3%
19.8%	240.4	241.3	0.9	0.4%
21.0%	239.6	241.0	1.5	0.6%
22.2%	238.2	240.8	2.7	1.1%
23.5%	237.4	239.1	1.7	0.7%
24.7%	237.0	239.0	1.9	0.8%
25.9%	237.0	237.8	0.9	0.4%
27.2%	236.9	237.7	0.9	0.4%
28.4%	236.4	237.5	1.1	0.5%
29.6%	235.7	236.9	1.2	0.5%
30.9%	234.2	236.0	1.9	0.8%
32.1%	234.1	234.1	0.1	0.0%
33.3%	233.5	233.7	0.2	0.1%
34.6%	230.9	232.7	1.7	0.8%
35.8%	230.5	231.0	0.5	0.2%
37.0%	228.0	229.1	1.1	0.5%
38.3%	227.9	228.8	1.0	0.4%
39.5%	226.6	227.0	0.4	0.2%
40.7%	226.6	226.7	0.1	0.0%
42.0%	225.8	226.3	0.6	0.3%
43.2%	225.6	225.8	0.2	0.1%
44.4%	225.2	225.8	0.5	0.2%
45.7%	225.0	225.3	0.4	0.2%
46.9%	221.8	225.3	3.5	1.6%
48.1%	221.4	223.1	1.7	0.8%
49.4%	221.3	222.8	1.5	0.7%
50.6%	220.9	222.4	1.5	0.7%
51.9%	220.5	222.2	1.8	0.8%
53.1%	220.1	221.6	1.5	0.7%
54.3%	220.0	220.4	0.4	0.2%
55.6%	218.5	218.9	0.4	0.2%
56.8%	217.1	217.9	0.8	0.4%
58.0%	216.6	216.2	-0.4	-0.2%
59.3%	216.3	215.9	-0.3	-0.2%
60.5%	215.7	215.9	0.3	0.1%
61.7%	215.5	215.7	0.3	0.1%
63.0%	215.4	215.5	0.1	0.0%
64.2%	215.4	215.0	-0.4	-0.2%
65.4%	213.7	213.8	0.1	0.0%
66.7%	213.7	213.4	-0.2	-0.1%
67.9%	213.6	213.3	-0.3	-0.1%
69.1%	213.2	213.2	-0.1	0.0%
70.4%	212.7	212.9	0.1	0.1%
71.6%	212.4	212.8	0.4	0.2%
72.8%	211.7	212.1	0.4	0.2%
74.1%	211.5	211.8	0.3	0.1%
75.3%	211.1	211.5	0.3	0.2%
76.5%	209.7	211.1	1.4	0.7%
77.8%	209.5	209.8	0.3	0.1%
79.0%	209.4	209.6	0.2	0.1%
80.2%	209.2	209.5	0.3	0.1%
81.5%	208.9	209.4	0.4	0.2%
82.7%	208.9	209.2	0.3	0.1%
84.0%	207.0	207.3	0.3	0.1%
85.2%	206.8	206.9	0.1	0.1%
86.4%	206.3	206.8	0.5	0.3%
87.7%	204.5	204.6	0.0	0.0%
88.9%	203.4	204.4	1.0	0.5%
90.1%	203.4	203.9	0.5	0.3%
91.4%	203.3	203.4	0.0	0.0%
92.6%	202.1	202.6	0.5	0.3%
93.8%	202.0	202.1	0.1	0.0%
95.1%	201.9	202.0	0.1	0.0%
96.3%	200.3	200.9	0.7	0.3%
97.5%	198.9	199.1	0.1	0.1%
98.8%	197.5	197.8	0.3	0.2%
100.0%	196.0	195.4	-0.6	-0.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	251.5	254.2	2.8	1.1%
1.2%	250.6	251.5	1.0	0.4%
2.5%	249.1	250.7	1.6	0.6%
3.7%	243.7	245.4	1.7	0.7%
4.9%	241.6	244.5	2.9	1.2%
6.2%	240.3	241.1	0.9	0.4%
7.4%	239.4	240.6	1.2	0.5%
8.6%	236.8	239.8	3.0	1.3%
9.9%	236.8	238.8	2.0	0.9%
11.1%	235.6	237.6	2.0	0.8%
12.3%	234.4	236.9	2.5	1.1%
13.6%	234.4	236.5	2.1	0.9%
14.8%	233.1	236.4	3.3	1.4%
16.0%	232.1	234.0	1.8	0.8%
17.3%	231.4	233.5	2.1	0.9%
18.5%	230.8	233.5	2.6	1.1%
19.8%	230.8	233.1	2.2	1.0%
21.0%	230.2	232.2	2.0	0.9%
22.2%	230.2	231.6	1.4	0.6%
23.5%	230.2	231.5	1.3	0.6%
24.7%	229.9	230.9	1.0	0.4%
25.9%	228.9	230.5	1.6	0.7%
27.2%	225.3	225.4	0.1	0.0%
28.4%	224.6	225.2	0.5	0.2%
29.6%	222.8	223.8	1.0	0.5%
30.9%	222.6	223.1	0.5	0.2%
32.1%	220.3	220.2	-0.1	0.0%
33.3%	219.4	219.5	0.1	0.0%
34.6%	218.1	218.7	0.6	0.3%
35.8%	217.9	218.5	0.6	0.3%
37.0%	217.3	218.2	0.9	0.4%
38.3%	217.0	218.1	1.2	0.5%
39.5%	216.9	218.0	1.2	0.5%
40.7%	216.8	217.1	0.2	0.1%
42.0%	216.5	217.0	0.5	0.2%
43.2%	216.2	216.8	0.6	0.3%
44.4%	215.6	216.1	0.4	0.2%
45.7%	215.6	216.1	0.5	0.2%
46.9%	215.4	215.7	0.3	0.1%
48.1%	214.8	215.5	0.7	0.3%
49.4%	214.6	215.4	0.7	0.3%
50.6%	213.5	214.6	1.1	0.5%
51.9%	212.6	213.4	0.8	0.4%
53.1%	212.0	212.2	0.1	0.1%
54.3%	211.5	212.1	0.7	0.3%
55.6%	211.0	211.3	0.4	0.2%
56.8%	209.6	210.7	1.1	0.5%
58.0%	209.6	210.6	1.0	0.5%
59.3%	209.3	209.7	0.4	0.2%
60.5%	208.9	209.6	0.7	0.3%
61.7%	208.4	209.4	0.9	0.4%
63.0%	208.2	209.3	1.1	0.5%
64.2%	207.4	208.6	1.2	0.6%
65.4%	207.4	208.1	0.8	0.4%
66.7%	206.9	207.7	0.7	0.4%
67.9%	206.9	207.6	0.7	0.4%
69.1%	206.8	207.3	0.5	0.2%
70.4%	206.3	206.9	0.6	0.3%
71.6%	206.2	206.9	0.7	0.3%
72.8%	206.0	206.7	0.7	0.3%
74.1%	204.9	206.4	1.5	0.7%
75.3%	204.9	204.5	-0.3	-0.2%
76.5%	204.2	204.0	-0.1	-0.1%
77.8%	203.4	203.6	0.2	0.1%
79.0%	203.3	203.5	0.2	0.1%
80.2%	203.2	203.4	0.2	0.1%
81.5%	202.3	203.2	0.9	0.5%
82.7%	202.3	203.1	0.8	0.4%
84.0%	202.2	202.7	0.6	0.3%
85.2%	202.0	202.5	0.5	0.2%
86.4%	201.8	202.2	0.5	0.2%
87.7%	201.5	201.9	0.4	0.2%
88.9%	201.3	201.6	0.3	0.1%
90.1%	200.0	199.9	-0.1	-0.1%
91.4%	200.0	199.9	-0.1	0.0%
92.6%	199.9	199.6	-0.3	-0.1%
93.8%	198.2	199.2	1.0	0.5%
95.1%	198.1	199.0	1.0	0.5%
96.3%	197.7	198.2	0.5	0.2%
97.5%	197.2	197.4	0.2	0.1%
98.8%	197.1	197.2	0.0	0.0%
100.0%	193.4	193.3	-0.1	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	245.3	237.8	-7.5	-3.1%
1.2%	235.9	235.6	-0.3	-0.1%
2.5%	232.1	233.1	1.0	0.5%
3.7%	232.0	232.2	0.2	0.1%
4.9%	231.7	232.2	0.5	0.2%
6.2%	230.3	229.6	-0.7	-0.3%
7.4%	227.4	229.4	2.0	0.9%
8.6%	224.1	225.4	1.3	0.6%
9.9%	221.2	224.6	3.4	1.5%
11.1%	220.3	223.1	2.9	1.3%
12.3%	220.2	221.6	1.4	0.6%
13.6%	217.7	220.5	2.8	1.3%
14.8%	217.4	217.4	0.0	0.0%
16.0%	216.8	216.4	-0.4	-0.2%
17.3%	214.6	216.1	1.5	0.7%
18.5%	214.4	214.6	0.2	0.1%
19.8%	212.4	214.3	1.9	0.9%
21.0%	211.4	212.1	0.7	0.3%
22.2%	211.2	212.1	0.9	0.4%
23.5%	210.4	211.8	1.4	0.6%
24.7%	210.1	211.7	1.5	0.7%
25.9%	210.0	211.2	1.1	0.5%
27.2%	208.8	210.0	1.3	0.6%
28.4%	208.6	210.0	1.4	0.7%
29.6%	208.4	209.8	1.4	0.7%
30.9%	208.4	209.8	1.4	0.7%
32.1%	208.4	209.1	0.7	0.3%
33.3%	208.3	208.8	0.5	0.2%
34.6%	208.3	208.6	0.3	0.2%
35.8%	207.8	208.4	0.7	0.3%
37.0%	207.8	208.3	0.6	0.3%
38.3%	207.7	208.2	0.4	0.2%
39.5%	207.6	208.1	0.5	0.2%
40.7%	207.3	207.9	0.6	0.3%
42.0%	207.2	207.7	0.5	0.3%
43.2%	207.1	207.7	0.6	0.3%
44.4%	207.1	207.7	0.6	0.3%
45.7%	206.6	206.8	0.2	0.1%
46.9%	206.6	206.4	-0.2	-0.1%
48.1%	206.2	206.3	0.1	0.0%
49.4%	205.9	206.2	0.3	0.2%
50.6%	205.0	205.5	0.5	0.3%
51.9%	204.6	205.1	0.5	0.2%
53.1%	204.6	204.8	0.2	0.1%
54.3%	203.4	204.0	0.5	0.3%
55.6%	203.3	203.3	0.0	0.0%
56.8%	202.6	203.1	0.5	0.2%
58.0%	201.9	202.7	0.8	0.4%
59.3%	201.7	202.4	0.6	0.3%
60.5%	201.5	201.7	0.2	0.1%
61.7%	201.3	201.7	0.4	0.2%
63.0%	200.6	201.0	0.4	0.2%
64.2%	200.6	200.6	0.0	0.0%
65.4%	200.5	200.3	-0.2	-0.1%
66.7%	200.2	200.3	0.1	0.0%
67.9%	200.2	200.1	0.0	0.0%
69.1%	199.9	199.9	0.0	0.0%
70.4%	199.5	199.7	0.3	0.1%
71.6%	199.0	199.1	0.1	0.1%
72.8%	198.5	199.0	0.5	0.3%
74.1%	198.5	198.8	0.3	0.2%
75.3%	198.2	198.8	0.6	0.3%
76.5%	198.1	198.3	0.2	0.1%
77.8%	197.1	198.1	0.9	0.5%
79.0%	196.9	197.4	0.5	0.3%
80.2%	196.8	197.3	0.5	0.2%
81.5%	196.5	197.0	0.5	0.3%
82.7%	196.1	196.9	0.7	0.4%
84.0%	196.0	196.8	0.8	0.4%
85.2%	196.0	196.8	0.8	0.4%
86.4%	196.0	196.2	0.2	0.1%
87.7%	195.9	195.9	0.0	0.0%
88.9%	195.8	195.7	-0.1	0.0%
90.1%	195.7	195.5	-0.2	-0.1%
91.4%	195.5	195.4	-0.1	0.0%
92.6%	195.4	195.2	-0.2	-0.1%
93.8%	194.7	195.0	0.3	0.1%
95.1%	194.5	194.7	0.1	0.1%
96.3%	194.4	194.3	-0.1	0.0%
97.5%	193.9	194.0	0.1	0.1%
98.8%	192.4	193.0	0.6	0.3%
100.0%	190.4	191.8	1.3	0.7%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	255.8	239.6	-16.2	-6.3%
1.2%	243.9	234.7	-9.2	-3.8%
2.5%	226.7	233.3	6.5	2.9%
3.7%	224.7	227.5	2.8	1.2%
4.9%	219.9	225.2	5.3	2.4%
6.2%	218.9	219.0	0.1	0.0%
7.4%	217.6	217.6	0.0	0.0%
8.6%	215.1	215.5	0.4	0.2%
9.9%	213.7	212.9	-0.8	-0.4%
11.1%	208.8	208.8	0.0	0.0%
12.3%	207.9	208.8	0.9	0.4%
13.6%	207.8	208.2	0.4	0.2%
14.8%	207.0	207.6	0.6	0.3%
16.0%	206.0	207.1	1.0	0.5%
17.3%	205.5	206.7	1.3	0.6%
18.5%	204.2	206.0	1.8	0.9%
19.8%	203.2	203.6	0.4	0.2%
21.0%	202.8	203.3	0.5	0.3%
22.2%	201.8	202.8	1.0	0.5%
23.5%	201.8	202.5	0.7	0.3%
24.7%	201.1	202.4	1.3	0.7%
25.9%	200.6	201.7	1.1	0.5%
27.2%	200.6	201.6	1.0	0.5%
28.4%	200.4	200.5	0.0	0.0%
29.6%	198.8	200.4	1.6	0.8%
30.9%	198.3	198.7	0.4	0.2%
32.1%	198.0	198.1	0.2	0.1%
33.3%	198.0	198.1	0.1	0.0%
34.6%	198.0	198.0	0.0	0.0%
35.8%	197.5	197.8	0.3	0.2%
37.0%	197.4	197.8	0.4	0.2%
38.3%	197.4	197.5	0.2	0.1%
39.5%	197.1	197.5	0.4	0.2%
40.7%	197.0	197.2	0.2	0.1%
42.0%	196.5	197.2	0.7	0.4%
43.2%	196.2	196.5	0.2	0.1%
44.4%	196.2	196.2	0.1	0.0%
45.7%	195.9	196.0	0.2	0.1%
46.9%	195.8	196.0	0.2	0.1%
48.1%	195.6	195.1	-0.4	-0.2%
49.4%	195.3	195.0	-0.3	-0.1%
50.6%	195.2	194.8	-0.4	-0.2%
51.9%	194.7	194.5	-0.2	-0.1%
53.1%	194.7	194.2	-0.4	-0.2%
54.3%	194.4	194.2	-0.2	-0.1%
55.6%	194.3	194.2	-0.1	-0.1%
56.8%	194.2	194.1	0.0	0.0%
58.0%	194.0	194.1	0.1	0.1%
59.3%	194.0	194.1	0.2	0.1%
60.5%	193.9	194.0	0.1	0.0%
61.7%	193.8	193.8	0.0	0.0%
63.0%	193.8	193.8	0.0	0.0%
64.2%	193.2	193.3	0.2	0.1%
65.4%	193.2	193.2	0.0	0.0%
66.7%	193.1	193.1	0.0	0.0%
67.9%	193.0	193.0	0.0	0.0%
69.1%	192.9	193.0	0.1	0.0%
70.4%	192.8	192.8	0.1	0.0%
71.6%	192.7	192.8	0.1	0.0%
72.8%	192.7	192.8	0.0	0.0%
74.1%	192.7	192.5	-0.2	-0.1%
75.3%	192.5	192.4	-0.1	-0.1%
76.5%	192.3	192.2	-0.1	-0.1%
77.8%	192.2	192.2	0.0	0.0%
79.0%	191.9	191.9	0.0	0.0%
80.2%	191.8	191.6	-0.2	-0.1%
81.5%	191.6	191.6	0.0	0.0%
82.7%	191.6	191.5	-0.1	0.0%
84.0%	191.1	191.1	0.1	0.0%
85.2%	190.9	191.0	0.1	0.0%
86.4%	190.4	191.0	0.5	0.3%
87.7%	190.4	190.5	0.1	0.0%
88.9%	190.4	190.4	0.0	0.0%
90.1%	190.3	190.3	0.1	0.1%
91.4%	190.2	190.3	0.1	0.0%
92.6%	189.8	190.0	0.2	0.1%
93.8%	189.3	189.7	0.4	0.2%
95.1%	189.1	189.7	0.6	0.3%
96.3%	189.0	189.0	0.0	0.0%
97.5%	189.0	189.0	0.0	0.0%
98.8%	187.6	187.5	-0.1	-0.1%
100.0%	186.3	187.1	0.8	0.4%

Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	234.9	228.6	-6.3	-2.7%
1.2%	229.6	227.4	-2.2	-0.9%
2.5%	225.7	222.4	-3.3	-1.5%
3.7%	222.2	221.8	-0.4	-0.2%
4.9%	221.9	216.7	-5.2	-2.4%
6.2%	214.3	214.3	0.0	0.0%
7.4%	213.2	211.2	-2.0	-0.9%
8.6%	211.2	206.1	-5.1	-2.4%
9.9%	199.6	199.5	0.0	0.0%
11.1%	198.8	198.7	-0.1	-0.1%
12.3%	198.6	198.5	-0.1	-0.1%
13.6%	198.5	198.4	0.0	0.0%
14.8%	198.0	197.8	-0.2	-0.1%
16.0%	197.9	197.0	-1.0	-0.5%
17.3%	196.2	196.3	0.1	0.1%
18.5%	195.5	195.6	0.1	0.0%
19.8%	195.5	195.2	-0.3	-0.1%
21.0%	194.5	194.5	0.0	0.0%
22.2%	194.4	194.3	-0.1	0.0%
23.5%	194.2	194.2	0.0	0.0%
24.7%	194.0	194.0	0.0	0.0%
25.9%	193.7	193.8	0.1	0.1%
27.2%	193.5	193.6	0.2	0.1%
28.4%	193.4	193.4	0.0	0.0%
29.6%	193.4	193.4	0.0	0.0%
30.9%	193.4	193.4	0.0	0.0%
32.1%	193.3	193.3	0.0	0.0%
33.3%	193.3	193.3	0.1	0.0%
34.6%	193.2	193.3	0.1	0.1%
35.8%	193.0	193.1	0.1	0.1%
37.0%	192.8	193.1	0.2	0.1%
38.3%	192.6	192.9	0.3	0.2%
39.5%	192.5	192.8	0.2	0.1%
40.7%	192.2	192.5	0.3	0.2%
42.0%	192.1	192.3	0.2	0.1%
43.2%	192.1	192.2	0.1	0.1%
44.4%	192.0	192.1	0.2	0.1%
45.7%	192.0	192.0	0.0	0.0%
46.9%	191.8	192.0	0.1	0.1%
48.1%	191.7	191.9	0.2	0.1%
49.4%	191.7	191.8	0.1	0.1%
50.6%	191.7	191.6	0.0	0.0%
51.9%	191.6	191.5	-0.1	0.0%
53.1%	191.4	191.4	0.0	0.0%
54.3%	191.4	191.4	0.0	0.0%
55.6%	191.3	191.2	-0.1	-0.1%
56.8%	191.3	191.1	-0.2	-0.1%
58.0%	191.2	191.1	-0.1	0.0%
59.3%	191.1	191.1	0.0	0.0%
60.5%	191.0	191.0	0.0	0.0%
61.7%	191.0	190.9	-0.1	-0.1%
63.0%	190.8	190.8	0.0	0.0%
64.2%	190.8	190.8	0.0	0.0%
65.4%	190.7	190.7	0.0	0.0%
66.7%	190.7	190.5	-0.2	-0.1%
67.9%	190.6	190.4	-0.1	-0.1%
69.1%	190.5	190.3	-0.2	-0.1%
70.4%	190.4	190.3	-0.1	0.0%
71.6%	190.3	190.0	-0.2	-0.1%
72.8%	190.2	190.0	-0.2	-0.1%
74.1%	190.0	189.8	-0.2	-0.1%
75.3%	189.8	189.8	-0.1	0.0%
76.5%	189.6	189.7	0.1	0.0%
77.8%	189.5	189.5	0.0	0.0%
79.0%	189.5	189.5	-0.1	0.0%
80.2%	189.3	189.4	0.1	0.1%
81.5%	189.3	189.3	0.0	0.0%
82.7%	189.3	189.3	0.0	0.0%
84.0%	189.1	189.0	-0.2	-0.1%
85.2%	189.1	188.8	-0.3	-0.1%
86.4%	188.7	188.7	0.0	0.0%
87.7%	188.6	188.5	-0.1	0.0%
88.9%	188.4	188.5	0.1	0.0%
90.1%	188.3	188.3	0.0	0.0%
91.4%	188.3	188.3	0.0	0.0%
92.6%	188.2	188.2	0.0	0.0%
93.8%	187.7	187.6	0.0	0.0%
95.1%	187.1	187.1	0.0	0.0%
96.3%	186.8	186.7	-0.1	-0.1%
97.5%	186.6	186.6	0.0	0.0%
98.8%	186.5	186.5	0.0	0.0%
100.0%	186.5	186.5	0.0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	205.2	205.2	0.0	0.0%
1.2%	204.8	204.7	-0.1	-0.1%
2.5%	204.0	203.8	-0.2	-0.1%
3.7%	203.7	202.4	-1.3	-0.6%
4.9%	202.5	202.3	-0.2	-0.1%
6.2%	202.4	201.7	-0.7	-0.3%
7.4%	202.3	201.5	-0.8	-0.4%
8.6%	202.0	201.4	-0.5	-0.3%
9.9%	201.6	200.8	-0.8	-0.4%
11.1%	200.9	198.8	-2.1	-1.0%
12.3%	199.3	196.8	-2.5	-1.3%
13.6%	196.5	196.6	0.0	0.0%
14.8%	191.9	191.9	0.0	0.0%
16.0%	191.9	191.6	-0.3	-0.1%
17.3%	191.7	191.6	-0.1	-0.1%
18.5%	191.5	191.5	-0.1	0.0%
19.8%	191.5	191.4	-0.1	-0.1%
21.0%	191.5	191.3	-0.1	-0.1%
22.2%	191.4	191.1	-0.3	-0.2%
23.5%	191.4	190.9	-0.5	-0.3%
24.7%	191.0	190.8	-0.1	-0.1%
25.9%	190.9	190.5	-0.4	-0.2%
27.2%	190.7	190.4	-0.2	-0.1%
28.4%	190.5	190.4	-0.1	-0.1%
29.6%	190.4	190.3	-0.2	-0.1%
30.9%	190.3	190.2	-0.1	-0.1%
32.1%	190.3	190.2	-0.1	0.0%
33.3%	190.2	190.1	-0.1	-0.1%
34.6%	190.2	190.1	-0.1	-0.1%
35.8%	190.1	190.0	-0.1	-0.1%
37.0%	190.1	190.0	-0.1	-0.1%
38.3%	190.1	189.8	-0.3	-0.1%
39.5%	189.8	189.7	-0.1	0.0%
40.7%	189.7	189.7	0.0	0.0%
42.0%	189.6	189.7	0.0	0.0%
43.2%	189.6	189.6	0.0	0.0%
44.4%	189.5	189.6	0.1	0.0%
45.7%	189.4	189.6	0.1	0.1%
46.9%	189.4	189.4	0.1	0.0%
48.1%	189.3	189.3	0.0	0.0%
49.4%	189.2	189.3	0.1	0.1%
50.6%	189.1	189.2	0.1	0.1%
51.9%	189.1	189.2	0.1	0.0%
53.1%	189.0	189.1	0.1	0.1%
54.3%	188.8	189.0	0.3	0.1%
55.6%	188.5	188.8	0.2	0.1%
56.8%	188.5	188.6	0.1	0.0%
58.0%	188.5	188.5	0.1	0.0%
59.3%	188.4	188.5	0.1	0.0%
60.5%	188.4	188.3	-0.1	-0.1%
61.7%	188.4	188.3	-0.1	0.0%
63.0%	188.3	188.3	0.0	0.0%
64.2%	188.2	188.2	0.0	0.0%
65.4%	188.1	188.2	0.1	0.0%
66.7%	188.1	188.2	0.1	0.0%
67.9%	188.1	188.2	0.1	0.0%
69.1%	188.1	188.1	0.0	0.0%
70.4%	188.1	188.1	0.0	0.0%
71.6%	188.0	188.1	0.0	0.0%
72.8%	188.0	188.1	0.0	0.0%
74.1%	188.0	188.0	0.1	0.0%
75.3%	187.9	188.0	0.1	0.0%
76.5%	187.9	187.9	0.0	0.0%
77.8%	187.8	187.8	0.0	0.0%
79.0%	187.7	187.8	0.1	0.1%
80.2%	187.6	187.7	0.0	0.0%
81.5%	187.6	187.6	0.0	0.0%
82.7%	187.6	187.6	-0.1	0.0%
84.0%	187.6	187.6	-0.1	0.0%
85.2%	187.5	187.5	0.1	0.0%
86.4%	187.5	187.5	0.0	0.0%
87.7%	187.4	187.4	0.0	0.0%
88.9%	187.3	187.4	0.1	0.1%
90.1%	187.2	187.2	0.0	0.0%
91.4%	187.1	187.1	0.0	0.0%
92.6%	187.1	187.1	0.0	0.0%
93.8%	186.6	186.5	-0.1	-0.1%
95.1%	186.4	186.2	-0.2	-0.1%
96.3%	186.3	186.1	-0.2	-0.1%
97.5%	186.3	185.9	-0.4	-0.2%
98.8%	185.8	185.8	0.0	0.0%
100.0%	185.7	185.8	0.1	0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	200.5	199.4	-1.1	-0.6%
1.2%	199.9	198.9	-0.9	-0.5%
2.5%	199.8	198.9	-0.9	-0.5%
3.7%	199.0	198.6	-0.5	-0.2%
4.9%	198.3	197.8	-0.5	-0.3%
6.2%	198.0	197.8	-0.3	-0.1%
7.4%	197.1	197.1	0.0	0.0%
8.6%	196.6	197.1	0.5	0.2%
9.9%	196.5	196.3	-0.2	-0.1%
11.1%	195.6	196.3	0.7	0.4%
12.3%	195.1	195.6	0.6	0.3%
13.6%	193.4	194.7	1.3	0.7%
14.8%	190.7	191.1	0.4	0.2%
16.0%	190.5	190.4	-0.1	-0.1%
17.3%	190.3	190.3	0.0	0.0%
18.5%	190.3	190.0	-0.3	-0.2%
19.8%	190.1	189.6	-0.5	-0.3%
21.0%	189.9	189.5	-0.3	-0.2%
22.2%	189.6	189.3	-0.4	-0.2%
23.5%	189.5	189.3	-0.2	-0.1%
24.7%	189.4	189.2	-0.1	-0.1%
25.9%	189.4	189.2	-0.2	-0.1%
27.2%	189.3	189.2	-0.1	-0.1%
28.4%	189.3	189.2	-0.1	-0.1%
29.6%	189.2	189.1	-0.1	-0.1%
30.9%	189.2	188.9	-0.4	-0.2%
32.1%	189.2	188.9	-0.3	-0.2%
33.3%	189.1	188.9	-0.2	-0.1%
34.6%	189.0	188.8	-0.2	-0.1%
35.8%	189.0	188.8	-0.2	-0.1%
37.0%	188.9	188.8	-0.2	-0.1%
38.3%	188.9	188.7	-0.2	-0.1%
39.5%	188.9	188.7	-0.2	-0.1%
40.7%	188.9	188.7	-0.2	-0.1%
42.0%	188.8	188.6	-0.3	-0.1%
43.2%	188.8	188.5	-0.3	-0.1%
44.4%	188.8	188.5	-0.3	-0.1%
45.7%	188.8	188.5	-0.3	-0.1%
46.9%	188.7	188.4	-0.3	-0.2%
48.1%	188.5	188.4	-0.1	0.0%
49.4%	188.5	188.4	-0.1	-0.1%
50.6%	188.5	188.4	-0.1	-0.1%
51.9%	188.4	188.3	-0.2	-0.1%
53.1%	188.4	188.3	-0.1	-0.1%
54.3%	188.4	188.3	-0.1	-0.1%
55.6%	188.2	188.3	0.0	0.0%
56.8%	188.2	188.3	0.0	0.0%
58.0%	188.2	188.2	0.0	0.0%
59.3%	188.2	188.2	0.1	0.0%
60.5%	188.2	188.2	0.1	0.0%
61.7%	188.1	188.2	0.1	0.0%
63.0%	188.0	188.1	0.0	0.0%
64.2%	188.0	188.1	0.0	0.0%
65.4%	188.0	188.0	0.0	0.0%
66.7%	188.0	188.0	0.0	0.0%
67.9%	187.9	187.9	0.0	0.0%
69.1%	187.9	187.9	0.0	0.0%
70.4%	187.8	187.9	0.0	0.0%
71.6%	187.8	187.8	0.0	0.0%
72.8%	187.8	187.8	0.0	0.0%
74.1%	187.8	187.7	0.0	0.0%
75.3%	187.7	187.7	0.0	0.0%
76.5%	187.7	187.7	0.0	0.0%
77.8%	187.7	187.6	-0.1	0.0%
79.0%	187.7	187.6	-0.1	0.0%
80.2%	187.6	187.6	0.0	0.0%
81.5%	187.6	187.6	-0.1	0.0%
82.7%	187.6	187.5	-0.1	0.0%
84.0%	187.5	187.5	0.0	0.0%
85.2%	187.5	187.5	0.0	0.0%
86.4%	187.5	187.5	0.0	0.0%
87.7%	187.4	187.4	0.0	0.0%
88.9%	187.4	187.4	0.0	0.0%
90.1%	187.4	187.2	-0.2	-0.1%
91.4%	187.3	187.1	-0.1	-0.1%
92.6%	187.2	187.1	-0.1	0.0%
93.8%	187.2	187.1	-0.1	-0.1%
95.1%	187.1	187.0	-0.1	0.0%
96.3%	187.1	187.0	-0.1	0.0%
97.5%	187.0	186.9	-0.1	-0.1%
98.8%	186.5	186.5	0.0	0.0%
100.0%	186.5	186.4	-0.1	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	200.0	198.7	-1.2	-0.6%
1.2%	199.7	198.4	-1.3	-0.7%
2.5%	199.6	198.0	-1.6	-0.8%
3.7%	199.4	197.8	-1.6	-0.8%
4.9%	198.9	197.8	-1.1	-0.5%
6.2%	198.6	197.5	-1.1	-0.6%
7.4%	198.4	197.5	-0.9	-0.5%
8.6%	197.9	197.3	-0.7	-0.3%
9.9%	197.9	194.0	-3.8	-1.9%
11.1%	197.7	193.4	-4.4	-2.2%
12.3%	195.9	192.9	-3.0	-1.5%
13.6%	195.3	191.9	-3.4	-1.8%
14.8%	194.3	191.8	-2.5	-1.3%
16.0%	194.1	191.7	-2.4	-1.2%
17.3%	193.8	191.7	-2.1	-1.1%
18.5%	193.6	191.6	-2.0	-1.0%
19.8%	193.1	191.2	-1.9	-1.0%
21.0%	192.9	190.5	-2.4	-1.3%
22.2%	192.8	190.5	-2.3	-1.2%
23.5%	192.4	190.1	-2.4	-1.2%
24.7%	192.4	189.9	-2.5	-1.3%
25.9%	192.0	189.7	-2.3	-1.2%
27.2%	192.0	189.7	-2.3	-1.2%
28.4%	191.7	189.6	-2.0	-1.1%
29.6%	191.6	189.6	-1.9	-1.0%
30.9%	191.4	189.6	-1.7	-0.9%
32.1%	190.2	189.4	-0.8	-0.4%
33.3%	190.0	189.4	-0.6	-0.3%
34.6%	189.7	189.4	-0.3	-0.2%
35.8%	189.7	189.3	-0.4	-0.2%
37.0%	189.7	189.3	-0.4	-0.2%
38.3%	189.6	189.2	-0.4	-0.2%
39.5%	189.6	189.2	-0.4	-0.2%
40.7%	189.4	189.1	-0.2	-0.1%
42.0%	189.4	188.9	-0.4	-0.2%
43.2%	189.3	188.9	-0.3	-0.2%
44.4%	189.1	188.7	-0.3	-0.2%
45.7%	189.1	188.7	-0.3	-0.2%
46.9%	189.0	188.7	-0.3	-0.1%
48.1%	188.9	188.7	-0.3	-0.1%
49.4%	188.9	188.7	-0.3	-0.1%
50.6%	188.9	188.6	-0.3	-0.1%
51.9%	188.8	188.6	-0.2	-0.1%
53.1%	188.8	188.6	-0.2	-0.1%
54.3%	188.8	188.6	-0.2	-0.1%
55.6%	188.7	188.6	-0.2	-0.1%
56.8%	188.7	188.5	-0.2	-0.1%
58.0%	188.7	188.5	-0.2	-0.1%
59.3%	188.7	188.5	-0.2	-0.1%
60.5%	188.6	188.4	-0.2	-0.1%
61.7%	188.6	188.4	-0.2	-0.1%
63.0%	188.6	188.4	-0.2	-0.1%
64.2%	188.6	188.4	-0.2	-0.1%
65.4%	188.5	188.4	-0.2	-0.1%
66.7%	188.5	188.3	-0.2	-0.1%
67.9%	188.5	188.3	-0.1	-0.1%
69.1%	188.5	188.3	-0.2	-0.1%
70.4%	188.4	188.3	-0.2	-0.1%
71.6%	188.4	188.2	-0.2	-0.1%
72.8%	188.4	188.2	-0.2	-0.1%
74.1%	188.4	188.2	-0.2	-0.1%
75.3%	188.4	188.2	-0.2	-0.1%
76.5%	188.4	188.2	-0.2	-0.1%
77.8%	188.4	188.2	-0.2	-0.1%
79.0%	188.4	188.1	-0.3	-0.2%
80.2%	188.3	188.0	-0.4	-0.2%
81.5%	188.2	187.9	-0.2	-0.1%
82.7%	188.2	187.9	-0.3	-0.2%
84.0%	188.1	187.8	-0.3	-0.1%
85.2%	187.9	187.8	-0.1	-0.1%
86.4%	187.9	187.8	-0.2	-0.1%
87.7%	187.9	187.8	-0.1	-0.1%
88.9%	187.8	187.7	-0.1	0.0%
90.1%	187.8	187.6	-0.2	-0.1%
91.4%	187.8	187.6	-0.2	-0.1%
92.6%	187.7	187.5	-0.3	-0.1%
93.8%	187.7	187.4	-0.2	-0.1%
95.1%	187.5	187.3	-0.2	-0.1%
96.3%	187.4	187.2	-0.2	-0.1%
97.5%	187.3	187.1	-0.2	-0.1%
98.8%	186.2	186.4	0.2	0.1%
100.0%	185.3	185.2	-0.1	-0.1%

Figure SQ-29-b
Old River at Los Vaqueros Intake, Monthly EC
Probability of Exceedance

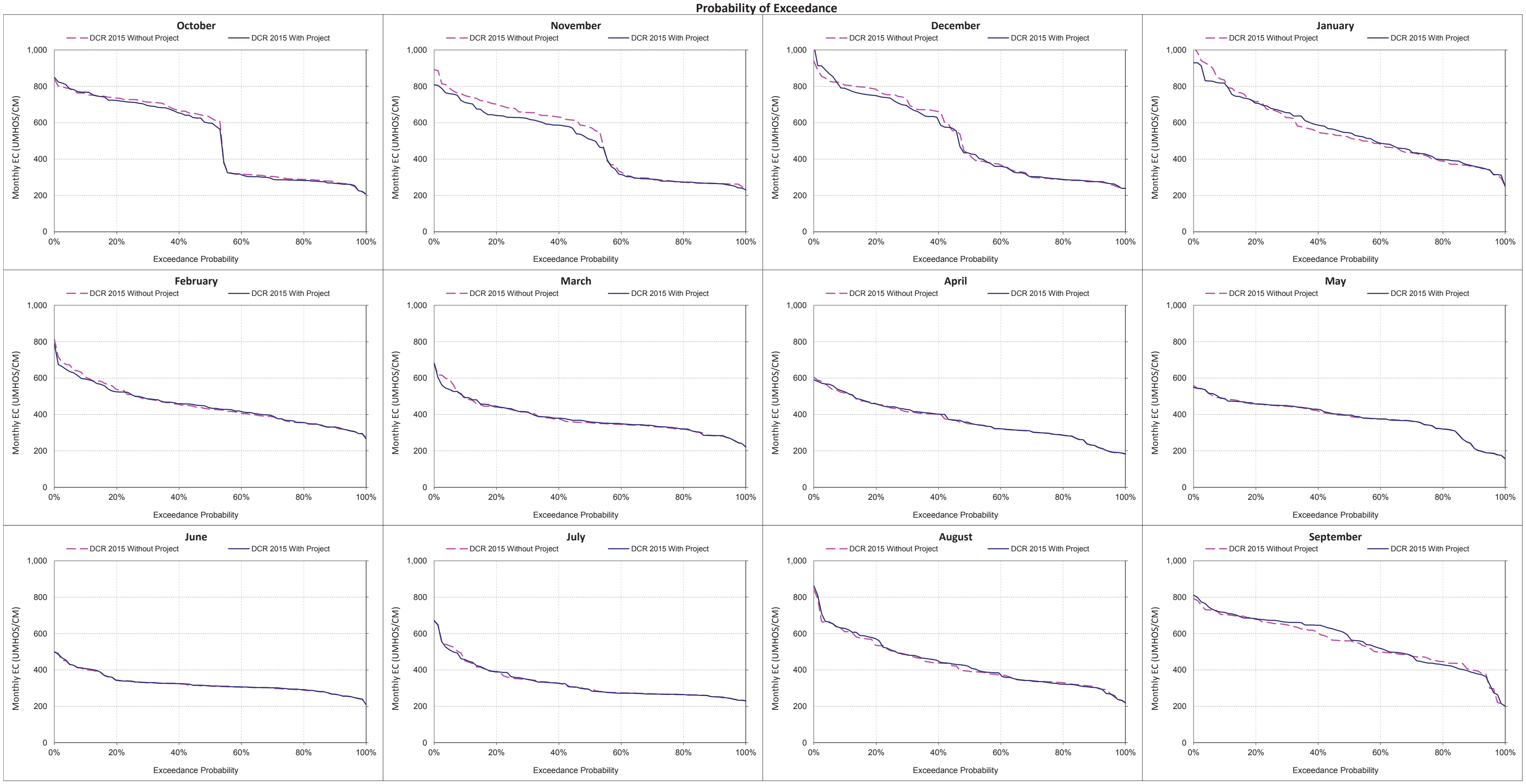


Table SQ-29-b

Old River at Los Vaqueros Intake, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	840.0	849.8	9.7	1.2%
1.2%	801.4	824.2	22.9	2.9%
2.5%	798.1	818.8	20.8	2.6%
3.7%	791.3	809.4	18.1	2.3%
4.9%	788.8	786.1	-2.7	-0.3%
6.2%	776.4	783.3	6.9	0.9%
7.4%	763.9	770.6	6.7	0.9%
8.6%	763.8	768.6	4.8	0.6%
9.9%	762.5	768.0	5.4	0.7%
11.1%	752.5	766.3	13.8	1.8%
12.3%	751.5	754.0	2.6	0.3%
13.6%	747.8	746.8	-1.0	-0.1%
14.8%	747.2	744.8	-2.4	-0.3%
16.0%	745.1	741.9	-3.2	-0.4%
17.3%	740.3	724.4	-15.9	-2.1%
18.5%	739.5	724.0	-15.5	-2.1%
19.8%	735.5	723.3	-12.2	-1.7%
21.0%	735.0	719.8	-15.2	-2.1%
22.2%	728.2	717.7	-10.5	-1.4%
23.5%	728.0	714.8	-13.3	-1.8%
24.7%	727.4	712.1	-15.4	-2.1%
25.9%	727.2	710.7	-16.5	-2.3%
27.2%	724.0	707.3	-16.7	-2.3%
28.4%	718.2	703.9	-14.3	-2.0%
29.6%	713.7	695.4	-18.3	-2.6%
30.9%	712.7	690.7	-22.1	-3.1%
32.1%	711.9	690.2	-21.7	-3.0%
33.3%	709.5	684.8	-24.6	-3.5%
34.6%	707.9	682.8	-25.1	-3.5%
35.8%	696.1	681.2	-14.9	-2.1%
37.0%	686.0	674.8	-11.2	-1.6%
38.3%	675.0	665.3	-9.7	-1.4%
39.5%	669.7	655.1	-14.6	-2.2%
40.7%	664.1	651.4	-12.7	-1.9%
42.0%	663.7	641.7	-22.0	-3.3%
43.2%	653.8	641.3	-12.5	-1.9%
44.4%	652.6	628.2	-24.3	-3.7%
45.7%	648.5	625.5	-23.0	-3.6%
46.9%	642.7	625.2	-17.5	-2.7%
48.1%	639.0	602.2	-36.8	-5.8%
49.4%	635.7	598.1	-37.7	-5.9%
50.6%	621.4	597.1	-24.3	-3.9%
51.9%	611.0	579.5	-31.5	-5.2%
53.1%	608.7	564.0	-44.7	-7.3%
54.3%	379.3	382.9	3.7	1.0%
55.6%	327.7	324.9	-2.8	-0.9%
56.8%	322.6	322.1	-0.5	-0.2%
58.0%	317.4	319.6	2.2	0.7%
59.3%	317.0	318.3	1.3	0.4%
60.5%	316.6	309.7	-6.9	-2.2%
61.7%	315.3	305.0	-10.3	-3.3%
63.0%	314.9	303.4	-11.5	-3.6%
64.2%	311.7	302.6	-9.1	-2.9%
65.4%	311.6	302.6	-9.1	-2.9%
66.7%	310.5	300.9	-9.6	-3.1%
67.9%	306.2	300.1	-6.1	-2.0%
69.1%	304.5	295.5	-9.0	-3.0%
70.4%	304.2	286.8	-17.4	-5.7%
71.6%	301.0	286.7	-14.3	-4.7%
72.8%	297.0	285.9	-11.1	-3.7%
74.1%	294.0	285.6	-8.4	-2.8%
75.3%	291.3	284.5	-6.8	-2.3%
76.5%	290.0	284.4	-5.6	-1.9%
77.8%	289.6	283.9	-5.7	-2.0%
79.0%	288.8	282.9	-5.9	-2.0%
80.2%	287.9	281.8	-6.1	-2.1%
81.5%	287.3	281.2	-6.0	-2.1%
82.7%	287.0	278.8	-8.2	-2.9%
84.0%	284.4	278.5	-5.9	-2.1%
85.2%	283.8	276.3	-7.5	-2.7%
86.4%	280.6	276.0	-4.6	-1.6%
87.7%	279.1	268.9	-10.2	-3.7%
88.9%	278.8	268.7	-10.0	-3.6%
90.1%	270.7	266.7	-4.0	-1.5%
91.4%	268.2	264.3	-3.9	-1.4%
92.6%	265.5	261.5	-4.0	-1.5%
93.8%	265.4	261.3	-4.1	-1.6%
95.1%	257.9	259.8	2.0	0.8%
96.3%	249.3	255.2	5.9	2.4%
97.5%	225.8	226.9	1.1	0.5%
98.8%	220.3	221.6	1.4	0.6%
100.0%	207.5	205.9	-1.6	-0.8%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	891.0	808.5	-82.5	-9.3%
1.2%	886.7	805.9	-80.8	-9.1%
2.5%	813.8	789.0	-24.9	-3.1%
3.7%	809.7	763.7	-46.0	-5.7%
4.9%	789.4	760.0	-29.4	-3.7%
6.2%	774.1	757.1	-17.0	-2.2%
7.4%	764.0	751.1	-13.0	-1.7%
8.6%	760.0	722.8	-37.2	-4.9%
9.9%	749.4	710.9	-38.5	-5.1%
11.1%	743.4	706.5	-36.9	-5.0%
12.3%	740.2	702.2	-38.0	-5.1%
13.6%	733.8	675.7	-58.1	-7.9%
14.8%	722.2	674.7	-47.5	-6.6%
16.0%	719.0	656.4	-62.6	-8.7%
17.3%	713.8	644.2	-69.6	-9.8%
18.5%	706.0	644.2	-61.8	-8.8%
19.8%	703.0	640.3	-62.8	-8.9%
21.0%	695.5	638.4	-57.1	-8.2%
22.2%	689.2	636.9	-52.3	-7.6%
23.5%	682.9	629.7	-53.2	-7.8%
24.7%	680.9	629.6	-51.2	-7.5%
25.9%	678.3	629.0	-49.4	-7.3%
27.2%	659.6	628.7	-30.9	-4.7%
28.4%	658.7	627.2	-31.5	-4.8%
29.6%	656.3	624.1	-32.2	-4.9%
30.9%	655.7	617.6	-38.1	-5.8%
32.1%	655.1	614.7	-40.4	-6.2%
33.3%	646.6	608.5	-38.2	-5.9%
34.6%	640.7	603.2	-37.5	-5.9%
35.8%	639.8	593.5	-46.3	-7.2%
37.0%	639.3	591.7	-47.6	-7.4%
38.3%	635.2	587.0	-48.2	-7.6%
39.5%	632.5	586.8	-45.8	-7.2%
40.7%	629.1	586.2	-42.9	-6.8%
42.0%	619.5	582.2	-37.3	-6.0%
43.2%	616.7	578.8	-38.0	-6.2%
44.4%	614.5	570.1	-44.4	-7.2%
45.7%	613.8	538.9	-75.0	-12.2%
46.9%	586.4	537.0	-49.4	-8.4%
48.1%	584.5	525.9	-58.7	-10.0%
49.4%	577.9	511.6	-66.3	-11.5%
50.6%	570.5	505.6	-65.0	-11.4%
51.9%	554.1	497.3	-56.8	-10.3%
53.1%	553.9	465.9	-88.0	-15.9%
54.3%	467.1	462.0	-5.0	-1.1%
55.6%	389.2	396.2	7.0	1.8%
56.8%	368.8	359.3	-9.4	-2.6%
58.0%	366.5	345.2	-21.3	-5.8%
59.3%	333.5	317.9	-15.6	-4.7%
60.5%	324.0	313.7	-10.3	-3.2%
61.7%	309.6	303.7	-5.9	-1.9%
63.0%	305.9	302.8	-3.1	-1.0%
64.2%	296.9	295.4	-1.4	-0.5%
65.4%	296.6	295.0	-1.5	-0.5%
66.7%	296.6	292.0	-4.6	-1.5%
67.9%	296.4	291.1	-5.3	-1.8%
69.1%	293.6	290.3	-3.2	-1.1%
70.4%	286.5	289.1	2.6	0.9%
71.6%	285.8	287.7	1.9	0.7%
72.8%	284.9	279.6	-5.3	-1.9%
74.1%	282.7	278.9	-3.8	-1.3%
75.3%	281.0	278.4	-2.6	-0.9%
76.5%	278.5	277.0	-1.5	-0.5%
77.8%	274.0	275.7	1.7	0.6%
79.0%	272.8	275.0	2.2	0.8%
80.2%	272.8	273.6	0.8	0.3%
81.5%	271.2	273.1	1.9	0.7%
82.7%	270.4	272.8	2.4	0.9%
84.0%	270.2	269.3	-0.9	-0.3%
85.2%	269.0	267.9	-1.0	-0.4%
86.4%	267.2	267.7	0.5	0.2%
87.7%	265.8	267.5	1.6	0.6%
88.9%	265.8	267.2	1.4	0.5%
90.1%	265.6	265.8	0.1	0.1%
91.4%	265.4	264.7	-0.7	-0.3%
92.6%	264.6	263.7	-0.9	-0.4%
93.8%	264.1	259.3	-4.8	-1.8%
95.1%	262.8	256.5	-6.2	-2.4%
96.3%	262.7	252.4	-10.3	-3.9%
97.5%	262.4	242.4	-19.9	-7.6%
98.8%	249.1	240.8	-8.3	-3.3%
100.0%	229.1	230.7	1.5	0.7%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	939.1	1027.9	88.8	9.5%
1.2%	888.7	913.9	25.2	2.8%
2.5%	856.3	913.0	56.8	6.6%
3.7%	845.5	891.3	45.8	5.4%
4.9%	828.2	869.5	41.3	5.0%
6.2%	824.5	852.9	28.4	3.4%
7.4%	823.1	821.5	-1.6	-0.2%
8.6%	821.3	790.8	-30.5	-3.7%
9.9%	806.7	789.4	-17.4	-2.2%
11.1%	806.0	782.0	-24.0	-3.0%
12.3%	803.2	773.2	-30.0	-3.7%
13.6%	799.2	766.2	-32.9	-4.1%
14.8%	797.1	760.7	-36.4	-4.6%
16.0%	796.3	757.6	-38.6	-4.9%
17.3%	792.7	754.5	-38.2	-4.8%
18.5%	788.6	750.9	-37.7	-4.8%
19.8%	785.5	750.2	-35.3	-4.5%
21.0%	771.0	743.7	-27.3	-3.5%
22.2%	759.3	739.2	-20.1	-2.6%
23.5%	754.0	739.0	-15.1	-2.0%
24.7%	753.8	734.6	-19.2	-2.5%
25.9%	753.8	718.3	-35.4	-4.7%
27.2%	744.2	706.9	-37.3	-5.0%
28.4%	741.7	699.1	-42.7	-5.8%
29.6%	733.7	695.6	-38.1	-5.2%
30.9%	693.5	679.6	-13.9	-2.0%
32.1%	683.6	669.2	-14.5	-2.1%
33.3%	672.5	661.3	-11.3	-1.7%
34.6%	671.7	649.0	-22.8	-3.4%
35.8%	671.4	636.0	-35.5	-5.3%
37.0%	671.2	634.7	-36.5	-5.4%
38.3%	667.2	634.4	-32.8	-4.9%
39.5%	662.7	630.6	-32.1	-4.8%
40.7%	658.6	586.4	-72.2	-11.0%
42.0%	598.5	575.2	-23.3	-3.9%
43.2%	591.5	574.8	-16.6	-2.8%
44.4%	555.8	570.3	14.4	2.6%
45.7%	555.4	554.7	-0.8	-0.1%
46.9%	536.0	468.5	-67.5	-12.6%
48.1%	445.6	435.2	-10.4	-2.3%
49.4%	434.2	434.4	0.2	0.1%
50.6%	409.6	427.5	17.9	4.4%
51.9%	392.0	424.7	32.7	8.4%
53.1%	389.4	401.7	12.2	3.1%
54.3%	388.6	398.8	10.1	2.6%
55.6%	381.1	384.3	3.2	0.8%
56.8%	380.2	374.5	-5.7	-1.5%
58.0%	376.0	361.0	-15.0	-4.0%
59.3%	372.6	360.6	-12.0	-3.2%
60.5%	363.6	358.5	-5.1	-1.4%
61.7%	359.9	354.4	-5.5	-1.5%
63.0%	342.9	342.5	-0.4	-0.1%
64.2%	335.2	327.5	-7.8	-2.3%
65.4%	332.0	325.2	-6.9	-2.1%
66.7%	329.1	324.0	-5.0	-1.5%
67.9%	325.7	319.6	-6.1	-1.9%
69.1%	299.8	304.1	4.2	1.4%
70.4%	299.2	303.8	4.7	1.6%
71.6%	297.5	303.3	5.9	2.0%
72.8%	297.3	301.3	4.1	1.4%
74.1%	295.3	297.8	2.5	0.9%
75.3%	294.7	295.6	1.0	0.3%
76.5%	290.3	293.5	3.2	1.1%
77.8%	289.1	291.3	2.1	0.7%
79.0%	288.4	289.8	1.4	0.5%
80.2%	287.9	286.2	-1.7	-0.6%
81.5%	283.9	286.2	2.2	0.8%
82.7%	283.4	285.0	1.5	0.5%
84.0%	283.1	284.3	1.2	0.4%
85.2%	282.7	283.9	1.2	0.4%
86.4%	282.5	281.5	-1.0	-0.4%
87.7%	281.4	276.7	-4.7	-1.7%
88.9%	278.1	276.5	-1.5	-0.5%
90.1%	276.1	276.2	0.1	0.0%
91.4%	275.6	275.8	0.2	0.1%
92.6%	271.1	275.8	4.6	1.7%
93.8%	268.3	268.7	0.4	0.1%
95.1%	259.5	264.2	4.7	1.8%
96.3%	255.2	263.4	8.2	3.2%
97.5%	246.5	253.9	7.4	3.0%
98.8%	241.5	239.7	-1.8	-0.7%
100.0%	239.5	238.7	-0.7	-0.3%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1011.8	930.1	-81.7	-8.1%
1.2%	989.6	929.9	-59.7	-6.0%
2.5%	941.1	913.8	-27.3	-2.9%
3.7%	929.5	830.6	-99.0	-10.6%
4.9%	917.5	830.4	-87.1	-9.5%
6.2%	899.5	828.3	-71.2	-7.9%
7.4%	854.0	821.1	-32.9	-3.9%
8.6%	840.8	818.6	-22.2	-2.6%
9.9%	835.1	818.1	-17.1	-2.0%
11.1%	792.3	790.7	-1.6	-0.2%
12.3%	789.8	756.1	-33.7	-4.3%
13.6%	768.7	746.1	-22.7	-2.9%
14.8%	765.9	743.9	-22.0	-2.9%
16.0%	759.5	735.7	-23.8	-3.1%
17.3%	737.1	732.1	-5.0	-0.7%
18.5%	724.3	725.2	1.0	0.1%
19.8%	716.6	708.6	-8.0	-1.1%
21.0%	716.5	706.2	-10.2	-1.4%
22.2%	702.9	695.6	-7.3	-1.0%
23.5%	673.9	692.3	18.4	2.7%
24.7%	671.8	679.3	7.5	1.1%
25.9%	667.6	674.5	6.9	1.0%
27.2%	660.2	670.6	10.4	1.6%
28.4%	650.1	663.4	13.2	2.0%
29.6%	628.8	655.6	26.7	4.3%
30.9%	627.3	653.6	26.4	4.2%
32.1%	623.6	637.6	14.0	2.2%
33.3%	582.0	637.1	55.0	9.5%
34.6%	578.0	636.5	58.6	10.1%
35.8%	571.7	610.9	39.1	6.8%
37.0%	567.7	602.6	34.9	6.1%
38.3%	562.7	594.4	31.7	5.6%
39.5%	553.4	588.0	34.5	6.2%
40.7%	544.1	583.8	39.7	7.3%
42.0%	541.6	581.5	39.9	7.4%
43.2%	538.4	566.7	28.3	5.3%
44.4%	538.4	566.4	28.0	5.2%
45.7%	530.4	559.4	29.0	5.5%
46.9%	530.1	553.6	23.5	4.4%
48.1%	525.9	547.6	21.6	4.1%
49.4%	523.3	545.6	22.3	4.3%
50.6%	513.0	542.7	29.8	5.8%
51.9%	509.5	530.2	20.7	4.1%
53.1%	508.1	525.6	17.5	3.4%
54.3%	500.2	523.1	22.9	4.6%
55.6%	498.8	514.5	15.7	3.2%
56.8%	497.8	512.5	14.7	2.9%
58.0%	486.7	499.7	13.0	2.7%
59.3%	486.4	490.3	3.9	0.8%
60.5%	478.8	486.4	7.6	1.6%
61.7%	464.9	482.6	17.7	3.8%
63.0%	464.8	481.5	16.8	3.6%
64.2%	462.2	471.4	9.2	2.0%
65.4%	460.0	462.2	2.2	0.5%
66.7%	444.7	458.5	13.8	3.1%
67.9%	437.9	457.5	19.6	4.5%
69.1%	435.3	451.9	16.6	3.8%
70.4%	435.2	435.1	0.0	0.0%
71.6%	430.0	434.5	4.6	1.1%
72.8%	423.8	429.9	6.1	1.4%
74.1%	421.6	428.7	7.1	1.7%
75.3%	415.1	421.7	6.6	1.6%
76.5%	400.4	414.5	14.1	3.5%
77.8%	399.5	400.0	0.5	0.1%
79.0%	390.7	399.5	8.8	2.3%
80.2%	388.4	396.3	7.8	2.0%
81.5%	377.3	395.3	18.0	4.8%
82.7%	371.7	392.2	20.6	5.5%
84.0%	371.4	390.9	19.5	5.3%
85.2%	369.2	389.3	20.1	5.4%
86.4%	367.5	377.4	9.9	2.7%
87.7%	366.2	370.4	4.2	1.2%
88.9%	360.7	366.4	5.7	1.6%
90.1%	356.5	360.9	4.4	1.2%
91.4%	355.8	356.3	0.5	0.1%
92.6%	347.7	352.0	4.3	1.2%
93.8%	345.6	346.0	0.5	0.1%
95.1%	341.1	339.4	-1.7	-0.5%
96.3%	314.2	314.8	0.6	0.2%
97.5%	312.2	314.0	1.8	0.6%
98.8%	294.1	311.4	17.3	5.9%
100.0%	250.7	250.7	0.0	0.0%

Table SQ-29-b

Old River at Los Vaqueros Intake, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	813.7	789.2	-24.6	-3.0%
1.2%	717.3	675.1	-42.1	-5.9%
2.5%	688.2	662.9	-25.2	-3.7%
3.7%	675.8	649.1	-26.7	-3.9%
4.9%	672.3	636.4	-35.8	-5.3%
6.2%	643.4	629.2	-14.2	-2.2%
7.4%	640.2	615.4	-24.8	-3.9%
8.6%	631.7	598.3	-33.5	-5.3%
9.9%	605.6	595.4	-10.2	-1.7%
11.1%	597.5	590.0	-7.5	-1.3%
12.3%	585.0	584.2	-0.7	-0.1%
13.6%	584.4	570.5	-13.8	-2.4%
14.8%	583.1	566.5	-16.6	-2.9%
16.0%	571.9	557.8	-14.1	-2.5%
17.3%	564.4	539.8	-24.6	-4.4%
18.5%	557.6	529.2	-28.5	-5.1%
19.8%	538.7	525.5	-13.1	-2.4%
21.0%	533.2	524.2	-9.0	-1.7%
22.2%	531.8	522.9	-8.9	-1.7%
23.5%	510.1	522.5	12.3	2.4%
24.7%	509.6	509.3	-0.2	0.0%
25.9%	500.2	499.3	-0.9	-0.2%
27.2%	496.6	499.1	2.5	0.5%
28.4%	487.1	493.3	6.2	1.3%
29.6%	486.2	486.2	0.0	0.0%
30.9%	482.6	484.9	2.3	0.5%
32.1%	479.1	481.6	2.6	0.5%
33.3%	477.4	481.5	4.0	0.8%
34.6%	472.0	468.8	-3.2	-0.7%
35.8%	465.5	467.4	1.9	0.4%
37.0%	465.2	467.3	2.1	0.5%
38.3%	459.1	465.2	6.1	1.3%
39.5%	457.7	459.8	2.1	0.5%
40.7%	451.9	458.9	6.9	1.5%
42.0%	450.4	458.4	8.0	1.8%
43.2%	448.8	458.1	9.2	2.1%
44.4%	447.0	455.5	8.5	1.9%
45.7%	439.0	450.4	11.4	2.6%
46.9%	438.8	448.8	10.0	2.3%
48.1%	433.8	448.4	14.6	3.4%
49.4%	430.7	440.0	9.3	2.2%
50.6%	428.8	434.1	5.3	1.2%
51.9%	426.9	433.9	6.9	1.6%
53.1%	425.6	429.9	4.3	1.0%
54.3%	423.8	427.8	4.0	0.9%
55.6%	417.7	427.6	9.9	2.4%
56.8%	417.0	426.3	9.4	2.3%
58.0%	414.2	419.2	5.1	1.2%
59.3%	409.4	419.2	9.8	2.4%
60.5%	404.8	413.8	9.1	2.2%
61.7%	404.5	410.8	6.3	1.6%
63.0%	399.6	410.7	11.1	2.8%
64.2%	399.3	405.8	6.5	1.6%
65.4%	394.9	403.0	8.1	2.1%
66.7%	391.8	399.4	7.6	1.9%
67.9%	389.4	398.6	9.1	2.3%
69.1%	389.4	397.0	7.6	2.0%
70.4%	386.8	389.8	3.0	0.8%
71.6%	377.6	376.7	-1.0	-0.3%
72.8%	376.4	376.5	0.1	0.0%
74.1%	365.7	368.1	2.4	0.6%
75.3%	360.9	366.1	5.1	1.4%
76.5%	357.7	364.6	6.8	1.9%
77.8%	356.8	357.2	0.4	0.1%
79.0%	355.9	356.6	0.7	0.2%
80.2%	354.9	355.7	0.8	0.2%
81.5%	347.6	349.0	1.3	0.4%
82.7%	346.9	348.3	1.4	0.4%
84.0%	346.9	347.9	1.0	0.3%
85.2%	346.6	342.1	-4.6	-1.3%
86.4%	336.4	335.9	-0.6	-0.2%
87.7%	330.7	331.0	0.3	0.1%
88.9%	330.6	330.9	0.4	0.1%
90.1%	329.7	330.5	0.8	0.2%
91.4%	321.1	326.7	5.6	1.7%
92.6%	319.7	320.0	0.3	0.1%
93.8%	315.1	315.1	0.0	0.0%
95.1%	309.7	309.1	-0.6	-0.2%
96.3%	305.3	306.4	1.1	0.3%
97.5%	296.0	296.0	0.0	0.0%
98.8%	295.1	294.5	-0.7	-0.2%
100.0%	270.5	266.9	-3.6	-1.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	680.6	680.5	-0.1	0.0%
1.2%	617.6	604.4	-13.2	-2.1%
2.5%	616.5	562.3	-54.2	-8.8%
3.7%	599.2	545.0	-54.2	-9.0%
4.9%	592.3	537.6	-54.7	-9.2%
6.2%	562.9	526.7	-36.2	-6.4%
7.4%	522.9	526.2	3.3	0.6%
8.6%	515.6	510.5	-5.1	-1.0%
9.9%	485.0	493.2	8.2	1.7%
11.1%	483.0	492.3	9.3	1.9%
12.3%	477.4	481.5	4.1	0.9%
13.6%	460.0	481.3	21.3	4.6%
14.8%	455.0	458.2	3.2	0.7%
16.0%	445.6	457.3	11.6	2.6%
17.3%	445.3	454.9	9.7	2.2%
18.5%	444.9	447.1	2.1	0.5%
19.8%	440.3	446.3	6.0	1.4%
21.0%	439.0	441.1	2.1	0.5%
22.2%	435.5	437.9	2.4	0.5%
23.5%	433.1	433.7	0.6	0.1%
24.7%	426.5	432.8	6.3	1.5%
25.9%	422.4	423.5	1.1	0.3%
27.2%	415.3	417.0	1.6	0.4%
28.4%	414.3	416.5	2.2	0.5%
29.6%	413.0	414.9	1.9	0.5%
30.9%	412.0	407.2	-4.8	-1.2%
32.1%	404.8	396.5	-8.3	-2.1%
33.3%	389.6	390.2	0.6	0.1%
34.6%	386.3	387.5	1.2	0.3%
35.8%	382.0	387.1	5.0	1.3%
37.0%	380.6	385.0	4.4	1.2%
38.3%	376.2	380.4	4.2	1.1%
39.5%	375.7	379.6	3.9	1.0%
40.7%	372.7	378.9	6.2	1.7%
42.0%	363.5	376.8	13.3	3.7%
43.2%	360.7	372.3	11.6	3.2%
44.4%	359.3	368.7	9.4	2.6%
45.7%	357.4	368.6	11.2	3.1%
46.9%	356.7	367.6	10.9	3.1%
48.1%	356.3	365.0	8.7	2.4%
49.4%	356.2	360.4	4.2	1.2%
50.6%	353.7	358.3	4.6	1.3%
51.9%	352.1	356.1	4.0	1.1%
53.1%	350.3	355.5	5.2	1.5%
54.3%	350.1	352.8	2.7	0.8%
55.6%	348.6	352.8	4.2	1.2%
56.8%	348.3	351.6	3.4	1.0%
58.0%	346.2	351.6	5.3	1.5%
59.3%	345.7	350.7	5.0	1.5%
60.5%	344.9	348.6	3.8	1.1%
61.7%	344.2	346.9	2.8	0.8%
63.0%	342.2	344.9	2.8	0.8%
64.2%	342.0	344.3	2.4	0.7%
65.4%	341.4	344.2	2.8	0.8%
66.7%	340.8	343.6	2.8	0.8%
67.9%	340.1	340.6	0.6	0.2%
69.1%	336.9	340.3	3.4	1.0%
70.4%	333.7	338.0	4.3	1.3%
71.6%	332.5	333.2	0.7	0.2%
72.8%	331.5	332.4	0.8	0.3%
74.1%	330.8	332.0	1.2	0.4%
75.3%	326.7	330.3	3.6	1.1%
76.5%	324.3	327.9	3.6	1.1%
77.8%	320.0	325.1	5.1	1.6%
79.0%	319.9	320.5	0.6	0.2%
80.2%	319.9	320.5	0.6	0.2%
81.5%	315.4	319.7	4.3	1.4%
82.7%	309.9	310.0	0.1	0.0%
84.0%	304.7	304.8	0.1	0.0%
85.2%	302.8	303.0	0.2	0.1%
86.4%	297.8	285.9	-11.9	-4.0%
87.7%	285.8	285.6	-0.1	0.0%
88.9%	284.0	285.4	1.4	0.5%
90.1%	283.8	284.5	0.7	0.3%
91.4%	283.1	284.1	1.0	0.3%
92.6%	281.6	283.7	2.1	0.8%
93.8%	274.1	274.2	0.1	0.0%
95.1%	268.4	268.7	0.3	0.1%
96.3%	256.9	256.6	-0.3	-0.1%
97.5%	245.1	245.1	0.0	0.0%
98.8%	240.1	239.7	-0.4	-0.2%
100.0%	220.6	221.0	0.4	0.2%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	604.9	590.5	-14.4	-2.4%
1.2%	588.7	581.9	-6.8	-1.2%
2.5%	582.0	571.8	-10.1	-1.7%
3.7%	568.3	568.4	0.1	0.0%
4.9%	551.1	566.2	15.1	2.7%
6.2%	535.6	558.1	22.6	4.2%
7.4%	533.7	540.6	6.9	1.3%
8.6%	522.8	532.8	9.9	1.9%
9.9%	519.0	524.3	5.3	1.0%
11.1%	509.1	514.8	5.6	1.1%
12.3%	508.9	506.8	-2.1	-0.4%
13.6%	485.8	488.1	2.3	0.5%
14.8%	475.2	483.3	8.1	1.7%
16.0%	474.1	475.9	1.8	0.4%
17.3%	468.9	470.6	1.6	0.3%
18.5%	468.9	461.2	-7.7	-1.6%
19.8%	460.3	459.2	-1.1	-0.2%
21.0%	453.0	453.4	0.5	0.1%
22.2%	452.5	447.3	-5.2	-1.2%
23.5%	446.4	442.3	-4.1	-0.9%
24.7%	435.8	442.1	6.3	1.4%
25.9%	433.5	441.7	8.2	1.9%
27.2%	429.6	434.9	5.3	1.2%
28.4%	422.0	432.0	10.1	2.4%
29.6%	415.5	428.2	12.7	3.1%
30.9%	413.9	424.9	11.0	2.7%
32.1%	412.8	415.9	3.1	0.7%
33.3%	407.8	415.0	7.3	1.8%
34.6%	406.1	412.8	6.7	1.7%
35.8%	404.9	409.9	5.0	1.2%
37.0%	403.3	407.9	4.7	1.2%
38.3%	402.9	405.6	2.7	0.7%
39.5%	401.6	402.1	0.6	0.1%
40.7%	400.7	401.6	0.8	0.2%
42.0%	376.4	401.1	24.7	6.6%
43.2%	370.2	371.9	1.7	0.4%
44.4%	368.7	370.7	2.0	0.6%
45.7%	366.6	368.7	2.1	0.6%
46.9%	358.0	368.0	10.0	2.8%
48.1%	357.9	358.2	0.3	0.1%
49.4%	349.4	357.7	8.3	2.4%
50.6%	348.7	348.9	0.1	0.0%
51.9%	344.9	345.1	0.2	0.1%
53.1%	341.6	342.6	1.0	0.3%
54.3%	340.9	340.1	-0.8	-0.2%
55.6%	334.1	334.9	0.7	0.2%
56.8%	333.5	333.9	0.4	0.1%
58.0%	322.2	322.4	0.2	0.1%
59.3%	321.9	322.2	0.3	0.1%
60.5%	320.0	320.7	0.6	0.2%
61.7%	318.2	318.2	0.0	0.0%
63.0%	316.2	316.4	0.2	0.1%
64.2%	315.6	316.0	0.4	0.1%
65.4%	313.7	314.2	0.6	0.2%
66.7%	312.5	312.5	0.0	0.0%
67.9%	311.6	311.6	0.0	0.0%
69.1%	311.3	311.3	0.0	0.0%
70.4%	302.6	303.2	0.6	0.2%
71.6%	300.9	301.6	0.7	0.2%
72.8%	299.3	299.2	0.0	0.0%
74.1%	297.9	298.0	0.1	0.0%
75.3%	297.2	297.3	0.1	0.0%
76.5%	291.9	292.0	0.1	0.0%
77.8%	290.2	289.9	-0.3	-0.1%
79.0%	288.5	289.7	1.3	0.4%
80.2%	285.2	285.2	-0.1	0.0%
81.5%	282.7	282.6	-0.1	0.0%
82.7%	282.5	281.8	-0.7	-0.3%
84.0%	270.6	270.5	-0.1	-0.1%
85.2%	261.8	261.9	0.1	0.0%
86.4%	261.7	261.7	0.0	0.0%
87.7%	237.9	238.4	0.5	0.2%
88.9%	232.8	233.2	0.4	0.2%
90.1%	229.5	229.9	0.4	0.2%
91.4%	218.2	218.7	0.5	0.2%
92.6%	212.0	212.8	0.8	0.4%
93.8%	202.7	203.3	0.6	0.3%
95.1%	195.0	195.2	0.2	0.1%
96.3%	191.2	191.8	0.6	0.3%
97.5%	190.5	190.7	0.2	0.1%
98.8%	188.1	188.0	-0.1	-0.1%
100.0%	183.0	183.2	0.1	0.1%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	559.9	549.0	-11.0	-2.0%
1.2%	544.5	544.3	-0.3	-0.1%
2.5%	541.6	541.9	0.3	0.1%
3.7%	534.0	536.2	2.1	0.4%
4.9%	514.8	515.8	1.0	0.2%
6.2%	503.1	515.2	12.1	2.4%
7.4%	493.3	504.9	11.6	2.4%
8.6%	492.3	490.0	-2.3	-0.5%
9.9%	487.1	487.3	0.2	0.0%
11.1%	482.9	473.5	-9.4	-1.9%
12.3%	482.5	473.0	-9.5	-2.0%
13.6%	478.9	471.5	-7.4	-1.5%
14.8%	474.3	470.3	-4.1	-0.9%
16.0%	466.3	469.5	3.2	0.7%
17.3%	463.4	465.3	1.9	0.4%
18.5%	458.2	464.6	6.4	1.4%
19.8%	457.2	457.6	0.4	0.1%
21.0%	456.7	457.4	0.7	0.2%
22.2%	456.5	457.1	0.6	0.1%
23.5%	451.2	455.5	4.3	1.0%
24.7%	450.9	451.6	0.7	0.2%
25.9%	450.1	450.5	0.4	0.1%
27.2%	447.7	450.5	2.8	0.6%
28.4%	445.9	449.3	3.4	0.8%
29.6%	445.4	449.3	3.9	0.9%
30.9%	444.2	446.3	2.1	0.5%
32.1%	441.6	444.8	3.2	0.7%
33.3%	440.0	440.8	0.8	0.2%
34.6%	438.3	440.0	1.7	0.4%
35.8%	433.4	436.7	3.3	0.8%
37.0%	429.9	434.4	4.5	1.0%
38.3%	424.8	429.9	5.0	1.2%
39.5%	422.5	429.5	7.0	1.7%
40.7%	414.7	426.0	11.3	2.7%
42.0%	408.1	414.5	6.4	1.6%
43.2%	406.2	410.4	4.2	1.0%
44.4%	405.0	405.6	0.7	0.2%
45.7%	397.6	402.9	5.3	1.3%
46.9%	397.4	402.5	5.1	1.3%
48.1%	396.5	397.6	1.1	0.3%
49.4%	396.4	396.7	0.3	0.1%
50.6%	388.0	395.9	7.9	2.0%
51.9%	385.7	390.1	4.4	1.1%
53.1%	383.1	388.3	5.2	1.4%
54.3%	380.4	380.5	0.1	0.0%
55.6%	379.8	379.8	0.0	0.0%
56.8%	378.5	378.8	0.4	0.1%
58.0%	375.8	378.5	2.7	0.7%
59.3%	375.0	375.7	0.7	0.2%
60.5%	375.0	375.3	0.3	0.1%
61.7%	374.5	375.0	0.5	0.1%
63.0%	372.0	369.8	-2.2	-0.6%
64.2%	371.9	368.2	-3.7	-1.0%
65.4%	369.3	367.9	-1.4	-0.4%
66.7%	368.3	367.2	-1.0	-0.3%
67.9%	367.8	366.2	-1.6	-0.4%
69.1%	366.2	365.7	-0.5	-0.1%
70.4%	362.7	362.7	0.0	0.0%
71.6%	360.8	360.4	-0.3	-0.1%
72.8%	354.7	354.7	-0.1	0.0%
74.1%	345.1	343.5	-1.6	-0.4%
75.3%	342.0	342.7	0.7	0.2%
76.5%	337.9	337.9	0.1	0.0%
77.8%	323.7	323.8	0.1	0.0%
79.0%	322.8	322.9	0.1	0.0%
80.2%	320.0	320.0	0.0	0.0%
81.5%	318.2	318.2	0.1	0.0%
82.7%	314.2	314.3	0.1	0.0%
84.0%	309.5	310.2	0.7	0.2%
85.2%	287.3	287.4	0.1	0.0%
86.4%	262.1	263.4	1.3	0.5%
87.7%	250.0	250.0	0.0	0.0%
88.9%	241.5	241.7	0.2	0.1%
90.1%	211.9	212.7	0.8	0.4%
91.4%	201.9	202.3	0.4	0.2%
92.6%	196.7	196.8	0.2	0.1%
93.8%	189.0	189.2	0.2	0.1%
95.1%	188.3	188.8	0.5	0.3%
96.3%	185.6	186.3	0.7	0.4%
97.5%	177.9	178.3	0.4	0.2%
98.8%	175.5	175.8	0.3	0.2%
100.0%	156.9	157.3	0.4	0.2%

Table SQ-29-b

Old River at Los Vaqueros Intake, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	498.1	500.3	2.2	0.4%
1.2%	490.8	485.6	-5.1	-1.0%
2.5%	451.9	466.2	14.3	3.2%
3.7%	450.7	454.2	3.4	0.8%
4.9%	429.7	430.1	0.3	0.1%
6.2%	426.7	426.3	-0.4	-0.1%
7.4%	412.4	412.4	0.0	0.0%
8.6%	410.3	411.7	1.4	0.3%
9.9%	400.6	407.1	6.5	1.6%
11.1%	399.5	404.0	4.4	1.1%
12.3%	397.0	401.8	4.8	1.2%
13.6%	392.2	396.9	4.7	1.2%
14.8%	386.5	386.9	0.4	0.1%
16.0%	369.5	368.4	-1.1	-0.3%
17.3%	360.6	363.2	2.6	0.7%
18.5%	357.5	359.5	2.0	0.6%
19.8%	344.0	343.5	-0.5	-0.1%
21.0%	342.1	339.5	-2.7	-0.8%
22.2%	339.6	339.1	-0.6	-0.2%
23.5%	339.5	338.5	-1.0	-0.3%
24.7%	336.1	338.0	1.9	0.6%
25.9%	336.0	332.8	-3.1	-0.9%
27.2%	331.6	332.8	1.2	0.4%
28.4%	331.5	331.0	-0.4	-0.1%
29.6%	330.2	330.8	0.6	0.2%
30.9%	328.6	330.0	1.4	0.4%
32.1%	328.5	329.8	1.3	0.4%
33.3%	327.8	327.8	-0.1	0.0%
34.6%	327.0	326.5	-0.4	-0.1%
35.8%	326.4	326.0	-0.3	-0.1%
37.0%	325.8	325.8	0.0	0.0%
38.3%	325.4	325.6	0.2	0.1%
39.5%	323.9	324.9	0.9	0.3%
40.7%	323.1	324.8	1.6	0.5%
42.0%	321.7	323.3	1.5	0.5%
43.2%	315.8	321.1	5.3	1.7%
44.4%	315.4	316.4	1.0	0.3%
45.7%	315.1	315.4	0.3	0.1%
46.9%	313.0	315.3	2.3	0.7%
48.1%	312.9	314.0	1.2	0.4%
49.4%	312.0	313.0	1.0	0.3%
50.6%	310.5	311.6	1.1	0.4%
51.9%	310.1	311.4	1.3	0.4%
53.1%	308.6	310.6	1.9	0.6%
54.3%	308.2	310.3	2.1	0.7%
55.6%	307.3	310.1	2.8	0.9%
56.8%	307.1	307.7	0.6	0.2%
58.0%	306.0	307.5	1.6	0.5%
59.3%	305.3	307.3	1.9	0.6%
60.5%	304.9	305.9	1.0	0.3%
61.7%	304.9	305.4	0.5	0.2%
63.0%	304.0	304.8	0.8	0.3%
64.2%	303.4	303.3	-0.2	-0.1%
65.4%	302.8	303.0	0.2	0.1%
66.7%	302.5	303.0	0.5	0.2%
67.9%	302.5	302.4	-0.1	0.0%
69.1%	301.8	302.1	0.4	0.1%
70.4%	297.9	301.7	3.8	1.3%
71.6%	297.6	301.2	3.6	1.2%
72.8%	296.5	298.3	1.8	0.6%
74.1%	294.5	297.5	3.0	1.0%
75.3%	294.0	295.0	1.0	0.3%
76.5%	293.1	294.5	1.4	0.5%
77.8%	291.6	294.5	2.9	1.0%
79.0%	290.7	292.0	1.3	0.4%
80.2%	287.5	291.2	3.6	1.3%
81.5%	286.4	287.4	1.0	0.3%
82.7%	286.4	287.1	0.7	0.3%
84.0%	283.3	282.5	-0.8	-0.3%
85.2%	280.7	280.5	-0.2	-0.1%
86.4%	280.4	280.4	0.0	0.0%
87.7%	275.3	274.4	-0.9	-0.3%
88.9%	266.9	267.4	0.5	0.2%
90.1%	266.1	266.4	0.2	0.1%
91.4%	261.2	261.3	0.1	0.0%
92.6%	255.8	256.1	0.3	0.1%
93.8%	255.4	255.8	0.4	0.1%
95.1%	252.2	252.4	0.2	0.1%
96.3%	247.4	247.6	0.1	0.0%
97.5%	241.8	243.3	1.5	0.6%
98.8%	238.7	238.9	0.1	0.1%
100.0%	210.1	208.9	-1.1	-0.5%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	668.7	671.0	2.3	0.3%
1.2%	648.8	646.3	-2.5	-0.4%
2.5%	549.2	554.1	5.0	0.9%
3.7%	541.0	525.6	-15.4	-2.8%
4.9%	533.0	510.5	-22.5	-4.2%
6.2%	525.6	498.4	-27.2	-5.2%
7.4%	504.1	492.7	-11.5	-2.3%
8.6%	492.8	461.1	-31.7	-6.4%
9.9%	449.1	457.1	8.0	1.8%
11.1%	443.1	446.8	3.7	0.8%
12.3%	434.8	441.8	7.0	1.6%
13.6%	416.5	422.9	6.4	1.5%
14.8%	415.7	418.7	2.9	0.7%
16.0%	406.3	409.0	2.7	0.7%
17.3%	394.5	398.1	3.6	0.9%
18.5%	392.5	393.0	0.5	0.1%
19.8%	391.6	389.0	-2.6	-0.7%
21.0%	390.0	388.5	-1.4	-0.4%
22.2%	367.6	385.6	18.0	4.9%
23.5%	360.4	385.5	25.1	7.0%
24.7%	358.8	362.6	3.7	1.0%
25.9%	352.0	358.9	7.0	2.0%
27.2%	351.2	357.5	6.3	1.8%
28.4%	349.5	353.2	3.7	1.1%
29.6%	349.4	348.9	-0.5	-0.1%
30.9%	344.3	346.3	2.0	0.6%
32.1%	343.3	339.7	-3.6	-1.1%
33.3%	338.1	333.7	-4.4	-1.3%
34.6%	334.6	332.4	-2.2	-0.7%
35.8%	334.3	331.5	-2.8	-0.8%
37.0%	330.7	330.7	0.0	0.0%
38.3%	328.9	328.9	0.0	0.0%
39.5%	327.9	326.8	-1.1	-0.3%
40.7%	324.3	324.9	0.6	0.2%
42.0%	317.0	324.3	7.3	2.3%
43.2%	306.8	309.2	2.4	0.8%
44.4%	306.8	306.5	-0.3	-0.1%
45.7%	303.8	306.2	2.4	0.8%
46.9%	301.6	299.0	-2.6	-0.9%
48.1%	297.5	296.3	-1.2	-0.4%
49.4%	294.2	294.0	-0.2	-0.1%
50.6%	294.1	282.8	-11.3	-3.9%
51.9%	285.1	281.3	-3.8	-1.3%
53.1%	281.4	280.0	-1.4	-0.5%
54.3%	279.4	278.4	-1.0	-0.4%
55.6%	276.4	276.5	0.1	0.0%
56.8%	275.7	274.9	-0.8	-0.3%
58.0%	275.1	272.7	-2.4	-0.9%
59.3%	274.2	272.3	-1.9	-0.7%
60.5%	273.6	271.9	-1.6	-0.6%
61.7%	273.2	271.7	-1.5	-0.6%
63.0%	272.5	271.4	-1.1	-0.4%
64.2%	272.3	271.4	-1.0	-0.4%
65.4%	270.6	270.3	-0.3	-0.1%
66.7%	270.5	269.8	-0.6	-0.2%
67.9%	270.1	268.0	-2.1	-0.8%
69.1%	268.5	267.8	-0.7	-0.3%
70.4%	268.2	267.7	-0.5	-0.2%
71.6%	267.3	267.4	0.2	0.1%
72.8%	267.0	265.9	-1.1	-0.4%
74.1%	266.2	265.8	-0.4	-0.2%
75.3%	265.4	265.7	0.3	0.1%
76.5%	265.4	265.4	0.0	0.0%
77.8%	264.6	265.3	0.8	0.3%
79.0%	264.3	264.5	0.2	0.1%
80.2%	264.2	264.3	0.1	0.0%
81.5%	263.6	262.0	-1.6	-0.6%
82.7%	262.1	261.6	-0.6	-0.2%
84.0%	261.9	261.5	-0.4	-0.2%
85.2%	261.5	260.8	-0.7	-0.3%
86.4%	260.0	260.3	0.3	0.1%
87.7%	259.3	259.3	0.0	0.0%
88.9%	252.4	252.6	0.2	0.1%
90.1%	251.8	251.9	0.1	0.0%
91.4%	251.2	251.1	-0.1	0.0%
92.6%	247.0	250.4	3.4	1.4%
93.8%	246.6	246.6	0.0	0.0%
95.1%	243.0	242.6	-0.4	-0.2%
96.3%	238.0	238.2	0.2	0.1%
97.5%	235.2	233.5	-1.6	-0.7%
98.8%	233.9	233.2	-0.7	-0.3%
100.0%	229.8	230.1	0.3	0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	841.9	862.6	20.6	2.5%
1.2%	791.9	809.4	17.5	2.2%
2.5%	665.4	708.6	43.2	6.5%
3.7%	661.4	667.5	6.1	0.9%
4.9%	660.5	664.3	3.8	0.6%
6.2%	653.2	652.3	-0.9	-0.1%
7.4%	632.4	637.6	5.2	0.8%
8.6%	629.3	631.1	1.8	0.3%
9.9%	610.2	628.4	18.2	3.0%
11.1%	610.0	621.9	11.9	1.9%
12.3%	603.4	607.4	4.0	0.7%
13.6%	582.0	606.4	24.4	4.2%
14.8%	575.6	588.9	13.3	2.3%
16.0%	573.0	588.3	15.3	2.7%
17.3%	569.5	583.1	13.5	2.4%
18.5%	568.5	579.0	10.6	1.9%
19.8%	535.6	572.0	36.5	6.8%
21.0%	533.4	560.0	26.6	5.0%
22.2%	533.2	524.7	-8.6	-1.6%
23.5%	516.2	519.7	3.6	0.7%
24.7%	504.8	510.3	5.4	1.1%
25.9%	503.6	503.3	-0.3	-0.1%
27.2%	498.2	491.2	-7.0	-1.4%
28.4%	485.6	490.2	4.6	0.9%
29.6%	484.2	484.5	0.3	0.1%
30.9%	477.0	480.3	3.3	0.7%
32.1%	471.1	479.8	8.7	1.8%
33.3%	465.3	474.4	9.0	1.9%
34.6%	463.8	465.1	1.3	0.3%
35.8%	446.8	463.4	16.7	3.7%
37.0%	443.1	459.8	16.8	3.8%
38.3%	439.6	457.7	18.1	4.1%
39.5%	439.1	453.2	14.2	3.2%
40.7%	436.9	440.8	3.9	0.9%
42.0%	436.6	438.2	1.6	0.4%
43.2%	435.1	437.3	2.2	0.5%
44.4%	423.1	432.8	9.7	2.3%
45.7%	421.2	429.4	8.2	1.9%
46.9%	398.6	428.3	29.7	7.5%
48.1%	395.8	425.7	29.9	7.6%
49.4%	393.3	421.9	28.5	7.3%
50.6%	390.3	409.1	18.8	4.8%
51.9%	390.0	404.3	14.3	3.7%
53.1%	388.2	394.4	6.3	1.6%
54.3%	386.6	390.8	4.2	1.1%
55.6%	382.6	387.1	4.5	1.2%
56.8%	376.7	386.0	9.3	2.5%
58.0%	376.5	385.1	8.6	2.3%
59.3%	373.0	384.7	11.8	3.2%
60.5%	372.2	363.2	-9.1	-2.4%
61.7%	367.2	359.1	-8.1	-2.2%
63.0%	360.1	358.5	-1.5	-0.4%
64.2%	350.9	351.5	0.6	0.2%
65.4%	345.3	346.8	1.5	0.4%
66.7%	345.3	343.2	-2.1	-0.6%
67.9%	342.7	341.4	-1.3	-0.4%
69.1%	341.4	341.4	0.0	0.0%
70.4%	340.7	337.9	-2.8	-0.8%
71.6%	337.9	336.2	-1.7	-0.5%
72.8%	337.2	335.5	-1.7	-0.5%
74.1%	335.8	333.5	-2.3	-0.7%
75.3%	334.9	330.0	-4.9	-1.5%
76.5%	334.2	327.0	-7.2	-2.2%
77.8%	332.0	325.2	-6.7	-2.0%
79.0%	331.0	321.9	-9.2	-2.8%
80.2%	329.6	321.0	-8.6	-2.6%
81.5%	325.1	320.0	-5.1	-1.6%
82.7%	321.3	319.9	-1.4	-0.4%
84.0%	319.1	318.0	-1.1	-0.4%
85.2%	318.7	313.3	-5.3	-1.7%
86.4%	314.9	308.4	-6.5	-2.1%
87.7%	313.0	307.5	-5.4	-1.7%
88.9%	310.9	304.9	-6.1	-1.9%
90.1%	306.5	303.4	-3.1	-1.0%
91.4%	297.5	299.8	2.3	0.8%
92.6%	293.0	292.0	-1.0	-0.3%
93.8%	292.8	270.9	-21.9	-7.5%
95.1%	270.1	267.2	-2.9	-1.1%
96.3%	253.0	260.5	7.5	3.0%
97.5%	234.4	237.3	2.9	1.2%
98.8%	232.7	232.6	-0.1	0.0%
100.0%	219.1	219.0	-0.1	-0.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	792.2	811.7	19.5	2.5%
1.2%	781.9	799.5	17.6	2.2%
2.5%	756.5	774.6	18.0	2.4%
3.7%	731.6	765.1	33.4	4.6%
4.9%	730.3	745.1	14.8	2.0%
6.2%	730.0	731.9	2.0	0.3%
7.4%	726.6	722.2	-4.4	-0.6%
8.6%	705.3	718.0	12.6	1.8%
9.9%	704.0	716.9	12.8	1.8%
11.1%	703.0	709.9	7.0	1.0%
12.3%	699.7	707.7	7.9	1.1%
13.6%	696.9	702.8	5.9	0.8%
14.8%	695.7	693.6	-2.1	-0.3%
16.0%	695.3	685.3	-10.0	-1.4%
17.3%	688.2	684.8	-3.4	-0.5%
18.5%	686.8	683.8	-3.0	-0.4%
19.8%	678.1	682.8	4.7	0.7%
21.0%	676.0	678.7	2.7	0.4%
22.2%	663.1	677.4	14.3	2.2%
23.5%	661.8	673.7	11.9	1.8%
24.7%	659.3	672.6	13.3	2.0%
25.9%	654.8	672.3	17.6	2.7%
27.2%	654.5	670.4	15.9	2.4%
28.4%	651.9	666.0	14.1	2.2%
29.6%	649.1	662.0	12.9	2.0%
30.9%	644.0	661.9	17.9	2.8%
32.1%	638.7	661.5	22.8	3.6%
33.3%	634.3	661.4	27.1	4.3%
34.6%	625.6	660.3	34.6	5.5%
35.8%	625.0	646.9	21.9	3.5%
37.0%	618.2	646.6	28.4	4.6%
38.3%	618.1	646.3	28.2	4.6%
39.5%	610.1	645.8	35.7	5.9%
40.7%	593.3	644.9	51.6	8.7%
42.0%	588.8	637.8	49.0	8.3%
43.2%	579.6	631.3	51.7	8.9%
44.4%	563.6	627.0	63.3	11.2%
45.7%	562.9	620.3	57.4	10.2%
46.9%	561.1	614.0	52.9	9.4%
48.1%	560.4	606.3	45.9	8.2%
49.4%	559.8	593.1	33.3	5.9%
50.6%	559.4	563.5	4.1	0.7%
51.9%	548.3	561.0	12.7	2.3%
53.1%	548.0	560.0	11.9	2.2%
54.3%	534.3	555.9	21.6	4.0%
55.6%	527.1	538.4	11.3	2.1%
56.8%	517.8	536.9	19.1	3.7%
58.0%	500.9	527.9	27.1	5.4%
59.3%	499.0	521.9	22.9	4.6%
60.5%	498.0	515.6	17.6	3.5%
61.7%	495.5	506.6	11.1	2.2%
63.0%	494.5	498.6	4.1	0.8%
64.2%	494.2	497.0	2.8	0.6%
65.4%	488.1	496.1	8.0	1.6%
66.7%	484.9	492.6	7.7	1.6%
67.9%	484.6	488.7	4.1	0.9%
69.1%	480.5	483.8	3.3	0.7%
70.4%	474.4	474.0	-0.4	-0.1%
71.6%	471.7	449.9	-21.7	-4.6%
72.8%	471.3	447.6	-23.7	-5.0%
74.1%	471.0	441.3	-29.6	-6.3%
75.3%	464.0	436.9	-27.1	-5.8%
76.5%	452.6	436.6	-15.9	-3.5%
77.8%	451.1	433.2	-17.9	-4.0%
79.0%	446.3	431.2	-15.1	-3.4%
80.2%	445.9	426.9	-19.0	-4.3%
81.5%	437.0	425.0	-12.1	-2.8%
82.7%	436.8	421.6	-15.2	-3.5%
84.0%	436.3	414.3	-22.0	-5.0%
85.2%	436.3	405.5	-30.8	-7.1%
86.4%	434.1	400.9	-33.2	-7.6%
87.7%	407.9	397.1	-10.8	-2.7%
88.9%	401.1	388.8	-12.3	-3.1%
90.1%	396.9	382.5	-14.5	-3.6%
91.4%	393.5	377.8	-15.7	-4.0%
92.6%	379.3	372.8	-6.5	-1.7%
93.8%	377.2	363.4	-13.9	-3.7%
95.1%	298.8	318.1	19.3	6.5%
96.3%	297.3	275.2	-22.1	-7.4%
97.5%	220.8	262.4	41.6	18.8%
98.8%	214.7	214.5	-0.2	-0.1%
100.0%	200.8	200.8	0.0	0.0%

Figure SQ-30-b
Victoria Canal at Alternative Intake, Monthly EC
Probability of Exceedance

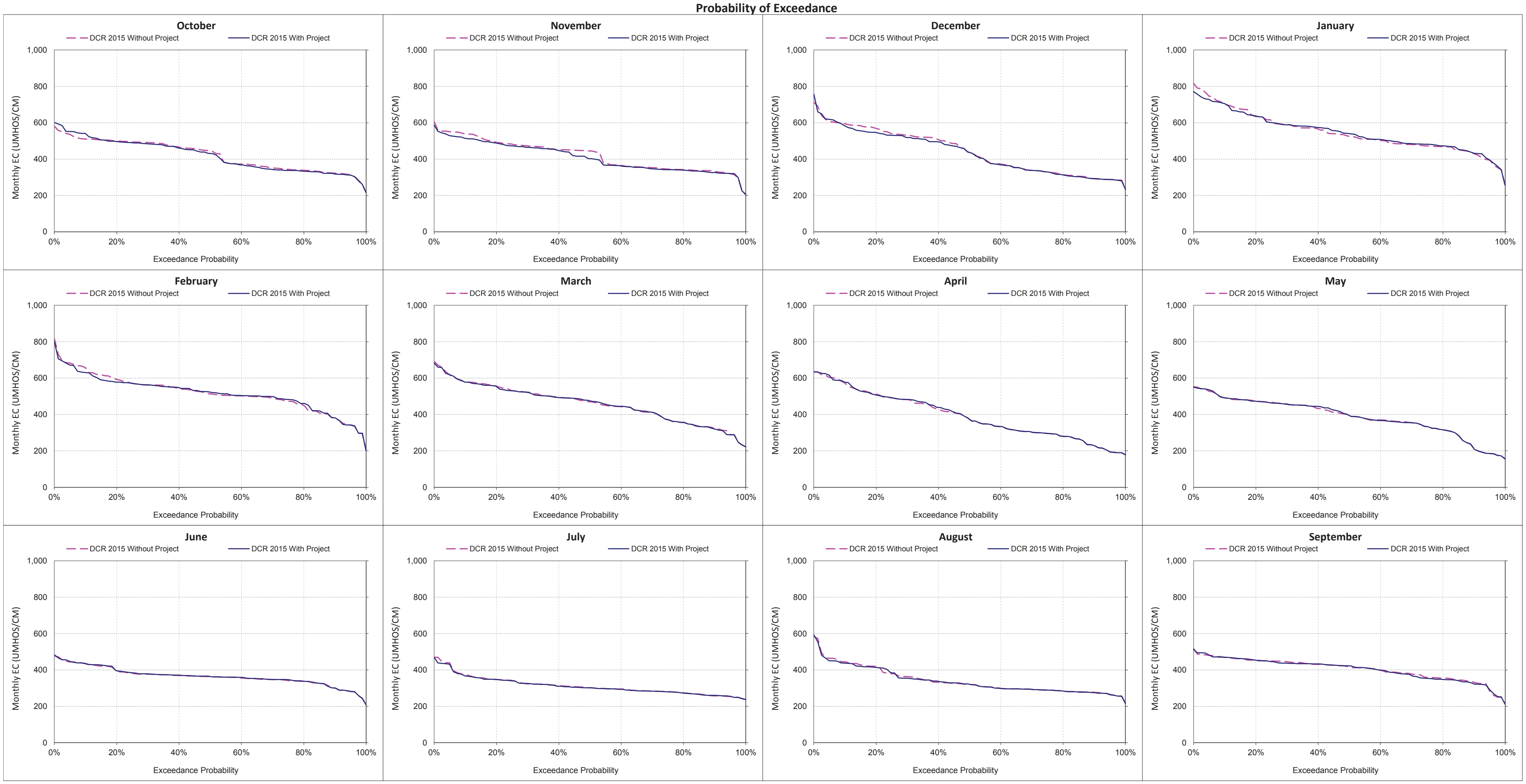


Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	580.8	602.1	21.2	3.7%
1.2%	558.2	592.2	34.0	6.1%
2.5%	550.5	583.8	33.3	6.1%
3.7%	541.6	552.5	10.9	2.0%
4.9%	536.6	551.6	15.0	2.8%
6.2%	524.7	551.3	26.6	5.1%
7.4%	516.2	543.7	27.6	5.3%
8.6%	512.1	541.7	29.5	5.8%
9.9%	510.6	541.3	30.7	6.0%
11.1%	510.4	522.4	12.0	2.4%
12.3%	509.5	517.2	7.7	1.5%
13.6%	507.0	514.3	7.3	1.4%
14.8%	505.5	505.5	0.0	0.0%
16.0%	505.2	504.0	-1.1	-0.2%
17.3%	504.6	498.3	-6.3	-1.2%
18.5%	502.2	498.3	-4.0	-0.8%
19.8%	498.7	497.1	-1.5	-0.3%
21.0%	498.6	494.2	-4.4	-0.9%
22.2%	497.6	493.0	-4.6	-0.9%
23.5%	497.2	492.3	-4.9	-1.0%
24.7%	493.6	490.1	-3.5	-0.7%
25.9%	493.6	488.6	-4.9	-1.0%
27.2%	493.1	488.2	-4.9	-1.0%
28.4%	491.4	485.5	-6.0	-1.2%
29.6%	491.3	483.9	-7.4	-1.5%
30.9%	490.4	483.7	-6.7	-1.4%
32.1%	489.7	480.9	-8.7	-1.8%
33.3%	486.4	480.2	-6.2	-1.3%
34.6%	486.0	479.2	-6.8	-1.4%
35.8%	479.1	471.5	-7.6	-1.6%
37.0%	473.7	470.7	-3.0	-0.6%
38.3%	469.3	469.9	0.7	0.1%
39.5%	468.0	461.5	-6.5	-1.4%
40.7%	462.9	458.7	-4.2	-0.9%
42.0%	460.5	452.4	-8.1	-1.8%
43.2%	459.5	452.3	-7.2	-1.6%
44.4%	457.9	451.2	-6.7	-1.5%
45.7%	457.2	444.8	-12.4	-2.7%
46.9%	451.0	439.4	-11.6	-2.6%
48.1%	447.8	438.6	-9.2	-2.1%
49.4%	446.6	432.2	-14.4	-3.2%
50.6%	443.0	429.7	-13.3	-3.0%
51.9%	430.2	423.1	-7.1	-1.7%
53.1%	429.2	404.9	-24.3	-5.7%
54.3%	382.7	382.9	0.2	0.0%
55.6%	378.1	377.8	-0.3	-0.1%
56.8%	374.9	374.4	-0.5	-0.1%
58.0%	374.0	374.1	0.1	0.0%
59.3%	372.9	369.2	-3.7	-1.0%
60.5%	372.7	367.0	-5.7	-1.5%
61.7%	372.0	363.1	-8.8	-2.4%
63.0%	368.9	362.0	-6.9	-1.9%
64.2%	368.2	357.9	-10.3	-2.8%
65.4%	361.3	355.0	-6.2	-1.7%
66.7%	360.0	348.8	-11.2	-3.1%
67.9%	358.4	346.1	-12.3	-3.4%
69.1%	352.2	344.4	-7.8	-2.2%
70.4%	350.2	342.2	-8.0	-2.3%
71.6%	349.4	340.8	-8.6	-2.5%
72.8%	347.2	340.0	-7.2	-2.1%
74.1%	344.3	338.1	-6.2	-1.8%
75.3%	343.1	337.8	-5.4	-1.6%
76.5%	340.7	337.3	-3.4	-1.0%
77.8%	340.5	337.2	-3.3	-1.0%
79.0%	339.0	334.4	-4.7	-1.4%
80.2%	338.0	332.6	-5.4	-1.6%
81.5%	337.6	332.5	-5.2	-1.5%
82.7%	336.0	330.8	-5.2	-1.5%
84.0%	333.0	330.7	-2.4	-0.7%
85.2%	331.3	329.6	-1.7	-0.5%
86.4%	326.1	322.0	-4.1	-1.2%
87.7%	325.6	321.5	-4.1	-1.3%
88.9%	323.5	321.2	-2.3	-0.7%
90.1%	322.0	317.2	-4.9	-1.5%
91.4%	321.7	316.6	-5.1	-1.6%
92.6%	319.5	315.6	-3.9	-1.2%
93.8%	317.0	313.2	-3.9	-1.2%
95.1%	312.3	311.4	-0.9	-0.3%
96.3%	302.8	302.6	-0.3	-0.1%
97.5%	279.7	283.8	4.1	1.5%
98.8%	260.1	260.4	0.3	0.1%
100.0%	216.3	215.9	-0.5	-0.2%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	605.7	585.2	-20.5	-3.4%
1.2%	558.5	552.7	-5.7	-1.0%
2.5%	554.1	543.8	-10.3	-1.9%
3.7%	553.5	539.2	-14.3	-2.6%
4.9%	550.7	528.8	-21.9	-4.0%
6.2%	548.7	526.2	-22.5	-4.1%
7.4%	548.6	523.1	-25.5	-4.7%
8.6%	544.7	520.9	-23.8	-4.4%
9.9%	538.2	514.4	-23.7	-4.4%
11.1%	537.7	511.3	-26.3	-4.9%
12.3%	536.8	511.1	-25.7	-4.8%
13.6%	528.7	506.7	-22.0	-4.2%
14.8%	518.3	501.5	-16.7	-3.2%
16.0%	508.7	495.8	-12.9	-2.5%
17.3%	502.3	495.4	-6.9	-1.4%
18.5%	501.5	491.2	-10.3	-2.1%
19.8%	492.2	489.2	-3.0	-0.6%
21.0%	490.4	485.0	-5.4	-1.1%
22.2%	486.1	480.2	-5.9	-1.2%
23.5%	484.4	474.2	-10.2	-2.1%
24.7%	483.2	473.3	-9.8	-2.0%
25.9%	478.2	472.3	-5.9	-1.2%
27.2%	476.0	469.4	-6.6	-1.4%
28.4%	475.2	468.2	-7.0	-1.5%
29.6%	473.7	465.0	-8.7	-1.8%
30.9%	471.1	464.3	-6.8	-1.4%
32.1%	470.2	462.3	-7.9	-1.7%
33.3%	468.8	461.4	-7.4	-1.6%
34.6%	467.0	457.9	-9.1	-2.0%
35.8%	466.2	457.1	-9.1	-1.9%
37.0%	454.1	456.1	1.9	0.4%
38.3%	454.1	455.4	1.3	0.3%
39.5%	451.7	448.6	-3.2	-0.7%
40.7%	451.6	444.2	-7.3	-1.6%
42.0%	451.5	439.7	-11.8	-2.6%
43.2%	450.8	438.1	-12.7	-2.8%
44.4%	450.3	420.7	-29.6	-6.6%
45.7%	448.4	416.3	-32.1	-7.2%
46.9%	447.4	416.3	-31.1	-7.0%
48.1%	446.7	415.8	-31.0	-6.9%
49.4%	445.4	402.9	-42.4	-9.5%
50.6%	444.0	401.8	-42.2	-9.5%
51.9%	439.3	399.0	-40.4	-9.2%
53.1%	435.0	394.0	-40.9	-9.4%
54.3%	376.8	367.3	-9.5	-2.5%
55.6%	375.1	365.9	-9.2	-2.4%
56.8%	368.6	365.8	-2.8	-0.8%
58.0%	368.4	365.1	-3.3	-0.9%
59.3%	367.9	364.2	-3.7	-1.0%
60.5%	364.6	360.3	-4.3	-1.2%
61.7%	359.6	359.1	-0.6	-0.2%
63.0%	359.0	358.5	-0.6	-0.2%
64.2%	358.9	355.2	-3.7	-1.0%
65.4%	357.6	355.0	-2.6	-0.7%
66.7%	355.8	354.0	-1.8	-0.5%
67.9%	355.7	351.6	-4.1	-1.2%
69.1%	353.5	348.1	-5.4	-1.5%
70.4%	352.5	345.9	-6.6	-1.9%
71.6%	352.1	344.4	-7.6	-2.2%
72.8%	347.9	343.3	-4.6	-1.3%
74.1%	345.8	341.7	-4.2	-1.2%
75.3%	344.5	341.4	-3.1	-0.9%
76.5%	344.0	341.1	-2.9	-0.9%
77.8%	342.9	340.7	-2.3	-0.7%
79.0%	342.6	339.8	-2.8	-0.8%
80.2%	341.6	338.5	-3.1	-0.9%
81.5%	340.9	337.2	-3.7	-1.1%
82.7%	339.3	334.4	-4.9	-1.4%
84.0%	337.3	334.3	-3.0	-0.9%
85.2%	337.1	333.6	-3.5	-1.0%
86.4%	336.8	331.4	-5.4	-1.6%
87.7%	336.6	329.3	-7.3	-2.2%
88.9%	336.1	325.9	-10.1	-3.0%
90.1%	332.5	325.6	-6.9	-2.1%
91.4%	328.3	322.9	-5.4	-1.7%
92.6%	326.8	322.4	-4.5	-1.4%
93.8%	325.0	321.7	-3.3	-1.0%
95.1%	319.3	320.9	1.5	0.5%
96.3%	313.5	320.3	6.7	2.2%
97.5%	297.7	298.3	0.6	0.2%
98.8%	224.8	225.0	0.1	0.1%
100.0%	202.8	206.6	3.8	1.9%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	712.1	756.6	44.5	6.3%
1.2%	691.7	659.4	-32.3	-4.7%
2.5%	639.9	648.6	8.7	1.4%
3.7%	619.3	621.2	2.0	0.3%
4.9%	605.1	618.9	13.8	2.3%
6.2%	604.3	616.0	11.6	1.9%
7.4%	600.4	605.0	4.6	0.8%
8.6%	600.3	595.7	-4.6	-0.8%
9.9%	595.0	583.4	-11.6	-1.9%
11.1%	589.1	573.1	-16.0	-2.7%
12.3%	587.1	568.7	-18.3	-3.1%
13.6%	585.7	558.9	-26.9	-4.6%
14.8%	584.1	556.4	-27.7	-4.7%
16.0%	578.2	552.4	-25.8	-4.5%
17.3%	576.0	548.3	-27.7	-4.8%
18.5%	575.7	547.5	-28.3	-4.9%
19.8%	569.8	546.7	-23.1	-4.1%
21.0%	564.0	541.4	-22.6	-4.0%
22.2%	552.2	538.0	-14.1	-2.6%
23.5%	550.6	532.1	-18.5	-3.4%
24.7%	541.3	531.7	-9.6	-1.8%
25.9%	537.7	529.5	-8.1	-1.5%
27.2%	536.3	529.5	-6.8	-1.3%
28.4%	534.5	528.6	-5.9	-1.1%
29.6%	531.7	519.1	-12.5	-2.4%
30.9%	530.5	518.3	-12.2	-2.3%
32.1%	524.8	513.2	-11.5	-2.2%
33.3%	521.9	513.1	-8.8	-1.7%
34.6%	521.2	510.3	-11.0	-2.1%
35.8%	520.4	508.1	-12.3	-2.4%
37.0%	519.8	496.2	-23.6	-4.5%
38.3%	517.8	496.2	-21.6	-4.2%
39.5%	510.3	495.9	-14.4	-2.8%
40.7%	501.4	492.8	-8.6	-1.7%
42.0%	500.3	480.1	-20.2	-4.0%
43.2%	491.2	477.3	-13.9	-2.8%
44.4%	486.2	473.0	-13.1	-2.7%
45.7%	484.9	470.8	-14.0	-2.9%
46.9%	463.8	463.1	-0.7	-0.1%
48.1%	458.5	459.2	0.7	0.2%
49.4%	439.2	438.4	-0.9	-0.2%
50.6%	436.6	433.0	-3.6	-0.8%
51.9%	417.5	422.3	4.8	1.2%
53.1%	412.1	405.5	-6.6	-1.6%
54.3%	403.0	404.4	1.4	0.3%
55.6%	390.6	386.6	-4.0	-1.0%
56.8%	374.8	375.8	1.0	0.3%
58.0%	374.7	372.8	-1.9	-0.5%
59.3%	374.5	370.4	-4.2	-1.1%
60.5%	371.1	368.1	-3.0	-0.8%
61.7%	368.5	364.6	-3.8	-1.0%
63.0%	364.9	363.4	-1.6	-0.4%
64.2%	354.8	353.4	-1.4	-0.4%
65.4%	353.1	352.8	-0.3	-0.1%
66.7%	353.0	348.3	-4.7	-1.3%
67.9%	341.8	340.1	-1.7	-0.5%
69.1%	338.5	339.5	1.0	0.3%
70.4%	338.2	337.7	-0.4	-0.1%
71.6%	336.8	335.6	-1.3	-0.4%
72.8%	334.2	335.0	0.8	0.2%
74.1%	330.5	330.5	0.1	0.0%
75.3%	327.8	328.7	0.8	0.3%
76.5%	325.5	323.9	-1.6	-0.5%
77.8%	323.2	316.6	-6.7	-2.1%
79.0%	317.0	315.6	-1.5	-0.5%
80.2%	313.9	311.8	-2.1	-0.7%
81.5%	310.9	307.9	-2.9	-0.9%
82.7%	310.5	306.2	-4.3	-1.4%
84.0%	305.8	303.4	-2.4	-0.8%
85.2%	305.2	303.1	-2.1	-0.7%
86.4%	304.3	300.5	-3.8	-1.3%
87.7%	300.9	296.0	-4.9	-1.6%
88.9%	293.5	293.7	0.2	0.1%
90.1%	291.2	292.7	1.5	0.5%
91.4%	289.8	291.3	1.5	0.5%
92.6%	289.0	289.0	0.0	0.0%
93.8%	288.7	287.5	-1.2	-0.4%
95.1%	288.1	287.0	-1.0	-0.4%
96.3%	288.0	286.8	-1.2	-0.4%
97.5%	284.7	282.9	-1.8	-0.6%
98.8%	284.1	279.9	-4.2	-1.5%
100.0%	232.3	232.9	0.6	0.3%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	816.5	771.1	-45.5	-5.6%
1.2%	790.8	757.3	-33.5	-4.2%
2.5%	786.8	741.8	-45.0	-5.7%
3.7%	767.8	731.1	-36.7	-4.8%
4.9%	747.0	728.4	-18.6	-2.5%
6.2%	739.9	716.7	-23.2	-3.1%
7.4%	722.6	715.1	-7.5	-1.0%
8.6%	715.8	711.8	-4.0	-0.6%
9.9%	699.3	705.8	6.5	0.9%
11.1%	697.1	693.7	-3.3	-0.5%
12.3%	689.6	666.5	-23.1	-3.4%
13.6%	681.8	665.4	-16.4	-2.4%
14.8%	676.1	659.9	-16.3	-2.4%
16.0%	673.5	658.8	-14.7	-2.2%
17.3%	672.5	643.9	-28.6	-4.2%
18.5%	643.8	641.7	-2.1	-0.3%
19.8%	634.8	639.0	4.2	0.7%
21.0%	633.6	632.2	-1.4	-0.2%
22.2%	629.8	631.7	1.9	0.3%
23.5%	616.0	604.4	-11.5	-1.9%
24.7%	615.9	600.9	-14.9	-2.4%
25.9%	595.8	599.0	3.1	0.5%
27.2%	594.0	595.4	1.4	0.2%
28.4%	592.0	590.4	-1.6	-0.3%
29.6%	590.7	589.1	-1.6	-0.3%
30.9%	589.8	588.5	-1.2	-0.2%
32.1%	581.0	584.5	3.5	0.6%
33.3%	578.6	583.5	4.9	0.8%
34.6%	571.8	582.1	10.3	1.8%
35.8%	571.7	581.0	9.2	1.6%
37.0%	571.5	580.2	8.6	1.5%
38.3%	569.7	576.5	6.8	1.2%
39.5%	568.4	574.8	6.4	1.1%
40.7%	560.3	573.2	13.0	2.3%
42.0%	559.0	570.7	11.6	2.1%
43.2%	542.0	568.9	26.9	5.0%
44.4%	539.9	557.5	17.6	3.3%
45.7%	539.3	556.2	16.9	3.1%
46.9%	536.1	551.6	15.5	2.9%
48.1%	534.6	542.3	7.7	1.4%
49.4%	527.4	542.2	14.8	2.8%
50.6%	524.2	538.6	14.5	2.8%
51.9%	522.0	535.2	13.2	2.5%
53.1%	513.5	524.3	10.9	2.1%
54.3%	509.7	522.1	12.4	2.4%
55.6%	509.5	513.0	3.5	0.7%
56.8%	509.1	510.8	1.7	0.3%
58.0%	508.5	508.9	0.4	0.1%
59.3%	502.2	508.2	6.0	1.2%
60.5%	501.8	507.5	5.7	1.1%
61.7%	499.9	502.4	2.5	0.5%
63.0%	486.0	502.3	16.3	3.3%
64.2%	485.9	496.7	10.8	2.2%
65.4%	484.5	496.0	11.5	2.4%
66.7%	484.2	490.5	6.3	1.3%
67.9%	480.5	486.4	5.9	1.2%
69.1%	480.3	485.9	5.6	1.2%
70.4%	480.1	484.6	4.5	0.9%
71.6%	479.3	482.9	3.6	0.8%
72.8%	475.8	482.8	7.0	1.5%
74.1%	472.9	481.6	8.7	1.8%
75.3%	472.4	481.0	8.6	1.8%
76.5%	471.8	480.8	8.9	1.9%
77.8%	469.0	477.6	8.7	1.8%
79.0%	468.9	473.6	4.6	1.0%
80.2%	468.1	473.1	5.0	1.1%
81.5%	467.8	469.5	1.7	0.4%
82.7%	466.8	468.1	1.4	0.3%
84.0%	451.2	466.9	15.7	3.5%
85.2%	450.6	451.0	0.3	0.1%
86.4%	447.6	449.6	2.1	0.5%
87.7%	444.9	446.5	1.6	0.4%
88.9%	438.1	438.3	0.2	0.1%
90.1%	429.3	432.2	3.0	0.7%
91.4%	420.3	430.1	9.8	2.3%
92.6%	406.4	428.7	22.4	5.5%
93.8%	398.1	407.0	8.9	2.2%
95.1%	394.4	394.9	0.5	0.1%
96.3%	368.5	377.6	9.1	2.5%
97.5%	353.0	359.8	6.8	1.9%
98.8%	341.4	342.3	0.9	0.3%
100.0%	256.2	256.4	0.1	0.1%

Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC

Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	817.6	799.9	-17.7	-2.2%
1.2%	731.2	706.2	-25.0	-3.4%
2.5%	697.6	695.3	-2.3	-0.3%
3.7%	685.0	683.4	-1.6	-0.2%
4.9%	682.8	672.0	-10.8	-1.6%
6.2%	675.2	669.4	-5.8	-0.9%
7.4%	668.6	637.3	-31.3	-4.7%
8.6%	666.9	633.3	-33.6	-5.0%
9.9%	658.6	630.0	-28.7	-4.4%
11.1%	631.0	629.7	-1.3	-0.2%
12.3%	629.0	612.0	-17.0	-2.7%
13.6%	620.0	603.5	-16.5	-2.7%
14.8%	619.7	590.0	-29.7	-4.8%
16.0%	613.6	588.5	-25.1	-4.1%
17.3%	612.2	583.1	-29.1	-4.8%
18.5%	603.0	582.3	-20.7	-3.4%
19.8%	593.4	578.2	-15.2	-2.6%
21.0%	589.4	577.7	-11.7	-2.0%
22.2%	580.8	575.3	-5.5	-0.9%
23.5%	578.6	574.9	-3.6	-0.6%
24.7%	572.1	572.7	0.5	0.1%
25.9%	568.1	568.6	0.5	0.1%
27.2%	566.0	566.1	0.1	0.0%
28.4%	563.7	563.6	-0.1	0.0%
29.6%	563.7	562.6	-1.1	-0.2%
30.9%	563.0	562.4	-0.5	-0.1%
32.1%	561.4	559.2	-2.2	-0.4%
33.3%	561.4	557.6	-3.8	-0.7%
34.6%	561.2	554.1	-7.2	-1.3%
35.8%	558.5	553.4	-5.1	-0.9%
37.0%	552.6	550.4	-2.2	-0.4%
38.3%	549.8	550.4	0.6	0.1%
39.5%	544.7	548.9	4.2	0.8%
40.7%	539.6	543.9	4.3	0.8%
42.0%	539.3	543.5	4.2	0.8%
43.2%	535.9	543.3	7.4	1.4%
44.4%	531.3	532.8	1.5	0.3%
45.7%	527.6	532.6	5.0	1.0%
46.9%	525.9	527.0	1.2	0.2%
48.1%	520.5	525.8	5.2	1.0%
49.4%	514.7	524.4	9.7	1.9%
50.6%	512.3	520.1	7.9	1.5%
51.9%	509.7	519.6	9.8	1.9%
53.1%	506.2	514.7	8.5	1.7%
54.3%	505.5	513.7	8.2	1.6%
55.6%	505.1	513.1	7.9	1.6%
56.8%	504.4	507.2	2.7	0.5%
58.0%	503.3	505.7	2.4	0.5%
59.3%	502.9	505.3	2.4	0.5%
60.5%	502.8	504.3	1.5	0.3%
61.7%	501.5	504.1	2.6	0.5%
63.0%	499.7	502.2	2.5	0.5%
64.2%	498.9	502.0	3.2	0.6%
65.4%	497.9	501.7	3.8	0.8%
66.7%	496.9	499.9	3.0	0.6%
67.9%	496.1	499.0	2.9	0.6%
69.1%	492.6	498.8	6.2	1.3%
70.4%	488.5	497.6	9.1	1.9%
71.6%	483.7	487.2	3.6	0.7%
72.8%	481.2	487.0	5.8	1.2%
74.1%	474.1	483.8	9.6	2.0%
75.3%	472.1	482.4	10.3	2.2%
76.5%	471.9	480.8	8.9	1.9%
77.8%	459.3	474.4	15.0	3.3%
79.0%	459.2	460.9	1.7	0.4%
80.2%	447.7	460.1	12.5	2.8%
81.5%	420.8	451.0	30.2	7.2%
82.7%	419.9	421.5	1.6	0.4%
84.0%	419.3	420.4	1.1	0.3%
85.2%	407.4	419.9	12.5	3.1%
86.4%	406.2	407.9	1.7	0.4%
87.7%	401.8	406.8	5.0	1.2%
88.9%	383.2	383.4	0.3	0.1%
90.1%	380.4	380.7	0.3	0.1%
91.4%	367.0	366.5	-0.5	-0.1%
92.6%	352.1	345.8	-6.4	-1.8%
93.8%	345.3	342.0	-3.3	-1.0%
95.1%	341.6	342.0	0.3	0.1%
96.3%	335.9	338.3	2.4	0.7%
97.5%	297.5	296.8	-0.7	-0.2%
98.8%	296.1	296.2	0.1	0.0%
100.0%	200.7	200.9	0.1	0.1%

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	691.9	682.0	-9.9	-1.4%
1.2%	671.1	660.6	-10.5	-1.6%
2.5%	661.0	657.2	-3.9	-0.6%
3.7%	635.7	626.5	-9.3	-1.5%
4.9%	618.0	619.4	1.4	0.2%
6.2%	605.3	611.0	5.7	0.9%
7.4%	595.4	594.6	-0.8	-0.1%
8.6%	585.3	588.8	3.6	0.6%
9.9%	581.0	577.7	-3.2	-0.6%
11.1%	577.6	577.7	0.1	0.0%
12.3%	577.1	570.4	-6.7	-1.2%
13.6%	573.7	569.9	-3.8	-0.7%
14.8%	570.3	566.5	-3.8	-0.7%
16.0%	568.7	560.5	-8.1	-1.4%
17.3%	564.2	560.1	-4.1	-0.7%
18.5%	560.2	559.3	-0.9	-0.2%
19.8%	557.8	556.9	-0.9	-0.2%
21.0%	549.8	539.6	-10.2	-1.9%
22.2%	545.1	535.9	-9.2	-1.7%
23.5%	542.6	532.1	-10.5	-1.9%
24.7%	532.6	530.3	-2.3	-0.4%
25.9%	529.0	528.8	-0.3	-0.1%
27.2%	527.7	524.5	-3.1	-0.6%
28.4%	526.0	523.7	-2.2	-0.4%
29.6%	522.3	522.9	0.7	0.1%
30.9%	522.2	518.4	-3.8	-0.7%
32.1%	514.1	508.3	-5.7	-1.1%
33.3%	512.5	504.9	-7.5	-1.5%
34.6%	503.0	504.2	1.2	0.2%
35.8%	502.6	502.3	-0.3	-0.1%
37.0%	501.3	500.1	-1.2	-0.2%
38.3%	498.3	496.8	-1.5	-0.3%
39.5%	497.5	494.2	-3.3	-0.7%
40.7%	493.5	492.5	-0.9	-0.2%
42.0%	491.7	491.3	-0.4	-0.1%
43.2%	490.4	490.8	0.4	0.1%
44.4%	490.2	489.6	-0.6	-0.1%
45.7%	483.6	488.2	4.6	0.9%
46.9%	477.4	484.7	7.2	1.5%
48.1%	476.8	479.6	2.8	0.6%
49.4%	470.7	477.9	7.3	1.5%
50.6%	469.7	472.4	2.7	0.6%
51.9%	465.1	471.1	5.9	1.3%
53.1%	456.6	465.9	9.4	2.0%
54.3%	452.1	459.0	6.9	1.5%
55.6%	448.5	453.3	4.8	1.1%
56.8%	445.1	448.7	3.6	0.8%
58.0%	444.5	446.3	1.8	0.4%
59.3%	444.0	445.5	1.5	0.3%
60.5%	442.4	444.5	2.1	0.5%
61.7%	441.9	442.0	0.1	0.0%
63.0%	438.8	438.9	0.1	0.0%
64.2%	424.5	425.7	1.3	0.3%
65.4%	421.9	421.7	-0.1	0.0%
66.7%	415.4	419.5	4.1	1.0%
67.9%	413.1	418.3	5.2	1.3%
69.1%	412.5	413.7	1.2	0.3%
70.4%	411.1	410.9	-0.2	0.0%
71.6%	400.6	402.6	2.0	0.5%
72.8%	389.2	389.8	0.6	0.2%
74.1%	375.5	374.8	-0.7	-0.2%
75.3%	369.9	371.3	1.4	0.4%
76.5%	361.8	361.9	0.1	0.0%
77.8%	360.2	360.9	0.7	0.2%
79.0%	357.4	357.4	0.0	0.0%
80.2%	355.9	356.4	0.6	0.2%
81.5%	348.3	348.1	-0.2	-0.1%
82.7%	345.9	346.0	0.1	0.0%
84.0%	335.6	339.1	3.5	1.0%
85.2%	333.6	333.7	0.1	0.0%
86.4%	332.9	332.7	-0.2	-0.1%
87.7%	332.1	332.5	0.3	0.1%
88.9%	330.1	325.4	-4.8	-1.4%
90.1%	322.9	319.9	-3.0	-0.9%
91.4%	319.8	313.5	-6.3	-2.0%
92.6%	313.0	311.2	-1.7	-0.6%
93.8%	310.9	290.2	-20.7	-6.6%
95.1%	289.7	288.8	-0.9	-0.3%
96.3%	288.6	288.6	-0.1	0.0%
97.5%	247.9	247.9	0.0	0.0%
98.8%	232.1	232.1	-0.1	0.0%
100.0%	221.6	222.0	0.4	0.2%

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	634.5	635.0	0.6	0.1%
1.2%	634.4	633.8	-0.6	-0.1%
2.5%	619.2	626.0	6.8	1.1%
3.7%	615.6	624.4	8.8	1.4%
4.9%	604.1	616.6	12.5	2.1%
6.2%	601.5	590.3	-11.2	-1.9%
7.4%	598.5	588.2	-10.3	-1.7%
8.6%	584.4	587.5	3.1	0.5%
9.9%	574.2	577.3	3.1	0.5%
11.1%	553.4	575.5	22.1	4.0%
12.3%	548.2	552.8	4.6	0.8%
13.6%	538.8	539.7	1.0	0.2%
14.8%	531.0	528.9	-2.1	-0.4%
16.0%	530.0	525.7	-4.4	-0.8%
17.3%	524.1	522.4	-1.7	-0.3%
18.5%	517.2	513.2	-4.0	-0.8%
19.8%	513.1	508.3	-4.9	-1.0%
21.0%	507.3	503.7	-3.6	-0.7%
22.2%	496.7	499.8	3.1	0.6%
23.5%	494.9	496.0	1.1	0.2%
24.7%	492.3	493.5	1.2	0.2%
25.9%	488.6	489.4	0.8	0.2%
27.2%	485.4	484.9	-0.5	-0.1%
28.4%	483.1	483.5	0.4	0.1%
29.6%	483.0	482.5	-0.5	-0.1%
30.9%	480.6	482.2	1.7	0.3%
32.1%	462.6	479.2	16.6	3.6%
33.3%	462.1	472.8	10.6	2.3%
34.6%	461.8	469.4	7.6	1.6%
35.8%	456.6	466.6	10.0	2.2%
37.0%	453.0	453.8	0.8	0.2%
38.3%	437.9	450.2	12.3	2.8%
39.5%	430.0	438.9	8.9	2.1%
40.7%	423.6	437.7	14.1	3.3%
42.0%	416.7	430.1	13.3	3.2%
43.2%	415.8	427.3	11.5	2.8%
44.4%	411.1	416.4	5.3	1.3%
45.7%	407.2	408.2	1.0	0.2%
46.9%	403.8	404.5	0.7	0.2%
48.1%	392.0	392.5	0.5	0.1%
49.4%	381.1	381.4	0.3	0.1%
50.6%	365.6	364.0	-1.6	-0.5%
51.9%	362.7	363.7	1.0	0.3%
53.1%	354.1	353.2	-0.9	-0.2%
54.3%	348.2	348.2	0.0	0.0%
55.6%	348.1	348.1	0.0	0.0%
56.8%	345.8	345.7	-0.1	0.0%
58.0%	335.1	336.5	1.3	0.4%
59.3%	334.6	334.3	-0.4	-0.1%
60.5%	334.6	333.9	-0.6	-0.2%
61.7%	323.7	323.2	-0.5	-0.2%
63.0%	317.5	317.8	0.3	0.1%
64.2%	314.7	314.7	0.1	0.0%
65.4%	311.1	311.4	0.3	0.1%
66.7%	308.2	308.4	0.2	0.1%
67.9%	306.6	306.6	0.0	0.0%
69.1%	306.1	306.1	0.0	0.0%
70.4%	301.2	300.8	-0.4	-0.1%
71.6%	300.3	300.1	-0.2	-0.1%
72.8%	300.3	299.2	-1.0	-0.3%
74.1%	297.5	297.5	0.0	0.0%
75.3%	295.4	295.7	0.2	0.1%
76.5%	293.5	293.5	0.1	0.0%
77.8%	292.6	292.7	0.1	0.0%
79.0%	281.3	282.5	1.2	0.4%
80.2%	279.2	279.3	0.1	0.0%
81.5%	278.8	279.0	0.2	0.1%
82.7%	274.5	274.7	0.3	0.1%
84.0%	267.4	267.3	-0.1	0.0%
85.2%	264.9	264.9	0.0	0.0%
86.4%	255.5	255.7	0.2	0.1%
87.7%	235.1	234.4	-0.8	-0.3%
88.9%	233.7	234.0	0.3	0.1%
90.1%	228.2	228.5	0.3	0.1%
91.4%	216.7	217.2	0.6	0.3%
92.6%	215.2	216.0	0.7	0.3%
93.8%	206.0	206.2	0.2	0.1%
95.1%	193.4	193.7	0.3	0.2%
96.3%	192.4	191.7	-0.6	-0.3%
97.5%	189.8	190.1	0.3	0.1%
98.8%	189.8	190.0	0.2	0.1%
100.0%	178.6	178.8	0.1	0.1%

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	552.7	550.8	-2.0	-0.4%
1.2%	550.2	545.1	-5.1	-0.9%
2.5%	541.3	542.3	1.0	0.2%
3.7%	540.1	540.9	0.8	0.1%
4.9%	527.9	536.5	8.6	1.6%
6.2%	524.1	528.8	4.6	0.9%
7.4%	511.2	512.5	1.4	0.3%
8.6%	495.4	497.4	2.0	0.4%
9.9%	492.2	492.1	0.0	0.0%
11.1%	487.0	488.8	1.8	0.4%
12.3%	483.2	486.6	3.4	0.7%
13.6%	482.1	486.5	4.4	0.9%
14.8%	481.3	482.0	0.7	0.2%
16.0%	480.7	480.7	0.0	0.0%
17.3%	480.4	479.9	-0.5	-0.1%
18.5%	478.4	474.1	-4.3	-0.9%
19.8%	475.4	473.5	-1.9	-0.4%
21.0%	472.4	471.1	-1.3	-0.3%
22.2%	469.8	470.2	0.4	0.1%
23.5%	469.2	468.0	-1.1	-0.2%
24.7%	468.6	464.3	-4.3	-0.9%
25.9%	464.9	462.3	-2.6	-0.6%
27.2%	461.7	461.8	0.1	0.0%
28.4%	460.9	460.0	-0.9	-0.2%
29.6%	459.8	455.9	-3.9	-0.9%
30.9%	454.1	454.0	-0.1	0.0%
32.1%	452.4	452.4	0.0	0.0%
33.3%	452.2	452.3	0.2	0.0%
34.6%	451.5	451.4	-0.2	0.0%
35.8%	450.3	451.0	0.7	0.2%
37.0%	444.6	446.5	1.9	0.4%
38.3%	444.5	445.1	0.6	0.1%
39.5%	434.2	444.7	10.5	2.4%
40.7%	432.1	443.8	11.7	2.7%
42.0%	425.4	436.8	11.4	2.7%
43.2%	422.2	436.4	14.2	3.4%
44.4%	413.2	426.7	13.6	3.3%
45.7%	413.0	422.3	9.3	2.3%
46.9%	407.0	416.0	8.9	2.2%
48.1%	403.9	406.8	3.0	0.7%
49.4%	402.9	399.1	-3.8	-0.9%
50.6%	389.0	389.2	0.2	0.0%
51.9%	389.0	388.4	-0.6	-0.2%
53.1%	386.4	386.4	0.0	0.0%
54.3%	381.4	381.7	0.3	0.1%
55.6%	376.2	375.6	-0.6	-0.2%
56.8%	372.9	369.3	-3.6	-1.0%
58.0%	371.1	368.8	-2.3	-0.6%
59.3%	370.8	367.4	-3.4	-0.9%
60.5%	369.5	366.5	-3.0	-0.8%
61.7%	368.6	365.5	-3.1	-0.8%
63.0%	365.3	362.6	-2.6	-0.7%
64.2%	363.2	360.5	-2.7	-0.7%
65.4%	361.0	360.2	-0.8	-0.2%
66.7%	360.5	357.3	-3.3	-0.9%
67.9%	360.1	355.8	-4.3	-1.2%
69.1%	356.2	355.1	-1.1	-0.3%
70.4%	355.1	354.3	-0.9	-0.3%
71.6%	352.3	352.1	-0.2	0.0%
72.8%	345.2	345.0	-0.1	0.0%
74.1%	334.6	335.2	0.5	0.2%
75.3%	334.5	333.1	-1.4	-0.4%
76.5%	324.3	324.3	0.0	0.0%
77.8%	323.7	323.7	0.0	0.0%
79.0%	317.5	317.7	0.1	0.0%
80.2%	315.0	315.2	0.1	0.0%
81.5%	311.5	311.5	0.0	0.0%
82.7%	306.7	306.8	0.1	0.0%
84.0%	299.6	300.3	0.7	0.2%
85.2%	281.9	282.0	0.1	0.0%
86.4%	256.3	257.4	1.2	0.4%
87.7%	245.7	245.8	0.0	0.0%
88.9%	237.6	237.8	0.2	0.1%
90.1%	208.2	208.8	0.7	0.3%
91.4%	199.2	199.5	0.3	0.2%
92.6%	193.1	193.1	0.0	0.0%
93.8%	186.3	186.5	0.2	0.1%
95.1%	185.1	185.5	0.4	0.2%
96.3%	184.3	184.2	-0.1	-0.1%
97.5%	174.7	175.1	0.3	0.2%
98.8%	173.1	173.4	0.3	0.2%
100.0%	155.5	155.6	0.0	0.0%

Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	476.4	482.6	6.2	1.3%
1.2%	472.2	466.0	-6.2	-1.3%
2.5%	456.1	456.3	0.2	0.0%
3.7%	447.4	455.6	8.2	1.8%
4.9%	444.1	447.4	3.3	0.7%
6.2%	444.0	440.9	-3.1	-0.7%
7.4%	441.1	439.2	-1.9	-0.4%
8.6%	438.8	438.8	0.0	0.0%
9.9%	434.1	435.7	1.6	0.4%
11.1%	427.4	430.5	3.1	0.7%
12.3%	427.4	429.0	1.6	0.4%
13.6%	423.8	428.0	4.2	1.0%
14.8%	420.9	427.1	6.2	1.5%
16.0%	420.5	424.1	3.7	0.9%
17.3%	419.9	421.2	1.2	0.3%
18.5%	415.0	420.7	5.8	1.4%
19.8%	396.8	396.2	-0.6	-0.1%
21.0%	389.3	392.8	3.5	0.9%
22.2%	389.0	389.7	0.7	0.2%
23.5%	384.3	387.9	3.6	0.9%
24.7%	382.4	384.9	2.5	0.6%
25.9%	378.7	383.4	4.7	1.2%
27.2%	377.3	378.6	1.3	0.3%
28.4%	377.3	378.6	1.3	0.3%
29.6%	376.8	378.4	1.6	0.4%
30.9%	376.1	377.4	1.3	0.4%
32.1%	375.6	376.0	0.4	0.1%
33.3%	375.3	374.7	-0.6	-0.1%
34.6%	374.1	372.9	-1.2	-0.3%
35.8%	373.8	372.8	-1.0	-0.3%
37.0%	372.8	372.4	-0.4	-0.1%
38.3%	369.9	371.8	1.9	0.5%
39.5%	369.3	371.8	2.4	0.7%
40.7%	369.2	370.1	0.9	0.2%
42.0%	367.3	369.3	1.9	0.5%
43.2%	366.9	369.2	2.2	0.6%
44.4%	366.1	367.9	1.7	0.5%
45.7%	365.0	366.1	1.1	0.3%
46.9%	364.4	365.7	1.3	0.4%
48.1%	364.0	365.6	1.6	0.4%
49.4%	363.3	365.2	1.9	0.5%
50.6%	362.3	361.6	-0.8	-0.2%
51.9%	361.3	361.6	0.2	0.1%
53.1%	361.0	361.4	0.3	0.1%
54.3%	360.6	360.8	0.3	0.1%
55.6%	360.5	360.3	-0.2	-0.1%
56.8%	359.0	359.8	0.8	0.2%
58.0%	358.5	359.5	1.0	0.3%
59.3%	356.9	358.8	1.9	0.5%
60.5%	355.1	358.1	3.0	0.9%
61.7%	353.1	355.0	1.9	0.5%
63.0%	352.4	352.8	0.4	0.1%
64.2%	352.1	352.3	0.3	0.1%
65.4%	350.2	351.7	1.5	0.4%
66.7%	348.1	351.6	3.5	1.0%
67.9%	348.0	348.2	0.2	0.1%
69.1%	347.7	347.8	0.2	0.1%
70.4%	346.7	347.4	0.7	0.2%
71.6%	346.6	346.9	0.4	0.1%
72.8%	346.2	346.9	0.7	0.2%
74.1%	343.3	346.6	3.4	1.0%
75.3%	340.5	345.7	5.2	1.5%
76.5%	339.8	341.5	1.7	0.5%
77.8%	338.6	339.9	1.3	0.4%
79.0%	337.7	339.8	2.1	0.6%
80.2%	337.6	337.2	-0.5	-0.1%
81.5%	337.4	335.8	-1.5	-0.5%
82.7%	329.4	332.6	3.2	1.0%
84.0%	328.4	329.3	0.9	0.3%
85.2%	325.5	326.2	0.7	0.2%
86.4%	324.7	324.7	0.0	0.0%
87.7%	315.1	310.9	-4.2	-1.3%
88.9%	301.5	301.6	0.1	0.0%
90.1%	300.1	300.4	0.3	0.1%
91.4%	288.4	289.4	1.0	0.3%
92.6%	287.7	288.4	0.8	0.3%
93.8%	284.6	285.3	0.7	0.2%
95.1%	281.2	281.7	0.5	0.2%
96.3%	279.0	279.7	0.7	0.3%
97.5%	259.0	259.4	0.4	0.1%
98.8%	242.9	243.6	0.7	0.3%
100.0%	208.4	206.9	-1.6	-0.8%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	469.7	467.5	-2.3	-0.5%
1.2%	469.5	438.3	-31.2	-6.7%
2.5%	445.5	435.4	-10.0	-2.3%
3.7%	439.6	434.2	-5.4	-1.2%
4.9%	438.8	431.8	-7.0	-1.6%
6.2%	396.5	390.4	-6.1	-1.5%
7.4%	384.5	380.0	-4.6	-1.2%
8.6%	378.3	377.7	-0.7	-0.2%
9.9%	373.0	367.4	-5.6	-1.5%
11.1%	369.4	364.8	-4.6	-1.3%
12.3%	362.3	362.0	-0.3	-0.1%
13.6%	356.8	357.0	0.1	0.0%
14.8%	356.8	356.5	-0.2	-0.1%
16.0%	354.6	348.9	-5.8	-1.6%
17.3%	348.9	348.8	-0.1	0.0%
18.5%	347.8	348.2	0.4	0.1%
19.8%	347.7	346.8	-1.0	-0.3%
21.0%	345.8	346.4	0.6	0.2%
22.2%	343.8	343.2	-0.6	-0.2%
23.5%	343.6	342.6	-1.0	-0.3%
24.7%	343.1	339.9	-3.2	-0.9%
25.9%	338.8	338.5	-0.3	-0.1%
27.2%	329.3	327.3	-2.0	-0.6%
28.4%	327.4	326.5	-0.9	-0.3%
29.6%	323.6	325.4	1.8	0.6%
30.9%	322.3	324.1	1.8	0.6%
32.1%	321.9	322.3	0.4	0.1%
33.3%	321.8	321.9	0.1	0.0%
34.6%	321.1	320.3	-0.8	-0.2%
35.8%	320.2	320.1	0.0	0.0%
37.0%	316.5	318.7	2.2	0.7%
38.3%	316.3	316.4	0.1	0.0%
39.5%	314.0	310.8	-3.2	-1.0%
40.7%	312.2	310.3	-1.9	-0.6%
42.0%	311.1	307.1	-4.0	-1.3%
43.2%	309.6	306.8	-2.8	-0.9%
44.4%	308.2	305.1	-3.1	-1.0%
45.7%	307.0	304.8	-2.1	-0.7%
46.9%	306.2	303.3	-2.9	-1.0%
48.1%	304.8	301.8	-3.0	-1.0%
49.4%	301.5	301.7	0.2	0.1%
50.6%	301.3	301.2	-0.1	0.0%
51.9%	299.8	299.2	-0.6	-0.2%
53.1%	299.1	298.0	-1.0	-0.3%
54.3%	297.8	296.8	-1.0	-0.3%
55.6%	296.7	296.6	-0.2	-0.1%
56.8%	296.5	296.5	0.0	0.0%
58.0%	294.7	295.4	0.6	0.2%
59.3%	294.6	293.5	-1.1	-0.4%
60.5%	294.5	293.0	-1.5	-0.5%
61.7%	294.4	288.6	-5.8	-2.0%
63.0%	286.6	288.2	1.6	0.6%
64.2%	286.5	287.7	1.2	0.4%
65.4%	285.8	285.0	-0.8	-0.3%
66.7%	285.0	284.9	-0.1	0.0%
67.9%	284.3	284.2	-0.2	-0.1%
69.1%	284.3	283.7	-0.6	-0.2%
70.4%	283.1	282.6	-0.5	-0.2%
71.6%	282.8	281.6	-1.3	-0.4%
72.8%	281.9	281.1	-0.8	-0.3%
74.1%	281.6	280.5	-1.1	-0.4%
75.3%	280.7	278.7	-2.0	-0.7%
76.5%	278.7	278.5	-0.2	-0.1%
77.8%	276.8	276.7	0.0	0.0%
79.0%	274.9	274.6	-0.3	-0.1%
80.2%	273.4	271.1	-2.3	-0.9%
81.5%	271.9	270.9	-1.0	-0.4%
82.7%	268.8	269.5	0.7	0.3%
84.0%	267.4	266.8	-0.6	-0.2%
85.2%	267.1	264.9	-2.2	-0.8%
86.4%	264.1	262.3	-1.8	-0.7%
87.7%	262.0	260.8	-1.2	-0.5%
88.9%	257.7	260.0	2.3	0.9%
90.1%	257.5	259.5	2.0	0.8%
91.4%	257.3	258.3	1.0	0.4%
92.6%	256.2	257.4	1.3	0.5%
93.8%	254.4	257.3	2.9	1.1%
95.1%	253.8	254.6	0.8	0.3%
96.3%	250.9	248.9	-2.0	-0.8%
97.5%	249.2	248.7	-0.5	-0.2%
98.8%	242.6	242.0	-0.6	-0.2%
100.0%	237.6	237.7	0.1	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	582.9	592.7	9.9	1.7%
1.2%	573.2	553.5	-19.7	-3.4%
2.5%	494.3	480.0	-14.3	-2.9%
3.7%	468.8	465.9	-2.9	-0.6%
4.9%	464.1	450.7	-13.5	-2.9%
6.2%	464.1	449.4	-14.7	-3.2%
7.4%	457.9	448.5	-9.4	-2.1%
8.6%	445.2	439.0	-6.3	-1.4%
9.9%	445.0	437.1	-7.9	-1.8%
11.1%	440.0	435.6	-4.4	-1.0%
12.3%	435.7	433.9	-1.8	-0.4%
13.6%	435.1	421.4	-13.7	-3.2%
14.8%	428.4	420.0	-8.4	-2.0%
16.0%	424.5	417.9	-6.7	-1.6%
17.3%	420.6	416.5	-4.1	-1.0%
18.5%	420.5	415.8	-4.7	-1.1%
19.8%	420.1	414.9	-5.2	-1.2%
21.0%	415.8	411.4	-4.4	-1.0%
22.2%	386.2	410.6	24.4	6.3%
23.5%	382.0	403.1	21.1	5.5%
24.7%	379.8	384.7	4.9	1.3%
25.9%	378.4	382.8	4.5	1.2%
27.2%	367.5	355.9	-11.6	-3.2%
28.4%	363.3	355.1	-8.3	-2.3%
29.6%	363.3	354.1	-9.2	-2.5%
30.9%	362.0	352.5	-9.6	-2.6%
32.1%	360.8	349.7	-11.1	-3.1%
33.3%	353.2	348.6	-4.6	-1.3%
34.6%	349.4	345.8	-3.6	-1.0%
35.8%	343.6	344.3	0.7	0.2%
37.0%	342.9	344.0	1.2	0.3%
38.3%	333.0	338.9	5.9	1.8%
39.5%	332.9	338.8	5.8	1.8%
40.7%	329.7	335.2	5.5	1.7%
42.0%	329.5	333.4	3.9	1.2%
43.2%	329.4	329.4	0.0	0.0%
44.4%	326.1	329.4	3.3	1.0%
45.7%	325.6	329.2	3.6	1.1%
46.9%	324.4	327.1	2.7	0.8%
48.1%	321.9	323.4	1.5	0.5%
49.4%	321.3	322.6	1.2	0.4%
50.6%	318.3	319.2	0.9	0.3%
51.9%	317.2	318.8	1.6	0.5%
53.1%	310.6	310.0	-0.6	-0.2%
54.3%	308.3	307.0	-1.4	-0.5%
55.6%	307.0	306.3	-0.7	-0.2%
56.8%	305.9	305.8	-0.1	0.0%
58.0%	303.2	300.2	-3.1	-1.0%
59.3%	301.5	299.4	-2.1	-0.7%
60.5%	296.8	296.7	-0.1	0.0%
61.7%	296.2	296.5	0.3	0.1%
63.0%	295.9	296.1	0.2	0.1%
64.2%	295.9	296.0	0.0	0.0%
65.4%	295.6	295.4	-0.2	-0.1%
66.7%	295.1	294.7	-0.5	-0.2%
67.9%	294.4	294.7	0.3	0.1%
69.1%	294.2	294.4	0.2	0.1%
70.4%	292.4	292.0	-0.4	-0.1%
71.6%	290.8	291.8	1.0	0.4%
72.8%	289.8	289.9	0.1	0.0%
74.1%	288.8	289.9	1.1	0.4%
75.3%	288.6	289.3	0.7	0.2%
76.5%	288.5	289.1	0.7	0.2%
77.8%	286.8	285.9	-1.0	-0.3%
79.0%	284.4	285.8	1.4	0.5%
80.2%	281.6	282.5	0.9	0.3%
81.5%	281.1	280.7	-0.4	-0.1%
82.7%	281.0	280.6	-0.4	-0.1%
84.0%	280.5	279.8	-0.8	-0.3%
85.2%	280.2	278.0	-2.2	-0.8%
86.4%	279.2	277.2	-2.1	-0.7%
87.7%	278.6	276.9	-1.7	-0.6%
88.9%	278.5	276.4	-2.1	-0.8%
90.1%	276.3	275.2	-1.1	-0.4%
91.4%	276.0	272.2	-3.8	-1.4%
92.6%	271.7	271.2	-0.5	-0.2%
93.8%	271.3	269.9	-1.4	-0.5%
95.1%	265.4	262.9	-2.6	-1.0%
96.3%	261.9	260.5	-1.4	-0.5%
97.5%	256.1	256.6	0.4	0.2%
98.8%	255.8	256.0	0.2	0.1%
100.0%	214.9	214.9	0.0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	517.5	512.6	-4.8	-0.9%
1.2%	487.9	494.3	6.4	1.3%
2.5%	483.9	493.9	10.0	2.1%
3.7%	482.9	493.2	10.3	2.1%
4.9%	480.1	483.4	3.3	0.7%
6.2%	479.0	471.7	-7.4	-1.5%
7.4%	473.6	470.9	-2.7	-0.6%
8.6%	472.9	470.4	-2.5	-0.5%
9.9%	469.5	469.4	-0.1	0.0%
11.1%	467.6	468.1	0.5	0.1%
12.3%	464.6	467.6	3.1	0.7%
13.6%	462.1	463.7	1.6	0.4%
14.8%	461.5	463.5	1.9	0.4%
16.0%	461.4	460.9	-0.5	-0.1%
17.3%	454.1	459.3	5.2	1.1%
18.5%	453.9	457.0	3.2	0.7%
19.8%	453.7	453.7	0.0	0.0%
21.0%	452.8	450.2	-2.6	-0.6%
22.2%	450.5	449.7	-0.8	-0.2%
23.5%	449.8	449.3	-0.5	-0.1%
24.7%	449.2	445.6	-3.6	-0.8%
25.9%	448.3	444.4	-3.9	-0.9%
27.2%	448.1	438.5	-9.6	-2.1%
28.4%	446.7	437.0	-9.7	-2.2%
29.6%	446.0	436.9	-9.1	-2.0%
30.9%	442.7	436.0	-6.7	-1.5%
32.1%	440.5	435.2	-5.3	-1.2%
33.3%	440.3	434.7	-5.6	-1.3%
34.6%	439.8	434.6	-5.1	-1.2%
35.8%	435.9	434.4	-1.5	-0.3%
37.0%	434.1	434.4	0.3	0.1%
38.3%	431.2	433.3	2.1	0.5%
39.5%	431.1	432.4	1.4	0.3%
40.7%	430.8	432.4	1.6	0.4%
42.0%	429.2	430.5	1.3	0.3%
43.2%	427.9	427.6	-0.2	-0.1%
44.4%	427.3	426.3	-0.9	-0.2%
45.7%	424.2	425.9	1.7	0.4%
46.9%	424.1	423.5	-0.6	-0.1%
48.1%	423.1	423.5	0.4	0.1%
49.4%	418.4	423.0	4.5	1.1%
50.6%	412.6	421.5	8.9	2.2%
51.9%	412.4	415.0	2.6	0.6%
53.1%	412.0	413.2	1.2	0.3%
54.3%	411.9	413.2	1.2	0.3%
55.6%	410.7	410.5	-0.2	0.0%
56.8%	406.8	409.3	2.5	0.6%
58.0%	406.7	403.7	-2.9	-0.7%
59.3%	399.9	400.0	0.1	0.0%
60.5%	395.9	398.9	3.0	0.8%
61.7%	388.6	393.9	5.3	1.4%
63.0%	388.0	387.4	-0.6	-0.1%
64.2%	387.9	385.7	-2.1	-0.6%
65.4%	386.0	382.0	-4.0	-1.0%
66.7%	383.1	378.3	-4.7	-1.2%
67.9%	381.8	377.9	-3.9	-1.0%
69.1%	380.9	376.0	-4.9	-1.3%
70.4%	376.3	365.6	-10.7	-2.8%
71.6%	373.6	362.3	-11.3	-3.0%
72.8%	373.0	355.2	-17.8	-4.8%
74.1%	360.3	354.1	-6.3	-1.7%
75.3%	358.7	353.6	-5.0	-1.4%
76.5%	357.5	351.6	-5.9	-1.6%
77.8%	356.5	349.4	-7.1	-2.0%
79.0%	355.5	349.0	-6.5	-1.8%
80.2%	354.5	347.3	-7.2	-2.0%
81.5%	354.3	345.6	-8.8	-2.5%
82.7%	350.8	345.2	-5.6	-1.6%
84.0%	345.4	344.0	-1.4	-0.4%
85.2%	344.2	340.7	-3.5	-1.0%
86.4%	343.7	335.0	-8.7	-2.5%
87.7%	339.3	334.3	-5.0	-1.5%
88.9%	338.2	330.3	-8.0	-2.4%
90.1%	331.8	321.9	-9.9	-3.0%
91.4%	325.6	320.9	-4.7	-1.4%
92.6%	324.8	319.6	-5.2	-1.6%
93.8%	323.8	317.8	-6.0	-1.9%
95.1%	282.3	290.2	7.9	2.8%
96.3%	259.9	269.2	9.4	3.6%
97.5%	250.9	253.1	2.2	0.9%
98.8%	249.1	251.3	2.3	0.9%
100.0%	212.3	212.4	0.1	0.0%

Figure SQ-31-b
Clifton Court Forebay, Monthly EC
Probability of Exceedance

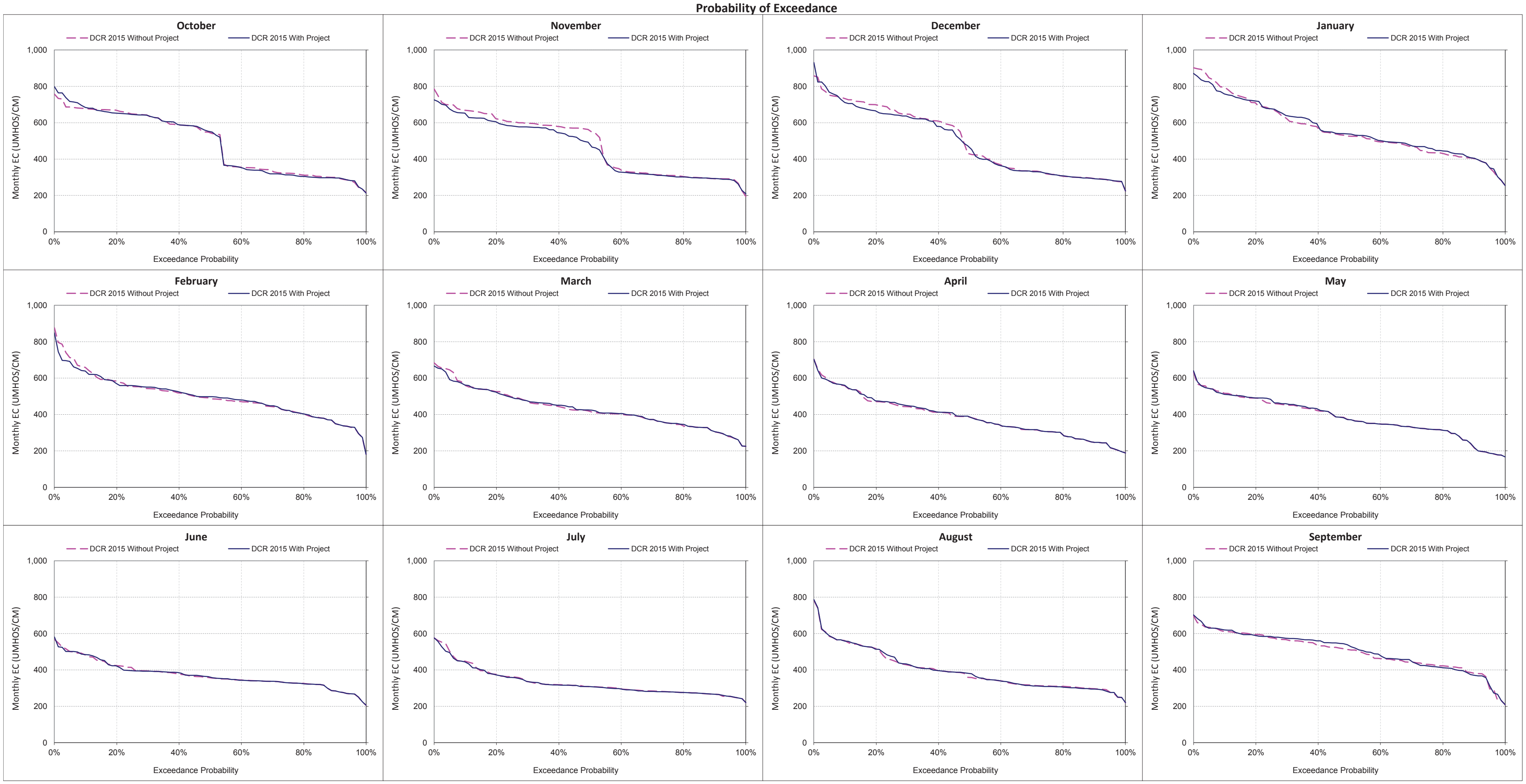


Table SQ-31-b
Clifton Court Forebay, Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	757.5	797.7	40.2	5.3%
1.2%	733.7	763.9	30.2	4.1%
2.5%	730.5	763.4	33.0	4.5%
3.7%	686.5	738.3	51.8	7.6%
4.9%	686.4	717.5	31.1	4.5%
6.2%	684.0	714.5	30.4	4.4%
7.4%	681.0	709.3	28.2	4.1%
8.6%	679.3	695.5	16.1	2.4%
9.9%	678.3	683.9	5.6	0.8%
11.1%	675.7	679.8	4.0	0.6%
12.3%	674.1	679.8	5.6	0.8%
13.6%	672.2	668.9	-3.3	-0.5%
14.8%	672.0	665.3	-6.7	-1.0%
16.0%	671.9	660.8	-11.1	-1.6%
17.3%	670.9	658.5	-12.4	-1.8%
18.5%	670.2	653.9	-16.3	-2.4%
19.8%	669.5	652.2	-17.3	-2.6%
21.0%	662.9	652.0	-10.9	-1.7%
22.2%	659.7	649.3	-10.4	-1.6%
23.5%	654.4	649.1	-5.2	-0.8%
24.7%	648.5	646.3	-2.2	-0.3%
25.9%	647.2	644.7	-2.5	-0.4%
27.2%	645.7	643.0	-2.8	-0.4%
28.4%	643.8	642.6	-1.3	-0.2%
29.6%	642.5	641.1	-1.3	-0.2%
30.9%	632.0	634.2	2.2	0.3%
32.1%	628.7	628.8	0.2	0.0%
33.3%	626.2	626.0	-0.1	0.0%
34.6%	609.9	610.4	0.6	0.1%
35.8%	605.6	605.5	-0.2	0.0%
37.0%	592.4	605.4	13.0	2.2%
38.3%	591.7	603.8	12.1	2.0%
39.5%	587.6	589.8	2.1	0.4%
40.7%	587.0	587.0	0.0	0.0%
42.0%	585.8	585.5	-0.3	-0.1%
43.2%	583.5	584.5	1.0	0.2%
44.4%	583.1	582.6	-0.4	-0.1%
45.7%	576.3	579.6	3.3	0.6%
46.9%	560.1	569.8	9.7	1.7%
48.1%	549.2	560.0	10.8	2.0%
49.4%	548.2	552.4	4.3	0.8%
50.6%	540.9	548.7	7.9	1.5%
51.9%	538.2	532.0	-6.1	-1.1%
53.1%	534.7	520.6	-14.1	-2.6%
54.3%	372.1	365.7	-6.4	-1.7%
55.6%	361.1	364.6	3.5	1.0%
56.8%	358.6	363.0	4.4	1.2%
58.0%	358.1	360.1	2.0	0.6%
59.3%	356.2	356.0	-0.2	0.0%
60.5%	354.4	350.7	-3.7	-1.1%
61.7%	352.9	342.2	-10.7	-3.0%
63.0%	352.8	339.7	-13.1	-3.7%
64.2%	352.3	338.7	-13.6	-3.9%
65.4%	345.6	338.6	-7.0	-2.0%
66.7%	343.1	336.7	-6.4	-1.9%
67.9%	342.4	325.5	-16.8	-4.9%
69.1%	342.2	319.6	-22.6	-6.6%
70.4%	329.8	319.6	-10.2	-3.1%
71.6%	325.7	318.9	-6.8	-2.1%
72.8%	323.7	317.6	-6.1	-1.9%
74.1%	322.4	313.7	-8.7	-2.7%
75.3%	322.2	312.9	-9.3	-2.9%
76.5%	321.3	311.8	-9.5	-3.0%
77.8%	319.6	307.3	-12.2	-3.8%
79.0%	314.3	304.4	-9.9	-3.1%
80.2%	311.6	304.0	-7.6	-2.4%
81.5%	311.6	302.0	-9.6	-3.1%
82.7%	311.3	299.9	-11.3	-3.6%
84.0%	305.6	299.4	-6.2	-2.0%
85.2%	304.8	298.2	-6.6	-2.2%
86.4%	300.8	298.0	-2.8	-0.9%
87.7%	300.3	297.7	-2.7	-0.9%
88.9%	299.7	296.9	-2.8	-0.9%
90.1%	299.3	296.7	-2.6	-0.9%
91.4%	293.8	295.9	2.1	0.7%
92.6%	288.5	292.2	3.7	1.3%
93.8%	285.5	286.3	0.8	0.3%
95.1%	282.4	282.4	0.1	0.0%
96.3%	271.4	280.4	9.0	3.3%
97.5%	245.3	247.4	2.1	0.9%
98.8%	234.7	235.4	0.7	0.3%
100.0%	215.1	213.4	-1.7	-0.8%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	785.0	726.3	-58.7	-7.5%
1.2%	748.7	717.0	-31.7	-4.2%
2.5%	711.6	701.8	-9.9	-1.4%
3.7%	700.1	696.6	-3.5	-0.5%
4.9%	698.2	675.4	-22.8	-3.3%
6.2%	697.7	662.8	-34.9	-5.0%
7.4%	677.8	656.4	-21.4	-3.2%
8.6%	671.5	654.1	-17.4	-2.6%
9.9%	669.0	653.1	-15.8	-2.4%
11.1%	666.5	628.1	-38.4	-5.8%
12.3%	663.9	627.3	-36.6	-5.5%
13.6%	661.8	625.5	-36.3	-5.5%
14.8%	657.5	625.5	-32.0	-4.9%
16.0%	650.9	624.0	-26.8	-4.1%
17.3%	649.1	612.3	-36.8	-5.7%
18.5%	648.6	608.4	-40.3	-6.2%
19.8%	622.4	605.1	-17.3	-2.8%
21.0%	617.6	594.5	-23.1	-3.7%
22.2%	614.0	589.9	-24.1	-3.9%
23.5%	606.8	584.5	-22.3	-3.7%
24.7%	605.8	582.5	-23.3	-3.9%
25.9%	603.9	579.4	-24.6	-4.1%
27.2%	600.0	577.9	-22.1	-3.7%
28.4%	599.8	577.6	-22.2	-3.7%
29.6%	596.8	576.8	-20.0	-3.3%
30.9%	596.4	576.0	-20.4	-3.4%
32.1%	595.4	575.0	-20.4	-3.4%
33.3%	591.0	573.8	-17.2	-2.9%
34.6%	586.4	571.2	-15.2	-2.6%
35.8%	586.3	570.9	-15.3	-2.6%
37.0%	585.5	562.1	-23.3	-4.0%
38.3%	585.1	561.3	-23.8	-4.1%
39.5%	579.5	546.3	-33.2	-5.7%
40.7%	577.9	543.5	-34.4	-5.9%
42.0%	571.9	538.3	-33.6	-5.9%
43.2%	571.7	526.5	-45.2	-7.9%
44.4%	570.5	524.3	-46.2	-8.1%
45.7%	570.4	519.8	-50.6	-8.9%
46.9%	570.1	504.2	-65.9	-11.6%
48.1%	566.3	497.2	-69.2	-12.2%
49.4%	562.8	493.4	-69.4	-12.3%
50.6%	548.5	466.4	-82.2	-15.0%
51.9%	540.0	462.0	-78.0	-14.5%
53.1%	518.4	450.1	-68.3	-13.2%
54.3%	413.0	412.0	-1.0	-0.2%
55.6%	368.4	374.2	5.8	1.6%
56.8%	360.6	356.4	-4.2	-1.2%
58.0%	352.0	335.6	-16.4	-4.7%
59.3%	347.9	329.5	-18.4	-5.3%
60.5%	334.0	327.1	-7.0	-2.1%
61.7%	331.3	325.7	-5.6	-1.7%
63.0%	328.5	323.1	-5.5	-1.7%
64.2%	327.5	322.0	-5.5	-1.7%
65.4%	326.7	319.1	-7.6	-2.3%
66.7%	323.1	318.5	-4.6	-1.4%
67.9%	323.1	317.7	-5.5	-1.7%
69.1%	319.2	316.7	-2.5	-0.8%
70.4%	315.1	314.3	-0.8	-0.2%
71.6%	314.3	310.7	-3.5	-1.1%
72.8%	312.5	310.1	-2.4	-0.8%
74.1%	311.8	309.4	-2.4	-0.8%
75.3%	309.6	306.1	-3.5	-1.1%
76.5%	309.5	304.5	-5.0	-1.6%
77.8%	309.0	302.0	-7.0	-2.3%
79.0%	306.6	301.7	-4.9	-1.6%
80.2%	303.1	301.3	-1.7	-0.6%
81.5%	300.6	300.9	0.3	0.1%
82.7%	299.6	297.7	-1.9	-0.6%
84.0%	298.9	296.9	-2.0	-0.7%
85.2%	298.0	296.8	-1.3	-0.4%
86.4%	296.6	296.6	-0.1	0.0%
87.7%	294.5	295.7	1.3	0.4%
88.9%	293.5	293.7	0.2	0.1%
90.1%	292.0	293.0	1.0	0.4%
91.4%	291.8	291.5	-0.3	-0.1%
92.6%	291.7	289.5	-2.2	-0.7%
93.8%	291.3	288.7	-2.6	-0.9%
95.1%	291.2	287.0	-4.2	-1.4%
96.3%	285.8	281.3	-4.5	-1.6%
97.5%	267.5	262.6	-4.9	-1.8%
98.8%	226.2	227.4	1.1	0.5%
100.0%	194.7	208.5	13.8	7.1%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	857.8	930.9	73.1	8.5%
1.2%	851.0	824.0	-27.0	-3.2%
2.5%	786.6	823.7	37.1	4.7%
3.7%	771.6	801.9	30.3	3.9%
4.9%	751.9	767.7	15.8	2.1%
6.2%	747.1	758.3	11.1	1.5%
7.4%	744.5	749.5	5.0	0.7%
8.6%	740.5	729.0	-11.6	-1.6%
9.9%	733.3	710.7	-22.6	-3.1%
11.1%	726.3	705.0	-21.3	-2.9%
12.3%	726.1	705.0	-21.1	-2.9%
13.6%	717.9	689.4	-28.5	-4.0%
14.8%	716.6	682.2	-34.4	-4.8%
16.0%	714.5	678.4	-36.1	-5.1%
17.3%	700.7	673.1	-27.6	-3.9%
18.5%	700.0	668.0	-32.0	-4.6%
19.8%	699.8	665.4	-34.4	-4.9%
21.0%	694.5	653.9	-40.5	-5.8%
22.2%	691.5	650.1	-41.4	-6.0%
23.5%	687.9	648.5	-39.4	-5.7%
24.7%	669.0	647.3	-21.8	-3.3%
25.9%	669.0	642.8	-26.3	-3.9%
27.2%	653.3	641.0	-12.2	-1.9%
28.4%	647.9	636.6	-11.4	-1.8%
29.6%	647.5	636.5	-11.0	-1.7%
30.9%	646.7	628.6	-18.1	-2.8%
32.1%	633.7	622.4	-11.3	-1.8%
33.3%	629.7	622.0	-7.7	-1.2%
34.6%	623.0	621.3	-1.6	-0.3%
35.8%	621.8	620.7	-1.1	-0.2%
37.0%	616.9	610.2	-6.7	-1.1%
38.3%	611.4	607.6	-3.8	-0.6%
39.5%	610.2	580.1	-30.1	-4.9%
40.7%	605.7	578.6	-27.1	-4.5%
42.0%	594.7	562.8	-31.9	-5.4%
43.2%	589.9	560.6	-29.3	-5.0%
44.4%	584.4	559.6	-24.8	-4.2%
45.7%	572.1	527.7	-44.4	-7.8%
46.9%	551.4	509.8	-41.6	-7.5%
48.1%	489.8	487.0	-2.7	-0.6%
49.4%	431.2	473.2	42.0	9.7%
50.6%	425.0	452.6	27.6	6.5%
51.9%	423.1	416.1	-7.1	-1.7%
53.1%	421.0	402.8	-18.2	-4.3%
54.3%	415.8	399.3	-16.6	-4.0%
55.6%	399.8	398.7	-1.1	-0.3%
56.8%	398.9	389.5	-9.5	-2.4%
58.0%	379.3	374.3	-5.0	-1.3%
59.3%	372.8	366.7	-6.2	-1.7%
60.5%	365.1	361.3	-3.8	-1.0%
61.7%	352.9	356.5	3.5	1.0%
63.0%	350.0	342.7	-7.3	-2.1%
64.2%	348.0	337.6	-10.4	-3.0%
65.4%	337.8	335.5	-2.3	-0.7%
66.7%	335.5	335.1	-0.4	-0.1%
67.9%	335.3	335.1	-0.2	-0.1%
69.1%	334.2	335.0	0.8	0.2%
70.4%	333.9	331.0	-2.9	-0.9%
71.6%	333.5	330.6	-2.9	-0.9%
72.8%	329.9	329.5	-0.4	-0.1%
74.1%	321.4	323.6	2.2	0.7%
75.3%	317.0	321.0	4.0	1.3%
76.5%	316.0	314.5	-1.5	-0.5%
77.8%	315.3	313.6	-1.7	-0.5%
79.0%	308.5	308.6	0.1	0.0%
80.2%	304.7	307.0	2.3	0.7%
81.5%	303.6	305.2	1.6	0.5%
82.7%	300.7	301.8	1.1	0.4%
84.0%	300.6	299.9	-0.7	-0.2%
85.2%	299.4	298.6	-0.9	-0.3%
86.4%	299.4	296.4	-3.0	-1.0%
87.7%	298.0	295.8	-2.2	-0.7%
88.9%	295.9	295.4	-0.5	-0.2%
90.1%	292.5	292.0	-0.5	-0.2%
91.4%	292.4	290.0	-2.4	-0.8%
92.6%	290.2	289.0	-1.2	-0.4%
93.8%	287.4	287.9	0.4	0.2%
95.1%	280.9	284.7	3.8	1.4%
96.3%	280.4	280.3	-0.2	-0.1%
97.5%	276.9	278.7	1.8	0.6%
98.8%	275.7	277.5	1.9	0.7%
100.0%	224.5	224.5	0.0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	902.2	870.7	-31.5	-3.5%
1.2%	896.9	854.8	-42.1	-4.7%
2.5%	893.3	835.7	-57.6	-6.5%
3.7%	876.5	826.4	-50.1	-5.7%
4.9%	847.2	824.9	-22.3	-2.6%
6.2%	837.1	810.0	-27.1	-3.2%
7.4%	820.0	775.5	-44.5	-5.4%
8.6%	797.0	770.9	-26.2	-3.3%
9.9%	796.9	758.3	-38.6	-4.8%
11.1%	780.7	753.0	-27.7	-3.5%
12.3%	763.0	749.2	-13.8	-1.8%
13.6%	753.1	739.5	-13.6	-1.8%
14.8%	746.0	736.1	-9.9	-1.3%
16.0%	740.5	728.3	-12.2	-1.7%
17.3%	733.5	724.1	-9.4	-1.3%
18.5%	711.5	722.3	10.8	1.5%
19.8%	710.5	719.2	8.8	1.2%
21.0%	690.1	717.4	27.3	4.0%
22.2%	688.1	685.2	-2.9	-0.4%
23.5%	684.7	677.9	-6.7	-1.0%
24.7%	674.1	677.4	3.3	0.5%
25.9%	669.1	674.6	5.5	0.8%
27.2%	656.0	663.5	7.5	1.1%
28.4%	636.9	653.5	16.6	2.6%
29.6%	626.5	639.4	12.9	2.1%
30.9%	607.4	636.0	28.5	4.7%
32.1%	603.9	633.4	29.5	4.9%
33.3%	599.4	629.7	30.3	5.1%
34.6%	594.7	629.4	34.7	5.8%
35.8%	593.8	625.8	32.0	5.4%
37.0%	587.4	618.9	31.6	5.4%
38.3%	581.7	599.9	18.2	3.1%
39.5%	579.1	595.3	16.1	2.8%
40.7%	554.2	560.6	6.4	1.2%
42.0%	547.9	552.0	4.1	0.8%
43.2%	546.5	550.6	4.1	0.7%
44.4%	541.8	549.2	7.3	1.4%
45.7%	538.7	541.0	2.3	0.4%
46.9%	533.8	539.9	6.2	1.2%
48.1%	531.4	539.7	8.3	1.6%
49.4%	526.4	538.5	12.0	2.3%
50.6%	525.8	537.4	11.6	2.2%
51.9%	525.6	532.2	6.6	1.3%
53.1%	524.5	530.7	6.1	1.2%
54.3%	523.2	530.4	7.2	1.4%
55.6%	512.3	527.8	15.5	3.0%
56.8%	510.2	521.2	11.0	2.2%
58.0%	500.4	512.1	11.7	2.3%
59.3%	495.6	502.8	7.2	1.5%
60.5%	493.8	500.4	6.5	1.3%
61.7%	493.3	495.7	2.3	0.5%
63.0%	491.6	494.1	2.5	0.5%
64.2%	489.3	493.2	3.9	0.8%
65.4%	488.3	491.4	3.1	0.6%
66.7%	483.7	490.6	6.9	1.4%
67.9%	477.7	487.9	10.2	2.1%
69.1%	470.6	478.2	7.6	1.6%
70.4%	469.3	471.0	1.7	0.4%
71.6%	465.0	469.1	4.1	0.9%
72.8%	447.1	469.0	22.0	4.9%
74.1%	447.0	468.7	21.8	4.9%
75.3%	435.6	460.1	24.5	5.6%
76.5%	435.1	457.8	22.7	5.2%
77.8%	434.5	447.8	13.3	3.1%
79.0%	434.4	446.7	12.3	2.8%
80.2%	430.1	445.1	15.0	3.5%
81.5%	423.7	442.6	18.9	4.5%
82.7%	419.5	435.0	15.6	3.7%
84.0%	419.2	430.7	11.5	2.7%
85.2%	412.2	429.0	16.8	4.1%
86.4%	411.6	427.7	16.2	3.9%
87.7%	407.2	414.3	7.1	1.7%
88.9%	406.8	407.9	1.1	0.3%
90.1%	402.8	404.3	1.5	0.4%
91.4%	395.1	395.7	0.6	0.2%
92.6%	386.2	386.3	0.1	0.0%
93.8%	378.7	379.3	0.6	0.2%
95.1%	351.1	351.6	0.5	0.1%
96.3%	330.6	345.4	14.9	4.5%
97.5%	302.0	302.7	0.6	0.2%
98.8%	282.9	283.0	0.1	0.0%
100.0%	254.5	254.6	0.1	0.0%

Table SQ-31-b

Clifton Court Forebay, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	877.0	848.4	-28.5	-3.3%
1.2%	796.3	744.8	-51.5	-6.5%
2.5%	786.5	697.6	-88.9	-11.3%
3.7%	740.7	695.9	-44.8	-6.0%
4.9%	712.8	691.2	-21.6	-3.0%
6.2%	709.5	662.1	-47.4	-6.7%
7.4%	671.0	652.8	-18.2	-2.7%
8.6%	663.8	641.7	-22.0	-3.3%
9.9%	659.4	638.9	-20.5	-3.1%
11.1%	640.9	620.1	-20.8	-3.2%
12.3%	625.4	619.9	-5.5	-0.9%
13.6%	604.3	619.2	14.9	2.5%
14.8%	593.3	609.0	15.7	2.6%
16.0%	591.9	592.4	0.6	0.1%
17.3%	591.8	588.6	-3.1	-0.5%
18.5%	585.6	587.8	2.2	0.4%
19.8%	584.1	571.9	-12.3	-2.1%
21.0%	576.7	559.3	-17.4	-3.0%
22.2%	572.0	559.1	-12.9	-2.3%
23.5%	555.8	559.1	3.2	0.6%
24.7%	554.2	558.8	4.6	0.8%
25.9%	553.1	558.5	5.4	1.0%
27.2%	552.7	554.8	2.0	0.4%
28.4%	548.7	552.6	3.9	0.7%
29.6%	542.8	551.2	8.5	1.6%
30.9%	542.1	550.9	8.8	1.6%
32.1%	541.2	548.9	7.7	1.4%
33.3%	538.1	543.1	4.9	0.9%
34.6%	531.4	540.4	9.0	1.7%
35.8%	529.6	540.3	10.6	2.0%
37.0%	527.2	534.5	7.4	1.4%
38.3%	526.9	530.9	4.0	0.8%
39.5%	519.4	526.1	6.7	1.3%
40.7%	517.4	520.5	3.1	0.6%
42.0%	517.1	516.5	-0.5	-0.1%
43.2%	507.5	511.4	3.9	0.8%
44.4%	501.8	505.8	4.0	0.8%
45.7%	496.7	499.4	2.7	0.6%
46.9%	494.8	497.9	3.0	0.6%
48.1%	492.9	497.7	4.8	1.0%
49.4%	491.9	497.2	5.3	1.1%
50.6%	485.6	497.2	11.6	2.4%
51.9%	485.0	496.0	11.0	2.3%
53.1%	483.2	492.9	9.7	2.0%
54.3%	482.0	490.9	8.9	1.9%
55.6%	476.5	490.9	14.4	3.0%
56.8%	475.7	487.1	11.3	2.4%
58.0%	472.5	482.7	10.2	2.2%
59.3%	472.2	480.2	8.0	1.7%
60.5%	469.6	478.8	9.2	2.0%
61.7%	469.4	475.5	6.1	1.3%
63.0%	465.3	472.9	7.7	1.6%
64.2%	464.1	472.2	8.0	1.7%
65.4%	463.1	464.5	1.3	0.3%
66.7%	461.9	461.0	-0.9	-0.2%
67.9%	446.3	451.8	5.6	1.2%
69.1%	444.6	447.5	2.9	0.7%
70.4%	442.2	447.4	5.2	1.2%
71.6%	440.8	442.4	1.6	0.4%
72.8%	428.6	428.9	0.3	0.1%
74.1%	423.2	424.1	0.9	0.2%
75.3%	419.8	421.9	2.1	0.5%
76.5%	417.0	412.0	-5.0	-1.2%
77.8%	410.4	410.9	0.5	0.1%
79.0%	406.5	407.0	0.5	0.1%
80.2%	401.6	402.2	0.6	0.2%
81.5%	392.8	398.4	5.5	1.4%
82.7%	387.9	387.9	0.0	0.0%
84.0%	386.8	383.2	-3.6	-0.9%
85.2%	382.3	380.5	-1.7	-0.5%
86.4%	379.0	379.8	0.8	0.2%
87.7%	371.3	371.6	0.3	0.1%
88.9%	369.2	369.2	0.0	0.0%
90.1%	348.9	349.2	0.3	0.1%
91.4%	343.5	344.1	0.5	0.2%
92.6%	337.2	337.6	0.4	0.1%
93.8%	336.2	335.7	-0.4	-0.1%
95.1%	329.4	331.3	1.9	0.6%
96.3%	327.4	329.7	2.3	0.7%
97.5%	295.8	294.8	-0.9	-0.3%
98.8%	273.4	273.9	0.4	0.2%
100.0%	181.6	181.9	0.3	0.2%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	683.6	666.4	-17.1	-2.5%
1.2%	664.4	654.2	-10.2	-1.5%
2.5%	655.6	650.6	-5.0	-0.8%
3.7%	652.4	632.8	-19.6	-3.0%
4.9%	645.9	592.0	-53.9	-8.3%
6.2%	630.9	583.1	-47.7	-7.6%
7.4%	586.9	581.3	-5.6	-0.9%
8.6%	581.0	573.3	-7.7	-1.3%
9.9%	560.3	561.6	1.3	0.2%
11.1%	551.5	559.3	7.8	1.4%
12.3%	550.0	547.1	-2.9	-0.5%
13.6%	539.7	542.8	3.1	0.6%
14.8%	539.0	541.0	2.0	0.4%
16.0%	538.6	537.3	-1.3	-0.2%
17.3%	538.4	537.1	-1.3	-0.2%
18.5%	531.3	528.5	-2.8	-0.5%
19.8%	525.8	523.8	-2.0	-0.4%
21.0%	525.7	513.4	-12.3	-2.3%
22.2%	511.9	507.8	-4.2	-0.8%
23.5%	507.7	500.9	-6.8	-1.3%
24.7%	497.5	495.7	-1.8	-0.4%
25.9%	492.8	488.2	-4.7	-0.9%
27.2%	489.8	486.2	-3.7	-0.7%
28.4%	482.0	479.9	-2.1	-0.4%
29.6%	475.5	476.4	1.0	0.2%
30.9%	464.0	469.7	5.7	1.2%
32.1%	460.3	468.1	7.8	1.7%
33.3%	458.7	464.7	6.0	1.3%
34.6%	458.2	463.0	4.8	1.0%
35.8%	453.1	462.8	9.8	2.2%
37.0%	450.5	460.9	10.5	2.3%
38.3%	450.3	454.3	4.0	0.9%
39.5%	445.9	451.1	5.2	1.2%
40.7%	440.9	450.4	9.5	2.1%
42.0%	435.1	447.7	12.6	2.9%
43.2%	427.9	442.0	14.1	3.3%
44.4%	424.8	441.7	16.8	4.0%
45.7%	424.4	426.3	1.9	0.5%
46.9%	423.7	426.2	2.5	0.6%
48.1%	423.7	425.4	1.7	0.4%
49.4%	420.1	425.2	5.2	1.2%
50.6%	413.9	423.8	9.9	2.4%
51.9%	409.8	419.8	10.0	2.4%
53.1%	408.1	409.0	0.9	0.2%
54.3%	406.3	408.5	2.2	0.5%
55.6%	406.1	407.8	1.7	0.4%
56.8%	404.3	407.5	3.2	0.8%
58.0%	404.1	407.2	3.1	0.8%
59.3%	403.5	405.6	2.1	0.5%
60.5%	399.9	405.2	5.3	1.3%
61.7%	397.5	399.9	2.5	0.6%
63.0%	397.0	398.6	1.6	0.4%
64.2%	396.6	396.5	-0.1	0.0%
65.4%	392.6	391.3	-1.3	-0.3%
66.7%	385.2	389.3	4.2	1.1%
67.9%	377.4	377.5	0.1	0.0%
69.1%	372.7	372.7	0.0	0.0%
70.4%	372.5	371.7	-0.8	-0.2%
71.6%	363.3	364.4	1.1	0.3%
72.8%	361.1	360.3	-0.7	-0.2%
74.1%	355.0	355.5	0.5	0.1%
75.3%	352.4	352.3	-0.2	0.0%
76.5%	349.4	351.2	1.8	0.5%
77.8%	345.5	350.8	5.3	1.5%
79.0%	345.2	346.0	0.8	0.2%
80.2%	335.3	345.2	9.9	2.9%
81.5%	334.0	335.2	1.2	0.4%
82.7%	333.3	333.2	0.0	0.0%
84.0%	330.8	329.7	-1.1	-0.3%
85.2%	328.5	329.0	0.5	0.2%
86.4%	328.3	328.8	0.5	0.2%
87.7%	328.2	328.3	0.1	0.0%
88.9%	312.3	312.5	0.2	0.1%
90.1%	304.3	305.2	0.9	0.3%
91.4%	300.5	300.9	0.4	0.1%
92.6%	294.7	294.9	0.2	0.1%
93.8%	281.1	284.5	3.4	1.2%
95.1%	276.9	280.9	4.0	1.5%
96.3%	269.4	270.3	0.9	0.3%
97.5%	260.8	260.7	-0.1	-0.1%
98.8%	227.1	227.4	0.3	0.1%
100.0%	224.6	224.8	0.2	0.1%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	703.9	703.4	-0.5	-0.1%
1.2%	650.4	643.1	-7.3	-1.1%
2.5%	617.9	601.0	-16.8	-2.7%
3.7%	604.5	595.1	-9.4	-1.6%
4.9%	582.6	584.4	1.8	0.3%
6.2%	577.5	572.1	-5.4	-0.9%
7.4%	566.5	567.6	1.1	0.2%
8.6%	562.4	565.6	3.2	0.6%
9.9%	558.5	560.1	1.6	0.3%
11.1%	541.4	545.5	4.0	0.7%
12.3%	536.1	536.4	0.3	0.1%
13.6%	535.4	534.8	-0.6	-0.1%
14.8%	524.7	514.2	-10.5	-2.0%
16.0%	492.2	509.0	16.8	3.4%
17.3%	475.6	493.2	17.6	3.7%
18.5%	472.3	492.2	19.9	4.2%
19.8%	470.8	475.0	4.2	0.9%
21.0%	470.3	473.3	3.0	0.6%
22.2%	468.6	471.4	2.8	0.6%
23.5%	467.1	470.6	3.5	0.7%
24.7%	461.3	467.0	5.7	1.2%
25.9%	455.1	465.9	10.8	2.4%
27.2%	448.5	457.9	9.4	2.1%
28.4%	443.8	453.8	10.0	2.3%
29.6%	443.2	449.2	6.0	1.4%
30.9%	442.6	447.2	4.6	1.0%
32.1%	434.4	444.5	10.1	2.3%
33.3%	431.6	437.4	5.8	1.3%
34.6%	431.1	435.6	4.5	1.0%
35.8%	422.1	432.5	10.4	2.5%
37.0%	419.5	421.7	2.3	0.5%
38.3%	413.0	419.7	6.6	1.6%
39.5%	412.5	413.4	1.0	0.2%
40.7%	412.2	412.9	0.7	0.2%
42.0%	410.0	412.3	2.2	0.5%
43.2%	408.7	410.8	2.2	0.5%
44.4%	391.0	409.5	18.4	4.7%
45.7%	390.2	391.7	1.5	0.4%
46.9%	389.5	391.1	1.5	0.4%
48.1%	389.5	390.7	1.3	0.3%
49.4%	388.8	390.5	1.8	0.5%
50.6%	382.4	382.5	0.1	0.0%
51.9%	377.1	374.3	-2.7	-0.7%
53.1%	369.5	369.8	0.4	0.1%
54.3%	365.3	365.2	-0.1	0.0%
55.6%	354.6	355.5	0.8	0.2%
56.8%	354.6	354.7	0.1	0.0%
58.0%	347.4	348.3	0.8	0.2%
59.3%	345.6	345.6	0.0	0.0%
60.5%	335.2	336.9	1.7	0.5%
61.7%	333.8	334.0	0.1	0.0%
63.0%	333.2	333.2	0.0	0.0%
64.2%	331.3	331.3	-0.1	0.0%
65.4%	327.5	327.5	0.0	0.0%
66.7%	317.9	323.0	5.1	1.6%
67.9%	317.1	317.7	0.5	0.2%
69.1%	317.1	317.4	0.3	0.1%
70.4%	316.4	317.1	0.8	0.3%
71.6%	315.1	317.1	2.0	0.6%
72.8%	309.5	309.7	0.2	0.1%
74.1%	306.6	306.6	0.0	0.0%
75.3%	305.6	305.4	-0.2	-0.1%
76.5%	304.8	304.8	0.0	0.0%
77.8%	303.0	303.2	0.2	0.1%
79.0%	302.5	302.6	0.2	0.1%
80.2%	283.2	283.1	-0.1	0.0%
81.5%	278.2	278.2	0.0	0.0%
82.7%	277.2	277.1	0.0	0.0%
84.0%	266.8	267.3	0.4	0.2%
85.2%	265.1	265.2	0.1	0.0%
86.4%	263.8	264.4	0.7	0.3%
87.7%	255.8	256.5	0.7	0.3%
88.9%	249.7	250.4	0.6	0.3%
90.1%	246.1	247.4	1.3	0.5%
91.4%	246.0	246.8	0.7	0.3%
92.6%	244.0	244.3	0.3	0.1%
93.8%	243.9	244.2	0.2	0.1%
95.1%	217.1	217.7	0.6	0.3%
96.3%	211.0	211.5	0.5	0.2%
97.5%	203.5	204.2	0.7	0.4%
98.8%	195.9	196.0	0.1	0.1%
100.0%	188.7	189.0	0.2	0.1%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	634.1	640.0	5.9	0.9%
1.2%	567.8	580.6	12.7	2.2%
2.5%	559.3	557.8	-1.4	-0.3%
3.7%	557.1	548.5	-8.6	-1.5%
4.9%	541.4	543.2	1.8	0.3%
6.2%	540.5	539.7	-0.9	-0.2%
7.4%	529.3	521.8	-7.5	-1.4%
8.6%	527.1	517.3	-9.9	-1.9%
9.9%	516.7	510.2	-6.6	-1.3%
11.1%	515.5	509.4	-6.1	-1.2%
12.3%	508.5	506.0	-2.5	-0.5%
13.6%	508.4	503.3	-5.1	-1.0%
14.8%	497.0	503.2	6.2	1.2%
16.0%	494.4	501.1	6.7	1.4%
17.3%	491.9	494.8	2.9	0.6%
18.5%	490.6	494.3	3.7	0.8%
19.8%	490.5	490.6	0.1	0.0%
21.0%	489.3	490.5	1.2	0.2%
22.2%	477.0	490.4	13.3	2.8%
23.5%	464.7	490.0	25.3	5.4%
24.7%	461.6	483.5	21.9	4.7%
25.9%	460.5	463.7	3.2	0.7%
27.2%	458.3	463.3	5.0	1.1%
28.4%	455.2	459.6	4.4	1.0%
29.6%	452.6	459.0	6.4	1.4%
30.9%	451.2	455.4	4.2	0.9%
32.1%	451.0	455.2	4.2	0.9%
33.3%	446.0	449.9	3.8	0.9%
34.6%	437.5	446.2	8.6	2.0%
35.8%	435.0	443.6	8.6	2.0%
37.0%	432.6	435.2	2.7	0.6%
38.3%	430.8	435.0	4.2	1.0%
39.5%	422.2	431.9	9.7	2.3%
40.7%	418.8	422.0	3.2	0.8%
42.0%	418.5	418.9	0.3	0.1%
43.2%	416.2	416.5	0.3	0.1%
44.4%	401.9	401.8	-0.1	0.0%
45.7%	385.7	386.0	0.4	0.1%
46.9%	385.4	385.4	0.0	0.0%
48.1%	384.2	382.5	-1.6	-0.4%
49.4%	373.0	372.3	-0.7	-0.2%
50.6%	371.3	371.5	0.2	0.1%
51.9%	364.7	364.4	-0.3	-0.1%
53.1%	362.5	362.5	0.0	0.0%
54.3%	360.8	360.8	0.0	0.0%
55.6%	352.1	351.8	-0.3	-0.1%
56.8%	351.6	351.7	0.1	0.0%
58.0%	351.1	350.4	-0.8	-0.2%
59.3%	349.0	348.7	-0.3	-0.1%
60.5%	347.1	347.2	0.0	0.0%
61.7%	347.0	347.1	0.0	0.0%
63.0%	345.4	345.5	0.0	0.0%
64.2%	343.8	343.6	-0.2	-0.1%
65.4%	341.7	341.2	-0.5	-0.1%
66.7%	334.8	334.8	0.0	0.0%
67.9%	334.7	334.2	-0.6	-0.2%
69.1%	334.1	334.0	0.0	0.0%
70.4%	329.3	329.3	-0.1	0.0%
71.6%	325.7	326.6	0.9	0.3%
72.8%	323.6	323.5	0.0	0.0%
74.1%	322.9	322.8	-0.1	0.0%
75.3%	318.9	319.0	0.1	0.0%
76.5%	317.8	318.0	0.2	0.1%
77.8%	317.1	317.1	0.0	0.0%
79.0%	316.6	316.7	0.1	0.0%
80.2%	312.2	312.3	0.2	0.1%
81.5%	311.5	311.6	0.1	0.0%
82.7%	295.4	296.5	1.1	0.4%
84.0%	295.3	295.4	0.1	0.0%
85.2%	280.9	281.0	0.1	0.0%
86.4%	259.8	259.8	0.0	0.0%
87.7%	257.5	258.4	1.0	0.4%
88.9%	240.9	241.1	0.2	0.1%
90.1%	215.7	216.3	0.6	0.3%
91.4%	199.8	200.1	0.3	0.2%
92.6%	196.4	196.6	0.1	0.1%
93.8%	193.5	194.0	0.5	0.2%
95.1%	186.0	186.3	0.3	0.2%
96.3%	183.4	183.7	0.3	0.1%
97.5%	178.1	178.5	0.4	0.2%
98.8%	177.0	177.4	0.4	0.2%
100.0%	166.3	166.5	0.2	0.1%

Table SQ-31-b

Clifton Court Forebay, Monthly EC

Probability of Exceedance

June				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	568.0	580.8	12.8	2.3%
1.2%	549.0	527.5	-21.6	-3.9%
2.5%	527.0	523.8	-3.2	-0.6%
3.7%	516.0	501.7	-14.3	-2.8%
4.9%	501.4	501.7	0.2	0.0%
6.2%	498.7	501.5	2.8	0.6%
7.4%	492.8	498.5	5.7	1.2%
8.6%	492.2	487.0	-5.2	-1.1%
9.9%	482.1	483.9	1.8	0.4%
11.1%	472.6	483.1	10.6	2.2%
12.3%	470.4	476.6	6.2	1.3%
13.6%	453.7	468.5	14.7	3.2%
14.8%	452.4	455.2	2.7	0.6%
16.0%	446.5	452.1	5.5	1.2%
17.3%	431.4	429.0	-2.4	-0.6%
18.5%	426.8	423.2	-3.6	-0.8%
19.8%	423.5	423.2	-0.3	-0.1%
21.0%	422.3	412.4	-9.8	-2.3%
22.2%	419.8	398.7	-21.1	-5.0%
23.5%	414.7	397.2	-17.5	-4.2%
24.7%	413.8	396.4	-17.4	-4.2%
25.9%	396.6	394.6	-2.0	-0.5%
27.2%	395.6	393.8	-1.8	-0.5%
28.4%	394.9	393.0	-1.9	-0.5%
29.6%	394.3	392.7	-1.6	-0.4%
30.9%	393.5	392.6	-0.9	-0.2%
32.1%	392.4	391.8	-0.6	-0.2%
33.3%	391.8	391.8	0.0	0.0%
34.6%	388.6	390.1	1.5	0.4%
35.8%	386.0	388.1	2.1	0.6%
37.0%	385.8	387.2	1.3	0.3%
38.3%	382.1	386.7	4.6	1.2%
39.5%	378.6	385.4	6.8	1.8%
40.7%	374.7	381.8	7.0	1.9%
42.0%	373.9	371.8	-2.0	-0.5%
43.2%	367.7	370.8	3.2	0.9%
44.4%	365.0	370.6	5.5	1.5%
45.7%	363.5	370.4	6.8	1.9%
46.9%	363.0	367.6	4.6	1.3%
48.1%	359.9	365.1	5.3	1.5%
49.4%	358.2	363.4	5.2	1.4%
50.6%	355.3	357.1	1.8	0.5%
51.9%	353.7	353.9	0.2	0.1%
53.1%	350.6	352.9	2.3	0.7%
54.3%	350.5	351.6	1.1	0.3%
55.6%	350.0	351.4	1.4	0.4%
56.8%	347.2	347.7	0.6	0.2%
58.0%	345.2	347.7	2.4	0.7%
59.3%	345.2	343.7	-1.5	-0.4%
60.5%	343.3	343.1	-0.2	-0.1%
61.7%	343.1	341.3	-1.9	-0.5%
63.0%	341.2	340.8	-0.4	-0.1%
64.2%	340.2	339.9	-0.3	-0.1%
65.4%	339.6	339.5	-0.1	0.0%
66.7%	338.4	339.1	0.7	0.2%
67.9%	337.3	336.8	-0.5	-0.1%
69.1%	336.7	336.7	0.0	0.0%
70.4%	336.6	336.7	0.0	0.0%
71.6%	336.1	335.9	-0.2	-0.1%
72.8%	333.4	333.4	0.0	0.0%
74.1%	330.7	329.9	-0.7	-0.2%
75.3%	329.1	328.3	-0.8	-0.2%
76.5%	327.8	327.9	0.1	0.0%
77.8%	327.5	327.9	0.4	0.1%
79.0%	327.2	326.0	-1.2	-0.4%
80.2%	325.1	323.6	-1.6	-0.5%
81.5%	322.7	321.8	-0.9	-0.3%
82.7%	321.4	321.3	-0.1	0.0%
84.0%	320.1	320.4	0.3	0.1%
85.2%	319.6	319.6	0.0	0.0%
86.4%	315.6	316.6	1.0	0.3%
87.7%	298.5	298.6	0.1	0.0%
88.9%	285.9	286.1	0.1	0.0%
90.1%	284.4	284.8	0.5	0.2%
91.4%	278.3	279.0	0.7	0.2%
92.6%	275.9	276.4	0.6	0.2%
93.8%	270.2	270.5	0.3	0.1%
95.1%	267.7	268.2	0.5	0.2%
96.3%	266.5	266.9	0.3	0.1%
97.5%	250.2	250.8	0.6	0.2%
98.8%	223.7	224.2	0.5	0.2%
100.0%	205.6	206.7	1.1	0.5%

July				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	575.6	575.5	0.0	0.0%
1.2%	561.5	556.7	-4.7	-0.8%
2.5%	552.0	526.8	-25.2	-4.6%
3.7%	544.3	502.8	-41.4	-7.6%
4.9%	503.6	495.5	-8.1	-1.6%
6.2%	473.7	464.3	-9.4	-2.0%
7.4%	451.7	450.7	-1.0	-0.2%
8.6%	448.2	448.0	-0.2	0.0%
9.9%	448.0	444.2	-3.8	-0.8%
11.1%	442.4	433.3	-9.2	-2.1%
12.3%	436.2	411.3	-25.0	-5.7%
13.6%	410.8	409.9	-1.0	-0.2%
14.8%	395.9	402.1	6.2	1.6%
16.0%	395.2	398.2	3.0	0.8%
17.3%	387.9	380.7	-7.2	-1.9%
18.5%	377.1	378.4	1.3	0.3%
19.8%	376.1	373.2	-2.9	-0.8%
21.0%	366.4	368.4	2.0	0.5%
22.2%	364.6	366.0	1.5	0.4%
23.5%	363.1	358.5	-4.6	-1.3%
24.7%	363.1	358.0	-5.1	-1.4%
25.9%	360.3	357.7	-2.6	-0.7%
27.2%	357.5	352.4	-5.1	-1.4%
28.4%	350.2	346.8	-3.4	-1.0%
29.6%	336.2	336.8	0.6	0.2%
30.9%	333.5	332.7	-0.8	-0.2%
32.1%	327.8	331.3	3.6	1.1%
33.3%	326.1	330.6	4.6	1.4%
34.6%	322.9	323.2	0.3	0.1%
35.8%	320.2	320.8	0.6	0.2%
37.0%	320.0	318.8	-1.2	-0.4%
38.3%	319.6	317.7	-1.9	-0.6%
39.5%	318.7	317.4	-1.3	-0.4%
40.7%	318.5	316.3	-2.3	-0.7%
42.0%	316.9	316.2	-0.7	-0.2%
43.2%	316.2	316.2	0.0	0.0%
44.4%	314.7	314.6	-0.2	-0.1%
45.7%	314.5	314.2	-0.3	-0.1%
46.9%	314.1	308.7	-5.4	-1.7%
48.1%	309.0	308.4	-0.6	-0.2%
49.4%	308.1	308.2	0.1	0.0%
50.6%	307.7	307.3	-0.4	-0.1%
51.9%	307.2	305.3	-1.9	-0.6%
53.1%	305.4	304.7	-0.7	-0.2%
54.3%	304.6	303.3	-1.3	-0.4%
55.6%	303.9	300.1	-3.8	-1.2%
56.8%	302.9	298.3	-4.6	-1.5%
58.0%	300.6	297.9	-2.8	-0.9%
59.3%	299.9	297.6	-2.3	-0.8%
60.5%	293.9	292.5	-1.4	-0.5%
61.7%	292.5	290.5	-2.0	-0.7%
63.0%	290.2	290.1	0.0	0.0%
64.2%	288.8	289.2	0.4	0.1%
65.4%	287.9	285.0	-2.9	-1.0%
66.7%	285.8	284.2	-1.6	-0.6%
67.9%	284.3	282.1	-2.2	-0.8%
69.1%	284.2	281.0	-3.1	-1.1%
70.4%	283.7	281.0	-2.7	-0.9%
71.6%	282.5	280.8	-1.7	-0.6%
72.8%	281.4	280.6	-0.8	-0.3%
74.1%	280.7	279.6	-1.1	-0.4%
75.3%	279.7	279.3	-0.4	-0.1%
76.5%	278.9	278.5	-0.4	-0.1%
77.8%	277.1	277.1	0.0	0.0%
79.0%	276.2	275.7	-0.5	-0.2%
80.2%	276.0	275.5	-0.5	-0.2%
81.5%	275.1	274.8	-0.3	-0.1%
82.7%	274.1	273.3	-0.8	-0.3%
84.0%	273.7	272.5	-1.2	-0.4%
85.2%	271.4	271.0	-0.4	-0.1%
86.4%	269.6	270.0	0.4	0.2%
87.7%	268.4	268.4	0.0	0.0%
88.9%	267.3	267.6	0.3	0.1%
90.1%	265.9	265.5	-0.5	-0.2%
91.4%	265.1	264.5	-0.6	-0.2%
92.6%	255.2	261.0	5.8	2.3%
93.8%	254.6	255.5	0.9	0.4%
95.1%	253.9	254.3	0.4	0.2%
96.3%	249.4	249.6	0.2	0.1%
97.5%	246.1	245.6	-0.5	-0.2%
98.8%	242.7	241.5	-1.2	-0.5%
100.0%	220.2	220.4	0.2	0.1%

August				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	782.4	787.2	4.9	0.6%
1.2%	740.6	741.8	1.3	0.2%
2.5%	622.6	626.7	4.1	0.7%
3.7%	609.8	607.6	-2.2	-0.4%
4.9%	585.0	587.9	2.9	0.5%
6.2%	577.2	577.0	-0.3	0.0%
7.4%	564.7	566.2	1.6	0.3%
8.6%	563.6	565.0	1.4	0.2%
9.9%	561.2	559.1	-2.2	-0.4%
11.1%	549.7	557.7	8.0	1.5%
12.3%	542.0	549.1	7.0	1.3%
13.6%	541.9	544.7	2.8	0.5%
14.8%	538.4	534.0	-4.3	-0.8%
16.0%	528.1	529.7	1.6	0.3%
17.3%	526.9	527.4	0.5	0.1%
18.5%	524.6	526.3	1.7	0.3%
19.8%	518.2	514.9	-3.3	-0.6%
21.0%	507.7	513.0	5.2	1.0%
22.2%	479.5	496.7	17.2	3.6%
23.5%	459.1	483.3	24.2	5.3%
24.7%	456.4	475.5	19.1	4.2%
25.9%	448.4	469.7	21.3	4.8%
27.2%	439.8	438.7	-1.1	-0.2%
28.4%	432.4	434.7	2.3	0.5%
29.6%	428.8	432.8	4.0	0.9%
30.9%	424.1	427.5	3.4	0.8%
32.1%	417.3	418.0	0.7	0.2%
33.3%	411.9	412.6	0.6	0.2%
34.6%	411.7	408.7	-3.0	-0.7%
35.8%	409.4	407.5	-1.9	-0.5%
37.0%	409.1	406.9	-2.2	-0.5%
38.3%	406.7	399.2	-7.5	-1.9%
39.5%	397.4	397.2	-0.2	-0.1%
40.7%	393.7	395.1	1.4	0.3%
42.0%	392.4	392.8	0.4	0.1%
43.2%	390.1	388.1	-2.0	-0.5%
44.4%	388.8	388.1	-0.7	-0.2%
45.7%	386.7	387.3	0.6	0.2%
46.9%	386.0	387.3	1.3	0.3%
48.1%	381.4	384.6	3.2	0.8%
49.4%	359.0	380.9	21.9	6.1%
50.6%	358.3	378.1	19.8	5.5%
51.9%	352.7	364.7	12.0	3.4%
53.1%	352.6	355.5	2.8	0.8%
54.3%	352.4	354.6	2.2	0.6%
55.6%	348.0	345.8	-2.2	-0.6%
56.8%	346.8	345.2	-1.6	-0.5%
58.0%	344.2	344.5	0.2	0.1%
59.3%	341.0	341.8	0.8	0.2%
60.5%	338.7	337.5	-1.2	-0.4%
61.7%	332.1	336.2	4.0	1.2%
63.0%	327.0	331.8	4.8	1.5%
64.2%	324.0	325.6	1.6	0.5%
65.4%	320.9	322.8	1.8	0.6%
66.7%	318.8	319.3	0.5	0.2%
67.9%	318.3	314.2	-4.0	-1.3%
69.1%	317.0	314.1	-2.9	-0.9%
70.4%	314.7	312.0	-2.7	-0.9%
71.6%	313.0	311.0	-2.0	-0.6%
72.8%	312.4	310.5	-2.0	-0.6%
74.1%	312.0	309.5	-2.6	-0.8%
75.3%	311.3	309.4	-1.9	-0.6%
76.5%	309.9	309.3	-0.6	-0.2%
77.8%	309.7	306.9	-2.7	-0.9%
79.0%	309.5	306.9	-2.6	-0.9%
80.2%	309.1	304.6	-4.6	-1.5%
81.5%	307.8	303.7	-4.1	-1.3%
82.7%	306.7	301.6	-5.2	-1.7%
84.0%	305.2	301.4	-3.8	-1.2%
85.2%	302.3	298.3	-4.1	-1.3%
86.4%	300.3	297.1	-3.2	-1.1%
87.7%	300.1	297.0	-3.2	-1.1%
88.9%	297.4	294.7	-2.7	-0.9%
90.1%	296.3	294.4	-1.9	-0.7%
91.4%	294.6	292.6	-2.0	-0.7%
92.6%	293.4	290.1	-3.3	-1.1%
93.8%	291.3	282.6	-8.7	-3.0%
95.1%	277.4	275.9	-1.4	-0.5%
96.3%	271.6	275.6	4.0	1.5%
97.5%	249.0	250.4	1.4	0.6%
98.8%	248.4	248.6	0.2	0.1%
100.0%	219.9	219.9	-0.1	0.0%

September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	698.1	701.9	3.9	0.6%
1.2%	660.1	683.1	23.0	3.5%
2.5%	650.7	666.9	16.2	2.5%
3.7%	636.3	640.3	4.0	0.6%
4.9%	634.2	630.2	-4.0	-0.6%
6.2%	631.4	629.2	-2.2	-0.4%
7.4%	627.3	628.1	0.8	0.1%
8.6%	617.0	623.5	6.4	1.0%
9.9%	610.9	619.3	8.4	1.4%
11.1%	610.2	618.8	8.6	1.4%
12.3%	608.7	617.8	9.1	1.5%
13.6%	604.2	605.8	1.6	0.3%
14.8%	602.8	599.3	-3.5	-0.6%
16.0%	602.7	594.2	-8.6	-1.4%
17.3%	600.5	593.9	-6.6	-1.1%
18.5%	596.3	593.8	-2.5	-0.4%
19.8%	595.3	589.7	-5.6	-0.9%
21.0%	594.9	586.2	-8.7	-1.5%
22.2%	591.7	584.4	-7.3	-1.2%
23.5%	581.5	584.2	2.7	0.5%
24.7%	576.9	583.9	6.9	1.2%
25.9%	574.3	580.0	5.7	1.0%
27.2%	567.4	579.3	11.9	2.1%
28.4%	567.4	576.8	9.3	1.6%
29.6%	566.9	574.3	7.4	1.3%
30.9%	561.7	572.7	10.9	1.9%
32.1%	560.1	572.5	12.5	2.2%
33.3%	559.9	571.7	11.8	2.1%
34.6%	557.9	568.9	11.0	2.0%
35.8%	551.8	565.4	13.5	2.5%
37.0%	551.1	565.1	14.0	2.5%
38.3%	549.5	564.3	14.8	2.7%
39.5%	537.5	560.3	22.8	4.2%
40.7%	532.2	559.9	27.7	5.2%
42.0%	532.0	550.4	18.4	3.5%
43.2%	526.5	549.3	22.8	4.3%
44.4%	523.9	549.2	25.3	4.8%
45.7%	523.9	548.1	24.2	4.6%
46.9%	519.6	545.7	26.1	5.0%
48.1%	516.5	544.7	28.2	5.5%
49.4%	512.0	538.2	26.3	5.1%
50.6%	509.6	527.0	17.5	3.4%
51.9%	509.5	520.3	10.8	2.1%
53.1%	501.3	510.2	8.9	1.8%
54.3%	495.0	505.3	10.3	2.1%
55.6%	485.9	498.1	12.2	2.5%
56.8%	483.2	497.4	14.2	2.9%
58.0%	463.7	487.9	24.2	5.2%
59.3%	463.1	487.6	24.5	5.3%
60.5%	461.0	472.7	11.7	2.5%
61.7%	459.3	463.0	3.7	0.8%
63.0%	459.1	462.7	3.6	0.8%
64.2%	454.7	461.7	7.0	1.5%
65.4%	452.8	459.8	7.0	1.6%
66.7%	451.9	457.7	5.8	1.3%
67.9%	443.8	456.9	13.0	2.9%
69.1%	443.0	456.7	13.7	3.1%
70.4%	442.8	442.8	0.0	0.0%
71.6%	438.9	435.0	-3.9	-0.9%
72.8%	437.5	424.9	-12.7	-2.9%
74.1%	430.9	424.2	-6.7	-1.6%
75.3%	430.4	422.1	-8.3	-1.9%
76.5%	428.6	418.8	-9.7	-2.3%
77.8%	424.7	417.6	-7.1	-1.7%
79.0%	422.4	414.4	-8.1	-1.9%
80.2%	422.0	410.9	-11.1	-2.6%
81.5%	420.1	409.5	-10.6	-2.5%
82.7%	416.2	409.0	-7.2	-1.7%
84.0%	415.5	402.2	-13.3	-3.2%
85.2%	412.1	397.2	-14.8	-3.6%
86.4%	411.5	395.7	-15.8	-3.8%
87.7%	389.1	385.3	-3.9	-1.0%
88.9%	386.6	375.1	-11.5	-3.0%
90.1%	381.0	370.4	-10.6	-2.8%
91.4%	379.7	366.8	-12.9	-3.4%
92.6%	378.8	366.7	-12.1	-3.2%
93.8%	362.4	357.0	-5.4	-1.5%
95.1%	295.1	311.7	16.7	5.7%
96.3%	294.8	273.0	-21.8	-7.4%
97.5%	234.3	266.6	32.3	13.8%
98.8%	231.1	231.1	0.0	0.0%
100.0%	208.7	208.7	0.0	0.0%

Figure SQ-32-b
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Probability of Exceedance

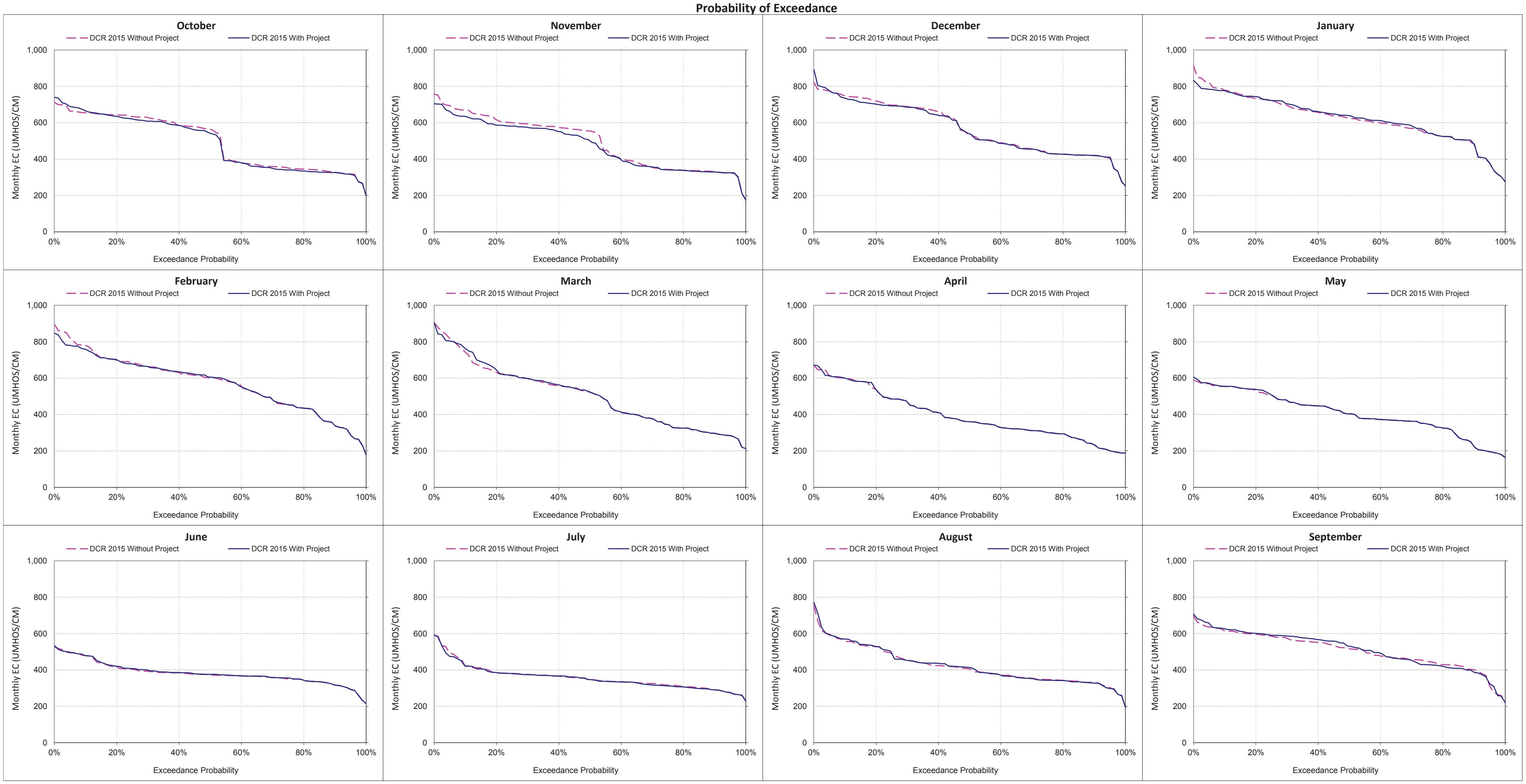


Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	712.8	740.3	27.6	3.9%
1.2%	699.6	735.4	35.8	5.1%
2.5%	698.6	710.3	11.7	1.7%
3.7%	696.7	703.7	7.0	1.0%
4.9%	663.8	690.6	26.7	4.0%
6.2%	663.8	685.6	21.8	3.3%
7.4%	660.3	682.3	22.0	3.3%
8.6%	655.5	675.9	20.4	3.1%
9.9%	654.9	665.1	10.1	1.5%
11.1%	653.1	657.9	4.8	0.7%
12.3%	652.8	655.4	2.6	0.4%
13.6%	648.9	652.1	3.2	0.5%
14.8%	648.2	648.5	0.3	0.0%
16.0%	645.5	646.8	1.3	0.2%
17.3%	644.6	640.9	-3.7	-0.6%
18.5%	644.1	639.0	-5.1	-0.8%
19.8%	642.6	635.9	-6.7	-1.0%
21.0%	642.3	631.5	-10.8	-1.7%
22.2%	641.4	625.6	-15.8	-2.5%
23.5%	641.2	623.8	-17.4	-2.7%
24.7%	633.8	621.3	-12.4	-2.0%
25.9%	632.6	616.8	-15.8	-2.5%
27.2%	631.2	613.8	-17.4	-2.8%
28.4%	630.9	612.7	-18.2	-2.9%
29.6%	630.4	609.2	-21.2	-3.4%
30.9%	624.4	609.1	-15.3	-2.4%
32.1%	622.3	607.8	-14.6	-2.3%
33.3%	618.5	606.7	-11.8	-1.9%
34.6%	611.9	605.8	-6.1	-1.0%
35.8%	609.5	599.2	-10.3	-1.7%
37.0%	602.8	591.7	-11.2	-1.9%
38.3%	602.4	588.7	-13.7	-2.3%
39.5%	586.7	586.0	-0.6	-0.1%
40.7%	582.4	582.3	0.0	0.0%
42.0%	581.8	575.0	-6.8	-1.2%
43.2%	580.2	570.4	-9.8	-1.7%
44.4%	578.6	562.5	-16.1	-2.8%
45.7%	578.1	558.4	-19.8	-3.4%
46.9%	572.5	557.1	-15.4	-2.7%
48.1%	567.8	556.7	-11.1	-2.0%
49.4%	565.6	546.2	-19.5	-3.4%
50.6%	560.8	538.3	-22.5	-4.0%
51.9%	546.0	532.7	-13.4	-2.5%
53.1%	537.0	506.6	-30.4	-5.7%
54.3%	400.7	391.2	-9.5	-2.4%
55.6%	400.3	391.1	-9.2	-2.3%
56.8%	389.8	390.3	0.5	0.1%
58.0%	389.3	382.8	-6.5	-1.7%
59.3%	378.5	382.5	4.0	1.1%
60.5%	378.0	377.9	-0.1	0.0%
61.7%	375.3	373.5	-1.8	-0.5%
63.0%	373.3	362.2	-11.1	-3.0%
64.2%	372.5	360.2	-12.3	-3.3%
65.4%	367.1	359.3	-7.7	-2.1%
66.7%	361.6	354.9	-6.7	-1.9%
67.9%	359.4	354.4	-5.0	-1.4%
69.1%	359.3	353.3	-6.1	-1.7%
70.4%	359.1	347.5	-11.5	-3.2%
71.6%	357.3	342.8	-14.5	-4.1%
72.8%	357.0	342.6	-14.5	-4.1%
74.1%	354.8	340.8	-14.0	-3.9%
75.3%	349.6	340.7	-9.0	-2.6%
76.5%	346.7	340.6	-6.1	-1.8%
77.8%	346.3	336.9	-9.5	-2.7%
79.0%	345.2	334.7	-10.5	-3.0%
80.2%	345.0	334.1	-10.9	-3.1%
81.5%	343.8	331.5	-12.3	-3.6%
82.7%	342.0	330.6	-11.5	-3.3%
84.0%	340.9	329.8	-11.1	-3.3%
85.2%	338.3	328.2	-10.2	-3.0%
86.4%	336.3	327.2	-9.1	-2.7%
87.7%	332.2	327.0	-5.2	-1.6%
88.9%	331.7	326.3	-5.4	-1.6%
90.1%	327.9	325.7	-2.2	-0.7%
91.4%	322.1	324.0	1.9	0.6%
92.6%	321.7	320.6	-1.2	-0.4%
93.8%	318.4	317.9	-0.5	-0.2%
95.1%	317.8	316.0	-1.8	-0.6%
96.3%	316.1	310.0	-6.1	-1.9%
97.5%	274.3	276.2	1.9	0.7%
98.8%	265.9	267.3	1.4	0.5%
100.0%	201.6	201.1	-0.5	-0.2%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	758.0	703.9	-54.1	-7.1%
1.2%	751.3	703.1	-48.2	-6.4%
2.5%	707.9	701.9	-6.0	-0.8%
3.7%	697.8	672.1	-25.7	-3.7%
4.9%	694.6	663.2	-31.5	-4.5%
6.2%	679.7	645.4	-34.3	-5.0%
7.4%	674.8	639.2	-35.5	-5.3%
8.6%	670.5	636.0	-34.4	-5.1%
9.9%	669.2	635.4	-33.8	-5.0%
11.1%	668.2	629.2	-39.0	-5.8%
12.3%	651.2	622.1	-29.1	-4.5%
13.6%	648.4	622.0	-26.4	-4.1%
14.8%	646.0	620.0	-26.0	-4.0%
16.0%	640.0	606.5	-33.6	-5.2%
17.3%	638.0	594.8	-43.1	-6.8%
18.5%	637.3	594.3	-43.1	-6.8%
19.8%	618.0	587.1	-30.9	-5.0%
21.0%	608.0	586.3	-21.7	-3.6%
22.2%	603.5	585.6	-17.9	-3.0%
23.5%	602.8	581.5	-21.3	-3.5%
24.7%	600.4	581.1	-19.3	-3.2%
25.9%	598.1	581.0	-17.1	-2.9%
27.2%	596.4	577.9	-18.5	-3.1%
28.4%	595.1	577.3	-17.8	-3.0%
29.6%	594.6	576.2	-18.4	-3.1%
30.9%	589.3	571.9	-17.3	-2.9%
32.1%	588.2	570.3	-17.9	-3.0%
33.3%	585.9	570.2	-15.7	-2.7%
34.6%	581.3	569.1	-12.2	-2.1%
35.8%	580.0	569.0	-10.9	-1.9%
37.0%	579.6	562.8	-16.7	-2.9%
38.3%	579.6	561.2	-18.3	-3.2%
39.5%	575.8	552.9	-23.0	-4.0%
40.7%	572.2	550.3	-21.8	-3.8%
42.0%	570.3	536.9	-33.4	-5.9%
43.2%	568.1	535.3	-32.8	-5.8%
44.4%	564.3	531.2	-33.0	-5.9%
45.7%	563.7	531.0	-32.7	-5.8%
46.9%	559.8	524.8	-34.9	-6.2%
48.1%	556.6	511.1	-45.5	-8.2%
49.4%	555.2	507.3	-47.9	-8.6%
50.6%	553.0	491.3	-61.7	-11.2%
51.9%	546.1	488.0	-58.1	-10.6%
53.1%	527.3	458.0	-69.4	-13.2%
54.3%	449.0	447.8	-1.1	-0.3%
55.6%	447.3	423.1	-24.2	-5.4%
56.8%	423.6	417.7	-6.0	-1.4%
58.0%	417.7	413.7	-4.0	-1.0%
59.3%	403.4	408.7	5.3	1.3%
60.5%	402.3	389.0	-13.3	-3.3%
61.7%	393.3	386.4	-6.9	-1.8%
63.0%	392.2	378.6	-13.6	-3.5%
64.2%	387.2	367.6	-19.6	-5.1%
65.4%	380.0	363.5	-16.5	-4.3%
66.7%	369.4	361.3	-8.1	-2.2%
67.9%	365.7	360.7	-5.1	-1.4%
69.1%	363.0	359.0	-4.0	-1.1%
70.4%	352.1	354.1	2.0	0.6%
71.6%	349.7	354.1	4.4	1.3%
72.8%	348.8	342.5	-6.3	-1.8%
74.1%	343.5	342.4	-1.1	-0.3%
75.3%	343.2	341.0	-2.2	-0.6%
76.5%	342.5	339.9	-2.6	-0.8%
77.8%	340.5	339.1	-1.4	-0.4%
79.0%	340.4	338.5	-1.8	-0.5%
80.2%	338.6	338.2	-0.4	-0.1%
81.5%	337.9	335.4	-2.4	-0.7%
82.7%	337.1	333.4	-3.7	-1.1%
84.0%	336.5	333.1	-3.3	-1.0%
85.2%	335.6	331.3	-4.2	-1.3%
86.4%	333.8	331.0	-2.8	-0.8%
87.7%	333.5	329.7	-3.8	-1.1%
88.9%	332.9	329.1	-3.8	-1.1%
90.1%	329.7	328.3	-1.4	-0.4%
91.4%	327.7	327.5	-0.2	0.0%
92.6%	325.7	325.3	-0.4	-0.1%
93.8%	324.3	324.4	0.2	0.1%
95.1%	322.0	324.2	2.2	0.7%
96.3%	321.8	324.2	2.4	0.7%
97.5%	303.1	299.0	-4.1	-1.4%
98.8%	209.9	211.1	1.2	0.6%
100.0%	176.0	174.9	-1.1	-0.6%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	822.1	892.0	69.9	8.5%
1.2%	784.1	805.2	21.1	2.7%
2.5%	784.0	798.7	14.7	1.9%
3.7%	778.8	792.0	13.2	1.7%
4.9%	775.2	776.8	1.5	0.2%
6.2%	762.6	764.2	1.7	0.2%
7.4%	762.5	761.7	-0.8	-0.1%
8.6%	756.7	740.8	-15.9	-2.1%
9.9%	747.8	735.7	-12.2	-1.6%
11.1%	744.7	727.8	-16.9	-2.3%
12.3%	741.9	726.8	-15.1	-2.0%
13.6%	741.4	721.8	-19.6	-2.6%
14.8%	740.1	713.4	-26.7	-3.6%
16.0%	734.6	711.2	-23.5	-3.2%
17.3%	733.8	708.6	-25.2	-3.4%
18.5%	724.5	705.0	-19.5	-2.7%
19.8%	720.9	702.6	-18.3	-2.5%
21.0%	715.1	700.3	-14.9	-2.1%
22.2%	709.1	695.8	-13.3	-1.9%
23.5%	699.3	695.8	-3.5	-0.5%
24.7%	697.0	693.3	-3.7	-0.5%
25.9%	696.2	692.4	-3.9	-0.6%
27.2%	695.2	690.7	-4.6	-0.7%
28.4%	691.2	689.7	-1.5	-0.2%
29.6%	689.7	685.8	-3.9	-0.6%
30.9%	687.1	684.6	-2.4	-0.4%
32.1%	684.7	683.9	-0.8	-0.1%
33.3%	684.1	676.8	-7.3	-1.1%
34.6%	679.7	673.2	-6.5	-1.0%
35.8%	678.4	668.0	-10.4	-1.5%
37.0%	673.6	650.2	-23.4	-3.5%
38.3%	668.3	647.7	-20.6	-3.1%
39.5%	662.6	642.5	-20.2	-3.0%
40.7%	660.0	639.1	-20.9	-3.2%
42.0%	635.5	638.9	3.3	0.5%
43.2%	629.6	635.2	5.6	0.9%
44.4%	628.1	613.6	-14.5	-2.3%
45.7%	610.1	612.6	2.5	0.4%
46.9%	560.3	568.0	7.7	1.4%
48.1%	554.6	555.9	1.3	0.2%
49.4%	539.3	542.3	3.0	0.6%
50.6%	527.3	533.9	6.7	1.3%
51.9%	522.9	510.5	-12.3	-2.4%
53.1%	507.6	505.4	-2.2	-0.4%
54.3%	505.7	505.4	-0.4	-0.1%
55.6%	505.6	504.0	-1.6	-0.3%
56.8%	504.5	500.7	-3.8	-0.8%
58.0%	496.4	498.1	1.7	0.3%
59.3%	489.7	488.0	-1.7	-0.3%
60.5%	489.0	485.8	-3.2	-0.7%
61.7%	481.8	483.9	2.1	0.4%
63.0%	480.9	477.9	-3.0	-0.6%
64.2%	480.2	477.8	-2.4	-0.5%
65.4%	472.2	461.1	-11.1	-2.3%
66.7%	459.2	457.2	-2.0	-0.4%
67.9%	458.7	456.2	-2.4	-0.5%
69.1%	458.1	455.0	-3.1	-0.7%
70.4%	454.9	454.3	-0.7	-0.1%
71.6%	452.5	451.3	-1.1	-0.3%
72.8%	443.6	440.9	-2.6	-0.6%
74.1%	443.1	439.2	-3.9	-0.9%
75.3%	432.0	429.9	-2.1	-0.5%
76.5%	428.9	429.5	0.6	0.1%
77.8%	428.9	427.3	-1.7	-0.4%
79.0%	427.5	427.2	-0.3	-0.1%
80.2%	425.9	426.8	0.9	0.2%
81.5%	425.8	426.1	0.3	0.1%
82.7%	424.3	424.2	-0.1	0.0%
84.0%	423.4	422.4	-1.0	-0.2%
85.2%	422.1	421.8	-0.3	-0.1%
86.4%	421.5	421.8	0.3	0.1%
87.7%	420.8	421.4	0.6	0.1%
88.9%	420.2	420.0	-0.3	-0.1%
90.1%	420.2	418.4	-1.7	-0.4%
91.4%	419.7	417.2	-2.6	-0.6%
92.6%	413.8	414.8	1.0	0.2%
93.8%	410.8	410.5	-0.3	-0.1%
95.1%	404.8	410.0	5.2	1.3%
96.3%	347.2	347.2	0.1	0.0%
97.5%	333.5	333.6	0.2	0.0%
98.8%	275.3	275.8	0.5	0.2%
100.0%	252.3	251.9	-0.3	-0.1%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	914.2	832.5	-81.7	-8.9%
1.2%	850.0	812.8	-37.2	-4.4%
2.5%	846.3	788.0	-58.3	-6.9%
3.7%	826.2	786.7	-39.5	-4.8%
4.9%	823.6	783.4	-40.1	-4.9%
6.2%	794.8	782.2	-12.7	-1.6%
7.4%	790.1	778.3	-11.8	-1.5%
8.6%	790.1	777.0	-13.1	-1.7%
9.9%	779.4	776.9	-2.5	-0.3%
11.1%	775.4	767.9	-7.5	-1.0%
12.3%	767.5	765.0	-2.4	-0.3%
13.6%	765.2	756.5	-8.7	-1.1%
14.8%	755.5	751.1	-4.4	-0.6%
16.0%	754.5	745.6	-8.9	-1.2%
17.3%	740.5	745.3	4.9	0.7%
18.5%	739.0	745.2	6.3	0.8%
19.8%	733.1	744.3	11.2	1.5%
21.0%	732.5	740.6	8.2	1.1%
22.2%	729.7	728.4	-1.3	-0.2%
23.5%	725.7	726.6	0.9	0.1%
24.7%	719.3	722.4	3.1	0.4%
25.9%	717.8	721.6	3.8	0.5%
27.2%	708.6	720.7	12.1	1.7%
28.4%	699.6	719.4	19.8	2.8%
29.6%	699.1	706.2	7.0	1.0%
30.9%	688.4	701.6	13.2	1.9%
32.1%	679.5	696.9	17.4	2.6%
33.3%	673.6	688.6	15.0	2.2%
34.6%	672.3	678.8	6.4	1.0%
35.8%	670.0	676.4	6.4	1.0%
37.0%	663.8	676.1	12.3	1.9%
38.3%	661.7	664.4	2.7	0.4%
39.5%	658.6	663.2	4.7	0.7%
40.7%	654.4	658.4	4.0	0.6%
42.0%	648.5	655.1	6.6	1.0%
43.2%	645.9	651.9	6.0	0.9%
44.4%	638.7	648.5	9.7	1.5%
45.7%	638.0	647.2	9.2	1.4%
46.9%	637.9	641.8	3.9	0.6%
48.1%	632.5	641.6	9.1	1.4%
49.4%	625.6	640.2	14.6	2.3%
50.6%	623.1	637.5	14.5	2.3%
51.9%	622.0	626.9	4.9	0.8%
53.1%	614.3	625.5	11.1	1.8%
54.3%	611.3	625.2	13.9	2.3%
55.6%	610.8	618.8	8.0	1.3%
56.8%	607.3	614.6	7.3	1.2%
58.0%	601.8	613.1	11.3	1.9%
59.3%	601.1	612.5	11.4	1.9%
60.5%	596.9	610.3	13.4	2.3%
61.7%	596.7	604.9	8.2	1.4%
63.0%	589.6	602.6	13.0	2.2%
64.2%	587.0	597.9	10.9	1.9%
65.4%	585.8	593.9	8.0	1.4%
66.7%	581.2	593.0	11.8	2.0%
67.9%	573.9	590.1	16.2	2.8%
69.1%	569.3	588.7	19.4	3.4%
70.4%	569.0	579.8	10.9	1.9%
71.6%	560.3	569.2	8.9	1.6%
72.8%	558.4	568.8	10.4	1.9%
74.1%	545.4	558.8	13.4	2.5%
75.3%	541.7	541.9	0.2	0.0%
76.5%	539.9	541.4	1.5	0.3%
77.8%	531.8	531.0	-0.8	-0.1%
79.0%	528.3	527.0	-1.3	-0.2%
80.2%	524.4	524.7	0.3	0.1%
81.5%	524.1	523.7	-0.3	-0.1%
82.7%	523.8	522.2	-1.6	-0.3%
84.0%	508.6	507.0	-1.6	-0.3%
85.2%	506.5	506.8	0.3	0.1%
86.4%	506.0	506.5	0.5	0.1%
87.7%	503.1	504.8	1.7	0.3%
88.9%	495.0	503.8	8.9	1.8%
90.1%	480.5	480.9	0.3	0.1%
91.4%	411.6	409.9	-1.7	-0.4%
92.6%	408.8	408.9	0.2	0.0%
93.8%	399.8	405.1	5.2	1.3%
95.1%	376.2	377.2	1.0	0.3%
96.3%	338.1	339.1	1.0	0.3%
97.5%	317.4	317.9	0.5	0.1%
98.8%	302.6	302.6	0.0	0.0%
100.0%	276.0	276.1	0.2	0.1%

Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC

Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	895.8	846.8	-49.0	-5.5%
1.2%	862.5	838.1	-24.4	-2.8%
2.5%	854.3	804.1	-50.2	-5.9%
3.7%	851.8	782.0	-69.8	-8.2%
4.9%	822.6	780.5	-42.1	-5.1%
6.2%	802.9	776.6	-26.4	-3.3%
7.4%	783.2	775.5	-7.7	-1.0%
8.6%	782.5	762.5	-20.0	-2.6%
9.9%	779.8	759.6	-20.2	-2.6%
11.1%	772.1	748.8	-23.2	-3.0%
12.3%	749.3	739.1	-10.3	-1.4%
13.6%	729.1	723.1	-6.0	-0.8%
14.8%	712.2	712.4	0.2	0.0%
16.0%	712.1	711.6	-0.6	-0.1%
17.3%	705.1	706.6	1.5	0.2%
18.5%	704.2	704.7	0.4	0.1%
19.8%	699.6	703.6	4.0	0.6%
21.0%	692.4	691.3	-1.1	-0.2%
22.2%	690.9	683.9	-7.0	-1.0%
23.5%	690.8	678.9	-11.9	-1.7%
24.7%	686.0	678.6	-7.3	-1.1%
25.9%	681.2	675.4	-5.8	-0.9%
27.2%	675.7	666.3	-9.3	-1.4%
28.4%	668.3	665.5	-2.8	-0.4%
29.6%	664.2	665.5	1.3	0.2%
30.9%	662.1	657.7	-4.4	-0.7%
32.1%	660.6	655.6	-5.0	-0.8%
33.3%	656.4	654.3	-2.1	-0.3%
34.6%	643.7	648.6	4.9	0.8%
35.8%	643.3	646.2	2.9	0.4%
37.0%	638.3	640.2	1.9	0.3%
38.3%	636.5	637.3	0.8	0.1%
39.5%	632.4	636.7	4.3	0.7%
40.7%	623.6	632.2	8.7	1.4%
42.0%	623.4	629.1	5.7	0.9%
43.2%	620.2	628.0	7.8	1.3%
44.4%	617.1	623.1	6.0	1.0%
45.7%	613.3	618.5	5.2	0.9%
46.9%	612.9	617.7	4.8	0.8%
48.1%	604.4	617.1	12.7	2.1%
49.4%	601.9	606.3	4.3	0.7%
50.6%	600.4	604.8	4.3	0.7%
51.9%	600.1	602.4	2.3	0.4%
53.1%	593.5	601.5	8.1	1.4%
54.3%	587.7	596.4	8.7	1.5%
55.6%	582.0	588.0	6.0	1.0%
56.8%	578.5	578.6	0.1	0.0%
58.0%	574.8	573.5	-1.3	-0.2%
59.3%	569.2	558.1	-11.0	-1.9%
60.5%	544.7	547.6	2.9	0.5%
61.7%	538.2	538.7	0.5	0.1%
63.0%	527.3	530.8	3.5	0.7%
64.2%	523.3	524.9	1.6	0.3%
65.4%	515.2	515.2	0.0	0.0%
66.7%	502.5	502.4	0.0	0.0%
67.9%	495.0	495.4	0.4	0.1%
69.1%	494.4	494.9	0.5	0.1%
70.4%	479.0	474.9	-4.1	-0.9%
71.6%	460.3	466.2	5.9	1.3%
72.8%	458.2	461.6	3.5	0.8%
74.1%	455.6	455.9	0.3	0.1%
75.3%	452.5	452.9	0.3	0.1%
76.5%	451.3	452.3	0.9	0.2%
77.8%	439.4	437.5	-1.9	-0.4%
79.0%	437.3	436.4	-0.9	-0.2%
80.2%	434.6	433.1	-1.5	-0.3%
81.5%	433.1	432.6	-0.6	-0.1%
82.7%	432.6	429.3	-3.3	-0.8%
84.0%	408.0	407.5	-0.5	-0.1%
85.2%	382.9	383.2	0.3	0.1%
86.4%	364.8	365.2	0.4	0.1%
87.7%	361.3	360.7	-0.6	-0.2%
88.9%	358.1	358.5	0.4	0.1%
90.1%	337.1	337.3	0.2	0.1%
91.4%	329.5	330.2	0.8	0.2%
92.6%	326.1	326.2	0.1	0.0%
93.8%	319.4	320.2	0.8	0.3%
95.1%	286.0	286.1	0.0	0.0%
96.3%	266.4	266.3	-0.1	0.0%
97.5%	263.7	263.8	0.0	0.0%
98.8%	230.7	231.0	0.3	0.1%
100.0%	180.7	180.5	-0.2	-0.1%

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	905.0	905.0	0.0	0.0%
1.2%	879.3	843.7	-35.6	-4.0%
2.5%	857.4	838.8	-18.6	-2.2%
3.7%	842.0	807.6	-34.4	-4.1%
4.9%	818.5	804.5	-14.1	-1.7%
6.2%	803.9	800.5	-3.4	-0.4%
7.4%	783.2	790.3	7.1	0.9%
8.6%	764.4	785.1	20.7	2.7%
9.9%	744.5	764.5	20.0	2.7%
11.1%	725.7	748.3	22.6	3.1%
12.3%	685.0	742.2	57.2	8.4%
13.6%	676.0	700.0	24.0	3.5%
14.8%	666.6	691.3	24.7	3.7%
16.0%	655.3	684.5	29.3	4.5%
17.3%	652.1	676.7	24.6	3.8%
18.5%	642.9	665.0	22.1	3.4%
19.8%	633.0	649.8	16.8	2.6%
21.0%	622.9	624.5	1.6	0.3%
22.2%	622.2	619.0	-3.2	-0.5%
23.5%	621.4	617.6	-3.7	-0.6%
24.7%	613.4	616.8	3.4	0.5%
25.9%	612.2	613.4	1.2	0.2%
27.2%	609.5	603.6	-5.9	-1.0%
28.4%	603.5	599.9	-3.6	-0.6%
29.6%	599.0	599.7	0.7	0.1%
30.9%	593.6	594.4	0.7	0.1%
32.1%	586.2	589.3	3.1	0.5%
33.3%	585.7	586.5	0.8	0.1%
34.6%	577.3	586.3	9.0	1.6%
35.8%	576.8	577.9	1.1	0.2%
37.0%	565.0	574.5	9.5	1.7%
38.3%	560.9	567.3	6.4	1.1%
39.5%	557.8	565.6	7.8	1.4%
40.7%	555.8	559.8	4.0	0.7%
42.0%	553.0	553.4	0.5	0.1%
43.2%	552.6	552.7	0.1	0.0%
44.4%	544.3	546.1	1.8	0.3%
45.7%	540.5	545.4	4.9	0.9%
46.9%	534.4	534.5	0.2	0.0%
48.1%	527.3	534.4	7.0	1.3%
49.4%	525.9	527.8	1.9	0.4%
50.6%	518.4	519.3	1.0	0.2%
51.9%	509.6	510.1	0.4	0.1%
53.1%	503.6	504.2	0.6	0.1%
54.3%	487.5	488.2	0.7	0.1%
55.6%	475.8	475.8	0.1	0.0%
56.8%	438.8	435.8	-3.0	-0.7%
58.0%	421.7	421.8	0.1	0.0%
59.3%	417.4	417.4	0.0	0.0%
60.5%	408.1	410.3	2.2	0.5%
61.7%	405.6	408.1	2.5	0.6%
63.0%	403.4	402.1	-1.3	-0.3%
64.2%	399.7	400.8	1.1	0.3%
65.4%	396.9	397.4	0.4	0.1%
66.7%	387.6	388.3	0.7	0.2%
67.9%	380.5	381.5	1.1	0.3%
69.1%	380.1	380.5	0.3	0.1%
70.4%	374.6	375.0	0.4	0.1%
71.6%	360.8	361.3	0.5	0.2%
72.8%	359.2	360.6	1.3	0.4%
74.1%	346.7	346.3	-0.3	-0.1%
75.3%	344.2	344.4	0.2	0.1%
76.5%	327.8	328.4	0.6	0.2%
77.8%	326.2	326.7	0.4	0.1%
79.0%	325.5	325.1	-0.4	-0.1%
80.2%	324.9	325.1	0.2	0.0%
81.5%	324.7	325.0	0.3	0.1%
82.7%	316.3	316.6	0.4	0.1%
84.0%	316.0	316.1	0.1	0.0%
85.2%	308.6	308.7	0.1	0.0%
86.4%	303.6	304.0	0.4	0.1%
87.7%	302.4	302.5	0.1	0.0%
88.9%	297.8	297.5	-0.3	-0.1%
90.1%	295.8	297.0	1.2	0.4%
91.4%	291.1	290.9	-0.2	-0.1%
92.6%	288.2	288.3	0.1	0.0%
93.8%	285.9	284.9	-1.1	-0.4%
95.1%	284.2	283.8	-0.3	-0.1%
96.3%	276.6	276.4	-0.2	-0.1%
97.5%	265.6	265.8	0.2	0.1%
98.8%	219.8	219.9	0.1	0.0%
100.0%	212.1	212.4	0.3	0.1%

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	670.1	672.0	1.9	0.3%
1.2%	646.2	667.5	21.3	3.3%
2.5%	645.8	646.4	0.6	0.1%
3.7%	645.1	615.2	-29.9	-4.6%
4.9%	610.9	614.4	3.6	0.6%
6.2%	606.7	608.2	1.5	0.3%
7.4%	603.7	607.3	3.6	0.6%
8.6%	601.5	604.9	3.4	0.6%
9.9%	600.5	600.3	-0.2	0.0%
11.1%	597.1	593.7	-3.4	-0.6%
12.3%	592.9	586.4	-6.5	-1.1%
13.6%	583.2	582.7	-0.6	-0.1%
14.8%	581.6	582.0	0.5	0.1%
16.0%	581.2	581.2	0.0	0.0%
17.3%	576.6	576.8	0.2	0.0%
18.5%	546.5	575.7	29.2	5.4%
19.8%	541.2	541.4	0.2	0.0%
21.0%	516.6	516.8	0.2	0.0%
22.2%	494.6	497.8	3.2	0.6%
23.5%	492.9	492.8	0.0	0.0%
24.7%	488.6	485.7	-2.9	-0.6%
25.9%	485.5	485.6	0.1	0.0%
27.2%	484.9	485.0	0.1	0.0%
28.4%	480.6	480.1	-0.5	-0.1%
29.6%	475.2	475.5	0.3	0.1%
30.9%	450.8	450.8	0.0	0.0%
32.1%	447.2	447.3	0.1	0.0%
33.3%	435.1	435.1	-0.1	0.0%
34.6%	433.5	433.8	0.3	0.1%
35.8%	433.1	433.4	0.3	0.1%
37.0%	425.4	425.4	0.0	0.0%
38.3%	413.8	413.8	0.0	0.0%
39.5%	412.0	412.7	0.7	0.2%
40.7%	406.6	406.7	0.1	0.0%
42.0%	383.4	383.5	0.0	0.0%
43.2%	382.7	382.7	0.0	0.0%
44.4%	378.7	378.6	0.0	0.0%
45.7%	376.7	376.7	0.0	0.0%
46.9%	368.9	368.9	0.0	0.0%
48.1%	362.9	362.6	-0.3	-0.1%
49.4%	360.3	360.4	0.1	0.0%
50.6%	359.9	359.9	0.0	0.0%
51.9%	358.7	358.7	0.0	0.0%
53.1%	353.8	352.8	-1.0	-0.3%
54.3%	348.7	349.0	0.2	0.1%
55.6%	348.5	348.5	0.0	0.0%
56.8%	345.9	345.9	0.0	0.0%
58.0%	342.7	342.7	0.0	0.0%
59.3%	331.4	331.5	0.1	0.0%
60.5%	326.7	326.7	0.0	0.0%
61.7%	325.0	325.0	0.0	0.0%
63.0%	322.9	322.9	0.0	0.0%
64.2%	321.5	321.6	0.0	0.0%
65.4%	321.4	321.4	0.0	0.0%
66.7%	319.1	319.1	0.0	0.0%
67.9%	316.2	316.2	0.0	0.0%
69.1%	312.8	312.8	-0.1	0.0%
70.4%	311.0	311.0	0.0	0.0%
71.6%	310.2	310.4	0.2	0.1%
72.8%	309.0	309.1	0.0	0.0%
74.1%	303.5	303.5	0.0	0.0%
75.3%	299.9	299.9	0.0	0.0%
76.5%	297.8	299.0	1.3	0.4%
77.8%	295.2	294.9	-0.3	-0.1%
79.0%	294.6	294.7	0.0	0.0%
80.2%	294.0	294.0	0.0	0.0%
81.5%	283.4	283.5	0.1	0.0%
82.7%	274.6	274.5	-0.1	0.0%
84.0%	271.1	271.0	-0.1	0.0%
85.2%	263.9	263.9	0.0	0.0%
86.4%	259.5	259.6	0.2	0.1%
87.7%	242.1	242.5	0.3	0.1%
88.9%	241.5	241.8	0.3	0.1%
90.1%	232.8	232.8	0.1	0.0%
91.4%	215.4	215.8	0.4	0.2%
92.6%	211.7	212.3	0.6	0.3%
93.8%	208.2	208.3	0.1	0.1%
95.1%	199.6	200.2	0.6	0.3%
96.3%	195.8	195.7	-0.1	-0.1%
97.5%	190.7	192.1	1.3	0.7%
98.8%	188.1	188.4	0.4	0.2%
100.0%	187.7	188.4	0.7	0.4%

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	590.1	604.9	14.7	2.5%
1.2%	581.9	592.9	11.1	1.9%
2.5%	572.5	575.2	2.7	0.5%
3.7%	570.3	575.0	4.7	0.8%
4.9%	569.5	572.5	3.0	0.5%
6.2%	559.4	564.4	5.0	0.9%
7.4%	558.9	560.8	1.9	0.3%
8.6%	554.6	556.8	2.2	0.4%
9.9%	554.4	554.9	0.5	0.1%
11.1%	553.4	554.8	1.4	0.3%
12.3%	553.1	554.8	1.6	0.3%
13.6%	551.6	551.3	-0.2	0.0%
14.8%	545.9	544.6	-1.3	-0.2%
16.0%	544.3	543.6	-0.7	-0.1%
17.3%	540.6	540.7	0.1	0.0%
18.5%	539.3	539.3	0.0	0.0%
19.8%	534.5	539.1	4.6	0.9%
21.0%	521.7	535.0	13.2	2.5%
22.2%	520.0	532.9	12.9	2.5%
23.5%	510.9	522.0	11.1	2.2%
24.7%	507.3	510.7	3.4	0.7%
25.9%	497.9	497.8	-0.1	0.0%
27.2%	483.0	482.9	0.0	0.0%
28.4%	481.1	481.0	-0.1	0.0%
29.6%	480.7	480.9	0.1	0.0%
30.9%	466.1	468.1	2.0	0.4%
32.1%	466.1	465.9	-0.2	0.0%
33.3%	460.0	460.0	0.0	0.0%
34.6%	452.7	452.7	0.1	0.0%
35.8%	451.9	451.9	0.0	0.0%
37.0%	450.8	450.7	-0.1	0.0%
38.3%	448.8	448.8	0.0	0.0%
39.5%	447.5	447.5	0.0	0.0%
40.7%	447.2	447.2	0.0	0.0%
42.0%	445.9	446.4	0.5	0.1%
43.2%	439.3	439.3	0.0	0.0%
44.4%	430.2	430.2	0.0	0.0%
45.7%	423.9	424.2	0.3	0.1%
46.9%	421.6	421.6	0.0	0.0%
48.1%	407.9	407.6	-0.3	-0.1%
49.4%	404.1	404.3	0.2	0.1%
50.6%	403.6	403.6	0.0	0.0%
51.9%	400.2	400.1	-0.1	0.0%
53.1%	380.0	380.0	0.0	0.0%
54.3%	377.6	377.5	0.0	0.0%
55.6%	377.3	377.5	0.1	0.0%
56.8%	376.4	376.4	0.1	0.0%
58.0%	376.3	376.3	0.0	0.0%
59.3%	373.0	372.6	-0.4	-0.1%
60.5%	372.5	372.5	0.0	0.0%
61.7%	370.7	370.6	-0.1	0.0%
63.0%	369.5	369.6	0.1	0.0%
64.2%	368.9	368.8	-0.1	0.0%
65.4%	367.2	367.0	-0.2	-0.1%
66.7%	366.6	366.7	0.0	0.0%
67.9%	364.2	364.0	-0.1	0.0%
69.1%	363.2	363.2	0.0	0.0%
70.4%	362.7	362.6	0.0	0.0%
71.6%	362.1	362.1	0.0	0.0%
72.8%	352.4	352.5	0.1	0.0%
74.1%	350.8	351.5	0.6	0.2%
75.3%	347.1	347.1	0.0	0.0%
76.5%	343.0	343.0	0.0	0.0%
77.8%	330.8	331.0	0.1	0.0%
79.0%	328.8	329.0	0.1	0.0%
80.2%	325.0	325.0	0.0	0.0%
81.5%	323.6	323.7	0.1	0.0%
82.7%	316.3	317.1	0.8	0.3%
84.0%	295.0	295.1	0.1	0.0%
85.2%	271.6	272.6	1.0	0.4%
86.4%	262.0	262.0	0.0	0.0%
87.7%	260.0	260.1	0.1	0.0%
88.9%	251.0	251.2	0.2	0.1%
90.1%	220.3	221.0	0.7	0.3%
91.4%	206.6	207.0	0.3	0.2%
92.6%	203.7	203.8	0.1	0.0%
93.8%	199.0	199.4	0.5	0.2%
95.1%	195.2	195.3	0.1	0.0%
96.3%	191.5	191.7	0.3	0.1%
97.5%	186.5	186.8	0.3	0.2%
98.8%	179.7	180.1	0.4	0.2%
100.0%	163.6	163.8	0.2	0.1%

Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	525.8	534.2	8.5	1.6%
1.2%	518.0	512.3	-5.7	-1.1%
2.5%	512.1	504.7	-7.4	-1.4%
3.7%	498.3	501.0	2.7	0.5%
4.9%	494.1	497.8	3.7	0.7%
6.2%	493.9	494.1	0.2	0.0%
7.4%	491.2	489.0	-2.2	-0.5%
8.6%	483.0	487.7	4.7	1.0%
9.9%	478.4	478.1	-0.2	0.0%
11.1%	476.4	477.2	0.8	0.2%
12.3%	465.9	473.6	7.8	1.7%
13.6%	443.5	452.1	8.5	1.9%
14.8%	436.6	443.2	6.6	1.5%
16.0%	433.5	434.3	0.7	0.2%
17.3%	424.8	426.9	2.1	0.5%
18.5%	419.0	424.4	5.4	1.3%
19.8%	417.6	419.4	1.8	0.4%
21.0%	408.1	418.4	10.2	2.5%
22.2%	406.9	409.6	2.8	0.7%
23.5%	406.8	409.0	2.2	0.5%
24.7%	404.0	407.6	3.6	0.9%
25.9%	401.3	406.9	5.6	1.4%
27.2%	394.8	402.2	7.5	1.9%
28.4%	393.6	401.0	7.4	1.9%
29.6%	392.7	400.1	7.4	1.9%
30.9%	390.8	395.0	4.2	1.1%
32.1%	389.3	394.2	4.9	1.3%
33.3%	386.3	389.8	3.5	0.9%
34.6%	386.0	389.2	3.3	0.8%
35.8%	385.8	388.6	2.8	0.7%
37.0%	384.5	385.8	1.3	0.3%
38.3%	384.3	385.6	1.3	0.3%
39.5%	384.3	385.5	1.3	0.3%
40.7%	383.6	384.7	1.1	0.3%
42.0%	381.0	384.3	3.4	0.9%
43.2%	378.6	383.8	5.2	1.4%
44.4%	377.3	380.1	2.9	0.8%
45.7%	376.4	377.8	1.4	0.4%
46.9%	375.8	377.2	1.5	0.4%
48.1%	375.3	376.5	1.3	0.3%
49.4%	373.2	376.0	2.8	0.8%
50.6%	371.8	375.4	3.6	1.0%
51.9%	370.7	375.3	4.6	1.2%
53.1%	370.4	373.7	3.2	0.9%
54.3%	369.8	372.6	2.8	0.8%
55.6%	369.5	371.7	2.2	0.6%
56.8%	369.4	370.0	0.6	0.2%
58.0%	368.0	369.0	1.0	0.3%
59.3%	366.7	369.0	2.3	0.6%
60.5%	366.2	366.6	0.5	0.1%
61.7%	365.8	365.6	-0.2	-0.1%
63.0%	365.8	365.6	-0.2	0.0%
64.2%	365.6	365.6	0.0	0.0%
65.4%	364.4	365.5	1.1	0.3%
66.7%	362.7	365.3	2.6	0.7%
67.9%	361.4	364.7	3.3	0.9%
69.1%	359.2	359.2	0.0	0.0%
70.4%	356.5	358.9	2.3	0.7%
71.6%	356.5	357.1	0.7	0.2%
72.8%	356.3	356.3	-0.1	0.0%
74.1%	352.1	355.9	3.8	1.1%
75.3%	350.7	355.9	5.2	1.5%
76.5%	350.0	350.4	0.5	0.1%
77.8%	349.8	350.1	0.2	0.1%
79.0%	348.9	348.9	0.0	0.0%
80.2%	338.1	341.9	3.9	1.1%
81.5%	337.8	338.1	0.3	0.1%
82.7%	337.3	336.4	-0.9	-0.3%
84.0%	336.7	335.2	-1.5	-0.5%
85.2%	335.1	335.1	0.0	0.0%
86.4%	331.9	332.2	0.3	0.1%
87.7%	328.2	328.2	0.0	0.0%
88.9%	322.5	322.7	0.2	0.1%
90.1%	315.8	316.3	0.5	0.1%
91.4%	313.2	314.3	1.1	0.4%
92.6%	310.9	308.8	-2.1	-0.7%
93.8%	302.6	303.5	1.0	0.3%
95.1%	291.7	292.7	1.0	0.4%
96.3%	286.0	286.8	0.8	0.3%
97.5%	260.0	260.7	0.8	0.3%
98.8%	232.8	233.1	0.3	0.1%
100.0%	214.0	214.6	0.6	0.3%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	591.1	592.1	1.0	0.2%
1.2%	585.3	581.1	-4.3	-0.7%
2.5%	533.4	534.1	0.6	0.1%
3.7%	528.4	494.0	-34.5	-6.5%
4.9%	493.1	474.3	-18.8	-3.8%
6.2%	486.5	473.2	-13.4	-2.7%
7.4%	470.5	462.0	-8.5	-1.8%
8.6%	460.7	451.8	-9.0	-1.9%
9.9%	423.1	422.1	-1.0	-0.2%
11.1%	416.9	422.1	5.2	1.2%
12.3%	412.6	418.7	6.0	1.5%
13.6%	412.0	406.3	-5.7	-1.4%
14.8%	411.8	405.8	-6.0	-1.5%
16.0%	404.8	404.2	-0.7	-0.2%
17.3%	401.2	391.3	-9.9	-2.5%
18.5%	389.2	386.8	-2.4	-0.6%
19.8%	382.8	385.1	2.4	0.6%
21.0%	382.5	382.3	-0.2	-0.1%
22.2%	381.9	382.2	0.3	0.1%
23.5%	380.5	382.0	1.5	0.4%
24.7%	379.4	380.8	1.4	0.4%
25.9%	378.3	380.8	2.4	0.6%
27.2%	376.6	379.3	2.7	0.7%
28.4%	375.3	374.5	-0.8	-0.2%
29.6%	374.5	374.5	-0.1	0.0%
30.9%	373.6	374.1	0.5	0.1%
32.1%	372.5	373.4	0.9	0.2%
33.3%	370.6	370.3	-0.3	-0.1%
34.6%	370.1	370.2	0.1	0.0%
35.8%	369.8	370.0	0.2	0.1%
37.0%	368.8	368.9	0.1	0.0%
38.3%	366.5	367.8	1.2	0.3%
39.5%	365.8	367.4	1.6	0.4%
40.7%	364.0	367.0	3.0	0.8%
42.0%	361.6	366.1	4.5	1.2%
43.2%	359.7	361.6	1.9	0.5%
44.4%	357.7	361.2	3.5	1.0%
45.7%	357.2	359.7	2.5	0.7%
46.9%	355.5	356.0	0.5	0.1%
48.1%	353.8	355.9	2.2	0.6%
49.4%	347.9	346.8	-1.0	-0.3%
50.6%	347.2	346.0	-1.1	-0.3%
51.9%	343.8	343.1	-0.7	-0.2%
53.1%	341.7	337.4	-4.3	-1.3%
54.3%	338.5	336.9	-1.6	-0.5%
55.6%	336.7	336.7	0.0	0.0%
56.8%	336.7	336.6	-0.1	0.0%
58.0%	336.0	335.1	-0.9	-0.3%
59.3%	335.2	335.0	-0.3	-0.1%
60.5%	335.2	333.5	-1.7	-0.5%
61.7%	332.9	333.3	0.5	0.1%
63.0%	332.8	333.1	0.3	0.1%
64.2%	330.5	332.3	1.7	0.5%
65.4%	328.9	327.4	-1.5	-0.4%
66.7%	327.7	322.5	-5.2	-1.6%
67.9%	325.6	319.8	-5.8	-1.8%
69.1%	325.0	319.0	-6.0	-1.8%
70.4%	324.9	316.2	-8.7	-2.7%
71.6%	323.3	315.9	-7.4	-2.3%
72.8%	319.9	314.4	-5.5	-1.7%
74.1%	316.7	313.1	-3.7	-1.2%
75.3%	316.0	311.1	-4.9	-1.6%
76.5%	315.4	309.6	-5.8	-1.8%
77.8%	314.4	308.0	-6.3	-2.0%
79.0%	310.6	307.9	-2.8	-0.9%
80.2%	307.0	306.3	-0.7	-0.2%
81.5%	306.5	303.3	-3.2	-1.0%
82.7%	305.9	301.7	-4.2	-1.4%
84.0%	303.9	299.4	-4.4	-1.5%
85.2%	301.4	297.2	-4.2	-1.4%
86.4%	300.5	295.9	-4.6	-1.5%
87.7%	298.2	295.9	-2.3	-0.8%
88.9%	291.0	291.9	0.8	0.3%
90.1%	290.4	290.1	-0.4	-0.1%
91.4%	288.3	288.6	0.2	0.1%
92.6%	282.9	283.1	0.3	0.1%
93.8%	279.0	277.7	-1.3	-0.5%
95.1%	275.4	274.9	-0.5	-0.2%
96.3%	266.5	265.3	-1.2	-0.4%
97.5%	263.5	263.9	0.4	0.2%
98.8%	260.1	260.4	0.3	0.1%
100.0%	227.8	228.3	0.4	0.2%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	752.9	771.3	18.4	2.4%
1.2%	671.2	712.1	40.9	6.1%
2.5%	616.1	632.3	16.2	2.6%
3.7%	603.2	604.2	1.0	0.2%
4.9%	595.4	593.3	-2.1	-0.4%
6.2%	595.1	587.3	-7.8	-1.3%
7.4%	572.8	579.2	6.5	1.1%
8.6%	570.4	571.0	0.6	0.1%
9.9%	557.1	569.2	12.1	2.2%
11.1%	555.9	568.4	12.5	2.3%
12.3%	554.9	558.5	3.6	0.7%
13.6%	542.4	557.5	15.2	2.8%
14.8%	536.7	540.3	3.6	0.7%
16.0%	534.4	539.4	4.9	0.9%
17.3%	530.5	537.5	7.0	1.3%
18.5%	529.8	536.0	6.2	1.2%
19.8%	528.2	528.4	0.2	0.0%
21.0%	527.3	527.4	0.2	0.0%
22.2%	501.7	511.6	9.8	2.0%
23.5%	498.0	508.8	10.8	2.2%
24.7%	493.0	502.2	9.2	1.9%
25.9%	479.5	459.6	-19.9	-4.1%
27.2%	468.5	458.8	-9.7	-2.1%
28.4%	462.4	458.1	-4.4	-0.9%
29.6%	454.6	452.5	-2.1	-0.5%
30.9%	451.2	449.5	-1.7	-0.4%
32.1%	448.3	447.3	-1.0	-0.2%
33.3%	442.8	441.0	-1.8	-0.4%
34.6%	439.2	438.1	-1.1	-0.3%
35.8%	437.8	437.5	-0.4	-0.1%
37.0%	428.4	437.3	8.9	2.1%
38.3%	424.5	436.6	12.2	2.9%
39.5%	423.9	436.6	12.7	3.0%
40.7%	423.3	434.3	11.0	2.6%
42.0%	421.7	434.2	12.4	2.9%
43.2%	419.5	421.1	1.7	0.4%
44.4%	418.2	419.7	1.6	0.4%
45.7%	416.3	419.4	3.0	0.7%
46.9%	412.2	417.8	5.7	1.4%
48.1%	408.4	415.4	7.0	1.7%
49.4%	407.1	413.8	6.6	1.6%
50.6%	401.9	410.9	9.0	2.2%
51.9%	389.0	399.5	10.5	2.7%
53.1%	388.4	386.1	-2.4	-0.6%
54.3%	386.4	385.4	-1.0	-0.3%
55.6%	383.7	382.8	-0.9	-0.2%
56.8%	378.2	381.2	3.0	0.8%
58.0%	378.2	378.2	0.0	0.0%
59.3%	374.8	376.1	1.3	0.3%
60.5%	370.7	367.0	-3.8	-1.0%
61.7%	370.1	365.5	-4.6	-1.3%
63.0%	370.0	365.0	-5.0	-1.4%
64.2%	360.6	364.7	4.0	1.1%
65.4%	359.1	358.0	-1.2	-0.3%
66.7%	358.2	355.7	-2.5	-0.7%
67.9%	355.9	354.7	-1.2	-0.3%
69.1%	355.3	352.8	-2.5	-0.7%
70.4%	353.6	351.1	-2.5	-0.7%
71.6%	348.5	346.4	-2.1	-0.6%
72.8%	347.7	344.6	-3.1	-0.9%
74.1%	347.1	343.3	-3.8	-1.1%
75.3%	346.9	343.2	-3.8	-1.1%
76.5%	345.0	342.4	-2.7	-0.8%
77.8%	344.8	342.1	-2.6	-0.8%
79.0%	343.0	341.6	-1.5	-0.4%
80.2%	342.5	341.4	-1.1	-0.3%
81.5%	340.6	338.6	-2.0	-0.6%
82.7%	339.3	334.8	-4.5	-1.3%
84.0%	337.9	334.4	-3.5	-1.0%
85.2%	337.6	334.0	-3.6	-1.1%
86.4%	332.2	331.8	-0.4	-0.1%
87.7%	331.6	330.7	-0.8	-0.3%
88.9%	331.4	328.7	-2.7	-0.8%
90.1%	331.4	327.9	-3.5	-1.0%
91.4%	326.4	327.7	1.4	0.4%
92.6%	316.5	314.1	-2.4	-0.8%
93.8%	306.9	301.0	-6.0	-1.9%
95.1%	302.5	297.9	-4.6	-1.5%
96.3%	291.9	295.3	3.4	1.2%
97.5%	265.0	266.1	1.1	0.4%
98.8%	259.2	259.3	0.1	0.1%
100.0%	193.5	193.5	0.0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly EC (UMHOS/CM)	DCR 2015 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	695.4	706.5	11.1	1.6%
1.2%	663.4	680.6	17.2	2.6%
2.5%	653.1	673.4	20.3	3.1%
3.7%	640.9	663.1	22.2	3.5%
4.9%	635.5	658.2	22.6	3.6%
6.2%	634.2	634.6	0.4	0.1%
7.4%	629.6	631.8	2.2	0.3%
8.6%	626.9	630.3	3.4	0.5%
9.9%	615.7	627.1	11.3	1.8%
11.1%	613.1	621.7	8.5	1.4%
12.3%	612.9	621.4	8.5	1.4%
13.6%	609.0	619.1	10.1	1.7%
14.8%	602.4	612.4	9.9	1.7%
16.0%	601.4	609.4	8.0	1.3%
17.3%	599.6	604.3	4.7	0.8%
18.5%	598.3	602.9	4.6	0.8%
19.8%	597.7	601.7	4.0	0.7%
21.0%	594.0	600.5	6.5	1.1%
22.2%	591.7	597.9	6.1	1.0%
23.5%	589.8	593.6	3.8	0.6%
24.7%	586.3	590.9	4.6	0.8%
25.9%	582.2	589.2	7.0	1.2%
27.2%	579.0	589.2	10.2	1.8%
28.4%	578.5	588.7	10.2	1.8%
29.6%	577.3	586.3	9.1	1.6%
30.9%	567.1	586.2	19.1	3.4%
32.1%	562.1	583.7	21.7	3.9%
33.3%	560.2	581.7	21.5	3.8%
34.6%	558.4	576.9	18.5	3.3%
35.8%	558.0	575.9	17.9	3.2%
37.0%	556.6	572.4	15.8	2.8%
38.3%	553.5	570.9	17.3	3.1%
39.5%	551.5	567.3	15.8	2.9%
40.7%	549.5	565.0	15.4	2.8%
42.0%	549.0	561.4	12.4	2.3%
43.2%	541.5	559.2	17.7	3.3%
44.4%	537.6	559.1	21.5	4.0%
45.7%	530.7	557.2	26.5	5.0%
46.9%	523.2	548.9	25.7	4.9%
48.1%	522.3	548.3	25.9	5.0%
49.4%	520.5	531.3	10.8	2.1%
50.6%	514.1	529.0	14.9	2.9%
51.9%	513.4	522.2	8.8	1.7%
53.1%	511.4	520.0	8.6	1.7%
54.3%	511.4	508.4	-3.0	-0.6%
55.6%	493.1	507.6	14.6	3.0%
56.8%	492.4	506.8	14.4	2.9%
58.0%	480.7	495.9	15.2	3.2%
59.3%	480.0	495.1	15.1	3.1%
60.5%	474.9	488.8	13.9	2.9%
61.7%	474.8	473.5	-1.2	-0.3%
63.0%	470.2	470.6	0.4	0.1%
64.2%	466.8	464.9	-1.9	-0.4%
65.4%	466.7	462.6	-4.1	-0.9%
66.7%	465.5	459.3	-6.2	-1.3%
67.9%	463.7	458.0	-5.7	-1.2%
69.1%	457.5	457.1	-0.4	-0.1%
70.4%	456.4	449.8	-6.7	-1.5%
71.6%	455.6	440.0	-15.6	-3.4%
72.8%	454.8	430.2	-24.5	-5.4%
74.1%	450.1	429.1	-21.0	-4.7%
75.3%	446.0	428.7	-17.2	-3.9%
76.5%	443.0	427.9	-15.1	-3.4%
77.8%	437.7	426.0	-11.6	-2.7%
79.0%	429.6	423.2	-6.4	-1.5%
80.2%	428.8	418.9	-9.9	-2.3%
81.5%	427.9	413.5	-14.4	-3.4%
82.7%	427.3	410.6	-16.7	-3.9%
84.0%	426.5	409.2	-17.4	-4.1%
85.2%	422.6	408.1	-14.5	-3.4%
86.4%	419.6	407.9	-11.7	-2.8%
87.7%	404.3	398.6	-5.8	-1.4%
88.9%	403.0	398.2	-4.8	-1.2%
90.1%	400.5	386.3	-14.2	-3.5%
91.4%	393.2	382.9	-10.2	-2.6%
92.6%	378.5	374.4	-4.1	-1.1%
93.8%	369.4	361.8	-7.6	-2.1%
95.1%	311.2	322.7	11.5	3.7%
96.3%	275.9	309.8	33.9	12.3%
97.5%	265.8	258.5	-7.3	-2.7%
98.8%	258.5	255.6	-3.0	-1.1%
100.0%	221.1	221.1	0.0	0.0%

Sacramento-San Joaquin Delta Modeling

Summary Tables and Bar Charts

Table SQ-01-a
X2, Monthly Position
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Position (KM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	87.8	83.1	77.0	67.4	61.9	63.7	68.1	75.7	83.4	83.7	90.4	84.4
WSIP 2030 With Project	86.9	82.9	77.8	68.3	62.6	64.4	68.2	75.8	82.9	83.6	89.9	83.6
Difference	-1	0	1	1	1	1	0	0	0	0	-1	-1
Percent Difference[3]	-1.0%	-0.2%	1.0%	1.4%	1.1%	1.1%	0.0%	0.0%	-0.5%	-0.2%	-0.6%	-1.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	80.0	74.5	73.7	55.8	55.1	57.3	59.2	67.6	79.7	79.3	88.6	69.4
WSIP 2030 With Project	79.8	74.7	74.8	56.2	55.2	57.6	59.3	67.4	79.3	79.4	88.3	69.2
Difference	0	0	1	0	0	0	0	0	0	0	0	0
Percent Difference	-0.3%	0.2%	1.4%	0.8%	0.1%	0.5%	0.2%	-0.2%	-0.5%	0.1%	-0.3%	-0.2%
Above Normal (14.6%)												
WSIP 2030 Without Project	84.8	80.1	78.3	60.6	57.0	57.9	63.8	72.5	83.5	79.8	89.0	80.8
WSIP 2030 With Project	84.1	80.0	79.1	61.4	57.2	58.6	64.0	72.7	83.5	79.5	88.6	80.3
Difference	-1	0	1	1	0	1	0	0	0	0	0	0
Percent Difference	-0.8%	-0.1%	1.1%	1.4%	0.5%	1.1%	0.3%	0.3%	0.0%	-0.4%	-0.5%	-0.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	93.0	88.8	77.8	70.2	63.3	64.2	68.4	75.9	84.0	82.5	90.0	92.9
WSIP 2030 With Project	90.9	88.3	77.3	71.6	63.8	65.4	68.5	76.1	83.6	82.5	89.4	91.2
Difference	-2	0	-1	1	1	1	0	0	0	0	-1	-2
Percent Difference	-2.2%	-0.5%	-0.7%	2.0%	0.8%	1.8%	0.2%	0.2%	-0.4%	0.0%	-0.6%	-1.8%
Dry (19.5%)												
WSIP 2030 Without Project	90.1	84.7	74.6	76.3	65.0	68.3	75.2	81.8	84.8	88.5	92.1	93.5
WSIP 2030 With Project	89.2	84.0	75.6	77.6	66.8	69.2	75.1	81.9	84.3	88.2	91.1	92.3
Difference	-1	-1	1	1	2	1	0	0	0	0	-1	-1
Percent Difference	-1.1%	-0.8%	1.3%	1.7%	2.8%	1.3%	-0.1%	0.0%	-0.5%	-0.3%	-1.1%	-1.3%
Critical (14.6%)												
WSIP 2030 Without Project	96.5	93.8	84.6	82.3	74.8	75.7	81.4	87.7	88.2	92.1	93.9	95.4
WSIP 2030 With Project	95.8	94.0	86.4	83.2	75.9	76.7	81.1	87.6	87.0	91.5	93.4	94.7
Difference	-1	0	2	1	1	1	0	0	-1	-1	0	-1
Percent Difference	-0.7%	0.2%	2.1%	1.1%	1.4%	1.2%	-0.4%	-0.1%	-1.4%	-0.7%	-0.5%	-0.8%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

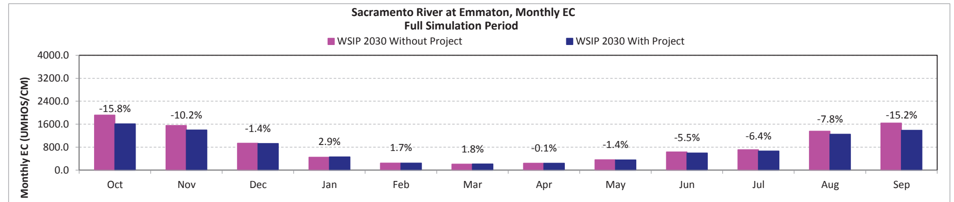
Table SQ-21-a
Sacramento River at Emmaton, Monthly EC
Long-term Average and Average by Water Year Type

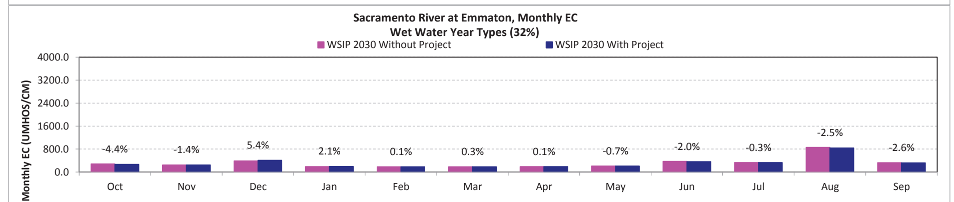
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1917.0	1553.6	936.6	446.5	242.9	208.1	237.4	361.1	633.0	710.3	1353.9	1635.6
WSIP 2030 With Project	1614.2	1394.7	923.7	459.4	247.0	211.8	237.1	356.2	598.2	665.0	1247.9	1387.4
Difference	-302.8	-159.0	-12.9	12.9	4.1	3.7	-0.4	-4.9	-34.8	-45.3	-106.0	-248.2
Percent Difference[3]	-15.8%	-10.2%	-1.4%	2.9%	1.7%	1.8%	-0.1%	-1.4%	-5.5%	-6.4%	-7.8%	-15.2%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	281.6	248.7	388.3	190.6	181.9	183.1	188.5	209.9	371.1	333.0	860.9	326.3
WSIP 2030 With Project	269.1	245.3	409.3	194.5	182.1	183.6	188.7	208.5	363.6	332.2	839.2	317.9
Difference	-12.5	-3.4	21.0	3.9	0.2	0.5	0.2	-1.4	-7.5	-0.9	-21.8	-8.5
Percent Difference	-4.4%	-1.4%	5.4%	2.1%	0.1%	0.3%	0.1%	-0.7%	-2.0%	-0.3%	-2.5%	-2.6%
Above Normal (14.6%)												
WSIP 2030 Without Project	593.0	471.9	573.3	270.7	188.5	183.2	193.3	222.7	443.6	349.4	820.9	589.2
WSIP 2030 With Project	531.1	453.5	572.6	281.7	189.6	184.4	194.3	223.5	436.3	344.2	776.8	533.2
Difference	-61.9	-18.4	-0.7	11.0	1.1	1.3	0.9	0.8	-7.3	-5.2	-44.1	-56.0
Percent Difference	-10.4%	-3.9%	-0.1%	4.1%	0.6%	0.7%	0.5%	0.4%	-1.6%	-1.5%	-5.4%	-9.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	2714.9	2098.2	1318.0	412.7	221.9	194.1	212.0	275.6	550.2	488.1	1048.9	2158.1
WSIP 2030 With Project	2032.5	1759.6	1148.8	410.6	222.5	200.1	212.1	274.5	533.7	483.2	970.9	1708.3
Difference	-682.5	-338.6	-169.1	-2.1	0.6	6.0	0.1	-1.1	-16.5	-4.9	-78.0	-449.8
Percent Difference	-25.1%	-16.1%	-12.8%	-0.5%	0.3%	3.1%	0.1%	-0.4%	-3.0%	-1.0%	-7.4%	-20.8%
Dry (19.5%)												
WSIP 2030 Without Project	2838.7	1976.9	1059.8	571.7	241.1	212.6	245.6	385.9	657.2	948.9	1842.8	2578.8
WSIP 2030 With Project	2338.4	1668.8	1004.3	606.5	257.3	215.9	246.8	376.2	627.6	886.7	1612.3	2089.6
Difference	-500.2	-308.0	-55.5	34.8	16.2	3.3	1.2	-9.7	-29.6	-62.2	-230.5	-489.2
Percent Difference	-17.6%	-15.6%	-5.2%	6.1%	6.7%	1.5%	0.5%	-2.5%	-4.5%	-6.6%	-12.5%	-19.0%
Critical (14.6%)												
WSIP 2030 Without Project	4289.0	4018.4	1738.1	1036.5	456.8	299.0	408.7	902.5	1452.8	1853.6	2694.0	3411.9
WSIP 2030 With Project	3941.6	3848.0	1920.2	1061.7	460.5	309.3	403.2	885.5	1300.7	1641.3	2477.1	3078.7
Difference	-347.4	-170.4	182.1	25.2	3.7	10.3	-5.5	-17.0	-152.1	-212.3	-216.9	-333.2
Percent Difference	-8.1%	-4.2%	10.5%	2.4%	0.8%	3.4%	-1.3%	-1.9%	-10.5%	-11.5%	-8.1%	-9.8%

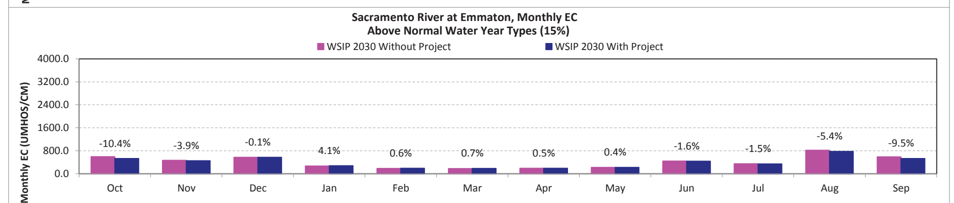
1 Based on the 82-year simulation period

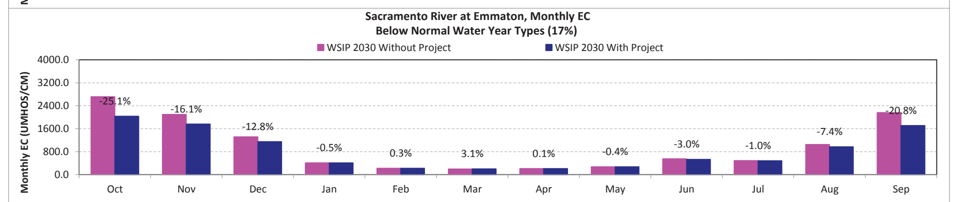
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

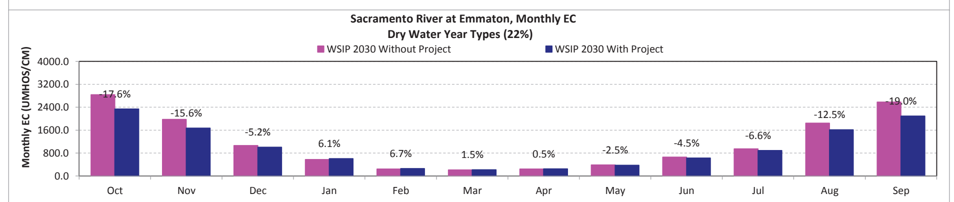
3 Relative difference of the monthly average











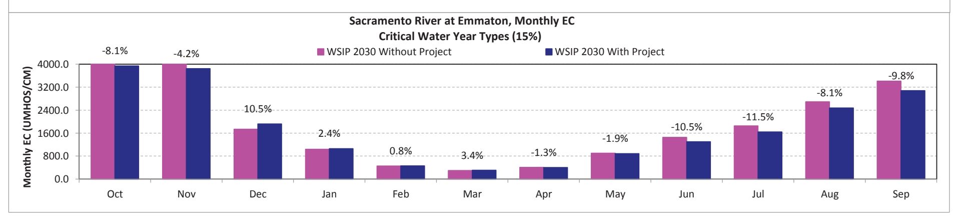


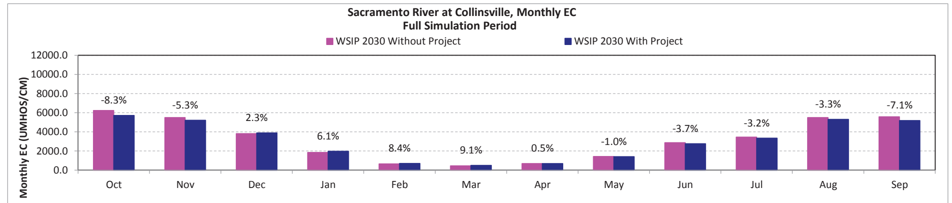
Table SQ-22-a
Sacramento River at Collinsville, Monthly EC
Long-term Average and Average by Water Year Type

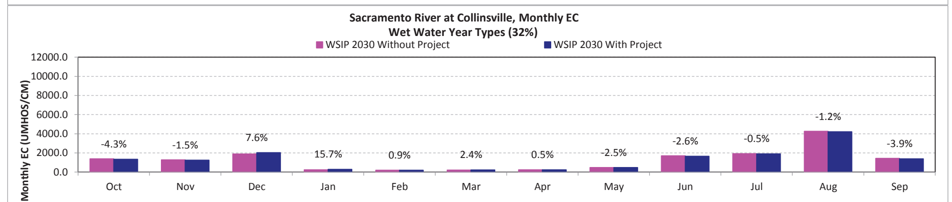
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6229.3	5501.7	3811.1	1857.4	652.5	453.9	685.7	1429.4	2873.1	3454.0	5490.8	5572.7
WSIP 2030 With Project	5713.2	5209.3	3898.2	1970.6	707.4	495.4	689.5	1414.7	2768.3	3343.5	5311.8	5179.4
Difference	-516.1	-292.4	87.1	113.2	54.9	41.5	3.7	-14.7	-104.9	-110.5	-179.0	-393.4
Percent Difference[3]	-8.3%	-5.3%	2.3%	6.1%	8.4%	9.1%	0.5%	-1.0%	-3.7%	-3.2%	-3.3%	-7.1%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1390.4	1269.3	1885.2	242.7	190.0	209.9	243.4	479.2	1692.3	1911.1	4267.3	1439.4
WSIP 2030 With Project	1330.5	1250.9	2028.2	280.8	191.7	214.8	244.6	467.4	1648.2	1902.2	4217.4	1382.7
Difference	-59.9	-18.4	143.0	38.1	1.6	5.0	1.3	-11.8	-44.2	-8.9	-49.9	-56.7
Percent Difference	-4.3%	-1.5%	7.6%	15.7%	0.9%	2.4%	0.5%	-2.5%	-2.6%	-0.5%	-1.2%	-3.9%
Above Normal (14.6%)												
WSIP 2030 Without Project	3288.6	2885.3	2969.3	875.8	224.3	232.9	283.3	623.2	2197.9	2077.1	4151.3	3163.5
WSIP 2030 With Project	3092.2	2801.0	3057.8	966.9	234.0	256.7	292.6	631.9	2197.3	2037.7	4006.6	2951.0
Difference	-196.4	-84.3	88.6	91.1	9.7	23.9	9.3	8.7	-0.6	-39.4	-144.6	-212.5
Percent Difference	-6.0%	-2.9%	3.0%	10.4%	4.3%	10.2%	3.3%	1.4%	0.0%	-1.9%	-3.5%	-6.7%
Below Normal (20.7%)												
WSIP 2030 Without Project	9169.0	7897.7	4982.3	1922.9	531.4	335.0	491.8	1111.7	2804.3	2992.1	4951.1	7654.0
WSIP 2030 With Project	7952.1	7230.1	4604.4	2004.1	561.3	393.5	498.9	1108.2	2745.4	2966.2	4789.5	6884.0
Difference	-1216.9	-667.6	-377.9	81.2	29.9	58.6	7.0	-3.5	-58.9	-25.9	-161.5	-770.0
Percent Difference	-13.3%	-8.5%	-7.6%	4.2%	5.6%		1.4%	-0.3%	-2.1%	-0.9%	-3.3%	-10.1%
Dry (19.5%)												
WSIP 2030 Without Project	8945.7	7116.1	4000.4	2845.3	739.7	514.0	862.9	1962.3	3389.2	4793.6	6807.7	8522.3
WSIP 2030 With Project	8179.2	6521.9	4026.3	3102.3	891.8	559.3	877.5	1944.2	3283.8	4658.1	6460.3	7820.4
Difference	-766.5	-594.2	25.9	257.0	152.1	45.3	14.6	-18.1	-105.4	-135.4	-347.3	-701.9
Percent Difference	-8.6%	-8.4%	0.6%	9.0%	20.6%	8.8%	1.7%	-0.9%	-3.1%	-2.8%	-5.1%	-8.2%
Critical (14.6%)												
WSIP 2030 Without Project	11464.9	11388.6	6753.8	4793.0	2099.1	1271.6	2048.3	3955.1	5417.8	6913.4	8388.4	9712.0
WSIP 2030 With Project	11005.3	11251.3	7463.5	4938.4	2216.1	1377.8	2032.3	3899.2	5017.8	6433.4	8105.3	9381.2
Difference	-459.7	-137.3	709.7	145.4	117.0	106.1	-16.0	-55.9	-400.1	-480.0	-283.0	-330.8
Percent Difference	-4.0%	-1.2%	10.5%	3.0%	5.6%	8.3%	-0.8%	-1.4%	-7.4%	-6.9%	-3.4%	-3.4%

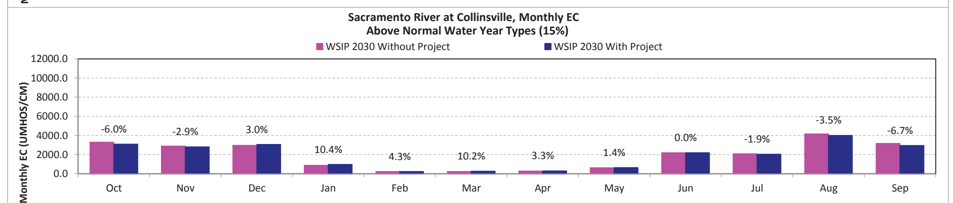
1 Based on the 82-year simulation period

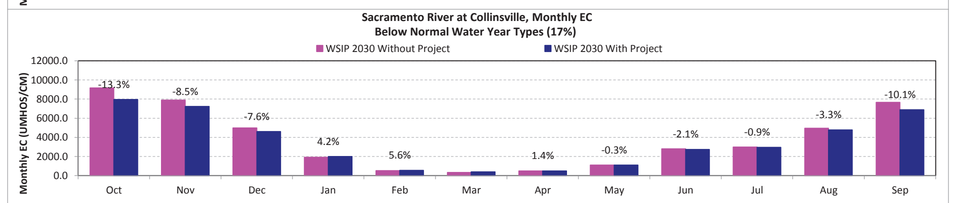
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

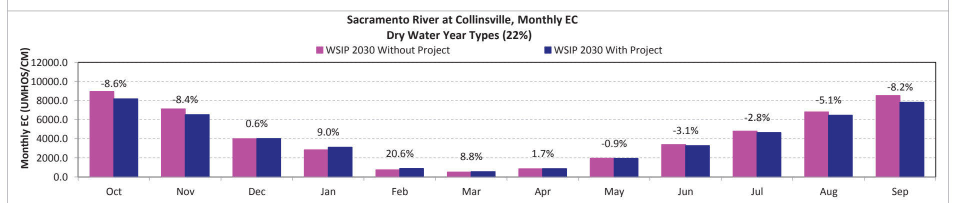
3 Relative difference of the monthly average











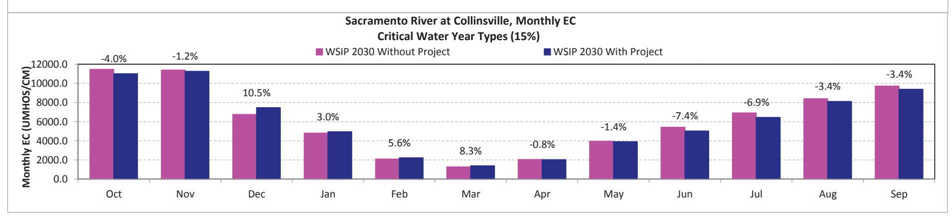


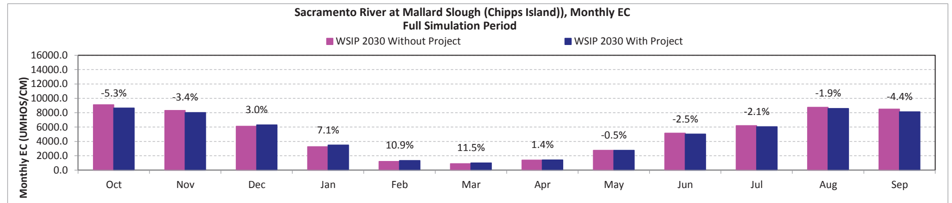
Table SQ-23-a
Sacramento River at Mallard Slough (Chipps Island)), Monthly EC
Long-term Average and Average by Water Year Type

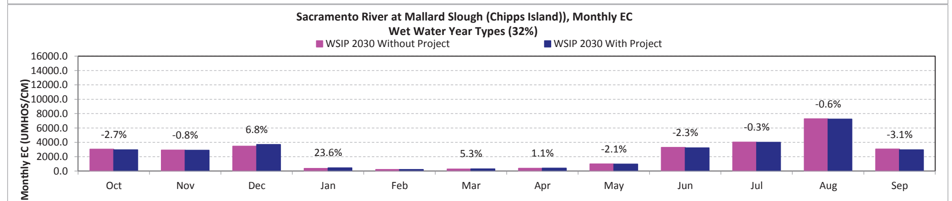
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	9117.8	8302.8	6114.8	3257.7	1210.4	905.4	1407.4	2768.6	5148.1	6186.7	8761.0	8493.5
WSIP 2030 With Project	8637.6	8023.6	6299.1	3489.0	1341.8	1009.3	1427.2	2754.7	5016.9	6059.0	8591.9	8122.4
Difference	-480.2	-279.2	184.3	231.2	131.3	103.9	19.9	-13.9	-131.2	-127.6	-169.1	-371.1
Percent Difference[3]	-5.3%	-3.4%	3.0%	7.1%	10.9%	11.5%	1.4%	-0.5%	-2.5%	-2.1%	-1.9%	-4.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	3045.7	2909.2	3454.9	354.5	210.2	281.6	386.4	993.5	3294.7	4016.2	7267.6	3056.5
WSIP 2030 With Project	2962.1	2886.5	3688.9	438.2	215.2	296.6	390.5	972.5	3218.9	4002.2	7224.5	2962.0
Difference	-83.5	-22.7	234.0	83.7	5.0	15.0	4.1	-21.0	-75.7	-14.0	-43.0	-94.6
Percent Difference	-2.7%	-0.8%	6.8%	23.6%		5.3%	1.1%	-2.1%	-2.3%	-0.3%	-0.6%	-3.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	6034.4	5498.1	5253.7	1623.1	304.6	376.3	540.8	1424.2	4231.5	4359.0	7155.4	5965.6
WSIP 2030 With Project	5812.1	5395.9	5441.3	1805.4	333.3	444.3	566.7	1448.5	4250.0	4292.8	6986.0	5697.4
Difference	-222.2	-102.1	187.6	182.3	28.6	68.0	25.9	24.4	18.5	-66.2	-169.4	-268.1
Percent Difference	-3.7%	-1.9%	3.6%	11.2%		18.1%	4.8%	1.7%	0.4%	-1.5%	-2.4%	-4.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	12894.6	11527.3	7560.5	3637.3	1070.2	692.1	1072.3	2383.4	5181.8	5817.0	8246.7	11294.2
WSIP 2030 With Project	11754.2	10905.9	7192.4	3856.7	1155.9	824.8	1103.3	2388.3	5108.6	5778.8	8094.1	10587.6
Difference	-1140.4	-621.4	-368.1	219.4	85.7	132.7	31.0	4.9	-73.1	-38.2	-152.7	-706.6
Percent Difference	-8.8%	-5.4%	-4.9%	6.0%	8.0%	19.2%	2.9%	0.2%	-1.4%	-0.7%	-1.9%	-6.3%
Dry (19.5%)												
WSIP 2030 Without Project	12410.1	10298.0	6183.4	5140.1	1517.0	1113.4	1986.0	3973.5	6118.6	8137.4	10378.7	12235.3
WSIP 2030 With Project	11754.9	9722.8	6339.8	5627.2	1859.8	1251.5	2030.8	3966.2	5985.1	7990.2	10064.1	11624.6
Difference	-655.2	-575.3	156.4	487.1	342.7	138.1	44.8	-7.3	-133.5	-147.2	-314.5	-610.7
Percent Difference	-5.3%	-5.6%	2.5%	9.5%	22.6%	12.4%	2.3%	-0.2%	-2.2%	-1.8%	-3.0%	-5.0%
Critical (14.6%)												
WSIP 2030 Without Project	15111.1	15116.0	10378.1	7893.3	3990.0	2759.1	4104.2	6750.6	8584.4	10458.8	12049.4	13391.4
WSIP 2030 With Project	14715.2	15004.6	11275.5	8156.5	4270.0	2997.5	4101.8	6677.4	8108.7	9932.4	11788.6	13135.9
Difference	-396.0	-111.4	897.4	263.2	280.0	238.4	-2.4	-73.2	-475.8	-526.4	-260.7	-255.5
Percent Difference	-2.6%	-0.7%	8.6%	3.3%	7.0%	8.6%	-0.1%	-1.1%	-5.5%	-5.0%	-2.2%	-1.9%

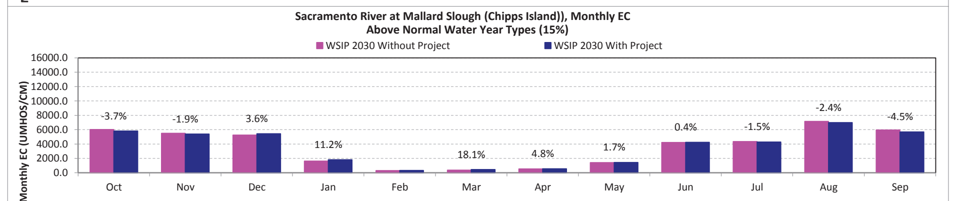
1 Based on the 82-year simulation period

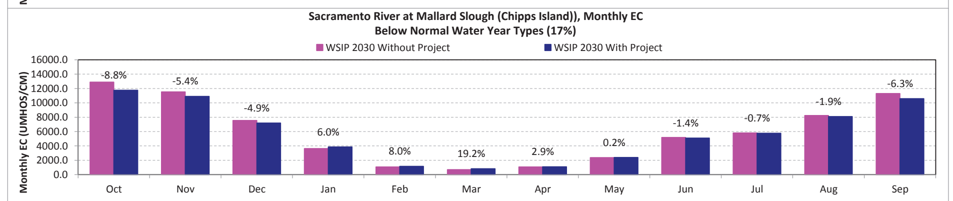
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

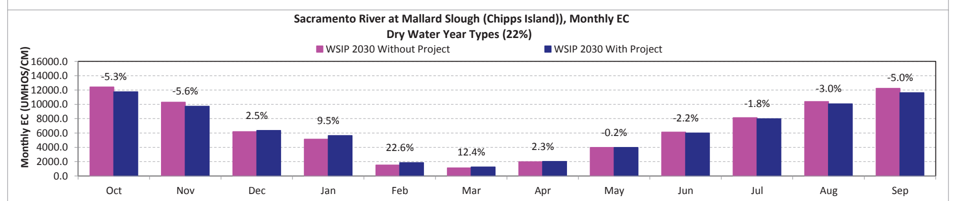
3 Relative difference of the monthly average











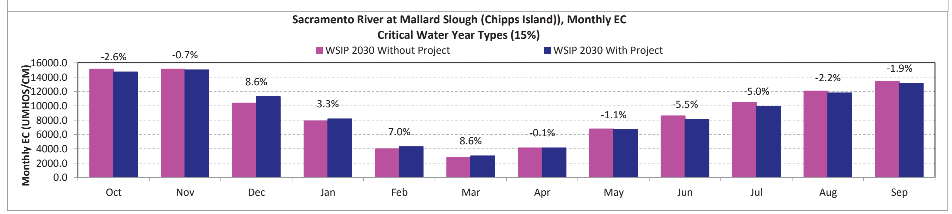


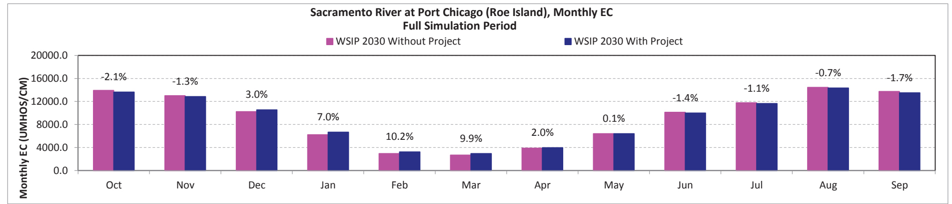
Table SQ-24-a
Sacramento River at Port Chicago (Roe Island), Monthly EC
Long-term Average and Average by Water Year Type

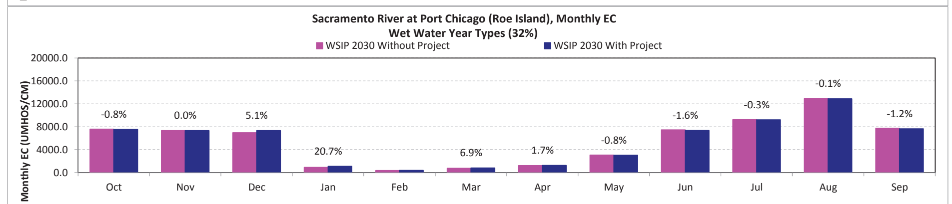
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	13920.5	13011.6	10243.2	6235.4	2941.8	2680.2	3887.1	6416.9	10121.4	11775.8	14436.9	13738.0
WSIP 2030 With Project	13633.0	12845.6	10553.2	6670.4	3241.2	2946.7	3964.2	6421.3	9984.7	11650.0	14331.9	13503.2
Difference	-287.5	-166.0	310.1	434.9	299.3	266.5	77.1	4.5	-136.8	-125.8	-105.0	-234.8
Percent Difference[3]	-2.1%	-1.3%	3.0%	7.0%	10.2%	9.9%	2.0%	0.1%	-1.4%	-1.1%	-0.7%	-1.7%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	7600.1	7330.1	6972.6	920.2	377.5	771.3	1246.7	3076.1	7471.4	9243.1	12903.1	7752.3
WSIP 2030 With Project	7540.3	7332.5	7331.4	1111.1	400.3	824.7	1268.0	3051.2	7348.9	9216.2	12894.5	7659.7
Difference	-59.9	2.4	358.8	190.9	22.8	53.4	21.4	-24.9	-122.5	-26.9	-8.6	-92.7
Percent Difference	-0.8%	0.0%	5.1%	20.7%		6.9%	1.7%	-0.8%	-1.6%	-0.3%	-0.1%	-1.2%
Above Normal (14.6%)												
WSIP 2030 Without Project	11439.2	10584.5	9607.7	3591.8	855.7	1179.5	2092.6	4475.8	9112.5	9843.6	12810.8	11783.1
WSIP 2030 With Project	11303.9	10512.5	9968.7	3930.4	958.2	1359.4	2173.3	4544.6	9168.1	9752.9	12674.3	11592.3
Difference	-135.3	-72.0	360.9	338.6	102.5	179.9	80.7	68.8	55.6	-90.8	-136.5	-190.8
Percent Difference	-1.2%	-0.7%	3.8%	9.4%	12.0%	15.3%	3.9%	1.5%	0.6%	-0.9%	-1.1%	-1.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	17882.7	16632.1	11770.3	7589.0	3101.5	2520.0	3558.0	6234.1	10394.3	11689.5	14085.8	16803.1
WSIP 2030 With Project	17174.0	16300.9	11583.0	8082.1	3347.0	2850.8	3686.4	6280.5	10325.8	11641.1	13993.7	16357.6
Difference	-708.7	-331.3	-187.3	493.1	245.5	330.8	128.5	46.5	-68.5	-48.4	-92.1	-445.5
Percent Difference	-4.0%	-2.0%	-1.6%	6.5%	7.9%	13.1%	3.6%	0.7%	-0.7%	-0.4%	-0.7%	-2.7%
Dry (19.5%)												
WSIP 2030 Without Project	17131.8	14869.6	9942.8	9888.7	4180.3	3636.7	5809.1	8943.9	11692.5	14043.8	16094.1	17655.5
WSIP 2030 With Project	16790.6	14483.1	10253.0	10726.0	4943.6	4070.1	5935.3	8964.1	11555.2	13907.0	15898.8	17298.7
Difference	-341.2	-386.5	310.2	837.3	763.3	433.4	126.1	20.2	-137.4	-136.8	-195.3	-356.8
Percent Difference	-2.0%	-2.6%	3.1%	8.5%	18.3%	11.9%	2.2%	0.2%	-1.2%	-1.0%	-1.2%	-2.0%
Critical (14.6%)												
WSIP 2030 Without Project	19674.2	19668.6	15929.4	13164.0	8492.9	7109.6	9085.6	12207.5	14170.0	16082.4	17546.2	18597.6
WSIP 2030 With Project	19428.7	19586.0	16791.5	13584.8	9022.7	7592.8	9137.2	12128.3	13715.0	15620.9	17374.1	18483.5
Difference	-245.5	-82.6	862.1	420.9	529.8	483.2	51.6	-79.2	-455.0	-461.5	-172.1	-114.1
Percent Difference	-1.2%	-0.4%	5.4%	3.2%	6.2%	6.8%	0.6%	-0.6%	-3.2%	-2.9%	-1.0%	-0.6%

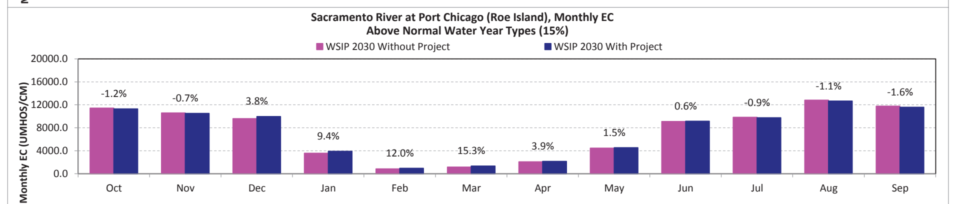
1 Based on the 82-year simulation period

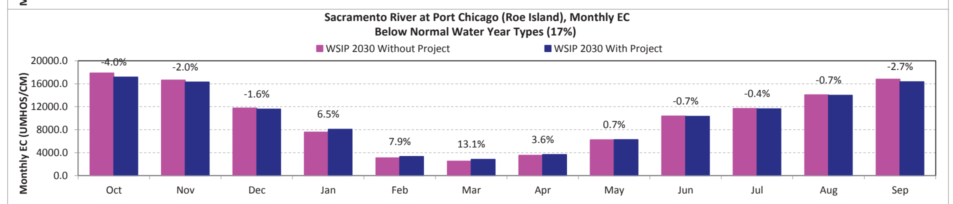
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

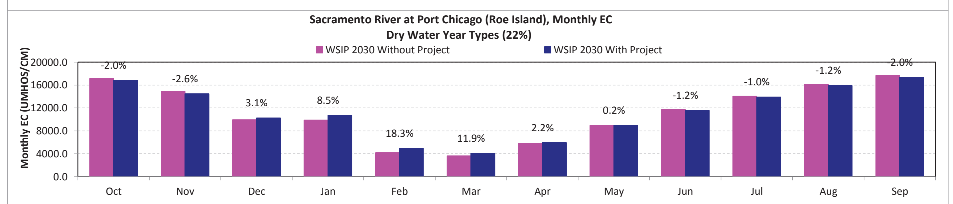
3 Relative difference of the monthly average











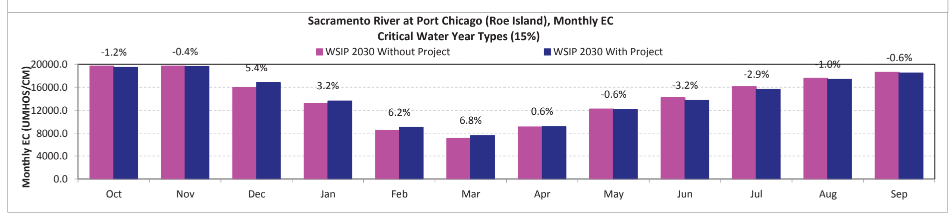


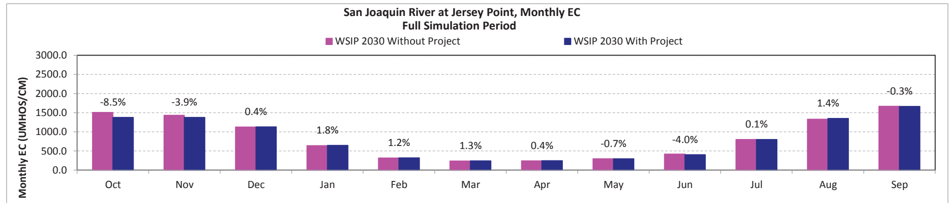
Table SQ-25-a
San Joaquin River at Jersey Point, Monthly EC
Long-term Average and Average by Water Year Type

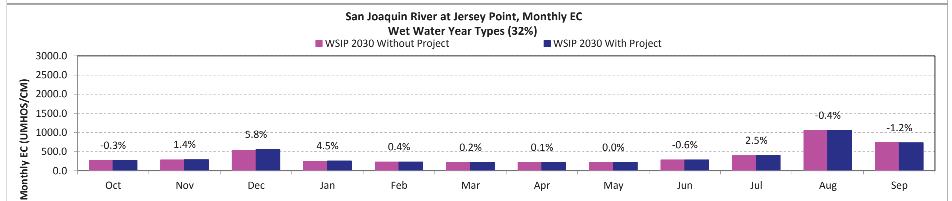
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1506.3	1432.6	1125.4	637.4	317.5	238.2	244.5	298.2	421.1	798.7	1331.4	1670.1
WSIP 2030 With Project	1379.0	1376.2	1130.2	648.6	321.2	241.4	245.5	296.1	404.4	799.5	1349.7	1664.3
Difference	-127.3	-56.4	4.9	11.2	3.7	3.2	1.0	-2.1	-16.7	0.7	18.3	-5.8
Percent Difference[3]	-8.5%	-3.9%	0.4%	1.8%	1.2%	1.3%	0.4%	-0.7%	-4.0%	0.1%	1.4%	-0.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	268.7	284.8	527.2	245.1	227.2	216.8	221.5	221.6	284.1	391.6	1055.8	740.1
WSIP 2030 With Project	267.8	288.9	558.0	256.2	228.2	217.3	221.8	221.6	282.4	401.5	1051.3	730.9
Difference	-0.9	4.1	30.8	11.1	1.0	0.5	0.3	0.0	-1.7	9.9	-4.5	-9.2
Percent Difference	-0.3%	1.4%	5.8%	4.5%	0.4%	0.2%	0.1%	0.0%	-0.6%	2.5%	-0.4%	-1.2%
Above Normal (14.6%)												
WSIP 2030 Without Project	471.2	567.1	837.2	421.1	244.2	212.0	224.0	241.3	331.3	436.8	1063.4	890.1
WSIP 2030 With Project	463.2	581.4	855.0	435.0	248.8	214.1	224.9	241.7	330.1	444.8	1029.7	862.7
Difference	-8.0	14.3	17.9	13.9	4.5	2.1	0.9	0.4	-1.2	7.9	-33.7	-27.5
Percent Difference	-1.7%	2.5%	2.1%	3.3%	1.9%	1.0%	0.4%	0.2%	-0.4%	1.8%	-3.2%	-3.1%
Below Normal (20.7%)												
WSIP 2030 Without Project	2443.6	2179.9	1530.9	696.7	283.8	229.3	235.2	257.9	391.0	784.9	1325.7	2346.9
WSIP 2030 With Project	2143.8	2007.8	1402.4	664.2	283.7	234.2	236.4	257.5	383.2	784.4	1345.7	2264.5
Difference	-299.8	-172.1	-128.5	-32.5	-0.2	4.9	1.2	-0.4	-7.7	-0.4	19.9	-82.4
Percent Difference	-12.3%	-7.9%	-8.4%	-4.7%	-0.1%	2.1%	0.5%	-0.2%	-2.0%	-0.1%	1.5%	-3.5%
Dry (19.5%)												
WSIP 2030 Without Project	2229.2	1939.8	1266.7	825.0	347.4	243.3	248.2	306.5	435.8	1167.8	1608.8	2448.1
WSIP 2030 With Project	2026.1	1799.1	1262.6	876.1	365.9	250.1	251.7	303.6	421.2	1217.9	1676.9	2474.6
Difference	-203.1	-140.7	-4.1	51.1	18.5	6.8	3.4	-2.9	-14.7	50.1	68.1	26.5
Percent Difference	-9.1%	-7.3%	-0.3%	6.2%	5.3%	2.8%	1.4%	-0.9%	-3.4%	4.3%	4.2%	1.1%
Critical (14.6%)												
WSIP 2030 Without Project	2828.3	2954.1	1896.8	1336.9	587.0	315.1	321.0	560.4	819.5	1536.4	1811.9	2391.5
WSIP 2030 With Project	2663.5	2977.5	2035.5	1354.4	581.2	317.6	320.0	550.4	740.3	1446.6	1860.9	2479.6
Difference	-164.7	23.4	138.6	17.4	-5.8	2.5	-1.0	-10.0	-79.2	-89.8	49.0	88.1
Percent Difference	-5.8%	0.8%	7.3%	1.3%	-1.0%	0.8%	-0.3%	-1.8%	-9.7%	-5.8%	2.7%	3.7%

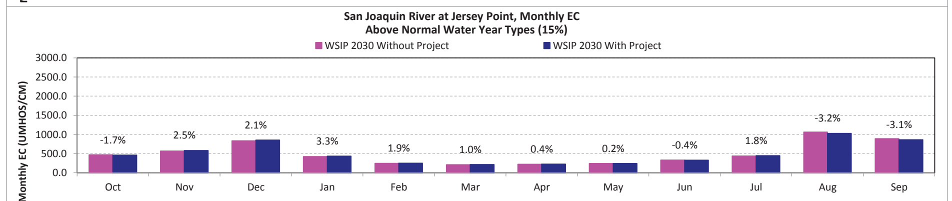
1 Based on the 82-year simulation period

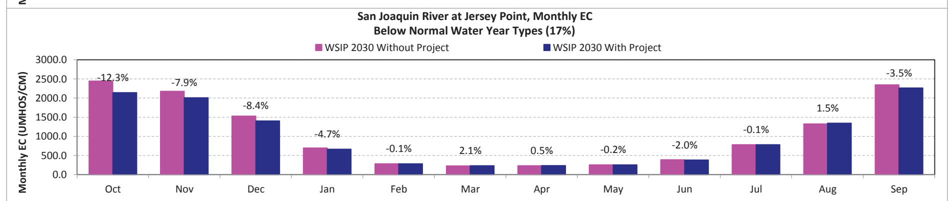
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

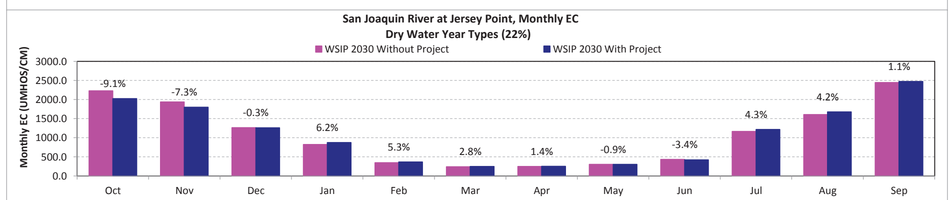
3 Relative difference of the monthly average











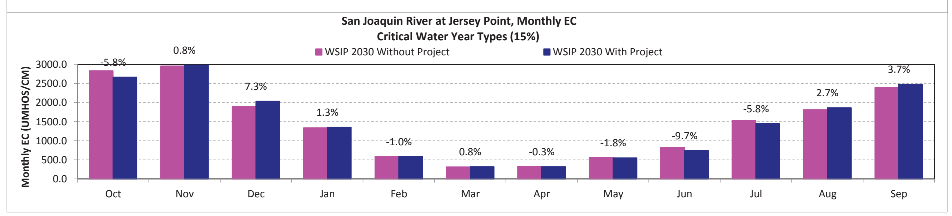


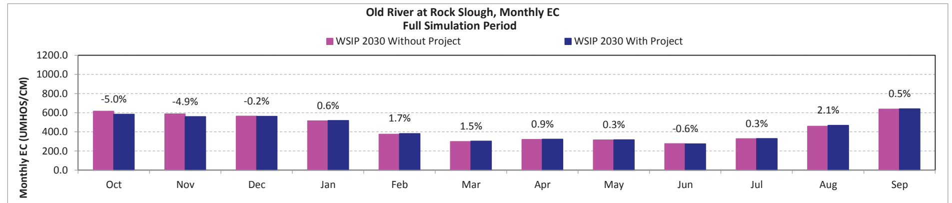
Table SQ-27-a
Old River at Rock Slough, Monthly EC
Long-term Average and Average by Water Year Type

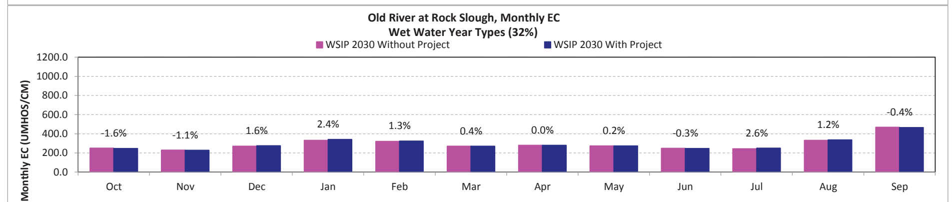
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	614.9	586.6	562.9	514.6	375.6	298.5	320.7	315.9	276.9	327.9	458.0	637.6
WSIP 2030 With Project	584.5	558.2	561.6	517.6	382.2	302.9	323.7	316.8	275.2	328.9	467.5	640.6
Difference	-30.5	-28.5	-1.3	3.0	6.6	4.5	3.0	0.9	-1.7	1.0	9.5	3.0
Percent Difference[3]	-5.0%	-4.9%	-0.2%	0.6%	1.7%	1.5%	0.9%	0.3%	-0.6%	0.3%	2.1%	0.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	250.5	229.8	270.9	332.5	320.5	269.9	279.5	273.3	248.0	244.2	332.0	468.0
WSIP 2030 With Project	246.5	227.3	275.1	340.4	324.5	271.1	279.6	273.7	247.2	250.6	336.1	465.9
Difference	-4.0	-2.5	4.2	8.0	4.0	1.2	0.1	0.5	-0.8	6.4	4.0	-2.1
Percent Difference	-1.6%	-1.1%	1.6%	2.4%	1.3%	0.4%	0.0%	0.2%	-0.3%	2.6%	1.2%	-0.4%
Above Normal (14.6%)												
WSIP 2030 Without Project	263.5	287.3	375.6	436.6	330.1	255.3	318.3	339.9	261.8	249.0	343.1	461.7
WSIP 2030 With Project	257.2	290.4	377.8	453.5	345.9	260.3	319.7	340.1	261.1	248.9	339.6	445.4
Difference	-6.2	3.1	2.2	16.8	15.8	4.9	1.4	0.2	-0.7	-0.1	-3.5	-16.3
Percent Difference	-2.4%	1.1%	0.6%	3.9%	4.8%	1.9%	0.4%	0.1%	-0.3%	0.0%	-1.0%	-3.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	884.4	815.9	746.2	593.4	365.9	300.5	331.6	328.1	261.5	321.8	449.1	772.3
WSIP 2030 With Project	807.4	755.7	700.2	563.9	362.1	303.8	333.0	328.2	261.1	321.5	459.5	771.0
Difference	-77.0	-60.2	-45.9	-29.5	-3.8	3.3	1.4	0.0	-0.4	-0.4	10.4	-1.3
Percent Difference	-8.7%	-7.4%	-6.2%	-5.0%	-1.0%	1.1%	0.4%	0.0%	-0.2%	-0.1%	2.3%	-0.2%
Dry (19.5%)												
WSIP 2030 Without Project	870.6	739.2	642.4	564.6	390.7	304.2	354.5	335.0	275.7	397.8	588.2	779.0
WSIP 2030 With Project	829.3	687.9	640.5	586.2	402.7	314.6	362.8	337.5	274.4	409.1	621.7	796.7
Difference	-41.3	-51.2	-1.9	21.6	11.9	10.4	8.3	2.5	-1.3	11.2	33.5	17.7
Percent Difference	-4.7%	-6.9%	-0.3%	3.8%	3.1%	3.4%	2.3%	0.7%	-0.5%	2.8%	5.7%	2.3%
Critical (14.6%)												
WSIP 2030 Without Project	1002.9	1101.3	993.0	793.5	529.5	390.7	348.1	338.0	375.5	496.8	674.6	787.6
WSIP 2030 With Project	973.5	1062.7	1040.9	793.7	539.6	395.2	353.9	339.8	369.0	475.9	675.3	806.7
Difference	-29.5	-38.6	47.9	0.2	10.1	4.5	5.8	1.7	-6.5	-21.0	0.7	19.1
Percent Difference	-2.9%	-3.5%	4.8%	0.0%	1.9%	1.2%	1.7%	0.5%	-1.7%	-4.2%	0.1%	2.4%

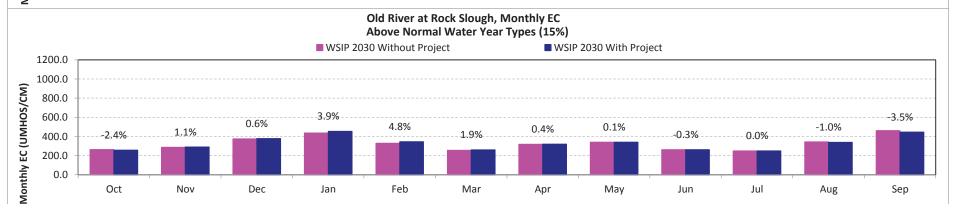
1 Based on the 82-year simulation period

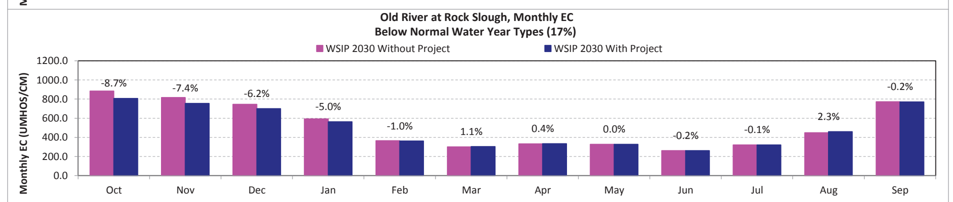
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

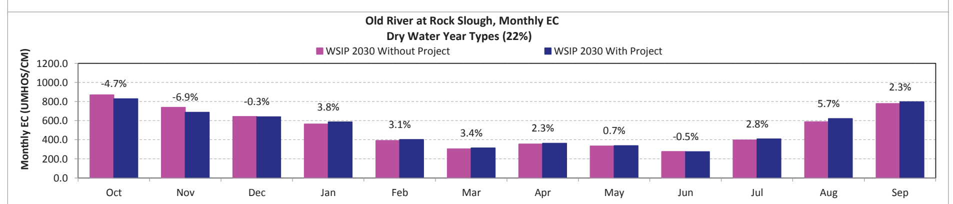
3 Relative difference of the monthly average











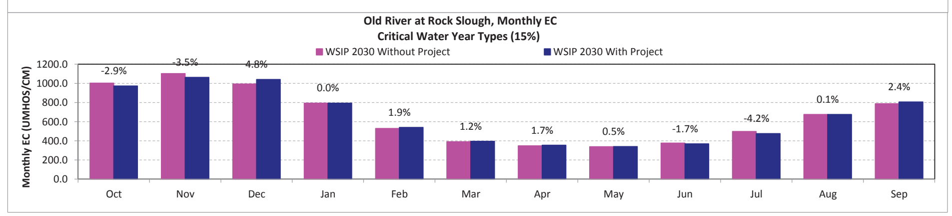


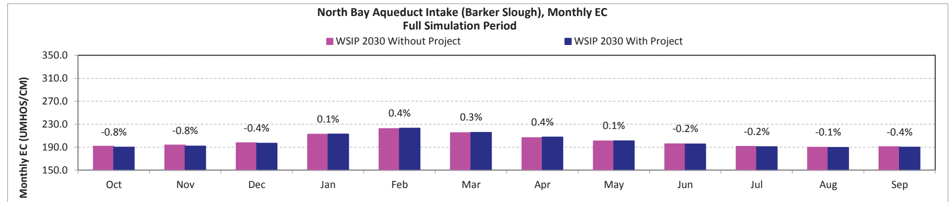
Table SQ-28-a
North Bay Aqueduct Intake (Barker Slough), Monthly EC
Long-term Average and Average by Water Year Type

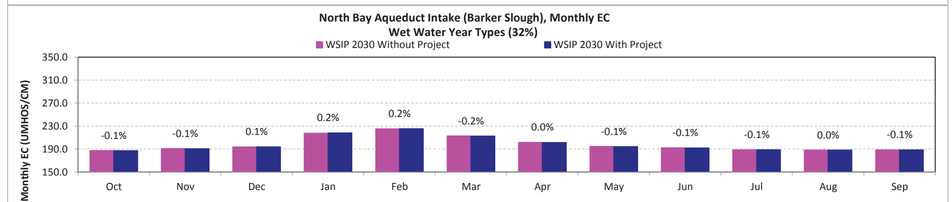
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	191.5	193.6	197.5	212.6	222.3	215.0	206.6	200.7	195.8	191.2	189.8	190.8
WSIP 2030 With Project	190.0	192.0	196.8	212.8	223.1	215.8	207.5	200.9	195.5	190.8	189.6	190.1
Difference	-1.5	-1.6	-0.7	0.2	0.8	0.7	0.9	0.2	-0.3	-0.4	-0.2	-0.7
Percent Difference[3]	-0.8%	-0.8%	-0.4%	0.1%	0.4%	0.3%	0.4%	0.1%	-0.2%	-0.2%	-0.1%	-0.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	187.4	190.9	193.6	217.6	225.1	213.0	201.5	194.4	192.2	188.9	188.2	188.6
WSIP 2030 With Project	187.2	190.7	193.8	218.1	225.5	212.7	201.5	194.3	192.0	188.7	188.2	188.5
Difference	-0.2	-0.3	0.1	0.5	0.4	-0.3	0.0	-0.1	-0.2	-0.1	0.0	-0.1
Percent Difference	-0.1%	-0.1%	0.1%	0.2%	0.2%	-0.2%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	-0.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	188.2	189.9	195.4	215.3	223.4	210.1	199.1	194.2	191.7	188.6	187.9	188.9
WSIP 2030 With Project	188.0	189.6	195.7	215.1	224.3	210.3	199.3	194.4	191.8	188.6	187.9	188.8
Difference	-0.3	-0.3	0.3	-0.2	0.9	0.2	0.2	0.2	0.1	0.0	0.0	-0.1
Percent Difference	-0.1%	-0.2%	0.2%	-0.1%	0.4%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%
Below Normal (20.7%)												
WSIP 2030 Without Project	189.4	190.8	195.5	212.4	219.3	211.9	203.7	195.4	192.3	188.8	188.3	189.0
WSIP 2030 With Project	188.4	189.8	195.0	212.6	220.5	213.5	204.6	195.5	192.2	188.6	188.1	188.5
Difference	-1.0	-1.0	-0.6	0.2	1.2	1.6	0.9	0.1	-0.1	-0.1	-0.2	-0.5
Percent Difference	-0.5%	-0.5%	-0.3%	0.1%	0.5%	0.7%	0.4%	0.1%	-0.1%	-0.1%	-0.1%	-0.3%
Dry (19.5%)												
WSIP 2030 Without Project	194.3	196.9	200.5	208.1	223.8	222.7	212.8	203.8	194.8	190.7	189.0	191.7
WSIP 2030 With Project	191.1	193.7	198.1	208.6	224.8	223.6	214.4	203.9	194.5	190.5	188.5	189.9
Difference	-3.2	-3.2	-2.4	0.5	1.0	0.8	1.6	0.2	-0.3	-0.2	-0.5	-1.8
Percent Difference	-1.7%	-1.6%	-1.2%	0.2%	0.5%	0.4%	0.8%	0.1%	-0.2%	-0.1%	-0.2%	-0.9%
Critical (14.6%)												
WSIP 2030 Without Project	202.4	202.2	206.8	205.7	217.6	218.4	220.7	223.9	213.8	203.1	198.2	198.6
WSIP 2030 With Project	198.4	197.7	205.1	204.9	218.4	220.5	223.3	225.0	212.3	201.0	197.8	197.4
Difference	-4.0	-4.5	-1.7	-0.7	0.8	2.2	2.7	1.1	-1.5	-2.0	-0.4	-1.3
Percent Difference	-2.0%	-2.2%	-0.8%	-0.4%	0.4%	1.0%	1.2%	0.5%	-0.7%	-1.0%	-0.2%	-0.6%

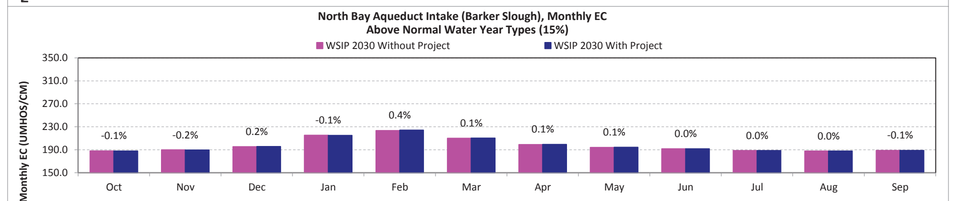
1 Based on the 82-year simulation period

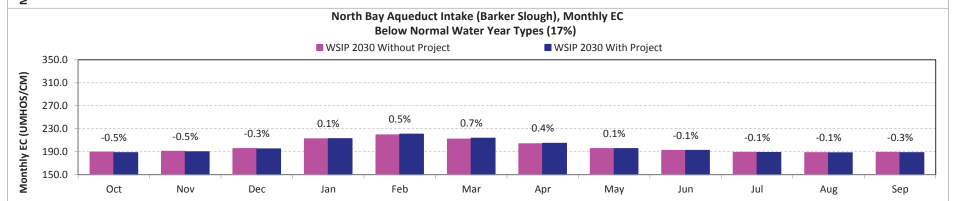
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

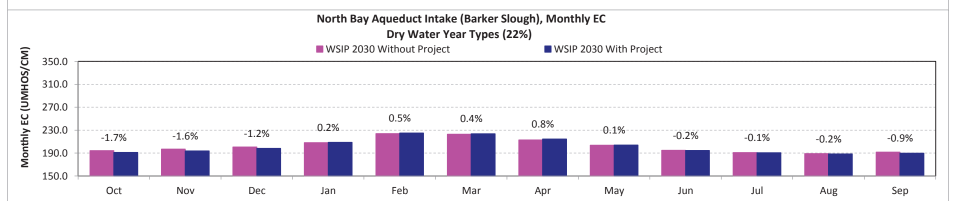
3 Relative difference of the monthly average











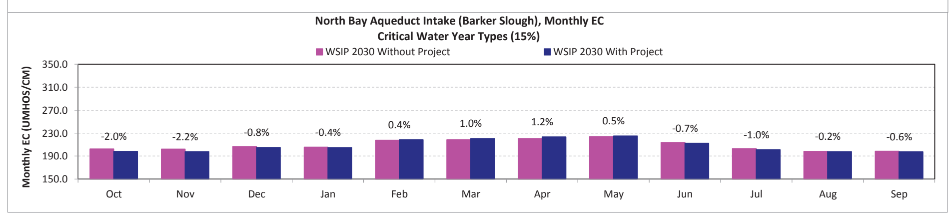


Table SQ-29-a
Old River at Los Vaqueros Intake, Monthly EC
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	562.7	540.7	529.3	549.5	458.5	385.6	361.3	369.6	328.4	328.7	413.3	564.1
WSIP 2030 With Project	543.2	517.6	527.7	549.4	466.0	391.2	364.7	371.4	328.2	328.2	421.6	568.9
Difference	-19.5	-23.1	-1.6	-0.1	7.5	5.6	3.4	1.7	-0.2	-0.5	8.3	4.7
Percent Difference[3]	-3.5%	-4.3%	-0.3%	0.0%	1.6%	1.4%	0.9%	0.5%	-0.1%	-0.1%	2.0%	0.8%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	297.3	271.6	285.0	396.5	368.8	318.0	259.7	271.0	287.7	276.5	314.0	446.7
WSIP 2030 With Project	291.5	267.0	287.0	400.6	373.0	318.6	259.8	271.3	286.3	281.3	318.2	445.3
Difference	-5.8	-4.6	2.0	4.2	4.2	0.7	0.1	0.2	-1.4	4.8	4.2	-1.4
Percent Difference	-2.0%	-1.7%	0.7%	1.0%	1.1%	0.2%	0.0%	0.1%	-0.5%	1.7%	1.3%	-0.3%
Above Normal (14.6%)												
WSIP 2030 Without Project	299.8	309.3	372.1	498.3	414.9	307.3	312.2	356.7	315.0	275.9	317.9	438.6
WSIP 2030 With Project	291.9	309.9	372.8	511.6	437.0	315.5	312.7	357.2	314.3	273.8	315.3	425.7
Difference	-7.9	0.6	0.6	13.2	22.1	8.2	0.5	0.4	-0.7	-2.1	-2.5	-12.9
Percent Difference	-2.6%	0.2%	0.2%	2.7%	5.3%	2.7%	0.2%	0.1%	-0.2%	-0.8%	-0.8%	-2.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	765.6	718.5	680.7	615.9	465.4	398.0	372.9	390.9	314.4	312.3	402.9	658.1
WSIP 2030 With Project	713.8	672.5	646.3	590.0	461.6	400.1	372.9	390.8	314.2	311.6	410.0	661.6
Difference	-51.8	-46.0	-34.4	-25.9	-3.7	2.1	0.0	0.0	-0.1	-0.7	7.2	3.5
Percent Difference	-6.8%	-6.4%	-5.1%	-4.2%	-0.8%	0.5%	0.0%	0.0%	0.0%	-0.2%	1.8%	0.5%
Dry (19.5%)												
WSIP 2030 Without Project	759.5	662.0	592.3	584.8	498.7	419.9	436.1	443.3	344.1	371.3	523.1	665.2
WSIP 2030 With Project	737.5	621.2	591.2	600.3	510.3	433.9	446.4	447.2	344.3	375.3	550.4	682.8
Difference	-22.0	-40.7	-1.2	15.4	11.6	13.9	10.3	3.9	0.1	4.0	27.3	17.6
Percent Difference	-2.9%	-6.2%	-0.2%	2.6%	2.3%	3.3%	2.4%	0.9%	0.0%	1.1%	5.2%	2.6%
Critical (14.6%)												
WSIP 2030 Without Project	828.7	919.0	896.6	778.5	625.8	541.3	506.1	459.8	425.5	456.5	583.7	666.3
WSIP 2030 With Project	818.2	889.8	931.1	771.7	636.0	548.3	514.8	465.4	427.4	441.1	587.6	686.1
Difference	-10.5	-29.2	34.6	-6.8	10.2	7.0	8.6	5.6	2.0	-15.4	3.9	19.8
Percent Difference	-1.3%	-3.2%	3.9%	-0.9%	1.6%	1.3%	1.7%	1.2%	0.5%	-3.4%	0.7%	3.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SQ-30-a
Victoria Canal at Alternative Intake, Monthly EC
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	439.2	433.0	442.4	529.5	500.5	445.4	384.5	372.3	364.3	317.3	328.9	404.9
WSIP 2030 With Project	431.7	423.0	441.2	528.6	502.6	448.5	387.5	374.0	364.8	314.6	329.7	403.3
Difference	-7.4	-10.0	-1.2	-0.8	2.1	3.2	3.0	1.7	0.5	-2.7	0.8	-1.6
Percent Difference[3]	-1.7%	-2.3%	-0.3%	-0.2%	0.4%	0.7%	0.8%	0.5%	0.1%	-0.9%	0.2%	-0.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	352.9	338.4	311.7	437.9	383.3	336.0	260.2	266.3	329.4	323.6	283.4	363.9
WSIP 2030 With Project	348.7	333.8	310.7	442.9	384.7	336.1	260.3	266.6	328.7	326.2	286.9	364.1
Difference	-4.1	-4.6	-1.0	5.1	1.4	0.1	0.1	0.3	-0.7	2.6	3.5	0.2
Percent Difference	-1.2%	-1.4%	-0.3%	1.2%	0.4%	0.0%	0.0%	0.1%	-0.2%	0.8%	1.2%	0.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	347.1	348.8	360.9	498.8	468.6	355.2	319.7	348.9	365.3	308.6	272.2	349.8
WSIP 2030 With Project	339.7	345.8	359.0	501.3	479.2	359.0	320.1	349.4	365.4	304.5	270.7	343.0
Difference	-7.4	-3.0	-1.9	2.5	10.6	3.8	0.4	0.5	0.1	-4.0	-1.5	-6.8
Percent Difference	-2.1%	-0.9%	-0.5%	0.5%	2.3%	1.1%	0.1%	0.1%	0.0%	-1.3%	-0.6%	-1.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	488.3	479.8	508.0	570.9	532.9	475.8	399.9	388.3	351.4	278.6	306.1	423.0
WSIP 2030 With Project	473.4	468.6	494.8	557.0	522.5	476.0	400.3	388.3	351.5	277.5	306.6	425.7
Difference	-14.9	-11.2	-13.2	-13.9	-10.4	0.2	0.4	0.1	0.1	-1.1	0.5	2.7
Percent Difference	-3.1%	-2.3%	-2.6%	-2.4%	-2.0%	0.0%	0.1%	0.0%	0.0%	-0.4%	0.2%	0.6%
Dry (19.5%)												
WSIP 2030 Without Project	508.1	472.8	472.9	549.1	569.2	536.5	487.1	457.9	383.3	309.7	387.2	441.8
WSIP 2030 With Project	501.0	457.2	476.6	555.2	575.9	543.9	496.2	462.0	384.1	303.4	392.9	441.5
Difference	-7.1	-15.7	3.8	6.1	6.7	7.3	9.0	4.1	0.8	-6.3	5.7	-0.3
Percent Difference	-1.4%	-3.3%	0.8%	1.1%	1.2%	1.4%	1.9%	0.9%	0.2%	-2.0%	1.5%	-0.1%
Critical (14.6%)												
WSIP 2030 Without Project	549.4	594.8	662.8	666.2	638.7	598.7	549.9	479.7	429.3	378.0	435.1	470.8
WSIP 2030 With Project	545.3	575.7	672.2	658.9	645.6	606.3	557.2	485.0	432.7	368.1	426.6	462.6
Difference	-4.1	-19.1	9.4	-7.3	6.9	7.5	7.3	5.3	3.4	-9.9	-8.5	-8.2
Percent Difference	-0.7%	-3.2%	1.4%	-1.1%	1.1%	1.3%	1.3%	1.1%	0.8%	-2.6%	-2.0%	-1.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

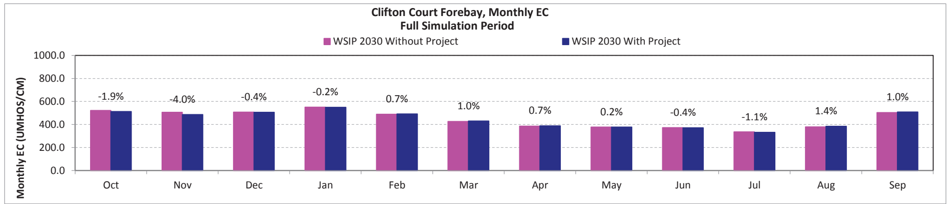
Table SQ-31-a
Clifton Court Forebay, Monthly EC
Long-term Average and Average by Water Year Type

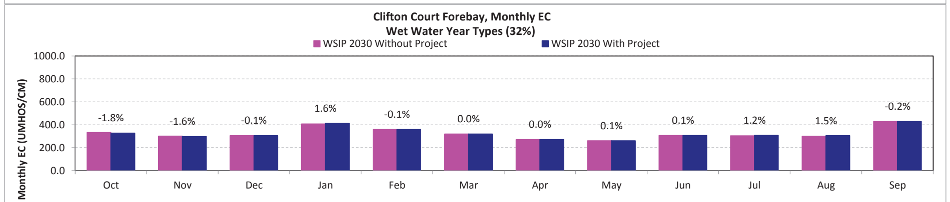
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	522.4	506.3	508.2	551.2	489.1	426.3	385.7	377.7	372.9	335.7	379.4	504.0
WSIP 2030 With Project	512.4	486.1	506.1	549.9	492.5	430.5	388.6	378.6	371.6	331.9	384.7	508.8
Difference	-10.0	-20.2	-2.0	-1.4	3.4	4.2	2.9	0.9	-1.3	-3.8	5.3	4.8
Percent Difference[3]	-1.9%	-4.0%	-0.4%	-0.2%	0.7%	1.0%	0.7%	0.2%	-0.4%	-1.1%	1.4%	1.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	333.0	301.7	305.4	406.8	359.5	319.2	270.8	260.1	306.2	303.8	300.2	428.5
WSIP 2030 With Project	327.1	296.9	305.3	413.2	359.3	319.1	270.9	260.3	306.7	307.4	304.6	427.7
Difference	-5.9	-4.7	-0.2	6.4	-0.3	-0.2	0.1	0.2	0.4	3.6	4.4	-0.8
Percent Difference	-1.8%	-1.6%	-0.1%	1.6%	-0.1%	0.0%	0.0%	0.1%	0.1%	1.2%	1.5%	-0.2%
Above Normal (14.6%)												
WSIP 2030 Without Project	325.9	325.5	376.6	497.2	446.5	335.7	315.8	335.9	351.2	300.7	297.5	418.5
WSIP 2030 With Project	316.7	323.9	376.6	501.5	453.1	339.8	316.5	336.2	349.5	297.0	295.5	408.3
Difference	-9.2	-1.6	0.0	4.3	6.6	4.1	0.7	0.4	-1.7	-3.7	-2.0	-10.3
Percent Difference	-2.8%	-0.5%	0.0%	0.9%	1.5%	1.2%	0.2%	0.1%	-0.5%	-1.2%	-0.7%	-2.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	671.3	640.5	626.7	616.7	517.8	437.6	386.6	382.3	360.3	305.3	364.4	560.0
WSIP 2030 With Project	637.1	603.6	602.1	596.7	508.7	437.1	386.1	382.3	359.7	304.1	368.6	567.6
Difference	-34.1	-36.9	-24.5	-20.1	-9.1	-0.5	-0.4	0.0	-0.6	-1.2	4.2	7.6
Percent Difference	-5.1%	-5.8%	-3.9%	-3.3%	-1.7%	-0.1%	-0.1%	0.0%	-0.2%	-0.4%	1.2%	1.4%
Dry (19.5%)												
WSIP 2030 Without Project	673.8	604.3	558.7	591.1	563.5	507.7	467.8	463.8	415.1	359.2	472.9	571.0
WSIP 2030 With Project	668.1	568.6	557.4	600.6	573.2	518.3	476.9	466.3	409.3	350.2	490.9	586.3
Difference	-5.7	-35.6	-1.4	9.5	9.8	10.6	9.2	2.6	-5.8	-8.9	18.0	15.3
Percent Difference	-0.9%	-5.9%	-0.2%	1.6%	1.7%	2.1%	2.0%	0.5%	-1.4%	-2.5%	3.8%	2.7%
Critical (14.6%)												
WSIP 2030 Without Project	700.5	792.4	826.8	759.9	661.9	615.6	584.4	543.2	495.1	448.9	522.8	577.8
WSIP 2030 With Project	709.8	765.8	849.7	748.9	679.2	627.1	591.4	545.0	495.5	432.5	522.0	591.7
Difference	9.2	-26.6	22.9	-11.1	17.3	11.6	7.0	1.8	0.3	-16.4	-0.8	13.9
Percent Difference	1.3%	-3.4%	2.8%	-1.5%	2.6%	1.9%	1.2%	0.3%	0.1%	-3.6%	-0.2%	2.4%

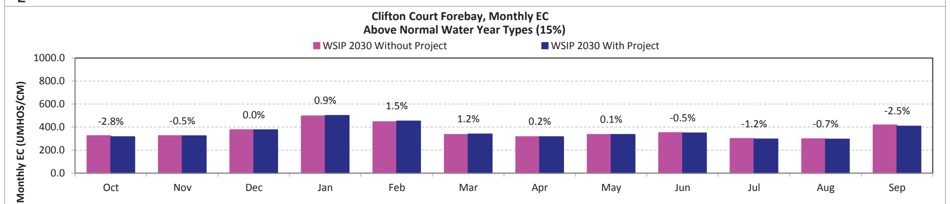
1 Based on the 82-year simulation period

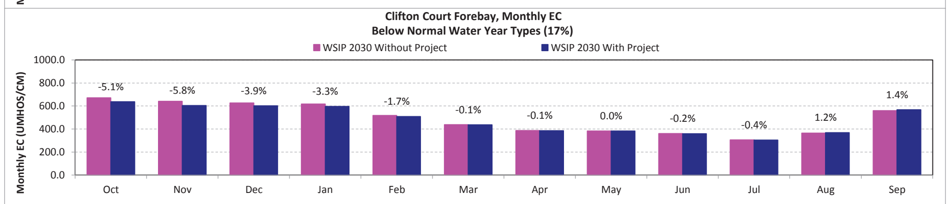
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

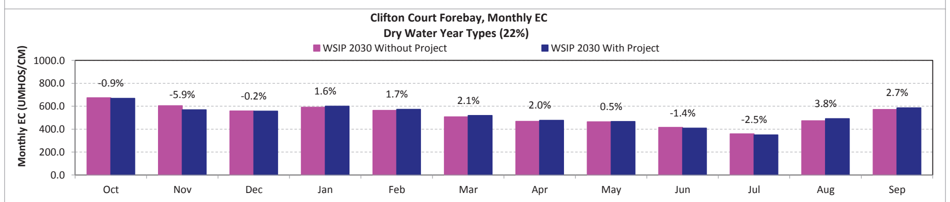
3 Relative difference of the monthly average











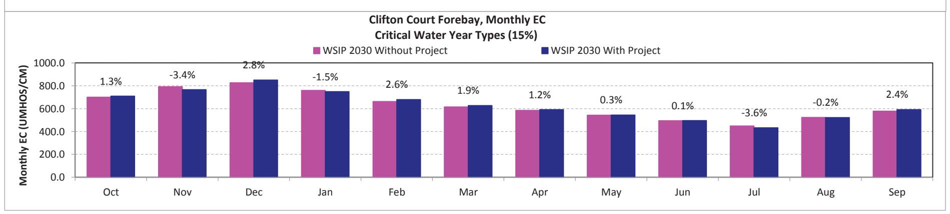


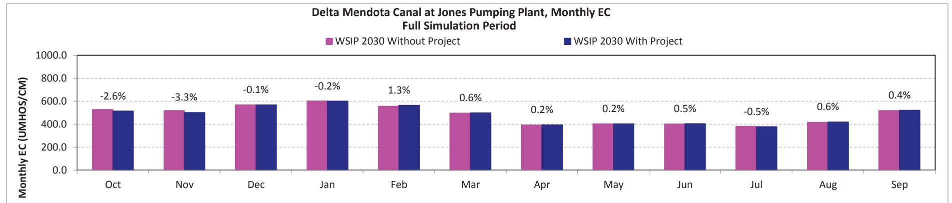
Table SQ-32-a
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Long-term Average and Average by Water Year Type

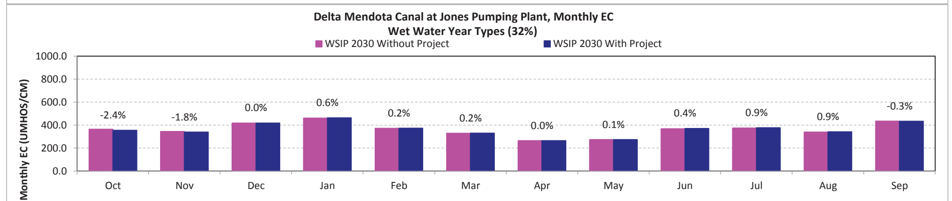
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	527.6	518.3	568.4	602.4	556.7	495.3	392.6	402.6	402.1	380.0	416.4	518.3
WSIP 2030 With Project	514.0	501.5	567.5	601.1	564.0	498.4	393.2	403.5	404.2	378.0	419.1	520.5
Difference	-13.6	-16.9	-0.8	-1.3	7.3	3.1	0.6	0.9	2.1	-2.0	2.7	2.2
Percent Difference[3]	-2.6%	-3.3%	-0.1%	-0.2%	1.3%	0.6%	0.2%	0.2%	0.5%	-0.5%	0.6%	0.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	363.6	344.9	417.8	461.1	372.4	329.4	264.5	273.8	368.7	374.7	339.3	434.7
WSIP 2030 With Project	354.8	338.7	418.0	463.9	373.2	329.9	264.6	274.0	370.3	377.8	342.4	433.6
Difference	-8.8	-6.2	0.2	2.7	0.8	0.5	0.1	0.2	1.7	3.2	3.1	-1.1
Percent Difference	-2.4%	-1.8%	0.0%	0.6%	0.2%	0.2%	0.0%	0.1%	0.4%	0.9%	0.9%	-0.3%
Above Normal (14.6%)												
WSIP 2030 Without Project	365.3	376.8	496.5	554.4	463.3	356.1	320.9	364.1	409.2	374.2	344.7	439.2
WSIP 2030 With Project	357.6	372.8	494.2	557.0	470.5	357.5	321.2	364.4	411.0	364.1	341.7	425.9
Difference	-7.6	-4.0	-2.3	2.6	7.1	1.4	0.3	0.3	1.8	-10.1	-3.1	-13.3
Percent Difference	-2.1%	-1.1%	-0.5%	0.5%	1.5%	0.4%	0.1%	0.1%	0.4%	-2.7%	-0.9%	-3.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	642.3	626.2	647.5	667.0	590.5	502.9	375.1	409.9	382.4	342.8	409.3	573.8
WSIP 2030 With Project	613.0	597.5	631.6	652.1	599.2	503.5	375.3	409.9	383.0	341.2	409.5	578.5
Difference	-29.3	-28.7	-15.8	-14.9	8.7	0.6	0.3	0.0	0.6	-1.6	0.2	4.7
Percent Difference	-4.6%	-4.6%	-2.4%	-2.2%	1.5%	0.1%	0.1%	0.0%	0.2%	-0.5%	0.0%	0.8%
Dry (19.5%)												
WSIP 2030 Without Project	652.0	589.4	598.5	662.2	703.2	618.4	491.2	504.7	413.9	383.2	498.9	586.9
WSIP 2030 With Project	639.6	562.7	598.0	670.0	704.0	626.8	492.9	506.1	416.3	383.2	512.9	598.0
Difference	-12.4	-26.7	-0.4	7.8	0.8	8.5	1.7	1.4	2.4	0.0	14.0	11.1
Percent Difference	-1.9%	-4.5%	-0.1%	1.2%	0.1%	1.4%	0.3%	0.3%	0.6%	0.0%	2.8%	1.9%
Critical (14.6%)												
WSIP 2030 Without Project	703.3	773.8	801.8	773.1	790.7	805.5	624.7	562.9	477.0	445.7	548.8	601.4
WSIP 2030 With Project	694.3	751.5	821.0	767.1	818.1	812.1	625.6	566.3	482.1	437.6	544.8	610.9
Difference	-9.0	-22.3	19.2	-6.0	27.4	6.6	0.9	3.4	5.0	-8.0	-4.0	9.5
Percent Difference	-1.3%	-2.9%	2.4%	-0.8%	3.5%	0.8%	0.1%	0.6%	1.1%	-1.8%	-0.7%	1.6%

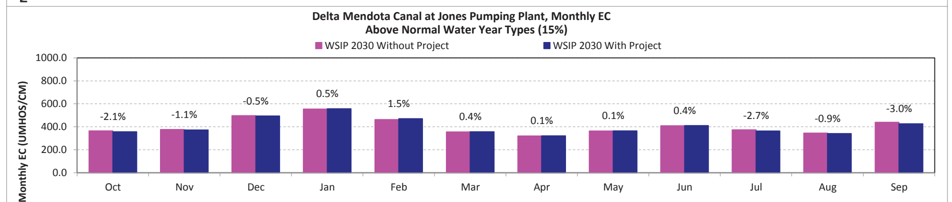
1 Based on the 82-year simulation period

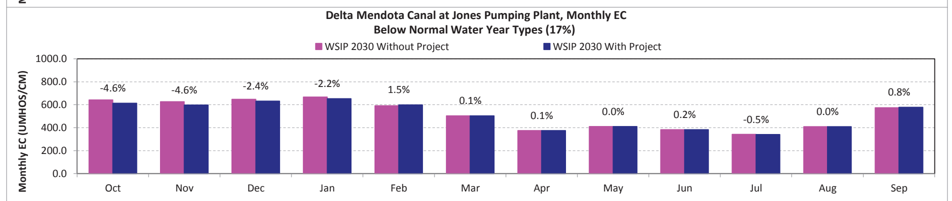
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

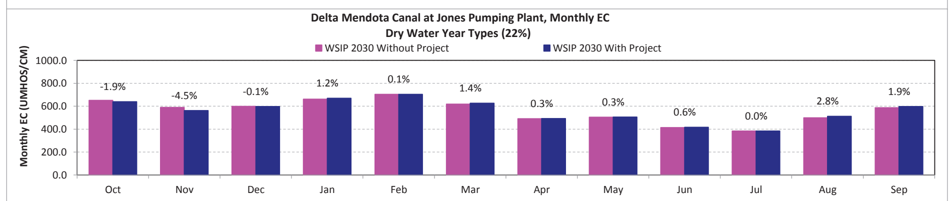
3 Relative difference of the monthly average

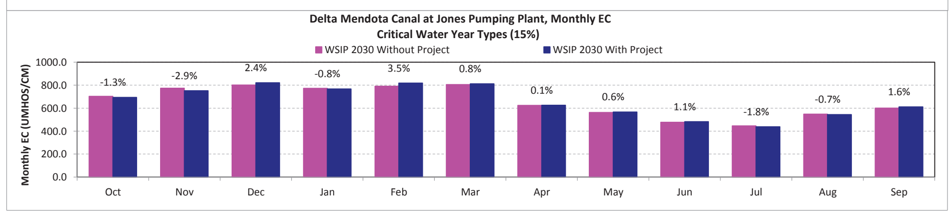












Sacramento-San Joaquin Delta Modeling
Exceedance Probability Charts and Tables

Figure SQ-01-b
X2, Monthly Position
Probability of Exceedance

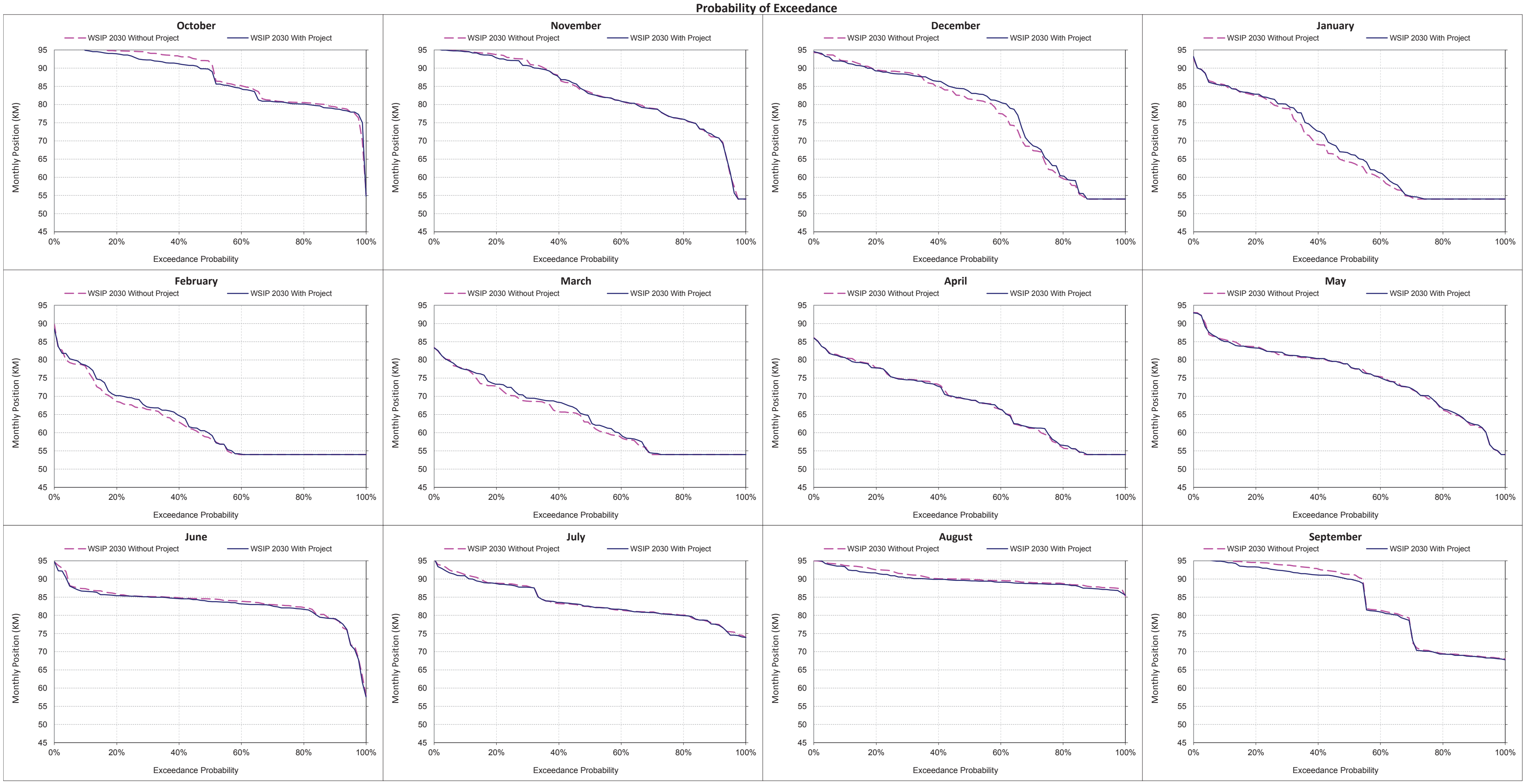


Table SQ-01-b

X2, Monthly Position

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	97.7	97.7	0	0.0%
1.2%	97.5	97.4	0	-0.1%
2.5%	97.4	97.2	0	-0.2%
3.7%	97.0	96.9	0	-0.1%
4.9%	96.9	96.5	0	-0.4%
6.2%	96.7	96.4	0	-0.3%
7.4%	96.2	96.1	0	-0.1%
8.6%	96.0	95.7	0	-0.3%
9.9%	96.0	94.9	-1	-1.1%
11.1%	95.7	94.7	-1	-1.0%
12.3%	95.7	94.6	-1	-1.2%
13.6%	95.5	94.6	-1	-1.0%
14.8%	95.4	94.4	-1	-1.1%
16.0%	95.1	94.2	-1	-0.9%
17.3%	94.9	94.1	-1	-0.8%
18.5%	94.8	94.1	-1	-0.8%
19.8%	94.8	94.0	-1	-0.8%
21.0%	94.8	93.8	-1	-1.0%
22.2%	94.7	93.6	-1	-1.2%
23.5%	94.7	93.6	-1	-1.2%
24.7%	94.7	93.4	-1	-1.4%
25.9%	94.6	92.9	-2	-1.8%
27.2%	94.6	92.5	-2	-2.2%
28.4%	94.6	92.4	-2	-2.3%
29.6%	94.3	92.3	-2	-2.2%
30.9%	94.1	92.3	-2	-1.9%
32.1%	94.1	92.0	-2	-2.2%
33.3%	94.0	91.9	-2	-2.2%
34.6%	93.7	91.7	-2	-2.1%
35.8%	93.6	91.5	-2	-2.3%
37.0%	93.6	91.4	-2	-2.3%
38.3%	93.4	91.4	-2	-2.2%
39.5%	93.4	91.3	-2	-2.2%
40.7%	93.1	91.1	-2	-2.2%
42.0%	93.1	90.9	-2	-2.4%
43.2%	93.1	90.8	-2	-2.5%
44.4%	92.7	90.8	-2	-2.1%
45.7%	92.5	90.5	-2	-2.1%
46.9%	92.1	89.8	-2	-2.5%
48.1%	92.1	89.8	-2	-2.5%
49.4%	92.1	89.8	-2	-2.5%
50.6%	90.9	89.0	-2	-2.0%
51.9%	86.4	85.6	-1	-0.9%
53.1%	86.4	85.6	-1	-0.9%
54.3%	86.1	85.4	-1	-0.8%
55.6%	85.8	85.3	0	-0.6%
56.8%	85.7	85.0	-1	-0.7%
58.0%	85.3	84.7	-1	-0.8%
59.3%	85.3	84.6	-1	-0.8%
60.5%	85.1	84.2	-1	-1.1%
61.7%	84.8	84.1	-1	-0.8%
63.0%	84.7	83.9	-1	-1.0%
64.2%	84.1	83.6	-1	-0.6%
65.4%	83.6	81.3	-2	-2.7%
66.7%	81.6	80.9	-1	-0.8%
67.9%	81.3	80.9	0	-0.5%
69.1%	81.2	80.9	0	-0.4%
70.4%	81.1	80.8	0	-0.4%
71.6%	80.9	80.7	0	-0.2%
72.8%	80.8	80.7	0	-0.2%
74.1%	80.7	80.6	0	-0.2%
75.3%	80.7	80.3	0	-0.4%
76.5%	80.6	80.2	0	-0.5%
77.8%	80.6	80.2	0	-0.5%
79.0%	80.6	80.1	0	-0.5%
80.2%	80.5	80.1	0	-0.5%
81.5%	80.5	80.0	0	-0.6%
82.7%	80.4	79.8	-1	-0.7%
84.0%	80.2	79.7	-1	-0.7%
85.2%	80.1	79.6	0	-0.6%
86.4%	80.1	79.2	-1	-1.1%
87.7%	79.7	79.1	-1	-0.8%
88.9%	79.5	79.0	-1	-0.6%
90.1%	79.4	78.8	-1	-0.8%
91.4%	79.0	78.7	0	-0.4%
92.6%	79.0	78.5	-1	-0.6%
93.8%	78.7	78.3	0	-0.6%
95.1%	77.9	77.9	0	0.0%
96.3%	77.6	77.9	0	0.4%
97.5%	76.3	77.3	1	1.2%
98.8%	70.1	75.0	5	7.0%
100.0%	55.4	54.8	-1	-1.2%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	96.1	96.1	0	0.0%
1.2%	95.6	95.4	0	-0.3%
2.5%	95.5	95.0	0	-0.5%
3.7%	95.2	95.0	0	-0.3%
4.9%	95.1	94.8	0	-0.3%
6.2%	95.1	94.8	0	-0.3%
7.4%	94.8	94.8	0	0.0%
8.6%	94.8	94.7	0	-0.1%
9.9%	94.7	94.5	0	-0.1%
11.1%	94.5	94.5	0	0.0%
12.3%	94.4	94.2	0	-0.2%
13.6%	94.3	94.2	0	-0.1%
14.8%	94.2	93.8	0	-0.5%
16.0%	94.1	93.6	0	-0.5%
17.3%	94.1	93.6	0	-0.5%
18.5%	94.0	93.5	-1	-0.5%
19.8%	93.8	92.9	-1	-0.9%
21.0%	93.7	92.6	-1	-1.2%
22.2%	93.5	92.6	-1	-1.0%
23.5%	92.9	92.2	-1	-0.8%
24.7%	92.9	92.1	-1	-0.9%
25.9%	92.7	92.1	-1	-0.6%
27.2%	92.6	92.0	-1	-0.6%
28.4%	92.6	90.8	-2	-1.9%
29.6%	92.4	90.8	-2	-1.8%
30.9%	91.0	90.5	-1	-0.5%
32.1%	90.9	90.0	-1	-0.9%
33.3%	90.8	90.0	-1	-0.9%
34.6%	90.4	89.8	-1	-0.6%
35.8%	89.8	89.5	0	-0.3%
37.0%	89.2	89.2	0	0.0%
38.3%	88.4	88.3	0	-0.1%
39.5%	88.1	87.9	0	-0.3%
40.7%	86.4	86.9	0	0.5%
42.0%	86.1	86.9	1	0.9%
43.2%	86.0	86.6	1	0.7%
44.4%	85.4	86.0	1	0.6%
45.7%	85.0	85.6	1	0.8%
46.9%	84.0	84.5	1	0.6%
48.1%	83.9	83.9	0	0.0%
49.4%	83.6	83.1	-1	-0.6%
50.6%	83.2	82.8	0	-0.5%
51.9%	82.7	82.5	0	-0.1%
53.1%	82.4	82.2	0	-0.3%
54.3%	82.1	82.0	0	-0.1%
55.6%	81.8	81.9	0	0.1%
56.8%	81.8	81.8	0	0.0%
58.0%	81.3	81.3	0	0.0%
59.3%	81.2	81.1	0	0.0%
60.5%	80.8	80.8	0	-0.1%
61.7%	80.5	80.6	0	0.2%
63.0%	80.4	80.3	0	0.0%
64.2%	80.3	80.3	0	0.0%
65.4%	80.1	79.7	0	-0.5%
66.7%	79.7	79.2	-1	-0.6%
67.9%	79.2	79.1	0	-0.2%
69.1%	79.0	78.9	0	-0.1%
70.4%	78.9	78.8	0	-0.2%
71.6%	78.8	78.7	0	0.0%
72.8%	77.8	77.9	0	0.1%
74.1%	77.3	77.3	0	0.0%
75.3%	76.7	76.8	0	0.1%
76.5%	76.4	76.4	0	0.1%
77.8%	76.3	76.3	0	0.0%
79.0%	76.1	76.1	0	0.0%
80.2%	75.9	76.0	0	0.1%
81.5%	75.3	75.4	0	0.2%
82.7%	75.1	75.1	0	0.0%
84.0%	74.8	74.8	0	0.0%
85.2%	73.3	73.3	0	0.0%
86.4%	73.0	73.2	0	0.3%
87.7%	72.0	72.3	0	0.4%
88.9%	71.2	72.0	1	1.1%
90.1%	71.1	71.1	0	0.1%
91.4%	70.7	70.8	0	0.1%
92.6%	69.6	69.3	0	-0.5%
93.8%	65.2	65.2	0	-0.1%
95.1%	60.4	61.2	1	1.5%
96.3%	57.3	55.7	-2	-2.9%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	94.3	94.6	0	0.3%
1.2%	94.3	94.3	0	0.0%
2.5%	93.8	94.0	0	0.3%
3.7%	93.7	93.3	0	-0.5%
4.9%	93.6	93.0	-1	-0.6%
6.2%	93.6	92.0	-2	-1.7%
7.4%	93.0	92.0	-1	-1.0%
8.6%	92.2	92.0	0	-0.2%
9.9%	92.0	91.8	0	-0.3%
11.1%	91.9	91.3	-1	-0.7%
12.3%	91.9	91.2	-1	-0.8%
13.6%	91.5	90.8	-1	-0.8%
14.8%	91.1	90.7	0	-0.5%
16.0%	90.6	90.5	0	-0.1%
17.3%	90.5	90.0	-1	-0.6%
18.5%	90.0	90.0	0	-0.1%
19.8%	89.5	89.3	0	-0.3%
21.0%	89.4	89.2	0	-0.3%
22.2%	89.3	88.9	0	-0.4%
23.5%	89.2	88.9	0	-0.3%
24.7%	89.2	88.7	-1	-0.6%
25.9%	89.2	88.5	-1	-0.7%
27.2%	89.0	88.4	-1	-0.7%
28.4%	89.0	88.4	-1	-0.7%
29.6%	88.8	88.3	0	-0.5%
30.9%	88.7	88.1	-1	-0.7%
32.1%	88.4	88.0	0	-0.5%
33.3%	88.3	87.8	-1	-0.6%
34.6%	87.7	87.7	0	0.0%
35.8%	86.2	87.6	1	1.7%
37.0%	85.9	87.1	1	1.4%
38.3%	85.7	86.6	1	1.0%
39.5%	84.7	86.4	2	2.0%
40.7%	84.7	86.4	2	1.9%
42.0%	84.0	85.7	2	2.0%
43.2%	84.0	85.1	1	1.3%
44.4%	83.7	84.8	1	1.2%
45.7%	82.6	84.5	2	2.4%
46.9%	82.5	84.4	2	2.3%
48.1%	82.3	84.4	2	2.5%
49.4%	81.6	83.9	2	2.8%
50.6%	81.4	83.1	2	2.0%
51.9%	81.2	83.0	2	2.2%
53.1%	81.1	82.9	2	2.2%
54.3%	80.9	82.8	2	2.3%
55.6%	80.5	82.3	2	2.2%
56.8%	80.3	81.3	1	1.2%
58.0%	79.3	81.2	2	2.4%
59.3%	77.6	80.9	3	4.3%
60.5%	77.4	80.4	3	3.8%
61.7%	76.7	80.2	4	4.6%
63.0%	74.4	79.0	5	6.2%
64.2%	74.2	78.7	4	6.0%
65.4%	72.8	77.1	4	5.8%
66.7%	70.1	73.7	4	5.1%
67.9%	68.6	71.0	2	3.5%
69.1%	68.5	69.6	1	1.6%
70.4%	67.3	68.7	1	2.0%
71.6%	67.2	68.3	1	1.6%
72.8%	67.0	67.6	1	0.9%
74.1%	64.3	65.4	1	1.8%
75.3%	62.2	64.6	2	3.9%
76.5%	62.0	63.2	1	2.1%
77.8%	61.1	63.2	2	3.4%
79.0%	60.0	60.4	0	0.7%
80.2%	59.5	60.3	1	1.3%
81.5%	59.2	59.3	0	0.2%
82.7%	57.8	59.2	1	2.4%
84.0%	57.7	59.1	1	2.5%
85.2%	55.4	55.6	0	0.4%
86.4%	54.7	55.5	1	1.4%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	92.7	93.2	1	0.6%
1.2%	90.1	90.1	0	-0.1%
2.5%	89.7	89.6	0	-0.1%
3.7%	88.6	88.6	0	0.0%
4.9%	86.5	86.2	0	-0.4%
6.2%	86.2	85.9	0	-0.4%
7.4%	85.7	85.5	0	-0.2%
8.6%	85.7	85.4	0	-0.4%
9.9%	85.5	85.3	0	-0.2%
11.1%	84.6	85.1	0	0.6%
12.3%	84.4	84.3	0	0.0%
13.6%	84.3	84.2	0	-0.1%
14.8%	83.5	83.6	0	0.2%
16.0%	83.3	83.5	0	0.2%
17.3%	83.0	83.3	0	0.4%
18.5%	82.8	83.0	0	0.3%
19.8%	82.5	82.9	0	0.5%
21.0%	82.4	82.8	0	0.5%
22.2%	82.0	82.1	0	0.1%
23.5%	81.4	82.0	1	0.7%
24.7%	80.6	81.7	1	1.3%
25.9%	79.8	81.4	2	2.0%
27.2%	79.5	80.2	1	0.9%
28.4%	79.1	80.2	1	1.4%
29.6%	78.9	80.2	1	1.6%
30.9%	78.9	79.3	0	0.5%
32.1%	76.1	79.1	3	3.9%
33.3%	75.0	77.8	3	3.7%
34.6%	74.5	77.7	3	4.4%
35.8%	71.8	75.1	3	4.5%
37.0%	71.5	74.6	3	4.3%
38.3%	70.2	73.6	3	4.8%
39.5%	69.1	72.8	4	5.3%
40.7%	68.9	72.5	4	5.3%
42.0%	68.9	71.7	3	4.1%
43.2%	66.6	69.7	3	4.7%
44.4%	66.5	69.1	3	4.0%
45.7%	66.2	68.6	2	3.6%
46.9%	65.0	67.0	2	3.1%
48.1%	64.6	66.9	2	3.7%
49.4%	64.3	66.8	3	4.0%
50.6%	64.1	66.3	2	3.4%
51.9%	63.7	66.1	2	3.8%
53.1%	63.1	65.1	2	3.3%
54.3%	62.9	64.8	2	3.1%
55.6%	61.2	64.2	3	4.9%
56.8%	61.0	62.1	1	1.7%
58.0%	60.7	62.0	1	2.2%
59.3%	60.1	61.4	1	2.2%
60.5%	59.5	61.0	2	2.6%
61.7%	58.3	60.0	2	3.0%
63.0%	57.7	59.0	1	2.3%
64.2%	57.1	58.3	1	2.0%
65.4%	56.5	57.9	1	2.3%
66.7%	56.4	56.6	0	0.4%
67.9%	54.9	55.2	0	0.5%
69.1%	54.8	54.9	0	0.1%
70.4%	54.3	54.7	0	0.7%
71.6%	54.0	54.6	1	1.1%
72.8%	54.0	54.3	0	0.6%
74.1%	54.0	54.0	0	0.0%
75.3%	54.0	54.0	0	0.0%
76.5%	54.0	54.0	0	0.0%
77.8%	54.0	54.0	0	0.0%
79.0%	54.0	54.0	0	0.0%
80.2%	54.0	54.0	0	0.0%
81.5%	54.0	54.0	0	0.0%
82.7%	54.0	54.0	0	0.0%
84.0%	54.0	54.0	0	0.0%
85.2%	54.0	54.0	0	0.0%
86.4%	54.0	54.0	0	0.0%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

Table SQ-01-b

X2, Monthly Position

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	89.8	88.5	-1	-1.4%
1.2%	83.2	83.7	0	0.5%
2.5%	82.7	81.8	-1	-1.0%
3.7%	80.0	81.8	2	2.2%
4.9%	79.3	80.3	1	1.4%
6.2%	78.9	80.0	1	1.4%
7.4%	78.8	79.7	1	1.2%
8.6%	78.7	78.9	0	0.2%
9.9%	78.4	78.6	0	0.3%
11.1%	76.4	78.1	2	2.2%
12.3%	74.9	77.1	2	3.0%
13.6%	72.7	74.7	2	2.8%
14.8%	72.0	74.5	2	3.4%
16.0%	70.7	73.8	3	4.3%
17.3%	70.3	71.5	1	1.7%
18.5%	69.5	70.7	1	1.7%
19.8%	68.6	70.2	2	2.3%
21.0%	68.4	70.2	2	2.6%
22.2%	67.9	70.0	2	3.1%
23.5%	67.7	69.7	2	2.9%
24.7%	67.7	69.6	2	2.9%
25.9%	67.0	69.2	2	3.3%
27.2%	66.9	69.1	2	3.4%
28.4%	66.8	67.9	1	1.5%
29.6%	66.4	67.1	1	1.0%
30.9%	66.3	66.9	1	0.9%
32.1%	66.1	66.8	1	1.2%
33.3%	65.8	66.8	1	1.5%
34.6%	64.9	66.2	1	2.0%
35.8%	64.3	66.2	2	3.0%
37.0%	64.1	66.0	2	2.9%
38.3%	63.2	65.7	2	3.9%
39.5%	63.2	64.9	2	2.7%
40.7%	62.6	64.4	2	3.0%
42.0%	61.8	63.9	2	3.3%
43.2%	61.3	61.6	0	0.6%
44.4%	60.9	61.4	0	0.7%
45.7%	60.4	61.3	1	1.4%
46.9%	59.6	60.6	1	1.6%
48.1%	58.9	60.6	2	2.7%
49.4%	58.7	60.0	1	2.1%
50.6%	58.1	59.2	1	1.9%
51.9%	57.4	57.2	0	-0.5%
53.1%	56.9	56.9	0	0.0%
54.3%	56.8	56.8	0	0.0%
55.6%	54.9	55.4	0	0.8%
56.8%	54.4	55.0	1	1.1%
58.0%	54.4	54.2	0	-0.2%
59.3%	54.0	54.2	0	0.4%
60.5%	54.0	54.0	0	0.0%
61.7%	54.0	54.0	0	0.0%
63.0%	54.0	54.0	0	0.0%
64.2%	54.0	54.0	0	0.0%
65.4%	54.0	54.0	0	0.0%
66.7%	54.0	54.0	0	0.0%
67.9%	54.0	54.0	0	0.0%
69.1%	54.0	54.0	0	0.0%
70.4%	54.0	54.0	0	0.0%
71.6%	54.0	54.0	0	0.0%
72.8%	54.0	54.0	0	0.0%
74.1%	54.0	54.0	0	0.0%
75.3%	54.0	54.0	0	0.0%
76.5%	54.0	54.0	0	0.0%
77.8%	54.0	54.0	0	0.0%
79.0%	54.0	54.0	0	0.0%
80.2%	54.0	54.0	0	0.0%
81.5%	54.0	54.0	0	0.0%
82.7%	54.0	54.0	0	0.0%
84.0%	54.0	54.0	0	0.0%
85.2%	54.0	54.0	0	0.0%
86.4%	54.0	54.0	0	0.0%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	83.4	83.3	0	-0.1%
1.2%	82.5	82.6	0	0.1%
2.5%	81.1	81.2	0	0.1%
3.7%	80.2	80.2	0	0.0%
4.9%	80.0	79.7	0	-0.4%
6.2%	78.4	79.1	1	0.9%
7.4%	78.2	78.1	0	-0.1%
8.6%	77.8	77.7	0	-0.2%
9.9%	77.7	77.4	0	-0.4%
11.1%	77.1	77.2	0	0.2%
12.3%	76.2	76.7	1	0.7%
13.6%	74.9	76.3	1	1.9%
14.8%	73.5	76.2	3	3.6%
16.0%	73.4	75.8	2	3.3%
17.3%	72.9	74.2	1	1.7%
18.5%	72.9	73.7	1	1.0%
19.8%	72.8	73.3	0	0.7%
21.0%	72.3	73.3	1	1.4%
22.2%	71.3	73.2	2	2.5%
23.5%	70.5	72.5	2	2.8%
24.7%	70.2	72.5	2	3.2%
25.9%	70.1	71.3	1	1.7%
27.2%	69.4	70.5	1	1.5%
28.4%	68.8	70.4	2	2.3%
29.6%	68.7	69.5	1	1.2%
30.9%	68.6	69.5	1	1.3%
32.1%	68.6	69.5	1	1.3%
33.3%	68.6	69.3	1	1.0%
34.6%	68.5	69.1	1	0.8%
35.8%	68.1	68.9	1	1.2%
37.0%	67.7	68.8	1	1.6%
38.3%	66.2	68.7	3	3.8%
39.5%	65.8	68.4	3	4.0%
40.7%	65.7	68.2	3	3.9%
42.0%	65.7	67.8	2	3.2%
43.2%	65.5	67.4	2	2.9%
44.4%	65.5	67.1	2	2.5%
45.7%	65.3	66.6	1	1.9%
46.9%	64.7	65.3	1	0.9%
48.1%	63.0	64.9	2	3.1%
49.4%	62.9	64.7	2	2.9%
50.6%	61.9	62.5	1	1.0%
51.9%	61.0	62.0	1	1.7%
53.1%	60.4	62.0	2	2.7%
54.3%	60.2	61.7	2	2.5%
55.6%	59.9	61.3	1	2.4%
56.8%	59.4	61.1	2	2.9%
58.0%	59.3	60.2	1	1.5%
59.3%	59.1	60.0	1	1.5%
60.5%	58.4	59.0	1	1.0%
61.7%	58.1	58.5	0	0.7%
63.0%	58.1	58.4	0	0.6%
64.2%	57.9	58.3	0	0.7%
65.4%	56.7	57.9	1	2.1%
66.7%	56.2	57.5	1	2.3%
67.9%	56.0	55.6	0	-0.7%
69.1%	54.0	54.5	0	0.9%
70.4%	54.0	54.3	0	0.6%
71.6%	54.0	54.3	0	0.6%
72.8%	54.0	54.0	0	0.0%
74.1%	54.0	54.0	0	0.0%
75.3%	54.0	54.0	0	0.0%
76.5%	54.0	54.0	0	0.0%
77.8%	54.0	54.0	0	0.0%
79.0%	54.0	54.0	0	0.0%
80.2%	54.0	54.0	0	0.0%
81.5%	54.0	54.0	0	0.0%
82.7%	54.0	54.0	0	0.0%
84.0%	54.0	54.0	0	0.0%
85.2%	54.0	54.0	0	0.0%
86.4%	54.0	54.0	0	0.0%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	86.1	86.0	0	-0.1%
1.2%	85.2	85.2	0	0.0%
2.5%	83.8	83.7	0	-0.1%
3.7%	83.1	83.2	0	0.0%
4.9%	82.0	81.8	0	-0.2%
6.2%	81.7	81.5	0	-0.2%
7.4%	81.5	81.3	0	-0.3%
8.6%	81.0	80.8	0	-0.2%
9.9%	80.7	80.6	0	-0.1%
11.1%	80.5	80.2	0	-0.4%
12.3%	80.4	79.5	-1	-1.1%
13.6%	79.6	79.3	0	-0.4%
14.8%	79.5	79.3	0	-0.2%
16.0%	79.3	79.1	0	-0.2%
17.3%	79.1	79.0	0	-0.1%
18.5%	78.9	77.9	-1	-1.2%
19.8%	77.9	77.8	0	-0.1%
21.0%	77.8	77.8	0	0.0%
22.2%	77.8	77.5	0	-0.3%
23.5%	76.2	76.5	0	0.5%
24.7%	75.4	75.4	0	0.0%
25.9%	75.0	75.1	0	0.1%
27.2%	74.9	74.8	0	-0.2%
28.4%	74.8	74.7	0	-0.1%
29.6%	74.7	74.5	0	-0.2%
30.9%	74.6	74.5	0	-0.1%
32.1%	74.6	74.5	0	-0.1%
33.3%	74.5	74.2	0	-0.4%
34.6%	74.2	74.2	0	0.0%
35.8%	74.2	73.7	0	-0.6%
37.0%	74.1	73.6	-1	-0.7%
38.3%	73.5	73.4	0	-0.1%
39.5%	73.4	72.9	0	-0.7%
40.7%	72.9	72.6	0	-0.5%
42.0%	71.6	70.6	-1	-1.5%
43.2%	70.2	70.2	0	0.1%
44.4%	69.7	70.0	0	0.4%
45.7%	69.6	69.7	0	0.1%
46.9%	69.5	69.7	0	0.2%
48.1%	69.4	69.3	0	0.0%
49.4%	69.2	69.2	0	0.0%
50.6%	68.9	68.9	0	0.0%
51.9%	68.9	68.9	0	0.0%
53.1%	68.2	68.2	0	0.1%
54.3%	68.1	68.2	0	0.2%
55.6%	68.0	67.9	0	-0.1%
56.8%	68.0	67.8	0	-0.3%
58.0%	66.9	67.7	1	1.3%
59.3%	66.5	66.6	0	0.1%
60.5%	66.2	66.3	0	0.0%
61.7%	65.1	65.1	0	0.0%
63.0%	65.0	64.6	0	-0.5%
64.2%	62.4	62.5	0	0.1%
65.4%	62.2	62.4	0	0.3%
66.7%	61.8	62.0	0	0.2%
67.9%	61.7	61.8	0	0.1%
69.1%	61.2	61.5	0	0.5%
70.4%	61.2	61.4	0	0.3%
71.6%	61.1	61.3	0	0.3%
72.8%	60.0	61.3	1	2.0%
74.1%	59.6	61.2	2	2.7%
75.3%	59.2	59.5	0	0.6%
76.5%	57.6	58.2	1	1.1%
77.8%	57.2	57.6	0	0.7%
79.0%	56.4	56.7	0	0.5%
80.2%	55.7	56.5	1	1.4%
81.5%	55.6	56.4	1	1.4%
82.7%	55.6	55.6	0	0.0%
84.0%	55.6	55.6	0	0.0%
85.2%	54.7	54.7	0	0.1%
86.4%	54.0	54.6	1	1.0%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	93.0	92.9	0	-0.1%
1.2%	93.0	92.8	0	-0.2%
2.5%	92.1	92.3	0	0.2%
3.7%	90.2	89.1	-1	-1.2%
4.9%	87.0	87.7	1	0.8%
6.2%	86.5	86.9	0	0.4%
7.4%	86.5	86.3	0	-0.2%
8.6%	85.8	85.5	0	-0.4%
9.9%	85.6	85.1	-1	-0.6%
11.1%	85.3	85.0	0	-0.4%
12.3%	85.2	84.5	-1	-0.8%
13.6%	84.9	83.9	-1	-1.1%
14.8%	84.2	83.8	0	-0.5%
16.0%	83.8	83.8	0	0.0%
17.3%	83.8	83.5	0	-0.3%
18.5%	83.7	83.4	0	-0.4%
19.8%	83.6	83.3	0	-0.4%
21.0%	83.5	83.2	0	-0.3%
22.2%	83.0	82.9	0	-0.1%
23.5%	82.5	82.4	0	-0.1%
24.7%	82.3	82.3	0	0.0%
25.9%	82.2	82.3	0	0.1%
27.2%	81.5	82.2	1	0.9%
28.4%	81.5	82.1	1	0.7%
29.6%	81.4	81.4	0	0.1%
30.9%	81.2	81.2	0	0.0%
32.1%	81.2	81.2	0	0.1%
33.3%	80.9	81.1	0	0.3%
34.6%	80.7	80.9	0	0.3%
35.8%	80.7	80.9	0	0.2%
37.0%	80.5	80.7	0	0.3%
38.3%	80.4	80.6	0	0.3%
39.5%	80.3	80.4	0	0.1%
40.7%	80.3	80.4	0	0.1%
42.0%	80.2	80.4	0	0.2%
43.2%	79.8	79.9	0	0.1%
44.4%	79.6	79.6	0	0.0%
45.7%	79.5	79.6	0	0.2%
46.9%	79.4	79.3	0	-0.2%
48.1%	78.9	79.0	0	0.0%
49.4%	78.9	78.9	0	0.1%
50.6%	77.9	77.9	0	0.0%
51.9%	77.5	77.6	0	0.1%
53.1%	77.5	77.5	0	0.1%
54.3%	77.4	76.5	-1	-1.1%
55.6%	76.4	76.2	0	-0.2%
56.8%	76.1	76.1	0	0.1%
58.0%	75.6	75.6	0	0.0%
59.3%	75.5	75.4	0	-0.1%
60.5%	75.3	74.9	0	-0.6%
61.7%	74.8	74.4	0	-0.5%
63.0%	74.2	74.1	0	0.0%
64.2%	74.0	74.0	0	0.0%
65.4%	74.0	73.1	-1	-1.1%
66.7%	72.7	72.9	0	0.2%
67.9%	72.6	72.7	0	0.1%
69.1%	72.5	72.4	0	-0.1%
70.4%	71.7	72.0	0	0.3%
71.6%	71.3	71.2	0	-0.1%
72.8%	70.2	70.2	0	0.1%
74.1%	70.1	70.2	0	0.1%
75.3%	69.3	70.2	1	1.3%
76.5%	69.2	69.3	0	0.1%
77.8%	68.4	68.4	0	0.0%
79.0%	67.0	67.3	0	0.4%
80.2%	66.2	66.4	0	0.4%
81.5%	65.8	66.3	0	0.7%
82.7%	65.1	65.9	1	1.2%
84.0%	64.8	65.4	1	1.0%
85.2%	64.7	64.8	0	0.2%
86.4%	64.0	64.1	0	0.2%
87.7%	63.2	63.1	0	-0.1%
88.9%	62.1	62.6	1	0.8%
90.1%	62.1	62.3	0	0.3%
91.4%	61.5	62.1	1	1.1%
92.6%	61.4	61.4	0	0.1%
93.8%	60.1	60.1	0	-0.1%
95.1%	56.7	56.7	0	0.1%
96.3%	55.5	55.5	0	0.0%
97.5%	55.0	55.1	0	0.1%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

Table SQ-01-b
X2, Monthly Position
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	94.7	94.7	0	0.0%
1.2%	93.8	92.3	-1	-1.6%
2.5%	93.0	92.2	-1	-0.9%
3.7%	92.1	90.4	-2	-1.8%
4.9%	88.2	88.1	0	-0.1%
6.2%	87.9	87.5	0	-0.4%
7.4%	87.6	87.1	-1	-0.6%
8.6%	87.4	86.7	-1	-0.8%
9.9%	87.3	86.6	-1	-0.8%
11.1%	87.1	86.5	-1	-0.6%
12.3%	86.8	86.5	0	-0.4%
13.6%	86.8	86.4	0	-0.5%
14.8%	86.7	85.7	-1	-1.2%
16.0%	86.4	85.7	-1	-0.8%
17.3%	86.3	85.6	-1	-0.8%
18.5%	86.1	85.5	-1	-0.7%
19.8%	85.9	85.4	0	-0.6%
21.0%	85.6	85.4	0	-0.3%
22.2%	85.6	85.4	0	-0.3%
23.5%	85.4	85.4	0	0.0%
24.7%	85.3	85.3	0	0.0%
25.9%	85.3	85.3	0	0.0%
27.2%	85.2	85.2	0	0.0%
28.4%	85.2	85.2	0	0.0%
29.6%	85.2	85.1	0	-0.1%
30.9%	85.2	85.0	0	-0.2%
32.1%	85.2	85.0	0	-0.2%
33.3%	85.1	85.0	0	-0.2%
34.6%	85.1	85.0	0	-0.2%
35.8%	85.0	84.9	0	-0.1%
37.0%	85.0	84.8	0	-0.2%
38.3%	84.9	84.7	0	-0.3%
39.5%	84.9	84.6	0	-0.3%
40.7%	84.7	84.6	0	-0.2%
42.0%	84.7	84.5	0	-0.2%
43.2%	84.7	84.5	0	-0.2%
44.4%	84.6	84.4	0	-0.3%
45.7%	84.6	84.3	0	-0.4%
46.9%	84.6	84.1	0	-0.6%
48.1%	84.6	84.1	-1	-0.6%
49.4%	84.5	83.8	-1	-0.8%
50.6%	84.5	83.8	-1	-0.9%
51.9%	84.5	83.7	-1	-0.9%
53.1%	84.4	83.7	-1	-0.8%
54.3%	84.1	83.7	0	-0.5%
55.6%	84.1	83.6	0	-0.6%
56.8%	84.0	83.5	-1	-0.6%
58.0%	84.0	83.5	-1	-0.7%
59.3%	83.9	83.2	-1	-0.8%
60.5%	83.8	83.2	-1	-0.8%
61.7%	83.8	83.0	-1	-0.9%
63.0%	83.7	83.0	-1	-0.9%
64.2%	83.6	83.0	-1	-0.7%
65.4%	83.5	83.0	-1	-0.7%
66.7%	83.3	82.9	0	-0.4%
67.9%	83.1	82.9	0	-0.2%
69.1%	83.0	82.8	0	-0.2%
70.4%	82.9	82.5	0	-0.6%
71.6%	82.8	82.4	0	-0.6%
72.8%	82.8	82.1	-1	-0.9%
74.1%	82.7	82.1	-1	-0.8%
75.3%	82.7	82.0	-1	-0.8%
76.5%	82.5	82.0	-1	-0.6%
77.8%	82.3	81.8	-1	-0.6%
79.0%	82.3	81.8	-1	-0.6%
80.2%	82.1	81.6	0	-0.6%
81.5%	82.0	81.5	-1	-0.7%
82.7%	81.6	80.9	-1	-0.9%
84.0%	80.4	80.1	0	-0.4%
85.2%	80.3	79.5	-1	-0.9%
86.4%	80.3	79.3	-1	-1.2%
87.7%	79.5	79.2	0	-0.4%
88.9%	79.4	79.1	0	-0.3%
90.1%	78.9	79.0	0	0.2%
91.4%	78.3	78.4	0	0.1%
92.6%	76.6	77.6	1	1.3%
93.8%	76.0	76.1	0	0.1%
95.1%	71.8	71.8	0	0.0%
96.3%	71.7	70.6	-1	-1.5%
97.5%	68.2	67.8	0	-0.5%
98.8%	63.4	61.5	-2	-3.0%
100.0%	57.9	57.6	0	-0.5%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.4	95.6	0	0.3%
1.2%	94.0	93.4	-1	-0.6%
2.5%	93.8	92.9	-1	-0.9%
3.7%	93.2	92.3	-1	-1.1%
4.9%	92.5	91.7	-1	-0.8%
6.2%	92.0	91.4	-1	-0.7%
7.4%	92.0	91.0	-1	-1.1%
8.6%	91.6	90.9	-1	-0.7%
9.9%	91.2	90.9	0	-0.3%
11.1%	90.9	90.1	-1	-1.0%
12.3%	90.7	90.0	-1	-0.8%
13.6%	90.5	89.5	-1	-1.1%
14.8%	90.0	89.2	-1	-0.9%
16.0%	89.4	88.9	0	-0.5%
17.3%	88.9	88.9	0	0.0%
18.5%	88.9	88.9	0	0.0%
19.8%	88.9	88.7	0	-0.1%
21.0%	88.8	88.6	0	-0.3%
22.2%	88.8	88.5	0	-0.3%
23.5%	88.7	88.4	0	-0.3%
24.7%	88.7	88.4	0	-0.3%
25.9%	88.5	88.1	0	-0.4%
27.2%	88.2	87.8	0	-0.5%
28.4%	88.1	87.8	0	-0.4%
29.6%	88.1	87.7	0	-0.4%
30.9%	87.8	87.7	0	-0.1%
32.1%	87.5	87.6	0	0.0%
33.3%	85.2	85.1	0	-0.1%
34.6%	84.5	84.4	0	-0.1%
35.8%	84.0	84.0	0	0.0%
37.0%	83.9	83.9	0	0.1%
38.3%	83.3	83.9	1	0.6%
39.5%	83.3	83.6	0	0.3%
40.7%	83.2	83.6	0	0.4%
42.0%	83.2	83.4	0	0.3%
43.2%	83.2	83.3	0	0.2%
44.4%	83.0	83.2	0	0.2%
45.7%	82.9	83.1	0	0.2%
46.9%	82.6	83.0	0	0.5%
48.1%	82.5	82.6	0	0.1%
49.4%	82.4	82.6	0	0.1%
50.6%	82.2	82.3	0	0.1%
51.9%	82.2	82.2	0	0.0%
53.1%	82.2	82.2	0	0.0%
54.3%	82.1	82.1	0	0.0%
55.6%	81.9	82.0	0	0.1%
56.8%	81.7	81.8	0	0.1%
58.0%	81.5	81.7	0	0.2%
59.3%	81.5	81.7	0	0.3%
60.5%	81.4	81.5	0	0.2%
61.7%	81.3	81.5	0	0.3%
63.0%	81.2	81.2	0	0.0%
64.2%	81.1	81.0	0	-0.1%
65.4%	81.0	81.0	0	0.0%
66.7%	81.0	80.8	0	-0.2%
67.9%	80.9	80.8	0	-0.1%
69.1%	80.9	80.8	0	-0.2%
70.4%	80.9	80.8	0	-0.2%
71.6%	80.6	80.6	0	0.0%
72.8%	80.6	80.4	0	-0.2%
74.1%	80.4	80.3	0	-0.1%
75.3%	80.4	80.3	0	-0.1%
76.5%	80.3	80.2	0	-0.1%
77.8%	80.3	80.0	0	-0.3%
79.0%	80.1	80.0	0	-0.1%
80.2%	80.1	79.9	0	-0.2%
81.5%	80.1	79.9	0	-0.2%
82.7%	79.3	79.6	0	0.4%
84.0%	78.9	78.9	0	-0.1%
85.2%	78.8	78.7	0	-0.1%
86.4%	78.7	78.7	0	0.0%
87.7%	78.4	78.7	0	0.4%
88.9%	78.0	77.6	0	-0.5%
90.1%	77.6	77.6	0	0.0%
91.4%	77.5	77.2	0	-0.3%
92.6%	76.6	76.6	0	0.1%
93.8%	75.6	75.7	0	0.1%
95.1%	75.5	74.6	-1	-1.2%
96.3%	75.4	74.5	-1	-1.1%
97.5%	74.7	74.4	0	-0.3%
98.8%	74.5	74.1	0	-0.6%
100.0%	73.9	74.0	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.0	95.2	0	0.2%
1.2%	95.0	95.1	0	0.2%
2.5%	94.8	95.0	0	0.2%
3.7%	94.5	94.2	0	-0.3%
4.9%	94.3	93.9	0	-0.4%
6.2%	94.2	93.7	0	-0.5%
7.4%	94.1	93.6	-1	-0.6%
8.6%	94.0	93.5	0	-0.5%
9.9%	93.7	93.4	0	-0.3%
11.1%	93.6	92.5	-1	-1.2%
12.3%	93.5	92.4	-1	-1.3%
13.6%	93.5	92.3	-1	-1.3%
14.8%	93.3	92.0	-1	-1.4%
16.0%	93.2	91.9	-1	-1.4%
17.3%	93.1	91.8	-1	-1.4%
18.5%	92.8	91.7	-1	-1.2%
19.8%	92.6	91.7	-1	-1.0%
21.0%	92.5	91.4	-1	-1.2%
22.2%	92.5	91.3	-1	-1.3%
23.5%	92.4	91.2	-1	-1.2%
24.7%	92.3	90.9	-1	-1.5%
25.9%	91.9	90.9	-1	-1.1%
27.2%	91.5	90.6	-1	-1.0%
28.4%	91.5	90.5	-1	-1.0%
29.6%	91.3	90.3	-1	-1.1%
30.9%	91.2	90.3	-1	-0.9%
32.1%	91.1	90.1	-1	-1.0%
33.3%	91.1	90.1	-1	-1.0%
34.6%	90.8	90.1	-1	-0.8%
35.8%	90.6	90.0	-1	-0.6%
37.0%	90.4	90.0	0	-0.4%
38.3%	90.1	89.9	0	-0.2%
39.5%	90.1	89.9	0	-0.2%
40.7%	90.1	89.9	0	-0.2%
42.0%	90.0	89.9	0	-0.2%
43.2%	90.0	89.8	0	-0.3%
44.4%	90.0	89.7	0	-0.4%
45.7%	90.0	89.7	0	-0.4%
46.9%	90.0	89.6	0	-0.4%
48.1%	90.0	89.6	0	-0.4%
49.4%	90.0	89.5	0	-0.5%
50.6%	89.9	89.5	0	-0.5%
51.9%	89.8	89.4	0	-0.4%
53.1%	89.8	89.4	0	-0.4%
54.3%	89.7	89.4	0	-0.3%
55.6%	89.6	89.4	0	-0.3%
56.8%	89.6	89.4	0	-0.2%
58.0%	89.6	89.2	0	-0.4%
59.3%	89.6	89.2	0	-0.5%
60.5%	89.6	89.1	0	-0.5%
61.7%	89.5	89.1	0	-0.4%
63.0%	89.5	89.1	0	-0.5%
64.2%	89.4	88.9	-1	-0.6%
65.4%	89.3	88.9	0	-0.5%
66.7%	89.2	88.8	0	-0.4%
67.9%	89.1	88.8	0	-0.4%
69.1%	89.1	88.7	0	-0.4%
70.4%	89.0	88.7	0	-0.3%
71.6%	89.0	88.7	0	-0.3%
72.8%	89.0	88.7	0	-0.3%
74.1%	88.9	88.6	0	-0.4%
75.3%	88.9	88.6	0	-0.4%
76.5%	88.9	88.6	0	-0.3%
77.8%	88.8	88.5	0	-0.3%
79.0%	88.8	88.5	0	-0.3%
80.2%	88.7	88.5	0	-0.2%
81.5%	88.6	88.4	0	-0.2%
82.7%	88.4	88.2	0	-0.2%
84.0%	88.4	88.2	0	-0.2%
85.2%	88.3	87.9	0	-0.5%
86.4%	88.3	87.5	-1	-0.8%
87.7%	88.0	87.5	-1	-0.6%
88.9%	87.9	87.4	0	-0.5%
90.1%	87.8	87.4	0	-0.5%
91.4%	87.8	87.3	-1	-0.6%
92.6%	87.6	87.1	-1	-0.6%
93.8%	87.6	87.1	-1	-0.6%
95.1%	87.6	87.0	-1	-0.7%
96.3%	87.6	86.9	-1	-0.7%
97.5%	87.4	86.8	-1	-0.7%
98.8%	87.3	86.2	-1	-1.3%
100.0%	85.2	85.6	0	0.4%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Position (KM)	WSIP 2030 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	96.6	95.5	-1	-1.1%
1.2%	96.3	95.4	-1	-0.9%
2.5%	96.2	95.3	-1	-1.0%
3.7%	95.8	95.2	-1	-0.6%
4.9%	95.8	95.2	-1	-0.6%
6.2%	95.7	95.0	-1	-0.7%
7.4%	95.7	94.9	-1	-0.8%
8.6%	95.7	94.9	-1	-0.8%
9.9%	95.2	94.8	0	-0.5%
11.1%	95.1	94.5	-1	-0.7%
12.3%	94.9	94.4	-1	-0.5%
13.6%	94.8	94.2	-1	-0.6%
14.8%	94.8	93.6	-1	-1.3%
16.0%	94.7	93.5	-1	-1.3%
17.3%	94.6	93.4	-1	-1.3%
18.5%	94.6	93.3	-1	-1.3%
19.8%	94.6	93.3	-1	-1.3%
21.0%	94.5	93.3	-1	-1.3%
22.2%	94.5	93.0	-1	-1.5%
23.5%	94.4	93.0	-1	-1.6%
24.7%	94.3	92.7	-2	-1.7%
25.9%	94.1	92.5	-2	-1.6%
27.2%	93.9	92.4	-2	-1.6%
28.4%	93.9	92.3	-2	-1.7%
29.6%	93.8	92.2	-2	-1.8%
30.9%	93.8	92.0	-2	-1.9%
32.1%	93.6	91.8	-2	-1.9%
33.3%	93.5	91.7	-2	-2.0%
34.6%	93.3	91.5	-2	-2.0%
35.8%	93.3	91.5	-2	-1.9%
37.0%	93.2	91.3	-2	-2.0%
38.3%	92.9	91.2	-2	-1.8%
39.5%	92.9	91.2	-2	-1.9%
40.7%	92.5	91.1	-1	-1.6%
42.0%	92.4	91.1	-1	-1.5%
43.2%	92.3	91.0	-1	-1.4%
44.4%	92.2	90.9	-1	-1.3%
45.7%	92.0	90.7	-1	-1.5%
46.9%	91.7	90.5	-1	-1.4%
48.1%	91.3	90.3	-1	-1.1%
49.4%	91.3	90.0	-1	-1.5%
50.6%	91.2	89.9	-1	-1.4%
51.9%	91.1	89.7	-1	-1.6%
53.1%	90.4	89.3	-1	-1.2%
54.3%	90.0	88.8	-1	-1.4%
55.6%	81.9	81.5	0	-0.5%
56.8%	81.6	81.3	0	-0.5%
58.0%	81.6	81.2	0	-0.5%
59.3%	81.5	81.0	0	-0.5%
60.5%	81.3	80.9	0	-0.5%
61.7%	81.0	80.5	-1	-0.7%
63.0%	80.8	80.4	0	-0.4%
64.2%	80.6	80.2	0	-0.5%
65.4%	80.4	80.1	0	-0.5%
66.7%	80.0	79.4	-1	-0.8%
67.9%	79.7	79.0	-1	-0.8%
69.1%	79.3	78.6	-1	-0.8%
70.4%	72.4	73.1	1	1.0%
71.6%	71.1	70.3	-1	-1.0%
72.8%	70.5	70.3	0	-0.4%
74.1%	70.4	70.2	0	-0.4%
75.3%	70.3	70.2	0	-0.2%
76.5%	70.0	70.0	0	0.0%
77.8%	69.9	69.7	0	-0.3%
79.0%	69.6	69.4	0	-0.3%
80.2%	69.4	69.4	0	-0.1%
81.5%	69.4	69.3	0	-0.2%
82.7%	69.3	69.3	0	-0.1%
84.0%	69.3	69.0	0	-0.5%
85.2%	69.2	69.0	0	-0.3%
86.4%	69.0	69.0	0	-0.1%
87.7%	69.0	68.8	0	-0.2%
88.9%	68.9	68.7	0	-0.2%
90.1%	68.8	68.7	0	-0.2%
91.4%	68.8	68.6	0	-0.3%
92.6%	68.6	68.5	0	-0.1%
93.8%	68.5	68.3	0	-0.3%
95.1%	68.4	68.3	0	-0.2%
96.3%	68.4	68.2	0	-0.3%
97.5%	68.3	68.1	0	-0.3%
98.8%	68.3	68.0	0	-0.4%
100.0%	68.0	67.8	0	-0.3%

Figure SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

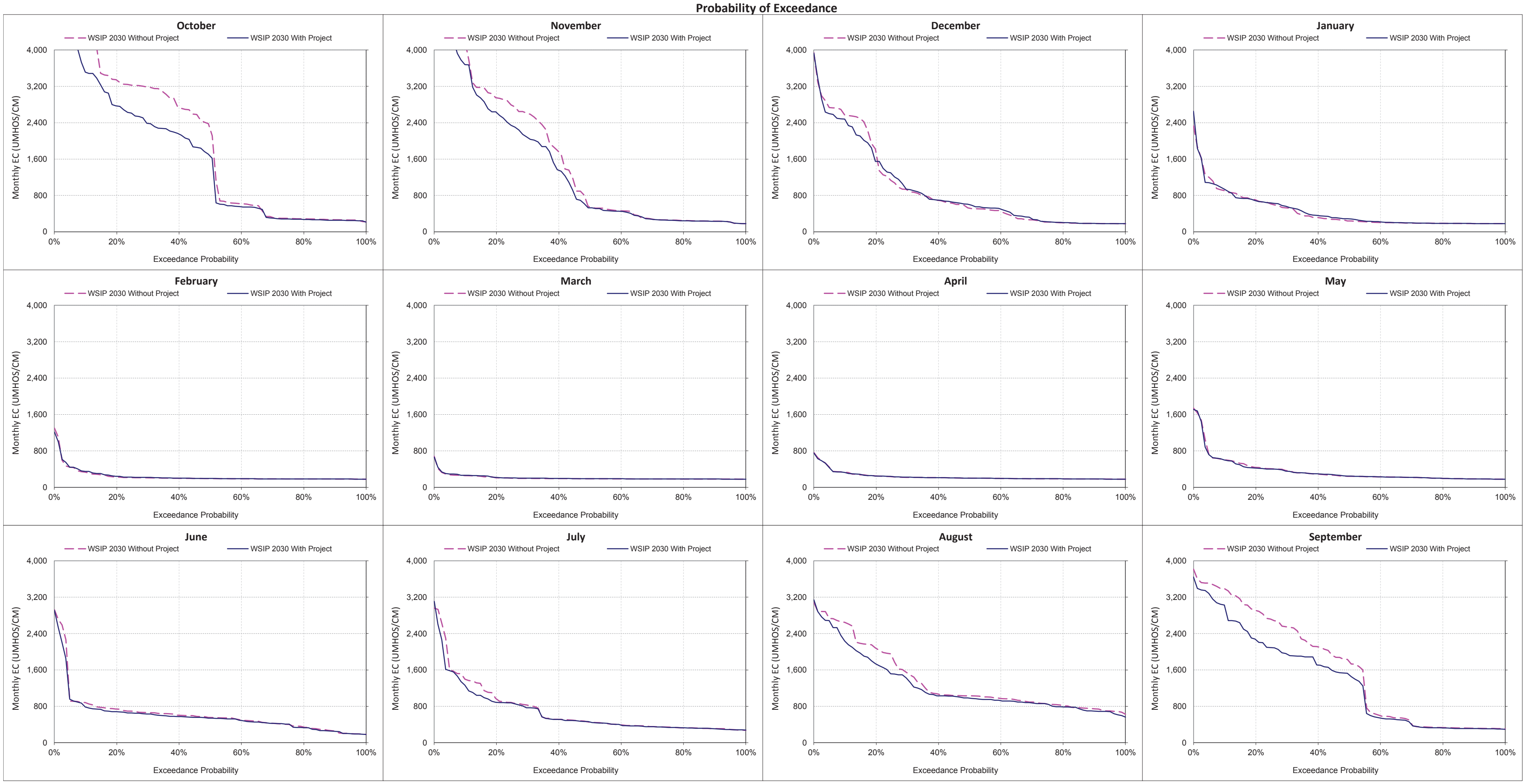


Table SQ-21-b

Sacramento River at Emmaton, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4715.9	4472.1	-243.8	-5.2%
1.2%	4569.1	4406.7	-162.3	-3.6%
2.5%	4530.7	4391.6	-139.1	-3.1%
3.7%	4294.7	4234.5	-60.2	-1.4%
4.9%	4268.3	4098.7	-169.6	-4.0%
6.2%	4223.1	4064.3	-158.8	-3.8%
7.4%	4203.4	4038.8	-164.6	-3.9%
8.6%	4188.2	3731.3	-456.9	-10.9%
9.9%	4173.8	3511.3	-662.5	-15.9%
11.1%	4141.2	3484.4	-656.8	-15.9%
12.3%	4122.2	3483.2	-639.0	-15.5%
13.6%	4037.0	3381.5	-655.5	-16.2%
14.8%	3489.0	3233.9	-255.1	-7.3%
16.0%	3452.2	3078.9	-373.3	-10.8%
17.3%	3437.5	3052.6	-384.9	-11.2%
18.5%	3355.2	2801.4	-553.8	-16.5%
19.8%	3347.3	2768.5	-578.8	-17.3%
21.0%	3286.9	2758.7	-528.2	-16.1%
22.2%	3246.8	2686.3	-560.5	-17.3%
23.5%	3242.2	2628.0	-614.2	-18.9%
24.7%	3224.6	2610.8	-613.8	-19.0%
25.9%	3221.2	2550.9	-670.3	-20.8%
27.2%	3216.5	2537.2	-679.2	-21.1%
28.4%	3205.0	2509.6	-695.5	-21.7%
29.6%	3187.1	2389.8	-797.3	-25.0%
30.9%	3175.3	2379.3	-796.0	-25.1%
32.1%	3151.6	2314.7	-836.8	-26.6%
33.3%	3149.7	2279.8	-869.9	-27.6%
34.6%	3094.2	2274.2	-820.0	-26.5%
35.8%	3027.2	2267.1	-760.1	-25.1%
37.0%	2944.2	2217.9	-726.3	-24.7%
38.3%	2942.5	2196.4	-746.1	-25.4%
39.5%	2754.9	2165.3	-589.6	-21.4%
40.7%	2715.5	2125.1	-590.3	-21.7%
42.0%	2693.9	2062.7	-631.3	-23.4%
43.2%	2686.2	2033.3	-652.9	-24.3%
44.4%	2590.0	1868.6	-721.4	-27.9%
45.7%	2580.7	1856.6	-724.1	-28.1%
46.9%	2455.1	1841.3	-613.8	-25.0%
48.1%	2409.5	1763.9	-645.6	-26.8%
49.4%	2378.9	1709.2	-669.6	-28.1%
50.6%	2113.1	1617.4	-495.7	-23.5%
51.9%	1116.6	634.6	-482.0	-43.2%
53.1%	680.0	609.6	-70.3	-10.3%
54.3%	673.1	600.7	-72.4	-10.8%
55.6%	646.5	575.3	-71.2	-11.0%
56.8%	633.7	571.7	-61.9	-9.8%
58.0%	628.5	560.1	-68.4	-10.9%
59.3%	620.8	556.3	-64.4	-10.4%
60.5%	616.8	545.9	-70.9	-11.5%
61.7%	610.4	545.6	-64.8	-10.6%
63.0%	590.7	544.8	-45.9	-7.8%
64.2%	579.9	537.7	-42.2	-7.3%
65.4%	576.1	516.6	-59.4	-10.3%
66.7%	462.0	494.0	32.0	6.9%
67.9%	337.4	315.2	-22.2	-6.6%
69.1%	335.7	308.0	-27.8	-8.3%
70.4%	308.9	300.1	-8.9	-2.9%
71.6%	299.3	286.1	-13.2	-4.4%
72.8%	298.1	282.6	-15.5	-5.2%
74.1%	296.7	282.5	-14.3	-4.8%
75.3%	295.0	282.1	-13.0	-4.4%
76.5%	291.5	276.9	-14.6	-5.0%
77.8%	287.0	276.2	-10.8	-3.8%
79.0%	286.8	274.2	-12.5	-4.4%
80.2%	286.2	270.0	-16.2	-5.6%
81.5%	282.5	269.4	-13.2	-4.7%
82.7%	282.0	266.9	-15.1	-5.3%
84.0%	279.4	265.1	-14.3	-5.1%
85.2%	273.9	264.6	-9.2	-3.4%
86.4%	273.8	262.1	-11.7	-4.3%
87.7%	268.8	256.1	-12.7	-4.7%
88.9%	267.9	255.2	-12.7	-4.7%
90.1%	266.0	253.7	-12.3	-4.6%
91.4%	265.6	252.8	-12.8	-4.8%
92.6%	260.2	252.5	-7.8	-3.0%
93.8%	259.8	249.7	-10.1	-3.9%
95.1%	259.2	247.8	-11.4	-4.4%
96.3%	257.8	246.8	-11.0	-4.3%
97.5%	253.6	242.9	-10.6	-4.2%
98.8%	226.5	240.1	13.5	6.0%
100.0%	219.9	214.9	-5.0	-2.3%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4638.7	4535.6	-103.0	-2.2%
1.2%	4605.8	4515.5	-90.3	-2.0%
2.5%	4579.8	4454.8	-125.0	-2.7%
3.7%	4508.9	4438.4	-70.5	-1.6%
4.9%	4485.3	4414.4	-70.9	-1.6%
6.2%	4467.6	4217.0	-250.5	-5.6%
7.4%	4346.8	3924.0	-422.8	-9.7%
8.6%	4294.7	3782.4	-512.3	-11.9%
9.9%	4200.3	3681.2	-519.1	-12.4%
11.1%	3786.0	3672.4	-113.6	-3.0%
12.3%	3281.5	3182.5	-99.1	-3.0%
13.6%	3178.9	3009.7	-169.2	-5.3%
14.8%	3175.8	2946.9	-228.9	-7.2%
16.0%	3167.7	2864.8	-303.0	-9.6%
17.3%	3060.7	2706.9	-353.8	-11.6%
18.5%	3038.4	2641.1	-397.3	-13.1%
19.8%	2951.1	2640.8	-310.3	-10.5%
21.0%	2938.0	2560.2	-377.8	-12.9%
22.2%	2910.2	2505.4	-404.9	-13.9%
23.5%	2884.9	2410.7	-474.2	-16.4%
24.7%	2792.2	2345.1	-447.0	-16.0%
25.9%	2748.7	2301.6	-447.2	-16.3%
27.2%	2647.4	2238.4	-409.0	-15.4%
28.4%	2646.1	2140.9	-505.1	-19.1%
29.6%	2615.0	2092.4	-522.6	-20.0%
30.9%	2586.8	2037.2	-549.6	-21.2%
32.1%	2522.1	2019.7	-502.3	-19.9%
33.3%	2441.7	1978.6	-463.1	-19.0%
34.6%	2360.5	1877.6	-483.0	-20.5%
35.8%	2251.5	1875.7	-375.8	-16.7%
37.0%	1946.3	1767.6	-178.7	-9.2%
38.3%	1869.6	1526.0	-343.6	-18.4%
39.5%	1791.4	1366.3	-425.0	-23.7%
40.7%	1705.2	1332.3	-372.9	-21.9%
42.0%	1382.3	1228.1	-154.2	-11.2%
43.2%	1358.0	1087.9	-270.1	-19.9%
44.4%	1182.1	921.7	-260.4	-22.0%
45.7%	897.1	719.0	-178.1	-19.9%
46.9%	895.0	696.0	-199.0	-22.2%
48.1%	804.4	617.2	-187.2	-23.3%
49.4%	562.9	526.9	-36.0	-6.4%
50.6%	530.2	526.5	-3.6	-0.7%
51.9%	522.2	510.9	-11.3	-2.2%
53.1%	521.7	508.8	-12.9	-2.5%
54.3%	517.9	472.4	-45.5	-8.8%
55.6%	495.8	466.0	-29.8	-6.0%
56.8%	482.0	458.3	-23.7	-4.9%
58.0%	472.1	456.4	-15.7	-3.3%
59.3%	462.2	455.2	-7.0	-1.5%
60.5%	460.0	446.7	-13.3	-2.9%
61.7%	459.1	429.4	-29.7	-6.5%
63.0%	451.3	405.6	-45.7	-10.1%
64.2%	373.6	364.2	-9.4	-2.5%
65.4%	358.1	352.3	-5.8	-1.6%
66.7%	300.7	329.0	28.3	9.4%
67.9%	299.6	286.2	-13.4	-4.5%
69.1%	291.3	280.9	-10.4	-3.6%
70.4%	273.5	269.3	-4.2	-1.5%
71.6%	266.9	265.2	-1.7	-0.6%
72.8%	262.3	260.4	-1.9	-0.7%
74.1%	261.4	257.1	-4.3	-1.6%
75.3%	260.5	253.5	-7.0	-2.7%
76.5%	256.6	252.6	-4.0	-1.6%
77.8%	256.3	245.7	-10.5	-4.1%
79.0%	249.1	243.7	-5.3	-2.1%
80.2%	248.5	242.4	-6.1	-2.4%
81.5%	245.4	241.5	-3.9	-1.6%
82.7%	242.8	239.8	-3.1	-1.3%
84.0%	240.1	237.5	-2.6	-1.1%
85.2%	239.9	237.0	-2.9	-1.2%
86.4%	239.2	235.7	-3.5	-1.5%
87.7%	238.0	234.9	-3.1	-1.3%
88.9%	236.5	234.1	-2.4	-1.0%
90.1%	235.1	231.9	-3.2	-1.3%
91.4%	235.0	229.9	-5.2	-2.2%
92.6%	230.6	229.4	-1.2	-0.5%
93.8%	229.0	226.5	-2.5	-1.1%
95.1%	216.2	211.7	-4.5	-2.1%
96.3%	186.2	188.5	2.3	1.2%
97.5%	184.9	183.9	-1.0	-0.6%
98.8%	181.0	182.0	1.0	0.5%
100.0%	178.9	178.8	-0.1	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3939.8	3926.9	-12.9	-0.3%
1.2%	3297.1	3377.7	80.6	2.4%
2.5%	2993.9	2919.7	-74.2	-2.5%
3.7%	2883.7	2631.6	-252.1	-8.7%
4.9%	2733.6	2601.0	-132.5	-4.8%
6.2%	2725.8	2585.0	-140.8	-5.2%
7.4%	2723.8	2497.3	-226.5	-8.3%
8.6%	2693.9	2486.2	-207.7	-7.7%
9.9%	2572.5	2478.0	-94.5	-3.7%
11.1%	2557.9	2335.5	-222.3	-8.7%
12.3%	2547.1	2307.1	-240.0	-9.4%
13.6%	2532.6	2132.6	-400.0	-15.8%
14.8%	2497.1	2106.9	-390.2	-15.6%
16.0%	2420.9	2012.9	-408.0	-16.9%
17.3%	2226.8	1958.7	-268.1	-12.0%
18.5%	1940.9	1845.4	-95.5	-4.9%
19.8%	1823.0	1550.6	-272.4	-14.9%
21.0%	1344.4	1549.6	205.1	15.3%
22.2%	1254.2	1393.4	139.2	11.1%
23.5%	1222.8	1317.2	94.4	7.7%
24.7%	1133.8	1298.3	164.5	14.5%
25.9%	1076.9	1206.0	129.1	12.0%
27.2%	981.2	1158.7	177.5	18.1%
28.4%	938.8	1058.8	120.0	12.8%
29.6%	936.1	941.1	4.9	0.5%
30.9%	879.9	925.1	45.2	5.1%
32.1%	870.4	904.5	34.1	3.9%
33.3%	847.5	879.7	32.1	3.8%
34.6%	800.6	848.8	48.2	6.0%
35.8%	786.0	789.5	3.5	0.5%
37.0%	763.1	715.1	-48.0	-6.3%
38.3%	704.7	709.3	4.5	0.6%
39.5%	694.1	700.2	6.1	0.9%
40.7%	687.0	691.9	4.9	0.7%
42.0%	658.3	677.7	19.4	3.0%
43.2%	641.3	671.0	29.7	4.6%
44.4%	629.3	653.2	23.9	3.8%
45.7%	602.7	641.2	38.5	6.4%
46.9%	602.3	628.9	26.5	4.4%
48.1%	587.0	611.0	23.9	4.1%
49.4%	527.7	609.8	82.1	15.6%
50.6%	509.4	583.2	73.8	14.5%
51.9%	507.6	550.7	43.1	8.5%
53.1%	505.4	549.2	43.9	8.7%
54.3%	504.7	532.2	27.5	5.5%
55.6%	493.8	528.1	34.3	6.9%
56.8%	478.7	523.4	44.7	9.3%
58.0%	469.2	522.4	53.3	11.4%
59.3%	469.0	518.7	49.7	10.6%
60.5%	432.7	485.6	52.9	12.2%
61.7%	397.3	458.8	61.5	15.5%
63.0%	368.1	431.2	63.1	17.1%
64.2%	332.2	364.3	32.0	9.6%
65.4%	289.2	352.1	62.9	21.7%
66.7%	287.8	342.9	55.1	19.1%
67.9%	268.7	330.5	61.8	23.0%
69.1%	265.4	325.3	59.9	22.6%
70.4%	263.7	273.4	9.7	3.7%
71.6%	250.6	265.9	15.4	6.1%
72.8%	238.3	232.8	-5.5	-2.3%
74.1%	215.3	225.8	10.4	4.8%
75.3%	214.7	219.7	4.9	2.3%
76.5%	212.5	216.7	4.2	2.0%
77.8%	206.3	207.4	1.1	0.5%
79.0%	200.8	206.5	5.8	2.9%
80.2%	200.0	203.0	3.0	1.5%
81.5%	197.8	200.7	2.9	1.5%
82.7%	192.2	197.8	5.6	2.9%
84.0%	190.5	197.5	6.9	3.6%
85.2%	186.8	188.3	1.5	0.8%
86.4%	184.3	184.9	0.6	0.3%
87.7%	184.0	184.9	1.0	0.5%
88.9%	183.9	184.0	0.1	0.0%
90.1%	182.9	183.2	0.3	0.2%
91.4%	182.2	182.1	-0.1	-0.1%
92.6%	181.6	181.8	0.2	0.1%
93.8%	181.5	181.3	-0.2	-0.1%
95.1%	180.6	180.7	0.1	0.1%
96.3%	179.6	179.6	0.0	0.0%
97.5%	178.7	178.9	0.2	0.1%
98.8%	178.5	178.5	0.0	0.0%
100.0%	177.8	177.9	0.0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2330.3	2648.8	318.5	13.7%
1.2%	1877.6	1832.6	-45.0	-2.4%
2.5%	1621.3	1625.2	3.9	0.2%
3.7%	1259.1	1086.7	-172.5	-13.7%
4.9%	1200.4	1079.7	-120.7	-10.1%
6.2%	1117.8	1058.1	-59.7	-5.3%
7.4%	953.8	1028.9	75.1	7.9%
8.6%	927.6	982.0	54.4	5.9%
9.9%	907.6	938.2	30.6	3.4%
11.1%	863.1	889.3	26.2	3.0%
12.3%	861.0	846.1	-14.9	-1.7%
13.6%	845.8	749.1	-96.7	-11.4%
14.8%	783.4	738.5	-45.0	-5.7%
16.0%	751.3	736.3	-15.0	-2.0%
17.3%	749.4	734.0	-15.4	-2.1%
18.5%	715.0	715.6	0.6	0.1%
19.8%	708.1	686.3	-21.8	-3.1%
21.0%	670.4	664.0	-6.4	-1.0%
22.2%	654.1	662.1	8.0	1.2%
23.5%	653.5	643.8	-9.6	-1.5%
24.7%	616.0	633.9	17.9	2.9%
25.9%	593.2	627.9	34.7	5.8%
27.2%	579.6	619.9	40.3	6.9%
28.4%	535.4	580.7	45.3	8.5%
29.6%	527.3	562.7	35.4	6.7%
30.9%	520.2	536.0	15.8	3.0%
32.1%	493.8	517.5	23.7	4.8%
33.3%	406.6	500.3	93.7	23.0%
34.6%	377.9	465.9	88.0	23.3%
35.8%	350.1	418.3	68.1	19.5%
37.0%	349.9	383.3	33.4	9.6%
38.3%	319.5	367.7	48.2	15.1%
39.5%	317.3	364.8	47.5	15.0%
40.7%	306.4	349.4	43.0	14.0%
42.0%	291.2	343.1	51.9	17.8%
43.2%	288.2	340.3	52.1	18.1%
44.4%	274.2	311.0	36.8	13.4%
45.7%	273.1	309.8	36.7	13.4%
46.9%	263.0	299.6	36.6	13.9%
48.1%	262.6	288.4	25.8	9.8%
49.4%	238.6	287.6	48.9	20.5%
50.6%	238.5	280.3	41.8	17.5%
51.9%	233.3	273.3	40.0	17.1%
53.1%	227.5	252.3	24.8	10.9%
54.3%	223.3	242.0	18.8	8.4%
55.6%	220.6	233.1	12.5	5.7%
56.8%	213.5	228.5	15.0	7.0%
58.0%	209.7	226.9	17.2	8.2%
59.3%	207.7	224.8	17.2	8.3%
60.5%	203.7	212.1	8.4	4.1%
61.7%	203.2	210.0	6.8	3.3%
63.0%	202.4	209.3	6.8	3.4%
64.2%	201.7	205.0	3.3	1.6%
65.4%	200.5	203.5	3.0	1.5%
66.7%	197.5	201.1	3.6	1.8%
67.9%	193.9	196.4	2.4	1.3%
69.1%	192.5	195.6	3.0	1.6%
70.4%	192.4	194.5	2.1	1.1%
71.6%	190.5	192.2	1.7	0.9%
72.8%	189.0	189.6	0.6	0.3%
74.1%	188.7	189.0	0.3	0.1%
75.3%	188.5	188.9	0.5	0.2%
76.5%	188.2	188.4	0.3	0.1%
77.8%	187.7	187.9	0.2	0.1%
79.0%	187.3	187.6	0.3	0.2%
80.2%	187.2	187.2	0.0	0.0%
81.5%	184.9	186.1	1.3	0.7%
82.7%	184.7	185.3	0.6	0.3%
84.0%	184.5	184.8	0.3	0.2%
85.2%	184.4	184.5	0.1	0.1%
86.4%	183.6	184.5	0.9	0.5%
87.7%	182.9	183.6	0.7	0.4%
88.9%	182.5	182.9	0.4	0.2%
90.1%	181.3	181.5	0.2	0.1%
91.4%	181.2	181.3	0.2	0.1%
92.6%	180.6	180.8	0.2	0.1%
93.8%	180.5	180.7	0.2	0.1%
95.1%	180.4	180.6	0.2	0.1%
96.3%	180.3	180.4	0.1	0.0%
97.5%	180.0	180.2	0.2	0.1%
98.8%	179.7	179.8	0.1	0.1%
100.0%	178.6	178.7	0.0	0.0%

Table SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1302.3	1218.0	-84.3	-6.5%
1.2%	1105.1	997.3	-107.8	-9.8%
2.5%	595.4	609.9	14.6	2.4%
3.7%	468.9	550.1	81.2	17.3%
4.9%	442.4	442.3	-0.1	0.0%
6.2%	433.7	440.0	6.4	1.5%
7.4%	361.6	406.2	44.6	12.3%
8.6%	343.7	358.4	14.7	4.3%
9.9%	332.1	349.7	17.6	5.3%
11.1%	312.0	348.3	36.3	11.6%
12.3%	288.3	312.7	24.4	8.4%
13.6%	286.8	303.6	16.8	5.8%
14.8%	275.8	302.3	26.5	9.6%
16.0%	270.7	276.3	5.6	2.1%
17.3%	242.1	268.1	26.0	10.8%
18.5%	233.0	251.1	18.1	7.8%
19.8%	223.0	242.0	19.1	8.6%
21.0%	221.6	238.7	17.1	7.7%
22.2%	215.8	225.2	9.4	4.4%
23.5%	214.6	223.0	8.4	3.9%
24.7%	212.9	222.1	9.2	4.3%
25.9%	211.3	218.6	7.2	3.4%
27.2%	211.2	218.0	6.9	3.3%
28.4%	210.5	217.3	6.8	3.2%
29.6%	208.5	216.5	7.9	3.8%
30.9%	206.0	216.3	10.3	5.0%
32.1%	206.0	213.4	7.5	3.6%
33.3%	205.3	211.7	6.4	3.1%
34.6%	202.0	206.0	4.0	2.0%
35.8%	201.4	204.7	3.3	1.6%
37.0%	198.9	204.4	5.4	2.7%
38.3%	197.7	203.0	5.2	2.6%
39.5%	197.0	201.5	4.5	2.3%
40.7%	196.1	201.1	5.1	2.6%
42.0%	195.1	199.1	3.9	2.0%
43.2%	194.9	197.7	2.8	1.4%
44.4%	194.8	197.0	2.1	1.1%
45.7%	194.1	196.9	2.8	1.4%
46.9%	194.0	196.4	2.4	1.2%
48.1%	191.9	196.2	4.3	2.2%
49.4%	191.9	194.6	2.8	1.4%
50.6%	191.8	194.4	2.6	1.3%
51.9%	189.6	193.2	3.6	1.9%
53.1%	188.8	191.3	2.5	1.3%
54.3%	188.4	190.9	2.5	1.3%
55.6%	188.3	190.5	2.2	1.2%
56.8%	187.8	190.3	2.6	1.4%
58.0%	187.3	189.1	1.7	0.9%
59.3%	187.2	187.8	0.6	0.3%
60.5%	186.6	187.3	0.7	0.4%
61.7%	186.4	187.0	0.6	0.3%
63.0%	185.2	186.6	1.4	0.8%
64.2%	185.1	186.4	1.3	0.7%
65.4%	184.7	185.6	0.9	0.5%
66.7%	184.4	185.0	0.6	0.3%
67.9%	184.3	184.7	0.4	0.2%
69.1%	184.2	184.6	0.4	0.2%
70.4%	184.1	184.5	0.4	0.2%
71.6%	184.1	184.4	0.3	0.2%
72.8%	184.0	184.2	0.3	0.2%
74.1%	183.6	184.0	0.5	0.2%
75.3%	183.3	183.3	0.0	0.0%
76.5%	183.2	183.2	0.0	0.0%
77.8%	182.7	183.0	0.4	0.2%
79.0%	182.5	182.7	0.2	0.1%
80.2%	182.4	182.5	0.1	0.1%
81.5%	182.3	182.5	0.1	0.1%
82.7%	182.3	182.3	-0.1	0.0%
84.0%	182.2	182.1	0.0	0.0%
85.2%	182.0	182.0	0.0	0.0%
86.4%	181.7	181.9	0.1	0.1%
87.7%	181.7	181.9	0.2	0.1%
88.9%	181.5	181.7	0.2	0.1%
90.1%	181.4	181.7	0.3	0.2%
91.4%	180.6	180.7	0.1	0.1%
92.6%	180.4	180.5	0.1	0.0%
93.8%	180.3	180.5	0.2	0.1%
95.1%	180.2	180.3	0.1	0.1%
96.3%	180.0	179.9	-0.1	-0.1%
97.5%	179.0	179.5	0.5	0.3%
98.8%	178.4	178.4	0.0	0.0%
100.0%	177.2	177.2	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	683.1	660.0	-23.1	-3.4%
1.2%	410.0	437.6	27.6	6.7%
2.5%	325.9	339.6	13.7	4.2%
3.7%	291.7	305.0	13.3	4.6%
4.9%	273.5	294.3	20.8	7.6%
6.2%	266.5	290.6	24.1	9.0%
7.4%	264.5	285.5	21.0	7.9%
8.6%	264.3	265.6	1.3	0.5%
9.9%	256.4	263.6	7.2	2.8%
11.1%	255.2	262.1	6.9	2.7%
12.3%	251.7	259.6	7.9	3.1%
13.6%	249.5	255.0	5.5	2.2%
14.8%	244.0	253.9	9.9	4.1%
16.0%	229.9	253.6	23.7	10.3%
17.3%	229.9	248.7	18.8	8.2%
18.5%	229.4	224.3	-5.1	-2.2%
19.8%	209.5	215.2	5.7	2.7%
21.0%	207.4	211.8	4.4	2.1%
22.2%	205.9	207.9	2.0	1.0%
23.5%	205.7	207.5	1.8	0.9%
24.7%	199.6	206.9	7.3	3.6%
25.9%	199.3	205.2	5.9	3.0%
27.2%	196.4	202.4	6.0	3.1%
28.4%	196.3	202.1	5.8	2.9%
29.6%	195.4	202.0	6.6	3.4%
30.9%	194.8	199.9	5.1	2.6%
32.1%	194.4	198.9	4.6	2.4%
33.3%	193.5	197.9	4.4	2.3%
34.6%	192.9	197.8	4.9	2.5%
35.8%	192.1	197.8	5.7	2.9%
37.0%	191.7	196.7	5.0	2.6%
38.3%	191.7	194.9	3.3	1.7%
39.5%	191.4	194.7	3.3	1.7%
40.7%	190.6	193.9	3.3	1.7%
42.0%	190.4	193.9	3.5	1.8%
43.2%	188.9	192.6	3.6	1.9%
44.4%	188.7	190.6	1.8	1.0%
45.7%	188.3	190.5	2.2	1.2%
46.9%	187.6	190.4	2.8	1.5%
48.1%	187.2	190.2	3.0	1.6%
49.4%	187.2	189.0	1.8	0.9%
50.6%	187.0	189.0	1.9	1.0%
51.9%	187.0	188.8	1.7	0.9%
53.1%	186.1	188.6	2.5	1.3%
54.3%	186.1	188.4	2.3	1.2%
55.6%	186.0	187.7	1.7	0.9%
56.8%	185.6	187.0	1.4	0.7%
58.0%	185.4	186.8	1.4	0.8%
59.3%	185.1	186.6	1.5	0.8%
60.5%	184.6	186.3	1.7	0.9%
61.7%	184.5	185.9	1.4	0.8%
63.0%	183.9	185.3	1.4	0.7%
64.2%	183.6	185.2	1.6	0.9%
65.4%	183.5	184.6	1.2	0.6%
66.7%	183.1	183.9	0.8	0.5%
67.9%	182.9	183.9	1.0	0.5%
69.1%	182.4	182.7	0.3	0.2%
70.4%	182.3	182.5	0.1	0.1%
71.6%	182.2	182.3	0.1	0.1%
72.8%	182.2	182.3	0.1	0.1%
74.1%	182.2	182.2	0.1	0.0%
75.3%	182.1	182.2	0.1	0.1%
76.5%	181.7	182.1	0.4	0.2%
77.8%	181.3	182.1	0.8	0.4%
79.0%	181.3	181.7	0.5	0.3%
80.2%	181.1	181.3	0.2	0.1%
81.5%	181.1	181.0	-0.1	-0.1%
82.7%	180.9	181.0	0.0	0.0%
84.0%	180.8	180.8	0.0	0.0%
85.2%	180.5	180.7	0.2	0.1%
86.4%	180.5	180.5	0.0	0.0%
87.7%	180.4	180.5	0.0	0.0%
88.9%	180.3	180.4	0.1	0.0%
90.1%	180.3	180.4	0.1	0.1%
91.4%	179.9	180.3	0.3	0.2%
92.6%	179.7	179.7	0.0	0.0%
93.8%	179.6	179.7	0.1	0.0%
95.1%	179.6	179.6	0.0	0.0%
96.3%	179.4	179.6	0.2	0.1%
97.5%	179.0	178.9	0.0	0.0%
98.8%	178.9	178.9	0.0	0.0%
100.0%	178.6	178.7	0.1	0.1%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	764.5	755.7	-8.7	-1.1%
1.2%	650.5	629.0	-21.5	-3.3%
2.5%	585.4	583.0	-2.4	-0.4%
3.7%	532.7	528.3	-4.5	-0.8%
4.9%	444.6	436.5	-8.1	-1.8%
6.2%	346.7	344.6	-2.1	-0.6%
7.4%	342.7	339.3	-3.4	-1.0%
8.6%	339.3	338.4	-0.9	-0.3%
9.9%	332.6	325.9	-6.7	-2.0%
11.1%	323.8	302.7	-21.1	-6.5%
12.3%	288.7	295.6	6.9	2.4%
13.6%	288.1	289.2	1.2	0.4%
14.8%	273.9	286.1	12.3	4.5%
16.0%	273.0	260.9	-12.0	-4.4%
17.3%	259.3	259.3	0.0	0.0%
18.5%	258.4	258.0	-0.4	-0.2%
19.8%	250.4	247.1	-3.4	-1.4%
21.0%	246.4	245.7	-0.8	-0.3%
22.2%	241.0	243.8	2.8	1.2%
23.5%	238.9	242.9	4.0	1.7%
24.7%	234.4	237.6	3.3	1.4%
25.9%	227.9	231.3	3.3	1.5%
27.2%	221.4	226.9	5.5	2.5%
28.4%	220.1	222.4	2.3	1.0%
29.6%	217.2	220.5	3.2	1.5%
30.9%	217.1	220.2	3.1	1.4%
32.1%	216.8	219.2	2.4	1.1%
33.3%	216.6	217.3	0.7	0.3%
34.6%	215.0	215.0	0.0	0.0%
35.8%	214.4	213.7	-0.7	-0.3%
37.0%	213.7	213.7	0.0	0.0%
38.3%	212.8	213.3	0.5	0.2%
39.5%	212.1	211.8	-0.3	-0.1%
40.7%	211.8	211.1	-0.6	-0.3%
42.0%	210.6	211.0	0.3	0.2%
43.2%	208.7	207.7	-1.0	-0.5%
44.4%	208.7	206.8	-1.9	-0.9%
45.7%	203.8	204.0	0.2	0.1%
46.9%	203.0	203.3	0.3	0.2%
48.1%	203.0	202.9	-0.1	-0.1%
49.4%	201.6	202.8	1.2	0.6%
50.6%	200.1	202.0	1.8	0.9%
51.9%	200.1	200.4	0.3	0.2%
53.1%	199.8	200.2	0.5	0.2%
54.3%	199.3	199.1	-0.3	-0.1%
55.6%	198.8	198.5	-0.2	-0.1%
56.8%	197.9	198.1	0.2	0.1%
58.0%	196.7	197.2	0.6	0.3%
59.3%	195.8	196.4	0.6	0.3%
60.5%	194.5	194.8	0.4	0.2%
61.7%	193.2	194.4	1.3	0.6%
63.0%	191.1	192.4	1.3	0.7%
64.2%	190.8	191.1	0.2	0.1%
65.4%	189.5	191.1	1.5	0.8%
66.7%	189.5	189.7	0.2	0.1%
67.9%	188.2	189.5	1.3	0.7%
69.1%	187.7	188.7	1.0	0.5%
70.4%	187.7	188.4	0.8	0.4%
71.6%	187.5	188.2	0.7	0.4%
72.8%	187.4	187.8	0.5	0.3%
74.1%	187.3	187.7	0.4	0.2%
75.3%	187.1	187.5	0.4	0.2%
76.5%	186.9	187.4	0.6	0.3%
77.8%	186.6	186.9	0.2	0.1%
79.0%	185.4	186.6	1.2	0.6%
80.2%	185.1	185.3	0.2	0.1%
81.5%	184.9	184.8	-0.1	-0.1%
82.7%	183.6	184.6	1.0	0.6%
84.0%	183.5	184.1	0.6	0.3%
85.2%	183.4	184.1	0.7	0.4%
86.4%	183.3	183.4	0.0	0.0%
87.7%	183.1	183.1	0.0	0.0%
88.9%	182.9	182.8	-0.1	-0.1%
90.1%	182.2	182.1	-0.1	0.0%
91.4%	181.5	181.8	0.4	0.2%
92.6%	180.4	180.8	0.4	0.2%
93.8%	180.4	180.2	-0.2	-0.1%
95.1%	179.6	179.7	0.0	0.0%
96.3%	179.2	179.2	0.0	0.0%
97.5%	179.1	179.1	-0.1	0.0%
98.8%	178.8	178.9	0.0	0.0%
100.0%	178.1	178.2	0.1	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1739.7	1712.5	-27.3	-1.6%
1.2%	1638.1	1679.0	40.9	2.5%
2.5%	1475.9	1443.0	-32.8	-2.2%
3.7%	1053.3	886.5	-166.8	-15.8%
4.9%	715.4	717.0	1.6	0.2%
6.2%	644.0	651.7	7.7	1.2%
7.4%	637.7	636.8	-0.9	-0.1%
8.6%	621.0	626.0	5.0	0.8%
9.9%	604.1	598.5	-5.6	-0.9%
11.1%	594.4	584.1	-10.3	-1.7%
12.3%	579.2	577.3	-2.0	-0.3%
13.6%	559.4	513.6	-45.8	-8.2%
14.8%	527.2	499.7	-27.6	-5.2%
16.0%	519.2	451.0	-68.2	-13.1%
17.3%	476.4	435.0	-41.5	-8.7%
18.5%	453.3	427.8	-25.6	-5.6%
19.8%	436.2	420.9	-15.3	-3.5%
21.0%	433.2	419.5	-13.8	-3.2%
22.2%	419.9	410.2	-9.7	-2.3%
23.5%	409.9	400.2	-9.8	-2.4%
24.7%	408.3	399.8	-8.5	-2.1%
25.9%	401.4	397.2	-4.2	-1.0%
27.2%	398.4	396.0	-2.4	-0.6%
28.4%	395.4	383.7	-11.7	-3.0%
29.6%	367.3	351.4	-15.9	-4.3%
30.9%	364.7	350.1	-14.7	-4.0%
32.1%	329.7	325.1	-4.7	-1.4%
33.3%	317.8	321.1	3.3	1.1%
34.6%	316.9	319.2	2.2	0.7%
35.8%	314.2	314.1	-0.1	0.0%
37.0%	304.2	301.5	-2.7	-0.9%
38.3%	294.5	297.6	3.0	1.0%
39.5%	292.9	296.6	3.7	1.3%
40.7%	284.2	294.2	10.0	3.5%
42.0%	277.9	286.2	8.3	3.0%
43.2%	269.0	285.9	16.9	6.3%
44.4%	266.6	279.4	12.8	4.8%
45.7%	263.5	268.1	4.6	1.7%
46.9%	248.7	264.6	15.9	6.4%
48.1%	247.4	250.3	3.0	1.2%
49.4%	241.8	246.8	5.1	2.1%
50.6%	241.2	243.8	2.6	1.1%
51.9%	241.1	241.8	0.7	0.3%
53.1%	239.8	239.4	-0.4	-0.2%
54.3%	237.7	239.3	1.6	0.7%
55.6%	233.0	233.0	0.0	0.0%
56.8%	231.5	233.0	1.4	0.6%
58.0%	231.3	231.8	0.4	0.2%
59.3%	229.6	230.5	0.9	0.4%
60.5%	229.4	229.1	-0.3	-0.1%
61.7%	227.9	225.7	-2.2	-1.0%
63.0%	224.2	225.5	1.2	0.5%
64.2%	223.8	223.9	0.1	0.0%
65.4%	223.0	220.9	-2.2	-1.0%
66.7%	219.6	220.5	0.8	0.4%
67.9%	219.3	219.5	0.2	0.1%
69.1%	218.0	218.4	0.3	0.1%
70.4%	215.0	215.7	0.7	0.3%
71.6%	214.5	215.0	0.5	0.2%
72.8%	212.1	213.7	1.6	0.8%
74.1%	209.5	210.0	0.5	0.3%
75.3%	207.8	207.7	-0.1	-0.1%
76.5%	199.9	202.4	2.5	1.2%
77.8%	198.7	200.4	1.7	0.8%
79.0%	198.3	199.4	1.1	0.6%
80.2%	193.1	196.9	3.7	1.9%
81.5%	192.6	192.9	0.2	0.1%
82.7%	191.5	191.6	0.1	0.1%
84.0%	189.9	189.9	0.0	0.0%
85.2%	188.6	188.7	0.1	0.0%
86.4%	187.4	187.8	0.4	0.2%
87.7%	185.6	185.8	0.2	0.1%
88.9%	185.1	185.4	0.3	0.1%
90.1%	184.5	185.4	0.9	0.5%
91.4%	184.1	184.4	0.3	0.2%
92.6%	182.4	182.3	0.0	0.0%
93.8%	181.6	181.6	0.0	0.0%
95.1%	181.5	181.6	0.1	0.1%
96.3%	179.1	179.0	-0.1	0.0%
97.5%	178.4	178.5	0.0	0.0%
98.8%	178.0	178.0	0.0	0.0%
100.0%	176.7	176.8	0.1	0.0%

Table SQ-21-b

Sacramento River at Emmaton, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2924.8	2915.3	-9.5	-0.3%
1.2%	2714.3	2532.1	-182.2	-6.7%
2.5%	2589.0	2190.9	-398.1	-15.4%
3.7%	2262.8	1850.2	-412.6	-18.2%
4.9%	913.5	956.1	42.5	4.7%
6.2%	909.8	914.8	5.0	0.6%
7.4%	906.6	893.7	-12.9	-1.4%
8.6%	885.7	872.5	-13.2	-1.5%
9.9%	881.3	783.6	-97.6	-11.1%
11.1%	848.5	761.7	-86.8	-10.2%
12.3%	830.1	743.9	-86.2	-10.4%
13.6%	785.4	740.6	-44.8	-5.7%
14.8%	775.3	735.4	-39.9	-5.1%
16.0%	767.4	700.5	-67.0	-8.7%
17.3%	751.2	693.4	-57.8	-7.7%
18.5%	749.0	681.0	-68.0	-9.1%
19.8%	738.0	680.7	-57.3	-7.8%
21.0%	736.2	673.1	-63.0	-8.6%
22.2%	705.9	668.5	-37.4	-5.3%
23.5%	693.0	653.1	-39.9	-5.8%
24.7%	692.8	650.8	-42.0	-6.1%
25.9%	686.9	646.3	-40.5	-5.9%
27.2%	666.5	645.6	-20.9	-3.1%
28.4%	664.3	636.5	-27.8	-4.2%
29.6%	661.8	630.2	-31.5	-4.8%
30.9%	659.3	628.6	-30.7	-4.7%
32.1%	657.1	613.1	-44.0	-6.7%
33.3%	643.2	599.7	-43.5	-6.8%
34.6%	638.2	596.2	-42.0	-6.6%
35.8%	637.7	590.4	-47.4	-7.4%
37.0%	634.0	576.8	-57.2	-9.0%
38.3%	627.7	576.4	-51.3	-8.2%
39.5%	604.1	575.7	-28.4	-4.7%
40.7%	599.6	572.4	-27.2	-4.5%
42.0%	595.0	568.7	-26.3	-4.4%
43.2%	594.4	564.1	-30.3	-5.1%
44.4%	594.1	558.5	-35.5	-6.0%
45.7%	576.7	555.6	-21.1	-3.7%
46.9%	574.7	553.3	-21.4	-3.7%
48.1%	571.8	548.3	-23.5	-4.1%
49.4%	553.7	540.3	-13.5	-2.4%
50.6%	552.8	537.4	-15.4	-2.8%
51.9%	550.0	531.9	-18.1	-3.3%
53.1%	544.9	531.4	-13.5	-2.5%
54.3%	543.7	525.5	-18.3	-3.4%
55.6%	543.1	520.6	-22.5	-4.1%
56.8%	542.5	520.4	-22.0	-4.1%
58.0%	521.3	520.4	-0.9	-0.2%
59.3%	505.7	495.1	-10.6	-2.1%
60.5%	489.7	478.9	-10.8	-2.2%
61.7%	487.2	462.0	-25.2	-5.2%
63.0%	480.9	459.4	-21.5	-4.5%
64.2%	473.6	455.7	-18.0	-3.8%
65.4%	470.5	451.1	-19.4	-4.1%
66.7%	446.6	443.1	-3.5	-0.8%
67.9%	437.7	433.3	-4.4	-1.0%
69.1%	428.9	426.4	-2.5	-0.6%
70.4%	423.1	421.9	-1.2	-0.3%
71.6%	418.4	418.4	0.0	0.0%
72.8%	410.7	416.3	5.6	1.4%
74.1%	404.7	407.5	2.8	0.7%
75.3%	401.0	404.8	3.9	1.0%
76.5%	365.4	338.6	-26.8	-7.3%
77.8%	364.7	334.9	-29.8	-8.2%
79.0%	359.8	330.6	-29.1	-8.1%
80.2%	337.3	328.2	-9.1	-2.7%
81.5%	332.9	327.3	-5.7	-1.7%
82.7%	310.3	294.9	-15.5	-5.0%
84.0%	307.6	286.6	-21.0	-6.8%
85.2%	290.9	262.6	-28.3	-9.7%
86.4%	289.2	262.0	-27.2	-9.4%
87.7%	271.8	261.0	-10.8	-4.0%
88.9%	264.1	253.3	-10.8	-4.1%
90.1%	255.6	247.4	-8.2	-3.2%
91.4%	211.7	240.7	29.0	13.7%
92.6%	205.9	202.5	-3.3	-1.6%
93.8%	204.9	201.2	-3.7	-1.8%
95.1%	195.8	195.9	0.1	0.1%
96.3%	193.4	191.5	-1.9	-1.0%
97.5%	192.6	190.9	-1.7	-0.9%
98.8%	188.5	187.5	-1.0	-0.5%
100.0%	181.8	181.6	-0.2	-0.1%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2959.7	3104.9	145.2	4.9%
1.2%	2930.5	2603.0	-327.5	-11.2%
2.5%	2621.8	2263.2	-358.6	-13.7%
3.7%	2293.1	1611.9	-681.2	-29.7%
4.9%	1611.5	1581.8	-29.7	-1.8%
6.2%	1570.7	1553.2	-17.4	-1.1%
7.4%	1519.2	1462.0	-57.2	-3.8%
8.6%	1518.2	1346.3	-171.9	-11.3%
9.9%	1396.4	1264.3	-132.1	-9.5%
11.1%	1365.7	1138.3	-227.5	-16.7%
12.3%	1357.1	1102.5	-254.6	-18.8%
13.6%	1315.0	1039.9	-275.1	-20.9%
14.8%	1304.9	1038.7	-266.3	-20.4%
16.0%	1143.6	987.8	-155.8	-13.6%
17.3%	1106.2	958.4	-147.8	-13.4%
18.5%	1098.7	907.6	-191.1	-17.4%
19.8%	973.6	884.7	-88.9	-9.1%
21.0%	909.0	880.0	-29.0	-3.2%
22.2%	903.9	878.8	-25.1	-2.8%
23.5%	887.1	875.7	-11.4	-1.3%
24.7%	883.2	873.8	-9.4	-1.1%
25.9%	863.1	850.0	-13.1	-1.5%
27.2%	859.9	832.3	-27.6	-3.2%
28.4%	839.5	806.2	-33.4	-4.0%
29.6%	828.8	768.4	-60.4	-7.3%
30.9%	810.2	765.9	-44.3	-5.5%
32.1%	794.1	759.7	-34.4	-4.3%
33.3%	760.1	743.1	-17.0	-2.2%
34.6%	566.4	565.9	-0.5	-0.1%
35.8%	535.7	530.6	-5.1	-1.0%
37.0%	534.4	522.7	-11.7	-2.2%
38.3%	513.6	512.8	-0.8	-0.2%
39.5%	512.5	510.2	-2.2	-0.4%
40.7%	509.9	509.9	0.0	0.0%
42.0%	507.8	489.9	-17.9	-3.5%
43.2%	498.9	489.5	-9.4	-1.9%
44.4%	493.7	489.5	-4.1	-0.8%
45.7%	484.8	480.8	-4.0	-0.8%
46.9%	480.9	472.0	-9.0	-1.9%
48.1%	473.7	467.2	-6.5	-1.4%
49.4%	454.2	465.9	11.7	2.6%
50.6%	445.3	441.5	-3.8	-0.9%
51.9%	440.9	433.3	-7.5	-1.7%
53.1%	440.1	428.5	-11.6	-2.6%
54.3%	423.6	428.1	4.4	1.0%
55.6%	417.5	425.3	7.8	1.9%
56.8%	406.7	408.8	2.1	0.5%
58.0%	404.9	404.4	-0.4	-0.1%
59.3%	396.9	403.4	6.5	1.6%
60.5%	386.5	375.3	-11.2	-2.9%
61.7%	376.2	374.1	-2.1	-0.6%
63.0%	375.8	369.5	-6.3	-1.7%
64.2%	374.4	369.3	-5.0	-1.3%
65.4%	369.7	369.1	-0.6	-0.2%
66.7%	369.0	364.3	-4.7	-1.3%
67.9%	368.4	352.9	-15.6	-4.2%
69.1%	353.5	350.2	-3.3	-0.9%
70.4%	352.5	348.2	-4.3	-1.2%
71.6%	349.0	343.2	-5.8	-1.7%
72.8%	346.0	342.4	-3.6	-1.0%
74.1%	343.1	340.7	-2.5	-0.7%
75.3%	342.1	335.9	-6.2	-1.8%
76.5%	336.7	334.5	-2.2	-0.7%
77.8%	331.7	334.4	2.8	0.8%
79.0%	325.6	325.8	0.3	0.1%
80.2%	324.4	325.0	0.6	0.2%
81.5%	323.3	322.5	-0.8	-0.3%
82.7%	323.2	321.6	-1.6	-0.5%
84.0%	321.7	318.9	-2.8	-0.9%
85.2%	318.8	318.0	-0.8	-0.2%
86.4%	314.2	314.7	0.5	0.1%
87.7%	313.1	314.4	1.2	0.4%
88.9%	309.7	308.2	-1.5	-0.5%
90.1%	308.7	306.8	-1.8	-0.6%
91.4%	307.6	299.0	-8.5	-2.8%
92.6%	307.3	291.6	-15.7	-5.1%
93.8%	304.9	288.9	-16.0	-5.2%
95.1%	287.7	286.9	-0.8	-0.3%
96.3%	285.8	284.7	-1.2	-0.4%
97.5%	277.1	283.4	6.3	2.3%
98.8%	275.6	279.6	4.0	1.5%
100.0%	270.6	273.4	2.9	1.1%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3086.5	3142.0	55.5	1.8%
1.2%	2888.7	2882.5	-6.2	-0.2%
2.5%	2886.2	2767.2	-119.0	-4.1%
3.7%	2883.0	2692.8	-190.2	-6.6%
4.9%	2730.9	2683.5	-47.4	-1.7%
6.2%	2726.9	2532.5	-194.4	-7.1%
7.4%	2689.1	2529.2	-160.0	-5.9%
8.6%	2661.1	2358.3	-302.7	-11.4%
9.9%	2648.1	2233.5	-414.6	-15.7%
11.1%	2609.6	2152.9	-456.8	-17.5%
12.3%	2564.2	2098.6	-465.5	-18.2%
13.6%	2208.8	2024.3	-184.5	-8.4%
14.8%	2185.8	1970.7	-215.1	-9.8%
16.0%	2169.5	1905.3	-264.2	-12.2%
17.3%	2164.4	1878.9	-285.5	-13.2%
18.5%	2153.0	1800.4	-352.5	-16.4%
19.8%	2083.1	1739.1	-344.1	-16.5%
21.0%	2031.4	1691.0	-340.4	-16.8%
22.2%	1982.6	1651.7	-331.0	-16.7%
23.5%	1965.7	1608.7	-356.9	-18.2%
24.7%	1953.5	1514.9	-438.5	-22.4%
25.9%	1768.5	1507.1	-261.4	-14.8%
27.2%	1620.5	1492.4	-128.1	-7.9%
28.4%	1608.4	1492.0	-116.4	-7.2%
29.6%	1549.6	1422.3	-127.4	-8.2%
30.9%	1491.9	1324.0	-167.9	-11.3%
32.1%	1442.3	1225.2	-217.1	-15.0%
33.3%	1329.3	1199.9	-129.4	-9.7%
34.6%	1302.5	1166.8	-135.7	-10.4%
35.8%	1199.3	1101.1	-98.1	-8.2%
37.0%	1109.8	1066.3	-43.5	-3.9%
38.3%	1085.5	1060.6	-24.9	-2.3%
39.5%	1075.7	1029.6	-46.1	-4.3%
40.7%	1051.0	1029.0	-21.9	-2.1%
42.0%	1048.2	1027.7	-20.5	-2.0%
43.2%	1046.9	1025.4	-21.5	-2.1%
44.4%	1037.7	1023.8	-13.9	-1.3%
45.7%	1035.2	1013.4	-21.8	-2.1%
46.9%	1033.2	998.7	-34.5	-3.3%
48.1%	1029.3	986.6	-42.7	-4.1%
49.4%	1028.5	985.2	-43.2	-4.2%
50.6%	1028.3	975.0	-53.3	-5.2%
51.9%	1027.2	964.8	-62.3	-6.1%
53.1%	1021.6	952.7	-68.9	-6.7%
54.3%	1005.6	949.2	-56.4	-5.6%
55.6%	1004.9	948.1	-56.8	-5.7%
56.8%	1001.5	947.2	-54.3	-5.4%
58.0%	983.9	933.2	-50.7	-5.2%
59.3%	979.9	930.5	-49.4	-5.0%
60.5%	967.3	914.5	-52.8	-5.5%
61.7%	963.7	914.1	-49.6	-5.1%
63.0%	961.6	913.5	-48.1	-5.0%
64.2%	950.6	907.8	-42.8	-4.5%
65.4%	932.5	894.1	-38.4	-4.1%
66.7%	925.4	890.8	-34.7	-3.7%
67.9%	908.0	882.7	-25.2	-2.8%
69.1%	893.3	879.1	-14.1	-1.6%
70.4%	892.5	870.3	-22.1	-2.5%
71.6%	876.5	859.9	-16.6	-1.9%
72.8%	864.2	858.3	-5.9	-0.7%
74.1%	859.2	856.1	-3.0	-0.4%
75.3%	843.0	839.6	-3.4	-0.4%
76.5%	840.3	799.2	-41.1	-4.9%
77.8%	836.5	789.1	-47.4	-5.7%
79.0%	828.2	787.2	-41.0	-4.9%
80.2%	808.7	787.0	-21.6	-2.7%
81.5%	805.9	782.9	-23.0	-2.9%
82.7%	777.8	781.2	3.4	0.4%
84.0%	769.3	781.1	11.8	1.5%
85.2%	768.7	743.0	-25.7	-3.3%
86.4%	760.9	716.7	-44.2	-5.8%
87.7%	756.9	697.1	-59.7	-7.9%
88.9%	751.3	696.8	-54.5	-7.2%
90.1%	743.9	694.9	-49.0	-6.6%
91.4%	737.5	689.5	-48.1	-6.5%
92.6%	712.8	689.2	-23.6	-3.3%
93.8%	698.1	686.4	-11.7	-1.7%
95.1%	697.8	678.9	-18.8	-2.7%
96.3%	688.6	636.8	-51.8	-7.5%
97.5%	686.9	614.9	-72.0	-10.5%
98.8%	669.1	594.9	-74.3	-11.1%
100.0%	623.8	563.9	-59.9	-9.6%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3816.4	3643.3	-173.1	-4.5%
1.2%	3603.0	3395.0	-208.0	-5.8%
2.5%	3521.6	3358.1	-163.5	-4.6%
3.7%	3511.0	3346.4	-164.6	-4.7%
4.9%	3510.9	3286.2	-224.7	-6.4%
6.2%	3478.6	3158.3	-320.3	-9.2%
7.4%	3438.4	3080.0	-358.4	-10.4%
8.6%	3391.3	3046.6	-344.7	-10.2%
9.9%	3387.8	3025.6	-362.2	-10.7%
11.1%	3338.8	2684.5	-654.3	-19.6%
12.3%	3232.3	2683.9	-548.4	-17.0%
13.6%	3227.7	2673.0	-554.7	-17.2%
14.8%	3168.5	2639.1	-529.4	-16.7%
16.0%	3036.1	2495.5	-540.6	-17.8%
17.3%	3025.9	2444.1	-581.7	-19.2%
18.5%	2941.7	2301.5	-640.2	-21.8%
19.8%	2910.7	2282.0	-628.7	-21.6%
21.0%	2888.6	2204.7	-683.9	-23.7%
22.2%	2832.3	2201.8	-630.6	-22.3%
23.5%	2734.2	2097.8	-636.4	-23.3%
24.7%	2717.6	2090.9	-626.7	-23.1%
25.9%	2682.5	2086.7	-595.8	-22.2%
27.2%	2669.4	2050.1	-619.4	-23.2%
28.4%	2561.5	1977.0	-584.5	-22.8%
29.6%	2549.9	1961.3	-588.5	-23.1%
30.9%	2538.5	1913.2	-625.4	-24.6%
32.1%	2523.3	1906.5	-616.7	-24.4%
33.3%	2456.3	1902.6	-553.7	-22.5%
34.6%	2283.1	1900.4	-382.7	-16.8%
35.8%	2251.2	1886.7	-364.5	-16.2%
37.0%	2175.6	1885.3	-290.4	-13.3%
38.3%	2117.7	1884.6	-233.2	-11.0%
39.5%	2114.2	1706.2	-408.0	-19.3%
40.7%	2097.2	1705.4	-391.8	-18.7%
42.0%	2054.0	1671.6	-382.5	-18.6%
43.2%	2028.4	1657.2	-371.2	-18.3%
44.4%	1922.8	1588.8	-334.0	-17.4%
45.7%	1876.3	1553.0	-323.3	-17.2%
46.9%	1874.8	1539.7	-335.1	-17.9%
48.1%	1834.2	1532.3	-301.9	-16.5%
49.4%	1831.9	1526.2	-305.7	-16.7%
50.6%	1730.6	1453.2	-277.4	-16.0%
51.9%	1726.9	1396.3	-330.7	-19.1%
53.1%	1675.3	1348.5	-326.7	-19.5%
54.3%	1602.6	1248.7	-353.9	-22.1%
55.6%	761.5	641.8	-119.8	-15.7%
56.8%	663.8	598.2	-65.6	-9.9%
58.0%	636.9	566.8	-70.1	-11.0%
59.3%	607.9	548.8	-59.2	-9.7%
60.5%	580.8	534.2	-46.7	-8.0%
61.7%	580.7	520.8	-59.9	-10.3%
63.0%	572.7	519.4	-53.3	-9.3%
64.2%	547.9	516.6	-31.3	-5.7%
65.4%	543.7	503.9	-39.8	-7.3%
66.7%	543.3	498.9	-44.4	-8.2%
67.9%	531.2	490.4	-40.8	-7.7%
69.1%	500.3	458.7	-41.6	-8.3%
70.4%	370.7	370.3	-0.4	-0.1%
71.6%	351.2	355.8	4.6	1.3%
72.8%	348.7	340.1	-8.5	-2.4%
74.1%	346.3	333.1	-13.2	-3.8%
75.3%	341.8	329.2	-12.6	-3.7%
76.5%	336.5	327.4	-9.2	-2.7%
77.8%	333.2	326.6	-6.6	-2.0%
79.0%	332.9	325.5	-7.4	-2.2%
80.2%	330.1	323.7	-6.4	-1.9%
81.5%	328.0	323.3	-4.7	-1.4%
82.7%	326.7	314.7	-12.0	-3.7%
84.0%	324.4	312.6	-11.8	-3.6%
85.2%	322.0	312.2	-9.8	-3.0%
86.4%	321.7	309.8	-11.9	-3.7%
87.7%	320.8	308.4	-12.4	-3.9%
88.9%	318.0	307.8	-10.2	-3.2%
90.1%	314.6	307.8	-6.8	-2.2%
91.4%	314.3	307.8	-6.6	-2.1%
92.6%	313.1	307.1	-6.0	-1.9%
93.8%	312.3	305.5	-6.8	-2.2%
95.1%	312.1	304.8	-7.3	-2.3%
96.3%	312.0	302.1	-9.9	-3.2%
97.5%	310.2	298.0	-12.2	-3.9%
98.8%	308.9	297.5	-11.5	-3.7%
100.0%	307.6	295.8	-11.8	-3.8%

Figure SQ-22-b
Sacramento River at Collinsville, Monthly EC
Probability of Exceedance

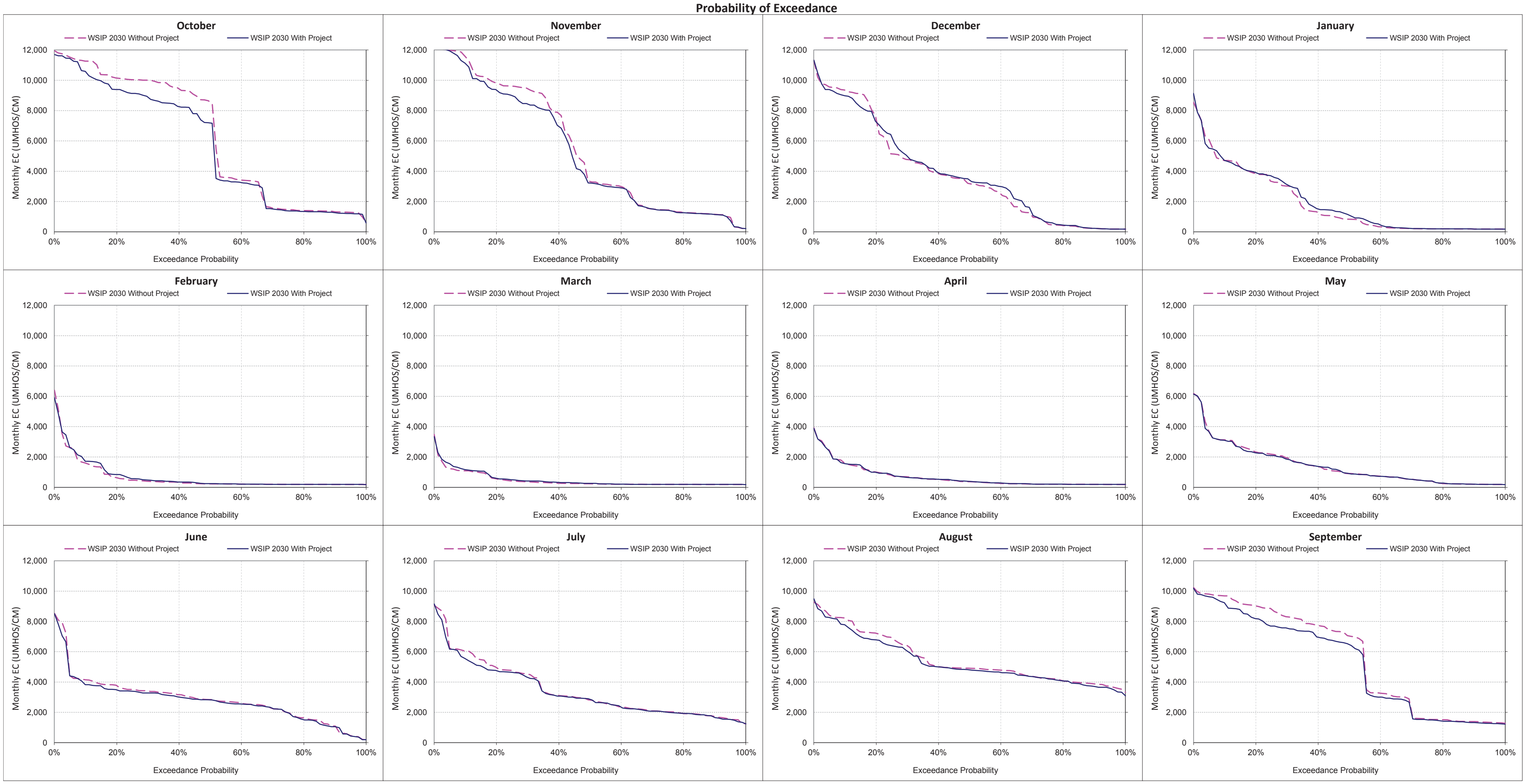


Table SQ-22-b
Sacramento River at Collinsville, Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11954.6	11710.1	-244.5	-2.0%
1.2%	11802.8	11613.4	-189.4	-1.6%
2.5%	11754.7	11613.1	-141.5	-1.2%
3.7%	11657.2	11456.6	-200.6	-1.7%
4.9%	11528.6	11451.8	-76.8	-0.7%
6.2%	11427.6	11250.3	-177.3	-1.6%
7.4%	11336.6	11231.8	-104.8	-0.9%
8.6%	11314.3	10636.8	-677.5	-6.0%
9.9%	11267.3	10595.4	-671.8	-6.0%
11.1%	11266.8	10296.4	-970.4	-8.6%
12.3%	11244.1	10166.9	-1077.2	-9.6%
13.6%	11024.6	10040.7	-983.9	-8.9%
14.8%	10377.0	9966.5	-410.5	-4.0%
16.0%	10365.0	9822.1	-542.9	-5.2%
17.3%	10361.2	9757.3	-603.8	-5.8%
18.5%	10215.9	9408.5	-807.4	-7.9%
19.8%	10149.5	9393.1	-756.4	-7.5%
21.0%	10123.5	9387.2	-736.3	-7.3%
22.2%	10098.4	9282.0	-816.4	-8.1%
23.5%	10059.6	9180.1	-879.5	-8.7%
24.7%	10042.4	9137.2	-905.2	-9.0%
25.9%	10035.4	9128.7	-906.7	-9.0%
27.2%	10034.0	9096.2	-937.8	-9.3%
28.4%	10009.9	9019.5	-990.4	-9.9%
29.6%	10009.3	8949.2	-1060.1	-10.6%
30.9%	10004.8	8748.5	-1256.3	-12.6%
32.1%	9935.4	8669.7	-1265.7	-12.7%
33.3%	9854.1	8624.1	-1229.9	-12.5%
34.6%	9846.2	8518.1	-1328.1	-13.5%
35.8%	9841.8	8498.3	-1343.5	-13.7%
37.0%	9633.4	8477.8	-1155.6	-12.0%
38.3%	9525.0	8447.5	-1077.5	-11.3%
39.5%	9503.2	8275.2	-1228.1	-12.9%
40.7%	9333.0	8229.1	-1103.9	-11.8%
42.0%	9317.8	8221.9	-1095.9	-11.8%
43.2%	9305.8	8214.3	-1091.5	-11.7%
44.4%	9095.9	7806.5	-1289.4	-14.2%
45.7%	8948.3	7804.7	-1143.6	-12.8%
46.9%	8720.0	7384.7	-1335.3	-15.3%
48.1%	8707.5	7216.8	-1490.6	-17.1%
49.4%	8647.8	7203.5	-1444.3	-16.7%
50.6%	8451.3	7171.2	-1280.1	-15.1%
51.9%	5467.5	3527.4	-1940.1	-35.5%
53.1%	3634.7	3411.9	-222.8	-6.1%
54.3%	3595.4	3363.1	-232.3	-6.5%
55.6%	3587.0	3359.5	-227.5	-6.3%
56.8%	3561.6	3303.2	-258.4	-7.3%
58.0%	3473.4	3297.6	-175.8	-5.1%
59.3%	3430.0	3273.4	-156.6	-4.6%
60.5%	3405.9	3234.9	-170.9	-5.0%
61.7%	3387.2	3217.0	-170.2	-5.0%
63.0%	3373.0	3147.0	-226.0	-6.7%
64.2%	3349.2	3088.7	-260.5	-7.8%
65.4%	3291.2	3076.1	-215.1	-6.5%
66.7%	2361.1	2897.3	536.2	22.7%
67.9%	1658.0	1536.1	-122.0	-7.4%
69.1%	1621.4	1534.5	-86.8	-5.4%
70.4%	1540.5	1491.7	-48.8	-3.2%
71.6%	1535.9	1457.7	-78.2	-5.1%
72.8%	1490.2	1452.0	-38.1	-2.6%
74.1%	1476.6	1393.2	-83.4	-5.6%
75.3%	1457.0	1382.3	-74.6	-5.1%
76.5%	1456.1	1379.9	-76.1	-5.2%
77.8%	1415.5	1371.0	-44.5	-3.1%
79.0%	1407.4	1352.9	-54.5	-3.9%
80.2%	1400.3	1338.5	-61.8	-4.4%
81.5%	1399.7	1334.6	-65.2	-4.7%
82.7%	1395.8	1334.3	-61.5	-4.4%
84.0%	1379.7	1328.4	-51.3	-3.7%
85.2%	1375.2	1325.7	-49.5	-3.6%
86.4%	1369.7	1313.1	-56.6	-4.1%
87.7%	1368.2	1300.9	-67.3	-4.9%
88.9%	1363.5	1290.7	-72.8	-5.3%
90.1%	1316.4	1266.0	-50.4	-3.8%
91.4%	1307.6	1231.5	-76.2	-5.8%
92.6%	1302.9	1229.8	-73.2	-5.6%
93.8%	1299.1	1212.7	-86.5	-6.7%
95.1%	1282.6	1207.7	-74.9	-5.8%
96.3%	1273.5	1190.5	-83.1	-6.5%
97.5%	1252.8	1186.7	-66.1	-5.3%
98.8%	988.8	1154.4	165.6	16.8%
100.0%	623.7	588.6	-35.1	-5.6%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12229.5	12130.2	-99.3	-0.8%
1.2%	12152.5	12122.4	-30.0	-0.2%
2.5%	12130.7	12039.4	-91.3	-0.8%
3.7%	12128.3	12034.2	-94.0	-0.8%
4.9%	11984.8	11944.8	-40.1	-0.3%
6.2%	11955.7	11793.2	-162.5	-1.4%
7.4%	11938.0	11632.9	-305.1	-2.6%
8.6%	11869.3	11305.4	-563.8	-4.8%
9.9%	11587.8	11131.5	-456.2	-3.9%
11.1%	11301.1	10886.9	-414.2	-3.7%
12.3%	10709.2	10114.2	-594.9	-5.6%
13.6%	10324.5	10103.9	-220.5	-2.1%
14.8%	10261.8	9936.4	-325.3	-3.2%
16.0%	10244.4	9929.9	-314.5	-3.1%
17.3%	10095.3	9571.3	-524.1	-5.2%
18.5%	9930.6	9413.0	-517.6	-5.2%
19.8%	9830.2	9385.5	-444.7	-4.5%
21.0%	9749.8	9191.9	-557.9	-5.7%
22.2%	9636.6	9109.6	-527.1	-5.5%
23.5%	9629.1	9075.4	-553.7	-5.8%
24.7%	9624.5	9016.5	-607.9	-6.3%
25.9%	9601.5	8919.8	-681.7	-7.1%
27.2%	9553.1	8631.0	-922.0	-9.7%
28.4%	9511.3	8465.6	-1045.7	-11.0%
29.6%	9491.2	8459.8	-1031.5	-10.9%
30.9%	9351.4	8365.5	-985.9	-10.5%
32.1%	9246.9	8357.2	-889.6	-9.6%
33.3%	9195.6	8201.5	-994.1	-10.8%
34.6%	9129.5	8109.7	-1019.8	-11.2%
35.8%	8822.3	8031.1	-791.1	-9.0%
37.0%	8190.5	8029.2	-161.3	-2.0%
38.3%	7907.7	7572.5	-335.1	-4.2%
39.5%	7893.2	7026.9	-866.4	-11.0%
40.7%	7670.1	6844.6	-825.6	-10.8%
42.0%	6620.5	6336.8	-283.7	-4.3%
43.2%	6368.8	5765.1	-603.8	-9.5%
44.4%	5790.1	4928.8	-861.3	-14.9%
45.7%	5040.1	4173.5	-866.7	-17.2%
46.9%	4785.6	4086.8	-698.8	-14.6%
48.1%	4561.4	3792.9	-768.5	-16.8%
49.4%	3354.4	3233.0	-121.4	-3.6%
50.6%	3286.6	3210.0	-76.6	-2.3%
51.9%	3279.1	3176.9	-102.2	-3.1%
53.1%	3158.2	3126.8	-31.4	-1.0%
54.3%	3149.1	3039.4	-109.8	-3.5%
55.6%	3131.8	2986.4	-145.4	-4.6%
56.8%	3077.6	2964.4	-113.2	-3.7%
58.0%	3060.4	2943.1	-117.3	-3.8%
59.3%	3036.4	2921.4	-115.1	-3.8%
60.5%	2947.2	2887.1	-60.1	-2.0%
61.7%	2816.5	2807.1	-9.4	-0.3%
63.0%	2581.4	2274.1	-307.3	-11.9%
64.2%	2043.3	2060.6	17.3	0.8%
65.4%	1774.4	1726.1	-48.3	-2.7%
66.7%	1734.6	1689.3	-45.2	-2.6%
67.9%	1569.1	1625.5	56.4	3.6%
69.1%	1527.9	1531.0	3.1	0.2%
70.4%	1500.5	1496.7	-3.8	-0.3%
71.6%	1478.7	1450.3	-28.4	-1.9%
72.8%	1460.8	1430.6	-30.2	-2.1%
74.1%	1444.9	1425.9	-19.0	-1.3%
75.3%	1439.7	1412.4	-27.2	-1.9%
76.5%	1389.0	1356.4	-32.6	-2.3%
77.8%	1311.9	1284.5	-27.4	-2.1%
79.0%	1309.3	1260.8	-48.5	-3.7%
80.2%	1265.4	1250.8	-14.6	-1.2%
81.5%	1258.5	1234.5	-23.9	-1.9%
82.7%	1248.0	1226.9	-21.1	-1.7%
84.0%	1237.4	1209.0	-28.4	-2.3%
85.2%	1221.3	1203.1	-18.2	-1.5%
86.4%	1197.7	1195.2	-2.5	-0.2%
87.7%	1196.0	1169.6	-26.4	-2.2%
88.9%	1159.9	1169.1	9.2	0.8%
90.1%	1153.8	1140.3	-13.5	-1.2%
91.4%	1136.0	1120.4	-15.6	-1.4%
92.6%	1130.3	1113.3	-17.0	-1.5%
93.8%	1026.5	998.0	-28.5	-2.8%
95.1%	950.0	747.8	-202.2	-21.3%
96.3%	326.3	337.6	11.4	3.5%
97.5%	293.9	315.9	22.1	7.5%
98.8%	231.0	229.8	-1.2	
100.0%	201.0	213.8	12.8	

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11317.5	11323.4	5.9	0.1%
1.2%	10201.8	10469.7	267.8	2.6%
2.5%	9774.6	9764.0	-10.5	-0.1%
3.7%	9713.9	9399.5	-314.4	-3.2%
4.9%	9560.7	9388.2	-172.5	-1.8%
6.2%	9525.6	9289.0	-236.5	-2.5%
7.4%	9499.0	9132.3	-366.6	-3.9%
8.6%	9393.3	9051.3	-342.1	-3.6%
9.9%	9358.7	8977.7	-381.0	-4.1%
11.1%	9241.2	8953.0	-288.2	-3.1%
12.3%	9200.9	8817.6	-383.3	-4.2%
13.6%	9138.2	8506.8	-631.4	-6.9%
14.8%	9123.5	8257.0	-866.5	-9.5%
16.0%	9045.9	8086.5	-959.3	-10.6%
17.3%	8650.3	7969.8	-680.6	-7.9%
18.5%	8059.2	7953.3	-105.8	-1.3%
19.8%	7673.5	7304.0	-369.5	-4.8%
21.0%	6454.6	7054.1	599.5	9.3%
22.2%	6304.1	6730.9	426.8	6.8%
23.5%	5984.8	6523.6	538.8	9.0%
24.7%	5147.9	6432.5	1284.6	25.0%
25.9%	5126.0	5843.8	717.8	14.0%
27.2%	5090.3	5475.6	385.3	7.6%
28.4%	4873.2	5253.0	379.9	7.8%
29.6%	4774.8	5053.8	278.9	5.8%
30.9%	4759.6	4783.8	24.1	0.5%
32.1%	4576.4	4694.1	117.7	2.6%
33.3%	4545.9	4610.5	64.5	1.4%
34.6%	4480.2	4583.0	102.8	2.3%
35.8%	4465.3	4416.9	-48.3	-1.1%
37.0%	4035.0	4209.1	174.1	4.3%
38.3%	3945.1	4185.5	240.4	6.1%
39.5%	3887.2	3942.8	55.5	1.4%
40.7%	3779.7	3822.4	42.8	1.1%
42.0%	3744.3	3812.9	68.6	1.8%
43.2%	3699.4	3750.1	50.8	1.4%
44.4%	3576.3	3684.0	107.7	3.0%
45.7%	3536.5	3625.3	88.8	2.5%
46.9%	3530.4	3575.0	44.6	1.3%
48.1%	3459.9	3514.1	54.2	1.6%
49.4%	3200.7	3497.0	296.2	9.3%
50.6%	3153.4	3311.0	157.6	5.0%
51.9%	3141.8	3260.1	118.3	3.8%
53.1%	3055.2	3241.0	185.8	6.1%
54.3%	3036.6	3234.3	197.8	6.5%
55.6%	2934.8	3225.6	290.8	9.9%
56.8%	2874.5	3078.4	203.9	7.1%
58.0%	2701.4	3076.5	375.1	13.9%
59.3%	2639.4	3013.3	373.8	14.2%
60.5%	2398.0	2974.7	576.8	24.1%
61.7%	2308.8	2879.4	570.6	24.7%
63.0%	1998.4	2684.7	686.3	34.3%
64.2%	1662.0	2205.6	543.6	32.7%
65.4%	1655.9	2116.1	460.2	27.8%
66.7%	1324.9	2041.8	716.9	54.1%
67.9%	1277.9	1662.3	384.3	30.1%
69.1%	1262.8	1620.1	357.2	28.3%
70.4%	959.5	1068.6	109.1	11.4%
71.6%	947.1	972.8	25.7	2.7%
72.8%	807.5	854.4	46.9	5.8%
74.1%	693.0	684.5	-8.4	-1.2%
75.3%	489.8	617.3	127.6	26.0%
76.5%	457.6	587.1	129.5	28.3%
77.8%	448.1	483.2	35.0	7.8%
79.0%	435.2	463.0	27.9	6.4%
80.2%	413.9	441.1	27.2	6.6%
81.5%	397.1	427.0	29.9	7.5%
82.7%	386.1	426.6	40.5	10.5%
84.0%	375.1	414.4	39.3	10.5%
85.2%	304.8	327.5	22.7	7.5%
86.4%	265.8	282.3	16.5	6.2%
87.7%	245.6	259.4	13.8	5.6%
88.9%	244.5	240.0	-4.5	-1.8%
90.1%	228.6	227.8	-0.8	-0.4%
91.4%	218.2	221.2	3.0	1.4%
92.6%	204.4	204.2	-0.2	-0.1%
93.8%	197.8	199.0	1.2	0.6%
95.1%	185.4	185.4	0.0	
96.3%	184.8	185.0	0.2	
97.5%	181.0	180.9	-0.1	
98.8%	180.7	180.7	0.0	
100.0%	180.3	180.4	0.1	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8539.9	9136.3	596.4	7.0%
1.2%	7994.6	7896.0	-98.7	-1.2%
2.5%	7356.3	7348.8	-7.6	-0.1%
3.7%	6325.3	5822.5	-502.9	-8.0%
4.9%	6083.2	5517.6	-565.6	-9.3%
6.2%	5497.8	5470.1	-27.8	-0.5%
7.4%	4884.4	5343.0	458.6	9.4%
8.6%	4783.6	5007.2	223.6	4.7%
9.9%	4703.7	4723.1	19.4	0.4%
11.1%	4703.7	4629.0	-74.7	-1.6%
12.3%	4665.6	4553.1	-112.5	-2.4%
13.6%	4650.8	4399.1	-251.7	-5.4%
14.8%	4291.2	4308.2	16.9	0.4%
16.0%	4102.8	4135.8	32.9	0.8%
17.3%	4038.8	4036.0	-2.9	-0.1%
18.5%	3931.7	3996.1	64.3	1.6%
19.8%	3847.3	3932.1	84.8	2.2%
21.0%	3790.8	3822.5	31.7	0.8%
22.2%	3784.4	3819.3	34.9	0.9%
23.5%	3779.8	3733.3	-46.5	-1.2%
24.7%	3344.4	3713.6	369.3	11.0%
25.9%	3276.0	3581.6	305.6	9.3%
27.2%	3262.5	3520.8	258.4	7.9%
28.4%	3054.3	3342.8	288.5	9.4%
29.6%	3028.2	3151.5	123.3	4.1%
30.9%	3008.7	3024.7	16.0	0.5%
32.1%	2535.0	2924.9	389.9	15.4%
33.3%	2319.5	2872.5	553.0	23.8%
34.6%	1719.3	2289.1	569.8	33.1%
35.8%	1460.4	2200.8	740.4	50.7%
37.0%	1389.1	1828.0	439.0	31.6%
38.3%	1350.5	1693.4	343.0	25.4%
39.5%	1323.6	1531.8	208.2	15.7%
40.7%	1134.8	1464.8	330.0	29.1%
42.0%	1084.0	1459.4	375.4	34.6%
43.2%	1075.0	1446.6	371.6	34.6%
44.4%	1066.6	1422.5	355.9	33.4%
45.7%	970.7	1341.8	371.1	38.2%
46.9%	916.2	1335.4	419.2	45.7%
48.1%	841.5	1239.5	397.9	47.3%
49.4%	834.9	1149.0	314.1	37.6%
50.6%	825.9	1038.6	212.7	25.8%
51.9%	820.0	911.3	91.3	11.1%
53.1%	798.6	909.3	110.8	13.9%
54.3%	570.5	872.5	301.9	52.9%
55.6%	477.8	757.4	279.6	58.5%
56.8%	453.1	642.6	189.5	41.8%
58.0%	404.5	564.0	159.5	39.4%
59.3%	341.6	517.1	175.5	51.4%
60.5%	322.1	402.7	80.7	25.0%
61.7%	284.1	333.7	49.6	17.5%
63.0%	259.9	330.1	70.2	27.0%
64.2%	252.3	280.6	28.3	11.2%
65.4%	245.9	273.9	27.9	11.4%
66.7%	231.0	257.6	26.6	11.5%
67.9%	230.2	241.9	11.7	5.1%
69.1%	225.2	228.2	3.0	1.3%
70.4%	212.5	221.8	9.4	4.4%
71.6%	211.5	218.9	7.3	3.5%
72.8%	204.4	214.3	9.9	4.8%
74.1%	202.3	209.2	6.9	3.4%
75.3%	200.6	202.0	1.4	0.7%
76.5%	196.2	201.2	5.0	2.5%
77.8%	195.9	198.4	2.5	1.3%
79.0%	195.5	196.4	0.8	0.4%
80.2%	194.9	195.8	0.9	0.5%
81.5%	194.9	195.1	0.2	0.1%
82.7%	194.8	195.0	0.2	0.1%
84.0%	192.1	192.4	0.4	0.2%
85.2%	191.4	192.2	0.8	0.4%
86.4%	190.9	191.8	0.9	0.5%
87.7%	189.3	191.4	2.1	1.1%
88.9%	189.0	189.6	0.6	0.3%
90.1%	186.3	186.5	0.1	0.1%
91.4%	185.5	186.3	0.8	0.4%
92.6%	185.3	185.9	0.5	0.3%
93.8%	185.1	185.8	0.7	0.4%
95.1%	184.7	184.8	0.1	0.1%
96.3%	184.3	184.4	0.1	0.1%
97.5%	182.9	183.1	0.2	0.1%
98.8%	182.2	182.6	0.4	0.2%
100.0%	180.5	180.5	0.0	0.0%

Table SQ-22-b
Sacramento River at Collinsville, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	6406.7	5924.5	-482.2	-7.5%
1.2%	5172.5	4855.8	-316.7	-6.1%
2.5%	3545.8	3640.5	94.7	2.7%
3.7%	2724.6	3456.5	732.0	26.9%
4.9%	2625.5	2612.1	-13.4	-0.5%
6.2%	2585.6	2488.3	-97.2	-3.8%
7.4%	1823.5	2138.3	314.8	17.3%
8.6%	1670.6	2044.8	374.2	22.4%
9.9%	1598.7	1720.9	122.2	7.6%
11.1%	1507.9	1720.8	212.9	14.1%
12.3%	1387.4	1702.4	315.1	22.7%
13.6%	1346.0	1657.6	311.7	23.2%
14.8%	1340.6	1584.6	244.0	18.2%
16.0%	861.8	1153.5	291.7	33.8%
17.3%	861.4	898.2	36.8	4.3%
18.5%	661.7	852.8	191.1	28.9%
19.8%	644.8	839.3	194.5	30.2%
21.0%	571.3	834.0	262.7	46.0%
22.2%	553.6	750.6	197.0	35.6%
23.5%	486.0	647.9	161.9	33.3%
24.7%	464.5	572.2	107.7	23.2%
25.9%	461.7	559.9	98.3	21.3%
27.2%	438.1	554.0	115.8	26.4%
28.4%	423.6	494.8	71.2	16.8%
29.6%	400.7	476.1	75.4	18.8%
30.9%	385.1	467.4	82.3	21.4%
32.1%	375.9	436.8	60.9	16.2%
33.3%	367.5	422.4	54.9	14.9%
34.6%	349.1	422.0	72.9	20.9%
35.8%	347.5	392.5	45.0	12.9%
37.0%	347.2	392.1	45.0	12.9%
38.3%	344.7	380.2	35.6	10.3%
39.5%	336.5	350.3	13.8	4.1%
40.7%	283.5	340.8	57.3	20.2%
42.0%	282.7	339.6	56.9	20.1%
43.2%	278.2	338.9	60.7	21.8%
44.4%	259.4	319.5	60.1	23.2%
45.7%	243.3	299.5	56.2	23.1%
46.9%	235.3	253.0	17.7	7.5%
48.1%	229.0	247.3	18.3	8.0%
49.4%	228.6	242.5	13.8	6.1%
50.6%	221.7	240.4	18.8	8.5%
51.9%	221.5	232.6	11.1	5.0%
53.1%	221.4	232.0	10.6	4.8%
54.3%	220.0	229.1	9.1	4.2%
55.6%	219.0	226.5	7.5	3.4%
56.8%	217.7	223.9	6.2	2.9%
58.0%	212.3	219.2	6.9	3.2%
59.3%	210.9	215.0	4.1	2.0%
60.5%	210.7	214.4	3.6	1.7%
61.7%	203.1	212.9	9.8	4.8%
63.0%	201.1	212.3	11.2	5.6%
64.2%	200.7	211.4	10.7	5.3%
65.4%	198.9	205.3	6.4	3.2%
66.7%	198.3	203.0	4.7	2.4%
67.9%	195.5	198.0	2.5	1.3%
69.1%	193.9	196.5	2.5	1.3%
70.4%	193.6	194.4	0.8	0.4%
71.6%	193.5	194.4	0.9	0.5%
72.8%	193.1	194.3	1.3	0.6%
74.1%	192.6	193.9	1.3	0.7%
75.3%	192.1	192.9	0.8	0.4%
76.5%	190.8	191.4	0.6	0.3%
77.8%	190.7	190.6	-0.1	0.0%
79.0%	190.3	190.2	0.0	0.0%
80.2%	189.5	189.5	0.0	0.0%
81.5%	189.4	189.4	0.0	0.0%
82.7%	188.8	189.2	0.4	0.2%
84.0%	188.4	188.7	0.4	0.2%
85.2%	187.6	188.3	0.7	0.4%
86.4%	187.6	188.2	0.6	0.3%
87.7%	187.1	187.1	0.1	0.0%
88.9%	186.3	186.3	0.0	0.0%
90.1%	185.7	186.2	0.5	0.3%
91.4%	185.7	186.2	0.5	0.3%
92.6%	185.5	185.7	0.1	0.1%
93.8%	185.1	185.3	0.1	0.1%
95.1%	184.8	184.7	-0.1	-0.1%
96.3%	183.5	184.7	1.2	0.6%
97.5%	183.0	183.4	0.3	0.2%
98.8%	182.5	182.5	0.0	0.0%
100.0%	179.4	179.4	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3483.7	3346.9	-136.9	-3.9%
1.2%	2126.0	2301.9	175.9	8.3%
2.5%	1715.0	1847.3	132.3	7.7%
3.7%	1327.3	1660.2	332.9	25.1%
4.9%	1233.2	1557.0	323.8	26.3%
6.2%	1200.3	1374.9	174.7	14.6%
7.4%	1113.9	1319.9	206.0	18.5%
8.6%	1093.0	1240.6	147.6	13.5%
9.9%	1087.5	1159.7	72.1	6.6%
11.1%	1085.1	1130.9	45.7	4.2%
12.3%	1030.9	1097.1	66.2	6.4%
13.6%	1013.5	1075.4	61.9	6.1%
14.8%	970.9	1062.5	91.6	9.4%
16.0%	945.7	1062.3	116.6	12.3%
17.3%	813.2	869.4	56.1	6.9%
18.5%	603.4	648.1	44.6	7.4%
19.8%	566.2	604.5	38.3	6.8%
21.0%	510.2	541.4	31.3	6.1%
22.2%	490.6	541.1	50.5	10.3%
23.5%	449.5	531.1	81.6	18.2%
24.7%	418.2	503.3	85.1	20.4%
25.9%	411.9	485.8	73.9	17.9%
27.2%	387.6	443.3	55.6	14.4%
28.4%	377.6	421.1	43.5	11.5%
29.6%	360.5	415.5	55.0	15.3%
30.9%	354.5	414.4	59.9	16.9%
32.1%	340.8	408.8	68.0	20.0%
33.3%	320.8	404.9	84.1	26.2%
34.6%	317.9	388.7	70.8	22.3%
35.8%	309.1	355.6	46.5	15.0%
37.0%	294.8	344.5	49.7	16.9%
38.3%	280.9	340.7	59.8	21.3%
39.5%	265.1	321.2	56.1	21.1%
40.7%	263.2	311.5	48.3	18.4%
42.0%	257.4	306.7	49.3	19.2%
43.2%	250.7	306.0	55.3	22.1%
44.4%	248.2	299.5	51.3	20.7%
45.7%	246.3	295.9	49.5	20.1%
46.9%	245.5	281.2	35.7	14.5%
48.1%	237.9	265.2	27.3	11.5%
49.4%	233.9	259.6	25.8	11.0%
50.6%	228.5	257.7	29.2	12.8%
51.9%	225.4	250.1	24.7	10.9%
53.1%	222.3	231.6	9.3	4.2%
54.3%	217.5	226.2	8.6	4.0%
55.6%	205.4	220.6	15.2	7.4%
56.8%	205.2	219.0	13.8	6.7%
58.0%	205.0	210.3	5.2	2.5%
59.3%	201.6	209.6	8.0	3.9%
60.5%	200.9	206.3	5.4	2.7%
61.7%	197.3	200.8	3.4	1.7%
63.0%	195.6	196.4	0.8	0.4%
64.2%	195.2	196.2	0.9	0.5%
65.4%	194.2	195.7	1.5	0.8%
66.7%	193.4	194.9	1.4	0.7%
67.9%	193.2	194.0	0.8	0.4%
69.1%	193.2	193.6	0.4	0.2%
70.4%	191.4	193.2	1.9	1.0%
71.6%	190.8	192.5	1.7	0.9%
72.8%	190.8	190.9	0.1	0.1%
74.1%	189.9	190.6	0.7	0.4%
75.3%	188.8	190.3	1.4	0.8%
76.5%	188.7	190.3	1.5	0.8%
77.8%	188.3	188.7	0.4	0.2%
79.0%	188.2	188.6	0.4	0.2%
80.2%	188.2	188.5	0.3	0.2%
81.5%	187.9	188.2	0.3	0.2%
82.7%	187.5	188.1	0.5	0.3%
84.0%	187.0	187.7	0.7	0.4%
85.2%	186.7	187.3	0.7	0.4%
86.4%	186.1	186.3	0.2	0.1%
87.7%	186.1	186.1	0.1	0.0%
88.9%	185.7	186.0	0.4	0.2%
90.1%	185.6	186.0	0.4	0.2%
91.4%	185.3	185.4	0.1	0.1%
92.6%	184.6	184.6	0.0	0.0%
93.8%	184.6	184.6	-0.1	0.0%
95.1%	183.8	184.4	0.5	0.3%
96.3%	182.8	182.8	0.0	0.0%
97.5%	181.7	181.7	0.0	0.0%
98.8%	181.1	181.4	0.3	0.2%
100.0%	180.9	180.9	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3920.2	3881.9	-38.3	-1.0%
1.2%	3182.5	3183.8	1.3	0.0%
2.5%	3065.6	2972.5	-93.0	-3.0%
3.7%	2679.7	2648.4	-31.3	-1.2%
4.9%	2441.1	2401.9	-39.2	-1.6%
6.2%	1900.0	1861.1	-38.9	-2.0%
7.4%	1831.3	1846.0	14.7	0.8%
8.6%	1797.4	1628.1	-169.3	-9.4%
9.9%	1595.3	1564.7	-30.5	-1.9%
11.1%	1503.8	1532.3	28.5	1.9%
12.3%	1446.7	1499.5	52.9	3.7%
13.6%	1406.9	1499.4	92.6	6.6%
14.8%	1382.9	1478.2	95.3	6.9%
16.0%	1158.1	1250.0	91.9	7.9%
17.3%	1154.0	1119.6	-34.4	-3.0%
18.5%	1035.5	1001.1	-34.4	-3.3%
19.8%	1008.0	992.6	-15.5	-1.5%
21.0%	964.3	933.3	-31.0	-3.2%
22.2%	915.6	930.9	15.3	1.7%
23.5%	862.5	921.1	58.6	6.8%
24.7%	808.1	863.5	55.5	6.9%
25.9%	708.8	740.5	31.7	4.5%
27.2%	706.7	718.1	11.4	1.6%
28.4%	699.6	691.2	-8.4	-1.2%
29.6%	696.1	658.6	-37.5	-5.4%
30.9%	663.0	627.4	-35.5	-5.4%
32.1%	634.0	623.2	-10.8	-1.7%
33.3%	619.5	621.1	1.6	0.3%
34.6%	596.4	567.0	-29.3	-4.9%
35.8%	549.5	560.0	10.5	1.9%
37.0%	536.6	556.5	19.9	3.7%
38.3%	536.3	546.4	10.1	1.9%
39.5%	514.1	525.5	11.4	2.2%
40.7%	511.0	515.1	4.0	0.8%
42.0%	476.8	513.7	36.9	7.7%
43.2%	452.7	512.1	59.4	13.1%
44.4%	447.7	459.9	12.2	2.7%
45.7%	437.4	441.9	4.5	1.0%
46.9%	382.0	404.1	22.1	5.8%
48.1%	369.3	404.0	34.7	9.4%
49.4%	369.2	402.2	33.0	8.9%
50.6%	364.5	380.7	16.3	4.5%
51.9%	353.5	354.5	1.0	0.3%
53.1%	348.3	340.9	-7.4	-2.1%
54.3%	320.2	330.3	10.1	3.1%
55.6%	301.5	321.9	20.4	6.8%
56.8%	300.3	299.6	-0.6	-0.2%
58.0%	284.2	292.9	8.8	3.1%
59.3%	268.0	290.6	22.6	8.4%
60.5%	247.3	269.8	22.5	9.1%
61.7%	237.9	251.1	13.2	5.6%
63.0%	236.7	249.0	12.3	5.2%
64.2%	234.1	238.9	4.8	2.0%
65.4%	230.1	236.6	6.6	2.8%
66.7%	229.4	236.4	6.9	3.0%
67.9%	223.4	234.5	11.1	5.0%
69.1%	217.9	219.7	1.8	0.8%
70.4%	208.8	212.7	3.8	1.8%
71.6%	205.9	208.5	2.6	1.3%
72.8%	205.0	206.8	1.8	0.9%
74.1%	203.0	205.3	2.3	1.1%
75.3%	202.9	203.6	0.7	0.3%
76.5%	201.8	203.0	1.2	0.6%
77.8%	201.2	202.0	0.8	0.4%
79.0%	199.7	201.4	1.7	0.8%
80.2%	199.6	199.7	0.1	0.0%
81.5%	196.8	196.9	0.1	0.0%
82.7%	195.9	196.3	0.4	0.2%
84.0%	195.8	195.8	0.0	0.0%
85.2%	195.0	195.7	0.7	0.4%
86.4%	194.5	195.6	1.1	0.5%
87.7%	194.2	195.2	0.9	0.5%
88.9%	192.5	192.6	0.1	0.0%
90.1%	190.1	192.2	2.1	1.1%
91.4%	189.1	190.9	1.8	1.0%
92.6%	188.2	188.2	0.0	0.0%
93.8%	186.4	186.2	-0.2	-0.1%
95.1%	185.7	185.7	0.0	0.0%
96.3%	185.4	185.6	0.2	0.1%
97.5%	185.3	185.3	0.0	0.0%
98.8%	182.6	182.7	0.1	0.1%
100.0%	181.2	181.5	0.4	0.2%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	6185.7	6149.8	-35.9	-0.6%
1.2%	6019.0	6030.4	11.3	0.2%
2.5%	5634.7	5609.4	-25.3	-0.4%
3.7%	4341.4	3888.4	-453.0	-10.4%
4.9%	3675.6	3681.2	5.6	0.2%
6.2%	3230.6	3252.7	22.1	0.7%
7.4%	3173.7	3189.7	16.0	0.5%
8.6%	3130.4	3124.3	-6.1	-0.2%
9.9%	3128.0	3106.9	-21.1	-0.7%
11.1%	3103.8	3032.6	-71.3	-2.3%
12.3%	3083.2	3023.9	-59.3	-1.9%
13.6%	2755.3	2701.4	-53.9	-2.0%
14.8%	2727.2	2650.7	-76.4	-2.8%
16.0%	2645.1	2450.0	-195.1	-7.4%
17.3%	2555.9	2368.2	-187.7	-7.3%
18.5%	2479.1	2338.9	-140.3	-5.7%
19.8%	2337.8	2269.7	-68.1	-2.9%
21.0%	2278.2	2252.1	-26.1	-1.1%
22.2%	2268.1	2246.9	-21.2	-0.9%
23.5%	2233.8	2106.9	-126.9	-5.7%
24.7%	2183.8	2094.3	-89.5	-4.1%
25.9%	2153.1	2092.1	-61.0	-2.8%
27.2%	2083.5	2020.8	-62.8	-3.0%
28.4%	2069.5	1990.9	-78.6	-3.8%
29.6%	1949.9	1869.8	-80.1	-4.1%
30.9%	1901.5	1824.0	-77.4	-4.1%
32.1%	1734.2	1676.2	-58.0	-3.3%
33.3%	1635.8	1644.4	8.6	0.5%
34.6%	1616.2	1614.8	-1.4	-0.1%
35.8%	1497.7	1522.6	24.9	1.7%
37.0%	1466.6	1454.4	-12.2	-0.8%
38.3%	1427.1	1443.7	16.7	1.2%
39.5%	1350.9	1391.4	40.5	3.0%
40.7%	1338.1	1350.8	12.8	1.0%
42.0%	1192.7	1324.3	131.6	11.0%
43.2%	1175.2	1320.1	144.9	12.3%
44.4%	1088.7	1207.9	119.3	11.0%
45.7%	1065.0	1186.5	121.5	11.4%
46.9%	1039.3	1098.2	58.9	5.7%
48.1%	928.4	961.5	33.2	3.6%
49.4%	907.9	921.8	13.8	1.5%
50.6%	905.4	880.9	-24.4	-2.7%
51.9%	881.2	871.9	-9.3	-1.1%
53.1%	872.6	848.1	-24.5	-2.8%
54.3%	843.1	834.4	-8.7	-1.0%
55.6%	824.3	833.1	8.8	1.1%
56.8%	771.3	760.5	-10.8	-1.4%
58.0%	757.6	758.7	1.1	0.1%
59.3%	741.8	719.8	-22.0	-3.0%
60.5%	709.6	714.8	5.2	0.7%
61.7%	702.5	697.6	-4.9	-0.7%
63.0%	681.0	675.3	-5.8	-0.8%
64.2%	672.1	674.2	2.2	0.3%
65.4%	645.2	668.0	22.8	3.5%
66.7%	603.5	621.2	17.7	2.9%
67.9%	557.8	568.6	10.9	1.9%
69.1%	521.6	534.3	12.7	2.4%
70.4%	521.6	521.4	-0.2	0.0%
71.6%	483.7	484.9	1.3	0.3%
72.8%	462.6	461.6	-1.0	-0.2%
74.1%	428.8	433.0	4.3	1.0%
75.3%	408.8	418.0	9.2	2.2%
76.5%	403.5	414.2	10.7	2.7%
77.8%	281.2	316.0	34.8	12.4%
79.0%	264.9	275.1	10.2	3.9%
80.2%	240.9	273.5	32.6	13.5%
81.5%	238.8	240.9	2.2	0.9%
82.7%	227.5	229.2	1.8	0.8%
84.0%	222.0	228.5	6.5	2.9%
85.2%	216.6	222.6	6.0	2.8%
86.4%	212.5	217.0	4.6	2.1%
87.7%	209.5	209.8	0.3	0.1%
88.9%	207.9	209.7	1.8	0.8%
90.1%	198.9	199.5	0.6	0.3%
91.4%	196.8	197.5	0.7	0.4%
92.6%	195.1	194.9	-0.2	-0.1%
93.8%	192.4	192.4	0.0	0.0%
95.1%	191.1	191.3	0.1	0.1%
96.3%	183.8	183.8	0.0	0.0%
97.5%	182.0	182.1	0.1	0.1%
98.8%	182.0	182.1	0.1	0.1%
100.0%	179.5	179.7	0.2	0.1%

Table SQ-22-b

Sacramento River at Collinsville, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8534.9	8519.7	-15.1	-0.2%
1.2%	8098.8	7809.2	-289.6	-3.6%
2.5%	7940.0	7045.6	-894.4	-11.3%
3.7%	7235.0	6646.9	-588.1	-8.1%
4.9%	4413.2	4414.7	1.5	0.0%
6.2%	4238.7	4353.1	114.4	2.7%
7.4%	4237.0	4242.0	5.0	0.1%
8.6%	4195.0	4077.8	-117.2	-2.8%
9.9%	4147.6	3830.6	-317.0	-7.6%
11.1%	4125.3	3817.0	-308.3	-7.5%
12.3%	4059.2	3779.6	-279.6	-6.9%
13.6%	3944.4	3764.1	-180.4	-4.6%
14.8%	3866.2	3758.0	-108.2	-2.8%
16.0%	3837.2	3574.5	-262.7	-6.8%
17.3%	3825.7	3520.1	-305.6	-8.0%
18.5%	3820.5	3518.0	-302.5	-7.9%
19.8%	3789.0	3503.4	-285.6	-7.5%
21.0%	3630.6	3417.9	-212.6	-5.9%
22.2%	3563.4	3408.4	-155.0	-4.4%
23.5%	3511.3	3405.9	-105.4	-3.0%
24.7%	3507.8	3400.9	-106.9	-3.0%
25.9%	3487.9	3373.4	-114.5	-3.3%
27.2%	3433.3	3321.9	-111.4	-3.2%
28.4%	3427.8	3279.6	-148.2	-4.3%
29.6%	3427.4	3275.6	-151.8	-4.4%
30.9%	3375.0	3271.7	-103.3	-3.1%
32.1%	3372.7	3271.6	-101.1	-3.0%
33.3%	3327.1	3256.5	-70.6	-2.1%
34.6%	3314.6	3166.8	-147.8	-4.5%
35.8%	3293.1	3143.0	-150.1	-4.6%
37.0%	3258.3	3105.8	-152.5	-4.7%
38.3%	3254.1	3081.3	-172.8	-5.3%
39.5%	3166.0	3021.2	-144.8	-4.6%
40.7%	3157.9	2994.2	-163.7	-5.2%
42.0%	3078.2	2949.5	-128.8	-4.2%
43.2%	3021.9	2925.3	-96.7	-3.2%
44.4%	2974.5	2863.3	-111.2	-3.7%
45.7%	2892.5	2862.3	-30.2	-1.0%
46.9%	2882.2	2837.2	-45.0	-1.6%
48.1%	2853.7	2832.0	-21.7	-0.8%
49.4%	2841.0	2826.3	-14.7	-0.5%
50.6%	2839.4	2817.7	-21.8	-0.8%
51.9%	2765.2	2764.4	-0.7	0.0%
53.1%	2735.5	2669.6	-65.9	-2.4%
54.3%	2723.0	2639.4	-83.7	-3.1%
55.6%	2713.8	2609.0	-104.8	-3.9%
56.8%	2687.8	2580.5	-107.3	-4.0%
58.0%	2662.6	2560.9	-101.8	-3.8%
59.3%	2647.1	2554.4	-92.8	-3.5%
60.5%	2572.5	2541.7	-30.8	-1.2%
61.7%	2544.0	2528.0	-15.9	-0.6%
63.0%	2528.0	2525.0	-3.0	-0.1%
64.2%	2510.2	2460.7	-49.6	-2.0%
65.4%	2505.3	2421.1	-84.2	-3.4%
66.7%	2472.0	2419.9	-52.1	-2.1%
67.9%	2410.6	2368.3	-42.4	-1.8%
69.1%	2314.7	2336.8	22.1	1.0%
70.4%	2222.7	2240.0	17.2	0.8%
71.6%	2220.7	2216.3	-4.4	-0.2%
72.8%	2146.7	2198.2	51.5	2.4%
74.1%	2029.6	2021.8	-7.8	-0.4%
75.3%	1954.0	1939.9	-14.1	-0.7%
76.5%	1814.2	1726.1	-88.1	-4.9%
77.8%	1684.9	1660.8	-24.0	-1.4%
79.0%	1643.0	1559.5	-83.5	-5.1%
80.2%	1636.5	1498.6	-137.9	-8.4%
81.5%	1549.9	1491.9	-58.0	-3.7%
82.7%	1503.2	1484.0	-19.2	-1.3%
84.0%	1490.2	1403.0	-87.1	-5.8%
85.2%	1464.7	1220.8	-244.0	-16.7%
86.4%	1255.9	1150.5	-105.4	-8.4%
87.7%	1229.2	1103.2	-126.0	-10.2%
88.9%	1102.9	1051.4	-51.5	-4.7%
90.1%	1089.3	1051.2	-38.1	-3.5%
91.4%	691.8	976.9	285.1	41.2%
92.6%	627.8	577.8	-50.0	-8.0%
93.8%	576.9	571.3	-5.6	-1.0%
95.1%	450.6	428.9	-21.6	-4.8%
96.3%	433.8	402.9	-30.9	-7.1%
97.5%	383.6	367.5	-16.1	-4.2%
98.8%	214.0	202.6	-11.4	-5.3%
100.0%	189.9	189.4	-0.5	-0.3%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	9063.6	9146.1	82.5	0.9%
1.2%	8869.1	8477.8	-391.3	-4.4%
2.5%	8691.5	8100.7	-590.8	-6.8%
3.7%	8149.3	6969.0	-1180.4	-14.5%
4.9%	6216.2	6177.7	-38.5	-0.6%
6.2%	6189.1	6147.0	-42.1	-0.7%
7.4%	6179.6	6078.8	-100.8	-1.6%
8.6%	6116.3	5691.5	-424.9	-6.9%
9.9%	6040.4	5554.8	-485.5	-8.0%
11.1%	6037.8	5405.7	-632.1	-10.5%
12.3%	5859.6	5257.7	-601.8	-10.3%
13.6%	5548.7	5110.9	-437.7	-7.9%
14.8%	5480.6	5077.9	-402.7	-7.3%
16.0%	5442.9	4951.5	-491.4	-9.0%
17.3%	5100.3	4795.1	-305.3	-6.0%
18.5%	5098.7	4779.7	-319.0	-6.3%
19.8%	4985.8	4773.3	-212.6	-4.3%
21.0%	4820.2	4682.6	-137.6	-2.9%
22.2%	4803.8	4679.8	-124.1	-2.6%
23.5%	4782.5	4669.0	-113.4	-2.4%
24.7%	4774.4	4655.2	-119.2	-2.5%
25.9%	4649.3	4607.7	-41.5	-0.9%
27.2%	4622.9	4601.1	-21.8	-0.5%
28.4%	4562.9	4473.4	-89.5	-2.0%
29.6%	4544.8	4336.7	-208.1	-4.6%
30.9%	4481.0	4237.2	-243.8	-5.4%
32.1%	4288.6	4217.8	-70.9	-1.7%
33.3%	4258.1	4075.7	-182.4	-4.3%
34.6%	3430.0	3412.8	-17.2	-0.5%
35.8%	3303.3	3239.4	-63.9	-1.9%
37.0%	3200.2	3181.5	-18.7	-0.6%
38.3%	3146.3	3146.5	0.2	0.0%
39.5%	3123.5	3076.7	-46.9	-1.5%
40.7%	3086.8	3070.6	-16.2	-0.5%
42.0%	3071.9	3040.1	-31.9	-1.0%
43.2%	3059.0	3005.6	-53.3	-1.7%
44.4%	3025.7	3003.6	-22.1	-0.7%
45.7%	2979.8	2930.2	-49.6	-1.7%
46.9%	2959.6	2927.8	-31.9	-1.1%
48.1%	2953.0	2919.7	-33.3	-1.1%
49.4%	2827.2	2896.8	69.7	2.5%
50.6%	2803.2	2817.4	14.2	0.5%
51.9%	2705.8	2636.8	-69.0	-2.6%
53.1%	2677.1	2636.4	-40.7	-1.5%
54.3%	2628.7	2633.4	4.7	0.2%
55.6%	2553.1	2613.4	60.3	2.4%
56.8%	2514.0	2510.1	-3.8	-0.2%
58.0%	2469.9	2474.7	4.8	0.2%
59.3%	2373.6	2439.4	65.8	2.8%
60.5%	2352.5	2275.6	-76.9	-3.3%
61.7%	2314.6	2247.5	-67.0	-2.9%
63.0%	2253.1	2239.0	-14.1	-0.6%
64.2%	2243.0	2237.3	-5.7	-0.3%
65.4%	2220.2	2206.3	-13.9	-0.6%
66.7%	2202.4	2159.3	-43.1	-2.0%
67.9%	2160.4	2120.2	-40.2	-1.9%
69.1%	2092.2	2076.8	-15.4	-0.7%
70.4%	2090.2	2072.4	-17.8	-0.9%
71.6%	2088.0	2071.0	-17.0	-0.8%
72.8%	2066.8	2066.5	-0.2	0.0%
74.1%	2031.0	2034.0	3.0	0.1%
75.3%	2030.4	1990.9	-39.4	-1.9%
76.5%	2029.6	1969.5	-60.1	-3.0%
77.8%	2016.5	1961.8	-54.7	-2.7%
79.0%	1950.6	1938.7	-11.9	-0.6%
80.2%	1916.1	1926.8	10.7	0.6%
81.5%	1909.9	1916.5	6.6	0.3%
82.7%	1906.6	1900.1	-6.5	-0.3%
84.0%	1889.9	1863.3	-26.6	-1.4%
85.2%	1867.3	1838.9	-28.4	-1.5%
86.4%	1799.1	1838.5	39.4	2.2%
87.7%	1779.5	1793.2	13.7	0.8%
88.9%	1774.4	1772.3	-2.0	-0.1%
90.1%	1718.1	1646.5	-71.6	-4.2%
91.4%	1669.3	1609.8	-59.5	-3.6%
92.6%	1642.6	1545.8	-96.8	-5.9%
93.8%	1594.7	1541.7	-53.0	-3.3%
95.1%	1525.6	1533.5	7.8	0.5%
96.3%	1517.5	1478.5	-39.0	-2.6%
97.5%	1504.0	1370.3	-133.7	-8.9%
98.8%	1275.4	1339.0	63.5	5.0%
100.0%	1,245.5	1,238.0	-7.5	-0.6%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	9271.0	9494.2	223.2	2.4%
1.2%	9122.1	8833.8	-288.3	-3.2%
2.5%	8834.9	8682.8	-152.1	-1.7%
3.7%	8697.0	8295.8	-401.2	-4.6%
4.9%	8417.1	8258.5	-158.5	-1.9%
6.2%	8271.5	8193.5	-78.0	-0.9%
7.4%	8259.5	8164.7	-94.7	-1.1%
8.6%	8255.4	7809.5	-445.9	-5.4%
9.9%	8224.8	7776.9	-447.9	-5.4%
11.1%	8065.1	7590.8	-474.3	-5.9%
12.3%	8010.8	7403.7	-607.1	-7.6%
13.6%	7498.1	7185.0	-313.2	-4.2%
14.8%	7317.6	7012.5	-305.0	-4.2%
16.0%	7291.8	6892.6	-399.2	-5.5%
17.3%	7285.7	6879.0	-406.7	-5.6%
18.5%	7250.8	6808.3	-442.5	-6.1%
19.8%	7231.3	6782.0	-449.4	-6.2%
21.0%	7159.6	6759.9	-399.7	-5.6%
22.2%	7077.9	6570.6	-507.3	-7.2%
23.5%	6980.2	6456.8	-523.4	-7.5%
24.7%	6951.5	6404.5	-547.1	-7.9%
25.9%	6761.0	6352.5	-408.5	-6.0%
27.2%	6603.6	6306.4	-297.3	-4.5%
28.4%	6472.4	6296.7	-175.7	-2.7%
29.6%	6449.6	6082.5	-367.1	-5.7%
30.9%	6266.7	5914.1	-352.6	-5.6%
32.1%	5840.5	5715.7	-124.8	-2.1%
33.3%	5715.2	5706.3	-9.0	-0.2%
34.6%	5623.1	5230.1	-393.0	-7.0%
35.8%	5563.3	5125.7	-437.6	-7.9%
37.0%	5167.2	5037.7	-129.5	-2.5%
38.3%	5103.7	5035.3	-68.4	-1.3%
39.5%	5018.4	5008.1	-10.2	-0.2%
40.7%	4995.7	4983.9	-11.8	-0.2%
42.0%	4958.1	4958.1	0.0	0.0%
43.2%	4954.7	4939.9	-14.8	-0.3%
44.4%	4947.1	4886.4	-60.7	-1.2%
45.7%	4928.9	4847.1	-81.8	-1.7%
46.9%	4919.5	4835.5	-84.0	-1.7%
48.1%	4918.8	4835.2	-83.5	-1.7%
49.4%	4913.1	4810.9	-102.2	-2.1%
50.6%	4904.6	4778.7	-125.9	-2.6%
51.9%	4895.3	4773.4	-121.9	-2.5%
53.1%	4887.0	4750.8	-136.1	-2.8%
54.3%	4860.2	4739.8	-120.4	-2.5%
55.6%	4825.8	4692.9	-132.9	-2.8%
56.8%	4824.8	4675.9	-148.9	-3.1%
58.0%	4809.6	4667.4	-142.2	-3.0%
59.3%	4793.5	4667.3	-126.2	-2.6%
60.5%	4780.4	4620.6	-159.9	-3.3%
61.7%	4760.1	4612.3	-147.8	-3.1%
63.0%	4755.4	4601.7	-153.7	-3.2%
64.2%	4715.8	4576.8	-139.0	-2.9%
65.4%	4569.8	4459.6	-110.2	-2.4%
66.7%	4516.1	4437.7	-78.3	-1.7%
67.9%	4436.4	4427.0	-9.4	-0.2%
69.1%	4399.0	4371.7	-27.3	-0.6%
70.4%	4364.8	4353.6	-11.2	-0.3%
71.6%	4322.9	4302.9	-20.0	-0.5%
72.8%	4256.6	4279.7	23.1	0.5%
74.1%	4247.1	4275.2	28.1	0.7%
75.3%	4241.2	4197.8	-43.4	-1.0%
76.5%	4214.7	4179.2	-35.5	-0.8%
77.8%	4209.9	4136.9	-73.0	-1.7%
79.0%	4131.3	4105.0	-26.3	-0.6%
80.2%	4065.3	4067.4	2.0	0.0%
81.5%	4048.6	4061.5	12.9	0.3%
82.7%	4007.7	3932.6	-75.1	-1.9%
84.0%	3985.6	3915.5	-70.1	-1.8%
85.2%	3966.0	3896.4	-69.6	-1.8%
86.4%	3933.3	3814.4	-118.9	-3.0%
87.7%	3927.8	3756.3	-171.5	-4.4%
88.9%	3902.1	3747.5	-154.6	-4.0%
90.1%	3875.8	3713.2	-162.6	-4.2%
91.4%	3847.3	3659.6	-187.7	-4.9%
92.6%	3836.0	3652.2	-183.8	-4.8%
93.8%	3745.3	3649.5	-95.9	-2.6%
95.1%	3716.1	3591.9	-124.2	-3.3%
96.3%	3648.2	3490.7	-157.5	-4.3%
97.5%	3579.4	3353.2	-226.2	-6.3%
98.8%	3522.9	3334.7	-188.2	-5.3%
100.0%	3,323.2	3,081.7	-241.6	-7.3%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	10233.1	10194.3	-38.8	-0.4%
1.2%	9963.6	9803.6	-160.0	-1.6%
2.5%	9844.3	9772.9	-71.4	-0.7%
3.7%	9824.1	9675.3	-148.8	-1.5%
4.9%	9800.1	9625.2	-174.9	-1.8%
6.2%	9752.7	9592.6	-160.1	-1.6%
7.4%	9720.6	9458.5	-262.1	-2.7%
8.6%	9703.0	9329.2	-373.8	-3.9%
9.9%	9687.1	9242.3	-444.9	-4.6%
11.1%	9686.2	8879.7	-806.5	-8.3%
12.3%	9463.5	8852.9	-610.6	-6.5%
13.6%	9353.5	8845.5	-508.1	-5.4%
14.8%	9192.7	8783.4	-409.4	-4.5%
16.0%	9141.6	8518.5	-623.1	-6.8%
17.3%	9104.4	8490.6	-613.7	-6.7%
18.5%	9078.1	8274.8	-803.3	-8.8%
19.8%	9034.8	8189.4	-845.4	-9.4%
21.0%	8975.5	8155.7	-819.8	-9.1%
22.2%	8897.2	8019.0	-878.2	-9.9%
23.5%	8865.8	7803.4	-1062.5	-12.0%
24.7%	8859.2	7699.2	-1160.0	-13.1%
25.9%	8656.8	7692.7	-964.1	-11.1%
27.2%	8550.1	7633.8	-916.3	-10.7%
28.4%	8396.1	7569.8	-826.3	-9.8%
29.6%	8312.7	7567.4	-745.2	-9.0%
30.9%	8286.5	7510.1	-776.4	-9.4%
32.1%	8233.9	7483.8	-750.1	-9.1%
33.3%	8181.9	7391.0	-790.9	-9.7%
34.6%	8139.6	7374.5	-765.2	-9.4%
35.8%	7860.5	7360.7	-499.8	-6.4%
37.0%	7854.6	7355.8	-498.8	-6.4%
38.3%	7809.4	7288.7	-520.7	-6.7%
39.5%	7754.2	6982.8	-771.4	-9.9%
40.7%	7700.6	6929.6	-771.0	-10.0%
42.0%	7664.3	6896.3	-767.9	-10.0%
43.2%	7479.7	6783.0	-696.8	-9.3%
44.4%	7402.0	6750.1	-651.9	-8.8%
45.7%	7335.6	6691.2	-644.4	-8.8%
46.9%	7329.0	6632.5	-696.5	-9.5%
48.1%	7282.0	6594.6	-687.4	-9.4%
49.4%	7063.8	6525.4	-538.4	-7.6%
50.6%	7009.2	6418.7	-590.5	-8.4%
51.9%	6977.5	6198.0	-779.4	-11.2%
53.1%	6874.9	6104.0	-770.9	-11.2%
54.3%	6682.9	5789.0	-894.0	-13.4%
55.6%	3481.0	3262.5	-218.5	-6.3%
56.8%	3293.1	3121.0	-172.2	-5.2%
58.0%	3285.6	3030.9	-254.7	-7.8%
59.3%	3280.0	3008.8	-271.2	-8.3%
60.5%	3250.9	3003.9	-247.0	-7.6%
61.7%	3233.1	2936.4	-296.7	-9.2%
63.0%	3143.0	2928.7	-214.3	-6.8%
64.2%	3056.3	2890.2	-166.1	-5.4%
65.4%	3025.4	2884.5	-141.0	-4.7%
66.7%	3018.4	2865.9	-152.5	-5.1%
67.9%	3005.2	2798.0	-207.2	-6.9%
69.1%	2890.2	2681.3	-208.9	-7.2%
70.4%	1609.9	1558.8	-51.1	-3.2%
71.6%	1595.7	1534.2	-61.5	-3.9%
72.8%	1589.0	1533.2	-55.9	-3.5%
74.1%	1575.1	1529.6	-45.5	-2.9%
75.3%	1531.8	1491.9	-39.9	-2.6%
76.5%	1526.4	1491.0	-35.4	-2.3%
77.8%	1525.9	1484.3	-41.7	-2.7%
79.0%	1517.0	1448.8	-68.3	-4.5%
80.2%	1509.9	1416.5	-93.4	-6.2%
81.5%	1503.8	1410.5	-93.3	-6.2%
82.7%	1439.7	1407.5	-32.2	-2.2%
84.0%	1429.4	1394.6	-34.8	-2.4%
85.2%	1403.3	1368.1	-35.2	-2.5%
86.4%	1400.8	1368.1	-32.7	-2.3%
87.7%	1396.5	1337.8	-58.7	-4.2%
88.9%	1391.4	1331.6	-59.8	-4.3%
90.1%	1389.2	1328.4	-60.8	-4.4%
91.4%	1381.6	1304.9	-76.7	-5.6%
92.6%	1355.3	1294.5	-60.8	-4.5%
93.8%	1353.1	1281.1	-72.0	-5.3%
95.1%	1335.6	1277.0	-58.6	-4.4%
96.3%	1332.0	1259.0	-73.0	-5.5%
97.5%	1312.7	1249.9	-62.8	-4.8%
98.8%	1304.7	1238.1	-66.6	-5.1%
100.0%	1,274.1	1,227.3	-46.7	-3.7%

Figure SQ-23-b
Sacramento River at Mallard Slough (Chipps Island)), Monthly EC
Probability of Exceedance

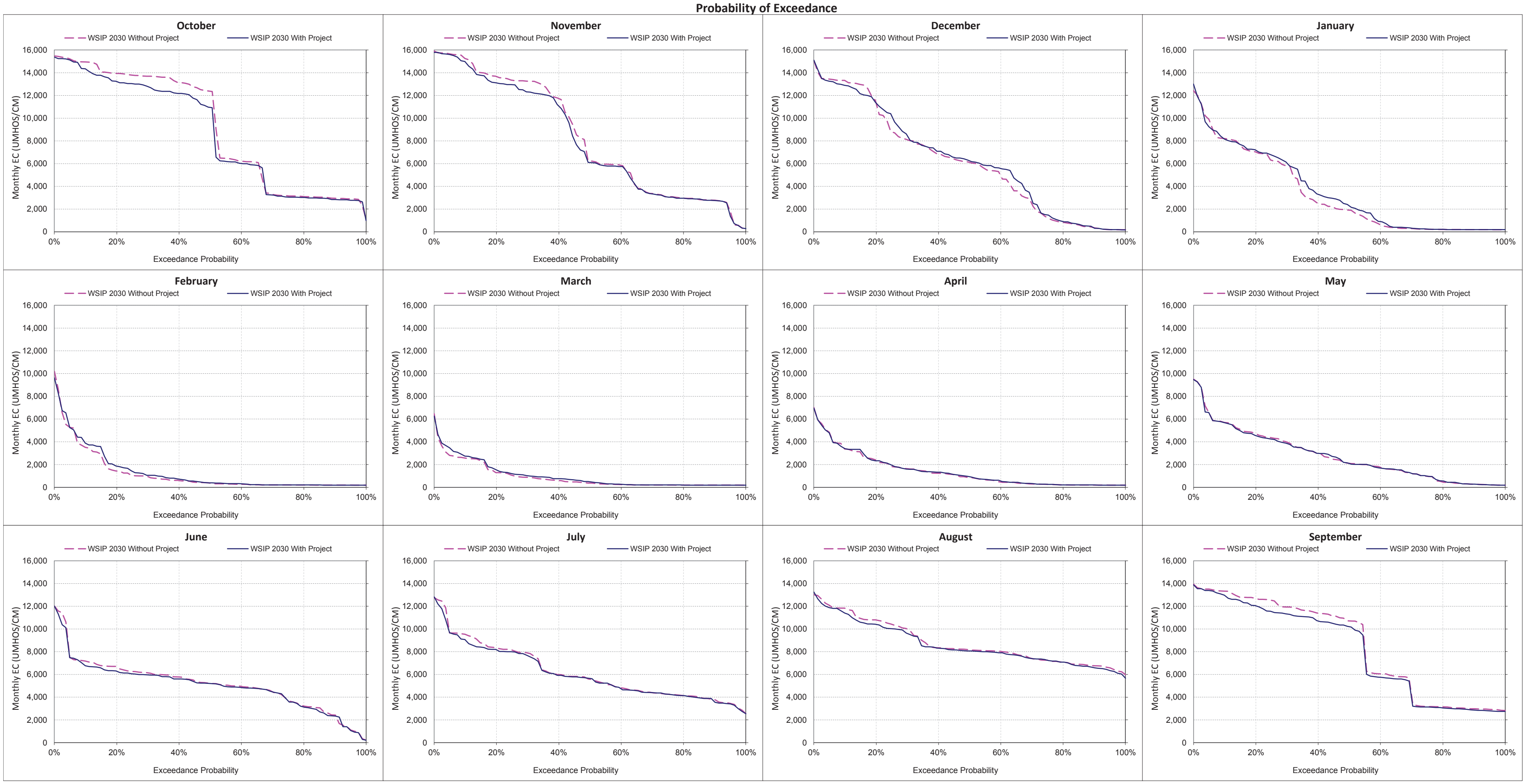


Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15477.7	15376.0	-101.7	-0.7%
1.2%	15433.0	15245.0	-188.0	-1.2%
2.5%	15367.4	15243.3	-124.1	-0.8%
3.7%	15328.6	15207.3	-121.3	-0.8%
4.9%	15219.2	15127.1	-92.1	-0.6%
6.2%	15055.7	14931.8	-123.9	-0.8%
7.4%	14975.3	14922.5	-52.9	-0.4%
8.6%	14958.3	14383.0	-575.3	-3.8%
9.9%	14948.7	14343.2	-605.6	-4.1%
11.1%	14928.7	14120.5	-808.2	-5.4%
12.3%	14897.8	13906.4	-991.5	-6.7%
13.6%	14743.1	13776.0	-967.2	-6.6%
14.8%	14059.8	13772.9	-287.0	-2.0%
16.0%	14055.4	13640.8	-414.6	-3.0%
17.3%	14014.3	13550.5	-463.8	-3.3%
18.5%	13959.1	13275.2	-683.9	-4.9%
19.8%	13943.3	13250.6	-692.7	-5.0%
21.0%	13939.1	13125.4	-813.7	-5.8%
22.2%	13898.1	13112.8	-785.3	-5.7%
23.5%	13839.6	13050.0	-789.6	-5.7%
24.7%	13794.2	13043.5	-750.7	-5.4%
25.9%	13765.1	13013.3	-751.8	-5.5%
27.2%	13755.3	12993.0	-762.3	-5.5%
28.4%	13705.5	12936.2	-769.3	-5.6%
29.6%	13695.6	12819.6	-875.9	-6.4%
30.9%	13691.6	12691.1	-1000.5	-7.3%
32.1%	13684.9	12467.1	-1217.8	-8.9%
33.3%	13636.3	12419.7	-1216.6	-8.9%
34.6%	13604.8	12371.9	-1233.0	-9.1%
35.8%	13602.8	12366.2	-1236.7	-9.1%
37.0%	13557.5	12358.1	-1199.4	-8.8%
38.3%	13308.8	12232.2	-1076.6	-8.1%
39.5%	13146.7	12186.5	-960.2	-7.3%
40.7%	13126.6	12170.5	-956.0	-7.3%
42.0%	13073.0	12146.0	-927.0	-7.1%
43.2%	12990.8	12067.3	-923.5	-7.1%
44.4%	12771.8	11772.1	-999.6	-7.8%
45.7%	12689.1	11635.7	-1053.4	-8.3%
46.9%	12513.6	11219.9	-1293.7	-10.3%
48.1%	12441.2	11128.7	-1312.5	-10.5%
49.4%	12394.9	10981.8	-1413.1	-11.4%
50.6%	12347.8	10927.6	-1420.2	-11.5%
51.9%	9010.2	6562.1	-2448.1	-27.2%
53.1%	6492.1	6247.1	-245.0	-3.8%
54.3%	6477.0	6223.0	-254.0	-3.9%
55.6%	6475.1	6173.8	-301.3	-4.7%
56.8%	6408.9	6146.4	-262.5	-4.1%
58.0%	6338.6	6145.8	-192.8	-3.0%
59.3%	6226.5	6049.3	-177.2	-2.8%
60.5%	6209.6	5998.0	-211.6	-3.4%
61.7%	6171.1	5994.3	-176.8	-2.9%
63.0%	6167.8	5912.2	-255.6	-4.1%
64.2%	6166.1	5884.0	-282.1	-4.6%
65.4%	6083.7	5835.5	-248.2	-4.1%
66.7%	4690.0	5620.8	930.8	19.8%
67.9%	3417.2	3271.0	-146.1	-4.3%
69.1%	3383.1	3254.7	-128.4	-3.8%
70.4%	3264.6	3226.7	-38.0	-1.2%
71.6%	3225.2	3147.2	-78.0	-2.4%
72.8%	3196.0	3136.3	-59.7	-1.9%
74.1%	3194.1	3082.5	-111.6	-3.5%
75.3%	3150.1	3054.7	-95.4	-3.0%
76.5%	3148.5	3052.3	-96.2	-3.1%
77.8%	3140.8	3040.3	-100.5	-3.2%
79.0%	3123.7	3015.4	-108.3	-3.5%
80.2%	3092.0	3014.5	-77.5	-2.5%
81.5%	3086.9	2990.7	-96.2	-3.1%
82.7%	3082.0	2977.5	-104.5	-3.4%
84.0%	3054.7	2977.0	-77.7	-2.5%
85.2%	3049.2	2963.2	-86.0	-2.8%
86.4%	3046.2	2946.3	-99.9	-3.3%
87.7%	3011.2	2938.7	-72.5	-2.4%
88.9%	2961.2	2852.3	-108.9	-3.7%
90.1%	2948.7	2848.7	-100.0	-3.4%
91.4%	2938.4	2827.2	-111.1	-3.8%
92.6%	2932.2	2826.8	-105.5	-3.6%
93.8%	2901.1	2815.0	-86.1	-3.0%
95.1%	2895.7	2777.1	-118.6	-4.1%
96.3%	2894.2	2773.5	-120.7	-4.2%
97.5%	2853.6	2748.5	-105.1	-3.7%
98.8%	2346.6	2631.2	284.6	12.1%
100.0%	1,063.4	991.5	-71.9	-6.8%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15904.5	15797.4	-107.1	-0.7%
1.2%	15744.4	15786.2	41.9	0.3%
2.5%	15736.7	15682.7	-54.0	-0.3%
3.7%	15730.7	15647.7	-83.0	-0.5%
4.9%	15658.2	15612.7	-45.4	-0.3%
6.2%	15603.3	15506.1	-97.2	-0.6%
7.4%	15579.2	15377.1	-202.1	-1.3%
8.6%	15546.6	15061.2	-485.4	-3.1%
9.9%	15249.5	14978.8	-270.6	-1.8%
11.1%	15140.3	14584.8	-555.5	-3.7%
12.3%	14805.3	14317.3	-488.0	-3.3%
13.6%	14069.8	13854.3	-215.5	-1.5%
14.8%	14016.2	13771.1	-245.1	-1.7%
16.0%	13974.7	13739.5	-235.3	-1.7%
17.3%	13847.9	13350.7	-497.2	-3.6%
18.5%	13725.8	13160.4	-565.4	-4.1%
19.8%	13688.6	13119.4	-569.2	-4.2%
21.0%	13561.0	13057.8	-503.2	-3.7%
22.2%	13547.8	13023.5	-524.3	-3.9%
23.5%	13472.9	12963.1	-509.9	-3.8%
24.7%	13357.5	12951.2	-406.4	-3.0%
25.9%	13299.9	12944.3	-355.6	-2.7%
27.2%	13293.8	12524.9	-768.9	-5.8%
28.4%	13293.4	12504.7	-788.7	-5.9%
29.6%	13261.2	12325.5	-935.7	-7.1%
30.9%	13252.1	12302.3	-949.8	-7.2%
32.1%	13239.0	12211.1	-1027.8	-7.8%
33.3%	13108.4	12151.9	-956.5	-7.3%
34.6%	12962.0	12113.4	-848.6	-6.5%
35.8%	12717.9	12046.7	-671.1	-5.3%
37.0%	12237.9	11966.7	-271.2	-2.2%
38.3%	11891.2	11788.5	-102.6	-0.9%
39.5%	11780.2	11189.8	-590.4	-5.0%
40.7%	11638.4	10860.9	-777.6	-6.7%
42.0%	10543.8	10321.3	-222.5	-2.1%
43.2%	10116.2	9590.4	-525.8	-5.2%
44.4%	9433.1	8446.1	-987.0	-10.5%
45.7%	8521.6	7658.3	-863.3	-10.1%
46.9%	8271.9	7207.1	-1064.8	-12.9%
48.1%	8125.3	7057.1	-1068.1	-13.1%
49.4%	6243.9	6111.6	-132.3	-2.1%
50.6%	6224.3	6093.2	-131.1	-2.1%
51.9%	6156.0	6054.4	-101.6	-1.7%
53.1%	5972.4	5903.0	-69.4	-1.2%
54.3%	5957.7	5844.5	-113.2	-1.9%
55.6%	5956.3	5798.6	-157.7	-2.6%
56.8%	5926.0	5795.5	-130.5	-2.2%
58.0%	5915.1	5795.0	-120.0	-2.0%
59.3%	5897.1	5739.7	-157.4	-2.7%
60.5%	5814.1	5736.2	-77.8	-1.3%
61.7%	5334.4	5327.3	-7.1	-0.1%
63.0%	5187.3	4746.9	-440.5	-8.5%
64.2%	4216.2	4255.5	39.3	0.9%
65.4%	3816.7	3762.0	-54.7	-1.4%
66.7%	3796.7	3738.6	-58.1	-1.5%
67.9%	3511.2	3455.0	-56.3	-1.6%
69.1%	3374.5	3371.1	-3.4	-0.1%
70.4%	3372.1	3329.6	-42.4	-1.3%
71.6%	3300.7	3261.1	-39.7	-1.2%
72.8%	3259.5	3234.9	-24.6	-0.8%
74.1%	3108.9	3102.8	-6.0	-0.2%
75.3%	3097.8	3053.3	-44.5	-1.4%
76.5%	3079.1	3051.1	-28.0	-0.9%
77.8%	3032.0	2959.3	-72.7	-2.4%
79.0%	2993.5	2955.9	-37.6	-1.3%
80.2%	2953.3	2953.6	0.3	0.0%
81.5%	2946.8	2918.7	-28.1	-1.0%
82.7%	2941.8	2918.3	-23.4	-0.8%
84.0%	2919.2	2891.7	-27.6	-0.9%
85.2%	2832.4	2888.8	56.3	2.0%
86.4%	2817.2	2795.1	-22.1	-0.8%
87.7%	2813.9	2781.4	-32.5	-1.2%
88.9%	2783.7	2770.1	-13.6	-0.5%
90.1%	2777.1	2757.7	-19.4	-0.7%
91.4%	2738.6	2720.4	-18.3	-0.7%
92.6%	2720.4	2686.2	-34.2	-1.3%
93.8%	2582.6	2537.4	-45.2	-1.8%
95.1%	1753.3	1377.5	-375.8	-21.4%
96.3%	603.9	728.1	124.1	20.6%
97.5%	579.5	551.9	-27.6	-4.8%
98.8%	337.8	341.4	3.6	
100.0%	238.6	285.1	46.5	

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15085.2	15102.4	17.2	0.1%
1.2%	14061.6	14276.7	215.1	1.5%
2.5%	13484.1	13513.6	29.5	0.2%
3.7%	13482.6	13334.6	-148.0	-1.1%
4.9%	13439.0	13256.6	-182.4	-1.4%
6.2%	13400.6	13218.7	-181.9	-1.4%
7.4%	13333.9	13027.2	-306.8	-2.3%
8.6%	13325.7	12976.7	-349.0	-2.6%
9.9%	13324.0	12891.9	-432.0	-3.2%
11.1%	13123.2	12851.1	-272.0	-2.1%
12.3%	13115.2	12674.8	-440.4	-3.4%
13.6%	13054.7	12555.3	-499.4	-3.8%
14.8%	12971.3	12161.9	-809.4	-6.2%
16.0%	12915.6	12046.2	-869.4	-6.7%
17.3%	12614.1	11987.6	-626.4	-5.0%
18.5%	11955.7	11887.9	-67.8	-0.6%
19.8%	11569.0	11409.8	-159.2	-1.4%
21.0%	10320.4	11033.4	713.0	6.9%
22.2%	10241.9	10760.1	518.1	5.1%
23.5%	9794.1	10493.5	699.4	7.1%
24.7%	8817.5	10397.7	1580.2	17.9%
25.9%	8713.9	9664.6	950.8	10.9%
27.2%	8373.9	9249.1	875.2	10.5%
28.4%	8238.6	8853.2	614.6	7.5%
29.6%	8138.0	8626.5	488.5	6.0%
30.9%	8019.9	8041.1	21.2	0.3%
32.1%	8000.8	7887.2	-113.6	-1.4%
33.3%	7721.7	7871.1	149.4	1.9%
34.6%	7686.4	7622.0	-64.4	-0.8%
35.8%	7516.6	7522.3	5.7	0.1%
37.0%	7317.7	7411.2	93.5	1.3%
38.3%	7084.5	7381.5	297.0	4.2%
39.5%	6864.9	7097.0	232.1	3.4%
40.7%	6821.8	7080.4	258.7	3.8%
42.0%	6636.5	6852.2	215.7	3.3%
43.2%	6569.5	6798.3	228.9	3.5%
44.4%	6468.2	6598.1	129.9	2.0%
45.7%	6331.7	6490.1	158.4	2.5%
46.9%	6253.6	6484.8	231.1	3.7%
48.1%	6177.1	6427.1	250.0	4.0%
49.4%	6156.2	6310.2	154.0	2.5%
50.6%	6056.0	6172.5	116.5	1.9%
51.9%	6016.9	6132.2	115.3	1.9%
53.1%	5880.1	6029.6	149.5	2.5%
54.3%	5641.1	5875.5	234.3	4.2%
55.6%	5434.1	5832.0	397.9	7.3%
56.8%	5388.7	5830.3	441.6	8.2%
58.0%	5360.9	5641.0	280.1	5.2%
59.3%	5298.7	5626.2	327.5	6.2%
60.5%	4646.0	5547.8	901.8	19.4%
61.7%	4628.1	5484.5	856.4	18.5%
63.0%	4165.9	5408.5	1242.7	29.8%
64.2%	3609.4	4733.6	1124.2	31.1%
65.4%	3602.4	4470.3	867.9	24.1%
66.7%	3169.6	4254.2	1084.6	34.2%
67.9%	3013.4	3667.6	654.2	21.7%
69.1%	2935.3	3482.8	547.6	18.7%
70.4%	2235.2	2500.3	265.1	11.9%
71.6%	1791.2	2377.1	585.9	32.7%
72.8%	1661.7	1645.7	-16.0	-1.0%
74.1%	1377.9	1524.2	146.3	10.6%
75.3%	1182.8	1466.1	283.3	24.0%
76.5%	1036.3	1213.4	177.1	17.1%
77.8%	946.6	1087.4	140.8	14.9%
79.0%	853.3	967.6	114.3	13.4%
80.2%	830.1	871.6	41.6	5.0%
81.5%	762.3	870.8	108.4	14.2%
82.7%	720.0	755.5	35.5	4.9%
84.0%	668.3	725.5	57.2	8.6%
85.2%	592.5	658.6	66.1	11.2%
86.4%	475.3	546.0	70.7	14.9%
87.7%	449.0	508.3	59.3	13.2%
88.9%	435.7	490.6	54.9	12.6%
90.1%	353.4	319.3	-34.0	-9.6%
91.4%	296.0	306.2	10.2	
92.6%	240.5	240.3	-0.3	
93.8%	211.6	213.0	1.4	
95.1%	190.0	190.5	0.5	
96.3%	188.4	188.5	0.2	
97.5%	185.3	185.2	-0.1	
98.8%	182.9	182.2	-0.7	
100.0%	181.3	181.6	0.3	

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12418.4	13010.3	591.9	4.8%
1.2%	12020.2	11926.1	-94.1	-0.8%
2.5%	11262.9	11239.1	-23.8	-0.2%
3.7%	10218.1	9691.6	-526.5	-5.2%
4.9%	9895.8	9251.9	-643.9	-6.5%
6.2%	9002.5	8967.5	-35.0	-0.4%
7.4%	8303.0	8849.4	546.4	6.6%
8.6%	8246.0	8446.1	200.1	2.4%
9.9%	8212.9	8172.5	-40.3	-0.5%
11.1%	8162.4	8021.2	-141.2	-1.7%
12.3%	8099.5	7928.4	-171.1	-2.1%
13.6%	8022.8	7904.5	-118.2	-1.5%
14.8%	7695.8	7698.1	2.3	0.0%
16.0%	7311.2	7578.1	266.9	3.7%
17.3%	7185.9	7279.8	93.9	1.3%
18.5%	7072.1	7276.5	204.5	2.9%
19.8%	7045.0	7223.4	178.4	2.5%
21.0%	6908.9	7015.2	106.4	1.5%
22.2%	6879.3	6934.1	54.8	0.8%
23.5%	6873.4	6925.4	52.0	0.8%
24.7%	6331.0	6802.3	471.2	7.4%
25.9%	6216.6	6659.2	442.6	7.1%
27.2%	6194.1	6516.9	322.8	5.2%
28.4%	5939.4	6340.8	401.5	6.8%
29.6%	5812.2	6156.9	344.7	5.9%
30.9%	5810.7	5789.2	-21.5	-0.4%
32.1%	4821.8	5654.2	832.4	17.3%
33.3%	4658.4	5504.1	845.7	18.2%
34.6%	3469.5	4476.6	1007.2	29.0%
35.8%	3106.5	4457.4	1350.9	43.5%
37.0%	2946.2	3808.7	862.5	29.3%
38.3%	2834.4	3658.0	823.7	29.1%
39.5%	2571.5	3337.6	766.1	29.8%
40.7%	2433.9	3221.8	787.9	32.4%
42.0%	2420.9	3093.8	672.9	27.8%
43.2%	2240.6	3008.2	767.6	34.3%
44.4%	2238.6	2961.8	723.3	32.3%
45.7%	2042.4	2886.6	844.2	41.3%
46.9%	1983.0	2778.2	795.1	40.1%
48.1%	1964.9	2500.2	535.4	27.2%
49.4%	1920.1	2400.9	480.8	25.0%
50.6%	1894.3	2162.1	267.8	14.1%
51.9%	1647.9	2076.3	428.4	26.0%
53.1%	1516.9	1899.6	382.6	25.2%
54.3%	1376.5	1846.5	470.1	34.1%
55.6%	1139.2	1682.6	543.4	47.7%
56.8%	978.4	1649.0	670.6	68.5%
58.0%	877.2	1172.1	294.9	33.6%
59.3%	720.6	923.8	203.1	28.2%
60.5%	524.1	870.1	346.0	66.0%
61.7%	470.1	728.9	258.8	55.0%
63.0%	393.1	489.6	96.4	24.5%
64.2%	381.5	406.3	24.9	6.5%
65.4%	343.5	402.3	58.8	17.1%
66.7%	303.9	389.2	85.3	28.1%
67.9%	303.6	378.6	75.0	24.7%
69.1%	289.4	351.4	62.0	21.4%
70.4%	285.1	311.1	26.0	9.1%
71.6%	252.4	274.9	22.5	8.9%
72.8%	237.4	268.1	30.7	12.9%
74.1%	232.6	252.0	19.4	8.3%
75.3%	221.8	229.4	7.6	3.4%
76.5%	219.0	226.8	7.8	3.6%
77.8%	217.7	220.3	2.6	1.2%
79.0%	213.2	218.4	5.2	2.4%
80.2%	210.9	210.3	-0.6	-0.3%
81.5%	203.0	203.6	0.7	0.3%
82.7%	199.9	201.8	1.9	1.0%
84.0%	199.3	200.1	0.8	0.4%
85.2%	198.9	199.2	0.3	0.1%
86.4%	197.8	198.2	0.4	0.2%
87.7%	196.1	197.7	1.6	0.8%
88.9%	194.2	194.7	0.5	0.3%
90.1%	193.8	194.5	0.7	0.4%
91.4%	193.4	194.3	0.9	0.5%
92.6%	191.8	192.2	0.4	0.2%
93.8%	189.2	191.6	2.4	1.3%
95.1%	189.1	189.8	0.7	0.4%
96.3%	187.6	188.1	0.5	0.3%
97.5%	187.4	187.9	0.5	0.3%
98.8%	186.7	186.9	0.2	0.1%
100.0%	183.9	183.9	0.0	0.0%

Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	10202.6	9629.1	-573.5	-5.6%
1.2%	8635.9	8252.8	-383.1	-4.4%
2.5%	6592.4	6726.8	134.4	2.0%
3.7%	5523.9	6551.6	1027.7	18.6%
4.9%	5275.0	5253.4	-21.5	-0.4%
6.2%	5206.0	5053.9	-152.1	-2.9%
7.4%	3893.3	4417.3	523.9	13.5%
8.6%	3709.5	4393.4	683.9	18.4%
9.9%	3512.8	3888.3	375.4	10.7%
11.1%	3440.5	3727.2	286.7	8.3%
12.3%	3139.7	3721.3	581.6	18.5%
13.6%	3097.3	3600.3	503.0	16.2%
14.8%	2939.5	3585.7	646.1	22.0%
16.0%	2086.2	2721.3	635.0	30.4%
17.3%	1624.3	2073.2	448.9	27.6%
18.5%	1510.8	2048.2	537.4	35.6%
19.8%	1433.6	1878.7	445.2	31.1%
21.0%	1396.5	1804.5	408.0	29.2%
22.2%	1252.2	1720.2	468.0	37.4%
23.5%	1248.7	1660.9	412.1	33.0%
24.7%	1055.5	1442.5	387.0	36.7%
25.9%	1006.4	1279.0	272.6	27.1%
27.2%	1002.4	1265.5	263.1	26.2%
28.4%	997.4	1204.4	207.0	20.8%
29.6%	984.8	1060.3	75.5	7.7%
30.9%	832.4	1051.8	219.5	26.4%
32.1%	793.5	1045.9	252.5	31.8%
33.3%	778.9	979.9	201.0	25.8%
34.6%	709.5	953.5	244.0	34.4%
35.8%	705.3	843.4	138.1	19.6%
37.0%	626.3	806.9	180.7	28.9%
38.3%	611.4	795.8	184.4	30.2%
39.5%	609.0	742.9	133.9	22.0%
40.7%	564.3	678.5	114.2	20.2%
42.0%	547.7	647.6	99.9	18.2%
43.2%	540.2	559.9	19.7	3.7%
44.4%	456.9	555.1	98.3	21.5%
45.7%	427.3	510.3	83.0	19.4%
46.9%	414.5	464.1	49.5	12.0%
48.1%	412.7	413.7	1.0	0.2%
49.4%	392.4	399.0	6.5	1.7%
50.6%	311.1	398.7	87.6	28.1%
51.9%	309.4	376.5	67.1	21.7%
53.1%	309.0	374.0	65.0	21.0%
54.3%	303.1	350.2	47.1	15.5%
55.6%	289.8	332.1	42.3	14.6%
56.8%	287.2	314.0	26.8	9.3%
58.0%	269.4	311.8	42.4	15.7%
59.3%	266.1	311.8	45.7	17.2%
60.5%	264.5	304.6	40.2	15.2%
61.7%	257.8	286.9	29.1	11.3%
63.0%	221.8	228.0	6.2	2.8%
64.2%	215.5	225.9	10.4	4.8%
65.4%	214.8	223.2	8.4	3.9%
66.7%	213.7	218.0	4.3	2.0%
67.9%	211.7	217.4	5.7	2.7%
69.1%	211.0	217.0	6.1	2.9%
70.4%	210.9	211.2	0.3	0.1%
71.6%	209.4	210.1	0.7	0.3%
72.8%	207.8	209.5	1.7	0.8%
74.1%	207.3	208.4	1.0	0.5%
75.3%	205.8	207.2	1.4	0.7%
76.5%	205.7	205.7	0.0	0.0%
77.8%	201.9	203.7	1.7	0.8%
79.0%	201.3	202.3	1.1	0.5%
80.2%	198.6	201.3	2.7	1.3%
81.5%	198.0	198.7	0.7	0.4%
82.7%	197.2	197.7	0.5	0.3%
84.0%	197.0	197.2	0.2	0.1%
85.2%	196.8	196.8	-0.1	0.0%
86.4%	194.2	194.1	-0.1	-0.1%
87.7%	191.8	192.0	0.2	0.1%
88.9%	191.6	192.0	0.4	0.2%
90.1%	191.0	191.8	0.8	0.4%
91.4%	189.6	191.5	1.9	1.0%
92.6%	189.3	190.4	1.1	0.6%
93.8%	189.0	189.5	0.6	0.3%
95.1%	188.7	189.3	0.6	0.3%
96.3%	187.7	188.2	0.5	0.3%
97.5%	187.6	187.0	-0.6	-0.3%
98.8%	186.8	186.8	0.0	0.0%
100.0%	184.8	184.8	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	6467.6	6260.2	-207.5	-3.2%
1.2%	4352.7	4647.2	294.5	6.8%
2.5%	3627.0	3878.3	251.3	6.9%
3.7%	3099.1	3677.7	578.5	18.7%
4.9%	2800.5	3472.3	671.9	24.0%
6.2%	2747.8	3141.7	393.9	14.3%
7.4%	2635.5	3085.4	449.9	17.1%
8.6%	2628.7	2927.6	298.9	11.4%
9.9%	2570.0	2744.4	174.4	6.8%
11.1%	2511.8	2720.9	209.0	8.3%
12.3%	2505.2	2614.2	109.1	4.4%
13.6%	2487.2	2549.3	62.1	2.5%
14.8%	2355.7	2464.4	108.7	4.6%
16.0%	2201.3	2421.9	220.7	10.0%
17.3%	1547.5	1802.6	255.1	16.5%
18.5%	1530.1	1718.8	188.7	12.3%
19.8%	1292.2	1550.4	258.2	20.0%
21.0%	1288.7	1386.1	97.4	7.6%
22.2%	1276.8	1335.4	58.6	4.6%
23.5%	1219.2	1306.3	87.2	7.1%
24.7%	1081.3	1217.3	136.0	12.6%
25.9%	983.7	1143.8	160.1	16.3%
27.2%	918.7	1108.9	190.2	20.7%
28.4%	888.6	1090.0	201.3	22.7%
29.6%	879.5	1029.1	149.7	17.0%
30.9%	860.1	987.3	127.2	14.8%
32.1%	827.4	970.9	143.5	17.3%
33.3%	757.6	923.8	166.2	21.9%
34.6%	731.0	913.9	182.9	25.0%
35.8%	697.1	895.1	197.9	28.4%
37.0%	651.7	861.8	210.1	32.2%
38.3%	627.2	766.2	139.0	22.2%
39.5%	587.8	758.1	170.3	29.0%
40.7%	587.1	750.7	163.6	27.9%
42.0%	501.1	732.4	231.3	46.2%
43.2%	480.1	682.3	202.2	42.1%
44.4%	473.8	674.6	200.7	42.4%
45.7%	469.7	608.6	138.9	29.6%
46.9%	432.4	584.8	152.4	35.3%
48.1%	412.9	502.0	89.2	21.6%
49.4%	368.2	493.4	125.2	34.0%
50.6%	366.1	456.3	90.2	24.6%
51.9%	334.2	402.0	67.8	20.3%
53.1%	298.9	383.3	84.5	28.3%
54.3%	289.3	349.0	59.7	20.6%
55.6%	281.7	300.6	18.9	6.7%
56.8%	274.5	298.8	24.4	8.9%
58.0%	249.4	275.2	25.8	10.4%
59.3%	243.0	264.5	21.5	8.8%
60.5%	228.9	263.3	34.4	15.0%
61.7%	222.7	233.5	10.7	4.8%
63.0%	221.8	232.2	10.3	4.7%
64.2%	212.0	213.0	1.0	0.5%
65.4%	210.9	211.2	0.3	0.1%
66.7%	206.8	210.9	4.1	2.0%
67.9%	204.2	210.0	5.8	2.9%
69.1%	200.9	205.4	4.5	2.2%
70.4%	200.4	200.6	0.3	0.1%
71.6%	200.0	200.5	0.5	0.2%
72.8%	199.7	200.4	0.7	0.4%
74.1%	199.4	199.5	0.1	0.0%
75.3%	198.6	199.4	0.8	0.4%
76.5%	197.2	197.9	0.7	0.4%
77.8%	195.7	197.1	1.4	0.7%
79.0%	195.3	197.0	1.7	0.9%
80.2%	195.3	195.8	0.5	0.2%
81.5%	195.0	195.5	0.5	0.3%
82.7%	194.9	195.5	0.6	0.3%
84.0%	193.6	195.1	1.5	0.8%
85.2%	193.4	194.8	1.3	0.7%
86.4%	193.0	193.5	0.5	0.2%
87.7%	192.7	193.5	0.7	0.4%
88.9%	192.3	192.6	0.2	0.1%
90.1%	192.1	192.4	0.4	0.2%
91.4%	191.0	192.1	1.1	0.6%
92.6%	190.9	192.0	1.1	0.6%
93.8%	190.8	191.5	0.7	0.4%
95.1%	190.3	190.7	0.4	0.2%
96.3%	190.1	190.6	0.5	0.3%
97.5%	189.5	190.2	0.7	0.4%
98.8%	183.8	183.7	0.0	0.0%
100.0%	183.3	183.3	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	7016.2	6958.5	-57.7	-0.8%
1.2%	5915.7	5928.9	13.2	0.2%
2.5%	5603.1	5465.8	-137.3	-2.5%
3.7%	5095.8	5047.4	-48.4	-1.0%
4.9%	4842.4	4793.3	-49.2	-1.0%
6.2%	3989.9	3936.1	-53.8	-1.3%
7.4%	3889.9	3884.2	-5.7	-0.1%
8.6%	3860.1	3600.3	-259.8	-6.7%
9.9%	3368.1	3409.3	41.2	1.2%
11.1%	3337.4	3338.8	1.4	0.0%
12.3%	3210.8	3330.7	119.8	3.7%
13.6%	3142.8	3329.9	187.1	6.0%
14.8%	3127.0	3325.7	198.7	6.4%
16.0%	2611.4	2892.4	281.0	10.8%
17.3%	2569.6	2559.6	-10.0	-0.4%
18.5%	2528.9	2402.8	-126.1	-5.0%
19.8%	2416.1	2328.8	-87.3	-3.6%
21.0%	2177.3	2326.5	149.2	6.9%
22.2%	2158.9	2186.2	27.4	1.3%
23.5%	2117.5	2131.7	14.1	0.7%
24.7%	1829.7	1992.6	162.9	8.9%
25.9%	1784.3	1819.0	34.8	1.9%
27.2%	1771.4	1762.6	-8.8	-0.5%
28.4%	1673.1	1666.1	-7.0	-0.4%
29.6%	1643.1	1600.3	-42.8	-2.6%
30.9%	1605.8	1582.6	-23.3	-1.4%
32.1%	1594.9	1577.5	-17.4	-1.1%
33.3%	1477.9	1481.4	3.5	0.2%
34.6%	1457.8	1396.5	-61.3	-4.2%
35.8%	1427.3	1382.5	-44.8	-3.1%
37.0%	1267.9	1367.1	99.2	7.8%
38.3%	1238.2	1356.3	118.2	9.5%
39.5%	1232.6	1327.0	94.3	7.7%
40.7%	1220.9	1318.0	97.1	8.0%
42.0%	1218.3	1247.1	28.8	2.4%
43.2%	1152.3	1234.9	82.7	7.2%
44.4%	1141.8	1154.0	12.2	1.1%
45.7%	1077.8	1100.7	22.9	2.1%
46.9%	934.2	1046.3	112.2	12.0%
48.1%	930.5	1007.5	77.1	8.3%
49.4%	859.7	960.1	100.4	11.7%
50.6%	844.9	892.3	47.4	5.6%
51.9%	790.8	793.9	3.1	0.4%
53.1%	718.5	721.3	2.9	0.4%
54.3%	705.6	710.9	5.3	0.7%
55.6%	638.4	686.8	48.4	7.6%
56.8%	636.3	635.3	-1.1	-0.2%
58.0%	592.7	611.6	18.9	3.2%
59.3%	489.4	609.1	119.6	24.4%
60.5%	439.2	496.1	56.9	13.0%
61.7%	436.3	472.0	35.7	8.2%
63.0%	431.5	444.8	13.3	3.1%
64.2%	431.5	440.0	8.6	2.0%
65.4%	354.9	438.1	83.2	23.4%
66.7%	343.0	372.0	29.0	8.5%
67.9%	341.8	352.8	11.0	3.2%
69.1%	296.2	348.8	52.6	17.8%
70.4%	290.0	319.6	29.6	10.2%
71.6%	284.4	277.9	-6.5	-2.3%
72.8%	270.2	270.1	-0.1	0.0%
74.1%	266.4	268.7	2.3	0.8%
75.3%	251.1	252.1	1.0	0.4%
76.5%	247.5	248.4	0.9	0.4%
77.8%	227.2	227.2	0.0	0.0%
79.0%	216.5	217.0	0.5	0.2%
80.2%	213.0	214.9	1.9	0.9%
81.5%	212.3	211.8	-0.5	-0.2%
82.7%	205.0	211.4	6.5	3.2%
84.0%	202.9	210.2	7.4	3.6%
85.2%	202.5	207.0	4.5	2.2%
86.4%	201.1	206.2	5.2	2.6%
87.7%	201.0	201.3	0.3	0.2%
88.9%	200.5	200.7	0.2	0.1%
90.1%	196.1	196.2	0.1	0.0%
91.4%	193.9	195.0	1.2	0.6%
92.6%	191.2	191.1	0.0	0.0%
93.8%	189.0	188.8	-0.2	-0.1%
95.1%	188.1	188.0	0.0	0.0%
96.3%	187.9	187.9	0.0	0.0%
97.5%	187.6	187.9	0.3	0.1%
98.8%	185.9	186.1	0.2	0.1%
100.0%	185.0	185.7	0.7	0.4%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	9506.5	9468.6	-37.9	-0.4%
1.2%	9278.9	9271.9	-7.0	-0.1%
2.5%	8808.8	8791.7	-17.0	-0.2%
3.7%	7167.4	6621.8	-545.6	-7.6%
4.9%	6558.7	6565.5	6.8	0.1%
6.2%	5856.5	5872.6	16.1	0.3%
7.4%	5851.3	5826.3	-25.0	-0.4%
8.6%	5804.7	5766.9	-37.8	-0.7%
9.9%	5698.2	5678.2	-20.0	-0.4%
11.1%	5671.6	5589.9	-81.8	-1.4%
12.3%	5566.4	5506.6	-59.8	-1.1%
13.6%	5238.4	5169.3	-69.1	-1.3%
14.8%	5107.0	4999.4	-107.5	-2.1%
16.0%	4919.5	4795.4	-124.1	-2.5%
17.3%	4888.1	4749.2	-138.8	-2.8%
18.5%	4847.2	4719.9	-127.2	-2.6%
19.8%	4751.3	4571.2	-180.1	-3.8%
21.0%	4573.7	4461.5	-112.2	-2.5%
22.2%	4499.8	4353.2	-146.7	-3.3%
23.5%	4381.4	4323.4	-58.1	-1.3%
24.7%	4371.5	4244.4	-127.1	-2.9%
25.9%	4307.1	4199.5	-107.6	-2.5%
27.2%	4268.1	4045.3	-222.8	-5.2%
28.4%	4084.7	3955.9	-128.7	-3.2%
29.6%	4009.3	3889.9	-119.4	-3.0%
30.9%	3872.3	3759.9	-112.4	-2.9%
32.1%	3656.9	3539.7	-117.2	-3.2%
33.3%	3494.5	3507.9	13.4	0.4%
34.6%	3485.5	3484.2	-1.3	0.0%
35.8%	3275.9	3316.5	40.5	1.2%
37.0%	3217.8	3202.8	-15.0	-0.5%
38.3%	3149.4	3169.9	20.4	0.6%
39.5%	2991.6	3001.2	9.5	0.3%
40.7%	2964.7	2971.4	6.7	0.2%
42.0%	2689.6	2966.9	277.4	10.3%
43.2%	2626.7	2898.9	272.2	10.4%
44.4%	2472.4	2719.7	247.4	10.0%
45.7%	2436.7	2646.7	209.9	8.6%
46.9%	2390.7	2498.1	107.4	4.5%
48.1%	2169.5	2202.7	33.2	1.5%
49.4%	2130.2	2140.1	9.9	0.5%
50.6%	2086.1	2040.8	-45.3	-2.2%
51.9%	2071.1	2011.7	-59.4	-2.9%
53.1%	2018.9	2010.4	-8.5	-0.4%
54.3%	1997.3	2009.9	12.7	0.6%
55.6%	1993.8	2007.2	13.4	0.7%
56.8%	1891.0	1929.4	38.4	2.0%
58.0%	1852.5	1789.4	-63.1	-3.4%
59.3%	1819.1	1715.2	-103.9	-5.7%
60.5%	1694.9	1672.4	-22.6	-1.3%
61.7%	1614.0	1622.2	8.2	0.5%
63.0%	1591.5	1615.1	23.6	1.5%
64.2%	1559.4	1606.2	46.8	3.0%
65.4%	1499.5	1542.0	42.5	2.8%
66.7%	1487.6	1540.1	52.4	3.5%
67.9%	1316.8	1344.4	27.6	2.1%
69.1%	1276.3	1307.2	30.9	2.4%
70.4%	1178.3	1178.9	0.6	0.0%
71.6%	1171.8	1171.4	-0.4	0.0%
72.8%	1041.4	1039.3	-2.1	-0.2%
74.1%	993.5	1032.9	39.4	4.0%
75.3%	957.6	971.3	13.7	1.4%
76.5%	937.8	947.3	9.6	1.0%
77.8%	569.4	675.5	106.1	18.6%
79.0%	527.6	566.8	39.2	7.4%
80.2%	436.3	548.0	111.7	25.6%
81.5%	430.1	445.5	15.4	3.6%
82.7%	429.1	436.2	7.1	1.7%
84.0%	353.3	427.6	74.4	21.0%
85.2%	350.5	356.2	5.8	1.6%
86.4%	307.6	309.4	1.9	0.6%
87.7%	295.7	303.9	8.2	2.8%
88.9%	280.9	284.0	3.1	1.1%
90.1%	270.6	272.6	2.0	0.8%
91.4%	251.2	253.7	2.5	1.0%
92.6%	241.7	240.7	-0.9	-0.4%
93.8%	227.1	227.3	0.2	0.1%
95.1%	212.8	213.4	0.6	0.3%
96.3%	197.1	197.2	0.1	0.1%
97.5%	192.0	192.5	0.5	0.3%
98.8%	183.9	184.0	0.1	0.1%
100.0%	181.2	181.6	0.4	0.2%

Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12023.9	12007.9	-16.0	-0.1%
1.2%	11590.2	11307.0	-283.1	-2.4%
2.5%	11431.9	10376.5	-1055.4	-9.2%
3.7%	10608.4	10121.2	-487.2	-4.6%
4.9%	7502.8	7474.6	-28.1	-0.4%
6.2%	7299.1	7435.4	136.3	1.9%
7.4%	7264.1	7302.7	38.6	0.5%
8.6%	7230.1	7031.7	-198.4	-2.7%
9.9%	7183.2	6763.6	-419.6	-5.8%
11.1%	7095.5	6695.2	-400.3	-5.6%
12.3%	7069.8	6678.0	-391.9	-5.5%
13.6%	6882.3	6642.2	-240.1	-3.5%
14.8%	6779.4	6591.2	-188.2	-2.8%
16.0%	6750.1	6405.2	-344.9	-5.1%
17.3%	6722.7	6325.9	-396.8	-5.9%
18.5%	6714.3	6323.4	-391.0	-5.8%
19.8%	6707.0	6308.6	-398.5	-5.9%
21.0%	6487.2	6164.0	-323.1	-5.0%
22.2%	6394.0	6127.9	-266.1	-4.2%
23.5%	6309.1	6121.7	-187.4	-3.0%
24.7%	6264.8	6070.2	-194.6	-3.1%
25.9%	6246.8	6026.1	-220.7	-3.5%
27.2%	6198.5	6000.0	-198.5	-3.2%
28.4%	6184.7	5995.9	-188.8	-3.1%
29.6%	6156.5	5971.7	-184.7	-3.0%
30.9%	6105.0	5948.3	-156.7	-2.6%
32.1%	5999.7	5935.4	-64.3	-1.1%
33.3%	5996.7	5933.1	-63.6	-1.1%
34.6%	5978.3	5817.9	-160.5	-2.7%
35.8%	5953.0	5796.9	-156.0	-2.6%
37.0%	5950.4	5796.2	-154.2	-2.6%
38.3%	5791.7	5607.5	-184.2	-3.2%
39.5%	5786.2	5604.3	-181.8	-3.1%
40.7%	5764.7	5598.5	-166.2	-2.9%
42.0%	5609.2	5577.4	-31.8	-0.6%
43.2%	5574.9	5526.1	-48.8	-0.9%
44.4%	5525.4	5394.2	-131.2	-2.4%
45.7%	5345.6	5256.9	-88.6	-1.7%
46.9%	5298.5	5246.2	-52.3	-1.0%
48.1%	5281.7	5234.6	-47.1	-0.9%
49.4%	5233.4	5221.3	-12.1	-0.2%
50.6%	5201.3	5202.2	0.9	0.0%
51.9%	5193.5	5170.2	-23.3	-0.4%
53.1%	5104.9	5095.7	-9.2	-0.2%
54.3%	5068.1	4954.5	-113.6	-2.2%
55.6%	5053.2	4920.1	-133.1	-2.6%
56.8%	4993.3	4893.7	-99.6	-2.0%
58.0%	4987.2	4892.7	-94.5	-1.9%
59.3%	4982.6	4861.9	-120.7	-2.4%
60.5%	4913.1	4833.4	-79.8	-1.6%
61.7%	4889.5	4798.2	-91.4	-1.9%
63.0%	4876.9	4797.2	-79.7	-1.6%
64.2%	4829.6	4771.7	-57.8	-1.2%
65.4%	4768.8	4751.1	-17.8	-0.4%
66.7%	4704.6	4713.7	9.1	0.2%
67.9%	4679.6	4667.4	-12.2	-0.3%
69.1%	4596.0	4537.8	-58.3	-1.3%
70.4%	4415.1	4442.4	27.3	0.6%
71.6%	4374.8	4372.9	-1.9	0.0%
72.8%	4228.3	4300.6	72.4	1.7%
74.1%	3935.3	3933.5	-1.9	0.0%
75.3%	3660.6	3572.8	-87.8	-2.4%
76.5%	3580.1	3560.0	-20.1	-0.6%
77.8%	3485.8	3451.5	-34.3	-1.0%
79.0%	3280.7	3200.9	-79.8	-2.4%
80.2%	3209.0	3105.6	-103.5	-3.2%
81.5%	3155.4	3072.5	-82.9	-2.6%
82.7%	3152.1	2991.0	-161.1	-5.1%
84.0%	3086.6	2936.9	-149.7	-4.8%
85.2%	3062.4	2703.4	-358.9	-11.7%
86.4%	2708.3	2608.9	-99.5	-3.7%
87.7%	2610.5	2380.3	-230.1	-8.8%
88.9%	2438.4	2369.6	-68.8	-2.8%
90.1%	2421.3	2335.9	-85.4	-3.5%
91.4%	1674.9	2244.4	569.4	34.0%
92.6%	1525.1	1410.8	-114.3	-7.5%
93.8%	1408.8	1403.3	-5.5	-0.4%
95.1%	1108.9	1056.5	-52.4	-4.7%
96.3%	999.7	928.5	-71.1	-7.1%
97.5%	925.4	883.1	-42.3	-4.6%
98.8%	344.7	279.9	-64.9	-18.8%
100.0%	220.0	216.6	-3.3	

July				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12764.9	12814.8	49.9	0.4%
1.2%	12559.4	12203.7	-355.7	-2.8%
2.5%	12454.9	11797.0	-657.9	-5.3%
3.7%	11852.0	10800.3	-1051.7	-8.9%
4.9%	9653.8	9660.3	6.5	0.1%
6.2%	9645.9	9552.9	-93.0	-1.0%
7.4%	9632.3	9478.8	-153.5	-1.6%
8.6%	9580.8	9115.7	-465.1	-4.9%
9.9%	9535.9	9076.9	-459.0	-4.8%
11.1%	9396.6	8697.3	-699.3	-7.4%
12.3%	9314.5	8579.6	-735.0	-7.9%
13.6%	9114.2	8435.8	-678.4	-7.4%
14.8%	8782.1	8409.1	-373.1	-4.2%
16.0%	8721.0	8362.3	-358.7	-4.1%
17.3%	8426.5	8217.8	-208.7	-2.5%
18.5%	8396.6	8195.5	-201.1	-2.4%
19.8%	8358.1	8195.1	-163.0	-1.9%
21.0%	8265.9	8025.3	-240.6	-2.9%
22.2%	8209.4	8011.8	-197.6	-2.4%
23.5%	8209.1	8006.9	-202.2	-2.5%
24.7%	8173.8	7993.5	-180.3	-2.2%
25.9%	8044.5	7965.6	-78.9	-1.0%
27.2%	7954.9	7843.4	-111.6	-1.4%
28.4%	7923.0	7828.6	-94.4	-1.2%
29.6%	7919.6	7693.6	-226.0	-2.9%
30.9%	7831.2	7540.2	-291.0	-3.7%
32.1%	7592.0	7373.0	-219.1	-2.9%
33.3%	7390.2	7156.5	-233.6	-3.2%
34.6%	6410.9	6365.1	-45.8	-0.7%
35.8%	6298.5	6216.6	-81.9	-1.3%
37.0%	6125.2	6099.4	-25.8	-0.4%
38.3%	6092.9	6092.2	-0.7	0.0%
39.5%	5994.4	5918.5	-75.9	-1.3%
40.7%	5984.3	5918.2	-66.1	-1.1%
42.0%	5894.3	5832.3	-61.9	-1.1%
43.2%	5830.1	5819.2	-10.9	-0.2%
44.4%	5829.7	5786.6	-43.1	-0.7%
45.7%	5826.9	5775.2	-51.7	-0.9%
46.9%	5805.0	5748.1	-56.9	-1.0%
48.1%	5781.2	5718.9	-62.4	-1.1%
49.4%	5608.0	5660.6	52.7	0.9%
50.6%	5547.3	5628.4	81.1	1.5%
51.9%	5424.9	5324.5	-100.5	-1.9%
53.1%	5334.5	5248.5	-86.0	-1.6%
54.3%	5234.3	5244.9	10.6	0.2%
55.6%	5107.6	5235.7	128.1	2.5%
56.8%	5100.8	5087.5	-13.3	-0.3%
58.0%	4929.2	4928.3	-0.9	0.0%
59.3%	4838.9	4860.5	21.7	0.4%
60.5%	4800.6	4641.9	-158.7	-3.3%
61.7%	4735.0	4633.2	-101.8	-2.1%
63.0%	4624.5	4612.9	-11.6	-0.3%
64.2%	4616.2	4597.9	-18.3	-0.4%
65.4%	4595.9	4556.3	-39.5	-0.9%
66.7%	4505.4	4440.9	-64.5	-1.4%
67.9%	4440.7	4424.0	-16.7	-0.4%
69.1%	4435.0	4418.4	-16.6	-0.4%
70.4%	4377.2	4396.0	18.9	0.4%
71.6%	4362.4	4369.5	7.1	0.2%
72.8%	4325.1	4368.0	42.9	1.0%
74.1%	4281.5	4277.0	-4.5	-0.1%
75.3%	4252.0	4249.6	-2.4	-0.1%
76.5%	4235.9	4215.0	-20.9	-0.5%
77.8%	4200.5	4167.6	-32.8	-0.8%
79.0%	4165.7	4150.6	-15.1	-0.4%
80.2%	4122.5	4137.7	15.2	0.4%
81.5%	4111.8	4081.7	-30.1	-0.7%
82.7%	4102.9	4032.8	-70.1	-1.7%
84.0%	4068.1	3986.3	-81.8	-2.0%
85.2%	3994.2	3942.8	-51.4	-1.3%
86.4%	3896.2	3900.7	4.6	0.1%
87.7%	3893.3	3891.1	-2.2	-0.1%
88.9%	3822.4	3889.1	66.7	1.7%
90.1%	3770.6	3539.6	-231.0	-6.1%
91.4%	3573.6	3488.3	-85.3	-2.4%
92.6%	3520.3	3470.9	-49.3	-1.4%
93.8%	3516.3	3437.1	-79.2	-2.3%
95.1%	3450.8	3401.7	-49.1	-1.4%
96.3%	3358.3	3290.3	-68.0	-2.0%
97.5%	3041.6	3000.4	-41.2	-1.4%
98.8%	2855.1	2753.2	-101.9	-3.6%
100.0%	2,552.0	2,536.7	-15.3	-0.6%

August				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13013.6	13254.9	241.3	1.9%
1.2%	12949.3	12654.7	-294.5	-2.3%
2.5%	12624.3	12252.3	-372.0	-2.9%
3.7%	12267.3	12023.1	-244.2	-2.0%
4.9%	12089.5	11870.5	-218.9	-1.8%
6.2%	11863.9	11802.8	-61.1	-0.5%
7.4%	11842.3	11802.5	-39.8	-0.3%
8.6%	11841.9	11605.9	-236.0	-2.0%
9.9%	11836.5	11400.1	-436.5	-3.7%
11.1%	11694.4	11276.2	-418.3	-3.6%
12.3%	11627.6	10997.0	-630.6	-5.4%
13.6%	11045.4	10774.2	-271.2	-2.5%
14.8%	10941.8	10605.8	-336.0	-3.1%
16.0%	10836.6	10523.6	-313.1	-2.9%
17.3%	10817.6	10440.5	-377.1	-3.5%
18.5%	10809.3	10431.0	-378.4	-3.5%
19.8%	10802.2	10412.3	-389.9	-3.6%
21.0%	10733.8	10355.6	-378.3	-3.5%
22.2%	10674.9	10148.1	-526.9	-4.9%
23.5%	10531.3	10057.5	-473.9	-4.5%
24.7%	10441.9	10041.8	-400.1	-3.8%
25.9%	10326.2	10001.7	-324.5	-3.1%
27.2%	10245.0	9961.5	-283.5	-2.8%
28.4%	10090.1	9928.0	-162.1	-1.6%
29.6%	10043.4	9644.8	-398.6	-4.0%
30.9%	9861.5	9515.9	-345.5	-3.5%
32.1%	9422.4	9374.9	-47.5	-0.5%
33.3%	9376.7	9332.6	-44.0	-0.5%
34.6%	9011.2	8521.5	-489.6	-5.4%
35.8%	8791.8	8432.6	-359.3	-4.1%
37.0%	8485.6	8428.7	-56.9	-0.7%
38.3%	8374.9	8418.7	43.8	0.5%
39.5%	8352.1	8313.5	-38.6	-0.5%
40.7%	8344.4	8304.5	-39.9	-0.5%
42.0%	8289.8	8266.9	-22.9	-0.3%
43.2%	8274.9	8191.0	-84.0	-1.0%
44.4%	8270.0	8159.2	-110.7	-1.3%
45.7%	8245.1	8155.4	-89.6	-1.1%
46.9%	8232.2	8107.2	-125.0	-1.5%
48.1%	8219.9	8093.6	-126.3	-1.5%
49.4%	8184.7	8077.2	-107.5	-1.3%
50.6%	8144.9	8071.3	-73.6	-0.9%
51.9%	8132.4	8053.3	-79.0	-1.0%
53.1%	8118.3	8027.2	-91.2	-1.1%
54.3%	8117.2	8004.7	-112.5	-1.4%
55.6%	8083.6	7989.7	-93.9	-1.2%
56.8%	8078.4	7974.6	-103.8	-1.3%
58.0%	8066.8	7955.4	-111.4	-1.4%
59.3%	8050.3	7913.8	-136.5	-1.7%
60.5%	8007.0	7897.1	-109.9	-1.4%
61.7%	7965.8	7803.9	-161.9	-2.0%
63.0%	7914.2	7756.5	-157.7	-2.0%
64.2%	7838.9	7733.2	-105.7	-1.3%
65.4%	7728.6	7688.3	-40.2	-0.5%
66.7%	7665.2	7622.0	-43.2	-0.6%
67.9%	7630.4	7496.0	-134.4	-1.8%
69.1%	7469.0	7437.5	-31.5	-0.4%
70.4%	7374.1	7384.0	9.8	0.1%
71.6%	7362.9	7362.2	-0.7	0.0%
72.8%	7274.1	7355.2	81.2	1.1%
74.1%	7260.2	7310.5	50.3	0.7%
75.3%	7260.2	7215.3	-44.9	-0.6%
76.5%	7154.4	7175.2	20.9	0.3%
77.8%	7152.2	7170.6	18.4	0.3%
79.0%	7105.1	7093.1	-12.0	-0.2%
80.2%	7086.2	7085.6	-0.7	0.0%
81.5%	7034.3	7019.7	-14.6	-0.2%
82.7%	6910.5	6884.0	-26.4	-0.4%
84.0%	6900.3	6781.2	-119.0	-1.7%
85.2%	6894.2	6771.3	-122.9	-1.8%
86.4%	6872.5	6718.5	-154.0	-2.2%
87.7%	6822.7	6711.0	-111.7	-1.6%
88.9%	6782.4	6641.6	-140.9	-2.1%
90.1%	6762.8	6583.9	-179.0	-2.6%
91.4%	6755.1	6531.0	-224.1	-3.3%
92.6%	6732.2	6505.0	-227.2	-3.4%
93.8%	6638.4	6449.7	-188.7	-2.8%
95.1%	6581.8	6324.3	-257.6	-3.9%
96.3%	6436.7	6271.0	-165.7	-2.6%
97.5%	6296.6	6102.2	-194.4	-3.1%
98.8%	6229.9	6043.8	-186.1	-3.0%
100.0%	5,980.6	5,660.0	-320.6	-5.4%

September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13941.1	13891.5	-49.6	-0.4%
1.2%	13631.9	13549.1	-82.8	-0.6%
2.5%	13546.6	13540.5	-6.1	0.0%
3.7%	13513.0	13394.0	-119.0	-0.9%
4.9%	13508.3	13382.7	-125.6	-0.9%
6.2%	13445.5	13351.9	-93.5	-0.7%
7.4%	13364.2	13176.2	-188.1	-1.4%
8.6%	13349.8	13086.4	-263.4	-2.0%
9.9%	13332.4	12985.6	-346.8	-2.6%
11.1%	13321.3	12700.5	-620.8	-4.7%
12.3%	13133.1	12617.6	-515.5	-3.9%
13.6%	12948.0	12600.0	-347.9	-2.7%
14.8%	12797.1	12527.1	-270.0	-2.1%
16.0%	12788.4	12308.4	-480.0	-3.8%
17.3%	12773.3	12283.8	-489.5	-3.8%
18.5%	12773.1	12084.2	-689.0	-5.4%
19.8%	12704.4	12054.3	-650.2	-5.1%
21.0%	12609.5	11954.5	-655.0	-5.2%
22.2%	12607.5	11793.1	-814.4	-6.5%
23.5%	12593.5	11575.6	-1017.9	-8.1%
24.7%	12542.4	11559.5	-982.9	-7.8%
25.9%	12472.1	11438.2	-1033.9	-8.3%
27.2%	12118.0	11424.7	-693.3	-5.7%
28.4%	11948.1	11396.6	-551.5	-4.6%
29.6%	11936.0	11335.1	-600.9	-5.0%
30.9%	11932.8	11298.1	-634.7	-5.3%
32.1%	11890.5	11166.1	-724.3	-6.1%
33.3%	11808.0	11122.1	-685.9	-5.8%
34.6%	11673.7	11098.4	-575.4	-4.9%
35.8%	11627.5	11075.4	-552.1	-4.7%
37.0%	11599.3	11065.4	-533.9	-4.6%
38.3%	11515.6	10999.8	-515.7	-4.5%
39.5%	11411.2	10747.5	-663.6	-5.8%
40.7%	11370.4	10647.9	-722.4	-6.4%
42.0%	11346.9	10615.7	-731.2	-6.4%
43.2%	11299.6	10596.7	-702.9	-6.2%
44.4%	11161.4	10499.8	-661.7	-5.9%
45.7%	11129.1	10411.5	-717.6	-6.4%
46.9%	10990.1	10358.8	-631.3	-5.7%
48.1%	10949.5	10348.2	-601.3	-5.5%
49.4%	10719.3	10237.1	-482.2	-4.5%
50.6%	10699.9	10162.1	-537.8	-5.0%
51.9%	10690.0	9892.7	-797.4	-7.5%
53.1%	10562.5	9808.5	-754.0	-7.1%
54.3%	10388.0	9451.9	-936.1	-9.0%
55.6%	6274.7	6023.2	-251.5	-4.0%
56.8%	6156.5	5864.9	-291.6	-4.7%
58.0%	6089.4	5816.3	-273.0	-4.5%
59.3%	6056.9	5759.9	-296.9	-4.9%
60.5%	6053.2	5742.1	-311.1	-5.1%
61.7%	6048.9	5684.0	-364.9	-6.0%
63.0%	5931.1	5676.6	-254.5	-4.3%
64.2%	5868.3	5630.1	-238.2	-4.1%
65.4%	5811.9	5613.3	-198.6	-3.4%
66.7%	5802.0	5609.9	-192.1	-3.3%
67.9%	5793.6	5524.6	-269.1	-4.6%
69.1%	5700.5	5424.4	-276.1	-4.8%
70.4%	3357.7	3207.8	-149.9	-4.5%
71.6%	3262.7	3151.6	-111.1	-3.4%
72.8%	3202.9	3141.5	-61.4	-1.9%
74.1%	3188.0	3141.0	-47.0	-1.5%
75.3%	3170.0	3126.5	-43.5	-1.4%
76.5%	3167.6	3103.6	-64.0	-2.0%
77.8%	3165.5	3090.8	-74.6	-2.4%
79.0%	3162.8	3089.4	-73.5	-2.3%
80.2%	3141.4	3034.3	-107.1	-3.4%
81.5%	3135.9	3016.6	-119.3	-3.8%
82.7%	3082.3	2997.2	-85.1	-2.8%
84.0%	3053.2	2983.5	-69.6	-2.3%
85.2%	3047.4	2976.8	-70.6	-2.3%
86.4%	3043.9	2961.3	-82.6	-2.7%
87.7%	3006.4	2936.6	-69.8	-2.3%
88.9%	2983.3	2891.3	-92.0	-3.1%
90.1%	2979.9	2863.2	-116.8	-3.9%
91.4%	2961.1	2847.8	-113.3	-3.8%
92.6%	2954.0	2837.6	-116.4	-3.9%
93.8%	2950.5	2818.9	-131.6	-4.5%
95.1%	2918.8	2803.0	-115.8	-4.0%
96.3%	2914.3	2766.9	-147.4	-5.1%
97.5%	2897.4	2756.3	-141.0	-4.9%
98.8%	2841.5	2753.2	-88.3	-3.1%
100.0%	2,824.5	2,752.6	-71.9	-2.5%

Figure SQ-24-b
Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

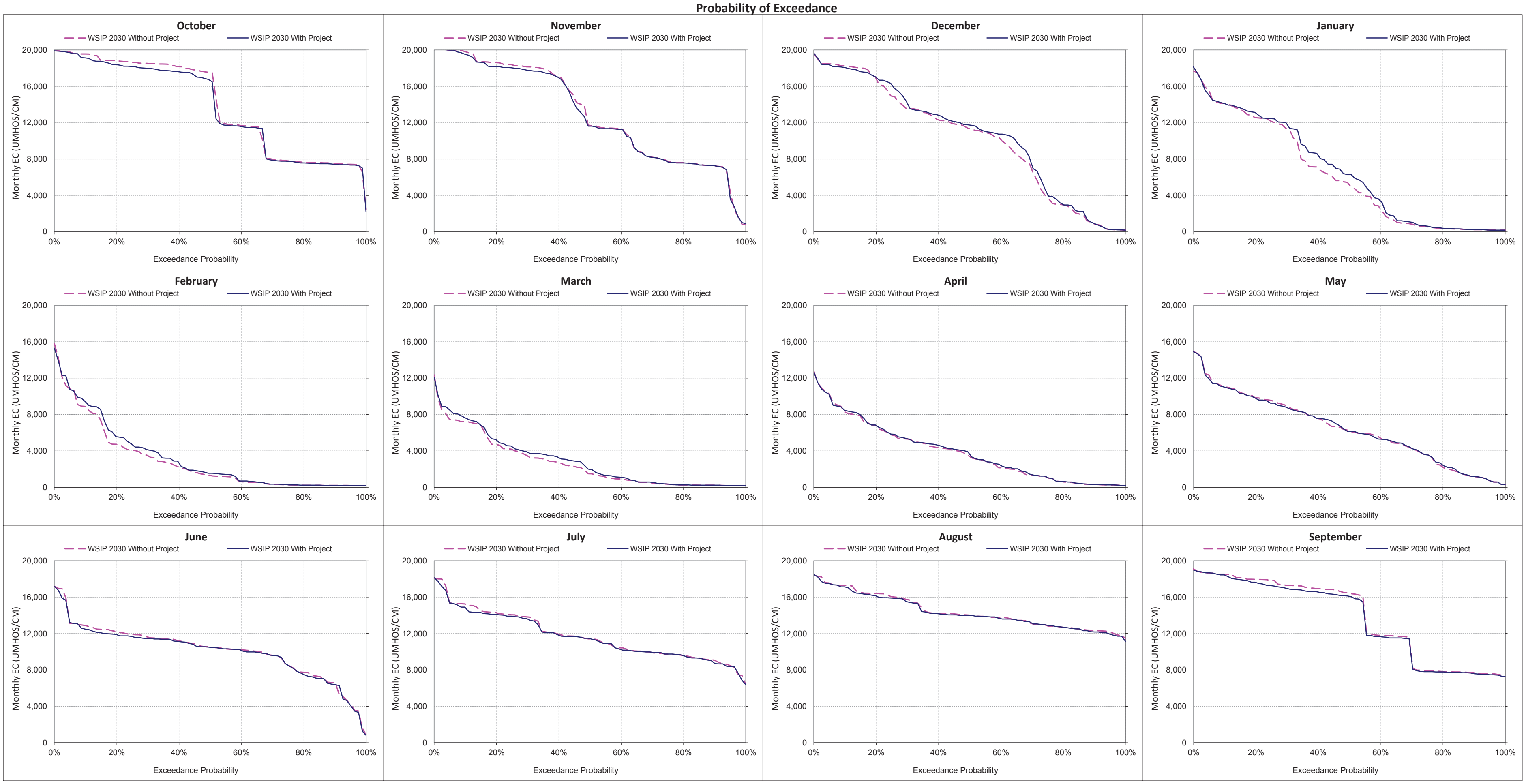


Table SQ-24-b

Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	20047.7	19918.1	-129.6	-0.6%
1.2%	19932.7	19863.8	-68.9	-0.3%
2.5%	19818.5	19837.1	18.6	0.1%
3.7%	19807.4	19800.2	-7.2	0.0%
4.9%	19781.9	19695.8	-86.1	-0.4%
6.2%	19618.4	19600.6	-17.7	-0.1%
7.4%	19579.2	19596.7	17.6	0.1%
8.6%	19565.3	19161.3	-404.0	-2.1%
9.9%	19564.0	19123.7	-440.3	-2.3%
11.1%	19557.8	19079.5	-478.3	-2.4%
12.3%	19417.3	18816.0	-601.3	-3.1%
13.6%	19400.2	18776.5	-623.8	-3.2%
14.8%	18878.6	18755.2	-123.5	-0.7%
16.0%	18872.1	18690.6	-181.5	-1.0%
17.3%	18861.8	18569.5	-292.4	-1.5%
18.5%	18842.0	18415.7	-426.3	-2.3%
19.8%	18834.2	18399.4	-434.9	-2.3%
21.0%	18775.0	18322.9	-452.1	-2.4%
22.2%	18737.0	18211.8	-525.2	-2.8%
23.5%	18729.4	18209.2	-520.2	-2.8%
24.7%	18660.3	18180.3	-480.0	-2.6%
25.9%	18639.9	18175.8	-464.1	-2.5%
27.2%	18555.4	18063.9	-491.5	-2.6%
28.4%	18545.7	18017.1	-528.5	-2.8%
29.6%	18539.8	18003.4	-536.4	-2.9%
30.9%	18505.4	17970.6	-534.7	-2.9%
32.1%	18500.3	17915.0	-585.2	-3.2%
33.3%	18463.6	17825.0	-638.7	-3.5%
34.6%	18463.1	17749.2	-714.0	-3.9%
35.8%	18451.8	17737.4	-714.4	-3.9%
37.0%	18427.8	17719.6	-708.2	-3.8%
38.3%	18278.0	17653.4	-624.6	-3.4%
39.5%	18172.7	17617.9	-554.8	-3.1%
40.7%	18153.0	17579.3	-573.7	-3.2%
42.0%	17965.5	17539.7	-425.8	-2.4%
43.2%	17952.7	17524.0	-428.8	-2.4%
44.4%	17833.0	17329.1	-504.0	-2.8%
45.7%	17777.1	17019.0	-758.1	-4.3%
46.9%	17676.5	16990.5	-686.0	-3.9%
48.1%	17603.8	16883.4	-720.3	-4.1%
49.4%	17551.5	16759.6	-791.8	-4.5%
50.6%	17532.6	16497.7	-1034.8	-5.9%
51.9%	14602.3	12416.4	-2185.9	-15.0%
53.1%	12039.5	11902.9	-136.6	-1.1%
54.3%	11956.9	11757.0	-199.9	-1.7%
55.6%	11827.8	11716.3	-111.6	-0.9%
56.8%	11823.1	11666.7	-156.4	-1.3%
58.0%	11820.1	11649.3	-170.8	-1.4%
59.3%	11721.8	11618.0	-103.9	-0.9%
60.5%	11651.7	11557.8	-93.9	-0.8%
61.7%	11647.4	11494.2	-153.2	-1.3%
63.0%	11615.1	11494.0	-121.1	-1.0%
64.2%	11549.4	11491.2	-58.2	-0.5%
65.4%	11543.8	11392.2	-151.6	-1.3%
66.7%	10254.5	11375.3	1120.7	10.9%
67.9%	8074.0	8026.5	-47.5	-0.6%
69.1%	8050.9	7918.8	-132.0	-1.6%
70.4%	7961.5	7859.9	-101.6	-1.3%
71.6%	7903.5	7813.2	-90.3	-1.1%
72.8%	7876.5	7789.1	-87.4	-1.1%
74.1%	7832.4	7788.9	-43.5	-0.6%
75.3%	7787.3	7746.4	-40.8	-0.5%
76.5%	7723.7	7732.1	8.4	0.1%
77.8%	7705.7	7625.7	-80.1	-1.0%
79.0%	7675.4	7588.9	-86.6	-1.1%
80.2%	7642.0	7586.4	-55.6	-0.7%
81.5%	7616.8	7554.7	-62.1	-0.8%
82.7%	7611.2	7515.5	-95.7	-1.3%
84.0%	7604.8	7514.5	-90.4	-1.2%
85.2%	7600.1	7504.4	-95.7	-1.3%
86.4%	7586.6	7502.3	-84.3	-1.1%
87.7%	7581.2	7495.7	-85.5	-1.1%
88.9%	7544.8	7457.4	-87.4	-1.2%
90.1%	7501.9	7417.2	-84.7	-1.1%
91.4%	7469.7	7381.1	-88.6	-1.2%
92.6%	7468.3	7371.6	-96.6	-1.3%
93.8%	7433.5	7365.9	-67.6	-0.9%
95.1%	7432.1	7349.6	-82.5	-1.1%
96.3%	7424.5	7337.5	-87.0	-1.2%
97.5%	7380.9	7294.8	-86.0	-1.2%
98.8%	6587.8	6995.0	407.3	6.2%
100.0%	2,479.4	2,245.8	-233.6	-9.4%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	20336.0	20243.8	-92.2	-0.5%
1.2%	20113.6	20122.7	9.1	0.0%
2.5%	20037.6	20101.6	63.9	0.3%
3.7%	20024.5	20017.3	-7.2	0.0%
4.9%	19994.0	20002.5	8.5	0.0%
6.2%	19976.2	19985.7	9.4	0.0%
7.4%	19967.6	19783.8	-183.8	-0.9%
8.6%	19966.0	19706.7	-259.3	-1.3%
9.9%	19831.2	19534.1	-297.1	-1.5%
11.1%	19705.1	19418.2	-286.9	-1.5%
12.3%	19687.0	19204.6	-482.4	-2.5%
13.6%	18741.1	18685.9	-55.2	-0.3%
14.8%	18709.3	18656.1	-53.2	-0.3%
16.0%	18700.1	18618.9	-81.2	-0.4%
17.3%	18675.7	18211.0	-464.7	-2.5%
18.5%	18623.1	18172.5	-450.6	-2.4%
19.8%	18608.9	18158.5	-450.3	-2.4%
21.0%	18588.2	18157.4	-430.9	-2.3%
22.2%	18437.0	18075.7	-361.3	-2.0%
23.5%	18411.7	18066.6	-345.1	-1.9%
24.7%	18390.6	18042.2	-348.4	-1.9%
25.9%	18286.9	18005.5	-281.3	-1.5%
27.2%	18249.5	17974.5	-275.1	-1.5%
28.4%	18229.9	17873.6	-356.3	-2.0%
29.6%	18152.9	17787.1	-365.8	-2.0%
30.9%	18145.2	17723.5	-421.6	-2.3%
32.1%	18095.7	17687.7	-408.0	-2.3%
33.3%	18069.7	17668.7	-401.1	-2.2%
34.6%	17983.0	17585.3	-397.7	-2.2%
35.8%	17867.6	17459.9	-407.7	-2.3%
37.0%	17652.6	17428.2	-224.4	-1.3%
38.3%	17313.2	17219.8	-93.4	-0.5%
39.5%	17035.5	17037.7	2.2	0.0%
40.7%	16984.0	16752.9	-231.2	-1.4%
42.0%	16203.3	16169.3	-33.9	-0.2%
43.2%	15612.2	15469.1	-143.2	-0.9%
44.4%	15143.1	14471.1	-672.0	-4.4%
45.7%	14204.0	13616.9	-587.2	-4.1%
46.9%	14043.2	13159.1	-884.1	-6.3%
48.1%	13990.0	12695.8	-1294.2	-9.3%
49.4%	11736.6	11632.5	-104.1	-0.9%
50.6%	11671.5	11630.8	-40.7	-0.3%
51.9%	11650.4	11540.3	-110.1	-0.9%
53.1%	11499.0	11349.4	-149.6	-1.3%
54.3%	11428.6	11342.2	-86.4	-0.8%
55.6%	11413.1	11335.6	-77.5	-0.7%
56.8%	11410.1	11331.5	-78.6	-0.7%
58.0%	11385.8	11328.2	-57.7	-0.5%
59.3%	11319.0	11271.5	-47.4	-0.4%
60.5%	11295.2	11260.0	-35.2	-0.3%
61.7%	10692.1	10516.6	-175.5	-1.6%
63.0%	10520.5	10370.0	-150.4	-1.4%
64.2%	9168.4	9247.0	78.6	0.9%
65.4%	8852.8	8818.7	-34.1	-0.4%
66.7%	8768.3	8731.1	-37.2	-0.4%
67.9%	8381.1	8334.0	-47.1	-0.6%
69.1%	8267.0	8238.9	-28.1	-0.3%
70.4%	8187.8	8186.3	-1.5	0.0%
71.6%	8150.0	8122.7	-27.3	-0.3%
72.8%	8032.7	8019.7	-13.0	-0.2%
74.1%	7915.6	7874.2	-41.5	-0.5%
75.3%	7708.8	7642.7	-66.1	-0.9%
76.5%	7659.2	7630.9	-28.2	-0.4%
77.8%	7642.7	7590.0	-52.7	-0.7%
79.0%	7621.5	7585.3	-36.2	-0.5%
80.2%	7617.2	7566.3	-50.9	-0.7%
81.5%	7580.1	7554.5	-25.7	-0.3%
82.7%	7505.7	7490.7	-15.0	-0.2%
84.0%	7501.6	7464.4	-37.2	-0.5%
85.2%	7411.3	7353.6	-57.7	-0.8%
86.4%	7337.9	7344.6	6.7	0.1%
87.7%	7310.3	7316.6	6.3	0.1%
88.9%	7310.1	7304.1	-6.0	-0.1%
90.1%	7236.7	7270.0	33.3	0.5%
91.4%	7206.5	7182.4	-24.1	-0.3%
92.6%	7134.9	7100.4	-34.5	-0.5%
93.8%	6613.9	6793.0	179.1	2.7%
95.1%	4301.9	3594.9	-707.1	-16.4%
96.3%	2404.5	2775.0	370.5	15.4%
97.5%	1684.7	1611.5	-73.2	-4.3%
98.8%	842.0	1023.0	181.0	21.5%
100.0%	786.8	913.4	126.5	16.1%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	19633.0	19660.4	27.4	0.1%
1.2%	19013.9	19091.1	77.2	0.4%
2.5%	18499.5	18435.5	-64.0	-0.3%
3.7%	18497.5	18433.9	-63.6	-0.3%
4.9%	18469.0	18393.4	-75.6	-0.4%
6.2%	18460.2	18166.4	-293.8	-1.6%
7.4%	18394.4	18157.5	-236.9	-1.3%
8.6%	18278.0	18134.0	-144.0	-0.8%
9.9%	18241.4	18083.6	-157.8	-0.9%
11.1%	18236.2	17959.6	-276.7	-1.5%
12.3%	18140.7	17893.6	-247.1	-1.4%
13.6%	18078.3	17828.9	-249.4	-1.4%
14.8%	18026.9	17616.7	-410.3	-2.3%
16.0%	17988.9	17558.6	-430.3	-2.4%
17.3%	17843.8	17535.2	-308.5	-1.7%
18.5%	17286.0	17265.3	-20.7	-0.1%
19.8%	17024.0	17052.5	28.5	0.2%
21.0%	16134.8	16683.2	548.4	3.4%
22.2%	16111.4	16669.4	558.0	3.5%
23.5%	15609.6	16504.6	895.0	5.7%
24.7%	14949.3	16329.2	1379.9	9.2%
25.9%	14870.9	15759.8	888.8	6.0%
27.2%	14307.8	15444.1	1136.3	7.9%
28.4%	13964.2	14996.0	1031.8	7.4%
29.6%	13580.7	14362.5	781.8	5.8%
30.9%	13531.2	13531.8	0.7	0.0%
32.1%	13528.3	13432.8	-95.5	-0.7%
33.3%	13451.4	13348.0	-103.3	-0.8%
34.6%	13115.7	13298.0	182.3	1.4%
35.8%	13112.1	13231.7	119.6	0.9%
37.0%	12913.2	13047.7	134.5	1.0%
38.3%	12730.8	12942.4	211.7	1.7%
39.5%	12376.6	12893.0	516.4	4.2%
40.7%	12236.6	12734.1	497.6	4.1%
42.0%	12223.3	12493.6	270.3	2.2%
43.2%	12117.2	12300.2	183.0	1.5%
44.4%	11894.2	12172.8	278.7	2.3%
45.7%	11836.3	12099.6	263.4	2.2%
46.9%	11818.3	11995.5	177.2	1.5%
48.1%	11639.9	11814.1	174.2	1.5%
49.4%	11402.2	11780.1	377.9	3.3%
50.6%	11293.7	11724.0	430.4	3.8%
51.9%	11152.7	11618.1	465.4	4.2%
53.1%	11135.2	11282.2	147.0	1.3%
54.3%	10926.7	11112.4	185.7	1.7%
55.6%	10889.6	11014.7	125.1	1.1%
56.8%	10755.9	10937.3	181.4	1.7%
58.0%	10462.4	10861.8	399.3	3.8%
59.3%	10450.8	10741.3	290.5	2.8%
60.5%	9947.9	10736.1	788.1	7.9%
61.7%	9689.8	10667.4	977.5	10.1%
63.0%	9252.0	10544.1	1292.2	14.0%
64.2%	8752.3	10284.4	1532.1	17.5%
65.4%	8423.0	9716.9	1293.9	15.4%
66.7%	8077.6	9293.3	1215.6	15.0%
67.9%	7738.9	9009.7	1270.9	16.4%
69.1%	7541.4	8236.9	695.5	9.2%
70.4%	6474.3	6942.5	468.1	7.2%
71.6%	5690.3	6686.0	995.7	17.5%
72.8%	4704.9	5767.1	1062.2	22.6%
74.1%	4073.0	4760.3	687.3	16.9%
75.3%	3675.9	3933.0	257.2	7.0%
76.5%	3110.8	3907.8	797.0	25.6%
77.8%	3043.9	3577.0	533.0	17.5%
79.0%	3033.2	3169.7	136.5	4.5%
80.2%	2947.6	2963.0	15.4	0.5%
81.5%	2838.5	2958.1	119.6	4.2%
82.7%	2493.5	2888.3	394.8	15.8%
84.0%	2069.4	2338.0	268.5	13.0%
85.2%	1950.9	2243.5	292.6	15.0%
86.4%	1857.9	2229.3	371.4	20.0%
87.7%	1240.8	1363.7	122.9	9.9%
88.9%	1056.0	1078.5	22.5	2.1%
90.1%	821.7	906.8	85.2	10.4%
91.4%	811.4	732.0	-79.4	-9.8%
92.6%	556.0	556.7	0.7	0.1%
93.8%	331.2	340.1	8.9	
95.1%	251.7	254.7	3.0	
96.3%	229.2	238.2	8.9	
97.5%	224.8	224.1	-0.7	
98.8%	206.4	208.3	2.0	
100.0%	188.7	188.8	0.1	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	17685.8	18139.6	453.8	2.6%
1.2%	17504.4	17442.4	-61.9	-0.4%
2.5%	16722.0	16672.7	-49.3	-0.3%
3.7%	15909.1	15568.2	-340.9	-2.1%
4.9%	15549.0	15040.0	-509.0	-3.3%
6.2%	14424.0	14495.1	71.1	0.5%
7.4%	14247.1	14359.5	112.3	0.8%
8.6%	14155.8	14212.9	57.2	0.4%
9.9%	14124.4	14124.6	0.2	0.0%
11.1%	14076.3	13953.5	-122.8	-0.9%
12.3%	13845.6	13951.9	106.3	0.8%
13.6%	13629.4	13772.2	142.9	1.0%
14.8%	13565.6	13656.7	91.1	0.7%
16.0%	13256.2	13474.4	218.2	1.6%
17.3%	12897.0	13280.3	383.3	3.0%
18.5%	12805.5	13213.4	407.9	3.2%
19.8%	12564.3	13147.7	583.4	4.6%
21.0%	12530.2	12809.4	279.1	2.2%
22.2%	12482.2	12518.0	35.8	0.3%
23.5%	12438.5	12498.8	60.3	0.5%
24.7%	12197.8	12456.4	258.6	2.1%
25.9%	12020.3	12414.7	394.5	3.3%
27.2%	11880.7	12075.7	195.0	1.6%
28.4%	11774.5	12055.0	280.5	2.4%
29.6%	11381.3	12029.9	648.6	5.7%
30.9%	11201.0	11384.6	183.6	1.6%
32.1%	10279.2	11308.8	1029.6	10.0%
33.3%	9835.7	11191.1	1355.4	13.8%
34.6%	7984.4	9624.7	1640.4	20.5%
35.8%	7798.5	9465.5	1667.0	21.4%
37.0%	7208.8	8727.7	1518.9	21.1%
38.3%	7145.7	8690.2	1544.5	21.6%
39.5%	7138.2	8623.2	1485.0	20.8%
40.7%	6750.0	8063.2	1313.2	19.5%
42.0%	6505.0	7933.0	1428.0	22.0%
43.2%	6342.0	7440.2	1098.1	17.3%
44.4%	6151.1	7425.9	1274.8	20.7%
45.7%	5632.6	6977.7	1345.1	23.9%
46.9%	5628.3	6899.5	1271.2	22.6%
48.1%	5496.7	6400.3	903.6	16.4%
49.4%	5443.4	6288.1	844.7	15.5%
50.6%	4891.7	6284.1	1392.4	28.5%
51.9%	4704.4	5875.2	1170.7	24.9%
53.1%	4297.0	5723.0	1425.9	33.2%
54.3%	4291.7	5430.9	1139.2	26.5%
55.6%	3887.0	4875.7	988.7	25.4%
56.8%	3886.9	4381.2	494.3	12.7%
58.0%	2926.7	3760.6	833.9	28.5%
59.3%	2862.0	3628.0	766.0	26.8%
60.5%	2259.5	3199.4	939.9	41.6%
61.7%	1685.6	2056.0	370.3	22.0%
63.0%	1425.2	1840.0	414.9	29.1%
64.2%	1292.4	1767.5	475.1	36.8%
65.4%	1031.5	1208.6	177.1	17.2%
66.7%	969.0	1203.8	234.8	24.2%
67.9%	949.1	1155.0	205.9	21.7%
69.1%	902.5	1085.8	183.3	20.3%
70.4%	825.9	1054.5	228.6	27.7%
71.6%	654.0	810.8	156.8	24.0%
72.8%	622.1	670.3	48.2	7.7%
74.1%	565.1	664.0	98.9	17.5%
75.3%	543.8	609.7	66.0	12.1%
76.5%	464.4	497.3	32.9	7.1%
77.8%	425.2	475.5	50.3	11.8%
79.0%	378.2	446.8	68.6	18.1%
80.2%	360.6	376.8	16.2	4.5%
81.5%	346.5	362.5	16.0	4.6%
82.7%	330.6	345.2	14.5	4.4%
84.0%	321.2	329.8	8.6	2.7%
85.2%	313.9	314.6	0.7	0.2%
86.4%	281.0	302.2	21.2	
87.7%	267.3	271.9	4.6	
88.9%	262.4	265.0	2.6	
90.1%	231.9	236.0	4.1	
91.4%	230.6	232.9	2.2	
92.6%	230.3	232.1	1.9	
93.8%	211.9	216.8	4.9	
95.1%	198.7	198.9	0.2	
96.3%	195.5	196.8	1.4	
97.5%	192.5	194.3	1.8	
98.8%	192.4	193.4	1.0	
100.0%	191.1	191.2	0.0	

Table SQ-24-b

Sacramento River at Port Chicago (Roe Island), Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15791.2	15295.1	-496.0	-3.1%
1.2%	14283.2	13930.2	-353.0	-2.5%
2.5%	12131.3	12281.7	150.4	1.2%
3.7%	11188.2	12270.2	1082.0	9.7%
4.9%	10816.2	10787.9	-28.3	-0.3%
6.2%	10792.3	10573.8	-218.5	-2.0%
7.4%	9096.8	9899.3	802.5	8.8%
8.6%	8926.5	9779.9	853.5	9.6%
9.9%	8889.9	9404.8	514.9	5.8%
11.1%	8409.3	8980.6	571.3	6.8%
12.3%	8126.1	8883.9	757.8	9.3%
13.6%	8069.5	8835.9	766.4	9.5%
14.8%	7398.0	8555.8	1157.8	15.7%
16.0%	6140.1	7247.3	1107.2	18.0%
17.3%	4943.6	6313.5	1369.9	27.7%
18.5%	4736.4	6112.8	1376.4	29.1%
19.8%	4725.8	5558.2	832.3	17.6%
21.0%	4687.5	5502.6	815.1	17.4%
22.2%	4368.7	5454.2	1085.5	24.8%
23.5%	4141.6	5018.5	876.8	21.2%
24.7%	4037.8	4768.9	731.1	18.1%
25.9%	4033.6	4431.6	398.0	9.9%
27.2%	3920.1	4430.8	510.8	13.0%
28.4%	3555.2	4329.1	773.9	21.8%
29.6%	3539.8	4129.1	589.3	16.6%
30.9%	3287.8	4063.3	775.5	23.6%
32.1%	3260.0	3978.1	718.1	22.0%
33.3%	2835.0	3762.4	927.4	32.7%
34.6%	2829.6	3226.2	396.6	14.0%
35.8%	2741.4	3201.3	459.9	16.8%
37.0%	2698.0	3198.6	500.6	18.6%
38.3%	2448.2	2884.8	436.6	17.8%
39.5%	2276.2	2881.5	605.3	26.6%
40.7%	2108.5	2297.5	189.0	9.0%
42.0%	2044.2	2112.2	68.0	3.3%
43.2%	1866.5	1886.0	19.5	1.0%
44.4%	1662.0	1873.1	211.1	12.7%
45.7%	1604.9	1793.2	188.2	11.7%
46.9%	1471.5	1740.9	269.4	18.3%
48.1%	1407.8	1661.6	253.9	18.0%
49.4%	1343.7	1549.9	206.2	15.3%
50.6%	1251.8	1534.8	282.9	22.6%
51.9%	1229.9	1527.0	297.1	24.2%
53.1%	1207.7	1466.5	258.8	21.4%
54.3%	1192.6	1441.0	248.4	20.8%
55.6%	1163.2	1406.4	243.2	20.9%
56.8%	1135.4	1367.6	232.2	20.5%
58.0%	1007.0	1199.7	192.8	19.1%
59.3%	647.8	687.3	39.6	6.1%
60.5%	592.5	682.7	90.2	15.2%
61.7%	557.9	681.4	123.5	22.1%
63.0%	552.4	622.1	69.7	12.6%
64.2%	552.0	593.7	41.7	7.6%
65.4%	548.8	553.0	4.2	0.8%
66.7%	545.4	551.9	6.4	1.2%
67.9%	379.0	390.1	11.1	2.9%
69.1%	341.7	345.9	4.2	1.2%
70.4%	330.9	345.7	14.9	4.5%
71.6%	293.9	337.1	43.3	14.7%
72.8%	284.4	302.5	18.1	6.4%
74.1%	274.3	293.3	19.0	6.9%
75.3%	259.5	268.9	9.4	3.6%
76.5%	247.5	249.5	2.0	0.8%
77.8%	243.6	247.5	3.9	1.6%
79.0%	234.3	229.8	-4.5	-1.9%
80.2%	221.5	227.6	6.1	2.7%
81.5%	220.3	224.9	4.6	2.1%
82.7%	219.7	224.6	4.9	2.2%
84.0%	215.5	222.3	6.9	3.2%
85.2%	214.1	218.3	4.2	2.0%
86.4%	208.7	209.7	0.9	0.5%
87.7%	208.6	209.1	0.5	0.2%
88.9%	207.9	208.9	1.0	0.5%
90.1%	207.8	208.6	0.7	0.4%
91.4%	207.6	208.0	0.4	0.2%
92.6%	205.6	205.6	0.0	0.0%
93.8%	203.8	203.9	0.0	0.0%
95.1%	202.6	203.3	0.7	0.3%
96.3%	198.5	202.3	3.7	1.9%
97.5%	198.0	202.0	4.0	2.0%
98.8%	197.2	199.1	1.9	1.0%
100.0%	185.3	185.4	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12354.4	12106.7	-247.7	-2.0%
1.2%	9755.9	10163.6	407.7	4.2%
2.5%	8486.7	8876.0	389.3	4.6%
3.7%	8096.2	8861.6	765.4	9.5%
4.9%	7444.1	8510.8	1066.7	14.3%
6.2%	7416.3	8117.2	700.8	9.4%
7.4%	7378.6	8075.1	696.5	9.4%
8.6%	7210.2	7880.8	670.6	9.3%
9.9%	7206.0	7651.6	445.6	6.2%
11.1%	7178.5	7443.2	264.7	3.7%
12.3%	7072.9	7312.6	239.7	3.4%
13.6%	6978.8	7223.4	244.5	3.5%
14.8%	6945.8	6837.0	-108.7	-1.6%
16.0%	6132.5	6602.6	470.1	7.7%
17.3%	5332.0	5767.7	435.7	8.2%
18.5%	4729.7	5339.2	609.4	12.9%
19.8%	4721.0	5255.2	534.2	11.3%
21.0%	4622.0	4890.0	268.0	5.8%
22.2%	4240.0	4788.8	548.8	12.9%
23.5%	4229.1	4580.4	351.3	8.3%
24.7%	4197.2	4532.4	335.2	8.0%
25.9%	4001.0	4220.8	219.7	5.5%
27.2%	3903.2	4120.9	217.7	5.6%
28.4%	3718.1	4007.2	289.2	7.8%
29.6%	3514.1	3907.1	393.0	11.2%
30.9%	3251.6	3706.4	454.8	14.0%
32.1%	3218.0	3701.0	483.0	15.0%
33.3%	3207.3	3700.5	493.2	15.4%
34.6%	3150.9	3653.9	503.1	16.0%
35.8%	3043.3	3565.5	522.2	17.2%
37.0%	2850.3	3457.7	607.5	21.3%
38.3%	2827.9	3451.9	624.0	22.1%
39.5%	2766.4	3349.3	582.9	21.1%
40.7%	2634.9	3101.7	466.8	17.7%
42.0%	2445.0	3088.9	643.8	26.3%
43.2%	2368.7	2980.5	611.8	25.8%
44.4%	2365.8	2908.7	542.9	22.9%
45.7%	2214.3	2854.1	639.8	28.9%
46.9%	2172.7	2821.6	648.8	29.9%
48.1%	1937.4	2440.6	503.2	26.0%
49.4%	1483.1	1996.6	513.5	34.6%
50.6%	1474.1	1930.6	456.5	31.0%
51.9%	1341.6	1619.8	278.2	20.7%
53.1%	1257.0	1474.9	217.9	17.3%
54.3%	1214.1	1347.2	133.1	11.0%
55.6%	1029.7	1287.1	257.4	25.0%
56.8%	1013.7	1268.0	254.3	25.1%
58.0%	919.8	1140.5	220.7	24.0%
59.3%	915.0	1117.0	202.0	22.1%
60.5%	910.0	1087.6	177.6	19.5%
61.7%	809.9	1012.9	203.0	25.1%
63.0%	760.5	813.4	52.9	7.0%
64.2%	731.1	739.7	8.7	1.2%
65.4%	575.8	583.4	7.6	1.3%
66.7%	548.1	573.5	25.4	4.6%
67.9%	532.6	567.0	34.4	6.5%
69.1%	494.6	560.5	65.9	13.3%
70.4%	452.1	508.9	56.8	12.6%
71.6%	397.3	431.2	33.9	8.5%
72.8%	361.4	397.1	35.7	9.9%
74.1%	357.2	383.1	25.8	7.2%
75.3%	338.2	358.1	20.0	5.9%
76.5%	281.6	281.6	0.0	0.0%
77.8%	266.0	272.9	6.9	2.6%
79.0%	256.7	259.2	2.5	1.0%
80.2%	252.4	256.8	4.4	1.7%
81.5%	251.8	253.5	1.8	0.7%
82.7%	240.5	244.1	3.6	1.5%
84.0%	238.3	238.5	0.2	0.1%
85.2%	234.7	235.2	0.5	0.2%
86.4%	232.6	233.9	1.3	0.5%
87.7%	231.7	232.1	0.4	0.2%
88.9%	230.9	231.6	0.7	0.3%
90.1%	225.9	230.6	4.7	2.1%
91.4%	218.1	218.3	0.2	0.1%
92.6%	203.6	206.4	2.9	1.4%
93.8%	201.3	201.2	0.0	0.0%
95.1%	199.4	199.5	0.0	0.0%
96.3%	196.2	197.2	1.0	0.5%
97.5%	194.8	197.1	2.3	1.2%
98.8%	194.4	194.4	0.0	0.0%
100.0%	192.3	193.0	0.7	0.3%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12768.7	12692.3	-76.4	-0.6%
1.2%	11457.1	11491.6	34.5	0.3%
2.5%	10941.9	10779.8	-162.1	-1.5%
3.7%	10535.2	10479.7	-55.5	-0.5%
4.9%	10266.3	10225.0	-41.3	-0.4%
6.2%	9255.1	9007.3	-247.8	-2.7%
7.4%	9061.4	8940.4	-120.9	-1.3%
8.6%	8906.9	8850.7	-56.2	-0.6%
9.9%	8290.7	8438.0	147.3	1.8%
11.1%	8090.5	8363.4	272.9	3.4%
12.3%	8035.2	8279.8	244.5	3.0%
13.6%	7928.4	8213.9	285.5	3.6%
14.8%	7917.7	7988.4	70.7	0.9%
16.0%	7188.3	7561.4	373.0	5.2%
17.3%	7094.3	7053.9	-40.4	-0.6%
18.5%	6859.2	6855.9	-3.3	0.0%
19.8%	6806.9	6838.5	31.6	0.5%
21.0%	6382.8	6577.4	194.6	3.0%
22.2%	6252.5	6396.7	144.2	2.3%
23.5%	6048.1	6088.5	40.4	0.7%
24.7%	5764.0	5849.5	85.4	1.5%
25.9%	5688.5	5811.9	123.4	2.2%
27.2%	5357.7	5524.6	166.9	3.1%
28.4%	5354.8	5487.5	132.7	2.5%
29.6%	5311.5	5356.3	44.7	0.8%
30.9%	5283.4	5261.1	-22.4	-0.4%
32.1%	5026.3	4969.4	-56.8	-1.1%
33.3%	4957.2	4922.0	-35.2	-0.7%
34.6%	4899.3	4897.0	-2.3	0.0%
35.8%	4768.0	4861.8	93.7	2.0%
37.0%	4536.1	4776.3	240.2	5.3%
38.3%	4461.3	4740.0	278.7	6.2%
39.5%	4370.5	4662.7	292.2	6.7%
40.7%	4302.2	4526.7	224.5	5.2%
42.0%	4265.7	4400.0	134.3	3.1%
43.2%	4220.5	4247.3	26.8	0.6%
44.4%	4052.0	4226.7	174.7	4.3%
45.7%	4020.4	4141.1	120.7	3.0%
46.9%	3946.6	4095.6	149.1	3.8%
48.1%	3776.2	4024.2	248.1	6.6%
49.4%	3525.3	3899.6	374.3	10.6%
50.6%	3237.2	3329.8	92.6	2.9%
51.9%	3114.0	3128.6	14.5	0.5%
53.1%	3003.1	3020.1	17.0	0.6%
54.3%	2939.8	3018.8	79.0	2.7%
55.6%	2845.7	2802.4	-43.3	-1.5%
56.8%	2551.0	2765.7	214.6	8.4%
58.0%	2547.0	2590.4	43.4	1.7%
59.3%	2149.6	2554.1	404.5	18.8%
60.5%	2133.5	2316.5	183.0	8.6%
61.7%	2058.3	2157.3	99.0	4.8%
63.0%	2012.6	2156.5	143.8	7.1%
64.2%	1985.8	2034.3	48.5	2.4%
65.4%	1771.0	2017.6	246.6	13.9%
66.7%	1705.9	1781.3	75.4	4.4%
67.9%	1419.7	1709.0	289.2	20.4%
69.1%	1294.3	1471.2	176.8	13.7%
70.4%	1291.1	1347.6	56.6	4.4%
71.6%	1286.8	1288.4	1.6	0.1%
72.8%	1216.8	1243.1	26.3	2.2%
74.1%	1203.0	1241.5	38.5	3.2%
75.3%	1014.6	1022.0	7.3	0.7%
76.5%	964.5	971.9	7.4	0.8%
77.8%	672.5	672.7	0.2	0.0%
79.0%	644.0	642.4	-1.6	-0.2%
80.2%	573.2	638.4	65.2	11.4%
81.5%	567.4	585.5	18.1	3.2%
82.7%	518.4	577.6	59.1	11.4%
84.0%	449.3	451.4	2.1	0.5%
85.2%	391.3	426.6	35.3	9.0%
86.4%	349.1	365.5	16.4	4.7%
87.7%	341.1	349.9	8.8	2.6%
88.9%	298.4	315.6	17.2	5.8%
90.1%	283.3	306.6	23.3	8.2%
91.4%	280.3	283.5	3.2	1.1%
92.6%	264.7	282.0	17.3	6.5%
93.8%	263.9	263.8	-0.1	0.0%
95.1%	255.5	261.4	6.0	2.3%
96.3%	249.0	249.0	0.0	0.0%
97.5%	234.2	234.1	-0.1	-0.1%
98.8%	192.6	193.1	0.5	
100.0%	190.1	190.8	0.7	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	14922.7	14887.6	-35.0	-0.2%
1.2%	14711.3	14687.8	-23.5	-0.2%
2.5%	14339.9	14335.0	-5.0	0.0%
3.7%	12492.6	12339.6	-153.0	-1.2%
4.9%	12333.7	11951.6	-382.1	-3.1%
6.2%	11436.7	11412.4	-24.3	-0.2%
7.4%	11390.4	11376.4	-14.0	-0.1%
8.6%	11226.5	11118.0	-108.5	-1.0%
9.9%	11030.5	11018.7	-11.8	-0.1%
11.1%	10989.7	10909.2	-80.5	-0.7%
12.3%	10843.5	10797.0	-46.5	-0.4%
13.6%	10772.4	10706.4	-66.0	-0.6%
14.8%	10442.6	10313.7	-128.9	-1.2%
16.0%	10290.0	10283.2	-6.9	-0.1%
17.3%	10147.3	10067.4	-79.9	-0.8%
18.5%	10137.4	10029.1	-108.3	-1.1%
19.8%	9835.7	9801.8	-33.9	-0.3%
21.0%	9812.4	9581.5	-230.9	-2.4%
22.2%	9670.3	9579.7	-90.6	-0.9%
23.5%	9626.1	9502.3	-123.8	-1.3%
24.7%	9562.5	9251.2	-311.3	-3.3%
25.9%	9442.3	9234.2	-208.0	-2.2%
27.2%	9243.3	8996.3	-247.0	-2.7%
28.4%	9141.9	8923.6	-218.4	-2.4%
29.6%	9005.5	8823.6	-181.9	-2.0%
30.9%	8757.7	8623.6	-134.1	-1.5%
32.1%	8544.2	8484.3	-59.9	-0.7%
33.3%	8484.8	8347.0	-137.8	-1.6%
34.6%	8275.6	8293.2	17.6	0.2%
35.8%	8152.9	8208.7	55.9	0.7%
37.0%	7885.8	7875.1	-10.8	-0.1%
38.3%	7841.3	7855.0	13.7	0.2%
39.5%	7575.7	7572.6	-3.1	0.0%
40.7%	7498.6	7552.8	54.2	0.7%
42.0%	7216.8	7507.4	290.7	4.0%
43.2%	6949.6	7420.7	471.0	6.8%
44.4%	6666.9	7268.8	601.9	9.0%
45.7%	6658.0	6980.9	322.9	4.8%
46.9%	6607.5	6757.3	149.8	2.3%
48.1%	6369.8	6425.5	55.7	0.9%
49.4%	6294.4	6178.3	-116.1	-1.8%
50.6%	6110.1	6151.7	41.7	0.7%
51.9%	6039.7	6113.8	74.0	1.2%
53.1%	5912.6	5934.0	21.4	0.4%
54.3%	5888.5	5888.3	-0.2	0.0%
55.6%	5866.2	5815.0	-51.2	-0.9%
56.8%	5859.6	5750.5	-109.1	-1.9%
58.0%	5719.7	5497.6	-222.1	-3.9%
59.3%	5571.8	5317.0	-254.8	-4.6%
60.5%	5280.3	5293.7	13.4	0.3%
61.7%	5241.5	5258.6	17.1	0.3%
63.0%	5047.1	5125.8	78.7	1.6%
64.2%	4872.8	5014.3	141.5	2.9%
65.4%	4840.6	4882.9	42.3	0.9%
66.7%	4709.0	4841.0	132.0	2.8%
67.9%	4566.8	4633.9	67.1	1.5%
69.1%	4390.3	4462.9	72.6	1.7%
70.4%	4232.8	4222.0	-10.9	-0.3%
71.6%	4020.1	4118.0	97.9	2.4%
72.8%	3842.4	3849.8	7.4	0.2%
74.1%	3555.4	3588.5	33.0	0.9%
75.3%	3533.2	3528.7	-4.5	-0.1%
76.5%	3267.1	3289.2	22.1	0.7%
77.8%	2519.1	2768.7	249.6	9.9%
79.0%	2456.6	2674.7	218.2	8.9%
80.2%	2153.6	2366.5	212.9	9.9%
81.5%	1981.2	2193.5	212.4	10.7%
82.7%	1926.5	2168.8	242.4	12.6%
84.0%	1784.6	2002.6	218.0	12.2%
85.2%	1627.5	1641.6	14.2	0.9%
86.4%	1458.6	1470.0	11.4	0.8%
87.7%	1325.6	1378.8	53.2	4.0%
88.9%	1212.6	1229.0	16.4	1.3%
90.1%	1160.1	1175.3	15.2	1.3%
91.4%	1129.6	1149.5	19.9	1.8%
92.6%	1067.9	1060.0	-7.9	-0.7%
93.8%	931.1	934.2	3.2	0.3%
95.1%	711.4	716.9	5.5	0.8%
96.3%	573.7	575.6	2.0	0.3%
97.5%	567.7	575.4	7.7	1.4%
98.8%	318.7	320.0	1.3	
100.0%	283.0	292.7	9.8	

Table SQ-24-b
Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	17200.3	17185.5	-14.8	-0.1%
1.2%	16975.1	16756.1	-219.1	-1.3%
2.5%	16929.3	15870.9	-1058.4	-6.3%
3.7%	15909.9	15678.3	-231.5	-1.5%
4.9%	13124.4	13191.7	67.3	0.5%
6.2%	13100.3	13102.8	2.5	0.0%
7.4%	13078.0	13076.9	-1.1	0.0%
8.6%	12946.8	12583.6	-363.2	-2.8%
9.9%	12889.8	12484.1	-405.8	-3.1%
11.1%	12761.6	12423.1	-338.5	-2.7%
12.3%	12654.3	12267.2	-387.1	-3.1%
13.6%	12482.2	12149.6	-332.6	-2.7%
14.8%	12470.4	12086.1	-384.3	-3.1%
16.0%	12441.7	12009.7	-432.0	-3.5%
17.3%	12419.0	11970.2	-448.8	-3.6%
18.5%	12298.3	11951.1	-347.1	-2.8%
19.8%	12225.7	11916.8	-308.9	-2.5%
21.0%	12111.2	11751.4	-359.8	-3.0%
22.2%	12051.9	11744.8	-307.1	-2.5%
23.5%	11959.0	11741.7	-217.3	-1.8%
24.7%	11908.4	11678.0	-230.4	-1.9%
25.9%	11866.8	11574.9	-291.9	-2.5%
27.2%	11862.2	11559.5	-302.6	-2.6%
28.4%	11795.1	11495.3	-299.8	-2.5%
29.6%	11643.5	11467.1	-176.4	-1.5%
30.9%	11525.2	11458.9	-66.3	-0.6%
32.1%	11499.5	11400.3	-99.2	-0.9%
33.3%	11445.3	11384.5	-60.8	-0.5%
34.6%	11436.3	11380.8	-55.5	-0.5%
35.8%	11397.0	11373.5	-23.5	-0.2%
37.0%	11385.9	11361.2	-24.8	-0.2%
38.3%	11373.6	11155.9	-217.7	-1.9%
39.5%	11216.0	11135.2	-80.8	-0.7%
40.7%	11142.9	11072.6	-70.4	-0.6%
42.0%	11071.9	11047.4	-24.5	-0.2%
43.2%	10972.3	10903.8	-68.5	-0.6%
44.4%	10903.8	10833.0	-70.8	-0.6%
45.7%	10806.4	10557.5	-248.9	-2.3%
46.9%	10619.5	10551.5	-68.0	-0.6%
48.1%	10565.5	10534.9	-30.6	-0.3%
49.4%	10547.4	10504.3	-43.2	-0.4%
50.6%	10491.3	10451.8	-39.5	-0.4%
51.9%	10442.6	10449.9	7.3	0.1%
53.1%	10438.4	10373.3	-65.2	-0.6%
54.3%	10342.6	10326.6	-16.0	-0.2%
55.6%	10298.4	10325.8	27.4	0.3%
56.8%	10271.7	10282.8	11.0	0.1%
58.0%	10251.4	10262.6	11.2	0.1%
59.3%	10221.7	10255.0	33.3	0.3%
60.5%	10200.2	10058.6	-141.6	-1.4%
61.7%	10160.5	9969.9	-190.6	-1.9%
63.0%	10138.5	9963.9	-174.6	-1.7%
64.2%	10057.7	9960.0	-97.7	-1.0%
65.4%	10046.0	9911.3	-134.7	-1.3%
66.7%	9933.6	9832.9	-100.7	-1.0%
67.9%	9757.8	9806.3	48.5	0.5%
69.1%	9634.1	9625.6	-8.5	-0.1%
70.4%	9589.0	9568.9	-20.2	-0.2%
71.6%	9548.1	9550.5	2.3	0.0%
72.8%	9300.3	9384.6	84.3	0.9%
74.1%	8678.8	8695.1	16.2	0.2%
75.3%	8465.0	8432.2	-32.8	-0.4%
76.5%	8225.1	8185.6	-39.5	-0.5%
77.8%	7797.8	7863.0	65.1	0.8%
79.0%	7758.5	7658.6	-99.9	-1.3%
80.2%	7728.2	7472.0	-256.2	-3.3%
81.5%	7688.2	7299.6	-388.6	-5.1%
82.7%	7373.3	7236.2	-137.1	-1.9%
84.0%	7326.5	7102.5	-224.0	-3.1%
85.2%	7263.6	7066.5	-197.1	-2.7%
86.4%	7049.0	7020.9	-28.1	-0.4%
87.7%	6646.3	6531.0	-115.3	-1.7%
88.9%	6606.0	6440.4	-165.6	-2.5%
90.1%	6562.1	6366.1	-196.0	-3.0%
91.4%	5303.7	6269.8	966.0	18.2%
92.6%	5045.9	4814.7	-231.2	-4.6%
93.8%	4622.3	4628.8	6.5	0.1%
95.1%	4177.2	4062.6	-114.6	-2.7%
96.3%	3549.7	3451.0	-98.6	-2.8%
97.5%	3472.6	3324.7	-147.8	-4.3%
98.8%	1624.8	1265.6	-359.2	-22.1%
100.0%	856.3	822.9	-33.3	-3.9%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	18113.1	18128.1	15.0	0.1%
1.2%	18001.8	17757.5	-244.3	-1.4%
2.5%	17997.6	17184.4	-813.3	-4.5%
3.7%	17249.4	16722.2	-527.2	-3.1%
4.9%	15361.3	15350.9	-10.5	-0.1%
6.2%	15321.5	15305.8	-15.7	-0.1%
7.4%	15303.4	15142.9	-160.5	-1.0%
8.6%	15278.9	14916.2	-362.7	-2.4%
9.9%	15248.9	14911.1	-337.8	-2.2%
11.1%	15100.8	14392.2	-708.6	-4.7%
12.3%	15090.7	14327.8	-762.9	-5.1%
13.6%	14921.4	14316.6	-604.9	-4.1%
14.8%	14501.5	14302.7	-198.8	-1.4%
16.0%	14404.2	14202.7	-201.5	-1.4%
17.3%	14365.7	14153.4	-212.3	-1.5%
18.5%	14334.5	14113.2	-221.3	-1.5%
19.8%	14305.8	14100.2	-205.6	-1.4%
21.0%	14183.5	14048.3	-135.2	-1.0%
22.2%	14139.8	14015.3	-124.6	-0.9%
23.5%	14129.9	13914.7	-215.3	-1.5%
24.7%	14055.1	13901.9	-153.2	-1.1%
25.9%	14047.5	13857.9	-189.7	-1.4%
27.2%	13880.3	13811.1	-69.1	-0.5%
28.4%	13869.8	13676.2	-193.6	-1.4%
29.6%	13828.5	13638.3	-190.2	-1.4%
30.9%	13799.6	13455.2	-344.4	-2.5%
32.1%	13499.1	13357.9	-141.2	-1.0%
33.3%	13356.2	12958.7	-397.5	-3.0%
34.6%	12243.3	12162.1	-81.2	-0.7%
35.8%	12176.2	12093.4	-82.8	-0.7%
37.0%	12109.2	12091.3	-17.8	-0.1%
38.3%	12096.1	12080.9	-15.1	-0.1%
39.5%	11972.1	11895.4	-76.7	-0.6%
40.7%	11852.3	11715.0	-137.3	-1.2%
42.0%	11737.9	11688.6	-49.3	-0.4%
43.2%	11729.7	11680.8	-48.9	-0.4%
44.4%	11713.9	11667.8	-46.1	-0.4%
45.7%	11694.5	11641.1	-53.4	-0.5%
46.9%	11623.4	11609.6	-13.9	-0.1%
48.1%	11490.3	11471.2	-19.2	-0.2%
49.4%	11418.6	11471.0	52.4	0.5%
50.6%	11385.8	11382.3	-3.5	0.0%
51.9%	11373.5	11274.3	-99.3	-0.9%
53.1%	11194.0	11095.2	-98.8	-0.9%
54.3%	10919.4	10926.1	6.7	0.1%
55.6%	10910.4	10902.1	-8.3	-0.1%
56.8%	10758.8	10878.5	119.7	1.1%
58.0%	10460.0	10414.8	-45.2	-0.4%
59.3%	10429.3	10305.6	-123.7	-1.2%
60.5%	10428.8	10180.8	-248.0	-2.4%
61.7%	10283.4	10179.9	-103.6	-1.0%
63.0%	10168.9	10111.6	-57.3	-0.6%
64.2%	10081.8	10045.7	-36.1	-0.4%
65.4%	10062.3	10038.5	-23.8	-0.2%
66.7%	10059.2	10001.2	-58.0	-0.6%
67.9%	9979.8	9984.5	4.7	0.0%
69.1%	9968.8	9971.6	2.9	0.0%
70.4%	9866.4	9923.6	57.1	0.6%
71.6%	9831.4	9884.2	52.8	0.5%
72.8%	9829.9	9883.9	54.0	0.5%
74.1%	9730.7	9740.5	9.8	0.1%
75.3%	9729.2	9735.3	6.1	0.1%
76.5%	9693.5	9730.8	37.3	0.4%
77.8%	9675.8	9698.5	22.7	0.2%
79.0%	9631.1	9645.9	14.8	0.2%
80.2%	9540.4	9537.1	-3.3	0.0%
81.5%	9508.8	9362.1	-146.7	-1.5%
82.7%	9390.4	9304.5	-85.9	-0.9%
84.0%	9314.3	9301.0	-13.3	-0.1%
85.2%	9298.2	9297.3	-0.9	0.0%
86.4%	9188.1	9179.8	-8.3	-0.1%
87.7%	9146.3	9096.2	-50.1	-0.5%
88.9%	9142.3	9041.4	-100.9	-1.1%
90.1%	9025.5	8682.0	-343.5	-3.8%
91.4%	8817.8	8672.1	-145.7	-1.7%
92.6%	8653.3	8656.1	2.8	0.0%
93.8%	8628.5	8407.5	-221.0	-2.6%
95.1%	8462.8	8384.8	-78.0	-0.9%
96.3%	8272.3	8336.9	64.6	0.8%
97.5%	7483.4	7663.1	179.7	2.4%
98.8%	7368.7	6873.6	-495.2	-6.7%
100.0%	6,373.0	6,339.2	-33.8	-0.5%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	18449.5	18489.5	40.0	0.2%
1.2%	18292.9	18229.3	-63.6	-0.3%
2.5%	18219.6	17705.7	-513.9	-2.8%
3.7%	17596.9	17546.9	-50.0	-0.3%
4.9%	17557.8	17503.2	-54.7	-0.3%
6.2%	17331.6	17358.6	27.0	0.2%
7.4%	17326.1	17323.0	-3.1	0.0%
8.6%	17317.8	17135.6	-182.2	-1.1%
9.9%	17283.8	17134.0	-149.8	-0.9%
11.1%	17266.4	17009.5	-257.0	-1.5%
12.3%	17227.7	16642.8	-584.9	-3.4%
13.6%	16684.7	16455.4	-229.3	-1.4%
14.8%	16590.0	16411.5	-178.5	-1.1%
16.0%	16436.5	16343.5	-93.0	-0.6%
17.3%	16433.4	16296.9	-136.5	-0.8%
18.5%	16424.7	16223.0	-201.7	-1.2%
19.8%	16412.4	16159.4	-253.0	-1.5%
21.0%	16383.0	15956.3	-426.7	-2.6%
22.2%	16370.2	15942.9	-427.2	-2.6%
23.5%	16297.3	15923.2	-374.1	-2.3%
24.7%	16066.9	15912.4	-154.5	-1.0%
25.9%	16015.4	15884.3	-131.1	-0.8%
27.2%	15979.4	15858.0	-121.4	-0.8%
28.4%	15915.8	15817.8	-98.0	-0.6%
29.6%	15746.8	15509.1	-237.7	-1.5%
30.9%	15670.7	15421.5	-249.2	-1.6%
32.1%	15419.3	15338.5	-80.8	-0.5%
33.3%	15343.4	15338.1	-5.4	0.0%
34.6%	14836.0	14433.0	-403.0	-2.7%
35.8%	14438.0	14376.6	-61.4	-0.4%
37.0%	14282.6	14254.6	-28.1	-0.2%
38.3%	14238.3	14199.8	-38.5	-0.3%
39.5%	14223.5	14198.0	-25.5	-0.2%
40.7%	14202.1	14137.9	-64.2	-0.5%
42.0%	14182.1	14103.9	-78.1	-0.6%
43.2%	14182.0	14059.6	-122.4	-0.9%
44.4%	14176.7	14048.3	-128.4	-0.9%
45.7%	14134.2	14046.3	-87.9	-0.6%
46.9%	14090.3	14005.9	-84.4	-0.6%
48.1%	14057.8	13985.8	-72.1	-0.5%
49.4%	14033.7	13982.6	-51.1	-0.4%
50.6%	14007.5	13981.0	-26.5	-0.2%
51.9%	13915.0	13920.5	5.5	0.0%
53.1%	13901.3	13904.7	3.5	0.0%
54.3%	13899.6	13871.1	-28.5	-0.2%
55.6%	13815.9	13843.0	27.1	0.2%
56.8%	13798.9	13833.9	35.1	0.3%
58.0%	13793.5	13819.2	25.7	0.2%
59.3%	13782.3	13671.5	-110.8	-0.8%
60.5%	13754.6	13604.5	-150.1	-1.1%
61.7%	13732.5	13597.6	-134.9	-1.0%
63.0%	13650.1	13584.5	-65.7	-0.5%
64.2%	13494.3	13569.1	74.9	0.6%
65.4%	13455.9	13458.0	2.1	0.0%
66.7%	13451.7	13434.6	-17.1	-0.1%
67.9%	13405.1	13304.3	-100.8	-0.8%
69.1%	13162.3	13295.6	133.3	1.0%
70.4%	13044.5	13050.3	5.9	0.0%
71.6%	12992.7	13045.5	52.8	0.4%
72.8%	12966.3	12991.1	24.8	0.2%
74.1%	12966.0	12977.9	11.9	0.1%
75.3%	12806.7	12874.3	67.6	0.5%
76.5%	12802.7	12853.3	50.6	0.4%
77.8%	12801.3	12757.3	-44.0	-0.3%
79.0%	12716.1	12731.2	15.1	0.1%
80.2%	12686.4	12693.5	7.1	0.1%
81.5%	12626.7	12633.8	7.1	0.1%
82.7%	12618.5	12556.5	-62.0	-0.5%
84.0%	12565.3	12524.9	-40.5	-0.3%
85.2%	12439.4	12522.9	83.5	0.7%
86.4%	12430.9	12311.5	-119.5	-1.0%
87.7%	12375.8	12304.7	-71.1	-0.6%
88.9%	12369.4	12197.9	-171.5	-1.4%
90.1%	12328.3	12181.1	-147.2	-1.2%
91.4%	12307.5	12160.4	-147.1	-1.2%
92.6%	12284.3	12079.3	-205.0	-1.7%
93.8%	12259.6	12070.5	-189.1	-1.5%
95.1%	12198.5	11902.2	-296.3	-2.4%
96.3%	12000.3	11810.9	-189.4	-1.6%
97.5%	11832.4	11724.6	-107.9	-0.9%
98.8%	11770.2	11711.4	-58.8	-0.5%
100.0%	11,478.3	11,154.6	-323.6	-2.8%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	19110.9	18977.4	-133.5	-0.7%
1.2%	18852.7	18852.9	0.2	0.0%
2.5%	18734.5	18783.8	49.3	0.3%
3.7%	18700.6	18681.9	-18.7	-0.1%
4.9%	18638.5	18666.4	27.8	0.1%
6.2%	18635.8	18659.5	23.7	0.1%
7.4%	18556.0	18539.2	-16.8	-0.1%
8.6%	18531.3	18455.7	-75.6	-0.4%
9.9%	18524.1	18437.6	-86.4	-0.5%
11.1%	18491.9	18259.6	-232.3	-1.3%
12.3%	18446.4	18036.7	-409.7	-2.2%
13.6%	18166.8	17987.0	-179.8	-1.0%
14.8%	18139.9	17943.9	-196.0	-1.1%
16.0%	18097.7	17863.9	-233.8	-1.3%
17.3%	17978.9	17818.6	-160.2	-0.9%
18.5%	17971.3	17650.6	-320.6	-1.8%
19.8%	17965.6	17636.1	-329.6	-1.8%
21.0%	17948.1	17501.2	-446.8	-2.5%
22.2%	17946.5	17434.8	-511.7	-2.9%
23.5%	17925.4	17302.9	-622.5	-3.5%
24.7%	17839.9	17262.6	-577.3	-3.2%
25.9%	17829.1	17211.8	-617.3	-3.5%
27.2%	17418.4	17126.5	-291.9	-1.7%
28.4%	17413.7	17072.7	-341.0	-2.0%
29.6%	17312.4	16990.9	-321.5	-1.9%
30.9%	17293.2	16890.5	-402.7	-2.3%
32.1%	17270.5	16859.7	-410.8	-2.4%
33.3%	17244.8	16833.3	-411.5	-2.4%
34.6%	17237.7	16792.1	-445.6	-2.6%
35.8%	17101.0	16664.4	-436.6	-2.6%
37.0%	17004.7	16622.6	-382.1	-2.2%
38.3%	16994.9	16616.4	-378.5	-2.2%
39.5%	16947.8	16600.5	-347.3	-2.0%
40.7%	16925.4	16499.9	-425.5	-2.5%
42.0%	16856.8	16468.2	-388.6	-2.3%
43.2%	16843.0	16358.6	-484.4	-2.9%
44.4%	16838.2	16343.1	-495.0	-2.9%
45.7%	16803.6	16263.7	-539.9	-3.2%
46.9%	16636.7	16204.7	-432.0	-2.6%
48.1%	16520.0	16173.2	-346.9	-2.1%
49.4%	16478.7	16147.6	-331.1	-2.0%
50.6%	16374.0	16060.8	-313.2	-1.9%
51.9%	16340.3	15810.6	-529.7	-3.2%
53.1%	16226.4	15804.0	-422.4	-2.6%
54.3%	16197.1	15492.0	-705.1	-4.4%
55.6%	12024.7	11801.9	-222.8	-1.9%
56.8%	11967.3	11797.3	-170.0	-1.4%
58.0%	11854.8	11679.9	-174.9	-1.5%
59.3%	11808.7	11675.3	-133.5	-1.1%
60.5%	11801.3	11614.1	-187.2	-1.6%
61.7%	11790.5	11584.2	-206.3	-1.8%
63.0%	11786.1	11524.3	-261.7	-2.2%
64.2%	11733.4	11509.5	-223.9	-1.9%
65.4%	11694.8	11505.4	-189.4	-1.6%
66.7%	11680.8	11503.8	-177.0	-1.5%
67.9%	11654.3	11456.9	-197.4	-1.7%
69.1%	11600.4	11455.0	-145.4	-1.3%
70.4%	8182.8	8075.7	-107.1	-1.3%
71.6%	7973.3	7914.7	-58.6	-0.7%
72.8%	7969.5	7833.0	-136.5	-1.7%
74.1%	7946.4	7804.6	-141.8	-1.8%
75.3%	7934.5	7801.1	-133.4	-1.7%
76.5%	7921.8	7789.7	-132.0	-1.7%
77.8%	7864.5	7785.1	-79.3	-1.0%
79.0%	7841.0	7783.8	-57.3	-0.7%
80.2%	7813.7	7779.7	-34.0	-0.4%
81.5%	7803.7	7737.6	-66.0	-0.8%
82.7%	7784.1	7715.1	-68.9	-0.9%
84.0%	7772.2	7710.9	-61.3	-0.8%
85.2%	7766.4	7710.7	-55.7	-0.7%
86.4%	7754.0	7688.5	-65.5	-0.8%
87.7%	7734.0	7674.0	-60.0	-0.8%
88.9%	7721.2	7648.0	-73.2	-0.9%
90.1%	7703.8	7562.7	-141.1	-1.8%
91.4%	7644.8	7537.8	-107.0	-1.4%
92.6%	7599.5	7527.9	-71.6	-0.9%
93.8%	7590.5	7506.7	-83.8	-1.1%
95.1%	7581.7	7456.3	-125.4	-1.7%
96.3%	7570.2	7455.6	-114.7	-1.5%
97.5%	7515.1	7433.6	-81.5	-1.1%
98.8%	7422.8	7303.3	-119.4	-1.6%
100.0%	7,397.0	7,255.2	-141.9	-1.9%

Figure SQ-25-b
San Joaquin River at Jersey Point, Monthly EC
Probability of Exceedance

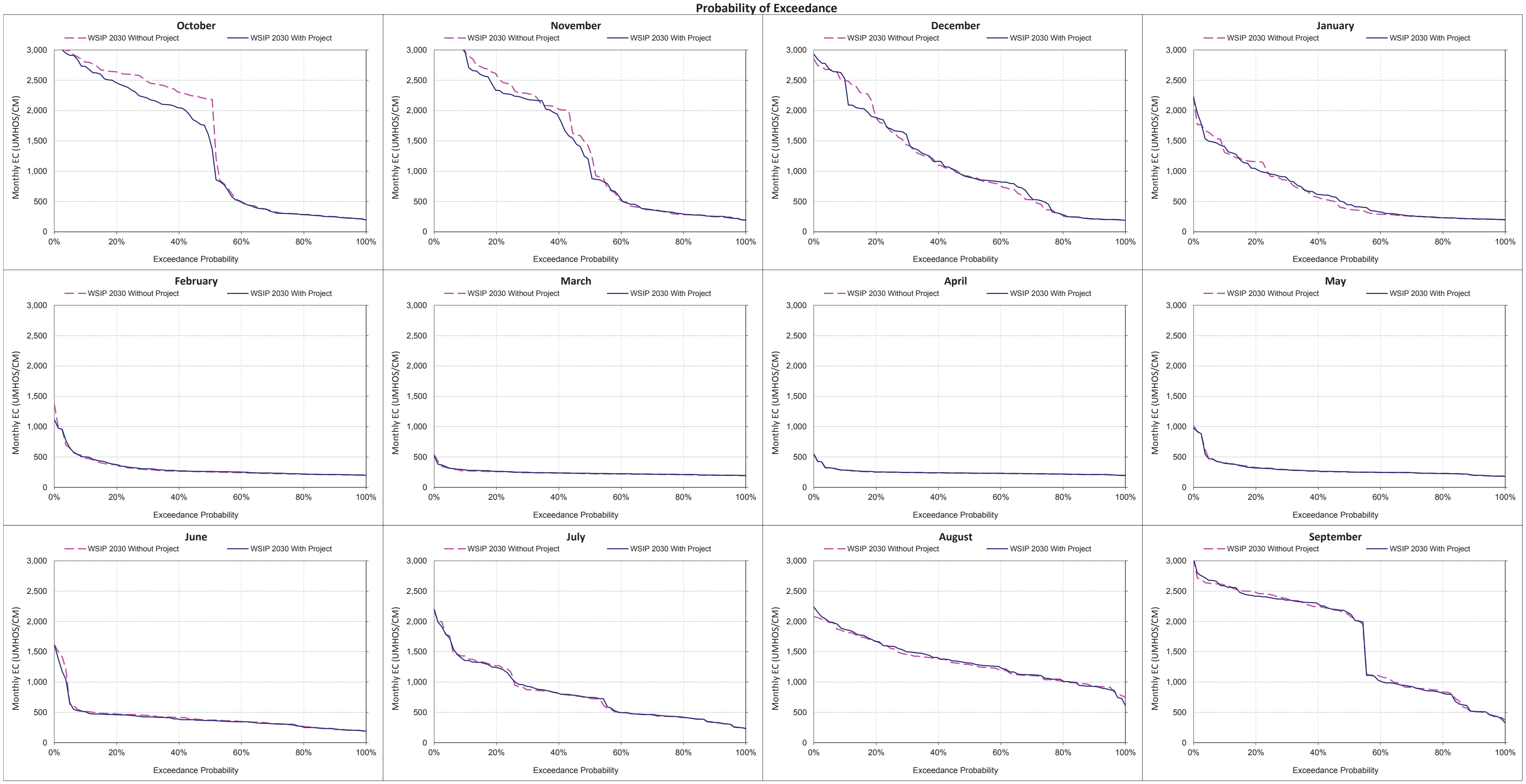


Table SQ-25-b

San Joaquin River at Jersey Point, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3212.7	3145.3	-67.4	-2.1%
1.2%	3190.3	3056.4	-133.9	-4.2%
2.5%	3056.4	3003.4	-53.1	-1.7%
3.7%	2992.1	2947.6	-44.5	-1.5%
4.9%	2991.5	2912.9	-78.6	-2.6%
6.2%	2918.7	2911.0	-7.7	-0.3%
7.4%	2889.4	2846.1	-43.3	-1.5%
8.6%	2850.0	2734.4	-115.7	-4.1%
9.9%	2799.8	2727.6	-72.2	-2.6%
11.1%	2798.8	2681.3	-117.4	-4.2%
12.3%	2766.7	2624.8	-141.9	-5.1%
13.6%	2734.8	2623.6	-111.2	-4.1%
14.8%	2672.4	2599.9	-72.5	-2.7%
16.0%	2662.3	2523.5	-138.8	-5.2%
17.3%	2650.1	2504.3	-145.8	-5.5%
18.5%	2645.1	2501.0	-144.1	-5.4%
19.8%	2640.7	2464.8	-175.9	-6.7%
21.0%	2622.9	2434.1	-188.8	-7.2%
22.2%	2603.0	2406.2	-196.7	-7.6%
23.5%	2600.2	2386.8	-213.4	-8.2%
24.7%	2598.7	2340.6	-258.1	-9.9%
25.9%	2587.2	2311.6	-275.6	-10.7%
27.2%	2580.8	2244.7	-336.1	-13.0%
28.4%	2535.2	2228.4	-306.8	-12.1%
29.6%	2485.6	2209.0	-276.6	-11.1%
30.9%	2448.2	2178.3	-269.9	-11.0%
32.1%	2444.4	2162.3	-282.1	-11.5%
33.3%	2427.4	2139.7	-287.7	-11.9%
34.6%	2421.7	2103.9	-317.8	-13.1%
35.8%	2401.1	2101.1	-300.0	-12.5%
37.0%	2368.3	2097.2	-271.1	-11.4%
38.3%	2360.2	2077.0	-283.3	-12.0%
39.5%	2309.1	2046.9	-262.2	-11.4%
40.7%	2293.7	2044.4	-249.3	-10.9%
42.0%	2277.9	2008.2	-269.8	-11.8%
43.2%	2257.2	1942.0	-315.2	-14.0%
44.4%	2241.8	1852.0	-389.8	-17.4%
45.7%	2239.8	1815.2	-424.7	-19.0%
46.9%	2215.6	1769.8	-445.8	-20.1%
48.1%	2200.7	1758.9	-441.8	-20.1%
49.4%	2184.5	1608.0	-576.5	-26.4%
50.6%	2183.2	1369.0	-814.1	-37.3%
51.9%	1213.0	857.0	-356.0	-29.3%
53.1%	848.2	829.1	-19.1	-2.3%
54.3%	797.9	780.7	-17.2	-2.2%
55.6%	725.5	695.2	-30.3	-4.2%
56.8%	637.6	587.2	-50.4	-7.9%
58.0%	549.6	526.7	-22.9	-4.2%
59.3%	505.5	517.5	12.0	2.4%
60.5%	473.3	483.1	9.8	2.1%
61.7%	440.3	447.7	7.4	1.7%
63.0%	431.4	432.9	1.5	0.3%
64.2%	430.7	405.3	-25.5	-5.9%
65.4%	392.9	388.3	-4.7	-1.2%
66.7%	386.7	380.2	-6.5	-1.7%
67.9%	371.6	373.6	2.0	0.5%
69.1%	355.4	342.0	-13.4	-3.8%
70.4%	331.6	323.5	-8.1	-2.4%
71.6%	321.7	306.6	-15.1	-4.7%
72.8%	306.6	305.2	-1.5	-0.5%
74.1%	304.7	303.3	-1.4	-0.5%
75.3%	302.0	302.9	0.9	0.3%
76.5%	298.1	299.4	1.3	0.4%
77.8%	293.0	296.7	3.7	1.3%
79.0%	292.3	285.7	-6.6	-2.3%
80.2%	281.7	285.5	3.8	1.4%
81.5%	280.3	285.0	4.7	1.7%
82.7%	277.0	273.4	-3.6	-1.3%
84.0%	267.3	272.8	5.5	2.1%
85.2%	267.1	268.8	1.7	0.6%
86.4%	256.2	254.1	-2.1	-0.8%
87.7%	255.3	251.6	-3.7	-1.5%
88.9%	252.2	251.5	-0.8	-0.3%
90.1%	245.3	250.8	5.5	2.2%
91.4%	241.8	236.2	-5.6	-2.3%
92.6%	236.6	235.0	-1.6	-0.7%
93.8%	226.9	228.4	1.5	0.7%
95.1%	222.4	227.4	5.0	2.3%
96.3%	217.7	219.8	2.2	1.0%
97.5%	216.4	215.4	-1.1	-0.5%
98.8%	212.4	213.8	1.4	0.6%
100.0%	192.1	194.5	2.4	1.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3753.5	3769.9	16.4	0.4%
1.2%	3428.4	3654.2	225.8	6.6%
2.5%	3309.9	3258.2	-51.7	-1.6%
3.7%	3218.8	3190.1	-28.7	-0.9%
4.9%	3138.9	3167.5	28.6	0.9%
6.2%	3129.3	3129.6	0.3	0.0%
7.4%	3070.5	3029.8	-40.7	-1.3%
8.6%	3050.0	3029.2	-20.8	-0.7%
9.9%	2959.9	2984.5	24.6	0.8%
11.1%	2898.1	2708.2	-189.9	-6.6%
12.3%	2855.9	2661.3	-194.7	-6.8%
13.6%	2749.4	2653.7	-95.7	-3.5%
14.8%	2728.1	2595.9	-132.2	-4.8%
16.0%	2696.9	2571.7	-125.1	-4.6%
17.3%	2685.9	2557.4	-128.5	-4.8%
18.5%	2635.4	2444.0	-191.4	-7.3%
19.8%	2612.6	2335.6	-276.9	-10.6%
21.0%	2506.3	2329.3	-176.9	-7.1%
22.2%	2462.3	2285.9	-176.4	-7.2%
23.5%	2448.0	2275.5	-172.6	-7.0%
24.7%	2431.0	2266.7	-164.3	-6.8%
25.9%	2323.4	2235.5	-87.8	-3.8%
27.2%	2291.5	2233.9	-57.5	-2.5%
28.4%	2290.3	2211.9	-78.4	-3.4%
29.6%	2285.5	2189.0	-96.5	-4.2%
30.9%	2270.9	2175.1	-95.7	-4.2%
32.1%	2255.0	2170.8	-84.1	-3.7%
33.3%	2188.4	2165.8	-22.5	-1.0%
34.6%	2089.8	2164.3	74.6	3.6%
35.8%	2082.9	2023.9	-59.1	-2.8%
37.0%	2079.6	2015.2	-64.4	-3.1%
38.3%	2067.6	1971.0	-96.7	-4.7%
39.5%	2034.4	1941.8	-92.5	-4.5%
40.7%	2010.6	1814.4	-196.2	-9.8%
42.0%	2010.0	1665.1	-344.9	-17.2%
43.2%	1993.3	1580.7	-412.6	-20.7%
44.4%	1625.9	1546.1	-79.9	-4.9%
45.7%	1597.7	1444.4	-153.4	-9.6%
46.9%	1587.0	1407.3	-179.8	-11.3%
48.1%	1491.4	1250.9	-240.6	-16.1%
49.4%	1421.7	1202.2	-219.5	-15.4%
50.6%	1246.6	875.6	-371.0	-29.8%
51.9%	927.7	866.8	-60.9	-6.6%
53.1%	901.0	859.5	-41.6	-4.6%
54.3%	886.7	828.1	-58.6	-6.6%
55.6%	716.7	795.2	78.5	10.9%
56.8%	678.1	687.0	8.9	1.3%
58.0%	642.6	666.3	23.6	3.7%
59.3%	539.9	593.9	54.0	10.0%
60.5%	498.0	505.0	7.0	1.4%
61.7%	491.0	479.3	-11.7	-2.4%
63.0%	427.1	457.8	30.7	7.2%
64.2%	413.4	454.9	41.5	10.0%
65.4%	406.4	425.3	19.0	4.7%
66.7%	392.2	382.5	-9.8	-2.5%
67.9%	366.9	377.3	10.4	2.8%
69.1%	365.0	368.8	3.8	1.0%
70.4%	360.6	359.1	-1.6	-0.4%
71.6%	358.2	349.2	-9.1	-2.5%
72.8%	341.8	340.0	-1.8	-0.5%
74.1%	327.7	337.1	9.4	2.9%
75.3%	321.7	326.3	4.6	1.4%
76.5%	298.7	322.5	23.8	8.0%
77.8%	293.2	307.3	14.1	4.8%
79.0%	284.7	301.5	16.8	5.9%
80.2%	284.3	289.8	5.5	1.9%
81.5%	283.6	284.3	0.7	0.2%
82.7%	281.9	278.7	-3.2	-1.1%
84.0%	280.8	278.2	-2.7	-1.0%
85.2%	278.4	277.1	-1.3	-0.5%
86.4%	268.2	271.6	3.4	1.3%
87.7%	266.9	259.1	-7.7	-2.9%
88.9%	252.7	258.8	6.1	2.4%
90.1%	249.6	256.7	7.0	2.8%
91.4%	248.0	254.1	6.2	2.5%
92.6%	241.5	253.2	11.7	4.8%
93.8%	234.1	240.4	6.3	2.7%
95.1%	224.5	240.3	15.9	7.1%
96.3%	217.6	222.0	4.3	2.0%
97.5%	215.1	220.9	5.8	2.7%
98.8%	196.9	196.0	-0.8	-0.4%
100.0%	195.3	194.2	-1.1	-0.6%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2848.9	2930.4	81.5	2.9%
1.2%	2744.5	2846.7	102.2	3.7%
2.5%	2721.4	2785.4	64.1	2.4%
3.7%	2679.1	2776.7	97.6	3.6%
4.9%	2677.4	2686.4	8.9	0.3%
6.2%	2662.9	2642.8	-20.1	-0.8%
7.4%	2635.1	2640.7	5.6	0.2%
8.6%	2504.1	2624.8	120.6	4.8%
9.9%	2499.9	2528.9	29.0	1.2%
11.1%	2483.8	2091.9	-392.0	-15.8%
12.3%	2419.2	2090.0	-329.2	-13.6%
13.6%	2398.3	2047.1	-351.2	-14.6%
14.8%	2299.3	2037.1	-262.2	-11.4%
16.0%	2282.1	2029.7	-252.4	-11.1%
17.3%	2274.0	1975.5	-298.6	-13.1%
18.5%	2165.0	1903.6	-261.5	-12.1%
19.8%	1901.0	1891.3	-9.6	-0.5%
21.0%	1810.2	1865.6	55.4	3.1%
22.2%	1785.2	1845.9	60.7	3.4%
23.5%	1736.0	1719.0	-16.9	-1.0%
24.7%	1656.6	1701.1	44.5	2.7%
25.9%	1626.9	1667.3	40.4	2.5%
27.2%	1559.7	1660.4	100.7	6.5%
28.4%	1524.1	1649.2	125.2	8.2%
29.6%	1436.5	1611.9	175.4	12.2%
30.9%	1418.3	1411.5	-6.8	-0.5%
32.1%	1345.3	1377.9	32.6	2.4%
33.3%	1297.7	1353.9	56.2	4.3%
34.6%	1272.3	1304.5	32.2	2.5%
35.8%	1235.9	1273.3	37.3	3.0%
37.0%	1234.8	1253.7	18.9	1.5%
38.3%	1207.0	1163.8	-43.2	-3.6%
39.5%	1102.0	1162.6	60.7	5.5%
40.7%	1096.1	1160.3	64.3	5.9%
42.0%	1059.5	1074.6	15.1	1.4%
43.2%	1037.6	1068.3	30.7	3.0%
44.4%	1036.6	1039.6	3.0	0.3%
45.7%	1014.1	983.3	-30.8	-3.0%
46.9%	974.1	963.0	-11.1	-1.1%
48.1%	927.7	920.8	-6.9	-0.7%
49.4%	920.3	905.2	-15.2	-1.6%
50.6%	902.6	891.1	-11.5	-1.3%
51.9%	895.2	876.4	-18.8	-2.1%
53.1%	866.9	855.2	-11.7	-1.4%
54.3%	833.5	853.6	20.1	2.4%
55.6%	829.3	849.4	20.0	2.4%
56.8%	813.2	841.6	28.4	3.5%
58.0%	798.8	838.1	39.2	4.9%
59.3%	790.5	828.6	38.0	4.8%
60.5%	738.0	819.1	81.0	11.0%
61.7%	723.9	819.0	95.1	13.1%
63.0%	704.4	797.2	92.8	13.2%
64.2%	701.4	793.1	91.7	13.1%
65.4%	636.5	736.9	100.4	15.8%
66.7%	606.2	727.4	121.2	20.0%
67.9%	534.2	685.1	150.9	28.3%
69.1%	531.9	598.3	66.4	12.5%
70.4%	528.1	533.4	5.3	1.0%
71.6%	472.0	530.9	58.9	12.5%
72.8%	458.2	515.0	56.8	12.4%
74.1%	366.8	488.9	122.1	33.3%
75.3%	362.7	454.9	92.2	25.4%
76.5%	356.7	328.0	-28.8	-8.1%
77.8%	309.8	314.6	4.8	1.6%
79.0%	303.4	297.8	-5.6	-1.8%
80.2%	253.6	275.3	21.7	8.5%
81.5%	246.4	251.9	5.5	2.2%
82.7%	244.2	246.4	2.2	0.9%
84.0%	244.1	245.6	1.4	0.6%
85.2%	237.6	241.9	4.3	1.8%
86.4%	225.1	224.2	-0.9	-0.4%
87.7%	224.5	218.9	-5.5	-2.5%
88.9%	212.6	214.2	1.7	0.8%
90.1%	212.1	213.6	1.5	0.7%
91.4%	210.1	210.7	0.6	0.3%
92.6%	203.6	206.3	2.7	1.3%
93.8%	202.1	202.4	0.3	0.2%
95.1%	201.6	202.1	0.5	0.2%
96.3%	201.6	201.3	-0.2	-0.1%
97.5%	200.1	200.3	0.1	0.1%
98.8%	195.1	193.2	-1.8	-0.9%
100.0%	190.7	191.2	0.5	0.3%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2234.3	2219.2	-15.1	-0.7%
1.2%	1770.5	1958.5	188.0	10.6%
2.5%	1767.4	1781.4	14.0	0.8%
3.7%	1667.7	1536.4	-131.4	-7.9%
4.9%	1639.8	1495.4	-144.4	-8.8%
6.2%	1588.1	1482.0	-106.2	-6.7%
7.4%	1537.0	1468.2	-68.8	-4.5%
8.6%	1527.7	1425.7	-102.0	-6.7%
9.9%	1312.9	1409.2	96.3	7.3%
11.1%	1286.7	1321.7	35.0	2.7%
12.3%	1261.4	1305.3	43.8	3.5%
13.6%	1221.5	1280.6	59.1	4.8%
14.8%	1217.5	1197.4	-20.1	-1.6%
16.0%	1184.8	1141.0	-43.7	-3.7%
17.3%	1172.0	1133.9	-38.1	-3.3%
18.5%	1162.2	1052.9	-109.4	-9.4%
19.8%	1160.9	1048.0	-112.9	-9.7%
21.0%	1158.3	1006.1	-152.2	-13.1%
22.2%	1146.3	985.3	-160.9	-14.0%
23.5%	1015.8	974.7	-41.1	-4.0%
24.7%	916.7	953.9	37.2	4.1%
25.9%	910.8	942.4	31.5	3.5%
27.2%	894.5	922.7	28.2	3.2%
28.4%	862.0	908.3	46.3	5.4%
29.6%	854.5	906.1	51.6	6.0%
30.9%	825.1	836.9	11.9	1.4%
32.1%	760.0	822.7	62.7	8.2%
33.3%	723.8	766.3	42.5	5.9%
34.6%	716.5	747.5	31.0	4.3%
35.8%	692.3	679.7	-12.5	-1.8%
37.0%	647.9	670.5	22.6	3.5%
38.3%	587.6	660.5	72.8	12.4%
39.5%	576.9	617.4	40.5	7.0%
40.7%	551.3	615.2	63.9	11.6%
42.0%	537.4	607.1	69.7	13.0%
43.2%	524.4	605.1	80.7	15.4%
44.4%	511.2	578.8	67.6	13.2%
45.7%	494.8	571.2	76.4	15.4%
46.9%	407.4	508.5	101.1	24.8%
48.1%	394.7	495.6	101.0	25.6%
49.4%	375.3	448.7	73.4	19.6%
50.6%	366.8	445.4	78.6	21.4%
51.9%	360.0	414.1	54.1	15.0%
53.1%	355.3	413.5	58.2	16.4%
54.3%	352.1	402.9	50.7	14.4%
55.6%	324.5	400.4	75.9	23.4%
56.8%	304.6	348.0	43.4	14.2%
58.0%	296.5	344.2	47.7	16.1%
59.3%	290.2	330.6	40.4	13.9%
60.5%	289.0	321.3	32.3	11.2%
61.7%	288.8	302.7	14.0	4.8%
63.0%	284.0	302.3	18.3	6.4%
64.2%	282.0	298.4	16.4	5.8%
65.4%	272.6	289.7	17.1	6.3%
66.7%	267.9	281.2	13.3	5.0%
67.9%	264.3	272.7	8.4	3.2%
69.1%	260.2	264.6	4.3	1.7%
70.4%	254.0	261.2	7.3	2.9%
71.6%	253.3	256.7	3.4	1.3%
72.8%	253.2	255.3	2.1	0.8%
74.1%	246.1	252.4	6.3	2.6%
75.3%	244.8	247.7	2.9	1.2%
76.5%	237.5	246.6	9.1	3.8%
77.8%	234.0	241.1	7.1	3.0%
79.0%	232.9	234.2	1.3	0.6%
80.2%	232.5	232.5	0.0	0.0%
81.5%	229.1	229.9	0.9	0.4%
82.7%	228.4	228.6	0.2	0.1%
84.0%	226.1	227.2	1.1	0.5%
85.2%	221.5	222.4	0.9	0.4%
86.4%	220.3	220.3	0.0	0.0%
87.7%	216.8	216.8	0.0	0.0%
88.9%	215.3	215.6	0.3	0.1%
90.1%	211.3	214.7	3.4	1.6%
91.4%	210.1	213.7	3.5	1.7%
92.6%	210.1	213.0	2.9	1.4%
93.8%	209.4	211.8	2.4	1.2%
95.1%	207.9	209.7	1.8	0.9%
96.3%	206.3	207.2	0.9	0.4%
97.5%	206.2	205.0	-1.2	-0.6%
98.8%	202.8	202.8	0.0	0.0%
100.0%	200.2	200.5	0.3	0.1%

Table SQ-25-b
San Joaquin River at Jersey Point, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1366.3	1112.6	-253.6	-18.6%
1.2%	997.8	974.5	-23.3	-2.3%
2.5%	957.7	956.1	-1.5	-0.2%
3.7%	694.5	775.9	81.4	11.7%
4.9%	652.2	647.3	-4.9	-0.7%
6.2%	571.5	576.4	5.0	0.9%
7.4%	541.0	544.2	3.2	0.6%
8.6%	528.4	505.4	-23.0	-4.4%
9.9%	478.8	501.1	22.4	4.7%
11.1%	472.0	497.0	25.1	5.3%
12.3%	452.7	462.5	9.8	2.2%
13.6%	424.9	445.7	20.7	4.9%
14.8%	403.5	433.1	29.5	7.3%
16.0%	388.9	423.9	35.0	9.0%
17.3%	384.6	399.1	14.5	3.8%
18.5%	375.8	384.8	9.0	2.4%
19.8%	373.8	372.6	-1.2	-0.3%
21.0%	363.3	347.3	-16.0	-4.4%
22.2%	349.3	345.3	-4.0	-1.1%
23.5%	318.8	333.2	14.4	4.5%
24.7%	317.5	326.5	9.0	2.8%
25.9%	316.5	322.6	6.1	1.9%
27.2%	298.9	310.7	11.8	3.9%
28.4%	297.3	306.0	8.7	2.9%
29.6%	291.1	305.4	14.3	4.9%
30.9%	288.2	302.5	14.3	4.9%
32.1%	285.0	299.2	14.3	5.0%
33.3%	278.4	288.9	10.4	3.8%
34.6%	270.4	288.6	18.2	6.7%
35.8%	269.8	280.4	10.6	3.9%
37.0%	268.8	280.0	11.2	4.2%
38.3%	266.6	279.9	13.4	5.0%
39.5%	264.9	270.3	5.3	2.0%
40.7%	264.5	269.3	4.8	1.8%
42.0%	263.0	268.5	5.5	2.1%
43.2%	262.6	266.9	4.3	1.6%
44.4%	262.3	263.3	1.0	0.4%
45.7%	259.0	263.3	4.2	1.6%
46.9%	257.4	262.3	4.9	1.9%
48.1%	254.1	261.0	7.0	2.7%
49.4%	253.4	260.3	6.8	2.7%
50.6%	252.2	260.0	7.8	3.1%
51.9%	251.7	258.6	6.9	2.7%
53.1%	249.8	256.6	6.8	2.7%
54.3%	247.1	256.3	9.2	3.7%
55.6%	246.6	255.4	8.8	3.6%
56.8%	246.0	254.4	8.4	3.4%
58.0%	242.5	254.1	11.7	4.8%
59.3%	240.4	253.6	13.2	5.5%
60.5%	240.0	250.4	10.4	4.3%
61.7%	235.7	248.1	12.3	5.2%
63.0%	235.7	241.5	5.8	2.5%
64.2%	234.6	240.1	5.5	2.3%
65.4%	230.3	236.8	6.6	2.9%
66.7%	230.1	235.9	5.8	2.5%
67.9%	228.9	235.8	6.9	3.0%
69.1%	227.4	235.2	7.8	3.4%
70.4%	226.3	233.5	7.2	3.2%
71.6%	225.4	231.2	5.9	2.6%
72.8%	225.0	230.1	5.0	2.2%
74.1%	224.6	226.3	1.7	0.8%
75.3%	221.7	223.4	1.6	0.7%
76.5%	220.4	221.6	1.1	0.5%
77.8%	219.6	221.2	1.5	0.7%
79.0%	218.0	220.6	2.6	1.2%
80.2%	215.0	219.3	4.2	2.0%
81.5%	214.1	215.5	1.4	0.7%
82.7%	211.6	214.1	2.4	1.2%
84.0%	211.4	213.5	2.1	1.0%
85.2%	211.3	211.3	0.0	0.0%
86.4%	210.8	211.3	0.5	0.2%
87.7%	208.9	210.5	1.6	0.8%
88.9%	208.9	208.6	-0.2	-0.1%
90.1%	208.0	208.4	0.4	0.2%
91.4%	207.8	208.0	0.2	0.1%
92.6%	207.2	207.1	-0.1	0.0%
93.8%	206.4	206.6	0.2	0.1%
95.1%	206.1	206.2	0.0	0.0%
96.3%	203.2	203.2	-0.1	0.0%
97.5%	202.0	201.9	-0.1	0.0%
98.8%	201.1	201.1	-0.1	0.0%
100.0%	198.3	199.0	0.8	0.4%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	538.9	513.4	-25.5	-4.7%
1.2%	428.8	379.5	-49.3	-11.5%
2.5%	344.2	368.2	24.0	7.0%
3.7%	325.4	341.6	16.1	5.0%
4.9%	315.1	314.1	-1.0	-0.3%
6.2%	295.4	306.7	11.3	3.8%
7.4%	292.3	296.5	4.2	1.4%
8.6%	272.2	294.4	22.2	8.2%
9.9%	271.8	286.3	14.5	5.3%
11.1%	270.7	277.4	6.7	2.5%
12.3%	268.9	277.1	8.2	3.0%
13.6%	268.4	276.8	8.4	3.1%
14.8%	266.0	275.9	9.9	3.7%
16.0%	262.0	275.2	13.1	5.0%
17.3%	260.1	273.9	13.8	5.3%
18.5%	259.9	265.0	5.1	2.0%
19.8%	259.1	262.2	3.1	1.2%
21.0%	258.1	260.9	2.7	1.1%
22.2%	257.7	260.8	3.1	1.2%
23.5%	257.4	258.4	1.0	0.4%
24.7%	249.5	258.3	8.8	3.5%
25.9%	246.5	249.8	3.3	1.3%
27.2%	245.9	247.9	2.0	0.8%
28.4%	241.8	247.7	5.8	2.4%
29.6%	241.6	247.1	5.5	2.3%
30.9%	240.8	246.2	5.3	2.2%
32.1%	240.0	241.4	1.5	0.6%
33.3%	239.4	241.1	1.8	0.7%
34.6%	239.1	240.1	1.0	0.4%
35.8%	238.8	239.6	0.8	0.3%
37.0%	238.5	239.0	0.5	0.2%
38.3%	234.5	238.5	4.0	1.7%
39.5%	233.7	236.6	2.9	1.2%
40.7%	232.8	236.5	3.7	1.6%
42.0%	232.1	235.8	3.8	1.6%
43.2%	231.8	233.6	1.8	0.8%
44.4%	230.4	233.1	2.7	1.2%
45.7%	230.3	233.0	2.7	1.2%
46.9%	229.7	232.0	2.3	1.0%
48.1%	225.4	231.4	6.0	2.7%
49.4%	224.7	230.1	5.4	2.4%
50.6%	224.0	227.1	3.1	1.4%
51.9%	222.3	226.3	4.0	1.8%
53.1%	222.2	225.8	3.5	1.6%
54.3%	222.0	225.4	3.4	1.5%
55.6%	221.6	225.1	3.5	1.6%
56.8%	221.5	224.2	2.7	1.2%
58.0%	220.8	222.5	1.7	0.8%
59.3%	220.7	222.1	1.4	0.6%
60.5%	220.5	221.7	1.2	0.5%
61.7%	218.3	221.6	3.3	1.5%
63.0%	217.4	220.8	3.5	1.6%
64.2%	216.4	220.7	4.3	2.0%
65.4%	215.5	219.6	4.2	1.9%
66.7%	215.2	219.4	4.2	2.0%
67.9%	215.0	217.4	2.4	1.1%
69.1%	214.5	217.4	2.8	1.3%
70.4%	214.1	216.2	2.0	1.0%
71.6%	214.1	216.1	2.1	1.0%
72.8%	213.4	215.7	2.3	1.1%
74.1%	210.8	214.9	4.0	1.9%
75.3%	210.0	214.6	4.7	2.2%
76.5%	209.7	213.7	4.0	1.9%
77.8%	209.0	212.7	3.7	1.8%
79.0%	208.8	211.9	3.2	1.5%
80.2%	207.5	210.6	3.1	1.5%
81.5%	207.0	210.3	3.3	1.6%
82.7%	206.0	208.4	2.4	1.1%
84.0%	204.0	208.1	4.2	2.0%
85.2%	201.1	201.6	0.5	0.3%
86.4%	200.7	201.6	0.9	0.5%
87.7%	200.2	201.5	1.4	0.7%
88.9%	199.9	200.6	0.7	0.4%
90.1%	199.2	199.9	0.8	0.4%
91.4%	198.5	199.1	0.5	0.3%
92.6%	198.5	198.9	0.4	0.2%
93.8%	198.0	198.3	0.4	0.2%
95.1%	197.7	197.9	0.2	0.1%
96.3%	197.7	197.7	0.0	0.0%
97.5%	196.3	197.7	1.4	0.7%
98.8%	193.6	193.6	0.0	0.0%
100.0%	193.4	193.4	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	549.5	539.9	-9.6	-1.7%
1.2%	430.3	423.5	-6.8	-1.6%
2.5%	422.1	417.6	-4.5	-1.1%
3.7%	322.3	320.8	-1.5	-0.5%
4.9%	321.3	319.6	-1.8	-0.5%
6.2%	315.0	311.5	-3.6	-1.1%
7.4%	300.2	301.5	1.3	0.4%
8.6%	284.4	283.1	-1.3	-0.5%
9.9%	281.2	281.6	0.4	0.1%
11.1%	279.4	280.1	0.7	0.2%
12.3%	278.5	271.9	-6.7	-2.4%
13.6%	265.6	269.5	3.8	1.4%
14.8%	261.0	265.9	4.9	1.9%
16.0%	258.3	263.5	5.2	2.0%
17.3%	257.9	262.7	4.8	1.9%
18.5%	252.7	261.0	8.3	3.3%
19.8%	251.1	254.6	3.4	1.4%
21.0%	250.7	252.9	2.2	0.9%
22.2%	250.6	252.2	1.6	0.6%
23.5%	250.0	249.4	-0.6	-0.2%
24.7%	249.4	248.5	-0.9	-0.4%
25.9%	248.6	247.1	-1.5	-0.6%
27.2%	246.3	246.8	0.4	0.2%
28.4%	244.9	245.2	0.3	0.1%
29.6%	243.7	245.1	1.4	0.6%
30.9%	242.5	244.8	2.2	0.9%
32.1%	242.2	244.1	1.9	0.8%
33.3%	241.7	243.3	1.6	0.6%
34.6%	240.4	242.4	2.0	0.8%
35.8%	238.6	242.0	3.4	1.4%
37.0%	237.0	242.0	5.0	2.1%
38.3%	236.9	240.0	3.2	1.3%
39.5%	236.8	239.8	3.0	1.2%
40.7%	236.8	238.5	1.8	0.7%
42.0%	236.2	238.3	2.1	0.9%
43.2%	234.7	237.0	2.3	1.0%
44.4%	234.6	236.8	2.2	1.0%
45.7%	233.8	236.2	2.3	1.0%
46.9%	233.8	235.1	1.3	0.6%
48.1%	233.2	234.8	1.6	0.7%
49.4%	232.9	233.6	0.7	0.3%
50.6%	232.9	233.3	0.4	0.2%
51.9%	232.9	233.1	0.2	0.1%
53.1%	231.8	232.9	1.1	0.5%
54.3%	230.6	232.3	1.7	0.7%
55.6%	229.8	231.0	1.2	0.5%
56.8%	229.6	230.8	1.2	0.5%
58.0%	228.8	230.1	1.3	0.6%
59.3%	228.8	229.9	1.0	0.4%
60.5%	227.4	229.8	2.4	1.1%
61.7%	226.8	229.2	2.4	1.0%
63.0%	226.6	228.5	1.9	0.9%
64.2%	226.2	227.1	0.8	0.4%
65.4%	225.2	226.6	1.4	0.6%
66.7%	224.9	226.2	1.3	0.6%
67.9%	224.5	224.8	0.3	0.1%
69.1%	224.5	224.5	0.0	0.0%
70.4%	223.3	224.5	1.2	0.5%
71.6%	221.7	224.0	2.3	1.0%
72.8%	220.3	223.5	3.2	1.4%
74.1%	220.0	221.5	1.5	0.7%
75.3%	219.8	220.3	0.5	0.2%
76.5%	219.5	219.9	0.4	0.2%
77.8%	218.0	219.6	1.6	0.8%
79.0%	216.5	218.4	1.9	0.9%
80.2%	215.8	217.8	2.0	0.9%
81.5%	214.0	216.4	2.3	1.1%
82.7%	213.7	214.2	0.5	0.2%
84.0%	212.9	214.0	1.1	0.5%
85.2%	211.8	213.6	1.8	0.9%
86.4%	210.6	210.9	0.3	0.1%
87.7%	210.4	210.7	0.4	0.2%
88.9%	210.1	210.3	0.2	0.1%
90.1%	209.8	209.9	0.1	0.1%
91.4%	209.6	209.7	0.0	0.0%
92.6%	208.8	209.7	0.9	0.4%
93.8%	208.7	208.9	0.3	0.1%
95.1%	205.1	205.5	0.4	0.2%
96.3%	201.3	201.4	0.1	0.0%
97.5%	198.8	198.9	0.1	0.1%
98.8%	194.6	196.1	1.5	0.8%
100.0%	194.3	195.2	0.8	0.4%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1016.9	978.1	-38.8	-3.8%
1.2%	919.2	919.4	0.2	0.0%
2.5%	860.3	880.3	19.9	2.3%
3.7%	623.4	543.3	-80.1	-12.9%
4.9%	469.8	472.9	3.1	0.7%
6.2%	464.1	464.9	0.9	0.2%
7.4%	427.3	429.6	2.3	0.5%
8.6%	412.9	413.8	0.9	0.2%
9.9%	410.6	394.0	-16.6	-4.0%
11.1%	389.1	387.8	-1.3	-0.3%
12.3%	386.9	382.8	-4.1	-1.1%
13.6%	383.2	378.0	-5.2	-1.3%
14.8%	365.0	357.7	-7.3	-2.0%
16.0%	354.4	347.1	-7.3	-2.1%
17.3%	350.2	329.0	-21.2	-6.1%
18.5%	335.1	326.2	-8.9	-2.7%
19.8%	328.5	319.1	-9.5	-2.9%
21.0%	319.2	316.8	-2.4	-0.8%
22.2%	318.6	314.5	-4.1	-1.3%
23.5%	316.3	310.0	-6.3	-2.0%
24.7%	314.4	306.6	-7.8	-2.5%
25.9%	304.8	300.6	-4.2	-1.4%
27.2%	296.8	291.9	-4.9	-1.7%
28.4%	296.4	290.6	-5.8	-2.0%
29.6%	290.4	290.3	-0.1	0.0%
30.9%	286.5	281.3	-5.2	-1.8%
32.1%	283.6	279.9	-3.7	-1.3%
33.3%	279.6	278.4	-1.2	-0.4%
34.6%	279.0	276.6	-2.4	-0.9%
35.8%	273.9	273.6	-0.3	-0.1%
37.0%	267.8	269.1	1.2	0.5%
38.3%	264.7	268.6	3.8	1.5%
39.5%	261.7	268.3	6.7	2.5%
40.7%	261.2	262.0	0.8	0.3%
42.0%	259.0	261.3	2.2	0.9%
43.2%	258.2	259.7	1.4	0.5%
44.4%	257.7	259.4	1.7	0.7%
45.7%	256.4	258.8	2.4	0.9%
46.9%	256.4	258.2	1.8	0.7%
48.1%	252.6	257.5	4.9	1.9%
49.4%	251.5	256.3	4.8	1.9%
50.6%	250.2	250.6	0.4	0.2%
51.9%	249.7	250.3	0.6	0.3%
53.1%	248.1	249.0	0.9	0.3%
54.3%	248.1	248.7	0.6	0.3%
55.6%	247.6	247.4	-0.3	-0.1%
56.8%	246.9	246.9	0.0	0.0%
58.0%	246.2	246.6	0.4	0.2%
59.3%	245.7	246.2	0.4	0.2%
60.5%	245.7	245.8	0.1	0.0%
61.7%	244.5	245.7	1.3	0.5%
63.0%	244.0	245.1	1.2	0.5%
64.2%	243.3	244.3	1.0	0.4%
65.4%	243.0	244.2	1.2	0.5%
66.7%	242.0	243.9	1.9	0.8%
67.9%	241.5	242.4	0.9	0.4%
69.1%	240.7	242.3	1.6	0.7%
70.4%	240.0	240.8	0.8	0.3%
71.6%	235.5	235.7	0.2	0.1%
72.8%	232.7	232.7	0.0	0.0%
74.1%	230.9	232.5	1.6	0.7%
75.3%	230.8	231.6	0.9	0.4%
76.5%	229.8	229.9	0.0	0.0%
77.8%	228.5	228.5	0.0	0.0%
79.0%	227.6	227.6	0.1	0.0%
80.2%	227.4	227.5	0.1	0.0%
81.5%	226.2	226.3	0.0	0.0%
82.7%	224.0	225.0	1.0	0.4%
84.0%	223.3	224.2	0.8	0.4%
85.2%	221.1	221.6	0.5	0.2%
86.4%	218.7	218.4	-0.3	-0.1%
87.7%	217.2	217.2	0.0	0.0%
88.9%	203.2	203.6	0.4	0.2%
90.1%	197.8	198.1	0.3	0.2%
91.4%	196.4	196.7	0.3	0.2%
92.6%	196.0	196.1	0.1	0.1%
93.8%	190.1	190.2	0.1	0.1%
95.1%	187.8	188.2	0.4	0.2%
96.3%	185.2	185.3	0.2	0.1%
97.5%	183.0	183.3	0.3	0.1%
98.8%	182.7	182.9	0.3	0.1%
100.0%	181.9	182.2	0.3	0.1%

Table SQ-25-b

San Joaquin River at Jersey Point, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1615.1	1612.4	-2.7	-0.2%
1.2%	1501.8	1384.6	-117.2	-7.8%
2.5%	1421.1	1173.4	-247.7	-17.4%
3.7%	1216.0	1047.7	-168.3	-13.8%
4.9%	631.1	660.0	28.9	4.6%
6.2%	610.3	547.5	-62.8	-10.3%
7.4%	550.7	528.2	-22.5	-4.1%
8.6%	525.5	517.8	-7.8	-1.5%
9.9%	516.0	512.6	-3.4	-0.7%
11.1%	510.8	479.6	-31.2	-6.1%
12.3%	500.6	474.6	-26.0	-5.2%
13.6%	493.3	473.1	-20.2	-4.1%
14.8%	483.0	470.5	-12.5	-2.6%
16.0%	480.4	467.4	-12.9	-2.7%
17.3%	478.9	463.9	-15.0	-3.1%
18.5%	478.5	462.7	-15.8	-3.3%
19.8%	474.0	461.1	-12.9	-2.7%
21.0%	467.9	458.5	-9.4	-2.0%
22.2%	466.5	454.2	-12.3	-2.6%
23.5%	464.2	453.4	-10.8	-2.3%
24.7%	462.3	446.4	-15.9	-3.4%
25.9%	462.1	443.0	-19.1	-4.1%
27.2%	453.5	435.3	-18.3	-4.0%
28.4%	453.1	426.6	-26.5	-5.8%
29.6%	449.7	426.0	-23.6	-5.3%
30.9%	446.0	423.8	-22.3	-5.0%
32.1%	442.5	421.6	-20.9	-4.7%
33.3%	424.2	418.1	-6.1	-1.4%
34.6%	424.1	415.4	-8.7	-2.1%
35.8%	422.2	414.5	-7.6	-1.8%
37.0%	421.0	413.7	-7.3	-1.7%
38.3%	417.4	390.0	-27.4	-6.6%
39.5%	415.5	389.4	-26.1	-6.3%
40.7%	414.1	377.5	-36.5	-8.8%
42.0%	412.4	377.3	-35.1	-8.5%
43.2%	390.8	376.5	-14.3	-3.7%
44.4%	389.7	376.4	-13.3	-3.4%
45.7%	388.7	370.0	-18.7	-4.8%
46.9%	380.2	367.8	-12.4	-3.3%
48.1%	374.3	367.1	-7.2	-1.9%
49.4%	371.8	365.2	-6.5	-1.7%
50.6%	371.6	364.8	-6.8	-1.8%
51.9%	371.5	359.7	-11.7	-3.2%
53.1%	369.8	358.1	-11.7	-3.2%
54.3%	363.9	352.2	-11.8	-3.2%
55.6%	362.0	350.3	-11.7	-3.2%
56.8%	361.9	347.6	-14.3	-3.9%
58.0%	356.7	344.7	-12.0	-3.4%
59.3%	350.7	343.6	-7.1	-2.0%
60.5%	346.0	343.5	-2.6	-0.7%
61.7%	344.4	342.9	-1.5	-0.4%
63.0%	338.0	339.9	1.8	0.5%
64.2%	337.3	332.0	-5.3	-1.6%
65.4%	336.1	324.0	-12.1	-3.6%
66.7%	333.8	320.0	-13.8	-4.1%
67.9%	329.7	319.0	-10.7	-3.2%
69.1%	314.2	313.7	-0.5	-0.2%
70.4%	311.8	310.3	-1.6	-0.5%
71.6%	311.4	307.4	-4.0	-1.3%
72.8%	308.2	307.4	-0.8	-0.2%
74.1%	308.1	303.7	-4.4	-1.4%
75.3%	305.4	297.0	-8.4	-2.7%
76.5%	304.8	294.8	-10.0	-3.3%
77.8%	285.1	275.5	-9.6	-3.4%
79.0%	277.8	271.1	-6.7	-2.4%
80.2%	263.0	252.1	-11.0	-4.2%
81.5%	261.5	252.0	-9.5	-3.6%
82.7%	249.1	250.9	1.8	0.7%
84.0%	246.6	247.2	0.6	0.2%
85.2%	240.6	237.8	-2.8	-1.2%
86.4%	236.3	234.5	-1.8	-0.7%
87.7%	236.1	233.5	-2.6	-1.1%
88.9%	233.8	232.9	-0.9	-0.4%
90.1%	223.3	219.2	-4.1	-1.8%
91.4%	219.7	216.6	-3.1	-1.4%
92.6%	217.8	212.6	-5.2	-2.4%
93.8%	206.7	206.6	-0.1	0.0%
95.1%	204.6	205.3	0.7	0.3%
96.3%	204.2	204.4	0.2	0.1%
97.5%	202.6	201.3	-1.3	-0.7%
98.8%	195.7	194.9	-0.7	-0.4%
100.0%	189.5	189.6	0.1	0.1%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2182.8	2198.5	15.7	0.7%
1.2%	2001.2	1990.6	-10.6	-0.5%
2.5%	1997.1	1910.3	-86.9	-4.3%
3.7%	1787.3	1791.5	4.1	0.2%
4.9%	1762.6	1727.8	-34.8	-2.0%
6.2%	1471.8	1541.0	69.2	4.7%
7.4%	1462.0	1452.9	-9.1	-0.6%
8.6%	1431.2	1400.6	-30.6	-2.1%
9.9%	1430.0	1352.5	-77.5	-5.4%
11.1%	1380.5	1352.3	-28.3	-2.0%
12.3%	1373.1	1330.0	-43.0	-3.1%
13.6%	1343.4	1326.5	-16.9	-1.3%
14.8%	1339.7	1322.5	-17.2	-1.3%
16.0%	1324.8	1308.9	-15.9	-1.2%
17.3%	1303.3	1289.8	-13.4	-1.0%
18.5%	1280.1	1246.2	-33.9	-2.7%
19.8%	1269.7	1243.3	-26.4	-2.1%
21.0%	1268.1	1226.7	-41.4	-3.3%
22.2%	1222.7	1202.3	-20.4	-1.7%
23.5%	1218.5	1157.6	-60.9	-5.0%
24.7%	1158.8	1072.5	-86.3	-7.5%
25.9%	947.7	1004.4	56.7	6.0%
27.2%	922.2	961.5	39.3	4.3%
28.4%	918.0	957.5	39.5	4.3%
29.6%	875.0	929.6	54.5	6.2%
30.9%	869.6	921.0	51.5	5.9%
32.1%	865.4	902.5	37.2	4.3%
33.3%	861.6	879.8	18.2	2.1%
34.6%	855.2	874.8	19.6	2.3%
35.8%	855.1	861.2	6.2	0.7%
37.0%	850.2	847.9	-2.3	-0.3%
38.3%	829.3	831.4	2.0	0.2%
39.5%	822.8	817.6	-5.2	-0.6%
40.7%	797.8	796.7	-1.0	-0.1%
42.0%	797.6	792.4	-5.2	-0.6%
43.2%	795.5	785.2	-10.3	-1.3%
44.4%	788.5	784.9	-3.6	-0.5%
45.7%	768.7	778.1	9.4	1.2%
46.9%	763.0	765.9	2.9	0.4%
48.1%	746.9	754.8	7.9	1.1%
49.4%	737.8	747.5	9.7	1.3%
50.6%	724.4	746.8	22.4	3.1%
51.9%	723.6	743.7	20.2	2.8%
53.1%	722.8	725.7	2.9	0.4%
54.3%	616.8	724.9	108.1	17.5%
55.6%	563.7	593.2	29.5	5.2%
56.8%	547.3	566.2	19.0	3.5%
58.0%	506.1	524.9	18.8	3.7%
59.3%	504.1	496.7	-7.3	-1.5%
60.5%	498.5	495.9	-2.6	-0.5%
61.7%	494.8	494.6	-0.2	0.0%
63.0%	478.2	481.6	3.4	0.7%
64.2%	474.4	472.8	-1.6	-0.3%
65.4%	471.1	470.4	-0.6	-0.1%
66.7%	462.8	469.5	6.7	1.5%
67.9%	462.7	466.1	3.4	0.7%
69.1%	462.0	463.4	1.4	0.3%
70.4%	454.9	462.9	8.0	1.8%
71.6%	436.4	450.2	13.8	3.2%
72.8%	434.6	448.9	14.3	3.3%
74.1%	434.2	436.3	2.1	0.5%
75.3%	433.0	435.6	2.6	0.6%
76.5%	430.9	434.9	4.0	0.9%
77.8%	430.6	431.8	1.2	0.3%
79.0%	416.0	424.1	8.1	1.9%
80.2%	414.4	415.7	1.3	0.3%
81.5%	413.5	408.1	-5.4	-1.3%
82.7%	400.3	401.4	1.0	0.3%
84.0%	387.5	391.8	4.3	1.1%
85.2%	386.8	387.3	0.5	0.1%
86.4%	386.5	386.7	0.2	0.1%
87.7%	344.4	348.2	3.8	1.1%
88.9%	335.8	344.7	8.8	2.6%
90.1%	325.6	331.4	5.7	1.8%
91.4%	324.0	329.4	5.4	1.7%
92.6%	315.5	315.9	0.4	0.1%
93.8%	304.9	310.9	6.0	2.0%
95.1%	303.0	299.3	-3.6	-1.2%
96.3%	256.7	254.8	-1.9	-0.7%
97.5%	253.7	250.0	-3.6	-1.4%
98.8%	250.3	245.1	-5.2	-2.1%
100.0%	232.2	234.6	2.5	1.1%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2078.2	2237.4	159.1	7.7%
1.2%	2064.1	2152.2	88.1	4.3%
2.5%	2037.3	2079.4	42.1	2.1%
3.7%	2027.8	2045.5	17.7	0.9%
4.9%	1984.0	1990.2	6.2	0.3%
6.2%	1983.5	1980.5	-3.0	-0.2%
7.4%	1872.8	1957.5	84.6	4.5%
8.6%	1860.6	1893.6	33.0	1.8%
9.9%	1827.9	1868.3	40.4	2.2%
11.1%	1814.0	1853.5	39.5	2.2%
12.3%	1810.0	1836.8	26.9	1.5%
13.6%	1772.9	1796.2	23.3	1.3%
14.8%	1743.5	1775.7	32.3	1.9%
16.0%	1736.2	1771.6	35.4	2.0%
17.3%	1714.7	1731.3	16.6	1.0%
18.5%	1680.4	1706.6	26.2	1.6%
19.8%	1676.5	1673.1	-3.4	-0.2%
21.0%	1647.8	1660.9	13.1	0.8%
22.2%	1619.8	1602.9	-16.9	-1.0%
23.5%	1601.9	1594.3	-7.6	-0.5%
24.7%	1552.6	1591.2	38.7	2.5%
25.9%	1543.3	1587.2	44.0	2.8%
27.2%	1489.6	1550.1	60.5	4.1%
28.4%	1469.6	1532.0	62.4	4.2%
29.6%	1455.8	1500.2	44.4	3.0%
30.9%	1454.2	1495.1	40.9	2.8%
32.1%	1427.1	1488.7	61.6	4.3%
33.3%	1425.0	1479.6	54.6	3.8%
34.6%	1419.4	1472.2	52.8	3.7%
35.8%	1411.6	1456.5	44.9	3.2%
37.0%	1404.3	1442.0	37.7	2.7%
38.3%	1395.5	1405.5	10.0	0.7%
39.5%	1391.4	1403.8	12.4	0.9%
40.7%	1378.7	1377.5	-1.2	-0.1%
42.0%	1378.1	1374.9	-3.2	-0.2%
43.2%	1338.0	1373.1	35.1	2.6%
44.4%	1319.4	1352.0	32.6	2.5%
45.7%	1314.3	1346.1	31.8	2.4%
46.9%	1302.1	1338.9	36.8	2.8%
48.1%	1293.5	1325.0	31.5	2.4%
49.4%	1291.7	1314.6	22.9	1.8%
50.6%	1279.5	1312.4	32.9	2.6%
51.9%	1277.5	1290.5	13.0	1.0%
53.1%	1249.0	1281.4	32.4	2.6%
54.3%	1242.7	1271.7	29.0	2.3%
55.6%	1240.1	1269.3	29.3	2.4%
56.8%	1232.1	1265.4	33.3	2.7%
58.0%	1230.4	1261.8	31.4	2.6%
59.3%	1206.2	1254.5	48.3	4.0%
60.5%	1204.8	1220.1	15.3	1.3%
61.7%	1186.2	1206.8	20.7	1.7%
63.0%	1146.3	1167.8	21.5	1.9%
64.2%	1122.1	1165.6	43.5	3.9%
65.4%	1121.4	1133.5	12.1	1.1%
66.7%	1112.4	1121.4	9.0	0.8%
67.9%	1110.9	1121.1	10.2	0.9%
69.1%	1108.8	1117.8	9.0	0.8%
70.4%	1105.4	1117.2	11.9	1.1%
71.6%	1101.5	1114.8	13.3	1.2%
72.8%	1086.1	1105.5	19.4	1.8%
74.1%	1039.4	1065.2	25.9	2.5%
75.3%	1039.2	1060.4	21.2	2.0%
76.5%	1037.8	1047.8	10.1	1.0%
77.8%	1027.3	1047.3	20.0	1.9%
79.0%	1020.4	1045.9	25.5	2.5%
80.2%	1005.0	1006.6	1.6	0.2%
81.5%	994.3	1006.2	11.8	1.2%
82.7%	989.9	1000.8	10.8	1.1%
84.0%	989.4	996.1	6.7	0.7%
85.2%	989.3	941.6	-47.6	-4.8%
86.4%	971.6	939.7	-31.9	-3.3%
87.7%	968.9	931.1	-37.8	-3.9%
88.9%	938.2	930.4	-7.8	-0.8%
90.1%	935.6	924.9	-10.7	-1.1%
91.4%	924.9	917.9	-7.1	-0.8%
92.6%	922.6	895.5	-27.1	-2.9%
93.8%	918.6	888.4	-30.2	-3.3%
95.1%	914.3	871.5	-42.8	-4.7%
96.3%	843.7	863.1	19.4	2.3%
97.5%	811.0	744.1	-66.9	-8.2%
98.8%	774.5	729.1	-45.5	-5.9%
100.0%	749.3	610.4	-138.9	-18.5%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3049.4	3041.4	-8.0	-0.3%
1.2%	2715.6	2798.2	82.6	3.0%
2.5%	2693.8	2755.0	61.2	2.3%
3.7%	2638.3	2719.7	81.4	3.1%
4.9%	2631.4	2676.6	45.2	1.7%
6.2%	2619.8	2676.1	56.3	2.1%
7.4%	2619.3	2658.6	39.3	1.5%
8.6%	2615.2	2590.4	-24.8	-0.9%
9.9%	2604.2	2589.1	-15.1	-0.6%
11.1%	2593.5	2560.4	-33.1	-1.3%
12.3%	2552.3	2559.5	7.2	0.3%
13.6%	2528.1	2558.0	30.0	1.2%
14.8%	2510.7	2480.1	-30.5	-1.2%
16.0%	2501.6	2455.7	-45.9	-1.8%
17.3%	2499.4	2439.0	-60.4	-2.4%
18.5%	2498.3	2428.5	-69.8	-2.8%
19.8%	2482.9	2417.7	-65.2	-2.6%
21.0%	2458.5	2416.3	-42.1	-1.7%
22.2%	2457.6	2408.4	-49.1	-2.0%
23.5%	2455.5	2401.2	-54.3	-2.2%
24.7%	2442.4	2391.0	-51.5	-2.1%
25.9%	2426.1	2378.5	-47.7	-2.0%
27.2%	2399.3	2369.7	-29.6	-1.2%
28.4%	2391.5	2368.1	-23.4	-1.0%
29.6%	2379.9	2353.8	-26.1	-1.1%
30.9%	2354.4	2351.2	-3.3	-0.1%
32.1%	2344.3	2340.9	-3.4	-0.1%
33.3%	2343.8	2327.3	-16.5	-0.7%
34.6%	2322.5	2324.5	2.0	0.1%
35.8%	2280.1	2312.3	32.2	1.4%
37.0%	2272.4	2311.1	38.7	1.7%
38.3%	2249.6	2307.3	57.7	2.6%
39.5%	2242.7	2304.0	61.3	2.7%
40.7%	2241.7	2263.7	22.0	1.0%
42.0%	2226.1	2251.7	25.6	1.1%
43.2%	2219.1	2218.0	-1.1	0.0%
44.4%	2194.1	2200.2	6.1	0.3%
45.7%	2186.7	2195.8	9.1	0.4%
46.9%	2176.5	2185.7	9.2	0.4%
48.1%	2148.9	2184.7	35.8	1.7%
49.4%	2127.3	2151.8	24.5	1.2%
50.6%	2070.8	2114.0	43.3	2.1%
51.9%	2040.8	2015.0	-25.9	-1.3%
53.1%	2004.1	2004.3	0.2	0.0%
54.3%	1954.9	1991.9	36.9	1.9%
55.6%	1126.6	1109.7	-16.9	-1.5%
56.8%	1113.1	1109.1	-4.0	-0.4%
58.0%	1110.6	1096.4	-14.1	-1.3%
59.3%	1108.9	1029.1	-79.8	-7.2%
60.5%	1081.1	1005.2	-76.0	-7.0%
61.7%	1069.9	988.0	-81.9	-7.7%
63.0%	1045.6	985.8	-59.8	-5.7%
64.2%	996.1	980.8	-15.3	-1.5%
65.4%	989.2	966.2	-23.0	-2.3%
66.7%	955.1	946.5	-8.6	-0.9%
67.9%	915.7	945.6	29.9	3.3%
69.1%	915.5	928.7	13.3	1.4%
70.4%	903.3	922.1	18.8	2.1%
71.6%	897.7	895.3	-2.4	-0.3%
72.8%	892.0	884.0	-7.9	-0.9%
74.1%	890.2	864.0	-26.3	-2.9%
75.3%	881.8	855.2	-26.6	-3.0%
76.5%	872.6	854.2	-18.4	-2.1%
77.8%	869.6	845.8	-23.8	-2.7%
79.0%	851.9	833.4	-18.5	-2.2%
80.2%	833.4	812.6	-20.9	-2.5%
81.5%	829.6	799.9	-29.7	-3.6%
82.7%	813.1	796.7	-16.3	-2.0%
84.0%	727.8	686.1	-41.7	-5.7%
85.2%	692.8	639.7	-53.2	-7.7%
86.4%	590.3	621.2	30.8	5.2%
87.7%	568.6	615.4	46.8	8.2%
88.9%	512.0	520.0	8.0	1.6%
90.1%	510.9	515.8	5.0	1.0%
91.4%	508.5	511.6	3.1	0.6%
92.6%	502.5	510.3	7.7	1.5%
93.8%	491.1	506.6	15.5	3.2%
95.1%	458.9	460.5	1.7	0.4%
96.3%	448.4	433.8	-14.6	-3.3%
97.5%	423.1	429.6	6.5	1.5%
98.8%	415.9	394.5	-21.4	-5.1%
100.0%	370.4	325.5	-44.8	-12.1%

Figure SQ-27-b
Old River at Rock Slough, Monthly EC
Probability of Exceedance

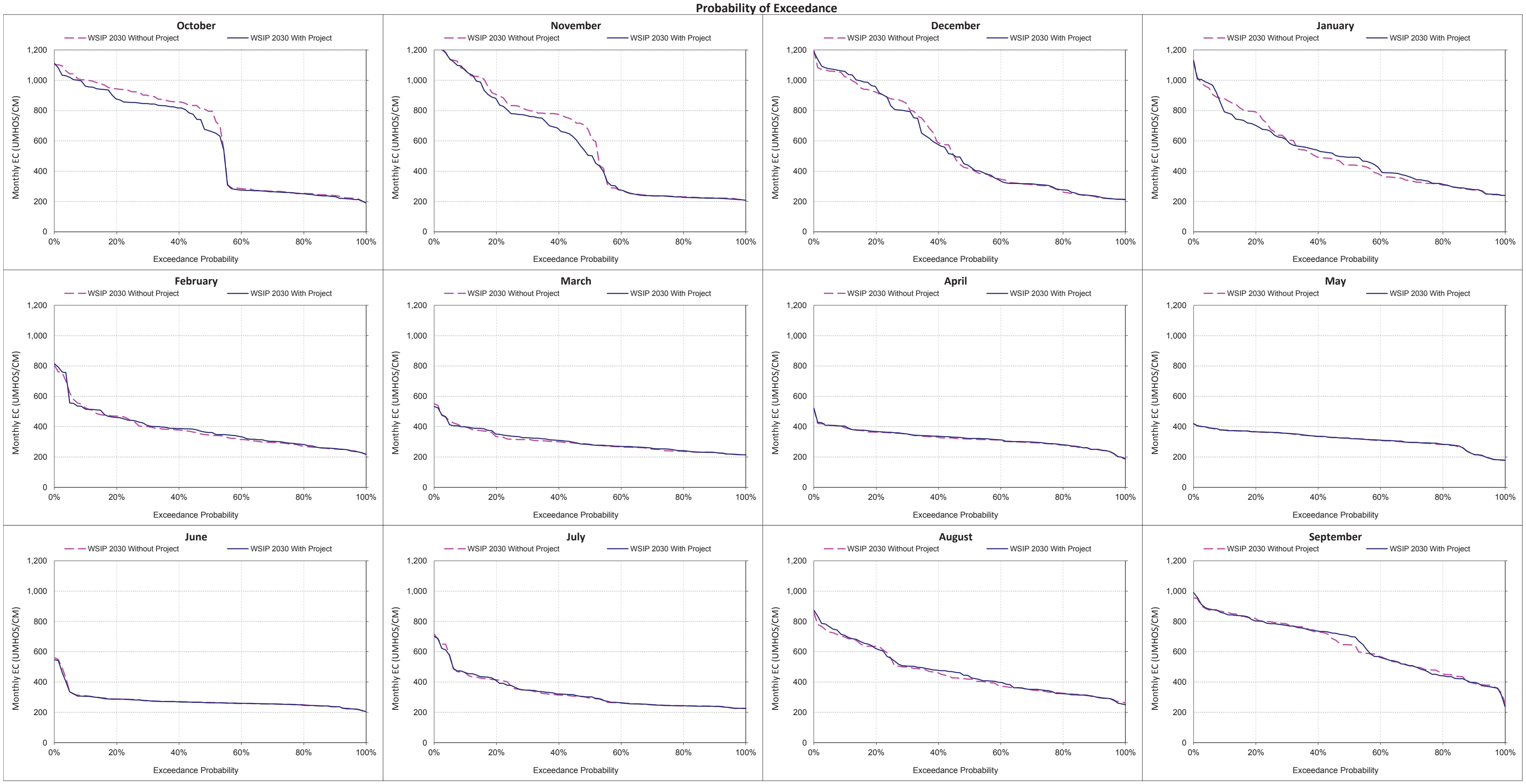


Table SQ-27-b

Old River at Rock Slough, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1104.0	1112.1	8.2	0.7%
1.2%	1102.5	1080.9	-21.6	-2.0%
2.5%	1095.9	1033.9	-62.1	-5.7%
3.7%	1061.5	1029.6	-31.9	-3.0%
4.9%	1043.4	1020.1	-23.2	-2.2%
6.2%	1042.9	1004.3	-38.6	-3.7%
7.4%	1011.4	1000.6	-10.8	-1.1%
8.6%	1004.4	996.2	-8.3	-0.8%
9.9%	1003.1	961.4	-41.7	-4.2%
11.1%	999.2	957.1	-42.1	-4.2%
12.3%	993.9	954.6	-39.3	-3.9%
13.6%	984.8	944.8	-40.0	-4.1%
14.8%	977.5	941.0	-36.5	-3.7%
16.0%	969.0	939.0	-30.0	-3.1%
17.3%	952.5	935.8	-16.7	-1.8%
18.5%	945.0	902.6	-42.5	-4.5%
19.8%	944.6	878.3	-66.3	-7.0%
21.0%	940.4	871.2	-69.2	-7.4%
22.2%	938.8	857.1	-81.7	-8.7%
23.5%	935.6	855.9	-79.7	-8.5%
24.7%	925.4	854.0	-71.4	-7.7%
25.9%	924.4	853.5	-70.9	-7.7%
27.2%	922.2	849.6	-72.6	-7.9%
28.4%	902.6	847.1	-55.5	-6.1%
29.6%	902.2	846.5	-55.7	-6.2%
30.9%	894.4	843.5	-50.8	-5.7%
32.1%	892.3	843.1	-49.1	-5.5%
33.3%	875.1	835.1	-40.0	-4.6%
34.6%	874.3	832.3	-42.0	-4.8%
35.8%	868.2	832.2	-36.0	-4.1%
37.0%	861.0	825.7	-35.3	-4.1%
38.3%	859.2	824.1	-35.0	-4.1%
39.5%	857.1	818.3	-38.9	-4.5%
40.7%	856.4	817.7	-38.7	-4.5%
42.0%	847.8	806.9	-40.9	-4.8%
43.2%	834.6	784.6	-50.0	-6.0%
44.4%	833.7	776.9	-56.8	-6.8%
45.7%	833.6	742.9	-90.7	-10.9%
46.9%	811.1	740.6	-70.5	-8.7%
48.1%	810.4	676.5	-134.0	-16.5%
49.4%	796.0	668.9	-127.2	-16.0%
50.6%	795.9	660.8	-135.1	-17.0%
51.9%	724.8	650.2	-74.6	-10.3%
53.1%	702.3	631.8	-70.5	-10.0%
54.3%	544.3	537.7	-6.7	-1.2%
55.6%	310.4	308.4	-2.0	-0.6%
56.8%	291.9	285.0	-6.8	-2.3%
58.0%	290.5	280.8	-9.7	-3.3%
59.3%	287.0	276.2	-10.7	-3.7%
60.5%	283.7	275.5	-8.1	-2.9%
61.7%	282.9	273.3	-9.6	-3.4%
63.0%	281.7	272.7	-9.0	-3.2%
64.2%	273.0	271.6	-1.5	-0.5%
65.4%	272.7	271.4	-1.3	-0.5%
66.7%	271.3	270.2	-1.1	-0.4%
67.9%	270.0	267.8	-2.2	-0.8%
69.1%	268.4	265.4	-3.0	-1.1%
70.4%	267.2	263.8	-3.3	-1.3%
71.6%	267.0	262.2	-4.8	-1.8%
72.8%	266.6	261.9	-4.7	-1.8%
74.1%	262.8	258.9	-3.9	-1.5%
75.3%	257.4	258.8	1.5	0.6%
76.5%	257.2	257.1	-0.1	0.0%
77.8%	255.1	252.9	-2.2	-0.9%
79.0%	253.6	252.8	-0.9	-0.3%
80.2%	253.1	250.9	-2.3	-0.9%
81.5%	252.9	247.5	-5.4	-2.1%
82.7%	251.7	246.2	-5.5	-2.2%
84.0%	246.6	239.9	-6.7	-2.7%
85.2%	245.3	239.3	-5.9	-2.4%
86.4%	244.1	237.2	-6.9	-2.8%
87.7%	243.5	236.7	-6.8	-2.8%
88.9%	240.2	233.4	-6.7	-2.8%
90.1%	239.9	232.7	-7.2	-3.0%
91.4%	234.3	222.4	-11.9	-5.1%
92.6%	226.8	220.8	-6.0	-2.6%
93.8%	223.6	219.1	-4.6	-2.0%
95.1%	222.7	217.1	-5.6	-2.5%
96.3%	220.8	213.9	-6.9	-3.1%
97.5%	215.9	213.9	-2.0	-0.9%
98.8%	202.3	201.0	-1.4	-0.7%
100.0%	191.1	190.9	-0.3	-0.1%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1276.4	1308.7	32.3	2.5%
1.2%	1231.8	1265.1	33.3	2.7%
2.5%	1199.3	1211.7	12.4	1.0%
3.7%	1184.1	1180.0	-4.1	-0.3%
4.9%	1136.3	1143.2	6.9	0.6%
6.2%	1133.2	1121.7	-11.5	-1.0%
7.4%	1126.0	1099.3	-26.7	-2.4%
8.6%	1082.0	1095.5	13.5	1.2%
9.9%	1072.7	1067.0	-5.7	-0.5%
11.1%	1037.2	1046.2	9.1	0.9%
12.3%	1027.1	1033.8	6.7	0.7%
13.6%	1026.5	994.2	-32.3	-3.1%
14.8%	1022.1	988.1	-34.0	-3.3%
16.0%	1006.3	933.9	-72.4	-7.2%
17.3%	958.6	907.2	-51.4	-5.4%
18.5%	919.2	889.1	-30.1	-3.3%
19.8%	907.0	880.3	-26.7	-2.9%
21.0%	897.7	835.9	-61.8	-6.9%
22.2%	884.1	827.8	-56.3	-6.4%
23.5%	849.2	805.7	-43.5	-5.1%
24.7%	833.3	780.2	-53.2	-6.4%
25.9%	833.0	779.0	-54.1	-6.5%
27.2%	829.2	774.7	-54.5	-6.6%
28.4%	814.8	772.5	-42.3	-5.2%
29.6%	805.4	767.6	-37.8	-4.7%
30.9%	798.7	760.4	-38.2	-4.8%
32.1%	797.1	759.4	-37.7	-4.7%
33.3%	783.4	752.2	-31.2	-4.0%
34.6%	783.4	750.4	-33.0	-4.2%
35.8%	781.2	725.8	-55.4	-7.1%
37.0%	780.4	699.2	-81.2	-10.4%
38.3%	780.2	693.4	-86.8	-11.1%
39.5%	777.1	686.5	-90.6	-11.7%
40.7%	769.6	662.4	-107.2	-13.9%
42.0%	758.3	655.8	-102.5	-13.5%
43.2%	750.1	648.0	-102.1	-13.6%
44.4%	739.3	630.5	-108.8	-14.7%
45.7%	717.1	606.0	-111.1	-15.5%
46.9%	716.2	569.0	-147.2	-20.6%
48.1%	704.1	538.9	-165.1	-23.5%
49.4%	676.3	503.5	-172.8	-25.6%
50.6%	611.6	503.1	-108.5	-17.7%
51.9%	593.9	453.1	-140.8	-23.7%
53.1%	437.2	434.2	-3.0	-0.7%
54.3%	419.7	398.6	-21.2	-5.0%
55.6%	314.9	329.0	14.1	4.5%
56.8%	289.5	306.1	16.6	5.7%
58.0%	289.4	304.1	14.7	5.1%
59.3%	276.4	278.6	2.2	0.8%
60.5%	271.9	273.4	1.6	0.6%
61.7%	260.7	262.0	1.4	0.5%
63.0%	252.2	254.6	2.4	1.0%
64.2%	250.7	248.7	-2.0	-0.8%
65.4%	248.1	244.2	-4.0	-1.6%
66.7%	244.1	240.9	-3.2	-1.3%
67.9%	241.9	238.6	-3.3	-1.4%
69.1%	237.9	238.5	0.6	0.2%
70.4%	237.5	238.0	0.5	0.2%
71.6%	236.8	237.7	0.9	0.4%
72.8%	236.7	236.6	-0.1	0.0%
74.1%	235.6	236.5	0.9	0.4%
75.3%	235.5	233.5	-2.0	-0.8%
76.5%	234.3	231.4	-2.9	-1.2%
77.8%	232.6	230.1	-2.6	-1.1%
79.0%	232.1	229.5	-2.6	-1.1%
80.2%	230.9	226.6	-4.3	-1.8%
81.5%	229.4	226.5	-2.9	-1.3%
82.7%	228.2	225.1	-3.1	-1.4%
84.0%	227.0	224.4	-2.6	-1.1%
85.2%	225.9	223.8	-2.1	-0.9%
86.4%	225.0	223.5	-1.6	-0.7%
87.7%	224.8	222.6	-2.2	-1.0%
88.9%	223.9	222.0	-1.9	-0.8%
90.1%	223.5	221.7	-1.7	-0.8%
91.4%	222.0	221.6	-0.3	-0.1%
92.6%	221.9	220.5	-1.4	-0.6%
93.8%	221.7	218.3	-3.4	-1.6%
95.1%	220.6	216.7	-4.0	-1.8%
96.3%	220.0	214.8	-5.2	-2.4%
97.5%	213.6	214.1	0.5	0.2%
98.8%	212.9	210.8	-2.1	-1.0%
100.0%	207.3	207.5	0.2	0.1%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1200.2	1187.6	-12.6	-1.1%
1.2%	1083.7	1138.3	54.6	5.0%
2.5%	1071.6	1093.4	21.8	2.0%
3.7%	1069.8	1082.4	12.6	1.2%
4.9%	1060.7	1076.0	15.3	1.4%
6.2%	1059.5	1072.3	12.9	1.2%
7.4%	1055.0	1068.3	13.3	1.3%
8.6%	1052.7	1063.1	10.4	1.0%
9.9%	1024.3	1059.5	35.2	3.4%
11.1%	1017.0	1037.8	20.7	2.0%
12.3%	997.1	1034.4	37.3	3.7%
13.6%	983.2	1002.0	18.8	1.9%
14.8%	951.6	997.4	45.8	4.8%
16.0%	941.0	988.5	47.6	5.1%
17.3%	939.5	987.6	48.1	5.1%
18.5%	928.1	964.0	35.9	3.9%
19.8%	923.6	960.2	36.6	4.0%
21.0%	911.2	916.8	5.7	0.6%
22.2%	907.1	902.7	-4.4	-0.5%
23.5%	887.3	889.4	2.2	0.2%
24.7%	878.6	832.8	-45.8	-5.2%
25.9%	872.5	806.5	-66.0	-7.6%
27.2%	871.3	803.9	-67.5	-7.7%
28.4%	862.2	801.8	-60.4	-7.0%
29.6%	849.4	796.9	-52.5	-6.2%
30.9%	802.7	794.2	-8.4	-1.1%
32.1%	796.2	752.0	-44.2	-5.6%
33.3%	763.3	749.8	-13.5	-1.8%
34.6%	750.7	652.1	-98.6	-13.1%
35.8%	720.2	634.8	-85.5	-11.9%
37.0%	683.7	617.8	-65.9	-9.6%
38.3%	656.2	595.6	-60.6	-9.2%
39.5%	594.6	580.7	-14.0	-2.4%
40.7%	578.5	566.5	-12.0	-2.1%
42.0%	575.6	559.1	-16.5	-2.9%
43.2%	574.6	517.1	-57.5	-10.0%
44.4%	519.8	511.7	-8.1	-1.6%
45.7%	472.8	493.9	21.1	4.5%
46.9%	443.8	493.3	49.5	11.2%
48.1%	425.6	449.3	23.7	5.6%
49.4%	419.6	441.4	21.7	5.2%
50.6%	414.2	421.3	7.1	1.7%
51.9%	397.3	402.7	5.4	1.4%
53.1%	385.5	401.0	15.5	4.0%
54.3%	384.3	391.7	7.4	1.9%
55.6%	382.3	378.7	-3.5	-0.9%
56.8%	363.7	374.8	11.1	3.0%
58.0%	362.4	354.6	-7.8	-2.1%
59.3%	350.0	343.9	-6.0	-1.7%
60.5%	345.0	329.9	-15.1	-4.4%
61.7%	339.1	322.6	-16.6	-4.9%
63.0%	324.9	320.0	-4.9	-1.5%
64.2%	322.9	318.7	-4.2	-1.3%
65.4%	320.4	318.6	-1.8	-0.6%
66.7%	315.1	318.2	3.0	1.0%
67.9%	314.8	318.0	3.2	1.0%
69.1%	312.6	317.9	5.3	1.7%
70.4%	310.5	316.8	6.3	2.0%
71.6%	308.1	312.4	4.3	1.4%
72.8%	305.2	310.8	5.6	1.8%
74.1%	304.7	309.0	4.4	1.4%
75.3%	300.9	305.7	4.8	1.6%
76.5%	292.8	296.3	3.5	1.2%
77.8%	281.8	282.7	0.9	0.3%
79.0%	273.1	278.3	5.2	1.9%
80.2%	260.5	276.7	16.2	6.2%
81.5%	257.7	275.6	17.9	6.9%
82.7%	252.9	260.5	7.7	3.0%
84.0%	252.0	256.0	4.0	1.6%
85.2%	246.1	245.9	-0.2	-0.1%
86.4%	241.9	243.9	2.0	0.8%
87.7%	239.8	241.9	2.1	0.9%
88.9%	238.3	239.0	0.7	0.3%
90.1%	233.5	237.8	4.3	1.8%
91.4%	225.9	232.8	6.9	3.1%
92.6%	221.1	225.4	4.3	1.9%
93.8%	220.5	221.1	0.6	0.3%
95.1%	218.5	220.8	2.3	1.1%
96.3%	218.3	216.4	-2.0	-0.9%
97.5%	215.9	215.1	-0.8	-0.4%
98.8%	215.0	214.7	-0.3	-0.2%
100.0%	213.3	213.5	0.2	0.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1133.0	1128.2	-4.8	-0.4%
1.2%	1018.8	1007.6	-11.2	-1.1%
2.5%	981.7	1006.4	24.6	2.5%
3.7%	962.3	990.6	28.4	2.9%
4.9%	949.2	980.2	31.0	3.3%
6.2%	905.0	965.9	60.9	6.7%
7.4%	889.0	916.7	27.6	3.1%
8.6%	880.9	852.6	-28.3	-3.2%
9.9%	879.1	791.4	-87.7	-10.0%
11.1%	864.2	783.5	-80.7	-9.3%
12.3%	850.3	774.4	-75.9	-8.9%
13.6%	842.5	744.5	-98.0	-11.6%
14.8%	818.6	740.8	-77.8	-9.5%
16.0%	802.3	734.7	-67.6	-8.4%
17.3%	796.2	719.0	-77.3	-9.7%
18.5%	796.1	714.2	-81.9	-10.3%
19.8%	792.7	705.1	-87.6	-11.1%
21.0%	778.4	690.1	-88.3	-11.3%
22.2%	738.7	675.8	-62.9	-8.5%
23.5%	720.1	673.3	-46.8	-6.5%
24.7%	678.1	663.2	-14.9	-2.2%
25.9%	661.0	637.9	-23.2	-3.5%
27.2%	637.9	625.2	-12.7	-2.0%
28.4%	637.7	622.9	-14.8	-2.3%
29.6%	616.0	610.9	-5.1	-0.8%
30.9%	605.0	583.5	-21.5	-3.6%
32.1%	601.9	570.9	-31.0	-5.2%
33.3%	546.1	566.0	19.9	3.6%
34.6%	542.0	563.0	21.0	3.9%
35.8%	539.3	559.4	20.1	3.7%
37.0%	526.0	552.9	26.9	5.1%
38.3%	508.9	546.0	37.1	7.3%
39.5%	495.6	540.4	44.9	9.1%
40.7%	488.4	529.5	41.1	8.4%
42.0%	487.5	526.6	39.1	8.0%
43.2%	486.3	522.7	36.4	7.5%
44.4%	481.8	520.0	38.2	7.9%
45.7%	474.5	502.2	27.6	5.8%
46.9%	468.3	498.1	29.8	6.4%
48.1%	444.1	495.2	51.0	11.5%
49.4%	441.4	492.4	51.1	11.6%
50.6%	440.6	492.3	51.6	11.7%
51.9%	440.5	492.1	51.5	11.7%
53.1%	434.9	490.6	55.7	12.8%
54.3%	434.1	466.3	32.2	7.4%
55.6%	427.3	464.1	36.7	8.6%
56.8%	416.8	456.0	39.3	9.4%
58.0%	391.7	444.9	53.2	13.6%
59.3%	383.2	426.1	42.9	11.2%
60.5%	368.7	391.0	22.2	6.0%
61.7%	362.1	389.7	27.6	7.6%
63.0%	361.9	388.7	26.9	7.4%
64.2%	359.2	387.2	28.0	7.8%
65.4%	355.0	385.7	30.7	8.6%
66.7%	354.7	376.9	22.2	6.3%
67.9%	342.8	372.6	29.8	8.7%
69.1%	337.0	363.2	26.2	7.8%
70.4%	333.4	354.6	21.2	6.3%
71.6%	328.3	343.2	14.9	4.5%
72.8%	327.2	343.1	15.9	4.9%
74.1%	320.6	337.4	16.8	5.2%
75.3%	320.1	334.0	13.8	4.3%
76.5%	319.0	321.0	1.9	0.6%
77.8%	317.9	318.9	1.0	0.3%
79.0%	313.2	318.6	5.5	1.8%
80.2%	308.2	313.0	4.9	1.6%
81.5%	307.4	307.4	0.0	0.0%
82.7%	295.8	298.6	2.8	0.9%
84.0%	294.5	294.2	-0.3	-0.1%
85.2%	290.2	290.9	0.6	0.2%
86.4%	285.0	290.1	5.1	1.8%
87.7%	281.9	284.9	3.0	1.0%
88.9%	278.0	281.6	3.6	1.3%
90.1%	275.9	279.1	3.1	1.1%
91.4%	274.6	277.9	3.3	1.2%
92.6%	271.4	267.6	-3.8	-1.4%
93.8%	251.0	249.1	-1.9	-0.8%
95.1%	247.7	249.0	1.3	0.5%
96.3%	245.7	248.2	2.4	1.0%
97.5%	244.8	247.3	2.5	1.0%
98.8%	243.8	241.2	-2.6	-1.1%
100.0%	240.8	240.8	0.1	0.0%

Table SQ-27-b

Old River at Rock Slough, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	804.6	814.3	9.7	1.2%
1.2%	762.0	792.5	30.5	4.0%
2.5%	757.8	759.4	1.6	0.2%
3.7%	702.2	757.4	55.3	7.9%
4.9%	623.4	557.0	-66.4	-10.7%
6.2%	579.3	552.6	-26.7	-4.6%
7.4%	556.2	536.0	-20.2	-3.6%
8.6%	548.2	533.9	-14.3	-2.6%
9.9%	524.1	515.9	-8.2	-1.6%
11.1%	514.3	513.9	-0.4	-0.1%
12.3%	508.4	513.0	4.6	0.9%
13.6%	485.4	509.7	24.3	5.0%
14.8%	478.6	509.1	30.5	6.4%
16.0%	475.0	479.7	4.7	1.0%
17.3%	474.5	467.9	-6.6	-1.4%
18.5%	470.2	464.5	-5.7	-1.2%
19.8%	470.0	459.8	-10.1	-2.2%
21.0%	467.6	458.8	-8.8	-1.9%
22.2%	464.9	451.2	-13.7	-2.9%
23.5%	454.4	442.7	-11.6	-2.6%
24.7%	433.9	441.6	7.7	1.8%
25.9%	428.3	438.6	10.3	2.4%
27.2%	403.6	430.1	26.5	6.6%
28.4%	401.4	425.4	23.9	6.0%
29.6%	400.9	409.2	8.3	2.1%
30.9%	397.4	402.0	4.6	1.2%
32.1%	390.7	401.5	10.8	2.8%
33.3%	388.4	400.9	12.5	3.2%
34.6%	384.8	397.5	12.7	3.3%
35.8%	382.9	395.0	12.1	3.2%
37.0%	382.0	388.4	6.4	1.7%
38.3%	380.9	388.2	7.2	1.9%
39.5%	377.8	387.3	9.5	2.5%
40.7%	376.5	386.3	9.8	2.6%
42.0%	372.0	385.7	13.7	3.7%
43.2%	370.5	384.6	14.2	3.8%
44.4%	364.3	383.9	19.6	5.4%
45.7%	360.6	379.0	18.5	5.1%
46.9%	351.9	370.2	18.2	5.2%
48.1%	347.4	365.3	18.0	5.2%
49.4%	344.7	360.8	16.1	4.7%
50.6%	341.6	360.7	19.1	5.6%
51.9%	341.5	348.3	6.8	2.0%
53.1%	340.0	348.0	8.0	2.4%
54.3%	339.1	347.0	8.0	2.4%
55.6%	327.9	345.4	17.4	5.3%
56.8%	322.5	342.6	20.1	6.2%
58.0%	322.0	340.1	18.1	5.6%
59.3%	315.2	336.2	21.0	6.7%
60.5%	314.8	330.1	15.3	4.9%
61.7%	312.9	320.0	7.1	2.3%
63.0%	305.8	317.0	11.2	3.7%
64.2%	305.8	316.1	10.4	3.4%
65.4%	302.1	314.2	12.1	4.0%
66.7%	298.7	313.7	15.0	5.0%
67.9%	297.0	306.9	9.9	3.3%
69.1%	296.7	303.8	7.1	2.4%
70.4%	295.0	302.3	7.2	2.5%
71.6%	294.8	300.7	6.0	2.0%
72.8%	292.1	299.7	7.6	2.6%
74.1%	290.4	295.4	5.0	1.7%
75.3%	285.6	291.1	5.5	1.9%
76.5%	284.0	289.7	5.6	2.0%
77.8%	281.5	285.9	4.4	1.5%
79.0%	274.1	283.9	9.9	3.6%
80.2%	268.6	280.6	11.9	4.4%
81.5%	267.1	273.4	6.3	2.4%
82.7%	264.4	272.6	8.2	3.1%
84.0%	263.4	265.8	2.4	0.9%
85.2%	260.3	260.3	0.0	0.0%
86.4%	259.7	259.3	-0.4	-0.1%
87.7%	256.0	258.6	2.6	1.0%
88.9%	254.0	256.1	2.0	0.8%
90.1%	252.2	255.4	3.2	1.3%
91.4%	250.7	252.5	1.8	0.7%
92.6%	250.6	250.5	-0.1	0.0%
93.8%	248.5	248.8	0.4	0.1%
95.1%	242.1	240.3	-1.7	-0.7%
96.3%	239.7	236.5	-3.2	-1.3%
97.5%	235.6	232.7	-2.9	-1.2%
98.8%	226.2	226.2	0.0	0.0%
100.0%	216.4	217.0	0.7	0.3%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	551.5	532.8	-18.6	-3.4%
1.2%	539.3	523.4	-16.0	-3.0%
2.5%	474.7	477.4	2.7	0.6%
3.7%	462.9	464.9	2.0	0.4%
4.9%	440.2	413.2	-27.0	-6.1%
6.2%	424.2	406.4	-17.8	-4.2%
7.4%	415.6	405.1	-10.5	-2.5%
8.6%	404.8	399.5	-5.3	-1.3%
9.9%	399.8	399.1	-0.7	-0.2%
11.1%	390.8	394.9	4.1	1.0%
12.3%	379.4	389.8	10.4	2.7%
13.6%	377.0	389.5	12.5	3.3%
14.8%	373.9	389.0	15.1	4.0%
16.0%	370.2	385.5	15.3	4.1%
17.3%	368.9	375.2	6.3	1.7%
18.5%	361.2	373.8	12.6	3.5%
19.8%	335.8	350.8	15.0	4.5%
21.0%	330.6	348.8	18.2	5.5%
22.2%	329.8	344.5	14.7	4.5%
23.5%	318.4	340.8	22.4	7.0%
24.7%	317.2	336.5	19.4	6.1%
25.9%	315.7	335.2	19.5	6.2%
27.2%	315.2	333.8	18.5	5.9%
28.4%	314.8	327.6	12.7	4.0%
29.6%	314.3	327.1	12.8	4.1%
30.9%	314.3	324.8	10.5	3.4%
32.1%	308.1	322.9	14.7	4.8%
33.3%	307.9	322.8	14.9	4.8%
34.6%	306.6	319.7	13.1	4.3%
35.8%	305.9	317.9	12.0	3.9%
37.0%	302.9	313.2	10.3	3.4%
38.3%	302.7	311.8	9.1	3.0%
39.5%	299.8	309.8	10.0	3.3%
40.7%	299.4	308.4	9.1	3.0%
42.0%	295.5	305.5	10.0	3.4%
43.2%	295.1	302.6	7.5	2.5%
44.4%	292.5	297.4	4.9	1.7%
45.7%	290.1	292.4	2.3	0.8%
46.9%	289.8	285.4	-4.4	-1.5%
48.1%	287.7	284.5	-3.2	-1.1%
49.4%	285.1	282.0	-3.2	-1.1%
50.6%	281.7	278.9	-2.9	-1.0%
51.9%	278.4	278.1	-0.4	-0.1%
53.1%	276.0	277.2	1.2	0.4%
54.3%	274.0	276.9	2.9	1.1%
55.6%	270.5	274.5	3.9	1.5%
56.8%	269.6	274.4	4.8	1.8%
58.0%	268.5	271.0	2.6	1.0%
59.3%	267.4	270.8	3.4	1.3%
60.5%	264.9	269.7	4.8	1.8%
61.7%	264.3	268.9	4.6	1.7%
63.0%	263.6	268.1	4.5	1.7%
64.2%	263.2	265.9	2.7	1.0%
65.4%	262.6	264.9	2.4	0.9%
66.7%	261.7	264.2	2.5	1.0%
67.9%	259.1	261.8	2.6	1.0%
69.1%	253.8	259.5	5.8	2.3%
70.4%	250.5	255.2	4.7	1.9%
71.6%	250.2	253.6	3.5	1.4%
72.8%	250.1	253.6	3.5	1.4%
74.1%	241.0	253.5	12.5	5.2%
75.3%	240.8	251.1	10.3	4.3%
76.5%	239.0	248.5	9.5	4.0%
77.8%	238.6	243.0	4.4	1.9%
79.0%	238.3	241.3	3.0	1.3%
80.2%	236.2	241.2	5.0	2.1%
81.5%	234.5	237.3	2.8	1.2%
82.7%	233.9	234.3	0.3	0.1%
84.0%	232.0	232.7	0.7	0.3%
85.2%	231.7	231.8	0.1	0.0%
86.4%	230.7	231.6	0.9	0.4%
87.7%	230.4	230.8	0.4	0.2%
88.9%	230.2	230.7	0.5	0.2%
90.1%	229.7	230.2	0.4	0.2%
91.4%	225.2	225.5	0.3	0.1%
92.6%	225.2	224.9	-0.2	-0.1%
93.8%	219.4	219.4	0.0	0.0%
95.1%	218.5	218.6	0.0	0.0%
96.3%	217.1	218.3	1.2	0.6%
97.5%	215.2	215.2	0.0	0.0%
98.8%	214.8	214.6	-0.1	-0.1%
100.0%	212.4	213.9	1.5	0.7%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	521.0	520.4	-0.6	-0.1%
1.2%	421.3	427.8	6.6	1.6%
2.5%	418.8	425.8	7.0	1.7%
3.7%	418.8	408.7	-10.1	-2.4%
4.9%	408.5	408.7	0.2	0.0%
6.2%	407.7	408.3	0.6	0.1%
7.4%	407.0	405.6	-1.4	-0.3%
8.6%	405.5	404.7	-0.8	-0.2%
9.9%	392.9	404.1	11.2	2.9%
11.1%	387.0	389.8	2.8	0.7%
12.3%	378.6	379.9	1.3	0.4%
13.6%	376.5	378.2	1.7	0.5%
14.8%	375.7	376.9	1.1	0.3%
16.0%	372.5	376.3	3.8	1.0%
17.3%	364.6	372.5	8.0	2.2%
18.5%	364.3	369.6	5.2	1.4%
19.8%	363.7	367.5	3.7	1.0%
21.0%	362.7	366.5	3.8	1.0%
22.2%	362.1	364.8	2.7	0.7%
23.5%	361.8	363.0	1.3	0.4%
24.7%	358.8	362.6	3.8	1.1%
25.9%	357.0	359.1	2.2	0.6%
27.2%	355.9	358.8	2.9	0.8%
28.4%	354.5	354.7	0.1	0.0%
29.6%	352.0	353.1	1.0	0.3%
30.9%	348.6	348.1	-0.5	-0.1%
32.1%	341.4	344.6	3.2	0.9%
33.3%	341.2	342.1	1.0	0.3%
34.6%	337.9	341.5	3.7	1.1%
35.8%	335.0	340.3	5.4	1.6%
37.0%	334.1	339.4	5.4	1.6%
38.3%	333.0	337.8	4.8	1.4%
39.5%	332.8	336.6	3.8	1.1%
40.7%	326.2	335.4	9.2	2.8%
42.0%	325.6	334.7	9.1	2.8%
43.2%	325.3	333.7	8.4	2.6%
44.4%	325.1	330.9	5.8	1.8%
45.7%	321.3	330.2	8.9	2.8%
46.9%	321.2	328.3	7.0	2.2%
48.1%	319.7	325.2	5.5	1.7%
49.4%	318.6	322.4	3.8	1.2%
50.6%	318.0	321.6	3.6	1.1%
51.9%	316.9	321.5	4.5	1.4%
53.1%	315.2	321.3	6.1	1.9%
54.3%	314.8	319.6	4.8	1.5%
55.6%	314.1	319.5	5.4	1.7%
56.8%	313.4	317.5	4.1	1.3%
58.0%	312.2	315.8	3.6	1.2%
59.3%	312.2	313.6	1.4	0.4%
60.5%	302.4	311.8	9.4	3.1%
61.7%	302.3	303.9	1.6	0.5%
63.0%	301.4	302.5	1.1	0.4%
64.2%	299.6	301.6	2.0	0.7%
65.4%	299.2	300.9	1.7	0.6%
66.7%	298.2	300.9	2.8	0.9%
67.9%	296.8	300.5	3.7	1.3%
69.1%	295.5	299.3	3.9	1.3%
70.4%	293.8	297.9	4.1	1.4%
71.6%	293.5	295.6	2.1	0.7%
72.8%	289.6	293.7	4.1	1.4%
74.1%	289.0	291.5	2.4	0.8%
75.3%	287.8	288.1	0.2	0.1%
76.5%	285.7	287.2	1.4	0.5%
77.8%	285.3	285.3	0.0	0.0%
79.0%	278.7	282.9	4.1	1.5%
80.2%	278.2	278.7	0.5	0.2%
81.5%	272.2	278.2	6.0	2.2%
82.7%	269.5	272.4	2.9	1.1%
84.0%	268.6	269.8	1.2	0.4%
85.2%	261.6	266.9	5.2	2.0%
86.4%	261.1	260.9	-0.2	-0.1%
87.7%	260.8	260.1	-0.7	-0.3%
88.9%	249.8	250.0	0.2	0.1%
90.1%	249.4	250.0	0.6	0.2%
91.4%	247.7	249.5	1.8	0.7%
92.6%	243.2	243.6	0.4	0.1%
93.8%	240.7	241.0	0.3	0.1%
95.1%	234.5	235.3	0.7	0.3%
96.3%	222.1	221.4	-0.6	-0.3%
97.5%	202.4	202.8	0.4	0.2%
98.8%	194.1	199.0	4.9	2.5%
100.0%	185.6	187.9	2.3	1.3%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	419.8	419.8	0.0	0.0%
1.2%	405.6	405.1	-0.5	-0.1%
2.5%	402.1	400.1	-2.0	-0.5%
3.7%	398.8	398.9	0.1	0.0%
4.9%	391.9	392.6	0.6	0.2%
6.2%	388.4	388.7	0.3	0.1%
7.4%	380.3	386.2	5.9	1.6%
8.6%	378.0	378.0	0.1	0.0%
9.9%	377.1	377.1	0.0	0.0%
11.1%	376.0	373.0	-3.0	-0.8%
12.3%	373.9	372.8	-1.1	-0.3%
13.6%	372.4	372.7	0.3	0.1%
14.8%	372.0	372.4	0.4	0.1%
16.0%	371.8	372.2	0.4	0.1%
17.3%	371.5	371.7	0.2	0.0%
18.5%	366.9	367.0	0.1	0.0%
19.8%	366.5	365.6	-0.9	-0.3%
21.0%	363.8	364.5	0.6	0.2%
22.2%	363.3	364.0	0.8	0.2%
23.5%	363.2	363.2	0.0	0.0%
24.7%	363.0	363.2	0.2	0.1%
25.9%	359.8	361.1	1.3	0.4%
27.2%	359.5	360.5	1.0	0.3%
28.4%	357.3	357.2	-0.1	0.0%
29.6%	356.9	356.8	-0.1	0.0%
30.9%	353.9	354.5	0.5	0.2%
32.1%	349.9	352.0	2.1	0.6%
33.3%	347.2	350.5	3.2	0.9%
34.6%	343.3	347.2	3.9	1.1%
35.8%	343.0	344.2	1.2	0.3%
37.0%	341.2	341.3	0.2	0.1%
38.3%	339.3	339.3	0.0	0.0%
39.5%	335.4	335.9	0.5	0.1%
40.7%	335.3	335.5	0.2	0.1%
42.0%	334.6	334.8	0.2	0.1%
43.2%	330.8	331.2	0.4	0.1%
44.4%	328.1	328.5	0.4	0.1%
45.7%	328.0	328.1	0.2	0.0%
46.9%	325.8	325.9	0.1	0.0%
48.1%	324.2	325.7	1.5	0.5%
49.4%	323.8	324.5	0.7	0.2%
50.6%	321.9	321.0	-0.8	-0.3%
51.9%	320.1	320.3	0.2	0.0%
53.1%	319.4	319.3	-0.1	0.0%
54.3%	319.1	316.8	-2.3	-0.7%
55.6%	316.5	314.5	-2.0	-0.6%
56.8%	312.8	313.1	0.3	0.1%
58.0%	310.2	312.8	2.6	0.9%
59.3%	309.2	310.9	1.7	0.6%
60.5%	307.9	309.2	1.3	0.4%
61.7%	306.8	308.9	2.1	0.7%
63.0%	306.8	307.4	0.6	0.2%
64.2%	303.1	306.7	3.6	1.2%
65.4%	302.8	304.3	1.5	0.5%
66.7%	300.0	304.3	4.2	1.4%
67.9%	298.2	298.2	0.0	0.0%
69.1%	296.2	296.9	0.7	0.2%
70.4%	295.6	296.1	0.5	0.2%
71.6%	295.3	295.7	0.4	0.1%
72.8%	293.5	293.1	-0.4	-0.1%
74.1%	290.6	292.8	2.2	0.8%
75.3%	289.7	292.1	2.3	0.8%
76.5%	288.5	291.4	3.0	1.0%
77.8%	284.1	290.6	6.5	2.3%
79.0%	283.0	286.2	3.3	1.2%
80.2%	282.3	282.9	0.6	0.2%
81.5%	279.9	282.1	2.2	0.8%
82.7%	275.8	279.9	4.2	1.5%
84.0%	275.0	276.3	1.4	0.5%
85.2%	264.4	272.1	7.7	2.9%
86.4%	260.8	261.0	0.2	0.1%
87.7%	239.4	239.7	0.2	0.1%
88.9%	225.1	226.8	1.8	0.8%
90.1%	214.6	215.0	0.4	0.2%
91.4%	214.1	214.9	0.8	0.4%
92.6%	208.4	210.0	1.6	0.8%
93.8%	198.2	198.8	0.6	0.3%
95.1%	191.3	191.6	0.3	0.2%
96.3%	182.7	183.6	0.9	0.5%
97.5%	181.7	182.1	0.5	0.3%
98.8%	179.7	180.1	0.4	0.2%
100.0%	178.0	178.2	0.2	0.1%

Table SQ-27-b

Old River at Rock Slough, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	560.6	546.0	-14.5	-2.6%
1.2%	548.7	542.4	-6.3	-1.1%
2.5%	496.2	463.0	-33.1	-6.7%
3.7%	426.2	403.9	-22.3	-5.2%
4.9%	334.4	334.7	0.3	0.1%
6.2%	321.3	322.0	0.7	0.2%
7.4%	313.2	306.9	-6.3	-2.0%
8.6%	310.8	306.8	-4.0	-1.3%
9.9%	309.8	306.1	-3.7	-1.2%
11.1%	307.0	305.3	-1.7	-0.5%
12.3%	303.0	302.7	-0.3	-0.1%
13.6%	301.4	299.0	-2.4	-0.8%
14.8%	295.5	295.6	0.2	0.1%
16.0%	295.4	289.2	-6.1	-2.1%
17.3%	290.6	288.8	-1.8	-0.6%
18.5%	288.7	286.8	-1.9	-0.6%
19.8%	288.2	286.7	-1.5	-0.5%
21.0%	287.5	286.2	-1.3	-0.4%
22.2%	286.5	286.1	-0.4	-0.1%
23.5%	286.0	285.5	-0.4	-0.2%
24.7%	285.1	283.3	-1.8	-0.6%
25.9%	284.6	281.3	-3.3	-1.2%
27.2%	282.5	281.2	-1.3	-0.5%
28.4%	278.7	278.4	-0.3	-0.1%
29.6%	275.4	278.2	2.8	1.0%
30.9%	274.1	275.0	1.0	0.4%
32.1%	272.8	274.1	1.3	0.5%
33.3%	272.7	273.0	0.3	0.1%
34.6%	271.8	271.4	-0.3	-0.1%
35.8%	271.4	270.8	-0.7	-0.2%
37.0%	271.3	270.7	-0.7	-0.2%
38.3%	271.1	270.4	-0.7	-0.3%
39.5%	270.8	269.3	-1.5	-0.6%
40.7%	270.5	267.6	-3.0	-1.1%
42.0%	269.4	267.3	-2.1	-0.8%
43.2%	267.9	267.1	-0.8	-0.3%
44.4%	267.2	266.3	-0.9	-0.3%
45.7%	267.0	265.6	-1.5	-0.6%
46.9%	267.0	265.3	-1.7	-0.6%
48.1%	266.0	264.8	-1.3	-0.5%
49.4%	265.2	263.2	-2.0	-0.8%
50.6%	264.6	263.2	-1.5	-0.5%
51.9%	264.3	263.0	-1.3	-0.5%
53.1%	263.5	262.9	-0.5	-0.2%
54.3%	262.1	262.2	0.1	0.0%
55.6%	261.3	261.3	0.1	0.0%
56.8%	260.4	260.5	0.1	0.0%
58.0%	258.9	260.2	1.3	0.5%
59.3%	258.9	259.9	1.0	0.4%
60.5%	258.5	259.3	0.7	0.3%
61.7%	257.9	259.2	1.2	0.5%
63.0%	257.8	258.4	0.6	0.2%
64.2%	257.6	258.4	0.8	0.3%
65.4%	256.7	257.7	1.1	0.4%
66.7%	256.6	256.5	-0.1	0.0%
67.9%	256.2	256.4	0.2	0.1%
69.1%	254.8	256.1	1.3	0.5%
70.4%	254.7	255.4	0.7	0.3%
71.6%	254.7	254.5	-0.1	-0.1%
72.8%	253.6	254.3	0.7	0.3%
74.1%	253.2	253.0	-0.3	-0.1%
75.3%	252.6	252.5	-0.1	-0.1%
76.5%	252.2	250.6	-1.6	-0.6%
77.8%	251.8	250.4	-1.4	-0.5%
79.0%	251.2	249.6	-1.6	-0.6%
80.2%	249.2	246.2	-3.1	-1.2%
81.5%	246.2	245.5	-0.7	-0.3%
82.7%	245.1	245.0	-0.2	-0.1%
84.0%	243.4	243.4	0.0	0.0%
85.2%	243.1	242.5	-0.6	-0.2%
86.4%	242.0	242.4	0.4	0.2%
87.7%	241.8	242.0	0.2	0.1%
88.9%	238.6	236.9	-1.7	-0.7%
90.1%	236.8	236.7	-0.1	0.0%
91.4%	236.8	236.6	-0.1	-0.1%
92.6%	227.1	226.7	-0.4	-0.2%
93.8%	226.9	224.1	-2.8	-1.2%
95.1%	224.1	223.6	-0.5	-0.2%
96.3%	222.3	221.7	-0.6	-0.3%
97.5%	219.8	217.8	-2.0	-0.9%
98.8%	210.4	210.6	0.2	0.1%
100.0%	203.6	203.8	0.2	0.1%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	716.7	701.7	-15.0	-2.1%
1.2%	681.9	688.0	6.1	0.9%
2.5%	650.7	622.3	-28.4	-4.4%
3.7%	648.8	611.2	-37.7	-5.8%
4.9%	574.6	575.5	0.9	0.2%
6.2%	490.9	487.7	-3.2	-0.7%
7.4%	468.0	473.4	5.3	1.1%
8.6%	466.0	472.6	6.6	1.4%
9.9%	462.7	463.0	0.2	0.1%
11.1%	440.5	454.9	14.4	3.3%
12.3%	434.6	454.8	20.2	4.6%
13.6%	433.4	445.7	12.4	2.9%
14.8%	425.6	436.2	10.6	2.5%
16.0%	422.9	434.4	11.5	2.7%
17.3%	420.2	431.4	11.3	2.7%
18.5%	416.5	427.0	10.5	2.5%
19.8%	415.4	411.6	-3.8	-0.9%
21.0%	412.4	391.6	-20.8	-5.0%
22.2%	406.8	390.3	-16.6	-4.1%
23.5%	401.8	379.5	-22.3	-5.5%
24.7%	372.6	376.7	4.1	1.1%
25.9%	354.6	365.0	10.3	2.9%
27.2%	353.0	352.7	-0.3	-0.1%
28.4%	347.4	348.3	0.9	0.2%
29.6%	346.3	346.1	-0.2	-0.1%
30.9%	345.8	345.5	-0.4	-0.1%
32.1%	336.6	344.1	7.5	2.2%
33.3%	336.5	338.5	2.0	0.6%
34.6%	325.2	337.0	11.7	3.6%
35.8%	323.1	333.7	10.6	3.3%
37.0%	319.5	331.7	12.2	3.8%
38.3%	318.1	327.7	9.6	3.0%
39.5%	314.7	320.2	5.5	1.7%
40.7%	313.5	320.2	6.7	2.1%
42.0%	312.4	319.8	7.4	2.4%
43.2%	310.8	317.5	6.7	2.1%
44.4%	306.6	317.4	10.8	3.5%
45.7%	306.6	310.3	3.7	1.2%
46.9%	305.7	305.8	0.1	0.0%
48.1%	304.0	302.7	-1.3	-0.4%
49.4%	295.1	302.3	7.2	2.4%
50.6%	294.3	301.4	7.2	2.4%
51.9%	292.8	290.1	-2.8	-0.9%
53.1%	290.7	288.9	-1.8	-0.6%
54.3%	282.3	277.6	-4.7	-1.7%
55.6%	266.0	273.5	7.5	2.8%
56.8%	264.5	265.7	1.3	0.5%
58.0%	264.4	265.3	0.9	0.4%
59.3%	263.1	264.5	1.4	0.5%
60.5%	259.9	262.0	2.1	0.8%
61.7%	259.1	259.1	0.0	0.0%
63.0%	259.0	255.5	-3.5	-1.4%
64.2%	255.8	255.4	-0.4	-0.1%
65.4%	255.2	255.1	-0.1	-0.1%
66.7%	253.9	254.6	0.6	0.3%
67.9%	253.0	253.8	0.7	0.3%
69.1%	251.8	250.9	-0.9	-0.4%
70.4%	250.2	248.6	-1.6	-0.7%
71.6%	248.6	247.9	-0.7	-0.3%
72.8%	246.9	246.7	-0.1	-0.1%
74.1%	245.8	246.3	0.5	0.2%
75.3%	244.8	244.8	0.0	0.0%
76.5%	244.6	243.5	-1.1	-0.4%
77.8%	243.8	243.4	-0.4	-0.2%
79.0%	243.0	243.1	0.1	0.0%
80.2%	242.7	243.0	0.2	0.1%
81.5%	242.3	242.2	-0.1	0.0%
82.7%	242.3	242.0	-0.2	-0.1%
84.0%	242.2	241.2	-1.0	-0.4%
85.2%	241.2	241.2	0.0	0.0%
86.4%	241.2	240.7	-0.4	-0.2%
87.7%	240.8	240.6	-0.2	-0.1%
88.9%	240.2	239.9	-0.3	-0.1%
90.1%	239.9	239.3	-0.7	-0.3%
91.4%	239.6	238.5	-1.2	-0.5%
92.6%	237.9	234.5	-3.4	-1.4%
93.8%	232.8	233.8	0.9	0.4%
95.1%	230.1	232.7	2.6	1.1%
96.3%	226.8	227.2	0.4	0.2%
97.5%	226.8	227.1	0.3	0.2%
98.8%	226.4	226.9	0.5	0.2%
100.0%	225.7	226.9	1.1	0.5%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	859.8	873.5	13.7	1.6%
1.2%	779.0	834.1	55.0	7.1%
2.5%	768.1	785.9	17.8	2.3%
3.7%	746.1	782.5	36.4	4.9%
4.9%	729.5	766.1	36.5	5.0%
6.2%	724.8	749.5	24.6	3.4%
7.4%	714.8	743.5	28.7	4.0%
8.6%	703.4	715.8	12.4	1.8%
9.9%	698.1	707.8	9.7	1.4%
11.1%	685.8	694.0	8.2	1.2%
12.3%	685.1	685.6	0.5	0.1%
13.6%	674.5	682.3	7.8	1.2%
14.8%	654.0	668.2	14.1	2.2%
16.0%	638.7	655.8	17.0	2.7%
17.3%	636.2	651.7	15.4	2.4%
18.5%	636.1	641.3	5.2	0.8%
19.8%	635.2	621.7	-13.5	-2.1%
21.0%	633.8	612.1	-21.6	-3.4%
22.2%	611.7	605.7	-6.0	-1.0%
23.5%	594.6	569.2	-25.4	-4.3%
24.7%	557.0	557.6	0.5	0.1%
25.9%	506.5	538.9	32.4	6.4%
27.2%	504.4	517.1	12.8	2.5%
28.4%	500.3	507.9	7.7	1.5%
29.6%	499.4	506.2	6.8	1.4%
30.9%	496.3	504.7	8.5	1.7%
32.1%	489.5	504.7	15.1	3.1%
33.3%	488.7	497.1	8.4	1.7%
34.6%	484.5	495.7	11.2	2.3%
35.8%	481.1	490.1	8.9	1.9%
37.0%	469.8	486.0	16.1	3.4%
38.3%	466.0	480.0	14.1	3.0%
39.5%	464.2	477.9	13.8	3.0%
40.7%	452.6	475.7	23.0	5.1%
42.0%	445.4	474.2	28.9	6.5%
43.2%	440.6	470.3	29.7	6.7%
44.4%	427.4	468.3	40.9	9.6%
45.7%	427.3	463.7	36.4	8.5%
46.9%	424.7	460.5	35.8	8.4%
48.1%	422.0	444.9	22.9	5.4%
49.4%	419.6	444.6	25.0	6.0%
50.6%	419.1	427.6	8.5	2.0%
51.9%	404.7	421.1	16.4	4.0%
53.1%	404.6	416.3	11.8	2.9%
54.3%	403.0	409.0	6.0	1.5%
55.6%	398.1	407.6	9.4	2.4%
56.8%	395.3	406.3	11.0	2.8%
58.0%	392.6	404.1	11.5	2.9%
59.3%	376.4	398.7	22.3	5.9%
60.5%	371.2	396.2	24.9	6.7%
61.7%	369.3	385.9	16.6	4.5%
63.0%	364.6	381.7	17.2	4.7%
64.2%	362.3	362.7	0.4	0.1%
65.4%	362.1	362.7	0.6	0.2%
66.7%	361.7	360.6	-1.1	-0.3%
67.9%	354.6	355.7	1.1	0.3%
69.1%	351.0	351.5	0.6	0.2%
70.4%	346.1	351.5	5.5	1.6%
71.6%	344.4	351.2	6.8	2.0%
72.8%	339.6	348.9	9.4	2.8%
74.1%	338.8	344.5	5.7	1.7%
75.3%	333.5	344.0	10.5	3.1%
76.5%	332.3	337.1	4.7	1.4%
77.8%	331.1	324.8	-6.3	-1.9%
79.0%	327.4	324.1	-3.3	-1.0%
80.2%	325.0	322.8	-2.2	-0.7%
81.5%	324.6	321.6	-3.0	-0.9%
82.7%	320.3	316.6	-3.8	-1.2%
84.0%	319.4	316.1	-3.3	-1.0%
85.2%	317.1	314.9	-2.2	-0.7%
86.4%	314.5	314.5	0.0	0.0%
87.7%	314.0	310.3	-3.7	-1.2%
88.9%	306.1	309.7	3.6	1.2%
90.1%	299.8	303.3	3.5	1.2%
91.4%	299.8	297.2	-2.6	-0.9%
92.6%	295.6	293.4	-2.2	-0.7%
93.8%	292.1	292.6	0.5	0.2%
95.1%	291.3	290.1	-1.1	-0.4%
96.3%	276.6	281.5	4.9	1.8%
97.5%	271.9	261.1	-10.8	-4.0%
98.8%	269.5	255.9	-13.6	-5.1%
100.0%	261.6	250.6	-11.1	-4.2%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	956.2	990.6	34.4	3.6%
1.2%	951.0	958.2	7.2	0.8%
2.5%	904.4	912.8	8.5	0.9%
3.7%	886.4	891.2	4.9	0.5%
4.9%	875.2	882.2	7.0	0.8%
6.2%	875.0	877.5	2.5	0.3%
7.4%	873.1	876.0	2.9	0.3%
8.6%	866.8	860.6	-6.2	-0.7%
9.9%	863.6	853.2	-10.4	-1.2%
11.1%	858.6	843.6	-15.0	-1.7%
12.3%	850.4	843.5	-7.0	-0.8%
13.6%	848.9	839.6	-9.4	-1.1%
14.8%	834.2	838.0	3.8	0.5%
16.0%	834.1	835.9	1.8	0.2%
17.3%	826.8	831.7	4.9	0.6%
18.5%	825.7	814.1	-11.5	-1.4%
19.8%	820.9	804.2	-16.7	-2.0%
21.0%	804.2	802.4	-1.9	-0.2%
22.2%	802.0	800.4	-1.5	-0.2%
23.5%	799.8	787.6	-12.2	-1.5%
24.7%	797.8	785.4	-12.5	-1.6%
25.9%	792.1	784.9	-7.2	-0.9%
27.2%	792.0	780.6	-11.4	-1.4%
28.4%	787.0	777.4	-9.5	-1.2%
29.6%	785.1	774.6	-10.5	-1.3%
30.9%	773.3	770.2	-3.0	-0.4%
32.1%	767.7	768.8	1.1	0.1%
33.3%	764.8	759.9	-4.9	-0.6%
34.6%	764.6	758.2	-6.4	-0.8%
35.8%	759.3	752.1	-7.2	-1.0%
37.0%	746.6	744.1	-2.5	-0.3%
38.3%	734.9	743.3	8.4	1.1%
39.5%	730.4	736.8	6.4	0.9%
40.7%	728.9	734.1	5.2	0.7%
42.0%	724.2	733.4	9.1	1.3%
43.2%	715.4	730.9	15.5	2.2%
44.4%	687.2	723.6	36.4	5.3%
45.7%	675.6	721.7	46.1	6.8%
46.9%	654.1	714.1	60.1	9.2%
48.1%	646.7	712.0	65.4	10.1%
49.4%	645.9	707.3	61.4	9.5%
50.6%	645.0	698.4	53.4	8.3%
51.9%	642.9	697.4	54.4	8.5%
53.1%	597.6	667.7	70.1	11.7%
54.3%	594.8	647.3	52.5	8.8%
55.6%	588.9	615.0	26.1	4.4%
56.8%	586.6	585.5	-1.2	-0.2%
58.0%	585.4	569.5	-15.8	-2.7%
59.3%	572.1	567.1	-5.0	-0.9%
60.5%	564.0	559.0	-5.0	-0.9%
61.7%	552.0	551.7	-0.3	-0.1%
63.0%	538.2	543.4	5.2	1.0%
64.2%	533.6	540.8	7.2	1.4%
65.4%	532.4	533.5	1.2	0.2%
66.7%	524.2	518.7	-5.6	-1.1%
67.9%	514.0	518.6	4.6	0.9%
69.1%	508.6	507.8	-0.8	-0.2%
70.4%	507.5	506.3	-1.2	-0.2%
71.6%	497.2	497.7	0.5	0.1%
72.8%	495.6	484.4	-11.2	-2.3%
74.1%	483.9	477.9	-6.0	-1.2%
75.3%	480.3	467.0	-13.3	-2.8%
76.5%	478.9	451.5	-27.4	-5.7%
77.8%	478.3	450.6	-27.7	-5.8%
79.0%	464.3	443.3	-21.0	-4.5%
80.2%	451.5	440.8	-10.7	-2.4%
81.5%	449.1	435.4	-13.7	-3.1%
82.7%	448.1	434.8	-13.4	-3.0%
84.0%	439.2	423.6	-15.6	-3.6%
85.2%	436.4	422.0	-14.4	-3.3%
86.4%	434.6	422.0	-12.7	-2.9%
87.7%	402.9	409.5	6.6	1.6%
88.9%	397.0	397.8	0.8	0.2%
90.1%	390.5	397.1	6.6	1.7%
91.4%	384.7	391.7	7.0	1.8%
92.6%	383.4	376.1	-7.3	-1.9%
93.8%	379.3	372.0	-7.3	-1.9%
95.1%	379.1	369.1	-9.9	-2.6%
96.3%	368.7	364.4	-4.3	-1.2%
97.5%	357.6	360.3	2.7	0.7%
98.8%	329.7	318.0	-11.8	-3.6%
100.0%	257.1	237.2	-20.0	-7.8%

Figure SQ-28-b
North Bay Aqueduct Intake (Barker Slough), Monthly EC
Probability of Exceedance

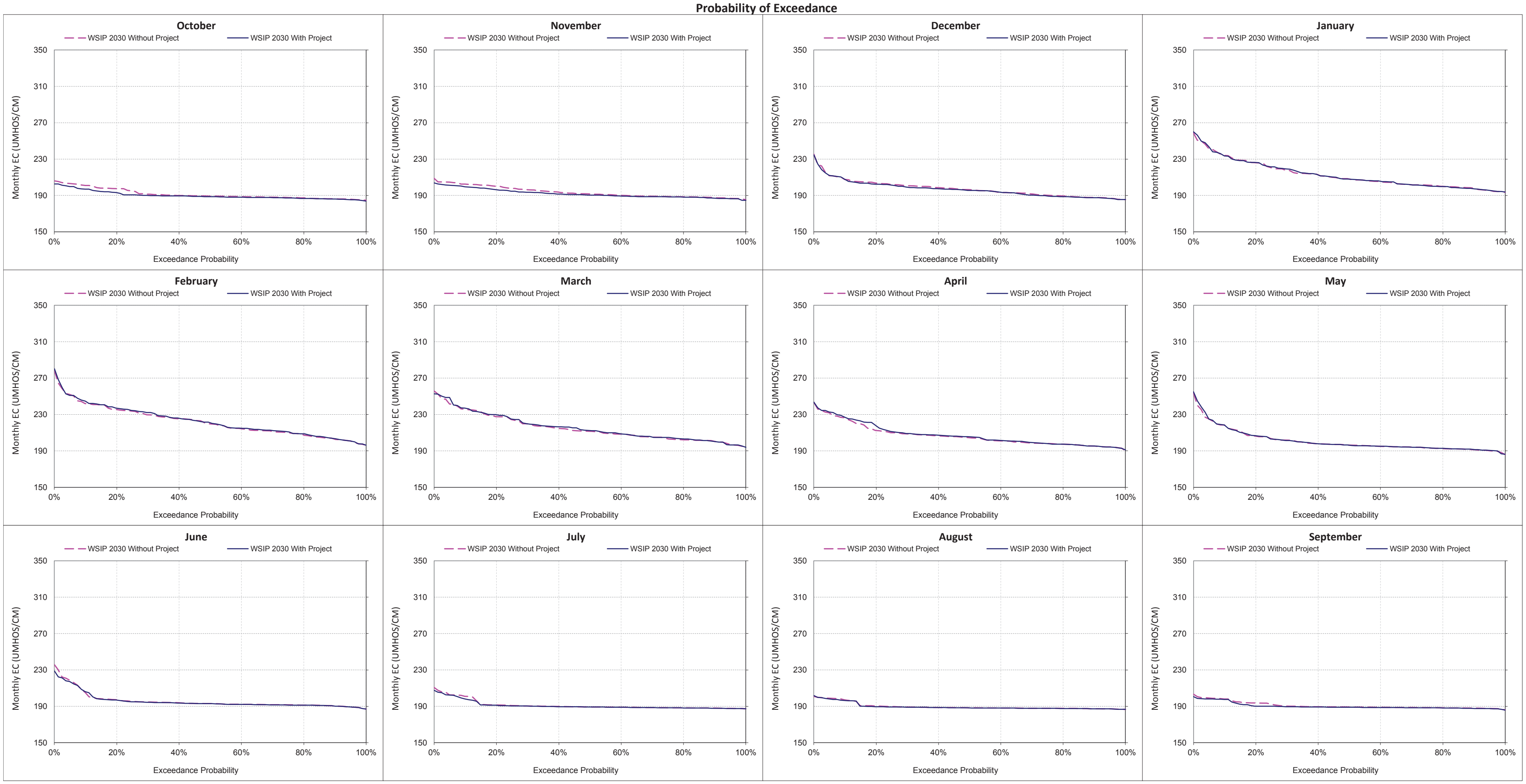


Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	206.1	202.7	-3.4	-1.6%
1.2%	205.3	202.5	-2.8	-1.4%
2.5%	204.1	201.2	-2.9	-1.4%
3.7%	203.5	200.7	-2.8	-1.4%
4.9%	203.2	199.8	-3.4	-1.7%
6.2%	202.7	199.7	-3.0	-1.5%
7.4%	202.4	197.8	-4.6	-2.3%
8.6%	201.5	197.4	-4.1	-2.0%
9.9%	201.0	196.9	-4.1	-2.0%
11.1%	201.0	196.9	-4.1	-2.0%
12.3%	200.1	195.5	-4.6	-2.3%
13.6%	198.7	194.9	-3.8	-1.9%
14.8%	198.1	194.4	-3.7	-1.9%
16.0%	198.0	194.2	-3.8	-1.9%
17.3%	198.0	194.1	-3.9	-2.0%
18.5%	197.6	193.4	-4.2	-2.1%
19.8%	197.6	193.2	-4.3	-2.2%
21.0%	197.5	192.3	-5.2	-2.6%
22.2%	197.4	190.8	-6.6	-3.4%
23.5%	195.6	190.8	-4.8	-2.5%
24.7%	195.2	190.6	-4.6	-2.4%
25.9%	194.4	190.5	-3.9	-2.0%
27.2%	191.9	190.4	-1.4	-0.7%
28.4%	191.8	190.0	-1.8	-0.9%
29.6%	191.4	190.0	-1.4	-0.7%
30.9%	191.4	189.9	-1.5	-0.8%
32.1%	191.0	189.8	-1.2	-0.6%
33.3%	190.9	189.7	-1.1	-0.6%
34.6%	190.8	189.7	-1.2	-0.6%
35.8%	190.4	189.5	-0.9	-0.4%
37.0%	190.4	189.5	-0.9	-0.5%
38.3%	190.1	189.5	-0.7	-0.4%
39.5%	190.0	189.4	-0.5	-0.3%
40.7%	190.0	189.4	-0.5	-0.3%
42.0%	189.9	189.4	-0.5	-0.2%
43.2%	189.9	189.2	-0.6	-0.3%
44.4%	189.6	189.1	-0.6	-0.3%
45.7%	189.6	188.9	-0.7	-0.4%
46.9%	189.5	188.9	-0.6	-0.3%
48.1%	189.5	188.8	-0.7	-0.4%
49.4%	189.3	188.8	-0.5	-0.3%
50.6%	189.3	188.7	-0.6	-0.3%
51.9%	189.3	188.6	-0.7	-0.4%
53.1%	189.2	188.5	-0.7	-0.4%
54.3%	189.2	188.3	-0.8	-0.4%
55.6%	189.1	188.2	-0.9	-0.5%
56.8%	188.9	188.2	-0.7	-0.3%
58.0%	188.9	188.2	-0.6	-0.3%
59.3%	188.8	188.1	-0.6	-0.3%
60.5%	188.6	188.1	-0.5	-0.3%
61.7%	188.6	188.0	-0.6	-0.3%
63.0%	188.5	187.9	-0.7	-0.3%
64.2%	188.5	187.8	-0.6	-0.3%
65.4%	188.4	187.8	-0.6	-0.3%
66.7%	188.3	187.8	-0.5	-0.3%
67.9%	188.1	187.8	-0.4	-0.2%
69.1%	188.1	187.8	-0.4	-0.2%
70.4%	188.0	187.5	-0.5	-0.3%
71.6%	188.0	187.5	-0.5	-0.3%
72.8%	187.8	187.4	-0.4	-0.2%
74.1%	187.8	187.3	-0.6	-0.3%
75.3%	187.7	187.2	-0.5	-0.3%
76.5%	187.7	187.2	-0.5	-0.3%
77.8%	187.6	187.1	-0.5	-0.3%
79.0%	187.4	186.8	-0.5	-0.3%
80.2%	187.3	186.7	-0.7	-0.3%
81.5%	186.8	186.6	-0.2	-0.1%
82.7%	186.7	186.6	-0.1	-0.1%
84.0%	186.6	186.5	-0.1	-0.1%
85.2%	186.6	186.5	-0.1	0.0%
86.4%	186.5	186.3	-0.2	-0.1%
87.7%	186.3	186.2	-0.1	-0.1%
88.9%	186.3	186.2	-0.1	-0.1%
90.1%	186.2	186.0	-0.2	-0.1%
91.4%	186.1	185.9	-0.3	-0.2%
92.6%	186.1	185.7	-0.4	-0.2%
93.8%	186.0	185.6	-0.4	-0.2%
95.1%	185.8	185.4	-0.4	-0.2%
96.3%	185.5	185.3	-0.2	-0.1%
97.5%	185.3	185.0	-0.3	-0.2%
98.8%	185.1	184.3	-0.8	-0.5%
100.0%	184.6	183.9	-0.8	-0.4%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	208.7	203.9	-4.8	-2.3%
1.2%	205.0	202.7	-2.3	-1.1%
2.5%	204.9	202.1	-2.8	-1.3%
3.7%	204.8	201.4	-3.4	-1.6%
4.9%	204.7	201.2	-3.5	-1.7%
6.2%	204.1	201.0	-3.1	-1.5%
7.4%	203.9	200.6	-3.4	-1.6%
8.6%	202.5	200.5	-2.0	-1.0%
9.9%	202.5	199.4	-3.1	-1.5%
11.1%	202.2	199.2	-3.0	-1.5%
12.3%	202.0	198.8	-3.2	-1.6%
13.6%	201.9	198.6	-3.4	-1.7%
14.8%	201.4	198.1	-3.3	-1.7%
16.0%	201.3	198.0	-3.3	-1.7%
17.3%	201.2	197.4	-3.8	-1.9%
18.5%	200.5	196.8	-3.7	-1.9%
19.8%	200.2	196.5	-3.7	-1.8%
21.0%	200.1	195.9	-4.2	-2.1%
22.2%	199.0	195.8	-3.2	-1.6%
23.5%	198.3	195.4	-2.9	-1.4%
24.7%	197.7	194.7	-3.0	-1.5%
25.9%	197.7	194.7	-3.0	-1.5%
27.2%	196.9	193.9	-3.0	-1.5%
28.4%	196.8	193.7	-3.1	-1.6%
29.6%	196.3	193.6	-2.7	-1.4%
30.9%	196.1	193.6	-2.5	-1.3%
32.1%	196.0	193.3	-2.7	-1.4%
33.3%	195.2	193.2	-2.0	-1.0%
34.6%	195.1	192.9	-2.2	-1.1%
35.8%	194.7	192.5	-2.3	-1.2%
37.0%	194.3	192.1	-2.2	-1.1%
38.3%	194.2	192.1	-2.1	-1.1%
39.5%	193.8	191.6	-2.2	-1.1%
40.7%	193.2	191.5	-1.7	-0.9%
42.0%	193.1	191.2	-1.9	-1.0%
43.2%	192.6	191.0	-1.6	-0.8%
44.4%	192.5	191.0	-1.6	-0.8%
45.7%	192.0	190.9	-1.1	-0.6%
46.9%	191.9	190.8	-1.1	-0.6%
48.1%	191.9	190.7	-1.2	-0.6%
49.4%	191.7	190.5	-1.3	-0.7%
50.6%	191.6	190.5	-1.1	-0.6%
51.9%	191.3	190.4	-0.9	-0.5%
53.1%	191.3	190.3	-1.0	-0.5%
54.3%	191.0	190.2	-0.8	-0.4%
55.6%	190.9	190.1	-0.8	-0.4%
56.8%	190.8	189.8	-1.0	-0.5%
58.0%	190.5	189.6	-0.9	-0.5%
59.3%	190.1	189.4	-0.7	-0.4%
60.5%	190.0	189.2	-0.9	-0.5%
61.7%	189.9	189.1	-0.8	-0.4%
63.0%	189.7	189.1	-0.6	-0.3%
64.2%	189.5	189.0	-0.5	-0.3%
65.4%	189.3	188.8	-0.5	-0.3%
66.7%	189.3	188.8	-0.5	-0.2%
67.9%	189.1	188.8	-0.4	-0.2%
69.1%	189.1	188.8	-0.4	-0.2%
70.4%	189.1	188.7	-0.4	-0.2%
71.6%	189.0	188.7	-0.3	-0.2%
72.8%	188.9	188.7	-0.2	-0.1%
74.1%	188.8	188.6	-0.2	-0.1%
75.3%	188.8	188.4	-0.4	-0.2%
76.5%	188.8	188.3	-0.5	-0.3%
77.8%	188.7	188.3	-0.4	-0.2%
79.0%	188.5	188.2	-0.3	-0.1%
80.2%	188.5	188.2	-0.3	-0.2%
81.5%	188.5	188.1	-0.4	-0.2%
82.7%	188.4	188.0	-0.4	-0.2%
84.0%	188.3	188.0	-0.3	-0.2%
85.2%	188.2	187.9	-0.3	-0.1%
86.4%	188.1	187.7	-0.4	-0.2%
87.7%	188.0	187.3	-0.6	-0.3%
88.9%	187.9	187.1	-0.7	-0.4%
90.1%	187.4	186.9	-0.6	-0.3%
91.4%	187.3	186.6	-0.7	-0.4%
92.6%	187.3	186.6	-0.7	-0.4%
93.8%	187.1	186.6	-0.5	-0.3%
95.1%	186.8	186.5	-0.3	-0.2%
96.3%	186.7	186.4	-0.3	-0.2%
97.5%	186.6	186.3	-0.4	-0.2%
98.8%	186.3	184.8	-1.5	-0.8%
100.0%	185.3	184.7	-0.6	-0.3%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	235.4	234.6	-0.8	-0.4%
1.2%	224.0	224.6	0.6	0.3%
2.5%	222.5	218.2	-4.2	-1.9%
3.7%	215.5	215.0	-0.5	-0.2%
4.9%	211.7	212.1	0.3	0.2%
6.2%	211.5	211.4	-0.1	0.0%
7.4%	210.7	210.8	0.1	0.1%
8.6%	210.3	210.3	0.0	0.0%
9.9%	207.6	207.7	0.1	0.0%
11.1%	207.3	205.6	-1.7	-0.8%
12.3%	205.6	204.9	-0.7	-0.3%
13.6%	205.3	204.5	-0.8	-0.4%
14.8%	205.1	203.6	-1.5	-0.7%
16.0%	204.9	203.5	-1.3	-0.7%
17.3%	204.6	203.4	-1.2	-0.6%
18.5%	204.5	202.6	-1.9	-0.9%
19.8%	203.8	202.5	-1.3	-0.6%
21.0%	203.3	202.4	-0.9	-0.4%
22.2%	203.0	202.1	-0.9	-0.5%
23.5%	202.9	202.0	-0.9	-0.4%
24.7%	202.0	201.5	-0.5	-0.2%
25.9%	201.8	200.8	-1.0	-0.5%
27.2%	201.8	200.1	-1.6	-0.8%
28.4%	201.3	200.0	-1.2	-0.6%
29.6%	200.7	199.3	-1.5	-0.7%
30.9%	200.7	198.6	-2.1	-1.0%
32.1%	200.6	198.5	-2.1	-1.0%
33.3%	200.1	198.5	-1.6	-0.8%
34.6%	199.9	198.4	-1.5	-0.8%
35.8%	199.9	198.2	-1.7	-0.8%
37.0%	199.8	198.2	-1.6	-0.8%
38.3%	198.9	197.5	-1.4	-0.7%
39.5%	198.6	197.5	-1.1	-0.6%
40.7%	198.5	197.4	-1.1	-0.6%
42.0%	198.0	197.0	-1.0	-0.5%
43.2%	197.9	196.9	-1.0	-0.5%
44.4%	197.7	196.8	-0.9	-0.5%
45.7%	197.2	196.7	-0.5	-0.3%
46.9%	196.9	196.5	-0.5	-0.2%
48.1%	196.4	196.1	-0.3	-0.2%
49.4%	196.4	195.6	-0.8	-0.4%
50.6%	196.3	195.6	-0.7	-0.3%
51.9%	195.8	195.4	-0.4	-0.2%
53.1%	195.4	195.2	-0.2	-0.1%
54.3%	195.3	195.2	-0.1	-0.1%
55.6%	195.0	195.2	0.2	0.1%
56.8%	195.0	194.6	-0.4	-0.2%
58.0%	194.3	194.5	0.2	0.1%
59.3%	193.4	193.9	0.5	0.3%
60.5%	193.2	193.2	0.0	0.0%
61.7%	193.1	193.1	0.0	0.0%
63.0%	193.0	193.0	0.0	0.0%
64.2%	193.0	192.9	-0.1	0.0%
65.4%	192.9	192.1	-0.8	-0.4%
66.7%	192.6	191.6	-1.0	-0.5%
67.9%	192.5	190.9	-1.6	-0.8%
69.1%	191.9	190.4	-1.5	-0.8%
70.4%	191.6	190.4	-1.2	-0.6%
71.6%	190.9	190.0	-0.9	-0.5%
72.8%	190.5	189.9	-0.6	-0.3%
74.1%	190.4	189.7	-0.7	-0.4%
75.3%	190.2	189.1	-1.0	-0.5%
76.5%	189.9	189.1	-0.8	-0.4%
77.8%	189.9	189.0	-0.8	-0.4%
79.0%	189.6	188.8	-0.8	-0.4%
80.2%	189.4	188.7	-0.7	-0.4%
81.5%	188.9	188.6	-0.3	-0.1%
82.7%	188.9	188.3	-0.6	-0.3%
84.0%	188.5	188.1	-0.3	-0.2%
85.2%	188.3	188.0	-0.3	-0.2%
86.4%	188.1	187.8	-0.3	-0.2%
87.7%	187.8	187.6	-0.1	-0.1%
88.9%	187.8	187.6	-0.2	-0.1%
90.1%	187.7	187.6	-0.1	-0.1%
91.4%	187.7	187.5	-0.1	-0.1%
92.6%	187.6	187.3	-0.2	-0.1%
93.8%	187.4	186.9	-0.5	-0.3%
95.1%	186.9	186.8	-0.1	0.0%
96.3%	186.6	186.3	-0.3	-0.1%
97.5%	185.9	185.6	-0.2	-0.1%
98.8%	185.6	185.6	0.1	0.0%
100.0%	185.5	185.5	0.1	0.0%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	258.7	259.9	1.2	0.5%
1.2%	250.8	256.4	5.7	2.3%
2.5%	249.8	249.6	-0.2	-0.1%
3.7%	246.4	248.1	1.7	0.7%
4.9%	241.4	243.8	2.5	1.0%
6.2%	240.4	238.1	-2.4	-1.0%
7.4%	238.0	237.5	-0.6	-0.2%
8.6%	235.5	236.1	0.6	0.3%
9.9%	234.1	233.5	-0.5	-0.2%
11.1%	233.7	233.1	-0.6	-0.2%
12.3%	231.1	230.0	-1.1	-0.5%
13.6%	229.2	228.8	-0.4	-0.2%
14.8%	228.8	228.4	-0.4	-0.2%
16.0%	228.5	228.4	-0.1	-0.1%
17.3%	228.4	226.5	-1.9	-0.8%
18.5%	226.2	226.2	0.0	0.0%
19.8%	226.0	226.2	0.2	0.1%
21.0%	225.8	225.9	0.2	0.1%
22.2%	225.6	223.4	-2.1	-1.0%
23.5%	222.0	222.3	0.3	0.1%
24.7%	220.7	221.4	0.7	0.3%
25.9%	219.3	221.4	2.1	0.9%
27.2%	219.3	220.2	0.9	0.4%
28.4%	219.2	219.8	0.6	0.3%
29.6%	217.6	219.2	1.6	0.7%
30.9%	217.3	218.8	1.5	0.7%
32.1%	215.1	217.8	2.7	1.2%
33.3%	214.4	216.3	1.9	0.9%
34.6%	214.3	214.9	0.6	0.3%
35.8%	214.2	214.6	0.3	0.2%
37.0%	213.9	214.2	0.3	0.2%
38.3%	213.7	214.1	0.4	0.2%
39.5%	213.3	213.2	-0.2	-0.1%
40.7%	211.6	211.6	0.0	0.0%
42.0%	211.2	211.5	0.4	0.2%
43.2%	210.6	210.8	0.2	0.1%
44.4%	210.0	210.5	0.4	0.2%
45.7%	209.6	210.1	0.5	0.2%
46.9%	208.5	208.7	0.1	0.1%
48.1%	208.5	208.1	-0.4	-0.2%
49.4%	208.5	208.0	-0.5	-0.2%
50.6%	207.6	207.7	0.0	0.0%
51.9%	207.1	207.4	0.3	0.1%
53.1%	207.1	207.3	0.3	0.1%
54.3%	206.9	206.9	0.0	0.0%
55.6%	206.4	206.2	-0.1	-0.1%
56.8%	205.9	206.2	0.3	0.2%
58.0%	205.5	206.1	0.5	0.3%
59.3%	205.5	205.9	0.5	0.2%
60.5%	204.8	205.3	0.5	0.3%
61.7%	204.5	205.2	0.8	0.4%
63.0%	204.4	205.0	0.6	0.3%
64.2%	203.9	204.8	1.0	0.5%
65.4%	203.0	202.8	-0.2	-0.1%
66.7%	202.4	202.6	0.2	0.1%
67.9%	202.3	202.4	0.1	0.1%
69.1%	201.9	202.0	0.1	0.1%
70.4%	201.7	201.6	-0.1	-0.1%
71.6%	201.6	201.5	-0.1	-0.1%
72.8%	201.6	201.1	-0.5	-0.2%
74.1%	201.5	200.8	-0.7	-0.3%
75.3%	201.3	200.4	-0.9	-0.4%
76.5%	201.1	200.1	-1.0	-0.5%
77.8%	200.9	200.1	-0.8	-0.4%
79.0%	200.1	199.9	-0.2	-0.1%
80.2%	199.9	199.8	-0.1	-0.1%
81.5%	199.7	199.7	0.1	0.0%
82.7%	199.6	198.7	-0.8	-0.4%
84.0%	199.5	198.7	-0.8	-0.4%
85.2%	198.9	198.4	-0.5	-0.2%
86.4%	198.8	198.1	-0.7	-0.4%
87.7%	198.6	197.9	-0.7	-0.4%
88.9%	198.5	197.7	-0.7	-0.4%
90.1%	197.8	197.4	-0.5	-0.2%
91.4%	196.6	196.8	0.3	0.1%
92.6%	196.2	196.3	0.1	0.1%
93.8%	195.8	196.1	0.3	0.2%
95.1%	195.5	195.6	0.1	0.0%
96.3%	194.5	194.9	0.4	0.2%
97.5%	194.4	194.5	0.1	0.0%
98.8%	194.4	194.3	-0.1	0.0%
100.0%	193.5	193.9	0.4	0.2%

Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	278.4	280.5	2.1	0.8%
1.2%	264.7	268.5	3.9	1.5%
2.5%	258.5	259.5	1.0	0.4%
3.7%	253.1	252.8	-0.3	-0.1%
4.9%	252.0	251.1	-0.9	-0.4%
6.2%	250.4	251.1	0.7	0.3%
7.4%	245.1	247.9	2.9	1.2%
8.6%	244.3	245.8	1.4	0.6%
9.9%	242.0	244.7	2.7	1.1%
11.1%	241.8	242.2	0.4	0.2%
12.3%	241.0	242.1	1.1	0.4%
13.6%	241.0	241.5	0.5	0.2%
14.8%	240.5	240.9	0.4	0.2%
16.0%	240.4	240.7	0.3	0.1%
17.3%	237.0	238.5	1.6	0.7%
18.5%	235.7	238.4	2.7	1.1%
19.8%	235.6	237.0	1.4	0.6%
21.0%	234.9	236.5	1.6	0.7%
22.2%	234.5	235.9	1.4	0.6%
23.5%	234.4	235.6	1.2	0.5%
24.7%	233.9	234.4	0.6	0.2%
25.9%	233.4	234.1	0.6	0.3%
27.2%	231.4	233.3	1.9	0.8%
28.4%	231.2	233.0	1.8	0.8%
29.6%	229.7	232.1	2.3	1.0%
30.9%	229.6	232.0	2.5	1.1%
32.1%	229.3	231.2	1.9	0.8%
33.3%	227.8	228.8	1.0	0.4%
34.6%	227.3	228.4	1.0	0.5%
35.8%	227.0	228.3	1.2	0.5%
37.0%	226.8	226.8	0.0	0.0%
38.3%	225.7	226.2	0.5	0.2%
39.5%	225.4	226.1	0.7	0.3%
40.7%	225.3	225.3	0.0	0.0%
42.0%	225.1	224.8	-0.3	-0.1%
43.2%	224.6	224.6	0.0	0.0%
44.4%	224.4	223.5	-0.9	-0.4%
45.7%	223.3	223.1	-0.2	-0.1%
46.9%	223.1	222.3	-0.7	-0.3%
48.1%	220.9	221.8	0.9	0.4%
49.4%	219.8	221.7	1.8	0.8%
50.6%	219.5	220.2	0.7	0.3%
51.9%	219.2	219.6	0.4	0.2%
53.1%	217.7	218.9	1.2	0.5%
54.3%	217.6	217.7	0.1	0.0%
55.6%	215.7	215.8	0.1	0.0%
56.8%	215.0	215.2	0.2	0.1%
58.0%	214.8	215.2	0.4	0.2%
59.3%	214.7	214.9	0.2	0.1%
60.5%	214.1	214.7	0.5	0.3%
61.7%	213.9	214.6	0.8	0.4%
63.0%	212.8	214.1	1.3	0.6%
64.2%	212.6	213.7	1.1	0.5%
65.4%	212.6	213.6	1.1	0.5%
66.7%	212.2	213.2	1.0	0.5%
67.9%	212.2	212.9	0.7	0.3%
69.1%	212.0	212.8	0.8	0.4%
70.4%	210.9	212.1	1.2	0.6%
71.6%	210.8	212.0	1.2	0.6%
72.8%	210.6	211.8	1.2	0.6%
74.1%	210.4	211.3	0.9	0.4%
75.3%	209.9	210.7	0.8	0.4%
76.5%	209.3	209.2	-0.1	-0.1%
77.8%	209.0	209.1	0.0	0.0%
79.0%	208.5	208.7	0.2	0.1%
80.2%	207.1	208.7	1.6	0.8%
81.5%	206.7	207.8	1.1	0.5%
82.7%	205.8	206.7	0.8	0.4%
84.0%	205.4	206.0	0.7	0.3%
85.2%	205.0	206.0	1.0	0.5%
86.4%	204.5	205.2	0.8	0.4%
87.7%	204.1	204.5	0.5	0.2%
88.9%	204.0	204.0	0.0	0.0%
90.1%	202.5	203.3	0.7	0.4%
91.4%	202.3	202.4	0.1	0.0%
92.6%	201.8	201.8	0.0	0.0%
93.8%	201.4	201.3	-0.1	-0.1%
95.1%	200.9	200.8	-0.1	-0.1%
96.3%	199.0	199.9	0.8	0.4%
97.5%	197.9	197.6	-0.3	-0.1%
98.8%	197.3	197.6	0.3	0.2%
100.0%	196.3	196.2	0.0	0.0%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	255.8	252.8	-3.0	-1.2%
1.2%	252.3	252.6	0.2	0.1%
2.5%	247.4	250.3	2.9	1.2%
3.7%	246.8	248.7	1.9	0.8%
4.9%	241.5	248.6	7.1	3.0%
6.2%	241.4	240.6	-0.9	-0.4%
7.4%	239.3	239.9	0.6	0.3%
8.6%	236.2	237.3	1.1	0.5%
9.9%	235.8	237.2	1.4	0.6%
11.1%	235.2	236.1	0.9	0.4%
12.3%	235.0	233.6	-1.4	-0.6%
13.6%	234.3	233.3	-1.0	-0.4%
14.8%	233.3	232.4	-0.9	-0.4%
16.0%	230.7	231.5	0.8	0.3%
17.3%	229.2	230.3	1.0	0.4%
18.5%	229.1	230.0	0.9	0.4%
19.8%	227.6	229.8	2.1	0.9%
21.0%	227.6	229.1	1.6	0.7%
22.2%	227.5	229.1	1.6	0.7%
23.5%	227.2	227.7	0.5	0.2%
24.7%	224.5	225.0	0.5	0.2%
25.9%	223.6	224.5	0.9	0.4%
27.2%	222.9	224.5	1.6	0.7%
28.4%	219.9	220.8	0.9	0.4%
29.6%	219.8	219.8	0.1	0.0%
30.9%	219.3	219.4	0.1	0.1%
32.1%	217.8	219.2	1.4	0.6%
33.3%	217.3	218.5	1.2	0.5%
34.6%	217.2	217.7	0.5	0.2%
35.8%	216.8	217.2	0.4	0.2%
37.0%	216.2	216.9	0.7	0.3%
38.3%	215.5	216.9	1.4	0.6%
39.5%	214.9	216.6	1.7	0.8%
40.7%	214.6	216.6	2.0	0.9%
42.0%	214.3	216.3	1.9	0.9%
43.2%	213.6	216.2	2.7	1.2%
44.4%	212.5	215.3	2.8	1.3%
45.7%	212.2	215.2	3.0	1.4%
46.9%	211.9	213.5	1.6	0.7%
48.1%	211.8	212.8	1.0	0.5%
49.4%	211.6	212.5	1.0	0.5%
50.6%	211.5	212.3	0.8	0.4%
51.9%	211.1	212.2	1.1	0.5%
53.1%	210.9	211.4	0.4	0.2%
54.3%	209.5	210.6	1.1	0.5%
55.6%	209.2	210.0	0.8	0.4%
56.8%	209.2	209.9	0.7	0.3%
58.0%	208.5	209.8	1.3	0.6%
59.3%	208.5	209.2	0.7	0.3%
60.5%	208.5	208.5	0.0	0.0%
61.7%	208.1	208.3	0.2	0.1%
63.0%	207.3	207.5	0.2	0.1%
64.2%	207.2	206.9	-0.3	-0.1%
65.4%	205.9	206.2	0.3	0.2%
66.7%	205.7	206.1	0.5	0.2%
67.9%	205.6	206.0	0.4	0.2%
69.1%	205.3	205.9	0.6	0.3%
70.4%	205.1	204.8	-0.2	-0.1%
71.6%	205.0	204.8	-0.2	-0.1%
72.8%	205.0	204.8	-0.2	-0.1%
74.1%	204.1	204.7	0.6	0.3%
75.3%	203.0	204.7	1.6	0.8%
76.5%	202.9	204.1	1.3	0.6%
77.8%	202.5	203.8	1.3	0.6%
79.0%	202.4	203.3	0.8	0.4%
80.2%	202.2	203.1	0.9	0.4%
81.5%	202.2	203.0	0.8	0.4%
82.7%	202.0	202.5	0.5	0.2%
84.0%	201.6	202.0	0.4	0.2%
85.2%	201.6	201.9	0.3	0.2%
86.4%	201.5	201.5	0.0	0.0%
87.7%	201.5	201.4	0.0	0.0%
88.9%	201.3	200.8	-0.5	-0.3%
90.1%	200.4	200.2	-0.1	-0.1%
91.4%	199.7	199.7	0.0	0.0%
92.6%	199.6	199.6	-0.1	0.0%
93.8%	198.3	196.8	-1.4	-0.7%
95.1%	196.9	196.6	-0.3	-0.1%
96.3%	196.4	196.5	0.1	0.1%
97.5%	196.1	196.4	0.3	0.2%
98.8%	195.2	195.4	0.2	0.1%
100.0%	193.9	193.9	0.0	0.0%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	243.4	243.5	0.1	0.0%
1.2%	235.9	237.4	1.4	0.6%
2.5%	234.3	234.5	0.1	0.1%
3.7%	232.6	234.4	1.7	0.7%
4.9%	231.8	232.6	0.8	0.3%
6.2%	228.6	232.1	3.5	1.5%
7.4%	228.3	229.8	1.5	0.7%
8.6%	226.8	229.0	2.2	1.0%
9.9%	226.4	227.1	0.7	0.3%
11.1%	224.2	225.4	1.1	0.5%
12.3%	222.6	225.0	2.4	1.1%
13.6%	220.2	223.9	3.7	1.7%
14.8%	219.9	223.0	3.1	1.4%
16.0%	218.6	221.5	2.9	1.3%
17.3%	214.9	221.5	6.6	3.1%
18.5%	214.3	221.4	7.1	3.3%
19.8%	212.5	218.2	5.7	2.7%
21.0%	212.1	215.1	3.0	1.4%
22.2%	211.5	213.7	2.2	1.1%
23.5%	211.0	212.5	1.5	0.7%
24.7%	210.0	211.4	1.4	0.7%
25.9%	209.9	210.7	0.8	0.4%
27.2%	209.8	210.2	0.4	0.2%
28.4%	208.9	210.0	1.1	0.5%
29.6%	208.8	209.2	0.4	0.2%
30.9%	208.6	209.0	0.5	0.2%
32.1%	208.5	208.5	0.0	0.0%
33.3%	207.8	208.3	0.5	0.3%
34.6%	207.7	208.0	0.3	0.2%
35.8%	207.3	208.0	0.7	0.4%
37.0%	207.2	207.7	0.5	0.2%
38.3%	206.9	207.5	0.7	0.3%
39.5%	206.7	207.3	0.6	0.3%
40.7%	206.4	207.1	0.8	0.4%
42.0%	206.2	206.7	0.6	0.3%
43.2%	205.9	206.6	0.7	0.3%
44.4%	205.7	206.2	0.5	0.2%
45.7%	205.7	206.1	0.4	0.2%
46.9%	205.3	206.0	0.7	0.3%
48.1%	204.9	205.8	0.8	0.4%
49.4%	204.7	205.7	1.0	0.5%
50.6%	204.2	205.5	1.2	0.6%
51.9%	204.1	205.0	0.8	0.4%
53.1%	204.1	204.9	0.8	0.4%
54.3%	202.8	203.4	0.6	0.3%
55.6%	201.9	202.0	0.1	0.1%
56.8%	201.6	201.9	0.4	0.2%
58.0%	201.2	201.8	0.6	0.3%
59.3%	201.1	201.6	0.5	0.2%
60.5%	201.0	201.4	0.5	0.2%
61.7%	200.7	201.1	0.4	0.2%
63.0%	200.7	200.9	0.2	0.1%
64.2%	199.8	200.8	1.0	0.5%
65.4%	199.8	200.5	0.7	0.3%
66.7%	199.6	200.4	0.8	0.4%
67.9%	199.2	199.9	0.7	0.4%
69.1%	198.9	199.5	0.6	0.3%
70.4%	198.5	199.1	0.6	0.3%
71.6%	198.5	198.7	0.2	0.1%
72.8%	198.3	198.4	0.1	0.0%
74.1%	198.2	198.3	0.1	0.1%
75.3%	198.1	197.9	-0.1	-0.1%
76.5%	197.9	197.4	-0.5	-0.3%
77.8%	197.5	197.4	-0.1	-0.1%
79.0%	197.4	197.3	0.0	0.0%
80.2%	197.3	197.3	0.0	0.0%
81.5%	197.3	197.1	-0.2	-0.1%
82.7%	196.9	197.0	0.0	0.0%
84.0%	196.8	196.6	-0.2	-0.1%
85.2%	196.2	196.6	0.3	0.2%
86.4%	195.9	195.8	-0.1	-0.1%
87.7%	195.5	195.4	-0.1	-0.1%
88.9%	195.4	195.3	-0.1	-0.1%
90.1%	195.3	195.3	0.0	0.0%
91.4%	194.7	195.0	0.3	0.1%
92.6%	194.6	194.6	0.0	0.0%
93.8%	194.3	194.4	0.0	0.0%
95.1%	194.3	194.1	-0.2	-0.1%
96.3%	194.3	193.9	-0.4	-0.2%
97.5%	193.5	193.3	-0.2	-0.1%
98.8%	193.0	192.7	-0.3	-0.2%
100.0%	190.0	191.1	1.1	0.6%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	253.7	255.0	1.3	0.5%
1.2%	240.2	245.0	4.8	2.0%
2.5%	235.5	238.5	3.0	1.3%
3.7%	227.1	232.4	5.3	2.3%
4.9%	225.0	225.1	0.1	0.0%
6.2%	222.6	223.7	1.0	0.5%
7.4%	219.6	219.6	0.0	0.0%
8.6%	218.5	219.0	0.5	0.2%
9.9%	218.5	218.6	0.1	0.1%
11.1%	214.7	214.7	0.0	0.0%
12.3%	213.8	213.3	-0.6	-0.3%
13.6%	212.9	212.5	-0.4	-0.2%
14.8%	212.1	210.4	-1.7	-0.8%
16.0%	209.4	209.5	0.1	0.0%
17.3%	206.9	208.5	1.6	0.8%
18.5%	206.8	207.0	0.2	0.1%
19.8%	206.2	206.8	0.5	0.3%
21.0%	205.7	206.3	0.6	0.3%
22.2%	205.6	205.8	0.2	0.1%
23.5%	205.5	205.5	0.0	0.0%
24.7%	203.7	203.2	-0.5	-0.2%
25.9%	202.7	202.8	0.1	0.1%
27.2%	202.0	202.4	0.4	0.2%
28.4%	201.8	202.0	0.1	0.1%
29.6%	201.8	201.4	-0.4	-0.2%
30.9%	201.8	201.3	-0.5	-0.2%
32.1%	201.3	200.8	-0.6	-0.3%
33.3%	200.1	200.0	-0.1	0.0%
34.6%	199.8	199.9	0.2	0.1%
35.8%	198.9	199.4	0.5	0.2%
37.0%	198.4	199.2	0.8	0.4%
38.3%	198.4	198.2	-0.1	-0.1%
39.5%	197.8	197.9	0.0	0.0%
40.7%	197.7	197.6	0.0	0.0%
42.0%	197.6	197.4	-0.2	-0.1%
43.2%	197.3	197.3	0.0	0.0%
44.4%	197.3	197.2	0.0	0.0%
45.7%	197.1	197.1	0.0	0.0%
46.9%	197.0	197.0	0.0	0.0%
48.1%	196.8	196.5	-0.4	-0.2%
49.4%	196.4	196.4	0.0	0.0%
50.6%	196.3	195.9	-0.5	-0.2%
51.9%	196.3	195.6	-0.6	-0.3%
53.1%	196.1	195.6	-0.5	-0.2%
54.3%	195.8	195.6	-0.2	-0.1%
55.6%	195.6	195.6	-0.1	0.0%
56.8%	195.6	195.5	-0.1	-0.1%
58.0%	195.3	195.4	0.1	0.0%
59.3%	195.1	195.2	0.1	0.1%
60.5%	194.9	195.1	0.2	0.1%
61.7%	194.9	195.0	0.1	0.0%
63.0%	194.7	194.8	0.1	0.1%
64.2%	194.5	194.5	0.0	0.0%
65.4%	194.5	194.4	-0.1	0.0%
66.7%	194.4	194.2	-0.1	-0.1%
67.9%	194.4	194.1	-0.2	-0.1%
69.1%	194.3	194.1	-0.2	-0.1%
70.4%	194.1	194.1	0.0	0.0%
71.6%	194.1	194.1	0.0	0.0%
72.8%	194.0	193.9	-0.1	-0.1%
74.1%	193.2	193.6	0.4	0.2%
75.3%	193.2	193.3	0.1	0.1%
76.5%	193.0	193.2	0.3	0.1%
77.8%	192.9	192.9	0.1	0.0%
79.0%	192.8	192.9	0.0	0.0%
80.2%	192.4	192.7	0.3	0.2%
81.5%	192.4	192.4	0.1	0.0%
82.7%	192.3	192.3	0.0	0.0%
84.0%	192.3	192.3	0.0	0.0%
85.2%	192.1	192.2	0.1	0.1%
86.4%	192.1	192.0	-0.1	-0.1%
87.7%	191.6	192.0	0.4	0.2%
88.9%	191.6	191.9	0.4	0.2%
90.1%	191.3	191.5	0.2	0.1%
91.4%	190.9	191.5	0.6	0.3%
92.6%	190.9	191.0	0.1	0.0%
93.8%	190.7	190.9	0.2	0.1%
95.1%	190.1	190.4	0.3	0.2%
96.3%	189.8	190.1	0.3	0.2%
97.5%	189.5	189.9	0.4	0.2%
98.8%	188.2	186.9	-1.2	-0.7%
100.0%	186.0	186.4	0.4	0.2%

Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	235.8	228.9	-6.9	-2.9%
1.2%	230.1	222.2	-7.9	-3.4%
2.5%	222.2	221.2	-1.0	-0.5%
3.7%	220.9	217.9	-3.0	-1.4%
4.9%	218.6	217.1	-1.5	-0.7%
6.2%	216.1	214.6	-1.5	-0.7%
7.4%	213.1	212.8	-0.3	-0.2%
8.6%	208.8	208.7	-0.1	0.0%
9.9%	205.2	206.1	0.9	0.4%
11.1%	200.3	204.8	4.5	2.2%
12.3%	199.9	200.3	0.4	0.2%
13.6%	198.4	198.3	-0.2	-0.1%
14.8%	198.4	197.7	-0.7	-0.3%
16.0%	197.8	197.4	-0.5	-0.2%
17.3%	197.7	197.3	-0.4	-0.2%
18.5%	197.4	197.0	-0.4	-0.2%
19.8%	197.3	197.0	-0.3	-0.2%
21.0%	196.3	196.3	-0.1	0.0%
22.2%	195.9	195.8	-0.1	0.0%
23.5%	195.9	195.3	-0.6	-0.3%
24.7%	195.3	194.9	-0.4	-0.2%
25.9%	195.2	194.9	-0.3	-0.1%
27.2%	194.9	194.8	-0.1	0.0%
28.4%	194.8	194.7	-0.1	0.0%
29.6%	194.7	194.3	-0.4	-0.2%
30.9%	194.6	194.2	-0.4	-0.2%
32.1%	194.5	194.2	-0.3	-0.2%
33.3%	194.4	194.1	-0.3	-0.2%
34.6%	194.3	194.1	-0.2	-0.1%
35.8%	194.2	194.1	-0.1	0.0%
37.0%	194.1	194.1	0.0	0.0%
38.3%	194.0	193.7	-0.3	-0.2%
39.5%	194.0	193.6	-0.4	-0.2%
40.7%	193.6	193.4	-0.2	-0.1%
42.0%	193.4	193.2	-0.2	-0.1%
43.2%	193.2	193.2	0.0	0.0%
44.4%	193.1	193.1	0.0	0.0%
45.7%	193.1	193.1	0.0	0.0%
46.9%	193.1	193.0	0.0	0.0%
48.1%	193.0	193.0	-0.1	0.0%
49.4%	193.0	192.9	-0.1	-0.1%
50.6%	193.0	192.8	-0.2	-0.1%
51.9%	192.9	192.7	-0.3	-0.1%
53.1%	192.6	192.6	0.0	0.0%
54.3%	192.4	192.4	0.0	0.0%
55.6%	192.3	192.2	-0.1	0.0%
56.8%	192.2	192.1	-0.1	-0.1%
58.0%	192.2	192.1	-0.1	-0.1%
59.3%	192.2	192.0	-0.2	-0.1%
60.5%	192.1	192.0	-0.2	-0.1%
61.7%	192.1	192.0	-0.1	-0.1%
63.0%	192.1	192.0	-0.1	-0.1%
64.2%	192.0	191.9	-0.1	-0.1%
65.4%	192.0	191.9	-0.1	-0.1%
66.7%	191.9	191.7	-0.2	-0.1%
67.9%	191.8	191.6	-0.1	-0.1%
69.1%	191.7	191.6	-0.1	-0.1%
70.4%	191.7	191.5	-0.2	-0.1%
71.6%	191.7	191.4	-0.3	-0.2%
72.8%	191.7	191.4	-0.3	-0.1%
74.1%	191.6	191.4	-0.3	-0.1%
75.3%	191.6	191.2	-0.4	-0.2%
76.5%	191.6	191.2	-0.4	-0.2%
77.8%	191.4	191.2	-0.2	-0.1%
79.0%	191.3	191.2	-0.2	-0.1%
80.2%	191.3	191.1	-0.1	-0.1%
81.5%	191.2	191.1	-0.1	-0.1%
82.7%	191.2	191.1	-0.1	-0.1%
84.0%	191.1	191.0	-0.1	-0.1%
85.2%	191.0	191.0	0.0	0.0%
86.4%	190.7	190.9	0.2	0.1%
87.7%	190.7	190.7	0.0	0.0%
88.9%	190.6	190.6	0.0	0.0%
90.1%	190.2	190.2	0.0	0.0%
91.4%	190.1	190.1	0.0	0.0%
92.6%	190.0	189.9	-0.1	-0.1%
93.8%	189.4	189.6	0.2	0.1%
95.1%	189.1	189.1	0.0	0.0%
96.3%	189.0	188.9	0.0	0.0%
97.5%	188.6	188.7	0.0	0.0%
98.8%	187.9	187.4	-0.6	-0.3%
100.0%	186.9	186.9	0.1	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	210.6	207.5	-3.1	-1.5%
1.2%	207.5	205.4	-2.0	-1.0%
2.5%	205.8	205.0	-0.8	-0.4%
3.7%	205.5	202.5	-3.0	-1.4%
4.9%	202.5	202.3	-0.1	-0.1%
6.2%	202.5	202.2	-0.3	-0.1%
7.4%	202.3	200.8	-1.5	-0.8%
8.6%	202.1	199.2	-2.9	-1.4%
9.9%	201.0	198.1	-2.9	-1.4%
11.1%	200.8	197.3	-3.5	-1.7%
12.3%	200.2	196.6	-3.6	-1.8%
13.6%	196.0	195.6	-0.5	-0.2%
14.8%	192.0	191.5	-0.5	-0.3%
16.0%	191.9	191.4	-0.5	-0.2%
17.3%	191.6	191.3	-0.3	-0.2%
18.5%	191.5	191.1	-0.4	-0.2%
19.8%	191.4	191.1	-0.3	-0.2%
21.0%	191.4	190.7	-0.6	-0.3%
22.2%	191.2	190.7	-0.6	-0.3%
23.5%	191.2	190.5	-0.7	-0.4%
24.7%	190.8	190.5	-0.3	-0.2%
25.9%	190.7	190.4	-0.3	-0.2%
27.2%	190.6	190.3	-0.3	-0.2%
28.4%	190.3	190.2	-0.1	0.0%
29.6%	190.3	190.2	-0.1	0.0%
30.9%	190.2	190.1	-0.2	-0.1%
32.1%	190.2	190.0	-0.2	-0.1%
33.3%	190.2	190.0	-0.2	-0.1%
34.6%	190.1	189.9	-0.2	-0.1%
35.8%	190.1	189.9	-0.2	-0.1%
37.0%	189.9	189.7	-0.2	-0.1%
38.3%	189.9	189.7	-0.2	-0.1%
39.5%	189.8	189.6	-0.2	-0.1%
40.7%	189.7	189.6	-0.1	-0.1%
42.0%	189.7	189.5	-0.1	-0.1%
43.2%	189.6	189.5	-0.1	0.0%
44.4%	189.4	189.4	0.0	0.0%
45.7%	189.4	189.4	0.0	0.0%
46.9%	189.4	189.4	0.0	0.0%
48.1%	189.3	189.3	-0.1	0.0%
49.4%	189.3	189.2	-0.1	-0.1%
50.6%	189.3	189.1	-0.1	-0.1%
51.9%	189.2	189.1	-0.1	-0.1%
53.1%	189.2	189.1	-0.1	0.0%
54.3%	189.1	189.1	-0.1	0.0%
55.6%	189.1	189.0	-0.1	0.0%
56.8%	189.1	189.0	-0.1	-0.1%
58.0%	189.1	189.0	-0.1	-0.1%
59.3%	189.0	188.9	-0.1	-0.1%
60.5%	189.0	188.8	-0.2	-0.1%
61.7%	188.9	188.8	-0.1	-0.1%
63.0%	188.9	188.6	-0.2	-0.1%
64.2%	188.8	188.6	-0.2	-0.1%
65.4%	188.6	188.6	0.0	0.0%
66.7%	188.6	188.5	-0.1	-0.1%
67.9%	188.6	188.5	-0.1	0.0%
69.1%	188.6	188.5	-0.1	0.0%
70.4%	188.6	188.5	-0.1	0.0%
71.6%	188.5	188.5	0.0	0.0%
72.8%	188.5	188.5	0.0	0.0%
74.1%	188.4	188.5	0.0	0.0%
75.3%	188.4	188.4	0.0	0.0%
76.5%	188.4	188.4	0.0	0.0%
77.8%	188.3	188.3	0.0	0.0%
79.0%	188.3	188.3	0.0	0.0%
80.2%	188.3	188.2	-0.1	0.0%
81.5%	188.3	188.2	-0.1	0.0%
82.7%	188.2	188.1	0.0	0.0%
84.0%	188.1	188.1	-0.1	0.0%
85.2%	188.1	188.1	-0.1	0.0%
86.4%	188.1	188.0	-0.1	0.0%
87.7%	188.1	188.0	-0.1	0.0%
88.9%	188.0	187.9	-0.1	-0.1%
90.1%	188.0	187.9	-0.1	0.0%
91.4%	187.9	187.8	-0.1	0.0%
92.6%	187.8	187.7	-0.1	-0.1%
93.8%	187.7	187.6	0.0	0.0%
95.1%	187.6	187.6	0.0	0.0%
96.3%	187.6	187.6	0.0	0.0%
97.5%	187.6	187.6	0.0	0.0%
98.8%	187.4	187.4	0.0	0.0%
100.0%	187.3	187.2	-0.1	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	200.9	201.9	1.0	0.5%
1.2%	199.9	199.7	-0.1	-0.1%
2.5%	199.5	199.5	0.0	0.0%
3.7%	199.0	198.7	-0.2	-0.1%
4.9%	198.8	197.9	-0.9	-0.4%
6.2%	198.7	197.6	-1.1	-0.5%
7.4%	198.4	197.5	-0.9	-0.5%
8.6%	198.1	196.7	-1.5	-0.7%
9.9%	197.1	196.2	-0.8	-0.4%
11.1%	196.5	196.1	-0.4	-0.2%
12.3%	196.4	195.9	-0.5	-0.2%
13.6%	195.5	195.7	0.2	0.1%
14.8%	190.7	190.0	-0.7	-0.4%
16.0%	190.7	190.0	-0.7	-0.4%
17.3%	190.6	189.7	-0.9	-0.5%
18.5%	190.6	189.7	-0.9	-0.5%
19.8%	190.2	189.6	-0.6	-0.3%
21.0%	190.1	189.4	-0.8	-0.4%
22.2%	190.0	189.4	-0.6	-0.3%
23.5%	189.9	189.3	-0.6	-0.3%
24.7%	189.7	189.2	-0.5	-0.2%
25.9%	189.7	189.1	-0.5	-0.3%
27.2%	189.4	189.1	-0.2	-0.1%
28.4%	189.2	189.1	-0.2	-0.1%
29.6%	189.2	189.1	-0.1	-0.1%
30.9%	189.1	189.0	-0.1	0.0%
32.1%	189.1	189.0	-0.1	0.0%
33.3%	189.0	189.0	0.1	0.0%
34.6%	188.9	189.0	0.1	0.0%
35.8%	188.9	188.9	0.0	0.0%
37.0%	188.7	188.7	0.0	0.0%
38.3%	188.7	188.7	0.0	0.0%
39.5%	188.6	188.6	0.0	0.0%
40.7%	188.6	188.5	-0.1	0.0%
42.0%	188.6	188.5	-0.1	0.0%
43.2%	188.5	188.5	-0.1	0.0%
44.4%	188.5	188.4	-0.1	0.0%
45.7%	188.5	188.4	-0.1	-0.1%
46.9%	188.4	188.4	-0.1	-0.1%
48.1%	188.4	188.3	-0.1	-0.1%
49.4%	188.4	188.2	-0.1	-0.1%
50.6%	188.3	188.2	-0.1	-0.1%
51.9%	188.3	188.2	-0.1	-0.1%
53.1%	188.3	188.1	-0.1	-0.1%
54.3%	188.2	188.1	-0.1	-0.1%
55.6%	188.2	188.1	-0.1	0.0%
56.8%	188.1	188.1	0.0	0.0%
58.0%	188.1	188.1	0.0	0.0%
59.3%	188.1	188.1	0.0	0.0%
60.5%	188.1	188.1	0.0	0.0%
61.7%	188.1	188.1	0.0	0.0%
63.0%	188.0	188.0	-0.1	0.0%
64.2%	188.0	188.0	-0.1	0.0%
65.4%	188.0	187.9	-0.1	-0.1%
66.7%	187.9	187.8	-0.1	-0.1%
67.9%	187.9	187.8	-0.1	-0.1%
69.1%	187.8	187.8	-0.1	0.0%
70.4%	187.8	187.8	-0.1	0.0%
71.6%	187.8	187.8	-0.1	0.0%
72.8%	187.8	187.7	-0.1	0.0%
74.1%	187.8	187.7	-0.1	0.0%
75.3%	187.8	187.7	-0.1	0.0%
76.5%	187.8	187.7	-0.1	0.0%
77.8%	187.8	187.7	-0.1	0.0%
79.0%	187.7	187.6	-0.1	-0.1%
80.2%	187.7	187.6	-0.1	-0.1%
81.5%	187.7	187.6	-0.1	-0.1%
82.7%	187.7	187.6	-0.1	-0.1%
84.0%	187.7	187.5	-0.2	-0.1%
85.2%	187.5	187.5	0.0	0.0%
86.4%	187.5	187.4	-0.1	0.0%
87.7%	187.5	187.4	-0.1	0.0%
88.9%	187.2	187.3	0.1	0.0%
90.1%	187.2	187.2	0.0	0.0%
91.4%	187.2	187.2	0.0	0.0%
92.6%	187.2	187.2	0.0	0.0%
93.8%	187.2	187.1	0.0	0.0%
95.1%	187.1	187.1	0.0	0.0%
96.3%	187.1	186.9	-0.2	-0.1%
97.5%	186.9	186.8	-0.1	0.0%
98.8%	186.9	186.8	-0.1	-0.1%
100.0%	186.5	186.7	0.2	0.1%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	203.3	200.6	-2.7	-1.3%
1.2%	200.5	198.6	-1.9	-1.0%
2.5%	199.5	198.2	-1.3	-0.6%
3.7%	199.5	198.1	-1.4	-0.7%
4.9%	199.1	198.0	-1.1	-0.6%
6.2%	198.8	198.0	-0.8	-0.4%
7.4%	198.8	197.8	-0.9	-0.5%
8.6%	198.4	197.7	-0.7	-0.3%
9.9%	198.0	197.5	-0.5	-0.2%
11.1%	198.0	197.4	-0.6	-0.3%
12.3%	196.1	194.6	-1.5	-0.7%
13.6%	195.0	193.6	-1.4	-0.7%
14.8%	194.7	192.2	-2.5	-1.3%
16.0%	193.9	191.9	-2.0	-1.0%
17.3%	193.9	191.7	-2.2	-1.1%
18.5%	193.6	190.7	-3.0	-1.5%
19.8%	193.6	190.1	-3.5	-1.8%
21.0%	193.5	190.1	-3.4	-1.8%
22.2%	193.5	190.1	-3.4	-1.7%
23.5%	193.4	190.1	-3.4	-1.7%
24.7%	192.5	190.0	-2.5	-1.3%
25.9%	191.6	190.0	-1.6	-0.8%
27.2%	190.9	189.9	-1.0	-0.5%
28.4%	190.4	189.7	-0.8	-0.4%
29.6%	190.1	189.6	-0.5	-0.3%
30.9%	190.0	189.6	-0.4	-0.2%
32.1%	190.0	189.5	-0.5	-0.3%
33.3%	190.0	189.4	-0.6	-0.3%
34.6%	189.9	189.3	-0.6	-0.3%
35.8%	189.6	189.3	-0.3	-0.2%
37.0%	189.5	189.3	-0.3	-0.1%
38.3%	189.5	189.2	-0.3	-0.2%
39.5%	189.4	189.2	-0.2	-0.1%
40.7%	189.4	189.1	-0.2	-0.1%
42.0%	189.4	189.1	-0.3	-0.1%
43.2%	189.3	189.0	-0.3	-0.2%
44.4%	189.3	189.0	-0.3	-0.1%
45.7%	189.3	189.0	-0.3	-0.1%
46.9%	189.3	189.0	-0.3	-0.1%
48.1%	189.3	189.0	-0.3	-0.1%
49.4%	189.2	189.0	-0.2	-0.1%
50.6%	189.1	188.9	-0.2	-0.1%
51.9%	189.1	188.9	-0.2	-0.1%
53.1%	189.1	188.9	-0.2	-0.1%
54.3%	189.1	188.8	-0.3	-0.1%
55.6%	189.0	188.8	-0.2	-0.1%
56.8%	189.0	188.7	-0.2	-0.1%
58.0%	188.9	188.7	-0.2	-0.1%
59.3%	188.9	188.7	-0.2	-0.1%
60.5%	188.8	188.7	-0.1	-0.1%
61.7%	188.8	188.7	-0.1	-0.1%
63.0%	188.8	188.6	-0.1	-0.1%
64.2%	188.7	188.6	-0.1	-0.1%
65.4%	188.7	188.6	-0.1	-0.1%
66.7%	188.7	188.5	-0.2	-0.1%
67.9%	188.6	188.5	-0.2	-0.1%
69.1%	188.6	188.4	-0.2	-0.1%
70.4%	188.6	188.4	-0.3	-0.1%
71.6%	188.6	188.4	-0.2	-0.1%
72.8%	188.5	188.3	-0.2	-0.1%
74.1%	188.5	188.3	-0.1	-0.1%
75.3%	188.4	188.3	-0.1	-0.1%
76.5%	188.4	188.3	-0.1	-0.1%
77.8%	188.4	188.3	-0.1	-0.1%
79.0%	188.4	188.3	-0.1	-0.1%
80.2%	188.3	188.2	-0.1	-0.1%
81.5%	188.2	188.2	0.0	0.0%
82.7%	188.2	188.2	0.0	0.0%
84.0%	188.1	188.1	-0.1	0.0%
85.2%	188.1	188.0	-0.2	-0.1%
86.4%	188.1	187.9	-0.2	-0.1%
87.7%	188.1	187.9	-0.2	-0.1%
88.9%	188.1	187.8	-0.3	-0.1%
90.1%	188.1	187.6	-0.5	-0.2%
91.4%	187.9	187.6	-0.3	-0.2%
92.6%	187.8	187.5	-0.4	-0.2%
93.8%	187.5	187.5	-0.1	0.0%
95.1%	187.5	187.4	-0.1	0.0%
96.3%	187.5	187.3	-0.1	-0.1%
97.5%	187.4	187.1	-0.3	-0.1%
98.8%	187.0	186.7	-0.3	-0.2%
100.0%	185.9	185.9	-0.1	0.0%

Figure SQ-29-b
Old River at Los Vaqueros Intake, Monthly EC
Probability of Exceedance

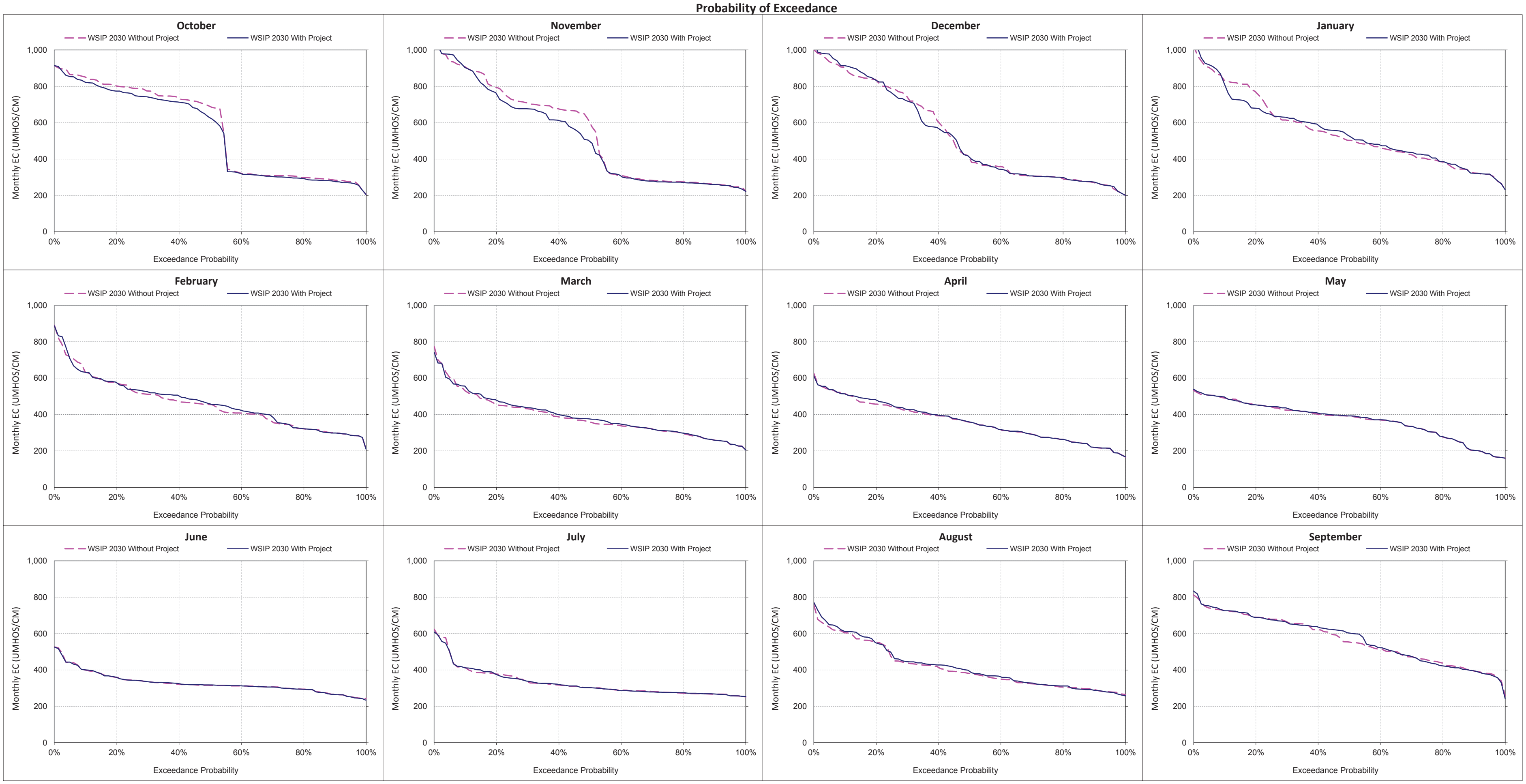


Table SQ-29-b

Old River at Los Vaqueros Intake, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	914.6	913.9	-0.7	-0.1%
1.2%	902.1	909.2	7.1	0.8%
2.5%	895.8	883.8	-12.0	-1.3%
3.7%	895.5	861.2	-34.2	-3.8%
4.9%	864.9	854.5	-10.4	-1.2%
6.2%	863.7	852.6	-11.1	-1.3%
7.4%	863.0	837.9	-25.1	-2.9%
8.6%	856.6	834.6	-22.0	-2.6%
9.9%	851.6	822.5	-29.1	-3.4%
11.1%	838.4	819.4	-19.1	-2.3%
12.3%	838.2	818.4	-19.8	-2.4%
13.6%	834.3	805.4	-28.9	-3.5%
14.8%	814.5	797.0	-17.5	-2.2%
16.0%	811.7	790.9	-20.8	-2.6%
17.3%	811.7	782.1	-29.6	-3.6%
18.5%	810.1	776.5	-33.6	-4.1%
19.8%	802.7	774.0	-28.7	-3.6%
21.0%	799.1	773.9	-25.2	-3.2%
22.2%	797.2	765.6	-31.5	-4.0%
23.5%	796.4	764.1	-32.3	-4.1%
24.7%	791.4	760.6	-30.7	-3.9%
25.9%	788.3	749.0	-39.4	-5.0%
27.2%	787.9	745.8	-42.1	-5.3%
28.4%	785.8	744.3	-41.5	-5.3%
29.6%	774.7	743.2	-31.5	-4.1%
30.9%	773.7	738.5	-35.2	-4.6%
32.1%	762.9	734.8	-28.1	-3.7%
33.3%	748.4	728.8	-19.6	-2.6%
34.6%	747.1	725.6	-21.5	-2.9%
35.8%	747.0	722.3	-24.7	-3.3%
37.0%	746.9	718.2	-28.7	-3.8%
38.3%	745.3	716.1	-29.2	-3.9%
39.5%	741.0	714.3	-26.7	-3.6%
40.7%	728.0	710.9	-17.1	-2.3%
42.0%	727.3	709.0	-18.3	-2.5%
43.2%	724.2	703.4	-20.8	-2.9%
44.4%	720.3	683.1	-37.1	-5.2%
45.7%	717.0	678.5	-38.5	-5.4%
46.9%	709.4	661.2	-48.1	-6.8%
48.1%	702.7	650.6	-52.2	-7.4%
49.4%	693.5	632.4	-61.1	-8.8%
50.6%	683.8	619.9	-63.9	-9.4%
51.9%	680.1	602.7	-77.3	-11.4%
53.1%	676.5	581.2	-95.3	-14.1%
54.3%	546.1	541.7	-4.4	-0.8%
55.6%	345.8	330.3	-15.4	-4.5%
56.8%	338.2	330.1	-8.1	-2.4%
58.0%	331.9	329.1	-2.8	-0.8%
59.3%	325.3	322.8	-2.5	-0.8%
60.5%	318.6	316.2	-2.3	-0.7%
61.7%	318.3	315.7	-2.7	-0.8%
63.0%	318.2	314.7	-3.5	-1.1%
64.2%	313.7	312.7	-1.0	-0.3%
65.4%	313.1	312.4	-0.7	-0.2%
66.7%	310.6	309.3	-1.3	-0.4%
67.9%	310.4	306.5	-3.9	-1.3%
69.1%	310.3	305.6	-4.7	-1.5%
70.4%	310.2	302.7	-7.5	-2.4%
71.6%	309.3	302.3	-7.1	-2.3%
72.8%	309.1	301.7	-7.4	-2.4%
74.1%	308.8	300.4	-8.3	-2.7%
75.3%	308.1	298.6	-9.5	-3.1%
76.5%	307.1	296.4	-10.7	-3.5%
77.8%	304.9	296.0	-8.9	-2.9%
79.0%	298.3	295.1	-3.3	-1.1%
80.2%	298.2	292.0	-6.3	-2.1%
81.5%	297.1	285.9	-11.2	-3.8%
82.7%	296.4	284.6	-11.8	-4.0%
84.0%	294.1	284.3	-9.7	-3.3%
85.2%	292.9	283.7	-9.2	-3.1%
86.4%	290.8	281.5	-9.3	-3.2%
87.7%	290.7	281.4	-9.3	-3.2%
88.9%	286.8	280.3	-6.6	-2.3%
90.1%	283.8	276.5	-7.3	-2.6%
91.4%	282.9	274.6	-8.3	-2.9%
92.6%	281.7	270.6	-11.1	-3.9%
93.8%	276.9	270.5	-6.4	-2.3%
95.1%	276.8	268.5	-8.4	-3.0%
96.3%	276.6	265.3	-11.3	-4.1%
97.5%	258.7	255.7	-3.1	-1.2%
98.8%	229.9	229.7	-0.2	-0.1%
100.0%	205.4	205.1	-0.3	-0.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1033.0	1091.0	58.0	5.6%
1.2%	1026.5	1022.7	-3.7	-0.4%
2.5%	980.4	979.2	-1.2	-0.1%
3.7%	974.1	978.3	4.2	0.4%
4.9%	937.8	977.1	39.4	4.2%
6.2%	934.6	972.1	37.4	4.0%
7.4%	922.7	944.1	21.4	2.3%
8.6%	916.2	926.7	10.5	1.2%
9.9%	907.7	903.4	-4.3	-0.5%
11.1%	894.5	893.9	-0.6	-0.1%
12.3%	884.2	884.1	-0.1	0.0%
13.6%	882.4	851.2	-31.2	-3.5%
14.8%	877.5	820.9	-56.5	-6.4%
16.0%	866.5	805.5	-61.0	-7.0%
17.3%	812.8	784.8	-27.9	-3.4%
18.5%	802.6	774.7	-27.9	-3.5%
19.8%	795.5	764.8	-30.6	-3.8%
21.0%	788.5	728.7	-59.8	-7.6%
22.2%	767.0	717.6	-49.4	-6.4%
23.5%	744.9	705.9	-39.0	-5.2%
24.7%	729.7	688.1	-41.5	-5.7%
25.9%	722.9	680.4	-42.5	-5.9%
27.2%	717.7	677.3	-40.5	-5.6%
28.4%	714.6	677.2	-37.4	-5.2%
29.6%	709.7	676.7	-33.0	-4.7%
30.9%	702.1	675.1	-27.0	-3.8%
32.1%	701.0	673.8	-27.2	-3.9%
33.3%	697.5	662.2	-35.2	-5.0%
34.6%	695.5	658.7	-36.7	-5.3%
35.8%	694.4	648.6	-45.8	-6.6%
37.0%	692.9	616.2	-76.6	-11.1%
38.3%	678.8	616.0	-62.7	-9.2%
39.5%	678.1	613.8	-64.3	-9.5%
40.7%	672.2	608.6	-63.6	-9.5%
42.0%	669.3	607.5	-61.8	-9.2%
43.2%	667.5	580.0	-87.5	-13.1%
44.4%	666.5	570.5	-96.1	-14.4%
45.7%	663.6	556.7	-106.8	-16.1%
46.9%	649.3	539.7	-109.6	-16.9%
48.1%	649.1	509.4	-139.7	-21.5%
49.4%	619.0	503.9	-115.1	-18.6%
50.6%	578.2	487.3	-90.9	-15.7%
51.9%	548.7	431.9	-116.8	-21.3%
53.1%	423.5	421.9	-1.6	-0.4%
54.3%	399.1	383.1	-16.0	-4.0%
55.6%	321.6	332.4	10.8	3.4%
56.8%	319.0	320.1	1.1	0.3%
58.0%	316.9	319.6	2.7	0.9%
59.3%	308.1	314.6	6.5	2.1%
60.5%	307.9	299.9	-7.9	-2.6%
61.7%	303.2	295.8	-7.4	-2.4%
63.0%	297.3	295.5	-1.7	-0.6%
64.2%	293.3	290.5	-2.8	-1.0%
65.4%	292.8	286.1	-6.7	-2.3%
66.7%	287.1	283.6	-3.5	-1.2%
67.9%	284.5	279.8	-4.7	-1.6%
69.1%	283.7	279.5	-4.2	-1.5%
70.4%	282.1	278.7	-3.4	-1.2%
71.6%	281.7	275.1	-6.6	-2.3%
72.8%	281.5	274.6	-7.0	-2.5%
74.1%	278.4	274.1	-4.3	-1.5%
75.3%	277.1	273.8	-3.3	-1.2%
76.5%	277.1	273.5	-3.6	-1.3%
77.8%	275.1	273.1	-2.0	-0.7%
79.0%	275.0	273.0	-2.0	-0.7%
80.2%	274.7	270.2	-4.6	-1.7%
81.5%	272.1	269.4	-2.7	-1.0%
82.7%	272.0	268.8	-3.2	-1.2%
84.0%	271.8	268.0	-3.8	-1.4%
85.2%	268.8	266.4	-2.4	-0.9%
86.4%	267.0	264.1	-2.8	-1.1%
87.7%	265.5	262.8	-2.7	-1.0%
88.9%	263.1	260.8	-2.3	-0.9%
90.1%	260.8	260.1	-0.7	-0.3%
91.4%	260.2	258.9	-1.3	-0.5%
92.6%	257.5	255.1	-2.4	-0.9%
93.8%	256.2	254.8	-1.4	-0.6%
95.1%	248.1	253.8	5.7	2.3%
96.3%	247.3	245.0	-2.3	-0.9%
97.5%	247.2	242.8	-4.4	-1.8%
98.8%	246.6	235.3	-11.3	-4.6%
100.0%	221.9	221.9	0.1	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1001.6	1051.2	49.6	4.9%
1.2%	982.0	988.6	6.5	0.7%
2.5%	974.9	983.1	8.2	0.8%
3.7%	956.1	980.2	24.1	2.5%
4.9%	936.0	978.9	42.8	4.6%
6.2%	925.3	954.5	29.2	3.2%
7.4%	921.7	941.3	19.6	2.1%
8.6%	906.6	914.0	7.4	0.8%
9.9%	905.8	913.9	8.1	0.9%
11.1%	876.2	910.2	33.9	3.9%
12.3%	863.2	902.3	39.2	4.5%
13.6%	854.7	897.1	42.4	5.0%
14.8%	852.2	881.2	29.0	3.4%
16.0%	846.2	870.2	24.0	2.8%
17.3%	844.4	854.1	9.7	1.2%
18.5%	840.2	848.8	8.7	1.0%
19.8%	839.0	834.9	-4.1	-0.5%
21.0%	815.7	824.0	8.3	1.0%
22.2%	800.0	823.6	23.7	3.0%
23.5%	799.7	779.2	-20.5	-2.6%
24.7%	788.9	768.5	-20.4	-2.6%
25.9%	785.5	751.1	-34.4	-4.4%
27.2%	770.7	734.2	-36.5	-4.7%
28.4%	766.1	732.5	-33.6	-4.4%
29.6%	749.8	721.9	-27.9	-3.7%
30.9%	719.2	714.0	-5.2	-0.7%
32.1%	719.2	706.7	-12.4	-1.7%
33.3%	699.9	666.8	-33.2	-4.7%
34.6%	690.3	609.5	-80.8	-11.7%
35.8%	667.9	586.2	-81.7	-12.2%
37.0%	666.2	579.3	-86.8	-13.0%
38.3%	661.4	577.3	-84.1	-12.7%
39.5%	614.1	574.0	-40.1	-6.5%
40.7%	588.9	559.8	-29.2	-5.0%
42.0%	567.1	546.3	-20.8	-3.7%
43.2%	534.3	545.7	11.4	2.1%
44.4%	513.3	529.4	16.1	3.1%
45.7%	463.6	503.9	40.2	8.7%
46.9%	442.1	456.5	14.4	3.3%
48.1%	426.4	424.5	-1.9	-0.4%
49.4%	419.6	418.3	-1.3	-0.3%
50.6%	382.5	399.3	16.8	4.4%
51.9%	380.5	387.1	6.7	1.8%
53.1%	372.8	386.8	14.0	3.8%
54.3%	365.8	370.6	4.8	1.3%
55.6%	363.9	368.3	4.4	1.2%
56.8%	363.7	359.1	-4.5	-1.2%
58.0%	363.0	355.4	-7.6	-2.1%
59.3%	359.3	345.1	-14.1	-3.9%
60.5%	357.4	343.9	-13.5	-3.8%
61.7%	349.9	337.6	-12.3	-3.5%
63.0%	323.1	320.4	-2.7	-0.8%
64.2%	317.1	319.2	2.0	0.6%
65.4%	314.7	319.0	4.2	1.3%
66.7%	310.4	316.8	6.4	2.0%
67.9%	310.1	314.9	4.8	1.5%
69.1%	306.1	307.3	1.3	0.4%
70.4%	305.9	306.9	1.0	0.3%
71.6%	305.8	304.8	-1.0	-0.3%
72.8%	305.6	304.7	-0.9	-0.3%
74.1%	305.4	303.7	-1.7	-0.6%
75.3%	304.4	303.3	-1.1	-0.4%
76.5%	302.5	301.9	-0.5	-0.2%
77.8%	300.4	301.0	0.6	0.2%
79.0%	299.8	300.8	1.0	0.3%
80.2%	289.4	298.1	8.6	3.0%
81.5%	287.9	287.2	-0.7	-0.2%
82.7%	285.9	285.2	-0.7	-0.3%
84.0%	285.9	283.6	-2.3	-0.8%
85.2%	281.2	278.3	-2.8	-1.0%
86.4%	278.1	277.8	-0.3	-0.1%
87.7%	276.1	277.1	1.0	0.4%
88.9%	274.7	276.3	1.7	0.6%
90.1%	269.7	273.3	3.7	1.4%
91.4%	263.8	266.4	2.6	1.0%
92.6%	259.2	258.4	-0.8	-0.3%
93.8%	256.9	254.4	-2.5	-1.0%
95.1%	254.0	252.9	-1.1	-0.4%
96.3%	235.5	247.5	12.1	5.1%
97.5%	223.6	223.6	0.0	0.0%
98.8%	211.5	211.4	-0.1	-0.1%
100.0%	200.8	201.0	0.2	0.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1028.4	1024.3	-4.1	-0.4%
1.2%	970.0	1015.6	45.6	4.7%
2.5%	939.3	957.0	17.7	1.9%
3.7%	911.9	927.2	15.3	1.7%
4.9%	903.9	919.2	15.2	1.7%
6.2%	889.0	909.7	20.7	2.3%
7.4%	867.6	894.4	26.8	3.1%
8.6%	862.0	868.8	6.7	0.8%
9.9%	833.0	814.5	-18.5	-2.2%
11.1%	826.7	761.8	-64.9	-7.9%
12.3%	821.4	729.9	-91.5	-11.1%
13.6%	820.0	726.9	-93.0	-11.3%
14.8%	813.9	724.9	-89.0	-10.9%
16.0%	811.9	723.4	-88.5	-10.9%
17.3%	811.6	711.3	-100.3	-12.4%
18.5%	782.9	681.0	-101.9	-13.0%
19.8%	772.3	679.8	-92.4	-12.0%
21.0%	750.5	678.3	-72.2	-9.6%
22.2%	725.3	661.5	-63.8	-8.8%
23.5%	690.6	651.6	-39.0	-5.7%
24.7%	660.1	646.7	-13.4	-2.0%
25.9%	634.1	636.0	1.9	0.3%
27.2%	630.9	634.4	3.5	0.6%
28.4%	615.0	631.5	16.4	2.7%
29.6%	614.9	630.7	15.7	2.6%
30.9%	610.5	624.4	13.9	2.3%
32.1%	609.5	623.6	14.1	2.3%
33.3%	601.4	611.6	10.2	1.7%
34.6%	601.4	606.8	5.5	0.9%
35.8%	584.0	604.1	20.1	3.4%
37.0%	567.6	601.1	33.5	5.9%
38.3%	558.9	595.4	36.5	6.5%
39.5%	555.4	592.5	37.1	6.7%
40.7%	554.3	577.2	22.9	4.1%
42.0%	550.2	565.0	14.8	2.7%
43.2%	541.9	559.5	17.6	3.3%
44.4%	532.9	559.2	26.3	4.9%
45.7%	529.8	557.3	27.5	5.2%
46.9%	522.2	554.1	32.0	6.1%
48.1%	512.3	549.2	36.9	7.2%
49.4%	503.5	533.4	30.0	6.0%
50.6%	502.8	520.4	17.6	3.5%
51.9%	496.4	506.6	10.1	2.0%
53.1%	487.8	505.2	17.4	3.6%
54.3%	483.5	504.2	20.7	4.3%
55.6%	482.3	489.3	7.1	1.5%
56.8%	479.7	486.0	6.3	1.3%
58.0%	468.8	481.9	13.1	2.8%
59.3%	468.1	481.8	13.7	2.9%
60.5%	459.4	473.1	13.7	3.0%
61.7%	454.9	472.8	17.9	3.9%
63.0%	450.4	460.2	9.8	2.2%
64.2%	446.6	453.5	6.8	1.5%
65.4%	440.7	449.4	8.7	2.0%
66.7%	439.4	446.4	7.0	1.6%
67.9%	435.1	440.9	5.7	1.3%
69.1%	426.7	437.7	11.0	2.6%
70.4%	421.9	436.1	14.1	3.3%
71.6%	408.1	427.4	19.3	4.7%
72.8%	405.9	427.0	21.1	5.2%
74.1%	405.4	422.7	17.3	4.3%
75.3%	398.4	421.4	23.0	5.8%
76.5%	396.9	405.7	8.8	2.2%
77.8%	393.7	405.4	11.7	3.0%
79.0%	386.7	386.7	0.0	0.0%
80.2%	383.5	385.4	1.8	0.5%
81.5%	373.6	377.9	4.3	1.2%
82.7%	357.8	372.2	14.4	4.0%
84.0%	346.3	372.1	25.8	7.4%
85.2%	345.7	357.9	12.2	3.5%
86.4%	344.9	348.6	3.7	1.1%
87.7%	344.1	343.1	-1.0	-0.3%
88.9%	328.6	323.1	-5.5	-1.7%
90.1%	323.4	322.3	-1.1	-0.3%
91.4%	322.3	321.8	-0.5	-0.2%
92.6%	316.9	319.1	2.1	0.7%
93.8%	316.2	317.5	1.3	0.4%
95.1%	315.3	317.2	2.0	0.6%
96.3%	303.9	299.3	-4.6	-1.5%
97.5%	279.5	279.7	0.2	0.1%
98.8%	265.1	264.1	-1.0	-0.4%
100.0%	231.3	231.4	0.1	0.0%

Table SQ-29-b
Old River at Los Vaqueros Intake, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	891.1	887.3	-3.8	-0.4%
1.2%	822.3	833.3	11.0	1.3%
2.5%	784.8	827.6	42.8	5.4%
3.7%	728.2	771.8	43.6	6.0%
4.9%	718.9	709.2	-9.8	-1.4%
6.2%	705.8	667.6	-38.2	-5.4%
7.4%	688.5	649.4	-39.1	-5.7%
8.6%	679.1	636.4	-42.7	-6.3%
9.9%	633.2	632.6	-0.6	-0.1%
11.1%	626.5	630.7	4.2	0.7%
12.3%	607.0	603.9	-3.2	-0.5%
13.6%	602.4	599.7	-2.8	-0.5%
14.8%	592.5	598.1	5.6	0.9%
16.0%	585.5	585.3	-0.2	0.0%
17.3%	578.6	582.6	4.1	0.7%
18.5%	578.0	581.5	3.4	0.6%
19.8%	576.5	578.2	1.8	0.3%
21.0%	567.0	562.5	-4.5	-0.8%
22.2%	562.9	557.9	-5.0	-0.9%
23.5%	561.7	539.4	-22.3	-4.0%
24.7%	534.2	538.3	4.1	0.8%
25.9%	522.8	535.8	13.0	2.5%
27.2%	515.0	534.0	19.0	3.7%
28.4%	514.0	529.7	15.7	3.1%
29.6%	511.8	526.6	14.9	2.9%
30.9%	510.7	519.5	8.8	1.7%
32.1%	510.1	519.1	9.0	1.8%
33.3%	505.4	513.4	8.0	1.6%
34.6%	490.8	510.1	19.2	3.9%
35.8%	489.1	509.7	20.7	4.2%
37.0%	481.0	509.0	28.1	5.8%
38.3%	479.6	506.8	27.2	5.7%
39.5%	473.1	505.8	32.6	6.9%
40.7%	468.3	495.5	27.3	5.8%
42.0%	467.4	491.7	24.3	5.2%
43.2%	465.6	485.4	19.8	4.3%
44.4%	464.4	484.3	19.9	4.3%
45.7%	460.6	480.4	19.8	4.3%
46.9%	458.4	473.4	14.9	3.3%
48.1%	455.6	467.5	11.9	2.6%
49.4%	455.5	460.8	5.3	1.2%
50.6%	453.9	455.4	1.5	0.3%
51.9%	442.2	454.5	12.3	2.8%
53.1%	423.5	452.9	29.4	6.9%
54.3%	414.4	450.0	35.6	8.6%
55.6%	410.6	444.8	34.1	8.3%
56.8%	409.7	435.3	25.6	6.3%
58.0%	408.3	429.4	21.1	5.2%
59.3%	408.2	426.4	18.2	4.5%
60.5%	407.2	419.8	12.6	3.1%
61.7%	404.2	416.5	12.3	3.1%
63.0%	402.9	412.8	9.9	2.5%
64.2%	402.9	408.6	5.7	1.4%
65.4%	399.6	408.2	8.5	2.1%
66.7%	396.8	403.8	7.0	1.8%
67.9%	377.7	401.1	23.5	6.2%
69.1%	369.1	397.8	28.7	7.8%
70.4%	354.5	381.3	26.8	7.6%
71.6%	351.4	355.3	3.8	1.1%
72.8%	347.2	352.9	5.6	1.6%
74.1%	345.0	349.6	4.6	1.3%
75.3%	344.1	345.0	0.9	0.3%
76.5%	338.5	327.0	-11.6	-3.4%
77.8%	323.7	326.6	2.9	0.9%
79.0%	322.7	323.7	1.0	0.3%
80.2%	320.9	320.7	-0.2	-0.1%
81.5%	318.7	319.4	0.7	0.2%
82.7%	317.8	318.2	0.4	0.1%
84.0%	317.2	316.9	-0.2	-0.1%
85.2%	313.7	307.6	-6.1	-1.9%
86.4%	307.5	302.4	-5.1	-1.7%
87.7%	302.7	300.6	-2.1	-0.7%
88.9%	301.1	298.9	-2.2	-0.7%
90.1%	298.8	298.0	-0.7	-0.2%
91.4%	297.2	297.4	0.2	0.1%
92.6%	293.3	293.5	0.2	0.1%
93.8%	291.8	292.9	1.1	0.4%
95.1%	285.8	286.0	0.2	0.1%
96.3%	283.8	283.9	0.1	0.0%
97.5%	283.7	282.9	-0.8	-0.3%
98.8%	274.8	274.6	-0.1	0.0%
100.0%	208.9	210.3	1.4	0.7%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	774.7	742.2	-32.4	-4.2%
1.2%	699.3	683.3	-16.0	-2.3%
2.5%	679.4	681.9	2.5	0.4%
3.7%	634.1	604.8	-29.3	-4.6%
4.9%	604.5	594.6	-9.8	-1.6%
6.2%	597.7	568.3	-29.5	-4.9%
7.4%	555.2	566.7	11.5	2.1%
8.6%	553.5	558.2	4.7	0.8%
9.9%	530.7	556.3	25.6	4.8%
11.1%	517.3	529.2	11.9	2.3%
12.3%	515.4	515.9	0.5	0.1%
13.6%	510.9	515.9	5.0	1.0%
14.8%	488.7	512.5	23.8	4.9%
16.0%	484.0	492.4	8.4	1.7%
17.3%	479.3	487.5	8.3	1.7%
18.5%	468.3	483.6	15.3	3.3%
19.8%	456.9	480.7	23.8	5.2%
21.0%	450.0	470.0	20.0	4.4%
22.2%	448.7	467.5	18.8	4.2%
23.5%	446.9	459.5	12.6	2.8%
24.7%	441.8	452.6	10.8	2.4%
25.9%	439.7	448.6	8.9	2.0%
27.2%	439.5	445.5	6.0	1.4%
28.4%	435.3	441.6	6.3	1.4%
29.6%	432.0	437.4	5.5	1.3%
30.9%	429.6	436.5	6.9	1.6%
32.1%	423.2	433.0	9.9	2.3%
33.3%	418.5	428.0	9.5	2.3%
34.6%	415.2	424.9	9.7	2.3%
35.8%	412.8	424.7	11.9	2.9%
37.0%	408.3	414.6	6.3	1.5%
38.3%	391.1	409.2	18.1	4.6%
39.5%	388.7	400.2	11.5	2.9%
40.7%	383.7	397.2	13.5	3.5%
42.0%	380.7	392.7	12.0	3.2%
43.2%	379.6	389.1	9.5	2.5%
44.4%	378.1	380.5	2.4	0.6%
45.7%	369.5	379.2	9.8	2.6%
46.9%	369.1	378.7	9.6	2.6%
48.1%	366.1	378.6	12.6	3.4%
49.4%	362.4	376.2	13.7	3.8%
50.6%	355.8	374.2	18.4	5.2%
51.9%	349.3	374.2	24.9	7.1%
53.1%	347.5	369.4	21.9	6.3%
54.3%	346.7	366.9	20.2	5.8%
55.6%	346.3	361.3	15.0	4.3%
56.8%	345.5	351.5	6.0	1.7%
58.0%	341.5	350.4	9.0	2.6%
59.3%	340.6	350.3	9.7	2.8%
60.5%	336.2	346.0	9.8	2.9%
61.7%	335.6	343.1	7.5	2.2%
63.0%	334.1	337.1	3.0	0.9%
64.2%	332.8	333.6	0.7	0.2%
65.4%	330.3	331.4	1.0	0.3%
66.7%	327.0	327.7	0.7	0.2%
67.9%	326.2	326.7	0.4	0.1%
69.1%	323.6	323.1	-0.5	-0.2%
70.4%	319.1	318.5	-0.7	-0.2%
71.6%	313.1	313.4	0.3	0.1%
72.8%	310.5	311.8	1.4	0.4%
74.1%	308.1	310.9	2.8	0.9%
75.3%	307.1	309.9	2.9	0.9%
76.5%	305.7	308.9	3.2	1.0%
77.8%	304.2	305.2	1.0	0.3%
79.0%	299.9	299.8	-0.1	0.0%
80.2%	293.2	297.0	3.8	1.3%
81.5%	288.8	293.5	4.7	1.6%
82.7%	283.3	288.3	5.0	1.8%
84.0%	281.6	284.3	2.8	1.0%
85.2%	277.4	279.1	1.8	0.6%
86.4%	270.0	270.2	0.2	0.1%
87.7%	265.9	265.9	0.0	0.0%
88.9%	263.1	263.2	0.1	0.1%
90.1%	258.4	258.8	0.4	0.2%
91.4%	257.0	256.7	-0.3	-0.1%
92.6%	253.6	253.7	0.2	0.1%
93.8%	252.1	252.1	-0.1	0.0%
95.1%	234.7	236.2	1.5	0.6%
96.3%	234.7	234.9	0.2	0.1%
97.5%	227.3	226.2	-1.1	-0.5%
98.8%	226.1	226.0	-0.2	-0.1%
100.0%	204.1	204.1	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	626.1	612.0	-14.1	-2.2%
1.2%	568.5	563.1	-5.5	-1.0%
2.5%	554.5	555.4	0.8	0.1%
3.7%	544.8	554.6	9.8	1.8%
4.9%	536.2	536.9	0.8	0.1%
6.2%	534.2	536.8	2.7	0.5%
7.4%	522.0	523.8	1.8	0.3%
8.6%	521.8	515.3	-6.5	-1.2%
9.9%	515.6	514.2	-1.4	-0.3%
11.1%	505.3	505.4	0.0	0.0%
12.3%	500.6	503.1	2.6	0.5%
13.6%	482.0	499.0	17.0	3.5%
14.8%	468.3	491.8	23.5	5.0%
16.0%	467.9	489.7	21.7	4.6%
17.3%	464.4	486.3	21.9	4.7%
18.5%	460.0	482.5	22.6	4.9%
19.8%	457.0	481.7	24.7	5.4%
21.0%	456.6	471.4	14.8	3.2%
22.2%	452.6	467.9	15.3	3.4%
23.5%	452.3	461.6	9.3	2.0%
24.7%	443.9	455.4	11.5	2.6%
25.9%	439.4	441.8	2.5	0.6%
27.2%	435.3	439.7	4.4	1.0%
28.4%	426.1	437.6	11.5	2.7%
29.6%	423.2	427.5	4.3	1.0%
30.9%	420.0	426.8	6.8	1.6%
32.1%	413.9	426.5	12.6	3.1%
33.3%	411.5	417.4	5.9	1.4%
34.6%	406.3	414.4	8.1	2.0%
35.8%	402.8	412.6	9.7	2.4%
37.0%	399.5	403.2	3.7	0.9%
38.3%	394.6	400.1	5.4	1.4%
39.5%	392.9	398.3	5.4	1.4%
40.7%	392.3	393.9	1.6	0.4%
42.0%	392.0	392.5	0.5	0.1%
43.2%	391.0	390.5	-0.4	-0.1%
44.4%	375.8	379.6	3.8	1.0%
45.7%	373.3	376.8	3.5	0.9%
46.9%	370.2	370.5	0.3	0.1%
48.1%	365.4	366.2	0.8	0.2%
49.4%	359.6	360.7	1.1	0.3%
50.6%	356.2	356.3	0.1	0.0%
51.9%	349.6	350.5	1.0	0.3%
53.1%	342.7	342.7	0.0	0.0%
54.3%	341.4	341.5	0.1	0.0%
55.6%	334.8	335.1	0.3	0.1%
56.8%	334.2	334.4	0.2	0.1%
58.0%	328.5	329.3	0.8	0.2%
59.3%	318.0	318.0	0.0	0.0%
60.5%	312.7	315.0	2.3	0.8%
61.7%	312.4	312.6	0.2	0.1%
63.0%	308.7	308.7	0.0	0.0%
64.2%	307.4	308.2	0.8	0.2%
65.4%	304.3	307.5	3.2	1.1%
66.7%	303.7	305.1	1.4	0.5%
67.9%	297.4	297.6	0.1	0.0%
69.1%	293.8	294.3	0.4	0.1%
70.4%	290.7	289.1	-1.5	-0.5%
71.6%	284.5	284.6	0.1	0.0%
72.8%	274.9	274.9	0.1	0.0%
74.1%	274.4	274.5	0.2	0.1%
75.3%	274.3	274.4	0.1	0.0%
76.5%	269.4	270.0	0.7	0.2%
77.8%	268.8	268.8	0.0	0.0%
79.0%	263.3	263.3	0.0	0.0%
80.2%	263.1	263.2	0.1	0.0%
81.5%	256.8	257.3	0.5	0.2%
82.7%	249.4	248.0	-1.4	-0.6%
84.0%	247.1	247.1	0.0	0.0%
85.2%	244.8	244.5	-0.2	-0.1%
86.4%	241.2	241.2	0.1	0.0%
87.7%	239.5	239.3	-0.3	-0.1%
88.9%	220.7	221.1	0.4	0.2%
90.1%	219.3	219.5	0.2	0.1%
91.4%	216.2	216.5	0.3	0.1%
92.6%	215.5	215.8	0.2	0.1%
93.8%	214.7	215.4	0.7	0.3%
95.1%	214.0	214.7	0.7	0.3%
96.3%	188.9	189.2	0.3	0.2%
97.5%	188.6	188.0	-0.6	-0.3%
98.8%	177.9	177.4	-0.5	-0.3%
100.0%	166.1	166.9	0.8	0.5%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	533.0	539.7	6.7	1.3%
1.2%	520.2	526.4	6.2	1.2%
2.5%	509.8	519.9	10.1	2.0%
3.7%	508.8	509.7	0.9	0.2%
4.9%	505.8	506.6	0.8	0.2%
6.2%	505.5	505.4	-0.1	0.0%
7.4%	504.5	500.3	-4.2	-0.8%
8.6%	494.9	499.4	4.6	0.9%
9.9%	490.9	496.7	5.9	1.2%
11.1%	485.9	483.6	-2.3	-0.5%
12.3%	484.5	481.3	-3.2	-0.7%
13.6%	483.6	475.1	-8.5	-1.8%
14.8%	469.3	473.6	4.4	0.9%
16.0%	463.5	463.9	0.3	0.1%
17.3%	460.6	461.5	0.9	0.2%
18.5%	458.9	454.3	-4.6	-1.0%
19.8%	452.0	453.7	1.7	0.4%
21.0%	451.8	451.1	-0.6	-0.1%
22.2%	448.9	449.8	0.8	0.2%
23.5%	445.3	445.7	0.4	0.1%
24.7%	443.1	443.8	0.7	0.2%
25.9%	436.3	443.7	7.4	1.7%
27.2%	435.1	442.0	6.9	1.6%
28.4%	425.4	437.0	11.6	2.7%
29.6%	424.3	436.6	12.2	2.9%
30.9%	422.8	429.3	6.5	1.5%
32.1%	422.5	422.8	0.4	0.1%
33.3%	421.2	420.8	-0.4	-0.1%
34.6%	417.5	418.7	1.2	0.3%
35.8%	415.8	418.4	2.6	0.6%
37.0%	413.9	412.9	-1.0	-0.2%
38.3%	407.4	411.9	4.5	1.1%
39.5%	402.7	408.8	6.1	1.5%
40.7%	400.9	403.2	2.3	0.6%
42.0%	396.8	403.1	6.3	1.6%
43.2%	396.2	401.1	4.9	1.2%
44.4%	395.8	397.9	2.1	0.5%
45.7%	395.3	397.0	1.7	0.4%
46.9%	392.9	396.0	3.0	0.8%
48.1%	392.8	393.1	0.3	0.1%
49.4%	391.9	392.2	0.3	0.1%
50.6%	391.2	392.1	0.9	0.2%
51.9%	386.2	391.5	5.3	1.4%
53.1%	383.6	386.1	2.6	0.7%
54.3%	377.0	383.9	6.9	1.8%
55.6%	374.8	383.5	8.8	2.3%
56.8%	372.1	377.0	4.9	1.3%
58.0%	371.7	371.5	-0.3	-0.1%
59.3%	371.4	371.2	-0.3	-0.1%
60.5%	369.4	370.5	1.1	0.3%
61.7%	368.2	369.4	1.3	0.3%
63.0%	363.7	364.1	0.3	0.1%
64.2%	363.4	362.9	-0.4	-0.1%
65.4%	359.2	359.1	-0.1	0.0%
66.7%	354.6	354.6	0.1	0.0%
67.9%	337.8	338.0	0.2	0.1%
69.1%	335.7	335.8	0.1	0.0%
70.4%	333.6	333.6	0.0	0.0%
71.6%	326.0	326.0	0.0	0.0%
72.8%	322.5	322.5	0.0	0.0%
74.1%	317.4	317.4	0.0	0.0%
75.3%	305.6	305.6	0.0	0.0%
76.5%	303.2	303.3	0.1	0.0%
77.8%	302.3	302.4	0.1	0.0%
79.0%	279.7	281.1	1.4	0.5%
80.2%	275.3	276.7	1.5	0.5%
81.5%	269.3	269.4	0.0	0.0%
82.7%	266.8	268.1	1.4	0.5%
84.0%	259.7	259.8	0.1	0.0%
85.2%	249.4	250.2	0.8	0.3%
86.4%	245.6	245.8	0.2	0.1%
87.7%	216.6	216.9	0.3	0.1%
88.9%	204.6	205.2	0.6	0.3%
90.1%	201.8	202.2	0.4	0.2%
91.4%	200.5	201.4	0.9	0.4%
92.6%	196.0	196.4	0.4	0.2%
93.8%	185.4	185.7	0.3	0.2%
95.1%	183.1	183.4	0.3	0.2%
96.3%	168.7	168.9	0.2	0.1%
97.5%	165.5	165.8	0.3	0.2%
98.8%	163.8	163.9	0.1	0.1%
100.0%	160.2	160.5	0.4	0.2%

Table SQ-29-b
Old River at Los Vaqueros Intake, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	526.2	526.2	0.0	0.0%
1.2%	521.5	516.9	-4.7	-0.9%
2.5%	493.3	479.6	-13.7	-2.8%
3.7%	442.9	443.5	0.5	0.1%
4.9%	441.1	443.1	2.1	0.5%
6.2%	439.4	431.9	-7.5	-1.7%
7.4%	427.3	426.4	-0.9	-0.2%
8.6%	404.2	402.9	-1.3	-0.3%
9.9%	399.1	399.9	0.7	0.2%
11.1%	394.4	398.6	4.2	1.1%
12.3%	392.2	395.4	3.2	0.8%
13.6%	385.6	386.9	1.3	0.3%
14.8%	380.1	380.3	0.1	0.0%
16.0%	370.4	367.4	-3.0	-0.8%
17.3%	366.0	366.8	0.8	0.2%
18.5%	363.2	364.5	1.3	0.4%
19.8%	358.6	360.1	1.4	0.4%
21.0%	358.1	352.2	-5.9	-1.6%
22.2%	346.5	346.7	0.2	0.1%
23.5%	345.2	344.8	-0.4	-0.1%
24.7%	343.9	343.1	-0.8	-0.2%
25.9%	342.9	342.3	-0.5	-0.2%
27.2%	341.5	342.2	0.6	0.2%
28.4%	338.4	338.3	-0.1	0.0%
29.6%	333.7	335.9	2.1	0.6%
30.9%	333.6	333.6	0.0	0.0%
32.1%	330.8	332.3	1.5	0.5%
33.3%	329.7	331.4	1.6	0.5%
34.6%	329.7	331.3	1.6	0.5%
35.8%	326.7	330.1	3.4	1.0%
37.0%	325.9	328.7	2.9	0.9%
38.3%	324.4	327.1	2.7	0.8%
39.5%	321.0	326.3	5.2	1.6%
40.7%	319.8	322.1	2.3	0.7%
42.0%	319.5	320.2	0.7	0.2%
43.2%	319.5	319.1	-0.4	-0.1%
44.4%	319.1	319.0	-0.1	0.0%
45.7%	316.8	318.7	1.9	0.6%
46.9%	315.9	318.5	2.5	0.8%
48.1%	315.8	317.7	1.9	0.6%
49.4%	315.7	317.3	1.7	0.5%
50.6%	314.9	316.7	1.8	0.6%
51.9%	314.0	315.6	1.6	0.5%
53.1%	313.8	315.3	1.5	0.5%
54.3%	313.8	315.3	1.5	0.5%
55.6%	313.4	314.9	1.4	0.5%
56.8%	312.1	313.0	0.9	0.3%
58.0%	311.9	312.8	0.9	0.3%
59.3%	311.9	312.5	0.7	0.2%
60.5%	311.8	311.8	0.0	0.0%
61.7%	311.3	311.4	0.1	0.0%
63.0%	311.2	309.0	-2.2	-0.7%
64.2%	310.3	308.1	-2.1	-0.7%
65.4%	309.1	308.1	-1.0	-0.3%
66.7%	307.7	306.9	-0.8	-0.3%
67.9%	306.6	306.1	-0.6	-0.2%
69.1%	306.6	305.9	-0.7	-0.2%
70.4%	306.3	305.5	-0.8	-0.3%
71.6%	306.3	304.7	-1.6	-0.5%
72.8%	301.0	300.6	-0.4	-0.1%
74.1%	299.0	298.4	-0.7	-0.2%
75.3%	298.4	296.8	-1.6	-0.5%
76.5%	296.2	296.3	0.1	0.0%
77.8%	295.7	294.5	-1.2	-0.4%
79.0%	294.2	293.8	-0.4	-0.1%
80.2%	294.1	293.1	-1.0	-0.3%
81.5%	292.0	292.1	0.2	0.1%
82.7%	291.6	292.0	0.4	0.1%
84.0%	279.9	279.5	-0.4	-0.2%
85.2%	278.2	276.3	-1.9	-0.7%
86.4%	276.4	275.5	-0.8	-0.3%
87.7%	272.1	268.7	-3.4	-1.2%
88.9%	266.0	266.4	0.4	0.1%
90.1%	265.8	264.7	-1.2	-0.4%
91.4%	263.7	263.6	-0.1	0.0%
92.6%	262.5	262.6	0.1	0.0%
93.8%	255.6	254.4	-1.3	-0.5%
95.1%	252.3	252.2	0.0	0.0%
96.3%	248.7	245.9	-2.8	-1.1%
97.5%	245.6	243.9	-1.7	-0.7%
98.8%	243.8	242.3	-1.5	-0.6%
100.0%	242.6	232.9	-9.7	-4.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	624.1	608.1	-16.0	-2.6%
1.2%	589.5	593.2	3.7	0.6%
2.5%	581.4	557.6	-23.8	-4.1%
3.7%	576.5	547.5	-29.0	-5.0%
4.9%	499.8	501.0	1.3	0.3%
6.2%	435.4	433.1	-2.3	-0.5%
7.4%	416.9	420.5	3.6	0.9%
8.6%	416.3	418.0	1.7	0.4%
9.9%	413.4	411.6	-1.8	-0.4%
11.1%	399.5	410.1	10.6	2.6%
12.3%	390.5	406.6	16.1	4.1%
13.6%	386.5	401.1	14.6	3.8%
14.8%	385.1	400.8	15.7	4.1%
16.0%	383.2	390.1	6.9	1.8%
17.3%	382.7	390.0	7.4	1.9%
18.5%	381.9	388.5	6.6	1.7%
19.8%	377.5	375.1	-2.4	-0.6%
21.0%	375.6	366.7	-8.9	-2.4%
22.2%	373.1	360.6	-12.6	-3.4%
23.5%	369.5	357.9	-11.6	-3.1%
24.7%	366.6	353.7	-12.8	-3.5%
25.9%	365.1	353.5	-11.6	-3.2%
27.2%	349.9	350.3	0.4	0.1%
28.4%	347.8	344.3	-3.5	-1.0%
29.6%	335.5	338.9	3.3	1.0%
30.9%	328.2	335.2	7.1	2.2%
32.1%	327.5	331.9	4.3	1.3%
33.3%	326.1	326.9	0.7	0.2%
34.6%	325.7	326.3	0.6	0.2%
35.8%	325.7	325.7	0.0	0.0%
37.0%	320.8	325.5	4.7	1.4%
38.3%	319.0	322.5	3.5	1.1%
39.5%	317.5	321.2	3.7	1.2%
40.7%	316.1	317.1	0.9	0.3%
42.0%	313.9	316.1	2.2	0.7%
43.2%	311.2	311.7	0.5	0.2%
44.4%	310.9	311.7	0.7	0.2%
45.7%	310.5	311.6	1.1	0.3%
46.9%	307.3	304.5	-2.9	-0.9%
48.1%	303.2	302.6	-0.5	-0.2%
49.4%	302.9	302.5	-0.4	-0.1%
50.6%	302.6	302.2	-0.5	-0.1%
51.9%	301.2	300.0	-1.3	-0.4%
53.1%	301.0	299.4	-1.6	-0.5%
54.3%	296.0	295.3	-0.7	-0.3%
55.6%	294.4	294.5	0.2	0.1%
56.8%	293.8	293.8	0.0	0.0%
58.0%	289.6	293.7	4.1	1.4%
59.3%	289.4	285.9	-3.4	-1.2%
60.5%	288.7	285.9	-2.9	-1.0%
61.7%	288.2	285.6	-2.6	-0.9%
63.0%	285.2	284.4	-0.8	-0.3%
64.2%	285.0	283.2	-1.8	-0.6%
65.4%	284.7	283.2	-1.5	-0.5%
66.7%	284.3	281.5	-2.7	-1.0%
67.9%	284.2	280.0	-4.2	-1.5%
69.1%	282.6	278.4	-4.2	-1.5%
70.4%	280.7	278.2	-2.4	-0.9%
71.6%	280.2	277.8	-2.4	-0.9%
72.8%	277.1	277.0	-0.1	0.0%
74.1%	277.0	276.6	-0.4	-0.1%
75.3%	276.5	276.6	0.1	0.0%
76.5%	275.1	275.8	0.7	0.2%
77.8%	274.3	275.4	1.1	0.4%
79.0%	273.0	274.8	1.8	0.7%
80.2%	271.2	274.3	3.1	1.1%
81.5%	269.9	271.5	1.6	0.6%
82.7%	269.6	271.1	1.6	0.6%
84.0%	269.5	271.1	1.6	0.6%
85.2%	269.2	269.8	0.6	0.2%
86.4%	269.1	269.3	0.2	0.1%
87.7%	268.2	269.2	1.0	0.4%
88.9%	267.0	268.4	1.4	0.5%
90.1%	266.5	267.4	0.8	0.3%
91.4%	266.4	265.5	-1.0	-0.4%
92.6%	266.4	263.9	-2.5	-1.0%
93.8%	266.1	262.7	-3.4	-1.3%
95.1%	257.9	257.6	-0.3	-0.1%
96.3%	257.3	257.3	0.0	0.0%
97.5%	257.0	257.1	0.1	0.0%
98.8%	255.6	254.6	-1.0	-0.4%
100.0%	251.3	252.5	1.2	0.5%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	758.5	770.5	12.0	1.6%
1.2%	678.1	727.8	49.7	7.3%
2.5%	661.8	691.8	30.0	4.5%
3.7%	649.4	672.6	23.2	3.6%
4.9%	635.3	648.0	12.7	2.0%
6.2%	619.9	647.0	27.1	4.4%
7.4%	617.4	639.0	21.6	3.5%
8.6%	614.9	622.0	7.1	1.1%
9.9%	604.1	611.5	7.4	1.2%
11.1%	603.2	611.3	8.1	1.3%
12.3%	592.7	610.4	17.7	3.0%
13.6%	570.8	607.3	36.5	6.4%
14.8%	570.5	589.2	18.7	3.3%
16.0%	563.9	581.3	17.4	3.1%
17.3%	563.3	579.8	16.5	2.9%
18.5%	558.9	573.2	14.3	2.6%
19.8%	554.3	550.4	-3.9	-0.7%
21.0%	549.9	543.2	-6.7	-1.2%
22.2%	539.1	536.9	-2.3	-0.4%
23.5%	526.7	505.4	-21.2	-4.0%
24.7%	474.9	498.0	23.2	4.9%
25.9%	449.1	461.7	12.7	2.8%
27.2%	448.8	459.4	10.6	2.4%
28.4%	443.4	450.5	7.1	1.6%
29.6%	439.6	446.0	6.4	1.4%
30.9%	434.9	444.8	9.9	2.3%
32.1%	433.2	444.2	11.0	2.6%
33.3%	430.7	438.5	7.8	1.8%
34.6%	427.6	438.3	10.7	2.5%
35.8%	426.2	433.0	6.8	1.6%
37.0%	425.0	430.7	5.6	1.3%
38.3%	423.1	430.3	7.1	1.7%
39.5%	419.0	426.9	7.9	1.9%
40.7%	406.2	426.6	20.5	5.0%
42.0%	403.1	425.7	22.6	5.6%
43.2%	392.8	422.2	29.4	7.5%
44.4%	392.3	417.3	25.0	6.4%
45.7%	390.8	409.4	18.6	4.8%
46.9%	386.9	407.1	20.2	5.2%
48.1%	385.9	401.9	16.1	4.2%
49.4%	382.1	398.6	16.5	4.3%
50.6%	378.0	384.4	6.4	1.7%
51.9%	375.2	378.5	3.4	0.9%
53.1%	371.5	378.2	6.7	1.8%
54.3%	366.6	374.8	8.1	2.2%
55.6%	362.6	367.9	5.2	1.4%
56.8%	357.7	367.8	10.1	2.8%
58.0%	353.7	367.2	13.5	3.8%
59.3%	351.8	365.5	13.8	3.9%
60.5%	348.3	359.2	10.9	3.1%
61.7%	346.3	358.3	12.0	3.5%
63.0%	346.0	356.3	10.3	3.0%
64.2%	338.3	340.6	2.3	0.7%
65.4%	330.2	338.8	8.7	2.6%
66.7%	329.8	334.5	4.7	1.4%
67.9%	328.3	330.2	1.9	0.6%
69.1%	324.4	329.5	5.1	1.6%
70.4%	323.3	327.7	4.5	1.4%
71.6%	321.7	321.8	0.1	0.0%
72.8%	320.9	320.8	-0.1	0.0%
74.1%	317.0	319.1	2.1	0.7%
75.3%	315.1	315.4	0.3	0.1%
76.5%	314.5	314.6	0.1	0.0%
77.8%	309.8	313.5	3.6	1.2%
79.0%	305.9	312.3	6.4	2.1%
80.2%	305.3	312.0	6.6	2.2%
81.5%	302.3	311.2	8.9	3.0%
82.7%	301.8	300.6	-1.3	-0.4%
84.0%	301.5	296.3	-5.2	-1.7%
85.2%	300.5	294.1	-6.3	-2.1%
86.4%	296.8	293.5	-3.2	-1.1%
87.7%	296.1	291.2	-4.9	-1.7%
88.9%	295.4	291.1	-4.3	-1.5%
90.1%	291.3	286.9	-4.4	-1.5%
91.4%	285.6	285.3	-0.4	-0.1%
92.6%	281.8	283.0	1.2	0.4%
93.8%	281.4	278.6	-2.8	-1.0%
95.1%	278.7	276.8	-2.0	-0.7%
96.3%	277.5	274.7	-2.8	-1.0%
97.5%	275.6	266.8	-8.8	-3.2%
98.8%	267.5	261.2	-6.3	-2.4%
100.0%	264.4	258.1	-6.3	-2.4%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	812.4	833.3	21.0	2.6%
1.2%	796.7	818.3	21.5	2.7%
2.5%	772.9	763.0	-9.9	-1.3%
3.7%	748.9	754.3	5.3	0.7%
4.9%	740.4	752.2	11.9	1.6%
6.2%	738.1	745.0	6.9	0.9%
7.4%	732.6	742.8	10.2	1.4%
8.6%	731.3	733.3	1.9	0.3%
9.9%	726.8	725.8	-1.0	-0.1%
11.1%	724.9	725.5	0.6	0.1%
12.3%	720.8	724.4	3.5	0.5%
13.6%	720.2	722.9	2.7	0.4%
14.8%	719.3	716.0	-3.3	-0.5%
16.0%	706.0	715.7	9.7	1.4%
17.3%	703.7	712.5	8.8	1.3%
18.5%	697.0	694.2	-2.9	-0.4%
19.8%	689.6	688.1	-1.5	-0.2%
21.0%	689.1	687.8	-1.3	-0.2%
22.2%	686.5	684.8	-1.7	-0.2%
23.5%	685.7	679.9	-5.8	-0.8%
24.7%	678.6	675.1	-3.5	-0.5%
25.9%	678.5	674.5	-4.0	-0.6%
27.2%	677.9	669.2	-8.7	-1.3%
28.4%	675.5	668.3	-7.2	-1.1%
29.6%	667.0	663.4	-3.6	-0.5%
30.9%	656.1	652.3	-3.8	-0.6%
32.1%	654.6	651.3	-3.3	-0.5%
33.3%	654.5	648.7	-5.8	-0.9%
34.6%	653.6	645.4	-8.2	-1.3%
35.8%	652.7	645.3	-7.3	-1.1%
37.0%	641.5	642.9	1.4	0.2%
38.3%	621.5	637.9	16.3	2.6%
39.5%	620.4	637.8	17.4	2.8%
40.7%	620.2	631.5	11.3	1.8%
42.0%	609.9	627.9	18.0	3.0%
43.2%	608.3	623.6	15.3	2.5%
44.4%	594.4	622.4	28.0	4.7%
45.7%	592.6	620.2	27.6	4.7%
46.9%	578.4	616.4	38.1	6.6%
48.1%	554.7	614.2	59.5	10.7%
49.4%	554.4	604.5	50.1	9.0%
50.6%	551.8	600.9	49.2	8.9%
51.9%	550.3	597.8	47.6	8.6%
53.1%	547.3	596.3	49.0	9.0%
54.3%	542.5	579.9	37.4	6.9%
55.6%	528.2	541.8	13.6	2.6%
56.8%	527.6	535.7	8.1	1.5%
58.0%	519.1	533.6	14.4	2.8%
59.3%	514.1	522.8	8.7	1.7%
60.5%	513.4	521.2	7.8	1.5%
61.7%	503.0	514.8	11.7	2.3%
63.0%	502.3	506.7	4.3	0.9%
64.2%	502.1	503.5	1.5	0.3%
65.4%	499.2	491.9	-7.4	-1.5%
66.7%	484.7	486.1	1.4	0.3%
67.9%	473.5	481.1	7.6	1.6%
69.1%	472.1	478.6	6.4	1.4%
70.4%	471.6	471.2	-0.3	-0.1%
71.6%	464.8	464.1	-0.7	-0.1%
72.8%	460.6	450.1	-10.6	-2.3%
74.1%	458.8	447.2	-11.6	-2.5%
75.3%	452.9	441.8	-11.2	-2.5%
76.5%	448.2	435.7	-12.6	-2.8%
77.8%	447.1	433.6	-13.5	-3.0%
79.0%	441.0	424.6	-16.4	-3.7%
80.2%	436.2	421.4	-14.9	-3.4%
81.5%	422.8	419.2	-3.6	-0.9%
82.7%	422.8	414.9	-7.9	-1.9%
84.0%	420.2	411.0	-9.2	-2.2%
85.2%	417.0	411.0	-6.0	-1.4%
86.4%	411.8	402.9	-8.9	-2.2%
87.7%	402.7	402.0	-0.7	-0.2%
88.9%	402.1	396.5	-5.6	-1.4%
90.1%	392.8	395.0	2.1	0.5%
91.4%	390.5	389.0	-1.4	-0.4%
92.6%	385.8	380.9	-5.0	-1.3%
93.8%	381.1	376.9	-4.2	-1.1%
95.1%	380.3	374.8	-5.5	-1.4%
96.3%	374.2	366.0	-8.2	-2.2%
97.5%	354.7	357.6	2.9	0.8%
98.8%	339.1	330.3	-8.8	-2.6%
100.0%	259.0	243.3	-15.7	-6.1%

Figure SQ-30-b
Victoria Canal at Alternative Intake, Monthly EC
Probability of Exceedance

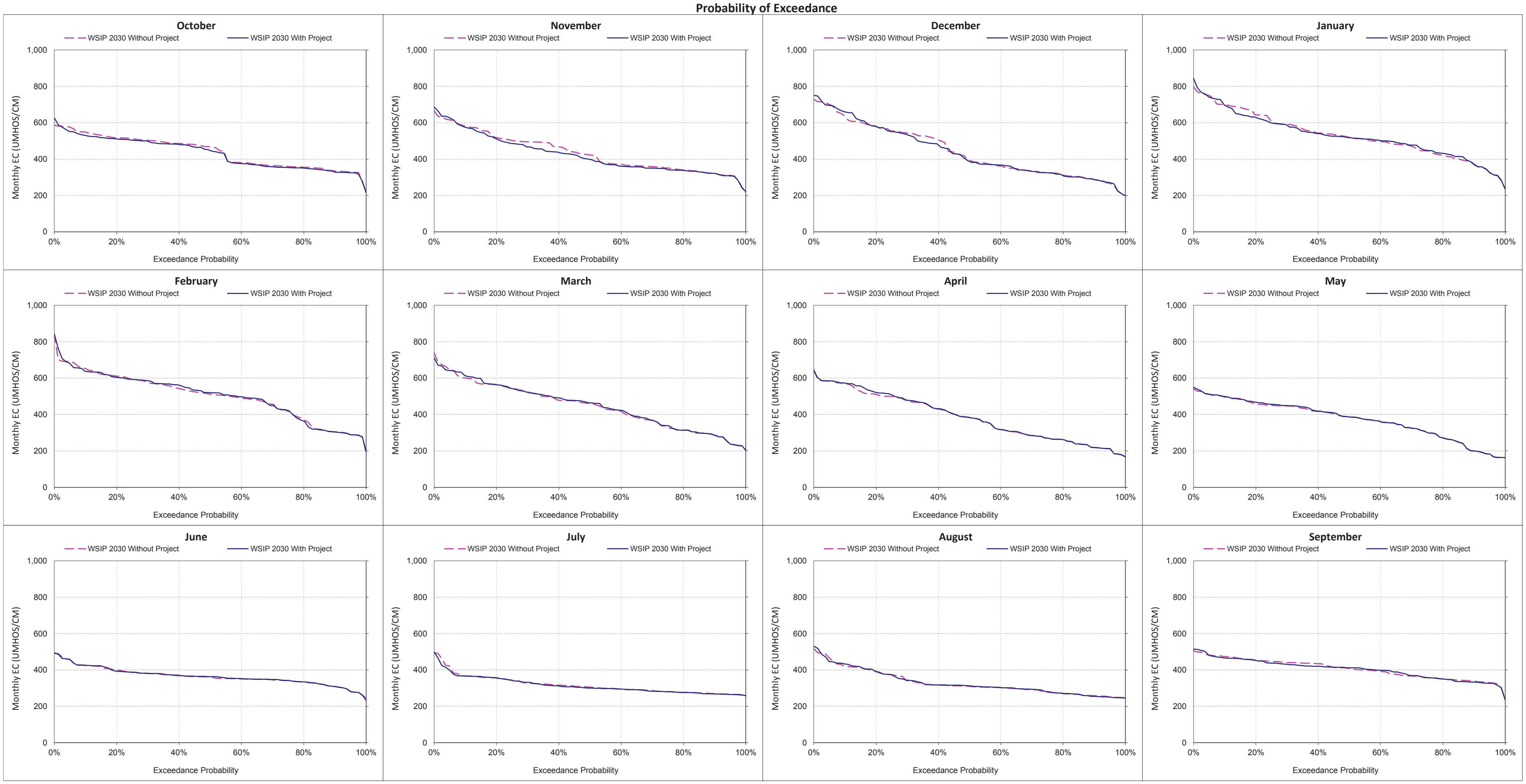


Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	585.5	625.6	40.0	6.8%
1.2%	581.7	588.0	6.2	1.1%
2.5%	580.0	576.0	-4.0	-0.7%
3.7%	579.0	562.8	-16.2	-2.8%
4.9%	576.0	552.2	-23.8	-4.1%
6.2%	566.4	549.7	-16.7	-2.9%
7.4%	550.8	539.7	-11.1	-2.0%
8.6%	549.8	534.9	-14.9	-2.7%
9.9%	548.7	529.7	-18.9	-3.5%
11.1%	542.5	526.3	-16.2	-3.0%
12.3%	540.4	524.8	-15.7	-2.9%
13.6%	534.3	522.4	-11.9	-2.2%
14.8%	532.2	519.0	-13.2	-2.5%
16.0%	527.3	517.8	-9.5	-1.8%
17.3%	523.1	512.9	-10.2	-2.0%
18.5%	519.4	512.7	-6.7	-1.3%
19.8%	516.9	511.0	-5.9	-1.1%
21.0%	516.2	509.1	-7.0	-1.4%
22.2%	515.6	508.9	-6.6	-1.3%
23.5%	515.3	507.0	-8.4	-1.6%
24.7%	511.5	504.6	-6.9	-1.4%
25.9%	509.6	502.9	-6.7	-1.3%
27.2%	506.4	501.3	-5.1	-1.0%
28.4%	504.5	500.8	-3.7	-0.7%
29.6%	504.4	500.3	-4.1	-0.8%
30.9%	501.6	491.0	-10.5	-2.1%
32.1%	501.0	489.0	-12.0	-2.4%
33.3%	499.7	486.4	-13.2	-2.7%
34.6%	495.3	484.9	-10.4	-2.1%
35.8%	491.9	484.5	-7.4	-1.5%
37.0%	488.4	483.0	-5.4	-1.1%
38.3%	486.4	482.8	-3.5	-0.7%
39.5%	485.7	480.9	-4.8	-1.0%
40.7%	485.7	478.9	-6.9	-1.4%
42.0%	483.6	478.2	-5.4	-1.1%
43.2%	481.5	474.8	-6.7	-1.4%
44.4%	481.0	467.8	-13.2	-2.7%
45.7%	476.6	464.3	-12.2	-2.6%
46.9%	474.1	463.8	-10.3	-2.2%
48.1%	468.9	453.8	-15.1	-3.2%
49.4%	468.9	452.2	-16.7	-3.6%
50.6%	465.3	443.2	-22.1	-4.7%
51.9%	461.5	439.7	-21.7	-4.7%
53.1%	445.1	434.7	-10.4	-2.3%
54.3%	444.9	433.5	-11.4	-2.6%
55.6%	387.1	388.9	1.8	0.5%
56.8%	383.2	380.8	-2.4	-0.6%
58.0%	381.4	377.5	-3.9	-1.0%
59.3%	381.4	375.3	-6.1	-1.6%
60.5%	379.9	374.3	-5.6	-1.5%
61.7%	379.2	374.0	-5.2	-1.4%
63.0%	376.4	369.9	-6.4	-1.7%
64.2%	373.4	369.1	-4.2	-1.1%
65.4%	372.4	367.0	-5.4	-1.4%
66.7%	368.6	363.3	-5.3	-1.4%
67.9%	366.5	358.4	-8.1	-2.2%
69.1%	364.6	358.2	-6.3	-1.7%
70.4%	364.1	356.8	-7.2	-2.0%
71.6%	363.3	354.9	-8.4	-2.3%
72.8%	361.7	354.9	-6.9	-1.9%
74.1%	361.7	354.4	-7.3	-2.0%
75.3%	358.5	352.7	-5.8	-1.6%
76.5%	357.7	351.8	-5.9	-1.7%
77.8%	357.3	351.7	-5.6	-1.6%
79.0%	356.2	351.6	-4.6	-1.3%
80.2%	354.9	350.9	-3.9	-1.1%
81.5%	354.8	346.9	-7.9	-2.2%
82.7%	353.1	346.7	-6.4	-1.8%
84.0%	351.5	344.2	-7.3	-2.1%
85.2%	349.4	341.1	-8.3	-2.4%
86.4%	348.6	340.9	-7.7	-2.2%
87.7%	338.6	335.5	-3.1	-0.9%
88.9%	337.5	334.2	-3.3	-1.0%
90.1%	334.0	328.1	-5.9	-1.8%
91.4%	333.5	327.4	-6.1	-1.8%
92.6%	331.4	327.4	-4.0	-1.2%
93.8%	330.2	325.7	-4.5	-1.4%
95.1%	329.3	325.0	-4.3	-1.3%
96.3%	327.2	324.5	-2.7	-0.8%
97.5%	326.6	316.9	-9.7	-3.0%
98.8%	275.7	277.2	1.5	0.5%
100.0%	216.2	216.2	0.0	0.0%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	666.2	686.2	20.0	3.0%
1.2%	634.6	665.0	30.4	4.8%
2.5%	633.4	635.4	1.9	0.3%
3.7%	619.1	635.2	16.1	2.6%
4.9%	616.3	627.2	10.9	1.8%
6.2%	610.7	615.7	5.0	0.8%
7.4%	595.8	593.4	-2.5	-0.4%
8.6%	588.0	584.7	-3.3	-0.6%
9.9%	581.8	576.2	-5.6	-1.0%
11.1%	576.0	569.7	-6.4	-1.1%
12.3%	574.3	566.7	-7.5	-1.3%
13.6%	572.2	553.2	-19.1	-3.3%
14.8%	558.4	547.9	-10.5	-1.9%
16.0%	555.1	543.2	-11.8	-2.1%
17.3%	553.3	526.8	-26.6	-4.8%
18.5%	527.5	523.5	-4.0	-0.8%
19.8%	519.0	513.7	-5.3	-1.0%
21.0%	514.3	503.4	-10.8	-2.1%
22.2%	512.0	496.1	-15.9	-3.1%
23.5%	508.3	490.9	-17.4	-3.4%
24.7%	503.9	486.6	-17.3	-3.4%
25.9%	499.3	484.3	-15.0	-3.0%
27.2%	498.1	482.2	-15.9	-3.2%
28.4%	496.4	480.7	-15.7	-3.2%
29.6%	495.0	468.0	-27.0	-5.5%
30.9%	494.2	467.4	-26.7	-5.4%
32.1%	494.0	458.6	-35.4	-7.2%
33.3%	493.9	455.5	-38.5	-7.8%
34.6%	492.5	455.4	-37.2	-7.5%
35.8%	492.2	443.7	-48.5	-9.9%
37.0%	488.1	441.1	-47.0	-9.6%
38.3%	468.4	440.3	-28.1	-6.0%
39.5%	466.8	438.8	-28.0	-6.0%
40.7%	465.8	433.5	-32.3	-6.9%
42.0%	457.6	429.6	-28.0	-6.1%
43.2%	441.6	429.3	-12.4	-2.8%
44.4%	439.9	426.6	-13.3	-3.0%
45.7%	436.9	421.9	-14.9	-3.4%
46.9%	428.1	409.9	-18.2	-4.3%
48.1%	427.1	402.9	-24.2	-5.7%
49.4%	424.0	400.5	-23.4	-5.5%
50.6%	421.1	395.7	-25.4	-6.0%
51.9%	419.4	386.9	-32.5	-7.8%
53.1%	386.9	385.8	-1.1	-0.3%
54.3%	377.5	374.1	-3.4	-0.9%
55.6%	376.4	370.3	-6.0	-1.6%
56.8%	374.4	369.4	-5.0	-1.3%
58.0%	372.7	368.4	-4.3	-1.2%
59.3%	370.4	361.2	-9.2	-2.5%
60.5%	370.1	359.7	-10.4	-2.8%
61.7%	365.3	358.7	-6.6	-1.8%
63.0%	364.6	357.7	-6.9	-1.9%
64.2%	364.1	357.6	-6.5	-1.8%
65.4%	362.7	357.4	-5.3	-1.5%
66.7%	361.8	356.6	-5.1	-1.4%
67.9%	360.4	350.5	-9.9	-2.7%
69.1%	359.3	350.5	-8.8	-2.5%
70.4%	358.6	350.2	-8.4	-2.4%
71.6%	356.4	349.5	-6.9	-1.9%
72.8%	355.7	348.3	-7.4	-2.1%
74.1%	351.2	347.9	-3.4	-1.0%
75.3%	350.4	341.0	-9.4	-2.7%
76.5%	346.8	340.9	-5.9	-1.7%
77.8%	344.7	339.2	-5.5	-1.6%
79.0%	342.2	338.3	-3.9	-1.1%
80.2%	338.8	336.9	-1.9	-0.6%
81.5%	338.5	335.2	-3.3	-1.0%
82.7%	335.7	333.6	-2.1	-0.6%
84.0%	334.8	333.2	-1.6	-0.5%
85.2%	327.8	328.2	0.4	0.1%
86.4%	327.1	328.1	0.9	0.3%
87.7%	323.7	323.7	0.0	0.0%
88.9%	322.6	322.2	-0.3	-0.1%
90.1%	320.8	321.8	1.0	0.3%
91.4%	315.3	314.9	-0.4	-0.1%
92.6%	311.7	309.3	-2.4	-0.8%
93.8%	311.4	308.8	-2.5	-0.8%
95.1%	310.7	307.5	-3.2	-1.0%
96.3%	304.2	307.4	3.3	1.1%
97.5%	284.3	282.5	-1.8	-0.6%
98.8%	244.5	242.6	-1.9	-0.8%
100.0%	220.9	221.2	0.3	0.1%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	728.5	749.6	21.1	2.9%
1.2%	715.8	746.6	30.8	4.3%
2.5%	715.3	718.5	3.2	0.4%
3.7%	710.1	699.1	-11.0	-1.5%
4.9%	701.3	696.0	-5.3	-0.8%
6.2%	690.2	693.3	3.1	0.4%
7.4%	659.4	678.1	18.7	2.8%
8.6%	651.7	667.0	15.3	2.4%
9.9%	637.8	659.4	21.7	3.4%
11.1%	612.9	656.2	43.3	7.1%
12.3%	607.3	654.0	46.7	7.7%
13.6%	606.9	622.8	15.9	2.6%
14.8%	606.0	614.5	8.5	1.4%
16.0%	596.4	610.6	14.2	2.4%
17.3%	589.8	594.6	4.8	0.8%
18.5%	587.4	583.6	-3.8	-0.6%
19.8%	581.9	580.8	-1.1	-0.2%
21.0%	571.2	573.6	2.3	0.4%
22.2%	569.8	573.0	3.2	0.6%
23.5%	567.2	556.6	-10.6	-1.9%
24.7%	554.9	551.0	-3.9	-0.7%
25.9%	553.4	549.9	-3.5	-0.6%
27.2%	552.0	545.9	-6.1	-1.1%
28.4%	544.9	541.3	-3.6	-0.7%
29.6%	544.7	535.7	-9.1	-1.7%
30.9%	539.7	528.5	-11.2	-2.1%
32.1%	539.6	521.4	-18.2	-3.4%
33.3%	529.2	500.1	-29.2	-5.5%
34.6%	527.4	494.9	-32.5	-6.2%
35.8%	527.4	491.4	-36.0	-6.8%
37.0%	522.0	487.8	-34.2	-6.5%
38.3%	516.4	486.5	-29.9	-5.8%
39.5%	507.9	484.2	-23.7	-4.7%
40.7%	500.0	465.6	-34.4	-6.9%
42.0%	491.1	460.6	-30.4	-6.2%
43.2%	440.8	458.0	17.2	3.9%
44.4%	439.2	430.3	-8.9	-2.0%
45.7%	431.6	428.9	-2.7	-0.6%
46.9%	423.5	425.6	2.1	0.5%
48.1%	419.0	406.1	-13.0	-3.1%
49.4%	395.7	391.6	-4.1	-1.0%
50.6%	388.3	381.5	-6.8	-1.7%
51.9%	383.2	381.0	-2.2	-0.6%
53.1%	381.7	372.8	-8.9	-2.3%
54.3%	379.8	372.4	-7.4	-2.0%
55.6%	375.5	371.2	-4.3	-1.1%
56.8%	369.9	369.7	-0.1	0.0%
58.0%	365.7	368.5	2.8	0.8%
59.3%	363.0	368.2	5.2	1.4%
60.5%	360.6	368.0	7.3	2.0%
61.7%	350.7	363.5	12.8	3.6%
63.0%	350.0	362.2	12.2	3.5%
64.2%	349.4	350.4	1.0	0.3%
65.4%	346.7	340.8	-5.9	-1.7%
66.7%	341.5	340.1	-1.4	-0.4%
67.9%	337.4	339.2	1.8	0.5%
69.1%	336.4	335.3	-1.0	-0.3%
70.4%	330.6	331.9	1.3	0.4%
71.6%	326.8	331.3	4.5	1.4%
72.8%	326.6	326.5	-0.1	0.0%
74.1%	325.2	325.7	0.5	0.1%
75.3%	324.5	324.7	0.1	0.0%
76.5%	323.5	323.4	-0.1	0.0%
77.8%	323.0	317.9	-5.0	-1.6%
79.0%	318.5	317.8	-0.7	-0.2%
80.2%	310.7	305.9	-4.8	-1.5%
81.5%	307.3	302.8	-4.5	-1.5%
82.7%	305.3	302.5	-2.8	-0.9%
84.0%	304.0	301.6	-2.4	-0.8%
85.2%	303.8	301.5	-2.3	-0.8%
86.4%	297.5	298.6	1.1	0.4%
87.7%	293.3	291.9	-1.5	-0.5%
88.9%	292.8	291.2	-1.5	-0.5%
90.1%	287.2	286.1	-1.1	-0.4%
91.4%	284.5	283.8	-0.7	-0.2%
92.6%	282.2	277.6	-4.6	-1.6%
93.8%	270.7	273.4	2.7	1.0%
95.1%	266.4	270.9	4.5	1.7%
96.3%	255.3	263.9	8.7	3.4%
97.5%	224.5	224.4	0.0	0.0%
98.8%	209.0	208.8	-0.2	-0.1%
100.0%	198.4	198.6	0.2	0.1%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	797.0	843.6	46.6	5.8%
1.2%	769.5	792.2	22.7	2.9%
2.5%	760.5	767.2	6.7	0.9%
3.7%	754.8	759.0	4.2	0.6%
4.9%	750.7	741.9	-8.8	-1.2%
6.2%	737.2	734.7	-2.4	-0.3%
7.4%	703.4	730.1	26.7	3.8%
8.6%	700.8	727.2	26.4	3.8%
9.9%	699.9	697.7	-2.2	-0.3%
11.1%	695.7	684.9	-10.7	-1.5%
12.3%	691.0	679.0	-12.1	-1.7%
13.6%	689.0	650.2	-38.8	-5.6%
14.8%	685.4	647.1	-38.3	-5.6%
16.0%	678.5	639.7	-38.8	-5.7%
17.3%	672.5	639.0	-33.5	-5.0%
18.5%	670.8	631.9	-38.8	-5.8%
19.8%	643.2	630.8	-12.5	-1.9%
21.0%	643.1	623.0	-20.1	-3.1%
22.2%	640.1	617.5	-22.6	-3.5%
23.5%	639.7	610.5	-29.2	-4.6%
24.7%	613.8	600.0	-13.9	-2.3%
25.9%	597.8	595.7	-2.1	-0.3%
27.2%	594.3	594.7	0.3	0.1%
28.4%	593.0	591.0	-2.0	-0.3%
29.6%	591.0	589.9	-1.1	-0.2%
30.9%	590.5	575.7	-14.9	-2.5%
32.1%	585.6	575.2	-10.4	-1.8%
33.3%	580.5	570.8	-9.7	-1.7%
34.6%	569.2	554.7	-14.5	-2.5%
35.8%	560.4	551.7	-8.7	-1.5%
37.0%	555.4	546.9	-8.5	-1.5%
38.3%	553.5	545.3	-8.1	-1.5%
39.5%	544.1	540.5	-3.6	-0.7%
40.7%	543.1	539.7	-3.3	-0.6%
42.0%	540.0	532.3	-7.6	-1.4%
43.2%	538.4	529.0	-9.4	-1.7%
44.4%	538.0	525.7	-12.3	-2.3%
45.7%	532.0	525.3	-6.6	-1.2%
46.9%	529.8	524.8	-5.1	-1.0%
48.1%	526.4	522.9	-3.5	-0.7%
49.4%	521.7	518.8	-2.9	-0.6%
50.6%	517.9	517.4	-0.6	-0.1%
51.9%	515.0	513.0	-2.0	-0.4%
53.1%	514.2	512.9	-1.3	-0.3%
54.3%	510.9	511.2	0.4	0.1%
55.6%	508.7	510.6	1.9	0.4%
56.8%	500.6	509.6	9.0	1.8%
58.0%	499.0	505.8	6.8	1.4%
59.3%	498.7	504.3	5.5	1.1%
60.5%	495.7	500.4	4.7	0.9%
61.7%	494.8	500.3	5.5	1.1%
63.0%	485.7	499.4	13.7	2.8%
64.2%	482.8	496.2	13.5	2.8%
65.4%	480.5	490.0	9.5	2.0%
66.7%	479.2	486.5	7.3	1.5%
67.9%	476.6	484.1	7.6	1.6%
69.1%	475.0	477.8	2.8	0.6%
70.4%	467.9	477.5	9.7	2.1%
71.6%	457.4	475.2	17.9	3.9%
72.8%	446.3	458.4	12.2	2.7%
74.1%	446.1	450.8	4.7	1.1%
75.3%	444.6	447.7	3.2	0.7%
76.5%	433.2	446.2	13.0	3.0%
77.8%	427.5	436.3	8.8	2.1%
79.0%	422.9	433.5	10.6	2.5%
80.2%	422.2	431.7	9.5	2.2%
81.5%	414.5	428.0	13.6	3.3%
82.7%	412.5	422.9	10.4	2.5%
84.0%	400.5	414.7	14.2	3.6%
85.2%	400.2	414.1	14.0	3.5%
86.4%	394.0	413.5	19.6	5.0%
87.7%	390.2	395.3	5.1	1.3%
88.9%	389.1	385.7	-3.4	-0.9%
90.1%	370.8	367.7	-3.0	-0.8%
91.4%	358.0	357.9	0.0	0.0%
92.6%	352.8	356.8	4.0	1.1%
93.8%	346.2	346.4	0.3	0.1%
95.1%	324.5	326.0	1.5	0.5%
96.3%	312.6	313.0	0.4	0.1%
97.5%	309.4	309.7	0.4	0.1%
98.8%	281.5	284.6	3.1	1.1%
100.0%	235.7	235.8	0.1	0.0%

Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	842.4	840.2	-2.3	-0.3%
1.2%	702.0	761.9	60.0	8.5%
2.5%	693.0	707.7	14.7	2.1%
3.7%	692.5	690.1	-2.4	-0.3%
4.9%	691.9	682.3	-9.6	-1.4%
6.2%	685.3	657.2	-28.1	-4.1%
7.4%	668.2	656.3	-11.9	-1.8%
8.6%	655.2	653.4	-1.8	-0.3%
9.9%	653.7	638.2	-15.5	-2.4%
11.1%	642.8	635.3	-7.5	-1.2%
12.3%	640.9	633.9	-7.0	-1.1%
13.6%	631.4	633.3	1.9	0.3%
14.8%	622.6	632.6	10.1	1.6%
16.0%	618.9	620.7	1.8	0.3%
17.3%	616.0	617.8	1.8	0.3%
18.5%	614.1	607.9	-6.1	-1.0%
19.8%	610.7	605.2	-5.5	-0.9%
21.0%	609.5	601.5	-8.0	-1.3%
22.2%	608.1	600.1	-8.0	-1.3%
23.5%	601.3	594.9	-6.4	-1.1%
24.7%	593.4	593.9	0.5	0.1%
25.9%	592.9	592.0	-0.9	-0.1%
27.2%	589.1	589.5	0.4	0.1%
28.4%	585.8	589.3	3.5	0.6%
29.6%	578.5	585.7	7.2	1.2%
30.9%	571.3	583.2	11.9	2.1%
32.1%	570.3	571.1	0.8	0.1%
33.3%	567.6	570.2	2.6	0.5%
34.6%	566.5	569.4	2.9	0.5%
35.8%	560.3	567.4	7.1	1.3%
37.0%	557.0	567.1	10.1	1.8%
38.3%	549.8	563.2	13.4	2.4%
39.5%	544.6	563.2	18.6	3.4%
40.7%	540.7	558.5	17.8	3.3%
42.0%	533.4	548.8	15.5	2.9%
43.2%	529.4	545.9	16.5	3.1%
44.4%	526.1	535.5	9.4	1.8%
45.7%	523.2	533.4	10.3	2.0%
46.9%	519.7	531.3	11.6	2.2%
48.1%	517.6	520.3	2.7	0.5%
49.4%	514.2	520.0	5.9	1.1%
50.6%	509.5	519.5	9.9	2.0%
51.9%	506.6	519.0	12.3	2.4%
53.1%	506.2	517.6	11.4	2.2%
54.3%	505.2	508.1	2.9	0.6%
55.6%	501.1	507.4	6.3	1.2%
56.8%	498.9	504.1	5.2	1.0%
58.0%	495.3	501.9	6.6	1.3%
59.3%	493.4	498.0	4.5	0.9%
60.5%	488.1	496.0	7.9	1.6%
61.7%	488.0	491.4	3.4	0.7%
63.0%	483.5	490.2	6.6	1.4%
64.2%	482.7	488.8	6.1	1.3%
65.4%	479.3	486.9	7.6	1.6%
66.7%	473.3	483.7	10.3	2.2%
67.9%	465.5	465.7	0.2	0.0%
69.1%	458.8	449.9	-8.8	-1.9%
70.4%	454.6	449.2	-5.5	-1.2%
71.6%	427.1	431.2	4.2	1.0%
72.8%	426.3	427.6	1.3	0.3%
74.1%	425.6	426.0	0.3	0.1%
75.3%	414.3	419.6	5.3	1.3%
76.5%	398.0	398.3	0.3	0.1%
77.8%	389.0	381.4	-7.6	-2.0%
79.0%	380.6	368.9	-11.7	-3.1%
80.2%	369.3	361.8	-7.5	-2.0%
81.5%	356.5	330.4	-26.2	-7.3%
82.7%	330.4	319.7	-10.7	-3.2%
84.0%	319.7	319.7	0.1	0.0%
85.2%	319.4	315.7	-3.7	-1.1%
86.4%	313.3	314.4	1.1	0.3%
87.7%	306.7	308.0	1.3	0.4%
88.9%	305.7	305.5	-0.2	-0.1%
90.1%	304.4	304.4	0.0	0.0%
91.4%	301.9	301.2	-0.7	-0.2%
92.6%	298.6	301.1	2.5	0.9%
93.8%	296.2	296.9	0.7	0.2%
95.1%	287.9	288.5	0.7	0.2%
96.3%	287.4	287.8	0.4	0.1%
97.5%	285.8	286.2	0.4	0.1%
98.8%	276.5	276.1	-0.4	-0.1%
100.0%	194.9	195.0	0.1	0.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	739.3	710.3	-29.0	-3.9%
1.2%	687.8	672.1	-15.7	-2.3%
2.5%	673.3	666.2	-7.1	-1.1%
3.7%	664.2	645.3	-18.9	-2.8%
4.9%	645.4	642.7	-2.8	-0.4%
6.2%	642.4	640.8	-1.6	-0.2%
7.4%	615.3	633.6	18.3	3.0%
8.6%	602.8	632.9	30.1	5.0%
9.9%	601.2	613.7	12.5	2.1%
11.1%	597.7	608.3	10.6	1.8%
12.3%	597.6	607.0	9.4	1.6%
13.6%	574.3	599.6	25.3	4.4%
14.8%	568.6	599.2	30.6	5.4%
16.0%	567.3	571.7	4.5	0.8%
17.3%	567.1	569.0	2.0	0.3%
18.5%	566.9	566.3	-0.6	-0.1%
19.8%	565.5	563.6	-1.9	-0.3%
21.0%	562.1	562.8	0.6	0.1%
22.2%	555.7	558.3	2.6	0.5%
23.5%	549.0	553.6	4.6	0.8%
24.7%	542.3	543.4	1.2	0.2%
25.9%	541.8	539.3	-2.5	-0.5%
27.2%	535.6	531.8	-3.8	-0.7%
28.4%	532.2	529.9	-2.3	-0.4%
29.6%	525.1	524.2	-0.9	-0.2%
30.9%	519.1	519.6	0.5	0.1%
32.1%	515.1	516.2	1.1	0.2%
33.3%	512.6	511.9	-0.7	-0.1%
34.6%	499.9	509.1	9.2	1.8%
35.8%	499.2	503.3	4.1	0.8%
37.0%	498.5	502.3	3.8	0.8%
38.3%	492.2	493.7	1.5	0.3%
39.5%	479.3	492.5	13.2	2.8%
40.7%	477.1	489.6	12.5	2.6%
42.0%	477.0	481.5	4.5	0.9%
43.2%	476.5	478.5	2.1	0.4%
44.4%	476.1	477.6	1.5	0.3%
45.7%	473.4	476.1	2.7	0.6%
46.9%	466.4	475.6	9.1	2.0%
48.1%	463.7	470.6	6.9	1.5%
49.4%	460.8	465.0	4.1	0.9%
50.6%	459.4	463.5	4.1	0.9%
51.9%	453.1	460.9	7.8	1.7%
53.1%	446.4	460.5	14.1	3.2%
54.3%	437.2	438.4	1.2	0.3%
55.6%	427.3	436.2	8.9	2.1%
56.8%	426.2	430.7	4.4	1.0%
58.0%	423.5	426.8	3.3	0.8%
59.3%	423.3	423.8	0.5	0.1%
60.5%	412.3	422.0	9.7	2.4%
61.7%	398.1	411.5	13.3	3.4%
63.0%	397.2	398.0	0.8	0.2%
64.2%	387.2	390.4	3.2	0.8%
65.4%	381.1	390.0	8.9	2.3%
66.7%	378.6	382.2	3.6	0.9%
67.9%	371.6	381.0	9.4	2.5%
69.1%	370.6	371.1	0.5	0.1%
70.4%	365.6	366.2	0.6	0.2%
71.6%	358.0	357.9	-0.1	0.0%
72.8%	338.6	340.6	2.1	0.6%
74.1%	337.5	339.7	2.2	0.6%
75.3%	325.1	338.7	13.5	4.2%
76.5%	323.6	324.0	0.5	0.1%
77.8%	317.1	315.5	-1.6	-0.5%
79.0%	313.9	314.2	0.2	0.1%
80.2%	313.8	314.1	0.3	0.1%
81.5%	313.7	314.0	0.3	0.1%
82.7%	303.9	305.0	1.1	0.4%
84.0%	298.5	304.2	5.8	1.9%
85.2%	297.5	297.7	0.2	0.1%
86.4%	296.9	297.0	0.1	0.0%
87.7%	294.4	294.7	0.3	0.1%
88.9%	292.7	292.9	0.2	0.1%
90.1%	285.1	285.1	0.0	0.0%
91.4%	281.9	277.4	-4.5	-1.6%
92.6%	277.3	277.0	-0.3	-0.1%
93.8%	254.6	254.9	0.3	0.1%
95.1%	234.6	237.5	2.9	1.2%
96.3%	233.6	234.0	0.4	0.2%
97.5%	230.2	228.9	-1.3	-0.6%
98.8%	228.5	228.5	0.1	0.0%
100.0%	202.9	203.1	0.3	0.1%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	648.3	637.5	-10.8	-1.7%
1.2%	592.6	602.0	9.4	1.6%
2.5%	586.7	586.5	-0.2	0.0%
3.7%	585.8	585.5	-0.3	0.0%
4.9%	582.9	585.1	2.2	0.4%
6.2%	582.2	585.0	2.8	0.5%
7.4%	580.4	575.2	-5.2	-0.9%
8.6%	573.2	574.0	0.8	0.1%
9.9%	569.3	573.9	4.6	0.8%
11.1%	566.9	569.3	2.4	0.4%
12.3%	557.0	568.7	11.7	2.1%
13.6%	535.9	558.3	22.4	4.2%
14.8%	529.1	557.4	28.3	5.3%
16.0%	517.9	546.2	28.3	5.5%
17.3%	513.9	534.9	21.0	4.1%
18.5%	513.7	529.1	15.3	3.0%
19.8%	511.7	522.0	10.3	2.0%
21.0%	504.5	518.4	13.9	2.8%
22.2%	502.3	518.0	15.7	3.1%
23.5%	499.4	515.1	15.7	3.1%
24.7%	499.2	511.2	12.0	2.4%
25.9%	496.8	500.1	3.3	0.7%
27.2%	496.2	492.1	-4.1	-0.8%
28.4%	486.5	491.4	4.9	1.0%
29.6%	477.4	479.2	1.8	0.4%
30.9%	471.8	476.2	4.4	0.9%
32.1%	468.0	475.2	7.2	1.5%
33.3%	467.6	469.8	2.2	0.5%
34.6%	465.2	466.4	1.2	0.2%
35.8%	459.5	461.7	2.1	0.5%
37.0%	448.0	449.0	1.0	0.2%
38.3%	433.6	434.9	1.2	0.3%
39.5%	431.4	431.7	0.3	0.1%
40.7%	427.3	430.8	3.5	0.8%
42.0%	423.5	425.8	2.3	0.5%
43.2%	412.5	413.7	1.2	0.3%
44.4%	404.6	404.6	0.0	0.0%
45.7%	398.0	398.8	0.7	0.2%
46.9%	388.6	388.8	0.2	0.1%
48.1%	386.7	388.2	1.5	0.4%
49.4%	385.1	385.1	0.0	0.0%
50.6%	381.4	381.5	0.1	0.0%
51.9%	378.3	378.4	0.0	0.0%
53.1%	372.6	373.8	1.2	0.3%
54.3%	359.0	359.8	0.8	0.2%
55.6%	357.8	358.1	0.4	0.1%
56.8%	347.9	348.0	0.1	0.0%
58.0%	324.7	325.1	0.4	0.1%
59.3%	318.1	318.1	0.0	0.0%
60.5%	316.2	316.2	0.0	0.0%
61.7%	312.1	312.0	0.0	0.0%
63.0%	306.1	306.2	0.1	0.0%
64.2%	305.8	306.1	0.3	0.1%
65.4%	302.6	305.2	2.5	0.8%
66.7%	296.0	297.0	1.1	0.4%
67.9%	290.7	290.9	0.1	0.0%
69.1%	285.1	285.2	0.1	0.0%
70.4%	284.4	284.6	0.2	0.1%
71.6%	281.2	281.2	0.0	0.0%
72.8%	280.2	279.2	-1.0	-0.4%
74.1%	271.0	271.1	0.1	0.0%
75.3%	270.2	270.3	0.2	0.1%
76.5%	264.2	264.3	0.1	0.0%
77.8%	263.6	264.2	0.6	0.2%
79.0%	263.5	263.5	0.0	0.0%
80.2%	261.0	261.1	0.1	0.0%
81.5%	252.7	252.0	-0.7	-0.3%
82.7%	251.4	251.7	0.3	0.1%
84.0%	238.9	238.8	-0.1	0.0%
85.2%	237.9	237.9	0.1	0.0%
86.4%	235.1	235.1	0.0	0.0%
87.7%	234.1	234.1	-0.1	0.0%
88.9%	220.0	220.4	0.4	0.2%
90.1%	218.7	219.0	0.3	0.1%
91.4%	216.5	217.1	0.6	0.3%
92.6%	214.4	214.4	0.0	0.0%
93.8%	212.7	213.0	0.3	0.1%
95.1%	211.8	212.3	0.5	0.2%
96.3%	184.9	184.8	-0.1	0.0%
97.5%	182.7	182.9	0.2	0.1%
98.8%	178.5	178.9	0.4	0.2%
100.0%	167.0	167.7	0.7	0.4%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	542.4	548.9	6.5	1.2%
1.2%	528.6	538.9	10.3	2.0%
2.5%	526.9	529.1	2.1	0.4%
3.7%	514.2	515.3	1.1	0.2%
4.9%	511.2	512.4	1.3	0.2%
6.2%	506.2	507.6	1.4	0.3%
7.4%	506.0	507.5	1.6	0.3%
8.6%	504.6	502.8	-1.8	-0.4%
9.9%	496.0	499.1	3.1	0.6%
11.1%	495.9	496.2	0.3	0.1%
12.3%	489.3	488.6	-0.7	-0.1%
13.6%	488.6	487.4	-1.3	-0.3%
14.8%	488.5	483.2	-5.4	-1.1%
16.0%	480.5	482.5	2.0	0.4%
17.3%	472.8	473.1	0.3	0.1%
18.5%	465.6	472.7	7.1	1.5%
19.8%	457.5	467.6	10.1	2.2%
21.0%	456.0	464.6	8.6	1.9%
22.2%	455.5	463.8	8.2	1.8%
23.5%	451.9	457.6	5.7	1.3%
24.7%	450.3	456.0	5.7	1.3%
25.9%	449.3	455.8	6.5	1.4%
27.2%	448.3	453.7	5.4	1.2%
28.4%	448.2	449.2	1.0	0.2%
29.6%	447.5	448.9	1.4	0.3%
30.9%	447.4	448.3	0.9	0.2%
32.1%	445.6	447.6	2.0	0.4%
33.3%	441.3	445.9	4.7	1.1%
34.6%	434.7	441.9	7.1	1.6%
35.8%	432.9	440.7	7.8	1.8%
37.0%	422.7	435.2	12.6	3.0%
38.3%	419.8	423.9	4.1	1.0%
39.5%	417.6	418.8	1.2	0.3%
40.7%	417.0	418.0	1.0	0.2%
42.0%	414.3	414.4	0.0	0.0%
43.2%	410.6	411.8	1.2	0.3%
44.4%	405.9	410.3	4.4	1.1%
45.7%	405.3	406.2	0.9	0.2%
46.9%	393.6	394.2	0.5	0.1%
48.1%	389.2	389.3	0.1	0.0%
49.4%	388.0	388.0	0.0	0.0%
50.6%	386.0	385.9	-0.1	0.0%
51.9%	385.0	385.4	0.4	0.1%
53.1%	381.1	381.2	0.0	0.0%
54.3%	375.6	375.7	0.1	0.0%
55.6%	372.1	372.0	0.0	0.0%
56.8%	371.0	371.0	0.0	0.0%
58.0%	367.4	367.0	-0.3	-0.1%
59.3%	365.3	365.3	0.0	0.0%
60.5%	357.0	358.2	1.2	0.3%
61.7%	355.7	356.5	0.8	0.2%
63.0%	354.5	354.6	0.0	0.0%
64.2%	354.1	354.0	0.0	0.0%
65.4%	345.7	345.7	0.1	0.0%
66.7%	342.6	343.8	1.2	0.3%
67.9%	327.9	327.9	0.0	0.0%
69.1%	327.4	327.6	0.2	0.1%
70.4%	323.5	323.5	0.0	0.0%
71.6%	321.9	322.1	0.2	0.1%
72.8%	313.3	313.2	0.0	0.0%
74.1%	308.5	308.5	0.0	0.0%
75.3%	298.4	298.4	0.0	0.0%
76.5%	297.8	297.9	0.0	0.0%
77.8%	293.2	293.3	0.1	0.0%
79.0%	274.5	275.8	1.3	0.5%
80.2%	269.5	270.8	1.4	0.5%
81.5%	264.6	264.6	0.0	0.0%
82.7%	261.2	262.5	1.3	0.5%
84.0%	255.8	255.9	0.1	0.0%
85.2%	246.9	247.6	0.8	0.3%
86.4%	241.2	241.4	0.2	0.1%
87.7%	213.3	213.5	0.3	0.1%
88.9%	200.9	201.5	0.6	0.3%
90.1%	199.2	199.6	0.4	0.2%
91.4%	196.1	196.7	0.7	0.3%
92.6%	191.4	192.0	0.6	0.3%
93.8%	184.2	184.4	0.2	0.1%
95.1%	181.9	182.2	0.3	0.2%
96.3%	166.4	166.6	0.2	0.1%
97.5%	164.1	164.4	0.3	0.2%
98.8%	163.6	163.6	0.0	0.0%
100.0%	161.3	162.1	0.8	0.5%

Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	490.3	494.8	4.5	0.9%
1.2%	489.4	485.7	-3.7	-0.8%
2.5%	471.4	463.2	-8.3	-1.8%
3.7%	460.4	461.0	0.6	0.1%
4.9%	457.9	458.3	0.4	0.1%
6.2%	438.3	437.5	-0.9	-0.2%
7.4%	427.6	426.3	-1.3	-0.3%
8.6%	427.3	425.7	-1.6	-0.4%
9.9%	424.9	425.7	0.7	0.2%
11.1%	423.6	425.0	1.4	0.3%
12.3%	421.9	423.5	1.6	0.4%
13.6%	420.6	422.5	1.9	0.4%
14.8%	419.6	422.4	2.8	0.7%
16.0%	408.2	416.3	8.1	2.0%
17.3%	407.5	409.6	2.1	0.5%
18.5%	403.5	398.0	-5.5	-1.4%
19.8%	400.2	393.2	-7.0	-1.7%
21.0%	397.8	391.0	-6.8	-1.7%
22.2%	392.9	390.7	-2.2	-0.6%
23.5%	389.6	388.2	-1.4	-0.4%
24.7%	387.2	387.9	0.7	0.2%
25.9%	387.0	387.2	0.2	0.1%
27.2%	382.8	382.6	-0.2	0.0%
28.4%	381.1	381.8	0.7	0.2%
29.6%	380.7	381.3	0.6	0.2%
30.9%	379.9	380.5	0.6	0.1%
32.1%	379.3	380.4	1.1	0.3%
33.3%	379.0	379.4	0.4	0.1%
34.6%	374.2	379.0	4.8	1.3%
35.8%	373.7	374.5	0.8	0.2%
37.0%	371.9	373.0	1.1	0.3%
38.3%	371.4	372.2	0.8	0.2%
39.5%	367.7	371.4	3.7	1.0%
40.7%	367.5	368.9	1.3	0.4%
42.0%	365.8	366.5	0.7	0.2%
43.2%	364.0	365.7	1.7	0.5%
44.4%	363.9	365.7	1.8	0.5%
45.7%	362.4	365.1	2.7	0.7%
46.9%	362.4	364.4	2.0	0.5%
48.1%	361.8	364.1	2.3	0.6%
49.4%	361.6	363.7	2.1	0.6%
50.6%	360.3	363.0	2.7	0.7%
51.9%	353.7	362.8	9.1	2.6%
53.1%	353.2	360.1	6.9	1.9%
54.3%	353.1	357.8	4.6	1.3%
55.6%	352.6	354.2	1.7	0.5%
56.8%	351.9	354.0	2.0	0.6%
58.0%	351.8	352.6	0.9	0.2%
59.3%	350.4	352.5	2.1	0.6%
60.5%	350.1	351.7	1.6	0.4%
61.7%	349.9	349.5	-0.3	-0.1%
63.0%	349.3	349.5	0.2	0.1%
64.2%	349.0	348.8	-0.1	0.0%
65.4%	348.4	348.8	0.4	0.1%
66.7%	348.0	348.7	0.7	0.2%
67.9%	347.6	348.3	0.6	0.2%
69.1%	347.2	347.4	0.2	0.1%
70.4%	344.8	346.9	2.1	0.6%
71.6%	343.3	346.8	3.4	1.0%
72.8%	343.3	342.6	-0.7	-0.2%
74.1%	342.5	341.5	-1.0	-0.3%
75.3%	342.4	341.3	-1.1	-0.3%
76.5%	337.9	337.9	0.0	0.0%
77.8%	335.9	335.4	-0.5	-0.2%
79.0%	335.0	334.1	-0.9	-0.3%
80.2%	334.8	334.0	-0.8	-0.2%
81.5%	329.7	331.1	1.3	0.4%
82.7%	328.9	328.8	-0.1	0.0%
84.0%	327.1	327.3	0.2	0.1%
85.2%	323.3	322.0	-1.3	-0.4%
86.4%	319.1	320.0	0.9	0.3%
87.7%	312.4	312.7	0.3	0.1%
88.9%	310.8	310.7	-0.1	0.0%
90.1%	307.5	308.1	0.6	0.2%
91.4%	304.3	304.1	-0.2	-0.1%
92.6%	301.9	301.9	0.0	0.0%
93.8%	295.2	295.9	0.7	0.3%
95.1%	279.9	279.6	-0.2	-0.1%
96.3%	277.4	277.6	0.2	0.1%
97.5%	276.8	276.4	-0.4	-0.1%
98.8%	261.7	262.2	0.5	0.2%
100.0%	244.3	232.7	-11.6	-4.8%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	494.6	497.1	2.4	0.5%
1.2%	489.7	466.3	-23.4	-4.8%
2.5%	460.8	424.2	-36.6	-7.9%
3.7%	425.3	414.6	-10.8	-2.5%
4.9%	421.5	399.1	-22.4	-5.3%
6.2%	383.2	375.8	-7.5	-1.9%
7.4%	379.7	367.7	-12.0	-3.2%
8.6%	367.2	366.8	-0.4	-0.1%
9.9%	366.7	366.5	-0.3	-0.1%
11.1%	366.2	366.3	0.1	0.0%
12.3%	365.3	365.0	-0.3	-0.1%
13.6%	363.7	364.8	1.0	0.3%
14.8%	360.0	364.3	4.3	1.2%
16.0%	359.2	360.8	1.6	0.5%
17.3%	358.5	360.1	1.7	0.5%
18.5%	358.3	356.9	-1.3	-0.4%
19.8%	358.2	356.0	-2.2	-0.6%
21.0%	353.5	353.1	-0.4	-0.1%
22.2%	352.9	350.1	-2.9	-0.8%
23.5%	346.1	346.8	0.7	0.2%
24.7%	345.0	343.7	-1.3	-0.4%
25.9%	338.9	339.0	0.1	0.0%
27.2%	338.4	338.5	0.1	0.0%
28.4%	330.9	333.7	2.7	0.8%
29.6%	328.0	332.0	3.9	1.2%
30.9%	325.4	331.7	6.3	1.9%
32.1%	325.2	324.4	-0.8	-0.3%
33.3%	322.7	324.0	1.3	0.4%
34.6%	322.2	319.1	-3.1	-1.0%
35.8%	322.1	315.4	-6.6	-2.1%
37.0%	320.3	314.8	-5.5	-1.7%
38.3%	317.8	313.2	-4.6	-1.4%
39.5%	316.3	312.4	-3.9	-1.2%
40.7%	315.8	308.2	-7.6	-2.4%
42.0%	314.1	307.8	-6.4	-2.0%
43.2%	314.0	307.5	-6.5	-2.1%
44.4%	311.9	306.9	-4.9	-1.6%
45.7%	308.1	305.1	-3.0	-1.0%
46.9%	308.1	303.8	-4.3	-1.4%
48.1%	307.4	302.0	-5.4	-1.8%
49.4%	306.1	300.0	-6.2	-2.0%
50.6%	304.3	299.7	-4.6	-1.5%
51.9%	302.9	298.7	-4.2	-1.4%
53.1%	300.5	298.5	-2.1	-0.7%
54.3%	299.0	297.5	-1.4	-0.5%
55.6%	298.9	297.1	-1.8	-0.6%
56.8%	298.6	296.9	-1.7	-0.6%
58.0%	298.0	295.6	-2.4	-0.8%
59.3%	295.4	294.2	-1.2	-0.4%
60.5%	293.4	293.9	0.5	0.2%
61.7%	292.9	291.8	-1.1	-0.4%
63.0%	291.4	291.5	0.1	0.0%
64.2%	291.2	291.3	0.0	0.0%
65.4%	291.2	289.8	-1.4	-0.5%
66.7%	291.1	289.1	-2.1	-0.7%
67.9%	288.8	285.3	-3.5	-1.2%
69.1%	287.5	283.4	-4.1	-1.4%
70.4%	285.5	282.9	-2.6	-0.9%
71.6%	282.9	281.4	-1.5	-0.5%
72.8%	282.5	281.1	-1.4	-0.5%
74.1%	280.7	279.8	-0.9	-0.3%
75.3%	280.5	279.7	-0.8	-0.3%
76.5%	279.8	278.3	-1.5	-0.5%
77.8%	277.9	277.0	-0.9	-0.3%
79.0%	276.5	276.6	0.1	0.1%
80.2%	276.4	276.1	-0.3	-0.1%
81.5%	275.9	276.0	0.1	0.0%
82.7%	275.7	274.9	-0.8	-0.3%
84.0%	274.1	274.8	0.7	0.3%
85.2%	272.8	272.3	-0.5	-0.2%
86.4%	272.1	269.5	-2.6	-1.0%
87.7%	271.6	269.3	-2.2	-0.8%
88.9%	269.7	268.4	-1.3	-0.5%
90.1%	269.4	268.1	-1.3	-0.5%
91.4%	267.3	267.7	0.4	0.1%
92.6%	267.0	267.1	0.1	0.0%
93.8%	266.5	265.5	-1.0	-0.4%
95.1%	265.9	264.8	-1.2	-0.4%
96.3%	265.1	264.2	-0.9	-0.3%
97.5%	264.8	262.5	-2.3	-0.9%
98.8%	263.7	261.4	-2.3	-0.9%
100.0%	261.0	258.6	-2.4	-0.9%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	516.8	529.8	13.0	2.5%
1.2%	494.5	518.3	23.8	4.8%
2.5%	493.6	485.8	-7.8	-1.6%
3.7%	488.8	472.7	-16.1	-3.3%
4.9%	465.6	445.1	-20.5	-4.4%
6.2%	449.1	443.7	-5.5	-1.2%
7.4%	432.2	437.8	5.6	1.3%
8.6%	431.6	437.3	5.6	1.3%
9.9%	418.9	433.2	14.3	3.4%
11.1%	417.5	430.7	13.1	3.1%
12.3%	416.6	422.1	5.6	1.3%
13.6%	415.9	419.8	3.9	0.9%
14.8%	413.7	416.8	3.1	0.7%
16.0%	407.3	405.8	-1.5	-0.4%
17.3%	402.5	404.7	2.2	0.6%
18.5%	398.2	404.7	6.5	1.6%
19.8%	390.6	392.8	2.3	0.6%
21.0%	388.3	384.0	-4.3	-1.1%
22.2%	377.9	376.7	-1.2	-0.3%
23.5%	375.5	376.0	0.6	0.1%
24.7%	374.3	374.9	0.6	0.2%
25.9%	370.8	364.6	-6.2	-1.7%
27.2%	368.2	353.5	-14.6	-4.0%
28.4%	364.1	350.8	-13.3	-3.7%
29.6%	341.5	344.2	2.6	0.8%
30.9%	338.0	341.8	3.8	1.1%
32.1%	335.1	340.1	5.0	1.5%
33.3%	329.8	333.9	4.1	1.2%
34.6%	328.5	330.4	2.0	0.6%
35.8%	321.3	318.7	-2.6	-0.8%
37.0%	319.5	318.3	-1.2	-0.4%
38.3%	317.3	317.5	0.2	0.0%
39.5%	316.7	317.4	0.7	0.2%
40.7%	316.1	317.2	1.1	0.3%
42.0%	315.7	316.9	1.2	0.4%
43.2%	313.5	316.4	3.0	0.9%
44.4%	312.5	316.4	3.9	1.3%
45.7%	312.4	315.9	3.4	1.1%
46.9%	311.9	315.8	3.9	1.3%
48.1%	311.9	314.6	2.7	0.9%
49.4%	311.1	312.8	1.7	0.6%
50.6%	308.1	312.1	4.0	1.3%
51.9%	306.7	309.1	2.5	0.8%
53.1%	305.3	308.9	3.6	1.2%
54.3%	305.3	307.9	2.6	0.9%
55.6%	305.1	306.2	1.1	0.4%
56.8%	304.4	305.9	1.6	0.5%
58.0%	304.1	304.6	0.4	0.1%
59.3%	303.4	303.8	0.5	0.2%
60.5%	301.9	302.1	0.2	0.1%
61.7%	301.6	301.9	0.3	0.1%
63.0%	298.4	301.5	3.1	1.0%
64.2%	297.7	299.7	2.0	0.7%
65.4%	296.7	296.6	-0.1	0.0%
66.7%	295.6	295.9	0.2	0.1%
67.9%	292.8	295.1	2.3	0.8%
69.1%	292.0	295.0	3.0	1.0%
70.4%	291.0	293.4	2.4	0.8%
71.6%	290.7	291.2	0.5	0.2%
72.8%	284.2	290.1	6.0	2.1%
74.1%	278.9	281.3	2.4	0.9%
75.3%	276.9	280.8	4.0	1.4%
76.5%	275.7	276.2	0.5	0.2%
77.8%	273.5	273.7	0.2	0.1%
79.0%	271.2	273.6	2.4	0.9%
80.2%	269.0	269.8	0.8	0.3%
81.5%	268.1	269.6	1.4	0.5%
82.7%	268.1	268.8	0.7	0.3%
84.0%	267.7	266.3	-1.4	-0.5%
85.2%	265.0	265.9	0.9	0.3%
86.4%	260.4	259.3	-1.2	-0.4%
87.7%	259.1	258.1	-1.0	-0.4%
88.9%	259.1	255.1	-3.9	-1.5%
90.1%	258.5	254.6	-3.9	-1.5%
91.4%	256.4	253.8	-2.6	-1.0%
92.6%	255.7	251.7	-4.1	-1.6%
93.8%	254.7	251.4	-3.3	-1.3%
95.1%	251.1	250.1	-0.9	-0.4%
96.3%	249.1	247.9	-1.2	-0.5%
97.5%	248.8	247.9	-0.9	-0.4%
98.8%	248.3	245.9	-2.4	-1.0%
100.0%	246.8	245.4	-1.5	-0.6%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	505.1	514.4	9.3	1.8%
1.2%	498.3	513.3	15.0	3.0%
2.5%	497.6	507.1	9.6	1.9%
3.7%	486.6	501.3	14.7	3.0%
4.9%	481.6	479.9	-1.7	-0.4%
6.2%	479.3	475.4	-3.9	-0.8%
7.4%	477.6	471.6	-6.0	-1.2%
8.6%	477.1	469.2	-7.9	-1.7%
9.9%	473.0	466.4	-6.5	-1.4%
11.1%	473.0	464.7	-8.3	-1.8%
12.3%	471.7	464.4	-7.3	-1.5%
13.6%	467.8	463.4	-4.4	-0.9%
14.8%	462.2	463.2	1.0	0.2%
16.0%	461.5	458.0	-3.4	-0.7%
17.3%	458.6	457.3	-1.3	-0.3%
18.5%	458.0	455.3	-2.7	-0.6%
19.8%	454.7	453.0	-1.7	-0.4%
21.0%	450.8	449.0	-1.8	-0.4%
22.2%	449.4	448.6	-0.8	-0.2%
23.5%	449.2	438.6	-10.6	-2.4%
24.7%	446.2	436.8	-9.4	-2.1%
25.9%	445.5	436.5	-9.0	-2.0%
27.2%	445.2	435.6	-9.7	-2.2%
28.4%	442.0	432.5	-9.5	-2.1%
29.6%	440.2	432.0	-8.2	-1.9%
30.9%	440.1	428.3	-11.8	-2.7%
32.1%	440.1	428.1	-12.0	-2.7%
33.3%	439.4	425.6	-13.9	-3.2%
34.6%	437.7	424.1	-13.6	-3.1%
35.8%	436.6	421.9	-14.7	-3.4%
37.0%	436.3	421.5	-14.8	-3.4%
38.3%	436.0	420.3	-15.7	-3.6%
39.5%	434.4	420.2	-14.2	-3.3%
40.7%	434.0	419.5	-14.5	-3.3%
42.0%	429.7	417.4	-12.3	-2.9%
43.2%	422.0	416.0	-6.0	-1.4%
44.4%	416.3	415.8	-0.5	-0.1%
45.7%	412.3	415.1	2.8	0.7%
46.9%	412.0	414.0	2.0	0.5%
48.1%	411.6	413.8	2.2	0.5%
49.4%	409.4	412.0	2.6	0.6%
50.6%	407.2	411.5	4.3	1.0%
51.9%	402.2	411.5	9.3	2.3%
53.1%	400.9	411.3	10.4	2.6%
54.3%	400.0	407.9	7.8	2.0%
55.6%	397.8	403.0	5.2	1.3%
56.8%	397.7	402.3	4.6	1.1%
58.0%	395.6	400.7	5.1	1.3%
59.3%	395.2	399.0	3.8	1.0%
60.5%	390.6	396.8	6.2	1.6%
61.7%	389.0	396.7	7.7	2.0%
63.0%	379.0	395.8	16.8	4.4%
64.2%	376.5	389.3	12.8	3.4%
65.4%	375.6	388.6	13.1	3.5%
66.7%	370.8	383.0	12.2	3.3%
67.9%	368.0	378.7	10.6	2.9%
69.1%	366.8	370.2	3.3	0.9%
70.4%	366.1	368.9	2.8	0.8%
71.6%	365.5	368.2	2.7	0.7%
72.8%	362.7	363.9	1.2	0.3%
74.1%	360.2	357.8	-2.4	-0.7%
75.3%	356.8	357.1	0.3	0.1%
76.5%	356.7	356.3	-0.3	-0.1%
77.8%	355.8	354.7	-1.1	-0.3%
79.0%	351.6	351.8	0.2	0.0%
80.2%	349.6	349.9	0.3	0.1%
81.5%	347.4	347.9	0.6	0.2%
82.7%	347.1	346.4	-0.7	-0.2%
84.0%	345.2	337.3	-7.9	-2.3%
85.2%	342.7	335.4	-7.3	-2.1%
86.4%	342.6	335.2	-7.4	-2.2%
87.7%	341.5	334.7	-6.8	-2.0%
88.9%	340.4	333.6	-6.8	-2.0%
90.1%	338.0	332.6	-5.3	-1.6%
91.4%	334.4	331.0	-3.4	-1.0%
92.6%	334.2	329.0	-5.2	-1.6%
93.8%	332.7	327.3	-5.4	-1.6%
95.1%	329.8	326.6	-3.3	-1.0%
96.3%	326.7	325.6	-1.0	-0.3%
97.5%	323.5	314.1	-9.3	-2.9%
98.8%	300.6	302.5	1.9	0.6%
100.0%	238.4	235.9	-2.5	-1.0%

Figure SQ-31-b
Clifton Court Forebay, Monthly EC
Probability of Exceedance

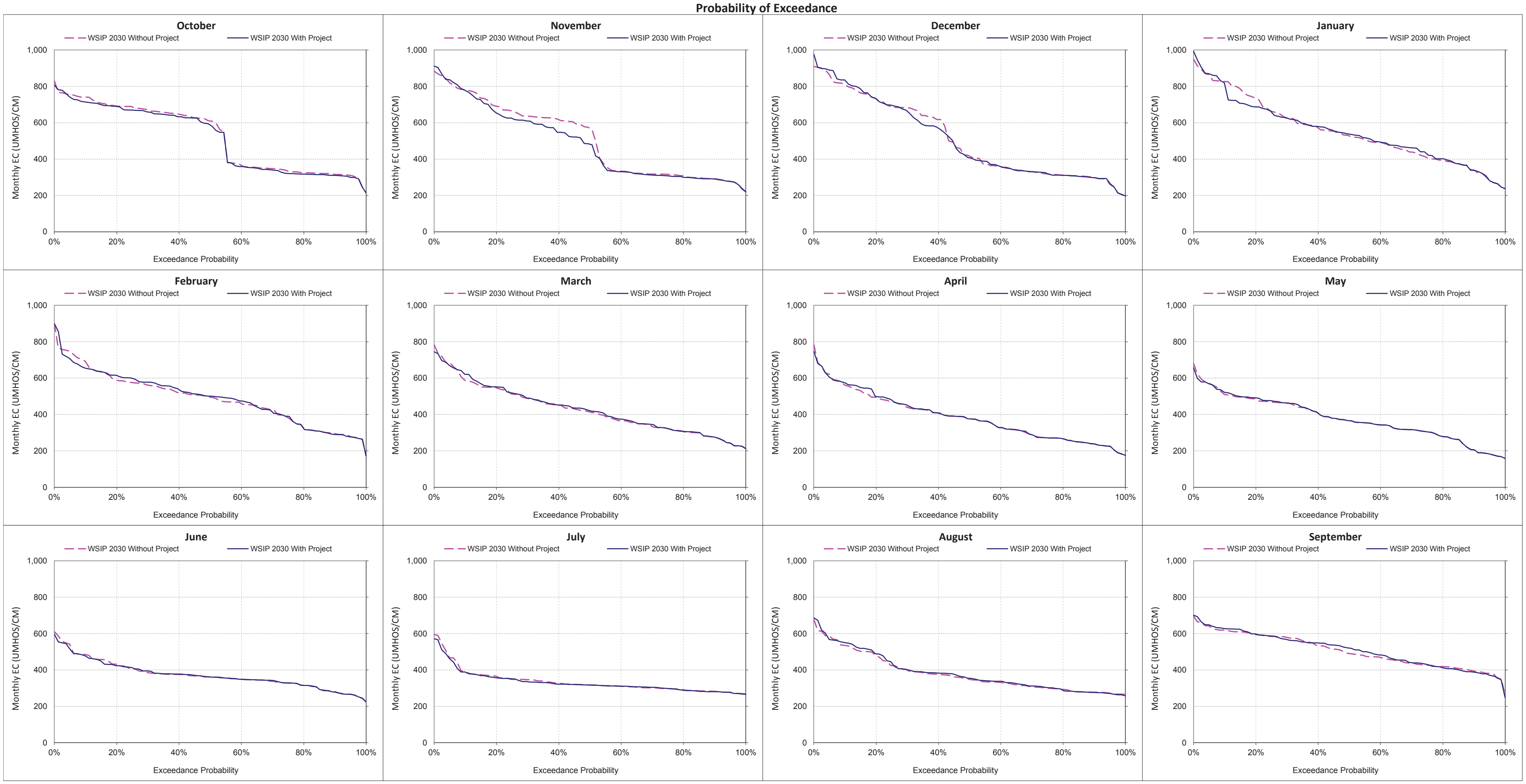


Table SQ-31-b
Clifton Court Forebay, Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	830.4	806.8	-23.6	-2.8%
1.2%	766.7	780.7	14.0	1.8%
2.5%	764.8	778.9	14.1	1.8%
3.7%	759.5	761.0	1.6	0.2%
4.9%	753.1	741.4	-11.7	-1.6%
6.2%	752.0	728.3	-23.6	-3.1%
7.4%	745.1	725.1	-19.9	-2.7%
8.6%	740.8	717.1	-23.7	-3.2%
9.9%	740.7	713.7	-27.0	-3.6%
11.1%	740.2	711.4	-28.8	-3.9%
12.3%	724.0	708.6	-15.4	-2.1%
13.6%	715.7	707.6	-8.1	-1.1%
14.8%	707.1	700.2	-6.9	-1.0%
16.0%	704.4	694.3	-10.1	-1.4%
17.3%	696.9	694.0	-2.9	-0.4%
18.5%	695.9	690.9	-5.1	-0.7%
19.8%	692.1	689.6	-2.5	-0.4%
21.0%	690.5	686.9	-3.6	-0.5%
22.2%	690.0	671.4	-18.6	-2.7%
23.5%	689.9	670.2	-19.7	-2.9%
24.7%	689.1	670.1	-18.9	-2.7%
25.9%	679.3	668.2	-11.1	-1.6%
27.2%	679.0	667.3	-11.7	-1.7%
28.4%	676.4	666.5	-9.9	-1.5%
29.6%	672.8	659.6	-13.2	-2.0%
30.9%	663.9	657.5	-6.4	-1.0%
32.1%	663.2	649.0	-14.1	-2.1%
33.3%	661.0	648.7	-12.3	-1.9%
34.6%	657.0	646.7	-10.3	-1.6%
35.8%	656.1	643.7	-12.4	-1.9%
37.0%	652.2	641.7	-10.5	-1.6%
38.3%	651.2	641.1	-10.1	-1.5%
39.5%	648.2	633.3	-14.8	-2.3%
40.7%	644.3	633.2	-11.1	-1.7%
42.0%	639.5	627.5	-12.0	-1.9%
43.2%	638.3	627.2	-11.1	-1.7%
44.4%	628.6	626.1	-2.5	-0.4%
45.7%	627.1	625.1	-1.9	-0.3%
46.9%	623.1	604.2	-18.9	-3.0%
48.1%	622.3	597.8	-24.5	-3.9%
49.4%	610.5	594.4	-16.1	-2.6%
50.6%	608.6	580.0	-28.6	-4.7%
51.9%	597.7	556.6	-41.2	-6.9%
53.1%	561.7	547.7	-14.0	-2.5%
54.3%	548.8	546.8	-2.0	-0.4%
55.6%	380.2	381.1	0.9	0.2%
56.8%	379.2	379.0	-0.2	-0.1%
58.0%	375.7	362.5	-13.2	-3.5%
59.3%	373.2	358.7	-14.5	-3.9%
60.5%	360.0	358.6	-1.3	-0.4%
61.7%	356.1	353.9	-2.2	-0.6%
63.0%	355.8	353.3	-2.4	-0.7%
64.2%	355.6	352.0	-3.5	-1.0%
65.4%	352.8	349.1	-3.8	-1.1%
66.7%	350.4	343.8	-6.5	-1.9%
67.9%	350.0	342.6	-7.5	-2.1%
69.1%	348.4	341.5	-6.9	-2.0%
70.4%	347.8	339.4	-8.4	-2.4%
71.6%	344.6	337.9	-6.6	-1.9%
72.8%	343.2	327.2	-16.0	-4.7%
74.1%	339.8	321.4	-18.3	-5.4%
75.3%	331.1	320.6	-10.5	-3.2%
76.5%	330.3	320.0	-10.4	-3.1%
77.8%	330.0	318.9	-11.1	-3.4%
79.0%	325.9	318.0	-7.9	-2.4%
80.2%	324.5	317.1	-7.3	-2.3%
81.5%	324.4	316.6	-7.8	-2.4%
82.7%	323.7	316.4	-7.3	-2.2%
84.0%	322.8	314.5	-8.3	-2.6%
85.2%	321.3	314.2	-7.1	-2.2%
86.4%	320.7	314.1	-6.6	-2.1%
87.7%	320.6	311.6	-9.1	-2.8%
88.9%	319.1	310.9	-8.2	-2.6%
90.1%	315.2	310.1	-5.1	-1.6%
91.4%	315.0	309.3	-5.7	-1.8%
92.6%	314.7	308.1	-6.6	-2.1%
93.8%	313.3	305.7	-7.6	-2.4%
95.1%	310.4	299.3	-11.1	-3.6%
96.3%	304.1	298.7	-5.4	-1.8%
97.5%	294.9	292.2	-2.8	-0.9%
98.8%	245.7	245.2	-0.5	-0.2%
100.0%	214.2	214.1	-0.1	0.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	884.0	911.5	27.5	3.1%
1.2%	868.2	903.5	35.3	4.1%
2.5%	857.7	867.8	10.1	1.2%
3.7%	845.0	838.6	-6.4	-0.8%
4.9%	820.7	836.5	15.8	1.9%
6.2%	806.3	821.4	15.2	1.9%
7.4%	790.6	808.7	18.1	2.3%
8.6%	783.9	787.8	3.9	0.5%
9.9%	781.6	778.4	-3.3	-0.4%
11.1%	776.4	767.6	-8.8	-1.1%
12.3%	772.2	750.5	-21.7	-2.8%
13.6%	762.4	730.8	-31.6	-4.1%
14.8%	735.9	726.9	-9.0	-1.2%
16.0%	733.0	705.2	-27.8	-3.8%
17.3%	723.7	700.8	-22.9	-3.2%
18.5%	698.0	673.7	-24.2	-3.5%
19.8%	691.5	656.1	-35.4	-5.1%
21.0%	688.0	643.9	-44.1	-6.4%
22.2%	669.6	633.4	-36.2	-5.4%
23.5%	669.6	625.9	-43.7	-6.5%
24.7%	665.8	625.3	-40.4	-6.1%
25.9%	659.7	617.8	-41.9	-6.4%
27.2%	648.7	614.5	-34.2	-5.3%
28.4%	637.1	613.7	-23.4	-3.7%
29.6%	636.3	610.3	-26.0	-4.1%
30.9%	635.5	608.7	-26.8	-4.2%
32.1%	632.4	594.3	-38.1	-6.0%
33.3%	630.3	592.1	-38.2	-6.1%
34.6%	628.6	590.9	-37.7	-6.0%
35.8%	627.4	577.0	-50.4	-8.0%
37.0%	627.1	573.3	-53.8	-8.6%
38.3%	625.2	573.2	-52.0	-8.3%
39.5%	620.4	547.9	-72.5	-11.7%
40.7%	611.1	547.7	-63.4	-10.4%
42.0%	610.5	543.9	-66.6	-10.9%
43.2%	607.5	524.3	-83.2	-13.7%
44.4%	605.8	522.1	-83.6	-13.8%
45.7%	591.7	520.9	-70.8	-12.0%
46.9%	590.7	516.9	-73.8	-12.5%
48.1%	578.3	486.2	-92.1	-15.9%
49.4%	575.1	484.9	-90.2	-15.7%
50.6%	563.7	479.2	-84.5	-15.0%
51.9%	496.9	417.8	-79.1	-15.9%
53.1%	404.7	403.9	-0.7	-0.2%
54.3%	375.8	364.2	-11.6	-3.1%
55.6%	353.5	337.4	-16.1	-4.6%
56.8%	338.8	334.4	-4.4	-1.3%
58.0%	335.2	333.3	-1.9	-0.6%
59.3%	333.9	330.0	-3.9	-1.2%
60.5%	333.0	329.8	-3.2	-1.0%
61.7%	332.1	329.3	-2.8	-0.8%
63.0%	325.9	327.5	1.7	0.5%
64.2%	322.3	320.4	-2.0	-0.6%
65.4%	322.2	319.3	-2.9	-0.9%
66.7%	320.9	317.3	-3.6	-1.1%
67.9%	320.6	314.2	-6.4	-2.0%
69.1%	317.6	313.4	-4.2	-1.3%
70.4%	317.3	312.4	-4.9	-1.6%
71.6%	317.2	310.5	-6.7	-2.1%
72.8%	317.2	310.4	-6.8	-2.1%
74.1%	316.6	309.3	-7.4	-2.3%
75.3%	315.5	307.2	-8.3	-2.6%
76.5%	313.3	305.4	-7.9	-2.5%
77.8%	312.4	305.2	-7.2	-2.3%
79.0%	308.7	304.8	-3.9	-1.3%
80.2%	308.7	299.3	-9.4	-3.0%
81.5%	300.6	298.6	-2.0	-0.7%
82.7%	298.5	297.4	-1.1	-0.4%
84.0%	297.7	295.3	-2.4	-0.8%
85.2%	297.7	293.2	-4.6	-1.5%
86.4%	293.9	292.2	-1.7	-0.6%
87.7%	292.7	292.2	-0.5	-0.2%
88.9%	292.1	291.3	-0.8	-0.3%
90.1%	291.8	290.7	-1.2	-0.4%
91.4%	288.4	286.7	-1.7	-0.6%
92.6%	284.8	283.0	-1.8	-0.6%
93.8%	279.5	278.8	-0.7	-0.2%
95.1%	277.1	277.6	0.6	0.2%
96.3%	273.2	273.6	0.4	0.1%
97.5%	263.7	260.6	-3.1	-1.2%
98.8%	234.9	238.5	3.6	1.5%
100.0%	219.8	220.2	0.4	0.2%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	909.0	976.3	67.3	7.4%
1.2%	905.2	904.6	-0.6	-0.1%
2.5%	900.9	898.1	-2.8	-0.3%
3.7%	889.5	896.6	7.1	0.8%
4.9%	865.7	889.3	23.6	2.7%
6.2%	824.7	886.1	61.5	7.5%
7.4%	819.6	840.9	21.3	2.6%
8.6%	818.2	836.1	17.9	2.2%
9.9%	810.8	835.5	24.7	3.1%
11.1%	797.5	811.9	14.5	1.8%
12.3%	791.2	803.1	11.9	1.5%
13.6%	778.2	800.4	22.2	2.9%
14.8%	764.6	789.0	24.4	3.2%
16.0%	759.5	765.7	6.2	0.8%
17.3%	758.1	763.5	5.4	0.7%
18.5%	741.5	740.6	-0.8	-0.1%
19.8%	735.0	734.6	-0.4	0.0%
21.0%	718.3	715.7	-2.6	-0.4%
22.2%	714.1	707.1	-6.9	-1.0%
23.5%	696.9	698.9	1.9	0.3%
24.7%	689.1	696.4	7.3	1.1%
25.9%	684.5	691.1	6.6	1.0%
27.2%	684.1	686.5	2.4	0.4%
28.4%	683.7	675.7	-8.0	-1.2%
29.6%	681.1	668.9	-12.2	-1.8%
30.9%	681.0	648.1	-33.0	-4.8%
32.1%	672.2	627.8	-44.5	-6.6%
33.3%	666.7	612.2	-54.4	-8.2%
34.6%	640.2	593.6	-46.6	-7.3%
35.8%	639.3	584.7	-54.6	-8.5%
37.0%	632.0	583.4	-48.6	-7.7%
38.3%	629.9	582.3	-47.6	-7.6%
39.5%	617.9	575.5	-42.4	-6.9%
40.7%	617.4	560.9	-56.5	-9.2%
42.0%	583.0	544.0	-39.0	-6.7%
43.2%	501.1	523.8	22.6	4.5%
44.4%	493.8	503.2	9.4	1.9%
45.7%	464.0	457.1	-6.9	-1.5%
46.9%	458.9	436.6	-22.3	-4.9%
48.1%	422.8	425.7	2.9	0.7%
49.4%	421.0	409.1	-11.9	-2.8%
50.6%	410.6	404.0	-6.6	-1.6%
51.9%	405.0	394.4	-10.6	-2.6%
53.1%	403.4	392.4	-11.0	-2.7%
54.3%	373.7	388.6	14.8	4.0%
55.6%	372.2	387.5	15.3	4.1%
56.8%	364.0	370.7	6.6	1.8%
58.0%	363.8	370.6	6.8	1.9%
59.3%	359.6	363.1	3.5	1.0%
60.5%	356.5	354.3	-2.2	-0.6%
61.7%	350.1	354.2	4.1	1.2%
63.0%	347.5	349.5	2.0	0.6%
64.2%	342.7	339.7	-3.0	-0.9%
65.4%	339.4	336.0	-3.4	-1.0%
66.7%	338.1	335.8	-2.3	-0.7%
67.9%	335.1	334.3	-0.7	-0.2%
69.1%	331.9	330.9	-1.0	-0.3%
70.4%	330.4	330.7	0.3	0.1%
71.6%	325.9	329.4	3.5	1.1%
72.8%	324.7	327.3	2.6	0.8%
74.1%	319.6	325.4	5.9	1.8%
75.3%	317.9	317.9	0.0	0.0%
76.5%	315.0	311.8	-3.2	-1.0%
77.8%	314.7	311.3	-3.3	-1.1%
79.0%	312.4	311.1	-1.3	-0.4%
80.2%	310.6	310.6	0.0	0.0%
81.5%	309.5	310.0	0.5	0.2%
82.7%	309.4	308.0	-1.4	-0.5%
84.0%	308.0	307.1	-0.9	-0.3%
85.2%	305.9	304.8	-1.1	-0.4%
86.4%	305.9	302.8	-3.1	-1.0%
87.7%	304.2	302.0	-2.2	-0.7%
88.9%	302.1	299.4	-2.8	-0.9%
90.1%	298.8	297.7	-1.1	-0.4%
91.4%	292.5	293.8	1.3	0.5%
92.6%	292.4	293.1	0.7	0.2%
93.8%	289.1	292.7	3.6	1.2%
95.1%	259.7	264.7	5.0	1.9%
96.3%	247.6	245.7	-1.9	-0.8%
97.5%	214.3	214.3	0.0	0.0%
98.8%	205.5	205.5	-0.1	0.0%
100.0%	198.1	198.3	0.2	0.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	949.4	993.2	43.8	4.6%
1.2%	913.0	944.6	31.6	3.5%
2.5%	894.4	905.1	10.6	1.2%
3.7%	870.5	872.7	2.2	0.2%
4.9%	864.5	869.0	4.5	0.5%
6.2%	832.3	860.5	28.2	3.4%
7.4%	831.1	858.5	27.4	3.3%
8.6%	828.4	830.6	2.2	0.3%
9.9%	826.9	820.0	-6.9	-0.8%
11.1%	825.5	725.7	-99.8	-12.1%
12.3%	801.2	723.2	-78.0	-9.7%
13.6%	799.9	723.0	-76.9	-9.6%
14.8%	789.3	706.9	-82.4	-10.4%
16.0%	767.1	706.3	-60.8	-7.9%
17.3%	751.2	698.1	-53.1	-7.1%
18.5%	744.8	689.5	-55.4	-7.4%
19.8%	735.8	687.3	-48.6	-6.6%
21.0%	725.6	686.6	-39.0	-5.4%
22.2%	687.0	678.3	-8.6	-1.3%
23.5%	680.9	674.3	-6.6	-1.0%
24.7%	664.9	663.9	-1.1	-0.2%
25.9%	658.7	640.4	-18.2	-2.8%
27.2%	654.0	635.6	-18.3	-2.8%
28.4%	639.4	629.9	-9.5	-1.5%
29.6%	625.9	629.2	3.3	0.5%
30.9%	625.3	620.5	-4.8	-0.8%
32.1%	621.9	617.0	-4.9	-0.8%
33.3%	595.9	613.3	17.4	2.9%
34.6%	592.8	598.0	5.2	0.9%
35.8%	590.3	594.8	4.5	0.8%
37.0%	587.1	585.8	-1.3	-0.2%
38.3%	584.9	580.5	-4.4	-0.8%
39.5%	577.8	579.5	1.7	0.3%
40.7%	561.5	577.9	16.4	2.9%
42.0%	559.0	575.7	16.6	3.0%
43.2%	556.9	566.2	9.3	1.7%
44.4%	554.2	559.4	5.2	0.9%
45.7%	553.2	548.7	-4.6	-0.8%
46.9%	546.6	546.7	0.2	0.0%
48.1%	532.6	544.0	11.4	2.1%
49.4%	530.8	539.2	8.4	1.6%
50.6%	523.2	535.9	12.7	2.4%
51.9%	519.9	532.2	12.3	2.4%
53.1%	518.3	530.7	12.5	2.4%
54.3%	511.7	518.5	6.9	1.3%
55.6%	503.4	515.8	12.3	2.4%
56.8%	495.2	510.7	15.5	3.1%
58.0%	492.2	497.2	5.0	1.0%
59.3%	491.7	496.4	4.7	1.0%
60.5%	489.5	491.2	1.6	0.3%
61.7%	483.2	489.4	6.2	1.3%
63.0%	474.2	476.8	2.7	0.6%
64.2%	465.3	475.6	10.4	2.2%
65.4%	460.9	474.4	13.5	2.9%
66.7%	453.8	467.4	13.6	3.0%
67.9%	453.2	465.9	12.7	2.8%
69.1%	440.0	462.9	23.0	5.2%
70.4%	438.2	461.9	23.8	5.4%
71.6%	432.2	460.4	28.2	6.5%
72.8%	421.6	440.4	18.8	4.5%
74.1%	414.7	439.6	24.9	6.0%
75.3%	404.0	421.8	17.8	4.4%
76.5%	401.6	418.2	16.6	4.1%
77.8%	399.0	401.4	2.4	0.6%
79.0%	394.3	401.0	6.7	1.7%
80.2%	393.7	401.0	7.3	1.9%
81.5%	386.8	394.9	8.1	2.1%
82.7%	384.9	389.1	4.2	1.1%
84.0%	376.6	377.1	0.5	0.1%
85.2%	375.1	373.8	-1.4	-0.4%
86.4%	366.9	369.4	2.5	0.7%
87.7%	366.6	364.2	-2.4	-0.7%
88.9%	342.5	338.7	-3.8	-1.1%
90.1%	338.9	338.0	-0.9	-0.3%
91.4%	322.4	331.1	8.7	2.7%
92.6%	321.9	322.0	0.1	0.0%
93.8%	309.1	303.4	-5.6	-1.8%
95.1%	280.9	281.0	0.1	0.0%
96.3%	270.0	270.5	0.5	0.2%
97.5%	264.2	264.9	0.6	0.2%
98.8%	247.5	245.9	-1.5	-0.6%
100.0%	237.2	237.3	0.1	0.0%

Table SQ-31-b

Clifton Court Forebay, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	901.8	898.1	-3.7	-0.4%
1.2%	766.5	856.6	90.2	11.8%
2.5%	757.9	731.8	-26.1	-3.4%
3.7%	753.6	720.3	-33.3	-4.4%
4.9%	748.1	707.8	-40.4	-5.4%
6.2%	729.4	686.1	-43.3	-5.9%
7.4%	711.8	678.0	-33.8	-4.7%
8.6%	704.7	663.4	-41.3	-5.9%
9.9%	692.6	654.4	-38.1	-5.5%
11.1%	659.3	650.9	-8.4	-1.3%
12.3%	646.2	647.5	1.3	0.2%
13.6%	638.0	639.7	1.6	0.3%
14.8%	636.7	634.3	-2.4	-0.4%
16.0%	634.8	632.3	-2.5	-0.4%
17.3%	624.7	617.8	-6.9	-1.1%
18.5%	598.5	616.6	18.1	3.0%
19.8%	588.6	616.3	27.7	4.7%
21.0%	585.3	607.7	22.4	3.8%
22.2%	584.1	602.6	18.4	3.2%
23.5%	577.1	602.5	25.5	4.4%
24.7%	576.3	601.1	24.9	4.3%
25.9%	573.4	593.7	20.3	3.5%
27.2%	572.6	580.3	7.7	1.3%
28.4%	570.7	578.3	7.5	1.3%
29.6%	562.7	577.9	15.2	2.7%
30.9%	558.7	577.7	19.0	3.4%
32.1%	557.0	573.9	16.9	3.0%
33.3%	553.1	564.4	11.3	2.0%
34.6%	543.8	558.0	14.3	2.6%
35.8%	540.9	557.1	16.2	3.0%
37.0%	540.1	556.3	16.2	3.0%
38.3%	530.6	547.2	16.6	3.1%
39.5%	520.6	541.6	21.0	4.0%
40.7%	518.8	527.5	8.7	1.7%
42.0%	518.0	523.5	5.5	1.1%
43.2%	510.1	520.1	10.0	2.0%
44.4%	509.0	513.6	4.6	0.9%
45.7%	507.6	512.3	4.8	0.9%
46.9%	505.9	508.9	3.0	0.6%
48.1%	502.6	503.6	1.0	0.2%
49.4%	496.6	501.0	4.4	0.9%
50.6%	493.8	500.1	6.4	1.3%
51.9%	488.0	498.4	10.3	2.1%
53.1%	474.5	496.9	22.4	4.7%
54.3%	471.3	493.3	21.9	4.7%
55.6%	469.4	490.8	21.3	4.5%
56.8%	468.9	489.1	20.2	4.3%
58.0%	467.8	483.3	15.5	3.3%
59.3%	467.3	475.6	8.3	1.8%
60.5%	456.2	473.5	17.3	3.8%
61.7%	453.9	467.6	13.7	3.0%
63.0%	453.4	464.3	10.9	2.4%
64.2%	451.4	448.7	-2.8	-0.6%
65.4%	446.8	437.7	-9.2	-2.1%
66.7%	436.2	428.0	-8.2	-1.9%
67.9%	433.1	427.3	-5.7	-1.3%
69.1%	427.9	425.7	-2.2	-0.5%
70.4%	427.1	407.2	-19.8	-4.6%
71.6%	398.9	404.5	5.6	1.4%
72.8%	396.1	399.4	3.3	0.8%
74.1%	391.0	390.8	-0.2	-0.1%
75.3%	378.8	389.3	10.5	2.8%
76.5%	361.4	361.6	0.2	0.1%
77.8%	348.0	347.8	-0.2	-0.1%
79.0%	346.7	345.3	-1.5	-0.4%
80.2%	318.3	316.7	-1.6	-0.5%
81.5%	316.2	314.9	-1.3	-0.4%
82.7%	314.2	312.6	-1.6	-0.5%
84.0%	309.5	309.6	0.0	0.0%
85.2%	307.5	307.6	0.1	0.0%
86.4%	302.8	302.7	-0.1	0.0%
87.7%	299.9	298.6	-1.3	-0.4%
88.9%	299.8	293.1	-6.7	-2.2%
90.1%	294.0	290.3	-3.7	-1.3%
91.4%	289.9	290.0	0.1	0.0%
92.6%	289.9	288.4	-1.6	-0.5%
93.8%	287.6	279.1	-8.5	-3.0%
95.1%	278.2	277.5	-0.8	-0.3%
96.3%	274.1	274.0	-0.1	0.0%
97.5%	272.5	268.7	-3.8	-1.4%
98.8%	263.5	263.7	0.2	0.1%
100.0%	172.0	172.2	0.2	0.1%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	782.5	745.0	-37.5	-4.8%
1.2%	736.2	735.4	-0.9	-0.1%
2.5%	718.7	696.9	-21.8	-3.0%
3.7%	687.1	687.5	0.5	0.1%
4.9%	686.4	669.5	-17.0	-2.5%
6.2%	663.8	656.1	-7.7	-1.2%
7.4%	645.5	646.9	1.4	0.2%
8.6%	607.7	642.3	34.6	5.7%
9.9%	587.6	620.8	33.2	5.7%
11.1%	584.6	620.5	35.9	6.1%
12.3%	577.9	593.6	15.7	2.7%
13.6%	568.1	583.0	14.9	2.6%
14.8%	551.4	570.4	19.0	3.5%
16.0%	550.6	559.9	9.2	1.7%
17.3%	549.5	556.7	7.2	1.3%
18.5%	549.0	552.8	3.8	0.7%
19.8%	548.2	552.2	4.0	0.7%
21.0%	540.6	550.4	9.8	1.8%
22.2%	534.9	549.5	14.6	2.7%
23.5%	533.1	523.5	-9.6	-1.8%
24.7%	513.4	518.7	5.3	1.0%
25.9%	510.7	514.8	4.1	0.8%
27.2%	508.1	511.4	3.4	0.7%
28.4%	494.6	505.5	10.9	2.2%
29.6%	490.5	491.3	0.8	0.2%
30.9%	483.1	489.3	6.3	1.3%
32.1%	481.9	482.1	0.2	0.0%
33.3%	481.0	477.0	-4.0	-0.8%
34.6%	466.1	471.7	5.6	1.2%
35.8%	458.9	466.5	7.5	1.6%
37.0%	457.3	458.9	1.6	0.4%
38.3%	453.8	458.6	4.8	1.1%
39.5%	451.6	452.3	0.7	0.1%
40.7%	449.8	451.6	1.8	0.4%
42.0%	436.1	449.8	13.7	3.1%
43.2%	434.1	447.1	13.0	3.0%
44.4%	433.0	436.3	3.3	0.8%
45.7%	427.8	435.7	7.9	1.8%
46.9%	423.5	435.2	11.7	2.8%
48.1%	421.6	430.2	8.5	2.0%
49.4%	416.2	423.9	7.7	1.8%
50.6%	411.1	417.9	6.9	1.7%
51.9%	409.6	416.9	7.3	1.8%
53.1%	400.0	413.8	13.7	3.4%
54.3%	396.0	408.7	12.6	3.2%
55.6%	384.3	391.3	7.0	1.8%
56.8%	379.9	387.6	7.7	2.0%
58.0%	373.0	379.8	6.9	1.8%
59.3%	366.1	375.7	9.6	2.6%
60.5%	365.5	374.1	8.6	2.4%
61.7%	365.1	369.8	4.7	1.3%
63.0%	356.6	364.6	7.9	2.2%
64.2%	356.2	357.7	1.5	0.4%
65.4%	349.1	349.7	0.6	0.2%
66.7%	348.7	349.2	0.5	0.1%
67.9%	346.6	348.7	2.2	0.6%
69.1%	342.2	347.2	4.9	1.4%
70.4%	331.0	344.2	13.2	4.0%
71.6%	327.8	329.5	1.7	0.5%
72.8%	327.4	328.8	1.3	0.4%
74.1%	326.6	327.3	0.8	0.2%
75.3%	321.6	321.7	0.1	0.0%
76.5%	315.9	313.9	-2.1	-0.7%
77.8%	313.3	311.8	-1.6	-0.5%
79.0%	311.4	307.7	-3.7	-1.2%
80.2%	305.0	306.9	1.9	0.6%
81.5%	304.9	305.5	0.5	0.2%
82.7%	300.5	305.4	4.9	1.6%
84.0%	300.4	301.8	1.4	0.5%
85.2%	299.0	300.4	1.4	0.5%
86.4%	282.6	282.8	0.2	0.1%
87.7%	280.5	280.8	0.4	0.1%
88.9%	277.9	277.9	0.0	0.0%
90.1%	274.9	275.0	0.2	0.1%
91.4%	268.3	268.3	0.0	0.0%
92.6%	258.4	258.5	0.0	0.0%
93.8%	249.4	245.3	-4.1	-1.6%
95.1%	242.7	242.9	0.2	0.1%
96.3%	227.8	228.1	0.3	0.1%
97.5%	227.0	227.9	0.9	0.4%
98.8%	224.7	226.0	1.3	0.6%
100.0%	211.9	212.3	0.4	0.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	784.8	746.9	-37.8	-4.8%
1.2%	685.9	680.8	-5.1	-0.8%
2.5%	663.6	666.4	2.8	0.4%
3.7%	628.5	630.8	2.3	0.4%
4.9%	622.0	606.9	-15.0	-2.4%
6.2%	589.0	592.4	3.4	0.6%
7.4%	584.0	588.1	4.1	0.7%
8.6%	583.5	581.0	-2.5	-0.4%
9.9%	561.8	575.1	13.3	2.4%
11.1%	555.9	563.0	7.1	1.3%
12.3%	547.3	561.7	14.4	2.6%
13.6%	537.7	559.0	21.3	4.0%
14.8%	532.2	549.1	16.9	3.2%
16.0%	517.5	544.8	27.2	5.3%
17.3%	512.8	544.5	31.7	6.2%
18.5%	495.7	541.4	45.7	9.2%
19.8%	494.9	500.0	5.1	1.0%
21.0%	487.1	496.8	9.7	2.0%
22.2%	481.5	496.6	15.0	3.1%
23.5%	477.9	489.9	12.1	2.5%
24.7%	470.4	483.5	13.1	2.8%
25.9%	468.5	466.1	-2.3	-0.5%
27.2%	458.6	460.5	1.9	0.4%
28.4%	457.2	458.5	1.3	0.3%
29.6%	442.1	453.7	11.6	2.6%
30.9%	434.9	442.5	7.7	1.8%
32.1%	431.2	433.8	2.7	0.6%
33.3%	429.6	431.1	1.5	0.3%
34.6%	427.7	430.9	3.2	0.8%
35.8%	426.1	426.7	0.7	0.2%
37.0%	422.8	426.1	3.2	0.8%
38.3%	409.6	410.7	1.0	0.2%
39.5%	409.3	408.9	-0.5	-0.1%
40.7%	408.0	403.3	-4.6	-1.1%
42.0%	396.4	395.0	-1.5	-0.4%
43.2%	391.3	392.1	0.8	0.2%
44.4%	390.5	392.0	1.6	0.4%
45.7%	389.1	390.0	0.9	0.2%
46.9%	389.1	389.9	0.8	0.2%
48.1%	387.4	388.7	1.3	0.3%
49.4%	375.2	377.3	2.1	0.6%
50.6%	375.0	374.8	-0.2	-0.1%
51.9%	374.1	374.1	0.0	0.0%
53.1%	366.0	365.8	-0.2	-0.1%
54.3%	363.6	364.1	0.5	0.1%
55.6%	361.4	364.0	2.6	0.7%
56.8%	354.6	354.7	0.1	0.0%
58.0%	341.1	341.2	0.2	0.0%
59.3%	328.2	328.6	0.4	0.1%
60.5%	327.0	327.8	0.9	0.3%
61.7%	320.0	320.0	0.0	0.0%
63.0%	318.4	319.8	1.4	0.5%
64.2%	316.5	318.4	1.9	0.6%
65.4%	313.9	315.0	1.1	0.3%
66.7%	309.7	309.6	-0.1	0.0%
67.9%	301.3	308.8	7.5	2.5%
69.1%	292.0	292.1	0.1	0.0%
70.4%	287.6	287.1	-0.5	-0.2%
71.6%	277.5	274.7	-2.9	-1.0%
72.8%	273.6	273.7	0.0	0.0%
74.1%	272.9	273.1	0.2	0.1%
75.3%	271.3	271.3	0.0	0.0%
76.5%	271.2	271.3	0.1	0.0%
77.8%	270.4	271.3	0.8	0.3%
79.0%	269.7	269.8	0.1	0.0%
80.2%	265.4	265.8	0.5	0.2%
81.5%	258.1	258.5	0.4	0.2%
82.7%	257.4	255.9	-1.5	-0.6%
84.0%	250.2	250.6	0.4	0.2%
85.2%	248.8	250.1	1.3	0.5%
86.4%	245.9	246.3	0.5	0.2%
87.7%	244.6	244.7	0.1	0.0%
88.9%	239.1	239.4	0.3	0.1%
90.1%	237.9	237.6	-0.3	-0.1%
91.4%	230.8	230.9	0.0	0.0%
92.6%	229.2	229.4	0.2	0.1%
93.8%	226.5	227.0	0.5	0.2%
95.1%	225.2	225.6	0.4	0.2%
96.3%	205.2	204.9	-0.3	-0.2%
97.5%	190.2	190.4	0.1	0.1%
98.8%	183.8	183.1	-0.8	-0.4%
100.0%	175.6	175.4	-0.2	-0.1%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	680.9	657.5	-23.4	-3.4%
1.2%	623.8	599.8	-24.0	-3.8%
2.5%	595.4	578.7	-16.7	-2.8%
3.7%	579.3	578.7	-0.6	-0.1%
4.9%	572.6	569.2	-3.4	-0.6%
6.2%	561.2	561.9	0.7	0.1%
7.4%	551.0	539.5	-11.5	-2.1%
8.6%	529.3	536.6	7.3	1.4%
9.9%	510.3	522.7	12.4	2.4%
11.1%	507.7	518.6	11.0	2.2%
12.3%	505.0	512.2	7.2	1.4%
13.6%	497.9	504.0	6.1	1.2%
14.8%	496.0	499.2	3.2	0.6%
16.0%	495.4	497.0	1.6	0.3%
17.3%	490.0	497.0	7.0	1.4%
18.5%	487.4	492.3	4.9	1.0%
19.8%	486.3	492.0	5.7	1.2%
21.0%	474.4	489.1	14.7	3.1%
22.2%	472.6	477.7	5.1	1.1%
23.5%	472.4	476.8	4.5	1.0%
24.7%	468.4	476.7	8.2	1.8%
25.9%	467.2	472.0	4.8	1.0%
27.2%	465.6	470.9	5.3	1.1%
28.4%	465.1	465.5	0.4	0.1%
29.6%	463.5	463.5	0.0	0.0%
30.9%	462.1	461.0	-1.2	-0.3%
32.1%	453.0	460.8	7.8	1.7%
33.3%	440.1	455.3	15.2	3.4%
34.6%	439.1	441.8	2.7	0.6%
35.8%	436.8	437.4	0.6	0.1%
37.0%	424.6	429.7	5.2	1.2%
38.3%	419.8	418.9	-0.9	-0.2%
39.5%	413.2	413.7	0.5	0.1%
40.7%	396.6	396.9	0.3	0.1%
42.0%	388.9	388.7	-0.2	0.0%
43.2%	387.6	388.4	0.8	0.2%
44.4%	379.7	379.7	0.0	0.0%
45.7%	378.1	378.1	0.1	0.0%
46.9%	372.5	372.6	0.1	0.0%
48.1%	371.4	371.8	0.3	0.1%
49.4%	366.6	367.2	0.6	0.2%
50.6%	365.7	365.8	0.1	0.0%
51.9%	357.6	357.6	0.0	0.0%
53.1%	355.4	356.3	0.9	0.3%
54.3%	355.0	355.3	0.3	0.1%
55.6%	353.8	354.4	0.5	0.2%
56.8%	352.1	352.1	-0.1	0.0%
58.0%	346.3	346.3	0.0	0.0%
59.3%	343.0	343.5	0.6	0.2%
60.5%	342.7	342.4	-0.3	-0.1%
61.7%	342.5	342.4	-0.1	0.0%
63.0%	338.1	338.1	-0.1	0.0%
64.2%	325.3	325.3	0.0	0.0%
65.4%	320.4	320.5	0.1	0.0%
66.7%	318.8	318.9	0.1	0.0%
67.9%	317.5	317.5	0.0	0.0%
69.1%	316.6	316.7	0.1	0.0%
70.4%	316.5	316.7	0.1	0.0%
71.6%	313.4	313.5	0.2	0.0%
72.8%	309.5	309.6	0.1	0.0%
74.1%	307.0	307.0	0.0	0.0%
75.3%	304.0	304.0	0.0	0.0%
76.5%	301.0	301.1	0.1	0.0%
77.8%	292.7	292.7	0.0	0.0%
79.0%	281.7	282.7	1.0	0.4%
80.2%	277.5	278.6	1.1	0.4%
81.5%	277.1	277.2	0.0	0.0%
82.7%	267.6	268.7	1.2	0.4%
84.0%	263.8	263.8	0.0	0.0%
85.2%	262.6	263.2	0.6	0.2%
86.4%	239.8	240.0	0.1	0.1%
87.7%	221.2	221.4	0.1	0.1%
88.9%	207.0	207.7	0.6	0.3%
90.1%	205.2	205.6	0.4	0.2%
91.4%	190.0	190.4	0.4	0.2%
92.6%	189.5	190.0	0.5	0.3%
93.8%	186.2	186.4	0.2	0.1%
95.1%	182.2	182.5	0.3	0.1%
96.3%	176.8	177.1	0.4	0.2%
97.5%	171.1	171.1	0.1	0.0%
98.8%	168.4	168.2	-0.1	-0.1%
100.0%	158.2	158.4	0.2	0.1%

Table SQ-31-b

Clifton Court Forebay, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	610.0	596.0	-14.0	-2.3%
1.2%	587.3	554.5	-32.8	-5.6%
2.5%	557.6	548.4	-9.1	-1.6%
3.7%	548.6	545.7	-2.9	-0.5%
4.9%	541.6	515.2	-26.4	-4.9%
6.2%	490.7	490.3	-0.4	-0.1%
7.4%	488.5	488.7	0.2	0.0%
8.6%	485.7	485.0	-0.8	-0.2%
9.9%	484.8	477.2	-7.6	-1.6%
11.1%	479.1	464.7	-14.4	-3.0%
12.3%	459.2	461.2	2.0	0.4%
13.6%	457.8	458.3	0.5	0.1%
14.8%	457.4	449.5	-7.9	-1.7%
16.0%	455.6	431.9	-23.8	-5.2%
17.3%	448.1	430.4	-17.7	-4.0%
18.5%	432.2	430.1	-2.2	-0.5%
19.8%	431.1	423.4	-7.7	-1.8%
21.0%	422.3	422.7	0.3	0.1%
22.2%	421.7	416.9	-4.8	-1.1%
23.5%	413.6	416.5	2.8	0.7%
24.7%	405.3	413.1	7.8	1.9%
25.9%	404.7	405.3	0.6	0.1%
27.2%	393.8	404.9	11.1	2.8%
28.4%	393.0	393.9	0.9	0.2%
29.6%	386.2	393.9	7.7	2.0%
30.9%	382.6	393.3	10.7	2.8%
32.1%	381.5	382.1	0.7	0.2%
33.3%	378.7	381.7	3.0	0.8%
34.6%	378.6	378.8	0.3	0.1%
35.8%	376.0	378.8	2.8	0.7%
37.0%	375.2	378.2	3.0	0.8%
38.3%	375.0	377.5	2.6	0.7%
39.5%	375.0	377.0	2.0	0.5%
40.7%	374.2	376.6	2.5	0.7%
42.0%	374.2	374.7	0.6	0.2%
43.2%	369.0	374.0	5.0	1.3%
44.4%	367.1	370.9	3.8	1.0%
45.7%	366.8	369.4	2.5	0.7%
46.9%	366.1	367.2	1.1	0.3%
48.1%	364.0	361.7	-2.3	-0.6%
49.4%	361.7	361.2	-0.5	-0.1%
50.6%	360.7	360.0	-0.7	-0.2%
51.9%	360.5	359.5	-1.0	-0.3%
53.1%	359.7	356.8	-3.0	-0.8%
54.3%	356.5	355.5	-1.0	-0.3%
55.6%	355.3	354.6	-0.7	-0.2%
56.8%	353.8	351.3	-2.6	-0.7%
58.0%	352.1	350.9	-1.1	-0.3%
59.3%	351.1	348.1	-3.0	-0.9%
60.5%	348.4	346.6	-1.8	-0.5%
61.7%	347.5	345.9	-1.6	-0.5%
63.0%	346.3	345.8	-0.6	-0.2%
64.2%	345.4	345.3	-0.2	0.0%
65.4%	344.5	344.8	0.3	0.1%
66.7%	344.1	344.3	0.2	0.1%
67.9%	342.4	342.3	0.0	0.0%
69.1%	338.2	342.3	4.1	1.2%
70.4%	337.3	341.0	3.7	1.1%
71.6%	331.8	336.6	4.8	1.4%
72.8%	330.3	330.1	-0.1	0.0%
74.1%	327.9	328.4	0.5	0.1%
75.3%	327.0	328.2	1.2	0.4%
76.5%	325.7	327.3	1.5	0.5%
77.8%	325.0	325.8	0.8	0.2%
79.0%	316.7	316.4	-0.3	-0.1%
80.2%	314.1	315.1	1.0	0.3%
81.5%	313.9	314.0	0.2	0.1%
82.7%	311.9	308.7	-3.1	-1.0%
84.0%	307.4	307.6	0.2	0.1%
85.2%	291.8	291.8	0.0	0.0%
86.4%	285.4	288.5	3.1	1.1%
87.7%	285.3	286.1	0.8	0.3%
88.9%	284.8	279.8	-5.0	-1.8%
90.1%	279.7	277.7	-2.0	-0.7%
91.4%	272.8	271.6	-1.2	-0.4%
92.6%	269.3	266.7	-2.6	-1.0%
93.8%	266.4	266.1	-0.3	-0.1%
95.1%	266.2	265.4	-0.8	-0.3%
96.3%	261.3	261.5	0.3	0.1%
97.5%	250.3	251.1	0.7	0.3%
98.8%	243.5	244.2	0.7	0.3%
100.0%	224.2	223.9	-0.3	-0.2%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	595.2	571.3	-23.9	-4.0%
1.2%	588.5	565.7	-22.8	-3.9%
2.5%	544.1	510.0	-34.2	-6.3%
3.7%	507.2	489.7	-17.5	-3.4%
4.9%	466.7	461.2	-5.5	-1.2%
6.2%	465.9	442.9	-22.9	-4.9%
7.4%	441.3	407.1	-34.2	-7.8%
8.6%	395.4	389.0	-6.4	-1.6%
9.9%	390.7	388.1	-2.6	-0.7%
11.1%	381.9	379.0	-2.9	-0.8%
12.3%	376.6	377.2	0.5	0.1%
13.6%	375.3	374.2	-1.0	-0.3%
14.8%	374.2	369.4	-4.8	-1.3%
16.0%	370.6	368.6	-2.0	-0.5%
17.3%	369.9	362.7	-7.3	-2.0%
18.5%	366.8	359.7	-7.1	-1.9%
19.8%	366.4	356.9	-9.5	-2.6%
21.0%	357.2	353.9	-3.3	-0.9%
22.2%	354.6	353.2	-1.4	-0.4%
23.5%	354.2	352.5	-1.7	-0.5%
24.7%	347.9	351.3	3.4	1.0%
25.9%	347.9	349.7	1.8	0.5%
27.2%	347.8	341.2	-6.6	-1.9%
28.4%	347.7	336.4	-11.3	-3.3%
29.6%	346.1	336.0	-10.1	-2.9%
30.9%	346.0	333.2	-12.8	-3.7%
32.1%	344.5	333.0	-11.5	-3.3%
33.3%	339.3	331.1	-8.2	-2.4%
34.6%	339.0	330.4	-8.6	-2.5%
35.8%	333.2	330.1	-3.1	-0.9%
37.0%	333.0	328.5	-4.6	-1.4%
38.3%	329.6	324.5	-5.1	-1.5%
39.5%	326.3	322.2	-4.1	-1.3%
40.7%	325.7	321.1	-4.5	-1.4%
42.0%	322.5	321.0	-1.5	-0.5%
43.2%	321.8	319.7	-2.1	-0.6%
44.4%	320.8	319.5	-1.3	-0.4%
45.7%	319.9	318.6	-1.3	-0.4%
46.9%	319.9	318.2	-1.7	-0.5%
48.1%	317.4	317.1	-0.3	-0.1%
49.4%	317.0	316.7	-0.3	-0.1%
50.6%	317.0	315.4	-1.6	-0.5%
51.9%	316.8	315.3	-1.5	-0.5%
53.1%	314.1	314.5	0.4	0.1%
54.3%	313.9	312.5	-1.4	-0.4%
55.6%	313.8	312.3	-1.5	-0.5%
56.8%	313.5	311.9	-1.6	-0.5%
58.0%	312.4	311.2	-1.2	-0.4%
59.3%	311.5	310.3	-1.2	-0.4%
60.5%	309.3	310.1	0.8	0.3%
61.7%	308.7	309.7	1.0	0.3%
63.0%	307.0	309.0	2.0	0.7%
64.2%	306.6	307.3	0.6	0.2%
65.4%	303.6	307.1	3.4	1.1%
66.7%	302.0	306.6	4.6	1.5%
67.9%	302.0	306.4	4.4	1.5%
69.1%	301.8	304.3	2.5	0.8%
70.4%	301.3	304.1	2.8	0.9%
71.6%	300.4	302.9	2.5	0.8%
72.8%	298.5	300.7	2.2	0.7%
74.1%	298.0	298.2	0.2	0.1%
75.3%	296.7	296.9	0.2	0.1%
76.5%	295.7	296.5	0.8	0.3%
77.8%	295.5	293.5	-2.0	-0.7%
79.0%	293.2	290.0	-3.2	-1.1%
80.2%	289.8	286.7	-3.1	-1.1%
81.5%	287.0	286.5	-0.4	-0.2%
82.7%	286.5	285.6	-0.9	-0.3%
84.0%	286.4	284.0	-2.4	-0.8%
85.2%	284.3	281.8	-2.5	-0.9%
86.4%	284.3	281.0	-3.3	-1.1%
87.7%	284.0	280.6	-3.4	-1.2%
88.9%	282.7	280.5	-2.2	-0.8%
90.1%	282.0	280.5	-1.5	-0.5%
91.4%	279.5	279.9	0.3	0.1%
92.6%	277.8	277.8	-0.1	0.0%
93.8%	277.2	277.2	-0.1	0.0%
95.1%	277.2	276.6	-0.6	-0.2%
96.3%	270.8	270.7	-0.2	-0.1%
97.5%	270.5	270.7	0.1	0.0%
98.8%	270.0	267.9	-2.1	-0.8%
100.0%	267.9	266.4	-1.5	-0.6%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	678.7	687.2	8.5	1.2%
1.2%	615.5	672.5	57.0	9.3%
2.5%	612.6	618.6	6.0	1.0%
3.7%	588.7	602.8	14.1	2.4%
4.9%	586.5	566.6	-19.9	-3.4%
6.2%	568.8	563.5	-5.3	-0.9%
7.4%	566.2	561.0	-5.2	-0.9%
8.6%	537.3	554.7	17.4	3.2%
9.9%	534.7	550.3	15.7	2.9%
11.1%	531.7	547.7	16.0	3.0%
12.3%	521.9	541.4	19.5	3.7%
13.6%	509.3	525.3	16.0	3.1%
14.8%	503.1	519.2	16.1	3.2%
16.0%	501.4	518.7	17.4	3.5%
17.3%	500.6	514.5	14.0	2.8%
18.5%	499.4	510.4	11.1	2.2%
19.8%	480.7	488.1	7.4	1.5%
21.0%	469.7	487.0	17.2	3.7%
22.2%	451.2	477.7	26.6	5.9%
23.5%	446.0	450.1	4.1	0.9%
24.7%	424.3	445.6	21.3	5.0%
25.9%	423.4	418.3	-5.1	-1.2%
27.2%	415.0	407.1	-7.9	-1.9%
28.4%	405.5	406.2	0.6	0.2%
29.6%	402.1	403.3	1.2	0.3%
30.9%	390.5	396.9	6.4	1.6%
32.1%	389.9	391.9	1.9	0.5%
33.3%	389.2	390.6	1.4	0.4%
34.6%	386.5	390.2	3.8	1.0%
35.8%	379.9	385.4	5.5	1.5%
37.0%	379.3	383.7	4.4	1.2%
38.3%	377.6	383.7	6.1	1.6%
39.5%	376.6	383.4	6.7	1.8%
40.7%	374.1	382.2	8.0	2.1%
42.0%	372.8	381.8	9.0	2.4%
43.2%	371.1	379.5	8.4	2.3%
44.4%	363.0	378.6	15.6	4.3%
45.7%	360.2	370.9	10.8	3.0%
46.9%	358.7	363.9	5.2	1.5%
48.1%	354.6	361.2	6.5	1.8%
49.4%	350.6	355.0	4.4	1.3%
50.6%	345.8	353.1	7.3	2.1%
51.9%	344.5	348.3	3.8	1.1%
53.1%	337.2	343.7	6.5	1.9%
54.3%	335.8	341.5	5.7	1.7%
55.6%	333.8	339.7	6.0	1.8%
56.8%	333.6	339.3	5.7	1.7%
58.0%	333.5	337.2	3.7	1.1%
59.3%	332.8	337.1	4.3	1.3%
60.5%	329.7	336.8	7.1	2.2%
61.7%	325.4	330.6	5.2	1.6%
63.0%	325.3	330.1	4.8	1.5%
64.2%	319.3	327.3	8.0	2.5%
65.4%	319.2	322.6	3.4	1.1%
66.7%	314.1	320.9	6.8	2.2%
67.9%	313.5	317.2	3.7	1.2%
69.1%	308.8	312.2	3.4	1.1%
70.4%	305.8	311.4	5.6	1.8%
71.6%	305.1	309.6	4.5	1.5%
72.8%	303.3	309.4	6.2	2.0%
74.1%	301.9	304.9	3.1	1.0%
75.3%	299.8	302.2	2.4	0.8%
76.5%	297.6	301.2	3.6	1.2%
77.8%	296.8	297.6	0.8	0.3%
79.0%	294.4	296.1	1.7	0.6%
80.2%	292.7	285.0	-7.7	-2.6%
81.5%	289.7	283.7	-6.0	-2.1%
82.7%	282.5	283.3	0.8	0.3%
84.0%	280.6	279.9	-0.7	-0.2%
85.2%	280.4	279.2	-1.2	-0.4%
86.4%	279.0	278.3	-0.7	-0.2%
87.7%	278.3	277.2	-1.1	-0.4%
88.9%	278.0	276.3	-1.7	-0.6%
90.1%	277.3	275.9	-1.4	-0.5%
91.4%	276.9	274.6	-2.3	-0.8%
92.6%	276.1	274.5	-1.5	-0.6%
93.8%	274.7	271.4	-3.3	-1.2%
95.1%	271.7	270.7	-1.0	-0.4%
96.3%	267.6	266.6	-1.0	-0.4%
97.5%	267.2	263.6	-3.6	-1.3%
98.8%	266.3	262.5	-3.9	-1.5%
100.0%	266.2	257.0	-9.2	-3.5%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	696.6	701.8	5.1	0.7%
1.2%	665.1	692.6	27.5	4.1%
2.5%	662.1	663.7	1.7	0.3%
3.7%	643.2	648.0	4.9	0.8%
4.9%	642.4	647.8	5.4	0.8%
6.2%	627.1	639.2	12.1	1.9%
7.4%	621.5	632.9	11.4	1.8%
8.6%	619.0	631.9	12.9	2.1%
9.9%	618.9	627.5	8.7	1.4%
11.1%	615.0	625.4	10.4	1.7%
12.3%	611.6	625.0	13.4	2.2%
13.6%	609.5	623.8	14.3	2.3%
14.8%	609.5	623.5	14.1	2.3%
16.0%	608.4	614.5	6.0	1.0%
17.3%	604.9	609.6	4.6	0.8%
18.5%	602.9	598.9	-4.0	-0.7%
19.8%	594.4	597.8	3.4	0.6%
21.0%	592.2	592.5	0.4	0.1%
22.2%	589.9	591.3	1.4	0.2%
23.5%	585.3	588.9	3.6	0.6%
24.7%	584.3	586.3	2.1	0.4%
25.9%	583.8	585.5	1.7	0.3%
27.2%	583.3	578.0	-5.3	-0.9%
28.4%	582.9	570.6	-12.3	-2.1%
29.6%	580.3	567.8	-12.6	-2.2%
30.9%	575.1	562.7	-12.5	-2.2%
32.1%	575.1	561.1	-14.0	-2.4%
33.3%	572.5	560.4	-12.1	-2.1%
34.6%	563.7	553.6	-10.1	-1.8%
35.8%	555.3	552.7	-2.6	-0.5%
37.0%	553.0	548.5	-4.5	-0.8%
38.3%	547.9	548.5	0.6	0.1%
39.5%	533.6	548.3	14.7	2.8%
40.7%	533.0	547.0	14.0	2.6%
42.0%	530.4	546.4	16.0	3.0%
43.2%	521.1	538.6	17.5	3.4%
44.4%	515.0	536.4	21.4	4.2%
45.7%	513.6	536.1	22.5	4.4%
46.9%	510.3	533.0	22.7	4.4%
48.1%	500.7	525.7	25.0	5.0%
49.4%	491.7	520.8	29.0	5.9%
50.6%	488.7	518.3	29.6	6.1%
51.9%	486.0	509.9	23.9	4.9%
53.1%	482.1	509.4	27.3	5.7%
54.3%	480.9	500.5	19.6	4.1%
55.6%	473.6	500.3	26.7	5.6%
56.8%	472.8	494.2	21.4	4.5%
58.0%	472.1	487.3	15.2	3.2%
59.3%	471.5	482.7	11.2	2.4%
60.5%	466.1	482.1	16.0	3.4%
61.7%	460.3	476.7	16.5	3.6%
63.0%	457.0	466.0	9.0	2.0%
64.2%	455.4	460.2	4.7	1.0%
65.4%	448.3	454.9	6.6	1.5%
66.7%	447.4	453.6	6.2	1.4%
67.9%	440.2	453.5	13.3	3.0%
69.1%	438.1	440.9	2.8	0.6%
70.4%	437.7	439.2	1.5	0.4%
71.6%	431.5	438.1	6.7	1.5%
72.8%	428.9	436.9	7.9	1.8%
74.1%	426.7	433.2	6.5	1.5%
75.3%	426.1	429.3	3.2	0.7%
76.5%	424.7	419.9	-4.8	-1.1%
77.8%	418.5	419.1	0.6	0.1%
79.0%	418.3	417.5	-0.8	-0.2%
80.2%	417.9	410.3	-7.6	-1.8%
81.5%	417.2	407.8	-9.4	-2.2%
82.7%	415.7	407.5	-8.2	-2.0%
84.0%	410.8	403.9	-6.9	-1.7%
85.2%	407.6	399.8	-7.8	-1.9%
86.4%	405.9	393.8	-12.1	-3.0%
87.7%	401.6	389.9	-11.7	-2.9%
88.9%	397.2	389.7	-7.4	-1.9%
90.1%	392.9	386.5	-6.3	-1.6%
91.4%	389.9	384.6	-5.3	-1.4%
92.6%	387.5	378.7	-8.8	-2.3%
93.8%	381.4	378.3	-3.1	-0.8%
95.1%	380.8	369.6	-11.2	-2.9%
96.3%	377.3	365.5	-11.8	-3.1%
97.5%	353.4	356.6	3.2	0.9%
98.8%	350.7	344.3	-6.4	-1.8%
100.0%	258.9	247.1	-11.8	-4.6%

Figure SQ-32-b
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Probability of Exceedance

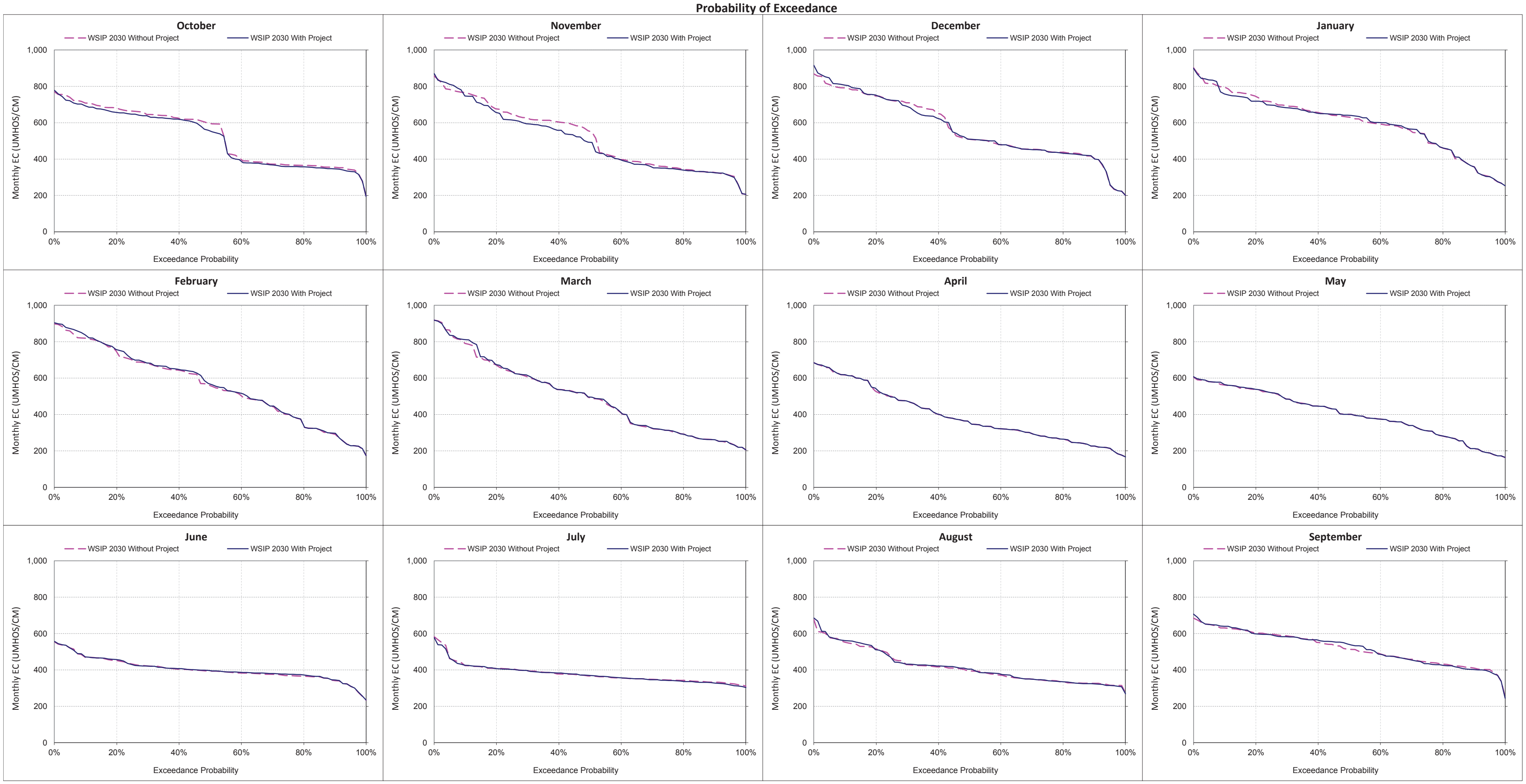


Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	770.2	778.7	8.5	1.1%
1.2%	755.4	757.9	2.5	0.3%
2.5%	755.3	744.1	-11.2	-1.5%
3.7%	751.3	724.0	-27.3	-3.6%
4.9%	740.1	720.7	-19.4	-2.6%
6.2%	722.3	708.6	-13.7	-1.9%
7.4%	722.0	702.3	-19.7	-2.7%
8.6%	717.7	702.3	-15.4	-2.2%
9.9%	708.2	692.4	-15.8	-2.2%
11.1%	707.6	685.5	-22.1	-3.1%
12.3%	702.8	685.0	-17.8	-2.5%
13.6%	695.1	677.4	-17.7	-2.6%
14.8%	691.8	675.3	-16.6	-2.4%
16.0%	684.6	671.4	-13.2	-1.9%
17.3%	683.4	665.4	-18.1	-2.6%
18.5%	683.4	659.6	-23.8	-3.5%
19.8%	682.3	657.2	-25.1	-3.7%
21.0%	674.2	654.4	-19.8	-2.9%
22.2%	669.4	653.8	-15.6	-2.3%
23.5%	665.3	649.7	-15.6	-2.3%
24.7%	664.1	647.6	-16.5	-2.5%
25.9%	662.5	646.8	-15.7	-2.4%
27.2%	660.4	641.9	-18.5	-2.8%
28.4%	659.0	638.7	-20.3	-3.1%
29.6%	645.3	638.3	-7.0	-1.1%
30.9%	645.1	630.7	-14.4	-2.2%
32.1%	644.3	630.3	-13.9	-2.2%
33.3%	641.5	627.4	-14.0	-2.2%
34.6%	639.7	626.9	-12.8	-2.0%
35.8%	639.2	624.2	-15.0	-2.3%
37.0%	637.4	622.9	-14.5	-2.3%
38.3%	628.6	620.2	-8.5	-1.3%
39.5%	626.6	619.7	-6.9	-1.1%
40.7%	619.3	617.1	-2.1	-0.3%
42.0%	619.2	613.3	-5.9	-1.0%
43.2%	619.0	609.4	-9.6	-1.6%
44.4%	618.9	603.9	-15.0	-2.4%
45.7%	617.4	597.0	-20.4	-3.3%
46.9%	610.8	581.4	-29.4	-4.8%
48.1%	604.0	563.8	-40.1	-6.6%
49.4%	597.0	559.1	-38.0	-6.4%
50.6%	594.0	550.1	-43.9	-7.4%
51.9%	593.2	543.8	-49.4	-8.3%
53.1%	592.6	539.3	-53.3	-9.0%
54.3%	528.9	526.5	-2.3	-0.4%
55.6%	429.2	429.8	0.6	0.1%
56.8%	426.3	407.7	-18.6	-4.4%
58.0%	421.6	399.7	-21.9	-5.2%
59.3%	408.1	396.7	-11.4	-2.8%
60.5%	390.1	380.7	-9.5	-2.4%
61.7%	389.8	378.5	-11.3	-2.9%
63.0%	388.4	378.2	-10.2	-2.6%
64.2%	384.8	377.2	-7.6	-2.0%
65.4%	384.1	376.8	-7.2	-1.9%
66.7%	382.2	373.7	-8.6	-2.2%
67.9%	378.1	372.4	-5.7	-1.5%
69.1%	372.7	368.3	-4.4	-1.2%
70.4%	372.4	367.1	-5.3	-1.4%
71.6%	372.2	364.9	-7.3	-2.0%
72.8%	371.4	359.7	-11.8	-3.2%
74.1%	368.4	359.4	-9.0	-2.5%
75.3%	367.8	359.3	-8.5	-2.3%
76.5%	366.6	359.1	-7.5	-2.0%
77.8%	366.0	358.5	-7.5	-2.1%
79.0%	365.5	357.4	-8.1	-2.2%
80.2%	365.1	356.8	-8.4	-2.3%
81.5%	364.9	356.5	-8.4	-2.3%
82.7%	364.1	355.3	-8.8	-2.4%
84.0%	363.3	352.2	-11.1	-3.1%
85.2%	360.2	351.1	-9.1	-2.5%
86.4%	356.6	349.8	-6.9	-1.9%
87.7%	355.9	347.4	-8.5	-2.4%
88.9%	355.9	347.1	-8.8	-2.5%
90.1%	354.9	346.4	-8.5	-2.4%
91.4%	352.8	345.3	-7.5	-2.1%
92.6%	352.8	340.9	-11.9	-3.4%
93.8%	345.1	335.2	-9.9	-2.9%
95.1%	342.2	332.1	-10.1	-3.0%
96.3%	339.4	329.9	-9.5	-2.8%
97.5%	321.0	315.6	-5.4	-1.7%
98.8%	278.8	279.6	0.8	0.3%
100.0%	194.5	195.4	0.9	0.5%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	856.3	870.0	13.7	1.6%
1.2%	838.4	834.0	-4.4	-0.5%
2.5%	818.3	827.6	9.3	1.1%
3.7%	786.3	821.1	34.8	4.4%
4.9%	783.3	810.6	27.4	3.5%
6.2%	776.4	805.2	28.7	3.7%
7.4%	771.6	790.8	19.2	2.5%
8.6%	768.2	781.7	13.5	1.8%
9.9%	767.1	746.3	-20.8	-2.7%
11.1%	760.2	745.9	-14.3	-1.9%
12.3%	753.1	745.8	-7.3	-1.0%
13.6%	746.3	712.3	-34.0	-4.6%
14.8%	738.6	707.2	-31.4	-4.2%
16.0%	734.9	695.4	-39.5	-5.4%
17.3%	709.4	693.8	-15.6	-2.2%
18.5%	688.0	672.1	-15.9	-2.3%
19.8%	676.3	657.1	-19.2	-2.8%
21.0%	674.1	651.8	-22.2	-3.3%
22.2%	659.1	618.6	-40.5	-6.1%
23.5%	658.0	617.0	-41.0	-6.2%
24.7%	647.8	616.0	-31.9	-4.9%
25.9%	642.7	612.2	-30.5	-4.7%
27.2%	633.2	609.2	-24.0	-3.8%
28.4%	628.7	600.2	-28.5	-4.5%
29.6%	627.8	593.8	-34.0	-5.4%
30.9%	618.8	592.5	-26.3	-4.3%
32.1%	616.0	589.5	-26.6	-4.3%
33.3%	615.5	588.1	-27.4	-4.4%
34.6%	613.6	583.3	-30.3	-4.9%
35.8%	613.4	581.9	-31.5	-5.1%
37.0%	613.3	576.4	-36.9	-6.0%
38.3%	607.0	565.9	-41.0	-6.8%
39.5%	605.4	559.2	-46.2	-7.6%
40.7%	602.2	558.1	-44.1	-7.3%
42.0%	599.9	538.9	-61.0	-10.2%
43.2%	597.2	535.9	-61.3	-10.3%
44.4%	590.3	534.5	-55.8	-9.5%
45.7%	583.0	523.3	-59.6	-10.2%
46.9%	581.3	521.6	-59.7	-10.3%
48.1%	570.5	501.2	-69.3	-12.1%
49.4%	556.0	493.2	-62.8	-11.3%
50.6%	548.9	492.1	-56.8	-10.3%
51.9%	514.0	440.1	-73.9	-14.4%
53.1%	434.3	432.2	-2.1	-0.5%
54.3%	433.1	430.2	-3.0	-0.7%
55.6%	424.1	414.1	-10.0	-2.4%
56.8%	419.0	414.0	-5.0	-1.2%
58.0%	413.4	402.9	-10.5	-2.5%
59.3%	398.4	399.6	1.2	0.3%
60.5%	397.2	391.1	-6.0	-1.5%
61.7%	393.3	385.6	-7.7	-1.9%
63.0%	388.1	379.8	-8.3	-2.1%
64.2%	387.1	371.7	-15.4	-4.0%
65.4%	386.4	371.1	-15.3	-3.9%
66.7%	381.7	369.8	-11.9	-3.1%
67.9%	373.5	368.2	-5.3	-1.4%
69.1%	373.1	362.2	-10.9	-2.9%
70.4%	368.4	351.8	-16.6	-4.5%
71.6%	362.4	351.2	-11.2	-3.1%
72.8%	360.4	350.7	-9.8	-2.7%
74.1%	359.9	350.1	-9.8	-2.7%
75.3%	354.8	348.1	-6.7	-1.9%
76.5%	352.5	347.7	-4.8	-1.4%
77.8%	352.0	344.7	-7.3	-2.1%
79.0%	347.3	341.2	-6.1	-1.8%
80.2%	342.5	338.3	-4.1	-1.2%
81.5%	341.6	336.3	-5.3	-1.5%
82.7%	339.9	336.2	-3.8	-1.1%
84.0%	334.0	332.0	-2.0	-0.6%
85.2%	331.6	331.4	-0.2	-0.1%
86.4%	330.2	331.1	0.9	0.3%
87.7%	329.9	328.1	-1.8	-0.6%
88.9%	329.3	327.9	-1.4	-0.4%
90.1%	326.2	324.2	-2.0	-0.6%
91.4%	322.7	323.8	1.1	0.4%
92.6%	318.8	322.8	4.0	1.3%
93.8%	316.1	314.9	-1.2	-0.4%
95.1%	309.5	306.9	-2.6	-0.8%
96.3%	304.5	299.2	-5.4	-1.8%
97.5%	260.5	260.3	-0.2	-0.1%
98.8%	209.2	210.0	0.8	0.4%
100.0%	206.5	206.4	-0.1	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	868.5	914.8	46.3	5.3%
1.2%	857.0	874.2	17.2	2.0%
2.5%	855.2	863.1	7.9	0.9%
3.7%	817.7	851.9	34.2	4.2%
4.9%	810.4	846.4	36.0	4.4%
6.2%	801.3	815.0	13.7	1.7%
7.4%	795.7	813.4	17.7	2.2%
8.6%	792.2	811.3	19.1	2.4%
9.9%	792.0	807.3	15.2	1.9%
11.1%	787.9	803.5	15.6	2.0%
12.3%	781.1	792.3	11.2	1.4%
13.6%	781.0	790.2	9.2	1.2%
14.8%	775.2	786.3	11.2	1.4%
16.0%	761.6	762.8	1.2	0.2%
17.3%	754.8	755.7	0.9	0.1%
18.5%	753.6	755.2	1.6	0.2%
19.8%	747.5	752.6	5.1	0.7%
21.0%	746.3	743.5	-2.8	-0.4%
22.2%	738.2	735.2	-3.0	-0.4%
23.5%	728.2	726.6	-1.7	-0.2%
24.7%	723.5	724.0	0.5	0.1%
25.9%	719.6	723.0	3.4	0.5%
27.2%	719.5	721.1	1.5	0.2%
28.4%	718.2	697.1	-21.1	-2.9%
29.6%	709.8	691.2	-18.6	-2.6%
30.9%	709.1	682.5	-26.6	-3.7%
32.1%	700.1	667.4	-32.7	-4.7%
33.3%	687.7	652.4	-35.3	-5.1%
34.6%	686.8	643.5	-43.3	-6.3%
35.8%	678.0	638.7	-39.4	-5.8%
37.0%	674.5	636.9	-37.6	-5.6%
38.3%	671.7	635.7	-36.0	-5.4%
39.5%	653.2	625.9	-27.3	-4.2%
40.7%	647.2	618.7	-28.5	-4.4%
42.0%	629.5	603.6	-25.9	-4.1%
43.2%	573.0	601.3	28.3	4.9%
44.4%	555.9	550.5	-5.4	-1.0%
45.7%	527.8	541.1	13.3	2.5%
46.9%	520.8	528.3	7.5	1.4%
48.1%	514.5	522.5	8.0	1.6%
49.4%	510.4	510.5	0.1	0.0%
50.6%	507.9	508.2	0.3	0.1%
51.9%	506.2	506.8	0.5	0.1%
53.1%	505.1	505.7	0.7	0.1%
54.3%	504.3	503.5	-0.8	-0.2%
55.6%	501.6	501.3	-0.3	-0.1%
56.8%	491.7	500.2	8.5	1.7%
58.0%	487.7	499.9	12.2	2.5%
59.3%	480.2	480.6	0.4	0.1%
60.5%	478.3	479.0	0.8	0.2%
61.7%	477.4	478.3	0.9	0.2%
63.0%	474.2	470.6	-3.7	-0.8%
64.2%	466.7	466.4	-0.3	-0.1%
65.4%	465.4	461.4	-4.0	-0.9%
66.7%	455.0	456.5	1.5	0.3%
67.9%	455.0	454.9	0.0	0.0%
69.1%	454.5	452.4	-2.1	-0.5%
70.4%	453.9	451.6	-2.3	-0.5%
71.6%	453.4	451.2	-2.2	-0.5%
72.8%	451.0	450.2	-0.8	-0.2%
74.1%	442.7	448.6	6.0	1.4%
75.3%	441.8	438.6	-3.1	-0.7%
76.5%	438.2	437.3	-0.9	-0.2%
77.8%	438.0	437.1	-0.9	-0.2%
79.0%	437.6	434.6	-3.0	-0.7%
80.2%	437.5	431.3	-6.2	-1.4%
81.5%	433.8	429.8	-4.0	-0.9%
82.7%	432.8	428.8	-4.0	-0.9%
84.0%	432.1	426.8	-5.4	-1.2%
85.2%	430.4	425.2	-5.1	-1.2%
86.4%	422.2	421.6	-0.6	-0.1%
87.7%	417.9	420.0	2.0	0.5%
88.9%	417.1	418.2	1.1	0.3%
90.1%	402.6	400.8	-1.7	-0.4%
91.4%	398.4	397.8	-0.6	-0.2%
92.6%	366.3	370.3	4.0	1.1%
93.8%	330.4	330.6	0.2	0.1%
95.1%	256.9	257.8	0.8	0.3%
96.3%	234.3	235.9	1.6	0.7%
97.5%	226.2	226.2	0.0	0.0%
98.8%	223.5	223.8	0.4	0.2%
100.0%	200.8	201.0	0.2	0.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	902.3	900.2	-2.0	-0.2%
1.2%	873.0	866.3	-6.7	-0.8%
2.5%	856.0	843.4	-12.6	-1.5%
3.7%	818.3	841.4	23.1	2.8%
4.9%	815.3	835.1	19.8	2.4%
6.2%	814.4	833.8	19.4	2.4%
7.4%	805.4	826.3	20.9	2.6%
8.6%	797.5	769.2	-28.4	-3.6%
9.9%	796.9	758.6	-38.2	-4.8%
11.1%	786.3	753.1	-33.2	-4.2%
12.3%	766.9	747.7	-19.2	-2.5%
13.6%	766.3	746.5	-19.8	-2.6%
14.8%	765.6	744.7	-20.9	-2.7%
16.0%	761.8	741.4	-20.4	-2.7%
17.3%	759.6	737.0	-22.6	-3.0%
18.5%	753.0	718.9	-34.1	-4.5%
19.8%	746.9	718.8	-28.2	-3.8%
21.0%	736.0	718.6	-17.4	-2.4%
22.2%	719.3	715.2	-4.1	-0.6%
23.5%	718.7	698.2	-20.5	-2.9%
24.7%	716.0	697.7	-18.2	-2.5%
25.9%	708.6	695.3	-13.3	-1.9%
27.2%	697.4	688.5	-8.9	-1.3%
28.4%	697.3	685.8	-11.5	-1.6%
29.6%	694.5	682.6	-11.8	-1.7%
30.9%	690.3	680.9	-9.4	-1.4%
32.1%	689.8	678.2	-11.6	-1.7%
33.3%	686.3	676.9	-9.4	-1.4%
34.6%	680.8	669.5	-11.2	-1.6%
35.8%	669.0	667.2	-1.8	-0.3%
37.0%	666.6	659.2	-7.5	-1.1%
38.3%	658.0	658.9	0.9	0.1%
39.5%	657.8	652.2	-5.6	-0.8%
40.7%	652.7	650.1	-2.6	-0.4%
42.0%	649.3	649.8	0.6	0.1%
43.2%	647.9	649.0	1.1	0.2%
44.4%	641.0	646.7	5.7	0.9%
45.7%	639.9	646.0	6.0	0.9%
46.9%	637.6	645.2	7.6	1.2%
48.1%	634.4	641.9	7.5	1.2%
49.4%	631.8	641.6	9.9	1.6%
50.6%	629.2	640.2	11.0	1.7%
51.9%	621.5	636.7	15.1	2.4%
53.1%	621.1	634.0	12.9	2.1%
54.3%	608.6	627.1	18.5	3.0%
55.6%	603.3	626.7	23.4	3.9%
56.8%	599.9	605.3	5.3	0.9%
58.0%	596.8	601.6	4.8	0.8%
59.3%	594.0	601.4	7.4	1.3%
60.5%	591.1	600.7	9.6	1.6%
61.7%	587.2	599.4	12.2	2.1%
63.0%	586.8	592.0	5.2	0.9%
64.2%	584.2	588.1	3.8	0.7%
65.4%	581.6	585.3	3.7	0.6%
66.7%	572.4	583.6	11.2	2.0%
67.9%	565.4	572.0	6.6	1.2%
69.1%	562.6	565.5	2.9	0.5%
70.4%	546.8	564.0	17.2	3.1%
71.6%	544.7	562.4	17.8	3.3%
72.8%	542.1	540.1	-2.1	-0.4%
74.1%	539.4	537.9	-1.5	-0.3%
75.3%	488.1	498.3	10.2	2.1%
76.5%	485.5	489.2	3.7	0.8%
77.8%	483.8	485.5	1.8	0.4%
79.0%	467.2	467.3	0.1	0.0%
80.2%	459.6	460.7	1.1	0.2%
81.5%	454.2	455.7	1.5	0.3%
82.7%	448.1	448.7	0.5	0.1%
84.0%	401.9	412.3	10.3	2.6%
85.2%	401.8	410.3	8.5	2.1%
86.4%	391.5	391.4	-0.1	0.0%
87.7%	377.6	378.1	0.4	0.1%
88.9%	363.7	363.9	0.2	0.1%
90.1%	357.4	356.7	-0.7	-0.2%
91.4%	318.6	323.0	4.4	1.4%
92.6%	312.9	313.0	0.1	0.0%
93.8%	308.4	304.1	-4.4	-1.4%
95.1%	303.3	303.5	0.1	0.0%
96.3%	289.8	291.9	2.0	0.7%
97.5%	275.6	276.4	0.7	0.3%
98.8%	267.4	267.6	0.3	0.1%
100.0%	252.9	253.0	0.1	0.0%

Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	898.3	904.9	6.6	0.7%
1.2%	894.9	898.4	3.5	0.4%
2.5%	884.2	895.3	11.1	1.3%
3.7%	863.5	879.0	15.5	1.8%
4.9%	859.6	872.7	13.1	1.5%
6.2%	841.4	867.7	26.4	3.1%
7.4%	822.2	859.0	36.8	4.5%
8.6%	820.7	849.8	29.1	3.6%
9.9%	819.5	838.1	18.6	2.3%
11.1%	815.1	821.5	6.4	0.8%
12.3%	811.6	820.8	9.2	1.1%
13.6%	807.6	806.9	-0.7	-0.1%
14.8%	796.1	798.9	2.8	0.3%
16.0%	789.5	787.8	-1.8	-0.2%
17.3%	772.0	779.7	7.7	1.0%
18.5%	771.9	774.7	2.9	0.4%
19.8%	750.4	757.3	6.9	0.9%
21.0%	716.2	751.6	35.4	4.9%
22.2%	714.6	745.6	31.1	4.3%
23.5%	708.7	724.1	15.4	2.2%
24.7%	702.3	707.7	5.5	0.8%
25.9%	688.6	699.2	10.6	1.5%
27.2%	688.5	698.4	10.0	1.4%
28.4%	686.2	692.1	5.9	0.9%
29.6%	681.7	683.5	1.8	0.3%
30.9%	676.0	681.9	5.9	0.9%
32.1%	669.0	668.7	-0.3	0.0%
33.3%	663.2	667.3	4.0	0.6%
34.6%	656.3	666.8	10.5	1.6%
35.8%	650.9	664.8	13.8	2.1%
37.0%	647.3	653.3	6.0	0.9%
38.3%	645.7	651.5	5.9	0.9%
39.5%	644.4	649.2	4.8	0.7%
40.7%	641.2	645.1	3.9	0.6%
42.0%	635.6	643.6	8.1	1.3%
43.2%	625.5	638.5	13.0	2.1%
44.4%	623.1	636.2	13.1	2.1%
45.7%	621.3	628.2	6.9	1.1%
46.9%	570.2	615.3	45.2	7.9%
48.1%	569.4	585.6	16.2	2.8%
49.4%	563.0	570.7	7.7	1.4%
50.6%	554.6	563.0	8.4	1.5%
51.9%	546.0	554.4	8.4	1.5%
53.1%	542.8	549.4	6.6	1.2%
54.3%	531.6	547.9	16.3	3.1%
55.6%	530.9	530.7	-0.2	0.0%
56.8%	529.7	528.2	-1.6	-0.3%
58.0%	523.0	523.0	0.0	0.0%
59.3%	512.7	518.7	6.0	1.2%
60.5%	495.1	513.0	17.9	3.6%
61.7%	489.9	502.7	12.9	2.6%
63.0%	484.4	486.9	2.5	0.5%
64.2%	482.1	483.2	1.1	0.2%
65.4%	478.6	479.0	0.5	0.1%
66.7%	477.2	478.5	1.3	0.3%
67.9%	461.6	461.5	0.0	0.0%
69.1%	446.0	446.6	0.7	0.1%
70.4%	442.2	446.5	4.3	1.0%
71.6%	418.8	430.4	11.6	2.8%
72.8%	412.4	413.7	1.4	0.3%
74.1%	401.1	405.8	4.8	1.2%
75.3%	400.5	401.2	0.6	0.2%
76.5%	386.6	386.7	0.0	0.0%
77.8%	379.4	381.2	1.8	0.5%
79.0%	374.6	375.3	0.6	0.2%
80.2%	329.1	329.9	0.8	0.2%
81.5%	325.3	324.4	-0.9	-0.3%
82.7%	324.3	324.4	0.0	0.0%
84.0%	323.4	323.7	0.3	0.1%
85.2%	316.1	316.2	0.1	0.0%
86.4%	302.6	309.5	6.9	2.3%
87.7%	299.5	300.1	0.6	0.2%
88.9%	296.0	297.5	1.5	0.5%
90.1%	290.4	297.4	7.0	2.4%
91.4%	270.3	270.9	0.6	0.2%
92.6%	254.5	254.6	0.1	0.0%
93.8%	237.2	237.5	0.2	0.1%
95.1%	231.1	228.8	-2.3	-1.0%
96.3%	227.7	227.8	0.1	0.1%
97.5%	225.7	226.2	0.5	0.2%
98.8%	211.2	212.0	0.8	0.4%
100.0%	174.5	174.0	-0.4	-0.2%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	918.4	918.6	0.2	0.0%
1.2%	914.9	913.5	-1.4	-0.2%
2.5%	905.5	899.6	-5.9	-0.7%
3.7%	866.1	864.5	-1.6	-0.2%
4.9%	864.1	836.6	-27.5	-3.2%
6.2%	824.3	832.5	8.2	1.0%
7.4%	815.2	818.7	3.5	0.4%
8.6%	811.4	814.2	2.8	0.3%
9.9%	790.8	811.5	20.7	2.6%
11.1%	786.2	810.6	24.4	3.1%
12.3%	778.9	795.0	16.1	2.1%
13.6%	715.6	784.7	69.1	9.7%
14.8%	714.2	717.2	3.0	0.4%
16.0%	700.3	716.9	16.5	2.4%
17.3%	698.3	700.2	1.9	0.3%
18.5%	680.9	698.0	17.1	2.5%
19.8%	674.4	674.9	0.5	0.1%
21.0%	660.0	669.9	9.9	1.5%
22.2%	650.6	654.3	3.6	0.6%
23.5%	641.8	651.4	9.7	1.5%
24.7%	636.3	638.8	2.5	0.4%
25.9%	630.8	624.4	-6.4	-1.0%
27.2%	623.1	621.3	-1.8	-0.3%
28.4%	616.4	618.5	2.0	0.3%
29.6%	609.3	617.8	8.4	1.4%
30.9%	598.4	607.7	9.2	1.5%
32.1%	595.3	595.2	-0.1	0.0%
33.3%	584.3	586.1	1.8	0.3%
34.6%	583.4	576.4	-7.0	-1.2%
35.8%	575.9	576.2	0.3	0.1%
37.0%	567.3	570.1	2.8	0.5%
38.3%	547.0	547.2	0.2	0.0%
39.5%	537.1	537.8	0.7	0.1%
40.7%	536.6	536.7	0.1	0.0%
42.0%	534.9	532.5	-2.3	-0.4%
43.2%	532.7	530.8	-1.9	-0.4%
44.4%	527.7	524.8	-2.8	-0.5%
45.7%	519.0	520.3	1.3	0.2%
46.9%	518.3	520.0	1.8	0.3%
48.1%	516.6	517.8	1.1	0.2%
49.4%	495.3	496.2	0.9	0.2%
50.6%	487.0	495.4	8.4	1.7%
51.9%	486.6	487.3	0.7	0.1%
53.1%	483.3	487.2	3.8	0.8%
54.3%	473.3	484.0	10.8	2.3%
55.6%	454.7	464.5	9.8	2.2%
56.8%	444.2	444.8	0.6	0.1%
58.0%	433.1	437.5	4.4	1.0%
59.3%	419.2	422.6	3.4	0.8%
60.5%	401.1	401.7	0.6	0.2%
61.7%	399.4	399.7	0.3	0.1%
63.0%	350.7	357.2	6.5	1.9%
64.2%	345.0	345.9	1.0	0.3%
65.4%	340.5	341.1	0.6	0.2%
66.7%	335.9	340.2	4.4	1.3%
67.9%	332.3	339.0	6.7	2.0%
69.1%	328.1	330.2	2.2	0.7%
70.4%	320.9	322.1	1.2	0.4%
71.6%	319.3	320.8	1.5	0.5%
72.8%	318.4	318.8	0.4	0.1%
74.1%	313.2	313.4	0.2	0.1%
75.3%	313.1	313.1	0.0	0.0%
76.5%	304.5	309.0	4.5	1.5%
77.8%	303.2	303.2	0.0	0.0%
79.0%	294.4	294.2	-0.2	-0.1%
80.2%	291.7	291.7	0.0	0.0%
81.5%	282.5	282.5	0.0	0.0%
82.7%	280.9	281.0	0.1	0.0%
84.0%	271.8	271.9	0.1	0.0%
85.2%	266.0	266.1	0.2	0.1%
86.4%	264.7	264.0	-0.8	-0.3%
87.7%	263.8	263.2	-0.6	-0.2%
88.9%	262.6	262.6	0.0	0.0%
90.1%	260.7	261.1	0.4	0.2%
91.4%	252.9	253.0	0.0	0.0%
92.6%	251.8	252.1	0.3	0.1%
93.8%	246.5	252.1	5.5	2.2%
95.1%	242.0	240.0	-2.0	-0.8%
96.3%	232.9	232.4	-0.5	-0.2%
97.5%	220.5	220.3	-0.2	-0.1%
98.8%	220.4	219.3	-1.1	-0.5%
100.0%	205.7	205.1	-0.6	-0.3%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	684.3	685.2	0.9	0.1%
1.2%	675.4	675.0	-0.4	-0.1%
2.5%	668.0	672.6	4.6	0.7%
3.7%	658.5	663.3	4.8	0.7%
4.9%	657.6	658.0	0.4	0.1%
6.2%	634.0	640.3	6.3	1.0%
7.4%	628.1	628.3	0.2	0.0%
8.6%	619.4	619.4	0.0	0.0%
9.9%	617.2	618.6	1.3	0.2%
11.1%	615.8	612.9	-2.8	-0.5%
12.3%	612.4	612.3	0.0	0.0%
13.6%	600.0	600.3	0.4	0.1%
14.8%	598.8	599.1	0.3	0.0%
16.0%	589.4	589.5	0.1	0.0%
17.3%	587.5	587.5	0.1	0.0%
18.5%	550.5	551.2	0.7	0.1%
19.8%	528.5	545.2	16.7	3.2%
21.0%	517.7	525.2	7.5	1.5%
22.2%	517.4	514.0	-3.4	-0.7%
23.5%	502.6	507.7	5.1	1.0%
24.7%	500.4	496.2	-4.2	-0.8%
25.9%	494.3	495.7	1.4	0.3%
27.2%	477.9	478.2	0.3	0.1%
28.4%	476.7	477.0	0.4	0.1%
29.6%	475.7	475.2	-0.6	-0.1%
30.9%	467.6	468.6	1.1	0.2%
32.1%	461.0	461.1	0.1	0.0%
33.3%	448.4	448.7	0.3	0.1%
34.6%	435.6	435.7	0.1	0.0%
35.8%	432.6	432.5	0.0	0.0%
37.0%	431.4	431.4	0.0	0.0%
38.3%	412.9	413.1	0.2	0.0%
39.5%	403.1	403.2	0.1	0.0%
40.7%	398.2	398.2	0.0	0.0%
42.0%	386.9	386.9	0.0	0.0%
43.2%	382.4	382.4	0.0	0.0%
44.4%	379.5	379.5	0.0	0.0%
45.7%	373.2	373.5	0.3	0.1%
46.9%	370.9	371.1	0.2	0.0%
48.1%	364.6	364.7	0.0	0.0%
49.4%	363.6	363.7	0.1	0.0%
50.6%	346.9	346.9	0.0	0.0%
51.9%	345.9	346.0	0.1	0.0%
53.1%	343.4	343.3	0.0	0.0%
54.3%	335.3	335.8	0.5	0.1%
55.6%	335.1	335.2	0.1	0.0%
56.8%	334.5	334.4	0.0	0.0%
58.0%	323.5	323.5	0.0	0.0%
59.3%	322.1	322.1	0.0	0.0%
60.5%	321.1	321.2	0.0	0.0%
61.7%	319.7	319.6	-0.1	0.0%
63.0%	316.8	316.8	0.0	0.0%
64.2%	316.7	316.8	0.1	0.0%
65.4%	312.7	315.0	2.3	0.7%
66.7%	307.5	307.9	0.4	0.1%
67.9%	302.3	302.3	0.0	0.0%
69.1%	300.8	301.0	0.3	0.1%
70.4%	292.4	292.4	0.0	0.0%
71.6%	287.0	287.0	0.0	0.0%
72.8%	281.7	281.5	-0.2	-0.1%
74.1%	280.5	280.7	0.2	0.1%
75.3%	273.9	274.0	0.0	0.0%
76.5%	271.7	271.7	0.0	0.0%
77.8%	270.5	271.0	0.5	0.2%
79.0%	264.8	264.8	0.0	0.0%
80.2%	263.9	264.0	0.1	0.0%
81.5%	258.4	260.6	2.2	0.9%
82.7%	247.4	247.3	-0.1	-0.1%
84.0%	245.1	245.2	0.0	0.0%
85.2%	244.5	244.5	0.0	0.0%
86.4%	241.5	241.5	0.0	0.0%
87.7%	236.0	236.2	0.2	0.1%
88.9%	226.6	226.8	0.2	0.1%
90.1%	226.3	226.7	0.4	0.2%
91.4%	220.8	220.8	0.0	0.0%
92.6%	220.5	219.5	-1.0	-0.4%
93.8%	218.5	218.5	0.0	0.0%
95.1%	212.9	213.4	0.4	0.2%
96.3%	197.0	196.6	-0.4	-0.2%
97.5%	183.8	183.8	0.1	0.0%
98.8%	176.8	176.9	0.2	0.1%
100.0%	166.7	166.3	-0.4	-0.2%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	605.4	608.3	2.9	0.5%
1.2%	590.8	596.5	5.8	1.0%
2.5%	588.8	592.3	3.5	0.6%
3.7%	586.6	588.9	2.3	0.4%
4.9%	580.4	580.4	0.0	0.0%
6.2%	578.6	579.0	0.4	0.1%
7.4%	577.2	578.3	1.1	0.2%
8.6%	565.2	577.9	12.8	2.3%
9.9%	562.0	565.4	3.4	0.6%
11.1%	559.3	561.0	1.7	0.3%
12.3%	558.7	559.0	0.3	0.1%
13.6%	556.6	556.9	0.3	0.0%
14.8%	545.4	551.1	5.7	1.0%
16.0%	543.6	549.0	5.3	1.0%
17.3%	543.6	545.3	1.8	0.3%
18.5%	539.4	543.8	4.4	0.8%
19.8%	538.5	539.0	0.5	0.1%
21.0%	536.0	536.8	0.8	0.2%
22.2%	525.2	531.5	6.4	1.2%
23.5%	525.2	525.2	0.0	0.0%
24.7%	519.5	520.2	0.7	0.1%
25.9%	517.7	518.2	0.5	0.1%
27.2%	509.5	513.5	3.9	0.8%
28.4%	498.3	498.0	-0.3	-0.1%
29.6%	485.7	485.7	0.1	0.0%
30.9%	483.6	483.5	0.0	0.0%
32.1%	471.3	471.2	-0.1	0.0%
33.3%	463.9	466.0	2.2	0.5%
34.6%	463.1	459.5	-3.6	-0.8%
35.8%	459.1	459.2	0.1	0.0%
37.0%	455.1	455.1	0.0	0.0%
38.3%	447.5	447.1	-0.4	-0.1%
39.5%	446.7	446.7	0.0	0.0%
40.7%	445.7	445.7	0.0	0.0%
42.0%	444.6	444.7	0.0	0.0%
43.2%	436.4	436.5	0.1	0.0%
44.4%	431.1	431.0	-0.1	0.0%
45.7%	429.3	429.3	0.0	0.0%
46.9%	404.3	404.2	-0.1	0.0%
48.1%	401.5	401.5	0.0	0.0%
49.4%	401.1	401.3	0.2	0.1%
50.6%	401.0	400.8	-0.2	0.0%
51.9%	395.4	395.4	0.0	0.0%
53.1%	392.8	393.0	0.2	0.1%
54.3%	390.8	390.9	0.0	0.0%
55.6%	381.5	381.5	0.1	0.0%
56.8%	380.0	379.9	-0.1	0.0%
58.0%	378.8	378.8	0.0	0.0%
59.3%	375.6	374.9	-0.7	-0.2%
60.5%	374.0	374.0	0.0	0.0%
61.7%	371.7	372.2	0.6	0.2%
63.0%	362.8	362.9	0.1	0.0%
64.2%	361.8	361.7	-0.1	0.0%
65.4%	359.9	359.9	0.1	0.0%
66.7%	359.1	359.0	-0.1	0.0%
67.9%	348.1	348.3	0.2	0.1%
69.1%	339.4	339.5	0.1	0.0%
70.4%	338.9	338.9	0.0	0.0%
71.6%	327.5	327.6	0.0	0.0%
72.8%	318.8	318.8	0.0	0.0%
74.1%	313.1	313.1	0.0	0.0%
75.3%	309.8	309.9	0.1	0.0%
76.5%	308.1	308.2	0.1	0.0%
77.8%	289.1	290.4	1.3	0.5%
79.0%	284.6	286.0	1.4	0.5%
80.2%	280.6	280.6	0.0	0.0%
81.5%	275.6	276.8	1.2	0.4%
82.7%	270.9	270.9	0.0	0.0%
84.0%	267.1	267.2	0.1	0.0%
85.2%	255.1	255.3	0.2	0.1%
86.4%	253.9	254.9	1.0	0.4%
87.7%	226.1	226.3	0.3	0.1%
88.9%	212.6	213.2	0.7	0.3%
90.1%	212.2	212.3	0.1	0.0%
91.4%	208.8	210.1	1.3	0.6%
92.6%	197.0	197.6	0.6	0.3%
93.8%	191.2	191.3	0.2	0.1%
95.1%	188.5	188.7	0.2	0.1%
96.3%	179.1	179.4	0.3	0.2%
97.5%	173.1	173.0	-0.1	-0.1%
98.8%	172.2	172.6	0.4	0.2%
100.0%	163.5	163.7	0.2	0.1%

Table SQ-32-b
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	554.4	556.9	2.6	0.5%
1.2%	541.7	544.4	2.7	0.5%
2.5%	536.9	538.1	1.2	0.2%
3.7%	534.6	536.3	1.7	0.3%
4.9%	521.2	521.4	0.1	0.0%
6.2%	514.8	507.9	-6.9	-1.3%
7.4%	488.8	490.0	1.2	0.3%
8.6%	485.0	488.9	3.9	0.8%
9.9%	469.5	471.2	1.8	0.4%
11.1%	468.5	470.6	2.1	0.5%
12.3%	468.2	466.6	-1.6	-0.3%
13.6%	466.2	466.3	0.1	0.0%
14.8%	465.4	465.8	0.4	0.1%
16.0%	461.9	464.9	2.9	0.6%
17.3%	456.1	460.4	4.3	1.0%
18.5%	453.0	458.8	5.8	1.3%
19.8%	452.4	457.4	5.0	1.1%
21.0%	448.0	454.5	6.5	1.5%
22.2%	444.8	448.3	3.5	0.8%
23.5%	438.2	435.2	-3.0	-0.7%
24.7%	432.7	430.4	-2.3	-0.5%
25.9%	428.8	424.9	-3.9	-0.9%
27.2%	424.7	423.5	-1.2	-0.3%
28.4%	424.3	421.8	-2.5	-0.6%
29.6%	421.8	420.9	-0.9	-0.2%
30.9%	420.7	420.7	-0.1	0.0%
32.1%	420.7	419.4	-1.3	-0.3%
33.3%	419.2	414.4	-4.8	-1.1%
34.6%	414.4	414.3	-0.1	0.0%
35.8%	409.5	409.6	0.1	0.0%
37.0%	409.3	408.6	-0.7	-0.2%
38.3%	406.4	408.0	1.6	0.4%
39.5%	404.2	407.6	3.4	0.8%
40.7%	404.0	407.1	3.1	0.8%
42.0%	402.7	403.9	1.3	0.3%
43.2%	402.0	402.1	0.0	0.0%
44.4%	398.5	401.0	2.5	0.6%
45.7%	398.0	400.1	2.1	0.5%
46.9%	396.9	399.0	2.1	0.5%
48.1%	394.8	398.7	3.9	1.0%
49.4%	394.1	396.9	2.8	0.7%
50.6%	393.2	394.6	1.4	0.4%
51.9%	393.1	394.4	1.3	0.3%
53.1%	392.0	392.4	0.4	0.1%
54.3%	390.0	390.5	0.5	0.1%
55.6%	387.8	389.3	1.5	0.4%
56.8%	386.6	389.0	2.4	0.6%
58.0%	383.8	388.2	4.4	1.2%
59.3%	383.0	387.9	4.8	1.3%
60.5%	382.7	386.4	3.7	1.0%
61.7%	382.5	386.1	3.6	1.0%
63.0%	381.9	384.4	2.4	0.6%
64.2%	380.6	383.3	2.7	0.7%
65.4%	379.1	382.9	3.8	1.0%
66.7%	377.8	382.9	5.1	1.3%
67.9%	376.2	382.2	6.0	1.6%
69.1%	375.9	380.6	4.7	1.3%
70.4%	375.7	380.4	4.7	1.3%
71.6%	375.5	378.1	2.7	0.7%
72.8%	372.5	377.8	5.3	1.4%
74.1%	369.0	377.1	8.1	2.2%
75.3%	368.6	376.4	7.8	2.1%
76.5%	368.0	376.0	8.0	2.2%
77.8%	366.4	375.0	8.6	2.3%
79.0%	365.6	374.7	9.1	2.5%
80.2%	365.2	370.9	5.6	1.5%
81.5%	364.2	368.0	3.7	1.0%
82.7%	362.6	366.3	3.7	1.0%
84.0%	362.0	364.5	2.4	0.7%
85.2%	362.0	363.7	1.8	0.5%
86.4%	354.7	356.2	1.5	0.4%
87.7%	354.0	353.9	0.0	0.0%
88.9%	343.7	346.0	2.3	0.7%
90.1%	340.8	343.9	3.1	0.9%
91.4%	339.7	341.2	1.6	0.5%
92.6%	324.1	325.2	1.0	0.3%
93.8%	323.3	322.8	-0.4	-0.1%
95.1%	309.2	310.3	1.1	0.4%
96.3%	300.4	300.3	0.0	0.0%
97.5%	276.0	276.8	0.8	0.3%
98.8%	255.3	256.0	0.7	0.3%
100.0%	233.7	234.0	0.4	0.2%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	582.6	577.6	-5.0	-0.9%
1.2%	565.9	539.0	-26.9	-4.8%
2.5%	550.0	537.0	-13.0	-2.4%
3.7%	535.5	515.8	-19.7	-3.7%
4.9%	462.1	463.7	1.6	0.3%
6.2%	453.9	451.6	-2.3	-0.5%
7.4%	447.2	435.7	-11.5	-2.6%
8.6%	441.2	431.6	-9.5	-2.2%
9.9%	423.8	425.2	1.5	0.3%
11.1%	423.5	424.8	1.4	0.3%
12.3%	419.4	422.0	2.6	0.6%
13.6%	419.4	419.7	0.3	0.1%
14.8%	418.8	418.7	0.0	0.0%
16.0%	411.7	418.0	6.3	1.5%
17.3%	409.9	411.7	1.9	0.5%
18.5%	409.0	411.1	2.1	0.5%
19.8%	408.8	406.5	-2.2	-0.5%
21.0%	408.5	405.6	-2.9	-0.7%
22.2%	407.0	404.1	-2.8	-0.7%
23.5%	405.7	404.1	-1.6	-0.4%
24.7%	404.1	402.7	-1.4	-0.3%
25.9%	403.0	401.2	-1.9	-0.5%
27.2%	398.7	398.2	-0.5	-0.1%
28.4%	397.7	396.8	-0.9	-0.2%
29.6%	395.3	396.6	1.3	0.3%
30.9%	393.2	391.7	-1.5	-0.4%
32.1%	393.2	390.7	-2.4	-0.6%
33.3%	391.3	388.4	-2.9	-0.7%
34.6%	387.9	386.3	-1.6	-0.4%
35.8%	385.6	385.5	-0.1	0.0%
37.0%	385.4	385.3	-0.1	0.0%
38.3%	383.2	384.4	1.2	0.3%
39.5%	377.6	383.1	5.5	1.5%
40.7%	377.0	382.8	5.8	1.5%
42.0%	376.4	380.3	3.9	1.0%
43.2%	375.9	378.5	2.6	0.7%
44.4%	375.9	377.2	1.3	0.4%
45.7%	374.0	377.2	3.2	0.9%
46.9%	372.7	371.0	-1.7	-0.5%
48.1%	370.2	370.9	0.7	0.2%
49.4%	366.8	369.7	2.9	0.8%
50.6%	366.6	368.9	2.3	0.6%
51.9%	364.6	367.1	2.5	0.7%
53.1%	362.7	364.5	1.8	0.5%
54.3%	362.5	364.1	1.5	0.4%
55.6%	362.5	362.6	0.1	0.0%
56.8%	357.5	360.2	2.7	0.7%
58.0%	356.7	359.1	2.4	0.7%
59.3%	356.4	356.8	0.4	0.1%
60.5%	354.9	356.1	1.2	0.3%
61.7%	354.1	354.3	0.2	0.1%
63.0%	352.3	352.9	0.6	0.2%
64.2%	351.1	351.3	0.2	0.1%
65.4%	351.0	351.3	0.3	0.1%
66.7%	350.9	351.2	0.4	0.1%
67.9%	350.6	349.4	-1.1	-0.3%
69.1%	348.4	346.3	-2.1	-0.6%
70.4%	347.8	345.8	-2.0	-0.6%
71.6%	346.9	345.7	-1.2	-0.3%
72.8%	345.8	343.2	-2.6	-0.8%
74.1%	344.9	342.6	-2.3	-0.7%
75.3%	344.0	341.4	-2.6	-0.8%
76.5%	344.0	341.1	-2.9	-0.8%
77.8%	342.7	339.7	-3.0	-0.9%
79.0%	342.2	338.3	-3.9	-1.1%
80.2%	342.2	336.4	-5.9	-1.7%
81.5%	341.6	336.2	-5.4	-1.6%
82.7%	338.2	336.0	-2.2	-0.7%
84.0%	337.3	332.5	-4.9	-1.4%
85.2%	335.8	332.2	-3.6	-1.1%
86.4%	335.8	332.0	-3.7	-1.1%
87.7%	333.3	331.6	-1.7	-0.5%
88.9%	332.9	330.4	-2.4	-0.7%
90.1%	332.6	326.7	-5.9	-1.8%
91.4%	332.1	326.3	-5.8	-1.7%
92.6%	329.9	324.5	-5.4	-1.6%
93.8%	327.2	321.8	-5.4	-1.7%
95.1%	325.0	316.8	-8.2	-2.5%
96.3%	322.9	313.5	-9.4	-2.9%
97.5%	318.6	312.2	-6.5	-2.0%
98.8%	317.7	308.9	-8.8	-2.8%
100.0%	310.5	303.5	-6.9	-2.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	676.4	685.4	9.0	1.3%
1.2%	610.9	667.7	56.8	9.3%
2.5%	608.0	612.1	4.1	0.7%
3.7%	601.1	611.5	10.4	1.7%
4.9%	577.3	581.7	4.4	0.8%
6.2%	573.2	575.5	2.2	0.4%
7.4%	573.1	568.7	-4.4	-0.8%
8.6%	560.6	564.6	3.9	0.7%
9.9%	552.7	561.2	8.5	1.5%
11.1%	548.0	559.2	11.2	2.0%
12.3%	544.0	559.0	14.9	2.7%
13.6%	541.4	553.1	11.6	2.2%
14.8%	529.4	548.5	19.1	3.6%
16.0%	528.7	542.4	13.7	2.6%
17.3%	528.5	539.1	10.6	2.0%
18.5%	526.3	533.9	7.6	1.4%
19.8%	516.5	512.1	-4.4	-0.9%
21.0%	510.4	508.9	-1.5	-0.3%
22.2%	502.8	498.4	-4.3	-0.9%
23.5%	496.0	483.1	-12.9	-2.6%
24.7%	472.9	469.6	-3.3	-0.7%
25.9%	455.1	443.0	-12.1	-2.7%
27.2%	450.9	442.0	-8.9	-2.0%
28.4%	450.2	437.8	-12.5	-2.8%
29.6%	429.5	432.0	2.5	0.6%
30.9%	428.2	431.2	3.0	0.7%
32.1%	425.7	430.5	4.8	1.1%
33.3%	424.3	427.7	3.4	0.8%
34.6%	423.8	426.8	3.0	0.7%
35.8%	422.7	426.6	3.9	0.9%
37.0%	422.4	424.8	2.5	0.6%
38.3%	418.8	423.7	4.9	1.2%
39.5%	416.8	421.7	4.9	1.2%
40.7%	416.7	420.8	4.1	1.0%
42.0%	415.8	420.1	4.3	1.0%
43.2%	410.2	419.0	8.7	2.1%
44.4%	410.2	418.7	8.5	2.1%
45.7%	408.6	414.5	6.0	1.5%
46.9%	406.9	410.3	3.3	0.8%
48.1%	402.5	409.4	6.9	1.7%
49.4%	394.7	404.9	10.2	2.6%
50.6%	393.9	404.1	10.2	2.6%
51.9%	392.6	394.7	2.1	0.5%
53.1%	391.6	385.3	-6.3	-1.6%
54.3%	388.4	384.5	-3.9	-1.0%
55.6%	382.1	383.8	1.8	0.5%
56.8%	377.7	383.2	5.4	1.4%
58.0%	376.7	381.0	4.2	1.1%
59.3%	372.2	380.0	7.8	2.1%
60.5%	370.3	375.0	4.7	1.3%
61.7%	363.8	373.0	9.2	2.5%
63.0%	361.9	371.7	9.8	2.7%
64.2%	357.3	359.6	2.3	0.6%
65.4%	355.2	358.0	2.7	0.8%
66.7%	353.3	352.4	-0.9	-0.2%
67.9%	350.8	350.8	0.0	0.0%
69.1%	350.5	350.6	0.1	0.0%
70.4%	349.0	349.2	0.2	0.1%
71.6%	345.4	346.5	1.2	0.3%
72.8%	345.2	345.2	0.0	0.0%
74.1%	341.8	344.0	2.2	0.6%
75.3%	341.3	340.3	-1.0	-0.3%
76.5%	341.2	338.2	-3.0	-0.9%
77.8%	340.2	337.8	-2.4	-0.7%
79.0%	335.1	335.9	0.9	0.3%
80.2%	334.8	335.1	0.4	0.1%
81.5%	328.9	333.6	4.7	1.4%
82.7%	328.6	330.4	1.8	0.5%
84.0%	328.1	326.7	-1.4	-0.4%
85.2%	328.0	326.4	-1.6	-0.5%
86.4%	326.9	325.0	-1.9	-0.6%
87.7%	326.9	324.9	-1.9	-0.6%
88.9%	326.3	324.2	-2.1	-0.6%
90.1%	326.0	322.4	-3.6	-1.1%
91.4%	325.9	321.0	-4.9	-1.5%
92.6%	321.7	320.5	-1.1	-0.3%
93.8%	320.9	315.0	-6.0	-1.9%
95.1%	315.5	314.5	-1.0	-0.3%
96.3%	315.0	312.8	-2.2	-0.7%
97.5%	314.9	309.7	-5.2	-1.7%
98.8%	314.0	307.3	-6.8	-2.2%
100.0%	273.3	269.1	-4.2	-1.5%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly EC (UMHOS/CM)	WSIP 2030 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	684.6	707.2	22.6	3.3%
1.2%	674.7	690.0	15.3	2.3%
2.5%	662.4	664.9	2.5	0.4%
3.7%	651.6	652.1	0.4	0.1%
4.9%	651.2	649.7	-1.5	-0.2%
6.2%	646.1	648.0	1.9	0.3%
7.4%	641.4	647.2	5.8	0.9%
8.6%	630.9	641.0	10.1	1.6%
9.9%	630.7	640.4	9.7	1.5%
11.1%	628.7	640.0	11.3	1.8%
12.3%	626.3	632.5	6.2	1.0%
13.6%	624.9	631.2	6.2	1.0%
14.8%	621.6	624.9	3.3	0.5%
16.0%	618.2	620.2	2.1	0.3%
17.3%	614.4	618.3	3.9	0.6%
18.5%	609.2	603.2	-6.0	-1.0%
19.8%	602.5	597.9	-4.5	-0.8%
21.0%	602.0	596.9	-5.1	-0.8%
22.2%	601.3	595.5	-5.8	-1.0%
23.5%	597.0	595.0	-2.0	-0.3%
24.7%	596.3	594.7	-1.6	-0.3%
25.9%	595.9	589.1	-6.7	-1.1%
27.2%	591.2	583.8	-7.4	-1.3%
28.4%	588.5	583.4	-5.2	-0.9%
29.6%	588.0	582.4	-5.7	-1.0%
30.9%	584.5	581.1	-3.4	-0.6%
32.1%	582.5	580.9	-1.5	-0.3%
33.3%	579.3	578.9	-0.4	-0.1%
34.6%	572.5	571.2	-1.3	-0.2%
35.8%	570.0	567.8	-2.2	-0.4%
37.0%	568.3	565.9	-2.4	-0.4%
38.3%	567.7	565.5	-2.2	-0.4%
39.5%	551.8	565.0	13.3	2.4%
40.7%	549.6	559.5	9.9	1.8%
42.0%	544.2	557.1	12.9	2.4%
43.2%	540.8	556.4	15.5	2.9%
44.4%	540.4	556.0	15.6	2.9%
45.7%	532.1	552.4	20.3	3.8%
46.9%	531.5	552.1	20.6	3.9%
48.1%	518.0	550.5	32.5	6.3%
49.4%	514.0	543.3	29.3	5.7%
50.6%	512.4	537.5	25.1	4.9%
51.9%	512.0	532.9	20.9	4.1%
53.1%	502.4	532.4	30.0	6.0%
54.3%	500.3	529.3	29.0	5.8%
55.6%	496.8	511.7	14.9	3.0%
56.8%	494.7	511.1	16.5	3.3%
58.0%	492.6	504.3	11.7	2.4%
59.3%	492.2	487.3	-5.0	-1.0%
60.5%	484.4	483.6	-0.9	-0.2%
61.7%	478.9	476.4	-2.5	-0.5%
63.0%	475.3	475.8	0.6	0.1%
64.2%	474.9	474.4	-0.4	-0.1%
65.4%	471.6	469.1	-2.5	-0.5%
66.7%	466.6	465.9	-0.7	-0.1%
67.9%	462.4	461.4	-0.9	-0.2%
69.1%	458.3	457.7	-0.6	-0.1%
70.4%	458.3	453.4	-4.9	-1.1%
71.6%	452.1	448.3	-3.8	-0.8%
72.8%	447.2	445.2	-2.0	-0.4%
74.1%	445.3	434.6	-10.7	-2.4%
75.3%	440.9	434.3	-6.6	-1.5%
76.5%	440.1	429.6	-10.5	-2.4%
77.8%	438.4	428.6	-9.8	-2.2%
79.0%	434.0	428.2	-5.8	-1.3%
80.2%	432.1	424.7	-7.4	-1.7%
81.5%	429.8	422.7	-7.0	-1.6%
82.7%	425.0	422.6	-2.5	-0.6%
84.0%	422.2	417.9	-4.3	-1.0%
85.2%	421.1	413.4	-7.7	-1.8%
86.4%	418.3	407.3	-11.1	-2.6%
87.7%	414.2	404.3	-9.9	-2.4%
88.9%	413.0	402.5	-10.5	-2.5%
90.1%	409.7	401.7	-8.0	-2.0%
91.4%	404.3	400.0	-4.3	-1.1%
92.6%	402.4	399.4	-3.0	-0.7%
93.8%	402.3	397.7	-4.7	-1.2%
95.1%	401.5	390.7	-10.8	-2.7%
96.3%	386.2	379.3	-6.9	-1.8%
97.5%	371.8	369.4	-2.4	-0.6%
98.8%	336.3	337.8	1.5	0.5%
100.0%	249.8	245.2	-4.7	-1.9%

Sacramento-San Joaquin Delta Modeling

Summary Tables and Bar Charts

Table SQ-01-a
X2, Monthly Position
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Position (KM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	87.7	84.3	78.0	68.1	62.7	64.5	70.1	78.1	84.1	84.1	91.1	84.9
WSIP 2070 With Project	87.1	84.1	78.9	69.1	63.4	65.1	70.2	78.1	83.7	84.0	90.5	84.0
Difference	-1	0	1	1	1	1	0	0	0	0	-1	-1
Percent Difference[3]	-0.7%	-0.1%	1.2%	1.4%	1.0%	0.9%	0.2%	0.0%	-0.5%	-0.2%	-0.6%	-1.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	80.0	76.6	75.0	56.5	55.6	57.7	61.9	71.7	80.6	79.2	89.8	69.2
WSIP 2070 With Project	79.6	76.8	76.3	56.9	55.6	57.9	61.8	71.8	80.4	79.2	89.5	69.1
Difference	0	0	1	0	0	0	0	0	0	0	0	0
Percent Difference	-0.5%	0.2%	1.7%	0.8%	0.1%	0.3%	-0.2%	0.2%	-0.2%	0.0%	-0.4%	-0.1%
Above Normal (13.4%)												
WSIP 2070 Without Project	84.0	80.9	80.9	61.5	56.6	59.0	65.9	75.3	83.7	78.8	89.9	80.3
WSIP 2070 With Project	83.4	81.0	81.5	62.4	56.9	59.5	66.2	75.3	83.6	78.4	89.6	80.1
Difference	-1	0	1	1	0	1	0	0	0	0	0	0
Percent Difference	-0.7%	0.1%	0.7%	1.4%	0.5%	0.9%	0.4%	0.0%	-0.1%	-0.6%	-0.3%	-0.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	92.4	85.5	74.5	68.9	64.2	65.8	71.9	78.1	84.5	82.5	90.6	94.4
WSIP 2070 With Project	90.9	85.0	74.8	70.8	65.1	66.8	71.9	78.2	84.1	82.4	90.2	92.8
Difference	-2	0	0	2	1	1	0	0	0	0	0	-2
Percent Difference	-1.7%	-0.5%	0.3%	2.7%	1.4%	1.5%	0.0%	0.1%	-0.4%	-0.1%	-0.4%	-1.7%
Dry (24.4%)												
WSIP 2070 Without Project	92.1	89.4	78.6	78.0	66.2	67.9	74.6	81.7	85.8	89.1	92.2	94.8
WSIP 2070 With Project	91.2	89.7	78.8	78.9	67.8	69.0	75.2	81.4	84.9	88.9	91.1	93.3
Difference	-1	0	0	1	2	1	1	0	-1	0	-1	-1
Percent Difference	-0.9%	0.3%	0.3%	1.2%	2.4%	1.6%	0.8%	-0.4%	-1.0%	-0.2%	-1.2%	-1.6%
Critical (14.6%)												
WSIP 2070 Without Project	95.4	93.9	84.4	81.9	76.5	77.1	82.1	88.7	89.2	93.1	93.5	96.2
WSIP 2070 With Project	95.7	92.7	86.8	83.3	76.8	77.3	82.0	88.7	88.4	92.7	92.9	95.1
Difference	0	-1	2	1	0	0	0	0	-1	0	-1	-1
Percent Difference	0.4%	-1.3%	2.9%	1.6%	0.4%	0.3%	-0.1%	0.0%	-0.9%	-0.4%	-0.6%	-1.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SQ-21-a
Sacramento River at Emmaton, Monthly EC
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1969.7	1540.0	993.9	489.0	261.1	219.6	254.5	413.2	699.1	838.7	1499.4	1846.3
WSIP 2070 With Project	1729.0	1385.2	979.4	515.5	256.3	222.3	256.1	409.1	660.6	788.5	1388.4	1541.6
Difference	-240.6	-154.8	-14.6	26.5	-4.9	2.8	1.6	-4.1	-38.5	-50.1	-111.0	-304.7
Percent Difference[3]	-12.2%	-10.0%	-1.5%	5.4%	-1.9%	1.3%	0.6%	-1.0%	-5.5%	-6.0%	-7.4%	-16.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	294.3	286.4	506.4	195.6	181.8	183.3	192.6	240.2	362.1	350.8	1040.4	360.5
WSIP 2070 With Project	276.7	282.0	528.8	206.9	182.1	183.8	191.6	240.6	359.8	348.2	984.3	351.3
Difference	-17.6	-4.4	22.4	11.3	0.3	0.4	-1.0	0.3	-2.3	-2.6	-56.2	-9.2
Percent Difference	-6.0%	-1.5%	4.4%	5.8%	0.2%	0.2%	-0.5%	0.1%	-0.6%	-0.7%	-5.4%	-2.5%
Above Normal (13.4%)												
WSIP 2070 Without Project	603.6	493.3	743.9	290.6	187.2	183.0	195.8	239.4	448.3	338.2	926.1	607.7
WSIP 2070 With Project	544.6	476.9	732.5	315.2	188.1	183.8	197.0	240.4	445.6	323.1	873.8	586.8
Difference	-59.0	-16.4	-11.5	24.6	0.9	0.8	1.3	1.0	-2.7	-15.1	-52.3	-20.9
Percent Difference	-9.8%	-3.3%	-1.5%	8.5%	0.5%	0.4%	0.6%	0.4%	-0.6%	-4.5%	-5.7%	-3.4%
Below Normal (15.9%)												
WSIP 2070 Without Project	2985.4	1755.6	930.6	415.7	214.7	194.3	229.5	334.2	591.5	541.6	1213.3	2635.0
WSIP 2070 With Project	2352.7	1401.4	850.7	481.7	221.6	203.2	229.8	323.3	563.5	526.8	1151.7	2139.7
Difference	-632.7	-354.2	-79.9	66.0	6.9	8.8	0.3	-10.9	-28.0	-14.8	-61.7	-495.2
Percent Difference	-21.2%	-20.2%	-8.6%	15.9%	3.2%	4.6%	0.1%	-3.3%	-4.7%	-2.7%	-5.1%	-18.8%
Dry (24.4%)												
WSIP 2070 Without Project	3022.8	2304.6	1317.1	656.7	259.9	219.9	252.7	389.3	766.5	1131.6	1920.4	2906.7
WSIP 2070 With Project	2566.1	2128.4	1252.0	697.1	280.7	224.3	264.3	380.2	694.5	1048.7	1706.0	2307.7
Difference	-456.7	-176.2	-65.0	40.4	20.8	4.4	11.7	-9.1	-72.1	-82.9	-214.4	-598.9
Percent Difference	-15.1%	-7.6%	-4.9%	6.2%	8.0%	2.0%	4.6%	-2.3%	-9.4%	-7.3%	-11.2%	-20.6%
Critical (14.6%)												
WSIP 2070 Without Project	3996.3	3707.5	1809.6	1106.4	553.2	358.4	472.4	1072.4	1663.5	2188.1	2627.2	3579.0
WSIP 2070 With Project	3890.7	3351.8	1867.0	1101.8	476.2	358.6	464.9	1069.9	1558.2	2019.3	2462.7	3071.0
Difference	-105.6	-355.6	57.5	-4.6	-77.0	0.2	-7.6	-2.5	-105.3	-168.8	-164.5	-508.0
Percent Difference	-2.6%	-9.6%	3.2%	-0.4%	-13.9%	0.0%	-1.6%	-0.2%	-6.3%	-7.7%	-6.3%	-14.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

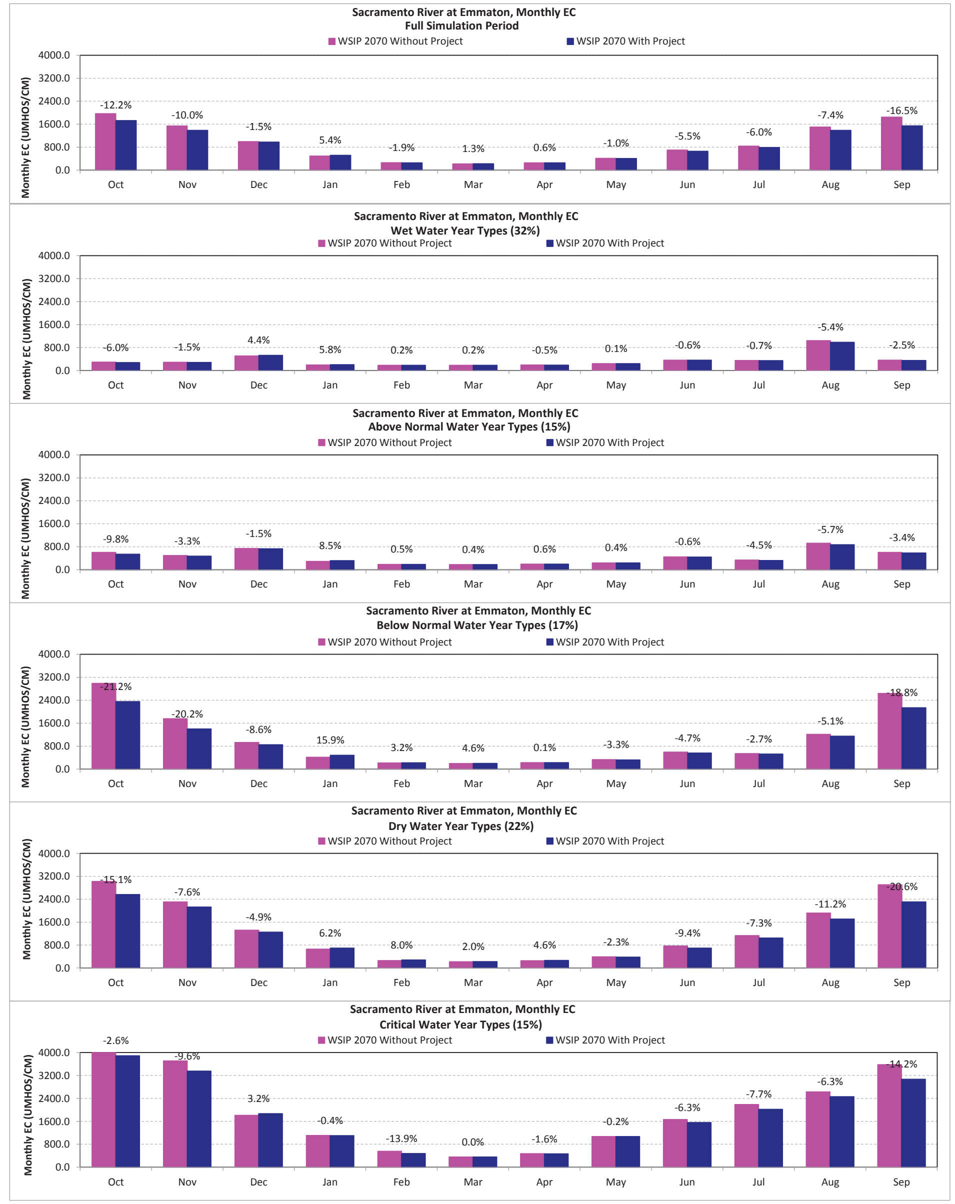


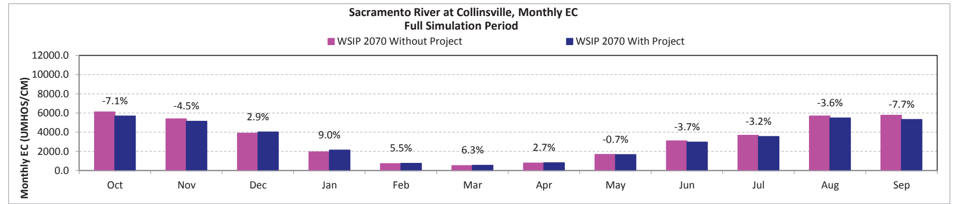
Table SQ-22-a
Sacramento River at Collinsville, Monthly EC
Long-term Average and Average by Water Year Type

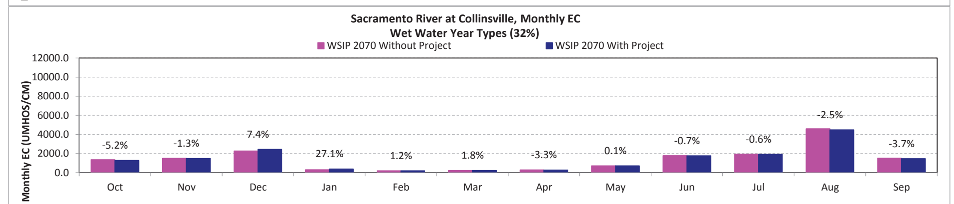
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	6113.1	5381.9	3899.2	1949.6	715.5	510.7	787.3	1670.3	3085.5	3664.9	5685.7	5759.0
WSIP 2070 With Project	5678.0	5140.7	4011.8	2125.7	754.7	542.7	808.7	1657.9	2970.5	3549.4	5479.1	5317.0
Difference	-435.1	-241.1	112.6	176.2	39.2	32.0	21.4	-12.4	-115.0	-115.5	-206.6	-442.0
Percent Difference[3]	-7.1%	-4.5%	2.9%	9.0%	5.5%	6.3%	2.7%	-0.7%	-3.7%	-3.2%	-3.6%	-7.7%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1349.4	1490.7	2263.5	298.2	193.4	215.2	280.2	712.2	1775.4	1934.2	4597.0	1511.5
WSIP 2070 With Project	1279.1	1471.8	2430.4	379.0	195.7	219.1	270.8	713.0	1763.6	1922.5	4480.0	1455.5
Difference	-70.3	-18.9	166.9	80.8	2.3	3.9	-9.4	0.7	-11.8	-11.7	-117.0	-56.0
Percent Difference	-5.2%	-1.3%	7.4%	27.1%	1.2%	1.8%	-3.3%	0.1%	-0.7%	-0.6%	-2.5%	-3.7%
Above Normal (13.4%)												
WSIP 2070 Without Project	3083.5	2799.9	3464.6	937.6	223.0	218.9	320.5	802.4	2331.2	1904.4	4231.6	3100.0
WSIP 2070 With Project	2916.9	2746.6	3497.6	1094.0	230.4	229.6	329.8	808.4	2318.1	1805.0	4092.1	3001.1
Difference	-166.6	-53.4	33.0	156.4	7.5	10.7	9.4	6.0	-13.1	-99.4	-139.5	-98.8
Percent Difference	-5.4%	-1.9%	1.0%	16.7%	3.3%	4.9%	2.9%	0.7%	-0.6%	-5.2%	-3.3%	-3.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	9204.4	6672.5	3687.6	1772.3	451.4	361.9	688.1	1473.3	2948.9	3080.1	5125.6	8258.3
WSIP 2070 With Project	8147.7	6034.2	3592.9	2146.0	528.5	437.8	696.6	1437.8	2861.3	3012.8	5016.2	7548.4
Difference	-1056.7	-638.3	-94.7	373.7	77.2	75.9	8.5	-35.5	-87.6	-67.3	-109.4	-709.8
Percent Difference	-11.5%	-9.6%	-2.6%	21.1%	17.1%		1.2%	-2.4%	-3.0%	-2.2%	-2.1%	-8.6%
Dry (24.4%)												
WSIP 2070 Without Project	9167.0	7925.2	4824.7	3134.5	869.3	526.8	862.0	1934.0	3642.4	5039.1	6734.0	8776.5
WSIP 2070 With Project	8354.9	7759.6	4800.0	3336.4	1031.4	590.0	965.6	1908.1	3397.5	4863.6	6377.1	7941.7
Difference	-812.1	-165.6	-24.7	201.9	162.1	63.2	103.6	-25.9	-244.9	-175.5	-356.9	-834.9
Percent Difference	-8.9%	-2.1%	-0.5%	6.4%	18.7%	12.0%	12.0%	-1.3%	-6.7%	-3.5%	-5.3%	-9.5%
Critical (14.6%)												
WSIP 2070 Without Project	10772.7	10542.1	6528.0	4672.5	2327.9	1552.9	2297.1	4315.4	5835.5	7371.8	8237.1	9662.5
WSIP 2070 With Project	10603.0	9951.9	7049.6	4816.5	2230.1	1565.4	2272.9	4305.4	5590.2	7064.6	7920.0	9014.7
Difference	-169.7	-590.2	521.5	144.1	-97.8	12.5	-24.2	-10.0	-245.3	-307.1	-317.1	-647.8
Percent Difference	-1.6%	-5.6%	8.0%	3.1%	-4.2%	0.8%	-1.1%	-0.2%	-4.2%	-4.2%	-3.9%	-6.7%

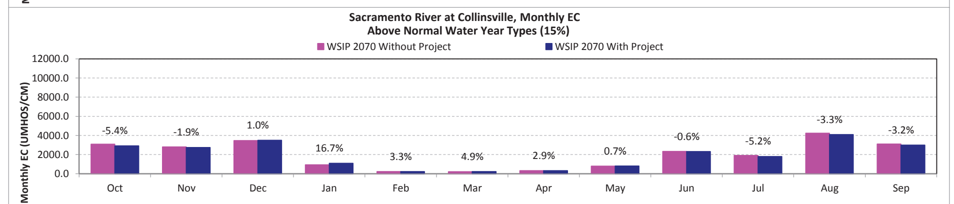
1 Based on the 82-year simulation period

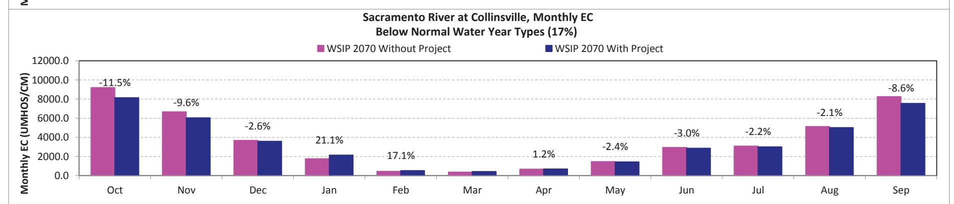
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

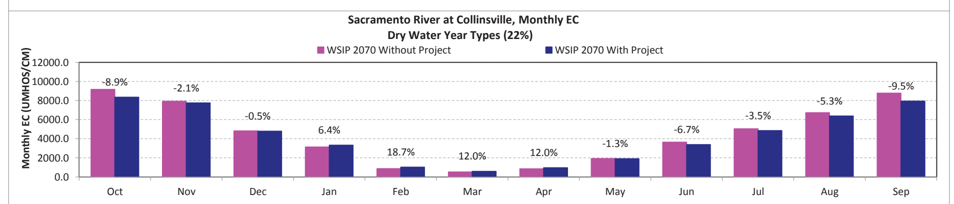
3 Relative difference of the monthly average











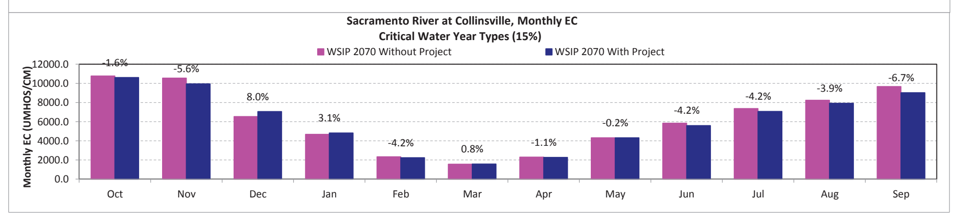


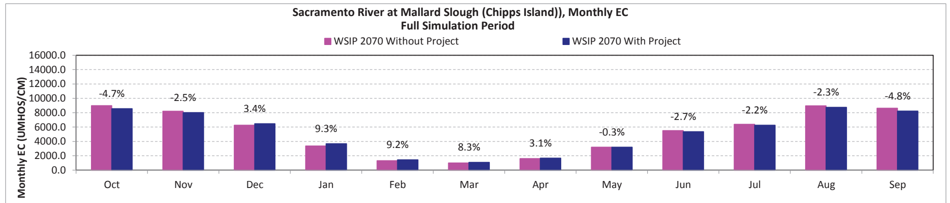
Table SQ-23-a
Sacramento River at Mallard Slough (Chipps Island)), Monthly EC
Long-term Average and Average by Water Year Type

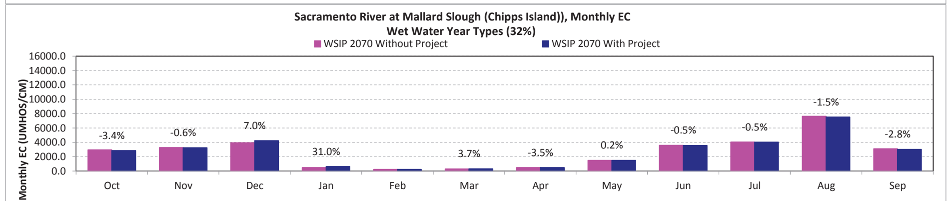
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	8985.8	8216.3	6251.6	3371.1	1312.9	1007.7	1617.6	3209.2	5502.9	6389.0	8958.1	8634.3
WSIP 2070 With Project	8565.1	8013.4	6464.5	3683.1	1434.2	1091.6	1667.8	3199.7	5357.0	6251.5	8753.6	8222.3
Difference	-420.7	-202.9	212.9	312.0	121.3	83.9	50.2	-9.6	-145.9	-137.4	-204.5	-412.0
Percent Difference[3]	-4.7%	-2.5%	3.4%	9.3%	9.2%	8.3%	3.1%	-0.3%	-2.7%	-2.2%	-2.3%	-4.8%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	2947.0	3262.4	3948.9	476.4	225.1	296.5	494.6	1493.4	3591.3	4036.0	7628.5	3096.4
WSIP 2070 With Project	2847.6	3242.7	4226.8	624.3	231.2	307.4	477.1	1496.5	3571.6	4017.6	7516.9	3010.4
Difference	-99.5	-19.7	277.9	147.9	6.1	10.9	-17.5	3.1	-19.7	-18.4	-111.7	-86.0
Percent Difference	-3.4%	-0.6%	7.0%	31.0%		3.7%	-3.5%	0.2%	-0.5%	-0.5%	-1.5%	-2.8%
Above Normal (13.4%)												
WSIP 2070 Without Project	5652.9	5325.5	5893.9	1710.7	294.7	326.5	646.6	1836.2	4536.8	4051.1	7176.4	5813.4
WSIP 2070 With Project	5464.4	5270.1	6003.0	1995.2	316.9	362.4	674.5	1850.6	4518.2	3893.5	7011.8	5680.4
Difference	-188.5	-55.4	109.1	284.5	22.2	35.8	27.9	14.4	-18.6	-157.6	-164.6	-133.1
Percent Difference	-3.3%	-1.0%	1.9%	16.6%			4.3%	0.8%	-0.4%	-3.9%	-2.3%	-2.3%
Below Normal (15.9%)												
WSIP 2070 Without Project	12913.0	9989.6	5935.4	3305.4	902.6	782.5	1536.8	3033.5	5434.3	5851.0	8368.0	11883.7
WSIP 2070 With Project	11944.5	9464.6	5911.4	3947.7	1091.5	943.1	1568.8	3003.3	5326.4	5759.1	8268.5	11258.0
Difference	-968.5	-525.1	-24.0	642.2	188.9	160.6	32.0	-30.2	-107.9	-92.0	-99.5	-625.7
Percent Difference	-7.5%	-5.3%	-0.4%	19.4%	20.9%	20.5%	2.1%	-1.0%	-2.0%	-1.6%	-1.2%	-5.3%
Dry (24.4%)												
WSIP 2070 Without Project	12805.5	11450.2	7407.2	5516.7	1775.5	1129.0	1948.9	3924.5	6421.3	8351.7	10256.8	12450.5
WSIP 2070 With Project	12036.4	11353.7	7446.9	5863.7	2112.7	1305.4	2157.1	3901.7	6098.7	8152.6	9908.4	11697.6
Difference	-769.1	-96.5	39.7	346.9	337.2	176.4	208.2	-22.7	-322.6	-199.1	-348.4	-752.9
Percent Difference	-6.0%	-0.8%	0.5%	6.3%	19.0%	15.6%	10.7%	-0.6%	-5.0%	-2.4%	-3.4%	-6.0%
Critical (14.6%)												
WSIP 2070 Without Project	14504.4	14288.8	9985.1	7660.1	4276.5	3215.0	4476.5	7183.8	9074.0	10941.6	11946.8	13338.1
WSIP 2070 With Project	14349.1	13725.5	10698.1	7936.8	4305.0	3263.6	4449.9	7169.2	8791.6	10618.5	11630.5	12763.9
Difference	-155.3	-563.3	713.0	276.7	28.5	48.6	-26.6	-14.5	-282.4	-323.1	-316.2	-574.2
Percent Difference	-1.1%	-3.9%	7.1%	3.6%	0.7%	1.5%	-0.6%	-0.2%	-3.1%	-3.0%	-2.6%	-4.3%

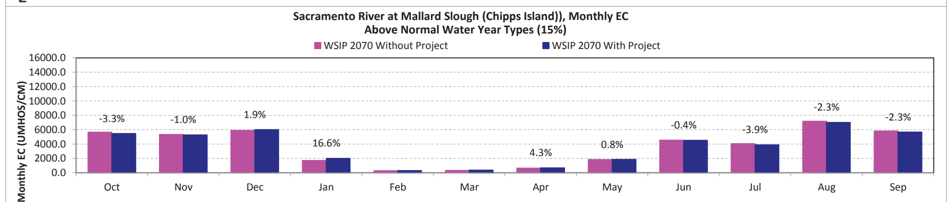
1 Based on the 82-year simulation period

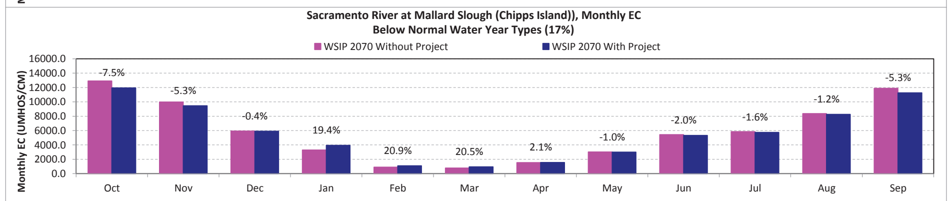
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

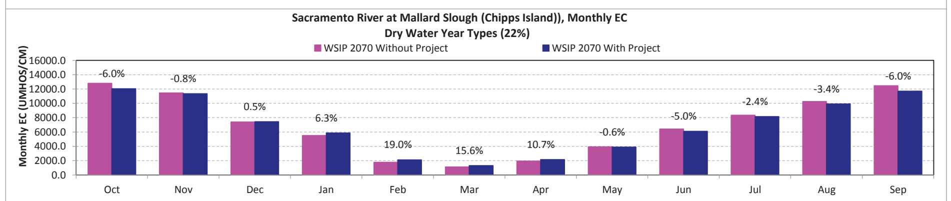
3 Relative difference of the monthly average











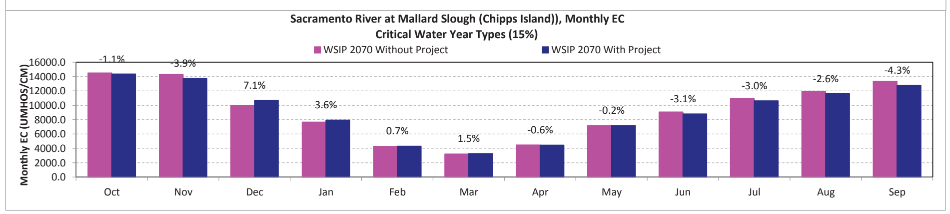


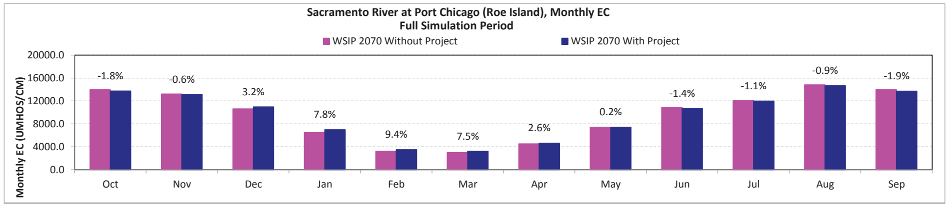
Table SQ-24-a
Sacramento River at Port Chicago (Roe Island), Monthly EC
Long-term Average and Average by Water Year Type

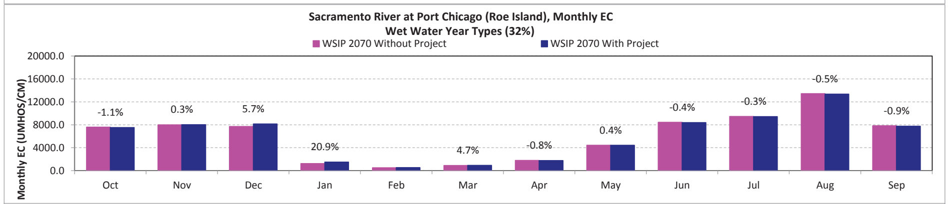
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	13980.8	13228.8	10619.9	6477.9	3208.5	2999.2	4522.8	7421.8	10874.6	12116.3	14803.4	13973.5
WSIP 2070 With Project	13731.1	13150.2	10957.6	6985.4	3508.7	3223.6	4639.8	7433.4	10720.9	11977.0	14664.1	13709.9
Difference	-249.8	-78.6	337.7	507.5	300.2	224.4	117.0	11.5	-153.6	-139.3	-139.3	-263.6
Percent Difference[3]	-1.8%	-0.6%	3.2%	7.8%	9.4%	7.5%	2.6%	0.2%	-1.4%	-1.1%	-0.9%	-1.9%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	7593.1	7995.9	7699.3	1244.9	503.4	890.4	1774.5	4418.7	8427.8	9445.7	13424.4	7834.9
WSIP 2070 With Project	7512.6	8016.2	8135.3	1504.9	528.9	931.8	1760.3	4434.9	8394.7	9419.8	13363.5	7762.9
Difference	-80.5	20.3	436.0	260.0	25.5	41.4	-14.1	16.1	-33.1	-25.9	-60.9	-71.9
Percent Difference	-1.1%	0.3%	5.7%	20.9%		4.7%	-0.8%	0.4%	-0.4%	-0.3%	-0.5%	-0.9%
Above Normal (13.4%)												
WSIP 2070 Without Project	11056.3	10611.8	10587.5	3904.8	798.7	1183.4	2613.6	5552.1	9856.0	9591.7	12950.9	11734.2
WSIP 2070 With Project	10937.6	10605.8	10844.7	4385.1	885.6	1315.3	2720.0	5596.4	9835.2	9380.8	12799.5	11635.1
Difference	-118.7	-6.0	257.2	480.2	86.9	131.9	106.4	44.3	-20.8	-210.9	-151.3	-99.0
Percent Difference	-1.1%	-0.1%	2.4%	12.3%	10.9%	11.1%	4.1%	0.8%	-0.2%	-2.2%	-1.2%	-0.8%
Below Normal (15.9%)												
WSIP 2070 Without Project	18118.7	15151.1	10114.9	7115.8	2996.2	2986.8	4785.1	7498.6	10979.0	11816.6	14337.2	17497.4
WSIP 2070 With Project	17593.5	14995.6	10265.9	8102.9	3461.1	3346.5	4888.5	7519.7	10877.7	11711.0	14281.8	17128.3
Difference	-525.2	-155.6	151.0	987.1	464.9	359.7	103.4	21.0	-101.3	-105.6	-55.4	-369.1
Percent Difference	-2.9%	-1.0%	1.5%	13.9%	15.5%	12.0%	2.2%	0.3%	-0.9%	-0.9%	-0.4%	-2.1%
Dry (24.4%)												
WSIP 2070 Without Project	17916.9	16634.9	11787.8	10355.8	4742.4	3786.4	5834.7	9052.2	12168.3	14411.9	16164.3	18010.8
WSIP 2070 With Project	17447.5	16640.2	11924.6	10939.9	5417.7	4271.5	6214.0	9050.7	11816.1	14217.7	15920.9	17522.7
Difference	-469.4	5.3	136.9	584.1	675.4	485.1	379.3	-1.5	-352.3	-194.2	-243.4	-488.1
Percent Difference	-2.6%	0.0%	1.2%	5.6%	14.2%	12.8%	6.5%	0.0%	-2.9%	-1.3%	-1.5%	-2.7%
Critical (14.6%)												
WSIP 2070 Without Project	19458.9	19206.4	15578.0	13020.5	8952.4	7934.3	9756.9	12842.1	14840.1	16715.5	17726.1	18780.6
WSIP 2070 With Project	19386.7	18790.2	16313.6	13442.1	9239.5	8058.9	9745.5	12825.1	14578.0	16450.9	17510.5	18439.1
Difference	-72.2	-416.2	735.7	421.6	287.1	124.6	-11.4	-17.0	-262.0	-264.6	-215.6	-341.4
Percent Difference	-0.4%	-2.2%	4.7%	3.2%	3.2%	1.6%	-0.1%	-0.1%	-1.8%	-1.6%	-1.2%	-1.8%

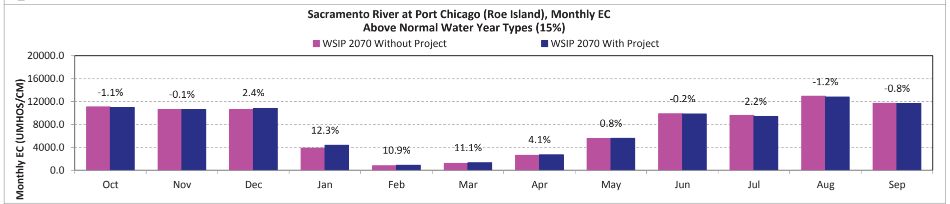
1 Based on the 82-year simulation period

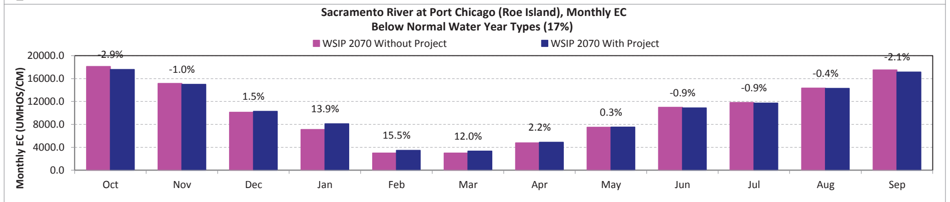
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

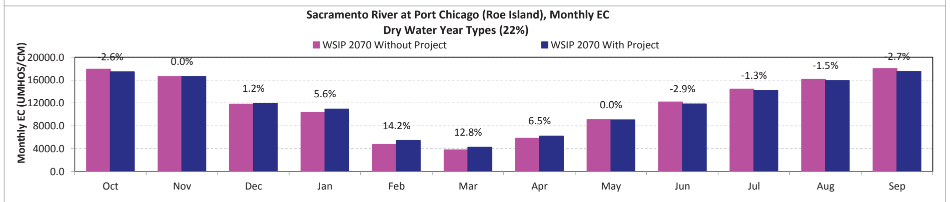
3 Relative difference of the monthly average











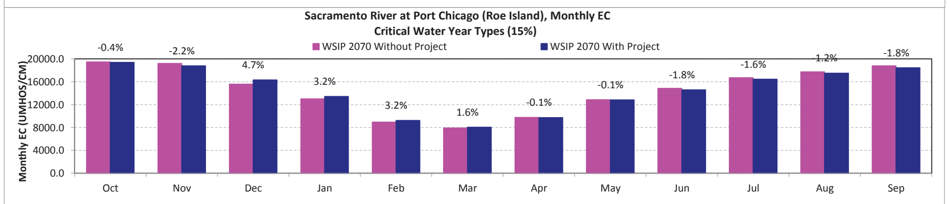


Table SQ-25-a
San Joaquin River at Jersey Point, Monthly EC
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1384.7	1292.0	1072.0	630.5	323.6	244.1	251.8	322.9	456.2	779.2	1315.9	1734.5
WSIP 2070 With Project	1252.2	1205.8	1118.2	680.7	322.2	244.3	252.4	321.9	440.0	781.7	1303.4	1676.7
Difference	-132.5	-86.2	46.2	50.2	-1.4	0.2	0.6	-1.0	-16.1	2.5	-12.5	-57.8
Percent Difference[3]	-9.6%	-6.7%	4.3%	8.0%	-0.4%	0.1%	0.2%	-0.3%	-3.5%	0.3%	-0.9%	-3.3%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	269.4	273.9	591.3	257.5	224.2	212.8	218.4	227.9	280.4	349.8	1137.7	805.7
WSIP 2070 With Project	267.8	272.7	638.7	284.6	226.0	213.2	218.0	227.7	278.7	348.9	1130.6	785.8
Difference	-1.6	-1.3	47.4	27.1	1.8	0.5	-0.4	-0.2	-1.7	-0.9	-7.1	-19.8
Percent Difference	-0.6%	-0.5%	8.0%	10.5%	0.8%	0.2%	-0.2%	-0.1%	-0.6%	-0.3%	-0.6%	-2.5%
Above Normal (13.4%)												
WSIP 2070 Without Project	426.3	544.5	917.5	427.0	242.3	208.2	218.8	239.6	338.8	364.8	1005.1	878.3
WSIP 2070 With Project	410.7	556.0	916.5	471.4	245.5	210.0	220.1	240.2	338.1	385.9	1012.9	852.3
Difference	-15.6	11.4	-1.0	44.4	3.2	1.8	1.3	0.5	-0.6	21.1	7.8	-26.0
Percent Difference	-3.6%	2.1%	-0.1%	10.4%	1.3%	0.9%	0.6%	0.2%	-0.2%	5.8%	0.8%	-3.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	2180.8	1817.4	1163.0	656.6	267.8	225.7	233.9	282.7	402.3	672.0	1244.1	2524.9
WSIP 2070 With Project	1837.8	1504.3	1207.6	762.1	283.2	232.7	236.8	280.2	395.1	674.5	1268.7	2467.9
Difference	-343.0	-313.2	44.6	105.5	15.4	7.0	2.9	-2.6	-7.2	2.5	24.6	-57.0
Percent Difference	-15.7%	-17.2%	3.8%	16.1%	5.8%	3.1%	1.2%	-0.9%	-1.8%	0.4%	2.0%	-2.3%
Dry (24.4%)												
WSIP 2070 Without Project	2127.5	1949.2	1327.6	839.8	355.4	249.8	259.1	312.4	483.5	1115.0	1417.7	2457.4
WSIP 2070 With Project	1910.3	1979.2	1362.9	901.8	375.6	255.3	261.7	310.4	453.1	1146.0	1436.0	2418.6
Difference	-217.2	30.0	35.3	62.0	20.1	5.5	2.5	-2.0	-30.4	31.0	18.3	-38.8
Percent Difference	-10.2%	1.5%	2.7%	7.4%	5.7%	2.2%	1.0%	-0.6%	-6.3%	2.8%	1.3%	-1.6%
Critical (14.6%)												
WSIP 2070 Without Project	2579.5	2518.2	1730.6	1248.1	621.1	355.5	361.7	666.2	957.4	1646.0	1895.1	2471.0
WSIP 2070 With Project	2425.1	2210.9	1837.0	1273.9	554.2	337.4	358.2	665.6	910.0	1591.2	1760.7	2268.9
Difference	-154.4	-307.4	106.4	25.8	-66.9	-18.1	-3.5	-0.6	-47.4	-54.8	-134.4	-202.1
Percent Difference	-6.0%	-12.2%	6.1%	2.1%	-10.8%	-5.1%	-1.0%	-0.1%	-5.0%	-3.3%	-7.1%	-8.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

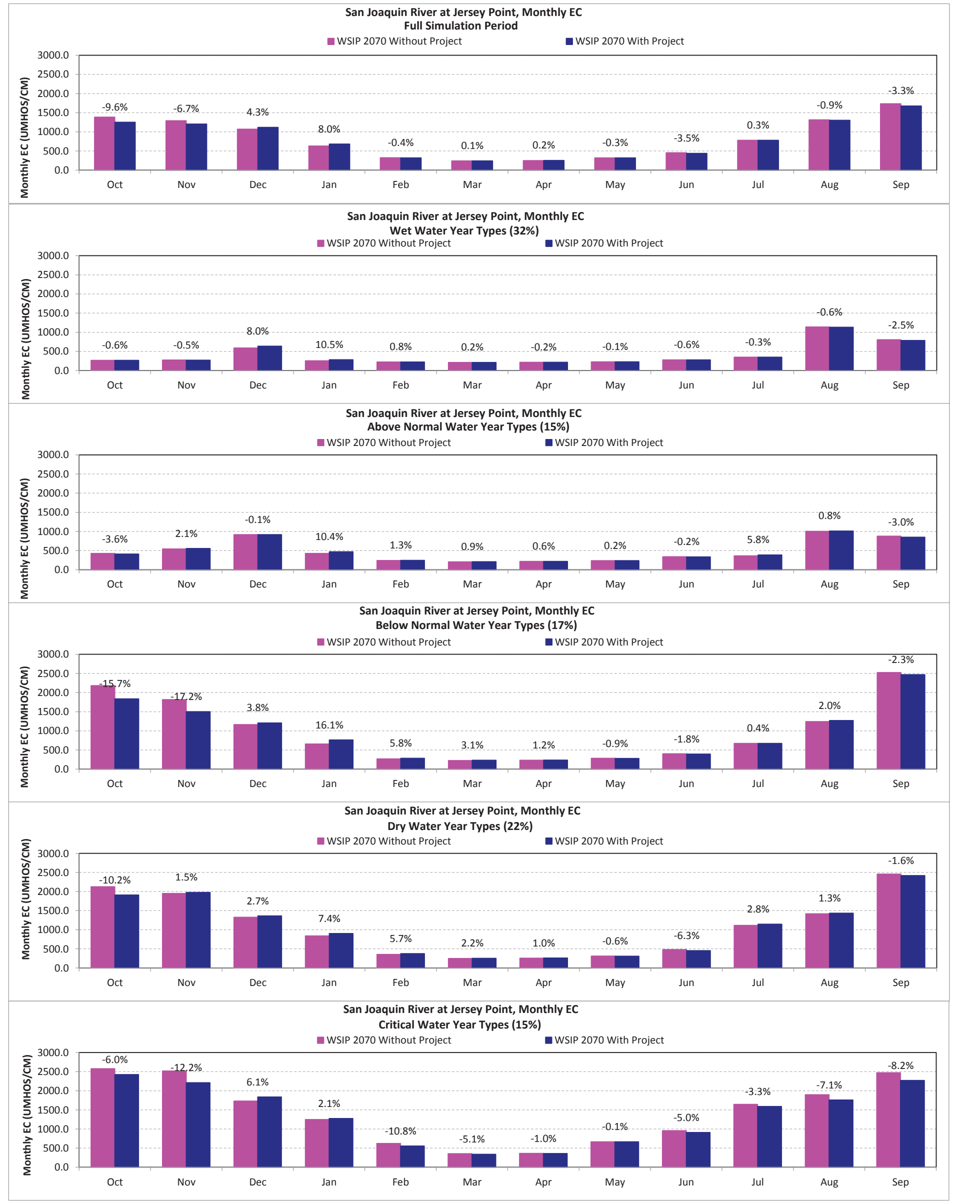


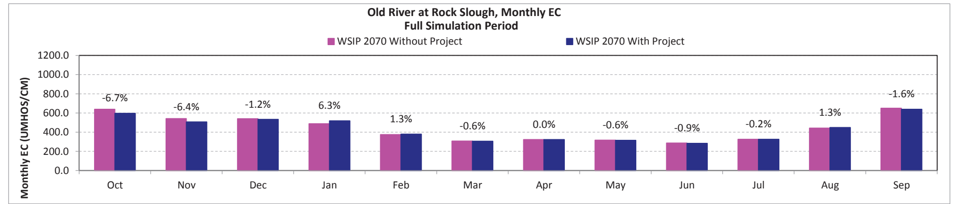
Table SQ-27-a
Old River at Rock Slough, Monthly EC
Long-term Average and Average by Water Year Type

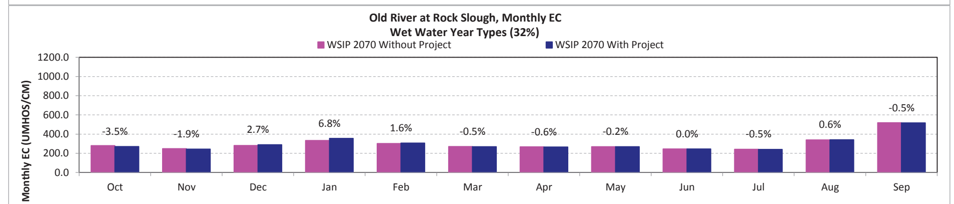
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	639.5	541.0	539.9	487.7	374.7	308.2	323.2	316.9	286.6	326.5	442.8	649.4
WSIP 2070 With Project	596.9	506.3	533.7	518.4	379.4	306.4	323.3	315.1	283.9	325.8	448.5	639.0
Difference	-42.6	-34.7	-6.2	30.7	4.7	-1.8	0.1	-1.8	-2.7	-0.7	5.7	-10.3
Percent Difference[3]	-6.7%	-6.4%	-1.2%	6.3%	1.3%	-0.6%	0.0%	-0.6%	-0.9%	-0.2%	1.3%	-1.6%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	280.4	248.0	281.0	332.6	302.5	270.0	267.6	269.0	244.6	242.5	339.8	519.2
WSIP 2070 With Project	270.6	243.4	288.6	355.1	307.2	268.6	266.1	268.6	244.7	241.3	341.7	516.8
Difference	-9.8	-4.6	7.6	22.5	4.8	-1.4	-1.5	-0.4	0.1	-1.2	1.9	-2.4
Percent Difference	-3.5%	-1.9%	2.7%	6.8%	1.6%	-0.5%	-0.6%	-0.2%	0.0%	-0.5%	0.6%	-0.5%
Above Normal (13.4%)												
WSIP 2070 Without Project	260.3	281.3	378.2	414.8	324.8	251.4	301.5	321.6	257.4	242.8	312.7	449.9
WSIP 2070 With Project	252.8	276.0	375.6	455.9	329.1	255.3	303.5	321.6	257.2	252.9	323.2	453.0
Difference	-7.5	-5.3	-2.5	41.1	4.2	3.9	1.9	0.0	-0.2	10.1	10.5	3.1
Percent Difference	-2.9%	-1.9%	-0.7%	9.9%	1.3%	1.6%	0.6%	0.0%	-0.1%	4.2%	3.4%	0.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	927.1	695.8	659.6	557.0	358.4	283.5	321.1	323.7	271.6	291.6	394.6	788.5
WSIP 2070 With Project	837.2	593.6	618.6	621.4	373.5	290.1	325.8	319.6	266.6	291.9	407.2	798.1
Difference	-89.9	-102.2	-41.0	64.5	15.1	6.6	4.7	-4.0	-5.0	0.3	12.5	9.6
Percent Difference	-9.7%	-14.7%	-6.2%	11.6%	4.2%	2.3%	1.5%	-1.2%	-1.8%	0.1%	3.2%	1.2%
Dry (24.4%)												
WSIP 2070 Without Project	903.8	703.1	672.2	523.3	409.7	343.4	380.4	343.2	289.1	376.7	516.3	742.5
WSIP 2070 With Project	858.1	690.3	707.6	561.6	423.3	342.9	380.0	340.2	283.8	381.6	540.0	737.5
Difference	-45.7	-12.8	35.3	38.4	13.6	-0.5	-0.4	-3.0	-5.3	4.9	23.7	-5.0
Percent Difference	-5.1%	-1.8%	5.3%	7.3%	3.3%	-0.1%	-0.1%	-0.9%	-1.8%	1.3%	4.6%	-0.7%
Critical (14.6%)												
WSIP 2070 Without Project	1012.7	976.2	898.8	756.0	535.8	411.2	370.6	365.5	416.5	539.6	714.6	808.4
WSIP 2070 With Project	923.4	886.0	827.5	745.5	514.8	391.8	368.5	363.2	412.4	519.8	686.8	738.0
Difference	-89.3	-90.1	-71.3	-10.5	-21.1	-19.4	-2.2	-2.3	-4.2	-19.8	-27.8	-70.4
Percent Difference	-8.8%	-9.2%	-7.9%	-1.4%	-3.9%	-4.7%	-0.6%	-0.6%	-1.0%	-3.7%	-3.9%	-8.7%

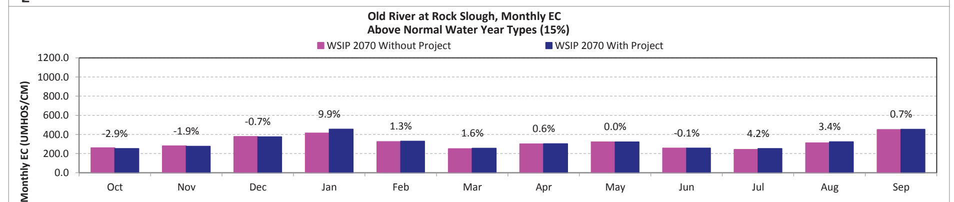
1 Based on the 82-year simulation period

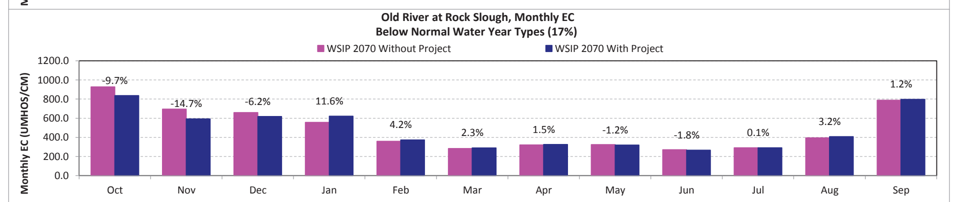
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

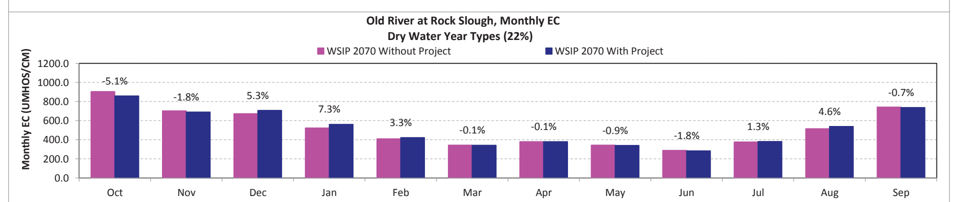
3 Relative difference of the monthly average











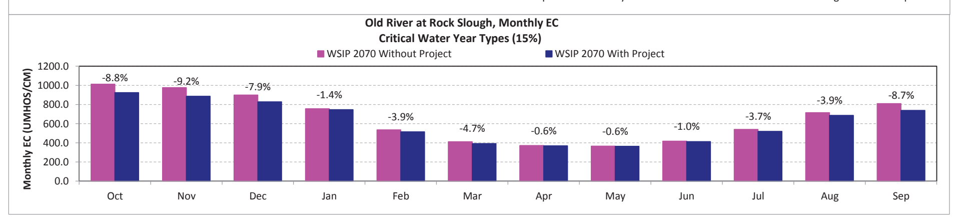


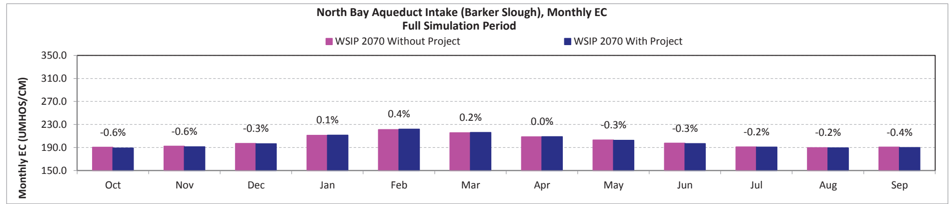
Table SQ-28-a
North Bay Aqueduct Intake (Barker Slough), Monthly EC
Long-term Average and Average by Water Year Type

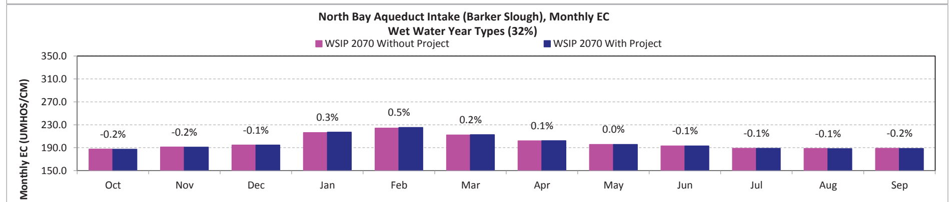
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	190.5	192.5	197.0	211.2	221.1	215.7	208.7	203.1	197.6	191.2	189.8	190.8
WSIP 2070 With Project	189.3	191.4	196.5	211.5	222.0	216.1	208.7	202.6	196.9	190.8	189.4	190.0
Difference	-1.2	-1.1	-0.5	0.3	0.9	0.3	0.1	-0.6	-0.7	-0.4	-0.4	-0.8
Percent Difference[3]	-0.6%	-0.6%	-0.3%	0.1%	0.4%	0.2%	0.0%	-0.3%	-0.3%	-0.2%	-0.2%	-0.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	187.5	191.3	194.6	216.4	224.0	212.1	201.8	195.6	193.1	188.9	188.4	188.9
WSIP 2070 With Project	187.2	190.8	194.5	216.9	225.2	212.6	202.1	195.7	192.9	188.7	188.2	188.5
Difference	-0.3	-0.5	-0.2	0.6	1.2	0.5	0.3	0.1	-0.1	-0.2	-0.2	-0.4
Percent Difference	-0.2%	-0.2%	-0.1%	0.3%	0.5%	0.2%	0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	187.7	190.0	195.8	211.9	221.8	211.2	199.3	194.3	191.4	188.1	187.9	188.9
WSIP 2070 With Project	187.5	189.7	196.0	212.4	222.5	211.9	199.7	194.4	191.3	188.0	187.7	188.7
Difference	-0.2	-0.3	0.2	0.5	0.7	0.7	0.5	0.1	0.0	-0.2	-0.2	-0.2
Percent Difference	-0.1%	-0.2%	0.1%	0.2%	0.3%	0.3%	0.2%	0.1%	0.0%	-0.1%	-0.1%	-0.1%
Below Normal (15.9%)												
WSIP 2070 Without Project	189.3	191.0	195.1	211.0	217.4	209.2	205.8	196.8	192.6	188.9	188.6	189.5
WSIP 2070 With Project	188.1	189.6	194.4	211.5	218.6	210.8	205.1	196.3	192.2	188.6	188.4	189.0
Difference	-1.2	-1.4	-0.7	0.5	1.2	1.5	-0.7	-0.5	-0.4	-0.3	-0.2	-0.5
Percent Difference	-0.6%	-0.7%	-0.4%	0.2%	0.6%	0.7%	-0.4%	-0.2%	-0.2%	-0.2%	-0.1%	-0.3%
Dry (24.4%)												
WSIP 2070 Without Project	192.2	193.2	197.2	208.1	221.9	223.9	217.6	208.5	194.5	190.2	188.8	191.4
WSIP 2070 With Project	190.5	191.9	196.5	208.5	222.2	224.2	218.0	208.0	193.8	190.0	188.2	189.7
Difference	-1.7	-1.3	-0.7	0.4	0.3	0.3	0.4	-0.6	-0.7	-0.3	-0.6	-1.7
Percent Difference	-0.9%	-0.7%	-0.4%	0.2%	0.1%	0.1%	0.2%	-0.3%	-0.3%	-0.2%	-0.3%	-0.9%
Critical (14.6%)												
WSIP 2070 Without Project	198.2	197.9	205.2	204.6	216.6	221.2	220.2	225.3	223.7	202.9	197.7	197.2
WSIP 2070 With Project	195.1	195.6	203.8	203.6	217.7	219.6	219.9	222.6	220.9	201.5	196.7	196.0
Difference	-3.1	-2.3	-1.4	-1.0	1.0	-1.5	-0.4	-2.6	-2.9	-1.5	-1.0	-1.2
Percent Difference	-1.6%	-1.2%	-0.7%	-0.5%	0.5%	-0.7%	-0.2%	-1.2%	-1.3%	-0.7%	-0.5%	-0.6%

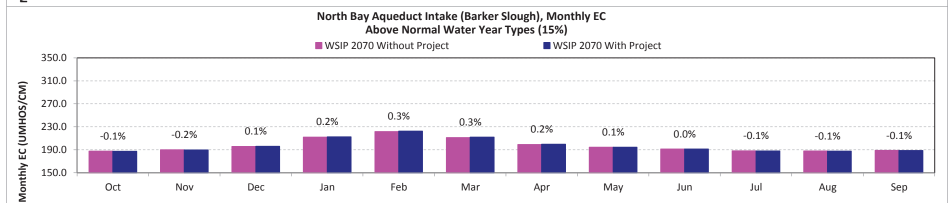
1 Based on the 82-year simulation period

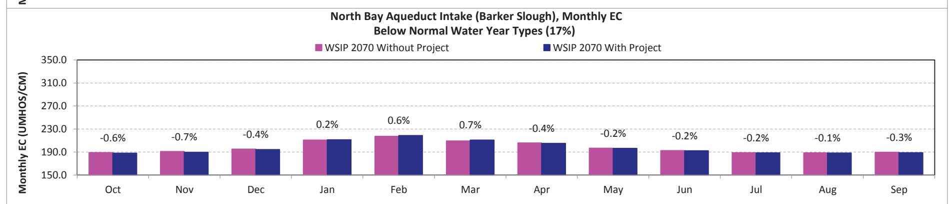
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

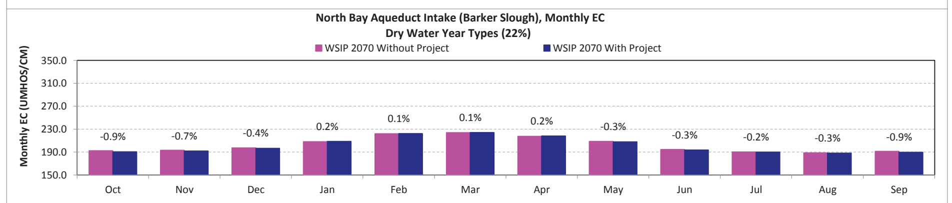
3 Relative difference of the monthly average











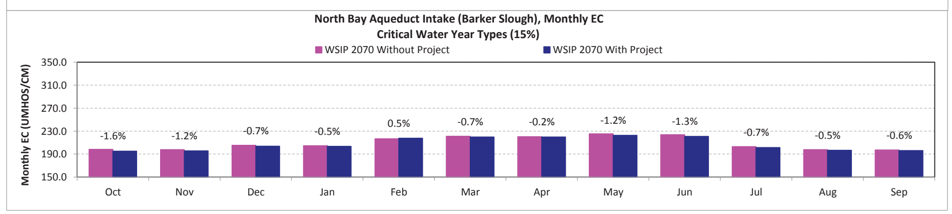


Table SQ-29-a

Old River at Los Vaqueros Intake, Monthly EC

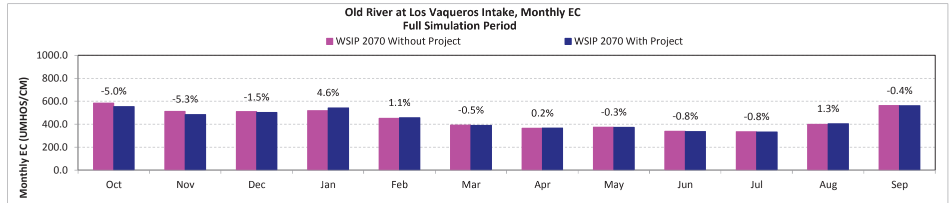
Long-term Average and Average by Water Year Type

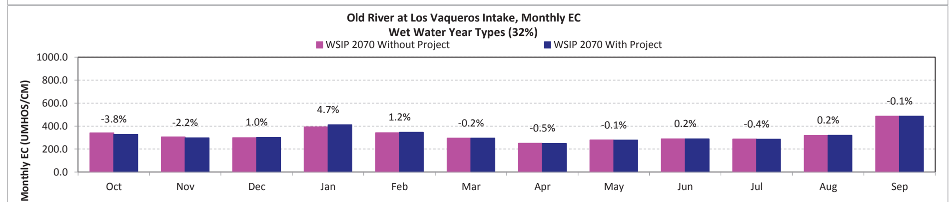
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	583.3	511.4	510.8	518.0	451.6	392.3	365.4	373.9	339.0	334.5	398.6	563.2
WSIP 2070 With Project	553.9	484.3	502.9	541.7	456.6	390.5	366.1	372.8	336.2	331.7	403.7	560.9
Difference	-29.4	-27.1	-7.8	23.7	5.0	-1.8	0.8	-1.1	-2.8	-2.8	5.0	-2.3
Percent Difference[3]	-5.0%	-5.3%	-1.5%	4.6%	1.1%	-0.5%	0.2%	-0.3%	-0.8%	-0.8%	1.3%	-0.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	340.3	304.6	298.3	393.4	341.5	295.2	250.5	278.5	287.8	287.1	318.4	485.8
WSIP 2070 With Project	327.4	297.7	301.4	411.7	345.6	294.6	249.3	278.3	288.4	286.0	319.1	485.3
Difference	-12.9	-6.9	3.1	18.3	4.1	-0.5	-1.2	-0.2	0.6	-1.0	0.7	-0.4
Percent Difference	-3.8%	-2.2%	1.0%	4.7%	1.2%	-0.2%	-0.5%	-0.1%	0.2%	-0.4%	0.2%	-0.1%
Above Normal (13.4%)												
WSIP 2070 Without Project	300.3	309.2	371.1	465.0	395.4	309.0	303.8	351.2	308.1	277.4	292.6	422.9
WSIP 2070 With Project	292.8	301.7	367.4	502.4	399.8	315.5	304.8	351.2	307.8	282.6	300.8	427.6
Difference	-7.4	-7.5	-3.7	37.4	4.4	6.5	0.9	-0.1	-0.2	5.3	8.1	4.7
Percent Difference	-2.5%	-2.4%	-1.0%	8.1%	1.1%	2.1%	0.3%	0.0%	-0.1%	1.9%	2.8%	1.1%
Below Normal (15.9%)												
WSIP 2070 Without Project	793.2	628.5	610.4	581.9	473.4	382.8	362.5	382.9	330.6	293.4	354.3	650.9
WSIP 2070 With Project	740.3	550.2	573.0	625.6	491.2	392.7	364.8	379.5	322.0	291.8	363.5	667.9
Difference	-52.8	-78.3	-37.3	43.7	17.7	9.9	2.3	-3.4	-8.7	-1.6	9.2	17.0
Percent Difference	-6.7%	-12.5%	-6.1%	7.5%	3.7%	2.6%	0.6%	-0.9%	-2.6%	-0.5%	2.6%	2.6%
Dry (24.4%)												
WSIP 2070 Without Project	773.1	630.2	614.9	542.5	506.4	470.4	456.9	441.1	359.9	361.1	460.2	621.4
WSIP 2070 With Project	746.9	617.3	646.5	574.1	519.3	466.6	461.5	440.6	354.8	359.0	480.5	623.5
Difference	-26.2	-12.9	31.5	31.5	12.9	-3.8	4.5	-0.5	-5.2	-2.1	20.3	2.0
Percent Difference	-3.4%	-2.0%	5.1%	5.8%	2.5%	-0.8%	1.0%	-0.1%	-1.4%	-0.6%	4.4%	0.3%
Critical (14.6%)												
WSIP 2070 Without Project	825.1	820.3	817.7	726.3	626.8	559.1	521.0	479.7	452.4	489.9	615.0	667.3
WSIP 2070 With Project	760.1	762.9	748.8	714.4	607.4	537.7	518.1	477.5	449.9	473.5	596.7	626.5
Difference	-65.0	-57.4	-68.9	-11.9	-19.4	-21.4	-2.9	-2.2	-2.5	-16.5	-18.3	-40.7
Percent Difference	-7.9%	-7.0%	-8.4%	-1.6%	-3.1%	-3.8%	-0.6%	-0.5%	-0.5%	-3.4%	-3.0%	-6.1%

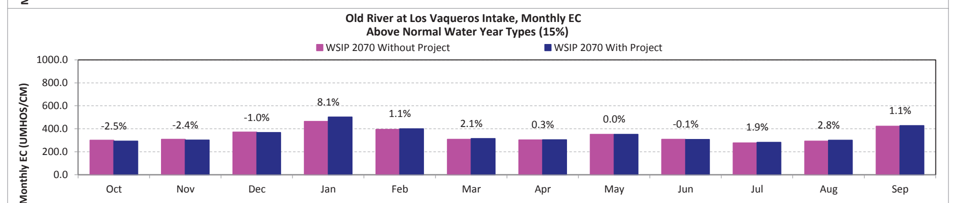
1 Based on the 82-year simulation period

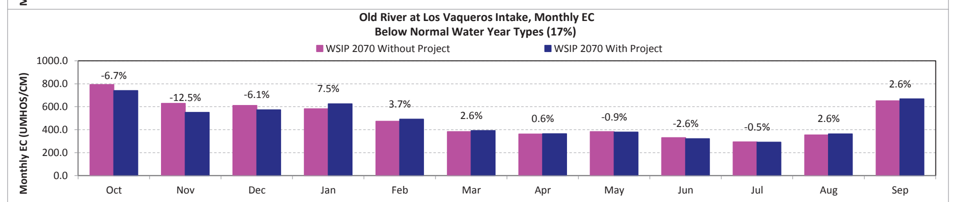
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

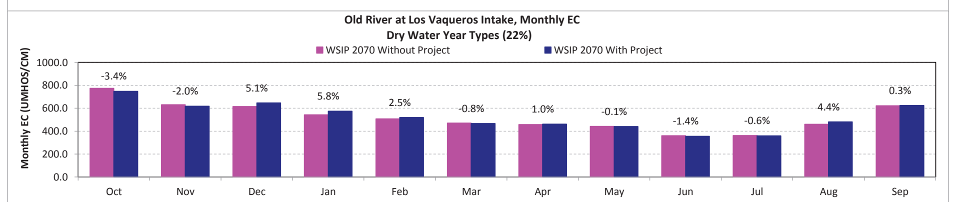
3 Relative difference of the monthly average











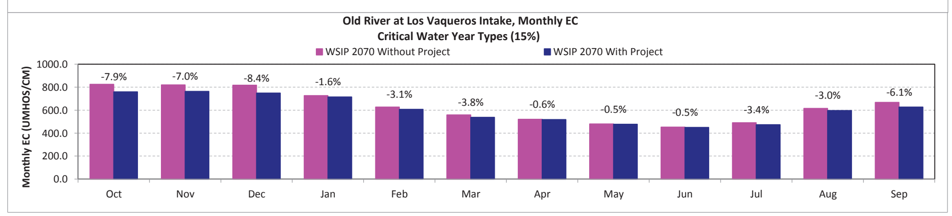


Table SQ-30-a
Victoria Canal at Alternative Intake, Monthly EC
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	460.0	438.5	441.8	507.4	477.4	434.1	382.5	374.0	367.0	328.5	322.8	401.6
WSIP 2070 With Project	448.4	425.2	432.7	517.3	480.5	432.9	383.4	373.1	365.0	323.3	322.3	397.0
Difference	-11.6	-13.4	-9.1	9.9	3.1	-1.2	0.9	-0.8	-1.9	-5.2	-0.5	-4.7
Percent Difference[3]	-2.5%	-3.1%	-2.1%	2.0%	0.7%	-0.3%	0.2%	-0.2%	-0.5%	-1.6%	-0.2%	-1.2%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	378.0	365.3	325.8	422.6	340.9	298.8	249.9	272.8	331.2	338.3	284.7	384.3
WSIP 2070 With Project	371.4	359.8	323.5	432.2	341.8	297.6	249.0	272.8	331.9	337.8	282.7	385.2
Difference	-6.5	-5.5	-2.3	9.6	0.9	-1.1	-0.9	0.1	0.8	-0.5	-1.9	0.9
Percent Difference	-1.7%	-1.5%	-0.7%	2.3%	0.3%	-0.4%	-0.4%	0.0%	0.2%	-0.2%	-0.7%	0.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	340.9	353.5	358.2	482.6	426.3	338.1	307.6	343.5	350.6	310.3	259.1	334.6
WSIP 2070 With Project	337.4	346.0	353.3	501.1	428.4	340.5	308.2	343.3	350.3	310.8	261.6	337.4
Difference	-3.5	-7.5	-4.9	18.5	2.2	2.5	0.7	-0.2	-0.3	0.5	2.5	2.8
Percent Difference	-1.0%	-2.1%	-1.4%	3.8%	0.5%	0.7%	0.2%	-0.1%	-0.1%	0.2%	1.0%	0.9%
Below Normal (15.9%)												
WSIP 2070 Without Project	524.3	453.3	478.0	551.0	530.8	458.9	390.0	384.2	354.1	275.4	276.3	404.8
WSIP 2070 With Project	508.5	426.1	455.2	569.2	542.7	466.0	392.7	381.1	347.6	271.5	278.5	413.0
Difference	-15.7	-27.1	-22.8	18.2	11.9	7.1	2.6	-3.1	-6.5	-3.9	2.2	8.3
Percent Difference	-3.0%	-6.0%	-4.8%	3.3%	2.2%	1.5%	0.7%	-0.8%	-1.8%	-1.4%	0.8%	2.0%
Dry (24.4%)												
WSIP 2070 Without Project	524.0	473.7	495.1	520.7	552.2	548.3	491.4	447.6	383.9	312.9	356.9	415.5
WSIP 2070 With Project	515.8	462.7	509.9	539.1	562.0	545.2	494.6	446.8	381.0	303.1	360.0	404.6
Difference	-8.2	-10.9	14.8	18.4	9.7	-3.1	3.1	-0.8	-3.0	-9.8	3.1	-10.9
Percent Difference	-1.6%	-2.3%	3.0%	3.5%	1.8%	-0.6%	0.6%	-0.2%	-0.8%	-3.1%	0.9%	-2.6%
Critical (14.6%)												
WSIP 2070 Without Project	570.8	600.8	641.6	644.5	637.5	598.4	548.8	487.3	445.0	407.6	457.0	474.1
WSIP 2070 With Project	539.7	575.7	588.9	624.4	625.9	587.8	547.9	486.4	442.4	393.0	447.9	446.8
Difference	-31.2	-25.0	-52.7	-20.1	-11.6	-10.6	-0.9	-0.9	-2.6	-14.6	-9.1	-27.3
Percent Difference	-5.5%	-4.2%	-8.2%	-3.1%	-1.8%	-1.8%	-0.2%	-0.2%	-0.6%	-3.6%	-2.0%	-5.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SQ-31-a
Clifton Court Forebay, Monthly EC
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	541.0	492.4	500.5	523.6	470.7	426.7	391.1	383.7	388.4	353.9	372.4	497.0
WSIP 2070 With Project	526.5	470.8	488.8	540.7	475.3	425.7	389.6	381.9	383.9	346.9	373.7	497.7
Difference	-14.5	-21.6	-11.7	17.1	4.6	-1.0	-1.5	-1.7	-4.4	-7.0	1.3	0.8
Percent Difference[3]	-2.7%	-4.4%	-2.3%	3.3%	1.0%	-0.2%	-0.4%	-0.5%	-1.1%	-2.0%	0.3%	0.2%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	376.6	339.0	324.5	401.6	317.6	281.8	255.2	261.1	317.1	323.8	304.9	455.8
WSIP 2070 With Project	366.3	331.4	325.3	416.4	318.1	281.3	254.8	261.2	318.2	323.8	303.4	457.2
Difference	-10.3	-7.6	0.8	14.8	0.6	-0.4	-0.4	0.1	1.0	0.0	-1.4	1.4
Percent Difference	-2.7%	-2.2%	0.3%	3.7%	0.2%	-0.2%	-0.2%	0.0%	0.3%	0.0%	-0.5%	0.3%
Above Normal (13.4%)												
WSIP 2070 Without Project	323.3	327.3	377.5	486.6	409.9	321.6	299.1	328.9	346.1	309.4	281.0	403.0
WSIP 2070 With Project	320.2	319.8	371.8	518.3	413.7	324.8	301.4	328.9	345.8	309.2	284.6	409.3
Difference	-3.1	-7.5	-5.7	31.8	3.8	3.1	2.2	0.0	-0.3	-0.2	3.6	6.3
Percent Difference	-0.9%	-2.3%	-1.5%	6.5%	0.9%	1.0%	0.7%	0.0%	-0.1%	-0.1%	1.3%	1.6%
Below Normal (15.9%)												
WSIP 2070 Without Project	704.7	579.2	572.9	587.6	530.7	443.7	386.9	381.6	378.8	300.8	323.0	534.2
WSIP 2070 With Project	678.6	518.4	534.5	614.1	550.3	450.5	388.8	378.7	367.3	295.4	327.2	552.5
Difference	-26.0	-60.8	-38.4	26.6	19.6	6.8	1.9	-2.9	-11.5	-5.4	4.2	18.2
Percent Difference	-3.7%	-10.5%	-6.7%	4.5%	3.7%	1.5%	0.5%	-0.8%	-3.0%	-1.8%	1.3%	3.4%
Dry (24.4%)												
WSIP 2070 Without Project	678.6	585.1	583.8	553.8	551.5	536.0	493.9	467.2	427.7	369.9	427.4	525.4
WSIP 2070 With Project	672.8	568.9	608.0	578.7	564.6	536.6	489.1	464.6	420.2	355.1	438.6	526.3
Difference	-5.7	-16.2	24.3	24.9	13.1	0.6	-4.8	-2.6	-7.5	-14.8	11.2	0.8
Percent Difference	-0.8%	-2.8%	4.2%	4.5%	2.4%	0.1%	-1.0%	-0.6%	-1.8%	-4.0%	2.6%	0.2%
Critical (14.6%)												
WSIP 2070 Without Project	690.3	727.4	777.0	702.1	658.6	636.7	602.9	562.8	526.2	490.8	564.7	584.6
WSIP 2070 With Project	653.8	695.8	701.7	687.7	642.2	619.3	597.6	558.1	519.0	473.6	549.9	559.9
Difference	-36.5	-31.5	-75.4	-14.5	-16.4	-17.4	-5.3	-4.6	-7.2	-17.2	-14.8	-24.7
Percent Difference	-5.3%	-4.3%	-9.7%	-2.1%	-2.5%	-2.7%	-0.9%	-0.8%	-1.4%	-3.5%	-2.6%	-4.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

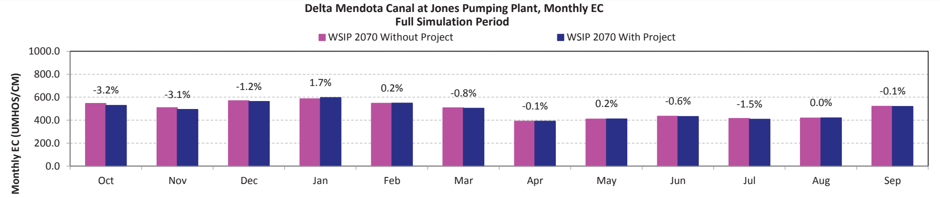
Table SQ-32-a
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Long-term Average and Average by Water Year Type

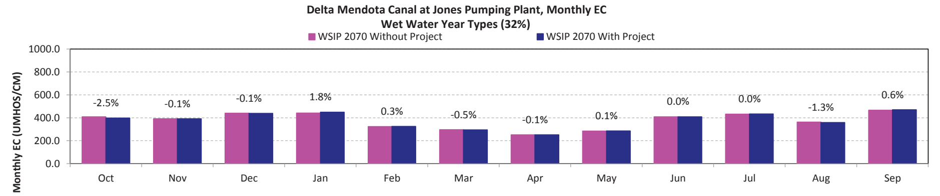
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly EC (UMHOS/CM)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	545.4	508.5	568.6	586.5	547.0	507.7	391.4	410.1	434.5	414.5	419.3	520.1
WSIP 2070 With Project	528.2	492.6	562.1	596.2	548.0	503.4	390.9	410.8	431.8	408.1	419.4	519.5
Difference	-17.2	-15.9	-6.6	9.7	1.0	-4.2	-0.5	0.8	-2.8	-6.4	0.1	-0.7
Percent Difference[3]	-3.2%	-3.1%	-1.2%	1.7%	0.2%	-0.8%	-0.1%	0.2%	-0.6%	-1.5%	0.0%	-0.1%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	408.2	391.8	439.7	441.7	323.7	296.4	251.7	284.7	409.3	432.8	363.1	466.8
WSIP 2070 With Project	398.2	391.4	439.2	449.6	324.8	294.9	251.5	285.0	409.2	433.0	358.4	469.7
Difference	-10.0	-0.4	-0.5	8.0	1.1	-1.5	-0.2	0.4	-0.1	0.2	-4.7	3.0
Percent Difference	-2.5%	-0.1%	-0.1%	1.8%	0.3%	-0.5%	-0.1%	0.1%	0.0%	0.0%	-1.3%	0.6%
Above Normal (13.4%)												
WSIP 2070 Without Project	374.3	381.4	507.0	578.8	440.9	336.7	301.8	367.7	422.8	406.5	351.1	444.9
WSIP 2070 With Project	377.7	374.7	501.1	593.8	442.7	339.1	302.1	367.8	421.3	392.7	347.6	450.2
Difference	3.4	-6.8	-6.0	15.0	1.8	2.5	0.4	0.1	-1.4	-13.8	-3.5	5.2
Percent Difference	0.9%	-1.8%	-1.2%	2.6%	0.4%	0.7%	0.1%	0.0%	-0.3%	-3.4%	-1.0%	1.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	651.9	559.3	595.2	660.1	625.3	532.9	381.6	411.7	414.6	354.4	382.9	561.5
WSIP 2070 With Project	627.1	515.0	572.4	674.6	633.7	532.6	381.0	411.6	405.4	345.3	382.7	575.0
Difference	-24.8	-44.3	-22.8	14.5	8.5	-0.3	-0.6	-0.1	-9.1	-9.1	-0.2	13.5
Percent Difference	-3.8%	-7.9%	-3.8%	2.2%	1.4%	-0.1%	-0.2%	0.0%	-2.2%	-2.6%	-0.1%	2.4%
Dry (24.4%)												
WSIP 2070 Without Project	653.3	578.8	634.4	639.2	694.9	659.7	479.1	497.0	443.1	392.7	463.1	554.1
WSIP 2070 With Project	635.8	566.9	647.2	655.2	693.7	647.5	477.1	499.3	439.6	387.3	474.5	552.1
Difference	-17.4	-11.9	12.8	16.0	-1.2	-12.2	-2.0	2.3	-3.6	-5.3	11.4	-2.0
Percent Difference	-2.7%	-2.1%	2.0%	2.5%	-0.2%	-1.9%	-0.4%	0.5%	-0.8%	-1.4%	2.5%	-0.4%
Critical (14.6%)												
WSIP 2070 Without Project	704.0	705.8	766.2	739.6	796.7	841.4	640.6	573.8	507.1	483.5	569.8	603.3
WSIP 2070 With Project	660.9	672.1	731.4	732.8	792.6	834.1	641.2	574.3	505.7	471.0	565.2	576.3
Difference	-43.0	-33.6	-34.8	-6.8	-4.1	-7.4	0.5	0.5	-1.5	-12.5	-4.5	-27.0
Percent Difference	-6.1%	-4.8%	-4.5%	-0.9%	-0.5%	-0.9%	0.1%	0.1%	-0.3%	-2.6%	-0.8%	-4.5%

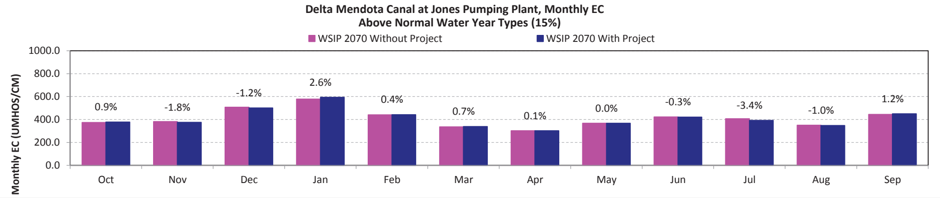
1 Based on the 82-year simulation period

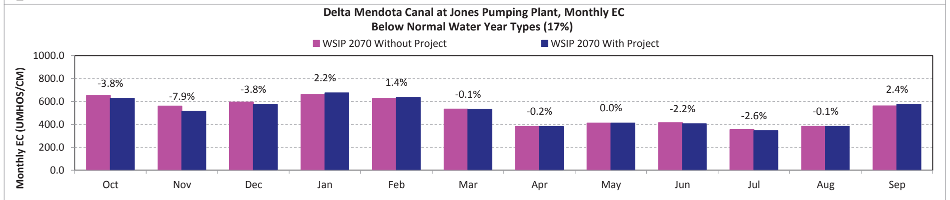
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

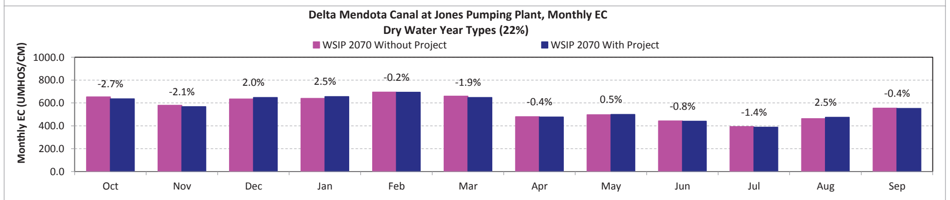
3 Relative difference of the monthly average

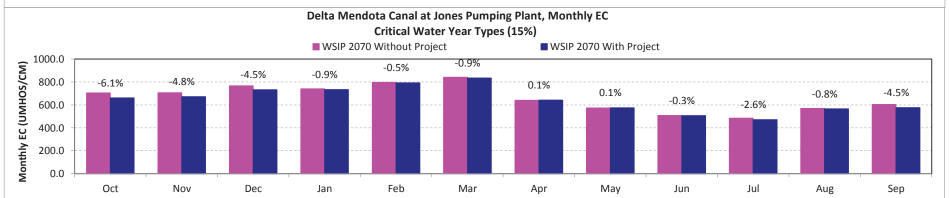












Sacramento-San Joaquin Delta Modeling

Exceedance Probability Charts and Tables

Figure SQ-01-b
X2, Monthly Position
Probability of Exceedance

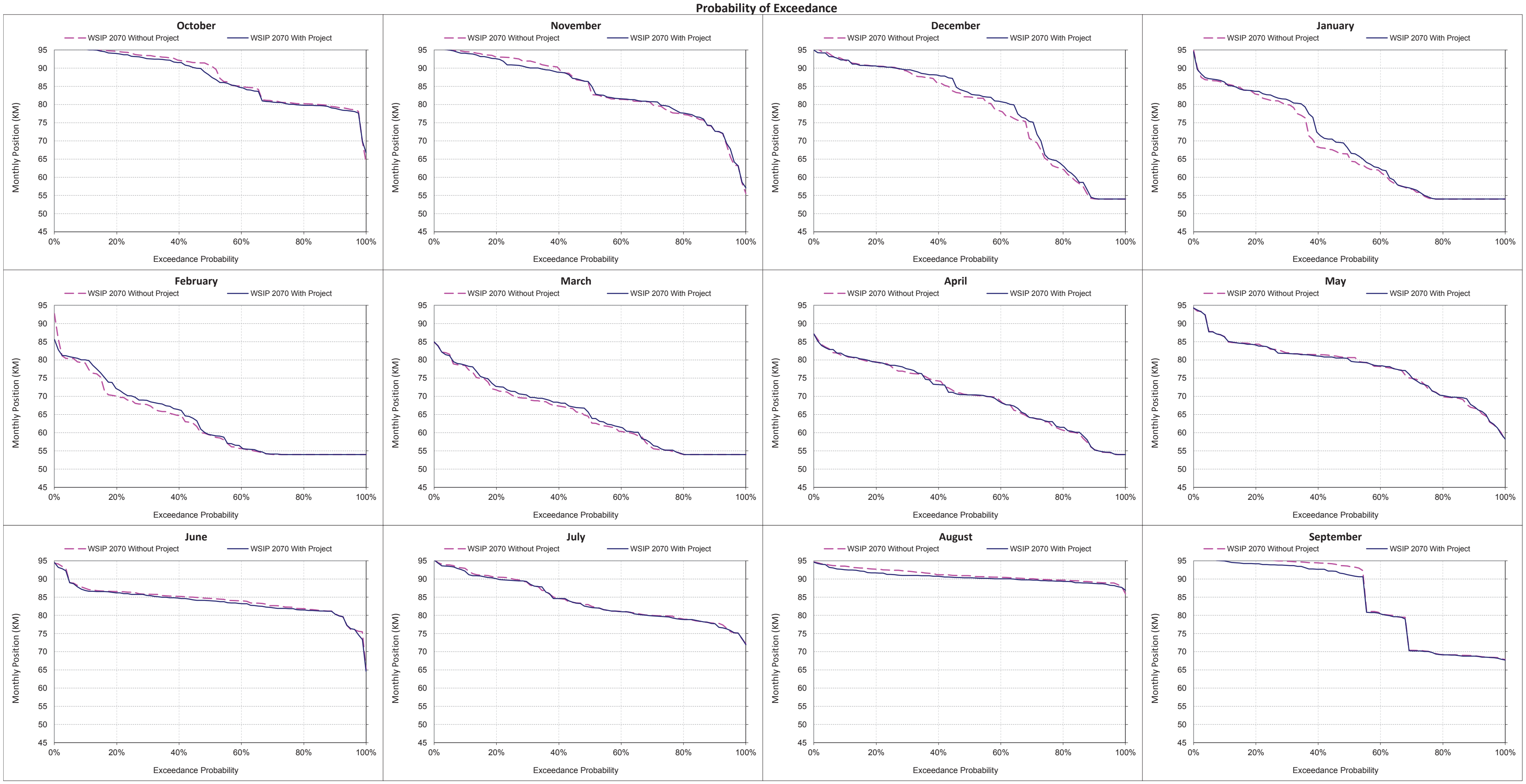


Table SQ-01-b

X2, Monthly Position

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	97.8	97.5	0	-0.4%
1.2%	97.5	97.4	0	-0.1%
2.5%	97.4	97.4	0	0.0%
3.7%	97.4	96.0	-1	-1.4%
4.9%	96.7	95.9	-1	-0.8%
6.2%	96.6	95.9	-1	-0.7%
7.4%	96.4	95.6	-1	-0.8%
8.6%	96.4	95.4	-1	-1.0%
9.9%	95.6	95.3	0	-0.3%
11.1%	95.3	95.1	0	-0.2%
12.3%	95.1	95.0	0	-0.1%
13.6%	95.1	95.0	0	-0.1%
14.8%	95.0	94.7	0	-0.3%
16.0%	95.0	94.5	0	-0.5%
17.3%	94.8	94.2	-1	-0.6%
18.5%	94.7	94.2	-1	-0.6%
19.8%	94.7	94.0	-1	-0.7%
21.0%	94.5	93.9	-1	-0.7%
22.2%	94.4	93.7	-1	-0.7%
23.5%	94.4	93.7	-1	-0.7%
24.7%	94.1	93.3	-1	-0.9%
25.9%	93.7	93.2	-1	-0.5%
27.2%	93.6	93.1	0	-0.5%
28.4%	93.5	92.9	-1	-0.6%
29.6%	93.5	92.6	-1	-1.0%
30.9%	93.5	92.5	-1	-1.0%
32.1%	93.3	92.5	-1	-0.8%
33.3%	93.2	92.5	-1	-0.8%
34.6%	93.1	92.4	-1	-0.7%
35.8%	93.0	92.2	-1	-0.8%
37.0%	92.8	92.2	-1	-0.7%
38.3%	92.7	91.7	-1	-1.1%
39.5%	92.2	91.6	-1	-0.7%
40.7%	92.1	91.5	-1	-0.6%
42.0%	91.9	90.8	-1	-1.2%
43.2%	91.8	90.6	-1	-1.2%
44.4%	91.6	90.2	-1	-1.5%
45.7%	91.5	90.0	-2	-1.7%
46.9%	91.5	89.9	-2	-1.7%
48.1%	91.4	89.0	-2	-2.7%
49.4%	91.0	88.3	-3	-3.0%
50.6%	90.5	87.4	-3	-3.4%
51.9%	89.7	86.9	-3	-3.1%
53.1%	87.2	86.1	-1	-1.3%
54.3%	86.3	86.1	0	-0.3%
55.6%	86.3	85.9	0	-0.4%
56.8%	85.3	85.4	0	0.0%
58.0%	85.1	85.2	0	0.1%
59.3%	85.1	84.8	0	-0.4%
60.5%	84.9	84.5	0	-0.4%
61.7%	84.7	84.0	-1	-0.8%
63.0%	84.7	84.0	-1	-0.8%
64.2%	84.6	83.7	-1	-1.1%
65.4%	84.2	83.6	-1	-0.6%
66.7%	81.3	81.0	0	-0.4%
67.9%	81.2	80.9	0	-0.3%
69.1%	81.1	80.8	0	-0.4%
70.4%	80.9	80.6	0	-0.4%
71.6%	80.9	80.6	0	-0.4%
72.8%	80.6	80.5	0	0.0%
74.1%	80.6	80.3	0	-0.4%
75.3%	80.6	80.1	0	-0.6%
76.5%	80.4	80.0	0	-0.4%
77.8%	80.3	79.9	0	-0.4%
79.0%	80.2	79.9	0	-0.5%
80.2%	80.2	79.8	0	-0.5%
81.5%	80.2	79.8	0	-0.5%
82.7%	80.1	79.8	0	-0.4%
84.0%	80.1	79.7	0	-0.4%
85.2%	80.0	79.7	0	-0.4%
86.4%	79.9	79.7	0	-0.3%
87.7%	79.8	79.5	0	-0.3%
88.9%	79.5	79.0	0	-0.5%
90.1%	79.4	78.9	0	-0.5%
91.4%	79.1	78.7	0	-0.6%
92.6%	79.1	78.4	-1	-0.9%
93.8%	78.9	78.3	-1	-0.7%
95.1%	78.7	78.2	0	-0.5%
96.3%	78.6	78.1	-1	-0.6%
97.5%	78.1	77.7	0	-0.6%
98.8%	70.0	69.9	0	0.0%
100.0%	64.1	66.8	3	4.2%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	96.0	96.6	1	0.6%
1.2%	95.5	95.8	0	0.4%
2.5%	95.2	95.2	0	0.0%
3.7%	95.1	95.1	0	0.0%
4.9%	95.0	95.0	0	-0.1%
6.2%	94.9	94.8	0	-0.1%
7.4%	94.8	94.4	0	-0.4%
8.6%	94.7	94.1	-1	-0.6%
9.9%	94.5	94.1	0	-0.5%
11.1%	94.5	94.0	-1	-0.5%
12.3%	94.4	93.9	0	-0.5%
13.6%	94.1	93.6	-1	-0.5%
14.8%	94.0	93.2	-1	-0.8%
16.0%	93.6	93.2	0	-0.5%
17.3%	93.6	93.0	-1	-0.7%
18.5%	93.5	92.7	-1	-0.9%
19.8%	93.1	92.6	0	-0.5%
21.0%	93.1	92.4	-1	-0.7%
22.2%	93.0	91.9	-1	-1.2%
23.5%	93.0	90.9	-2	-2.2%
24.7%	92.9	90.9	-2	-2.2%
25.9%	92.7	90.8	-2	-2.0%
27.2%	92.6	90.8	-2	-1.9%
28.4%	92.0	90.5	-1	-1.6%
29.6%	92.0	90.3	-2	-1.8%
30.9%	92.0	90.1	-2	-2.0%
32.1%	91.7	90.1	-2	-1.8%
33.3%	91.4	90.0	-1	-1.5%
34.6%	91.0	89.8	-1	-1.3%
35.8%	90.8	89.6	-1	-1.3%
37.0%	90.5	89.5	-1	-1.1%
38.3%	90.5	89.2	-1	-1.4%
39.5%	90.3	88.9	-1	-1.6%
40.7%	89.1	88.8	0	-0.3%
42.0%	88.7	88.7	0	0.0%
43.2%	88.6	88.2	0	-0.4%
44.4%	87.7	87.2	0	-0.5%
45.7%	86.8	87.0	0	0.3%
46.9%	86.7	86.7	0	0.1%
48.1%	86.5	86.4	0	-0.1%
49.4%	86.2	86.3	0	0.1%
50.6%	82.7	84.9	2	2.6%
51.9%	82.7	82.8	0	0.2%
53.1%	82.5	82.6	0	0.2%
54.3%	82.0	82.5	1	0.7%
55.6%	81.9	82.1	0	0.2%
56.8%	81.6	81.9	0	0.4%
58.0%	81.5	81.7	0	0.3%
59.3%	81.4	81.7	0	0.3%
60.5%	81.4	81.5	0	0.1%
61.7%	81.4	81.5	0	0.2%
63.0%	81.2	81.4	0	0.2%
64.2%	80.9	81.4	0	0.5%
65.4%	80.9	81.1	0	0.2%
66.7%	80.8	81.0	0	0.2%
67.9%	80.8	80.9	0	0.1%
69.1%	80.7	80.8	0	0.1%
70.4%	79.8	80.8	1	1.3%
71.6%	79.7	80.7	1	1.3%
72.8%	79.5	79.8	0	0.4%
74.1%	78.7	79.7	1	1.3%
75.3%	78.2	79.5	1	1.7%
76.5%	77.7	78.8	1	1.5%
77.8%	77.6	78.3	1	0.8%
79.0%	77.5	77.7	0	0.3%
80.2%	77.2	77.6	0	0.5%
81.5%	77.1	77.5	0	0.5%
82.7%	76.7	77.2	1	0.7%
84.0%	76.4	76.7	0	0.3%
85.2%	75.9	76.5	1	0.8%
86.4%	75.7	76.0	0	0.3%
87.7%	74.3	74.3	0	0.1%
88.9%	74.1	74.2	0	0.2%
90.1%	72.6	72.6	0	0.0%
91.4%	72.5	72.6	0	0.1%
92.6%	72.0	72.1	0	0.1%
93.8%	68.9	69.3	0	0.5%
95.1%	65.6	67.8	2	3.4%
96.3%	63.3	64.2	1	1.4%
97.5%	63.2	63.2	0	0.0%
98.8%	58.5	58.7	0	0.4%
100.0%	55.6	57.1	2	2.7%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.5	95.0	-1	-0.6%
1.2%	95.2	94.3	-1	-1.0%
2.5%	94.6	94.2	0	-0.5%
3.7%	94.6	94.2	0	-0.4%
4.9%	94.0	93.2	-1	-0.8%
6.2%	93.2	93.1	0	-0.1%
7.4%	93.1	92.8	0	-0.3%
8.6%	92.7	92.3	0	-0.5%
9.9%	92.2	92.3	0	0.1%
11.1%	91.9	92.2	0	0.4%
12.3%	91.4	91.1	0	-0.3%
13.6%	91.3	91.1	0	-0.1%
14.8%	91.0	90.8	0	-0.3%
16.0%	90.9	90.7	0	-0.1%
17.3%	90.8	90.7	0	-0.1%
18.5%	90.6	90.6	0	0.0%
19.8%	90.6	90.6	0	0.0%
21.0%	90.5	90.4	0	-0.1%
22.2%	90.5	90.4	0	-0.1%
23.5%	90.3	90.3	0	-0.1%
24.7%	90.3	90.3	0	0.0%
25.9%	90.2	90.0	0	-0.2%
27.2%	89.8	89.9	0	0.1%
28.4%	89.5	89.7	0	0.3%
29.6%	89.3	89.6	0	0.3%
30.9%	88.8	89.5	1	0.8%
32.1%	88.1	89.2	1	1.4%
33.3%	87.7	89.0	1	1.5%
34.6%	87.7	88.5	1	1.0%
35.8%	87.5	88.4	1	1.1%
37.0%	87.4	88.2	1	0.9%
38.3%	87.2	88.2	1	1.2%
39.5%	86.0	88.1	2	2.4%
40.7%	85.9	87.8	2	2.3%
42.0%	85.3	87.8	3	3.0%
43.2%	85.0	87.4	2	2.8%
44.4%	83.8	87.2	3	4.1%
45.7%	83.3	84.8	1	1.8%
46.9%	83.2	84.1	1	1.2%
48.1%	82.1	83.8	2	2.0%
49.4%	82.1	83.4	1	1.6%
50.6%	82.0	82.8	1	0.9%
51.9%	81.8	82.6	1	1.0%
53.1%	81.7	82.6	1	1.0%
54.3%	81.7	82.2	1	0.6%
55.6%	80.4	82.1	2	2.0%
56.8%	80.3	82.0	2	2.1%
58.0%	78.8	81.0	2	2.8%
59.3%	78.4	81.0	3	3.3%
60.5%	78.0	80.7	3	3.5%
61.7%	76.8	80.5	4	4.8%
63.0%	76.8	80.1	3	4.3%
64.2%	76.2	80.0	4	4.9%
65.4%	75.7	77.5	2	2.4%
66.7%	75.7	76.5	1	1.1%
67.9%	75.3	76.2	1	1.2%
69.1%	70.7	75.3	5	6.5%
70.4%	70.1	75.2	5	7.3%
71.6%	69.5	71.8	2	3.4%
72.8%	67.6	70.0	2	3.6%
74.1%	65.3	66.3	1	1.5%
75.3%	64.5	65.1	1	0.9%
76.5%	63.2	64.8	2	2.5%
77.8%	62.8	64.6	2	2.8%
79.0%	62.5	63.9	1	2.2%
80.2%	62.1	63.0	1	1.4%
81.5%	60.8	61.7	1	1.5%
82.7%	60.0	61.1	1	1.8%
84.0%	59.0	60.1	1	1.8%
85.2%	58.3	58.6	0	0.6%
86.4%	57.5	58.6	1	1.9%
87.7%	55.5	56.6	1	1.9%
88.9%	54.2	54.5	0	0.6%
90.1%	54.1	54.2	0	0.2%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.1	94.6	0	-0.5%
1.2%	90.0	89.7	0	-0.4%
2.5%	87.5	88.4	1	1.1%
3.7%	86.9	87.4	1	0.7%
4.9%	86.7	87.1	0	0.4%
6.2%	86.6	87.0	0	0.5%
7.4%	86.5	86.8	0	0.3%
8.6%	86.3	86.6	0	0.4%
9.9%	85.7	86.2	1	0.7%
11.1%	85.6	85.2	0	-0.5%
12.3%	85.3	85.1	0	-0.2%
13.6%	85.0	84.9	0	-0.2%
14.8%	84.8	84.3	0	-0.6%
16.0%	84.0	84.0	0	0.0%
17.3%	83.9	83.9	0	0.1%
18.5%	83.7	83.8	0	0.2%
19.8%	82.9	83.7	1	0.9%
21.0%	82.7	83.6	1	1.1%
22.2%	81.7	83.0	1	1.5%
23.5%	81.5	82.7	1	1.5%
24.7%	81.2	82.7	2	1.8%
25.9%	81.0	82.2	1	1.4%
27.2%	81.0	81.8	1	0.9%
28.4%	80.4	81.6	1	1.4%
29.6%	79.9	81.5	2	2.0%
30.9%	79.9	81.1	1	1.5%
32.1%	79.2	80.4	1	1.6%
33.3%	77.5	80.4	3	3.7%
34.6%	77.0	80.2	3	4.2%
35.8%	76.3	79.4	3	4.0%
37.0%	71.4	77.4	6	8.5%
38.3%	70.4	76.5	6	8.7%
39.5%	68.5	72.4	4	5.8%
40.7%	68.1	71.5	3	4.9%
42.0%	68.0	70.7	3	3.9%
43.2%	67.7	70.5	3	4.1%
44.4%	67.6	70.5	3	4.3%
45.7%	67.1	69.6	2	3.7%
46.9%	66.6	69.6	3	4.5%
48.1%	66.5	69.4	3	4.5%
49.4%	66.4	68.2	2	2.6%
50.6%	64.4	66.6	2	3.4%
51.9%	64.3	66.4	2	3.4%
53.1%	63.5	65.8	2	3.6%
54.3%	63.4	65.0	2	2.5%
55.6%	62.6	64.1	1	2.3%
56.8%	62.2	63.6	1	2.3%
58.0%	62.1	62.9	1	1.3%
59.3%	62.0	62.6	1	1.0%
60.5%	61.0	62.0	1	1.6%
61.7%	60.4	61.8	1	2.3%
63.0%	59.1	59.8	1	1.2%
64.2%	58.4	59.3	1	1.5%
65.4%	57.8	57.9	0	0.2%
66.7%	57.6	57.5	0	-0.2%
67.9%	57.2	57.3	0	0.1%
69.1%	56.8	57.1	0	0.6%
70.4%	56.7	56.8	0	0.2%
71.6%	55.9	56.5	1	1.0%
72.8%	55.8	55.7	0	-0.2%
74.1%	54.8	55.0	0	0.4%
75.3%	54.3	54.6	0	0.6%
76.5%	54.0	54.2	0	0.3%
77.8%	54.0	54.0	0	0.0%
79.0%	54.0	54.0	0	0.0%
80.2%	54.0	54.0	0	0.0%
81.5%	54.0	54.0	0	0.0%
82.7%	54.0	54.0	0	0.0%
84.0%	54.0	54.0	0	0.0%
85.2%	54.0	54.0	0	0.0%
86.4%	54.0	54.0	0	0.0%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

Table SQ-01-b
X2, Monthly Position
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	92.7	85.6	-7	-7.7%
1.2%	85.8	82.8	-3	-3.5%
2.5%	81.1	81.2	0	0.1%
3.7%	80.4	81.2	1	0.9%
4.9%	80.4	80.9	1	0.6%
6.2%	80.4	80.7	0	0.3%
7.4%	79.5	80.4	1	1.2%
8.6%	79.3	80.1	1	0.9%
9.9%	79.2	80.0	1	1.1%
11.1%	77.3	79.8	3	3.3%
12.3%	76.4	78.6	2	2.9%
13.6%	76.2	77.5	1	1.8%
14.8%	75.3	76.5	1	1.6%
16.0%	71.5	75.2	4	5.1%
17.3%	70.4	73.9	3	4.9%
18.5%	70.3	73.8	4	5.0%
19.8%	70.1	72.2	2	3.0%
21.0%	69.7	71.6	2	2.8%
22.2%	69.7	70.8	1	1.7%
23.5%	69.0	70.2	1	1.8%
24.7%	68.9	70.1	1	1.8%
25.9%	68.1	69.8	2	2.5%
27.2%	67.9	69.0	1	1.6%
28.4%	67.9	69.0	1	1.6%
29.6%	67.7	68.9	1	1.8%
30.9%	67.3	68.5	1	1.7%
32.1%	66.4	68.3	2	2.8%
33.3%	66.0	68.0	2	3.0%
34.6%	65.8	67.9	2	3.2%
35.8%	65.8	67.4	2	2.4%
37.0%	65.3	67.3	2	3.0%
38.3%	65.0	66.6	2	2.4%
39.5%	64.8	66.4	2	2.5%
40.7%	64.7	66.1	1	2.2%
42.0%	63.0	64.6	2	2.5%
43.2%	62.9	64.5	2	2.6%
44.4%	62.6	64.0	1	2.2%
45.7%	61.7	63.3	2	2.5%
46.9%	60.0	61.0	1	1.6%
48.1%	59.9	60.1	0	0.4%
49.4%	59.5	59.6	0	0.2%
50.6%	59.2	59.4	0	0.3%
51.9%	58.7	59.2	0	0.8%
53.1%	58.6	59.1	1	0.9%
54.3%	58.1	58.7	1	1.2%
55.6%	57.0	57.1	0	0.1%
56.8%	56.1	57.0	1	1.6%
58.0%	56.1	56.5	0	0.8%
59.3%	55.7	56.5	1	1.5%
60.5%	55.6	55.6	0	-0.2%
61.7%	55.4	55.5	0	0.2%
63.0%	55.2	55.4	0	0.4%
64.2%	54.9	55.3	0	0.7%
65.4%	54.8	54.9	0	0.3%
66.7%	54.5	54.7	0	0.4%
67.9%	54.2	54.2	0	0.0%
69.1%	54.1	54.2	0	0.1%
70.4%	54.0	54.1	0	0.3%
71.6%	54.0	54.1	0	0.2%
72.8%	54.0	54.0	0	0.0%
74.1%	54.0	54.0	0	0.0%
75.3%	54.0	54.0	0	0.0%
76.5%	54.0	54.0	0	0.0%
77.8%	54.0	54.0	0	0.0%
79.0%	54.0	54.0	0	0.0%
80.2%	54.0	54.0	0	0.0%
81.5%	54.0	54.0	0	0.0%
82.7%	54.0	54.0	0	0.0%
84.0%	54.0	54.0	0	0.0%
85.2%	54.0	54.0	0	0.0%
86.4%	54.0	54.0	0	0.0%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	84.9	85.0	0	0.1%
1.2%	83.9	83.9	0	-0.1%
2.5%	82.2	82.2	0	0.0%
3.7%	82.0	81.4	-1	-0.7%
4.9%	81.6	81.2	0	-0.5%
6.2%	78.9	79.6	1	0.8%
7.4%	78.7	79.0	0	0.4%
8.6%	78.5	78.9	0	0.4%
9.9%	78.5	78.6	0	0.1%
11.1%	77.3	78.3	1	1.3%
12.3%	76.7	78.1	1	1.9%
13.6%	75.1	76.8	2	2.2%
14.8%	75.0	75.5	1	0.7%
16.0%	74.8	75.1	0	0.4%
17.3%	73.9	74.8	1	1.2%
18.5%	72.1	73.6	2	2.1%
19.8%	71.8	72.7	1	1.3%
21.0%	71.4	72.6	1	1.7%
22.2%	71.4	72.5	1	1.6%
23.5%	71.2	71.7	1	0.8%
24.7%	70.5	71.4	1	1.3%
25.9%	69.9	71.3	1	2.1%
27.2%	69.6	70.7	1	1.5%
28.4%	69.5	70.5	1	1.5%
29.6%	69.5	70.4	1	1.3%
30.9%	69.0	69.7	1	1.1%
32.1%	68.8	69.7	1	1.3%
33.3%	68.8	69.5	1	1.0%
34.6%	68.5	69.5	1	1.3%
35.8%	68.5	69.2	1	1.0%
37.0%	67.9	68.9	1	1.5%
38.3%	67.5	68.4	1	1.3%
39.5%	67.4	68.4	1	1.5%
40.7%	67.2	68.1	1	1.3%
42.0%	67.1	68.1	1	1.6%
43.2%	66.8	67.4	1	0.9%
44.4%	66.6	67.1	0	0.7%
45.7%	65.7	66.9	1	1.9%
46.9%	65.7	66.8	1	1.7%
48.1%	64.9	66.7	2	2.9%
49.4%	64.5	65.7	1	1.7%
50.6%	62.6	63.9	1	2.0%
51.9%	62.6	63.9	1	2.1%
53.1%	62.2	63.1	1	1.5%
54.3%	61.9	63.0	1	1.8%
55.6%	61.8	62.4	1	0.9%
56.8%	61.5	62.2	1	1.1%
58.0%	61.4	61.8	0	0.7%
59.3%	60.4	61.6	1	2.0%
60.5%	60.3	61.3	1	1.7%
61.7%	60.0	60.4	0	0.7%
63.0%	60.0	60.3	0	0.6%
64.2%	59.7	60.1	0	0.8%
65.4%	59.1	60.1	1	1.7%
66.7%	58.9	58.3	-1	-0.9%
67.9%	57.3	58.1	1	1.3%
69.1%	56.4	57.4	1	1.9%
70.4%	55.6	56.4	1	1.5%
71.6%	55.5	56.2	1	1.4%
72.8%	55.3	55.6	0	0.5%
74.1%	55.2	55.2	0	0.0%
75.3%	55.2	55.2	0	0.1%
76.5%	54.9	55.2	0	0.6%
77.8%	54.8	54.6	0	-0.2%
79.0%	54.2	54.4	0	0.3%
80.2%	54.0	54.0	0	0.0%
81.5%	54.0	54.0	0	0.0%
82.7%	54.0	54.0	0	0.0%
84.0%	54.0	54.0	0	0.0%
85.2%	54.0	54.0	0	0.0%
86.4%	54.0	54.0	0	0.0%
87.7%	54.0	54.0	0	0.0%
88.9%	54.0	54.0	0	0.0%
90.1%	54.0	54.0	0	0.0%
91.4%	54.0	54.0	0	0.0%
92.6%	54.0	54.0	0	0.0%
93.8%	54.0	54.0	0	0.0%
95.1%	54.0	54.0	0	0.0%
96.3%	54.0	54.0	0	0.0%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	87.1	87.2	0	0.0%
1.2%	85.7	85.2	-1	-0.6%
2.5%	84.2	84.0	0	-0.3%
3.7%	83.6	83.3	0	-0.3%
4.9%	83.1	82.9	0	-0.2%
6.2%	82.0	82.8	1	1.0%
7.4%	81.9	81.9	0	0.0%
8.6%	81.3	81.9	1	0.7%
9.9%	81.2	81.2	0	0.0%
11.1%	80.8	81.0	0	0.2%
12.3%	80.7	80.7	0	0.0%
13.6%	80.3	80.6	0	0.4%
14.8%	80.2	80.3	0	0.1%
16.0%	79.9	80.1	0	0.3%
17.3%	79.6	80.0	0	0.4%
18.5%	79.5	79.6	0	0.1%
19.8%	79.5	79.4	0	-0.2%
21.0%	79.2	79.3	0	0.2%
22.2%	79.1	79.1	0	0.1%
23.5%	79.0	78.7	0	-0.3%
24.7%	78.3	78.6	0	0.3%
25.9%	77.4	78.5	1	1.4%
27.2%	76.9	78.3	1	1.8%
28.4%	76.9	78.1	1	1.5%
29.6%	76.7	77.6	1	1.3%
30.9%	76.4	77.4	1	1.4%
32.1%	76.2	77.1	1	1.1%
33.3%	76.2	76.4	0	0.2%
34.6%	75.9	76.3	0	0.5%
35.8%	75.5	74.7	-1	-1.0%
37.0%	74.8	74.5	0	-0.4%
38.3%	74.4	73.4	-1	-1.4%
39.5%	74.3	73.3	-1	-1.4%
40.7%	74.1	73.2	-1	-1.3%
42.0%	72.7	73.1	0	0.6%
43.2%	72.3	71.1	-1	-1.6%
44.4%	71.7	71.1	-1	-0.8%
45.7%	71.0	70.7	0	-0.5%
46.9%	70.9	70.5	0	-0.6%
48.1%	70.6	70.4	0	-0.2%
49.4%	70.4	70.4	0	0.0%
50.6%	70.4	70.4	0	0.1%
51.9%	70.3	70.4	0	0.1%
53.1%	70.2	70.3	0	0.2%
54.3%	70.2	70.3	0	0.1%
55.6%	69.9	69.9	0	0.0%
56.8%	69.9	69.9	0	0.1%
58.0%	69.8	69.5	0	-0.5%
59.3%	69.2	68.7	0	-0.7%
60.5%	68.2	68.1	0	-0.1%
61.7%	67.7	67.7	0	0.0%
63.0%	67.7	67.6	0	-0.1%
64.2%	66.2	67.3	1	1.7%
65.4%	65.9	66.7	1	1.2%
66.7%	65.3	65.6	0	0.6%
67.9%	64.8	65.2	0	0.6%
69.1%	64.1	64.2	0	0.1%
70.4%	64.1	64.1	0	0.0%
71.6%	63.7	63.8	0	0.2%
72.8%	63.7	63.7	0	-0.1%
74.1%	63.0	63.3	0	0.4%
75.3%	63.0	63.1	0	0.2%
76.5%	61.8	63.0	1	2.0%
77.8%	61.4	61.8	0	0.6%
79.0%	61.0	61.5	1	0.9%
80.2%	60.6	61.5	1	1.5%
81.5%	60.4	60.5	0	0.2%
82.7%	60.1	60.4	0	0.4%
84.0%	60.0	60.2	0	0.2%
85.2%	59.7	60.2	0	0.7%
86.4%	58.4	59.1	1	1.2%
87.7%	57.4	58.0	1	1.1%
88.9%	56.1	56.1	0	0.0%
90.1%	55.3	55.3	0	0.0%
91.4%	55.0	55.0	0	0.0%
92.6%	54.6	54.8	0	0.3%
93.8%	54.6	54.6	0	0.1%
95.1%	54.5	54.6	0	0.1%
96.3%	54.0	54.1	0	0.2%
97.5%	54.0	54.0	0	0.0%
98.8%	54.0	54.0	0	0.0%
100.0%	54.0	54.0	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	94.3	94.3	0	0.0%
1.2%	93.4	93.7	0	0.3%
2.5%	93.3	93.3	0	-0.1%
3.7%	92.4	92.4	0	-0.1%
4.9%	87.8	87.7	0	-0.1%
6.2%	87.8	87.7	0	-0.1%
7.4%	87.2	87.2	0	0.0%
8.6%	86.9	86.9	0	0.0%
9.9%	86.5	86.4	0	-0.1%
11.1%	84.9	85.1	0	0.2%
12.3%	84.8	84.9	0	0.2%
13.6%	84.8	84.8	0	0.0%
14.8%	84.7	84.6	0	-0.1%
16.0%	84.6	84.5	0	-0.1%
17.3%	84.6	84.3	0	-0.3%
18.5%	84.4	84.3	0	-0.1%
19.8%	84.3	84.2	0	-0.2%
21.0%	84.3	83.8	-1	-0.6%
22.2%	83.7	83.8	0	0.1%
23.5%	83.7	83.7	0	0.0%
24.7%	83.0	83.1	0	0.2%
25.9%	82.9	82.8	0	-0.1%
27.2%	82.8	81.9	-1	-1.2%
28.4%	82.4	81.8	-1	-0.7%
29.6%	82.0	81.8	0	-0.3%
30.9%	81.9	81.7	0	-0.3%
32.1%	81.7	81.6	0	-0.1%
33.3%	81.7	81.6	0	0.0%
34.6%	81.6	81.5	0	-0.2%
35.8%	81.5	81.4	0	-0.1%
37.0%	81.5	81.4	0	-0.2%
38.3%	81.5	81.3	0	-0.3%
39.5%	81.5	81.1	0	-0.5%
40.7%	81.5	81.1	0	-0.5%
42.0%	81.4	80.8	-1	-0.7%
43.2%	81.3	80.8	-1	-0.7%
44.4%	81.1	80.8	0	-0.4%
45.7%	81.1	80.5	-1	-0.7%
46.9%	80.9	80.5	0	-0.4%
48.1%	80.7	80.5	0	-0.3%
49.4%	80.7	80.5	0	-0.2%
50.6%	80.7	79.6	-1	-1.3%
51.9%	80.7	79.5	-1	-1.5%
53.1%	79.6	79.4	0	-0.2%
54.3%	79.4	79.3	0	-0.1%
55.6%	79.2	79.3	0	0.1%
56.8%	78.9	78.9	0	0.0%
58.0%	78.3	78.5	0	0.3%
59.3%	78.3	78.4	0	0.1%
60.5%	78.1	78.4	0	0.3%
61.7%	78.0	78.2	0	0.3%
63.0%	77.8	78.2	0	0.4%
64.2%	77.7	77.6	0	-0.1%
65.4%	77.3	77.4	0	0.1%
66.7%	77.2	77.1	0	-0.1%
67.9%	75.9	77.1	1	1.6%
69.1%	75.1	76.1	1	1.3%
70.4%	74.9	74.9	0	0.0%
71.6%	74.6	74.2	0	-0.5%
72.8%	74.3	73.5	-1	-1.0%
74.1%	73.3	73.3	0	0.0%
75.3%	72.1	72.8	1	1.0%
76.5%	71.5	71.5	0	0.0%
77.8%	71.1	71.1	0	-0.1%
79.0%	70.4	70.3	0	-0.1%
80.2%	69.9	70.2	0	0.5%
81.5%	69.7	70.0	0	0.4%
82.7%	69.7	69.8	0	0.1%
84.0%	69.6	69.8	0	0.2%
85.2%	69.4	69.7	0	0.4%
86.4%	69.1	69.6	0	0.7%
87.7%	67.8	69.3	2	2.3%
88.9%	67.0	67.8	1	1.1%
90.1%	66.8	67.1	0	0.6%
91.4%	66.4	66.3	0	-0.2%
92.6%	65.2	65.9	1	1.0%
93.8%	64.6	65.0	0	0.6%
95.1%	62.9	63.1	0	0.3%
96.3%	62.2	62.3	0	0.2%
97.5%	61.3	61.3	0	0.0%
98.8%	59.9	59.7	0	-0.5%
100.0%	57.8	58.3	1	0.9%

Table SQ-01-b

X2, Monthly Position

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	94.4	94.5	0	0.2%
1.2%	94.1	93.2	-1	-1.0%
2.5%	93.5	92.8	-1	-0.7%
3.7%	92.8	92.2	-1	-0.6%
4.9%	89.0	89.0	0	-0.1%
6.2%	88.9	88.7	0	-0.2%
7.4%	88.2	87.8	0	-0.5%
8.6%	87.8	87.2	-1	-0.7%
9.9%	87.5	86.8	-1	-0.7%
11.1%	87.1	86.7	0	-0.5%
12.3%	87.0	86.6	0	-0.4%
13.6%	86.8	86.6	0	-0.3%
14.8%	86.7	86.6	0	-0.2%
16.0%	86.7	86.5	0	-0.2%
17.3%	86.6	86.5	0	-0.1%
18.5%	86.6	86.4	0	-0.3%
19.8%	86.5	86.2	0	-0.4%
21.0%	86.5	86.2	0	-0.4%
22.2%	86.5	86.0	-1	-0.6%
23.5%	86.4	86.0	0	-0.5%
24.7%	86.4	85.8	-1	-0.7%
25.9%	86.2	85.8	0	-0.5%
27.2%	86.0	85.7	0	-0.3%
28.4%	85.8	85.7	0	-0.1%
29.6%	85.8	85.5	0	-0.4%
30.9%	85.8	85.4	0	-0.5%
32.1%	85.8	85.2	-1	-0.7%
33.3%	85.8	85.1	-1	-0.7%
34.6%	85.4	85.0	0	-0.5%
35.8%	85.4	85.0	0	-0.4%
37.0%	85.3	84.9	0	-0.5%
38.3%	85.3	84.8	0	-0.5%
39.5%	85.2	84.8	0	-0.6%
40.7%	85.2	84.6	-1	-0.7%
42.0%	85.1	84.6	-1	-0.6%
43.2%	85.0	84.5	-1	-0.7%
44.4%	85.0	84.3	-1	-0.8%
45.7%	84.9	84.2	-1	-0.9%
46.9%	84.9	84.1	-1	-0.9%
48.1%	84.7	84.1	-1	-0.8%
49.4%	84.7	84.1	-1	-0.7%
50.6%	84.6	84.0	-1	-0.8%
51.9%	84.5	83.9	-1	-0.7%
53.1%	84.5	83.8	-1	-0.8%
54.3%	84.4	83.7	-1	-0.8%
55.6%	84.1	83.5	-1	-0.7%
56.8%	84.1	83.4	-1	-0.8%
58.0%	84.1	83.4	-1	-0.8%
59.3%	84.0	83.3	-1	-0.8%
60.5%	84.0	83.2	-1	-0.9%
61.7%	83.9	83.2	-1	-0.8%
63.0%	83.4	82.8	-1	-0.7%
64.2%	83.4	82.7	-1	-0.8%
65.4%	83.4	82.6	-1	-0.9%
66.7%	83.3	82.5	-1	-0.9%
67.9%	83.1	82.3	-1	-1.0%
69.1%	82.7	82.2	0	-0.6%
70.4%	82.7	82.0	-1	-0.8%
71.6%	82.6	81.9	-1	-0.8%
72.8%	82.5	81.9	-1	-0.7%
74.1%	82.3	81.9	0	-0.5%
75.3%	82.3	81.9	0	-0.5%
76.5%	82.3	81.9	0	-0.5%
77.8%	81.9	81.5	0	-0.4%
79.0%	81.9	81.5	0	-0.5%
80.2%	81.8	81.5	0	-0.4%
81.5%	81.6	81.4	0	-0.3%
82.7%	81.6	81.4	0	-0.3%
84.0%	81.5	81.3	0	-0.2%
85.2%	81.4	81.2	0	-0.2%
86.4%	81.2	81.2	0	0.0%
87.7%	81.2	81.1	0	-0.1%
88.9%	81.2	81.1	0	-0.1%
90.1%	80.4	80.3	0	-0.2%
91.4%	79.8	79.9	0	0.0%
92.6%	79.6	79.6	0	0.0%
93.8%	77.2	77.3	0	0.0%
95.1%	76.1	76.3	0	0.3%
96.3%	76.0	76.2	0	0.2%
97.5%	75.6	74.7	-1	-1.3%
98.8%	75.5	73.4	-2	-2.8%
100.0%	65.1	64.6	0	-0.7%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	95.4	95.2	0	-0.2%
1.2%	94.5	94.4	0	-0.1%
2.5%	94.1	93.6	0	-0.5%
3.7%	93.9	93.6	0	-0.4%
4.9%	93.9	93.5	0	-0.4%
6.2%	93.7	93.3	0	-0.4%
7.4%	93.2	92.9	0	-0.3%
8.6%	93.1	92.6	0	-0.5%
9.9%	92.9	92.2	-1	-0.8%
11.1%	92.2	91.2	-1	-1.0%
12.3%	91.5	90.9	-1	-0.6%
13.6%	91.2	90.9	0	-0.3%
14.8%	91.1	90.9	0	-0.2%
16.0%	91.0	90.6	0	-0.4%
17.3%	90.9	90.4	-1	-0.6%
18.5%	90.7	90.3	0	-0.4%
19.8%	90.5	90.1	0	-0.5%
21.0%	90.5	89.8	-1	-0.7%
22.2%	90.5	89.7	-1	-0.8%
23.5%	90.4	89.7	-1	-0.8%
24.7%	90.1	89.6	-1	-0.6%
25.9%	89.9	89.6	0	-0.3%
27.2%	89.8	89.5	0	-0.3%
28.4%	89.3	89.5	0	0.1%
29.6%	89.2	89.3	0	0.1%
30.9%	88.3	88.6	0	0.3%
32.1%	88.0	88.1	0	0.1%
33.3%	87.9	87.9	0	0.0%
34.6%	86.9	87.8	1	1.1%
35.8%	86.8	86.4	0	-0.4%
37.0%	85.8	86.0	0	0.2%
38.3%	85.1	84.7	0	-0.5%
39.5%	84.7	84.6	0	0.0%
40.7%	84.6	84.6	0	0.0%
42.0%	84.4	84.6	0	0.2%
43.2%	83.7	84.0	0	0.4%
44.4%	83.6	83.6	0	0.0%
45.7%	83.4	83.4	0	0.0%
46.9%	83.3	83.3	0	-0.1%
48.1%	83.0	82.6	0	-0.5%
49.4%	83.0	82.4	-1	-0.7%
50.6%	82.5	82.1	0	-0.4%
51.9%	82.2	82.1	0	-0.2%
53.1%	82.0	82.0	0	0.0%
54.3%	81.6	81.6	0	0.0%
55.6%	81.4	81.4	0	0.0%
56.8%	81.2	81.2	0	0.0%
58.0%	81.2	81.2	0	0.0%
59.3%	81.1	81.1	0	-0.1%
60.5%	81.0	81.0	0	0.0%
61.7%	81.0	81.0	0	0.0%
63.0%	80.8	80.8	0	0.1%
64.2%	80.7	80.4	0	-0.4%
65.4%	80.5	80.3	0	-0.2%
66.7%	80.3	80.1	0	-0.2%
67.9%	80.1	80.1	0	0.0%
69.1%	80.1	79.9	0	-0.2%
70.4%	80.0	79.9	0	-0.1%
71.6%	79.9	79.8	0	-0.2%
72.8%	79.9	79.7	0	-0.2%
74.1%	79.9	79.6	0	-0.3%
75.3%	79.8	79.6	0	-0.3%
76.5%	79.8	79.3	0	-0.6%
77.8%	79.2	79.1	0	-0.1%
79.0%	79.1	78.9	0	-0.3%
80.2%	78.9	78.8	0	-0.1%
81.5%	78.9	78.8	0	-0.1%
82.7%	78.7	78.8	0	0.1%
84.0%	78.5	78.6	0	0.2%
85.2%	78.4	78.4	0	0.1%
86.4%	78.2	78.2	0	0.0%
87.7%	78.1	78.2	0	0.1%
88.9%	77.9	77.8	0	-0.2%
90.1%	77.8	77.7	0	-0.1%
91.4%	77.8	76.7	-1	-1.4%
92.6%	77.4	76.6	-1	-1.0%
93.8%	76.5	76.3	0	-0.2%
95.1%	75.5	75.8	0	0.4%
96.3%	75.2	75.2	0	0.0%
97.5%	75.1	75.2	0	0.1%
98.8%	73.5	73.7	0	0.2%
100.0%	72.2	72.0	0	-0.3%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	94.7	94.6	0	-0.1%
1.2%	94.5	94.3	0	-0.2%
2.5%	94.2	94.1	0	-0.1%
3.7%	94.1	94.0	0	-0.2%
4.9%	93.8	93.2	-1	-0.7%
6.2%	93.7	93.0	-1	-0.7%
7.4%	93.6	92.8	-1	-1.0%
8.6%	93.5	92.7	-1	-0.9%
9.9%	93.5	92.5	-1	-1.1%
11.1%	93.4	92.5	-1	-1.0%
12.3%	93.2	92.5	-1	-0.8%
13.6%	93.1	92.4	-1	-0.8%
14.8%	93.0	92.2	-1	-0.9%
16.0%	93.0	92.1	-1	-0.9%
17.3%	92.9	91.8	-1	-1.2%
18.5%	92.8	91.7	-1	-1.1%
19.8%	92.7	91.7	-1	-1.1%
21.0%	92.7	91.6	-1	-1.2%
22.2%	92.5	91.6	-1	-1.0%
23.5%	92.5	91.3	-1	-1.3%
24.7%	92.4	91.3	-1	-1.3%
25.9%	92.4	91.2	-1	-1.3%
27.2%	92.4	91.0	-1	-1.5%
28.4%	92.3	91.0	-1	-1.4%
29.6%	92.2	91.0	-1	-1.3%
30.9%	92.1	91.0	-1	-1.2%
32.1%	92.0	91.0	-1	-1.1%
33.3%	91.8	91.0	-1	-1.0%
34.6%	91.8	90.9	-1	-1.0%
35.8%	91.6	90.9	-1	-0.8%
37.0%	91.6	90.9	-1	-0.7%
38.3%	91.5	90.8	-1	-0.8%
39.5%	91.2	90.8	0	-0.4%
40.7%	91.2	90.7	0	-0.5%
42.0%	91.2	90.6	-1	-0.6%
43.2%	91.1	90.5	-1	-0.7%
44.4%	91.0	90.5	0	-0.5%
45.7%	91.0	90.4	-1	-0.6%
46.9%	90.9	90.4	-1	-0.5%
48.1%	90.9	90.3	-1	-0.6%
49.4%	90.9	90.3	-1	-0.6%
50.6%	90.9	90.3	-1	-0.6%
51.9%	90.7	90.3	0	-0.4%
53.1%	90.7	90.2	0	-0.5%
54.3%	90.7	90.2	0	-0.5%
55.6%	90.6	90.2	0	-0.5%
56.8%	90.5	90.1	0	-0.4%
58.0%	90.5	90.1	0	-0.5%
59.3%	90.5	90.1	0	-0.5%
60.5%	90.4	90.1	0	-0.4%
61.7%	90.4	90.0	0	-0.4%
63.0%	90.3	90.0	0	-0.3%
64.2%	90.3	90.0	0	-0.4%
65.4%	90.2	89.8	0	-0.5%
66.7%	90.2	89.8	0	-0.4%
67.9%	90.1	89.8	0	-0.4%
69.1%	90.1	89.7	0	-0.4%
70.4%	90.1	89.7	0	-0.4%
71.6%	90.0	89.7	0	-0.3%
72.8%	89.9	89.5	0	-0.4%
74.1%	89.9	89.5	0	-0.4%
75.3%	89.8	89.5	0	-0.4%
76.5%	89.7	89.5	0	-0.3%
77.8%	89.7	89.4	0	-0.3%
79.0%	89.7	89.4	0	-0.4%
80.2%	89.7	89.3	0	-0.4%
81.5%	89.7	89.3	0	-0.4%
82.7%	89.5	89.3	0	-0.3%
84.0%	89.5	89.0	-1	-0.6%
85.2%	89.5	89.0	-1	-0.6%
86.4%	89.3	88.9	0	-0.4%
87.7%	89.3	88.9	0	-0.4%
88.9%	89.2	88.8	0	-0.4%
90.1%	89.1	88.7	0	-0.4%
91.4%	89.1	88.7	0	-0.4%
92.6%	89.0	88.7	0	-0.3%
93.8%	88.9	88.5	0	-0.4%
95.1%	88.9	88.2	-1	-0.8%
96.3%	88.9	88.2	-1	-0.8%
97.5%	88.5	87.9	-1	-0.6%
98.8%	87.9	87.7	0	-0.2%
100.0%	85.9	86.9	1	1.1%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Position (KM)	WSIP 2070 With Project Monthly Position (KM)	Absolute Difference (KM)	Relative Difference (%)
0.0%	97.7	96.9	-1	-0.8%
1.2%	97.4	96.6	-1	-0.8%
2.5%	97.1	96.5	-1	-0.6%
3.7%	96.9	96.3	-1	-0.6%
4.9%	96.6	96.2	0	-0.4%
6.2%	96.6	95.7	-1	-1.0%
7.4%	96.5	95.1	-1	-1.4%
8.6%	96.3	95.0	-1	-1.3%
9.9%	96.2	95.0	-1	-1.3%
11.1%	95.8	94.8	-1	-1.0%
12.3%	95.7	94.6	-1	-1.2%
13.6%	95.7	94.5	-1	-1.2%
14.8%	95.6	94.4	-1	-1.3%
16.0%	95.6	94.3	-1	-1.4%
17.3%	95.6	94.2	-1	-1.4%
18.5%	95.5	94.2	-1	-1.4%
19.8%	95.4	94.2	-1	-1.3%
21.0%	95.3	94.2	-1	-1.2%
22.2%	95.3	94.0	-1	-1.3%
23.5%	95.2	94.0	-1	-1.3%
24.7%	95.2	93.9	-1	-1.3%
25.9%	95.1	93.9	-1	-1.3%
27.2%	95.0	93.8	-1	-1.2%
28.4%	95.0	93.8	-1	-1.2%
29.6%	94.9	93.8	-1	-1.2%
30.9%	94.8	93.7	-1	-1.2%
32.1%	94.8	93.7	-1	-1.2%
33.3%	94.7	93.5	-1	-1.3%
34.6%	94.7	93.5	-1	-1.3%
35.8%	94.6	93.1	-2	-1.6%
37.0%	94.5	92.8	-2	-1.8%
38.3%	94.5	92.8	-2	-1.8%
39.5%	94.5	92.7	-2	-1.8%
40.7%	94.4	92.7	-2	-1.7%
42.0%	94.4	92.7	-2	-1.7%
43.2%	94.3	92.2	-2	-2.2%
44.4%	94.2	92.2	-2	-2.1%
45.7%	94.0	92.2	-2	-2.0%
46.9%	93.7	91.6	-2	-2.2%
48.1%	93.7	91.5	-2	-2.3%
49.4%	93.6	91.2	-2	-2.5%
50.6%	93.3	91.0	-2	-2.5%
51.9%	93.2	90.7	-3	-2.7%
53.1%	93.0	90.6	-2	-2.6%
54.3%	92.3	90.6	-2	-1.9%
55.6%	81.1	80.8	0	-0.4%
56.8%	81.1	80.8	0	-0.4%
58.0%	81.1	80.8	0	-0.4%
59.3%	80.9	80.7	0	-0.2%
60.5%	80.3	80.3	0	0.0%
61.7%	80.2	80.1	0	-0.2%
63.0%	80.0	79.9	0	-0.1%
64.2%	80.0	79.6	0	-0.5%
65.4%	79.6	79.6	0	0.0%
66.7%	79.5	79.5	0	0.0%
67.9%	79.5	79.0	0	-0.6%
69.1%	70.4	70.3	0	-0.2%
70.4%	70.4	70.2	0	-0.2%
71.6%	70.4	70.2	0	-0.2%
72.8%	70.4	70.2	0	-0.2%
74.1%	70.2	70.1	0	-0.1%
75.3%	70.1	70.1	0	0.0%
76.5%	69.8	69.8	0	0.0%
77.8%	69.5	69.3	0	-0.2%
79.0%	69.3	69.2	0	0.0%
80.2%	69.2	69.2	0	0.0%
81.5%	69.1	69.2	0	0.0%
82.7%	69.1	69.1	0	-0.1%
84.0%	69.1	69.1	0	-0.1%
85.2%	69.1	69.0	0	-0.1%
86.4%	69.0	68.8	0	-0.3%
87.7%	69.0	68.8	0	-0.2%
88.9%	69.0	68.8	0	-0.2%
90.1%	68.9	68.8	0	-0.2%
91.4%	68.7	68.7	0	-0.1%
92.6%	68.6	68.5	0	-0.2%
93.8%	68.5	68.5	0	0.0%
95.1%	68.5	68.4	0	0.0%
96.3%	68.5	68.4	0	-0.1%
97.5%	68.4	68.2	0	-0.3%
98.8%	68.1	67.9	0	-0.2%
100.0%	67.8	67.7	0	-0.2%

Figure SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

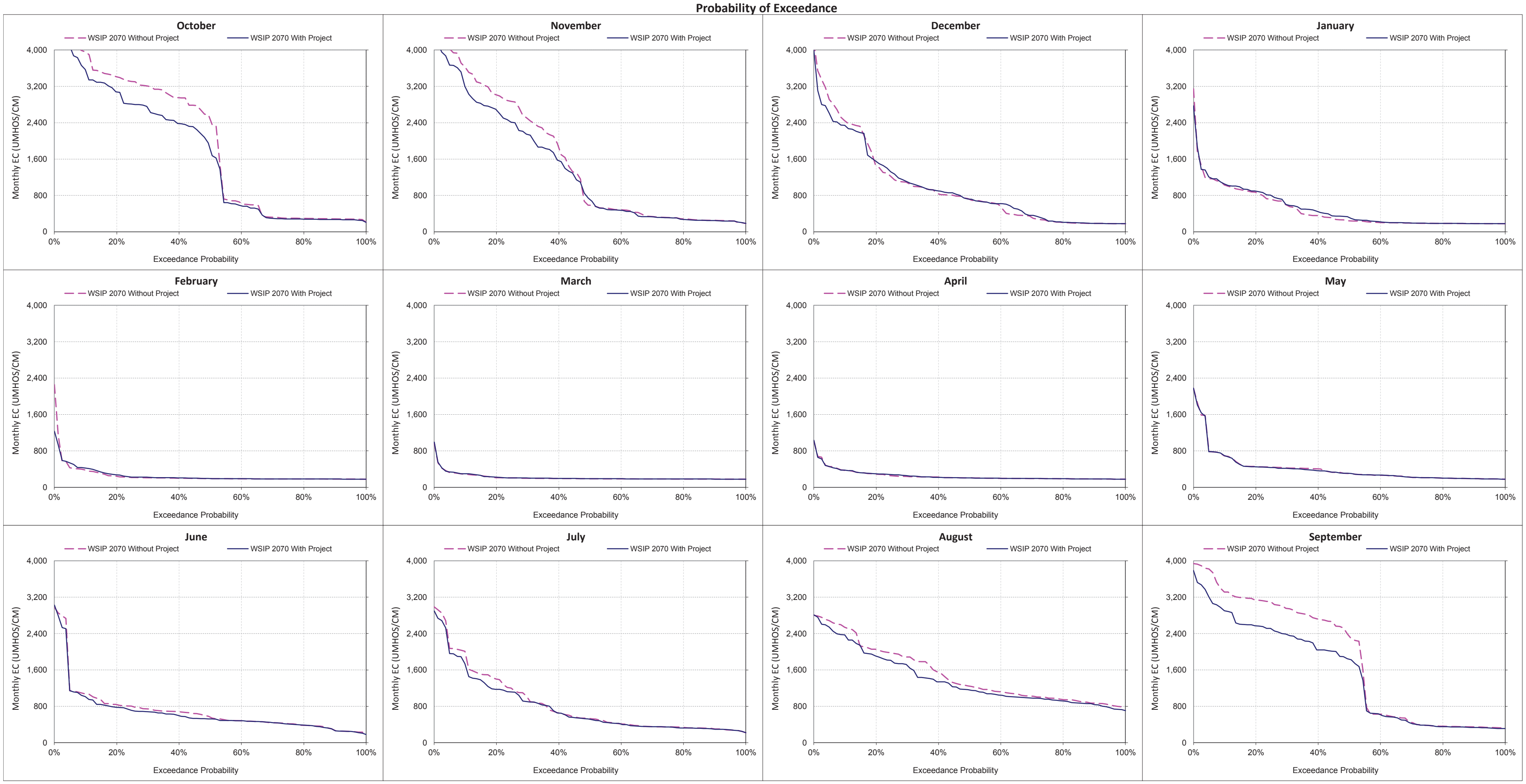


Table SQ-21-b

Sacramento River at Emmaton, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4786.0	4737.8	-48.2	-1.0%
1.2%	4698.9	4461.9	-237.1	-5.0%
2.5%	4643.7	4437.8	-205.9	-4.4%
3.7%	4574.6	4258.9	-315.7	-6.9%
4.9%	4466.0	4090.2	-375.8	-8.4%
6.2%	4167.8	3872.5	-295.3	-7.1%
7.4%	4073.1	3831.8	-241.3	-5.9%
8.6%	3992.4	3662.4	-330.0	-8.3%
9.9%	3957.8	3570.0	-387.8	-9.8%
11.1%	3897.8	3344.1	-553.7	-14.2%
12.3%	3557.3	3343.0	-214.3	-6.0%
13.6%	3551.3	3292.3	-259.0	-7.3%
14.8%	3520.3	3291.2	-229.1	-6.5%
16.0%	3484.0	3271.8	-212.2	-6.1%
17.3%	3469.5	3211.3	-258.2	-7.4%
18.5%	3448.5	3169.1	-279.4	-8.1%
19.8%	3415.4	3078.0	-337.4	-9.9%
21.0%	3391.8	3068.6	-323.2	-9.5%
22.2%	3354.4	2827.3	-527.1	-15.7%
23.5%	3323.4	2819.1	-504.3	-15.2%
24.7%	3307.5	2811.3	-496.3	-15.0%
25.9%	3301.7	2801.4	-500.3	-15.2%
27.2%	3229.2	2799.6	-429.6	-13.3%
28.4%	3221.5	2789.1	-432.4	-13.4%
29.6%	3211.5	2761.2	-450.3	-14.0%
30.9%	3193.2	2624.6	-568.6	-17.8%
32.1%	3137.0	2598.1	-539.0	-17.2%
33.3%	3136.1	2578.7	-557.4	-17.8%
34.6%	3122.7	2561.9	-560.8	-18.0%
35.8%	3057.7	2469.9	-587.8	-19.2%
37.0%	3007.1	2455.6	-551.6	-18.3%
38.3%	2957.7	2454.0	-503.7	-17.0%
39.5%	2952.7	2385.2	-567.5	-19.2%
40.7%	2945.9	2378.8	-567.1	-19.3%
42.0%	2945.2	2361.2	-583.9	-19.8%
43.2%	2786.1	2320.4	-465.7	-16.7%
44.4%	2784.7	2316.3	-468.5	-16.8%
45.7%	2777.1	2244.5	-532.6	-19.2%
46.9%	2686.1	2160.8	-525.3	-19.6%
48.1%	2588.6	2078.3	-510.4	-19.7%
49.4%	2576.7	1954.3	-622.5	-24.2%
50.6%	2354.6	1677.7	-676.9	-28.7%
51.9%	2333.8	1626.4	-707.4	-30.3%
53.1%	1489.2	1381.0	-108.2	-7.3%
54.3%	723.5	643.9	-79.6	-11.0%
55.6%	703.2	640.5	-62.7	-8.9%
56.8%	683.7	621.0	-62.7	-9.2%
58.0%	682.0	615.0	-67.0	-9.8%
59.3%	657.3	587.0	-70.3	-10.7%
60.5%	608.5	562.7	-45.7	-7.5%
61.7%	602.9	561.0	-41.9	-6.9%
63.0%	595.4	524.4	-71.0	-11.9%
64.2%	591.6	523.8	-67.8	-11.5%
65.4%	577.9	501.9	-76.0	-13.2%
66.7%	344.1	366.1	22.0	6.4%
67.9%	330.4	309.5	-20.9	-6.3%
69.1%	324.5	297.1	-27.5	-8.5%
70.4%	318.6	291.5	-27.1	-8.5%
71.6%	316.4	290.4	-26.0	-8.2%
72.8%	304.6	285.6	-19.0	-6.3%
74.1%	300.8	284.2	-16.6	-5.5%
75.3%	300.1	283.8	-16.4	-5.5%
76.5%	299.5	282.3	-17.3	-5.8%
77.8%	299.3	281.0	-18.3	-6.1%
79.0%	296.6	280.6	-15.9	-5.4%
80.2%	295.0	279.1	-15.9	-5.4%
81.5%	294.2	277.6	-16.6	-5.6%
82.7%	292.4	275.4	-17.0	-5.8%
84.0%	291.6	274.7	-16.9	-5.8%
85.2%	289.5	273.8	-15.7	-5.4%
86.4%	288.9	273.5	-15.4	-5.3%
87.7%	286.2	273.2	-13.0	-4.5%
88.9%	285.5	271.5	-14.0	-4.9%
90.1%	284.4	270.9	-13.5	-4.7%
91.4%	283.1	270.2	-12.9	-4.6%
92.6%	281.7	268.1	-13.6	-4.8%
93.8%	281.1	267.5	-13.6	-4.8%
95.1%	280.7	265.8	-14.9	-5.3%
96.3%	279.0	262.9	-16.1	-5.8%
97.5%	276.5	253.2	-23.3	-8.4%
98.8%	270.5	250.3	-20.3	-7.5%
100.0%	213.3	209.1	-4.2	-2.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4442.1	4274.4	-167.7	-3.8%
1.2%	4267.2	4140.1	-127.1	-3.0%
2.5%	4068.1	3951.9	-116.2	-2.9%
3.7%	4030.6	3875.1	-155.5	-3.9%
4.9%	4025.6	3666.3	-359.3	-8.9%
6.2%	3940.2	3661.0	-279.3	-7.1%
7.4%	3930.7	3611.2	-319.5	-8.1%
8.6%	3711.4	3518.0	-193.4	-5.2%
9.9%	3628.9	3198.8	-430.1	-11.9%
11.1%	3508.2	3027.9	-480.4	-13.7%
12.3%	3468.9	2929.3	-539.7	-15.6%
13.6%	3299.0	2850.7	-448.3	-13.6%
14.8%	3272.6	2829.9	-442.8	-13.5%
16.0%	3225.5	2776.6	-448.9	-13.9%
17.3%	3189.2	2765.4	-423.8	-13.3%
18.5%	3053.8	2733.2	-320.6	-10.5%
19.8%	3017.2	2697.9	-319.3	-10.6%
21.0%	2988.7	2602.0	-386.7	-12.9%
22.2%	2929.9	2503.0	-426.9	-14.6%
23.5%	2889.9	2468.3	-421.6	-14.6%
24.7%	2869.2	2410.8	-458.4	-16.0%
25.9%	2856.2	2400.1	-456.1	-16.0%
27.2%	2743.1	2226.8	-516.3	-18.8%
28.4%	2568.8	2211.0	-357.8	-13.9%
29.6%	2509.2	2150.3	-358.9	-14.3%
30.9%	2441.3	2126.6	-314.7	-12.9%
32.1%	2381.0	1989.4	-391.5	-16.4%
33.3%	2318.5	1866.3	-452.2	-19.5%
34.6%	2289.4	1861.3	-428.1	-18.7%
35.8%	2181.6	1831.3	-350.3	-16.1%
37.0%	2137.3	1809.6	-327.7	-15.3%
38.3%	2103.4	1745.5	-357.9	-17.0%
39.5%	1946.4	1581.1	-365.3	-18.8%
40.7%	1697.4	1542.0	-155.5	-9.2%
42.0%	1635.0	1393.9	-241.1	-14.7%
43.2%	1441.6	1331.9	-109.7	-7.6%
44.4%	1320.2	1294.7	-25.5	-1.9%
45.7%	1300.5	1146.7	-153.8	-11.8%
46.9%	1162.8	1092.6	-70.2	-6.0%
48.1%	673.6	856.2	182.6	27.1%
49.4%	585.3	746.9	161.6	27.6%
50.6%	585.0	671.3	86.2	14.7%
51.9%	559.8	559.2	-0.6	-0.1%
53.1%	528.3	524.5	-3.8	-0.7%
54.3%	522.1	515.9	-6.2	-1.2%
55.6%	520.3	489.5	-30.8	-5.9%
56.8%	505.6	484.6	-21.0	-4.2%
58.0%	489.5	481.8	-7.7	-1.6%
59.3%	488.8	476.4	-12.5	-2.6%
60.5%	481.9	468.2	-13.7	-2.9%
61.7%	478.3	450.7	-27.6	-5.8%
63.0%	460.7	446.2	-14.5	-3.1%
64.2%	429.6	419.5	-10.1	-2.4%
65.4%	424.9	346.8	-78.1	-18.4%
66.7%	385.9	336.1	-49.8	-12.9%
67.9%	346.1	333.9	-12.1	-3.5%
69.1%	338.0	333.0	-4.9	-1.5%
70.4%	335.1	327.8	-7.3	-2.2%
71.6%	322.7	314.8	-7.8	-2.4%
72.8%	318.3	314.5	-3.9	-1.2%
74.1%	316.6	309.0	-7.6	-2.4%
75.3%	312.6	308.6	-4.1	-1.3%
76.5%	309.9	307.3	-2.6	-0.9%
77.8%	309.4	304.2	-5.2	-1.7%
79.0%	289.0	277.7	-11.3	-3.9%
80.2%	281.5	271.7	-9.8	-3.5%
81.5%	280.6	263.3	-17.3	-6.2%
82.7%	268.4	260.0	-8.4	-3.1%
84.0%	263.4	254.3	-9.2	-3.5%
85.2%	259.4	253.4	-6.0	-2.3%
86.4%	254.4	251.6	-2.8	-1.1%
87.7%	253.8	250.8	-3.1	-1.2%
88.9%	251.8	248.6	-3.3	-1.3%
90.1%	251.7	247.9	-3.8	-1.5%
91.4%	247.5	241.9	-5.6	-2.3%
92.6%	247.1	238.5	-8.6	-3.5%
93.8%	246.7	237.9	-8.8	-3.5%
95.1%	242.2	236.7	-5.5	-2.3%
96.3%	238.2	234.6	-3.5	-1.5%
97.5%	199.6	212.9	13.3	6.7%
98.8%	199.6	202.3	2.7	1.3%
100.0%	183.3	183.8	0.5	0.2%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4173.5	3995.2	-178.3	-4.3%
1.2%	3545.4	3105.1	-440.3	-12.4%
2.5%	3352.9	2799.6	-553.3	-16.5%
3.7%	3175.3	2778.4	-397.0	-12.5%
4.9%	2911.0	2613.0	-298.0	-10.2%
6.2%	2814.1	2430.7	-383.4	-13.6%
7.4%	2689.1	2416.7	-272.4	-10.1%
8.6%	2523.0	2348.6	-174.4	-6.9%
9.9%	2444.5	2343.8	-100.7	-4.1%
11.1%	2379.3	2267.5	-111.8	-4.7%
12.3%	2364.6	2254.8	-109.8	-4.6%
13.6%	2339.5	2210.4	-129.1	-5.5%
14.8%	2320.8	2180.5	-140.3	-6.0%
16.0%	2124.3	2166.5	42.2	2.0%
17.3%	1937.9	1685.6	-252.3	-13.0%
18.5%	1755.1	1625.4	-129.6	-7.4%
19.8%	1478.2	1561.1	82.8	5.6%
21.0%	1411.1	1498.9	87.8	6.2%
22.2%	1306.1	1459.6	153.5	11.8%
23.5%	1293.0	1399.0	106.0	8.2%
24.7%	1218.8	1319.7	100.9	8.3%
25.9%	1141.7	1271.2	129.5	11.3%
27.2%	1109.7	1184.3	74.6	6.7%
28.4%	1099.6	1147.5	47.9	4.4%
29.6%	1093.3	1108.9	15.6	1.4%
30.9%	1047.6	1072.1	24.5	2.3%
32.1%	998.6	1048.5	49.9	5.0%
33.3%	993.3	1016.5	23.3	2.3%
34.6%	985.1	991.9	6.7	0.7%
35.8%	945.9	956.8	10.9	1.2%
37.0%	931.5	925.3	-6.3	-0.7%
38.3%	924.3	921.9	-2.4	-0.3%
39.5%	846.1	905.6	59.4	7.0%
40.7%	819.1	891.4	72.3	8.8%
42.0%	817.0	872.7	55.6	6.8%
43.2%	807.1	860.9	53.7	6.7%
44.4%	806.4	857.4	51.0	6.3%
45.7%	784.6	826.5	41.9	5.3%
46.9%	780.8	800.8	20.0	2.6%
48.1%	745.1	745.8	0.6	0.1%
49.4%	731.1	720.8	-10.3	-1.4%
50.6%	695.4	717.1	21.7	3.1%
51.9%	686.6	681.8	-4.8	-0.7%
53.1%	683.3	670.5	-12.8	-1.9%
54.3%	662.9	658.5	-4.4	-0.7%
55.6%	652.5	655.5	3.0	0.5%
56.8%	642.9	627.4	-15.5	-2.4%
58.0%	627.4	621.9	-5.6	-0.9%
59.3%	600.7	621.1	20.4	3.4%
60.5%	506.0	618.4	112.4	22.2%
61.7%	407.2	608.0	200.9	49.3%
63.0%	389.3	572.1	182.8	46.9%
64.2%	381.5	518.2	136.7	35.8%
65.4%	364.3	502.4	138.0	37.9%
66.7%	363.5	459.8	96.3	26.5%
67.9%	357.0	389.9	32.9	9.2%
69.1%	350.9	362.9	12.0	3.4%
70.4%	297.9	361.0	63.1	21.2%
71.6%	278.4	341.7	63.3	22.7%
72.8%	267.7	312.7	45.0	16.8%
74.1%	260.5	279.9	19.3	7.4%
75.3%	233.3	239.8	6.5	2.8%
76.5%	229.9	237.3	7.4	3.2%
77.8%	214.3	220.9	6.6	3.1%
79.0%	212.9	218.3	5.5	2.6%
80.2%	201.0	208.8	7.8	3.9%
81.5%	200.3	206.1	5.8	2.9%
82.7%	196.5	204.2	7.6	3.9%
84.0%	192.0	204.1	12.2	6.3%
85.2%	191.9	199.8	7.9	4.1%
86.4%	188.3	194.5	6.2	3.3%
87.7%	186.7	189.5	2.9	1.5%
88.9%	185.1	186.4	1.3	0.7%
90.1%	184.5	185.6	1.1	0.6%
91.4%	184.1	185.4	1.3	0.7%
92.6%	184.1	183.6	-0.5	-0.3%
93.8%	181.6	181.2	-0.4	-0.2%
95.1%	180.9	181.0	0.1	0.1%
96.3%	179.4	179.6	0.2	0.1%
97.5%	179.2	179.5	0.3	0.2%
98.8%	178.2	178.2	0.0	0.0%
100.0%	177.9	177.9	-0.1	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3146.0	2770.2	-375.8	-11.9%
1.2%	1770.0	1861.4	91.4	5.2%
2.5%	1456.4	1373.5	-82.9	-5.7%
3.7%	1195.7	1363.9	168.2	14.1%
4.9%	1169.6	1206.9	37.3	3.2%
6.2%	1164.6	1167.1	2.5	0.2%
7.4%	1124.4	1167.0	42.6	3.8%
8.6%	1111.1	1100.0	-11.1	-1.0%
9.9%	1029.9	1053.8	23.9	2.3%
11.1%	1003.4	1018.4	15.0	1.5%
12.3%	977.7	1008.7	30.9	3.2%
13.6%	946.1	1004.9	58.8	6.2%
14.8%	930.5	990.8	60.3	6.5%
16.0%	912.9	938.9	26.0	2.8%
17.3%	897.9	932.2	34.2	3.8%
18.5%	878.7	901.9	23.2	2.6%
19.8%	872.4	897.3	24.9	2.9%
21.0%	836.0	884.0	48.0	5.7%
22.2%	799.6	862.6	63.0	7.9%
23.5%	727.9	814.6	86.7	11.9%
24.7%	720.4	809.7	89.2	12.4%
25.9%	694.1	757.3	63.2	9.1%
27.2%	677.8	731.4	53.6	7.9%
28.4%	677.7	716.6	38.8	5.7%
29.6%	597.8	602.2	4.4	0.7%
30.9%	554.1	578.4	24.3	4.4%
32.1%	539.3	571.2	32.0	5.9%
33.3%	490.8	549.3	58.4	11.9%
34.6%	400.0	500.6	100.7	25.2%
35.8%	383.9	498.1	114.2	29.7%
37.0%	369.1	495.3	126.2	34.2%
38.3%	358.2	480.9	122.7	34.2%
39.5%	358.2	452.9	94.8	26.5%
40.7%	351.8	426.6	74.9	21.3%
42.0%	322.8	409.5	86.7	26.9%
43.2%	316.6	395.3	78.8	24.9%
44.4%	311.5	352.8	41.2	13.2%
45.7%	272.6	346.1	73.5	27.0%
46.9%	265.2	345.6	80.4	30.3%
48.1%	263.2	342.4	79.2	30.1%
49.4%	243.7	335.3	91.6	37.6%
50.6%	239.1	296.5	57.4	24.0%
51.9%	237.2	267.8	30.6	12.9%
53.1%	236.4	261.3	24.9	10.6%
54.3%	235.5	253.2	17.7	7.5%
55.6%	221.3	253.1	31.8	14.4%
56.8%	212.3	235.2	22.8	10.7%
58.0%	211.7	233.7	22.1	10.4%
59.3%	207.4	227.0	19.6	9.4%
60.5%	203.3	216.3	13.0	6.4%
61.7%	201.5	206.7	5.2	2.6%
63.0%	199.6	204.9	5.3	2.7%
64.2%	199.1	204.6	5.5	2.8%
65.4%	198.6	201.9	3.2	1.6%
66.7%	198.0	201.8	3.8	1.9%
67.9%	193.7	198.7	5.0	2.6%
69.1%	192.6	195.5	2.9	1.5%
70.4%	192.3	193.6	1.3	0.7%
71.6%	189.0	191.8	2.8	1.5%
72.8%	188.2	189.7	1.5	0.8%
74.1%	188.0	188.9	0.9	0.5%
75.3%	187.7	187.6	-0.1	-0.1%
76.5%	187.1	187.3	0.2	0.1%
77.8%	185.9	186.8	1.0	0.5%
79.0%	185.7	186.3	0.6	0.3%
80.2%	185.5	185.6	0.0	0.0%
81.5%	185.1	184.9	-0.1	-0.1%
82.7%	185.0	184.8	-0.2	-0.1%
84.0%	183.9	184.4	0.5	0.3%
85.2%	183.5	183.5	0.0	0.0%
86.4%	182.8	183.2	0.4	0.2%
87.7%	182.1	182.6	0.5	0.3%
88.9%	181.9	182.0	0.2	0.1%
90.1%	180.7	180.3	-0.4	-0.2%
91.4%	180.1	180.3	0.2	0.1%
92.6%	179.9	180.1	0.2	0.1%
93.8%	179.5	179.5	0.0	0.0%
95.1%	179.4	179.5	0.1	0.1%
96.3%	179.4	179.4	0.0	0.0%
97.5%	179.2	179.3	0.0	0.0%
98.8%	178.7	179.0	0.3	0.1%
100.0%	177.8	177.9	0.1	0.1%

Table SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2256.9	1235.3	-1021.6	-45.3%
1.2%	1150.1	926.0	-224.1	-19.5%
2.5%	571.8	589.9	18.1	3.2%
3.7%	571.1	573.3	2.2	0.4%
4.9%	430.8	535.8	105.0	24.4%
6.2%	412.8	503.6	90.7	22.0%
7.4%	406.9	436.0	29.1	7.2%
8.6%	399.8	433.2	33.4	8.3%
9.9%	381.0	424.4	43.4	11.4%
11.1%	354.2	412.0	57.8	16.3%
12.3%	348.0	393.3	45.4	13.0%
13.6%	328.9	367.2	38.3	11.7%
14.8%	308.4	337.3	28.9	9.4%
16.0%	286.7	314.6	27.9	9.7%
17.3%	253.9	298.2	44.3	17.4%
18.5%	251.6	283.6	32.0	12.7%
19.8%	243.2	272.4	29.3	12.0%
21.0%	227.7	266.9	39.2	17.2%
22.2%	227.0	246.4	19.3	8.5%
23.5%	224.1	234.0	9.9	4.4%
24.7%	215.1	224.1	8.9	4.2%
25.9%	214.6	223.7	9.0	4.2%
27.2%	212.6	223.2	10.6	5.0%
28.4%	210.6	220.6	10.0	4.7%
29.6%	209.4	220.3	10.8	5.2%
30.9%	208.6	217.9	9.3	4.5%
32.1%	207.4	214.1	6.7	3.2%
33.3%	207.4	212.1	4.7	2.3%
34.6%	207.3	212.0	4.7	2.3%
35.8%	206.8	210.5	3.7	1.8%
37.0%	202.9	210.0	7.1	3.5%
38.3%	202.7	209.3	6.6	3.3%
39.5%	200.1	206.5	6.3	3.2%
40.7%	199.8	206.2	6.4	3.2%
42.0%	198.8	205.8	7.0	3.5%
43.2%	197.6	199.8	2.1	1.1%
44.4%	196.6	199.0	2.5	1.3%
45.7%	195.1	197.4	2.3	1.2%
46.9%	193.6	196.5	2.9	1.5%
48.1%	191.0	195.6	4.7	2.4%
49.4%	190.1	193.1	3.0	1.6%
50.6%	190.0	191.2	1.1	0.6%
51.9%	190.0	191.1	1.2	0.6%
53.1%	188.8	191.1	2.3	1.2%
54.3%	188.4	190.1	1.7	0.9%
55.6%	188.0	189.7	1.6	0.9%
56.8%	187.9	188.5	0.6	0.3%
58.0%	187.8	188.2	0.4	0.2%
59.3%	186.5	187.6	1.1	0.6%
60.5%	186.3	187.4	1.0	0.6%
61.7%	185.5	186.6	1.1	0.6%
63.0%	184.6	186.5	1.9	1.0%
64.2%	184.2	185.6	1.4	0.8%
65.4%	183.8	184.7	0.9	0.5%
66.7%	183.7	184.6	0.8	0.4%
67.9%	183.6	184.2	0.6	0.3%
69.1%	183.6	184.1	0.5	0.3%
70.4%	183.4	183.9	0.5	0.3%
71.6%	182.9	183.0	0.0	0.0%
72.8%	182.7	182.8	0.2	0.1%
74.1%	182.6	182.7	0.1	0.1%
75.3%	182.5	182.6	0.1	0.0%
76.5%	182.1	182.5	0.4	0.2%
77.8%	182.0	182.4	0.4	0.2%
79.0%	182.0	182.2	0.1	0.1%
80.2%	182.0	182.1	0.1	0.0%
81.5%	181.9	182.0	0.1	0.1%
82.7%	181.7	181.7	0.1	0.0%
84.0%	181.6	181.7	0.0	0.0%
85.2%	181.6	181.6	0.1	0.0%
86.4%	181.5	181.6	0.0	0.0%
87.7%	181.4	181.6	0.1	0.1%
88.9%	181.4	181.4	0.1	0.0%
90.1%	180.7	180.7	0.0	0.0%
91.4%	180.6	180.6	0.0	0.0%
92.6%	179.9	180.2	0.3	0.1%
93.8%	179.9	180.2	0.3	0.2%
95.1%	179.8	180.0	0.2	0.1%
96.3%	179.7	179.6	-0.1	-0.1%
97.5%	178.9	179.3	0.4	0.2%
98.8%	177.7	177.7	0.0	0.0%
100.0%	177.1	177.1	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	978.3	994.9	16.6	1.7%
1.2%	536.8	551.9	15.1	2.8%
2.5%	419.2	425.7	6.6	1.6%
3.7%	365.8	356.3	-9.5	-2.6%
4.9%	324.2	334.4	10.2	3.2%
6.2%	320.2	330.2	10.0	3.1%
7.4%	308.1	313.5	5.4	1.8%
8.6%	296.0	298.8	2.8	0.9%
9.9%	286.1	297.0	10.9	3.8%
11.1%	279.4	296.5	17.1	6.1%
12.3%	271.1	287.1	16.0	5.9%
13.6%	266.3	273.5	7.2	2.7%
14.8%	259.4	263.6	4.2	1.6%
16.0%	246.0	234.2	-11.8	-4.8%
17.3%	234.7	234.1	-0.6	-0.3%
18.5%	224.4	230.6	6.2	2.8%
19.8%	210.9	223.4	12.4	5.9%
21.0%	209.8	215.3	5.5	2.6%
22.2%	207.8	209.4	1.6	0.8%
23.5%	206.6	207.4	0.7	0.4%
24.7%	206.5	206.6	0.1	0.0%
25.9%	206.3	206.4	0.1	0.1%
27.2%	206.0	204.5	-1.5	-0.7%
28.4%	197.3	204.5	7.2	3.6%
29.6%	197.0	203.5	6.5	3.3%
30.9%	196.8	201.9	5.1	2.6%
32.1%	195.3	201.2	5.8	3.0%
33.3%	194.7	200.6	5.9	3.0%
34.6%	194.7	200.5	5.9	3.0%
35.8%	194.3	200.2	6.0	3.1%
37.0%	193.9	199.4	5.4	2.8%
38.3%	192.8	196.8	4.0	2.1%
39.5%	192.6	196.5	3.9	2.0%
40.7%	191.8	195.9	4.1	2.2%
42.0%	191.6	194.3	2.7	1.4%
43.2%	191.3	192.5	1.3	0.7%
44.4%	190.3	192.3	2.0	1.1%
45.7%	189.5	191.8	2.2	1.2%
46.9%	188.9	191.4	2.5	1.3%
48.1%	188.2	189.4	1.1	0.6%
49.4%	187.9	188.8	1.0	0.5%
50.6%	187.1	188.4	1.4	0.7%
51.9%	186.1	188.0	1.9	1.0%
53.1%	186.0	187.9	1.9	1.0%
54.3%	185.8	187.8	2.0	1.1%
55.6%	185.7	187.6	1.9	1.0%
56.8%	185.6	187.3	1.7	0.9%
58.0%	185.5	186.9	1.4	0.8%
59.3%	185.2	186.0	0.9	0.5%
60.5%	184.5	186.0	1.5	0.8%
61.7%	183.9	185.4	1.5	0.8%
63.0%	183.7	185.3	1.6	0.9%
64.2%	183.7	184.8	1.0	0.6%
65.4%	183.5	184.0	0.5	0.3%
66.7%	182.8	183.9	1.1	0.6%
67.9%	182.7	183.5	0.7	0.4%
69.1%	182.3	183.4	1.1	0.6%
70.4%	182.0	183.2	1.2	0.6%
71.6%	181.9	182.9	1.0	0.5%
72.8%	181.9	182.7	0.8	0.5%
74.1%	181.8	182.3	0.4	0.2%
75.3%	181.5	182.1	0.5	0.3%
76.5%	181.4	181.7	0.3	0.1%
77.8%	181.3	181.5	0.1	0.1%
79.0%	181.3	181.4	0.0	0.0%
80.2%	181.1	181.3	0.2	0.1%
81.5%	181.1	181.1	0.0	0.0%
82.7%	180.9	181.0	0.1	0.1%
84.0%	180.9	180.9	0.1	0.0%
85.2%	180.8	180.9	0.0	0.0%
86.4%	180.7	180.5	-0.1	-0.1%
87.7%	180.5	180.4	-0.1	0.0%
88.9%	180.3	180.3	0.0	0.0%
90.1%	179.6	180.2	0.5	0.3%
91.4%	179.4	179.8	0.5	0.3%
92.6%	179.3	179.3	-0.1	0.0%
93.8%	179.2	179.2	0.0	0.0%
95.1%	179.0	179.2	0.1	0.1%
96.3%	179.0	179.0	0.0	0.0%
97.5%	179.0	178.9	-0.1	-0.1%
98.8%	178.6	178.7	0.0	0.0%
100.0%	178.3	178.4	0.1	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1024.9	1034.8	9.9	1.0%
1.2%	680.0	657.0	-23.0	-3.4%
2.5%	662.2	624.5	-37.7	-5.7%
3.7%	485.0	479.6	-5.4	-1.1%
4.9%	454.4	459.6	5.1	1.1%
6.2%	452.9	430.8	-22.1	-4.9%
7.4%	417.0	412.3	-4.7	-1.1%
8.6%	383.2	379.2	-4.1	-1.1%
9.9%	371.8	376.1	4.3	1.2%
11.1%	371.5	363.8	-7.7	-2.1%
12.3%	354.5	363.7	9.2	2.6%
13.6%	333.1	330.4	-2.7	-0.8%
14.8%	318.4	319.1	0.7	0.2%
16.0%	317.7	312.8	-5.0	-1.6%
17.3%	301.8	308.9	7.1	2.4%
18.5%	300.1	302.6	2.5	0.8%
19.8%	286.8	295.3	8.4	2.9%
21.0%	284.5	291.0	6.5	2.3%
22.2%	282.1	290.8	8.8	3.1%
23.5%	262.6	286.3	23.7	9.0%
24.7%	255.0	277.5	22.5	8.8%
25.9%	247.1	274.3	27.2	11.0%
27.2%	241.2	272.1	30.9	12.8%
28.4%	241.1	264.5	23.4	9.7%
29.6%	239.2	259.8	20.6	8.6%
30.9%	232.5	247.4	14.9	6.4%
32.1%	232.2	247.3	15.1	6.5%
33.3%	230.5	241.3	10.8	4.7%
34.6%	228.3	230.4	2.1	0.9%
35.8%	227.1	230.3	3.1	1.4%
37.0%	227.1	228.3	1.2	0.5%
38.3%	225.4	218.9	-6.5	-2.9%
39.5%	225.3	217.4	-7.9	-3.5%
40.7%	219.9	215.6	-4.3	-2.0%
42.0%	213.7	214.4	0.7	0.3%
43.2%	212.6	212.7	0.1	0.1%
44.4%	211.4	211.9	0.5	0.2%
45.7%	210.2	210.4	0.2	0.1%
46.9%	208.1	208.7	0.6	0.3%
48.1%	206.9	204.2	-2.7	-1.3%
49.4%	205.8	203.6	-2.2	-1.1%
50.6%	205.4	203.3	-2.1	-1.0%
51.9%	205.2	202.8	-2.3	-1.1%
53.1%	204.2	202.6	-1.6	-0.8%
54.3%	203.1	202.6	-0.6	-0.3%
55.6%	197.7	200.1	2.4	1.2%
56.8%	197.3	197.9	0.7	0.3%
58.0%	197.0	197.8	0.7	0.4%
59.3%	196.4	197.5	1.1	0.5%
60.5%	196.4	196.7	0.3	0.2%
61.7%	195.9	195.2	-0.7	-0.4%
63.0%	195.3	194.9	-0.4	-0.2%
64.2%	194.5	194.4	-0.1	0.0%
65.4%	194.1	194.1	0.0	0.0%
66.7%	193.4	194.0	0.6	0.3%
67.9%	193.3	193.9	0.7	0.3%
69.1%	192.2	193.7	1.5	0.8%
70.4%	191.5	193.3	1.8	1.0%
71.6%	190.9	192.2	1.3	0.7%
72.8%	190.8	191.9	1.1	0.6%
74.1%	190.7	191.1	0.3	0.2%
75.3%	189.4	189.4	0.0	0.0%
76.5%	189.0	188.9	0.0	0.0%
77.8%	188.7	188.8	0.1	0.0%
79.0%	188.0	187.9	-0.1	0.0%
80.2%	186.6	187.4	0.8	0.4%
81.5%	186.2	186.8	0.6	0.3%
82.7%	186.1	185.9	-0.2	-0.1%
84.0%	184.7	185.7	1.0	0.6%
85.2%	184.3	185.6	1.3	0.7%
86.4%	183.9	184.6	0.6	0.4%
87.7%	183.8	184.2	0.4	0.2%
88.9%	183.6	183.9	0.3	0.2%
90.1%	182.8	182.9	0.1	0.1%
91.4%	182.2	182.3	0.1	0.0%
92.6%	180.9	181.2	0.4	0.2%
93.8%	180.6	180.6	0.0	0.0%
95.1%	180.2	180.3	0.0	0.0%
96.3%	179.3	179.5	0.2	0.1%
97.5%	179.2	179.1	-0.1	0.0%
98.8%	178.6	178.5	0.0	0.0%
100.0%	178.1	178.1	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2173.5	2179.4	5.8	0.3%
1.2%	1863.0	1808.7	-54.2	-2.9%
2.5%	1588.5	1640.2	51.7	3.3%
3.7%	1580.2	1565.5	-14.7	-0.9%
4.9%	790.2	784.9	-5.3	-0.7%
6.2%	777.6	780.7	3.1	0.4%
7.4%	774.1	770.0	-4.1	-0.5%
8.6%	746.5	751.0	4.4	0.6%
9.9%	690.8	696.9	6.1	0.9%
11.1%	678.1	669.8	-8.4	-1.2%
12.3%	639.8	639.5	-0.3	0.0%
13.6%	566.5	552.3	-14.1	-2.5%
14.8%	508.0	504.6	-3.4	-0.7%
16.0%	465.0	461.0	-4.0	-0.9%
17.3%	460.0	458.8	-1.3	-0.3%
18.5%	458.5	453.5	-5.0	-1.1%
19.8%	457.9	449.0	-8.8	-1.9%
21.0%	449.5	447.6	-1.9	-0.4%
22.2%	448.0	447.4	-0.6	-0.1%
23.5%	446.5	438.4	-8.1	-1.8%
24.7%	439.6	436.1	-3.5	-0.8%
25.9%	437.8	434.5	-3.4	-0.8%
27.2%	436.1	416.2	-19.9	-4.6%
28.4%	434.2	415.4	-18.7	-4.3%
29.6%	426.4	414.9	-11.5	-2.7%
30.9%	421.0	409.3	-11.7	-2.8%
32.1%	420.6	403.9	-16.7	-4.0%
33.3%	419.5	403.8	-15.8	-3.8%
34.6%	419.5	397.4	-22.1	-5.3%
35.8%	414.3	389.3	-25.0	-6.0%
37.0%	414.2	383.2	-31.0	-7.5%
38.3%	407.9	374.6	-33.3	-8.2%
39.5%	406.1	365.3	-40.8	-10.0%
40.7%	402.6	361.9	-40.6	-10.1%
42.0%	366.0	361.9	-4.1	-1.1%
43.2%	344.6	346.9	2.3	0.7%
44.4%	330.8	333.6	2.8	0.8%
45.7%	328.1	329.6	1.6	0.5%
46.9%	326.9	316.3	-10.5	-3.2%
48.1%	307.7	309.7	2.0	0.6%
49.4%	304.2	308.6	4.4	1.4%
50.6%	301.8	300.9	-0.9	-0.3%
51.9%	286.2	288.1	1.9	0.7%
53.1%	280.6	278.0	-2.6	-0.9%
54.3%	280.5	276.9	-3.6	-1.3%
55.6%	275.9	272.9	-3.0	-1.1%
56.8%	272.7	271.8	-0.8	-0.3%
58.0%	264.8	268.3	3.5	1.3%
59.3%	264.2	267.0	2.7	1.0%
60.5%	263.9	266.7	2.8	1.1%
61.7%	262.8	264.0	1.2	0.4%
63.0%	253.6	259.2	5.6	2.2%
64.2%	250.2	254.7	4.5	1.8%
65.4%	246.1	244.4	-1.7	-0.7%
66.7%	244.6	241.7	-2.9	-1.2%
67.9%	228.8	230.8	2.0	0.9%
69.1%	226.1	220.3	-5.8	-2.6%
70.4%	215.6	215.3	-0.2	-0.1%
71.6%	214.1	215.1	1.0	0.5%
72.8%	212.2	212.3	0.0	0.0%
74.1%	210.8	211.0	0.2	0.1%
75.3%	210.6	209.9	-0.8	-0.4%
76.5%	207.7	208.9	1.1	0.5%
77.8%	207.6	207.5	-0.1	0.0%
79.0%	201.7	204.7	3.0	1.5%
80.2%	200.6	201.6	1.0	0.5%
81.5%	199.8	200.9	1.1	0.6%
82.7%	196.3	200.0	3.7	1.9%
84.0%	196.2	197.0	0.8	0.4%
85.2%	196.1	196.5	0.4	0.2%
86.4%	195.5	196.5	1.0	0.5%
87.7%	190.9	195.5	4.6	2.4%
88.9%	190.6	191.4	0.8	0.4%
90.1%	190.2	190.9	0.7	0.4%
91.4%	189.9	190.6	0.7	0.4%
92.6%	186.5	185.9	-0.6	-0.3%
93.8%	185.6	185.8	0.2	0.1%
95.1%	184.2	185.2	1.0	0.5%
96.3%	184.0	184.2	0.2	0.1%
97.5%	182.0	181.7	-0.3	-0.1%
98.8%	180.1	180.0	-0.1	0.0%
100.0%	177.1	177.3	0.2	0.1%

Table SQ-21-b
Sacramento River at Emmaton, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (UMHOS/CM)	Relative Difference (%)
	Monthly EC (UMHOS/CM)	Monthly EC (UMHOS/CM)		
0.0%	2978.9	3028.9	50.0	1.7%
1.2%	2853.3	2788.4	-64.9	-2.3%
2.5%	2789.4	2529.0	-260.4	-9.3%
3.7%	2731.0	2509.0	-222.1	-8.1%
4.9%	1142.0	1142.4	0.4	0.0%
6.2%	1135.5	1116.5	-19.0	-1.7%
7.4%	1116.3	1102.9	-13.5	-1.2%
8.6%	1093.6	1039.2	-54.3	-5.0%
9.9%	1072.9	1013.3	-59.6	-5.6%
11.1%	1064.9	951.7	-113.2	-10.6%
12.3%	1008.3	940.0	-68.3	-6.8%
13.6%	976.1	842.8	-133.3	-13.7%
14.8%	948.1	840.3	-107.8	-11.4%
16.0%	859.4	822.0	-37.4	-4.4%
17.3%	857.4	809.8	-47.6	-5.6%
18.5%	841.6	787.0	-54.6	-6.5%
19.8%	840.9	779.1	-61.7	-7.3%
21.0%	817.8	771.3	-46.5	-5.7%
22.2%	813.1	766.2	-46.9	-5.8%
23.5%	805.9	741.4	-64.6	-8.0%
24.7%	803.0	709.7	-93.3	-11.6%
25.9%	778.6	693.3	-85.2	-10.9%
27.2%	772.7	689.9	-82.8	-10.7%
28.4%	747.6	688.1	-59.5	-8.0%
29.6%	743.7	679.9	-63.8	-8.6%
30.9%	738.6	674.9	-63.6	-8.6%
32.1%	712.6	672.7	-39.9	-5.6%
33.3%	703.7	654.0	-49.7	-7.1%
34.6%	696.1	654.0	-42.2	-6.1%
35.8%	692.8	632.6	-60.2	-8.7%
37.0%	688.3	631.7	-56.6	-8.2%
38.3%	685.6	624.5	-61.1	-8.9%
39.5%	684.0	603.0	-81.0	-11.8%
40.7%	673.6	576.6	-97.0	-14.4%
42.0%	664.4	574.0	-90.4	-13.6%
43.2%	657.3	543.1	-114.2	-17.4%
44.4%	640.3	535.8	-104.5	-16.3%
45.7%	638.2	531.1	-107.1	-16.8%
46.9%	620.4	527.1	-93.3	-15.0%
48.1%	598.8	525.8	-73.0	-12.2%
49.4%	579.3	523.0	-56.3	-9.7%
50.6%	539.2	522.2	-16.9	-3.1%
51.9%	524.1	515.2	-8.9	-1.7%
53.1%	520.7	489.4	-31.3	-6.0%
54.3%	505.7	487.3	-18.4	-3.6%
55.6%	489.0	485.8	-3.3	-0.7%
56.8%	486.0	485.0	-1.0	-0.2%
58.0%	484.8	484.4	-0.5	-0.1%
59.3%	481.6	483.0	1.4	0.3%
60.5%	480.1	480.7	0.6	0.1%
61.7%	472.5	471.7	-0.7	-0.2%
63.0%	471.3	469.2	-2.1	-0.4%
64.2%	466.6	466.6	0.0	0.0%
65.4%	461.9	462.9	1.0	0.2%
66.7%	460.9	460.9	0.0	0.0%
67.9%	450.5	455.5	5.1	1.1%
69.1%	440.1	444.7	4.6	1.0%
70.4%	438.6	438.1	-0.5	-0.1%
71.6%	433.4	434.4	1.0	0.2%
72.8%	430.9	427.3	-3.6	-0.8%
74.1%	426.4	414.6	-11.7	-2.8%
75.3%	414.2	408.4	-5.8	-1.4%
76.5%	412.6	404.5	-8.1	-2.0%
77.8%	403.2	396.9	-6.3	-1.6%
79.0%	382.8	392.5	9.7	2.5%
80.2%	379.7	383.3	3.7	1.0%
81.5%	378.9	381.4	2.5	0.7%
82.7%	365.3	371.6	6.3	1.7%
84.0%	365.2	358.5	-6.7	-1.8%
85.2%	362.5	351.8	-10.6	-2.9%
86.4%	349.6	334.9	-14.7	-4.2%
87.7%	324.1	324.3	0.2	0.1%
88.9%	304.9	305.2	0.3	0.1%
90.1%	263.0	261.4	-1.5	-0.6%
91.4%	254.8	255.9	1.1	0.4%
92.6%	251.6	251.9	0.3	0.1%
93.8%	251.1	247.7	-3.4	-1.4%
95.1%	247.0	245.9	-1.2	-0.5%
96.3%	239.8	237.3	-2.5	-1.0%
97.5%	231.6	220.7	-10.9	-4.7%
98.8%	230.9	208.3	-22.5	-9.8%
100.0%	183.9	181.8	-2.1	-1.1%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (UMHOS/CM)	Relative Difference (%)
	Monthly EC (UMHOS/CM)	Monthly EC (UMHOS/CM)		
0.0%	2986.4	2898.4	-88.0	-2.9%
1.2%	2920.8	2735.6	-185.2	-6.3%
2.5%	2851.7	2686.7	-165.0	-5.8%
3.7%	2682.7	2525.7	-157.0	-5.9%
4.9%	2072.2	1961.4	-110.8	-5.3%
6.2%	2069.2	1952.1	-117.1	-5.7%
7.4%	2052.1	1896.7	-155.4	-7.6%
8.6%	2033.9	1892.2	-141.6	-7.0%
9.9%	2009.2	1737.8	-271.4	-13.5%
11.1%	1613.6	1454.5	-159.2	-9.9%
12.3%	1579.9	1416.4	-163.5	-10.3%
13.6%	1542.5	1407.0	-135.5	-8.8%
14.8%	1504.7	1385.0	-119.7	-8.0%
16.0%	1495.4	1321.8	-173.5	-11.6%
17.3%	1493.8	1237.6	-256.1	-17.1%
18.5%	1434.9	1183.6	-251.3	-17.5%
19.8%	1402.6	1174.7	-227.8	-16.2%
21.0%	1385.5	1171.0	-214.5	-15.5%
22.2%	1278.4	1156.3	-122.2	-9.6%
23.5%	1212.7	1123.4	-89.4	-7.4%
24.7%	1199.7	1115.1	-84.6	-7.1%
25.9%	1134.0	1110.3	-23.7	-2.1%
27.2%	1101.1	1038.4	-62.7	-5.7%
28.4%	1099.5	915.7	-183.8	-16.7%
29.6%	1024.7	903.7	-121.0	-11.8%
30.9%	898.0	891.8	-6.2	-0.7%
32.1%	888.6	890.2	1.6	0.2%
33.3%	870.0	864.1	-5.9	-0.7%
34.6%	861.6	832.5	-29.1	-3.4%
35.8%	816.0	818.7	2.6	0.3%
37.0%	716.1	802.6	86.5	12.1%
38.3%	688.7	704.0	15.3	2.2%
39.5%	657.9	653.3	-4.6	-0.7%
40.7%	640.9	647.2	6.3	1.0%
42.0%	618.1	613.4	-4.7	-0.8%
43.2%	605.0	561.1	-43.9	-7.3%
44.4%	571.7	555.4	-16.4	-2.9%
45.7%	555.5	544.7	-10.8	-1.9%
46.9%	538.2	537.7	-0.5	-0.1%
48.1%	538.1	526.9	-11.2	-2.1%
49.4%	534.4	523.2	-11.3	-2.1%
50.6%	524.3	504.1	-20.2	-3.8%
51.9%	517.6	488.4	-29.2	-5.6%
53.1%	495.2	480.6	-14.7	-3.0%
54.3%	485.8	446.1	-39.6	-8.2%
55.6%	446.4	439.6	-6.7	-1.5%
56.8%	441.4	431.2	-10.2	-2.3%
58.0%	427.5	423.9	-3.6	-0.8%
59.3%	418.0	422.8	4.8	1.1%
60.5%	409.7	394.6	-15.2	-3.7%
61.7%	404.9	393.9	-11.0	-2.7%
63.0%	393.5	375.8	-17.8	-4.5%
64.2%	379.2	367.8	-11.4	-3.0%
65.4%	374.8	360.4	-14.5	-3.9%
66.7%	358.8	357.2	-1.6	-0.4%
67.9%	356.0	357.2	1.2	0.3%
69.1%	355.7	353.2	-2.4	-0.7%
70.4%	348.5	349.2	0.7	0.2%
71.6%	348.2	348.6	0.4	0.1%
72.8%	348.1	348.1	0.0	0.0%
74.1%	347.3	343.9	-3.4	-1.0%
75.3%	347.1	343.6	-3.5	-1.0%
76.5%	346.3	340.9	-5.4	-1.6%
77.8%	343.6	326.8	-16.7	-4.9%
79.0%	342.5	323.9	-18.6	-5.4%
80.2%	332.4	321.9	-10.5	-3.2%
81.5%	324.9	320.8	-4.1	-1.3%
82.7%	322.2	319.9	-2.3	-0.7%
84.0%	322.0	316.8	-5.2	-1.6%
85.2%	321.4	315.2	-6.2	-1.9%
86.4%	320.0	312.6	-7.4	-2.3%
87.7%	316.0	311.7	-4.4	-1.4%
88.9%	313.4	303.6	-9.9	-3.1%
90.1%	301.0	295.7	-5.3	-1.8%
91.4%	299.9	293.1	-6.7	-2.2%
92.6%	297.9	291.1	-6.8	-2.3%
93.8%	280.9	285.5	4.6	1.6%
95.1%	276.3	279.7	3.4	1.2%
96.3%	274.0	270.5	-3.5	-1.3%
97.5%	266.2	266.1	-0.1	-0.1%
98.8%	245.4	247.9	2.5	1.0%
100.0%	217.0	218.9	1.8	0.8%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (UMHOS/CM)	Relative Difference (%)
	Monthly EC (UMHOS/CM)	Monthly EC (UMHOS/CM)		
0.0%	2802.1	2811.0	8.9	0.3%
1.2%	2786.0	2757.9	-28.1	-1.0%
2.5%	2757.3	2606.7	-150.6	-5.5%
3.7%	2712.5	2592.0	-120.5	-4.4%
4.9%	2684.5	2539.8	-144.8	-5.4%
6.2%	2634.7	2448.5	-186.2	-7.1%
7.4%	2609.5	2396.4	-213.1	-8.2%
8.6%	2594.1	2377.1	-216.9	-8.4%
9.9%	2537.6	2369.6	-167.9	-6.6%
11.1%	2506.0	2254.8	-251.2	-10.0%
12.3%	2486.3	2254.7	-231.6	-9.3%
13.6%	2416.0	2180.9	-235.1	-9.7%
14.8%	2129.4	2144.5	15.0	0.7%
16.0%	2106.5	1972.4	-134.2	-6.4%
17.3%	2088.6	1961.4	-127.1	-6.1%
18.5%	2055.8	1946.6	-109.2	-5.3%
19.8%	2054.5	1911.3	-143.2	-7.0%
21.0%	2026.9	1882.2	-144.7	-7.1%
22.2%	2003.3	1845.8	-157.5	-7.9%
23.5%	1987.8	1814.9	-172.9	-8.7%
24.7%	1977.0	1809.0	-168.0	-8.5%
25.9%	1959.3	1749.8	-209.5	-10.7%
27.2%	1947.0	1738.6	-208.4	-10.7%
28.4%	1898.2	1737.5	-160.7	-8.5%
29.6%	1884.6	1722.4	-162.2	-8.6%
30.9%	1883.4	1637.2	-246.2	-13.1%
32.1%	1821.1	1586.8	-234.3	-12.9%
33.3%	1783.9	1433.8	-350.1	-19.6%
34.6%	1782.4	1433.3	-349.1	-19.6%
35.8%	1781.4	1421.7	-359.7	-20.2%
37.0%	1708.8	1410.5	-298.3	-17.5%
38.3%	1604.1	1396.3	-207.8	-13.0%
39.5%	1559.8	1339.4	-220.4	-14.1%
40.7%	1528.7	1338.6	-190.1	-12.4%
42.0%	1452.6	1335.2	-117.4	-8.1%
43.2%	1381.1	1311.6	-69.5	-5.0%
44.4%	1327.0	1230.7	-96.3	-7.3%
45.7%	1300.8	1223.7	-77.1	-5.9%
46.9%	1278.6	1175.4	-103.3	-8.1%
48.1%	1267.8	1172.4	-95.4	-7.5%
49.4%	1249.0	1164.6	-84.4	-6.8%
50.6%	1235.9	1149.8	-86.1	-7.0%
51.9%	1214.0	1145.5	-68.5	-5.6%
53.1%	1198.5	1112.5	-86.0	-7.2%
54.3%	1170.3	1112.0	-58.3	-5.0%
55.6%	1169.3	1076.4	-92.9	-7.9%
56.8%	1153.4	1074.7	-78.7	-6.8%
58.0%	1129.3	1063.9	-65.4	-5.8%
59.3%	1121.9	1046.7	-75.2	-6.7%
60.5%	1116.8	1039.4	-77.4	-6.9%
61.7%	1098.1	1018.4	-79.7	-7.3%
63.0%	1086.6	1010.8	-75.8	-7.0%
64.2%	1078.0	1009.0	-68.9	-6.4%
65.4%	1067.1	998.4	-68.7	-6.4%
66.7%	1039.1	995.8	-43.2	-4.2%
67.9%	1029.5	986.8	-42.7	-4.2%
69.1%	1024.8	986.4	-38.3	-3.7%
70.4%	1021.5	980.5	-41.0	-4.0%
71.6%	1004.4	976.4	-28.0	-2.8%
72.8%	1000.7	972.6	-28.1	-2.8%
74.1%	1000.6	956.6	-44.0	-4.4%
75.3%	978.9	952.9	-26.0	-2.7%
76.5%	978.2	936.9	-41.3	-4.2%
77.8%	975.3	933.6	-41.7	-4.3%
79.0%	955.9	921.1	-34.8	-3.6%
80.2%	944.8	917.4	-27.4	-2.9%
81.5%	942.8	902.8	-39.9	-4.2%
82.7%	941.4	882.5	-59.0	-6.3%
84.0%	927.8	875.3	-52.5	-5.7%
85.2%	908.1	867.4	-40.7	-4.5%
86.4%	895.6	866.1	-29.5	-3.3%
87.7%	889.9	859.1	-30.8	-3.5%
88.9%	868.4	858.8	-9.6	-1.1%
90.1%	867.7	832.9	-34.8	-4.0%
91.4%	862.1	828.3	-33.8	-3.9%
92.6%	859.5	799.9	-59.6	-6.9%
93.8%	846.0	788.7	-57.2	-6.8%
95.1%	826.4	769.1	-57.4	-6.9%
96.3%	809.9	738.8	-71.0	-8.8%
97.5%	796.6	734.8	-61.8	-7.8%
98.8%	787.5	728.4	-59.1	-7.5%
100.0%	769.1	703.9	-65.2	-8.5%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (UMHOS/CM)	Relative Difference (%)
	Monthly EC (UMHOS/CM)	Monthly EC (UMHOS/CM)		
0.0%	3938.7	3787.3	-151.4	-3.8%
1.2%	3926.6	3521.8	-404.8	-10.3%
2.5%	3891.8	3470.5	-421.3	-10.8%
3.7%	3838.3	3371.7	-466.6	-12.2%
4.9%	3820.6	3207.2	-613.4	-16.1%
6.2%	3739.5	3062.9	-676.6	-18.1%
7.4%	3528.6	3034.9	-493.7	-14.0%
8.6%	3398.1	2976.3	-421.8	-12.4%
9.9%	3313.4	2902.4	-410.9	-12.4%
11.1%	3312.4	2884.2	-428.3	-12.9%
12.3%	3238.1	2859.2	-378.9	-11.7%
13.6%	3205.7	2631.2	-574.5	-17.9%
14.8%	3193.6	2605.6	-588.0	-18.4%
16.0%	3190.3	2600.8	-589.5	-18.5%
17.3%	3177.2	2595.3	-581.9	-18.3%
18.5%	3173.5	2592.3	-581.2	-18.3%
19.8%	3137.7	2572.5	-565.2	-18.0%
21.0%	3132.2	2567.4	-564.8	-18.0%
22.2%	3122.2	2552.3	-569.9	-18.3%
23.5%	3107.4	2515.1	-592.3	-19.1%
24.7%	3105.0	2512.4	-592.6	-19.1%
25.9%	3037.6	2457.2	-580.4	-19.1%
27.2%	3025.0	2435.1	-589.9	-19.5%
28.4%	3011.2	2399.9	-611.3	-20.3%
29.6%	2955.0	2388.1	-566.9	-19.2%
30.9%	2943.5	2355.0	-588.5	-20.0%
32.1%	2913.1	2345.1	-568.0	-19.5%
33.3%	2858.3	2281.0	-577.3	-20.2%
34.6%	2843.4	2274.3	-569.0	-20.0%
35.8%	2826.9	2234.0	-592.9	-21.0%
37.0%	2804.4	2230.8	-573.6	-20.5%
38.3%	2749.4	2192.5	-557.0	-20.3%
39.5%	2725.5	2041.7	-683.8	-25.1%
40.7%	2704.8	2039.8	-664.9	-24.6%
42.0%	2693.8	2038.8	-655.0	-24.3%
43.2%	2670.3	2024.9	-645.4	-24.2%
44.4%	2664.2	2012.4	-651.8	-24.5%
45.7%	2561.6	2003.0	-558.6	-21.8%
46.9%	2555.3	1899.2	-656.1	-25.7%
48.1%	2520.4	1891.1	-629.3	-25.0%
49.4%	2391.5	1846.1	-545.4	-22.8%
50.6%	2286.6	1823.9	-462.7	-20.2%
51.9%	2248.0	1737.8	-510.2	-22.7%
53.1%	2230.5	1673.1	-557.4	-25.0%
54.3%	1623.8	1374.1	-249.7	-15.4%
55.6%	770.5	699.1	-71.3	-9.3%
56.8%	629.3	646.6	17.4	2.8%
58.0%	628.3	639.4	11.1	1.8%
59.3%	625.8	637.5	11.6	1.9%
60.5%	625.8	593.8	-32.0	-5.1%
61.7%	604.2	572.3	-31.9	-5.3%
63.0%	583.8	566.5	-17.3	-3.0%
64.2%	568.2	559.1	-9.1	-1.6%
65.4%	564.1	546.3	-17.8	-3.2%
66.7%	544.2	501.2	-43.0	-7.9%
67.9%	540.7	493.1	-47.6	-8.8%
69.1%	455.9	441.4	-14.5	-3.2%
70.4%	437.2	415.0	-22.3	-5.1%
71.6%	395.9	401.3	5.4	1.4%
72.8%	393.1	386.2	-6.9	-1.8%
74.1%	381.1	382.4	1.4	0.4%
75.3%	380.3	376.6	-3.8	-1.0%
76.5%	367.1	374.3	7.2	2.0%
77.8%	366.7	357.8	-8.9	-2.4%
79.0%	361.3	350.1	-11.2	-3.1%
80.2%	361.0	348.9	-12.1	-3.4%
81.5%	356.3	347.8	-8.5	-2.4%
82.7%	355.2	346.4	-8.8	-2.5%
84.0%	354.2	346.1	-8.1	-2.3%
85.2%	352.6	343.5	-9.1	-2.6%
86.4%	350.2	343.1	-7.1	-2.0%
87.7%	348.4	339.1	-9.3	-2.7%
88.9%	348.2	334.8	-13.3	-3.8%
90.1%	345.5	334.8	-10.7	-3.1%
91.4%	344.1	334.7	-9.3	-2.7%
92.6%	342.1	330.3	-11.8	-3.5%
93.8%	336.1	328.9	-7.2	-2.2%
95.1%	335.2	324.6	-10.6	-3.2%
96.3%	330.7	317.5	-13.2	-4.0%
97.5%	328.4	312.8	-15.6	-4.8%
98.8%	324.2	308.5	-15.7	-4.8%
100.0%	322.4	307.8	-14.6	-4.5%

Figure SQ-22-b
Sacramento River at Collinsville, Monthly EC
Probability of Exceedance

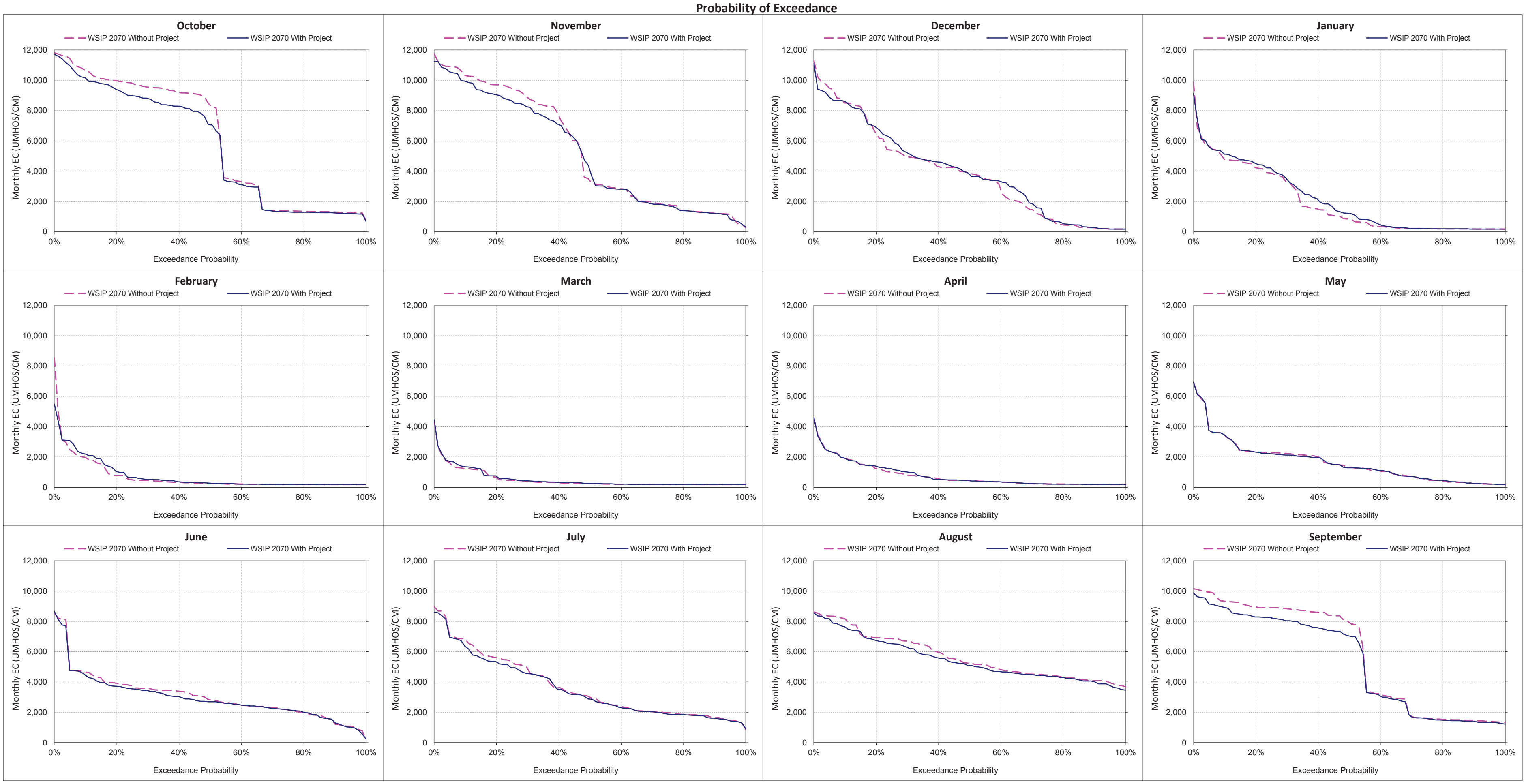


Table SQ-22-b

Sacramento River at Collinsville, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11816.3	11729.3	-87.0	-0.7%
1.2%	11735.1	11578.0	-157.2	-1.3%
2.5%	11632.7	11409.4	-223.3	-1.9%
3.7%	11597.7	11177.0	-420.7	-3.6%
4.9%	11446.9	10959.5	-487.4	-4.3%
6.2%	11036.5	10655.8	-380.6	-3.4%
7.4%	10911.6	10363.4	-548.2	-5.0%
8.6%	10822.7	10227.1	-595.6	-5.5%
9.9%	10648.8	10155.5	-493.3	-4.6%
11.1%	10546.5	9929.3	-617.1	-5.9%
12.3%	10312.5	9915.8	-396.6	-3.8%
13.6%	10175.3	9864.3	-311.0	-3.1%
14.8%	10127.3	9782.6	-344.7	-3.4%
16.0%	10088.7	9750.6	-338.1	-3.4%
17.3%	10036.6	9706.8	-329.8	-3.3%
18.5%	10000.8	9571.6	-429.2	-4.3%
19.8%	9989.9	9409.9	-580.0	-5.8%
21.0%	9915.0	9308.1	-606.8	-6.1%
22.2%	9894.8	9161.3	-733.6	-7.4%
23.5%	9853.7	9014.3	-839.4	-8.5%
24.7%	9828.6	8987.5	-841.1	-8.6%
25.9%	9723.5	8956.3	-767.2	-7.9%
27.2%	9684.4	8910.3	-774.1	-8.0%
28.4%	9609.0	8832.0	-777.0	-8.1%
29.6%	9555.6	8829.4	-726.1	-7.6%
30.9%	9548.6	8746.0	-802.6	-8.4%
32.1%	9505.3	8567.6	-937.7	-9.9%
33.3%	9499.3	8529.8	-969.5	-10.2%
34.6%	9483.6	8379.6	-1104.0	-11.6%
35.8%	9421.3	8376.1	-1045.2	-11.1%
37.0%	9328.7	8349.3	-979.4	-10.5%
38.3%	9311.1	8303.6	-1007.5	-10.8%
39.5%	9201.7	8292.4	-909.4	-9.9%
40.7%	9172.2	8280.1	-892.1	-9.7%
42.0%	9169.4	8153.2	-1016.3	-11.1%
43.2%	9151.4	8150.2	-1001.2	-10.9%
44.4%	9140.9	7949.0	-1191.9	-13.0%
45.7%	9082.5	7945.8	-1136.7	-12.5%
46.9%	9023.3	7830.5	-1192.9	-13.2%
48.1%	8904.8	7624.4	-1280.3	-14.4%
49.4%	8470.3	7072.7	-1397.6	-16.5%
50.6%	8226.3	7039.4	-1186.9	-14.4%
51.9%	8185.0	6682.2	-1502.8	-18.4%
53.1%	6213.5	6376.7	163.2	2.6%
54.3%	3571.7	3414.0	-157.7	-4.4%
55.6%	3536.9	3322.3	-214.6	-6.1%
56.8%	3508.5	3295.2	-213.3	-6.1%
58.0%	3367.9	3275.9	-91.9	-2.7%
59.3%	3338.7	3124.1	-214.5	-6.4%
60.5%	3272.4	3091.9	-180.5	-5.5%
61.7%	3209.3	3007.3	-202.0	-6.3%
63.0%	3205.3	2964.8	-240.4	-7.5%
64.2%	3109.0	2952.3	-156.7	-5.0%
65.4%	3076.3	2947.6	-128.7	-4.2%
66.7%	1543.2	1467.3	-75.9	-4.9%
67.9%	1420.5	1420.2	-0.3	0.0%
69.1%	1418.9	1395.8	-23.1	-1.6%
70.4%	1414.2	1362.0	-52.3	-3.7%
71.6%	1391.4	1351.1	-40.3	-2.9%
72.8%	1390.1	1344.6	-45.5	-3.3%
74.1%	1385.7	1327.7	-58.0	-4.2%
75.3%	1382.8	1309.0	-73.8	-5.3%
76.5%	1379.4	1299.4	-80.0	-5.8%
77.8%	1368.8	1299.1	-69.7	-5.1%
79.0%	1362.9	1293.1	-69.8	-5.1%
80.2%	1352.5	1288.5	-64.0	-4.7%
81.5%	1350.0	1288.0	-62.0	-4.6%
82.7%	1349.8	1284.5	-65.3	-4.8%
84.0%	1348.4	1270.0	-78.4	-5.8%
85.2%	1342.9	1267.2	-75.7	-5.6%
86.4%	1324.9	1258.5	-66.3	-5.0%
87.7%	1323.7	1255.7	-68.0	-5.1%
88.9%	1322.4	1252.4	-70.0	-5.3%
90.1%	1303.7	1237.6	-66.1	-5.1%
91.4%	1298.2	1227.5	-70.6	-5.4%
92.6%	1277.4	1219.2	-58.2	-4.6%
93.8%	1276.4	1215.1	-61.3	-4.8%
95.1%	1273.9	1207.3	-66.5	-5.2%
96.3%	1243.8	1197.1	-46.8	-3.8%
97.5%	1240.2	1172.5	-67.7	-5.5%
98.8%	1239.1	1165.6	-73.4	-5.9%
100.0%	722.4	690.2	-32.2	-4.5%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11751.7	11237.1	-514.6	-4.4%
1.2%	11242.5	11236.6	-5.8	-0.1%
2.5%	11017.6	10840.2	-177.4	-1.6%
3.7%	10928.7	10783.3	-145.4	-1.3%
4.9%	10914.8	10559.2	-355.6	-3.3%
6.2%	10898.6	10485.9	-412.7	-3.8%
7.4%	10847.8	10453.5	-394.3	-3.6%
8.6%	10630.5	9999.3	-631.2	-5.9%
9.9%	10313.7	9933.4	-380.2	-3.7%
11.1%	10278.8	9853.6	-425.1	-4.1%
12.3%	10253.6	9810.6	-443.0	-4.3%
13.6%	10111.9	9379.3	-732.6	-7.2%
14.8%	9954.9	9357.4	-597.5	-6.0%
16.0%	9917.1	9242.1	-675.0	-6.8%
17.3%	9782.7	9150.7	-631.9	-6.5%
18.5%	9715.2	9124.8	-590.4	-6.1%
19.8%	9703.5	9052.1	-651.4	-6.7%
21.0%	9700.7	9004.8	-696.0	-7.2%
22.2%	9680.3	8819.3	-861.0	-8.9%
23.5%	9585.2	8733.1	-852.1	-8.9%
24.7%	9490.9	8677.0	-813.9	-8.6%
25.9%	9366.4	8492.9	-873.4	-9.3%
27.2%	9322.1	8485.2	-837.0	-9.0%
28.4%	9148.2	8413.1	-735.1	-8.0%
29.6%	8907.3	8259.6	-647.7	-7.3%
30.9%	8733.6	8215.7	-517.9	-5.9%
32.1%	8628.9	7839.6	-789.3	-9.1%
33.3%	8397.8	7818.3	-579.5	-6.9%
34.6%	8380.0	7678.6	-701.4	-8.4%
35.8%	8311.3	7554.4	-756.9	-9.1%
37.0%	8278.1	7384.6	-893.5	-10.8%
38.3%	8274.8	7318.0	-956.8	-11.6%
39.5%	7853.2	7117.2	-736.0	-9.4%
40.7%	7320.3	7015.9	-304.3	-4.2%
42.0%	6939.0	6561.9	-377.1	-5.4%
43.2%	6549.0	6491.7	-57.2	-0.9%
44.4%	6012.4	6297.1	284.8	4.7%
45.7%	6009.0	5994.9	-14.1	-0.2%
46.9%	5624.9	5454.0	-170.9	-3.0%
48.1%	3610.5	4774.9	1164.4	32.2%
49.4%	3517.4	4403.3	885.9	25.2%
50.6%	3196.7	3629.7	433.0	13.5%
51.9%	3131.4	3033.6	-97.8	-3.1%
53.1%	3129.8	3030.2	-99.7	-3.2%
54.3%	3079.7	3018.7	-61.0	-2.0%
55.6%	2985.3	2868.3	-117.0	-3.9%
56.8%	2916.9	2846.6	-70.3	-2.4%
58.0%	2897.5	2828.6	-68.9	-2.4%
59.3%	2847.8	2823.0	-24.8	-0.9%
60.5%	2835.0	2821.2	-13.8	-0.5%
61.7%	2808.0	2800.4	-7.6	-0.3%
63.0%	2377.9	2628.2	250.3	10.5%
64.2%	2329.0	2279.1	-49.8	-2.1%
65.4%	2044.7	1994.0	-50.6	-2.5%
66.7%	2028.5	1972.0	-56.5	-2.8%
67.9%	2011.9	1957.2	-54.8	-2.7%
69.1%	1990.3	1882.5	-107.8	-5.4%
70.4%	1913.7	1823.9	-89.8	-4.7%
71.6%	1882.5	1823.5	-59.0	-3.1%
72.8%	1824.6	1799.4	-25.2	-1.4%
74.1%	1795.5	1773.6	-21.9	-1.2%
75.3%	1787.6	1699.9	-87.7	-4.9%
76.5%	1729.9	1665.9	-64.0	-3.7%
77.8%	1723.2	1570.3	-152.9	-8.9%
79.0%	1422.0	1390.9	-31.1	-2.2%
80.2%	1419.0	1390.0	-29.0	-2.0%
81.5%	1403.8	1375.6	-28.2	-2.0%
82.7%	1390.3	1368.9	-21.4	-1.5%
84.0%	1323.7	1314.2	-9.5	-0.7%
85.2%	1311.4	1284.8	-26.6	-2.0%
86.4%	1311.0	1277.8	-33.1	-2.5%
87.7%	1277.4	1259.0	-18.4	-1.4%
88.9%	1258.9	1224.8	-34.1	-2.7%
90.1%	1218.3	1213.4	-5.0	-0.4%
91.4%	1214.8	1204.7	-10.1	-0.8%
92.6%	1191.7	1158.1	-33.5	-2.8%
93.8%	1173.5	1147.6	-25.8	-2.2%
95.1%	1153.2	810.0	-343.1	-29.8%
96.3%	785.8	747.5	-38.3	-4.9%
97.5%	519.9	691.9	172.0	33.1%
98.8%	490.4	512.0	21.6	4.4%
100.0%	274.3	294.9	20.6	7.5%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	11316.5	11118.0	-198.5	-1.8%
1.2%	10233.2	9401.8	-831.5	-8.1%
2.5%	9884.0	9328.0	-556.1	-5.6%
3.7%	9768.5	9215.0	-553.5	-5.7%
4.9%	9497.1	8902.7	-594.4	-6.3%
6.2%	9391.2	8690.4	-700.7	-7.5%
7.4%	8829.8	8671.9	-157.9	-1.8%
8.6%	8812.3	8667.7	-144.6	-1.6%
9.9%	8502.7	8627.2	124.4	1.5%
11.1%	8501.0	8438.3	-62.7	-0.7%
12.3%	8475.5	8213.3	-262.3	-3.1%
13.6%	8332.0	8142.7	-189.3	-2.3%
14.8%	8288.7	8108.3	-180.4	-2.2%
16.0%	7897.6	7838.4	-59.2	-0.7%
17.3%	7276.2	7113.1	-163.1	-2.2%
18.5%	7061.6	7053.0	-8.6	-0.1%
19.8%	6554.1	6918.7	364.5	5.6%
21.0%	6174.5	6730.1	555.6	9.0%
22.2%	6118.8	6434.9	316.1	5.2%
23.5%	5419.4	6319.8	900.4	16.6%
24.7%	5398.1	6204.2	806.1	14.9%
25.9%	5379.6	5873.6	494.0	9.2%
27.2%	5284.3	5741.1	456.8	8.6%
28.4%	5112.9	5380.7	267.8	5.2%
29.6%	4969.1	5241.1	272.0	5.5%
30.9%	4925.4	5118.4	193.0	3.9%
32.1%	4901.9	4971.7	69.9	1.4%
33.3%	4870.5	4876.4	5.9	0.1%
34.6%	4774.0	4802.1	28.1	0.6%
35.8%	4773.9	4734.3	-39.6	-0.8%
37.0%	4627.9	4714.4	86.5	1.9%
38.3%	4616.5	4655.6	39.1	0.8%
39.5%	4326.9	4620.3	293.4	6.8%
40.7%	4261.1	4601.6	340.5	8.0%
42.0%	4256.9	4518.9	262.0	6.2%
43.2%	4247.5	4404.2	156.7	3.7%
44.4%	4242.8	4301.2	58.3	1.4%
45.7%	4230.0	4259.8	29.8	0.7%
46.9%	3981.9	4156.2	174.3	4.4%
48.1%	3981.2	3989.2	8.0	0.2%
49.4%	3892.4	3893.7	1.3	0.0%
50.6%	3825.5	3660.8	-164.7	-4.3%
51.9%	3778.9	3659.8	-119.1	-3.2%
53.1%	3709.5	3631.3	-78.1	-2.1%
54.3%	3546.5	3472.4	-74.1	-2.1%
55.6%	3442.0	3459.1	17.1	0.5%
56.8%	3428.8	3396.3	-32.5	-0.9%
58.0%	3284.4	3384.5	100.1	3.0%
59.3%	3201.8	3369.0	167.1	5.2%
60.5%	2493.4	3286.7	793.3	31.8%
61.7%	2270.7	3236.5	965.8	42.5%
63.0%	2119.5	2971.2	851.7	40.2%
64.2%	2086.8	2950.6	863.7	41.4%
65.4%	2011.6	2719.7	708.1	35.2%
66.7%	1919.6	2601.1	681.6	35.5%
67.9%	1665.4	2388.9	723.5	43.4%
69.1%	1497.7	1907.3	409.6	27.3%
70.4%	1436.9	1816.5	379.6	26.4%
71.6%	1196.5	1588.0	391.5	32.7%
72.8%	1112.0	1559.7	447.7	40.3%
74.1%	924.0	907.4	-16.6	-1.8%
75.3%	826.1	825.2	-0.9	-0.1%
76.5%	824.1	695.5	-128.7	-15.6%
77.8%	516.0	694.8	178.8	34.6%
79.0%	492.8	635.3	142.5	28.9%
80.2%	452.3	526.8	74.5	16.5%
81.5%	447.4	500.1	52.7	11.8%
82.7%	446.0	465.9	19.9	4.5%
84.0%	424.7	447.6	22.9	5.4%
85.2%	301.6	446.8	145.3	48.2%
86.4%	293.7	326.4	32.7	11.1%
87.7%	281.9	309.5	27.6	9.8%
88.9%	275.3	300.3	25.0	9.1%
90.1%	268.8	290.0	21.2	7.9%
91.4%	220.5	226.1	5.6	2.5%
92.6%	203.9	203.5	-0.4	-0.2%
93.8%	200.7	198.4	-2.3	-1.2%
95.1%	185.9	186.5	0.6	
96.3%	185.2	186.1	0.9	
97.5%	182.0	182.4	0.5	
98.8%	181.7	181.5	-0.2	
100.0%	180.0	179.9	-0.1	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	9878.1	9140.9	-737.2	-7.5%
1.2%	6882.8	7388.6	505.9	7.4%
2.5%	6273.7	6096.7	-177.0	-2.8%
3.7%	5769.1	6040.9	271.8	4.7%
4.9%	5679.1	5625.6	-53.5	-0.9%
6.2%	5431.9	5421.2	-10.7	-0.2%
7.4%	5400.0	5392.7	-7.3	-0.1%
8.6%	5119.7	5349.0	229.3	4.5%
9.9%	4782.6	5132.1	349.5	7.3%
11.1%	4752.7	5114.9	362.2	7.6%
12.3%	4724.2	4993.0	268.7	5.7%
13.6%	4714.1	4929.2	215.1	4.6%
14.8%	4710.9	4751.5	40.6	0.9%
16.0%	4566.5	4747.4	180.8	4.0%
17.3%	4536.3	4708.4	172.1	3.8%
18.5%	4492.2	4670.0	177.8	4.0%
19.8%	4235.5	4525.1	289.6	6.8%
21.0%	4189.2	4428.7	239.5	5.7%
22.2%	4152.5	4412.2	259.7	6.3%
23.5%	3909.7	4217.2	307.6	7.9%
24.7%	3879.3	4215.2	335.9	8.7%
25.9%	3798.9	3962.5	163.7	4.3%
27.2%	3720.0	3850.3	130.3	3.5%
28.4%	3657.7	3774.7	117.0	3.2%
29.6%	3319.1	3560.2	241.0	7.3%
30.9%	3234.6	3242.8	8.2	0.3%
32.1%	2952.8	3116.2	163.4	5.5%
33.3%	2665.1	2866.4	201.3	7.6%
34.6%	1692.7	2722.0	1029.3	60.8%
35.8%	1691.0	2464.5	773.5	45.7%
37.0%	1611.8	2463.8	851.9	52.9%
38.3%	1537.7	2266.0	728.2	47.4%
39.5%	1524.3	2201.5	677.2	44.4%
40.7%	1445.9	1950.0	504.1	34.9%
42.0%	1441.6	1848.9	407.3	28.3%
43.2%	1121.2	1838.2	717.0	64.0%
44.4%	1092.6	1684.7	592.1	54.2%
45.7%	1028.9	1389.6	360.7	35.1%
46.9%	1027.5	1330.0	302.5	29.4%
48.1%	864.9	1241.3	376.4	43.5%
49.4%	852.9	1220.9	368.0	43.1%
50.6%	824.5	1188.5	364.0	44.2%
51.9%	660.4	1082.6	422.3	63.9%
53.1%	650.3	833.8	183.6	28.2%
54.3%	627.0	818.3	191.2	30.5%
55.6%	618.7	809.5	190.7	30.8%
56.8%	432.9	757.3	324.4	74.9%
58.0%	354.8	644.4	289.7	81.7%
59.3%	354.4	527.4	172.9	48.8%
60.5%	340.9	416.9	76.1	22.3%
61.7%	319.9	361.6	41.7	13.0%
63.0%	293.9	354.7	60.8	20.7%
64.2%	273.2	296.3	23.2	8.5%
65.4%	258.3	289.2	30.9	12.0%
66.7%	245.2	269.8	24.6	10.0%
67.9%	223.0	259.5	36.6	16.4%
69.1%	221.7	232.2	10.5	4.7%
70.4%	215.0	229.9	14.9	6.9%
71.6%	210.4	225.3	14.9	7.1%
72.8%	209.8	223.7	13.9	6.6%
74.1%	209.2	216.4	7.2	3.5%
75.3%	207.2	210.1	2.9	1.4%
76.5%	198.9	204.9	6.1	3.0%
77.8%	198.2	198.7	0.5	0.2%
79.0%	193.7	197.4	3.7	1.9%
80.2%	192.8	192.9	0.1	0.1%
81.5%	192.3	192.3	-0.1	0.0%
82.7%	192.2	192.2	0.0	0.0%
84.0%	191.3	192.2	0.9	0.5%
85.2%	188.7	189.4	0.6	0.3%
86.4%	188.6	189.2	0.6	0.3%
87.7%	188.3	188.9	0.6	0.3%
88.9%	187.7	188.2	0.5	0.3%
90.1%	185.3	184.8	-0.6	-0.3%
91.4%	184.6	184.4	-0.3	-0.1%
92.6%	182.9	183.3	0.4	0.2%
93.8%	182.7	182.9	0.3	0.1%
95.1%	182.3	182.7	0.4	0.2%
96.3%	182.0	182.3	0.3	0.2%
97.5%	181.3	181.7	0.4	0.2%
98.8%	181.0	181.1	0.1	0.0%
100.0%	179.4	179.5	0.1	0.1%

Table SQ-22-b

Sacramento River at Collinsville, Monthly EC
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8541.5	5485.0	-3056.5	-35.8%
1.2%	4965.1	4335.1	-630.0	-12.7%
2.5%	3113.1	3115.4	2.3	0.1%
3.7%	2967.7	3105.7	138.0	4.7%
4.9%	2477.0	3078.1	601.1	24.3%
6.2%	2310.6	2827.6	517.0	22.4%
7.4%	2061.5	2381.1	319.6	15.5%
8.6%	2017.7	2265.1	247.4	12.3%
9.9%	1969.7	2200.1	230.3	11.7%
11.1%	1815.6	2089.1	273.5	15.1%
12.3%	1787.0	2083.6	296.6	16.6%
13.6%	1615.5	1905.7	290.2	18.0%
14.8%	1547.9	1883.6	335.8	21.7%
16.0%	1315.8	1495.7	179.9	13.7%
17.3%	896.2	1386.5	490.3	54.7%
18.5%	795.1	1320.7	525.6	66.1%
19.8%	786.7	1038.4	251.8	32.0%
21.0%	785.9	980.9	195.0	24.8%
22.2%	773.0	969.3	196.4	25.4%
23.5%	552.2	666.7	114.5	20.7%
24.7%	494.0	648.9	154.9	31.4%
25.9%	460.6	645.7	185.1	40.2%
27.2%	452.0	580.3	128.3	28.4%
28.4%	446.6	545.9	99.3	22.2%
29.6%	445.7	516.1	70.4	15.8%
30.9%	435.2	507.9	72.7	16.7%
32.1%	409.8	504.7	94.9	23.1%
33.3%	406.0	494.9	88.9	21.9%
34.6%	374.6	470.3	95.6	25.5%
35.8%	360.0	439.0	79.0	22.0%
37.0%	345.5	435.6	90.0	26.1%
38.3%	335.2	420.9	85.7	25.6%
39.5%	332.2	367.4	35.2	10.6%
40.7%	306.8	340.2	33.4	10.9%
42.0%	295.7	324.1	28.3	9.6%
43.2%	292.3	320.3	28.0	9.6%
44.4%	289.1	320.0	30.9	10.7%
45.7%	280.7	314.1	33.4	11.9%
46.9%	270.4	299.2	28.7	10.6%
48.1%	270.3	283.9	13.6	5.0%
49.4%	254.7	277.5	22.8	9.0%
50.6%	252.3	257.7	5.4	2.1%
51.9%	236.8	254.6	17.8	7.5%
53.1%	220.3	253.9	33.7	15.3%
54.3%	219.9	246.7	26.8	12.2%
55.6%	212.6	237.8	25.2	11.9%
56.8%	209.4	234.4	25.0	11.9%
58.0%	208.8	224.2	15.4	7.4%
59.3%	208.3	214.8	6.5	3.1%
60.5%	208.2	212.7	4.6	2.2%
61.7%	202.5	204.9	2.4	1.2%
63.0%	198.6	203.0	4.3	2.2%
64.2%	195.8	200.3	4.5	2.3%
65.4%	195.0	198.9	3.9	2.0%
66.7%	194.1	197.2	3.1	1.6%
67.9%	193.3	196.0	2.6	1.4%
69.1%	192.9	194.8	1.9	1.0%
70.4%	192.8	194.2	1.4	0.7%
71.6%	191.2	191.9	0.7	0.4%
72.8%	191.2	191.4	0.2	0.1%
74.1%	190.9	191.4	0.4	0.2%
75.3%	190.1	191.2	1.1	0.6%
76.5%	190.0	190.8	0.8	0.4%
77.8%	189.8	190.1	0.3	0.1%
79.0%	189.4	190.0	0.6	0.3%
80.2%	188.2	190.0	1.8	1.0%
81.5%	188.1	188.6	0.5	0.3%
82.7%	187.7	187.8	0.2	0.1%
84.0%	187.5	187.3	-0.1	-0.1%
85.2%	187.2	187.0	-0.2	-0.1%
86.4%	186.1	186.1	0.0	0.0%
87.7%	185.3	185.9	0.6	0.3%
88.9%	185.2	185.5	0.3	0.2%
90.1%	185.1	185.4	0.3	0.2%
91.4%	184.9	185.3	0.4	0.2%
92.6%	184.5	184.5	0.0	0.0%
93.8%	183.8	184.1	0.3	0.2%
95.1%	183.6	184.1	0.5	0.3%
96.3%	182.7	183.3	0.6	0.3%
97.5%	182.5	183.1	0.6	0.3%
98.8%	181.1	181.6	0.5	0.3%
100.0%	179.1	179.1	0.0	0.0%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4390.7	4453.4	62.7	1.4%
1.2%	2679.1	2734.7	55.6	2.1%
2.5%	2136.7	2211.9	75.1	3.5%
3.7%	1775.0	1796.6	21.6	1.2%
4.9%	1623.3	1720.8	97.5	6.0%
6.2%	1339.7	1679.1	339.4	25.3%
7.4%	1304.2	1505.0	200.8	15.4%
8.6%	1275.7	1410.2	134.5	10.5%
9.9%	1230.4	1357.3	126.8	10.3%
11.1%	1225.2	1334.1	108.9	8.9%
12.3%	1191.3	1294.7	103.5	8.7%
13.6%	1158.4	1248.5	90.1	7.8%
14.8%	1114.0	1233.1	119.1	10.7%
16.0%	1100.8	795.8	-305.0	-27.7%
17.3%	807.3	760.2	-47.0	-5.8%
18.5%	698.9	759.4	60.5	8.7%
19.8%	662.9	755.3	92.4	13.9%
21.0%	495.2	565.6	70.4	14.2%
22.2%	481.9	560.7	78.8	16.4%
23.5%	463.2	559.7	96.4	20.8%
24.7%	453.8	533.3	79.5	17.5%
25.9%	444.0	495.2	51.1	11.5%
27.2%	437.0	438.8	1.8	0.4%
28.4%	423.3	436.4	13.1	3.1%
29.6%	362.0	427.0	65.0	18.0%
30.9%	359.9	405.4	45.6	12.7%
32.1%	354.3	399.3	45.0	12.7%
33.3%	334.3	395.2	60.9	18.2%
34.6%	326.6	368.3	41.8	12.8%
35.8%	315.3	352.9	37.6	11.9%
37.0%	308.7	351.7	43.0	13.9%
38.3%	305.9	348.0	42.1	13.8%
39.5%	295.0	333.8	38.8	13.2%
40.7%	287.8	328.1	40.3	14.0%
42.0%	271.4	322.6	51.2	18.9%
43.2%	265.7	316.4	50.8	19.1%
44.4%	263.6	315.8	52.3	19.8%
45.7%	257.5	308.0	50.5	19.6%
46.9%	243.8	285.9	42.1	17.3%
48.1%	241.9	265.2	23.2	9.6%
49.4%	241.1	256.7	15.5	6.4%
50.6%	226.8	255.7	29.0	12.8%
51.9%	226.4	252.1	25.7	11.3%
53.1%	220.6	241.1	20.4	9.3%
54.3%	214.0	220.7	6.7	3.1%
55.6%	212.2	217.2	5.1	2.4%
56.8%	209.3	215.8	6.5	3.1%
58.0%	202.3	214.9	12.6	6.2%
59.3%	199.2	206.7	7.4	3.7%
60.5%	198.9	203.8	4.8	2.4%
61.7%	198.5	201.2	2.7	1.4%
63.0%	196.0	197.7	1.8	0.9%
64.2%	195.6	197.3	1.7	0.9%
65.4%	195.0	196.3	1.3	0.7%
66.7%	195.0	196.1	1.1	0.6%
67.9%	193.5	195.4	1.9	1.0%
69.1%	193.2	195.3	2.1	1.1%
70.4%	191.8	193.9	2.1	1.1%
71.6%	191.3	193.3	2.0	1.0%
72.8%	190.6	192.1	1.5	0.8%
74.1%	189.9	191.1	1.2	0.6%
75.3%	189.7	190.6	0.9	0.5%
76.5%	189.1	190.4	1.3	0.7%
77.8%	189.1	190.3	1.2	0.6%
79.0%	188.1	189.5	1.4	0.7%
80.2%	187.5	188.9	1.4	0.7%
81.5%	187.4	187.8	0.4	0.2%
82.7%	187.1	187.8	0.7	0.4%
84.0%	186.8	186.8	0.0	0.0%
85.2%	186.1	186.8	0.6	0.3%
86.4%	186.1	186.2	0.1	0.1%
87.7%	185.9	186.2	0.2	0.1%
88.9%	185.8	185.7	-0.1	-0.1%
90.1%	185.6	185.4	-0.2	-0.1%
91.4%	184.9	184.9	-0.1	0.0%
92.6%	184.0	184.6	0.6	0.3%
93.8%	183.3	183.8	0.6	0.3%
95.1%	182.4	182.9	0.5	0.3%
96.3%	181.5	181.5	0.0	0.0%
97.5%	181.5	181.4	0.0	0.0%
98.8%	180.5	180.6	0.1	0.1%
100.0%	180.2	180.4	0.2	0.1%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	4576.0	4606.9	30.9	0.7%
1.2%	3476.5	3393.0	-83.4	-2.4%
2.5%	3003.1	2917.2	-85.9	-2.9%
3.7%	2502.1	2475.7	-26.4	-1.1%
4.9%	2406.1	2374.9	-31.2	-1.3%
6.2%	2291.5	2286.7	-4.8	-0.2%
7.4%	2246.7	2225.0	-21.8	-1.0%
8.6%	2024.7	1964.8	-59.8	-3.0%
9.9%	1898.6	1920.9	22.4	1.2%
11.1%	1833.7	1806.9	-26.7	-1.5%
12.3%	1785.9	1751.3	-34.6	-1.9%
13.6%	1670.4	1726.9	56.5	3.4%
14.8%	1525.2	1491.9	-33.3	-2.2%
16.0%	1511.2	1481.8	-29.3	-1.9%
17.3%	1481.3	1439.8	-41.5	-2.8%
18.5%	1436.6	1439.4	2.8	0.2%
19.8%	1237.7	1407.7	170.0	13.7%
21.0%	1233.7	1311.7	78.0	6.3%
22.2%	1114.5	1300.9	186.4	16.7%
23.5%	1025.3	1243.3	218.0	21.3%
24.7%	1005.1	1230.1	225.0	22.4%
25.9%	959.6	1151.5	191.9	20.0%
27.2%	922.2	1105.7	183.5	19.9%
28.4%	886.2	1036.8	150.6	17.0%
29.6%	812.3	1010.0	197.6	24.3%
30.9%	778.3	985.5	207.2	26.6%
32.1%	760.9	969.6	208.7	27.4%
33.3%	734.3	781.2	47.0	6.4%
34.6%	728.6	741.5	12.9	1.8%
35.8%	681.8	685.6	3.8	0.6%
37.0%	646.9	670.4	23.5	3.6%
38.3%	644.9	538.7	-106.2	-16.5%
39.5%	586.0	516.3	-69.7	-11.9%
40.7%	519.2	507.9	-11.3	-2.2%
42.0%	494.1	501.9	7.9	1.6%
43.2%	472.0	481.2	9.2	1.9%
44.4%	463.3	480.4	17.1	3.7%
45.7%	460.6	476.0	15.4	3.3%
46.9%	450.1	466.8	16.7	3.7%
48.1%	445.4	456.6	11.2	2.5%
49.4%	443.2	443.0	-0.2	0.0%
50.6%	424.7	418.3	-6.4	-1.5%
51.9%	414.7	414.1	-0.6	-0.2%
53.1%	398.5	395.4	-3.1	-0.8%
54.3%	396.0	392.1	-3.9	-1.0%
55.6%	387.0	391.0	3.9	1.0%
56.8%	376.1	379.3	3.2	0.8%
58.0%	356.7	364.8	8.1	2.3%
59.3%	351.3	356.7	5.3	1.5%
60.5%	324.7	342.8	18.2	5.6%
61.7%	313.6	335.3	21.7	6.9%
63.0%	310.8	313.2	2.4	0.8%
64.2%	306.9	309.1	2.2	0.7%
65.4%	270.0	286.9	16.9	6.2%
66.7%	267.7	267.5	-0.3	-0.1%
67.9%	246.9	258.7	11.7	4.7%
69.1%	244.3	245.3	1.0	0.4%
70.4%	223.2	242.3	19.1	8.5%
71.6%	222.8	226.3	3.5	1.6%
72.8%	218.5	224.7	6.2	2.8%
74.1%	216.0	218.2	2.2	1.0%
75.3%	215.4	215.4	0.0	0.0%
76.5%	213.4	214.1	0.8	0.4%
77.8%	213.3	212.9	-0.3	-0.2%
79.0%	209.9	211.0	1.2	0.5%
80.2%	208.9	208.9	0.1	0.0%
81.5%	201.9	204.9	3.0	1.5%
82.7%	200.5	202.2	1.7	0.8%
84.0%	199.2	199.3	0.0	0.0%
85.2%	198.2	199.1	0.9	0.4%
86.4%	195.9	198.2	2.3	1.2%
87.7%	193.2	193.4	0.2	0.1%
88.9%	191.1	192.1	1.1	0.6%
90.1%	190.7	191.9	1.1	0.6%
91.4%	189.2	189.7	0.5	0.2%
92.6%	187.2	187.2	0.0	0.0%
93.8%	187.2	187.2	0.0	0.0%
95.1%	186.2	186.2	0.0	0.0%
96.3%	185.9	185.6	-0.3	-0.2%
97.5%	184.2	184.6	0.4	0.2%
98.8%	181.7	181.8	0.1	0.1%
100.0%	180.8	180.7	-0.1	0.0%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	6916.4	6926.6	10.2	0.1%
1.2%	6222.1	6107.0	-115.0	-1.8%
2.5%	5842.9	5921.1	78.2	1.3%
3.7%	5596.7	5562.2	-34.5	-0.6%
4.9%	3776.1	3754.2	-21.9	-0.6%
6.2%	3625.1	3629.1	4.1	0.1%
7.4%	3608.3	3603.4	-4.9	-0.1%
8.6%	3583.4	3588.6	5.2	0.1%
9.9%	3443.5	3460.3	16.7	0.5%
11.1%	3235.0	3230.5	-4.6	-0.1%
12.3%	3091.1	3093.6	2.5	0.1%
13.6%	2844.1	2787.6	-56.5	-2.0%
14.8%	2420.2	2461.2	41.1	1.7%
16.0%	2415.1	2411.4	-3.7	-0.2%
17.3%	2390.8	2408.6	17.8	0.7%
18.5%	2377.3	2355.8	-21.5	-0.9%
19.8%	2338.1	2332.2	-5.9	-0.3%
21.0%	2318.2	2298.0	-20.2	-0.9%
22.2%	2300.2	2231.0	-69.1	-3.0%
23.5%	2287.7	2228.5	-59.2	-2.6%
24.7%	2280.1	2203.8	-76.3	-3.3%
25.9%	2275.8	2199.8	-76.1	-3.3%
27.2%	2272.5	2158.0	-114.5	-5.0%
28.4%	2250.1	2147.6	-102.5	-4.6%
29.6%	2241.9	2121.7	-120.1	-5.4%
30.9%	2205.7	2117.7	-88.0	-4.0%
32.1%	2171.3	2109.9	-61.4	-2.8%
33.3%	2142.7	2052.6	-90.1	-4.2%
34.6%	2140.3	2038.4	-101.9	-4.8%
35.8%	2122.9	2022.2	-100.7	-4.7%
37.0%	2086.2	2007.1	-79.1	-3.8%
38.3%	2080.0	1962.2	-117.8	-5.7%
39.5%	2034.3	1953.1	-81.2	-4.0%
40.7%	1944.9	1927.5	-17.4	-0.9%
42.0%	1635.2	1744.8	109.6	6.7%
43.2%	1593.3	1572.7	-20.6	-1.3%
44.4%	1558.2	1533.0	-25.2	-1.6%
45.7%	1507.5	1514.9	7.3	0.5%
46.9%	1478.3	1477.0	-1.3	-0.1%
48.1%	1445.0	1323.9	-121.1	-8.4%
49.4%	1314.8	1286.4	-28.4	-2.2%
50.6%	1314.4	1284.8	-29.6	-2.3%
51.9%	1270.0	1283.6	13.6	1.1%
53.1%	1269.7	1266.9	-2.8	-0.2%
54.3%	1266.7	1250.1	-16.6	-1.3%
55.6%	1198.7	1238.7	40.1	3.3%
56.8%	1128.3	1226.0	97.7	8.7%
58.0%	1107.3	1159.7	52.4	4.7%
59.3%	1094.5	1114.0	19.5	1.8%
60.5%	1044.3	1108.3	63.9	6.1%
61.7%	1023.7	1039.3	15.6	1.5%
63.0%	997.9	1010.0	12.1	1.2%
64.2%	867.5	897.6	30.1	3.5%
65.4%	835.8	828.6	-7.1	-0.9%
66.7%	820.0	748.2	-71.8	-8.8%
67.9%	769.9	742.1	-27.7	-3.6%
69.1%	731.0	724.0	-7.0	-1.0%
70.4%	689.8	700.0	10.2	1.5%
71.6%	623.4	668.7	45.3	7.3%
72.8%	602.4	569.0	-33.4	-5.5%
74.1%	547.2	559.0	11.7	2.1%
75.3%	457.9	547.0	89.1	19.5%
76.5%	457.4	474.2	16.8	3.7%
77.8%	456.1	467.1	11.1	2.4%
79.0%	452.3	457.5	5.2	1.1%
80.2%	412.2	457.4	45.1	10.9%
81.5%	347.9	412.1	64.1	18.4%
82.7%	344.6	356.7	12.0	3.5%
84.0%	335.2	353.8	18.7	5.6%
85.2%	334.5	345.0	10.6	3.2%
86.4%	322.7	339.5	16.8	5.2%
87.7%	278.5	278.2	-0.4	-0.1%
88.9%	272.4	276.4	4.0	1.5%
90.1%	238.8	245.0	6.2	2.6%
91.4%	228.4	233.1	4.7	2.1%
92.6%	217.6	227.3	9.7	4.5%
93.8%	214.5	220.8	6.3	2.9%
95.1%	207.6	209.3	1.7	0.8%
96.3%	207.4	203.8	-3.6	-1.7%
97.5%	191.8	191.7	0.0	0.0%
98.8%	188.1	187.6	-0.5	-0.2%
100.0%	179.9	180.3	0.5	0.3%

Table SQ-22-b

Sacramento River at Collinsville, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8562.0	8645.7	83.7	1.0%
1.2%	8213.0	8128.4	-84.6	-1.0%
2.5%	8136.4	7770.1	-366.3	-4.5%
3.7%	8105.6	7710.5	-395.0	-4.9%
4.9%	4778.2	4753.5	-24.8	-0.5%
6.2%	4752.7	4746.1	-6.6	-0.1%
7.4%	4731.2	4729.3	-1.9	0.0%
8.6%	4721.9	4653.9	-68.0	-1.4%
9.9%	4663.5	4456.4	-207.1	-4.4%
11.1%	4617.2	4288.6	-328.6	-7.1%
12.3%	4443.4	4236.5	-206.9	-4.7%
13.6%	4311.6	4066.0	-245.7	-5.7%
14.8%	4300.5	3967.2	-333.3	-7.8%
16.0%	3993.2	3946.2	-46.9	-1.2%
17.3%	3981.7	3798.5	-183.2	-4.6%
18.5%	3965.7	3741.4	-224.4	-5.7%
19.8%	3917.7	3718.5	-199.1	-5.1%
21.0%	3845.0	3705.2	-139.8	-3.6%
22.2%	3835.6	3632.3	-203.3	-5.3%
23.5%	3811.5	3590.2	-221.2	-5.8%
24.7%	3766.9	3548.5	-218.4	-5.8%
25.9%	3609.6	3539.7	-70.0	-1.9%
27.2%	3598.9	3491.3	-107.6	-3.0%
28.4%	3591.0	3452.9	-138.1	-3.8%
29.6%	3584.4	3447.6	-136.8	-3.8%
30.9%	3556.7	3387.8	-168.9	-4.7%
32.1%	3485.4	3372.6	-112.8	-3.2%
33.3%	3465.3	3296.2	-169.1	-4.9%
34.6%	3447.7	3268.4	-179.2	-5.2%
35.8%	3446.5	3143.6	-302.9	-8.8%
37.0%	3435.7	3087.6	-348.2	-10.1%
38.3%	3433.0	3057.6	-375.3	-10.9%
39.5%	3402.2	3055.8	-346.4	-10.2%
40.7%	3379.5	2986.5	-393.0	-11.6%
42.0%	3342.3	2890.0	-452.3	-13.5%
43.2%	3272.7	2887.4	-385.3	-11.8%
44.4%	3120.6	2849.5	-271.1	-8.7%
45.7%	3093.8	2767.7	-326.1	-10.5%
46.9%	3081.7	2730.4	-351.3	-11.4%
48.1%	3007.8	2730.1	-277.6	-9.2%
49.4%	2839.3	2700.8	-138.6	-4.9%
50.6%	2817.6	2700.6	-117.0	-4.2%
51.9%	2782.8	2697.1	-85.7	-3.1%
53.1%	2691.6	2656.1	-35.4	-1.3%
54.3%	2654.4	2603.9	-50.5	-1.9%
55.6%	2641.1	2581.9	-59.2	-2.2%
56.8%	2599.1	2569.0	-30.1	-1.2%
58.0%	2559.8	2510.2	-49.6	-1.9%
59.3%	2510.5	2506.8	-3.8	-0.1%
60.5%	2449.0	2453.3	4.2	0.2%
61.7%	2444.7	2432.2	-12.5	-0.5%
63.0%	2414.9	2422.5	7.6	0.3%
64.2%	2393.9	2418.9	25.0	1.0%
65.4%	2376.0	2380.6	4.6	0.2%
66.7%	2373.4	2362.9	-10.4	-0.4%
67.9%	2351.3	2316.5	-34.8	-1.5%
69.1%	2314.6	2289.8	-24.8	-1.1%
70.4%	2304.7	2249.8	-55.0	-2.4%
71.6%	2291.5	2235.9	-55.6	-2.4%
72.8%	2189.3	2212.9	23.6	1.1%
74.1%	2188.1	2200.7	12.5	0.6%
75.3%	2145.3	2151.7	6.4	0.3%
76.5%	2098.7	2121.7	23.0	1.1%
77.8%	2040.7	2093.0	52.3	2.6%
79.0%	2007.1	2077.2	70.0	3.5%
80.2%	1969.6	1982.9	13.3	0.7%
81.5%	1902.8	1964.2	61.4	3.2%
82.7%	1829.9	1858.7	28.8	1.6%
84.0%	1814.7	1831.1	16.4	0.9%
85.2%	1813.6	1685.2	-128.4	-7.1%
86.4%	1697.0	1621.8	-75.2	-4.4%
87.7%	1581.6	1583.0	1.4	0.1%
88.9%	1549.2	1549.7	0.5	0.0%
90.1%	1207.8	1288.3	80.5	6.7%
91.4%	1179.7	1219.1	39.4	3.3%
92.6%	1120.8	1128.3	7.4	0.7%
93.8%	1086.4	1034.6	-51.8	-4.8%
95.1%	1082.8	1021.5	-61.2	-5.7%
96.3%	996.9	970.8	-26.0	-2.6%
97.5%	882.4	806.4	-76.0	-8.6%
98.8%	762.0	580.0	-182.0	-23.9%
100.0%	247.1	233.8	-13.3	-5.4%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8962.9	8596.9	-366.0	-4.1%
1.2%	8690.2	8574.5	-115.8	-1.3%
2.5%	8687.5	8383.8	-303.7	-3.5%
3.7%	8292.3	8150.2	-142.1	-1.7%
4.9%	7088.9	6962.6	-126.4	-1.8%
6.2%	7004.0	6887.0	-117.0	-1.7%
7.4%	6875.8	6826.3	-49.5	-0.7%
8.6%	6869.6	6739.2	-130.5	-1.9%
9.9%	6839.5	6355.6	-484.0	-7.1%
11.1%	6544.2	6167.6	-376.6	-5.8%
12.3%	6437.2	5771.5	-665.7	-10.3%
13.6%	6168.8	5747.4	-421.4	-6.8%
14.8%	5954.0	5610.9	-343.1	-5.8%
16.0%	5723.5	5527.9	-195.6	-3.4%
17.3%	5716.6	5384.5	-332.1	-5.8%
18.5%	5667.0	5367.6	-299.4	-5.3%
19.8%	5608.0	5355.2	-252.7	-4.5%
21.0%	5577.0	5187.7	-389.4	-7.0%
22.2%	5466.0	5162.6	-303.4	-5.6%
23.5%	5453.3	5155.9	-297.3	-5.5%
24.7%	5373.7	4945.4	-428.4	-8.0%
25.9%	5183.4	4941.1	-242.3	-4.7%
27.2%	5145.0	4787.5	-357.6	-6.9%
28.4%	5105.7	4640.8	-464.9	-9.1%
29.6%	5009.8	4553.9	-455.9	-9.1%
30.9%	4555.3	4547.5	-7.8	-0.2%
32.1%	4484.3	4515.9	31.6	0.7%
33.3%	4448.1	4449.4	1.4	0.0%
34.6%	4443.4	4374.6	-68.8	-1.5%
35.8%	4261.0	4310.6	49.6	1.2%
37.0%	3938.6	4217.9	279.3	7.1%
38.3%	3668.7	3848.7	179.9	4.9%
39.5%	3653.9	3526.0	-127.9	-3.5%
40.7%	3604.2	3512.2	-92.0	-2.6%
42.0%	3424.0	3383.9	-40.2	-1.2%
43.2%	3347.4	3221.5	-125.8	-3.8%
44.4%	3260.4	3175.1	-85.4	-2.6%
45.7%	3207.0	3170.5	-36.4	-1.1%
46.9%	3137.5	3160.9	23.4	0.7%
48.1%	3121.3	3057.0	-64.4	-2.1%
49.4%	3063.0	2876.1	-186.9	-6.1%
50.6%	2925.1	2860.1	-65.0	-2.2%
51.9%	2910.0	2714.4	-195.6	-6.7%
53.1%	2691.8	2645.6	-46.2	-1.7%
54.3%	2630.1	2596.3	-33.8	-1.3%
55.6%	2557.7	2572.0	14.4	0.6%
56.8%	2503.6	2481.4	-22.2	-0.9%
58.0%	2463.4	2459.4	-4.0	-0.2%
59.3%	2443.0	2336.8	-106.2	-4.3%
60.5%	2355.5	2281.2	-74.3	-3.2%
61.7%	2311.3	2262.1	-49.2	-2.1%
63.0%	2248.6	2254.7	6.1	0.3%
64.2%	2121.2	2152.7	31.5	1.5%
65.4%	2099.4	2086.7	-12.8	-0.6%
66.7%	2084.9	2069.9	-15.0	-0.7%
67.9%	2072.6	2066.2	-6.3	-0.3%
69.1%	2058.9	2042.9	-16.0	-0.8%
70.4%	2032.6	2029.0	-3.5	-0.2%
71.6%	2029.0	1998.7	-30.3	-1.5%
72.8%	2028.3	1977.8	-50.4	-2.5%
74.1%	1968.1	1911.3	-56.8	-2.9%
75.3%	1966.5	1877.9	-88.6	-4.5%
76.5%	1947.2	1864.0	-83.3	-4.3%
77.8%	1911.1	1862.2	-48.9	-2.6%
79.0%	1868.0	1854.1	-13.9	-0.7%
80.2%	1863.1	1839.5	-23.6	-1.3%
81.5%	1853.0	1823.9	-29.1	-1.6%
82.7%	1837.9	1799.2	-38.7	-2.1%
84.0%	1832.6	1781.8	-50.8	-2.8%
85.2%	1785.9	1768.7	-17.3	-1.0%
86.4%	1774.5	1766.1	-8.4	-0.5%
87.7%	1770.1	1652.5	-117.6	-6.6%
88.9%	1677.0	1616.3	-60.7	-3.6%
90.1%	1659.7	1609.7	-50.0	-3.0%
91.4%	1646.0	1566.0	-80.0	-4.9%
92.6%	1578.1	1542.3	-35.8	-2.3%
93.8%	1494.0	1517.4	23.4	1.6%
95.1%	1477.0	1433.3	-43.7	-3.0%
96.3%	1459.8	1386.9	-73.0	-5.0%
97.5%	1381.1	1379.9	-1.2	-0.1%
98.8%	1265.0	1290.6	25.6	2.0%
100.0%	877.2	891.0	13.8	1.6%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	8626.0	8572.8	-53.3	-0.6%
1.2%	8544.7	8363.5	-181.2	-2.1%
2.5%	8417.2	8351.5	-65.7	-0.8%
3.7%	8381.6	8184.2	-197.4	-2.4%
4.9%	8352.1	8174.6	-177.4	-2.1%
6.2%	8344.6	7875.6	-469.1	-5.6%
7.4%	8318.8	7857.1	-461.7	-5.6%
8.6%	8234.7	7717.0	-517.7	-6.3%
9.9%	8193.4	7644.2	-549.2	-6.7%
11.1%	7914.5	7469.1	-445.4	-5.6%
12.3%	7761.1	7423.6	-337.5	-4.3%
13.6%	7756.7	7406.5	-350.1	-4.5%
14.8%	7173.6	7348.6	175.0	2.4%
16.0%	6983.0	6961.4	-21.6	-0.3%
17.3%	6972.9	6872.9	-100.0	-1.4%
18.5%	6968.1	6840.3	-127.9	-1.8%
19.8%	6911.7	6746.5	-165.1	-2.4%
21.0%	6910.7	6680.6	-230.2	-3.3%
22.2%	6900.0	6666.2	-233.8	-3.4%
23.5%	6867.0	6559.9	-307.2	-4.5%
24.7%	6859.4	6531.0	-328.4	-4.8%
25.9%	6845.5	6518.7	-326.8	-4.8%
27.2%	6839.0	6499.8	-339.2	-5.0%
28.4%	6717.8	6409.3	-308.5	-4.6%
29.6%	6704.0	6311.5	-392.4	-5.9%
30.9%	6695.9	6205.2	-490.7	-7.3%
32.1%	6558.5	6188.6	-370.0	-5.6%
33.3%	6539.7	5928.9	-610.8	-9.3%
34.6%	6460.3	5851.2	-609.0	-9.4%
35.8%	6444.0	5795.8	-648.2	-10.1%
37.0%	6331.7	5770.8	-560.9	-8.9%
38.3%	6022.6	5677.0	-345.6	-5.7%
39.5%	5996.7	5604.5	-392.1	-6.5%
40.7%	5919.8	5561.6	-358.2	-6.1%
42.0%	5781.3	5547.6	-233.7	-4.0%
43.2%	5559.3	5364.3	-195.0	-3.5%
44.4%	5550.9	5289.4	-261.5	-4.7%
45.7%	5498.2	5271.2	-227.0	-4.1%
46.9%	5417.1	5226.5	-190.6	-3.5%
48.1%	5261.6	5213.7	-47.9	-0.9%
49.4%	5246.1	5090.2	-155.9	-3.0%
50.6%	5231.1	5089.1	-142.0	-2.7%
51.9%	5151.2	5001.2	-150.0	-2.9%
53.1%	5150.1	4995.8	-154.3	-3.0%
54.3%	5136.4	4941.4	-195.0	-3.8%
55.6%	5108.0	4861.6	-246.4	-4.8%
56.8%	4966.8	4746.8	-219.9	-4.4%
58.0%	4941.9	4703.7	-238.1	-4.8%
59.3%	4857.2	4694.1	-163.2	-3.4%
60.5%	4792.6	4663.6	-128.9	-2.7%
61.7%	4737.2	4656.6	-80.7	-1.7%
63.0%	4697.2	4630.0	-67.2	-1.4%
64.2%	4685.8	4601.8	-83.9	-1.8%
65.4%	4659.8	4559.2	-100.6	-2.2%
66.7%	4620.7	4522.4	-98.3	-2.1%
67.9%	4529.4	4491.9	-37.5	-0.8%
69.1%	4525.6	4487.1	-38.6	-0.9%
70.4%	4519.5	4470.9	-48.6	-1.1%
71.6%	4514.3	4447.1	-67.2	-1.5%
72.8%	4505.0	4430.7	-74.3	-1.6%
74.1%	4466.8	4426.0	-40.8	-0.9%
75.3%	4459.2	4377.2	-81.9	-1.8%
76.5%	4414.2	4369.8	-44.4	-1.0%
77.8%	4405.6	4369.3	-36.3	-0.8%
79.0%	4360.7	4307.6	-53.1	-1.2%
80.2%	4293.9	4283.3	-10.6	-0.2%
81.5%	4280.6	4219.8	-60.8	-1.4%
82.7%	4275.1	4215.9	-59.2	-1.4%
84.0%	4260.2	4197.2	-63.0	-1.5%
85.2%	4194.0	4135.0	-58.9	-1.4%
86.4%	4150.9	4067.1	-83.8	-2.0%
87.7%	4127.3	4064.8	-62.5	-1.5%
88.9%	4083.1	4064.5	-18.6	-0.5%
90.1%	4082.5	4017.0	-65.5	-1.6%
91.4%	4080.2	3882.2	-198.0	-4.9%
92.6%	4078.0	3878.4	-199.6	-4.9%
93.8%	4049.0	3878.3	-170.7	-4.2%
95.1%	3943.8	3761.2	-182.6	-4.6%
96.3%	3871.2	3635.5	-235.7	-6.1%
97.5%	3790.6	3599.4	-191.2	-5.0%
98.8%	3756.3	3505.6	-250.7	-6.7%
100.0%	3,692.6	3,461.1	-231.5	-6.3%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	10155.6	9875.5	-280.1	-2.8%
1.2%	10105.8	9628.9	-476.9	-4.7%
2.5%	10028.3	9586.6	-441.7	-4.4%
3.7%	9947.5	9549.7	-397.8	-4.0%
4.9%	9939.9	9152.6	-787.3	-7.9%
6.2%	9908.9	9121.8	-787.1	-7.9%
7.4%	9565.2	9041.9	-523.4	-5.5%
8.6%	9359.1	8985.7	-373.4	-4.0%
9.9%	9334.9	8928.1	-406.8	-4.4%
11.1%	9293.8	8864.7	-429.1	-4.6%
12.3%	9286.5	8561.9	-724.5	-7.8%
13.6%	9267.3	8508.7	-758.6	-8.2%
14.8%	9237.2	8482.3	-755.0	-8.2%
16.0%	9115.7	8438.9	-676.8	-7.4%
17.3%	9057.9	8425.4	-632.5	-7.0%
18.5%	8978.8	8358.4	-620.5	-6.9%
19.8%	8963.7	8300.5	-663.2	-7.4%
21.0%	8918.8	8292.9	-625.9	-7.0%
22.2%	8912.5	8280.5	-632.1	-7.1%
23.5%	8907.0	8263.1	-643.9	-7.2%
24.7%	8898.3	8238.8	-659.5	-7.4%
25.9%	8895.9	8192.5	-703.4	-7.9%
27.2%	8894.2	8161.1	-733.2	-8.2%
28.4%	8884.3	8120.4	-763.9	-8.6%
29.6%	8839.9	8040.5	-799.5	-9.0%
30.9%	8821.5	8033.4	-788.1	-8.9%
32.1%	8764.4	8006.9	-757.5	-8.6%
33.3%	8758.7	7982.2	-776.5	-8.9%
34.6%	8731.8	7793.5	-938.3	-10.7%
35.8%	8721.6	7769.2	-952.3	-10.9%
37.0%	8640.8	7706.9	-933.9	-10.8%
38.3%	8622.0	7614.6	-1007.3	-11.7%
39.5%	8603.7	7594.1	-1009.7	-11.7%
40.7%	8598.5	7546.9	-1051.7	-12.2%
42.0%	8597.8	7483.0	-1114.8	-13.0%
43.2%	8402.6	7409.7	-992.9	-11.8%
44.4%	8374.7	7382.5	-992.2	-11.8%
45.7%	8372.7	7360.7	-1012.1	-12.1%
46.9%	8372.1	7353.4	-1018.6	-12.2%
48.1%	8097.4	7162.3	-935.0	-11.5%
49.4%	8022.3	7063.1	-959.2	-12.0%
50.6%	7830.9	7018.3	-812.6	-10.4%
51.9%	7793.3	6988.5	-804.7	-10.3%
53.1%	7638.3	6545.2	-1093.2	-14.3%
54.3%	6375.5	5924.5	-451.0	-7.1%
55.6%	3376.4	3318.4	-58.0	-1.7%
56.8%	3339.7	3253.7	-86.1	-2.6%
58.0%	3248.8	3219.8	-29.1	-0.9%
59.3%	3241.2	3174.1	-67.1	-2.1%
60.5%	3146.6	3010.9	-135.7	-4.3%
61.7%	3080.3	3005.1	-75.2	-2.4%
63.0%	3037.4	2896.5	-140.9	-4.6%
64.2%	2937.3	2865.7	-71.6	-2.4%
65.4%	2921.2	2827.4	-93.8	-3.2%
66.7%	2891.2	2747.4	-143.8	-5.0%
67.9%	2879.4	2693.6	-185.8	-6.5%
69.1%	1828.8	1815.8	-13.0	-0.7%
70.4%	1692.9	1652.2	-40.7	-2.4%
71.6%	1633.9	1634.7	0.8	0.0%
72.8%	1627.0	1632.1	5.1	0.3%
74.1%	1626.9	1608.7	-18.2	-1.1%
75.3%	1609.3	1568.1	-41.2	-2.6%
76.5%	1602.6	1545.2	-57.4	-3.6%
77.8%	1560.1	1504.5	-55.6	-3.6%
79.0%	1554.7	1493.4	-61.4	-3.9%
80.2%	1528.7	1484.2	-44.5	-2.9%
81.5%	1521.8	1460.3	-61.5	-4.0%
82.7%	1504.6	1453.5	-51.1	-3.4%
84.0%	1502.6	1450.9	-51.7	-3.4%
85.2%	1502.5	1448.0	-54.5	-3.6%
86.4%	1489.5	1423.4	-66.1	-4.4%
87.7%	1481.1	1413.6	-67.4	-4.6%
88.9%	1476.6	1406.8	-69.7	-4.7%
90.1%	1464.0	1406.8	-57.2	-3.9%
91.4%	1436.9	1346.7	-90.2	-6.3%
92.6%	1431.6	1339.5	-92.0	-6.4%
93.8%	1418.3	1330.3	-87.9	-6.2%
95.1%	1404.7	1327.0	-77.8	-5.5%
96.3%	1374.0	1322.7	-51.3	-3.7%
97.5%	1361.2	1300.5	-60.7	-4.5%
98.8%	1340.0	1254.1	-85.8	-6.4%
100.0%	1,325.1	1,219.3	-105.8	-8.0%

Figure SQ-23-b
Sacramento River at Mallard Slough (Chipps Island)), Monthly EC
Probability of Exceedance

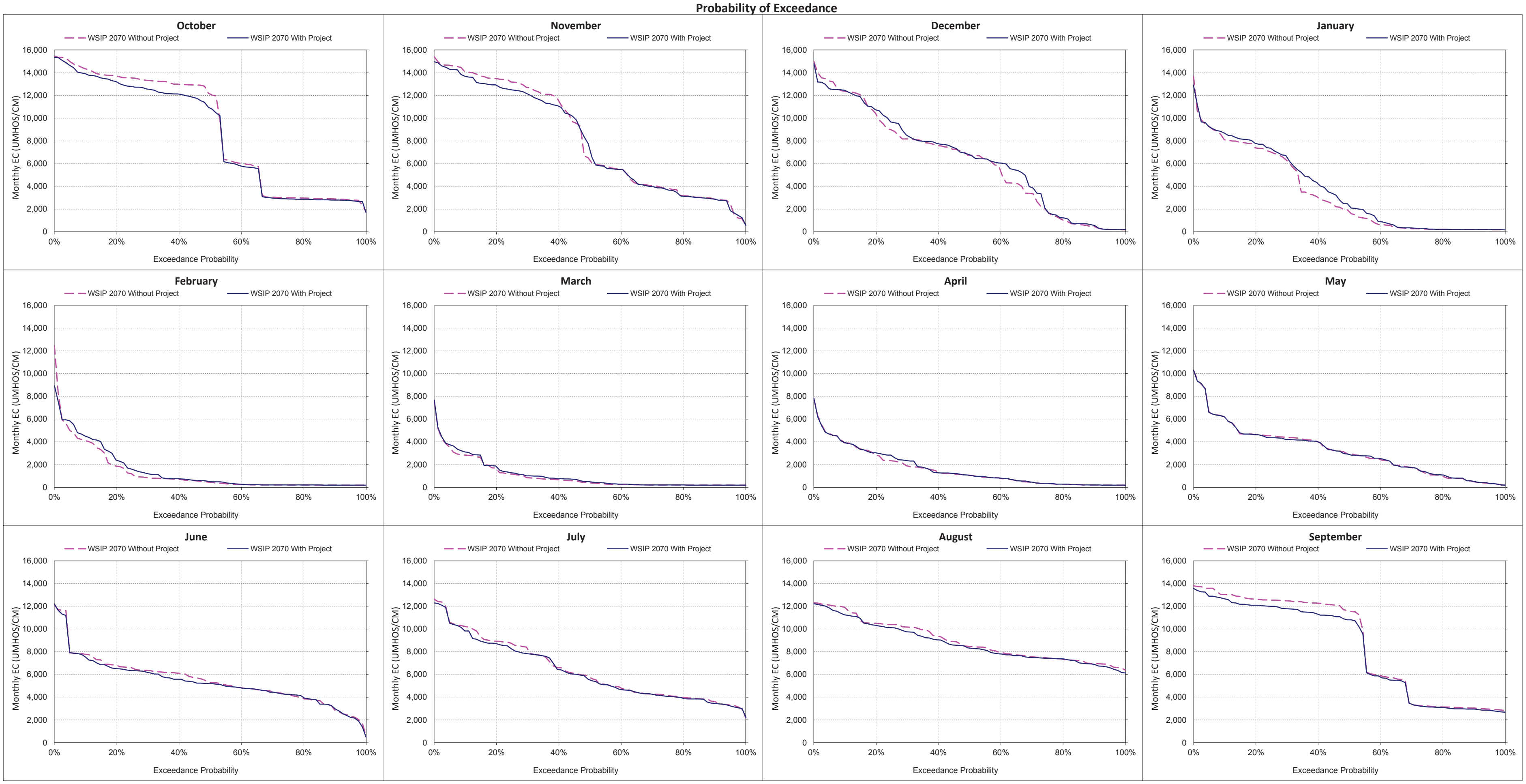


Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15452.4	15364.4	-87.9	-0.6%
1.2%	15355.3	15330.9	-24.4	-0.2%
2.5%	15354.2	15089.6	-264.7	-1.7%
3.7%	15285.4	14906.8	-378.6	-2.5%
4.9%	14996.3	14657.3	-339.0	-2.3%
6.2%	14770.2	14449.9	-320.2	-2.2%
7.4%	14661.4	14049.0	-612.4	-4.2%
8.6%	14490.3	13993.7	-496.5	-3.4%
9.9%	14342.6	13911.6	-430.9	-3.0%
11.1%	14275.8	13773.1	-502.7	-3.5%
12.3%	14092.0	13745.8	-346.2	-2.5%
13.6%	13921.3	13697.2	-224.2	-1.6%
14.8%	13853.8	13561.2	-292.6	-2.1%
16.0%	13803.8	13471.9	-331.9	-2.4%
17.3%	13766.7	13431.2	-335.4	-2.4%
18.5%	13758.5	13307.3	-451.2	-3.3%
19.8%	13737.9	13237.4	-500.4	-3.6%
21.0%	13635.0	13015.6	-619.4	-4.5%
22.2%	13559.5	12917.9	-641.5	-4.7%
23.5%	13558.0	12808.9	-749.1	-5.5%
24.7%	13543.1	12785.9	-757.2	-5.6%
25.9%	13515.2	12736.5	-778.7	-5.8%
27.2%	13438.8	12722.4	-716.4	-5.3%
28.4%	13379.5	12682.0	-697.5	-5.2%
29.6%	13325.5	12559.8	-765.7	-5.7%
30.9%	13310.4	12529.9	-780.5	-5.9%
32.1%	13263.7	12456.0	-807.7	-6.1%
33.3%	13245.0	12283.2	-961.8	-7.3%
34.6%	13225.2	12243.3	-981.9	-7.4%
35.8%	13211.7	12160.0	-1051.7	-8.0%
37.0%	13101.2	12155.0	-946.2	-7.2%
38.3%	12999.9	12143.7	-856.2	-6.6%
39.5%	12998.7	12138.3	-860.4	-6.6%
40.7%	12955.1	12077.8	-877.2	-6.8%
42.0%	12954.9	11988.5	-966.4	-7.5%
43.2%	12937.1	11928.7	-1008.4	-7.8%
44.4%	12930.0	11845.9	-1084.1	-8.4%
45.7%	12922.1	11752.2	-1169.9	-9.1%
46.9%	12904.3	11546.5	-1357.8	-10.5%
48.1%	12818.8	11413.2	-1405.6	-11.0%
49.4%	12200.7	10968.2	-1232.5	-10.1%
50.6%	12022.5	10795.0	-1227.4	-10.2%
51.9%	11953.4	10460.4	-1493.0	-12.5%
53.1%	9839.8	10227.9	388.1	3.9%
54.3%	6377.9	6176.0	-201.8	-3.2%
55.6%	6318.6	6078.5	-240.1	-3.8%
56.8%	6215.7	6037.0	-178.7	-2.9%
58.0%	6104.5	5974.2	-130.3	-2.1%
59.3%	6036.6	5838.2	-198.4	-3.3%
60.5%	6034.0	5752.9	-281.1	-4.7%
61.7%	5932.4	5706.0	-226.4	-3.8%
63.0%	5919.3	5674.9	-244.5	-4.1%
64.2%	5750.6	5622.6	-128.0	-2.2%
65.4%	5745.4	5556.0	-189.4	-3.3%
66.7%	3204.4	3104.5	-99.9	-3.1%
67.9%	3061.7	3025.6	-36.1	-1.2%
69.1%	3053.3	2997.0	-56.3	-1.8%
70.4%	3045.8	2946.9	-98.9	-3.2%
71.6%	3011.5	2942.0	-69.4	-2.3%
72.8%	3005.8	2905.6	-100.1	-3.3%
74.1%	2999.1	2901.4	-97.6	-3.3%
75.3%	2998.9	2894.4	-104.5	-3.5%
76.5%	2997.6	2891.8	-105.8	-3.5%
77.8%	2986.9	2875.8	-111.2	-3.7%
79.0%	2975.7	2873.8	-101.9	-3.4%
80.2%	2965.8	2860.6	-105.2	-3.5%
81.5%	2959.9	2854.5	-105.4	-3.6%
82.7%	2946.8	2854.0	-92.8	-3.2%
84.0%	2934.0	2828.2	-105.9	-3.6%
85.2%	2924.3	2821.6	-102.7	-3.5%
86.4%	2923.0	2818.1	-104.8	-3.6%
87.7%	2914.9	2816.7	-98.3	-3.4%
88.9%	2905.5	2797.2	-108.3	-3.7%
90.1%	2894.5	2790.3	-104.1	-3.6%
91.4%	2873.5	2790.2	-83.3	-2.9%
92.6%	2862.3	2778.8	-83.6	-2.9%
93.8%	2826.5	2771.0	-55.4	-2.0%
95.1%	2793.0	2743.3	-49.7	-1.8%
96.3%	2788.4	2704.1	-84.3	-3.0%
97.5%	2769.6	2671.0	-98.6	-3.6%
98.8%	2364.8	2652.3	287.5	12.2%
100.0%	1,746.9	1,692.2	-54.6	-3.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15412.8	14958.1	-454.7	-3.0%
1.2%	14969.9	14881.2	-88.7	-0.6%
2.5%	14690.3	14591.3	-99.0	-0.7%
3.7%	14670.0	14476.8	-193.2	-1.3%
4.9%	14657.5	14301.7	-355.8	-2.4%
6.2%	14595.7	14289.9	-305.8	-2.1%
7.4%	14544.2	14255.3	-288.8	-2.0%
8.6%	14468.1	13857.4	-610.7	-4.2%
9.9%	14064.2	13697.5	-366.8	-2.6%
11.1%	14048.4	13617.7	-430.7	-3.1%
12.3%	14005.9	13604.0	-401.9	-2.9%
13.6%	13875.8	13134.9	-740.9	-5.3%
14.8%	13714.2	13077.3	-637.0	-4.6%
16.0%	13657.5	13044.7	-612.8	-4.5%
17.3%	13527.7	12976.3	-551.5	-4.1%
18.5%	13510.3	12945.0	-565.2	-4.2%
19.8%	13498.7	12923.0	-575.7	-4.3%
21.0%	13430.9	12739.5	-691.5	-5.1%
22.2%	13407.0	12615.8	-791.1	-5.9%
23.5%	13401.6	12579.6	-822.0	-6.1%
24.7%	13186.1	12489.0	-697.1	-5.3%
25.9%	13157.7	12446.9	-710.8	-5.4%
27.2%	13097.4	12398.2	-699.2	-5.3%
28.4%	12957.7	12328.9	-628.8	-4.9%
29.6%	12715.3	12171.4	-543.9	-4.3%
30.9%	12669.3	12030.2	-639.2	-5.0%
32.1%	12449.8	11818.1	-631.7	-5.1%
33.3%	12334.4	11687.7	-646.7	-5.2%
34.6%	12138.8	11536.8	-602.1	-5.0%
35.8%	12101.4	11324.1	-777.3	-6.4%
37.0%	12091.7	11296.5	-795.2	-6.6%
38.3%	11993.9	11187.0	-806.8	-6.7%
39.5%	11734.5	11103.3	-631.3	-5.4%
40.7%	11151.0	10956.1	-195.0	-1.7%
42.0%	10706.9	10437.5	-269.4	-2.5%
43.2%	10331.7	10344.8	13.0	0.1%
44.4%	9685.0	10160.0	475.0	4.9%
45.7%	9541.0	9830.3	289.3	3.0%
46.9%	9293.2	9040.4	-252.8	-2.7%
48.1%	6675.7	8355.5	1679.8	25.2%
49.4%	6524.2	7776.9	1252.7	19.2%
50.6%	6048.0	6547.1	499.1	8.3%
51.9%	5938.1	5874.1	-64.1	-1.1%
53.1%	5874.4	5805.2	-69.2	-1.2%
54.3%	5833.7	5779.4	-54.3	-0.9%
55.6%	5758.6	5565.9	-192.7	-3.3%
56.8%	5617.5	5559.6	-57.8	-1.0%
58.0%	5574.9	5512.7	-62.3	-1.1%
59.3%	5508.8	5493.1	-15.7	-0.3%
60.5%	5497.0	5467.5	-29.5	-0.5%
61.7%	5122.3	5120.4	-1.9	0.0%
63.0%	4614.2	4750.1	135.9	2.9%
64.2%	4324.3	4543.6	219.3	5.1%
65.4%	4233.4	4162.3	-71.1	-1.7%
66.7%	4169.1	4135.7	-33.4	-0.8%
67.9%	4149.4	4067.7	-81.7	-2.0%
69.1%	4064.0	3992.0	-72.1	-1.8%
70.4%	4030.0	3957.9	-72.1	-1.8%
71.6%	4022.0	3870.1	-151.9	-3.8%
72.8%	3904.5	3860.0	-44.5	-1.1%
74.1%	3832.2	3772.9	-59.2	-1.5%
75.3%	3809.5	3666.5	-143.0	-3.8%
76.5%	3725.1	3636.3	-88.8	-2.4%
77.8%	3715.7	3490.5	-225.3	-6.1%
79.0%	3196.8	3151.4	-45.4	-1.4%
80.2%	3164.8	3122.7	-42.2	-1.3%
81.5%	3150.5	3120.4	-30.2	-1.0%
82.7%	3120.0	3074.5	-45.4	-1.5%
84.0%	3041.7	3024.8	-16.9	-0.6%
85.2%	3040.6	3001.7	-39.0	-1.3%
86.4%	3001.8	2969.2	-32.6	-1.1%
87.7%	2997.3	2947.7	-49.6	-1.7%
88.9%	2958.7	2905.9	-52.8	-1.8%
90.1%	2870.6	2862.8	-7.8	-0.3%
91.4%	2826.7	2771.8	-54.9	-1.9%
92.6%	2783.5	2767.3	-16.2	-0.6%
93.8%	2766.5	2718.6	-47.9	-1.7%
95.1%	2423.6	1853.0	-570.7	-23.5%
96.3%	1484.9	1644.4	159.5	10.7%
97.5%	1216.1	1440.1	224.0	18.4%
98.8%	1157.7	1246.1	88.4	7.6%
100.0%	481.8	561.1	79.3	16.5%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	14998.4	14833.3	-165.1	-1.1%
1.2%	13993.6	13176.1	-817.5	-5.8%
2.5%	13553.7	13152.8	-400.9	-3.0%
3.7%	13471.7	12969.1	-502.6	-3.7%
4.9%	13272.0	12601.7	-670.3	-5.1%
6.2%	13188.3	12522.3	-666.0	-5.0%
7.4%	12676.7	12513.2	-163.6	-1.3%
8.6%	12432.1	12490.1	58.1	0.5%
9.9%	12364.7	12456.8	92.1	0.7%
11.1%	12330.1	12300.9	-29.2	-0.2%
12.3%	12283.9	12129.7	-154.1	-1.3%
13.6%	12198.0	11972.0	-226.0	-1.9%
14.8%	12070.1	11914.8	-155.4	-1.3%
16.0%	11763.0	11391.2	-371.8	-3.2%
17.3%	11059.7	11054.0	-5.7	-0.1%
18.5%	10803.8	11004.7	200.9	1.9%
19.8%	10451.7	10741.6	290.0	2.8%
21.0%	9832.7	10653.7	821.1	8.4%
22.2%	9516.6	10258.2	741.6	7.8%
23.5%	9073.8	10060.7	986.9	10.9%
24.7%	8992.6	9658.7	666.1	7.4%
25.9%	8836.3	9608.8	772.5	8.7%
27.2%	8495.4	9540.6	1045.2	12.3%
28.4%	8174.4	8935.9	761.5	9.3%
29.6%	8171.0	8522.2	351.1	4.3%
30.9%	8170.5	8311.9	141.4	1.7%
32.1%	8111.4	8170.7	59.3	0.7%
33.3%	8099.1	8033.9	-65.2	-0.8%
34.6%	8029.5	7977.2	-52.3	-0.7%
35.8%	7838.3	7966.6	128.3	1.6%
37.0%	7805.0	7959.6	154.6	2.0%
38.3%	7719.0	7918.5	199.5	2.6%
39.5%	7572.6	7769.7	197.1	2.6%
40.7%	7569.2	7695.0	125.8	1.7%
42.0%	7468.7	7688.5	219.8	2.9%
43.2%	7446.7	7603.6	156.9	2.1%
44.4%	7269.0	7460.9	191.9	2.6%
45.7%	7262.5	7326.9	64.4	0.9%
46.9%	7113.4	7012.4	-101.0	-1.4%
48.1%	7041.8	6954.6	-87.2	-1.2%
49.4%	6754.4	6847.3	92.9	1.4%
50.6%	6734.0	6709.0	-25.0	-0.4%
51.9%	6708.5	6449.4	-259.1	-3.9%
53.1%	6698.2	6420.8	-277.4	-4.1%
54.3%	6451.4	6420.2	-31.3	-0.5%
55.6%	6399.2	6398.9	-0.3	0.0%
56.8%	6203.1	6231.5	28.4	0.5%
58.0%	5884.2	6135.1	250.9	4.3%
59.3%	5852.3	6064.9	212.7	3.6%
60.5%	4915.8	6047.4	1131.6	23.0%
61.7%	4311.5	5959.2	1647.7	38.2%
63.0%	4303.6	5554.4	1250.7	29.1%
64.2%	4275.1	5478.5	1203.3	28.1%
65.4%	4231.6	5394.8	1163.2	27.5%
66.7%	4013.4	5209.4	1196.0	29.8%
67.9%	3406.9	4961.8	1555.0	45.6%
69.1%	3376.5	3991.9	615.3	18.2%
70.4%	3346.8	3853.5	506.8	15.1%
71.6%	2660.8	3381.1	720.3	27.1%
72.8%	2241.0	3377.6	1136.7	50.7%
74.1%	2039.0	2102.4	63.4	3.1%
75.3%	1682.9	1652.3	-30.7	-1.8%
76.5%	1398.9	1548.0	149.1	10.7%
77.8%	1356.7	1474.4	117.7	8.7%
79.0%	1161.8	1235.5	73.8	6.3%
80.2%	996.2	1227.9	231.7	23.3%
81.5%	884.3	1122.9	238.6	27.0%
82.7%	714.9	758.3	43.4	6.1%
84.0%	685.3	714.9	29.6	4.3%
85.2%	625.6	712.4	86.7	13.9%
86.4%	607.2	711.2	104.0	17.1%
87.7%	547.1	703.9	156.8	28.7%
88.9%	479.9	624.0	144.1	30.0%
90.1%	452.7	569.7	117.0	25.8%
91.4%	302.6	322.0	19.4	
92.6%	244.1	243.6	-0.5	
93.8%	224.7	224.3	-0.4	
95.1%	193.1	198.6	5.5	
96.3%	189.5	189.7	0.1	
97.5%	185.8	187.2	1.4	
98.8%	185.2	184.9	-0.3	
100.0%	183.8	183.9	0.1	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13680.7	12906.8	-773.9	-5.7%
1.2%	10616.9	11171.4	554.5	5.2%
2.5%	9857.5	9679.0	-178.5	-1.8%
3.7%	9477.9	9615.8	137.9	1.5%
4.9%	9297.3	9256.3	-41.0	-0.4%
6.2%	9010.6	9070.0	59.5	0.7%
7.4%	8859.8	8904.3	44.4	0.5%
8.6%	8610.0	8851.3	241.3	2.8%
9.9%	8098.9	8690.6	591.8	7.3%
11.1%	8079.3	8473.0	393.7	4.9%
12.3%	7994.6	8468.7	474.2	5.9%
13.6%	7985.6	8291.2	305.6	3.8%
14.8%	7868.6	8175.8	307.2	3.9%
16.0%	7857.6	8137.3	279.7	3.6%
17.3%	7789.0	8123.4	334.4	4.3%
18.5%	7780.3	8054.7	274.4	3.5%
19.8%	7391.8	7807.6	415.7	5.6%
21.0%	7343.7	7701.7	358.0	4.9%
22.2%	7321.9	7701.7	379.8	5.2%
23.5%	7150.5	7405.4	255.0	3.6%
24.7%	7035.5	7371.2	335.7	4.8%
25.9%	6890.3	7108.0	217.7	3.2%
27.2%	6806.7	6951.9	145.2	2.1%
28.4%	6616.7	6770.4	153.6	2.3%
29.6%	6363.6	6714.8	351.2	5.5%
30.9%	6003.8	6184.8	181.0	3.0%
32.1%	5589.9	5793.7	203.8	3.6%
33.3%	5297.9	5459.2	161.3	3.0%
34.6%	3497.3	5250.5	1753.2	50.1%
35.8%	3497.1	4882.8	1385.7	39.6%
37.0%	3320.1	4819.7	1499.5	45.2%
38.3%	3254.0	4508.1	1254.1	38.5%
39.5%	3105.7	4343.0	1237.3	39.8%
40.7%	2844.6	4023.0	1178.4	41.4%
42.0%	2748.3	3908.8	1160.5	42.2%
43.2%	2631.3	3516.7	885.4	33.7%
44.4%	2495.4	3386.6	891.2	35.7%
45.7%	2210.8	3233.2	1022.4	46.2%
46.9%	2161.9	2783.1	621.2	28.7%
48.1%	1982.6	2483.0	500.4	25.2%
49.4%	1939.2	2476.4	537.2	27.7%
50.6%	1599.4	2092.1	492.7	30.8%
51.9%	1495.6	2073.5	577.8	38.6%
53.1%	1287.0	2007.7	720.6	56.0%
54.3%	1229.1	1985.1	756.1	61.5%
55.6%	1174.8	1626.3	451.5	38.4%
56.8%	1042.3	1554.6	512.2	49.1%
58.0%	811.0	1404.3	593.3	73.2%
59.3%	653.2	892.9	239.7	36.7%
60.5%	645.4	875.9	230.5	35.7%
61.7%	591.3	797.2	206.0	34.8%
63.0%	578.9	707.2	128.3	22.2%
64.2%	415.5	607.4	191.8	46.2%
65.4%	377.4	409.4	32.0	8.5%
66.7%	345.7	382.2	36.6	10.6%
67.9%	303.5	349.4	45.8	15.1%
69.1%	291.3	346.9	55.6	19.1%
70.4%	277.1	321.9	44.8	16.2%
71.6%	276.4	308.8	32.4	11.7%
72.8%	261.7	300.6	39.0	14.9%
74.1%	245.8	298.0	52.2	21.2%
75.3%	232.7	249.4	16.7	7.2%
76.5%	222.0	246.3	24.3	11.0%
77.8%	220.3	223.5	3.2	1.5%
79.0%	211.9	212.9	1.0	0.5%
80.2%	207.1	207.5	0.4	0.2%
81.5%	206.9	206.8	-0.1	-0.1%
82.7%	196.9	197.5	0.5	0.3%
84.0%	196.1	196.8	0.7	0.3%
85.2%	195.6	196.0	0.4	0.2%
86.4%	194.7	194.7	0.0	0.0%
87.7%	193.4	194.4	1.0	0.5%
88.9%	193.4	193.7	0.4	0.2%
90.1%	192.7	193.1	0.3	0.2%
91.4%	191.5	192.3	0.8	0.4%
92.6%	191.2	191.3	0.2	0.1%
93.8%	189.0	189.4	0.4	0.2%
95.1%	188.7	188.3	-0.3	-0.2%
96.3%	186.2	187.7	1.5	0.8%
97.5%	186.0	187.5	1.5	0.8%
98.8%	185.9	186.7	0.8	0.4%
100.0%	182.3	182.5	0.1	0.1%

Table SQ-23-b

Sacramento River at Mallard Slough (Chipps Island)), Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12469.1	8949.3	-3519.9	-28.2%
1.2%	8274.0	7511.8	-762.2	-9.2%
2.5%	5932.0	5946.7	14.7	0.2%
3.7%	5630.3	5933.0	302.7	5.4%
4.9%	4999.5	5851.0	851.5	17.0%
6.2%	4782.5	5531.0	748.6	15.7%
7.4%	4315.4	4797.4	482.0	11.2%
8.6%	4205.2	4673.5	468.3	11.1%
9.9%	4102.6	4496.8	394.2	9.6%
11.1%	4006.8	4378.7	371.9	9.3%
12.3%	3860.4	4199.8	339.4	8.8%
13.6%	3475.5	4156.6	681.1	19.6%
14.8%	3322.8	4026.2	703.4	21.2%
16.0%	3002.3	3340.5	338.2	11.3%
17.3%	2112.8	3163.7	1050.9	49.7%
18.5%	1988.7	2990.4	1001.7	50.4%
19.8%	1857.9	2398.8	540.9	29.1%
21.0%	1822.4	2283.2	460.8	25.3%
22.2%	1670.5	2147.0	476.5	28.5%
23.5%	1260.7	1700.2	439.5	34.9%
24.7%	1197.0	1605.7	408.7	34.1%
25.9%	947.0	1475.5	528.5	55.8%
27.2%	916.4	1374.7	458.3	50.0%
28.4%	893.6	1302.1	408.5	45.7%
29.6%	846.8	1220.7	373.9	44.1%
30.9%	789.0	1133.4	344.4	43.7%
32.1%	788.4	1124.3	335.9	42.6%
33.3%	779.9	1117.7	337.8	43.3%
34.6%	759.8	816.9	57.1	7.5%
35.8%	756.7	782.8	26.0	3.4%
37.0%	743.2	762.1	18.9	2.5%
38.3%	713.4	757.9	44.5	6.2%
39.5%	709.8	755.9	46.1	6.5%
40.7%	690.1	735.1	45.0	6.5%
42.0%	614.7	698.9	84.3	13.7%
43.2%	597.4	671.1	73.8	12.3%
44.4%	596.4	623.2	26.8	4.5%
45.7%	561.1	589.4	28.4	5.1%
46.9%	521.0	587.3	66.2	12.7%
48.1%	501.5	574.5	73.0	14.6%
49.4%	457.2	524.2	67.0	14.7%
50.6%	439.0	487.1	48.2	11.0%
51.9%	360.4	480.0	119.6	33.2%
53.1%	359.0	479.2	120.2	33.5%
54.3%	334.2	437.8	103.6	31.0%
55.6%	296.6	366.0	69.4	23.4%
56.8%	282.0	355.6	73.6	26.1%
58.0%	251.7	299.0	47.3	18.8%
59.3%	251.2	264.8	13.5	5.4%
60.5%	227.8	261.2	33.4	14.7%
61.7%	226.9	239.0	12.1	5.3%
63.0%	213.4	230.6	17.3	8.1%
64.2%	213.2	224.8	11.7	5.5%
65.4%	212.4	223.3	10.9	5.1%
66.7%	208.7	214.5	5.7	2.7%
67.9%	208.5	211.7	3.1	1.5%
69.1%	208.1	211.3	3.2	1.5%
70.4%	207.5	208.6	1.2	0.6%
71.6%	207.4	208.2	0.8	0.4%
72.8%	207.1	207.9	0.8	0.4%
74.1%	206.9	207.4	0.5	0.2%
75.3%	202.9	204.1	1.2	0.6%
76.5%	201.8	202.3	0.5	0.3%
77.8%	201.4	201.4	0.1	0.0%
79.0%	201.1	201.4	0.3	0.1%
80.2%	200.3	200.7	0.4	0.2%
81.5%	198.5	198.8	0.3	0.2%
82.7%	197.6	198.5	0.9	0.5%
84.0%	196.3	196.9	0.5	0.3%
85.2%	195.1	196.5	1.4	0.7%
86.4%	194.5	194.7	0.3	0.1%
87.7%	192.6	193.5	1.0	0.5%
88.9%	191.5	191.9	0.4	0.2%
90.1%	189.9	190.2	0.3	0.2%
91.4%	189.1	189.9	0.7	0.4%
92.6%	188.3	189.8	1.5	0.8%
93.8%	187.9	188.3	0.4	0.2%
95.1%	187.9	188.3	0.4	0.2%
96.3%	187.4	188.1	0.6	0.3%
97.5%	187.4	187.3	0.0	0.0%
98.8%	186.1	186.5	0.4	0.2%
100.0%	184.3	184.3	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	7591.0	7674.3	83.3	1.1%
1.2%	5164.7	5250.8	86.1	1.7%
2.5%	4278.2	4423.4	145.2	3.4%
3.7%	3843.2	3878.8	35.7	0.9%
4.9%	3534.9	3753.9	219.0	6.2%
6.2%	3085.4	3639.5	554.1	18.0%
7.4%	2929.5	3347.4	417.9	14.3%
8.6%	2847.9	3215.7	367.8	12.9%
9.9%	2832.8	3096.3	263.5	9.3%
11.1%	2806.2	3060.0	253.8	9.0%
12.3%	2789.2	2885.2	96.0	3.4%
13.6%	2671.5	2858.5	187.0	7.0%
14.8%	2647.9	2835.7	187.9	7.1%
16.0%	1984.5	1915.8	-68.7	-3.5%
17.3%	1942.8	1912.5	-30.4	-1.6%
18.5%	1720.6	1893.8	173.2	10.1%
19.8%	1685.8	1870.0	184.1	10.9%
21.0%	1285.9	1497.2	211.2	16.4%
22.2%	1261.1	1391.1	130.0	10.3%
23.5%	1194.6	1354.0	159.5	13.4%
24.7%	1160.4	1275.4	115.0	9.9%
25.9%	1119.0	1238.8	119.8	10.7%
27.2%	1081.6	1146.9	65.3	6.0%
28.4%	1070.8	1120.7	49.9	4.7%
29.6%	839.3	1009.0	169.7	20.2%
30.9%	823.7	1006.8	183.1	22.2%
32.1%	794.6	993.4	198.8	25.0%
33.3%	779.1	981.8	202.6	26.0%
34.6%	742.1	960.0	218.0	29.4%
35.8%	714.7	863.6	149.0	20.8%
37.0%	705.5	802.9	97.4	13.8%
38.3%	698.9	798.8	99.9	14.3%
39.5%	680.1	755.9	75.9	11.2%
40.7%	638.1	747.0	109.0	17.1%
42.0%	592.2	741.7	149.5	25.2%
43.2%	579.8	721.1	141.3	24.4%
44.4%	577.7	710.7	133.1	23.0%
45.7%	564.2	693.3	129.1	22.9%
46.9%	467.9	572.7	104.8	22.4%
48.1%	420.0	496.9	76.9	18.3%
49.4%	402.5	495.8	93.3	23.2%
50.6%	377.0	467.7	90.7	24.0%
51.9%	356.4	405.4	49.0	13.7%
53.1%	326.9	402.8	76.0	23.2%
54.3%	309.9	385.3	75.4	24.3%
55.6%	274.1	336.8	62.7	22.9%
56.8%	272.9	290.0	17.1	6.3%
58.0%	269.1	287.8	18.7	6.9%
59.3%	261.1	278.4	17.4	6.6%
60.5%	245.4	277.0	31.6	12.9%
61.7%	242.2	269.9	27.6	11.4%
63.0%	240.9	249.9	8.9	3.7%
64.2%	221.4	240.8	19.4	8.7%
65.4%	218.2	221.5	3.3	1.5%
66.7%	211.4	215.7	4.3	2.0%
67.9%	206.6	214.3	7.8	3.8%
69.1%	205.5	212.0	6.5	3.2%
70.4%	205.0	207.5	2.5	1.2%
71.6%	204.9	207.3	2.4	1.2%
72.8%	203.3	205.7	2.4	1.2%
74.1%	201.4	204.2	2.8	1.4%
75.3%	200.5	203.8	3.3	1.6%
76.5%	200.5	201.5	1.0	0.5%
77.8%	199.6	199.9	0.4	0.2%
79.0%	199.2	199.6	0.4	0.2%
80.2%	196.5	197.8	1.3	0.7%
81.5%	193.4	195.2	1.7	0.9%
82.7%	193.4	193.8	0.4	0.2%
84.0%	192.6	193.2	0.6	0.3%
85.2%	191.1	192.5	1.4	0.7%
86.4%	191.1	191.8	0.7	0.4%
87.7%	190.9	191.5	0.6	0.3%
88.9%	190.8	191.3	0.5	0.3%
90.1%	190.7	191.1	0.4	0.2%
91.4%	189.6	190.7	1.1	0.6%
92.6%	189.1	189.4	0.3	0.2%
93.8%	189.1	189.1	0.0	0.0%
95.1%	188.4	188.5	0.1	0.1%
96.3%	188.2	188.4	0.2	0.1%
97.5%	187.0	187.5	0.5	0.3%
98.8%	184.3	184.2	0.0	0.0%
100.0%	183.4	183.3	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	7801.6	7840.6	39.0	0.5%
1.2%	6300.1	6194.3	-105.8	-1.7%
2.5%	5516.8	5416.4	-100.4	-1.8%
3.7%	4873.5	4838.7	-34.9	-0.7%
4.9%	4749.4	4691.2	-58.1	-1.2%
6.2%	4552.3	4569.2	16.9	0.4%
7.4%	4530.7	4522.8	-7.8	-0.2%
8.6%	4193.5	4095.9	-97.5	-2.3%
9.9%	3900.2	3933.5	33.3	0.9%
11.1%	3891.3	3844.7	-46.5	-1.2%
12.3%	3843.1	3786.5	-56.6	-1.5%
13.6%	3510.4	3610.5	100.1	2.9%
14.8%	3399.7	3329.0	-70.8	-2.1%
16.0%	3273.1	3294.4	21.3	0.7%
17.3%	3244.7	3142.3	-102.4	-3.2%
18.5%	3089.8	3036.1	-53.7	-1.7%
19.8%	2831.4	3035.0	203.6	7.2%
21.0%	2763.9	2969.6	205.6	7.4%
22.2%	2375.8	2893.4	517.6	21.8%
23.5%	2359.7	2841.1	481.4	20.4%
24.7%	2338.7	2828.3	489.6	20.9%
25.9%	2301.9	2600.1	298.2	13.0%
27.2%	2222.0	2426.2	204.2	9.2%
28.4%	2142.5	2401.4	258.9	12.1%
29.6%	1900.3	2353.6	453.3	23.9%
30.9%	1818.7	2311.7	492.9	27.1%
32.1%	1779.6	2310.0	530.4	29.8%
33.3%	1775.6	1805.5	29.9	1.7%
34.6%	1709.0	1784.0	75.0	4.4%
35.8%	1691.4	1691.3	-0.2	0.0%
37.0%	1577.5	1586.3	8.7	0.6%
38.3%	1517.0	1321.7	-195.3	-12.9%
39.5%	1405.0	1284.5	-120.6	-8.6%
40.7%	1247.6	1263.1	15.6	1.2%
42.0%	1218.4	1261.5	43.2	3.5%
43.2%	1196.8	1251.6	54.8	4.6%
44.4%	1196.0	1222.2	26.2	2.2%
45.7%	1141.3	1206.9	65.6	5.7%
46.9%	1137.8	1140.7	2.9	0.3%
48.1%	1082.6	1098.7	16.1	1.5%
49.4%	1069.1	1084.1	14.9	1.4%
50.6%	1033.0	1029.0	-4.0	-0.4%
51.9%	979.3	968.9	-10.4	-1.1%
53.1%	914.2	966.6	52.4	5.7%
54.3%	886.9	955.8	68.9	7.8%
55.6%	883.5	897.5	14.1	1.6%
56.8%	861.3	846.5	-14.8	-1.7%
58.0%	839.7	833.9	-5.8	-0.7%
59.3%	823.4	826.6	3.1	0.4%
60.5%	753.3	777.8	24.5	3.3%
61.7%	750.0	774.9	24.9	3.3%
63.0%	692.1	699.3	7.2	1.0%
64.2%	638.0	644.2	6.2	1.0%
65.4%	547.0	563.5	16.5	3.0%
66.7%	487.6	543.2	55.5	11.4%
67.9%	475.7	539.2	63.5	13.3%
69.1%	454.0	491.8	37.7	8.3%
70.4%	389.8	436.1	46.3	11.9%
71.6%	374.1	372.4	-1.6	-0.4%
72.8%	342.9	348.1	5.2	1.5%
74.1%	339.9	338.3	-1.6	-0.5%
75.3%	333.3	333.2	-0.1	0.0%
76.5%	305.4	319.4	14.0	4.6%
77.8%	274.6	277.4	2.8	1.0%
79.0%	265.6	274.7	9.2	3.4%
80.2%	264.8	268.1	3.3	1.3%
81.5%	254.0	266.4	12.4	4.9%
82.7%	240.2	240.0	-0.2	-0.1%
84.0%	230.1	237.2	7.2	3.1%
85.2%	222.2	234.3	12.1	5.5%
86.4%	207.4	212.6	5.2	2.5%
87.7%	205.1	208.9	3.8	1.9%
88.9%	199.6	202.5	2.9	1.5%
90.1%	197.4	200.1	2.7	1.3%
91.4%	196.9	197.1	0.3	0.1%
92.6%	191.2	191.2	0.0	0.0%
93.8%	190.7	190.4	-0.3	-0.2%
95.1%	189.7	189.7	0.0	0.0%
96.3%	188.5	188.5	0.0	0.0%
97.5%	186.9	187.6	0.7	0.4%
98.8%	184.1	184.4	0.2	0.1%
100.0%	184.0	183.9	-0.1	-0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	10304.4	10316.4	12.1	0.1%
1.2%	9462.9	9330.7	-132.2	-1.4%
2.5%	9063.0	9132.9	70.0	0.8%
3.7%	8697.2	8659.6	-37.6	-0.4%
4.9%	6628.3	6597.9	-30.4	-0.5%
6.2%	6397.0	6426.5	29.5	0.5%
7.4%	6387.1	6352.4	-34.7	-0.5%
8.6%	6297.3	6300.3	3.1	0.0%
9.9%	6198.3	6217.9	19.6	0.3%
11.1%	5790.6	5790.9	0.3	0.0%
12.3%	5658.1	5662.9	4.8	0.1%
13.6%	5320.9	5242.0	-78.9	-1.5%
14.8%	4703.1	4795.8	92.7	2.0%
16.0%	4696.2	4683.1	-13.1	-0.3%
17.3%	4689.7	4677.5	-12.2	-0.3%
18.5%	4687.6	4651.7	-35.9	-0.8%
19.8%	4625.9	4626.2	0.3	0.0%
21.0%	4610.8	4607.0	-3.8	-0.1%
22.2%	4587.9	4511.6	-76.3	-1.7%
23.5%	4535.5	4381.5	-154.0	-3.4%
24.7%	4533.8	4359.8	-174.1	-3.8%
25.9%	4516.6	4358.9	-157.8	-3.5%
27.2%	4431.3	4338.6	-92.7	-2.1%
28.4%	4422.6	4317.2	-105.3	-2.4%
29.6%	4395.2	4205.0	-190.2	-4.3%
30.9%	4364.4	4191.2	-173.3	-4.0%
32.1%	4364.4	4175.0	-189.4	-4.3%
33.3%	4329.7	4165.9	-163.7	-3.8%
34.6%	4271.1	4147.3	-123.7	-2.9%
35.8%	4179.9	4138.1	-41.8	-1.0%
37.0%	4165.2	4071.9	-93.4	-2.2%
38.3%	4152.8	4061.6	-91.3	-2.2%
39.5%	4044.1	4047.3	3.2	0.1%
40.7%	3892.5	3907.4	14.9	0.4%
42.0%	3441.6	3615.7	174.1	5.1%
43.2%	3384.4	3311.0	-73.4	-2.2%
44.4%	3271.5	3295.7	24.2	0.7%
45.7%	3219.3	3204.6	-14.7	-0.5%
46.9%	3186.7	3173.8	-12.9	-0.4%
48.1%	3122.7	2963.1	-159.5	-5.1%
49.4%	2945.5	2913.7	-31.7	-1.1%
50.6%	2937.8	2831.3	-106.5	-3.6%
51.9%	2856.8	2816.2	-40.6	-1.4%
53.1%	2806.5	2791.4	-15.1	-0.5%
54.3%	2761.3	2762.3	1.0	0.0%
55.6%	2628.8	2756.6	127.7	4.9%
56.8%	2529.3	2730.0	200.6	7.9%
58.0%	2520.6	2556.0	35.4	1.4%
59.3%	2512.4	2547.9	35.6	1.4%
60.5%	2375.7	2494.4	118.7	5.0%
61.7%	2372.5	2404.9	32.4	1.4%
63.0%	2241.6	2304.1	62.5	2.8%
64.2%	1941.0	1973.0	32.0	1.6%
65.4%	1918.7	1898.2	-20.5	-1.1%
66.7%	1897.6	1788.2	-109.4	-5.8%
67.9%	1828.5	1771.8	-56.7	-3.1%
69.1%	1773.8	1755.1	-18.7	-1.1%
70.4%	1703.7	1725.1	21.5	1.3%
71.6%	1570.5	1672.0	101.5	6.5%
72.8%	1457.8	1412.1	-45.7	-3.1%
74.1%	1265.9	1392.2	126.3	10.0%
75.3%	1113.5	1267.4	153.9	13.8%
76.5%	1083.0	1155.8	72.7	6.7%
77.8%	1078.0	1108.1	30.1	2.8%
79.0%	1070.6	1095.3	24.7	2.3%
80.2%	930.3	1070.7	140.4	15.1%
81.5%	803.7	930.1	126.4	15.7%
82.7%	792.2	813.0	20.8	2.6%
84.0%	783.9	807.3	23.3	3.0%
85.2%	769.9	804.2	34.3	4.5%
86.4%	758.3	791.6	33.3	4.4%
87.7%	571.1	569.9	-1.3	-0.2%
88.9%	554.8	569.2	14.4	2.6%
90.1%	478.8	504.1	25.2	5.3%
91.4%	404.9	435.3	30.5	7.5%
92.6%	394.7	419.4	24.7	6.3%
93.8%	373.3	415.1	41.7	11.2%
95.1%	332.4	326.3	-6.1	-1.8%
96.3%	318.4	313.5	-4.9	-1.5%
97.5%	265.5	265.8	0.2	0.1%
98.8%	214.3	210.8	-3.4	-1.6%
100.0%	187.9	190.4	2.6	1.4%

Table SQ-23-b
Sacramento River at Mallard Slough (Chipps Island)), Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12113.4	12197.9	84.5	0.7%
1.2%	11686.1	11637.8	-48.3	-0.4%
2.5%	11653.8	11315.1	-338.7	-2.9%
3.7%	11627.3	11188.6	-438.7	-3.8%
4.9%	7900.5	7927.7	27.2	0.3%
6.2%	7873.3	7869.4	-3.9	0.0%
7.4%	7868.1	7850.4	-17.7	-0.2%
8.6%	7850.5	7774.9	-75.6	-1.0%
9.9%	7772.0	7531.5	-240.5	-3.1%
11.1%	7738.7	7262.3	-476.3	-6.2%
12.3%	7517.2	7215.7	-301.5	-4.0%
13.6%	7290.4	7011.7	-278.7	-3.8%
14.8%	7286.6	6863.1	-423.5	-5.8%
16.0%	6904.6	6859.0	-45.6	-0.7%
17.3%	6896.5	6692.7	-203.8	-3.0%
18.5%	6845.2	6568.0	-277.2	-4.1%
19.8%	6827.9	6519.6	-308.3	-4.5%
21.0%	6685.9	6503.8	-182.2	-2.7%
22.2%	6659.8	6435.9	-223.9	-3.4%
23.5%	6613.9	6376.1	-237.8	-3.6%
24.7%	6595.6	6330.2	-265.3	-4.0%
25.9%	6446.4	6324.0	-122.4	-1.9%
27.2%	6392.9	6304.1	-88.8	-1.4%
28.4%	6384.5	6297.6	-86.9	-1.4%
29.6%	6358.2	6189.8	-168.4	-2.6%
30.9%	6330.9	6127.6	-203.3	-3.2%
32.1%	6263.2	6042.3	-221.0	-3.5%
33.3%	6232.4	6027.7	-204.7	-3.3%
34.6%	6210.2	5818.4	-391.8	-6.3%
35.8%	6168.9	5712.7	-456.1	-7.4%
37.0%	6158.6	5698.4	-460.2	-7.5%
38.3%	6157.6	5588.9	-568.7	-9.2%
39.5%	6112.8	5584.6	-528.2	-8.6%
40.7%	6097.6	5575.2	-522.4	-8.6%
42.0%	6031.8	5429.1	-602.7	-10.0%
43.2%	5824.9	5405.4	-419.4	-7.2%
44.4%	5744.1	5352.5	-391.6	-6.8%
45.7%	5699.3	5248.1	-451.2	-7.9%
46.9%	5628.2	5231.6	-396.6	-7.0%
48.1%	5501.7	5210.0	-291.7	-5.3%
49.4%	5307.5	5195.9	-111.6	-2.1%
50.6%	5275.8	5188.5	-87.3	-1.7%
51.9%	5270.7	5143.0	-127.8	-2.4%
53.1%	5207.6	5114.9	-92.7	-1.8%
54.3%	5112.2	5012.9	-99.3	-1.9%
55.6%	5039.7	4941.8	-98.0	-1.9%
56.8%	4998.7	4906.4	-92.3	-1.8%
58.0%	4877.6	4892.9	15.3	0.3%
59.3%	4852.4	4855.3	2.9	0.1%
60.5%	4800.6	4773.8	-26.8	-0.6%
61.7%	4747.7	4755.4	7.6	0.2%
63.0%	4743.6	4755.1	11.5	0.2%
64.2%	4719.5	4706.3	-13.2	-0.3%
65.4%	4641.8	4656.0	14.2	0.3%
66.7%	4585.6	4591.1	5.5	0.1%
67.9%	4579.4	4571.5	-7.9	-0.2%
69.1%	4547.9	4430.5	-117.4	-2.6%
70.4%	4434.1	4426.7	-7.4	-0.2%
71.6%	4413.4	4365.4	-48.0	-1.1%
72.8%	4352.4	4296.5	-55.9	-1.3%
74.1%	4247.6	4265.9	18.3	0.4%
75.3%	4242.7	4247.8	5.2	0.1%
76.5%	4119.7	4215.1	95.4	2.3%
77.8%	4045.9	4185.9	140.0	3.5%
79.0%	3956.5	4152.3	195.7	4.9%
80.2%	3845.6	3923.5	77.9	2.0%
81.5%	3835.3	3869.5	34.2	0.9%
82.7%	3755.4	3800.0	44.5	1.2%
84.0%	3719.0	3786.1	67.1	1.8%
85.2%	3696.5	3389.1	-307.4	-8.3%
86.4%	3384.2	3386.5	2.4	0.1%
87.7%	3367.3	3357.8	-9.5	-0.3%
88.9%	3244.2	3244.4	0.2	0.0%
90.1%	2801.8	2943.2	141.4	5.0%
91.4%	2710.7	2779.2	68.5	2.5%
92.6%	2519.9	2536.0	16.1	0.6%
93.8%	2463.6	2381.3	-82.4	-3.3%
95.1%	2288.2	2231.2	-57.0	-2.5%
96.3%	2244.1	2150.9	-93.2	-4.2%
97.5%	2036.2	1899.1	-137.1	-6.7%
98.8%	1728.8	1371.9	-356.9	-20.6%
100.0%	524.2	481.2	-43.0	-8.2%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12625.4	12281.6	-343.8	-2.7%
1.2%	12408.0	12240.2	-167.8	-1.4%
2.5%	12373.0	12094.9	-278.1	-2.2%
3.7%	11988.3	11904.7	-83.6	-0.7%
4.9%	10588.1	10511.4	-76.7	-0.7%
6.2%	10457.1	10389.2	-67.9	-0.6%
7.4%	10336.9	10297.5	-39.4	-0.4%
8.6%	10301.7	10152.4	-149.3	-1.4%
9.9%	10227.9	9830.4	-397.5	-3.9%
11.1%	10164.4	9823.2	-341.2	-3.4%
12.3%	10003.4	9174.6	-828.8	-8.3%
13.6%	9825.0	9096.6	-728.4	-7.4%
14.8%	9327.8	8924.8	-403.0	-4.3%
16.0%	9076.7	8853.7	-223.0	-2.5%
17.3%	9013.8	8760.2	-253.6	-2.8%
18.5%	8947.0	8753.1	-193.9	-2.2%
19.8%	8924.0	8722.3	-201.7	-2.3%
21.0%	8905.9	8609.1	-296.9	-3.3%
22.2%	8863.2	8548.2	-315.0	-3.6%
23.5%	8849.8	8531.6	-318.1	-3.6%
24.7%	8751.8	8281.5	-470.3	-5.4%
25.9%	8558.3	8074.3	-484.0	-5.7%
27.2%	8550.4	7980.5	-569.9	-6.7%
28.4%	8458.2	7888.0	-570.2	-6.7%
29.6%	8412.3	7829.1	-583.2	-6.9%
30.9%	7843.3	7790.3	-52.9	-0.7%
32.1%	7747.5	7765.5	18.0	0.2%
33.3%	7729.1	7706.3	-22.8	-0.3%
34.6%	7706.1	7654.9	-51.2	-0.7%
35.8%	7501.9	7577.9	76.0	1.0%
37.0%	7117.6	7452.0	334.4	4.7%
38.3%	6749.6	6973.8	224.3	3.3%
39.5%	6599.9	6436.1	-163.8	-2.5%
40.7%	6596.0	6391.9	-204.1	-3.1%
42.0%	6310.0	6243.6	-66.5	-1.1%
43.2%	6194.3	6093.1	-101.2	-1.6%
44.4%	6110.8	6041.8	-69.0	-1.1%
45.7%	6065.7	6018.3	-47.4	-0.8%
46.9%	5973.6	5954.1	-19.6	-0.3%
48.1%	5933.7	5875.3	-58.4	-1.0%
49.4%	5884.7	5577.4	-307.3	-5.2%
50.6%	5624.1	5436.2	-187.9	-3.3%
51.9%	5531.7	5381.6	-150.2	-2.7%
53.1%	5172.4	5177.1	4.7	0.1%
54.3%	5146.8	5103.4	-43.3	-0.8%
55.6%	5099.0	5099.9	0.9	0.0%
56.8%	4990.4	4957.9	-32.6	-0.7%
58.0%	4958.9	4881.7	-77.1	-1.6%
59.3%	4913.5	4719.7	-193.8	-3.9%
60.5%	4722.8	4653.2	-69.6	-1.5%
61.7%	4680.8	4612.8	-68.0	-1.5%
63.0%	4600.3	4597.2	-3.2	-0.1%
64.2%	4435.2	4484.4	49.2	1.1%
65.4%	4372.6	4390.2	17.6	0.4%
66.7%	4359.4	4335.2	-24.2	-0.6%
67.9%	4299.5	4295.8	-3.8	-0.1%
69.1%	4277.4	4294.2	16.8	0.4%
70.4%	4257.2	4237.3	-19.9	-0.5%
71.6%	4256.9	4155.5	-101.4	-2.4%
72.8%	4236.0	4137.3	-98.7	-2.3%
74.1%	4191.5	4103.8	-87.7	-2.1%
75.3%	4123.2	4057.0	-66.2	-1.6%
76.5%	4088.2	4041.5	-46.7	-1.1%
77.8%	4066.1	4001.4	-64.7	-1.6%
79.0%	3988.1	3979.1	-9.0	-0.2%
80.2%	3980.6	3862.4	-118.3	-3.0%
81.5%	3929.0	3849.6	-79.4	-2.0%
82.7%	3927.5	3848.3	-79.2	-2.0%
84.0%	3871.4	3847.8	-23.6	-0.6%
85.2%	3855.3	3847.7	-7.6	-0.2%
86.4%	3835.9	3830.5	-5.5	-0.1%
87.7%	3829.0	3569.3	-259.7	-6.8%
88.9%	3652.0	3472.4	-179.6	-4.9%
90.1%	3613.3	3466.6	-146.7	-4.1%
91.4%	3412.4	3413.2	0.8	0.0%
92.6%	3378.0	3391.7	13.7	0.4%
93.8%	3374.7	3325.7	-49.0	-1.5%
95.1%	3280.8	3234.7	-46.1	-1.4%
96.3%	3274.1	3133.6	-140.5	-4.3%
97.5%	3135.9	3070.7	-65.1	-2.1%
98.8%	2954.9	3003.1	48.2	1.6%
100.0%	2,195.2	2,221.1	25.9	1.2%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	12297.6	12224.0	-73.6	-0.6%
1.2%	12278.1	12165.3	-112.8	-0.9%
2.5%	12189.4	12075.1	-114.3	-0.9%
3.7%	12157.6	12008.2	-149.4	-1.2%
4.9%	12109.9	11858.6	-251.3	-2.1%
6.2%	12042.8	11632.1	-410.7	-3.4%
7.4%	11987.5	11554.5	-433.0	-3.6%
8.6%	11980.9	11388.8	-592.1	-4.9%
9.9%	11905.9	11240.6	-665.3	-5.6%
11.1%	11595.4	11201.9	-393.5	-3.4%
12.3%	11419.9	11124.3	-295.5	-2.6%
13.6%	11396.5	11093.1	-303.4	-2.7%
14.8%	10737.0	10953.2	216.2	2.0%
16.0%	10564.1	10515.3	-48.8	-0.5%
17.3%	10523.6	10475.8	-47.8	-0.5%
18.5%	10516.8	10384.2	-132.6	-1.3%
19.8%	10506.0	10319.3	-186.7	-1.8%
21.0%	10486.2	10256.8	-229.5	-2.2%
22.2%	10428.8	10208.3	-220.5	-2.1%
23.5%	10393.7	10127.7	-265.9	-2.6%
24.7%	10388.9	10122.3	-266.6	-2.6%
25.9%	10388.2	10094.6	-293.6	-2.8%
27.2%	10384.9	10012.0	-372.8	-3.6%
28.4%	10201.8	9876.0	-325.9	-3.2%
29.6%	10174.5	9760.6	-413.9	-4.1%
30.9%	10158.0	9730.7	-427.3	-4.2%
32.1%	10151.3	9708.8	-442.5	-4.4%
33.3%	10056.3	9443.9	-612.4	-6.1%
34.6%	9934.1	9363.1	-571.0	-5.7%
35.8%	9933.9	9236.5	-697.4	-7.0%
37.0%	9781.5	9218.5	-563.0	-5.8%
38.3%	9425.8	9105.4	-320.4	-3.4%
39.5%	9374.3	9046.8	-327.5	-3.5%
40.7%	9311.6	9022.0	-289.6	-3.1%
42.0%	9106.3	8874.8	-231.5	-2.5%
43.2%	8909.7	8678.0	-231.6	-2.6%
44.4%	8904.7	8582.1	-322.6	-3.6%
45.7%	8882.9	8570.0	-312.8	-3.5%
46.9%	8708.7	8536.2	-172.5	-2.0%
48.1%	8498.0	8517.2	19.2	0.2%
49.4%	8484.1	8352.9	-131.2	-1.5%
50.6%	8448.2	8305.8	-142.4	-1.7%
51.9%	8418.7	8276.3	-142.4	-1.7%
53.1%	8409.7	8259.1	-150.6	-1.8%
54.3%	8402.9	8181.3	-221.7	-2.6%
55.6%	8328.0	8113.1	-214.8	-2.6%
56.8%	8144.5	7941.1	-203.4	-2.5%
58.0%	8093.5	7865.0	-228.4	-2.8%
59.3%	7970.2	7811.6	-158.6	-2.0%
60.5%	7920.4	7805.2	-115.2	-1.5%
61.7%	7823.3	7733.2	-90.1	-1.2%
63.0%	7802.2	7730.4	-71.8	-0.9%
64.2%	7731.2	7657.5	-73.8	-1.0%
65.4%	7705.6	7656.0	-49.6	-0.6%
66.7%	7678.9	7624.2	-54.7	-0.7%
67.9%	7642.2	7550.2	-92.0	-1.2%
69.1%	7554.1	7493.1	-61.0	-0.8%
70.4%	7539.3	7484.6	-54.8	-0.7%
71.6%	7509.4	7477.0	-32.5	-0.4%
72.8%	7508.5	7457.0	-51.5	-0.7%
74.1%	7488.2	7424.0	-64.2	-0.9%
75.3%	7427.0	7421.1	-6.0	-0.1%
76.5%	7421.9	7412.5	-9.3	-0.1%
77.8%	7394.5	7393.0	-1.5	0.0%
79.0%	7381.0	7385.6	4.6	0.1%
80.2%	7330.0	7370.5	40.4	0.6%
81.5%	7275.5	7293.4	18.0	0.2%
82.7%	7261.4	7252.4	-9.0	-0.1%
84.0%	7229.3	7200.0	-29.3	-0.4%
85.2%	7211.8	7017.3	-194.5	-2.7%
86.4%	7167.9	6972.4	-195.5	-2.7%
87.7%	6988.7	6943.0	-45.7	-0.7%
88.9%	6968.0	6931.9	-36.1	-0.5%
90.1%	6953.8	6882.3	-71.6	-1.0%
91.4%	6941.9	6752.8	-189.1	-2.7%
92.6%	6921.0	6710.7	-210.3	-3.0%
93.8%	6909.6	6671.7	-237.9	-3.4%
95.1%	6809.7	6576.4	-233.3	-3.4%
96.3%	6628.6	6439.2	-189.4	-2.9%
97.5%	6606.9	6360.6	-246.3	-3.7%
98.8%	6565.0	6171.2	-393.7	-6.0%
100.0%	6,373.0	6,129.2	-243.8	-3.8%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13800.6	13571.2	-229.4	-1.7%
1.2%	13734.6	13378.3	-356.3	-2.6%
2.5%	13717.4	13265.3	-452.0	-3.3%
3.7%	13585.5	13248.5	-337.0	-2.5%
4.9%	13581.0	12893.9	-687.1	-5.1%
6.2%	13578.1	12887.6	-690.5	-5.1%
7.4%	13304.8	12827.3	-477.5	-3.6%
8.6%	13044.7	12739.6	-305.2	-2.3%
9.9%	13032.3	12666.9	-365.3	-2.8%
11.1%	13025.1	12594.7	-430.4	-3.3%
12.3%	13016.9	12303.1	-713.8	-5.5%
13.6%	12899.8	12298.7	-601.0	-4.7%
14.8%	12859.7	12185.5	-674.2	-5.2%
16.0%	12768.8	12184.3	-584.5	-4.6%
17.3%	12684.4	12140.8	-543.6	-4.3%
18.5%	12645.3	12094.9	-550.3	-4.4%
19.8%	12627.7	12091.5	-536.2	-4.2%
21.0%	12606.4	12082.8	-523.5	-4.2%
22.2%	12557.6	12047.7	-510.0	-4.1%
23.5%	12554.8	12019.5	-535.2	-4.3%
24.7%	12540.1	11985.5	-554.6	-4.4%
25.9%	12536.9	11983.4	-553.5	-4.4%
27.2%	12520.1	11924.0	-596.2	-4.8%
28.4%	12506.8	11809.7	-697.1	-5.6%
29.6%	12478.2	11784.5	-693.7	-5.6%
30.9%	12470.0	11758.4	-711.7	-5.7%
32.1%	12414.4	11750.5	-663.9	-5.3%
33.3%	12411.3	11728.8	-682.5	-5.5%
34.6%	12399.4	11512.6	-886.9	-7.2%
35.8%	12324.7	11488.2	-836.5	-6.8%
37.0%	12312.7	11471.6	-841.1	-6.8%
38.3%	12291.3	11441.9	-849.4	-6.9%
39.5%	12282.7	11332.5	-950.2	-7.7%
40.7%	12251.2	11219.8	-1031.4	-8.4%
42.0%	12203.6	11208.7	-994.9	-8.2%
43.2%	12147.5	11206.3	-941.1	-7.7%
44.4%	12128.4	11180.3	-948.1	-7.8%
45.7%	12086.7	11090.0	-996.7	-8.2%
46.9%	12057.4	11088.5	-968.9	-8.0%
48.1%	11686.5	10904.4	-782.1	-6.7%
49.4%	11640.7	10817.1	-823.5	-7.1%
50.6%	11544.8	10807.9	-736.9	-6.4%
51.9%	11505.6	10717.8	-787.8	-6.8%
53.1%	11262.5	10188.3	-1074.2	-9.5%
54.3%	9927.1	9550.4	-376.7	-3.8%
55.6%	6194.0	6148.3	-45.7	-0.7%
56.8%	6064.1	5991.3	-72.8	-1.2%
58.0%	5999.0	5874.5	-124.5	-2.1%
59.3%	5976.4	5874.2	-102.2	-1.7%
60.5%	5841.7	5684.7	-157.0	-2.7%
61.7%	5793.8	5670.8	-123.1	-2.1%
63.0%	5710.2	5522.0	-188.1	-3.3%
64.2%	5699.2	5494.2	-205.0	-3.6%
65.4%	5591.2	5480.1	-111.1	-2.0%
66.7%	5554.1	5450.3	-103.8	-1.9%
67.9%	5524.1	5293.8	-230.3	-4.2%
69.1%	3479.8	3471.4	-8.4	-0.2%
70.4%	3315.8	3335.5	19.7	0.6%
71.6%	3273.9	3271.1	-2.8	-0.1%
72.8%	3261.4	3197.7	-63.7	-2.0%
74.1%	3260.4	3188.6	-71.8	-2.2%
75.3%	3217.5	3138.6	-78.9	-2.5%
76.5%	3187.5	3134.1	-53.3	-1.7%
77.8%	3152.6	3120.5	-32.1	-1.0%
79.0%	3142.1	3109.1	-33.0	-1.0%
80.2%	3135.0	3100.1	-34.9	-1.1%
81.5%	3131.5	3048.8	-82.8	-2.6%
82.7%	3126.5	2996.4	-130.1	-4.2%
84.0%	3097.0	2981.2	-115.8	-3.7%
85.2%	3092.0	2978.3	-113.7	-3.7%
86.4%	3055.9	2970.5	-85.4	-2.8%
87.7%	3055.9	2949.1	-106.7	-3.5%
88.9%	3044.6	2945.1	-99.4	-3.3%
90.1%	3040.9	2944.7	-96.2	-3.2%
91.4%	3016.1	2904.7	-111.3	-3.7%
92.6%	3014.2	2864.0	-150.3	-5.0%
93.8%	2961.7	2857.7	-104.1	-3.5%
95.1%	2944.6	2834.9	-109.7	-3.7%
96.3%	2905.6	2801.1	-104.5	-3.6%
97.5%	2904.0	2749.2	-154.9	-5.3%
98.8%	2866.9	2700.0	-166.9	-5.8%
100.0%	2,824.1	2,677.9	-146.1	-5.2%

Figure SQ-24-b
Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

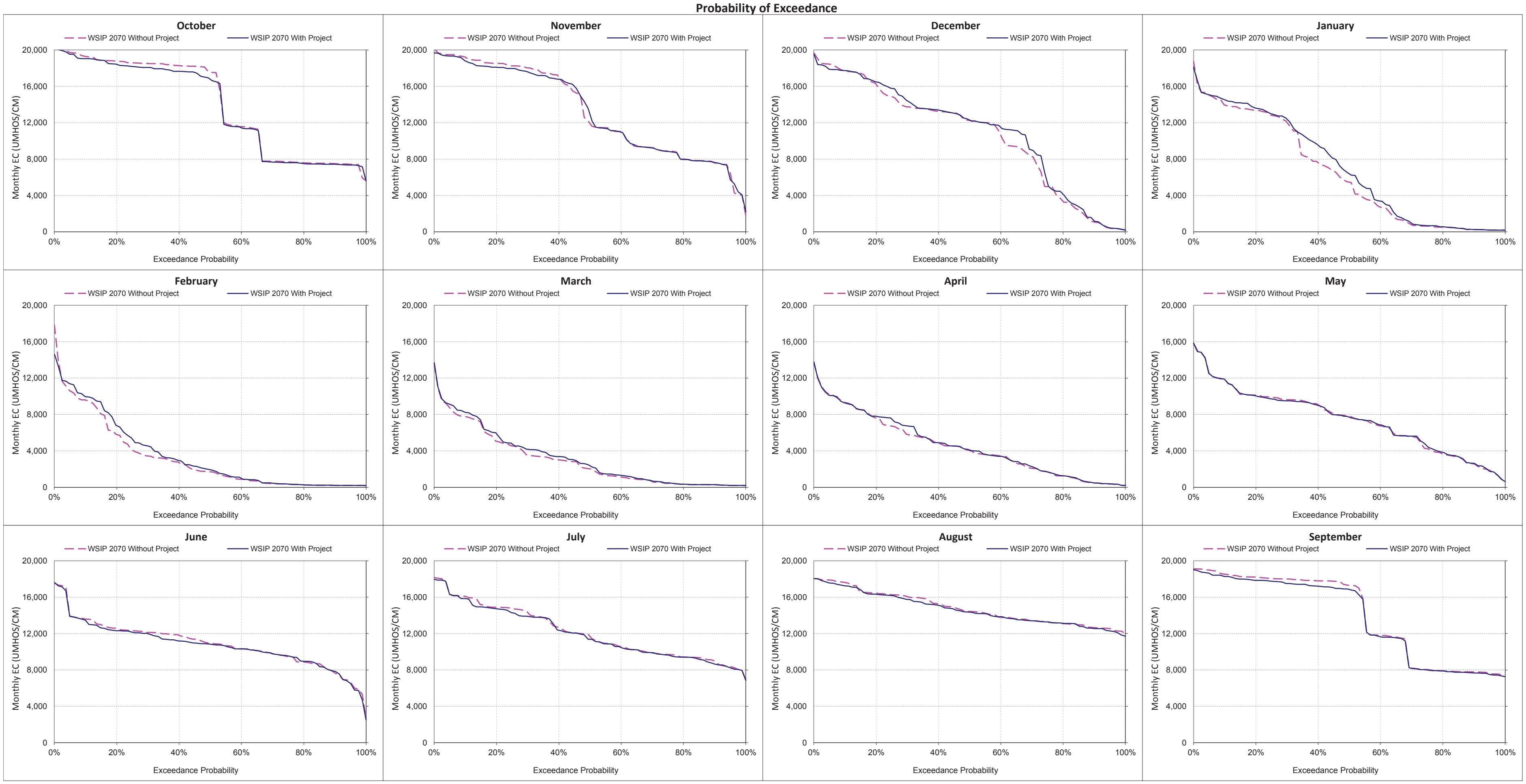


Table SQ-24-b

Sacramento River at Port Chicago (Roe Island), Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	20179.5	20159.6	-19.9	-0.1%
1.2%	20115.0	20045.1	-69.9	-0.3%
2.5%	20046.0	19920.9	-125.1	-0.6%
3.7%	19971.0	19799.6	-171.4	-0.9%
4.9%	19723.3	19547.3	-176.0	-0.9%
6.2%	19681.8	19547.2	-134.5	-0.7%
7.4%	19641.9	19120.5	-521.3	-2.7%
8.6%	19401.4	19053.8	-347.6	-1.8%
9.9%	19292.7	19043.5	-249.2	-1.3%
11.1%	19238.2	19039.6	-198.6	-1.0%
12.3%	19216.0	19009.2	-206.8	-1.1%
13.6%	18914.5	18929.5	15.0	0.1%
14.8%	18866.7	18877.3	10.7	0.1%
16.0%	18864.9	18863.7	-1.2	0.0%
17.3%	18824.2	18499.8	-324.4	-1.7%
18.5%	18822.0	18476.3	-345.7	-1.8%
19.8%	18786.7	18444.3	-342.4	-1.8%
21.0%	18737.6	18298.4	-439.1	-2.3%
22.2%	18735.3	18266.2	-469.0	-2.5%
23.5%	18610.1	18243.8	-366.3	-2.0%
24.7%	18591.5	18190.1	-401.5	-2.2%
25.9%	18574.4	18172.1	-402.3	-2.2%
27.2%	18560.8	18117.6	-443.2	-2.4%
28.4%	18527.1	18092.8	-434.3	-2.3%
29.6%	18525.9	18089.3	-436.6	-2.4%
30.9%	18507.8	18081.5	-426.3	-2.3%
32.1%	18506.5	17946.5	-560.0	-3.0%
33.3%	18496.3	17941.6	-554.7	-3.0%
34.6%	18489.4	17929.7	-559.7	-3.0%
35.8%	18398.4	17857.0	-541.4	-2.9%
37.0%	18380.4	17792.0	-588.4	-3.2%
38.3%	18323.2	17652.5	-670.7	-3.7%
39.5%	18294.5	17651.4	-643.1	-3.5%
40.7%	18258.0	17639.3	-618.7	-3.4%
42.0%	18255.9	17636.2	-619.7	-3.4%
43.2%	18223.3	17600.8	-622.5	-3.4%
44.4%	18222.6	17581.6	-640.9	-3.5%
45.7%	18203.6	17445.3	-758.3	-4.2%
46.9%	18158.7	17121.3	-1037.4	-5.7%
48.1%	18132.7	17037.5	-1095.2	-6.0%
49.4%	17603.5	16927.3	-676.2	-3.8%
50.6%	17524.1	16636.7	-887.4	-5.1%
51.9%	17514.7	16517.2	-997.6	-5.7%
53.1%	15526.7	16316.8	790.1	5.1%
54.3%	12023.6	11843.0	-180.5	-1.5%
55.6%	11805.6	11673.0	-132.7	-1.1%
56.8%	11711.2	11608.0	-103.3	-0.9%
58.0%	11707.8	11572.2	-135.6	-1.2%
59.3%	11563.8	11541.1	-22.8	-0.2%
60.5%	11559.8	11386.2	-173.6	-1.5%
61.7%	11535.8	11342.6	-193.3	-1.7%
63.0%	11438.8	11335.0	-103.8	-0.9%
64.2%	11351.9	11283.4	-68.4	-0.6%
65.4%	11283.4	11153.0	-130.4	-1.2%
66.7%	7792.2	7721.1	-71.1	-0.9%
67.9%	7782.9	7706.6	-76.3	-1.0%
69.1%	7771.2	7680.3	-90.9	-1.2%
70.4%	7764.4	7666.8	-97.6	-1.3%
71.6%	7757.9	7660.8	-97.1	-1.3%
72.8%	7743.2	7646.7	-96.5	-1.2%
74.1%	7702.4	7619.3	-83.2	-1.1%
75.3%	7698.7	7616.5	-82.2	-1.1%
76.5%	7654.2	7614.5	-39.7	-0.5%
77.8%	7647.1	7614.0	-33.2	-0.4%
79.0%	7629.3	7562.4	-66.9	-0.9%
80.2%	7583.3	7494.0	-89.2	-1.2%
81.5%	7570.0	7474.6	-95.4	-1.3%
82.7%	7551.2	7462.9	-88.4	-1.2%
84.0%	7544.7	7461.1	-83.6	-1.1%
85.2%	7536.4	7454.4	-82.0	-1.1%
86.4%	7534.7	7437.5	-97.2	-1.3%
87.7%	7527.8	7436.2	-91.6	-1.2%
88.9%	7515.4	7425.5	-89.9	-1.2%
90.1%	7500.1	7423.6	-76.5	-1.0%
91.4%	7464.2	7408.0	-56.2	-0.8%
92.6%	7461.3	7386.0	-75.3	-1.0%
93.8%	7459.9	7361.9	-98.0	-1.3%
95.1%	7425.2	7357.7	-67.6	-0.9%
96.3%	7410.0	7337.8	-72.2	-1.0%
97.5%	7391.5	7296.9	-94.6	-1.3%
98.8%	5920.0	7147.1	1227.1	20.7%
100.0%	5,637.3	5,575.9	-61.5	-1.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	20131.9	19678.7	-453.1	-2.3%
1.2%	19690.1	19653.7	-36.4	-0.2%
2.5%	19578.5	19444.5	-134.0	-0.7%
3.7%	19492.5	19368.4	-124.1	-0.6%
4.9%	19491.8	19341.4	-150.4	-0.8%
6.2%	19490.3	19337.9	-152.4	-0.8%
7.4%	19329.2	19239.1	-90.1	-0.5%
8.6%	19327.5	19166.4	-161.1	-0.8%
9.9%	19236.1	18815.1	-421.0	-2.2%
11.1%	18958.4	18614.6	-343.7	-1.8%
12.3%	18913.0	18517.5	-395.5	-2.1%
13.6%	18870.3	18285.7	-584.7	-3.1%
14.8%	18868.8	18262.0	-606.8	-3.2%
16.0%	18595.8	18235.4	-360.5	-1.9%
17.3%	18591.1	18186.3	-404.8	-2.2%
18.5%	18546.4	18109.1	-437.3	-2.4%
19.8%	18527.8	18105.7	-422.1	-2.3%
21.0%	18527.2	18089.3	-437.9	-2.4%
22.2%	18512.3	18075.9	-436.4	-2.4%
23.5%	18367.0	17976.5	-390.5	-2.1%
24.7%	18269.3	17971.8	-297.5	-1.6%
25.9%	18249.5	17951.1	-298.3	-1.6%
27.2%	18230.4	17806.0	-424.5	-2.3%
28.4%	18214.2	17694.4	-519.9	-2.9%
29.6%	18046.5	17644.3	-402.2	-2.2%
30.9%	18019.7	17481.4	-538.3	-3.0%
32.1%	17840.9	17343.0	-497.9	-2.8%
33.3%	17791.7	17207.6	-584.1	-3.3%
34.6%	17473.6	17194.2	-279.4	-1.6%
35.8%	17459.7	17175.9	-283.8	-1.6%
37.0%	17430.3	16946.3	-483.9	-2.8%
38.3%	17276.6	16893.2	-383.4	-2.2%
39.5%	17267.1	16785.4	-481.7	-2.8%
40.7%	16654.3	16762.2	107.9	0.6%
42.0%	16226.1	16488.8	262.6	1.6%
43.2%	16109.6	16346.7	237.1	1.5%
44.4%	15492.4	16226.1	733.7	4.7%
45.7%	15265.5	15762.7	497.2	3.3%
46.9%	15090.7	14976.0	-114.8	-0.8%
48.1%	12586.4	14327.1	1740.7	13.8%
49.4%	12193.8	13577.7	1384.0	11.3%
50.6%	11615.4	12207.7	592.3	5.1%
51.9%	11494.2	11519.0	24.8	0.2%
53.1%	11486.4	11425.6	-60.8	-0.5%
54.3%	11457.6	11392.9	-64.6	-0.6%
55.6%	11442.4	11334.4	-108.0	-0.9%
56.8%	11200.3	11125.7	-74.6	-0.7%
58.0%	11040.4	11116.1	75.7	0.7%
59.3%	11038.1	11037.1	-1.0	0.0%
60.5%	10991.9	10929.3	-62.6	-0.6%
61.7%	10154.8	10152.4	-2.4	0.0%
63.0%	9782.3	9718.1	-64.2	-0.7%
64.2%	9427.1	9567.2	140.1	1.5%
65.4%	9382.5	9366.0	-16.5	-0.2%
66.7%	9367.3	9344.0	-23.3	-0.2%
67.9%	9293.4	9318.4	25.0	0.3%
69.1%	9281.9	9270.5	-11.4	-0.1%
70.4%	9234.9	9195.5	-39.3	-0.4%
71.6%	9057.8	9033.8	-24.0	-0.3%
72.8%	8924.8	8943.3	18.5	0.2%
74.1%	8893.2	8849.7	-43.5	-0.5%
75.3%	8883.3	8821.1	-62.2	-0.7%
76.5%	8864.2	8772.6	-91.6	-1.0%
77.8%	8764.7	8718.5	-46.3	-0.5%
79.0%	8025.9	7981.2	-44.7	-0.6%
80.2%	7997.8	7957.1	-40.8	-0.5%
81.5%	7963.6	7943.5	-20.1	-0.3%
82.7%	7856.5	7831.0	-25.4	-0.3%
84.0%	7829.5	7812.2	-17.3	-0.2%
85.2%	7822.3	7800.7	-21.7	-0.3%
86.4%	7816.1	7778.4	-37.6	-0.5%
87.7%	7799.9	7743.6	-56.3	-0.7%
88.9%	7748.0	7706.5	-41.4	-0.5%
90.1%	7620.2	7567.6	-52.6	-0.7%
91.4%	7551.4	7536.2	-15.2	-0.2%
92.6%	7412.9	7404.8	-8.1	-0.1%
93.8%	7401.6	7348.3	-53.4	-0.7%
95.1%	6401.3	5713.5	-687.8	-10.7%
96.3%	4275.6	5282.9	1007.3	23.6%
97.5%	4100.7	4423.6	322.9	7.9%
98.8%	4045.8	4062.0	16.3	0.4%
100.0%	1,780.2	2,196.4	416.2	23.4%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	19682.7	19570.6	-112.1	-0.6%
1.2%	19027.3	18397.2	-630.1	-3.3%
2.5%	18527.8	18357.3	-170.5	-0.9%
3.7%	18483.4	18215.2	-268.1	-1.5%
4.9%	18451.7	17869.0	-582.7	-3.2%
6.2%	18359.5	17853.5	-506.0	-2.8%
7.4%	18092.3	17847.3	-244.9	-1.4%
8.6%	17843.4	17777.8	-65.6	-0.4%
9.9%	17697.0	17744.9	47.9	0.3%
11.1%	17634.0	17698.7	64.7	0.4%
12.3%	17619.6	17606.3	-13.4	-0.1%
13.6%	17548.1	17553.8	5.8	0.0%
14.8%	17478.2	17337.7	-140.5	-0.8%
16.0%	17283.3	16860.4	-422.9	-2.4%
17.3%	16716.8	16852.5	135.8	0.8%
18.5%	16497.6	16689.3	191.6	1.2%
19.8%	16342.3	16507.8	165.5	1.0%
21.0%	15739.1	16417.3	678.1	4.3%
22.2%	15248.7	16173.7	925.0	6.1%
23.5%	15013.1	15987.4	974.3	6.5%
24.7%	14906.9	15790.6	883.7	5.9%
25.9%	14767.2	15732.8	965.6	6.5%
27.2%	14272.6	15094.0	821.3	5.8%
28.4%	13902.1	14915.4	1013.3	7.3%
29.6%	13750.1	14469.8	719.7	5.2%
30.9%	13732.3	14222.1	489.8	3.6%
32.1%	13606.9	13942.0	335.1	2.5%
33.3%	13594.2	13630.1	35.9	0.3%
34.6%	13578.1	13562.6	-15.5	-0.1%
35.8%	13567.7	13527.5	-40.1	-0.3%
37.0%	13441.7	13521.8	80.1	0.6%
38.3%	13344.4	13445.7	101.3	0.8%
39.5%	13262.2	13436.8	174.7	1.3%
40.7%	13233.9	13333.9	100.0	0.8%
42.0%	13197.3	13250.0	52.7	0.4%
43.2%	13166.0	13139.9	-26.0	-0.2%
44.4%	13080.8	13078.0	-2.7	0.0%
45.7%	13059.1	13005.5	-53.6	-0.4%
46.9%	12824.2	12870.0	45.8	0.4%
48.1%	12373.7	12524.6	150.9	1.2%
49.4%	12281.8	12403.4	121.6	1.0%
50.6%	12220.9	12164.7	-56.2	-0.5%
51.9%	12196.4	12160.9	-35.5	-0.3%
53.1%	12066.4	12066.4	0.0	0.0%
54.3%	12009.3	12018.0	8.7	0.1%
55.6%	11999.2	11977.4	-21.8	-0.2%
56.8%	11992.1	11782.7	-209.4	-1.7%
58.0%	11732.3	11773.6	41.4	0.4%
59.3%	11134.9	11723.0	588.1	5.3%
60.5%	10239.2	11357.1	1117.9	10.9%
61.7%	9507.1	11247.1	1740.0	18.3%
63.0%	9459.7	11238.6	1778.9	18.8%
64.2%	9410.6	11174.0	1763.4	18.7%
65.4%	9356.7	11108.7	1752.1	18.7%
66.7%	9119.7	10738.3	1618.6	17.7%
67.9%	8776.1	10656.1	1880.0	21.4%
69.1%	8439.2	9090.7	651.5	7.7%
70.4%	8234.3	8959.2	724.9	8.8%
71.6%	7358.1	8471.3	1113.3	15.1%
72.8%	6644.5	8367.9	1723.4	25.9%
74.1%	4986.6	6461.7	1475.1	29.6%
75.3%	4963.7	5005.1	41.4	0.8%
76.5%	4920.6	4641.1	-279.5	-5.7%
77.8%	4061.8	4480.0	418.2	10.3%
79.0%	3707.5	4463.8	756.3	20.4%
80.2%	3253.2	4030.7	777.4	23.9%
81.5%	3243.6	3467.8	224.2	6.9%
82.7%	2968.6	3143.2	174.6	5.9%
84.0%	2577.5	2973.7	396.2	15.4%
85.2%	2377.1	2729.6	352.5	14.8%
86.4%	2011.6	2440.3	428.6	21.3%
87.7%	1559.5	1604.3	44.7	2.9%
88.9%	1184.2	1574.8	390.6	33.0%
90.1%	1061.4	1170.0	108.6	10.2%
91.4%	1018.6	1111.6	93.0	9.1%
92.6%	762.3	761.6	-0.8	-0.1%
93.8%	502.0	543.0	41.0	
95.1%	393.3	420.3	26.9	
96.3%	346.2	375.3	29.1	
97.5%	340.1	362.9	22.7	
98.8%	269.3	274.8	5.5	
100.0%	194.2	195.5	1.3	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	18764.7	18117.6	-647.1	-3.4%
1.2%	16272.2	16661.1	388.9	2.4%
2.5%	15360.3	15331.6	-28.7	-0.2%
3.7%	15323.9	15200.6	-123.3	-0.8%
4.9%	15046.1	15089.8	43.7	0.3%
6.2%	14845.7	14974.7	129.0	0.9%
7.4%	14592.3	14899.2	306.9	2.1%
8.6%	14559.3	14703.4	144.1	1.0%
9.9%	13952.3	14552.0	599.7	4.3%
11.1%	13847.6	14379.2	531.7	3.8%
12.3%	13777.6	14341.0	563.4	4.1%
13.6%	13776.9	14203.4	426.5	3.1%
14.8%	13581.0	14197.5	616.5	4.5%
16.0%	13520.8	14146.4	625.6	4.6%
17.3%	13515.8	14134.2	618.4	4.6%
18.5%	13425.9	13785.9	360.0	2.7%
19.8%	13349.2	13629.5	280.3	2.1%
21.0%	13341.0	13532.0	191.0	1.4%
22.2%	13233.3	13454.5	221.2	1.7%
23.5%	13151.3	13229.9	78.6	0.6%
24.7%	12835.8	12987.4	151.5	1.2%
25.9%	12769.7	12892.4	122.8	1.0%
27.2%	12681.6	12756.5	74.9	0.6%
28.4%	12385.0	12747.9	362.9	2.9%
29.6%	12197.4	12502.0	304.6	2.5%
30.9%	11638.7	12098.2	459.5	3.9%
32.1%	11093.0	11364.1	271.1	2.4%
33.3%	11060.6	10970.8	-89.8	-0.8%
34.6%	8498.5	10760.1	2261.5	26.6%
35.8%	8298.0	10465.8	2167.8	26.1%
37.0%	8189.1	10148.6	1959.6	23.9%
38.3%	7772.0	9924.6	2152.6	27.7%
39.5%	7745.4	9646.5	1901.1	24.5%
40.7%	7387.0	9331.0	1944.0	26.3%
42.0%	7274.1	9154.9	1880.9	25.9%
43.2%	7064.4	8604.2	1539.8	21.8%
44.4%	6788.3	8144.1	1355.7	20.0%
45.7%	6548.8	7949.6	1400.7	21.4%
46.9%	6045.5	7235.3	1189.8	19.7%
48.1%	5696.3	6831.1	1134.8	19.9%
49.4%	5496.3	6510.4	1014.1	18.5%
50.6%	5425.1	6248.7	823.7	15.2%
51.9%	4156.3	6219.1	2062.7	49.6%
53.1%	4136.4	5341.4	1205.0	29.1%
54.3%	3801.1	5006.5	1205.5	31.7%
55.6%	3560.7	4775.0	1214.2	34.1%
56.8%	3460.1	4741.0	1281.0	37.0%
58.0%	3228.4	3551.2	322.8	10.0%
59.3%	2806.5	3412.9	606.4	21.6%
60.5%	2651.0	3346.2	695.3	26.2%
61.7%	2608.7	2972.0	363.4	13.9%
63.0%	2126.7	2888.5	761.8	35.8%
64.2%	1621.1	2150.9	529.8	32.7%
65.4%	1361.0	1684.7	323.7	23.8%
66.7%	1316.2	1559.1	242.9	18.5%
67.9%	1207.5	1318.6	111.1	9.2%
69.1%	924.3	1148.8	224.5	24.3%
70.4%	711.0	844.7	133.7	18.8%
71.6%	706.9	786.3	79.4	11.2%
72.8%	640.0	717.3	77.2	12.1%
74.1%	637.1	691.6	54.5	8.6%
75.3%	631.9	683.5	51.6	8.2%
76.5%	575.8	668.4	92.5	16.1%
77.8%	526.3	666.8	140.5	26.7%
79.0%	521.3	547.6	26.3	5.1%
80.2%	513.3	544.6	31.3	6.1%
81.5%	511.9	514.2	2.3	0.4%
82.7%	479.5	470.1	-9.3	-1.9%
84.0%	449.3	457.1	7.8	1.7%
85.2%	376.1	385.7	9.6	2.5%
86.4%	363.6	380.7	17.2	4.7%
87.7%	268.6	270.9	2.3	
88.9%	258.0	269.1	11.1	
90.1%	256.7	255.2	-1.5	
91.4%	240.9	248.7	7.8	
92.6%	234.7	246.2	11.5	
93.8%	224.3	228.1	3.8	
95.1%	194.5	196.0	1.6	
96.3%	193.9	194.5	0.7	
97.5%	193.2	194.5	1.3	
98.8%	192.6	194.4	1.9	
100.0%	192.5	193.0	0.5	

Table SQ-24-b

Sacramento River at Port Chicago (Roe Island), Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	17840.4	14645.8	-3194.6	-17.9%
1.2%	13995.2	13318.6	-676.7	-4.8%
2.5%	11677.9	11750.8	73.0	0.6%
3.7%	11125.0	11675.8	550.8	5.0%
4.9%	10615.6	11392.9	777.3	7.3%
6.2%	10377.3	11269.3	892.0	8.6%
7.4%	9812.0	10372.7	560.6	5.7%
8.6%	9621.3	10309.4	688.2	7.2%
9.9%	9603.5	9958.1	354.6	3.7%
11.1%	9442.6	9925.3	482.8	5.1%
12.3%	9228.6	9801.0	572.4	6.2%
13.6%	8719.7	9471.1	751.4	8.6%
14.8%	8084.2	9425.4	1341.2	16.6%
16.0%	7903.8	8429.2	525.3	6.6%
17.3%	6282.7	8187.5	1904.8	30.3%
18.5%	6251.0	7742.5	1491.5	23.9%
19.8%	5822.2	6809.6	987.4	17.0%
21.0%	5694.8	6629.3	934.5	16.4%
22.2%	4947.6	6054.1	1106.5	22.4%
23.5%	4747.3	5711.9	964.6	20.3%
24.7%	4124.0	5429.4	1305.4	31.7%
25.9%	3901.0	4918.5	1017.5	26.1%
27.2%	3757.8	4894.3	1136.5	30.2%
28.4%	3544.6	4645.6	1101.0	31.1%
29.6%	3449.1	4562.4	1113.3	32.3%
30.9%	3422.4	4454.4	1032.0	30.2%
32.1%	3237.1	3962.4	725.3	22.4%
33.3%	3232.2	3884.4	652.2	20.2%
34.6%	3200.0	3400.3	200.3	6.3%
35.8%	3126.2	3245.5	119.4	3.8%
37.0%	2959.1	3226.4	267.3	9.0%
38.3%	2821.1	3135.2	314.1	11.1%
39.5%	2788.0	2960.2	172.2	6.2%
40.7%	2567.6	2889.9	322.4	12.6%
42.0%	2484.1	2490.0	5.9	0.2%
43.2%	2167.4	2489.6	322.2	14.9%
44.4%	1929.2	2336.9	407.8	21.1%
45.7%	1871.6	2272.9	401.4	21.4%
46.9%	1766.3	2130.5	364.2	20.6%
48.1%	1762.7	2068.3	305.6	17.3%
49.4%	1695.3	1978.6	283.3	16.7%
50.6%	1691.7	1899.0	207.3	12.3%
51.9%	1571.8	1737.1	165.3	10.5%
53.1%	1340.8	1519.0	178.1	13.3%
54.3%	1270.9	1452.8	181.9	14.3%
55.6%	1168.5	1306.3	137.8	11.8%
56.8%	1103.8	1172.0	68.2	6.2%
58.0%	936.4	1109.6	173.2	18.5%
59.3%	885.1	1103.7	218.6	24.7%
60.5%	878.9	890.2	11.4	1.3%
61.7%	829.1	865.2	36.2	4.4%
63.0%	715.4	827.6	112.2	15.7%
64.2%	702.8	817.5	114.7	16.3%
65.4%	691.6	738.2	46.7	6.7%
66.7%	478.1	482.9	4.8	1.0%
67.9%	440.1	477.8	37.7	8.6%
69.1%	420.5	475.1	54.5	13.0%
70.4%	405.1	431.3	26.2	6.5%
71.6%	376.2	387.9	11.7	3.1%
72.8%	371.3	379.8	8.5	2.3%
74.1%	357.1	371.9	14.8	4.1%
75.3%	327.5	357.8	30.2	9.2%
76.5%	311.0	327.6	16.6	5.3%
77.8%	306.9	321.8	14.8	4.8%
79.0%	280.5	291.5	11.0	3.9%
80.2%	255.4	273.2	17.7	6.9%
81.5%	244.2	264.3	20.1	8.2%
82.7%	236.0	240.5	4.5	1.9%
84.0%	217.7	220.5	2.9	1.3%
85.2%	217.6	219.6	2.0	0.9%
86.4%	214.3	219.0	4.7	2.2%
87.7%	213.6	217.0	3.4	1.6%
88.9%	213.1	216.4	3.3	1.6%
90.1%	210.7	215.6	5.0	2.4%
91.4%	209.3	215.6	6.3	3.0%
92.6%	208.8	210.2	1.4	0.7%
93.8%	207.4	207.9	0.5	0.2%
95.1%	207.2	207.0	-0.2	-0.1%
96.3%	200.7	203.5	2.8	1.4%
97.5%	200.3	200.7	0.4	0.2%
98.8%	198.9	198.9	0.0	0.0%
100.0%	185.3	185.3	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13594.3	13686.8	92.5	0.7%
1.2%	10913.2	11031.5	118.4	1.1%
2.5%	9515.4	9740.1	224.6	2.4%
3.7%	9261.9	9288.5	26.6	0.3%
4.9%	8762.1	9143.4	381.3	4.4%
6.2%	8270.2	8950.3	680.1	8.2%
7.4%	7956.4	8475.3	518.9	6.5%
8.6%	7819.4	8433.7	614.3	7.9%
9.9%	7786.9	8233.7	446.8	5.7%
11.1%	7690.4	8199.5	509.1	6.6%
12.3%	7517.2	7942.6	425.4	5.7%
13.6%	7459.4	7785.0	325.6	4.4%
14.8%	7204.8	7410.4	205.6	2.9%
16.0%	6116.7	6351.4	234.7	3.8%
17.3%	5844.1	6253.5	409.4	7.0%
18.5%	5653.7	6044.2	390.4	6.9%
19.8%	5077.8	6001.1	923.2	18.2%
21.0%	4973.8	5443.3	469.5	9.4%
22.2%	4826.1	4970.0	144.0	3.0%
23.5%	4764.8	4893.9	129.1	2.7%
24.7%	4570.3	4840.1	269.8	5.9%
25.9%	4513.1	4541.7	28.6	0.6%
27.2%	4354.8	4533.8	179.0	4.1%
28.4%	4019.0	4383.6	364.6	9.1%
29.6%	3566.0	4209.9	643.9	18.1%
30.9%	3488.4	4149.7	661.3	19.0%
32.1%	3439.2	4139.3	700.1	20.4%
33.3%	3396.3	4085.4	689.1	20.3%
34.6%	3371.5	3915.2	543.7	16.1%
35.8%	3316.8	3825.4	508.6	15.3%
37.0%	3228.8	3512.9	284.1	8.8%
38.3%	3044.4	3414.0	369.6	12.1%
39.5%	3031.4	3372.3	340.8	11.2%
40.7%	2980.1	3371.6	391.5	13.1%
42.0%	2931.5	3315.7	384.2	13.1%
43.2%	2864.9	3063.1	198.2	6.9%
44.4%	2825.7	3060.0	234.3	8.3%
45.7%	2824.1	2920.8	96.7	3.4%
46.9%	2221.7	2614.1	392.4	17.7%
48.1%	2120.6	2606.2	485.5	22.9%
49.4%	2047.3	2491.0	443.7	21.7%
50.6%	2002.2	2221.5	219.3	11.0%
51.9%	1708.1	2122.1	413.9	24.2%
53.1%	1448.0	1606.3	158.2	10.9%
54.3%	1367.8	1494.0	126.3	9.2%
55.6%	1280.5	1467.5	187.0	14.6%
56.8%	1263.0	1451.7	188.7	14.9%
58.0%	1226.4	1358.4	132.1	10.8%
59.3%	1145.8	1333.4	187.6	16.4%
60.5%	1110.0	1295.2	185.2	16.7%
61.7%	1045.5	1234.0	188.5	18.0%
63.0%	932.5	1160.1	227.6	24.4%
64.2%	929.6	1048.8	119.1	12.8%
65.4%	854.6	941.8	87.2	10.2%
66.7%	847.3	940.0	92.8	10.9%
67.9%	813.8	834.3	20.6	2.5%
69.1%	756.0	783.6	27.7	3.7%
70.4%	565.0	646.4	81.3	14.4%
71.6%	555.8	630.9	75.1	13.5%
72.8%	548.3	595.5	47.1	8.6%
74.1%	440.7	499.4	58.6	13.3%
75.3%	437.8	475.6	37.8	8.6%
76.5%	436.7	440.7	4.0	0.9%
77.8%	384.8	379.3	-5.6	-1.4%
79.0%	336.4	343.0	6.6	2.0%
80.2%	330.6	342.2	11.6	3.5%
81.5%	306.8	309.2	2.4	0.8%
82.7%	297.4	300.2	2.9	1.0%
84.0%	296.2	297.1	0.8	0.3%
85.2%	294.5	296.1	1.6	0.5%
86.4%	292.0	295.2	3.2	1.1%
87.7%	287.2	294.4	7.2	2.5%
88.9%	276.0	287.6	11.6	4.2%
90.1%	275.6	276.1	0.5	0.2%
91.4%	266.2	266.1	0.0	0.0%
92.6%	225.1	224.7	-0.4	-0.2%
93.8%	214.0	220.0	6.0	2.8%
95.1%	201.5	205.9	4.4	2.2%
96.3%	196.2	198.7	2.5	1.3%
97.5%	192.4	193.0	0.6	0.3%
98.8%	191.3	191.9	0.6	0.3%
100.0%	190.2	190.2	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	13740.2	13779.6	39.4	0.3%
1.2%	12084.0	11975.9	-108.1	-0.9%
2.5%	11068.0	10972.7	-95.3	-0.9%
3.7%	10514.5	10482.3	-32.2	-0.3%
4.9%	10191.0	10098.6	-92.4	-0.9%
6.2%	10128.8	10085.5	-43.4	-0.4%
7.4%	9834.9	9971.8	136.9	1.4%
8.6%	9573.6	9446.7	-126.9	-1.3%
9.9%	9341.1	9271.3	-69.8	-0.7%
11.1%	9234.5	9165.3	-69.1	-0.7%
12.3%	9038.5	9078.5	39.9	0.4%
13.6%	8619.8	8685.3	65.5	0.8%
14.8%	8530.4	8527.2	-3.1	0.0%
16.0%	8473.0	8508.9	35.9	0.4%
17.3%	8163.9	8054.5	-109.4	-1.3%
18.5%	7821.3	7816.8	-4.5	-0.1%
19.8%	7624.6	7809.1	184.5	2.4%
21.0%	7564.2	7732.2	168.0	2.2%
22.2%	6901.6	7701.6	800.0	11.6%
23.5%	6808.1	7641.5	833.4	12.2%
24.7%	6744.4	7620.9	876.6	13.0%
25.9%	6673.0	7195.6	522.6	7.8%
27.2%	6432.8	7079.7	646.9	10.1%
28.4%	6416.1	6807.7	391.6	6.1%
29.6%	5848.0	6759.0	911.0	15.6%
30.9%	5733.6	6703.0	969.4	16.9%
32.1%	5710.8	6669.7	958.9	16.8%
33.3%	5578.4	5770.2	191.9	3.4%
34.6%	5492.0	5559.8	67.8	1.2%
35.8%	5390.9	5517.4	126.5	2.3%
37.0%	5322.7	5283.3	-39.4	-0.7%
38.3%	5088.7	4919.5	-169.2	-3.3%
39.5%	4800.9	4907.1	106.2	2.2%
40.7%	4767.4	4881.7	114.3	2.4%
42.0%	4571.5	4823.4	251.9	5.5%
43.2%	4544.1	4566.2	22.1	0.5%
44.4%	4543.9	4548.1	4.2	0.1%
45.7%	4525.9	4524.2	-1.8	0.0%
46.9%	4452.2	4474.9	22.7	0.5%
48.1%	4176.0	4213.0	37.0	0.9%
49.4%	4084.7	4158.5	73.8	1.8%
50.6%	3968.7	4011.7	43.0	1.1%
51.9%	3709.3	4007.2	297.8	8.0%
53.1%	3684.6	3974.9	290.3	7.9%
54.3%	3617.7	3675.5	57.8	1.6%
55.6%	3593.3	3557.0	-36.3	-1.0%
56.8%	3585.7	3514.2	-71.5	-2.0%
58.0%	3524.5	3448.8	-75.7	-2.1%
59.3%	3477.1	3397.2	-79.9	-2.3%
60.5%	3370.5	3388.4	17.9	0.5%
61.7%	3366.1	3219.0	-147.2	-4.4%
63.0%	2981.7	3001.1	19.4	0.7%
64.2%	2814.7	2831.7	17.0	0.6%
65.4%	2583.9	2826.9	243.0	9.4%
66.7%	2549.8	2575.1	25.3	1.0%
67.9%	2291.0	2558.9	267.9	11.7%
69.1%	2126.9	2382.7	255.8	12.0%
70.4%	2077.4	2217.6	140.2	6.7%
71.6%	2049.5	2034.9	-14.5	-0.7%
72.8%	1800.5	1805.0	4.5	0.2%
74.1%	1743.4	1767.3	23.9	1.4%
75.3%	1666.2	1665.5	-0.7	0.0%
76.5%	1460.8	1548.4	87.6	6.0%
77.8%	1261.2	1410.3	149.1	11.8%
79.0%	1261.1	1277.3	16.2	1.3%
80.2%	1234.9	1271.7	36.8	3.0%
81.5%	1213.7	1214.4	0.7	0.1%
82.7%	1071.6	1114.7	43.1	4.0%
84.0%	992.9	1071.2	78.3	7.9%
85.2%	776.5	863.1	86.6	11.2%
86.4%	645.4	697.3	51.9	8.0%
87.7%	560.0	606.5	46.5	8.3%
88.9%	509.4	546.6	37.2	7.3%
90.1%	466.7	466.9	0.2	0.0%
91.4%	463.0	463.1	0.1	0.0%
92.6%	387.3	398.8	11.5	3.0%
93.8%	378.0	392.0	14.0	3.7%
95.1%	360.8	361.5	0.7	0.2%
96.3%	350.3	353.9	3.6	1.0%
97.5%	332.5	350.6	18.1	5.4%
98.8%	206.0	207.3	1.3	
100.0%	199.6	199.7	0.1	

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	15857.3	15869.6	12.3	0.1%
1.2%	15060.9	14936.0	-125.0	-0.8%
2.5%	14800.0	14845.8	45.7	0.3%
3.7%	14249.5	14219.1	-30.4	-0.2%
4.9%	12549.8	12515.5	-34.3	-0.3%
6.2%	12147.3	12181.2	33.9	0.3%
7.4%	12028.4	12044.7	16.3	0.1%
8.6%	11979.5	11932.9	-46.6	-0.4%
9.9%	11913.7	11911.2	-2.6	0.0%
11.1%	11398.2	11405.4	7.2	0.1%
12.3%	11256.8	11263.4	6.6	0.1%
13.6%	10863.3	10776.2	-87.1	-0.8%
14.8%	10244.4	10355.3	110.8	1.1%
16.0%	10179.0	10249.4	70.4	0.7%
17.3%	10154.8	10171.2	16.4	0.2%
18.5%	10148.0	10143.6	-4.5	0.0%
19.8%	10133.9	10081.9	-52.1	-0.5%
21.0%	10102.2	9969.1	-133.1	-1.3%
22.2%	9958.5	9911.7	-46.7	-0.5%
23.5%	9954.2	9806.1	-148.1	-1.5%
24.7%	9920.3	9723.5	-196.8	-2.0%
25.9%	9862.0	9659.9	-202.1	-2.0%
27.2%	9825.4	9560.3	-265.1	-2.7%
28.4%	9652.0	9531.9	-120.2	-1.2%
29.6%	9636.4	9501.6	-134.8	-1.4%
30.9%	9632.9	9488.4	-144.4	-1.5%
32.1%	9614.7	9467.8	-147.0	-1.5%
33.3%	9561.2	9429.1	-132.1	-1.4%
34.6%	9548.4	9405.1	-143.4	-1.5%
35.8%	9439.9	9368.3	-71.6	-0.8%
37.0%	9310.1	9297.8	-12.3	-0.1%
38.3%	9191.6	9170.3	-21.3	-0.2%
39.5%	9186.6	9039.8	-146.8	-1.6%
40.7%	8902.2	8926.0	23.8	0.3%
42.0%	8515.3	8754.9	239.6	2.8%
43.2%	8404.6	8303.2	-101.4	-1.2%
44.4%	8171.0	7980.5	-190.5	-2.3%
45.7%	7938.2	7972.9	34.7	0.4%
46.9%	7917.0	7947.7	30.7	0.4%
48.1%	7914.4	7821.5	-92.9	-1.2%
49.4%	7805.2	7789.0	-16.2	-0.2%
50.6%	7758.5	7621.8	-136.7	-1.8%
51.9%	7520.6	7556.1	35.5	0.5%
53.1%	7457.3	7434.6	-22.6	-0.3%
54.3%	7369.3	7408.0	38.7	0.5%
55.6%	7330.5	7339.0	8.5	0.1%
56.8%	7091.4	7322.5	231.1	3.3%
58.0%	6963.8	7107.9	144.1	2.1%
59.3%	6785.0	6919.9	134.9	2.0%
60.5%	6732.5	6832.9	100.4	1.5%
61.7%	6593.0	6655.6	62.6	0.9%
63.0%	6471.2	6607.5	136.3	2.1%
64.2%	5904.5	5730.3	-174.1	-2.9%
65.4%	5740.3	5687.6	-52.7	-0.9%
66.7%	5680.1	5647.7	-32.5	-0.6%
67.9%	5679.0	5642.5	-36.5	-0.6%
69.1%	5570.6	5634.0	63.4	1.1%
70.4%	5557.4	5612.4	55.0	1.0%
71.6%	5488.7	5611.1	122.4	2.2%
72.8%	4927.1	5100.2	173.1	3.5%
74.1%	4284.2	4825.8	541.6	12.6%
75.3%	4218.1	4391.4	173.3	4.1%
76.5%	3977.7	4232.7	255.0	6.4%
77.8%	3858.0	4041.1	183.0	4.7%
79.0%	3827.5	3907.9	80.4	2.1%
80.2%	3572.0	3827.5	255.6	7.2%
81.5%	3543.0	3584.3	41.2	1.2%
82.7%	3468.1	3520.5	52.5	1.5%
84.0%	3370.1	3468.8	98.7	2.9%
85.2%	3329.7	3330.4	0.8	0.0%
86.4%	3076.3	3130.7	54.4	1.8%
87.7%	2651.9	2701.2	49.3	1.9%
88.9%	2624.3	2665.7	41.4	1.6%
90.1%	2564.7	2620.3	55.7	2.2%
91.4%	2282.0	2363.3	81.4	3.6%
92.6%	2064.3	2349.0	284.7	13.8%
93.8%	1995.7	2094.6	99.0	5.0%
95.1%	1851.8	1749.1	-102.7	-5.5%
96.3%	1632.8	1673.6	40.8	2.5%
97.5%	1329.1	1331.2	2.1	0.2%
98.8%	921.4	884.4	-36.9	-4.0%
100.0%	598.4	644.0	45.6	7.6%

Table SQ-24-b

Sacramento River at Port Chicago (Roe Island), Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	17550.3	17618.8	68.5	0.4%
1.2%	17337.0	17234.4	-102.6	-0.6%
2.5%	17261.1	17133.7	-127.4	-0.7%
3.7%	17113.3	16713.9	-399.4	-2.3%
4.9%	13900.0	13919.3	19.3	0.1%
6.2%	13821.7	13814.3	-7.5	-0.1%
7.4%	13729.4	13695.0	-34.3	-0.3%
8.6%	13688.9	13592.5	-96.3	-0.7%
9.9%	13594.8	13468.1	-126.7	-0.9%
11.1%	13572.0	13003.0	-569.1	-4.2%
12.3%	13459.6	12961.2	-498.5	-3.7%
13.6%	13052.5	12904.3	-148.2	-1.1%
14.8%	12987.5	12615.8	-371.7	-2.9%
16.0%	12793.2	12575.4	-217.7	-1.7%
17.3%	12674.4	12438.5	-235.9	-1.9%
18.5%	12608.0	12378.9	-229.1	-1.8%
19.8%	12582.1	12304.8	-277.3	-2.2%
21.0%	12427.5	12296.6	-130.8	-1.1%
22.2%	12388.6	12284.4	-104.2	-0.8%
23.5%	12353.3	12273.6	-79.7	-0.6%
24.7%	12352.2	12156.5	-195.7	-1.6%
25.9%	12293.0	12095.3	-197.7	-1.6%
27.2%	12261.9	12070.3	-191.6	-1.6%
28.4%	12227.0	12033.9	-193.1	-1.6%
29.6%	12119.6	12029.0	-90.6	-0.7%
30.9%	12115.0	11875.9	-239.1	-2.0%
32.1%	12106.9	11733.0	-373.9	-3.1%
33.3%	12089.3	11691.9	-397.4	-3.3%
34.6%	11984.6	11409.0	-575.6	-4.8%
35.8%	11966.1	11377.8	-588.3	-4.9%
37.0%	11922.2	11319.7	-602.6	-5.1%
38.3%	11869.4	11305.2	-564.2	-4.8%
39.5%	11869.3	11191.8	-677.5	-5.7%
40.7%	11722.1	11173.0	-549.1	-4.7%
42.0%	11676.2	11132.2	-544.0	-4.7%
43.2%	11481.5	11056.6	-424.8	-3.7%
44.4%	11386.1	10976.6	-409.5	-3.6%
45.7%	11375.8	10927.9	-447.9	-3.9%
46.9%	11223.7	10897.4	-326.3	-2.9%
48.1%	11041.4	10884.6	-156.8	-1.4%
49.4%	10956.1	10852.0	-104.1	-1.0%
50.6%	10904.5	10798.2	-106.3	-1.0%
51.9%	10864.6	10754.2	-110.3	-1.0%
53.1%	10835.1	10738.2	-96.9	-0.9%
54.3%	10734.4	10680.7	-53.8	-0.5%
55.6%	10652.4	10530.2	-122.1	-1.1%
56.8%	10605.8	10469.7	-136.1	-1.3%
58.0%	10318.2	10326.3	8.1	0.1%
59.3%	10307.1	10319.8	12.7	0.1%
60.5%	10304.8	10317.7	12.9	0.1%
61.7%	10303.5	10279.6	-23.9	-0.2%
63.0%	10296.0	10196.5	-99.6	-1.0%
64.2%	10148.7	10158.9	10.2	0.1%
65.4%	10087.2	10107.1	19.9	0.2%
66.7%	10054.2	9984.4	-69.8	-0.7%
67.9%	9947.1	9923.1	-24.0	-0.2%
69.1%	9868.8	9873.5	4.8	0.0%
70.4%	9735.5	9756.0	20.4	0.2%
71.6%	9691.6	9684.5	-7.1	-0.1%
72.8%	9637.3	9611.9	-25.4	-0.3%
74.1%	9520.8	9591.2	70.5	0.7%
75.3%	9433.4	9500.6	67.2	0.7%
76.5%	9414.0	9391.7	-22.2	-0.2%
77.8%	8891.9	9362.7	470.8	5.3%
79.0%	8879.3	8970.0	90.7	1.0%
80.2%	8865.2	8936.9	71.7	0.8%
81.5%	8809.6	8929.2	119.6	1.4%
82.7%	8708.7	8883.6	174.9	2.0%
84.0%	8692.3	8701.6	9.3	0.1%
85.2%	8660.7	8332.9	-327.8	-3.8%
86.4%	8329.6	8314.7	-14.9	-0.2%
87.7%	8068.3	8067.5	-0.8	0.0%
88.9%	7916.7	7921.6	4.9	0.1%
90.1%	7626.0	7832.7	206.7	2.7%
91.4%	7450.1	7548.1	98.0	1.3%
92.6%	6920.5	6954.6	34.1	0.5%
93.8%	6903.6	6797.4	-106.2	-1.5%
95.1%	6604.4	6485.6	-118.8	-1.8%
96.3%	5988.1	5777.0	-211.1	-3.5%
97.5%	5870.2	5755.4	-114.8	-2.0%
98.8%	5303.4	4654.2	-649.1	-12.2%
100.0%	2,626.1	2,481.6	-144.5	-5.5%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	18159.6	17956.8	-202.8	-1.1%
1.2%	18081.2	17872.8	-208.4	-1.2%
2.5%	18020.6	17869.7	-151.0	-0.8%
3.7%	17774.3	17773.9	-0.4	0.0%
4.9%	16319.1	16295.4	-23.7	-0.1%
6.2%	16182.8	16166.7	-16.2	-0.1%
7.4%	16182.1	16163.9	-18.3	-0.1%
8.6%	16110.0	15863.7	-246.3	-1.5%
9.9%	16096.1	15853.7	-242.4	-1.5%
11.1%	15961.4	15797.6	-163.8	-1.0%
12.3%	15898.6	15113.5	-785.1	-4.9%
13.6%	15800.2	14950.5	-849.7	-5.4%
14.8%	15186.9	14944.9	-241.9	-1.6%
16.0%	15130.0	14917.6	-212.3	-1.4%
17.3%	14936.2	14846.2	-90.0	-0.6%
18.5%	14896.3	14788.1	-108.3	-0.7%
19.8%	14893.8	14741.6	-152.3	-1.0%
21.0%	14884.5	14683.4	-201.1	-1.4%
22.2%	14869.0	14643.5	-225.6	-1.5%
23.5%	14852.8	14565.3	-287.5	-1.9%
24.7%	14795.9	14312.2	-483.7	-3.3%
25.9%	14691.8	14215.3	-476.5	-3.2%
27.2%	14655.3	13974.9	-680.4	-4.6%
28.4%	14580.6	13922.6	-657.9	-4.5%
29.6%	14466.9	13902.3	-564.6	-3.9%
30.9%	14000.9	13847.2	-153.7	-1.1%
32.1%	13921.7	13807.0	-114.7	-0.8%
33.3%	13861.4	13785.5	-75.9	-0.5%
34.6%	13807.3	13779.3	-28.0	-0.2%
35.8%	13655.0	13740.0	85.1	0.6%
37.0%	13311.5	13607.6	296.1	2.2%
38.3%	12840.9	13062.5	221.7	1.7%
39.5%	12720.7	12393.4	-327.3	-2.6%
40.7%	12552.2	12296.8	-255.4	-2.0%
42.0%	12272.1	12170.9	-101.2	-0.8%
43.2%	12120.1	12151.4	31.3	0.3%
44.4%	12118.2	12062.7	-55.5	-0.5%
45.7%	12045.4	12060.2	14.8	0.1%
46.9%	12002.6	11953.2	-49.4	-0.4%
48.1%	11969.7	11848.0	-121.6	-1.0%
49.4%	11929.6	11381.0	-548.6	-4.6%
50.6%	11434.3	11379.7	-54.6	-0.5%
51.9%	11220.3	11100.4	-119.9	-1.1%
53.1%	11055.7	11086.5	30.8	0.3%
54.3%	10942.7	10892.3	-50.4	-0.5%
55.6%	10904.4	10851.7	-52.7	-0.5%
56.8%	10878.9	10849.7	-29.2	-0.3%
58.0%	10771.9	10567.4	-204.5	-1.9%
59.3%	10595.9	10557.6	-38.3	-0.4%
60.5%	10516.6	10405.5	-111.1	-1.1%
61.7%	10397.9	10294.5	-103.4	-1.0%
63.0%	10234.0	10246.6	12.6	0.1%
64.2%	10223.0	10219.3	-3.7	0.0%
65.4%	10095.4	10206.1	110.7	1.1%
66.7%	10091.0	9962.4	-128.6	-1.3%
67.9%	9997.6	9911.8	-85.8	-0.9%
69.1%	9873.1	9904.6	31.5	0.3%
70.4%	9856.5	9893.4	37.0	0.4%
71.6%	9800.1	9740.3	-59.7	-0.6%
72.8%	9722.5	9714.9	-7.5	-0.1%
74.1%	9713.6	9659.0	-54.6	-0.6%
75.3%	9692.8	9630.1	-62.7	-0.6%
76.5%	9670.7	9491.3	-179.4	-1.9%
77.8%	9566.9	9439.5	-127.4	-1.3%
79.0%	9442.3	9405.4	-37.0	-0.4%
80.2%	9413.1	9401.5	-11.6	-0.1%
81.5%	9401.8	9389.0	-12.8	-0.1%
82.7%	9380.9	9360.9	-20.0	-0.2%
84.0%	9373.9	9286.3	-87.6	-0.9%
85.2%	9332.7	9150.4	-182.4	-2.0%
86.4%	9280.3	9096.9	-183.3	-2.0%
87.7%	9128.5	8893.6	-234.9	-2.6%
88.9%	9118.5	8768.3	-350.2	-3.8%
90.1%	8952.8	8624.8	-328.0	-3.7%
91.4%	8578.2	8548.7	-29.5	-0.3%
92.6%	8455.3	8539.1	83.8	1.0%
93.8%	8435.7	8369.5	-66.2	-0.8%
95.1%	8364.5	8228.0	-136.5	-1.6%
96.3%	8231.6	8096.4	-135.2	-1.6%
97.5%	8042.9	8047.3	4.4	0.1%
98.8%	7971.1	7949.4	-21.7	-0.3%
100.0%	6,822.4	6,869.0	46.5	0.7%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	18047.1	18039.9	-7.2	0.0%
1.2%	18014.1	18015.2	1.1	0.0%
2.5%	17920.4	17816.6	-103.8	-0.6%
3.7%	17895.1	17718.3	-176.8	-1.0%
4.9%	17892.8	17568.1	-324.7	-1.8%
6.2%	17859.8	17538.4	-321.4	-1.8%
7.4%	17694.7	17428.1	-266.5	-1.5%
8.6%	17683.5	17342.7	-340.8	-1.9%
9.9%	17631.3	17243.0	-388.3	-2.2%
11.1%	17526.1	17224.8	-301.3	-1.7%
12.3%	17276.0	17107.7	-168.3	-1.0%
13.6%	17272.7	17083.2	-189.5	-1.1%
14.8%	16548.5	16850.5	301.9	1.8%
16.0%	16525.3	16500.8	-24.5	-0.1%
17.3%	16506.6	16370.4	-136.2	-0.8%
18.5%	16480.7	16348.1	-132.6	-0.8%
19.8%	16464.8	16326.3	-138.5	-0.8%
21.0%	16390.6	16287.8	-102.8	-0.6%
22.2%	16383.0	16249.8	-133.3	-0.8%
23.5%	16308.1	16216.3	-91.9	-0.6%
24.7%	16285.0	16180.8	-104.2	-0.6%
25.9%	16250.4	16137.4	-112.9	-0.7%
27.2%	16241.4	15962.8	-278.6	-1.7%
28.4%	16204.7	15869.6	-335.1	-2.1%
29.6%	16096.2	15770.5	-325.8	-2.0%
30.9%	15978.3	15728.3	-250.0	-1.6%
32.1%	15968.4	15531.1	-437.3	-2.7%
33.3%	15962.2	15493.7	-468.5	-2.9%
34.6%	15896.0	15462.3	-433.7	-2.7%
35.8%	15841.0	15248.5	-592.4	-3.7%
37.0%	15630.3	15221.6	-408.7	-2.6%
38.3%	15324.2	15200.2	-124.0	-0.8%
39.5%	15291.5	15149.0	-142.5	-0.9%
40.7%	15225.9	15043.6	-182.3	-1.2%
42.0%	14991.2	14835.7	-155.4	-1.0%
43.2%	14965.1	14795.6	-169.6	-1.1%
44.4%	14933.1	14750.7	-182.4	-1.2%
45.7%	14783.5	14553.2	-230.4	-1.6%
46.9%	14658.2	14511.8	-146.4	-1.0%
48.1%	14518.0	14394.6	-123.4	-0.8%
49.4%	14441.2	14378.1	-63.1	-0.4%
50.6%	14414.2	14329.3	-84.9	-0.6%
51.9%	14401.1	14236.3	-164.8	-1.1%
53.1%	14326.5	14188.4	-138.1	-1.0%
54.3%	14290.6	14183.5	-107.0	-0.7%
55.6%	14195.0	14173.0	-22.0	-0.2%
56.8%	14065.9	13958.9	-107.0	-0.8%
58.0%	14059.1	13879.2	-179.9	-1.3%
59.3%	13814.7	13863.8	49.1	0.4%
60.5%	13770.8	13853.6	82.8	0.6%
61.7%	13752.1	13698.2	-54.0	-0.4%
63.0%	13732.7	13638.1	-94.6	-0.7%
64.2%	13649.2	13609.8	-39.4	-0.3%
65.4%	13588.5	13518.0	-70.5	-0.5%
66.7%	13570.5	13498.0	-72.5	-0.5%
67.9%	13566.2	13447.4	-118.8	-0.9%
69.1%	13440.7	13428.9	-11.8	-0.1%
70.4%	13392.0	13402.7	10.7	0.1%
71.6%	13356.9	13383.6	26.7	0.2%
72.8%	13326.8	13312.2	-14.6	-0.1%
74.1%	13323.5	13281.3	-42.2	-0.3%
75.3%	13239.3	13271.5	32.2	0.2%
76.5%	13186.5	13183.9	-2.5	0.0%
77.8%	13176.9	13169.5	-7.3	-0.1%
79.0%	13121.3	13152.8	31.6	0.2%
80.2%	13096.2	13119.7	23.6	0.2%
81.5%	13059.5	13118.9	59.4	0.5%
82.7%	13045.5	13113.7	68.2	0.5%
84.0%	13001.1	13074.8	73.7	0.6%
85.2%	12956.3	12796.4	-159.9	-1.2%
86.4%	12942.0	12773.1	-168.9	-1.3%
87.7%	12715.0	12595.2	-119.8	-0.9%
88.9%	12682.5	12584.6	-97.9	-0.8%
90.1%	12648.1	12547.4	-100.7	-0.8%
91.4%	12620.7	12544.5	-76.2	-0.6%
92.6%	12585.7	12530.6	-55.2	-0.4%
93.8%	12570.9	12346.7	-224.2	-1.8%
95.1%	12541.3	12286.5	-254.9	-2.0%
96.3%	12344.5	12238.6	-105.9	-0.9%
97.5%	12272.1	12088.4	-183.7	-1.5%
98.8%	12261.1	11824.8	-436.3	-3.6%
100.0%	11,965.8	11,711.3	-254.6	-2.1%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	19123.7	19019.5	-104.2	-0.5%
1.2%	19098.6	18926.7	-171.9	-0.9%
2.5%	19088.4	18766.8	-321.6	-1.7%
3.7%	18991.9	18715.6	-276.3	-1.5%
4.9%	18989.6	18647.5	-342.2	-1.8%
6.2%	18919.5	18415.0	-504.6	-2.7%
7.4%	18875.3	18411.6	-463.7	-2.5%
8.6%	18602.1	18407.0	-195.1	-1.0%
9.9%	18528.8	18288.1	-240.6	-1.3%
11.1%	18492.4	18281.2	-211.2	-1.1%
12.3%	18391.2	18182.4	-208.8	-1.1%
13.6%	18389.5	18039.4	-350.2	-1.9%
14.8%	18265.4	17985.8	-279.5	-1.5%
16.0%	18255.5	17979.0	-276.5	-1.5%
17.3%	18226.0	17959.1	-266.9	-1.5%
18.5%	18219.2	17906.3	-312.9	-1.7%
19.8%	18214.0	17857.8	-356.2	-2.0%
21.0%	18176.7	17844.9	-331.8	-1.8%
22.2%	18138.4	17844.6	-293.9	-1.6%
23.5%	18088.2	17820.2	-268.1	-1.5%
24.7%	18082.3	17771.8	-310.5	-1.7%
25.9%	18029.2	17730.5	-298.6	-1.7%
27.2%	18018.5	17706.2	-312.3	-1.7%
28.4%	18009.3	17679.3	-330.1	-1.8%
29.6%	18002.1	17502.6	-499.5	-2.8%
30.9%	17995.4	17499.4	-496.1	-2.8%
32.1%	17947.1	17450.3	-496.9	-2.8%
33.3%	17916.7	17421.4	-495.4	-2.8%
34.6%	17902.1	17411.1	-491.0	-2.7%
35.8%	17844.9	17406.8	-438.1	-2.5%
37.0%	17841.3	17262.4	-578.9	-3.2%
38.3%	17821.6	17243.8	-577.7	-3.2%
39.5%	17804.9	17222.1	-582.8	-3.3%
40.7%	17793.4	17197.7	-595.7	-3.3%
42.0%	17791.6	17126.3	-665.3	-3.7%
43.2%	17785.7	17124.4	-661.3	-3.7%
44.4%	17767.1	17067.1	-700.0	-3.9%
45.7%	17740.2	16965.1	-775.1	-4.4%
46.9%	17725.2	16964.5	-760.7	-4.3%
48.1%	17410.3	16907.4	-502.9	-2.9%
49.4%	17320.8	16906.1	-414.8	-2.4%
50.6%	17284.4	16805.1	-479.3	-2.8%
51.9%	17267.8	16715.2	-552.6	-3.2%
53.1%	16983.8	16251.9	-731.9	-4.3%
54.3%	15888.1	15754.1	-134.0	-0.8%
55.6%	12183.3	12130.0	-53.2	-0.4%
56.8%	11840.8	11814.7	-26.1	-0.2%
58.0%	11833.6	11814.2	-19.5	-0.2%
59.3%	11823.4	11707.0	-116.5	-1.0%
60.5%	11782.6	11606.7	-175.9	-1.5%
61.7%	11771.0	11602.4	-168.6	-1.4%
63.0%	11690.6	11584.2	-106.4	-0.9%
64.2%	11644.2	11573.5	-70.8	-0.6%
65.4%	11592.0	11507.3	-84.7	-0.7%
66.7%	11492.1	11454.3	-37.8	-0.3%
67.9%	11422.5	11192.5	-230.0	-2.0%
69.1%	8208.1	8216.8	8.7	0.1%
70.4%	8178.3	8138.9	-39.4	-0.5%
71.6%	8130.5	8124.6	-5.8	-0.1%
72.8%	8086.2	8030.7	-55.5	-0.7%
74.1%	8042.0	8019.0	-23.0	-0.3%
75.3%	8030.9	7982.4	-48.6	-0.6%
76.5%	7966.5	7918.5	-48.0	-0.6%
77.8%	7928.6	7902.4	-26.2	-0.3%
79.0%	7911.2	7883.2	-28.0	-0.4%
80.2%	7886.5	7879.6	-6.9	-0.1%
81.5%	7882.6	7797.6	-85.1	-1.1%
82.7%	7845.9	7791.7	-54.2	-0.7%
84.0%	7819.7	7756.4	-63.3	-0.8%
85.2%	7805.8	7749.0	-56.8	-0.7%
86.4%	7793.9	7739.8	-54.1	-0.7%
87.7%	7792.9	7704.3	-88.6	-1.1%
88.9%	7779.6	7682.1	-97.6	-1.3%
90.1%	7777.1	7668.5	-108.5	-1.4%
91.4%	7774.6	7663.3	-111.3	-1.4%
92.6%	7748.3	7636.6	-111.7	-1.4%
93.8%	7729.5	7630.6	-98.8	-1.3%
95.1%	7587.2	7475.1	-112.1	-1.5%
96.3%	7558.0	7429.9	-128.2	-1.7%
97.5%	7557.9	7425.0	-132.9	-1.8%
98.8%	7489.5	7342.7	-146.8	-2.0%
100.0%	7,394.9	7,247.1	-147.8	-2.0%

Figure SQ-25-b
San Joaquin River at Jersey Point, Monthly EC
Probability of Exceedance

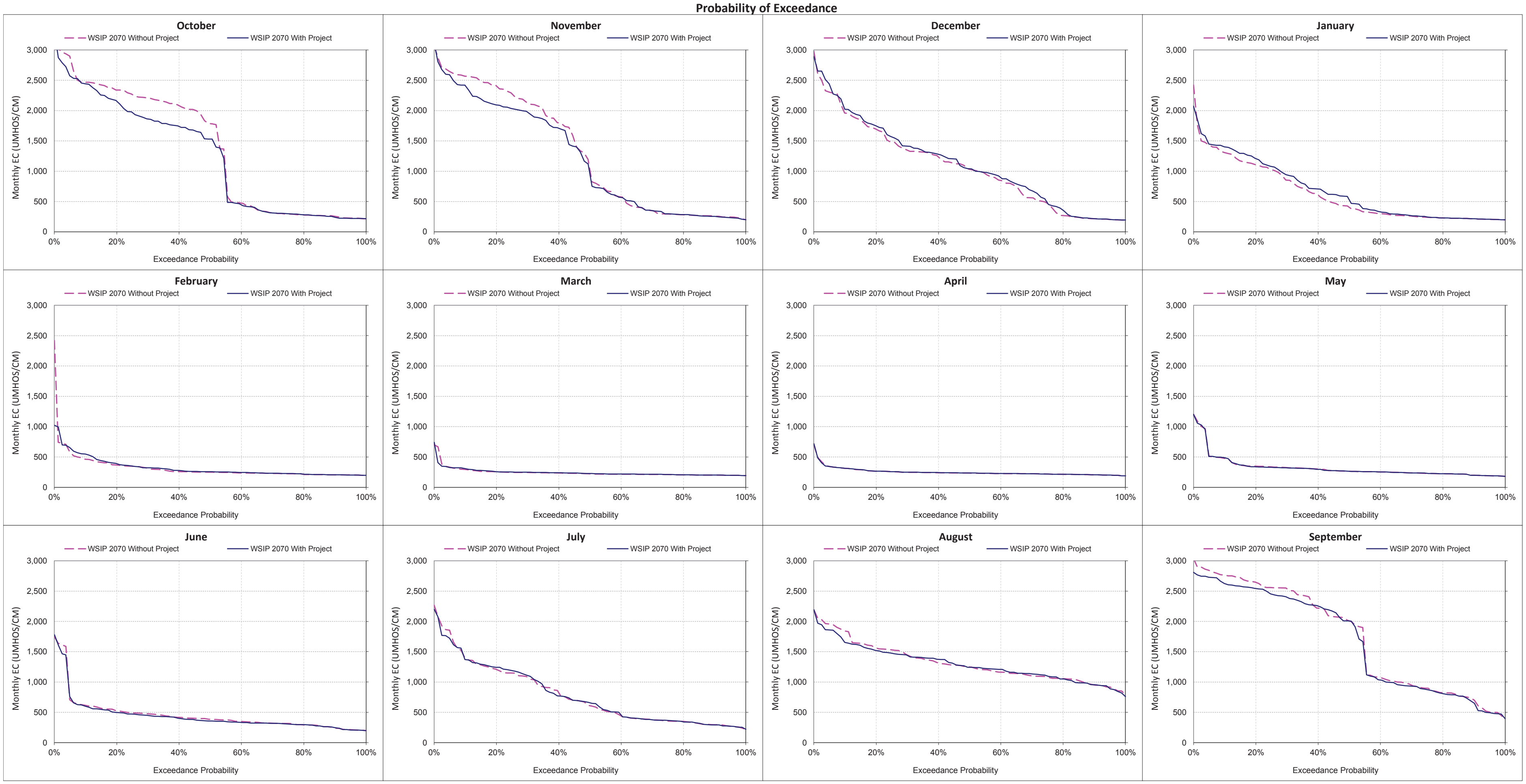


Table SQ-25-b
San Joaquin River at Jersey Point, Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3340.7	3325.1	-15.6	-0.5%
1.2%	3022.5	2876.4	-146.1	-4.8%
2.5%	2966.6	2788.3	-178.3	-6.0%
3.7%	2936.0	2726.2	-209.8	-7.1%
4.9%	2898.7	2573.1	-325.6	-11.2%
6.2%	2651.8	2532.8	-119.0	-4.5%
7.4%	2502.7	2528.2	25.5	1.0%
8.6%	2473.1	2454.5	-18.6	-0.8%
9.9%	2468.8	2440.5	-28.3	-1.1%
11.1%	2467.9	2434.7	-33.2	-1.3%
12.3%	2457.5	2376.8	-80.7	-3.3%
13.6%	2442.9	2330.7	-112.1	-4.6%
14.8%	2426.4	2256.5	-169.9	-7.0%
16.0%	2412.9	2247.9	-165.0	-6.8%
17.3%	2378.9	2202.4	-176.5	-7.4%
18.5%	2373.0	2186.0	-187.0	-7.9%
19.8%	2339.6	2169.1	-170.4	-7.3%
21.0%	2339.3	2108.4	-230.9	-9.9%
22.2%	2335.8	2035.6	-300.2	-12.9%
23.5%	2293.6	1985.8	-307.8	-13.4%
24.7%	2275.0	1981.3	-293.7	-12.9%
25.9%	2235.9	1931.6	-304.2	-13.6%
27.2%	2222.0	1913.4	-308.6	-13.9%
28.4%	2219.0	1887.9	-331.0	-14.9%
29.6%	2211.6	1862.4	-349.2	-15.8%
30.9%	2200.8	1857.1	-343.7	-15.6%
32.1%	2181.8	1827.3	-354.4	-16.2%
33.3%	2169.9	1825.5	-344.4	-15.9%
34.6%	2157.1	1787.0	-370.1	-17.2%
35.8%	2142.7	1786.5	-356.1	-16.6%
37.0%	2116.3	1764.7	-351.6	-16.6%
38.3%	2116.3	1755.2	-361.1	-17.1%
39.5%	2096.0	1749.7	-346.3	-16.5%
40.7%	2061.5	1723.3	-338.3	-16.4%
42.0%	2035.1	1721.0	-314.1	-15.4%
43.2%	2021.1	1683.8	-337.3	-16.7%
44.4%	2018.6	1679.0	-339.6	-16.8%
45.7%	1995.9	1653.0	-342.9	-17.2%
46.9%	1940.9	1640.8	-300.1	-15.5%
48.1%	1833.3	1535.8	-297.5	-16.2%
49.4%	1788.4	1532.5	-256.0	-14.3%
50.6%	1781.0	1528.8	-252.1	-14.2%
51.9%	1769.3	1398.7	-370.6	-20.9%
53.1%	1370.0	1385.0	15.1	1.1%
54.3%	1366.7	1207.4	-159.3	-11.7%
55.6%	576.0	487.4	-88.6	-15.4%
56.8%	490.6	486.1	-4.5	-0.9%
58.0%	487.7	471.9	-15.8	-3.2%
59.3%	478.8	463.5	-15.3	-3.2%
60.5%	468.7	432.4	-36.3	-7.7%
61.7%	429.9	417.7	-12.2	-2.8%
63.0%	428.8	411.8	-17.0	-4.0%
64.2%	394.9	406.5	11.7	3.0%
65.4%	353.9	361.6	7.6	2.2%
66.7%	340.9	340.6	-0.3	-0.1%
67.9%	335.3	328.6	-6.7	-2.0%
69.1%	315.6	315.6	0.0	0.0%
70.4%	313.9	312.0	-1.9	-0.6%
71.6%	303.5	307.4	3.9	1.3%
72.8%	302.3	304.3	2.1	0.7%
74.1%	294.4	302.7	8.3	2.8%
75.3%	293.9	299.0	5.1	1.7%
76.5%	291.5	294.2	2.7	0.9%
77.8%	283.7	294.0	10.3	3.6%
79.0%	283.4	286.5	3.1	1.1%
80.2%	277.2	279.8	2.6	0.9%
81.5%	276.6	278.8	2.2	0.8%
82.7%	272.3	272.2	-0.1	0.0%
84.0%	270.0	269.2	-0.9	-0.3%
85.2%	268.1	268.0	-0.1	0.0%
86.4%	266.3	261.9	-4.4	-1.7%
87.7%	265.2	253.8	-11.4	-4.3%
88.9%	264.9	252.9	-11.9	-4.5%
90.1%	254.5	238.4	-16.0	-6.3%
91.4%	244.5	226.4	-18.1	-7.4%
92.6%	229.8	226.2	-3.6	-1.6%
93.8%	228.6	224.9	-3.8	-1.6%
95.1%	226.3	222.6	-3.7	-1.7%
96.3%	225.3	222.4	-2.8	-1.3%
97.5%	224.2	222.2	-2.0	-0.9%
98.8%	216.5	220.8	4.4	2.0%
100.0%	215.8	217.1	1.3	0.6%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3064.9	3112.0	47.1	1.5%
1.2%	2871.2	2807.2	-64.1	-2.2%
2.5%	2706.1	2679.3	-26.8	-1.0%
3.7%	2687.7	2598.5	-89.2	-3.3%
4.9%	2645.7	2590.9	-54.8	-2.1%
6.2%	2612.1	2491.7	-120.4	-4.6%
7.4%	2593.4	2431.0	-162.4	-6.3%
8.6%	2587.6	2421.6	-166.0	-6.4%
9.9%	2567.8	2418.7	-149.1	-5.8%
11.1%	2566.4	2334.3	-232.2	-9.0%
12.3%	2552.0	2236.6	-315.4	-12.4%
13.6%	2540.8	2234.1	-306.6	-12.1%
14.8%	2493.1	2198.7	-294.5	-11.8%
16.0%	2462.6	2155.1	-307.5	-12.5%
17.3%	2462.2	2136.0	-326.2	-13.2%
18.5%	2421.1	2114.4	-306.7	-12.7%
19.8%	2417.8	2095.4	-322.4	-13.3%
21.0%	2358.6	2088.9	-269.7	-11.4%
22.2%	2352.3	2061.7	-290.6	-12.4%
23.5%	2320.8	2058.9	-261.8	-11.3%
24.7%	2292.3	2035.8	-256.5	-11.2%
25.9%	2226.8	2020.8	-206.0	-9.3%
27.2%	2200.2	2012.0	-188.3	-8.6%
28.4%	2188.6	1997.9	-190.7	-8.7%
29.6%	2138.4	1988.9	-149.5	-7.0%
30.9%	2105.5	1939.6	-165.9	-7.9%
32.1%	2099.4	1893.5	-205.8	-9.8%
33.3%	2074.5	1886.4	-188.2	-9.1%
34.6%	2051.8	1867.0	-184.8	-9.0%
35.8%	1920.6	1838.5	-82.2	-4.3%
37.0%	1877.6	1760.3	-117.3	-6.2%
38.3%	1876.7	1724.7	-152.0	-8.1%
39.5%	1800.9	1720.2	-80.8	-4.5%
40.7%	1789.9	1694.8	-95.1	-5.3%
42.0%	1738.4	1670.7	-67.8	-3.9%
43.2%	1725.5	1442.6	-282.9	-16.4%
44.4%	1591.3	1416.5	-174.8	-11.0%
45.7%	1398.0	1401.3	3.3	0.2%
46.9%	1336.9	1316.4	-20.5	-1.5%
48.1%	1298.5	1166.6	-131.8	-10.2%
49.4%	1194.6	1121.5	-73.1	-6.1%
50.6%	825.2	750.7	-74.5	-9.0%
51.9%	801.2	728.1	-73.1	-9.1%
53.1%	763.2	727.0	-36.2	-4.7%
54.3%	729.3	714.7	-14.6	-2.0%
55.6%	671.1	653.0	-18.1	-2.7%
56.8%	664.3	616.5	-47.8	-7.2%
58.0%	597.3	605.5	8.2	1.4%
59.3%	580.7	570.0	-10.7	-1.8%
60.5%	570.7	564.9	-5.8	-1.0%
61.7%	472.1	516.5	44.3	9.4%
63.0%	435.1	511.0	75.9	17.5%
64.2%	411.8	500.6	88.8	21.6%
65.4%	403.2	412.2	8.9	2.2%
66.7%	400.7	394.6	-6.0	-1.5%
67.9%	355.9	356.9	1.0	0.3%
69.1%	353.6	356.1	2.5	0.7%
70.4%	348.2	346.2	-2.0	-0.6%
71.6%	305.6	340.3	34.7	11.4%
72.8%	297.5	337.5	40.0	13.4%
74.1%	295.2	299.3	4.1	1.4%
75.3%	292.4	296.1	3.7	1.3%
76.5%	292.1	295.1	3.0	1.0%
77.8%	286.9	287.8	0.8	0.3%
79.0%	283.5	286.6	3.1	1.1%
80.2%	282.3	284.3	2.0	0.7%
81.5%	276.3	283.7	7.5	2.7%
82.7%	273.6	275.6	2.0	0.7%
84.0%	270.4	272.2	1.7	0.6%
85.2%	267.0	262.8	-4.2	-1.6%
86.4%	266.3	260.5	-5.7	-2.1%
87.7%	264.5	257.9	-6.6	-2.5%
88.9%	264.4	255.1	-9.3	-3.5%
90.1%	256.6	253.5	-3.1	-1.2%
91.4%	256.5	245.2	-11.3	-4.4%
92.6%	244.7	242.2	-2.6	-1.0%
93.8%	244.1	236.5	-7.6	-3.1%
95.1%	244.0	234.0	-10.0	-4.1%
96.3%	240.5	228.4	-12.1	-5.0%
97.5%	231.1	226.9	-4.1	-1.8%
98.8%	213.0	208.8	-4.2	-2.0%
100.0%	199.9	200.3	0.4	0.2%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2979.9	2892.4	-87.5	-2.9%
1.2%	2605.4	2654.0	48.6	1.9%
2.5%	2506.0	2653.8	147.7	5.9%
3.7%	2328.9	2513.7	184.8	7.9%
4.9%	2305.4	2444.0	138.6	6.0%
6.2%	2289.2	2277.0	-12.2	-0.5%
7.4%	2286.1	2252.8	-33.3	-1.5%
8.6%	2106.6	2195.5	88.9	4.2%
9.9%	1960.0	2022.5	62.5	3.2%
11.1%	1951.8	2018.9	67.1	3.4%
12.3%	1905.1	1967.4	62.2	3.3%
13.6%	1874.1	1938.3	64.3	3.4%
14.8%	1851.2	1921.4	70.3	3.8%
16.0%	1798.8	1831.3	32.5	1.8%
17.3%	1735.0	1795.1	60.1	3.5%
18.5%	1724.0	1778.3	54.3	3.1%
19.8%	1699.1	1752.7	53.6	3.2%
21.0%	1665.4	1724.3	58.8	3.5%
22.2%	1645.3	1710.5	65.1	4.0%
23.5%	1515.4	1604.0	88.6	5.8%
24.7%	1478.6	1573.8	95.3	6.4%
25.9%	1476.8	1546.6	69.9	4.7%
27.2%	1415.9	1513.2	97.4	6.9%
28.4%	1381.7	1419.3	37.5	2.7%
29.6%	1356.1	1413.5	57.4	4.2%
30.9%	1327.6	1409.4	81.8	6.2%
32.1%	1327.2	1380.6	53.4	4.0%
33.3%	1323.0	1378.1	55.1	4.2%
34.6%	1318.4	1350.6	32.3	2.4%
35.8%	1313.8	1318.3	4.6	0.3%
37.0%	1301.0	1312.3	11.3	0.9%
38.3%	1272.5	1300.4	27.9	2.2%
39.5%	1257.0	1287.2	30.2	2.4%
40.7%	1199.6	1270.9	71.3	5.9%
42.0%	1156.2	1239.7	83.5	7.2%
43.2%	1154.3	1209.8	55.5	4.8%
44.4%	1137.0	1205.7	68.7	6.0%
45.7%	1122.6	1199.4	76.7	6.8%
46.9%	1120.5	1095.7	-24.8	-2.2%
48.1%	1097.2	1058.2	-39.0	-3.6%
49.4%	1038.2	1041.0	2.8	0.3%
50.6%	1024.9	1038.7	13.8	1.3%
51.9%	1010.7	1001.6	-9.1	-0.9%
53.1%	996.9	997.3	0.4	0.0%
54.3%	981.7	983.3	1.6	0.2%
55.6%	939.7	978.6	38.9	4.1%
56.8%	908.1	963.1	55.0	6.1%
58.0%	897.1	944.1	47.1	5.2%
59.3%	854.3	922.3	68.0	8.0%
60.5%	840.8	876.0	35.2	4.2%
61.7%	801.7	874.4	72.7	9.1%
63.0%	801.5	836.3	34.8	4.3%
64.2%	770.1	807.2	37.2	4.8%
65.4%	725.2	780.1	54.9	7.6%
66.7%	637.2	760.9	123.8	19.4%
67.9%	565.7	747.8	182.1	32.2%
69.1%	563.2	697.5	134.3	23.8%
70.4%	559.7	668.1	108.3	19.4%
71.6%	515.2	635.4	120.2	23.3%
72.8%	507.9	573.5	65.7	12.9%
74.1%	494.7	544.1	49.4	10.0%
75.3%	460.7	451.9	-8.8	-1.9%
76.5%	389.0	428.4	39.4	10.1%
77.8%	314.2	419.2	105.0	33.4%
79.0%	272.8	393.7	121.0	44.3%
80.2%	266.9	343.6	76.7	28.7%
81.5%	264.1	285.4	21.4	8.1%
82.7%	244.0	252.8	8.8	3.6%
84.0%	242.8	251.9	9.1	3.7%
85.2%	238.8	236.2	-2.7	-1.1%
86.4%	224.6	229.3	4.7	2.1%
87.7%	222.7	227.1	4.4	2.0%
88.9%	217.7	222.3	4.6	2.1%
90.1%	216.1	216.5	0.4	0.2%
91.4%	213.8	214.1	0.3	0.1%
92.6%	211.0	213.0	2.0	1.0%
93.8%	209.9	211.7	1.8	0.9%
95.1%	203.7	203.7	0.0	0.0%
96.3%	201.0	198.0	-3.0	-1.5%
97.5%	197.9	197.7	-0.2	-0.1%
98.8%	194.6	195.5	0.8	0.4%
100.0%	193.7	194.8	1.1	0.6%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2421.9	2073.1	-348.8	-14.4%
1.2%	1772.6	1857.5	84.9	4.8%
2.5%	1500.0	1619.9	119.9	8.0%
3.7%	1475.0	1580.8	105.8	7.2%
4.9%	1432.7	1448.0	15.3	1.1%
6.2%	1399.4	1436.1	36.7	2.6%
7.4%	1393.8	1429.7	35.9	2.6%
8.6%	1331.6	1427.9	96.3	7.2%
9.9%	1307.7	1401.0	93.3	7.1%
11.1%	1292.3	1391.7	99.4	7.7%
12.3%	1278.1	1369.5	91.4	7.2%
13.6%	1215.6	1332.8	117.2	9.6%
14.8%	1173.5	1296.8	123.3	10.5%
16.0%	1153.8	1293.0	139.2	12.1%
17.3%	1142.6	1265.7	123.2	10.8%
18.5%	1130.7	1251.5	120.9	10.7%
19.8%	1109.9	1215.3	105.4	9.5%
21.0%	1093.1	1188.8	95.6	8.7%
22.2%	1070.7	1125.7	55.0	5.1%
23.5%	1066.4	1103.1	36.6	3.4%
24.7%	1030.6	1079.9	49.3	4.8%
25.9%	1012.3	1068.4	56.2	5.5%
27.2%	982.2	1028.0	45.8	4.7%
28.4%	929.7	980.8	51.1	5.5%
29.6%	854.7	945.6	90.9	10.6%
30.9%	849.5	925.3	75.8	8.9%
32.1%	801.3	913.8	112.5	14.0%
33.3%	750.2	851.8	101.6	13.5%
34.6%	724.3	806.4	82.1	11.3%
35.8%	719.1	786.3	67.2	9.3%
37.0%	661.8	717.1	55.3	8.4%
38.3%	635.5	713.8	78.3	12.3%
39.5%	631.8	709.2	77.5	12.3%
40.7%	571.6	705.7	134.1	23.5%
42.0%	535.2	661.4	126.2	23.6%
43.2%	505.7	618.5	112.9	22.3%
44.4%	483.5	616.9	133.4	27.6%
45.7%	466.6	614.3	147.7	31.6%
46.9%	433.2	594.8	161.6	37.3%
48.1%	432.0	586.7	154.7	35.8%
49.4%	426.7	585.8	159.1	37.3%
50.6%	380.9	467.0	86.1	22.6%
51.9%	379.3	464.4	85.1	22.4%
53.1%	361.2	457.4	96.2	26.6%
54.3%	330.1	384.6	54.4	16.5%
55.6%	328.8	377.1	48.3	14.7%
56.8%	320.0	360.6	40.6	12.7%
58.0%	311.0	358.9	47.9	15.4%
59.3%	302.0	337.9	35.9	11.9%
60.5%	297.5	323.2	25.6	8.6%
61.7%	293.5	318.4	25.0	8.5%
63.0%	281.3	298.8	17.4	6.2%
64.2%	274.0	293.6	19.6	7.2%
65.4%	271.3	292.6	21.4	7.9%
66.7%	270.6	286.0	15.4	5.7%
67.9%	265.1	279.0	13.9	5.3%
69.1%	263.7	271.7	8.0	3.0%
70.4%	257.3	262.2	5.0	1.9%
71.6%	249.8	261.6	11.8	4.7%
72.8%	243.7	255.4	11.6	4.8%
74.1%	243.1	253.2	10.1	4.1%
75.3%	239.6	242.8	3.3	1.4%
76.5%	236.8	239.5	2.8	1.2%
77.8%	236.4	237.0	0.7	0.3%
79.0%	229.1	230.6	1.5	0.7%
80.2%	228.7	228.8	0.0	0.0%
81.5%	227.5	228.0	0.6	0.2%
82.7%	223.4	224.2	0.8	0.4%
84.0%	223.4	223.7	0.3	0.1%
85.2%	222.5	223.1	0.5	0.2%
86.4%	221.5	221.2	-0.3	-0.2%
87.7%	221.1	218.6	-2.6	-1.2%
88.9%	216.4	216.9	0.5	0.2%
90.1%	216.4	216.9	0.5	0.2%
91.4%	210.5	211.8	1.3	0.6%
92.6%	208.5	209.9	1.4	0.7%
93.8%	206.5	209.5	2.9	1.4%
95.1%	206.0	207.1	1.0	0.5%
96.3%	204.6	204.2	-0.4	-0.2%
97.5%	204.4	202.9	-1.6	-0.8%
98.8%	199.0	199.1	0.1	0.1%
100.0%	197.2	197.9	0.7	0.3%

Table SQ-25-b

San Joaquin River at Jersey Point, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2420.0	1025.0	-1395.0	-57.6%
1.2%	742.6	994.0	251.5	33.9%
2.5%	727.3	698.3	-28.9	-4.0%
3.7%	707.8	693.8	-14.0	-2.0%
4.9%	581.7	654.8	73.1	12.6%
6.2%	518.9	593.8	74.9	14.4%
7.4%	499.8	570.7	71.0	14.2%
8.6%	487.8	551.9	64.1	13.1%
9.9%	462.4	547.6	85.1	18.4%
11.1%	459.1	529.1	70.0	15.3%
12.3%	440.3	506.2	65.9	15.0%
13.6%	421.4	459.2	37.8	9.0%
14.8%	411.7	440.7	29.0	7.0%
16.0%	404.4	426.5	22.0	5.4%
17.3%	404.3	410.4	6.1	1.5%
18.5%	371.1	402.4	31.3	8.4%
19.8%	367.5	392.3	24.8	6.8%
21.0%	361.5	371.0	9.5	2.6%
22.2%	354.6	365.3	10.7	3.0%
23.5%	349.5	359.0	9.4	2.7%
24.7%	348.9	353.3	4.3	1.2%
25.9%	343.5	341.1	-2.4	-0.7%
27.2%	337.8	336.8	-1.0	-0.3%
28.4%	329.6	323.3	-6.3	-1.9%
29.6%	319.3	322.0	2.8	0.9%
30.9%	300.2	319.6	19.4	6.5%
32.1%	296.6	318.0	21.5	7.2%
33.3%	295.4	315.0	19.6	6.6%
34.6%	288.9	309.1	20.1	7.0%
35.8%	278.7	304.9	26.2	9.4%
37.0%	264.8	297.3	32.5	12.3%
38.3%	258.9	279.3	20.5	7.9%
39.5%	258.8	276.8	18.0	7.0%
40.7%	257.9	273.7	15.9	6.2%
42.0%	256.6	267.3	10.7	4.2%
43.2%	256.6	261.3	4.7	1.8%
44.4%	253.1	260.3	7.2	2.9%
45.7%	251.5	259.5	8.1	3.2%
46.9%	251.0	258.7	7.7	3.1%
48.1%	250.7	256.7	6.0	2.4%
49.4%	249.1	256.4	7.3	2.9%
50.6%	248.6	255.8	7.2	2.9%
51.9%	245.9	253.4	7.5	3.1%
53.1%	245.8	252.6	6.8	2.8%
54.3%	244.9	252.1	7.2	2.9%
55.6%	244.9	251.6	6.8	2.8%
56.8%	240.9	250.3	9.4	3.9%
58.0%	238.9	247.0	8.1	3.4%
59.3%	236.9	245.4	8.4	3.6%
60.5%	236.9	243.2	6.3	2.7%
61.7%	235.2	242.5	7.4	3.1%
63.0%	235.1	241.4	6.3	2.7%
64.2%	232.8	237.9	5.0	2.2%
65.4%	232.8	237.6	4.8	2.1%
66.7%	232.5	233.6	1.1	0.5%
67.9%	230.5	232.8	2.4	1.0%
69.1%	229.8	232.6	2.8	1.2%
70.4%	228.8	231.4	2.7	1.2%
71.6%	227.4	231.3	3.9	1.7%
72.8%	225.9	229.0	3.2	1.4%
74.1%	225.1	228.9	3.8	1.7%
75.3%	223.9	228.0	4.2	1.9%
76.5%	223.1	226.9	3.8	1.7%
77.8%	221.9	224.6	2.7	1.2%
79.0%	220.8	224.1	3.2	1.5%
80.2%	210.6	215.6	5.0	2.4%
81.5%	210.4	214.3	3.9	1.9%
82.7%	210.0	211.7	1.7	0.8%
84.0%	209.2	210.4	1.2	0.6%
85.2%	208.7	209.8	1.1	0.5%
86.4%	208.7	208.8	0.1	0.0%
87.7%	206.7	207.8	1.0	0.5%
88.9%	205.7	206.5	0.9	0.4%
90.1%	205.4	205.4	0.0	0.0%
91.4%	204.5	205.4	0.9	0.4%
92.6%	203.9	204.2	0.4	0.2%
93.8%	203.1	203.6	0.5	0.3%
95.1%	203.1	203.1	0.0	0.0%
96.3%	202.7	202.6	-0.1	0.0%
97.5%	200.0	200.1	0.1	0.1%
98.8%	197.7	198.6	0.9	0.4%
100.0%	195.2	195.3	0.1	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	699.8	738.5	38.8	5.5%
1.2%	666.5	406.8	-259.7	-39.0%
2.5%	380.2	348.4	-31.9	-8.4%
3.7%	344.7	340.8	-3.9	-1.1%
4.9%	331.7	323.7	-7.9	-2.4%
6.2%	315.4	322.2	6.8	2.1%
7.4%	309.8	322.0	12.3	4.0%
8.6%	297.4	320.0	22.6	7.6%
9.9%	293.9	306.9	13.0	4.4%
11.1%	285.9	295.3	9.4	3.3%
12.3%	276.1	289.3	13.1	4.8%
13.6%	274.3	277.1	2.8	1.0%
14.8%	262.5	276.5	13.9	5.3%
16.0%	262.2	273.0	10.8	4.1%
17.3%	259.6	268.7	9.1	3.5%
18.5%	258.8	265.5	6.7	2.6%
19.8%	256.6	255.1	-1.5	-0.6%
21.0%	253.4	254.7	1.3	0.5%
22.2%	250.4	253.3	2.9	1.2%
23.5%	247.4	251.2	3.7	1.5%
24.7%	247.0	250.7	3.8	1.5%
25.9%	244.6	248.3	3.6	1.5%
27.2%	244.6	248.1	3.5	1.4%
28.4%	244.5	247.6	3.1	1.3%
29.6%	244.3	247.3	3.0	1.2%
30.9%	242.9	247.0	4.1	1.7%
32.1%	242.3	245.5	3.2	1.3%
33.3%	241.7	244.4	2.7	1.1%
34.6%	240.0	243.2	3.2	1.3%
35.8%	239.8	242.3	2.4	1.0%
37.0%	237.1	241.4	4.3	1.8%
38.3%	237.0	241.1	4.1	1.7%
39.5%	235.4	240.9	5.6	2.4%
40.7%	235.1	238.8	3.7	1.6%
42.0%	231.9	237.3	5.4	2.3%
43.2%	231.7	237.0	5.3	2.3%
44.4%	230.3	236.5	6.2	2.7%
45.7%	228.8	234.7	5.8	2.5%
46.9%	228.3	230.7	2.4	1.0%
48.1%	225.6	229.1	3.5	1.6%
49.4%	222.7	227.3	4.6	2.1%
50.6%	220.1	226.0	5.9	2.7%
51.9%	218.8	223.5	4.7	2.2%
53.1%	218.3	221.6	3.3	1.5%
54.3%	216.9	221.3	4.4	2.0%
55.6%	216.2	220.7	4.5	2.1%
56.8%	216.0	220.4	4.4	2.0%
58.0%	215.9	219.0	3.2	1.5%
59.3%	215.7	219.0	3.3	1.5%
60.5%	215.4	218.7	3.4	1.6%
61.7%	214.9	217.0	2.1	1.0%
63.0%	214.7	217.0	2.3	1.1%
64.2%	214.6	216.6	2.0	1.0%
65.4%	214.2	214.9	0.8	0.4%
66.7%	212.6	214.7	2.2	1.0%
67.9%	212.5	214.6	2.1	1.0%
69.1%	212.5	213.0	0.5	0.2%
70.4%	212.1	212.8	0.7	0.3%
71.6%	211.2	212.6	1.3	0.6%
72.8%	211.0	212.2	1.2	0.6%
74.1%	209.9	210.3	0.5	0.2%
75.3%	209.6	209.9	0.3	0.2%
76.5%	208.5	208.7	0.2	0.1%
77.8%	206.7	207.8	1.1	0.5%
79.0%	205.8	207.4	1.6	0.8%
80.2%	205.7	207.2	1.5	0.8%
81.5%	204.3	205.9	1.5	0.7%
82.7%	202.8	205.7	2.9	1.4%
84.0%	201.4	203.1	1.7	0.9%
85.2%	201.1	202.9	1.8	0.9%
86.4%	201.0	201.8	0.8	0.4%
87.7%	200.6	200.8	0.2	0.1%
88.9%	200.4	200.7	0.3	0.1%
90.1%	200.2	200.7	0.5	0.2%
91.4%	199.7	200.6	1.0	0.5%
92.6%	198.8	200.3	1.5	0.8%
93.8%	197.7	198.8	1.2	0.6%
95.1%	197.2	197.6	0.4	0.2%
96.3%	196.9	197.3	0.3	0.2%
97.5%	196.5	197.0	0.5	0.3%
98.8%	194.3	192.9	-1.4	-0.7%
100.0%	191.6	191.7	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	709.9	718.9	9.1	1.3%
1.2%	492.2	483.3	-8.9	-1.8%
2.5%	423.5	401.2	-22.3	-5.3%
3.7%	360.2	350.4	-9.8	-2.7%
4.9%	342.7	343.5	0.8	0.2%
6.2%	331.7	332.2	0.5	0.2%
7.4%	328.4	326.9	-1.5	-0.5%
8.6%	318.8	319.4	0.7	0.2%
9.9%	311.9	313.8	1.9	0.6%
11.1%	310.2	308.1	-2.1	-0.7%
12.3%	299.3	304.2	4.9	1.6%
13.6%	291.1	294.5	3.4	1.2%
14.8%	290.2	290.4	0.3	0.1%
16.0%	286.5	289.1	2.6	0.9%
17.3%	272.2	272.7	0.5	0.2%
18.5%	268.3	268.1	-0.3	-0.1%
19.8%	266.1	267.4	1.2	0.5%
21.0%	264.2	266.2	2.1	0.8%
22.2%	263.0	264.9	1.9	0.7%
23.5%	262.8	262.9	0.2	0.1%
24.7%	258.5	259.1	0.7	0.3%
25.9%	254.9	258.1	3.2	1.3%
27.2%	252.9	255.8	2.9	1.2%
28.4%	248.1	250.2	2.1	0.9%
29.6%	247.5	249.8	2.3	0.9%
30.9%	246.0	249.5	3.5	1.4%
32.1%	245.4	247.7	2.3	0.9%
33.3%	245.4	246.5	1.1	0.4%
34.6%	243.5	246.3	2.8	1.2%
35.8%	243.1	245.7	2.6	1.1%
37.0%	242.7	245.3	2.6	1.1%
38.3%	242.0	243.1	1.0	0.4%
39.5%	239.5	242.3	2.9	1.2%
40.7%	238.7	240.5	1.8	0.7%
42.0%	238.6	240.4	1.8	0.8%
43.2%	237.7	239.0	1.3	0.5%
44.4%	236.8	238.7	1.9	0.8%
45.7%	236.7	238.7	2.0	0.9%
46.9%	236.6	237.5	1.0	0.4%
48.1%	234.6	236.6	2.0	0.8%
49.4%	233.8	235.6	1.8	0.8%
50.6%	233.5	235.3	1.8	0.8%
51.9%	231.6	234.2	2.7	1.1%
53.1%	231.2	232.3	1.1	0.5%
54.3%	229.5	231.3	1.8	0.8%
55.6%	228.6	230.0	1.4	0.6%
56.8%	228.5	229.5	1.1	0.5%
58.0%	226.5	228.3	1.7	0.8%
59.3%	226.1	226.6	0.5	0.2%
60.5%	225.6	226.1	0.5	0.2%
61.7%	225.2	226.1	0.9	0.4%
63.0%	225.0	226.1	1.1	0.5%
64.2%	224.9	225.8	0.9	0.4%
65.4%	224.3	225.6	1.3	0.6%
66.7%	224.2	225.0	0.8	0.4%
67.9%	224.0	224.2	0.2	0.1%
69.1%	223.5	224.0	0.5	0.2%
70.4%	223.0	221.5	-1.5	-0.7%
71.6%	221.6	221.0	-0.6	-0.3%
72.8%	221.2	220.7	-0.5	-0.2%
74.1%	219.8	218.5	-1.3	-0.6%
75.3%	218.7	217.1	-1.6	-0.7%
76.5%	215.6	216.2	0.6	0.3%
77.8%	215.4	215.8	0.4	0.2%
79.0%	215.0	215.5	0.5	0.2%
80.2%	213.2	214.3	1.1	0.5%
81.5%	212.8	213.3	0.5	0.2%
82.7%	211.8	213.1	1.3	0.6%
84.0%	211.3	211.4	0.0	0.0%
85.2%	210.0	211.2	1.2	0.6%
86.4%	209.0	209.8	0.8	0.4%
87.7%	207.8	209.7	1.9	0.9%
88.9%	207.2	207.2	0.0	0.0%
90.1%	206.7	206.6	-0.1	0.0%
91.4%	205.6	205.7	0.1	0.0%
92.6%	201.4	201.5	0.0	0.0%
93.8%	201.0	201.2	0.2	0.1%
95.1%	200.7	201.2	0.5	0.2%
96.3%	197.0	197.0	0.0	0.0%
97.5%	196.9	196.2	-0.7	-0.4%
98.8%	189.9	189.9	0.0	0.0%
100.0%	189.0	189.4	0.4	0.2%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1204.1	1204.7	0.6	0.0%
1.2%	1092.9	1058.7	-34.1	-3.1%
2.5%	1004.2	1026.3	22.0	2.2%
3.7%	967.1	956.7	-10.4	-1.1%
4.9%	510.5	508.3	-2.2	-0.4%
6.2%	503.4	507.9	4.5	0.9%
7.4%	494.5	495.6	1.1	0.2%
8.6%	489.8	495.6	5.8	1.2%
9.9%	476.2	489.9	13.7	2.9%
11.1%	467.3	469.5	2.1	0.5%
12.3%	407.3	407.4	0.1	0.0%
13.6%	377.1	391.9	14.8	3.9%
14.8%	364.6	366.4	1.7	0.5%
16.0%	358.3	363.9	5.6	1.6%
17.3%	350.4	346.8	-3.6	-1.0%
18.5%	348.7	339.6	-9.1	-2.6%
19.8%	347.8	337.6	-10.2	-2.9%
21.0%	345.3	334.2	-11.1	-3.2%
22.2%	344.5	333.2	-11.3	-3.3%
23.5%	340.8	329.5	-11.3	-3.3%
24.7%	337.0	327.8	-9.2	-2.7%
25.9%	331.7	326.0	-5.7	-1.7%
27.2%	331.4	325.2	-6.2	-1.9%
28.4%	329.4	321.0	-8.5	-2.6%
29.6%	326.3	320.3	-5.9	-1.8%
30.9%	321.1	319.0	-2.1	-0.7%
32.1%	320.5	317.4	-3.1	-1.0%
33.3%	319.8	314.5	-5.4	-1.7%
34.6%	316.6	313.6	-3.0	-1.0%
35.8%	311.2	312.1	1.0	0.3%
37.0%	309.2	309.0	-0.2	-0.1%
38.3%	304.1	304.5	0.4	0.1%
39.5%	303.2	295.7	-7.6	-2.5%
40.7%	295.5	293.7	-1.8	-0.6%
42.0%	295.3	279.5	-15.8	-5.3%
43.2%	275.7	277.6	1.9	0.7%
44.4%	274.3	273.5	-0.8	-0.3%
45.7%	273.2	273.1	-0.1	0.0%
46.9%	268.1	269.1	1.0	0.4%
48.1%	266.6	269.1	2.4	0.9%
49.4%	264.8	265.2	0.4	0.2%
50.6%	262.2	261.0	-1.2	-0.5%
51.9%	261.6	260.1	-1.5	-0.6%
53.1%	258.0	259.9	1.9	0.7%
54.3%	257.1	259.2	2.1	0.8%
55.6%	257.1	258.0	0.9	0.4%
56.8%	256.8	257.1	0.3	0.1%
58.0%	254.9	256.4	1.5	0.6%
59.3%	254.0	254.6	0.6	0.2%
60.5%	252.2	254.5	2.3	0.9%
61.7%	252.0	252.7	0.7	0.3%
63.0%	247.5	247.1	-0.5	-0.2%
64.2%	246.9	246.2	-0.8	-0.3%
65.4%	246.2	245.8	-0.4	-0.2%
66.7%	241.9	242.5	0.6	0.3%
67.9%	241.3	241.5	0.3	0.1%
69.1%	237.0	237.2	0.2	0.1%
70.4%	236.2	236.9	0.8	0.3%
71.6%	235.6	235.7	0.1	0.1%
72.8%	233.4	235.4	2.0	0.8%
74.1%	229.2	234.2	5.0	2.2%
75.3%	228.2	229.0	0.8	0.3%
76.5%	227.5	225.5	-2.0	-0.9%
77.8%	225.4	225.5	0.1	0.0%
79.0%	223.8	223.7	-0.1	0.0%
80.2%	223.1	222.7	-0.4	-0.2%
81.5%	222.2	222.6	0.4	0.2%
82.7%	221.7	221.9	0.2	0.1%
84.0%	219.5	220.5	1.0	0.5%
85.2%	219.0	219.6	0.6	0.3%
86.4%	217.7	217.7	0.0	0.0%
87.7%	215.0	215.2	0.2	0.1%
88.9%	198.5	199.1	0.6	0.3%
90.1%	198.0	198.7	0.7	0.3%
91.4%	195.7	195.9	0.2	0.1%
92.6%	193.3	193.5	0.1	0.1%
93.8%	191.0	191.1	0.1	0.1%
95.1%	190.3	190.7	0.4	0.2%
96.3%	186.8	187.1	0.3	0.1%
97.5%	186.8	186.7	0.0	0.0%
98.8%	185.7	185.7	0.0	0.0%
100.0%	179.8	180.1	0.3	0.2%

Table SQ-25-b

San Joaquin River at Jersey Point, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1749.0	1783.2	34.3	2.0%
1.2%	1638.5	1610.7	-27.8	-1.7%
2.5%	1614.1	1466.8	-147.3	-9.1%
3.7%	1586.3	1449.1	-137.2	-8.6%
4.9%	706.8	759.8	53.0	7.5%
6.2%	659.9	655.4	-4.4	-0.7%
7.4%	640.3	626.1	-14.2	-2.2%
8.6%	626.6	621.3	-5.3	-0.9%
9.9%	615.3	602.7	-12.7	-2.1%
11.1%	602.5	585.4	-17.1	-2.8%
12.3%	602.2	560.3	-42.0	-7.0%
13.6%	588.6	556.3	-32.3	-5.5%
14.8%	567.8	551.0	-16.9	-3.0%
16.0%	554.3	542.1	-12.2	-2.2%
17.3%	553.7	538.0	-15.7	-2.8%
18.5%	553.0	505.5	-47.5	-8.6%
19.8%	526.8	497.8	-28.9	-5.5%
21.0%	519.4	495.3	-24.2	-4.7%
22.2%	507.6	490.0	-17.6	-3.5%
23.5%	498.2	474.2	-24.1	-4.8%
24.7%	492.5	471.2	-21.3	-4.3%
25.9%	489.5	470.3	-19.3	-3.9%
27.2%	487.2	459.0	-28.2	-5.8%
28.4%	482.3	453.5	-28.8	-6.0%
29.6%	478.1	450.1	-28.0	-5.9%
30.9%	472.9	442.9	-30.0	-6.3%
32.1%	467.6	435.8	-31.8	-6.8%
33.3%	461.1	433.2	-27.9	-6.1%
34.6%	452.7	431.4	-21.3	-4.7%
35.8%	439.3	431.3	-8.0	-1.8%
37.0%	434.8	423.7	-11.1	-2.6%
38.3%	421.5	421.4	-0.1	0.0%
39.5%	417.0	403.4	-13.6	-3.3%
40.7%	414.9	394.9	-20.0	-4.8%
42.0%	409.8	386.8	-23.0	-5.6%
43.2%	403.7	382.9	-20.9	-5.2%
44.4%	403.2	381.5	-21.8	-5.4%
45.7%	400.0	371.8	-28.2	-7.1%
46.9%	398.4	366.4	-32.0	-8.0%
48.1%	397.4	359.4	-38.1	-9.6%
49.4%	385.7	357.3	-28.4	-7.4%
50.6%	383.4	357.0	-26.4	-6.9%
51.9%	382.3	353.4	-28.9	-7.6%
53.1%	377.3	352.6	-24.8	-6.6%
54.3%	375.4	352.1	-23.3	-6.2%
55.6%	375.0	342.4	-32.6	-8.7%
56.8%	366.7	338.1	-28.6	-7.8%
58.0%	352.3	338.0	-14.4	-4.1%
59.3%	352.1	337.7	-14.4	-4.1%
60.5%	347.3	331.9	-15.4	-4.4%
61.7%	342.6	331.9	-10.7	-3.1%
63.0%	340.6	324.6	-16.0	-4.7%
64.2%	337.3	324.4	-12.9	-3.8%
65.4%	333.5	324.2	-9.3	-2.8%
66.7%	323.9	322.4	-1.6	-0.5%
67.9%	322.3	322.4	0.0	0.0%
69.1%	322.2	319.8	-2.3	-0.7%
70.4%	319.4	319.6	0.2	0.1%
71.6%	318.6	317.2	-1.4	-0.4%
72.8%	316.8	315.5	-1.3	-0.4%
74.1%	316.3	311.9	-4.4	-1.4%
75.3%	315.9	304.1	-11.8	-3.7%
76.5%	311.1	303.4	-7.6	-2.5%
77.8%	297.3	298.7	1.4	0.5%
79.0%	296.6	296.1	-0.5	-0.2%
80.2%	291.7	296.0	4.2	1.5%
81.5%	290.7	294.0	3.3	1.1%
82.7%	289.8	288.7	-1.1	-0.4%
84.0%	287.5	277.2	-10.2	-3.6%
85.2%	277.3	275.7	-1.6	-0.6%
86.4%	263.4	263.1	-0.3	-0.1%
87.7%	262.6	261.9	-0.6	-0.2%
88.9%	256.8	256.9	0.1	0.0%
90.1%	238.4	243.8	5.4	2.3%
91.4%	234.3	236.7	2.3	1.0%
92.6%	218.4	216.2	-2.2	-1.0%
93.8%	215.2	214.5	-0.7	-0.3%
95.1%	214.5	208.2	-6.3	-2.9%
96.3%	209.1	206.5	-2.6	-1.3%
97.5%	206.4	205.2	-1.2	-0.6%
98.8%	206.2	203.8	-2.3	-1.1%
100.0%	197.5	197.5	-0.1	0.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2266.8	2196.7	-70.0	-3.1%
1.2%	2078.1	2077.4	-0.6	0.0%
2.5%	1925.5	1768.1	-157.4	-8.2%
3.7%	1864.2	1766.4	-97.8	-5.2%
4.9%	1854.5	1720.8	-133.7	-7.2%
6.2%	1659.4	1614.6	-44.8	-2.7%
7.4%	1557.6	1568.7	11.1	0.7%
8.6%	1524.4	1560.6	36.2	2.4%
9.9%	1396.3	1372.7	-23.7	-1.7%
11.1%	1362.4	1361.5	-0.9	-0.1%
12.3%	1356.1	1321.8	-34.3	-2.5%
13.6%	1291.5	1317.0	25.4	2.0%
14.8%	1286.2	1292.3	6.1	0.5%
16.0%	1264.6	1286.9	22.3	1.8%
17.3%	1250.0	1269.0	19.0	1.5%
18.5%	1227.6	1252.2	24.6	2.0%
19.8%	1213.3	1243.6	30.3	2.5%
21.0%	1184.3	1243.2	58.9	5.0%
22.2%	1153.6	1212.1	58.5	5.1%
23.5%	1150.0	1205.7	55.8	4.8%
24.7%	1149.9	1190.4	40.5	3.5%
25.9%	1147.6	1180.6	33.0	2.9%
27.2%	1103.4	1162.2	58.8	5.3%
28.4%	1101.0	1135.9	34.9	3.2%
29.6%	1091.3	1114.2	22.8	2.1%
30.9%	1046.8	1095.1	48.3	4.6%
32.1%	1036.6	1041.7	5.1	0.5%
33.3%	943.6	1012.7	69.1	7.3%
34.6%	926.5	970.7	44.2	4.8%
35.8%	910.3	861.9	-48.4	-5.3%
37.0%	906.8	832.4	-74.5	-8.2%
38.3%	869.0	814.4	-54.6	-6.3%
39.5%	860.6	773.7	-86.9	-10.1%
40.7%	761.2	765.9	4.7	0.6%
42.0%	756.1	757.9	1.8	0.2%
43.2%	716.0	736.1	20.1	2.8%
44.4%	705.6	700.5	-5.2	-0.7%
45.7%	698.7	695.1	-3.6	-0.5%
46.9%	684.9	684.8	-0.1	0.0%
48.1%	671.0	679.3	8.3	1.2%
49.4%	615.8	664.3	48.5	7.9%
50.6%	603.2	648.1	44.8	7.4%
51.9%	586.4	644.2	57.7	9.8%
53.1%	545.8	587.7	42.0	7.7%
54.3%	535.0	544.2	9.2	1.7%
55.6%	512.4	533.1	20.8	4.1%
56.8%	509.1	507.1	-2.1	-0.4%
58.0%	495.2	505.5	10.4	2.1%
59.3%	463.6	503.2	39.6	8.5%
60.5%	424.9	427.0	2.1	0.5%
61.7%	421.3	422.9	1.6	0.4%
63.0%	406.6	409.0	2.4	0.6%
64.2%	401.3	404.9	3.6	0.9%
65.4%	391.4	398.4	7.0	1.8%
66.7%	391.4	392.5	1.1	0.3%
67.9%	388.2	383.4	-4.8	-1.2%
69.1%	385.4	382.3	-3.1	-0.8%
70.4%	374.0	373.8	-0.2	-0.1%
71.6%	372.9	369.8	-3.1	-0.8%
72.8%	368.8	369.4	0.6	0.2%
74.1%	360.4	368.0	7.6	2.1%
75.3%	355.1	364.9	9.8	2.8%
76.5%	353.5	363.3	9.8	2.8%
77.8%	353.3	356.2	2.9	0.8%
79.0%	353.2	351.0	-2.2	-0.6%
80.2%	349.1	340.6	-8.5	-2.4%
81.5%	341.0	340.0	-0.9	-0.3%
82.7%	334.0	339.2	5.2	1.6%
84.0%	325.1	328.3	3.2	1.0%
85.2%	314.0	318.4	4.4	1.4%
86.4%	303.8	302.2	-1.6	-0.5%
87.7%	301.9	298.8	-3.1	-1.0%
88.9%	297.1	294.6	-2.5	-0.8%
90.1%	296.0	294.2	-1.8	-0.6%
91.4%	294.7	291.4	-3.3	-1.1%
92.6%	289.6	277.7	-11.9	-4.1%
93.8%	277.7	277.4	-0.2	-0.1%
95.1%	271.6	273.5	1.9	0.7%
96.3%	261.4	265.4	3.9	1.5%
97.5%	259.4	255.3	-4.1	-1.6%
98.8%	241.7	253.7	12.0	4.9%
100.0%	216.9	219.3	2.4	1.1%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	2192.6	2194.4	1.8	0.1%
1.2%	2053.7	1971.3	-82.4	-4.0%
2.5%	2030.4	1944.8	-85.6	-4.2%
3.7%	1963.9	1865.3	-98.6	-5.0%
4.9%	1957.5	1857.5	-100.0	-5.1%
6.2%	1946.1	1856.8	-89.3	-4.6%
7.4%	1903.0	1798.9	-104.1	-5.5%
8.6%	1873.7	1743.5	-130.2	-7.0%
9.9%	1841.7	1654.0	-187.6	-10.2%
11.1%	1830.8	1642.9	-187.9	-10.3%
12.3%	1648.7	1625.5	-23.2	-1.4%
13.6%	1643.1	1619.5	-23.7	-1.4%
14.8%	1638.5	1605.0	-33.6	-2.0%
16.0%	1628.6	1571.1	-57.5	-3.5%
17.3%	1607.4	1554.9	-52.5	-3.3%
18.5%	1600.1	1542.9	-57.2	-3.6%
19.8%	1565.5	1519.6	-45.9	-2.9%
21.0%	1545.4	1510.9	-34.5	-2.2%
22.2%	1544.5	1492.6	-51.9	-3.4%
23.5%	1540.4	1487.5	-52.8	-3.4%
24.7%	1533.9	1477.3	-56.6	-3.7%
25.9%	1523.4	1467.3	-56.2	-3.7%
27.2%	1520.0	1456.0	-64.0	-4.2%
28.4%	1499.5	1454.7	-44.8	-3.0%
29.6%	1454.6	1449.9	-4.7	-0.3%
30.9%	1426.5	1416.1	-10.4	-0.7%
32.1%	1397.9	1409.9	12.0	0.9%
33.3%	1395.8	1409.1	13.3	1.0%
34.6%	1389.6	1404.4	14.7	1.1%
35.8%	1369.2	1396.7	27.5	2.0%
37.0%	1361.2	1391.7	30.4	2.2%
38.3%	1348.7	1391.2	42.6	3.2%
39.5%	1321.1	1373.7	52.7	4.0%
40.7%	1303.0	1372.8	69.7	5.4%
42.0%	1299.4	1371.1	71.7	5.5%
43.2%	1288.2	1323.8	35.6	2.8%
44.4%	1279.4	1310.9	31.5	2.5%
45.7%	1277.6	1280.9	3.4	0.3%
46.9%	1275.0	1273.5	-1.5	-0.1%
48.1%	1258.9	1270.1	11.3	0.9%
49.4%	1249.4	1244.2	-5.2	-0.4%
50.6%	1245.0	1242.4	-2.7	-0.2%
51.9%	1225.7	1239.4	13.8	1.1%
53.1%	1209.3	1236.7	27.5	2.3%
54.3%	1204.1	1226.2	22.0	1.8%
55.6%	1202.2	1221.8	19.6	1.6%
56.8%	1187.5	1215.8	28.3	2.4%
58.0%	1175.6	1214.3	38.7	3.3%
59.3%	1164.3	1209.2	44.9	3.9%
60.5%	1162.4	1208.6	46.2	4.0%
61.7%	1159.9	1178.6	18.7	1.6%
63.0%	1144.0	1163.4	19.4	1.7%
64.2%	1142.3	1162.0	19.7	1.7%
65.4%	1139.2	1145.2	5.9	0.5%
66.7%	1138.0	1144.5	6.5	0.6%
67.9%	1120.8	1142.3	21.5	1.9%
69.1%	1108.9	1140.0	31.1	2.8%
70.4%	1099.6	1130.0	30.5	2.8%
71.6%	1095.1	1126.6	31.4	2.9%
72.8%	1094.4	1119.2	24.7	2.3%
74.1%	1093.0	1115.4	22.4	2.1%
75.3%	1075.3	1092.1	16.7	1.6%
76.5%	1060.7	1085.6	24.8	2.3%
77.8%	1060.7	1085.5	24.8	2.3%
79.0%	1057.9	1052.1	-5.8	-0.6%
80.2%	1054.7	1050.6	-4.1	-0.4%
81.5%	1049.9	1035.2	-14.7	-1.4%
82.7%	1048.1	1023.8	-24.3	-2.3%
84.0%	1041.1	989.1	-51.9	-5.0%
85.2%	1021.0	985.6	-35.4	-3.5%
86.4%	999.6	984.8	-14.8	-1.5%
87.7%	973.6	981.0	7.4	0.8%
88.9%	964.0	957.4	-6.7	-0.7%
90.1%	949.5	955.8	6.3	0.7%
91.4%	948.1	947.8	-0.2	0.0%
92.6%	941.0	941.0	0.0	0.0%
93.8%	920.0	939.0	18.9	2.1%
95.1%	916.9	889.5	-27.4	-3.0%
96.3%	888.1	873.4	-14.7	-1.7%
97.5%	854.3	843.4	-10.9	-1.3%
98.8%	851.6	820.7	-30.9	-3.6%
100.0%	788.4	760.1	-28.3	-3.6%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	3039.6	2811.0	-228.6	-7.5%
1.2%	2897.6	2764.9	-132.7	-4.6%
2.5%	2896.4	2745.5	-151.0	-5.2%
3.7%	2861.6	2744.0	-117.6	-4.1%
4.9%	2843.1	2729.9	-113.2	-4.0%
6.2%	2815.4	2725.1	-90.3	-3.2%
7.4%	2795.7	2721.5	-74.2	-2.7%
8.6%	2771.7	2663.5	-108.1	-3.9%
9.9%	2764.0	2623.6	-140.4	-5.1%
11.1%	2752.0	2603.0	-149.0	-5.4%
12.3%	2750.7	2599.8	-150.9	-5.5%
13.6%	2734.1	2585.9	-148.2	-5.4%
14.8%	2729.4	2581.1	-148.3	-5.4%
16.0%	2686.8	2570.5	-116.3	-4.3%
17.3%	2667.4	2566.3	-101.1	-3.8%
18.5%	2660.1	2555.5	-104.6	-3.9%
19.8%	2649.0	2544.7	-104.3	-3.9%
21.0%	2624.3	2534.4	-89.9	-3.4%
22.2%	2574.6	2532.6	-42.0	-1.6%
23.5%	2559.5	2495.6	-64.0	-2.5%
24.7%	2559.2	2454.7	-104.4	-4.1%
25.9%	2554.1	2435.8	-118.4	-4.6%
27.2%	2554.0	2422.6	-131.4	-5.1%
28.4%	2552.3	2418.2	-134.1	-5.3%
29.6%	2550.6	2408.8	-141.8	-5.6%
30.9%	2508.9	2378.0	-130.8	-5.2%
32.1%	2503.4	2369.7	-133.8	-5.3%
33.3%	2440.0	2347.5	-92.4	-3.8%
34.6%	2434.9	2324.1	-110.8	-4.6%
35.8%	2422.1	2292.3	-129.8	-5.4%
37.0%	2407.3	2276.0	-131.3	-5.5%
38.3%	2272.3	2268.4	-4.0	-0.2%
39.5%	2221.7	2260.6	38.8	1.7%
40.7%	2213.0	2241.0	28.1	1.3%
42.0%	2201.7	2206.4	4.7	0.2%
43.2%	2093.9	2194.1	100.3	4.8%
44.4%	2081.8	2170.1	88.3	4.2%
45.7%	2074.8	2143.1	68.3	3.3%
46.9%	2070.4	2061.1	-9.3	-0.5%
48.1%	2062.9	2011.2	-51.7	-2.5%
49.4%	2019.5	2010.2	-9.3	-0.5%
50.6%	1996.1	2004.3	8.2	0.4%
51.9%	1942.3	1909.9	-32.4	-1.7%
53.1%	1914.4	1709.8	-204.7	-10.7%
54.3%	1899.3	1665.9	-233.4	-12.3%
55.6%	1118.1	1120.8	2.7	0.2%
56.8%	1111.2	1096.1	-15.1	-1.4%
58.0%	1083.4	1086.0	2.5	0.2%
59.3%	1080.4	1038.6	-41.8	-3.9%
60.5%	1064.2	1028.8	-35.5	-3.3%
61.7%	1042.7	1000.3	-42.4	-4.1%
63.0%	1022.0	995.1	-26.9	-2.6%
64.2%	1014.0	989.3	-24.6	-2.4%
65.4%	999.9	958.3	-41.6	-4.2%
66.7%	998.1	946.2	-51.9	-5.2%
67.9%	979.5	938.0	-41.5	-4.2%
69.1%	969.5	935.5	-34.0	-3.5%
70.4%	938.2	930.4	-7.8	-0.8%
71.6%	925.8	927.8	2.0	0.2%
72.8%	908.9	890.5	-18.4	-2.0%
74.1%	898.9	882.4	-16.5	-1.8%
75.3%	896.7	872.4	-24.2	-2.7%
76.5%	858.6	858.8	0.1	0.0%
77.8%	846.6	836.3	-10.3	-1.2%
79.0%	826.8	817.2	-9.6	-1.2%
80.2%	822.5	805.1	-17.4	-2.1%
81.5%	820.0	795.5	-24.5	-3.0%
82.7%	819.0	787.7	-31.3	-3.8%
84.0%	801.7	787.7	-14.1	-1.8%
85.2%	767.9	767.7	-0.2	0.0%
86.4%	761.9	766.6	4.7	0.6%
87.7%	752.2	732.8	-19.4	-2.6%
88.9%	739.6	691.2	-48.4	-6.5%
90.1%	700.1	647.1	-53.0	-7.6%
91.4%	605.7	527.1	-78.7	-13.0%
92.6%	573.9	524.4	-49.5	-8.6%
93.8%	519.4	500.3	-19.1	-3.7%
95.1%	503.4	493.9	-9.5	-1.9%
96.3%	500.9	482.5	-18.4	-3.7%
97.5%	499.1	477.5	-21.6	-4.3%
98.8%	445.8	473.8	28.0	6.3%
100.0%	392.1	397.5	5.4	1.4%

Figure SQ-27-b
Old River at Rock Slough, Monthly EC
Probability of Exceedance

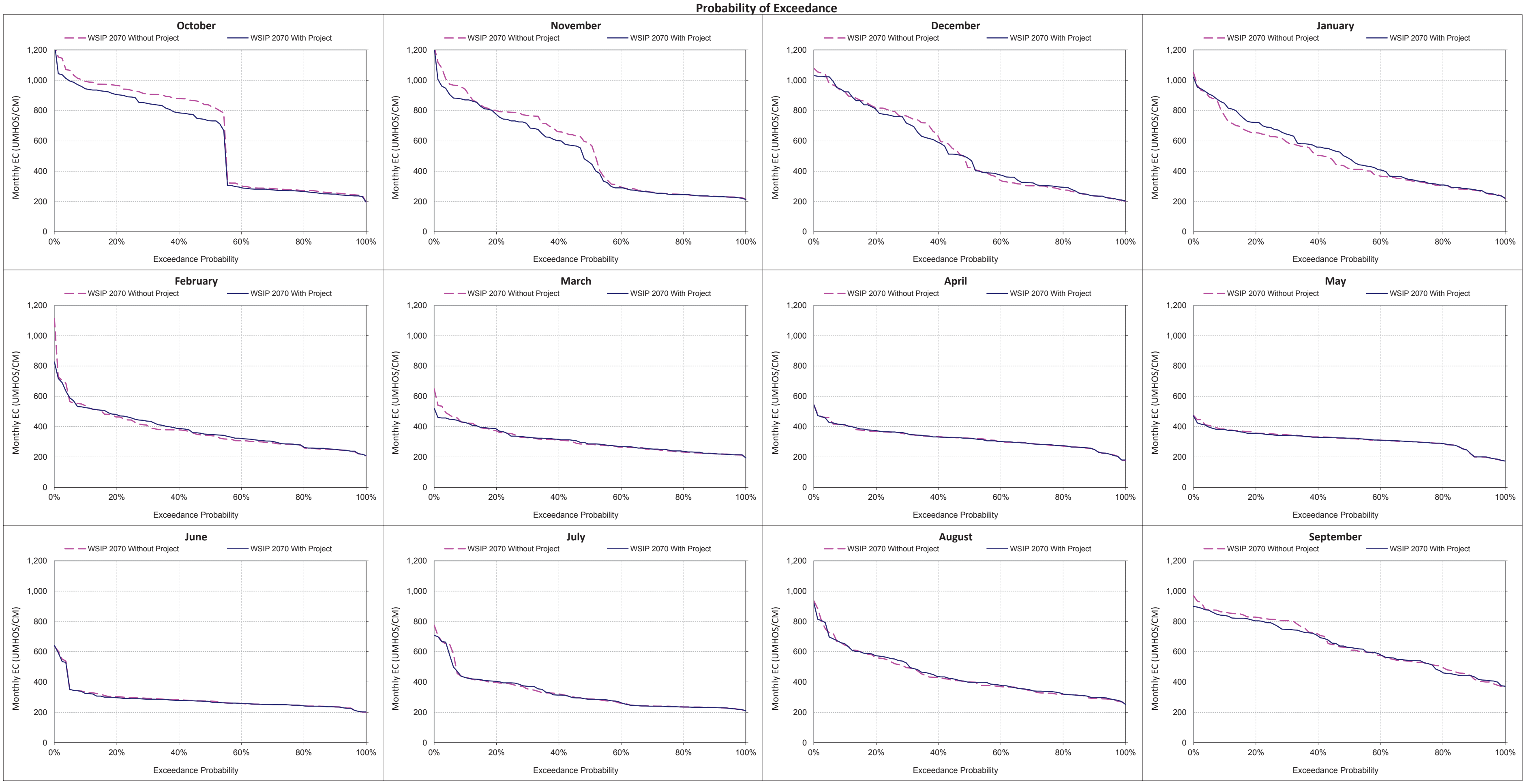


Table SQ-27-b
Old River at Rock Slough, Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1251.7	1251.5	-0.1	0.0%
1.2%	1153.9	1043.9	-110.1	-9.5%
2.5%	1145.7	1036.8	-108.9	-9.5%
3.7%	1071.2	1013.5	-57.6	-5.4%
4.9%	1065.7	995.8	-69.9	-6.6%
6.2%	1034.5	987.8	-46.7	-4.5%
7.4%	1014.2	971.2	-43.0	-4.2%
8.6%	1005.4	960.5	-44.9	-4.5%
9.9%	992.8	944.3	-48.5	-4.9%
11.1%	988.7	939.9	-48.8	-4.9%
12.3%	986.7	936.3	-50.4	-5.1%
13.6%	974.7	936.1	-38.6	-4.0%
14.8%	974.4	930.4	-44.0	-4.5%
16.0%	973.3	926.8	-46.5	-4.8%
17.3%	973.2	924.2	-49.1	-5.0%
18.5%	970.4	913.9	-56.5	-5.8%
19.8%	966.1	906.8	-59.3	-6.1%
21.0%	963.3	903.8	-59.5	-6.2%
22.2%	941.5	900.3	-41.1	-4.4%
23.5%	940.5	891.0	-49.5	-5.3%
24.7%	934.7	888.8	-45.9	-4.9%
25.9%	930.0	886.6	-43.4	-4.7%
27.2%	924.7	853.5	-71.2	-7.7%
28.4%	914.5	853.4	-61.2	-6.7%
29.6%	910.6	847.8	-62.8	-6.9%
30.9%	907.1	843.2	-63.9	-7.0%
32.1%	906.4	839.6	-66.8	-7.4%
33.3%	906.1	836.2	-69.9	-7.7%
34.6%	904.3	832.7	-71.6	-7.9%
35.8%	893.3	815.5	-77.8	-8.7%
37.0%	891.9	808.2	-83.7	-9.4%
38.3%	880.4	792.2	-88.3	-10.0%
39.5%	880.2	787.3	-92.9	-10.6%
40.7%	878.6	783.6	-95.0	-10.8%
42.0%	878.1	781.0	-97.1	-11.1%
43.2%	869.4	776.6	-92.8	-10.7%
44.4%	866.6	774.9	-91.8	-10.6%
45.7%	863.6	749.7	-113.8	-13.2%
46.9%	853.6	745.2	-108.4	-12.7%
48.1%	840.3	741.9	-98.3	-11.7%
49.4%	838.5	733.4	-105.1	-12.5%
50.6%	823.9	732.1	-91.8	-11.1%
51.9%	814.6	731.7	-82.9	-10.2%
53.1%	799.1	711.5	-87.6	-11.0%
54.3%	784.2	666.6	-117.5	-15.0%
55.6%	322.6	306.1	-16.4	-5.1%
56.8%	321.8	305.8	-15.9	-5.0%
58.0%	321.5	298.9	-22.6	-7.0%
59.3%	311.5	295.0	-16.6	-5.3%
60.5%	299.9	289.0	-10.9	-3.6%
61.7%	299.1	286.1	-13.0	-4.4%
63.0%	292.5	284.1	-8.4	-2.9%
64.2%	289.7	282.2	-7.5	-2.6%
65.4%	288.7	281.5	-7.2	-2.5%
66.7%	288.6	281.2	-7.4	-2.6%
67.9%	287.5	281.1	-6.5	-2.2%
69.1%	287.5	278.5	-9.0	-3.1%
70.4%	284.3	277.3	-7.0	-2.5%
71.6%	282.6	272.8	-9.8	-3.5%
72.8%	281.1	272.7	-8.4	-3.0%
74.1%	279.6	272.6	-7.0	-2.5%
75.3%	278.9	270.9	-7.9	-2.8%
76.5%	277.8	270.6	-7.2	-2.6%
77.8%	276.1	269.1	-7.1	-2.6%
79.0%	273.8	268.7	-5.1	-1.9%
80.2%	272.9	265.9	-7.0	-2.6%
81.5%	272.1	262.1	-10.0	-3.7%
82.7%	271.8	259.8	-12.0	-4.4%
84.0%	269.7	258.3	-11.4	-4.2%
85.2%	264.4	254.2	-10.1	-3.8%
86.4%	261.6	251.6	-10.0	-3.8%
87.7%	259.9	250.9	-9.0	-3.5%
88.9%	257.1	249.9	-7.3	-2.8%
90.1%	256.4	248.6	-7.8	-3.0%
91.4%	254.2	243.7	-10.5	-4.1%
92.6%	252.2	242.9	-9.3	-3.7%
93.8%	249.7	240.6	-9.1	-3.6%
95.1%	244.3	239.4	-4.9	-2.0%
96.3%	243.9	237.4	-6.5	-2.7%
97.5%	241.8	237.0	-4.8	-2.0%
98.8%	239.7	232.2	-7.5	-3.1%
100.0%	196.8	196.6	-0.2	-0.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1224.1	1217.1	-7.0	-0.6%
1.2%	1117.3	1006.6	-110.7	-9.9%
2.5%	1079.8	962.1	-117.7	-10.9%
3.7%	1010.2	948.0	-62.2	-6.2%
4.9%	974.8	907.0	-67.7	-6.9%
6.2%	967.7	882.3	-85.3	-8.8%
7.4%	966.6	881.4	-85.2	-8.8%
8.6%	957.3	877.4	-79.9	-8.3%
9.9%	942.5	870.8	-71.7	-7.6%
11.1%	906.0	870.0	-35.9	-4.0%
12.3%	870.6	862.0	-8.5	-1.0%
13.6%	856.0	856.1	0.0	0.0%
14.8%	837.7	829.5	-8.3	-1.0%
16.0%	822.7	812.4	-10.3	-1.3%
17.3%	814.6	809.1	-5.5	-0.7%
18.5%	802.9	802.3	-0.6	-0.1%
19.8%	801.9	778.2	-23.7	-3.0%
21.0%	793.0	755.3	-37.7	-4.8%
22.2%	791.9	744.0	-47.9	-6.1%
23.5%	791.5	742.7	-48.8	-6.2%
24.7%	788.7	732.6	-56.2	-7.1%
25.9%	787.7	731.9	-55.8	-7.1%
27.2%	786.1	725.8	-60.3	-7.7%
28.4%	773.3	725.3	-47.9	-6.2%
29.6%	768.4	717.1	-51.3	-6.7%
30.9%	765.8	684.8	-81.0	-10.6%
32.1%	763.8	682.2	-81.6	-10.7%
33.3%	763.0	675.1	-87.9	-11.5%
34.6%	715.4	647.8	-67.6	-9.5%
35.8%	715.3	625.3	-90.1	-12.6%
37.0%	696.1	624.5	-71.6	-10.3%
38.3%	684.0	609.8	-74.2	-10.8%
39.5%	661.7	602.4	-59.3	-9.0%
40.7%	659.2	600.1	-59.1	-9.0%
42.0%	653.5	578.6	-74.9	-11.5%
43.2%	642.7	573.4	-69.3	-10.8%
44.4%	640.6	569.2	-71.4	-11.1%
45.7%	631.3	565.7	-65.6	-10.4%
46.9%	628.7	554.3	-74.4	-11.8%
48.1%	596.4	482.5	-113.9	-19.1%
49.4%	590.2	464.1	-126.1	-21.4%
50.6%	567.0	444.2	-122.8	-21.7%
51.9%	493.6	402.1	-91.6	-18.5%
53.1%	405.3	385.8	-19.5	-4.8%
54.3%	365.9	335.5	-30.4	-8.3%
55.6%	341.9	324.3	-17.7	-5.2%
56.8%	315.3	299.6	-15.8	-5.0%
58.0%	313.1	290.3	-22.8	-7.3%
59.3%	301.2	290.1	-11.1	-3.7%
60.5%	291.1	289.8	-1.2	-0.4%
61.7%	286.7	283.9	-2.7	-0.9%
63.0%	285.8	276.9	-8.9	-3.1%
64.2%	283.7	274.0	-9.6	-3.4%
65.4%	274.1	269.4	-4.8	-1.7%
66.7%	273.8	268.8	-5.0	-1.8%
67.9%	268.7	264.3	-4.4	-1.6%
69.1%	262.3	262.6	0.3	0.1%
70.4%	260.8	257.3	-3.5	-1.3%
71.6%	253.9	255.2	1.2	0.5%
72.8%	253.7	254.6	0.9	0.4%
74.1%	253.6	252.4	-1.1	-0.5%
75.3%	249.8	248.2	-1.6	-0.6%
76.5%	249.2	246.5	-2.7	-1.1%
77.8%	248.7	246.5	-2.2	-0.9%
79.0%	247.2	246.0	-1.1	-0.5%
80.2%	246.4	245.5	-0.9	-0.4%
81.5%	244.8	245.1	0.3	0.1%
82.7%	239.4	243.0	3.6	1.5%
84.0%	239.3	238.9	-0.4	-0.2%
85.2%	238.9	237.2	-1.7	-0.7%
86.4%	237.0	236.7	-0.3	-0.1%
87.7%	236.4	236.6	0.2	0.1%
88.9%	235.1	233.9	-1.2	-0.5%
90.1%	234.7	233.0	-1.7	-0.7%
91.4%	234.0	232.6	-1.4	-0.6%
92.6%	234.0	232.5	-1.5	-0.6%
93.8%	230.2	230.4	0.2	0.1%
95.1%	230.0	229.4	-0.5	-0.2%
96.3%	229.3	228.0	-1.3	-0.6%
97.5%	226.1	225.9	-0.1	-0.1%
98.8%	225.2	221.5	-3.6	-1.6%
100.0%	214.2	213.4	-0.8	-0.4%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1079.9	1031.6	-48.4	-4.5%
1.2%	1055.8	1027.1	-28.7	-2.7%
2.5%	1047.6	1025.7	-22.0	-2.1%
3.7%	1038.1	1023.5	-14.5	-1.4%
4.9%	977.4	1023.2	45.8	4.7%
6.2%	969.0	993.5	24.6	2.5%
7.4%	956.1	951.4	-4.7	-0.5%
8.6%	930.9	941.0	10.1	1.1%
9.9%	926.8	924.0	-2.8	-0.3%
11.1%	895.4	923.1	27.7	3.1%
12.3%	893.3	888.8	-4.5	-0.5%
13.6%	881.7	866.2	-15.5	-1.8%
14.8%	869.0	864.8	-4.3	-0.5%
16.0%	862.8	838.0	-24.8	-2.9%
17.3%	847.9	837.7	-10.2	-1.2%
18.5%	831.7	825.7	-6.0	-0.7%
19.8%	820.4	813.1	-7.3	-0.9%
21.0%	816.9	782.2	-34.7	-4.2%
22.2%	816.4	775.8	-40.6	-5.0%
23.5%	807.5	773.1	-34.4	-4.3%
24.7%	796.9	768.4	-28.5	-3.6%
25.9%	794.3	761.6	-32.7	-4.1%
27.2%	769.0	761.5	-7.5	-1.0%
28.4%	766.9	759.5	-7.4	-1.0%
29.6%	765.4	718.8	-46.5	-6.1%
30.9%	753.7	705.8	-47.9	-6.4%
32.1%	742.1	693.6	-48.5	-6.5%
33.3%	738.9	656.6	-82.2	-11.1%
34.6%	720.1	631.1	-89.1	-12.4%
35.8%	719.4	621.7	-97.7	-13.6%
37.0%	698.0	616.3	-81.8	-11.7%
38.3%	663.2	608.9	-54.4	-8.2%
39.5%	647.8	595.8	-52.0	-8.0%
40.7%	594.5	582.5	-12.0	-2.0%
42.0%	594.2	566.5	-27.8	-4.7%
43.2%	578.7	513.3	-65.3	-11.3%
44.4%	550.2	512.2	-38.0	-6.9%
45.7%	538.9	511.6	-27.3	-5.1%
46.9%	510.1	505.5	-4.7	-0.9%
48.1%	497.4	501.0	3.6	0.7%
49.4%	424.2	487.9	63.7	15.0%
50.6%	422.7	468.7	45.9	10.9%
51.9%	407.9	404.0	-3.9	-1.0%
53.1%	402.2	400.2	-2.0	-0.5%
54.3%	392.2	391.8	-0.4	-0.1%
55.6%	388.0	389.4	1.3	0.3%
56.8%	374.0	388.4	14.4	3.8%
58.0%	367.5	386.3	18.8	5.1%
59.3%	345.8	377.0	31.2	9.0%
60.5%	334.0	371.9	37.8	11.3%
61.7%	330.2	362.8	32.6	9.9%
63.0%	324.5	360.6	36.2	11.1%
64.2%	323.2	359.8	36.6	11.3%
65.4%	316.7	340.3	23.7	7.5%
66.7%	315.3	327.0	11.7	3.7%
67.9%	305.2	326.0	20.8	6.8%
69.1%	303.8	324.2	20.4	6.7%
70.4%	303.7	322.8	19.0	6.3%
71.6%	303.5	309.6	6.1	2.0%
72.8%	302.9	305.0	2.1	0.7%
74.1%	302.4	304.4	2.0	0.7%
75.3%	293.0	304.0	11.0	3.7%
76.5%	292.5	302.7	10.2	3.5%
77.8%	287.5	299.2	11.7	4.1%
79.0%	280.9	295.4	14.6	5.2%
80.2%	275.7	293.5	17.7	6.4%
81.5%	274.5	291.6	17.1	6.2%
82.7%	266.4	280.8	14.4	5.4%
84.0%	263.0	270.0	7.1	2.7%
85.2%	255.6	254.4	-1.2	-0.5%
86.4%	248.4	251.4	3.0	1.2%
87.7%	247.8	247.2	-0.6	-0.2%
88.9%	240.2	239.7	-0.4	-0.2%
90.1%	236.9	237.9	1.0	0.4%
91.4%	234.4	235.2	0.8	0.4%
92.6%	232.8	234.8	2.0	0.8%
93.8%	226.4	225.8	-0.6	-0.3%
95.1%	223.3	221.0	-2.3	-1.0%
96.3%	216.5	219.9	3.4	1.6%
97.5%	211.0	213.1	2.1	1.0%
98.8%	209.3	209.5	0.2	0.1%
100.0%	201.2	203.3	2.2	1.1%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1050.7	1019.1	-31.5	-3.0%
1.2%	967.5	954.2	-13.3	-1.4%
2.5%	932.5	942.0	9.5	1.0%
3.7%	928.2	927.0	-1.1	-0.1%
4.9%	891.5	910.5	19.0	2.1%
6.2%	879.2	898.0	18.7	2.1%
7.4%	876.9	877.9	1.0	0.1%
8.6%	811.9	860.8	48.9	6.0%
9.9%	768.3	848.4	80.1	10.4%
11.1%	726.8	815.3	88.5	12.2%
12.3%	716.5	811.6	95.1	13.3%
13.6%	701.9	800.0	98.2	14.0%
14.8%	696.1	772.8	76.7	11.0%
16.0%	676.1	749.7	73.6	10.9%
17.3%	665.0	728.5	63.5	9.5%
18.5%	655.5	724.1	68.6	10.5%
19.8%	654.4	722.3	67.9	10.4%
21.0%	651.9	721.2	69.3	10.6%
22.2%	643.8	699.3	55.5	8.6%
23.5%	643.4	690.4	47.1	7.3%
24.7%	629.0	689.8	60.9	9.7%
25.9%	628.3	674.8	46.5	7.4%
27.2%	624.1	672.7	48.6	7.8%
28.4%	617.6	657.1	39.5	6.4%
29.6%	596.6	645.8	49.2	8.2%
30.9%	581.0	640.3	59.3	10.2%
32.1%	579.0	630.7	51.8	8.9%
33.3%	570.6	585.6	15.0	2.6%
34.6%	564.4	581.4	17.0	3.0%
35.8%	564.1	580.9	16.8	3.0%
37.0%	555.9	577.6	21.7	3.9%
38.3%	524.9	573.6	48.7	9.3%
39.5%	503.9	559.0	55.1	10.9%
40.7%	503.5	558.7	55.2	11.0%
42.0%	498.5	553.0	54.5	10.9%
43.2%	494.5	549.9	55.4	11.2%
44.4%	479.2	540.5	61.3	12.8%
45.7%	445.8	532.4	86.6	19.4%
46.9%	439.7	527.3	87.6	19.9%
48.1%	436.9	502.1	65.2	14.9%
49.4%	421.1	490.1	69.0	16.4%
50.6%	413.3	474.7	61.4	14.9%
51.9%	412.4	455.4	43.0	10.4%
53.1%	412.1	443.0	30.9	7.5%
54.3%	411.3	439.9	28.6	7.0%
55.6%	401.8	434.6	32.8	8.2%
56.8%	401.2	431.1	29.9	7.4%
58.0%	378.3	424.6	46.3	12.2%
59.3%	371.2	410.9	39.7	10.7%
60.5%	365.5	407.5	42.0	11.5%
61.7%	364.3	396.6	32.3	8.9%
63.0%	360.3	366.8	6.5	1.8%
64.2%	359.0	366.0	7.0	2.0%
65.4%	352.4	365.6	13.3	3.8%
66.7%	351.5	363.6	12.2	3.5%
67.9%	342.9	354.0	11.0	3.2%
69.1%	341.4	344.3	2.9	0.9%
70.4%	334.5	343.4	8.9	2.7%
71.6%	332.7	336.2	3.5	1.0%
72.8%	328.6	333.2	4.6	1.4%
74.1%	327.0	330.7	3.7	1.1%
75.3%	315.7	321.9	6.2	2.0%
76.5%	315.2	317.0	1.8	0.6%
77.8%	307.5	315.6	8.1	2.6%
79.0%	307.1	308.5	1.4	0.4%
80.2%	306.7	308.3	1.6	0.5%
81.5%	304.6	305.3	0.7	0.2%
82.7%	291.0	293.1	2.1	0.7%
84.0%	290.7	292.3	1.6	0.6%
85.2%	282.6	291.8	9.2	3.3%
86.4%	282.4	286.5	4.0	1.4%
87.7%	280.9	284.8	3.9	1.4%
88.9%	278.1	280.9	2.8	1.0%
90.1%	274.9	278.2	3.4	1.2%
91.4%	271.5	273.9	2.4	0.9%
92.6%	267.0	271.6	4.6	1.7%
93.8%	256.2	256.3	0.1	0.1%
95.1%	247.6	252.3	4.7	1.9%
96.3%	246.8	249.3	2.5	1.0%
97.5%	245.8	240.1	-5.7	-2.3%
98.8%	236.8	237.4	0.6	0.3%
100.0%	221.3	221.4	0.1	0.0%

Table SQ-27-b

Old River at Rock Slough, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	1114.4	827.1	-287.3	-25.8%
1.2%	727.8	717.5	-10.3	-1.4%
2.5%	705.8	690.0	-15.8	-2.2%
3.7%	685.6	635.6	-50.0	-7.3%
4.9%	566.0	590.0	24.0	4.2%
6.2%	554.0	570.1	16.1	2.9%
7.4%	553.0	532.4	-20.6	-3.7%
8.6%	550.0	531.1	-18.9	-3.4%
9.9%	538.4	525.9	-12.5	-2.3%
11.1%	522.3	522.2	0.0	0.0%
12.3%	514.9	515.9	1.0	0.2%
13.6%	512.3	511.4	-0.9	-0.2%
14.8%	507.6	509.1	1.4	0.3%
16.0%	482.3	507.5	25.2	5.2%
17.3%	480.7	492.1	11.3	2.4%
18.5%	477.4	483.3	5.9	1.2%
19.8%	464.1	480.4	16.3	3.5%
21.0%	463.2	470.8	7.6	1.6%
22.2%	451.9	469.1	17.2	3.8%
23.5%	444.4	463.5	19.1	4.3%
24.7%	443.5	456.3	12.8	2.9%
25.9%	427.4	449.1	21.7	5.1%
27.2%	417.1	444.2	27.1	6.5%
28.4%	412.3	441.4	29.1	7.1%
29.6%	410.8	436.2	25.4	6.2%
30.9%	390.1	435.5	45.4	11.6%
32.1%	386.5	422.3	35.7	9.2%
33.3%	380.6	413.0	32.4	8.5%
34.6%	380.5	409.6	29.1	7.6%
35.8%	379.5	402.4	22.9	6.0%
37.0%	379.1	398.7	19.6	5.2%
38.3%	378.8	393.6	14.7	3.9%
39.5%	378.6	387.0	8.4	2.2%
40.7%	377.6	386.9	9.3	2.5%
42.0%	373.9	383.3	9.3	2.5%
43.2%	369.0	378.8	9.9	2.7%
44.4%	358.7	360.3	1.6	0.5%
45.7%	349.3	359.6	10.3	2.9%
46.9%	345.6	355.5	9.9	2.9%
48.1%	344.2	350.6	6.5	1.9%
49.4%	343.6	348.8	5.2	1.5%
50.6%	339.9	347.0	7.2	2.1%
51.9%	337.5	346.6	9.0	2.7%
53.1%	324.2	344.5	20.3	6.3%
54.3%	319.0	342.4	23.4	7.3%
55.6%	317.6	335.5	17.9	5.6%
56.8%	316.4	331.2	14.8	4.7%
58.0%	307.8	324.4	16.6	5.4%
59.3%	307.1	322.9	15.8	5.1%
60.5%	306.5	319.7	13.2	4.3%
61.7%	305.7	319.1	13.5	4.4%
63.0%	302.2	316.1	13.9	4.6%
64.2%	301.2	314.1	12.9	4.3%
65.4%	300.5	309.1	8.7	2.9%
66.7%	299.3	308.7	9.5	3.2%
67.9%	295.6	305.4	9.8	3.3%
69.1%	293.4	305.0	11.6	3.9%
70.4%	292.2	300.7	8.5	2.9%
71.6%	286.9	294.0	7.1	2.5%
72.8%	285.6	288.1	2.6	0.9%
74.1%	285.1	286.8	1.7	0.6%
75.3%	284.4	285.2	0.7	0.3%
76.5%	283.3	283.5	0.3	0.1%
77.8%	279.2	281.2	1.9	0.7%
79.0%	277.9	279.2	1.4	0.5%
80.2%	258.8	261.9	3.1	1.2%
81.5%	257.3	258.3	1.0	0.4%
82.7%	256.7	258.0	1.3	0.5%
84.0%	254.4	257.5	3.1	1.2%
85.2%	252.8	257.0	4.2	1.7%
86.4%	252.7	256.8	4.2	1.6%
87.7%	251.2	253.1	1.8	0.7%
88.9%	249.8	251.5	1.7	0.7%
90.1%	249.2	249.2	0.0	0.0%
91.4%	246.2	246.2	0.0	0.0%
92.6%	244.9	245.3	0.4	0.2%
93.8%	242.3	242.4	0.1	0.1%
95.1%	235.8	237.9	2.0	0.9%
96.3%	234.0	237.3	3.3	1.4%
97.5%	221.0	221.2	0.2	0.1%
98.8%	216.6	216.8	0.2	0.1%
100.0%	207.4	209.7	2.2	1.1%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	649.4	520.4	-129.0	-19.9%
1.2%	539.8	460.4	-79.4	-14.7%
2.5%	534.6	457.3	-77.2	-14.4%
3.7%	492.7	456.9	-35.8	-7.3%
4.9%	476.8	448.4	-28.4	-6.0%
6.2%	460.1	447.7	-12.5	-2.7%
7.4%	457.4	442.6	-14.8	-3.2%
8.6%	431.0	431.6	0.6	0.1%
9.9%	428.1	428.5	0.4	0.1%
11.1%	422.4	419.9	-2.5	-0.6%
12.3%	421.7	408.3	-13.4	-3.2%
13.6%	404.4	405.7	1.3	0.3%
14.8%	393.4	396.2	2.8	0.7%
16.0%	388.4	393.6	5.2	1.3%
17.3%	386.8	389.7	2.9	0.8%
18.5%	377.1	388.0	10.9	2.9%
19.8%	374.4	386.7	12.3	3.3%
21.0%	362.0	369.7	7.6	2.1%
22.2%	359.2	365.8	6.5	1.8%
23.5%	355.2	356.8	1.7	0.5%
24.7%	354.9	338.1	-16.8	-4.7%
25.9%	346.0	337.9	-8.1	-2.3%
27.2%	332.3	335.2	2.8	0.9%
28.4%	328.3	333.1	4.8	1.5%
29.6%	327.0	331.0	4.0	1.2%
30.9%	325.3	329.6	4.3	1.3%
32.1%	324.6	324.7	0.0	0.0%
33.3%	318.2	324.5	6.3	2.0%
34.6%	317.2	322.8	5.6	1.8%
35.8%	315.9	322.6	6.6	2.1%
37.0%	315.7	321.2	5.6	1.8%
38.3%	314.3	317.7	3.4	1.1%
39.5%	311.6	316.7	5.1	1.6%
40.7%	309.3	314.0	4.7	1.5%
42.0%	308.4	313.7	5.3	1.7%
43.2%	306.3	312.9	6.6	2.2%
44.4%	300.2	309.1	9.0	3.0%
45.7%	289.3	306.4	17.1	5.9%
46.9%	285.8	296.9	11.0	3.9%
48.1%	285.8	295.6	9.8	3.4%
49.4%	284.3	286.2	1.8	0.6%
50.6%	283.4	285.7	2.3	0.8%
51.9%	280.1	285.6	5.5	2.0%
53.1%	277.9	283.9	6.1	2.2%
54.3%	277.5	281.4	3.9	1.4%
55.6%	273.9	277.8	3.9	1.4%
56.8%	272.9	275.1	2.2	0.8%
58.0%	271.6	272.2	0.6	0.2%
59.3%	265.0	269.4	4.4	1.7%
60.5%	264.2	269.4	5.2	2.0%
61.7%	263.6	267.1	3.5	1.3%
63.0%	263.6	266.3	2.8	1.1%
64.2%	262.6	263.2	0.7	0.3%
65.4%	262.5	259.3	-3.2	-1.2%
66.7%	261.4	259.3	-2.1	-0.8%
67.9%	252.1	257.7	5.6	2.2%
69.1%	249.9	253.9	4.0	1.6%
70.4%	249.6	252.2	2.6	1.0%
71.6%	249.5	251.7	2.2	0.9%
72.8%	243.7	250.7	7.0	2.9%
74.1%	241.5	249.6	8.1	3.3%
75.3%	240.3	244.5	4.2	1.7%
76.5%	238.9	240.2	1.3	0.5%
77.8%	233.8	239.7	5.9	2.5%
79.0%	233.5	239.1	5.6	2.4%
80.2%	232.5	235.7	3.2	1.4%
81.5%	229.3	233.2	3.8	1.7%
82.7%	227.9	232.7	4.8	2.1%
84.0%	227.0	232.0	4.9	2.2%
85.2%	226.2	230.4	4.2	1.9%
86.4%	224.1	224.2	0.1	0.0%
87.7%	223.9	224.0	0.1	0.0%
88.9%	223.5	223.6	0.1	0.1%
90.1%	220.9	221.1	0.2	0.1%
91.4%	219.6	219.7	0.1	0.0%
92.6%	219.0	218.4	-0.6	-0.3%
93.8%	218.5	218.4	-0.1	-0.1%
95.1%	217.4	215.0	-2.5	-1.1%
96.3%	215.0	214.4	-0.5	-0.3%
97.5%	214.3	214.3	0.0	0.0%
98.8%	212.6	214.1	1.5	0.7%
100.0%	192.8	193.3	0.5	0.3%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	543.9	544.5	0.6	0.1%
1.2%	480.9	472.7	-8.2	-1.7%
2.5%	464.3	466.4	2.1	0.4%
3.7%	461.3	457.5	-3.8	-0.8%
4.9%	459.6	425.6	-34.0	-7.4%
6.2%	417.3	424.7	7.4	1.8%
7.4%	416.3	418.0	1.7	0.4%
8.6%	412.1	413.9	1.8	0.4%
9.9%	411.0	412.2	1.2	0.3%
11.1%	403.6	402.6	-1.1	-0.3%
12.3%	401.9	398.8	-3.2	-0.8%
13.6%	380.8	391.4	10.5	2.8%
14.8%	378.1	385.3	7.2	1.9%
16.0%	373.9	383.3	9.3	2.5%
17.3%	373.2	377.6	4.4	1.2%
18.5%	369.2	375.9	6.7	1.8%
19.8%	369.2	375.3	6.1	1.7%
21.0%	368.8	369.3	0.5	0.1%
22.2%	366.1	366.7	0.6	0.2%
23.5%	364.6	366.5	2.0	0.5%
24.7%	363.5	364.6	1.2	0.3%
25.9%	363.2	363.9	0.7	0.2%
27.2%	361.9	361.5	-0.4	-0.1%
28.4%	354.5	361.4	6.9	1.9%
29.6%	351.4	355.0	3.6	1.0%
30.9%	346.1	347.0	0.9	0.3%
32.1%	345.4	345.5	0.1	0.0%
33.3%	340.9	343.5	2.6	0.8%
34.6%	339.1	342.5	3.3	1.0%
35.8%	337.7	338.9	1.1	0.3%
37.0%	336.4	337.9	1.5	0.4%
38.3%	335.4	332.6	-2.8	-0.8%
39.5%	333.1	332.5	-0.5	-0.2%
40.7%	332.9	330.0	-2.9	-0.9%
42.0%	329.5	329.7	0.1	0.0%
43.2%	329.5	329.6	0.1	0.0%
44.4%	328.9	327.7	-1.2	-0.4%
45.7%	326.7	326.5	-0.2	0.0%
46.9%	326.5	326.4	0.0	0.0%
48.1%	325.1	324.4	-0.7	-0.2%
49.4%	323.8	323.0	-0.7	-0.2%
50.6%	322.6	322.8	0.1	0.0%
51.9%	322.1	318.6	-3.5	-1.1%
53.1%	320.5	314.6	-5.9	-1.8%
54.3%	318.6	313.6	-5.0	-1.6%
55.6%	313.6	307.0	-6.7	-2.1%
56.8%	311.3	305.9	-5.4	-1.7%
58.0%	309.5	305.9	-3.6	-1.2%
59.3%	301.2	301.4	0.2	0.1%
60.5%	299.8	301.4	1.6	0.5%
61.7%	297.2	300.5	3.3	1.1%
63.0%	297.0	299.9	2.8	0.9%
64.2%	296.6	296.2	-0.4	-0.1%
65.4%	296.5	296.2	-0.4	-0.1%
66.7%	295.8	292.6	-3.2	-1.1%
67.9%	292.2	292.5	0.3	0.1%
69.1%	292.2	287.4	-4.7	-1.6%
70.4%	287.4	286.4	-1.0	-0.3%
71.6%	284.0	284.2	0.2	0.1%
72.8%	282.8	282.9	0.1	0.1%
74.1%	282.3	282.8	0.5	0.2%
75.3%	278.3	282.4	4.1	1.5%
76.5%	274.9	279.5	4.6	1.7%
77.8%	274.9	275.0	0.1	0.0%
79.0%	273.7	273.9	0.2	0.1%
80.2%	271.4	273.5	2.1	0.8%
81.5%	271.3	271.4	0.1	0.0%
82.7%	265.8	266.0	0.3	0.1%
84.0%	264.9	265.5	0.6	0.2%
85.2%	264.3	263.6	-0.7	-0.3%
86.4%	261.2	261.3	0.1	0.1%
87.7%	258.4	260.2	1.8	0.7%
88.9%	257.1	257.4	0.3	0.1%
90.1%	247.5	247.6	0.1	0.0%
91.4%	232.1	232.1	0.0	0.0%
92.6%	224.5	225.3	0.9	0.4%
93.8%	223.6	224.0	0.4	0.2%
95.1%	217.8	217.5	-0.2	-0.1%
96.3%	212.6	208.4	-4.2	-2.0%
97.5%	204.2	203.9	-0.3	-0.1%
98.8%	178.6	179.9	1.3	0.7%
100.0%	175.9	179.5	3.5	2.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	474.4	471.4	-3.0	-0.6%
1.2%	446.5	425.0	-21.5	-4.8%
2.5%	446.3	415.3	-31.0	-6.9%
3.7%	411.6	411.5	-0.1	0.0%
4.9%	407.8	397.7	-10.1	-2.5%
6.2%	400.8	388.6	-12.2	-3.0%
7.4%	392.4	382.6	-9.8	-2.5%
8.6%	384.7	382.1	-2.6	-0.7%
9.9%	384.6	382.1	-2.5	-0.7%
11.1%	377.7	375.5	-2.1	-0.6%
12.3%	376.9	375.5	-1.3	-0.4%
13.6%	374.4	371.3	-3.1	-0.8%
14.8%	373.3	366.0	-7.3	-1.9%
16.0%	368.7	362.5	-6.2	-1.7%
17.3%	367.0	356.8	-10.2	-2.8%
18.5%	366.7	355.6	-11.1	-3.0%
19.8%	356.9	355.4	-1.5	-0.4%
21.0%	355.7	354.0	-1.7	-0.5%
22.2%	355.2	352.7	-2.5	-0.7%
23.5%	354.4	347.6	-6.8	-1.9%
24.7%	353.9	347.4	-6.4	-1.8%
25.9%	351.0	344.1	-6.9	-2.0%
27.2%	348.1	343.2	-4.9	-1.4%
28.4%	347.9	343.0	-4.9	-1.4%
29.6%	347.1	342.8	-4.3	-1.2%
30.9%	344.0	341.0	-3.0	-0.9%
32.1%	343.3	340.3	-3.0	-0.9%
33.3%	342.1	339.2	-2.9	-0.8%
34.6%	338.6	338.8	0.2	0.1%
35.8%	334.8	334.4	-0.4	-0.1%
37.0%	333.9	334.4	0.5	0.1%
38.3%	332.1	330.4	-1.6	-0.5%
39.5%	332.0	330.4	-1.6	-0.5%
40.7%	332.0	329.0	-3.0	-0.9%
42.0%	331.1	328.1	-2.9	-0.9%
43.2%	330.4	328.0	-2.4	-0.7%
44.4%	328.7	327.4	-1.3	-0.4%
45.7%	325.1	327.0	2.0	0.6%
46.9%	324.6	325.5	0.9	0.3%
48.1%	323.0	325.3	2.3	0.7%
49.4%	321.9	324.3	2.4	0.7%
50.6%	320.3	324.3	4.0	1.2%
51.9%	319.6	323.4	3.8	1.2%
53.1%	317.3	320.4	3.1	1.0%
54.3%	315.8	318.3	2.5	0.8%
55.6%	315.7	316.6	0.9	0.3%
56.8%	311.1	315.3	4.1	1.3%
58.0%	310.6	311.4	0.7	0.2%
59.3%	310.1	311.2	1.1	0.4%
60.5%	309.5	310.4	0.9	0.3%
61.7%	308.0	309.3	1.3	0.4%
63.0%	306.6	308.1	1.5	0.5%
64.2%	306.5	306.6	0.1	0.0%
65.4%	303.5	306.6	3.1	1.0%
66.7%	303.3	304.6	1.4	0.4%
67.9%	302.4	302.3	-0.1	0.0%
69.1%	302.2	302.2	0.0	0.0%
70.4%	301.5	299.4	-2.1	-0.7%
71.6%	298.4	299.2	0.8	0.3%
72.8%	297.6	295.5	-2.1	-0.7%
74.1%	295.3	295.4	0.1	0.0%
75.3%	294.8	295.0	0.2	0.1%
76.5%	292.9	290.5	-2.4	-0.8%
77.8%	290.0	290.5	0.4	0.2%
79.0%	287.4	290.3	2.9	1.0%
80.2%	287.1	287.5	0.4	0.1%
81.5%	280.5	282.2	1.8	0.6%
82.7%	279.2	279.1	-0.1	0.0%
84.0%	278.1	278.2	0.0	0.0%
85.2%	266.1	266.8	0.8	0.3%
86.4%	253.7	254.2	0.5	0.2%
87.7%	245.9	246.0	0.2	0.1%
88.9%	221.4	222.1	0.7	0.3%
90.1%	200.4	200.9	0.6	0.3%
91.4%	200.3	200.8	0.5	0.2%
92.6%	200.2	200.7	0.5	0.3%
93.8%	198.9	200.1	1.2	0.6%
95.1%	194.1	194.2	0.1	0.0%
96.3%	188.2	188.9	0.7	0.4%
97.5%	184.3	185.3	1.0	0.5%
98.8%	177.0	178.2	1.2	0.7%
100.0%	173.0	173.3	0.3	0.2%

Table SQ-27-b

Old River at Rock Slough, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	637.3	640.2	2.9	0.5%
1.2%	603.9	592.7	-11.1	-1.8%
2.5%	551.8	535.3	-16.4	-3.0%
3.7%	537.9	530.5	-7.4	-1.4%
4.9%	350.5	350.9	0.4	0.1%
6.2%	345.7	345.1	-0.6	-0.2%
7.4%	343.2	343.8	0.6	0.2%
8.6%	340.4	338.5	-1.9	-0.6%
9.9%	334.0	324.6	-9.4	-2.8%
11.1%	329.4	324.6	-4.9	-1.5%
12.3%	328.7	321.1	-7.7	-2.3%
13.6%	323.7	307.6	-16.1	-5.0%
14.8%	320.3	307.2	-13.1	-4.1%
16.0%	310.7	300.9	-9.8	-3.1%
17.3%	305.0	299.7	-5.3	-1.8%
18.5%	304.7	298.7	-6.0	-2.0%
19.8%	303.9	297.0	-6.9	-2.3%
21.0%	303.0	294.7	-8.3	-2.7%
22.2%	299.4	292.4	-6.9	-2.3%
23.5%	299.3	291.4	-7.9	-2.6%
24.7%	296.7	290.8	-5.9	-2.0%
25.9%	295.8	289.7	-6.0	-2.0%
27.2%	294.4	289.3	-5.2	-1.8%
28.4%	294.3	288.6	-5.8	-2.0%
29.6%	292.4	287.0	-5.5	-1.9%
30.9%	291.9	286.6	-5.3	-1.8%
32.1%	290.1	285.9	-4.3	-1.5%
33.3%	289.3	285.7	-3.6	-1.2%
34.6%	287.3	285.1	-2.2	-0.8%
35.8%	284.9	284.9	0.0	0.0%
37.0%	284.4	282.3	-2.2	-0.8%
38.3%	284.2	280.1	-4.1	-1.4%
39.5%	283.3	278.8	-4.5	-1.6%
40.7%	282.1	277.5	-4.6	-1.6%
42.0%	280.0	277.4	-2.6	-0.9%
43.2%	279.2	276.8	-2.4	-0.9%
44.4%	277.8	276.7	-1.1	-0.4%
45.7%	276.2	274.5	-1.6	-0.6%
46.9%	275.8	274.3	-1.5	-0.5%
48.1%	274.7	273.5	-1.2	-0.4%
49.4%	274.0	272.8	-1.1	-0.4%
50.6%	273.3	266.2	-7.1	-2.6%
51.9%	271.9	265.4	-6.5	-2.4%
53.1%	263.6	263.8	0.1	0.1%
54.3%	262.9	262.4	-0.5	-0.2%
55.6%	262.4	261.5	-1.0	-0.4%
56.8%	260.8	260.7	-0.1	0.0%
58.0%	259.5	260.3	0.8	0.3%
59.3%	259.1	258.4	-0.7	-0.3%
60.5%	258.2	257.9	-0.3	-0.1%
61.7%	255.4	256.9	1.5	0.6%
63.0%	254.1	256.3	2.3	0.9%
64.2%	253.9	254.2	0.3	0.1%
65.4%	253.8	254.1	0.4	0.1%
66.7%	252.9	253.2	0.4	0.1%
67.9%	252.8	253.1	0.3	0.1%
69.1%	251.6	253.0	1.3	0.5%
70.4%	251.0	251.3	0.3	0.1%
71.6%	250.9	251.2	0.3	0.1%
72.8%	250.8	251.2	0.4	0.1%
74.1%	250.7	250.8	0.1	0.0%
75.3%	250.0	249.7	-0.3	-0.1%
76.5%	246.9	247.0	0.1	0.0%
77.8%	246.7	246.8	0.1	0.1%
79.0%	246.3	246.3	0.0	0.0%
80.2%	241.2	241.5	0.3	0.1%
81.5%	240.8	241.2	0.4	0.2%
82.7%	240.8	241.1	0.3	0.1%
84.0%	240.4	241.0	0.6	0.2%
85.2%	240.4	240.0	-0.4	-0.2%
86.4%	239.6	238.0	-1.6	-0.7%
87.7%	238.5	237.3	-1.1	-0.5%
88.9%	237.9	236.2	-1.8	-0.7%
90.1%	236.2	236.0	-0.3	-0.1%
91.4%	235.3	235.6	0.3	0.1%
92.6%	232.0	230.1	-1.9	-0.8%
93.8%	228.4	227.4	-1.0	-0.4%
95.1%	228.0	226.7	-1.3	-0.6%
96.3%	212.9	212.6	-0.3	-0.1%
97.5%	205.5	205.8	0.3	0.2%
98.8%	202.4	202.5	0.0	0.0%
100.0%	201.5	202.0	0.5	0.3%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	775.6	708.7	-66.9	-8.6%
1.2%	706.0	698.7	-7.3	-1.0%
2.5%	667.3	666.8	-0.5	-0.1%
3.7%	652.1	663.4	11.2	1.7%
4.9%	650.7	580.2	-70.5	-10.8%
6.2%	586.8	498.6	-88.2	-15.0%
7.4%	456.5	469.9	13.4	2.9%
8.6%	439.4	439.4	0.0	0.0%
9.9%	430.4	429.8	-0.6	-0.1%
11.1%	425.6	423.4	-2.1	-0.5%
12.3%	416.5	420.4	3.9	0.9%
13.6%	413.4	418.6	5.2	1.3%
14.8%	410.6	416.3	5.7	1.4%
16.0%	409.9	410.4	0.5	0.1%
17.3%	401.5	408.0	6.6	1.6%
18.5%	399.2	406.3	7.0	1.8%
19.8%	399.1	405.5	6.4	1.6%
21.0%	393.0	401.5	8.5	2.2%
22.2%	392.9	394.9	1.9	0.5%
23.5%	390.6	394.4	3.7	1.0%
24.7%	386.6	393.8	7.2	1.9%
25.9%	379.0	392.4	13.5	3.6%
27.2%	374.2	385.4	11.2	3.0%
28.4%	371.8	376.3	4.5	1.2%
29.6%	357.1	372.8	15.7	4.4%
30.9%	350.2	371.0	20.8	5.9%
32.1%	346.8	370.1	23.4	6.7%
33.3%	338.6	355.3	16.7	4.9%
34.6%	330.1	352.3	22.3	6.7%
35.8%	328.7	333.5	4.8	1.5%
37.0%	327.9	328.6	0.7	0.2%
38.3%	326.3	315.2	-11.1	-3.4%
39.5%	323.5	313.8	-9.7	-3.0%
40.7%	318.5	313.6	-4.9	-1.5%
42.0%	313.6	313.0	-0.7	-0.2%
43.2%	307.8	305.5	-2.3	-0.7%
44.4%	302.9	296.8	-6.1	-2.0%
45.7%	296.3	295.5	-0.8	-0.3%
46.9%	295.4	295.4	0.0	0.0%
48.1%	293.0	290.7	-2.2	-0.8%
49.4%	288.3	287.2	-1.1	-0.4%
50.6%	287.1	286.4	-0.7	-0.2%
51.9%	286.5	285.7	-0.8	-0.3%
53.1%	282.8	285.1	2.3	0.8%
54.3%	277.2	284.6	7.4	2.7%
55.6%	275.7	281.0	5.4	2.0%
56.8%	273.7	276.0	2.4	0.9%
58.0%	271.5	275.3	3.8	1.4%
59.3%	262.3	268.9	6.6	2.5%
60.5%	259.8	259.5	-0.2	-0.1%
61.7%	255.6	253.2	-2.4	-0.9%
63.0%	247.4	247.0	-0.4	-0.2%
64.2%	245.9	245.3	-0.6	-0.3%
65.4%	243.8	243.2	-0.6	-0.2%
66.7%	243.1	242.9	-0.2	-0.1%
67.9%	242.3	242.0	-0.3	-0.1%
69.1%	242.3	240.2	-2.1	-0.9%
70.4%	241.2	240.2	-1.1	-0.4%
71.6%	240.5	240.0	-0.6	-0.2%
72.8%	240.3	239.8	-0.6	-0.2%
74.1%	240.3	238.7	-1.6	-0.7%
75.3%	240.1	237.7	-2.4	-1.0%
76.5%	239.1	236.8	-2.3	-1.0%
77.8%	238.1	236.5	-1.5	-0.6%
79.0%	237.4	235.6	-1.8	-0.8%
80.2%	235.5	235.3	-0.2	-0.1%
81.5%	235.2	235.0	-0.3	-0.1%
82.7%	234.9	234.2	-0.7	-0.3%
84.0%	234.8	233.8	-1.0	-0.4%
85.2%	234.3	233.2	-1.1	-0.5%
86.4%	232.7	232.5	-0.2	-0.1%
87.7%	232.3	232.4	0.0	0.0%
88.9%	232.0	231.6	-0.4	-0.2%
90.1%	231.7	231.3	-0.4	-0.2%
91.4%	230.5	229.6	-1.0	-0.4%
92.6%	229.6	229.3	-0.3	-0.1%
93.8%	229.2	228.1	-1.2	-0.5%
95.1%	224.2	225.1	0.9	0.4%
96.3%	224.0	224.1	0.1	0.0%
97.5%	220.5	220.1	-0.5	-0.2%
98.8%	217.1	218.3	1.2	0.6%
100.0%	208.6	209.2	0.6	0.3%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	935.7	921.9	-13.8	-1.5%
1.2%	884.7	814.6	-70.1	-7.9%
2.5%	803.4	805.8	2.4	0.3%
3.7%	750.8	792.1	41.3	5.5%
4.9%	725.6	698.2	-27.5	-3.8%
6.2%	723.5	685.9	-37.6	-5.2%
7.4%	667.5	673.4	6.0	0.9%
8.6%	660.0	659.2	-0.8	-0.1%
9.9%	644.4	653.6	9.2	1.4%
11.1%	635.1	631.7	-3.3	-0.5%
12.3%	610.2	609.0	-1.1	-0.2%
13.6%	609.4	602.5	-6.9	-1.1%
14.8%	601.0	599.6	-1.4	-0.2%
16.0%	593.6	590.4	-3.1	-0.5%
17.3%	584.7	589.0	4.3	0.7%
18.5%	581.2	586.0	4.8	0.8%
19.8%	561.9	574.1	12.1	2.2%
21.0%	557.9	570.4	12.5	2.2%
22.2%	555.0	567.6	12.6	2.3%
23.5%	547.2	562.4	15.2	2.8%
24.7%	534.8	555.8	21.0	3.9%
25.9%	520.9	552.1	31.1	6.0%
27.2%	515.1	541.0	25.9	5.0%
28.4%	510.2	538.7	28.5	5.6%
29.6%	495.6	526.9	31.3	6.3%
30.9%	492.2	496.2	4.0	0.8%
32.1%	485.0	488.0	3.1	0.6%
33.3%	473.1	481.4	8.3	1.8%
34.6%	454.5	464.5	10.0	2.2%
35.8%	443.6	463.8	20.2	4.6%
37.0%	433.0	455.7	22.7	5.2%
38.3%	432.0	449.4	17.4	4.0%
39.5%	429.6	436.8	7.2	1.7%
40.7%	427.4	434.5	7.1	1.7%
42.0%	422.0	433.3	11.3	2.7%
43.2%	418.7	425.6	6.8	1.6%
44.4%	411.2	421.4	10.2	2.5%
45.7%	409.3	415.9	6.6	1.6%
46.9%	408.3	407.4	-0.9	-0.2%
48.1%	403.3	406.9	3.5	0.9%
49.4%	401.1	400.0	-1.1	-0.3%
50.6%	400.1	398.8	-1.3	-0.3%
51.9%	398.8	398.6	-0.3	-0.1%
53.1%	378.1	397.8	19.7	5.2%
54.3%	377.8	397.5	19.6	5.2%
55.6%	376.2	395.5	19.3	5.1%
56.8%	376.1	386.1	10.0	2.6%
58.0%	374.7	383.8	9.2	2.4%
59.3%	370.9	381.5	10.6	2.9%
60.5%	368.8	376.0	7.2	2.0%
61.7%	367.0	375.5	8.6	2.3%
63.0%	366.6	369.3	2.7	0.7%
64.2%	366.6	363.1	-3.5	-0.9%
65.4%	361.2	359.4	-1.8	-0.5%
66.7%	356.8	355.0	-1.7	-0.5%
67.9%	351.7	353.0	1.3	0.4%
69.1%	343.5	349.4	5.9	1.7%
70.4%	341.2	341.1	-0.1	0.0%
71.6%	331.1	339.6	8.6	2.6%
72.8%	328.6	338.9	10.4	3.2%
74.1%	327.5	338.8	11.3	3.5%
75.3%	326.2	337.9	11.7	3.6%
76.5%	325.5	336.2	10.7	3.3%
77.8%	320.8	332.7	11.9	3.7%
79.0%	319.6	327.8	8.2	2.6%
80.2%	317.8	319.8	2.0	0.6%
81.5%	317.3	318.1	0.8	0.3%
82.7%	315.0	314.9	-0.1	0.0%
84.0%	314.5	314.4	-0.1	0.0%
85.2%	310.8	311.7	0.9	0.3%
86.4%	310.7	310.8	0.1	0.0%
87.7%	297.0	307.2	10.2	3.4%
88.9%	292.8	299.3	6.4	2.2%
90.1%	290.8	298.9	8.1	2.8%
91.4%	290.8	296.5	5.7	2.0%
92.6%	289.3	296.3	7.1	2.4%
93.8%	288.8	295.2	6.4	2.2%
95.1%	285.1	288.9	3.8	1.4%
96.3%	279.3	283.0	3.7	1.3%
97.5%	274.5	279.4	5.0	1.8%
98.8%	268.8	270.7	2.0	0.7%
100.0%	254.3	252.2	-2.2	-0.8%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	968.9	899.4	-69.6	-7.2%
1.2%	933.8	893.8	-40.0	-4.3%
2.5%	924.7	888.1	-36.6	-4.0%
3.7%	879.8	877.4	-2.4	-0.3%
4.9%	877.6	874.5	-3.2	-0.4%
6.2%	875.3	860.2	-15.1	-1.7%
7.4%	874.3	848.0	-26.3	-3.0%
8.6%	863.8	841.2	-22.6	-2.6%
9.9%	861.6	840.5	-21.1	-2.5%
11.1%	856.4	833.7	-22.7	-2.7%
12.3%	852.8	821.8	-31.0	-3.6%
13.6%	850.9	820.9	-30.0	-3.5%
14.8%	850.0	820.3	-29.7	-3.5%
16.0%	842.5	820.0	-22.5	-2.7%
17.3%	830.0	818.2	-11.8	-1.4%
18.5%	828.8	809.9	-18.8	-2.3%
19.8%	828.4	803.4	-25.0	-3.0%
21.0%	825.2	803.4	-21.8	-2.6%
22.2%	819.2	800.3	-18.9	-2.3%
23.5%	816.9	791.5	-25.4	-3.1%
24.7%	813.6	791.4	-22.2	-2.7%
25.9%	813.3	780.5	-32.8	-4.0%
27.2%	809.2	766.6	-42.6	-5.3%
28.4%	805.1	748.1	-57.0	-7.1%
29.6%	804.9	747.9	-57.0	-7.1%
30.9%	803.6	747.2	-56.5	-7.0%
32.1%	800.0	743.0	-57.0	-7.1%
33.3%	781.1	741.3	-39.8	-5.1%
34.6%	765.1	732.8	-32.2	-4.2%
35.8%	754.5	725.9	-28.6	-3.8%
37.0%	728.2	725.5	-2.7	-0.4%
38.3%	726.3	721.8	-4.6	-0.6%
39.5%	721.2	709.0	-12.2	-1.7%
40.7%	706.3	692.3	-14.0	-2.0%
42.0%	701.5	688.0	-13.5	-1.9%
43.2%	654.1	676.5	22.4	3.4%
44.4%	646.8	656.4	9.6	1.5%
45.7%	645.6	654.0	8.4	1.3%
46.9%	631.9	638.1	6.2	1.0%
48.1%	630.2	638.0	7.8	1.2%
49.4%	626.0	629.0	3.0	0.5%
50.6%	610.0	627.7	17.7	2.9%
51.9%	610.0	622.6	12.6	2.1%
53.1%	603.0	618.3	15.3	2.5%
54.3%	602.0	617.1	15.1	2.5%
55.6%	597.1	598.5	1.4	0.2%
56.8%	596.4	595.4	-1.0	-0.2%
58.0%	588.3	595.0	6.7	1.1%
59.3%	576.2	588.2	12.0	2.1%
60.5%	575.1	573.9	-1.1	-0.2%
61.7%	555.9	562.0	6.1	1.1%
63.0%	555.0	560.2	5.2	0.9%
64.2%	548.8	558.7	9.9	1.8%
65.4%	543.2	548.6	5.4	1.0%
66.7%	541.5	547.8	6.3	1.2%
67.9%	540.1	544.4	4.3	0.8%
69.1%	537.6	542.3	4.8	0.9%
70.4%	534.2	542.0	7.8	1.5%
71.6%	531.0	541.2	10.2	1.9%
72.8%	529.4	540.6	11.2	2.1%
74.1%	527.6	526.6	-1.0	-0.2%
75.3%	521.3	521.7	0.4	0.1%
76.5%	513.7	513.1	-0.6	-0.1%
77.8%	509.0	485.1	-23.9	-4.7%
79.0%	507.1	474.5	-32.6	-6.4%
80.2%	493.1	459.5	-33.6	-6.8%
81.5%	480.1	456.9	-23.2	-4.8%
82.7%	476.3	455.1	-21.2	-4.5%
84.0%	467.7	448.7	-19.1	-4.1%
85.2%	459.4	444.4	-15.1	-3.3%
86.4%	457.8	443.1	-14.7	-3.2%
87.7%	452.4	442.9	-9.5	-2.1%
88.9%	443.0	441.9	-1.0	-0.2%
90.1%	417.7	434.7	16.9	4.0%
91.4%	407.7	419.0	11.3	2.8%
92.6%	403.2	413.3	10.1	2.5%
93.8%	400.8	412.3	11.6	2.9%
95.1%	400.2	407.9	7.6	1.9%
96.3%	388.3	407.2	18.9	4.9%
97.5%	379.3	400.3	21.0	5.5%
98.8%	371.2	376.5	5.3	1.4%
100.0%	367.7	372.5	4.9	1.3%

Figure SQ-28-b
North Bay Aqueduct Intake (Barker Slough), Monthly EC
Probability of Exceedance

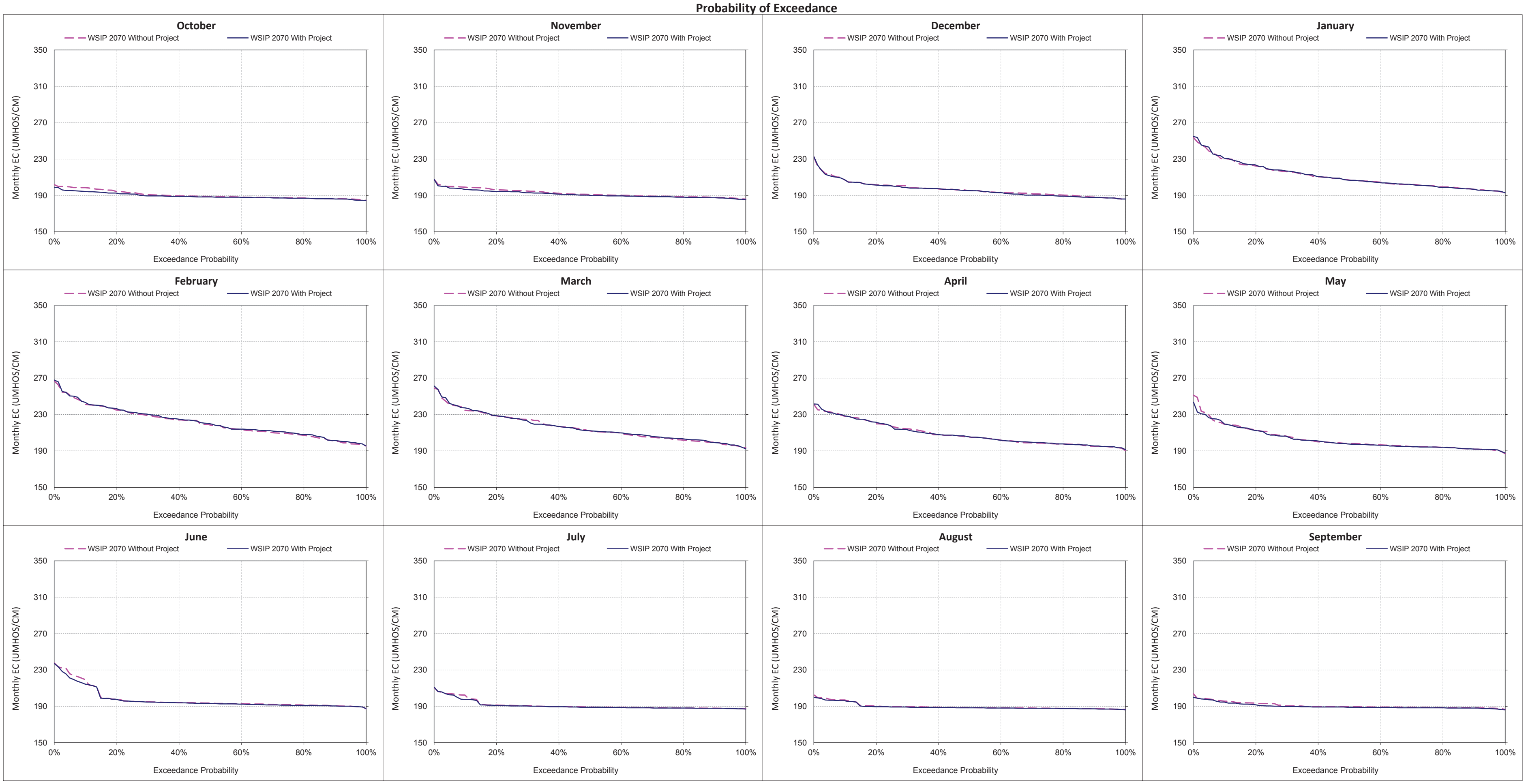


Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	201.8	198.8	-3.0	-1.5%
1.2%	199.9	198.6	-1.3	-0.7%
2.5%	199.9	196.2	-3.7	-1.9%
3.7%	199.6	195.7	-4.0	-2.0%
4.9%	199.5	195.4	-4.1	-2.1%
6.2%	198.7	195.1	-3.6	-1.8%
7.4%	198.7	194.8	-3.9	-1.9%
8.6%	198.6	194.7	-3.9	-1.9%
9.9%	198.6	194.5	-4.1	-2.1%
11.1%	198.1	194.2	-3.9	-2.0%
12.3%	197.4	194.0	-3.4	-1.7%
13.6%	197.0	193.8	-3.2	-1.6%
14.8%	196.6	193.4	-3.2	-1.6%
16.0%	196.3	193.1	-3.1	-1.6%
17.3%	195.9	192.8	-3.1	-1.6%
18.5%	195.8	192.8	-3.1	-1.6%
19.8%	194.5	192.7	-1.8	-0.9%
21.0%	194.4	191.9	-2.5	-1.3%
22.2%	194.0	191.9	-2.1	-1.1%
23.5%	193.3	191.9	-1.5	-0.8%
24.7%	193.3	191.7	-1.6	-0.8%
25.9%	192.8	191.5	-1.3	-0.7%
27.2%	192.0	190.3	-1.7	-0.9%
28.4%	191.4	189.7	-1.6	-0.8%
29.6%	191.2	189.6	-1.6	-0.8%
30.9%	190.7	189.5	-1.2	-0.6%
32.1%	190.6	189.5	-1.2	-0.6%
33.3%	190.4	189.4	-0.9	-0.5%
34.6%	190.3	189.4	-0.9	-0.5%
35.8%	190.0	189.2	-0.9	-0.5%
37.0%	189.9	189.1	-0.8	-0.4%
38.3%	189.7	189.1	-0.6	-0.3%
39.5%	189.6	189.0	-0.7	-0.4%
40.7%	189.5	188.9	-0.6	-0.3%
42.0%	189.5	188.9	-0.7	-0.3%
43.2%	189.3	188.8	-0.4	-0.2%
44.4%	189.3	188.7	-0.5	-0.3%
45.7%	189.1	188.5	-0.6	-0.3%
46.9%	189.1	188.4	-0.6	-0.3%
48.1%	189.0	188.4	-0.6	-0.3%
49.4%	189.0	188.4	-0.6	-0.3%
50.6%	188.9	188.3	-0.7	-0.3%
51.9%	188.9	188.2	-0.7	-0.4%
53.1%	188.9	188.2	-0.7	-0.4%
54.3%	188.8	188.2	-0.6	-0.3%
55.6%	188.5	188.2	-0.4	-0.2%
56.8%	188.5	188.0	-0.5	-0.3%
58.0%	188.4	188.0	-0.4	-0.2%
59.3%	188.3	188.0	-0.3	-0.2%
60.5%	188.2	187.9	-0.3	-0.2%
61.7%	188.0	187.8	-0.2	-0.1%
63.0%	187.9	187.7	-0.2	-0.1%
64.2%	187.9	187.6	-0.3	-0.2%
65.4%	187.9	187.6	-0.3	-0.2%
66.7%	187.9	187.6	-0.3	-0.2%
67.9%	187.8	187.4	-0.4	-0.2%
69.1%	187.8	187.4	-0.4	-0.2%
70.4%	187.6	187.3	-0.3	-0.1%
71.6%	187.6	187.3	-0.3	-0.1%
72.8%	187.5	187.2	-0.4	-0.2%
74.1%	187.5	187.1	-0.3	-0.2%
75.3%	187.4	187.0	-0.4	-0.2%
76.5%	187.4	187.0	-0.4	-0.2%
77.8%	187.4	187.0	-0.4	-0.2%
79.0%	187.2	187.0	-0.3	-0.1%
80.2%	187.2	186.9	-0.3	-0.1%
81.5%	186.8	186.9	0.1	0.0%
82.7%	186.7	186.6	-0.1	-0.1%
84.0%	186.7	186.5	-0.3	-0.1%
85.2%	186.7	186.4	-0.3	-0.2%
86.4%	186.6	186.4	-0.3	-0.1%
87.7%	186.5	186.3	-0.2	-0.1%
88.9%	186.4	186.3	-0.1	0.0%
90.1%	186.4	186.2	-0.2	-0.1%
91.4%	186.3	186.1	-0.2	-0.1%
92.6%	186.3	186.1	-0.2	-0.1%
93.8%	186.2	186.0	-0.2	-0.1%
95.1%	186.2	185.5	-0.6	-0.3%
96.3%	185.9	185.0	-1.0	-0.5%
97.5%	185.5	184.7	-0.7	-0.4%
98.8%	185.2	184.6	-0.6	-0.3%
100.0%	184.6	184.4	-0.2	-0.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	207.7	207.4	-0.3	-0.1%
1.2%	202.3	200.8	-1.5	-0.7%
2.5%	201.3	200.1	-1.1	-0.6%
3.7%	200.2	200.0	-0.2	-0.1%
4.9%	200.1	198.2	-1.9	-0.9%
6.2%	200.0	198.0	-2.0	-1.0%
7.4%	199.6	197.7	-1.9	-1.0%
8.6%	199.4	197.4	-2.0	-1.0%
9.9%	199.1	196.7	-2.5	-1.2%
11.1%	198.7	196.5	-2.3	-1.1%
12.3%	198.7	196.2	-2.5	-1.2%
13.6%	198.6	196.1	-2.5	-1.3%
14.8%	198.6	195.8	-2.7	-1.4%
16.0%	198.3	195.0	-3.3	-1.7%
17.3%	197.7	194.9	-2.8	-1.4%
18.5%	196.8	194.8	-2.0	-1.0%
19.8%	196.3	194.5	-1.7	-0.9%
21.0%	196.1	194.5	-1.7	-0.8%
22.2%	196.0	194.3	-1.7	-0.9%
23.5%	195.8	194.2	-1.5	-0.8%
24.7%	195.5	194.2	-1.3	-0.7%
25.9%	195.4	194.1	-1.3	-0.6%
27.2%	195.3	194.1	-1.2	-0.6%
28.4%	194.9	193.2	-1.7	-0.9%
29.6%	194.9	193.0	-1.9	-1.0%
30.9%	194.6	192.9	-1.7	-0.9%
32.1%	194.6	192.6	-2.0	-1.0%
33.3%	194.4	192.6	-1.8	-0.9%
34.6%	194.2	192.6	-1.6	-0.8%
35.8%	193.3	192.5	-0.8	-0.4%
37.0%	192.9	192.4	-0.5	-0.3%
38.3%	192.9	191.9	-1.0	-0.5%
39.5%	192.5	191.5	-0.9	-0.5%
40.7%	192.1	191.3	-0.7	-0.4%
42.0%	192.0	191.2	-0.8	-0.4%
43.2%	191.5	190.9	-0.6	-0.3%
44.4%	191.5	190.9	-0.6	-0.3%
45.7%	191.4	190.7	-0.6	-0.3%
46.9%	191.3	190.5	-0.9	-0.5%
48.1%	191.3	190.4	-0.9	-0.5%
49.4%	191.3	190.4	-0.9	-0.5%
50.6%	191.1	189.9	-1.1	-0.6%
51.9%	190.8	189.9	-0.8	-0.4%
53.1%	190.7	189.8	-0.9	-0.5%
54.3%	190.6	189.7	-0.9	-0.5%
55.6%	190.5	189.6	-0.9	-0.4%
56.8%	190.3	189.6	-0.7	-0.4%
58.0%	190.3	189.5	-0.8	-0.4%
59.3%	190.2	189.5	-0.8	-0.4%
60.5%	190.1	189.4	-0.8	-0.4%
61.7%	190.1	189.2	-0.9	-0.5%
63.0%	190.0	189.2	-0.8	-0.4%
64.2%	189.6	189.2	-0.4	-0.2%
65.4%	189.5	189.1	-0.4	-0.2%
66.7%	189.4	189.0	-0.4	-0.2%
67.9%	189.3	188.9	-0.4	-0.2%
69.1%	189.2	188.8	-0.4	-0.2%
70.4%	189.2	188.8	-0.4	-0.2%
71.6%	189.2	188.8	-0.4	-0.2%
72.8%	189.1	188.7	-0.4	-0.2%
74.1%	189.1	188.6	-0.5	-0.3%
75.3%	189.0	188.6	-0.5	-0.2%
76.5%	189.0	188.4	-0.6	-0.3%
77.8%	188.9	188.2	-0.8	-0.4%
79.0%	188.9	188.0	-0.8	-0.4%
80.2%	188.5	188.0	-0.4	-0.2%
81.5%	188.4	187.9	-0.5	-0.3%
82.7%	188.4	187.9	-0.5	-0.3%
84.0%	188.4	187.9	-0.5	-0.2%
85.2%	188.3	187.7	-0.6	-0.3%
86.4%	188.3	187.6	-0.7	-0.4%
87.7%	188.2	187.5	-0.6	-0.3%
88.9%	188.0	187.5	-0.5	-0.3%
90.1%	187.8	187.4	-0.4	-0.2%
91.4%	187.8	187.4	-0.4	-0.2%
92.6%	187.7	187.2	-0.5	-0.3%
93.8%	187.6	187.0	-0.7	-0.4%
95.1%	187.4	186.8	-0.6	-0.3%
96.3%	187.0	186.5	-0.5	-0.3%
97.5%	186.7	185.9	-0.8	-0.4%
98.8%	186.3	185.8	-0.4	-0.2%
100.0%	185.9	185.2	-0.7	-0.4%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	232.6	232.7	0.1	0.0%
1.2%	221.6	223.2	1.5	0.7%
2.5%	218.0	217.4	-0.6	-0.3%
3.7%	214.2	213.2	-1.0	-0.5%
4.9%	214.2	211.7	-2.6	-1.2%
6.2%	211.6	210.6	-1.0	-0.5%
7.4%	210.4	210.1	-0.3	-0.1%
8.6%	210.0	209.1	-1.0	-0.5%
9.9%	207.2	207.3	0.1	0.1%
11.1%	204.8	204.7	0.0	0.0%
12.3%	204.7	204.5	-0.1	-0.1%
13.6%	204.5	204.3	-0.2	-0.1%
14.8%	204.1	204.3	0.2	0.1%
16.0%	202.9	202.8	-0.1	-0.1%
17.3%	202.4	202.4	0.0	0.0%
18.5%	202.3	201.8	-0.5	-0.3%
19.8%	201.7	201.5	-0.2	-0.1%
21.0%	201.6	201.3	-0.3	-0.1%
22.2%	201.3	200.8	-0.6	-0.3%
23.5%	201.3	200.6	-0.7	-0.3%
24.7%	201.0	200.5	-0.5	-0.2%
25.9%	201.0	200.2	-0.8	-0.4%
27.2%	200.9	200.0	-0.9	-0.5%
28.4%	200.8	198.9	-1.9	-0.9%
29.6%	200.6	198.7	-1.9	-1.0%
30.9%	198.6	198.1	-0.4	-0.2%
32.1%	198.4	198.1	-0.3	-0.2%
33.3%	198.2	198.0	-0.2	-0.1%
34.6%	198.0	198.0	0.0	0.0%
35.8%	198.0	197.9	-0.1	0.0%
37.0%	197.7	197.7	-0.1	0.0%
38.3%	197.6	197.7	0.1	0.0%
39.5%	197.5	197.6	0.1	0.1%
40.7%	196.9	197.3	0.3	0.2%
42.0%	196.9	196.8	-0.1	-0.1%
43.2%	196.9	196.7	-0.2	-0.1%
44.4%	196.8	196.6	-0.1	-0.1%
45.7%	196.2	196.3	0.2	0.1%
46.9%	196.1	195.9	-0.2	-0.1%
48.1%	196.1	195.5	-0.6	-0.3%
49.4%	195.5	195.4	-0.1	0.0%
50.6%	195.5	195.4	-0.1	0.0%
51.9%	195.4	195.3	0.0	0.0%
53.1%	195.1	194.9	-0.2	-0.1%
54.3%	194.2	194.5	0.4	0.2%
55.6%	193.9	194.4	0.5	0.3%
56.8%	193.9	193.6	-0.2	-0.1%
58.0%	193.7	193.3	-0.4	-0.2%
59.3%	193.2	193.2	0.0	0.0%
60.5%	193.1	193.0	-0.1	0.0%
61.7%	193.0	192.0	-1.0	-0.5%
63.0%	192.9	191.8	-1.0	-0.5%
64.2%	192.8	191.6	-1.3	-0.7%
65.4%	192.8	191.4	-1.4	-0.7%
66.7%	192.6	191.0	-1.6	-0.8%
67.9%	192.6	190.5	-2.1	-1.1%
69.1%	192.2	190.5	-1.7	-0.9%
70.4%	191.7	190.4	-1.3	-0.7%
71.6%	191.6	190.4	-1.3	-0.7%
72.8%	191.6	190.3	-1.3	-0.7%
74.1%	191.5	190.0	-1.5	-0.8%
75.3%	191.2	189.9	-1.3	-0.7%
76.5%	191.2	189.8	-1.3	-0.7%
77.8%	190.7	189.6	-1.1	-0.6%
79.0%	190.6	189.4	-1.2	-0.6%
80.2%	190.3	189.3	-1.1	-0.6%
81.5%	190.2	189.0	-1.2	-0.6%
82.7%	190.2	189.0	-1.2	-0.6%
84.0%	189.8	188.7	-1.1	-0.6%
85.2%	189.3	188.3	-1.0	-0.5%
86.4%	188.7	188.2	-0.5	-0.3%
87.7%	188.7	188.0	-0.7	-0.4%
88.9%	188.3	188.0	-0.3	-0.2%
90.1%	188.2	187.8	-0.4	-0.2%
91.4%	187.8	187.7	-0.1	-0.1%
92.6%	187.6	187.4	-0.1	-0.1%
93.8%	187.6	187.2	-0.3	-0.2%
95.1%	187.2	187.2	0.0	0.0%
96.3%	187.2	187.2	0.0	0.0%
97.5%	186.5	186.3	-0.2	-0.1%
98.8%	186.0	186.1	0.1	0.1%
100.0%	185.8	186.0	0.2	0.1%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	253.6	254.9	1.2	0.5%
1.2%	248.9	253.9	4.9	2.0%
2.5%	245.7	245.5	-0.3	-0.1%
3.7%	243.3	244.4	1.0	0.4%
4.9%	238.9	243.2	4.4	1.8%
6.2%	236.8	235.8	-1.0	-0.4%
7.4%	234.6	234.2	-0.4	-0.2%
8.6%	230.9	233.7	2.8	1.2%
9.9%	230.4	231.0	0.6	0.3%
11.1%	230.2	230.7	0.5	0.2%
12.3%	229.7	229.3	-0.4	-0.2%
13.6%	226.3	228.0	1.6	0.7%
14.8%	224.7	226.9	2.3	1.0%
16.0%	223.8	224.8	1.0	0.4%
17.3%	223.7	224.2	0.5	0.2%
18.5%	223.3	223.7	0.5	0.2%
19.8%	222.6	223.7	1.0	0.5%
21.0%	221.9	222.1	0.1	0.1%
22.2%	221.5	221.9	0.4	0.2%
23.5%	219.1	219.6	0.4	0.2%
24.7%	218.6	218.5	-0.1	0.0%
25.9%	217.5	218.1	0.6	0.3%
27.2%	217.3	218.0	0.7	0.3%
28.4%	216.6	217.7	1.1	0.5%
29.6%	216.2	216.9	0.7	0.3%
30.9%	215.8	216.6	0.7	0.3%
32.1%	215.7	215.9	0.2	0.1%
33.3%	214.8	214.9	0.1	0.0%
34.6%	213.4	214.7	1.3	0.6%
35.8%	213.0	213.1	0.1	0.1%
37.0%	212.7	212.8	0.1	0.1%
38.3%	211.2	212.5	1.3	0.6%
39.5%	210.5	211.1	0.6	0.3%
40.7%	210.4	210.5	0.1	0.0%
42.0%	210.1	210.1	0.0	0.0%
43.2%	210.0	210.0	-0.1	0.0%
44.4%	208.9	209.2	0.3	0.1%
45.7%	208.9	209.0	0.2	0.1%
46.9%	208.8	208.9	0.1	0.1%
48.1%	207.2	207.6	0.4	0.2%
49.4%	207.2	206.8	-0.4	-0.2%
50.6%	206.6	206.7	0.1	0.1%
51.9%	206.4	206.5	0.1	0.1%
53.1%	206.4	206.2	-0.2	-0.1%
54.3%	206.0	206.2	0.2	0.1%
55.6%	205.8	205.4	-0.4	-0.2%
56.8%	205.8	205.3	-0.5	-0.3%
58.0%	205.2	204.5	-0.7	-0.3%
59.3%	204.8	204.4	-0.4	-0.2%
60.5%	204.4	203.8	-0.7	-0.3%
61.7%	203.4	203.7	0.3	0.2%
63.0%	203.1	203.6	0.6	0.3%
64.2%	202.6	203.3	0.7	0.3%
65.4%	202.3	202.8	0.4	0.2%
66.7%	202.3	202.7	0.4	0.2%
67.9%	202.3	202.4	0.1	0.1%
69.1%	202.1	202.3	0.2	0.1%
70.4%	202.1	201.8	-0.2	-0.1%
71.6%	201.9	201.3	-0.6	-0.3%
72.8%	201.1	201.2	0.1	0.0%
74.1%	201.0	200.9	-0.1	0.0%
75.3%	200.9	200.7	-0.2	-0.1%
76.5%	200.9	200.4	-0.5	-0.2%
77.8%	200.0	199.9	-0.1	-0.1%
79.0%	199.4	199.0	-0.4	-0.2%
80.2%	199.4	198.9	-0.5	-0.2%
81.5%	199.4	198.9	-0.5	-0.3%
82.7%	198.9	198.6	-0.3	-0.2%
84.0%	198.8	198.0	-0.8	-0.4%
85.2%	198.1	197.8	-0.3	-0.1%
86.4%	197.7	197.4	-0.3	-0.1%
87.7%	197.7	197.4	-0.3	-0.2%
88.9%	197.2	197.3	0.1	0.1%
90.1%	196.7	196.5	-0.2	-0.1%
91.4%	196.4	195.8	-0.6	-0.3%
92.6%	196.3	195.8	-0.5	-0.3%
93.8%	195.6	195.4	-0.1	-0.1%
95.1%	195.1	195.3	0.2	0.1%
96.3%	195.1	195.0	-0.1	-0.1%
97.5%	194.9	194.9	0.1	0.0%
98.8%	194.0	194.5	0.6	0.3%
100.0%	193.3	193.0	-0.3	-0.2%

Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	266.6	267.7	1.1	0.4%
1.2%	262.6	265.9	3.3	1.2%
2.5%	254.6	255.3	0.7	0.3%
3.7%	254.5	254.6	0.0	0.0%
4.9%	251.5	250.4	-1.1	-0.4%
6.2%	248.7	250.3	1.6	0.6%
7.4%	246.8	249.1	2.3	0.9%
8.6%	244.8	244.8	-0.1	0.0%
9.9%	241.2	243.4	2.2	0.9%
11.1%	240.6	240.9	0.3	0.1%
12.3%	240.5	240.4	-0.1	0.0%
13.6%	240.2	240.2	0.0	0.0%
14.8%	239.3	239.7	0.4	0.2%
16.0%	239.1	239.0	-0.1	0.0%
17.3%	236.9	237.2	0.3	0.1%
18.5%	236.8	237.0	0.2	0.1%
19.8%	235.0	236.7	1.7	0.7%
21.0%	234.8	235.0	0.2	0.1%
22.2%	233.7	234.6	0.9	0.4%
23.5%	233.0	232.8	-0.2	-0.1%
24.7%	231.5	232.5	1.1	0.5%
25.9%	230.7	232.1	1.3	0.6%
27.2%	230.3	231.3	1.0	0.4%
28.4%	229.9	230.7	0.8	0.3%
29.6%	229.1	230.4	1.4	0.6%
30.9%	228.8	229.7	0.9	0.4%
32.1%	227.6	229.4	1.8	0.8%
33.3%	227.2	229.0	1.7	0.8%
34.6%	226.2	226.9	0.7	0.3%
35.8%	225.5	226.3	0.8	0.4%
37.0%	225.3	225.8	0.4	0.2%
38.3%	224.5	225.7	1.2	0.5%
39.5%	224.1	225.1	1.0	0.5%
40.7%	224.0	224.4	0.4	0.2%
42.0%	223.6	224.1	0.4	0.2%
43.2%	223.5	223.8	0.3	0.1%
44.4%	223.4	223.3	-0.2	-0.1%
45.7%	223.4	222.7	-0.6	-0.3%
46.9%	219.2	221.0	1.8	0.8%
48.1%	219.0	220.5	1.5	0.7%
49.4%	218.9	220.3	1.3	0.6%
50.6%	218.0	219.2	1.2	0.6%
51.9%	217.9	217.9	0.0	0.0%
53.1%	217.8	217.9	0.1	0.0%
54.3%	215.4	216.2	0.8	0.4%
55.6%	215.2	215.6	0.5	0.2%
56.8%	214.5	214.0	-0.5	-0.2%
58.0%	214.1	213.9	-0.3	-0.1%
59.3%	213.7	213.8	0.2	0.1%
60.5%	213.1	213.8	0.7	0.3%
61.7%	212.6	213.5	0.9	0.4%
63.0%	212.2	213.5	1.3	0.6%
64.2%	211.6	213.3	1.6	0.8%
65.4%	211.4	212.9	1.5	0.7%
66.7%	211.3	212.6	1.2	0.6%
67.9%	211.1	212.3	1.2	0.6%
69.1%	210.6	212.2	1.6	0.8%
70.4%	209.8	211.5	1.7	0.8%
71.6%	209.6	211.3	1.7	0.8%
72.8%	209.5	211.1	1.6	0.8%
74.1%	209.4	210.7	1.3	0.6%
75.3%	208.9	210.0	1.0	0.5%
76.5%	208.4	209.7	1.2	0.6%
77.8%	207.9	209.2	1.3	0.6%
79.0%	207.6	208.1	0.5	0.3%
80.2%	207.1	208.0	0.9	0.4%
81.5%	206.2	207.9	1.7	0.8%
82.7%	205.7	207.6	1.9	0.9%
84.0%	204.8	206.3	1.5	0.7%
85.2%	204.0	205.8	1.7	0.9%
86.4%	204.0	204.7	0.7	0.3%
87.7%	202.0	202.0	0.0	0.0%
88.9%	201.4	201.4	0.0	0.0%
90.1%	200.8	201.2	0.4	0.2%
91.4%	200.2	200.9	0.7	0.4%
92.6%	198.8	200.3	1.5	0.8%
93.8%	198.8	200.3	1.5	0.8%
95.1%	197.7	199.3	1.6	0.8%
96.3%	197.7	199.0	1.3	0.7%
97.5%	197.5	198.2	0.7	0.4%
98.8%	196.8	197.6	0.8	0.4%
100.0%	195.4	195.4	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	258.9	261.3	2.4	0.9%
1.2%	257.7	257.5	-0.2	-0.1%
2.5%	248.0	249.2	1.2	0.5%
3.7%	244.7	248.3	3.6	1.5%
4.9%	240.8	242.3	1.4	0.6%
6.2%	239.8	240.9	1.0	0.4%
7.4%	239.5	239.5	0.0	0.0%
8.6%	238.6	237.5	-1.1	-0.5%
9.9%	234.7	237.4	2.7	1.2%
11.1%	234.3	236.5	2.3	1.0%
12.3%	234.0	234.5	0.4	0.2%
13.6%	233.4	234.1	0.6	0.3%
14.8%	232.9	233.5	0.6	0.3%
16.0%	231.6	232.1	0.5	0.2%
17.3%	231.5	231.4	0.0	0.0%
18.5%	228.8	229.4	0.6	0.3%
19.8%	228.6	228.8	0.2	0.1%
21.0%	228.1	228.2	0.1	0.1%
22.2%	227.2	227.8	0.6	0.3%
23.5%	227.1	226.8	-0.3	-0.2%
24.7%	226.8	225.9	-0.9	-0.4%
25.9%	225.0	225.6	0.6	0.3%
27.2%	224.9	225.3	0.4	0.2%
28.4%	224.9	223.9	-1.0	-0.4%
29.6%	224.7	223.5	-1.2	-0.5%
30.9%	224.5	220.7	-3.9	-1.7%
32.1%	223.4	219.5	-4.0	-1.8%
33.3%	223.4	219.4	-4.0	-1.8%
34.6%	220.2	219.3	-0.9	-0.4%
35.8%	218.9	218.4	-0.5	-0.2%
37.0%	218.1	218.4	0.3	0.1%
38.3%	217.4	218.0	0.6	0.3%
39.5%	216.9	217.1	0.2	0.1%
40.7%	216.5	216.5	0.0	0.0%
42.0%	216.4	215.9	-0.5	-0.2%
43.2%	215.4	215.7	0.3	0.1%
44.4%	215.4	215.4	0.0	0.0%
45.7%	214.8	213.9	-0.9	-0.4%
46.9%	214.7	213.1	-1.6	-0.7%
48.1%	213.5	212.5	-0.9	-0.4%
49.4%	212.3	212.2	-0.1	-0.1%
50.6%	211.7	211.9	0.2	0.1%
51.9%	211.1	211.5	0.4	0.2%
53.1%	211.0	211.5	0.5	0.2%
54.3%	210.8	211.0	0.2	0.1%
55.6%	210.6	210.9	0.3	0.1%
56.8%	210.3	210.7	0.4	0.2%
58.0%	210.2	210.6	0.4	0.2%
59.3%	209.9	209.9	-0.1	0.0%
60.5%	208.3	209.8	1.4	0.7%
61.7%	208.1	208.9	0.8	0.4%
63.0%	207.5	208.6	1.1	0.5%
64.2%	207.1	207.9	0.9	0.4%
65.4%	206.9	207.8	1.0	0.5%
66.7%	205.6	207.6	2.0	1.0%
67.9%	205.4	206.9	1.5	0.8%
69.1%	205.2	206.6	1.5	0.7%
70.4%	205.0	205.8	0.8	0.4%
71.6%	204.4	205.5	1.1	0.5%
72.8%	204.2	205.1	0.9	0.4%
74.1%	204.1	204.3	0.2	0.1%
75.3%	204.1	204.1	0.0	0.0%
76.5%	202.7	204.0	1.3	0.7%
77.8%	202.3	203.6	1.3	0.7%
79.0%	202.2	203.5	1.3	0.7%
80.2%	201.7	203.2	1.5	0.7%
81.5%	201.3	202.6	1.3	0.7%
82.7%	201.1	202.2	1.1	0.6%
84.0%	200.8	202.2	1.4	0.7%
85.2%	200.5	201.8	1.3	0.7%
86.4%	200.4	201.7	1.3	0.6%
87.7%	199.7	200.8	1.1	0.5%
88.9%	199.7	199.5	-0.2	-0.1%
90.1%	199.4	199.1	-0.3	-0.1%
91.4%	199.1	198.7	-0.4	-0.2%
92.6%	197.1	198.1	1.0	0.5%
93.8%	196.8	197.9	1.1	0.6%
95.1%	196.0	196.5	0.5	0.2%
96.3%	195.8	196.4	0.6	0.3%
97.5%	195.4	195.7	0.3	0.2%
98.8%	193.9	194.0	0.1	0.1%
100.0%	193.9	192.3	-1.6	-0.8%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	241.3	241.6	0.3	0.1%
1.2%	235.1	241.4	6.3	2.7%
2.5%	234.9	235.8	0.9	0.4%
3.7%	233.2	234.0	0.9	0.4%
4.9%	233.2	231.8	-1.3	-0.6%
6.2%	232.0	231.7	-0.3	-0.1%
7.4%	231.5	230.2	-1.3	-0.6%
8.6%	229.4	230.2	0.8	0.3%
9.9%	228.2	228.4	0.1	0.1%
11.1%	227.5	227.8	0.3	0.1%
12.3%	226.7	226.8	0.1	0.1%
13.6%	226.6	225.0	-1.6	-0.7%
14.8%	225.8	224.6	-1.1	-0.5%
16.0%	224.4	224.6	0.2	0.1%
17.3%	223.3	223.2	-0.1	0.0%
18.5%	222.2	221.9	-0.3	-0.1%
19.8%	219.7	221.7	1.9	0.9%
21.0%	219.7	220.5	0.8	0.4%
22.2%	219.4	219.8	0.4	0.2%
23.5%	219.0	219.2	0.2	0.1%
24.7%	217.3	217.7	0.4	0.2%
25.9%	216.2	213.9	-2.3	-1.1%
27.2%	215.4	213.9	-1.5	-0.7%
28.4%	214.8	213.8	-1.0	-0.5%
29.6%	214.3	213.7	-0.6	-0.3%
30.9%	214.1	212.1	-2.0	-0.9%
32.1%	213.0	211.5	-1.5	-0.7%
33.3%	212.9	210.7	-2.2	-1.0%
34.6%	212.0	210.6	-1.4	-0.7%
35.8%	211.1	209.7	-1.4	-0.7%
37.0%	210.6	209.0	-1.6	-0.7%
38.3%	207.9	208.8	0.9	0.5%
39.5%	207.8	208.3	0.5	0.2%
40.7%	207.8	207.7	-0.1	0.0%
42.0%	207.2	207.5	0.3	0.1%
43.2%	207.1	207.5	0.4	0.2%
44.4%	207.1	207.4	0.3	0.2%
45.7%	206.9	206.9	0.0	0.0%
46.9%	206.3	206.4	0.1	0.0%
48.1%	205.7	206.4	0.7	0.3%
49.4%	205.3	205.7	0.4	0.2%
50.6%	205.0	205.1	0.1	0.1%
51.9%	204.9	205.0	0.2	0.1%
53.1%	204.8	204.8	0.0	0.0%
54.3%	204.4	204.2	-0.2	-0.1%
55.6%	203.7	203.9	0.2	0.1%
56.8%	203.4	203.1	-0.3	-0.1%
58.0%	202.6	202.9	0.3	0.2%
59.3%	202.3	201.9	-0.5	-0.2%
60.5%	201.3	201.6	0.3	0.2%
61.7%	201.3	201.0	-0.3	-0.2%
63.0%	201.2	200.7	-0.5	-0.2%
64.2%	200.6	200.6	0.0	0.0%
65.4%	199.5	200.2	0.8	0.4%
66.7%	199.1	200.1	1.0	0.5%
67.9%	198.9	200.0	1.1	0.5%
69.1%	198.9	199.8	0.9	0.4%
70.4%	198.8	199.5	0.7	0.4%
71.6%	198.6	199.3	0.7	0.4%
72.8%	198.5	199.3	0.7	0.4%
74.1%	198.5	198.8	0.2	0.1%
75.3%	198.0	198.5	0.5	0.3%
76.5%	197.8	198.4	0.6	0.3%
77.8%	197.7	197.7	0.0	0.0%
79.0%	197.6	197.6	0.0	0.0%
80.2%	197.6	197.6	0.1	0.0%
81.5%	197.5	197.1	-0.4	-0.2%
82.7%	197.3	197.1	-0.1	-0.1%
84.0%	197.2	196.9	-0.3	-0.2%
85.2%	197.2	196.9	-0.3	-0.2%
86.4%	196.1	196.6	0.5	0.3%
87.7%	195.4	196.5	1.1	0.6%
88.9%	195.0	195.8	0.8	0.4%
90.1%	194.9	195.5	0.6	0.3%
91.4%	194.9	195.3	0.4	0.2%
92.6%	194.9	194.9	0.1	0.0%
93.8%	194.8	194.9	0.0	0.0%
95.1%	194.4	194.6	0.2	0.1%
96.3%	194.2	194.4	0.2	0.1%
97.5%	193.6	193.5	-0.1	-0.1%
98.8%	193.0	193.4	0.4	0.2%
100.0%	190.3	191.5	1.2	0.6%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	251.2	243.7	-7.5	-3.0%
1.2%	248.9	232.9	-16.0	-6.4%
2.5%	233.5	230.7	-2.9	-1.2%
3.7%	232.2	230.2	-2.0	-0.9%
4.9%	229.4	226.4	-3.0	-1.3%
6.2%	224.0	225.2	1.3	0.6%
7.4%	221.5	224.9	3.4	1.5%
8.6%	221.2	223.7	2.5	1.1%
9.9%	219.3	219.5	0.2	0.1%
11.1%	219.1	218.7	-0.4	-0.2%
12.3%	218.3	218.0	-0.3	-0.1%
13.6%	218.2	216.4	-1.8	-0.8%
14.8%	217.1	215.7	-1.3	-0.6%
16.0%	214.9	215.2	0.3	0.1%
17.3%	214.3	215.2	0.9	0.4%
18.5%	213.9	213.2	-0.7	-0.3%
19.8%	213.2	212.4	-0.8	-0.4%
21.0%	212.3	211.8	-0.5	-0.2%
22.2%	211.4	211.4	0.0	0.0%
23.5%	211.4	208.4	-2.9	-1.4%
24.7%	208.2	207.4	-0.8	-0.4%
25.9%	208.0	207.3	-0.6	-0.3%
27.2%	207.3	206.4	-0.8	-0.4%
28.4%	207.2	206.2	-1.0	-0.5%
29.6%	206.3	206.1	-0.1	-0.1%
30.9%	205.4	204.5	-0.9	-0.4%
32.1%	204.7	202.8	-2.0	-1.0%
33.3%	202.6	202.7	0.1	0.0%
34.6%	202.2	201.9	-0.3	-0.2%
35.8%	202.0	201.6	-0.3	-0.2%
37.0%	201.5	201.6	0.1	0.0%
38.3%	201.1	201.5	0.4	0.2%
39.5%	200.1	201.1	1.1	0.5%
40.7%	199.8	200.4	0.6	0.3%
42.0%	199.7	199.9	0.2	0.1%
43.2%	199.5	199.5	0.0	0.0%
44.4%	199.1	199.1	0.0	0.0%
45.7%	198.9	198.4	-0.5	-0.3%
46.9%	198.8	198.3	-0.5	-0.2%
48.1%	198.4	198.1	-0.3	-0.2%
49.4%	198.2	197.7	-0.5	-0.3%
50.6%	198.2	197.4	-0.8	-0.4%
51.9%	198.1	197.3	-0.8	-0.4%
53.1%	197.9	197.1	-0.8	-0.4%
54.3%	197.5	197.1	-0.5	-0.2%
55.6%	197.4	196.7	-0.7	-0.4%
56.8%	197.0	196.5	-0.5	-0.2%
58.0%	196.7	196.5	-0.2	-0.1%
59.3%	196.6	196.3	-0.3	-0.2%
60.5%	196.6	196.1	-0.4	-0.2%
61.7%	196.3	196.1	-0.2	-0.1%
63.0%	196.3	195.4	-0.9	-0.5%
64.2%	196.1	195.3	-0.7	-0.4%
65.4%	195.8	195.2	-0.6	-0.3%
66.7%	195.5	195.1	-0.4	-0.2%
67.9%	195.3	194.7	-0.6	-0.3%
69.1%	194.9	194.7	-0.2	-0.1%
70.4%	194.7	194.6	-0.1	-0.1%
71.6%	194.7	194.4	-0.3	-0.1%
72.8%	194.5	194.3	-0.2	-0.1%
74.1%	194.5	194.2	-0.3	-0.1%
75.3%	194.4	194.2	-0.1	-0.1%
76.5%	194.3	194.2	-0.1	0.0%
77.8%	194.2	194.2	0.0	0.0%
79.0%	194.0	194.1	0.1	0.0%
80.2%	193.9	194.0	0.1	0.0%
81.5%	193.9	193.7	-0.2	-0.1%
82.7%	193.5	193.4	-0.1	-0.1%
84.0%	193.5	193.3	-0.2	-0.1%
85.2%	192.8	192.7	-0.2	-0.1%
86.4%	192.4	192.5	0.2	0.1%
87.7%	192.4	192.2	-0.1	-0.1%
88.9%	192.1	192.2	0.0	0.0%
90.1%	191.8	192.1	0.2	0.1%
91.4%	191.8	191.8	0.1	0.0%
92.6%	191.7	191.7	-0.1	0.0%
93.8%	191.7	191.6	-0.1	0.0%
95.1%	191.6	191.6	0.0	0.0%
96.3%	190.9	191.3	0.4	0.2%
97.5%	189.7	191.0	1.3	0.7%
98.8%	189.3	189.4	0.1	0.0%
100.0%	186.9	187.6	0.6	0.3%

Table SQ-28-b

North Bay Aqueduct Intake (Barker Slough), Monthly EC

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	237.5	236.8	-0.7	-0.3%
1.2%	233.3	233.4	0.0	0.0%
2.5%	232.0	228.4	-3.6	-1.6%
3.7%	231.9	225.6	-6.3	-2.7%
4.9%	225.8	221.2	-4.6	-2.0%
6.2%	223.9	219.4	-4.5	-2.0%
7.4%	222.7	217.5	-5.2	-2.3%
8.6%	221.0	215.9	-5.1	-2.3%
9.9%	219.4	214.4	-5.0	-2.3%
11.1%	213.2	213.8	0.6	0.3%
12.3%	212.7	212.7	0.0	0.0%
13.6%	211.2	211.1	-0.1	-0.1%
14.8%	200.0	198.9	-1.2	-0.6%
16.0%	198.9	198.6	-0.3	-0.2%
17.3%	198.8	198.5	-0.3	-0.2%
18.5%	197.9	197.9	0.0	0.0%
19.8%	197.7	197.8	0.1	0.1%
21.0%	197.5	196.7	-0.8	-0.4%
22.2%	196.1	195.7	-0.3	-0.2%
23.5%	195.7	195.6	-0.1	0.0%
24.7%	195.7	195.4	-0.3	-0.2%
25.9%	195.2	195.3	0.1	0.0%
27.2%	195.2	195.1	-0.1	-0.1%
28.4%	195.1	195.0	-0.1	-0.1%
29.6%	195.1	194.7	-0.3	-0.2%
30.9%	194.7	194.7	-0.1	0.0%
32.1%	194.7	194.6	-0.1	0.0%
33.3%	194.6	194.5	-0.1	0.0%
34.6%	194.4	194.4	0.1	0.0%
35.8%	194.3	194.3	0.0	0.0%
37.0%	194.3	194.2	-0.1	-0.1%
38.3%	194.3	194.1	-0.2	-0.1%
39.5%	194.3	193.8	-0.5	-0.3%
40.7%	194.2	193.8	-0.4	-0.2%
42.0%	194.0	193.7	-0.4	-0.2%
43.2%	194.0	193.5	-0.4	-0.2%
44.4%	193.8	193.5	-0.4	-0.2%
45.7%	193.7	193.3	-0.4	-0.2%
46.9%	193.6	193.3	-0.4	-0.2%
48.1%	193.5	193.1	-0.4	-0.2%
49.4%	193.5	193.1	-0.4	-0.2%
50.6%	193.4	193.0	-0.4	-0.2%
51.9%	193.1	192.8	-0.2	-0.1%
53.1%	193.1	192.7	-0.4	-0.2%
54.3%	193.1	192.7	-0.4	-0.2%
55.6%	193.0	192.6	-0.3	-0.2%
56.8%	193.0	192.6	-0.3	-0.2%
58.0%	192.8	192.6	-0.2	-0.1%
59.3%	192.8	192.5	-0.3	-0.2%
60.5%	192.8	192.2	-0.5	-0.3%
61.7%	192.7	192.1	-0.6	-0.3%
63.0%	192.6	192.1	-0.6	-0.3%
64.2%	192.5	192.0	-0.4	-0.2%
65.4%	192.5	191.9	-0.5	-0.3%
66.7%	192.4	191.9	-0.6	-0.3%
67.9%	192.3	191.5	-0.7	-0.4%
69.1%	192.1	191.5	-0.6	-0.3%
70.4%	192.1	191.5	-0.6	-0.3%
71.6%	191.9	191.4	-0.5	-0.3%
72.8%	191.9	191.3	-0.7	-0.3%
74.1%	191.9	191.2	-0.7	-0.4%
75.3%	191.8	191.2	-0.7	-0.3%
76.5%	191.5	191.1	-0.4	-0.2%
77.8%	191.5	191.0	-0.5	-0.2%
79.0%	191.5	191.0	-0.5	-0.2%
80.2%	191.2	191.0	-0.2	-0.1%
81.5%	191.2	190.9	-0.3	-0.1%
82.7%	191.1	190.8	-0.3	-0.2%
84.0%	191.0	190.7	-0.3	-0.2%
85.2%	191.0	190.7	-0.3	-0.2%
86.4%	191.0	190.7	-0.3	-0.2%
87.7%	190.9	190.7	-0.2	-0.1%
88.9%	190.4	190.3	0.0	0.0%
90.1%	190.4	190.3	-0.1	-0.1%
91.4%	190.2	190.1	-0.2	-0.1%
92.6%	190.2	190.0	-0.1	-0.1%
93.8%	190.1	190.0	-0.1	0.0%
95.1%	190.0	190.0	0.0	0.0%
96.3%	189.8	189.7	-0.1	0.0%
97.5%	189.5	189.5	-0.1	0.0%
98.8%	189.4	189.1	-0.3	-0.1%
100.0%	187.2	187.6	0.4	0.2%

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	210.8	211.0	0.2	0.1%
1.2%	206.2	206.3	0.1	0.0%
2.5%	205.5	205.9	0.4	0.2%
3.7%	204.1	203.7	-0.4	-0.2%
4.9%	204.0	202.7	-1.3	-0.6%
6.2%	203.5	202.2	-1.3	-0.6%
7.4%	202.7	199.6	-3.1	-1.5%
8.6%	202.4	197.9	-4.5	-2.2%
9.9%	202.3	197.6	-4.7	-2.3%
11.1%	198.2	197.5	-0.7	-0.4%
12.3%	198.0	197.1	-0.8	-0.4%
13.6%	197.6	196.3	-1.3	-0.6%
14.8%	192.2	191.5	-0.8	-0.4%
16.0%	191.8	191.4	-0.4	-0.2%
17.3%	191.4	191.3	-0.1	-0.1%
18.5%	191.4	191.1	-0.2	-0.1%
19.8%	191.3	190.8	-0.5	-0.3%
21.0%	191.1	190.7	-0.4	-0.2%
22.2%	191.1	190.7	-0.4	-0.2%
23.5%	191.1	190.7	-0.4	-0.2%
24.7%	191.0	190.4	-0.5	-0.3%
25.9%	190.8	190.4	-0.4	-0.2%
27.2%	190.8	190.4	-0.4	-0.2%
28.4%	190.7	190.4	-0.4	-0.2%
29.6%	190.7	190.2	-0.5	-0.3%
30.9%	190.7	190.1	-0.6	-0.3%
32.1%	190.1	190.0	0.0	0.0%
33.3%	190.1	190.0	0.0	0.0%
34.6%	190.0	190.0	0.0	0.0%
35.8%	189.9	189.9	0.0	0.0%
37.0%	189.9	189.5	-0.4	-0.2%
38.3%	189.9	189.4	-0.4	-0.2%
39.5%	189.7	189.4	-0.3	-0.2%
40.7%	189.5	189.4	-0.1	-0.1%
42.0%	189.5	189.4	-0.1	-0.1%
43.2%	189.4	189.3	-0.1	-0.1%
44.4%	189.4	189.3	-0.1	-0.1%
45.7%	189.4	189.2	-0.2	-0.1%
46.9%	189.4	189.0	-0.4	-0.2%
48.1%	189.4	189.0	-0.4	-0.2%
49.4%	189.3	188.9	-0.4	-0.2%
50.6%	189.1	188.9	-0.2	-0.1%
51.9%	189.0	188.8	-0.2	-0.1%
53.1%	189.0	188.8	-0.2	-0.1%
54.3%	189.0	188.8	-0.2	-0.1%
55.6%	188.9	188.8	-0.2	-0.1%
56.8%	188.9	188.7	-0.2	-0.1%
58.0%	188.9	188.7	-0.2	-0.1%
59.3%	188.8	188.7	-0.1	-0.1%
60.5%	188.8	188.6	-0.1	-0.1%
61.7%	188.8	188.5	-0.3	-0.2%
63.0%	188.7	188.5	-0.2	-0.1%
64.2%	188.7	188.5	-0.2	-0.1%
65.4%	188.7	188.3	-0.3	-0.2%
66.7%	188.6	188.3	-0.3	-0.2%
67.9%	188.5	188.3	-0.2	-0.1%
69.1%	188.5	188.3	-0.3	-0.1%
70.4%	188.5	188.2	-0.3	-0.2%
71.6%	188.5	188.2	-0.3	-0.2%
72.8%	188.5	188.1	-0.3	-0.2%
74.1%	188.3	188.1	-0.2	-0.1%
75.3%	188.3	188.0	-0.2	-0.1%
76.5%	188.2	188.0	-0.2	-0.1%
77.8%	188.1	188.0	-0.1	-0.1%
79.0%	188.1	188.0	-0.1	-0.1%
80.2%	188.1	188.0	-0.1	-0.1%
81.5%	188.0	187.9	-0.1	0.0%
82.7%	188.0	187.9	-0.1	0.0%
84.0%	188.0	187.9	-0.1	0.0%
85.2%	188.0	187.8	-0.1	-0.1%
86.4%	187.9	187.8	-0.1	-0.1%
87.7%	187.9	187.8	-0.1	-0.1%
88.9%	187.9	187.8	-0.1	-0.1%
90.1%	187.9	187.7	-0.1	-0.1%
91.4%	187.8	187.7	-0.1	-0.1%
92.6%	187.8	187.7	-0.1	-0.1%
93.8%	187.7	187.6	-0.1	0.0%
95.1%	187.6	187.4	-0.2	-0.1%
96.3%	187.6	187.4	-0.2	-0.1%
97.5%	187.6	187.3	-0.3	-0.1%
98.8%	187.5	187.3	-0.2	-0.1%
100.0%	187.2	187.0	-0.3	-0.1%

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	202.5	199.8	-2.7	-1.3%
1.2%	199.5	199.2	-0.3	-0.2%
2.5%	199.3	198.2	-1.1	-0.6%
3.7%	199.3	197.0	-2.3	-1.1%
4.9%	197.8	196.5	-1.3	-0.6%
6.2%	197.3	196.5	-0.8	-0.4%
7.4%	197.1	196.4	-0.6	-0.3%
8.6%	197.0	196.1	-0.8	-0.4%
9.9%	196.9	196.0	-0.9	-0.5%
11.1%	196.0	195.1	-0.9	-0.5%
12.3%	195.5	195.1	-0.4	-0.2%
13.6%	194.7	194.7	0.0	0.0%
14.8%	190.9	190.4	-0.5	-0.2%
16.0%	190.8	189.9	-0.9	-0.5%
17.3%	190.7	189.7	-0.9	-0.5%
18.5%	190.6	189.7	-0.9	-0.5%
19.8%	190.1	189.5	-0.6	-0.3%
21.0%	190.1	189.5	-0.6	-0.3%
22.2%	189.8	189.4	-0.4	-0.2%
23.5%	189.8	189.4	-0.4	-0.2%
24.7%	189.8	189.3	-0.4	-0.2%
25.9%	189.8	189.3	-0.5	-0.3%
27.2%	189.6	189.2	-0.5	-0.3%
28.4%	189.6	189.1	-0.4	-0.2%
29.6%	189.5	189.1	-0.3	-0.2%
30.9%	189.4	188.8	-0.6	-0.3%
32.1%	189.4	188.8	-0.6	-0.3%
33.3%	189.4	188.8	-0.6	-0.3%
34.6%	189.4	188.7	-0.6	-0.3%
35.8%	189.2	188.7	-0.5	-0.3%
37.0%	189.1	188.7	-0.4	-0.2%
38.3%	189.0	188.6	-0.3	-0.2%
39.5%	188.9	188.6	-0.3	-0.2%
40.7%	188.9	188.6	-0.3	-0.2%
42.0%	188.7	188.6	-0.1	-0.1%
43.2%	188.7	188.5	-0.2	-0.1%
44.4%	188.7	188.5	-0.2	-0.1%
45.7%	188.7	188.5	-0.2	-0.1%
46.9%	188.6	188.5	-0.2	-0.1%
48.1%	188.6	188.4	-0.2	-0.1%
49.4%	188.6	188.3	-0.3	-0.1%
50.6%	188.6	188.3	-0.3	-0.2%
51.9%	188.5	188.3	-0.2	-0.1%
53.1%	188.4	188.3	-0.1	-0.1%
54.3%	188.4	188.3	-0.1	-0.1%
55.6%	188.4	188.2	-0.2	-0.1%
56.8%	188.3	188.2	-0.2	-0.1%
58.0%	188.3	188.1	-0.2	-0.1%
59.3%	188.2	188.1	-0.2	-0.1%
60.5%	188.2	188.1	-0.2	-0.1%
61.7%	188.2	188.0	-0.2	-0.1%
63.0%	188.2	188.0	-0.2	-0.1%
64.2%	188.2	187.9	-0.2	-0.1%
65.4%	188.2	187.9	-0.3	-0.2%
66.7%	188.1	187.9	-0.3	-0.1%
67.9%	188.1	187.8	-0.3	-0.1%
69.1%	188.1	187.8	-0.3	-0.2%
70.4%	188.0	187.8	-0.2	-0.1%
71.6%	188.0	187.8	-0.2	-0.1%
72.8%	188.0	187.7	-0.2	-0.1%
74.1%	187.9	187.7	-0.1	-0.1%
75.3%	187.9	187.7	-0.2	-0.1%
76.5%	187.8	187.7	-0.2	-0.1%
77.8%	187.8	187.6	-0.2	-0.1%
79.0%	187.7	187.6	-0.1	-0.1%
80.2%	187.7	187.6	-0.1	-0.1%
81.5%	187.7	187.4	-0.3	-0.1%
82.7%	187.7	187.4	-0.2	-0.1%
84.0%	187.7	187.4	-0.2	-0.1%
85.2%	187.6	187.2	-0.4	-0.2%
86.4%	187.6	187.2	-0.4	-0.2%
87.7%	187.6	187.2	-0.4	-0.2%
88.9%	187.5	187.2	-0.4	-0.2%
90.1%	187.4	187.1	-0.3	-0.2%
91.4%	187.3	187.0	-0.2	-0.1%
92.6%	187.1	187.0	-0.1	-0.1%
93.8%	187.1	186.9	-0.2	-0.1%
95.1%	187.1	186.8	-0.3	-0.1%
96.3%	186.9	186.8	-0.1	0.0%
97.5%	186.8	186.7	-0.1	-0.1%
98.8%	186.6	186.2	-0.4	-0.2%
100.0%	186.5	186.2	-0.3	-0.2%

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	203.7	199.8	-3.9	-1.9%
1.2%	198.6	198.9	0.3	0.1%
2.5%	198.6	198.1	-0.5	-0.3%
3.7%	198.6	197.8	-0.8	-0.4%
4.9%	198.0	197.2	-0.8	-0.4%
6.2%	197.4	196.8	-0.6	-0.3%
7.4%	196.6	195.4	-1.2	-0.6%
8.6%	196.2	194.6	-1.6	-0.8%
9.9%	195.6	194.6	-1.0	-0.5%
11.1%	195.5	193.6	-1.9	-1.0%
12.3%	195.1	193.5	-1.6	-0.8%
13.6%	194.3	193.5	-0.9	-0.4%
14.8%	194.2	192.5	-1.7	-0.9%
16.0%	193.9	192.4	-1.5	-0.8%
17.3%	193.7	192.3	-1.5	-0.8%
18.5%	193.6	191.9	-1.7	-0.9%
19.8%	193.6	191.7	-1.9	-1.0%
21.0%	193.0	190.9	-2.1	-1.1%
22.2%	193.0	190.6	-2.3	-1.2%
23.5%	193.0	190.5	-2.5	-1.3%
24.7%	192.9	190.3	-2.6	-1.3%
25.9%	192.9	190.1	-2.7	-1.4%
27.2%	191.3	190.1	-1.2	-0.6%
28.4%	191.2	189.9	-1.3	-0.7%
29.6%	190.4	189.8	-0.6	-0.3%
30.9%	190.4	189.8	-0.7	-0.4%
32.1%	190.3	189.7	-0.6	-0.3%
33.3%	190.3	189.7	-0.6	-0.3%
34.6%	190.3	189.6	-0.7	-0.4%
35.8%	189.9	189.4	-0.5	-0.3%
37.0%	189.9	189.4	-0.5	-0.3%
38.3%	189.8	189.3	-0.5	-0.3%
39.5%	189.8	189.3	-0.5	-0.3%
40.7%	189.7	189.3	-0.4	-0.2%
42.0%	189.6	189.3	-0.4	-0.2%
43.2%	189.6	189.3	-0.4	-0.2%
44.4%	189.6	189.2	-0.4	-0.2%
45.7%	189.6	189.1	-0.4	-0.2%
46.9%	189.5	189.1	-0.4	-0.2%
48.1%	189.5	189.1	-0.4	-0.2%
49.4%	189.5	189.1	-0.4	-0.2%
50.6%	189.4	189.0	-0.4	-0.2%
51.9%	189.4	189.0	-0.4	-0.2%
53.1%	189.4	188.9	-0.5	-0.3%
54.3%	189.4	188.8	-0.6	-0.3%
55.6%	189.3	188.7	-0.6	-0.3%
56.8%	189.2	188.6	-0.6	-0.3%
58.0%	189.1	188.6	-0.5	-0.3%
59.3%	189.1	188.6	-0.5	-0.3%
60.5%	189.1	188.6	-0.5	-0.3%
61.7%	189.1	188.6	-0.5	-0.3%
63.0%	189.1	188.6	-0.5	-0.3%
64.2%	189.1	188.5	-0.5	-0.3%
65.4%	189.0	188.5	-0.6	-0.3%
66.7%	189.0	188.4	-0.5	-0.3%
67.9%	188.9	188.4	-0.6	-0.3%
69.1%	188.9	188.4	-0.5	-0.3%
70.4%	188.9	188.4	-0.5	-0.3%
71.6%	188.9	188.3	-0.6	-0.3%
72.8%	188.8	188.3	-0.5	-0.3%
74.1%	188.7	188.3	-0.5	-0.3%
75.3%	188.7	188.3	-0.5	-0.3%
76.5%	188.7	188.2	-0.5	-0.2%
77.8%	188.7	188.2	-0.5	-0.2%
79.0%	188.6	188.2	-0.3	-0.2%
80.2%	188.6	188.2	-0.3	-0.2%
81.5%	188.5	188.2	-0.4	-0.2%
82.7%	188.5	188.2	-0.3	-0.2%
84.0%	188.5	188.2	-0.3	-0.2%
85.2%	188.4	188.1	-0.3	-0.2%
86.4%	188.4	188.1	-0.3	-0.2%
87.7%	188.4	188.1	-0.3	-0.2%
88.9%	188.4	188.0	-0.4	-0.2%
90.1%	188.4	188.0	-0.4	-0.2%
91.4%	188.3	187.9	-0.4	-0.2%
92.6%	188.2	187.5	-0.7	-0.4%
93.8%	188.2	187.4	-0.8	-0.4%
95.1%	187.9	187.4	-0.6	-0.3%
96.3%	187.9	187.2	-0.7	-0.4%
97.5%	187.7	186.9	-0.8	-0.4%
98.8%	187.6	186.3	-1.2	-0.7%
100.0%	186.4	186.0	-0.4	-0.2%

Figure SQ-29-b
Old River at Los Vaqueros Intake, Monthly EC
Probability of Exceedance

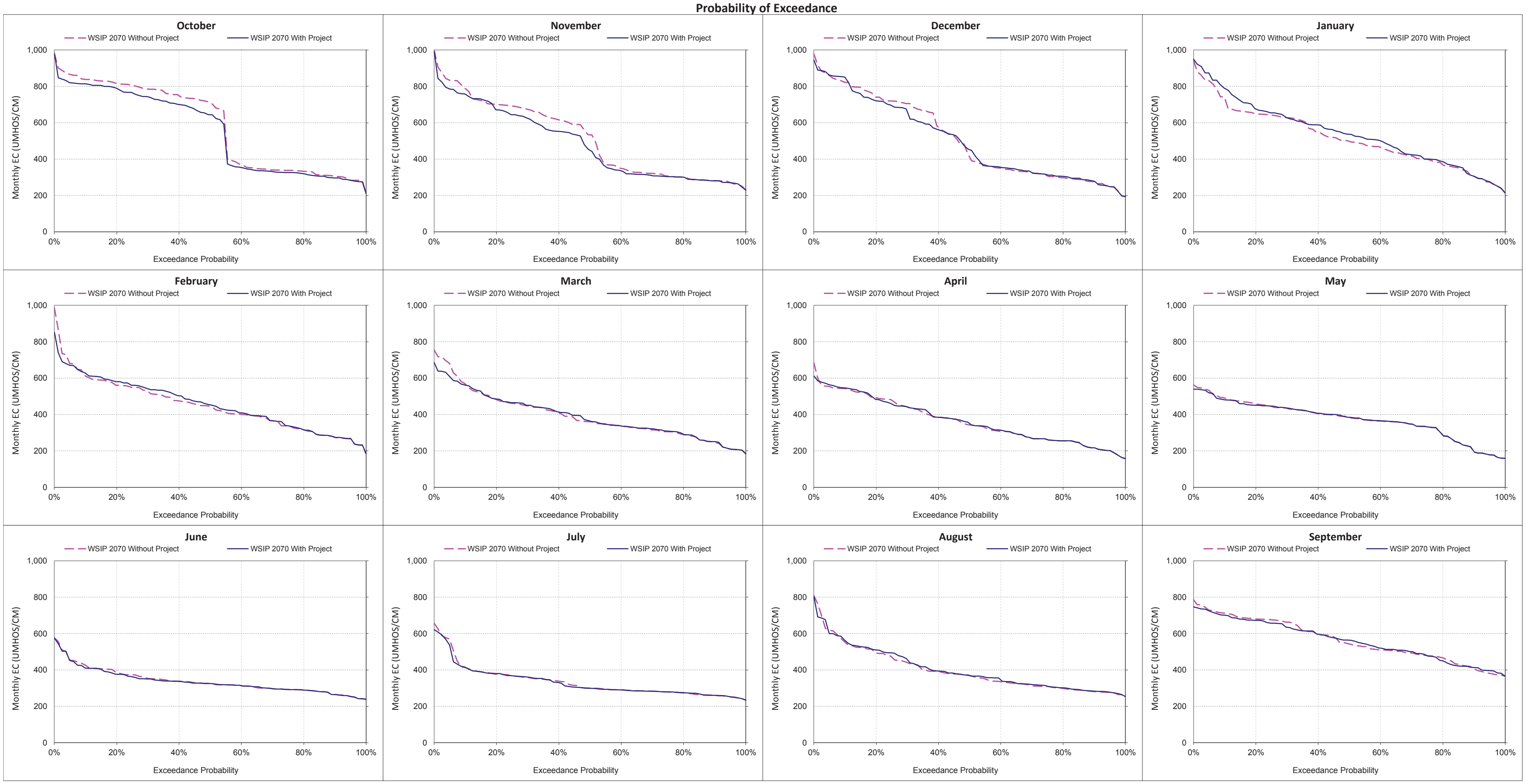


Table SQ-29-b

Old River at Los Vaqueros Intake, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	980.9	982.1	1.2	0.1%
1.2%	901.1	847.6	-53.6	-5.9%
2.5%	887.7	840.3	-47.4	-5.3%
3.7%	873.4	832.1	-41.3	-4.7%
4.9%	866.3	820.3	-46.1	-5.3%
6.2%	861.3	819.0	-42.3	-4.9%
7.4%	860.9	815.7	-45.2	-5.2%
8.6%	841.7	814.2	-27.5	-3.3%
9.9%	837.9	813.8	-24.1	-2.9%
11.1%	837.7	811.1	-26.6	-3.2%
12.3%	836.4	805.9	-30.5	-3.6%
13.6%	832.1	805.1	-27.0	-3.2%
14.8%	829.9	805.0	-24.8	-3.0%
16.0%	828.5	799.1	-29.4	-3.5%
17.3%	828.2	799.1	-29.1	-3.5%
18.5%	823.8	796.4	-27.5	-3.3%
19.8%	817.0	790.9	-26.1	-3.2%
21.0%	813.2	779.2	-34.0	-4.2%
22.2%	812.1	768.0	-44.1	-5.4%
23.5%	811.5	766.3	-45.2	-5.6%
24.7%	805.1	766.3	-38.8	-4.8%
25.9%	802.4	757.0	-45.4	-5.7%
27.2%	795.9	749.3	-46.6	-5.9%
28.4%	789.6	744.6	-45.0	-5.7%
29.6%	785.3	744.1	-41.2	-5.3%
30.9%	784.4	738.1	-46.3	-5.9%
32.1%	784.0	728.9	-55.1	-7.0%
33.3%	779.9	727.4	-52.5	-6.7%
34.6%	778.9	720.1	-58.8	-7.6%
35.8%	761.0	718.7	-42.3	-5.6%
37.0%	758.4	708.9	-49.5	-6.5%
38.3%	755.0	707.2	-47.8	-6.3%
39.5%	754.4	702.0	-52.4	-6.9%
40.7%	740.3	698.3	-42.0	-5.7%
42.0%	737.1	695.5	-41.6	-5.6%
43.2%	734.4	686.6	-47.9	-6.5%
44.4%	733.5	680.1	-53.4	-7.3%
45.7%	730.2	666.9	-63.2	-8.7%
46.9%	723.2	657.4	-65.8	-9.1%
48.1%	720.5	654.2	-66.3	-9.2%
49.4%	714.9	644.5	-70.4	-9.9%
50.6%	702.9	644.4	-58.5	-8.3%
51.9%	680.5	623.4	-57.0	-8.4%
53.1%	675.4	616.8	-58.6	-8.7%
54.3%	666.0	591.8	-74.2	-11.1%
55.6%	394.5	373.7	-20.9	-5.3%
56.8%	392.9	364.8	-28.1	-7.1%
58.0%	385.7	357.0	-28.7	-7.4%
59.3%	372.9	356.4	-16.5	-4.4%
60.5%	366.5	351.3	-15.2	-4.2%
61.7%	354.4	346.2	-8.2	-2.3%
63.0%	352.7	343.8	-8.8	-2.5%
64.2%	351.6	338.5	-13.1	-3.7%
65.4%	346.9	336.4	-10.4	-3.0%
66.7%	345.8	335.5	-10.3	-3.0%
67.9%	344.9	334.6	-10.3	-3.0%
69.1%	340.4	333.0	-7.4	-2.2%
70.4%	340.3	330.4	-9.9	-2.9%
71.6%	339.6	327.8	-11.8	-3.5%
72.8%	339.1	327.5	-11.6	-3.4%
74.1%	338.1	326.7	-11.4	-3.4%
75.3%	338.0	326.1	-11.9	-3.5%
76.5%	337.8	326.0	-11.8	-3.5%
77.8%	335.3	325.3	-9.9	-3.0%
79.0%	334.6	321.8	-12.8	-3.8%
80.2%	332.5	318.9	-13.6	-4.1%
81.5%	332.0	313.3	-18.7	-5.6%
82.7%	330.0	309.9	-20.0	-6.1%
84.0%	314.6	307.8	-6.8	-2.2%
85.2%	312.8	306.2	-6.6	-2.1%
86.4%	311.4	306.0	-5.4	-1.7%
87.7%	310.5	298.3	-12.1	-3.9%
88.9%	309.0	297.4	-11.6	-3.8%
90.1%	304.4	296.7	-7.7	-2.5%
91.4%	304.0	295.6	-8.4	-2.8%
92.6%	301.6	289.4	-12.3	-4.1%
93.8%	294.7	287.7	-7.0	-2.4%
95.1%	283.4	283.4	0.0	0.0%
96.3%	283.3	279.2	-4.1	-1.4%
97.5%	283.0	276.3	-6.7	-2.4%
98.8%	282.4	274.2	-8.2	-2.9%
100.0%	210.1	210.0	-0.1	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	999.6	991.6	-8.0	-0.8%
1.2%	905.5	844.4	-61.1	-6.7%
2.5%	875.9	823.4	-52.5	-6.0%
3.7%	843.8	796.0	-47.9	-5.7%
4.9%	833.6	784.9	-48.8	-5.9%
6.2%	832.8	782.8	-50.0	-6.0%
7.4%	830.7	764.8	-65.9	-7.9%
8.6%	809.8	759.8	-50.0	-6.2%
9.9%	789.8	758.7	-31.0	-3.9%
11.1%	771.8	744.7	-27.1	-3.5%
12.3%	731.1	733.2	2.1	0.3%
13.6%	728.0	732.9	4.9	0.7%
14.8%	722.5	731.4	8.9	1.2%
16.0%	718.7	724.6	5.9	0.8%
17.3%	704.2	718.7	14.5	2.1%
18.5%	703.5	705.8	2.3	0.3%
19.8%	700.7	670.7	-30.0	-4.3%
21.0%	699.5	669.4	-30.1	-4.3%
22.2%	697.6	666.0	-31.6	-4.5%
23.5%	696.0	656.8	-39.1	-5.6%
24.7%	692.0	644.3	-47.7	-6.9%
25.9%	690.3	643.7	-46.6	-6.7%
27.2%	685.6	639.0	-46.6	-6.8%
28.4%	679.9	635.7	-44.2	-6.5%
29.6%	675.2	627.7	-47.5	-7.0%
30.9%	670.1	618.7	-51.4	-7.7%
32.1%	661.2	602.7	-58.4	-8.8%
33.3%	660.3	592.4	-68.0	-10.3%
34.6%	646.2	583.2	-63.0	-9.8%
35.8%	636.4	564.0	-72.4	-11.4%
37.0%	627.9	559.0	-68.9	-11.0%
38.3%	623.8	553.9	-69.9	-11.2%
39.5%	618.1	553.5	-64.6	-10.4%
40.7%	612.3	551.5	-60.8	-9.9%
42.0%	608.6	548.6	-60.0	-9.9%
43.2%	601.0	545.9	-55.1	-9.2%
44.4%	590.1	537.8	-52.3	-8.9%
45.7%	589.8	533.5	-56.3	-9.6%
46.9%	589.8	527.1	-62.7	-10.6%
48.1%	560.1	479.7	-80.4	-14.3%
49.4%	534.0	454.2	-79.8	-15.0%
50.6%	532.4	442.0	-90.4	-17.0%
51.9%	490.6	408.2	-82.4	-16.8%
53.1%	419.9	398.5	-21.4	-5.1%
54.3%	380.9	367.0	-13.9	-3.6%
55.6%	368.2	351.2	-16.9	-4.6%
56.8%	367.8	347.7	-20.0	-5.5%
58.0%	364.3	340.8	-23.5	-6.4%
59.3%	350.9	339.4	-11.5	-3.3%
60.5%	347.6	332.9	-14.7	-4.2%
61.7%	340.9	319.0	-21.8	-6.4%
63.0%	331.8	318.8	-12.9	-3.9%
64.2%	327.6	317.8	-9.8	-3.0%
65.4%	327.0	316.2	-10.8	-3.3%
66.7%	325.8	315.8	-10.0	-3.1%
67.9%	322.6	315.1	-7.5	-2.3%
69.1%	321.8	311.9	-9.9	-3.1%
70.4%	320.9	308.2	-12.7	-4.0%
71.6%	317.4	307.0	-10.4	-3.3%
72.8%	317.1	306.5	-10.6	-3.3%
74.1%	308.2	304.5	-3.7	-1.2%
75.3%	306.3	302.6	-3.6	-1.2%
76.5%	303.2	302.6	-0.6	-0.2%
77.8%	301.8	301.8	0.0	0.0%
79.0%	301.0	301.6	0.6	0.2%
80.2%	298.1	300.8	2.8	0.9%
81.5%	293.4	289.2	-4.2	-1.4%
82.7%	287.2	288.5	1.3	0.5%
84.0%	287.0	286.9	0.0	0.0%
85.2%	285.9	284.2	-1.6	-0.6%
86.4%	285.6	284.2	-1.4	-0.5%
87.7%	283.0	283.4	0.4	0.1%
88.9%	281.4	280.1	-1.3	-0.5%
90.1%	281.2	280.0	-1.2	-0.4%
91.4%	281.1	279.8	-1.4	-0.5%
92.6%	279.1	272.4	-6.7	-2.4%
93.8%	278.8	272.3	-6.5	-2.3%
95.1%	269.9	269.8	-0.1	0.0%
96.3%	263.2	268.1	4.9	1.8%
97.5%	260.0	263.3	3.3	1.3%
98.8%	250.5	246.1	-4.4	-1.7%
100.0%	229.6	229.3	-0.3	-0.1%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	978.6	945.6	-33.1	-3.4%
1.2%	916.9	889.0	-27.9	-3.0%
2.5%	882.9	887.5	4.6	0.5%
3.7%	875.8	880.6	4.7	0.5%
4.9%	859.9	862.4	2.5	0.3%
6.2%	844.5	856.5	12.0	1.4%
7.4%	837.2	855.8	18.6	2.2%
8.6%	831.4	853.4	22.0	2.6%
9.9%	822.7	851.8	29.1	3.5%
11.1%	821.0	822.3	1.3	0.2%
12.3%	797.7	774.9	-22.8	-2.9%
13.6%	795.9	766.4	-29.5	-3.7%
14.8%	795.6	761.1	-34.5	-4.3%
16.0%	779.5	740.1	-39.3	-5.0%
17.3%	772.7	740.0	-32.6	-4.2%
18.5%	764.9	730.5	-34.5	-4.5%
19.8%	740.9	721.9	-18.9	-2.6%
21.0%	740.6	718.4	-22.2	-3.0%
22.2%	725.1	717.2	-7.9	-1.1%
23.5%	719.5	702.4	-17.1	-2.4%
24.7%	719.5	697.3	-22.2	-3.1%
25.9%	719.3	685.9	-33.3	-4.6%
27.2%	714.8	683.9	-30.9	-4.3%
28.4%	710.4	682.3	-28.1	-4.0%
29.6%	705.3	675.0	-30.3	-4.3%
30.9%	705.2	619.3	-85.9	-12.2%
32.1%	683.8	618.0	-65.8	-9.6%
33.3%	675.3	607.4	-67.9	-10.1%
34.6%	669.2	603.6	-65.6	-9.8%
35.8%	666.2	592.6	-73.6	-11.0%
37.0%	657.7	592.1	-65.6	-10.0%
38.3%	653.9	571.3	-82.6	-12.6%
39.5%	582.6	564.6	-18.0	-3.1%
40.7%	565.2	557.1	-8.1	-1.4%
42.0%	547.7	552.2	4.5	0.8%
43.2%	540.0	536.8	-3.2	-0.6%
44.4%	535.5	536.1	0.6	0.1%
45.7%	514.2	526.7	12.5	2.4%
46.9%	484.5	504.7	20.2	4.2%
48.1%	483.9	476.4	-7.6	-1.6%
49.4%	429.7	456.0	26.3	6.1%
50.6%	390.0	447.6	57.6	14.8%
51.9%	386.8	415.3	28.4	7.4%
53.1%	377.2	389.7	12.5	3.3%
54.3%	371.7	364.7	-7.0	-1.9%
55.6%	364.3	361.7	-2.6	-0.7%
56.8%	362.1	360.1	-2.1	-0.6%
58.0%	353.8	358.6	4.8	1.4%
59.3%	350.9	358.2	7.3	2.1%
60.5%	350.7	352.9	2.1	0.6%
61.7%	343.6	351.7	8.2	2.4%
63.0%	343.2	348.6	5.4	1.6%
64.2%	336.4	347.0	10.7	3.2%
65.4%	332.9	341.4	8.5	2.5%
66.7%	331.7	339.2	7.5	2.3%
67.9%	331.5	334.4	2.9	0.9%
69.1%	327.5	334.2	6.7	2.1%
70.4%	323.0	322.4	-0.6	-0.2%
71.6%	321.8	320.3	-1.5	-0.5%
72.8%	319.1	318.4	-0.7	-0.2%
74.1%	315.9	317.0	1.1	0.4%
75.3%	304.6	311.9	7.3	2.4%
76.5%	304.4	311.8	7.4	2.4%
77.8%	302.1	306.4	4.3	1.4%
79.0%	298.3	306.2	7.9	2.7%
80.2%	297.4	305.0	7.6	2.6%
81.5%	293.4	302.4	9.0	3.1%
82.7%	292.5	295.3	2.8	1.0%
84.0%	289.0	294.7	5.7	2.0%
85.2%	287.9	294.3	6.4	2.2%
86.4%	285.5	286.6	1.1	0.4%
87.7%	279.0	285.6	6.6	2.4%
88.9%	276.8	282.0	5.2	1.9%
90.1%	276.4	277.6	1.2	0.4%
91.4%	265.2	258.5	-6.7	-2.5%
92.6%	265.1	256.4	-8.7	-3.3%
93.8%	252.5	254.0	1.6	0.6%
95.1%	249.4	248.1	-1.3	-0.5%
96.3%	246.0	247.4	1.4	0.6%
97.5%	225.5	225.4	-0.1	0.0%
98.8%	198.3	198.4	0.2	0.1%
100.0%	192.5	193.3	0.7	0.4%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	942.1	949.3	7.2	0.8%
1.2%	880.2	921.8	41.6	4.7%
2.5%	861.2	909.2	48.0	5.6%
3.7%	834.0	874.6	40.5	4.9%
4.9%	831.3	874.3	43.0	5.2%
6.2%	814.2	834.6	20.3	2.5%
7.4%	786.1	834.2	48.1	6.1%
8.6%	742.6	808.3	65.8	8.9%
9.9%	742.5	789.9	47.4	6.4%
11.1%	676.8	778.9	102.0	15.1%
12.3%	674.2	754.7	80.5	11.9%
13.6%	667.1	740.4	73.3	11.0%
14.8%	664.2	724.8	60.5	9.1%
16.0%	662.1	709.3	47.2	7.1%
17.3%	658.8	709.2	50.4	7.6%
18.5%	656.0	702.8	46.8	7.1%
19.8%	649.6	676.9	27.2	4.2%
21.0%	647.6	668.4	20.9	3.2%
22.2%	646.7	665.0	18.3	2.8%
23.5%	645.1	662.0	16.8	2.6%
24.7%	643.0	654.5	11.5	1.8%
25.9%	639.8	653.7	13.9	2.2%
27.2%	636.5	649.9	13.4	2.1%
28.4%	629.6	645.4	15.8	2.5%
29.6%	627.9	629.7	1.8	0.3%
30.9%	626.9	621.2	-5.8	-0.9%
32.1%	624.1	617.8	-6.4	-1.0%
33.3%	617.2	608.0	-9.2	-1.5%
34.6%	613.3	606.5	-6.8	-1.1%
35.8%	604.4	596.8	-7.6	-1.3%
37.0%	568.5	590.1	21.6	3.8%
38.3%	564.0	589.1	25.1	4.5%
39.5%	546.2	588.7	42.4	7.8%
40.7%	544.5	587.3	42.9	7.9%
42.0%	530.3	569.4	39.1	7.4%
43.2%	522.3	564.9	42.5	8.1%
44.4%	520.0	562.3	42.3	8.1%
45.7%	517.2	554.0	36.8	7.1%
46.9%	505.5	550.0	44.5	8.8%
48.1%	502.5	542.0	39.4	7.8%
49.4%	501.3	537.2	35.9	7.2%
50.6%	493.8	536.0	42.1	8.5%
51.9%	492.6	526.1	33.5	6.8%
53.1%	488.1	524.1	36.0	7.4%
54.3%	484.4	518.5	34.1	7.0%
55.6%	474.5	510.3	35.8	7.6%
56.8%	472.1	508.1	36.0	7.6%
58.0%	469.4	507.1	37.7	8.0%
59.3%	469.2	504.0	34.8	7.4%
60.5%	461.7	496.9	35.2	7.6%
61.7%	452.3	486.6	34.2	7.6%
63.0%	444.0	476.7	32.6	7.4%
64.2%	436.4	466.4	30.0	6.9%
65.4%	436.2	459.4	23.2	5.3%
66.7%	428.9	441.7	12.8	3.0%
67.9%	424.2	429.4	5.2	1.2%
69.1%	418.0	425.5	7.6	1.8%
70.4%	415.8	423.8	7.9	1.9%
71.6%	403.9	421.4	17.5	4.3%
72.8%	401.9	417.2	15.4	3.8%
74.1%	400.3	400.8	0.5	0.1%
75.3%	398.1	400.5	2.4	0.6%
76.5%	389.8	398.2	8.3	2.1%
77.8%	383.6	397.6	14.0	3.6%
79.0%	382.9	390.3	7.4	1.9%
80.2%	365.4	385.0	19.6	5.4%
81.5%	361.7	372.2	10.5	2.9%
82.7%	359.6	368.0	8.4	2.3%
84.0%	354.8	363.4	8.6	2.4%
85.2%	351.7	358.0	6.3	1.8%
86.4%	340.4	351.8	11.4	3.4%
87.7%	335.4	322.0	-13.4	-4.0%
88.9%	312.0	312.0	0.1	0.0%
90.1%	304.4	305.0	0.7	0.2%
91.4%	292.7	294.4	1.7	0.6%
92.6%	292.4	292.0	-0.4	-0.1%
93.8%	275.4	281.8	6.4	2.3%
95.1%	272.8	274.6	1.8	0.7%
96.3%	261.6	262.5	0.9	0.4%
97.5%	252.3	249.8	-2.5	-1.0%
98.8%	238.8	238.7	-0.1	0.0%
100.0%	213.7	213.8	0.1	0.0%

Table SQ-29-b

Old River at Los Vaqueros Intake, Monthly EC

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	986.6	853.5	-133.0	-13.5%
1.2%	868.5	739.1	-129.4	-14.9%
2.5%	735.2	690.2	-45.0	-6.1%
3.7%	729.4	680.3	-49.1	-6.7%
4.9%	680.7	670.1	-10.7	-1.6%
6.2%	678.5	669.7	-8.8	-1.3%
7.4%	648.7	647.9	-0.8	-0.1%
8.6%	645.1	636.3	-8.8	-1.4%
9.9%	612.3	627.9	15.6	2.5%
11.1%	602.1	611.5	9.4	1.6%
12.3%	592.4	610.9	18.5	3.1%
13.6%	590.9	609.8	18.9	3.2%
14.8%	589.8	607.0	17.2	2.9%
16.0%	588.2	594.8	6.6	1.1%
17.3%	579.4	592.6	13.2	2.3%
18.5%	575.8	585.7	9.9	1.7%
19.8%	560.7	581.1	20.5	3.6%
21.0%	560.4	581.0	20.6	3.7%
22.2%	558.9	573.7	14.8	2.6%
23.5%	556.5	572.9	16.4	3.0%
24.7%	549.1	561.2	12.1	2.2%
25.9%	548.6	561.1	12.6	2.3%
27.2%	548.4	557.5	9.1	1.7%
28.4%	534.5	550.7	16.3	3.0%
29.6%	531.4	544.0	12.6	2.4%
30.9%	514.5	536.3	21.9	4.2%
32.1%	511.0	535.9	24.8	4.9%
33.3%	510.8	534.3	23.4	4.6%
34.6%	505.6	533.6	27.9	5.5%
35.8%	496.0	527.3	31.2	6.3%
37.0%	494.9	522.7	27.8	5.6%
38.3%	476.9	512.1	35.1	7.4%
39.5%	475.9	503.3	27.5	5.8%
40.7%	472.4	501.9	29.5	6.2%
42.0%	470.6	484.4	13.8	2.9%
43.2%	466.1	483.0	16.9	3.6%
44.4%	460.3	474.9	14.5	3.2%
45.7%	454.2	470.5	16.2	3.6%
46.9%	449.0	469.6	20.6	4.6%
48.1%	448.9	461.1	12.3	2.7%
49.4%	447.1	454.6	7.5	1.7%
50.6%	440.4	451.0	10.7	2.4%
51.9%	424.5	444.6	20.1	4.7%
53.1%	421.8	432.1	10.3	2.4%
54.3%	415.3	428.4	13.1	3.2%
55.6%	407.2	423.7	16.5	4.1%
56.8%	404.5	422.7	18.2	4.5%
58.0%	403.6	420.2	16.6	4.1%
59.3%	401.5	409.0	7.5	1.9%
60.5%	400.3	407.5	7.2	1.8%
61.7%	398.2	403.6	5.4	1.4%
63.0%	396.2	395.9	-0.3	-0.1%
64.2%	392.3	394.2	1.9	0.5%
65.4%	391.0	393.4	2.3	0.6%
66.7%	385.2	390.8	5.6	1.4%
67.9%	380.2	389.7	9.5	2.5%
69.1%	366.5	367.1	0.5	0.1%
70.4%	365.0	365.1	0.1	0.0%
71.6%	361.4	362.9	1.5	0.4%
72.8%	337.8	360.8	23.1	6.8%
74.1%	337.7	339.6	1.9	0.6%
75.3%	337.7	336.5	-1.2	-0.4%
76.5%	327.5	331.9	4.3	1.3%
77.8%	322.6	327.6	5.0	1.6%
79.0%	320.9	322.6	1.7	0.5%
80.2%	314.3	314.2	-0.1	0.0%
81.5%	308.2	313.5	5.2	1.7%
82.7%	307.1	306.9	-0.3	-0.1%
84.0%	290.7	291.3	0.6	0.2%
85.2%	287.0	287.3	0.2	0.1%
86.4%	286.2	285.2	-1.1	-0.4%
87.7%	282.7	285.0	2.3	0.8%
88.9%	280.7	281.2	0.5	0.2%
90.1%	273.2	273.6	0.4	0.2%
91.4%	271.1	273.6	2.5	0.9%
92.6%	269.7	270.4	0.7	0.3%
93.8%	267.4	268.8	1.4	0.5%
95.1%	266.1	268.1	2.0	0.8%
96.3%	237.3	237.6	0.3	0.1%
97.5%	232.8	232.9	0.1	0.0%
98.8%	230.3	232.7	2.4	1.0%
100.0%	182.9	185.3	2.4	1.3%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	753.9	684.3	-69.6	-9.2%
1.2%	717.8	638.7	-79.2	-11.0%
2.5%	716.0	637.2	-78.8	-11.0%
3.7%	696.5	632.1	-64.4	-9.2%
4.9%	680.8	609.6	-71.1	-10.4%
6.2%	629.2	586.4	-42.7	-6.8%
7.4%	610.4	583.8	-26.5	-4.3%
8.6%	581.6	567.6	-14.0	-2.4%
9.9%	569.6	562.6	-7.0	-1.2%
11.1%	547.4	558.0	10.6	1.9%
12.3%	531.8	541.7	9.8	1.9%
13.6%	525.3	534.2	8.9	1.7%
14.8%	524.0	529.1	5.0	1.0%
16.0%	506.9	507.8	0.9	0.2%
17.3%	506.3	499.8	-6.5	-1.3%
18.5%	492.4	488.7	-3.7	-0.7%
19.8%	484.0	485.3	1.3	0.3%
21.0%	474.1	483.6	9.4	2.0%
22.2%	471.8	470.2	-1.7	-0.4%
23.5%	466.2	470.0	3.8	0.8%
24.7%	462.1	465.1	3.0	0.7%
25.9%	460.3	464.8	4.5	1.0%
27.2%	457.7	464.2	6.5	1.4%
28.4%	452.6	462.2	9.6	2.1%
29.6%	447.7	450.9	3.2	0.7%
30.9%	447.3	450.4	3.1	0.7%
32.1%	439.8	442.0	2.2	0.5%
33.3%	439.7	441.4	1.7	0.4%
34.6%	437.6	438.5	0.9	0.2%
35.8%	426.0	435.1	9.1	2.1%
37.0%	422.5	432.9	10.4	2.5%
38.3%	418.5	423.4	4.9	1.2%
39.5%	412.1	414.9	2.8	0.7%
40.7%	403.6	411.1	7.4	1.8%
42.0%	390.4	410.5	20.0	5.1%
43.2%	389.7	406.0	16.3	4.2%
44.4%	387.3	395.6	8.2	2.1%
45.7%	368.1	394.5	26.4	7.2%
46.9%	365.6	393.9	28.3	7.8%
48.1%	361.5	372.8	11.3	3.1%
49.4%	361.0	367.0	6.0	1.7%
50.6%	360.3	361.5	1.2	0.3%
51.9%	350.1	360.1	10.0	2.9%
53.1%	349.7	352.1	2.4	0.7%
54.3%	349.5	347.0	-2.5	-0.7%
55.6%	348.8	345.0	-3.7	-1.1%
56.8%	344.6	341.4	-3.2	-0.9%
58.0%	339.5	340.3	0.9	0.3%
59.3%	339.3	339.6	0.3	0.1%
60.5%	334.9	335.7	0.8	0.2%
61.7%	334.5	333.8	-0.7	-0.2%
63.0%	332.4	329.5	-2.9	-0.9%
64.2%	329.0	329.3	0.3	0.1%
65.4%	324.4	325.7	1.3	0.4%
66.7%	323.1	325.6	2.5	0.8%
67.9%	321.6	324.9	3.2	1.0%
69.1%	315.4	322.1	6.7	2.1%
70.4%	315.2	321.2	6.0	1.9%
71.6%	313.7	317.4	3.7	1.2%
72.8%	306.1	315.5	9.4	3.1%
74.1%	305.6	309.8	4.2	1.4%
75.3%	305.3	308.6	3.4	1.1%
76.5%	305.2	307.2	2.0	0.7%
77.8%	300.3	306.0	5.7	1.9%
79.0%	293.2	300.3	7.1	2.4%
80.2%	288.4	289.6	1.2	0.4%
81.5%	286.7	288.6	1.9	0.7%
82.7%	281.2	287.3	6.1	2.2%
84.0%	276.3	277.4	1.1	0.4%
85.2%	260.3	260.3	0.0	0.0%
86.4%	258.8	258.5	-0.2	-0.1%
87.7%	252.2	253.0	0.8	0.3%
88.9%	251.0	251.2	0.2	0.1%
90.1%	246.4	250.8	4.4	1.8%
91.4%	240.8	247.3	6.5	2.7%
92.6%	221.3	221.3	0.0	0.0%
93.8%	215.3	215.3	0.1	0.0%
95.1%	209.3	209.4	0.1	0.1%
96.3%	207.7	208.2	0.4	0.2%
97.5%	206.7	206.8	0.1	0.0%
98.8%	203.2	203.5	0.2	0.1%
100.0%	183.0	183.6	0.6	0.3%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	684.5	611.4	-73.1	-10.7%
1.2%	600.8	584.4	-16.4	-2.7%
2.5%	558.7	577.6	18.9	3.4%
3.7%	556.0	572.3	16.3	2.9%
4.9%	553.9	563.6	9.7	1.7%
6.2%	545.8	559.5	13.7	2.5%
7.4%	544.3	552.6	8.3	1.5%
8.6%	543.0	547.6	4.6	0.8%
9.9%	542.9	546.7	3.8	0.7%
11.1%	540.5	543.3	2.8	0.5%
12.3%	530.6	539.0	8.3	1.6%
13.6%	523.7	536.2	12.5	2.4%
14.8%	522.1	526.9	4.8	0.9%
16.0%	522.1	523.8	1.8	0.3%
17.3%	510.6	518.3	7.7	1.5%
18.5%	493.6	500.9	7.3	1.5%
19.8%	492.6	484.2	-8.4	-1.7%
21.0%	487.9	481.4	-6.5	-1.3%
22.2%	485.1	472.5	-12.6	-2.6%
23.5%	483.3	467.6	-15.7	-3.3%
24.7%	482.0	460.7	-21.3	-4.4%
25.9%	467.5	448.9	-18.7	-4.0%
27.2%	451.5	447.1	-4.5	-1.0%
28.4%	449.1	446.2	-2.9	-0.7%
29.6%	444.2	444.1	-0.1	0.0%
30.9%	435.4	436.4	1.0	0.2%
32.1%	430.6	433.1	2.6	0.6%
33.3%	428.0	431.5	3.5	0.8%
34.6%	416.2	428.9	12.7	3.0%
35.8%	404.6	427.3	22.7	5.6%
37.0%	398.5	408.5	10.0	2.5%
38.3%	390.1	386.7	-3.4	-0.9%
39.5%	386.1	385.9	-0.1	0.0%
40.7%	384.1	384.1	0.0	0.0%
42.0%	382.3	381.0	-1.2	-0.3%
43.2%	380.8	380.0	-0.8	-0.2%
44.4%	374.9	376.3	1.4	0.4%
45.7%	374.6	372.2	-2.3	-0.6%
46.9%	360.3	370.1	9.8	2.7%
48.1%	350.4	361.9	11.4	3.3%
49.4%	344.0	358.3	14.3	4.2%
50.6%	342.1	342.2	0.1	0.0%
51.9%	338.2	338.4	0.2	0.1%
53.1%	336.8	338.3	1.5	0.4%
54.3%	333.1	336.9	3.7	1.1%
55.6%	321.9	333.7	11.8	3.7%
56.8%	314.7	321.8	7.1	2.3%
58.0%	312.6	315.3	2.7	0.9%
59.3%	308.6	315.0	6.4	2.1%
60.5%	307.7	312.6	4.9	1.6%
61.7%	306.7	307.0	0.2	0.1%
63.0%	305.0	304.9	0.0	0.0%
64.2%	294.5	296.4	2.0	0.7%
65.4%	290.3	291.0	0.6	0.2%
66.7%	290.1	290.2	0.1	0.0%
67.9%	278.0	278.2	0.2	0.1%
69.1%	272.6	273.4	0.8	0.3%
70.4%	267.5	267.4	-0.1	0.0%
71.6%	267.4	267.3	-0.1	-0.1%
72.8%	267.0	267.2	0.1	0.0%
74.1%	267.0	267.0	0.0	0.0%
75.3%	259.6	259.7	0.0	0.0%
76.5%	258.4	258.6	0.1	0.0%
77.8%	256.1	256.2	0.1	0.0%
79.0%	255.3	255.5	0.3	0.1%
80.2%	255.2	255.3	0.0	0.0%
81.5%	254.5	254.8	0.3	0.1%
82.7%	254.1	254.8	0.6	0.3%
84.0%	248.5	249.2	0.7	0.3%
85.2%	246.7	243.5	-3.2	-1.3%
86.4%	230.3	230.3	0.0	0.0%
87.7%	221.6	221.4	-0.2	-0.1%
88.9%	217.5	217.5	0.0	0.0%
90.1%	215.8	216.7	0.9	0.4%
91.4%	208.7	208.4	-0.2	-0.1%
92.6%	205.3	205.6	0.3	0.2%
93.8%	202.7	203.2	0.5	0.2%
95.1%	202.0	201.8	-0.2	-0.1%
96.3%	190.0	189.6	-0.4	-0.2%
97.5%	177.1	176.3	-0.8	-0.5%
98.8%	163.7	164.3	0.7	0.4%
100.0%	157.0	157.0	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	562.9	539.9	-22.9	-4.1%
1.2%	549.4	539.3	-10.1	-1.8%
2.5%	546.2	536.6	-9.5	-1.7%
3.7%	539.7	532.9	-6.8	-1.3%
4.9%	533.0	518.7	-14.2	-2.7%
6.2%	510.6	516.9	6.3	1.2%
7.4%	503.8	489.1	-14.7	-2.9%
8.6%	494.0	484.7	-9.2	-1.9%
9.9%	491.7	481.0	-10.7	-2.2%
11.1%	482.2	479.7	-2.6	-0.5%
12.3%	477.7	479.5	1.8	0.4%
13.6%	475.7	477.0	1.3	0.3%
14.8%	473.7	460.1	-13.7	-2.9%
16.0%	469.3	459.8	-9.5	-2.0%
17.3%	468.1	453.3	-14.8	-3.2%
18.5%	464.7	452.9	-11.8	-2.5%
19.8%	457.3	451.4	-6.0	-1.3%
21.0%	455.2	450.1	-5.1	-1.1%
22.2%	452.7	448.4	-4.3	-1.0%
23.5%	449.7	447.8	-1.9	-0.4%
24.7%	446.1	447.0	0.9	0.2%
25.9%	439.0	444.8	5.8	1.3%
27.2%	438.1	439.3	1.2	0.3%
28.4%	436.9	439.3	2.3	0.5%
29.6%	435.8	436.8	1.0	0.2%
30.9%	429.3	433.7	4.3	1.0%
32.1%	429.1	429.5	0.4	0.1%
33.3%	427.4	425.4	-2.1	-0.5%
34.6%	422.7	424.9	2.2	0.5%
35.8%	420.5	422.1	1.7	0.4%
37.0%	414.8	415.9	1.1	0.3%
38.3%	413.3	410.4	-2.9	-0.7%
39.5%	407.8	407.0	-0.8	-0.2%
40.7%	400.6	406.1	5.5	1.4%
42.0%	399.9	401.8	1.9	0.5%
43.2%	399.5	401.3	1.8	0.5%
44.4%	398.1	401.1	3.0	0.8%
45.7%	397.6	400.2	2.6	0.6%
46.9%	390.6	396.2	5.6	1.4%
48.1%	390.2	390.2	0.0	0.0%
49.4%	389.6	385.8	-3.8	-1.0%
50.6%	380.6	384.1	3.6	0.9%
51.9%	378.5	381.3	2.8	0.7%
53.1%	377.2	380.6	3.4	0.9%
54.3%	370.9	372.6	1.7	0.5%
55.6%	369.7	371.0	1.3	0.4%
56.8%	367.1	370.0	2.9	0.8%
58.0%	364.7	367.1	2.4	0.7%
59.3%	364.2	366.1	2.0	0.5%
60.5%	363.9	365.2	1.3	0.4%
61.7%	361.6	363.8	2.3	0.6%
63.0%	360.6	362.3	1.7	0.5%
64.2%	359.9	360.6	0.8	0.2%
65.4%	359.0	359.8	0.8	0.2%
66.7%	356.3	356.4	0.0	0.0%
67.9%	354.2	354.0	-0.2	-0.1%
69.1%	348.7	348.7	0.1	0.0%
70.4%	347.2	347.2	0.0	0.0%
71.6%	335.5	335.7	0.2	0.0%
72.8%	334.7	335.7	1.0	0.3%
74.1%	334.0	334.7	0.7	0.2%
75.3%	330.9	331.0	0.0	0.0%
76.5%	328.0	329.4	1.5	0.5%
77.8%	327.3	328.0	0.8	0.2%
79.0%	304.6	304.8	0.2	0.1%
80.2%	281.1	282.4	1.3	0.5%
81.5%	280.0	281.4	1.4	0.5%
82.7%	266.3	266.3	0.0	0.0%
84.0%	251.7	251.8	0.0	0.0%
85.2%	245.5	246.3	0.8	0.3%
86.4%	232.0	232.7	0.7	0.3%
87.7%	228.7	228.9	0.2	0.1%
88.9%	221.9	223.0	1.1	0.5%
90.1%	192.9	193.2	0.4	0.2%
91.4%	187.6	188.1	0.5	0.2%
92.6%	187.6	187.9	0.3	0.2%
93.8%	182.9	183.4	0.5	0.3%
95.1%	178.1	178.3	0.2	0.1%
96.3%	177.3	177.5	0.2	0.1%
97.5%	164.3	164.7	0.3	0.2%
98.8%	159.9	160.2	0.3	0.2%
100.0%	159.1	159.3	0.2	0.1%

Table SQ-29-b
Old River at Los Vaqueros Intake, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	576.5	573.8	-2.7	-0.5%
1.2%	556.5	543.6	-12.9	-2.3%
2.5%	508.9	503.3	-5.6	-1.1%
3.7%	502.2	502.7	0.4	0.1%
4.9%	453.4	451.8	-1.6	-0.4%
6.2%	451.2	445.4	-5.8	-1.3%
7.4%	443.8	425.7	-18.1	-4.1%
8.6%	437.2	423.9	-13.3	-3.0%
9.9%	426.3	409.7	-16.6	-3.9%
11.1%	411.7	409.3	-2.3	-0.6%
12.3%	409.6	408.8	-0.8	-0.2%
13.6%	407.4	408.3	0.9	0.2%
14.8%	406.4	404.8	-1.6	-0.4%
16.0%	404.9	391.4	-13.6	-3.4%
17.3%	403.7	388.8	-14.8	-3.7%
18.5%	401.9	382.8	-19.1	-4.7%
19.8%	386.3	375.5	-10.8	-2.8%
21.0%	380.8	375.4	-5.3	-1.4%
22.2%	374.1	375.2	1.2	0.3%
23.5%	373.8	365.6	-8.1	-2.2%
24.7%	373.7	362.8	-10.9	-2.9%
25.9%	372.2	358.2	-14.0	-3.7%
27.2%	364.8	352.3	-12.5	-3.4%
28.4%	362.4	351.7	-10.7	-2.9%
29.6%	354.4	349.7	-4.7	-1.3%
30.9%	351.3	349.7	-1.7	-0.5%
32.1%	351.0	344.8	-6.2	-1.8%
33.3%	350.4	343.2	-7.2	-2.1%
34.6%	347.5	339.6	-8.0	-2.3%
35.8%	344.7	338.5	-6.2	-1.8%
37.0%	339.6	338.2	-1.4	-0.4%
38.3%	338.8	337.6	-1.2	-0.3%
39.5%	337.8	337.5	-0.4	-0.1%
40.7%	337.7	335.8	-1.9	-0.6%
42.0%	335.1	332.4	-2.7	-0.8%
43.2%	334.9	332.2	-2.7	-0.8%
44.4%	331.1	327.8	-3.3	-1.0%
45.7%	328.1	327.3	-0.8	-0.2%
46.9%	327.5	327.1	-0.4	-0.1%
48.1%	325.2	326.4	1.2	0.4%
49.4%	325.1	326.2	1.2	0.4%
50.6%	324.7	325.0	0.3	0.1%
51.9%	318.6	322.0	3.4	1.1%
53.1%	318.3	318.9	0.6	0.2%
54.3%	318.2	318.1	-0.1	0.0%
55.6%	318.1	317.8	-0.3	-0.1%
56.8%	317.9	317.5	-0.5	-0.1%
58.0%	315.9	315.8	-0.1	0.0%
59.3%	315.5	315.3	-0.2	-0.1%
60.5%	311.2	312.2	1.0	0.3%
61.7%	310.4	311.6	1.2	0.4%
63.0%	308.9	309.8	1.0	0.3%
64.2%	304.9	307.5	2.6	0.8%
65.4%	300.7	307.0	6.3	2.1%
66.7%	300.4	301.0	0.6	0.2%
67.9%	300.1	300.4	0.3	0.1%
69.1%	299.1	298.7	-0.3	-0.1%
70.4%	295.5	295.7	0.2	0.1%
71.6%	295.3	295.2	-0.2	-0.1%
72.8%	295.2	295.2	0.0	0.0%
74.1%	292.5	292.6	0.1	0.0%
75.3%	292.4	292.4	0.0	0.0%
76.5%	292.1	292.3	0.3	0.1%
77.8%	291.3	292.0	0.7	0.2%
79.0%	291.2	290.5	-0.7	-0.2%
80.2%	288.6	288.8	0.2	0.1%
81.5%	287.4	287.7	0.3	0.1%
82.7%	285.2	286.2	1.0	0.3%
84.0%	283.3	283.3	0.1	0.0%
85.2%	280.1	280.6	0.5	0.2%
86.4%	280.0	280.3	0.4	0.1%
87.7%	277.1	277.1	0.0	0.0%
88.9%	265.6	264.5	-1.1	-0.4%
90.1%	264.6	264.3	-0.2	-0.1%
91.4%	262.0	261.8	-0.2	-0.1%
92.6%	261.4	258.6	-2.8	-1.1%
93.8%	259.6	258.2	-1.4	-0.6%
95.1%	253.3	253.0	-0.3	-0.1%
96.3%	250.9	250.1	-0.8	-0.3%
97.5%	241.2	241.5	0.3	0.1%
98.8%	241.2	241.4	0.2	0.1%
100.0%	237.4	238.2	0.7	0.3%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	656.5	621.5	-35.1	-5.3%
1.2%	625.3	608.5	-16.8	-2.7%
2.5%	588.5	593.2	4.7	0.8%
3.7%	577.2	568.3	-8.8	-1.5%
4.9%	569.4	537.4	-32.0	-5.6%
6.2%	505.4	444.8	-60.6	-12.0%
7.4%	448.5	431.2	-17.4	-3.9%
8.6%	417.5	420.1	2.7	0.6%
9.9%	413.1	416.1	3.0	0.7%
11.1%	406.1	404.5	-1.6	-0.4%
12.3%	396.1	394.3	-1.8	-0.5%
13.6%	392.8	392.8	0.0	0.0%
14.8%	389.8	390.6	0.8	0.2%
16.0%	388.1	385.7	-2.4	-0.6%
17.3%	384.7	382.1	-2.5	-0.7%
18.5%	380.1	381.6	1.5	0.4%
19.8%	376.5	380.8	4.3	1.1%
21.0%	376.4	379.8	3.4	0.9%
22.2%	374.3	374.9	0.6	0.2%
23.5%	373.9	369.1	-4.8	-1.3%
24.7%	367.7	368.9	1.1	0.3%
25.9%	366.2	365.7	-0.5	-0.1%
27.2%	364.0	363.8	-0.2	0.0%
28.4%	360.3	363.2	2.9	0.8%
29.6%	359.0	361.8	2.7	0.8%
30.9%	355.8	358.4	2.6	0.7%
32.1%	352.4	354.3	1.9	0.5%
33.3%	351.0	352.9	1.9	0.6%
34.6%	349.6	352.3	2.7	0.8%
35.8%	346.7	347.6	1.0	0.3%
37.0%	344.5	345.4	0.8	0.2%
38.3%	344.0	333.3	-10.7	-3.1%
39.5%	339.4	331.4	-8.0	-2.4%
40.7%	336.0	327.2	-8.8	-2.6%
42.0%	334.9	311.7	-23.2	-6.9%
43.2%	320.2	308.9	-11.3	-3.5%
44.4%	315.8	305.2	-10.6	-3.4%
45.7%	314.4	304.1	-10.3	-3.3%
46.9%	303.4	303.1	-0.3	-0.1%
48.1%	301.4	300.2	-1.2	-0.4%
49.4%	300.5	299.0	-1.5	-0.5%
50.6%	299.7	298.7	-1.0	-0.3%
51.9%	298.8	297.4	-1.5	-0.5%
53.1%	297.8	294.5	-3.3	-1.1%
54.3%	295.6	293.6	-1.9	-0.7%
55.6%	293.2	292.7	-0.5	-0.2%
56.8%	291.1	292.2	1.1	0.4%
58.0%	291.0	291.4	0.5	0.2%
59.3%	290.8	290.8	0.0	0.0%
60.5%	289.1	290.2	1.1	0.4%
61.7%	288.5	287.8	-0.7	-0.2%
63.0%	287.2	286.1	-1.1	-0.4%
64.2%	285.6	284.8	-0.9	-0.3%
65.4%	285.6	284.7	-0.9	-0.3%
66.7%	284.5	284.6	0.2	0.1%
67.9%	284.3	283.5	-0.8	-0.3%
69.1%	283.2	282.6	-0.7	-0.2%
70.4%	282.7	282.4	-0.3	-0.1%
71.6%	281.8	281.3	-0.5	-0.2%
72.8%	279.5	279.5	0.1	0.0%
74.1%	279.4	279.3	-0.1	0.0%
75.3%	278.5	279.1	0.7	0.2%
76.5%	278.4	278.3	-0.1	0.0%
77.8%	277.7	276.2	-1.5	-0.5%
79.0%	274.0	276.1	2.1	0.8%
80.2%	273.8	274.0	0.2	0.1%
81.5%	271.4	273.5	2.1	0.8%
82.7%	268.8	271.9	3.1	1.2%
84.0%	265.1	271.9	6.8	2.6%
85.2%	264.3	266.9	2.6	1.0%
86.4%	263.2	262.1	-1.1	-0.4%
87.7%	262.1	260.4	-1.7	-0.6%
88.9%	261.7	260.2	-1.5	-0.6%
90.1%	259.7	260.1	0.4	0.1%
91.4%	257.7	259.5	1.8	0.7%
92.6%	257.5	258.7	1.2	0.5%
93.8%	254.8	255.8	1.0	0.4%
95.1%	251.8	252.0	0.1	0.1%
96.3%	251.0	249.3	-1.7	-0.7%
97.5%	246.2	245.7	-0.5	-0.2%
98.8%	242.6	241.9	-0.7	-0.3%
100.0%	233.4	233.8	0.4	0.2%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	808.8	803.8	-5.1	-0.6%
1.2%	764.1	690.5	-73.6	-9.6%
2.5%	698.5	685.9	-12.6	-1.8%
3.7%	628.8	676.5	47.6	7.6%
4.9%	617.8	600.2	-17.6	-2.9%
6.2%	614.8	599.8	-15.0	-2.4%
7.4%	595.2	588.5	-6.7	-1.1%
8.6%	574.0	585.1	11.1	1.9%
9.9%	554.2	562.9	8.7	1.6%
11.1%	535.6	545.9	10.3	1.9%
12.3%	532.2	535.9	3.7	0.7%
13.6%	524.7	533.1	8.4	1.6%
14.8%	523.4	528.6	5.2	1.0%
16.0%	522.3	526.1	3.8	0.7%
17.3%	514.8	524.0	9.1	1.8%
18.5%	514.6	514.9	0.3	0.1%
19.8%	492.7	510.3	17.6	3.6%
21.0%	490.9	508.9	17.9	3.7%
22.2%	490.4	498.8	8.5	1.7%
23.5%	479.0	494.1	15.0	3.1%
24.7%	475.9	493.8	17.8	3.7%
25.9%	455.2	491.9	36.7	8.1%
27.2%	451.1	478.6	27.5	6.1%
28.4%	449.3	472.8	23.5	5.2%
29.6%	442.6	463.1	20.5	4.6%
30.9%	434.2	439.1	4.8	1.1%
32.1%	433.0	434.0	0.9	0.2%
33.3%	426.9	425.0	-2.0	-0.5%
34.6%	405.1	417.8	12.7	3.1%
35.8%	398.5	417.2	18.7	4.7%
37.0%	393.4	405.1	11.6	3.0%
38.3%	393.1	395.7	2.7	0.7%
39.5%	392.9	393.7	0.8	0.2%
40.7%	388.3	393.3	4.9	1.3%
42.0%	382.9	391.5	8.5	2.2%
43.2%	380.0	382.9	2.9	0.8%
44.4%	378.2	382.6	4.3	1.1%
45.7%	377.6	378.6	1.0	0.3%
46.9%	376.6	375.9	-0.7	-0.2%
48.1%	373.3	373.5	0.2	0.0%
49.4%	372.7	370.6	-2.0	-0.5%
50.6%	366.8	366.0	-0.8	-0.2%
51.9%	359.7	365.8	6.1	1.7%
53.1%	356.6	365.3	8.8	2.5%
54.3%	354.3	363.7	9.4	2.7%
55.6%	346.3	357.4	11.2	3.2%
56.8%	338.8	357.1	18.3	5.4%
58.0%	338.3	356.6	18.3	5.4%
59.3%	337.0	356.3	19.3	5.7%
60.5%	334.0	337.4	3.4	1.0%
61.7%	330.9	336.3	5.4	1.6%
63.0%	328.9	336.2	7.3	2.2%
64.2%	326.3	331.8	5.5	1.7%
65.4%	325.2	324.8	-0.4	-0.1%
66.7%	325.2	322.9	-2.3	-0.7%
67.9%	320.0	322.9	2.9	0.9%
69.1%	317.3	321.6	4.3	1.4%
70.4%	311.5	319.1	7.6	2.4%
71.6%	310.8	317.6	6.8	2.2%
72.8%	309.2	315.2	6.0	1.9%
74.1%	309.1	315.0	5.9	1.9%
75.3%	308.6	309.0	0.3	0.1%
76.5%	304.1	306.1	2.1	0.7%
77.8%	301.5	304.1	2.6	0.9%
79.0%	301.1	301.6	0.5	0.2%
80.2%	296.7	300.9	4.2	1.4%
81.5%	294.6	298.4	3.8	1.3%
82.7%	292.7	294.4	1.7	0.6%
84.0%	289.9	292.9	3.0	1.0%
85.2%	288.7	291.9	3.1	1.1%
86.4%	288.0	286.9	-1.1	-0.4%
87.7%	284.8	285.7	0.9	0.3%
88.9%	282.1	284.8	2.7	1.0%
90.1%	280.6	282.4	1.8	0.6%
91.4%	280.6	281.3	0.8	0.3%
92.6%	277.7	281.1	3.4	1.2%
93.8%	277.1	279.8	2.7	1.0%
95.1%	276.2	278.1	1.9	0.7%
96.3%	275.5	273.3	-2.2	-0.8%
97.5%	264.8	270.9	6.1	2.3%
98.8%	263.9	264.3	0.5	0.2%
100.0%	254.5	253.0	-1.6	-0.6%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	786.4	746.6	-39.8	-5.1%
1.2%	758.5	741.1	-17.3	-2.3%
2.5%	758.2	735.9	-22.3	-2.9%
3.7%	744.5	734.5	-10.0	-1.3%
4.9%	728.4	725.3	-3.1	-0.4%
6.2%	726.4	716.8	-9.7	-1.3%
7.4%	718.6	710.4	-8.2	-1.1%
8.6%	714.3	702.2	-12.1	-1.7%
9.9%	712.1	701.2	-10.9	-1.5%
11.1%	708.3	698.6	-9.7	-1.4%
12.3%	705.9	686.8	-19.1	-2.7%
13.6%	694.8	685.1	-9.7	-1.4%
14.8%	687.5	680.0	-7.5	-1.1%
16.0%	686.4	679.0	-7.4	-1.1%
17.3%	684.3	674.0	-10.3	-1.5%
18.5%	683.3	673.8	-9.5	-1.4%
19.8%	680.5	672.1	-8.3	-1.2%
21.0%	679.2	672.1	-7.1	-1.0%
22.2%	678.6	670.3	-8.3	-1.2%
23.5%	677.5	661.4	-16.0	-2.4%
24.7%	676.6	657.3	-19.3	-2.9%
25.9%	674.2	656.4	-17.8	-2.6%
27.2%	671.9	655.2	-16.7	-2.5%
28.4%	668.0	654.3	-13.7	-2.0%
29.6%	663.1	636.0	-27.0	-4.1%
30.9%	662.3	633.4	-28.9	-4.4%
32.1%	654.9	624.2	-30.7	-4.7%
33.3%	644.3	619.6	-24.8	-3.8%
34.6%	621.2	616.2	-5.0	-0.8%
35.8%	612.4	614.8	2.3	0.4%
37.0%	611.2	614.2	3.0	0.5%
38.3%	611.0	613.7	2.7	0.4%
39.5%	600.1	597.0	-3.1	-0.5%
40.7%	592.8	593.5	0.6	0.1%
42.0%	591.8	590.6	-1.2	-0.2%
43.2%	590.5	583.0	-7.5	-1.3%
44.4%	586.6	578.9	-7.7	-1.3%
45.7%	575.1	573.8	-1.3	-0.2%
46.9%	550.8	568.0	17.3	3.1%
48.1%	550.5	564.6	14.1	2.6%
49.4%	545.0	564.0	19.0	3.5%
50.6%	540.5	562.3	21.8	4.0%
51.9%	533.6	556.8	23.3	4.4%
53.1%	532.4	549.8	17.4	3.3%
54.3%	528.6	544.9	16.3	3.1%
55.6%	528.2	541.9	13.7	2.6%
56.8%	516.0	533.9	17.9	3.5%
58.0%	513.9	529.5	15.6	3.0%
59.3%	510.5	521.0	10.5	2.1%
60.5%	510.5	518.0	7.5	1.5%
61.7%	508.7	513.3	4.7	0.9%
63.0%	507.2	512.5	5.3	1.0%
64.2%	507.2	512.1	4.9	1.0%
65.4%	502.3	508.6	6.3	1.3%
66.7%	502.3	508.0	5.7	1.1%
67.9%	495.7	506.7	11.0	2.2%
69.1%	493.6	501.2	7.6	1.5%
70.4%	492.0	499.4	7.4	1.5%
71.6%	486.2	490.2	4.1	0.8%
72.8%	484.0	490.2	6.3	1.3%
74.1%	480.0	485.5	5.5	1.1%
75.3%	477.2	475.8	-1.4	-0.3%
76.5%	477.0	474.6	-2.5	-0.5%
77.8%	474.9	470.5	-4.4	-0.9%
79.0%	470.5	453.3	-17.3	-3.7%
80.2%	465.0	449.1	-15.9	-3.4%
81.5%	455.1	436.7	-18.4	-4.0%
82.7%	449.0	428.2	-20.8	-4.6%
84.0%	433.7	424.0	-9.7	-2.2%
85.2%	430.3	420.8	-9.5	-2.2%
86.4%	424.9	420.7	-4.2	-1.0%
87.7%	420.8	420.0	-0.7	-0.2%
88.9%	418.8	414.9	-3.9	-0.9%
90.1%	404.1	413.2	9.1	2.3%
91.4%	395.6	412.1	16.5	4.2%
92.6%	390.5	399.2	8.7	2.2%
93.8%	383.7	396.9	13.2	3.4%
95.1%	381.6	395.7	14.0	3.7%
96.3%	376.5	394.0	17.5	4.6%
97.5%	372.4	383.2	10.8	2.9%
98.8%	371.5	381.1	9.5	2.6%
100.0%	364.5	366.2	1.7	0.5%

Figure SQ-30-b
Victoria Canal at Alternative Intake, Monthly EC
Probability of Exceedance

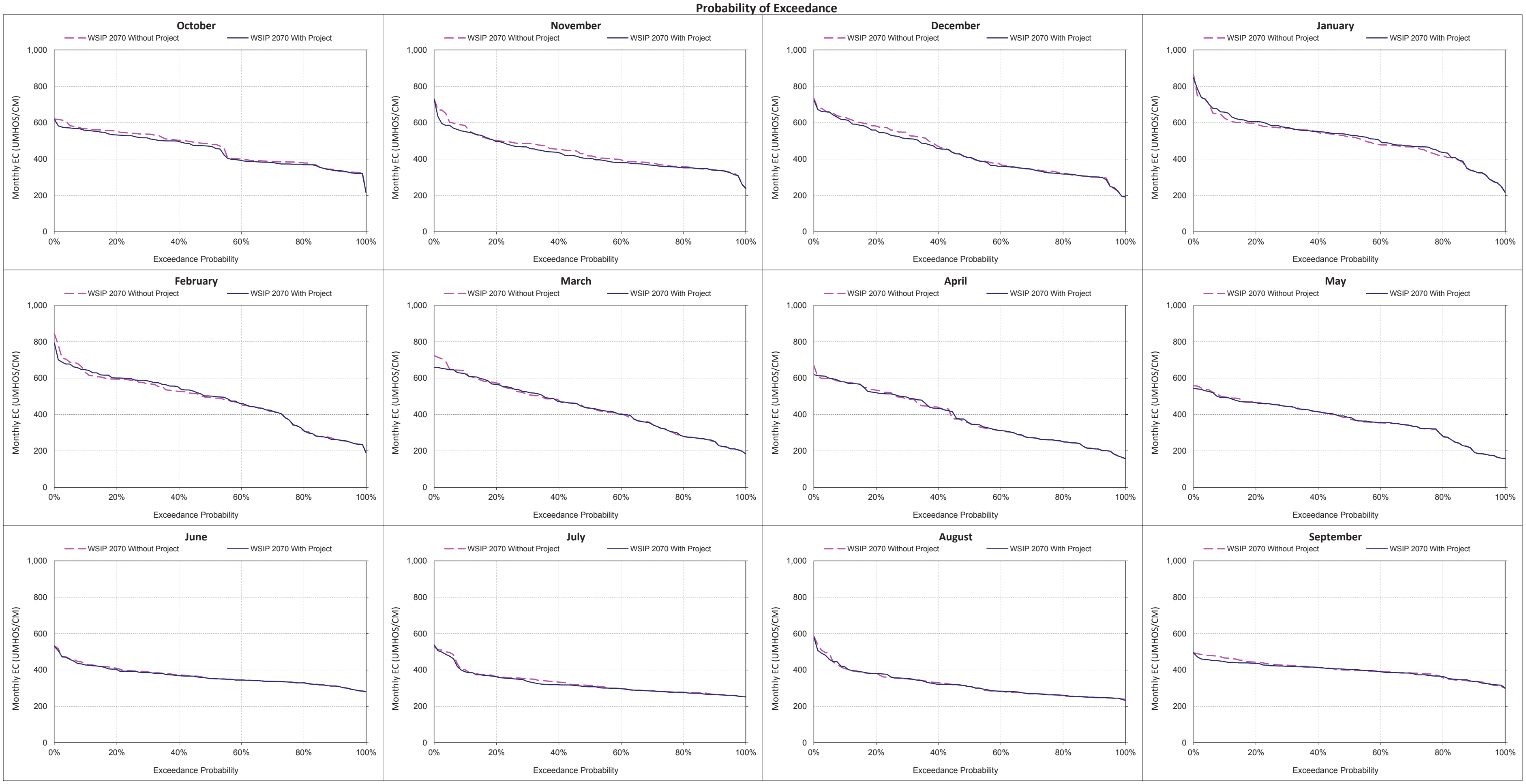


Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	620.5	618.9	-1.6	-0.3%
1.2%	618.2	583.1	-35.1	-5.7%
2.5%	614.2	575.1	-39.1	-6.4%
3.7%	611.8	572.7	-39.2	-6.4%
4.9%	583.8	571.5	-12.3	-2.1%
6.2%	580.1	568.9	-11.2	-1.9%
7.4%	578.1	568.7	-9.3	-1.6%
8.6%	569.4	563.9	-5.5	-1.0%
9.9%	566.7	557.5	-9.2	-1.6%
11.1%	566.1	556.7	-9.4	-1.7%
12.3%	562.1	554.1	-8.0	-1.4%
13.6%	562.0	552.9	-9.1	-1.6%
14.8%	560.1	548.1	-12.1	-2.2%
16.0%	557.9	547.3	-10.6	-1.9%
17.3%	556.7	538.3	-18.4	-3.3%
18.5%	555.8	534.4	-21.4	-3.8%
19.8%	555.0	532.8	-22.1	-4.0%
21.0%	547.9	531.5	-16.3	-3.0%
22.2%	546.5	530.1	-16.4	-3.0%
23.5%	543.9	529.3	-14.7	-2.7%
24.7%	541.6	528.6	-13.0	-2.4%
25.9%	541.5	523.5	-18.0	-3.3%
27.2%	538.5	518.7	-19.8	-3.7%
28.4%	537.5	517.5	-20.0	-3.7%
29.6%	537.5	516.6	-20.9	-3.9%
30.9%	536.9	510.5	-26.4	-4.9%
32.1%	532.1	507.0	-25.1	-4.7%
33.3%	531.1	503.6	-27.5	-5.2%
34.6%	519.7	501.4	-18.3	-3.5%
35.8%	510.6	500.4	-10.1	-2.0%
37.0%	510.1	500.3	-9.8	-1.9%
38.3%	507.2	499.7	-7.5	-1.5%
39.5%	503.5	499.3	-4.2	-0.8%
40.7%	503.3	492.4	-10.9	-2.2%
42.0%	501.4	486.7	-14.7	-2.9%
43.2%	497.1	486.5	-10.6	-2.1%
44.4%	494.4	476.3	-18.1	-3.7%
45.7%	489.6	474.2	-15.4	-3.1%
46.9%	488.0	474.1	-13.9	-2.8%
48.1%	485.8	472.8	-13.0	-2.7%
49.4%	485.4	471.2	-14.2	-2.9%
50.6%	480.5	469.0	-11.5	-2.4%
51.9%	480.5	457.4	-23.1	-4.8%
53.1%	471.9	455.4	-16.5	-3.5%
54.3%	463.8	424.8	-39.0	-8.4%
55.6%	407.9	404.3	-3.6	-0.9%
56.8%	405.4	398.5	-6.8	-1.7%
58.0%	401.8	397.4	-4.4	-1.1%
59.3%	401.5	394.2	-7.2	-1.8%
60.5%	399.1	390.4	-8.7	-2.2%
61.7%	396.0	387.7	-8.3	-2.1%
63.0%	392.9	386.7	-6.2	-1.6%
64.2%	392.9	385.6	-7.2	-1.8%
65.4%	390.8	385.3	-5.5	-1.4%
66.7%	389.7	383.6	-6.2	-1.6%
67.9%	389.0	383.1	-5.9	-1.5%
69.1%	388.1	381.4	-6.7	-1.7%
70.4%	386.1	380.7	-5.5	-1.4%
71.6%	385.4	376.2	-9.2	-2.4%
72.8%	385.0	373.6	-11.4	-3.0%
74.1%	384.4	373.6	-10.8	-2.8%
75.3%	384.3	373.5	-10.8	-2.8%
76.5%	383.9	372.4	-11.5	-3.0%
77.8%	383.0	372.3	-10.7	-2.8%
79.0%	380.9	371.8	-9.1	-2.4%
80.2%	378.4	369.1	-9.3	-2.5%
81.5%	378.0	368.5	-9.5	-2.5%
82.7%	370.4	368.2	-2.2	-0.6%
84.0%	368.5	363.7	-4.8	-1.3%
85.2%	354.6	354.9	0.2	0.1%
86.4%	350.7	349.2	-1.5	-0.4%
87.7%	344.9	343.0	-1.9	-0.6%
88.9%	344.5	339.8	-4.7	-1.4%
90.1%	341.5	335.5	-6.0	-1.8%
91.4%	331.7	335.5	3.7	1.1%
92.6%	331.0	335.3	4.3	1.3%
93.8%	329.8	331.0	1.2	0.4%
95.1%	329.0	324.6	-4.4	-1.4%
96.3%	327.0	321.4	-5.6	-1.7%
97.5%	326.8	319.9	-6.9	-2.1%
98.8%	326.4	319.8	-6.7	-2.0%
100.0%	216.0	216.7	0.6	0.3%

November				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	730.5	726.5	-4.0	-0.5%
1.2%	670.6	634.6	-36.0	-5.4%
2.5%	669.5	595.4	-74.1	-11.1%
3.7%	651.2	586.5	-64.8	-9.9%
4.9%	603.2	585.3	-17.9	-3.0%
6.2%	598.3	570.6	-27.7	-4.6%
7.4%	589.2	563.6	-25.6	-4.3%
8.6%	589.1	555.6	-33.5	-5.7%
9.9%	584.8	552.2	-32.6	-5.6%
11.1%	560.1	547.5	-12.6	-2.3%
12.3%	541.4	543.8	2.4	0.4%
13.6%	535.5	534.2	-1.3	-0.2%
14.8%	526.0	531.3	5.3	1.0%
16.0%	517.4	524.9	7.5	1.4%
17.3%	515.9	511.4	-4.5	-0.9%
18.5%	504.3	508.8	4.5	0.9%
19.8%	504.1	497.6	-6.5	-1.3%
21.0%	499.3	496.1	-3.2	-0.6%
22.2%	498.0	489.9	-8.1	-1.6%
23.5%	495.5	482.1	-13.4	-2.7%
24.7%	493.5	475.3	-18.2	-3.7%
25.9%	488.0	470.4	-17.6	-3.6%
27.2%	486.6	469.4	-17.2	-3.5%
28.4%	486.4	467.7	-18.7	-3.8%
29.6%	486.1	467.2	-18.9	-3.9%
30.9%	485.3	457.3	-28.0	-5.8%
32.1%	484.0	455.8	-28.2	-5.8%
33.3%	477.8	450.7	-27.1	-5.7%
34.6%	475.5	447.6	-27.9	-5.9%
35.8%	474.6	441.7	-33.0	-6.9%
37.0%	458.6	439.5	-19.0	-4.2%
38.3%	456.9	439.2	-17.8	-3.9%
39.5%	453.9	437.9	-16.1	-3.5%
40.7%	452.3	431.2	-21.1	-4.7%
42.0%	449.0	420.9	-28.1	-6.3%
43.2%	447.4	420.3	-27.1	-6.1%
44.4%	446.8	420.2	-26.6	-6.0%
45.7%	444.9	415.4	-29.5	-6.6%
46.9%	430.6	408.8	-21.8	-5.1%
48.1%	428.6	404.7	-23.8	-5.6%
49.4%	417.2	404.6	-12.6	-3.0%
50.6%	417.1	402.9	-14.2	-3.4%
51.9%	410.4	396.6	-13.8	-3.4%
53.1%	405.7	396.1	-9.6	-2.4%
54.3%	405.3	393.6	-11.6	-2.9%
55.6%	404.0	389.4	-14.6	-3.6%
56.8%	402.8	384.5	-18.3	-4.5%
58.0%	399.9	381.9	-18.0	-4.5%
59.3%	398.9	381.1	-17.8	-4.5%
60.5%	393.5	380.5	-13.0	-3.3%
61.7%	387.9	380.0	-7.9	-2.0%
63.0%	386.3	377.4	-8.9	-2.3%
64.2%	385.6	374.7	-10.8	-2.8%
65.4%	383.7	374.3	-9.4	-2.4%
66.7%	383.5	373.1	-10.4	-2.7%
67.9%	382.5	369.7	-12.7	-3.3%
69.1%	378.3	367.4	-10.9	-2.9%
70.4%	377.7	365.7	-12.0	-3.2%
71.6%	372.6	362.7	-9.9	-2.6%
72.8%	367.9	360.8	-7.0	-1.9%
74.1%	367.0	358.9	-8.1	-2.2%
75.3%	363.1	358.4	-4.7	-1.3%
76.5%	360.4	357.6	-2.8	-0.8%
77.8%	360.2	356.3	-3.8	-1.1%
79.0%	358.7	353.9	-4.9	-1.4%
80.2%	357.7	352.0	-5.6	-1.6%
81.5%	356.7	351.8	-4.9	-1.4%
82.7%	353.3	351.6	-1.7	-0.5%
84.0%	348.6	349.4	0.8	0.2%
85.2%	347.1	349.2	2.1	0.6%
86.4%	345.5	347.9	2.5	0.7%
87.7%	345.3	347.0	1.8	0.5%
88.9%	343.1	340.5	-2.6	-0.7%
90.1%	340.6	338.9	-1.7	-0.5%
91.4%	338.6	337.4	-1.2	-0.4%
92.6%	335.6	336.7	1.2	0.3%
93.8%	333.2	330.9	-2.4	-0.7%
95.1%	326.1	324.6	-1.6	-0.5%
96.3%	321.7	314.9	-6.8	-2.1%
97.5%	308.3	309.2	0.9	0.3%
98.8%	262.1	261.8	-0.3	-0.1%
100.0%	236.6	237.2	0.5	0.2%

December				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	734.5	725.8	-8.7	-1.2%
1.2%	681.6	672.2	-9.3	-1.4%
2.5%	679.2	661.4	-17.8	-2.6%
3.7%	665.1	660.0	-5.1	-0.8%
4.9%	652.9	659.4	6.5	1.0%
6.2%	652.3	642.8	-9.5	-1.5%
7.4%	638.8	630.9	-7.9	-1.2%
8.6%	633.5	619.0	-14.6	-2.3%
9.9%	630.8	617.8	-12.9	-2.0%
11.1%	622.2	613.4	-8.8	-1.4%
12.3%	614.2	592.4	-21.8	-3.5%
13.6%	603.6	591.3	-12.3	-2.0%
14.8%	601.6	585.1	-16.5	-2.7%
16.0%	597.3	583.2	-14.1	-2.4%
17.3%	593.5	573.6	-19.9	-3.3%
18.5%	583.4	560.6	-22.7	-3.9%
19.8%	582.3	560.0	-22.4	-3.8%
21.0%	575.8	546.0	-29.8	-5.2%
22.2%	574.9	545.1	-29.7	-5.2%
23.5%	573.2	541.8	-31.3	-5.5%
24.7%	559.5	531.4	-28.1	-5.0%
25.9%	559.2	526.7	-32.5	-5.8%
27.2%	548.9	524.0	-24.8	-4.5%
28.4%	548.3	515.4	-32.8	-6.0%
29.6%	547.7	512.8	-34.9	-6.4%
30.9%	527.8	511.5	-16.3	-3.1%
32.1%	526.7	510.0	-16.7	-3.2%
33.3%	522.5	505.1	-17.4	-3.3%
34.6%	519.8	487.7	-32.1	-6.2%
35.8%	515.0	486.5	-28.5	-5.5%
37.0%	498.0	479.2	-18.8	-3.8%
38.3%	489.1	473.5	-15.5	-3.2%
39.5%	473.6	459.4	-14.3	-3.0%
40.7%	463.1	455.9	-7.3	-1.6%
42.0%	461.7	454.5	-7.2	-1.6%
43.2%	450.0	452.4	2.4	0.5%
44.4%	438.0	436.1	-1.9	-0.4%
45.7%	429.9	429.1	-0.8	-0.2%
46.9%	425.7	428.2	2.6	0.6%
48.1%	415.2	415.9	0.7	0.2%
49.4%	409.5	408.2	-1.3	-0.3%
50.6%	404.7	407.5	2.9	0.7%
51.9%	395.0	397.6	2.7	0.7%
53.1%	390.0	389.5	-0.5	-0.1%
54.3%	389.7	388.0	-1.8	-0.5%
55.6%	386.5	382.2	-4.3	-1.1%
56.8%	379.5	364.9	-14.6	-3.8%
58.0%	377.6	364.1	-13.4	-3.6%
59.3%	376.5	360.2	-16.2	-4.3%
60.5%	365.2	359.9	-5.2	-1.4%
61.7%	364.6	359.5	-5.1	-1.4%
63.0%	356.0	356.9	0.9	0.2%
64.2%	354.8	356.8	2.0	0.6%
65.4%	354.4	351.2	-3.2	-0.9%
66.7%	351.1	350.6	-0.5	-0.1%
67.9%	348.3	347.0	-1.3	-0.4%
69.1%	346.6	345.9	-0.7	-0.2%
70.4%	342.9	341.4	-1.5	-0.4%
71.6%	340.7	335.7	-5.0	-1.5%
72.8%	337.5	333.7	-3.8	-1.1%
74.1%	333.5	328.0	-5.5	-1.6%
75.3%	333.4	324.9	-8.5	-2.5%
76.5%	333.4	323.5	-9.9	-3.0%
77.8%	329.3	321.5	-7.8	-2.4%
79.0%	323.2	319.2	-4.1	-1.3%
80.2%	323.1	317.6	-5.5	-1.7%
81.5%	318.6	317.2	-1.4	-0.5%
82.7%	312.9	315.8	3.0	0.9%
84.0%	309.9	313.9	4.0	1.3%
85.2%	309.4	308.3	-1.1	-0.4%
86.4%	306.1	307.9	1.8	0.6%
87.7%	306.0	306.5	0.5	0.2%
88.9%	303.1	302.5	-0.6	-0.2%
90.1%	302.9	301.5	-1.4	-0.5%
91.4%	301.9	299.8	-2.0	-0.7%
92.6%	299.5	299.5	0.0	0.0%
93.8%	296.2	286.7	-9.5	-3.2%
95.1%	252.7	248.9	-3.8	-1.5%
96.3%	238.4	244.0	5.6	2.3%
97.5%	224.7	225.0	0.3	0.1%
98.8%	196.4	196.6	0.2	0.1%
100.0%	191.4	192.0	0.5	0.3%

January				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	865.1	847.2	-17.9	-2.1%
1.2%	749.4	787.1	37.7	5.0%
2.5%	736.2	739.2	3.0	0.4%
3.7%	730.3	730.6	0.2	0.0%
4.9%	703.3	703.4	0.1	0.0%
6.2%	653.6	680.6	27.0	4.1%
7.4%	648.5	679.1	30.5	4.7%
8.6%	647.3	660.2	12.8	2.0%
9.9%	626.3	658.4	32.1	5.1%
11.1%	613.6	653.3	39.7	6.5%
12.3%	606.8	631.3	24.6	4.1%
13.6%	601.7	623.4	21.7	3.6%
14.8%	601.4	616.5	15.1	2.5%
16.0%	601.3	616.1	14.8	2.5%
17.3%	599.2	609.0	9.8	1.6%
18.5%	597.0	606.1	9.1	1.5%
19.8%	596.2	606.0	9.8	1.6%
21.0%	587.3	605.1	17.8	3.0%
22.2%	580.6	602.9	22.3	3.8%
23.5%	579.0	596.2	17.2	3.0%
24.7%	576.3	585.1	8.8	1.5%
25.9%	575.2	585.0	9.8	1.7%
27.2%	572.5	583.7	11.2	2.0%
28.4%	571.4	577.2	5.8	1.0%
29.6%	569.3	573.9	4.6	0.8%
30.9%	568.8	571.1	2.3	0.4%
32.1%	566.1	564.9	-1.2	-0.2%
33.3%	565.4	561.2	-4.3	-0.8%
34.6%	561.6	558.6	-3.0	-0.5%
35.8%	559.9	557.5	-2.4	-0.4%
37.0%	559.8	555.7	-4.1	-0.7%
38.3%	555.3	553.5	-1.8	-0.3%
39.5%	549.9	552.3	2.3	0.4%
40.7%	542.6	550.5	7.9	1.5%
42.0%	541.5	548.0	6.5	1.2%
43.2%	540.1	545.6	5.4	1.0%
44.4%	537.3	541.4	4.1	0.8%
45.7%	536.6	540.0	3.5	0.6%
46.9%	532.0	540.0	8.0	1.5%
48.1%	529.2	539.2	10.0	1.9%
49.4%	522.9	535.6	12.7	2.4%
50.6%	521.7	530.6	8.9	1.7%
51.9%	519.5	529.7	10.2	2.0%
53.1%	512.0	525.2	13.2	2.6%
54.3%	506.9	523.3	16.4	3.2%
55.6%	495.8	520.3	24.5	4.9%
56.8%	492.0	511.8	19.9	4.0%
58.0%	484.5	510.7	26.2	5.4%
59.3%	480.6	507.4	26.8	5.6%
60.5%	478.0	490.2	12.2	2.5%
61.7%	477.9	489.7	11.9	2.5%
63.0%	476.9	487.0	10.1	2.1%
64.2%	475.6	479.7	4.2	0.9%
65.4%	472.9	477.3	4.4	0.9%
66.7%	470.8	476.7	5.9	1.2%
67.9%	467.9	473.0	5.2	1.1%
69.1%	467.6	472.7	5.1	1.1%
70.4%	466.9	469.7	2.8	0.6%
71.6%	464.6	468.5	3.9	0.8%
72.8%	453.8	467.9	14.1	3.1%
74.1%	450.7	467.8	17.1	3.8%
75.3%	436.9	465.2	28.3	6.5%
76.5%	433.2	456.6	23.4	5.4%
77.8%	426.6	451.6	25.1	5.9%
79.0%	418.1	440.1	22.0	5.3%
80.2%	417.4	436.6	19.2	4.6%
81.5%	408.9	433.0	24.1	5.9%
82.7%	408.7	409.3	0.6	0.1%
84.0%	401.4	409.0	7.6	1.9%
85.2%	393.8	394.7	0.9	0.2%
86.4%	381.4	389.3	7.9	2.1%
87.7%	348.7	351.5	2.7	0.8%
88.9%	338.5	338.2	-0.3	-0.1%
90.1%	333.1	333.2	0.1	0.0%
91.4%	324.9	325.3	0.4	0.1%
92.6%	324.6	325.1	0.5	0.2%
93.8%	312.2	312.2	0.0	0.0%
95.1%	292.0	288.1	-3.9	-1.3%
96.3%	274.6	277.5	3.0	1.1%
97.5%	270.2	267.5	-2.7	-1.0%
98.8%	249.6	249.9	0.2	0.1%
100.0%	217.1	217.2	0.1	0.0%

Table SQ-30-b
Victoria Canal at Alternative Intake, Monthly EC
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	843.8	793.7	-50.2	-5.9%
1.2%	783.9	701.1	-82.8	-10.6%
2.5%	709.1	688.1	-20.9	-3.0%
3.7%	705.0	677.6	-27.4	-3.9%
4.9%	688.0	677.1	-11.0	-1.6%
6.2%	686.6	661.2	-25.4	-3.7%
7.4%	681.1	657.3	-23.8	-3.5%
8.6%	664.4	647.4	-17.0	-2.6%
9.9%	632.0	645.8	13.8	2.2%
11.1%	615.4	642.0	26.7	4.3%
12.3%	612.8	628.5	15.8	2.6%
13.6%	607.4	628.5	21.1	3.5%
14.8%	606.5	617.2	10.7	1.8%
16.0%	600.8	616.9	16.1	2.7%
17.3%	595.2	616.5	21.2	3.6%
18.5%	595.2	602.6	7.5	1.3%
19.8%	594.7	601.2	6.5	1.1%
21.0%	594.4	600.8	6.5	1.1%
22.2%	594.0	599.8	5.8	1.0%
23.5%	591.4	599.4	7.9	1.3%
24.7%	588.3	596.1	7.7	1.3%
25.9%	585.9	589.1	3.2	0.5%
27.2%	577.4	587.4	10.0	1.7%
28.4%	575.6	587.2	11.6	2.0%
29.6%	570.0	586.6	16.6	2.9%
30.9%	568.0	580.2	12.2	2.2%
32.1%	564.8	575.6	10.8	1.9%
33.3%	554.0	575.4	21.4	3.9%
34.6%	553.8	567.1	13.3	2.4%
35.8%	535.9	563.1	27.2	5.1%
37.0%	533.0	556.5	23.5	4.4%
38.3%	530.8	556.1	25.3	4.8%
39.5%	527.7	553.8	26.1	4.9%
40.7%	527.2	537.5	10.3	2.0%
42.0%	524.9	535.0	10.2	1.9%
43.2%	518.2	534.6	16.3	3.2%
44.4%	516.2	529.7	13.5	2.6%
45.7%	515.0	520.6	5.6	1.1%
46.9%	502.1	513.6	11.4	2.3%
48.1%	496.4	502.8	6.4	1.3%
49.4%	494.3	501.6	7.3	1.5%
50.6%	491.2	500.2	9.0	1.8%
51.9%	490.3	497.5	7.1	1.5%
53.1%	490.0	496.8	6.7	1.4%
54.3%	483.5	494.5	11.0	2.3%
55.6%	478.1	487.0	8.9	1.9%
56.8%	472.7	474.2	1.4	0.3%
58.0%	469.5	473.1	3.6	0.8%
59.3%	461.3	461.6	0.3	0.1%
60.5%	450.5	459.7	9.2	2.0%
61.7%	449.3	450.6	1.3	0.3%
63.0%	442.4	443.5	1.1	0.2%
64.2%	441.2	442.1	0.9	0.2%
65.4%	436.0	436.9	0.9	0.2%
66.7%	434.0	434.3	0.3	0.1%
67.9%	425.5	425.6	0.0	0.0%
69.1%	417.6	424.1	6.5	1.6%
70.4%	415.3	416.5	1.2	0.3%
71.6%	407.7	410.5	2.8	0.7%
72.8%	402.9	403.7	0.9	0.2%
74.1%	382.1	382.4	0.3	0.1%
75.3%	371.2	370.2	-0.9	-0.2%
76.5%	341.9	344.0	2.1	0.6%
77.8%	338.5	338.6	0.1	0.0%
79.0%	325.1	328.1	3.0	0.9%
80.2%	307.0	307.7	0.7	0.2%
81.5%	304.7	298.5	-6.2	-2.0%
82.7%	294.8	295.1	0.3	0.1%
84.0%	281.3	281.8	0.5	0.2%
85.2%	279.0	279.2	0.2	0.1%
86.4%	278.6	277.5	-1.1	-0.4%
87.7%	276.6	272.8	-3.9	-1.4%
88.9%	271.2	262.1	-9.0	-3.3%
90.1%	262.1	262.0	0.0	0.0%
91.4%	257.1	259.2	2.1	0.8%
92.6%	256.2	257.1	0.9	0.4%
93.8%	253.2	254.0	0.8	0.3%
95.1%	246.8	247.5	0.7	0.3%
96.3%	239.5	239.8	0.3	0.1%
97.5%	236.0	237.3	1.3	0.6%
98.8%	234.9	235.2	0.3	0.1%
100.0%	189.5	189.6	0.1	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	724.4	658.6	-65.8	-9.1%
1.2%	714.1	658.5	-55.5	-7.8%
2.5%	706.7	653.7	-53.0	-7.5%
3.7%	691.7	650.4	-41.3	-6.0%
4.9%	650.1	646.4	-3.7	-0.6%
6.2%	644.8	646.0	1.2	0.2%
7.4%	643.9	629.9	-14.0	-2.2%
8.6%	643.1	628.2	-15.0	-2.3%
9.9%	639.9	625.5	-14.4	-2.3%
11.1%	609.9	609.9	0.0	0.0%
12.3%	606.0	607.8	1.8	0.3%
13.6%	594.2	605.6	11.4	1.9%
14.8%	590.3	598.0	7.8	1.3%
16.0%	582.5	592.9	10.5	1.8%
17.3%	582.2	584.8	2.6	0.4%
18.5%	578.3	568.3	-10.0	-1.7%
19.8%	574.8	566.8	-7.9	-1.4%
21.0%	569.0	562.0	-7.0	-1.2%
22.2%	552.8	551.8	-1.0	-0.2%
23.5%	545.1	551.5	6.4	1.2%
24.7%	544.3	547.3	3.0	0.5%
25.9%	529.9	537.2	7.3	1.4%
27.2%	525.0	536.8	11.8	2.3%
28.4%	522.3	526.9	4.6	0.9%
29.6%	510.5	525.4	14.9	2.9%
30.9%	507.7	519.0	11.3	2.2%
32.1%	504.3	517.4	13.1	2.6%
33.3%	503.6	512.9	9.3	1.9%
34.6%	497.4	506.8	9.4	1.9%
35.8%	486.4	492.5	6.1	1.3%
37.0%	486.2	489.7	3.5	0.7%
38.3%	485.8	488.0	2.3	0.5%
39.5%	483.4	473.6	-9.8	-2.0%
40.7%	467.3	469.0	1.6	0.4%
42.0%	466.3	467.5	1.2	0.2%
43.2%	463.5	463.0	-0.4	-0.1%
44.4%	463.2	462.1	-1.1	-0.2%
45.7%	460.1	460.2	0.1	0.0%
46.9%	457.3	447.9	-9.4	-2.0%
48.1%	439.9	440.8	0.9	0.2%
49.4%	435.1	437.3	2.2	0.5%
50.6%	431.1	433.8	2.7	0.6%
51.9%	426.8	431.5	4.7	1.1%
53.1%	419.6	425.6	6.0	1.4%
54.3%	417.4	420.3	2.9	0.7%
55.6%	413.5	418.3	4.8	1.2%
56.8%	410.8	417.6	6.8	1.7%
58.0%	409.7	410.4	0.7	0.2%
59.3%	405.8	402.6	-3.2	-0.8%
60.5%	401.2	401.1	-0.1	0.0%
61.7%	392.6	399.8	7.1	1.8%
63.0%	380.3	394.2	13.9	3.7%
64.2%	373.9	374.4	0.5	0.1%
65.4%	364.9	365.5	0.6	0.2%
66.7%	362.4	361.6	-0.8	-0.2%
67.9%	361.6	357.7	-3.9	-1.1%
69.1%	357.1	353.6	-3.6	-1.0%
70.4%	341.6	341.7	0.1	0.0%
71.6%	333.0	333.5	0.5	0.2%
72.8%	323.7	324.3	0.5	0.2%
74.1%	320.7	321.4	0.7	0.2%
75.3%	307.9	310.1	2.2	0.7%
76.5%	302.6	303.3	0.7	0.2%
77.8%	290.3	301.1	10.7	3.7%
79.0%	285.2	285.2	0.0	0.0%
80.2%	278.6	278.9	0.3	0.1%
81.5%	275.5	275.5	0.0	0.0%
82.7%	274.2	274.7	0.4	0.2%
84.0%	271.6	271.8	0.2	0.1%
85.2%	268.1	268.2	0.0	0.0%
86.4%	267.0	267.2	0.2	0.1%
87.7%	260.8	261.0	0.2	0.1%
88.9%	254.7	259.4	4.7	1.9%
90.1%	251.3	251.5	0.2	0.1%
91.4%	224.9	228.4	3.5	1.5%
92.6%	223.9	224.1	0.2	0.1%
93.8%	221.6	221.7	0.1	0.0%
95.1%	211.5	211.8	0.3	0.1%
96.3%	211.4	211.6	0.3	0.1%
97.5%	205.4	205.6	0.2	0.1%
98.8%	198.9	199.1	0.2	0.1%
100.0%	182.2	182.4	0.2	0.1%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	669.1	619.9	-49.3	-7.4%
1.2%	608.9	614.1	5.2	0.9%
2.5%	599.2	612.2	13.0	2.2%
3.7%	598.7	609.9	11.2	1.9%
4.9%	598.6	599.1	0.5	0.1%
6.2%	593.6	595.7	2.1	0.3%
7.4%	584.9	590.1	5.2	0.9%
8.6%	582.5	580.2	-2.4	-0.4%
9.9%	576.8	578.9	2.1	0.4%
11.1%	573.9	571.0	-2.9	-0.5%
12.3%	573.7	569.1	-4.6	-0.8%
13.6%	568.4	568.9	0.5	0.1%
14.8%	566.7	566.5	-0.2	0.0%
16.0%	548.3	549.2	0.9	0.2%
17.3%	546.3	528.3	-18.0	-3.3%
18.5%	537.6	522.9	-14.7	-2.7%
19.8%	534.8	521.1	-13.7	-2.6%
21.0%	531.1	516.8	-14.3	-2.7%
22.2%	522.1	515.0	-7.0	-1.3%
23.5%	521.3	514.1	-7.2	-1.4%
24.7%	521.0	513.6	-7.5	-1.4%
25.9%	499.6	508.9	9.3	1.9%
27.2%	496.5	502.2	5.8	1.2%
28.4%	494.5	498.8	4.4	0.9%
29.6%	484.5	496.3	11.8	2.4%
30.9%	483.6	488.0	4.4	0.9%
32.1%	483.3	486.1	2.7	0.6%
33.3%	460.5	481.3	20.8	4.5%
34.6%	448.4	478.9	30.5	6.8%
35.8%	447.2	461.2	13.9	3.1%
37.0%	445.0	441.0	-4.1	-0.9%
38.3%	442.4	435.7	-6.7	-1.5%
39.5%	441.3	434.0	-7.2	-1.6%
40.7%	433.9	433.0	-0.9	-0.2%
42.0%	433.6	425.3	-8.3	-1.9%
43.2%	429.8	421.0	-8.8	-2.1%
44.4%	375.6	414.8	39.1	10.4%
45.7%	375.6	380.1	4.6	1.2%
46.9%	374.4	375.7	1.3	0.4%
48.1%	356.6	374.8	18.2	5.1%
49.4%	356.1	358.4	2.2	0.6%
50.6%	345.0	346.2	1.2	0.4%
51.9%	344.0	345.0	1.0	0.3%
53.1%	332.5	344.0	11.6	3.5%
54.3%	327.5	333.1	5.6	1.7%
55.6%	322.0	328.0	6.1	1.9%
56.8%	319.1	322.0	2.9	0.9%
58.0%	316.8	316.9	0.1	0.0%
59.3%	313.0	313.0	0.0	0.0%
60.5%	310.9	311.2	0.3	0.1%
61.7%	305.2	308.6	3.4	1.1%
63.0%	303.5	303.6	0.0	0.0%
64.2%	298.6	299.6	1.1	0.4%
65.4%	289.1	289.2	0.1	0.0%
66.7%	286.5	288.1	1.5	0.5%
67.9%	276.8	276.9	0.1	0.0%
69.1%	272.1	272.3	0.2	0.1%
70.4%	272.0	271.9	-0.1	0.0%
71.6%	268.3	269.4	1.1	0.4%
72.8%	263.3	263.2	-0.1	0.0%
74.1%	261.9	261.9	0.0	0.0%
75.3%	261.0	261.2	0.2	0.1%
76.5%	260.7	260.5	-0.3	-0.1%
77.8%	257.3	257.4	0.1	0.0%
79.0%	255.0	255.0	0.0	0.0%
80.2%	248.7	249.3	0.5	0.2%
81.5%	248.6	248.6	0.0	0.0%
82.7%	245.0	244.2	-0.8	-0.3%
84.0%	243.5	243.6	0.1	0.0%
85.2%	241.6	241.8	0.3	0.1%
86.4%	225.1	225.2	0.2	0.1%
87.7%	215.5	215.3	-0.2	-0.1%
88.9%	214.1	214.7	0.6	0.3%
90.1%	211.5	211.5	0.0	0.0%
91.4%	210.4	209.8	-0.6	-0.3%
92.6%	201.4	201.9	0.5	0.2%
93.8%	201.3	201.6	0.3	0.1%
95.1%	198.9	198.8	-0.1	-0.1%
96.3%	182.7	182.8	0.1	0.1%
97.5%	173.0	173.2	0.2	0.1%
98.8%	165.2	166.2	1.0	0.6%
100.0%	156.7	156.6	-0.1	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	557.8	543.0	-14.9	-2.7%
1.2%	556.7	540.0	-16.7	-3.0%
2.5%	546.0	538.3	-7.7	-1.4%
3.7%	539.4	531.3	-8.1	-1.5%
4.9%	535.6	526.0	-9.7	-1.8%
6.2%	522.1	520.6	-1.5	-0.3%
7.4%	516.3	502.7	-13.5	-2.6%
8.6%	501.0	493.7	-7.2	-1.4%
9.9%	496.7	493.5	-3.2	-0.6%
11.1%	494.4	492.9	-1.5	-0.3%
12.3%	490.0	485.7	-4.2	-0.9%
13.6%	489.9	477.5	-12.4	-2.5%
14.8%	485.9	472.1	-13.7	-2.8%
16.0%	471.1	469.0	-2.1	-0.4%
17.3%	470.0	468.3	-1.7	-0.4%
18.5%	469.4	468.1	-1.3	-0.3%
19.8%	468.6	466.2	-2.4	-0.5%
21.0%	466.8	461.1	-5.7	-1.2%
22.2%	460.6	460.5	0.0	0.0%
23.5%	458.1	460.1	2.0	0.4%
24.7%	456.1	457.7	1.6	0.4%
25.9%	456.0	454.2	-1.8	-0.4%
27.2%	455.7	452.5	-3.2	-0.7%
28.4%	446.6	447.5	0.9	0.2%
29.6%	445.3	445.0	-0.3	-0.1%
30.9%	444.6	444.6	0.0	0.0%
32.1%	439.9	440.3	0.4	0.1%
33.3%	436.7	430.7	-5.9	-1.4%
34.6%	427.6	428.9	1.3	0.3%
35.8%	426.8	428.1	1.3	0.3%
37.0%	424.0	424.6	0.6	0.1%
38.3%	417.5	419.7	2.2	0.5%
39.5%	416.0	416.2	0.1	0.0%
40.7%	412.5	413.6	1.1	0.3%
42.0%	409.7	408.1	-1.6	-0.4%
43.2%	405.9	406.7	0.8	0.2%
44.4%	399.2	405.1	5.9	1.5%
45.7%	396.9	397.7	0.8	0.2%
46.9%	391.2	392.2	1.0	0.3%
48.1%	384.1	391.9	7.8	2.0%
49.4%	381.9	384.7	2.9	0.7%
50.6%	372.4	381.9	9.5	2.5%
51.9%	368.8	368.9	0.1	0.0%
53.1%	363.8	364.8	1.0	0.3%
54.3%	359.7	363.9	4.2	1.2%
55.6%	358.9	363.4	4.4	1.2%
56.8%	357.8	359.3	1.5	0.4%
58.0%	356.9	358.0	1.0	0.3%
59.3%	354.6	355.3	0.7	0.2%
60.5%	354.1	355.1	1.0	0.3%
61.7%	353.2	354.8	1.5	0.4%
63.0%	351.3	354.6	3.3	0.9%
64.2%	350.9	351.0	0.1	0.0%
65.4%	350.4	350.6	0.2	0.1%
66.7%	345.6	345.6	0.0	0.0%
67.9%	343.3	343.3	0.0	0.0%
69.1%	340.8	340.9	0.1	0.0%
70.4%	335.6	335.6	0.0	0.0%
71.6%	334.4	334.3	-0.1	0.0%
72.8%	323.0	323.1	0.1	0.0%
74.1%	321.7	322.3	0.6	0.2%
75.3%	321.4	321.9	0.6	0.2%
76.5%	320.4	320.5	0.1	0.0%
77.8%	318.5	320.5	1.9	0.6%
79.0%	296.1	296.3	0.1	0.0%
80.2%	276.6	277.8	1.3	0.5%
81.5%	274.3	275.6	1.3	0.5%
82.7%	260.6	260.7	0.1	0.0%
84.0%	247.7	247.8	0.0	0.0%
85.2%	242.0	242.8	0.8	0.3%
86.4%	227.4	228.1	0.7	0.3%
87.7%	225.2	225.4	0.2	0.1%
88.9%	216.1	217.1	1.1	0.5%
90.1%	190.5	190.6	0.2	0.1%
91.4%	185.2	185.5	0.2	0.1%
92.6%	184.3	184.7	0.5	0.3%
93.8%	180.4	180.8	0.4	0.2%
95.1%	175.6	175.8	0.2	0.1%
96.3%	174.5	174.9	0.4	0.2%
97.5%	163.8	164.1	0.3	0.2%
98.8%	159.9	160.4	0.5	0.3%
100.0%	157.6	157.8	0.2	0.1%

Table SQ-30-b

Victoria Canal at Alternative Intake, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	533.3	528.7	-4.7	-0.9%
1.2%	516.9	505.1	-11.8	-2.3%
2.5%	473.2	471.5	-1.8	-0.4%
3.7%	471.7	470.7	-1.0	-0.2%
4.9%	460.4	459.1	-1.3	-0.3%
6.2%	457.6	448.7	-8.9	-1.9%
7.4%	447.5	436.0	-11.5	-2.6%
8.6%	444.5	432.6	-12.0	-2.7%
9.9%	433.2	427.8	-5.4	-1.2%
11.1%	428.4	425.2	-3.2	-0.7%
12.3%	426.9	422.6	-4.3	-1.0%
13.6%	421.5	421.8	0.3	0.1%
14.8%	419.5	419.2	-0.3	-0.1%
16.0%	419.5	414.5	-5.0	-1.2%
17.3%	416.9	405.5	-11.3	-2.7%
18.5%	412.5	404.9	-7.7	-1.9%
19.8%	409.6	404.4	-5.2	-1.3%
21.0%	404.4	393.3	-11.1	-2.8%
22.2%	396.3	393.2	-3.2	-0.8%
23.5%	395.6	392.6	-3.0	-0.7%
24.7%	395.2	392.5	-2.7	-0.7%
25.9%	392.8	392.5	-0.3	-0.1%
27.2%	391.7	387.7	-4.0	-1.0%
28.4%	391.7	386.3	-5.3	-1.4%
29.6%	390.9	386.1	-4.8	-1.2%
30.9%	385.9	383.9	-2.0	-0.5%
32.1%	383.7	382.0	-1.7	-0.4%
33.3%	383.4	381.7	-1.7	-0.5%
34.6%	380.7	381.0	0.3	0.1%
35.8%	378.9	374.4	-4.5	-1.2%
37.0%	378.9	373.0	-5.9	-1.5%
38.3%	374.4	371.8	-2.6	-0.7%
39.5%	372.2	368.3	-3.9	-1.0%
40.7%	371.7	367.9	-3.9	-1.0%
42.0%	369.5	366.2	-3.3	-0.9%
43.2%	367.9	365.8	-2.1	-0.6%
44.4%	366.6	365.3	-1.3	-0.4%
45.7%	365.6	361.3	-4.3	-1.2%
46.9%	363.7	358.9	-4.8	-1.3%
48.1%	356.7	356.9	0.2	0.1%
49.4%	353.3	354.9	1.6	0.4%
50.6%	352.4	352.8	0.5	0.1%
51.9%	350.8	351.6	0.7	0.2%
53.1%	349.9	350.0	0.1	0.0%
54.3%	349.8	350.0	0.2	0.1%
55.6%	348.1	349.3	1.2	0.3%
56.8%	344.9	348.1	3.2	0.9%
58.0%	344.7	345.0	0.3	0.1%
59.3%	344.2	344.9	0.7	0.2%
60.5%	344.2	344.1	-0.1	0.0%
61.7%	343.4	343.3	-0.1	0.0%
63.0%	342.5	342.4	-0.1	0.0%
64.2%	341.4	342.2	0.8	0.2%
65.4%	341.2	341.8	0.7	0.2%
66.7%	339.0	338.8	-0.3	-0.1%
67.9%	337.0	337.3	0.3	0.1%
69.1%	336.7	336.9	0.2	0.1%
70.4%	336.5	336.7	0.1	0.0%
71.6%	336.2	336.5	0.3	0.1%
72.8%	335.3	336.4	1.1	0.3%
74.1%	334.2	334.7	0.6	0.2%
75.3%	333.5	333.0	-0.6	-0.2%
76.5%	331.9	331.4	-0.5	-0.2%
77.8%	329.0	329.0	0.1	0.0%
79.0%	329.0	328.9	0.0	0.0%
80.2%	328.7	328.7	0.1	0.0%
81.5%	323.4	324.0	0.6	0.2%
82.7%	321.7	321.9	0.2	0.1%
84.0%	321.6	320.6	-1.0	-0.3%
85.2%	317.8	318.0	0.2	0.1%
86.4%	317.2	316.9	-0.2	-0.1%
87.7%	313.2	313.6	0.4	0.1%
88.9%	310.9	311.5	0.6	0.2%
90.1%	310.4	311.0	0.6	0.2%
91.4%	307.8	308.3	0.6	0.2%
92.6%	302.8	302.2	-0.6	-0.2%
93.8%	300.2	300.4	0.2	0.1%
95.1%	294.0	294.0	0.1	0.0%
96.3%	289.7	290.5	0.7	0.3%
97.5%	285.2	285.6	0.3	0.1%
98.8%	284.6	283.0	-1.6	-0.6%
100.0%	280.4	280.7	0.3	0.1%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	526.9	536.8	9.9	1.9%
1.2%	511.7	506.3	-5.4	-1.1%
2.5%	508.9	498.5	-10.4	-2.0%
3.7%	499.8	485.6	-14.2	-2.8%
4.9%	496.1	475.6	-20.5	-4.1%
6.2%	484.7	461.5	-23.2	-4.8%
7.4%	434.5	418.5	-16.0	-3.7%
8.6%	401.5	400.4	-1.0	-0.3%
9.9%	401.3	389.5	-11.8	-2.9%
11.1%	387.2	385.0	-2.2	-0.6%
12.3%	384.3	384.9	0.7	0.2%
13.6%	378.6	373.3	-5.3	-1.4%
14.8%	375.1	372.9	-2.2	-0.6%
16.0%	373.7	370.3	-3.4	-0.9%
17.3%	373.5	369.3	-4.2	-1.1%
18.5%	370.7	365.6	-5.1	-1.4%
19.8%	363.6	362.8	-0.8	-0.2%
21.0%	361.7	357.2	-4.4	-1.2%
22.2%	360.0	356.5	-3.6	-1.0%
23.5%	357.5	353.2	-4.3	-1.2%
24.7%	356.0	352.4	-3.6	-1.0%
25.9%	355.7	350.1	-5.5	-1.6%
27.2%	355.2	348.8	-6.3	-1.8%
28.4%	353.5	346.9	-6.7	-1.9%
29.6%	351.9	338.9	-13.0	-3.7%
30.9%	350.2	333.6	-16.6	-4.7%
32.1%	348.7	329.4	-19.4	-5.6%
33.3%	342.7	324.3	-18.4	-5.4%
34.6%	342.0	321.0	-21.0	-6.1%
35.8%	339.4	320.2	-19.2	-5.7%
37.0%	337.6	319.5	-18.2	-5.4%
38.3%	336.4	318.7	-17.6	-5.2%
39.5%	333.9	318.2	-15.8	-4.7%
40.7%	331.4	317.8	-13.5	-4.1%
42.0%	330.5	317.1	-13.3	-4.0%
43.2%	322.5	316.7	-5.9	-1.8%
44.4%	319.1	315.7	-3.4	-1.1%
45.7%	318.0	313.2	-4.8	-1.5%
46.9%	317.8	311.7	-6.1	-1.9%
48.1%	316.4	308.5	-7.9	-2.5%
49.4%	315.2	307.2	-8.0	-2.5%
50.6%	314.5	307.0	-7.5	-2.4%
51.9%	313.3	306.8	-6.5	-2.1%
53.1%	307.4	301.1	-6.2	-2.0%
54.3%	307.4	300.3	-7.1	-2.3%
55.6%	301.8	300.0	-1.8	-0.6%
56.8%	299.0	299.2	0.2	0.1%
58.0%	298.9	298.3	-0.7	-0.2%
59.3%	298.4	296.8	-1.6	-0.5%
60.5%	295.8	296.4	0.6	0.2%
61.7%	294.6	292.7	-1.9	-0.6%
63.0%	289.8	289.8	0.0	0.0%
64.2%	288.5	288.5	0.1	0.0%
65.4%	288.3	287.4	-0.9	-0.3%
66.7%	287.2	286.8	-0.4	-0.1%
67.9%	285.3	286.2	1.0	0.3%
69.1%	284.9	284.7	-0.2	-0.1%
70.4%	283.5	284.6	1.1	0.4%
71.6%	282.5	282.0	-0.5	-0.2%
72.8%	281.5	281.5	0.0	0.0%
74.1%	280.8	279.9	-0.9	-0.3%
75.3%	279.5	278.0	-1.5	-0.5%
76.5%	278.3	277.8	-0.5	-0.2%
77.8%	277.6	277.4	-0.2	-0.1%
79.0%	277.2	277.3	0.2	0.1%
80.2%	276.4	276.1	-0.3	-0.1%
81.5%	275.5	272.7	-2.9	-1.0%
82.7%	275.5	271.5	-4.0	-1.4%
84.0%	275.3	271.4	-3.9	-1.4%
85.2%	274.9	271.0	-3.9	-1.4%
86.4%	273.9	268.1	-5.8	-2.1%
87.7%	271.0	266.2	-4.8	-1.8%
88.9%	266.7	266.1	-0.6	-0.2%
90.1%	264.3	264.0	-0.3	-0.1%
91.4%	264.2	263.7	-0.6	-0.2%
92.6%	261.6	262.4	0.8	0.3%
93.8%	260.3	260.8	0.5	0.2%
95.1%	260.1	260.6	0.5	0.2%
96.3%	259.4	260.4	1.1	0.4%
97.5%	255.6	256.0	0.3	0.1%
98.8%	252.6	252.8	0.3	0.1%
100.0%	251.1	252.0	0.9	0.4%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	585.2	582.0	-3.2	-0.6%
1.2%	539.9	507.5	-32.4	-6.0%
2.5%	508.2	491.9	-16.4	-3.2%
3.7%	495.8	481.7	-14.1	-2.9%
4.9%	491.3	458.2	-33.1	-6.7%
6.2%	444.4	446.2	1.7	0.4%
7.4%	430.3	445.9	15.6	3.6%
8.6%	416.6	422.0	5.4	1.3%
9.9%	406.8	417.8	11.0	2.7%
11.1%	403.3	401.0	-2.3	-0.6%
12.3%	394.6	395.8	1.3	0.3%
13.6%	391.8	393.7	2.0	0.5%
14.8%	388.5	390.3	1.8	0.5%
16.0%	384.9	388.0	3.1	0.8%
17.3%	381.2	383.0	1.8	0.5%
18.5%	380.3	379.8	-0.5	-0.1%
19.8%	380.1	379.7	-0.3	-0.1%
21.0%	372.8	379.6	6.7	1.8%
22.2%	361.2	376.9	15.7	4.4%
23.5%	360.4	376.4	16.0	4.4%
24.7%	360.0	361.9	1.9	0.5%
25.9%	356.1	356.2	0.1	0.0%
27.2%	353.0	355.2	2.1	0.6%
28.4%	352.6	354.5	1.8	0.5%
29.6%	351.5	352.6	1.2	0.3%
30.9%	349.1	351.2	2.0	0.6%
32.1%	349.0	347.2	-1.8	-0.5%
33.3%	346.8	342.9	-3.9	-1.1%
34.6%	341.6	341.2	-0.5	-0.1%
35.8%	338.4	334.0	-4.4	-1.3%
37.0%	334.5	329.0	-5.5	-1.6%
38.3%	332.3	326.2	-6.1	-1.8%
39.5%	330.9	322.1	-8.8	-2.7%
40.7%	329.6	321.6	-8.0	-2.4%
42.0%	327.4	320.2	-7.2	-2.2%
43.2%	322.7	320.1	-2.6	-0.8%
44.4%	320.3	318.1	-2.2	-0.7%
45.7%	319.3	318.0	-1.3	-0.4%
46.9%	315.9	317.7	1.8	0.6%
48.1%	313.7	314.6	0.8	0.3%
49.4%	312.5	308.8	-3.6	-1.2%
50.6%	307.4	307.6	0.2	0.1%
51.9%	300.4	300.8	0.5	0.2%
53.1%	300.4	300.3	-0.1	0.0%
54.3%	287.1	294.8	7.6	2.7%
55.6%	286.2	291.8	5.6	2.0%
56.8%	284.5	285.3	0.7	0.3%
58.0%	283.5	285.1	1.6	0.6%
59.3%	282.4	283.5	1.2	0.4%
60.5%	280.9	282.7	1.8	0.6%
61.7%	278.3	280.8	2.6	0.9%
63.0%	277.3	280.4	3.1	1.1%
64.2%	276.5	279.6	3.1	1.1%
65.4%	276.3	279.1	2.8	1.0%
66.7%	274.3	275.2	0.9	0.3%
67.9%	272.1	272.0	-0.1	0.0%
69.1%	268.7	269.1	0.4	0.2%
70.4%	268.5	268.5	-0.1	0.0%
71.6%	267.8	268.5	0.7	0.2%
72.8%	267.4	267.8	0.4	0.1%
74.1%	266.5	264.8	-1.7	-0.6%
75.3%	264.5	263.8	-0.7	-0.3%
76.5%	263.6	263.4	-0.2	-0.1%
77.8%	261.9	263.1	1.2	0.5%
79.0%	259.0	262.3	3.3	1.3%
80.2%	256.3	260.5	4.3	1.7%
81.5%	255.9	257.6	1.6	0.6%
82.7%	255.4	253.6	-1.8	-0.7%
84.0%	254.8	252.7	-2.2	-0.8%
85.2%	254.2	252.5	-1.6	-0.6%
86.4%	252.6	252.0	-0.6	-0.2%
87.7%	251.9	249.9	-2.0	-0.8%
88.9%	251.1	249.7	-1.5	-0.6%
90.1%	249.0	248.0	-1.0	-0.4%
91.4%	248.4	247.3	-1.1	-0.5%
92.6%	247.8	247.0	-0.8	-0.3%
93.8%	246.5	246.8	0.4	0.1%
95.1%	245.7	245.7	0.0	0.0%
96.3%	244.4	245.0	0.7	0.3%
97.5%	243.4	244.4	1.0	0.4%
98.8%	239.9	239.3	-0.5	-0.2%
100.0%	238.5	231.9	-6.7	-2.8%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	493.8	494.3	0.5	0.1%
1.2%	489.5	471.9	-17.6	-3.6%
2.5%	484.4	460.1	-24.3	-5.0%
3.7%	482.9	457.2	-25.7	-5.3%
4.9%	478.7	456.2	-22.6	-4.7%
6.2%	478.2	451.4	-26.8	-5.6%
7.4%	476.1	451.3	-24.8	-5.2%
8.6%	472.5	448.0	-24.4	-5.2%
9.9%	465.4	445.5	-19.9	-4.3%
11.1%	464.8	441.8	-23.0	-4.9%
12.3%	461.9	441.3	-20.5	-4.4%
13.6%	459.4	439.6	-19.8	-4.3%
14.8%	453.6	438.8	-14.8	-3.3%
16.0%	453.1	438.7	-14.4	-3.2%
17.3%	445.6	438.7	-6.9	-1.6%
18.5%	443.6	436.6	-7.0	-1.6%
19.8%	442.9	435.9	-7.1	-1.6%
21.0%	441.0	435.8	-5.1	-1.2%
22.2%	439.2	426.7	-12.4	-2.8%
23.5%	433.8	425.5	-8.3	-1.9%
24.7%	431.5	422.9	-8.6	-2.0%
25.9%	430.4	422.3	-8.1	-1.9%
27.2%	427.8	421.4	-6.4	-1.5%
28.4%	426.6	421.2	-5.4	-1.3%
29.6%	426.2	419.6	-6.6	-1.6%
30.9%	424.8	419.5	-5.3	-1.2%
32.1%	424.4	418.7	-5.7	-1.3%
33.3%	422.8	417.9	-4.9	-1.2%
34.6%	419.8	416.8	-3.0	-0.7%
35.8%	419.8	416.3	-3.4	-0.8%
37.0%	416.7	415.8	-0.9	-0.2%
38.3%	414.8	415.5	0.7	0.2%
39.5%	414.3	413.3	-1.0	-0.2%
40.7%	411.8	413.1	1.3	0.3%
42.0%	410.9	410.2	-0.7	-0.2%
43.2%	409.6	407.8	-1.8	-0.4%
44.4%	408.6	406.7	-1.9	-0.5%
45.7%	401.7	405.8	4.1	1.0%
46.9%	400.5	405.7	5.2	1.3%
48.1%	400.0	403.7	3.6	0.9%
49.4%	399.5	403.0	3.5	0.9%
50.6%	399.1	402.2	3.1	0.8%
51.9%	397.6	401.9	4.2	1.1%
53.1%	396.5	399.6	3.1	0.8%
54.3%	395.3	397.2	1.9	0.5%
55.6%	394.3	397.1	2.8	0.7%
56.8%	393.6	396.8	3.2	0.8%
58.0%	393.1	393.9	0.8	0.2%
59.3%	392.6	392.0	-0.6	-0.1%
60.5%	390.5	388.7	-1.8	-0.5%
61.7%	389.2	385.7	-3.5	-0.9%
63.0%	388.5	385.6	-2.9	-0.7%
64.2%	386.7	385.4	-1.3	-0.3%
65.4%	386.3	384.1	-2.2	-0.6%
66.7%	385.3	383.7	-1.6	-0.4%
67.9%	385.2	383.2	-2.0	-0.5%
69.1%	383.4	382.4	-1.0	-0.3%
70.4%	382.3	380.0	-2.2	-0.6%
71.6%	381.9	373.3	-8.6	-2.3%
72.8%	380.7	372.8	-7.9	-2.1%
74.1%	379.3	372.7	-6.6	-1.7%
75.3%	377.8	369.4	-8.4	-2.2%
76.5%	377.6	367.7	-9.9	-2.6%
77.8%	370.5	366.2	-4.3	-1.1%
79.0%	365.5	366.1	0.6	0.2%
80.2%	355.1	362.5	7.5	2.1%
81.5%	349.8	354.5	4.7	1.3%
82.7%	348.1	350.7	2.7	0.8%
84.0%	344.4	349.3	4.9	1.4%
85.2%	344.3	346.6	2.2	0.6%
86.4%	343.5	346.2	2.7	0.8%
87.7%	340.7	345.4	4.7	1.4%
88.9%	338.2	338.3	0.0	0.0%
90.1%	338.0	335.4	-2.5	-0.8%
91.4%	335.2	333.9	-1.3	-0.4%
92.6%	333.0	327.5	-5.4	-1.6%
93.8%	327.3	326.2	-1.2	-0.4%
95.1%	323.4	322.0	-1.4	-0.4%
96.3%	314.6	319.2	4.6	1.5%
97.5%	313.6	316.9	3.3	1.1%
98.8%	309.6	315.6	6.0	1.9%
100.0%	298.4	299.7	1.3	0.4%

Figure SQ-31-b
Clifton Court Forebay, Monthly EC
Probability of Exceedance

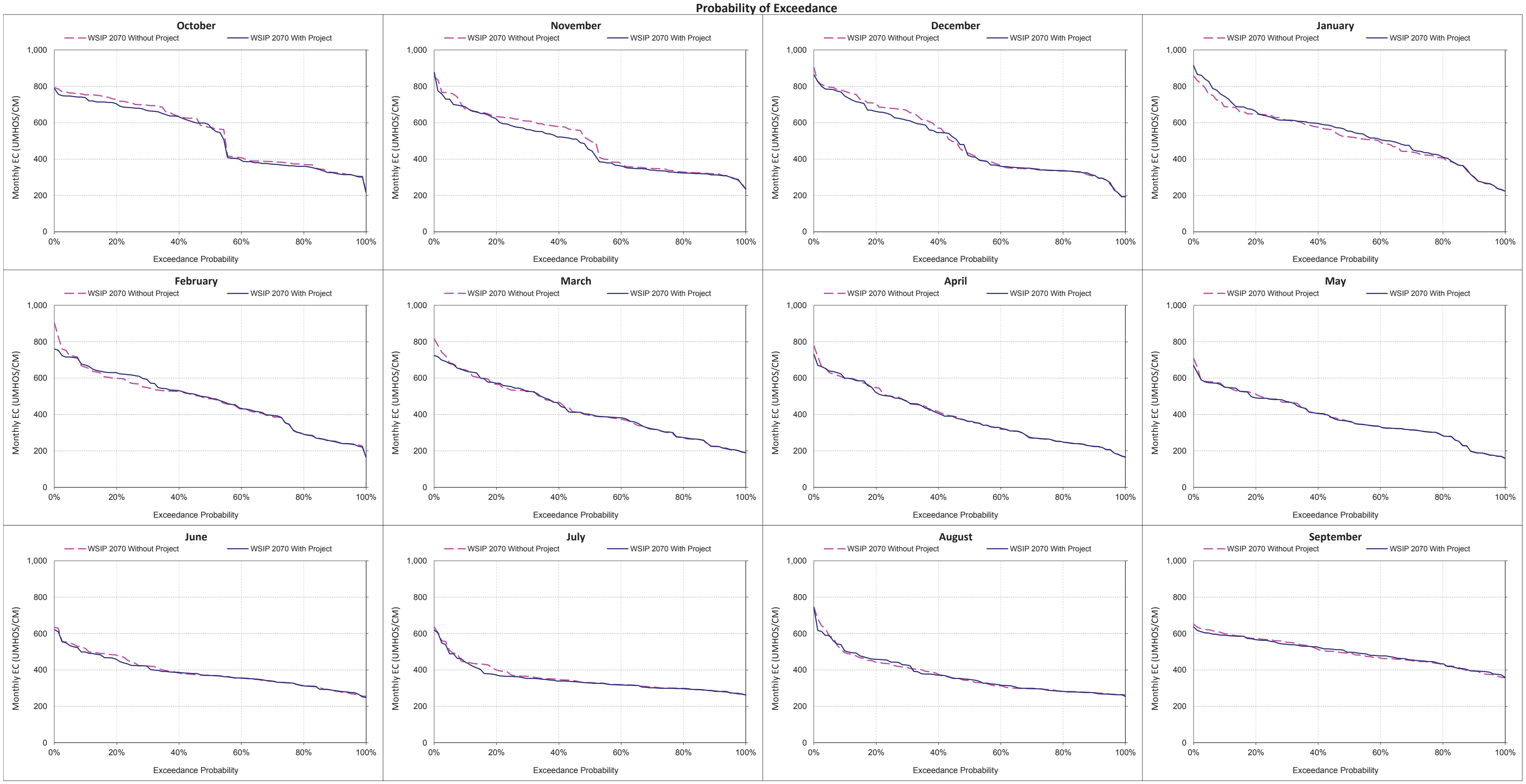


Table SQ-31-b
Clifton Court Forebay, Monthly EC
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	793.4	788.2	-5.1	-0.6%
1.2%	786.6	756.4	-30.2	-3.8%
2.5%	770.8	749.0	-21.9	-2.8%
3.7%	769.7	747.3	-22.3	-2.9%
4.9%	763.5	747.1	-16.4	-2.1%
6.2%	762.7	744.6	-18.1	-2.4%
7.4%	759.1	741.8	-17.3	-2.3%
8.6%	758.9	741.5	-17.4	-2.3%
9.9%	753.4	739.0	-14.4	-1.9%
11.1%	753.1	720.6	-32.6	-4.3%
12.3%	753.0	719.6	-33.4	-4.4%
13.6%	751.1	714.3	-36.8	-4.9%
14.8%	749.0	713.7	-35.3	-4.7%
16.0%	741.0	713.5	-27.5	-3.7%
17.3%	740.3	711.6	-28.7	-3.9%
18.5%	732.0	711.0	-20.9	-2.9%
19.8%	728.6	705.0	-23.6	-3.2%
21.0%	717.8	691.8	-26.0	-3.6%
22.2%	717.7	685.9	-31.8	-4.4%
23.5%	712.5	684.9	-27.6	-3.9%
24.7%	709.6	682.8	-26.7	-3.8%
25.9%	700.6	680.0	-20.6	-2.9%
27.2%	699.6	679.9	-19.7	-2.8%
28.4%	698.9	676.0	-22.9	-3.3%
29.6%	696.7	667.1	-29.6	-4.2%
30.9%	694.3	663.7	-30.6	-4.4%
32.1%	694.0	663.4	-30.6	-4.4%
33.3%	688.5	660.2	-28.3	-4.1%
34.6%	686.5	650.8	-35.7	-5.2%
35.8%	659.1	643.6	-15.4	-2.3%
37.0%	654.9	637.6	-17.4	-2.7%
38.3%	645.3	636.7	-8.6	-1.3%
39.5%	636.5	636.2	-0.3	0.0%
40.7%	631.5	627.6	-3.9	-0.6%
42.0%	626.2	618.5	-7.8	-1.2%
43.2%	624.9	612.0	-12.9	-2.1%
44.4%	624.5	604.0	-20.5	-3.3%
45.7%	622.3	598.5	-23.9	-3.8%
46.9%	585.3	598.4	13.0	2.2%
48.1%	582.2	598.3	16.1	2.8%
49.4%	575.0	591.7	16.7	2.9%
50.6%	572.6	567.1	-5.5	-1.0%
51.9%	565.3	550.9	-14.4	-2.5%
53.1%	564.6	545.1	-19.5	-3.5%
54.3%	562.1	507.8	-54.3	-9.7%
55.6%	416.9	408.3	-8.6	-2.1%
56.8%	413.2	404.7	-8.6	-2.1%
58.0%	409.7	404.3	-5.4	-1.3%
59.3%	409.5	399.9	-9.7	-2.4%
60.5%	404.9	387.9	-17.0	-4.2%
61.7%	395.1	386.6	-8.5	-2.2%
63.0%	390.1	386.4	-3.7	-1.0%
64.2%	389.6	380.7	-8.9	-2.3%
65.4%	389.4	379.9	-9.4	-2.4%
66.7%	388.9	376.5	-12.4	-3.2%
67.9%	387.3	375.9	-11.3	-2.9%
69.1%	386.8	373.5	-13.3	-3.4%
70.4%	385.1	371.3	-13.8	-3.6%
71.6%	383.3	369.7	-13.6	-3.6%
72.8%	382.9	367.1	-15.8	-4.1%
74.1%	380.3	365.5	-14.8	-3.9%
75.3%	379.7	363.8	-15.9	-4.2%
76.5%	374.3	363.1	-11.2	-3.0%
77.8%	373.4	360.8	-12.6	-3.4%
79.0%	373.2	360.6	-12.6	-3.4%
80.2%	369.7	360.6	-9.1	-2.5%
81.5%	368.5	356.9	-11.6	-3.2%
82.7%	368.0	353.7	-14.3	-3.9%
84.0%	350.6	347.4	-3.2	-0.9%
85.2%	344.8	341.1	-3.8	-1.1%
86.4%	343.1	335.1	-8.0	-2.3%
87.7%	329.1	326.2	-2.9	-0.9%
88.9%	327.2	325.7	-1.5	-0.5%
90.1%	325.8	322.4	-3.4	-1.1%
91.4%	322.0	317.7	-4.4	-1.4%
92.6%	321.1	315.3	-5.8	-1.8%
93.8%	315.2	315.1	-0.1	0.0%
95.1%	314.4	314.2	-0.2	-0.1%
96.3%	306.9	308.9	2.1	0.7%
97.5%	305.7	302.0	-3.7	-1.2%
98.8%	305.1	301.3	-3.8	-1.2%
100.0%	216.8	217.1	0.3	0.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	851.9	877.1	25.2	3.0%
1.2%	835.2	775.5	-59.7	-7.1%
2.5%	767.0	758.1	-8.9	-1.2%
3.7%	766.2	729.7	-36.5	-4.8%
4.9%	765.1	729.6	-35.4	-4.6%
6.2%	757.5	699.4	-58.2	-7.7%
7.4%	742.1	697.3	-44.7	-6.0%
8.6%	702.9	692.5	-10.4	-1.5%
9.9%	677.0	688.7	11.7	1.7%
11.1%	668.1	674.4	6.3	0.9%
12.3%	666.5	662.4	-4.1	-0.6%
13.6%	657.1	661.4	4.3	0.7%
14.8%	655.8	651.9	-3.9	-0.6%
16.0%	654.5	650.0	-4.5	-0.7%
17.3%	649.0	642.9	-6.0	-0.9%
18.5%	640.2	631.5	-8.7	-1.4%
19.8%	634.2	623.5	-10.7	-1.7%
21.0%	632.9	602.0	-31.0	-4.9%
22.2%	629.1	594.1	-35.0	-5.6%
23.5%	627.3	592.3	-35.1	-5.6%
24.7%	626.5	584.7	-41.8	-6.7%
25.9%	620.6	576.7	-43.8	-7.1%
27.2%	619.2	574.2	-44.9	-7.3%
28.4%	611.5	571.0	-40.5	-6.6%
29.6%	609.8	562.8	-47.0	-7.7%
30.9%	608.4	561.8	-46.6	-7.7%
32.1%	605.3	554.2	-51.0	-8.4%
33.3%	594.8	551.9	-42.9	-7.2%
34.6%	593.7	551.0	-42.8	-7.2%
35.8%	585.8	540.8	-45.0	-7.7%
37.0%	585.7	538.2	-47.5	-8.1%
38.3%	582.6	532.7	-49.9	-8.6%
39.5%	579.3	521.5	-57.8	-10.0%
40.7%	578.0	521.3	-56.7	-9.8%
42.0%	575.8	518.6	-57.2	-9.9%
43.2%	565.2	516.3	-48.9	-8.6%
44.4%	560.9	510.6	-50.2	-9.0%
45.7%	559.7	509.6	-50.1	-9.0%
46.9%	557.8	490.5	-67.2	-12.1%
48.1%	521.2	485.6	-35.6	-6.8%
49.4%	508.0	454.8	-53.2	-10.5%
50.6%	495.0	444.2	-50.7	-10.3%
51.9%	491.8	415.5	-76.3	-15.5%
53.1%	408.9	384.9	-24.0	-5.9%
54.3%	400.2	383.6	-16.6	-4.1%
55.6%	398.6	379.1	-19.5	-4.9%
56.8%	385.3	378.2	-7.1	-1.8%
58.0%	383.2	366.2	-17.0	-4.4%
59.3%	383.0	365.2	-17.8	-4.7%
60.5%	367.2	359.9	-7.3	-2.0%
61.7%	358.8	352.4	-6.4	-1.8%
63.0%	356.8	350.5	-6.2	-1.7%
64.2%	356.6	348.2	-8.3	-2.3%
65.4%	354.2	348.2	-6.0	-1.7%
66.7%	354.1	346.8	-7.3	-2.0%
67.9%	350.4	346.0	-4.4	-1.3%
69.1%	349.9	339.7	-10.2	-2.9%
70.4%	348.0	338.6	-9.4	-2.7%
71.6%	347.6	335.6	-12.0	-3.4%
72.8%	345.9	335.6	-10.3	-3.0%
74.1%	345.3	335.1	-10.2	-3.0%
75.3%	337.6	329.5	-8.1	-2.4%
76.5%	337.5	328.3	-9.3	-2.7%
77.8%	331.3	326.4	-4.9	-1.5%
79.0%	330.3	324.6	-5.7	-1.7%
80.2%	328.0	323.5	-4.5	-1.4%
81.5%	326.6	323.4	-3.2	-1.0%
82.7%	326.2	321.1	-5.1	-1.6%
84.0%	324.9	320.7	-4.2	-1.3%
85.2%	324.8	320.5	-4.3	-1.3%
86.4%	321.4	319.4	-2.1	-0.6%
87.7%	321.1	318.4	-2.7	-0.9%
88.9%	319.9	313.9	-6.1	-1.9%
90.1%	319.7	313.2	-6.6	-2.0%
91.4%	318.5	311.2	-7.3	-2.3%
92.6%	309.9	308.9	-1.0	-0.3%
93.8%	309.2	307.6	-1.5	-0.5%
95.1%	302.4	300.4	-2.0	-0.7%
96.3%	294.2	292.0	-2.2	-0.8%
97.5%	283.8	288.7	4.9	1.7%
98.8%	263.2	259.6	-3.6	-1.4%
100.0%	233.8	234.1	0.3	0.1%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	904.5	863.9	-40.7	-4.5%
1.2%	825.9	826.4	0.5	0.1%
2.5%	809.9	800.4	-9.5	-1.2%
3.7%	803.2	785.3	-18.0	-2.2%
4.9%	795.1	783.8	-11.4	-1.4%
6.2%	794.8	782.0	-12.8	-1.6%
7.4%	782.5	774.2	-8.3	-1.1%
8.6%	780.9	770.0	-10.9	-1.4%
9.9%	773.0	746.5	-26.5	-3.4%
11.1%	766.0	735.0	-31.0	-4.1%
12.3%	759.2	724.2	-35.0	-4.6%
13.6%	755.5	715.5	-40.0	-5.3%
14.8%	728.1	711.6	-16.5	-2.3%
16.0%	725.7	705.6	-20.1	-2.8%
17.3%	709.7	670.4	-39.3	-5.5%
18.5%	708.7	669.0	-39.7	-5.6%
19.8%	707.8	663.0	-44.9	-6.3%
21.0%	685.8	658.3	-27.4	-4.0%
22.2%	684.3	656.9	-27.5	-4.0%
23.5%	680.5	651.7	-28.8	-4.2%
24.7%	679.6	644.6	-35.0	-5.1%
25.9%	678.1	627.4	-50.7	-7.5%
27.2%	675.4	624.0	-51.5	-7.6%
28.4%	673.0	620.0	-53.1	-7.9%
29.6%	669.0	614.4	-54.5	-8.2%
30.9%	654.9	609.9	-45.0	-6.9%
32.1%	653.7	601.5	-52.2	-8.0%
33.3%	636.8	594.7	-42.1	-6.6%
34.6%	617.9	591.7	-26.3	-4.2%
35.8%	615.4	587.0	-28.4	-4.6%
37.0%	606.3	559.5	-46.9	-7.7%
38.3%	596.8	556.8	-40.0	-6.7%
39.5%	571.1	546.5	-24.6	-4.3%
40.7%	569.7	546.4	-23.3	-4.1%
42.0%	543.7	544.9	1.1	0.2%
43.2%	510.6	542.2	31.6	6.2%
44.4%	496.6	523.5	26.9	5.4%
45.7%	496.5	508.7	12.2	2.4%
46.9%	457.1	479.7	22.7	5.0%
48.1%	443.9	479.5	35.6	8.0%
49.4%	434.1	421.3	-12.8	-2.9%
50.6%	424.6	413.8	-10.8	-2.6%
51.9%	415.9	409.7	-6.2	-1.5%
53.1%	393.0	394.1	1.1	0.3%
54.3%	391.0	390.8	-0.3	-0.1%
55.6%	388.3	386.8	-1.5	-0.4%
56.8%	385.4	368.1	-17.3	-4.5%
58.0%	376.8	367.4	-9.5	-2.5%
59.3%	370.2	362.8	-7.3	-2.0%
60.5%	360.1	359.6	-0.5	-0.1%
61.7%	352.8	358.4	5.5	1.6%
63.0%	351.2	355.8	4.6	1.3%
64.2%	349.6	355.1	5.5	1.6%
65.4%	348.5	352.5	4.0	1.1%
66.7%	348.5	351.2	2.8	0.8%
67.9%	347.0	350.8	3.8	1.1%
69.1%	346.9	350.5	3.7	1.1%
70.4%	346.8	346.9	0.1	0.0%
71.6%	346.8	342.1	-4.7	-1.4%
72.8%	342.2	340.7	-1.4	-0.4%
74.1%	340.3	340.4	0.1	0.0%
75.3%	339.3	337.4	-1.9	-0.6%
76.5%	338.6	337.3	-1.3	-0.4%
77.8%	338.2	337.0	-1.2	-0.4%
79.0%	337.3	335.2	-2.1	-0.6%
80.2%	336.9	334.9	-2.0	-0.6%
81.5%	333.7	334.1	0.4	0.1%
82.7%	333.7	333.0	-0.6	-0.2%
84.0%	330.5	330.8	0.3	0.1%
85.2%	327.6	329.8	2.2	0.7%
86.4%	325.0	325.4	0.4	0.1%
87.7%	315.4	325.1	9.7	3.1%
88.9%	308.6	314.6	6.0	1.9%
90.1%	307.6	309.9	2.3	0.7%
91.4%	294.9	295.4	0.5	0.2%
92.6%	294.5	294.0	-0.5	-0.2%
93.8%	284.2	285.1	0.9	0.3%
95.1%	261.6	270.6	9.1	3.5%
96.3%	238.8	230.3	-8.5	-3.5%
97.5%	215.8	215.7	0.0	0.0%
98.8%	194.5	194.0	-0.5	-0.3%
100.0%	193.8	193.9	0.1	0.1%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	858.7	915.5	56.8	6.6%
1.2%	831.9	866.0	34.1	4.1%
2.5%	815.1	861.1	46.0	5.6%
3.7%	791.3	839.1	47.8	6.0%
4.9%	754.6	826.6	71.9	9.5%
6.2%	751.2	788.8	37.6	5.0%
7.4%	724.9	779.8	54.9	7.6%
8.6%	722.3	758.9	36.6	5.1%
9.9%	688.5	746.0	57.5	8.4%
11.1%	687.0	731.8	44.8	6.5%
12.3%	685.3	709.9	24.6	3.6%
13.6%	682.6	689.4	6.7	1.0%
14.8%	661.2	687.1	26.0	3.9%
16.0%	661.1	686.4	25.3	3.8%
17.3%	649.4	676.6	27.2	4.2%
18.5%	648.4	673.6	25.2	3.9%
19.8%	647.9	665.4	17.5	2.7%
21.0%	646.5	647.4	1.0	0.1%
22.2%	645.5	640.8	-4.7	-0.7%
23.5%	643.9	637.6	-6.3	-1.0%
24.7%	642.3	632.1	-10.2	-1.6%
25.9%	629.0	623.2	-5.9	-0.9%
27.2%	628.4	616.2	-12.2	-1.9%
28.4%	621.6	614.5	-7.0	-1.1%
29.6%	613.9	614.1	0.2	0.0%
30.9%	612.1	613.8	1.7	0.3%
32.1%	608.8	613.4	4.6	0.8%
33.3%	607.9	608.4	0.6	0.1%
34.6%	601.7	607.7	6.0	1.0%
35.8%	590.8	606.4	15.5	2.6%
37.0%	588.6	599.9	11.3	1.9%
38.3%	580.9	598.4	17.5	3.0%
39.5%	577.0	596.7	19.7	3.4%
40.7%	575.1	593.5	18.4	3.2%
42.0%	566.2	588.9	22.8	4.0%
43.2%	564.4	587.6	23.3	4.1%
44.4%	561.3	582.0	20.8	3.7%
45.7%	544.7	572.5	27.8	5.1%
46.9%	531.5	572.2	40.7	7.7%
48.1%	524.0	566.9	42.8	8.2%
49.4%	523.5	554.0	30.5	5.8%
50.6%	520.6	552.6	32.0	6.1%
51.9%	517.8	544.6	26.8	5.2%
53.1%	511.7	539.5	27.8	5.4%
54.3%	511.0	538.7	27.7	5.4%
55.6%	508.4	525.2	16.8	3.3%
56.8%	506.3	515.5	9.1	1.8%
58.0%	505.8	515.3	9.4	1.9%
59.3%	501.0	511.8	10.8	2.2%
60.5%	487.4	504.3	16.8	3.5%
61.7%	483.3	501.0	17.7	3.7%
63.0%	480.6	499.4	18.9	3.9%
64.2%	467.9	495.7	27.8	5.9%
65.4%	467.4	490.0	22.7	4.9%
66.7%	442.9	481.5	38.7	8.7%
67.9%	442.7	475.8	33.1	7.5%
69.1%	442.0	475.3	33.2	7.5%
70.4%	437.9	450.5	12.6	2.9%
71.6%	434.6	444.3	9.8	2.2%
72.8%	425.6	442.9	17.3	4.1%
74.1%	423.2	436.1	13.0	3.1%
75.3%	421.6	434.7	13.2	3.1%
76.5%	420.2	426.8	6.6	1.6%
77.8%	408.8	426.4	17.6	4.3%
79.0%	408.5	420.5	12.0	2.9%
80.2%	405.0	409.1	4.1	1.0%
81.5%	387.4	403.8	16.4	4.2%
82.7%	385.5	388.5	3.1	0.8%
84.0%	377.2	376.9	-0.2	-0.1%
85.2%	364.8	365.6	0.8	0.2%
86.4%	363.8	364.4	0.6	0.2%
87.7%	337.1	344.1	7.0	2.1%
88.9%	315.4	315.5	0.1	0.0%
90.1%	297.8	300.7	3.0	1.0%
91.4%	277.9	278.7	0.8	0.3%
92.6%	272.0	273.4	1.4	0.5%
93.8%	268.5	265.0	-3.5	-1.3%
95.1%	264.2	264.1	0.0	0.0%
96.3%	255.4	255.1	-0.3	-0.1%
97.5%	237.9	238.0	0.2	0.1%
98.8%	232.8	232.6	-0.2	-0.1%
100.0%	223.8	223.9	0.1	0.0%

Table SQ-31-b

Clifton Court Forebay, Monthly EC
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	903.6	760.7	-142.9	-15.8%
1.2%	828.1	753.7	-74.4	-9.0%
2.5%	760.0	722.6	-37.4	-4.9%
3.7%	753.2	716.8	-36.4	-4.8%
4.9%	721.3	716.1	-5.2	-0.7%
6.2%	721.3	713.3	-8.0	-1.1%
7.4%	715.7	710.3	-5.4	-0.8%
8.6%	668.0	677.2	9.1	1.4%
9.9%	660.1	671.6	11.5	1.7%
11.1%	653.1	664.2	11.1	1.7%
12.3%	637.0	649.7	12.8	2.0%
13.6%	633.9	641.6	7.6	1.2%
14.8%	627.7	637.7	10.0	1.6%
16.0%	606.6	633.2	26.6	4.4%
17.3%	604.8	631.2	26.4	4.4%
18.5%	600.5	630.5	30.0	5.0%
19.8%	598.3	629.9	31.7	5.3%
21.0%	598.2	623.5	25.3	4.2%
22.2%	596.4	621.8	25.3	4.2%
23.5%	581.3	619.8	38.5	6.6%
24.7%	571.8	617.6	45.8	8.0%
25.9%	569.3	613.5	44.1	7.7%
27.2%	567.8	610.0	42.2	7.4%
28.4%	551.4	597.7	46.2	8.4%
29.6%	548.5	593.6	45.1	8.2%
30.9%	543.8	571.9	28.1	5.2%
32.1%	537.0	570.5	33.5	6.2%
33.3%	533.9	547.7	13.8	2.6%
34.6%	531.2	543.0	11.8	2.2%
35.8%	529.3	542.4	13.2	2.5%
37.0%	528.6	534.9	6.3	1.2%
38.3%	528.1	533.4	5.4	1.0%
39.5%	527.6	531.8	4.1	0.8%
40.7%	526.3	528.0	1.7	0.3%
42.0%	522.3	517.7	-4.6	-0.9%
43.2%	513.7	515.7	2.0	0.4%
44.4%	507.0	513.2	6.2	1.2%
45.7%	503.4	507.5	4.1	0.8%
46.9%	500.4	500.3	-0.1	0.0%
48.1%	489.4	497.7	8.3	1.7%
49.4%	487.0	495.1	8.1	1.7%
50.6%	486.5	487.3	0.8	0.2%
51.9%	480.8	484.4	3.6	0.7%
53.1%	474.4	475.9	1.5	0.3%
54.3%	462.1	468.9	6.8	1.5%
55.6%	457.1	461.4	4.3	0.9%
56.8%	454.9	454.6	-0.3	-0.1%
58.0%	448.3	453.2	5.0	1.1%
59.3%	432.5	436.3	3.8	0.9%
60.5%	429.8	430.3	0.5	0.1%
61.7%	428.6	428.8	0.2	0.0%
63.0%	416.9	425.1	8.2	2.0%
64.2%	413.8	417.8	4.0	1.0%
65.4%	408.5	414.9	6.5	1.6%
66.7%	407.2	411.3	4.1	1.0%
67.9%	396.5	398.2	1.7	0.4%
69.1%	394.2	396.4	2.2	0.5%
70.4%	385.9	394.3	8.3	2.2%
71.6%	385.8	393.0	7.2	1.9%
72.8%	382.8	383.3	0.6	0.1%
74.1%	354.2	354.5	0.3	0.1%
75.3%	346.9	344.9	-2.0	-0.6%
76.5%	312.3	314.1	1.8	0.6%
77.8%	302.6	304.2	1.7	0.5%
79.0%	297.3	297.9	0.6	0.2%
80.2%	289.8	290.1	0.3	0.1%
81.5%	285.8	286.7	0.9	0.3%
82.7%	282.6	284.7	2.1	0.7%
84.0%	270.0	270.3	0.3	0.1%
85.2%	266.9	267.7	0.8	0.3%
86.4%	263.7	263.8	0.1	0.1%
87.7%	255.4	258.2	2.8	1.1%
88.9%	254.1	253.7	-0.4	-0.2%
90.1%	253.5	249.9	-3.6	-1.4%
91.4%	245.3	243.8	-1.5	-0.6%
92.6%	243.0	240.4	-2.7	-1.1%
93.8%	239.6	240.0	0.4	0.2%
95.1%	238.3	237.7	-0.6	-0.2%
96.3%	237.5	233.8	-3.7	-1.6%
97.5%	233.5	225.9	-7.6	-3.3%
98.8%	225.9	221.8	-4.1	-1.8%
100.0%	165.9	166.0	0.1	0.1%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	817.2	724.3	-92.9	-11.4%
1.2%	779.2	717.4	-61.7	-7.9%
2.5%	741.3	699.0	-42.4	-5.7%
3.7%	721.5	692.0	-29.6	-4.1%
4.9%	684.3	680.0	-4.3	-0.6%
6.2%	677.5	675.5	-2.1	-0.3%
7.4%	664.0	654.2	-9.8	-1.5%
8.6%	649.2	649.4	0.3	0.0%
9.9%	646.3	641.2	-5.1	-0.8%
11.1%	637.6	634.7	-2.8	-0.4%
12.3%	610.4	631.7	21.4	3.5%
13.6%	606.3	628.6	22.3	3.7%
14.8%	599.5	601.1	1.7	0.3%
16.0%	599.4	595.9	-3.6	-0.6%
17.3%	595.2	578.2	-17.1	-2.9%
18.5%	569.3	577.1	7.8	1.4%
19.8%	566.7	572.6	5.9	1.0%
21.0%	565.1	571.8	6.7	1.2%
22.2%	545.3	559.1	13.8	2.5%
23.5%	542.6	556.9	14.4	2.6%
24.7%	534.6	553.9	19.3	3.6%
25.9%	533.5	544.7	11.3	2.1%
27.2%	532.8	544.5	11.7	2.2%
28.4%	531.7	537.9	6.2	1.2%
29.6%	531.4	527.1	-4.3	-0.8%
30.9%	526.1	526.7	0.6	0.1%
32.1%	522.5	524.7	2.2	0.4%
33.3%	513.2	504.7	-8.5	-1.7%
34.6%	493.8	497.7	4.0	0.8%
35.8%	480.1	488.1	8.0	1.7%
37.0%	477.7	481.8	4.1	0.9%
38.3%	471.7	467.4	-4.3	-0.9%
39.5%	470.9	465.2	-5.8	-1.2%
40.7%	460.2	443.6	-16.6	-3.6%
42.0%	440.0	436.8	-3.2	-0.7%
43.2%	439.0	413.4	-25.7	-5.8%
44.4%	415.5	413.0	-2.5	-0.6%
45.7%	413.9	412.4	-1.4	-0.3%
46.9%	409.8	411.7	1.8	0.4%
48.1%	402.0	404.3	2.3	0.6%
49.4%	397.1	402.5	5.4	1.4%
50.6%	391.5	397.7	6.2	1.6%
51.9%	390.4	392.1	1.7	0.4%
53.1%	389.3	388.0	-1.3	-0.3%
54.3%	387.6	387.5	-0.2	0.0%
55.6%	387.1	387.0	-0.1	0.0%
56.8%	381.7	385.8	4.1	1.1%
58.0%	379.2	383.3	4.1	1.1%
59.3%	373.7	382.2	8.6	2.3%
60.5%	372.7	381.4	8.8	2.4%
61.7%	367.6	374.9	7.3	2.0%
63.0%	361.3	361.9	0.6	0.2%
64.2%	349.7	359.4	9.8	2.8%
65.4%	338.7	350.7	12.0	3.5%
66.7%	337.7	338.2	0.5	0.1%
67.9%	330.3	329.7	-0.6	-0.2%
69.1%	320.2	323.6	3.3	1.0%
70.4%	318.7	320.2	1.5	0.5%
71.6%	315.4	316.2	0.8	0.3%
72.8%	309.3	309.7	0.4	0.1%
74.1%	303.4	304.4	1.0	0.3%
75.3%	299.8	303.7	3.9	1.3%
76.5%	294.8	300.7	5.9	2.0%
77.8%	276.3	276.7	0.4	0.1%
79.0%	275.7	275.8	0.1	0.0%
80.2%	269.7	272.2	2.5	0.9%
81.5%	265.5	270.2	4.7	1.8%
82.7%	264.9	265.7	0.8	0.3%
84.0%	263.7	264.9	1.2	0.4%
85.2%	262.4	263.1	0.8	0.3%
86.4%	258.1	258.5	0.4	0.2%
87.7%	237.5	241.1	3.7	1.5%
88.9%	225.4	225.0	-0.4	-0.2%
90.1%	224.9	224.5	-0.4	-0.2%
91.4%	223.6	223.7	0.1	0.0%
92.6%	216.0	215.8	-0.2	-0.1%
93.8%	215.5	211.5	-4.0	-1.9%
95.1%	206.7	207.2	0.4	0.2%
96.3%	206.7	206.5	-0.1	-0.1%
97.5%	201.1	201.3	0.2	0.1%
98.8%	193.8	193.5	-0.3	-0.2%
100.0%	189.5	189.5	0.0	0.0%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	778.3	731.2	-47.1	-6.0%
1.2%	719.5	670.4	-49.1	-6.8%
2.5%	662.4	663.7	1.3	0.2%
3.7%	655.2	653.6	-1.6	-0.2%
4.9%	630.6	638.9	8.2	1.3%
6.2%	623.0	636.4	13.4	2.2%
7.4%	616.8	629.9	13.1	2.1%
8.6%	609.4	623.0	13.6	2.2%
9.9%	598.4	599.8	1.4	0.2%
11.1%	598.3	599.8	1.5	0.2%
12.3%	597.9	594.7	-3.2	-0.5%
13.6%	590.5	585.8	-4.7	-0.8%
14.8%	579.0	585.3	6.3	1.1%
16.0%	573.8	584.9	11.1	1.9%
17.3%	565.2	559.4	-5.7	-1.0%
18.5%	549.9	550.8	0.9	0.2%
19.8%	547.9	523.0	-24.9	-4.5%
21.0%	544.7	510.2	-34.6	-6.3%
22.2%	514.1	505.0	-9.1	-1.8%
23.5%	502.9	501.5	-1.3	-0.3%
24.7%	501.7	500.6	-1.0	-0.2%
25.9%	496.2	490.3	-5.9	-1.2%
27.2%	495.3	489.4	-5.9	-1.2%
28.4%	483.7	484.1	0.5	0.1%
29.6%	472.9	475.0	2.1	0.4%
30.9%	457.9	461.3	3.4	0.8%
32.1%	456.2	459.2	3.0	0.7%
33.3%	454.4	457.6	3.2	0.7%
34.6%	448.2	447.7	-0.5	-0.1%
35.8%	445.6	434.6	-11.0	-2.5%
37.0%	423.2	431.2	7.9	1.9%
38.3%	421.5	418.3	-3.2	-0.8%
39.5%	418.8	409.9	-9.0	-2.1%
40.7%	409.3	400.5	-8.8	-2.2%
42.0%	399.9	391.5	-8.4	-2.1%
43.2%	394.4	391.4	-2.9	-0.7%
44.4%	390.9	390.6	-0.3	-0.1%
45.7%	388.2	379.2	-9.0	-2.3%
46.9%	376.7	375.6	-1.2	-0.3%
48.1%	371.1	371.2	0.1	0.0%
49.4%	363.0	363.1	0.1	0.0%
50.6%	356.6	362.0	5.5	1.5%
51.9%	354.7	354.9	0.2	0.0%
53.1%	351.8	352.5	0.6	0.2%
54.3%	341.9	341.7	-0.2	-0.1%
55.6%	341.3	341.5	0.2	0.1%
56.8%	332.1	332.5	0.3	0.1%
58.0%	329.1	329.8	0.7	0.2%
59.3%	321.2	329.5	8.3	2.6%
60.5%	318.7	322.0	3.4	1.1%
61.7%	317.5	318.4	0.9	0.3%
63.0%	308.9	309.4	0.4	0.1%
64.2%	308.3	309.0	0.7	0.2%
65.4%	308.0	308.0	0.0	0.0%
66.7%	299.8	300.7	0.9	0.3%
67.9%	287.8	288.0	0.2	0.1%
69.1%	271.0	275.5	4.5	1.7%
70.4%	269.7	271.0	1.3	0.5%
71.6%	268.6	270.1	1.5	0.6%
72.8%	267.3	267.4	0.0	0.0%
74.1%	265.1	265.1	0.0	0.0%
75.3%	264.7	265.0	0.3	0.1%
76.5%	259.3	259.5	0.2	0.1%
77.8%	252.9	253.0	0.1	0.0%
79.0%	251.9	252.7	0.8	0.3%
80.2%	247.6	247.5	-0.1	0.0%
81.5%	244.6	245.4	0.9	0.4%
82.7%	242.8	241.3	-1.4	-0.6%
84.0%	239.5	240.0	0.5	0.2%
85.2%	238.9	240.0	1.1	0.5%
86.4%	237.2	237.5	0.3	0.1%
87.7%	229.9	229.1	-0.8	-0.3%
88.9%	226.6	227.2	0.6	0.3%
90.1%	224.4	224.5	0.1	0.0%
91.4%	223.4	223.7	0.2	0.1%
92.6%	216.2	218.7	2.5	1.2%
93.8%	207.3	207.5	0.3	0.1%
95.1%	207.1	207.2	0.2	0.1%
96.3%	187.6	187.8	0.1	0.1%
97.5%	182.0	181.9	-0.1	0.0%
98.8%	171.5	172.0	0.5	0.3%
100.0%	166.0	166.0	0.0	0.0%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	709.5	671.1	-38.3	-5.4%
1.2%	660.2	629.8	-30.4	-4.6%
2.5%	582.7	591.3	8.6	1.5%
3.7%	581.9	579.6	-2.3	-0.4%
4.9%	580.3	574.9	-5.4	-0.9%
6.2%	579.5	572.8	-6.7	-1.2%
7.4%	576.5	572.5	-4.0	-0.7%
8.6%	572.1	565.1	-7.0	-1.2%
9.9%	551.9	550.2	-1.7	-0.3%
11.1%	551.6	547.7	-3.9	-0.7%
12.3%	539.5	546.7	7.2	1.3%
13.6%	530.8	544.9	14.1	2.7%
14.8%	530.8	528.2	-2.6	-0.5%
16.0%	526.4	525.2	-1.2	-0.2%
17.3%	525.8	524.0	-1.8	-0.3%
18.5%	521.1	497.3	-23.8	-4.6%
19.8%	514.2	492.6	-21.5	-4.2%
21.0%	502.6	489.7	-12.9	-2.6%
22.2%	495.5	489.3	-6.2	-1.3%
23.5%	486.8	489.1	2.3	0.5%
24.7%	485.5	483.4	-2.1	-0.4%
25.9%	485.0	482.3	-2.6	-0.5%
27.2%	484.1	481.9	-2.3	-0.5%
28.4%	468.0	480.3	12.3	2.6%
29.6%	467.1	471.8	4.8	1.0%
30.9%	466.2	467.5	1.2	0.3%
32.1%	464.9	462.8	-2.1	-0.5%
33.3%	460.9	447.2	-13.7	-3.0%
34.6%	440.1	439.0	-1.1	-0.2%
35.8%	438.8	433.8	-5.0	-1.1%
37.0%	413.0	414.5	1.5	0.4%
38.3%	410.0	410.6	0.6	0.1%
39.5%	406.4	406.1	-0.3	-0.1%
40.7%	404.9	404.8	0.0	0.0%
42.0%	404.9	400.6	-4.3	-1.1%
43.2%	386.6	397.0	10.4	2.7%
44.4%	383.7	383.0	-0.7	-0.2%
45.7%	380.7	372.7	-7.9	-2.1%
46.9%	373.6	367.5	-6.1	-1.6%
48.1%	370.9	366.8	-4.0	-1.1%
49.4%	364.1	363.9	-0.2	-0.1%
50.6%	357.1	361.1	4.0	1.1%
51.9%	349.7	350.3	0.6	0.2%
53.1%	347.1	347.1	0.0	0.0%
54.3%	345.2	345.3	0.0	0.0%
55.6%	343.6	342.9	-0.8	-0.2%
56.8%	339.4	339.7	0.3	0.1%
58.0%	336.5	336.8	0.2	0.1%
59.3%	335.9	336.5	0.6	0.2%
60.5%	328.2	328.4	0.1	0.0%
61.7%	325.2	325.3	0.1	0.0%
63.0%	324.8	324.9	0.2	0.0%
64.2%	322.5	323.7	1.2	0.4%
65.4%	322.5	322.6	0.1	0.0%
66.7%	322.4	322.6	0.1	0.0%
67.9%	318.0	318.3	0.3	0.1%
69.1%	315.7	317.1	1.4	0.4%
70.4%	314.8	314.8	0.0	0.0%
71.6%	313.0	313.6	0.6	0.2%
72.8%	309.5	309.5	0.0	0.0%
74.1%	306.3	306.9	0.6	0.2%
75.3%	304.5	304.4	0.0	0.0%
76.5%	301.9	302.4	0.5	0.2%
77.8%	301.0	301.9	1.0	0.3%
79.0%	292.2	292.3	0.2	0.1%
80.2%	281.2	281.2	0.1	0.0%
81.5%	279.3	280.2	0.9	0.3%
82.7%	279.3	280.1	0.8	0.3%
84.0%	259.5	259.6	0.1	0.0%
85.2%	251.4	252.0	0.6	0.2%
86.4%	228.4	228.9	0.4	0.2%
87.7%	227.5	227.7	0.2	0.1%
88.9%	197.9	198.6	0.6	0.3%
90.1%	192.0	192.3	0.2	0.1%
91.4%	188.0	188.4	0.5	0.2%
92.6%	187.5	187.8	0.3	0.2%
93.8%	183.4	184.0	0.5	0.3%
95.1%	176.9	177.1	0.2	0.1%
96.3%	174.7	175.0	0.3	0.2%
97.5%	171.9	170.4	-1.6	-0.9%
98.8%	169.7	169.9	0.2	0.1%
100.0%	158.5	158.8	0.2	0.1%

Table SQ-31-b

Clifton Court Forebay, Monthly EC

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	633.8	620.7	-13.1	-2.1%
1.2%	629.0	609.2	-19.8	-3.2%
2.5%	555.8	554.5	-1.3	-0.2%
3.7%	553.1	550.2	-2.9	-0.5%
4.9%	548.6	534.1	-14.5	-2.6%
6.2%	541.1	527.7	-13.4	-2.5%
7.4%	528.9	523.4	-5.5	-1.0%
8.6%	528.4	498.8	-29.6	-5.6%
9.9%	517.9	498.2	-19.7	-3.8%
11.1%	499.0	491.8	-7.3	-1.5%
12.3%	494.6	489.8	-4.7	-1.0%
13.6%	494.1	485.2	-8.9	-1.8%
14.8%	490.3	483.4	-6.9	-1.4%
16.0%	490.0	467.0	-23.1	-4.7%
17.3%	485.5	467.0	-18.5	-3.8%
18.5%	484.1	465.1	-19.0	-3.9%
19.8%	482.1	460.5	-21.6	-4.5%
21.0%	472.8	446.3	-26.5	-5.6%
22.2%	470.1	438.0	-32.2	-6.8%
23.5%	453.4	432.7	-20.6	-4.6%
24.7%	442.2	425.0	-17.2	-3.9%
25.9%	436.9	424.6	-12.3	-2.8%
27.2%	422.6	422.9	0.3	0.1%
28.4%	422.0	422.3	0.3	0.1%
29.6%	421.4	421.9	0.5	0.1%
30.9%	419.8	400.8	-19.0	-4.5%
32.1%	418.3	398.3	-20.0	-4.8%
33.3%	407.9	397.1	-10.8	-2.7%
34.6%	400.6	391.7	-8.8	-2.2%
35.8%	396.2	391.0	-5.2	-1.3%
37.0%	391.8	389.4	-2.4	-0.6%
38.3%	389.5	387.6	-1.9	-0.5%
39.5%	384.1	387.0	3.0	0.8%
40.7%	379.7	384.6	4.9	1.3%
42.0%	378.2	382.7	4.5	1.2%
43.2%	376.9	381.8	4.8	1.3%
44.4%	375.7	379.8	4.0	1.1%
45.7%	372.7	379.6	6.9	1.9%
46.9%	371.8	372.4	0.6	0.2%
48.1%	370.2	370.4	0.2	0.0%
49.4%	369.8	370.1	0.3	0.1%
50.6%	368.5	368.8	0.3	0.1%
51.9%	368.1	368.1	0.0	0.0%
53.1%	366.5	367.8	1.3	0.3%
54.3%	364.7	363.4	-1.3	-0.4%
55.6%	364.0	360.9	-3.1	-0.9%
56.8%	359.1	359.2	0.1	0.0%
58.0%	355.3	356.4	1.1	0.3%
59.3%	355.2	356.0	0.8	0.2%
60.5%	354.9	355.1	0.2	0.1%
61.7%	352.3	354.9	2.6	0.7%
63.0%	350.4	352.0	1.5	0.4%
64.2%	348.1	350.3	2.2	0.6%
65.4%	346.8	348.3	1.5	0.4%
66.7%	342.6	345.9	3.3	1.0%
67.9%	339.1	340.9	1.8	0.5%
69.1%	338.0	339.8	1.8	0.5%
70.4%	337.1	337.0	-0.2	-0.1%
71.6%	332.0	331.5	-0.5	-0.1%
72.8%	331.2	331.4	0.1	0.0%
74.1%	329.4	329.5	0.1	0.0%
75.3%	328.1	329.2	1.1	0.3%
76.5%	327.8	327.6	-0.1	0.0%
77.8%	320.3	320.5	0.2	0.1%
79.0%	315.2	315.1	-0.1	0.0%
80.2%	313.8	311.1	-2.7	-0.9%
81.5%	311.4	310.5	-0.9	-0.3%
82.7%	310.9	309.1	-1.8	-0.6%
84.0%	309.4	307.3	-2.1	-0.7%
85.2%	303.2	293.4	-9.8	-3.2%
86.4%	293.3	293.1	-0.2	-0.1%
87.7%	292.7	292.8	0.0	0.0%
88.9%	288.8	288.7	-0.1	0.0%
90.1%	283.6	285.7	2.1	0.7%
91.4%	281.2	282.6	1.4	0.5%
92.6%	275.7	279.6	3.9	1.4%
93.8%	275.3	278.5	3.2	1.1%
95.1%	268.8	275.7	6.9	2.6%
96.3%	266.5	274.1	7.6	2.9%
97.5%	263.8	265.8	2.0	0.8%
98.8%	256.3	251.5	-4.8	-1.9%
100.0%	255.2	249.0	-6.3	-2.4%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	635.9	618.5	-17.3	-2.7%
1.2%	604.5	604.4	-0.1	0.0%
2.5%	559.9	548.1	-11.8	-2.1%
3.7%	555.5	538.7	-16.8	-3.0%
4.9%	507.2	488.7	-18.5	-3.7%
6.2%	491.7	488.6	-3.2	-0.6%
7.4%	490.3	462.3	-28.0	-5.7%
8.6%	448.5	462.3	13.8	3.1%
9.9%	443.0	443.9	1.0	0.2%
11.1%	441.4	433.0	-8.4	-1.9%
12.3%	435.5	419.6	-15.9	-3.7%
13.6%	433.6	411.1	-22.5	-5.2%
14.8%	433.0	402.7	-30.3	-7.0%
16.0%	430.1	379.8	-50.3	-11.7%
17.3%	428.2	378.7	-49.5	-11.6%
18.5%	411.7	376.6	-35.0	-8.5%
19.8%	401.8	373.0	-28.7	-7.2%
21.0%	394.9	367.1	-27.7	-7.0%
22.2%	392.2	366.0	-26.2	-6.7%
23.5%	389.4	364.4	-25.0	-6.4%
24.7%	372.3	364.0	-8.3	-2.2%
25.9%	367.1	362.4	-4.7	-1.3%
27.2%	366.9	361.5	-5.4	-1.5%
28.4%	365.3	357.9	-7.4	-2.0%
29.6%	364.9	353.3	-11.6	-3.2%
30.9%	363.1	352.8	-10.3	-2.8%
32.1%	359.0	352.8	-6.2	-1.7%
33.3%	355.7	351.6	-4.1	-1.2%
34.6%	352.7	348.2	-4.5	-1.3%
35.8%	351.1	347.7	-3.4	-1.0%
37.0%	351.0	344.3	-6.7	-1.9%
38.3%	349.8	343.0	-6.8	-1.9%
39.5%	348.6	339.4	-9.2	-2.6%
40.7%	345.0	339.1	-5.9	-1.7%
42.0%	344.6	338.6	-6.0	-1.7%
43.2%	343.9	337.7	-6.2	-1.8%
44.4%	341.8	335.5	-6.4	-1.9%
45.7%	338.7	334.4	-4.3	-1.3%
46.9%	331.8	332.6	0.9	0.3%
48.1%	331.5	330.2	-1.4	-0.4%
49.4%	330.0	328.8	-1.2	-0.4%
50.6%	329.9	327.7	-2.2	-0.7%
51.9%	328.1	326.2	-1.9	-0.6%
53.1%	327.8	325.9	-1.9	-0.6%
54.3%	326.6	325.2	-1.4	-0.4%
55.6%	321.9	322.1	0.3	0.1%
56.8%	321.3	319.2	-2.0	-0.6%
58.0%	319.9	318.4	-1.5	-0.5%
59.3%	319.0	317.4	-1.6	-0.5%
60.5%	318.3	316.7	-1.6	-0.5%
61.7%	317.9	316.5	-1.5	-0.5%
63.0%	317.0	315.4	-1.7	-0.5%
64.2%	315.6	314.7	-0.9	-0.3%
65.4%	313.1	314.2	1.1	0.3%
66.7%	309.6	305.2	-4.4	-1.4%
67.9%	309.2	304.2	-5.0	-1.6%
69.1%	306.4	302.1	-4.4	-1.4%
70.4%	305.5	301.2	-4.3	-1.4%
71.6%	303.3	299.8	-3.6	-1.2%
72.8%	300.5	299.4	-1.1	-0.4%
74.1%	300.0	298.5	-1.5	-0.5%
75.3%	299.9	298.4	-1.5	-0.5%
76.5%	299.8	298.3	-1.5	-0.5%
77.8%	299.7	297.2	-2.5	-0.8%
79.0%	298.9	297.0	-1.9	-0.6%
80.2%	298.7	296.3	-2.4	-0.8%
81.5%	297.1	293.9	-3.2	-1.1%
82.7%	293.7	292.5	-1.2	-0.4%
84.0%	292.1	292.1	0.0	0.0%
85.2%	292.0	291.3	-0.7	-0.2%
86.4%	288.7	289.6	0.9	0.3%
87.7%	287.3	287.1	-0.2	-0.1%
88.9%	285.3	286.7	1.4	0.5%
90.1%	285.1	282.3	-2.8	-1.0%
91.4%	283.3	281.2	-2.1	-0.7%
92.6%	282.4	280.6	-1.8	-0.7%
93.8%	282.3	279.1	-3.2	-1.1%
95.1%	272.1	275.2	3.1	1.1%
96.3%	271.7	271.5	-0.2	-0.1%
97.5%	267.4	271.3	3.9	1.4%
98.8%	266.9	268.1	1.2	0.5%
100.0%	260.7	262.1	1.4	0.5%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	744.6	746.1	1.4	0.2%
1.2%	682.6	617.1	-65.5	-9.6%
2.5%	642.5	611.4	-31.1	-4.8%
3.7%	627.7	589.6	-38.1	-6.1%
4.9%	585.9	589.4	3.5	0.6%
6.2%	578.3	561.4	-16.9	-2.9%
7.4%	537.9	542.3	4.5	0.8%
8.6%	512.5	539.4	26.9	5.2%
9.9%	495.0	504.2	9.2	1.9%
11.1%	488.7	498.6	9.9	2.0%
12.3%	485.8	493.6	7.8	1.6%
13.6%	476.9	492.9	15.9	3.3%
14.8%	466.4	477.0	10.7	2.3%
16.0%	464.3	470.9	6.6	1.4%
17.3%	452.0	465.9	13.8	3.1%
18.5%	451.6	460.2	8.5	1.9%
19.8%	443.3	458.9	15.6	3.5%
21.0%	441.7	457.2	15.5	3.5%
22.2%	436.0	455.8	19.7	4.5%
23.5%	434.9	454.3	19.4	4.4%
24.7%	432.4	443.2	10.8	2.5%
25.9%	423.4	442.9	19.5	4.6%
27.2%	418.9	441.1	22.2	5.3%
28.4%	416.0	428.2	12.2	2.9%
29.6%	415.4	426.8	11.4	2.7%
30.9%	408.7	422.3	13.6	3.3%
32.1%	404.9	391.7	-13.2	-3.2%
33.3%	403.3	390.2	-13.1	-3.2%
34.6%	400.7	378.8	-21.9	-5.5%
35.8%	392.2	377.9	-14.3	-3.6%
37.0%	390.2	376.9	-13.3	-3.4%
38.3%	387.9	376.4	-11.4	-2.9%
39.5%	380.0	371.3	-8.6	-2.3%
40.7%	369.2	371.1	1.9	0.5%
42.0%	364.6	369.4	4.8	1.3%
43.2%	361.6	362.9	1.3	0.4%
44.4%	354.1	355.1	1.1	0.3%
45.7%	352.3	353.1	0.8	0.2%
46.9%	350.0	352.7	2.7	0.8%
48.1%	343.8	350.4	6.6	1.9%
49.4%	342.5	348.9	6.5	1.9%
50.6%	337.2	346.3	9.1	2.7%
51.9%	331.2	343.4	12.2	3.7%
53.1%	330.0	337.1	7.0	2.1%
54.3%	329.2	327.6	-1.6	-0.5%
55.6%	324.3	326.9	2.6	0.8%
56.8%	317.5	322.8	5.2	1.7%
58.0%	312.5	321.7	9.1	2.9%
59.3%	312.5	319.1	6.6	2.1%
60.5%	311.8	314.5	2.7	0.9%
61.7%	303.5	314.4	11.0	3.6%
63.0%	302.8	313.3	10.5	3.5%
64.2%	299.5	308.7	9.2	3.1%
65.4%	298.7	301.3	2.6	0.9%
66.7%	298.4	299.5	1.1	0.4%
67.9%	296.7	299.4	2.7	0.9%
69.1%	296.7	298.7	2.0	0.7%
70.4%	296.4	298.4	2.0	0.7%
71.6%	296.3	295.7	-0.6	-0.2%
72.8%	296.0	295.4	-0.6	-0.2%
74.1%	292.6	292.0	-0.6	-0.2%
75.3%	291.9	287.7	-4.1	-1.4%
76.5%	291.6	285.7	-6.0	-2.0%
77.8%	285.4	284.7	-0.7	-0.2%
79.0%	282.6	282.5	-0.1	0.0%
80.2%	281.3	281.0	-0.3	-0.1%
81.5%	281.1	279.5	-1.6	-0.6%
82.7%	280.7	278.5	-2.2	-0.8%
84.0%	280.4	278.2	-2.2	-0.8%
85.2%	278.4	277.7	-0.7	-0.3%
86.4%	277.7	276.1	-1.6	-0.6%
87.7%	276.6	275.8	-0.8	-0.3%
88.9%	275.7	275.7	0.0	0.0%
90.1%	274.9	272.9	-2.0	-0.7%
91.4%	272.0	268.6	-3.4	-1.3%
92.6%	272.0	267.2	-4.8	-1.8%
93.8%	269.3	267.0	-2.3	-0.8%
95.1%	266.5	266.0	-0.5	-0.2%
96.3%	265.4	265.0	-0.4	-0.2%
97.5%	265.1	263.2	-1.9	-0.7%
98.8%	263.8	262.5	-1.3	-0.5%
100.0%	263.3	254.2	-9.1	-3.4%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	651.8	637.3	-14.5	-2.2%
1.2%	634.8	616.6	-18.2	-2.9%
2.5%	626.2	610.0	-16.2	-2.6%
3.7%	622.4	603.9	-18.5	-3.0%
4.9%	620.6	602.2	-18.4	-3.0%
6.2%	614.9	597.1	-17.7	-2.9%
7.4%	610.8	595.5	-15.3	-2.5%
8.6%	606.8	591.6	-15.2	-2.5%
9.9%	599.0	591.3	-7.7	-1.3%
11.1%	597.1	588.0	-9.1	-1.5%
12.3%	590.6	586.7	-3.9	-0.7%
13.6%	588.8	586.1	-2.7	-0.5%
14.8%	585.2	585.7	0.5	0.1%
16.0%	579.6	585.7	6.1	1.0%
17.3%	576.9	573.2	-3.8	-0.7%
18.5%	574.2	571.2	-2.9	-0.5%
19.8%	573.2	566.9	-6.3	-1.1%
21.0%	571.8	563.8	-7.9	-1.4%
22.2%	567.8	562.3	-5.5	-1.0%
23.5%	567.1	562.1	-5.1	-0.9%
24.7%	566.7	557.4	-9.3	-1.6%
25.9%	561.1	553.7	-7.4	-1.3%
27.2%	560.1	546.5	-13.6	-2.4%
28.4%	558.6	542.6	-15.9	-2.9%
29.6%	552.6	541.3	-11.3	-2.0%
30.9%	550.8	538.8	-12.0	-2.2%
32.1%	548.4	538.5	-9.9	-1.8%
33.3%	543.9	535.0	-9.0	-1.6%
34.6%	537.8	531.5	-6.3	-1.2%
35.8%	535.8	529.7	-6.1	-1.1%
37.0%	530.4	529.3	-1.1	-0.2%
38.3%	525.1	526.9	1.8	0.4%
39.5%	516.3	526.5	10.3	2.0%
40.7%	508.0	521.0	13.0	2.6%
42.0%	504.3	515.4	11.1	2.2%
43.2%	502.4	515.2	12.8	2.6%
44.4%	502.2	513.9	11.7	2.3%
45.7%	501.5	511.3	9.8	2.0%
46.9%	496.3	511.0	14.6	2.9%
48.1%	494.2	508.5	14.3	2.9%
49.4%	492.5	497.2	4.8	1.0%
50.6%	492.3	497.2	4.9	1.0%
51.9%	483.1	495.8	12.7	2.6%
53.1%	481.9	491.4	9.5	2.0%
54.3%	480.4	490.2	9.8	2.0%
55.6%	474.1	487.5	13.5	2.8%
56.8%	472.7	480.3	7.6	1.6%
58.0%	468.4	479.3	10.9	2.3%
59.3%	467.4	477.6	10.1	2.2%
60.5%	463.1	477.3	14.1	3.1%
61.7%	461.8	477.2	15.3	3.3%
63.0%	461.7	472.5	10.8	2.3%
64.2%	460.5	470.5	10.0	2.2%
65.4%	458.6	464.5	5.8	1.3%
66.7%	458.3	463.0	4.7	1.0%
67.9%	455.3	461.8	6.5	1.4%
69.1%	453.5	456.2	2.6	0.6%
70.4%	449.5	454.2	4.7	1.0%
71.6%	446.7	451.5	4.8	1.1%
72.8%	445.9	449.5	3.6	0.8%
74.1%	445.8	448.0	2.2	0.5%
75.3%	444.9	446.1	1.2	0.3%
76.5%	440.4	445.2	4.8	1.1%
77.8%	436.1	440.9	4.8	1.1%
79.0%	434.3	434.7	0.4	0.1%
80.2%	424.7	432.5	7.8	1.8%
81.5%	421.1	418.3	-2.8	-0.7%
82.7%	420.9	418.3	-2.7	-0.6%
84.0%	419.4	412.4	-7.0	-1.7%
85.2%	412.8	407.6	-5.2	-1.3%
86.4%	403.2	407.2	4.0	1.0%
87.7%	397.7	402.4	4.6	1.2%
88.9%	396.1	394.8	-1.3	-0.3%
90.1%	393.7	393.9	0.2	0.1%
91.4%	391.6	392.4	0.8	0.2%
92.6%	377.5	391.9	14.4	3.8%
93.8%	376.7	390.1	13.4	3.5%
95.1%	375.6	386.8	11.2	3.0%
96.3%	373.4	378.0	4.5	1.2%
97.5%	365.1	376.3	11.3	3.1%
98.8%	360.0	373.5	13.5	3.7%
100.0%	356.5	358.5	2.0	0.6%

Figure SQ-32-b
Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Probability of Exceedance

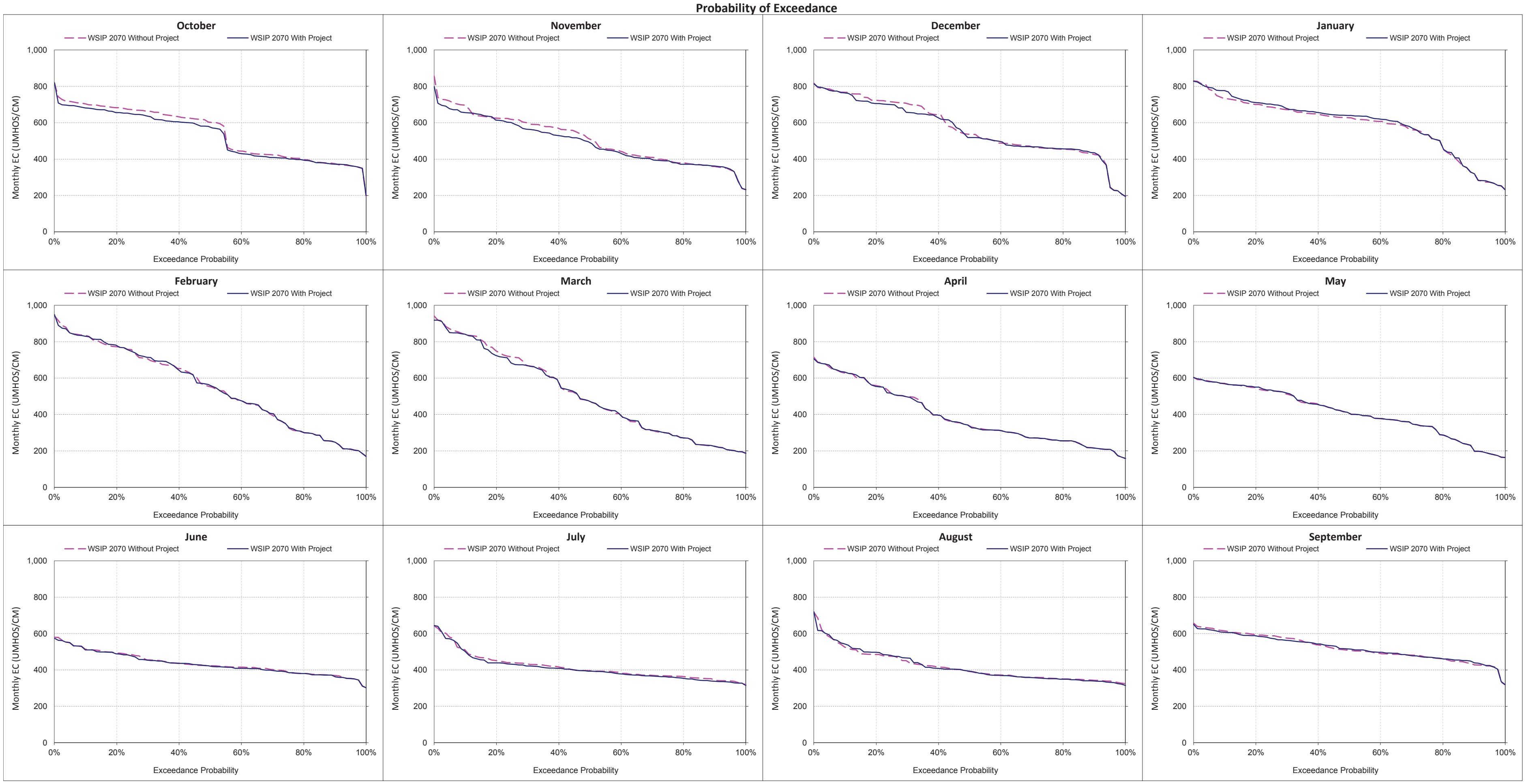


Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	819.2	820.7	1.5	0.2%
1.2%	742.7	708.9	-33.9	-4.6%
2.5%	727.9	698.4	-29.5	-4.1%
3.7%	718.8	696.6	-22.1	-3.1%
4.9%	717.3	694.3	-23.0	-3.2%
6.2%	713.5	694.2	-19.3	-2.7%
7.4%	709.3	689.7	-19.6	-2.8%
8.6%	708.1	685.8	-22.3	-3.1%
9.9%	703.9	681.8	-22.1	-3.1%
11.1%	698.5	679.3	-19.2	-2.8%
12.3%	697.5	676.7	-20.8	-3.0%
13.6%	696.9	672.4	-24.6	-3.5%
14.8%	691.8	672.0	-19.9	-2.9%
16.0%	690.5	671.7	-18.8	-2.7%
17.3%	688.0	663.6	-24.4	-3.5%
18.5%	684.4	662.4	-22.0	-3.2%
19.8%	682.7	656.2	-26.5	-3.9%
21.0%	682.7	655.9	-26.8	-3.9%
22.2%	679.0	653.3	-25.7	-3.8%
23.5%	674.2	652.3	-21.9	-3.3%
24.7%	672.4	648.4	-24.0	-3.6%
25.9%	668.6	646.1	-22.5	-3.4%
27.2%	668.5	646.0	-22.5	-3.4%
28.4%	667.3	643.1	-24.2	-3.6%
29.6%	663.3	636.7	-26.6	-4.0%
30.9%	662.9	633.4	-29.5	-4.5%
32.1%	657.3	618.8	-38.5	-5.9%
33.3%	657.2	617.8	-39.5	-6.0%
34.6%	646.4	616.0	-30.5	-4.7%
35.8%	642.9	610.4	-32.5	-5.1%
37.0%	640.6	608.7	-31.8	-5.0%
38.3%	637.1	605.5	-31.6	-5.0%
39.5%	633.9	605.0	-28.9	-4.6%
40.7%	629.6	603.1	-26.5	-4.2%
42.0%	626.9	601.8	-25.0	-4.0%
43.2%	625.4	599.6	-25.8	-4.1%
44.4%	622.7	598.0	-24.7	-4.0%
45.7%	620.1	589.5	-30.6	-4.9%
46.9%	619.1	581.3	-37.7	-6.1%
48.1%	616.5	580.9	-35.7	-5.8%
49.4%	603.7	580.6	-23.1	-3.8%
50.6%	601.1	571.9	-29.3	-4.9%
51.9%	600.7	568.3	-32.4	-5.4%
53.1%	594.8	564.4	-30.4	-5.1%
54.3%	581.6	538.7	-42.9	-7.4%
55.6%	463.4	449.9	-13.5	-2.9%
56.8%	452.7	443.7	-9.0	-2.0%
58.0%	449.2	438.6	-10.6	-2.4%
59.3%	444.5	431.7	-12.8	-2.9%
60.5%	443.8	428.6	-15.2	-3.4%
61.7%	439.1	427.8	-11.2	-2.6%
63.0%	432.5	424.1	-8.4	-1.9%
64.2%	429.1	418.0	-11.1	-2.6%
65.4%	427.6	415.4	-12.3	-2.9%
66.7%	427.2	415.2	-12.0	-2.8%
67.9%	425.4	412.6	-12.8	-3.0%
69.1%	424.5	409.0	-15.4	-3.6%
70.4%	422.7	408.5	-14.1	-3.3%
71.6%	421.7	407.9	-13.8	-3.3%
72.8%	416.0	406.4	-9.6	-2.3%
74.1%	410.9	405.7	-5.3	-1.3%
75.3%	409.2	400.6	-8.5	-2.1%
76.5%	405.4	400.5	-4.9	-1.2%
77.8%	404.3	397.4	-6.9	-1.7%
79.0%	403.4	397.2	-6.2	-1.5%
80.2%	396.5	393.1	-3.4	-0.9%
81.5%	395.1	391.9	-3.2	-0.8%
82.7%	386.7	387.5	0.8	0.2%
84.0%	382.3	380.8	-1.6	-0.4%
85.2%	381.8	380.1	-1.7	-0.4%
86.4%	379.7	378.9	-0.8	-0.2%
87.7%	378.4	375.4	-3.0	-0.8%
88.9%	377.5	373.6	-3.9	-1.0%
90.1%	374.1	371.4	-2.7	-0.7%
91.4%	368.2	371.4	3.2	0.9%
92.6%	368.1	369.7	1.7	0.4%
93.8%	365.5	369.1	3.7	1.0%
95.1%	363.4	363.0	-0.3	-0.1%
96.3%	359.6	359.7	0.1	0.0%
97.5%	355.0	355.9	0.9	0.3%
98.8%	349.4	349.5	0.1	0.0%
100.0%	198.1	199.2	1.1	0.6%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	855.9	798.4	-57.5	-6.7%
1.2%	738.2	707.7	-30.6	-4.1%
2.5%	728.2	696.1	-32.1	-4.4%
3.7%	726.1	691.7	-34.4	-4.7%
4.9%	719.5	677.2	-42.3	-5.9%
6.2%	708.9	671.5	-37.4	-5.3%
7.4%	702.8	670.9	-31.9	-4.5%
8.6%	698.6	658.3	-40.3	-5.8%
9.9%	697.1	655.9	-41.1	-5.9%
11.1%	677.0	654.3	-22.7	-3.4%
12.3%	646.8	652.3	5.5	0.9%
13.6%	638.7	648.9	10.2	1.6%
14.8%	637.0	645.4	8.4	1.3%
16.0%	634.7	638.4	3.7	0.6%
17.3%	631.6	636.1	4.6	0.7%
18.5%	627.2	632.2	5.0	0.8%
19.8%	625.2	614.4	-10.8	-1.7%
21.0%	624.4	613.3	-11.1	-1.8%
22.2%	623.8	609.8	-14.0	-2.2%
23.5%	623.7	602.5	-21.2	-3.4%
24.7%	618.4	601.6	-16.7	-2.7%
25.9%	616.2	591.6	-24.6	-4.0%
27.2%	616.1	583.5	-32.6	-5.3%
28.4%	604.1	568.9	-35.2	-5.8%
29.6%	600.4	564.2	-36.2	-6.0%
30.9%	591.6	563.3	-28.3	-4.8%
32.1%	590.6	559.7	-30.9	-5.2%
33.3%	590.1	555.7	-34.4	-5.8%
34.6%	583.8	547.1	-36.7	-6.3%
35.8%	578.8	545.6	-33.2	-5.7%
37.0%	578.7	542.7	-36.0	-6.2%
38.3%	575.0	532.4	-42.6	-7.4%
39.5%	572.4	530.5	-41.9	-7.3%
40.7%	563.0	526.7	-36.3	-6.4%
42.0%	561.8	523.3	-38.5	-6.9%
43.2%	559.8	522.4	-37.4	-6.7%
44.4%	558.2	517.7	-40.5	-7.3%
45.7%	548.8	517.2	-31.6	-5.8%
46.9%	538.5	511.5	-27.0	-5.0%
48.1%	531.6	501.1	-30.5	-5.7%
49.4%	514.4	495.3	-19.1	-3.7%
50.6%	505.0	484.9	-20.1	-4.0%
51.9%	493.0	464.4	-28.6	-5.8%
53.1%	463.9	454.9	-9.0	-1.9%
54.3%	461.9	454.7	-7.2	-1.6%
55.6%	455.1	449.4	-5.8	-1.3%
56.8%	454.4	446.8	-7.7	-1.7%
58.0%	450.4	443.2	-7.2	-1.6%
59.3%	445.9	436.9	-9.0	-2.0%
60.5%	439.6	427.8	-11.8	-2.7%
61.7%	429.8	418.8	-11.0	-2.5%
63.0%	423.0	415.9	-7.1	-1.7%
64.2%	422.3	409.1	-13.1	-3.1%
65.4%	417.7	408.1	-9.6	-2.3%
66.7%	414.7	405.2	-9.5	-2.3%
67.9%	412.7	404.8	-8.0	-1.9%
69.1%	409.3	403.6	-5.7	-1.4%
70.4%	409.1	394.2	-14.9	-3.6%
71.6%	399.0	393.4	-5.7	-1.4%
72.8%	399.0	391.6	-7.4	-1.9%
74.1%	396.1	389.9	-6.3	-1.6%
75.3%	395.6	389.9	-5.7	-1.4%
76.5%	384.2	380.7	-3.5	-0.9%
77.8%	379.9	379.2	-0.7	-0.2%
79.0%	379.2	371.9	-7.3	-1.9%
80.2%	379.2	371.6	-7.6	-2.0%
81.5%	375.3	371.1	-4.3	-1.1%
82.7%	371.9	371.0	-0.8	-0.2%
84.0%	371.0	369.4	-1.7	-0.4%
85.2%	369.4	368.7	-0.7	-0.2%
86.4%	366.9	366.2	-0.6	-0.2%
87.7%	365.4	365.8	0.4	0.1%
88.9%	360.1	363.7	3.7	1.0%
90.1%	359.3	362.0	2.7	0.8%
91.4%	355.7	358.2	2.5	0.7%
92.6%	351.2	357.3	6.0	1.7%
93.8%	350.2	351.1	0.8	0.2%
95.1%	339.9	344.7	4.8	1.4%
96.3%	332.1	330.2	-1.9	-0.6%
97.5%	281.3	277.1	-4.2	-1.5%
98.8%	238.2	239.0	0.8	0.3%
100.0%	232.3	232.1	-0.1	-0.1%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	817.4	813.8	-3.6	-0.4%
1.2%	794.5	796.3	1.8	0.2%
2.5%	789.6	794.5	5.0	0.6%
3.7%	787.2	789.0	1.9	0.2%
4.9%	785.8	778.8	-7.0	-0.9%
6.2%	778.0	773.7	-4.3	-0.5%
7.4%	772.7	773.4	0.7	0.1%
8.6%	768.4	766.0	-2.3	-0.3%
9.9%	767.4	764.5	-3.0	-0.4%
11.1%	766.9	760.6	-6.3	-0.8%
12.3%	758.6	749.4	-9.2	-1.2%
13.6%	758.2	722.4	-35.8	-4.7%
14.8%	757.9	720.1	-37.9	-5.0%
16.0%	740.3	718.9	-21.4	-2.9%
17.3%	738.2	718.7	-19.4	-2.6%
18.5%	724.1	708.0	-16.1	-2.2%
19.8%	724.1	706.1	-18.0	-2.5%
21.0%	721.8	705.5	-16.3	-2.3%
22.2%	721.3	703.5	-17.8	-2.5%
23.5%	718.2	701.5	-16.7	-2.3%
24.7%	715.6	700.5	-15.1	-2.1%
25.9%	713.0	697.9	-15.2	-2.1%
27.2%	710.7	681.8	-28.9	-4.1%
28.4%	710.1	680.7	-29.5	-4.2%
29.6%	707.2	656.7	-50.5	-7.1%
30.9%	700.5	655.1	-45.4	-6.5%
32.1%	696.8	654.2	-42.5	-6.1%
33.3%	696.4	649.2	-47.3	-6.8%
34.6%	690.4	649.0	-41.5	-6.0%
35.8%	669.3	646.9	-22.4	-3.3%
37.0%	651.3	643.1	-8.1	-1.2%
38.3%	646.3	642.6	-3.8	-0.6%
39.5%	643.9	631.4	-12.5	-1.9%
40.7%	643.8	620.2	-23.6	-3.7%
42.0%	605.7	616.5	10.8	1.8%
43.2%	580.1	615.2	35.1	6.1%
44.4%	574.1	602.0	27.9	4.9%
45.7%	558.6	572.7	14.0	2.5%
46.9%	548.0	564.1	16.2	2.9%
48.1%	539.8	541.5	1.7	0.3%
49.4%	537.2	518.5	-18.7	-3.5%
50.6%	536.6	518.2	-18.4	-3.4%
51.9%	535.4	518.2	-17.2	-3.2%
53.1%	518.3	516.9	-1.4	-0.3%
54.3%	513.6	511.2	-2.4	-0.5%
55.6%	512.3	510.8	-1.5	-0.3%
56.8%	506.0	505.6	-0.4	-0.1%
58.0%	500.2	500.9	0.7	0.1%
59.3%	488.0	498.5	10.5	2.2%
60.5%	487.9	493.9	6.0	1.2%
61.7%	486.2	477.8	-8.4	-1.7%
63.0%	485.8	475.8	-10.0	-2.1%
64.2%	479.8	472.1	-7.7	-1.6%
65.4%	477.9	472.1	-5.8	-1.2%
66.7%	476.4	468.9	-7.5	-1.6%
67.9%	472.6	468.3	-4.3	-0.9%
69.1%	471.7	468.1	-3.6	-0.8%
70.4%	464.6	467.4	2.8	0.6%
71.6%	463.4	466.9	3.5	0.8%
72.8%	461.7	465.6	3.9	0.8%
74.1%	460.5	462.2	1.8	0.4%
75.3%	458.6	460.6	1.9	0.4%
76.5%	458.0	459.6	1.6	0.4%
77.8%	456.0	456.8	0.8	0.2%
79.0%	454.7	456.6	2.0	0.4%
80.2%	454.5	455.8	1.3	0.3%
81.5%	453.3	455.7	2.4	0.5%
82.7%	452.3	455.5	3.2	0.7%
84.0%	450.6	453.4	2.9	0.6%
85.2%	442.5	451.1	8.6	1.9%
86.4%	435.6	444.8	9.1	2.1%
87.7%	433.9	442.5	8.7	2.0%
88.9%	429.9	436.6	6.7	1.6%
90.1%	424.8	435.0	10.2	2.4%
91.4%	422.3	423.6	1.2	0.3%
92.6%	404.8	390.5	-14.3	-3.5%
93.8%	368.0	368.1	0.2	0.0%
95.1%	243.2	244.1	0.9	0.4%
96.3%	228.6	227.5	-1.1	-0.5%
97.5%	226.7	226.8	0.1	0.0%
98.8%	207.8	208.1	0.2	0.1%
100.0%	194.7	194.5	-0.1	-0.1%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	830.1	828.3	-1.8	-0.2%
1.2%	827.3	824.1	-3.2	-0.4%
2.5%	815.3	811.7	-3.6	-0.4%
3.7%	814.7	799.9	-14.8	-1.8%
4.9%	783.9	793.5	9.6	1.2%
6.2%	776.2	791.3	15.1	1.9%
7.4%	749.3	777.8	28.5	3.8%
8.6%	740.8	777.7	36.9	5.0%
9.9%	733.0	777.3	44.3	6.0%
11.1%	731.3	770.1	38.9	5.3%
12.3%	727.8	745.2	17.5	2.4%
13.6%	723.8	737.8	14.0	1.9%
14.8%	723.3	731.5	8.1	1.1%
16.0%	711.2	724.0	12.9	1.8%
17.3%	707.7	722.5	14.8	2.1%
18.5%	703.8	713.5	9.7	1.4%
19.8%	700.8	710.9	10.1	1.4%
21.0%	700.6	710.4	9.8	1.4%
22.2%	696.4	707.4	11.0	1.6%
23.5%	687.5	703.2	15.7	2.3%
24.7%	686.7	703.0	16.3	2.4%
25.9%	683.3	698.7	15.3	2.2%
27.2%	679.0	697.2	18.2	2.7%
28.4%	675.1	691.6	16.5	2.4%
29.6%	672.7	679.8	7.1	1.1%
30.9%	670.8	672.6	1.8	0.3%
32.1%	665.9	672.5	6.6	1.0%
33.3%	657.8	666.9	9.1	1.4%
34.6%	657.6	665.6	8.0	1.2%
35.8%	652.9	665.0	12.1	1.9%
37.0%	651.0	661.8	10.8	1.7%
38.3%	649.2	661.2	12.0	1.8%
39.5%	649.0	656.4	7.5	1.2%
40.7%	644.4	654.2	9.9	1.5%
42.0%	639.9	650.3	10.4	1.6%
43.2%	636.7	646.8	10.1	1.6%
44.4%	635.5	644.2	8.7	1.4%
45.7%	631.2	642.9	11.7	1.9%
46.9%	629.3	641.1	11.8	1.9%
48.1%	629.1	640.9	11.8	1.9%
49.4%	627.9	640.4	12.6	2.0%
50.6%	627.1	639.7	12.6	2.0%
51.9%	619.8	637.3	17.5	2.8%
53.1%	617.8	637.0	19.3	3.1%
54.3%	617.3	635.7	18.5	3.0%
55.6%	615.7	635.4	19.8	3.2%
56.8%	611.4	628.1	16.7	2.7%
58.0%	609.3	622.2	12.9	2.1%
59.3%	607.4	621.5	14.1	2.3%
60.5%	607.4	618.2	10.7	1.8%
61.7%	595.8	617.3	21.5	3.6%
63.0%	593.8	612.1	18.3	3.1%
64.2%	592.7	608.4	15.8	2.7%
65.4%	590.8	607.4	16.6	2.8%
66.7%	587.5	594.9	7.5	1.3%
67.9%	580.2	585.8	5.7	1.0%
69.1%	565.8	579.4	13.6	2.4%
70.4%	561.0	569.0	8.0	1.4%
71.6%	558.4	560.4	2.1	0.4%
72.8%	552.2	543.4	-8.7	-1.6%
74.1%	534.6	534.9	0.3	0.1%
75.3%	533.9	534.2	0.3	0.0%
76.5%	509.7	512.5	2.8	0.5%
77.8%	507.8	507.1	-0.7	-0.1%
79.0%	501.9	502.1	0.1	0.0%
80.2%	451.5	453.2	1.7	0.4%
81.5%	435.5	438.3	2.8	0.6%
82.7%	423.3	436.6	13.3	3.1%
84.0%	406.1	406.7	0.6	0.1%
85.2%	384.7	406.5	21.7	5.6%
86.4%	363.5	363.4	-0.1	0.0%
87.7%	353.4	353.6	0.2	0.1%
88.9%	328.8	329.0	0.1	0.0%
90.1%	318.7	318.7	0.1	0.0%
91.4%	282.5	283.3	0.8	0.3%
92.6%	279.6	282.3	2.7	1.0%
93.8%	273.5	280.3	6.8	2.5%
95.1%	273.2	272.6	-0.6	-0.2%
96.3%	267.6	268.1	0.5	0.2%
97.5%	256.0	256.2	0.2	0.1%
98.8%	252.1	253.1	1.0	0.4%
100.0%	231.6	231.7	0.1	0.0%

Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	942.7	950.1	7.4	0.8%
1.2%	917.4	890.0	-27.4	-3.0%
2.5%	889.6	874.1	-15.5	-1.7%
3.7%	879.8	871.0	-8.7	-1.0%
4.9%	846.8	848.3	1.5	0.2%
6.2%	842.8	842.1	-0.7	-0.1%
7.4%	840.4	835.9	-4.5	-0.5%
8.6%	837.0	834.6	-2.3	-0.3%
9.9%	835.8	829.7	-6.2	-0.7%
11.1%	828.7	827.7	-1.0	-0.1%
12.3%	810.0	814.2	4.2	0.5%
13.6%	808.4	812.8	4.4	0.5%
14.8%	796.3	812.6	16.3	2.0%
16.0%	786.8	797.0	10.2	1.3%
17.3%	781.5	786.4	4.9	0.6%
18.5%	774.8	784.4	9.5	1.2%
19.8%	773.0	781.9	8.9	1.2%
21.0%	771.0	768.2	-2.8	-0.4%
22.2%	768.2	767.0	-1.2	-0.2%
23.5%	758.1	756.6	-1.5	-0.2%
24.7%	756.7	747.7	-9.0	-1.2%
25.9%	735.2	739.1	3.9	0.5%
27.2%	712.9	724.4	11.5	1.6%
28.4%	710.4	720.0	9.5	1.3%
29.6%	708.9	714.7	5.7	0.8%
30.9%	696.2	713.1	16.9	2.4%
32.1%	690.8	696.4	5.7	0.8%
33.3%	688.0	693.5	5.5	0.8%
34.6%	675.4	693.3	17.9	2.6%
35.8%	672.7	691.2	18.5	2.8%
37.0%	670.1	680.9	10.8	1.6%
38.3%	668.8	667.8	-1.0	-0.1%
39.5%	653.3	648.7	-4.7	-0.7%
40.7%	652.3	633.4	-18.8	-2.9%
42.0%	641.0	631.1	-9.9	-1.5%
43.2%	631.3	627.1	-4.3	-0.7%
44.4%	617.9	619.1	1.2	0.2%
45.7%	603.2	573.3	-29.9	-5.0%
46.9%	570.8	571.4	0.6	0.1%
48.1%	562.8	569.7	6.9	1.2%
49.4%	555.3	564.5	9.2	1.7%
50.6%	550.1	555.6	5.5	1.0%
51.9%	539.7	546.8	7.1	1.3%
53.1%	530.9	530.1	-0.8	-0.2%
54.3%	529.4	518.2	-11.2	-2.1%
55.6%	508.4	509.0	0.7	0.1%
56.8%	488.1	489.9	1.8	0.4%
58.0%	488.1	488.5	0.5	0.1%
59.3%	474.5	478.9	4.4	0.9%
60.5%	471.4	472.0	0.6	0.1%
61.7%	460.3	461.3	1.0	0.2%
63.0%	456.7	460.5	3.8	0.8%
64.2%	454.6	457.3	2.7	0.6%
65.4%	449.9	451.9	2.0	0.4%
66.7%	427.0	426.6	-0.4	-0.1%
67.9%	423.0	419.8	-3.3	-0.8%
69.1%	403.4	406.2	2.8	0.7%
70.4%	391.2	404.3	13.1	3.4%
71.6%	372.0	372.3	0.3	0.1%
72.8%	363.0	363.6	0.6	0.2%
74.1%	350.9	351.1	0.2	0.0%
75.3%	324.5	326.2	1.7	0.5%
76.5%	313.6	321.2	7.6	2.4%
77.8%	310.0	311.8	1.8	0.6%
79.0%	306.5	307.6	1.1	0.4%
80.2%	299.1	299.3	0.2	0.1%
81.5%	298.6	298.7	0.1	0.0%
82.7%	295.2	295.6	0.4	0.1%
84.0%	286.7	286.4	-0.3	-0.1%
85.2%	286.4	286.1	-0.3	-0.1%
86.4%	256.2	256.6	0.4	0.2%
87.7%	255.3	256.0	0.7	0.3%
88.9%	252.5	253.5	1.0	0.4%
90.1%	246.6	246.7	0.0	0.0%
91.4%	232.4	232.5	0.1	0.0%
92.6%	212.8	210.9	-1.8	-0.9%
93.8%	210.7	210.6	0.0	0.0%
95.1%	210.6	208.6	-2.0	-0.9%
96.3%	203.9	204.2	0.3	0.1%
97.5%	200.5	200.9	0.4	0.2%
98.8%	185.7	185.8	0.1	0.1%
100.0%	169.8	169.9	0.1	0.1%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	941.1	918.8	-22.3	-2.4%
1.2%	918.5	918.5	0.0	0.0%
2.5%	915.7	910.9	-4.9	-0.5%
3.7%	884.4	879.0	-5.4	-0.6%
4.9%	871.0	850.0	-21.0	-2.4%
6.2%	861.4	849.4	-12.0	-1.4%
7.4%	855.9	848.6	-7.3	-0.9%
8.6%	847.7	843.8	-3.9	-0.5%
9.9%	839.0	841.7	2.7	0.3%
11.1%	835.4	832.9	-2.5	-0.3%
12.3%	833.4	830.5	-2.9	-0.3%
13.6%	830.1	810.9	-19.1	-2.3%
14.8%	812.0	809.0	-3.0	-0.4%
16.0%	799.3	762.6	-36.7	-4.6%
17.3%	771.2	756.7	-14.5	-1.9%
18.5%	770.5	736.1	-34.4	-4.5%
19.8%	751.4	724.1	-27.3	-3.6%
21.0%	738.4	718.1	-20.4	-2.8%
22.2%	727.5	715.1	-12.3	-1.7%
23.5%	721.1	712.2	-8.9	-1.2%
24.7%	717.4	683.1	-34.3	-4.8%
25.9%	714.5	674.7	-39.9	-5.6%
27.2%	711.7	673.3	-38.4	-5.4%
28.4%	694.6	672.9	-21.7	-3.1%
29.6%	668.9	670.7	1.8	0.3%
30.9%	666.1	664.2	-1.9	-0.3%
32.1%	663.2	661.9	-1.3	-0.2%
33.3%	660.7	651.5	-9.2	-1.4%
34.6%	649.3	644.8	-4.4	-0.7%
35.8%	638.8	618.1	-20.7	-3.2%
37.0%	605.8	606.3	0.5	0.1%
38.3%	601.8	605.4	3.6	0.6%
39.5%	594.0	591.7	-2.4	-0.4%
40.7%	546.2	544.9	-1.3	-0.2%
42.0%	532.1	540.3	8.2	1.5%
43.2%	527.2	535.3	8.1	1.5%
44.4%	525.0	528.9	3.9	0.8%
45.7%	514.0	517.3	3.3	0.6%
46.9%	484.3	486.1	1.8	0.4%
48.1%	481.3	482.3	1.1	0.2%
49.4%	476.4	476.0	-0.5	-0.1%
50.6%	467.0	467.2	0.2	0.0%
51.9%	459.8	460.5	0.7	0.1%
53.1%	443.2	443.8	0.6	0.1%
54.3%	433.1	433.5	0.4	0.1%
55.6%	424.8	427.8	3.0	0.7%
56.8%	420.9	421.9	0.9	0.2%
58.0%	405.6	421.1	15.5	3.8%
59.3%	405.6	406.8	1.2	0.3%
60.5%	385.0	385.9	0.9	0.2%
61.7%	378.0	378.4	0.4	0.1%
63.0%	361.9	368.2	6.4	1.8%
64.2%	360.7	366.0	5.3	1.5%
65.4%	357.7	363.8	6.0	1.7%
66.7%	327.8	327.9	0.1	0.0%
67.9%	317.1	317.4	0.3	0.1%
69.1%	313.6	316.3	2.7	0.9%
70.4%	310.5	310.7	0.2	0.1%
71.6%	304.5	309.6	5.2	1.7%
72.8%	303.2	303.6	0.4	0.1%
74.1%	299.9	300.1	0.2	0.1%
75.3%	297.0	297.3	0.3	0.1%
76.5%	285.4	284.6	-0.8	-0.3%
77.8%	284.5	282.2	-2.2	-0.8%
79.0%	273.0	273.5	0.5	0.2%
80.2%	271.1	271.1	0.0	0.0%
81.5%	270.2	270.4	0.1	0.1%
82.7%	260.3	260.2	-0.1	0.0%
84.0%	235.4	235.9	0.5	0.2%
85.2%	233.7	233.6	-0.1	-0.1%
86.4%	232.1	232.4	0.3	0.1%
87.7%	229.5	230.5	1.0	0.4%
88.9%	229.0	229.5	0.4	0.2%
90.1%	224.9	224.7	-0.1	-0.1%
91.4%	219.5	219.6	0.1	0.1%
92.6%	217.2	217.3	0.1	0.1%
93.8%	206.5	206.6	0.1	0.1%
95.1%	204.0	203.7	-0.2	-0.1%
96.3%	202.0	201.9	-0.1	0.0%
97.5%	195.1	195.9	0.7	0.4%
98.8%	194.6	195.4	0.8	0.4%
100.0%	186.2	186.8	0.6	0.3%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	714.8	705.7	-9.1	-1.3%
1.2%	688.2	686.5	-1.6	-0.2%
2.5%	683.8	679.9	-3.9	-0.6%
3.7%	677.7	676.9	-0.8	-0.1%
4.9%	661.9	671.3	9.4	1.4%
6.2%	646.5	650.6	4.1	0.6%
7.4%	643.5	644.5	1.0	0.2%
8.6%	633.1	636.6	3.5	0.5%
9.9%	628.5	633.2	4.7	0.7%
11.1%	626.2	625.8	-0.5	-0.1%
12.3%	623.7	623.2	-0.5	-0.1%
13.6%	603.6	617.9	14.3	2.4%
14.8%	603.3	604.0	0.6	0.1%
16.0%	601.0	603.2	2.2	0.4%
17.3%	581.2	579.6	-1.5	-0.3%
18.5%	562.9	562.4	-0.5	-0.1%
19.8%	559.7	554.4	-5.3	-0.9%
21.0%	555.6	552.3	-3.3	-0.6%
22.2%	550.6	550.7	0.0	0.0%
23.5%	538.0	518.9	-19.2	-3.6%
24.7%	518.1	517.7	-0.4	-0.1%
25.9%	506.4	507.3	0.9	0.2%
27.2%	504.6	504.7	0.0	0.0%
28.4%	503.2	502.9	-0.3	-0.1%
29.6%	498.2	498.5	0.3	0.1%
30.9%	497.5	492.9	-4.6	-0.9%
32.1%	494.8	482.6	-12.2	-2.5%
33.3%	484.9	469.7	-15.2	-3.1%
34.6%	468.3	465.5	-2.8	-0.6%
35.8%	433.2	432.7	-0.6	-0.1%
37.0%	419.3	420.0	0.6	0.1%
38.3%	397.6	397.7	0.0	0.0%
39.5%	397.6	397.6	0.0	0.0%
40.7%	394.3	394.5	0.2	0.0%
42.0%	372.6	374.8	2.2	0.6%
43.2%	365.1	369.1	4.0	1.1%
44.4%	360.6	360.7	0.1	0.0%
45.7%	356.9	360.2	3.3	0.9%
46.9%	354.7	354.8	0.1	0.0%
48.1%	347.1	347.1	0.0	0.0%
49.4%	342.2	342.2	0.0	0.0%
50.6%	330.7	326.1	-4.6	-1.4%
51.9%	326.1	324.6	-1.4	-0.4%
53.1%	324.2	319.6	-4.6	-1.4%
54.3%	319.3	315.5	-3.7	-1.2%
55.6%	316.0	315.4	-0.6	-0.2%
56.8%	315.2	315.2	0.0	0.0%
58.0%	313.8	314.5	0.8	0.2%
59.3%	313.7	313.8	0.1	0.0%
60.5%	309.8	309.8	0.0	0.0%
61.7%	302.5	303.8	1.3	0.4%
63.0%	302.4	302.7	0.2	0.1%
64.2%	299.0	299.7	0.7	0.2%
65.4%	295.2	295.3	0.0	0.0%
66.7%	287.2	287.3	0.1	0.0%
67.9%	276.1	276.6	0.5	0.2%
69.1%	272.0	271.7	-0.4	-0.1%
70.4%	271.7	271.6	-0.1	0.0%
71.6%	270.9	271.2	0.2	0.1%
72.8%	268.8	268.8	0.0	0.0%
74.1%	268.3	268.3	0.1	0.0%
75.3%	264.0	262.8	-1.1	-0.4%
76.5%	260.3	260.3	0.0	0.0%
77.8%	259.4	259.5	0.1	0.0%
79.0%	255.7	255.8	0.0	0.0%
80.2%	255.1	255.8	0.7	0.3%
81.5%	255.0	255.3	0.2	0.1%
82.7%	254.4	255.1	0.7	0.3%
84.0%	250.1	250.4	0.2	0.1%
85.2%	242.1	240.3	-1.8	-0.7%
86.4%	229.4	229.2	-0.2	-0.1%
87.7%	218.5	218.1	-0.4	-0.2%
88.9%	218.1	217.4	-0.6	-0.3%
90.1%	215.0	215.4	0.4	0.2%
91.4%	212.1	212.4	0.3	0.1%
92.6%	209.8	209.5	-0.2	-0.1%
93.8%	208.3	208.6	0.3	0.1%
95.1%	207.8	208.1	0.3	0.1%
96.3%	196.9	196.6	-0.3	-0.1%
97.5%	173.7	174.1	0.4	0.2%
98.8%	166.2	166.2	0.0	0.0%
100.0%	158.0	158.6	0.6	0.4%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	604.6	602.9	-1.7	-0.3%
1.2%	592.6	596.6	4.0	0.7%
2.5%	590.9	593.1	2.1	0.4%
3.7%	587.4	584.9	-2.5	-0.4%
4.9%	584.0	581.1	-2.8	-0.5%
6.2%	578.9	579.9	0.9	0.2%
7.4%	578.1	578.0	-0.1	0.0%
8.6%	571.6	572.8	1.2	0.2%
9.9%	571.3	568.8	-2.6	-0.4%
11.1%	566.7	565.1	-1.6	-0.3%
12.3%	561.8	563.4	1.5	0.3%
13.6%	561.8	561.8	0.0	0.0%
14.8%	560.7	561.2	0.4	0.1%
16.0%	554.4	560.0	5.7	1.0%
17.3%	553.7	555.6	1.9	0.3%
18.5%	549.0	554.4	5.4	1.0%
19.8%	548.5	550.6	2.1	0.4%
21.0%	538.3	550.4	12.1	2.2%
22.2%	534.7	541.1	6.4	1.2%
23.5%	531.8	535.0	3.2	0.6%
24.7%	530.7	534.5	3.8	0.7%
25.9%	528.7	528.6	-0.1	0.0%
27.2%	527.8	526.7	-1.1	-0.2%
28.4%	524.4	524.6	0.1	0.0%
29.6%	513.6	518.8	5.3	1.0%
30.9%	507.7	513.8	6.0	1.2%
32.1%	502.3	502.3	0.0	0.0%
33.3%	478.0	478.0	0.0	0.0%
34.6%	467.8	477.5	9.7	2.1%
35.8%	464.3	467.9	3.6	0.8%
37.0%	464.2	461.1	-3.1	-0.7%
38.3%	462.8	458.1	-4.8	-1.0%
39.5%	459.9	457.0	-2.9	-0.6%
40.7%	450.6	451.3	0.7	0.1%
42.0%	447.2	447.7	0.5	0.1%
43.2%	440.1	438.8	-1.3	-0.3%
44.4%	434.2	434.7	0.5	0.1%
45.7%	426.4	424.6	-1.9	-0.4%
46.9%	422.3	422.3	0.0	0.0%
48.1%	416.6	415.1	-1.5	-0.4%
49.4%	412.8	412.8	0.0	0.0%
50.6%	401.3	401.5	0.2	0.1%
51.9%	400.7	400.7	0.0	0.0%
53.1%	398.8	398.9	0.1	0.0%
54.3%	394.3	394.4	0.1	0.0%
55.6%	393.2	393.3	0.1	0.0%
56.8%	391.5	391.5	0.0	0.0%
58.0%	378.9	379.0	0.0	0.0%
59.3%	378.7	378.4	-0.2	-0.1%
60.5%	375.6	377.7	2.1	0.6%
61.7%	374.2	374.3	0.0	0.0%
63.0%	372.3	372.3	0.0	0.0%
64.2%	370.2	370.8	0.5	0.1%
65.4%	368.2	368.1	-0.1	0.0%
66.7%	361.9	361.9	0.0	0.0%
67.9%	361.2	361.2	0.0	0.0%
69.1%	359.5	359.5	0.0	0.0%
70.4%	346.7	346.7	0.1	0.0%
71.6%	344.3	344.3	0.0	0.0%
72.8%	338.9	338.8	-0.1	0.0%
74.1%	335.6	337.3	1.7	0.5%
75.3%	335.2	335.8	0.6	0.2%
76.5%	333.8	333.9	0.0	0.0%
77.8%	316.8	316.9	0.1	0.0%
79.0%	288.6	290.0	1.4	0.5%
80.2%	286.2	287.3	1.2	0.4%
81.5%	278.8	278.8	0.0	0.0%
82.7%	266.4	266.5	0.1	0.0%
84.0%	263.0	263.1	0.0	0.0%
85.2%	252.4	253.3	0.8	0.3%
86.4%	240.7	241.7	1.1	0.4%
87.7%	236.2	236.5	0.3	0.1%
88.9%	230.3	231.2	0.9	0.4%
90.1%	197.5	198.0	0.5	0.3%
91.4%	197.4	197.8	0.4	0.2%
92.6%	196.2	195.7	-0.5	-0.3%
93.8%	190.0	190.4	0.4	0.2%
95.1%	184.3	184.7	0.4	0.2%
96.3%	179.1	179.7	0.6	0.3%
97.5%	173.5	173.5	0.0	0.0%
98.8%	165.1	165.2	0.2	0.1%
100.0%	163.3	163.5	0.2	0.1%

Table SQ-32-b

Delta Mendota Canal at Jones Pumping Plant, Monthly EC
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	579.2	573.5	-5.7	-1.0%
1.2%	579.1	563.4	-15.7	-2.7%
2.5%	563.7	561.1	-2.6	-0.5%
3.7%	554.1	553.1	-1.0	-0.2%
4.9%	550.0	550.1	0.1	0.0%
6.2%	531.6	532.4	0.8	0.2%
7.4%	530.9	531.5	0.6	0.1%
8.6%	530.4	530.4	0.0	0.0%
9.9%	513.6	510.5	-3.1	-0.6%
11.1%	511.4	510.1	-1.3	-0.3%
12.3%	510.1	509.9	-0.2	0.0%
13.6%	508.3	499.7	-8.6	-1.7%
14.8%	505.8	499.2	-6.6	-1.3%
16.0%	499.5	498.2	-1.3	-0.3%
17.3%	498.6	497.8	-0.8	-0.2%
18.5%	497.6	497.2	-0.4	-0.1%
19.8%	492.3	488.1	-4.2	-0.9%
21.0%	492.0	487.0	-5.1	-1.0%
22.2%	489.5	482.6	-6.9	-1.4%
23.5%	485.0	482.2	-2.8	-0.6%
24.7%	484.3	476.4	-7.9	-1.6%
25.9%	478.8	471.1	-7.7	-1.6%
27.2%	476.9	457.7	-19.2	-4.0%
28.4%	465.3	456.5	-8.8	-1.9%
29.6%	454.5	454.1	-0.5	-0.1%
30.9%	454.5	451.2	-3.3	-0.7%
32.1%	453.1	450.9	-2.2	-0.5%
33.3%	452.0	448.6	-3.4	-0.8%
34.6%	447.9	448.6	0.7	0.1%
35.8%	444.6	443.1	-1.6	-0.4%
37.0%	439.2	438.1	-1.1	-0.3%
38.3%	439.0	437.3	-1.8	-0.4%
39.5%	435.6	436.9	1.3	0.3%
40.7%	435.5	435.5	0.0	0.0%
42.0%	431.7	435.3	3.5	0.8%
43.2%	430.8	434.2	3.4	0.8%
44.4%	428.4	430.7	2.3	0.5%
45.7%	425.6	428.4	2.7	0.6%
46.9%	424.6	426.7	2.1	0.5%
48.1%	424.1	423.7	-0.3	-0.1%
49.4%	423.0	423.3	0.3	0.1%
50.6%	422.7	418.2	-4.5	-1.1%
51.9%	422.2	417.0	-5.1	-1.2%
53.1%	420.2	416.5	-3.7	-0.9%
54.3%	418.4	415.8	-2.6	-0.6%
55.6%	417.2	414.5	-2.7	-0.6%
56.8%	415.7	414.4	-1.2	-0.3%
58.0%	415.5	408.7	-6.8	-1.6%
59.3%	415.3	408.4	-6.9	-1.7%
60.5%	415.2	408.3	-7.0	-1.7%
61.7%	413.5	408.2	-5.3	-1.3%
63.0%	413.2	407.7	-5.5	-1.3%
64.2%	413.0	407.2	-5.9	-1.4%
65.4%	408.4	407.0	-1.4	-0.3%
66.7%	408.2	401.9	-6.3	-1.6%
67.9%	408.2	398.7	-9.5	-2.3%
69.1%	403.1	398.1	-5.1	-1.3%
70.4%	401.2	395.5	-5.7	-1.4%
71.6%	399.5	393.2	-6.3	-1.6%
72.8%	397.7	392.9	-4.9	-1.2%
74.1%	393.7	389.7	-4.0	-1.0%
75.3%	384.1	384.6	0.5	0.1%
76.5%	382.8	384.0	1.2	0.3%
77.8%	381.5	381.5	0.0	0.0%
79.0%	380.9	380.5	-0.5	-0.1%
80.2%	380.7	380.3	-0.4	-0.1%
81.5%	378.4	378.4	0.0	0.0%
82.7%	375.9	373.5	-2.3	-0.6%
84.0%	374.3	372.6	-1.7	-0.5%
85.2%	373.4	372.4	-1.0	-0.3%
86.4%	373.3	372.2	-1.1	-0.3%
87.7%	372.0	372.1	0.0	0.0%
88.9%	371.2	371.4	0.2	0.1%
90.1%	368.9	361.3	-7.7	-2.1%
91.4%	366.8	358.7	-8.1	-2.2%
92.6%	357.8	358.0	0.2	0.1%
93.8%	353.7	353.5	-0.2	-0.1%
95.1%	352.3	352.5	0.2	0.1%
96.3%	350.5	350.1	-0.4	-0.1%
97.5%	344.9	344.6	-0.4	-0.1%
98.8%	310.7	311.9	1.2	0.4%
100.0%	301.8	301.5	-0.3	-0.1%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	641.8	643.9	2.1	0.3%
1.2%	628.1	639.8	11.7	1.9%
2.5%	602.8	608.2	5.4	0.9%
3.7%	602.0	573.3	-28.7	-4.8%
4.9%	580.4	571.2	-9.2	-1.6%
6.2%	572.2	563.1	-9.0	-1.6%
7.4%	525.3	547.7	22.3	4.3%
8.6%	518.8	517.5	-1.3	-0.3%
9.9%	510.6	503.1	-7.4	-1.5%
11.1%	486.0	480.8	-5.1	-1.1%
12.3%	481.9	467.3	-14.6	-3.0%
13.6%	472.4	461.6	-10.8	-2.3%
14.8%	467.6	456.4	-11.2	-2.4%
16.0%	466.8	453.7	-13.1	-2.8%
17.3%	462.3	439.3	-23.1	-5.0%
18.5%	453.8	438.9	-14.9	-3.3%
19.8%	451.3	438.8	-12.5	-2.8%
21.0%	447.7	438.8	-9.0	-2.0%
22.2%	444.7	437.3	-7.5	-1.7%
23.5%	440.2	433.6	-6.6	-1.5%
24.7%	439.9	431.4	-8.5	-1.9%
25.9%	438.8	430.6	-8.1	-1.9%
27.2%	437.3	427.4	-9.9	-2.3%
28.4%	436.6	426.6	-10.0	-2.3%
29.6%	433.8	421.3	-12.6	-2.9%
30.9%	429.9	421.1	-8.8	-2.0%
32.1%	429.5	419.8	-9.7	-2.3%
33.3%	428.6	419.1	-9.5	-2.2%
34.6%	427.6	414.4	-13.2	-3.1%
35.8%	424.4	411.1	-13.3	-3.1%
37.0%	421.0	409.9	-11.1	-2.6%
38.3%	420.3	409.6	-10.7	-2.6%
39.5%	417.8	409.1	-8.7	-2.1%
40.7%	413.5	408.7	-4.8	-1.2%
42.0%	411.9	404.5	-7.4	-1.8%
43.2%	405.5	403.8	-1.7	-0.4%
44.4%	400.7	401.4	0.7	0.2%
45.7%	399.0	397.0	-1.9	-0.5%
46.9%	396.4	396.3	-0.1	0.0%
48.1%	396.1	396.2	0.1	0.0%
49.4%	396.0	393.6	-2.4	-0.6%
50.6%	395.2	392.5	-2.6	-0.7%
51.9%	393.1	391.5	-1.6	-0.4%
53.1%	392.8	391.2	-1.6	-0.4%
54.3%	392.5	390.0	-2.5	-0.6%
55.6%	391.2	387.4	-3.9	-1.0%
56.8%	391.2	385.5	-5.7	-1.4%
58.0%	387.8	381.0	-6.9	-1.8%
59.3%	387.3	379.0	-8.3	-2.2%
60.5%	381.0	377.3	-3.7	-1.0%
61.7%	380.3	374.4	-5.9	-1.6%
63.0%	376.1	373.4	-2.7	-0.7%
64.2%	375.0	372.2	-2.7	-0.7%
65.4%	374.9	371.1	-3.7	-1.0%
66.7%	371.9	369.1	-2.8	-0.7%
67.9%	371.2	367.1	-4.1	-1.1%
69.1%	371.0	366.6	-4.3	-1.2%
70.4%	369.5	365.2	-4.3	-1.2%
71.6%	368.0	364.9	-3.1	-0.9%
72.8%	368.0	363.0	-5.0	-1.3%
74.1%	367.2	362.9	-4.3	-1.2%
75.3%	366.6	360.3	-6.3	-1.7%
76.5%	365.6	359.7	-5.9	-1.6%
77.8%	365.4	357.8	-7.6	-2.1%
79.0%	364.6	355.6	-9.0	-2.5%
80.2%	362.8	352.8	-10.0	-2.8%
81.5%	359.1	349.7	-9.3	-2.6%
82.7%	357.1	349.5	-7.6	-2.1%
84.0%	356.0	346.1	-9.8	-2.8%
85.2%	354.7	343.0	-11.7	-3.3%
86.4%	353.2	341.7	-11.5	-3.3%
87.7%	352.3	341.7	-10.7	-3.0%
88.9%	351.7	338.4	-13.4	-3.8%
90.1%	342.2	337.6	-4.6	-1.4%
91.4%	340.6	335.8	-4.8	-1.4%
92.6%	340.4	335.7	-4.6	-1.4%
93.8%	340.1	334.4	-5.7	-1.7%
95.1%	339.0	333.2	-5.8	-1.7%
96.3%	337.1	329.5	-7.6	-2.3%
97.5%	330.4	327.7	-2.7	-0.8%
98.8%	321.9	327.6	5.7	1.8%
100.0%	320.7	314.8	-6.0	-1.9%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	717.5	719.8	2.3	0.3%
1.2%	685.5	617.0	-68.5	-10.0%
2.5%	623.1	616.2	-6.9	-1.1%
3.7%	595.0	601.3	6.3	1.1%
4.9%	582.6	592.4	9.8	1.7%
6.2%	568.8	568.9	0.1	0.0%
7.4%	552.7	562.2	9.4	1.7%
8.6%	541.1	548.8	7.7	1.4%
9.9%	525.8	543.4	17.7	3.4%
11.1%	518.0	536.0	18.0	3.5%
12.3%	511.8	517.9	6.1	1.2%
13.6%	510.3	516.6	6.3	1.2%
14.8%	488.3	516.3	28.1	5.8%
16.0%	488.0	499.2	11.3	2.3%
17.3%	486.2	498.5	12.3	2.5%
18.5%	485.7	497.2	11.5	2.4%
19.8%	484.6	497.1	12.5	2.6%
21.0%	484.5	495.5	11.0	2.3%
22.2%	477.8	484.5	6.7	1.4%
23.5%	476.3	483.0	6.8	1.4%
24.7%	475.5	480.2	4.8	1.0%
25.9%	474.5	473.9	-0.6	-0.1%
27.2%	464.9	473.6	8.8	1.9%
28.4%	451.6	466.5	14.9	3.3%
29.6%	450.8	465.2	14.5	3.2%
30.9%	437.9	464.1	26.2	6.0%
32.1%	433.5	439.8	6.3	1.5%
33.3%	431.0	439.5	8.5	2.0%
34.6%	429.0	430.6	1.6	0.4%
35.8%	423.8	414.8	-9.0	-2.1%
37.0%	423.2	414.7	-8.5	-2.0%
38.3%	421.0	410.3	-10.6	-2.5%
39.5%	416.3	408.2	-8.1	-1.9%
40.7%	414.8	407.3	-7.5	-1.8%
42.0%	413.3	404.9	-8.4	-2.0%
43.2%	409.7	404.1	-5.5	-1.4%
44.4%	404.2	404.1	-0.1	0.0%
45.7%	403.0	402.7	-0.3	-0.1%
46.9%	402.3	402.6	0.4	0.1%
48.1%	397.6	396.6	-1.1	-0.3%
49.4%	393.0	393.7	0.7	0.2%
50.6%	389.7	391.9	2.2	0.6%
51.9%	385.0	386.7	1.7	0.4%
53.1%	384.2	381.2	-3.0	-0.8%
54.3%	379.9	379.5	-0.4	-0.1%
55.6%	378.8	374.3	-4.5	-1.2%
56.8%	376.3	371.1	-5.2	-1.4%
58.0%	372.9	369.6	-3.3	-0.9%
59.3%	372.5	369.5	-3.0	-0.8%
60.5%	371.9	369.2	-2.7	-0.7%
61.7%	371.2	368.9	-2.3	-0.6%
63.0%	370.9	367.8	-3.1	-0.8%
64.2%	365.8	364.9	-0.9	-0.3%
65.4%	362.4	361.7	-0.6	-0.2%
66.7%	360.4	361.1	0.7	0.2%
67.9%	359.2	358.3	-0.9	-0.2%
69.1%	359.0	358.1	-0.9	-0.3%
70.4%	358.7	357.3	-1.4	-0.4%
71.6%	358.6	355.8	-2.8	-0.8%
72.8%	358.1	354.6	-3.5	-1.0%
74.1%	358.0	353.5	-4.5	-1.3%
75.3%	354.4	352.2	-2.2	-0.6%
76.5%	354.0	351.9	-2.2	-0.6%
77.8%	352.6	351.3	-1.3	-0.4%
79.0%	350.9	348.6	-2.3	-0.7%
80.2%	350.2	348.5	-1.7	-0.5%
81.5%	350.1	348.4	-1.7	-0.5%
82.7%	349.1	346.1	-3.0	-0.9%
84.0%	347.9	345.5	-2.4	-0.7%
85.2%	347.7	345.0	-2.8	-0.8%
86.4%	346.3	340.7	-5.6	-1.6%
87.7%	344.6	340.5	-4.1	-1.2%
88.9%	343.8	339.9	-3.9	-1.1%
90.1%	342.6	338.1	-4.6	-1.3%
91.4%	342.3	337.3	-5.0	-1.5%
92.6%	340.3	336.6	-3.7	-1.1%
93.8%	338.7	332.3	-6.4	-1.9%
95.1%	338.7	331.1	-7.6	-2.2%
96.3%	334.8	330.5	-4.3	-1.3%
97.5%	331.1	323.9	-7.3	-2.2%
98.8%	326.7	322.2	-4.5	-1.4%
100.0%	324.6	314.2	-10.4	-3.2%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly EC (UMHOS/CM)	WSIP 2070 With Project Monthly EC (UMHOS/CM)	Absolute Difference (UMHOS/CM)	Relative Difference (%)
0.0%	657.4	651.2	-6.2	-0.9%
1.2%	638.7	626.3	-12.4	-1.9%
2.5%	636.2	626.0	-10.3	-1.6%
3.7%	632.6	625.0	-7.6	-1.2%
4.9%	630.1	621.5	-8.6	-1.4%
6.2%	628.2	618.9	-9.3	-1.5%
7.4%	618.9	614.0	-4.9	-0.8%
8.6%	617.6	608.0	-9.5	-1.5%
9.9%	615.1	607.1	-8.0	-1.3%
11.1%	611.1	606.1	-5.0	-0.8%
12.3%	605.6	605.5	-0.1	0.0%
13.6%	605.5	601.4	-4.0	-0.7%
14.8%	602.2	593.8	-8.4	-1.4%
16.0%	602.1	590.4	-11.7	-1.9%
17.3%	601.3	589.5	-11.8	-2.0%
18.5%	596.9	589.1	-7.8	-1.3%
19.8%	594.3	588.6	-5.7	-1.0%
21.0%	591.5	584.1	-7.4	-1.2%
22.2%	591.1	582.1	-9.0	-1.5%
23.5%	588.0	580.5	-7.5	-1.3%
24.7%	587.6	574.5	-13.1	-2.2%
25.9%	587.6	571.4	-16.2	-2.8%
27.2%	582.7	566.3	-16.4	-2.8%
28.4%	578.2	566.2	-11.9	-2.1%
29.6%	575.5	563.2	-12.2	-2.1%
30.9%	573.6	561.6	-12.0	-2.1%
32.1%	572.5	559.1	-13.4	-2.3%
33.3%	565.9	555.5	-10.4	-1.8%
34.6%	562.2	554.1	-8.1	-1.4%
35.8%	552.1	552.8	0.7	0.1%
37.0%	551.2	551.4	0.2	0.0%
38.3%	543.3	549.1	5.8	1.1%
39.5%	537.9	543.5	5.6	1.0%
40.7%	536.2	542.1	5.8	1.1%
42.0%	532.9	536.4	3.5	0.7%
43.2%	525.4	534.8	9.4	1.8%
44.4%	520.6	532.8	12.2	2.3%
45.7%	514.5	529.6	15.1	2.9%
46.9%	513.3	517.7	4.3	0.8%
48.1%	511.2	516.8	5.6	1.1%
49.4%	508.9	516.2	7.3	1.4%
50.6%	507.4	513.6	6.2	1.2%
51.9%	504.0	510.5	6.5	1.3%
53.1%	503.7	509.9	6.1	1.2%
54.3%	502.8	509.3	6.5	1.3%
55.6%	501.2	505.6	4.4	0.9%
56.8%	500.4	500.5	0.1	0.0%
58.0%	494.2	498.7	4.5	0.9%
59.3%	492.2	497.5	5.3	1.1%
60.5%	488.7	496.5	7.8	1.6%
61.7%	488.5	492.7	4.2	0.9%
63.0%	488.0	492.5	4.5	0.9%
64.2%	486.2	491.0	4.8	1.0%
65.4%	485.9	490.9	4.9	1.0%
66.7%	485.4	484.1	-1.2	-0.3%
67.9%	482.6	483.7	1.1	0.2%
69.1%	481.9	479.7	-2.2	-0.5%
70.4%	481.3	477.2	-4.1	-0.8%
71.6%	479.6	476.6	-3.0	-0.6%
72.8%	477.9	472.7	-5.3	-1.1%
74.1%	472.0	470.5	-1.5	-0.3%
75.3%	469.4	469.7	0.3	0.1%
76.5%	467.0	469.1	2.0	0.4%
77.8%	464.3	465.7	1.4	0.3%
79.0%	462.7	464.5	1.8	0.4%
80.2%	460.4	460.5	0.1	0.0%
81.5%	455.0	459.6	4.6	1.0%
82.7%	448.9	457.7	8.7	1.9%
84.0%	447.8	454.5	6.7	1.5%
85.2%	446.4	454.5	8.1	1.8%
86.4%	444.8	451.6	6.8	1.5%
87.7%	439.6	451.4	11.9	2.7%
88.9%	436.2	448.2	12.0	2.8%
90.1%	427.6	438.9	11.2	2.6%
91.4%	426.8	436.5	9.7	2.3%
92.6%	425.9	430.9	5.0	1.2%
93.8%	422.2	424.8	2.6	0.6%
95.1%	421.5	424.3	2.8	0.7%
96.3%	417.3	415.9	-1.4	-0.3%
97.5%	413.6	404.9	-8.7	-2.1%
98.8%	333.2	336.1	2.9	0.9%
100.0%	318.0	318.8	0.8	0.3%

Sacramento-San Joaquin Delta Operations

Summary Tables and Bar Charts

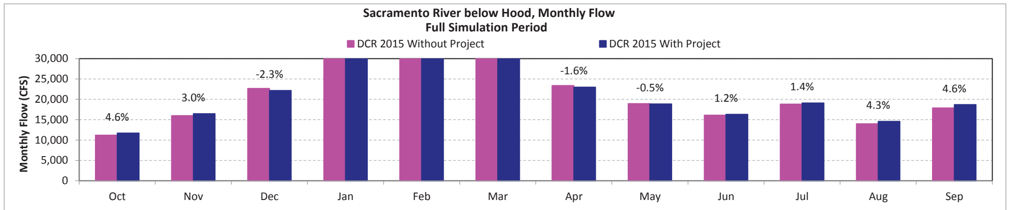
Table SW-30-a
Sacramento River below Hood, Monthly Flow
Long-term Average and Average by Water Year Type

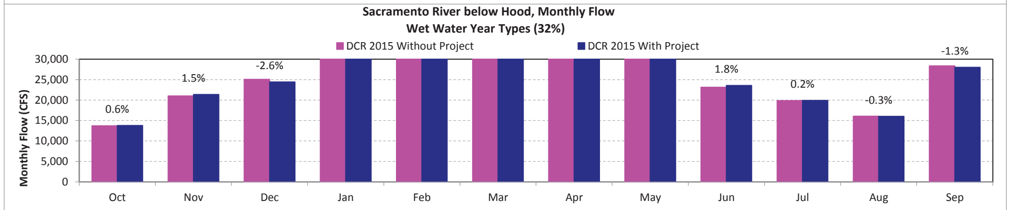
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	11,190	15,984	22,686	31,279	37,805	32,259	23,386	18,961	16,101	18,839	13,979	17,877
DCR 2015 With Project	11,707	16,460	22,171	30,149	36,652	30,882	23,011	18,862	16,299	19,097	14,586	18,704
Difference	517	476	-515	-1,130	-1,153	-1,376	-375	-100	198	259	607	827
Percent Difference[3]	4.6%	3.0%	-2.3%	-3.6%	-3.0%	-4.3%	-1.6%	-0.5%	1.2%	1.4%	4.3%	4.6%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	13,723	21,033	25,062	50,342	57,602	49,750	38,158	31,442	23,152	19,877	16,070	28,365
DCR 2015 With Project	13,808	21,355	24,420	49,544	57,009	48,918	37,800	31,279	23,563	19,912	16,017	28,009
Difference	86	321	-642	-797	-593	-831	-358	-164	411	35	-53	-356
Percent Difference	0.6%	1.5%	-2.6%	-1.6%	-1.0%	-1.7%	-0.9%	-0.5%	1.8%	0.2%	-0.3%	-1.3%
Above Normal (14.6%)												
DCR 2015 Without Project	12,378	19,307	23,445	37,857	45,549	42,492	25,927	20,517	16,167	21,992	16,466	21,908
DCR 2015 With Project	12,967	19,275	22,324	36,201	44,290	40,516	25,215	20,499	16,133	22,222	16,375	22,136
Difference	589	-32	-1,120	-1,656	-1,258	-1,976	-711	-17	-34	230	-91	228
Percent Difference	4.8%	-0.2%	-4.8%	-4.4%	-2.8%	-4.7%	-2.7%	-0.1%	-0.2%	1.0%	-0.6%	1.0%
Below Normal (17.1%)												
DCR 2015 Without Project	12,651	15,851	27,233	22,626	31,691	22,887	17,875	14,365	13,613	21,091	15,837	13,734
DCR 2015 With Project	13,684	16,953	26,858	20,898	30,702	20,661	17,357	13,947	13,718	21,213	16,085	14,488
Difference	1,033	1,102	-375	-1,728	-989	-2,226	-518	-418	105	122	248	754
Percent Difference	8.2%	7.0%	-1.4%	-7.6%	-3.1%	-9.7%	-2.9%	-2.9%	0.8%	0.6%	1.6%	5.5%
Dry (22%)												
DCR 2015 Without Project	8,557	12,186	21,859	17,163	23,089	20,161	13,283	10,848	12,387	18,267	11,453	10,383
DCR 2015 With Project	9,418	12,909	21,928	16,314	21,359	18,342	12,943	11,027	12,372	18,910	13,088	12,628
Difference	861	723	69	-849	-1,731	-1,819	-340	179	-15	643	1,635	2,245
Percent Difference	10.1%	5.9%	0.3%	-4.9%	-7.5%	-9.0%	-2.6%	1.6%	-0.1%	3.5%	14.3%	21.6%
Critical (14.6%)												
DCR 2015 Without Project	6,764	7,574	12,714	14,665	16,374	13,208	10,422	7,896	9,231	11,666	8,584	7,192
DCR 2015 With Project	7,022	7,791	12,040	13,616	14,790	12,905	10,464	7,807	9,627	12,020	10,198	9,142
Difference	259	217	-674	-1,049	-1,584	-303	42	-89	395	354	1,614	1,951
Percent Difference	3.8%	2.9%	-5.3%	-7.2%	-9.7%	-2.3%	0.4%	-1.1%	4.3%	3.0%	18.8%	27.1%

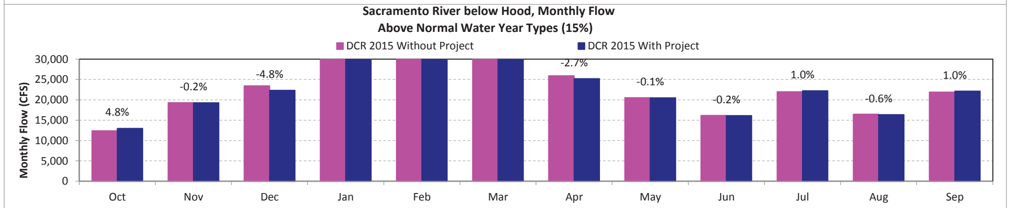
1 Based on the 82-year simulation period

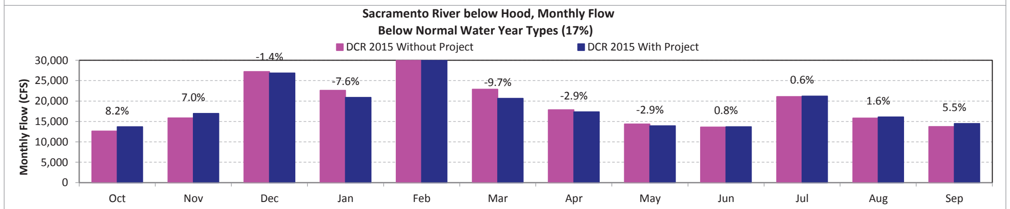
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

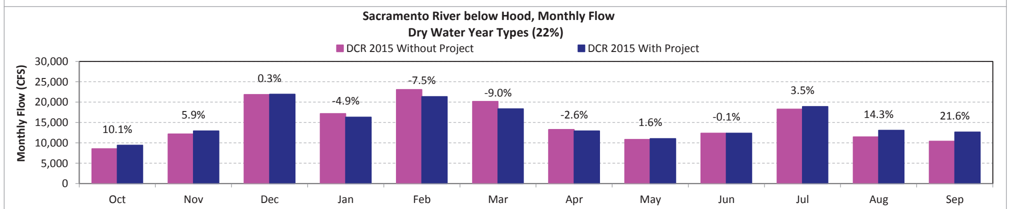
3 Relative difference of the monthly average











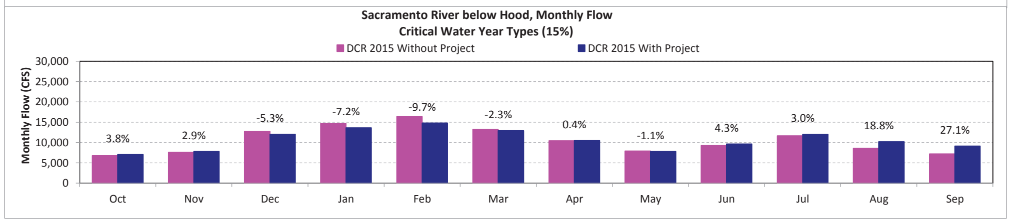


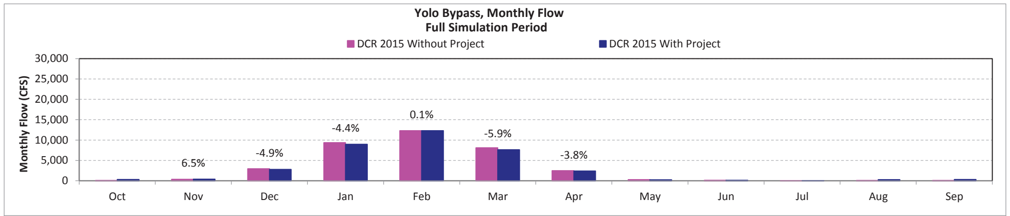
Table SW-31-a
Yolo Bypass, Monthly Flow
Long-term Average and Average by Water Year Type

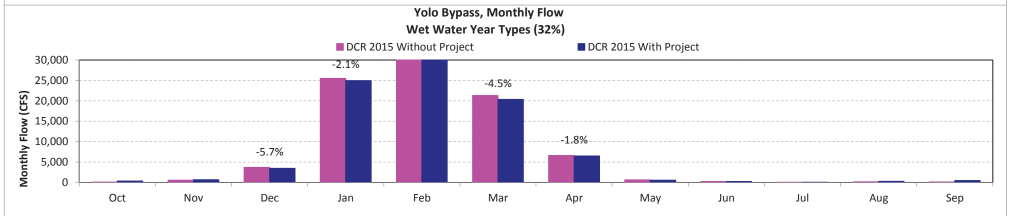
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	96	367	2,961	9,378	12,300	8,114	2,477	265	125	48	100	88
DCR 2015 With Project	322	391	2,815	8,961	12,313	7,638	2,384	244	124	48	281	336
Difference	227	24	-147	-417	13	-476	-93	-21	0	0	181	248
Percent Difference[3]		6.5%	-4.9%	-4.4%	0.1%	-5.9%	-3.8%					
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	86	537	3,682	25,491	30,636	21,308	6,587	632	251	48	143	128
DCR 2015 With Project	365	657	3,474	24,947	31,228	20,341	6,468	565	250	48	278	458
Difference	279	120	-208	-545	592	-968	-120	-67	-1	0	135	331
Percent Difference			-5.7%	-2.1%	1.9%	-4.5%	-1.8%					
Above Normal (14.6%)												
DCR 2015 Without Project	37	763	1,110	6,598	11,377	7,134	1,426	183	66	48	95	65
DCR 2015 With Project	269	578	1,075	5,603	10,838	6,537	1,180	183	66	48	388	414
Difference	232	-185	-34	-995	-538	-597	-246	0	0	0	293	349
Percent Difference		-24.3%	-3.1%	-15.1%	-4.7%	-8.4%	-17.3%					
Below Normal (17.1%)												
DCR 2015 Without Project	280	235	2,804	964	2,810	693	566	67	66	48	114	85
DCR 2015 With Project	676	283	2,423	720	2,380	527	455	67	66	48	365	342
Difference	396	47	-381	-244	-429	-166	-111	0	0	0	251	257
Percent Difference	141.5%	20.1%	-13.6%	-25.3%	-15.3%	-24.0%	-19.6%					
Dry (22%)												
DCR 2015 Without Project	43	189	5,054	545	1,769	697	308	77	67	48	62	65
DCR 2015 With Project	190	211	5,006	406	1,663	574	308	77	67	48	257	251
Difference	148	22	-47	-139	-106	-123	0	0	0	0	195	186
Percent Difference		11.5%	-0.9%	-25.4%	-6.0%	-17.6%	0.0%	0.0%				
Critical (14.6%)												
DCR 2015 Without Project	41	23	295	310	363	292	107	68	64	48	54	67
DCR 2015 With Project	69	22	295	128	366	109	107	68	64	48	119	117
Difference	28	-1	0	-182	3	-183	0	0	0	0	65	50
Percent Difference	67.1%	-6.1%	0.0%	-58.8%	0.8%	-62.7%	0.0%	0.0%	0.0%	0.0%	119.6%	74.5%

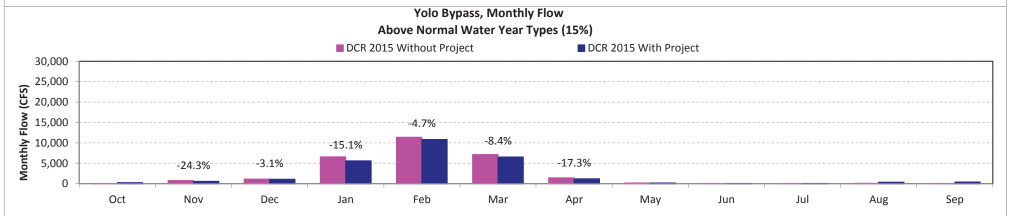
1 Based on the 82-year simulation period

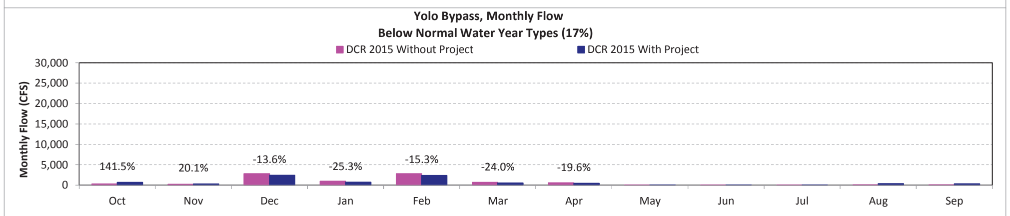
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

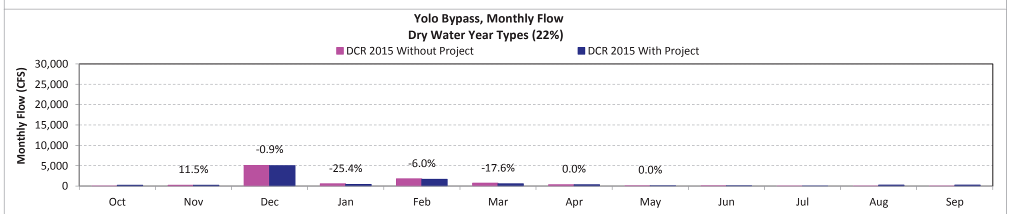
3 Relative difference of the monthly average











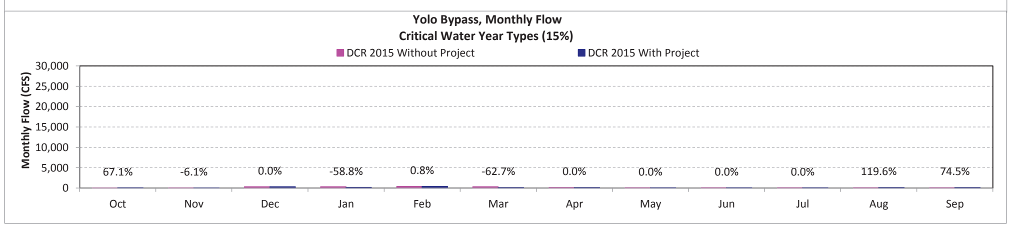


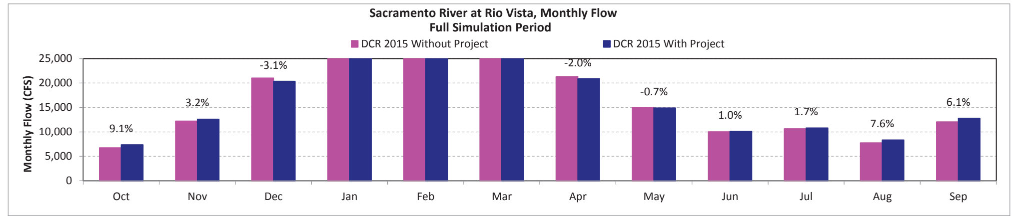
Table SW-32-a
Sacramento River at Rio Vista, Monthly Flow
Long-term Average and Average by Water Year Type

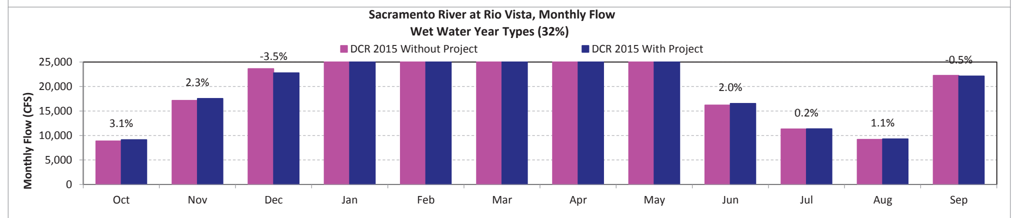
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	6,742	12,235	21,035	35,870	44,346	34,979	21,318	15,007	10,024	10,633	7,758	12,065
DCR 2015 With Project	7,359	12,626	20,381	34,471	43,357	33,308	20,900	14,900	10,121	10,809	8,351	12,795
Difference	617	392	-654	-1,399	-989	-1,671	-418	-107	97	176	593	730
Percent Difference[3]	9.1%	3.2%	-3.1%	-3.9%	-2.2%	-4.8%	-2.0%	-0.7%	1.0%	1.7%	7.6%	6.1%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	8,862	17,150	23,642	68,933	80,027	63,511	38,355	26,226	16,206	11,327	9,204	22,250
DCR 2015 With Project	9,135	17,545	22,804	67,697	80,104	61,821	37,925	26,017	16,525	11,351	9,303	22,133
Difference	273	396	-838	-1,237	77	-1,689	-430	-209	320	24	100	-117
Percent Difference	3.1%	2.3%	-3.5%	-1.8%	0.1%	-2.7%	-1.1%	-0.8%	2.0%	0.2%	1.1%	-0.5%
Above Normal (14.6%)												
DCR 2015 Without Project	7,460	15,531	19,935	39,074	50,372	42,888	22,441	16,294	10,124	12,759	9,456	13,324
DCR 2015 With Project	8,262	15,198	18,767	36,643	48,741	40,576	21,577	16,278	9,755	12,915	9,687	13,828
Difference	802	-333	-1,168	-2,432	-1,631	-2,312	-864	-15	-369	156	231	503
Percent Difference	10.7%	-2.1%	-5.9%	-6.2%	-3.2%	-5.4%	-3.8%	-0.1%	-3.6%	1.2%	2.4%	3.8%
Below Normal (17.1%)												
DCR 2015 Without Project	7,983	11,743	24,916	19,714	29,548	19,346	14,572	10,775	7,521	12,145	9,038	7,817
DCR 2015 With Project	9,208	12,760	24,190	17,966	28,260	17,248	14,011	10,411	7,593	12,227	9,457	8,585
Difference	1,225	1,017	-726	-1,749	-1,288	-2,098	-561	-364	73	82	419	769
Percent Difference	15.3%	8.7%	-2.9%	-8.9%	-4.4%	-10.8%	-3.9%	-3.4%	1.0%	0.7%	4.6%	9.8%
Dry (22%)												
DCR 2015 Without Project	4,507	8,551	22,555	14,455	20,846	16,980	10,352	7,772	6,650	10,259	5,993	5,551
DCR 2015 With Project	5,329	9,100	22,555	13,580	19,237	15,278	10,056	7,928	6,638	10,696	7,299	7,239
Difference	823	549	0	-875	-1,609	-1,702	-295	157	-12	436	1,306	1,688
Percent Difference	18.3%	6.4%	0.0%	-6.1%	-7.7%	-10.0%	-2.9%	2.0%	-0.2%	4.3%	21.8%	30.4%
Critical (14.6%)												
DCR 2015 Without Project	3,338	4,387	9,681	11,998	13,523	10,490	7,601	5,204	4,512	5,803	4,082	3,470
DCR 2015 With Project	3,494	4,531	9,042	10,901	12,145	10,041	7,641	5,127	4,784	6,046	5,242	4,780
Difference	156	144	-639	-1,096	-1,378	-449	40	-77	272	243	1,160	1,310
Percent Difference	4.7%	3.3%	-6.6%	-9.1%	-10.2%	-4.3%	0.5%	-1.5%	6.0%	4.2%	28.4%	37.8%

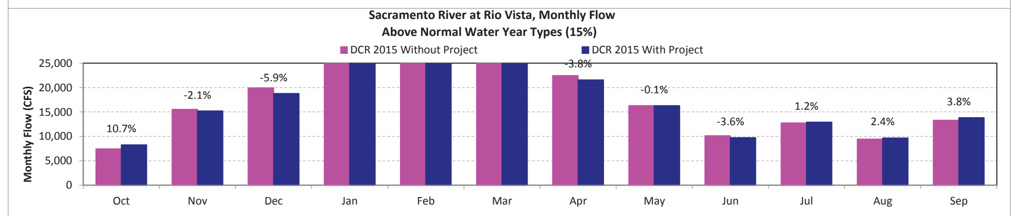
1 Based on the 82-year simulation period

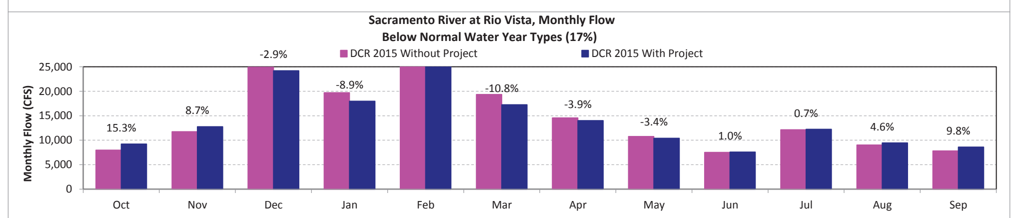
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

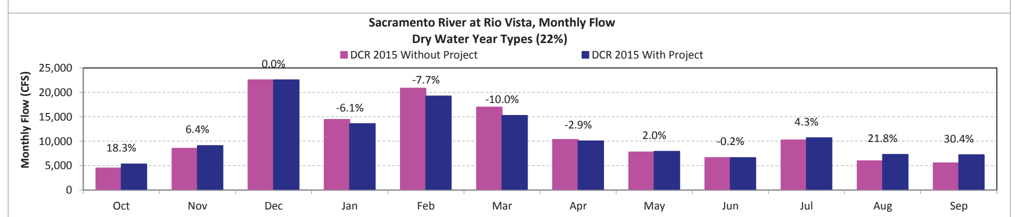
3 Relative difference of the monthly average











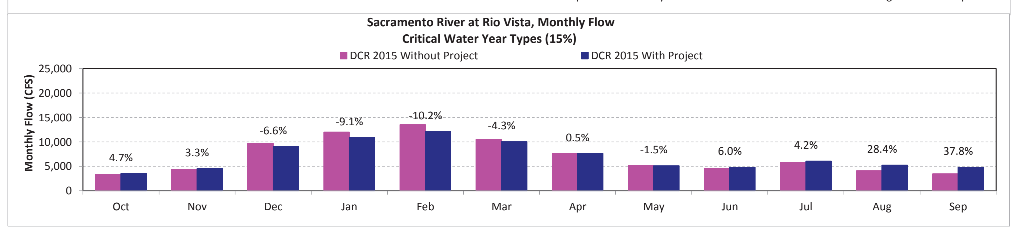


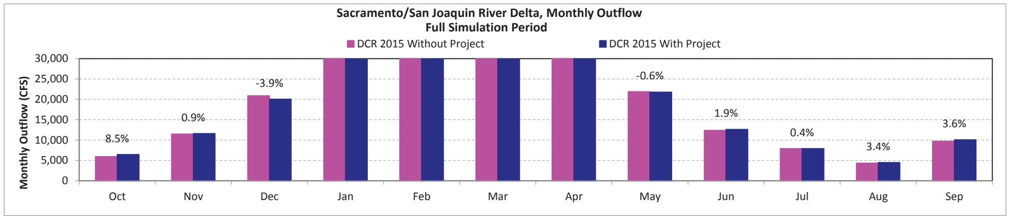
Table SW-33-a
Sacramento/San Joaquin River Delta, Monthly Outflow
Long-term Average and Average by Water Year Type

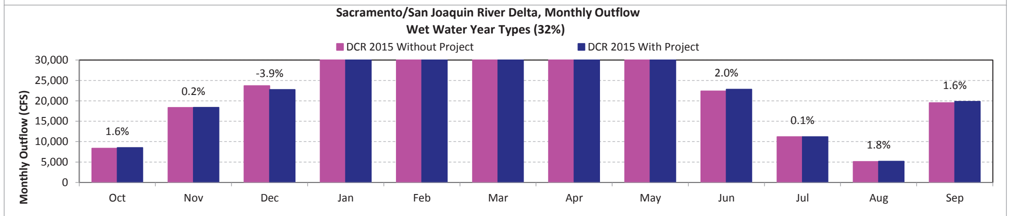
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Outflow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	5,942	11,480	20,871	41,889	52,430	42,330	30,953	21,902	12,373	7,887	4,343	9,712
DCR 2015 With Project	6,446	11,581	20,055	40,312	51,190	40,594	30,492	21,779	12,611	7,915	4,489	10,064
Difference	503	101	-816	-1,577	-1,240	-1,736	-461	-123	237	29	146	351
Percent Difference[3]	8.5%	0.9%	-3.9%	-3.8%	-2.4%	-4.1%	-1.5%	-0.6%	1.9%	0.4%	3.4%	3.6%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	8,383	18,345	23,677	83,496	95,664	78,692	55,826	39,956	22,378	11,198	5,102	19,532
DCR 2015 With Project	8,514	18,383	22,746	82,079	95,566	77,027	55,360	39,705	22,821	11,213	5,194	19,851
Difference	131	37	-930	-1,417	-98	-1,665	-466	-251	443	15	92	320
Percent Difference	1.6%	0.2%	-3.9%	-1.7%	-0.1%	-2.1%	-0.8%	-0.6%	2.0%	0.1%	1.8%	1.6%
Above Normal (14.6%)												
DCR 2015 Without Project	5,906	13,276	18,127	46,359	60,552	50,948	32,946	23,526	11,314	9,573	4,000	11,784
DCR 2015 With Project	6,204	13,012	16,967	43,721	58,876	48,360	31,980	23,507	11,250	9,614	4,293	12,102
Difference	298	-263	-1,160	-2,638	-1,676	-2,588	-966	-19	-64	42	293	318
Percent Difference	5.0%	-2.0%	-6.4%	-5.7%	-2.8%	-5.1%	-2.9%	-0.1%	-0.6%	0.4%	7.3%	2.7%
Below Normal (17.1%)												
DCR 2015 Without Project	5,697	9,387	26,091	21,862	35,993	22,818	22,817	15,836	7,908	7,205	4,017	3,885
DCR 2015 With Project	6,654	10,464	25,012	19,870	34,351	20,468	22,204	15,429	8,229	7,198	4,265	4,354
Difference	957	1,076	-1,079	-1,992	-1,642	-2,349	-613	-408	321	-7	249	468
Percent Difference	16.8%	11.5%	-4.1%	-9.1%	-4.6%	-10.3%	-2.7%	-2.6%	4.1%	-0.1%	6.2%	12.1%
Dry (22%)												
DCR 2015 Without Project	4,182	6,919	23,293	14,390	22,702	19,624	14,602	10,063	6,772	5,071	4,002	3,155
DCR 2015 With Project	4,717	6,798	22,567	13,365	20,873	17,811	14,270	10,226	6,756	5,098	4,276	3,652
Difference	535	-121	-726	-1,024	-1,829	-1,813	-332	163	-17	27	274	497
Percent Difference	12.8%	-1.7%	-3.1%	-7.1%	-8.1%	-9.2%	-2.3%	1.6%	-0.2%	0.5%	6.8%	15.7%
Critical (14.6%)												
DCR 2015 Without Project	3,617	4,092	7,813	11,886	14,407	11,750	9,089	5,997	5,368	4,046	3,937	3,000
DCR 2015 With Project	4,555	3,893	7,760	10,678	12,480	11,543	9,128	5,950	5,744	4,135	3,740	3,099
Difference	938	-199	-54	-1,208	-1,927	-207	39	-46	376	88	-197	99
Percent Difference	25.9%	-4.9%	-0.7%	-10.2%	-13.4%	-1.8%	0.4%	-0.8%	7.0%	2.2%	-5.0%	3.3%

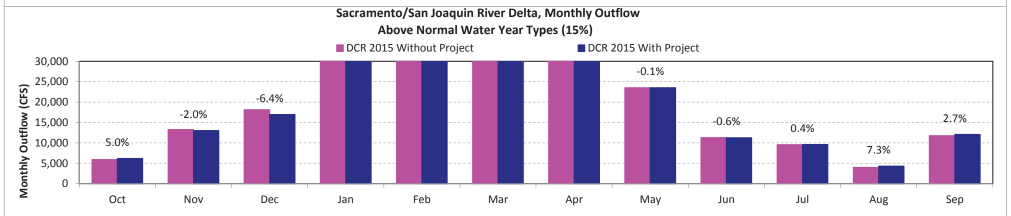
1 Based on the 82-year simulation period

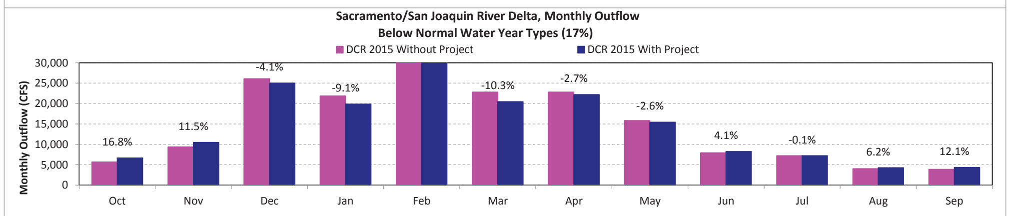
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

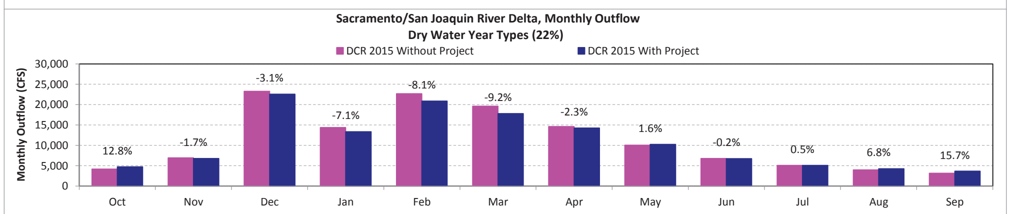
3 Relative difference of the monthly average











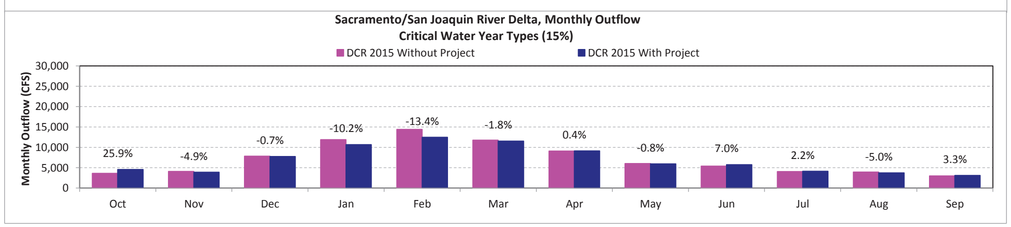


Table SW-34-a
Delta Cross Channel, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	4,161	3,847	4,513	5,219	6,081	5,348	4,176	3,592	5,160	7,111	5,548	5,381
DCR 2015 With Project	4,280	3,954	4,505	5,070	5,929	5,167	4,127	3,579	5,259	7,195	5,743	5,712
Difference	119	107	-8	-149	-152	-182	-50	-13	99	83	195	332
Percent Difference[3]	2.9%	2.8%	-0.2%	-2.9%	-2.5%	-3.4%	-1.2%	-0.4%	1.9%	1.2%	3.5%	6.2%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	4,522	4,155	4,929	7,737	8,696	7,659	6,128	5,241	6,179	7,445	6,221	5,694
DCR 2015 With Project	4,614	4,202	4,918	7,632	8,618	7,549	6,080	5,219	6,269	7,457	6,204	5,786
Difference	92	46	-11	-105	-78	-110	-47	-22	89	11	-17	92
Percent Difference	2.0%	1.1%	-0.2%	-1.4%	-0.9%	-1.4%	-0.8%	-0.4%	1.4%	0.2%	-0.3%	1.6%
Above Normal (14.6%)												
DCR 2015 Without Project	4,543	4,255	4,577	6,088	7,104	6,700	4,512	3,797	5,047	8,126	6,348	8,099
DCR 2015 With Project	4,562	4,371	4,590	5,869	6,938	6,439	4,418	3,795	5,382	8,200	6,319	8,172
Difference	19	116	13	-219	-166	-261	-94	-2	334	74	-29	73
Percent Difference	0.4%	2.7%	0.3%	-3.6%	-2.3%	-3.9%	-2.1%	-0.1%	6.6%	0.9%	-0.5%	0.9%
Below Normal (17.1%)												
DCR 2015 Without Project	4,582	4,063	5,043	4,076	5,273	4,110	3,448	2,985	5,091	7,836	6,146	5,469
DCR 2015 With Project	4,783	4,193	5,013	3,848	5,143	3,816	3,380	2,929	5,122	7,875	6,225	5,712
Difference	201	131	-30	-228	-131	-294	-68	-55	31	39	80	243
Percent Difference	4.4%	3.2%	-0.6%	-5.6%	-2.5%	-7.2%	-2.0%	-1.9%	0.6%	0.5%	1.3%	4.4%
Dry (22%)												
DCR 2015 Without Project	3,723	3,565	4,323	3,354	4,137	3,750	2,842	2,520	4,728	6,927	4,735	4,391
DCR 2015 With Project	3,912	3,766	4,341	3,242	3,908	3,510	2,797	2,544	4,723	7,134	5,262	5,114
Difference	188	200	18	-112	-229	-240	-45	24	-4	207	526	722
Percent Difference	5.1%	5.6%	0.4%	-3.3%	-5.5%	-6.4%	-1.6%	0.9%	-0.1%	3.0%	11.1%	16.4%
Critical (14.6%)												
DCR 2015 Without Project	3,160	2,939	3,215	3,024	3,250	2,832	2,464	2,130	3,792	4,804	3,812	3,365
DCR 2015 With Project	3,239	3,001	3,180	2,886	3,041	2,792	2,469	2,118	3,909	4,918	4,332	3,992
Difference	79	62	-35	-139	-209	-40	6	-12	117	114	519	628
Percent Difference	2.5%	2.1%	-1.1%	-4.6%	-6.4%	-1.4%	0.2%	-0.6%	3.1%	2.4%	13.6%	18.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-35-a
Old and Middle River, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	-6,145	-6,593	-6,593	-3,593	-3,333	-2,961	1,076	330	-3,767	-9,072	-8,390	-8,010
DCR 2015 With Project	-6,362	-6,962	-6,735	-3,613	-3,422	-2,856	1,078	357	-3,725	-9,273	-8,987	-8,666
Difference	-217	-369	-142	-20	-89	104	2	27	42	-201	-597	-656
Percent Difference[3]							0.2%	8.1%				
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	-6,600	-6,205	-7,399	-2,153	-2,711	-2,087	2,916	1,727	-4,425	-8,898	-10,416	-9,430
DCR 2015 With Project	-6,812	-6,573	-7,473	-2,219	-2,802	-1,954	2,924	1,766	-4,389	-8,914	-10,409	-9,110
Difference	-213	-367	-74	-65	-91	133	8	39	36	-15	7	320
Percent Difference							0.3%	2.3%				
Above Normal (14.6%)												
DCR 2015 Without Project	-7,024	-8,021	-7,797	-3,685	-2,902	-4,108	1,332	520	-4,824	-9,833	-10,812	-9,748
DCR 2015 With Project	-7,559	-8,098	-7,809	-3,685	-2,779	-4,122	1,308	530	-4,854	-9,985	-10,729	-9,922
Difference	-535	-77	-12	0	122	-15	-25	9	-29	-152	83	-174
Percent Difference							-1.8%	1.8%				
Below Normal (17.1%)												
DCR 2015 Without Project	-8,065	-8,224	-6,386	-4,240	-3,535	-3,974	863	76	-4,227	-10,907	-10,233	-9,414
DCR 2015 With Project	-8,498	-8,287	-6,669	-4,240	-3,726	-3,945	875	100	-4,026	-10,995	-10,446	-9,908
Difference	-433	-63	-283	0	-191	30	12	24	200	-88	-213	-494
Percent Difference							1.3%	31.3%				
Dry (22%)												
DCR 2015 Without Project	-5,028	-6,514	-5,364	-4,790	-4,161	-2,993	-224	-715	-3,227	-10,100	-5,832	-6,615
DCR 2015 With Project	-5,466	-7,312	-6,051	-4,817	-4,156	-2,886	-214	-700	-3,227	-10,647	-7,271	-8,378
Difference	-438	-798	-687	-28	5	107	10	15	0	-546	-1,440	-1,762
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	-3,572	-4,107	-5,587	-4,096	-3,459	-2,399	-970	-949	-1,542	-4,929	-3,240	-3,719
DCR 2015 With Project	-2,948	-4,487	-5,024	-4,053	-3,767	-2,156	-976	-909	-1,542	-5,155	-4,993	-5,460
Difference	625	-380	563	43	-307	243	-6	39	0	-226	-1,753	-1,741
Percent Difference												

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

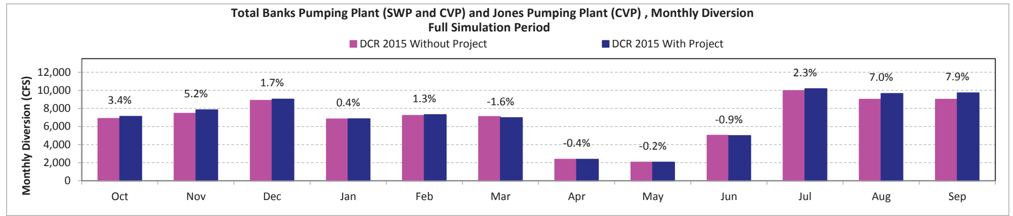
Table SW-36-a
Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Long-term Average and Average by Water Year Type

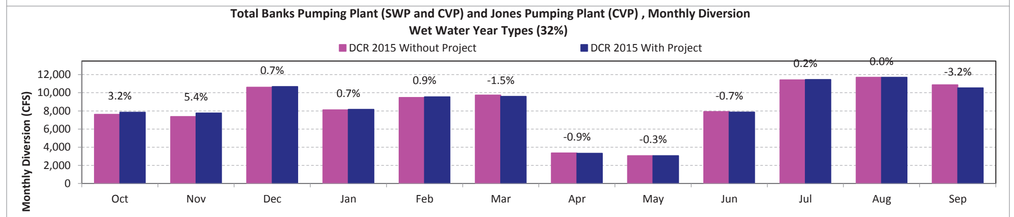
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	6,879	7,451	8,875	6,822	7,219	7,091	2,379	2,061	5,029	9,951	9,009	9,000
DCR 2015 With Project	7,115	7,836	9,030	6,846	7,313	6,976	2,369	2,057	4,983	10,177	9,643	9,711
Difference	236	385	155	25	94	-115	-9	-4	-46	226	635	711
Percent Difference[3]	3.4%	5.2%	1.7%	0.4%	1.3%	-1.6%	-0.4%	-0.2%	-0.9%	2.3%	7.0%	7.9%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	7,612	7,364	10,600	8,116	9,469	9,748	3,363	3,064	7,921	11,430	11,697	10,876
DCR 2015 With Project	7,855	7,759	10,678	8,172	9,556	9,602	3,331	3,056	7,869	11,452	11,702	10,532
Difference	243	395	78	56	87	-146	-31	-9	-52	22	5	-344
Percent Difference	3.2%	5.4%	0.7%	0.7%	0.9%	-1.5%	-0.9%	-0.3%	-0.7%	0.2%	0.0%	-3.2%
Above Normal (14.6%)												
DCR 2015 Without Project	7,998	9,050	9,997	6,525	7,045	8,445	2,156	1,679	6,232	10,670	11,597	10,728
DCR 2015 With Project	8,527	9,113	10,027	6,518	6,924	8,457	2,154	1,679	6,261	10,875	11,525	10,961
Difference	529	63	29	-6	-121	12	-1	0	29	205	-72	233
Percent Difference	6.6%	0.7%	0.3%	-0.1%	-1.7%	0.1%	-0.1%	0.0%	0.5%	1.9%	-0.6%	2.2%
Below Normal (17.1%)												
DCR 2015 Without Project	8,919	9,116	8,843	6,304	6,814	7,003	1,998	1,572	4,591	11,235	10,856	10,468
DCR 2015 With Project	9,364	9,150	9,155	6,317	7,024	6,970	1,998	1,572	4,374	11,359	11,087	11,006
Difference	445	34	312	13	210	-33	0	-1	-217	124	231	538
Percent Difference	5.0%	0.4%	3.5%	0.2%	3.1%	-0.5%	0.0%	0.0%	-4.7%	1.1%	2.1%	5.1%
Dry (22%)												
DCR 2015 Without Project	5,536	7,206	7,014	6,495	5,971	4,785	1,892	1,638	3,067	10,075	5,977	7,336
DCR 2015 With Project	6,015	8,051	7,760	6,536	5,965	4,667	1,893	1,660	3,067	10,666	7,482	9,231
Difference	478	845	747	41	-5	-118	1	22	0	591	1,506	1,896
Percent Difference	8.6%	11.7%	10.6%	0.6%	-0.1%	-2.5%	0.0%	1.4%	0.0%	5.9%	25.2%	25.8%
Critical (14.6%)												
DCR 2015 Without Project	3,806	4,465	6,842	5,410	4,861	3,540	1,643	1,476	1,012	4,347	2,991	3,991
DCR 2015 With Project	3,123	4,870	6,222	5,386	5,199	3,274	1,650	1,433	1,036	4,606	4,860	5,888
Difference	-683	405	-620	-24	337	-266	7	-43	24	260	1,869	1,896
Percent Difference	-17.9%	9.1%	-9.1%	-0.4%	6.9%	-7.5%	0.4%	-2.9%	2.4%	6.0%	62.5%	47.5%

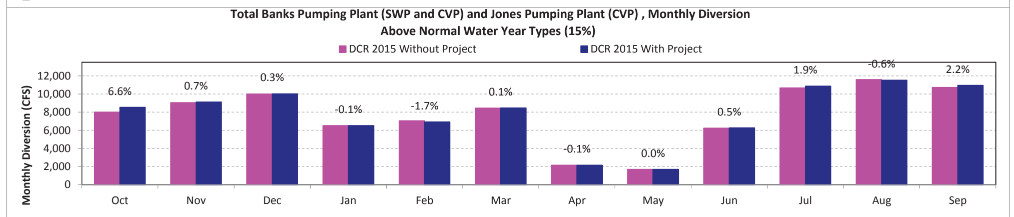
1 Based on the 82-year simulation period

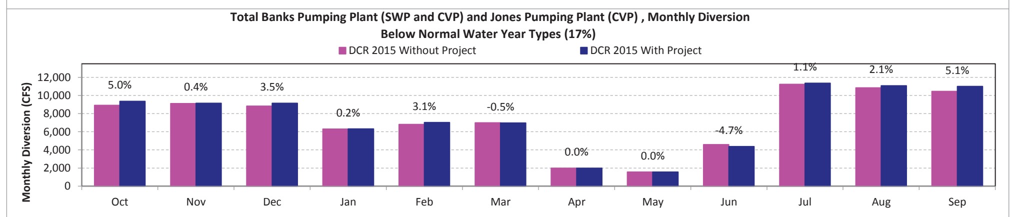
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

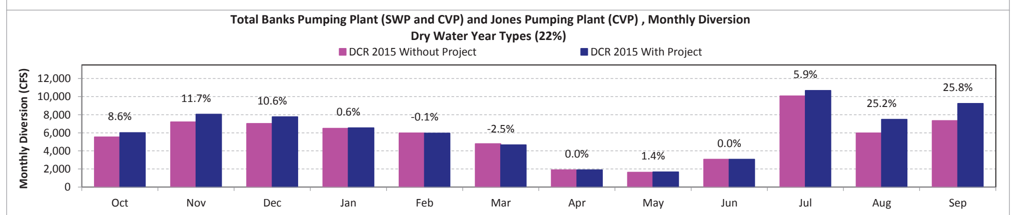
3 Relative difference of the monthly average











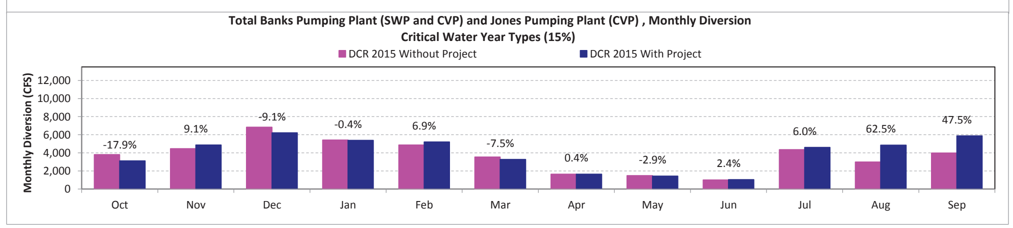


Table SW-37-a
Jones Pumping Plant (CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	3,591	3,581	3,908	3,177	3,170	3,040	1,192	1,044	2,546	3,973	3,835	3,901
DCR 2015 With Project	3,458	3,619	3,857	3,173	3,257	3,009	1,188	1,036	2,463	4,084	4,136	4,255
Difference	-133	38	-51	-4	87	-31	-4	-8	-83	111	301	354
Percent Difference[3]	-3.7%	1.1%	-1.3%	-0.1%	2.8%	-1.0%	-0.3%	-0.8%	-3.3%	2.8%	7.9%	9.1%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	3,847	3,555	4,235	3,518	3,945	3,824	1,593	1,448	3,747	4,533	4,595	4,375
DCR 2015 With Project	4,022	3,784	4,289	3,546	3,965	3,769	1,567	1,446	3,744	4,570	4,600	4,418
Difference	174	229	54	28	20	-55	-26	-2	-2	37	5	42
Percent Difference	4.5%	6.4%	1.3%	0.8%	0.5%	-1.4%	-1.7%	-0.2%	-0.1%	0.8%	0.1%	1.0%
Above Normal (14.6%)												
DCR 2015 Without Project	3,778	4,207	4,309	2,874	3,020	3,790	1,086	876	3,211	4,086	4,584	4,048
DCR 2015 With Project	4,182	4,115	4,328	3,014	3,030	3,745	1,086	876	3,268	4,412	4,512	4,365
Difference	404	-91	19	140	10	-45	-1	0	57	326	-72	317
Percent Difference	10.7%	-2.2%	0.4%	4.9%	0.3%	-1.2%	-0.1%	0.0%	1.8%	8.0%	-1.6%	7.8%
Below Normal (17.1%)												
DCR 2015 Without Project	3,915	4,071	4,035	3,141	2,983	2,959	988	829	2,506	4,264	3,961	4,322
DCR 2015 With Project	4,012	3,938	3,985	3,047	3,292	3,030	993	829	2,162	4,384	4,227	4,454
Difference	97	-133	-50	-94	308	71	5	0	-343	120	266	132
Percent Difference	2.5%	-3.3%	-1.2%	-3.0%	10.3%	2.4%	0.5%	0.0%	-13.7%	2.8%	6.7%	3.0%
Dry (22%)												
DCR 2015 Without Project	3,372	3,612	3,484	3,242	2,997	2,351	999	847	1,662	4,029	3,084	3,686
DCR 2015 With Project	2,852	3,706	3,541	3,293	2,995	2,359	999	847	1,576	4,191	3,518	4,217
Difference	-520	94	56	51	-1	9	0	0	-86	162	434	530
Percent Difference	-15.4%	2.6%	1.6%	1.6%	0.0%	0.4%	0.0%	0.0%	-5.2%	4.0%	14.1%	14.4%
Critical (14.6%)												
DCR 2015 Without Project	2,797	2,396	3,284	2,685	2,117	1,720	957	886	650	2,223	2,418	2,554
DCR 2015 With Project	1,773	2,262	2,777	2,488	2,301	1,577	982	834	562	2,191	3,575	3,618
Difference	-1,024	-133	-507	-197	185	-142	25	-51	-88	-32	1,157	1,063
Percent Difference	-36.6%	-5.6%	-15.4%	-7.3%	8.7%	-8.3%	2.6%	-5.8%	-13.5%	-1.5%	47.9%	41.6%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

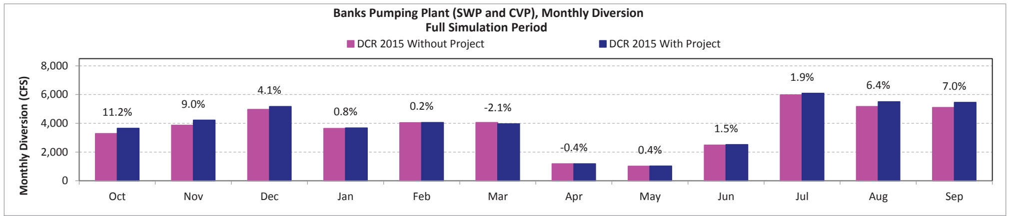
Table SW-38-a
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

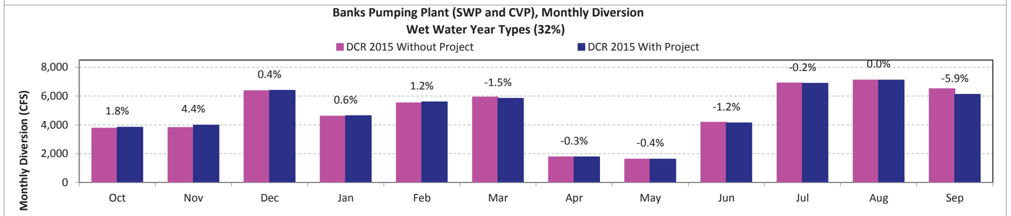
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	3,288	3,870	4,967	3,645	4,049	4,051	1,186	1,017	2,483	5,978	5,174	5,099
DCR 2015 With Project	3,657	4,217	5,173	3,674	4,056	3,967	1,181	1,021	2,520	6,094	5,507	5,456
Difference	369	347	206	29	7	-84	-5	4	37	115	333	356
Percent Difference[3]	11.2%	9.0%	4.1%	0.8%	0.2%	-2.1%	-0.4%	0.4%	1.5%	1.9%	6.4%	7.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	3,765	3,809	6,365	4,598	5,525	5,924	1,769	1,616	4,174	6,897	7,102	6,501
DCR 2015 With Project	3,833	3,975	6,389	4,626	5,591	5,833	1,764	1,610	4,125	6,882	7,102	6,114
Difference	68	166	24	28	67	-91	-5	-6	-49	-15	0	-386
Percent Difference	1.8%	4.4%	0.4%	0.6%	1.2%	-1.5%	-0.3%	-0.4%	-1.2%	-0.2%	0.0%	-5.9%
Above Normal (14.6%)												
DCR 2015 Without Project	4,220	4,844	5,688	3,650	4,025	4,655	1,070	803	3,021	6,585	7,013	6,680
DCR 2015 With Project	4,345	4,998	5,699	3,504	3,894	4,712	1,069	803	2,993	6,463	7,013	6,596
Difference	125	154	11	-146	-131	57	-1	0	-28	-121	0	-84
Percent Difference	3.0%	3.2%	0.2%	-4.0%	-3.3%	1.2%	-0.1%	0.0%	-0.9%	-1.8%	0.0%	-1.3%
Below Normal (17.1%)												
DCR 2015 Without Project	5,003	5,045	4,808	3,163	3,831	4,044	1,010	743	2,086	6,971	6,895	6,146
DCR 2015 With Project	5,352	5,213	5,170	3,270	3,732	3,940	1,005	743	2,212	6,975	6,860	6,552
Difference	349	168	362	107	-98	-104	-5	0	126	4	-35	406
Percent Difference	7.0%	3.3%	7.5%	3.4%	-2.6%	-2.6%	-0.5%	0.0%	6.1%	0.1%	-0.5%	6.6%
Dry (22%)												
DCR 2015 Without Project	2,164	3,594	3,529	3,253	2,974	2,434	893	791	1,405	6,046	2,892	3,649
DCR 2015 With Project	3,163	4,345	4,220	3,243	2,970	2,308	894	813	1,491	6,475	3,964	5,015
Difference	998	751	690	-10	-4	-126	1	22	86	429	1,072	1,365
Percent Difference	46.1%	20.9%	19.6%	-0.3%	-0.1%	-5.2%	0.1%	2.8%	6.1%	7.1%	37.1%	37.4%
Critical (14.6%)												
DCR 2015 Without Project	1,009	2,069	3,557	2,725	2,745	1,821	686	591	362	2,123	573	1,437
DCR 2015 With Project	1,350	2,607	3,445	2,898	2,898	1,697	668	599	474	2,415	1,284	2,270
Difference	341	538	-113	173	153	-124	-18	8	112	292	712	833
Percent Difference	33.8%	26.0%	-3.2%	6.3%	5.6%	-6.8%	-2.6%	1.4%	31.0%	13.7%	124.2%	57.9%

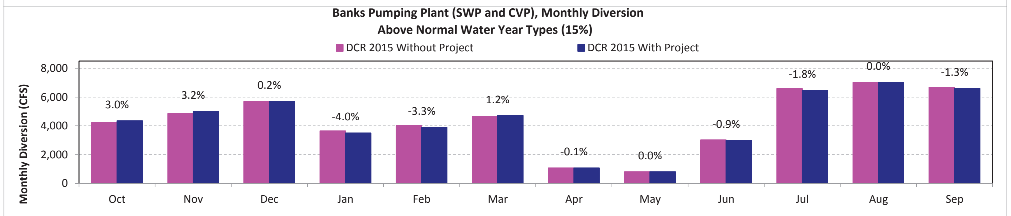
1 Based on the 82-year simulation period

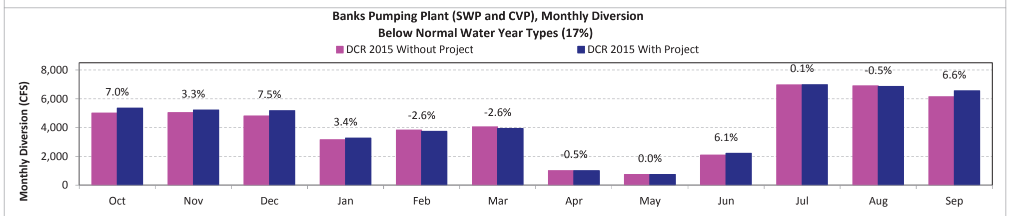
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

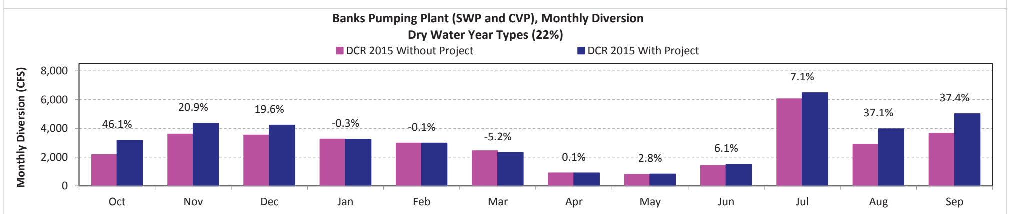
3 Relative difference of the monthly average











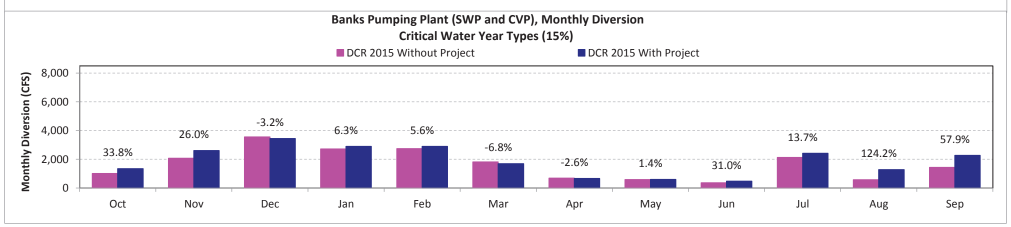


Table SW-39-a
Banks Pumping Plant (SWP), Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	3,186	3,197	4,962	3,643	4,038	4,051	1,186	1,017	2,463	5,587	4,731	4,966
DCR 2015 With Project	3,541	3,510	5,160	3,674	4,044	3,961	1,181	1,021	2,518	5,801	5,017	5,333
Difference	355	313	198	31	7	-89	-5	4	55	214	286	367
Percent Difference[3]	11.1%	9.8%	4.0%	0.9%	0.2%	-2.2%	-0.4%	0.4%	2.2%	3.8%	6.0%	7.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	3,765	2,366	6,352	4,590	5,501	5,924	1,769	1,616	4,114	6,620	6,680	6,501
DCR 2015 With Project	3,833	2,424	6,351	4,626	5,572	5,816	1,764	1,610	4,117	6,602	6,680	6,114
Difference	68	58	-2	36	71	-108	-5	-6	3	-18	0	-386
Percent Difference	1.8%	2.5%	0.0%	0.8%	1.3%	-1.8%	-0.3%	-0.4%	0.1%	-0.3%	0.0%	-5.9%
Above Normal (14.6%)												
DCR 2015 Without Project	4,220	3,374	5,688	3,650	4,025	4,655	1,070	803	3,021	6,321	6,680	6,680
DCR 2015 With Project	4,345	3,538	5,699	3,504	3,894	4,712	1,069	803	2,993	6,275	6,680	6,596
Difference	125	164	11	-146	-131	57	-1	0	-28	-46	0	-84
Percent Difference	3.0%	4.9%	0.2%	-4.0%	-3.3%	1.2%	-0.1%	0.0%	-0.9%	-0.7%	0.0%	-1.3%
Below Normal (17.1%)												
DCR 2015 Without Project	4,441	5,045	4,803	3,163	3,806	4,044	1,010	743	2,086	6,669	6,396	5,711
DCR 2015 With Project	4,731	5,212	5,165	3,270	3,700	3,940	1,005	743	2,212	6,664	6,378	6,234
Difference	290	167	362	107	-106	-104	-5	0	126	-5	-18	523
Percent Difference	6.5%	3.3%	7.5%	3.4%	-2.8%	-2.6%	-0.5%	0.0%	6.1%	-0.1%	-0.3%	9.2%
Dry (22%)												
DCR 2015 Without Project	2,135	3,594	3,529	3,253	2,974	2,434	893	791	1,400	5,343	2,190	3,474
DCR 2015 With Project	3,120	4,339	4,220	3,243	2,970	2,308	894	813	1,491	6,123	3,108	4,776
Difference	985	744	690	-10	-4	-126	1	22	91	780	918	1,302
Percent Difference	46.1%	20.7%	19.6%	-0.3%	-0.1%	-5.2%	0.1%	2.8%	6.5%	14.6%	41.9%	37.5%
Critical (14.6%)												
DCR 2015 Without Project	1,009	2,069	3,557	2,725	2,745	1,821	686	591	361	1,715	429	1,294
DCR 2015 With Project	1,344	2,607	3,445	2,898	2,898	1,697	668	599	474	2,101	1,028	2,161
Difference	335	538	-113	173	153	-124	-18	8	113	385	599	867
Percent Difference	33.2%	26.0%	-3.2%	6.3%	5.6%	-6.8%	-2.6%	1.4%	31.3%	22.5%	139.5%	67.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-40-a
Banks Pumping Plant (CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	91	644	4	2	11	0	0	0	19	135	99	56
DCR 2015 With Project	102	681	11	0	11	5	0	0	0	57	142	56
Difference	11	38	7	-2	0	5	0	0	-19	-78	43	0
Percent Difference[3]	11.7%	5.9%			-0.4%				-100.0%	-58.0%	43.3%	-0.3%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	1,396	12	7	24	0	0	0	60	50	0	0
DCR 2015 With Project	0	1,540	34	0	19	17	0	0	0	51	0	0
Difference	0	144	22	-7	-5	17	0	0	-60	1	0	0
Percent Difference		10.3%			-19.2%				-100.0%	1.1%		
Above Normal (14.6%)												
DCR 2015 Without Project	0	1,374	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	0	1,310	0	0	0	0	0	0	0	2	0	0
Difference	0	-64	0	0	0	0	0	0	0	2	0	0
Percent Difference		-4.7%										
Below Normal (17.1%)												
DCR 2015 Without Project	498	0	0	0	19	0	0	0	0	6	56	328
DCR 2015 With Project	552	0	0	0	27	0	0	0	0	14	44	236
Difference	54	0	0	0	8	0	0	0	0	8	-12	-91
Percent Difference	10.8%				42.4%						-20.8%	-27.9%
Dry (22%)												
DCR 2015 Without Project	29	0	0	0	0	0	0	0	0	383	387	0
DCR 2015 With Project	36	6	0	0	0	0	0	0	0	73	532	70
Difference	7	6	0	0	0	0	0	0	0	-310	145	70
Percent Difference	24.1%									-80.9%	37.5%	
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	233	29	0
DCR 2015 With Project	0	0	0	0	0	0	0	0	0	150	117	0
Difference	0	0	0	0	0	0	0	0	0	-83	88	0
Percent Difference										-35.6%		

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

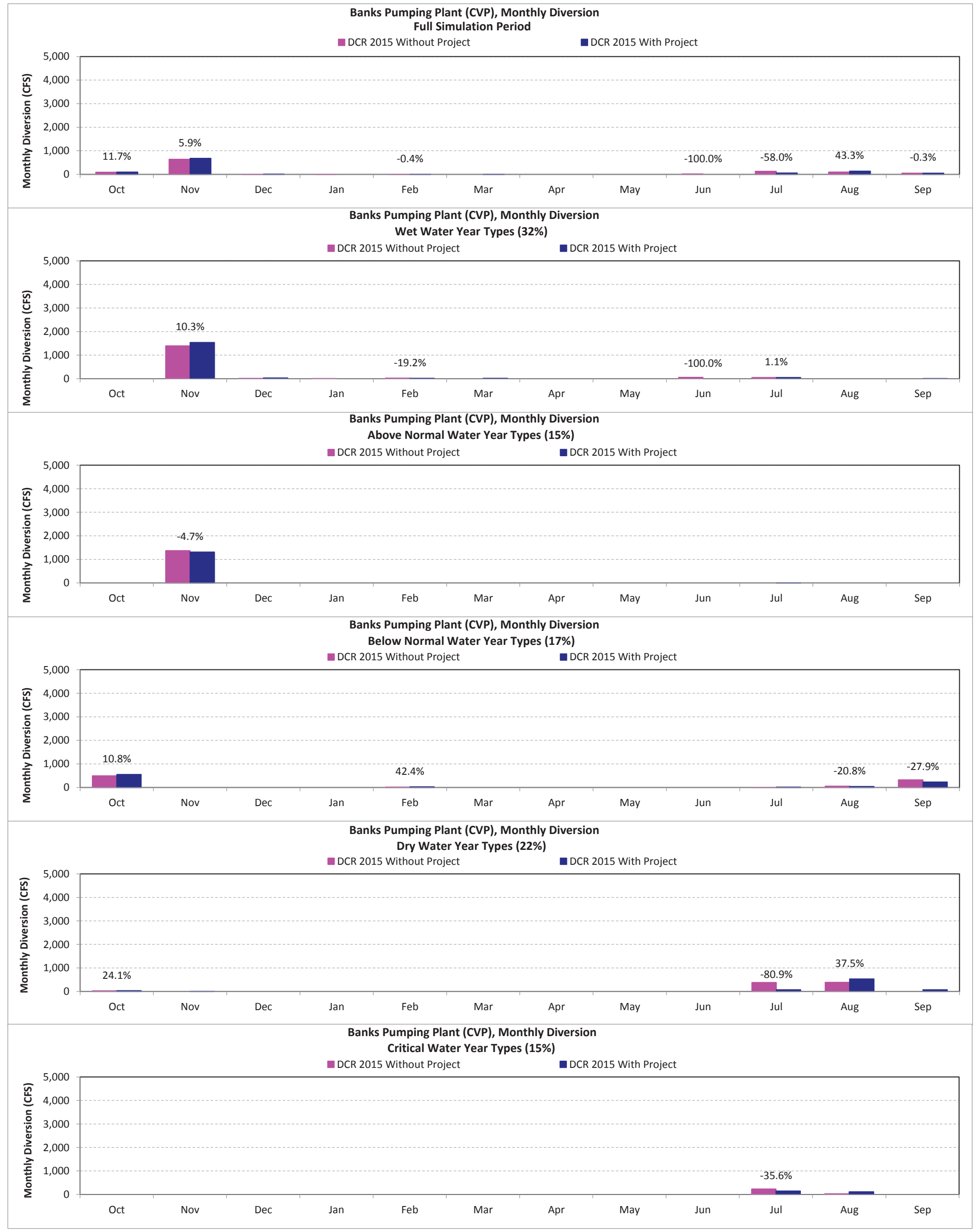


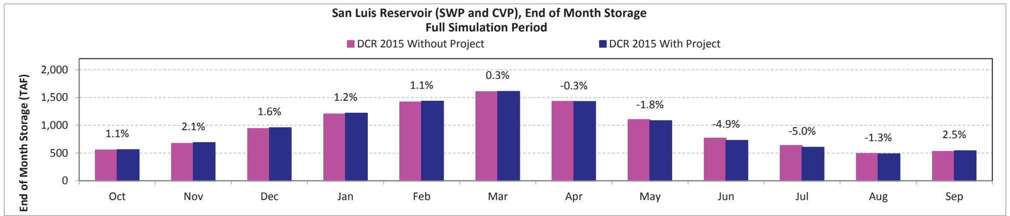
Table SW-41-a
San Luis Reservoir (SWP and CVP), End of Month Storage
Long-term Average and Average by Water Year Type

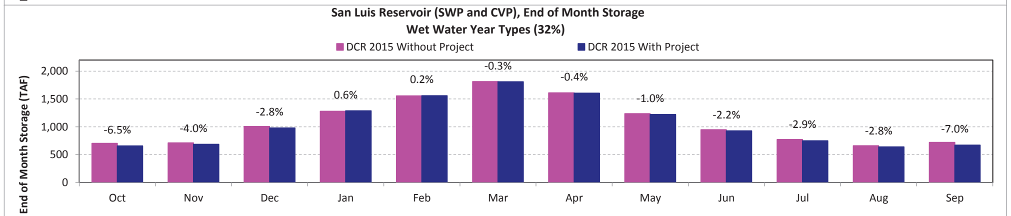
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	552	673	940	1,202	1,418	1,603	1,431	1,100	766	635	491	527
DCR 2015 With Project	558	687	956	1,216	1,433	1,608	1,426	1,081	728	603	485	540
Difference	6	14	15	14	16	5	-5	-20	-38	-32	-6	13
Percent Difference[3]	1.1%	2.1%	1.6%	1.2%	1.1%	0.3%	-0.3%	-1.8%	-4.9%	-5.0%	-1.3%	2.5%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	703	713	1,006	1,279	1,557	1,814	1,611	1,235	948	771	659	720
DCR 2015 With Project	657	684	978	1,287	1,560	1,808	1,604	1,222	927	749	640	670
Difference	-46	-29	-28	8	3	-5	-7	-13	-21	-22	-19	-50
Percent Difference	-6.5%	-4.0%	-2.8%	0.6%	0.2%	-0.3%	-0.4%	-1.0%	-2.2%	-2.9%	-2.8%	-7.0%
Above Normal (14.6%)												
DCR 2015 Without Project	563	678	973	1,239	1,431	1,653	1,425	1,011	665	500	443	523
DCR 2015 With Project	577	685	979	1,249	1,438	1,659	1,427	1,002	650	498	434	520
Difference	14	8	6	10	7	6	2	-9	-14	-2	-9	-3
Percent Difference	2.4%	1.1%	0.6%	0.8%	0.5%	0.4%	0.2%	-0.9%	-2.2%	-0.4%	-2.1%	-0.6%
Below Normal (17.1%)												
DCR 2015 Without Project	721	961	1,243	1,181	1,383	1,580	1,386	1,027	656	599	550	622
DCR 2015 With Project	722	955	1,249	1,172	1,386	1,568	1,367	994	602	546	506	609
Difference	1	-6	6	-9	3	-12	-19	-32	-55	-53	-44	-12
Percent Difference	0.1%	-0.6%	0.5%	-0.7%	0.2%	-0.7%	-1.4%	-3.1%	-8.3%	-8.9%	-8.1%	-2.0%
Dry (22%)												
DCR 2015 Without Project	374	569	782	1,186	1,378	1,499	1,353	1,067	690	631	367	359
DCR 2015 With Project	411	619	854	1,221	1,404	1,512	1,337	1,020	610	572	356	412
Difference	36	50	72	35	26	14	-15	-46	-80	-59	-11	53
Percent Difference	9.8%	8.8%	9.2%	3.0%	1.9%	0.9%	-1.1%	-4.3%	-11.6%	-9.4%	-3.0%	14.8%
Critical (14.6%)												
DCR 2015 Without Project	287	400	649	1,046	1,204	1,281	1,216	1,035	714	521	291	253
DCR 2015 With Project	357	481	695	1,074	1,255	1,312	1,241	1,043	699	505	366	389
Difference	70	81	46	28	51	32	25	8	-14	-16	75	136
Percent Difference	24.4%	20.2%	7.1%	2.7%	4.2%	2.5%	2.1%	0.8%	-2.0%	-3.1%	25.6%	53.8%

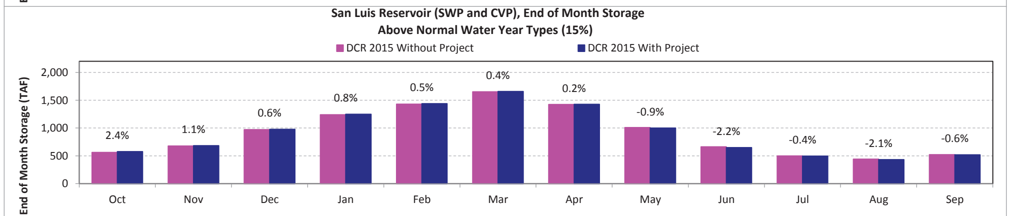
1 Based on the 82-year simulation period

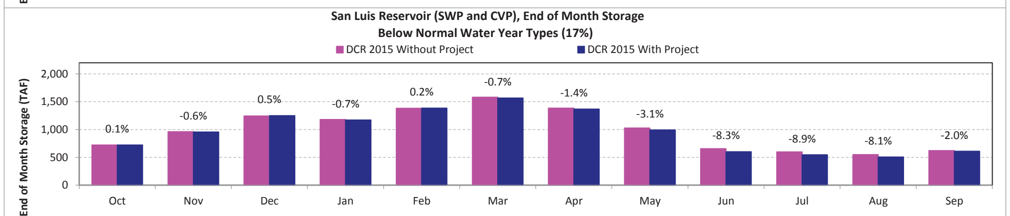
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

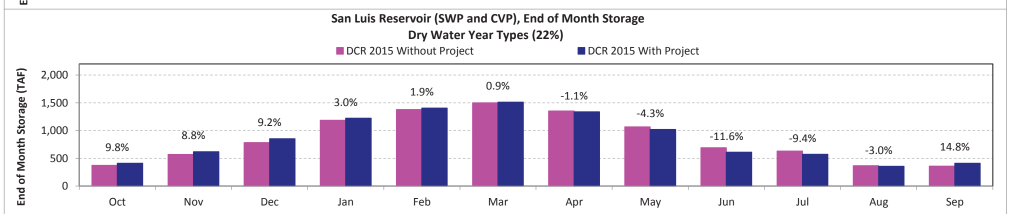
3 Relative difference of the monthly average











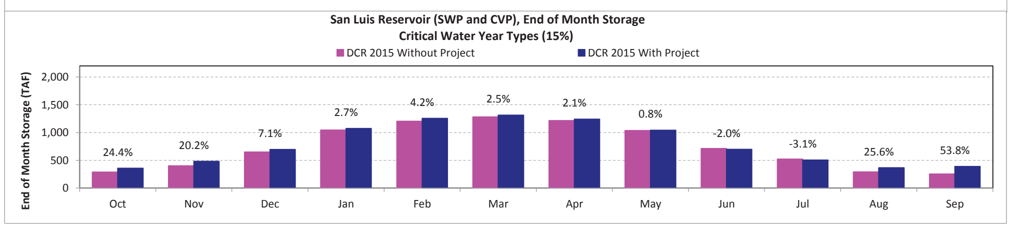


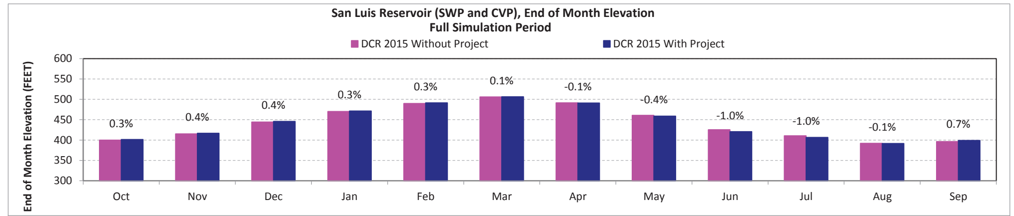
Table SW-42-a
San Luis Reservoir (SWP and CVP), End of Month Elevation
Long-term Average and Average by Water Year Type

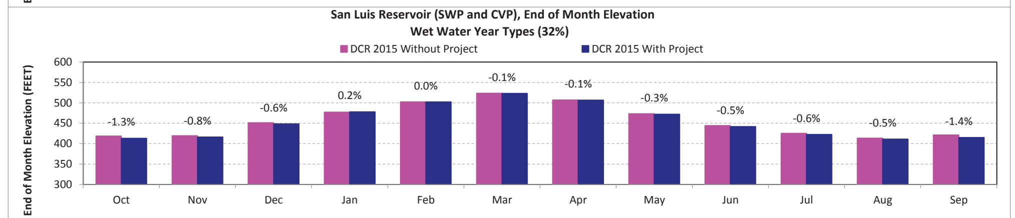
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	400	415	444	470	490	506	491	461	425	411	392	397
DCR 2015 With Project	401	417	446	472	491	506	491	459	421	407	392	399
Difference	1	2	2	1	1	0	0	-2	-4	-4	0	3
Percent Difference[3]	0.3%	0.4%	0.4%	0.3%	0.3%	0.1%	-0.1%	-0.4%	-1.0%	-1.0%	-0.1%	0.7%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	419	420	451	477	502	524	507	473	444	425	413	421
DCR 2015 With Project	413	416	449	478	502	523	507	472	442	423	411	415
Difference	-5	-3	-3	1	0	0	-1	-1	-2	-3	-2	-6
Percent Difference	-1.3%	-0.8%	-0.6%	0.2%	0.0%	-0.1%	-0.1%	-0.3%	-0.5%	-0.6%	-0.5%	-1.4%
Above Normal (14.6%)												
DCR 2015 Without Project	405	417	449	473	491	510	491	453	415	394	388	399
DCR 2015 With Project	406	418	450	473	491	511	491	452	413	394	387	399
Difference	2	1	1	1	1	1	0	-1	-2	0	-1	0
Percent Difference	0.4%	0.3%	0.1%	0.1%	0.1%	0.1%	0.0%	-0.2%	-0.4%	0.0%	-0.3%	-0.1%
Below Normal (17.1%)												
DCR 2015 Without Project	422	448	475	469	487	504	487	454	413	406	401	410
DCR 2015 With Project	422	447	475	468	487	503	486	451	406	399	395	409
Difference	0	-1	1	-1	0	-1	-2	-3	-7	-7	-6	-1
Percent Difference	0.0%	-0.1%	0.1%	-0.2%	0.0%	-0.2%	-0.3%	-0.7%	-1.7%	-1.7%	-1.4%	-0.3%
Dry (22%)												
DCR 2015 Without Project	377	404	428	470	487	498	485	458	418	412	376	374
DCR 2015 With Project	382	410	435	473	490	499	484	454	409	405	374	382
Difference	6	6	7	3	2	1	-1	-4	-9	-7	-1	9
Percent Difference	1.5%	1.4%	1.7%	0.7%	0.5%	0.2%	-0.3%	-1.0%	-2.2%	-1.8%	-0.3%	2.3%
Critical (14.6%)												
DCR 2015 Without Project	364	382	414	455	470	477	472	454	421	398	364	358
DCR 2015 With Project	374	392	419	458	475	480	474	455	419	396	375	379
Difference	10	10	5	3	5	3	2	1	-2	-2	11	20
Percent Difference	2.8%	2.6%	1.1%	0.7%	1.0%	0.6%	0.5%	0.2%	-0.5%	-0.6%	3.0%	5.7%

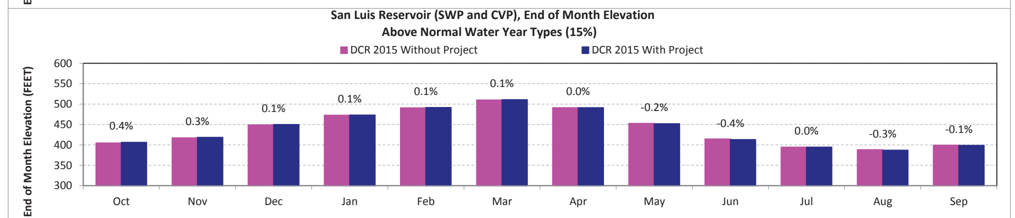
1 Based on the 82-year simulation period

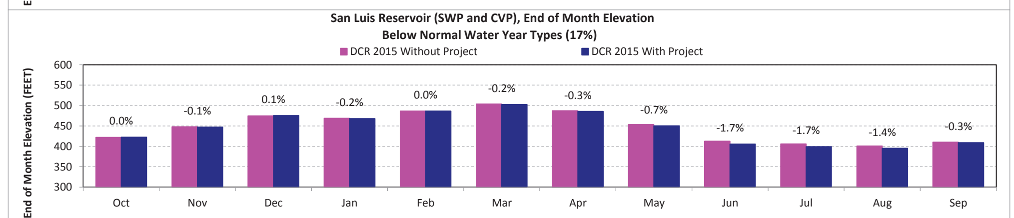
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

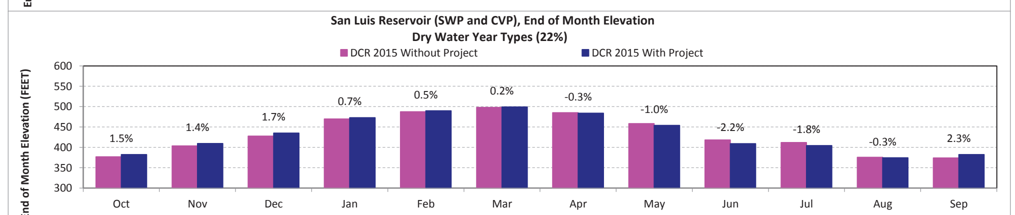
3 Relative difference of the monthly average











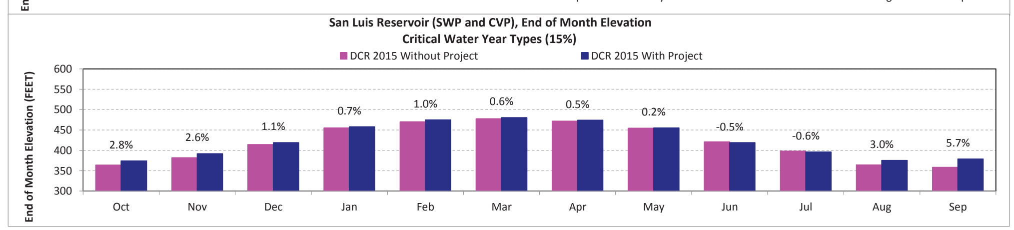


Table SW-43-a
San Luis Reservoir (SWP and CVP), End of Month Area
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
	Long-term											
Full Simulation Period[1]												
DCR 2015 Without Project	7,761	8,459	9,612	10,506	11,143	11,639	11,196	10,205	8,867	8,269	7,388	7,589
DCR 2015 With Project	7,851	8,538	9,666	10,550	11,186	11,655	11,186	10,142	8,683	8,092	7,384	7,772
Difference	90	79	55	44	43	15	-10	-62	-184	-177	-4	183
Percent Difference[3]	1.2%	0.9%	0.6%	0.4%	0.4%	0.1%	-0.1%	-0.6%	-2.1%	-2.1%	-0.1%	2.4%
	Water Year Types[2]											
Wet (31.7%)												
DCR 2015 Without Project	8,626	8,656	9,878	10,737	11,535	12,182	11,689	10,614	9,575	8,860	8,404	8,763
DCR 2015 With Project	8,392	8,523	9,781	10,760	11,535	12,167	11,668	10,571	9,490	8,747	8,308	8,495
Difference	-234	-133	-98	23	0	-15	-21	-43	-86	-113	-96	-268
Percent Difference	-2.7%	-1.5%	-1.0%	0.2%	0.0%	-0.1%	-0.2%	-0.4%	-0.9%	-1.3%	-1.1%	-3.1%
Above Normal (14.6%)												
DCR 2015 Without Project	8,141	8,626	9,825	10,569	11,171	11,773	11,189	9,933	8,445	7,547	7,318	7,875
DCR 2015 With Project	8,218	8,685	9,854	10,571	11,184	11,791	11,197	9,904	8,383	7,568	7,265	7,874
Difference	77	60	30	2	13	18	8	-29	-62	22	-53	-2
Percent Difference	0.9%	0.7%	0.3%	0.0%	0.1%	0.2%	0.1%	-0.3%	-0.7%	0.3%	-0.7%	0.0%
Below Normal (17.1%)												
DCR 2015 Without Project	8,829	9,778	10,676	10,473	11,029	11,570	11,063	9,951	8,309	8,042	7,872	8,321
DCR 2015 With Project	8,837	9,751	10,694	10,438	11,030	11,540	11,012	9,847	7,989	7,719	7,605	8,290
Difference	8	-28	18	-34	1	-31	-51	-104	-320	-322	-267	-31
Percent Difference	0.1%	-0.3%	0.2%	-0.3%	0.0%	-0.3%	-0.5%	-1.0%	-3.9%	-4.0%	-3.4%	-0.4%
Dry (22%)												
DCR 2015 Without Project	6,642	8,021	8,985	10,509	11,077	11,416	11,020	10,145	8,643	8,396	6,571	6,465
DCR 2015 With Project	6,968	8,261	9,235	10,619	11,156	11,454	10,985	10,001	8,286	8,072	6,535	6,957
Difference	325	240	250	109	79	38	-35	-145	-357	-324	-36	492
Percent Difference	4.9%	3.0%	2.8%	1.0%	0.7%	0.3%	-0.3%	-1.4%	-4.1%	-3.9%	-0.5%	7.6%
Critical (14.6%)												
DCR 2015 Without Project	5,936	6,983	8,519	9,975	10,497	10,743	10,554	9,974	8,740	7,785	5,916	5,592
DCR 2015 With Project	6,484	7,423	8,678	10,098	10,660	10,844	10,635	10,007	8,640	7,664	6,514	6,720
Difference	548	439	159	123	164	100	81	34	-100	-121	598	1,128
Percent Difference	9.2%	6.3%	1.9%	1.2%	1.6%	0.9%	0.8%	0.3%	-1.1%	-1.5%	10.1%	20.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

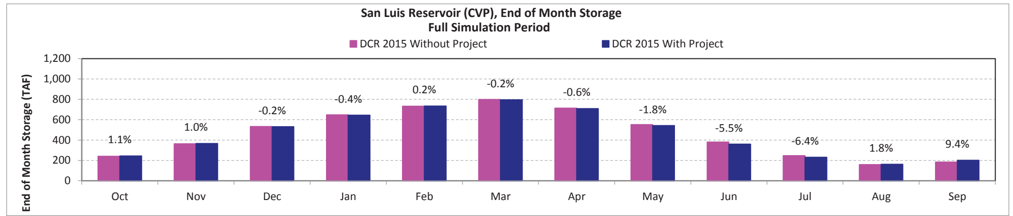
Table SW-44-a
San Luis Reservoir (CVP), End of Month Storage
Long-term Average and Average by Water Year Type

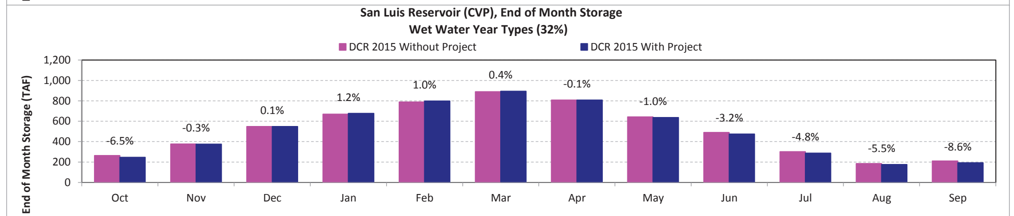
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	241	363	532	648	732	798	714	553	381	247	159	184
DCR 2015 With Project	244	367	531	646	734	796	709	542	360	232	162	202
Difference	3	4	-1	-2	1	-2	-5	-10	-21	-16	3	17
Percent Difference[3]	1.1%	1.0%	-0.2%	-0.4%	0.2%	-0.2%	-0.6%	-1.8%	-5.5%	-6.4%	1.8%	9.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	264	376	548	669	790	890	808	643	490	301	186	211
DCR 2015 With Project	247	375	548	677	798	894	807	637	475	287	176	193
Difference	-17	-1	0	8	8	4	-1	-6	-15	-15	-10	-18
Percent Difference	-6.5%	-0.3%	0.1%	1.2%	1.0%	0.4%	-0.1%	-1.0%	-3.2%	-4.8%	-5.5%	-8.6%
Above Normal (14.6%)												
DCR 2015 Without Project	198	350	533	650	732	838	732	535	361	185	111	131
DCR 2015 With Project	218	357	539	646	726	827	719	516	340	185	105	136
Difference	20	7	6	-4	-6	-11	-13	-19	-20	0	-6	5
Percent Difference	10.0%	2.0%	1.1%	-0.6%	-0.8%	-1.3%	-1.7%	-3.5%	-5.6%	0.0%	-5.3%	3.8%
Below Normal (17.1%)												
DCR 2015 Without Project	332	481	664	689	756	817	726	554	381	277	204	257
DCR 2015 With Project	308	447	625	665	746	810	716	538	338	238	177	233
Difference	-23	-34	-39	-25	-10	-7	-10	-16	-43	-40	-27	-24
Percent Difference	-7.0%	-7.1%	-5.9%	-3.6%	-1.3%	-0.9%	-1.4%	-2.9%	-11.3%	-14.3%	-13.1%	-9.4%
Dry (22%)												
DCR 2015 Without Project	186	314	467	627	702	730	642	478	281	204	112	138
DCR 2015 With Project	188	319	475	631	706	732	641	473	266	193	122	176
Difference	2	6	8	5	4	2	0	-5	-15	-11	10	38
Percent Difference	1.0%	1.8%	1.7%	0.8%	0.5%	0.3%	0.0%	-1.1%	-5.4%	-5.6%	9.3%	27.5%
Critical (14.6%)												
DCR 2015 Without Project	210	284	442	583	627	639	587	483	312	222	166	165
DCR 2015 With Project	270	335	462	576	630	634	582	474	296	210	229	289
Difference	60	52	20	-7	4	-6	-5	-9	-16	-13	63	124
Percent Difference	28.7%	18.2%	4.5%	-1.2%	0.6%	-0.9%	-0.8%	-2.0%	-5.2%	-5.7%	37.7%	75.4%

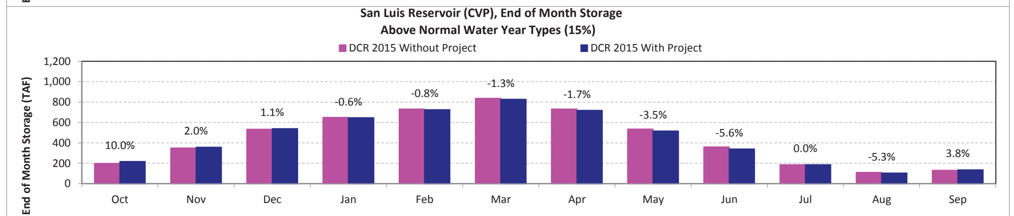
1 Based on the 82-year simulation period

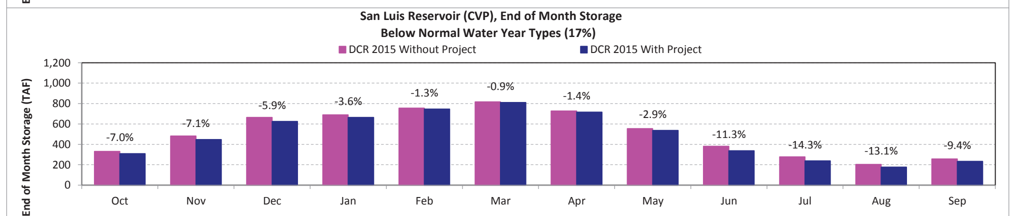
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

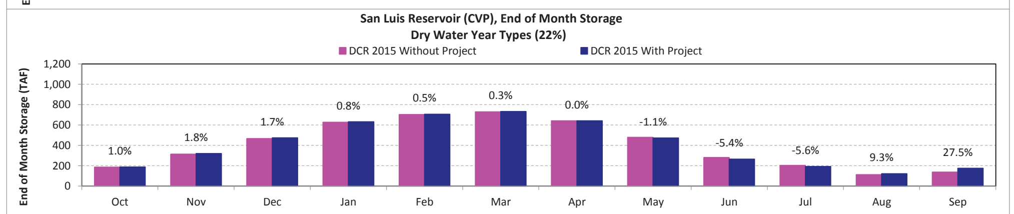
3 Relative difference of the monthly average











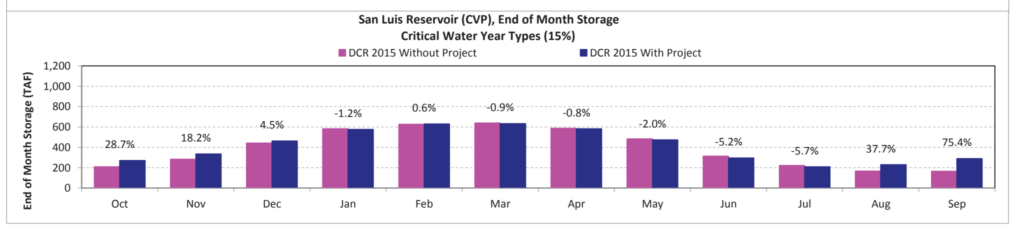


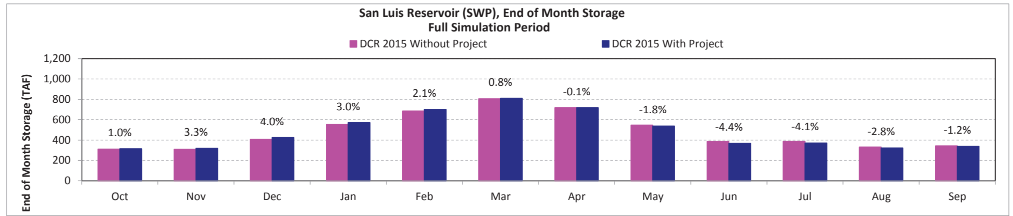
Table SW-45-a
San Luis Reservoir (SWP), End of Month Storage
Long-term Average and Average by Water Year Type

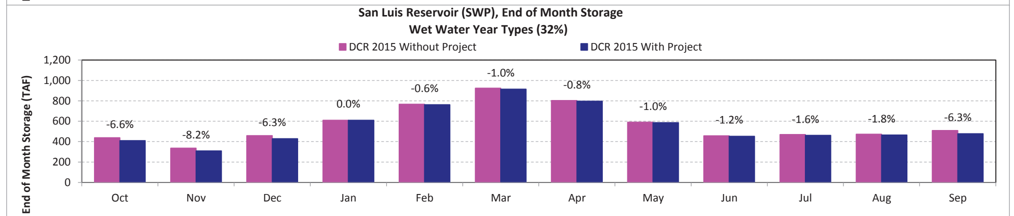
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	311	310	408	554	685	805	717	548	385	387	332	342
DCR 2015 With Project	315	320	424	571	700	812	716	538	368	371	323	338
Difference	3	10	16	17	14	7	0	-10	-17	-16	-9	-4
Percent Difference[3]	1.0%	3.3%	4.0%	3.0%	2.1%	0.8%	-0.1%	-1.8%	-4.4%	-4.1%	-2.8%	-1.2%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	439	337	458	610	767	923	803	592	458	470	473	509
DCR 2015 With Project	410	309	430	610	762	914	796	585	452	462	465	477
Difference	-29	-27	-29	0	-5	-9	-7	-6	-6	-8	-8	-32
Percent Difference	-6.6%	-8.2%	-6.3%	0.0%	-0.6%	-1.0%	-0.8%	-1.0%	-1.2%	-1.6%	-1.8%	-6.3%
Above Normal (14.6%)												
DCR 2015 Without Project	365	327	440	589	699	815	693	476	304	314	332	392
DCR 2015 With Project	359	328	439	603	712	832	708	486	310	312	329	383
Difference	-6	1	-1	14	13	17	15	10	6	-2	-3	-8
Percent Difference	-1.6%	0.2%	-0.1%	2.4%	1.9%	2.1%	2.2%	2.1%	1.9%	-0.7%	-1.0%	-2.1%
Below Normal (17.1%)												
DCR 2015 Without Project	389	480	579	492	627	763	660	473	275	322	346	364
DCR 2015 With Project	413	508	624	508	640	758	651	457	264	309	328	376
Difference	24	29	45	16	13	-5	-9	-16	-12	-13	-18	12
Percent Difference	6.2%	6.0%	7.9%	3.3%	2.0%	-0.6%	-1.4%	-3.4%	-4.2%	-4.2%	-5.1%	3.3%
Dry (22%)												
DCR 2015 Without Project	188	256	315	559	676	768	711	588	410	427	255	221
DCR 2015 With Project	222	300	379	590	697	780	696	547	344	379	234	236
Difference	35	44	64	30	22	11	-15	-41	-65	-48	-22	15
Percent Difference	18.4%	17.3%	20.2%	5.4%	3.3%	1.5%	-2.2%	-7.0%	-16.0%	-11.2%	-8.4%	7.0%
Critical (14.6%)												
DCR 2015 Without Project	77	116	207	463	577	641	629	552	401	298	125	88
DCR 2015 With Project	87	145	233	498	624	679	659	569	403	295	137	100
Difference	10	29	26	35	47	37	30	17	2	-3	12	12
Percent Difference	12.8%	25.0%	12.6%	7.5%	8.1%	5.8%	4.7%	3.1%	0.4%	-1.1%	9.6%	13.4%

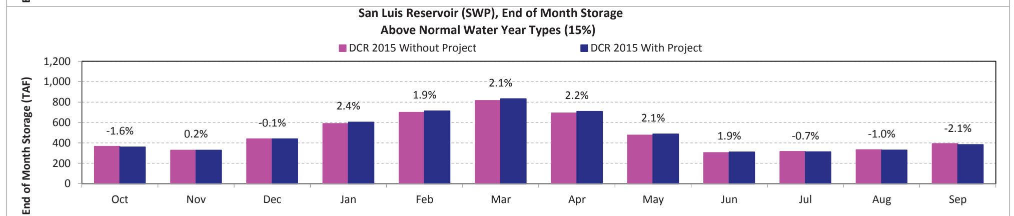
1 Based on the 82-year simulation period

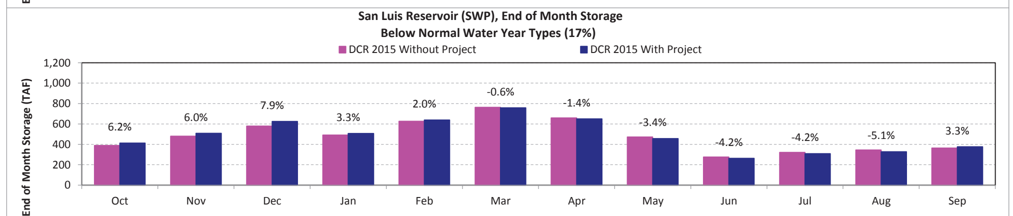
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

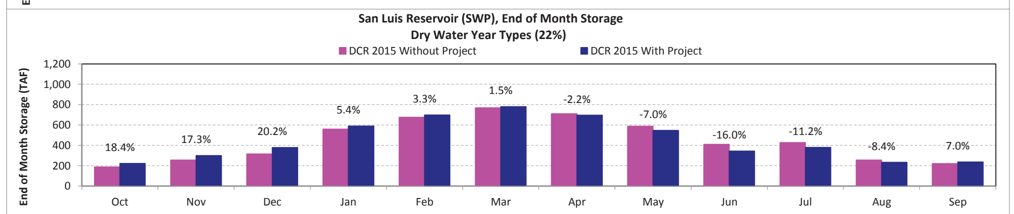
3 Relative difference of the monthly average

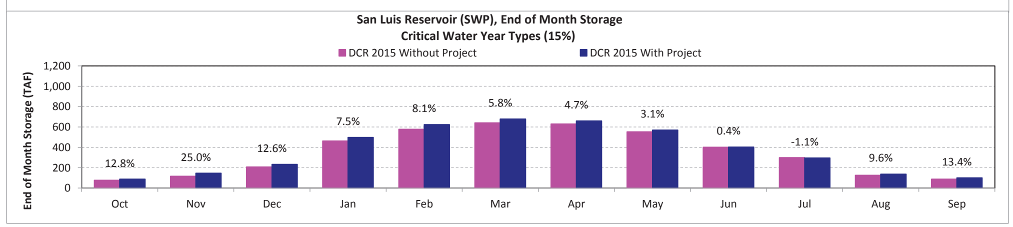












Sacramento-San Joaquin Delta Operations
Exceedance Probability Charts and Tables

Figure SW-30-b
Sacramento River below Hood, Monthly Flow
Probability of Exceedance

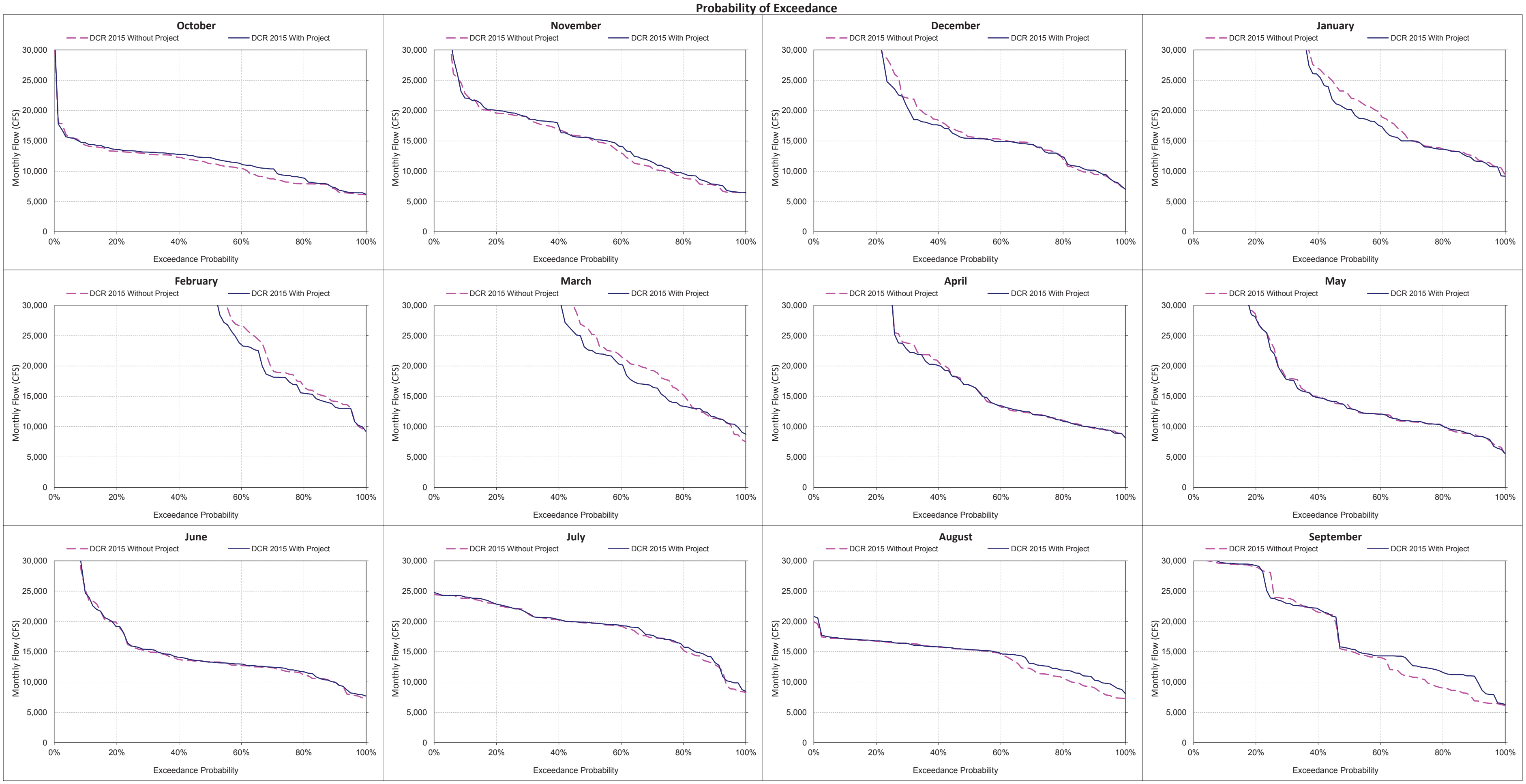


Table SW-30-b

Sacramento River below Hood, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	32,157	33,041	884	2.7%
1.2%	17,960	17,788	-172	-1.0%
2.5%	17,835	16,824	-1,011	-5.7%
3.7%	16,098	15,698	-400	-2.5%
4.9%	15,506	15,529	23	0.1%
6.2%	15,474	15,416	-58	-0.4%
7.4%	15,271	15,104	-167	-1.1%
8.6%	14,681	14,734	53	0.4%
9.9%	14,309	14,704	396	2.8%
11.1%	14,125	14,418	293	2.1%
12.3%	14,049	14,401	351	2.5%
13.6%	13,996	14,287	291	2.1%
14.8%	13,923	14,260	337	2.4%
16.0%	13,816	13,996	181	1.3%
17.3%	13,358	13,873	514	3.9%
18.5%	13,323	13,679	357	2.7%
19.8%	13,294	13,613	318	2.4%
21.0%	13,282	13,529	248	1.9%
22.2%	13,200	13,410	210	1.6%
23.5%	13,146	13,391	245	1.9%
24.7%	13,087	13,365	278	2.1%
25.9%	13,083	13,343	260	2.0%
27.2%	13,017	13,258	241	1.9%
28.4%	12,976	13,184	208	1.6%
29.6%	12,855	13,174	320	2.5%
30.9%	12,751	13,129	378	3.0%
32.1%	12,724	13,122	398	3.1%
33.3%	12,715	13,057	342	2.7%
34.6%	12,713	13,015	302	2.4%
35.8%	12,711	12,999	287	2.3%
37.0%	12,671	12,866	195	1.5%
38.3%	12,545	12,853	308	2.5%
39.5%	12,278	12,787	510	4.2%
40.7%	12,252	12,744	492	4.0%
42.0%	12,009	12,718	709	5.9%
43.2%	11,923	12,594	670	5.6%
44.4%	11,890	12,583	693	5.8%
45.7%	11,738	12,341	604	5.1%
46.9%	11,729	12,312	583	5.0%
48.1%	11,550	12,275	725	6.3%
49.4%	11,288	12,252	963	8.5%
50.6%	11,219	12,177	959	8.5%
51.9%	11,178	11,977	799	7.2%
53.1%	10,988	11,843	855	7.8%
54.3%	10,861	11,700	839	7.7%
55.6%	10,743	11,618	875	8.1%
56.8%	10,705	11,503	798	7.5%
58.0%	10,642	11,434	793	7.4%
59.3%	10,450	11,332	883	8.4%
60.5%	10,418	11,063	645	6.2%
61.7%	10,120	10,999	878	8.7%
63.0%	9,480	10,978	1,499	15.8%
64.2%	9,456	10,751	1,295	13.7%
65.4%	9,163	10,589	1,426	15.6%
66.7%	9,093	10,513	1,421	15.6%
67.9%	8,958	10,452	1,494	16.7%
69.1%	8,741	10,385	1,644	18.8%
70.4%	8,733	10,379	1,646	18.9%
71.6%	8,484	9,585	1,101	13.0%
72.8%	8,452	9,385	934	11.0%
74.1%	8,224	9,333	1,108	13.5%
75.3%	8,206	9,327	1,121	13.7%
76.5%	8,022	9,098	1,076	13.4%
77.8%	7,954	9,082	1,128	14.2%
79.0%	7,941	8,978	1,037	13.1%
80.2%	7,927	8,851	924	11.7%
81.5%	7,916	8,181	265	3.3%
82.7%	7,915	8,141	226	2.9%
84.0%	7,895	8,041	146	1.8%
85.2%	7,882	8,002	119	1.5%
86.4%	7,877	7,965	88	1.1%
87.7%	7,856	7,856	0	0.0%
88.9%	7,244	7,434	190	2.6%
90.1%	7,033	7,239	207	2.9%
91.4%	6,509	6,873	364	5.6%
92.6%	6,444	6,730	286	4.4%
93.8%	6,434	6,555	121	1.9%
95.1%	6,348	6,486	138	2.2%
96.3%	6,314	6,436	121	1.9%
97.5%	6,190	6,434	245	4.0%
98.8%	6,174	6,423	249	4.0%
100.0%	6,127	6,188	61	1.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	53,246	54,574	1,328	2.5%
1.2%	46,934	46,754	-180	-0.4%
2.5%	45,064	46,633	1,568	3.5%
3.7%	32,165	33,769	1,604	5.0%
4.9%	31,934	32,899	966	3.0%
6.2%	26,073	28,635	2,562	9.8%
7.4%	25,374	26,080	706	2.8%
8.6%	24,588	23,176	-1,412	-5.7%
9.9%	22,861	22,058	-803	-3.5%
11.1%	22,123	22,046	-77	-0.3%
12.3%	22,058	21,659	-399	-1.8%
13.6%	21,386	21,634	248	1.2%
14.8%	20,172	21,247	1,075	5.3%
16.0%	20,127	20,524	397	2.0%
17.3%	20,092	20,149	57	0.3%
18.5%	19,892	20,137	246	1.2%
19.8%	19,609	20,064	455	2.3%
21.0%	19,549	19,991	442	2.3%
22.2%	19,487	19,914	427	2.2%
23.5%	19,388	19,761	373	1.9%
24.7%	19,337	19,645	309	1.6%
25.9%	19,208	19,572	365	1.9%
27.2%	19,150	19,335	184	1.0%
28.4%	19,063	19,167	104	0.5%
29.6%	19,034	18,976	-58	-0.3%
30.9%	18,325	18,579	254	1.4%
32.1%	18,093	18,543	450	2.5%
33.3%	17,871	18,333	462	2.6%
34.6%	17,670	18,289	620	3.5%
35.8%	17,560	18,239	679	3.9%
37.0%	17,449	18,172	723	4.1%
38.3%	17,244	18,139	894	5.2%
39.5%	16,871	17,984	1,113	6.6%
40.7%	16,737	16,325	-413	-2.5%
42.0%	16,484	16,319	-165	-1.0%
43.2%	16,251	16,079	-172	-1.1%
44.4%	15,912	15,778	-135	-0.8%
45.7%	15,867	15,665	-202	-1.3%
46.9%	15,811	15,616	-195	-1.2%
48.1%	15,656	15,577	-80	-0.5%
49.4%	15,595	15,565	-30	-0.2%
50.6%	15,166	15,454	287	1.9%
51.9%	14,990	15,179	188	1.3%
53.1%	14,760	15,169	409	2.8%
54.3%	14,676	15,075	399	2.7%
55.6%	14,509	14,988	479	3.3%
56.8%	14,221	14,853	632	4.4%
58.0%	13,695	14,672	976	7.1%
59.3%	13,180	14,131	950	7.2%
60.5%	12,906	14,073	1,167	9.0%
61.7%	12,256	13,335	1,079	8.8%
63.0%	11,930	13,236	1,306	10.9%
64.2%	11,322	12,438	1,116	9.9%
65.4%	11,185	12,355	1,170	10.5%
66.7%	11,139	12,059	920	8.3%
67.9%	10,912	11,972	1,060	9.7%
69.1%	10,817	11,689	872	8.1%
70.4%	10,355	11,429	1,074	10.4%
71.6%	10,189	11,000	811	8.0%
72.8%	10,122	10,983	861	8.5%
74.1%	10,003	10,577	574	5.7%
75.3%	9,893	10,473	580	5.9%
76.5%	9,707	9,932	225	2.3%
77.8%	9,342	9,774	432	4.6%
79.0%	9,209	9,768	559	6.1%
80.2%	8,810	9,584	773	8.8%
81.5%	8,754	9,314	560	6.4%
82.7%	8,689	9,248	559	6.4%
84.0%	8,556	9,240	684	8.0%
85.2%	7,876	8,615	739	9.4%
86.4%	7,847	8,450	604	7.7%
87.7%	7,838	8,247	409	5.2%
88.9%	7,802	7,879	77	1.0%
90.1%	7,698	7,838	140	1.8%
91.4%	7,411	7,738	327	4.4%
92.6%	6,707	7,620	913	13.6%
93.8%	6,545	6,840	295	4.5%
95.1%	6,537	6,703	166	2.5%
96.3%	6,533	6,625	92	1.4%
97.5%	6,520	6,537	17	0.3%
98.8%	6,409	6,533	124	1.9%
100.0%	6,388	6,506	118	1.8%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	77,016	76,686	-330	-0.4%
1.2%	71,094	68,588	-2,506	-3.5%
2.5%	65,998	66,524	526	0.8%
3.7%	59,091	57,524	-1,566	-2.7%
4.9%	57,864	55,709	-2,155	-3.7%
6.2%	56,442	55,559	-884	-1.6%
7.4%	50,391	50,348	-43	-0.1%
8.6%	50,191	49,980	-211	-0.4%
9.9%	47,938	47,373	-566	-1.2%
11.1%	47,826	44,601	-3,225	-6.7%
12.3%	44,500	44,095	-405	-0.9%
13.6%	37,651	39,586	1,936	5.1%
14.8%	37,050	36,549	-501	-1.4%
16.0%	35,746	35,848	102	0.3%
17.3%	35,270	34,814	-456	-1.3%
18.5%	34,210	34,251	41	0.1%
19.8%	33,118	32,732	-386	-1.2%
21.0%	31,308	31,908	600	1.9%
22.2%	29,033	28,536	-497	-1.7%
23.5%	28,605	24,761	-3,844	-13.4%
24.7%	27,520	24,219	-3,301	-12.0%
25.9%	25,993	23,574	-2,419	-9.3%
27.2%	25,497	22,563	-2,934	-11.5%
28.4%	22,298	22,363	65	0.3%
29.6%	22,120	20,864	-1,256	-5.7%
30.9%	21,988	19,682	-2,305	-10.5%
32.1%	21,900	18,512	-3,388	-15.5%
33.3%	20,317	18,494	-1,822	-9.0%
34.6%	19,970	18,172	-1,799	-9.0%
35.8%	19,402	18,096	-1,306	-6.7%
37.0%	19,316	17,879	-1,436	-7.4%
38.3%	18,617	17,669	-948	-5.1%
39.5%	18,524	17,660	-864	-4.7%
40.7%	18,142	17,516	-625	-3.4%
42.0%	17,838	17,079	-758	-4.3%
43.2%	17,302	17,029	-274	-1.6%
44.4%	17,086	16,285	-801	-4.7%
45.7%	16,748	15,975	-773	-4.6%
46.9%	16,510	15,659	-851	-5.2%
48.1%	16,373	15,456	-917	-5.6%
49.4%	15,698	15,439	-259	-1.6%
50.6%	15,659	15,409	-250	-1.6%
51.9%	15,593	15,399	-194	-1.2%
53.1%	15,439	15,343	-96	-0.6%
54.3%	15,399	15,337	-62	-0.4%
55.6%	15,368	15,269	-99	-0.6%
56.8%	15,343	15,181	-162	-1.1%
58.0%	15,337	14,913	-424	-2.8%
59.3%	15,330	14,901	-429	-2.8%
60.5%	15,181	14,884	-297	-2.0%
61.7%	15,036	14,878	-158	-1.0%
63.0%	14,906	14,861	-45	-0.3%
64.2%	14,870	14,807	-62	-0.4%
65.4%	14,807	14,677	-130	-0.9%
66.7%	14,803	14,546	-257	-1.7%
67.9%	14,794	14,535	-259	-1.8%
69.1%	14,703	14,445	-258	-1.8%
70.4%	14,341	14,424	83	0.6%
71.6%	13,974	13,998	24	0.2%
72.8%	13,793	13,998	205	1.5%
74.1%	13,509	13,216	-293	-2.2%
75.3%	13,454	13,000	-454	-3.4%
76.5%	13,296	13,000	-296	-2.2%
77.8%	13,017	13,000	-17	-0.1%
79.0%	12,687	12,523	-164	-1.3%
80.2%	11,771	12,323	552	4.7%
81.5%	10,803	11,125	322	3.0%
82.7%	10,725	10,929	204	1.9%
84.0%	10,428	10,833	405	3.9%
85.2%	10,153	10,750	597	5.9%
86.4%	9,889	10,431	542	5.5%
87.7%	9,866	10,199	333	3.4%
88.9%	9,828	10,182	353	3.6%
90.1%	9,455	10,150	695	7.3%
91.4%	9,443	9,874	431	4.6%
92.6%	9,297	9,511	214	2.3%
93.8%	9,206	9,396	190	2.1%
95.1%	8,733	8,717	-15	-0.2%
96.3%	8,155	8,278	123	1.5%
97.5%	8,035	8,092	57	0.7%
98.8%	7,388	7,522	134	1.8%
100.0%	6,927	6,997	70	1.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	78,038	78,039	1	0.0%
1.2%	77,354	77,356	1	0.0%
2.5%	75,450	74,936	-514	-0.7%
3.7%	72,807	72,828	21	0.0%
4.9%	70,395	70,021	-374	-0.5%
6.2%	65,440	64,769	-671	-1.0%
7.4%	64,401	64,665	264	0.4%
8.6%	63,425	63,367	-58	-0.1%
9.9%	63,267	63,050	-217	-0.3%
11.1%	62,502	61,490	-1,012	-1.6%
12.3%	60,538	58,865	-1,673	-2.8%
13.6%	58,952	58,435	-517	-0.9%
14.8%	58,797	57,189	-1,609	-2.7%
16.0%	58,401	56,961	-1,440	-2.5%
17.3%	57,181	56,433	-747	-1.3%
18.5%	57,162	54,616	-2,546	-4.5%
19.8%	54,099	53,121	-978	-1.8%
21.0%	53,197	52,630	-567	-1.1%
22.2%	48,676	48,204	-472	-1.0%
23.5%	48,556	47,464	-1,092	-2.2%
24.7%	47,429	46,930	-499	-1.1%
25.9%	46,712	46,766	54	0.1%
27.2%	45,682	41,275	-4,407	-9.6%
28.4%	43,194	40,345	-2,848	-6.6%
29.6%	41,005	39,709	-1,296	-3.2%
30.9%	38,738	38,737	-1	0.0%
32.1%	38,546	35,133	-3,413	-8.9%
33.3%	37,303	35,064	-2,239	-6.0%
34.6%	37,301	34,212	-3,088	-8.3%
35.8%	31,727	31,162	-566	-1.8%
37.0%	29,888	27,409	-2,480	-8.3%
38.3%	27,585	26,106	-1,479	-5.4%
39.5%	27,187	26,044	-1,143	-4.2%
40.7%	26,675	25,391	-1,284	-4.8%
42.0%	25,987	24,132	-1,856	-7.1%
43.2%	25,579	23,933	-1,645	-6.4%
44.4%	24,993	21,880	-3,113	-12.5%
45.7%	24,124	21,133	-2,991	-12.4%
46.9%	23,252	20,900	-2,352	-10.1%
48.1%	23,236	20,508	-2,727	-11.7%
49.4%	22,905	20,198	-2,707	-11.8%
50.6%	22,046	20,178	-1,869	-8.5%
51.9%	21,899	19,209	-2,689	-12.3%
53.1%	21,585	18,735	-2,850	-13.2%
54.3%	21,146	18,692	-2,454	-11.6%
55.6%	20,735	18,552	-2,182	-10.5%
56.8%	20,593	18,261	-2,333	-11.3%
58.0%	20,169	18,235	-1,935	-9.6%
59.3%	19,866	17,618	-2,247	-11.3%
60.5%	18,925	17,317	-1,608	-8.5%
61.7%	18,648	16,454	-2,193	-11.8%
63.0%	18,120	15,894	-2,226	-12.3%
64.2%	17,860	15,675	-2,185	-12.2%
65.4%	17,172	15,540	-1,632	-9.5%
66.7%	16,640	15,000	-1,640	-9.9%
67.9%	16,016	15,000	-1,016	-6.3%
69.1%	15,083	15,000	-83	-0.6%
70.4%	14,962	15,000	38	0.3%
71.6%	14,804	14,941	137	0.9%
72.8%	14,730	14,627	-103	-0.7%
74.1%	14,176	14,028	-148	-1.0%
75.3%	14,113	13,992	-121	-0.9%
76.5%	13,971	13,858	-113	-0.8%
77.8%	13,872	13,742	-130	-0.9%
79.0%	13,861	13,639	-222	-1.6%
80.2%	13,598	13,623	25	0.2%
81.5%	13,585	13,500	-85	-0.6%
82.7%	13,353	13,308	-46	-0.3%
84.0%	13,292	13,265	-27	-0.2%
85.2%	13,239	13,243	4	0.0%
86.4%	13,153	12,832	-321	-2.4%
87.7%	12,784	12,495	-289	-2.3%
88.9%	12,647	12,310	-337	-2.7%
90.1%	12,478	11,729	-749	-6.0%
91.4%	11,870	11,644	-226	-1.9%
92.6%	11,660	11,617	-43	-0.4%
93.8%	11,575	11,338	-236	-2.0%
95.1%	11,362	10,801	-561	-4.9%
96.3%	10,837	10,743	-94	-0.9%
97.5%	10,814	10,742	-72	-0.7%
98.8%	10,517	9,232	-1,286	-12.2%
100.0%	9,396	9,162	-234	-2.5%

Table SW-30-b

Sacramento River below Hood, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	77,258	77,256	-3	0.0%
1.2%	75,949	75,942	-7	0.0%
2.5%	73,747	73,752	5	0.0%
3.7%	72,383	72,946	563	0.8%
4.9%	70,908	72,503	1,595	2.2%
6.2%	70,033	70,421	388	0.6%
7.4%	69,404	69,753	350	0.5%
8.6%	69,261	69,241	-20	0.0%
9.9%	68,581	68,789	208	0.3%
11.1%	68,108	67,447	-661	-1.0%
12.3%	67,357	67,132	-225	-0.3%
13.6%	64,736	64,273	-464	-0.7%
14.8%	64,133	63,587	-546	-0.9%
16.0%	63,486	63,472	-15	0.0%
17.3%	62,170	62,211	41	0.1%
18.5%	60,827	59,975	-852	-1.4%
19.8%	60,040	59,377	-664	-1.1%
21.0%	59,783	58,763	-1,021	-1.7%
22.2%	59,367	58,542	-824	-1.4%
23.5%	59,048	57,676	-1,372	-2.3%
24.7%	57,556	55,842	-1,714	-3.0%
25.9%	54,549	53,820	-729	-1.3%
27.2%	53,760	53,751	-9	0.0%
28.4%	50,405	50,047	-358	-0.7%
29.6%	50,072	49,268	-805	-1.6%
30.9%	49,171	46,444	-2,727	-5.5%
32.1%	48,846	46,174	-2,672	-5.5%
33.3%	47,975	45,907	-2,068	-4.3%
34.6%	47,488	45,459	-2,029	-4.3%
35.8%	46,661	45,316	-1,345	-2.9%
37.0%	45,620	45,282	-338	-0.7%
38.3%	45,501	44,261	-1,241	-2.7%
39.5%	44,729	43,026	-1,703	-3.8%
40.7%	43,929	42,939	-990	-2.3%
42.0%	42,548	42,391	-156	-0.4%
43.2%	40,224	40,411	188	0.5%
44.4%	38,660	36,824	-1,836	-4.7%
45.7%	36,810	35,263	-1,547	-4.2%
46.9%	35,879	33,418	-2,461	-6.9%
48.1%	35,492	32,194	-3,298	-9.3%
49.4%	35,297	31,484	-3,814	-10.8%
50.6%	34,666	31,214	-3,452	-10.0%
51.9%	31,746	31,137	-609	-1.9%
53.1%	31,314	28,364	-2,950	-9.4%
54.3%	30,533	27,206	-3,327	-10.9%
55.6%	29,487	26,775	-2,713	-9.2%
56.8%	27,670	25,774	-1,896	-6.9%
58.0%	26,955	24,898	-2,057	-7.6%
59.3%	26,639	23,833	-2,806	-10.5%
60.5%	26,602	23,282	-3,320	-12.5%
61.7%	25,958	23,234	-2,724	-10.5%
63.0%	25,336	23,080	-2,256	-8.9%
64.2%	24,929	22,694	-2,236	-9.0%
65.4%	24,349	22,490	-1,859	-7.6%
66.7%	23,789	20,001	-3,789	-15.9%
67.9%	22,045	18,651	-3,394	-15.4%
69.1%	20,249	18,411	-1,838	-9.1%
70.4%	19,101	18,141	-960	-5.0%
71.6%	18,928	18,138	-791	-4.2%
72.8%	18,914	18,120	-793	-4.2%
74.1%	18,903	18,083	-821	-4.3%
75.3%	18,647	17,388	-1,259	-6.7%
76.5%	18,549	16,967	-1,582	-8.5%
77.8%	17,537	16,916	-620	-3.5%
79.0%	17,425	15,586	-1,839	-10.6%
80.2%	16,459	15,491	-968	-5.9%
81.5%	16,050	15,414	-636	-4.0%
82.7%	15,999	15,328	-671	-4.2%
84.0%	15,464	14,587	-877	-5.7%
85.2%	15,256	14,396	-860	-5.6%
86.4%	15,070	14,160	-910	-6.0%
87.7%	14,852	14,015	-837	-5.6%
88.9%	14,249	13,817	-433	-3.0%
90.1%	14,163	13,172	-991	-7.0%
91.4%	14,085	13,000	-1,085	-7.7%
92.6%	13,644	13,000	-644	-4.7%
93.8%	13,628	13,000	-628	-4.6%
95.1%	13,113	13,000	-113	-0.9%
96.3%	10,914	10,826	-88	-0.8%
97.5%	10,038	10,177	139	1.4%
98.8%	9,670	9,958	288	3.0%
100.0%	9,330	9,198	-131	-1.4%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,001	80,681	-320	-0.4%
1.2%	77,569	77,658	89	0.1%
2.5%	72,527	72,345	-182	-0.3%
3.7%	71,696	71,066	-631	-0.9%
4.9%	68,820	68,823	2	0.0%
6.2%	68,363	66,253	-2,110	-3.1%
7.4%	67,571	65,409	-2,161	-3.2%
8.6%	62,598	62,614	16	0.0%
9.9%	62,236	62,219	-17	0.0%
11.1%	61,911	62,023	112	0.2%
12.3%	61,102	61,134	32	0.1%
13.6%	58,763	58,742	-21	0.0%
14.8%	58,087	58,079	-9	0.0%
16.0%	57,465	57,455	-10	0.0%
17.3%	55,801	55,745	-55	-0.1%
18.5%	54,648	52,288	-2,360	-4.3%
19.8%	53,890	51,950	-1,940	-3.6%
21.0%	48,589	49,145	556	1.1%
22.2%	46,069	47,420	1,351	2.9%
23.5%	45,068	45,996	929	2.1%
24.7%	44,692	41,341	-3,351	-7.5%
25.9%	44,532	40,808	-3,724	-8.4%
27.2%	44,231	40,357	-3,874	-8.8%
28.4%	39,803	39,419	-384	-1.0%
29.6%	39,430	38,143	-1,287	-3.3%
30.9%	38,562	35,821	-2,741	-7.1%
32.1%	36,280	35,275	-1,005	-2.8%
33.3%	36,011	35,110	-901	-2.5%
34.6%	35,937	35,084	-853	-2.4%
35.8%	35,506	33,815	-1,691	-4.8%
37.0%	35,318	32,547	-2,771	-7.8%
38.3%	35,115	32,473	-2,642	-7.5%
39.5%	34,635	30,750	-3,886	-11.2%
40.7%	32,651	29,982	-2,669	-8.2%
42.0%	31,118	27,178	-3,940	-12.7%
43.2%	30,157	26,455	-3,703	-12.3%
44.4%	30,144	25,793	-4,351	-14.4%
45.7%	28,811	25,103	-3,708	-12.9%
46.9%	26,937	25,005	-1,932	-7.2%
48.1%	26,562	23,136	-3,426	-12.9%
49.4%	26,147	22,648	-3,499	-13.4%
50.6%	25,206	22,539	-2,667	-10.6%
51.9%	25,150	22,144	-3,007	-12.0%
53.1%	23,149	21,987	-1,162	-5.0%
54.3%	23,079	21,953	-1,126	-4.9%
55.6%	22,561	21,733	-828	-3.7%
56.8%	22,464	21,660	-804	-3.6%
58.0%	22,398	20,935	-1,463	-6.5%
59.3%	21,919	20,323	-1,596	-7.3%
60.5%	21,354	20,147	-1,207	-5.7%
61.7%	20,967	18,464	-2,503	-11.9%
63.0%	20,369	17,753	-2,616	-12.8%
64.2%	20,229	17,372	-2,856	-14.1%
65.4%	20,161	17,089	-3,071	-15.2%
66.7%	19,841	17,042	-2,799	-14.1%
67.9%	19,682	16,928	-2,754	-14.0%
69.1%	19,306	16,844	-2,462	-12.8%
70.4%	19,234	16,442	-2,792	-14.5%
71.6%	18,869	16,354	-2,516	-13.3%
72.8%	18,051	15,407	-2,644	-14.6%
74.1%	17,798	14,931	-2,867	-16.1%
75.3%	17,629	14,243	-3,385	-19.2%
76.5%	16,535	13,996	-2,539	-15.4%
77.8%	16,258	13,960	-2,298	-14.1%
79.0%	15,654	13,429	-2,225	-14.2%
80.2%	15,059	13,367	-1,692	-11.2%
81.5%	14,268	13,208	-1,060	-7.4%
82.7%	13,208	13,068	-139	-1.1%
84.0%	12,901	13,000	99	0.8%
85.2%	12,471	13,000	529	4.2%
86.4%	12,330	12,450	120	1.0%
87.7%	11,883	12,371	488	4.1%
88.9%	11,429	11,688	259	2.3%
90.1%	11,339	11,591	252	2.2%
91.4%	11,332	11,271	-61	-0.5%
92.6%	11,163	11,160	-3	0.0%
93.8%	10,588	10,676	88	0.8%
95.1%	10,364	10,429	66	0.6%
96.3%	8,703	10,408	1,705	19.6%
97.5%	8,640	9,904	1,264	14.6%
98.8%	7,858	9,063	1,205	15.3%
100.0%	7,465	8,729	1,265	16.9%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	73,244	73,239	-5	0.0%
1.2%	67,856	67,963	107	0.2%
2.5%	64,406	64,071	-335	-0.5%
3.7%	57,218	56,207	-1,011	-1.8%
4.9%	56,220	54,628	-1,591	-2.8%
6.2%	54,644	54,534	-110	-0.2%
7.4%	54,614	52,809	-1,805	-3.3%
8.6%	54,493	52,612	-1,881	-3.5%
9.9%	50,680	49,843	-837	-1.7%
11.1%	49,909	47,946	-1,964	-3.9%
12.3%	46,183	46,180	-4	0.0%
13.6%	42,600	41,960	-640	-1.5%
14.8%	41,960	40,890	-1,070	-2.6%
16.0%	41,620	40,169	-1,451	-3.5%
17.3%	40,822	38,738	-2,084	-5.1%
18.5%	40,174	38,713	-1,461	-3.6%
19.8%	37,318	36,083	-1,235	-3.3%
21.0%	36,472	35,617	-855	-2.3%
22.2%	35,606	35,612	6	0.0%
23.5%	34,814	33,478	-1,337	-3.8%
24.7%	33,113	33,174	61	0.2%
25.9%	25,501	25,194	-307	-1.2%
27.2%	25,320	23,806	-1,514	-6.0%
28.4%	23,991	23,758	-232	-1.0%
29.6%	23,806	22,849	-957	-4.0%
30.9%	23,693	22,199	-1,495	-6.3%
32.1%	23,517	22,191	-1,325	-5.6%
33.3%	22,198	21,899	-299	-1.3%
34.6%	21,879	21,868	-11	-0.1%
35.8%	21,879	20,793	-1,085	-5.0%
37.0%	21,852	20,290	-1,562	-7.1%
38.3%	21,040	20,273	-767	-3.6%
39.5%	20,986	20,155	-831	-4.0%
40.7%	20,239	19,941	-299	-1.5%
42.0%	20,041	19,304	-737	-3.7%
43.2%	19,609	19,225	-383	-2.0%
44.4%	18,348	18,282	-66	-0.4%
45.7%	18,286	18,174	-112	-0.6%
46.9%	18,015	17,778	-238	-1.3%
48.1%	16,953	16,953	0	0.0%
49.4%	16,941	16,934	-7	0.0%
50.6%	16,707	16,699	-8	0.0%
51.9%	16,378	16,381	4	0.0%
53.1%	15,746	15,574	-172	-1.1%
54.3%	14,957	14,957	0	0.0%
55.6%	14,134	14,786	652	4.6%
56.8%	13,910	14,002	92	0.7%
58.0%	13,741	13,743	2	0.0%
59.3%	13,471	13,472	1	0.0%
60.5%	13,147	13,415	268	2.0%
61.7%	13,142	13,136	-6	0.0%
63.0%	12,701	13,000	299	2.4%
64.2%	12,568	12,794	226	1.8%
65.4%	12,566	12,703	136	1.1%
66.7%	12,475	12,569	95	0.8%
67.9%	12,329	12,461	133	1.1%
69.1%	12,294	12,454	160	1.3%
70.4%	11,960	11,964	4	0.0%
71.6%	11,957	11,960	3	0.0%
72.8%	11,953	11,845	-107	-0.9%
74.1%	11,840	11,817	-23	-0.2%
75.3%	11,471	11,651	179	1.6%
76.5%	11,455	11,478	22	0.2%
77.8%	11,369	11,171	-198	-1.7%
79.0%	11,170	11,075	-95	-0.9%
80.2%	10,995	10,839	-156	-1.4%
81.5%	10,749	10,784	35	0.3%
82.7%	10,512	10,509	-3	0.0%
84.0%	10,509	10,371	-137	-1.3%
85.2%	10,371	10,222	-148	-1.4%
86.4%	10,136	10,058	-78	-0.8%
87.7%	10,001	10,004	3	0.0%
88.9%	9,885	9,885	0	0.0%
90.1%	9,627	9,828	201	2.1%
91.4%	9,622	9,625	3	0.0%
92.6%	9,550	9,623	74	0.8%
93.8%	9,430	9,430	0	0.0%
95.1%	9,428	9,428	0	0.0%
96.3%	9,268	8,953	-314	-3.4%
97.5%	8,952	8,920	-33	-0.4%
98.8%	8,856	8,867	11	0.1%
100.0%	8,260	8,137	-123	-1.5%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	57,862	57,143	-719	-1.2%
1.2%	57,293	56,723	-570	-1.0%
2.5%	53,473	53,467	-6	0.0%
3.7%	51,751	51,590	-161	-0.3%
4.9%	47,388	47,424	36	0.1%
6.2%	43,854	43,858	4	0.0%
7.4%	43,564	43,252	-312	-0.7%
8.6%	42,299	42,136	-163	-0.4%
9.9%	40,674	40,576	-98	-0.2%
11.1%	40,417	40,196	-221	-0.5%
12.3%	38,950	38,818	-133	-0.3%
13.6%	38,082	37,905	-178	-0.5%
14.8%	36,735	36,348	-387	-1.1%
16.0%	31,386	32,793	1,407	4.5%
17.3%	30,918	30,808	-110	-0.4%
18.5%	29,220	28,478	-741	-2.5%
19.8%	28,657	28,173	-484	-1.7%
21.0%	26,801	26,811	10	0.0%
22.2%	25,937	26,030	93	0.4%
23.5%	25,474	25,489	15	0.1%
24.7%	24,082	22,685	-1,397	-5.8%
25.9%	22,835	21,937	-898	-3.9%
27.2%	19,987	19,884	-103	-0.5%
28.4%	19,317	18,823	-494	-2.6%
29.6%	18,139	17,849	-290	-1.6%
30.9%	17,908	17,655	-253	-1.4%
32.1%	17,867	17,623	-244	-1.4%
33.3%	17,750	16,326	-1,425	-8.0%
34.6%	16,344	15,933	-411	-2.5%
35.8%	15,954	15,731	-223	-1.4%
37.0%	15,734	15,640	-94	-0.6%
38.3%	15,045	15,023	-22	-0.1%
39.5%	15,022	14,828	-193	-1.3%
40.7%	14,830	14,735	-94	-0.6%
42.0%	14,610	14,611	0	0.0%
43.2%	14,292	14,294	2	0.0%
44.4%	14,177	14,187	9	0.1%
45.7%	13,790	14,178	388	2.8%
46.9%	13,783	13,785	2	0.0%
48.1%	13,724	13,711	-13	-0.1%
49.4%	13,690	13,000	-690	-5.0%
50.6%	12,924	12,912	-12	-0.1%
51.9%	12,787	12,794	6	0.0%
53.1%	12,304	12,479	175	1.4%
54.3%	12,228	12,225	-3	0.0%
55.6%	12,203	12,204	1	0.0%
56.8%	12,142	12,145	3	0.0%
58.0%	12,134	12,134	0	0.0%
59.3%	12,074	12,080	6	0.0%
60.5%	12,059	12,061	2	0.0%
61.7%	11,985	11,888	-97	-0.8%
63.0%	11,887	11,505	-382	-3.2%
64.2%	11,239	11,348	109	1.0%
65.4%	10,992	11,239	247	2.3%
66.7%	10,918	11,009	91	0.8%
67.9%	10,895	10,995	100	0.9%
69.1%	10,860	10,973	113	1.0%
70.4%	10,780	10,879	99	0.9%
71.6%	10,754	10,861	107	1.0%
72.8%	10,719	10,811	92	0.9%
74.1%	10,600	10,636	36	0.3%
75.3%	10,449	10,442	-8	-0.1%
76.5%	10,441	10,426	-15	-0.1%
77.8%	10,407	10,407	0	0.0%
79.0%	10,404	10,373	-32	-0.3%
80.2%	10,044	10,034	-10	-0.1%
81.5%	9,505	9,776	271	2.8%
82.7%	9,370	9,501	130	1.4%
84.0%	9,149	9,455	306	3.3%
85.2%	9,063	9,374	311	3.4%
86.4%	8,937	9,218	281	3.1%
87.7%	8,925	8,926	1	0.0%
88.9%	8,868	8,826	-42	-0.5%
90.1%	8,741	8,421	-320	-3.7%
91.4%	8,421	8,405	-16	-0.2%
92.6%	8,381	8,400	20	0.2%
93.8%	8,151	8,154	3	0.0%
95.1%	7,668	7,867	199	2.6%
96.3%	7,102	6,775	-327	-4.6%
97.5%	6,775	6,428	-347	-5.1%
98.8%	6,587	6,257	-330	-5.0%
100.0%	5,339	5,553	214	4.0%

Table SW-30-b

Sacramento River below Hood, Monthly Flow
Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,381	59,347	-34	-0.1%
1.2%	48,750	48,583	-167	-0.3%
2.5%	37,163	37,756	593	1.6%
3.7%	35,596	36,571	976	2.7%
4.9%	33,971	36,370	2,399	7.1%
6.2%	33,521	33,745	224	0.7%
7.4%	33,410	33,506	96	0.3%
8.6%	28,250	29,250	1,000	3.5%
9.9%	25,338	24,664	-673	-2.7%
11.1%	23,363	24,018	655	2.8%
12.3%	23,361	22,577	-785	-3.4%
13.6%	22,863	21,995	-868	-3.8%
14.8%	21,680	21,668	-11	-0.1%
16.0%	20,346	20,631	285	1.4%
17.3%	20,038	20,335	297	1.5%
18.5%	19,948	20,024	76	0.4%
19.8%	19,910	19,198	-712	-3.6%
21.0%	18,903	19,154	251	1.3%
22.2%	18,102	18,089	-13	-0.1%
23.5%	16,206	16,475	269	1.7%
24.7%	15,914	15,939	25	0.2%
25.9%	15,604	15,864	260	1.7%
27.2%	15,392	15,677	285	1.8%
28.4%	15,285	15,409	124	0.8%
29.6%	15,209	15,382	173	1.1%
30.9%	14,927	15,371	444	3.0%
32.1%	14,918	15,270	352	2.4%
33.3%	14,755	14,898	143	1.0%
34.6%	14,655	14,755	100	0.7%
35.8%	14,478	14,619	140	1.0%
37.0%	14,159	14,558	399	2.8%
38.3%	14,056	14,290	234	1.7%
39.5%	13,759	14,115	356	2.6%
40.7%	13,632	14,044	411	3.0%
42.0%	13,620	13,908	288	2.1%
43.2%	13,615	13,759	144	1.1%
44.4%	13,501	13,629	128	0.9%
45.7%	13,436	13,532	96	0.7%
46.9%	13,431	13,504	74	0.5%
48.1%	13,402	13,431	29	0.2%
49.4%	13,381	13,292	-89	-0.7%
50.6%	13,317	13,291	-26	-0.2%
51.9%	13,292	13,212	-80	-0.6%
53.1%	13,291	13,164	-127	-1.0%
54.3%	13,110	13,145	35	0.3%
55.6%	13,077	13,110	33	0.3%
56.8%	12,800	13,076	277	2.2%
58.0%	12,769	13,000	231	1.8%
59.3%	12,741	13,000	259	2.0%
60.5%	12,708	12,956	248	1.9%
61.7%	12,675	12,741	66	0.5%
63.0%	12,628	12,709	81	0.6%
64.2%	12,502	12,687	185	1.5%
65.4%	12,495	12,618	124	1.0%
66.7%	12,474	12,616	142	1.1%
67.9%	12,462	12,502	39	0.3%
69.1%	12,408	12,483	75	0.6%
70.4%	12,341	12,422	81	0.7%
71.6%	12,070	12,409	339	2.8%
72.8%	12,005	12,343	339	2.8%
74.1%	11,802	12,270	468	4.0%
75.3%	11,688	12,015	328	2.8%
76.5%	11,671	12,005	333	2.9%
77.8%	11,622	11,867	244	2.1%
79.0%	11,484	11,747	262	2.3%
80.2%	11,047	11,666	620	5.6%
81.5%	10,998	11,451	454	4.1%
82.7%	10,608	11,386	777	7.3%
84.0%	10,583	10,826	243	2.3%
85.2%	10,571	10,571	0	0.0%
86.4%	10,528	10,378	-149	-1.4%
87.7%	10,378	10,349	-30	-0.3%
88.9%	10,093	10,093	0	0.0%
90.1%	9,940	9,940	0	0.0%
91.4%	9,455	9,455	0	0.0%
92.6%	9,269	9,287	18	0.2%
93.8%	8,020	8,715	695	8.7%
95.1%	7,961	8,202	241	3.0%
96.3%	7,794	8,109	315	4.0%
97.5%	7,665	7,939	274	3.6%
98.8%	7,401	7,894	492	6.7%
100.0%	7,329	7,658	329	4.5%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,451	24,742	292	1.2%
1.2%	24,353	24,571	218	0.9%
2.5%	24,340	24,306	-35	-0.1%
3.7%	24,306	24,306	0	0.0%
4.9%	24,306	24,306	0	0.0%
6.2%	24,306	24,306	0	0.0%
7.4%	24,077	24,306	229	1.0%
8.6%	23,833	24,247	414	1.7%
9.9%	23,807	24,036	230	1.0%
11.1%	23,787	24,004	217	0.9%
12.3%	23,634	23,813	178	0.8%
13.6%	23,563	23,806	243	1.0%
14.8%	23,450	23,770	321	1.4%
16.0%	23,140	23,603	463	2.0%
17.3%	23,065	23,452	387	1.7%
18.5%	22,971	23,120	148	0.6%
19.8%	22,907	22,896	-11	0.0%
21.0%	22,535	22,727	192	0.9%
22.2%	22,441	22,637	196	0.9%
23.5%	22,289	22,442	152	0.7%
24.7%	22,224	22,290	66	0.3%
25.9%	22,143	22,075	-68	-0.3%
27.2%	22,077	22,041	-35	-0.2%
28.4%	22,053	21,825	-228	-1.0%
29.6%	21,471	21,471	0	0.0%
30.9%	21,000	21,170	170	0.8%
32.1%	20,751	20,752	0	0.0%
33.3%	20,660	20,668	8	0.0%
34.6%	20,625	20,654	29	0.1%
35.8%	20,500	20,640	139	0.7%
37.0%	20,406	20,613	207	1.0%
38.3%	20,318	20,500	182	0.9%
39.5%	20,313	20,346	33	0.2%
40.7%	20,097	20,232	134	0.7%
42.0%	19,976	20,063	87	0.4%
43.2%	19,966	19,967	1	0.0%
44.4%	19,937	19,965	28	0.1%
45.7%	19,911	19,937	26	0.1%
46.9%	19,818	19,883	65	0.3%
48.1%	19,757	19,880	124	0.6%
49.4%	19,750	19,835	85	0.4%
50.6%	19,712	19,761	49	0.2%
51.9%	19,708	19,711	3	0.0%
53.1%	19,666	19,662	-4	0.0%
54.3%	19,437	19,572	135	0.7%
55.6%	19,422	19,496	74	0.4%
56.8%	19,390	19,448	57	0.3%
58.0%	19,344	19,445	100	0.5%
59.3%	19,284	19,391	107	0.6%
60.5%	19,135	19,278	142	0.7%
61.7%	18,808	19,251	443	2.4%
63.0%	18,739	19,068	329	1.8%
64.2%	18,453	19,019	566	3.1%
65.4%	17,926	18,990	1,064	5.9%
66.7%	17,653	18,454	801	4.5%
67.9%	17,643	17,844	201	1.1%
69.1%	17,357	17,796	440	2.5%
70.4%	17,286	17,668	382	2.2%
71.6%	17,252	17,286	35	0.2%
72.8%	17,229	17,222	-8	0.0%
74.1%	17,221	17,053	-169	-1.0%
75.3%	17,053	17,005	-48	-0.3%
76.5%	16,644	16,892	248	1.5%
77.8%	16,560	16,560	1	0.0%
79.0%	15,856	16,360	504	3.2%
80.2%	15,118	15,710	592	3.9%
81.5%	14,819	15,709	890	6.0%
82.7%	14,651	15,287	636	4.3%
84.0%	14,332	14,960	627	4.4%
85.2%	14,300	14,819	519	3.6%
86.4%	13,563	14,624	1,060	7.8%
87.7%	13,390	14,284	893	6.7%
88.9%	13,173	14,164	991	7.5%
90.1%	12,841	13,188	347	2.7%
91.4%	12,475	12,754	278	2.2%
92.6%	11,733	10,879	-854	-7.3%
93.8%	9,384	10,188	804	8.6%
95.1%	8,870	10,065	1,194	13.5%
96.3%	8,832	9,878	1,046	11.8%
97.5%	8,494	9,860	1,366	16.1%
98.8%	8,424	8,729	304	3.6%
100.0%	8,286	8,460	174	2.1%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,971	20,814	843	4.2%
1.2%	19,561	20,543	982	5.0%
2.5%	17,465	17,733	268	1.5%
3.7%	17,363	17,570	207	1.2%
4.9%	17,205	17,450	245	1.4%
6.2%	17,186	17,373	187	1.1%
7.4%	17,185	17,320	136	0.8%
8.6%	17,143	17,178	35	0.2%
9.9%	17,112	17,143	31	0.2%
11.1%	17,085	17,112	27	0.2%
12.3%	17,040	17,072	32	0.2%
13.6%	16,965	17,044	79	0.5%
14.8%	16,893	16,965	71	0.4%
16.0%	16,887	16,931	43	0.3%
17.3%	16,858	16,919	61	0.4%
18.5%	16,809	16,894	85	0.5%
19.8%	16,765	16,809	43	0.3%
21.0%	16,661	16,791	130	0.8%
22.2%	16,650	16,706	56	0.3%
23.5%	16,604	16,674	71	0.4%
24.7%	16,482	16,661	179	1.1%
25.9%	16,469	16,455	-14	-0.1%
27.2%	16,444	16,428	-16	-0.1%
28.4%	16,396	16,396	0	0.0%
29.6%	16,363	16,396	33	0.2%
30.9%	16,338	16,260	-78	-0.5%
32.1%	16,315	16,085	-229	-1.4%
33.3%	16,260	16,062	-198	-1.2%
34.6%	16,063	16,018	-45	-0.3%
35.8%	16,017	15,915	-102	-0.6%
37.0%	15,915	15,874	-41	-0.3%
38.3%	15,833	15,858	25	0.2%
39.5%	15,782	15,833	51	0.3%
40.7%	15,731	15,799	68	0.4%
42.0%	15,678	15,731	53	0.3%
43.2%	15,666	15,678	12	0.1%
44.4%	15,508	15,642	134	0.9%
45.7%	15,477	15,478	0	0.0%
46.9%	15,459	15,452	-8	-0.1%
48.1%	15,384	15,429	46	0.3%
49.4%	15,329	15,371	42	0.3%
50.6%	15,309	15,341	32	0.2%
51.9%	15,260	15,310	49	0.3%
53.1%	15,195	15,261	66	0.4%
54.3%	15,115	15,173	58	0.4%
55.6%	15,109	15,172	64	0.4%
56.8%	14,931	15,116	185	1.2%
58.0%	14,881	15,011	130	0.9%
59.3%	14,805	14,865	61	0.4%
60.5%	14,426	14,630	204	1.4%
61.7%	14,190	14,602	412	2.9%
63.0%	13,836	14,545	709	5.1%
64.2%	13,465	14,523	1,058	7.9%
65.4%	13,066	14,393	1,327	10.2%
66.7%	12,312	14,297	1,986	16.1%
67.9%	12,291	14,059	1,768	14.4%
69.1%	12,287	13,089	803	6.5%
70.4%	11,971	13,085	1,115	9.3%
71.6%	11,468	12,824	1,356	11.8%
72.8%	11,370	12,740	1,370	12.0%
74.1%	11,336	12,645	1,309	11.5%
75.3%	11,230	12,592	1,362	12.1%
76.5%	10,998	12,275	1,277	11.6%
77.8%	10,954	12,265	1,310	12.0%
79.0%	10,879	12,012	1,133	10.4%
80.2%	10,557	11,944	1,387	13.1%
81.5%	10,281	11,910	1,629	15.8%
82.7%	9,990	11,784	1,795	18.0%
84.0%	9,904	11,472	1,568	15.8%
85.2%	9,798	11,465	1,667	17.0%
86.4%	9,388	11,000	1,612	17.2%
87.7%	9,279	10,965	1,686	18.2%
88.9%	9,254	10,943	1,689	18.2%
90.1%	9,017	10,307	1,290	14.3%
91.4%	8,560	10,188	1,629	19.0%
92.6%	8,211	9,859	1,647	20.1%
93.8%	7,847	9,758	1,912	24.4%
95.1%	7,786	9,682	1,897	24.4%
96.3%	7,414	9,319	1,905	25.7%
97.5%	7,362	8,941	1,579	21.4%
98.8%	7,322	8,801	1,479	20.2%
100.0%	7,304	8,062	758	10.4%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,379	31,376	-3	0.0%
1.2%	30,335	30,460	125	0.4%
2.5%	30,219	30,351	133	0.4%
3.7%	30,099	30,191	91	0.3%
4.9%	29,948	30,169	221	0.7%
6.2%	29,870	30,121	251	0.8%
7.4%	29,679	30,024	345	1.2%
8.6%	29,553	29,743	190	0.6%
9.9%	29,540	29,630	90	0.3%
11.1%	29,505	29,593	88	0.3%
12.3%	29,415	29,581	166	0.6%
13.6%	29,385	29,491	106	0.4%
14.8%	29,383	29,481	98	0.3%
16.0%	29,367	29,469	102	0.3%
17.3%	29,319	29,448	128	0.4%
18.5%	29,150	29,374	224	0.8%
19.8%	29,048	29,267	218	0.8%
21.0%	28,791	29,072	281	1.0%
22.2%	28,333	28,193	-140	-0.5%
23.5%	28,233	25,087	-3,145	-11.1%
24.7%	28,059	23,854	-4,205	-15.0%
25.9%	23,952	23,762	-190	-0.8%
27.2%	23,951	23,521	-430	-1.8%
28.4%	23,830	23,335	-495	-2.1%
29.6%	23,803	23,012	-792	-3.3%
30.9%	23,778	22,962	-816	-3.4%
32.1%	23,524	22,636	-889	-3.8%
33.3%	22,991	22,626	-365	-1.6%
34.6%	22,722	22,517	-205	-0.9%
35.8%	22,364	22,517	153	0.7%
37.0%	22,324	22,284	-40	-0.2%
38.3%	21,996	22,239	244	1.1%
39.5%	21,609	22,207	598	2.8%
40.7%	21,430	21,846	415	1.9%
42.0%	21,427	21,496	68	0.3%
43.2%	21,140	21,337	197	0.9%
44.4%	21,116	20,869	-248	-1.2%
45.7%	19,828	20,732	904	4.6%
46.9%	15,529	15,797	268	1.7%
48.1%	15,354	15,710	356	2.3%
49.4%	15,253	15,587	334	2.2%
50.6%	15,046	15,410	364	2.4%
51.9%	14,859	15,321	462	3.1%
53.1%	14,569	14,895	326	2.2%
54.3%	14,475	14,747	272	1.9%
55.6%	14,318	14,655	337	2.4%
56.8%	14,128	14,579	452	3.2%
58.0%	14,121	14,376	255	1.8%
59.3%	14,095	14,322	226	1.6%
60.5%	13,982	14,319	337	2.4%
61.7%	13,673	14,316	643	4.7%
63.0%	12,074	14,305	2,231	18.5%
64.2%	11,999	14,295	2,296	19.1%
65.4%	11,926	14,283	2,357	19.8%
66.7%	11,309	14,251	2,941	26.0%
67.9%	11,045	14,074	3,029	27.4%
69.1%	10,992	13,330	2,338	21.3%
70.4%	10,797	12,702	1,905	17.6%
71.6%	10,753	12,627	1,874	17.4%
72.8%	10,556	12,465	1,909	18.1%
74.1%	10,431	12,400	1,969	18.9%
75.3%	9,774	12,312	2,538	26.0%
76.5%	9,581	12,164	2,583	27.0%
77.8%	9,293	12,059	2,766	29.8%
79.0%	9,112	11,846	2,734	30.0%
80.2%	8,975	11,545	2,570	28.6%
81.5%	8,907	11,314	2,407	27.0%
82.7%	8,623	11,250	2,627	30.5%
84.0%	8,614	11,250	2,636	30.6%
85.2%	8,492	11,250	2,758	32.5%
86.4%	8,203	11,223	3,019	36.8%
87.7%	8,147	11,026	2,879	35.3%
88.9%	7,736	11,000	3,264	42.2%
90.1%	6,893	10,992	4,099	59.5%
91.4%	6,881	9,890	3,009	43.7%
92.6%	6,617	8,685	2,068	31.3%
93.8%	6,566	8,083	1,517	23.1%
95.1%	6,484	7,927	1,443	22.3%
96.3%	6,449	7,923	1,474	22.9%
97.5%	6,434	6,582	148	2.3%
98.8%	6,272	6,475	202	3.2%
100.0%	6,149	6,297	148	2.4%

Figure SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

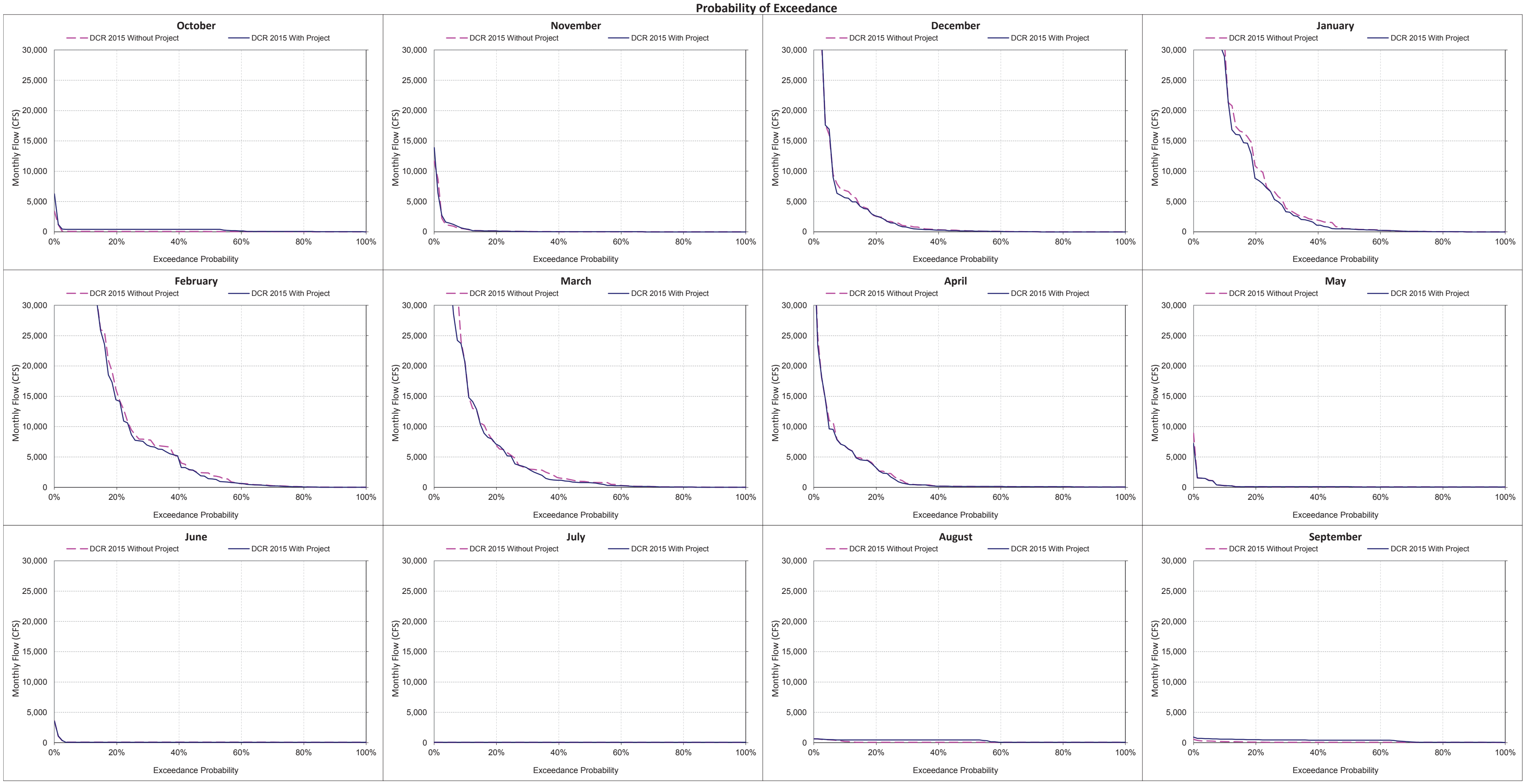


Table SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,405	6,270	2,864	84.1%
1.2%	1,201	1,201	0	0.0%
2.5%	126	449	323	255.4%
3.7%	104	390	286	274.6%
4.9%	76	390	314	413.1%
6.2%	64	390	326	508.2%
7.4%	63	390	327	515.8%
8.6%	63	390	327	516.6%
9.9%	63	390	327	516.6%
11.1%	63	390	327	516.6%
12.3%	63	390	327	516.6%
13.6%	63	390	327	520.9%
14.8%	63	390	327	520.9%
16.0%	63	390	328	523.1%
17.3%	62	390	329	532.0%
18.5%	62	390	329	534.3%
19.8%	61	390	329	536.5%
21.0%	61	390	329	538.8%
22.2%	61	390	329	538.8%
23.5%	61	390	330	543.5%
24.7%	60	390	330	545.9%
25.9%	60	390	330	550.6%
27.2%	59	390	331	557.9%
28.4%	58	390	333	575.5%
29.6%	58	390	333	577.9%
30.9%	56	390	334	593.9%
32.1%	54	390	336	617.1%
33.3%	54	390	336	619.4%
34.6%	54	390	336	622.3%
35.8%	54	390	337	625.2%
37.0%	53	390	337	631.2%
38.3%	53	390	337	634.3%
39.5%	53	390	337	637.2%
40.7%	53	390	338	643.3%
42.0%	52	390	338	648.5%
43.2%	52	390	338	653.1%
44.4%	50	390	340	676.0%
45.7%	49	390	342	702.6%
46.9%	46	390	344	751.1%
48.1%	45	390	345	759.1%
49.4%	45	390	346	771.7%
50.6%	45	390	346	776.2%
51.9%	44	390	346	789.1%
53.1%	43	390	347	798.5%
54.3%	43	265	221	512.3%
55.6%	42	224	182	429.0%
56.8%	42	192	150	355.1%
58.0%	40	187	146	362.0%
59.3%	40	153	113	284.5%
60.5%	39	150	110	279.6%
61.7%	38	75	37	97.3%
63.0%	38	64	26	68.2%
64.2%	37	63	26	69.9%
65.4%	37	63	27	72.9%
66.7%	36	63	26	73.2%
67.9%	30	62	32	107.3%
69.1%	29	61	32	110.6%
70.4%	26	61	35	132.9%
71.6%	24	61	37	156.6%
72.8%	22	60	38	168.6%
74.1%	20	54	34	168.4%
75.3%	19	53	34	184.4%
76.5%	18	53	35	189.1%
77.8%	17	53	36	209.5%
79.0%	16	50	35	221.0%
80.2%	15	46	31	214.9%
81.5%	14	45	31	227.5%
82.7%	12	44	32	256.9%
84.0%	12	43	32	264.7%
85.2%	11	42	31	290.3%
86.4%	9	40	32	369.1%
87.7%	6	40	34	569.8%
88.9%	5	37	32	654.9%
90.1%	4	36	32	
91.4%	3	26	23	
92.6%	3	19	16	
93.8%	3	11	8	
95.1%	2	6	4	
96.3%	1	4	3	
97.5%	0	3	3	
98.8%	0	2	2	
100.0%	0	0	0	

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,658	13,899	2,241	19.2%
1.2%	8,668	6,435	-2,233	-25.8%
2.5%	2,224	2,704	480	21.6%
3.7%	1,168	1,605	437	37.4%
4.9%	1,059	1,442	384	36.2%
6.2%	933	1,209	276	29.6%
7.4%	655	933	277	42.3%
8.6%	551	655	104	18.9%
9.9%	489	489	0	0.0%
11.1%	353	429	76	21.4%
12.3%	213	213	0	0.0%
13.6%	197	197	0	0.0%
14.8%	187	187	0	0.0%
16.0%	165	165	0	0.0%
17.3%	160	160	0	0.0%
18.5%	156	156	0	0.0%
19.8%	151	151	0	0.0%
21.0%	121	127	6	5.3%
22.2%	109	109	0	0.0%
23.5%	97	97	0	0.0%
24.7%	90	81	-10	-10.6%
25.9%	81	66	-15	-18.7%
27.2%	66	51	-14	-21.9%
28.4%	51	50	-1	-1.6%
29.6%	50	49	-1	-2.4%
30.9%	49	38	-11	-23.2%
32.1%	38	37	-1	-2.2%
33.3%	37	36	-1	-3.2%
34.6%	36	35	-1	-1.4%
35.8%	35	35	0	0.0%
37.0%	35	25	-10	-28.6%
38.3%	25	12	-13	-53.3%
39.5%	17	10	-7	
40.7%	12	10	-2	
42.0%	10	10	0	
43.2%	10	10	0	
44.4%	10	10	0	
45.7%	10	9	0	
46.9%	10	9	-1	
48.1%	9	9	-1	
49.4%	9	8	0	
50.6%	9	8	0	
51.9%	8	7	-1	
53.1%	8	7	-1	
54.3%	7	7	-1	
55.6%	7	7	0	
56.8%	7	6	0	
58.0%	7	5	-1	
59.3%	6	5	-1	
60.5%	5	5	0	
61.7%	5	5	0	
63.0%	5	5	0	
64.2%	5	3	-2	
65.4%	3	2	-1	
66.7%	2	1	0	
67.9%	1	0	-1	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	55,099	52,525	-2,574	-4.7%
1.2%	34,576	34,044	-532	-1.5%
2.5%	31,396	31,919	523	1.7%
3.7%	17,672	17,617	-55	-0.3%
4.9%	15,971	16,924	953	6.0%
6.2%	9,479	9,030	-449	-4.7%
7.4%	7,923	6,367	-1,556	-19.6%
8.6%	7,007	5,998	-1,009	-14.4%
9.9%	6,851	5,621	-1,230	-18.0%
11.1%	6,648	5,539	-1,109	-16.7%
12.3%	5,922	4,944	-979	-16.5%
13.6%	5,521	4,936	-585	-10.6%
14.8%	4,199	4,218	19	0.5%
16.0%	4,068	3,828	-240	-5.9%
17.3%	3,804	3,755	-49	-1.3%
18.5%	2,817	2,990	173	6.1%
19.8%	2,614	2,632	19	0.7%
21.0%	2,450	2,468	18	0.7%
22.2%	2,417	2,177	-240	-9.9%
23.5%	1,715	1,734	20	1.2%
24.7%	1,711	1,498	-213	-12.4%
25.9%	1,498	1,426	-72	-4.8%
27.2%	1,426	1,047	-379	-26.6%
28.4%	1,047	826	-221	-21.1%
29.6%	976	800	-176	-18.0%
30.9%	967	605	-362	-37.4%
32.1%	800	514	-286	-35.7%
33.3%	790	470	-320	-40.5%
34.6%	605	411	-194	-32.0%
35.8%	470	375	-95	-20.2%
37.0%	442	350	-93	-21.0%
38.3%	411	330	-81	-19.8%
39.5%	350	297	-53	-15.2%
40.7%	330	285	-46	-13.8%
42.0%	294	265	-29	-9.9%
43.2%	281	195	-86	-30.7%
44.4%	280	192	-88	-31.4%
45.7%	265	174	-91	-34.4%
46.9%	195	158	-37	-19.2%
48.1%	192	158	-34	-17.8%
49.4%	158	138	-20	-12.4%
50.6%	138	135	-3	
51.9%	135	107	-28	
53.1%	122	102	-20	
54.3%	107	93	-15	
55.6%	93	91	-2	
56.8%	91	81	-10	
58.0%	81	63	-18	
59.3%	63	57	-7	
60.5%	57	55	-2	
61.7%	55	42	-13	
63.0%	42	42	0	
64.2%	42	41	-2	
65.4%	41	37	-3	
66.7%	37	23	-15	
67.9%	23	20	-3	
69.1%	20	13	-7	
70.4%	13	10	-3	
71.6%	10	5	-5	
72.8%	5	0	-5	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	134,629	134,582	-46	0.0%
1.2%	114,246	114,432	187	0.2%
2.5%	63,949	60,137	-3,812	-6.0%
3.7%	56,205	56,373	168	0.3%
4.9%	39,142	42,530	3,388	8.7%
6.2%	38,077	38,565	488	1.3%
7.4%	33,349	32,095	-1,254	-3.8%
8.6%	33,223	30,663	-2,559	-7.7%
9.9%	31,727	28,945	-2,782	-8.8%
11.1%	21,352	21,441	89	0.4%
12.3%	20,786	16,824	-3,962	-19.1%
13.6%	17,358	16,076	-1,283	-7.4%
14.8%	16,638	15,981	-657	-3.9%
16.0%	16,392	14,723	-1,669	-10.2%
17.3%	15,702	14,606	-1,096	-7.0%
18.5%	14,750	12,759	-1,991	-13.5%
19.8%	10,892	8,849	-2,043	-18.8%
21.0%	10,261	8,435	-1,826	-17.8%
22.2%	9,823	7,937	-1,886	-19.2%
23.5%	7,388	7,224	-163	-2.2%
24.7%	6,705	6,656	-49	-0.7%
25.9%	6,634	5,350	-1,284	-19.4%
27.2%	5,830	4,987	-843	-14.5%
28.4%	5,341	4,450	-891	-16.7%
29.6%	3,894	3,335	-559	-14.4%
30.9%	3,588	3,232	-356	-9.9%
32.1%	3,209	2,681	-528	-16.4%
33.3%	2,825	2,547	-278	-9.8%
34.6%	2,539	2,039	-500	-19.7%
35.8%	2,455	1,999	-455	-18.5%
37.0%	2,151	1,805	-346	-16.1%
38.3%	2,025	1,598	-428	-21.1%
39.5%	1,973	1,088	-885	-44.8%
40.7%	1,822	1,085	-737	-40.5%
42.0%	1,619	859	-760	-47.0%
43.2%	1,598	792	-806	-50.4%
44.4%	1,531	517	-1,014	-66.2%
45.7%	849	500	-349	-41.1%
46.9%	792	493	-299	-37.8%
48.1%	517	490	-28	-5.3%
49.4%	500	475	-26	-5.2%
50.6%	490	452	-37	-7.6%
51.9%	447	397	-50	
53.1%	397	374	-23	
54.3%	374	371	-3	
55.6%	371	342	-30	
56.8%	342	327	-15	
58.0%	327	326	-1	
59.3%	326	241	-86	
60.5%	232	232	0	
61.7%	218	218	0	
63.0%	214	214	0	
64.2%	132	188	56	
65.4%	128	132	3	
66.7%	121	128	8	
67.9%	70	102	32	
69.1%	63	70	7	
70.4%	62	63	2	
71.6%	62	62	0	
72.8%	61	62	1	
74.1%	59	59	0	
75.3%	37	40	2	
76.5%	31	37	7	
77.8%	26	37	11	
79.0%	26	31	5	
80.2%	23	28	5	
81.5%	21	26	5	
82.7%	14	26	12	
84.0%	7	21	15	
85.2%	2	14	13	
86.4%	0	2	2	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	123,829	125,425	1,595	1.3%
1.2%	109,983	114,191	4,208	3.8%
2.5%	70,534	97,250	26,716	37.9%
3.7%	69,092	69,045	-46	-0.1%
4.9%	67,450	67,342	-108	-0.2%
6.2%	46,738	46,819	81	0.2%
7.4%	43,582	43,288	-294	-0.7%
8.6%	42,662	43,062	400	0.9%
9.9%	42,385	40,477	-1,908	-4.5%
11.1%	42,264	39,865	-2,399	-5.7%
12.3%	40,644	38,483	-2,161	-5.3%
13.6%	31,015	30,682	-333	-1.1%
14.8%	25,977	25,841	-136	-0.5%
16.0%	25,696	23,588	-2,108	-8.2%
17.3%	20,981	18,547	-2,434	-11.6%
18.5%	19,059	17,338	-1,722	-9.0%
19.8%	16,097	14,411	-1,685	-10.5%
21.0%	14,236	14,165	-71	-0.5%
22.2%	12,817	10,919	-1,898	-14.8%
23.5%	10,867	10,615	-252	-2.3%
24.7%	9,475	8,653	-822	-8.7%
25.9%	8,655	7,748	-907	-10.5%
27.2%	7,942	7,656	-286	-3.6%
28.4%	7,936	7,580	-356	-4.5%
29.6%	7,858	6,985	-873	-11.1%
30.9%	7,784	6,730	-1,054	-13.5%
32.1%	6,907	6,656	-252	-3.6%
33.3%	6,859	6,276	-583	-8.5%
34.6%	6,792	6,245	-547	-8.1%
35.8%	6,721	5,852	-869	-12.9%
37.0%	6,643	5,515	-1,128	-17.0%
38.3%	5,359	5,358	-1	0.0%
39.5%	5,082	5,201	118	2.3%
40.7%	3,994	3,250	-744	-18.6%
42.0%	3,793	3,242	-551	-14.5%
43.2%	2,887	2,894	7	0.3%
44.4%	2,823	2,828	5	0.2%
45.7%	2,515	2,418	-97	-3.9%
46.9%	2,410	1,890	-520	-21.6%
48.1%	2,381	1,826	-554	-23.3%
49.4%	2,361	1,406	-955	-40.4%
50.6%	1,882	1,365	-517	-27.5%
51.9%	1,819	1,277	-542	-29.8%
53.1%	1,703	957	-746	-43.8%
54.3%	1,406	911	-496	-35.2%
55.6%	1,365	879	-486	-35.6%
56.8%	879	782	-97	-11.0%
58.0%	744	744	0	0.0%
59.3%	629	629	0	0.0%
60.5%	596	596	0	
61.7%	588	468	-120	
63.0%	468	425	-43	
64.2%	425	389	-36	
65.4%	389	389	0	
66.7%	389	355	-34	
67.9%	355	303	-52	
69.1%	303	229	-74	
70.4%	229	227	-2	
71.6%	227	219	-8	
72.8%	219	193	-26	
74.1%	193	137	-56	
75.3%	137	112	-25	
76.5%	112	110	-2	
77.8%	110	85	-25	
79.0%	85	81	-4	
80.2%	81	52	-29	
81.5%	52	50	-2	
82.7%	41	37	-4	
84.0%	26	26	0	
85.2%	26	24	-2	
86.4%	22	19	-3	
87.7%	19	2	-17	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	121,185	127,845	6,660	5.5%
1.2%	115,215	109,603	-5,612	-4.9%
2.5%	65,521	64,162	-1,359	-2.1%
3.7%	46,872	42,161	-4,712	-10.1%
4.9%	42,305	36,178	-6,127	-14.5%
6.2%	36,162	28,633	-7,529	-20.8%
7.4%	33,094	24,208	-8,886	-26.9%
8.6%	24,101	23,714	-387	-1.6%
9.9%	20,671	20,614	-58	-0.3%
11.1%	14,897	14,821	-76	-0.5%
12.3%	12,992	14,143	1,152	8.9%
13.6%	12,827	12,821	-6	-0.1%
14.8%	10,602	10,330	-272	-2.6%
16.0%	10,231	8,893	-1,338	-13.1%
17.3%	8,905	8,208	-697	-7.8%
18.5%	7,915	7,956	41	0.5%
19.8%	7,005	7,143	138	2.0%
21.0%	6,305	6,794	489	7.8%
22.2%	6,211	6,213	2	0.0%
23.5%	5,706	5,197	-509	-8.9%
24.7%	5,264	5,119	-146	-2.8%
25.9%	4,802	3,842	-959	-20.0%
27.2%	3,623	3,623	0	0.0%
28.4%	3,393	3,488	94	2.8%
29.6%	3,128	3,276	148	4.7%
30.9%	2,984	2,838	-146	-4.9%
32.1%	2,937	2,485	-452	-15.4%
33.3%	2,835	2,243	-591	-20.9%
34.6%	2,827	1,969	-858	-30.4%
35.8%	2,485	1,442	-1,043	-42.0%
37.0%	2,241	1,306	-935	-41.7%
38.3%	1,966	1,205	-761	-38.7%
39.5%	1,591	1,169	-422	-26.5%
40.7%	1,480	1,153	-328	-22.1%
42.0%	1,453	1,028	-426	-29.3%
43.2%	1,306	969	-337	-25.8%
44.4%	1,169	868	-302	-25.8%
45.7%	1,028	799	-229	-22.3%
46.9%	982	780	-202	-20.6%
48.1%	969	778	-190	-19.7%
49.4%	865	775	-89	-10.3%
50.6%	803	738	-65	-8.0%
51.9%	780	696	-84	-10.8%
53.1%	778	549	-229	-29.5%
54.3%	772	475	-297	-38.5%
55.6%	766	313	-454	-59.2%
56.8%	475	306	-169	-35.6%
58.0%	464	268	-196	-42.2%
59.3%	313	257	-56	
60.5%	257	244	-13	
61.7%	244	229	-15	
63.0%	220	169	-50	
64.2%	169	150	-20	
65.4%	150	148	-2	
66.7%	148	130	-18	
67.9%	130	119	-11	
69.1%	119	113	-6	
70.4%	113	80	-33	
71.6%	80	77	-3	
72.8%	77	65	-12	
74.1%	65	62	-4	
75.3%	62	49	-13	
76.5%	50	48	-2	
77.8%	49	47	-2	
79.0%	47	45	-2	
80.2%	45	36	-9	
81.5%	36	30	-6	
82.7%	30	28	-2	
84.0%	28	19	-9	
85.2%	19	13	-6	
86.4%	13	7	-6	
87.7%	7	7	0	
88.9%	7	7	0	
90.1%	7	4	-3	
91.4%	4	2	-1	
92.6%	2	0	-2	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,188	41,149	-39	-0.1%
1.2%	24,877	23,342	-1,535	-6.2%
2.5%	18,189	18,127	-61	-0.3%
3.7%	14,430	14,608	177	1.2%
4.9%	10,983	9,615	-1,369	-12.5%
6.2%	10,754	9,565	-1,189	-11.1%
7.4%	7,928	7,843	-85	-1.1%
8.6%	7,096	7,096	0	0.0%
9.9%	6,839	6,840	0	0.0%
11.1%	6,313	6,299	-14	-0.2%
12.3%	5,970	5,955	-15	-0.3%
13.6%	4,903	4,846	-57	-1.2%
14.8%	4,846	4,556	-289	-6.0%
16.0%	4,555	4,458	-97	-2.1%
17.3%	4,458	4,396	-62	-1.4%
18.5%	4,093	3,925	-168	-4.1%
19.8%	3,336	3,336	0	0.0%
21.0%	2,671	2,670	-1	0.0%
22.2%	2,662	2,293	-368	-13.8%
23.5%	2,293	2,264	-29	-1.3%
24.7%	2,264	1,697	-567	-25.0%
25.9%	1,697	1,315	-382	-22.5%
27.2%	1,315	899	-415	-31.6%
28.4%	1,095	668	-427	-39.0%
29.6%	668	558	-110	-16.5%
30.9%	558	445	-113	-20.2%
32.1%	445	418	-27	-6.1%
33.3%	418	388	-30	-7.1%
34.6%	388	385	-4	-0.9%
35.8%	385	383	-2	-0.5%
37.0%	383	250	-132	-34.6%
38.3%	250	198	-53	-21.0%
39.5%	198	176	-22	-11.0%
40.7%	176	172	-4	-2.3%
42.0%	176	167	-9	-5.3%
43.2%	167	159	-8	-4.7%
44.4%	159	150	-9	-5.6%
45.7%	150	142	-8	-5.3%
46.9%	142	139	-3	-2.2%
48.1%	139	139	0	-0.2%
49.4%	139	131	-8	-5.7%
50.6%	131	120	-11	-8.6%
51.9%	120	119	0	
53.1%	119	119	0	
54.3%	119	116	-3	
55.6%	116	115	-1	
56.8%	115	114	-1	
58.0%	114	112	-2	
59.3%	112	111	-1	
60.5%	111	111	-1	
61.7%	111	109	-2	
63.0%	109	103	-6	
64.2%	103	99	-3	
65.4%	99	95	-4	
66.7%	95	95	-1	
67.9%	95	90	-4	
69.1%	90	87	-3	
70.4%	87	87	0	
71.6%	87	86	-1	
72.8%	86	85	-1	
74.1%	85	85	0	
75.3%	85	82	-3	
76.5%	82	81	0	
77.8%	81	80	-1	
79.0%	80	78	-2	
80.2%	78	76	-2	
81.5%	76	72	-4	
82.7%	72	71	-2	
84.0%	71	65	-5	
85.2%	65	64	-1	
86.4%	64	62	-2	
87.7%	62	58	-5	
88.9%	58	56	-2	
90.1%	56	55	0	
91.4%	55	55	0	
92.6%	55	55	0	
93.8%	55	54	-1	
95.1%	54	50	-4	
96.3%	50	49	-1	
97.5%	49	45	-4	
98.8%	45	43	-2	
100.0%	42	42	0	

May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,914	7,232	-1,682	-18.9%
1.2%	1,544	1,544	0	0.0%
2.5%	1,506	1,506	0	0.0%
3.7%	1,478	1,479	1	0.1%
4.9%	1,150	1,112	-39	-3.4%
6.2%	1,070	1,064	-6	-0.6%
7.4%	394	395	1	0.2%
8.6%	326	327	0	0.1%
9.9%	278	278	0	0.0%
11.1%	248	248	0	0.0%
12.3%	227	216	-12	-5.1%
13.6%	82	82	0	0.0%
14.8%	80	80	0	0.0%
16.0%	80	80	0	0.0%
17.3%	79	79	0	0.0%
18.5%	78	78	0	0.0%
19.8%	78	78	0	0.0%
21.0%	78	78	0	0.0%
22.2%	77	77	0	0.0%
23.5%	77	77	0	0.0%
24.7%	77	77	0	0.0%
25.9%	76	76	0	0.0%
27.2%	75	75	0	0.0%
28.4%	74	74	0	0.0%
29.6%	73	73	0	0.0%
30.9%	73	73	0	0.0%
32.1%	73	73	0	0.0%
33.3%	72	72	0	0.0%
34.6%	72	72	0	0.0%
35.8%	71	71	0	0.0%
37.0%	71	71	0	0.0%
38.3%	71	71	0	0.0%
39.5%	70	70	0	0.0%
40.7%	70	70	0	0.0%
42.0%	70	70	0	0.0%
43.2%	70	70	0	0.0%
44.4%	69	69	0	0.0%
45.7%	69	69	0	0.0%
46.9%	69	69	0	0.0%
48.1%	68	68	0	0.0%
49.4%	68	68	0	0.0%
50.6%	68	68	0	0.0%
51.9%	68	68	0	0.0%
53.1%	67	67	0	0.0%
54.3%	67	67	0	0.0%
55.6%	66	66	0	0.0%
56.8%	66	66	0	0.0%
58.0%	65	65	0	0.0%
59.3%	65	65	0	0.0%
60.5%	64	64	0	0.0%
61.7%	64	64	0	0.0%
63.0%	64	64	0	0.0%
64.2%	64	64	0	0.0%
65.4%	64	64	0	0.0%
66.7%	63	63	0	0.0%
67.9%	63	63	0	0.0%
69.1%	63	63	0	0.0%
70.4%	63	63	0	0.0%
71.6%	63	63	0	0.0%
72.8%	62	62	0	0.0%
74.1%	62	62	0	0.0%
75.3%	61	61	0	0.0%
76.5%	61	61	0	0.0%
77.8%	60	60	0	0.0%
79.0%	59	59	0	0.0%
80.2%	58	58	0	0.0%
81.5%	58	58	0	0.0%
82.7%	58	58	0	0.0%
84.0%	56	56	0	0.0%
85.2%	55	55	0	0.0%
86.4%	55	55	0	0.0%
87.7%	54	54	0	0.0%
88.9%	53	53	0	0.0%
90.1%	53	53	0	0.0%
91.4%	53	53	0	0.0%
92.6%	52	52	0	0.0%
93.8%	52	52	0	0.0%
95.1%	50	50	0	0.0%
96.3%	47	47	0	0.0%
97.5%	46	46	0	0.0%
98.8%	45	45	0	0.0%
100.0%	40	40	0	0.0%

Table SW-31-b

Yolo Bypass, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,609	3,576	-33	-0.9%
1.2%	1,081	1,082	0	0.0%
2.5%	349	349	0	0.0%
3.7%	68	68	0	0.0%
4.9%	68	68	0	0.0%
6.2%	68	68	0	0.0%
7.4%	68	68	0	0.0%
8.6%	68	68	0	0.0%
9.9%	68	68	0	0.0%
11.1%	68	68	0	0.0%
12.3%	68	68	0	0.0%
13.6%	68	68	0	0.0%
14.8%	68	68	0	0.0%
16.0%	68	68	0	0.0%
17.3%	68	68	0	0.0%
18.5%	68	68	0	0.0%
19.8%	68	68	0	0.0%
21.0%	68	68	0	0.0%
22.2%	68	68	0	0.0%
23.5%	68	68	0	0.0%
24.7%	68	68	0	0.0%
25.9%	68	68	0	0.0%
27.2%	68	68	0	0.0%
28.4%	68	68	0	0.0%
29.6%	68	68	0	0.0%
30.9%	68	68	0	0.0%
32.1%	68	68	0	0.0%
33.3%	68	68	0	0.0%
34.6%	68	68	0	0.0%
35.8%	68	68	0	0.0%
37.0%	68	68	0	0.0%
38.3%	68	68	0	0.0%
39.5%	68	68	0	0.0%
40.7%	68	68	0	0.0%
42.0%	68	68	0	0.0%
43.2%	68	68	0	0.0%
44.4%	68	68	0	0.0%
45.7%	67	67	0	0.0%
46.9%	67	67	0	0.0%
48.1%	67	67	0	0.0%
49.4%	67	67	0	0.0%
50.6%	67	67	0	0.0%
51.9%	67	67	0	0.0%
53.1%	67	67	0	0.0%
54.3%	67	67	0	0.0%
55.6%	67	67	0	0.0%
56.8%	67	67	0	0.0%
58.0%	67	67	0	0.0%
59.3%	67	67	0	0.0%
60.5%	67	67	0	0.0%
61.7%	66	66	0	0.0%
63.0%	66	66	0	0.0%
64.2%	66	66	0	0.0%
65.4%	66	66	0	0.0%
66.7%	66	66	0	0.0%
67.9%	66	66	0	0.0%
69.1%	66	66	0	0.0%
70.4%	66	66	0	0.0%
71.6%	65	65	0	0.0%
72.8%	65	65	0	0.0%
74.1%	65	65	0	0.0%
75.3%	65	65	0	0.0%
76.5%	65	65	0	0.0%
77.8%	65	65	0	0.0%
79.0%	65	65	0	0.0%
80.2%	64	64	0	0.0%
81.5%	63	63	0	0.0%
82.7%	63	63	0	0.0%
84.0%	63	63	0	0.0%
85.2%	63	63	0	0.0%
86.4%	63	63	0	0.0%
87.7%	63	63	0	0.0%
88.9%	63	63	0	0.0%
90.1%	62	62	0	0.0%
91.4%	62	62	0	0.0%
92.6%	61	61	0	0.0%
93.8%	59	59	0	0.0%
95.1%	57	57	0	0.0%
96.3%	57	57	0	0.0%
97.5%	56	56	0	0.0%
98.8%	56	56	0	0.0%
100.0%	53	53	0	0.0%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	48	48	0	0.0%
1.2%	48	48	0	0.0%
2.5%	48	48	0	0.0%
3.7%	48	48	0	0.0%
4.9%	48	48	0	0.0%
6.2%	48	48	0	0.0%
7.4%	48	48	0	0.0%
8.6%	48	48	0	0.0%
9.9%	48	48	0	0.0%
11.1%	48	48	0	0.0%
12.3%	48	48	0	0.0%
13.6%	48	48	0	0.0%
14.8%	48	48	0	0.0%
16.0%	48	48	0	0.0%
17.3%	48	48	0	0.0%
18.5%	48	48	0	0.0%
19.8%	48	48	0	0.0%
21.0%	48	48	0	0.0%
22.2%	48	48	0	0.0%
23.5%	48	48	0	0.0%
24.7%	48	48	0	0.0%
25.9%	48	48	0	0.0%
27.2%	48	48	0	0.0%
28.4%	48	48	0	0.0%
29.6%	48	48	0	0.0%
30.9%	48	48	0	0.0%
32.1%	48	48	0	0.0%
33.3%	48	48	0	0.0%
34.6%	48	48	0	0.0%
35.8%	48	48	0	0.0%
37.0%	48	48	0	0.0%
38.3%	48	48	0	0.0%
39.5%	48	48	0	0.0%
40.7%	48	48	0	0.0%
42.0%	48	48	0	0.0%
43.2%	48	48	0	0.0%
44.4%	48	48	0	0.0%
45.7%	48	48	0	0.0%
46.9%	48	48	0	0.0%
48.1%	48	48	0	0.0%
49.4%	48	48	0	0.0%
50.6%	48	48	0	0.0%
51.9%	48	48	0	0.0%
53.1%	48	48	0	0.0%
54.3%	48	48	0	0.0%
55.6%	48	48	0	0.0%
56.8%	48	48	0	0.0%
58.0%	48	48	0	0.0%
59.3%	48	48	0	0.0%
60.5%	48	48	0	0.0%
61.7%	48	48	0	0.0%
63.0%	48	48	0	0.0%
64.2%	48	48	0	0.0%
65.4%	48	48	0	0.0%
66.7%	48	48	0	0.0%
67.9%	48	48	0	0.0%
69.1%	48	48	0	0.0%
70.4%	48	48	0	0.0%
71.6%	48	48	0	0.0%
72.8%	48	48	0	0.0%
74.1%	48	48	0	0.0%
75.3%	48	48	0	0.0%
76.5%	48	48	0	0.0%
77.8%	48	48	0	0.0%
79.0%	48	48	0	0.0%
80.2%	48	48	0	0.0%
81.5%	48	48	0	0.0%
82.7%	48	48	0	0.0%
84.0%	48	48	0	0.0%
85.2%	48	48	0	0.0%
86.4%	48	48	0	0.0%
87.7%	48	48	0	0.0%
88.9%	48	48	0	0.0%
90.1%	48	48	0	0.0%
91.4%	48	48	0	0.0%
92.6%	48	48	0	0.0%
93.8%	48	48	0	0.0%
95.1%	48	48	0	0.0%
96.3%	48	48	0	0.0%
97.5%	47	47	0	0.0%
98.8%	47	47	0	0.0%
100.0%	41	41	0	0.0%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	628	628	0	0.0%
1.2%	610	610	0	0.0%
2.5%	549	576	27	4.8%
3.7%	502	549	47	9.3%
4.9%	486	502	16	3.4%
6.2%	431	486	55	12.7%
7.4%	366	450	84	23.0%
8.6%	302	445	143	47.3%
9.9%	186	445	260	140.0%
11.1%	164	445	281	170.9%
12.3%	126	445	320	254.6%
13.6%	60	445	385	644.2%
14.8%	55	445	390	711.1%
16.0%	55	445	390	711.1%
17.3%	55	445	390	711.1%
18.5%	55	445	390	711.1%
19.8%	55	445	390	711.1%
21.0%	55	445	390	711.1%
22.2%	55	445	390	711.1%
23.5%	55	445	390	711.1%
24.7%	55	445	390	711.1%
25.9%	55	445	390	711.1%
27.2%	55	445	390	711.1%
28.4%	55	445	390	711.1%
29.6%	55	445	390	711.1%
30.9%	55	445	390	711.1%
32.1%	55	445	390	711.1%
33.3%	55	445	390	711.1%
34.6%	55	445	390	711.1%
35.8%	55	445	390	711.1%
37.0%	55	445	390	711.1%
38.3%	55	445	390	711.1%
39.5%	55	445	390	711.1%
40.7%	55	445	390	711.1%
42.0%	55	445	390	711.1%
43.2%	55	445	390	711.1%
44.4%	55	445	390	711.1%
45.7%	55	445	390	710.9%
46.9%	55	445	390	710.6%
48.1%	55	445	390	710.4%
49.4%	55	444	389	709.4%
50.6%	55	444	389	708.5%
51.9%	55	439	385	700.7%
53.1%	55	431	376	685.5%
54.3%	55	366	311	566.8%
55.6%	55	302	247	450.7%
56.8%	55	164	109	199.4%
58.0%	55	126	71	128.7%
59.3%	55	55	0	0.0%
60.5%	55	55	0	0.0%
61.7%	55	55	0	0.0%
63.0%	55	55	0	0.0%
64.2%	55	55	0	0.0%
65.4%	55	55	0	0.0%
66.7%	55	55	0	0.0%
67.9%	55	55	0	0.0%
69.1%	55	55	0	0.0%
70.4%	55	55	0	0.0%
71.6%	55	55	0	0.0%
72.8%	55	55	0	0.0%
74.1%	55	55	0	0.0%
75.3%	55	55	0	0.3%
76.5%	55	55	0	0.3%
77.8%	55	55	0	0.3%
79.0%	55	55	0	0.3%
80.2%	55	55	0	0.3%
81.5%	55	55	0	0.3%
82.7%	55	55	0	0.3%
84.0%	55	55	0	0.3%
85.2%	54	55	0	0.5%
86.4%	54	55	0	0.6%
87.7%	54	55	0	0.6%
88.9%	54	55	0	0.7%
90.1%	54	54	0	0.8%
91.4%	54	54	0	0.8%
92.6%	54	54	0	0.9%
93.8%	54	54	0	0.5%
95.1%	53	54	0	0.6%
96.3%	52	54	1	2.3%
97.5%	50	52	2	4.6%
98.8%	49	50	1	2.0%
100.0%	42	42	0	0.0%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	554	911	357	64.5%
1.2%	366	721	356	97.2%
2.5%	291	695	405	139.2%
3.7%	279	677	398	142.4%
4.9%	274	654	380	139.0%
6.2%	251	626	375	149.7%
7.4%	204	601	397	194.7%
8.6%	192	571	379	197.7%
9.9%	168	565	397	236.2%
11.1%	162	558	396	245.2%
12.3%	154	554	400	259.0%
13.6%	153	544	391	254.6%
14.8%	141	532	391	277.6%
16.0%	128	531	403	314.5%
17.3%	114	499	385	338.5%
18.5%	96	493	397	414.9%
19.8%	89	475	386	432.2%
21.0%	72	470	398	556.4%
22.2%	67	464	397	595.3%
23.5%	62	463	401	650.0%
24.7%	60	463	403	674.4%
25.9%	59	463	403	680.0%
27.2%	59	463	403	680.4%
28.4%	59	458	399	672.6%
29.6%	59	456	397	669.1%
30.9%	59	453	393	663.5%
32.1%	59	437	377	636.6%
33.3%	59	429	370	624.2%
34.6%	59	429	369	622.9%
35.8%	59	427	367	619.9%
37.0%	59	422	362	611.2%
38.3%	59	408	349	588.8%
39.5%	59	403	344	580.4%
40.7%	59	403	344	580.4%
42.0%	59	403	344	580.4%
43.2%	59	403	344	580.4%
44.4%	59	403	344	580.4%
45.7%	59	403	344	580.4%
46.9%	59	403	344	580.4%
48.1%	59	403	344	580.4%
49.4%	59	403	344	580.4%
50.6%	59	403	344	580.4%
51.9%	59	403	344	580.4%
53.1%	59	403	344	580.4%
54.3%	59	403	344	580.4%
55.6%	59	403	344	580.4%
56.8%	59	403	344	580.4%
58.0%	59	403	344	581.6%
59.3%	59	403	344	581.6%
60.5%	59	403	344	581.6%
61.7%	59	403	344	584.0%
63.0%	59	403	344	584.0%
64.2%	59	366	307	521.8%
65.4%	59	254	195	333.8%
66.7%	59	228	170	289.7%
67.9%	58	209	151	258.8%
69.1%	58	128	69	118.7%
70.4%	58	91	33	56.8%
71.6%	58	60	2	3.0%
72.8%	58	59	1	2.1%
74.1%	57	59	2	3.4%
75.3%	57	59	2	3.8%
76.5%	57	59	3	4.8%
77.8%	57	59	3	4.8%
79.0%	56	59	3	6.1%
80.2%	55	59	4	6.9%
81.5%	55	59	4	7.5%
82.7%	55	59	4	8.0%
84.0%	55	59	5	8.4%
85.2%	55	59	4	8.0%
86.4%	54	59	5	9.9%
87.7%	53	59	6	11.4%
88.9%	52	58	6	12.4%
90.1%	52	57	6	10.6%
91.4%	51	57	6	11.4%
92.6%	50	57	6	12.6%
93.8%	49	55	7	13.6%
95.1%	46	55	9	18.7%
96.3%	45	52	7	16.0%
97.5%	24	49	25	106.8%
98.8%	23	46	23	97.4%
100.0%	20	24	3	16.6%

Figure SW-32-b
Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

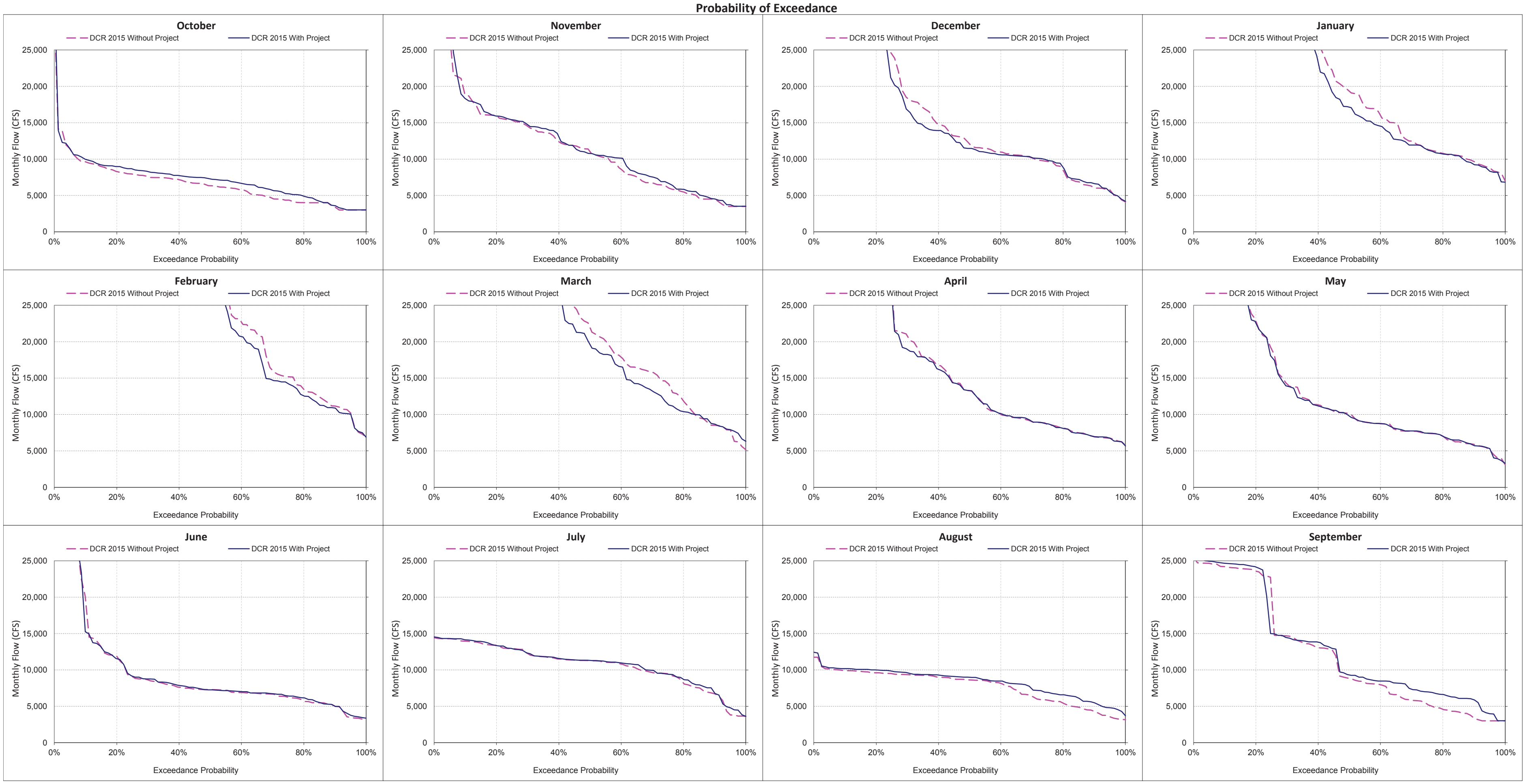


Table SW-32-b

Sacramento River at Rio Vista, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,162	33,794	3,631	12.0%
1.2%	14,143	13,944	-198	-1.4%
2.5%	13,985	12,305	-1,679	-12.0%
3.7%	11,975	12,169	194	1.6%
4.9%	11,439	11,458	19	0.2%
6.2%	10,619	10,617	-2	0.0%
7.4%	10,074	10,550	476	4.7%
8.6%	9,659	10,296	637	6.6%
9.9%	9,646	9,987	342	3.5%
11.1%	9,452	9,815	363	3.8%
12.3%	9,339	9,676	336	3.6%
13.6%	9,259	9,403	145	1.6%
14.8%	9,000	9,219	219	2.4%
16.0%	8,868	9,131	263	3.0%
17.3%	8,595	9,080	485	5.6%
18.5%	8,550	9,079	529	6.2%
19.8%	8,309	8,973	664	8.0%
21.0%	8,196	8,960	763	9.3%
22.2%	8,118	8,804	687	8.5%
23.5%	7,989	8,688	699	8.8%
24.7%	7,965	8,674	709	8.9%
25.9%	7,893	8,526	633	8.0%
27.2%	7,781	8,423	642	8.2%
28.4%	7,753	8,386	634	8.2%
29.6%	7,654	8,342	688	9.0%
30.9%	7,474	8,202	728	9.7%
32.1%	7,461	8,146	685	9.2%
33.3%	7,459	8,098	639	8.6%
34.6%	7,449	8,029	580	7.8%
35.8%	7,417	7,971	554	7.5%
37.0%	7,356	7,940	585	7.9%
38.3%	7,233	7,766	532	7.4%
39.5%	7,230	7,744	514	7.1%
40.7%	7,088	7,674	586	8.3%
42.0%	6,902	7,602	700	10.1%
43.2%	6,824	7,536	712	10.4%
44.4%	6,695	7,517	823	12.3%
45.7%	6,679	7,478	798	12.0%
46.9%	6,657	7,473	816	12.3%
48.1%	6,558	7,439	881	13.4%
49.4%	6,352	7,344	992	15.6%
50.6%	6,335	7,234	899	14.2%
51.9%	6,271	7,186	915	14.6%
53.1%	6,155	7,125	970	15.8%
54.3%	6,147	7,074	927	15.1%
55.6%	6,068	7,068	1,000	16.5%
56.8%	6,013	6,902	889	14.8%
58.0%	5,960	6,842	882	14.8%
59.3%	5,813	6,726	913	15.7%
60.5%	5,798	6,616	818	14.1%
61.7%	5,572	6,494	922	16.5%
63.0%	5,194	6,468	1,274	24.5%
64.2%	5,122	6,431	1,308	25.5%
65.4%	5,070	6,120	1,050	20.7%
66.7%	5,030	6,075	1,045	20.8%
67.9%	4,861	5,937	1,076	22.1%
69.1%	4,756	5,817	1,061	22.3%
70.4%	4,521	5,642	1,120	24.8%
71.6%	4,498	5,610	1,111	24.7%
72.8%	4,486	5,494	1,008	22.5%
74.1%	4,360	5,280	920	21.1%
75.3%	4,352	5,216	864	19.8%
76.5%	4,170	5,110	940	22.5%
77.8%	4,047	5,110	1,062	26.2%
79.0%	4,015	5,053	1,038	25.9%
80.2%	4,012	4,854	842	21.0%
81.5%	4,000	4,712	712	17.8%
82.7%	4,000	4,653	653	16.3%
84.0%	4,000	4,378	378	9.5%
85.2%	4,000	4,206	206	5.2%
86.4%	4,000	4,000	0	0.0%
87.7%	4,000	4,000	0	0.0%
88.9%	3,601	3,642	41	1.2%
90.1%	3,368	3,598	230	6.8%
91.4%	3,000	3,284	284	9.5%
92.6%	3,000	3,193	193	6.4%
93.8%	3,000	3,000	0	0.0%
95.1%	3,000	3,000	0	0.0%
96.3%	3,000	3,000	0	0.0%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

November				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	56,606	59,999	3,393	6.0%
1.2%	48,191	45,697	-2,494	-5.2%
2.5%	38,827	40,839	2,013	5.2%
3.7%	28,914	30,031	1,118	3.9%
4.9%	27,317	29,801	2,484	9.1%
6.2%	21,578	24,634	3,056	14.2%
7.4%	21,379	21,385	6	0.0%
8.6%	21,081	18,950	-2,130	-10.1%
9.9%	18,860	18,354	-506	-2.7%
11.1%	18,677	18,012	-665	-3.6%
12.3%	17,913	17,913	0	0.0%
13.6%	17,295	17,705	410	2.4%
14.8%	16,192	17,510	1,318	8.1%
16.0%	16,090	16,536	447	2.8%
17.3%	16,062	16,365	303	1.9%
18.5%	16,040	16,074	34	0.2%
19.8%	16,035	15,936	-98	-0.6%
21.0%	15,620	15,896	276	1.8%
22.2%	15,526	15,786	260	1.7%
23.5%	15,413	15,588	176	1.1%
24.7%	15,412	15,442	30	0.2%
25.9%	15,157	15,370	213	1.4%
27.2%	15,101	15,224	124	0.8%
28.4%	14,941	15,188	247	1.7%
29.6%	14,634	14,867	233	1.6%
30.9%	14,257	14,474	217	1.5%
32.1%	14,100	14,463	363	2.6%
33.3%	13,755	14,387	632	4.6%
34.6%	13,720	14,198	478	3.5%
35.8%	13,579	14,195	615	4.5%
37.0%	13,556	13,971	415	3.1%
38.3%	13,191	13,934	743	5.6%
39.5%	12,524	13,526	1,002	8.0%
40.7%	12,184	12,402	219	1.8%
42.0%	12,007	12,181	173	1.4%
43.2%	11,979	11,893	-86	-0.7%
44.4%	11,872	11,882	10	0.1%
45.7%	11,788	11,314	-474	-4.0%
46.9%	11,547	11,066	-481	-4.2%
48.1%	11,417	10,996	-421	-3.7%
49.4%	11,394	10,778	-617	-5.4%
50.6%	10,669	10,773	105	1.0%
51.9%	10,567	10,576	9	0.1%
53.1%	10,372	10,523	151	1.5%
54.3%	10,244	10,520	275	2.7%
55.6%	10,236	10,327	91	0.9%
56.8%	9,588	10,286	698	7.3%
58.0%	9,572	10,181	609	6.4%
59.3%	8,840	10,135	1,295	14.6%
60.5%	8,419	10,108	1,689	20.1%
61.7%	7,899	9,059	1,160	14.7%
63.0%	7,853	8,460	607	7.7%
64.2%	7,709	8,333	624	8.1%
65.4%	7,492	8,047	555	7.4%
66.7%	7,013	7,927	914	13.0%
67.9%	6,764	7,820	1,056	15.6%
69.1%	6,761	7,625	864	12.8%
70.4%	6,681	7,493	813	12.2%
71.6%	6,492	7,339	847	13.0%
72.8%	6,456	6,916	460	7.1%
74.1%	6,371	6,906	535	8.4%
75.3%	6,010	6,649	639	10.6%
76.5%	5,837	6,365	528	9.0%
77.8%	5,817	5,867	50	0.9%
79.0%	5,586	5,866	280	5.0%
80.2%	5,451	5,825	374	6.9%
81.5%	5,215	5,621	406	7.8%
82.7%	5,176	5,553	377	7.3%
84.0%	5,030	5,539	510	10.1%
85.2%	4,550	5,047	497	10.9%
86.4%	4,500	4,926	426	9.5%
87.7%	4,500	4,801	301	6.7%
88.9%	4,500	4,574	74	1.6%
90.1%	4,500	4,500	0	0.0%
91.4%	4,107	4,350	242	5.9%
92.6%	3,732	4,296	564	15.1%
93.8%	3,500	3,729	229	6.5%
95.1%	3,500	3,717	217	6.2%
96.3%	3,500	3,521	21	0.6%
97.5%	3,500	3,500	0	0.0%
98.8%	3,500	3,500	0	0.0%
100.0%	3,500	3,500	0	0.0%

December				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	121,403	118,543	-2,861	-2.4%
1.2%	78,142	77,427	-715	-0.9%
2.5%	72,372	73,782	1,410	1.9%
3.7%	69,155	69,766	611	0.9%
4.9%	67,719	63,832	-3,887	-5.7%
6.2%	60,597	60,504	-92	-0.2%
7.4%	58,636	57,892	-744	-1.3%
8.6%	58,115	52,747	-5,368	-9.2%
9.9%	50,616	49,740	-876	-1.7%
11.1%	47,525	46,182	-1,343	-2.8%
12.3%	44,687	41,472	-3,215	-7.2%
13.6%	37,975	36,492	-1,483	-3.9%
14.8%	37,392	36,292	-1,100	-2.9%
16.0%	34,496	35,457	961	2.8%
17.3%	32,573	33,374	800	2.5%
18.5%	32,112	32,650	538	1.7%
19.8%	30,257	29,939	-317	-1.0%
21.0%	29,012	29,084	72	0.2%
22.2%	27,249	26,823	-426	-1.6%
23.5%	27,235	24,874	-2,362	-8.7%
24.7%	24,648	21,202	-3,446	-14.0%
25.9%	23,874	20,159	-3,715	-15.6%
27.2%	22,025	19,767	-2,258	-10.3%
28.4%	19,421	18,605	-816	-4.2%
29.6%	18,518	16,899	-1,620	-8.7%
30.9%	18,071	16,383	-1,689	-9.3%
32.1%	17,913	15,588	-2,325	-13.0%
33.3%	17,799	14,936	-2,863	-16.1%
34.6%	17,205	14,833	-2,373	-13.8%
35.8%	16,838	14,349	-2,488	-14.8%
37.0%	16,504	14,076	-2,428	-14.7%
38.3%	15,515	13,958	-1,557	-10.0%
39.5%	14,900	13,930	-970	-6.5%
40.7%	14,728	13,919	-808	-5.5%
42.0%	14,511	13,573	-938	-6.5%
43.2%	13,869	13,502	-367	-2.6%
44.4%	13,237	12,971	-266	-2.0%
45.7%	13,148	12,326	-822	-6.2%
46.9%	13,063	12,249	-814	-6.2%
48.1%	12,888	11,525	-1,364	-10.6%
49.4%	12,355	11,487	-867	-7.0%
50.6%	11,773	11,478	-295	-2.5%
51.9%	11,580	11,307	-273	-2.4%
53.1%	11,565	11,028	-536	-4.6%
54.3%	11,487	11,018	-469	-4.1%
55.6%	11,460	10,907	-553	-4.8%
56.8%	11,307	10,799	-508	-4.5%
58.0%	11,028	10,739	-290	-2.6%
59.3%	10,997	10,596	-400	-3.6%
60.5%	10,940	10,574	-365	-3.3%
61.7%	10,739	10,572	-166	-1.5%
63.0%	10,729	10,506	-222	-2.1%
64.2%	10,574	10,454	-120	-1.1%
65.4%	10,548	10,449	-99	-0.9%
66.7%	10,506	10,415	-91	-0.9%
67.9%	10,389	10,371	-18	-0.2%
69.1%	10,289	10,358	69	0.7%
70.4%	10,114	10,161	46	0.5%
71.6%	9,840	10,104	264	2.7%
72.8%	9,819	10,069	250	2.5%
74.1%	9,743	9,971	228	2.3%
75.3%	9,652	9,789	136	1.4%
76.5%	9,601	9,710	109	1.1%
77.8%	9,100	9,467	367	4.0%
79.0%	9,013	9,448	435	4.8%
80.2%	8,308	8,671	363	4.4%
81.5%	7,232	7,558	326	4.5%
82.7%	7,154	7,318	164	2.3%
84.0%	6,939	7,251	312	4.5%
85.2%	6,866	7,177	311	4.5%
86.4%	6,502	6,937	435	6.7%
87.7%	6,425	6,772	346	5.4%
88.9%	6,325	6,746	421	6.7%
90.1%	6,009	6,618	609	10.1%
91.4%	6,009	6,537	529	8.8%
92.6%	5,979	6,048	69	1.2%
93.8%	5,838	5,987	149	2.5%
95.1%	5,750	5,470	-280	-4.9%
96.3%	5,030	5,128	98	2.0%
97.5%	4,938	4,955	16	0.3%
98.8%	4,384	4,489	105	2.4%
100.0%	4,118	4,200	82	2.0%

January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	202,880	202,835	-45	0.0%
1.2%	181,713	181,901	188	0.1%
2.5%	129,516	125,258	-4,258	-3.3%
3.7%	118,762	118,948	186	0.2%
4.9%	95,750	100,304	4,554	4.8%
6.2%	94,389	95,106	717	0.8%
7.4%	92,358	89,251	-3,107	-3.4%
8.6%	87,728	86,098	-1,630	-1.9%
9.9%	87,414	84,165	-3,249	-3.7%
11.1%	77,363	72,581	-4,782	-6.2%
12.3%	72,434	71,602	-833	-1.1%
13.6%	68,703	65,143	-3,561	-5.2%
14.8%	68,134	64,899	-3,235	-4.7%
16.0%	65,633	64,032	-1,601	-2.4%
17.3%	63,661	59,793	-3,868	-6.1%
18.5%	57,748	54,345	-3,403	-5.9%
19.8%	55,499	53,053	-2,446	-4.4%
21.0%	54,065	51,555	-2,510	-4.6%
22.2%	53,303	51,507	-1,797	-3.4%
23.5%	48,199	47,563	-637	-1.3%
24.7%	46,587	46,640	53	0.1%
25.9%	43,185	42,733	-453	-1.0%
27.2%	42,662	39,437	-3,225	-7.6%
28.4%	42,629	38,980	-3,649	-8.6%
29.6%	40,529	38,777	-1,752	-4.3%
30.9%	39,310	37,082	-2,228	-5.7%
32.1%	38,461	36,718	-1,743	-4.5%
33.3%	35,224	34,285	-939	-2.7%
34.6%	34,287	32,155	-2,132	-6.2%
35.8%	34,250	31,471	-2,779	-8.1%
37.0%	28,546	26,685	-1,861	-6.5%
38.3%	28,121	25,749	-2,371	-8.4%
39.5%	27,245	24,218	-3,027	-11.1%
40.7%	25,308	21,972	-3,337	-13.2%
42.0%	24,087	21,737	-2,350	-9.8%
43.2%	22,835	20,617	-2,218	-9.7%
44.4%	22,254	19,249	-3,005	-13.5%
45.7%	20,722	18,452	-2,270	-11.0%
46.9%	20,365	18,207	-2,158	-10.6%
48.1%	19,946	17,236	-2,711	-13.6%
49.4%	19,563	17,227	-2,337	-11.9%
50.6%	19,097	17,083	-2,014	-10.5%
51.9%	19,000	16,193	-2,806	-14.8%
53.1%	18,831	15,917	-2,913	-15.5%
54.3%	17,676	15,659	-2,016	-11.4%
55.6%	17,025	15,253	-1,771	-10.4%
56.8%	16,947	15,212	-1,735	-10.2%
58.0%	16,945	14,791	-2,154	-12.7%
59.3%	16,560	14,609	-1,951	-11.8%
60.5%	15,621	14,470	-1,151	-7.4%
61.7%	15,509	13,933	-1,576	-10.2%
63.0%	15,043	13,663	-1,380	-9.2%
64.2%	15,003	12,763	-2,240	-14.9%
65.4%	14,883	12,689	-2,194	-14.7%
66.7%	13,304	12,595	-709	-5.3%
67.9%	12,806	12,392	-414	-3.2%
69.1%	12,481	11,941	-541	-4.3%
70.4%	12,476	11,929	-547	-4.4%
71.6%	12,032	11,925	-107	-0.9%
72.8%	11,896	11,881	-16	-0.1%
74.1%	11,569	11,495	-74	-0.6%
75.3%	11,309	11,205	-104	-0.9%
76.5%	11,179	11,084	-95	-0.9%
77.8%	11,066	10,858	-208	-1.9%
79.0%	10,870	10,789	-81	-0.7%
80.2%	10,766	10,675	-91	-0.8%
81.5%	10,624	10,657	33	0.3%
82.7%	10,609	10,645	36	0.3%
84.0%	10,563	10,474	-89	-0.8%
85.2%	10,460	10,467	7	0.1%
86.4%	10,374	10,044	-330	-3.2%
87.7%	10,003	9,661	-341	-3.4%
88.9%	9,884	9,531	-353	-3.6%
90.1%	9,646	9,224	-423	-4.4%
91.4%	9,318	9,176	-142	-1.5%
92.6%	9,169	8,952	-218	-2.4%
93.8%	8,949	8,835	-114	-1.3%
95.1%	8,799	8,320	-479	-5.4%
96.3%	8,351	8,189	-161	-1.9%
97.5%	8,233	8,171	-62	-0.8%
98.8%	8,069	6,861	-1,208	-15.0%
100.0%	7,003	6,814	-189	-2.7%

Table SW-32-b
Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	184,697	186,473	1,776	1.0%
1.2%	177,775	181,981	4,206	2.4%
2.5%	135,036	161,149	26,113	19.3%
3.7%	131,359	134,984	3,625	2.8%
4.9%	126,753	126,629	-125	-0.1%
6.2%	110,648	110,734	86	0.1%
7.4%	105,219	106,227	1,008	1.0%
8.6%	105,127	101,744	-3,383	-3.2%
9.9%	102,344	100,988	-1,356	-1.3%
11.1%	101,266	99,941	-1,325	-1.3%
12.3%	98,254	96,064	-2,189	-2.2%
13.6%	84,064	82,710	-1,354	-1.6%
14.8%	83,100	80,828	-2,272	-2.7%
16.0%	79,000	79,180	180	0.2%
17.3%	72,636	69,388	-3,247	-4.5%
18.5%	71,548	68,943	-2,605	-3.6%
19.8%	68,168	68,084	-84	-0.1%
21.0%	62,541	59,832	-2,709	-4.3%
22.2%	61,587	57,897	-3,690	-6.0%
23.5%	58,731	57,883	-848	-1.4%
24.7%	58,543	57,738	-805	-1.4%
25.9%	58,383	54,622	-3,761	-6.4%
27.2%	55,533	54,475	-1,058	-1.9%
28.4%	53,983	53,973	-10	0.0%
29.6%	49,288	49,264	-25	0.0%
30.9%	49,248	47,587	-1,661	-3.4%
32.1%	48,922	46,053	-2,870	-5.9%
33.3%	47,765	45,622	-2,144	-4.5%
34.6%	47,610	45,255	-2,355	-4.9%
35.8%	46,375	45,088	-1,286	-2.8%
37.0%	44,800	45,064	264	0.6%
38.3%	44,666	42,037	-2,629	-5.9%
39.5%	42,684	39,807	-2,877	-6.7%
40.7%	42,026	39,533	-2,493	-5.9%
42.0%	40,178	38,011	-2,168	-5.4%
43.2%	39,252	37,899	-1,353	-3.4%
44.4%	38,027	37,027	-1,000	-2.6%
45.7%	32,340	31,062	-1,278	-4.0%
46.9%	32,158	28,969	-3,189	-9.9%
48.1%	31,049	28,597	-2,452	-7.9%
49.4%	30,853	28,525	-2,328	-7.5%
50.6%	30,736	27,663	-3,073	-10.0%
51.9%	29,723	27,073	-2,650	-8.9%
53.1%	29,355	25,921	-3,434	-11.7%
54.3%	28,803	25,710	-3,093	-10.7%
55.6%	26,455	24,108	-2,347	-8.9%
56.8%	23,666	21,905	-1,761	-7.4%
58.0%	23,177	21,510	-1,667	-7.2%
59.3%	23,161	20,774	-2,387	-10.3%
60.5%	22,379	20,649	-1,731	-7.7%
61.7%	22,349	19,857	-2,491	-11.1%
63.0%	21,670	19,737	-1,932	-8.9%
64.2%	21,586	19,116	-2,470	-11.4%
65.4%	20,834	18,986	-1,848	-8.9%
66.7%	20,676	17,060	-3,616	-17.5%
67.9%	18,099	14,959	-3,139	-17.3%
69.1%	16,471	14,876	-1,595	-9.7%
70.4%	15,852	14,660	-1,192	-7.5%
71.6%	15,546	14,617	-929	-6.0%
72.8%	15,350	14,485	-865	-5.6%
74.1%	15,230	14,473	-756	-5.0%
75.3%	15,175	14,172	-1,003	-6.6%
76.5%	15,159	13,924	-1,235	-8.1%
77.8%	14,093	13,543	-550	-3.9%
79.0%	13,956	12,761	-1,195	-8.6%
80.2%	13,343	12,502	-841	-6.3%
81.5%	13,109	12,491	-618	-4.7%
82.7%	13,054	12,068	-986	-7.5%
84.0%	12,746	11,718	-1,028	-8.1%
85.2%	12,381	11,261	-1,120	-9.0%
86.4%	12,005	11,218	-788	-6.6%
87.7%	11,658	10,951	-707	-6.1%
88.9%	11,202	10,950	-252	-2.2%
90.1%	11,153	10,890	-264	-2.4%
91.4%	11,018	10,267	-751	-6.8%
92.6%	10,717	10,158	-559	-5.2%
93.8%	10,681	10,120	-561	-5.3%
95.1%	10,190	10,072	-118	-1.2%
96.3%	8,262	8,124	-137	-1.7%
97.5%	7,571	7,658	87	1.2%
98.8%	7,309	7,502	193	2.6%
100.0%	6,895	6,900	5	0.1%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	191,686	198,068	6,382	3.3%
1.2%	182,491	176,956	-5,535	-3.0%
2.5%	127,923	126,406	-1,517	-1.2%
3.7%	108,427	103,168	-5,259	-4.9%
4.9%	101,057	95,256	-5,801	-5.7%
6.2%	95,238	85,440	-9,798	-10.3%
7.4%	91,044	79,903	-11,142	-12.2%
8.6%	76,218	76,353	135	0.2%
9.9%	70,924	70,848	-76	-0.1%
11.1%	67,588	67,497	-91	-0.1%
12.3%	63,183	63,379	196	0.3%
13.6%	62,203	62,258	55	0.1%
14.8%	61,593	61,578	-15	0.0%
16.0%	57,907	57,887	-20	0.0%
17.3%	57,684	55,415	-2,269	-3.9%
18.5%	53,781	52,382	-1,398	-2.6%
19.8%	52,497	51,883	-614	-1.2%
21.0%	49,243	48,212	-1,031	-2.1%
22.2%	45,836	47,735	1,900	4.1%
23.5%	44,699	45,994	1,295	2.9%
24.7%	43,712	40,805	-2,907	-6.6%
25.9%	43,002	39,182	-3,819	-8.9%
27.2%	38,845	35,242	-3,604	-9.3%
28.4%	38,450	35,097	-3,353	-8.7%
29.6%	35,131	34,997	-134	-0.4%
30.9%	35,004	33,417	-1,587	-4.5%
32.1%	34,138	31,911	-2,227	-6.5%
33.3%	32,999	30,921	-2,078	-6.3%
34.6%	32,963	29,982	-2,982	-9.0%
35.8%	31,935	29,903	-2,031	-6.4%
37.0%	31,178	28,440	-2,738	-8.8%
38.3%	30,016	28,204	-1,811	-6.0%
39.5%	29,490	26,691	-2,799	-9.5%
40.7%	28,542	25,900	-2,642	-9.3%
42.0%	28,320	22,919	-5,401	-19.1%
43.2%	27,119	22,497	-4,622	-17.0%
44.4%	25,013	22,428	-2,585	-10.3%
45.7%	24,454	21,308	-3,146	-12.9%
46.9%	23,307	21,255	-2,052	-8.8%
48.1%	22,846	21,150	-1,696	-7.4%
49.4%	22,586	20,071	-2,515	-11.1%
50.6%	21,319	19,116	-2,203	-10.3%
51.9%	21,022	19,005	-2,017	-9.6%
53.1%	20,685	18,465	-2,220	-10.7%
54.3%	20,425	18,247	-2,178	-10.7%
55.6%	19,856	18,247	-1,609	-8.1%
56.8%	19,078	18,135	-943	-4.9%
58.0%	18,264	16,924	-1,340	-7.3%
59.3%	18,154	16,635	-1,519	-8.4%
60.5%	17,695	16,498	-1,197	-6.8%
61.7%	16,952	14,793	-2,160	-12.7%
63.0%	16,528	14,747	-1,781	-10.8%
64.2%	16,526	14,256	-2,270	-13.7%
65.4%	16,416	14,248	-2,167	-13.2%
66.7%	16,197	14,009	-2,188	-13.5%
67.9%	16,070	13,682	-2,388	-14.9%
69.1%	15,882	13,490	-2,391	-15.1%
70.4%	15,767	13,129	-2,638	-16.7%
71.6%	15,396	12,833	-2,562	-16.6%
72.8%	14,664	12,560	-2,104	-14.3%
74.1%	14,615	11,828	-2,787	-19.1%
75.3%	14,159	11,311	-2,848	-20.1%
76.5%	13,011	11,170	-1,842	-14.2%
77.8%	12,880	10,776	-2,104	-16.3%
79.0%	12,456	10,479	-1,977	-15.9%
80.2%	11,724	10,364	-1,360	-11.6%
81.5%	11,146	10,309	-836	-7.5%
82.7%	10,479	10,112	-367	-3.5%
84.0%	9,872	9,982	110	1.1%
85.2%	9,524	9,958	434	4.6%
86.4%	9,401	9,428	27	0.3%
87.7%	8,940	9,423	482	5.4%
88.9%	8,527	8,771	243	2.9%
90.1%	8,516	8,658	141	1.7%
91.4%	8,469	8,416	-53	-0.6%
92.6%	8,329	8,326	-3	0.0%
93.8%	7,898	7,975	77	1.0%
95.1%	7,871	7,928	57	0.7%
96.3%	6,317	7,718	1,401	22.2%
97.5%	6,239	7,413	1,174	18.8%
98.8%	5,581	6,627	1,046	18.7%
100.0%	5,164	6,305	1,141	22.1%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	103,661	103,618	-44	0.0%
1.2%	80,015	78,189	-1,826	-2.3%
2.5%	72,407	72,677	270	0.4%
3.7%	60,414	60,296	-119	-0.2%
4.9%	59,393	54,027	-5,366	-9.0%
6.2%	56,565	53,915	-2,650	-4.7%
7.4%	53,879	53,724	-155	-0.3%
8.6%	53,344	53,318	-26	0.0%
9.9%	52,290	52,263	-27	-0.1%
11.1%	47,322	44,949	-2,374	-5.0%
12.3%	43,186	43,184	-2	0.0%
13.6%	40,088	39,948	-140	-0.3%
14.8%	39,948	38,060	-1,888	-4.7%
16.0%	39,712	37,080	-2,632	-6.6%
17.3%	37,029	37,035	6	0.0%
18.5%	36,810	35,044	-1,766	-4.8%
19.8%	35,048	34,978	-70	-0.2%
21.0%	34,328	34,382	53	0.2%
22.2%	32,467	31,726	-742	-2.3%
23.5%	31,545	29,943	-1,602	-5.1%
24.7%	31,019	28,622	-2,397	-7.7%
25.9%	21,545	21,416	-129	-0.6%
27.2%	21,458	20,958	-500	-2.3%
28.4%	21,256	19,209	-2,047	-9.6%
29.6%	21,067	19,045	-2,022	-9.6%
30.9%	20,164	18,673	-1,491	-7.4%
32.1%	19,953	18,622	-1,331	-6.7%
33.3%	19,111	17,945	-1,166	-6.1%
34.6%	17,954	17,944	-10	-0.1%
35.8%	17,927	17,819	-108	-0.6%
37.0%	17,819	17,329	-490	-2.8%
38.3%	17,402	17,178	-224	-1.3%
39.5%	16,804	16,297	-507	-3.0%
40.7%	16,694	16,090	-604	-3.6%
42.0%	16,185	15,815	-371	-2.3%
43.2%	15,526	15,229	-298	-1.9%
44.4%	14,437	14,380	-57	-0.4%
45.7%	14,367	14,270	-97	-0.7%
46.9%	14,269	14,063	-206	-1.4%
48.1%	13,405	13,399	-6	0.0%
49.4%	13,311	13,305	-7	-0.1%
50.6%	13,250	13,249	0	0.0%
51.9%	12,633	12,636	3	0.0%
53.1%	12,125	11,975	-149	-1.2%
54.3%	11,504	11,504	0	0.0%
55.6%	10,837	11,402	566	5.2%
56.8%	10,502	10,649	147	1.4%
58.0%	10,461	10,463	2	0.0%
59.3%	10,209	10,210	1	0.0%
60.5%	9,907	10,073	166	1.7%
61.7%	9,856	9,851	-5	-0.1%
63.0%	9,608	9,825	217	2.3%
64.2%	9,598	9,611	13	0.1%
65.4%	9,526	9,607	81	0.9%
66.7%	9,450	9,586	136	1.4%
67.9%	9,328	9,527	199	2.1%
69.1%	9,173	9,286	113	1.2%
70.4%	8,941	8,945	4	0.0%
71.6%	8,934	8,937	3	0.0%
72.8%	8,898	8,900	2	0.0%
74.1%	8,851	8,790	-62	-0.7%
75.3%	8,525	8,695	169	2.0%
76.5%	8,509	8,514	5	0.1%
77.8%	8,401	8,219	-181	-2.2%
79.0%	8,219	8,198	-21	-0.3%
80.2%	8,128	8,066	-62	-0.8%
81.5%	7,988	8,005	18	0.2%
82.7%	7,695	7,579	-116	-1.5%
84.0%	7,579	7,459	-119	-1.6%
85.2%	7,459	7,444	-15	-0.2%
86.4%	7,443	7,358	-85	-1.1%
87.7%	7,242	7,245	3	0.0%
88.9%	7,076	7,076	0	0.0%
90.1%	6,919	6,950	32	0.5%
91.4%	6,874	6,919	45	0.7%
92.6%	6,832	6,919	86	1.3%
93.8%	6,776	6,898	122	1.8%
95.1%	6,740	6,740	0	0.0%
96.3%	6,601	6,352	-249	-3.8%
97.5%	6,352	6,299	-54	-0.8%
98.8%	6,246	6,256	10	0.2%
100.0%	5,766	5,659	-107	-1.8%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	57,612	54,942	-2,670	-4.6%
1.2%	48,190	48,048	-141	-0.3%
2.5%	46,226	46,222	-4	0.0%
3.7%	44,256	44,110	-146	-0.3%
4.9%	39,488	39,519	31	0.1%
6.2%	37,057	37,061	5	0.0%
7.4%	36,077	35,807	-271	-0.8%
8.6%	35,347	35,206	-141	-0.4%
9.9%	34,926	34,802	-123	-0.4%
11.1%	33,722	33,607	-115	-0.3%
12.3%	33,498	33,307	-191	-0.6%
13.6%	31,820	31,485	-335	-1.1%
14.8%	31,442	31,288	-154	-0.5%
16.0%	25,526	26,747	1,221	4.8%
17.3%	25,519	25,423	-96	-0.4%
18.5%	23,864	22,993	-870	-3.6%
19.8%	23,149	22,827	-322	-1.4%
21.0%	21,697	21,705	9	0.0%
22.2%	20,886	21,096	209	1.0%
23.5%	20,578	20,591	13	0.1%
24.7%	19,284	18,089	-1,195	-6.2%
25.9%	18,220	17,423	-797	-4.4%
27.2%	15,648	15,558	-89	-0.6%
28.4%	15,128	14,700	-428	-2.8%
29.6%	14,357	13,937	-420	-2.9%
30.9%	13,847	13,819	-28	-0.2%
32.1%	13,834	13,633	-200	-1.4%
33.3%	13,744	12,355	-1,389	-10.1%
34.6%	12,372	12,202	-170	-1.4%
35.8%	12,220	11,957	-263	-2.2%
37.0%	12,024	11,943	-81	-0.7%
38.3%	11,378	11,370	-9	-0.1%
39.5%	11,369	11,246	-123	-1.1%
40.7%	11,247	11,109	-138	-1.2%
42.0%	10,920	10,920	0	0.0%
43.2%	10,792	10,793	2	0.0%
44.4%	10,601	10,602	1	0.0%
45.7%	10,280	10,565	285	2.8%
46.9%	10,280	10,276	-4	0.0%
48.1%	10,215	10,269	54	0.5%
49.4%	10,180	9,978	-202	-2.0%
50.6%	9,989	9,589	-400	-4.0%
51.9%	9,421	9,426	5	0.1%
53.1%	9,030	9,128	99	1.1%
54.3%	8,984	9,030	46	0.5%
55.6%	8,934	8,932	-2	0.0%
56.8%	8,854	8,854	0	0.0%
58.0%	8,789	8,790	1	0.0%
59.3%	8,772	8,777	5	0.1%
60.5%	8,728	8,731	3	0.0%
61.7%	8,700	8,657	-43	-0.5%
63.0%	8,655	8,410	-245	-2.8%
64.2%	8,030	8,135	105	1.3%
65.4%	7,850	8,030	181	2.3%
66.7%	7,751	7,929	178	2.3%
67.9%	7,728	7,744	15	0.2%
69.1%	7,728	7,737	9	0.1%
70.4%	7,706	7,732	26	0.3%
71.6%	7,684	7,731	47	0.6%
72.8%	7,554	7,685	131	1.7%
74.1%	7,445	7,470	25	0.3%
75.3%	7,435	7,425	-10	-0.1%
76.5%	7,380	7,411	31	0.4%
77.8%	7,365	7,365	0	0.0%
79.0%	7,254	7,224	-30	-0.4%
80.2%	6,952	6,943	-9	-0.1%
81.5%	6,519	6,752	233	3.6%
82.7%	6,517	6,522	5	0.1%
84.0%	6,254	6,499	245	3.9%
85.2%	6,246	6,483	238	3.8%
86.4%	6,104	6,306	202	3.3%
87.7%	6,010	6,104	94	1.6%
88.9%	5,974	5,962	-12	-0.2%
90.1%	5,888	5,726	-163	-2.8%
91.4%	5,725	5,678	-47	-0.8%
92.6%	5,599	5,620	21	0.4%
93.8%	5,479	5,482	2	0.0%
95.1%	5,126	5,299	173	3.4%
96.3%	4,498	4,031	-466	-10.4%
97.5%	4,031	3,913	-119	-2.9%
98.8%	3,979	3,692	-287	-7.2%
100.0%	3,105	3,291	186	6.0%

Table SW-32-b

Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	53,206	53,143	-63	-0.1%
1.2%	41,230	41,086	-144	-0.4%
2.5%	30,363	30,877	515	1.7%
3.7%	29,001	29,848	847	2.9%
4.9%	27,505	29,588	2,082	7.6%
6.2%	27,149	27,439	290	1.1%
7.4%	27,032	27,020	-13	0.0%
8.6%	22,522	23,390	868	3.9%
9.9%	20,116	15,263	-4,853	-24.1%
11.1%	14,505	14,966	461	3.2%
12.3%	14,347	13,763	-583	-4.1%
13.6%	13,965	13,632	-333	-2.4%
14.8%	13,272	13,264	-8	-0.1%
16.0%	12,334	12,508	174	1.4%
17.3%	12,088	12,326	238	2.0%
18.5%	12,031	12,022	-10	-0.1%
19.8%	12,027	11,587	-440	-3.7%
21.0%	11,244	11,421	177	1.6%
22.2%	10,766	10,757	-9	-0.1%
23.5%	9,376	9,548	172	1.8%
24.7%	9,153	9,188	35	0.4%
25.9%	8,829	9,014	185	2.1%
27.2%	8,765	9,012	247	2.8%
28.4%	8,752	8,795	43	0.5%
29.6%	8,681	8,763	83	1.0%
30.9%	8,486	8,755	269	3.2%
32.1%	8,406	8,733	327	3.9%
33.3%	8,311	8,323	13	0.2%
34.6%	8,201	8,311	110	1.3%
35.8%	8,028	8,303	275	3.4%
37.0%	7,953	8,175	222	2.8%
38.3%	7,850	8,045	195	2.5%
39.5%	7,643	7,889	247	3.2%
40.7%	7,597	7,820	222	2.9%
42.0%	7,502	7,746	244	3.3%
43.2%	7,494	7,604	110	1.5%
44.4%	7,389	7,597	208	2.8%
45.7%	7,388	7,504	116	1.6%
46.9%	7,309	7,401	92	1.3%
48.1%	7,304	7,291	-13	-0.2%
49.4%	7,294	7,270	-24	-0.3%
50.6%	7,290	7,243	-47	-0.6%
51.9%	7,270	7,223	-48	-0.7%
53.1%	7,243	7,174	-69	-1.0%
54.3%	7,223	7,164	-59	-0.8%
55.6%	7,174	7,146	-28	-0.4%
56.8%	6,938	7,118	180	2.6%
58.0%	6,899	7,072	173	2.5%
59.3%	6,886	7,059	172	2.5%
60.5%	6,874	7,005	131	1.9%
61.7%	6,840	6,996	157	2.3%
63.0%	6,832	6,840	7	0.1%
64.2%	6,830	6,833	3	0.0%
65.4%	6,757	6,832	75	1.1%
66.7%	6,722	6,832	110	1.6%
67.9%	6,703	6,830	128	1.9%
69.1%	6,690	6,759	69	1.0%
70.4%	6,659	6,714	55	0.8%
71.6%	6,392	6,662	269	4.2%
72.8%	6,383	6,659	276	4.3%
74.1%	6,345	6,486	141	2.2%
75.3%	6,185	6,415	230	3.7%
76.5%	6,153	6,392	240	3.9%
77.8%	6,111	6,277	166	2.7%
79.0%	5,963	6,184	221	3.7%
80.2%	5,665	6,137	472	8.3%
81.5%	5,645	5,937	293	5.2%
82.7%	5,492	5,893	401	7.3%
84.0%	5,491	5,637	146	2.7%
85.2%	5,469	5,493	24	0.4%
86.4%	5,467	5,332	-135	-2.5%
87.7%	5,294	5,294	0	0.0%
88.9%	5,273	5,273	0	0.0%
90.1%	4,977	4,977	0	0.0%
91.4%	4,958	4,958	0	0.0%
92.6%	4,316	4,329	13	0.3%
93.8%	3,556	4,046	489	13.8%
95.1%	3,451	3,751	300	8.7%
96.3%	3,381	3,620	240	7.1%
97.5%	3,359	3,531	172	5.1%
98.8%	3,236	3,451	215	6.6%
100.0%	3,152	3,354	202	6.4%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,421	14,544	123	0.9%
1.2%	14,315	14,445	130	0.9%
2.5%	14,306	14,323	16	0.1%
3.7%	14,294	14,306	12	0.1%
4.9%	14,288	14,305	17	0.1%
6.2%	14,248	14,294	46	0.3%
7.4%	14,206	14,283	77	0.5%
8.6%	13,985	14,266	281	2.0%
9.9%	13,952	14,156	204	1.5%
11.1%	13,927	14,121	194	1.4%
12.3%	13,850	14,024	173	1.3%
13.6%	13,828	13,939	111	0.8%
14.8%	13,711	13,931	220	1.6%
16.0%	13,514	13,855	341	2.5%
17.3%	13,467	13,712	245	1.8%
18.5%	13,410	13,501	90	0.7%
19.8%	13,397	13,353	-44	-0.3%
21.0%	13,212	13,289	77	0.6%
22.2%	12,987	13,281	294	2.3%
23.5%	12,964	12,987	23	0.2%
24.7%	12,908	12,964	56	0.4%
25.9%	12,906	12,812	-94	-0.7%
27.2%	12,834	12,785	-50	-0.4%
28.4%	12,813	12,690	-123	-1.0%
29.6%	12,359	12,359	0	0.0%
30.9%	12,029	12,219	190	1.6%
32.1%	11,941	11,942	0	0.0%
33.3%	11,877	11,894	17	0.1%
34.6%	11,849	11,836	-14	-0.1%
35.8%	11,793	11,812	19	0.2%
37.0%	11,676	11,793	117	1.0%
38.3%	11,644	11,752	108	0.9%
39.5%	11,520	11,604	83	0.7%
40.7%	11,483	11,544	61	0.5%
42.0%	11,426	11,460	34	0.3%
43.2%	11,385	11,425	40	0.4%
44.4%	11,367	11,385	18	0.2%
45.7%	11,333	11,348	15	0.1%
46.9%	11,316	11,327	11	0.1%
48.1%	11,316	11,327	12	0.1%
49.4%	11,292	11,315	22	0.2%
50.6%	11,255	11,291	36	0.3%
51.9%	11,239	11,284	44	0.4%
53.1%	11,222	11,236	14	0.1%
54.3%	11,077	11,204	126	1.1%
55.6%	11,043	11,118	75	0.7%
56.8%	11,033	11,083	50	0.5%
58.0%	11,029	11,078	49	0.4%
59.3%	10,879	11,001	122	1.1%
60.5%	10,756	10,929	172	1.6%
61.7%	10,548	10,842	294	2.8%
63.0%	10,495	10,821	326	3.1%
64.2%	10,363	10,759	396	3.8%
65.4%	10,103	10,718	615	6.1%
66.7%	9,902	10,364	462	4.7%
67.9%	9,856	9,993	136	1.4%
69.1%	9,726	9,975	248	2.6%
70.4%	9,605	9,937	332	3.5%
71.6%	9,545	9,545	0	0.0%
72.8%	9,545	9,545	0	0.0%
74.1%	9,505	9,469	-36	-0.4%
75.3%	9,469	9,390	-79	-0.8%
76.5%	9,190	9,353	163	1.8%
77.8%	9,052	9,052	0	0.0%
79.0%	8,714	8,958	244	2.8%
80.2%	8,063	8,651	589	7.3%
81.5%	7,944	8,615	671	8.4%
82.7%	7,731	8,181	450	5.8%
84.0%	7,583	7,955	372	4.9%
85.2%	7,512	7,945	433	5.8%
86.4%	7,126	7,712	586	8.2%
87.7%	6,944	7,550	606	8.7%
88.9%	6,834	7,533	699	10.2%
90.1%	6,707	6,753	46	0.7%
91.4%	6,396	6,550	154	2.4%
92.6%	5,766	5,313	-453	-7.9%
93.8%	4,325	4,937	612	14.2%
95.1%	3,800	4,786	986	26.0%
96.3%	3,796	4,497	702	18.5%
97.5%	3,655	4,479	824	22.6%
98.8%	3,647	3,825	177	4.9%
100.0%	3,618	3,632	14	0.4%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,745	12,411	666	5.7%
1.2%	11,745	12,317	572	4.9%
2.5%	10,461	10,522	61	0.6%
3.7%	10,166	10,416	250	2.5%
4.9%	10,143	10,296	153	1.5%
6.2%	10,056	10,284	228	2.3%
7.4%	10,019	10,202	183	1.8%
8.6%	9,971	10,192	222	2.2%
9.9%	9,896	10,168	273	2.8%
11.1%	9,893	10,164	271	2.7%
12.3%	9,884	10,140	256	2.6%
13.6%	9,850	10,086	236	2.4%
14.8%	9,811	10,074	263	2.7%
16.0%	9,750	10,062	312	3.2%
17.3%	9,730	10,056	326	3.3%
18.5%	9,619	10,018	399	4.1%
19.8%	9,610	10,009	399	4.2%
21.0%	9,609	9,973	364	3.8%
22.2%	9,532	9,940	408	4.3%
23.5%	9,525	9,922	398	4.2%
24.7%	9,513	9,850	337	3.5%
25.9%	9,413	9,742	329	3.5%
27.2%	9,380	9,730	351	3.7%
28.4%	9,377	9,690	313	3.3%
29.6%	9,366	9,631	264	2.8%
30.9%	9,337	9,499	162	1.7%
32.1%	9,281	9,413	131	1.4%
33.3%	9,278	9,382	104	1.1%
34.6%	9,267	9,377	110	1.2%
35.8%	9,260	9,352	92	1.0%
37.0%	9,240	9,346	106	1.1%
38.3%	9,158	9,337	179	2.0%
39.5%	9,024	9,337	313	3.5%
40.7%	8,980	9,260	280	3.1%
42.0%	8,962	9,195	232	2.6%
43.2%	8,946	9,129	183	2.0%
44.4%	8,788	9,095	307	3.5%
45.7%	8,716	9,087	371	4.3%
46.9%	8,713	9,024	311	3.6%
48.1%	8,697	9,013	317	3.6%
49.4%	8,629	8,993	364	4.2%
50.6%	8,609	8,966	357	4.1%
51.9%	8,576	8,963	387	4.5%
53.1%	8,571	8,837	266	3.1%
54.3%	8,559	8,692	133	1.6%
55.6%	8,496	8,629	133	1.6%
56.8%	8,315	8,496	181	2.2%
58.0%	8,281	8,486	204	2.5%
59.3%	8,245	8,479	233	2.8%
60.5%	8,070	8,475	405	5.0%
61.7%	7,780	8,270	491	6.3%
63.0%	7,717	8,157	440	5.7%
64.2%	7,342	8,114	771	10.5%
65.4%	7,174	8,081	908	12.7%
66.7%	6,644	8,054	1,410	21.2%
67.9%	6,637	7,983	1,346	20.3%
69.1%	6,548	7,747	1,199	18.3%
70.4%	6,297	7,209	912	14.5%
71.6%	5,999	7,168	1,170	19.5%
72.8%	5,900	7,156	1,256	21.3%
74.1%	5,897	6,920	1,023	17.3%
75.3%	5,820	6,895	1,075	18.5%
76.5%	5,708	6,756	1,048	18.4%
77.8%	5,662	6,699	1,037	18.3%
79.0%	5,645	6,562	917	16.2%
80.2%	5,380	6,561	1,182	22.0%
81.5%	5,152	6,458	1,305	25.3%
82.7%	5,012	6,387	1,375	27.4%
84.0%	4,940	6,321	1,381	27.9%
85.2%	4,862	6,064	1,202	24.7%
86.4%	4,644	5,689	1,045	22.5%
87.7%	4,509	5,677	1,168	25.9%
88.9%	4,474	5,601	1,127	25.2%
90.1%	4,285	5,483	1,198	28.0%
91.4%	4,045	5,227	1,181	29.2%
92.6%	3,759	4,963	1,204	32.0%
93.8%	3,752	4,835	1,084	28.9%
95.1%	3,546	4,783	1,236	34.9%
96.3%	3,353	4,721	1,368	40.8%
97.5%	3,259	4,545	1,285	39.4%
98.8%	3,182	4,294	1,113	35.0%
100.0%	3,171	3,673	502	15.8%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,650	26,050	400	1.6%
1.2%	24,736	25,448	712	2.9%
2.5%	24,682	25,189	506	2.1%
3.7%	24,677	25,029	351	1.4%
4.9%	24,670	24,960	290	1.2%
6.2%	24,541	24,917	377	1.5%
7.4%	24,536	24,812	276	1.1%
8.6%	24,225	24,730	505	2.1%
9.9%	24,198	24,657	459	1.9%
11.1%	24,106	24,625	519	2.2%
12.3%	24,060	24,577	518	2.2%
13.6%	24,023	24,543	520	2.2%
14.8%	23,923	24,473	550	2.3%
16.0%	23,910	24,470	560	2.3%
17.3%	23,860	24,366	506	2.1%
18.5%	23,829	24,285	455	1.9%
19.8%	23,608	24,185	577	2.4%
21.0%	23,468	23,985	517	2.2%
22.2%	22,958	23,718	760	3.3%
23.5%	22,912	20,180	-2,731	-11.9%
24.7%	22,745	14,991	-7,754	-34.1%
25.9%	14,762	14,974	212	1.4%
27.2%	14,696	14,762	66	0.4%
28.4%	14,695	14,761	66	0.4%
29.6%	14,684	14,470	-213	-1.5%
30.9%	14,632	14,356	-276	-1.9%
32.1%	14,399	14,140	-259	-1.8%
33.3%	14,053	14,065	12	0.1%
34.6%	13,849	14,031	182	1.3%
35.8%	13,614	13,953	339	2.5%
37.0%	13,590	13,863	273	2.0%
38.3%	13,383	13,841	458	3.4%
39.5%	13,090	13,840	750	5.7%
40.7%	13,019	13,749	730	5.6%
42.0%	12,999	13,342	343	2.6%
43.2%	12,892	13,201	309	2.4%
44.4%	12,789	12,966	177	1.4%
45.7%	11,916	12,873	957	8.0%
46.9%	9,160	9,710	550	6.0%
48.1%	9,007	9,602	595	6.6%
49.4%	8,880	9,368	488	5.5%
50.6%	8,792	9,266	474	5.4%
51.9%	8,571	9,242	671	7.8%
53.1%	8,449	9,005	556	6.6%
54.3%	8,429	8,999	570	6.8%
55.6%	8,146	8,755	609	7.5%
56.8%	8,094	8,646	552	6.8%
58.0%	8,075	8,556	482	6.0%
59.3%	8,033	8,485	452	5.6%
60.5%	7,907	8,480	572	7.2%
61.7%	7,717	8,467	750	9.7%
63.0%	6,694	8,432	1,738	26.0%
64.2%	6,611	8,218	1,607	24.3%
65.4%	6,603	8,200	1,596	24.2%
66.7%	6,206	8,165	1,959	31.6%
67.9%	5,959	8,081	2,122	35.6%
69.1%	5,908	7,484	1,575	26.7%
70.4%	5,812	7,297	1,485	25.6%
71.6%	5,769	7,264	1,495	25.9%
72.8%	5,726	7,094	1,368	23.9%
74.1%	5,578	7,023	1,445	25.9%
75.3%	5,185	6,982	1,798	34.7%
76.5%	5,000	6,904	1,904	38.1%
77.8%	4,772	6,754	1,982	41.5%
79.0%	4,758	6,667	1,908	40.1%
80.2%	4,528	6,621	2,093	46.2%
81.5%	4,484	6,441	1,957	43.7%
82.7%	4,323	6,292	1,969	45.6%
84.0%	4,299	6,273	1,974	45.9%
85.2%	4,214	6,094	1,880	44.6%
86.4%	4,030	6,092	2,062	51.2%
87.7%	4,013	6,070	2,058	51.3%
88.9%	3,762	6,042	2,280	60.6%
90.1%	3,334	5,877	2,543	76.3%
91.4%	3,152	5,506	2,353	74.7%
92.6%	3,006	4,368	1,362	45.3%
93.8%	3,000	4,099	1,099	36.6%
95.1%	3,000	3,977	977	32.6%
96.3%	3,000	3,951	951	31.7%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

Figure SW-33-b
Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

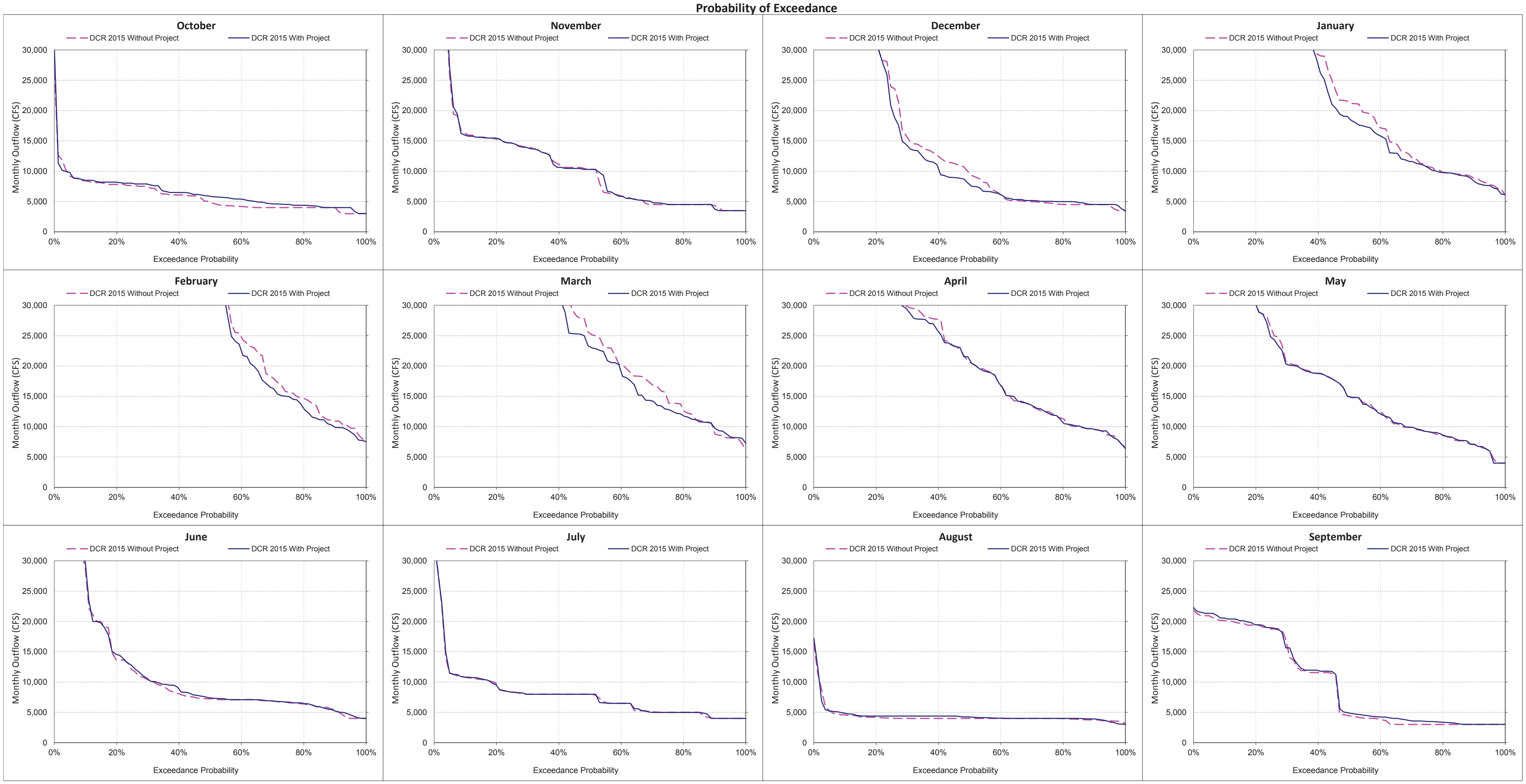


Table SW-33-b

Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,544	30,268	3,724	14.0%
1.2%	12,627	11,328	-1,300	-10.3%
2.5%	11,875	10,156	-1,719	-14.5%
3.7%	10,181	9,969	-212	-2.1%
4.9%	9,219	9,772	553	6.0%
6.2%	8,906	8,828	-78	-0.9%
7.4%	8,750	8,828	78	0.9%
8.6%	8,438	8,672	234	2.8%
9.9%	8,438	8,515	78	0.9%
11.1%	8,281	8,515	234	2.8%
12.3%	8,125	8,515	390	4.8%
13.6%	8,125	8,281	156	1.9%
14.8%	8,125	8,203	78	1.0%
16.0%	7,969	8,203	234	2.9%
17.3%	7,813	8,203	390	5.0%
18.5%	7,813	8,203	390	5.0%
19.8%	7,813	8,203	390	5.0%
21.0%	7,813	8,125	313	4.0%
22.2%	7,813	8,047	234	3.0%
23.5%	7,656	8,047	390	5.1%
24.7%	7,656	8,047	390	5.1%
25.9%	7,656	7,890	234	3.1%
27.2%	7,500	7,890	390	5.2%
28.4%	7,500	7,890	390	5.2%
29.6%	7,500	7,890	390	5.2%
30.9%	7,188	7,711	524	7.3%
32.1%	7,188	7,578	390	5.4%
33.3%	6,563	7,578	1,015	15.5%
34.6%	6,250	6,787	537	8.6%
35.8%	6,250	6,640	390	6.2%
37.0%	6,094	6,484	390	6.4%
38.3%	6,094	6,484	390	6.4%
39.5%	6,094	6,484	390	6.4%
40.7%	6,094	6,484	390	6.4%
42.0%	6,076	6,484	408	6.7%
43.2%	5,938	6,403	466	7.8%
44.4%	5,938	6,190	253	4.3%
45.7%	5,938	6,172	234	3.9%
46.9%	5,625	6,094	469	8.3%
48.1%	5,047	5,981	933	18.5%
49.4%	5,040	5,938	897	17.8%
50.6%	4,772	5,788	1,015	21.3%
51.9%	4,555	5,772	1,217	26.7%
53.1%	4,415	5,724	1,309	29.6%
54.3%	4,355	5,691	1,335	30.7%
55.6%	4,321	5,627	1,306	30.2%
56.8%	4,318	5,500	1,182	27.4%
58.0%	4,221	5,414	1,193	28.3%
59.3%	4,216	5,403	1,187	28.2%
60.5%	4,147	5,390	1,243	30.0%
61.7%	4,117	5,207	1,089	26.5%
63.0%	4,082	5,118	1,037	25.4%
64.2%	4,000	5,045	1,045	26.1%
65.4%	4,000	4,922	922	23.1%
66.7%	4,000	4,894	894	22.4%
67.9%	4,000	4,719	719	18.0%
69.1%	4,000	4,656	656	16.4%
70.4%	4,000	4,587	587	14.7%
71.6%	4,000	4,583	583	14.6%
72.8%	4,000	4,542	542	13.6%
74.1%	4,000	4,532	532	13.3%
75.3%	4,000	4,501	501	12.5%
76.5%	4,000	4,397	397	9.9%
77.8%	4,000	4,390	390	9.8%
79.0%	4,000	4,390	390	9.8%
80.2%	4,000	4,390	390	9.8%
81.5%	4,000	4,328	328	8.2%
82.7%	4,000	4,293	293	7.3%
84.0%	4,000	4,265	265	6.6%
85.2%	4,000	4,139	139	3.5%
86.4%	4,000	4,000	0	0.0%
87.7%	4,000	4,000	0	0.0%
88.9%	4,000	4,000	0	0.0%
90.1%	3,984	4,000	16	0.4%
91.4%	3,225	4,000	775	24.0%
92.6%	3,000	4,000	1,000	33.3%
93.8%	3,000	4,000	1,000	33.3%
95.1%	3,000	4,000	1,000	33.3%
96.3%	3,000	3,363	363	12.1%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	77,876	79,742	1,866	2.4%
1.2%	49,026	46,492	-2,534	-5.2%
2.5%	43,662	45,898	2,236	5.1%
3.7%	37,338	39,927	2,589	6.9%
4.9%	25,995	27,190	1,195	4.6%
6.2%	19,405	20,586	1,182	6.1%
7.4%	19,178	19,411	234	1.2%
8.6%	16,741	16,250	-491	-2.9%
9.9%	16,250	15,938	-313	-1.9%
11.1%	15,938	15,781	-156	-1.0%
12.3%	15,938	15,781	-156	-1.0%
13.6%	15,625	15,625	0	0.0%
14.8%	15,625	15,602	-23	-0.1%
16.0%	15,602	15,532	-70	-0.4%
17.3%	15,469	15,469	0	0.0%
18.5%	15,469	15,469	0	0.0%
19.8%	15,313	15,462	150	1.0%
21.0%	15,313	15,313	0	0.0%
22.2%	14,863	14,863	0	0.0%
23.5%	14,696	14,696	0	0.0%
24.7%	14,676	14,676	0	0.0%
25.9%	14,502	14,502	0	0.0%
27.2%	14,219	14,087	-133	-0.9%
28.4%	14,087	13,961	-126	-0.9%
29.6%	13,961	13,930	-30	-0.2%
30.9%	13,930	13,726	-204	-1.5%
32.1%	13,689	13,689	0	0.0%
33.3%	13,499	13,499	0	0.0%
34.6%	13,114	13,114	0	0.0%
35.8%	12,964	12,964	0	0.0%
37.0%	12,664	12,664	0	0.0%
38.3%	11,623	11,094	-529	-4.6%
39.5%	11,250	10,625	-625	-5.6%
40.7%	10,928	10,625	-303	-2.8%
42.0%	10,625	10,469	-156	-1.5%
43.2%	10,625	10,469	-156	-1.5%
44.4%	10,625	10,469	-156	-1.5%
45.7%	10,625	10,469	-156	-1.5%
46.9%	10,625	10,429	-196	-1.8%
48.1%	10,469	10,313	-156	-1.5%
49.4%	10,313	10,313	0	0.0%
50.6%	10,313	10,313	0	0.0%
51.9%	10,313	10,238	-75	-0.7%
53.1%	8,003	9,777	1,774	22.2%
54.3%	6,525	9,307	2,782	42.6%
55.6%	6,418	6,694	276	4.3%
56.8%	6,283	6,587	304	4.8%
58.0%	6,196	6,188	-8	-0.1%
59.3%	6,034	5,899	-135	-2.2%
60.5%	5,862	5,853	-9	-0.2%
61.7%	5,783	5,519	-264	-4.6%
63.0%	5,549	5,498	-52	-0.9%
64.2%	5,335	5,423	88	1.6%
65.4%	5,295	5,259	-37	-0.7%
66.7%	5,240	5,211	-28	-0.5%
67.9%	4,667	5,115	448	9.6%
69.1%	4,500	5,058	558	12.4%
70.4%	4,500	4,781	281	6.2%
71.6%	4,500	4,773	273	6.1%
72.8%	4,500	4,746	246	5.5%
74.1%	4,500	4,616	116	2.6%
75.3%	4,500	4,504	4	0.1%
76.5%	4,500	4,500	0	0.0%
77.8%	4,500	4,500	0	0.0%
79.0%	4,500	4,500	0	0.0%
80.2%	4,500	4,500	0	0.0%
81.5%	4,500	4,500	0	0.0%
82.7%	4,500	4,500	0	0.0%
84.0%	4,500	4,500	0	0.0%
85.2%	4,500	4,500	0	0.0%
86.4%	4,500	4,500	0	0.0%
87.7%	4,500	4,500	0	0.0%
88.9%	4,500	4,500	0	0.0%
90.1%	4,298	3,702	-596	-13.9%
91.4%	3,915	3,500	-415	-10.6%
92.6%	3,500	3,500	0	0.0%
93.8%	3,500	3,500	0	0.0%
95.1%	3,500	3,500	0	0.0%
96.3%	3,500	3,500	0	0.0%
97.5%	3,500	3,500	0	0.0%
98.8%	3,500	3,500	0	0.0%
100.0%	3,500	3,500	0	0.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	155,700	152,477	-3,223	-2.1%
1.2%	92,205	91,452	-753	-0.8%
2.5%	90,294	86,066	-4,228	-4.7%
3.7%	81,282	80,792	-490	-0.6%
4.9%	79,313	80,443	1,130	1.4%
6.2%	79,022	79,591	570	0.7%
7.4%	69,175	68,941	-234	-0.3%
8.6%	68,760	67,316	-1,444	-2.1%
9.9%	65,752	59,913	-5,839	-8.9%
11.1%	57,445	56,471	-973	-1.7%
12.3%	50,306	46,598	-3,707	-7.4%
13.6%	40,520	39,118	-1,402	-3.5%
14.8%	39,616	38,677	-939	-2.4%
16.0%	35,812	37,536	1,724	4.8%
17.3%	34,604	34,954	350	1.0%
18.5%	34,317	34,673	356	1.0%
19.8%	33,360	33,002	-358	-1.1%
21.0%	29,589	29,667	77	0.3%
22.2%	28,282	27,618	-664	-2.3%
23.5%	28,097	25,863	-2,234	-7.9%
24.7%	23,947	20,885	-3,062	-12.8%
25.9%	23,624	18,878	-4,747	-20.1%
27.2%	21,507	17,628	-3,879	-18.0%
28.4%	16,622	14,911	-1,712	-10.3%
29.6%	15,872	14,396	-1,476	-9.3%
30.9%	14,867	13,699	-1,168	-7.9%
32.1%	14,538	13,464	-1,074	-7.4%
33.3%	14,448	13,383	-1,065	-7.4%
34.6%	14,019	12,628	-1,391	-9.9%
35.8%	13,602	11,883	-1,719	-12.6%
37.0%	13,462	11,635	-1,827	-13.6%
38.3%	13,103	11,488	-1,615	-12.3%
39.5%	12,672	11,120	-1,552	-12.2%
40.7%	12,140	9,408	-2,732	-22.5%
42.0%	11,667	9,264	-2,404	-20.6%
43.2%	11,490	8,999	-2,490	-21.7%
44.4%	11,383	8,967	-2,415	-21.2%
45.7%	11,163	8,935	-2,228	-20.0%
46.9%	10,952	8,827	-2,126	-19.4%
48.1%	10,701	8,696	-2,004	-18.7%
49.4%	9,960	8,079	-1,881	-18.9%
50.6%	9,289	7,529	-1,760	-18.9%
51.9%	9,045	7,451	-1,594	-17.6%
53.1%	8,768	7,315	-1,454	-16.6%
54.3%	8,211	6,695	-1,517	-18.5%
55.6%	8,069	6,656	-1,413	-17.5%
56.8%	6,998	6,619	-379	-5.4%
58.0%	6,760	6,452	-308	-4.6%
59.3%	6,430	6,320	-110	-1.7%
60.5%	5,798	6,016	218	3.8%
61.7%	5,346	5,608	262	4.9%
63.0%	5,179	5,506	328	6.3%
64.2%	5,164	5,346	182	3.5%
65.4%	5,164	5,340	176	3.4%
66.7%	5,102	5,317	215	4.2%
67.9%	5,052	5,179	127	2.5%
69.1%	5,020	5,164	144	2.9%
70.4%	4,973	5,164	190	3.8%
71.6%	4,946	5,102	155	3.1%
72.8%	4,852	5,052	199	4.1%
74.1%	4,810	5,025	215	4.5%
75.3%	4,778	5,020	243	5.1%
76.5%	4,697	5,014	318	6.8%
77.8%	4,609	5,004	395	8.6%
79.0%	4,526	5,000	474	10.5%
80.2%	4,526	4,999	473	10.4%
81.5%	4,501	4,977	476	10.6%
82.7%	4,500	4,973	473	10.5%
84.0%	4,500	4,945	445	9.9%
85.2%	4,500	4,836	336	7.5%
86.4%	4,500	4,776	276	6.1%
87.7%	4,500	4,597	97	2.2%
88.9%	4,500	4,500	0	0.0%
90.1%	4,500	4,500	0	0.0%
91.4%	4,500	4,500	0	0.0%
92.6%	4,500	4,500	0	0.0%
93.8%	4,500	4,500	0	0.0%
95.1%	4,299	4,500	201	4.7%
96.3%	3,808	4,500	692	18.2%
97.5%	3,518	4,372	854	24.3%
98.8%	3,500	3,789	289	8.2%
100.0%	3,500	3,500	0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	280,190	280,101	-89	0.0%
1.2%	208,025	208,168	143	0.1%
2.5%	159,202	154,866	-4,336	-2.7%
3.7%	131,591	131,757	166	0.1%
4.9%	116,979	117,698	719	0.6%
6.2%	111,069	115,801	4,731	4.3%
7.4%	107,844	104,804	-3,041	-2.8%
8.6%	104,845	104,688	-157	-0.1%
9.9%	99,145	96,736	-2,409	-2.4%
11.1%	98,081	93,646	-4,434	-4.5%
12.3%	97,353	93,099	-4,254	-4.4%
13.6%	82,815	78,386	-4,429	-5.3%
14.8%	80,722	77,291	-3,431	-4.3%
16.0%	77,830	76,757	-1,073	-1.4%
17.3%	76,808	72,662	-4,146	-5.4%
18.5%	70,086	68,923	-1,163	-1.7%
19.8%	67,066	63,448	-3,618	-5.4%
21.0%	64,998	63,411	-1,587	-2.4%
22.2%	63,398	63,114	-284	-0.4%
23.5%	61,934	61,130	-804	-1.3%
24.7%	61,849	57,652	-4,197	-6.8%
25.9%	51,886	48,579	-3,307	-6.4%
27.2%	48,475	48,550	75	0.2%
28.4%	48,472	45,907	-2,565	-5.3%
29.6%	48,166	43,937	-4,229	-8.8%
30.9%	46,581	43,662	-2,919	-6.3%
32.1%	45,211	42,188	-3,024	-6.7%
33.3%	41,670	39,991	-1,679	-4.0%
34.6%	39,993	37,344	-2,649	-6.6%
35.8%	39,609	37,209	-2,400	-6.1%
37.0%	34,303	31,570	-2,733	-8.0%
38.3%	32,273	30,338	-1,935	-6.0%
39.5%	29,385	28,397	-988	-3.4%
40.7%	29,017	26,216	-2,801	-9.7%
42.0%	28,993	25,165	-3,828	-13.2%
43.2%	26,604	22,932	-3,672	-13.8%
44.4%	24,997	21,000	-3,997	-16.0%
45.7%	23,222	20,336	-2,886	-12.4%
46.9%	21,725	19,425	-2,300	-10.6%
48.1%	21,688	19,070	-2,619	-12.1%
49.4%	21,580	19,031	-2,548	-11.8%
50.6%	21,161	18,366	-2,794	-13.2%
51.9%	21,144	18,061	-3,083	-14.6%
53.1%	21,068	17,626	-3,442	-16.3%
54.3%	19,750	17,484	-2,267	-11.5%
55.6%	19,625	17,304	-2,321	-11.8%
56.8%	19,464	17,124	-2,340	-12.0%
58.0%	18,785	16,402	-2,383	-12.7%
59.3%	17,300	15,972	-1,328	-7.7%
60.5%	17,080	15,687	-1,393	-8.2%
61.7%	16,965	15,259	-1,705	-10.1%
63.0%	14,809	13,031	-1,779	-12.0%
64.2%	14,802	13,007	-1,795	-12.1%
65.4%	14,343	12,938	-1,406	-9.8%
66.7%	13,247	12,009	-1,238	-9.3%
67.9%	13,133	11,894	-1,239	-9.4%
69.1%	12,843	11,607	-1,236	-9.6%
70.4%	11,997	11,560	-437	-3.6%
71.6%	11,928	11,278	-650	-5.5%
72.8%	11,266	11,145	-121	-1.1%
74.1%	11,240	10,942	-299	-2.7%
75.3%	10,702	10,560	-142	-1.3%
76.5%	10,645	10,153	-492	-4.6%
77.8%	10,133	10,033	-101	-1.0%
79.0%	10,133	9,826	-307	-3.0%
80.2%	9,749	9,769	20	0.2%
81.5%	9,744	9,730	-13	-0.1%
82.7%	9,665	9,703	38	0.4%
84.0%	9,532	9,574	41	0.4%
85.2%	9,499	9,336	-164	-1.7%
86.4%	9,431	9,274	-158	-1.7%
87.7%	9,384	9,178	-206	-2.2%
88.9%	9,162	8,849	-314	-3.4%
90.1%	8,801	8,304	-497	-5.6%
91.4%	8,668	7,931	-737	-8.5%
92.6%	8,286	7,772	-515	-6.2%
93.8%	8,069	7,644	-426	-5.3%
95.1%	7,796	7,635	-161	-2.1%
96.3%	7,640	7,232	-408	-5.3%
97.5%	7,190	7,023	-167	-2.3%
98.8%	7,059	6,245	-814	-11.5%
100.0%	6,000	6,150	150	2.5%

Table SW-33-b
Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	219,222	220,972	1,749	0.8%
1.2%	213,228	218,089	4,861	2.3%
2.5%	183,454	182,663	-790	-0.4%
3.7%	144,364	174,622	30,258	21.0%
4.9%	139,383	138,799	-584	-0.4%
6.2%	138,927	133,839	-5,087	-3.7%
7.4%	134,210	132,674	-1,536	-1.1%
8.6%	131,943	131,685	-259	-0.2%
9.9%	123,307	124,331	1,024	0.8%
11.1%	122,693	122,780	87	0.1%
12.3%	113,494	111,214	-2,280	-2.0%
13.6%	102,278	101,764	-513	-0.5%
14.8%	102,162	98,913	-3,249	-3.2%
16.0%	95,586	95,771	186	0.2%
17.3%	85,148	81,585	-3,563	-4.2%
18.5%	83,752	81,520	-2,232	-2.7%
19.8%	78,527	79,557	1,030	1.3%
21.0%	78,473	78,418	-55	-0.1%
22.2%	75,664	75,607	-57	-0.1%
23.5%	72,827	70,053	-2,773	-3.8%
24.7%	72,452	68,786	-3,665	-5.1%
25.9%	70,845	68,556	-2,289	-3.2%
27.2%	69,671	66,330	-3,340	-4.8%
28.4%	66,907	65,915	-992	-1.5%
29.6%	57,804	57,541	-262	-0.5%
30.9%	57,567	55,175	-2,393	-4.2%
32.1%	56,525	54,311	-2,214	-3.9%
33.3%	55,336	52,949	-2,387	-4.3%
34.6%	54,301	52,929	-1,372	-2.5%
35.8%	54,057	52,069	-1,988	-3.7%
37.0%	53,883	51,355	-2,528	-4.7%
38.3%	52,741	51,141	-1,600	-3.0%
39.5%	52,054	49,671	-2,383	-4.6%
40.7%	47,372	45,310	-2,062	-4.4%
42.0%	47,233	43,632	-3,601	-7.6%
43.2%	46,390	41,884	-4,506	-9.7%
44.4%	44,827	41,621	-3,206	-7.2%
45.7%	41,769	40,351	-1,419	-3.4%
46.9%	40,380	39,918	-463	-1.1%
48.1%	39,617	35,601	-4,015	-10.1%
49.4%	36,521	34,019	-2,502	-6.9%
50.6%	36,150	33,084	-3,066	-8.5%
51.9%	36,137	31,910	-4,227	-11.7%
53.1%	35,232	31,829	-3,404	-9.7%
54.3%	34,259	31,782	-2,478	-7.2%
55.6%	31,043	28,359	-2,684	-8.6%
56.8%	26,865	24,919	-1,946	-7.2%
58.0%	25,511	24,097	-1,414	-5.5%
59.3%	25,467	23,560	-1,908	-7.5%
60.5%	24,300	21,692	-2,608	-10.7%
61.7%	23,744	21,566	-2,178	-9.2%
63.0%	23,217	20,371	-2,846	-12.3%
64.2%	22,948	19,912	-3,036	-13.2%
65.4%	22,021	19,074	-2,948	-13.4%
66.7%	21,723	17,665	-4,058	-18.7%
67.9%	18,750	17,128	-1,622	-8.7%
69.1%	18,388	16,518	-1,870	-10.2%
70.4%	17,936	16,256	-1,680	-9.4%
71.6%	17,290	15,354	-1,936	-11.2%
72.8%	16,812	15,114	-1,698	-10.1%
74.1%	15,812	15,036	-776	-4.9%
75.3%	15,652	14,931	-721	-4.6%
76.5%	15,517	14,506	-1,011	-6.5%
77.8%	14,956	14,427	-529	-3.5%
79.0%	14,752	13,776	-975	-6.6%
80.2%	14,606	12,777	-1,829	-12.5%
81.5%	14,296	12,226	-2,070	-14.5%
82.7%	13,814	11,575	-2,239	-16.2%
84.0%	13,526	11,400	-2,126	-15.7%
85.2%	12,036	11,145	-891	-7.4%
86.4%	11,489	11,114	-375	-3.3%
87.7%	11,145	10,491	-654	-5.9%
88.9%	11,067	10,283	-784	-7.1%
90.1%	10,917	9,841	-1,076	-9.9%
91.4%	10,910	9,834	-1,075	-9.9%
92.6%	10,262	9,805	-456	-4.4%
93.8%	10,208	9,550	-658	-6.4%
95.1%	9,766	9,115	-651	-6.7%
96.3%	9,713	8,636	-1,077	-11.1%
97.5%	8,636	7,774	-862	-10.0%
98.8%	7,999	7,714	-285	-3.6%
100.0%	7,521	7,528	6	0.1%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	262,148	268,450	6,302	2.4%
1.2%	210,242	204,696	-5,546	-2.6%
2.5%	166,583	165,755	-827	-0.5%
3.7%	141,548	138,673	-2,875	-2.0%
4.9%	117,388	108,601	-8,787	-7.5%
6.2%	108,582	99,036	-9,546	-8.8%
7.4%	104,815	95,843	-8,972	-8.6%
8.6%	89,051	90,195	1,145	1.3%
9.9%	86,769	86,658	-111	-0.1%
11.1%	83,273	83,138	-136	-0.2%
12.3%	82,641	82,562	-79	-0.1%
13.6%	82,331	82,494	162	0.2%
14.8%	75,048	75,258	211	0.3%
16.0%	68,979	68,938	-41	-0.1%
17.3%	68,024	63,888	-4,136	-6.1%
18.5%	67,183	62,642	-4,541	-6.8%
19.8%	64,563	62,573	-1,990	-3.1%
21.0%	64,251	61,866	-2,386	-3.7%
22.2%	62,180	60,934	-1,246	-2.0%
23.5%	61,057	60,746	-310	-0.5%
24.7%	55,037	56,948	1,910	3.5%
25.9%	54,393	56,455	2,062	3.8%
27.2%	49,118	44,515	-4,603	-9.4%
28.4%	47,149	42,947	-4,202	-8.9%
29.6%	46,148	40,495	-5,653	-12.2%
30.9%	39,549	39,961	412	1.0%
32.1%	38,582	38,519	-63	-0.2%
33.3%	38,527	38,091	-436	-1.1%
34.6%	38,120	36,148	-1,971	-5.2%
35.8%	37,437	34,018	-3,419	-9.1%
37.0%	36,366	34,009	-2,357	-6.5%
38.3%	36,225	31,422	-4,803	-13.3%
39.5%	34,771	31,105	-3,666	-10.5%
40.7%	34,668	30,566	-4,103	-11.8%
42.0%	31,221	28,883	-2,338	-7.5%
43.2%	30,738	25,413	-5,325	-17.3%
44.4%	29,162	25,331	-3,832	-13.1%
45.7%	28,238	25,271	-2,967	-10.5%
46.9%	27,829	25,260	-2,569	-9.2%
48.1%	27,824	24,975	-2,850	-10.2%
49.4%	25,591	23,316	-2,275	-8.9%
50.6%	25,149	22,995	-2,154	-8.6%
51.9%	24,987	22,858	-2,129	-8.5%
53.1%	24,632	22,596	-2,036	-8.3%
54.3%	23,299	22,394	-905	-3.9%
55.6%	23,004	20,885	-2,119	-9.2%
56.8%	22,931	20,556	-2,375	-10.4%
58.0%	21,740	20,522	-1,218	-5.6%
59.3%	20,314	20,247	-66	-0.3%
60.5%	20,173	18,294	-1,879	-9.3%
61.7%	19,558	18,045	-1,513	-7.7%
63.0%	18,935	17,562	-1,372	-7.2%
64.2%	18,353	16,909	-1,444	-7.9%
65.4%	18,327	15,211	-3,116	-17.0%
66.7%	18,267	15,182	-3,085	-16.9%
67.9%	17,826	14,353	-3,473	-19.5%
69.1%	17,290	14,338	-2,952	-17.1%
70.4%	16,747	14,172	-2,575	-15.4%
71.6%	16,568	13,502	-3,065	-18.5%
72.8%	15,907	13,449	-2,459	-15.5%
74.1%	15,683	12,925	-2,758	-17.6%
75.3%	13,866	12,806	-1,060	-7.6%
76.5%	13,847	12,516	-1,331	-9.6%
77.8%	13,826	12,208	-1,618	-11.7%
79.0%	13,755	12,100	-1,656	-12.0%
80.2%	12,516	11,738	-778	-6.2%
81.5%	12,208	11,568	-640	-5.2%
82.7%	12,038	11,219	-819	-6.8%
84.0%	11,154	11,136	-17	-0.2%
85.2%	11,034	10,805	-229	-2.1%
86.4%	10,779	10,740	-40	-0.4%
87.7%	10,773	10,692	-81	-0.8%
88.9%	10,625	10,590	-35	-0.3%
90.1%	8,763	9,729	966	11.0%
91.4%	8,573	9,315	742	8.7%
92.6%	8,524	9,239	714	8.4%
93.8%	8,160	8,773	613	7.5%
95.1%	8,131	8,294	163	2.0%
96.3%	8,102	8,160	57	0.7%
97.5%	8,003	8,158	154	1.9%
98.8%	7,239	8,073	834	11.5%
100.0%	6,088	7,239	1,150	18.9%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	140,892	141,434	543	0.4%
1.2%	105,544	105,807	262	0.2%
2.5%	98,027	96,156	-1,871	-1.9%
3.7%	91,045	85,013	-6,031	-6.6%
4.9%	79,248	79,109	-140	-0.2%
6.2%	78,906	78,828	-78	-0.1%
7.4%	77,153	76,966	-187	-0.2%
8.6%	73,855	70,981	-2,874	-3.9%
9.9%	70,872	70,845	-27	0.0%
11.1%	69,508	66,739	-2,768	-4.0%
12.3%	65,597	65,548	-49	-0.1%
13.6%	60,213	60,197	-16	0.0%
14.8%	60,170	60,192	22	0.0%
16.0%	56,652	56,652	0	0.0%
17.3%	55,630	52,240	-3,389	-6.1%
18.5%	53,992	52,114	-1,878	-3.5%
19.8%	52,559	50,450	-2,109	-4.0%
21.0%	48,271	47,329	-942	-2.0%
22.2%	47,268	45,171	-2,097	-4.4%
23.5%	42,736	41,831	-906	-2.1%
24.7%	41,590	40,351	-1,239	-3.0%
25.9%	34,693	34,568	-125	-0.4%
27.2%	31,717	31,669	-48	-0.2%
28.4%	30,198	29,928	-269	-0.9%
29.6%	29,908	29,483	-425	-1.4%
30.9%	29,578	28,690	-888	-3.0%
32.1%	29,484	27,866	-1,617	-5.5%
33.3%	29,310	27,748	-1,562	-5.3%
34.6%	28,699	27,712	-987	-3.4%
35.8%	27,988	27,630	-357	-1.3%
37.0%	27,953	26,999	-954	-3.4%
38.3%	27,791	26,953	-838	-3.0%
39.5%	27,710	26,000	-1,710	-6.2%
40.7%	27,599	25,162	-2,437	-8.8%
42.0%	24,145	23,823	-322	-1.3%
43.2%	24,060	23,792	-268	-1.1%
44.4%	23,447	23,381	-66	-0.3%
45.7%	23,193	23,147	-47	-0.2%
46.9%	22,727	23,059	332	1.5%
48.1%	21,700	21,528	-172	-0.8%
49.4%	20,854	21,507	653	3.1%
50.6%	20,455	20,448	-8	0.0%
51.9%	20,062	20,066	4	0.0%
53.1%	19,589	19,542	-48	-0.2%
54.3%	19,540	19,197	-343	-1.8%
55.6%	19,195	19,035	-160	-0.8%
56.8%	19,034	18,893	-141	-0.7%
58.0%	18,507	18,494	-13	-0.1%
59.3%	17,257	17,251	-6	0.0%
60.5%	16,491	16,486	-5	0.0%
61.7%	15,409	15,132	-277	-1.8%
63.0%	14,971	15,065	95	0.6%
64.2%	14,277	14,978	701	4.9%
65.4%	14,170	14,171	1	0.0%
66.7%	13,973	14,156	183	1.3%
67.9%	13,919	13,920	1	0.0%
69.1%	13,689	13,683	-5	0.0%
70.4%	13,208	13,403	195	1.5%
71.6%	12,928	13,000	72	0.6%
72.8%	12,583	12,931	347	2.8%
74.1%	12,499	12,481	-18	-0.1%
75.3%	12,481	12,207	-274	-2.2%
76.5%	12,116	11,908	-208	-1.7%
77.8%	11,705	11,877	172	1.5%
79.0%	11,445	11,243	-202	-1.8%
80.2%	11,243	10,472	-770	-6.9%
81.5%	10,412	10,416	4	0.0%
82.7%	10,106	10,313	206	2.0%
84.0%	10,024	10,131	107	1.1%
85.2%	9,931	10,113	182	1.8%
86.4%	9,829	9,830	0	0.0%
87.7%	9,673	9,673	0	0.0%
88.9%	9,673	9,673	0	0.0%
90.1%	9,513	9,558	46	0.5%
91.4%	9,427	9,427	0	0.0%
92.6%	9,227	9,300	73	0.8%
93.8%	8,652	9,300	648	7.5%
95.1%	8,559	8,562	3	0.0%
96.3%	8,482	8,134	-348	-4.1%
97.5%	7,817	7,817	0	0.0%
98.8%	7,100	7,100	0	0.0%
100.0%	6,510	6,387	-123	-1.9%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	87,006	84,132	-2,874	-3.3%
1.2%	75,294	75,207	-87	-0.1%
2.5%	70,716	70,466	-250	-0.4%
3.7%	69,441	69,203	-238	-0.3%
4.9%	60,373	60,071	-302	-0.5%
6.2%	59,690	59,628	-61	-0.1%
7.4%	54,740	54,776	35	0.1%
8.6%	54,496	54,267	-229	-0.4%
9.9%	51,827	51,607	-220	-0.4%
11.1%	48,785	48,653	-132	-0.3%
12.3%	48,262	48,126	-136	-0.3%
13.6%	46,526	47,871	1,345	2.9%
14.8%	45,057	44,880	-178	-0.4%
16.0%	38,957	38,846	-111	-0.3%
17.3%	38,922	38,536	-387	-1.0%
18.5%	30,927	30,748	-179	-0.6%
19.8%	30,419	30,515	97	0.3%
21.0%	28,871	28,881	10	0.0%
22.2%	28,562	28,577	15	0.1%
23.5%	28,279	27,229	-1,050	-3.7%
24.7%	26,431	24,815	-1,616	-6.1%
25.9%	24,966	24,287	-679	-2.7%
27.2%	24,803	23,357	-1,446	-5.8%
28.4%	23,459	22,618	-841	-3.6%
29.6%	20,825	20,330	-494	-2.4%
30.9%	20,422	20,094	-328	-1.6%
32.1%	20,196	20,067	-128	-0.6%
33.3%	20,110	19,938	-172	-0.9%
34.6%	19,586	19,560	-26	-0.1%
35.8%	19,348	19,217	-132	-0.7%
37.0%	19,213	19,039	-174	-0.9%
38.3%	18,832	18,814	-18	-0.1%
39.5%	18,808	18,796	-11	-0.1%
40.7%	18,800	18,747	-53	-0.3%
42.0%	18,537	18,535	-1	0.0%
43.2%	18,268	18,170	-98	-0.5%
44.4%	17,902	17,881	-21	-0.1%
45.7%	17,507	17,505	-3	0.0%
46.9%	17,068	17,058	-9	-0.1%
48.1%	16,387	16,374	-13	-0.1%
49.4%	15,012	15,011	-1	0.0%
50.6%	14,811	14,844	33	0.2%
51.9%	14,776	14,815	39	0.3%
53.1%	14,659	14,776	117	0.8%
54.3%	14,048	13,688	-360	-2.6%
55.6%	13,687	13,661	-26	-0.2%
56.8%	13,655	13,186	-470	-3.4%
58.0%	12,925	12,873	-52	-0.4%
59.3%	12,490	12,263	-226	-1.8%
60.5%	12,262	11,951	-310	-2.5%
61.7%	11,513	11,695	181	1.6%
63.0%	11,116	11,519	403	3.6%
64.2%	10,496	10,710	214	2.0%
65.4%	10,468	10,587	119	1.1%
66.7%	9,970	10,468	498	5.0%
67.9%	9,923	9,954	31	0.3%
69.1%	9,902	9,902	0	0.0%
70.4%	9,879	9,881	2	0.0%
71.6%	9,512	9,622	110	1.2%
72.8%	9,404	9,513	109	1.2%
74.1%	9,261	9,225	-35	-0.4%
75.3%	9,147	9,174	27	0.3%
76.5%	9,059	9,021	-38	-0.4%
77.8%	8,744	9,014	270	3.1%
79.0%	8,634	8,865	230	2.7%
80.2%	8,507	8,542	36	0.4%
81.5%	8,317	8,329	13	0.2%
82.7%	8,166	8,294	128	1.6%
84.0%	7,742	7,994	252	3.3%
85.2%	7,665	7,746	81	1.1%
86.4%	7,662	7,698	36	0.5%
87.7%	7,407	7,665	258	3.5%
88.9%	7,100	7,100	0	0.0%
90.1%	7,031	7,100	69	1.0%
91.4%	6,875	6,734	-141	-2.1%
92.6%	6,534	6,719	184	2.8%
93.8%	6,342	6,344	3	0.0%
95.1%	5,998	5,998	0	0.0%
96.3%	4,671	4,000	-671	-14.4%
97.5%	4,000	4,000	0	0.0%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

Table SW-33-b
Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	69,915	69,746	-169	-0.2%
1.2%	66,247	67,547	1,300	2.0%
2.5%	38,940	39,608	668	1.7%
3.7%	38,738	39,473	735	1.9%
4.9%	36,933	37,944	1,011	2.7%
6.2%	35,598	37,162	1,564	4.4%
7.4%	35,379	35,364	-15	0.0%
8.6%	31,713	31,601	-112	-0.4%
9.9%	28,819	29,819	1,001	3.5%
11.1%	22,075	23,378	1,303	5.9%
12.3%	21,108	19,994	-1,114	-5.3%
13.6%	20,013	19,980	-33	-0.2%
14.8%	20,006	19,775	-230	-1.2%
16.0%	19,120	18,973	-148	-0.8%
17.3%	18,987	17,766	-1,221	-6.4%
18.5%	14,854	15,106	252	1.7%
19.8%	13,696	14,561	865	6.3%
21.0%	13,650	14,379	729	5.3%
22.2%	13,643	13,806	162	1.2%
23.5%	13,182	13,169	-13	-0.1%
24.7%	12,111	12,764	653	5.4%
25.9%	11,665	12,129	464	4.0%
27.2%	10,926	11,676	750	6.9%
28.4%	10,800	11,044	244	2.3%
29.6%	10,484	10,633	149	1.4%
30.9%	10,096	10,128	32	0.3%
32.1%	9,920	10,081	161	1.6%
33.3%	9,563	9,920	357	3.7%
34.6%	9,383	9,643	260	2.8%
35.8%	9,000	9,586	586	6.5%
37.0%	8,543	9,484	941	11.0%
38.3%	8,353	9,460	1,106	13.2%
39.5%	8,157	9,130	973	11.9%
40.7%	7,921	8,341	420	5.3%
42.0%	7,700	8,317	617	8.0%
43.2%	7,577	8,173	596	7.9%
44.4%	7,533	7,910	377	5.0%
45.7%	7,384	7,801	417	5.6%
46.9%	7,262	7,700	438	6.0%
48.1%	7,250	7,577	327	4.5%
49.4%	7,243	7,420	177	2.4%
50.6%	7,243	7,320	77	1.1%
51.9%	7,133	7,291	157	2.2%
53.1%	7,100	7,243	143	2.0%
54.3%	7,100	7,243	143	2.0%
55.6%	7,100	7,133	33	0.5%
56.8%	7,100	7,100	0	0.0%
58.0%	7,100	7,100	0	0.0%
59.3%	7,100	7,100	0	0.0%
60.5%	7,100	7,100	0	0.0%
61.7%	7,100	7,100	0	0.0%
63.0%	7,100	7,100	0	0.0%
64.2%	7,100	7,100	0	0.0%
65.4%	7,008	7,099	91	1.3%
66.7%	6,932	7,026	94	1.4%
67.9%	6,929	6,922	-7	-0.1%
69.1%	6,875	6,910	36	0.5%
70.4%	6,846	6,875	29	0.4%
71.6%	6,753	6,784	31	0.5%
72.8%	6,724	6,764	41	0.6%
74.1%	6,707	6,713	7	0.1%
75.3%	6,563	6,707	144	2.2%
76.5%	6,563	6,573	10	0.2%
77.8%	6,448	6,563	115	1.8%
79.0%	6,437	6,563	126	2.0%
80.2%	6,373	6,448	74	1.2%
81.5%	6,232	6,375	143	2.3%
82.7%	6,219	6,173	-46	-0.7%
84.0%	5,938	5,968	30	0.5%
85.2%	5,930	5,910	-20	-0.3%
86.4%	5,910	5,693	-217	-3.7%
87.7%	5,770	5,556	-214	-3.7%
88.9%	5,538	5,469	-69	-1.2%
90.1%	5,469	5,209	-259	-4.7%
91.4%	4,967	5,006	39	0.8%
92.6%	4,550	5,000	450	9.9%
93.8%	4,078	4,816	738	18.1%
95.1%	4,000	4,538	538	13.5%
96.3%	4,000	4,319	319	8.0%
97.5%	4,000	4,100	100	2.5%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,678	33,465	-213	-0.6%
1.2%	28,347	28,145	-201	-0.7%
2.5%	22,491	22,993	502	2.2%
3.7%	14,048	14,999	951	6.8%
4.9%	11,490	11,491	1	0.0%
6.2%	11,246	11,273	27	0.2%
7.4%	11,031	11,250	219	2.0%
8.6%	11,009	10,880	-129	-1.2%
9.9%	10,782	10,798	16	0.1%
11.1%	10,692	10,787	96	0.9%
12.3%	10,592	10,726	133	1.3%
13.6%	10,523	10,709	186	1.8%
14.8%	10,437	10,529	92	0.9%
16.0%	10,385	10,404	20	0.2%
17.3%	10,237	10,310	74	0.7%
18.5%	10,072	9,847	-225	-2.2%
19.8%	9,843	9,580	-264	-2.7%
21.0%	8,709	8,731	22	0.3%
22.2%	8,548	8,608	59	0.7%
23.5%	8,457	8,462	5	0.1%
24.7%	8,375	8,322	-53	-0.6%
25.9%	8,320	8,269	-51	-0.6%
27.2%	8,193	8,237	44	0.5%
28.4%	8,000	8,212	212	2.7%
29.6%	8,000	8,000	0	0.0%
30.9%	8,000	8,000	0	0.0%
32.1%	8,000	8,000	0	0.0%
33.3%	8,000	8,000	0	0.0%
34.6%	8,000	8,000	0	0.0%
35.8%	8,000	8,000	0	0.0%
37.0%	8,000	8,000	0	0.0%
38.3%	8,000	8,000	0	0.0%
39.5%	8,000	8,000	0	0.0%
40.7%	8,000	8,000	0	0.0%
42.0%	8,000	8,000	0	0.0%
43.2%	8,000	8,000	0	0.0%
44.4%	8,000	8,000	0	0.0%
45.7%	8,000	8,000	0	0.0%
46.9%	8,000	8,000	0	0.0%
48.1%	8,000	8,000	0	0.0%
49.4%	8,000	8,000	0	0.0%
50.6%	8,000	8,000	0	0.0%
51.9%	7,805	7,974	169	2.2%
53.1%	7,291	6,594	-697	-9.6%
54.3%	6,788	6,560	-228	-3.4%
55.6%	6,500	6,525	25	0.4%
56.8%	6,500	6,500	0	0.0%
58.0%	6,500	6,500	0	0.0%
59.3%	6,500	6,500	0	0.0%
60.5%	6,500	6,500	0	0.0%
61.7%	6,500	6,500	0	0.0%
63.0%	6,500	6,500	0	0.0%
64.2%	5,319	5,639	320	6.0%
65.4%	5,280	5,568	288	5.5%
66.7%	5,260	5,299	40	0.8%
67.9%	5,169	5,223	54	1.1%
69.1%	5,145	5,041	-105	-2.0%
70.4%	5,076	5,000	-76	-1.5%
71.6%	5,036	5,000	-36	-0.7%
72.8%	5,000	5,000	0	0.0%
74.1%	5,000	5,000	0	0.0%
75.3%	5,000	5,000	0	0.0%
76.5%	5,000	5,000	0	0.0%
77.8%	5,000	5,000	0	0.0%
79.0%	5,000	5,000	0	0.0%
80.2%	5,000	5,000	0	0.0%
81.5%	5,000	5,000	0	0.0%
82.7%	5,000	5,000	0	0.0%
84.0%	5,000	5,000	0	0.0%
85.2%	5,000	5,000	0	0.0%
86.4%	4,338	4,873	535	12.3%
87.7%	4,216	4,713	497	11.8%
88.9%	4,000	4,029	29	0.7%
90.1%	4,000	4,000	0	0.0%
91.4%	4,000	4,000	0	0.0%
92.6%	4,000	4,000	0	0.0%
93.8%	4,000	4,000	0	0.0%
95.1%	4,000	4,000	0	0.0%
96.3%	4,000	4,000	0	0.0%
97.5%	4,000	4,000	0	0.0%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,421	17,264	843	5.1%
1.2%	11,468	12,450	982	8.6%
2.5%	8,788	6,774	-2,014	-22.9%
3.7%	5,899	5,460	-439	-7.4%
4.9%	5,303	5,253	-50	-0.9%
6.2%	4,871	5,145	273	5.6%
7.4%	4,694	5,119	425	9.0%
8.6%	4,593	5,003	410	8.9%
9.9%	4,577	4,871	294	6.4%
11.1%	4,477	4,716	238	5.3%
12.3%	4,458	4,709	250	5.6%
13.6%	4,444	4,531	87	2.0%
14.8%	4,258	4,434	175	4.1%
16.0%	4,212	4,401	190	4.5%
17.3%	4,202	4,399	197	4.7%
18.5%	4,189	4,398	209	5.0%
19.8%	4,184	4,390	207	4.9%
21.0%	4,124	4,390	266	6.5%
22.2%	4,095	4,390	295	7.2%
23.5%	4,073	4,390	317	7.8%
24.7%	4,046	4,390	344	8.5%
25.9%	4,005	4,390	386	9.6%
27.2%	4,000	4,390	390	9.8%
28.4%	4,000	4,390	390	9.8%
29.6%	4,000	4,390	390	9.8%
30.9%	4,000	4,390	390	9.8%
32.1%	4,000	4,390	390	9.8%
33.3%	4,000	4,390	390	9.8%
34.6%	4,000	4,390	390	9.8%
35.8%	4,000	4,390	390	9.8%
37.0%	4,000	4,390	390	9.8%
38.3%	4,000	4,390	390	9.8%
39.5%	4,000	4,390	390	9.8%
40.7%	4,000	4,390	390	9.8%
42.0%	4,000	4,390	390	9.8%
43.2%	4,000	4,390	390	9.8%
44.4%	4,000	4,390	390	9.8%
45.7%	4,000	4,390	390	9.8%
46.9%	4,000	4,317	317	7.9%
48.1%	4,000	4,247	247	6.2%
49.4%	4,000	4,235	235	5.9%
50.6%	4,000	4,212	212	5.3%
51.9%	4,000	4,186	186	4.6%
53.1%	4,000	4,140	140	3.5%
54.3%	4,000	4,138	138	3.5%
55.6%	4,000	4,133	133	3.3%
56.8%	4,000	4,102	102	2.5%
58.0%	4,000	4,055	55	1.4%
59.3%	4,000	4,043	43	1.1%
60.5%	4,000	4,023	23	0.6%
61.7%	4,000	4,000	0	0.0%
63.0%	4,000	4,000	0	0.0%
64.2%	4,000	4,000	0	0.0%
65.4%	4,000	4,000	0	0.0%
66.7%	4,000	4,000	0	0.0%
67.9%	4,000	4,000	0	0.0%
69.1%	4,000	4,000	0	0.0%
70.4%	4,000	4,000	0	0.0%
71.6%	4,000	4,000	0	0.0%
72.8%	4,000	4,000	0	0.0%
74.1%	4,000	4,000	0	0.0%
75.3%	4,000	4,000	0	0.0%
76.5%	4,000	4,000	0	0.0%
77.8%	4,000	4,000	0	0.0%
79.0%	4,000	4,000	0	0.0%
80.2%	3,968	4,000	32	0.8%
81.5%	3,925	4,000	75	1.9%
82.7%	3,891	4,000	109	2.8%
84.0%	3,889	4,000	111	2.9%
85.2%	3,788	4,000	212	5.6%
86.4%	3,785	3,947	163	4.3%
87.7%	3,769	3,926	157	4.2%
88.9%	3,769	3,924	155	4.1%
90.1%	3,765	3,918	154	4.1%
91.4%	3,726	3,834	108	2.9%
92.6%	3,620	3,760	140	3.9%
93.8%	3,605	3,600	-5	-0.1%
95.1%	3,580	3,420	-160	-4.5%
96.3%	3,559	3,301	-258	-7.3%
97.5%	3,544	3,084	-461	-13.0%
98.8%	3,500	3,061	-439	-12.6%
100.0%	3,100	3,000	-100	-3.2%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Outflow (CFS)	DCR 2015 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,875	22,278	403	1.8%
1.2%	21,250	21,653	403	1.9%
2.5%	20,938	21,497	560	2.7%
3.7%	20,938	21,341	403	1.9%
4.9%	20,938	21,341	403	1.9%
6.2%	20,625	21,341	716	3.5%
7.4%	20,313	21,028	716	3.5%
8.6%	20,156	20,560	403	2.0%
9.9%	20,143	20,560	417	2.1%
11.1%	20,078	20,403	325	1.6%
12.3%	20,000	20,403	403	2.0%
13.6%	19,844	20,403	560	2.8%
14.8%	19,688	20,156	469	2.4%
16.0%	19,688	20,091	403	2.0%
17.3%	19,375	19,935	560	2.9%
18.5%	19,375	19,778	403	2.1%
19.8%	19,375	19,466	91	0.5%
21.0%	19,375	19,466	91	0.5%
22.2%	19,063	19,375	313	1.6%
23.5%	19,063	18,997	-65	-0.3%
24.7%	18,750	18,975	225	1.2%
25.9%	18,750	18,841	91	0.5%
27.2%	18,594	18,750	156	0.8%
28.4%	18,594	18,216	-378	-2.0%
29.6%	16,981	15,655	-1,326	-7.8%
30.9%	14,063	15,625	1,563	11.1%
32.1%	13,594	13,841	247	1.8%
33.3%	12,344	12,903	560	4.5%
34.6%	11,875	12,278	403	3.4%
35.8%	11,875	11,966	91	0.8%
37.0%	11,563	11,966	403	3.5%
38.3%	11,563	11,966	403	3.5%
39.5%	11,563	11,966	403	3.5%
40.7%	11,563	11,810	247	2.1%
42.0%	11,563	11,810	247	2.1%
43.2%	11,563	11,810	247	2.1%
44.4%	11,406	11,728	322	2.8%
45.7%	10,938	11,185	247	2.3%
46.9%	4,699	5,603	904	19.2%
48.1%	4,617	5,055	438	9.5%
49.4%	4,487	4,940	453	10.1%
50.6%	4,389	4,827	438	10.0%
51.9%	4,269	4,732	462	10.8%
53.1%	4,163	4,649	486	11.7%
54.3%	4,053	4,553	501	12.3%
55.6%	4,045	4,480	435	10.7%
56.8%	4,014	4,378	364	9.1%
58.0%	4,008	4,283	275	6.9%
59.3%	3,904	4,245	341	8.7%
60.5%	3,774	4,212	438	11.6%
61.7%	3,639	4,200	561	15.4%
63.0%	3,072	4,065	993	32.3%
64.2%	3,055	4,018	963	31.5%
65.4%	3,000	4,008	1,008	33.6%
66.7%	3,000	3,879	879	29.3%
67.9%	3,000	3,794	794	26.5%
69.1%	3,000	3,650	650	21.7%
70.4%	3,000	3,581	581	19.4%
71.6%	3,000	3,565	565	18.8%
72.8%	3,000	3,551	551	18.4%
74.1%	3,000	3,547	547	18.2%
75.3%	3,000	3,478	478	15.9%
76.5%	3,000	3,463	463	15.4%
77.8%	3,000	3,453	453	15.1%
79.0%	3,000	3,402	402	13.4%
80.2%	3,000	3,371	371	12.4%
81.5%	3,000	3,298	298	9.9%
82.7%	3,000	3,268	268	8.9%
84.0%	3,000	3,242	242	8.1%
85.2%	3,000	3,080	80	2.7%
86.4%	3,000	3,000	0	0.0%
87.7%	3,000	3,000	0	0.0%
88.9%	3,000	3,000	0	0.0%
90.1%	3,000	3,000	0	0.0%
91.4%	3,000	3,000	0	0.0%
92.6%	3,000	3,000	0	0.0%
93.8%	3,000	3,000	0	0.0%
95.1%	3,000	3,000	0	0.0%
96.3%	3,000	3,000	0	0.0%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

Figure SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

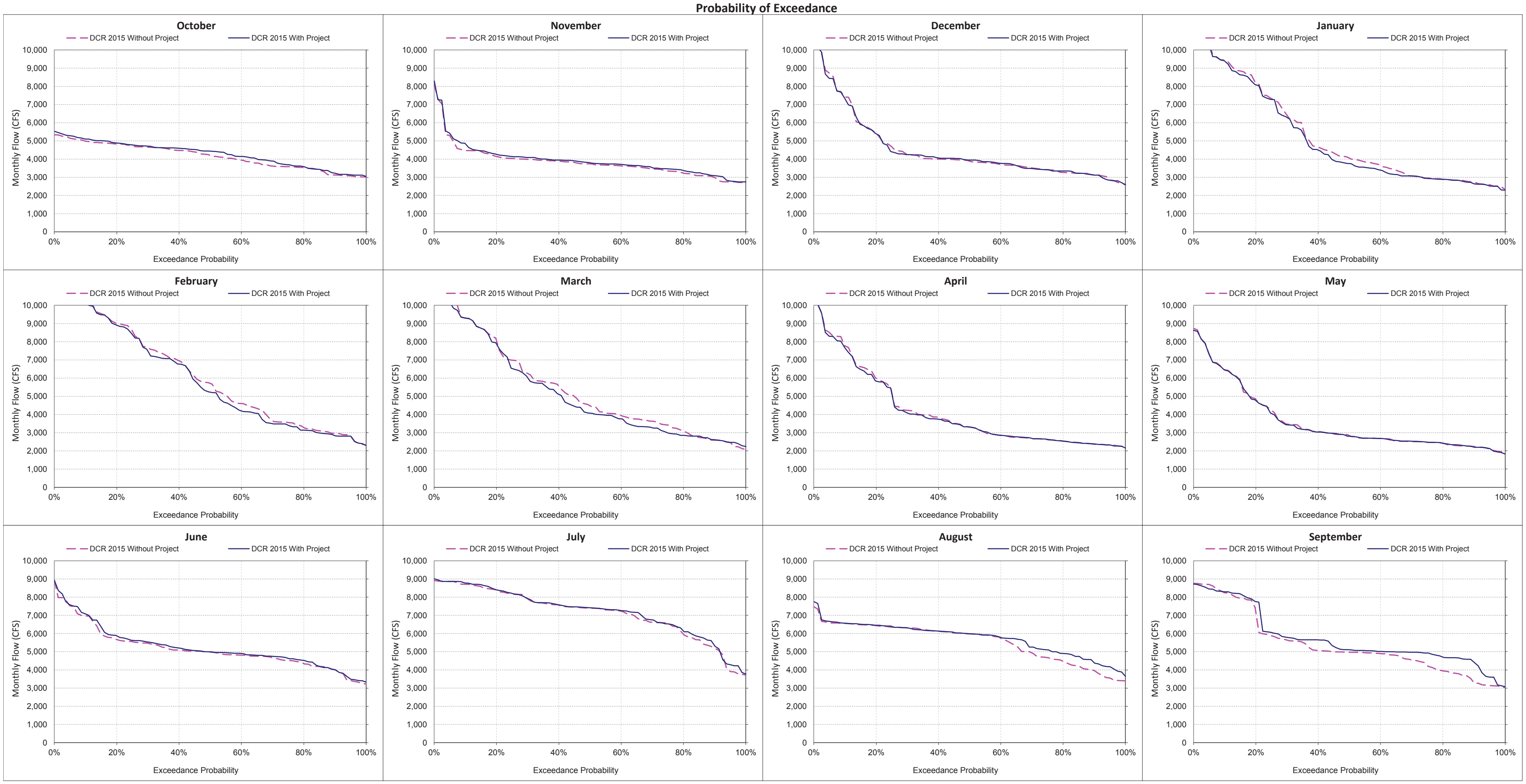


Table SW-34-b

Delta Cross Channel, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,335	5,524	189	3.5%
1.2%	5,329	5,452	123	2.3%
2.5%	5,261	5,380	119	2.3%
3.7%	5,260	5,316	56	1.1%
4.9%	5,153	5,292	139	2.7%
6.2%	5,109	5,251	142	2.8%
7.4%	5,087	5,186	99	2.0%
8.6%	5,062	5,165	102	2.0%
9.9%	4,992	5,102	110	2.2%
11.1%	4,963	5,102	139	2.8%
12.3%	4,914	5,037	123	2.5%
13.6%	4,914	5,021	107	2.2%
14.8%	4,898	5,012	114	2.3%
16.0%	4,887	5,000	113	2.3%
17.3%	4,876	4,992	116	2.4%
18.5%	4,857	4,912	56	1.1%
19.8%	4,835	4,894	59	1.2%
21.0%	4,827	4,874	47	1.0%
22.2%	4,820	4,844	25	0.5%
23.5%	4,768	4,796	28	0.6%
24.7%	4,767	4,788	22	0.5%
25.9%	4,682	4,760	77	1.7%
27.2%	4,681	4,729	49	1.0%
28.4%	4,678	4,725	47	1.0%
29.6%	4,660	4,719	59	1.3%
30.9%	4,647	4,697	50	1.1%
32.1%	4,638	4,647	9	0.2%
33.3%	4,622	4,625	3	0.1%
34.6%	4,614	4,625	11	0.2%
35.8%	4,586	4,613	27	0.6%
37.0%	4,542	4,610	69	1.5%
38.3%	4,495	4,610	115	2.6%
39.5%	4,480	4,606	126	2.8%
40.7%	4,474	4,589	115	2.6%
42.0%	4,462	4,574	112	2.5%
43.2%	4,445	4,544	99	2.2%
44.4%	4,402	4,526	124	2.8%
45.7%	4,378	4,520	142	3.3%
46.9%	4,283	4,457	175	4.1%
48.1%	4,270	4,450	180	4.2%
49.4%	4,246	4,445	199	4.7%
50.6%	4,152	4,428	276	6.6%
51.9%	4,145	4,413	268	6.5%
53.1%	4,114	4,392	278	6.8%
54.3%	4,093	4,380	287	7.0%
55.6%	4,045	4,261	216	5.3%
56.8%	4,044	4,252	208	5.1%
58.0%	3,999	4,162	163	4.1%
59.3%	3,949	4,152	203	5.1%
60.5%	3,933	4,141	208	5.3%
61.7%	3,863	4,121	258	6.7%
63.0%	3,860	4,076	215	5.6%
64.2%	3,785	4,054	269	7.1%
65.4%	3,780	3,978	197	5.2%
66.7%	3,697	3,958	260	7.0%
67.9%	3,697	3,939	242	6.6%
69.1%	3,632	3,898	267	7.3%
70.4%	3,610	3,886	276	7.6%
71.6%	3,598	3,775	177	4.9%
72.8%	3,597	3,734	137	3.8%
74.1%	3,587	3,701	114	3.2%
75.3%	3,585	3,683	98	2.7%
76.5%	3,578	3,625	47	1.3%
77.8%	3,554	3,617	63	1.8%
79.0%	3,544	3,613	70	2.0%
80.2%	3,541	3,578	38	1.1%
81.5%	3,495	3,493	-2	-0.1%
82.7%	3,459	3,483	24	0.7%
84.0%	3,443	3,442	-1	0.0%
85.2%	3,381	3,437	55	1.6%
86.4%	3,313	3,380	66	2.0%
87.7%	3,145	3,378	233	7.4%
88.9%	3,131	3,262	131	4.2%
90.1%	3,124	3,216	92	2.9%
91.4%	3,121	3,161	40	1.3%
92.6%	3,093	3,160	67	2.2%
93.8%	3,084	3,158	73	2.4%
95.1%	3,082	3,137	55	1.8%
96.3%	3,042	3,121	79	2.6%
97.5%	3,037	3,121	84	2.8%
98.8%	3,022	3,117	95	3.2%
100.0%	3,012	3,042	30	1.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,121	8,296	175	2.2%
1.2%	7,287	7,263	-24	-0.3%
2.5%	7,040	7,247	207	2.9%
3.7%	5,336	5,548	212	4.0%
4.9%	5,305	5,433	128	2.4%
6.2%	4,971	5,112	141	2.8%
7.4%	4,581	5,019	438	9.6%
8.6%	4,531	4,885	353	7.8%
9.9%	4,470	4,870	399	8.9%
11.1%	4,470	4,632	162	3.6%
12.3%	4,466	4,532	66	1.5%
13.6%	4,462	4,485	23	0.5%
14.8%	4,439	4,465	26	0.6%
16.0%	4,335	4,452	117	2.7%
17.3%	4,296	4,376	80	1.9%
18.5%	4,226	4,321	95	2.3%
19.8%	4,155	4,278	123	3.0%
21.0%	4,107	4,222	115	2.8%
22.2%	4,064	4,207	143	3.5%
23.5%	4,050	4,180	130	3.2%
24.7%	4,043	4,149	106	2.6%
25.9%	4,033	4,137	105	2.6%
27.2%	4,009	4,134	125	3.1%
28.4%	4,001	4,115	114	2.9%
29.6%	3,990	4,095	105	2.6%
30.9%	3,976	4,085	109	2.7%
32.1%	3,974	4,083	110	2.8%
33.3%	3,944	4,032	88	2.2%
34.6%	3,937	4,001	63	1.6%
35.8%	3,937	3,999	62	1.6%
37.0%	3,912	3,976	64	1.6%
38.3%	3,909	3,948	40	1.0%
39.5%	3,884	3,945	61	1.6%
40.7%	3,878	3,942	64	1.7%
42.0%	3,850	3,928	78	2.0%
43.2%	3,844	3,927	83	2.2%
44.4%	3,837	3,923	86	2.2%
45.7%	3,792	3,894	102	2.7%
46.9%	3,750	3,854	105	2.8%
48.1%	3,746	3,831	85	2.3%
49.4%	3,741	3,823	82	2.2%
50.6%	3,737	3,774	37	1.0%
51.9%	3,677	3,766	88	2.4%
53.1%	3,676	3,747	71	1.9%
54.3%	3,675	3,747	71	1.9%
55.6%	3,669	3,737	68	1.9%
56.8%	3,661	3,736	74	2.0%
58.0%	3,648	3,728	80	2.2%
59.3%	3,641	3,718	76	2.1%
60.5%	3,620	3,697	77	2.1%
61.7%	3,617	3,673	56	1.5%
63.0%	3,601	3,666	64	1.8%
64.2%	3,586	3,651	65	1.8%
65.4%	3,572	3,641	69	1.9%
66.7%	3,537	3,619	82	2.3%
67.9%	3,516	3,590	73	2.1%
69.1%	3,478	3,588	110	3.2%
70.4%	3,448	3,503	55	1.6%
71.6%	3,444	3,496	53	1.5%
72.8%	3,428	3,481	53	1.5%
74.1%	3,365	3,471	106	3.1%
75.3%	3,340	3,454	113	3.4%
76.5%	3,329	3,451	123	3.7%
77.8%	3,320	3,430	110	3.3%
79.0%	3,275	3,418	143	4.4%
80.2%	3,215	3,360	145	4.5%
81.5%	3,202	3,322	121	3.8%
82.7%	3,191	3,290	99	3.1%
84.0%	3,099	3,250	151	4.9%
85.2%	3,091	3,247	156	5.0%
86.4%	3,089	3,195	106	3.4%
87.7%	3,080	3,165	85	2.8%
88.9%	3,053	3,100	47	1.5%
90.1%	2,979	3,089	110	3.7%
91.4%	2,797	3,063	267	9.5%
92.6%	2,755	3,033	278	10.1%
93.8%	2,753	2,831	78	2.8%
95.1%	2,752	2,796	44	1.6%
96.3%	2,748	2,776	27	1.0%
97.5%	2,720	2,753	33	1.2%
98.8%	2,714	2,752	37	1.4%
100.0%	2,622	2,745	122	4.7%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,261	11,217	-44	-0.4%
1.2%	10,478	10,147	-331	-3.2%
2.5%	9,805	9,875	69	0.7%
3.7%	8,893	8,686	-207	-2.3%
4.9%	8,731	8,446	-285	-3.3%
6.2%	8,543	8,426	-117	-1.4%
7.4%	7,744	7,738	-6	-0.1%
8.6%	7,717	7,689	-28	-0.4%
9.9%	7,420	7,345	-75	-1.0%
11.1%	7,405	6,979	-426	-5.8%
12.3%	6,965	6,912	-53	-0.8%
13.6%	6,061	6,316	256	4.2%
14.8%	5,981	5,915	-66	-1.1%
16.0%	5,809	5,822	13	0.2%
17.3%	5,746	5,686	-60	-1.0%
18.5%	5,606	5,612	5	0.1%
19.8%	5,462	5,411	-51	-0.9%
21.0%	5,223	5,302	79	1.5%
22.2%	4,922	4,857	-66	-1.3%
23.5%	4,866	4,773	-93	-1.9%
24.7%	4,722	4,424	-299	-6.3%
25.9%	4,521	4,358	-163	-3.6%
27.2%	4,455	4,286	-169	-3.8%
28.4%	4,424	4,284	-139	-3.1%
29.6%	4,284	4,249	-35	-0.8%
30.9%	4,231	4,249	18	0.4%
32.1%	4,226	4,235	9	0.2%
33.3%	4,193	4,226	33	0.8%
34.6%	4,033	4,223	190	4.7%
35.8%	4,029	4,147	118	2.9%
37.0%	4,026	4,135	109	2.7%
38.3%	4,009	4,132	123	3.1%
39.5%	4,006	4,068	62	1.5%
40.7%	4,000	4,047	47	1.2%
42.0%	3,992	4,045	54	1.3%
43.2%	3,983	4,041	59	1.5%
44.4%	3,980	4,041	60	1.5%
45.7%	3,964	4,037	73	1.8%
46.9%	3,956	4,037	81	2.0%
48.1%	3,947	3,974	28	0.7%
49.4%	3,919	3,950	30	0.8%
50.6%	3,853	3,948	95	2.5%
51.9%	3,849	3,947	98	2.5%
53.1%	3,824	3,912	88	2.3%
54.3%	3,818	3,867	49	1.3%
55.6%	3,800	3,866	66	1.7%
56.8%	3,779	3,843	64	1.7%
58.0%	3,771	3,818	47	1.2%
59.3%	3,725	3,779	54	1.5%
60.5%	3,687	3,758	72	1.9%
61.7%	3,670	3,754	84	2.3%
63.0%	3,669	3,742	73	2.0%
64.2%	3,650	3,687	37	1.0%
65.4%	3,639	3,612	-27	-0.7%
66.7%	3,603	3,532	-71	-2.0%
67.9%	3,563	3,493	-70	-2.0%
69.1%	3,546	3,487	-59	-1.7%
70.4%	3,500	3,473	-27	-0.8%
71.6%	3,484	3,449	-35	-1.0%
72.8%	3,443	3,429	-14	-0.4%
74.1%	3,423	3,420	-3	-0.1%
75.3%	3,406	3,411	5	0.2%
76.5%	3,399	3,353	-46	-1.3%
77.8%	3,374	3,345	-30	-0.9%
79.0%	3,279	3,344	65	2.0%
80.2%	3,268	3,343	75	2.3%
81.5%	3,250	3,342	92	2.8%
82.7%	3,244	3,336	92	2.8%
84.0%	3,224	3,226	3	0.1%
85.2%	3,220	3,221	0	0.0%
86.4%	3,219	3,220	1	0.0%
87.7%	3,211	3,169	-42	-1.3%
88.9%	3,147	3,142	-5	-0.2%
90.1%	3,129	3,122	-8	-0.2%
91.4%	3,127	3,117	-10	-0.3%
92.6%	3,075	2,969	-106	-3.5%
93.8%	3,039	2,873	-166	-5.5%
95.1%	2,846	2,833	-14	-0.5%
96.3%	2,820	2,804	-16	-0.6%
97.5%	2,711	2,804	93	3.4%
98.8%	2,679	2,708	29	1.1%
100.0%	2,579	2,594	15	0.6%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,396	11,396	0	0.0%
1.2%	11,306	11,306	0	0.0%
2.5%	11,054	10,986	-68	-0.6%
3.7%	10,705	10,708	3	0.0%
4.9%	10,386	10,337	-49	-0.5%
6.2%	9,732	9,643	-89	-0.9%
7.4%	9,594	9,629	35	0.4%
8.6%	9,465	9,458	-8	-0.1%
9.9%	9,445	9,416	-29	-0.3%
11.1%	9,344	9,210	-134	-1.4%
12.3%	9,084	8,863	-221	-2.4%
13.6%	8,875	8,806	-68	-0.8%
14.8%	8,854	8,642	-213	-2.4%
16.0%	8,802	8,612	-190	-2.2%
17.3%	8,641	8,542	-99	-1.1%
18.5%	8,638	8,302	-336	-3.9%
19.8%	8,234	8,104	-129	-1.6%
21.0%	8,114	8,039	-75	-0.9%
22.2%	7,517	7,455	-62	-0.8%
23.5%	7,501	7,357	-144	-1.9%
24.7%	7,352	7,286	-66	-0.9%
25.9%	7,258	7,265	7	0.1%
27.2%	7,122	6,539	-582	-8.2%
28.4%	6,793	6,417	-376	-5.5%
29.6%	6,504	6,333	-171	-2.6%
30.9%	6,204	6,204	0	0.0%
32.1%	6,179	5,728	-451	-7.3%
33.3%	6,015	5,719	-296	-4.9%
34.6%	6,014	5,606	-408	-6.8%
35.8%	5,278	5,203	-75	-1.4%
37.0%	5,035	4,708	-328	-6.5%
38.3%	4,731	4,536	-195	-4.1%
39.5%	4,678	4,527	-151	-3.2%
40.7%	4,611	4,441	-170	-3.7%
42.0%	4,520	4,275	-245	-5.4%
43.2%	4,466	4,249	-217	-4.9%
44.4%	4,389	3,977	-411	-9.4%
45.7%	4,274	3,879	-395	-9.2%
46.9%	4,159	3,848	-311	-7.5%
48.1%	4,156	3,796	-360	-8.7%
49.4%	4,113	3,755	-358	-8.7%
50.6%	3,999	3,752	-247	-6.2%
51.9%	3,980	3,625	-355	-8.9%
53.1%	3,938	3,562	-376	-9.6%
54.3%	3,880	3,556	-324	-8.4%
55.6%	3,826	3,538	-288	-7.5%
56.8%	3,807	3,499	-308	-8.1%
58.0%	3,751	3,496	-256	-6.8%
59.3%	3,711	3,414	-297	-8.0%
60.5%	3,587	3,375	-212	-5.9%
61.7%	3,550	3,261	-290	-8.2%
63.0%	3,481	3,187	-294	-8.4%
64.2%	3,446	3,158	-289	-8.4%
65.4%	3,355	3,140	-216	-6.4%
66.7%	3,285	3,069	-217	-6.6%
67.9%	3,203	3,069	-134	-4.2%
69.1%	3,080	3,069	-11	-0.4%
70.4%	3,063	3,069	5	0.2%
71.6%	3,043	3,061	18	0.6%
72.8%	3,033	3,019	-14	-0.4%
74.1%	2,960	2,940	-20	-0.7%
75.3%	2,951	2,935	-16	-0.5%
76.5%	2,933	2,918	-15	-0.5%
77.8%	2,919	2,902	-17	-0.6%
79.0%	2,918	2,889	-29	-1.0%
80.2%	2,883	2,887	3	0.1%
81.5%	2,882	2,870	-11	-0.4%
82.7%	2,851	2,845	-6	-0.2%
84.0%	2,843	2,839	-4	-0.1%
85.2%	2,836	2,836	0	0.0%
86.4%	2,824	2,782	-42	-1.5%
87.7%	2,776	2,738	-38	-1.4%
88.9%	2,758	2,713	-45	-1.6%
90.1%	2,735	2,636	-99	-3.6%
91.4%	2,655	2,625	-30	-1.1%
92.6%	2,627	2,622	-6	-0.2%
93.8%	2,616	2,585	-31	-1.2%
95.1%	2,588	2,514	-74	-2.9%
96.3%	2,519	2,506	-12	-0.5%
97.5%	2,516	2,506	-9	-0.4%
98.8%	2,476	2,307	-170	-6.9%
100.0%	2,328	2,297	-31	-1.3%

Table SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,293	11,292	0	0.0%
1.2%	11,120	11,119	-1	0.0%
2.5%	10,829	10,830	1	0.0%
3.7%	10,649	10,723	74	0.7%
4.9%	10,454	10,665	211	2.0%
6.2%	10,338	10,390	51	0.5%
7.4%	10,255	10,301	46	0.5%
8.6%	10,236	10,234	-3	0.0%
9.9%	10,146	10,174	28	0.3%
11.1%	10,084	9,997	-87	-0.9%
12.3%	9,985	9,955	-30	-0.3%
13.6%	9,639	9,577	-61	-0.6%
14.8%	9,559	9,487	-72	-0.8%
16.0%	9,474	9,472	-2	0.0%
17.3%	9,300	9,305	5	0.1%
18.5%	9,122	9,010	-113	-1.2%
19.8%	9,018	8,931	-88	-1.0%
21.0%	8,984	8,850	-135	-1.5%
22.2%	8,929	8,820	-109	-1.2%
23.5%	8,887	8,706	-181	-2.0%
24.7%	8,690	8,464	-226	-2.6%
25.9%	8,293	8,197	-96	-1.2%
27.2%	8,189	8,188	-1	0.0%
28.4%	7,746	7,698	-47	-0.6%
29.6%	7,702	7,595	-106	-1.4%
30.9%	7,583	7,222	-360	-4.8%
32.1%	7,540	7,187	-353	-4.7%
33.3%	7,424	7,151	-273	-3.7%
34.6%	7,360	7,092	-268	-3.6%
35.8%	7,251	7,073	-178	-2.5%
37.0%	7,113	7,069	-45	-0.6%
38.3%	7,098	6,934	-164	-2.3%
39.5%	6,996	6,771	-225	-3.2%
40.7%	6,890	6,759	-131	-1.9%
42.0%	6,708	6,687	-21	-0.3%
43.2%	6,401	6,425	25	0.4%
44.4%	6,194	5,951	-242	-3.9%
45.7%	5,950	5,745	-204	-3.4%
46.9%	5,827	5,502	-325	-5.6%
48.1%	5,775	5,340	-436	-7.5%
49.4%	5,750	5,246	-504	-8.8%
50.6%	5,666	5,210	-456	-8.0%
51.9%	5,281	5,200	-80	-1.5%
53.1%	5,224	4,834	-390	-7.5%
54.3%	5,120	4,681	-440	-8.6%
55.6%	4,982	4,624	-358	-7.2%
56.8%	4,742	4,492	-251	-5.3%
58.0%	4,648	4,376	-272	-5.8%
59.3%	4,606	4,235	-371	-8.0%
60.5%	4,601	4,163	-439	-9.5%
61.7%	4,516	4,156	-360	-8.0%
63.0%	4,434	4,136	-298	-6.7%
64.2%	4,380	4,085	-295	-6.7%
65.4%	4,303	4,058	-246	-5.7%
66.7%	4,230	3,729	-500	-11.8%
67.9%	3,999	3,551	-448	-11.2%
69.1%	3,762	3,519	-243	-6.5%
70.4%	3,610	3,483	-127	-3.5%
71.6%	3,587	3,483	-104	-2.9%
72.8%	3,586	3,481	-105	-2.9%
74.1%	3,584	3,476	-108	-3.0%
75.3%	3,550	3,384	-166	-4.7%
76.5%	3,537	3,328	-209	-5.9%
77.8%	3,404	3,322	-82	-2.4%
79.0%	3,389	3,146	-243	-7.2%
80.2%	3,261	3,133	-128	-3.9%
81.5%	3,207	3,123	-84	-2.6%
82.7%	3,201	3,112	-89	-2.8%
84.0%	3,130	3,014	-116	-3.7%
85.2%	3,102	2,989	-114	-3.7%
86.4%	3,078	2,958	-120	-3.9%
87.7%	3,049	2,938	-111	-3.6%
88.9%	2,969	2,912	-57	-1.9%
90.1%	2,958	2,827	-131	-4.4%
91.4%	2,948	2,804	-143	-4.9%
92.6%	2,889	2,804	-85	-2.9%
93.8%	2,887	2,804	-83	-2.9%
95.1%	2,819	2,804	-15	-0.5%
96.3%	2,529	2,517	-12	-0.5%
97.5%	2,413	2,431	18	0.8%
98.8%	2,364	2,402	38	1.6%
100.0%	2,319	2,302	-17	-0.7%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,787	11,745	-42	-0.4%
1.2%	11,334	11,346	12	0.1%
2.5%	10,668	10,644	-24	-0.2%
3.7%	10,558	10,475	-83	-0.8%
4.9%	10,178	10,178	0	0.0%
6.2%	10,118	9,839	-279	-2.8%
7.4%	10,013	9,728	-286	-2.9%
8.6%	9,356	9,358	2	0.0%
9.9%	9,308	9,306	-2	0.0%
11.1%	9,266	9,280	15	0.2%
12.3%	9,159	9,163	4	0.0%
13.6%	8,850	8,847	-3	0.0%
14.8%	8,760	8,759	-1	0.0%
16.0%	8,678	8,677	-1	0.0%
17.3%	8,458	8,451	-7	-0.1%
18.5%	8,306	7,994	-312	-3.8%
19.8%	8,206	7,950	-256	-3.1%
21.0%	7,506	7,579	73	1.0%
22.2%	7,173	7,351	178	2.5%
23.5%	7,040	7,163	123	1.7%
24.7%	6,991	6,548	-443	-6.3%
25.9%	6,970	6,478	-492	-7.1%
27.2%	6,930	6,418	-512	-7.4%
28.4%	6,345	6,294	-51	-0.8%
29.6%	6,296	6,126	-170	-2.7%
30.9%	6,181	5,819	-362	-5.9%
32.1%	5,880	5,747	-133	-2.3%
33.3%	5,844	5,725	-119	-2.0%
34.6%	5,834	5,722	-113	-1.9%
35.8%	5,777	5,554	-223	-3.9%
37.0%	5,752	5,386	-366	-6.4%
38.3%	5,726	5,377	-349	-6.1%
39.5%	5,662	5,149	-513	-9.1%
40.7%	5,400	5,048	-353	-6.5%
42.0%	5,198	4,677	-520	-10.0%
43.2%	5,071	4,582	-489	-9.6%
44.4%	5,069	4,494	-575	-11.3%
45.7%	4,893	4,403	-490	-10.0%
46.9%	4,645	4,390	-255	-5.5%
48.1%	4,596	4,143	-453	-9.8%
49.4%	4,541	4,079	-462	-10.2%
50.6%	4,417	4,064	-352	-8.0%
51.9%	4,409	4,012	-397	-9.0%
53.1%	4,145	3,991	-153	-3.7%
54.3%	4,136	3,987	-149	-3.6%
55.6%	4,067	3,958	-109	-2.7%
56.8%	4,054	3,948	-106	-2.6%
58.0%	4,046	3,852	-193	-4.8%
59.3%	3,982	3,772	-211	-5.3%
60.5%	3,908	3,748	-159	-4.1%
61.7%	3,857	3,526	-331	-8.6%
63.0%	3,778	3,432	-346	-9.1%
64.2%	3,759	3,382	-377	-10.0%
65.4%	3,750	3,345	-406	-10.8%
66.7%	3,708	3,338	-370	-10.0%
67.9%	3,687	3,323	-364	-9.9%
69.1%	3,637	3,312	-325	-8.9%
70.4%	3,628	3,259	-369	-10.2%
71.6%	3,580	3,247	-332	-9.3%
72.8%	3,472	3,122	-349	-10.1%
74.1%	3,438	3,059	-379	-11.0%
75.3%	3,416	2,969	-447	-13.1%
76.5%	3,271	2,936	-335	-10.3%
77.8%	3,235	2,931	-304	-9.4%
79.0%	3,155	2,861	-294	-9.3%
80.2%	3,076	2,853	-224	-7.3%
81.5%	2,972	2,832	-140	-4.7%
82.7%	2,832	2,813	-18	-0.6%
84.0%	2,791	2,804	13	0.5%
85.2%	2,734	2,804	70	2.6%
86.4%	2,716	2,732	16	0.6%
87.7%	2,657	2,721	64	2.4%
88.9%	2,597	2,631	34	1.3%
90.1%	2,585	2,618	33	1.3%
91.4%	2,584	2,576	-8	-0.3%
92.6%	2,562	2,561	0	0.0%
93.8%	2,486	2,497	12	0.5%
95.1%	2,456	2,465	9	0.4%
96.3%	2,237	2,462	225	10.1%
97.5%	2,228	2,395	167	7.5%
98.8%	2,125	2,284	159	7.5%
100.0%	2,073	2,240	167	8.1%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,763	10,762	-1	0.0%
1.2%	10,051	10,065	14	0.1%
2.5%	9,595	9,551	-44	-0.5%
3.7%	8,646	8,512	-134	-1.5%
4.9%	8,514	8,303	-210	-2.5%
6.2%	8,305	8,291	-14	-0.2%
7.4%	8,302	8,063	-238	-2.9%
8.6%	8,286	8,037	-248	-3.0%
9.9%	7,782	7,671	-111	-1.4%
11.1%	7,680	7,421	-259	-3.4%
12.3%	7,188	7,187	0	0.0%
13.6%	6,714	6,630	-85	-1.3%
14.8%	6,630	6,489	-141	-2.1%
16.0%	6,585	6,393	-192	-2.9%
17.3%	6,480	6,204	-275	-4.2%
18.5%	6,394	6,201	-193	-3.0%
19.8%	6,017	5,854	-163	-2.7%
21.0%	5,905	5,792	-113	-1.9%
22.2%	5,791	5,791	1	0.0%
23.5%	5,686	5,509	-177	-3.1%
24.7%	5,461	5,469	8	0.1%
25.9%	4,456	4,415	-41	-0.9%
27.2%	4,432	4,232	-200	-4.5%
28.4%	4,256	4,225	-31	-0.7%
29.6%	4,232	4,105	-126	-3.0%
30.9%	4,217	4,019	-197	-4.7%
32.1%	4,194	4,018	-175	-4.2%
33.3%	4,019	3,980	-40	-1.0%
34.6%	3,977	3,976	-1	0.0%
35.8%	3,977	3,834	-143	-3.6%
37.0%	3,974	3,767	-206	-5.2%
38.3%	3,866	3,765	-101	-2.6%
39.5%	3,859	3,749	-110	-2.8%
40.7%	3,761	3,721	-39	-1.0%
42.0%	3,734	3,637	-97	-2.6%
43.2%	3,677	3,627	-51	-1.4%
44.4%	3,511	3,502	-9	-0.2%
45.7%	3,503	3,488	-15	-0.4%
46.9%	3,467	3,435	-31	-0.9%
48.1%	3,327	3,327	0	0.0%
49.4%	3,325	3,324	-1	0.0%
50.6%	3,294	3,293	-1	0.0%
51.9%	3,250	3,251	0	0.0%
53.1%	3,167	3,144	-23	-0.7%
54.3%	3,063	3,063	0	0.0%
55.6%	2,954	3,040	86	2.9%
56.8%	2,924	2,937	12	0.4%
58.0%	2,902	2,902	0	0.0%
59.3%	2,866	2,867	0	0.0%
60.5%	2,824	2,859	35	1.3%
61.7%	2,823	2,822	-1	0.0%
63.0%	2,765	2,804	39	1.4%
64.2%	2,747	2,777	30	1.1%
65.4%	2,747	2,765	18	0.7%
66.7%	2,735	2,747	12	0.5%
67.9%	2,716	2,733	18	0.6%
69.1%	2,711	2,732	21	0.8%
70.4%	2,667	2,667	0	0.0%
71.6%	2,666	2,667	0	0.0%
72.8%	2,666	2,652	-14	-0.5%
74.1%	2,651	2,648	-3	-0.1%
75.3%	2,602	2,626	24	0.9%
76.5%	2,600	2,603	3	0.1%
77.8%	2,589	2,563	-26	-1.0%
79.0%	2,563	2,550	-13	-0.5%
80.2%	2,539	2,519	-21	-0.8%
81.5%	2,507	2,512	5	0.2%
82.7%	2,476	2,475	0	0.0%
84.0%	2,475	2,457	-18	-0.7%
85.2%	2,457	2,437	-20	-0.8%
86.4%	2,426	2,416	-10	-0.4%
87.7%	2,408	2,409	0	0.0%
88.9%	2,393	2,393	0	0.0%
90.1%	2,359	2,385	27	1.1%
91.4%	2,358	2,359	0	0.0%
92.6%	2,349	2,358	10	0.4%
93.8%	2,333	2,333	0	0.0%
95.1%	2,332	2,332	0	0.0%
96.3%	2,311	2,270	-42	-1.8%
97.5%	2,270	2,265	-4	-0.2%
98.8%	2,257	2,258	2	0.1%
100.0%	2,178	2,162	-16	-0.7%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,731	8,636	-95	-1.1%
1.2%	8,655	8,580	-75	-0.9%
2.5%	8,151	8,150	-1	0.0%
3.7%	7,923	7,902	-21	-0.3%
4.9%	7,347	7,352	5	0.1%
6.2%	6,880	6,881	1	0.0%
7.4%	6,842	6,801	-41	-0.6%
8.6%	6,675	6,653	-21	-0.3%
9.9%	6,460	6,447	-13	-0.2%
11.1%	6,426	6,397	-29	-0.5%
12.3%	6,232	6,215	-18	-0.3%
13.6%	6,118	6,094	-23	-0.4%
14.8%	5,940	5,889	-51	-0.9%
16.0%	5,233	5,419	186	3.6%
17.3%	5,171	5,157	-15	-0.3%
18.5%	4,947	4,849	-98	-2.0%
19.8%	4,873	4,809	-64	-1.3%
21.0%	4,627	4,629	1	0.0%
22.2%	4,513	4,526	12	0.3%
23.5%	4,452	4,454	2	0.0%
24.7%	4,268	4,084	-185	-4.3%
25.9%	4,104	3,985	-119	-2.9%
27.2%	3,727	3,714	-14	-0.4%
28.4%	3,639	3,574	-65	-1.8%
29.6%	3,483	3,445	-38	-1.1%
30.9%	3,453	3,419	-33	-1.0%
32.1%	3,447	3,415	-32	-0.9%
33.3%	3,432	3,244	-188	-5.5%
34.6%	3,246	3,192	-54	-1.7%
35.8%	3,194	3,165	-29	-0.9%
37.0%	3,165	3,153	-12	-0.4%
38.3%	3,074	3,071	-3	-0.1%
39.5%	3,071	3,046	-26	-0.8%
40.7%	3,046	3,034	-12	-0.4%
42.0%	3,017	3,017	0	0.0%
43.2%	2,975	2,975	0	0.0%
44.4%	2,960	2,961	1	0.0%
45.7%	2,909	2,960	51	1.8%
46.9%	2,908	2,908	0	0.0%
48.1%	2,900	2,898	-2	-0.1%
49.4%	2,895	2,804	-91	-3.1%
50.6%	2,794	2,793	-2	-0.1%
51.9%	2,776	2,777	1	0.0%
53.1%	2,712	2,735	23	0.9%
54.3%	2,702	2,702	0	0.0%
55.6%	2,699	2,699	0	0.0%
56.8%	2,691	2,691	0	0.0%
58.0%	2,690	2,690	0	0.0%
59.3%	2,682	2,683	1	0.0%
60.5%	2,680	2,680	0	0.0%
61.7%	2,670	2,657	-13	-0.5%
63.0%	2,657	2,607	-50	-1.9%
64.2%	2,572	2,586	14	0.6%
65.4%	2,539	2,572	33	1.3%
66.7%	2,529	2,541	12	0.5%
67.9%	2,526	2,539	13	0.5%
69.1%	2,522	2,537	15	0.6%
70.4%	2,511	2,524	13	0.5%
71.6%	2,508	2,522	14	0.6%
72.8%	2,503	2,515	12	0.5%
74.1%	2,487	2,492	5	0.2%
75.3%	2,467	2,466	-1	0.0%
76.5%	2,466	2,464	-2	-0.1%
77.8%	2,462	2,462	0	0.0%
79.0%	2,461	2,457	-4	-0.2%
80.2%	2,414	2,412	-1	-0.1%
81.5%	2,343	2,378	36	1.5%
82.7%	2,325	2,342	17	0.7%
84.0%	2,296	2,336	40	1.8%
85.2%	2,284	2,325	41	1.8%
86.4%	2,268	2,305	37	1.6%
87.7%	2,266	2,266	0	0.0%
88.9%	2,258	2,253	-6	-0.2%
90.1%	2,242	2,199	-42	-1.9%
91.4%	2,199	2,197	-2	-0.1%
92.6%	2,194	2,197	3	0.1%
93.8%	2,164	2,164	0	0.0%
95.1%	2,100	2,126	26	1.3%
96.3%	2,025	1,982	-43	-2.1%
97.5%	1,982	1,936	-46	-2.3%
98.8%	1,957	1,914	-44	-2.2%
100.0%	1,792	1,821	28	1.6%

Table SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,931	8,927	-4	-0.1%
1.2%	7,981	8,367	386	4.8%
2.5%	7,981	8,175	195	2.4%
3.7%	7,833	7,748	-85	-1.1%
4.9%	7,527	7,576	49	0.6%
6.2%	7,482	7,505	23	0.3%
7.4%	7,087	7,479	392	5.5%
8.6%	6,995	7,171	176	2.5%
9.9%	6,969	7,083	115	1.6%
11.1%	6,958	6,991	34	0.5%
12.3%	6,659	6,746	87	1.3%
13.6%	6,421	6,733	312	4.9%
14.8%	5,996	6,418	421	7.0%
16.0%	5,860	6,075	215	3.7%
17.3%	5,789	5,939	150	2.6%
18.5%	5,773	5,918	145	2.5%
19.8%	5,681	5,891	210	3.7%
21.0%	5,618	5,780	162	2.9%
22.2%	5,586	5,758	172	3.1%
23.5%	5,575	5,703	128	2.3%
24.7%	5,564	5,623	59	1.1%
25.9%	5,515	5,615	100	1.8%
27.2%	5,500	5,612	112	2.0%
28.4%	5,480	5,582	102	1.9%
29.6%	5,478	5,545	67	1.2%
30.9%	5,430	5,513	84	1.5%
32.1%	5,400	5,472	72	1.3%
33.3%	5,347	5,430	82	1.5%
34.6%	5,253	5,389	136	2.6%
35.8%	5,222	5,371	149	2.9%
37.0%	5,134	5,292	157	3.1%
38.3%	5,097	5,240	143	2.8%
39.5%	5,093	5,219	126	2.5%
40.7%	5,091	5,178	87	1.7%
42.0%	5,058	5,134	76	1.5%
43.2%	5,038	5,096	57	1.1%
44.4%	5,037	5,067	30	0.6%
45.7%	5,028	5,059	30	0.6%
46.9%	5,022	5,037	15	0.3%
48.1%	5,003	4,996	-8	-0.2%
49.4%	4,996	4,996	0	0.0%
50.6%	4,996	4,972	-23	-0.5%
51.9%	4,942	4,958	16	0.3%
53.1%	4,932	4,952	20	0.4%
54.3%	4,850	4,951	101	2.1%
55.6%	4,841	4,942	101	2.1%
56.8%	4,833	4,932	99	2.1%
58.0%	4,823	4,909	86	1.8%
59.3%	4,819	4,909	90	1.9%
60.5%	4,813	4,896	83	1.7%
61.7%	4,799	4,833	34	0.7%
63.0%	4,762	4,823	61	1.3%
64.2%	4,760	4,816	57	1.2%
65.4%	4,753	4,796	43	0.9%
66.7%	4,750	4,796	46	1.0%
67.9%	4,734	4,762	28	0.6%
69.1%	4,714	4,756	42	0.9%
70.4%	4,634	4,738	104	2.3%
71.6%	4,614	4,734	120	2.6%
72.8%	4,554	4,715	161	3.5%
74.1%	4,520	4,693	173	3.8%
75.3%	4,515	4,617	102	2.3%
76.5%	4,501	4,614	113	2.5%
77.8%	4,460	4,573	113	2.5%
79.0%	4,434	4,538	104	2.3%
80.2%	4,330	4,514	184	4.2%
81.5%	4,316	4,450	134	3.1%
82.7%	4,200	4,431	230	5.5%
84.0%	4,193	4,265	72	1.7%
85.2%	4,189	4,189	0	0.0%
86.4%	4,176	4,132	-44	-1.1%
87.7%	4,132	4,123	-9	-0.2%
88.9%	4,048	4,048	0	0.0%
90.1%	4,002	4,002	0	0.0%
91.4%	3,859	3,859	0	0.0%
92.6%	3,803	3,809	5	0.1%
93.8%	3,433	3,639	206	6.0%
95.1%	3,415	3,487	72	2.1%
96.3%	3,366	3,459	93	2.8%
97.5%	3,328	3,409	81	2.4%
98.8%	3,250	3,396	146	4.5%
100.0%	3,228	3,326	98	3.0%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,917	9,011	94	1.1%
1.2%	8,885	8,956	70	0.8%
2.5%	8,881	8,870	-11	-0.1%
3.7%	8,870	8,870	0	0.0%
4.9%	8,870	8,870	0	0.0%
6.2%	8,870	8,870	0	0.0%
7.4%	8,797	8,870	74	0.8%
8.6%	8,718	8,851	133	1.5%
9.9%	8,710	8,783	74	0.8%
11.1%	8,703	8,773	70	0.8%
12.3%	8,654	8,712	57	0.7%
13.6%	8,631	8,709	78	0.9%
14.8%	8,595	8,698	103	1.2%
16.0%	8,495	8,644	149	1.8%
17.3%	8,471	8,595	125	1.5%
18.5%	8,441	8,489	48	0.6%
19.8%	8,420	8,417	-4	0.0%
21.0%	8,301	8,362	62	0.7%
22.2%	8,270	8,333	63	0.8%
23.5%	8,222	8,270	49	0.6%
24.7%	8,200	8,222	21	0.3%
25.9%	8,174	8,153	-22	-0.3%
27.2%	8,153	8,142	-11	-0.1%
28.4%	8,145	8,072	-73	-0.9%
29.6%	7,958	7,958	0	0.0%
30.9%	7,807	7,861	55	0.7%
32.1%	7,727	7,727	0	0.0%
33.3%	7,697	7,700	2	0.0%
34.6%	7,686	7,696	9	0.1%
35.8%	7,646	7,691	45	0.6%
37.0%	7,616	7,682	67	0.9%
38.3%	7,587	7,646	59	0.8%
39.5%	7,586	7,596	11	0.1%
40.7%	7,516	7,560	43	0.6%
42.0%	7,477	7,505	28	0.4%
43.2%	7,474	7,475	0	0.0%
44.4%	7,465	7,474	9	0.1%
45.7%	7,456	7,465	8	0.1%
46.9%	7,427	7,447	21	0.3%
48.1%	7,407	7,446	40	0.5%
49.4%	7,404	7,432	27	0.4%
50.6%	7,392	7,408	16	0.2%
51.9%	7,391	7,392	1	0.0%
53.1%	7,378	7,376	-1	0.0%
54.3%	7,304	7,347	43	0.6%
55.6%	7,299	7,323	24	0.3%
56.8%	7,289	7,307	18	0.3%
58.0%	7,274	7,306	32	0.4%
59.3%	7,255	7,289	34	0.5%
60.5%	7,207	7,253	46	0.6%
61.7%	7,102	7,244	143	2.0%
63.0%	7,079	7,185	106	1.5%
64.2%	6,987	7,169	182	2.6%
65.4%	6,818	7,160	342	5.0%
66.7%	6,730	6,988	258	3.8%
67.9%	6,727	6,791	65	1.0%
69.1%	6,635	6,776	141	2.1%
70.4%	6,612	6,735	123	1.9%
71.6%	6,601	6,612	11	0.2%
72.8%	6,594	6,591	-3	0.0%
74.1%	6,591	6,537	-54	-0.8%
75.3%	6,537	6,522	-16	-0.2%
76.5%	6,405	6,485	80	1.2%
77.8%	6,378	6,378	0	0.0%
79.0%	6,152	6,314	162	2.6%
80.2%	5,915	6,105	190	3.2%
81.5%	5,818	6,104	286	4.9%
82.7%	5,764	5,969	205	3.6%
84.0%	5,662	5,864	202	3.6%
85.2%	5,651	5,818	167	3.0%
86.4%	5,414	5,755	341	6.3%
87.7%	5,359	5,646	287	5.4%
88.9%	5,289	5,607	319	6.0%
90.1%	5,182	5,294	112	2.2%
91.4%	5,064	5,154	90	1.8%
92.6%	4,826	4,551	-275	-5.7%
93.8%	4,070	4,329	259	6.4%
95.1%	3,905	4,289	384	9.8%
96.3%	3,892	4,229	336	8.6%
97.5%	3,784	4,223	439	11.6%
98.8%	3,761	3,859	98	2.6%
100.0%	3,717	3,773	56	1.5%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,476	7,747	271	3.6%
1.2%	7,344	7,660	316	4.3%
2.5%	6,669	6,756	86	1.3%
3.7%	6,637	6,703	67	1.0%
4.9%	6,586	6,665	79	1.2%
6.2%	6,580	6,640	60	0.9%
7.4%	6,579	6,623	44	0.7%
8.6%	6,566	6,577	11	0.2%
9.9%	6,556	6,566	10	0.2%
11.1%	6,547	6,556	9	0.1%
12.3%	6,533	6,543	10	0.2%
13.6%	6,509	6,534	26	0.4%
14.8%	6,486	6,509	23	0.4%
16.0%	6,484	6,498	14	0.2%
17.3%	6,474	6,494	20	0.3%
18.5%	6,458	6,486	27	0.4%
19.8%	6,444	6,458	14	0.2%
21.0%	6,411	6,453	42	0.7%
22.2%	6,407	6,425	18	0.3%
23.5%	6,392	6,415	23	0.4%
24.7%	6,353	6,411	57	0.9%
25.9%	6,349	6,345	-4	-0.1%
27.2%	6,341	6,336	-5	-0.1%
28.4%	6,326	6,326	0	0.0%
29.6%	6,315	6,325	11	0.2%
30.9%	6,307	6,282	-25	-0.4%
32.1%	6,299	6,226	-74	-1.2%
33.3%	6,282	6,218	-64	-1.0%
34.6%	6,218	6,204	-14	-0.2%
35.8%	6,204	6,171	-33	-0.5%
37.0%	6,171	6,158	-13	-0.2%
38.3%	6,145	6,152	8	0.1%
39.5%	6,128	6,144	17	0.3%
40.7%	6,112	6,133	22	0.4%
42.0%	6,095	6,112	17	0.3%
43.2%	6,091	6,095	4	0.1%
44.4%	6,040	6,083	43	0.7%
45.7%	6,030	6,030	0	0.0%
46.9%	6,024	6,022	-3	0.0%
48.1%	6,000	6,015	15	0.2%
49.4%	5,982	5,996	13	0.2%
50.6%	5,976	5,986	10	0.2%
51.9%	5,960	5,976	16	0.3%
53.1%	5,939	5,960	21	0.4%
54.3%	5,914	5,932	19	0.3%
55.6%	5,911	5,932	20	0.3%
56.8%	5,854	5,914	59	1.0%
58.0%	5,838	5,880	42	0.7%
59.3%	5,814	5,833	19	0.3%
60.5%	5,692	5,758	66	1.2%
61.7%	5,616	5,748	133	2.4%
63.0%	5,502	5,730	228	4.1%
64.2%	5,383	5,723	340	6.3%
65.4%	5,254	5,681	427	8.1%
66.7%	5,012	5,650	639	12.7%
67.9%	5,005	5,574	569	11.4%
69.1%	5,004	5,262	258	5.2%
70.4%	4,902	5,261	359	7.3%
71.6%	4,740	5,176	436	9.2%
72.8%	4,709	5,149	441	9.4%
74.1%	4,698	5,119	421	9.0%
75.3%	4,664	5,102	438	9.4%
76.5%	4,589	5,000	411	9.0%
77.8%	4,575	4,997	422	9.2%
79.0%	4,551	4,915	365	8.0%
80.2%	4,447	4,894	446	10.0%
81.5%	4,359	4,883	524	12.0%
82.7%	4,265	4,842	577	13.5%
84.0%	4,237	4,741	504	11.9%
85.2%	4,203	4,739	536	12.8%
86.4%	4,071	4,590	519	12.7%
87.7%	4,036	4,579	542	13.4%
88.9%	4,028	4,571	543	13.5%
90.1%	3,952	4,367	415	10.5%
91.4%	3,805	4,329	524	13.8%
92.6%	3,693	4,222	530	14.4%
93.8%	3,575	4,190	615	17.2%
95.1%	3,556	4,166	610	17.2%
96.3%	3,436	4,049	613	17.8%
97.5%	3,419	3,927	508	14.9%
98.8%	3,407	3,882	476	14.0%
100.0%	3,401	3,645	244	7.2%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,756	8,725	-31	-0.4%
1.2%	8,756	8,695	-61	-0.7%
2.5%	8,717	8,618	-99	-1.1%
3.7%	8,709	8,558	-151	-1.7%
4.9%	8,701	8,454	-247	-2.8%
6.2%	8,619	8,438	-181	-2.1%
7.4%	8,447	8,333	-114	-1.4%
8.6%	8,361	8,330	-31	-0.4%
9.9%	8,246	8,295	49	0.6%
11.1%	8,233	8,295	62	0.8%
12.3%	8,127	8,220	93	1.1%
13.6%	8,003	8,205	203	2.5%
14.8%	7,945	8,195	250	3.1%
16.0%	7,944	8,079	135	1.7%
17.3%	7,852	7,966	115	1.5%
18.5%	7,844	7,915	71	0.9%
19.8%	7,430	7,764	335	4.5%
21.0%	6,047	7,721	1,674	27.7%
22.2%	5,990	6,133	143	2.4%
23.5%	5,958	6,105	147	2.5%
24.7%	5,891	6,065	174	3.0%
25.9%	5,831	6,008	177	3.0%
27.2%	5,738	5,980	242	4.2%
28.4%	5,708	5,843	135	2.4%
29.6%	5,657	5,795	138	2.4%
30.9%	5,596	5,765	170	3.0%
32.1%	5,594	5,741	148	2.6%
33.3%	5,585	5,676	90	1.6%
34.6%	5,549	5,658	109	2.0%
35.8%	5,450	5,657	208	3.8%
37.0%	5,232	5,657	424	8.1%
38.3%	5,094	5,653	559	11.0%
39.5%	5,079	5,650	571	11.2%
40.7%	5,063	5,646	583	11.5%
42.0%	5,043	5,635	592	11.7%
43.2%	5,033	5,578	546	10.8%
44.4%	5,008	5,339	332	6.6%
45.7%	4,991	5,232	241	4.8%
46.9%	4,989	5,137	148	3.0%
48.1%	4,985	5,113	129	2.6%
49.4%	4,973	5,111	138	2.8%
50.6%	4,969	5,096	128	2.6%
51.9%	4,969	5,075	107	2.1%
53.1%	4,966	5,072	106	2.1%
54.3%	4,960	5,066	106	2.1%
55.6%	4,938	5,061	123	2.5%
56.8%	4,935	5,053	118	2.4%
58.0%	4,924	5,040	116	2.4%
59.3%	4,911	5,016	105	2.1%
60.5%	4,890	5,012	122	2.5%
61.7%	4,888	5,001	114	2.3%
63.0%	4,830	4,996	166	3.4%
64.2%	4,817	4,995	178	3.7%
65.4%	4,794	4,983	189	3.9%
66.7%	4,689	4,981	292	6.2%
67.9%	4,604	4,980	376	8.2%
69.1%	4,587	4,977	390	8.5%
70.4%	4,524	4,967	443	9.8%
71.6%	4,510	4,964	454	10.1%
72.8%	4,447	4,953	506	11.4%
74.1%	4,407	4,930	524	11.9%
75.3%	4,195	4,927	732	17.5%
76.5%	4,133	4,862	729	17.6%
77.8%	4,041	4,811	771	19.1%
79.0%	3,982	4,765	783	19.7%
80.2%	3,938	4,691	752	19.1%
81.5%	3,916	4,670	754	19.2%
82.7%	3,825	4,670	845	22.1%
84.0%	3,822	4,670	848	22.2%
85.2%	3,783	4,661	878	23.2%
86.4%	3,690	4,598	908	24.6%
87.7%	3,672	4,590	918	25.0%
88.9%	3,540	4,587	1,048	29.6%
90.1%	3,269	4,401	1,132	34.6%
91.4%	3,264	4,233	968	29.7%
92.6%	3,180	3,845	665	20.9%
93.8%	3,163	3,651	488	15.4%
95.1%	3,137	3,601	464	14.8%
96.3%	3,126	3,600	474	15.2%
97.5%	3,121	3,168	48	1.5%
98.8%	3,069	3,134	65	2.1%
100.0%	3,029	3,077	47	1.6%

Figure SW-35-b
Old and Middle River, Monthly Flow
Probability of Exceedance

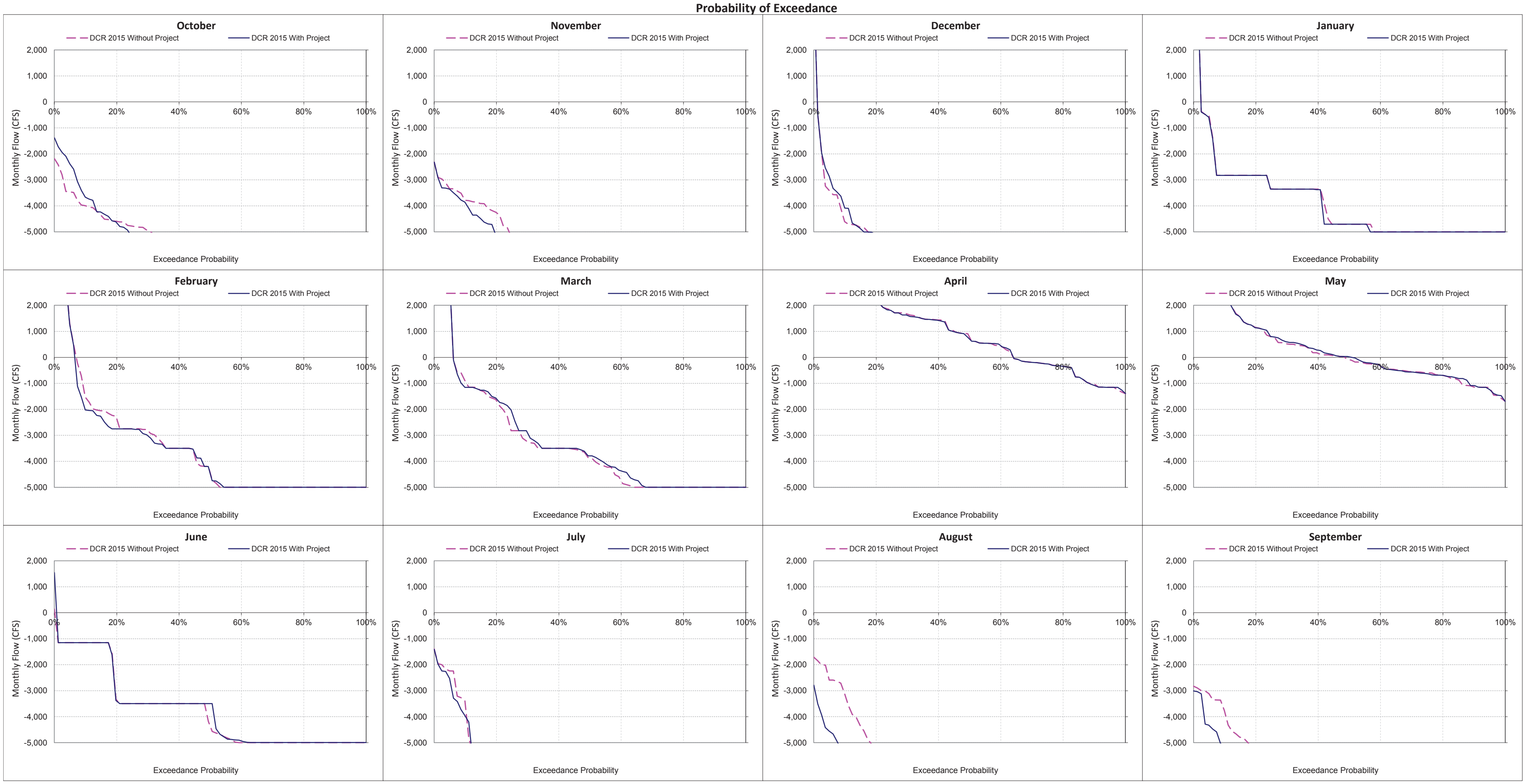


Table SW-35-b

Old and Middle River, Monthly Flow

Probability of Exceedance

	October			
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-2,182	-1,381	800	
1.2%	-2,417	-1,732	685	
2.5%	-2,804	-1,948	856	
3.7%	-3,445	-2,085	1,360	
4.9%	-3,463	-2,381	1,082	
6.2%	-3,484	-2,589	894	
7.4%	-3,785	-3,067	718	
8.6%	-3,966	-3,408	559	
9.9%	-3,992	-3,662	330	
11.1%	-4,047	-3,732	315	
12.3%	-4,069	-3,785	284	
13.6%	-4,206	-4,224	-19	
14.8%	-4,350	-4,238	111	
16.0%	-4,514	-4,322	192	
17.3%	-4,530	-4,402	128	
18.5%	-4,577	-4,577	0	
19.8%	-4,592	-4,619	-26	
21.0%	-4,618	-4,797	-179	
22.2%	-4,618	-4,828	-210	
23.5%	-4,751	-4,932	-181	
24.7%	-4,776	-5,187	-411	
25.9%	-4,803	-5,301	-498	
27.2%	-4,820	-5,322	-502	
28.4%	-4,829	-5,334	-505	
29.6%	-4,936	-5,359	-423	
30.9%	-4,994	-5,584	-590	
32.1%	-5,132	-5,726	-595	
33.3%	-5,162	-5,791	-629	
34.6%	-5,182	-5,880	-698	
35.8%	-5,186	-5,898	-712	
37.0%	-5,243	-5,960	-717	
38.3%	-5,442	-5,988	-546	
39.5%	-5,466	-6,053	-587	
40.7%	-5,473	-6,134	-661	
42.0%	-5,511	-6,226	-715	
43.2%	-5,673	-6,289	-616	
44.4%	-5,920	-6,314	-394	
45.7%	-5,940	-6,355	-415	
46.9%	-5,943	-6,362	-418	
48.1%	-5,949	-6,370	-421	
49.4%	-5,972	-6,391	-420	
50.6%	-6,036	-6,465	-429	
51.9%	-6,077	-6,512	-435	
53.1%	-6,084	-6,644	-560	
54.3%	-6,121	-6,648	-527	
55.6%	-6,258	-6,673	-415	
56.8%	-6,289	-6,678	-389	
58.0%	-6,333	-6,732	-398	
59.3%	-6,381	-6,904	-522	
60.5%	-6,425	-6,990	-566	
61.7%	-6,460	-7,044	-584	
63.0%	-6,611	-7,120	-509	
64.2%	-6,687	-7,125	-438	
65.4%	-6,914	-7,125	-211	
66.7%	-6,928	-7,284	-355	
67.9%	-6,991	-7,391	-400	
69.1%	-7,049	-7,569	-520	
70.4%	-7,072	-7,648	-577	
71.6%	-7,111	-7,683	-572	
72.8%	-7,260	-7,700	-440	
74.1%	-7,296	-7,706	-410	
75.3%	-7,297	-7,724	-427	
76.5%	-7,313	-7,750	-437	
77.8%	-7,349	-7,773	-424	
79.0%	-7,391	-7,828	-437	
80.2%	-7,494	-7,853	-359	
81.5%	-7,832	-8,062	-231	
82.7%	-7,835	-8,308	-473	
84.0%	-8,123	-8,653	-530	
85.2%	-8,230	-8,659	-429	
86.4%	-8,529	-8,660	-131	
87.7%	-8,601	-8,828	-227	
88.9%	-8,771	-8,844	-72	
90.1%	-8,862	-8,994	-132	
91.4%	-9,055	-9,096	-41	
92.6%	-9,096	-9,177	-81	
93.8%	-9,567	-9,596	-29	
95.1%	-9,613	-9,633	-20	
96.3%	-9,616	-9,656	-39	
97.5%	-9,687	-9,684	3	
98.8%	-10,106	-10,314	-208	
100.0%	-10,402	-10,402	0	

	November			
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-2,313	-2,316	-2	
1.2%	-2,907	-2,905	3	
2.5%	-2,966	-3,304	-338	
3.7%	-3,116	-3,321	-205	
4.9%	-3,342	-3,362	-20	
6.2%	-3,344	-3,492	-148	
7.4%	-3,429	-3,623	-193	
8.6%	-3,515	-3,773	-258	
9.9%	-3,785	-3,853	-68	
11.1%	-3,800	-4,097	-298	
12.3%	-3,843	-4,354	-510	
13.6%	-3,857	-4,355	-498	
14.8%	-3,911	-4,490	-579	
16.0%	-3,918	-4,623	-704	
17.3%	-4,103	-4,696	-593	
18.5%	-4,181	-4,715	-534	
19.8%	-4,244	-5,123	-879	
21.0%	-4,354	-5,181	-828	
22.2%	-4,777	-5,189	-412	
23.5%	-4,832	-5,218	-385	
24.7%	-5,175	-5,430	-256	
25.9%	-5,290	-5,434	-144	
27.2%	-5,341	-5,470	-128	
28.4%	-5,360	-5,626	-266	
29.6%	-5,392	-5,789	-397	
30.9%	-5,501	-5,886	-385	
32.1%	-5,504	-6,136	-631	
33.3%	-5,638	-6,168	-530	
34.6%	-5,648	-6,175	-527	
35.8%	-5,832	-6,182	-350	
37.0%	-5,841	-6,235	-394	
38.3%	-5,851	-6,313	-462	
39.5%	-5,939	-6,333	-394	
40.7%	-5,951	-6,418	-467	
42.0%	-6,064	-6,442	-379	
43.2%	-6,095	-6,509	-414	
44.4%	-6,123	-6,536	-413	
45.7%	-6,155	-6,719	-564	
46.9%	-6,236	-6,742	-506	
48.1%	-6,251	-6,764	-513	
49.4%	-6,377	-6,801	-425	
50.6%	-6,421	-6,816	-395	
51.9%	-6,483	-6,825	-342	
53.1%	-6,516	-6,896	-379	
54.3%	-6,534	-6,907	-372	
55.6%	-6,591	-6,945	-354	
56.8%	-6,615	-7,000	-386	
58.0%	-6,673	-7,095	-422	
59.3%	-6,776	-7,280	-504	
60.5%	-6,810	-7,292	-481	
61.7%	-6,904	-7,393	-489	
63.0%	-7,006	-7,488	-483	
64.2%	-7,091	-7,605	-514	
65.4%	-7,165	-7,625	-461	
66.7%	-7,229	-7,771	-542	
67.9%	-7,377	-7,775	-399	
69.1%	-7,390	-7,819	-428	
70.4%	-7,445	-8,066	-621	
71.6%	-7,540	-8,217	-677	
72.8%	-7,786	-8,561	-775	
74.1%	-7,848	-9,025	-1,176	
75.3%	-8,307	-9,072	-764	
76.5%	-8,392	-9,081	-689	
77.8%	-8,909	-9,319	-410	
79.0%	-9,171	-9,458	-287	
80.2%	-9,394	-9,754	-360	
81.5%	-9,454	-9,783	-328	
82.7%	-9,544	-9,810	-266	
84.0%	-9,751	-9,852	-100	
85.2%	-9,783	-9,888	-105	
86.4%	-9,852	-10,018	-166	
87.7%	-9,888	-10,021	-134	
88.9%	-10,023	-10,029	-6	
90.1%	-10,029	-10,152	-123	
91.4%	-10,130	-10,159	-29	
92.6%	-10,152	-10,218	-66	
93.8%	-10,170	-10,238	-68	
95.1%	-10,180	-10,260	-80	
96.3%	-10,223	-10,264	-41	
97.5%	-10,258	-10,266	-8	
98.8%	-10,266	-10,332	-66	
100.0%	-10,445	-10,445	0	

	December			
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,686	4,394	-292	-6.2%
1.2%	-455	-490	-34	
2.5%	-1,946	-1,964	-18	
3.7%	-3,243	-2,541	701	
4.9%	-3,409	-2,858	551	
6.2%	-3,568	-3,331	237	
7.4%	-3,577	-3,466	111	
8.6%	-4,092	-3,630	462	
9.9%	-4,606	-4,090	517	
11.1%	-4,710	-4,097	614	
12.3%	-4,717	-4,670	47	
13.6%	-4,743	-4,759	-16	
14.8%	-4,820	-4,861	-41	
16.0%	-4,832	-5,002	-169	
17.3%	-4,987	-5,008	-21	
18.5%	-5,201	-5,011	190	
19.8%	-5,264	-5,095	168	
21.0%	-5,316	-5,225	91	
22.2%	-5,336	-5,344	-8	
23.5%	-5,389	-5,561	-172	
24.7%	-5,419	-5,871	-452	
25.9%	-5,520	-5,871	-351	
27.2%	-5,833	-5,871	-38	
28.4%	-5,871	-5,871	0	
29.6%	-5,871	-5,871	0	
30.9%	-5,871	-5,871	0	
32.1%	-5,871	-5,871	0	
33.3%	-5,871	-5,871	0	
34.6%	-5,871	-5,871	0	
35.8%	-5,871	-5,871	0	
37.0%	-5,871	-5,871	0	
38.3%	-5,871	-5,871	0	
39.5%	-5,871	-5,871	0	
40.7%	-5,871	-5,871	0	
42.0%	-5,871	-5,871	0	
43.2%	-5,871	-5,871	0	
44.4%	-5,871	-5,871	0	
45.7%	-5,871	-5,871	0	
46.9%	-5,871	-5,871	0	
48.1%	-5,871	-5,871	0	
49.4%	-5,871	-5,871	0	
50.6%	-5,871	-5,871	0	
51.9%	-5,871	-6,112	-241	
53.1%	-5,871	-6,185	-314	
54.3%	-5,871	-6,229	-358	
55.6%	-5,872	-6,282	-411	
56.8%	-5,893	-6,428	-534	
58.0%	-5,938	-6,431	-492	
59.3%	-6,401	-6,554	-153	
60.5%	-6,513	-6,627	-114	
61.7%	-6,697	-6,720	-23	
63.0%	-6,799	-7,767	-968	
64.2%	-6,830	-7,961	-1,131	
65.4%	-6,889	-8,768	-1,879	
66.7%	-7,090	-8,901	-1,811	
67.9%	-7,717	-9,270	-1,554	
69.1%	-8,261	-9,374	-1,114	
70.4%	-8,527	-9,398	-871	
71.6%	-8,932	-9,399	-468	
72.8%	-9,068	-9,406	-338	
74.1%	-9,155	-9,416	-260	
75.3%	-9,355	-9,462	-107	
76.5%	-9,368	-9,483	-114	
77.8%	-9,462	-9,487	-26	
79.0%	-9,476	-9,491	-15	
80.2%	-9,494	-9,567	-73	
81.5%	-9,562	-9,600	-38	
82.7%	-9,567	-9,620	-53	
84.0%	-9,620	-9,667	-47	
85.2%	-9,659	-9,680	-21	
86.4%	-9,677	-9,680	-3	
87.7%	-9,680	-9,681	-1	
88.9%	-9,681	-9,684	-2	
90.1%	-9,684	-9,697	-14	
91.4%	-9,697	-9,704	-7	
92.6%	-9,704	-9,720	-17	
93.8%	-9,707	-9,746	-39	
95.1%	-9,720	-9,749	-29	
96.3%	-9,746	-9,763	-17	
97.5%	-9,783	-9,810	-27	
98.8%	-9,810	-9,838	-28	
100.0%	-10,104	-10,104	0	

	January			
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,817	24,789	-28	-0.1%
1.2%	5,037	4,863	-175	-3.5%
2.5%	-366	-386	-21	
3.7%	-482	-482	0	
4.9%	-501	-589	-88	
6.2%	-1,395	-1,422	-27	
7.4%	-2,823	-2,823	0	
8.6%	-2,823	-2,823	0	
9.9%	-2,823	-2,823	0	
11.1%	-2,823	-2,823	0	
12.3%	-2,823	-2,823	0	
13.6%	-2,823	-2,823	0	
14.8%	-2,823	-2,823	0	
16.0%	-2,823	-2,823	0	
17.3%	-2,823	-2,823	0	
18.5%	-2,823	-2,823	0	
19.8%	-2,823	-2,823	0	
21.0%	-2,823	-2,823	0	
22.2%	-2,823	-2,823	0	
23.5%	-2,823	-2,823	0	
24.7%	-3,343	-3,355	-12	
25.9%	-3,355	-3,355	0	
27.2%	-3,355	-3,355	0	
28.4%	-3,355	-3,355	0	
29.6%	-3,355	-3,355	0	
30.9%	-3,355	-3,355	0	
32.1%	-3,355	-3,355	0	
33.3%	-3,355	-3,355	0	
34.6%	-3,355	-3,355	0	
35.8%	-3,355	-3,355	0	
37.0%	-3,355	-3,355	0	
38.3%	-3,355	-3,355	0	
39.5%	-3,355	-3,374	-19	
40.7%	-3,355	-3,379	-25	
42.0%	-3,921	-4,710	-789	
43.2%	-4,503	-4,710	-207	
44.4%	-4,710	-4,710	0	
45.7%	-4,710	-4,710	0	
46.9%	-4,710	-4,710	0	
48.1%	-4,710	-4,710	0	
49.4%	-4,710	-4,710	0	
50.6%	-4,710	-4,710	0	
51.9%	-4,710	-4,710	0	
53.1%	-4,710	-4,710	0	
54.3%	-4,710	-4,710	0	
55.6%	-4,710	-4,710	0	
56.8%	-4,710	-5,000	-290	
58.0%	-5,000	-5,000	0	
59.3%	-5,000	-5,000	0	
60.5%	-5,000	-5,000	0	
61.7%	-5,000	-5,000	0	
63.0%	-5,000	-5,000	0	
64.2%	-5,000	-5,000	0	
65.4%	-5,000	-5,000	0	
66.7%	-5,000	-5,000	0	
67.9%	-5,000	-5,000	0	
69.1%	-5,000	-5,000	0	
70.4%	-5,000	-5,000	0	
71.6%	-5,000	-5,000	0	
72.8%	-5,000	-5,000	0	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

Table SW-35-b
Old and Middle River, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,508	13,830	-679	-4.7%
1.2%	5,492	5,830	338	6.1%
2.5%	4,501	3,141	-1,360	-30.2%
3.7%	2,998	2,902	-96	-3.2%
4.9%	1,297	1,259	-38	-2.9%
6.2%	491	460	-31	-6.4%
7.4%	-220	-1,120	-900	
8.6%	-713	-1,531	-818	
9.9%	-1,531	-2,027	-496	
11.1%	-1,722	-2,044	-322	
12.3%	-1,984	-2,054	-70	
13.6%	-2,027	-2,233	-206	
14.8%	-2,053	-2,268	-215	
16.0%	-2,054	-2,497	-443	
17.3%	-2,155	-2,660	-505	
18.5%	-2,233	-2,750	-517	
19.8%	-2,268	-2,750	-482	
21.0%	-2,750	-2,750	0	
22.2%	-2,750	-2,750	0	
23.5%	-2,750	-2,750	0	
24.7%	-2,750	-2,750	0	
25.9%	-2,750	-2,776	-26	
27.2%	-2,750	-2,776	-26	
28.4%	-2,776	-2,931	-155	
29.6%	-2,776	-2,983	-207	
30.9%	-2,931	-3,109	-178	
32.1%	-2,983	-3,303	-320	
33.3%	-3,127	-3,328	-200	
34.6%	-3,288	-3,339	-52	
35.8%	-3,500	-3,500	0	
37.0%	-3,500	-3,500	0	
38.3%	-3,500	-3,500	0	
39.5%	-3,500	-3,500	0	
40.7%	-3,500	-3,500	0	
42.0%	-3,500	-3,500	0	
43.2%	-3,500	-3,500	0	
44.4%	-3,527	-3,527	0	
45.7%	-4,074	-3,869	205	
46.9%	-4,180	-3,883	296	
48.1%	-4,196	-4,196	0	
49.4%	-4,196	-4,196	0	
50.6%	-4,737	-4,746	-9	
51.9%	-4,844	-4,760	84	
53.1%	-5,000	-4,864	136	
54.3%	-5,000	-5,000	0	
55.6%	-5,000	-5,000	0	
56.8%	-5,000	-5,000	0	
58.0%	-5,000	-5,000	0	
59.3%	-5,000	-5,000	0	
60.5%	-5,000	-5,000	0	
61.7%	-5,000	-5,000	0	
63.0%	-5,000	-5,000	0	
64.2%	-5,000	-5,000	0	
65.4%	-5,000	-5,000	0	
66.7%	-5,000	-5,000	0	
67.9%	-5,000	-5,000	0	
69.1%	-5,000	-5,000	0	
70.4%	-5,000	-5,000	0	
71.6%	-5,000	-5,000	0	
72.8%	-5,000	-5,000	0	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,288	25,264	-24	-0.1%
1.2%	8,164	8,848	684	8.4%
2.5%	5,452	6,053	601	11.0%
3.7%	3,729	5,178	1,449	38.9%
4.9%	3,217	3,079	-138	-4.3%
6.2%	-108	-108	0	
7.4%	-582	-660	-78	
8.6%	-596	-989	-392	
9.9%	-899	-1,150	-251	
11.1%	-1,150	-1,150	-1	
12.3%	-1,150	-1,150	0	
13.6%	-1,150	-1,207	-56	
14.8%	-1,269	-1,269	0	
16.0%	-1,328	-1,269	59	
17.3%	-1,506	-1,328	178	
18.5%	-1,566	-1,506	59	
19.8%	-1,617	-1,566	51	
21.0%	-1,867	-1,734	133	
22.2%	-2,024	-1,776	249	
23.5%	-2,255	-1,853	402	
24.7%	-2,823	-2,024	798	
25.9%	-2,823	-2,466	357	
27.2%	-2,823	-2,823	0	
28.4%	-3,113	-2,823	290	
29.6%	-3,219	-2,823	397	
30.9%	-3,287	-3,113	174	
32.1%	-3,306	-3,200	106	
33.3%	-3,500	-3,315	185	
34.6%	-3,500	-3,500	0	
35.8%	-3,500	-3,500	0	
37.0%	-3,500	-3,500	0	
38.3%	-3,500	-3,500	0	
39.5%	-3,500	-3,500	0	
40.7%	-3,500	-3,500	0	
42.0%	-3,500	-3,500	0	
43.2%	-3,500	-3,500	0	
44.4%	-3,527	-3,500	27	
45.7%	-3,549	-3,500	49	
46.9%	-3,603	-3,548	55	
48.1%	-3,645	-3,606	39	
49.4%	-3,854	-3,790	64	
50.6%	-3,887	-3,793	95	
51.9%	-4,032	-3,854	178	
53.1%	-4,122	-3,941	181	
54.3%	-4,173	-4,032	141	
55.6%	-4,224	-4,142	81	
56.8%	-4,226	-4,207	19	
58.0%	-4,516	-4,226	290	
59.3%	-4,593	-4,344	249	
60.5%	-4,857	-4,389	468	
61.7%	-4,902	-4,429	473	
63.0%	-4,943	-4,639	304	
64.2%	-5,000	-4,712	288	
65.4%	-5,000	-4,747	253	
66.7%	-5,000	-4,925	75	
67.9%	-5,000	-5,000	0	
69.1%	-5,000	-5,000	0	
70.4%	-5,000	-5,000	0	
71.6%	-5,000	-5,000	0	
72.8%	-5,000	-5,000	0	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,106	8,067	-39	-0.5%
1.2%	6,904	7,475	570	8.3%
2.5%	6,123	6,110	-13	-0.2%
3.7%	5,369	5,410	41	0.8%
4.9%	5,369	5,340	-29	-0.5%
6.2%	4,792	4,778	-14	-0.3%
7.4%	3,968	3,939	-29	-0.7%
8.6%	3,157	3,146	-11	-0.3%
9.9%	3,053	3,046	-7	-0.2%
11.1%	2,821	2,821	0	0.0%
12.3%	2,809	2,807	-2	-0.1%
13.6%	2,795	2,779	-16	-0.6%
14.8%	2,427	2,427	0	0.0%
16.0%	2,296	2,296	0	0.0%
17.3%	2,227	2,227	1	0.0%
18.5%	2,211	2,207	-5	-0.2%
19.8%	2,207	2,206	-1	0.0%
21.0%	2,068	2,068	0	0.0%
22.2%	1,918	1,918	0	0.0%
23.5%	1,870	1,827	-43	-2.3%
24.7%	1,827	1,806	-21	-1.1%
25.9%	1,714	1,715	0	0.0%
27.2%	1,713	1,713	0	0.0%
28.4%	1,711	1,633	-79	-4.6%
29.6%	1,678	1,628	-50	-3.0%
30.9%	1,628	1,569	-60	-3.7%
32.1%	1,607	1,565	-43	-2.6%
33.3%	1,565	1,544	-21	-1.3%
34.6%	1,496	1,496	0	0.0%
35.8%	1,471	1,460	-10	-0.7%
37.0%	1,460	1,456	-4	-0.2%
38.3%	1,457	1,438	-18	-1.3%
39.5%	1,438	1,426	-12	-0.8%
40.7%	1,435	1,400	-35	-2.4%
42.0%	1,426	1,361	-64	-4.5%
43.2%	1,056	1,056	0	0.0%
44.4%	1,044	1,005	-39	-3.7%
45.7%	960	960	0	0.0%
46.9%	936	936	0	0.0%
48.1%	925	908	-17	-1.8%
49.4%	908	772	-136	-14.9%
50.6%	620	620	0	0.0%
51.9%	611	611	0	0.0%
53.1%	555	555	0	0.0%
54.3%	546	546	0	0.0%
55.6%	540	540	0	0.0%
56.8%	536	536	0	0.0%
58.0%	466	535	69	14.7%
59.3%	444	512	68	15.3%
60.5%	399	398	0	-0.1%
61.7%	289	362	72	25.0%
63.0%	224	289	66	29.3%
64.2%	-48	-48	0	
65.4%	-82	-81	0	
66.7%	-144	-144	0	
67.9%	-170	-170	0	
69.1%	-178	-185	-7	
70.4%	-198	-198	0	
71.6%	-203	-203	0	
72.8%	-227	-227	0	
74.1%	-240	-242	-3	
75.3%	-255	-255	0	
76.5%	-303	-303	0	
77.8%	-327	-326	0	
79.0%	-327	-327	1	
80.2%	-352	-352	0	
81.5%	-375	-375	0	
82.7%	-394	-394	0	
84.0%	-751	-752	0	
85.2%	-764	-764	0	
86.4%	-854	-854	0	
87.7%	-965	-966	0	
88.9%	-1,012	-1,033	-21	
90.1%	-1,033	-1,086	-52	
91.4%	-1,143	-1,143	0	
92.6%	-1,150	-1,150	0	
93.8%	-1,150	-1,150	0	
95.1%	-1,150	-1,150	0	
96.3%	-1,150	-1,150	0	
97.5%	-1,259	-1,153	106	
98.8%	-1,335	-1,259	77	
100.0%	-1,398	-1,398	0	

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,624	5,592	-31	-0.6%
1.2%	5,333	5,277	-56	-1.1%
2.5%	4,270	4,233	-37	-0.9%
3.7%	4,034	4,066	32	0.8%
4.9%	3,748	3,687	-61	-1.6%
6.2%	3,633	3,612	-22	-0.6%
7.4%	2,868	2,824	-43	-1.5%
8.6%	2,576	2,576	0	0.0%
9.9%	2,300	2,279	-22	-0.9%
11.1%	2,185	2,185	0	0.0%
12.3%	1,928	1,926	-3	-0.1%
13.6%	1,686	1,665	-22	-1.3%
14.8%	1,572	1,572	0	0.0%
16.0%	1,362	1,362	0	0.0%
17.3%	1,279	1,279	0	0.0%
18.5%	1,246	1,246	0	0.0%
19.8%	1,153	1,145	-9	-0.7%
21.0%	1,123	1,124	0	0.0%
22.2%	1,079	1,080	1	0.1%
23.5%	857	1,045	188	21.9%
24.7%	798	798	0	0.0%
25.9%	780	779	-1	-0.1%
27.2%	572	750	178	31.1%
28.4%	562	661	99	17.7%
29.6%	526	598	72	13.7%
30.9%	504	572	68	13.5%
32.1%	501	568	67	13.4%
33.3%	457	540	84	18.3%
34.6%	455	503	48	10.6%
35.8%	431	451	21	4.8%
37.0%	340	367	27	8.1%
38.3%	180	340	160	88.9%
39.5%	176	283	106	60.1%
40.7%	116	262	146	125.7%
42.0%	95	176	81	85.6%
43.2%	95	141	46	48.6%
44.4%	75	116	41	55.5%
45.7%	66	67	1	1.0%
46.9%	37	36	0	-1.0%
48.1%	31	32	1	4.4%
49.4%	-77	31	108	
50.6%	-108	5	113	
51.9%	-180	-26	153	
53.1%	-183	-108	75	
54.3%	-209	-180	29	
55.6%	-244	-209	35	
56.8%	-254	-221	33	
58.0%	-269	-243	26	
59.3%	-273	-269	4	
60.5%	-382	-382	0	
61.7%	-449	-459	-10	
63.0%	-459	-463	-4	
64.2%	-463	-490	-26	
65.4%	-490	-504	-14	
66.7%	-504	-520	-17	
67.9%	-520	-552	-32	
69.1%	-549	-564	-15	
70.4%	-552	-568	-16	
71.6%	-563	-590	-27	
72.8%	-569	-605	-37	
74.1%	-590	-612	-22	
75.3%	-590	-638	-47	
76.5%	-606	-671	-65	
77.8%	-671	-682	-11	
79.0%	-682	-690	-8	
80.2%	-699	-699	0	
81.5%	-735	-735	0	
82.7%	-815	-743	72	
84.0%	-817	-779	38	
85.2%	-878	-816	63	
86.4%	-1,079	-817	262	
87.7%	-1,081	-878	203	
88.9%	-1,093	-1,081	12	
90.1%	-1,147	-1,090	57	
91.4%	-1,150	-1,147	4	
92.6%	-1,150	-1,150	0	
93.8%	-1,151	-1,151	0	
95.1%	-1,164	-1,242	-77	
96.3%	-1,452	-1,396	56	
97.5%	-1,472	-1,453	19	
98.8%	-1,579	-1,472	107	
100.0%	-1,691	-1,692	0	

Table SW-35-b

Old and Middle River, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	143	1,547	1,405	984.4%
1.2%	-1,150	-1,150	0	
2.5%	-1,150	-1,150	0	
3.7%	-1,150	-1,150	0	
4.9%	-1,150	-1,150	0	
6.2%	-1,150	-1,150	0	
7.4%	-1,150	-1,150	0	
8.6%	-1,150	-1,150	0	
9.9%	-1,150	-1,150	0	
11.1%	-1,150	-1,150	0	
12.3%	-1,150	-1,150	0	
13.6%	-1,150	-1,150	0	
14.8%	-1,150	-1,150	0	
16.0%	-1,150	-1,150	0	
17.3%	-1,150	-1,150	0	
18.5%	-1,578	-1,620	-42	
19.8%	-3,337	-3,379	-43	
21.0%	-3,497	-3,500	-3	
22.2%	-3,500	-3,500	0	
23.5%	-3,500	-3,500	0	
24.7%	-3,500	-3,500	0	
25.9%	-3,500	-3,500	0	
27.2%	-3,500	-3,500	0	
28.4%	-3,500	-3,500	0	
29.6%	-3,500	-3,500	0	
30.9%	-3,500	-3,500	0	
32.1%	-3,500	-3,500	0	
33.3%	-3,500	-3,500	0	
34.6%	-3,500	-3,500	0	
35.8%	-3,500	-3,500	0	
37.0%	-3,500	-3,500	0	
38.3%	-3,500	-3,500	0	
39.5%	-3,500	-3,500	0	
40.7%	-3,500	-3,500	0	
42.0%	-3,500	-3,500	0	
43.2%	-3,500	-3,500	0	
44.4%	-3,500	-3,500	0	
45.7%	-3,500	-3,500	0	
46.9%	-3,500	-3,500	0	
48.1%	-3,500	-3,500	0	
49.4%	-4,186	-3,500	686	
50.6%	-4,569	-3,500	1,069	
51.9%	-4,631	-4,467	164	
53.1%	-4,673	-4,676	-2	
54.3%	-4,764	-4,778	-14	
55.6%	-4,822	-4,867	-44	
56.8%	-4,883	-4,879	4	
58.0%	-4,982	-4,892	90	
59.3%	-5,000	-4,908	92	
60.5%	-5,000	-4,960	40	
61.7%	-5,000	-4,983	17	
63.0%	-5,000	-5,000	0	
64.2%	-5,000	-5,000	0	
65.4%	-5,000	-5,000	0	
66.7%	-5,000	-5,000	0	
67.9%	-5,000	-5,000	0	
69.1%	-5,000	-5,000	0	
70.4%	-5,000	-5,000	0	
71.6%	-5,000	-5,000	0	
72.8%	-5,000	-5,000	0	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,394	-1,408	-14	
1.2%	-1,962	-1,966	-4	
2.5%	-1,998	-2,243	-245	
3.7%	-2,172	-2,256	-84	
4.9%	-2,239	-2,531	-292	
6.2%	-2,242	-3,285	-1,043	
7.4%	-3,210	-3,414	-204	
8.6%	-3,272	-3,728	-456	
9.9%	-3,397	-3,959	-563	
11.1%	-4,815	-4,203	612	
12.3%	-5,405	-5,617	-211	
13.6%	-5,602	-5,975	-374	
14.8%	-5,678	-6,097	-419	
16.0%	-5,858	-6,520	-662	
17.3%	-6,075	-7,294	-1,219	
18.5%	-6,385	-7,987	-1,602	
19.8%	-7,363	-8,054	-692	
21.0%	-8,029	-8,193	-164	
22.2%	-8,245	-8,245	0	
23.5%	-8,339	-8,385	-45	
24.7%	-8,384	-8,604	-219	
25.9%	-8,737	-8,819	-82	
27.2%	-8,859	-8,859	0	
28.4%	-8,870	-9,106	-236	
29.6%	-9,106	-9,165	-59	
30.9%	-9,165	-9,217	-52	
32.1%	-9,243	-9,243	0	
33.3%	-9,262	-9,656	-394	
34.6%	-9,463	-9,702	-239	
35.8%	-9,501	-9,722	-221	
37.0%	-9,692	-9,881	-189	
38.3%	-9,701	-9,896	-194	
39.5%	-9,711	-9,970	-259	
40.7%	-9,757	-9,983	-226	
42.0%	-9,884	-10,013	-128	
43.2%	-9,906	-10,092	-186	
44.4%	-10,030	-10,103	-73	
45.7%	-10,063	-10,120	-58	
46.9%	-10,096	-10,127	-31	
48.1%	-10,104	-10,149	-45	
49.4%	-10,127	-10,200	-73	
50.6%	-10,149	-10,269	-120	
51.9%	-10,187	-10,404	-216	
53.1%	-10,197	-10,466	-270	
54.3%	-10,250	-10,480	-231	
55.6%	-10,269	-10,553	-284	
56.8%	-10,316	-10,562	-246	
58.0%	-10,361	-10,619	-257	
59.3%	-10,451	-10,621	-170	
60.5%	-10,480	-10,654	-173	
61.7%	-10,509	-10,710	-201	
63.0%	-10,553	-10,871	-318	
64.2%	-10,702	-10,894	-192	
65.4%	-10,710	-10,897	-187	
66.7%	-10,733	-10,990	-258	
67.9%	-10,807	-11,088	-281	
69.1%	-10,860	-11,113	-253	
70.4%	-10,897	-11,129	-232	
71.6%	-10,912	-11,137	-225	
72.8%	-10,974	-11,159	-185	
74.1%	-11,013	-11,187	-174	
75.3%	-11,088	-11,236	-148	
76.5%	-11,113	-11,260	-147	
77.8%	-11,129	-11,312	-183	
79.0%	-11,142	-11,334	-192	
80.2%	-11,188	-11,335	-147	
81.5%	-11,305	-11,348	-43	
82.7%	-11,333	-11,381	-47	
84.0%	-11,350	-11,411	-61	
85.2%	-11,381	-11,418	-37	
86.4%	-11,410	-11,428	-18	
87.7%	-11,417	-11,433	-16	
88.9%	-11,428	-11,450	-22	
90.1%	-11,450	-11,478	-28	
91.4%	-11,477	-11,500	-23	
92.6%	-11,500	-11,529	-29	
93.8%	-11,528	-11,538	-9	
95.1%	-11,541	-11,590	-50	
96.3%	-11,581	-11,595	-15	
97.5%	-11,595	-11,596	0	
98.8%	-11,611	-11,609	1	
100.0%	-11,630	-11,796	-166	

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,714	-2,786	-1,072	
1.2%	-1,847	-3,507	-1,660	
2.5%	-2,011	-3,942	-1,931	
3.7%	-2,012	-4,422	-2,409	
4.9%	-2,592	-4,556	-1,964	
6.2%	-2,593	-4,663	-2,069	
7.4%	-2,637	-4,942	-2,305	
8.6%	-2,708	-5,236	-2,528	
9.9%	-3,116	-5,282	-2,165	
11.1%	-3,579	-5,518	-1,938	
12.3%	-3,915	-5,734	-1,819	
13.6%	-4,021	-5,818	-1,797	
14.8%	-4,328	-6,056	-1,728	
16.0%	-4,545	-6,139	-1,593	
17.3%	-4,874	-6,184	-1,310	
18.5%	-5,057	-6,321	-1,265	
19.8%	-5,236	-6,332	-1,096	
21.0%	-5,354	-6,512	-1,158	
22.2%	-5,388	-6,702	-1,314	
23.5%	-5,773	-6,875	-1,102	
24.7%	-5,917	-6,917	-1,000	
25.9%	-6,043	-7,081	-1,037	
27.2%	-6,120	-7,125	-1,005	
28.4%	-6,302	-7,129	-827	
29.6%	-6,588	-7,261	-674	
30.9%	-6,654	-7,350	-696	
32.1%	-7,001	-7,407	-407	
33.3%	-7,101	-7,916	-815	
34.6%	-7,131	-8,500	-1,369	
35.8%	-7,261	-8,633	-1,372	
37.0%	-8,095	-9,313	-1,218	
38.3%	-8,908	-9,539	-631	
39.5%	-9,313	-9,581	-268	
40.7%	-9,770	-9,770	0	
42.0%	-9,777	-9,777	0	
43.2%	-9,787	-9,808	-21	
44.4%	-9,859	-10,003	-144	
45.7%	-9,874	-10,124	-251	
46.9%	-9,895	-10,186	-291	
48.1%	-10,167	-10,223	-56	
49.4%	-10,172	-10,236	-64	
50.6%	-10,223	-10,335	-112	
51.9%	-10,237	-10,535	-298	
53.1%	-10,350	-10,581	-231	
54.3%	-10,525	-10,589	-63	
55.6%	-10,536	-10,603	-67	
56.8%	-10,570	-10,607	-38	
58.0%	-10,572	-10,621	-49	
59.3%	-10,580	-10,634	-54	
60.5%	-10,589	-10,637	-48	
61.7%	-10,603	-10,662	-59	
63.0%	-10,607	-10,677	-70	
64.2%	-10,621	-10,694	-73	
65.4%	-10,662	-10,698	-36	
66.7%	-10,667	-10,725	-58	
67.9%	-10,677	-10,727	-50	
69.1%	-10,698	-10,744	-45	
70.4%	-10,724	-10,755	-31	
71.6%	-10,727	-10,759	-32	
72.8%	-10,744	-10,769	-25	
74.1%	-10,755	-10,770	-15	
75.3%	-10,759	-10,787	-28	
76.5%	-10,770	-10,790	-20	
77.8%	-10,788	-10,805	-16	
79.0%	-10,790	-10,859	-69	
80.2%	-10,859	-10,885	-26	
81.5%	-10,885	-10,933	-48	
82.7%	-10,903	-10,988	-84	
84.0%	-10,933	-11,032	-98	
85.2%	-10,988	-11,080	-93	
86.4%	-11,000	-11,083	-83	
87.7%	-11,031	-11,096	-65	
88.9%	-11,080	-11,127	-47	
90.1%	-11,083	-11,137	-54	
91.4%	-11,099	-11,152	-53	
92.6%	-11,126	-11,162	-36	
93.8%	-11,129	-11,223	-94	
95.1%	-11,137	-11,225	-88	
96.3%	-11,162	-11,228	-67	
97.5%	-11,166	-11,244	-79	
98.8%	-11,261	-11,261	0	
100.0%	-11,302	-11,302	0	

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-2,828	-3,005	-177	
1.2%	-2,896	-3,043	-147	
2.5%	-2,997	-3,120	-123	
3.7%	-3,008	-4,285	-1,277	
4.9%	-3,115	-4,332	-1,217	
6.2%	-3,352	-4,472	-1,120	
7.4%	-3,358	-4,588	-1,230	
8.6%	-3,361	-5,025	-1,665	
9.9%	-3,762	-5,149	-1,387	
11.1%	-4,324	-6,062	-1,738	
12.3%	-4,559	-6,134	-1,575	
13.6%	-4,660	-6,678	-2,017	
14.8%	-4,789	-6,984	-2,196	
16.0%	-4,825	-7,326	-2,501	
17.3%	-4,981	-7,329	-2,349	
18.5%	-5,158	-7,447	-2,289	
19.8%	-5,577	-7,523	-1,946	
21.0%	-5,869	-7,528	-1,659	
22.2%	-6,022	-7,688	-1,666	
23.5%	-6,076	-7,897	-1,822	
24.7%	-6,168	-7,932	-1,764	
25.9%	-6,196	-7,986	-1,790	
27.2%	-6,728	-8,168	-1,440	
28.4%	-6,759	-8,217	-1,459	
29.6%	-6,856	-8,394	-1,538	
30.9%	-7,089	-8,401	-1,312	
32.1%	-7,213	-8,409	-1,196	
33.3%	-7,727	-8,473	-745	
34.6%	-7,748	-8,507	-759	
35.8%	-7,932	-8,517	-585	
37.0%	-8,032	-8,945	-913	
38.3%	-8,201	-9,011	-809	
39.5%	-8,218	-9,059	-841	
40.7%	-8,265	-9,116	-851	
42.0%	-8,626	-9,155	-529	
43.2%	-8,713	-9,266	-552	
44.4%	-8,934	-9,415	-482	
45.7%	-8,945	-9,453	-509	
46.9%	-8,962	-9,455	-492	
48.1%	-9,157	-9,474	-317	
49.4%	-9,220	-9,502	-282	
50.6%	-9,258	-9,562	-304	
51.9%	-9,274	-9,591	-317	
53.1%	-9,337	-9,592	-256	
54.3%	-9,426	-9,679	-253	
55.6%	-9,441	-9,692	-251	
56.8%	-9,472	-9,789	-318	
58.0%	-9,498	-9,817	-318	
59.3%	-9,592	-9,830	-237	
60.5%	-9,600	-9,847	-247	
61.7%	-9,629	-9,866	-237	
63.0%	-9,726	-9,868	-142	
64.2%	-9,830	-9,939	-109	
65.4%	-9,850	-9,945	-95	
66.7%	-9,868	-9,947	-79	
67.9%	-9,875	-9,959	-84	
69.1%	-9,876	-9,965	-89	
70.4%	-9,893	-9,984	-91	
71.6%	-9,921	-9,986	-65	
72.8%	-9,939	-9,988	-49	
74.1%	-9,940	-9,999	-60	
75.3%	-9,951	-10,001	-49	
76.5%	-9,960	-10,010	-50	
77.8%	-9,968	-10,010	-42	
79.0%	-9,973	-10,011	-38	
80.2%	-9,979	-10,026	-47	
81.5%	-9,986	-10,026	-40	
82.7%	-10,001	-10,106	-105	
84.0%	-10,013	-10,117	-104	
85.2%	-10,051	-10,127	-76	
86.4%	-10,060	-10,136	-76	
87.7%	-10,102	-10,139	-37	
88.9%	-10,120	-10,140	-20	
90.1%	-10,124	-10,176	-52	
91.4%	-10,127	-10,187	-60	
92.6%	-10,136	-10,216	-80	
93.8%	-10,195	-10,236	-42	
95.1%	-10,231	-10,267	-37	
96.3%	-10,297	-10,287	10	
97.5%	-10,347	-10,295	52	
98.8%	-10,364	-10,383	-19	
100.0%	-10,407	-10,407	0	

Figure SW-36-b
Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Probability of Exceedance

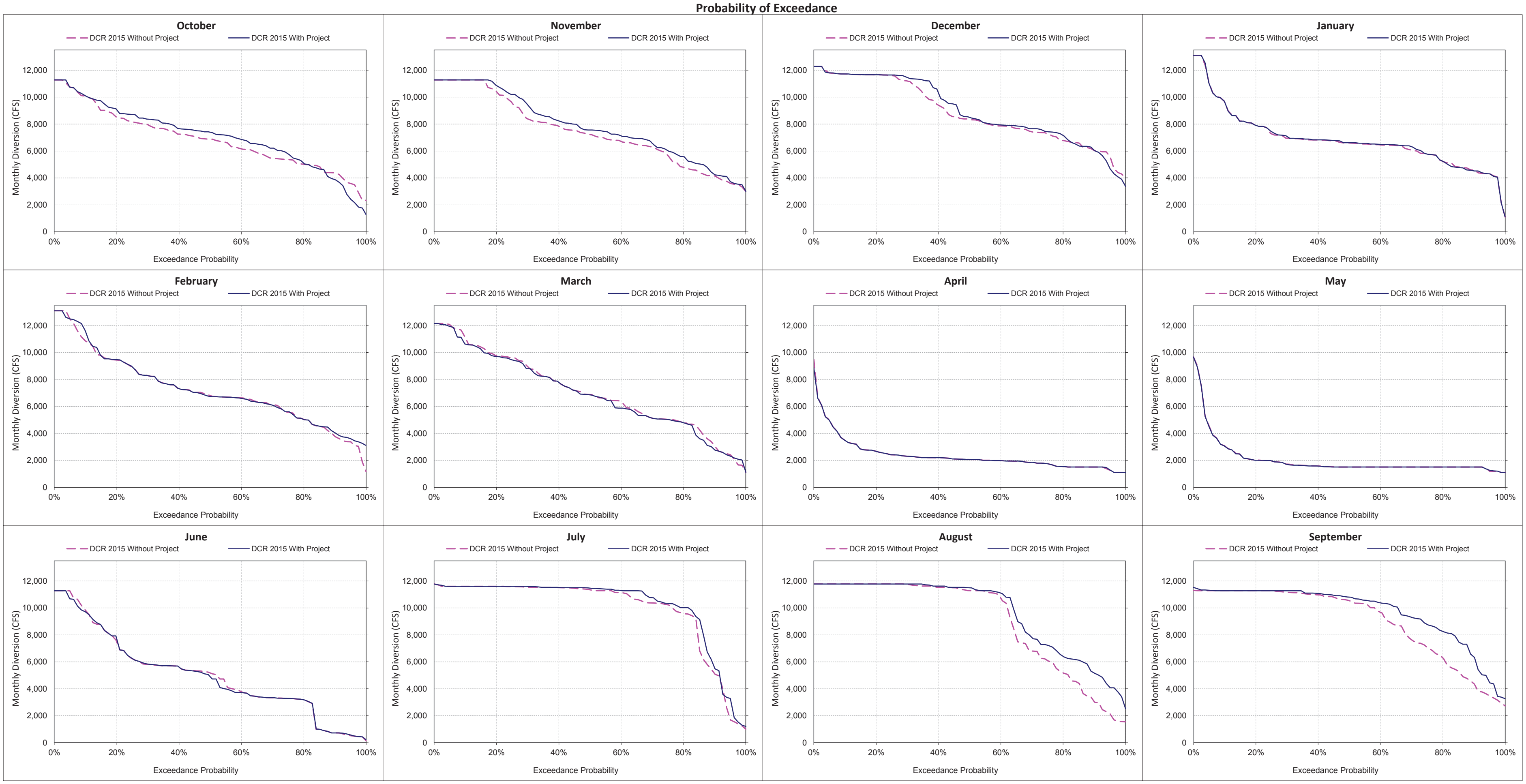


Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,280	0	0.0%
1.2%	11,280	11,280	0	0.0%
2.5%	11,280	11,280	0	0.0%
3.7%	11,056	11,280	224	2.0%
4.9%	10,754	10,734	-20	-0.2%
6.2%	10,687	10,692	5	0.1%
7.4%	10,383	10,414	31	0.3%
8.6%	10,115	10,270	154	1.5%
9.9%	10,083	10,112	29	0.3%
11.1%	9,960	9,976	16	0.2%
12.3%	9,845	9,872	27	0.3%
13.6%	9,478	9,769	291	3.1%
14.8%	9,023	9,745	722	8.0%
16.0%	9,020	9,478	459	5.1%
17.3%	8,915	9,256	341	3.8%
18.5%	8,810	9,200	390	4.4%
19.8%	8,540	9,144	604	7.1%
21.0%	8,456	8,781	325	3.8%
22.2%	8,420	8,775	356	4.2%
23.5%	8,251	8,731	480	5.8%
24.7%	8,185	8,718	533	6.5%
25.9%	8,116	8,705	588	7.3%
27.2%	8,066	8,456	390	4.8%
28.4%	8,000	8,454	454	5.7%
29.6%	7,998	8,366	368	4.6%
30.9%	7,844	8,355	510	6.5%
32.1%	7,717	8,313	597	7.7%
33.3%	7,691	8,297	606	7.9%
34.6%	7,690	8,078	388	5.0%
35.8%	7,612	8,054	442	5.8%
37.0%	7,491	8,000	509	6.8%
38.3%	7,480	7,903	423	5.7%
39.5%	7,254	7,684	429	5.9%
40.7%	7,248	7,629	381	5.3%
42.0%	7,235	7,622	387	5.3%
43.2%	7,152	7,604	453	6.3%
44.4%	7,110	7,567	457	6.4%
45.7%	7,027	7,501	475	6.8%
46.9%	6,933	7,490	557	8.0%
48.1%	6,901	7,433	532	7.7%
49.4%	6,880	7,423	543	7.9%
50.6%	6,880	7,373	494	7.2%
51.9%	6,781	7,225	444	6.5%
53.1%	6,722	7,209	487	7.2%
54.3%	6,687	7,203	516	7.7%
55.6%	6,598	7,149	551	8.4%
56.8%	6,318	7,093	774	12.3%
58.0%	6,306	6,979	672	10.7%
59.3%	6,203	6,916	713	11.5%
60.5%	6,126	6,834	708	11.6%
61.7%	6,121	6,757	636	10.4%
63.0%	6,082	6,560	478	7.9%
64.2%	5,961	6,551	590	9.9%
65.4%	5,834	6,505	671	11.5%
66.7%	5,772	6,458	686	11.9%
67.9%	5,632	6,390	758	13.5%
69.1%	5,485	6,215	730	13.3%
70.4%	5,458	6,206	748	13.7%
71.6%	5,429	6,033	603	11.1%
72.8%	5,404	6,012	608	11.3%
74.1%	5,372	5,917	546	10.2%
75.3%	5,362	5,735	374	7.0%
76.5%	5,330	5,475	145	2.7%
77.8%	5,070	5,398	328	6.5%
79.0%	5,048	5,306	258	5.1%
80.2%	5,010	5,039	28	0.6%
81.5%	4,990	4,990	0	0.0%
82.7%	4,929	4,818	-110	-2.2%
84.0%	4,929	4,743	-186	-3.8%
85.2%	4,823	4,652	-171	-3.6%
86.4%	4,403	4,638	235	5.3%
87.7%	4,398	4,112	-286	-6.5%
88.9%	4,395	3,957	-437	-10.0%
90.1%	4,379	3,871	-508	-11.6%
91.4%	4,255	3,666	-589	-13.9%
92.6%	3,957	3,420	-538	-13.6%
93.8%	3,671	2,778	-893	-24.3%
95.1%	3,585	2,422	-1,164	-32.5%
96.3%	3,497	2,174	-1,323	-37.8%
97.5%	2,920	1,846	-1,074	-36.8%
98.8%	2,350	1,767	-583	-24.8%
100.0%	2,341	1,277	-1,064	-45.4%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,280	0	0.0%
1.2%	11,280	11,280	0	0.0%
2.5%	11,280	11,280	0	0.0%
3.7%	11,280	11,280	0	0.0%
4.9%	11,280	11,280	0	0.0%
6.2%	11,280	11,280	0	0.0%
7.4%	11,280	11,280	0	0.0%
8.6%	11,280	11,280	0	0.0%
9.9%	11,280	11,280	0	0.0%
11.1%	11,280	11,280	0	0.0%
12.3%	11,280	11,280	0	0.0%
13.6%	11,280	11,280	0	0.0%
14.8%	11,280	11,280	0	0.0%
16.0%	11,280	11,280	0	0.0%
17.3%	10,716	11,280	564	5.3%
18.5%	10,629	11,176	547	5.2%
19.8%	10,470	10,899	430	4.1%
21.0%	10,157	10,714	557	5.5%
22.2%	10,131	10,572	441	4.4%
23.5%	9,902	10,350	448	4.5%
24.7%	9,661	10,207	546	5.7%
25.9%	9,297	10,199	903	9.7%
27.2%	9,222	9,966	744	8.1%
28.4%	8,807	9,836	1,029	11.7%
29.6%	8,417	9,553	1,136	13.5%
30.9%	8,313	9,200	887	10.7%
32.1%	8,188	8,847	659	8.0%
33.3%	8,177	8,740	562	6.9%
34.6%	8,129	8,665	536	6.6%
35.8%	8,109	8,563	454	5.6%
37.0%	7,980	8,547	567	7.1%
38.3%	7,945	8,379	434	5.5%
39.5%	7,895	8,276	381	4.8%
40.7%	7,736	8,169	433	5.6%
42.0%	7,605	8,088	483	6.3%
43.2%	7,566	8,059	493	6.5%
44.4%	7,552	7,997	446	5.9%
45.7%	7,510	7,986	476	6.3%
46.9%	7,374	7,713	339	4.6%
48.1%	7,330	7,584	254	3.5%
49.4%	7,242	7,568	326	4.5%
50.6%	7,205	7,568	363	5.0%
51.9%	7,086	7,537	451	6.4%
53.1%	7,005	7,525	521	7.4%
54.3%	6,984	7,468	485	6.9%
55.6%	6,858	7,419	562	8.2%
56.8%	6,828	7,260	432	6.3%
58.0%	6,800	7,249	449	6.6%
59.3%	6,784	7,197	413	6.1%
60.5%	6,662	7,088	426	6.4%
61.7%	6,622	7,084	462	7.0%
63.0%	6,613	6,980	367	5.5%
64.2%	6,521	6,937	416	6.4%
65.4%	6,456	6,929	474	7.3%
66.7%	6,427	6,926	500	7.8%
67.9%	6,402	6,840	438	6.8%
69.1%	6,331	6,766	435	6.9%
70.4%	6,279	6,483	205	3.3%
71.6%	6,117	6,253	136	2.2%
72.8%	5,994	6,242	249	4.1%
74.1%	5,901	6,162	261	4.4%
75.3%	5,588	5,974	386	6.9%
76.5%	5,201	5,900	699	13.4%
77.8%	5,158	5,754	596	11.6%
79.0%	4,841	5,596	754	15.6%
80.2%	4,780	5,578	798	16.7%
81.5%	4,685	5,254	570	12.2%
82.7%	4,609	5,201	592	12.9%
84.0%	4,584	5,078	494	10.8%
85.2%	4,392	5,032	640	14.6%
86.4%	4,285	4,973	688	16.1%
87.7%	4,177	4,788	611	14.6%
88.9%	4,171	4,445	273	6.6%
90.1%	4,143	4,236	93	2.2%
91.4%	3,977	4,181	204	5.1%
92.6%	3,817	4,139	322	8.4%
93.8%	3,756	4,104	348	9.3%
95.1%	3,593	3,731	138	3.8%
96.3%	3,527	3,591	64	1.8%
97.5%	3,510	3,531	21	0.6%
98.8%	3,332	3,502	169	5.1%
100.0%	2,999	3,001	2	0.1%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,278	12,278	0	0.0%
1.2%	12,278	12,278	0	0.0%
2.5%	12,278	12,278	0	0.0%
3.7%	11,983	11,851	-133	-1.1%
4.9%	11,801	11,801	0	0.0%
6.2%	11,770	11,800	30	0.3%
7.4%	11,748	11,748	0	0.0%
8.6%	11,725	11,725	0	0.0%
9.9%	11,719	11,719	0	0.0%
11.1%	11,717	11,719	2	0.0%
12.3%	11,693	11,693	0	0.0%
13.6%	11,686	11,686	0	0.0%
14.8%	11,669	11,680	11	0.1%
16.0%	11,665	11,669	4	0.0%
17.3%	11,663	11,665	2	0.0%
18.5%	11,661	11,663	2	0.0%
19.8%	11,659	11,661	3	0.0%
21.0%	11,654	11,659	4	0.0%
22.2%	11,648	11,654	6	0.1%
23.5%	11,642	11,648	6	0.1%
24.7%	11,599	11,642	43	0.4%
25.9%	11,582	11,640	57	0.5%
27.2%	11,338	11,605	267	2.4%
28.4%	11,220	11,599	380	3.4%
29.6%	11,218	11,491	272	2.4%
30.9%	11,154	11,371	217	1.9%
32.1%	10,881	11,360	479	4.4%
33.3%	10,721	11,346	625	5.8%
34.6%	10,430	11,303	873	8.4%
35.8%	10,057	11,215	1,158	11.5%
37.0%	9,825	11,202	1,377	14.0%
38.3%	9,769	10,703	934	9.6%
39.5%	9,466	10,614	1,148	12.1%
40.7%	9,308	9,893	585	6.3%
42.0%	9,140	9,765	625	6.8%
43.2%	8,705	9,521	816	9.4%
44.4%	8,558	9,500	942	11.0%
45.7%	8,536	9,428	892	10.5%
46.9%	8,420	8,705	285	3.4%
48.1%	8,382	8,556	174	2.1%
49.4%	8,382	8,536	155	1.8%
50.6%	8,320	8,450	130	1.6%
51.9%	8,313	8,382	69	0.8%
53.1%	8,233	8,313	80	1.0%
54.3%	8,113	8,113	0	0.0%
55.6%	8,017	8,069	51	0.6%
56.8%	7,943	7,996	53	0.7%
58.0%	7,908	7,988	80	1.0%
59.3%	7,863	7,943	80	1.0%
60.5%	7,862	7,937	75	1.0%
61.7%	7,850	7,908	58	0.7%
63.0%	7,835	7,892	57	0.7%
64.2%	7,716	7,880	164	2.1%
65.4%	7,656	7,855	200	2.6%
66.7%	7,643	7,837	194	2.5%
67.9%	7,608	7,780	172	2.3%
69.1%	7,477	7,665	188	2.5%
70.4%	7,406	7,662	256	3.5%
71.6%	7,398	7,661	263	3.6%
72.8%	7,375	7,608	233	3.2%
74.1%	7,358	7,460	102	1.4%
75.3%	7,268	7,435	167	2.3%
76.5%	7,120	7,406	286	4.0%
77.8%	7,049	7,375	326	4.6%
79.0%	6,789	7,296	506	7.5%
80.2%	6,776	7,120	343	5.1%
81.5%	6,706	6,834	128	1.9%
82.7%	6,648	6,645	-3	0.0%
84.0%	6,645	6,527	-117	-1.8%
85.2%	6,580	6,371	-209	-3.2%
86.4%	6,277	6,354	78	1.2%
87.7%	6,258	6,352	93	1.5%
88.9%	6,179	6,282	103	1.7%
90.1%	6,023	6,023	0	0.0%
91.4%	6,009	5,903	-105	-1.8%
92.6%	5,943	5,656	-286	-4.8%
93.8%	5,937	5,270	-667	-11.2%
95.1%	5,586	4,663	-924	-16.5%
96.3%	4,709	4,298	-411	-8.7%
97.5%	4,410	4,094	-316	-7.2%
98.8%	4,292	3,894	-399	-9.3%
100.0%	3,997	3,391	-606	-15.2%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,100	13,100	0	0.0%
1.2%	13,100	13,100	0	0.0%
2.5%	13,100	13,100	0	0.0%
3.7%	12,377	12,532	154	1.2%
4.9%	11,081	11,074	-7	-0.1%
6.2%	10,315	10,308	-7	-0.1%
7.4%	10,058	10,035	-23	-0.2%
8.6%	9,954	9,946	-8	-0.1%
9.9%	9,691	9,691	0	0.0%
11.1%	8,974	8,950	-24	-0.3%
12.3%	8,669	8,645	-25	-0.3%
13.6%	8,629	8,629	0	0.0%
14.8%	8,222	8,215	-8	-0.1%
16.0%	8,212	8,212	0	0.0%
17.3%	8,104	8,104	0	0.0%
18.5%	8,092	8,082	-11	-0.1%
19.8%	7,926	7,926	0	0.0%
21.0%	7,826	7,831	4	0.1%
22.2%	7,824	7,824	0	0.0%
23.5%	7,739	7,739	0	0.0%
24.7%	7,308	7,491	183	2.5%
25.9%	7,191	7,308	118	1.6%
27.2%	7,175	7,191	16	0.2%
28.4%	7,157	7,175	18	0.2%
29.6%	6,956	7,136	180	2.6%
30.9%	6,935	6,950	15	0.2%
32.1%	6,919	6,935	16	0.2%
33.3%	6,919	6,925	6	0.1%
34.6%	6,892	6,919	28	0.4%
35.8%	6,831	6,888	57	0.8%
37.0%	6,830	6,883	53	0.8%
38.3%	6,826	6,831	5	0.1%
39.5%	6,825	6,830	5	0.1%
40.7%	6,816	6,829	13	0.2%
42.0%	6,811	6,826	15	0.2%
43.2%	6,778	6,817	39	0.6%
44.4%	6,757	6,783	26	0.4%
45.7%	6,752	6,762	10	0.1%
46.9%	6,638	6,759	121	1.8%
48.1%	6,607	6,618	11	0.2%
49.4%	6,603	6,616	13	0.2%
50.6%	6,588	6,613	25	0.4%
51.9%	6,575	6,610	35	0.5%
53.1%	6,574	6,586	11	0.2%
54.3%	6,527	6,583	55	0.8%
55.6%	6,522	6,572	50	0.8%
56.8%	6,501	6,529	28	0.4%
58.0%	6,473	6,514	40	0.6%
59.3%	6,470	6,505	35	0.5%
60.5%	6,445	6,483	38	0.6%
61.7%	6,440	6,480	40	0.6%
63.0%	6,437	6,473	36	0.6%
64.2%	6,431	6,470	39	0.6%
65.4%	6,404	6,446	42	0.7%
66.7%	6,391	6,406	16	0.2%
67.9%	6,188	6,394	206	3.3%
69.1%	6,112	6,390	278	4.6%
70.4%	6,042	6,290	248	4.1%
71.6%	6,004	6,112	108	1.8%
72.8%	5,830	6,042	212	3.6%
74.1%	5,812	5,830	19	0.3%
75.3%	5,746	5,746	0	0.0%
76.5%	5,729	5,729	0	0.0%
77.8%	5,699	5,699	0	0.0%
79.0%	5,339	5,339	0	0.0%
80.2%	5,196	5,205	9	0.2%
81.5%	5,122	5,025	-97	-1.9%
82.7%	5,108	4,845	-262	-5.1%
84.0%	4,845	4,814	-31	-0.6%
85.2%	4,814	4,763	-51	-1.1%
86.4%	4,763	4,745	-18	-0.4%
87.7%	4,745	4,604	-141	-3.0%
88.9%	4,604	4,569	-35	-0.8%
90.1%	4,569	4,513	-56	-1.2%
91.4%	4,381	4,512	131	3.0%
92.6%	4,337	4,390	53	1.2%
93.8%	4,332	4,332	0	0.0%
95.1%	4,309	4,309	0	0.0%
96.3%	4,163	4,109	-54	-1.3%
97.5%	4,064	4,049	-14	-0.4%
98.8%	2,130	2,159	29	1.4%
100.0%	1,100	1,100	0	0.0%

Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,100	13,100	0	0.0%
1.2%	13,100	13,100	0	0.0%
2.5%	13,100	13,100	0	0.0%
3.7%	13,100	12,618	-482	-3.7%
4.9%	12,505	12,505	0	0.0%
6.2%	12,160	12,448	288	2.4%
7.4%	11,615	12,299	685	5.9%
8.6%	11,177	12,160	983	8.8%
9.9%	10,869	11,615	746	6.9%
11.1%	10,703	10,869	166	1.6%
12.3%	10,453	10,453	0	0.0%
13.6%	9,845	10,373	528	5.4%
14.8%	9,800	9,776	-25	-0.3%
16.0%	9,591	9,533	-58	-0.6%
17.3%	9,529	9,529	0	0.0%
18.5%	9,469	9,501	32	0.3%
19.8%	9,447	9,469	22	0.2%
21.0%	9,427	9,447	20	0.2%
22.2%	9,289	9,289	0	0.0%
23.5%	9,137	9,137	0	0.0%
24.7%	8,944	8,988	44	0.5%
25.9%	8,726	8,726	0	0.0%
27.2%	8,387	8,379	-8	-0.1%
28.4%	8,325	8,325	0	0.0%
29.6%	8,304	8,304	0	0.0%
30.9%	8,233	8,233	0	0.0%
32.1%	8,231	8,231	0	0.0%
33.3%	7,883	7,883	0	0.0%
34.6%	7,748	7,748	0	0.0%
35.8%	7,687	7,687	0	0.0%
37.0%	7,613	7,613	0	0.0%
38.3%	7,607	7,607	0	0.0%
39.5%	7,360	7,360	0	0.0%
40.7%	7,260	7,260	0	0.0%
42.0%	7,247	7,247	0	0.0%
43.2%	7,223	7,203	-20	-0.3%
44.4%	7,040	7,040	0	0.0%
45.7%	7,039	7,038	-1	0.0%
46.9%	7,038	6,943	-94	-1.3%
48.1%	6,943	6,851	-92	-1.3%
49.4%	6,851	6,755	-96	-1.4%
50.6%	6,755	6,723	-32	-0.5%
51.9%	6,723	6,719	-3	0.0%
53.1%	6,719	6,699	-21	-0.3%
54.3%	6,699	6,695	-4	-0.1%
55.6%	6,695	6,676	-19	-0.3%
56.8%	6,675	6,675	0	0.0%
58.0%	6,671	6,637	-33	-0.5%
59.3%	6,637	6,622	-15	-0.2%
60.5%	6,622	6,561	-61	-0.9%
61.7%	6,561	6,522	-40	-0.6%
63.0%	6,522	6,398	-123	-1.9%
64.2%	6,398	6,354	-44	-0.7%
65.4%	6,329	6,300	-29	-0.5%
66.7%	6,300	6,281	-19	-0.3%
67.9%	6,281	6,195	-86	-1.4%
69.1%	6,142	6,137	-5	-0.1%
70.4%	6,137	6,066	-71	-1.2%
71.6%	6,066	5,916	-149	-2.5%
72.8%	5,807	5,807	0	0.0%
74.1%	5,600	5,605	5	0.1%
75.3%	5,568	5,600	32	0.6%
76.5%	5,503	5,391	-112	-2.0%
77.8%	5,140	5,140	0	0.0%
79.0%	5,132	5,132	0	0.0%
80.2%	5,011	5,011	0	0.0%
81.5%	4,998	4,998	0	0.0%
82.7%	4,663	4,663	0	0.0%
84.0%	4,570	4,577	7	0.2%
85.2%	4,492	4,530	39	0.9%
86.4%	4,462	4,492	30	0.7%
87.7%	4,205	4,462	257	6.1%
88.9%	4,017	4,205	189	4.7%
90.1%	3,744	4,017	272	7.3%
91.4%	3,609	3,839	231	6.4%
92.6%	3,451	3,744	293	8.5%
93.8%	3,380	3,703	323	9.6%
95.1%	3,378	3,612	234	6.9%
96.3%	3,101	3,451	350	11.3%
97.5%	3,037	3,380	343	11.3%
98.8%	1,881	3,256	1,375	73.1%
100.0%	1,153	3,101	1,948	169.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,161	12,161	0	0.0%
1.2%	12,161	12,161	0	0.0%
2.5%	12,161	12,081	-80	-0.7%
3.7%	12,139	12,058	-81	-0.7%
4.9%	12,081	11,936	-145	-1.2%
6.2%	11,817	11,870	53	0.4%
7.4%	11,776	11,142	-634	-5.4%
8.6%	11,668	11,133	-535	-4.6%
9.9%	11,163	10,622	-542	-4.9%
11.1%	10,571	10,564	-7	-0.1%
12.3%	10,564	10,555	-9	-0.1%
13.6%	10,555	10,431	-124	-1.2%
14.8%	10,431	10,292	-138	-1.3%
16.0%	10,292	9,985	-308	-3.0%
17.3%	9,985	9,930	-55	-0.5%
18.5%	9,930	9,771	-159	-1.6%
19.8%	9,771	9,710	-61	-0.6%
21.0%	9,760	9,683	-78	-0.8%
22.2%	9,710	9,601	-109	-1.1%
23.5%	9,683	9,594	-89	-0.9%
24.7%	9,601	9,483	-118	-1.2%
25.9%	9,595	9,407	-188	-2.0%
27.2%	9,407	9,350	-58	-0.6%
28.4%	9,350	9,184	-166	-1.8%
29.6%	9,044	8,800	-244	-2.7%
30.9%	8,770	8,795	25	0.3%
32.1%	8,763	8,468	-295	-3.4%
33.3%	8,468	8,288	-180	-2.1%
34.6%	8,249	8,249	0	0.0%
35.8%	8,232	8,232	0	0.0%
37.0%	8,151	8,150	0	0.0%
38.3%	7,893	7,893	0	0.0%
39.5%	7,870	7,870	0	0.0%
40.7%	7,649	7,649	0	0.0%
42.0%	7,484	7,484	0	0.0%
43.2%	7,390	7,390	0	0.0%
44.4%	7,226	7,226	0	0.0%
45.7%	7,153	7,153	0	0.0%
46.9%	7,096	6,913	-183	-2.6%
48.1%	6,913	6,890	-23	-0.3%
49.4%	6,890	6,874	-16	-0.2%
50.6%	6,874	6,843	-31	-0.5%
51.9%	6,691	6,737	46	0.7%
53.1%	6,640	6,691	51	0.8%
54.3%	6,613	6,613	0	0.0%
55.6%	6,591	6,436	-155	-2.4%
56.8%	6,445	6,423	-21	-0.3%
58.0%	6,435	5,898	-537	-8.3%
59.3%	6,417	5,884	-533	-8.3%
60.5%	6,245	5,870	-374	-6.0%
61.7%	5,898	5,813	-86	-1.5%
63.0%	5,877	5,782	-95	-1.6%
64.2%	5,813	5,604	-208	-3.6%
65.4%	5,612	5,342	-270	-4.8%
66.7%	5,479	5,312	-167	-3.0%
67.9%	5,312	5,310	-2	0.0%
69.1%	5,188	5,188	0	0.0%
70.4%	5,099	5,099	0	0.0%
71.6%	5,067	5,067	0	0.0%
72.8%	5,062	5,062	0	0.0%
74.1%	5,054	5,054	0	0.0%
75.3%	5,031	5,031	0	0.0%
76.5%	5,021	4,946	-75	-1.5%
77.8%	4,947	4,895	-52	-1.1%
79.0%	4,864	4,858	-6	-0.1%
80.2%	4,858	4,770	-88	-1.8%
81.5%	4,686	4,686	0	0.0%
82.7%	4,686	4,598	-88	-1.9%
84.0%	4,598	3,866	-732	-15.9%
85.2%	4,252	3,593	-659	-15.5%
86.4%	3,866	3,491	-375	-9.7%
87.7%	3,593	3,097	-496	-13.8%
88.9%	3,392	3,018	-374	-11.0%
90.1%	3,018	2,755	-263	-8.7%
91.4%	2,672	2,672	0	0.0%
92.6%	2,582	2,582	0	0.0%
93.8%	2,496	2,409	-87	-3.5%
95.1%	2,409	2,312	-97	-4.0%
96.3%	2,079	2,180	101	4.9%
97.5%	1,653	2,079	426	25.8%
98.8%	1,642	2,016	374	22.8%
100.0%	1,100	1,100	0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,499	8,851	-648	-6.8%
1.2%	6,695	6,605	-90	-1.3%
2.5%	6,082	6,083	1	0.0%
3.7%	5,242	5,235	-7	-0.1%
4.9%	5,010	4,994	-16	-0.3%
6.2%	4,482	4,474	-8	-0.2%
7.4%	4,173	4,156	-16	-0.4%
8.6%	3,705	3,694	-11	-0.3%
9.9%	3,501	3,494	-7	-0.2%
11.1%	3,329	3,313	-16	-0.5%
12.3%	3,244	3,244	0	0.0%
13.6%	3,207	3,207	0	0.0%
14.8%	2,851	2,851	0	0.0%
16.0%	2,784	2,784	0	0.0%
17.3%	2,769	2,764	-5	-0.2%
18.5%	2,755	2,754	0	0.0%
19.8%	2,686	2,686	1	0.0%
21.0%	2,599	2,599	0	0.0%
22.2%	2,541	2,541	0	0.0%
23.5%	2,493	2,493	0	0.0%
24.7%	2,415	2,415	0	0.0%
25.9%	2,402	2,402	0	0.0%
27.2%	2,387	2,387	0	0.0%
28.4%	2,339	2,339	-1	0.0%
29.6%	2,308	2,308	0	0.0%
30.9%	2,284	2,284	0	0.0%
32.1%	2,270	2,270	0	0.0%
33.3%	2,235	2,235	0	0.0%
34.6%	2,209	2,202	-7	-0.3%
35.8%	2,202	2,197	-4	-0.2%
37.0%	2,197	2,194	-3	-0.1%
38.3%	2,194	2,193	0	0.0%
39.5%	2,193	2,193	0	0.0%
40.7%	2,192	2,192	0	0.0%
42.0%	2,176	2,176	0	0.0%
43.2%	2,157	2,157	0	0.0%
44.4%	2,102	2,102	0	0.0%
45.7%	2,098	2,098	0	0.0%
46.9%	2,087	2,087	0	0.0%
48.1%	2,072	2,072	1	0.0%
49.4%	2,064	2,064	0	0.0%
50.6%	2,056	2,057	1	0.0%
51.9%	2,056	2,056	0	0.0%
53.1%	2,041	2,041	0	0.0%
54.3%	2,010	2,010	0	0.0%
55.6%	2,008	2,008	0	0.0%
56.8%	2,004	2,004	0	0.0%
58.0%	1,978	1,978	0	0.0%
59.3%	1,977	1,977	0	0.0%
60.5%	1,970	1,970	0	0.0%
61.7%	1,954	1,954	0	0.0%
63.0%	1,953	1,953	0	0.0%
64.2%	1,943	1,943	0	0.0%
65.4%	1,940	1,940	0	0.0%
66.7%	1,927	1,927	0	0.0%
67.9%	1,866	1,874	8	0.4%
69.1%	1,849	1,849	0	0.0%
70.4%	1,848	1,848	0	0.0%
71.6%	1,787	1,788	0	0.0%
72.8%	1,786	1,786	0	0.0%
74.1%	1,779	1,779	0	0.0%
75.3%	1,729	1,729	0	0.0%
76.5%	1,660	1,660	0	0.0%
77.8%	1,557	1,557	0	0.0%
79.0%	1,548	1,548	0	0.0%
80.2%	1,540	1,540	0	0.0%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,500	1,500	0	0.0%
90.1%	1,500	1,500	0	0.0%
91.4%	1,500	1,500	0	0.0%
92.6%	1,500	1,500	0	0.0%
93.8%	1,384	1,465	80	5.8%
95.1%	1,263	1,266	3	0.2%
96.3%	1,100	1,100	0	0.0%
97.5%	1,100	1,100	0	0.0%
98.8%	1,100	1,100	0	0.0%
100.0%	1,100	1,100	0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,664	9,664	0	0.0%
1.2%	9,019	8,922	-97	-1.1%
2.5%	7,529	7,530	2	0.0%
3.7%	5,269	5,251	-18	-0.3%
4.9%	4,573	4,552	-21	-0.5%
6.2%	3,892	3,869	-22	-0.6%
7.4%	3,654	3,632	-21	-0.6%
8.6%	3,190	3,190	0	0.0%
9.9%	3,089	3,067	-22	-0.7%
11.1%	2,861	2,861	0	0.0%
12.3%	2,777	2,774	-3	-0.1%
13.6%	2,517	2,495	-22	-0.9%
14.8%	2,469	2,469	0	0.0%
16.0%	2,160	2,160	0	0.0%
17.3%	2,117	2,117	0	0.0%
18.5%	2,056	2,056	0	0.0%
19.8%	2,017	2,013	-4	-0.2%
21.0%	2,012	2,008	-4	-0.2%
22.2%	1,995	1,995	1	0.0%
23.5%	1,994	1,994	0	0.0%
24.7%	1,976	1,976	0	0.0%
25.9%	1,888	1,888	0	0.0%
27.2%	1,877	1,877	-1	0.0%
28.4%	1,854	1,855	1	0.0%
29.6%	1,718	1,709	-10	-0.6%
30.9%	1,709	1,652	-56	-3.3%
32.1%	1,652	1,643	-9	-0.5%
33.3%	1,644	1,635	-9	-0.5%
34.6%	1,635	1,616	-18	-1.1%
35.8%	1,616	1,600	-16	-1.0%
37.0%	1,600	1,587	-13	-0.8%
38.3%	1,587	1,586	-1	-0.1%
39.5%	1,586	1,573	-13	-0.8%
40.7%	1,572	1,561	-12	-0.7%
42.0%	1,561	1,520	-41	-2.6%
43.2%	1,523	1,519	-4	-0.2%
44.4%	1,520	1,500	-20	-1.3%
45.7%	1,500	1,500	0	0.0%
46.9%	1,500	1,500	0	0.0%
48.1%	1,500	1,500	0	0.0%
49.4%	1,500	1,500	0	0.0%
50.6%	1,500	1,500	0	0.0%
51.9%	1,500	1,500	0	0.0%
53.1%	1,500	1,500	0	0.0%
54.3%	1,500	1,500	0	0.0%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,500	1,500	0	0.0%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,500	1,500	0	0.0%
77.8%	1,500	1,500	0	0.0%
79.0%	1,500	1,500	0	0.0%
80.2%	1,500	1,500	0	0.0%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,500	1,500	0	0.0%
90.1%	1,500	1,500	0	0.0%
91.4%	1,500	1,500	0	0.0%
92.6%	1,500	1,500	0	0.0%
93.8%	1,430	1,378	-52	-3.6%
95.1%	1,180	1,262	82	6.9%
96.3%	1,177	1,213	36	3.1%
97.5%	1,164	1,205	41	3.5%
98.8%	1,100	1,100	0	0.0%
100.0%	1,100	1,100	0	0.0%

Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,280	0	0.0%
1.2%	11,280	11,280	0	0.0%
2.5%	11,280	11,280	0	0.0%
3.7%	11,280	11,280	0	0.0%
4.9%	11,280	10,688	-592	-5.3%
6.2%	10,731	10,646	-85	-0.8%
7.4%	10,647	10,147	-499	-4.7%
8.6%	10,197	9,853	-344	-3.4%
9.9%	9,852	9,716	-137	-1.4%
11.1%	9,501	9,501	0	0.0%
12.3%	8,910	9,149	240	2.7%
13.6%	8,798	8,910	112	1.3%
14.8%	8,769	8,769	0	0.0%
16.0%	8,329	8,329	0	0.0%
17.3%	8,120	8,120	0	0.0%
18.5%	7,921	7,921	0	0.0%
19.8%	7,613	7,917	304	4.0%
21.0%	6,883	6,884	0	0.0%
22.2%	6,843	6,843	0	0.0%
23.5%	6,474	6,474	0	0.0%
24.7%	6,265	6,281	15	0.2%
25.9%	6,122	6,118	-4	-0.1%
27.2%	6,030	6,046	16	0.3%
28.4%	5,844	5,930	86	1.5%
29.6%	5,805	5,844	39	0.7%
30.9%	5,785	5,805	21	0.4%
32.1%	5,755	5,787	32	0.5%
33.3%	5,737	5,755	19	0.3%
34.6%	5,707	5,707	0	0.0%
35.8%	5,705	5,705	0	0.0%
37.0%	5,701	5,701	0	0.0%
38.3%	5,696	5,696	0	0.0%
39.5%	5,686	5,686	0	0.0%
40.7%	5,471	5,469	-2	0.0%
42.0%	5,381	5,381	0	0.0%
43.2%	5,369	5,369	0	0.0%
44.4%	5,350	5,319	-31	-0.6%
45.7%	5,326	5,280	-46	-0.9%
46.9%	5,319	5,227	-92	-1.7%
48.1%	5,280	5,110	-170	-3.2%
49.4%	5,227	5,051	-176	-3.4%
50.6%	5,110	4,728	-382	-7.5%
51.9%	5,051	4,725	-326	-6.5%
53.1%	4,728	4,082	-646	-13.7%
54.3%	4,725	4,015	-710	-15.0%
55.6%	4,082	3,953	-129	-3.2%
56.8%	4,015	3,861	-154	-3.8%
58.0%	3,952	3,727	-225	-5.7%
59.3%	3,861	3,720	-141	-3.7%
60.5%	3,719	3,702	-17	-0.5%
61.7%	3,673	3,673	0	0.0%
63.0%	3,483	3,483	0	0.0%
64.2%	3,451	3,451	1	0.0%
65.4%	3,396	3,396	0	0.0%
66.7%	3,386	3,387	1	0.0%
67.9%	3,349	3,349	0	0.0%
69.1%	3,336	3,336	0	0.0%
70.4%	3,335	3,335	0	0.0%
71.6%	3,312	3,311	0	0.0%
72.8%	3,306	3,306	0	0.0%
74.1%	3,285	3,285	-1	0.0%
75.3%	3,274	3,274	0	0.0%
76.5%	3,271	3,271	0	0.0%
77.8%	3,239	3,239	0	0.0%
79.0%	3,215	3,215	0	0.0%
80.2%	3,170	3,170	0	0.0%
81.5%	3,042	3,042	0	0.0%
82.7%	2,906	2,909	3	0.1%
84.0%	1,002	1,002	0	0.0%
85.2%	999	999	0	0.0%
86.4%	898	898	0	0.0%
87.7%	829	829	0	0.0%
88.9%	728	728	0	0.0%
90.1%	727	727	0	0.0%
91.4%	721	720	0	0.0%
92.6%	644	709	65	10.1%
93.8%	555	645	91	16.4%
95.1%	519	561	41	8.0%
96.3%	482	482	0	0.0%
97.5%	453	453	0	0.0%
98.8%	440	440	0	0.1%
100.0%	135	227	92	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,780	11,780	0	0.0%
1.2%	11,715	11,715	0	0.0%
2.5%	11,605	11,677	72	0.6%
3.7%	11,605	11,605	0	0.0%
4.9%	11,605	11,605	0	0.0%
6.2%	11,605	11,605	0	0.0%
7.4%	11,605	11,605	0	0.0%
8.6%	11,605	11,605	0	0.0%
9.9%	11,605	11,605	0	0.0%
11.1%	11,605	11,605	0	0.0%
12.3%	11,605	11,605	0	0.0%
13.6%	11,605	11,605	0	0.0%
14.8%	11,605	11,605	0	0.0%
16.0%	11,605	11,605	0	0.0%
17.3%	11,605	11,605	0	0.0%
18.5%	11,605	11,605	0	0.0%
19.8%	11,605	11,605	0	0.0%
21.0%	11,605	11,605	0	0.0%
22.2%	11,605	11,605	0	0.0%
23.5%	11,589	11,605	16	0.1%
24.7%	11,588	11,605	17	0.1%
25.9%	11,586	11,605	19	0.2%
27.2%	11,577	11,605	28	0.2%
28.4%	11,570	11,605	35	0.3%
29.6%	11,529	11,605	76	0.7%
30.9%	11,529	11,588	59	0.5%
32.1%	11,529	11,577	48	0.4%
33.3%	11,515	11,570	55	0.5%
34.6%	11,515	11,529	14	0.1%
35.8%	11,515	11,529	14	0.1%
37.0%	11,515	11,529	14	0.1%
38.3%	11,515	11,529	14	0.1%
39.5%	11,513	11,519	7	0.1%
40.7%	11,501	11,515	14	0.1%
42.0%	11,498	11,515	17	0.1%
43.2%	11,498	11,515	17	0.1%
44.4%	11,477	11,515	38	0.3%
45.7%	11,443	11,515	72	0.6%
46.9%	11,423	11,513	90	0.8%
48.1%	11,411	11,498	88	0.8%
49.4%	11,381	11,498	117	1.0%
50.6%	11,318	11,443	125	1.1%
51.9%	11,280	11,442	162	1.4%
53.1%	11,280	11,440	160	1.4%
54.3%	11,280	11,411	131	1.2%
55.6%	11,280	11,399	119	1.1%
56.8%	11,280	11,385	105	0.9%
58.0%	11,155	11,322	168	1.5%
59.3%	11,145	11,313	168	1.5%
60.5%	11,123	11,280	157	1.4%
61.7%	11,061	11,280	219	2.0%
63.0%	10,832	11,280	448	4.1%
64.2%	10,653	11,280	627	5.9%
65.4%	10,614	11,280	666	6.3%
66.7%	10,504	11,264	760	7.2%
67.9%	10,390	10,956	566	5.5%
69.1%	10,372	10,771	399	3.8%
70.4%	10,369	10,754	385	3.7%
71.6%	10,352	10,508	156	1.5%
72.8%	10,340	10,442	102	1.0%
74.1%	10,276	10,345	69	0.7%
75.3%	10,224	10,336	112	1.1%
76.5%	9,975	10,317	343	3.4%
77.8%	9,732	10,177	445	4.6%
79.0%	9,661	10,027	365	3.8%
80.2%	9,573	10,017	444	4.6%
81.5%	9,549	10,015	466	4.9%
82.7%	9,428	9,803	375	4.0%
84.0%	9,235	9,379	144	1.6%
85.2%	6,809	9,134	2,325	34.1%
86.4%	6,165	7,943	1,778	28.8%
87.7%	5,790	6,736	946	16.3%
88.9%	5,467	6,184	717	13.1%
90.1%	5,076	5,472	395	7.8%
91.4%	4,957	5,345	389	7.8%
92.6%	4,012	3,583	-429	-10.7%
93.8%	2,602	3,360	758	29.1%
95.1%	1,680	3,283	1,603	95.4%
96.3%	1,547	1,862	315	20.4%
97.5%	1,391	1,525	133	9.6%
98.8%	1,242	1,307	65	5.2%
100.0%	1,003	1,208	205	20.4%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,780	11,780	0	0.0%
1.2%	11,780	11,780	0	0.0%
2.5%	11,780	11,780	0	0.0%
3.7%	11,780	11,780	0	0.0%
4.9%	11,780	11,780	0	0.0%
6.2%	11,780	11,780	0	0.0%
7.4%	11,780	11,780	0	0.0%
8.6%	11,780	11,780	0	0.0%
9.9%	11,780	11,780	0	0.0%
11.1%	11,780	11,780	0	0.0%
12.3%	11,780	11,780	0	0.0%
13.6%	11,780	11,780	0	0.0%
14.8%	11,780	11,780	0	0.0%
16.0%	11,780	11,780	0	0.0%
17.3%	11,780	11,780	0	0.0%
18.5%	11,780	11,780	0	0.0%
19.8%	11,780	11,780	0	0.0%
21.0%	11,780	11,780	0	0.0%
22.2%	11,780	11,780	0	0.0%
23.5%	11,780	11,780	0	0.0%
24.7%	11,780	11,780	0	0.0%
25.9%	11,780	11,780	0	0.0%
27.2%	11,780	11,780	0	0.0%
28.4%	11,780	11,780	0	0.0%
29.6%	11,756	11,780	24	0.2%
30.9%	11,723	11,780	57	0.5%
32.1%	11,676	11,780	104	0.9%
33.3%	11,646	11,780	134	1.2%
34.6%	11,630	11,780	150	1.3%
35.8%	11,630	11,723	93	0.8%
37.0%	11,630	11,695	66	0.6%
38.3%	11,630	11,630	0	0.0%
39.5%	11,534	11,630	96	0.8%
40.7%	11,530	11,630	100	0.9%
42.0%	11,530	11,630	100	0.9%
43.2%	11,530	11,534	4	0.0%
44.4%	11,506	11,530	24	0.2%
45.7%	11,493	11,530	37	0.3%
46.9%	11,371	11,530	159	1.4%
48.1%	11,348	11,530	182	1.6%
49.4%	11,291	11,506	215	1.9%
50.6%	11,280	11,493	213	1.9%
51.9%	11,280	11,348	68	0.6%
53.1%	11,280	11,291	11	0.1%
54.3%	11,280	11,280	0	0.0%
55.6%	11,147	11,280	133	1.2%
56.8%	11,134	11,280	146	1.3%
58.0%	11,092	11,212	121	1.1%
59.3%	11,001	11,167	166	1.5%
60.5%	10,540	11,058	519	4.9%
61.7%	10,343	10,796	453	4.4%
63.0%	9,279	10,776	1,498	16.1%
64.2%	8,414	9,851	1,437	17.1%
65.4%	7,483	8,980	1,497	20.0%
66.7%	7,420	8,829	1,409	19.0%
67.9%	7,351	8,214	863	11.7%
69.1%	6,801	8,003	1,202	17.7%
70.4%	6,800	7,709	909	13.4%
71.6%	6,772	7,668	896	13.2%
72.8%	6,264	7,291	1,027	16.4%
74.1%	6,228	7,291	1,063	17.1%
75.3%	6,052	7,215	1,163	19.2%
76.5%	6,002	7,090	1,088	18.1%
77.8%	5,512	6,849	1,337	24.3%
79.0%	5,298	6,551	1,253	23.6%
80.2%	5,150	6,368	1,218	23.7%
81.5%	5,059	6,247	1,188	23.5%
82.7%	4,581	6,205	1,625	35.5%
84.0%	4,556	6,174	1,618	35.5%
85.2%	4,389	6,115	1,726	39.3%
86.4%	3,642	5,974	2,332	64.0%
87.7%	3,464	5,846	2,383	68.8%
88.9%	3,411	5,307	1,896	55.6%
90.1%	2,995	5,150	2,155	71.9%
91.4%	2,984	5,022	2,038	68.3%
92.6%	2,448	4,848	2,401	98.1%
93.8%	2,300	4,392	2,092	91.0%
95.1%	2,142	4,076	1,934	90.3%
96.3%	1,692	4,068	2,376	140.4%
97.5%	1,575	3,780	2,205	140.0%
98.8%	1,573	3,413	1,840	116.9%
100.0%	1,542	2,532	990	64.2%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,307	11,522	215	1.9%
1.2%	11,280	11,423	143	1.3%
2.5%	11,280	11,335	55	0.5%
3.7%	11,280	11,327	47	0.4%
4.9%	11,280	11,314	34	0.3%
6.2%	11,280	11,295	15	0.1%
7.4%	11,280	11,280	0	0.0%
8.6%	11,280	11,280	0	0.0%
9.9%	11,280	11,280	0	0.0%
11.1%	11,280	11,280	0	0.0%
12.3%	11,280	11,280	0	0.0%
13.6%	11,280	11,280	0	0.0%
14.8%	11,280	11,280	0	0.0%
16.0%	11,280	11,280	0	0.0%
17.3%	11,280	11,280	0	0.0%
18.5%	11,280	11,280	0	0.0%
19.8%	11,280	11,280	0	0.0%
21.0%	11,280	11,280	0	0.0%
22.2%	11,280	11,280	0	0.0%
23.5%	11,280	11,280	0	0.0%
24.7%	11,280	11,280	0	0.0%
25.9%	11,260	11,280	20	0.2%
27.2%	11,216	11,280	64	0.6%
28.4%	11,206	11,280	74	0.7%
29.6%	11,156	11,280	124	1.1%
30.9%	11,151	11,280	129	1.2%
32.1%	11,137	11,280	143	1.3%
33.3%	11,133	11,280	147	1.3%
34.6%	11,104	11,280	176	1.6%
35.8%	11,050	11,101	51	0.5%
37.0%	11,023	11,094	71	0.6%
38.3%	11,020	11,094	74	0.7%
39.5%	10,975	11,092	117	1.1%
40.7%	10,966	11,058	92	0.8%
42.0%	10,859	11,011	152	1.4%
43.2%	10,846	10,985	139	1.3%
44.4%	10,843	10,973	130	1.2%
45.7%	10,741	10,912	172	1.6%
46.9%	10,647	10,909	262	2.5%
48.1%	10,630	10,855	226	2.1%
49.4%	10,583	10,815	232	2.2%
50.6%	10,490	10,796	306	2.9%
51.9%	10,356	10,677	321	3.1%
53.1%	10,348	10,653	305	2.9%
54.3%	10,335	10,589	253	2.5%
55.6%	10,304	10,567	263	2.6%
56.8%	10,027	10,510	483	4.8%
58.0%	10,019	10,498	480	4.8%
59.3%	9,751	10,416	665	6.8%
60.5%	9,620	10,356	736	7.6%
61.7%	9,098	10,334	1,236	13.6%
63.0%	8,954	10,273	1,320	14.7%
64.2%	8,770	10,124	1,354	15.4%
65.4%	8,685	10,070	1,384	15.9%
66.7%	8,665	9,492	827	9.5%
67.9%	8,113	9,449	1,335	16.5%
69.1%	7,782	9,376	1,595	20.5%
70.4%	7,566	9,273	1,707	22.6%
71.6%	7,406	9,206	1,800	24.3%
72.8%	7,376	9,170	1,794	24.3%
74.1%	7,254	8,890	1,636	22.6%
75.3%	7,003	8,729	1,726	24.6%
76.5%	6,856	8,663	1,806	26.3%
77.8%	6,598	8,554	1,956	29.6%
79.0%	6,510	8,344	1,834	28.2%
80.2%	6,232	8,229	1,997	32.0%
81.5%	5,729	8,143	2,414	42.1%
82.7%	5,560	8,092	2,532	45.5%
84.0%	5,445	7,925	2,479	45.5%
85.2%	5,279	7,470	2,191	41.5%
86.4%	4,897	7,303	2,405	49.1%
87.7%	4,780	7,302	2,522	52.8%
88.9%	4,592	6,570	1,978	43.1%
90.1%	4,342	6,323	1,982	45.6%
91.4%	3,804	5,428	1,624	42.7%
92.6%	3,764	5,042	1,278	33.9%
93.8%	3,635	4,997	1,361	37.4%
95.1%	3,466	4,446	980	28.3%
96.3%	3,319	4,360	1,041	31.4%
97.5%	3,161	3,428	267	8.4%
98.8%	2,937	3,385	448	15.3%
100.0%	2,726	3,268	542	19.9%

Figure SW-37-b
Jones Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

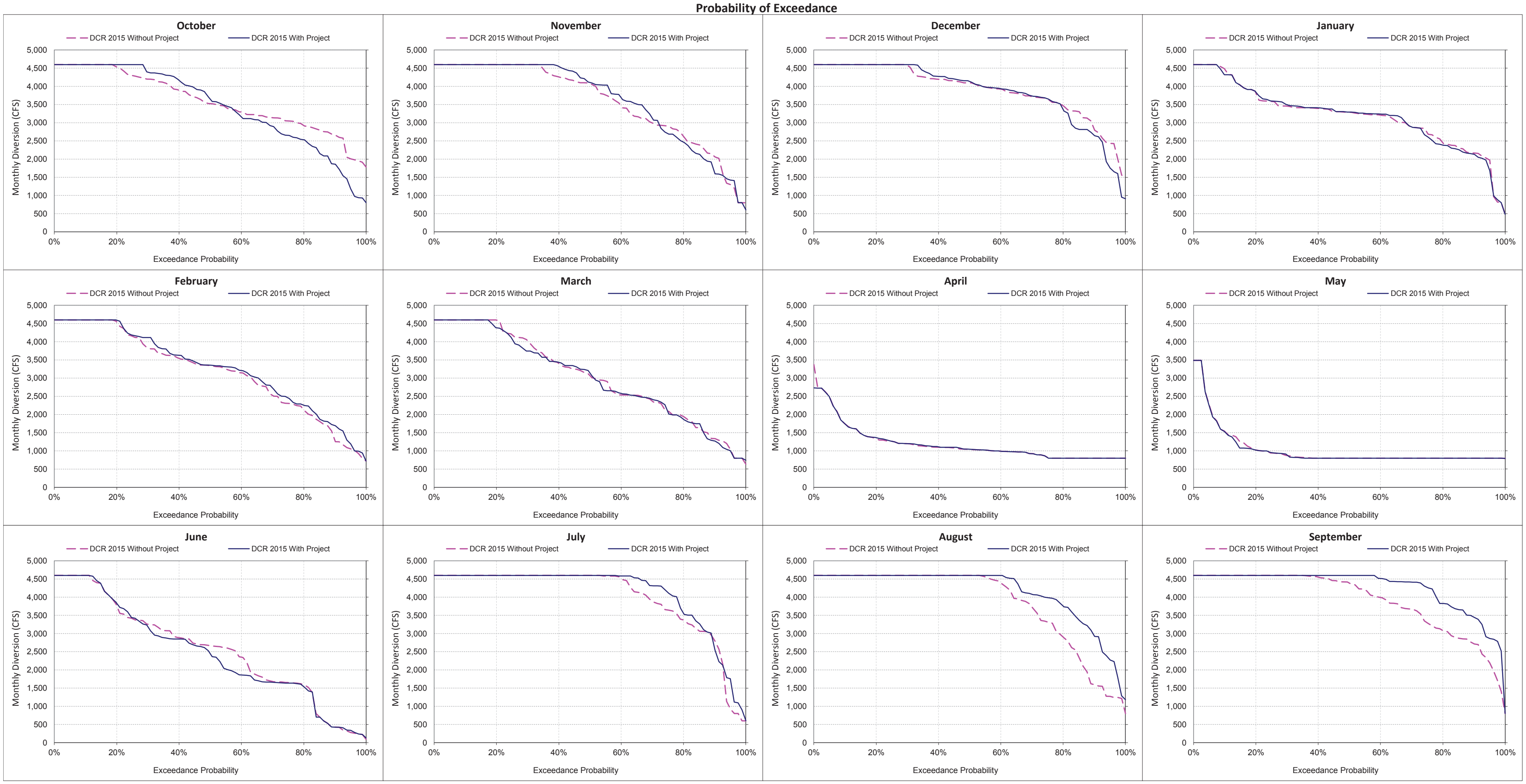


Table SW-37-b
Jones Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,542	4,600	58	1.3%
21.0%	4,505	4,600	95	2.1%
22.2%	4,424	4,600	176	4.0%
23.5%	4,331	4,600	269	6.2%
24.7%	4,304	4,600	296	6.9%
25.9%	4,283	4,600	317	7.4%
27.2%	4,255	4,600	345	8.1%
28.4%	4,234	4,600	366	8.7%
29.6%	4,201	4,399	198	4.7%
30.9%	4,198	4,372	174	4.2%
32.1%	4,183	4,367	184	4.4%
33.3%	4,128	4,354	226	5.5%
34.6%	4,120	4,341	221	5.4%
35.8%	4,086	4,309	223	5.5%
37.0%	4,028	4,299	271	6.7%
38.3%	3,926	4,270	343	8.7%
39.5%	3,911	4,201	291	7.4%
40.7%	3,864	4,112	248	6.4%
42.0%	3,861	4,036	175	4.5%
43.2%	3,770	4,016	245	6.5%
44.4%	3,721	3,988	266	7.2%
45.7%	3,692	3,917	225	6.1%
46.9%	3,639	3,898	259	7.1%
48.1%	3,560	3,854	294	8.3%
49.4%	3,528	3,717	189	5.4%
50.6%	3,524	3,586	63	1.8%
51.9%	3,504	3,582	78	2.2%
53.1%	3,477	3,534	57	1.6%
54.3%	3,465	3,487	22	0.6%
55.6%	3,391	3,450	58	1.7%
56.8%	3,358	3,411	53	1.6%
58.0%	3,354	3,316	-39	-1.2%
59.3%	3,299	3,220	-79	-2.4%
60.5%	3,291	3,117	-173	-5.3%
61.7%	3,226	3,115	-112	-3.5%
63.0%	3,224	3,112	-112	-3.5%
64.2%	3,224	3,088	-135	-4.2%
65.4%	3,197	3,075	-122	-3.8%
66.7%	3,193	3,014	-179	-5.6%
67.9%	3,158	3,009	-149	-4.7%
69.1%	3,146	2,924	-222	-7.1%
70.4%	3,134	2,894	-239	-7.6%
71.6%	3,132	2,770	-362	-11.6%
72.8%	3,116	2,696	-420	-13.5%
74.1%	3,054	2,660	-394	-12.9%
75.3%	3,048	2,647	-400	-13.1%
76.5%	3,039	2,601	-438	-14.4%
77.8%	2,999	2,584	-415	-13.8%
79.0%	2,979	2,546	-433	-14.5%
80.2%	2,910	2,528	-383	-13.1%
81.5%	2,900	2,428	-472	-16.3%
82.7%	2,868	2,354	-513	-17.9%
84.0%	2,830	2,319	-512	-18.1%
85.2%	2,795	2,151	-644	-23.0%
86.4%	2,756	2,089	-667	-24.2%
87.7%	2,746	2,089	-657	-23.9%
88.9%	2,691	1,874	-817	-30.4%
90.1%	2,658	1,856	-802	-30.2%
91.4%	2,597	1,714	-884	-34.0%
92.6%	2,577	1,546	-1,031	-40.0%
93.8%	2,050	1,461	-589	-28.8%
95.1%	2,006	1,180	-826	-41.2%
96.3%	1,980	977	-1,003	-50.7%
97.5%	1,952	941	-1,011	-51.8%
98.8%	1,915	931	-984	-51.4%
100.0%	1,780	800	-980	-55.1%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,600	4,600	0	0.0%
25.9%	4,600	4,600	0	0.0%
27.2%	4,600	4,600	0	0.0%
28.4%	4,600	4,600	0	0.0%
29.6%	4,600	4,600	0	0.0%
30.9%	4,600	4,600	0	0.0%
32.1%	4,600	4,600	0	0.0%
33.3%	4,600	4,600	0	0.0%
34.6%	4,524	4,600	76	1.7%
35.8%	4,391	4,600	209	4.8%
37.0%	4,351	4,600	249	5.7%
38.3%	4,295	4,600	305	7.1%
39.5%	4,271	4,572	301	7.0%
40.7%	4,241	4,514	273	6.4%
42.0%	4,228	4,469	241	5.7%
43.2%	4,185	4,435	250	6.0%
44.4%	4,167	4,417	250	6.0%
45.7%	4,125	4,367	242	5.9%
46.9%	4,100	4,235	135	3.3%
48.1%	4,099	4,214	116	2.8%
49.4%	4,094	4,119	25	0.6%
50.6%	4,055	4,091	36	0.9%
51.9%	3,998	4,049	51	1.3%
53.1%	3,807	4,040	232	6.1%
54.3%	3,784	4,036	252	6.7%
55.6%	3,742	4,035	293	7.8%
56.8%	3,685	3,798	113	3.1%
58.0%	3,612	3,784	172	4.8%
59.3%	3,543	3,779	236	6.7%
60.5%	3,409	3,637	228	6.7%
61.7%	3,400	3,592	192	5.6%
63.0%	3,249	3,587	338	10.4%
64.2%	3,181	3,536	355	11.1%
65.4%	3,165	3,499	333	10.5%
66.7%	3,117	3,490	373	12.0%
67.9%	3,117	3,358	241	7.7%
69.1%	3,026	3,242	216	7.1%
70.4%	2,981	3,070	89	3.0%
71.6%	2,933	3,065	132	4.5%
72.8%	2,929	2,841	-89	-3.0%
74.1%	2,919	2,743	-176	-6.0%
75.3%	2,904	2,690	-215	-7.4%
76.5%	2,833	2,685	-148	-5.2%
77.8%	2,815	2,597	-217	-7.7%
79.0%	2,737	2,511	-226	-8.3%
80.2%	2,601	2,460	-141	-5.4%
81.5%	2,464	2,369	-95	-3.8%
82.7%	2,449	2,236	-213	-8.7%
84.0%	2,414	2,156	-258	-10.7%
85.2%	2,390	2,128	-262	-11.0%
86.4%	2,292	2,008	-284	-12.4%
87.7%	2,168	1,944	-223	-10.3%
88.9%	2,148	1,926	-222	-10.3%
90.1%	2,058	1,596	-462	-22.5%
91.4%	2,021	1,590	-431	-21.3%
92.6%	1,601	1,555	-45	-2.8%
93.8%	1,338	1,458	120	9.0%
95.1%	1,300	1,420	120	9.2%
96.3%	1,202	1,409	207	17.2%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	600	-200	-25.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,600	4,600	0	0.0%
25.9%	4,600	4,600	0	0.0%
27.2%	4,600	4,600	0	0.0%
28.4%	4,600	4,600	0	0.0%
29.6%	4,600	4,600	0	0.0%
30.9%	4,529	4,600	71	1.6%
32.1%	4,353	4,600	247	5.7%
33.3%	4,279	4,586	307	7.2%
34.6%	4,268	4,458	190	4.5%
35.8%	4,251	4,397	146	3.4%
37.0%	4,214	4,352	138	3.3%
38.3%	4,212	4,283	72	1.7%
39.5%	4,198	4,278	79	1.9%
40.7%	4,191	4,268	77	1.8%
42.0%	4,191	4,268	77	1.8%
43.2%	4,160	4,222	62	1.5%
44.4%	4,157	4,211	55	1.3%
45.7%	4,140	4,191	51	1.2%
46.9%	4,123	4,171	48	1.2%
48.1%	4,098	4,157	59	1.4%
49.4%	4,096	4,156	60	1.5%
50.6%	4,093	4,110	17	0.4%
51.9%	4,056	4,056	0	0.0%
53.1%	4,009	4,034	26	0.6%
54.3%	3,998	3,994	-4	-0.1%
55.6%	3,971	3,971	0	0.0%
56.8%	3,954	3,968	14	0.4%
58.0%	3,931	3,954	23	0.6%
59.3%	3,931	3,946	15	0.4%
60.5%	3,917	3,928	10	0.3%
61.7%	3,858	3,919	61	1.6%
63.0%	3,828	3,890	62	1.6%
64.2%	3,822	3,877	56	1.5%
65.4%	3,804	3,833	29	0.8%
66.7%	3,787	3,831	44	1.2%
67.9%	3,739	3,804	65	1.7%
69.1%	3,739	3,754	15	0.4%
70.4%	3,703	3,730	27	0.7%
71.6%	3,699	3,718	19	0.5%
72.8%	3,688	3,703	15	0.4%
74.1%	3,679	3,688	9	0.2%
75.3%	3,634	3,648	14	0.4%
76.5%	3,560	3,584	23	0.7%
77.8%	3,560	3,560	0	0.0%
79.0%	3,525	3,522	-3	-0.1%
80.2%	3,452	3,322	-129	-3.8%
81.5%	3,355	3,264	-91	-2.7%
82.7%	3,324	2,952	-372	-11.2%
84.0%	3,322	2,848	-475	-14.3%
85.2%	3,303	2,817	-486	-14.7%
86.4%	3,138	2,815	-323	-10.3%
87.7%	3,129	2,812	-317	-10.1%
88.9%	3,052	2,734	-318	-10.4%
90.1%	2,793	2,645	-148	-5.3%
91.4%	2,726	2,613	-113	-4.2%
92.6%	2,574	2,464	-110	-4.3%
93.8%	2,459	1,929	-530	-21.6%
95.1%	2,432	1,750	-682	-28.0%
96.3%	2,428	1,649	-778	-32.1%
97.5%	2,003	1,602	-401	-20.0%
98.8%	1,560	951	-609	-39.0%
100.0%	1,462	909	-553	-37.8%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,544	4,475	-69	-1.5%
9.9%	4,487	4,322	-165	-3.7%
11.1%	4,335	4,320	-15	-0.3%
12.3%	4,315	4,315	0	0.0%
13.6%	4,106	4,106	0	0.0%
14.8%	4,046	4,041	-5	-0.1%
16.0%	3,963	3,963	0	0.0%
17.3%	3,913	3,915	2	0.1%
18.5%	3,912	3,912	0	0.0%
19.8%	3,870	3,870	0	0.0%
21.0%	3,619	3,745	127	3.5%
22.2%	3,601	3,654	53	1.5%
23.5%	3,595	3,643	47	1.3%
24.7%	3,587	3,599	12	0.3%
25.9%	3,579	3,595	17	0.5%
27.2%	3,468	3,587	120	3.4%
28.4%	3,460	3,568	108	3.1%
29.6%	3,460	3,508	48	1.4%
30.9%	3,446	3,468	22	0.6%
32.1%	3,415	3,463	47	1.4%
33.3%	3,415	3,460	45	1.3%
34.6%	3,413	3,441	29	0.8%
35.8%	3,412	3,415	3	0.1%
37.0%	3,408	3,415	7	0.2%
38.3%	3,405	3,414	9	0.3%
39.5%	3,395	3,413	18	0.5%
40.7%	3,389	3,409	20	0.6%
42.0%	3,378	3,392	13	0.4%
43.2%	3,376	3,381	5	0.1%
44.4%	3,319	3,380	61	1.8%
45.7%	3,303	3,308	5	0.1%
46.9%	3,302	3,306	5	0.1%
48.1%	3,294	3,305	11	0.3%
49.4%	3,288	3,293	5	0.2%
50.6%	3,287	3,291	4	0.1%
51.9%	3,264	3,286	22	0.7%
53.1%	3,251	3,264	14	0.4%
54.3%	3,237	3,261	24	0.7%
55.6%	3,235	3,253	17	0.5%
56.8%	3,222	3,251	28	0.9%
58.0%	3,220	3,242	22	0.7%
59.3%	3,219	3,240	21	0.7%
60.5%	3,202	3,237	35	1.1%
61.7%	3,195	3,235	40	1.2%
63.0%	3,164	3,203	39	1.2%
64.2%	3,094	3,197	103	3.3%
65.4%	3,021	3,195	174	5.8%
66.7%	3,013	3,145	132	4.4%
67.9%	3,002	3,021	19	0.6%
69.1%	2,915	2,915	0	0.0%
70.4%	2,873	2,873	0	0.0%
71.6%	2,864	2,864	0	0.0%
72.8%	2,850	2,850	0	0.0%
74.1%	2,846	2,670	-177	-6.2%
75.3%	2,682	2,603	-79	-3.0%
76.5%	2,670	2,512	-157	-5.9%
77.8%	2,598	2,423	-176	-6.8%
79.0%	2,554	2,407	-147	-5.7%
80.2%	2,423	2,381	-41	-1.7%
81.5%	2,407	2,372	-35	-1.4%
82.7%	2,381	2,302	-79	-3.3%
84.0%	2,372	2,284	-88	-3.7%
85.2%	2,302	2,257	-45	-2.0%
86.4%	2,284	2,195	-89	-3.9%
87.7%	2,190	2,166	-24	-1.1%
88.9%	2,169	2,155	-14	-0.6%
90.1%	2,166	2,132	-34	-1.6%
91.4%	2,155	2,054	-100	-4.7%
92.6%	2,081	2,025	-57	-2.7%
93.8%	2,032	1,973	-59	-2.9%
95.1%	1,973	1,678	-294	-14.9%
96.3%	971	986	15	1.6%
97.5%	818	879	60	7.4%
98.8%	800	800	0	0.0%
100.0%	481	479	-2	-0.4%

Table SW-37-b

Jones Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,568	4,600	32	0.7%
21.0%	4,423	4,568	145	3.3%
22.2%	4,363	4,363	0	0.0%
23.5%	4,194	4,239	46	1.1%
24.7%	4,162	4,190	27	0.7%
25.9%	4,117	4,162	46	1.1%
27.2%	4,115	4,141	25	0.6%
28.4%	3,941	4,118	176	4.5%
29.6%	3,843	4,117	273	7.1%
30.9%	3,807	4,115	309	8.1%
32.1%	3,804	3,942	138	3.6%
33.3%	3,680	3,843	163	4.4%
34.6%	3,673	3,807	134	3.6%
35.8%	3,630	3,804	174	4.8%
37.0%	3,624	3,680	56	1.6%
38.3%	3,616	3,639	23	0.6%
39.5%	3,558	3,630	72	2.0%
40.7%	3,520	3,624	103	2.9%
42.0%	3,519	3,520	1	0.0%
43.2%	3,472	3,519	47	1.4%
44.4%	3,425	3,472	46	1.3%
45.7%	3,377	3,425	48	1.4%
46.9%	3,361	3,377	16	0.5%
48.1%	3,360	3,361	2	0.0%
49.4%	3,349	3,360	10	0.3%
50.6%	3,335	3,349	14	0.4%
51.9%	3,319	3,338	19	0.6%
53.1%	3,311	3,337	26	0.8%
54.3%	3,281	3,319	38	1.2%
55.6%	3,232	3,311	79	2.4%
56.8%	3,199	3,304	105	3.3%
58.0%	3,191	3,281	90	2.8%
59.3%	3,150	3,215	65	2.1%
60.5%	3,140	3,199	59	1.9%
61.7%	3,068	3,150	82	2.7%
63.0%	3,033	3,068	36	1.2%
64.2%	2,904	3,033	129	4.4%
65.4%	2,800	3,000	200	7.1%
66.7%	2,784	2,904	120	4.3%
67.9%	2,765	2,809	44	1.6%
69.1%	2,570	2,800	230	8.9%
70.4%	2,505	2,696	190	7.6%
71.6%	2,499	2,570	71	2.8%
72.8%	2,331	2,505	174	7.5%
74.1%	2,309	2,499	190	8.2%
75.3%	2,305	2,442	137	6.0%
76.5%	2,285	2,331	46	2.0%
77.8%	2,246	2,291	46	2.0%
79.0%	2,231	2,289	57	2.6%
80.2%	2,103	2,246	143	6.8%
81.5%	2,008	2,231	223	11.1%
82.7%	1,973	2,103	130	6.6%
84.0%	1,872	2,008	136	7.3%
85.2%	1,804	1,872	68	3.8%
86.4%	1,726	1,819	93	5.4%
87.7%	1,690	1,806	116	6.9%
88.9%	1,551	1,726	175	11.3%
90.1%	1,254	1,690	436	34.8%
91.4%	1,250	1,601	351	28.0%
92.6%	1,167	1,551	383	32.9%
93.8%	1,091	1,300	209	19.2%
95.1%	1,055	1,194	139	13.2%
96.3%	1,013	1,001	-13	-1.2%
97.5%	927	993	66	7.1%
98.8%	800	939	139	17.4%
100.0%	721	719	-2	-0.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,498	-102	-2.2%
19.8%	4,600	4,383	-217	-4.7%
21.0%	4,578	4,375	-203	-4.4%
22.2%	4,257	4,309	53	1.2%
23.5%	4,234	4,234	0	0.0%
24.7%	4,216	4,124	-91	-2.2%
25.9%	4,124	3,947	-178	-4.3%
27.2%	4,116	3,909	-207	-5.0%
28.4%	4,108	3,825	-283	-6.9%
29.6%	4,061	3,745	-316	-7.8%
30.9%	3,947	3,742	-205	-5.2%
32.1%	3,825	3,695	-130	-3.4%
33.3%	3,742	3,689	-52	-1.4%
34.6%	3,695	3,577	-118	-3.2%
35.8%	3,577	3,573	-4	-0.1%
37.0%	3,571	3,457	-114	-3.2%
38.3%	3,457	3,456	0	0.0%
39.5%	3,437	3,445	8	0.2%
40.7%	3,346	3,414	68	2.0%
42.0%	3,306	3,346	39	1.2%
43.2%	3,295	3,343	48	1.5%
44.4%	3,249	3,343	94	2.9%
45.7%	3,244	3,306	63	1.9%
46.9%	3,208	3,244	36	1.1%
48.1%	3,154	3,238	84	2.7%
49.4%	3,122	3,212	90	2.9%
50.6%	3,011	3,061	50	1.7%
51.9%	2,984	2,949	-35	-1.2%
53.1%	2,949	2,906	-43	-1.5%
54.3%	2,939	2,671	-268	-9.1%
55.6%	2,906	2,656	-250	-8.6%
56.8%	2,656	2,655	-1	0.0%
58.0%	2,594	2,638	44	1.7%
59.3%	2,539	2,594	55	2.2%
60.5%	2,537	2,566	29	1.2%
61.7%	2,536	2,564	27	1.1%
63.0%	2,531	2,531	0	0.0%
64.2%	2,529	2,527	-2	-0.1%
65.4%	2,527	2,499	-28	-1.1%
66.7%	2,500	2,474	-26	-1.0%
67.9%	2,458	2,467	8	0.3%
69.1%	2,429	2,444	15	0.6%
70.4%	2,343	2,404	61	2.6%
71.6%	2,343	2,385	42	1.8%
72.8%	2,299	2,343	44	1.9%
74.1%	2,126	2,266	140	6.6%
75.3%	2,085	2,012	-73	-3.5%
76.5%	1,991	1,991	0	0.0%
77.8%	1,990	1,987	-3	-0.2%
79.0%	1,987	1,933	-54	-2.7%
80.2%	1,933	1,855	-78	-4.0%
81.5%	1,855	1,797	-58	-3.1%
82.7%	1,797	1,770	-27	-1.5%
84.0%	1,641	1,748	107	6.5%
85.2%	1,641	1,745	104	6.4%
86.4%	1,525	1,499	-26	-1.7%
87.7%	1,499	1,336	-163	-10.9%
88.9%	1,342	1,291	-51	-3.8%
90.1%	1,336	1,273	-63	-4.7%
91.4%	1,291	1,204	-87	-6.7%
92.6%	1,273	1,090	-183	-14.4%
93.8%	1,204	1,039	-165	-13.7%
95.1%	1,039	1,008	-31	-3.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	637	739	102	16.1%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,373	2,734	-639	-18.9%
1.2%	2,734	2,726	-8	-0.3%
2.5%	2,722	2,722	0	0.0%
3.7%	2,621	2,617	-4	-0.1%
4.9%	2,505	2,497	-8	-0.3%
6.2%	2,241	2,237	-4	-0.2%
7.4%	2,086	2,078	-8	-0.4%
8.6%	1,852	1,847	-6	-0.3%
9.9%	1,751	1,747	-4	-0.2%
11.1%	1,665	1,657	-8	-0.5%
12.3%	1,622	1,622	0	0.0%
13.6%	1,604	1,604	0	0.0%
14.8%	1,487	1,488	0	0.0%
16.0%	1,426	1,426	0	0.0%
17.3%	1,392	1,392	0	0.0%
18.5%	1,377	1,377	0	0.0%
19.8%	1,343	1,367	24	1.8%
21.0%	1,299	1,343	44	3.4%
22.2%	1,295	1,325	30	2.3%
23.5%	1,275	1,299	24	1.9%
24.7%	1,270	1,270	0	0.0%
25.9%	1,246	1,246	0	0.0%
27.2%	1,208	1,208	0	0.0%
28.4%	1,201	1,205	4	0.3%
29.6%	1,200	1,201	1	0.1%
30.9%	1,194	1,200	6	0.5%
32.1%	1,170	1,194	24	2.1%
33.3%	1,142	1,169	27	2.4%
34.6%	1,135	1,165	30	2.6%
35.8%	1,124	1,142	18	1.6%
37.0%	1,118	1,135	17	1.6%
38.3%	1,104	1,124	19	1.8%
39.5%	1,101	1,118	17	1.5%
40.7%	1,099	1,101	2	0.2%
42.0%	1,097	1,099	2	0.2%
43.2%	1,096	1,097	1	0.1%
44.4%	1,084	1,097	12	1.1%
45.7%	1,078	1,096	17	1.6%
46.9%	1,051	1,079	28	2.6%
48.1%	1,049	1,051	2	0.2%
49.4%	1,044	1,049	5	0.5%
50.6%	1,036	1,044	8	0.8%
51.9%	1,032	1,032	0	0.0%
53.1%	1,028	1,028	0	0.0%
54.3%	1,028	1,028	0	0.0%
55.6%	1,020	1,020	0	0.0%
56.8%	1,004	1,004	0	0.0%
58.0%	1,002	1,002	0	0.0%
59.3%	996	996	0	0.0%
60.5%	988	988	0	0.0%
61.7%	985	985	0	0.0%
63.0%	977	977	0	0.0%
64.2%	976	976	0	0.0%
65.4%	971	971	0	0.0%
66.7%	970	970	0	0.0%
67.9%	963	963	0	0.0%
69.1%	924	924	0	0.0%
70.4%	924	924	0	0.0%
71.6%	893	893	0	0.0%
72.8%	889	889	0	0.0%
74.1%	864	864	0	0.0%
75.3%	806	800	-6	-0.8%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,487	3,487	0	0.0%
1.2%	3,487	3,487	0	0.0%
2.5%	3,487	3,487	0	0.0%
3.7%	2,634	2,626	-9	-0.3%
4.9%	2,286	2,276	-10	-0.5%
6.2%	1,946	1,935	-11	-0.6%
7.4%	1,827	1,816	-11	-0.6%
8.6%	1,595	1,595	0	0.0%
9.9%	1,545	1,533	-11	-0.7%
11.1%	1,446	1,430	-15	-1.1%
12.3%	1,430	1,387	-43	-3.0%
13.6%	1,388	1,247	-141	-10.2%
14.8%	1,258	1,080	-179	-14.2%
16.0%	1,223	1,078	-145	-11.9%
17.3%	1,130	1,069	-60	-5.3%
18.5%	1,080	1,059	-21	-2.0%
19.8%	1,028	1,028	0	0.0%
21.0%	1,008	1,004	-4	-0.4%
22.2%	997	998	0	0.0%
23.5%	997	997	0	0.0%
24.7%	944	959	15	1.6%
25.9%	939	944	5	0.6%
27.2%	927	938	11	1.2%
28.4%	915	927	12	1.3%
29.6%	877	914	36	4.2%
30.9%	864	826	-38	-4.4%
32.1%	834	822	-12	-1.5%
33.3%	826	817	-9	-1.1%
34.6%	822	808	-14	-1.7%
35.8%	817	800	-17	-2.1%
37.0%	808	800	-8	-1.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	793	793	0	0.0%

Table SW-37-b

Jones Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,455	4,575	120	2.7%
13.6%	4,399	4,455	56	1.3%
14.8%	4,385	4,385	0	0.0%
16.0%	4,165	4,165	0	0.0%
17.3%	4,060	4,060	0	0.0%
18.5%	3,961	3,961	0	0.0%
19.8%	3,814	3,866	52	1.4%
21.0%	3,556	3,720	165	4.6%
22.2%	3,535	3,683	148	4.2%
23.5%	3,442	3,599	158	4.6%
24.7%	3,422	3,442	20	0.6%
25.9%	3,374	3,422	48	1.4%
27.2%	3,370	3,343	-27	-0.8%
28.4%	3,352	3,262	-90	-2.7%
29.6%	3,259	3,237	-22	-0.7%
30.9%	3,245	3,068	-177	-5.5%
32.1%	3,237	2,957	-280	-8.6%
33.3%	3,169	2,936	-232	-7.3%
34.6%	3,086	2,893	-192	-6.2%
35.8%	3,078	2,878	-201	-6.5%
37.0%	3,076	2,854	-222	-7.2%
38.3%	2,922	2,852	-70	-2.4%
39.5%	2,892	2,851	-42	-1.4%
40.7%	2,878	2,848	-30	-1.0%
42.0%	2,854	2,843	-11	-0.4%
43.2%	2,851	2,735	-116	-4.1%
44.4%	2,736	2,690	-45	-1.7%
45.7%	2,712	2,659	-52	-1.9%
46.9%	2,693	2,640	-53	-2.0%
48.1%	2,690	2,613	-77	-2.9%
49.4%	2,675	2,526	-149	-5.6%
50.6%	2,659	2,364	-295	-11.1%
51.9%	2,646	2,347	-299	-11.3%
53.1%	2,640	2,231	-409	-15.5%
54.3%	2,613	2,041	-572	-21.9%
55.6%	2,599	2,008	-592	-22.8%
56.8%	2,563	1,976	-587	-22.9%
58.0%	2,526	1,930	-595	-23.6%
59.3%	2,364	1,863	-501	-21.2%
60.5%	2,341	1,860	-482	-20.6%
61.7%	2,204	1,851	-353	-16.0%
63.0%	1,930	1,837	-94	-4.9%
64.2%	1,886	1,726	-161	-8.5%
65.4%	1,837	1,698	-139	-7.6%
66.7%	1,802	1,675	-127	-7.1%
67.9%	1,725	1,668	-57	-3.3%
69.1%	1,698	1,668	-30	-1.8%
70.4%	1,675	1,656	-19	-1.1%
71.6%	1,668	1,653	-15	-0.9%
72.8%	1,668	1,642	-25	-1.5%
74.1%	1,656	1,640	-16	-1.0%
75.3%	1,653	1,637	-16	-1.0%
76.5%	1,643	1,636	-7	-0.4%
77.8%	1,637	1,620	-17	-1.1%
79.0%	1,619	1,608	-12	-0.7%
80.2%	1,585	1,521	-64	-4.1%
81.5%	1,521	1,421	-100	-6.6%
82.7%	1,385	1,392	8	0.6%
84.0%	800	702	-98	-12.3%
85.2%	699	699	0	0.0%
86.4%	598	598	0	0.0%
87.7%	529	529	0	0.0%
88.9%	428	428	0	0.0%
90.1%	427	427	0	-0.1%
91.4%	421	420	0	-0.1%
92.6%	344	409	65	18.9%
93.8%	320	345	25	7.9%
95.1%	277	335	58	20.9%
96.3%	260	280	21	8.0%
97.5%	241	241	0	0.0%
98.8%	226	226	0	0.0%
100.0%	90	131	41	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,600	4,600	0	0.0%
25.9%	4,600	4,600	0	0.0%
27.2%	4,600	4,600	0	0.0%
28.4%	4,600	4,600	0	0.0%
29.6%	4,600	4,600	0	0.0%
30.9%	4,600	4,600	0	0.0%
32.1%	4,600	4,600	0	0.0%
33.3%	4,600	4,600	0	0.0%
34.6%	4,600	4,600	0	0.0%
35.8%	4,600	4,600	0	0.0%
37.0%	4,600	4,600	0	0.0%
38.3%	4,600	4,600	0	0.0%
39.5%	4,600	4,600	0	0.0%
40.7%	4,600	4,600	0	0.0%
42.0%	4,600	4,600	0	0.0%
43.2%	4,600	4,600	0	0.0%
44.4%	4,600	4,600	0	0.0%
45.7%	4,600	4,600	0	0.0%
46.9%	4,600	4,600	0	0.0%
48.1%	4,600	4,600	0	0.0%
49.4%	4,600	4,600	0	0.0%
50.6%	4,600	4,600	0	0.0%
51.9%	4,600	4,600	0	0.0%
53.1%	4,600	4,600	0	0.0%
54.3%	4,584	4,600	16	0.4%
55.6%	4,583	4,600	17	0.4%
56.8%	4,582	4,600	18	0.4%
58.0%	4,581	4,600	19	0.4%
59.3%	4,562	4,584	22	0.5%
60.5%	4,481	4,583	103	2.3%
61.7%	4,456	4,583	127	2.8%
63.0%	4,275	4,582	306	7.2%
64.2%	4,150	4,531	381	9.2%
65.4%	4,133	4,525	392	9.5%
66.7%	4,115	4,463	348	8.5%
67.9%	4,056	4,451	396	9.8%
69.1%	3,946	4,317	371	9.4%
70.4%	3,869	4,314	446	11.5%
71.6%	3,827	4,308	481	12.6%
72.8%	3,802	4,308	506	13.3%
74.1%	3,660	4,205	545	14.9%
75.3%	3,643	4,106	463	12.7%
76.5%	3,620	4,036	416	11.5%
77.8%	3,547	4,013	466	13.1%
79.0%	3,396	3,696	300	8.8%
80.2%	3,367	3,527	160	4.7%
81.5%	3,271	3,504	233	7.1%
82.7%	3,236	3,503	267	8.3%
84.0%	3,142	3,347	205	6.5%
85.2%	3,062	3,262	199	6.5%
86.4%	3,060	3,106	47	1.5%
87.7%	3,052	3,040	-12	-0.4%
88.9%	2,958	3,010	52	1.8%
90.1%	2,788	2,546	-242	-8.7%
91.4%	2,572	2,232	-340	-13.2%
92.6%	2,153	2,129	-24	-1.1%
93.8%	1,135	1,789	655	57.7%
95.1%	922	1,756	833	90.3%
96.3%	800	1,118	318	39.7%
97.5%	800	1,093	293	36.7%
98.8%	600	904	304	50.7%
100.0%	600	600	0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,600	4,600	0	0.0%
25.9%	4,600	4,600	0	0.0%
27.2%	4,600	4,600	0	0.0%
28.4%	4,600	4,600	0	0.0%
29.6%	4,600	4,600	0	0.0%
30.9%	4,600	4,600	0	0.0%
32.1%	4,600	4,600	0	0.0%
33.3%	4,600	4,600	0	0.0%
34.6%	4,600	4,600	0	0.0%
35.8%	4,600	4,600	0	0.0%
37.0%	4,600	4,600	0	0.0%
38.3%	4,600	4,600	0	0.0%
39.5%	4,600	4,600	0	0.0%
40.7%	4,600	4,600	0	0.0%
42.0%	4,600	4,600	0	0.0%
43.2%	4,600	4,600	0	0.0%
44.4%	4,600	4,600	0	0.0%
45.7%	4,600	4,600	0	0.0%
46.9%	4,600	4,600	0	0.0%
48.1%	4,600	4,600	0	0.0%
49.4%	4,600	4,600	0	0.0%
50.6%	4,600	4,600	0	0.0%
51.9%	4,600	4,600	0	0.0%
53.1%	4,600	4,600	0	0.0%
54.3%	4,576	4,600	24	0.5%
55.6%	4,543	4,600	57	1.3%
56.8%	4,496	4,600	104	2.3%
58.0%	4,466	4,600	134	3.0%
59.3%	4,445	4,600	155	3.5%
60.5%	4,358	4,600	242	5.5%
61.7%	4,281	4,543	262	6.1%
63.0%	4,191	4,515	324	7.7%
64.2%	3,967	4,515	548	13.8%
65.4%	3,954	4,368	414	10.5%
66.7%	3,912	4,148	236	6.0%
67.9%	3,882	4,116	234	6.0%
69.1%	3,821	4,107	286	7.5%
70.4%	3,688	4,073	385	10.4%
71.6%	3,563	4,061	498	14.0%
72.8%	3,360	4,032	673	20.0%
74.1%	3,342	4,000	658	19.7%
75.3%	3,309	3,987	677	20.5%
76.5%	3,285	3,972	688	20.9%
77.8%	3,061	3,931	870	28.4%
79.0%	2,980	3,837	857	28.8%
80.2%	2,883	3,731	848	29.4%
81.5%	2,795	3,718	923	33.0%
82.7%	2,615	3,596	982	37.5%
84.0%	2,550	3,476	926	36.3%
85.2%	2,329	3,364	1,036	44.5%
86.4%	2,099	3,269	1,170	55.8%
87.7%	1,950	3,217	1,267	65.0%
88.9%	1,619	3,091	1,472	90.9%
90.1%	1,592	2,921	1,329	83.5%
91.4%	1,558	2,916	1,358	87.2%
92.6%	1,550	2,494	943	60.8%
93.8%	1,275	2,393	1,118	87.7%
95.1%	1,273	2,268	995	78.1%
96.3%	1,242	2,232	990	79.7%
97.5%	1,242	1,800	558	44.9%
98.8%	1,217	1,286	69	5.6%
100.0%	800	1,177	377	47.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,600	4,600	0	0.0%
25.9%	4,600	4,600	0	0.0%
27.2%	4,600	4,600	0	0.0%
28.4%	4,600	4,600	0	0.0%
29.6%	4,600	4,600	0	0.0%
30.9%	4,600	4,600	0	0.0%
32.1%	4,600	4,600	0	0.0%
33.3%	4,600	4,600	0	0.0%
34.6%	4,600	4,600	0	0.0%
35.8%	4,593	4,600	7	0.2%
37.0%	4,580	4,600	20	0.4%
38.3%	4,571	4,600	29	0.6%
39.5%	4,564	4,600	36	0.8%
40.7%	4,536	4,600	64	1.4%
42.0%	4,522	4,600	78	1.7%
43.2%	4,513	4,600	87	1.9%
44.4%	4,457	4,600	143	3.2%
45.7%	4,453	4,600	147	3.3%
46.9%	4,424	4,600	176	4.0%
48.1%	4,421	4,600	179	4.0%
49.4%	4,418	4,600	182	4.1%
50.6%	4,358	4,600	242	5.6%
51.9%	4,340	4,600	260	6.0%
53.1%	4,229	4,600	371	8.8%
54.3%	4,224	4,600	376	8.9%
55.6%	4,175	4,600	425	10.2%
56.8%	4,058	4,600	542	13.4%
58.0%	4,031	4,600	569	14.1%
59.3%	4,003	4,521	518	12.9%
60.5%	3,984	4,510	526	13.2%
61.7%	3,927	4,490	564	14.4%
63.0%	3,836	4,432	596	15.5%
64.2%	3,833	4,431	598	15.6%
65.4%	3,818	4,429	611	16.0%
66.7%	3,712	4,424	712	19.2%
67.9%	3,689	4,421	732	19.8%
69.1%	3,676	4,415	739	20.1%
70.4%	3,668	4,414	746	20.3%
71.6%	3,624	4,412	788	21.7%
72.8%	3,539	4,389	850	24.0%
74.1%	3,347	4,305	958	28.6%
75.3%	3,278	4,257	979	29.9%
76.5%	3,214	4,229	1,015	31.6%
77.8%	3,151	4,029	878	27.9%
79.0%	3,134	3,830	696	22.2%
80.2%	3,071	3,826	755	24.6%
81.5%	3,051	3,816	765	25.1%
82.7%	2,940	3,736	796	27.1%
84.0%	2,894	3,681	787	27.2%
85.2%	2,869	3,654	784	27.3%
86.4%	2,852	3,649	797	27.9%
87.7%	2,849	3,508	659	23.1%
88.9%	2,770	3,497	727	26.3%
90.1%	2,712	3,444	731	27.0%
91.4%	2,695	3,390	695	25.8%
92.6%	2,433	3,246	813	33.4%
93.8%	2,340	2,913	573	24.5%
95.1%	2,192	2,867	674	30.8%
96.3%	1,971	2,841	871	44.2%
97.5%	1,711	2,787	1,076	62.9%
98.8%	1,404	2,519	1,115	79.4%
100.0%	800	800	0	0.0%

Figure SW-38-b
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Probability of Exceedance

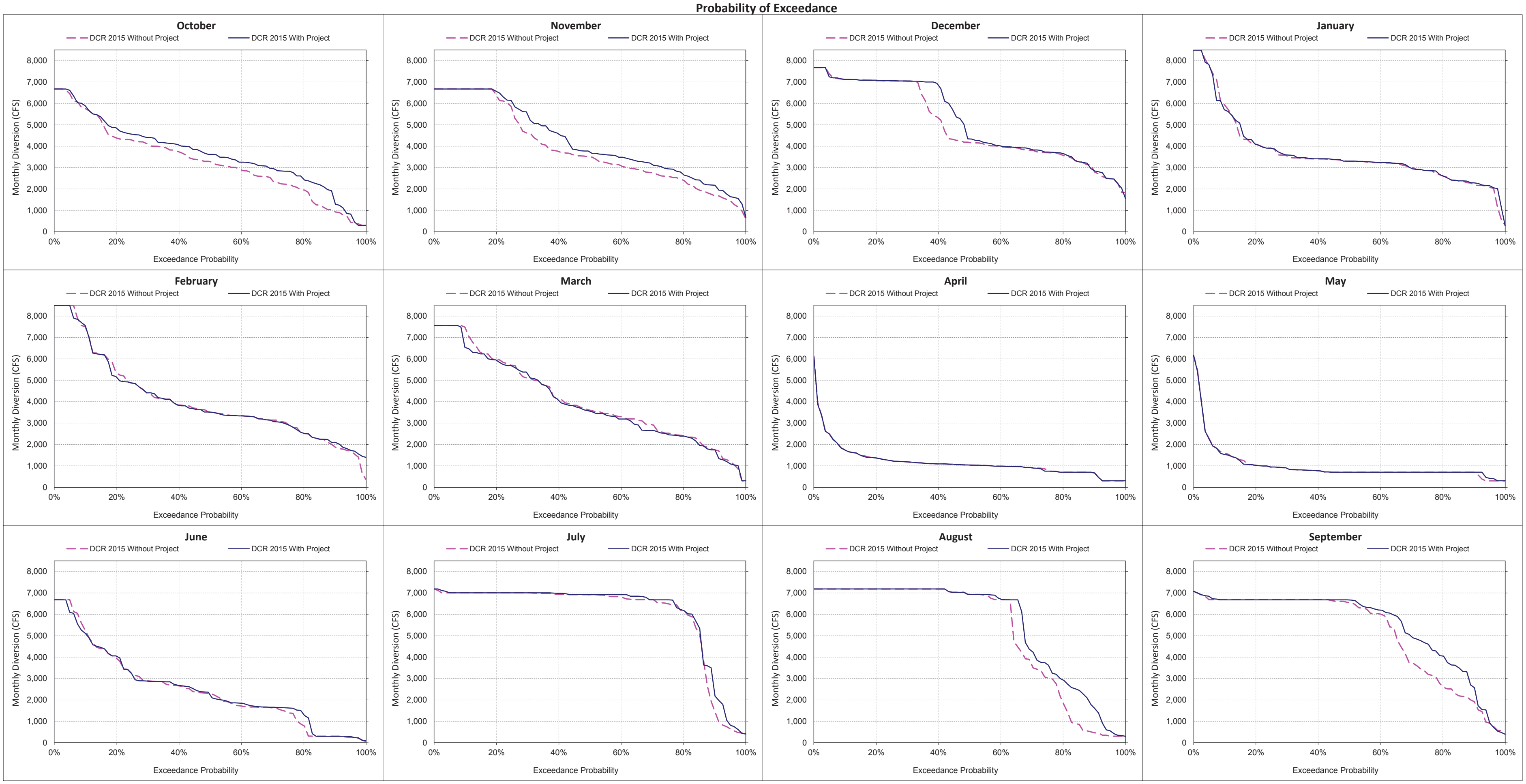


Table SW-38-b

Banks Pumping Plant (SWP and CVP), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,626	6,680	54	0.8%
4.9%	6,456	6,622	166	2.6%
6.2%	6,100	6,351	251	4.1%
7.4%	6,087	6,035	-52	-0.9%
8.6%	5,830	6,015	185	3.2%
9.9%	5,762	5,884	122	2.1%
11.1%	5,665	5,670	4	0.1%
12.3%	5,515	5,512	-3	-0.1%
13.6%	5,483	5,476	-8	-0.1%
14.8%	5,245	5,376	132	2.5%
16.0%	4,878	5,169	291	6.0%
17.3%	4,545	4,966	421	9.3%
18.5%	4,471	4,878	408	9.1%
19.8%	4,395	4,870	476	10.8%
21.0%	4,338	4,711	373	8.6%
22.2%	4,321	4,656	335	7.8%
23.5%	4,315	4,600	285	6.6%
24.7%	4,303	4,566	263	6.1%
25.9%	4,222	4,544	322	7.6%
27.2%	4,210	4,529	318	7.6%
28.4%	4,204	4,460	255	6.1%
29.6%	4,120	4,410	290	7.0%
30.9%	4,009	4,405	396	9.9%
32.1%	4,000	4,378	378	9.4%
33.3%	3,998	4,181	183	4.6%
34.6%	3,951	4,175	224	5.7%
35.8%	3,930	4,155	225	5.7%
37.0%	3,828	4,126	299	7.8%
38.3%	3,820	4,118	298	7.8%
39.5%	3,763	4,084	320	8.5%
40.7%	3,698	4,005	307	8.3%
42.0%	3,609	4,001	392	10.9%
43.2%	3,463	3,986	524	15.1%
44.4%	3,400	3,856	456	13.4%
45.7%	3,378	3,854	476	14.1%
46.9%	3,344	3,766	422	12.6%
48.1%	3,297	3,685	387	11.8%
49.4%	3,296	3,621	325	9.9%
50.6%	3,259	3,621	362	11.1%
51.9%	3,142	3,614	472	15.0%
53.1%	3,117	3,489	373	12.0%
54.3%	3,087	3,486	399	12.9%
55.6%	3,069	3,478	409	13.3%
56.8%	3,015	3,400	385	12.8%
58.0%	3,010	3,365	355	11.8%
59.3%	2,941	3,262	322	10.9%
60.5%	2,858	3,262	404	14.1%
61.7%	2,848	3,249	402	14.1%
63.0%	2,779	3,217	438	15.7%
64.2%	2,632	3,180	548	20.8%
65.4%	2,603	3,094	492	18.9%
66.7%	2,590	3,088	498	19.2%
67.9%	2,584	3,074	490	19.0%
69.1%	2,543	2,963	419	16.5%
70.4%	2,328	2,957	630	27.1%
71.6%	2,301	2,859	558	24.2%
72.8%	2,240	2,840	600	26.8%
74.1%	2,226	2,833	608	27.3%
75.3%	2,226	2,828	602	27.1%
76.5%	2,135	2,773	638	29.9%
77.8%	2,079	2,620	540	26.0%
79.0%	1,971	2,609	638	32.4%
80.2%	1,952	2,422	470	24.1%
81.5%	1,844	2,389	545	29.6%
82.7%	1,425	2,316	891	62.5%
84.0%	1,265	2,248	983	77.7%
85.2%	1,245	2,205	960	77.1%
86.4%	1,140	2,110	970	85.1%
87.7%	1,045	1,973	928	88.8%
88.9%	1,031	1,924	892	86.5%
90.1%	929	1,297	368	39.6%
91.4%	903	1,241	338	37.4%
92.6%	790	1,118	328	41.5%
93.8%	727	857	130	17.8%
95.1%	448	826	378	84.3%
96.3%	426	459	34	7.9%
97.5%	372	300	-72	-19.4%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,444	6,576	132	2.1%
21.0%	6,133	6,481	349	5.7%
22.2%	6,116	6,299	184	3.0%
23.5%	6,032	6,160	128	2.1%
24.7%	5,870	6,142	272	4.6%
25.9%	5,302	5,836	534	10.1%
27.2%	5,069	5,731	662	13.1%
28.4%	4,708	5,622	914	19.4%
29.6%	4,622	5,607	985	21.3%
30.9%	4,610	5,210	600	13.0%
32.1%	4,393	5,068	675	15.4%
33.3%	4,272	5,065	793	18.6%
34.6%	4,094	4,956	862	21.0%
35.8%	4,055	4,953	899	22.2%
37.0%	3,832	4,730	899	23.5%
38.3%	3,809	4,676	867	22.8%
39.5%	3,778	4,616	838	22.2%
40.7%	3,713	4,498	785	21.2%
42.0%	3,689	4,462	773	21.0%
43.2%	3,674	4,140	466	12.7%
44.4%	3,608	3,861	252	7.0%
45.7%	3,557	3,834	278	7.8%
46.9%	3,551	3,793	241	6.8%
48.1%	3,543	3,784	241	6.8%
49.4%	3,504	3,779	275	7.8%
50.6%	3,496	3,673	177	5.1%
51.9%	3,400	3,669	269	7.9%
53.1%	3,272	3,636	364	11.1%
54.3%	3,263	3,624	361	11.1%
55.6%	3,221	3,598	377	11.7%
56.8%	3,165	3,579	414	13.1%
58.0%	3,163	3,569	406	12.9%
59.3%	3,136	3,490	354	11.3%
60.5%	3,054	3,488	434	14.2%
61.7%	3,005	3,433	428	14.3%
63.0%	2,966	3,386	420	14.2%
64.2%	2,952	3,342	390	13.2%
65.4%	2,910	3,292	383	13.2%
66.7%	2,884	3,286	402	13.9%
67.9%	2,793	3,242	448	16.0%
69.1%	2,774	3,216	442	15.9%
70.4%	2,759	3,113	355	12.9%
71.6%	2,682	3,084	403	15.0%
72.8%	2,615	3,047	432	16.5%
74.1%	2,601	2,969	368	14.2%
75.3%	2,585	2,937	352	13.6%
76.5%	2,544	2,925	382	15.0%
77.8%	2,532	2,832	300	11.8%
79.0%	2,472	2,791	319	12.9%
80.2%	2,392	2,646	254	10.6%
81.5%	2,228	2,597	369	16.6%
82.7%	2,199	2,512	313	14.2%
84.0%	2,029	2,434	405	20.0%
85.2%	1,948	2,419	471	24.2%
86.4%	1,909	2,240	332	17.4%
87.7%	1,827	2,201	375	20.5%
88.9%	1,757	2,194	437	24.9%
90.1%	1,679	2,173	494	29.4%
91.4%	1,679	1,941	262	15.6%
92.6%	1,589	1,938	349	22.0%
93.8%	1,517	1,759	243	16.0%
95.1%	1,452	1,642	190	13.1%
96.3%	1,274	1,603	329	25.8%
97.5%	1,162	1,562	400	34.4%
98.8%	972	1,300	328	33.7%
100.0%	608	661	53	8.8%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,678	7,678	0	0.0%
1.2%	7,678	7,678	0	0.0%
2.5%	7,678	7,678	0	0.0%
3.7%	7,678	7,678	0	0.0%
4.9%	7,383	7,251	-133	-1.8%
6.2%	7,201	7,201	0	0.0%
7.4%	7,170	7,200	30	0.4%
8.6%	7,148	7,148	0	0.0%
9.9%	7,125	7,125	0	0.0%
11.1%	7,124	7,124	0	0.0%
12.3%	7,119	7,119	0	0.0%
13.6%	7,117	7,119	2	0.0%
14.8%	7,094	7,094	0	0.0%
16.0%	7,093	7,093	0	0.0%
17.3%	7,088	7,092	4	0.1%
18.5%	7,086	7,088	2	0.0%
19.8%	7,069	7,086	17	0.2%
21.0%	7,065	7,080	15	0.2%
22.2%	7,063	7,069	6	0.1%
23.5%	7,061	7,065	4	0.0%
24.7%	7,059	7,063	5	0.1%
25.9%	7,054	7,061	7	0.1%
27.2%	7,053	7,059	5	0.1%
28.4%	7,048	7,054	6	0.1%
29.6%	7,042	7,053	11	0.2%
30.9%	7,031	7,048	18	0.2%
32.1%	7,004	7,045	41	0.6%
33.3%	6,999	7,042	43	0.6%
34.6%	6,433	7,031	598	9.3%
35.8%	6,121	7,005	884	14.4%
37.0%	5,629	7,004	1,375	24.4%
38.3%	5,457	6,999	1,542	28.3%
39.5%	5,368	6,948	1,579	29.4%
40.7%	5,225	6,703	1,478	28.3%
42.0%	4,708	6,103	1,395	29.6%
43.2%	4,353	6,014	1,661	38.2%
44.4%	4,327	5,732	1,405	32.5%
45.7%	4,279	5,365	1,087	25.4%
46.9%	4,268	5,293	1,025	24.0%
48.1%	4,191	5,041	850	20.3%
49.4%	4,191	4,352	162	3.9%
50.6%	4,160	4,340	180	4.3%
51.9%	4,157	4,278	121	2.9%
53.1%	4,152	4,268	116	2.8%
54.3%	4,111	4,191	79	1.9%
55.6%	4,056	4,157	100	2.5%
56.8%	4,022	4,126	104	2.6%
58.0%	4,020	4,056	37	0.9%
59.3%	4,009	4,034	26	0.6%
60.5%	3,971	3,994	23	0.6%
61.7%	3,954	3,971	17	0.4%
63.0%	3,931	3,968	37	0.9%
64.2%	3,931	3,954	23	0.6%
65.4%	3,917	3,946	29	0.7%
66.7%	3,858	3,928	70	1.8%
67.9%	3,828	3,919	91	2.4%
69.1%	3,822	3,890	68	1.8%
70.4%	3,804	3,833	29	0.8%
71.6%	3,739	3,831	92	2.5%
72.8%	3,725	3,804	79	2.1%
74.1%	3,703	3,730	27	0.7%
75.3%	3,699	3,726	27	0.7%
76.5%	3,688	3,718	30	0.8%
77.8%	3,679	3,703	24	0.6%
79.0%	3,634	3,688	53	1.5%
80.2%	3,560	3,648	88	2.5%
81.5%	3,525	3,560	35	1.0%
82.7%	3,453	3,507	54	1.6%
84.0%	3,324	3,322	-1	0.0%
85.2%	3,322	3,264	-59	-1.8%
86.4%	3,229	3,250	21	0.7%
87.7%	3,138	3,208	69	2.2%
88.9%	3,129	2,952	-177	-5.7%
90.1%	2,793	2,844	51	1.8%
91.4%	2,706	2,806	100	3.7%
92.6%	2,588	2,760	172	6.7%
93.8%	2,508	2,492	-16	-0.7%
95.1%	2,485	2,482	-4	-0.1%
96.3%	2,437	2,474	37	1.5%
97.5%	2,277	2,244	-33	-1.4%
98.8%	1,836	2,050	214	11.7%
100.0%	1,833	1,564	-269	-14.7%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,068	7,932	-137	-1.7%
4.9%	7,777	7,823	46	0.6%
6.2%	7,404	7,336	-68	-0.9%
7.4%	7,108	6,139	-968	-13.6%
8.6%	6,132	6,132	0	0.0%
9.9%	5,951	5,708	-242	-4.1%
11.1%	5,715	5,626	-89	-1.6%
12.3%	5,458	5,435	-23	-0.4%
13.6%	5,091	5,210	119	2.3%
14.8%	4,487	5,091	604	13.5%
16.0%	4,335	4,475	140	3.2%
17.3%	4,315	4,322	8	0.2%
18.5%	4,145	4,315	170	4.1%
19.8%	4,106	4,106	0	0.0%
21.0%	4,046	4,041	-5	-0.1%
22.2%	3,963	3,963	0	0.0%
23.5%	3,913	3,915	2	0.1%
24.7%	3,912	3,912	0	0.0%
25.9%	3,870	3,870	0	0.0%
27.2%	3,595	3,745	150	4.2%
28.4%	3,587	3,654	67	1.9%
29.6%	3,579	3,595	17	0.5%
30.9%	3,468	3,587	120	3.4%
32.1%	3,460	3,568	108	3.1%
33.3%	3,460	3,468	8	0.2%
34.6%	3,446	3,463	17	0.5%
35.8%	3,415	3,460	44	1.3%
37.0%	3,415	3,441	26	0.8%
38.3%	3,413	3,415	2	0.1%
39.5%	3,412	3,415	3	0.1%
40.7%	3,408	3,414	6	0.2%
42.0%	3,405	3,413	8	0.2%
43.2%	3,389	3,409	20	0.6%
44.4%	3,378	3,392	13	0.4%
45.7%	3,376	3,381	5	0.1%
46.9%	3,355	3,380	25	0.7%
48.1%	3,319	3,308	-11	-0.3%
49.4%	3,303	3,307	4	0.1%
50.6%	3,302	3,306	5	0.1%
51.9%	3,294	3,305	11	0.3%
53.1%	3,288	3,293	5	0.2%
54.3%	3,287	3,291	4	0.1%
55.6%	3,264	3,286	22	0.7%
56.8%	3,251	3,264	14	0.4%
58.0%	3,237	3,253	16	0.5%
59.3%	3,235	3,242	6	0.2%
60.5%	3,222	3,240	18	0.6%
61.7%	3,220	3,237	17	0.5%
63.0%	3,219	3,235	16	0.5%
64.2%	3,202	3,203	1	0.0%
65.4%	3,195	3,197	2	0.0%
66.7%	3,130	3,195	65	2.1%
67.9%	3,094	3,145	51	1.7%
69.1%	3,021	3,021	0	0.0%
70.4%	3,002	2,938	-64	-2.1%
71.6%	2,915	2,915	0	0.0%
72.8%	2,903	2,915	12	0.4%
74.1%	2,873	2,873	0	0.0%
75.3%	2,864	2,864	0	0.0%
76.5%	2,850	2,851	2	0.1%
77.8%	2,717	2,850	133	4.9%
79.0%	2,670	2,670	0	0.0%
80.2%	2,598	2,603	4	0.2%
81.5%	2,554	2,512	-42	-1.6%
82.7%	2,423	2,423	0	0.0%
84.0%	2,407	2,407	0	0.0%
85.2%	2,381	2,381	0	0.0%
86.4%	2,372	2,380	7	0.3%
87.7%	2,302	2,372	70	3.1%
88.9%	2,284	2,302	18	0.8%
90.1%	2,190	2,284	94	4.3%
91.4%	2,169	2,257	88	4.1%
92.6%	2,166	2,195	29	1.3%
93.8%	2,155	2,166	11	0.5%
95.1%	2,081	2,155	73	3.5%
96.3%	2,032	2,054	23	1.1%
97.5%	1,159	2,025	866	74.7%
98.8%	578	1,173	595	103.0%
100.0%	300	300	0	0.0%

Table SW-38-b

Banks Pumping Plant (SWP and CVP), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	7,905	-595	-7.0%
7.4%	7,905	7,848	-57	-0.7%
8.6%	7,560	7,699	139	1.8%
9.9%	7,505	7,560	55	0.7%
11.1%	7,015	7,015	0	0.0%
12.3%	6,279	6,269	-10	-0.2%
13.6%	6,269	6,232	-37	-0.6%
14.8%	6,209	6,210	0	0.0%
16.0%	6,178	6,178	0	0.0%
17.3%	5,983	5,853	-130	-2.2%
18.5%	5,853	5,222	-632	-10.8%
19.8%	5,354	5,176	-179	-3.3%
21.0%	5,245	4,977	-268	-5.1%
22.2%	5,200	4,933	-267	-5.1%
23.5%	4,929	4,929	0	0.0%
24.7%	4,869	4,869	0	0.0%
25.9%	4,847	4,847	0	0.0%
27.2%	4,689	4,689	0	0.0%
28.4%	4,568	4,568	0	0.0%
29.6%	4,411	4,413	2	0.1%
30.9%	4,363	4,411	48	1.1%
32.1%	4,194	4,363	169	4.0%
33.3%	4,162	4,190	27	0.7%
34.6%	4,132	4,162	30	0.7%
35.8%	4,117	4,117	0	0.0%
37.0%	4,115	4,115	0	0.0%
38.3%	3,941	3,942	0	0.0%
39.5%	3,843	3,843	0	0.0%
40.7%	3,837	3,807	-30	-0.8%
42.0%	3,807	3,804	-3	-0.1%
43.2%	3,804	3,704	-99	-2.6%
44.4%	3,704	3,680	-24	-0.7%
45.7%	3,680	3,630	-50	-1.4%
46.9%	3,630	3,624	-7	-0.2%
48.1%	3,624	3,520	-103	-2.9%
49.4%	3,520	3,519	-1	0.0%
50.6%	3,519	3,509	-10	-0.3%
51.9%	3,472	3,472	0	0.0%
53.1%	3,443	3,425	-17	-0.5%
54.3%	3,425	3,377	-48	-1.4%
55.6%	3,377	3,361	-16	-0.5%
56.8%	3,361	3,360	-2	0.0%
58.0%	3,360	3,349	-10	-0.3%
59.3%	3,349	3,338	-12	-0.3%
60.5%	3,335	3,337	2	0.1%
61.7%	3,319	3,319	0	0.0%
63.0%	3,311	3,311	0	0.0%
64.2%	3,281	3,281	0	0.0%
65.4%	3,199	3,199	0	0.0%
66.7%	3,194	3,195	0	0.0%
67.9%	3,150	3,150	0	0.0%
69.1%	3,140	3,139	-1	0.0%
70.4%	3,138	3,068	-70	-2.2%
71.6%	3,137	3,056	-81	-2.6%
72.8%	3,068	3,033	-35	-1.2%
74.1%	3,033	2,976	-56	-1.9%
75.3%	2,904	2,904	0	0.0%
76.5%	2,800	2,800	0	0.0%
77.8%	2,784	2,696	-88	-3.2%
79.0%	2,570	2,570	0	0.0%
80.2%	2,505	2,505	0	0.0%
81.5%	2,499	2,499	0	0.0%
82.7%	2,331	2,331	0	0.0%
84.0%	2,285	2,289	3	0.2%
85.2%	2,246	2,246	0	0.0%
86.4%	2,231	2,239	8	0.3%
87.7%	2,103	2,231	128	6.1%
88.9%	2,008	2,103	94	4.7%
90.1%	1,872	2,102	230	12.3%
91.4%	1,804	2,008	204	11.3%
92.6%	1,783	1,872	89	5.0%
93.8%	1,726	1,806	80	4.7%
95.1%	1,690	1,726	35	2.1%
96.3%	1,551	1,690	140	9.0%
97.5%	1,405	1,551	145	10.4%
98.8%	631	1,438	807	127.9%
100.0%	353	1,397	1,044	295.9%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,561	7,561	0	0.0%
1.2%	7,561	7,561	0	0.0%
2.5%	7,561	7,561	0	0.0%
3.7%	7,561	7,561	0	0.0%
4.9%	7,561	7,561	0	0.0%
6.2%	7,561	7,561	0	0.0%
7.4%	7,561	7,561	0	0.0%
8.6%	7,561	7,481	-80	-1.1%
9.9%	7,481	6,542	-939	-12.6%
11.1%	7,057	6,473	-584	-8.3%
12.3%	6,776	6,301	-475	-7.0%
13.6%	6,563	6,296	-268	-4.1%
14.8%	6,296	6,234	-62	-1.0%
16.0%	6,234	6,231	-3	-0.1%
17.3%	6,231	5,998	-233	-3.7%
18.5%	6,003	5,964	-39	-0.7%
19.8%	5,964	5,955	-9	-0.2%
21.0%	5,955	5,831	-124	-2.1%
22.2%	5,831	5,737	-94	-1.6%
23.5%	5,785	5,692	-92	-1.6%
24.7%	5,699	5,685	-14	-0.3%
25.9%	5,692	5,594	-99	-1.7%
27.2%	5,385	5,466	81	1.5%
28.4%	5,171	5,388	217	4.2%
29.6%	5,110	5,385	275	5.4%
30.9%	5,083	5,110	27	0.5%
32.1%	5,001	5,083	82	1.6%
33.3%	4,995	5,001	5	0.1%
34.6%	4,807	4,807	0	0.0%
35.8%	4,750	4,750	0	0.0%
37.0%	4,690	4,584	-106	-2.3%
38.3%	4,234	4,234	0	0.0%
39.5%	4,124	4,124	0	0.0%
40.7%	4,116	3,947	-169	-4.1%
42.0%	3,947	3,883	-63	-1.6%
43.2%	3,906	3,834	-72	-1.8%
44.4%	3,838	3,825	-13	-0.3%
45.7%	3,825	3,742	-83	-2.2%
46.9%	3,742	3,695	-47	-1.3%
48.1%	3,695	3,617	-78	-2.1%
49.4%	3,622	3,577	-45	-1.2%
50.6%	3,577	3,532	-44	-1.2%
51.9%	3,532	3,457	-76	-2.1%
53.1%	3,525	3,445	-80	-2.3%
54.3%	3,457	3,429	-28	-0.8%
55.6%	3,437	3,346	-91	-2.7%
56.8%	3,425	3,319	-107	-3.1%
58.0%	3,346	3,306	-39	-1.2%
59.3%	3,306	3,192	-115	-3.5%
60.5%	3,295	3,185	-110	-3.3%
61.7%	3,208	3,184	-24	-0.7%
63.0%	3,196	3,108	-88	-2.8%
64.2%	3,191	2,949	-242	-7.6%
65.4%	3,122	2,906	-216	-6.9%
66.7%	3,108	2,671	-437	-14.1%
67.9%	2,949	2,658	-291	-9.9%
69.1%	2,939	2,656	-283	-9.6%
70.4%	2,906	2,655	-251	-8.6%
71.6%	2,656	2,594	-62	-2.3%
72.8%	2,594	2,531	-63	-2.4%
74.1%	2,531	2,527	-4	-0.2%
75.3%	2,527	2,447	-80	-3.2%
76.5%	2,484	2,439	-46	-1.8%
77.8%	2,447	2,421	-26	-1.1%
79.0%	2,429	2,391	-38	-1.6%
80.2%	2,406	2,385	-21	-0.9%
81.5%	2,343	2,343	0	0.0%
82.7%	2,343	2,297	-45	-1.9%
84.0%	2,299	2,154	-145	-6.3%
85.2%	2,126	1,955	-172	-8.1%
86.4%	1,933	1,933	0	0.0%
87.7%	1,867	1,797	-71	-3.8%
88.9%	1,797	1,745	-51	-2.9%
90.1%	1,745	1,745	0	0.0%
91.4%	1,696	1,336	-360	-21.2%
92.6%	1,336	1,291	-45	-3.3%
93.8%	1,291	1,204	-87	-6.7%
95.1%	1,204	1,090	-115	-9.5%
96.3%	1,039	1,039	0	0.0%
97.5%	853	1,008	155	18.2%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,125	6,125	0	0.0%
1.2%	3,961	3,871	-90	-2.3%
2.5%	3,360	3,362	1	0.0%
3.7%	2,621	2,617	-4	-0.1%
4.9%	2,505	2,497	-8	-0.3%
6.2%	2,241	2,237	-4	-0.2%
7.4%	2,086	2,078	-8	-0.4%
8.6%	1,852	1,847	-6	-0.3%
9.9%	1,751	1,747	-4	-0.2%
11.1%	1,665	1,657	-8	-0.5%
12.3%	1,622	1,622	0	0.0%
13.6%	1,604	1,604	0	0.0%
14.8%	1,508	1,508	0	0.0%
16.0%	1,474	1,426	-48	-3.3%
17.3%	1,426	1,396	-29	-2.1%
18.5%	1,392	1,392	0	0.0%
19.8%	1,377	1,377	0	0.0%
21.0%	1,343	1,343	0	0.0%
22.2%	1,299	1,299	0	0.0%
23.5%	1,270	1,270	0	0.0%
24.7%	1,246	1,246	0	0.0%
25.9%	1,210	1,210	0	0.0%
27.2%	1,208	1,208	0	0.0%
28.4%	1,201	1,201	0	0.0%
29.6%	1,194	1,194	0	0.0%
30.9%	1,172	1,178	6	0.5%
32.1%	1,170	1,169	0	0.0%
33.3%	1,142	1,142	0	0.0%
34.6%	1,135	1,135	0	0.0%
35.8%	1,118	1,118	0	0.0%
37.0%	1,104	1,101	-4	-0.3%
38.3%	1,101	1,099	-2	-0.2%
39.5%	1,099	1,097	-2	-0.1%
40.7%	1,097	1,097	0	0.0%
42.0%	1,096	1,096	0	0.0%
43.2%	1,078	1,079	0	0.0%
44.4%	1,066	1,074	8	0.8%
45.7%	1,052	1,052	1	0.0%
46.9%	1,051	1,051	0	0.0%
48.1%	1,049	1,049	0	0.0%
49.4%	1,044	1,044	0	0.0%
50.6%	1,036	1,032	-4	-0.4%
51.9%	1,032	1,028	-4	-0.3%
53.1%	1,028	1,028	0	0.0%
54.3%	1,028	1,020	-7	-0.7%
55.6%	1,020	1,004	-17	-1.6%
56.8%	1,004	1,002	-2	-0.2%
58.0%	1,002	988	-14	-1.4%
59.3%	988	988	-1	-0.1%
60.5%	985	985	0	0.0%
61.7%	977	977	0	0.0%
63.0%	976	976	0	0.0%
64.2%	971	971	0	0.0%
65.4%	970	970	0	0.0%
66.7%	963	963	0	0.0%
67.9%	924	924	0	0.0%
69.1%	924	924	0	0.0%
70.4%	918	893	-25	-2.7%
71.6%	893	889	-3	-0.4%
72.8%	889	864	-25	-2.8%
74.1%	864	757	-107	-12.4%
75.3%	757	748	-10	-1.3%
76.5%	748	747	0	0.0%
77.8%	740	740	0	0.1%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	663	664	0	0.1%
91.4%	463	466	3	0.6%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,177	6,177	0	0.0%
1.2%	5,531	5,435	-97	-1.8%
2.5%	4,042	4,043	2	0.0%
3.7%	2,634	2,626	-9	-0.3%
4.9%	2,286	2,276	-10	-0.5%
6.2%	1,946	1,935	-11	-0.6%
7.4%	1,827	1,816	-11	-0.6%
8.6%	1,669	1,595	-74	-4.4%
9.9%	1,595	1,533	-62	-3.9%
11.1%	1,545	1,510	-35	-2.2%
12.3%	1,430	1,430	0	0.0%
13.6%	1,388	1,387	-1	-0.1%
14.8%	1,284	1,247	-36	-2.8%
16.0%	1,258	1,080	-179	-14.2%
17.3%	1,080	1,062	-18	-1.7%
18.5%	1,061	1,059	-2	-0.2%
19.8%	1,028	1,028	0	0.0%
21.0%	1,008	1,004	-4	-0.4%
22.2%	997	998	0	0.0%
23.5%	997	997	0	0.0%
24.7%	944	944	0	0.0%
25.9%	939	943	5	0.5%
27.2%	927	938	11	1.2%
28.4%	918	927	9	1.0%
29.6%	909	909	0	0.0%
30.9%	826	826	0	0.0%
32.1%	822	822	0	0.0%
33.3%	817	817	0	0.0%
34.6%	808	808	0	0.0%
35.8%	800	800	-1	-0.1%
37.0%	793	793	0	0.0%
38.3%	787	787	0	0.0%
39.5%	772	773	1	0.1%
40.7%	761	761	0	0.0%
42.0%	720	720	-1	-0.1%
43.2%	700	719	19	2.7%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	567	700	133	23.5%
92.6%	380	700	320	84.0%
93.8%	300	462	162	54.0%
95.1%	300	413	113	37.8%
96.3%	300	405	105	34.9%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-38-b
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,088	-592	-8.9%
6.2%	6,131	6,046	-85	-1.4%
7.4%	6,047	5,547	-499	-8.3%
8.6%	5,597	5,253	-344	-6.1%
9.9%	5,252	5,116	-137	-2.6%
11.1%	4,901	4,901	0	0.0%
12.3%	4,645	4,575	-71	-1.5%
13.6%	4,455	4,509	55	1.2%
14.8%	4,399	4,455	56	1.3%
16.0%	4,385	4,385	0	0.0%
17.3%	4,165	4,165	0	0.0%
18.5%	4,060	4,060	0	0.0%
19.8%	3,961	4,051	91	2.3%
21.0%	3,799	3,961	161	4.2%
22.2%	3,442	3,442	0	0.0%
23.5%	3,422	3,422	0	0.0%
24.7%	3,237	3,237	0	0.0%
25.9%	3,141	2,937	-204	-6.5%
27.2%	3,097	2,893	-203	-6.6%
28.4%	2,922	2,887	-35	-1.2%
29.6%	2,892	2,878	-15	-0.5%
30.9%	2,878	2,856	-22	-0.8%
32.1%	2,863	2,854	-9	-0.3%
33.3%	2,854	2,852	-1	-0.1%
34.6%	2,851	2,851	0	0.0%
35.8%	2,736	2,848	113	4.1%
37.0%	2,690	2,843	153	5.7%
38.3%	2,675	2,735	60	2.2%
39.5%	2,659	2,690	31	1.2%
40.7%	2,640	2,659	19	0.7%
42.0%	2,534	2,640	106	4.2%
43.2%	2,526	2,613	88	3.5%
44.4%	2,383	2,526	142	6.0%
45.7%	2,364	2,433	69	2.9%
46.9%	2,335	2,379	44	1.9%
48.1%	2,322	2,364	42	1.8%
49.4%	2,291	2,363	72	3.1%
50.6%	2,271	2,085	-186	-8.2%
51.9%	2,181	2,041	-140	-6.4%
53.1%	2,081	2,008	-73	-3.5%
54.3%	1,930	1,976	46	2.4%
55.6%	1,917	1,930	13	0.7%
56.8%	1,837	1,863	27	1.5%
58.0%	1,740	1,860	120	6.9%
59.3%	1,725	1,851	126	7.3%
60.5%	1,698	1,837	139	8.2%
61.7%	1,675	1,778	103	6.2%
63.0%	1,668	1,726	58	3.4%
64.2%	1,668	1,698	30	1.8%
65.4%	1,656	1,675	19	1.1%
66.7%	1,653	1,668	15	0.9%
67.9%	1,643	1,668	25	1.5%
69.1%	1,637	1,656	19	1.1%
70.4%	1,619	1,653	34	2.1%
71.6%	1,585	1,642	57	3.6%
72.8%	1,521	1,637	116	7.6%
74.1%	1,469	1,636	166	11.3%
75.3%	1,385	1,620	235	17.0%
76.5%	1,369	1,608	239	17.4%
77.8%	1,011	1,521	510	50.5%
79.0%	876	1,511	635	72.4%
80.2%	771	1,270	499	64.8%
81.5%	307	1,156	849	276.6%
82.7%	300	415	115	38.2%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	277	300	23	8.2%
93.8%	260	300	40	15.5%
95.1%	241	280	39	16.3%
96.3%	226	241	15	6.6%
97.5%	202	226	25	12.3%
98.8%	120	105	-15	
100.0%	45	97	51	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,180	7,180	0	0.0%
1.2%	7,115	7,180	65	0.9%
2.5%	7,005	7,115	110	1.6%
3.7%	7,005	7,077	72	1.0%
4.9%	7,005	7,005	0	0.0%
6.2%	7,005	7,005	0	0.0%
7.4%	7,005	7,005	0	0.0%
8.6%	7,005	7,005	0	0.0%
9.9%	7,005	7,005	0	0.0%
11.1%	7,005	7,005	0	0.0%
12.3%	7,005	7,005	0	0.0%
13.6%	7,005	7,005	0	0.0%
14.8%	7,005	7,005	0	0.0%
16.0%	7,005	7,005	0	0.0%
17.3%	7,005	7,005	0	0.0%
18.5%	7,005	7,005	0	0.0%
19.8%	7,005	7,005	0	0.0%
21.0%	7,005	7,005	0	0.0%
22.2%	7,005	7,005	0	0.0%
23.5%	7,005	7,005	0	0.0%
24.7%	7,005	7,005	0	0.0%
25.9%	7,005	7,005	0	0.0%
27.2%	7,005	7,005	0	0.0%
28.4%	7,005	7,005	0	0.0%
29.6%	7,005	7,005	0	0.0%
30.9%	7,005	7,005	0	0.0%
32.1%	6,989	7,005	16	0.2%
33.3%	6,988	7,005	17	0.2%
34.6%	6,977	7,005	28	0.4%
35.8%	6,977	7,005	28	0.4%
37.0%	6,970	7,005	35	0.5%
38.3%	6,929	6,988	59	0.9%
39.5%	6,929	6,977	48	0.7%
40.7%	6,929	6,977	48	0.7%
42.0%	6,929	6,970	41	0.6%
43.2%	6,915	6,929	14	0.2%
44.4%	6,915	6,929	14	0.2%
45.7%	6,915	6,929	14	0.2%
46.9%	6,915	6,929	14	0.2%
48.1%	6,915	6,929	14	0.2%
49.4%	6,915	6,919	4	0.1%
50.6%	6,915	6,915	0	0.0%
51.9%	6,915	6,915	0	0.0%
53.1%	6,901	6,915	14	0.2%
54.3%	6,898	6,915	17	0.2%
55.6%	6,843	6,915	72	1.1%
56.8%	6,829	6,915	86	1.3%
58.0%	6,828	6,915	87	1.3%
59.3%	6,823	6,915	92	1.3%
60.5%	6,781	6,915	134	2.0%
61.7%	6,718	6,915	197	2.9%
63.0%	6,702	6,851	149	2.2%
64.2%	6,680	6,843	163	2.4%
65.4%	6,680	6,842	162	2.4%
66.7%	6,680	6,829	149	2.2%
67.9%	6,680	6,799	119	1.8%
69.1%	6,680	6,680	0	0.0%
70.4%	6,680	6,680	0	0.0%
71.6%	6,545	6,680	135	2.1%
72.8%	6,538	6,680	142	2.2%
74.1%	6,523	6,680	157	2.4%
75.3%	6,483	6,680	197	3.0%
76.5%	6,447	6,664	217	3.4%
77.8%	6,443	6,310	-134	-2.1%
79.0%	6,192	6,223	31	0.5%
80.2%	6,159	6,171	13	0.2%
81.5%	5,953	6,022	69	1.2%
82.7%	5,888	6,009	121	2.1%
84.0%	5,365	5,683	318	5.9%
85.2%	5,061	5,340	278	5.5%
86.4%	3,851	3,629	-222	-5.8%
87.7%	2,648	3,590	942	35.6%
88.9%	1,921	3,492	1,571	81.8%
90.1%	1,433	2,172	738	51.5%
91.4%	950	1,967	1,018	107.2%
92.6%	824	1,793	970	117.7%
93.8%	747	1,051	304	40.7%
95.1%	642	814	172	26.7%
96.3%	545	745	199	36.6%
97.5%	469	608	139	29.6%
98.8%	449	431	-18	-4.0%
100.0%	403	403	0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,180	7,180	0	0.0%
1.2%	7,180	7,180	0	0.0%
2.5%	7,180	7,180	0	0.0%
3.7%	7,180	7,180	0	0.0%
4.9%	7,180	7,180	0	0.0%
6.2%	7,180	7,180	0	0.0%
7.4%	7,180	7,180	0	0.0%
8.6%	7,180	7,180	0	0.0%
9.9%	7,180	7,180	0	0.0%
11.1%	7,180	7,180	0	0.0%
12.3%	7,180	7,180	0	0.0%
13.6%	7,180	7,180	0	0.0%
14.8%	7,180	7,180	0	0.0%
16.0%	7,180	7,180	0	0.0%
17.3%	7,180	7,180	0	0.0%
18.5%	7,180	7,180	0	0.0%
19.8%	7,180	7,180	0	0.0%
21.0%	7,180	7,180	0	0.0%
22.2%	7,180	7,180	0	0.0%
23.5%	7,180	7,180	0	0.0%
24.7%	7,180	7,180	0	0.0%
25.9%	7,180	7,180	0	0.0%
27.2%	7,180	7,180	0	0.0%
28.4%	7,180	7,180	0	0.0%
29.6%	7,180	7,180	0	0.0%
30.9%	7,180	7,180	0	0.0%
32.1%	7,180	7,180	0	0.0%
33.3%	7,180	7,180	0	0.0%
34.6%	7,180	7,180	0	0.0%
35.8%	7,180	7,180	0	0.0%
37.0%	7,180	7,180	0	0.0%
38.3%	7,180	7,180	0	0.0%
39.5%	7,180	7,180	0	0.0%
40.7%	7,180	7,180	0	0.0%
42.0%	7,180	7,180	0	0.0%
43.2%	7,058	7,058	0	0.0%
44.4%	7,030	7,030	0	0.0%
45.7%	7,030	7,030	0	0.0%
46.9%	7,030	7,030	0	0.0%
48.1%	7,030	7,030	0	0.0%
49.4%	6,934	6,934	0	0.0%
50.6%	6,930	6,930	0	0.0%
51.9%	6,930	6,930	0	0.0%
53.1%	6,930	6,930	0	0.0%
54.3%	6,906	6,930	24	0.4%
55.6%	6,893	6,930	37	0.5%
56.8%	6,748	6,906	158	2.3%
58.0%	6,691	6,893	202	3.0%
59.3%	6,680	6,748	68	1.0%
60.5%	6,680	6,691	11	0.2%
61.7%	6,680	6,680	0	0.0%
63.0%	6,680	6,680	0	0.0%
64.2%	4,726	6,680	1,954	41.3%
65.4%	4,472	6,680	2,208	49.4%
66.7%	4,223	6,114	1,891	44.8%
67.9%	3,920	4,688	768	19.6%
69.1%	3,893	4,375	482	12.4%
70.4%	3,490	4,229	739	21.2%
71.6%	3,433	3,855	422	12.3%
72.8%	3,381	3,758	378	11.2%
74.1%	3,072	3,737	665	21.6%
75.3%	3,006	3,614	608	20.2%
76.5%	2,975	3,243	268	9.0%
77.8%	2,751	3,193	443	16.1%
79.0%	2,184	3,004	820	37.6%
80.2%	1,778	2,905	1,127	63.4%
81.5%	1,402	2,722	1,320	94.2%
82.7%	940	2,580	1,640	174.4%
84.0%	890	2,515	1,626	182.7%
85.2%	849	2,445	1,596	188.0%
86.4%	550	2,278	1,728	314.3%
87.7%	550	2,090	1,540	280.1%
88.9%	507	1,774	1,267	250.0%
90.1%	459	1,605	1,147	250.0%
91.4%	450	1,387	937	208.3%
92.6%	350	919	570	162.7%
93.8%	350	600	250	71.4%
95.1%	300	550	250	83.3%
96.3%	300	422	122	40.6%
97.5%	300	350	50	16.7%
98.8%	300	330	30	10.1%
100.0%	300	300	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,078	7,078	0	0.0%
1.2%	6,992	6,998	7	0.1%
2.5%	6,907	6,922	15	0.2%
3.7%	6,842	6,866	24	0.3%
4.9%	6,680	6,848	168	2.5%
6.2%	6,680	6,727	47	0.7%
7.4%	6,680	6,714	34	0.5%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,680	6,680	0	0.0%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,680	6,680	0	0.0%
35.8%	6,680	6,680	0	0.0%
37.0%	6,680	6,680	0	0.0%
38.3%	6,680	6,680	0	0.0%
39.5%	6,680	6,680	0	0.0%
40.7%	6,680	6,680	0	0.0%
42.0%	6,680	6,680	0	0.0%
43.2%	6,680	6,680	0	0.0%
44.4%	6,635	6,680	45	0.7%
45.7%	6,609	6,680	71	1.1%
46.9%	6,606	6,680	74	1.1%
48.1%	6,605	6,680	75	1.1%
49.4%	6,556	6,670	114	1.7%
50.6%	6,551	6,662	112	1.7%
51.9%	6,453	6,643	190	2.9%
53.1%	6,304	6,490	186	2.9%
54.3%	6,296	6,373	77	1.2%
55.6%	6,243	6,325	82	1.3%
56.8%	6,047	6,312	265	4.4%
58.0%	6,034	6,255	221	3.7%
59.3%	6,030	6,200	170	2.8%
60.5%	5,983	6,196	213	3.6%
61.7%	5,890	6,077	188	3.2%
63.0%	5,409	6,053	644	11.9%
64.2%	5,387	5,967	580	10.8%
65.4%	4,778	5,898	1,120	23.4%
66.7%	4,461	5,673	1,212	27.2%
67.9%	4,170	5,141	971	23.3%
69.1%	3,748	5,060	1,312	35.0%
70.4%	3,715	4,904	1,189	32.0%
71.6%	3,600	4,849	1,248	34.7%
72.8%	3,450	4,776	1,327	38.5%
74.1%	3,363	4,673	1,310	39.0%
75.3%	3,189	4,606	1,417	44.4%
76.5%	3,144	4,327	1,183	37.6%
77.8%	3,069	4,290	1,221	39.8%
79.0%	2,762	4,063	1,300	47.1%
80.2%	2,582	4,043	1,461	56.6%
81.5%	2,515	3,744	1,230	48.9%
82.7%	2,509	3,629	1,120	44.6%
84.0%	2,294	3,621	1,327	57.8%
85.2%	2,185	3,492	1,307	59.8%
86.4%	2,159	3,325	1,165	54.0%
87.7%	2,145	3,324	1,179	54.9%
88.9%	2,002	2,702	700	35.0%
90.1%	1,910	2,562	651	34.1%
91.4%	1,533	1,723	191	12.4%
92.6%	1,443	1,545	102	7.0%
93.8%	955	1,533	578	60.5%
95.1%	912	909	-3	-0.3%
96.3%	755	711	-44	-5.9%
97.5%	572	543	-28	-5.0%
98.8%	550	481	-69	-12.5%
100.0%	466	397	-69	-14.9%

Figure SW-39-b
Banks Pumping Plant (SWP), Monthly Diversion
Probability of Exceedance

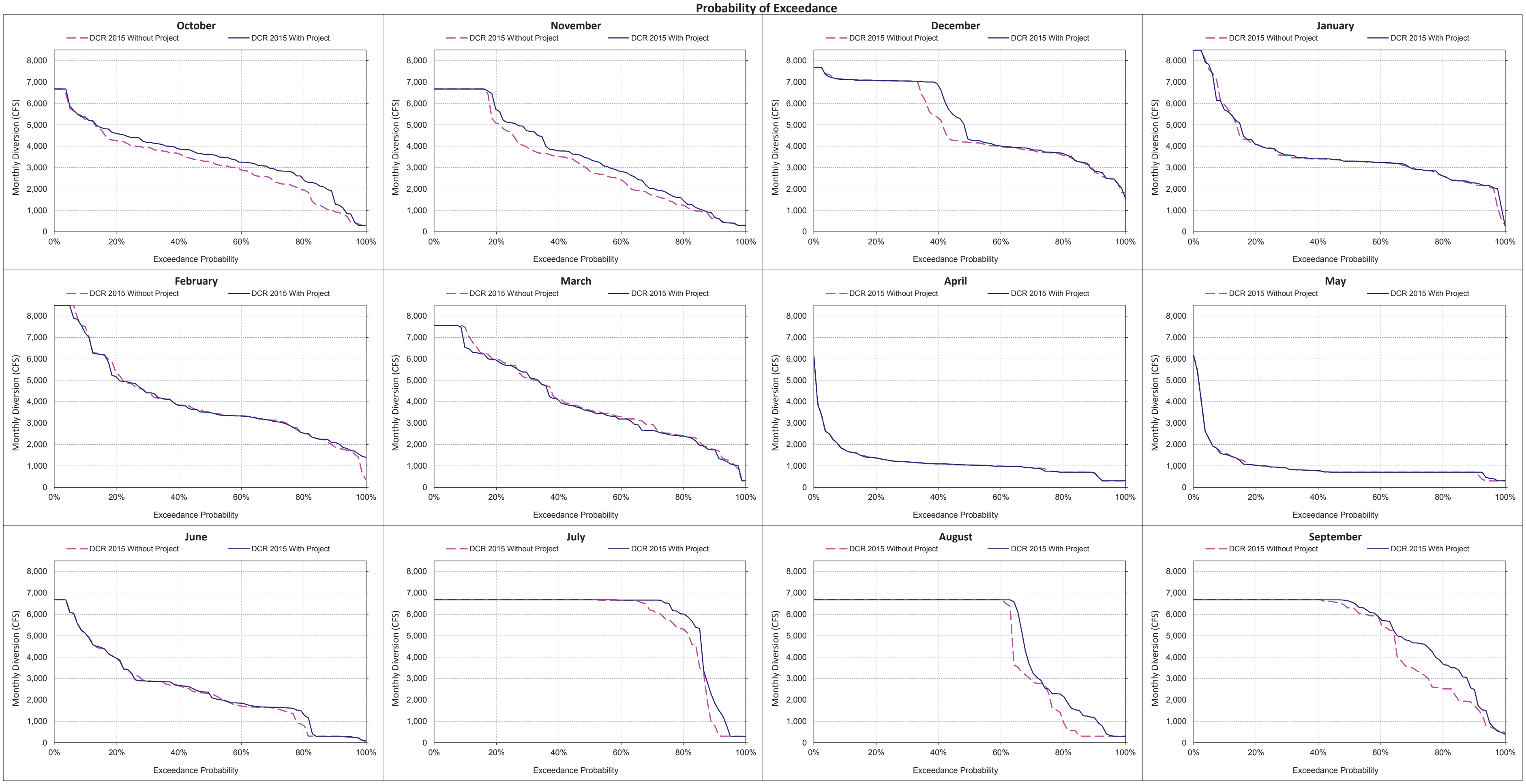


Table SW-39-b

Banks Pumping Plant (SWP), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,456	6,680	224	3.5%
4.9%	5,762	5,884	122	2.1%
6.2%	5,665	5,670	4	0.1%
7.4%	5,515	5,495	-20	-0.4%
8.6%	5,440	5,376	-64	-1.2%
9.9%	5,245	5,365	120	2.3%
11.1%	5,219	5,211	-9	-0.2%
12.3%	5,165	5,200	35	0.7%
13.6%	4,878	4,966	87	1.8%
14.8%	4,804	4,878	74	1.5%
16.0%	4,545	4,818	274	6.0%
17.3%	4,338	4,804	466	10.7%
18.5%	4,293	4,656	363	8.4%
19.8%	4,262	4,600	338	7.9%
21.0%	4,222	4,566	344	8.2%
22.2%	4,210	4,529	318	7.6%
23.5%	4,120	4,460	340	8.2%
24.7%	4,009	4,410	401	10.0%
25.9%	4,000	4,405	405	10.1%
27.2%	3,998	4,400	403	10.1%
28.4%	3,951	4,243	292	7.4%
29.6%	3,930	4,181	251	6.4%
30.9%	3,929	4,175	246	6.3%
32.1%	3,828	4,126	299	7.8%
33.3%	3,820	4,118	298	7.8%
34.6%	3,780	4,084	304	8.0%
35.8%	3,763	4,005	241	6.4%
37.0%	3,698	4,001	303	8.2%
38.3%	3,695	3,986	291	7.9%
39.5%	3,676	3,890	214	5.8%
40.7%	3,609	3,856	247	6.9%
42.0%	3,477	3,854	377	10.9%
43.2%	3,463	3,842	379	11.0%
44.4%	3,400	3,766	366	10.7%
45.7%	3,378	3,685	306	9.1%
46.9%	3,344	3,657	313	9.4%
48.1%	3,297	3,621	324	9.8%
49.4%	3,296	3,621	325	9.9%
50.6%	3,259	3,614	355	10.9%
51.9%	3,142	3,572	430	13.7%
53.1%	3,117	3,489	373	12.0%
54.3%	3,087	3,486	399	12.9%
55.6%	3,069	3,478	409	13.3%
56.8%	3,015	3,400	385	12.8%
58.0%	3,010	3,365	355	11.8%
59.3%	2,941	3,262	322	10.9%
60.5%	2,858	3,262	404	14.1%
61.7%	2,848	3,249	402	14.1%
63.0%	2,779	3,217	438	15.7%
64.2%	2,632	3,180	548	20.8%
65.4%	2,603	3,094	492	18.9%
66.7%	2,590	3,088	498	19.2%
67.9%	2,584	3,074	490	19.0%
69.1%	2,543	2,963	419	16.5%
70.4%	2,328	2,957	630	27.1%
71.6%	2,301	2,859	558	24.2%
72.8%	2,240	2,840	600	26.8%
74.1%	2,226	2,833	608	27.3%
75.3%	2,226	2,828	602	27.1%
76.5%	2,135	2,773	638	29.9%
77.8%	2,079	2,620	540	26.0%
79.0%	1,971	2,609	638	32.4%
80.2%	1,952	2,389	437	22.4%
81.5%	1,844	2,316	471	25.6%
82.7%	1,425	2,307	882	61.9%
84.0%	1,265	2,248	983	77.7%
85.2%	1,245	2,139	894	71.8%
86.4%	1,140	2,110	970	85.1%
87.7%	1,045	1,973	928	88.8%
88.9%	1,031	1,924	892	86.5%
90.1%	929	1,297	368	39.6%
91.4%	903	1,241	338	37.4%
92.6%	790	1,118	328	41.5%
93.8%	727	857	130	17.8%
95.1%	448	826	378	84.3%
96.3%	426	459	34	7.9%
97.5%	372	300	-72	-19.4%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,438	6,576	139	2.2%
18.5%	5,302	6,461	1,159	21.9%
19.8%	5,088	5,731	643	12.6%
21.0%	5,034	5,622	588	11.7%
22.2%	4,818	5,210	392	8.1%
23.5%	4,708	5,130	422	9.0%
24.7%	4,657	5,099	442	9.5%
25.9%	4,393	5,068	675	15.4%
27.2%	4,094	4,956	862	21.0%
28.4%	4,055	4,942	888	21.9%
29.6%	3,982	4,730	749	18.8%
30.9%	3,832	4,690	858	22.4%
32.1%	3,778	4,676	898	23.8%
33.3%	3,689	4,498	809	21.9%
34.6%	3,674	4,462	788	21.4%
35.8%	3,668	4,009	341	9.3%
37.0%	3,608	3,861	252	7.0%
38.3%	3,551	3,834	283	8.0%
39.5%	3,543	3,793	250	7.0%
40.7%	3,504	3,784	280	8.0%
42.0%	3,496	3,779	283	8.1%
43.2%	3,409	3,760	350	10.3%
44.4%	3,400	3,636	236	6.9%
45.7%	3,272	3,624	352	10.7%
46.9%	3,165	3,588	423	13.4%
48.1%	3,054	3,490	436	14.3%
49.4%	2,918	3,433	516	17.7%
50.6%	2,759	3,342	583	21.1%
51.9%	2,724	3,292	568	20.9%
53.1%	2,692	3,242	550	20.4%
54.3%	2,682	3,084	403	15.0%
55.6%	2,601	3,047	447	17.2%
56.8%	2,544	2,969	425	16.7%
58.0%	2,532	2,913	381	15.1%
59.3%	2,472	2,845	374	15.1%
60.5%	2,392	2,812	420	17.6%
61.7%	2,228	2,776	547	24.6%
63.0%	2,029	2,646	617	30.4%
64.2%	1,948	2,572	624	32.1%
65.4%	1,944	2,434	491	25.3%
66.7%	1,909	2,419	510	26.7%
67.9%	1,874	2,194	320	17.1%
69.1%	1,757	2,033	276	15.7%
70.4%	1,679	2,014	335	19.9%
71.6%	1,651	1,941	290	17.6%
72.8%	1,589	1,938	349	22.0%
74.1%	1,555	1,875	319	20.5%
75.3%	1,452	1,759	308	21.2%
76.5%	1,404	1,663	259	18.5%
77.8%	1,274	1,603	329	25.8%
79.0%	1,258	1,602	343	27.3%
80.2%	1,243	1,428	185	14.9%
81.5%	1,112	1,282	170	15.3%
82.7%	1,039	1,267	228	21.9%
84.0%	976	1,134	158	16.2%
85.2%	972	1,065	93	9.6%
86.4%	915	996	81	8.9%
87.7%	880	926	45	5.2%
88.9%	635	904	269	42.4%
90.1%	623	661	38	6.0%
91.4%	608	610	2	0.4%
92.6%	459	443	-16	-3.6%
93.8%	434	423	-10	-2.4%
95.1%	391	417	26	6.7%
96.3%	382	405	24	6.2%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,678	7,678	0	0.0%
1.2%	7,678	7,678	0	0.0%
2.5%	7,678	7,678	0	0.0%
3.7%	7,383	7,358	-25	-0.3%
4.9%	7,358	7,251	-108	-1.5%
6.2%	7,201	7,201	0	0.0%
7.4%	7,170	7,148	-22	-0.3%
8.6%	7,148	7,125	-23	-0.3%
9.9%	7,125	7,124	-2	0.0%
11.1%	7,124	7,119	-4	-0.1%
12.3%	7,119	7,119	0	0.0%
13.6%	7,117	7,094	-23	-0.3%
14.8%	7,094	7,093	-2	0.0%
16.0%	7,093	7,092	-1	0.0%
17.3%	7,088	7,088	0	0.0%
18.5%	7,086	7,086	0	0.0%
19.8%	7,069	7,082	13	0.2%
21.0%	7,065	7,080	15	0.2%
22.2%	7,063	7,069	6	0.1%
23.5%	7,061	7,065	4	0.0%
24.7%	7,059	7,063	5	0.1%
25.9%	7,054	7,061	7	0.1%
27.2%	7,053	7,059	5	0.1%
28.4%	7,048	7,054	6	0.1%
29.6%	7,042	7,053	11	0.2%
30.9%	7,031	7,048	18	0.2%
32.1%	7,004	7,045	41	0.6%
33.3%	6,999	7,042	43	0.6%
34.6%	6,428	7,031	603	9.4%
35.8%	6,121	7,005	884	14.4%
37.0%	5,629	7,004	1,375	24.4%
38.3%	5,457	6,999	1,542	28.3%
39.5%	5,368	6,948	1,579	29.4%
40.7%	5,225	6,656	1,430	27.4%
42.0%	4,708	6,103	1,395	29.6%
43.2%	4,353	5,732	1,380	31.7%
44.4%	4,279	5,515	1,236	28.9%
45.7%	4,268	5,365	1,097	25.7%
46.9%	4,257	5,293	1,036	24.3%
48.1%	4,191	5,041	850	20.3%
49.4%	4,191	4,352	162	3.9%
50.6%	4,160	4,278	118	2.8%
51.9%	4,157	4,270	113	2.7%
53.1%	4,152	4,268	116	2.8%
54.3%	4,111	4,191	79	1.9%
55.6%	4,056	4,157	100	2.5%
56.8%	4,022	4,126	104	2.6%
58.0%	4,020	4,056	37	0.9%
59.3%	4,009	4,034	26	0.6%
60.5%	3,971	3,994	23	0.6%
61.7%	3,954	3,971	17	0.4%
63.0%	3,931	3,968	37	0.9%
64.2%	3,931	3,954	23	0.6%
65.4%	3,917	3,946	29	0.7%
66.7%	3,858	3,928	70	1.8%
67.9%	3,828	3,919	91	2.4%
69.1%	3,822	3,890	68	1.8%
70.4%	3,804	3,833	29	0.8%
71.6%	3,739	3,831	92	2.5%
72.8%	3,725	3,804	79	2.1%
74.1%	3,703	3,730	27	0.7%
75.3%	3,699	3,726	27	0.7%
76.5%	3,688	3,718	30	0.8%
77.8%	3,679	3,703	24	0.6%
79.0%	3,634	3,688	53	1.5%
80.2%	3,560	3,648	88	2.5%
81.5%	3,525	3,560	35	1.0%
82.7%	3,453	3,507	54	1.6%
84.0%	3,324	3,322	-1	0.0%
85.2%	3,322	3,264	-59	-1.8%
86.4%	3,229	3,250	21	0.7%
87.7%	3,138	3,208	69	2.2%
88.9%	3,129	2,952	-177	-5.7%
90.1%	2,793	2,844	51	1.8%
91.4%	2,706	2,806	100	3.7%
92.6%	2,588	2,760	172	6.7%
93.8%	2,508	2,492	-16	-0.7%
95.1%	2,485	2,482	-4	-0.1%
96.3%	2,437	2,474	37	1.5%
97.5%	2,277	2,244	-33	-1.4%
98.8%	1,836	2,050	214	11.7%
100.0%	1,833	1,564	-269	-14.7%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,068	7,932	-137	-1.7%
4.9%	7,583	7,823	241	3.2%
6.2%	7,404	7,336	-68	-0.9%
7.4%	7,108	6,139	-968	-13.6%
8.6%	6,132	6,132	0	0.0%
9.9%	5,951	5,708	-242	-4.1%
11.1%	5,715	5,626	-89	-1.6%
12.3%	5,458	5,435	-23	-0.4%
13.6%	5,091	5,210	119	2.3%
14.8%	4,487	5,091	604	13.5%
16.0%	4,335	4,475	140	3.2%
17.3%	4,315	4,322	8	0.2%
18.5%	4,145	4,315	170	4.1%
19.8%	4,106	4,106	0	0.0%
21.0%	4,046	4,041	-5	-0.1%
22.2%	3,963	3,963	0	0.0%
23.5%	3,913	3,915	2	0.1%
24.7%	3,912	3,912	0	0.0%
25.9%	3,870	3,870	0	0.0%
27.2%	3,595	3,745	150	4.2%
28.4%	3,587	3,654	67	1.9%
29.6%	3,579	3,595	17	0.5%
30.9%	3,468	3,587	120	3.4%
32.1%	3,460	3,568	108	3.1%
33.3%	3,460	3,468	8	0.2%
34.6%	3,446	3,463	17	0.5%
35.8%	3,415	3,460	44	1.3%
37.0%	3,415	3,441	26	0.8%
38.3%	3,413	3,415	2	0.1%
39.5%	3,412	3,415	3	0.1%
40.7%	3,408	3,414	6	0.2%
42.0%	3,405	3,413	8	0.2%
43.2%	3,389	3,409	20	0.6%
44.4%	3,378	3,392	13	0.4%
45.7%	3,376	3,381	5	0.1%
46.9%	3,355	3,380	25	0.7%
48.1%	3,319	3,308	-11	-0.3%
49.4%	3,303	3,307	4	0.1%
50.6%	3,302	3,306	5	0.1%
51.9%	3,294	3,305	11	0.3%
53.1%	3,288	3,293	5	0.2%
54.3%	3,287	3,291	4	0.1%
55.6%	3,264	3,286	22	0.7%
56.8%	3,251	3,264	14	0.4%
58.0%	3,237	3,253	16	0.5%
59.3%	3,235	3,242	6	0.2%
60.5%	3,222	3,240	18	0.6%
61.7%	3,220	3,237	17	0.5%
63.0%	3,219	3,235	16	0.5%
64.2%	3,202	3,203	1	0.0%
65.4%	3,195	3,197	2	0.0%
66.7%	3,130	3,195	65	2.1%
67.9%	3,094	3,145	51	1.7%
69.1%	3,021	3,021	0	0.0%
70.4%	3,002	2,938	-64	-2.1%
71.6%	2,915	2,915	0	0.0%
72.8%	2,903	2,915	12	0.4%
74.1%	2,873	2,873	0	0.0%
75.3%	2,864	2,864	0	0.0%
76.5%	2,850	2,851	2	0.1%
77.8%	2,717	2,850	133	4.9%
79.0%	2,670	2,670	0	0.0%
80.2%	2,598	2,603	4	0.2%
81.5%	2,554	2,512	-42	-1.6%
82.7%	2,423	2,423	0	0.0%
84.0%	2,407	2,407	0	0.0%
85.2%	2,381	2,381	0	0.0%
86.4%	2,372	2,380	7	0.3%
87.7%	2,302	2,372	70	3.1%
88.9%	2,284	2,302	18	0.8%
90.1%	2,190	2,284	94	4.3%
91.4%	2,169	2,257	88	4.1%
92.6%	2,166	2,195	29	1.3%
93.8%	2,155	2,166	11	0.5%
95.1%	2,081	2,155	73	3.5%
96.3%	2,032	2,054	23	1.1%
97.5%	1,159	2,025	866	74.7%
98.8%	578	1,173	595	103.0%
100.0%	300	300	0	0.0%

Table SW-39-b
Banks Pumping Plant (SWP), Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	7,905	-595	-7.0%
7.4%	7,905	7,848	-57	-0.7%
8.6%	7,560	7,560	0	0.0%
9.9%	7,505	7,205	-300	-4.0%
11.1%	7,015	7,015	0	0.0%
12.3%	6,279	6,269	-10	-0.2%
13.6%	6,269	6,232	-37	-0.6%
14.8%	6,209	6,210	0	0.0%
16.0%	6,178	6,178	0	0.0%
17.3%	5,983	5,853	-130	-2.2%
18.5%	5,853	5,222	-632	-10.8%
19.8%	5,354	5,176	-179	-3.3%
21.0%	5,200	4,977	-223	-4.3%
22.2%	4,929	4,933	4	0.1%
23.5%	4,869	4,929	60	1.2%
24.7%	4,847	4,869	22	0.4%
25.9%	4,689	4,847	158	3.4%
27.2%	4,633	4,689	56	1.2%
28.4%	4,568	4,568	0	0.0%
29.6%	4,411	4,413	2	0.1%
30.9%	4,363	4,411	48	1.1%
32.1%	4,194	4,363	169	4.0%
33.3%	4,162	4,190	27	0.7%
34.6%	4,132	4,162	30	0.7%
35.8%	4,117	4,117	0	0.0%
37.0%	4,115	4,115	0	0.0%
38.3%	3,941	3,942	0	0.0%
39.5%	3,843	3,843	0	0.0%
40.7%	3,837	3,807	-30	-0.8%
42.0%	3,807	3,804	-3	-0.1%
43.2%	3,804	3,680	-124	-3.2%
44.4%	3,680	3,630	-50	-1.4%
45.7%	3,630	3,624	-7	-0.2%
46.9%	3,624	3,520	-103	-2.9%
48.1%	3,520	3,519	-1	0.0%
49.4%	3,519	3,509	-10	-0.3%
50.6%	3,472	3,472	0	0.0%
51.9%	3,443	3,425	-17	-0.5%
53.1%	3,425	3,377	-48	-1.4%
54.3%	3,377	3,361	-16	-0.5%
55.6%	3,361	3,360	-2	0.0%
56.8%	3,360	3,349	-10	-0.3%
58.0%	3,359	3,338	-22	-0.6%
59.3%	3,349	3,337	-12	-0.4%
60.5%	3,335	3,319	-17	-0.5%
61.7%	3,319	3,311	-8	-0.2%
63.0%	3,311	3,281	-30	-0.9%
64.2%	3,281	3,246	-35	-1.1%
65.4%	3,199	3,199	0	0.0%
66.7%	3,194	3,195	0	0.0%
67.9%	3,150	3,150	0	0.0%
69.1%	3,140	3,139	-1	0.0%
70.4%	3,138	3,068	-70	-2.2%
71.6%	3,137	3,056	-81	-2.6%
72.8%	3,068	3,033	-35	-1.2%
74.1%	3,033	2,976	-56	-1.9%
75.3%	2,904	2,904	0	0.0%
76.5%	2,800	2,800	0	0.0%
77.8%	2,784	2,696	-88	-3.2%
79.0%	2,570	2,570	0	0.0%
80.2%	2,505	2,505	0	0.0%
81.5%	2,499	2,499	0	0.0%
82.7%	2,331	2,331	0	0.0%
84.0%	2,285	2,289	3	0.2%
85.2%	2,246	2,246	0	0.0%
86.4%	2,231	2,239	8	0.3%
87.7%	2,103	2,231	128	6.1%
88.9%	2,008	2,103	94	4.7%
90.1%	1,872	2,102	230	12.3%
91.4%	1,804	2,008	204	11.3%
92.6%	1,783	1,872	89	5.0%
93.8%	1,726	1,806	80	4.7%
95.1%	1,690	1,726	35	2.1%
96.3%	1,551	1,690	140	9.0%
97.5%	1,405	1,551	145	10.4%
98.8%	631	1,438	807	127.9%
100.0%	353	1,397	1,044	295.9%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,561	7,561	0	0.0%
1.2%	7,561	7,561	0	0.0%
2.5%	7,561	7,561	0	0.0%
3.7%	7,561	7,561	0	0.0%
4.9%	7,561	7,561	0	0.0%
6.2%	7,561	7,561	0	0.0%
7.4%	7,561	7,561	0	0.0%
8.6%	7,561	7,481	-80	-1.1%
9.9%	7,481	6,542	-939	-12.6%
11.1%	7,057	6,473	-584	-8.3%
12.3%	6,776	6,301	-475	-7.0%
13.6%	6,563	6,296	-268	-4.1%
14.8%	6,296	6,234	-62	-1.0%
16.0%	6,234	6,231	-3	-0.1%
17.3%	6,231	5,998	-233	-3.7%
18.5%	6,003	5,964	-39	-0.7%
19.8%	5,964	5,955	-9	-0.2%
21.0%	5,955	5,831	-124	-2.1%
22.2%	5,831	5,737	-94	-1.6%
23.5%	5,785	5,692	-92	-1.6%
24.7%	5,699	5,685	-14	-0.3%
25.9%	5,692	5,594	-99	-1.7%
27.2%	5,385	5,466	81	1.5%
28.4%	5,171	5,388	217	4.2%
29.6%	5,110	5,385	275	5.4%
30.9%	5,083	5,110	27	0.5%
32.1%	5,001	5,083	82	1.6%
33.3%	4,995	5,001	5	0.1%
34.6%	4,807	4,807	0	0.0%
35.8%	4,750	4,750	0	0.0%
37.0%	4,690	4,234	-456	-9.7%
38.3%	4,234	4,153	-81	-1.9%
39.5%	4,124	4,124	0	0.0%
40.7%	4,116	3,947	-169	-4.1%
42.0%	3,947	3,883	-63	-1.6%
43.2%	3,906	3,834	-72	-1.8%
44.4%	3,838	3,825	-13	-0.3%
45.7%	3,825	3,742	-83	-2.2%
46.9%	3,742	3,695	-47	-1.3%
48.1%	3,695	3,617	-78	-2.1%
49.4%	3,622	3,577	-45	-1.2%
50.6%	3,577	3,532	-44	-1.2%
51.9%	3,532	3,457	-76	-2.1%
53.1%	3,525	3,445	-80	-2.3%
54.3%	3,457	3,429	-28	-0.8%
55.6%	3,437	3,346	-91	-2.7%
56.8%	3,425	3,319	-107	-3.1%
58.0%	3,346	3,306	-39	-1.2%
59.3%	3,306	3,192	-115	-3.5%
60.5%	3,295	3,185	-110	-3.3%
61.7%	3,208	3,184	-24	-0.7%
63.0%	3,196	3,108	-88	-2.8%
64.2%	3,191	2,949	-242	-7.6%
65.4%	3,122	2,906	-216	-6.9%
66.7%	3,108	2,671	-437	-14.1%
67.9%	2,949	2,658	-291	-9.9%
69.1%	2,939	2,656	-283	-9.6%
70.4%	2,906	2,655	-251	-8.6%
71.6%	2,656	2,594	-62	-2.3%
72.8%	2,594	2,531	-63	-2.4%
74.1%	2,531	2,527	-4	-0.2%
75.3%	2,527	2,447	-80	-3.2%
76.5%	2,484	2,439	-46	-1.8%
77.8%	2,447	2,421	-26	-1.1%
79.0%	2,429	2,391	-38	-1.6%
80.2%	2,406	2,385	-21	-0.9%
81.5%	2,343	2,343	0	0.0%
82.7%	2,343	2,297	-45	-1.9%
84.0%	2,299	2,154	-145	-6.3%
85.2%	2,126	1,955	-172	-8.1%
86.4%	1,933	1,933	0	0.0%
87.7%	1,867	1,797	-71	-3.8%
88.9%	1,797	1,745	-51	-2.9%
90.1%	1,745	1,745	0	0.0%
91.4%	1,696	1,336	-360	-21.2%
92.6%	1,336	1,291	-45	-3.3%
93.8%	1,291	1,204	-87	-6.7%
95.1%	1,204	1,090	-115	-9.5%
96.3%	1,039	1,039	0	0.0%
97.5%	853	1,008	155	18.2%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,125	6,125	0	0.0%
1.2%	3,961	3,871	-90	-2.3%
2.5%	3,360	3,362	1	0.0%
3.7%	2,621	2,617	-4	-0.1%
4.9%	2,505	2,497	-8	-0.3%
6.2%	2,241	2,237	-4	-0.2%
7.4%	2,086	2,078	-8	-0.4%
8.6%	1,852	1,847	-6	-0.3%
9.9%	1,751	1,747	-4	-0.2%
11.1%	1,665	1,657	-8	-0.5%
12.3%	1,622	1,622	0	0.0%
13.6%	1,604	1,604	0	0.0%
14.8%	1,508	1,508	0	0.0%
16.0%	1,474	1,426	-48	-3.3%
17.3%	1,426	1,396	-29	-2.1%
18.5%	1,392	1,392	0	0.0%
19.8%	1,377	1,377	0	0.0%
21.0%	1,343	1,343	0	0.0%
22.2%	1,299	1,299	0	0.0%
23.5%	1,270	1,270	0	0.0%
24.7%	1,246	1,246	0	0.0%
25.9%	1,210	1,210	0	0.0%
27.2%	1,208	1,208	0	0.0%
28.4%	1,201	1,201	0	0.0%
29.6%	1,194	1,194	0	0.0%
30.9%	1,172	1,178	6	0.5%
32.1%	1,170	1,169	0	0.0%
33.3%	1,142	1,142	0	0.0%
34.6%	1,135	1,135	0	0.0%
35.8%	1,118	1,118	0	0.0%
37.0%	1,104	1,101	-4	-0.3%
38.3%	1,101	1,099	-2	-0.2%
39.5%	1,099	1,097	-2	-0.1%
40.7%	1,097	1,097	0	0.0%
42.0%	1,096	1,096	0	0.0%
43.2%	1,078	1,079	0	0.0%
44.4%	1,066	1,074	8	0.8%
45.7%	1,052	1,052	1	0.0%
46.9%	1,051	1,051	0	0.0%
48.1%	1,049	1,049	0	0.0%
49.4%	1,044	1,044	0	0.0%
50.6%	1,036	1,032	-4	-0.4%
51.9%	1,032	1,028	-4	-0.3%
53.1%	1,028	1,028	0	0.0%
54.3%	1,028	1,020	-7	-0.7%
55.6%	1,020	1,004	-17	-1.6%
56.8%	1,004	1,002	-2	-0.2%
58.0%	1,002	988	-14	-1.4%
59.3%	988	988	-1	-0.1%
60.5%	985	985	0	0.0%
61.7%	977	977	0	0.0%
63.0%	976	976	0	0.0%
64.2%	971	971	0	0.0%
65.4%	970	970	0	0.0%
66.7%	963	963	0	0.0%
67.9%	924	924	0	0.0%
69.1%	924	924	0	0.0%
70.4%	918	893	-25	-2.7%
71.6%	893	889	-3	-0.4%
72.8%	889	864	-25	-2.8%
74.1%	864	757	-107	-12.4%
75.3%	757	748	-10	-1.3%
76.5%	748	747	0	0.0%
77.8%	740	740	0	0.1%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	663	664	0	0.1%
91.4%	463	466	3	0.6%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,177	6,177	0	0.0%
1.2%	5,531	5,435	-97	-1.8%
2.5%	4,042	4,043	2	0.0%
3.7%	2,634	2,626	-9	-0.3%
4.9%	2,286	2,276	-10	-0.5%
6.2%	1,946	1,935	-11	-0.6%
7.4%	1,827	1,816	-11	-0.6%
8.6%	1,669	1,595	-74	-4.4%
9.9%	1,595	1,533	-62	-3.9%
11.1%	1,545	1,510	-35	-2.2%
12.3%	1,430	1,430	0	0.0%
13.6%	1,388	1,387	-1	-0.1%
14.8%	1,284	1,247	-36	-2.8%
16.0%	1,258	1,080	-179	-14.2%
17.3%	1,080	1,062	-18	-1.7%
18.5%	1,061	1,059	-2	-0.2%
19.8%	1,028	1,028	0	0.0%
21.0%	1,008	1,004	-4	-0.4%
22.2%	997	998	0	0.0%
23.5%	997	997	0	0.0%
24.7%	944	944	0	0.0%
25.9%	939	943	5	0.5%
27.2%	927	938	11	1.2%
28.4%	918	927	9	1.0%
29.6%	909	909	0	0.0%
30.9%	826	826	0	0.0%
32.1%	822	822	0	0.0%
33.3%	817	817	0	0.0%
34.6%	808	808	0	0.0%
35.8%	800	800	-1	-0.1%
37.0%	793	793	0	0.0%
38.3%	787	787	0	0.0%
39.5%	772	773	1	0.1%
40.7%	761	761	0	0.0%
42.0%	720	720	-1	-0.1%
43.2%	700	719	19	2.7%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	567	700	133	23.5%
92.6%	380	700	320	84.0%
93.8%	300	462	162	54.0%
95.1%	300	413	113	37.8%
96.3%	300	405	105	34.9%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-39-b

Banks Pumping Plant (SWP), Monthly Diversion

Probability of Exceedance

June				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,131	6,088	-44	-0.7%
6.2%	6,047	6,046	0	0.0%
7.4%	5,597	5,547	-49	-0.9%
8.6%	5,252	5,253	0	0.0%
9.9%	5,114	5,116	2	0.0%
11.1%	4,901	4,901	0	0.0%
12.3%	4,645	4,575	-71	-1.5%
13.6%	4,455	4,509	55	1.2%
14.8%	4,399	4,455	56	1.3%
16.0%	4,385	4,385	0	0.0%
17.3%	4,165	4,165	0	0.0%
18.5%	4,060	4,060	0	0.0%
19.8%	3,961	3,961	0	0.0%
21.0%	3,799	3,860	60	1.6%
22.2%	3,442	3,442	0	0.0%
23.5%	3,422	3,422	0	0.0%
24.7%	3,237	3,237	0	0.0%
25.9%	3,141	2,935	-207	-6.6%
27.2%	3,096	2,893	-202	-6.5%
28.4%	2,922	2,887	-35	-1.2%
29.6%	2,892	2,878	-15	-0.5%
30.9%	2,878	2,856	-22	-0.8%
32.1%	2,863	2,854	-9	-0.3%
33.3%	2,854	2,852	-1	-0.1%
34.6%	2,851	2,851	0	0.0%
35.8%	2,736	2,848	113	4.1%
37.0%	2,690	2,843	153	5.7%
38.3%	2,675	2,735	60	2.2%
39.5%	2,659	2,690	31	1.2%
40.7%	2,640	2,659	19	0.7%
42.0%	2,534	2,640	106	4.2%
43.2%	2,526	2,613	88	3.5%
44.4%	2,383	2,526	142	6.0%
45.7%	2,364	2,433	69	2.9%
46.9%	2,335	2,379	44	1.9%
48.1%	2,322	2,364	42	1.8%
49.4%	2,291	2,363	72	3.1%
50.6%	2,271	2,085	-186	-8.2%
51.9%	2,181	2,041	-140	-6.4%
53.1%	2,081	2,008	-73	-3.5%
54.3%	1,930	1,976	46	2.4%
55.6%	1,917	1,930	13	0.7%
56.8%	1,837	1,863	27	1.5%
58.0%	1,740	1,860	120	6.9%
59.3%	1,725	1,851	126	7.3%
60.5%	1,698	1,837	139	8.2%
61.7%	1,675	1,778	103	6.2%
63.0%	1,668	1,726	58	3.4%
64.2%	1,668	1,698	30	1.8%
65.4%	1,656	1,675	19	1.1%
66.7%	1,653	1,668	15	0.9%
67.9%	1,643	1,668	25	1.5%
69.1%	1,637	1,656	19	1.1%
70.4%	1,619	1,653	34	2.1%
71.6%	1,585	1,642	57	3.6%
72.8%	1,521	1,637	116	7.6%
74.1%	1,469	1,636	166	11.3%
75.3%	1,385	1,620	235	17.0%
76.5%	1,369	1,608	239	17.4%
77.8%	919	1,521	602	65.5%
79.0%	876	1,511	635	72.4%
80.2%	771	1,270	499	64.8%
81.5%	300	1,156	856	285.4%
82.7%	300	415	115	38.2%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	277	300	23	8.2%
93.8%	260	300	40	15.5%
95.1%	241	280	39	16.3%
96.3%	226	241	15	6.6%
97.5%	202	226	25	12.3%
98.8%	120	105	-15	
100.0%	45	97	51	

July				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,680	6,680	0	0.0%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,680	6,680	0	0.0%
35.8%	6,680	6,680	0	0.0%
37.0%	6,680	6,680	0	0.0%
38.3%	6,680	6,680	0	0.0%
39.5%	6,680	6,680	0	0.0%
40.7%	6,680	6,680	0	0.0%
42.0%	6,680	6,680	0	0.0%
43.2%	6,680	6,680	0	0.0%
44.4%	6,680	6,680	0	0.0%
45.7%	6,680	6,680	0	0.0%
46.9%	6,680	6,680	0	0.0%
48.1%	6,680	6,680	0	0.0%
49.4%	6,680	6,680	0	0.0%
50.6%	6,680	6,680	0	0.0%
51.9%	6,680	6,680	0	0.0%
53.1%	6,664	6,680	16	0.2%
54.3%	6,663	6,680	17	0.3%
55.6%	6,663	6,680	17	0.3%
56.8%	6,663	6,680	17	0.3%
58.0%	6,662	6,680	18	0.3%
59.3%	6,662	6,664	2	0.0%
60.5%	6,662	6,664	2	0.0%
61.7%	6,659	6,664	5	0.1%
63.0%	6,647	6,664	16	0.2%
64.2%	6,629	6,663	34	0.5%
65.4%	6,612	6,663	51	0.8%
66.7%	6,538	6,662	124	1.9%
67.9%	6,507	6,662	154	2.4%
69.1%	6,201	6,662	461	7.4%
70.4%	6,159	6,661	503	8.2%
71.6%	6,012	6,660	647	10.8%
72.8%	6,008	6,648	640	10.7%
74.1%	5,789	6,534	745	12.9%
75.3%	5,757	6,522	764	13.3%
76.5%	5,596	6,171	576	10.3%
77.8%	5,392	6,158	766	14.2%
79.0%	5,344	6,022	678	12.7%
80.2%	5,287	6,009	723	13.7%
81.5%	5,087	5,875	788	15.5%
82.7%	4,583	5,683	1,100	24.0%
84.0%	4,550	5,394	843	18.5%
85.2%	3,506	5,340	1,834	52.3%
86.4%	3,305	3,380	75	2.3%
87.7%	1,924	2,835	911	47.4%
88.9%	931	2,270	1,339	143.9%
90.1%	779	1,829	1,050	134.9%
91.4%	313	1,514	1,201	384.3%
92.6%	300	1,259	959	319.6%
93.8%	300	789	489	162.9%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

August				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,680	6,680	0	0.0%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,680	6,680	0	0.0%
35.8%	6,680	6,680	0	0.0%
37.0%	6,680	6,680	0	0.0%
38.3%	6,680	6,680	0	0.0%
39.5%	6,680	6,680	0	0.0%
40.7%	6,680	6,680	0	0.0%
42.0%	6,680	6,680	0	0.0%
43.2%	6,680	6,680	0	0.0%
44.4%	6,680	6,680	0	0.0%
45.7%	6,680	6,680	0	0.0%
46.9%	6,680	6,680	0	0.0%
48.1%	6,680	6,680	0	0.0%
49.4%	6,680	6,680	0	0.0%
50.6%	6,680	6,680	0	0.0%
51.9%	6,680	6,680	0	0.0%
53.1%	6,680	6,680	0	0.0%
54.3%	6,680	6,680	0	0.0%
55.6%	6,680	6,680	0	0.0%
56.8%	6,680	6,680	0	0.0%
58.0%	6,680	6,680	0	0.0%
59.3%	6,680	6,680	0	0.0%
60.5%	6,659	6,680	21	0.3%
61.7%	6,485	6,680	195	3.0%
63.0%	6,380	6,680	300	4.7%
64.2%	3,631	6,579	2,949	81.2%
65.4%	3,533	6,113	2,580	73.0%
66.7%	3,300	5,202	1,903	57.7%
67.9%	3,164	4,301	1,138	36.0%
69.1%	3,020	3,651	631	20.9%
70.4%	2,811	3,245	434	15.5%
71.6%	2,775	3,050	275	9.9%
72.8%	2,764	2,917	153	5.5%
74.1%	2,756	2,550	-206	-7.5%
75.3%	2,302	2,499	197	8.6%
76.5%	1,579	2,285	706	44.7%
77.8%	1,533	2,280	747	48.7%
79.0%	1,411	2,268	857	60.7%
80.2%	904	2,145	1,241	137.3%
81.5%	590	1,840	1,251	212.1%
82.7%	572	1,605	1,033	180.6%
84.0%	549	1,536	987	179.8%
85.2%	309	1,511	1,202	388.3%
86.4%	300	1,253	953	317.5%
87.7%	300	1,237	937	312.3%
88.9%	300	1,195	895	298.5%
90.1%	300	1,151	851	283.8%
91.4%	300	919	619	206.5%
92.6%	300	766	466	155.3%
93.8%	300	422	122	40.6%
95.1%	300	330	30	10.1%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,680	6,680	0	0.0%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,680	6,680	0	0.0%
35.8%	6,680	6,680	0	0.0%
37.0%	6,680	6,680	0	0.0%
38.3%	6,680	6,680	0	0.0%
39.5%	6,680	6,680	0	0.0%
40.7%	6,680	6,680	0	0.0%
42.0%	6,609	6,680	71	1.1%
43.2%	6,606	6,680	74	1.1%
44.4%	6,605	6,680	75	1.1%
45.7%	6,556	6,680	124	1.9%
46.9%	6,551	6,670	119	1.8%
48.1%	6,453	6,662	209	3.2%
49.4%	6,304	6,643	338	5.4%
50.6%	6,296	6,573	278	4.4%
51.9%	6,243	6,490	247	4.0%
53.1%	6,047	6,325	278	4.6%
54.3%	6,034	6,312	278	4.6%
55.6%	5,983	6,200	217	3.6%
56.8%	5,933	6,077	144	2.4%
58.0%	5,930	6,053	122	2.1%
59.3%	5,890	5,898	8	0.1%
60.5%	5,435	5,708	273	5.0%
61.7%	5,387	5,688	301	5.6%
63.0%	5,258	5,673	415	7.9%
64.2%	5,231	5,253	22	0.4%
65.4%	3,920	4,990	1,070	27.3%
66.7%	3,818	4,958	1,140	29.9%
67.9%	3,600	4,810	1,210	33.6%
69.1%	3,498	4,772	1,274	36.4%
70.4%	3,492	4,666	1,174	33.6%
71.6%	3,363	4,658	1,296	38.5%
72.8%	3,274	4,628	1,353	41.3%
74.1%	3,144	4,606	1,462	46.5%
75.3%	2,993	4,446	1,453	48.5%
76.5%	2,596	4,249	1,653	63.7%
77.8%	2,582	3,987	1,404	54.4%
79.0%	2,557	3,866	1,309	51.2%
80.2%	2,515	3,649	1,134	45.1%
81.5%	2,512	3,621	1,109	44.1%
82.7%	2,509	3,494	985	39.3%
84.0%	2,216	3,492	1,276	57.6%
85.2%	1,965	3,379	1,414	72.0%
86.4%	1,936	3,075	1,138	58.8%
87.7%	1,935	3,051	1,116	57.6%
88.9%	1,910	2,562	651	34.1%
90.1%	1,729	2,479	750	43.4%
91.4%	1,533	1,723	191	12.4%
92.6%	1,313	1,533	220	16.7%
93.8%	805	1,512	707	87.8%
95.1%	755	909	154	20.5%
96.3%	662	711	48	7.3%
97.5%	572	543	-28	-5.0%
98.8%	550	481	-69	-12.5%
100.0%	466	397	-69	-14.9%

Figure SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

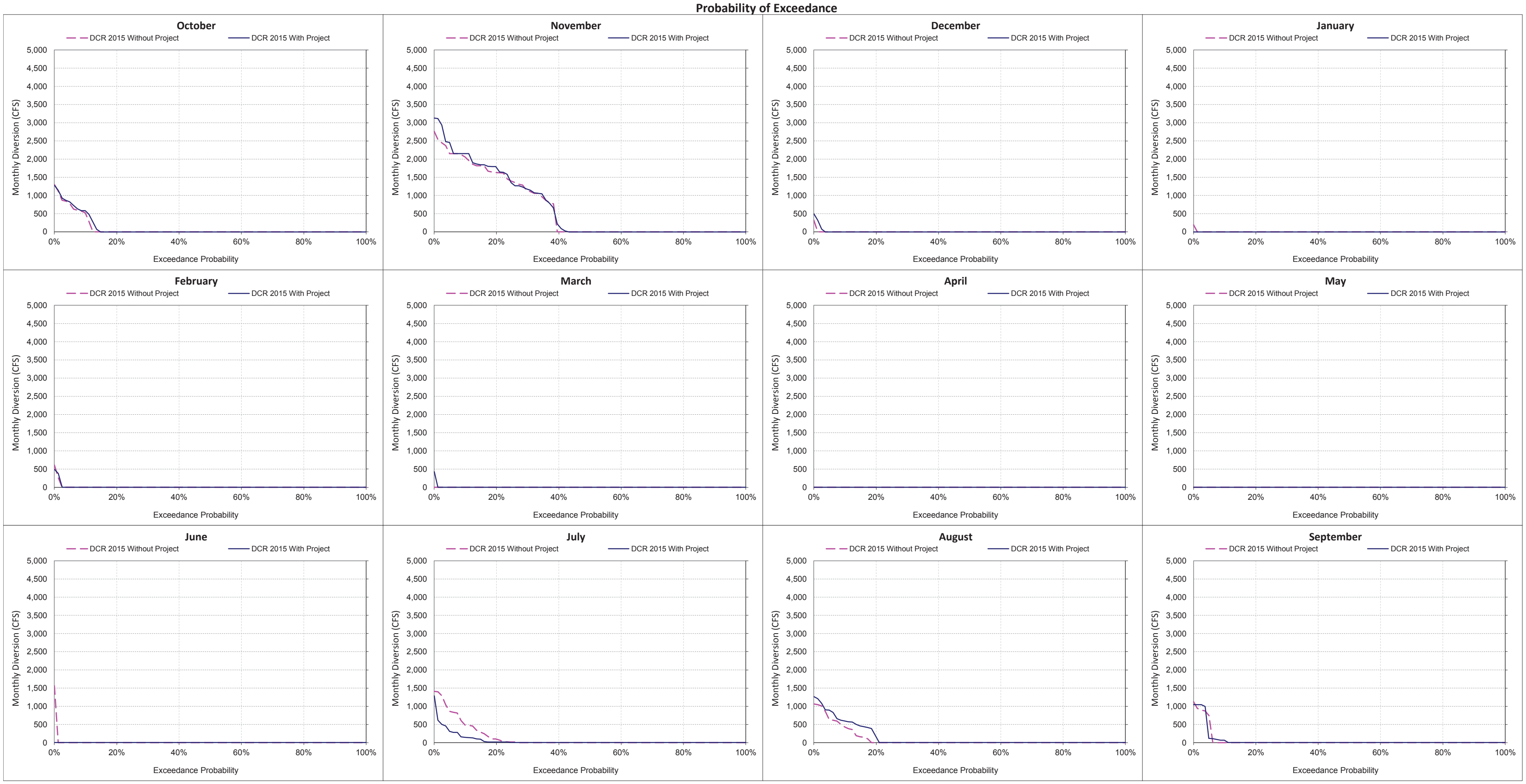


Table SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,302	1,281	-21	-1.6%
1.2%	1,120	1,141	20	1.8%
2.5%	868	927	59	6.8%
3.7%	844	866	22	2.7%
4.9%	775	821	45	5.9%
6.2%	623	721	98	15.8%
7.4%	596	632	36	6.1%
8.6%	569	582	13	2.3%
9.9%	523	582	58	11.2%
11.1%	275	479	204	73.9%
12.3%	0	276	276	
13.6%	0	67	67	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,764	3,127	362	13.1%
1.2%	2,532	3,116	584	23.0%
2.5%	2,447	2,939	492	20.1%
3.7%	2,370	2,476	106	4.5%
4.9%	2,151	2,460	309	14.4%
6.2%	2,151	2,151	0	0.0%
7.4%	2,151	2,151	0	0.0%
8.6%	2,124	2,151	27	1.3%
9.9%	2,062	2,151	89	4.3%
11.1%	1,961	2,151	190	9.7%
12.3%	1,859	1,902	42	2.3%
13.6%	1,817	1,868	51	2.8%
14.8%	1,817	1,848	30	1.7%
16.0%	1,817	1,847	29	1.6%
17.3%	1,667	1,798	131	7.9%
18.5%	1,646	1,796	149	9.1%
19.8%	1,629	1,794	165	10.1%
21.0%	1,625	1,644	19	1.1%
22.2%	1,615	1,636	21	1.3%
23.5%	1,455	1,581	126	8.7%
24.7%	1,396	1,351	-45	-3.2%
25.9%	1,356	1,270	-86	-6.3%
27.2%	1,307	1,269	-38	-2.9%
28.4%	1,285	1,230	-55	-4.3%
29.6%	1,142	1,182	40	3.5%
30.9%	1,106	1,145	39	3.5%
32.1%	1,059	1,074	15	1.4%
33.3%	1,058	1,057	-1	-0.1%
34.6%	963	1,043	80	8.3%
35.8%	865	876	12	1.4%
37.0%	805	791	-13	-1.6%
38.3%	772	658	-114	-14.8%
39.5%	0	219	219	
40.7%	0	91	91	
42.0%	0	25	25	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	320	499	179	55.9%
1.2%	0	320	320	
2.5%	0	73	73	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	195	0	-195	-100.0%
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-40-b

Banks Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	612	495	-117	-19.2%
1.2%	268	381	114	42.4%
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	431	431	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-40-b

Banks Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

June				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,566	0	-1,566	-100.0%
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,411	1,286	-124	-8.8%
1.2%	1,398	619	-779	-55.7%
2.5%	1,288	502	-786	-61.1%
3.7%	1,039	460	-578	-55.7%
4.9%	862	308	-554	-64.3%
6.2%	834	281	-553	-66.3%
7.4%	816	280	-536	-65.7%
8.6%	607	158	-449	-73.9%
9.9%	488	143	-345	-70.7%
11.1%	477	138	-338	-71.0%
12.3%	458	131	-326	-71.3%
13.6%	342	103	-240	-70.0%
14.8%	291	99	-193	-66.1%
16.0%	245	32	-214	-87.1%
17.3%	169	20	-148	-87.9%
18.5%	103	19	-84	-81.7%
19.8%	101	18	-83	-81.8%
21.0%	68	18	-50	-73.2%
22.2%	27	18	-9	-33.9%
23.5%	21	17	-4	-18.2%
24.7%	18	0	-18	-100.0%
25.9%	18	0	-18	-100.0%
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,063	1,268	205	19.2%
1.2%	1,046	1,212	166	15.9%
2.5%	1,010	1,079	69	6.8%
3.7%	855	903	48	5.6%
4.9%	633	895	263	41.5%
6.2%	616	833	217	35.3%
7.4%	592	657	65	11.1%
8.6%	507	618	111	21.9%
9.9%	433	597	164	37.8%
11.1%	382	575	192	50.2%
12.3%	360	567	207	57.3%
13.6%	190	505	315	165.5%
14.8%	161	458	297	184.3%
16.0%	147	438	291	197.5%
17.3%	105	420	315	299.8%
18.5%	0	387	387	
19.8%	0	195	195	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,126	1,048	-79	-7.0%
1.2%	943	1,048	104	11.1%
2.5%	897	1,043	146	16.3%
3.7%	872	992	119	13.7%
4.9%	747	118	-629	-84.2%
6.2%	0	107	107	
7.4%	0	86	86	
8.6%	0	68	68	
9.9%	0	65	65	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure SW-41-b
San Luis Reservoir (SWP and CVP), End of Month Storage
Probability of Exceedance

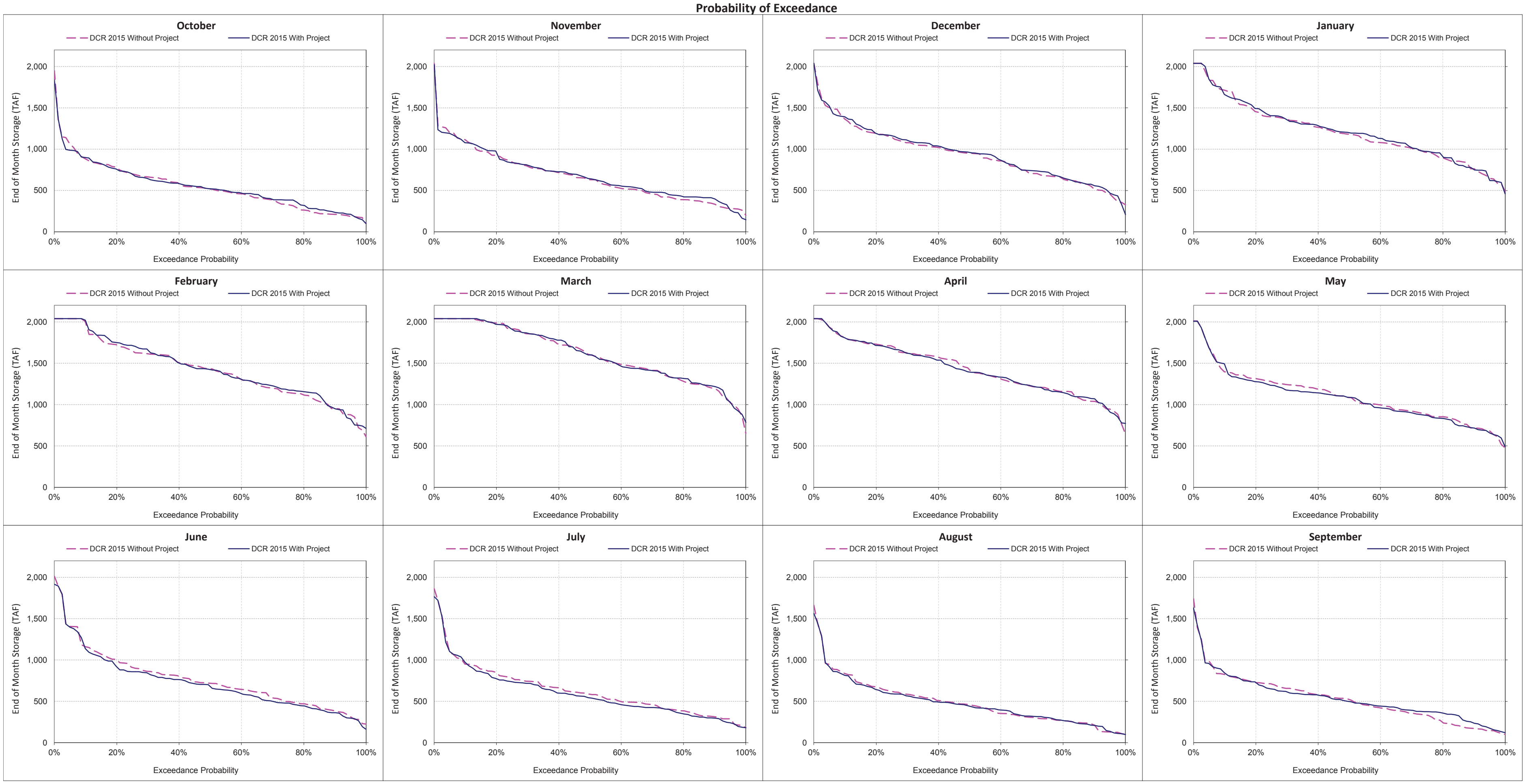


Table SW-41-b

San Luis Reservoir (SWP and CVP), End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,949	1,838	-111	-5.7%
1.2%	1,352	1,361	9	0.7%
2.5%	1,150	1,126	-24	-2.1%
3.7%	1,139	997	-142	-12.5%
4.9%	1,064	988	-75	-7.1%
6.2%	1,021	983	-38	-3.7%
7.4%	953	971	18	1.9%
8.6%	912	905	-7	-0.8%
9.9%	885	900	15	1.7%
11.1%	859	892	33	3.9%
12.3%	841	845	4	0.5%
13.6%	830	840	10	1.2%
14.8%	819	827	8	1.0%
16.0%	817	809	-8	-1.0%
17.3%	813	783	-30	-3.7%
18.5%	790	771	-19	-2.4%
19.8%	784	762	-22	-2.8%
21.0%	747	736	-12	-1.5%
22.2%	728	732	4	0.5%
23.5%	716	725	10	1.3%
24.7%	703	705	2	0.3%
25.9%	692	674	-18	-2.6%
27.2%	680	659	-21	-3.1%
28.4%	668	658	-10	-1.4%
29.6%	666	648	-19	-2.8%
30.9%	660	630	-29	-4.4%
32.1%	656	621	-35	-5.4%
33.3%	653	615	-38	-5.8%
34.6%	638	612	-26	-4.2%
35.8%	638	602	-36	-5.7%
37.0%	606	591	-15	-2.6%
38.3%	601	590	-11	-1.8%
39.5%	596	589	-7	-1.2%
40.7%	560	576	16	2.8%
42.0%	549	563	13	2.4%
43.2%	547	561	14	2.5%
44.4%	545	555	10	1.8%
45.7%	537	549	12	2.3%
46.9%	535	547	12	2.2%
48.1%	531	529	-3	-0.5%
49.4%	520	522	2	0.4%
50.6%	516	520	4	0.8%
51.9%	503	517	15	2.9%
53.1%	493	508	15	3.0%
54.3%	493	503	9	1.9%
55.6%	483	495	12	2.4%
56.8%	474	482	8	1.7%
58.0%	464	476	12	2.5%
59.3%	461	475	14	3.0%
60.5%	460	464	4	1.0%
61.7%	447	463	16	3.5%
63.0%	434	463	29	6.7%
64.2%	413	453	40	9.7%
65.4%	411	450	40	9.7%
66.7%	405	418	13	3.1%
67.9%	398	406	8	2.1%
69.1%	391	403	12	3.2%
70.4%	387	387	0	-0.1%
71.6%	356	387	31	8.8%
72.8%	335	387	51	15.2%
74.1%	335	386	51	15.2%
75.3%	326	385	59	18.1%
76.5%	316	385	69	21.7%
77.8%	291	360	68	23.5%
79.0%	266	324	59	22.1%
80.2%	263	320	57	21.6%
81.5%	256	284	28	10.9%
82.7%	232	282	50	21.4%
84.0%	231	281	50	21.7%
85.2%	220	266	46	21.0%
86.4%	219	264	45	20.4%
87.7%	216	253	37	17.2%
88.9%	212	245	33	15.7%
90.1%	212	235	23	11.0%
91.4%	210	227	17	8.2%
92.6%	205	226	21	10.4%
93.8%	197	215	18	9.0%
95.1%	186	210	25	13.4%
96.3%	183	183	0	-0.1%
97.5%	177	163	-14	-7.7%
98.8%	172	145	-27	-15.9%
100.0%	100	100	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,023	-16	-0.8%
1.2%	1,277	1,236	-41	-3.2%
2.5%	1,270	1,204	-66	-5.2%
3.7%	1,258	1,199	-59	-4.7%
4.9%	1,202	1,190	-12	-1.0%
6.2%	1,199	1,169	-30	-2.5%
7.4%	1,136	1,142	6	0.5%
8.6%	1,121	1,120	0	0.0%
9.9%	1,115	1,078	-37	-3.3%
11.1%	1,081	1,076	-5	-0.5%
12.3%	1,064	1,066	2	0.2%
13.6%	993	1,047	54	5.4%
14.8%	976	1,022	46	4.7%
16.0%	976	1,005	29	2.9%
17.3%	963	981	19	1.9%
18.5%	927	981	53	5.8%
19.8%	926	976	50	5.4%
21.0%	914	877	-37	-4.0%
22.2%	884	867	-17	-1.9%
23.5%	870	846	-24	-2.7%
24.7%	850	837	-12	-1.4%
25.9%	828	835	7	0.9%
27.2%	827	824	-3	-0.4%
28.4%	809	814	4	0.5%
29.6%	799	812	13	1.6%
30.9%	778	797	19	2.4%
32.1%	765	780	15	1.9%
33.3%	765	774	10	1.3%
34.6%	760	765	5	0.6%
35.8%	736	740	4	0.5%
37.0%	736	737	1	0.2%
38.3%	731	734	2	0.3%
39.5%	720	728	8	1.1%
40.7%	711	727	16	2.3%
42.0%	703	723	20	2.9%
43.2%	692	704	12	1.8%
44.4%	687	700	12	1.8%
45.7%	657	697	40	6.1%
46.9%	654	680	26	3.9%
48.1%	651	664	12	1.9%
49.4%	632	646	14	2.3%
50.6%	630	638	8	1.2%
51.9%	630	630	0	0.0%
53.1%	590	618	28	4.7%
54.3%	577	606	29	5.1%
55.6%	568	587	19	3.3%
56.8%	550	568	18	3.2%
58.0%	541	565	24	4.5%
59.3%	533	560	28	5.2%
60.5%	522	553	31	5.8%
61.7%	517	547	29	5.7%
63.0%	517	543	26	5.0%
64.2%	516	538	22	4.3%
65.4%	505	528	23	4.5%
66.7%	499	522	23	4.7%
67.9%	474	493	19	3.9%
69.1%	465	481	16	3.5%
70.4%	457	479	22	4.8%
71.6%	451	479	27	6.1%
72.8%	422	478	57	13.5%
74.1%	422	473	52	12.2%
75.3%	422	450	28	6.8%
76.5%	409	444	35	8.5%
77.8%	395	440	46	11.5%
79.0%	389	436	47	12.0%
80.2%	389	423	34	8.7%
81.5%	389	422	33	8.5%
82.7%	379	422	42	11.1%
84.0%	376	422	45	12.1%
85.2%	372	419	47	12.6%
86.4%	359	414	55	15.3%
87.7%	354	414	60	16.8%
88.9%	346	412	65	18.9%
90.1%	333	397	64	19.2%
91.4%	305	365	60	19.7%
92.6%	297	345	48	16.2%
93.8%	287	328	41	14.4%
95.1%	282	263	-19	-6.8%
96.3%	279	238	-41	-14.7%
97.5%	276	232	-45	-16.2%
98.8%	261	164	-98	-37.3%
100.0%	200	145	-55	-27.6%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	1,792	1,710	-82	-4.6%
2.5%	1,618	1,592	-26	-1.6%
3.7%	1,528	1,570	42	2.7%
4.9%	1,504	1,524	21	1.4%
6.2%	1,484	1,431	-53	-3.6%
7.4%	1,484	1,407	-77	-5.2%
8.6%	1,412	1,399	-13	-0.9%
9.9%	1,366	1,393	27	2.0%
11.1%	1,333	1,365	33	2.4%
12.3%	1,282	1,357	75	5.9%
13.6%	1,277	1,305	28	2.2%
14.8%	1,246	1,286	40	3.2%
16.0%	1,223	1,255	32	2.6%
17.3%	1,209	1,239	30	2.5%
18.5%	1,200	1,235	36	3.0%
19.8%	1,193	1,195	2	0.2%
21.0%	1,181	1,177	-5	-0.4%
22.2%	1,177	1,176	-1	-0.1%
23.5%	1,161	1,173	12	1.1%
24.7%	1,154	1,167	13	1.1%
25.9%	1,120	1,155	35	3.1%
27.2%	1,108	1,132	25	2.2%
28.4%	1,093	1,115	22	2.0%
29.6%	1,078	1,114	35	3.3%
30.9%	1,078	1,094	15	1.4%
32.1%	1,061	1,085	24	2.2%
33.3%	1,049	1,078	29	2.8%
34.6%	1,047	1,077	31	2.9%
35.8%	1,046	1,074	28	2.7%
37.0%	1,034	1,070	36	3.5%
38.3%	1,027	1,040	13	1.3%
39.5%	1,024	1,040	15	1.5%
40.7%	1,016	1,031	15	1.5%
42.0%	995	1,013	18	1.8%
43.2%	983	1,001	18	1.9%
44.4%	980	992	12	1.3%
45.7%	971	984	12	1.3%
46.9%	963	972	10	1.0%
48.1%	956	968	12	1.2%
49.4%	953	966	14	1.4%
50.6%	949	956	7	0.7%
51.9%	946	953	7	0.7%
53.1%	945	944	-1	-0.1%
54.3%	893	942	49	5.5%
55.6%	893	940	47	5.2%
56.8%	874	934	60	6.9%
58.0%	871	913	42	4.8%
59.3%	859	878	19	2.3%
60.5%	856	860	4	0.4%
61.7%	845	833	-11	-1.3%
63.0%	800	817	18	2.2%
64.2%	793	813	20	2.5%
65.4%	789	781	-8	-1.0%
66.7%	749	745	-4	-0.5%
67.9%	744	745	1	0.1%
69.1%	708	742	34	4.9%
70.4%	705	739	34	4.8%
71.6%	705	736	31	4.4%
72.8%	687	730	43	6.3%
74.1%	678	728	50	7.4%
75.3%	676	722	45	6.7%
76.5%	670	689	19	2.8%
77.8%	668	679	10	1.6%
79.0%	662	666	4	0.6%
80.2%	634	647	13	2.0%
81.5%	620	637	16	2.6%
82.7%	620	624	4	0.6%
84.0%	616	605	-11	-1.8%
85.2%	595	601	5	0.9%
86.4%	580	588	9	1.5%
87.7%	576	576	-1	-0.1%
88.9%	554	575	22	3.9%
90.1%	512	557	45	8.7%
91.4%	505	551	46	9.2%
92.6%	501	534	33	6.6%
93.8%	473	510	37	7.8%
95.1%	456	466	10	2.3%
96.3%	408	447	39	9.6%
97.5%	364	434	71	19.4%
98.8%	356	331	-25	-7.0%
100.0%	328	209	-119	-36.3%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	1,945	2,001	55	2.8%
4.9%	1,834	1,850	16	0.9%
6.2%	1,831	1,780	-51	-2.8%
7.4%	1,756	1,761	5	0.3%
8.6%	1,724	1,754	31	1.8%
9.9%	1,715	1,664	-51	-3.0%
11.1%	1,699	1,637	-63	-3.7%
12.3%	1,696	1,617	-79	-4.6%
13.6%	1,580	1,608	28	1.7%
14.8%	1,541	1,600	59	3.8%
16.0%	1,536	1,579	43	2.8%
17.3%	1,523	1,557	34	2.3%
18.5%	1,498	1,538	40	2.6%
19.8%	1,456	1,494	38	2.6%
21.0%	1,445	1,491	46	3.2%
22.2%	1,404	1,460	56	4.0%
23.5%	1,396	1,426	30	2.1%
24.7%	1,393	1,404	11	0.8%
25.9%	1,392	1,404	11	0.8%
27.2%	1,385	1,402	17	1.2%
28.4%	1,377	1,390	13	0.9%
29.6%	1,373	1,365	-8	-0.6%
30.9%	1,348	1,335	-13	-0.9%
32.1%	1,346	1,331	-14	-1.1%
33.3%	1,340	1,320	-20	-1.5%
34.6%	1,329	1,304	-25	-1.9%
35.8%	1,315	1,303	-12	-0.9%
37.0%	1,315	1,302	-13	-1.0%
38.3%	1,276	1,301	25	1.9%
39.5%	1,268	1,292	24	1.9%
40.7%	1,263	1,274	12	0.9%
42.0%	1,238	1,263	25	2.1%
43.2%	1,235	1,248	13	1.1%
44.4%	1,219	1,237	19	1.5%
45.7%	1,199	1,221	22	1.9%
46.9%	1,195	1,211	15	1.3%
48.1%	1,190	1,208	18	1.5%
49.4%	1,183	1,203	20	1.7%
50.6%	1,178	1,196	18	1.5%
51.9%	1,172	1,196	24	2.0%
53.1%	1,161	1,190	29	2.5%
54.3%	1,120	1,190	70	6.3%
55.6%	1,112	1,183	71	6.4%
56.8%	1,088	1,161	73	6.7%
58.0%	1,084	1,158	73	6.8%
59.3%	1,083	1,133	50	4.6%
60.5%	1,078	1,128	50	4.6%
61.7%	1,074	1,103	29	2.7%
63.0%	1,067	1,097	30	2.8%
64.2%	1,058	1,095	37	3.5%
65.4%	1,042	1,082	40	3.9%
66.7%	1,038	1,076	38	3.6%
67.9%	1,028	1,072	44	4.2%
69.1%	1,020	1,034	13	1.3%
70.4%	1,006	1,014	8	0.8%
71.6%	993	1,008	15	1.5%
72.8%	985	982	-3	-0.3%
74.1%	965	975	10	1.1%
75.3%	959	972	13	1.3%
76.5%	953	961	8	0.8%
77.8%	926	956	30	3.3%
79.0%	895	956	61	6.8%
80.2%	891	901	9	1.1%
81.5%	873	896	22	2.6%
82.7%	855	895	40	4.6%
84.0%	854	826	-28	-3.2%
85.2%	854	806	-48	-5.6%
86.4%	846	802	-43	-5.1%
87.7%	840	780	-60	-7.1%
88.9%	764	779	15	2.0%
90.1%	762	748	-14	-1.9%
91.4%	729	747	18	2.5%
92.6%	702	746	43	6.2%
93.8%	683	736	54	7.9%
95.1%	647	621	-27	-4.1%
96.3%	640	620	-20	-3.2%
97.5%	588	606	18	3.1%
98.8%	584	598	14	2.3%
100.0%	488	459	-29	-6.0%

Table SW-41-b

San Luis Reservoir (SWP and CVP), End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,039	2,039	0	0.0%
4.9%	2,039	2,039	0	0.0%
6.2%	2,039	2,039	0	0.0%
7.4%	2,039	2,039	0	0.0%
8.6%	2,039	2,039	0	0.0%
9.9%	2,006	2,022	16	0.8%
11.1%	1,848	1,904	56	3.0%
12.3%	1,848	1,887	39	2.1%
13.6%	1,841	1,840	-1	-0.1%
14.8%	1,790	1,838	48	2.7%
16.0%	1,746	1,834	88	5.1%
17.3%	1,737	1,797	61	3.5%
18.5%	1,730	1,758	28	1.6%
19.8%	1,726	1,751	26	1.5%
21.0%	1,700	1,744	44	2.6%
22.2%	1,695	1,727	32	1.9%
23.5%	1,676	1,717	41	2.5%
24.7%	1,657	1,716	59	3.6%
25.9%	1,627	1,704	78	4.8%
27.2%	1,624	1,682	58	3.6%
28.4%	1,622	1,672	50	3.1%
29.6%	1,616	1,672	56	3.5%
30.9%	1,610	1,625	15	0.9%
32.1%	1,608	1,617	9	0.6%
33.3%	1,606	1,593	-13	-0.8%
34.6%	1,602	1,590	-11	-0.7%
35.8%	1,598	1,581	-17	-1.1%
37.0%	1,593	1,579	-13	-0.8%
38.3%	1,548	1,554	6	0.4%
39.5%	1,513	1,508	-4	-0.3%
40.7%	1,500	1,489	-10	-0.7%
42.0%	1,494	1,488	-5	-0.3%
43.2%	1,478	1,465	-13	-0.9%
44.4%	1,472	1,449	-23	-1.5%
45.7%	1,469	1,435	-34	-2.3%
46.9%	1,455	1,434	-21	-1.5%
48.1%	1,438	1,433	-5	-0.4%
49.4%	1,436	1,427	-9	-0.6%
50.6%	1,431	1,420	-11	-0.8%
51.9%	1,407	1,417	10	0.7%
53.1%	1,396	1,403	8	0.6%
54.3%	1,384	1,366	-18	-1.3%
55.6%	1,375	1,361	-14	-1.0%
56.8%	1,370	1,333	-37	-2.7%
58.0%	1,352	1,322	-30	-2.2%
59.3%	1,315	1,317	2	0.1%
60.5%	1,295	1,298	2	0.2%
61.7%	1,294	1,293	-1	0.0%
63.0%	1,283	1,286	3	0.2%
64.2%	1,270	1,266	-4	-0.3%
65.4%	1,226	1,262	36	3.0%
66.7%	1,221	1,246	25	2.0%
67.9%	1,208	1,244	35	2.9%
69.1%	1,202	1,234	32	2.7%
70.4%	1,197	1,223	26	2.2%
71.6%	1,190	1,208	18	1.5%
72.8%	1,154	1,189	35	3.0%
74.1%	1,148	1,187	39	3.4%
75.3%	1,144	1,173	29	2.6%
76.5%	1,138	1,173	35	3.0%
77.8%	1,135	1,164	29	2.5%
79.0%	1,132	1,162	31	2.7%
80.2%	1,114	1,156	41	3.7%
81.5%	1,109	1,148	39	3.5%
82.7%	1,077	1,142	65	6.1%
84.0%	1,053	1,141	88	8.4%
85.2%	1,035	1,108	72	7.0%
86.4%	1,018	1,047	29	2.9%
87.7%	1,004	989	-14	-1.4%
88.9%	952	971	19	1.9%
90.1%	950	948	-1	-0.2%
91.4%	949	940	-9	-0.9%
92.6%	889	936	47	5.3%
93.8%	880	842	-37	-4.3%
95.1%	877	824	-52	-6.0%
96.3%	850	752	-98	-11.5%
97.5%	720	749	29	4.0%
98.8%	691	742	51	7.4%
100.0%	610	713	104	17.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,039	2,039	0	0.0%
4.9%	2,039	2,039	0	0.0%
6.2%	2,039	2,039	0	0.0%
7.4%	2,039	2,039	0	0.0%
8.6%	2,039	2,039	0	0.0%
9.9%	2,039	2,039	0	0.0%
11.1%	2,039	2,039	0	0.0%
12.3%	2,039	2,039	0	0.0%
13.6%	2,025	2,039	14	0.7%
14.8%	2,017	2,025	8	0.4%
16.0%	2,005	2,023	18	0.9%
17.3%	2,003	1,998	-5	-0.2%
18.5%	1,989	1,995	6	0.3%
19.8%	1,987	1,971	-17	-0.8%
21.0%	1,984	1,967	-17	-0.8%
22.2%	1,981	1,965	-16	-0.8%
23.5%	1,922	1,954	32	1.6%
24.7%	1,917	1,917	0	0.0%
25.9%	1,914	1,889	-25	-1.3%
27.2%	1,904	1,885	-19	-1.0%
28.4%	1,865	1,871	6	0.3%
29.6%	1,858	1,867	9	0.5%
30.9%	1,855	1,855	0	0.0%
32.1%	1,852	1,853	1	0.1%
33.3%	1,846	1,839	-7	-0.4%
34.6%	1,812	1,835	24	1.3%
35.8%	1,785	1,817	32	1.8%
37.0%	1,776	1,800	24	1.4%
38.3%	1,772	1,796	23	1.3%
39.5%	1,737	1,779	43	2.5%
40.7%	1,720	1,779	59	3.4%
42.0%	1,719	1,762	43	2.5%
43.2%	1,716	1,700	-16	-0.9%
44.4%	1,694	1,699	5	0.3%
45.7%	1,693	1,655	-38	-2.3%
46.9%	1,671	1,649	-23	-1.4%
48.1%	1,645	1,622	-24	-1.4%
49.4%	1,609	1,601	-8	-0.5%
50.6%	1,597	1,601	3	0.2%
51.9%	1,583	1,578	-5	-0.3%
53.1%	1,568	1,546	-22	-1.4%
54.3%	1,545	1,546	1	0.1%
55.6%	1,522	1,535	13	0.8%
56.8%	1,510	1,522	12	0.8%
58.0%	1,502	1,505	2	0.2%
59.3%	1,492	1,479	-13	-0.9%
60.5%	1,481	1,455	-26	-1.7%
61.7%	1,476	1,449	-27	-1.8%
63.0%	1,467	1,440	-27	-1.8%
64.2%	1,457	1,439	-19	-1.3%
65.4%	1,452	1,437	-15	-1.0%
66.7%	1,441	1,429	-12	-0.8%
67.9%	1,435	1,420	-15	-1.1%
69.1%	1,417	1,414	-3	-0.2%
70.4%	1,414	1,408	-5	-0.4%
71.6%	1,413	1,405	-8	-0.6%
72.8%	1,387	1,381	-7	-0.5%
74.1%	1,355	1,378	23	1.7%
75.3%	1,335	1,336	1	0.1%
76.5%	1,327	1,324	-3	-0.3%
77.8%	1,320	1,322	2	0.2%
79.0%	1,298	1,322	24	1.8%
80.2%	1,278	1,316	38	3.0%
81.5%	1,260	1,311	51	4.0%
82.7%	1,251	1,263	12	1.0%
84.0%	1,246	1,262	16	1.3%
85.2%	1,246	1,255	10	0.8%
86.4%	1,244	1,237	-7	-0.6%
87.7%	1,217	1,232	16	1.3%
88.9%	1,202	1,227	25	2.1%
90.1%	1,195	1,218	22	1.9%
91.4%	1,161	1,203	42	3.6%
92.6%	1,098	1,175	76	6.9%
93.8%	1,077	1,061	-16	-1.5%
95.1%	1,018	1,028	10	1.0%
96.3%	994	956	-38	-3.8%
97.5%	944	923	-22	-2.3%
98.8%	861	882	21	2.5%
100.0%	653	785	132	20.2%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,026	2,039	13	0.6%
3.7%	1,994	1,994	0	0.0%
4.9%	1,938	1,938	0	0.0%
6.2%	1,905	1,893	-12	-0.6%
7.4%	1,858	1,878	21	1.1%
8.6%	1,830	1,828	-3	-0.1%
9.9%	1,811	1,806	-5	-0.3%
11.1%	1,789	1,786	-3	-0.2%
12.3%	1,779	1,781	3	0.2%
13.6%	1,767	1,776	8	0.5%
14.8%	1,767	1,764	-3	-0.2%
16.0%	1,749	1,763	14	0.8%
17.3%	1,737	1,746	9	0.5%
18.5%	1,736	1,745	9	0.5%
19.8%	1,732	1,716	-16	-0.9%
21.0%	1,725	1,714	-11	-0.6%
22.2%	1,714	1,707	-7	-0.4%
23.5%	1,712	1,694	-18	-1.1%
24.7%	1,711	1,683	-28	-1.6%
25.9%	1,692	1,666	-26	-1.5%
27.2%	1,639	1,663	25	1.5%
28.4%	1,629	1,648	18	1.1%
29.6%	1,629	1,622	-6	-0.4%
30.9%	1,615	1,617	2	0.1%
32.1%	1,615	1,596	-18	-1.1%
33.3%	1,603	1,595	-8	-0.5%
34.6%	1,600	1,590	-10	-0.6%
35.8%	1,599	1,579	-20	-1.2%
37.0%	1,594	1,571	-23	-1.5%
38.3%	1,588	1,558	-30	-1.9%
39.5%	1,582	1,539	-43	-2.7%
40.7%	1,561	1,538	-22	-1.4%
42.0%	1,553	1,492	-61	-3.9%
43.2%	1,545	1,478	-67	-4.3%
44.4%	1,542	1,458	-84	-5.5%
45.7%	1,530	1,435	-95	-6.2%
46.9%	1,474	1,428	-46	-3.1%
48.1%	1,457	1,416	-41	-2.8%
49.4%	1,444	1,396	-48	-3.4%
50.6%	1,393	1,392	-2	-0.1%
51.9%	1,384	1,390	6	0.4%
53.1%	1,379	1,386	6	0.5%
54.3%	1,369	1,376	6	0.5%
55.6%	1,358	1,357	-1	-0.1%
56.8%	1,347	1,350	4	0.3%
58.0%	1,334	1,342	9	0.6%
59.3%	1,323	1,335	12	0.9%
60.5%	1,302	1,330	28	2.1%
61.7%	1,291	1,326	35	2.7%
63.0%	1,274	1,303	29	2.3%
64.2%	1,271	1,279	8	0.6%
65.4%	1,254	1,265	11	0.9%
66.7%	1,246	1,247	1	0.1%
67.9%	1,244	1,241	-3	-0.2%
69.1%	1,228	1,232	4	0.4%
70.4%	1,216	1,220	4	0.3%
71.6%	1,212	1,212	0	0.0%
72.8%	1,208	1,209	1	0.1%
74.1%	1,206	1,180	-26	-2.1%
75.3%	1,190	1,178	-12	-1.0%
76.5%	1,185	1,159	-26	-2.2%
77.8%	1,169	1,158	-11	-1.0%
79.0%	1,160	1,152	-8	-0.7%
80.2%	1,160	1,142	-18	-1.5%
81.5%	1,159	1,130	-29	-2.5%
82.7%	1,153	1,108	-45	-3.9%
84.0%	1,094	1,095	2	0.2%
85.2%	1,078	1,095	17	1.6%
86.4%	1,054	1,093	39	3.7%
87.7%	1,050	1,087	37	3.6%
88.9%	1,040	1,074	35	3.3%
90.1%	1,039	1,071	32	3.1%
91.4%	1,026	1,023	-3	-0.3%
92.6%	988	1,015	27	2.7%
93.8%	950	962	13	1.3%
95.1%	945	907	-37	-4.0%
96.3%	921	888	-32	-3.5%
97.5%	882	850	-32	-3.7%
98.8%	761	780	19	2.5%
100.0%	641	771	130	20.2%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,012	2,009	-3	-0.1%
1.2%	2,011	2,008	-3	-0.2%
2.5%	1,932	1,929	-3	-0.2%
3.7%	1,803	1,804	0	0.0%
4.9%	1,686	1,691	5	0.3%
6.2%	1,623	1,594	-29	-1.8%
7.4%	1,522	1,516	-6	-0.4%
8.6%	1,443	1,502	59	4.1%
9.9%	1,397	1,492	96	6.9%
11.1%	1,392	1,367	-25	-1.8%
12.3%	1,382	1,337	-46	-3.3%
13.6%	1,359	1,333	-26	-1.9%
14.8%	1,358	1,317	-41	-3.0%
16.0%	1,356	1,310	-46	-3.4%
17.3%	1,326	1,298	-29	-2.2%
18.5%	1,318	1,290	-29	-2.2%
19.8%	1,316	1,278	-37	-2.8%
21.0%	1,308	1,275	-32	-2.5%
22.2%	1,298	1,264	-34	-2.6%
23.5%	1,286	1,250	-36	-2.8%
24.7%	1,283	1,233	-49	-3.8%
25.9%	1,262	1,229	-33	-2.6%
27.2%	1,253	1,216	-38	-3.0%
28.4%	1,252	1,202	-50	-4.0%
29.6%	1,243	1,176	-67	-5.4%
30.9%	1,238	1,170	-68	-5.5%
32.1%	1,238	1,169	-69	-5.6%
33.3%	1,230	1,167	-63	-5.1%
34.6%	1,228	1,154	-74	-6.0%
35.8%	1,207	1,154	-53	-4.4%
37.0%	1,207	1,153	-54	-4.5%
38.3%	1,204	1,146	-58	-4.8%
39.5%	1,190	1,141	-49	-4.2%
40.7%	1,182	1,139	-43	-3.6%
42.0%	1,181	1,129	-52	-4.4%
43.2%	1,161	1,124	-37	-3.2%
44.4%	1,141	1,116	-25	-2.1%
45.7%	1,109	1,109	0	0.0%
46.9%	1,104	1,105	1	0.1%
48.1%	1,102	1,103	2	0.1%
49.4%	1,087	1,088	1	0.1%
50.6%	1,084	1,087	3	0.3%
51.9%	1,045	1,080	34	3.3%
53.1%	1,023	1,050	28	2.7%
54.3%	1,012	1,018	6	0.6%
55.6%	1,010	1,010	0	0.0%
56.8%	1,006	1,007	1	0.1%
58.0%	1,006	966	-40	-4.0%
59.3%	1,000	965	-35	-3.5%
60.5%	993	957	-36	-3.6%
61.7%	980	956	-24	-2.5%
63.0%	975	949	-26	-2.6%
64.2%	941	925	-16	-1.7%
65.4%	939	919	-20	-2.2%
66.7%	937	918	-19	-2.0%
67.9%	930	913	-17	-1.9%
69.1%	925	908	-17	-1.9%
70.4%	918	897	-21	-2.3%
71.6%	909	884	-25	-2.7%
72.8%	899	878	-22	-2.4%
74.1%	888	873	-14	-1.6%
75.3%	879	867	-12	-1.4%
76.5%	855	844	-11	-1.3%
77.8%	854	837	-17	-2.0%
79.0%	853	835	-18	-2.1%
80.2%	852	832	-21	-2.4%
81.5%	846	823	-23	-2.8%
82.7%	833	813	-20	-2.4%
84.0%	820	762	-58	-7.0%
85.2%	797	745	-51	-6.4%
86.4%	765	745	-20	-2.6%
87.7%	761	733	-28	-3.7%
88.9%	718	722	4	0.5%
90.1%	716	717	1	0.1%
91.4%	715	697	-17	-2.4%
92.6%	707	692	-15	-2.2%
93.8%	683	688	5	0.7%
95.1%	679	655	-25	-3.6%
96.3%	637	637	-1	-0.1%
97.5%	612	626	14	2.2%
98.8%	519	597	78	15.1%
100.0%	474	489	14	3.0%

Table SW-41-b

San Luis Reservoir (SWP and CVP), End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,013	1,916	-97	-4.8%
1.2%	1,894	1,895	1	0.1%
2.5%	1,797	1,794	-3	-0.2%
3.7%	1,434	1,435	1	0.1%
4.9%	1,406	1,399	-8	-0.6%
6.2%	1,405	1,378	-27	-1.9%
7.4%	1,403	1,343	-60	-4.3%
8.6%	1,185	1,270	85	7.2%
9.9%	1,162	1,138	-23	-2.0%
11.1%	1,151	1,095	-56	-4.8%
12.3%	1,116	1,072	-44	-4.0%
13.6%	1,098	1,057	-41	-3.8%
14.8%	1,073	1,042	-31	-2.9%
16.0%	1,055	1,003	-53	-5.0%
17.3%	1,028	988	-40	-3.9%
18.5%	1,010	987	-24	-2.4%
19.8%	1,009	928	-81	-8.0%
21.0%	967	881	-86	-8.9%
22.2%	964	880	-84	-8.7%
23.5%	959	860	-99	-10.3%
24.7%	913	859	-54	-5.9%
25.9%	900	858	-42	-4.7%
27.2%	895	857	-38	-4.2%
28.4%	874	850	-24	-2.7%
29.6%	863	846	-17	-2.0%
30.9%	861	820	-41	-4.7%
32.1%	849	809	-41	-4.8%
33.3%	845	790	-55	-6.5%
34.6%	824	788	-36	-4.3%
35.8%	821	778	-43	-5.2%
37.0%	819	775	-44	-5.3%
38.3%	817	765	-51	-6.3%
39.5%	811	765	-46	-5.7%
40.7%	787	762	-25	-3.2%
42.0%	780	750	-30	-3.9%
43.2%	775	726	-49	-6.3%
44.4%	735	716	-19	-2.5%
45.7%	735	709	-26	-3.6%
46.9%	726	706	-20	-2.7%
48.1%	724	704	-20	-2.7%
49.4%	720	701	-19	-2.6%
50.6%	716	658	-58	-8.0%
51.9%	715	648	-67	-9.4%
53.1%	698	644	-55	-7.8%
54.3%	685	640	-45	-6.6%
55.6%	669	635	-34	-5.1%
56.8%	668	628	-40	-6.0%
58.0%	653	620	-33	-5.0%
59.3%	647	603	-44	-6.8%
60.5%	643	584	-59	-9.2%
61.7%	638	579	-60	-9.4%
63.0%	624	576	-48	-7.7%
64.2%	617	561	-56	-9.0%
65.4%	610	551	-59	-9.7%
66.7%	605	520	-86	-14.1%
67.9%	605	509	-95	-15.8%
69.1%	549	506	-42	-7.7%
70.4%	538	498	-40	-7.4%
71.6%	534	484	-50	-9.3%
72.8%	518	481	-37	-7.2%
74.1%	498	480	-19	-3.7%
75.3%	497	478	-20	-3.9%
76.5%	486	463	-23	-4.8%
77.8%	483	458	-26	-5.3%
79.0%	471	447	-24	-5.0%
80.2%	469	442	-27	-5.7%
81.5%	458	429	-29	-6.4%
82.7%	455	413	-43	-9.4%
84.0%	446	409	-37	-8.3%
85.2%	411	396	-15	-3.6%
86.4%	410	387	-23	-5.6%
87.7%	400	367	-33	-8.2%
88.9%	394	364	-30	-7.6%
90.1%	384	363	-21	-5.4%
91.4%	372	356	-16	-4.2%
92.6%	366	323	-43	-11.8%
93.8%	342	298	-44	-12.8%
95.1%	311	296	-15	-4.8%
96.3%	282	289	8	2.7%
97.5%	280	266	-14	-5.0%
98.8%	231	194	-37	-15.9%
100.0%	224	161	-63	-28.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,862	1,766	-97	-5.2%
1.2%	1,716	1,720	4	0.2%
2.5%	1,538	1,533	-5	-0.3%
3.7%	1,293	1,216	-77	-6.0%
4.9%	1,094	1,103	9	0.8%
6.2%	1,067	1,070	3	0.2%
7.4%	1,024	1,057	32	3.2%
8.6%	1,015	1,036	21	2.0%
9.9%	950	973	23	2.4%
11.1%	947	929	-18	-1.9%
12.3%	940	901	-38	-4.1%
13.6%	928	863	-64	-6.9%
14.8%	892	863	-29	-3.2%
16.0%	887	846	-41	-4.6%
17.3%	865	838	-28	-3.2%
18.5%	864	790	-74	-8.6%
19.8%	852	778	-75	-8.8%
21.0%	810	759	-51	-6.3%
22.2%	803	756	-47	-5.8%
23.5%	796	745	-51	-6.4%
24.7%	788	740	-48	-6.0%
25.9%	762	730	-32	-4.2%
27.2%	762	728	-34	-4.4%
28.4%	751	724	-27	-3.6%
29.6%	743	718	-25	-3.4%
30.9%	742	717	-25	-3.4%
32.1%	738	703	-36	-4.8%
33.3%	736	696	-40	-5.4%
34.6%	683	658	-25	-3.6%
35.8%	680	645	-35	-5.1%
37.0%	675	643	-33	-4.9%
38.3%	669	626	-43	-6.4%
39.5%	665	600	-65	-9.8%
40.7%	663	597	-65	-9.9%
42.0%	626	596	-29	-4.7%
43.2%	620	587	-34	-5.4%
44.4%	612	582	-30	-4.8%
45.7%	610	566	-44	-7.3%
46.9%	602	562	-40	-6.6%
48.1%	599	559	-40	-6.7%
49.4%	589	545	-44	-7.4%
50.6%	582	537	-45	-7.7%
51.9%	581	529	-52	-8.9%
53.1%	568	520	-48	-8.4%
54.3%	547	512	-34	-6.3%
55.6%	526	492	-33	-6.3%
56.8%	524	483	-41	-7.8%
58.0%	524	480	-44	-8.3%
59.3%	504	466	-38	-7.5%
60.5%	492	456	-36	-7.3%
61.7%	491	449	-42	-8.5%
63.0%	490	443	-47	-9.5%
64.2%	489	439	-50	-10.2%
65.4%	486	437	-49	-10.0%
66.7%	480	432	-48	-10.0%
67.9%	467	426	-42	-8.9%
69.1%	464	425	-38	-8.2%
70.4%	461	424	-38	-8.2%
71.6%	445	421	-23	-5.3%
72.8%	414	418	4	1.0%
74.1%	411	406	-6	-1.4%
75.3%	404	403	-1	-0.2%
76.5%	400	384	-16	-4.1%
77.8%	394	366	-28	-7.0%
79.0%	386	356	-30	-7.7%
80.2%	385	346	-39	-10.1%
81.5%	371	341	-30	-8.2%
82.7%	365	322	-42	-11.5%
84.0%	345	317	-28	-8.2%
85.2%	329	309	-20	-6.1%
86.4%	321	308	-13	-4.2%
87.7%	321	300	-21	-6.7%
88.9%	318	299	-19	-6.0%
90.1%	312	295	-17	-5.4%
91.4%	305	291	-14	-4.5%
92.6%	289	263	-26	-8.8%
93.8%	288	246	-43	-14.8%
95.1%	288	241	-47	-16.3%
96.3%	221	228	7	3.1%
97.5%	212	197	-16	-7.3%
98.8%	208	186	-22	-10.7%
100.0%	180	181	1	0.5%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,662	1,563	-99	-5.9%
1.2%	1,438	1,443	5	0.3%
2.5%	1,292	1,285	-7	-0.5%
3.7%	960	968	8	0.8%
4.9%	946	920	-27	-2.8%
6.2%	888	862	-26	-2.9%
7.4%	885	858	-27	-3.0%
8.6%	860	836	-24	-2.8%
9.9%	837	815	-22	-2.6%
11.1%	823	808	-15	-1.8%
12.3%	818	750	-68	-8.3%
13.6%	737	706	-31	-4.2%
14.8%	724	704	-19	-2.7%
16.0%	709	696	-13	-1.8%
17.3%	701	680	-21	-3.0%
18.5%	681	668	-13	-1.9%
19.8%	676	644	-32	-4.8%
21.0%	664	633	-31	-4.7%
22.2%	644	608	-36	-5.6%
23.5%	632	602	-31	-4.8%
24.7%	623	591	-32	-5.1%
25.9%	612	589	-24	-3.9%
27.2%	609	587	-21	-3.5%
28.4%	587	586	-1	-0.2%
29.6%	586	566	-20	-3.4%
30.9%	581	560	-21	-3.6%
32.1%	571	546	-25	-4.4%
33.3%	563	541	-22	-4.0%
34.6%	555	536	-18	-3.3%
35.8%	541	526	-15	-2.7%
37.0%	540	519	-21	-3.9%
38.3%	537	496	-41	-7.7%
39.5%	510	494	-16	-3.2%
40.7%	507	487	-20	-3.9%
42.0%	495	487	-7	-1.5%
43.2%	492	484	-8	-1.6%
44.4%	487	476	-11	-2.2%
45.7%	480	465	-15	-3.2%
46.9%	468	463	-5	-1.1%
48.1%	468	460	-7	-1.6%
49.4%	462	448	-14	-3.1%
50.6%	453	436	-17	-3.8%
51.9%	445	421	-24	-5.4%
53.1%	434	419	-14	-3.3%
54.3%	419	417	-2	-0.4%
55.6%	416	409	-6	-1.5%
56.8%	390	409	19	4.9%
58.0%	369	409	40	10.8%
59.3%	355	398	42	11.8%
60.5%	352	393	41	11.7%
61.7%	352	390	38	10.9%
63.0%	342	380	38	11.1%
64.2%	339	349	10	3.0%
65.4%	328	340	12	3.5%
66.7%	319	327	7	2.2%
67.9%	312	322	10	3.1%
69.1%	307	321	14	4.6%
70.4%	305	317	12	3.9%
71.6%	295	315	20	6.7%
72.8%	291	314	23	8.1%
74.1%	289	305	16	5.5%
75.3%	289	304	15	5.2%
76.5%	284	294	11	3.8%
77.8%	273	276	3	1.2%
79.0%	269	274	5	1.9%
80.2%	266	266	0	-0.1%
81.5%	260	263	3	1.1%
82.7%	254	256	2	0.8%
84.0%	244	241	-3	-1.1%
85.2%	241	230	-11	-4.6%
86.4%	238	227	-11	-4.7%
87.7%	237	224	-13	-5.5%
88.9%	230	211	-19	-8.3%
90.1%	211	210	-1	-0.4%
91.4%	145	199	54	37.3%
92.6%	134	196	63	46.9%
93.8%	130	144	14	10.6%
95.1%	129	137	8	6.6%
96.3%	125	116	-9	-7.3%
97.5%	124	110	-14	-11.5%
98.8%	108	109	1	1.3%
100.0%	100	100	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,740	1,630	-110	-6.3%
1.2%	1,392	1,417	25	1.8%
2.5%	1,256	1,239	-16	-1.3%
3.7%	991	965	-27	-2.7%
4.9%	987	957	-30	-3.0%
6.2%	922	919	-4	-0.4%
7.4%	835	904	68	8.2%
8.6%	835	894	59	7.1%
9.9%	826	846	21	2.5%
11.1%	805	810	5	0.6%
12.3%	796	801	5	0.6%
13.6%	787	798	11	1.4%
14.8%	777	775	-2	-0.2%
16.0%	765	750	-15	-1.9%
17.3%	752	746	-6	-0.8%
18.5%	741	736	-5	-0.7%
19.8%	726	735	8	1.1%
21.0%	725	698	-27	-3.7%
22.2%	718	686	-32	-4.4%
23.5%	713	659	-54	-7.5%
24.7%	713	650	-63	-8.8%
25.9%	699	646	-54	-7.7%
27.2%	677	624	-53	-7.8%
28.4%	667	623	-43	-6.5%
29.6%	657	621	-36	-5.5%
30.9%	657	600	-57	-8.6%
32.1%	647	595	-52	-8.0%
33.3%	638	595	-43	-6.7%
34.6%	628	588	-40	-6.4%
35.8%	626	581	-45	-7.2%
37.0%	597	581	-17	-2.8%
38.3%	590	580	-10	-1.7%
39.5%	582	579	-2	-0.4%
40.7%	579	568	-12	-2.0%
42.0%	576	565	-11	-1.9%
43.2%	566	553	-14	-2.4%
44.4%	544	531	-13	-2.3%
45.7%	541	523	-19	-3.5%
46.9%	537	521	-16	-2.9%
48.1%	536	509	-27	-5.0%
49.4%	529	500	-29	-5.5%
50.6%	513	494	-19	-3.7%
51.9%	486	479	-7	-1.4%
53.1%	484	479	-5	-1.1%
54.3%	460	473	13	2.8%
55.6%	454	468	14	3.1%
56.8%	448	459	10	2.3%
58.0%	431	450	19	4.4%
59.3%	425	444	19	4.3%
60.5%	416	441	24	5.8%
61.7%	415	439	24	5.7%
63.0%	400	432	32	8.1%
64.2%	392	432	40	10.1%
65.4%	389	422	32	8.3%
66.7%	382	404	22	5.8%
67.9%	374	397	23	6.2%
69.1%	357	393	37	10.3%
70.4%	357	390	33	9.3%
71.6%	347	378	31	8.9%
72.8%	343	377	33	9.8%
74.1%	337	376	39	11.6%
75.3%	330	375	45	13.7%
76.5%	307	372	66	21.4%
77.8%	273	370	97	35.6%
79.0%	273	365	93	34.0%
80.2%	236	355	119	50.2%
81.5%	232	342	110	47.4%
82.7%	227	342	115	50.9%
84.0%	209	338	128	61.3%
85.2%	205	325	121	58.9%
86.4%	189	274	84	44.5%
87.7%	178	258	80	44.8%
88.9%	175	252	76	43.6%
90.1%	171	232	61	35.5%
91.4%	167	226	59	35.6%
92.6%	163	203	41	25.2%
93.8%	147	192	45	30.7%
95.1%	146	174	28	19.2%
96.3%	145	155	10	7.1%
97.5%	127	145	18	14.3%
98.8%	112	132	21	18.6%
100.0%	100	119	19	19.0%

Figure SW-42-b
San Luis Reservoir (SWP and CVP), End of Month Elevation
Probability of Exceedance

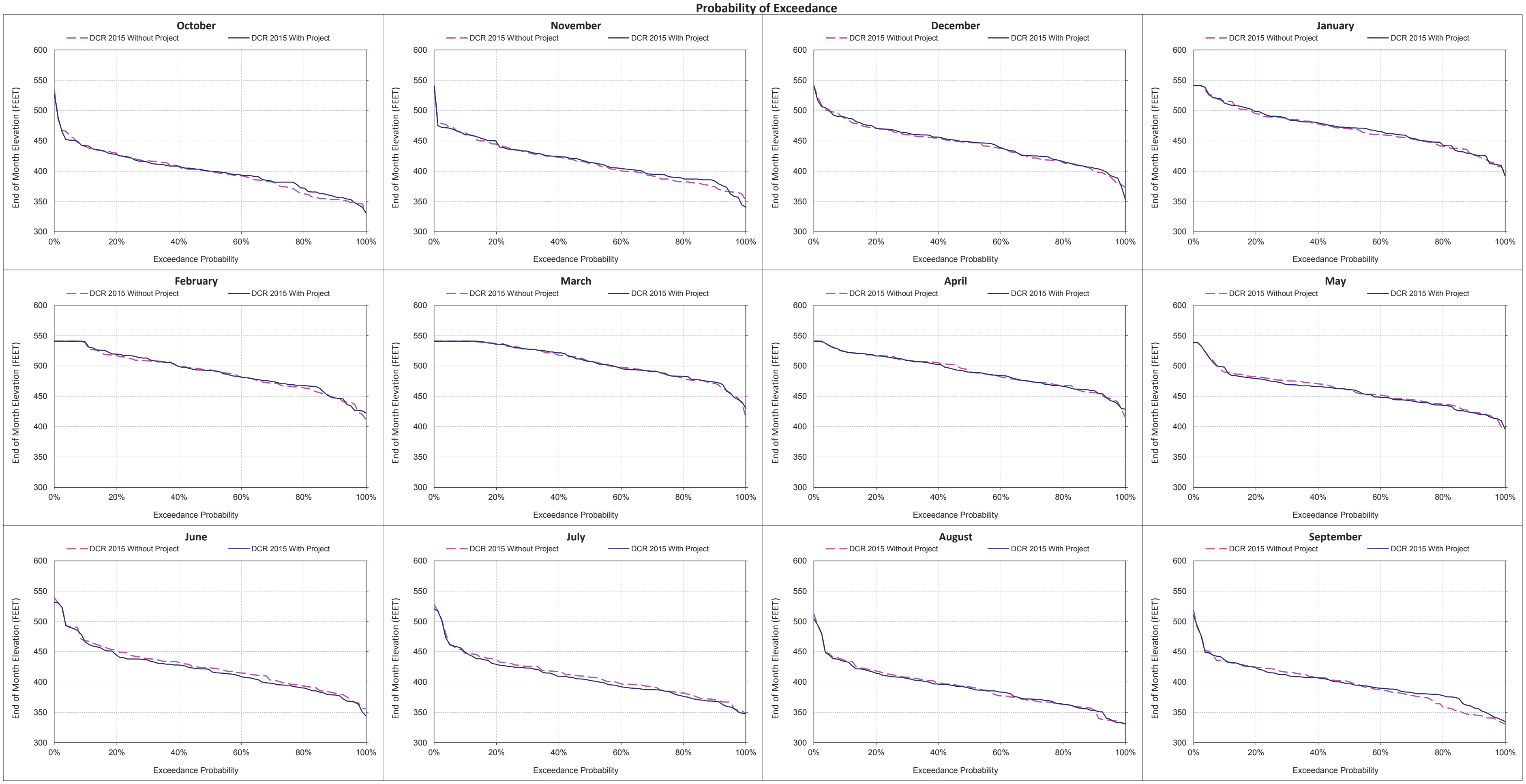


Table SW-42-b

San Luis Reservoir (SWP and CVP), End of Month Elevation

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	534	526	-8	-1.5%
1.2%	486	487	1	0.2%
2.5%	467	465	-2	-0.5%
3.7%	466	452	-14	-3.0%
4.9%	459	451	-7	-1.6%
6.2%	454	451	-4	-0.8%
7.4%	448	450	2	0.4%
8.6%	444	443	-1	-0.2%
9.9%	441	442	2	0.4%
11.1%	438	441	3	0.8%
12.3%	436	437	0	0.1%
13.6%	435	436	1	0.2%
14.8%	434	435	1	0.2%
16.0%	434	433	-1	-0.2%
17.3%	433	430	-3	-0.7%
18.5%	431	429	-2	-0.5%
19.8%	430	428	-2	-0.5%
21.0%	426	425	-1	-0.3%
22.2%	424	425	0	0.1%
23.5%	423	424	1	0.2%
24.7%	421	422	0	0.1%
25.9%	420	418	-2	-0.5%
27.2%	419	417	-2	-0.6%
28.4%	418	416	-1	-0.3%
29.6%	417	415	-2	-0.5%
30.9%	417	413	-3	-0.8%
32.1%	416	412	-4	-1.0%
33.3%	416	411	-4	-1.0%
34.6%	414	411	-3	-0.7%
35.8%	414	410	-4	-1.0%
37.0%	411	409	-2	-0.4%
38.3%	410	409	-1	-0.3%
39.5%	409	408	-1	-0.2%
40.7%	405	407	2	0.5%
42.0%	404	405	2	0.4%
43.2%	403	405	2	0.4%
44.4%	403	404	1	0.3%
45.7%	402	404	2	0.4%
46.9%	402	403	1	0.4%
48.1%	401	401	0	-0.1%
49.4%	400	400	0	0.1%
50.6%	399	400	1	0.1%
51.9%	398	400	2	0.5%
53.1%	397	399	2	0.5%
54.3%	397	398	1	0.3%
55.6%	395	397	2	0.4%
56.8%	394	395	1	0.3%
58.0%	393	394	2	0.4%
59.3%	392	394	2	0.5%
60.5%	392	393	1	0.2%
61.7%	391	393	2	0.5%
63.0%	389	393	4	1.0%
64.2%	386	391	6	1.4%
65.4%	386	391	5	1.4%
66.7%	385	387	2	0.5%
67.9%	384	385	1	0.3%
69.1%	383	384	2	0.5%
70.4%	382	382	0	0.0%
71.6%	378	382	5	1.2%
72.8%	374	382	8	2.0%
74.1%	374	382	8	2.0%
75.3%	373	382	9	2.4%
76.5%	371	382	10	2.8%
77.8%	367	378	11	2.9%
79.0%	363	373	10	2.6%
80.2%	363	372	9	2.6%
81.5%	362	366	5	1.3%
82.7%	357	366	9	2.4%
84.0%	357	366	9	2.4%
85.2%	355	363	8	2.3%
86.4%	355	363	8	2.2%
87.7%	354	361	7	1.9%
88.9%	354	360	6	1.7%
90.1%	354	358	4	1.2%
91.4%	353	356	3	0.9%
92.6%	352	356	4	1.1%
93.8%	351	354	3	0.9%
95.1%	349	353	5	1.3%
96.3%	348	348	0	0.0%
97.5%	347	344	-3	-0.8%
98.8%	346	340	-6	-1.6%
100.0%	331	331	0	0.0%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	540	-1	-0.2%
1.2%	479	475	-4	-0.8%
2.5%	478	472	-6	-1.3%
3.7%	477	472	-6	-1.2%
4.9%	472	471	-1	-0.2%
6.2%	472	469	-3	-0.6%
7.4%	466	466	1	0.1%
8.6%	464	464	0	0.0%
9.9%	464	460	-4	-0.8%
11.1%	460	460	-1	-0.1%
12.3%	459	459	0	0.0%
13.6%	452	457	5	1.2%
14.8%	450	455	5	1.0%
16.0%	450	453	3	0.6%
17.3%	449	451	2	0.4%
18.5%	445	450	5	1.2%
19.8%	445	450	5	1.1%
21.0%	444	440	-4	-0.8%
22.2%	441	439	-2	-0.4%
23.5%	439	437	-2	-0.6%
24.7%	437	436	-1	-0.3%
25.9%	435	436	1	0.2%
27.2%	435	434	0	-0.1%
28.4%	433	433	0	0.1%
29.6%	432	433	1	0.3%
30.9%	430	432	2	0.5%
32.1%	428	430	2	0.4%
33.3%	428	429	1	0.2%
34.6%	428	428	0	0.1%
35.8%	425	426	0	0.1%
37.0%	425	425	0	0.0%
38.3%	425	425	0	0.1%
39.5%	423	424	1	0.2%
40.7%	422	424	2	0.4%
42.0%	421	424	2	0.5%
43.2%	420	422	1	0.3%
44.4%	420	421	1	0.3%
45.7%	416	421	4	1.1%
46.9%	416	419	3	0.7%
48.1%	416	417	1	0.3%
49.4%	413	415	2	0.4%
50.6%	413	414	1	0.2%
51.9%	413	413	0	0.0%
53.1%	409	412	3	0.8%
54.3%	407	411	3	0.9%
55.6%	406	408	2	0.6%
56.8%	404	406	2	0.5%
58.0%	403	406	3	0.7%
59.3%	402	405	3	0.8%
60.5%	400	404	4	0.9%
61.7%	400	403	4	0.9%
63.0%	400	403	3	0.8%
64.2%	399	402	3	0.7%
65.4%	398	401	3	0.7%
66.7%	397	400	3	0.7%
67.9%	394	397	2	0.6%
69.1%	393	395	2	0.5%
70.4%	392	395	3	0.7%
71.6%	391	395	4	0.9%
72.8%	387	395	8	2.0%
74.1%	387	394	7	1.8%
75.3%	387	391	4	1.0%
76.5%	385	390	5	1.2%
77.8%	383	390	6	1.7%
79.0%	383	389	7	1.7%
80.2%	382	387	5	1.3%
81.5%	382	387	5	1.2%
82.7%	381	387	6	1.6%
84.0%	381	387	6	1.7%
85.2%	380	387	7	1.8%
86.4%	378	386	8	2.1%
87.7%	377	386	9	2.3%
88.9%	376	386	10	2.5%
90.1%	374	384	10	2.5%
91.4%	370	379	9	2.5%
92.6%	368	376	8	2.1%
93.8%	367	373	7	1.8%
95.1%	366	363	-3	-0.9%
96.3%	365	358	-7	-1.9%
97.5%	365	357	-8	-2.1%
98.8%	362	344	-18	-5.0%
100.0%	351	340	-11	-3.1%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	523	516	-6	-1.2%
2.5%	509	507	-2	-0.4%
3.7%	501	505	3	0.7%
4.9%	499	501	2	0.4%
6.2%	498	493	-5	-0.9%
7.4%	498	491	-7	-1.4%
8.6%	491	490	-1	-0.2%
9.9%	487	490	2	0.5%
11.1%	484	487	3	0.6%
12.3%	480	486	7	1.4%
13.6%	479	482	3	0.5%
14.8%	476	480	4	0.8%
16.0%	474	477	3	0.6%
17.3%	473	476	3	0.6%
18.5%	472	475	3	0.7%
19.8%	471	471	0	0.0%
21.0%	470	470	0	-0.1%
22.2%	470	470	0	0.0%
23.5%	468	469	1	0.2%
24.7%	467	469	1	0.3%
25.9%	464	468	3	0.7%
27.2%	463	465	2	0.5%
28.4%	462	464	2	0.5%
29.6%	460	464	3	0.8%
30.9%	460	462	1	0.3%
32.1%	458	461	2	0.5%
33.3%	457	460	3	0.6%
34.6%	457	460	3	0.7%
35.8%	457	460	3	0.6%
37.0%	456	459	4	0.8%
38.3%	455	456	1	0.3%
39.5%	455	456	2	0.3%
40.7%	454	455	2	0.3%
42.0%	452	454	2	0.4%
43.2%	451	452	2	0.4%
44.4%	450	452	1	0.3%
45.7%	450	451	1	0.3%
46.9%	449	450	1	0.2%
48.1%	448	449	1	0.3%
49.4%	448	449	1	0.3%
50.6%	447	448	1	0.1%
51.9%	447	448	1	0.2%
53.1%	447	447	0	0.0%
54.3%	442	447	5	1.1%
55.6%	442	446	5	1.1%
56.8%	440	446	6	1.4%
58.0%	439	444	4	1.0%
59.3%	438	440	2	0.5%
60.5%	438	438	0	0.1%
61.7%	437	435	-1	-0.3%
63.0%	432	434	2	0.4%
64.2%	431	433	2	0.5%
65.4%	431	430	-1	-0.2%
66.7%	427	426	0	-0.1%
67.9%	426	426	0	0.0%
69.1%	422	426	4	0.9%
70.4%	422	425	4	0.9%
71.6%	422	425	3	0.8%
72.8%	420	424	5	1.1%
74.1%	419	424	6	1.3%
75.3%	419	424	5	1.2%
76.5%	418	420	2	0.5%
77.8%	418	419	1	0.3%
79.0%	417	417	0	0.1%
80.2%	414	415	1	0.4%
81.5%	412	414	2	0.5%
82.7%	412	413	0	0.1%
84.0%	412	410	-1	-0.3%
85.2%	409	410	1	0.2%
86.4%	407	408	1	0.3%
87.7%	407	407	0	0.0%
88.9%	404	407	3	0.6%
90.1%	399	405	6	1.4%
91.4%	398	404	6	1.5%
92.6%	398	402	4	1.0%
93.8%	394	399	5	1.2%
95.1%	392	393	1	0.4%
96.3%	385	391	5	1.4%
97.5%	379	389	10	2.7%
98.8%	378	374	-4	-1.0%
100.0%	373	353	-20	-5.4%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	534	538	4	0.8%
4.9%	526	527	1	0.2%
6.2%	526	522	-4	-0.7%
7.4%	520	520	0	0.1%
8.6%	517	520	2	0.5%
9.9%	517	513	-4	-0.8%
11.1%	515	510	-5	-1.0%
12.3%	515	509	-6	-1.2%
13.6%	506	508	2	0.4%
14.8%	503	507	5	1.0%
16.0%	502	506	4	0.7%
17.3%	501	504	3	0.6%
18.5%	499	502	3	0.7%
19.8%	495	498	3	0.7%
21.0%	494	498	4	0.8%
22.2%	491	496	5	1.0%
23.5%	490	493	3	0.5%
24.7%	490	491	1	0.2%
25.9%	490	491	1	0.2%
27.2%	489	490	2	0.3%
28.4%	488	489	1	0.2%
29.6%	488	487	-1	-0.1%
30.9%	486	484	-1	-0.2%
32.1%	485	484	-1	-0.3%
33.3%	485	483	-2	-0.4%
34.6%	484	482	-2	-0.5%
35.8%	483	481	-1	-0.2%
37.0%	483	481	-1	-0.2%
38.3%	479	481	2	0.5%
39.5%	478	480	2	0.5%
40.7%	478	479	1	0.2%
42.0%	475	478	2	0.5%
43.2%	475	476	1	0.3%
44.4%	474	475	2	0.4%
45.7%	472	474	2	0.4%
46.9%	471	473	1	0.3%
48.1%	471	473	2	0.4%
49.4%	470	472	2	0.4%
50.6%	470	471	2	0.4%
51.9%	469	471	2	0.5%
53.1%	468	471	3	0.6%
54.3%	464	471	7	1.5%
55.6%	463	470	7	1.5%
56.8%	461	468	7	1.5%
58.0%	461	468	7	1.5%
59.3%	461	465	5	1.1%
60.5%	460	465	5	1.1%
61.7%	460	462	3	0.6%
63.0%	459	462	3	0.6%
64.2%	458	462	4	0.8%
65.4%	457	460	4	0.9%
66.7%	456	460	4	0.8%
67.9%	455	459	4	0.9%
69.1%	454	456	1	0.3%
70.4%	453	454	1	0.2%
71.6%	452	453	1	0.3%
72.8%	451	451	0	-0.1%
74.1%	449	450	1	0.2%
75.3%	448	450	1	0.3%
76.5%	448	448	1	0.2%
77.8%	445	448	3	0.7%
79.0%	442	448	6	1.4%
80.2%	441	442	1	0.2%
81.5%	440	442	2	0.5%
82.7%	438	442	4	0.9%
84.0%	438	435	-3	-0.7%
85.2%	438	433	-5	-1.1%
86.4%	437	432	-5	-1.0%
87.7%	436	430	-6	-1.4%
88.9%	428	430	2	0.4%
90.1%	428	426	-2	-0.4%
91.4%	424	426	2	0.5%
92.6%	421	426	5	1.1%
93.8%	419	425	6	1.4%
95.1%	415	412	-3	-0.7%
96.3%	414	412	-2	-0.6%
97.5%	408	411	2	0.5%
98.8%	408	409	2	0.4%
100.0%	396	392	-4	-1.0%

Table SW-42-b

San Luis Reservoir (SWP and CVP), End of Month Elevation

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	541	541	0	0.0%
4.9%	541	541	0	0.0%
6.2%	541	541	0	0.0%
7.4%	541	541	0	0.0%
8.6%	541	541	0	0.0%
9.9%	539	540	1	0.2%
11.1%	527	531	4	0.8%
12.3%	527	530	3	0.6%
13.6%	526	526	0	0.0%
14.8%	522	526	4	0.7%
16.0%	519	526	7	1.3%
17.3%	518	523	5	0.9%
18.5%	518	520	2	0.4%
19.8%	517	519	2	0.4%
21.0%	515	519	3	0.7%
22.2%	515	518	3	0.5%
23.5%	514	517	3	0.6%
24.7%	512	517	5	0.9%
25.9%	510	516	6	1.2%
27.2%	509	514	5	0.9%
28.4%	509	513	4	0.8%
29.6%	509	513	5	0.9%
30.9%	508	509	1	0.2%
32.1%	508	509	1	0.1%
33.3%	508	507	-1	-0.2%
34.6%	508	507	-1	-0.2%
35.8%	507	506	-1	-0.3%
37.0%	507	506	-1	-0.2%
38.3%	503	504	1	0.1%
39.5%	500	500	0	-0.1%
40.7%	499	498	-1	-0.2%
42.0%	498	498	0	-0.1%
43.2%	497	496	-1	-0.2%
44.4%	497	495	-2	-0.4%
45.7%	496	493	-3	-0.6%
46.9%	495	493	-2	-0.4%
48.1%	494	493	0	-0.1%
49.4%	493	493	-1	-0.2%
50.6%	493	492	-1	-0.2%
51.9%	491	492	1	0.2%
53.1%	490	491	1	0.1%
54.3%	489	487	-2	-0.3%
55.6%	488	487	-1	-0.3%
56.8%	488	484	-3	-0.7%
58.0%	486	483	-3	-0.6%
59.3%	483	483	0	0.0%
60.5%	481	481	0	0.0%
61.7%	481	481	0	0.0%
63.0%	480	480	0	0.1%
64.2%	478	478	0	-0.1%
65.4%	474	478	3	0.7%
66.7%	474	476	2	0.5%
67.9%	473	476	3	0.7%
69.1%	472	475	3	0.6%
70.4%	472	474	2	0.5%
71.6%	471	473	2	0.4%
72.8%	467	471	3	0.7%
74.1%	467	471	4	0.8%
75.3%	466	469	3	0.6%
76.5%	466	469	3	0.7%
77.8%	466	468	3	0.6%
79.0%	465	468	3	0.6%
80.2%	464	468	4	0.9%
81.5%	463	467	4	0.8%
82.7%	460	466	6	1.4%
84.0%	458	466	9	1.9%
85.2%	456	463	7	1.5%
86.4%	454	457	3	0.6%
87.7%	453	451	-1	-0.3%
88.9%	448	449	2	0.4%
90.1%	447	447	0	0.0%
91.4%	447	446	-1	-0.2%
92.6%	441	446	5	1.1%
93.8%	440	436	-4	-0.9%
95.1%	440	435	-5	-1.2%
96.3%	437	427	-10	-2.4%
97.5%	423	427	3	0.7%
98.8%	420	426	6	1.3%
100.0%	411	423	12	2.9%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	541	541	0	0.0%
4.9%	541	541	0	0.0%
6.2%	541	541	0	0.0%
7.4%	541	541	0	0.0%
8.6%	541	541	0	0.0%
9.9%	541	541	0	0.0%
11.1%	541	541	0	0.0%
12.3%	541	541	0	0.0%
13.6%	540	541	1	0.2%
14.8%	539	540	1	0.1%
16.0%	538	540	1	0.2%
17.3%	538	538	0	-0.1%
18.5%	537	538	0	0.1%
19.8%	537	536	-1	-0.2%
21.0%	537	536	-1	-0.2%
22.2%	537	536	-1	-0.2%
23.5%	532	535	2	0.4%
24.7%	532	532	0	0.0%
25.9%	532	530	-2	-0.3%
27.2%	531	530	-1	-0.3%
28.4%	528	529	0	0.1%
29.6%	528	528	1	0.1%
30.9%	527	527	0	0.0%
32.1%	527	527	0	0.0%
33.3%	527	526	-1	-0.1%
34.6%	524	526	2	0.3%
35.8%	522	524	2	0.5%
37.0%	521	523	2	0.4%
38.3%	521	523	2	0.3%
39.5%	518	522	3	0.6%
40.7%	517	522	5	0.9%
42.0%	517	520	3	0.6%
43.2%	517	515	-1	-0.2%
44.4%	515	515	0	0.1%
45.7%	515	512	-3	-0.6%
46.9%	513	511	-2	-0.4%
48.1%	511	509	-2	-0.4%
49.4%	508	508	-1	-0.1%
50.6%	507	507	0	0.1%
51.9%	506	506	0	-0.1%
53.1%	505	503	-2	-0.4%
54.3%	503	503	0	0.0%
55.6%	501	502	1	0.2%
56.8%	500	501	1	0.2%
58.0%	499	499	0	0.0%
59.3%	498	497	-1	-0.2%
60.5%	497	495	-2	-0.4%
61.7%	497	495	-2	-0.5%
63.0%	496	494	-2	-0.5%
64.2%	495	494	-2	-0.3%
65.4%	495	494	-1	-0.3%
66.7%	494	493	-1	-0.2%
67.9%	493	492	-1	-0.3%
69.1%	492	491	0	-0.1%
70.4%	491	491	0	-0.1%
71.6%	491	491	-1	-0.1%
72.8%	489	489	-1	-0.1%
74.1%	486	488	2	0.4%
75.3%	484	485	0	0.0%
76.5%	484	483	0	-0.1%
77.8%	483	483	0	0.0%
79.0%	481	483	2	0.5%
80.2%	479	483	4	0.7%
81.5%	477	482	5	1.0%
82.7%	477	478	1	0.2%
84.0%	476	478	1	0.3%
85.2%	476	477	1	0.2%
86.4%	476	475	-1	-0.1%
87.7%	473	475	1	0.3%
88.9%	472	474	2	0.5%
90.1%	471	473	2	0.5%
91.4%	468	472	4	0.9%
92.6%	462	469	7	1.6%
93.8%	460	458	-2	-0.3%
95.1%	454	455	1	0.2%
96.3%	452	448	-4	-0.8%
97.5%	447	445	-2	-0.5%
98.8%	438	441	2	0.5%
100.0%	416	430	14	3.5%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	540	541	1	0.2%
3.7%	538	538	0	0.0%
4.9%	534	534	0	0.0%
6.2%	531	530	-1	-0.2%
7.4%	528	529	2	0.3%
8.6%	526	525	0	0.0%
9.9%	524	524	0	-0.1%
11.1%	522	522	0	0.0%
12.3%	522	522	0	0.0%
13.6%	521	521	1	0.1%
14.8%	521	520	0	0.0%
16.0%	519	520	1	0.2%
17.3%	518	519	1	0.1%
18.5%	518	519	1	0.1%
19.8%	518	517	-1	-0.2%
21.0%	517	517	-1	-0.2%
22.2%	517	516	-1	-0.1%
23.5%	516	515	-1	-0.3%
24.7%	516	514	-2	-0.4%
25.9%	515	513	-2	-0.4%
27.2%	511	513	2	0.4%
28.4%	510	511	1	0.3%
29.6%	510	509	-1	-0.1%
30.9%	509	509	0	0.0%
32.1%	509	507	-2	-0.3%
33.3%	508	507	-1	-0.1%
34.6%	507	507	-1	-0.2%
35.8%	507	506	-2	-0.3%
37.0%	507	505	-2	-0.4%
38.3%	506	504	-2	-0.5%
39.5%	506	502	-4	-0.7%
40.7%	504	502	-2	-0.4%
42.0%	503	498	-5	-1.0%
43.2%	503	497	-6	-1.1%
44.4%	503	495	-7	-1.4%
45.7%	502	493	-8	-1.6%
46.9%	497	493	-4	-0.8%
48.1%	495	492	-4	-0.7%
49.4%	494	490	-4	-0.9%
50.6%	490	489	0	0.0%
51.9%	489	489	1	0.1%
53.1%	488	489	1	0.1%
54.3%	488	488	1	0.1%
55.6%	486	486	0	0.0%
56.8%	485	486	0	0.1%
58.0%	484	485	1	0.2%
59.3%	483	484	1	0.2%
60.5%	481	484	3	0.5%
61.7%	480	484	3	0.7%
63.0%	479	481	3	0.6%
64.2%	478	479	1	0.2%
65.4%	477	478	1	0.2%
66.7%	476	476	0	0.0%
67.9%	476	476	0	-0.1%
69.1%	474	475	0	0.1%
70.4%	473	474	0	0.1%
71.6%	473	473	0	0.0%
72.8%	473	473	0	0.0%
74.1%	472	470	-2	-0.5%
75.3%	471	470	-1	-0.3%
76.5%	470	468	-2	-0.5%
77.8%	469	468	-1	-0.2%
79.0%	468	467	-1	-0.2%
80.2%	468	466	-2	-0.4%
81.5%	468	465	-3	-0.6%
82.7%	467	463	-4	-0.9%
84.0%	462	462	0	0.0%
85.2%	460	462	2	0.4%
86.4%	458	462	4	0.8%
87.7%	457	461	4	0.8%
88.9%	456	460	3	0.7%
90.1%	456	459	3	0.7%
91.4%	455	455	0	-0.1%
92.6%	451	454	3	0.6%
93.8%	447	449	1	0.3%
95.1%	447	443	-4	-0.8%
96.3%	444	441	-3	-0.7%
97.5%	441	437	-3	-0.8%
98.8%	428	430	2	0.5%
100.0%	415	429	14	3.5%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	539	539	0	0.0%
1.2%	539	539	0	0.0%
2.5%	533	533	0	0.0%
3.7%	523	524	0	0.0%
4.9%	514	515	0	0.1%
6.2%	509	507	-2	-0.5%
7.4%	501	500	0	-0.1%
8.6%	494	499	5	1.0%
9.9%	490	498	8	1.7%
11.1%	490	487	-2	-0.5%
12.3%	489	485	-4	-0.8%
13.6%	487	484	-2	-0.5%
14.8%	486	483	-4	-0.8%
16.0%	486	482	-4	-0.9%
17.3%	484	481	-3	-0.5%
18.5%	483	480	-3	-0.5%
19.8%	483	479	-3	-0.7%
21.0%	482	479	-3	-0.6%
22.2%	481	478	-3	-0.7%
23.5%	480	477	-3	-0.7%
24.7%	480	475	-5	-1.0%
25.9%	478	475	-3	-0.7%
27.2%	477	473	-4	-0.7%
28.4%	477	472	-5	-1.0%
29.6%	476	470	-6	-1.3%
30.9%	475	469	-6	-1.3%
32.1%	475	469	-7	-1.4%
33.3%	475	469	-6	-1.3%
34.6%	474	467	-7	-1.5%
35.8%	473	467	-5	-1.1%
37.0%	472	467	-5	-1.1%
38.3%	472	467	-6	-1.2%
39.5%	471	466	-5	-1.0%
40.7%	470	466	-4	-0.9%
42.0%	470	465	-5	-1.1%
43.2%	468	465	-4	-0.8%
44.4%	466	464	-2	-0.5%
45.7%	463	463	0	0.0%
46.9%	463	463	0	0.0%
48.1%	462	463	0	0.0%
49.4%	461	461	0	0.0%
50.6%	461	461	0	0.1%
51.9%	457	460	3	0.7%
53.1%	455	457	3	0.6%
54.3%	454	454	1	0.1%
55.6%	453	453	0	0.0%
56.8%	453	453	0	0.0%
58.0%	453	449	-4	-0.9%
59.3%	452	449	-3	-0.8%
60.5%	452	448	-4	-0.8%
61.7%	450	448	-2	-0.5%
63.0%	450	447	-3	-0.6%
64.2%	447	445	-2	-0.4%
65.4%	446	444	-2	-0.5%
66.7%	446	444	-2	-0.4%
67.9%	445	444	-2	-0.4%
69.1%	445	443	-2	-0.4%
70.4%	444	442	-2	-0.5%
71.6%	443	441	-3	-0.6%
72.8%	442	440	-2	-0.5%
74.1%	441	440	-1	-0.3%
75.3%	440	439	-1	-0.3%
76.5%	438	437	-1	-0.3%
77.8%	438	436	-2	-0.4%
79.0%	437	436	-2	-0.4%
80.2%	437	435	-2	-0.5%
81.5%	437	434	-2	-0.6%
82.7%	435	433	-2	-0.5%
84.0%	434	428	-6	-1.4%
85.2%	432	426	-5	-1.3%
86.4%	428	426	-2	-0.5%
87.7%	428	425	-3	-0.7%
88.9%	423	424	0	0.1%
90.1%	423	423	0	0.0%
91.4%	423	421	-2	-0.5%
92.6%	422	420	-2	-0.4%
93.8%	419	420	1	0.1%
95.1%	419	416	-3	-0.7%
96.3%	414	414	0	0.0%
97.5%	411	413	2	0.4%
98.8%	400	409	10	2.4%
100.0%	394	396	2	0.5%

Table SW-42-b
San Luis Reservoir (SWP and CVP), End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	539	532	-7	-1.3%
1.2%	530	530	0	0.0%
2.5%	523	523	0	-0.1%
3.7%	493	493	0	0.0%
4.9%	491	490	-1	-0.1%
6.2%	491	488	-2	-0.5%
7.4%	490	485	-5	-1.1%
8.6%	470	478	8	1.7%
9.9%	468	466	-2	-0.5%
11.1%	467	462	-5	-1.2%
12.3%	464	460	-4	-0.9%
13.6%	462	458	-4	-0.9%
14.8%	460	457	-3	-0.7%
16.0%	458	453	-5	-1.1%
17.3%	455	451	-4	-0.9%
18.5%	453	451	-2	-0.5%
19.8%	453	445	-8	-1.8%
21.0%	449	440	-9	-1.9%
22.2%	449	440	-9	-1.9%
23.5%	448	438	-10	-2.3%
24.7%	444	438	-6	-1.2%
25.9%	442	438	-4	-1.0%
27.2%	442	438	-4	-0.9%
28.4%	440	437	-2	-0.6%
29.6%	439	437	-2	-0.4%
30.9%	438	434	-4	-1.0%
32.1%	437	433	-4	-1.0%
33.3%	437	431	-6	-1.3%
34.6%	434	431	-4	-0.9%
35.8%	434	430	-5	-1.0%
37.0%	434	429	-5	-1.1%
38.3%	434	428	-5	-1.3%
39.5%	433	428	-5	-1.1%
40.7%	431	428	-3	-0.6%
42.0%	430	427	-3	-0.8%
43.2%	429	424	-5	-1.2%
44.4%	425	423	-2	-0.5%
45.7%	425	422	-3	-0.7%
46.9%	424	422	-2	-0.5%
48.1%	424	422	-2	-0.5%
49.4%	423	421	-2	-0.5%
50.6%	423	416	-6	-1.5%
51.9%	423	415	-8	-1.8%
53.1%	421	415	-6	-1.5%
54.3%	419	414	-5	-1.2%
55.6%	418	414	-4	-0.9%
56.8%	418	413	-5	-1.1%
58.0%	416	412	-4	-0.9%
59.3%	415	410	-5	-1.2%
60.5%	415	408	-7	-1.7%
61.7%	414	407	-7	-1.7%
63.0%	413	407	-6	-1.4%
64.2%	412	405	-7	-1.6%
65.4%	411	404	-7	-1.7%
66.7%	410	400	-10	-2.5%
67.9%	410	399	-12	-2.8%
69.1%	404	398	-5	-1.3%
70.4%	402	397	-5	-1.3%
71.6%	402	395	-6	-1.6%
72.8%	400	395	-5	-1.2%
74.1%	397	395	-2	-0.6%
75.3%	397	395	-3	-0.6%
76.5%	396	393	-3	-0.8%
77.8%	395	392	-3	-0.9%
79.0%	394	391	-3	-0.8%
80.2%	393	390	-4	-0.9%
81.5%	392	388	-4	-1.0%
82.7%	392	386	-6	-1.5%
84.0%	390	385	-5	-1.3%
85.2%	386	383	-2	-0.5%
86.4%	385	382	-3	-0.8%
87.7%	384	379	-5	-1.2%
88.9%	383	379	-4	-1.1%
90.1%	382	379	-3	-0.8%
91.4%	380	378	-2	-0.6%
92.6%	379	372	-7	-1.7%
93.8%	375	369	-7	-1.8%
95.1%	371	368	-2	-0.6%
96.3%	366	367	1	0.3%
97.5%	366	363	-2	-0.6%
98.8%	357	350	-7	-1.9%
100.0%	356	344	-12	-3.4%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	528	521	-7	-1.4%
1.2%	517	517	0	0.1%
2.5%	502	502	0	-0.1%
3.7%	481	473	-7	-1.5%
4.9%	462	463	1	0.2%
6.2%	459	459	0	0.1%
7.4%	455	458	3	0.7%
8.6%	454	456	2	0.5%
9.9%	447	450	2	0.5%
11.1%	447	445	-2	-0.4%
12.3%	446	442	-4	-0.9%
13.6%	445	439	-7	-1.5%
14.8%	441	439	-3	-0.7%
16.0%	441	437	-4	-1.0%
17.3%	439	436	-3	-0.7%
18.5%	439	431	-8	-1.8%
19.8%	437	430	-8	-1.8%
21.0%	433	428	-5	-1.2%
22.2%	432	427	-5	-1.2%
23.5%	432	426	-5	-1.3%
24.7%	431	426	-5	-1.2%
25.9%	428	424	-3	-0.8%
27.2%	428	424	-4	-0.9%
28.4%	427	424	-3	-0.7%
29.6%	426	423	-3	-0.6%
30.9%	426	423	-3	-0.6%
32.1%	425	421	-4	-0.9%
33.3%	425	421	-4	-1.0%
34.6%	419	416	-3	-0.7%
35.8%	419	415	-4	-0.9%
37.0%	418	415	-4	-0.9%
38.3%	418	413	-5	-1.2%
39.5%	417	410	-8	-1.8%
40.7%	417	409	-8	-1.8%
42.0%	413	409	-3	-0.8%
43.2%	412	408	-4	-1.0%
44.4%	411	408	-3	-0.8%
45.7%	411	406	-5	-1.3%
46.9%	410	405	-5	-1.2%
48.1%	410	405	-5	-1.2%
49.4%	408	403	-5	-1.3%
50.6%	408	402	-5	-1.3%
51.9%	408	401	-6	-1.5%
53.1%	406	400	-6	-1.5%
54.3%	403	399	-4	-1.1%
55.6%	401	396	-4	-1.1%
56.8%	401	395	-5	-1.3%
58.0%	400	395	-6	-1.4%
59.3%	398	393	-5	-1.2%
60.5%	396	392	-5	-1.2%
61.7%	396	391	-6	-1.4%
63.0%	396	390	-6	-1.6%
64.2%	396	389	-7	-1.7%
65.4%	396	389	-6	-1.6%
66.7%	395	389	-6	-1.6%
67.9%	393	388	-6	-1.4%
69.1%	393	388	-5	-1.3%
70.4%	392	387	-5	-1.3%
71.6%	390	387	-3	-0.8%
72.8%	386	387	1	0.1%
74.1%	386	385	-1	-0.2%
75.3%	385	385	0	0.0%
76.5%	384	382	-2	-0.6%
77.8%	383	379	-4	-1.1%
79.0%	382	378	-4	-1.1%
80.2%	382	376	-6	-1.5%
81.5%	380	375	-5	-1.2%
82.7%	379	372	-6	-1.7%
84.0%	376	372	-4	-1.2%
85.2%	374	370	-3	-0.9%
86.4%	372	370	-2	-0.6%
87.7%	372	369	-3	-0.9%
88.9%	372	369	-3	-0.8%
90.1%	371	368	-3	-0.7%
91.4%	370	367	-2	-0.6%
92.6%	367	363	-4	-1.2%
93.8%	367	360	-7	-2.0%
95.1%	367	359	-8	-2.2%
96.3%	355	356	1	0.4%
97.5%	354	351	-3	-0.8%
98.8%	353	349	-4	-1.2%
100.0%	347	348	0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	512	504	-8	-1.6%
1.2%	494	494	0	0.1%
2.5%	480	480	-1	-0.1%
3.7%	448	449	1	0.2%
4.9%	447	444	-3	-0.6%
6.2%	441	438	-3	-0.6%
7.4%	441	438	-3	-0.6%
8.6%	438	436	-3	-0.6%
9.9%	436	434	-2	-0.5%
11.1%	434	433	-2	-0.4%
12.3%	434	427	-7	-1.7%
13.6%	425	422	-3	-0.8%
14.8%	424	422	-2	-0.5%
16.0%	422	421	-1	-0.3%
17.3%	421	419	-2	-0.6%
18.5%	419	418	-1	-0.3%
19.8%	418	415	-4	-0.9%
21.0%	417	414	-4	-0.9%
22.2%	415	411	-4	-1.0%
23.5%	414	410	-4	-0.9%
24.7%	412	409	-4	-0.9%
25.9%	411	408	-3	-0.7%
27.2%	411	408	-3	-0.6%
28.4%	408	408	0	0.0%
29.6%	408	406	-2	-0.6%
30.9%	408	405	-3	-0.6%
32.1%	406	403	-3	-0.7%
33.3%	405	403	-3	-0.7%
34.6%	404	402	-2	-0.6%
35.8%	403	401	-2	-0.5%
37.0%	403	400	-3	-0.7%
38.3%	402	397	-5	-1.3%
39.5%	399	397	-2	-0.5%
40.7%	398	396	-3	-0.6%
42.0%	397	396	-1	-0.2%
43.2%	396	395	-1	-0.3%
44.4%	396	394	-1	-0.4%
45.7%	395	393	-2	-0.5%
46.9%	393	393	-1	-0.2%
48.1%	393	392	-1	-0.2%
49.4%	393	391	-2	-0.5%
50.6%	391	389	-2	-0.6%
51.9%	390	387	-3	-0.8%
53.1%	389	387	-2	-0.5%
54.3%	387	386	0	-0.1%
55.6%	386	385	-1	-0.2%
56.8%	383	385	3	0.7%
58.0%	379	385	6	1.5%
59.3%	377	384	6	1.6%
60.5%	377	383	6	1.6%
61.7%	377	383	6	1.5%
63.0%	375	381	6	1.5%
64.2%	375	377	2	0.4%
65.4%	373	375	2	0.5%
66.7%	372	373	1	0.3%
67.9%	371	372	2	0.4%
69.1%	370	372	2	0.6%
70.4%	370	372	2	0.5%
71.6%	368	371	3	0.9%
72.8%	367	371	4	1.0%
74.1%	367	370	3	0.7%
75.3%	367	369	2	0.7%
76.5%	366	368	2	0.5%
77.8%	364	365	1	0.1%
79.0%	364	365	1	0.2%
80.2%	363	363	0	0.0%
81.5%	362	363	0	0.1%
82.7%	361	361	0	0.1%
84.0%	359	359	0	-0.1%
85.2%	359	357	-2	-0.6%
86.4%	358	356	-2	-0.6%
87.7%	358	356	-2	-0.7%
88.9%	357	353	-3	-1.0%
90.1%	353	353	0	0.0%
91.4%	340	351	11	3.1%
92.6%	338	351	13	3.7%
93.8%	337	340	3	0.9%
95.1%	337	339	2	0.5%
96.3%	336	334	-2	-0.6%
97.5%	336	333	-3	-0.9%
98.8%	333	333	0	0.1%
100.0%	331	331	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	519	510	-9	-1.7%
1.2%	490	492	2	0.4%
2.5%	477	476	-2	-0.3%
3.7%	452	449	-3	-0.6%
4.9%	451	448	-3	-0.7%
6.2%	445	444	0	-0.1%
7.4%	436	443	7	1.6%
8.6%	436	442	6	1.4%
9.9%	435	437	2	0.5%
11.1%	433	433	0	0.1%
12.3%	432	432	1	0.1%
13.6%	431	432	1	0.3%
14.8%	429	429	0	0.0%
16.0%	428	427	-2	-0.4%
17.3%	427	426	-1	-0.1%
18.5%	426	425	-1	-0.1%
19.8%	424	425	1	0.2%
21.0%	424	421	-3	-0.7%
22.2%	423	420	-4	-0.8%
23.5%	423	417	-6	-1.4%
24.7%	423	415	-7	-1.7%
25.9%	421	415	-6	-1.4%
27.2%	419	413	-6	-1.4%
28.4%	417	412	-5	-1.2%
29.6%	416	412	-4	-1.0%
30.9%	416	410	-7	-1.6%
32.1%	415	409	-6	-1.4%
33.3%	414	409	-5	-1.2%
34.6%	413	408	-5	-1.1%
35.8%	413	408	-5	-1.3%
37.0%	409	407	-2	-0.5%
38.3%	409	407	-1	-0.3%
39.5%	408	407	0	-0.1%
40.7%	407	406	-1	-0.3%
42.0%	407	406	-1	-0.3%
43.2%	406	404	-2	-0.4%
44.4%	403	401	-2	-0.4%
45.7%	403	400	-2	-0.6%
46.9%	402	400	-2	-0.5%
48.1%	402	399	-3	-0.8%
49.4%	401	398	-4	-0.9%
50.6%	399	397	-2	-0.6%
51.9%	396	395	-1	-0.2%
53.1%	395	395	-1	-0.2%
54.3%	392	394	2	0.4%
55.6%	391	393	2	0.5%
56.8%	391	392	1	0.3%
58.0%	388	391	3	0.7%
59.3%	388	390	3	0.7%
60.5%	386	390	3	0.9%
61.7%	386	389	3	0.8%
63.0%	384	389	5	1.2%
64.2%	383	388	6	1.5%
65.4%	382	387	5	1.2%
66.7%	381	385	3	0.8%
67.9%	380	384	3	0.9%
69.1%	378	383	5	1.4%
70.4%	378	383	5	1.3%
71.6%	376	381	5	1.2%
72.8%	376	381	5	1.3%
74.1%	375	380	6	1.6%
75.3%	374	380	7	1.8%
76.5%	370	380	10	2.7%
77.8%	364	380	15	4.2%
79.0%	364	379	15	4.0%
80.2%	358	377	19	5.4%
81.5%	357	375	18	5.1%
82.7%	356	375	19	5.4%
84.0%	353	375	22	6.1%
85.2%	352	373	21	5.9%
86.4%	349	364	15	4.3%
87.7%	347	362	15	4.2%
88.9%	347	361	14	4.1%
90.1%	346	357	11	3.3%
91.4%	345	356	11	3.3%
92.6%	344	352	8	2.3%
93.8%	341	350	9	2.6%
95.1%	341	346	6	1.7%
96.3%	340	343	2	0.6%
97.5%	337	340	4	1.1%
98.8%	333	338	4	1.3%
100.0%	331	335	4	1.3%

Figure SW-43-b
San Luis Reservoir (SWP and CVP), End of Month Area
Probability of Exceedance

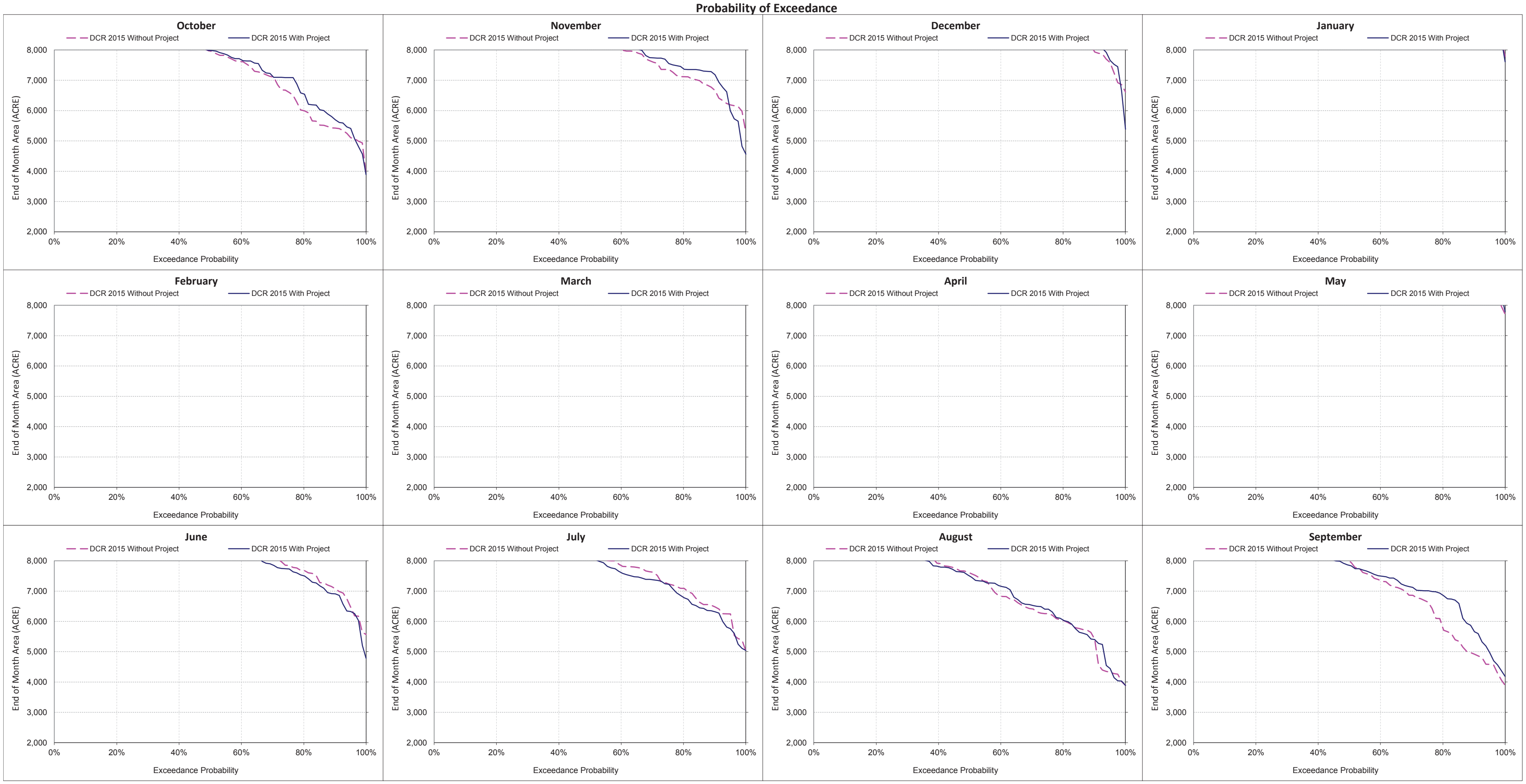


Table SW-43-b

San Luis Reservoir (SWP and CVP), End of Month Area

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,491	12,254	-237	-1.9%
1.2%	11,053	11,080	26	0.2%
2.5%	10,440	10,363	-77	-0.7%
3.7%	10,406	9,945	-461	-4.4%
4.9%	10,164	9,915	-248	-2.4%
6.2%	10,023	9,897	-126	-1.3%
7.4%	9,795	9,857	62	0.6%
8.6%	9,655	9,630	-24	-0.3%
9.9%	9,560	9,614	54	0.6%
11.1%	9,467	9,585	118	1.2%
12.3%	9,402	9,416	15	0.2%
13.6%	9,364	9,399	35	0.4%
14.8%	9,322	9,353	31	0.3%
16.0%	9,316	9,286	-31	-0.3%
17.3%	9,300	9,186	-114	-1.2%
18.5%	9,213	9,140	-73	-0.8%
19.8%	9,191	9,105	-85	-0.9%
21.0%	9,047	9,001	-46	-0.5%
22.2%	8,971	8,986	15	0.2%
23.5%	8,919	8,959	39	0.4%
24.7%	8,867	8,876	10	0.1%
25.9%	8,820	8,743	-78	-0.9%
27.2%	8,770	8,679	-91	-1.0%
28.4%	8,715	8,673	-42	-0.5%
29.6%	8,709	8,626	-83	-1.0%
30.9%	8,680	8,547	-134	-1.5%
32.1%	8,662	8,501	-161	-1.9%
33.3%	8,648	8,473	-175	-2.0%
34.6%	8,583	8,459	-124	-1.4%
35.8%	8,583	8,411	-171	-2.0%
37.0%	8,433	8,357	-76	-0.9%
38.3%	8,405	8,350	-55	-0.7%
39.5%	8,382	8,346	-36	-0.4%
40.7%	8,198	8,281	83	1.0%
42.0%	8,143	8,213	71	0.9%
43.2%	8,131	8,203	72	0.9%
44.4%	8,119	8,170	51	0.6%
45.7%	8,072	8,139	66	0.8%
46.9%	8,063	8,127	64	0.8%
48.1%	8,043	8,029	-15	-0.2%
49.4%	7,977	7,989	12	0.1%
50.6%	7,955	7,979	24	0.3%
51.9%	7,879	7,964	85	1.1%
53.1%	7,824	7,912	88	1.1%
54.3%	7,824	7,879	55	0.7%
55.6%	7,764	7,836	72	0.9%
56.8%	7,708	7,757	49	0.6%
58.0%	7,642	7,717	75	1.0%
59.3%	7,624	7,713	89	1.2%
60.5%	7,614	7,642	29	0.4%
61.7%	7,531	7,635	104	1.4%
63.0%	7,442	7,634	192	2.6%
64.2%	7,297	7,573	276	3.8%
65.4%	7,279	7,553	274	3.8%
66.7%	7,239	7,331	92	1.3%
67.9%	7,183	7,245	62	0.9%
69.1%	7,133	7,226	93	1.3%
70.4%	7,104	7,102	-2	0.0%
71.6%	6,854	7,101	247	3.6%
72.8%	6,683	7,099	416	6.2%
74.1%	6,677	7,094	416	6.2%
75.3%	6,602	7,090	488	7.4%
76.5%	6,512	7,086	575	8.8%
77.8%	6,279	6,887	608	9.7%
79.0%	6,022	6,586	564	9.4%
80.2%	5,994	6,544	550	9.2%
81.5%	5,927	6,211	284	4.8%
82.7%	5,662	6,188	526	9.3%
84.0%	5,651	6,182	531	9.4%
85.2%	5,521	6,026	506	9.2%
86.4%	5,513	6,004	490	8.9%
87.7%	5,475	5,891	416	7.6%
88.9%	5,430	5,807	377	6.9%
90.1%	5,424	5,694	269	5.0%
91.4%	5,408	5,608	200	3.7%
92.6%	5,343	5,593	250	4.7%
93.8%	5,249	5,462	213	4.1%
95.1%	5,105	5,411	306	6.0%
96.3%	5,075	5,072	-3	-0.1%
97.5%	4,990	4,809	-181	-3.6%
98.8%	4,934	4,562	-372	-7.5%
100.0%	3,889	3,889	0	0.0%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,656	-39	-0.3%
1.2%	10,832	10,708	-124	-1.1%
2.5%	10,811	10,609	-202	-1.9%
3.7%	10,775	10,593	-181	-1.7%
4.9%	10,603	10,566	-37	-0.3%
6.2%	10,594	10,501	-93	-0.9%
7.4%	10,396	10,415	19	0.2%
8.6%	10,347	10,346	-1	0.0%
9.9%	10,329	10,210	-119	-1.2%
11.1%	10,220	10,202	-18	-0.2%
12.3%	10,165	10,171	7	0.1%
13.6%	9,932	10,109	177	1.8%
14.8%	9,874	10,027	153	1.5%
16.0%	9,873	9,969	96	1.0%
17.3%	9,829	9,892	62	0.6%
18.5%	9,708	9,889	181	1.9%
19.8%	9,704	9,875	171	1.8%
21.0%	9,662	9,532	-129	-1.3%
22.2%	9,558	9,499	-59	-0.6%
23.5%	9,507	9,423	-85	-0.9%
24.7%	9,435	9,390	-45	-0.5%
25.9%	9,354	9,381	27	0.3%
27.2%	9,354	9,341	-13	-0.1%
28.4%	9,287	9,302	15	0.2%
29.6%	9,248	9,297	49	0.5%
30.9%	9,167	9,239	72	0.8%
32.1%	9,119	9,176	57	0.6%
33.3%	9,116	9,153	37	0.4%
34.6%	9,100	9,117	18	0.2%
35.8%	9,003	9,018	16	0.2%
37.0%	9,003	9,009	6	0.1%
38.3%	8,984	8,993	9	0.1%
39.5%	8,938	8,971	33	0.4%
40.7%	8,899	8,967	68	0.8%
42.0%	8,866	8,949	83	0.9%
43.2%	8,821	8,873	52	0.6%
44.4%	8,800	8,853	53	0.6%
45.7%	8,667	8,840	173	2.0%
46.9%	8,654	8,768	113	1.3%
48.1%	8,643	8,698	55	0.6%
49.4%	8,552	8,618	66	0.8%
50.6%	8,547	8,583	36	0.4%
51.9%	8,546	8,545	-1	0.0%
53.1%	8,355	8,489	134	1.6%
54.3%	8,286	8,433	146	1.8%
55.6%	8,239	8,335	96	1.2%
56.8%	8,145	8,238	93	1.1%
58.0%	8,094	8,224	130	1.6%
59.3%	8,052	8,201	149	1.9%
60.5%	7,991	8,159	168	2.1%
61.7%	7,965	8,128	163	2.0%
63.0%	7,964	8,109	145	1.8%
64.2%	7,955	8,081	126	1.6%
65.4%	7,896	8,027	132	1.7%
66.7%	7,857	7,992	135	1.7%
67.9%	7,705	7,820	115	1.5%
69.1%	7,648	7,750	102	1.3%
70.4%	7,597	7,737	140	1.8%
71.6%	7,560	7,735	176	2.3%
72.8%	7,357	7,733	375	5.1%
74.1%	7,357	7,700	343	4.7%
75.3%	7,357	7,552	194	2.6%
76.5%	7,270	7,513	243	3.3%
77.8%	7,161	7,485	324	4.5%
79.0%	7,122	7,459	337	4.7%
80.2%	7,117	7,366	248	3.5%
81.5%	7,115	7,357	242	3.4%
82.7%	7,044	7,357	313	4.4%
84.0%	7,019	7,357	338	4.8%
85.2%	6,987	7,339	352	5.0%
86.4%	6,879	7,300	421	6.1%
87.7%	6,840	7,300	460	6.7%
88.9%	6,775	7,286	511	7.5%
90.1%	6,664	7,180	516	7.7%
91.4%	6,410	6,933	523	8.2%
92.6%	6,332	6,765	433	6.8%
93.8%	6,238	6,621	384	6.2%
95.1%	6,188	5,993	-196	-3.2%
96.3%	6,163	5,731	-432	-7.0%
97.5%	6,132	5,656	-476	-7.8%
98.8%	5,978	4,821	-1,158	-19.4%
100.0%	5,286	4,562	-725	-13.7%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,154	11,974	-180	-1.5%
2.5%	11,761	11,697	-64	-0.5%
3.7%	11,537	11,643	106	0.9%
4.9%	11,473	11,527	54	0.5%
6.2%	11,421	11,276	-145	-1.3%
7.4%	11,420	11,209	-211	-1.8%
8.6%	11,225	11,187	-37	-0.3%
9.9%	11,093	11,170	77	0.7%
11.1%	10,996	11,090	94	0.9%
12.3%	10,846	11,068	222	2.0%
13.6%	10,831	10,914	83	0.8%
14.8%	10,738	10,858	120	1.1%
16.0%	10,668	10,764	96	0.9%
17.3%	10,623	10,717	93	0.9%
18.5%	10,595	10,705	110	1.0%
19.8%	10,575	10,581	6	0.1%
21.0%	10,538	10,523	-15	-0.1%
22.2%	10,525	10,521	-4	0.0%
23.5%	10,474	10,513	38	0.4%
24.7%	10,452	10,492	40	0.4%
25.9%	10,345	10,455	110	1.1%
27.2%	10,305	10,383	78	0.8%
28.4%	10,257	10,328	71	0.7%
29.6%	10,211	10,325	114	1.1%
30.9%	10,211	10,260	49	0.5%
32.1%	10,155	10,232	77	0.8%
33.3%	10,115	10,210	96	0.9%
34.6%	10,108	10,207	99	1.0%
35.8%	10,104	10,197	92	0.9%
37.0%	10,065	10,183	119	1.2%
38.3%	10,043	10,087	44	0.4%
39.5%	10,034	10,085	51	0.5%
40.7%	10,006	10,056	50	0.5%
42.0%	9,937	9,996	59	0.6%
43.2%	9,896	9,957	61	0.6%
44.4%	9,886	9,927	42	0.4%
45.7%	9,858	9,899	41	0.4%
46.9%	9,829	9,862	32	0.3%
48.1%	9,807	9,847	40	0.4%
49.4%	9,795	9,840	46	0.5%
50.6%	9,784	9,806	22	0.2%
51.9%	9,772	9,795	23	0.2%
53.1%	9,768	9,764	-4	0.0%
54.3%	9,591	9,760	169	1.8%
55.6%	9,588	9,750	162	1.7%
56.8%	9,522	9,731	209	2.2%
58.0%	9,512	9,659	146	1.5%
59.3%	9,468	9,537	69	0.7%
60.5%	9,459	9,473	13	0.1%
61.7%	9,417	9,376	-41	-0.4%
63.0%	9,250	9,317	67	0.7%
64.2%	9,225	9,300	74	0.8%
65.4%	9,209	9,180	-29	-0.3%
66.7%	9,056	9,041	-16	-0.2%
67.9%	9,036	9,039	3	0.0%
69.1%	8,887	9,027	141	1.6%
70.4%	8,875	9,014	139	1.6%
71.6%	8,874	9,003	128	1.4%
72.8%	8,798	8,978	180	2.0%
74.1%	8,759	8,969	210	2.4%
75.3%	8,754	8,945	191	2.2%
76.5%	8,727	8,810	83	0.9%
77.8%	8,718	8,763	46	0.5%
79.0%	8,692	8,708	16	0.2%
80.2%	8,564	8,623	59	0.7%
81.5%	8,499	8,575	76	0.9%
82.7%	8,498	8,515	17	0.2%
84.0%	8,479	8,425	-53	-0.6%
85.2%	8,378	8,405	26	0.3%
86.4%	8,300	8,344	44	0.5%
87.7%	8,284	8,280	-3	0.0%
88.9%	8,166	8,278	112	1.4%
90.1%	7,934	8,182	248	3.1%
91.4%	7,894	8,154	260	3.3%
92.6%	7,871	8,060	189	2.4%
93.8%	7,701	7,925	224	2.9%
95.1%	7,587	7,655	67	0.9%
96.3%	7,258	7,530	272	3.7%
97.5%	6,922	7,446	525	7.6%
98.8%	6,855	6,645	-211	-3.1%
100.0%	6,615	5,389	-1,225	-18.5%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,695	-1	0.0%
3.7%	12,482	12,605	123	1.0%
4.9%	12,244	12,278	34	0.3%
6.2%	12,238	12,128	-109	-0.9%
7.4%	12,076	12,088	11	0.1%
8.6%	12,005	12,073	68	0.6%
9.9%	11,986	11,869	-117	-1.0%
11.1%	11,951	11,806	-145	-1.2%
12.3%	11,942	11,758	-184	-1.5%
13.6%	11,669	11,736	68	0.6%
14.8%	11,570	11,716	146	1.3%
16.0%	11,557	11,665	108	0.9%
17.3%	11,523	11,611	88	0.8%
18.5%	11,458	11,561	103	0.9%
19.8%	11,344	11,446	103	0.9%
21.0%	11,315	11,439	124	1.1%
22.2%	11,201	11,355	154	1.4%
23.5%	11,178	11,261	84	0.8%
24.7%	11,169	11,200	31	0.3%
25.9%	11,168	11,200	32	0.3%
27.2%	11,147	11,195	49	0.4%
28.4%	11,123	11,160	37	0.3%
29.6%	11,114	11,091	-23	-0.2%
30.9%	11,041	11,004	-36	-0.3%
32.1%	11,034	10,992	-41	-0.4%
33.3%	11,018	10,959	-59	-0.5%
34.6%	10,986	10,913	-73	-0.7%
35.8%	10,945	10,909	-36	-0.3%
37.0%	10,945	10,906	-39	-0.4%
38.3%	10,829	10,902	74	0.7%
39.5%	10,802	10,874	72	0.7%
40.7%	10,788	10,823	35	0.3%
42.0%	10,712	10,789	77	0.7%
43.2%	10,703	10,743	40	0.4%
44.4%	10,654	10,711	57	0.5%
45.7%	10,592	10,661	69	0.7%
46.9%	10,582	10,629	48	0.4%
48.1%	10,565	10,620	55	0.5%
49.4%	10,543	10,604	61	0.6%
50.6%	10,529	10,583	55	0.5%
51.9%	10,508	10,582	74	0.7%
53.1%	10,473	10,565	92	0.9%
54.3%	10,344	10,565	221	2.1%
55.6%	10,318	10,543	224	2.2%
56.8%	10,242	10,475	233	2.3%
58.0%	10,230	10,463	234	2.3%
59.3%	10,224	10,385	161	1.6%
60.5%	10,210	10,370	160	1.6%
61.7%	10,195	10,289	93	0.9%
63.0%	10,174	10,270	95	0.9%
64.2%	10,145	10,266	121	1.2%
65.4%	10,092	10,223	131	1.3%
66.7%	10,081	10,204	123	1.2%
67.9%	10,047	10,189	142	1.4%
69.1%	10,021	10,065	44	0.4%
70.4%	9,974	9,999	25	0.3%
71.6%	9,929	9,979	50	0.5%
72.8%	9,906	9,895	-11	-0.1%
74.1%	9,837	9,871	34	0.3%
75.3%	9,817	9,860	44	0.4%
76.5%	9,795	9,823	27	0.3%
77.8%	9,704	9,808	104	1.1%
79.0%	9,595	9,806	211	2.2%
80.2%	9,583	9,616	33	0.3%
81.5%	9,519	9,598	79	0.8%
82.7%	9,455	9,596	141	1.5%
84.0%	9,451	9,350	-101	-1.1%
85.2%	9,451	9,275	-176	-1.9%
86.4%	9,420	9,261	-160	-1.7%
87.7%	9,398	9,175	-223	-2.4%
88.9%	9,113	9,171	58	0.6%
90.1%	9,106	9,050	-56	-0.6%
91.4%	8,974	9,047	73	0.8%
92.6%	8,865	9,041	177	2.0%
93.8%	8,782	9,005	223	2.5%
95.1%	8,625	8,502	-123	-1.4%
96.3%	8,591	8,497	-94	-1.1%
97.5%	8,344	8,433	89	1.1%
98.8%	8,322	8,390	68	0.8%
100.0%	7,793	7,608	-185	-2.4%

Table SW-43-b

San Luis Reservoir (SWP and CVP), End of Month Area

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,696	12,696	0	0.0%
4.9%	12,696	12,696	0	0.0%
6.2%	12,696	12,696	0	0.0%
7.4%	12,696	12,696	0	0.0%
8.6%	12,696	12,696	0	0.0%
9.9%	12,618	12,655	37	0.3%
11.1%	12,274	12,393	119	1.0%
12.3%	12,274	12,356	82	0.7%
13.6%	12,260	12,257	-3	0.0%
14.8%	12,150	12,252	102	0.8%
16.0%	12,055	12,245	190	1.6%
17.3%	12,035	12,166	132	1.1%
18.5%	12,020	12,081	61	0.5%
19.8%	12,010	12,067	56	0.5%
21.0%	11,953	12,051	98	0.8%
22.2%	11,940	12,012	72	0.6%
23.5%	11,896	11,990	94	0.8%
24.7%	11,854	11,989	135	1.1%
25.9%	11,782	11,962	180	1.5%
27.2%	11,775	11,912	137	1.2%
28.4%	11,769	11,888	119	1.0%
29.6%	11,755	11,887	132	1.1%
30.9%	11,742	11,779	37	0.3%
32.1%	11,737	11,759	22	0.2%
33.3%	11,733	11,701	-32	-0.3%
34.6%	11,721	11,693	-27	-0.2%
35.8%	11,712	11,670	-41	-0.4%
37.0%	11,699	11,666	-33	-0.3%
38.3%	11,588	11,604	15	0.1%
39.5%	11,496	11,485	-11	-0.1%
40.7%	11,462	11,434	-27	-0.2%
42.0%	11,446	11,432	-13	-0.1%
43.2%	11,403	11,368	-35	-0.3%
44.4%	11,388	11,326	-62	-0.5%
45.7%	11,380	11,288	-92	-0.8%
46.9%	11,342	11,284	-58	-0.5%
48.1%	11,296	11,281	-14	-0.1%
49.4%	11,291	11,266	-25	-0.2%
50.6%	11,276	11,246	-31	-0.3%
51.9%	11,209	11,237	28	0.2%
53.1%	11,177	11,199	22	0.2%
54.3%	11,144	11,092	-51	-0.5%
55.6%	11,119	11,078	-40	-0.4%
56.8%	11,104	10,996	-108	-1.0%
58.0%	11,053	10,965	-87	-0.8%
59.3%	10,944	10,950	6	0.1%
60.5%	10,886	10,893	7	0.1%
61.7%	10,880	10,879	-2	0.0%
63.0%	10,849	10,856	8	0.1%
64.2%	10,810	10,797	-13	-0.1%
65.4%	10,676	10,787	111	1.0%
66.7%	10,661	10,738	77	0.7%
67.9%	10,621	10,730	109	1.0%
69.1%	10,601	10,701	100	0.9%
70.4%	10,586	10,667	82	0.8%
71.6%	10,565	10,621	56	0.5%
72.8%	10,453	10,563	110	1.1%
74.1%	10,434	10,555	121	1.2%
75.3%	10,420	10,512	92	0.9%
76.5%	10,402	10,511	109	1.0%
77.8%	10,391	10,482	91	0.9%
79.0%	10,382	10,478	97	0.9%
80.2%	10,327	10,458	131	1.3%
81.5%	10,308	10,433	125	1.2%
82.7%	10,207	10,416	209	2.0%
84.0%	10,127	10,410	283	2.8%
85.2%	10,071	10,305	234	2.3%
86.4%	10,014	10,110	96	1.0%
87.7%	9,966	9,919	-48	-0.5%
88.9%	9,794	9,856	63	0.6%
90.1%	9,785	9,780	-5	-0.1%
91.4%	9,782	9,752	-31	-0.3%
92.6%	9,575	9,737	162	1.7%
93.8%	9,542	9,408	-134	-1.4%
95.1%	9,531	9,343	-189	-2.0%
96.3%	9,435	9,067	-369	-3.9%
97.5%	8,937	9,055	117	1.3%
98.8%	8,816	9,026	210	2.4%
100.0%	8,448	8,909	461	5.5%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,696	12,696	0	0.0%
4.9%	12,696	12,696	0	0.0%
6.2%	12,696	12,696	0	0.0%
7.4%	12,696	12,696	0	0.0%
8.6%	12,696	12,696	0	0.0%
9.9%	12,696	12,696	0	0.0%
11.1%	12,696	12,696	0	0.0%
12.3%	12,696	12,696	0	0.0%
13.6%	12,663	12,696	33	0.3%
14.8%	12,643	12,662	19	0.2%
16.0%	12,614	12,656	42	0.3%
17.3%	12,611	12,600	-11	-0.1%
18.5%	12,579	12,592	13	0.1%
19.8%	12,575	12,538	-37	-0.3%
21.0%	12,567	12,530	-37	-0.3%
22.2%	12,561	12,526	-35	-0.3%
23.5%	12,432	12,500	68	0.5%
24.7%	12,420	12,420	0	0.0%
25.9%	12,414	12,361	-53	-0.4%
27.2%	12,394	12,353	-41	-0.3%
28.4%	12,310	12,322	12	0.1%
29.6%	12,295	12,313	18	0.1%
30.9%	12,290	12,289	-1	0.0%
32.1%	12,282	12,285	2	0.0%
33.3%	12,269	12,255	-14	-0.1%
34.6%	12,197	12,247	50	0.4%
35.8%	12,140	12,208	68	0.6%
37.0%	12,121	12,172	52	0.4%
38.3%	12,112	12,162	50	0.4%
39.5%	12,034	12,127	93	0.8%
40.7%	11,998	12,127	129	1.1%
42.0%	11,996	12,090	94	0.8%
43.2%	11,988	11,952	-36	-0.3%
44.4%	11,938	11,950	12	0.1%
45.7%	11,937	11,848	-89	-0.7%
46.9%	11,886	11,834	-53	-0.4%
48.1%	11,826	11,769	-57	-0.5%
49.4%	11,740	11,720	-20	-0.2%
50.6%	11,711	11,719	8	0.1%
51.9%	11,675	11,663	-13	-0.1%
53.1%	11,638	11,582	-56	-0.5%
54.3%	11,579	11,581	2	0.0%
55.6%	11,520	11,553	33	0.3%
56.8%	11,490	11,522	32	0.3%
58.0%	11,469	11,475	6	0.1%
59.3%	11,442	11,407	-35	-0.3%
60.5%	11,412	11,343	-69	-0.6%
61.7%	11,398	11,326	-72	-0.6%
63.0%	11,375	11,302	-73	-0.6%
64.2%	11,348	11,297	-51	-0.5%
65.4%	11,333	11,292	-41	-0.4%
66.7%	11,305	11,271	-33	-0.3%
67.9%	11,288	11,246	-42	-0.4%
69.1%	11,238	11,229	-9	-0.1%
70.4%	11,228	11,214	-15	-0.1%
71.6%	11,226	11,204	-22	-0.2%
72.8%	11,154	11,135	-19	-0.2%
74.1%	11,061	11,128	68	0.6%
75.3%	11,004	11,007	3	0.0%
76.5%	10,980	10,971	-10	-0.1%
77.8%	10,959	10,966	7	0.1%
79.0%	10,893	10,963	70	0.6%
80.2%	10,833	10,946	114	1.0%
81.5%	10,780	10,932	151	1.4%
82.7%	10,751	10,787	36	0.3%
84.0%	10,738	10,785	47	0.4%
85.2%	10,736	10,765	29	0.3%
86.4%	10,732	10,711	-22	-0.2%
87.7%	10,647	10,695	48	0.4%
88.9%	10,603	10,679	76	0.7%
90.1%	10,581	10,650	69	0.7%
91.4%	10,475	10,607	132	1.3%
92.6%	10,275	10,517	241	2.3%
93.8%	10,208	10,156	-52	-0.5%
95.1%	10,015	10,048	33	0.3%
96.3%	9,933	9,807	-127	-1.3%
97.5%	9,766	9,692	-74	-0.8%
98.8%	9,475	9,551	76	0.8%
100.0%	8,649	9,193	544	6.3%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,664	12,696	31	0.2%
3.7%	12,589	12,590	0	0.0%
4.9%	12,466	12,465	-1	0.0%
6.2%	12,394	12,370	-25	-0.2%
7.4%	12,294	12,338	44	0.4%
8.6%	12,237	12,231	-6	0.0%
9.9%	12,196	12,185	-10	-0.1%
11.1%	12,149	12,141	-7	-0.1%
12.3%	12,126	12,132	6	0.0%
13.6%	12,102	12,120	18	0.1%
14.8%	12,101	12,095	-6	-0.1%
16.0%	12,061	12,091	30	0.3%
17.3%	12,035	12,054	20	0.2%
18.5%	12,033	12,053	19	0.2%
19.8%	12,023	11,988	-35	-0.3%
21.0%	12,009	11,985	-24	-0.2%
22.2%	11,984	11,968	-17	-0.1%
23.5%	11,979	11,938	-41	-0.3%
24.7%	11,977	11,913	-64	-0.5%
25.9%	11,934	11,874	-60	-0.5%
27.2%	11,810	11,868	58	0.5%
28.4%	11,788	11,831	43	0.4%
29.6%	11,786	11,771	-15	-0.1%
30.9%	11,752	11,758	6	0.0%
32.1%	11,752	11,708	-44	-0.4%
33.3%	11,725	11,706	-19	-0.2%
34.6%	11,718	11,693	-25	-0.2%
35.8%	11,715	11,666	-48	-0.4%
37.0%	11,703	11,645	-58	-0.5%
38.3%	11,686	11,613	-74	-0.6%
39.5%	11,672	11,563	-109	-0.9%
40.7%	11,620	11,563	-57	-0.5%
42.0%	11,599	11,442	-157	-1.4%
43.2%	11,579	11,403	-176	-1.5%
44.4%	11,572	11,350	-222	-1.9%
45.7%	11,541	11,286	-255	-2.2%
46.9%	11,394	11,267	-127	-1.1%
48.1%	11,349	11,236	-113	-1.0%
49.4%	11,312	11,177	-135	-1.2%
50.6%	11,170	11,166	-5	0.0%
51.9%	11,144	11,161	17	0.2%
53.1%	11,131	11,149	18	0.2%
54.3%	11,103	11,120	18	0.2%
55.6%	11,070	11,067	-3	0.0%
56.8%	11,037	11,047	10	0.1%
58.0%	11,000	11,025	25	0.2%
59.3%	10,968	11,003	35	0.3%
60.5%	10,906	10,988	82	0.8%
61.7%	10,872	10,977	105	1.0%
63.0%	10,823	10,909	86	0.8%
64.2%	10,812	10,836	24	0.2%
65.4%	10,763	10,795	32	0.3%
66.7%	10,737	10,740	3	0.0%
67.9%	10,732	10,723	-9	-0.1%
69.1%	10,681	10,695	13	0.1%
70.4%	10,646	10,657	11	0.1%
71.6%	10,633	10,632	-1	0.0%
72.8%	10,621	10,623	2	0.0%
74.1%	10,615	10,535	-80	-0.8%
75.3%	10,565	10,527	-39	-0.4%
76.5%	10,550	10,469	-80	-0.8%
77.8%	10,498	10,463	-35	-0.3%
79.0%	10,471	10,445	-25	-0.2%
80.2%	10,470	10,414	-56	-0.5%
81.5%	10,469	10,377	-92	-0.9%
82.7%	10,448	10,306	-142	-1.4%
84.0%	10,260	10,265	5	0.1%
85.2%	10,210	10,265	55	0.5%
86.4%	10,133	10,259	126	1.2%
87.7%	10,119	10,240	121	1.2%
88.9%	10,086	10,198	112	1.1%
90.1%	10,082	10,186	104	1.0%
91.4%	10,040	10,030	-10	-0.1%
92.6%	9,913	10,003	90	0.9%
93.8%	9,785	9,828	43	0.4%
95.1%	9,767	9,639	-129	-1.3%
96.3%	9,686	9,573	-113	-1.2%
97.5%	9,552	9,436	-115	-1.2%
98.8%	9,103	9,175	73	0.8%
100.0%	8,598	9,141	543	6.3%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,631	12,624	-7	-0.1%
1.2%	12,629	12,622	-7	-0.1%
2.5%	12,452	12,446	-7	-0.1%
3.7%	12,179	12,180	1	0.0%
4.9%	11,921	11,932	12	0.1%
6.2%	11,773	11,702	-71	-0.6%
7.4%	11,521	11,506	-15	-0.1%
8.6%	11,310	11,468	158	1.4%
9.9%	11,180	11,443	263	2.3%
11.1%	11,167	11,096	-71	-0.6%
12.3%	11,139	11,008	-131	-1.2%
13.6%	11,074	10,998	-75	-0.7%
14.8%	11,070	10,951	-119	-1.1%
16.0%	11,064	10,929	-134	-1.2%
17.3%	10,978	10,892	-85	-0.8%
18.5%	10,954	10,869	-85	-0.8%
19.8%	10,946	10,835	-111	-1.0%
21.0%	10,923	10,826	-97	-0.9%
22.2%	10,895	10,793	-102	-0.9%
23.5%	10,859	10,750	-108	-1.0%
24.7%	10,848	10,699	-149	-1.4%
25.9%	10,787	10,686	-101	-0.9%
27.2%	10,759	10,644	-115	-1.1%
28.4%	10,754	10,602	-152	-1.4%
29.6%	10,728	10,520	-208	-1.9%
30.9%	10,712	10,503	-209	-2.0%
32.1%	10,712	10,499	-213	-2.0%
33.3%	10,688	10,492	-196	-1.8%
34.6%	10,682	10,453	-229	-2.1%
35.8%	10,618	10,451	-167	-1.6%
37.0%	10,617	10,448	-169	-1.6%
38.3%	10,607	10,427	-181	-1.7%
39.5%	10,566	10,411	-155	-1.5%
40.7%	10,539	10,405	-134	-1.3%
42.0%	10,536	10,372	-164	-1.6%
43.2%	10,474	10,358	-116	-1.1%
44.4%	10,410	10,332	-78	-0.7%
45.7%	10,310	10,309	-1	0.0%
46.9%	10,293	10,296	4	0.0%
48.1%	10,287	10,292	5	0.0%
49.4%	10,239	10,243	5	0.0%
50.6%	10,229	10,240	11	0.1%
51.9%	10,104	10,215	111	1.1%
53.1%	10,029	10,120	90	0.9%
54.3%	9,992	10,014	21	0.2%
55.6%	9,988	9,987	-1	0.0%
56.8%	9,975	9,978	3	0.0%
58.0%	9,974	9,841	-133	-1.3%
59.3%	9,953	9,837	-117	-1.2%
60.5%	9,932	9,811	-120	-1.2%
61.7%	9,887	9,805	-82	-0.8%
63.0%	9,869	9,783	-87	-0.9%
64.2%	9,757	9,701	-56	-0.6%
65.4%	9,747	9,678	-70	-0.7%
66.7%	9,740	9,676	-64	-0.7%
67.9%	9,717	9,657	-60	-0.6%
69.1%	9,700	9,641	-59	-0.6%
70.4%	9,677	9,604	-73	-0.8%
71.6%	9,644	9,557	-87	-0.9%
72.8%	9,611	9,536	-76	-0.8%
74.1%	9,571	9,519	-51	-0.5%
75.3%	9,541	9,498	-43	-0.4%
76.5%	9,454	9,413	-42	-0.4%
77.8%	9,451	9,389	-62	-0.7%
79.0%	9,447	9,381	-66	-0.7%
80.2%	9,445	9,369	-75	-0.8%
81.5%	9,422	9,337	-85	-0.9%
82.7%	9,374	9,301	-73	-0.8%
84.0%	9,325	9,106	-219	-2.4%
85.2%	9,239	9,040	-199	-2.2%
86.4%	9,116	9,039	-77	-0.8%
87.7%	9,102	8,990	-112	-1.2%
88.9%	8,931	8,946	14	0.2%
90.1%	8,923	8,926	4	0.0%
91.4%	8,917	8,844	-73	-0.8%
92.6%	8,885	8,821	-64	-0.7%
93.8%	8,782	8,802	20	0.2%
95.1%	8,767	8,659	-108	-1.2%
96.3%	8,578	8,576	-2	0.0%
97.5%	8,462	8,527	65	0.8%
98.8%	7,975	8,389	414	5.2%
100.0%	7,707	7,795	88	1.1%

Table SW-43-b

San Luis Reservoir (SWP and CVP), End of Month Area

Probability of Exceedance

June				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,633	12,418	-215	-1.7%
1.2%	12,371	12,374	3	0.0%
2.5%	12,165	12,158	-7	-0.1%
3.7%	11,285	11,287	2	0.0%
4.9%	11,207	11,185	-22	-0.2%
6.2%	11,202	11,127	-76	-0.7%
7.4%	11,197	11,025	-172	-1.5%
8.6%	10,549	10,811	262	2.5%
9.9%	10,476	10,403	-73	-0.7%
11.1%	10,442	10,265	-177	-1.7%
12.3%	10,333	10,190	-142	-1.4%
13.6%	10,275	10,142	-133	-1.3%
14.8%	10,192	10,091	-101	-1.0%
16.0%	10,135	9,962	-173	-1.7%
17.3%	10,047	9,915	-132	-1.3%
18.5%	9,988	9,909	-79	-0.8%
19.8%	9,983	9,710	-273	-2.7%
21.0%	9,844	9,547	-297	-3.0%
22.2%	9,832	9,542	-290	-2.9%
23.5%	9,816	9,471	-345	-3.5%
24.7%	9,659	9,469	-189	-2.0%
25.9%	9,614	9,464	-151	-1.6%
27.2%	9,596	9,461	-135	-1.4%
28.4%	9,521	9,435	-86	-0.9%
29.6%	9,482	9,420	-62	-0.7%
30.9%	9,474	9,326	-149	-1.6%
32.1%	9,434	9,284	-150	-1.6%
33.3%	9,416	9,212	-204	-2.2%
34.6%	9,341	9,208	-134	-1.4%
35.8%	9,329	9,168	-161	-1.7%
37.0%	9,321	9,157	-164	-1.8%
38.3%	9,315	9,119	-195	-2.1%
39.5%	9,292	9,116	-176	-1.9%
40.7%	9,202	9,105	-97	-1.1%
42.0%	9,177	9,058	-119	-1.3%
43.2%	9,155	8,961	-193	-2.1%
44.4%	8,999	8,923	-76	-0.8%
45.7%	8,997	8,890	-107	-1.2%
46.9%	8,961	8,878	-82	-0.9%
48.1%	8,955	8,873	-82	-0.9%
49.4%	8,937	8,860	-77	-0.9%
50.6%	8,921	8,675	-247	-2.8%
51.9%	8,917	8,626	-291	-3.3%
53.1%	8,847	8,607	-240	-2.7%
54.3%	8,790	8,590	-200	-2.3%
55.6%	8,721	8,568	-153	-1.8%
56.8%	8,717	8,535	-182	-2.1%
58.0%	8,650	8,498	-151	-1.8%
59.3%	8,623	8,415	-208	-2.4%
60.5%	8,604	8,321	-283	-3.3%
61.7%	8,584	8,295	-289	-3.4%
63.0%	8,518	8,282	-237	-2.8%
64.2%	8,482	8,204	-278	-3.3%
65.4%	8,452	8,151	-302	-3.6%
66.7%	8,427	7,977	-450	-5.3%
67.9%	8,424	7,918	-506	-6.0%
69.1%	8,138	7,900	-237	-2.9%
70.4%	8,082	7,853	-229	-2.8%
71.6%	8,060	7,770	-290	-3.6%
72.8%	7,968	7,746	-222	-2.8%
74.1%	7,855	7,742	-113	-1.4%
75.3%	7,849	7,729	-120	-1.5%
76.5%	7,781	7,635	-146	-1.9%
77.8%	7,763	7,601	-162	-2.1%
79.0%	7,687	7,533	-154	-2.0%
80.2%	7,674	7,500	-173	-2.3%
81.5%	7,605	7,407	-198	-2.6%
82.7%	7,586	7,293	-292	-3.9%
84.0%	7,523	7,267	-256	-3.4%
85.2%	7,279	7,170	-108	-1.5%
86.4%	7,271	7,101	-171	-2.3%
87.7%	7,202	6,950	-252	-3.5%
88.9%	7,153	6,920	-232	-3.2%
90.1%	7,076	6,911	-165	-2.3%
91.4%	6,986	6,860	-126	-1.8%
92.6%	6,937	6,572	-365	-5.3%
93.8%	6,741	6,346	-395	-5.9%
95.1%	6,464	6,325	-139	-2.1%
96.3%	6,184	6,258	74	1.2%
97.5%	6,173	6,031	-142	-2.3%
98.8%	5,643	5,208	-435	-7.7%
100.0%	5,568	4,785	-783	-14.1%

July				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,304	12,098	-206	-1.7%
1.2%	11,988	11,998	9	0.1%
2.5%	11,563	11,550	-13	-0.1%
3.7%	10,880	10,645	-235	-2.2%
4.9%	10,262	10,290	28	0.3%
6.2%	10,174	10,182	8	0.1%
7.4%	10,034	10,141	106	1.1%
8.6%	10,004	10,072	68	0.7%
9.9%	9,787	9,864	77	0.8%
11.1%	9,776	9,714	-62	-0.6%
12.3%	9,750	9,618	-132	-1.4%
13.6%	9,710	9,484	-225	-2.3%
14.8%	9,584	9,482	-102	-1.1%
16.0%	9,568	9,421	-147	-1.5%
17.3%	9,491	9,391	-100	-1.1%
18.5%	9,486	9,213	-274	-2.9%
19.8%	9,445	9,167	-278	-2.9%
21.0%	9,289	9,095	-194	-2.1%
22.2%	9,263	9,083	-180	-1.9%
23.5%	9,236	9,038	-199	-2.2%
24.7%	9,205	9,019	-186	-2.0%
25.9%	9,106	8,979	-126	-1.4%
27.2%	9,105	8,970	-135	-1.5%
28.4%	9,062	8,953	-109	-1.2%
29.6%	9,030	8,928	-102	-1.1%
30.9%	9,025	8,923	-102	-1.1%
32.1%	9,012	8,866	-146	-1.6%
33.3%	9,003	8,840	-163	-1.8%
34.6%	8,781	8,673	-109	-1.2%
35.8%	8,767	8,613	-154	-1.8%
37.0%	8,750	8,603	-146	-1.7%
38.3%	8,722	8,528	-194	-2.2%
39.5%	8,703	8,400	-303	-3.5%
40.7%	8,693	8,389	-305	-3.5%
42.0%	8,526	8,384	-142	-1.7%
43.2%	8,500	8,335	-165	-1.9%
44.4%	8,459	8,313	-146	-1.7%
45.7%	8,450	8,228	-222	-2.6%
46.9%	8,410	8,210	-200	-2.4%
48.1%	8,397	8,192	-205	-2.4%
49.4%	8,346	8,118	-228	-2.7%
50.6%	8,312	8,077	-235	-2.8%
51.9%	8,307	8,032	-275	-3.3%
53.1%	8,241	7,981	-260	-3.2%
54.3%	8,128	7,936	-192	-2.4%
55.6%	8,011	7,817	-194	-2.4%
56.8%	8,002	7,761	-240	-3.0%
58.0%	8,001	7,742	-258	-3.2%
59.3%	7,887	7,656	-231	-2.9%
60.5%	7,815	7,589	-225	-2.9%
61.7%	7,809	7,545	-264	-3.4%
63.0%	7,805	7,507	-298	-3.8%
64.2%	7,795	7,476	-319	-4.1%
65.4%	7,777	7,462	-314	-4.0%
66.7%	7,745	7,432	-314	-4.1%
67.9%	7,664	7,388	-277	-3.6%
69.1%	7,639	7,384	-255	-3.3%
70.4%	7,625	7,371	-254	-3.3%
71.6%	7,516	7,355	-160	-2.1%
72.8%	7,303	7,332	29	0.4%
74.1%	7,284	7,241	-43	-0.6%
75.3%	7,231	7,226	-5	-0.1%
76.5%	7,201	7,077	-124	-1.7%
77.8%	7,154	6,940	-215	-3.0%
79.0%	7,093	6,858	-235	-3.3%
80.2%	7,089	6,777	-312	-4.4%
81.5%	6,981	6,731	-250	-3.6%
82.7%	6,926	6,569	-357	-5.2%
84.0%	6,766	6,519	-247	-3.6%
85.2%	6,631	6,449	-182	-2.7%
86.4%	6,557	6,434	-123	-1.9%
87.7%	6,556	6,358	-198	-3.0%
88.9%	6,532	6,356	-177	-2.7%
90.1%	6,478	6,319	-159	-2.5%
91.4%	6,409	6,279	-130	-2.0%
92.6%	6,252	5,996	-257	-4.1%
93.8%	6,250	5,811	-439	-7.0%
95.1%	6,248	5,762	-486	-7.8%
96.3%	5,531	5,610	79	1.4%
97.5%	5,434	5,246	-188	-3.5%
98.8%	5,386	5,112	-274	-5.1%
100.0%	5,029	5,040	11	0.2%

August				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,865	11,625	-239	-2.0%
1.2%	11,296	11,310	13	0.1%
2.5%	10,876	10,855	-21	-0.2%
3.7%	9,820	9,845	25	0.3%
4.9%	9,773	9,682	-91	-0.9%
6.2%	9,572	9,480	-93	-1.0%
7.4%	9,560	9,466	-94	-1.0%
8.6%	9,473	9,386	-87	-0.9%
9.9%	9,389	9,309	-80	-0.9%
11.1%	9,337	9,281	-55	-0.6%
12.3%	9,318	9,059	-259	-2.8%
13.6%	9,006	8,880	-126	-1.4%
14.8%	8,953	8,873	-80	-0.9%
16.0%	8,893	8,839	-54	-0.6%
17.3%	8,859	8,769	-90	-1.0%
18.5%	8,774	8,719	-55	-0.6%
19.8%	8,751	8,607	-143	-1.6%
21.0%	8,700	8,558	-142	-1.6%
22.2%	8,608	8,439	-169	-2.0%
23.5%	8,556	8,411	-145	-1.7%
24.7%	8,514	8,360	-154	-1.8%
25.9%	8,462	8,345	-117	-1.4%
27.2%	8,443	8,338	-105	-1.2%
28.4%	8,337	8,332	-5	-0.1%
29.6%	8,333	8,230	-103	-1.2%
30.9%	8,310	8,200	-109	-1.3%
32.1%	8,255	8,124	-131	-1.6%
33.3%	8,215	8,096	-120	-1.5%
34.6%	8,170	8,070	-99	-1.2%
35.8%	8,095	8,013	-81	-1.0%
37.0%	8,093	7,975	-118	-1.5%
38.3%	8,075	7,837	-237	-2.9%
39.5%	7,924	7,828	-96	-1.2%
40.7%	7,905	7,788	-117	-1.5%
42.0%	7,832	7,788	-45	-0.6%
43.2%	7,817	7,770	-47	-0.6%
44.4%	7,785	7,719	-66	-0.8%
45.7%	7,741	7,645	-95	-1.2%
46.9%	7,668	7,634	-34	-0.4%
48.1%	7,665	7,618	-47	-0.6%
49.4%	7,630	7,538	-93	-1.2%
50.6%	7,571	7,455	-115	-1.5%
51.9%	7,517	7,351	-166	-2.2%
53.1%	7,441	7,340	-101	-1.4%
54.3%	7,338	7,326	-12	-0.2%
55.6%	7,316	7,270	-46	-0.6%
56.8%	7,124	7,266	142	2.0%
58.0%	6,961	7,264	303	4.4%
59.3%	6,853	7,182	330	4.8%
60.5%	6,824	7,151	327	4.8%
61.7%	6,821	7,125	304	4.5%
63.0%	6,738	7,046	308	4.6%
64.2%	6,716	6,802	85	1.3%
65.4%	6,618	6,719	101	1.5%
66.7%	6,541	6,605	64	1.0%
67.9%	6,476	6,562	86	1.3%
69.1%	6,427	6,557	130	2.0%
70.4%	6,411	6,521	110	1.7%
71.6%	6,313	6,497	184	2.9%
72.8%	6,272	6,493	221	3.5%
74.1%	6,256	6,406	151	2.4%
75.3%	6,255	6,400	144	2.3%
76.5%	6,205	6,309	104	1.7%
77.8%	6,096	6,128	32	0.5%
79.0%	6,054	6,107	52	0.9%
80.2%	6,026	6,024	-2	0.0%
81.5%	5,966	5,996	30	0.5%
82.7%	5,896	5,917	20	0.3%
84.0%	5,792	5,762	-30	-0.5%
85.2%	5,765	5,641	-124	-2.2%
86.4%	5,730	5,604	-126	-2.2%
87.7%	5,714	5,568	-147	-2.6%
88.9%	5,639	5,418	-221	-3.9%
90.1%	5,415	5,405	-11	-0.2%
91.4%	4,562	5,273	711	15.6%
92.6%	4,397	5,236	839	19.1%
93.8%	4,351	4,549	199	4.6%
95.1%	4,325	4,447	123	2.8%
96.3%	4,278	4,140	-138	-3.2%
97.5%	4,260	4,043	-217	-5.1%
98.8%	4,011	4,033	22	0.5%
100.0%	3,889	3,889	0	0.0%

September				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,042	11,790	-252	-2.1%
1.2%	11,167	11,236	69	0.6%
2.5%	10,766	10,717	-49	-0.5%
3.7%	9,925	9,836	-89	-0.9%
4.9%	9,910	9,810	-99	-1.0%
6.2%	9,691	9,678	-13	-0.1%
7.4%	9,382	9,626	244	2.6%
8.6%	9,380	9,591	211	2.2%
9.9%	9,347	9,423	76	0.8%
11.1%	9,272	9,289	17	0.2%
12.3%	9,236	9,254	18	0.2%
13.6%	9,203	9,245	42	0.5%
14.8%	9,163	9,157	-6	-0.1%
16.0%	9,116	9,058	-58	-0.6%
17.3%	9,065	9,042	-23	-0.3%
18.5%	9,024	9,004	-20	-0.2%
19.8%	8,964	8,997	33	0.4%
21.0%	8,956	8,845	-111	-1.2%
22.2%	8,930	8,796	-134	-1.5%
23.5%	8,908	8,677	-230	-2.6%
24.7%	8,907	8,635	-272	-3.1%
25.9%	8,852	8,617	-235	-2.7%
27.2%	8,757	8,519	-238	-2.7%
28.4%	8,711	8,513	-197	-2.3%
29.6%	8,668	8,502	-166	-1.9%
30.9%	8,666	8,401	-265	-3.1%
32.1%	8,623	8,379	-244	-2.8%
33.3%	8,580	8,375	-205	-2.4%
34.6%	8,536	8,343	-193	-2.3%
35.8%	8,525	8,307	-218	-2.6%
37.0%	8,388	8,306	-82	-1.0%
38.3%	8,353	8,303	-51	-0.6%
39.5%	8,310	8,300	-10	-0.1%
40.7%	8,300	8,240	-59	-0.7%
42.0%	8,281	8,226	-55	-0.7%
43.2%	8,231	8,160	-71	-0.9%
44.4%	8,111	8,042	-69	-0.8%
45.7%	8,100	7,995	-104	-1.3%
46.9%	8,074	7,987	-87	-1.1%
48.1%	8,068	7,916	-152	-1.9%
49.4%	8,033	7,865	-168	-2.1%
50.6%	7,942	7,830	-112	-1.4%
51.9%	7,778	7,737	-41	-0.5%
53.1%	7,768	7,735	-32	-0.4%
54.3%	7,617	7,700	83	1.1%
55.6%	7,574	7,665	91	1.2%
56.8%	7,541	7,608	67	0.9%
58.0%	7,423	7,552	129	1.7%
59.3%	7,384	7,511	127	1.7%
60.5%	7,320	7,488	168	2.3%
61.7%	7,312	7,475	164	2.2%
63.0%	7,202	7,432	231	3.2%
64.2%	7,143	7,429	286	4.0%
65.4%	7,120	7,358	238	3.3%
66.7%	7,066	7,233	167	2.4%
67.9%	6,999	7,179	179	2.6%
69.1%	6,864	7,152	288	4.2%
70.4%	6,861	7,123	262	3.8%
71.6%	6,780	7,030	250	3.7%
72.8%	6,751	7,024	273	4.0%
74.1%	6,693	7,014	322	4.8%
75.3%	6,635	7,010	375	5.7%
76.5%	6,425	6,988	563	8.8%
77.8%	6,101	6,974	873	14.3%
79.0%	6,095	6,933	839	13.8%
80.2%	5,709	6,849	1,140	20.0%
81.5%	5,663	6,742	1,079	19.1%
82.7%	5,599	6,740	1,141	20.4%
84.0%	5,396	6,701	1,305	24.2%
85.2%	5,342	6,595	1,253	23.5%
86.4%	5,152	6,103	951	18.5%
87.7%	5,010	5,943	933	18.6%
88.9%	4,972	5,875	903	18.2%
90.1%	4,920	5,662	742	15.1%
91.4%	4,863	5,596	733	15.1%
92.6%	4,804	5,327	523	10.9%
93.8%	4,588	5,186	597	13.0%
95.1%	4,580	4,962	381	8.3%
96.3%	4,562	4,704	142	3.1%
97.5%	4,299	4,562	262	6.1%
98.8%	4,070	4,380	311	7.6%
100.0%	3,889	4,183	294	7.6%

Figure SW-44-b
San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

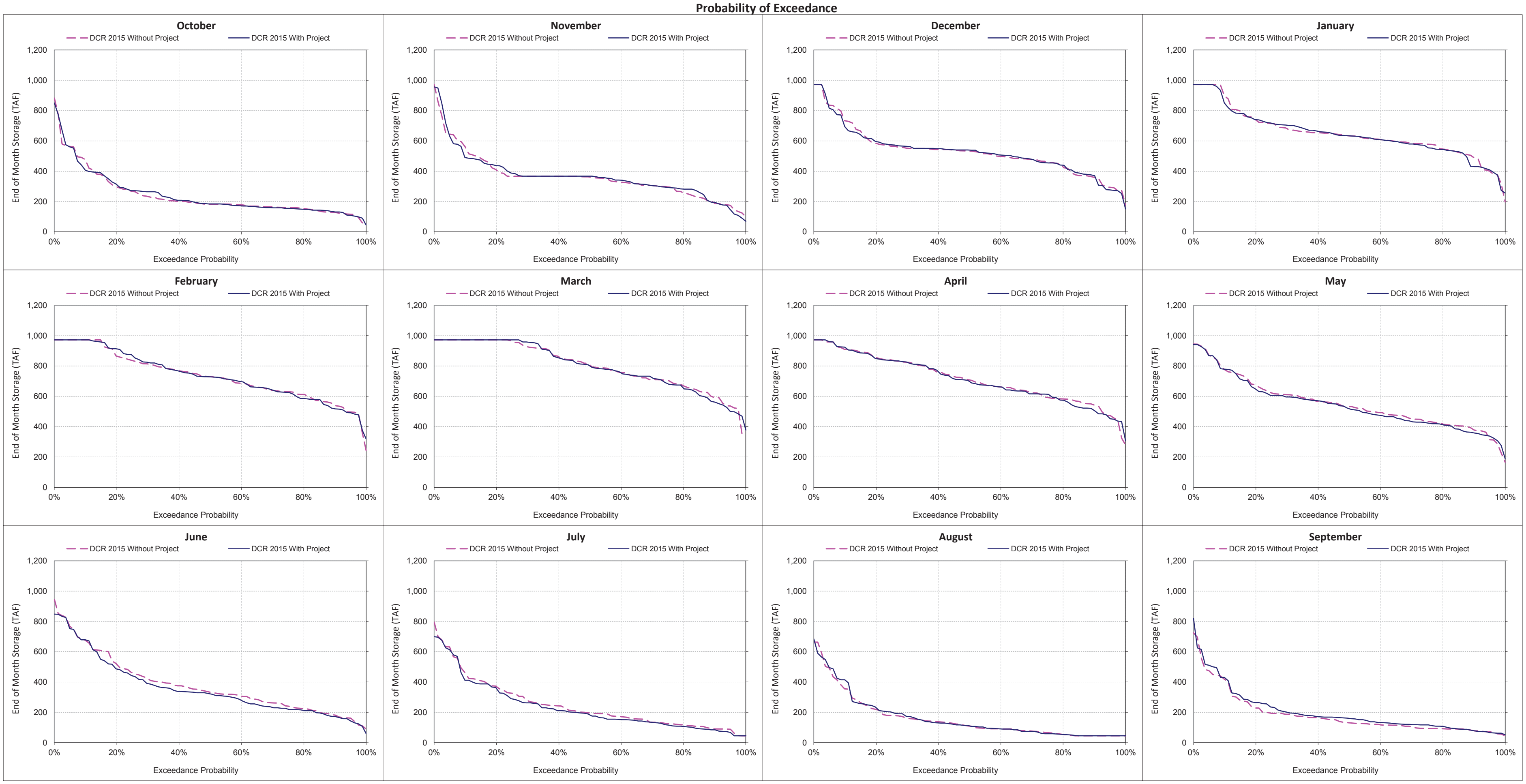


Table SW-44-b

San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	882	850	-33	-3.7%
1.2%	775	771	-4	-0.5%
2.5%	580	667	87	15.0%
3.7%	569	575	7	1.2%
4.9%	564	561	-3	-0.5%
6.2%	560	551	-9	-1.6%
7.4%	495	466	-29	-5.9%
8.6%	491	442	-49	-10.1%
9.9%	477	406	-71	-14.9%
11.1%	419	398	-21	-5.1%
12.3%	409	395	-15	-3.6%
13.6%	381	393	12	3.3%
14.8%	379	390	11	3.0%
16.0%	364	370	6	1.5%
17.3%	332	350	18	5.5%
18.5%	310	330	20	6.4%
19.8%	298	316	17	5.8%
21.0%	289	294	5	1.8%
22.2%	280	290	9	3.3%
23.5%	279	280	1	0.4%
24.7%	268	272	4	1.7%
25.9%	264	272	8	3.0%
27.2%	248	269	21	8.4%
28.4%	238	266	27	11.5%
29.6%	235	265	30	12.6%
30.9%	228	264	36	15.7%
32.1%	228	264	36	15.6%
33.3%	218	259	41	19.0%
34.6%	215	235	19	9.0%
35.8%	209	230	22	10.5%
37.0%	205	225	20	9.9%
38.3%	205	213	8	3.8%
39.5%	201	209	7	3.6%
40.7%	201	208	7	3.4%
42.0%	200	206	6	3.2%
43.2%	195	205	9	4.9%
44.4%	194	198	3	1.7%
45.7%	189	193	4	2.0%
46.9%	187	188	1	0.6%
48.1%	183	187	3	1.9%
49.4%	183	183	0	0.0%
50.6%	183	183	0	0.0%
51.9%	183	183	0	0.0%
53.1%	183	183	0	0.0%
54.3%	183	182	-2	-0.9%
55.6%	183	180	-3	-1.8%
56.8%	182	176	-6	-3.3%
58.0%	178	175	-4	-2.1%
59.3%	178	172	-6	-3.3%
60.5%	177	171	-6	-3.4%
61.7%	172	170	-2	-1.2%
63.0%	170	168	-2	-1.2%
64.2%	169	166	-3	-1.8%
65.4%	169	163	-6	-3.4%
66.7%	167	162	-5	-3.1%
67.9%	165	160	-5	-2.9%
69.1%	165	160	-5	-2.8%
70.4%	164	158	-6	-3.6%
71.6%	162	158	-4	-2.3%
72.8%	161	158	-4	-2.2%
74.1%	161	156	-6	-3.4%
75.3%	161	155	-5	-3.2%
76.5%	159	154	-5	-3.1%
77.8%	159	151	-8	-5.0%
79.0%	157	151	-6	-3.8%
80.2%	153	148	-5	-3.4%
81.5%	149	148	-2	-1.1%
82.7%	148	144	-5	-3.0%
84.0%	142	143	1	0.5%
85.2%	136	143	6	4.8%
86.4%	132	142	10	7.5%
87.7%	131	140	9	7.2%
88.9%	128	135	6	5.1%
90.1%	128	131	3	2.2%
91.4%	123	130	7	5.9%
92.6%	122	128	6	5.2%
93.8%	117	110	-7	-6.2%
95.1%	116	108	-8	-7.0%
96.3%	115	104	-11	-9.3%
97.5%	94	98	4	3.9%
98.8%	60	90	30	49.5%
100.0%	45	45	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	956	-16	-1.7%
1.2%	859	950	91	10.6%
2.5%	765	849	84	11.0%
3.7%	652	717	66	10.1%
4.9%	645	633	-12	-1.8%
6.2%	640	581	-59	-9.2%
7.4%	605	578	-27	-4.5%
8.6%	595	564	-32	-5.3%
9.9%	563	490	-73	-13.0%
11.1%	515	486	-29	-5.6%
12.3%	507	484	-24	-4.7%
13.6%	499	479	-20	-3.9%
14.8%	488	474	-14	-2.9%
16.0%	471	453	-18	-3.8%
17.3%	461	446	-15	-3.2%
18.5%	423	444	21	4.9%
19.8%	412	437	25	6.2%
21.0%	390	436	47	12.0%
22.2%	387	425	39	10.0%
23.5%	367	402	35	9.5%
24.7%	367	388	21	5.9%
25.9%	367	385	18	4.9%
27.2%	367	371	4	1.2%
28.4%	367	367	0	0.0%
29.6%	367	367	0	0.0%
30.9%	367	367	0	0.0%
32.1%	367	367	0	0.0%
33.3%	367	367	0	0.0%
34.6%	367	367	0	0.0%
35.8%	367	367	0	0.0%
37.0%	367	367	0	0.0%
38.3%	367	367	0	0.0%
39.5%	367	367	0	0.0%
40.7%	367	367	0	0.0%
42.0%	367	367	0	0.0%
43.2%	367	367	0	0.0%
44.4%	367	367	0	0.0%
45.7%	367	367	0	0.0%
46.9%	364	367	3	0.7%
48.1%	363	367	3	0.9%
49.4%	363	367	3	0.9%
50.6%	360	367	6	1.8%
51.9%	356	364	8	2.2%
53.1%	354	359	4	1.2%
54.3%	354	359	5	1.3%
55.6%	348	353	5	1.3%
56.8%	334	351	17	5.0%
58.0%	332	342	10	3.0%
59.3%	328	342	14	4.3%
60.5%	327	340	13	4.0%
61.7%	324	335	11	3.5%
63.0%	321	329	8	2.5%
64.2%	320	317	-3	-0.8%
65.4%	318	316	-3	-0.9%
66.7%	307	314	7	2.1%
67.9%	307	312	6	1.8%
69.1%	307	307	1	0.2%
70.4%	305	304	-1	-0.2%
71.6%	302	302	0	0.0%
72.8%	300	297	-3	-0.9%
74.1%	299	296	-3	-1.1%
75.3%	295	291	-4	-1.4%
76.5%	293	291	-2	-0.7%
77.8%	268	289	22	8.0%
79.0%	266	284	17	6.6%
80.2%	256	282	26	10.1%
81.5%	250	281	31	12.5%
82.7%	241	281	41	16.9%
84.0%	232	273	41	17.8%
85.2%	227	259	32	14.2%
86.4%	221	246	25	11.2%
87.7%	206	208	1	0.7%
88.9%	205	197	-8	-3.8%
90.1%	186	194	7	3.9%
91.4%	186	183	-2	-1.2%
92.6%	181	178	-3	-1.9%
93.8%	179	175	-4	-2.1%
95.1%	174	146	-29	-16.4%
96.3%	145	116	-29	-19.8%
97.5%	134	109	-25	-18.8%
98.8%	125	90	-35	-27.7%
100.0%	99	70	-30	-30.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	856	910	54	6.3%
4.9%	836	817	-19	-2.3%
6.2%	833	806	-28	-3.3%
7.4%	815	772	-43	-5.2%
8.6%	798	772	-26	-3.3%
9.9%	734	694	-40	-5.5%
11.1%	729	667	-62	-8.5%
12.3%	718	661	-57	-8.0%
13.6%	676	657	-18	-2.7%
14.8%	668	643	-25	-3.7%
16.0%	638	621	-17	-2.6%
17.3%	613	618	5	0.8%
18.5%	591	616	25	4.2%
19.8%	586	596	10	1.8%
21.0%	577	591	14	2.4%
22.2%	574	582	8	1.4%
23.5%	574	579	5	0.9%
24.7%	565	574	8	1.5%
25.9%	565	573	8	1.3%
27.2%	558	567	9	1.6%
28.4%	558	566	8	1.5%
29.6%	553	564	12	2.1%
30.9%	550	563	13	2.3%
32.1%	550	550	0	0.1%
33.3%	550	550	0	0.0%
34.6%	550	550	0	0.0%
35.8%	550	550	0	0.0%
37.0%	547	550	3	0.5%
38.3%	544	550	6	1.0%
39.5%	544	548	5	0.8%
40.7%	544	548	4	0.8%
42.0%	544	546	2	0.4%
43.2%	544	543	-1	-0.1%
44.4%	540	541	1	0.1%
45.7%	538	541	3	0.5%
46.9%	535	540	6	1.0%
48.1%	534	540	6	1.1%
49.4%	533	540	7	1.3%
50.6%	532	539	7	1.3%
51.9%	529	539	9	1.8%
53.1%	525	524	-1	-0.1%
54.3%	516	523	6	1.2%
55.6%	516	520	4	0.8%
56.8%	511	517	6	1.2%
58.0%	502	514	13	2.5%
59.3%	499	508	9	1.9%
60.5%	496	506	9	1.9%
61.7%	494	504	9	1.8%
63.0%	490	503	14	2.8%
64.2%	485	496	12	2.5%
65.4%	483	493	10	2.0%
66.7%	482	487	5	1.0%
67.9%	482	486	4	0.9%
69.1%	479	481	2	0.4%
70.4%	476	477	1	0.2%
71.6%	475	465	-10	-2.1%
72.8%	466	458	-8	-1.8%
74.1%	465	457	-9	-1.9%
75.3%	457	455	-2	-0.4%
76.5%	457	454	-3	-0.6%
77.8%	452	453	0	0.1%
79.0%	449	441	-8	-1.9%
80.2%	423	439	16	3.9%
81.5%	418	411	-8	-1.9%
82.7%	389	408	19	4.9%
84.0%	376	392	16	4.1%
85.2%	371	387	16	4.4%
86.4%	371	382	11	3.0%
87.7%	370	379	10	2.6%
88.9%	365	375	10	2.7%
90.1%	359	372	13	3.5%
91.4%	353	308	-45	-12.8%
92.6%	309	306	-3	-0.9%
93.8%	297	278	-19	-6.3%
95.1%	294	276	-18	-6.1%
96.3%	291	274	-17	-5.9%
97.5%	273	271	-1	-0.5%
98.8%	272	253	-19	-7.1%
100.0%	178	152	-26	-14.6%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	960	-12	-1.3%
8.6%	968	934	-35	-3.6%
9.9%	898	851	-47	-5.3%
11.1%	877	819	-58	-6.7%
12.3%	807	797	-11	-1.3%
13.6%	806	783	-24	-2.9%
14.8%	799	782	-17	-2.1%
16.0%	767	781	14	1.9%
17.3%	760	759	0	-0.1%
18.5%	758	753	-5	-0.7%
19.8%	742	740	-2	-0.3%
21.0%	722	738	16	2.2%
22.2%	722	730	9	1.2%
23.5%	716	721	5	0.7%
24.7%	715	718	2	0.3%
25.9%	714	712	-2	-0.3%
27.2%	689	709	19	2.8%
28.4%	689	707	18	2.6%
29.6%	685	705	19	2.8%
30.9%	671	702	31	4.6%
32.1%	671	702	30	4.5%
33.3%	667	694	28	4.1%
34.6%	662	688	26	3.9%
35.8%	661	679	18	2.7%
37.0%	658	671	13	2.0%
38.3%	654	670	16	2.4%
39.5%	654	665	10	1.6%
40.7%	654	660	6	0.9%
42.0%	652	659	8	1.2%
43.2%	652	656	5	0.7%
44.4%	648	650	2	0.3%
45.7%	645	641	-4	-0.6%
46.9%	643	636	-6	-1.0%
48.1%	638	636	-3	-0.4%
49.4%	634	634	-1	-0.1%
50.6%	632	633	0	0.0%
51.9%	632	630	-2	-0.3%
53.1%	626	630	4	0.6%
54.3%	620	624	4	0.6%
55.6%	616	620	4	0.6%
56.8%	615	619	5	0.8%
58.0%	612	612	0	-0.1%
59.3%	612	609	-3	-0.4%
60.5%	607	606	-1	-0.1%
61.7%	604	604	0	0.0%
63.0%	602	601	-1	-0.2%
64.2%	599	597	-2	-0.3%
65.4%	596	595	-1	-0.2%
66.7%	593	588	-5	-0.8%
67.9%	592	585	-7	-1.2%
69.1%	588	580	-8	-1.3%
70.4%	584	579	-5	-0.9%
71.6%	583	577	-6	-1.0%
72.8%	582	572	-10	-1.7%
74.1%	579	571	-9	-1.5%
75.3%	578	554	-24	-4.1%
76.5%	576	552	-25	-4.3%
77.8%	572	546	-27	-4.7%
79.0%	549	544	-5	-0.9%
80.2%	546	543	-2	-0.4%
81.5%	543	537	-6	-1.0%
82.7%	537	536	-1	-0.3%
84.0%	531	532	1	0.2%
85.2%	523	528	5	0.9%
86.4%	518	520	2	0.3%
87.7%	510	496	-15	-2.9%
88.9%	505	432	-74	-14.6%
90.1%	488	431	-56	-11.6%
91.4%	480	431	-49	-10.1%
92.6%	410	425	15	3.8%
93.8%	408	417	9	2.1%
95.1%	400	409	9	2.2%
96.3%	379	392	13	3.4%
97.5%	376	374	-2	-0.5%
98.8%	315	274	-41	-13.0%
100.0%	197	255	58	29.5%

Table SW-44-b

San Luis Reservoir (CVP), End of Month Storage

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	972	0	0.0%
8.6%	972	972	0	0.0%
9.9%	972	972	0	0.0%
11.1%	972	972	0	0.0%
12.3%	972	965	-7	-0.7%
13.6%	972	962	-10	-1.1%
14.8%	972	959	-13	-1.3%
16.0%	926	955	29	3.1%
17.3%	918	919	1	0.1%
18.5%	914	914	0	0.0%
19.8%	867	914	47	5.5%
21.0%	859	910	51	5.9%
22.2%	853	882	28	3.3%
23.5%	845	877	32	3.8%
24.7%	838	875	37	4.5%
25.9%	831	853	22	2.7%
27.2%	824	842	18	2.2%
28.4%	815	827	12	1.4%
29.6%	814	825	11	1.3%
30.9%	811	820	9	1.1%
32.1%	804	820	16	1.9%
33.3%	795	812	17	2.2%
34.6%	792	808	16	2.0%
35.8%	785	783	-2	-0.2%
37.0%	781	779	-2	-0.2%
38.3%	776	773	-3	-0.4%
39.5%	771	768	-2	-0.3%
40.7%	765	762	-3	-0.5%
42.0%	762	755	-7	-0.9%
43.2%	760	754	-7	-0.9%
44.4%	751	746	-5	-0.7%
45.7%	748	732	-16	-2.1%
46.9%	737	730	-7	-0.9%
48.1%	734	730	-4	-0.6%
49.4%	729	729	-1	-0.1%
50.6%	729	727	-3	-0.4%
51.9%	725	726	1	0.2%
53.1%	723	723	0	0.1%
54.3%	720	715	-5	-0.7%
55.6%	709	713	4	0.5%
56.8%	704	709	4	0.6%
58.0%	689	705	16	2.3%
59.3%	687	698	11	1.6%
60.5%	685	695	10	1.4%
61.7%	681	679	-2	-0.3%
63.0%	671	662	-9	-1.3%
64.2%	665	661	-5	-0.7%
65.4%	659	659	-1	-0.1%
66.7%	659	658	-1	-0.1%
67.9%	649	653	4	0.6%
69.1%	641	648	6	1.0%
70.4%	638	638	0	0.0%
71.6%	635	630	-5	-0.8%
72.8%	631	629	-2	-0.3%
74.1%	630	627	-3	-0.5%
75.3%	630	625	-5	-0.7%
76.5%	628	614	-14	-2.2%
77.8%	615	597	-18	-2.9%
79.0%	612	586	-26	-4.3%
80.2%	612	585	-27	-4.4%
81.5%	598	582	-16	-2.7%
82.7%	586	579	-7	-1.2%
84.0%	573	579	6	1.1%
85.2%	572	578	6	1.0%
86.4%	565	547	-18	-3.2%
87.7%	562	540	-22	-3.9%
88.9%	555	522	-34	-6.1%
90.1%	538	517	-20	-3.8%
91.4%	535	515	-20	-3.7%
92.6%	527	510	-17	-3.3%
93.8%	497	493	-5	-0.9%
95.1%	496	491	-5	-1.0%
96.3%	494	483	-12	-2.4%
97.5%	487	477	-10	-2.0%
98.8%	361	375	14	3.9%
100.0%	243	321	77	31.8%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	972	0	0.0%
8.6%	972	972	0	0.0%
9.9%	972	972	0	0.0%
11.1%	972	972	0	0.0%
12.3%	972	972	0	0.0%
13.6%	972	972	0	0.0%
14.8%	972	972	0	0.0%
16.0%	972	972	0	0.0%
17.3%	972	972	0	0.0%
18.5%	972	972	0	0.0%
19.8%	972	972	0	0.0%
21.0%	972	972	0	0.0%
22.2%	972	972	0	0.0%
23.5%	972	972	0	0.0%
24.7%	967	972	5	0.5%
25.9%	956	972	16	1.7%
27.2%	955	972	17	1.8%
28.4%	938	959	21	2.2%
29.6%	928	959	30	3.3%
30.9%	922	956	33	3.6%
32.1%	920	953	33	3.6%
33.3%	917	947	30	3.3%
34.6%	915	911	-4	-0.5%
35.8%	914	907	-7	-0.8%
37.0%	903	901	-1	-0.1%
38.3%	868	865	-3	-0.4%
39.5%	866	856	-10	-1.1%
40.7%	852	850	-2	-0.2%
42.0%	845	841	-4	-0.4%
43.2%	842	838	-4	-0.5%
44.4%	840	836	-4	-0.5%
45.7%	833	818	-15	-1.8%
46.9%	829	813	-16	-2.0%
48.1%	818	812	-7	-0.8%
49.4%	818	808	-10	-1.2%
50.6%	795	790	-4	-0.6%
51.9%	791	786	-5	-0.6%
53.1%	788	783	-5	-0.7%
54.3%	787	781	-6	-0.8%
55.6%	785	778	-7	-0.9%
56.8%	772	777	5	0.7%
58.0%	768	769	2	0.2%
59.3%	759	764	5	0.6%
60.5%	757	747	-10	-1.3%
61.7%	756	745	-11	-1.5%
63.0%	739	739	0	0.0%
64.2%	734	738	4	0.6%
65.4%	732	734	2	0.2%
66.7%	722	733	11	1.5%
67.9%	722	733	11	1.5%
69.1%	710	732	22	3.2%
70.4%	710	717	7	0.9%
71.6%	710	714	4	0.6%
72.8%	709	709	0	0.0%
74.1%	706	692	-14	-2.0%
75.3%	703	679	-24	-3.5%
76.5%	688	676	-12	-1.8%
77.8%	681	675	-6	-0.9%
79.0%	680	674	-6	-0.9%
80.2%	667	648	-19	-2.8%
81.5%	657	647	-10	-1.5%
82.7%	650	643	-8	-1.2%
84.0%	645	628	-18	-2.8%
85.2%	632	605	-27	-4.3%
86.4%	626	599	-27	-4.3%
87.7%	626	591	-34	-5.4%
88.9%	599	567	-32	-5.4%
90.1%	592	562	-30	-5.0%
91.4%	591	551	-41	-6.9%
92.6%	555	543	-12	-2.1%
93.8%	538	528	-10	-1.9%
95.1%	536	500	-36	-6.8%
96.3%	523	499	-24	-4.6%
97.5%	520	485	-35	-6.8%
98.8%	352	469	117	33.1%
100.0%	350	377	27	7.7%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	960	972	12	1.3%
4.9%	959	960	1	0.1%
6.2%	959	958	0	-0.1%
7.4%	927	928	2	0.2%
8.6%	922	927	5	0.5%
9.9%	910	925	15	1.7%
11.1%	907	906	0	-0.1%
12.3%	905	905	0	0.0%
13.6%	902	893	-9	-1.0%
14.8%	892	887	-5	-0.5%
16.0%	890	885	-5	-0.6%
17.3%	888	883	-4	-0.5%
18.5%	871	870	-2	-0.2%
19.8%	857	849	-8	-0.9%
21.0%	849	845	-4	-0.4%
22.2%	845	841	-3	-0.4%
23.5%	841	838	-3	-0.4%
24.7%	841	837	-3	-0.4%
25.9%	835	834	-1	-0.1%
27.2%	832	833	2	0.2%
28.4%	827	828	1	0.2%
29.6%	825	828	3	0.3%
30.9%	823	816	-7	-0.9%
32.1%	816	812	-4	-0.5%
33.3%	807	812	5	0.7%
34.6%	803	806	3	0.4%
35.8%	800	804	4	0.5%
37.0%	778	782	4	0.5%
38.3%	777	782	5	0.6%
39.5%	760	773	13	1.7%
40.7%	760	747	-13	-1.7%
42.0%	746	739	-7	-1.0%
43.2%	742	736	-7	-0.9%
44.4%	733	719	-15	-2.0%
45.7%	726	710	-16	-2.2%
46.9%	725	710	-15	-2.0%
48.1%	718	710	-9	-1.2%
49.4%	710	705	-5	-0.7%
50.6%	705	688	-17	-2.5%
51.9%	694	683	-11	-1.6%
53.1%	691	676	-16	-2.3%
54.3%	680	675	-6	-0.9%
55.6%	673	672	0	0.0%
56.8%	667	672	6	0.8%
58.0%	665	666	1	0.1%
59.3%	663	663	0	0.0%
60.5%	660	661	1	0.1%
61.7%	658	643	-16	-2.4%
63.0%	658	642	-16	-2.4%
64.2%	648	637	-12	-1.8%
65.4%	643	636	-7	-1.2%
66.7%	640	634	-6	-0.9%
67.9%	638	634	-4	-0.6%
69.1%	628	617	-11	-1.8%
70.4%	624	616	-7	-1.2%
71.6%	622	616	-6	-0.9%
72.8%	611	615	4	0.6%
74.1%	595	614	19	3.1%
75.3%	591	613	21	3.6%
76.5%	586	594	8	1.4%
77.8%	586	590	5	0.8%
79.0%	584	576	-8	-1.4%
80.2%	582	574	-8	-1.4%
81.5%	581	562	-19	-3.3%
82.7%	578	545	-33	-5.6%
84.0%	569	533	-36	-6.3%
85.2%	566	527	-40	-7.0%
86.4%	554	522	-32	-5.7%
87.7%	552	522	-30	-5.5%
88.9%	550	520	-30	-5.5%
90.1%	542	505	-36	-6.7%
91.4%	535	485	-50	-9.3%
92.6%	495	484	-11	-2.3%
93.8%	475	478	3	0.6%
95.1%	473	452	-22	-4.6%
96.3%	457	449	-8	-1.8%
97.5%	443	436	-6	-1.4%
98.8%	324	433	109	33.8%
100.0%	280	308	28	10.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	945	942	-3	-0.3%
1.2%	944	941	-3	-0.3%
2.5%	931	928	-4	-0.4%
3.7%	916	908	-8	-0.9%
4.9%	871	869	-2	-0.2%
6.2%	858	867	9	1.1%
7.4%	843	843	0	0.0%
8.6%	801	782	-19	-2.4%
9.9%	777	779	2	0.3%
11.1%	762	777	15	1.9%
12.3%	757	771	14	1.9%
13.6%	750	749	-1	-0.1%
14.8%	743	715	-29	-3.8%
16.0%	734	706	-28	-3.8%
17.3%	717	704	-14	-1.9%
18.5%	681	665	-17	-2.4%
19.8%	676	651	-25	-3.7%
21.0%	661	632	-29	-4.4%
22.2%	648	629	-18	-2.8%
23.5%	638	620	-18	-2.8%
24.7%	625	607	-18	-2.9%
25.9%	617	607	-10	-1.6%
27.2%	614	606	-8	-1.3%
28.4%	614	606	-8	-1.3%
29.6%	611	596	-15	-2.5%
30.9%	610	596	-15	-2.4%
32.1%	607	594	-13	-2.1%
33.3%	604	591	-13	-2.2%
34.6%	592	583	-8	-1.4%
35.8%	588	580	-9	-1.5%
37.0%	582	576	-6	-1.1%
38.3%	581	572	-9	-1.5%
39.5%	566	571	5	0.9%
40.7%	564	569	5	0.9%
42.0%	563	565	3	0.4%
43.2%	562	552	-9	-1.7%
44.4%	558	552	-6	-1.1%
45.7%	556	550	-7	-1.2%
46.9%	545	538	-7	-1.3%
48.1%	534	535	1	0.2%
49.4%	533	522	-12	-2.2%
50.6%	533	514	-19	-3.5%
51.9%	526	510	-16	-3.0%
53.1%	520	506	-13	-2.6%
54.3%	519	493	-27	-5.1%
55.6%	503	492	-11	-2.2%
56.8%	500	485	-15	-3.0%
58.0%	498	480	-18	-3.6%
59.3%	493	475	-18	-3.6%
60.5%	493	472	-21	-4.2%
61.7%	482	466	-15	-3.2%
63.0%	479	466	-12	-2.6%
64.2%	476	466	-10	-2.1%
65.4%	475	454	-22	-4.5%
66.7%	475	450	-24	-5.1%
67.9%	467	440	-27	-5.9%
69.1%	456	438	-18	-4.0%
70.4%	450	432	-17	-3.9%
71.6%	449	430	-18	-4.1%
72.8%	448	430	-18	-4.1%
74.1%	435	427	-8	-1.7%
75.3%	434	424	-10	-2.3%
76.5%	430	420	-10	-2.4%
77.8%	426	420	-6	-1.5%
79.0%	425	417	-8	-1.9%
80.2%	415	411	-4	-0.9%
81.5%	413	407	-6	-1.4%
82.7%	409	405	-4	-1.0%
84.0%	409	386	-23	-5.6%
85.2%	405	383	-22	-5.5%
86.4%	404	372	-32	-7.9%
87.7%	401	365	-36	-9.0%
88.9%	393	362	-30	-7.7%
90.1%	377	359	-18	-4.7%
91.4%	375	354	-21	-5.6%
92.6%	371	347	-24	-6.4%
93.8%	363	343	-20	-5.5%
95.1%	313	338	24	7.7%
96.3%	312	324	11	3.6%
97.5%	287	307	20	6.8%
98.8%	224	276	52	23.1%
100.0%	165	190	25	14.9%

Table SW-44-b

San Luis Reservoir (CVP), End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	946	849	-97	-10.2%
1.2%	851	847	-4	-0.5%
2.5%	838	833	-5	-0.6%
3.7%	829	826	-3	-0.4%
4.9%	767	752	-15	-2.0%
6.2%	750	748	-2	-0.3%
7.4%	698	699	1	0.1%
8.6%	686	679	-7	-1.0%
9.9%	676	679	3	0.5%
11.1%	657	672	16	2.4%
12.3%	614	614	0	0.0%
13.6%	612	600	-12	-1.9%
14.8%	609	550	-58	-9.6%
16.0%	603	540	-63	-10.5%
17.3%	601	520	-81	-13.4%
18.5%	539	518	-21	-3.9%
19.8%	522	487	-36	-6.8%
21.0%	494	481	-13	-2.6%
22.2%	488	465	-23	-4.8%
23.5%	483	460	-24	-4.9%
24.7%	463	443	-20	-4.4%
25.9%	454	436	-19	-4.1%
27.2%	447	417	-30	-6.6%
28.4%	436	415	-21	-4.8%
29.6%	428	392	-37	-8.5%
30.9%	410	386	-24	-5.8%
32.1%	405	378	-27	-6.7%
33.3%	400	368	-32	-8.0%
34.6%	399	363	-36	-9.0%
35.8%	393	361	-32	-8.1%
37.0%	392	359	-33	-8.5%
38.3%	381	344	-36	-9.5%
39.5%	375	338	-37	-9.9%
40.7%	375	337	-38	-10.1%
42.0%	369	336	-33	-8.9%
43.2%	361	334	-28	-7.7%
44.4%	353	333	-20	-5.7%
45.7%	352	330	-23	-6.4%
46.9%	346	329	-18	-5.1%
48.1%	341	329	-13	-3.8%
49.4%	335	323	-12	-3.5%
50.6%	329	318	-11	-3.3%
51.9%	326	311	-15	-4.7%
53.1%	321	310	-11	-3.5%
54.3%	320	307	-12	-3.9%
55.6%	319	305	-14	-4.4%
56.8%	319	300	-19	-6.0%
58.0%	316	296	-20	-6.5%
59.3%	312	287	-25	-8.1%
60.5%	304	272	-32	-10.6%
61.7%	304	263	-41	-13.5%
63.0%	290	256	-34	-11.6%
64.2%	287	256	-31	-10.8%
65.4%	283	249	-34	-12.1%
66.7%	272	242	-30	-10.9%
67.9%	267	238	-29	-10.8%
69.1%	263	237	-26	-10.0%
70.4%	262	231	-31	-11.9%
71.6%	261	230	-32	-12.2%
72.8%	258	227	-30	-11.8%
74.1%	243	227	-16	-6.6%
75.3%	240	219	-21	-8.8%
76.5%	233	219	-14	-5.9%
77.8%	228	218	-9	-4.1%
79.0%	226	216	-10	-4.6%
80.2%	225	212	-13	-5.9%
81.5%	221	211	-10	-4.5%
82.7%	213	211	-3	-1.2%
84.0%	211	198	-13	-6.3%
85.2%	200	196	-4	-1.8%
86.4%	192	189	-3	-1.4%
87.7%	192	178	-14	-7.3%
88.9%	185	174	-11	-6.0%
90.1%	181	172	-9	-5.2%
91.4%	169	165	-3	-1.9%
92.6%	166	159	-7	-4.1%
93.8%	164	158	-6	-3.5%
95.1%	162	143	-18	-11.4%
96.3%	139	131	-8	-6.1%
97.5%	116	123	7	5.8%
98.8%	111	106	-5	-4.2%
100.0%	90	60	-30	-33.4%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	795	699	-97	-12.1%
1.2%	701	696	-4	-0.6%
2.5%	678	675	-2	-0.4%
3.7%	633	625	-8	-1.2%
4.9%	632	613	-19	-2.9%
6.2%	567	579	12	2.2%
7.4%	559	570	11	1.9%
8.6%	493	463	-30	-6.1%
9.9%	463	411	-51	-11.0%
11.1%	424	411	-13	-3.1%
12.3%	422	400	-22	-5.2%
13.6%	418	390	-28	-6.7%
14.8%	409	388	-21	-5.2%
16.0%	404	388	-16	-3.9%
17.3%	386	387	1	0.2%
18.5%	375	368	-8	-2.0%
19.8%	373	364	-9	-2.4%
21.0%	355	327	-28	-7.9%
22.2%	347	325	-22	-6.3%
23.5%	330	311	-19	-5.9%
24.7%	326	290	-36	-11.1%
25.9%	325	285	-40	-12.2%
27.2%	306	276	-31	-10.0%
28.4%	305	264	-41	-13.4%
29.6%	281	263	-17	-6.2%
30.9%	269	263	-6	-2.4%
32.1%	266	259	-7	-2.6%
33.3%	259	256	-4	-1.5%
34.6%	252	231	-22	-8.6%
35.8%	249	230	-19	-7.7%
37.0%	246	226	-21	-8.3%
38.3%	245	224	-22	-8.8%
39.5%	243	212	-31	-12.7%
40.7%	242	210	-31	-12.9%
42.0%	228	209	-19	-8.2%
43.2%	214	203	-11	-5.2%
44.4%	212	201	-11	-5.2%
45.7%	207	200	-8	-3.6%
46.9%	201	196	-5	-2.6%
48.1%	200	195	-5	-2.5%
49.4%	197	188	-8	-4.3%
50.6%	194	176	-18	-9.4%
51.9%	191	175	-16	-8.5%
53.1%	191	165	-26	-13.7%
54.3%	191	163	-28	-14.6%
55.6%	190	155	-34	-18.1%
56.8%	177	155	-22	-12.5%
58.0%	174	155	-19	-11.2%
59.3%	173	153	-20	-11.4%
60.5%	170	152	-18	-10.5%
61.7%	168	151	-17	-10.0%
63.0%	161	150	-11	-6.6%
64.2%	157	147	-10	-6.2%
65.4%	156	142	-13	-8.6%
66.7%	155	142	-13	-8.4%
67.9%	154	137	-16	-10.7%
69.1%	135	136	1	0.9%
70.4%	135	132	-2	-1.6%
71.6%	134	130	-4	-2.9%
72.8%	132	128	-4	-2.8%
74.1%	127	119	-8	-6.5%
75.3%	125	116	-9	-7.4%
76.5%	124	110	-13	-10.8%
77.8%	120	108	-12	-10.2%
79.0%	118	108	-10	-8.4%
80.2%	117	107	-10	-8.7%
81.5%	113	104	-9	-8.1%
82.7%	111	101	-9	-8.4%
84.0%	108	95	-13	-12.1%
85.2%	107	91	-16	-14.6%
86.4%	106	90	-16	-15.0%
87.7%	98	87	-10	-10.7%
88.9%	93	85	-8	-8.7%
90.1%	90	84	-6	-6.7%
91.4%	90	76	-14	-16.0%
92.6%	90	74	-16	-17.3%
93.8%	90	72	-17	-19.5%
95.1%	88	67	-21	-23.7%
96.3%	62	45	-17	-26.9%
97.5%	46	45	-1	-3.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	663	684	21	3.1%
1.2%	663	590	-73	-11.1%
2.5%	592	564	-28	-4.7%
3.7%	503	549	46	9.1%
4.9%	494	496	3	0.5%
6.2%	435	488	53	12.1%
7.4%	414	426	11	2.7%
8.6%	382	415	33	8.5%
9.9%	355	414	59	16.7%
11.1%	353	395	42	11.9%
12.3%	294	271	-23	-7.9%
13.6%	284	264	-20	-7.2%
14.8%	266	257	-9	-3.5%
16.0%	252	256	4	1.6%
17.3%	243	249	6	2.5%
18.5%	226	246	20	8.8%
19.8%	220	235	15	6.7%
21.0%	213	211	-1	-0.7%
22.2%	185	208	22	12.0%
23.5%	180	204	24	13.6%
24.7%	179	202	23	12.6%
25.9%	178	195	17	9.6%
27.2%	177	191	15	8.2%
28.4%	172	190	18	10.6%
29.6%	162	173	11	6.7%
30.9%	158	171	13	8.0%
32.1%	156	165	9	5.8%
33.3%	152	155	3	1.7%
34.6%	149	149	0	-0.2%
35.8%	144	139	-5	-3.4%
37.0%	142	137	-5	-3.3%
38.3%	141	132	-9	-6.4%
39.5%	139	131	-8	-5.9%
40.7%	136	129	-7	-5.2%
42.0%	134	129	-6	-4.1%
43.2%	132	126	-6	-4.3%
44.4%	128	122	-5	-4.1%
45.7%	123	118	-5	-4.3%
46.9%	122	118	-4	-3.3%
48.1%	115	114	-1	-0.9%
49.4%	110	113	3	2.7%
50.6%	108	107	-1	-1.1%
51.9%	99	107	9	8.7%
53.1%	97	103	6	6.7%
54.3%	95	103	8	8.0%
55.6%	95	95	0	0.1%
56.8%	92	95	3	3.4%
58.0%	91	94	2	2.6%
59.3%	91	92	1	1.0%
60.5%	90	90	0	0.0%
61.7%	90	90	0	0.0%
63.0%	90	90	0	0.0%
64.2%	90	85	-5	-5.5%
65.4%	83	84	2	1.9%
66.7%	79	75	-4	-4.9%
67.9%	79	75	-4	-4.6%
69.1%	78	74	-4	-5.3%
70.4%	75	74	-2	-2.6%
71.6%	74	71	-3	-3.5%
72.8%	71	62	-9	-12.9%
74.1%	68	59	-9	-13.7%
75.3%	65	59	-7	-10.3%
76.5%	64	58	-5	-8.1%
77.8%	61	58	-3	-4.9%
79.0%	57	55	-2	-3.6%
80.2%	53	54	1	1.6%
81.5%	52	52	0	-0.7%
82.7%	48	50	3	5.7%
84.0%	45	47	2	3.4%
85.2%	45	45	0	0.0%
86.4%	45	45	0	0.0%
87.7%	45	45	0	0.0%
88.9%	45	45	0	0.0%
90.1%	45	45	0	0.0%
91.4%	45	45	0	0.0%
92.6%	45	45	0	0.0%
93.8%	45	45	0	0.0%
95.1%	45	45	0	0.0%
96.3%	45	45	0	0.0%
97.5%	45	45	0	0.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	725	821	97	13.4%
1.2%	697	625	-72	-10.3%
2.5%	559	615	56	10.0%
3.7%	483	515	32	6.7%
4.9%	475	510	35	7.5%
6.2%	450	500	51	11.3%
7.4%	448	495	47	10.5%
8.6%	440	431	-8	-1.9%
9.9%	418	430	12	2.9%
11.1%	399	408	8	2.1%
12.3%	305	328	23	7.4%
13.6%	302	324	23	7.6%
14.8%	282	313	32	11.3%
16.0%	275	287	12	4.5%
17.3%	269	285	16	6.0%
18.5%	240	269	30	12.4%
19.8%	229	265	36	15.7%
21.0%	228	265	37	16.1%
22.2%	200	257	57	28.3%
23.5%	200	256	56	28.0%
24.7%	195	235	40	20.4%
25.9%	192	231	39	20.4%
27.2%	192	215	23	12.0%
28.4%	192	208	16	8.4%
29.6%	187	203	15	8.2%
30.9%	187	195	8	4.5%
32.1%	179	194	15	8.5%
33.3%	175	191	16	9.2%
34.6%	173	186	13	7.3%
35.8%	173	180	7	4.1%
37.0%	166	179	13	7.8%
38.3%	165	177	12	7.1%
39.5%	165	172	7	4.5%
40.7%	161	170	9	5.4%
42.0%	158	169	11	6.8%
43.2%	154	169	15	9.7%
44.4%	153	169	15	10.1%
45.7%	150	167	17	11.5%
46.9%	139	165	26	19.0%
48.1%	134	163	29	21.5%
49.4%	132	161	30	22.4%
50.6%	130	158	29	22.0%
51.9%	128	157	30	23.3%
53.1%	127	151	24	18.8%
54.3%	126	151	24	19.2%
55.6%	124	147	23	18.2%
56.8%	121	137	16	12.9%
58.0%	121	137	16	13.1%
59.3%	120	133	13	10.5%
60.5%	116	133	16	14.1%
61.7%	116	130	14	12.3%
63.0%	116	130	14	12.2%
64.2%	115	126	11	9.5%
65.4%	114	124	10	8.5%
66.7%	112	123	11	9.5%
67.9%	108	121	12	11.2%
69.1%	108	120	12	11.1%
70.4%	101	119	18	17.9%
71.6%	97	118	21	22.0%
72.8%	95	117	22	23.4%
74.1%	94	117	22	23.8%
75.3%	93	116	23	25.2%
76.5%	93	112	20	21.5%
77.8%	93	108	15	16.7%
79.0%	92	108	16	17.3%
80.2%	91	106	15	16.2%
81.5%	90	100	10	11.4%
82.7%	90	95	5	5.6%
84.0%	90	93	3	3.2%
85.2%	90	90	0	0.0%
86.4%	90	89	-1	-1.4%
87.7%	83	87	4	4.6%
88.9%	83	83	0	0.0%
90.1%	78	77	-1	-0.9%
91.4%	78	74	-4	-5.1%
92.6%	75	73	-2	-3.0%
93.8%	72	72	0	0.7%
95.1%	71	66	-5	-7.0%
96.3%	69	64	-5	-7.1%
97.5%	58	62	4	6.9%
98.8%	57	62	5	9.1%
100.0%	45	53	8	16.9%

Figure SW-45-b
San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

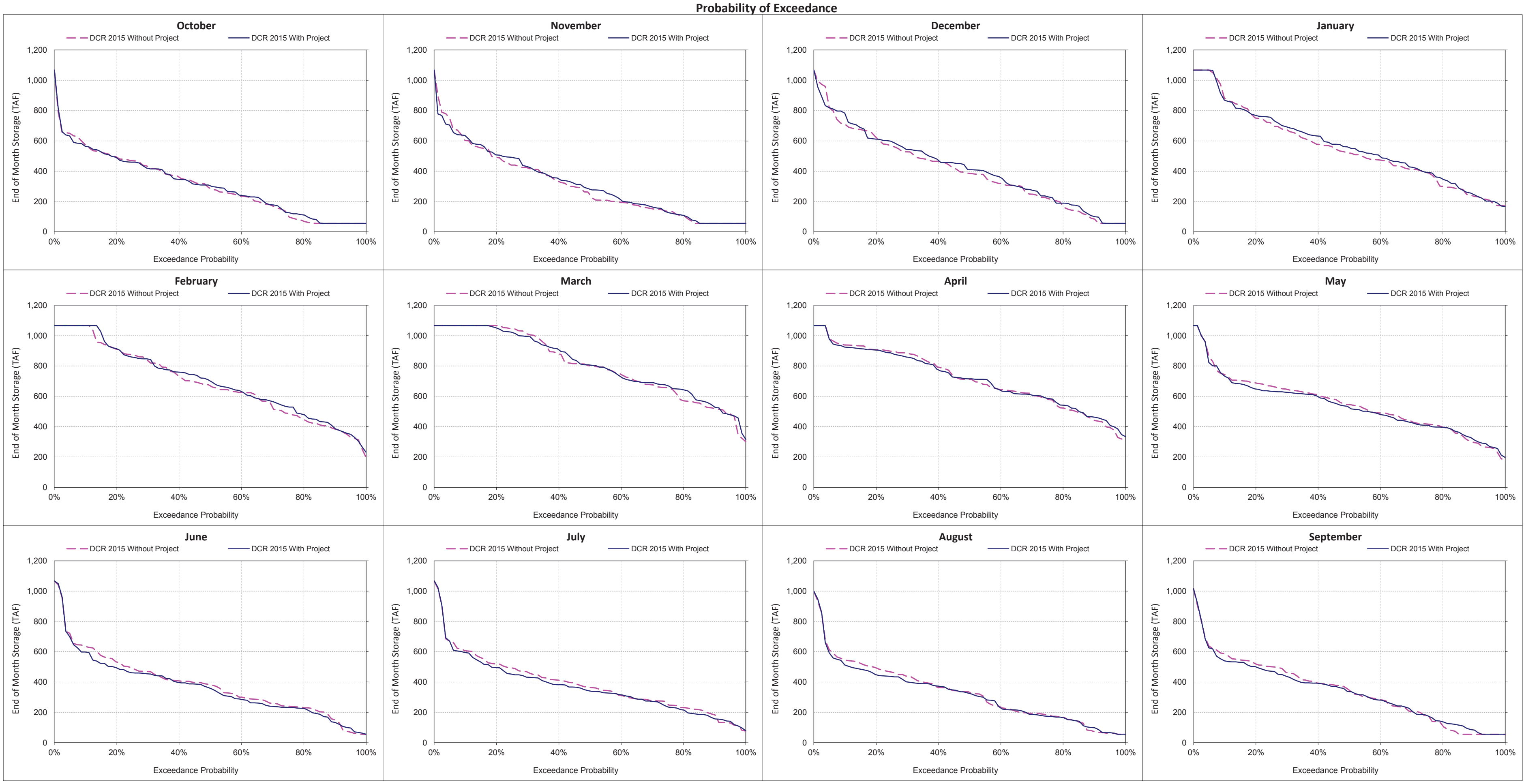


Table SW-45-b

San Luis Reservoir (SWP), End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	792	810	18	2.3%
2.5%	657	660	3	0.4%
3.7%	655	640	-15	-2.3%
4.9%	650	633	-17	-2.6%
6.2%	634	590	-44	-7.0%
7.4%	628	585	-43	-6.9%
8.6%	601	582	-19	-3.2%
9.9%	576	564	-11	-2.0%
11.1%	555	561	7	1.2%
12.3%	536	545	10	1.8%
13.6%	532	542	10	1.8%
14.8%	524	529	5	1.0%
16.0%	519	514	-5	-1.0%
17.3%	513	510	-4	-0.7%
18.5%	499	498	-1	-0.2%
19.8%	495	492	-3	-0.6%
21.0%	480	472	-8	-1.7%
22.2%	479	464	-15	-3.1%
23.5%	475	461	-14	-2.9%
24.7%	469	460	-9	-1.9%
25.9%	468	460	-8	-1.6%
27.2%	462	455	-6	-1.3%
28.4%	439	436	-4	-0.8%
29.6%	435	421	-14	-3.2%
30.9%	418	416	-2	-0.5%
32.1%	417	416	-2	-0.4%
33.3%	411	415	4	0.9%
34.6%	399	409	11	2.7%
35.8%	380	383	3	0.8%
37.0%	376	378	2	0.6%
38.3%	371	349	-22	-5.9%
39.5%	368	347	-21	-5.8%
40.7%	351	346	-6	-1.6%
42.0%	346	345	-1	-0.2%
43.2%	343	334	-9	-2.7%
44.4%	332	317	-15	-4.6%
45.7%	320	312	-8	-2.6%
46.9%	319	309	-10	-3.2%
48.1%	317	309	-8	-2.6%
49.4%	293	308	16	5.4%
50.6%	279	299	20	7.2%
51.9%	276	296	19	7.0%
53.1%	263	291	28	10.5%
54.3%	261	288	27	10.4%
55.6%	257	267	10	4.1%
56.8%	252	265	13	5.0%
58.0%	247	263	17	6.7%
59.3%	236	243	7	3.2%
60.5%	235	239	3	1.5%
61.7%	232	236	4	1.8%
63.0%	226	231	6	2.4%
64.2%	204	231	27	13.4%
65.4%	200	227	27	13.3%
66.7%	187	208	21	11.1%
67.9%	182	187	6	3.2%
69.1%	179	179	0	0.0%
70.4%	167	178	11	6.4%
71.6%	155	173	17	11.1%
72.8%	150	151	1	0.7%
74.1%	137	129	-8	-5.6%
75.3%	97	126	29	30.1%
76.5%	89	120	31	34.4%
77.8%	82	118	36	44.4%
79.0%	79	114	35	44.5%
80.2%	68	110	43	62.9%
81.5%	62	96	34	54.6%
82.7%	58	84	26	45.9%
84.0%	55	81	25	45.6%
85.2%	55	57	2	4.0%
86.4%	55	55	0	0.0%
87.7%	55	55	0	0.0%
88.9%	55	55	0	0.0%
90.1%	55	55	0	0.0%
91.4%	55	55	0	0.0%
92.6%	55	55	0	0.0%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	894	779	-116	-12.9%
2.5%	789	767	-21	-2.7%
3.7%	780	712	-69	-8.8%
4.9%	752	705	-47	-6.3%
6.2%	675	655	-20	-2.9%
7.4%	672	641	-31	-4.6%
8.6%	644	639	-5	-0.7%
9.9%	604	636	32	5.3%
11.1%	601	612	12	1.9%
12.3%	566	584	18	3.2%
13.6%	563	578	15	2.7%
14.8%	555	576	22	3.9%
16.0%	551	562	12	2.2%
17.3%	548	531	-17	-3.1%
18.5%	498	527	28	5.7%
19.8%	493	508	15	3.0%
21.0%	488	506	17	3.6%
22.2%	465	498	32	7.0%
23.5%	455	495	39	8.6%
24.7%	441	493	52	11.7%
25.9%	441	487	47	10.6%
27.2%	432	484	52	12.0%
28.4%	425	437	12	2.8%
29.6%	425	433	8	1.9%
30.9%	416	424	8	1.9%
32.1%	412	409	-3	-0.8%
33.3%	410	394	-16	-4.0%
34.6%	386	392	6	1.4%
35.8%	373	381	8	2.2%
37.0%	369	367	-2	-0.7%
38.3%	349	357	7	2.1%
39.5%	336	356	20	6.0%
40.7%	325	339	14	4.2%
42.0%	321	338	17	5.4%
43.2%	300	333	33	11.0%
44.4%	299	324	25	8.3%
45.7%	294	313	19	6.3%
46.9%	291	312	21	7.4%
48.1%	264	294	30	11.3%
49.4%	262	285	22	8.6%
50.6%	224	277	53	23.6%
51.9%	210	276	66	31.6%
53.1%	209	275	67	31.9%
54.3%	209	272	63	30.4%
55.6%	208	253	45	21.6%
56.8%	201	248	47	23.1%
58.0%	201	236	35	17.5%
59.3%	198	222	24	12.3%
60.5%	193	202	9	4.4%
61.7%	192	198	6	3.1%
63.0%	183	194	11	5.7%
64.2%	177	186	9	4.9%
65.4%	175	183	9	4.9%
66.7%	161	180	20	12.2%
67.9%	160	177	17	10.3%
69.1%	155	168	13	8.5%
70.4%	151	162	11	7.3%
71.6%	149	156	7	4.7%
72.8%	148	155	7	4.9%
74.1%	139	134	-4	-3.1%
75.3%	133	126	-7	-5.2%
76.5%	132	121	-11	-8.3%
77.8%	115	115	0	-0.1%
79.0%	107	112	5	4.5%
80.2%	105	107	2	2.1%
81.5%	85	96	11	13.4%
82.7%	69	78	9	12.5%
84.0%	55	74	19	33.7%
85.2%	55	55	0	0.0%
86.4%	55	55	0	0.0%
87.7%	55	55	0	0.0%
88.9%	55	55	0	0.0%
90.1%	55	55	0	0.0%
91.4%	55	55	0	0.0%
92.6%	55	55	0	0.0%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	996	957	-38	-3.9%
2.5%	974	893	-81	-8.3%
3.7%	958	833	-126	-13.1%
4.9%	819	819	0	0.0%
6.2%	799	812	13	1.6%
7.4%	742	798	56	7.5%
8.6%	718	797	79	11.1%
9.9%	712	784	71	10.0%
11.1%	691	722	31	4.5%
12.3%	683	713	29	4.3%
13.6%	677	707	30	4.4%
14.8%	677	690	13	2.0%
16.0%	669	679	10	1.5%
17.3%	666	619	-47	-7.1%
18.5%	656	615	-41	-6.2%
19.8%	628	611	-17	-2.7%
21.0%	604	610	6	1.1%
22.2%	580	604	24	4.1%
23.5%	576	601	25	4.3%
24.7%	568	598	30	5.2%
25.9%	560	586	26	4.6%
27.2%	549	573	24	4.5%
28.4%	528	560	32	6.1%
29.6%	528	544	17	3.1%
30.9%	527	544	16	3.1%
32.1%	507	539	32	6.3%
33.3%	489	535	46	9.5%
34.6%	484	534	50	10.4%
35.8%	481	512	32	6.6%
37.0%	471	498	27	5.8%
38.3%	466	490	25	5.3%
39.5%	465	481	15	3.3%
40.7%	460	459	-1	-0.1%
42.0%	457	458	1	0.2%
43.2%	444	457	14	3.1%
44.4%	424	456	33	7.7%
45.7%	414	452	38	9.1%
46.9%	396	451	55	13.8%
48.1%	394	445	51	12.8%
49.4%	387	410	22	5.7%
50.6%	384	410	25	6.6%
51.9%	381	408	28	7.3%
53.1%	380	406	26	6.9%
54.3%	379	405	26	6.9%
55.6%	348	394	45	13.0%
56.8%	334	380	47	14.0%
58.0%	328	370	43	13.1%
59.3%	320	365	45	14.0%
60.5%	319	352	34	10.5%
61.7%	307	325	18	5.9%
63.0%	307	309	2	0.6%
64.2%	306	306	-1	-0.3%
65.4%	305	299	-7	-2.2%
66.7%	300	293	-7	-2.4%
67.9%	261	281	20	7.8%
69.1%	249	281	31	12.6%
70.4%	248	274	26	10.4%
71.6%	242	267	26	10.6%
72.8%	228	237	9	3.9%
74.1%	227	237	9	4.2%
75.3%	219	231	12	5.4%
76.5%	210	225	15	6.9%
77.8%	205	190	-15	-7.4%
79.0%	197	189	-8	-3.9%
80.2%	162	188	27	16.5%
81.5%	150	188	38	25.7%
82.7%	143	178	35	24.5%
84.0%	142	175	33	23.1%
85.2%	134	169	35	26.3%
86.4%	118	138	20	16.7%
87.7%	113	122	9	8.0%
88.9%	91	107	17	18.3%
90.1%	84	100	16	19.1%
91.4%	55	96	41	75.1%
92.6%	55	57	2	3.6%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,051	1,067	16	1.5%
7.4%	1,014	994	-20	-2.0%
8.6%	973	915	-58	-6.0%
9.9%	883	870	-13	-1.5%
11.1%	863	860	-3	-0.3%
12.3%	858	856	-2	-0.3%
13.6%	844	816	-28	-3.3%
14.8%	841	815	-26	-3.1%
16.0%	821	808	-13	-1.6%
17.3%	813	795	-18	-2.3%
18.5%	776	777	1	0.1%
19.8%	752	770	18	2.5%
21.0%	747	763	16	2.1%
22.2%	743	761	18	2.4%
23.5%	724	760	36	5.0%
24.7%	720	755	36	5.0%
25.9%	696	733	36	5.2%
27.2%	694	719	25	3.6%
28.4%	678	701	23	3.4%
29.6%	678	694	16	2.4%
30.9%	661	686	25	3.7%
32.1%	655	681	26	3.9%
33.3%	644	669	25	3.8%
34.6%	622	662	40	6.4%
35.8%	615	651	36	5.9%
37.0%	604	641	37	6.1%
38.3%	592	636	44	7.5%
39.5%	578	632	54	9.3%
40.7%	576	630	54	9.4%
42.0%	570	596	25	4.5%
43.2%	569	591	22	3.9%
44.4%	562	578	16	2.9%
45.7%	545	577	32	5.8%
46.9%	534	577	43	8.0%
48.1%	529	562	33	6.3%
49.4%	522	561	39	7.4%
50.6%	518	551	33	6.3%
51.9%	509	548	39	7.7%
53.1%	509	531	22	4.4%
54.3%	497	529	32	6.4%
55.6%	486	519	33	6.9%
56.8%	479	518	39	8.2%
58.0%	477	510	33	6.9%
59.3%	475	508	33	6.9%
60.5%	472	488	16	3.3%
61.7%	470	485	15	3.3%
63.0%	460	474	14	3.1%
64.2%	436	465	29	6.7%
65.4%	436	465	29	6.8%
66.7%	431	456	25	5.8%
67.9%	420	455	35	8.3%
69.1%	414	428	15	3.5%
70.4%	413	426	13	3.2%
71.6%	411	418	7	1.6%
72.8%	404	404	0	0.1%
74.1%	391	394	3	0.8%
75.3%	390	392	3	0.6%
76.5%	375	388	13	3.6%
77.8%	349	362	13	3.8%
79.0%	302	359	56	18.7%
80.2%	298	346	47	15.9%
81.5%	294	337	43	14.5%
82.7%	294	320	26	8.9%
84.0%	288	319	31	10.9%
85.2%	283	289	6	2.1%
86.4%	279	275	-4	-1.5%
87.7%	247	260	13	5.4%
88.9%	243	256	13	5.2%
90.1%	233	244	10	4.4%
91.4%	232	232	0	0.0%
92.6%	219	222	3	1.4%
93.8%	215	204	-11	-5.1%
95.1%	208	203	-4	-2.0%
96.3%	183	201	17	9.5%
97.5%	173	189	16	9.2%
98.8%	172	171	-1	-0.8%
100.0%	171	166	-5	-2.8%

Table SW-45-b

San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,067	1,067	0	0.0%
12.3%	1,034	1,067	33	3.2%
13.6%	958	1,067	109	11.4%
14.8%	955	1,029	73	7.7%
16.0%	942	961	19	2.0%
17.3%	934	931	-3	-0.4%
18.5%	922	920	-2	-0.2%
19.8%	911	916	5	0.5%
21.0%	906	904	-1	-0.1%
22.2%	882	874	-8	-0.9%
23.5%	877	866	-11	-1.3%
24.7%	876	860	-17	-1.9%
25.9%	869	855	-14	-1.6%
27.2%	860	848	-12	-1.4%
28.4%	860	848	-13	-1.5%
29.6%	841	847	6	0.7%
30.9%	820	842	22	2.6%
32.1%	819	800	-20	-2.4%
33.3%	818	786	-32	-3.9%
34.6%	793	782	-11	-1.4%
35.8%	791	775	-16	-2.0%
37.0%	765	774	9	1.1%
38.3%	761	762	1	0.1%
39.5%	740	761	21	2.8%
40.7%	723	758	35	4.8%
42.0%	703	756	52	7.4%
43.2%	703	745	42	6.0%
44.4%	697	744	47	6.8%
45.7%	693	737	44	6.3%
46.9%	685	721	36	5.2%
48.1%	678	720	42	6.2%
49.4%	677	709	32	4.7%
50.6%	662	693	32	4.8%
51.9%	655	677	22	3.3%
53.1%	645	668	23	3.5%
54.3%	644	662	18	2.7%
55.6%	644	659	15	2.3%
56.8%	633	650	17	2.7%
58.0%	630	642	12	1.9%
59.3%	626	638	12	1.9%
60.5%	625	627	2	0.3%
61.7%	624	607	-17	-2.8%
63.0%	624	604	-20	-3.2%
64.2%	614	591	-23	-3.8%
65.4%	587	583	-4	-0.7%
66.7%	567	576	9	1.6%
67.9%	567	576	10	1.7%
69.1%	562	570	8	1.4%
70.4%	513	563	50	9.7%
71.6%	511	553	43	8.4%
72.8%	505	543	37	7.4%
74.1%	489	534	45	9.1%
75.3%	488	529	41	8.3%
76.5%	477	529	52	10.9%
77.8%	474	490	17	3.5%
79.0%	456	484	28	6.2%
80.2%	445	478	33	7.5%
81.5%	430	456	25	5.9%
82.7%	424	450	27	6.3%
84.0%	422	449	26	6.2%
85.2%	411	434	23	5.5%
86.4%	406	431	25	6.2%
87.7%	405	428	23	5.6%
88.9%	392	409	18	4.5%
90.1%	383	385	2	0.5%
91.4%	378	374	-3	-0.9%
92.6%	363	366	4	1.0%
93.8%	350	357	7	2.0%
95.1%	329	350	21	6.3%
96.3%	322	329	7	2.1%
97.5%	312	303	-9	-2.9%
98.8%	249	265	16	6.2%
100.0%	196	230	34	17.3%

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,067	1,067	0	0.0%
12.3%	1,067	1,067	0	0.0%
13.6%	1,067	1,067	0	0.0%
14.8%	1,067	1,067	0	0.0%
16.0%	1,067	1,067	0	0.0%
17.3%	1,067	1,067	0	0.0%
18.5%	1,067	1,060	-7	-0.7%
19.8%	1,067	1,053	-14	-1.3%
21.0%	1,067	1,043	-24	-2.2%
22.2%	1,053	1,029	-24	-2.3%
23.5%	1,051	1,026	-25	-2.4%
24.7%	1,045	1,023	-22	-2.1%
25.9%	1,044	1,015	-28	-2.7%
27.2%	1,033	1,000	-32	-3.1%
28.4%	1,031	999	-32	-3.1%
29.6%	1,013	995	-18	-1.7%
30.9%	1,005	993	-12	-1.2%
32.1%	1,002	966	-36	-3.6%
33.3%	984	957	-27	-2.7%
34.6%	964	940	-24	-2.5%
35.8%	942	935	-7	-0.8%
37.0%	894	924	29	3.3%
38.3%	893	917	24	2.7%
39.5%	884	913	29	3.3%
40.7%	875	895	20	2.3%
42.0%	822	892	70	8.6%
43.2%	820	868	47	5.8%
44.4%	816	845	29	3.5%
45.7%	816	835	20	2.4%
46.9%	814	814	0	-0.1%
48.1%	813	808	-4	-0.6%
49.4%	803	807	4	0.5%
50.6%	800	805	5	0.6%
51.9%	796	803	7	0.9%
53.1%	794	793	-1	-0.1%
54.3%	792	792	0	0.1%
55.6%	776	780	4	0.5%
56.8%	771	769	-2	-0.3%
58.0%	757	756	-2	-0.2%
59.3%	753	737	-15	-2.0%
60.5%	739	721	-17	-2.3%
61.7%	725	710	-16	-2.2%
63.0%	722	705	-17	-2.3%
64.2%	705	698	-7	-0.9%
65.4%	698	696	-2	-0.3%
66.7%	691	692	1	0.2%
67.9%	678	690	12	1.7%
69.1%	678	690	12	1.7%
70.4%	675	689	15	2.2%
71.6%	662	681	19	2.9%
72.8%	660	679	19	2.8%
74.1%	659	677	18	2.7%
75.3%	657	668	11	1.6%
76.5%	644	650	6	1.0%
77.8%	617	650	33	5.3%
79.0%	578	648	70	12.1%
80.2%	570	642	73	12.8%
81.5%	567	634	67	11.8%
82.7%	566	613	47	8.3%
84.0%	557	576	19	3.4%
85.2%	556	572	17	3.0%
86.4%	537	566	29	5.4%
87.7%	527	561	34	6.5%
88.9%	524	546	22	4.1%
90.1%	518	528	10	2.0%
91.4%	514	525	10	2.0%
92.6%	511	489	-22	-4.3%
93.8%	485	485	0	0.0%
95.1%	483	478	-5	-1.0%
96.3%	466	471	5	1.1%
97.5%	345	457	111	32.2%
98.8%	323	354	32	9.8%
100.0%	301	316	15	5.1%

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	979	980	0	0.0%
6.2%	966	944	-21	-2.2%
7.4%	951	938	-13	-1.4%
8.6%	944	934	-10	-1.1%
9.9%	939	925	-14	-1.5%
11.1%	938	923	-15	-1.6%
12.3%	937	921	-16	-1.7%
13.6%	934	918	-16	-1.7%
14.8%	933	915	-18	-1.9%
16.0%	932	913	-19	-2.1%
17.3%	911	907	-4	-0.4%
18.5%	910	907	-3	-0.3%
19.8%	907	905	-2	-0.2%
21.0%	907	905	-3	-0.3%
22.2%	906	895	-11	-1.2%
23.5%	901	888	-13	-1.5%
24.7%	898	887	-11	-1.2%
25.9%	896	877	-20	-2.2%
27.2%	888	871	-17	-1.9%
28.4%	888	866	-22	-2.4%
29.6%	886	859	-28	-3.1%
30.9%	879	856	-23	-2.6%
32.1%	876	850	-27	-3.0%
33.3%	865	835	-30	-3.5%
34.6%	852	833	-19	-2.2%
35.8%	837	817	-21	-2.5%
37.0%	824	813	-11	-1.3%
38.3%	823	808	-15	-1.8%
39.5%	795	779	-16	-2.0%
40.7%	788	768	-21	-2.6%
42.0%	783	763	-20	-2.6%
43.2%	772	755	-17	-2.3%
44.4%	739	728	-11	-1.5%
45.7%	724	724	0	0.0%
46.9%	714	723	8	1.1%
48.1%	713	718	6	0.8%
49.4%	712	716	4	0.6%
50.6%	711	715	5	0.7%
51.9%	695	713	18	2.5%
53.1%	693	713	19	2.8%
54.3%	679	711	32	4.7%
55.6%	677	711	33	4.9%
56.8%	658	688	30	4.5%
58.0%	655	654	-1	-0.2%
59.3%	647	646	-1	-0.2%
60.5%	643	634	-9	-1.4%
61.7%	641	632	-9	-1.4%
63.0%	637	631	-6	-0.9%
64.2%	634	617	-17	-2.6%
65.4%	630	616	-15	-2.3%
66.7%	624	615	-9	-1.4%
67.9%	621	615	-6	-1.0%
69.1%	621	613	-8	-1.3%
70.4%	604	606	1	0.2%
71.6%	603	605	2	0.4%
72.8%	596	602	6	1.0%
74.1%	590	590	0	0.0%
75.3%	579	585	6	1.0%
76.5%	577	582	6	1.0%
77.8%	542	560	18	3.4%
79.0%	525	542	17	3.3%
80.2%	522	541	19	3.6%
81.5%	510	538	28	5.6%
82.7%	510	522	12	2.3%
84.0%	501	520	18	3.6%
85.2%	492	498	6	1.3%
86.4%	487	492	5	0.9%
87.7%	467	466	-1	-0.2%
88.9%	455	465	11	2.3%
90.1%	440	462	21	4.9%
91.4%	436	457	21	4.9%
92.6%	431	449	18	4.3%
93.8%	399	440	41	10.3%
95.1%	394	408	13	3.4%
96.3%	377	399	21	5.6%
97.5%	329	385	57	17.2%
98.8%	318	347	29	9.0%
100.0%	318	335	17	5.3%

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,001	1,001	0	0.0%
3.7%	961	961	0	0.0%
4.9%	863	824	-38	-4.5%
6.2%	828	802	-26	-3.2%
7.4%	771	802	31	4.0%
8.6%	751	757	6	0.8%
9.9%	745	734	-11	-1.4%
11.1%	727	721	-6	-0.9%
12.3%	707	691	-16	-2.3%
13.6%	706	685	-21	-3.0%
14.8%	704	683	-21	-3.0%
16.0%	701	678	-23	-3.3%
17.3%	700	669	-31	-4.5%
18.5%	691	657	-34	-4.9%
19.8%	689	649	-40	-5.8%
21.0%	684	645	-38	-5.6%
22.2%	680	638	-43	-6.3%
23.5%	669	636	-33	-4.9%
24.7%	669	633	-36	-5.3%
25.9%	662	631	-31	-4.7%
27.2%	657	630	-27	-4.1%
28.4%	650	629	-21	-3.2%
29.6%	648	627	-20	-3.2%
30.9%	642	624	-17	-2.7%
32.1%	639	622	-16	-2.6%
33.3%	636	618	-17	-2.7%
34.6%	631	618	-13	-2.1%
35.8%	625	615	-10	-1.6%
37.0%	622	613	-9	-1.4%
38.3%	616	611	-4	-0.7%
39.5%	612	602	-10	-1.7%
40.7%	601	590	-11	-1.9%
42.0%	595	585	-10	-1.6%
43.2%	589	568	-21	-3.6%
44.4%	582	560	-22	-3.8%
45.7%	579	552	-27	-4.6%
46.9%	562	544	-18	-3.3%
48.1%	550	538	-12	-2.1%
49.4%	545	535	-11	-2.0%
50.6%	544	517	-27	-4.9%
51.9%	539	514	-25	-4.6%
53.1%	538	512	-27	-4.9%
54.3%	524	502	-22	-4.1%
55.6%	513	502	-11	-2.2%
56.8%	497	496	-1	-0.2%
58.0%	492	493	1	0.2%
59.3%	491	484	-6	-1.3%
60.5%	489	477	-12	-2.5%
61.7%	489	475	-14	-2.9%
63.0%	480	465	-15	-3.2%
64.2%	477	459	-18	-3.8%
65.4%	473	442	-30	-6.4%
66.7%	456	441	-14	-3.2%
67.9%	445	436	-8	-1.9%
69.1%	444	429	-15	-3.3%
70.4%	430	425	-4	-1.0%
71.6%	423	415	-8	-1.8%
72.8%	420	412	-8	-2.0%
74.1%	419	409	-9	-2.2%
75.3%	416	409	-7	-1.8%
76.5%	413	400	-13	-3.2%
77.8%	411	397	-14	-3.3%
79.0%	404	397	-7	-1.7%
80.2%	395	395	0	0.1%
81.5%	391	391	0	0.0%
82.7%	382	383	0	0.1%
84.0%	358	371	13	3.6%
85.2%	356	364	8	2.1%
86.4%	337	347	9	2.8%
87.7%	314	336	22	7.1%
88.9%	303	328	25	8.3%
90.1%	295	311	17	5.7%
91.4%	290	299	9	3.1%
92.6%	268	291	24	8.9%
93.8%	265	287	23	8.5%
95.1%	262	268	5	2.0%
96.3%	257	264	7	2.8%
97.5%	229	254	25	10.9%
98.8%	187	212	25	13.5%
100.0%	182	196	14	7.9%

Table SW-45-b
San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,042	1,048	5	0.5%
2.5%	959	960	1	0.1%
3.7%	736	736	0	0.0%
4.9%	720	699	-22	-3.0%
6.2%	655	646	-8	-1.2%
7.4%	646	626	-19	-3.0%
8.6%	644	598	-46	-7.2%
9.9%	635	598	-38	-5.9%
11.1%	628	595	-34	-5.4%
12.3%	625	546	-79	-12.6%
13.6%	602	538	-63	-10.5%
14.8%	576	523	-53	-9.2%
16.0%	564	523	-41	-7.3%
17.3%	559	502	-57	-10.2%
18.5%	554	502	-53	-9.5%
19.8%	533	495	-38	-7.1%
21.0%	527	483	-44	-8.4%
22.2%	505	482	-23	-4.6%
23.5%	502	468	-34	-6.8%
24.7%	495	460	-35	-7.0%
25.9%	482	460	-23	-4.7%
27.2%	472	459	-12	-2.6%
28.4%	471	458	-12	-2.6%
29.6%	469	455	-15	-3.2%
30.9%	468	452	-16	-3.4%
32.1%	451	444	-7	-1.6%
33.3%	441	441	0	0.1%
34.6%	429	441	12	2.9%
35.8%	416	423	7	1.6%
37.0%	413	422	9	2.2%
38.3%	411	404	-6	-1.6%
39.5%	408	398	-10	-2.4%
40.7%	406	394	-12	-2.8%
42.0%	406	394	-11	-2.8%
43.2%	405	388	-17	-4.1%
44.4%	398	387	-11	-2.7%
45.7%	397	386	-11	-2.7%
46.9%	396	385	-11	-2.9%
48.1%	389	372	-16	-4.2%
49.4%	385	364	-20	-5.2%
50.6%	379	354	-25	-6.6%
51.9%	372	340	-33	-8.8%
53.1%	358	324	-34	-9.6%
54.3%	330	310	-19	-5.9%
55.6%	328	308	-20	-6.2%
56.8%	325	303	-22	-6.7%
58.0%	317	291	-27	-8.4%
59.3%	300	289	-12	-3.9%
60.5%	299	284	-15	-5.1%
61.7%	291	279	-11	-3.9%
63.0%	289	263	-26	-9.0%
64.2%	287	262	-25	-8.6%
65.4%	285	260	-25	-8.7%
66.7%	284	257	-27	-9.4%
67.9%	274	246	-28	-10.2%
69.1%	261	241	-20	-7.5%
70.4%	260	239	-20	-7.8%
71.6%	256	238	-18	-7.0%
72.8%	244	233	-11	-4.4%
74.1%	241	233	-9	-3.5%
75.3%	241	232	-9	-3.5%
76.5%	237	231	-6	-2.5%
77.8%	236	228	-7	-3.2%
79.0%	234	227	-7	-2.9%
80.2%	230	224	-6	-2.6%
81.5%	230	213	-17	-7.3%
82.7%	226	197	-29	-12.7%
84.0%	213	192	-21	-10.1%
85.2%	203	187	-16	-7.8%
86.4%	202	172	-30	-14.8%
87.7%	188	168	-20	-10.4%
88.9%	157	138	-19	-12.3%
90.1%	149	133	-16	-10.7%
91.4%	130	120	-10	-7.3%
92.6%	82	107	26	31.7%
93.8%	75	100	25	33.3%
95.1%	69	96	27	39.3%
96.3%	61	70	10	16.0%
97.5%	58	68	10	16.7%
98.8%	55	63	8	14.3%
100.0%	55	55	0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,016	1,024	8	0.8%
2.5%	906	908	2	0.2%
3.7%	685	693	7	1.1%
4.9%	670	669	0	-0.1%
6.2%	661	608	-53	-8.0%
7.4%	622	605	-17	-2.7%
8.6%	621	602	-18	-2.9%
9.9%	606	594	-12	-2.0%
11.1%	604	591	-14	-2.3%
12.3%	601	563	-38	-6.4%
13.6%	574	546	-28	-4.8%
14.8%	562	533	-29	-5.2%
16.0%	552	517	-35	-6.4%
17.3%	527	516	-11	-2.1%
18.5%	523	498	-26	-4.9%
19.8%	519	495	-24	-4.7%
21.0%	518	494	-25	-4.7%
22.2%	505	476	-30	-5.9%
23.5%	497	456	-41	-8.2%
24.7%	494	452	-42	-8.5%
25.9%	489	448	-41	-8.4%
27.2%	474	447	-27	-5.7%
28.4%	470	443	-27	-5.8%
29.6%	469	432	-37	-7.8%
30.9%	456	430	-26	-5.7%
32.1%	448	429	-19	-4.2%
33.3%	447	428	-19	-4.3%
34.6%	429	410	-19	-4.4%
35.8%	427	402	-25	-5.9%
37.0%	417	393	-24	-5.8%
38.3%	415	384	-32	-7.6%
39.5%	413	382	-30	-7.3%
40.7%	410	382	-28	-6.9%
42.0%	406	382	-24	-6.0%
43.2%	398	368	-30	-7.6%
44.4%	395	366	-29	-7.3%
45.7%	386	366	-20	-5.2%
46.9%	378	359	-18	-4.9%
48.1%	369	349	-20	-5.5%
49.4%	366	343	-24	-6.5%
50.6%	363	339	-24	-6.6%
51.9%	361	339	-22	-6.2%
53.1%	351	335	-16	-4.5%
54.3%	345	330	-16	-4.5%
55.6%	344	328	-16	-4.5%
56.8%	340	327	-13	-3.9%
58.0%	329	324	-5	-1.6%
59.3%	313	318	5	1.5%
60.5%	310	314	4	1.4%
61.7%	299	306	7	2.4%
63.0%	296	303	7	2.4%
64.2%	291	292	1	0.5%
65.4%	287	287	0	0.0%
66.7%	286	287	1	0.2%
67.9%	285	274	-11	-3.8%
69.1%	279	274	-5	-1.8%
70.4%	279	272	-7	-2.5%
71.6%	275	269	-6	-2.0%
72.8%	275	257	-18	-6.4%
74.1%	273	244	-28	-10.4%
75.3%	248	234	-14	-5.6%
76.5%	246	232	-14	-5.8%
77.8%	244	228	-16	-6.7%
79.0%	231	218	-13	-5.6%
80.2%	231	216	-16	-6.7%
81.5%	227	197	-31	-13.5%
82.7%	222	192	-30	-13.4%
84.0%	220	189	-31	-14.1%
85.2%	217	186	-31	-14.2%
86.4%	211	186	-25	-11.9%
87.7%	198	180	-18	-9.2%
88.9%	190	167	-23	-12.1%
90.1%	182	157	-25	-13.8%
91.4%	133	154	21	15.7%
92.6%	133	152	19	14.4%
93.8%	133	142	10	7.4%
95.1%	130	141	11	8.6%
96.3%	115	119	5	3.9%
97.5%	114	111	-3	-2.6%
98.8%	81	96	15	19.0%
100.0%	77	78	2	2.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	999	999	0	0.0%
1.2%	935	947	11	1.2%
2.5%	857	859	2	0.3%
3.7%	672	660	-12	-1.7%
4.9%	613	593	-21	-3.4%
6.2%	591	559	-32	-5.5%
7.4%	566	551	-15	-2.6%
8.6%	557	544	-12	-2.2%
9.9%	545	512	-33	-6.1%
11.1%	541	505	-36	-6.7%
12.3%	539	496	-43	-7.9%
13.6%	536	490	-46	-8.5%
14.8%	524	484	-40	-7.6%
16.0%	514	479	-34	-6.7%
17.3%	506	474	-32	-6.2%
18.5%	502	465	-37	-7.3%
19.8%	495	448	-47	-9.4%
21.0%	484	442	-42	-8.8%
22.2%	478	441	-37	-7.6%
23.5%	472	439	-32	-6.8%
24.7%	466	437	-29	-6.2%
25.9%	462	434	-28	-6.0%
27.2%	450	433	-17	-3.8%
28.4%	450	419	-31	-6.8%
29.6%	439	401	-38	-8.6%
30.9%	439	397	-41	-9.4%
32.1%	423	395	-28	-6.6%
33.3%	408	391	-17	-4.2%
34.6%	402	389	-12	-3.1%
35.8%	397	389	-7	-1.9%
37.0%	392	388	-4	-1.1%
38.3%	389	378	-11	-2.8%
39.5%	367	375	8	2.1%
40.7%	363	371	8	2.3%
42.0%	362	367	5	1.4%
43.2%	357	351	-6	-1.6%
44.4%	345	348	3	1.0%
45.7%	343	345	2	0.6%
46.9%	338	336	-3	-0.8%
48.1%	338	335	-3	-1.0%
49.4%	337	328	-9	-2.8%
50.6%	325	321	-3	-1.0%
51.9%	322	311	-12	-3.6%
53.1%	321	304	-17	-5.2%
54.3%	307	300	-7	-2.4%
55.6%	267	282	14	5.4%
56.8%	252	280	28	11.1%
58.0%	243	277	34	14.0%
59.3%	242	239	-3	-1.2%
60.5%	229	222	-7	-2.9%
61.7%	226	218	-8	-3.3%
63.0%	221	217	-4	-1.7%
64.2%	212	216	4	2.1%
65.4%	203	214	11	5.3%
66.7%	198	210	12	6.2%
67.9%	197	201	3	1.8%
69.1%	194	187	-7	-3.5%
70.4%	194	186	-8	-3.9%
71.6%	193	183	-10	-5.3%
72.8%	190	179	-11	-5.9%
74.1%	186	174	-12	-6.2%
75.3%	183	174	-9	-5.2%
76.5%	174	172	-2	-1.3%
77.8%	174	169	-5	-2.8%
79.0%	170	169	-2	-1.0%
80.2%	167	163	-4	-2.3%
81.5%	153	151	-2	-1.1%
82.7%	151	149	-2	-1.4%
84.0%	150	145	-5	-3.2%
85.2%	134	140	6	4.4%
86.4%	128	112	-16	-12.7%
87.7%	83	103	20	23.5%
88.9%	80	101	20	25.3%
90.1%	72	98	26	35.9%
91.4%	68	86	18	26.1%
92.6%	67	66	-2	-2.4%
93.8%	63	66	3	4.7%
95.1%	62	65	3	4.8%
96.3%	62	62	0	-0.4%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,016	1,016	0	0.0%
1.2%	909	922	13	1.4%
2.5%	806	809	3	0.4%
3.7%	694	686	-8	-1.2%
4.9%	638	625	-12	-1.9%
6.2%	621	618	-3	-0.5%
7.4%	611	571	-40	-6.5%
8.6%	591	554	-38	-6.4%
9.9%	587	541	-47	-7.9%
11.1%	573	535	-38	-6.6%
12.3%	553	534	-20	-3.5%
13.6%	551	533	-18	-3.2%
14.8%	546	531	-16	-2.8%
16.0%	544	529	-15	-2.7%
17.3%	541	512	-29	-5.3%
18.5%	537	503	-35	-6.5%
19.8%	521	502	-19	-3.6%
21.0%	512	492	-20	-4.0%
22.2%	511	483	-28	-5.5%
23.5%	504	476	-28	-5.6%
24.7%	501	472	-29	-5.8%
25.9%	499	471	-29	-5.8%
27.2%	496	451	-45	-9.1%
28.4%	489	449	-40	-8.1%
29.6%	464	438	-26	-5.6%
30.9%	458	430	-28	-6.1%
32.1%	455	417	-38	-8.4%
33.3%	439	406	-33	-7.4%
34.6%	415	398	-17	-4.1%
35.8%	414	394	-20	-4.8%
37.0%	406	394	-12	-3.0%
38.3%	405	393	-12	-2.9%
39.5%	394	393	-1	-0.2%
40.7%	390	390	0	0.0%
42.0%	387	386	-1	-0.2%
43.2%	386	379	-7	-1.9%
44.4%	383	371	-11	-2.9%
45.7%	378	371	-7	-1.9%
46.9%	377	362	-15	-4.0%
48.1%	371	358	-13	-3.6%
49.4%	356	338	-17	-4.9%
50.6%	336	336	0	-0.1%
51.9%	319	324	5	1.6%
53.1%	316	316	-1	-0.2%
54.3%	304	316	12	3.8%
55.6%	302	306	4	1.3%
56.8%	295	294	-1	-0.4%
58.0%	292	285	-7	-2.4%
59.3%	284	282	-2	-0.8%
60.5%	281	279	-2	-0.8%
61.7%	276	269	-7	-2.5%
63.0%	247	262	15	6.2%
64.2%	242	252	10	4.1%
65.4%	239	243	4	1.8%
66.7%	235	243	7	3.2%
67.9%	229	235	6	2.7%
69.1%	208	227	19	9.0%
70.4%	205	204	-2	-0.9%
71.6%	205	187	-18	-9.0%
72.8%	198	186	-12	-6.0%
74.1%	179	185	6	3.4%
75.3%	179	175	-4	-2.1%
76.5%	140	164	24	16.9%
77.8%	140	144	4	3.1%
79.0%	137	142	5	4.0%
80.2%	104	136	32	30.3%
81.5%	88	126	38	43.0%
82.7%	81	125	44	54.1%
84.0%	75	121	45	60.3%
85.2%	55	115	60	108.3%
86.4%	55	110	55	100.0%
87.7%	55	95	40	73.0%
88.9%	55	86	31	56.3%
90.1%	55	83	28	51.5%
91.4%	55	66	11	20.7%
92.6%	55	55	0	0.0%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

Sacramento-San Joaquin Delta Operations
Summary Tables and Bar Charts

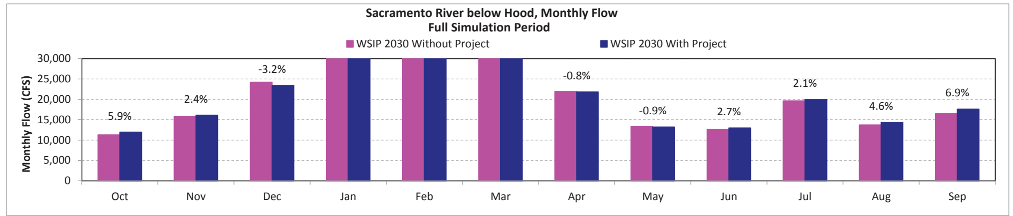
Table SW-30-a
Sacramento River below Hood, Monthly Flow
Long-term Average and Average by Water Year Type

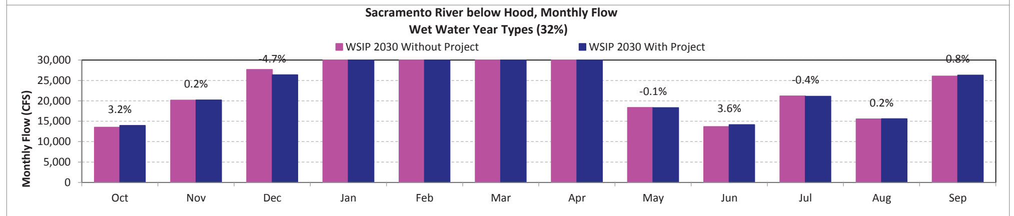
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	11,298	15,756	24,214	34,006	41,580	35,136	21,981	13,343	12,622	19,599	13,737	16,495
WSIP 2030 With Project	11,970	16,130	23,441	32,748	40,419	33,846	21,812	13,221	12,967	20,017	14,366	17,627
Difference	672	374	-774	-1,257	-1,161	-1,290	-170	-123	345	418	629	1,132
Percent Difference[3]	5.9%	2.4%	-3.2%	-3.7%	-2.8%	-3.7%	-0.8%	-0.9%	2.7%	2.1%	4.6%	6.9%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	13,496	20,140	27,657	56,120	63,839	51,935	36,579	18,334	13,662	21,180	15,551	26,069
WSIP 2030 With Project	13,930	20,182	26,370	55,304	63,408	51,188	36,138	18,323	14,150	21,103	15,587	26,282
Difference	434	42	-1,287	-817	-431	-746	-441	-12	487	-77	37	213
Percent Difference	3.2%	0.2%	-4.7%	-1.5%	-0.7%	-1.4%	-1.2%	-0.1%	3.6%	-0.4%	0.2%	0.8%
Above Normal (14.6%)												
WSIP 2030 Without Project	12,670	17,961	22,790	43,213	50,832	45,704	22,237	14,655	13,087	22,476	16,115	19,034
WSIP 2030 With Project	12,996	18,293	21,895	41,697	49,616	44,738	21,904	14,394	13,105	23,061	16,199	19,666
Difference	326	332	-895	-1,516	-1,216	-966	-333	-261	18	585	84	632
Percent Difference	2.6%	1.8%	-3.9%	-3.5%	-2.4%	-2.1%	-1.5%	-1.8%	0.1%	2.6%	0.5%	3.3%
Below Normal (20.7%)												
WSIP 2030 Without Project	10,343	12,993	23,077	23,768	32,425	29,039	18,041	11,847	12,809	22,581	15,237	12,008
WSIP 2030 With Project	11,644	13,661	23,571	21,806	31,521	27,168	17,863	11,546	13,027	22,696	16,025	13,825
Difference	1,301	669	494	-1,962	-904	-1,871	-178	-301	218	115	787	1,816
Percent Difference	12.6%	5.1%	2.1%	-8.3%	-2.8%	-6.4%	-1.0%	-2.5%	1.7%	0.5%	5.2%	15.1%
Dry (19.5%)												
WSIP 2030 Without Project	11,490	16,213	29,071	17,737	27,724	22,990	11,918	10,218	12,499	17,185	11,494	10,938
WSIP 2030 With Project	12,252	16,850	28,351	16,453	25,265	20,957	11,989	10,124	12,801	18,251	12,879	12,897
Difference	761	637	-720	-1,284	-2,459	-2,033	71	-94	302	1,066	1,385	1,959
Percent Difference	6.6%	3.9%	-2.5%	-7.2%	-8.9%	-8.8%	0.6%	-0.9%	2.4%	6.2%	12.0%	17.9%
Critical (14.6%)												
WSIP 2030 Without Project	6,446	7,726	13,601	14,922	17,402	14,406	10,316	7,919	9,888	12,420	8,446	7,777
WSIP 2030 With Project	6,947	8,064	12,150	14,038	16,140	13,472	10,565	7,919	10,503	13,271	9,624	9,249
Difference	501	338	-1,451	-884	-1,262	-934	249	0	616	851	1,178	1,472
Percent Difference	7.8%	4.4%	-10.7%	-5.9%	-7.3%	-6.5%	2.4%	0.0%	6.2%	6.9%	14.0%	18.9%

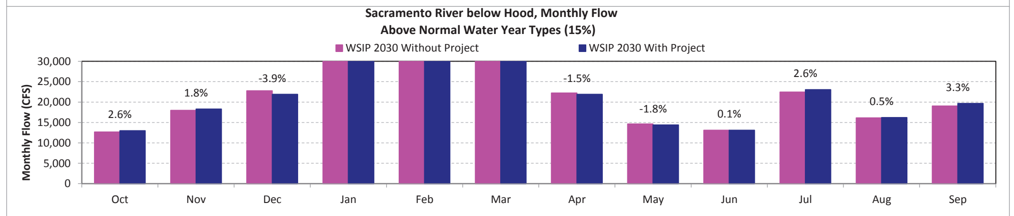
1 Based on the 82-year simulation period

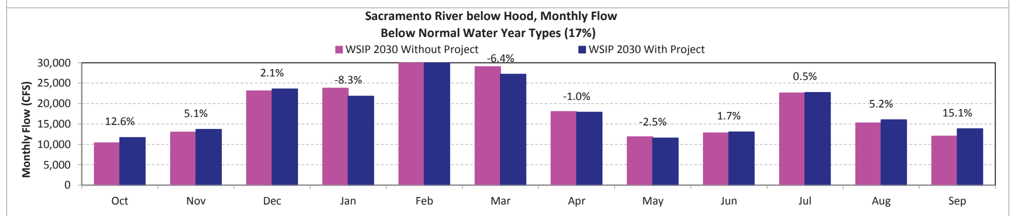
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

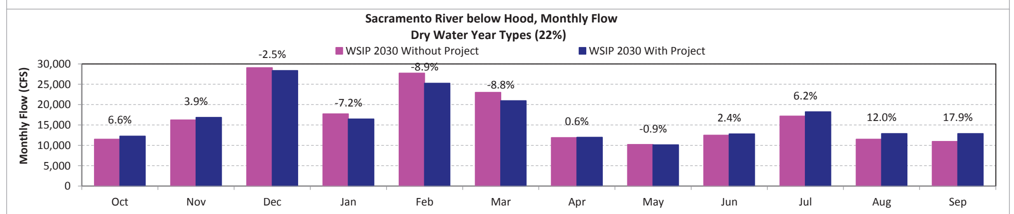
3 Relative difference of the monthly average











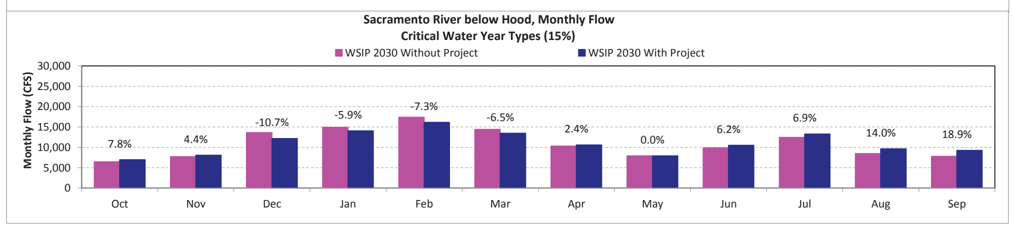


Table SW-31-a
Yolo Bypass, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	227	456	4,223	12,025	17,725	9,988	2,576	139	82	48	107	90
WSIP 2030 With Project	457	444	4,010	11,463	17,043	9,495	2,471	130	82	53	273	331
Difference	230	-11	-213	-562	-682	-493	-104	-9	1	5	166	241
Percent Difference[3]		-2.5%	-5.0%	-4.7%	-3.8%	-4.9%	-4.0%					
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	88	531	4,276	33,937	46,143	25,531	7,055	240	117	48	150	135
WSIP 2030 With Project	365	447	4,226	32,800	45,176	24,679	6,882	210	120	48	307	447
Difference	277	-84	-50	-1,137	-967	-852	-173	-31	3	0	156	312
Percent Difference			-1.2%	-3.4%	-2.1%	-3.3%	-2.5%					
Above Normal (14.6%)												
WSIP 2030 Without Project	39	970	3,154	8,997	14,753	11,228	1,327	185	66	48	95	67
WSIP 2030 With Project	345	965	2,622	7,910	13,569	10,755	1,120	185	66	80	355	423
Difference	306	-5	-532	-1,087	-1,184	-473	-206	0	0	32	260	356
Percent Difference		-0.6%	-16.9%	-12.1%	-8.0%	-4.2%	-15.6%					
Below Normal (20.7%)												
WSIP 2030 Without Project	41	138	3,398	1,274	5,193	1,403	756	76	66	48	103	80
WSIP 2030 With Project	272	145	3,191	1,070	4,455	1,092	653	76	66	48	287	357
Difference	230	7	-207	-204	-738	-311	-103	0	0	0	184	276
Percent Difference		5.3%	-6.1%	-16.0%	-14.2%	-22.2%	-13.6%					
Dry (19.5%)												
WSIP 2030 Without Project	923	614	8,664	258	1,886	1,162	299	67	67	48	63	65
WSIP 2030 With Project	1,192	683	8,349	192	1,574	796	299	67	67	48	282	233
Difference	269	70	-315	-66	-312	-366	0	0	0	0	220	168
Percent Difference	29.1%	11.3%	-3.6%	-25.7%	-16.5%	-31.5%	0.0%					
Critical (14.6%)												
WSIP 2030 Without Project	41	22	432	320	363	300	107	68	64	48	92	67
WSIP 2030 With Project	45	22	327	314	364	108	107	68	64	48	87	96
Difference	4	0	-105	-6	0	-192	0	0	0	0	-5	29
Percent Difference	8.6%	-1.0%	-24.3%	-1.8%	0.1%	-64.1%	0.0%	0.0%	0.0%	0.0%	-5.9%	43.6%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

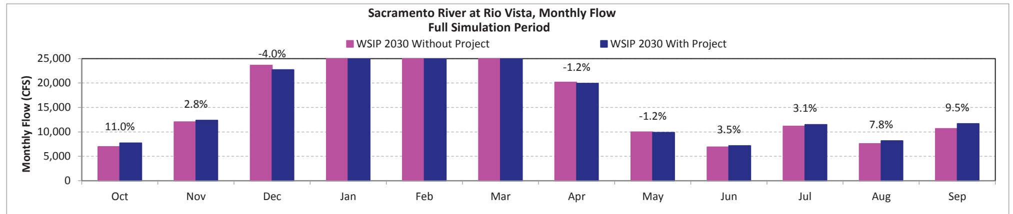
Table SW-32-a
Sacramento River at Rio Vista, Monthly Flow
Long-term Average and Average by Water Year Type

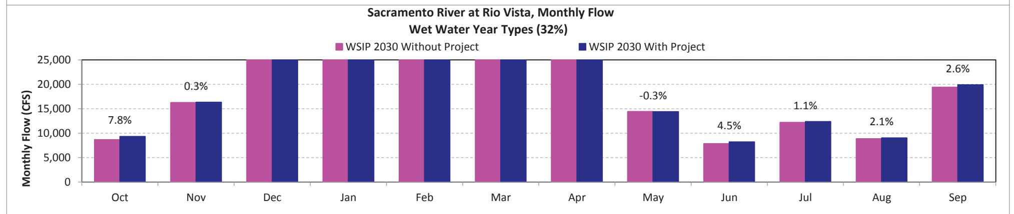
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,965	12,054	23,666	40,883	53,054	39,355	20,195	10,000	6,921	11,159	7,599	10,669
WSIP 2030 With Project	7,733	12,394	22,720	39,229	51,362	37,742	19,944	9,885	7,165	11,506	8,194	11,685
Difference	768	339	-945	-1,654	-1,692	-1,612	-252	-115	243	347	595	1,016
Percent Difference[3]	11.0%	2.8%	-4.0%	-4.0%	-3.2%	-4.1%	-1.2%	-1.2%	3.5%	3.1%	7.8%	9.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	8,664	16,284	26,646	82,489	100,991	69,664	37,460	14,454	7,855	12,226	8,863	19,413
WSIP 2030 With Project	9,338	16,327	25,373	80,643	99,650	68,163	36,904	14,414	8,206	12,363	9,045	19,910
Difference	674	43	-1,273	-1,846	-1,341	-1,500	-556	-41	351	136	182	497
Percent Difference	7.8%	0.3%	-4.8%	-2.2%	-1.3%	-2.2%	-1.5%	-0.3%	4.5%	1.1%	2.1%	2.6%
Above Normal (14.6%)												
WSIP 2030 Without Project	7,567	14,332	21,282	46,023	58,321	49,712	19,131	11,177	7,160	13,108	9,223	11,378
WSIP 2030 With Project	8,275	14,634	19,902	43,619	56,080	48,401	18,636	10,950	7,172	13,538	9,544	12,165
Difference	708	302	-1,380	-2,404	-2,240	-1,312	-495	-227	12	430	320	787
Percent Difference	9.4%	2.1%	-6.5%	-5.2%	-3.8%	-2.6%	-2.6%	-2.0%	0.2%	3.3%	3.5%	6.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	5,715	9,112	21,800	20,996	32,460	25,438	14,912	8,640	6,958	13,170	8,633	6,647
WSIP 2030 With Project	7,005	9,688	21,982	19,088	30,938	23,502	14,654	8,378	7,110	13,248	9,351	8,161
Difference	1,290	576	182	-1,907	-1,523	-1,936	-257	-261	152	78	718	1,514
Percent Difference	22.6%	6.3%	0.8%	-9.1%	-4.7%	-7.6%	-1.7%	-3.0%	2.2%	0.6%	8.3%	22.8%
Dry (19.5%)												
WSIP 2030 Without Project	8,109	12,531	32,562	14,650	25,065	19,882	9,144	7,189	6,716	9,527	5,999	5,893
WSIP 2030 With Project	8,880	13,200	31,620	13,469	22,612	17,755	9,206	7,108	6,924	10,253	7,162	7,379
Difference	771	669	-942	-1,182	-2,452	-2,127	62	-81	208	726	1,163	1,485
Percent Difference	9.5%	5.3%	-2.9%	-8.1%	-9.8%	-10.7%	0.7%	-1.1%	3.1%	7.6%	19.4%	25.2%
Critical (14.6%)												
WSIP 2030 Without Project	3,072	4,498	10,620	12,214	14,409	11,531	7,511	5,217	4,961	6,313	4,013	3,809
WSIP 2030 With Project	3,352	4,716	9,190	11,441	13,311	10,530	7,727	5,220	5,387	6,891	4,813	4,803
Difference	280	218	-1,430	-773	-1,099	-1,001	216	3	426	578	800	994
Percent Difference	9.1%	4.8%	-13.5%	-6.3%	-7.6%	-8.7%	2.9%	0.1%	8.6%	9.1%	19.9%	26.1%

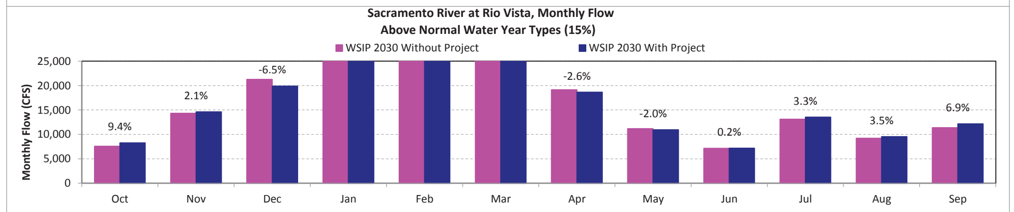
1 Based on the 82-year simulation period

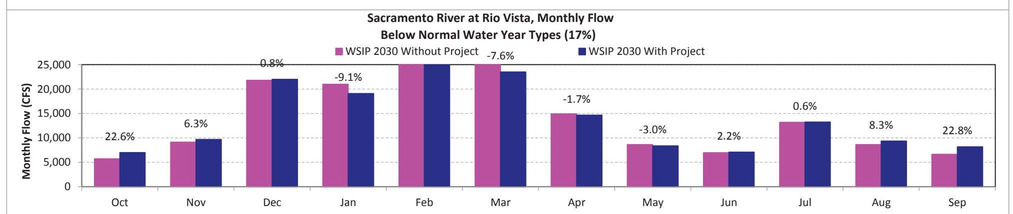
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

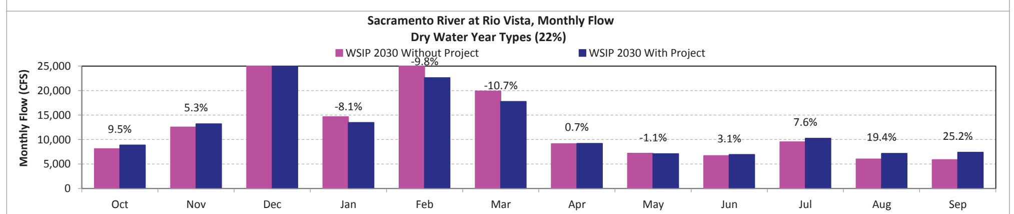
3 Relative difference of the monthly average











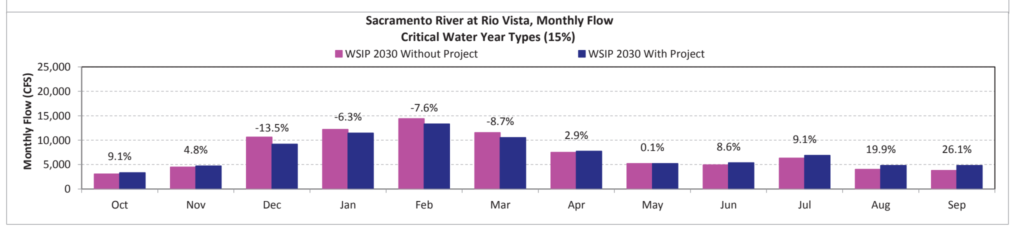


Table SW-33-a
Sacramento/San Joaquin River Delta, Monthly Outflow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Outflow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,897	11,525	25,347	48,708	63,736	48,732	29,976	16,061	7,978	8,475	4,067	9,332
WSIP 2030 With Project	7,372	11,482	24,296	46,938	62,116	47,046	29,695	15,918	8,308	8,473	4,276	9,752
Difference	475	-43	-1,051	-1,770	-1,620	-1,686	-281	-143	329	-1	209	420
Percent Difference[3]	6.9%	-0.4%	-4.1%	-3.6%	-2.5%	-3.5%	-0.9%	-0.9%	4.1%	0.0%	5.2%	4.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	9,646	17,082	28,927	101,465	121,221	88,368	55,531	26,691	10,581	11,013	4,127	19,384
WSIP 2030 With Project	9,915	16,747	27,543	99,569	119,831	86,742	54,863	26,625	11,008	10,892	4,275	19,735
Difference	269	-335	-1,384	-1,896	-1,390	-1,626	-668	-65	426	-121	148	351
Percent Difference	2.8%	-2.0%	-4.8%	-1.9%	-1.1%	-1.8%	-1.2%	-0.2%	4.0%	-1.1%	3.6%	1.8%
Above Normal (14.6%)												
WSIP 2030 Without Project	7,344	13,104	19,548	55,217	70,662	61,187	29,671	17,395	7,373	11,452	4,021	11,133
WSIP 2030 With Project	7,671	13,208	18,032	52,802	68,726	59,805	29,125	17,103	7,294	11,682	4,271	11,536
Difference	327	104	-1,516	-2,416	-1,937	-1,382	-546	-292	-79	230	250	403
Percent Difference	4.5%	0.8%	-7.8%	-4.4%	-2.7%	-2.3%	-1.8%	-1.7%	-1.1%	2.0%	6.2%	3.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	4,369	7,100	22,973	23,888	40,056	31,116	23,204	13,261	6,814	8,794	4,050	3,455
WSIP 2030 With Project	5,269	7,201	23,192	21,734	38,929	29,045	22,923	12,957	7,025	8,735	4,311	4,174
Difference	899	101	220	-2,155	-1,127	-2,071	-281	-305	211	-59	260	718
Percent Difference	20.6%	1.4%	1.0%	-9.0%	-2.8%	-6.7%	-1.2%	-2.3%	3.1%	-0.7%	6.4%	20.8%
Dry (19.5%)												
WSIP 2030 Without Project	7,835	11,915	37,913	15,422	29,434	22,586	13,147	8,960	7,006	5,278	4,142	3,262
WSIP 2030 With Project	8,403	12,269	36,559	14,086	26,700	20,500	13,240	8,856	7,301	5,255	4,502	3,663
Difference	568	354	-1,354	-1,336	-2,733	-2,086	93	-104	295	-23	360	401
Percent Difference	7.2%	3.0%	-3.6%	-8.7%	-9.3%	-9.2%	0.7%	-1.2%	4.2%	-0.4%	8.7%	12.3%
Critical (14.6%)												
WSIP 2030 Without Project	3,054	4,116	10,299	11,834	16,331	13,518	9,070	6,014	6,106	4,020	3,908	3,010
WSIP 2030 With Project	3,380	3,801	9,009	10,937	15,336	12,481	9,365	6,037	6,855	4,147	3,933	3,193
Difference	326	-316	-1,290	-897	-995	-1,037	295	23	749	127	25	183
Percent Difference	10.7%	-7.7%	-12.5%	-7.6%	-6.1%	-7.7%	3.3%	0.4%	12.3%	3.2%	0.6%	6.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-34-a
Delta Cross Channel, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	4,184	3,887	4,674	5,577	6,574	5,726	3,995	2,858	4,741	7,341	5,473	5,389
WSIP 2030 With Project	4,301	3,903	4,630	5,412	6,421	5,556	3,972	2,842	4,841	7,416	5,673	5,737
Difference	117	16	-44	-165	-153	-170	-22	-16	100	75	201	349
Percent Difference[3]	2.8%	0.4%	-0.9%	-3.0%	-2.3%	-3.0%	-0.6%	-0.6%	2.1%	1.0%	3.7%	6.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	4,493	4,126	5,148	8,487	9,503	7,937	5,916	3,515	4,904	7,845	6,051	6,245
WSIP 2030 With Project	4,531	4,041	5,084	8,380	9,446	7,838	5,858	3,513	5,042	7,630	6,062	6,273
Difference	38	-85	-64	-107	-57	-98	-58	-2	138	-215	12	28
Percent Difference	0.8%	-2.1%	-1.3%	-1.3%	-0.6%	-1.2%	-1.0%	0.0%	2.8%	-2.7%	0.2%	0.4%
Above Normal (14.6%)												
WSIP 2030 Without Project	4,731	4,308	4,574	6,789	7,791	7,117	4,028	3,031	4,940	8,258	6,230	7,161
WSIP 2030 With Project	4,656	4,332	4,529	6,589	7,631	6,990	3,985	2,996	4,945	8,444	6,257	7,362
Difference	-75	25	-45	-200	-160	-127	-44	-34	5	186	27	202
Percent Difference	-1.6%	0.6%	-1.0%	-2.9%	-2.1%	-1.8%	-1.1%	-1.1%	0.1%	2.3%	0.4%	2.8%
Below Normal (20.7%)												
WSIP 2030 Without Project	4,271	3,731	4,553	4,230	5,369	4,924	3,476	2,661	4,858	8,291	5,951	4,922
WSIP 2030 With Project	4,507	3,830	4,653	3,972	5,250	4,677	3,453	2,622	4,922	8,328	6,202	5,500
Difference	236	100	100	-258	-119	-246	-23	-40	64	37	251	579
Percent Difference	5.5%	2.7%	2.2%	-6.1%	-2.2%	-5.0%	-0.7%	-1.5%	1.3%	0.4%	4.2%	11.8%
Dry (19.5%)												
WSIP 2030 Without Project	3,975	4,042	5,174	3,436	4,750	4,127	2,670	2,447	4,767	6,572	4,758	4,580
WSIP 2030 With Project	4,211	4,063	5,072	3,267	4,427	3,860	2,680	2,434	4,856	6,911	5,199	5,205
Difference	235	21	-102	-169	-324	-267	9	-12	89	340	441	624
Percent Difference	5.9%	0.5%	-2.0%	-4.9%	-6.8%	-6.5%	0.4%	-0.5%	1.9%	5.2%	9.3%	13.6%
Critical (14.6%)												
WSIP 2030 Without Project	3,149	2,984	3,292	3,066	3,392	2,998	2,460	2,144	4,000	5,053	3,786	3,573
WSIP 2030 With Project	3,295	3,078	3,167	2,949	3,226	2,875	2,492	2,144	4,181	5,324	4,162	4,042
Difference	146	94	-125	-116	-166	-123	33	0	181	271	376	469
Percent Difference	4.6%	3.2%	-3.8%	-3.8%	-4.9%	-4.1%	1.3%	0.0%	4.5%	5.4%	9.9%	13.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-35-a
Old and Middle River, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	-5,543	-6,584	-5,724	-3,122	-2,435	-2,307	1,083	498	-3,577	-8,666	-8,261	-7,029
WSIP 2030 With Project	-5,922	-6,952	-5,780	-3,079	-2,225	-2,216	1,079	490	-3,585	-9,064	-8,807	-7,905
Difference	-379	-367	-56	43	209	91	-4	-8	-8	-398	-546	-876
Percent Difference[3]							-0.3%	-1.5%				
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	-5,333	-6,563	-6,309	-1,209	-1,428	-460	3,141	2,275	-4,188	-8,628	-10,318	-7,348
WSIP 2030 With Project	-5,736	-6,830	-6,353	-1,150	-1,416	-472	3,099	2,256	-4,237	-8,671	-10,373	-7,501
Difference	-402	-267	-44	59	12	-12	-43	-19	-48	-43	-55	-154
Percent Difference							-1.4%	-0.8%				
Above Normal (14.6%)												
WSIP 2030 Without Project	-6,364	-7,229	-7,609	-3,503	-2,998	-3,154	1,404	739	-4,335	-8,481	-10,506	-7,277
WSIP 2030 With Project	-6,650	-7,439	-7,688	-3,314	-2,541	-3,098	1,401	722	-4,428	-8,776	-10,606	-7,875
Difference	-286	-209	-79	189	457	56	-3	-17	-93	-295	-100	-598
Percent Difference							-0.2%	-2.2%				
Below Normal (20.7%)												
WSIP 2030 Without Project	-6,769	-7,331	-5,520	-3,637	-2,729	-3,492	556	124	-4,034	-10,690	-9,461	-8,128
WSIP 2030 With Project	-7,348	-7,858	-5,579	-3,637	-2,245	-3,390	554	122	-4,039	-10,855	-10,119	-9,390
Difference	-578	-527	-59	0	484	102	-2	-2	-4	-165	-658	-1,262
Percent Difference							-0.4%	-1.5%				
Dry (19.5%)												
WSIP 2030 Without Project	-5,335	-6,975	-4,339	-4,283	-2,965	-3,436	-314	-865	-3,058	-9,010	-5,848	-7,045
WSIP 2030 With Project	-5,747	-7,282	-4,624	-4,283	-2,926	-3,150	-295	-875	-3,059	-10,050	-6,994	-8,618
Difference	-412	-307	-285	0	39	286	19	-10	-1	-1,040	-1,146	-1,573
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	-3,910	-4,322	-4,577	-4,346	-2,677	-1,970	-918	-1,008	-1,542	-5,705	-3,213	-4,274
WSIP 2030 With Project	-4,019	-4,918	-4,335	-4,352	-2,427	-1,901	-873	-990	-1,398	-6,357	-4,279	-5,507
Difference	-109	-596	242	-5	250	69	44	18	145	-652	-1,065	-1,233
Percent Difference												

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

Table SW-36-a
Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,259	7,460	8,597	7,027	7,176	7,107	2,522	2,253	4,350	9,121	8,735	7,889
WSIP 2030 With Project	6,664	7,843	8,656	6,978	6,945	7,004	2,521	2,256	4,356	9,548	9,324	8,838
Difference	405	382	59	-49	-231	-103	0	3	7	426	588	948
Percent Difference[3]	6.5%	5.1%	0.7%	-0.7%	-3.2%	-1.4%	0.0%	0.1%	0.2%	4.7%	6.7%	12.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	6,257	7,701	10,130	9,133	10,219	9,438	3,467	3,483	6,668	10,069	11,324	8,520
WSIP 2030 With Project	6,686	7,981	10,173	9,067	10,195	9,445	3,498	3,482	6,712	10,125	11,370	8,694
Difference	429	279	44	-66	-24	7	30	-1	44	57	46	173
Percent Difference	6.9%	3.6%	0.4%	-0.7%	-0.2%	0.1%	0.9%	0.0%	0.7%	0.6%	0.4%	2.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	7,004	8,219	9,807	7,425	8,266	9,155	2,321	1,728	5,043	8,920	11,245	8,337
WSIP 2030 With Project	7,310	8,421	9,899	7,249	7,803	9,092	2,320	1,724	5,139	9,295	11,345	8,938
Difference	306	202	92	-176	-463	-63	-2	-4	96	376	99	602
Percent Difference	4.4%	2.5%	0.9%	-2.4%	-5.6%	-0.7%	-0.1%	-0.2%	1.9%	4.2%	0.9%	7.2%
Below Normal (20.7%)												
WSIP 2030 Without Project	7,523	8,143	7,968	5,601	6,306	6,682	2,491	1,851	4,189	10,826	9,889	9,027
WSIP 2030 With Project	8,131	8,670	8,007	5,580	5,782	6,570	2,489	1,850	4,194	11,005	10,601	10,398
Difference	608	527	39	-21	-524	-112	-3	-1	5	179	712	1,371
Percent Difference	8.1%	6.5%	0.5%	-0.4%	-8.3%	-1.7%	-0.1%	0.0%	0.1%	1.6%	7.2%	15.2%
Dry (19.5%)												
WSIP 2030 Without Project	5,900	7,851	8,111	5,949	4,922	5,401	1,914	1,689	2,873	8,938	5,927	7,786
WSIP 2030 With Project	6,329	8,174	8,425	5,945	4,884	5,088	1,906	1,713	2,875	10,024	7,171	9,486
Difference	429	322	314	-3	-39	-314	-8	24	2	1,086	1,244	1,700
Percent Difference	7.3%	4.1%	3.9%	-0.1%	-0.8%	-5.8%	-0.4%	1.4%	0.1%	12.2%	21.0%	21.8%
Critical (14.6%)												
WSIP 2030 Without Project	4,205	4,711	5,735	5,700	3,983	3,079	1,604	1,537	1,021	5,178	2,944	4,652
WSIP 2030 With Project	4,343	5,364	5,480	5,712	3,709	3,004	1,555	1,534	870	5,897	4,102	5,962
Difference	137	653	-254	13	-274	-76	-49	-3	-151	718	1,157	1,310
Percent Difference	3.3%	13.9%	-4.4%	0.2%	-6.9%	-2.5%	-3.1%	-0.2%	-14.8%	13.9%	39.3%	28.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

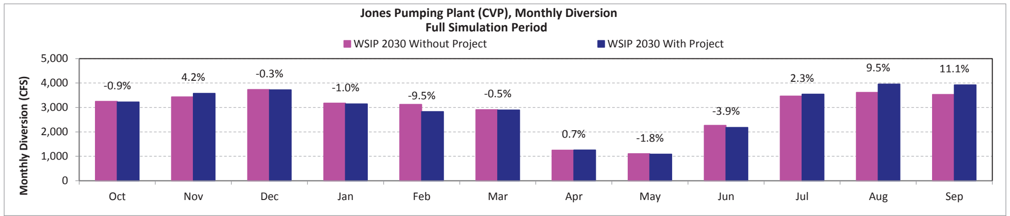
Table SW-37-a
Jones Pumping Plant (CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

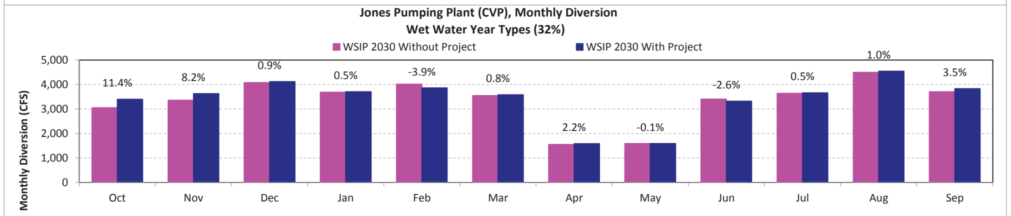
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	3,250	3,433	3,732	3,179	3,126	2,912	1,250	1,107	2,269	3,465	3,614	3,532
WSIP 2030 With Project	3,221	3,576	3,722	3,146	2,828	2,897	1,258	1,088	2,181	3,545	3,958	3,923
Difference	-29	143	-10	-33	-298	-15	8	-20	-88	80	344	391
Percent Difference[3]	-0.9%	4.2%	-0.3%	-1.0%	-9.5%	-0.5%	0.7%	-1.8%	-3.9%	2.3%	9.5%	11.1%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	3,052	3,356	4,080	3,690	4,016	3,552	1,553	1,591	3,407	3,643	4,496	3,704
WSIP 2030 With Project	3,399	3,631	4,117	3,708	3,861	3,581	1,586	1,590	3,320	3,662	4,542	3,833
Difference	348	274	36	18	-155	28	33	-2	-87	19	46	129
Percent Difference	11.4%	8.2%	0.9%	0.5%	-3.9%	0.8%	2.2%	-0.1%	-2.6%	0.5%	1.0%	3.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	3,257	3,258	4,198	3,233	3,611	3,676	1,169	893	2,895	2,686	4,387	3,606
WSIP 2030 With Project	3,398	3,425	4,202	3,089	3,206	3,629	1,168	891	2,750	3,124	4,486	3,997
Difference	141	167	4	-145	-405	-47	-1	-2	-146	438	99	391
Percent Difference	4.3%	5.1%	0.1%	-4.5%	-11.2%	-1.3%	-0.1%	-0.2%	-5.0%	16.3%	2.3%	10.8%
Below Normal (20.7%)												
WSIP 2030 Without Project	3,675	3,900	3,643	2,800	2,825	2,760	1,245	943	2,101	4,104	3,552	3,797
WSIP 2030 With Project	3,490	3,946	3,635	2,790	2,236	2,725	1,237	946	2,069	4,213	3,948	4,425
Difference	-185	46	-8	-10	-589	-36	-8	4	-32	109	396	628
Percent Difference	-5.0%	1.2%	-0.2%	-0.4%	-20.9%	-1.3%	-0.7%	0.4%	-1.5%	2.7%	11.2%	16.5%
Dry (19.5%)												
WSIP 2030 Without Project	3,446	3,659	3,628	3,013	2,488	2,618	1,046	863	1,460	3,557	2,882	3,523
WSIP 2030 With Project	3,126	3,668	3,609	3,008	2,470	2,576	1,053	803	1,360	3,784	3,584	4,093
Difference	-320	9	-19	-5	-18	-42	7	-60	-100	227	702	570
Percent Difference	-9.3%	0.3%	-0.5%	-0.2%	-0.7%	-1.6%	0.6%	-6.9%	-6.8%	6.4%	24.4%	16.2%
Critical (14.6%)												
WSIP 2030 Without Project	2,795	2,807	2,806	2,815	2,064	1,421	978	873	585	2,846	2,070	2,735
WSIP 2030 With Project	2,418	2,969	2,697	2,720	1,614	1,415	969	819	492	2,456	2,728	3,101
Difference	-377	162	-109	-95	-450	-6	-9	-55	-93	-389	658	366
Percent Difference	-13.5%	5.8%	-3.9%	-3.4%	-21.8%	-0.4%	-0.9%	-6.3%	-15.9%	-13.7%	31.8%	13.4%

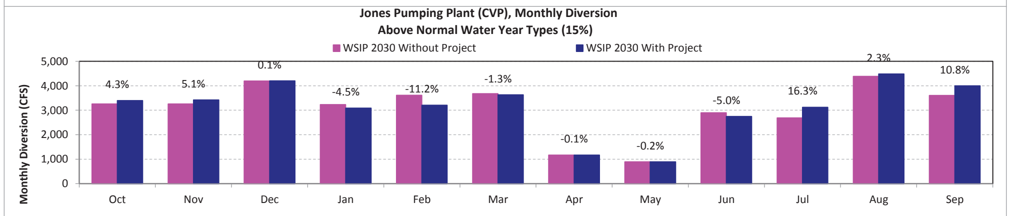
1 Based on the 82-year simulation period

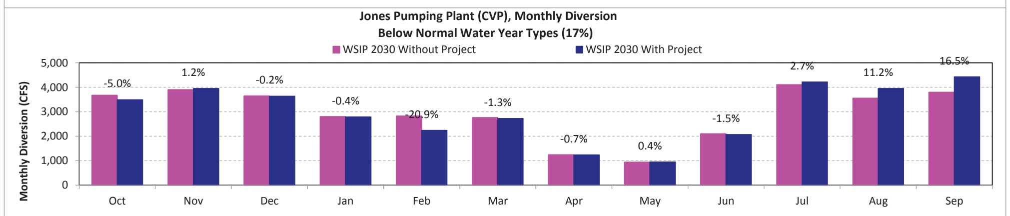
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

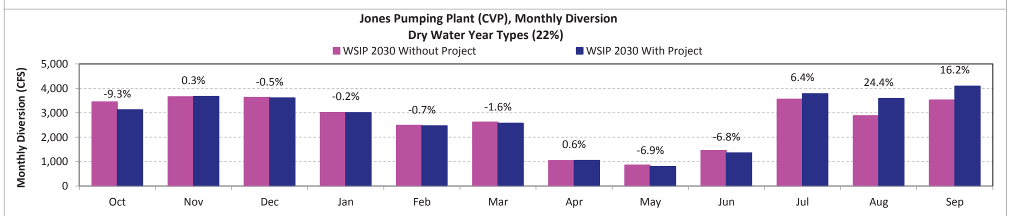
3 Relative difference of the monthly average











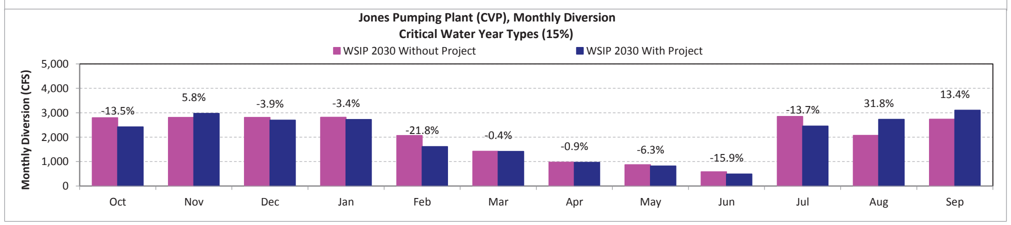


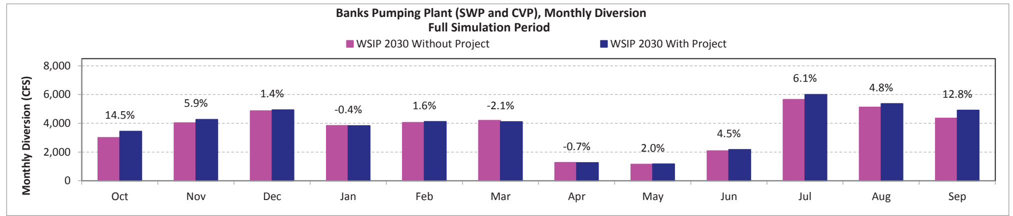
Table SW-38-a
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

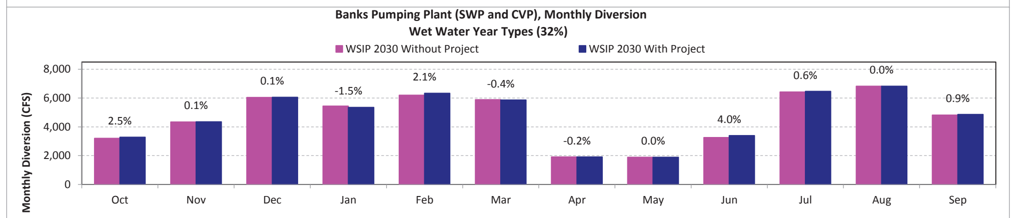
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	3,008	4,027	4,865	3,848	4,050	4,195	1,272	1,146	2,081	5,656	5,121	4,357
WSIP 2030 With Project	3,443	4,266	4,934	3,832	4,116	4,107	1,263	1,168	2,175	6,003	5,366	4,914
Difference	435	239	69	-16	67	-88	-9	23	94	347	244	557
Percent Difference[3]	14.5%	5.9%	1.4%	-0.4%	1.6%	-2.1%	-0.7%	2.0%	4.5%	6.1%	4.8%	12.8%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	3,205	4,345	6,049	5,443	6,203	5,886	1,915	1,892	3,261	6,426	6,828	4,816
WSIP 2030 With Project	3,287	4,350	6,057	5,359	6,334	5,864	1,912	1,892	3,392	6,463	6,828	4,861
Difference	81	5	7	-84	131	-22	-3	0	131	37	0	45
Percent Difference	2.5%	0.1%	0.1%	-1.5%	2.1%	-0.4%	-0.2%	0.0%	4.0%	0.6%	0.0%	0.9%
Above Normal (14.6%)												
WSIP 2030 Without Project	3,747	4,961	5,609	4,191	4,655	5,479	1,152	835	2,148	6,234	6,859	4,731
WSIP 2030 With Project	3,912	4,996	5,698	4,160	4,596	5,463	1,151	833	2,389	6,172	6,859	4,941
Difference	165	35	89	-31	-59	-16	-1	-2	241	-62	0	211
Percent Difference	4.4%	0.7%	1.6%	-0.7%	-1.3%	-0.3%	-0.1%	-0.2%	11.2%	-1.0%	0.0%	4.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	3,847	4,243	4,325	2,800	3,481	3,922	1,246	909	2,088	6,722	6,337	5,230
WSIP 2030 With Project	4,641	4,725	4,373	2,790	3,546	3,845	1,252	904	2,125	6,792	6,653	5,973
Difference	794	481	48	-10	65	-77	6	-4	36	70	316	743
Percent Difference	20.6%	11.3%	1.1%	-0.4%	1.9%	-2.0%	0.5%	-0.5%	1.7%	1.0%	5.0%	14.2%
Dry (19.5%)												
WSIP 2030 Without Project	2,454	4,192	4,483	2,936	2,434	2,784	868	826	1,413	5,381	3,045	4,263
WSIP 2030 With Project	3,203	4,505	4,816	2,937	2,414	2,512	853	910	1,514	6,241	3,587	5,393
Difference	749	313	333	2	-20	-272	-15	83	102	860	542	1,130
Percent Difference	30.5%	7.5%	7.4%	0.1%	-0.8%	-9.8%	-1.7%	10.1%	7.2%	16.0%	17.8%	26.5%
Critical (14.6%)												
WSIP 2030 Without Project	1,410	1,904	2,928	2,885	1,920	1,659	625	663	436	2,333	875	1,917
WSIP 2030 With Project	1,925	2,395	2,783	2,992	2,095	1,589	585	715	378	3,440	1,374	2,861
Difference	515	491	-145	107	176	-70	-40	52	-58	1,108	499	944
Percent Difference	36.5%	25.8%	-5.0%	3.7%	9.1%	-4.2%	-6.4%	7.8%	-13.2%	47.5%	57.1%	49.3%

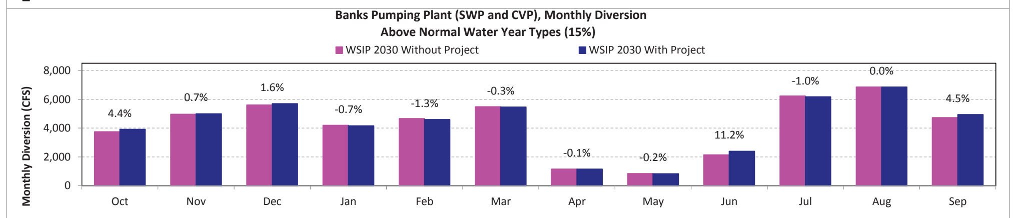
1 Based on the 82-year simulation period

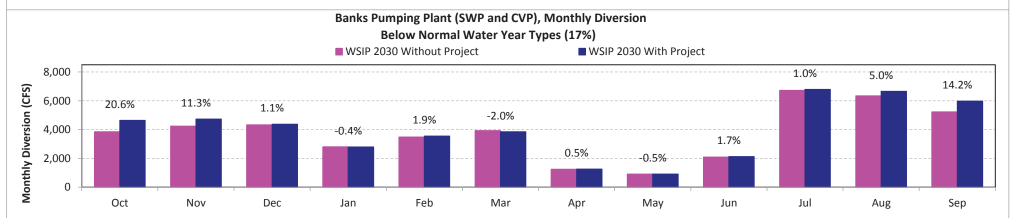
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

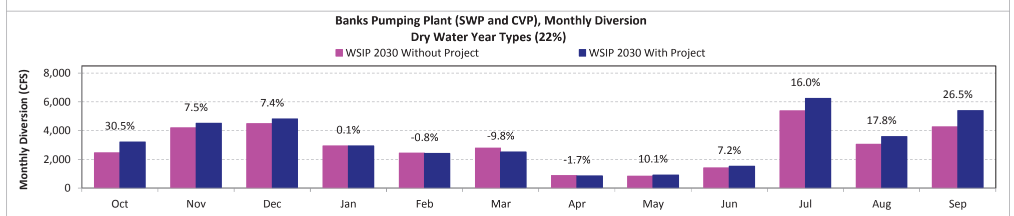
3 Relative difference of the monthly average











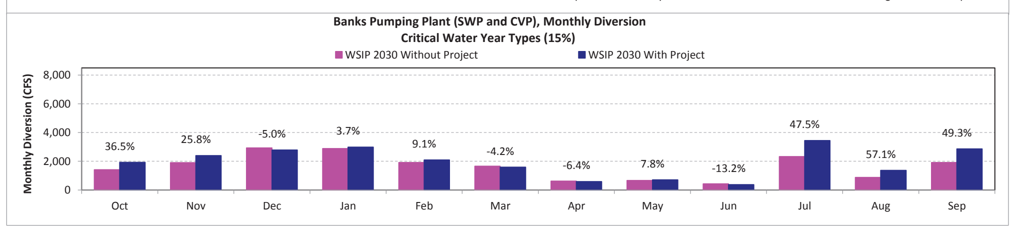


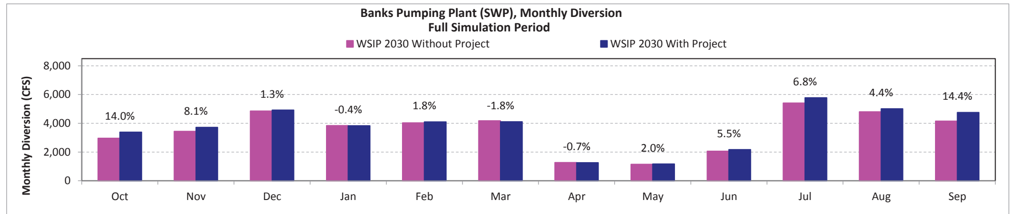
Table SW-39-a
Banks Pumping Plant (SWP), Monthly Diversion
Long-term Average and Average by Water Year Type

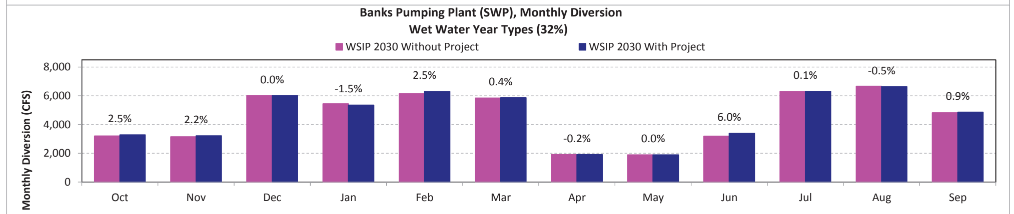
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	2,969	3,443	4,853	3,848	4,031	4,182	1,272	1,146	2,060	5,414	4,801	4,152
WSIP 2030 With Project	3,384	3,722	4,919	3,832	4,102	4,106	1,263	1,168	2,173	5,785	5,015	4,752
Difference	415	279	65	-16	71	-77	-9	23	113	371	213	600
Percent Difference[3]	14.0%	8.1%	1.3%	-0.4%	1.8%	-1.8%	-0.7%	2.0%	5.5%	6.8%	4.4%	14.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	3,205	3,146	6,015	5,443	6,143	5,843	1,915	1,892	3,199	6,299	6,666	4,816
WSIP 2030 With Project	3,287	3,215	6,014	5,359	6,296	5,864	1,912	1,892	3,392	6,308	6,631	4,861
Difference	81	69	-1	-84	154	21	-3	0	193	9	-35	45
Percent Difference	2.5%	2.2%	0.0%	-1.5%	2.5%	0.4%	-0.2%	0.0%	6.0%	0.1%	-0.5%	0.9%
Above Normal (14.6%)												
WSIP 2030 Without Project	3,747	3,511	5,600	4,191	4,655	5,479	1,152	835	2,148	6,167	6,623	4,731
WSIP 2030 With Project	3,912	3,643	5,683	4,160	4,596	5,453	1,151	833	2,389	6,116	6,680	4,941
Difference	165	131	83	-31	-59	-26	-1	-2	241	-51	57	211
Percent Difference	4.4%	3.7%	1.5%	-0.7%	-1.3%	-0.5%	-0.1%	-0.2%	11.2%	-0.8%	0.9%	4.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	3,705	4,212	4,325	2,800	3,481	3,922	1,246	909	2,078	6,515	5,847	4,507
WSIP 2030 With Project	4,388	4,725	4,373	2,790	3,533	3,845	1,252	904	2,115	6,529	6,204	5,445
Difference	683	512	48	-10	52	-77	6	-4	36	14	357	938
Percent Difference	18.4%	12.2%	1.1%	-0.4%	1.5%	-2.0%	0.5%	-0.5%	1.8%	0.2%	6.1%	20.8%
Dry (19.5%)												
WSIP 2030 Without Project	2,404	4,192	4,483	2,936	2,434	2,784	868	826	1,413	4,864	2,550	4,112
WSIP 2030 With Project	3,177	4,505	4,816	2,937	2,413	2,512	853	910	1,514	5,919	2,865	5,278
Difference	772	313	333	2	-21	-272	-15	83	102	1,055	315	1,166
Percent Difference	32.1%	7.5%	7.4%	0.1%	-0.9%	-9.8%	-1.7%	10.1%	7.2%	21.7%	12.3%	28.4%
Critical (14.6%)												
WSIP 2030 Without Project	1,410	1,904	2,928	2,885	1,920	1,659	625	663	436	1,992	616	1,741
WSIP 2030 With Project	1,912	2,395	2,783	2,992	2,095	1,589	585	715	378	3,131	1,161	2,653
Difference	501	491	-145	107	176	-70	-40	52	-58	1,139	545	912
Percent Difference	35.6%	25.8%	-5.0%	3.7%	9.1%	-4.2%	-6.4%	7.8%	-13.2%	57.2%	88.5%	52.4%

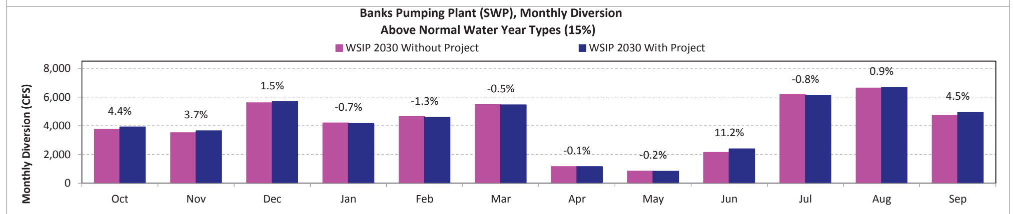
1 Based on the 82-year simulation period

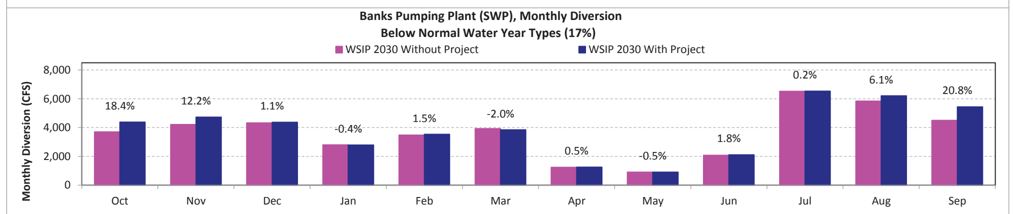
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

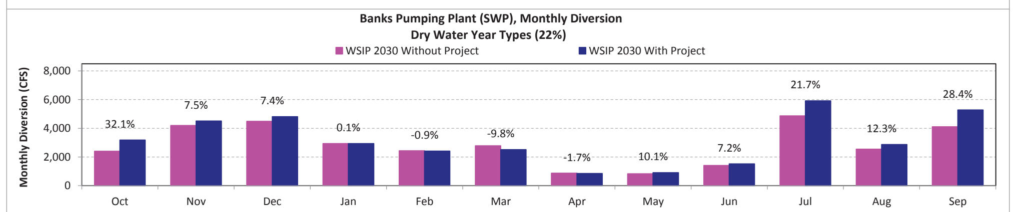
3 Relative difference of the monthly average











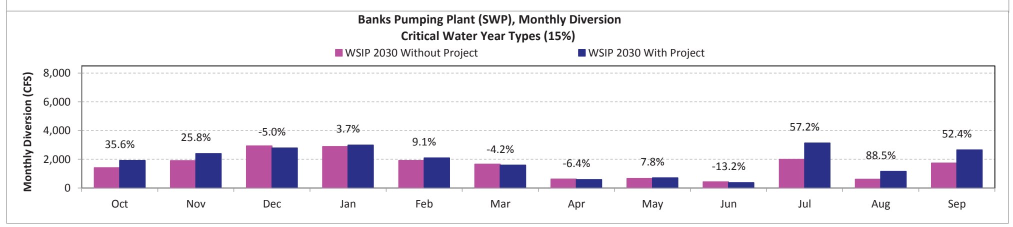


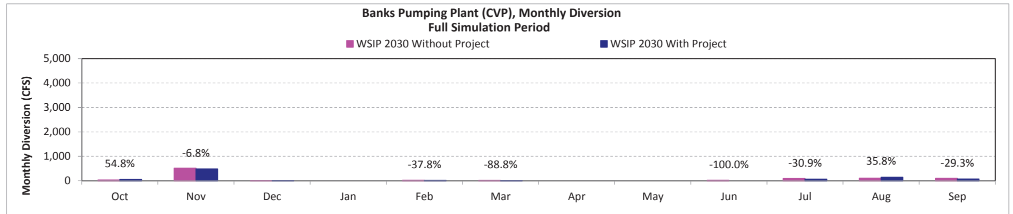
Table SW-40-a
Banks Pumping Plant (CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

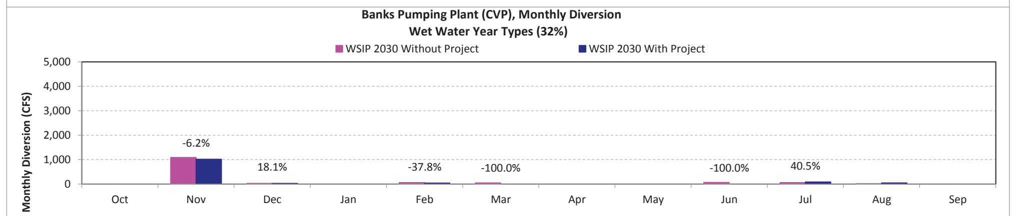
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	33	518	7	0	18	13	0	0	19	95	107	102
WSIP 2030 With Project	51	483	8	0	12	1	0	0	0	66	145	72
Difference	18	-35	1	0	-7	-12	0	0	-19	-29	38	-30
Percent Difference[3]	54.8%	-6.8%			-37.8%	-88.8%			-100.0%	-30.9%	35.8%	-29.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	1,084	24	0	61	43	0	0	62	59	14	0
WSIP 2030 With Project	0	1,017	28	0	38	0	0	0	0	83	49	0
Difference	0	-67	4	0	-23	-43	0	0	-62	24	35	0
Percent Difference		-6.2%	18.1%		-37.8%	-100.0%			-100.0%	40.5%		
Above Normal (14.6%)												
WSIP 2030 Without Project	0	1,236	0	0	0	0	0	0	0	0	56	0
WSIP 2030 With Project	0	1,181	0	0	0	10	0	0	0	1	0	0
Difference	0	-56	0	0	0	10	0	0	0	1	-56	0
Percent Difference		-4.5%									-100.0%	
Below Normal (20.7%)												
WSIP 2030 Without Project	132	31	0	0	0	0	0	0	0	0	202	484
WSIP 2030 With Project	245	0	0	0	0	0	0	0	0	16	184	349
Difference	113	-31	0	0	0	0	0	0	0	16	-18	-135
Percent Difference	85.0%	-100.0%									-8.9%	-28.0%
Dry (19.5%)												
WSIP 2030 Without Project	27	0	0	0	0	0	0	0	0	260	230	10
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	55	428	0
Difference	-27	0	0	0	0	0	0	0	0	-205	198	-10
Percent Difference	-100.0%									-78.9%	86.1%	-100.0%
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	183	53	0
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	181	59	0
Difference	0	0	0	0	0	0	0	0	0	-2	6	0
Percent Difference										-1.1%	11.5%	

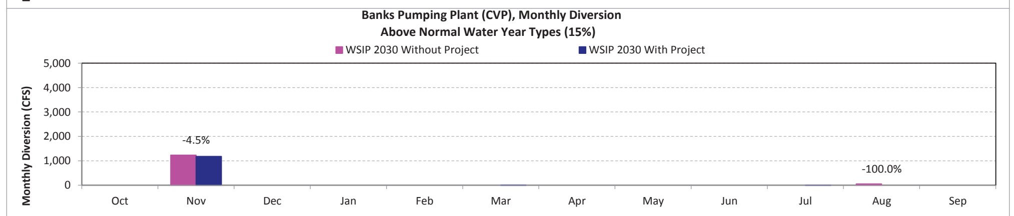
1 Based on the 82-year simulation period

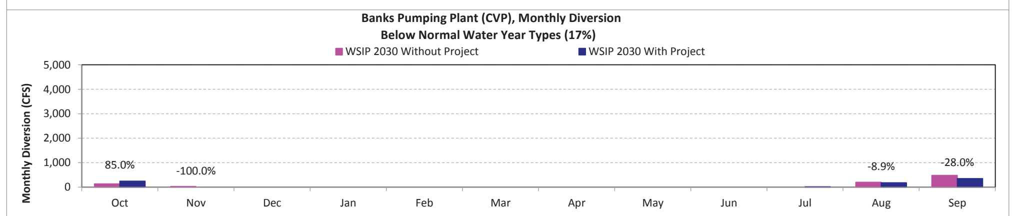
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

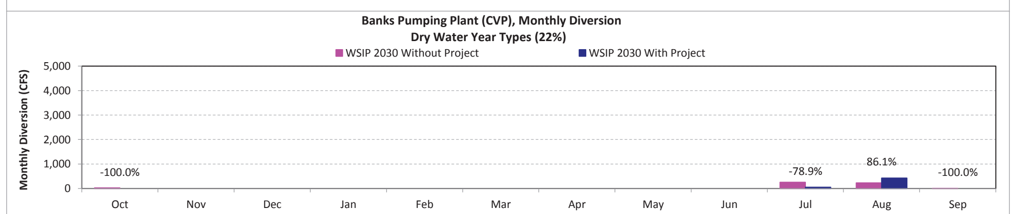
3 Relative difference of the monthly average











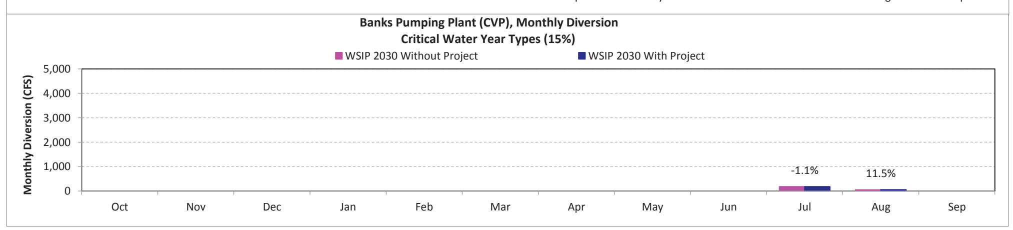


Table SW-41-a
San Luis Reservoir (SWP and CVP), End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	457	596	863	1,155	1,385	1,577	1,429	1,136	780	631	492	462
WSIP 2030 With Project	496	643	902	1,186	1,399	1,581	1,428	1,122	749	609	491	500
Difference	39	47	39	31	14	4	-2	-14	-31	-21	0	37
Percent Difference[3]	8.6%	7.9%	4.5%	2.7%	1.0%	0.3%	-0.1%	-1.3%	-4.0%	-3.4%	0.0%	8.1%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	497	548	812	1,329	1,674	1,905	1,722	1,394	1,047	802	671	595
WSIP 2030 With Project	486	548	815	1,302	1,645	1,882	1,703	1,369	1,020	777	646	571
Difference	-11	1	4	-27	-29	-23	-20	-24	-27	-25	-24	-24
Percent Difference	-2.2%	0.1%	0.4%	-2.0%	-1.7%	-1.2%	-1.1%	-1.8%	-2.5%	-3.1%	-3.6%	-4.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	404	493	772	1,231	1,481	1,761	1,545	1,160	741	503	453	403
WSIP 2030 With Project	406	503	788	1,254	1,472	1,738	1,523	1,128	707	478	425	399
Difference	2	10	16	24	-9	-24	-23	-31	-34	-26	-28	-3
Percent Difference	0.5%	2.1%	2.0%	1.9%	-0.6%	-1.3%	-1.5%	-2.7%	-4.6%	-5.2%	-6.2%	-0.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	611	810	1,053	1,122	1,319	1,508	1,370	1,072	700	648	557	556
WSIP 2030 With Project	669	882	1,113	1,157	1,322	1,493	1,346	1,033	645	595	533	603
Difference	58	72	60	34	2	-14	-24	-39	-55	-53	-24	47
Percent Difference	9.6%	9.0%	5.7%	3.1%	0.2%	-0.9%	-1.7%	-3.6%	-7.9%	-8.2%	-4.2%	8.5%
Dry (19.5%)												
WSIP 2030 Without Project	391	642	952	981	1,131	1,304	1,191	939	600	542	329	356
WSIP 2030 With Project	461	698	992	1,013	1,155	1,307	1,175	901	529	506	340	431
Difference	70	56	40	32	24	3	-16	-38	-71	-36	11	75
Percent Difference	18.0%	8.7%	4.2%	3.3%	2.2%	0.3%	-1.3%	-4.0%	-11.9%	-6.6%	3.3%	21.1%
Critical (14.6%)												
WSIP 2030 Without Project	297	436	671	996	1,116	1,168	1,103	930	618	495	281	256
WSIP 2030 With Project	410	568	776	1,151	1,245	1,286	1,211	1,020	668	551	378	397
Difference	113	132	105	154	129	117	108	90	50	55	96	141
Percent Difference	38.2%	30.2%	15.6%	15.5%	11.5%	10.0%	9.8%	9.7%	8.1%	11.2%	34.2%	55.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

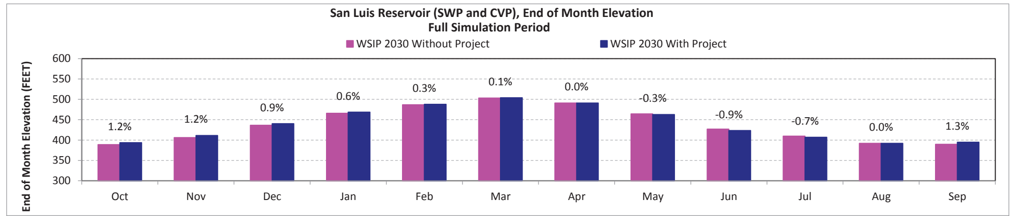
Table SW-42-a
San Luis Reservoir (SWP and CVP), End of Month Elevation
Long-term Average and Average by Water Year Type

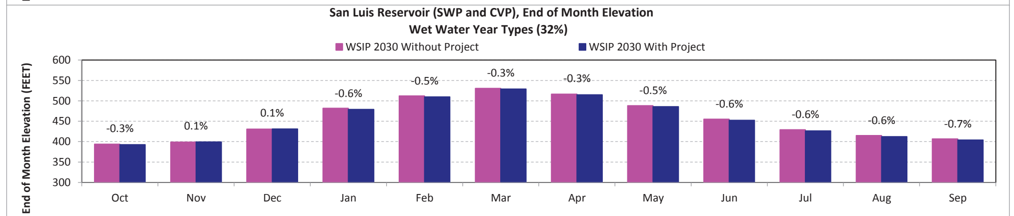
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	389	406	436	466	487	503	491	464	427	410	392	390
WSIP 2030 With Project	394	411	440	469	488	504	491	463	423	407	392	395
Difference	5	5	4	3	1	1	0	-1	-4	-3	0	5
Percent Difference[3]	1.2%	1.2%	0.9%	0.6%	0.3%	0.1%	0.0%	-0.3%	-0.9%	-0.7%	0.0%	1.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	394	399	431	482	512	531	517	488	455	429	415	407
WSIP 2030 With Project	393	399	431	479	510	529	515	486	452	427	412	404
Difference	-1	0	0	-3	-2	-2	-2	-2	-3	-3	-3	-3
Percent Difference	-0.3%	0.1%	0.1%	-0.6%	-0.5%	-0.3%	-0.3%	-0.5%	-0.6%	-0.6%	-0.6%	-0.7%
Above Normal (14.6%)												
WSIP 2030 Without Project	384	395	428	472	496	519	502	467	424	393	387	383
WSIP 2030 With Project	383	396	430	474	494	518	500	464	420	390	383	382
Difference	0	1	2	1	-1	-2	-2	-3	-4	-3	-4	-1
Percent Difference	-0.1%	0.3%	0.5%	0.2%	-0.3%	-0.4%	-0.4%	-0.6%	-0.9%	-0.8%	-1.0%	-0.2%
Below Normal (20.7%)												
WSIP 2030 Without Project	410	432	456	464	481	498	486	458	418	412	402	404
WSIP 2030 With Project	415	439	462	466	481	497	484	454	411	405	398	408
Difference	6	7	5	3	0	-1	-2	-4	-7	-7	-4	5
Percent Difference	1.4%	1.7%	1.2%	0.6%	0.0%	-0.3%	-0.5%	-0.9%	-1.7%	-1.7%	-1.0%	1.2%
Dry (19.5%)												
WSIP 2030 Without Project	381	413	446	450	465	481	471	446	408	401	371	376
WSIP 2030 With Project	389	418	449	453	467	481	469	442	400	396	372	385
Difference	8	5	3	3	2	0	-1	-4	-9	-5	1	9
Percent Difference	2.2%	1.2%	0.6%	0.7%	0.5%	0.1%	-0.3%	-0.8%	-2.1%	-1.2%	0.2%	2.5%
Critical (14.6%)												
WSIP 2030 Without Project	367	387	415	451	462	467	461	444	410	395	364	360
WSIP 2030 With Project	383	403	428	466	475	479	472	453	415	402	378	381
Difference	16	16	12	15	12	11	10	9	5	6	14	20
Percent Difference	4.3%	4.1%	2.9%	3.4%	2.7%	2.4%	2.3%	2.0%	1.2%	1.6%	3.8%	5.7%

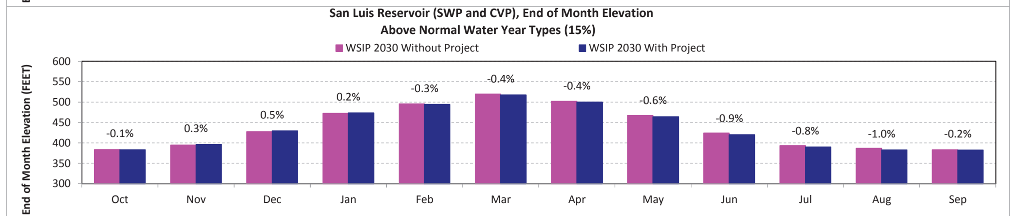
1 Based on the 82-year simulation period

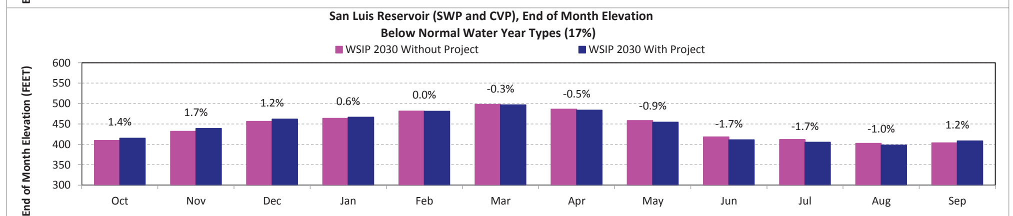
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

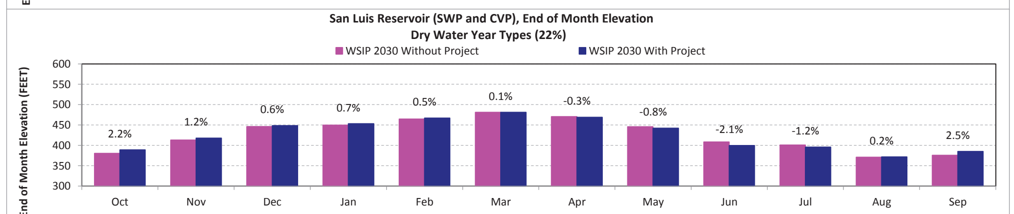
3 Relative difference of the monthly average











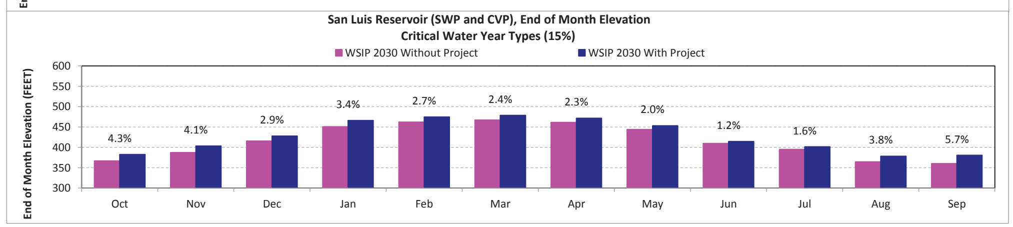


Table SW-43-a
San Luis Reservoir (SWP and CVP), End of Month Area
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	7,320	8,091	9,315	10,368	11,038	11,556	11,177	10,314	8,946	8,221	7,394	7,354
WSIP 2030 With Project	7,517	8,282	9,453	10,459	11,084	11,580	11,182	10,272	8,779	8,090	7,386	7,586
Difference	197	191	138	90	46	23	4	-42	-167	-131	-8	232
Percent Difference[3]	2.7%	2.4%	1.5%	0.9%	0.4%	0.2%	0.0%	-0.4%	-1.9%	-1.6%	-0.1%	3.1%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	7,554	7,736	9,125	10,880	11,837	12,391	11,973	11,096	9,993	9,015	8,463	8,165
WSIP 2030 With Project	7,490	7,763	9,147	10,791	11,761	12,340	11,926	11,024	9,898	8,911	8,359	8,054
Difference	-64	27	22	-89	-76	-50	-48	-72	-95	-104	-104	-111
Percent Difference	-0.8%	0.4%	0.2%	-0.8%	-0.6%	-0.4%	-0.4%	-0.7%	-0.9%	-1.2%	-1.2%	-1.4%
Above Normal (14.6%)												
WSIP 2030 Without Project	7,129	7,626	9,009	10,579	11,325	12,057	11,525	10,427	8,868	7,399	7,089	7,101
WSIP 2030 With Project	7,079	7,684	9,115	10,584	11,277	12,002	11,467	10,329	8,719	7,256	6,881	7,033
Difference	-50	58	106	6	-48	-54	-58	-98	-150	-143	-207	-68
Percent Difference	-0.7%	0.8%	1.2%	0.1%	-0.4%	-0.4%	-0.5%	-0.9%	-1.7%	-1.9%	-2.9%	-1.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	8,313	9,188	10,044	10,306	10,871	11,406	11,033	10,122	8,585	8,312	7,959	8,086
WSIP 2030 With Project	8,479	9,433	10,219	10,392	10,863	11,359	10,957	9,985	8,254	7,986	7,699	8,255
Difference	166	245	175	86	-8	-47	-75	-137	-331	-326	-260	169
Percent Difference	2.0%	2.7%	1.7%	0.8%	-0.1%	-0.4%	-0.7%	-1.4%	-3.9%	-3.9%	-3.3%	2.1%
Dry (19.5%)												
WSIP 2030 Without Project	6,910	8,437	9,682	9,852	10,343	10,887	10,550	9,724	8,260	7,917	6,369	6,666
WSIP 2030 With Project	7,263	8,546	9,703	9,965	10,428	10,898	10,505	9,597	7,890	7,663	6,374	7,087
Difference	353	109	21	112	85	12	-45	-127	-370	-253	5	421
Percent Difference	5.1%	1.3%	0.2%	1.1%	0.8%	0.1%	-0.4%	-1.3%	-4.5%	-3.2%	0.1%	6.3%
Critical (14.6%)												
WSIP 2030 Without Project	6,166	7,280	8,496	9,867	10,248	10,423	10,213	9,632	8,272	7,666	6,040	5,800
WSIP 2030 With Project	6,987	7,980	9,011	10,394	10,667	10,793	10,566	9,953	8,439	7,927	6,771	6,880
Difference	821	700	515	527	419	370	354	322	167	261	731	1,080
Percent Difference	13.3%	9.6%	6.1%	5.3%	4.1%	3.6%	3.5%	3.3%	2.0%	3.4%	12.1%	18.6%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

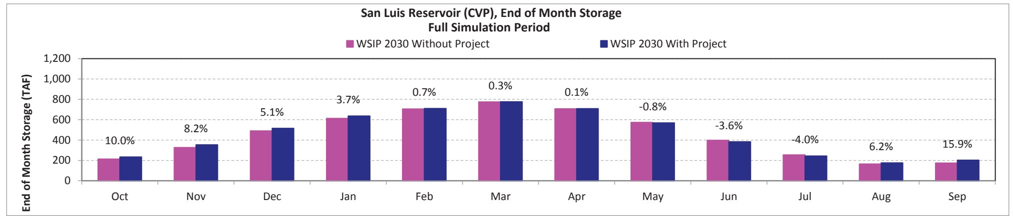
Table SW-44-a
San Luis Reservoir (CVP), End of Month Storage
Long-term Average and Average by Water Year Type

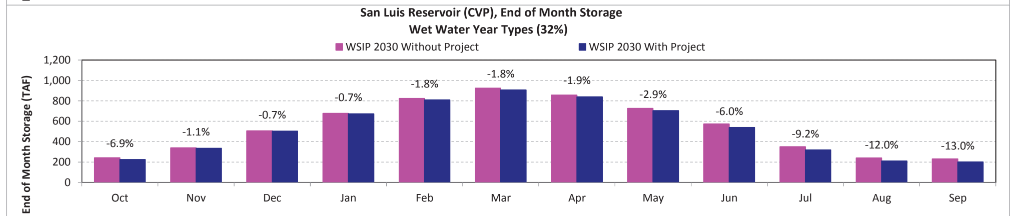
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	214	328	490	614	706	774	708	573	398	255	166	175
WSIP 2030 With Project	235	355	515	636	711	777	709	569	384	244	176	202
Difference	21	27	25	23	5	2	1	-4	-14	-10	10	28
Percent Difference[3]	10.0%	8.2%	5.1%	3.7%	0.7%	0.3%	0.1%	-0.8%	-3.6%	-4.0%	6.2%	15.9%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	241	339	506	678	824	924	856	725	573	351	240	231
WSIP 2030 With Project	225	335	502	673	809	907	840	704	539	319	211	201
Difference	-17	-4	-4	-5	-15	-17	-16	-21	-34	-32	-29	-30
Percent Difference	-6.9%	-1.1%	-0.7%	-0.7%	-1.8%	-1.8%	-1.9%	-2.9%	-6.0%	-9.2%	-12.0%	-13.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	167	262	442	652	765	876	788	628	432	193	130	127
WSIP 2030 With Project	172	273	451	667	756	862	772	605	396	179	116	129
Difference	5	10	9	15	-9	-13	-16	-22	-36	-14	-14	2
Percent Difference	3.1%	3.9%	2.0%	2.3%	-1.1%	-1.5%	-2.1%	-3.5%	-8.4%	-7.4%	-10.7%	1.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	275	418	579	623	699	756	694	558	369	271	184	213
WSIP 2030 With Project	313	453	613	649	691	745	683	543	350	266	204	265
Difference	37	35	34	26	-8	-11	-11	-15	-18	-5	20	52
Percent Difference	13.6%	8.4%	5.8%	4.2%	-1.1%	-1.4%	-1.7%	-2.7%	-5.0%	-1.9%	11.1%	24.4%
Dry (19.5%)												
WSIP 2030 Without Project	180	316	487	528	576	630	567	424	245	179	97	121
WSIP 2030 With Project	223	359	528	541	588	637	572	420	230	170	133	188
Difference	44	43	41	13	11	7	5	-4	-15	-9	36	66
Percent Difference	24.3%	13.5%	8.4%	2.4%	2.0%	1.2%	0.9%	-0.9%	-6.1%	-5.0%	37.1%	54.6%
Critical (14.6%)												
WSIP 2030 Without Project	161	258	386	543	588	581	529	423	245	192	115	120
WSIP 2030 With Project	225	332	454	637	657	649	596	486	301	223	182	208
Difference	65	74	67	95	69	68	67	63	57	31	67	88
Percent Difference	40.2%	28.8%	17.4%	17.5%	11.8%	11.8%	12.7%	15.0%	23.1%	16.2%	58.5%	73.3%

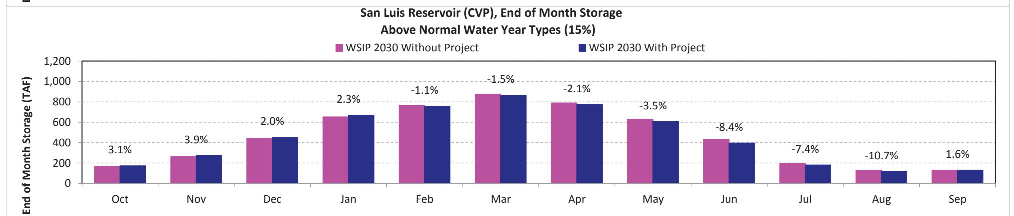
1 Based on the 82-year simulation period

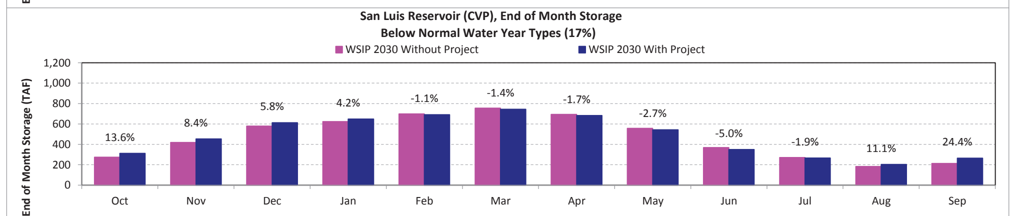
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

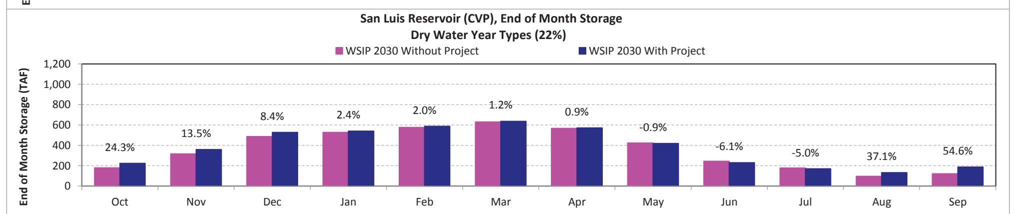
3 Relative difference of the monthly average











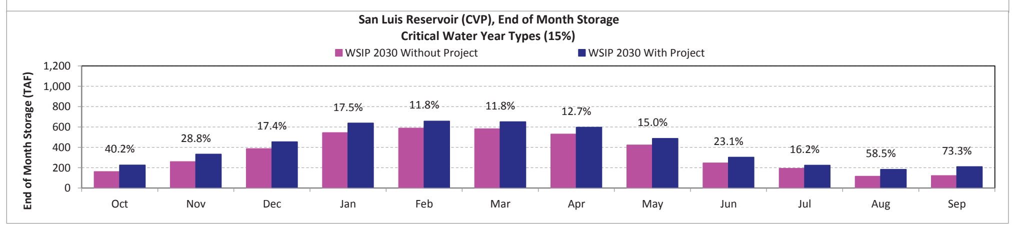


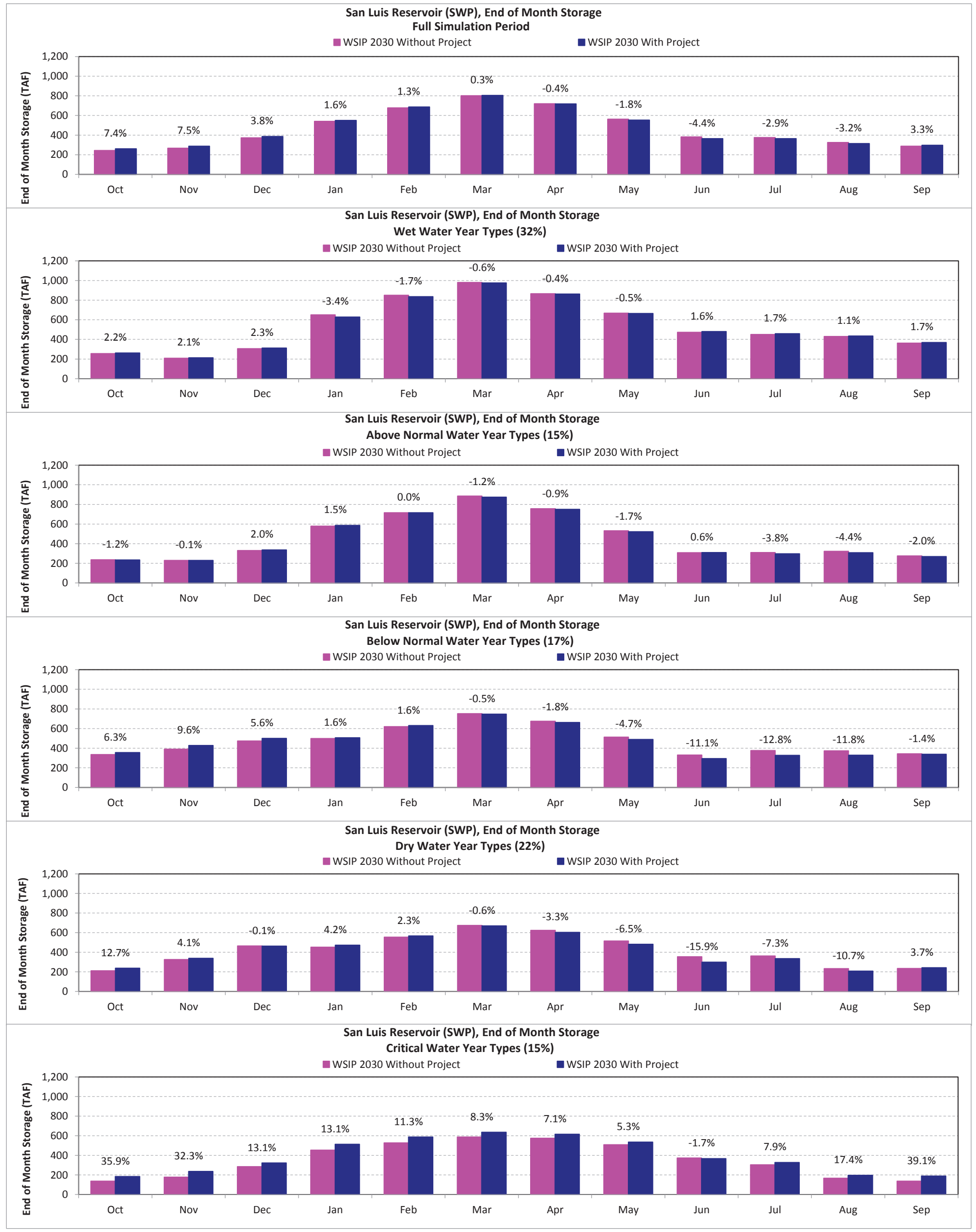
Table SW-45-a
San Luis Reservoir (SWP), End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	243	268	372	542	678	802	721	563	382	376	326	288
WSIP 2030 With Project	261	288	386	550	687	804	718	553	365	365	315	297
Difference	18	20	14	9	9	2	-3	-10	-17	-11	-10	10
Percent Difference[3]	7.4%	7.5%	3.8%	1.6%	1.3%	0.3%	-0.4%	-1.8%	-4.4%	-2.9%	-3.2%	3.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	256	209	306	651	850	981	866	668	473	451	431	363
WSIP 2030 With Project	262	213	313	629	836	975	863	665	481	458	435	370
Difference	6	4	7	-22	-14	-6	-3	-3	8	7	5	6
Percent Difference	2.2%	2.1%	2.3%	-3.4%	-1.7%	-0.6%	-0.4%	-0.5%	1.6%	1.7%	1.1%	1.7%
Above Normal (14.6%)												
WSIP 2030 Without Project	237	230	331	579	716	886	757	532	309	310	324	275
WSIP 2030 With Project	234	230	337	587	716	875	751	523	311	298	309	270
Difference	-3	0	7	9	0	-10	-7	-9	2	-12	-14	-5
Percent Difference	-1.2%	-0.1%	2.0%	1.5%	0.0%	-1.2%	-0.9%	-1.7%	0.6%	-3.8%	-4.4%	-2.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	335	391	474	500	621	752	676	514	332	377	373	343
WSIP 2030 With Project	357	429	501	508	631	748	663	490	295	328	329	338
Difference	21	37	27	8	10	-4	-12	-24	-37	-48	-44	-5
Percent Difference	6.3%	9.6%	5.6%	1.6%	1.6%	-0.5%	-1.8%	-4.7%	-11.1%	-12.8%	-11.8%	-1.4%
Dry (19.5%)												
WSIP 2030 Without Project	211	326	464	453	555	674	624	515	355	363	233	234
WSIP 2030 With Project	238	339	464	472	568	670	604	482	299	336	208	243
Difference	27	13	0	19	13	-4	-21	-34	-56	-27	-25	9
Percent Difference	12.7%	4.1%	-0.1%	4.2%	2.3%	-0.6%	-3.3%	-6.5%	-15.9%	-7.3%	-10.7%	3.7%
Critical (14.6%)												
WSIP 2030 Without Project	136	178	285	454	528	587	575	508	373	304	167	136
WSIP 2030 With Project	185	236	322	513	588	636	615	534	367	328	196	189
Difference	49	58	37	59	60	49	41	27	-6	24	29	53
Percent Difference	35.9%	32.3%	13.1%	13.1%	11.3%	8.3%	7.1%	5.3%	-1.7%	7.9%	17.4%	39.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



Sacramento-San Joaquin Delta Operations

Exceedance Probability Charts and Tables

Figure SW-30-b
Sacramento River below Hood, Monthly Flow
Probability of Exceedance

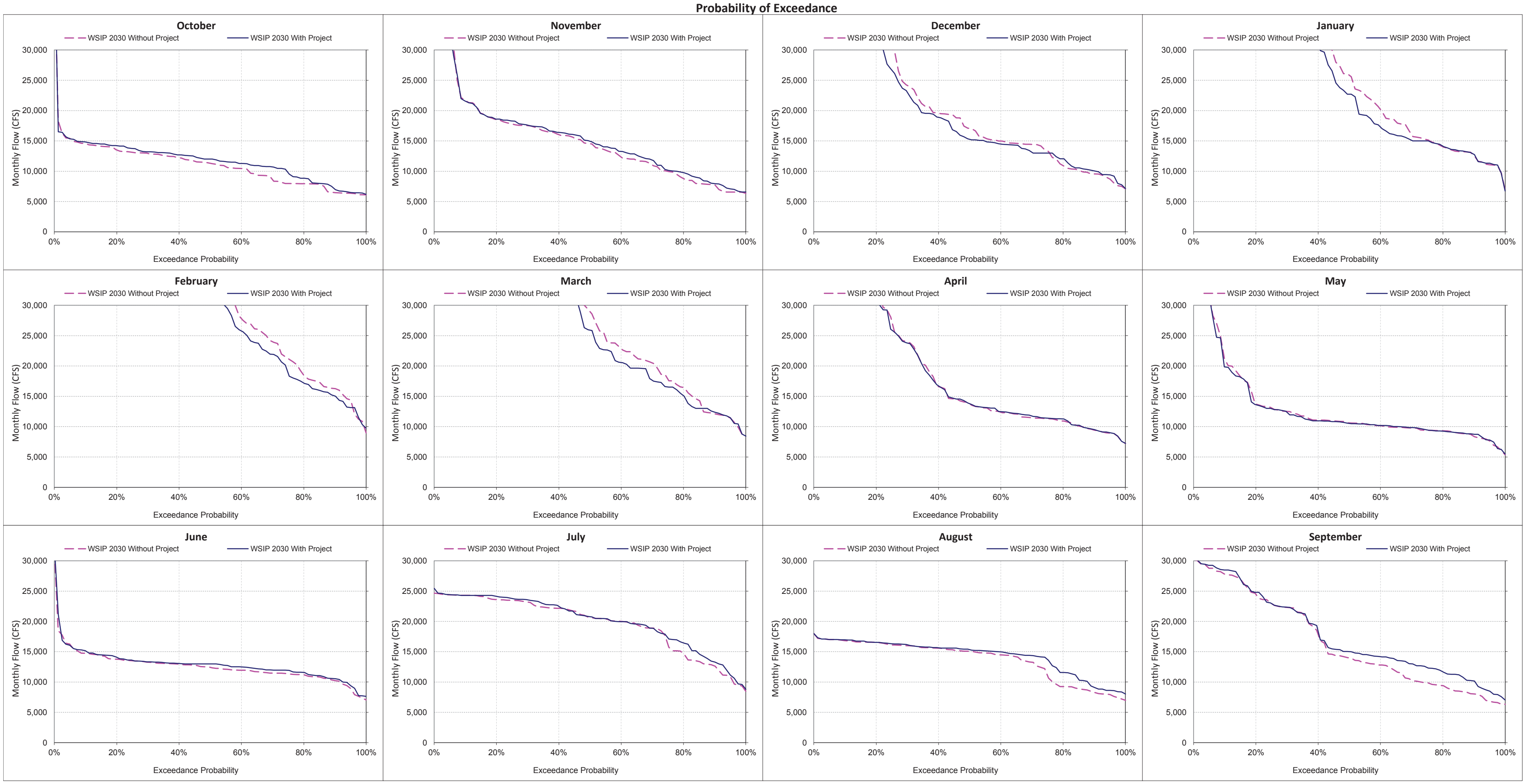


Table SW-30-b

Sacramento River below Hood, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,906	46,561	1,656	3.7%
1.2%	18,309	16,496	-1,813	-9.9%
2.5%	16,311	16,424	113	0.7%
3.7%	15,483	15,701	219	1.4%
4.9%	15,429	15,352	-77	-0.5%
6.2%	14,924	15,261	338	2.3%
7.4%	14,812	14,933	121	0.8%
8.6%	14,617	14,855	238	1.6%
9.9%	14,583	14,852	270	1.8%
11.1%	14,349	14,686	337	2.4%
12.3%	14,306	14,581	275	1.9%
13.6%	14,228	14,576	348	2.4%
14.8%	14,120	14,491	371	2.6%
16.0%	14,080	14,487	407	2.9%
17.3%	14,042	14,313	271	1.9%
18.5%	14,002	14,227	225	1.6%
19.8%	13,550	14,226	676	5.0%
21.0%	13,302	14,152	849	6.4%
22.2%	13,235	14,149	914	6.9%
23.5%	13,231	13,835	604	4.6%
24.7%	13,147	13,760	612	4.7%
25.9%	13,046	13,726	680	5.2%
27.2%	13,037	13,407	370	2.8%
28.4%	13,022	13,263	241	1.9%
29.6%	12,987	13,211	224	1.7%
30.9%	12,826	13,204	378	2.9%
32.1%	12,821	13,161	340	2.7%
33.3%	12,791	13,090	299	2.3%
34.6%	12,642	13,059	417	3.3%
35.8%	12,527	13,016	489	3.9%
37.0%	12,444	13,011	567	4.6%
38.3%	12,438	12,832	395	3.2%
39.5%	12,234	12,713	479	3.9%
40.7%	12,177	12,706	530	4.3%
42.0%	11,925	12,613	687	5.8%
43.2%	11,843	12,572	729	6.2%
44.4%	11,755	12,501	747	6.4%
45.7%	11,541	12,250	709	6.1%
46.9%	11,510	12,137	626	5.4%
48.1%	11,490	12,022	531	4.6%
49.4%	11,369	12,021	652	5.7%
50.6%	11,245	11,994	749	6.7%
51.9%	11,139	11,878	739	6.6%
53.1%	10,988	11,664	676	6.2%
54.3%	10,930	11,635	705	6.5%
55.6%	10,595	11,532	937	8.8%
56.8%	10,558	11,495	937	8.9%
58.0%	10,473	11,494	1,021	9.7%
59.3%	10,470	11,299	829	7.9%
60.5%	10,444	11,280	836	8.0%
61.7%	10,355	11,226	871	8.4%
63.0%	9,664	11,003	1,338	13.8%
64.2%	9,591	10,940	1,349	14.1%
65.4%	9,330	10,929	1,599	17.1%
66.7%	9,309	10,796	1,487	16.0%
67.9%	9,284	10,770	1,486	16.0%
69.1%	9,157	10,747	1,591	17.4%
70.4%	8,349	10,683	2,334	28.0%
71.6%	8,328	10,469	2,141	25.7%
72.8%	8,167	10,452	2,284	28.0%
74.1%	7,970	10,322	2,352	29.5%
75.3%	7,968	9,515	1,547	19.4%
76.5%	7,956	9,099	1,143	14.4%
77.8%	7,955	9,062	1,107	13.9%
79.0%	7,945	8,851	905	11.4%
80.2%	7,942	8,847	906	11.4%
81.5%	7,920	8,738	817	10.3%
82.7%	7,912	8,070	158	2.0%
84.0%	7,892	8,036	144	1.8%
85.2%	7,880	7,994	114	1.4%
86.4%	7,527	7,945	418	5.6%
87.7%	6,602	7,861	1,259	19.1%
88.9%	6,525	7,515	989	15.2%
90.1%	6,470	6,943	473	7.3%
91.4%	6,430	6,763	333	5.2%
92.6%	6,402	6,694	292	4.6%
93.8%	6,374	6,627	253	4.0%
95.1%	6,357	6,470	113	1.8%
96.3%	6,313	6,456	143	2.3%
97.5%	6,125	6,434	309	5.0%
98.8%	6,123	6,403	280	4.6%
100.0%	6,105	6,179	73	1.2%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	54,108	52,066	-2,041	-3.8%
1.2%	49,151	48,972	-179	-0.4%
2.5%	47,977	46,846	-1,131	-2.4%
3.7%	40,516	42,823	2,306	5.7%
4.9%	33,592	33,571	-21	-0.1%
6.2%	30,866	29,157	-1,709	-5.5%
7.4%	25,013	25,764	751	3.0%
8.6%	22,145	21,996	-150	-0.7%
9.9%	21,734	21,577	-158	-0.7%
11.1%	21,316	21,316	0	0.0%
12.3%	21,288	21,152	-136	-0.6%
13.6%	20,767	20,554	-213	-1.0%
14.8%	19,592	19,540	-52	-0.3%
16.0%	19,385	19,322	-63	-0.3%
17.3%	18,979	18,929	-50	-0.3%
18.5%	18,768	18,912	144	0.8%
19.8%	18,524	18,608	84	0.5%
21.0%	18,454	18,595	142	0.8%
22.2%	18,152	18,432	280	1.5%
23.5%	17,984	18,426	442	2.5%
24.7%	17,855	18,282	427	2.4%
25.9%	17,663	18,260	597	3.4%
27.2%	17,578	17,827	249	1.4%
28.4%	17,573	17,726	153	0.9%
29.6%	17,542	17,646	104	0.6%
30.9%	17,495	17,469	-26	-0.1%
32.1%	17,288	17,380	92	0.5%
33.3%	17,081	17,362	281	1.6%
34.6%	16,742	17,317	575	3.4%
35.8%	16,577	17,046	469	2.8%
37.0%	16,436	16,650	215	1.3%
38.3%	16,418	16,567	150	0.9%
39.5%	16,119	16,405	286	1.8%
40.7%	15,898	16,368	471	3.0%
42.0%	15,897	16,277	380	2.4%
43.2%	15,838	16,128	290	1.8%
44.4%	15,615	16,078	463	3.0%
45.7%	15,255	15,949	694	4.5%
46.9%	15,210	15,800	590	3.9%
48.1%	14,666	15,143	477	3.3%
49.4%	14,569	15,029	460	3.2%
50.6%	14,500	14,818	317	2.2%
51.9%	13,883	14,500	617	4.4%
53.1%	13,798	14,369	571	4.1%
54.3%	13,617	14,025	408	3.0%
55.6%	13,364	14,011	647	4.8%
56.8%	13,139	13,798	659	5.0%
58.0%	13,119	13,776	657	5.0%
59.3%	12,627	13,294	667	5.3%
60.5%	12,144	13,238	1,093	9.0%
61.7%	12,095	13,032	937	7.7%
63.0%	12,014	12,878	863	7.2%
64.2%	11,993	12,870	877	7.3%
65.4%	11,669	12,532	863	7.4%
66.7%	11,661	12,299	638	5.5%
67.9%	11,595	12,085	490	4.2%
69.1%	11,325	12,026	701	6.2%
70.4%	10,896	11,772	876	8.0%
71.6%	10,736	11,000	264	2.5%
72.8%	10,096	11,000	904	9.0%
74.1%	10,072	10,317	245	2.4%
75.3%	9,951	10,145	194	2.0%
76.5%	9,866	10,056	190	1.9%
77.8%	9,497	10,014	517	5.4%
79.0%	9,065	9,865	800	8.8%
80.2%	8,720	9,720	999	11.5%
81.5%	8,500	9,513	1,014	11.9%
82.7%	8,475	9,165	690	8.1%
84.0%	7,968	9,029	1,061	13.3%
85.2%	7,952	8,880	928	11.7%
86.4%	7,899	8,417	518	6.6%
87.7%	7,846	8,368	522	6.6%
88.9%	7,806	8,032	226	2.9%
90.1%	7,721	7,952	231	3.0%
91.4%	6,979	7,899	920	13.2%
92.6%	6,683	7,634	951	14.2%
93.8%	6,564	7,197	633	9.6%
95.1%	6,562	7,065	503	7.7%
96.3%	6,560	6,987	427	6.5%
97.5%	6,551	6,708	157	2.4%
98.8%	6,547	6,564	17	0.3%
100.0%	6,348	6,560	212	3.3%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	79,391	79,407	16	0.0%
1.2%	78,285	78,077	-208	-0.3%
2.5%	73,239	73,096	-143	-0.2%
3.7%	69,988	69,363	-624	-0.9%
4.9%	66,024	66,404	380	0.6%
6.2%	62,303	61,259	-1,044	-1.7%
7.4%	58,165	56,083	-2,082	-3.6%
8.6%	56,114	54,436	-1,678	-3.0%
9.9%	55,503	54,123	-1,380	-2.5%
11.1%	53,803	53,863	61	0.1%
12.3%	44,265	44,654	388	0.9%
13.6%	44,119	43,705	-415	-0.9%
14.8%	39,239	38,421	-817	-2.1%
16.0%	39,070	36,930	-2,141	-5.5%
17.3%	37,104	35,166	-1,938	-5.2%
18.5%	35,156	33,998	-1,159	-3.3%
19.8%	34,874	30,994	-3,880	-11.1%
21.0%	32,960	30,914	-2,046	-6.2%
22.2%	32,347	30,068	-2,279	-7.0%
23.5%	30,864	27,682	-3,181	-10.3%
24.7%	30,368	26,890	-3,478	-11.5%
25.9%	29,779	26,135	-3,644	-12.2%
27.2%	26,517	24,718	-1,798	-6.8%
28.4%	24,842	23,687	-1,155	-4.6%
29.6%	24,253	23,309	-945	-3.9%
30.9%	23,916	22,301	-1,614	-6.8%
32.1%	23,438	21,363	-2,075	-8.9%
33.3%	22,157	20,862	-1,295	-5.8%
34.6%	21,187	19,673	-1,514	-7.1%
35.8%	20,687	19,549	-1,138	-5.5%
37.0%	20,648	19,535	-1,113	-5.4%
38.3%	19,685	19,410	-274	-1.4%
39.5%	19,632	18,928	-704	-3.6%
40.7%	19,484	18,819	-665	-3.4%
42.0%	19,464	18,514	-950	-4.9%
43.2%	19,382	18,254	-1,128	-5.8%
44.4%	19,348	16,861	-2,487	-12.9%
45.7%	18,802	16,556	-2,247	-11.9%
46.9%	18,797	15,932	-2,865	-15.2%
48.1%	17,448	15,693	-1,755	-10.1%
49.4%	17,108	15,362	-1,746	-10.2%
50.6%	17,021	15,187	-1,834	-10.8%
51.9%	16,637	15,164	-1,473	-8.9%
53.1%	15,687	15,110	-577	-3.7%
54.3%	15,639	15,074	-564	-3.6%
55.6%	15,350	14,850	-499	-3.3%
56.8%	15,192	14,781	-411	-2.7%
58.0%	15,164	14,718	-447	-2.9%
59.3%	14,981	14,521	-460	-3.1%
60.5%	14,969	14,465	-504	-3.4%
61.7%	14,815	14,399	-416	-2.8%
63.0%	14,647	14,377	-270	-1.8%
64.2%	14,634	14,306	-328	-2.2%
65.4%	14,585	14,264	-321	-2.2%
66.7%	14,537	13,782	-755	-5.2%
67.9%	14,457	13,688	-769	-5.3%
69.1%	14,442	13,421	-1,021	-7.1%
70.4%	14,410	13,000	-1,410	-9.8%
71.6%	14,378	13,000	-1,378	-9.6%
72.8%	14,168	13,000	-1,168	-8.2%
74.1%	13,542	13,000	-542	-4.0%
75.3%	13,238	13,000	-238	-1.8%
76.5%	12,268	13,000	732	6.0%
77.8%	12,007	12,412	405	3.4%
79.0%	11,205	12,065	860	7.7%
80.2%	10,849	12,048	1,199	11.1%
81.5%	10,475	11,383	908	8.7%
82.7%	10,364	10,841	477	4.6%
84.0%	10,335	10,564	230	2.2%
85.2%	10,107	10,560	452	4.5%
86.4%	9,877	10,370	493	5.0%
87.7%	9,826	10,302	476	4.8%
88.9%	9,564	10,173	609	6.4%
90.1%	9,560	10,060	499	5.2%
91.4%	9,542	9,913	371	3.9%
92.6%	9,348	9,434	86	0.9%
93.8%	9,039	9,423	383	4.2%
95.1%	8,694	9,399	705	8.1%
96.3%	8,050	9,193	1,143	14.2%
97.5%	7,615	7,968	353	4.6%
98.8%	7,502	7,773	271	3.6%
100.0%	7,090	7,141	51	0.7%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,139	81,011	-128	-0.2%
1.2%	78,542	78,186	-356	-0.5%
2.5%	77,628	77,665	37	0.0%
3.7%	77,566	77,568	2	0.0%
4.9%	75,325	75,330	6	0.0%
6.2%	72,865	72,597	-269	-0.4%
7.4%	71,234	71,230	-5	0.0%
8.6%	70,762	70,262	-501	-0.7%
9.9%	69,334	69,219	-115	-0.2%
11.1%	69,129	68,941	-187	-0.3%
12.3%	67,499	65,653	-1,846	-2.7%
13.6%	64,866	65,079	214	0.3%
14.8%	64,736	63,670	-1,066	-1.6%
16.0%	63,487	63,454	-33	-0.1%
17.3%	63,395	62,459	-936	-1.5%
18.5%	61,486	59,003	-2,483	-4.0%
19.8%	60,676	58,725	-1,950	-3.2%
21.0%	56,868	55,639	-1,229	-2.2%
22.2%	56,400	55,131	-1,268	-2.2%
23.5%	55,090	54,651	-438	-0.8%
24.7%	54,609	54,344	-266	-0.5%
25.9%	51,278	49,012	-2,266	-4.4%
27.2%	48,754	48,677	-77	-0.2%
28.4%	47,014	47,298	285	0.6%
29.6%	44,713	44,422	-291	-0.7%
30.9%	41,793	37,943	-3,850	-9.2%
32.1%	39,479	37,850	-1,628	-4.1%
33.3%	38,169	37,788	-381	-1.0%
34.6%	38,118	34,504	-3,614	-9.5%
35.8%	37,301	33,842	-3,459	-9.3%
37.0%	35,070	33,760	-1,310	-3.7%
38.3%	34,612	31,631	-2,980	-8.6%
39.5%	34,120	31,471	-2,649	-7.8%
40.7%	34,097	29,881	-4,216	-12.4%
42.0%	30,609	29,630	-979	-3.2%
43.2%	30,594	27,543	-3,051	-10.0%
44.4%	30,013	26,553	-3,461	-11.5%
45.7%	27,975	24,533	-3,441	-12.3%
46.9%	27,382	23,799	-3,583	-13.1%
48.1%	26,099	23,344	-2,755	-10.6%
49.4%	26,076	22,694	-3,381	-13.0%
50.6%	25,593	22,693	-2,900	-11.3%
51.9%	23,574	22,283	-1,291	-5.5%
53.1%	23,365	19,432	-3,933	-16.8%
54.3%	23,040	19,305	-3,735	-16.2%
55.6%	22,327	19,205	-3,123	-14.0%
56.8%	21,885	18,688	-3,197	-14.6%
58.0%	21,335	17,818	-3,516	-16.5%
59.3%	20,655	17,642	-3,013	-14.6%
60.5%	19,841	17,006	-2,834	-14.3%
61.7%	18,721	16,613	-2,109	-11.3%
63.0%	18,617	16,208	-2,409	-12.9%
64.2%	18,587	16,091	-2,495	-13.4%
65.4%	17,935	15,872	-2,063	-11.5%
66.7%	17,783	15,830	-1,953	-11.0%
67.9%	17,773	15,591	-2,183	-12.3%
69.1%	16,698	15,303	-1,395	-8.4%
70.4%	15,717	15,000	-717	-4.6%
71.6%	15,618	15,000	-618	-4.0%
72.8%	15,498	15,000	-498	-3.2%
74.1%	15,298	15,000	-298	-1.9%
75.3%	15,143	15,000	-143	-0.9%
76.5%	14,794	14,711	-82	-0.6%
77.8%	14,660	14,583	-77	-0.5%
79.0%	14,284	14,429	145	1.0%
80.2%	13,982	14,043	61	0.4%
81.5%	13,820	13,839	19	0.1%
82.7%	13,528	13,583	55	0.4%
84.0%	13,317	13,559	242	1.8%
85.2%	13,249	13,364	115	0.9%
86.4%	13,222	13,351	129	1.0%
87.7%	13,176	13,189	13	0.1%
88.9%	13,131	13,074	-57	-0.4%
90.1%	12,511	12,724	213	1.7%
91.4%	11,635	11,580	-55	-0.5%
92.6%	11,527	11,493	-33	-0.3%
93.8%	11,160	11,332	172	1.5%
95.1%	11,069	11,320	251	2.3%
96.3%	11,019	11,121	101	0.9%
97.5%	10,950	11,028	78	0.7%
98.8%	9,700	9,717	17	0.2%
100.0%	6,837	6,749	-88	-1.3%

Table SW-30-b

Sacramento River below Hood, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	80,937	80,949	12	0.0%
1.2%	80,327	80,535	208	0.3%
2.5%	79,774	79,672	-103	-0.1%
3.7%	79,165	79,245	80	0.1%
4.9%	78,078	78,010	-68	-0.1%
6.2%	77,383	77,386	3	0.0%
7.4%	75,932	75,928	-4	0.0%
8.6%	75,800	75,458	-342	-0.5%
9.9%	75,474	75,262	-212	-0.3%
11.1%	72,732	72,729	-3	0.0%
12.3%	71,013	70,755	-258	-0.4%
13.6%	70,908	70,634	-274	-0.4%
14.8%	70,730	70,113	-617	-0.9%
16.0%	69,908	69,909	1	0.0%
17.3%	68,341	68,372	31	0.0%
18.5%	67,019	66,586	-433	-0.6%
19.8%	66,723	66,478	-244	-0.4%
21.0%	66,367	65,261	-1,106	-1.7%
22.2%	64,720	65,095	375	0.6%
23.5%	64,381	64,131	-250	-0.4%
24.7%	63,277	61,755	-1,522	-2.4%
25.9%	62,756	61,725	-1,031	-1.6%
27.2%	62,412	61,589	-823	-1.3%
28.4%	57,783	57,616	-167	-0.3%
29.6%	57,238	56,049	-1,190	-2.1%
30.9%	55,132	53,875	-1,257	-2.3%
32.1%	53,869	53,668	-202	-0.4%
33.3%	53,292	50,795	-2,497	-4.7%
34.6%	51,639	50,460	-1,180	-2.3%
35.8%	51,152	50,422	-730	-1.4%
37.0%	50,960	48,897	-2,063	-4.0%
38.3%	50,024	48,528	-1,495	-3.0%
39.5%	49,838	48,182	-1,657	-3.3%
40.7%	49,200	48,067	-1,133	-2.3%
42.0%	45,262	45,849	587	1.3%
43.2%	44,404	44,398	-6	0.0%
44.4%	42,987	43,000	14	0.0%
45.7%	41,545	39,259	-2,286	-5.5%
46.9%	40,769	39,010	-1,760	-4.3%
48.1%	38,954	38,769	-185	-0.5%
49.4%	35,456	34,339	-1,117	-3.2%
50.6%	35,423	32,922	-2,501	-7.1%
51.9%	34,658	31,636	-3,022	-8.7%
53.1%	34,087	31,352	-2,735	-8.0%
54.3%	32,372	30,134	-2,238	-6.9%
55.6%	31,409	29,492	-1,917	-6.1%
56.8%	31,304	28,325	-2,979	-9.5%
58.0%	29,962	26,514	-3,448	-11.5%
59.3%	28,250	25,961	-2,289	-8.1%
60.5%	27,525	25,617	-1,908	-6.9%
61.7%	27,002	25,015	-1,986	-7.4%
63.0%	26,929	24,126	-2,803	-10.4%
64.2%	26,138	23,881	-2,256	-8.6%
65.4%	26,045	23,765	-2,280	-8.8%
66.7%	25,554	22,778	-2,775	-10.9%
67.9%	25,049	22,469	-2,581	-10.3%
69.1%	24,221	21,942	-2,279	-9.4%
70.4%	23,906	21,931	-1,976	-8.3%
71.6%	23,704	21,551	-2,153	-9.1%
72.8%	21,966	20,674	-1,291	-5.9%
74.1%	21,530	20,169	-1,361	-6.3%
75.3%	21,112	18,321	-2,791	-13.2%
76.5%	20,709	18,010	-2,698	-13.0%
77.8%	20,210	17,813	-2,396	-11.9%
79.0%	19,197	17,489	-1,708	-8.9%
80.2%	18,308	17,126	-1,183	-6.5%
81.5%	17,848	16,967	-881	-4.9%
82.7%	17,657	16,258	-1,399	-7.9%
84.0%	17,524	16,133	-1,391	-7.9%
85.2%	17,266	15,960	-1,306	-7.6%
86.4%	16,598	15,750	-848	-5.1%
87.7%	16,494	15,648	-846	-5.1%
88.9%	16,337	15,236	-1,101	-6.7%
90.1%	16,256	15,039	-1,217	-7.5%
91.4%	16,001	14,321	-1,680	-10.5%
92.6%	15,234	14,185	-1,048	-6.9%
93.8%	14,608	13,213	-1,395	-9.6%
95.1%	14,378	13,144	-1,234	-8.6%
96.3%	12,073	13,142	1,070	8.9%
97.5%	11,245	11,525	280	2.5%
98.8%	10,864	10,300	-564	-5.2%
100.0%	8,957	9,758	801	8.9%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	79,482	79,482	0	0.0%
1.2%	79,149	79,150	1	0.0%
2.5%	77,048	77,072	23	0.0%
3.7%	76,191	75,596	-595	-0.8%
4.9%	73,804	73,806	2	0.0%
6.2%	71,726	71,122	-604	-0.8%
7.4%	70,399	69,837	-562	-0.8%
8.6%	65,157	65,170	13	0.0%
9.9%	63,664	62,450	-1,214	-1.9%
11.1%	62,459	61,846	-614	-1.0%
12.3%	61,637	61,640	4	0.0%
13.6%	61,387	61,139	-248	-0.4%
14.8%	60,933	60,933	-1	0.0%
16.0%	59,687	59,444	-243	-0.4%
17.3%	58,035	58,240	205	0.4%
18.5%	57,812	57,816	4	0.0%
19.8%	56,939	55,704	-1,235	-2.2%
21.0%	55,256	54,202	-1,054	-1.9%
22.2%	54,496	54,168	-328	-0.6%
23.5%	54,299	53,908	-391	-0.7%
24.7%	50,473	50,665	192	0.4%
25.9%	50,252	48,884	-1,368	-2.7%
27.2%	50,201	48,268	-1,933	-3.9%
28.4%	49,685	46,219	-3,466	-7.0%
29.6%	47,829	45,696	-2,134	-4.5%
30.9%	46,924	45,352	-1,572	-3.3%
32.1%	44,703	42,022	-2,681	-6.0%
33.3%	42,620	40,922	-1,698	-4.0%
34.6%	41,783	39,422	-2,361	-5.7%
35.8%	39,475	38,783	-692	-1.8%
37.0%	39,468	38,143	-1,325	-3.4%
38.3%	38,498	37,860	-638	-1.7%
39.5%	38,421	36,654	-1,767	-4.6%
40.7%	37,944	36,311	-1,633	-4.3%
42.0%	36,698	35,036	-1,662	-4.5%
43.2%	36,360	31,964	-4,397	-12.1%
44.4%	36,311	31,372	-4,940	-13.6%
45.7%	33,631	31,098	-2,533	-7.5%
46.9%	30,519	28,888	-1,631	-5.3%
48.1%	30,036	26,335	-3,700	-12.3%
49.4%	29,356	25,967	-3,389	-11.5%
50.6%	28,592	25,845	-2,747	-9.6%
51.9%	27,110	23,925	-3,185	-11.7%
53.1%	25,775	22,902	-2,873	-11.1%
54.3%	25,616	22,683	-2,932	-11.4%
55.6%	23,880	22,621	-1,259	-5.3%
56.8%	23,809	22,374	-1,434	-6.0%
58.0%	23,787	20,903	-2,884	-12.1%
59.3%	23,227	20,645	-2,582	-11.1%
60.5%	22,631	20,528	-2,102	-9.3%
61.7%	22,355	20,269	-2,086	-9.3%
63.0%	22,353	19,664	-2,689	-12.0%
64.2%	21,701	19,641	-2,060	-9.5%
65.4%	21,181	19,633	-1,549	-7.3%
66.7%	21,111	19,585	-1,525	-7.2%
67.9%	20,912	19,552	-1,360	-6.5%
69.1%	20,679	17,933	-2,746	-13.3%
70.4%	20,430	17,519	-2,912	-14.3%
71.6%	19,660	17,391	-2,270	-11.5%
72.8%	18,627	17,300	-1,327	-7.1%
74.1%	18,614	16,591	-2,024	-10.9%
75.3%	17,563	16,538	-1,026	-5.8%
76.5%	17,550	16,515	-1,035	-5.9%
77.8%	16,955	16,105	-850	-5.0%
79.0%	16,550	15,504	-1,047	-6.3%
80.2%	16,436	15,036	-1,400	-8.5%
81.5%	15,573	13,807	-1,766	-11.3%
82.7%	15,032	13,299	-1,733	-11.5%
84.0%	14,598	13,000	-1,598	-10.9%
85.2%	14,256	13,000	-1,256	-8.8%
86.4%	12,437	13,000	563	4.5%
87.7%	12,329	13,000	671	5.4%
88.9%	12,260	12,577	317	2.6%
90.1%	12,102	12,357	255	2.1%
91.4%	11,967	12,191	224	1.9%
92.6%	11,882	11,941	59	0.5%
93.8%	11,752	11,782	29	0.2%
95.1%	11,399	11,482	83	0.7%
96.3%	10,701	10,532	-168	-1.6%
97.5%	9,907	10,446	539	5.4%
98.8%	8,744	8,756	12	0.1%
100.0%	8,389	8,435	46	0.6%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	76,345	76,347	2	0.0%
1.2%	76,209	76,205	-5	0.0%
2.5%	70,020	69,468	-552	-0.8%
3.7%	57,130	57,133	3	0.0%
4.9%	53,663	54,341	678	1.3%
6.2%	50,175	50,170	-4	0.0%
7.4%	49,730	49,615	-116	-0.2%
8.6%	49,600	48,975	-625	-1.3%
9.9%	48,925	48,307	-617	-1.3%
11.1%	48,523	47,756	-767	-1.6%
12.3%	47,762	45,615	-2,148	-4.5%
13.6%	39,923	37,527	-2,396	-6.0%
14.8%	39,274	37,197	-2,076	-5.3%
16.0%	37,553	36,973	-581	-1.5%
17.3%	37,054	36,164	-890	-2.4%
18.5%	35,594	35,188	-406	-1.1%
19.8%	35,192	33,470	-1,723	-4.9%
21.0%	31,925	30,121	-1,805	-5.7%
22.2%	29,691	29,262	-430	-1.4%
23.5%	29,309	29,233	-76	-0.3%
24.7%	28,055	26,058	-1,997	-7.1%
25.9%	25,547	25,598	51	0.2%
27.2%	25,054	24,942	-112	-0.4%
28.4%	24,223	24,101	-121	-0.5%
29.6%	24,038	23,847	-191	-0.8%
30.9%	23,807	23,687	-120	-0.5%
32.1%	23,196	22,796	-399	-1.7%
33.3%	21,786	21,785	-1	0.0%
34.6%	20,442	20,395	-46	-0.2%
35.8%	20,138	19,232	-906	-4.5%
37.0%	19,076	18,500	-576	-3.0%
38.3%	18,266	17,620	-646	-3.5%
39.5%	16,669	16,911	242	1.5%
40.7%	16,509	16,481	-28	-0.2%
42.0%	16,264	16,095	-169	-1.0%
43.2%	14,654	14,915	261	1.8%
44.4%	14,584	14,707	123	0.8%
45.7%	14,567	14,539	-28	-0.2%
46.9%	14,249	14,533	284	2.0%
48.1%	14,073	14,304	232	1.6%
49.4%	14,038	13,927	-111	-0.8%
50.6%	13,532	13,662	131	1.0%
51.9%	13,325	13,350	25	0.2%
53.1%	13,258	13,277	20	0.1%
54.3%	13,116	13,202	86	0.7%
55.6%	13,082	13,135	52	0.4%
56.8%	12,632	13,048	417	3.3%
58.0%	12,596	13,045	449	3.6%
59.3%	12,508	12,513	5	0.0%
60.5%	12,296	12,463	167	1.4%
61.7%	12,288	12,408	120	1.0%
63.0%	12,241	12,296	55	0.5%
64.2%	12,096	12,220	124	1.0%
65.4%	12,075	12,136	61	0.5%
66.7%	11,604	12,031	427	3.7%
67.9%	11,564	11,951	387	3.3%
69.1%	11,510	11,890	380	3.3%
70.4%	11,414	11,673	259	2.3%
71.6%	11,406	11,657	251	2.2%
72.8%	11,399	11,492	93	0.8%
74.1%	11,344	11,424	79	0.7%
75.3%	11,300	11,385	85	0.8%
76.5%	11,266	11,343	77	0.7%
77.8%	11,121	11,319	199	1.8%
79.0%	10,927	11,294	367	3.4%
80.2%	10,924	11,242	318	2.9%
81.5%	10,744	10,923	178	1.7%
82.7%	10,638	10,330	-308	-2.9%
84.0%	10,256	10,252	-5	0.0%
85.2%	10,068	10,216	148	1.5%
86.4%	9,964	9,875	-89	-0.9%
87.7%	9,696	9,770	75	0.8%
88.9%	9,604	9,639	35	0.4%
90.1%	9,407	9,496	88	0.9%
91.4%	9,333	9,278	-55	-0.6%
92.6%	9,127	9,133	5	0.1%
93.8%	8,972	9,120	148	1.6%
95.1%	8,934	8,974	40	0.4%
96.3%	8,872	8,853	-19	-0.2%
97.5%	8,403	8,420	17	0.2%
98.8%	7,569	7,575	6	0.1%
100.0%	7,231	7,220	-12	-0.2%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	50,620	49,497	-1,123	-2.2%
1.2%	37,804	37,699	-105	-0.3%
2.5%	36,526	36,704	178	0.5%
3.7%	32,282	32,285	4	0.0%
4.9%	32,205	31,981	-224	-0.7%
6.2%	28,343	28,178	-165	-0.6%
7.4%	26,994	24,757	-2,236	-8.3%
8.6%	24,922	24,658	-263	-1.1%
9.9%	21,276	19,856	-1,420	-6.7%
11.1%	20,051	19,761	-290	-1.4%
12.3%	19,975	18,979	-995	-5.0%
13.6%	19,196	18,373	-823	-4.3%
14.8%	18,393	18,240	-154	-0.8%
16.0%	17,635	17,861	225	1.3%
17.3%	17,321	17,198	-123	-0.7%
18.5%	15,868	14,064	-1,804	-11.4%
19.8%	13,767	13,645	-122	-0.9%
21.0%	13,567	13,485	-81	-0.6%
22.2%	13,354	13,264	-90	-0.7%
23.5%	13,323	13,000	-323	-2.4%
24.7%	13,166	13,000	-166	-1.3%
25.9%	12,838	12,801	-37	-0.3%
27.2%	12,746	12,790	44	0.3%
28.4%	12,566	12,677	111	0.9%
29.6%	12,516	12,533	17	0.1%
30.9%	12,473	11,947	-526	-4.2%
32.1%	12,222	11,943	-279	-2.3%
33.3%	12,052	11,666	-387	-3.2%
34.6%	11,760	11,655	-104	-0.9%
35.8%	11,751	11,242	-509	-4.3%
37.0%	11,320	11,116	-204	-1.8%
38.3%	11,095	10,970	-125	-1.1%
39.5%	11,083	10,967	-116	-1.0%
40.7%	11,073	10,963	-111	-1.0%
42.0%	11,071	10,910	-161	-1.5%
43.2%	11,036	10,904	-132	-1.2%
44.4%	10,945	10,847	-98	-0.9%
45.7%	10,910	10,809	-101	-0.9%
46.9%	10,873	10,777	-96	-0.9%
48.1%	10,845	10,721	-124	-1.1%
49.4%	10,618	10,565	-53	-0.5%
50.6%	10,594	10,505	-89	-0.8%
51.9%	10,580	10,491	-90	-0.8%
53.1%	10,552	10,447	-104	-1.0%
54.3%	10,532	10,440	-91	-0.9%
55.6%	10,337	10,427	90	0.9%
56.8%	10,313	10,311	-1	0.0%
58.0%	10,185	10,305	120	1.2%
59.3%	10,175	10,206	31	0.3%
60.5%	10,126	10,188	62	0.6%
61.7%	10,007	10,185	177	1.8%
63.0%	9,934	10,151	217	2.2%
64.2%	9,902	10,035	133	1.3%
65.4%	9,895	10,032	137	1.4%
66.7%	9,885	9,975	90	0.9%
67.9%	9,833	9,911	78	0.8%
69.1%	9,792	9,863	70	0.7%
70.4%	9,753	9,837	84	0.9%
71.6%	9,740	9,784	44	0.5%
72.8%	9,458	9,694	237	2.5%
74.1%	9,407	9,557	151	1.6%
75.3%	9,393	9,398	5	0.1%
76.5%	9,363	9,389	26	0.3%
77.8%	9,359	9,308	-52	-0.6%
79.0%	9,352	9,288	-65	-0.7%
80.2%	9,308	9,240	-67	-0.7%
81.5%	9,283	9,178	-106	-1.1%
82.7%	9,188	9,105	-83	-0.9%
84.0%	9,045	9,029	-16	-0.2%
85.2%	8,914	8,984	70	0.8%
86.4%	8,855	8,942	87	1.0%
87.7%	8,835	8,839	4	0.0%
88.9%	8,736	8,810	74	0.8%
90.1%	8,342	8,743	401	4.8%
91.4%	8,161	8,736	575	7.0%
92.6%	8,045	8,282	236	2.9%
93.8%	7,957	7,834	-123	-1.5%
95.1%	7,623	7,779	156	2.0%
96.3%	6,931	7,447	516	7.4%
97.5%	6,662	6,388	-275	-4.1%
98.8%	6,035	6,240	206	3.4%
100.0%	5,362	5,494	132	2.5%

Table SW-30-b

Sacramento River below Hood, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,658	32,459	801	2.5%
1.2%	18,495	21,100	2,606	14.1%
2.5%	17,763	16,901	-863	-4.9%
3.7%	16,407	16,252	-155	-0.9%
4.9%	16,252	16,048	-204	-1.3%
6.2%	15,409	15,496	87	0.6%
7.4%	15,137	15,337	200	1.3%
8.6%	14,769	15,315	547	3.7%
9.9%	14,749	15,188	439	3.0%
11.1%	14,678	14,803	125	0.9%
12.3%	14,563	14,769	206	1.4%
13.6%	14,540	14,540	0	0.0%
14.8%	14,293	14,478	185	1.3%
16.0%	14,288	14,462	174	1.2%
17.3%	13,861	14,419	558	4.0%
18.5%	13,792	14,346	554	4.0%
19.8%	13,762	14,133	371	2.7%
21.0%	13,743	13,861	118	0.9%
22.2%	13,613	13,792	179	1.3%
23.5%	13,574	13,626	51	0.4%
24.7%	13,528	13,613	85	0.6%
25.9%	13,476	13,477	1	0.0%
27.2%	13,457	13,457	0	0.0%
28.4%	13,401	13,425	24	0.2%
29.6%	13,284	13,342	58	0.4%
30.9%	13,245	13,319	74	0.6%
32.1%	13,164	13,285	121	0.9%
33.3%	13,111	13,282	171	1.3%
34.6%	13,086	13,251	165	1.3%
35.8%	13,061	13,164	103	0.8%
37.0%	13,037	13,111	74	0.6%
38.3%	13,005	13,108	103	0.8%
39.5%	12,965	13,064	99	0.8%
40.7%	12,880	13,037	157	1.2%
42.0%	12,846	13,000	154	1.2%
43.2%	12,842	13,000	158	1.2%
44.4%	12,794	13,000	206	1.6%
45.7%	12,722	13,000	278	2.2%
46.9%	12,544	13,000	456	3.6%
48.1%	12,511	13,000	489	3.9%
49.4%	12,495	13,000	505	4.0%
50.6%	12,330	13,000	670	5.4%
51.9%	12,259	12,997	738	6.0%
53.1%	12,246	12,882	636	5.2%
54.3%	12,129	12,758	629	5.2%
55.6%	12,088	12,722	633	5.2%
56.8%	12,017	12,533	517	4.3%
58.0%	11,974	12,522	549	4.6%
59.3%	11,955	12,522	568	4.7%
60.5%	11,951	12,468	517	4.3%
61.7%	11,944	12,411	466	3.9%
63.0%	11,869	12,349	481	4.1%
64.2%	11,713	12,277	564	4.8%
65.4%	11,684	12,190	506	4.3%
66.7%	11,613	12,137	523	4.5%
67.9%	11,553	12,017	464	4.0%
69.1%	11,483	12,003	520	4.5%
70.4%	11,476	11,974	497	4.3%
71.6%	11,467	11,970	502	4.4%
72.8%	11,462	11,950	488	4.3%
74.1%	11,405	11,943	538	4.7%
75.3%	11,322	11,935	613	5.4%
76.5%	11,267	11,676	409	3.6%
77.8%	11,231	11,636	405	3.6%
79.0%	11,224	11,634	410	3.7%
80.2%	11,160	11,578	418	3.7%
81.5%	10,951	11,230	279	2.5%
82.7%	10,894	11,145	251	2.3%
84.0%	10,894	11,074	180	1.6%
85.2%	10,822	11,052	230	2.1%
86.4%	10,618	10,893	275	2.6%
87.7%	10,571	10,634	63	0.6%
88.9%	10,352	10,571	219	2.1%
90.1%	10,225	10,531	305	3.0%
91.4%	10,138	10,408	270	2.7%
92.6%	9,631	10,003	372	3.9%
93.8%	9,406	9,957	551	5.9%
95.1%	8,927	9,406	479	5.4%
96.3%	7,906	8,960	1,054	13.3%
97.5%	7,647	7,754	107	1.4%
98.8%	7,350	7,718	368	5.0%
100.0%	7,048	7,647	600	8.5%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,664	25,431	767	3.1%
1.2%	24,604	24,652	48	0.2%
2.5%	24,496	24,651	154	0.6%
3.7%	24,396	24,462	65	0.3%
4.9%	24,394	24,396	2	0.0%
6.2%	24,383	24,379	-4	0.0%
7.4%	24,321	24,366	45	0.2%
8.6%	24,312	24,306	-6	0.0%
9.9%	24,306	24,306	0	0.0%
11.1%	24,306	24,306	0	0.0%
12.3%	24,306	24,306	0	0.0%
13.6%	24,266	24,306	40	0.2%
14.8%	24,139	24,306	167	0.7%
16.0%	24,103	24,306	203	0.8%
17.3%	23,838	24,306	468	2.0%
18.5%	23,659	24,306	647	2.7%
19.8%	23,617	24,174	556	2.4%
21.0%	23,560	24,013	453	1.9%
22.2%	23,556	23,971	416	1.8%
23.5%	23,502	23,925	423	1.8%
24.7%	23,492	23,831	340	1.4%
25.9%	23,469	23,674	205	0.9%
27.2%	23,430	23,663	233	1.0%
28.4%	23,324	23,640	316	1.4%
29.6%	23,230	23,612	383	1.6%
30.9%	23,125	23,492	367	1.6%
32.1%	22,648	23,391	743	3.3%
33.3%	22,405	23,309	903	4.0%
34.6%	22,397	22,990	594	2.7%
35.8%	22,303	22,796	493	2.2%
37.0%	22,232	22,754	522	2.3%
38.3%	22,201	22,734	533	2.4%
39.5%	22,170	22,650	480	2.2%
40.7%	22,155	22,219	64	0.3%
42.0%	22,117	22,047	-70	-0.3%
43.2%	21,916	21,737	-179	-0.8%
44.4%	21,733	21,698	-35	-0.2%
45.7%	21,640	21,121	-520	-2.4%
46.9%	21,131	21,056	-76	-0.4%
48.1%	21,009	20,960	-49	-0.2%
49.4%	20,714	20,832	118	0.6%
50.6%	20,603	20,715	112	0.5%
51.9%	20,506	20,486	-20	-0.1%
53.1%	20,487	20,477	-10	0.0%
54.3%	20,445	20,457	12	0.1%
55.6%	20,353	20,445	92	0.5%
56.8%	20,097	20,083	-14	-0.1%
58.0%	20,059	19,994	-65	-0.3%
59.3%	20,037	19,956	-81	-0.4%
60.5%	19,984	19,946	-39	-0.2%
61.7%	19,925	19,944	18	0.1%
63.0%	19,751	19,686	-66	-0.3%
64.2%	19,745	19,597	-148	-0.7%
65.4%	19,368	19,572	204	1.1%
66.7%	19,137	19,492	355	1.9%
67.9%	18,945	19,372	427	2.3%
69.1%	18,907	18,897	-11	-0.1%
70.4%	18,899	18,838	-61	-0.3%
71.6%	18,815	18,296	-519	-2.8%
72.8%	18,432	18,053	-379	-2.1%
74.1%	17,690	17,902	212	1.2%
75.3%	15,745	17,114	1,369	8.7%
76.5%	15,155	17,028	1,873	12.4%
77.8%	15,155	16,989	1,835	12.1%
79.0%	15,109	16,622	1,514	10.0%
80.2%	14,589	16,425	1,836	12.6%
81.5%	13,643	16,260	2,617	19.2%
82.7%	13,615	15,188	1,572	11.5%
84.0%	13,505	15,154	1,648	12.2%
85.2%	13,360	14,571	1,211	9.1%
86.4%	13,002	14,217	1,215	9.3%
87.7%	12,947	13,866	920	7.1%
88.9%	12,856	13,464	609	4.7%
90.1%	12,618	13,276	657	5.2%
91.4%	11,896	12,980	1,083	9.1%
92.6%	11,157	12,801	1,644	14.7%
93.8%	11,122	11,958	836	7.5%
95.1%	10,862	11,151	290	2.7%
96.3%	9,672	10,643	971	10.0%
97.5%	9,502	9,703	201	2.1%
98.8%	9,364	9,622	257	2.7%
100.0%	8,470	8,786	316	3.7%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,996	17,978	-18	-0.1%
1.2%	17,209	17,295	86	0.5%
2.5%	17,135	17,108	-27	-0.2%
3.7%	17,085	17,086	1	0.0%
4.9%	17,013	17,007	-6	0.0%
6.2%	17,012	17,003	-9	-0.1%
7.4%	17,003	16,999	-4	0.0%
8.6%	16,928	16,978	50	0.3%
9.9%	16,834	16,950	116	0.7%
11.1%	16,775	16,929	154	0.9%
12.3%	16,753	16,918	165	1.0%
13.6%	16,620	16,775	154	0.9%
14.8%	16,596	16,755	159	1.0%
16.0%	16,590	16,737	147	0.9%
17.3%	16,590	16,596	6	0.0%
18.5%	16,570	16,572	2	0.0%
19.8%	16,560	16,560	0	0.0%
21.0%	16,479	16,534	55	0.3%
22.2%	16,405	16,458	54	0.3%
23.5%	16,263	16,405	142	0.9%
24.7%	16,116	16,343	227	1.4%
25.9%	16,114	16,282	168	1.0%
27.2%	16,081	16,280	200	1.2%
28.4%	16,044	16,222	178	1.1%
29.6%	16,005	16,219	214	1.3%
30.9%	15,979	16,044	65	0.4%
32.1%	15,944	15,946	2	0.0%
33.3%	15,854	15,838	-16	-0.1%
34.6%	15,689	15,822	133	0.8%
35.8%	15,681	15,781	101	0.6%
37.0%	15,670	15,756	86	0.5%
38.3%	15,630	15,681	51	0.3%
39.5%	15,596	15,673	77	0.5%
40.7%	15,581	15,615	34	0.2%
42.0%	15,434	15,606	173	1.1%
43.2%	15,355	15,602	247	1.6%
44.4%	15,338	15,597	259	1.7%
45.7%	15,161	15,580	419	2.8%
46.9%	15,146	15,455	309	2.0%
48.1%	15,094	15,444	350	2.3%
49.4%	15,084	15,428	344	2.3%
50.6%	15,075	15,260	185	1.2%
51.9%	14,945	15,234	289	1.9%
53.1%	14,830	15,233	403	2.7%
54.3%	14,810	15,160	350	2.4%
55.6%	14,772	15,145	373	2.5%
56.8%	14,769	15,085	315	2.1%
58.0%	14,559	15,028	469	3.2%
59.3%	14,487	14,998	511	3.5%
60.5%	14,468	14,943	475	3.3%
61.7%	14,419	14,830	411	2.9%
63.0%	14,400	14,694	294	2.0%
64.2%	14,246	14,652	406	2.8%
65.4%	14,115	14,583	467	3.3%
66.7%	13,571	14,468	897	6.6%
67.9%	13,453	14,419	965	7.2%
69.1%	13,310	14,402	1,092	8.2%
70.4%	13,248	14,370	1,122	8.5%
71.6%	12,627	14,246	1,619	12.8%
72.8%	12,421	14,139	1,718	13.8%
74.1%	12,209	14,104	1,895	15.5%
75.3%	10,641	13,589	2,948	27.7%
76.5%	10,044	12,669	2,625	26.1%
77.8%	9,645	12,376	2,731	28.3%
79.0%	9,253	11,568	2,315	25.0%
80.2%	9,241	11,566	2,325	25.2%
81.5%	9,229	11,512	2,283	24.7%
82.7%	9,213	11,377	2,164	23.5%
84.0%	9,009	11,189	2,181	24.2%
85.2%	8,872	10,280	1,408	15.9%
86.4%	8,782	10,231	1,449	16.5%
87.7%	8,687	10,135	1,447	16.7%
88.9%	8,491	9,332	841	9.9%
90.1%	8,278	9,102	824	10.0%
91.4%	8,090	8,853	763	9.4%
92.6%	8,033	8,834	801	10.0%
93.8%	8,030	8,617	587	7.3%
95.1%	7,922	8,602	680	8.6%
96.3%	7,623	8,585	962	12.6%
97.5%	7,424	8,387	963	13.0%
98.8%	7,194	8,352	1,157	16.1%
100.0%	6,982	8,025	1,043	14.9%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,164	30,153	-11	0.0%
1.2%	30,037	30,122	85	0.3%
2.5%	29,418	29,491	73	0.2%
3.7%	29,363	29,438	75	0.3%
4.9%	28,771	29,261	489	1.7%
6.2%	28,764	29,253	490	1.7%
7.4%	28,300	28,838	538	1.9%
8.6%	28,209	28,564	355	1.3%
9.9%	27,827	28,481	654	2.3%
11.1%	27,689	28,472	784	2.8%
12.3%	27,625	28,371	745	2.7%
13.6%	27,367	28,235	867	3.2%
14.8%	27,125	27,199	75	0.3%
16.0%	26,289	26,079	-210	-0.8%
17.3%	25,544	25,875	331	1.3%
18.5%	24,807	24,954	147	0.6%
19.8%	24,659	24,807	148	0.6%
21.0%	23,787	24,800	1,014	4.3%
22.2%	23,614	24,126	512	2.2%
23.5%	23,596	23,166	-430	-1.8%
24.7%	23,057	23,031	-26	-0.1%
25.9%	22,657	22,656	-1	0.0%
27.2%	22,483	22,541	58	0.3%
28.4%	22,367	22,423	57	0.3%
29.6%	22,329	22,367	38	0.2%
30.9%	22,280	22,339	59	0.3%
32.1%	22,218	21,957	-261	-1.2%
33.3%	21,539	21,442	-97	-0.5%
34.6%	21,469	21,391	-79	-0.4%
35.8%	20,922	21,268	346	1.7%
37.0%	19,631	19,699	68	0.3%
38.3%	19,204	19,581	377	2.0%
39.5%	18,548	19,340	792	4.3%
40.7%	16,793	16,920	128	0.8%
42.0%	16,436	16,830	395	2.4%
43.2%	14,626	15,697	1,071	7.3%
44.4%	14,580	15,467	886	6.1%
45.7%	14,353	15,367	1,014	7.1%
46.9%	14,332	15,345	1,013	7.1%
48.1%	14,201	15,057	857	6.0%
49.4%	14,024	15,027	1,004	7.2%
50.6%	13,928	14,989	1,062	7.6%
51.9%	13,576	14,792	1,216	9.0%
53.1%	13,519	14,754	1,236	9.1%
54.3%	13,212	14,549	1,337	10.1%
55.6%	13,175	14,542	1,366	10.4%
56.8%	13,017	14,396	1,379	10.6%
58.0%	12,978	14,256	1,278	9.8%
59.3%	12,809	14,225	1,416	11.1%
60.5%	12,806	14,145	1,339	10.5%
61.7%	12,726	14,123	1,397	11.0%
63.0%	12,403	13,980	1,578	12.7%
64.2%	12,025	13,906	1,880	15.6%
65.4%	11,629	13,550	1,920	16.5%
66.7%	11,516	13,495	1,979	17.2%
67.9%	10,685	13,396	2,711	25.4%
69.1%	10,548	13,046	2,498	23.7%
70.4%	10,191	12,994	2,803	27.5%
71.6%	10,140	12,677	2,537	25.0%
72.8%	10,013	12,676	2,664	26.6%
74.1%	9,899	12,589	2,690	27.2%
75.3%	9,842	12,304	2,462	25.0%
76.5%	9,606	12,267	2,661	27.7%
77.8%	9,537	12,166	2,629	27.6%
79.0%	9,467	11,975	2,508	26.5%
80.2%	9,383	11,626	2,243	23.9%
81.5%	9,009	11,330	2,321	25.8%
82.7%	8,766	11,288	2,522	28.8%
84.0%	8,530	11,282	2,752	32.3%
85.2%	8,505	11,182	2,677	31.5%
86.4%	8,396	10,809	2,413	28.7%
87.7%	8,317	10,310	1,993	24.0%
88.9%	8,074	10,240	2,165	26.8%
90.1%	8,024	10,153	2,130	26.5%
91.4%	7,963	9,270	1,307	16.4%
92.6%	7,621	8,945	1,324	17.4%
93.8%	6,974	8,707	1,732	24.8%
95.1%	6,805	8,483	1,678	24.7%
96.3%	6,674	7,984	1,310	19.6%
97.5%	6,617	7,944	1,327	20.1%
98.8%	6,352	7,602	1,250	19.7%
100.0%	6,334	7,023	690	10.9%

Figure SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

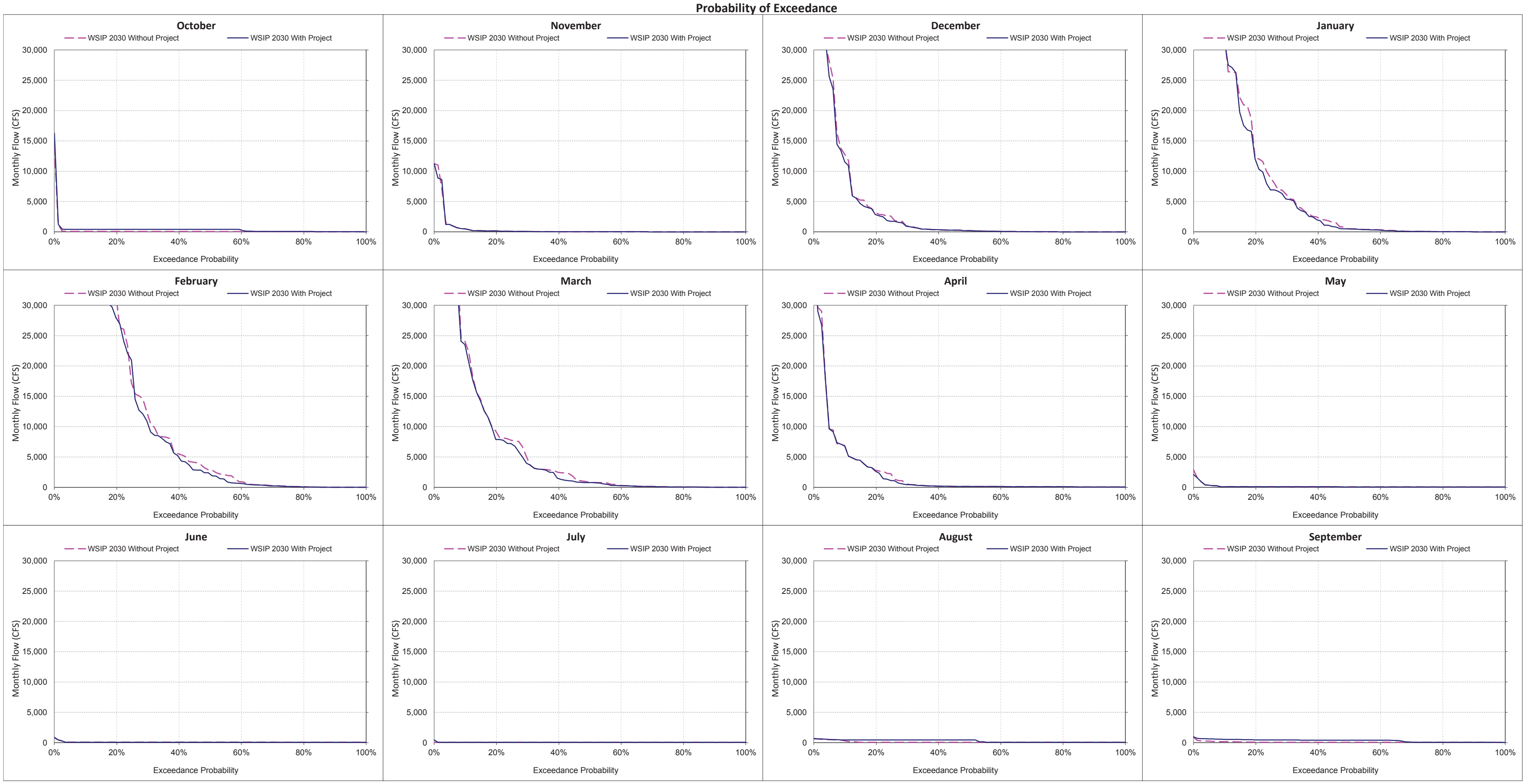


Table SW-31-b

Yolo Bypass, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,206	16,283	2,076	14.6%
1.2%	1,201	1,201	0	0.0%
2.5%	138	449	311	225.0%
3.7%	93	391	297	318.7%
4.9%	76	390	314	413.1%
6.2%	64	390	326	508.2%
7.4%	63	390	327	515.8%
8.6%	63	390	327	516.6%
9.9%	63	390	327	516.6%
11.1%	63	390	327	516.6%
12.3%	63	390	327	516.6%
13.6%	63	390	327	520.9%
14.8%	63	390	327	520.9%
16.0%	63	390	328	523.1%
17.3%	62	390	329	532.0%
18.5%	62	390	329	534.3%
19.8%	61	390	329	536.5%
21.0%	61	390	329	538.8%
22.2%	61	390	329	538.8%
23.5%	61	390	330	543.5%
24.7%	60	390	330	545.9%
25.9%	60	390	330	550.6%
27.2%	59	390	331	557.9%
28.4%	58	390	333	575.5%
29.6%	58	390	333	577.9%
30.9%	56	390	334	593.9%
32.1%	54	390	336	617.1%
33.3%	54	390	336	619.4%
34.6%	54	390	336	622.3%
35.8%	54	390	337	625.2%
37.0%	53	390	337	631.2%
38.3%	53	390	337	634.3%
39.5%	53	390	337	637.2%
40.7%	53	390	338	643.3%
42.0%	52	390	338	648.5%
43.2%	52	390	338	653.1%
44.4%	50	390	340	676.0%
45.7%	49	390	342	702.6%
46.9%	46	390	344	751.1%
48.1%	45	390	345	759.1%
49.4%	45	390	346	771.7%
50.6%	45	390	346	776.2%
51.9%	44	390	346	789.1%
53.1%	43	390	347	798.5%
54.3%	43	390	347	803.1%
55.6%	42	390	348	821.7%
56.8%	42	390	348	824.4%
58.0%	40	390	350	878.4%
59.3%	39	390	351	888.4%
60.5%	38	180	142	371.5%
61.7%	38	100	62	162.7%
63.0%	37	94	56	151.4%
64.2%	37	80	44	119.5%
65.4%	36	75	39	108.1%
66.7%	30	63	34	112.5%
67.9%	29	63	34	117.4%
69.1%	29	63	34	118.5%
70.4%	26	62	36	135.4%
71.6%	24	61	38	157.5%
72.8%	22	61	39	171.6%
74.1%	20	61	41	204.7%
75.3%	18	60	42	229.9%
76.5%	17	54	37	217.2%
77.8%	16	53	37	239.3%
79.0%	15	53	38	263.6%
80.2%	14	50	37	267.8%
81.5%	12	46	34	272.8%
82.7%	12	45	33	275.9%
84.0%	11	43	33	
85.2%	9	40	31	
86.4%	8	37	28	
87.7%	6	36	30	
88.9%	5	30	25	
90.1%	4	29	24	
91.4%	3	26	23	
92.6%	3	18	15	
93.8%	3	11	8	
95.1%	2	8	7	
96.3%	1	6	5	
97.5%	0	4	4	
98.8%	0	3	3	
100.0%	0	0	0	

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,269	11,191	-78	-0.7%
1.2%	10,999	8,899	-2,100	-19.1%
2.5%	7,078	8,626	1,548	21.9%
3.7%	1,564	1,219	-344	-22.0%
4.9%	1,168	1,209	41	3.5%
6.2%	933	933	0	0.0%
7.4%	655	655	0	0.0%
8.6%	551	551	0	0.0%
9.9%	489	489	0	0.0%
11.1%	353	353	0	0.0%
12.3%	213	213	0	0.0%
13.6%	197	197	0	0.0%
14.8%	187	187	0	0.0%
16.0%	165	165	0	0.0%
17.3%	160	160	0	0.0%
18.5%	156	156	0	0.0%
19.8%	151	155	3	2.2%
21.0%	121	121	0	0.0%
22.2%	109	109	0	0.0%
23.5%	97	97	0	0.0%
24.7%	90	83	-8	-8.6%
25.9%	81	81	0	0.0%
27.2%	66	66	0	0.0%
28.4%	51	51	0	0.0%
29.6%	50	50	0	0.0%
30.9%	49	49	0	0.0%
32.1%	37	37	0	0.0%
33.3%	36	36	0	0.0%
34.6%	35	35	0	0.0%
35.8%	35	35	0	0.0%
37.0%	25	25	0	0.0%
38.3%	20	20	0	
39.5%	12	12	0	
40.7%	10	10	0	
42.0%	10	10	0	
43.2%	10	10	0	
44.4%	10	10	0	
45.7%	10	10	0	
46.9%	9	9	0	
48.1%	9	9	0	
49.4%	9	9	0	
50.6%	8	9	0	
51.9%	8	8	0	
53.1%	7	8	1	
54.3%	7	7	0	
55.6%	7	7	0	
56.8%	7	7	0	
58.0%	6	7	0	
59.3%	6	6	1	
60.5%	5	5	0	
61.7%	5	5	0	
63.0%	5	5	0	
64.2%	5	5	0	
65.4%	2	3	1	
66.7%	1	2	0	
67.9%	0	1	1	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	62,698	62,880	182	0.3%
1.2%	51,722	48,323	-3,399	-6.6%
2.5%	34,588	32,910	-1,678	-4.9%
3.7%	30,952	32,094	1,142	3.7%
4.9%	28,126	25,612	-2,514	-8.9%
6.2%	25,252	23,509	-1,743	-6.9%
7.4%	16,277	14,467	-1,811	-11.1%
8.6%	13,819	13,420	-399	-2.9%
9.9%	12,826	11,549	-1,277	-10.0%
11.1%	11,761	10,952	-809	-6.9%
12.3%	6,119	5,943	-176	-2.9%
13.6%	5,624	5,538	-87	-1.5%
14.8%	5,249	4,702	-547	-10.4%
16.0%	5,223	4,220	-1,003	-19.2%
17.3%	4,199	3,985	-214	-5.1%
18.5%	3,838	3,829	-9	-0.2%
19.8%	3,205	2,841	-364	-11.4%
21.0%	2,860	2,633	-227	-7.9%
22.2%	2,818	2,470	-348	-12.3%
23.5%	2,614	1,873	-741	-28.3%
24.7%	2,606	1,739	-867	-33.3%
25.9%	1,856	1,734	-122	-6.6%
27.2%	1,715	1,553	-162	-9.4%
28.4%	1,711	1,498	-213	-12.4%
29.6%	976	913	-63	-6.4%
30.9%	913	826	-87	-9.5%
32.1%	790	728	-62	-7.9%
33.3%	605	605	0	0.0%
34.6%	470	470	0	0.0%
35.8%	442	442	0	0.0%
37.0%	411	411	0	0.0%
38.3%	350	350	0	0.0%
39.5%	349	349	0	0.0%
40.7%	330	330	0	0.0%
42.0%	285	307	22	7.8%
43.2%	281	285	3	1.1%
44.4%	280	280	0	0.0%
45.7%	265	265	0	0.0%
46.9%	261	261	0	0.0%
48.1%	195	195	0	
49.4%	192	192	0	
50.6%	178	178	0	
51.9%	138	138	0	
53.1%	135	135	0	
54.3%	122	122	0	
55.6%	107	107	0	
56.8%	93	102	10	
58.0%	81	93	11	
59.3%	63	63	0	
60.5%	57	57	0	
61.7%	57	57	0	
63.0%	42	47	5	
64.2%	42	45	3	
65.4%	41	42	2	
66.7%	37	41	3	
67.9%	23	37	15	
69.1%	20	34	15	
70.4%	13	23	10	
71.6%	10	13	3	
72.8%	5	10	5	
74.1%	1	9	8	
75.3%	0	6	6	
76.5%	0	5	5	
77.8%	0	3	3	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	143,506	141,445	-2,062	-1.4%
1.2%	124,205	118,580	-5,625	-4.5%
2.5%	88,325	84,144	-4,180	-4.7%
3.7%	83,929	83,545	-384	-0.5%
4.9%	68,883	68,117	-765	-1.1%
6.2%	58,944	59,016	72	0.1%
7.4%	47,765	46,418	-1,347	-2.8%
8.6%	47,066	42,992	-4,074	-8.7%
9.9%	32,617	31,593	-1,024	-3.1%
11.1%	26,420	27,513	1,093	4.1%
12.3%	26,346	27,103	757	2.9%
13.6%	26,236	26,284	48	0.2%
14.8%	22,159	19,774	-2,385	-10.8%
16.0%	20,955	17,572	-3,384	-16.1%
17.3%	20,781	16,804	-3,977	-19.1%
18.5%	18,697	16,602	-2,095	-11.2%
19.8%	12,077	12,102	25	0.2%
21.0%	12,043	10,339	-1,704	-14.1%
22.2%	11,583	9,854	-1,729	-14.9%
23.5%	9,945	7,940	-2,004	-20.2%
24.7%	8,926	6,924	-2,001	-22.4%
25.9%	8,025	6,906	-1,119	-13.9%
27.2%	6,931	6,693	-239	-3.4%
28.4%	6,881	6,302	-579	-8.4%
29.6%	6,257	5,408	-849	-13.6%
30.9%	5,455	5,349	-105	-1.9%
32.1%	5,341	5,107	-235	-4.4%
33.3%	4,171	3,871	-300	-7.2%
34.6%	3,913	3,487	-427	-10.9%
35.8%	3,316	3,277	-38	-1.2%
37.0%	2,942	2,547	-395	-13.4%
38.3%	2,539	2,464	-75	-2.9%
39.5%	2,455	1,990	-464	-18.9%
40.7%	2,062	1,830	-232	-11.2%
42.0%	1,973	1,088	-885	-44.8%
43.2%	1,822	1,085	-737	-40.5%
44.4%	1,619	858	-760	-47.0%
45.7%	1,531	792	-739	-48.3%
46.9%	849	517	-332	-39.1%
48.1%	792	493	-299	-37.8%
49.4%	517	490	-28	
50.6%	500	447	-53	
51.9%	490	444	-46	
53.1%	447	397	-50	
54.3%	397	374	-23	
55.6%	374	371	-3	
56.8%	371	342	-30	
58.0%	342	327	-15	
59.3%	327	326	-1	
60.5%	326	218	-108	
61.7%	232	214	-18	
63.0%	218	197	-21	
64.2%	214	182	-32	
65.4%	132	128	-4	
66.7%	128	102	-26	
67.9%	102	70	-32	
69.1%	70	63	-7	
70.4%	63	62	-2	
71.6%	62	62	0	
72.8%	61	59	-2	
74.1%	59	50	-8	
75.3%	50	50	0	
76.5%	40	40	0	
77.8%	37	38	0	
79.0%	31	37	7	
80.2%	26	31	5	
81.5%	26	26	0	
82.7%	23	26	3	
84.0%	21	21	0	
85.2%	21	14	-6	
86.4%	14	13	-1	
87.7%	13	7	-7	
88.9%	7	2	-5	
90.1%	3	0	-3	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-31-b

Yolo Bypass, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	145,292	145,272	-19	0.0%
1.2%	119,219	117,190	-2,030	-1.7%
2.5%	111,701	108,144	-3,558	-3.2%
3.7%	107,343	107,297	-46	0.0%
4.9%	102,942	102,877	-65	-0.1%
6.2%	82,237	82,392	154	0.2%
7.4%	81,705	78,249	-3,456	-4.2%
8.6%	60,162	58,486	-1,676	-2.8%
9.9%	59,071	56,757	-2,314	-3.9%
11.1%	57,403	53,422	-3,981	-6.9%
12.3%	47,208	47,092	-116	-0.2%
13.6%	42,275	38,311	-3,964	-9.4%
14.8%	35,958	36,103	144	0.4%
16.0%	34,180	34,194	14	0.0%
17.3%	33,246	30,294	-2,952	-8.9%
18.5%	32,625	29,758	-2,867	-8.8%
19.8%	31,694	28,002	-3,691	-11.6%
21.0%	26,337	26,947	610	2.3%
22.2%	26,063	24,118	-1,946	-7.5%
23.5%	23,366	22,082	-1,284	-5.5%
24.7%	17,257	20,960	3,703	21.5%
25.9%	15,386	14,490	-896	-5.8%
27.2%	15,070	12,694	-2,376	-15.8%
28.4%	14,562	12,050	-2,512	-17.3%
29.6%	12,463	10,963	-1,500	-12.0%
30.9%	10,473	9,139	-1,334	-12.7%
32.1%	9,875	8,557	-1,319	-13.4%
33.3%	8,493	8,507	14	0.2%
34.6%	8,338	8,050	-288	-3.5%
35.8%	8,260	7,503	-757	-9.2%
37.0%	8,050	7,200	-850	-10.6%
38.3%	5,860	5,668	-192	-3.3%
39.5%	5,561	5,219	-343	-6.2%
40.7%	5,361	4,319	-1,042	-19.4%
42.0%	5,079	4,202	-876	-17.3%
43.2%	4,243	3,700	-543	-12.8%
44.4%	4,144	2,872	-1,272	-30.7%
45.7%	4,049	2,842	-1,207	-29.8%
46.9%	3,766	2,828	-938	-24.9%
48.1%	3,203	2,418	-785	-24.5%
49.4%	2,887	2,398	-489	-16.9%
50.6%	2,823	1,890	-933	-33.1%
51.9%	2,410	1,827	-583	-24.2%
53.1%	2,175	1,406	-769	-35.4%
54.3%	2,122	1,365	-757	-35.7%
55.6%	1,936	879	-1,057	-54.6%
56.8%	1,882	744	-1,139	-60.5%
58.0%	1,365	671	-694	-50.8%
59.3%	909	629	-279	-30.8%
60.5%	879	596	-283	
61.7%	629	468	-161	
63.0%	468	425	-43	
64.2%	425	389	-36	
65.4%	389	389	0	
66.7%	389	355	-34	
67.9%	355	303	-52	
69.1%	303	229	-74	
70.4%	229	227	-2	
71.6%	227	219	-8	
72.8%	219	193	-26	
74.1%	193	137	-56	
75.3%	137	112	-25	
76.5%	112	110	-2	
77.8%	110	85	-25	
79.0%	85	81	-4	
80.2%	81	52	-29	
81.5%	52	51	-1	
82.7%	26	26	0	
84.0%	26	26	0	
85.2%	24	24	0	
86.4%	22	22	0	
87.7%	19	19	0	
88.9%	0	4	4	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	148,855	148,831	-24	0.0%
1.2%	134,358	129,433	-4,925	-3.7%
2.5%	80,153	80,159	6	0.0%
3.7%	56,612	51,797	-4,815	-8.5%
4.9%	50,292	45,066	-5,226	-10.4%
6.2%	45,054	44,893	-161	-0.4%
7.4%	37,594	33,048	-4,546	-12.1%
8.6%	24,659	24,083	-575	-2.3%
9.9%	24,068	23,544	-524	-2.2%
11.1%	22,282	20,576	-1,706	-7.7%
12.3%	18,331	17,706	-625	-3.4%
13.6%	15,712	15,673	-39	-0.3%
14.8%	14,609	14,235	-375	-2.6%
16.0%	12,603	12,661	58	0.5%
17.3%	11,549	11,551	1	0.0%
18.5%	9,985	9,899	-86	-0.9%
19.8%	9,289	7,864	-1,425	-15.3%
21.0%	8,193	7,861	-332	-4.1%
22.2%	8,148	7,760	-388	-4.8%
23.5%	8,011	7,216	-795	-9.9%
24.7%	7,754	7,186	-568	-7.3%
25.9%	7,639	6,772	-867	-11.3%
27.2%	7,551	5,815	-1,736	-23.0%
28.4%	6,638	4,924	-1,714	-25.8%
29.6%	5,039	3,966	-1,074	-21.3%
30.9%	3,623	3,623	0	0.0%
32.1%	3,148	3,117	-31	-1.0%
33.3%	2,984	2,986	2	0.1%
34.6%	2,951	2,939	-12	-0.4%
35.8%	2,937	2,838	-100	-3.4%
37.0%	2,835	2,485	-349	-12.3%
38.3%	2,788	2,458	-330	-11.8%
39.5%	2,485	1,488	-997	-40.1%
40.7%	2,394	1,306	-1,088	-45.5%
42.0%	2,365	1,169	-1,196	-50.6%
43.2%	2,241	1,081	-1,160	-51.8%
44.4%	1,845	1,028	-817	-44.3%
45.7%	1,169	868	-302	-25.8%
46.9%	1,079	804	-274	-25.4%
48.1%	982	780	-202	-20.6%
49.4%	865	778	-86	-10.0%
50.6%	780	775	-5	-0.6%
51.9%	778	738	-40	-5.1%
53.1%	772	696	-76	-9.8%
54.3%	766	549	-217	-28.4%
55.6%	696	475	-221	-31.8%
56.8%	475	313	-162	
58.0%	464	306	-158	
59.3%	313	268	-44	
60.5%	257	257	0	
61.7%	244	244	0	
63.0%	242	220	-22	
64.2%	220	169	-50	
65.4%	169	148	-22	
66.7%	148	131	-17	
67.9%	130	130	0	
69.1%	119	119	0	
70.4%	113	113	0	
71.6%	80	80	0	
72.8%	77	77	0	
74.1%	72	72	0	
75.3%	65	65	0	
76.5%	62	62	0	
77.8%	50	50	0	
79.0%	49	49	0	
80.2%	47	47	0	
81.5%	45	45	0	
82.7%	36	36	0	
84.0%	30	30	0	
85.2%	28	28	0	
86.4%	19	19	0	
87.7%	13	13	0	
88.9%	7	7	0	
90.1%	7	7	0	
91.4%	7	7	0	
92.6%	4	4	0	
93.8%	2	2	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,106	41,071	-35	-0.1%
1.2%	29,686	29,052	-634	-2.1%
2.5%	29,044	26,694	-2,351	-8.1%
3.7%	17,986	17,982	-4	0.0%
4.9%	9,610	9,610	1	0.0%
6.2%	9,452	9,153	-298	-3.2%
7.4%	7,174	7,385	211	2.9%
8.6%	7,096	7,096	0	0.0%
9.9%	6,839	6,840	0	0.0%
11.1%	5,137	5,141	4	0.1%
12.3%	4,846	4,846	0	0.0%
13.6%	4,555	4,556	1	0.0%
14.8%	4,458	4,458	0	0.0%
16.0%	3,892	3,875	-16	-0.4%
17.3%	3,336	3,336	0	0.0%
18.5%	3,271	3,271	0	0.0%
19.8%	2,814	2,645	-169	-6.0%
21.0%	2,670	2,293	-377	-14.1%
22.2%	2,662	1,402	-1,260	-47.3%
23.5%	2,293	1,315	-979	-42.7%
24.7%	2,232	1,095	-1,137	-50.9%
25.9%	1,315	1,079	-236	-17.9%
27.2%	1,111	668	-443	-39.9%
28.4%	1,079	558	-521	-48.3%
29.6%	558	445	-113	-20.2%
30.9%	445	418	-27	-6.1%
32.1%	418	383	-35	-8.4%
33.3%	383	288	-94	-24.7%
34.6%	288	285	-4	-1.3%
35.8%	250	250	0	0.0%
37.0%	218	218	0	0.0%
38.3%	208	198	-10	-5.0%
39.5%	198	176	-22	-11.0%
40.7%	176	176	0	-0.3%
42.0%	167	167	0	0.0%
43.2%	159	159	0	0.0%
44.4%	150	150	0	0.0%
45.7%	142	142	0	0.0%
46.9%	139	139	0	0.0%
48.1%	139	139	0	0.0%
49.4%	131	131	0	0.0%
50.6%	120	120	0	
51.9%	119	119	0	
53.1%	119	119	0	
54.3%	116	116	0	
55.6%	115	115	0	
56.8%	114	114	0	
58.0%	112	112	0	
59.3%	111	111	0	
60.5%	111	111	0	
61.7%	109	109	0	
63.0%	103	103	0	
64.2%	99	99	0	
65.4%	95	95	0	
66.7%	95	95	0	
67.9%	90	90	0	
69.1%	87	87	0	
70.4%	87	87	0	
71.6%	86	86	0	
72.8%	85	85	0	
74.1%	85	85	0	
75.3%	82	82	0	
76.5%	81	81	0	
77.8%	80	80	0	
79.0%	78	78	0	
80.2%	76	76	0	
81.5%	72	72	0	
82.7%	71	71	0	
84.0%	65	65	0	
85.2%	64	64	0	
86.4%	62	62	0	
87.7%	58	58	0	
88.9%	57	56	-1	
90.1%	56	55	0	
91.4%	55	55	0	
92.6%	55	55	0	
93.8%	55	54	-1	
95.1%	54	52	-2	
96.3%	50	50	0	
97.5%	49	49	0	
98.8%	45	45	0	
100.0%	42	42	0	

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,871	2,105	-766	-26.7%
1.2%	1,544	1,545	1	0.0%
2.5%	899	899	0	0.0%
3.7%	394	395	1	0.2%
4.9%	355	355	0	0.0%
6.2%	278	278	0	0.0%
7.4%	248	248	0	0.0%
8.6%	82	82	0	0.0%
9.9%	80	80	0	0.0%
11.1%	80	80	0	0.0%
12.3%	79	79	0	0.0%
13.6%	78	78	0	0.0%
14.8%	78	78	0	0.0%
16.0%	78	78	0	0.0%
17.3%	77	77	0	0.0%
18.5%	77	77	0	0.0%
19.8%	77	77	0	0.0%
21.0%	76	76	0	0.0%
22.2%	75	75	0	0.0%
23.5%	74	74	0	0.0%
24.7%	73	73	0	0.0%
25.9%	73	73	0	0.0%
27.2%	73	73	0	0.0%
28.4%	72	72	0	0.0%
29.6%	72	72	0	0.0%
30.9%	71	71	0	0.0%
32.1%	71	71	0	0.0%
33.3%	71	71	0	0.0%
34.6%	70	70	0	0.0%
35.8%	70	70	0	0.0%
37.0%	70	70	0	0.0%
38.3%	70	70	0	0.0%
39.5%	69	69	0	0.0%
40.7%	69	69	0	0.0%
42.0%	69	69	0	0.0%
43.2%	68	68	0	0.0%
44.4%	68	68	0	0.0%
45.7%	68	68	0	0.0%
46.9%	68	68	0	0.0%
48.1%	67	67	0	0.0%
49.4%	67	67	0	0.0%
50.6%	66	66	0	0.0%
51.9%	66	66	0	0.0%
53.1%	65	65	0	0.0%
54.3%	65	65	0	0.0%
55.6%	64	64	0	0.0%
56.8%	64	64	0	0.0%
58.0%	64	64	0	0.0%
59.3%	64	64	0	0.0%
60.5%	64	64	0	0.0%
61.7%	63	63	0	0.0%
63.0%	63	63	0	0.0%
64.2%	63	63	0	0.0%
65.4%	63	63	0	0.0%
66.7%	63	63	0	0.0%
67.9%	62	62	0	0.0%
69.1%	62	62	0	0.0%
70.4%	62	62	0	0.0%
71.6%	61	61	0	0.0%
72.8%	61	61	0	0.0%
74.1%	60	60	0	0.0%
75.3%	59	59	0	0.0%
76.5%	58	58	0	0.0%
77.8%	58	58	0	0.0%
79.0%	58	58	0	0.0%
80.2%	57	57	0	0.0%
81.5%	56	56	0	0.0%
82.7%	55	55	0	0.0%
84.0%	55	55	0	0.0%
85.2%	54	54	0	0.0%
86.4%	53	53	0	0.0%
87.7%	53	53	0	0.0%
88.9%	53	53	0	0.0%
90.1%	53	53	0	0.0%
91.4%	52	52	0	0.0%
92.6%	52	52	0	0.0%
93.8%	50	50	0	0.0%
95.1%	47	47	0	0.0%
96.3%	46	46	0	0.0%
97.5%	45	45	0	0.0%
98.8%	40	40	0	0.0%
100.0%	26	26	0	0.0%

Table SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	788	854	66	8.3%
1.2%	449	449	0	0.0%
2.5%	266	266	0	0.0%
3.7%	68	68	0	0.0%
4.9%	68	68	0	0.0%
6.2%	68	68	0	0.0%
7.4%	68	68	0	0.0%
8.6%	68	68	0	0.0%
9.9%	68	68	0	0.0%
11.1%	68	68	0	0.0%
12.3%	68	68	0	0.0%
13.6%	68	68	0	0.0%
14.8%	68	68	0	0.0%
16.0%	68	68	0	0.0%
17.3%	68	68	0	0.0%
18.5%	68	68	0	0.0%
19.8%	68	68	0	0.0%
21.0%	68	68	0	0.0%
22.2%	68	68	0	0.0%
23.5%	68	68	0	0.0%
24.7%	68	68	0	0.0%
25.9%	68	68	0	0.0%
27.2%	68	68	0	0.0%
28.4%	68	68	0	0.0%
29.6%	68	68	0	0.0%
30.9%	68	68	0	0.0%
32.1%	68	68	0	0.0%
33.3%	68	68	0	0.0%
34.6%	68	68	0	0.0%
35.8%	68	68	0	0.0%
37.0%	68	68	0	0.0%
38.3%	68	68	0	0.0%
39.5%	68	68	0	0.0%
40.7%	68	68	0	0.0%
42.0%	68	68	0	0.0%
43.2%	68	68	0	0.0%
44.4%	68	68	0	0.0%
45.7%	67	67	0	0.0%
46.9%	67	67	0	0.0%
48.1%	67	67	0	0.0%
49.4%	67	67	0	0.0%
50.6%	67	67	0	0.0%
51.9%	67	67	0	0.0%
53.1%	67	67	0	0.0%
54.3%	67	67	0	0.0%
55.6%	67	67	0	0.0%
56.8%	67	67	0	0.0%
58.0%	67	67	0	0.0%
59.3%	67	67	0	0.0%
60.5%	67	67	0	0.0%
61.7%	66	66	0	0.0%
63.0%	66	66	0	0.0%
64.2%	66	66	0	0.0%
65.4%	66	66	0	0.0%
66.7%	66	66	0	0.0%
67.9%	66	66	0	0.0%
69.1%	66	66	0	0.0%
70.4%	66	66	0	0.0%
71.6%	65	65	0	0.0%
72.8%	65	65	0	0.0%
74.1%	65	65	0	0.0%
75.3%	65	65	0	0.0%
76.5%	65	65	0	0.0%
77.8%	65	65	0	0.0%
79.0%	65	65	0	0.0%
80.2%	64	64	0	0.0%
81.5%	63	63	0	0.0%
82.7%	63	63	0	0.0%
84.0%	63	63	0	0.0%
85.2%	63	63	0	0.0%
86.4%	63	63	0	0.0%
87.7%	63	63	0	0.0%
88.9%	63	63	0	0.0%
90.1%	62	62	0	0.0%
91.4%	62	62	0	0.0%
92.6%	61	61	0	0.0%
93.8%	59	59	0	0.0%
95.1%	57	57	0	0.0%
96.3%	57	57	0	0.0%
97.5%	56	56	0	0.0%
98.8%	56	56	0	0.0%
100.0%	53	53	0	0.0%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	48	429	381	791.1%
1.2%	48	48	0	0.0%
2.5%	48	48	0	0.0%
3.7%	48	48	0	0.0%
4.9%	48	48	0	0.0%
6.2%	48	48	0	0.0%
7.4%	48	48	0	0.0%
8.6%	48	48	0	0.0%
9.9%	48	48	0	0.0%
11.1%	48	48	0	0.0%
12.3%	48	48	0	0.0%
13.6%	48	48	0	0.0%
14.8%	48	48	0	0.0%
16.0%	48	48	0	0.0%
17.3%	48	48	0	0.0%
18.5%	48	48	0	0.0%
19.8%	48	48	0	0.0%
21.0%	48	48	0	0.0%
22.2%	48	48	0	0.0%
23.5%	48	48	0	0.0%
24.7%	48	48	0	0.0%
25.9%	48	48	0	0.0%
27.2%	48	48	0	0.0%
28.4%	48	48	0	0.0%
29.6%	48	48	0	0.0%
30.9%	48	48	0	0.0%
32.1%	48	48	0	0.0%
33.3%	48	48	0	0.0%
34.6%	48	48	0	0.0%
35.8%	48	48	0	0.0%
37.0%	48	48	0	0.0%
38.3%	48	48	0	0.0%
39.5%	48	48	0	0.0%
40.7%	48	48	0	0.0%
42.0%	48	48	0	0.0%
43.2%	48	48	0	0.0%
44.4%	48	48	0	0.0%
45.7%	48	48	0	0.0%
46.9%	48	48	0	0.0%
48.1%	48	48	0	0.0%
49.4%	48	48	0	0.0%
50.6%	48	48	0	0.0%
51.9%	48	48	0	0.0%
53.1%	48	48	0	0.0%
54.3%	48	48	0	0.0%
55.6%	48	48	0	0.0%
56.8%	48	48	0	0.0%
58.0%	48	48	0	0.0%
59.3%	48	48	0	0.0%
60.5%	48	48	0	0.0%
61.7%	48	48	0	0.0%
63.0%	48	48	0	0.0%
64.2%	48	48	0	0.0%
65.4%	48	48	0	0.0%
66.7%	48	48	0	0.0%
67.9%	48	48	0	0.0%
69.1%	48	48	0	0.0%
70.4%	48	48	0	0.0%
71.6%	48	48	0	0.0%
72.8%	48	48	0	0.0%
74.1%	48	48	0	0.0%
75.3%	48	48	0	0.0%
76.5%	48	48	0	0.0%
77.8%	48	48	0	0.0%
79.0%	48	48	0	0.0%
80.2%	48	48	0	0.0%
81.5%	48	48	0	0.0%
82.7%	48	48	0	0.0%
84.0%	48	48	0	0.0%
85.2%	48	48	0	0.0%
86.4%	48	48	0	0.0%
87.7%	48	48	0	0.0%
88.9%	48	48	0	0.0%
90.1%	48	48	0	0.0%
91.4%	48	48	0	0.0%
92.6%	48	48	0	0.0%
93.8%	48	48	0	0.0%
95.1%	48	48	0	0.0%
96.3%	48	48	0	0.0%
97.5%	47	47	0	0.0%
98.8%	47	47	0	0.0%
100.0%	41	41	0	0.0%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	628	693	65	10.3%
1.2%	610	628	18	3.0%
2.5%	549	610	60	11.0%
3.7%	510	576	66	12.9%
4.9%	502	549	47	9.3%
6.2%	486	502	16	3.4%
7.4%	466	486	20	4.3%
8.6%	431	466	35	8.1%
9.9%	302	450	148	48.9%
11.1%	186	445	260	140.0%
12.3%	164	445	281	170.9%
13.6%	126	445	320	254.6%
14.8%	60	445	385	644.2%
16.0%	55	445	390	711.1%
17.3%	55	445	390	711.1%
18.5%	55	445	390	711.1%
19.8%	55	445	390	711.1%
21.0%	55	445	390	711.1%
22.2%	55	445	390	711.1%
23.5%	55	445	390	711.1%
24.7%	55	445	390	711.1%
25.9%	55	445	390	711.1%
27.2%	55	445	390	711.1%
28.4%	55	445	390	711.1%
29.6%	55	445	390	711.1%
30.9%	55	445	390	711.1%
32.1%	55	445	390	711.1%
33.3%	55	445	390	711.1%
34.6%	55	445	390	711.1%
35.8%	55	445	390	711.1%
37.0%	55	445	390	711.1%
38.3%	55	445	390	711.1%
39.5%	55	445	390	711.1%
40.7%	55	445	390	711.1%
42.0%	55	445	390	710.9%
43.2%	55	445	390	710.6%
44.4%	55	445	390	710.4%
45.7%	55	445	390	710.3%
46.9%	55	444	389	709.4%
48.1%	55	444	389	709.4%
49.4%	55	444	389	709.0%
50.6%	55	439	385	700.7%
51.9%	55	431	376	685.5%
53.1%	55	164	109	199.4%
54.3%	55	126	71	128.7%
55.6%	55	55	0	0.0%
56.8%	55	55	0	0.0%
58.0%	55	55	0	0.0%
59.3%	55	55	0	0.0%
60.5%	55	55	0	0.0%
61.7%	55	55	0	0.0%
63.0%	55	55	0	0.0%
64.2%	55	55	0	0.0%
65.4%	55	55	0	0.0%
66.7%	55	55	0	0.0%
67.9%	55	55	0	0.0%
69.1%	55	55	0	0.0%
70.4%	55	55	0	0.0%
71.6%	55	55	0	0.0%
72.8%	55	55	0	0.0%
74.1%	55	55	0	0.0%
75.3%	55	55	0	0.3%
76.5%	55	55	0	0.3%
77.8%	55	55	0	0.3%
79.0%	55	55	0	0.3%
80.2%	55	55	0	0.3%
81.5%	55	55	0	0.3%
82.7%	55	55	0	0.5%
84.0%	55	55	0	0.5%
85.2%	54	55	0	0.5%
86.4%	54	55	0	0.6%
87.7%	54	55	0	0.6%
88.9%	54	55	1	1.0%
90.1%	54	55	1	1.5%
91.4%	54	55	1	1.2%
92.6%	54	54	1	1.3%
93.8%	54	54	0	0.9%
95.1%	53	54	0	0.6%
96.3%	52	53	1	1.8%
97.5%	50	52	2	4.6%
98.8%	49	50	1	2.0%
100.0%	42	42	0	0.0%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	909	959	50	5.5%
1.2%	366	700	334	91.2%
2.5%	279	677	398	142.3%
3.7%	274	654	380	139.0%
4.9%	251	607	357	142.2%
6.2%	204	596	392	192.2%
7.4%	192	565	373	194.3%
8.6%	168	558	390	231.9%
9.9%	162	544	383	236.8%
11.1%	154	541	386	250.4%
12.3%	153	532	378	246.5%
13.6%	141	518	377	268.0%
14.8%	128	517	389	303.3%
16.0%	114	499	385	338.5%
17.3%	96	493	397	414.9%
18.5%	89	470	381	426.7%
19.8%	72	465	393	549.4%
21.0%	67	463	396	593.5%
22.2%	62	463	401	650.0%
23.5%	60	463	403	674.4%
24.7%	59	462	403	679.5%
25.9%	59	455	396	667.6%
27.2%	59	454	394	665.2%
28.4%	59	443	384	647.4%
29.6%	59	437	377	636.6%
30.9%	59	435	376	633.8%
32.1%	59	432	372	628.2%
33.3%	59	429	370	624.1%
34.6%	59	408	349	588.8%
35.8%	59	403	344	580.4%
37.0%	59	403	344	580.4%
38.3%	59	403	344	580.4%
39.5%	59	403	344	580.4%
40.7%	59	403	344	580.4%
42.0%	59	403	344	580.4%
43.2%	59	403	344	580.4%
44.4%	59	403	344	580.4%
45.7%	59	403	344	580.4%
46.9%	59	403	344	580.4%
48.1%	59	403	344	580.4%
49.4%	59	403	344	580.4%
50.6%	59	403	344	580.4%
51.9%	59	403	344	580.4%
53.1%	59	403	344	580.4%
54.3%	59	403	344	580.4%
55.6%	59	403	344	580.4%
56.8%	59	403	344	580.4%
58.0%	59	403	344	580.4%
59.3%	59	403	344	581.6%
60.5%	59	403	344	581.6%
61.7%	59	403	344	581.6%
63.0%	59	403	344	584.0%
64.2%	59	366	307	520.5%
65.4%	59	360	301	514.3%
66.7%	59	288	230	392.1%
67.9%	58	161	103	176.3%
69.1%	58	93	35	60.2%
70.4%	58	59	1	1.6%
71.6%	58	59	1	2.1%
72.8%	58	59	1	2.1%
74.1%	57	59	2	3.4%
75.3%	57	59	2	3.8%
76.5%	57	59	3	4.8%
77.8%	57	59	3	4.8%
79.0%	56	59	3	6.1%
80.2%	55	59	4	6.9%
81.5%	55	59	4	7.5%
82.7%	55	59	4	7.8%
84.0%	55	59	5	8.4%
85.2%	55	59	4	8.0%
86.4%	54	59	5	9.9%
87.7%	53	59	6	11.4%
88.9%	52	58	6	12.4%
90.1%	52	57	6	10.6%
91.4%	51	57	6	11.4%
92.6%	50	57	6	12.6%
93.8%	49	55	7	13.6%
95.1%	46	55	9	18.7%
96.3%	45	54	9	19.9%
97.5%	24	50	27	112.9%
98.8%	23	46	23	97.4%
100.0%	20	24	3	16.6%

Figure SW-32-b
Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

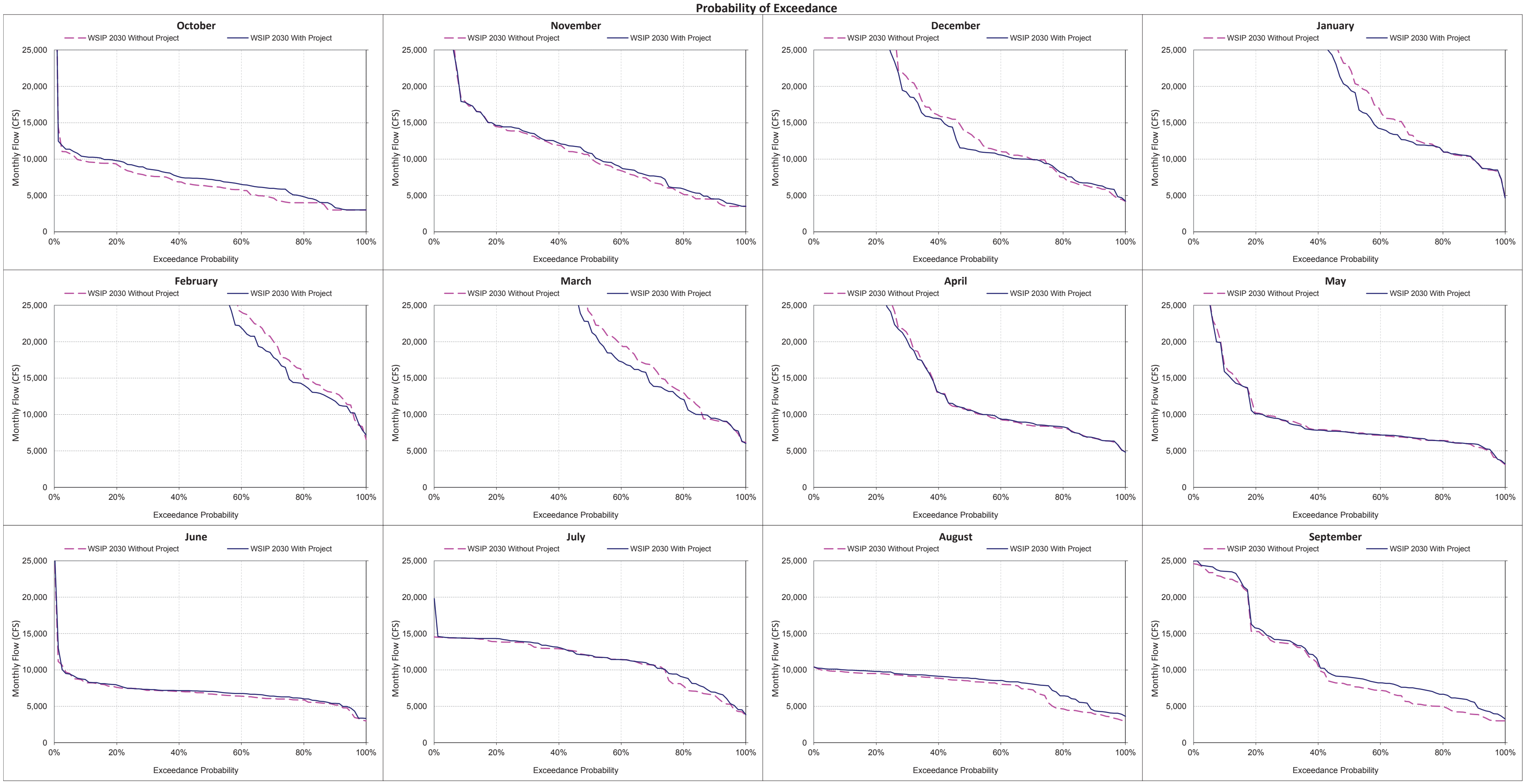


Table SW-32-b

Sacramento River at Rio Vista, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	52,043	55,557	3,514	6.8%
1.2%	14,437	12,483	-1,954	-13.5%
2.5%	11,036	11,869	833	7.5%
3.7%	11,009	11,376	366	3.3%
4.9%	10,770	11,353	583	5.4%
6.2%	10,476	11,053	577	5.5%
7.4%	9,934	10,808	874	8.8%
8.6%	9,821	10,405	584	5.9%
9.9%	9,704	10,340	636	6.5%
11.1%	9,590	10,270	680	7.1%
12.3%	9,562	10,256	695	7.3%
13.6%	9,521	10,215	694	7.3%
14.8%	9,444	10,167	723	7.7%
16.0%	9,428	9,948	520	5.5%
17.3%	9,424	9,920	496	5.3%
18.5%	9,421	9,910	489	5.2%
19.8%	9,339	9,804	465	5.0%
21.0%	8,998	9,718	720	8.0%
22.2%	8,650	9,561	911	10.5%
23.5%	8,399	9,255	856	10.2%
24.7%	8,273	9,218	945	11.4%
25.9%	8,012	9,069	1,057	13.2%
27.2%	7,963	8,949	986	12.4%
28.4%	7,870	8,948	1,078	13.7%
29.6%	7,700	8,657	957	12.4%
30.9%	7,670	8,585	915	11.9%
32.1%	7,605	8,525	920	12.1%
33.3%	7,589	8,444	855	11.3%
34.6%	7,575	8,266	692	9.1%
35.8%	7,532	8,134	602	8.0%
37.0%	7,330	8,076	746	10.2%
38.3%	7,043	7,780	737	10.5%
39.5%	6,870	7,630	760	11.1%
40.7%	6,849	7,463	614	9.0%
42.0%	6,616	7,417	802	12.1%
43.2%	6,592	7,389	796	12.1%
44.4%	6,486	7,368	881	13.6%
45.7%	6,413	7,363	950	14.8%
46.9%	6,365	7,342	977	15.4%
48.1%	6,344	7,306	962	15.2%
49.4%	6,267	7,209	942	15.0%
50.6%	6,212	7,171	960	15.5%
51.9%	6,190	7,094	903	14.6%
53.1%	6,148	7,045	896	14.6%
54.3%	6,028	6,872	844	14.0%
55.6%	5,978	6,826	848	14.2%
56.8%	5,838	6,775	936	16.0%
58.0%	5,807	6,705	899	15.5%
59.3%	5,806	6,582	776	13.4%
60.5%	5,681	6,477	796	14.0%
61.7%	5,672	6,448	777	13.7%
63.0%	5,114	6,345	1,231	24.1%
64.2%	5,110	6,208	1,098	21.5%
65.4%	4,962	6,161	1,199	24.2%
66.7%	4,956	6,117	1,161	23.4%
67.9%	4,886	6,035	1,148	23.5%
69.1%	4,762	5,992	1,229	25.8%
70.4%	4,622	5,977	1,355	29.3%
71.6%	4,234	5,891	1,657	39.1%
72.8%	4,212	5,884	1,672	39.7%
74.1%	4,095	5,882	1,787	43.6%
75.3%	4,016	5,409	1,393	34.7%
76.5%	4,000	5,089	1,089	27.2%
77.8%	4,000	5,050	1,050	26.3%
79.0%	4,000	4,931	931	23.3%
80.2%	4,000	4,786	786	19.6%
81.5%	4,000	4,616	616	15.4%
82.7%	4,000	4,540	540	13.5%
84.0%	4,000	4,378	378	9.5%
85.2%	4,000	4,034	34	0.8%
86.4%	3,772	4,000	228	6.0%
87.7%	3,096	4,000	904	29.2%
88.9%	3,000	3,764	764	25.5%
90.1%	3,000	3,315	315	10.5%
91.4%	3,000	3,218	218	7.3%
92.6%	3,000	3,082	82	2.7%
93.8%	3,000	3,025	25	0.8%
95.1%	3,000	3,000	0	0.0%
96.3%	3,000	3,000	0	0.0%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	56,706	52,833	-3,873	-6.8%
1.2%	51,706	52,492	786	1.5%
2.5%	42,919	44,572	1,653	3.9%
3.7%	41,021	40,574	-448	-1.1%
4.9%	28,896	28,919	22	0.1%
6.2%	26,390	24,906	-1,484	-5.6%
7.4%	21,366	22,018	652	3.1%
8.6%	18,415	17,909	-506	-2.7%
9.9%	17,944	17,814	-130	-0.7%
11.1%	17,300	17,551	250	1.4%
12.3%	17,295	17,295	0	0.0%
13.6%	16,570	16,525	-45	-0.3%
14.8%	16,503	16,447	-56	-0.3%
16.0%	15,893	15,838	-55	-0.3%
17.3%	15,068	15,025	-43	-0.3%
18.5%	14,872	14,997	125	0.8%
19.8%	14,482	14,635	153	1.1%
21.0%	14,398	14,624	225	1.6%
22.2%	14,334	14,439	105	0.7%
23.5%	13,926	14,432	506	3.6%
24.7%	13,874	14,427	553	4.0%
25.9%	13,865	14,276	411	3.0%
27.2%	13,859	14,200	341	2.5%
28.4%	13,638	13,894	256	1.9%
29.6%	13,506	13,758	252	1.9%
30.9%	13,226	13,591	365	2.8%
32.1%	13,109	13,496	387	3.0%
33.3%	12,796	13,114	318	2.5%
34.6%	12,683	12,784	102	0.8%
35.8%	12,463	12,589	126	1.0%
37.0%	12,234	12,589	355	2.9%
38.3%	11,948	12,523	575	4.8%
39.5%	11,930	12,294	364	3.1%
40.7%	11,850	12,076	226	1.9%
42.0%	11,400	11,992	592	5.2%
43.2%	11,039	11,831	792	7.2%
44.4%	11,020	11,793	773	7.0%
45.7%	10,931	11,729	798	7.3%
46.9%	10,880	11,637	757	7.0%
48.1%	10,649	11,112	462	4.3%
49.4%	10,648	10,879	231	2.2%
50.6%	9,964	10,763	799	8.0%
51.9%	9,604	10,137	533	5.6%
53.1%	9,319	9,918	599	6.4%
54.3%	9,277	9,649	371	4.0%
55.6%	9,169	9,582	413	4.5%
56.8%	9,022	9,534	512	5.7%
58.0%	8,565	9,205	640	7.5%
59.3%	8,502	9,060	558	6.6%
60.5%	8,344	8,675	331	4.0%
61.7%	8,131	8,617	487	6.0%
63.0%	7,889	8,558	669	8.5%
64.2%	7,781	8,468	687	8.8%
65.4%	7,527	8,130	602	8.0%
66.7%	7,478	8,006	528	7.1%
67.9%	7,400	7,826	426	5.8%
69.1%	7,045	7,701	656	9.3%
70.4%	6,741	7,695	954	14.2%
71.6%	6,665	7,609	944	14.2%
72.8%	6,554	7,552	998	15.2%
74.1%	6,121	7,241	1,120	18.3%
75.3%	6,007	6,207	200	3.3%
76.5%	5,997	6,086	88	1.5%
77.8%	5,648	6,033	385	6.8%
79.0%	5,382	6,017	635	11.8%
80.2%	5,112	5,869	756	14.8%
81.5%	5,088	5,663	575	11.3%
82.7%	4,891	5,484	593	12.1%
84.0%	4,549	5,317	768	16.9%
85.2%	4,549	5,301	752	16.5%
86.4%	4,532	4,913	381	8.4%
87.7%	4,503	4,900	397	8.8%
88.9%	4,500	4,551	51	1.1%
90.1%	4,500	4,500	0	0.0%
91.4%	3,914	4,500	586	15.0%
92.6%	3,633	4,289	656	18.1%
93.8%	3,500	3,939	439	12.5%
95.1%	3,500	3,897	397	11.3%
96.3%	3,500	3,807	307	8.8%
97.5%	3,500	3,652	152	4.3%
98.8%	3,500	3,500	0	0.0%
100.0%	3,500	3,500	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	131,088	131,283	196	0.1%
1.2%	99,911	95,586	-4,325	-4.3%
2.5%	97,295	95,493	-1,802	-1.9%
3.7%	88,101	82,942	-5,159	-5.9%
4.9%	83,657	81,665	-1,992	-2.4%
6.2%	73,157	73,490	333	0.5%
7.4%	69,083	70,008	925	1.3%
8.6%	68,514	69,994	1,480	2.2%
9.9%	66,815	63,638	-3,176	-4.8%
11.1%	53,708	51,772	-1,936	-3.6%
12.3%	51,895	50,189	-1,706	-3.3%
13.6%	49,420	48,251	-1,169	-2.4%
14.8%	36,097	35,407	-691	-1.9%
16.0%	35,576	34,040	-1,536	-4.3%
17.3%	35,313	32,286	-3,027	-8.6%
18.5%	34,557	32,050	-2,507	-7.3%
19.8%	34,169	31,857	-2,312	-6.8%
21.0%	32,111	29,611	-2,500	-7.8%
22.2%	29,721	27,410	-2,311	-7.8%
23.5%	28,867	26,188	-2,679	-9.3%
24.7%	27,928	24,650	-3,278	-11.7%
25.9%	27,468	23,379	-4,090	-14.9%
27.2%	22,195	21,808	-387	-1.7%
28.4%	21,896	19,463	-2,433	-11.1%
29.6%	21,393	19,249	-2,144	-10.0%
30.9%	20,650	18,534	-2,115	-10.2%
32.1%	20,457	18,476	-1,981	-9.7%
33.3%	19,504	17,742	-1,762	-9.0%
34.6%	18,109	16,394	-1,715	-9.5%
35.8%	17,175	15,877	-1,299	-7.6%
37.0%	17,121	15,828	-1,293	-7.6%
38.3%	16,348	15,644	-704	-4.3%
39.5%	16,132	15,607	-525	-3.3%
40.7%	15,830	15,493	-337	-2.1%
42.0%	15,803	14,872	-932	-5.9%
43.2%	15,671	14,489	-1,183	-7.5%
44.4%	15,479	14,380	-1,099	-7.1%
45.7%	15,465	12,664	-2,801	-18.1%
46.9%	14,726	11,539	-3,187	-21.6%
48.1%	13,871	11,500	-2,371	-17.1%
49.4%	13,663	11,355	-2,308	-16.9%
50.6%	13,346	11,275	-2,071	-15.5%
51.9%	12,803	11,235	-1,569	-12.3%
53.1%	12,632	11,004	-1,628	-12.9%
54.3%	11,848	10,930	-917	-7.7%
55.6%	11,514	10,884	-630	-5.5%
56.8%	11,451	10,879	-572	-5.0%
58.0%	11,280	10,828	-452	-4.0%
59.3%	11,125	10,611	-513	-4.6%
60.5%	11,004	10,539	-465	-4.2%
61.7%	10,974	10,408	-567	-5.2%
63.0%	10,539	10,224	-315	-3.0%
64.2%	10,538	10,095	-443	-4.2%
65.4%	10,535	10,041	-493	-4.7%
66.7%	10,433	10,016	-417	-4.0%
67.9%	10,376	10,008	-367	-3.5%
69.1%	10,123	9,960	-163	-1.6%
70.4%	9,911	9,928	18	0.2%
71.6%	9,903	9,890	-12	-0.1%
72.8%	9,901	9,737	-164	-1.7%
74.1%	9,880	9,417	-463	-4.7%
75.3%	8,952	9,365	413	4.6%
76.5%	8,830	9,096	266	3.0%
77.8%	8,295	8,624	329	4.0%
79.0%	7,543	8,197	653	8.7%
80.2%	7,450	8,019	569	7.6%
81.5%	6,950	7,591	641	9.2%
82.7%	6,866	7,537	671	9.8%
84.0%	6,698	7,055	357	5.3%
85.2%	6,488	6,784	296	4.6%
86.4%	6,471	6,740	270	4.2%
87.7%	6,324	6,725	401	6.3%
88.9%	6,157	6,637	480	7.8%
90.1%	6,156	6,509	353	5.7%
91.4%	6,049	6,370	321	5.3%
92.6%	5,863	6,312	448	7.6%
93.8%	5,847	5,995	148	2.5%
95.1%	5,424	5,904	480	8.9%
96.3%	4,949	5,845	896	18.1%
97.5%	4,566	4,822	256	5.6%
98.8%	4,459	4,691	232	5.2%
100.0%	4,183	4,223	40	1.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	211,426	209,397	-2,030	-1.0%
1.2%	191,879	186,256	-5,624	-2.9%
2.5%	158,855	154,563	-4,291	-2.7%
3.7%	147,335	146,947	-388	-0.3%
4.9%	129,496	128,631	-865	-0.7%
6.2%	123,709	123,786	77	0.1%
7.4%	114,792	110,409	-4,383	-3.8%
8.6%	107,916	106,406	-1,510	-1.4%
9.9%	96,206	94,948	-1,258	-1.3%
11.1%	83,590	84,458	868	1.0%
12.3%	81,515	82,071	556	0.7%
13.6%	80,556	81,424	868	1.1%
14.8%	80,360	78,801	-1,560	-1.9%
16.0%	79,338	73,381	-5,957	-7.5%
17.3%	79,020	71,687	-7,333	-9.3%
18.5%	62,274	59,594	-2,680	-4.3%
19.8%	60,726	58,750	-1,976	-3.3%
21.0%	60,652	57,040	-3,611	-6.0%
22.2%	59,498	55,637	-3,861	-6.5%
23.5%	53,770	52,658	-1,112	-2.1%
24.7%	52,577	50,644	-1,933	-3.7%
25.9%	52,395	49,799	-2,597	-5.0%
27.2%	48,045	47,971	-74	-0.2%
28.4%	47,418	47,690	272	0.6%
29.6%	46,497	45,157	-1,340	-2.9%
30.9%	46,402	43,339	-3,063	-6.6%
32.1%	43,336	42,735	-601	-1.4%
33.3%	37,287	35,416	-1,871	-5.0%
34.6%	35,686	33,818	-1,868	-5.2%
35.8%	34,901	31,726	-3,174	-9.1%
37.0%	34,168	31,091	-3,076	-9.0%
38.3%	33,284	30,941	-2,342	-7.0%
39.5%	32,290	28,670	-3,620	-11.2%
40.7%	31,583	27,153	-4,430	-14.0%
42.0%	29,295	26,193	-3,102	-10.6%
43.2%	28,453	24,940	-3,513	-12.3%
44.4%	27,179	24,313	-2,866	-10.5%
45.7%	25,705	23,055	-2,650	-10.3%
46.9%	24,345	21,357	-2,989	-12.3%
48.1%	23,185	20,367	-2,818	-12.2%
49.4%	23,104	20,043	-3,061	-13.2%
50.6%	22,090	19,402	-2,688	-12.2%
51.9%	20,363	19,132	-1,231	-6.0%
53.1%	20,157	16,750	-3,407	-16.9%
54.3%	19,637	16,381	-3,256	-16.6%
55.6%	19,420	16,236	-3,184	-16.4%
56.8%	18,812	15,641	-3,170	-16.9%
58.0%	17,455	14,735	-2,720	-15.6%
59.3%	17,198	14,248	-2,950	-17.2%
60.5%	16,166	14,093	-2,073	-12.8%
61.7%	15,609	13,913	-1,696	-10.9%
63.0%	15,561	13,586	-1,975	-12.7%
64.2%	15,492	13,379	-2,113	-13.6%
65.4%	15,187	13,363	-1,824	-12.0%
66.7%	15,167	12,675	-2,493	-16.4%
67.9%	14,326	12,652	-1,674	-11.7%
69.1%	13,348	12,464	-884	-6.6%
70.4%	13,245	12,316	-929	-7.0%
71.6%	12,556	11,969	-587	-4.7%
72.8%	12,384	11,933	-451	-3.6%
74.1%	12,178	11,925	-253	-2.1%
75.3%	12,152	11,873	-279	-2.3%
76.5%	12,049	11,858	-191	-1.6%
77.8%	11,668	11,759	91	0.8%
79.0%	11,547	11,591	44	0.4%
80.2%	10,961	10,987	26	0.2%
81.5%	10,934	10,977	43	0.4%
82.7%	10,743	10,734	-9	-0.1%
84.0%	10,567	10,714	147	1.4%
85.2%	10,507	10,614	107	1.0%
86.4%	10,422	10,537	115	1.1%
87.7%	10,404	10,502	98	0.9%
88.9%	10,401	10,354	-47	-0.4%
90.1%	9,666	9,851	185	1.9%
91.4%	9,397	9,349	-48	-0.5%
92.6%	8,764	8,735	-29	-0.3%
93.8%	8,564	8,702	139	1.6%
95.1%	8,500	8,665	166	1.9%
96.3%	8,463	8,508	45	0.5%
97.5%	8,319	8,507	188	2.3%
98.8%	7,241	7,256	15	0.2%
100.0%	4,732	4,652	-80	-1.7%

Table SW-32-b
Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	212,562	212,539	-23	0.0%
1.2%	187,146	185,119	-2,027	-1.1%
2.5%	182,361	178,137	-4,223	-2.3%
3.7%	176,664	177,534	870	0.5%
4.9%	165,279	165,212	-68	0.0%
6.2%	152,536	152,701	165	0.1%
7.4%	149,398	145,883	-3,515	-2.4%
8.6%	123,218	119,721	-3,497	-2.8%
9.9%	121,621	118,769	-2,852	-2.3%
11.1%	120,778	118,226	-2,552	-2.1%
12.3%	112,749	112,619	-130	-0.1%
13.6%	102,851	99,274	-3,578	-3.5%
14.8%	99,323	94,889	-4,433	-4.5%
16.0%	94,637	94,809	172	0.2%
17.3%	93,822	93,705	-117	-0.1%
18.5%	93,690	88,663	-5,027	-5.4%
19.8%	87,857	85,946	-1,912	-2.2%
21.0%	80,153	77,427	-2,725	-3.4%
22.2%	79,960	77,038	-2,923	-3.7%
23.5%	75,925	76,663	738	1.0%
24.7%	73,329	76,594	3,265	4.5%
25.9%	71,982	72,630	648	0.9%
27.2%	65,544	63,329	-2,215	-3.4%
28.4%	63,890	61,250	-2,641	-4.1%
29.6%	63,763	60,038	-3,725	-5.8%
30.9%	56,717	53,985	-2,733	-4.8%
32.1%	56,013	53,947	-2,067	-3.7%
33.3%	53,927	53,388	-540	-1.0%
34.6%	53,386	51,468	-1,918	-3.6%
35.8%	51,488	50,890	-598	-1.2%
37.0%	49,986	47,786	-2,201	-4.4%
38.3%	49,846	46,462	-3,384	-6.8%
39.5%	49,261	45,606	-3,655	-7.4%
40.7%	47,300	44,724	-2,576	-5.4%
42.0%	43,622	44,439	817	1.9%
43.2%	43,205	41,044	-2,161	-5.0%
44.4%	39,645	39,648	3	0.0%
45.7%	39,157	37,323	-1,834	-4.7%
46.9%	37,216	36,429	-788	-2.1%
48.1%	36,417	35,570	-847	-2.3%
49.4%	34,119	31,005	-3,113	-9.1%
50.6%	32,579	29,400	-3,180	-9.8%
51.9%	31,726	29,231	-2,495	-7.9%
53.1%	31,424	28,328	-3,096	-9.9%
54.3%	29,564	27,905	-1,659	-5.6%
55.6%	29,071	25,750	-3,322	-11.4%
56.8%	26,823	24,236	-2,587	-9.6%
58.0%	26,054	22,281	-3,773	-14.5%
59.3%	24,271	22,232	-2,039	-8.4%
60.5%	23,930	21,674	-2,256	-9.4%
61.7%	23,740	21,025	-2,715	-11.4%
63.0%	23,135	20,765	-2,370	-10.2%
64.2%	22,482	20,748	-1,734	-7.7%
65.4%	22,324	19,369	-2,955	-13.2%
66.7%	21,827	19,198	-2,629	-12.0%
67.9%	20,911	18,720	-2,191	-10.5%
69.1%	20,778	18,561	-2,217	-10.7%
70.4%	19,984	17,828	-2,157	-10.8%
71.6%	19,316	17,489	-1,827	-9.5%
72.8%	17,858	16,674	-1,184	-6.6%
74.1%	17,765	16,465	-1,300	-7.3%
75.3%	17,471	14,854	-2,617	-15.0%
76.5%	16,866	14,402	-2,463	-14.6%
77.8%	16,427	14,365	-2,063	-12.6%
79.0%	16,274	14,303	-1,971	-12.1%
80.2%	14,986	13,981	-1,004	-6.7%
81.5%	14,896	13,586	-1,310	-8.8%
82.7%	14,531	13,041	-1,490	-10.3%
84.0%	14,161	13,032	-1,129	-8.0%
85.2%	14,037	12,903	-1,134	-8.1%
86.4%	13,433	12,698	-735	-5.5%
87.7%	13,165	12,429	-736	-5.6%
88.9%	13,061	12,136	-925	-7.1%
90.1%	12,939	11,811	-1,128	-8.7%
91.4%	12,690	11,263	-1,427	-11.2%
92.6%	12,134	11,147	-987	-8.1%
93.8%	11,397	11,126	-270	-2.4%
95.1%	11,306	10,234	-1,072	-9.5%
96.3%	9,290	10,187	897	9.7%
97.5%	8,540	8,815	275	3.2%
98.8%	8,335	7,845	-490	-5.9%
100.0%	6,561	7,221	660	10.1%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	217,773	217,750	-23	0.0%
1.2%	201,205	196,301	-4,904	-2.4%
2.5%	148,617	148,622	6	0.0%
3.7%	122,093	116,761	-5,332	-4.4%
4.9%	110,717	108,491	-2,226	-2.0%
6.2%	108,477	104,830	-3,648	-3.4%
7.4%	99,285	94,215	-5,070	-5.1%
8.6%	79,581	76,684	-2,897	-3.6%
9.9%	76,665	73,919	-2,746	-3.6%
11.1%	70,879	70,521	-358	-0.5%
12.3%	69,130	70,038	909	1.3%
13.6%	68,870	69,199	329	0.5%
14.8%	68,614	68,566	-47	-0.1%
16.0%	63,037	63,037	0	0.0%
17.3%	60,767	60,137	-630	-1.0%
18.5%	57,616	57,645	28	0.0%
19.8%	56,746	56,755	9	0.0%
21.0%	56,018	55,819	-200	-0.4%
22.2%	55,935	55,609	-326	-0.6%
23.5%	54,901	50,354	-4,547	-8.3%
24.7%	50,830	49,597	-1,234	-2.4%
25.9%	50,529	48,334	-2,195	-4.3%
27.2%	50,089	47,319	-2,770	-5.5%
28.4%	49,962	45,865	-4,097	-8.2%
29.6%	49,329	45,040	-4,289	-8.7%
30.9%	42,397	41,600	-796	-1.9%
32.1%	40,410	38,143	-2,267	-5.6%
33.3%	39,900	36,082	-3,818	-9.6%
34.6%	35,743	35,680	-63	-0.2%
35.8%	35,717	35,046	-671	-1.9%
37.0%	35,600	34,873	-727	-2.0%
38.3%	35,464	33,106	-2,358	-6.6%
39.5%	34,465	32,302	-2,163	-6.3%
40.7%	33,563	31,182	-2,381	-7.1%
42.0%	33,161	30,522	-2,639	-8.0%
43.2%	31,217	27,316	-3,901	-12.5%
44.4%	30,952	27,186	-3,766	-12.2%
45.7%	28,634	26,207	-2,427	-8.5%
46.9%	28,226	23,881	-4,345	-15.4%
48.1%	26,742	22,813	-3,929	-14.7%
49.4%	24,287	22,789	-1,498	-6.2%
50.6%	23,654	21,269	-2,385	-10.1%
51.9%	22,297	20,857	-1,440	-6.5%
53.1%	22,194	19,911	-2,282	-10.3%
54.3%	21,646	19,355	-2,291	-10.6%
55.6%	20,865	18,479	-2,386	-11.4%
56.8%	20,836	18,453	-2,383	-11.4%
58.0%	20,425	17,820	-2,606	-12.8%
59.3%	19,884	17,362	-2,522	-12.7%
60.5%	19,344	17,203	-2,142	-11.1%
61.7%	19,336	16,846	-2,490	-12.9%
63.0%	18,787	16,709	-2,079	-11.1%
64.2%	18,276	16,203	-2,073	-11.3%
65.4%	17,363	16,181	-1,182	-6.8%
66.7%	17,167	15,913	-1,254	-7.3%
67.9%	16,951	15,792	-1,159	-6.8%
69.1%	16,891	14,407	-2,484	-14.7%
70.4%	16,460	13,878	-2,582	-15.7%
71.6%	15,816	13,821	-1,995	-12.6%
72.8%	14,976	13,772	-1,204	-8.0%
74.1%	14,818	13,414	-1,403	-9.5%
75.3%	14,107	13,174	-933	-6.6%
76.5%	13,799	13,172	-627	-4.5%
77.8%	13,478	12,628	-851	-6.3%
79.0%	13,205	12,199	-1,006	-7.6%
80.2%	12,913	12,027	-886	-6.9%
81.5%	12,259	10,629	-1,630	-13.3%
82.7%	12,024	10,303	-1,721	-14.3%
84.0%	11,425	10,037	-1,388	-12.1%
85.2%	10,992	9,975	-1,018	-9.3%
86.4%	9,400	9,973	573	6.1%
87.7%	9,382	9,901	519	5.5%
88.9%	9,332	9,504	172	1.8%
90.1%	9,194	9,500	306	3.3%
91.4%	9,086	9,333	247	2.7%
92.6%	9,067	9,093	25	0.3%
93.8%	9,004	9,064	59	0.7%
95.1%	8,524	8,596	72	0.8%
96.3%	7,963	7,892	-70	-0.9%
97.5%	7,349	7,742	393	5.3%
98.8%	6,265	6,318	53	0.8%
100.0%	6,180	6,034	-146	-2.4%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	106,176	106,138	-39	0.0%
1.2%	94,412	94,420	9	0.0%
2.5%	89,715	86,244	-3,471	-3.9%
3.7%	60,451	60,444	-7	0.0%
4.9%	53,314	53,622	309	0.6%
6.2%	52,823	53,320	497	0.9%
7.4%	51,417	51,431	13	0.0%
8.6%	51,139	49,605	-1,534	-3.0%
9.9%	48,598	48,642	44	0.1%
11.1%	45,459	44,561	-898	-2.0%
12.3%	44,566	42,933	-1,632	-3.7%
13.6%	35,420	34,397	-1,024	-2.9%
14.8%	34,419	34,073	-347	-1.0%
16.0%	34,077	32,703	-1,373	-4.0%
17.3%	33,434	31,572	-1,861	-5.6%
18.5%	33,318	30,918	-2,400	-7.2%
19.8%	30,771	30,696	-75	-0.2%
21.0%	29,088	27,804	-1,284	-4.4%
22.2%	27,760	26,253	-1,507	-5.4%
23.5%	25,907	24,784	-1,124	-4.3%
24.7%	25,539	24,098	-1,441	-5.6%
25.9%	24,139	22,367	-1,772	-7.3%
27.2%	21,816	21,711	-105	-0.5%
28.4%	21,804	21,272	-532	-2.4%
29.6%	21,370	20,391	-978	-4.6%
30.9%	20,495	19,242	-1,253	-6.1%
32.1%	18,842	18,779	-63	-0.3%
33.3%	18,676	17,578	-1,098	-5.9%
34.6%	17,457	17,457	-1	0.0%
35.8%	16,528	16,488	-40	-0.2%
37.0%	16,016	15,625	-391	-2.4%
38.3%	14,786	14,593	-193	-1.3%
39.5%	13,074	13,212	138	1.1%
40.7%	12,906	12,927	22	0.2%
42.0%	12,863	12,743	-121	-0.9%
43.2%	11,488	11,566	78	0.7%
44.4%	11,148	11,534	386	3.5%
45.7%	11,068	11,175	107	1.0%
46.9%	10,987	11,029	42	0.4%
48.1%	10,745	10,920	175	1.6%
49.4%	10,702	10,576	-127	-1.2%
50.6%	10,648	10,541	-107	-1.0%
51.9%	10,195	10,346	151	1.5%
53.1%	10,034	10,114	80	0.8%
54.3%	10,005	9,974	-31	-0.3%
55.6%	9,893	9,972	80	0.8%
56.8%	9,600	9,912	311	3.2%
58.0%	9,480	9,834	354	3.7%
59.3%	9,420	9,485	65	0.7%
60.5%	9,249	9,350	102	1.1%
61.7%	9,198	9,338	140	1.5%
63.0%	9,137	9,249	111	1.2%
64.2%	8,992	9,119	127	1.4%
65.4%	8,918	8,977	58	0.7%
66.7%	8,729	8,954	225	2.6%
67.9%	8,564	8,947	383	4.5%
69.1%	8,530	8,873	343	4.0%
70.4%	8,434	8,768	334	4.0%
71.6%	8,421	8,576	155	1.8%
72.8%	8,399	8,563	164	2.0%
74.1%	8,397	8,537	141	1.7%
75.3%	8,387	8,450	63	0.8%
76.5%	8,321	8,430	108	1.3%
77.8%	8,174	8,375	202	2.5%
79.0%	8,139	8,345	207	2.5%
80.2%	8,120	8,292	172	2.1%
81.5%	7,986	8,135	149	1.9%
82.7%	7,757	7,626	-130	-1.7%
84.0%	7,427	7,488	61	0.8%
85.2%	7,329	7,393	64	0.9%
86.4%	7,122	7,045	-77	-1.1%
87.7%	6,866	6,928	62	0.9%
88.9%	6,863	6,897	34	0.5%
90.1%	6,712	6,789	77	1.1%
91.4%	6,662	6,614	-47	-0.7%
92.6%	6,424	6,408	-16	-0.3%
93.8%	6,369	6,385	15	0.2%
95.1%	6,359	6,363	3	0.1%
96.3%	6,212	6,359	147	2.4%
97.5%	5,842	5,857	14	0.2%
98.8%	5,124	5,126	2	0.0%
100.0%	4,861	4,812	-49	-1.0%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	45,294	43,553	-1,741	-3.8%
1.2%	32,051	31,960	-91	-0.3%
2.5%	31,642	31,798	156	0.5%
3.7%	27,014	27,018	4	0.0%
4.9%	26,252	26,057	-195	-0.7%
6.2%	22,960	22,817	-144	-0.6%
7.4%	21,930	19,985	-1,945	-8.9%
8.6%	20,128	19,902	-226	-1.1%
9.9%	16,836	15,913	-924	-5.5%
11.1%	16,016	15,414	-603	-3.8%
12.3%	15,666	14,826	-840	-5.4%
13.6%	15,014	14,315	-699	-4.7%
14.8%	14,244	14,110	-133	-0.9%
16.0%	13,793	13,824	31	0.2%
17.3%	13,628	13,687	58	0.4%
18.5%	12,128	10,561	-1,567	-12.9%
19.8%	10,218	10,112	-106	-1.0%
21.0%	10,168	10,097	-71	-0.7%
22.2%	10,050	9,972	-78	-0.8%
23.5%	9,859	9,706	-154	-1.6%
24.7%	9,809	9,578	-231	-2.4%
25.9%	9,748	9,492	-256	-2.6%
27.2%	9,474	9,464	-10	-0.1%
28.4%	9,195	9,289	94	1.0%
29.6%	9,094	9,177	84	0.9%
30.9%	9,081	8,730	-351	-3.9%
32.1%	9,028	8,600	-428	-4.7%
33.3%	8,825	8,543	-282	-3.2%
34.6%	8,626	8,417	-209	-2.4%
35.8%	8,498	8,025	-473	-5.6%
37.0%	8,092	7,939	-153	-1.9%
38.3%	7,956	7,892	-64	-0.8%
39.5%	7,928	7,838	-90	-1.1%
40.7%	7,921	7,832	-89	-1.1%
42.0%	7,920	7,823	-97	-1.2%
43.2%	7,832	7,718	-114	-1.5%
44.4%	7,816	7,715	-101	-1.3%
45.7%	7,801	7,693	-108	-1.4%
46.9%	7,772	7,663	-109	-1.4%
48.1%	7,711	7,626	-85	-1.1%
49.4%	7,568	7,588	20	0.3%
50.6%	7,544	7,478	-66	-0.9%
51.9%	7,540	7,446	-94	-1.2%
53.1%	7,460	7,363	-97	-1.3%
54.3%	7,451	7,361	-91	-1.2%
55.6%	7,276	7,316	39	0.5%
56.8%	7,220	7,299	78	1.1%
58.0%	7,176	7,267	91	1.3%
59.3%	7,153	7,237	84	1.2%
60.5%	7,151	7,174	23	0.3%
61.7%	7,052	7,161	109	1.5%
63.0%	7,016	7,146	130	1.8%
64.2%	6,958	7,123	165	2.4%
65.4%	6,913	7,076	163	2.4%
66.7%	6,897	7,024	127	1.8%
67.9%	6,854	6,938	85	1.2%
69.1%	6,811	6,883	72	1.1%
70.4%	6,722	6,830	108	1.6%
71.6%	6,682	6,726	44	0.7%
72.8%	6,512	6,690	178	2.7%
74.1%	6,489	6,679	190	2.9%
75.3%	6,455	6,455	0	0.0%
76.5%	6,448	6,452	4	0.1%
77.8%	6,446	6,431	-15	-0.2%
79.0%	6,438	6,400	-38	-0.6%
80.2%	6,415	6,378	-37	-0.6%
81.5%	6,388	6,257	-131	-2.1%
82.7%	6,313	6,180	-134	-2.1%
84.0%	6,087	6,102	15	0.2%
85.2%	6,050	6,097	47	0.8%
86.4%	6,037	6,080	43	0.7%
87.7%	6,004	5,990	-14	-0.2%
88.9%	5,896	5,977	81	1.4%
90.1%	5,586	5,957	371	6.6%
91.4%	5,490	5,896	407	7.4%
92.6%	5,409	5,594	185	3.4%
93.8%	5,148	5,268	120	2.3%
95.1%	5,078	5,214	136	2.7%
96.3%	4,122	4,571	448	10.9%
97.5%	4,032	3,866	-166	-4.1%
98.8%	3,559	3,665	106	3.0%
100.0%	3,113	3,227	114	3.7%

Table SW-32-b

Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,325	27,087	762	2.9%
1.2%	11,158	12,999	1,840	16.5%
2.5%	10,662	10,035	-627	-5.9%
3.7%	9,686	9,491	-195	-2.0%
4.9%	9,491	9,434	-57	-0.6%
6.2%	8,791	9,187	396	4.5%
7.4%	8,734	8,843	109	1.2%
8.6%	8,660	8,763	103	1.2%
9.9%	8,241	8,668	428	5.2%
11.1%	8,217	8,305	88	1.1%
12.3%	8,216	8,265	49	0.6%
13.6%	8,126	8,241	115	1.4%
14.8%	8,025	8,126	101	1.3%
16.0%	7,980	8,117	137	1.7%
17.3%	7,780	8,034	254	3.3%
18.5%	7,760	8,018	258	3.3%
19.8%	7,630	7,977	347	4.5%
21.0%	7,526	7,780	254	3.4%
22.2%	7,474	7,630	156	2.1%
23.5%	7,467	7,467	0	0.0%
24.7%	7,454	7,454	0	0.0%
25.9%	7,444	7,405	-39	-0.5%
27.2%	7,416	7,402	-14	-0.2%
28.4%	7,328	7,329	1	0.0%
29.6%	7,195	7,310	114	1.6%
30.9%	7,195	7,285	91	1.3%
32.1%	7,186	7,274	88	1.2%
33.3%	7,167	7,206	40	0.6%
34.6%	7,136	7,196	60	0.8%
35.8%	7,121	7,195	74	1.0%
37.0%	7,107	7,186	79	1.1%
38.3%	7,068	7,167	98	1.4%
39.5%	7,036	7,163	127	1.8%
40.7%	7,022	7,160	138	2.0%
42.0%	6,986	7,150	164	2.4%
43.2%	6,984	7,140	156	2.2%
44.4%	6,979	7,113	134	1.9%
45.7%	6,867	7,106	239	3.5%
46.9%	6,862	7,070	208	3.0%
48.1%	6,849	7,062	213	3.1%
49.4%	6,696	7,054	358	5.4%
50.6%	6,678	7,050	372	5.6%
51.9%	6,618	7,016	398	6.0%
53.1%	6,565	6,936	371	5.7%
54.3%	6,528	6,867	339	5.2%
55.6%	6,483	6,824	341	5.3%
56.8%	6,472	6,785	314	4.8%
58.0%	6,413	6,768	355	5.5%
59.3%	6,403	6,750	346	5.4%
60.5%	6,378	6,748	371	5.8%
61.7%	6,306	6,715	409	6.5%
63.0%	6,305	6,665	360	5.7%
64.2%	6,223	6,638	414	6.7%
65.4%	6,181	6,600	419	6.8%
66.7%	6,115	6,587	472	7.7%
67.9%	6,071	6,456	386	6.4%
69.1%	6,068	6,413	345	5.7%
70.4%	6,049	6,400	351	5.8%
71.6%	6,001	6,324	323	5.4%
72.8%	5,999	6,305	307	5.1%
74.1%	5,996	6,305	309	5.2%
75.3%	5,965	6,288	322	5.4%
76.5%	5,887	6,163	276	4.7%
77.8%	5,870	6,145	276	4.7%
79.0%	5,860	6,112	251	4.3%
80.2%	5,850	6,019	169	2.9%
81.5%	5,563	5,995	432	7.8%
82.7%	5,538	5,811	274	4.9%
84.0%	5,535	5,796	260	4.7%
85.2%	5,464	5,698	234	4.3%
86.4%	5,418	5,654	236	4.3%
87.7%	5,398	5,537	139	2.6%
88.9%	5,326	5,418	92	1.7%
90.1%	5,171	5,412	241	4.7%
91.4%	5,162	5,362	200	3.9%
92.6%	4,776	4,968	192	4.0%
93.8%	4,773	4,955	182	3.8%
95.1%	4,240	4,773	533	12.6%
96.3%	3,457	4,334	877	25.4%
97.5%	3,327	3,356	29	0.9%
98.8%	3,096	3,350	253	8.2%
100.0%	2,983	3,327	343	11.5%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,538	19,802	5,264	36.2%
1.2%	14,488	14,599	111	0.8%
2.5%	14,480	14,529	49	0.3%
3.7%	14,439	14,476	37	0.3%
4.9%	14,402	14,441	39	0.3%
6.2%	14,395	14,433	38	0.3%
7.4%	14,390	14,402	12	0.1%
8.6%	14,364	14,390	27	0.2%
9.9%	14,350	14,385	35	0.2%
11.1%	14,345	14,350	5	0.0%
12.3%	14,317	14,350	33	0.2%
13.6%	14,307	14,336	28	0.2%
14.8%	14,225	14,335	110	0.8%
16.0%	14,221	14,335	113	0.8%
17.3%	14,017	14,334	318	2.3%
18.5%	13,906	14,332	426	3.1%
19.8%	13,893	14,317	424	3.1%
21.0%	13,827	14,277	450	3.3%
22.2%	13,826	14,192	367	2.7%
23.5%	13,824	14,102	279	2.0%
24.7%	13,810	14,012	203	1.5%
25.9%	13,792	14,011	219	1.6%
27.2%	13,775	13,922	146	1.1%
28.4%	13,773	13,883	110	0.8%
29.6%	13,609	13,861	252	1.8%
30.9%	13,478	13,817	340	2.5%
32.1%	13,124	13,712	588	4.5%
33.3%	13,091	13,683	592	4.5%
34.6%	12,971	13,386	415	3.2%
35.8%	12,966	13,383	418	3.2%
37.0%	12,947	13,285	338	2.6%
38.3%	12,924	13,183	259	2.0%
39.5%	12,922	13,132	210	1.6%
40.7%	12,875	12,994	118	0.9%
42.0%	12,822	12,822	1	0.0%
43.2%	12,714	12,601	-113	-0.9%
44.4%	12,639	12,559	-80	-0.6%
45.7%	12,562	12,173	-389	-3.1%
46.9%	12,199	12,090	-108	-0.9%
48.1%	12,115	12,081	-33	-0.3%
49.4%	11,956	12,025	68	0.6%
50.6%	11,772	11,957	185	1.6%
51.9%	11,765	11,765	0	0.0%
53.1%	11,743	11,723	-21	-0.2%
54.3%	11,696	11,710	14	0.1%
55.6%	11,676	11,662	-14	-0.1%
56.8%	11,460	11,435	-25	-0.2%
58.0%	11,458	11,418	-40	-0.4%
59.3%	11,456	11,417	-39	-0.3%
60.5%	11,427	11,398	-29	-0.3%
61.7%	11,374	11,383	8	0.1%
63.0%	11,296	11,255	-41	-0.4%
64.2%	11,206	11,163	-43	-0.4%
65.4%	10,996	11,116	120	1.1%
66.7%	10,810	11,084	274	2.5%
67.9%	10,740	10,999	259	2.4%
69.1%	10,721	10,738	18	0.2%
70.4%	10,653	10,665	12	0.1%
71.6%	10,564	10,210	-354	-3.3%
72.8%	10,389	10,209	-179	-1.7%
74.1%	9,962	10,081	120	1.2%
75.3%	8,544	9,489	945	11.1%
76.5%	8,130	9,419	1,289	15.9%
77.8%	8,123	9,419	1,296	16.0%
79.0%	8,100	9,097	998	12.3%
80.2%	7,703	8,954	1,251	16.2%
81.5%	7,155	8,813	1,658	23.2%
82.7%	7,091	8,153	1,062	15.0%
84.0%	7,070	8,099	1,029	14.6%
85.2%	6,958	7,817	859	12.3%
86.4%	6,746	7,638	892	13.2%
87.7%	6,670	7,276	606	9.1%
88.9%	6,614	6,967	353	5.3%
90.1%	6,441	6,933	492	7.6%
91.4%	5,990	6,703	714	11.9%
92.6%	5,554	6,571	1,017	18.3%
93.8%	5,313	6,029	716	13.5%
95.1%	5,282	5,363	81	1.5%
96.3%	4,506	5,106	599	13.3%
97.5%	4,295	4,538	244	5.7%
98.8%	4,239	4,525	286	6.7%
100.0%	3,721	3,846	125	3.4%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,422	10,410	-12	-0.1%
1.2%	10,154	10,236	82	0.8%
2.5%	9,981	10,217	236	2.4%
3.7%	9,967	10,146	179	1.8%
4.9%	9,864	10,115	251	2.5%
6.2%	9,827	10,113	287	2.9%
7.4%	9,826	10,113	287	2.9%
8.6%	9,789	10,030	241	2.5%
9.9%	9,711	10,008	296	3.1%
11.1%	9,676	9,981	305	3.2%
12.3%	9,617	9,979	362	3.8%
13.6%	9,588	9,916	328	3.4%
14.8%	9,560	9,912	352	3.7%
16.0%	9,524	9,883	359	3.8%
17.3%	9,513	9,862	348	3.7%
18.5%	9,510	9,826	317	3.3%
19.8%	9,498	9,802	304	3.2%
21.0%	9,493	9,792	299	3.2%
22.2%	9,474	9,729	255	2.7%
23.5%	9,407	9,724	316	3.4%
24.7%	9,365	9,712	347	3.7%
25.9%	9,332	9,498	166	1.8%
27.2%	9,305	9,454	149	1.6%
28.4%	9,246	9,420	174	1.9%
29.6%	9,187	9,379	191	2.1%
30.9%	9,134	9,337	203	2.2%
32.1%	9,116	9,337	221	2.4%
33.3%	9,064	9,323	260	2.9%
34.6%	9,049	9,309	260	2.9%
35.8%	9,000	9,278	279	3.1%
37.0%	8,982	9,212	230	2.6%
38.3%	8,917	9,166	249	2.8%
39.5%	8,867	9,160	293	3.3%
40.7%	8,834	9,116	281	3.2%
42.0%	8,770	9,074	304	3.5%
43.2%	8,669	9,055	387	4.5%
44.4%	8,615	8,957	342	4.0%
45.7%	8,604	8,938	334	3.9%
46.9%	8,597	8,914	318	3.7%
48.1%	8,540	8,911	371	4.3%
49.4%	8,511	8,902	391	4.6%
50.6%	8,419	8,834	416	4.9%
51.9%	8,357	8,809	452	5.4%
53.1%	8,342	8,701	359	4.3%
54.3%	8,310	8,682	371	4.5%
55.6%	8,245	8,596	351	4.3%
56.8%	8,208	8,561	353	4.3%
58.0%	8,208	8,541	333	4.1%
59.3%	8,038	8,540	503	6.3%
60.5%	8,001	8,539	538	6.7%
61.7%	7,979	8,391	412	5.2%
63.0%	7,968	8,374	406	5.1%
64.2%	7,877	8,358	481	6.1%
65.4%	7,817	8,350	532	6.8%
66.7%	7,405	8,207	802	10.8%
67.9%	7,401	8,186	785	10.6%
69.1%	7,325	8,107	782	10.7%
70.4%	7,244	8,030	786	10.9%
71.6%	6,744	7,968	1,224	18.1%
72.8%	6,634	7,903	1,269	19.1%
74.1%	6,485	7,870	1,384	21.3%
75.3%	5,454	7,837	2,383	43.7%
76.5%	5,023	7,201	2,179	43.4%
77.8%	4,748	6,957	2,209	46.5%
79.0%	4,689	6,447	1,758	37.5%
80.2%	4,609	6,424	1,815	39.4%
81.5%	4,442	6,369	1,927	43.4%
82.7%	4,439	6,049	1,610	36.3%
84.0%	4,412	5,958	1,547	35.1%
85.2%	4,309	5,537	1,228	28.5%
86.4%	4,190	5,518	1,328	31.7%
87.7%	4,151	5,434	1,283	30.9%
88.9%	4,127	4,625	498	12.1%
90.1%	3,909	4,373	464	11.9%
91.4%	3,905	4,313	408	10.4%
92.6%	3,778	4,251	473	12.5%
93.8%	3,613	4,182	569	15.7%
95.1%	3,558	4,070	512	14.4%
96.3%	3,374	4,055	681	20.2%
97.5%	3,241	4,041	800	24.7%
98.8%	3,074	3,887	812	26.4%
100.0%	2,978	3,628	650	21.8%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,595	24,989	394	1.6%
1.2%	24,509	24,986	477	1.9%
2.5%	24,285	24,374	89	0.4%
3.7%	23,896	24,302	406	1.7%
4.9%	23,379	24,242	863	3.7%
6.2%	23,370	24,146	776	3.3%
7.4%	22,969	23,781	812	3.5%
8.6%	22,874	23,608	734	3.2%
9.9%	22,630	23,573	943	4.2%
11.1%	22,486	23,506	1,019	4.5%
12.3%	22,455	23,471	1,016	4.5%
13.6%	22,172	23,274	1,103	5.0%
14.8%	21,983	22,451	468	2.1%
16.0%	21,223	21,468	246	1.2%
17.3%	20,777	21,040	263	1.3%
18.5%	15,316	16,291	975	6.4%
19.8%	15,286	15,786	500	3.3%
21.0%	15,261	15,665	403	2.6%
22.2%	14,771	15,340	569	3.8%
23.5%	14,728	14,794	66	0.4%
24.7%	14,073	14,551	478	3.4%
25.9%	13,825	14,172	346	2.5%
27.2%	13,761	14,169	408	3.0%
28.4%	13,719	14,102	383	2.8%
29.6%	13,653	14,056	403	3.0%
30.9%	13,622	14,014	392	2.9%
32.1%	13,530	13,682	152	1.1%
33.3%	13,104	13,371	268	2.0%
34.6%	13,050	13,328	278	2.1%
35.8%	12,633	12,966	334	2.6%
37.0%	11,796	12,188	392	3.3%
38.3%	11,506	12,107	601	5.2%
39.5%	11,056	11,598	542	4.9%
40.7%	9,831	10,263	432	4.4%
42.0%	9,604	10,217	613	6.4%
43.2%	8,488	9,645	1,157	13.6%
44.4%	8,337	9,359	1,022	12.3%
45.7%	8,204	9,140	936	11.4%
46.9%	8,199	9,109	910	11.1%
48.1%	8,147	9,073	926	11.4%
49.4%	7,953	9,044	1,091	13.7%
50.6%	7,938	8,957	1,019	12.8%
51.9%	7,669	8,902	1,233	16.1%
53.1%	7,632	8,809	1,177	15.4%
54.3%	7,519	8,750	1,231	16.4%
55.6%	7,511	8,598	1,086	14.5%
56.8%	7,360	8,446	1,086	14.8%
58.0%	7,229	8,328	1,099	15.2%
59.3%	7,197	8,234	1,037	14.4%
60.5%	7,164	8,222	1,057	14.8%
61.7%	7,091	8,137	1,046	14.7%
63.0%	6,857	8,132	1,276	18.6%
64.2%	6,615	8,036	1,420	21.5%
65.4%	6,491	7,878	1,387	21.4%
66.7%	6,463	7,615	1,152	17.8%
67.9%	5,679	7,610	1,932	34.0%
69.1%	5,631	7,540	1,909	33.9%
70.4%	5,316	7,534	2,217	41.7%
71.6%	5,288	7,419	2,132	40.3%
72.8%	5,261	7,360	2,099	39.9%
74.1%	5,164	7,252	2,088	40.4%
75.3%	5,141	7,145	2,003	39.0%
76.5%	5,028	7,051	2,023	40.2%
77.8%	5,009	6,841	1,832	36.6%
79.0%	4,993	6,662	1,669	33.4%
80.2%	4,941	6,655	1,715	34.7%
81.5%	4,721	6,511	1,790	37.9%
82.7%	4,409	6,152	1,744	39.6%
84.0%	4,219	6,138	1,919	45.5%
85.2%	4,218	6,096	1,879	44.5%
86.4%	4,191	5,990	1,799	42.9%
87.7%	4,113	5,950	1,836	44.6%
88.9%	3,923	5,671	1,748	44.6%
90.1%	3,878	5,550	1,673	43.1%
91.4%	3,858	4,752	894	23.2%
92.6%	3,602	4,550	948	26.3%
93.8%	3,375	4,357	982	29.1%
95.1%	3,092	4,266	1,174	38.0%
96.3%	3,021	3,969	948	31.4%
97.5%	3,000	3,931	931	31.0%
98.8%	3,000	3,653	653	21.8%
100.0%	3,000	3,267	267	8.9%

Figure SW-33-b
Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

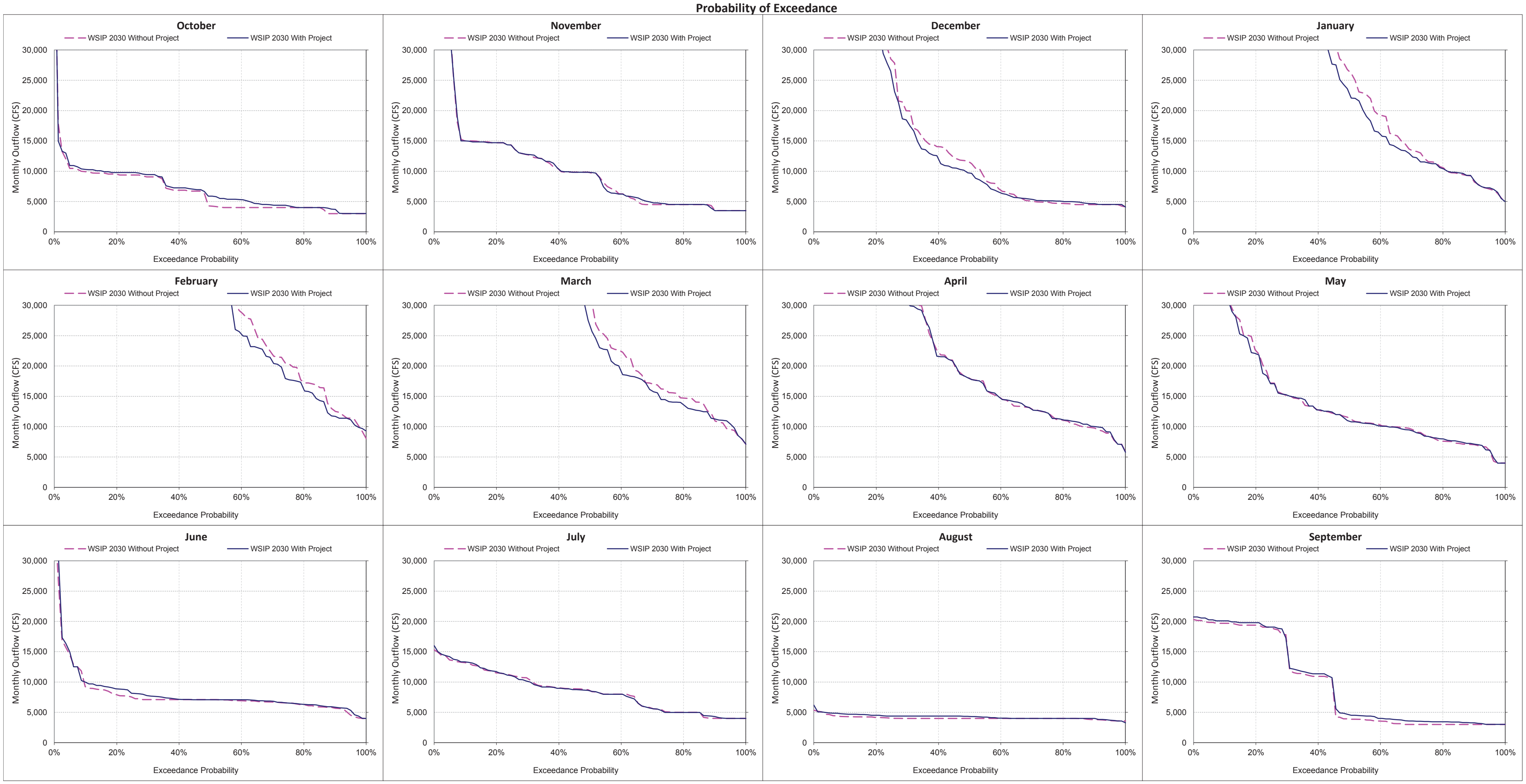


Table SW-33-b

Sacramento/San Joaquin River Delta, Monthly Outflow

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	51,285	54,915	3,630	7.1%
1.2%	17,909	14,961	-2,948	-16.5%
2.5%	13,281	13,281	0	0.0%
3.7%	12,010	12,997	986	8.2%
4.9%	10,469	10,938	469	4.5%
6.2%	10,469	10,923	454	4.3%
7.4%	10,313	10,703	390	3.8%
8.6%	10,000	10,390	390	3.9%
9.9%	9,922	10,312	390	3.9%
11.1%	9,844	10,234	390	4.0%
12.3%	9,692	10,234	542	5.6%
13.6%	9,688	10,078	390	4.0%
14.8%	9,688	10,078	390	4.0%
16.0%	9,688	9,922	234	2.4%
17.3%	9,531	9,922	390	4.1%
18.5%	9,531	9,765	234	2.5%
19.8%	9,531	9,765	234	2.5%
21.0%	9,375	9,765	390	4.2%
22.2%	9,375	9,765	390	4.2%
23.5%	9,375	9,765	390	4.2%
24.7%	9,375	9,765	390	4.2%
25.9%	9,375	9,765	390	4.2%
27.2%	9,375	9,688	313	3.3%
28.4%	9,219	9,531	313	3.4%
29.6%	9,063	9,453	390	4.3%
30.9%	9,063	9,453	390	4.3%
32.1%	9,063	9,453	390	4.3%
33.3%	9,063	9,140	78	0.9%
34.6%	8,750	9,063	313	3.6%
35.8%	7,188	7,578	390	5.4%
37.0%	7,031	7,422	390	5.6%
38.3%	6,875	7,265	390	5.7%
39.5%	6,875	7,265	390	5.7%
40.7%	6,875	7,265	390	5.7%
42.0%	6,875	7,265	390	5.7%
43.2%	6,719	7,109	390	5.8%
44.4%	6,719	7,055	336	5.0%
45.7%	6,719	6,953	234	3.5%
46.9%	6,719	6,953	234	3.5%
48.1%	6,250	6,640	390	6.2%
49.4%	4,285	5,890	1,606	37.5%
50.6%	4,230	5,890	1,660	39.2%
51.9%	4,173	5,822	1,649	39.5%
53.1%	4,072	5,516	1,444	35.5%
54.3%	4,000	5,512	1,512	37.8%
55.6%	4,000	5,390	1,390	34.8%
56.8%	4,000	5,390	1,390	34.8%
58.0%	4,000	5,361	1,361	34.0%
59.3%	4,000	5,350	1,350	33.7%
60.5%	4,000	5,291	1,291	32.3%
61.7%	4,000	5,125	1,125	28.1%
63.0%	4,000	4,926	926	23.2%
64.2%	4,000	4,668	668	16.7%
65.4%	4,000	4,660	660	16.5%
66.7%	4,000	4,527	527	13.2%
67.9%	4,000	4,498	498	12.5%
69.1%	4,000	4,484	484	12.1%
70.4%	4,000	4,390	390	9.8%
71.6%	4,000	4,390	390	9.8%
72.8%	4,000	4,390	390	9.8%
74.1%	4,000	4,390	390	9.8%
75.3%	4,000	4,270	270	6.8%
76.5%	4,000	4,134	134	3.4%
77.8%	4,000	4,000	0	0.0%
79.0%	4,000	4,000	0	0.0%
80.2%	4,000	4,000	0	0.0%
81.5%	4,000	4,000	0	0.0%
82.7%	4,000	4,000	0	0.0%
84.0%	4,000	4,000	0	0.0%
85.2%	4,000	4,000	0	0.0%
86.4%	3,648	4,000	352	9.6%
87.7%	3,000	3,921	921	30.7%
88.9%	3,000	3,731	731	24.4%
90.1%	3,000	3,703	703	23.4%
91.4%	3,000	3,082	82	2.7%
92.6%	3,000	3,000	0	0.0%
93.8%	3,000	3,000	0	0.0%
95.1%	3,000	3,000	0	0.0%
96.3%	3,000	3,000	0	0.0%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	73,874	68,051	-5,824	-7.9%
1.2%	57,849	55,200	-2,649	-4.6%
2.5%	52,789	53,701	912	1.7%
3.7%	40,090	43,943	3,853	9.6%
4.9%	35,399	33,594	-1,805	-5.1%
6.2%	25,796	25,821	25	0.1%
7.4%	18,145	18,870	725	4.0%
8.6%	15,270	15,000	-270	-1.8%
9.9%	15,000	15,000	0	0.0%
11.1%	15,000	14,964	-36	-0.2%
12.3%	15,000	14,844	-156	-1.0%
13.6%	14,964	14,844	-121	-0.8%
14.8%	14,844	14,844	0	0.0%
16.0%	14,844	14,844	0	0.0%
17.3%	14,844	14,688	-156	-1.1%
18.5%	14,688	14,688	0	0.0%
19.8%	14,688	14,688	0	0.0%
21.0%	14,688	14,688	0	0.0%
22.2%	14,688	14,688	0	0.0%
23.5%	14,375	14,375	0	0.0%
24.7%	14,332	14,332	0	0.0%
25.9%	13,585	13,585	0	0.0%
27.2%	13,051	13,051	0	0.0%
28.4%	12,888	12,888	0	0.0%
29.6%	12,756	12,758	2	0.0%
30.9%	12,631	12,756	125	1.0%
32.1%	12,246	12,631	384	3.1%
33.3%	12,169	12,169	0	0.0%
34.6%	12,095	12,054	-41	-0.3%
35.8%	11,619	11,629	10	0.1%
37.0%	11,302	11,619	317	2.8%
38.3%	10,700	11,302	602	5.6%
39.5%	10,542	10,542	0	0.0%
40.7%	9,922	10,000	78	0.8%
42.0%	9,844	9,922	78	0.8%
43.2%	9,844	9,922	78	0.8%
44.4%	9,844	9,844	0	0.0%
45.7%	9,844	9,844	0	0.0%
46.9%	9,844	9,844	0	0.0%
48.1%	9,844	9,844	0	0.0%
49.4%	9,844	9,844	0	0.0%
50.6%	9,688	9,795	107	1.1%
51.9%	9,688	9,688	0	0.0%
53.1%	8,999	8,910	-89	-1.0%
54.3%	8,145	7,438	-707	-8.7%
55.6%	7,470	6,698	-772	-10.3%
56.8%	7,149	6,398	-751	-10.5%
58.0%	6,900	6,354	-546	-7.9%
59.3%	6,277	6,250	-27	-0.4%
60.5%	6,250	6,218	-32	-0.5%
61.7%	6,092	5,871	-221	-3.6%
63.0%	5,598	5,844	246	4.4%
64.2%	5,412	5,722	310	5.7%
65.4%	4,871	5,584	712	14.6%
66.7%	4,563	5,271	708	15.5%
67.9%	4,500	5,072	572	12.7%
69.1%	4,500	4,942	442	9.8%
70.4%	4,500	4,756	256	5.7%
71.6%	4,500	4,753	253	5.6%
72.8%	4,500	4,673	173	3.8%
74.1%	4,500	4,657	157	3.5%
75.3%	4,500	4,500	0	0.0%
76.5%	4,500	4,500	0	0.0%
77.8%	4,500	4,500	0	0.0%
79.0%	4,500	4,500	0	0.0%
80.2%	4,500	4,500	0	0.0%
81.5%	4,500	4,500	0	0.0%
82.7%	4,500	4,500	0	0.0%
84.0%	4,500	4,500	0	0.0%
85.2%	4,500	4,500	0	0.0%
86.4%	4,500	4,500	0	0.0%
87.7%	4,500	4,450	-50	-1.1%
88.9%	4,332	3,936	-396	-9.1%
90.1%	3,500	3,500	0	0.0%
91.4%	3,500	3,500	0	0.0%
92.6%	3,500	3,500	0	0.0%
93.8%	3,500	3,500	0	0.0%
95.1%	3,500	3,500	0	0.0%
96.3%	3,500	3,500	0	0.0%
97.5%	3,500	3,500	0	0.0%
98.8%	3,500	3,500	0	0.0%
100.0%	3,500	3,500	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	172,053	171,946	-106	-0.1%
1.2%	143,403	138,912	-4,491	-3.1%
2.5%	123,042	121,023	-2,019	-1.6%
3.7%	110,476	111,395	919	0.8%
4.9%	107,748	105,926	-1,821	-1.7%
6.2%	96,981	91,740	-5,241	-5.4%
7.4%	90,367	87,912	-2,455	-2.7%
8.6%	84,147	84,603	457	0.5%
9.9%	81,265	82,783	1,519	1.9%
11.1%	77,454	77,315	-139	-0.2%
12.3%	60,669	56,618	-4,051	-6.7%
13.6%	52,932	51,708	-1,224	-2.3%
14.8%	39,738	38,608	-1,130	-2.8%
16.0%	39,490	38,157	-1,334	-3.4%
17.3%	39,391	35,699	-3,692	-9.4%
18.5%	38,320	35,421	-2,899	-7.6%
19.8%	37,374	34,951	-2,423	-6.5%
21.0%	36,260	33,461	-2,800	-7.7%
22.2%	34,008	29,412	-4,597	-13.5%
23.5%	30,496	27,832	-2,664	-8.7%
24.7%	28,514	26,504	-2,009	-7.0%
25.9%	27,836	23,124	-4,712	-16.9%
27.2%	21,587	21,321	-267	-1.2%
28.4%	21,426	18,638	-2,788	-13.0%
29.6%	19,977	18,471	-1,506	-7.5%
30.9%	19,950	17,445	-2,504	-12.6%
32.1%	17,106	16,613	-493	-2.9%
33.3%	16,752	14,858	-1,894	-11.3%
34.6%	15,821	13,692	-2,129	-13.5%
35.8%	15,024	13,562	-1,462	-9.7%
37.0%	14,462	12,948	-1,514	-10.5%
38.3%	14,428	12,646	-1,782	-12.4%
39.5%	14,051	12,577	-1,474	-10.5%
40.7%	14,018	11,257	-2,761	-19.7%
42.0%	13,855	10,933	-2,922	-21.1%
43.2%	13,056	10,859	-2,197	-16.8%
44.4%	12,468	10,559	-1,909	-15.3%
45.7%	12,071	10,519	-1,552	-12.9%
46.9%	11,832	10,299	-1,533	-13.0%
48.1%	11,763	10,147	-1,615	-13.7%
49.4%	11,677	9,736	-1,941	-16.6%
50.6%	11,240	9,664	-1,576	-14.0%
51.9%	10,490	8,851	-1,639	-15.6%
53.1%	10,471	8,601	-1,870	-17.9%
54.3%	9,328	8,188	-1,140	-12.2%
55.6%	8,293	7,799	-494	-6.0%
56.8%	8,045	7,074	-971	-12.1%
58.0%	7,984	6,883	-1,101	-13.8%
59.3%	7,133	6,562	-571	-8.0%
60.5%	6,675	6,325	-350	-5.2%
61.7%	6,594	6,183	-411	-6.2%
63.0%	6,289	5,950	-339	-5.4%
64.2%	6,173	5,657	-516	-8.4%
65.4%	5,598	5,611	13	0.2%
66.7%	5,525	5,554	29	0.5%
67.9%	5,174	5,500	326	6.3%
69.1%	5,113	5,432	319	6.2%
70.4%	5,032	5,346	314	6.2%
71.6%	4,931	5,155	224	4.6%
72.8%	4,918	5,150	231	4.7%
74.1%	4,891	5,127	236	4.8%
75.3%	4,878	5,123	246	5.0%
76.5%	4,742	5,103	361	7.6%
77.8%	4,700	5,085	385	8.2%
79.0%	4,698	5,071	373	7.9%
80.2%	4,677	5,000	323	6.9%
81.5%	4,634	5,000	366	7.9%
82.7%	4,611	5,000	389	8.4%
84.0%	4,500	4,952	452	10.0%
85.2%	4,500	4,886	386	8.6%
86.4%	4,500	4,753	253	5.6%
87.7%	4,500	4,674	174	3.9%
88.9%	4,500	4,639	139	3.1%
90.1%	4,500	4,636	136	3.0%
91.4%	4,500	4,518	18	0.4%
92.6%	4,500	4,500	0	0.0%
93.8%	4,500	4,500	0	0.0%
95.1%	4,500	4,500	0	0.0%
96.3%	4,500	4,500	0	0.0%
97.5%	4,500	4,500	0	0.0%
98.8%	4,249	4,500	251	5.9%
100.0%	4,091	4,090	-1	0.0%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	299,948	297,906	-2,042	-0.7%
1.2%	225,446	219,775	-5,671	-2.5%
2.5%	193,529	190,419	-3,110	-1.6%
3.7%	172,116	171,221	-894	-0.5%
4.9%	165,639	165,250	-389	-0.2%
6.2%	139,918	139,996	78	0.1%
7.4%	139,372	134,927	-4,445	-3.2%
8.6%	120,682	119,584	-1,098	-0.9%
9.9%	119,371	117,826	-1,545	-1.3%
11.1%	117,568	116,241	-1,327	-1.1%
12.3%	106,077	100,658	-5,420	-5.1%
13.6%	100,860	99,854	-1,006	-1.0%
14.8%	98,957	99,234	277	0.3%
16.0%	91,683	93,632	1,950	2.1%
17.3%	90,594	84,050	-6,544	-7.2%
18.5%	77,582	72,902	-4,680	-6.0%
19.8%	76,402	72,604	-3,798	-5.0%
21.0%	72,824	72,204	-619	-0.9%
22.2%	67,186	67,065	-121	-0.2%
23.5%	66,077	65,650	-427	-0.6%
24.7%	65,353	62,171	-3,182	-4.9%
25.9%	62,212	60,292	-1,920	-3.1%
27.2%	60,925	59,879	-1,046	-1.7%
28.4%	59,792	55,168	-4,624	-7.7%
29.6%	55,032	53,653	-1,379	-2.5%
30.9%	53,895	52,966	-928	-1.7%
32.1%	52,118	50,630	-1,488	-2.9%
33.3%	42,780	41,695	-1,086	-2.5%
34.6%	42,000	38,784	-3,216	-7.7%
35.8%	41,809	38,152	-3,657	-8.7%
37.0%	39,460	36,583	-2,876	-7.3%
38.3%	39,220	36,529	-2,691	-6.9%
39.5%	37,949	35,928	-2,021	-5.3%
40.7%	37,562	33,060	-4,502	-12.0%
42.0%	36,800	31,886	-4,914	-13.4%
43.2%	33,292	29,990	-3,302	-9.9%
44.4%	31,583	27,683	-3,900	-12.3%
45.7%	30,734	27,536	-3,198	-10.4%
46.9%	28,552	25,111	-3,441	-12.1%
48.1%	27,921	24,350	-3,571	-12.8%
49.4%	26,765	23,588	-3,177	-11.9%
50.6%	26,166	22,050	-4,116	-15.7%
51.9%	24,986	22,006	-2,980	-11.9%
53.1%	23,080	21,602	-1,478	-6.4%
54.3%	22,922	20,107	-2,814	-12.3%
55.6%	22,605	19,026	-3,579	-15.8%
56.8%	21,990	18,303	-3,687	-16.8%
58.0%	19,948	16,644	-3,304	-16.6%
59.3%	19,314	16,478	-2,836	-14.7%
60.5%	19,182	15,786	-3,396	-17.7%
61.7%	19,014	15,670	-3,344	-17.6%
63.0%	16,254	14,410	-1,844	-11.3%
64.2%	16,020	14,230	-1,789	-11.2%
65.4%	15,819	13,865	-1,953	-12.3%
66.7%	15,007	13,449	-1,557	-10.4%
67.9%	14,517	13,396	-1,122	-7.7%
69.1%	13,671	12,955	-717	-5.2%
70.4%	13,357	12,345	-1,012	-7.6%
71.6%	13,257	12,227	-1,029	-7.8%
72.8%	13,020	11,558	-1,461	-11.2%
74.1%	12,118	11,548	-570	-4.7%
75.3%	11,574	11,375	-198	-1.7%
76.5%	11,543	11,234	-309	-2.7%
77.8%	11,430	11,219	-211	-1.8%
79.0%	10,776	10,584	-192	-1.8%
80.2%	10,533	10,392	-141	-1.3%
81.5%	9,918	9,978	61	0.6%
82.7%	9,755	9,814	59	0.6%
84.0%	9,714	9,810	96	1.0%
85.2%	9,561	9,733	172	1.8%
86.4%	9,431	9,660	229	2.4%
87.7%	9,313	9,325	12	0.1%
88.9%	9,252	9,322	70	0.8%
90.1%	8,219	8,432	213	2.6%
91.4%	7,823	7,768	-55	-0.7%
92.6%	7,358	7,443	85	1.2%
93.8%	7,232	7,264	32	0.4%
95.1%	7,052	7,241	188	2.7%
96.3%	6,842	7,019	176	2.6%
97.5%	6,382	6,535	153	2.4%
98.8%	5,583	5,498	-85	-1.5%
100.0%	4,965	4,982	17	0.3%

Table SW-33-b

Sacramento/San Joaquin River Delta, Monthly Outflow

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	244,993	244,921	-72	0.0%
1.2%	243,749	241,709	-2,041	-0.8%
2.5%	225,272	219,940	-5,332	-2.4%
3.7%	206,805	207,015	210	0.1%
4.9%	190,017	190,898	881	0.5%
6.2%	187,438	187,322	-116	-0.1%
7.4%	167,461	162,394	-5,068	-3.0%
8.6%	163,137	159,603	-3,533	-2.2%
9.9%	158,467	155,839	-2,628	-1.7%
11.1%	146,685	144,705	-1,979	-1.3%
12.3%	142,680	141,613	-1,068	-0.7%
13.6%	135,069	134,935	-134	-0.1%
14.8%	116,593	116,769	176	0.2%
16.0%	115,670	113,109	-2,561	-2.2%
17.3%	110,135	110,126	-9	0.0%
18.5%	108,356	107,248	-1,108	-1.0%
19.8%	106,610	106,106	-505	-0.5%
21.0%	99,915	96,614	-3,301	-3.3%
22.2%	93,712	90,461	-3,251	-3.5%
23.5%	89,920	89,644	-277	-0.3%
24.7%	88,330	89,202	872	1.0%
25.9%	84,128	89,046	4,918	5.8%
27.2%	76,739	76,711	-28	0.0%
28.4%	76,490	74,165	-2,324	-3.0%
29.6%	76,117	73,277	-2,841	-3.7%
30.9%	70,327	66,436	-3,892	-5.5%
32.1%	68,234	64,467	-3,767	-5.5%
33.3%	66,523	64,302	-2,222	-3.3%
34.6%	64,913	62,938	-1,975	-3.0%
35.8%	64,321	61,265	-3,055	-4.7%
37.0%	62,265	59,147	-3,118	-5.0%
38.3%	59,953	58,811	-1,141	-1.9%
39.5%	58,609	57,168	-1,440	-2.5%
40.7%	57,813	55,932	-1,881	-3.3%
42.0%	51,133	50,276	-857	-1.7%
43.2%	49,557	48,773	-784	-1.6%
44.4%	49,382	46,608	-2,774	-5.6%
45.7%	46,188	46,161	-27	-0.1%
46.9%	45,136	44,202	-935	-2.1%
48.1%	44,199	43,423	-777	-1.8%
49.4%	42,603	41,183	-1,420	-3.3%
50.6%	40,383	36,843	-3,540	-8.8%
51.9%	38,480	34,578	-3,902	-10.1%
53.1%	36,454	34,382	-2,072	-5.7%
54.3%	36,294	33,927	-2,367	-6.5%
55.6%	33,303	33,213	-90	-0.3%
56.8%	32,258	30,288	-1,970	-6.1%
58.0%	30,383	26,038	-4,345	-14.3%
59.3%	29,162	25,664	-3,499	-12.0%
60.5%	28,598	24,954	-3,644	-12.7%
61.7%	27,901	24,922	-2,979	-10.7%
63.0%	27,746	23,217	-4,529	-16.3%
64.2%	26,120	23,207	-2,913	-11.2%
65.4%	24,450	22,965	-1,484	-6.1%
66.7%	24,420	22,766	-1,654	-6.8%
67.9%	23,384	21,633	-1,751	-7.5%
69.1%	22,505	21,457	-1,049	-4.7%
70.4%	21,612	20,397	-1,214	-5.6%
71.6%	21,491	20,270	-1,221	-5.7%
72.8%	21,427	19,808	-1,619	-7.6%
74.1%	20,489	17,929	-2,560	-12.5%
75.3%	20,326	17,728	-2,598	-12.8%
76.5%	19,843	17,626	-2,217	-11.2%
77.8%	19,765	17,489	-2,276	-11.5%
79.0%	17,723	17,354	-369	-2.1%
80.2%	17,214	15,899	-1,315	-7.6%
81.5%	17,214	15,779	-1,435	-8.3%
82.7%	17,058	15,524	-1,534	-9.0%
84.0%	16,891	14,624	-2,267	-13.4%
85.2%	16,442	14,290	-2,152	-13.1%
86.4%	16,387	14,112	-2,275	-13.9%
87.7%	13,824	12,265	-1,559	-11.3%
88.9%	12,996	11,762	-1,234	-9.5%
90.1%	12,513	11,669	-844	-6.7%
91.4%	12,359	11,400	-959	-7.8%
92.6%	11,879	11,400	-479	-4.0%
93.8%	11,400	11,400	0	0.0%
95.1%	11,400	11,145	-255	-2.2%
96.3%	11,145	10,265	-879	-7.9%
97.5%	10,174	9,885	-290	-2.8%
98.8%	9,215	9,688	474	5.1%
100.0%	8,049	9,281	1,233	15.3%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	296,906	296,853	-53	0.0%
1.2%	244,331	239,409	-4,923	-2.0%
2.5%	206,470	206,412	-58	0.0%
3.7%	168,825	163,363	-5,461	-3.2%
4.9%	128,169	122,208	-5,961	-4.7%
6.2%	122,651	122,166	-485	-0.4%
7.4%	122,152	117,478	-4,674	-3.8%
8.6%	98,505	94,949	-3,555	-3.6%
9.9%	93,755	91,789	-1,966	-2.1%
11.1%	91,770	91,242	-527	-0.6%
12.3%	87,770	87,684	-86	-0.1%
13.6%	87,096	86,351	-745	-0.9%
14.8%	84,677	83,955	-722	-0.9%
16.0%	82,245	83,803	1,558	1.9%
17.3%	80,884	80,500	-384	-0.5%
18.5%	74,855	73,550	-1,305	-1.7%
19.8%	74,806	73,394	-1,412	-1.9%
21.0%	73,457	72,627	-830	-1.1%
22.2%	73,074	72,369	-705	-1.0%
23.5%	69,402	71,104	1,702	2.5%
24.7%	65,646	65,655	9	0.0%
25.9%	65,182	59,468	-5,715	-8.8%
27.2%	60,771	57,824	-2,947	-4.8%
28.4%	60,462	56,302	-4,160	-6.9%
29.6%	60,311	55,912	-4,399	-7.3%
30.9%	57,407	54,456	-2,951	-5.1%
32.1%	47,385	46,119	-1,266	-2.7%
33.3%	46,588	42,969	-3,619	-7.8%
34.6%	44,797	42,947	-1,850	-4.1%
35.8%	43,012	42,414	-598	-1.4%
37.0%	42,877	42,183	-693	-1.6%
38.3%	40,847	38,982	-1,865	-4.6%
39.5%	38,526	37,491	-1,035	-2.7%
40.7%	37,588	35,676	-1,912	-5.1%
42.0%	37,567	35,041	-2,525	-6.7%
43.2%	35,940	33,276	-2,663	-7.4%
44.4%	35,737	31,659	-4,079	-11.4%
45.7%	34,944	31,408	-3,536	-10.1%
46.9%	34,407	30,509	-3,898	-11.3%
48.1%	32,084	30,394	-1,690	-5.3%
49.4%	31,876	27,531	-4,344	-13.6%
50.6%	30,470	25,682	-4,788	-15.7%
51.9%	26,896	24,571	-2,325	-8.6%
53.1%	25,692	23,021	-2,671	-10.4%
54.3%	25,279	22,754	-2,526	-10.0%
55.6%	24,556	22,666	-1,889	-7.7%
56.8%	22,998	20,813	-2,184	-9.5%
58.0%	22,736	20,263	-2,472	-10.9%
59.3%	22,638	20,022	-2,616	-11.6%
60.5%	22,268	18,571	-3,697	-16.6%
61.7%	21,397	18,499	-2,898	-13.5%
63.0%	21,353	18,308	-3,045	-14.3%
64.2%	19,361	18,219	-1,142	-5.9%
65.4%	19,097	18,032	-1,065	-5.6%
66.7%	18,498	17,755	-743	-4.0%
67.9%	17,240	17,219	-20	-0.1%
69.1%	17,183	16,137	-1,047	-6.1%
70.4%	16,992	15,758	-1,234	-7.3%
71.6%	16,885	15,585	-1,300	-7.7%
72.8%	16,221	14,488	-1,733	-10.7%
74.1%	16,165	14,485	-1,680	-10.4%
75.3%	15,612	14,144	-1,469	-9.4%
76.5%	15,585	14,025	-1,559	-10.0%
77.8%	15,507	14,023	-1,484	-9.6%
79.0%	14,748	13,979	-769	-5.2%
80.2%	14,707	13,535	-1,172	-8.0%
81.5%	14,659	13,030	-1,629	-11.1%
82.7%	14,628	12,877	-1,751	-12.0%
84.0%	14,046	12,702	-1,344	-9.6%
85.2%	14,022	12,647	-1,374	-9.8%
86.4%	13,719	12,475	-1,244	-9.1%
87.7%	12,618	12,462	-156	-1.2%
88.9%	12,177	11,400	-777	-6.4%
90.1%	10,938	11,250	313	2.9%
91.4%	10,706	11,094	387	3.6%
92.6%	10,625	11,051	426	4.0%
93.8%	9,674	10,938	1,264	13.1%
95.1%	9,531	10,444	912	9.6%
96.3%	9,375	9,814	439	4.7%
97.5%	8,432	8,514	83	1.0%
98.8%	7,923	7,978	55	0.7%
100.0%	7,100	7,100	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	147,944	147,759	-185	-0.1%
1.2%	137,898	137,065	-833	-0.6%
2.5%	109,438	105,894	-3,544	-3.2%
3.7%	80,944	80,936	-8	0.0%
4.9%	79,754	79,725	-29	0.0%
6.2%	75,937	75,964	28	0.0%
7.4%	72,654	72,661	7	0.0%
8.6%	71,179	72,067	888	1.2%
9.9%	70,732	69,010	-1,722	-2.4%
11.1%	68,067	68,003	-64	-0.1%
12.3%	66,615	63,674	-2,941	-4.4%
13.6%	55,863	55,514	-349	-0.6%
14.8%	55,587	52,736	-2,851	-5.1%
16.0%	51,428	51,297	-132	-0.3%
17.3%	49,950	49,946	-4	0.0%
18.5%	48,313	46,172	-2,141	-4.4%
19.8%	45,087	43,924	-1,163	-2.6%
21.0%	44,021	42,329	-1,692	-3.8%
22.2%	43,099	40,586	-2,514	-5.8%
23.5%	40,534	40,027	-508	-1.3%
24.7%	33,903	33,646	-257	-0.8%
25.9%	33,769	32,936	-833	-2.5%
27.2%	33,575	32,630	-945	-2.8%
28.4%	32,752	30,662	-2,090	-6.4%
29.6%	32,599	30,653	-1,946	-6.0%
30.9%	30,854	29,925	-929	-3.0%
32.1%	30,654	29,834	-819	-2.7%
33.3%	30,023	29,410	-613	-2.0%
34.6%	29,946	29,203	-744	-2.5%
35.8%	27,678	27,509	-169	-0.6%
37.0%	25,353	26,319	966	3.8%
38.3%	23,952	23,905	-47	-0.2%
39.5%	22,575	21,633	-942	-4.2%
40.7%	21,828	21,527	-301	-1.4%
42.0%	21,790	21,506	-284	-1.3%
43.2%	21,011	21,119	108	0.5%
44.4%	20,975	20,829	-146	-0.7%
45.7%	19,405	19,807	401	2.1%
46.9%	18,910	18,656	-254	-1.3%
48.1%	18,347	18,382	36	0.2%
49.4%	18,135	18,068	-67	-0.4%
50.6%	17,778	17,760	-18	-0.1%
51.9%	17,657	17,612	-45	-0.3%
53.1%	17,580	17,559	-21	-0.1%
54.3%	17,526	17,112	-415	-2.4%
55.6%	15,858	15,867	8	0.1%
56.8%	15,497	15,671	174	1.1%
58.0%	15,200	15,551	351	2.3%
59.3%	14,979	14,939	-40	-0.3%
60.5%	14,489	14,452	-37	-0.3%
61.7%	14,355	14,409	54	0.4%
63.0%	13,994	14,282	287	2.1%
64.2%	13,404	14,133	729	5.4%
65.4%	13,357	14,024	668	5.0%
66.7%	13,350	13,845	496	3.7%
67.9%	13,216	13,352	137	1.0%
69.1%	13,154	13,146	-7	-0.1%
70.4%	12,767	12,730	-38	-0.3%
71.6%	12,738	12,650	-89	-0.7%
72.8%	12,520	12,572	52	0.4%
74.1%	12,421	12,402	-19	-0.2%
75.3%	12,225	12,207	-18	-0.1%
76.5%	11,663	11,363	-301	-2.6%
77.8%	11,188	11,350	162	1.4%
79.0%	11,166	11,241	74	0.7%
80.2%	11,032	11,083	51	0.5%
81.5%	10,907	11,063	156	1.4%
82.7%	10,438	10,907	469	4.5%
84.0%	10,413	10,809	396	3.8%
85.2%	10,148	10,706	558	5.5%
86.4%	9,968	10,413	445	4.5%
87.7%	9,920	10,413	493	5.0%
88.9%	9,862	10,049	187	1.9%
90.1%	9,752	9,996	243	2.5%
91.4%	9,454	9,920	466	4.9%
92.6%	9,269	9,853	584	6.3%
93.8%	8,933	9,163	229	2.6%
95.1%	8,914	9,101	187	2.1%
96.3%	7,773	7,862	89	1.1%
97.5%	7,133	7,100	-33	-0.5%
98.8%	7,100	7,083	-17	-0.2%
100.0%	5,815	5,793	-22	-0.4%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	71,763	69,806	-1,957	-2.7%
1.2%	63,828	63,663	-165	-0.3%
2.5%	46,842	46,532	-310	-0.7%
3.7%	45,300	45,239	-61	-0.1%
4.9%	41,418	41,264	-153	-0.4%
6.2%	38,558	38,738	180	0.5%
7.4%	36,286	35,968	-318	-0.9%
8.6%	33,071	33,171	100	0.3%
9.9%	33,030	32,843	-186	-0.6%
11.1%	31,030	30,822	-209	-0.7%
12.3%	29,477	28,998	-479	-1.6%
13.6%	28,197	28,079	-119	-0.4%
14.8%	27,627	25,291	-2,336	-8.5%
16.0%	25,100	24,977	-123	-0.5%
17.3%	25,099	24,599	-499	-2.0%
18.5%	24,883	22,195	-2,688	-10.8%
19.8%	22,667	22,067	-600	-2.6%
21.0%	21,969	21,836	-133	-0.6%
22.2%	20,191	18,768	-1,423	-7.0%
23.5%	19,133	18,386	-747	-3.9%
24.7%	17,191	17,068	-122	-0.7%
25.9%	17,176	17,065	-111	-0.6%
27.2%	15,720	15,545	-174	-1.1%
28.4%	15,440	15,350	-90	-0.6%
29.6%	15,167	15,263	95	0.6%
30.9%	15,119	15,036	-83	-0.5%
32.1%	14,727	14,910	183	1.2%
33.3%	14,644	14,704	61	0.4%
34.6%	14,466	14,665	199	1.4%
35.8%	13,502	14,418	916	6.8%
37.0%	13,385	13,393	8	0.1%
38.3%	13,291	13,392	101	0.8%
39.5%	12,832	12,737	-95	-0.7%
40.7%	12,634	12,736	102	0.8%
42.0%	12,518	12,545	27	0.2%
43.2%	12,436	12,531	94	0.8%
44.4%	12,229	12,403	174	1.4%
45.7%	12,077	11,979	-98	-0.8%
46.9%	11,971	11,973	2	0.0%
48.1%	11,720	11,527	-193	-1.6%
49.4%	11,559	11,019	-540	-4.7%
50.6%	11,171	10,806	-366	-3.3%
51.9%	10,855	10,766	-89	-0.8%
53.1%	10,770	10,721	-49	-0.5%
54.3%	10,740	10,591	-149	-1.4%
55.6%	10,607	10,548	-58	-0.6%
56.8%	10,570	10,472	-98	-0.9%
58.0%	10,471	10,374	-97	-0.9%
59.3%	10,407	10,157	-250	-2.4%
60.5%	10,141	10,080	-61	-0.6%
61.7%	10,080	10,067	-13	-0.1%
63.0%	10,031	9,937	-94	-0.9%
64.2%	9,956	9,923	-34	-0.3%
65.4%	9,955	9,859	-96	-1.0%
66.7%	9,870	9,613	-258	-2.6%
67.9%	9,801	9,517	-284	-2.9%
69.1%	9,729	9,478	-251	-2.6%
70.4%	9,478	9,287	-191	-2.0%
71.6%	9,078	8,979	-98	-1.1%
72.8%	9,032	8,881	-151	-1.7%
74.1%	8,586	8,440	-146	-1.7%
75.3%	8,449	8,372	-78	-0.9%
76.5%	8,235	8,156	-79	-1.0%
77.8%	7,908	8,143	235	3.0%
79.0%	7,600	8,014	415	5.5%
80.2%	7,591	7,967	376	5.0%
81.5%	7,563	7,728	165	2.2%
82.7%	7,555	7,675	120	1.6%
84.0%	7,291	7,668	377	5.2%
85.2%	7,239	7,539	300	4.1%
86.4%	7,127	7,398	271	3.8%
87.7%	7,100	7,239	139	2.0%
88.9%	7,067	7,227	160	2.3%
90.1%	7,031	7,100	69	1.0%
91.4%	6,870	7,031	161	2.4%
92.6%	6,719	6,875	156	2.3%
93.8%	6,655	6,184	-471	-7.1%
95.1%	6,043	6,114	71	1.2%
96.3%	4,317	4,833	517	12.0%
97.5%	4,008	4,000	-8	-0.2%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

Table SW-33-b

Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	38,493	39,261	768	2.0%
1.2%	27,087	31,174	4,087	15.1%
2.5%	16,886	17,324	438	2.6%
3.7%	15,690	16,380	690	4.4%
4.9%	14,518	15,000	482	3.3%
6.2%	12,837	12,534	-303	-2.4%
7.4%	12,525	12,525	0	0.0%
8.6%	11,840	10,261	-1,579	-13.3%
9.9%	9,224	9,998	774	8.4%
11.1%	8,979	9,707	728	8.1%
12.3%	8,931	9,704	773	8.7%
13.6%	8,802	9,450	648	7.4%
14.8%	8,740	9,448	709	8.1%
16.0%	8,687	9,278	592	6.8%
17.3%	8,483	9,172	690	8.1%
18.5%	8,126	9,032	906	11.2%
19.8%	7,925	8,870	945	11.9%
21.0%	7,727	8,838	1,110	14.4%
22.2%	7,722	8,813	1,091	14.1%
23.5%	7,700	8,687	987	12.8%
24.7%	7,545	8,165	620	8.2%
25.9%	7,243	8,107	864	11.9%
27.2%	7,243	8,050	807	11.1%
28.4%	7,100	7,958	858	12.1%
29.6%	7,100	7,774	674	9.5%
30.9%	7,100	7,700	600	8.5%
32.1%	7,100	7,642	542	7.6%
33.3%	7,100	7,573	473	6.7%
34.6%	7,100	7,522	422	5.9%
35.8%	7,100	7,370	270	3.8%
37.0%	7,100	7,342	242	3.4%
38.3%	7,100	7,243	143	2.0%
39.5%	7,100	7,152	52	0.7%
40.7%	7,100	7,126	26	0.4%
42.0%	7,100	7,120	20	0.3%
43.2%	7,100	7,105	5	0.1%
44.4%	7,100	7,100	0	0.0%
45.7%	7,100	7,100	0	0.0%
46.9%	7,100	7,100	0	0.0%
48.1%	7,100	7,100	0	0.0%
49.4%	7,100	7,100	0	0.0%
50.6%	7,100	7,100	0	0.0%
51.9%	7,100	7,100	0	0.0%
53.1%	7,064	7,100	36	0.5%
54.3%	7,057	7,100	43	0.6%
55.6%	7,046	7,100	54	0.8%
56.8%	6,974	7,100	126	1.8%
58.0%	6,938	7,100	162	2.3%
59.3%	6,923	7,100	177	2.6%
60.5%	6,906	7,094	188	2.7%
61.7%	6,875	7,070	195	2.8%
63.0%	6,875	7,046	171	2.5%
64.2%	6,875	7,004	129	1.9%
65.4%	6,780	6,906	125	1.8%
66.7%	6,765	6,896	131	1.9%
67.9%	6,719	6,878	159	2.4%
69.1%	6,710	6,875	165	2.5%
70.4%	6,692	6,811	119	1.8%
71.6%	6,656	6,667	10	0.2%
72.8%	6,588	6,656	69	1.0%
74.1%	6,563	6,575	13	0.2%
75.3%	6,555	6,513	-42	-0.6%
76.5%	6,492	6,463	-29	-0.4%
77.8%	6,374	6,447	73	1.1%
79.0%	6,270	6,356	86	1.4%
80.2%	6,250	6,315	65	1.0%
81.5%	6,094	6,258	164	2.7%
82.7%	6,085	6,250	165	2.7%
84.0%	5,921	6,233	312	5.3%
85.2%	5,901	6,094	193	3.3%
86.4%	5,887	6,003	116	2.0%
87.7%	5,821	5,940	119	2.0%
88.9%	5,818	5,917	100	1.7%
90.1%	5,673	5,818	145	2.6%
91.4%	5,640	5,745	105	1.9%
92.6%	5,571	5,722	151	2.7%
93.8%	5,054	5,683	629	12.4%
95.1%	4,517	5,327	810	17.9%
96.3%	4,248	4,585	337	7.9%
97.5%	4,075	4,368	292	7.2%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,311	15,994	683	4.5%
1.2%	14,916	15,009	93	0.6%
2.5%	14,327	14,586	259	1.8%
3.7%	14,314	14,347	32	0.2%
4.9%	13,635	14,185	549	4.0%
6.2%	13,536	13,773	237	1.8%
7.4%	13,358	13,618	260	1.9%
8.6%	13,271	13,347	76	0.6%
9.9%	13,196	13,333	138	1.0%
11.1%	13,088	13,234	146	1.1%
12.3%	12,784	13,116	333	2.6%
13.6%	12,673	12,846	173	1.4%
14.8%	12,638	12,341	-298	-2.4%
16.0%	11,993	12,250	258	2.1%
17.3%	11,881	11,955	74	0.6%
18.5%	11,816	11,828	12	0.1%
19.8%	11,523	11,725	202	1.8%
21.0%	11,477	11,490	12	0.1%
22.2%	11,375	11,390	15	0.1%
23.5%	11,301	11,142	-159	-1.4%
24.7%	11,111	11,070	-41	-0.4%
25.9%	10,950	10,867	-83	-0.8%
27.2%	10,872	10,416	-456	-4.2%
28.4%	10,722	10,367	-355	-3.3%
29.6%	10,708	10,166	-541	-5.1%
30.9%	10,312	10,007	-305	-3.0%
32.1%	9,780	9,572	-208	-2.1%
33.3%	9,450	9,394	-56	-0.6%
34.6%	9,356	9,196	-160	-1.7%
35.8%	9,292	9,163	-129	-1.4%
37.0%	9,245	9,156	-89	-1.0%
38.3%	9,133	9,117	-16	-0.2%
39.5%	9,089	8,955	-133	-1.5%
40.7%	9,010	8,954	-57	-0.6%
42.0%	8,936	8,889	-47	-0.5%
43.2%	8,900	8,886	-13	-0.1%
44.4%	8,891	8,744	-147	-1.7%
45.7%	8,866	8,739	-126	-1.4%
46.9%	8,855	8,725	-130	-1.5%
48.1%	8,777	8,656	-121	-1.4%
49.4%	8,722	8,639	-82	-0.9%
50.6%	8,417	8,452	35	0.4%
51.9%	8,362	8,392	31	0.4%
53.1%	8,192	8,183	-9	-0.1%
54.3%	8,000	8,000	0	0.0%
55.6%	8,000	8,000	0	0.0%
56.8%	8,000	8,000	0	0.0%
58.0%	8,000	8,000	0	0.0%
59.3%	8,000	8,000	0	0.0%
60.5%	8,000	8,000	0	0.0%
61.7%	8,000	7,624	-376	-4.7%
63.0%	7,751	7,439	-312	-4.0%
64.2%	7,642	7,196	-446	-5.8%
65.4%	6,500	6,500	0	0.0%
66.7%	6,032	6,052	20	0.3%
67.9%	5,858	5,894	37	0.6%
69.1%	5,797	5,707	-89	-1.5%
70.4%	5,570	5,581	11	0.2%
71.6%	5,545	5,526	-19	-0.4%
72.8%	5,473	5,313	-161	-2.9%
74.1%	5,107	5,001	-106	-2.1%
75.3%	5,067	5,000	-67	-1.3%
76.5%	5,000	5,000	0	0.0%
77.8%	5,000	5,000	0	0.0%
79.0%	5,000	5,000	0	0.0%
80.2%	5,000	5,000	0	0.0%
81.5%	5,000	5,000	0	0.0%
82.7%	5,000	5,000	0	0.0%
84.0%	5,000	5,000	0	0.0%
85.2%	5,000	5,000	0	0.0%
86.4%	4,168	4,470	301	7.2%
87.7%	4,071	4,438	368	9.0%
88.9%	4,000	4,369	369	9.2%
90.1%	4,000	4,312	312	7.8%
91.4%	4,000	4,122	122	3.0%
92.6%	4,000	4,057	57	1.4%
93.8%	4,000	4,000	0	0.0%
95.1%	4,000	4,000	0	0.0%
96.3%	4,000	4,000	0	0.0%
97.5%	4,000	4,000	0	0.0%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,354	6,185	831	15.5%
1.2%	5,175	5,081	-94	-1.8%
2.5%	5,088	5,048	-41	-0.8%
3.7%	4,677	4,995	318	6.8%
4.9%	4,652	4,893	241	5.2%
6.2%	4,449	4,875	427	9.6%
7.4%	4,423	4,856	433	9.8%
8.6%	4,312	4,765	453	10.5%
9.9%	4,304	4,719	415	9.6%
11.1%	4,285	4,689	404	9.4%
12.3%	4,273	4,676	403	9.4%
13.6%	4,257	4,665	408	9.6%
14.8%	4,253	4,652	399	9.4%
16.0%	4,245	4,641	396	9.3%
17.3%	4,242	4,619	377	8.9%
18.5%	4,237	4,517	281	6.6%
19.8%	4,157	4,506	349	8.4%
21.0%	4,152	4,491	339	8.2%
22.2%	4,124	4,423	299	7.2%
23.5%	4,088	4,390	303	7.4%
24.7%	4,038	4,390	352	8.7%
25.9%	4,016	4,390	374	9.3%
27.2%	4,007	4,390	383	9.6%
28.4%	4,000	4,390	390	9.8%
29.6%	4,000	4,390	390	9.8%
30.9%	4,000	4,390	390	9.8%
32.1%	4,000	4,390	390	9.8%
33.3%	4,000	4,390	390	9.8%
34.6%	4,000	4,390	390	9.8%
35.8%	4,000	4,390	390	9.8%
37.0%	4,000	4,390	390	9.8%
38.3%	4,000	4,390	390	9.8%
39.5%	4,000	4,390	390	9.8%
40.7%	4,000	4,390	390	9.8%
42.0%	4,000	4,390	390	9.8%
43.2%	4,000	4,390	390	9.8%
44.4%	4,000	4,390	390	9.8%
45.7%	4,000	4,390	390	9.8%
46.9%	4,000	4,390	390	9.8%
48.1%	4,000	4,341	341	8.5%
49.4%	4,000	4,339	339	8.5%
50.6%	4,000	4,285	285	7.1%
51.9%	4,000	4,278	278	7.0%
53.1%	4,000	4,241	241	6.0%
54.3%	4,000	4,226	226	5.7%
55.6%	4,000	4,220	220	5.5%
56.8%	4,000	4,132	132	3.3%
58.0%	4,000	4,114	114	2.8%
59.3%	4,000	4,055	55	1.4%
60.5%	4,000	4,031	31	0.8%
61.7%	4,000	4,022	22	0.5%
63.0%	4,000	4,012	12	0.3%
64.2%	4,000	4,004	4	0.1%
65.4%	4,000	4,000	0	0.0%
66.7%	4,000	4,000	0	0.0%
67.9%	4,000	4,000	0	0.0%
69.1%	4,000	4,000	0	0.0%
70.4%	4,000	4,000	0	0.0%
71.6%	4,000	4,000	0	0.0%
72.8%	4,000	4,000	0	0.0%
74.1%	4,000	4,000	0	0.0%
75.3%	4,000	4,000	0	0.0%
76.5%	4,000	4,000	0	0.0%
77.8%	4,000	4,000	0	0.0%
79.0%	4,000	4,000	0	0.0%
80.2%	4,000	4,000	0	0.0%
81.5%	4,000	4,000	0	0.0%
82.7%	4,000	4,000	0	0.0%
84.0%	4,000	4,000	0	0.0%
85.2%	3,977	4,000	23	0.6%
86.4%	3,969	4,000	31	0.8%
87.7%	3,870	4,000	130	3.4%
88.9%	3,810	4,000	190	5.0%
90.1%	3,797	4,000	203	5.4%
91.4%	3,788	3,839	51	1.3%
92.6%	3,754	3,815	61	1.6%
93.8%	3,699	3,781	82	2.2%
95.1%	3,640	3,712	72	2.0%
96.3%	3,596	3,676	80	2.2%
97.5%	3,590	3,586	-4	-0.1%
98.8%	3,583	3,558	-26	-0.7%
100.0%	3,579	3,271	-309	-8.6%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Outflow (CFS)	WSIP 2030 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,313	20,716	403	2.0%
1.2%	20,156	20,716	560	2.8%
2.5%	20,156	20,560	403	2.0%
3.7%	19,922	20,560	638	3.2%
4.9%	19,844	20,247	403	2.0%
6.2%	19,844	20,247	403	2.0%
7.4%	19,688	20,091	403	2.0%
8.6%	19,688	20,091	403	2.0%
9.9%	19,688	20,091	403	2.0%
11.1%	19,688	20,091	403	2.0%
12.3%	19,688	19,935	247	1.3%
13.6%	19,531	19,935	403	2.1%
14.8%	19,375	19,778	403	2.1%
16.0%	19,375	19,778	403	2.1%
17.3%	19,375	19,778	403	2.1%
18.5%	19,375	19,778	403	2.1%
19.8%	19,375	19,778	403	2.1%
21.0%	19,375	19,778	403	2.1%
22.2%	19,063	19,375	313	1.6%
23.5%	19,063	19,063	0	0.0%
24.7%	19,063	19,063	0	0.0%
25.9%	18,750	19,063	313	1.7%
27.2%	18,594	18,841	247	1.3%
28.4%	17,813	18,750	938	5.3%
29.6%	17,813	17,278	-534	-3.0%
30.9%	11,875	12,278	403	3.4%
32.1%	11,563	12,122	560	4.8%
33.3%	11,406	11,966	560	4.9%
34.6%	11,406	11,810	403	3.5%
35.8%	11,250	11,653	403	3.6%
37.0%	11,094	11,497	403	3.6%
38.3%	10,938	11,341	403	3.7%
39.5%	10,938	11,341	403	3.7%
40.7%	10,938	11,341	403	3.7%
42.0%	10,938	11,341	403	3.7%
43.2%	10,781	11,028	247	2.3%
44.4%	10,469	10,716	247	2.4%
45.7%	4,221	5,561	1,340	31.8%
46.9%	4,191	4,901	710	16.9%
48.1%	3,931	4,837	906	23.0%
49.4%	3,927	4,702	775	19.7%
50.6%	3,871	4,522	651	16.8%
51.9%	3,860	4,497	636	16.5%
53.1%	3,845	4,484	639	16.6%
54.3%	3,842	4,417	575	15.0%
55.6%	3,737	4,401	664	17.8%
56.8%	3,710	4,378	668	18.0%
58.0%	3,585	4,277	692	19.3%
59.3%	3,565	4,011	445	12.5%
60.5%	3,537	3,996	459	13.0%
61.7%	3,527	3,931	404	11.4%
63.0%	3,309	3,902	593	17.9%
64.2%	3,143	3,812	669	21.3%
65.4%	3,127	3,782	655	20.9%
66.7%	3,124	3,727	603	19.3%
67.9%	3,000	3,631	631	21.0%
69.1%	3,000	3,589	589	19.6%
70.4%	3,000	3,552	552	18.4%
71.6%	3,000	3,539	539	18.0%
72.8%	3,000	3,506	506	16.9%
74.1%	3,000	3,484	484	16.1%
75.3%	3,000	3,466	466	15.5%
76.5%	3,000	3,456	456	15.2%
77.8%	3,000	3,447	447	14.9%
79.0%	3,000	3,439	439	14.6%
80.2%	3,000	3,430	430	14.3%
81.5%	3,000	3,430	430	14.3%
82.7%	3,000	3,420	420	14.0%
84.0%	3,000	3,403	403	13.4%
85.2%	3,000	3,387	387	12.9%
86.4%	3,000	3,331	331	11.0%
87.7%	3,000	3,327	327	10.9%
88.9%	3,000	3,291	291	9.7%
90.1%	3,000	3,278	278	9.3%
91.4%	3,000	3,193	193	6.4%
92.6%	3,000	3,143	143	4.8%
93.8%	3,000	3,000	0	0.0%
95.1%	3,000	3,000	0	0.0%
96.3%	3,000	3,000	0	0.0%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

Figure SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

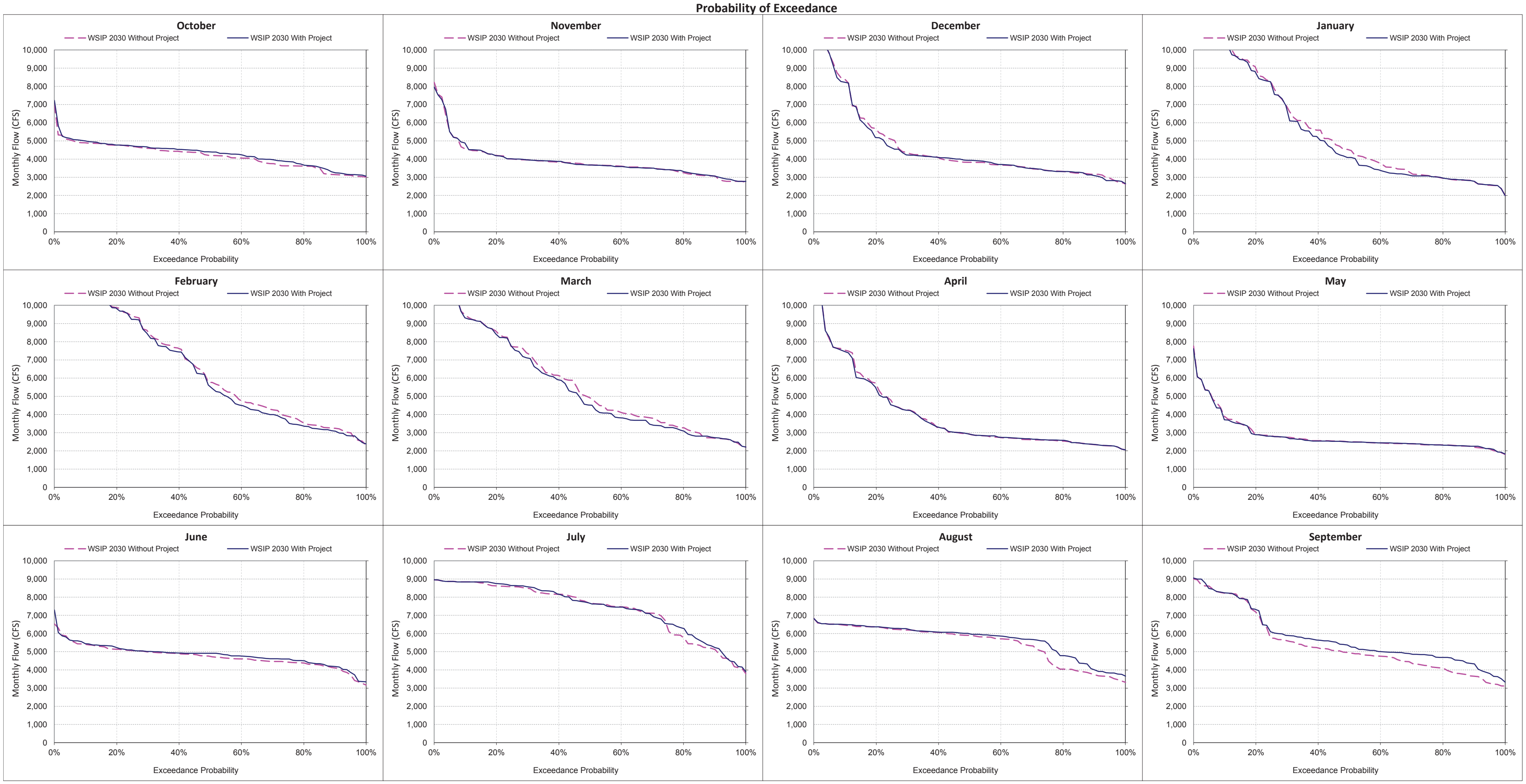


Table SW-34-b

Delta Cross Channel, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,012	7,229	218	3.1%
1.2%	5,334	5,828	494	9.3%
2.5%	5,311	5,256	-55	-1.0%
3.7%	5,105	5,184	79	1.6%
4.9%	5,058	5,144	86	1.7%
6.2%	4,994	5,079	85	1.7%
7.4%	4,918	5,064	146	3.0%
8.6%	4,902	5,029	127	2.6%
9.9%	4,895	4,999	103	2.1%
11.1%	4,872	4,963	91	1.9%
12.3%	4,869	4,950	81	1.7%
13.6%	4,863	4,926	63	1.3%
14.8%	4,857	4,863	6	0.1%
16.0%	4,841	4,853	13	0.3%
17.3%	4,785	4,812	27	0.6%
18.5%	4,773	4,811	38	0.8%
19.8%	4,763	4,773	10	0.2%
21.0%	4,761	4,770	9	0.2%
22.2%	4,757	4,763	6	0.1%
23.5%	4,718	4,758	40	0.8%
24.7%	4,689	4,726	37	0.8%
25.9%	4,678	4,696	17	0.4%
27.2%	4,645	4,689	44	1.0%
28.4%	4,618	4,683	65	1.4%
29.6%	4,596	4,672	76	1.7%
30.9%	4,591	4,611	20	0.4%
32.1%	4,578	4,601	23	0.5%
33.3%	4,478	4,595	118	2.6%
34.6%	4,471	4,582	111	2.5%
35.8%	4,459	4,581	122	2.7%
37.0%	4,432	4,578	145	3.3%
38.3%	4,431	4,576	145	3.3%
39.5%	4,430	4,535	105	2.4%
40.7%	4,405	4,527	122	2.8%
42.0%	4,389	4,523	134	3.1%
43.2%	4,387	4,499	112	2.6%
44.4%	4,374	4,492	118	2.7%
45.7%	4,372	4,492	120	2.7%
46.9%	4,360	4,449	89	2.0%
48.1%	4,247	4,400	153	3.6%
49.4%	4,209	4,398	189	4.5%
50.6%	4,198	4,384	187	4.4%
51.9%	4,190	4,383	193	4.6%
53.1%	4,182	4,320	138	3.3%
54.3%	4,175	4,319	144	3.4%
55.6%	4,151	4,305	154	3.7%
56.8%	4,072	4,278	206	5.1%
58.0%	4,068	4,268	200	4.9%
59.3%	4,061	4,261	200	4.9%
60.5%	4,054	4,224	169	4.2%
61.7%	4,053	4,147	93	2.3%
63.0%	4,049	4,142	93	2.3%
64.2%	4,013	4,127	114	2.8%
65.4%	3,887	4,005	118	3.0%
66.7%	3,834	4,002	167	4.4%
67.9%	3,782	3,995	213	5.6%
69.1%	3,755	3,983	227	6.1%
70.4%	3,749	3,953	205	5.5%
71.6%	3,697	3,915	218	5.9%
72.8%	3,634	3,901	267	7.4%
74.1%	3,630	3,879	249	6.9%
75.3%	3,630	3,857	227	6.2%
76.5%	3,627	3,845	219	6.0%
77.8%	3,626	3,755	129	3.6%
79.0%	3,619	3,734	115	3.2%
80.2%	3,616	3,656	40	1.1%
81.5%	3,610	3,642	33	0.9%
82.7%	3,606	3,627	21	0.6%
84.0%	3,511	3,600	88	2.5%
85.2%	3,493	3,547	54	1.5%
86.4%	3,199	3,490	291	9.1%
87.7%	3,174	3,424	250	7.9%
88.9%	3,157	3,307	151	4.8%
90.1%	3,144	3,250	106	3.4%
91.4%	3,135	3,228	93	3.0%
92.6%	3,126	3,207	81	2.6%
93.8%	3,121	3,157	36	1.2%
95.1%	3,107	3,152	46	1.5%
96.3%	3,047	3,145	98	3.2%
97.5%	3,046	3,135	89	2.9%
98.8%	3,040	3,122	82	2.7%
100.0%	3,012	3,064	51	1.7%

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,223	7,954	-269	-3.3%
1.2%	7,570	7,547	-24	-0.3%
2.5%	7,416	7,267	-149	-2.0%
3.7%	6,434	6,737	304	4.7%
4.9%	5,523	5,520	-3	-0.1%
6.2%	5,206	5,200	-6	-0.1%
7.4%	5,164	5,148	-16	-0.3%
8.6%	4,678	4,939	261	5.6%
9.9%	4,570	4,885	315	6.9%
11.1%	4,521	4,514	-7	-0.2%
12.3%	4,467	4,512	45	1.0%
13.6%	4,465	4,505	40	0.9%
14.8%	4,427	4,493	66	1.5%
16.0%	4,394	4,396	2	0.1%
17.3%	4,288	4,282	-6	-0.1%
18.5%	4,239	4,276	37	0.9%
19.8%	4,205	4,195	-10	-0.2%
21.0%	4,180	4,169	-11	-0.3%
22.2%	4,171	4,127	-44	-1.1%
23.5%	4,016	4,020	4	0.1%
24.7%	4,007	4,018	11	0.3%
25.9%	4,000	3,997	-3	-0.1%
27.2%	3,964	3,996	32	0.8%
28.4%	3,964	3,995	31	0.8%
29.6%	3,962	3,953	-9	-0.2%
30.9%	3,943	3,941	-2	0.0%
32.1%	3,941	3,927	-14	-0.4%
33.3%	3,907	3,921	14	0.4%
34.6%	3,904	3,918	14	0.4%
35.8%	3,890	3,907	17	0.4%
37.0%	3,858	3,898	40	1.0%
38.3%	3,849	3,886	36	0.9%
39.5%	3,837	3,881	44	1.1%
40.7%	3,833	3,872	39	1.0%
42.0%	3,807	3,807	0	0.0%
43.2%	3,804	3,772	-33	-0.9%
44.4%	3,803	3,749	-55	-1.4%
45.7%	3,770	3,704	-66	-1.8%
46.9%	3,760	3,697	-63	-1.7%
48.1%	3,706	3,695	-11	-0.3%
49.4%	3,680	3,675	-5	-0.1%
50.6%	3,679	3,673	-5	-0.1%
51.9%	3,671	3,665	-6	-0.2%
53.1%	3,671	3,664	-6	-0.2%
54.3%	3,656	3,645	-11	-0.3%
55.6%	3,653	3,635	-18	-0.5%
56.8%	3,648	3,626	-22	-0.6%
58.0%	3,629	3,593	-36	-1.0%
59.3%	3,618	3,591	-27	-0.7%
60.5%	3,600	3,589	-11	-0.3%
61.7%	3,572	3,562	-10	-0.3%
63.0%	3,565	3,536	-29	-0.8%
64.2%	3,565	3,530	-34	-1.0%
65.4%	3,562	3,527	-36	-1.0%
66.7%	3,531	3,518	-13	-0.4%
67.9%	3,525	3,508	-17	-0.5%
69.1%	3,513	3,505	-8	-0.2%
70.4%	3,491	3,497	7	0.2%
71.6%	3,469	3,448	-21	-0.6%
72.8%	3,446	3,446	1	0.0%
74.1%	3,426	3,424	-2	-0.1%
75.3%	3,421	3,412	-9	-0.3%
76.5%	3,392	3,401	9	0.3%
77.8%	3,332	3,378	45	1.4%
79.0%	3,269	3,373	104	3.2%
80.2%	3,246	3,302	56	1.7%
81.5%	3,191	3,255	64	2.0%
82.7%	3,170	3,218	48	1.5%
84.0%	3,139	3,190	51	1.6%
85.2%	3,108	3,156	48	1.5%
86.4%	3,098	3,135	37	1.2%
87.7%	3,086	3,122	36	1.2%
88.9%	3,076	3,096	20	0.7%
90.1%	3,073	3,054	-19	-0.6%
91.4%	2,886	3,010	124	4.3%
92.6%	2,810	2,942	132	4.7%
93.8%	2,780	2,908	128	4.6%
95.1%	2,779	2,888	109	3.9%
96.3%	2,779	2,817	38	1.4%
97.5%	2,776	2,780	4	0.1%
98.8%	2,775	2,780	4	0.2%
100.0%	2,724	2,779	54	2.0%

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,550	11,552	2	0.0%
1.2%	11,404	11,377	-27	-0.2%
2.5%	10,740	10,721	-19	-0.2%
3.7%	10,312	10,230	-82	-0.8%
4.9%	9,791	9,841	50	0.5%
6.2%	9,301	9,164	-137	-1.5%
7.4%	8,757	8,483	-274	-3.1%
8.6%	8,487	8,266	-221	-2.6%
9.9%	8,406	8,225	-182	-2.2%
11.1%	8,182	8,190	8	0.1%
12.3%	6,927	6,978	51	0.7%
13.6%	6,908	6,854	-55	-0.8%
14.8%	6,266	6,158	-108	-1.7%
16.0%	6,244	5,962	-282	-4.5%
17.3%	5,985	5,730	-255	-4.3%
18.5%	5,729	5,576	-152	-2.7%
19.8%	5,691	5,181	-511	-9.0%
21.0%	5,440	5,170	-269	-4.9%
22.2%	5,359	5,059	-300	-5.6%
23.5%	5,164	4,745	-419	-8.1%
24.7%	5,098	4,641	-458	-9.0%
25.9%	5,021	4,541	-480	-9.6%
27.2%	4,592	4,541	-50	-1.1%
28.4%	4,416	4,355	-61	-1.4%
29.6%	4,371	4,237	-135	-3.1%
30.9%	4,294	4,219	-74	-1.7%
32.1%	4,249	4,218	-31	-0.7%
33.3%	4,240	4,190	-50	-1.2%
34.6%	4,223	4,169	-53	-1.3%
35.8%	4,186	4,143	-43	-1.0%
37.0%	4,142	4,141	-1	0.0%
38.3%	4,133	4,112	-21	-0.5%
39.5%	4,119	4,096	-23	-0.6%
40.7%	4,018	4,078	60	1.5%
42.0%	3,959	4,077	117	3.0%
43.2%	3,943	4,054	111	2.8%
44.4%	3,909	4,037	128	3.3%
45.7%	3,890	4,009	119	3.1%
46.9%	3,854	3,999	145	3.8%
48.1%	3,828	3,946	118	3.1%
49.4%	3,824	3,937	113	2.9%
50.6%	3,823	3,935	112	2.9%
51.9%	3,819	3,913	94	2.5%
53.1%	3,819	3,902	83	2.2%
54.3%	3,819	3,892	73	1.9%
55.6%	3,792	3,847	55	1.5%
56.8%	3,703	3,818	115	3.1%
58.0%	3,693	3,748	55	1.5%
59.3%	3,686	3,706	20	0.6%
60.5%	3,666	3,702	36	1.0%
61.7%	3,663	3,691	28	0.8%
63.0%	3,653	3,675	22	0.6%
64.2%	3,648	3,656	8	0.2%
65.4%	3,602	3,579	-24	-0.7%
66.7%	3,576	3,558	-19	-0.5%
67.9%	3,559	3,517	-42	-1.2%
69.1%	3,519	3,490	-29	-0.8%
70.4%	3,455	3,482	28	0.8%
71.6%	3,453	3,463	10	0.3%
72.8%	3,404	3,441	36	1.1%
74.1%	3,398	3,381	-18	-0.5%
75.3%	3,362	3,360	-2	-0.1%
76.5%	3,353	3,339	-14	-0.4%
77.8%	3,344	3,325	-19	-0.6%
79.0%	3,332	3,321	-11	-0.3%
80.2%	3,313	3,318	5	0.2%
81.5%	3,283	3,311	28	0.9%
82.7%	3,261	3,297	36	1.1%
84.0%	3,233	3,282	49	1.5%
85.2%	3,222	3,273	51	1.6%
86.4%	3,214	3,241	27	0.8%
87.7%	3,197	3,135	-62	-1.9%
88.9%	3,165	3,130	-36	-1.1%
90.1%	3,165	3,085	-79	-2.5%
91.4%	3,161	3,047	-113	-3.6%
92.6%	3,119	2,969	-149	-4.8%
93.8%	2,977	2,820	-157	-5.3%
95.1%	2,943	2,813	-131	-4.4%
96.3%	2,838	2,813	-25	-0.9%
97.5%	2,744	2,797	53	1.9%
98.8%	2,720	2,778	59	2.2%
100.0%	2,631	2,642	11	0.4%

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,780	11,763	-17	-0.1%
1.2%	11,438	11,391	-47	-0.4%
2.5%	11,318	11,323	5	0.0%
3.7%	11,310	11,310	0	0.0%
4.9%	11,015	11,015	1	0.0%
6.2%	10,691	10,656	-35	-0.3%
7.4%	10,476	10,476	-1	0.0%
8.6%	10,414	10,348	-66	-0.6%
9.9%	10,226	10,211	-15	-0.1%
11.1%	10,199	10,175	-25	-0.2%
12.3%	9,985	9,742	-243	-2.4%
13.6%	9,638	9,666	28	0.3%
14.8%	9,621	9,481	-140	-1.5%
16.0%	9,457	9,453	-4	0.0%
17.3%	9,445	9,322	-123	-1.3%
18.5%	9,194	8,867	-327	-3.6%
19.8%	9,087	8,830	-257	-2.8%
21.0%	8,586	8,424	-162	-1.9%
22.2%	8,524	8,357	-167	-2.0%
23.5%	8,352	8,294	-58	-0.7%
24.7%	8,289	8,254	-35	-0.4%
25.9%	7,850	7,552	-298	-3.8%
27.2%	7,518	7,508	-10	-0.1%
28.4%	7,289	7,326	37	0.5%
29.6%	6,986	6,948	-38	-0.5%
30.9%	6,602	6,095	-507	-7.7%
32.1%	6,297	6,083	-214	-3.4%
33.3%	6,125	6,075	-50	-0.8%
34.6%	6,118	5,643	-476	-7.8%
35.8%	6,011	5,556	-455	-7.6%
37.0%	5,717	5,545	-172	-3.0%
38.3%	5,657	5,265	-392	-6.9%
39.5%	5,592	5,244	-349	-6.2%
40.7%	5,589	5,034	-555	-9.9%
42.0%	5,130	5,001	-129	-2.5%
43.2%	5,128	4,727	-402	-7.8%
44.4%	5,052	4,596	-455	-9.0%
45.7%	4,783	4,331	-453	-9.5%
46.9%	4,706	4,234	-472	-10.0%
48.1%	4,537	4,174	-363	-8.0%
49.4%	4,534	4,089	-445	-9.8%
50.6%	4,470	4,088	-382	-8.5%
51.9%	4,204	4,035	-170	-4.0%
53.1%	4,177	3,659	-518	-12.4%
54.3%	4,134	3,642	-492	-11.9%
55.6%	4,040	3,629	-411	-10.2%
56.8%	3,982	3,561	-421	-10.6%
58.0%	3,910	3,447	-463	-11.8%
59.3%	3,820	3,424	-396	-10.4%
60.5%	3,713	3,340	-373	-10.0%
61.7%	3,566	3,288	-277	-7.8%
63.0%	3,552	3,235	-317	-8.9%
64.2%	3,548	3,220	-328	-9.3%
65.4%	3,462	3,191	-271	-7.8%
66.7%	3,442	3,185	-257	-7.5%
67.9%	3,441	3,154	-287	-8.3%
69.1%	3,300	3,116	-184	-5.6%
70.4%	3,170	3,076	-94	-3.0%
71.6%	3,157	3,076	-81	-2.6%
72.8%	3,142	3,076	-66	-2.1%
74.1%	3,115	3,076	-39	-1.3%
75.3%	3,095	3,076	-19	-0.6%
76.5%	3,049	3,038	-11	-0.4%
77.8%	3,031	3,021	-10	-0.3%
79.0%	2,982	3,001	19	0.6%
80.2%	2,942	2,950	8	0.3%
81.5%	2,921	2,923	3	0.1%
82.7%	2,882	2,890	7	0.2%
84.0%	2,854	2,886	32	1.1%
85.2%	2,846	2,861	15	0.5%
86.4%	2,842	2,859	17	0.6%
87.7%	2,836	2,838	2	0.1%
88.9%	2,830	2,823	-8	-0.3%
90.1%	2,748	2,776	28	1.0%
91.4%	2,633	2,626	-7	-0.3%
92.6%	2,619	2,615	-4	-0.2%
93.8%	2,571	2,593	23	0.9%
95.1%	2,559	2,592	33	1.3%
96.3%	2,552	2,565	13	0.5%
97.5%	2,543	2,553	10	0.4%
98.8%	2,379	2,381	2	0.1%
100.0%	2,002	1,990	-12	-0.6%

Table SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,753	11,755	2	0.0%
1.2%	11,673	11,700	27	0.2%
2.5%	11,600	11,587	-14	-0.1%
3.7%	11,520	11,531	10	0.1%
4.9%	11,377	11,368	-9	-0.1%
6.2%	11,286	11,286	0	0.0%
7.4%	11,095	11,094	-1	0.0%
8.6%	11,077	11,032	-45	-0.4%
9.9%	11,034	11,006	-28	-0.3%
11.1%	10,674	10,673	0	0.0%
12.3%	10,447	10,413	-34	-0.3%
13.6%	10,433	10,397	-36	-0.3%
14.8%	10,410	10,329	-81	-0.8%
16.0%	10,302	10,302	0	0.0%
17.3%	10,096	10,100	4	0.0%
18.5%	9,922	9,865	-57	-0.6%
19.8%	9,883	9,851	-32	-0.3%
21.0%	9,836	9,690	-146	-1.5%
22.2%	9,619	9,669	49	0.5%
23.5%	9,575	9,542	-33	-0.3%
24.7%	9,429	9,229	-200	-2.1%
25.9%	9,361	9,225	-136	-1.4%
27.2%	9,315	9,207	-108	-1.2%
28.4%	8,706	8,684	-22	-0.3%
29.6%	8,635	8,478	-157	-1.8%
30.9%	8,357	8,192	-165	-2.0%
32.1%	8,191	8,165	-27	-0.3%
33.3%	8,115	7,787	-329	-4.0%
34.6%	7,898	7,742	-155	-2.0%
35.8%	7,834	7,737	-96	-1.2%
37.0%	7,808	7,537	-272	-3.5%
38.3%	7,685	7,488	-197	-2.6%
39.5%	7,661	7,443	-218	-2.8%
40.7%	7,577	7,428	-149	-2.0%
42.0%	7,058	7,136	77	1.1%
43.2%	6,946	6,945	-1	0.0%
44.4%	6,759	6,761	2	0.0%
45.7%	6,569	6,269	-301	-4.6%
46.9%	6,467	6,236	-232	-3.6%
48.1%	6,228	6,204	-24	-0.4%
49.4%	5,768	5,621	-147	-2.5%
50.6%	5,764	5,435	-329	-5.7%
51.9%	5,663	5,265	-398	-7.0%
53.1%	5,588	5,228	-360	-6.4%
54.3%	5,362	5,068	-295	-5.5%
55.6%	5,235	4,983	-252	-4.8%
56.8%	5,222	4,830	-392	-7.5%
58.0%	5,045	4,591	-454	-9.0%
59.3%	4,820	4,518	-301	-6.3%
60.5%	4,724	4,473	-251	-5.3%
61.7%	4,655	4,394	-261	-5.6%
63.0%	4,646	4,277	-369	-7.9%
64.2%	4,542	4,245	-297	-6.5%
65.4%	4,530	4,229	-300	-6.6%
66.7%	4,465	4,100	-365	-8.2%
67.9%	4,398	4,059	-340	-7.7%
69.1%	4,289	3,990	-300	-7.0%
70.4%	4,248	3,988	-260	-6.1%
71.6%	4,221	3,938	-283	-6.7%
72.8%	3,993	3,823	-170	-4.3%
74.1%	3,935	3,756	-179	-4.6%
75.3%	3,880	3,513	-367	-9.5%
76.5%	3,827	3,472	-355	-9.3%
77.8%	3,762	3,446	-315	-8.4%
79.0%	3,628	3,404	-225	-6.2%
80.2%	3,511	3,356	-156	-4.4%
81.5%	3,451	3,335	-116	-3.4%
82.7%	3,426	3,242	-184	-5.4%
84.0%	3,408	3,225	-183	-5.4%
85.2%	3,374	3,202	-172	-5.1%
86.4%	3,286	3,175	-112	-3.4%
87.7%	3,273	3,161	-111	-3.4%
88.9%	3,252	3,107	-145	-4.5%
90.1%	3,241	3,081	-160	-4.9%
91.4%	3,208	2,987	-221	-6.9%
92.6%	3,107	2,969	-138	-4.4%
93.8%	3,024	2,841	-184	-6.1%
95.1%	2,994	2,832	-162	-5.4%
96.3%	2,691	2,832	141	5.2%
97.5%	2,582	2,619	37	1.4%
98.8%	2,532	2,457	-74	-2.9%
100.0%	2,281	2,386	105	4.6%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,562	11,562	0	0.0%
1.2%	11,518	11,518	0	0.0%
2.5%	11,242	11,245	3	0.0%
3.7%	11,129	11,050	-78	-0.7%
4.9%	10,815	10,815	0	0.0%
6.2%	10,541	10,462	-79	-0.8%
7.4%	10,366	10,293	-74	-0.7%
8.6%	9,677	9,678	2	0.0%
9.9%	9,480	9,320	-160	-1.7%
11.1%	9,322	9,241	-81	-0.9%
12.3%	9,213	9,214	1	0.0%
13.6%	9,180	9,148	-33	-0.4%
14.8%	9,121	9,121	0	0.0%
16.0%	8,957	8,925	-32	-0.4%
17.3%	8,739	8,766	27	0.3%
18.5%	8,710	8,711	1	0.0%
19.8%	8,595	8,433	-163	-1.9%
21.0%	8,374	8,235	-139	-1.7%
22.2%	8,274	8,231	-43	-0.5%
23.5%	8,248	8,196	-51	-0.6%
24.7%	7,744	7,769	25	0.3%
25.9%	7,715	7,535	-180	-2.3%
27.2%	7,708	7,454	-254	-3.3%
28.4%	7,641	7,184	-456	-6.0%
29.6%	7,396	7,116	-281	-3.8%
30.9%	7,277	7,070	-207	-2.8%
32.1%	6,985	6,632	-353	-5.1%
33.3%	6,711	6,487	-223	-3.3%
34.6%	6,601	6,290	-311	-4.7%
35.8%	6,297	6,206	-91	-1.4%
37.0%	6,296	6,122	-174	-2.8%
38.3%	6,168	6,084	-84	-1.4%
39.5%	6,158	5,926	-233	-3.8%
40.7%	6,095	5,881	-215	-3.5%
42.0%	5,931	5,713	-219	-3.7%
43.2%	5,887	5,308	-579	-9.8%
44.4%	5,881	5,231	-650	-11.1%
45.7%	5,528	5,195	-333	-6.0%
46.9%	5,118	4,904	-215	-4.2%
48.1%	5,055	4,568	-487	-9.6%
49.4%	4,965	4,519	-446	-9.0%
50.6%	4,865	4,503	-361	-7.4%
51.9%	4,670	4,251	-419	-9.0%
53.1%	4,494	4,116	-378	-8.4%
54.3%	4,473	4,087	-386	-8.6%
55.6%	4,245	4,079	-166	-3.9%
56.8%	4,235	4,046	-189	-4.5%
58.0%	4,232	3,853	-380	-9.0%
59.3%	4,159	3,819	-340	-8.2%
60.5%	4,080	3,804	-277	-6.8%
61.7%	4,044	3,769	-275	-6.8%
63.0%	4,044	3,690	-354	-8.8%
64.2%	3,958	3,687	-271	-6.9%
65.4%	3,889	3,686	-204	-5.2%
66.7%	3,880	3,679	-201	-5.2%
67.9%	3,854	3,675	-179	-4.6%
69.1%	3,823	3,462	-361	-9.5%
70.4%	3,791	3,407	-383	-10.1%
71.6%	3,689	3,391	-299	-8.1%
72.8%	3,553	3,379	-175	-4.9%
74.1%	3,552	3,285	-266	-7.5%
75.3%	3,413	3,278	-135	-4.0%
76.5%	3,412	3,275	-136	-4.0%
77.8%	3,333	3,221	-112	-3.4%
79.0%	3,280	3,142	-138	-4.2%
80.2%	3,265	3,081	-184	-5.6%
81.5%	3,151	2,919	-232	-7.4%
82.7%	3,080	2,852	-228	-7.4%
84.0%	3,023	2,813	-210	-7.0%
85.2%	2,978	2,813	-165	-5.6%
86.4%	2,739	2,813	74	2.7%
87.7%	2,724	2,813	88	3.2%
88.9%	2,715	2,757	42	1.5%
90.1%	2,695	2,728	34	1.2%
91.4%	2,677	2,706	29	1.1%
92.6%	2,666	2,673	8	0.3%
93.8%	2,649	2,652	4	0.1%
95.1%	2,602	2,613	11	0.4%
96.3%	2,510	2,488	-22	-0.9%
97.5%	2,406	2,477	71	3.0%
98.8%	2,253	2,254	2	0.1%
100.0%	2,206	2,212	6	0.3%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,149	11,149	0	0.0%
1.2%	11,131	11,131	-1	0.0%
2.5%	10,317	10,244	-73	-0.7%
3.7%	8,620	8,621	0	0.0%
4.9%	8,164	8,253	89	1.1%
6.2%	7,705	7,704	-1	0.0%
7.4%	7,647	7,631	-15	-0.2%
8.6%	7,629	7,547	-82	-1.1%
9.9%	7,540	7,459	-81	-1.1%
11.1%	7,488	7,387	-101	-1.3%
12.3%	7,388	7,105	-283	-3.8%
13.6%	6,356	6,041	-315	-5.0%
14.8%	6,270	5,997	-273	-4.4%
16.0%	6,044	5,968	-76	-1.3%
17.3%	5,978	5,861	-117	-2.0%
18.5%	5,786	5,733	-53	-0.9%
19.8%	5,733	5,507	-227	-4.0%
21.0%	5,303	5,066	-237	-4.5%
22.2%	5,009	4,953	-57	-1.1%
23.5%	4,959	4,949	-10	-0.2%
24.7%	4,794	4,531	-263	-5.5%
25.9%	4,464	4,471	7	0.2%
27.2%	4,399	4,384	-15	-0.3%
28.4%	4,290	4,274	-16	-0.4%
29.6%	4,265	4,240	-25	-0.6%
30.9%	4,235	4,219	-16	-0.4%
32.1%	4,155	4,102	-53	-1.3%
33.3%	3,969	3,969	0	0.0%
34.6%	3,792	3,786	-6	-0.2%
35.8%	3,752	3,633	-119	-3.2%
37.0%	3,612	3,537	-76	-2.1%
38.3%	3,506	3,421	-85	-2.4%
39.5%	3,296	3,327	32	1.0%
40.7%	3,275	3,271	-4	-0.1%
42.0%	3,242	3,220	-22	-0.7%
43.2%	3,030	3,065	34	1.1%
44.4%	3,021	3,037	16	0.5%
45.7%	3,019	3,015	-4	-0.1%
46.9%	2,977	3,015	37	1.3%
48.1%	2,954	2,984	30	1.0%
49.4%	2,949	2,935	-15	-0.5%
50.6%	2,883	2,900	17	0.6%
51.9%	2,856	2,859	3	0.1%
53.1%	2,847	2,849	3	0.1%
54.3%	2,828	2,839	11	0.4%
55.6%	2,824	2,831	7	0.2%
56.8%	2,764	2,819	55	2.0%
58.0%	2,760	2,819	59	2.1%
59.3%	2,748	2,749	1	0.0%
60.5%	2,720	2,742	22	0.8%
61.7%	2,719	2,735	16	0.6%
63.0%	2,713	2,720	7	0.3%
64.2%	2,694	2,710	16	0.6%
65.4%	2,691	2,699	8	0.3%
66.7%	2,629	2,685	56	2.1%
67.9%	2,624	2,675	51	1.9%
69.1%	2,617	2,667	50	1.9%
70.4%	2,604	2,638	34	1.3%
71.6%	2,603	2,636	33	1.3%
72.8%	2,602	2,614	12	0.5%
74.1%	2,595	2,605	10	0.4%
75.3%	2,589	2,600	11	0.4%
76.5%	2,585	2,595	10	0.4%
77.8%	2,566	2,592	26	1.0%
79.0%	2,540	2,588	48	1.9%
80.2%	2,540	2,582	42	1.6%
81.5%	2,516	2,539	23	0.9%
82.7%	2,502	2,461	-41	-1.6%
84.0%	2,452	2,451	-1	0.0%
85.2%	2,427	2,446	20	0.8%
86.4%	2,413	2,402	-12	-0.5%
87.7%	2,378	2,388	10	0.4%
88.9%	2,366	2,371	5	0.2%
90.1%	2,340	2,352	12	0.5%
91.4%	2,330	2,323	-7	-0.3%
92.6%	2,303	2,304	1	0.0%
93.8%	2,283	2,302	19	0.9%
95.1%	2,278	2,283	5	0.2%
96.3%	2,270	2,267	-2	-0.1%
97.5%	2,208	2,210	2	0.1%
98.8%	2,098	2,099	1	0.0%
100.0%	2,054	2,052	-2	-0.1%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,764	7,616	-148	-1.9%
1.2%	6,077	6,063	-14	-0.2%
2.5%	5,909	5,932	23	0.4%
3.7%	5,350	5,351	1	0.0%
4.9%	5,340	5,311	-30	-0.6%
6.2%	4,832	4,810	-22	-0.5%
7.4%	4,654	4,360	-294	-6.3%
8.6%	4,382	4,347	-35	-0.8%
9.9%	3,902	3,715	-187	-4.8%
11.1%	3,741	3,703	-38	-1.0%
12.3%	3,731	3,600	-131	-3.5%
13.6%	3,628	3,520	-108	-3.0%
14.8%	3,523	3,502	-20	-0.6%
16.0%	3,423	3,452	30	0.9%
17.3%	3,381	3,365	-16	-0.5%
18.5%	3,190	2,953	-237	-7.4%
19.8%	2,914	2,898	-16	-0.6%
21.0%	2,887	2,877	-11	-0.4%
22.2%	2,859	2,847	-12	-0.4%
23.5%	2,855	2,813	-43	-1.5%
24.7%	2,835	2,813	-22	-0.8%
25.9%	2,792	2,787	-5	-0.2%
27.2%	2,779	2,785	6	0.2%
28.4%	2,756	2,770	15	0.5%
29.6%	2,749	2,751	2	0.1%
30.9%	2,743	2,674	-69	-2.5%
32.1%	2,710	2,674	-37	-1.4%
33.3%	2,688	2,637	-51	-1.9%
34.6%	2,650	2,636	-14	-0.5%
35.8%	2,648	2,581	-67	-2.5%
37.0%	2,592	2,565	-27	-1.0%
38.3%	2,562	2,546	-17	-0.6%
39.5%	2,560	2,545	-15	-0.6%
40.7%	2,559	2,545	-15	-0.6%
42.0%	2,559	2,538	-21	-0.8%
43.2%	2,554	2,537	-17	-0.7%
44.4%	2,542	2,529	-13	-0.5%
45.7%	2,538	2,524	-13	-0.5%
46.9%	2,533	2,520	-13	-0.5%
48.1%	2,529	2,513	-16	-0.6%
49.4%	2,499	2,492	-7	-0.3%
50.6%	2,496	2,484	-12	-0.5%
51.9%	2,494	2,483	-12	-0.5%
53.1%	2,491	2,477	-14	-0.6%
54.3%	2,488	2,476	-12	-0.5%
55.6%	2,462	2,474	12	0.5%
56.8%	2,459	2,459	0	0.0%
58.0%	2,442	2,458	16	0.6%
59.3%	2,441	2,445	4	0.2%
60.5%	2,435	2,443	8	0.3%
61.7%	2,419	2,442	23	1.0%
63.0%	2,409	2,438	29	1.2%
64.2%	2,405	2,423	18	0.7%
65.4%	2,404	2,422	18	0.7%
66.7%	2,403	2,415	12	0.5%
67.9%	2,396	2,406	10	0.4%
69.1%	2,391	2,400	9	0.4%
70.4%	2,385	2,396	11	0.5%
71.6%	2,384	2,390	6	0.2%
72.8%	2,347	2,378	31	1.3%
74.1%	2,340	2,360	20	0.8%
75.3%	2,338	2,339	1	0.0%
76.5%	2,334	2,338	3	0.1%
77.8%	2,334	2,327	-7	-0.3%
79.0%	2,333	2,324	-9	-0.4%
80.2%	2,327	2,318	-9	-0.4%
81.5%	2,324	2,310	-14	-0.6%
82.7%	2,311	2,300	-11	-0.5%
84.0%	2,292	2,290	-2	-0.1%
85.2%	2,275	2,284	9	0.4%
86.4%	2,267	2,279	11	0.5%
87.7%	2,265	2,265	0	0.0%
88.9%	2,252	2,261	10	0.4%
90.1%	2,200	2,253	53	2.4%
91.4%	2,176	2,252	76	3.5%
92.6%	2,161	2,192	31	1.4%
93.8%	2,149	2,133	-16	-0.8%
95.1%	2,105	2,126	21	1.0%
96.3%	2,014	2,082	68	3.4%
97.5%	1,979	1,943	-36	-1.8%
98.8%	1,896	1,923	27	1.4%
100.0%	1,808	1,825	17	1.0%

Table SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,528	7,294	765	11.7%
1.2%	6,314	6,060	-253	-4.0%
2.5%	5,915	5,870	-45	-0.8%
3.7%	5,870	5,810	-60	-1.0%
4.9%	5,622	5,648	26	0.5%
6.2%	5,542	5,601	59	1.1%
7.4%	5,434	5,594	161	3.0%
8.6%	5,428	5,557	129	2.4%
9.9%	5,407	5,444	37	0.7%
11.1%	5,373	5,434	60	1.1%
12.3%	5,367	5,374	7	0.1%
13.6%	5,294	5,367	73	1.4%
14.8%	5,293	5,348	56	1.1%
16.0%	5,268	5,344	76	1.4%
17.3%	5,167	5,331	164	3.2%
18.5%	5,147	5,310	163	3.2%
19.8%	5,138	5,247	109	2.1%
21.0%	5,133	5,167	35	0.7%
22.2%	5,095	5,147	53	1.0%
23.5%	5,083	5,098	15	0.3%
24.7%	5,069	5,094	25	0.5%
25.9%	5,054	5,055	0	0.0%
27.2%	5,049	5,049	0	0.0%
28.4%	5,032	5,039	7	0.1%
29.6%	4,998	5,015	17	0.3%
30.9%	4,986	5,008	22	0.4%
32.1%	4,963	4,998	35	0.7%
33.3%	4,947	4,997	50	1.0%
34.6%	4,940	4,988	48	1.0%
35.8%	4,932	4,963	30	0.6%
37.0%	4,925	4,947	22	0.4%
38.3%	4,916	4,946	30	0.6%
39.5%	4,904	4,933	29	0.6%
40.7%	4,879	4,925	46	0.9%
42.0%	4,869	4,914	45	0.9%
43.2%	4,868	4,914	46	1.0%
44.4%	4,854	4,914	61	1.2%
45.7%	4,833	4,914	82	1.7%
46.9%	4,781	4,914	134	2.8%
48.1%	4,771	4,914	144	3.0%
49.4%	4,766	4,914	148	3.1%
50.6%	4,718	4,914	197	4.2%
51.9%	4,697	4,914	217	4.6%
53.1%	4,693	4,880	187	4.0%
54.3%	4,659	4,843	185	4.0%
55.6%	4,647	4,833	186	4.0%
56.8%	4,625	4,777	152	3.3%
58.0%	4,613	4,774	161	3.5%
59.3%	4,607	4,774	167	3.6%
60.5%	4,606	4,758	152	3.3%
61.7%	4,604	4,741	137	3.0%
63.0%	4,582	4,723	141	3.1%
64.2%	4,536	4,702	166	3.7%
65.4%	4,528	4,676	149	3.3%
66.7%	4,507	4,661	154	3.4%
67.9%	4,489	4,626	136	3.0%
69.1%	4,469	4,622	153	3.4%
70.4%	4,467	4,613	146	3.3%
71.6%	4,464	4,612	148	3.3%
72.8%	4,463	4,606	143	3.2%
74.1%	4,446	4,604	158	3.6%
75.3%	4,421	4,601	180	4.1%
76.5%	4,405	4,526	120	2.7%
77.8%	4,395	4,514	119	2.7%
79.0%	4,393	4,513	120	2.7%
80.2%	4,374	4,497	123	2.8%
81.5%	4,313	4,394	82	1.9%
82.7%	4,296	4,369	74	1.7%
84.0%	4,296	4,349	53	1.2%
85.2%	4,275	4,342	68	1.6%
86.4%	4,215	4,296	81	1.9%
87.7%	4,201	4,219	19	0.4%
88.9%	4,136	4,201	64	1.6%
90.1%	4,099	4,189	90	2.2%
91.4%	4,074	4,153	79	1.9%
92.6%	3,925	4,034	109	2.8%
93.8%	3,859	4,021	162	4.2%
95.1%	3,718	3,859	141	3.8%
96.3%	3,418	3,727	310	9.1%
97.5%	3,342	3,373	32	0.9%
98.8%	3,255	3,363	108	3.3%
100.0%	3,166	3,342	176	5.6%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,955	8,951	-4	0.0%
1.2%	8,936	8,951	15	0.2%
2.5%	8,902	8,890	-11	-0.1%
3.7%	8,870	8,870	0	0.0%
4.9%	8,869	8,864	-5	-0.1%
6.2%	8,865	8,860	-5	-0.1%
7.4%	8,846	8,841	-5	-0.1%
8.6%	8,843	8,841	-2	0.0%
9.9%	8,841	8,841	0	0.0%
11.1%	8,841	8,841	0	0.0%
12.3%	8,841	8,841	0	0.0%
13.6%	8,828	8,841	13	0.1%
14.8%	8,788	8,841	53	0.6%
16.0%	8,776	8,841	65	0.7%
17.3%	8,692	8,841	149	1.7%
18.5%	8,635	8,799	164	1.9%
19.8%	8,621	8,747	126	1.5%
21.0%	8,603	8,734	131	1.5%
22.2%	8,602	8,719	118	1.4%
23.5%	8,585	8,690	105	1.2%
24.7%	8,581	8,639	58	0.7%
25.9%	8,574	8,636	62	0.7%
27.2%	8,562	8,629	67	0.8%
28.4%	8,528	8,620	92	1.1%
29.6%	8,498	8,581	84	1.0%
30.9%	8,464	8,549	85	1.0%
32.1%	8,313	8,523	211	2.5%
33.3%	8,235	8,422	186	2.3%
34.6%	8,232	8,360	127	1.5%
35.8%	8,203	8,346	144	1.8%
37.0%	8,180	8,340	160	2.0%
38.3%	8,170	8,313	143	1.8%
39.5%	8,160	8,176	16	0.2%
40.7%	8,156	8,121	-35	-0.4%
42.0%	8,143	8,022	-121	-1.5%
43.2%	8,079	8,010	-69	-0.9%
44.4%	8,021	7,826	-195	-2.4%
45.7%	7,991	7,805	-186	-2.3%
46.9%	7,829	7,775	-55	-0.7%
48.1%	7,790	7,734	-57	-0.7%
49.4%	7,696	7,697	0	0.0%
50.6%	7,661	7,623	-37	-0.5%
51.9%	7,630	7,621	-9	-0.1%
53.1%	7,624	7,614	-10	-0.1%
54.3%	7,610	7,611	0	0.0%
55.6%	7,581	7,495	-86	-1.1%
56.8%	7,499	7,467	-33	-0.4%
58.0%	7,487	7,455	-33	-0.4%
59.3%	7,480	7,451	-29	-0.4%
60.5%	7,464	7,451	-13	-0.2%
61.7%	7,445	7,368	-76	-1.0%
63.0%	7,389	7,340	-49	-0.7%
64.2%	7,387	7,332	-55	-0.7%
65.4%	7,267	7,307	40	0.5%
66.7%	7,194	7,269	75	1.0%
67.9%	7,133	7,117	-16	-0.2%
69.1%	7,120	7,098	-22	-0.3%
70.4%	7,118	6,926	-192	-2.7%
71.6%	7,091	6,848	-243	-3.4%
72.8%	6,969	6,800	-169	-2.4%
74.1%	6,732	6,549	-184	-2.7%
75.3%	6,112	6,522	409	6.7%
76.5%	5,925	6,509	584	9.9%
77.8%	5,924	6,392	468	7.9%
79.0%	5,910	6,329	419	7.1%
80.2%	5,744	6,277	532	9.3%
81.5%	5,442	5,935	492	9.0%
82.7%	5,434	5,924	490	9.0%
84.0%	5,399	5,738	340	6.3%
85.2%	5,352	5,625	273	5.1%
86.4%	5,238	5,514	276	5.3%
87.7%	5,221	5,386	165	3.2%
88.9%	5,192	5,326	134	2.6%
90.1%	5,116	5,231	115	2.3%
91.4%	4,886	5,174	288	5.9%
92.6%	4,650	4,906	255	5.5%
93.8%	4,639	4,649	9	0.2%
95.1%	4,556	4,486	-70	-1.5%
96.3%	4,177	4,449	272	6.5%
97.5%	4,123	4,187	64	1.6%
98.8%	4,079	4,161	82	2.0%
100.0%	3,794	3,895	101	2.7%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,830	6,824	-6	-0.1%
1.2%	6,579	6,607	27	0.4%
2.5%	6,556	6,547	-9	-0.1%
3.7%	6,540	6,540	0	0.0%
4.9%	6,517	6,515	-2	0.0%
6.2%	6,516	6,514	-3	0.0%
7.4%	6,514	6,512	-1	0.0%
8.6%	6,490	6,506	16	0.2%
9.9%	6,460	6,497	37	0.6%
11.1%	6,441	6,490	49	0.8%
12.3%	6,434	6,487	53	0.8%
13.6%	6,392	6,441	49	0.8%
14.8%	6,384	6,434	51	0.8%
16.0%	6,382	6,429	47	0.7%
17.3%	6,382	6,384	2	0.0%
18.5%	6,376	6,376	1	0.0%
19.8%	6,372	6,372	0	0.0%
21.0%	6,346	6,364	17	0.3%
22.2%	6,323	6,340	17	0.3%
23.5%	6,278	6,323	45	0.7%
24.7%	6,231	6,303	72	1.2%
25.9%	6,230	6,284	54	0.9%
27.2%	6,219	6,283	64	1.0%
28.4%	6,208	6,265	57	0.9%
29.6%	6,195	6,264	68	1.1%
30.9%	6,187	6,208	21	0.3%
32.1%	6,176	6,177	1	0.0%
33.3%	6,147	6,142	-5	-0.1%
34.6%	6,095	6,137	42	0.7%
35.8%	6,092	6,124	32	0.5%
37.0%	6,088	6,116	27	0.5%
38.3%	6,076	6,092	16	0.3%
39.5%	6,065	6,090	25	0.4%
40.7%	6,060	6,071	11	0.2%
42.0%	6,013	6,068	55	0.9%
43.2%	5,988	6,067	79	1.3%
44.4%	5,983	6,065	82	1.4%
45.7%	5,926	6,060	134	2.3%
46.9%	5,922	6,020	99	1.7%
48.1%	5,905	6,017	111	1.9%
49.4%	5,902	6,012	110	1.9%
50.6%	5,899	5,958	59	1.0%
51.9%	5,858	5,950	92	1.6%
53.1%	5,821	5,949	129	2.2%
54.3%	5,814	5,926	112	1.9%
55.6%	5,803	5,921	119	2.0%
56.8%	5,802	5,902	101	1.7%
58.0%	5,734	5,884	150	2.6%
59.3%	5,712	5,874	163	2.9%
60.5%	5,706	5,857	151	2.7%
61.7%	5,690	5,821	131	2.3%
63.0%	5,684	5,778	94	1.7%
64.2%	5,635	5,764	129	2.3%
65.4%	5,593	5,742	149	2.7%
66.7%	5,420	5,706	286	5.3%
67.9%	5,382	5,690	308	5.7%
69.1%	5,337	5,685	348	6.5%
70.4%	5,317	5,674	357	6.7%
71.6%	5,119	5,635	516	10.1%
72.8%	5,053	5,601	547	10.8%
74.1%	4,986	5,590	604	12.1%
75.3%	4,486	5,426	940	20.9%
76.5%	4,296	5,132	837	19.5%
77.8%	4,169	5,039	870	20.9%
79.0%	4,044	4,781	738	18.2%
80.2%	4,040	4,781	741	18.3%
81.5%	4,036	4,764	728	18.0%
82.7%	4,031	4,721	690	17.1%
84.0%	3,966	4,661	695	17.5%
85.2%	3,922	4,371	449	11.4%
86.4%	3,893	4,355	462	11.9%
87.7%	3,863	4,324	461	11.9%
88.9%	3,801	4,069	268	7.1%
90.1%	3,733	3,995	263	7.0%
91.4%	3,673	3,916	243	6.6%
92.6%	3,655	3,910	255	7.0%
93.8%	3,654	3,841	187	5.1%
95.1%	3,619	3,836	217	6.0%
96.3%	3,524	3,831	307	8.7%
97.5%	3,460	3,767	307	8.9%
98.8%	3,387	3,756	369	10.9%
100.0%	3,320	3,652	332	10.0%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,001	9,047	47	0.5%
1.2%	8,953	9,001	47	0.5%
2.5%	8,675	8,998	323	3.7%
3.7%	8,620	8,784	163	1.9%
4.9%	8,615	8,478	-137	-1.6%
6.2%	8,443	8,435	-8	-0.1%
7.4%	8,315	8,315	0	0.0%
8.6%	8,260	8,278	18	0.2%
9.9%	8,223	8,241	18	0.2%
11.1%	8,211	8,223	12	0.1%
12.3%	8,195	8,214	19	0.2%
13.6%	8,175	8,092	-83	-1.0%
14.8%	7,959	7,928	-31	-0.4%
16.0%	7,937	7,912	-25	-0.3%
17.3%	7,763	7,873	110	1.4%
18.5%	7,351	7,373	22	0.3%
19.8%	7,215	7,335	120	1.7%
21.0%	7,006	7,258	252	3.6%
22.2%	6,446	6,487	41	0.6%
23.5%	6,333	6,458	126	2.0%
24.7%	5,756	6,097	341	5.9%
25.9%	5,741	6,024	282	4.9%
27.2%	5,669	5,992	323	5.7%
28.4%	5,662	5,985	323	5.7%
29.6%	5,620	5,893	273	4.9%
30.9%	5,564	5,884	320	5.7%
32.1%	5,533	5,872	338	6.1%
33.3%	5,421	5,809	387	7.1%
34.6%	5,403	5,797	394	7.3%
35.8%	5,305	5,731	426	8.0%
37.0%	5,294	5,729	435	8.2%
38.3%	5,243	5,682	439	8.4%
39.5%	5,231	5,638	407	7.8%
40.7%	5,177	5,628	451	8.7%
42.0%	5,176	5,603	427	8.2%
43.2%	5,150	5,596	445	8.6%
44.4%	5,072	5,550	478	9.4%
45.7%	5,055	5,526	471	9.3%
46.9%	5,047	5,413	366	7.2%
48.1%	4,973	5,396	422	8.5%
49.4%	4,966	5,364	398	8.0%
50.6%	4,927	5,252	325	6.6%
51.9%	4,888	5,236	347	7.1%
53.1%	4,887	5,135	247	5.1%
54.3%	4,826	5,134	308	6.4%
55.6%	4,814	5,107	292	6.1%
56.8%	4,801	5,070	269	5.6%
58.0%	4,765	5,066	301	6.3%
59.3%	4,764	5,016	252	5.3%
60.5%	4,746	5,004	258	5.4%
61.7%	4,738	4,983	246	5.2%
63.0%	4,704	4,976	273	5.8%
64.2%	4,672	4,972	300	6.4%
65.4%	4,562	4,953	391	8.6%
66.7%	4,500	4,952	452	10.0%
67.9%	4,464	4,911	448	10.0%
69.1%	4,456	4,897	441	9.9%
70.4%	4,342	4,861	519	11.9%
71.6%	4,326	4,850	524	12.1%
72.8%	4,286	4,849	563	13.1%
74.1%	4,249	4,836	586	13.8%
75.3%	4,231	4,818	586	13.9%
76.5%	4,156	4,800	644	15.5%
77.8%	4,134	4,705	572	13.8%
79.0%	4,112	4,692	581	14.1%
80.2%	4,085	4,690	605	14.8%
81.5%	3,966	4,681	716	18.0%
82.7%	3,888	4,658	770	19.8%
84.0%	3,813	4,540	726	19.0%
85.2%	3,805	4,534	729	19.2%
86.4%	3,770	4,507	737	19.5%
87.7%	3,745	4,380	635	17.0%
88.9%	3,668	4,358	690	18.8%
90.1%	3,652	4,330	679	18.6%
91.4%	3,632	4,049	417	11.5%
92.6%	3,523	3,945	422	12.0%
93.8%	3,317	3,869	552	16.6%
95.1%	3,263	3,798	535	16.4%
96.3%	3,222	3,639	418	13.0%
97.5%	3,203	3,626	423	13.2%
98.8%	3,119	3,517	398	12.8%
100.0%	3,113	3,333	220	7.1%

Figure SW-35-b
Old and Middle River, Monthly Flow
Probability of Exceedance

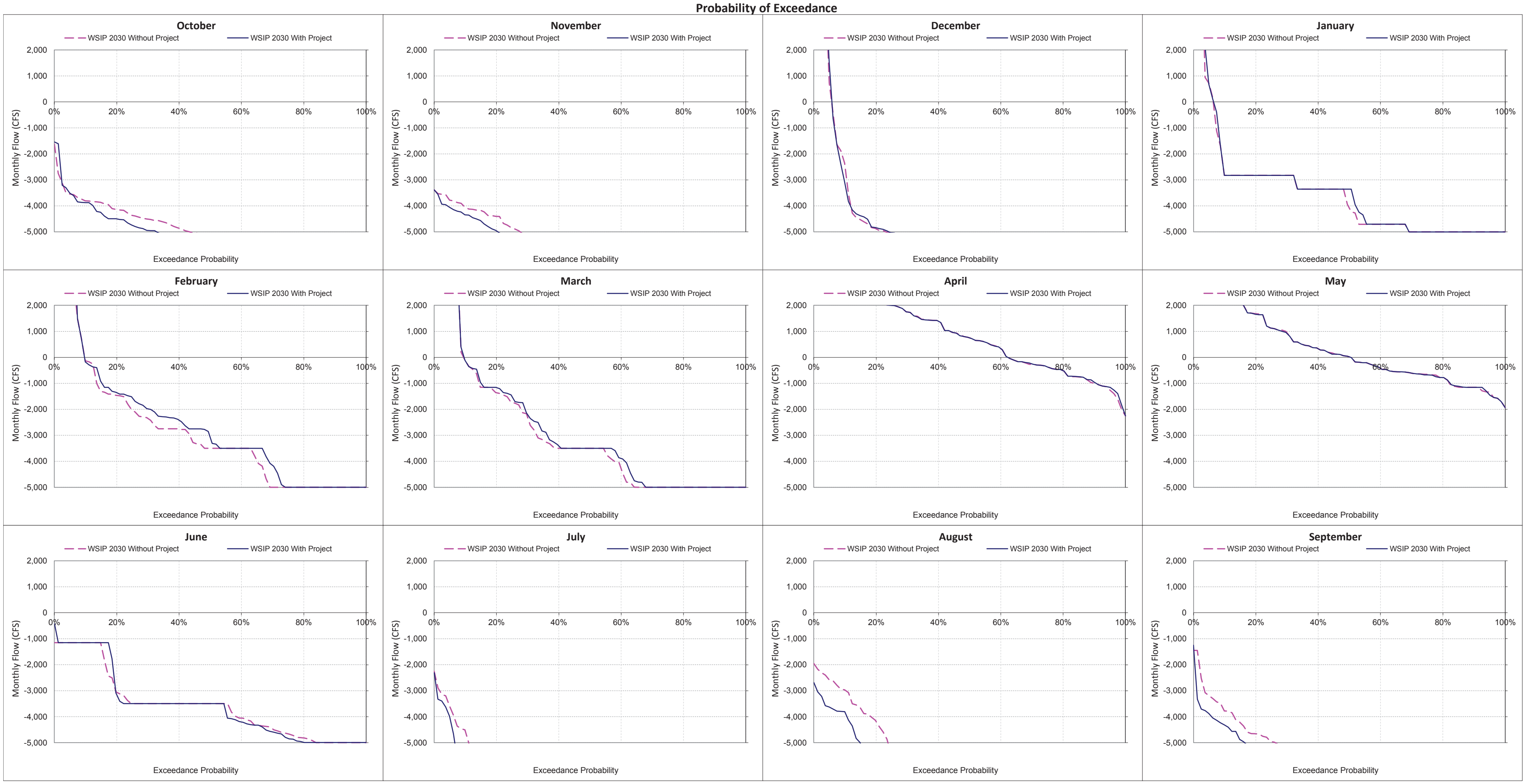


Table SW-35-b
Old and Middle River, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,620	-1,540	81	
1.2%	-2,750	-1,612	1,138	
2.5%	-3,101	-3,206	-105	
3.7%	-3,492	-3,292	200	
4.9%	-3,545	-3,506	39	
6.2%	-3,569	-3,610	-41	
7.4%	-3,674	-3,846	-172	
8.6%	-3,736	-3,871	-134	
9.9%	-3,807	-3,873	-66	
11.1%	-3,815	-3,875	-61	
12.3%	-3,837	-3,986	-149	
13.6%	-3,846	-4,220	-374	
14.8%	-3,864	-4,243	-379	
16.0%	-3,922	-4,397	-475	
17.3%	-3,950	-4,492	-542	
18.5%	-4,107	-4,494	-387	
19.8%	-4,138	-4,498	-360	
21.0%	-4,160	-4,525	-365	
22.2%	-4,170	-4,539	-370	
23.5%	-4,275	-4,657	-383	
24.7%	-4,362	-4,730	-368	
25.9%	-4,393	-4,795	-403	
27.2%	-4,437	-4,843	-406	
28.4%	-4,479	-4,874	-395	
29.6%	-4,504	-4,944	-440	
30.9%	-4,525	-4,950	-425	
32.1%	-4,563	-4,953	-390	
33.3%	-4,564	-5,039	-474	
34.6%	-4,610	-5,081	-472	
35.8%	-4,648	-5,093	-444	
37.0%	-4,719	-5,280	-561	
38.3%	-4,789	-5,312	-523	
39.5%	-4,843	-5,391	-548	
40.7%	-4,885	-5,427	-542	
42.0%	-4,956	-5,435	-479	
43.2%	-4,994	-5,444	-450	
44.4%	-5,037	-5,531	-495	
45.7%	-5,046	-5,535	-490	
46.9%	-5,220	-5,695	-475	
48.1%	-5,287	-5,751	-464	
49.4%	-5,291	-5,925	-634	
50.6%	-5,396	-5,956	-560	
51.9%	-5,577	-5,981	-404	
53.1%	-5,623	-6,011	-388	
54.3%	-5,648	-6,066	-418	
55.6%	-5,739	-6,103	-364	
56.8%	-5,746	-6,183	-437	
58.0%	-5,794	-6,264	-470	
59.3%	-5,813	-6,277	-465	
60.5%	-5,837	-6,278	-440	
61.7%	-5,844	-6,303	-459	
63.0%	-5,870	-6,330	-460	
64.2%	-6,026	-6,470	-444	
65.4%	-6,032	-6,582	-550	
66.7%	-6,036	-6,589	-552	
67.9%	-6,047	-6,598	-551	
69.1%	-6,057	-6,767	-709	
70.4%	-6,159	-6,801	-643	
71.6%	-6,163	-6,865	-702	
72.8%	-6,286	-6,914	-628	
74.1%	-6,523	-6,977	-454	
75.3%	-6,586	-7,184	-597	
76.5%	-6,864	-7,233	-369	
77.8%	-6,900	-7,332	-431	
79.0%	-6,948	-7,367	-419	
80.2%	-6,957	-7,460	-503	
81.5%	-6,964	-7,480	-516	
82.7%	-7,072	-7,504	-432	
84.0%	-7,117	-7,518	-402	
85.2%	-7,228	-7,705	-477	
86.4%	-7,295	-8,008	-713	
87.7%	-7,471	-8,126	-654	
88.9%	-7,490	-8,138	-647	
90.1%	-7,687	-8,197	-510	
91.4%	-7,706	-8,282	-576	
92.6%	-7,733	-8,369	-636	
93.8%	-8,201	-8,446	-245	
95.1%	-8,721	-8,610	111	
96.3%	-8,746	-8,779	-33	
97.5%	-9,332	-9,328	4	
98.8%	-9,436	-9,525	-89	
100.0%	-10,323	-10,413	-90	

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-3,386	-3,386	0	
1.2%	-3,529	-3,557	-29	
2.5%	-3,557	-3,939	-382	
3.7%	-3,569	-3,956	-387	
4.9%	-3,779	-4,054	-275	
6.2%	-3,809	-4,146	-337	
7.4%	-3,870	-4,207	-337	
8.6%	-3,901	-4,232	-332	
9.9%	-4,050	-4,341	-291	
11.1%	-4,122	-4,360	-239	
12.3%	-4,132	-4,455	-323	
13.6%	-4,163	-4,505	-342	
14.8%	-4,169	-4,566	-397	
16.0%	-4,232	-4,700	-467	
17.3%	-4,373	-4,798	-425	
18.5%	-4,378	-4,884	-506	
19.8%	-4,404	-4,946	-543	
21.0%	-4,410	-5,043	-633	
22.2%	-4,676	-5,097	-421	
23.5%	-4,740	-5,172	-432	
24.7%	-4,835	-5,179	-345	
25.9%	-4,892	-5,180	-287	
27.2%	-4,963	-5,216	-253	
28.4%	-5,066	-5,391	-325	
29.6%	-5,096	-5,471	-376	
30.9%	-5,231	-5,610	-379	
32.1%	-5,246	-5,686	-441	
33.3%	-5,325	-5,697	-372	
34.6%	-5,511	-5,795	-283	
35.8%	-5,575	-5,841	-266	
37.0%	-5,581	-5,917	-336	
38.3%	-5,657	-6,217	-560	
39.5%	-5,666	-6,272	-607	
40.7%	-5,784	-6,287	-503	
42.0%	-5,864	-6,346	-482	
43.2%	-6,225	-6,378	-153	
44.4%	-6,236	-6,423	-187	
45.7%	-6,278	-6,468	-190	
46.9%	-6,345	-6,509	-164	
48.1%	-6,416	-6,522	-107	
49.4%	-6,447	-6,633	-186	
50.6%	-6,451	-6,662	-211	
51.9%	-6,459	-6,914	-455	
53.1%	-6,752	-6,949	-196	
54.3%	-6,782	-6,984	-201	
55.6%	-6,884	-7,041	-157	
56.8%	-6,924	-7,246	-322	
58.0%	-7,027	-7,295	-267	
59.3%	-7,100	-7,428	-328	
60.5%	-7,123	-7,510	-387	
61.7%	-7,138	-7,792	-653	
63.0%	-7,148	-7,794	-646	
64.2%	-7,160	-7,833	-673	
65.4%	-7,168	-8,081	-912	
66.7%	-7,180	-8,136	-956	
67.9%	-7,357	-8,195	-838	
69.1%	-7,437	-8,228	-792	
70.4%	-7,633	-8,339	-706	
71.6%	-7,715	-8,366	-650	
72.8%	-7,732	-8,515	-783	
74.1%	-7,741	-8,538	-796	
75.3%	-7,810	-8,668	-859	
76.5%	-8,136	-8,746	-610	
77.8%	-8,219	-8,840	-620	
79.0%	-8,247	-8,943	-696	
80.2%	-8,400	-9,050	-650	
81.5%	-8,718	-9,159	-441	
82.7%	-9,083	-9,426	-343	
84.0%	-9,145	-9,463	-318	
85.2%	-9,204	-9,472	-268	
86.4%	-9,262	-9,670	-407	
87.7%	-9,840	-9,701	139	
88.9%	-9,888	-9,888	0	
90.1%	-9,903	-9,903	0	
91.4%	-10,010	-10,000	10	
92.6%	-10,108	-10,108	0	
93.8%	-10,117	-10,112	5	
95.1%	-10,159	-10,160	-1	
96.3%	-10,243	-10,262	-19	
97.5%	-10,260	-10,320	-59	
98.8%	-10,334	-10,445	-111	
100.0%	-10,445	-10,496	-51	

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,809	9,774	-35	-0.4%
1.2%	9,336	9,320	-16	-0.2%
2.5%	8,205	7,938	-267	-3.3%
3.7%	4,527	4,527	0	0.0%
4.9%	731	1,541	810	110.8%
6.2%	-445	-643	-198	
7.4%	-1,644	-1,660	-16	
8.6%	-1,876	-2,396	-520	
9.9%	-2,354	-3,108	-755	
11.1%	-3,550	-3,823	-273	
12.3%	-4,282	-4,157	124	
13.6%	-4,450	-4,305	144	
14.8%	-4,523	-4,374	149	
16.0%	-4,610	-4,424	187	
17.3%	-4,695	-4,515	180	
18.5%	-4,836	-4,813	23	
19.8%	-4,871	-4,832	39	
21.0%	-4,949	-4,876	72	
22.2%	-4,954	-4,906	48	
23.5%	-5,023	-4,968	54	
24.7%	-5,037	-5,032	4	
25.9%	-5,140	-5,041	99	
27.2%	-5,279	-5,178	101	
28.4%	-5,349	-5,305	45	
29.6%	-5,424	-5,464	-39	
30.9%	-5,518	-5,524	-7	
32.1%	-5,583	-5,576	7	
33.3%	-5,651	-5,683	-32	
34.6%	-5,871	-5,871	0	
35.8%	-5,871	-5,871	0	
37.0%	-5,871	-5,871	0	
38.3%	-5,871	-5,871	0	
39.5%	-5,871	-5,871	0	
40.7%	-5,871	-5,871	0	
42.0%	-5,871	-5,871	0	
43.2%	-5,871	-5,871	0	
44.4%	-5,871	-5,871	0	
45.7%	-5,871	-5,871	0	
46.9%	-5,871	-5,871	0	
48.1%	-5,871	-5,871	0	
49.4%	-5,871	-5,871	0	
50.6%	-5,871	-5,871	0	
51.9%	-5,871	-5,871	0	
53.1%	-5,871	-5,871	0	
54.3%	-5,871	-5,871	0	
55.6%	-5,871	-5,871	0	
56.8%	-5,871	-5,871	0	
58.0%	-5,871	-5,871	0	
59.3%	-5,871	-5,871	0	
60.5%	-5,871	-5,871	0	
61.7%	-5,871	-6,122	-251	
63.0%	-5,871	-6,277	-406	
64.2%	-5,944	-6,437	-494	
65.4%	-6,221	-6,474	-253	
66.7%	-6,396	-6,531	-135	
67.9%	-6,430	-6,736	-306	
69.1%	-6,467	-6,870	-403	
70.4%	-6,523	-7,142	-619	
71.6%	-7,228	-7,237	-9	
72.8%	-7,243	-8,364	-1,121	
74.1%	-8,197	-8,490	-293	
75.3%	-9,053	-8,987	66	
76.5%	-9,083	-9,010	73	
77.8%	-9,180	-9,233	-52	
79.0%	-9,233	-9,325	-92	
80.2%	-9,281	-9,357	-76	
81.5%	-9,357	-9,448	-91	
82.7%	-9,448	-9,458	-10	
84.0%	-9,467	-9,541	-74	
85.2%	-9,516	-9,567	-51	
86.4%	-9,567	-9,601	-34	
87.7%	-9,620	-9,620	0	
88.9%	-9,672	-9,658	14	
90.1%	-9,681	-9,670	12	
91.4%	-9,690	-9,681	8	
92.6%	-9,704	-9,685	18	
93.8%	-9,723	-9,700	23	
95.1%	-9,742	-9,704	39	
96.3%	-9,752	-9,723	30	
97.5%	-9,792	-9,742	49	
98.8%	-9,827	-9,832	-5	
100.0%	-9,967	-10,076	-109	

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,732	30,721	-11	0.0%
1.2%	8,781	7,849	-932	-10.6%
2.5%	6,435	6,426	-9	-0.1%
3.7%	943	2,098	1,155	122.4%
4.9%	714	689	-26	-3.6%
6.2%	153	119	-35	-22.5%
7.4%	-1,115	-390	725	
8.6%	-1,706	-1,700	6	
9.9%	-2,823	-2,823	0	
11.1%	-2,823	-2,823	0	
12.3%	-2,823	-2,823	0	
13.6%	-2,823	-2,823	0	
14.8%	-2,823	-2,823	0	
16.0%	-2,823	-2,823	0	
17.3%	-2,823	-2,823	0	
18.5%	-2,823	-2,823	0	
19.8%	-2,823	-2,823	0	
21.0%	-2,823	-2,823	0	
22.2%	-2,823	-2,823	0	
23.5%	-2,823	-2,823	0	
24.7%	-2,823	-2,823	0	
25.9%	-2,823	-2,823	0	
27.2%	-2,823	-2,823	0	
28.4%	-2,823	-2,823	0	
29.6%	-2,823	-2,823	0	
30.9%	-2,823	-2,823	0	
32.1%	-2,823	-2,823	0	
33.3%	-3,355	-3,355	0	
34.6%	-3,355	-3,355	0	
35.8%	-3,355	-3,355	0	
37.0%	-3,355	-3,355	0	
38.3%	-3,355	-3,355	0	
39.5%	-3,355	-3,355	0	
40.7%	-3,355	-3,355	0	
42.0%	-3,355	-3,355	0	
43.2%	-3,355	-3,355	0	
44.4%	-3,355	-3,355	0	
45.7%	-3,355	-3,355	0	
46.9%	-3,355	-3,355	0	
48.1%	-3,355	-3,355	0	
49.4%	-3,943	-3,355	588	
50.6%	-4,227	-3,355	872	
51.9%	-4,274	-3,953	321	
53.1%	-4,710	-4,243	467	
54.3%	-4,710	-4,343	367	
55.6%	-4,710	-4,710	0	
56.8%	-4,710	-4,710	0	
58.0%	-4,710	-4,710	0	
59.3%	-4,710	-4,710	0	
60.5%	-4,710	-4,710	0	
61.7%	-4,710	-4,710	0	
63.0%	-4,710	-4,710	0	
64.2%	-4,710	-4,710	0	
65.4%	-4,710	-4,710	0	
66.7%	-4,710	-4,710	0	
67.9%	-4,710	-4,710	0	
69.1%	-5,000	-5,000	0	
70.4%	-5,000	-5,000	0	
71.6%	-5,000	-5,000	0	
72.8%	-5,000	-5,000	0	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

Table SW-35-b

Old and Middle River, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,536	16,589	53	0.3%
1.2%	9,987	9,978	-9	-0.1%
2.5%	9,645	9,136	-509	-5.3%
3.7%	8,019	7,987	-32	-0.4%
4.9%	7,409	6,351	-1,058	-14.3%
6.2%	2,980	5,352	2,372	79.6%
7.4%	1,509	1,476	-33	-2.2%
8.6%	748	717	-31	-4.1%
9.9%	-133	-172	-39	
11.1%	-172	-288	-116	
12.3%	-255	-363	-108	
13.6%	-1,009	-399	610	
14.8%	-1,309	-915	394	
16.0%	-1,341	-1,150	190	
17.3%	-1,413	-1,157	256	
18.5%	-1,413	-1,309	104	
19.8%	-1,463	-1,341	122	
21.0%	-1,479	-1,413	66	
22.2%	-1,512	-1,413	98	
23.5%	-1,786	-1,479	307	
24.7%	-2,000	-1,512	488	
25.9%	-2,107	-1,692	415	
27.2%	-2,268	-1,786	482	
28.4%	-2,295	-1,845	450	
29.6%	-2,321	-1,973	348	
30.9%	-2,422	-2,000	422	
32.1%	-2,618	-2,107	510	
33.3%	-2,750	-2,268	482	
34.6%	-2,750	-2,287	463	
35.8%	-2,750	-2,295	455	
37.0%	-2,750	-2,321	429	
38.3%	-2,750	-2,336	414	
39.5%	-2,750	-2,386	364	
40.7%	-2,776	-2,473	303	
42.0%	-2,776	-2,634	142	
43.2%	-2,940	-2,750	190	
44.4%	-3,277	-2,750	527	
45.7%	-3,329	-2,750	579	
46.9%	-3,339	-2,750	589	
48.1%	-3,500	-2,776	724	
49.4%	-3,500	-2,857	643	
50.6%	-3,500	-3,315	185	
51.9%	-3,500	-3,339	161	
53.1%	-3,500	-3,500	0	
54.3%	-3,500	-3,500	0	
55.6%	-3,500	-3,500	0	
56.8%	-3,500	-3,500	0	
58.0%	-3,500	-3,500	0	
59.3%	-3,500	-3,500	0	
60.5%	-3,500	-3,500	0	
61.7%	-3,500	-3,500	0	
63.0%	-3,500	-3,500	0	
64.2%	-3,784	-3,500	284	
65.4%	-4,084	-3,500	584	
66.7%	-4,188	-3,500	688	
67.9%	-4,668	-3,817	850	
69.1%	-5,000	-4,085	915	
70.4%	-5,000	-4,188	812	
71.6%	-5,000	-4,461	539	
72.8%	-5,000	-4,902	98	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	29,800	29,781	-19	-0.1%
1.2%	17,575	17,528	-47	-0.3%
2.5%	11,288	11,246	-42	-0.4%
3.7%	6,656	6,643	-14	-0.2%
4.9%	4,996	4,971	-26	-0.5%
6.2%	4,993	4,946	-46	-0.9%
7.4%	3,896	3,411	-485	-12.4%
8.6%	200	397	197	98.4%
9.9%	-108	-108	0	
11.1%	-346	-354	-8	
12.3%	-460	-430	31	
13.6%	-623	-460	163	
14.8%	-1,150	-963	187	
16.0%	-1,150	-1,150	0	
17.3%	-1,150	-1,150	0	
18.5%	-1,210	-1,150	59	
19.8%	-1,358	-1,150	208	
21.0%	-1,388	-1,210	178	
22.2%	-1,447	-1,358	89	
23.5%	-1,516	-1,388	128	
24.7%	-1,734	-1,447	287	
25.9%	-1,764	-1,701	63	
27.2%	-1,831	-1,734	97	
28.4%	-2,132	-1,745	387	
29.6%	-2,167	-2,134	33	
30.9%	-2,619	-2,352	266	
32.1%	-2,807	-2,460	347	
33.3%	-3,102	-2,499	602	
34.6%	-3,158	-2,833	325	
35.8%	-3,258	-2,881	378	
37.0%	-3,323	-3,169	154	
38.3%	-3,459	-3,250	210	
39.5%	-3,500	-3,355	145	
40.7%	-3,500	-3,500	0	
42.0%	-3,500	-3,500	0	
43.2%	-3,500	-3,500	0	
44.4%	-3,500	-3,500	0	
45.7%	-3,500	-3,500	0	
46.9%	-3,500	-3,500	0	
48.1%	-3,500	-3,500	0	
49.4%	-3,500	-3,500	0	
50.6%	-3,500	-3,500	0	
51.9%	-3,500	-3,500	0	
53.1%	-3,500	-3,500	0	
54.3%	-3,500	-3,500	0	
55.6%	-3,782	-3,500	282	
56.8%	-3,908	-3,500	408	
58.0%	-4,017	-3,587	430	
59.3%	-4,026	-3,858	168	
60.5%	-4,461	-3,908	553	
61.7%	-4,805	-4,058	747	
63.0%	-4,814	-4,451	363	
64.2%	-4,995	-4,745	250	
65.4%	-5,000	-4,803	197	
66.7%	-5,000	-4,805	195	
67.9%	-5,000	-4,995	5	
69.1%	-5,000	-5,000	0	
70.4%	-5,000	-5,000	0	
71.6%	-5,000	-5,000	0	
72.8%	-5,000	-5,000	0	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,870	9,752	-118	-1.2%
1.2%	9,731	8,960	-772	-7.9%
2.5%	6,863	6,834	-29	-0.4%
3.7%	5,676	5,662	-14	-0.2%
4.9%	4,150	4,121	-28	-0.7%
6.2%	3,723	3,704	-19	-0.5%
7.4%	3,704	3,694	-11	-0.3%
8.6%	3,187	3,187	0	0.0%
9.9%	3,163	3,148	-15	-0.5%
11.1%	3,041	3,026	-15	-0.5%
12.3%	2,816	2,812	-4	-0.2%
13.6%	2,738	2,727	-11	-0.4%
14.8%	2,688	2,688	0	0.0%
16.0%	2,615	2,615	0	0.0%
17.3%	2,360	2,360	0	0.0%
18.5%	2,358	2,358	0	0.0%
19.8%	2,352	2,336	-16	-0.7%
21.0%	2,173	2,173	0	0.0%
22.2%	2,112	2,112	0	0.0%
23.5%	2,009	2,008	-1	0.0%
24.7%	2,008	2,002	-6	-0.3%
25.9%	1,993	1,993	0	0.0%
27.2%	1,940	1,940	0	0.0%
28.4%	1,877	1,877	0	0.0%
29.6%	1,754	1,754	0	0.0%
30.9%	1,733	1,733	0	0.0%
32.1%	1,605	1,604	0	0.0%
33.3%	1,577	1,553	-24	-1.5%
34.6%	1,466	1,457	-9	-0.6%
35.8%	1,457	1,446	-11	-0.8%
37.0%	1,431	1,431	0	0.0%
38.3%	1,424	1,424	0	0.0%
39.5%	1,421	1,421	0	0.0%
40.7%	1,341	1,341	0	0.0%
42.0%	1,035	1,035	0	0.0%
43.2%	1,030	1,030	0	0.0%
44.4%	958	958	0	0.0%
45.7%	936	936	0	0.0%
46.9%	874	828	-46	-5.2%
48.1%	797	798	0	0.0%
49.4%	771	771	0	0.0%
50.6%	725	722	-3	-0.5%
51.9%	652	652	0	0.0%
53.1%	641	641	0	0.0%
54.3%	614	614	0	0.0%
55.6%	564	564	0	0.0%
56.8%	485	485	0	0.0%
58.0%	450	435	-15	-3.4%
59.3%	399	400	1	0.2%
60.5%	289	289	0	0.0%
61.7%	29	29	0	
63.0%	-48	-48	0	
64.2%	-109	-109	0	
65.4%	-162	-162	0	
66.7%	-171	-170	0	
67.9%	-213	-197	16	
69.1%	-266	-213	53	
70.4%	-272	-266	5	
71.6%	-296	-296	0	
72.8%	-303	-303	0	
74.1%	-329	-328	0	
75.3%	-383	-383	0	
76.5%	-440	-440	0	
77.8%	-453	-462	-10	
79.0%	-463	-463	0	
80.2%	-526	-526	0	
81.5%	-719	-724	-5	
82.7%	-741	-729	12	
84.0%	-741	-741	1	
85.2%	-756	-741	15	
86.4%	-764	-764	0	
87.7%	-859	-859	0	
88.9%	-965	-865	101	
90.1%	-1,003	-965	38	
91.4%	-1,053	-1,057	-4	
92.6%	-1,105	-1,105	0	
93.8%	-1,129	-1,127	2	
95.1%	-1,265	-1,150	115	
96.3%	-1,396	-1,265	131	
97.5%	-1,616	-1,396	219	
98.8%	-2,014	-1,831	182	
100.0%	-2,253	-2,254	0	

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,232	8,191	-40	-0.5%
1.2%	5,809	5,665	-144	-2.5%
2.5%	5,453	5,414	-40	-0.7%
3.7%	4,813	4,775	-38	-0.8%
4.9%	4,487	4,446	-40	-0.9%
6.2%	4,282	4,225	-58	-1.3%
7.4%	3,038	2,979	-58	-1.9%
8.6%	2,964	2,942	-22	-0.7%
9.9%	2,891	2,881	-10	-0.4%
11.1%	2,474	2,452	-22	-0.9%
12.3%	2,387	2,420	33	1.4%
13.6%	2,335	2,315	-20	-0.9%
14.8%	2,107	2,107	0	0.0%
16.0%	1,996	1,996	0	0.0%
17.3%	1,737	1,715	-22	-1.3%
18.5%	1,702	1,702	0	0.0%
19.8%	1,682	1,660	-23	-1.4%
21.0%	1,666	1,643	-23	-1.4%
22.2%	1,642	1,642	0	0.0%
23.5%	1,205	1,205	0	0.0%
24.7%	1,129	1,129	0	0.0%
25.9%	1,105	1,105	0	0.0%
27.2%	1,053	1,047	-6	-0.5%
28.4%	1,047	999	-49	-4.7%
29.6%	999	962	-36	-3.7%
30.9%	814	814	0	0.0%
32.1%	596	596	0	0.0%
33.3%	589	589	0	0.0%
34.6%	515	515	0	-0.1%
35.8%	465	465	0	0.0%
37.0%	443	440	-3	-0.7%
38.3%	368	367	-1	-0.2%
39.5%	365	365	0	0.0%
40.7%	283	282	0	0.0%
42.0%	272	272	-1	-0.2%
43.2%	193	193	0	0.1%
44.4%	169	123	-46	-27.2%
45.7%	119	119	0	0.0%
46.9%	114	114	0	-0.2%
48.1%	63	63	0	-0.1%
49.4%	42	42	0	0.0%
50.6%	-5	-5	0	
51.9%	-179	-179	0	
53.1%	-189	-188	0	
54.3%	-204	-204	0	
55.6%	-211	-211	0	
56.8%	-269	-269	0	
58.0%	-312	-312	0	
59.3%	-368	-368	1	
60.5%	-463	-464	0	
61.7%	-467	-467	0	
63.0%	-522	-522	0	
64.2%	-550	-550	0	
65.4%	-555	-555	0	
66.7%	-565	-559	6	
67.9%	-568	-568	0	
69.1%	-590	-590	0	
70.4%	-619	-619	0	
71.6%	-629	-640	-11	
72.8%	-640	-650	-10	
74.1%	-650	-675	-25	
75.3%	-657	-675	-19	
76.5%	-675	-687	-12	
77.8%	-686	-749	-62	
79.0%	-773	-778	-5	
80.2%	-778	-779	-1	
81.5%	-878	-878	0	
82.7%	-1,112	-1,056	56	
84.0%	-1,118	-1,094	24	
85.2%	-1,150	-1,113	38	
86.4%	-1,150	-1,143	7	
87.7%	-1,150	-1,150	0	
88.9%	-1,150	-1,150	0	
90.1%	-1,150	-1,150	0	
91.4%	-1,150	-1,150	0	
92.6%	-1,287	-1,150	137	
93.8%	-1,325	-1,287	37	
95.1%	-1,338	-1,459	-120	
96.3%	-1,541	-1,541	0	
97.5%	-1,577	-1,577	0	
98.8%	-1,702	-1,702	0	
100.0%	-1,933	-1,933	0	

Table SW-35-b

Old and Middle River, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,150	-415	735	
1.2%	-1,150	-1,150	0	
2.5%	-1,150	-1,150	0	
3.7%	-1,150	-1,150	0	
4.9%	-1,150	-1,150	0	
6.2%	-1,150	-1,150	0	
7.4%	-1,150	-1,150	0	
8.6%	-1,150	-1,150	0	
9.9%	-1,150	-1,150	0	
11.1%	-1,150	-1,150	0	
12.3%	-1,150	-1,150	0	
13.6%	-1,150	-1,150	0	
14.8%	-1,150	-1,150	0	
16.0%	-1,825	-1,150	674	
17.3%	-2,433	-1,150	1,282	
18.5%	-2,508	-1,766	743	
19.8%	-3,047	-3,089	-41	
21.0%	-3,125	-3,407	-282	
22.2%	-3,188	-3,500	-312	
23.5%	-3,379	-3,500	-121	
24.7%	-3,500	-3,500	0	
25.9%	-3,500	-3,500	0	
27.2%	-3,500	-3,500	0	
28.4%	-3,500	-3,500	0	
29.6%	-3,500	-3,500	0	
30.9%	-3,500	-3,500	0	
32.1%	-3,500	-3,500	0	
33.3%	-3,500	-3,500	0	
34.6%	-3,500	-3,500	0	
35.8%	-3,500	-3,500	0	
37.0%	-3,500	-3,500	0	
38.3%	-3,500	-3,500	0	
39.5%	-3,500	-3,500	0	
40.7%	-3,500	-3,500	0	
42.0%	-3,500	-3,500	0	
43.2%	-3,500	-3,500	0	
44.4%	-3,500	-3,500	0	
45.7%	-3,500	-3,500	0	
46.9%	-3,500	-3,500	0	
48.1%	-3,500	-3,500	0	
49.4%	-3,500	-3,500	0	
50.6%	-3,500	-3,500	0	
51.9%	-3,500	-3,500	0	
53.1%	-3,500	-3,500	0	
54.3%	-3,500	-3,500	0	
55.6%	-3,500	-4,052	-552	
56.8%	-3,824	-4,080	-256	
58.0%	-3,979	-4,115	-136	
59.3%	-4,052	-4,183	-131	
60.5%	-4,058	-4,215	-157	
61.7%	-4,120	-4,276	-156	
63.0%	-4,166	-4,305	-139	
64.2%	-4,326	-4,327	-1	
65.4%	-4,329	-4,330	-1	
66.7%	-4,355	-4,393	-38	
67.9%	-4,374	-4,519	-145	
69.1%	-4,394	-4,569	-175	
70.4%	-4,505	-4,601	-95	
71.6%	-4,549	-4,634	-85	
72.8%	-4,605	-4,670	-65	
74.1%	-4,633	-4,797	-164	
75.3%	-4,670	-4,854	-183	
76.5%	-4,720	-4,869	-148	
77.8%	-4,797	-4,932	-135	
79.0%	-4,806	-4,958	-152	
80.2%	-4,823	-5,000	-177	
81.5%	-4,856	-5,000	-144	
82.7%	-4,918	-5,000	-82	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-2,252	-2,306	-54	
1.2%	-2,901	-3,328	-427	
2.5%	-3,141	-3,400	-260	
3.7%	-3,201	-3,632	-432	
4.9%	-3,590	-3,991	-401	
6.2%	-3,938	-4,668	-730	
7.4%	-4,366	-5,653	-1,288	
8.6%	-4,464	-5,726	-1,262	
9.9%	-4,507	-5,807	-1,300	
11.1%	-5,014	-6,340	-1,327	
12.3%	-5,924	-6,374	-451	
13.6%	-6,041	-6,868	-827	
14.8%	-6,083	-6,877	-795	
16.0%	-6,250	-7,070	-820	
17.3%	-6,312	-7,229	-917	
18.5%	-6,325	-7,233	-908	
19.8%	-6,691	-7,368	-677	
21.0%	-6,908	-7,605	-697	
22.2%	-7,217	-7,676	-458	
23.5%	-7,301	-7,734	-434	
24.7%	-7,372	-7,745	-373	
25.9%	-7,385	-7,977	-592	
27.2%	-7,483	-7,979	-496	
28.4%	-7,553	-8,029	-477	
29.6%	-7,614	-8,284	-669	
30.9%	-7,709	-8,316	-607	
32.1%	-7,978	-8,715	-737	
33.3%	-8,016	-8,755	-739	
34.6%	-8,063	-8,856	-793	
35.8%	-8,108	-9,048	-940	
37.0%	-8,251	-9,064	-814	
38.3%	-8,327	-9,113	-786	
39.5%	-8,412	-9,141	-729	
40.7%	-8,711	-9,163	-453	
42.0%	-8,795	-9,179	-384	
43.2%	-8,824	-9,311	-487	
44.4%	-9,108	-9,385	-277	
45.7%	-9,176	-9,404	-227	
46.9%	-9,262	-9,512	-250	
48.1%	-9,285	-9,624	-339	
49.4%	-9,515	-9,697	-181	
50.6%	-9,544	-9,712	-169	
51.9%	-9,633	-9,731	-98	
53.1%	-9,727	-9,739	-12	
54.3%	-9,727	-9,742	-15	
55.6%	-9,739	-9,916	-177	
56.8%	-9,743	-9,930	-188	
58.0%	-9,883	-9,932	-49	
59.3%	-9,931	-9,995	-64	
60.5%	-9,963	-10,124	-161	
61.7%	-9,987	-10,140	-153	
63.0%	-10,026	-10,195	-169	
64.2%	-10,067	-10,260	-193	
65.4%	-10,259	-10,285	-25	
66.7%	-10,260	-10,302	-43	
67.9%	-10,291	-10,406	-114	
69.1%	-10,369	-10,444	-75	
70.4%	-10,376	-10,448	-72	
71.6%	-10,385	-10,639	-254	
72.8%	-10,405	-10,659	-254	
74.1%	-10,413	-10,725	-312	
75.3%	-10,444	-10,760	-317	
76.5%	-10,495	-10,826	-331	
77.8%	-10,579	-10,889	-310	
79.0%	-10,695	-11,003	-308	
80.2%	-10,790	-11,032	-242	
81.5%	-10,830	-11,088	-258	
82.7%	-10,863	-11,171	-308	
84.0%	-10,910	-11,178	-269	
85.2%	-11,004	-11,213	-210	
86.4%	-11,080	-11,223	-143	
87.7%	-11,087	-11,315	-228	
88.9%	-11,153	-11,328	-175	
90.1%	-11,179	-11,341	-162	
91.4%	-11,232	-11,371	-139	
92.6%	-11,283	-11,423	-140	
93.8%	-11,327	-11,456	-129	
95.1%	-11,354	-11,519	-165	
96.3%	-11,422	-11,563	-142	
97.5%	-11,519	-11,610	-91	
98.8%	-11,564	-11,712	-148	
100.0%	-11,713	-11,712	1	

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,955	-2,686	-732	
1.2%	-2,173	-3,049	-876	
2.5%	-2,309	-3,217	-909	
3.7%	-2,400	-3,576	-1,176	
4.9%	-2,583	-3,624	-1,041	
6.2%	-2,623	-3,708	-1,086	
7.4%	-2,794	-3,788	-995	
8.6%	-2,940	-3,799	-859	
9.9%	-2,969	-3,810	-842	
11.1%	-3,074	-4,125	-1,051	
12.3%	-3,503	-4,358	-855	
13.6%	-3,548	-4,839	-1,291	
14.8%	-3,642	-4,997	-1,356	
16.0%	-3,884	-5,453	-1,569	
17.3%	-3,899	-5,633	-1,735	
18.5%	-4,024	-5,987	-1,963	
19.8%	-4,140	-6,111	-1,971	
21.0%	-4,384	-6,420	-2,036	
22.2%	-4,589	-6,793	-2,204	
23.5%	-4,863	-6,874	-2,011	
24.7%	-5,395	-7,613	-2,218	
25.9%	-6,011	-7,897	-1,886	
27.2%	-6,750	-8,026	-1,276	
28.4%	-7,064	-8,221	-1,157	
29.6%	-7,169	-8,470	-1,301	
30.9%	-7,378	-8,738	-1,360	
32.1%	-7,798	-8,807	-1,009	
33.3%	-8,332	-8,854	-522	
34.6%	-8,680	-9,164	-485	
35.8%	-8,854	-9,226	-372	
37.0%	-8,973	-9,424	-451	
38.3%	-9,070	-9,540	-471	
39.5%	-9,088	-9,559	-471	
40.7%	-9,098	-9,573	-475	
42.0%	-9,395	-9,832	-437	
43.2%	-9,585	-9,838	-253	
44.4%	-9,677	-9,851	-174	
45.7%	-9,793	-9,868	-75	
46.9%	-9,821	-9,915	-93	
48.1%	-9,832	-9,984	-152	
49.4%	-9,868	-10,109	-241	
50.6%	-9,891	-10,159	-268	
51.9%	-9,939	-10,159	-220	
53.1%	-9,949	-10,213	-264	
54.3%	-10,036	-10,232	-195	
55.6%	-10,159	-10,238	-79	
56.8%	-10,195	-10,273	-78	
58.0%	-10,213	-10,292	-79	
59.3%	-10,232	-10,314	-82	
60.5%	-10,238	-10,324	-86	
61.7%	-10,265	-10,336	-71	
63.0%	-10,274	-10,349	-75	
64.2%	-10,292	-10,378	-86	
65.4%	-10,295	-10,397	-102	
66.7%	-10,296	-10,511	-214	
67.9%	-10,349	-10,522	-173	
69.1%	-10,397	-10,549	-152	
70.4%	-10,511	-10,587	-77	
71.6%	-10,549	-10,678	-129	
72.8%	-10,587	-10,710	-124	
74.1%	-10,651	-10,739	-88	
75.3%	-10,652	-10,746	-94	
76.5%	-10,679	-10,752	-74	
77.8%	-10,709	-10,758	-49	
79.0%	-10,739	-10,796	-57	
80.2%	-10,752	-10,812	-60	
81.5%	-10,758	-10,825	-67	
82.7%	-10,795	-10,847	-52	
84.0%	-10,825	-10,855	-29	
85.2%	-10,847	-10,898	-51	
86.4%	-10,855	-10,903	-49	
87.7%	-10,899	-10,906	-7	
88.9%	-10,903	-10,919	-16	
90.1%	-10,906	-10,923	-18	
91.4%	-10,919	-10,925	-6	
92.6%	-10,923	-10,941	-18	
93.8%	-10,924	-10,948	-24	
95.1%	-10,930	-10,966	-36	
96.3%	-10,966	-10,992	-27	
97.5%	-10,997	-10,997	0	
98.8%	-11,023	-10,997	25	
100.0%	-11,119	-11,119	0	

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,449	-1,247	202	
1.2%	-1,450	-3,329	-1,878	
2.5%	-2,523	-3,704	-1,181	
3.7%	-3,078	-3,765	-687	
4.9%	-3,193	-3,879	-686	
6.2%	-3,301	-4,050	-750	
7.4%	-3,430	-4,138	-708	
8.6%	-3,483	-4,235	-752	
9.9%	-3,779	-4,320	-541	
11.1%	-3,789	-4,406	-617	
12.3%	-3,852	-4,565	-713	
13.6%	-4,129	-4,565	-437	
14.8%	-4,213	-4,878	-666	
16.0%	-4,360	-4,962	-602	
17.3%	-4,594	-5,095	-501	
18.5%	-4,653	-5,114	-461	
19.8%	-4,657	-5,132	-474	
21.0%	-4,668	-5,550	-882	
22.2%	-4,756	-5,583	-827	
23.5%	-4,791	-6,417	-1,626	
24.7%	-4,958	-6,451	-1,493	
25.9%	-4,984	-6,602	-1,619	
27.2%	-5,062	-6,605	-1,543	
28.4%	-5,149	-6,875	-1,727	
29.6%	-5,156	-7,141	-1,986	
30.9%	-5,550	-7,411	-1,860	
32.1%	-5,577	-7,427	-1,850	
33.3%	-5,600	-7,511	-1,911	
34.6%	-5,781	-7,611	-1,830	
35.8%	-5,955	-7,628	-1,673	
37.0%	-6,002	-7,710	-1,708	
38.3%	-6,234	-7,814	-1,579	
39.5%	-6,375	-8,220	-1,845	
40.7%	-6,491	-8,280	-1,789	
42.0%	-6,596	-8,318	-1,722	
43.2%	-6,783	-8,400	-1,618	
44.4%	-6,796	-8,454	-1,658	
45.7%	-6,805	-8,485	-1,679	
46.9%	-6,846	-8,539	-1,693	
48.1%	-6,909	-8,547	-1,637	
49.4%	-7,206	-8,597	-1,391	
50.6%	-7,402	-8,671	-1,269	
51.9%	-7,419	-8,684	-1,265	
53.1%	-7,831	-8,689	-859	
54.3%	-7,863	-8,705	-842	
55.6%	-8,004	-8,931	-928	
56.8%	-8,035	-8,980	-945	
58.0%	-8,400	-8,989	-589	
59.3%	-8,430	-9,039	-609	
60.5%	-8,537	-9,075	-538	
61.7%	-8,572	-9,089	-517	
63.0%	-8,676	-9,338	-662	
64.2%	-8,692	-9,389	-697	
65.4%	-8,737	-9,405	-669	
66.7%	-8,760	-9,460	-700	
67.9%	-8,763	-9,505	-742	
69.1%	-8,793	-9,545	-752	
70.4%	-8,808	-9,566	-758	
71.6%	-8,810	-9,627	-817	
72.8%	-8,963	-9,730	-767	
74.1%	-9,105	-9,737	-632	
75.3%	-9,144	-9,788	-644	
76.5%	-9,161	-9,862	-700	
77.8%	-9,177	-9,911	-734	
79.0%	-9,486	-9,937	-451	
80.2%	-9,584	-9,947	-363	
81.5%	-9,586	-10,022	-436	
82.7%	-9,627	-10,029	-402	
84.0%	-9,702	-10,049	-347	
85.2%	-9,774	-10,053	-280	
86.4%	-9,849	-10,074	-225	
87.7%	-9,859	-10,084	-225	
88.9%	-9,884	-10,092	-208	
90.1%	-10,032	-10,133	-101	
91.4%	-10,053	-10,169	-116	
92.6%	-10,066	-10,251	-186	
93.8%	-10,175	-10,276	-102	
95.1%	-10,178	-10,292	-114	
96.3%	-10,292	-10,337	-46	
97.5%	-10,362	-10,360	2	
98.8%	-10,383	-10,382	0	
100.0%	-10,461	-10,454	7	

Figure SW-36-b
Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Probability of Exceedance

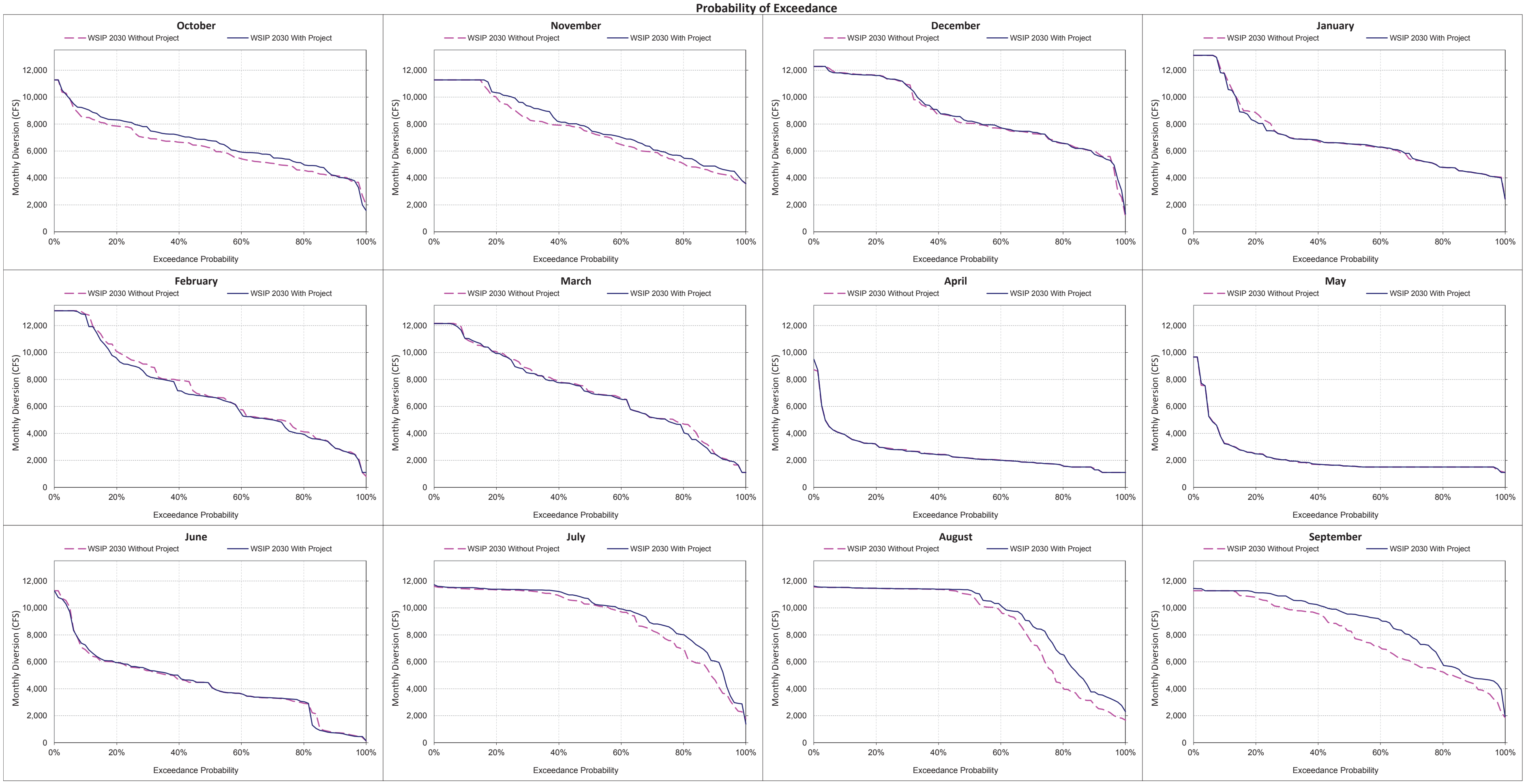


Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,280	0	0.0%
1.2%	11,280	11,280	0	0.0%
2.5%	10,374	10,515	141	1.4%
3.7%	10,304	10,215	-88	-0.9%
4.9%	9,912	9,881	-31	-0.3%
6.2%	9,186	9,516	330	3.6%
7.4%	8,888	9,258	370	4.2%
8.6%	8,562	9,228	666	7.8%
9.9%	8,494	9,134	639	7.5%
11.1%	8,486	9,038	552	6.5%
12.3%	8,337	8,869	533	6.4%
13.6%	8,276	8,791	515	6.2%
14.8%	8,116	8,547	431	5.3%
16.0%	8,083	8,454	371	4.6%
17.3%	7,925	8,345	420	5.3%
18.5%	7,889	8,336	448	5.7%
19.8%	7,854	8,316	463	5.9%
21.0%	7,825	8,284	459	5.9%
22.2%	7,795	8,222	427	5.5%
23.5%	7,788	8,150	362	4.6%
24.7%	7,700	8,118	418	5.4%
25.9%	7,307	7,959	652	8.9%
27.2%	7,080	7,902	822	11.6%
28.4%	7,023	7,812	789	11.2%
29.6%	7,020	7,805	785	11.2%
30.9%	6,913	7,475	562	8.1%
32.1%	6,903	7,448	545	7.9%
33.3%	6,872	7,388	516	7.5%
34.6%	6,779	7,305	526	7.8%
35.8%	6,732	7,280	548	8.1%
37.0%	6,731	7,248	517	7.7%
38.3%	6,721	7,246	525	7.8%
39.5%	6,666	7,189	522	7.8%
40.7%	6,639	7,110	471	7.1%
42.0%	6,618	7,048	430	6.5%
43.2%	6,607	7,032	425	6.4%
44.4%	6,442	6,960	518	8.0%
45.7%	6,433	6,890	457	7.1%
46.9%	6,403	6,875	471	7.4%
48.1%	6,338	6,864	527	8.3%
49.4%	6,261	6,791	530	8.5%
50.6%	6,220	6,757	537	8.6%
51.9%	5,955	6,742	787	13.2%
53.1%	5,949	6,532	583	9.8%
54.3%	5,897	6,478	581	9.9%
55.6%	5,832	6,305	473	8.1%
56.8%	5,675	6,086	411	7.3%
58.0%	5,503	6,048	545	9.9%
59.3%	5,474	5,936	463	8.5%
60.5%	5,393	5,904	512	9.5%
61.7%	5,332	5,892	560	10.5%
63.0%	5,295	5,889	594	11.2%
64.2%	5,228	5,873	645	12.3%
65.4%	5,206	5,844	638	12.2%
66.7%	5,166	5,776	610	11.8%
67.9%	5,145	5,766	621	12.1%
69.1%	5,104	5,739	635	12.4%
70.4%	5,072	5,483	411	8.1%
71.6%	4,994	5,474	479	9.6%
72.8%	4,959	5,465	506	10.2%
74.1%	4,934	5,410	476	9.6%
75.3%	4,909	5,386	477	9.7%
76.5%	4,831	5,231	400	8.3%
77.8%	4,602	5,150	548	11.9%
79.0%	4,583	5,140	557	12.2%
80.2%	4,554	4,967	413	9.1%
81.5%	4,488	4,928	441	9.8%
82.7%	4,486	4,928	442	9.9%
84.0%	4,380	4,898	518	11.8%
85.2%	4,289	4,815	526	12.3%
86.4%	4,269	4,765	497	11.6%
87.7%	4,204	4,453	249	5.9%
88.9%	4,192	4,237	45	1.1%
90.1%	4,164	4,170	6	0.2%
91.4%	4,134	4,042	-92	-2.2%
92.6%	4,063	4,023	-40	-1.0%
93.8%	4,023	3,954	-68	-1.7%
95.1%	3,795	3,908	113	3.0%
96.3%	3,701	3,782	82	2.2%
97.5%	3,674	3,291	-383	-10.4%
98.8%	2,709	2,000	-709	-26.2%
100.0%	2,000	1,599	-401	-20.1%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,280	0	0.0%
1.2%	11,280	11,280	0	0.0%
2.5%	11,280	11,280	0	0.0%
3.7%	11,280	11,280	0	0.0%
4.9%	11,280	11,280	0	0.0%
6.2%	11,280	11,280	0	0.0%
7.4%	11,280	11,280	0	0.0%
8.6%	11,280	11,280	0	0.0%
9.9%	11,280	11,280	0	0.0%
11.1%	11,280	11,280	0	0.0%
12.3%	11,280	11,280	0	0.0%
13.6%	11,280	11,280	0	0.0%
14.8%	11,280	11,280	0	0.0%
16.0%	10,842	11,280	438	4.0%
17.3%	10,523	11,130	607	5.8%
18.5%	10,102	10,390	288	2.9%
19.8%	10,032	10,345	313	3.1%
21.0%	9,668	10,301	633	6.5%
22.2%	9,512	10,148	636	6.7%
23.5%	9,452	10,100	649	6.9%
24.7%	9,171	10,026	854	9.3%
25.9%	9,017	9,924	907	10.1%
27.2%	8,787	9,613	826	9.4%
28.4%	8,568	9,594	1,025	12.0%
29.6%	8,508	9,373	866	10.2%
30.9%	8,276	9,318	1,043	12.6%
32.1%	8,228	9,157	929	11.3%
33.3%	8,215	9,145	930	11.3%
34.6%	8,186	9,048	862	10.5%
35.8%	8,081	8,965	883	10.9%
37.0%	7,967	8,922	955	12.0%
38.3%	7,941	8,512	571	7.2%
39.5%	7,933	8,225	292	3.7%
40.7%	7,913	8,147	235	3.0%
42.0%	7,909	8,144	235	3.0%
43.2%	7,899	8,027	128	1.6%
44.4%	7,811	8,021	210	2.7%
45.7%	7,779	8,018	239	3.1%
46.9%	7,731	7,912	181	2.3%
48.1%	7,511	7,872	362	4.8%
49.4%	7,445	7,738	293	3.9%
50.6%	7,334	7,469	136	1.8%
51.9%	7,226	7,418	192	2.7%
53.1%	7,164	7,346	182	2.5%
54.3%	7,066	7,231	165	2.3%
55.6%	7,042	7,213	171	2.4%
56.8%	6,964	7,189	224	3.2%
58.0%	6,633	7,135	502	7.6%
59.3%	6,532	7,072	540	8.3%
60.5%	6,443	6,991	548	8.5%
61.7%	6,358	6,894	536	8.4%
63.0%	6,325	6,880	555	8.8%
64.2%	6,250	6,792	541	8.7%
65.4%	6,080	6,644	564	9.3%
66.7%	5,997	6,565	568	9.5%
67.9%	5,975	6,393	418	7.0%
69.1%	5,954	6,352	399	6.7%
70.4%	5,912	6,084	172	2.9%
71.6%	5,886	6,054	168	2.9%
72.8%	5,658	5,954	297	5.2%
74.1%	5,626	5,919	293	5.2%
75.3%	5,430	5,770	340	6.3%
76.5%	5,393	5,697	304	5.6%
77.8%	5,195	5,694	499	9.6%
79.0%	5,177	5,659	482	9.3%
80.2%	5,029	5,453	424	8.4%
81.5%	4,841	5,452	611	12.6%
82.7%	4,819	5,414	596	12.4%
84.0%	4,812	5,264	452	9.4%
85.2%	4,742	5,042	300	6.3%
86.4%	4,649	4,892	243	5.2%
87.7%	4,608	4,883	275	6.0%
88.9%	4,472	4,881	409	9.1%
90.1%	4,405	4,880	475	10.8%
91.4%	4,312	4,737	425	9.9%
92.6%	4,271	4,634	363	8.5%
93.8%	4,227	4,581	354	8.4%
95.1%	4,207	4,519	312	7.4%
96.3%	3,898	4,502	605	15.5%
97.5%	3,820	4,152	332	8.7%
98.8%	3,802	3,802	0	0.0%
100.0%	3,571	3,571	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,278	12,278	0	0.0%
1.2%	12,278	12,278	0	0.0%
2.5%	12,278	12,278	0	0.0%
3.7%	12,278	12,278	0	0.0%
4.9%	12,138	11,928	-210	-1.7%
6.2%	11,928	11,810	-118	-1.0%
7.4%	11,810	11,808	-2	0.0%
8.6%	11,808	11,804	-4	0.0%
9.9%	11,804	11,748	-56	-0.5%
11.1%	11,748	11,742	-6	-0.1%
12.3%	11,742	11,689	-53	-0.5%
13.6%	11,689	11,686	-3	0.0%
14.8%	11,686	11,663	-23	-0.2%
16.0%	11,677	11,654	-22	-0.2%
17.3%	11,663	11,642	-21	-0.2%
18.5%	11,654	11,642	-13	-0.1%
19.8%	11,642	11,616	-26	-0.2%
21.0%	11,616	11,602	-14	-0.1%
22.2%	11,550	11,505	-45	-0.4%
23.5%	11,349	11,375	26	0.2%
24.7%	11,344	11,340	-4	0.0%
25.9%	11,316	11,338	23	0.2%
27.2%	11,206	11,268	62	0.6%
28.4%	11,168	11,174	6	0.1%
29.6%	10,947	10,900	-47	-0.4%
30.9%	10,908	10,671	-237	-2.2%
32.1%	9,812	10,406	594	6.1%
33.3%	9,795	9,978	183	1.9%
34.6%	9,434	9,720	286	3.0%
35.8%	9,317	9,434	117	1.3%
37.0%	9,140	9,382	242	2.6%
38.3%	9,094	9,105	11	0.1%
39.5%	8,763	9,081	318	3.6%
40.7%	8,762	8,763	0	0.0%
42.0%	8,697	8,758	61	0.7%
43.2%	8,654	8,697	43	0.5%
44.4%	8,561	8,595	34	0.4%
45.7%	8,215	8,561	346	4.2%
46.9%	8,112	8,560	448	5.5%
48.1%	8,082	8,314	233	2.9%
49.4%	8,057	8,215	158	2.0%
50.6%	8,050	8,212	162	2.0%
51.9%	8,046	8,148	102	1.3%
53.1%	7,943	8,057	114	1.4%
54.3%	7,940	7,949	9	0.1%
55.6%	7,862	7,943	80	1.0%
56.8%	7,718	7,940	222	2.9%
58.0%	7,717	7,925	208	2.7%
59.3%	7,692	7,799	107	1.4%
60.5%	7,655	7,692	37	0.5%
61.7%	7,607	7,642	35	0.5%
63.0%	7,494	7,607	114	1.5%
64.2%	7,463	7,494	31	0.4%
65.4%	7,458	7,492	35	0.5%
66.7%	7,454	7,463	9	0.1%
67.9%	7,413	7,459	47	0.6%
69.1%	7,375	7,458	82	1.1%
70.4%	7,277	7,395	117	1.6%
71.6%	7,273	7,375	102	1.4%
72.8%	7,248	7,277	30	0.4%
74.1%	7,222	7,256	35	0.5%
75.3%	6,881	6,962	81	1.2%
76.5%	6,829	6,728	-102	-1.5%
77.8%	6,648	6,686	38	0.6%
79.0%	6,583	6,616	33	0.5%
80.2%	6,563	6,552	-11	-0.2%
81.5%	6,524	6,512	-12	-0.2%
82.7%	6,401	6,313	-88	-1.4%
84.0%	6,270	6,201	-69	-1.1%
85.2%	6,216	6,187	-30	-0.5%
86.4%	6,154	6,180	26	0.4%
87.7%	6,078	6,101	22	0.4%
88.9%	6,030	6,017	-13	-0.2%
90.1%	5,994	5,752	-242	-4.0%
91.4%	5,782	5,644	-138	-2.4%
92.6%	5,597	5,557	-40	-0.7%
93.8%	5,595	5,386	-209	-3.7%
95.1%	5,591	5,298	-293	-5.2%
96.3%	4,658	4,960	302	6.5%
97.5%	3,021	3,905	884	29.3%
98.8%	2,552	3,067	515	20.2%
100.0%	1,100	1,316	216	19.6%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,100	13,100	0	0.0%
1.2%	13,100	13,100	0	0.0%
2.5%	13,100	13,100	0	0.0%
3.7%	13,100	13,100	0	0.0%
4.9%	13,100	13,100	0	0.0%
6.2%	13,100	13,100	0	0.0%
7.4%	12,983	12,948	-34	-0.3%
8.6%	12,131	11,818	-313	-2.6%
9.9%	11,766	11,766	0	0.0%
11.1%	11,166	10,569	-597	-5.3%
12.3%	10,570	10,506	-64	-0.6%
13.6%	10,057	10,033	-24	-0.2%
14.8%	9,526	8,913	-613	-6.4%
16.0%	8,989	8,871	-118	-1.3%
17.3%	8,980	8,733	-247	-2.7%
18.5%	8,913	8,329	-584	-6.5%
19.8%	8,882	8,209	-673	-7.6%
21.0%	8,656	8,044	-612	-7.1%
22.2%	8,337	8,039	-298	-3.6%
23.5%	8,209	7,508	-701	-8.5%
24.7%	8,044	7,502	-542	-6.7%
25.9%	7,520	7,493	-27	-0.4%
27.2%	7,292	7,292	0	0.0%
28.4%	7,237	7,237	0	0.0%
29.6%	7,157	7,157	0	0.0%
30.9%	6,990	6,990	0	0.0%
32.1%	6,948	6,906	-41	-0.6%
33.3%	6,898	6,894	-3	-0.1%
34.6%	6,889	6,894	5	0.1%
35.8%	6,858	6,858	0	0.0%
37.0%	6,855	6,858	3	0.0%
38.3%	6,820	6,848	28	0.4%
39.5%	6,761	6,821	60	0.9%
40.7%	6,648	6,754	106	1.6%
42.0%	6,638	6,638	0	0.0%
43.2%	6,619	6,626	8	0.1%
44.4%	6,616	6,620	4	0.1%
45.7%	6,609	6,609	1	0.0%
46.9%	6,601	6,601	0	0.0%
48.1%	6,554	6,592	39	0.6%
49.4%	6,524	6,540	17	0.3%
50.6%	6,520	6,526	6	0.1%
51.9%	6,493	6,508	15	0.2%
53.1%	6,468	6,500	32	0.5%
54.3%	6,413	6,490	77	1.2%
55.6%	6,386	6,467	81	1.3%
56.8%	6,359	6,414	55	0.9%
58.0%	6,298	6,343	45	0.7%
59.3%	6,288	6,298	11	0.2%
60.5%	6,282	6,283	1	0.0%
61.7%	6,221	6,241	20	0.3%
63.0%	6,111	6,221	109	1.8%
64.2%	6,091	6,111	20	0.3%
65.4%	6,010	6,091	81	1.4%
66.7%	5,834	6,010	175	3.0%
67.9%	5,830	5,834	4	0.1%
69.1%	5,435	5,830	395	7.3%
70.4%	5,339	5,436	97	1.8%
71.6%	5,292	5,365	72	1.4%
72.8%	5,290	5,292	3	0.1%
74.1%	5,205	5,207	2	0.0%
75.3%	5,167	5,167	0	0.0%
76.5%	5,108	5,108	0	0.0%
77.8%	5,003	5,003	0	0.0%
79.0%	4,811	4,811	0	0.0%
80.2%	4,784	4,784	0	0.0%
81.5%	4,760	4,760	0	0.0%
82.7%	4,759	4,759	0	0.0%
84.0%	4,745	4,745	0	0.0%
85.2%	4,527	4,530	3	0.1%
86.4%	4,516	4,520	4	0.1%
87.7%	4,450	4,450	0	0.0%
88.9%	4,440	4,440	0	0.0%
90.1%	4,385	4,388	3	0.1%
91.4%	4,341	4,341	0	0.0%
92.6%	4,309	4,309	0	0.0%
93.8%	4,257	4,257	0	0.0%
95.1%	4,135	4,135	0	0.0%
96.3%	4,110	4,103	-7	-0.2%
97.5%	4,080	4,049	-31	-0.8%
98.8%	4,059	4,005	-54	-1.3%
100.0%	2,443	2,437	-6	-0.3%

Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,100	13,100	0	0.0%
1.2%	13,100	13,100	0	0.0%
2.5%	13,100	13,100	0	0.0%
3.7%	13,100	13,100	0	0.0%
4.9%	13,100	13,100	0	0.0%
6.2%	13,100	13,100	0	0.0%
7.4%	13,100	13,037	-63	-0.5%
8.6%	13,037	12,856	-181	-1.4%
9.9%	12,859	12,833	-25	-0.2%
11.1%	12,777	11,929	-849	-6.6%
12.3%	11,929	11,912	-17	-0.1%
13.6%	11,689	11,466	-223	-1.9%
14.8%	11,385	10,911	-474	-4.2%
16.0%	10,911	10,612	-299	-2.7%
17.3%	10,637	10,254	-383	-3.6%
18.5%	10,624	9,792	-832	-7.8%
19.8%	10,118	9,626	-492	-4.9%
21.0%	9,944	9,310	-634	-6.4%
22.2%	9,803	9,151	-652	-6.6%
23.5%	9,628	9,132	-496	-5.2%
24.7%	9,447	9,034	-412	-4.4%
25.9%	9,392	8,976	-416	-4.4%
27.2%	9,310	8,882	-428	-4.6%
28.4%	9,151	8,652	-499	-5.5%
29.6%	9,140	8,298	-842	-9.2%
30.9%	8,935	8,173	-762	-8.5%
32.1%	8,882	8,105	-777	-8.8%
33.3%	8,173	8,052	-121	-1.5%
34.6%	8,052	8,019	-33	-0.4%
35.8%	8,019	7,947	-72	-0.9%
37.0%	8,014	7,892	-122	-1.5%
38.3%	8,010	7,833	-178	-2.2%
39.5%	7,947	7,173	-774	-9.7%
40.7%	7,938	7,140	-798	-10.0%
42.0%	7,892	6,967	-924	-11.7%
43.2%	7,844	6,890	-954	-12.2%
44.4%	7,173	6,883	-289	-4.0%
45.7%	6,970	6,813	-158	-2.3%
46.9%	6,890	6,808	-82	-1.2%
48.1%	6,883	6,751	-132	-1.9%
49.4%	6,751	6,695	-57	-0.8%
50.6%	6,695	6,675	-20	-0.3%
51.9%	6,675	6,637	-38	-0.6%
53.1%	6,656	6,548	-108	-1.6%
54.3%	6,637	6,424	-213	-3.2%
55.6%	6,424	6,364	-61	-0.9%
56.8%	6,279	6,279	0	0.0%
58.0%	6,148	6,148	0	0.0%
59.3%	5,783	5,699	-84	-1.5%
60.5%	5,740	5,272	-467	-8.1%
61.7%	5,255	5,237	-18	-0.3%
63.0%	5,238	5,230	-8	-0.2%
64.2%	5,230	5,140	-90	-1.7%
65.4%	5,162	5,132	-30	-0.6%
66.7%	5,140	5,123	-18	-0.3%
67.9%	5,132	5,073	-59	-1.1%
69.1%	5,058	5,034	-24	-0.5%
70.4%	5,050	4,998	-52	-1.0%
71.6%	5,000	4,919	-80	-1.6%
72.8%	4,998	4,830	-168	-3.4%
74.1%	4,919	4,430	-490	-10.0%
75.3%	4,830	4,163	-667	-13.8%
76.5%	4,470	4,092	-378	-8.5%
77.8%	4,295	4,012	-283	-6.6%
79.0%	4,163	3,990	-173	-4.2%
80.2%	4,104	3,904	-200	-4.9%
81.5%	4,092	3,725	-366	-9.0%
82.7%	3,904	3,611	-294	-7.5%
84.0%	3,611	3,579	-31	-0.9%
85.2%	3,579	3,542	-37	-1.0%
86.4%	3,542	3,486	-56	-1.6%
87.7%	3,416	3,416	0	0.0%
88.9%	3,137	3,137	0	0.0%
90.1%	2,882	2,882	0	0.0%
91.4%	2,836	2,836	0	0.0%
92.6%	2,695	2,695	0	0.0%
93.8%	2,621	2,621	0	0.0%
95.1%	2,618	2,498	-120	-4.6%
96.3%	2,456	2,456	0	0.0%
97.5%	2,206	2,017	-189	-8.6%
98.8%	1,100	1,100	0	0.0%
100.0%	807	1,100	293	36.3%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,161	12,161	0	0.0%
1.2%	12,161	12,161	0	0.0%
2.5%	12,161	12,161	0	0.0%
3.7%	12,161	12,161	0	0.0%
4.9%	12,161	12,161	0	0.0%
6.2%	12,161	12,085	-75	-0.6%
7.4%	12,085	11,918	-167	-1.4%
8.6%	11,918	11,667	-251	-2.1%
9.9%	11,048	11,048	0	0.0%
11.1%	10,873	11,029	156	1.4%
12.3%	10,760	10,873	113	1.0%
13.6%	10,544	10,760	216	2.0%
14.8%	10,530	10,672	142	1.3%
16.0%	10,420	10,420	0	0.0%
17.3%	10,395	10,395	0	0.0%
18.5%	10,105	10,105	0	0.0%
19.8%	10,084	9,942	-142	-1.4%
21.0%	9,953	9,910	-43	-0.4%
22.2%	9,909	9,750	-159	-1.6%
23.5%	9,655	9,655	0	0.0%
24.7%	9,499	9,452	-48	-0.5%
25.9%	9,452	8,962	-490	-5.2%
27.2%	9,312	8,865	-447	-4.8%
28.4%	8,931	8,798	-133	-1.5%
29.6%	8,863	8,511	-352	-4.0%
30.9%	8,763	8,459	-304	-3.5%
32.1%	8,495	8,437	-57	-0.7%
33.3%	8,290	8,280	-9	-0.1%
34.6%	8,252	8,275	23	0.3%
35.8%	8,196	7,986	-210	-2.6%
37.0%	8,160	7,923	-238	-2.9%
38.3%	7,998	7,916	-82	-1.0%
39.5%	7,923	7,785	-138	-1.7%
40.7%	7,785	7,742	-43	-0.6%
42.0%	7,742	7,741	-2	0.0%
43.2%	7,728	7,719	-9	-0.1%
44.4%	7,719	7,649	-70	-0.9%
45.7%	7,649	7,554	-95	-1.2%
46.9%	7,554	7,513	-41	-0.5%
48.1%	7,513	7,153	-360	-4.8%
49.4%	7,153	7,096	-57	-0.8%
50.6%	7,096	6,958	-139	-2.0%
51.9%	6,958	6,890	-68	-1.0%
53.1%	6,890	6,874	-17	-0.2%
54.3%	6,874	6,834	-40	-0.6%
55.6%	6,834	6,813	-21	-0.3%
56.8%	6,813	6,808	-5	-0.1%
58.0%	6,808	6,691	-116	-1.7%
59.3%	6,691	6,591	-100	-1.5%
60.5%	6,591	6,514	-77	-1.2%
61.7%	6,504	6,504	0	0.0%
63.0%	5,775	5,775	0	0.0%
64.2%	5,687	5,687	0	0.0%
65.4%	5,613	5,613	0	0.0%
66.7%	5,516	5,516	0	0.0%
67.9%	5,429	5,429	0	0.0%
69.1%	5,182	5,213	30	0.6%
70.4%	5,161	5,161	0	0.0%
71.6%	5,103	5,099	-3	-0.1%
72.8%	5,099	5,071	-28	-0.5%
74.1%	5,071	5,062	-10	-0.2%
75.3%	5,062	4,876	-186	-3.7%
76.5%	5,053	4,770	-283	-5.6%
77.8%	4,876	4,686	-190	-3.9%
79.0%	4,770	4,655	-116	-2.4%
80.2%	4,686	4,017	-670	-14.3%
81.5%	4,654	3,956	-698	-15.0%
82.7%	4,360	3,547	-813	-18.7%
84.0%	4,086	3,538	-548	-13.4%
85.2%	3,547	3,323	-224	-6.3%
86.4%	3,323	3,083	-241	-7.2%
87.7%	3,176	2,894	-282	-8.9%
88.9%	2,894	2,524	-371	-12.8%
90.1%	2,470	2,470	0	0.0%
91.4%	2,279	2,279	0	0.0%
92.6%	2,159	2,079	-80	-3.7%
93.8%	2,079	2,030	-49	-2.3%
95.1%	1,886	1,943	57	3.0%
96.3%	1,657	1,886	229	13.8%
97.5%	1,652	1,652	0	0.0%
98.8%	1,100	1,109	9	0.8%
100.0%	1,100	1,100	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,720	9,499	778	8.9%
1.2%	8,622	8,705	84	1.0%
2.5%	6,088	6,086	-2	0.0%
3.7%	4,977	4,969	-8	-0.2%
4.9%	4,498	4,499	1	0.0%
6.2%	4,274	4,258	-16	-0.4%
7.4%	4,115	4,098	-16	-0.4%
8.6%	4,005	4,005	0	0.0%
9.9%	3,904	3,903	0	0.0%
11.1%	3,725	3,709	-16	-0.4%
12.3%	3,535	3,535	0	0.0%
13.6%	3,489	3,474	-15	-0.4%
14.8%	3,390	3,386	-4	-0.1%
16.0%	3,279	3,279	0	0.0%
17.3%	3,274	3,263	-11	-0.3%
18.5%	3,249	3,249	0	0.0%
19.8%	3,219	3,219	0	0.0%
21.0%	2,970	2,971	0	0.0%
22.2%	2,954	2,953	0	0.0%
23.5%	2,913	2,858	-55	-1.9%
24.7%	2,875	2,821	-53	-1.9%
25.9%	2,821	2,790	-32	-1.1%
27.2%	2,790	2,787	-3	-0.1%
28.4%	2,787	2,783	-4	-0.2%
29.6%	2,783	2,680	-103	-3.7%
30.9%	2,680	2,670	-10	-0.4%
32.1%	2,670	2,658	-13	-0.5%
33.3%	2,658	2,640	-18	-0.7%
34.6%	2,647	2,508	-139	-5.2%
35.8%	2,508	2,497	-11	-0.4%
37.0%	2,504	2,470	-34	-1.4%
38.3%	2,470	2,459	-10	-0.4%
39.5%	2,460	2,437	-23	-0.9%
40.7%	2,440	2,410	-30	-1.2%
42.0%	2,437	2,402	-34	-1.4%
43.2%	2,391	2,391	0	0.0%
44.4%	2,261	2,261	0	0.0%
45.7%	2,228	2,228	0	0.0%
46.9%	2,208	2,208	0	0.0%
48.1%	2,189	2,189	0	0.0%
49.4%	2,171	2,171	0	0.0%
50.6%	2,152	2,140	-12	-0.6%
51.9%	2,140	2,091	-49	-2.3%
53.1%	2,091	2,076	-15	-0.7%
54.3%	2,077	2,059	-17	-0.8%
55.6%	2,059	2,058	-1	0.0%
56.8%	2,059	2,056	-3	-0.1%
58.0%	2,056	2,028	-28	-1.4%
59.3%	2,028	2,000	-28	-1.4%
60.5%	2,014	1,999	-15	-0.8%
61.7%	1,975	1,975	0	0.0%
63.0%	1,960	1,961	0	0.0%
64.2%	1,948	1,948	0	0.0%
65.4%	1,934	1,934	0	0.0%
66.7%	1,876	1,876	0	0.0%
67.9%	1,869	1,869	0	0.0%
69.1%	1,848	1,848	0	0.0%
70.4%	1,846	1,845	0	0.0%
71.6%	1,785	1,784	0	0.0%
72.8%	1,784	1,784	0	0.0%
74.1%	1,764	1,762	-2	-0.1%
75.3%	1,744	1,744	0	0.0%
76.5%	1,735	1,735	0	0.0%
77.8%	1,708	1,713	5	0.3%
79.0%	1,680	1,680	0	0.0%
80.2%	1,557	1,557	0	0.0%
81.5%	1,545	1,545	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,500	1,500	0	0.0%
90.1%	1,382	1,300	-82	-5.9%
91.4%	1,273	1,289	17	1.3%
92.6%	1,100	1,100	0	0.0%
93.8%	1,100	1,100	0	0.0%
95.1%	1,100	1,100	0	0.0%
96.3%	1,100	1,100	0	0.0%
97.5%	1,100	1,100	0	0.0%
98.8%	1,100	1,100	0	0.0%
100.0%	1,100	1,100	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,664	9,664	0	0.0%
1.2%	9,664	9,664	0	0.0%
2.5%	7,571	7,715	145	1.9%
3.7%	7,536	7,534	-3	0.0%
4.9%	5,274	5,252	-22	-0.4%
6.2%	4,877	4,856	-22	-0.4%
7.4%	4,631	4,609	-23	-0.5%
8.6%	3,803	3,792	-10	-0.3%
9.9%	3,268	3,245	-22	-0.7%
11.1%	3,204	3,182	-22	-0.7%
12.3%	3,088	3,067	-21	-0.7%
13.6%	2,974	2,953	-21	-0.7%
14.8%	2,780	2,780	0	0.0%
16.0%	2,710	2,711	0	0.0%
17.3%	2,596	2,596	0	0.0%
18.5%	2,589	2,589	0	0.0%
19.8%	2,513	2,489	-23	-0.9%
21.0%	2,499	2,476	-23	-0.9%
22.2%	2,464	2,441	-23	-0.9%
23.5%	2,251	2,251	0	0.0%
24.7%	2,220	2,220	0	0.0%
25.9%	2,114	2,115	1	0.1%
27.2%	2,083	2,083	0	0.0%
28.4%	2,050	2,050	0	0.0%
29.6%	2,046	2,047	1	0.1%
30.9%	1,950	1,950	0	0.0%
32.1%	1,935	1,940	5	0.3%
33.3%	1,842	1,935	93	5.1%
34.6%	1,841	1,842	1	0.1%
35.8%	1,838	1,841	4	0.2%
37.0%	1,734	1,837	104	6.0%
38.3%	1,709	1,734	25	1.5%
39.5%	1,698	1,709	11	0.6%
40.7%	1,674	1,698	24	1.4%
42.0%	1,664	1,673	9	0.5%
43.2%	1,662	1,662	0	0.0%
44.4%	1,642	1,641	0	0.0%
45.7%	1,641	1,641	0	0.0%
46.9%	1,633	1,633	0	0.0%
48.1%	1,582	1,582	0	0.0%
49.4%	1,576	1,578	2	0.1%
50.6%	1,566	1,555	-11	-0.7%
51.9%	1,554	1,554	0	0.0%
53.1%	1,516	1,525	9	0.6%
54.3%	1,508	1,511	3	0.2%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,500	1,500	0	0.0%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,500	1,500	0	0.0%
77.8%	1,500	1,500	0	0.0%
79.0%	1,500	1,500	0	0.0%
80.2%	1,500	1,500	0	0.0%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,500	1,500	0	0.0%
90.1%	1,500	1,500	0	0.0%
91.4%	1,500	1,500	0	0.0%
92.6%	1,500	1,500	0	0.0%
93.8%	1,500	1,500	0	0.0%
95.1%	1,500	1,500	0	0.0%
96.3%	1,500	1,500	0	0.0%
97.5%	1,247	1,378	132	10.6%
98.8%	1,172	1,100	-72	-6.2%
100.0%	1,100	1,100	0	0.0%

Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,280	0	0.0%
1.2%	11,280	10,779	-501	-4.4%
2.5%	10,711	10,664	-46	-0.4%
3.7%	10,559	10,314	-245	-2.3%
4.9%	10,055	9,719	-336	-3.3%
6.2%	8,366	8,322	-44	-0.5%
7.4%	7,813	7,813	0	0.0%
8.6%	7,076	7,390	314	4.4%
9.9%	6,904	7,254	350	5.1%
11.1%	6,632	6,876	244	3.7%
12.3%	6,404	6,632	228	3.6%
13.6%	6,341	6,403	63	1.0%
14.8%	6,075	6,224	149	2.5%
16.0%	6,036	6,104	67	1.1%
17.3%	6,024	6,080	56	0.9%
18.5%	6,008	6,075	67	1.1%
19.8%	5,945	5,945	0	0.0%
21.0%	5,903	5,932	30	0.5%
22.2%	5,823	5,852	29	0.5%
23.5%	5,646	5,823	177	3.1%
24.7%	5,599	5,646	47	0.8%
25.9%	5,571	5,646	75	1.3%
27.2%	5,549	5,599	49	0.9%
28.4%	5,454	5,571	117	2.2%
29.6%	5,350	5,454	104	1.9%
30.9%	5,331	5,350	19	0.4%
32.1%	5,185	5,315	130	2.5%
33.3%	5,170	5,266	96	1.9%
34.6%	5,108	5,235	127	2.5%
35.8%	5,036	5,170	133	2.7%
37.0%	5,018	5,069	51	1.0%
38.3%	4,982	5,026	43	0.9%
39.5%	4,726	5,018	292	6.2%
40.7%	4,654	4,726	72	1.5%
42.0%	4,621	4,654	33	0.7%
43.2%	4,483	4,650	168	3.7%
44.4%	4,481	4,621	140	3.1%
45.7%	4,481	4,483	2	0.0%
46.9%	4,480	4,481	1	0.0%
48.1%	4,477	4,480	3	0.1%
49.4%	4,443	4,462	19	0.4%
50.6%	4,078	4,078	0	0.0%
51.9%	3,918	3,918	0	0.0%
53.1%	3,819	3,819	0	0.0%
54.3%	3,747	3,747	0	0.0%
55.6%	3,710	3,710	0	0.0%
56.8%	3,701	3,701	0	0.0%
58.0%	3,668	3,668	0	0.0%
59.3%	3,666	3,666	0	0.0%
60.5%	3,600	3,599	-1	0.0%
61.7%	3,450	3,450	0	0.0%
63.0%	3,443	3,444	0	0.0%
64.2%	3,386	3,386	0	0.0%
65.4%	3,355	3,376	20	0.6%
66.7%	3,336	3,355	19	0.6%
67.9%	3,334	3,336	3	0.1%
69.1%	3,322	3,333	12	0.4%
70.4%	3,306	3,322	15	0.5%
71.6%	3,301	3,306	5	0.1%
72.8%	3,269	3,301	32	1.0%
74.1%	3,236	3,269	33	1.0%
75.3%	3,180	3,235	55	1.7%
76.5%	3,080	3,220	140	4.6%
77.8%	3,040	3,212	172	5.7%
79.0%	2,985	3,080	95	3.2%
80.2%	2,909	3,040	131	4.5%
81.5%	2,882	2,909	27	1.0%
82.7%	2,221	1,303	-918	-41.3%
84.0%	2,139	1,044	-1,095	-51.2%
85.2%	1,044	914	-129	-12.4%
86.4%	914	850	-64	-7.0%
87.7%	850	781	-69	-8.2%
88.9%	788	735	-52	-6.6%
90.1%	735	727	-8	-1.1%
91.4%	727	707	-20	-2.7%
92.6%	707	654	-53	-7.5%
93.8%	654	579	-75	-11.5%
95.1%	575	525	-50	-8.6%
96.3%	524	472	-52	-10.0%
97.5%	453	453	0	0.0%
98.8%	402	444	42	10.4%
100.0%	135	135	0	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,605	11,711	106	0.9%
1.2%	11,541	11,605	64	0.6%
2.5%	11,522	11,587	64	0.6%
3.7%	11,505	11,541	36	0.3%
4.9%	11,503	11,522	19	0.2%
6.2%	11,502	11,521	19	0.2%
7.4%	11,452	11,508	56	0.5%
8.6%	11,432	11,505	73	0.6%
9.9%	11,419	11,505	86	0.7%
11.1%	11,407	11,504	98	0.9%
12.3%	11,392	11,503	112	1.0%
13.6%	11,390	11,482	92	0.8%
14.8%	11,388	11,455	67	0.6%
16.0%	11,378	11,452	74	0.7%
17.3%	11,373	11,407	34	0.3%
18.5%	11,366	11,392	26	0.2%
19.8%	11,352	11,391	39	0.3%
21.0%	11,343	11,390	48	0.4%
22.2%	11,338	11,388	50	0.4%
23.5%	11,334	11,378	44	0.4%
24.7%	11,331	11,374	43	0.4%
25.9%	11,318	11,373	55	0.5%
27.2%	11,316	11,366	49	0.4%
28.4%	11,280	11,360	80	0.7%
29.6%	11,265	11,352	88	0.8%
30.9%	11,262	11,338	76	0.7%
32.1%	11,223	11,334	111	1.0%
33.3%	11,197	11,333	136	1.2%
34.6%	11,128	11,331	203	1.8%
35.8%	11,085	11,318	233	2.1%
37.0%	11,084	11,316	233	2.1%
38.3%	11,001	11,280	279	2.5%
39.5%	10,965	11,241	276	2.5%
40.7%	10,842	11,172	330	3.0%
42.0%	10,713	11,055	342	3.2%
43.2%	10,594	10,971	376	3.6%
44.4%	10,556	10,960	403	3.8%
45.7%	10,538	10,903	365	3.5%
46.9%	10,513	10,840	327	3.1%
48.1%	10,295	10,741	446	4.3%
49.4%	10,286	10,691	406	3.9%
50.6%	10,272	10,409	136	1.3%
51.9%	10,194	10,247	53	0.5%
53.1%	10,117	10,213	96	0.9%
54.3%	10,080	10,195	114	1.1%
55.6%	10,067	10,168	101	1.0%
56.8%	9,921	10,123	202	2.0%
58.0%	9,852	10,109	257	2.6%
59.3%	9,760	9,949	188	1.9%
60.5%	9,681	9,900	219	2.3%
61.7%	9,673	9,806	132	1.4%
63.0%	9,433	9,802	369	3.9%
64.2%	9,420	9,667	247	2.6%
65.4%	8,665	9,560	895	10.3%
66.7%	8,642	9,455	813	9.4%
67.9%	8,550	9,328	778	9.1%
69.1%	8,448	8,929	481	5.7%
70.4%	8,277	8,809	532	6.4%
71.6%	8,167	8,804	638	7.8%
72.8%	7,979	8,756	776	9.7%
74.1%	7,718	8,676	958	12.4%
75.3%	7,583	8,593	1,010	13.3%
76.5%	7,555	8,407	852	11.3%
77.8%	7,096	8,106	1,011	14.2%
79.0%	7,005	8,034	1,029	14.7%
80.2%	6,920	8,001	1,081	15.6%
81.5%	6,182	7,774	1,592	25.8%
82.7%	6,052	7,564	1,512	25.0%
84.0%	5,922	7,287	1,365	23.0%
85.2%	5,893	7,118	1,225	20.8%
86.4%	5,855	6,914	1,059	18.1%
87.7%	5,462	6,665	1,202	22.0%
88.9%	4,956	6,087	1,131	22.8%
90.1%	4,644	6,054	1,410	30.4%
91.4%	4,119	5,964	1,845	44.8%
92.6%	3,667	5,256	1,589	43.3%
93.8%	3,603	4,177	574	15.9%
95.1%	3,080	3,470	389	12.6%
96.3%	2,688	2,969	281	10.5%
97.5%	2,337	2,921	584	25.0%
98.8%	2,290	2,881	591	25.8%
100.0%	1,788	1,369	-419	-23.4%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,559	11,620	62	0.5%
1.2%	11,538	11,559	21	0.2%
2.5%	11,537	11,538	1	0.0%
3.7%	11,526	11,537	12	0.1%
4.9%	11,525	11,526	1	0.0%
6.2%	11,522	11,522	0	0.0%
7.4%	11,522	11,522	0	0.0%
8.6%	11,522	11,522	0	0.0%
9.9%	11,521	11,521	0	0.0%
11.1%	11,518	11,519	1	0.0%
12.3%	11,494	11,496	2	0.0%
13.6%	11,476	11,494	18	0.2%
14.8%	11,471	11,488	17	0.1%
16.0%	11,468	11,476	9	0.1%
17.3%	11,464	11,471	7	0.1%
18.5%	11,460	11,464	4	0.0%
19.8%	11,459	11,460	2	0.0%
21.0%	11,450	11,459	8	0.1%
22.2%	11,445	11,455	10	0.1%
23.5%	11,433	11,450	18	0.2%
24.7%	11,432	11,445	14	0.1%
25.9%	11,430	11,433	2	0.0%
27.2%	11,429	11,432	3	0.0%
28.4%	11,425	11,430	5	0.0%
29.6%	11,414	11,429	15	0.1%
30.9%	11,406	11,429	22	0.2%
32.1%	11,406	11,428	22	0.2%
33.3%	11,405	11,425	20	0.2%
34.6%	11,400	11,414	14	0.1%
35.8%	11,398	11,406	9	0.1%
37.0%	11,393	11,406	13	0.1%
38.3%	11,389	11,405	17	0.1%
39.5%	11,379	11,400	21	0.2%
40.7%	11,376	11,398	22	0.2%
42.0%	11,357	11,393	36	0.3%
43.2%	11,310	11,389	78	0.7%
44.4%	11,280	11,379	99	0.9%
45.7%	11,253	11,376	123	1.1%
46.9%	11,108	11,374	266	2.4%
48.1%	11,054	11,357	303	2.7%
49.4%	11,022	11,345	323	2.9%
50.6%	10,963	11,280	317	2.9%
51.9%	10,657	11,097	440	4.1%
53.1%	10,277	11,038	761	7.4%
54.3%	10,102	10,569	467	4.6%
55.6%	10,064	10,527	464	4.6%
56.8%	10,049	10,513	464	4.6%
58.0%	10,047	10,337	289	2.9%
59.3%	9,921	10,329	409	4.1%
60.5%	9,587	10,086	498	5.2%
61.7%	9,572	9,856	284	3.0%
63.0%	9,381	9,793	412	4.4%
64.2%	9,305	9,760	455	4.9%
65.4%	8,986	9,741	755	8.4%
66.7%	8,602	9,532	930	10.8%
67.9%	8,164	9,089	925	11.3%
69.1%	7,722	9,044	1,321	17.1%
70.4%	7,260	8,626	1,367	18.8%
71.6%	7,197	8,441	1,244	17.3%
72.8%	6,738	8,432	1,695	25.2%
74.1%	6,028	8,262	2,234	37.1%
75.3%	5,525	7,765	2,240	40.5%
76.5%	5,315	7,403	2,088	39.3%
77.8%	4,506	6,883	2,377	52.8%
79.0%	4,441	6,599	2,158	48.6%
80.2%	3,967	6,490	2,523	63.6%
81.5%	3,950	5,981	2,031	51.4%
82.7%	3,763	5,613	1,850	49.2%
84.0%	3,704	5,319	1,615	43.6%
85.2%	3,329	4,975	1,646	49.4%
86.4%	3,190	4,735	1,545	48.4%
87.7%	3,139	4,305	1,166	37.2%
88.9%	3,135	3,771	636	20.3%
90.1%	2,779	3,762	983	35.4%
91.4%	2,521	3,567	1,046	41.5%
92.6%	2,479	3,540	1,061	42.8%
93.8%	2,375	3,395	1,020	43.0%
95.1%	2,231	3,288	1,057	47.4%
96.3%	2,009	3,152	1,143	56.9%
97.5%	1,865	3,008	1,143	61.3%
98.8%	1,819	2,767	948	52.1%
100.0%	1,669	2,300	631	37.8%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,451	171	1.5%
1.2%	11,280	11,435	155	1.4%
2.5%	11,280	11,434	154	1.4%
3.7%	11,280	11,280	0	0.0%
4.9%	11,280	11,280	0	0.0%
6.2%	11,280	11,280	0	0.0%
7.4%	11,280	11,280	0	0.0%
8.6%	11,280	11,280	0	0.0%
9.9%	11,280	11,280	0	0.0%
11.1%	11,280	11,280	0	0.0%
12.3%	11,272	11,280	8	0.1%
13.6%	11,197	11,280	83	0.7%
14.8%	10,919	11,280	361	3.3%
16.0%	10,896	11,277	382	3.5%
17.3%	10,874	11,274	399	3.7%
18.5%	10,839	11,229	391	3.6%
19.8%	10,802	11,141	339	3.1%
21.0%	10,666	11,132	465	4.4%
22.2%	10,577	11,123	546	5.2%
23.5%	10,548	11,102	554	5.3%
24.7%	10,337	11,074	737	7.1%
25.9%	10,148	10,975	827	8.1%
27.2%	10,101	10,896	796	7.9%
28.4%	10,094	10,893	799	7.9%
29.6%	9,951	10,884	933	9.4%
30.9%	9,860	10,726	866	8.8%
32.1%	9,854	10,569	715	7.3%
33.3%	9,792	10,543	750	7.7%
34.6%	9,782	10,537	754	7.7%
35.8%	9,742	10,486	744	7.6%
37.0%	9,708	10,342	634	6.5%
38.3%	9,698	10,301	603	6.2%
39.5%	9,599	10,247	648	6.8%
40.7%	9,518	10,153	635	6.7%
42.0%	9,309	10,087	778	8.4%
43.2%	8,926	9,968	1,042	11.7%
44.4%	8,859	9,906	1,047	11.8%
45.7%	8,855	9,906	1,051	11.9%
46.9%	8,679	9,769	1,091	12.6%
48.1%	8,669	9,656	987	11.4%
49.4%	8,321	9,550	1,229	14.8%
50.6%	8,268	9,545	1,278	15.5%
51.9%	7,720	9,517	1,797	23.3%
53.1%	7,653	9,453	1,800	23.5%
54.3%	7,582	9,411	1,829	24.1%
55.6%	7,439	9,378	1,939	26.1%
56.8%	7,398	9,297	1,899	25.7%
58.0%	7,183	9,260	2,077	28.9%
59.3%	7,168	9,220	2,052	28.6%
60.5%	6,958	9,014	2,056	29.5%
61.7%	6,928	9,010	2,082	30.0%
63.0%	6,725	8,885	2,160	32.1%
64.2%	6,553	8,489	1,936	29.5%
65.4%	6,353	8,378	2,024	31.9%
66.7%	6,260	8,350	2,090	33.4%
67.9%	6,153	8,078	1,926	31.3%
69.1%	6,104	8,013	1,909	31.3%
70.4%	5,890	7,796	1,906	32.4%
71.6%	5,765	7,629	1,864	32.3%
72.8%	5,595	7,298	1,703	30.4%
74.1%	5,561	7,285	1,723	31.0%
75.3%	5,551	7,233	1,682	30.3%
76.5%	5,549	6,952	1,402	25.3%
77.8%	5,424	6,725	1,301	24.0%
79.0%	5,308	6,222	915	17.2%
80.2%	5,231	5,732	501	9.6%
81.5%	5,042	5,693	650	12.9%
82.7%	5,039	5,643	604	12.0%
84.0%	4,913	5,567	655	13.3%
85.2%	4,807	5,434	627	13.0%
86.4%	4,711	5,105	394	8.4%
87.7%	4,548	4,984	436	9.6%
88.9%	4,455	4,865	410	9.2%
90.1%	4,358	4,780	422	9.7%
91.4%	3,937	4,750	813	20.7%
92.6%	3,894	4,719	824	21.2%
93.8%	3,769	4,683	914	24.3%
95.1%	3,590	4,649	1,059	29.5%
96.3%	3,248	4,564	1,315	40.5%
97.5%	2,996	4,346	1,350	45.0%
98.8%	2,234	3,928	1,694	75.9%
100.0%	1,857	1,943	86	4.7%

Figure SW-37-b
Jones Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

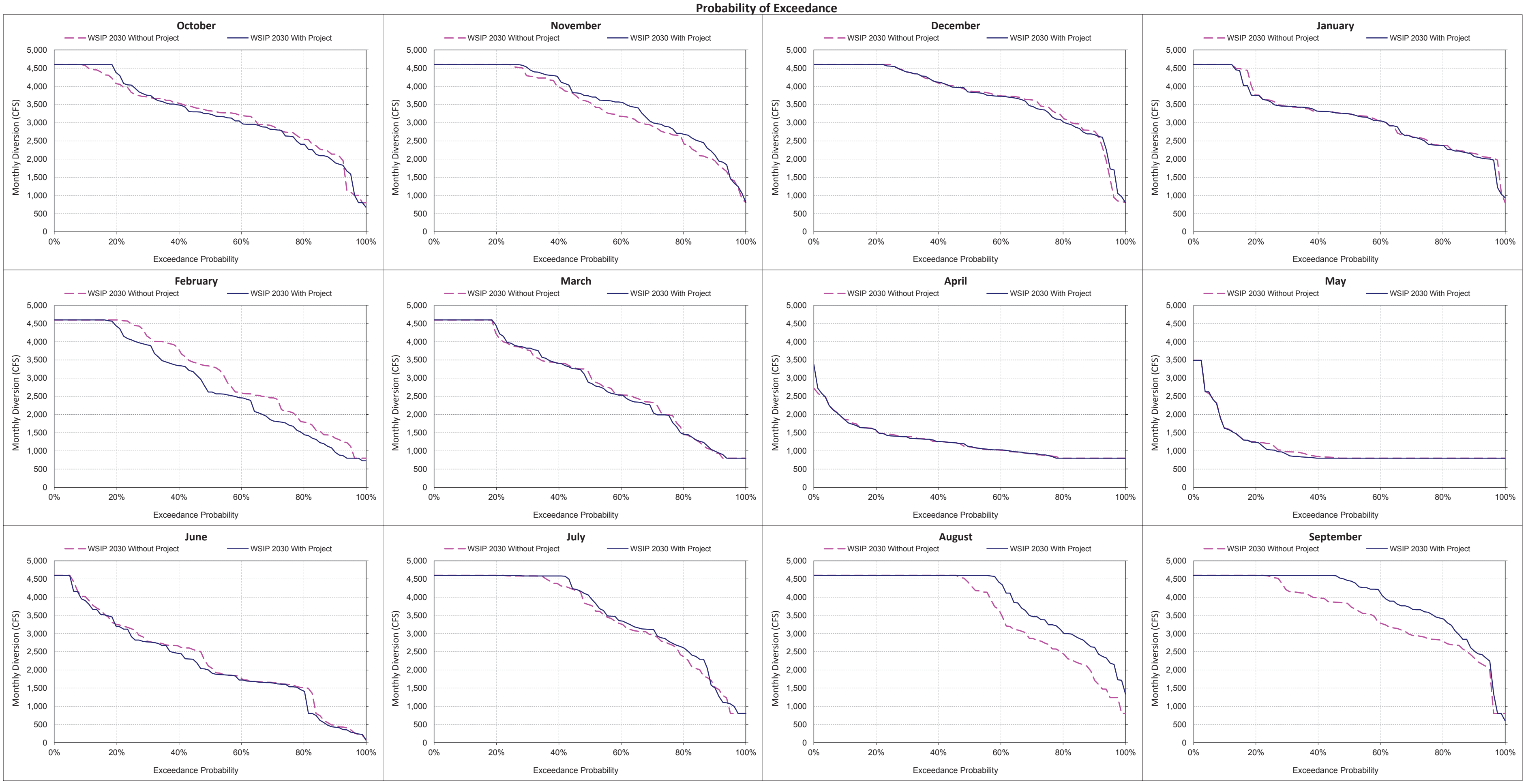


Table SW-37-b

Jones Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,575	4,600	25	0.5%
11.1%	4,485	4,600	115	2.6%
12.3%	4,462	4,600	138	3.1%
13.6%	4,451	4,600	149	3.3%
14.8%	4,400	4,600	200	4.6%
16.0%	4,313	4,600	287	6.6%
17.3%	4,309	4,600	291	6.8%
18.5%	4,221	4,595	374	8.9%
19.8%	4,076	4,387	311	7.6%
21.0%	4,057	4,299	242	6.0%
22.2%	3,972	4,078	106	2.7%
23.5%	3,971	4,039	68	1.7%
24.7%	3,832	4,035	203	5.3%
25.9%	3,779	3,951	172	4.5%
27.2%	3,744	3,848	104	2.8%
28.4%	3,720	3,796	76	2.0%
29.6%	3,714	3,758	44	1.2%
30.9%	3,689	3,751	62	1.7%
32.1%	3,670	3,660	-10	-0.3%
33.3%	3,670	3,606	-64	-1.7%
34.6%	3,662	3,585	-77	-2.1%
35.8%	3,618	3,544	-74	-2.1%
37.0%	3,617	3,513	-105	-2.9%
38.3%	3,556	3,512	-44	-1.2%
39.5%	3,546	3,492	-54	-1.5%
40.7%	3,518	3,479	-39	-1.1%
42.0%	3,482	3,430	-52	-1.5%
43.2%	3,468	3,306	-162	-4.7%
44.4%	3,432	3,298	-134	-3.9%
45.7%	3,399	3,296	-103	-3.0%
46.9%	3,395	3,290	-105	-3.1%
48.1%	3,360	3,248	-111	-3.3%
49.4%	3,329	3,248	-81	-2.4%
50.6%	3,321	3,219	-102	-3.1%
51.9%	3,303	3,176	-127	-3.9%
53.1%	3,278	3,169	-109	-3.3%
54.3%	3,274	3,165	-110	-3.3%
55.6%	3,274	3,138	-136	-4.2%
56.8%	3,268	3,130	-138	-4.2%
58.0%	3,252	3,053	-199	-6.1%
59.3%	3,213	3,051	-162	-5.0%
60.5%	3,191	2,967	-224	-7.0%
61.7%	3,181	2,960	-222	-7.0%
63.0%	3,174	2,959	-214	-6.8%
64.2%	3,084	2,955	-129	-4.2%
65.4%	2,947	2,926	-22	-0.7%
66.7%	2,947	2,885	-62	-2.1%
67.9%	2,943	2,882	-62	-2.1%
69.1%	2,930	2,824	-106	-3.6%
70.4%	2,894	2,817	-77	-2.7%
71.6%	2,825	2,801	-24	-0.8%
72.8%	2,775	2,792	17	0.6%
74.1%	2,743	2,636	-106	-3.9%
75.3%	2,734	2,628	-107	-3.9%
76.5%	2,728	2,616	-112	-4.1%
77.8%	2,647	2,496	-152	-5.7%
79.0%	2,575	2,410	-165	-6.4%
80.2%	2,542	2,406	-135	-5.3%
81.5%	2,539	2,268	-271	-10.7%
82.7%	2,409	2,259	-150	-6.2%
84.0%	2,368	2,133	-235	-9.9%
85.2%	2,274	2,096	-178	-7.8%
86.4%	2,245	2,091	-154	-6.9%
87.7%	2,224	2,069	-154	-6.9%
88.9%	2,138	1,986	-152	-7.1%
90.1%	2,137	1,891	-245	-11.5%
91.4%	2,084	1,855	-229	-11.0%
92.6%	1,958	1,828	-130	-6.6%
93.8%	1,130	1,674	543	48.1%
95.1%	1,092	1,591	499	45.7%
96.3%	1,001	1,000	-1	-0.1%
97.5%	1,000	800	-200	-20.0%
98.8%	800	800	0	0.0%
100.0%	800	673	-127	-15.8%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,593	4,600	7	0.2%
25.9%	4,534	4,600	66	1.5%
27.2%	4,518	4,600	82	1.8%
28.4%	4,505	4,579	75	1.7%
29.6%	4,295	4,536	241	5.6%
30.9%	4,276	4,450	174	4.1%
32.1%	4,271	4,398	127	3.0%
33.3%	4,231	4,394	163	3.9%
34.6%	4,230	4,354	124	2.9%
35.8%	4,230	4,322	92	2.2%
37.0%	4,176	4,307	130	3.1%
38.3%	4,162	4,297	135	3.3%
39.5%	3,983	4,279	295	7.4%
40.7%	3,954	4,111	156	3.9%
42.0%	3,873	4,075	203	5.2%
43.2%	3,853	4,038	184	4.8%
44.4%	3,812	3,825	13	0.3%
45.7%	3,728	3,822	94	2.5%
46.9%	3,631	3,807	176	4.9%
48.1%	3,613	3,746	133	3.7%
49.4%	3,582	3,739	157	4.4%
50.6%	3,522	3,710	188	5.3%
51.9%	3,422	3,704	282	8.2%
53.1%	3,414	3,621	208	6.1%
54.3%	3,321	3,615	294	8.9%
55.6%	3,268	3,615	347	10.6%
56.8%	3,244	3,602	358	11.0%
58.0%	3,232	3,570	338	10.5%
59.3%	3,185	3,568	383	12.0%
60.5%	3,172	3,559	386	12.2%
61.7%	3,162	3,491	328	10.4%
63.0%	3,128	3,446	318	10.2%
64.2%	3,100	3,431	331	10.7%
65.4%	3,017	3,410	393	13.0%
66.7%	2,988	3,267	279	9.3%
67.9%	2,959	3,154	196	6.6%
69.1%	2,945	3,052	107	3.6%
70.4%	2,890	2,992	102	3.5%
71.6%	2,841	2,970	129	4.5%
72.8%	2,766	2,955	189	6.8%
74.1%	2,730	2,901	171	6.3%
75.3%	2,715	2,883	167	6.2%
76.5%	2,665	2,829	164	6.2%
77.8%	2,658	2,707	49	1.8%
79.0%	2,649	2,705	56	2.1%
80.2%	2,405	2,679	274	11.4%
81.5%	2,404	2,658	253	10.5%
82.7%	2,275	2,578	303	13.3%
84.0%	2,215	2,521	305	13.8%
85.2%	2,094	2,489	395	18.9%
86.4%	2,082	2,450	368	17.7%
87.7%	2,040	2,303	263	12.9%
88.9%	2,019	2,225	206	10.2%
90.1%	1,947	2,107	159	8.2%
91.4%	1,822	1,945	123	6.8%
92.6%	1,745	1,917	172	9.9%
93.8%	1,662	1,844	182	10.9%
95.1%	1,453	1,470	17	1.2%
96.3%	1,401	1,338	-63	-4.5%
97.5%	1,208	1,246	38	3.2%
98.8%	907	1,058	151	16.6%
100.0%	800	800	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,565	-35	-0.8%
24.7%	4,600	4,553	-47	-1.0%
25.9%	4,547	4,540	-6	-0.1%
27.2%	4,485	4,489	4	0.1%
28.4%	4,460	4,440	-19	-0.4%
29.6%	4,397	4,395	-2	-0.1%
30.9%	4,381	4,381	0	0.0%
32.1%	4,348	4,348	0	0.0%
33.3%	4,344	4,340	-4	-0.1%
34.6%	4,281	4,283	3	0.1%
35.8%	4,223	4,281	57	1.4%
37.0%	4,203	4,213	10	0.2%
38.3%	4,153	4,146	-7	-0.2%
39.5%	4,108	4,120	13	0.3%
40.7%	4,062	4,108	46	1.1%
42.0%	4,056	4,074	18	0.4%
43.2%	4,029	4,029	0	0.0%
44.4%	4,023	3,975	-48	-1.2%
45.7%	3,971	3,971	0	0.0%
46.9%	3,970	3,970	0	0.0%
48.1%	3,931	3,962	31	0.8%
49.4%	3,874	3,846	-28	-0.7%
50.6%	3,865	3,835	-30	-0.8%
51.9%	3,859	3,828	-32	-0.8%
53.1%	3,855	3,821	-34	-0.9%
54.3%	3,846	3,804	-42	-1.1%
55.6%	3,827	3,754	-73	-1.9%
56.8%	3,804	3,747	-57	-1.5%
58.0%	3,764	3,732	-32	-0.9%
59.3%	3,747	3,730	-17	-0.5%
60.5%	3,733	3,729	-4	-0.1%
61.7%	3,732	3,712	-20	-0.5%
63.0%	3,729	3,697	-31	-0.8%
64.2%	3,727	3,688	-39	-1.1%
65.4%	3,706	3,666	-40	-1.1%
66.7%	3,688	3,639	-49	-1.3%
67.9%	3,639	3,590	-48	-1.3%
69.1%	3,637	3,470	-167	-4.6%
70.4%	3,624	3,445	-178	-4.9%
71.6%	3,579	3,388	-191	-5.3%
72.8%	3,456	3,364	-92	-2.7%
74.1%	3,440	3,352	-88	-2.6%
75.3%	3,426	3,276	-150	-4.4%
76.5%	3,324	3,156	-167	-5.0%
77.8%	3,262	3,100	-162	-5.0%
79.0%	3,233	3,090	-143	-4.4%
80.2%	3,108	3,009	-100	-3.2%
81.5%	3,077	2,974	-103	-3.3%
82.7%	2,997	2,940	-56	-1.9%
84.0%	2,972	2,876	-97	-3.3%
85.2%	2,967	2,846	-121	-4.1%
86.4%	2,799	2,743	-56	-2.0%
87.7%	2,795	2,695	-100	-3.6%
88.9%	2,791	2,693	-98	-3.5%
90.1%	2,762	2,672	-90	-3.3%
91.4%	2,635	2,621	-14	-0.5%
92.6%	2,336	2,601	265	11.3%
93.8%	1,959	2,255	296	15.1%
95.1%	1,462	1,733	271	18.5%
96.3%	944	1,704	760	80.5%
97.5%	846	1,060	214	25.4%
98.8%	844	970	126	14.9%
100.0%	800	800	0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,494	4,457	-38	-0.8%
14.8%	4,490	4,436	-55	-1.2%
16.0%	4,457	4,022	-434	-9.7%
17.3%	4,441	4,020	-422	-9.5%
18.5%	4,022	3,754	-268	-6.7%
19.8%	3,760	3,751	-9	-0.2%
21.0%	3,759	3,746	-13	-0.3%
22.2%	3,646	3,646	0	0.0%
23.5%	3,631	3,619	-13	-0.3%
24.7%	3,619	3,579	-40	-1.1%
25.9%	3,579	3,495	-84	-2.3%
27.2%	3,495	3,471	-24	-0.7%
28.4%	3,474	3,459	-15	-0.4%
29.6%	3,449	3,453	4	0.1%
30.9%	3,444	3,447	3	0.1%
32.1%	3,429	3,447	18	0.5%
33.3%	3,428	3,429	2	0.0%
34.6%	3,410	3,429	19	0.6%
35.8%	3,390	3,424	33	1.0%
37.0%	3,381	3,410	30	0.9%
38.3%	3,324	3,377	53	1.6%
39.5%	3,319	3,319	0	0.0%
40.7%	3,309	3,313	4	0.1%
42.0%	3,308	3,310	2	0.1%
43.2%	3,304	3,305	0	0.0%
44.4%	3,300	3,296	-4	-0.1%
45.7%	3,277	3,270	-7	-0.2%
46.9%	3,262	3,263	1	0.0%
48.1%	3,260	3,254	-6	-0.2%
49.4%	3,252	3,250	-2	-0.1%
50.6%	3,234	3,234	0	0.0%
51.9%	3,207	3,207	1	0.0%
53.1%	3,193	3,172	-22	-0.7%
54.3%	3,185	3,158	-27	-0.8%
55.6%	3,179	3,149	-30	-1.0%
56.8%	3,149	3,110	-39	-1.2%
58.0%	3,110	3,057	-53	-1.7%
59.3%	3,056	3,056	0	0.0%
60.5%	3,046	3,046	0	0.0%
61.7%	3,005	3,005	0	0.0%
63.0%	2,917	2,917	0	0.0%
64.2%	2,915	2,915	0	0.0%
65.4%	2,718	2,886	168	6.2%
66.7%	2,670	2,718	48	1.8%
67.9%	2,666	2,646	-20	-0.8%
69.1%	2,646	2,645	-1	0.0%
70.4%	2,604	2,603	-1	0.0%
71.6%	2,602	2,583	-19	-0.7%
72.8%	2,583	2,554	-30	-1.1%
74.1%	2,554	2,502	-52	-2.0%
75.3%	2,502	2,405	-96	-3.9%
76.5%	2,405	2,392	-13	-0.5%
77.8%	2,392	2,380	-12	-0.5%
79.0%	2,380	2,380	0	0.0%
80.2%	2,380	2,372	-7	-0.3%
81.5%	2,372	2,265	-107	-4.5%
82.7%	2,263	2,260	-3	-0.2%
84.0%	2,258	2,225	-33	-1.5%
85.2%	2,225	2,220	-5	-0.2%
86.4%	2,220	2,194	-26	-1.2%
87.7%	2,193	2,170	-22	-1.0%
88.9%	2,170	2,155	-16	-0.7%
90.1%	2,155	2,068	-87	-4.0%
91.4%	2,128	2,051	-77	-3.6%
92.6%	2,068	2,024	-43	-2.1%
93.8%	2,055	2,006	-49	-2.4%
95.1%	2,040	2,002	-38	-1.8%
96.3%	2,030	1,973	-57	-2.8%
97.5%	1,973	1,215	-757	-38.4%
98.8%	1,078	1,042	-36	-3.3%
100.0%	800	938	138	17.2%

Table SW-37-b

Jones Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,576	-24	-0.5%
18.5%	4,600	4,566	-34	-0.7%
19.8%	4,600	4,441	-159	-3.5%
21.0%	4,600	4,356	-244	-5.3%
22.2%	4,576	4,149	-427	-9.3%
23.5%	4,570	4,086	-484	-10.6%
24.7%	4,488	4,052	-435	-9.7%
25.9%	4,441	4,009	-432	-9.7%
27.2%	4,432	3,973	-458	-10.3%
28.4%	4,340	3,946	-394	-9.1%
29.6%	4,160	3,916	-243	-5.9%
30.9%	4,086	3,894	-192	-4.7%
32.1%	4,009	3,671	-338	-8.4%
33.3%	4,007	3,586	-421	-10.5%
34.6%	4,005	3,484	-521	-13.0%
35.8%	3,973	3,442	-532	-13.4%
37.0%	3,946	3,406	-540	-13.7%
38.3%	3,922	3,376	-546	-13.9%
39.5%	3,849	3,347	-501	-13.0%
40.7%	3,669	3,337	-332	-9.0%
42.0%	3,586	3,319	-268	-7.5%
43.2%	3,485	3,212	-273	-7.8%
44.4%	3,442	3,182	-260	-7.5%
45.7%	3,413	3,074	-339	-9.9%
46.9%	3,376	2,966	-410	-12.1%
48.1%	3,347	2,797	-550	-16.4%
49.4%	3,337	2,619	-719	-21.5%
50.6%	3,319	2,615	-704	-21.2%
51.9%	3,283	2,570	-713	-21.7%
53.1%	3,212	2,566	-646	-20.1%
54.3%	3,074	2,561	-512	-16.7%
55.6%	2,870	2,536	-333	-11.6%
56.8%	2,756	2,517	-239	-8.7%
58.0%	2,619	2,499	-120	-4.6%
59.3%	2,615	2,460	-155	-5.9%
60.5%	2,581	2,453	-128	-5.0%
61.7%	2,570	2,415	-155	-6.0%
63.0%	2,566	2,388	-178	-6.9%
64.2%	2,529	2,081	-448	-17.7%
65.4%	2,525	2,046	-479	-19.0%
66.7%	2,500	2,006	-494	-19.8%
67.9%	2,499	1,952	-547	-21.9%
69.1%	2,460	1,863	-597	-24.3%
70.4%	2,457	1,817	-640	-26.0%
71.6%	2,415	1,805	-610	-25.3%
72.8%	2,137	1,790	-347	-16.2%
74.1%	2,081	1,771	-310	-14.9%
75.3%	2,081	1,708	-373	-17.9%
76.5%	2,046	1,674	-372	-18.2%
77.8%	1,952	1,568	-384	-19.7%
79.0%	1,805	1,522	-283	-15.7%
80.2%	1,790	1,441	-349	-19.5%
81.5%	1,771	1,418	-353	-19.9%
82.7%	1,708	1,347	-360	-21.1%
84.0%	1,568	1,310	-258	-16.4%
85.2%	1,548	1,228	-320	-20.7%
86.4%	1,442	1,200	-242	-16.8%
87.7%	1,441	1,128	-313	-21.7%
88.9%	1,418	1,087	-331	-23.3%
90.1%	1,347	959	-388	-28.8%
91.4%	1,310	888	-422	-32.2%
92.6%	1,244	872	-371	-29.8%
93.8%	1,228	800	-428	-34.8%
95.1%	1,120	800	-320	-28.6%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	731	-69	-8.6%
100.0%	800	728	-72	-9.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,236	4,462	226	5.3%
21.0%	4,080	4,219	138	3.4%
22.2%	3,998	4,149	151	3.8%
23.5%	3,961	3,978	17	0.4%
24.7%	3,893	3,961	69	1.8%
25.9%	3,871	3,893	21	0.6%
27.2%	3,859	3,871	12	0.3%
28.4%	3,825	3,859	35	0.9%
29.6%	3,777	3,825	47	1.3%
30.9%	3,757	3,821	65	1.7%
32.1%	3,577	3,777	201	5.6%
33.3%	3,548	3,757	208	5.9%
34.6%	3,479	3,577	98	2.8%
35.8%	3,455	3,548	93	2.7%
37.0%	3,445	3,479	34	1.0%
38.3%	3,437	3,445	8	0.2%
39.5%	3,417	3,406	-11	-0.3%
40.7%	3,406	3,404	-3	-0.1%
42.0%	3,404	3,346	-58	-1.7%
43.2%	3,346	3,313	-33	-1.0%
44.4%	3,295	3,257	-39	-1.2%
45.7%	3,266	3,252	-14	-0.4%
46.9%	3,254	3,239	-14	-0.4%
48.1%	3,252	3,111	-141	-4.3%
49.4%	3,187	2,888	-300	-9.4%
50.6%	2,969	2,844	-126	-4.2%
51.9%	2,888	2,783	-104	-3.6%
53.1%	2,844	2,758	-86	-3.0%
54.3%	2,771	2,715	-57	-2.0%
55.6%	2,758	2,628	-130	-4.7%
56.8%	2,715	2,581	-134	-4.9%
58.0%	2,581	2,564	-17	-0.7%
59.3%	2,551	2,536	-16	-0.6%
60.5%	2,536	2,531	-5	-0.2%
61.7%	2,531	2,438	-93	-3.7%
63.0%	2,529	2,385	-144	-5.7%
64.2%	2,470	2,349	-120	-4.9%
65.4%	2,438	2,343	-95	-3.9%
66.7%	2,385	2,327	-58	-2.4%
67.9%	2,349	2,281	-68	-2.9%
69.1%	2,343	2,276	-67	-2.9%
70.4%	2,327	2,038	-289	-12.4%
71.6%	2,245	1,991	-254	-11.3%
72.8%	2,048	1,990	-58	-2.8%
74.1%	1,991	1,987	-4	-0.2%
75.3%	1,990	1,975	-15	-0.8%
76.5%	1,965	1,774	-191	-9.7%
77.8%	1,774	1,662	-112	-6.3%
79.0%	1,662	1,499	-163	-9.8%
80.2%	1,447	1,447	0	0.0%
81.5%	1,432	1,445	13	0.9%
82.7%	1,348	1,379	32	2.3%
84.0%	1,302	1,304	2	0.1%
85.2%	1,235	1,262	27	2.2%
86.4%	1,139	1,235	96	8.4%
87.7%	1,066	1,139	74	6.9%
88.9%	1,039	1,039	0	0.0%
90.1%	943	995	52	5.5%
91.4%	934	943	9	0.9%
92.6%	800	898	98	12.3%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,722	3,373	652	23.9%
1.2%	2,595	2,722	127	4.9%
2.5%	2,497	2,580	84	3.3%
3.7%	2,489	2,485	-4	-0.2%
4.9%	2,249	2,250	1	0.0%
6.2%	2,137	2,129	-8	-0.4%
7.4%	2,057	2,049	-8	-0.4%
8.6%	1,952	1,952	0	0.0%
9.9%	1,862	1,855	-8	-0.4%
11.1%	1,852	1,768	-85	-4.6%
12.3%	1,768	1,737	-31	-1.7%
13.6%	1,744	1,700	-44	-2.5%
14.8%	1,639	1,639	0	0.0%
16.0%	1,637	1,632	-5	-0.3%
17.3%	1,629	1,624	-5	-0.3%
18.5%	1,624	1,618	-7	-0.4%
19.8%	1,558	1,585	27	1.7%
21.0%	1,485	1,485	0	0.0%
22.2%	1,477	1,477	0	0.0%
23.5%	1,464	1,429	-35	-2.4%
24.7%	1,456	1,411	-46	-3.1%
25.9%	1,437	1,406	-32	-2.2%
27.2%	1,411	1,395	-16	-1.1%
28.4%	1,395	1,394	-1	-0.1%
29.6%	1,394	1,391	-2	-0.2%
30.9%	1,391	1,341	-51	-3.7%
32.1%	1,382	1,340	-42	-3.1%
33.3%	1,340	1,335	-5	-0.4%
34.6%	1,335	1,329	-6	-0.5%
35.8%	1,329	1,320	-9	-0.7%
37.0%	1,323	1,317	-6	-0.5%
38.3%	1,257	1,297	39	3.1%
39.5%	1,254	1,254	0	0.0%
40.7%	1,252	1,253	1	0.1%
42.0%	1,247	1,248	2	0.1%
43.2%	1,235	1,235	0	0.0%
44.4%	1,230	1,230	0	0.0%
45.7%	1,218	1,218	0	0.0%
46.9%	1,195	1,201	6	0.5%
48.1%	1,130	1,195	65	5.7%
49.4%	1,114	1,130	16	1.5%
50.6%	1,104	1,114	10	0.9%
51.9%	1,086	1,086	0	0.0%
53.1%	1,070	1,070	0	0.0%
54.3%	1,046	1,053	8	0.8%
55.6%	1,038	1,046	7	0.7%
56.8%	1,030	1,038	8	0.8%
58.0%	1,029	1,030	0	0.0%
59.3%	1,028	1,029	1	0.1%
60.5%	1,014	1,028	14	1.4%
61.7%	1,007	1,014	7	0.7%
63.0%	980	999	19	2.0%
64.2%	974	980	6	0.7%
65.4%	967	974	7	0.7%
66.7%	952	967	15	1.6%
67.9%	938	940	2	0.2%
69.1%	924	938	14	1.5%
70.4%	923	924	1	0.1%
71.6%	892	923	30	3.4%
72.8%	892	892	0	0.0%
74.1%	872	892	20	2.3%
75.3%	868	872	5	0.5%
76.5%	856	840	-16	-1.9%
77.8%	840	800	-40	-4.8%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,487	3,487	0	0.0%
1.2%	3,487	3,487	0	0.0%
2.5%	3,487	3,487	0	0.0%
3.7%	2,637	2,626	-11	-0.4%
4.9%	2,575	2,623	47	1.8%
6.2%	2,439	2,428	-11	-0.4%
7.4%	2,316	2,304	-11	-0.5%
8.6%	1,901	1,896	-5	-0.3%
9.9%	1,634	1,623	-11	-0.7%
11.1%	1,602	1,591	-11	-0.7%
12.3%	1,544	1,533	-11	-0.7%
13.6%	1,487	1,476	-11	-0.7%
14.8%	1,390	1,390	0	0.0%
16.0%	1,298	1,298	0	0.0%
17.3%	1,295	1,295	0	0.0%
18.5%	1,256	1,245	-12	-0.9%
19.8%	1,249	1,238	-11	-0.9%
21.0%	1,232	1,220	-12	-0.9%
22.2%	1,226	1,126	-101	-8.2%
23.5%	1,208	1,041	-166	-13.8%
24.7%	1,200	1,025	-175	-14.6%
25.9%	1,126	1,024	-102	-9.1%
27.2%	1,025	975	-50	-4.9%
28.4%	1,023	968	-55	-5.4%
29.6%	975	921	-54	-5.6%
30.9%	975	867	-108	-11.1%
32.1%	972	849	-123	-12.7%
33.3%	968	848	-120	-12.4%
34.6%	947	837	-110	-11.6%
35.8%	921	831	-90	-9.8%
37.0%	872	821	-51	-5.9%
38.3%	867	816	-50	-5.8%
39.5%	849	800	-49	-5.8%
40.7%	837	800	-37	-4.4%
42.0%	832	800	-32	-3.9%
43.2%	831	800	-31	-3.7%
44.4%	821	800	-21	-2.5%
45.7%	816	800	-16	-2.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

Table SW-37-b
Jones Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,427	4,161	-267	-6.0%
7.4%	4,183	4,155	-28	-0.7%
8.6%	4,022	3,957	-64	-1.6%
9.9%	4,019	3,907	-113	-2.8%
11.1%	3,907	3,804	-103	-2.6%
12.3%	3,776	3,662	-115	-3.0%
13.6%	3,701	3,661	-41	-1.1%
14.8%	3,645	3,525	-120	-3.3%
16.0%	3,530	3,513	-17	-0.5%
17.3%	3,452	3,486	34	1.0%
18.5%	3,307	3,452	146	4.4%
19.8%	3,255	3,207	-49	-1.5%
21.0%	3,232	3,186	-46	-1.4%
22.2%	3,202	3,123	-79	-2.5%
23.5%	3,170	3,117	-53	-1.7%
24.7%	3,133	2,911	-221	-7.1%
25.9%	3,085	2,823	-262	-8.5%
27.2%	2,951	2,823	-128	-4.3%
28.4%	2,911	2,786	-126	-4.3%
29.6%	2,793	2,768	-25	-0.9%
30.9%	2,773	2,762	-10	-0.4%
32.1%	2,747	2,753	6	0.2%
33.3%	2,746	2,727	-19	-0.7%
34.6%	2,727	2,673	-54	-2.0%
35.8%	2,687	2,670	-17	-0.6%
37.0%	2,673	2,509	-164	-6.1%
38.3%	2,670	2,479	-192	-7.2%
39.5%	2,665	2,455	-210	-7.9%
40.7%	2,614	2,441	-172	-6.6%
42.0%	2,605	2,310	-295	-11.3%
43.2%	2,604	2,301	-303	-11.6%
44.4%	2,564	2,295	-269	-10.5%
45.7%	2,526	2,191	-334	-13.2%
46.9%	2,509	2,039	-470	-18.7%
48.1%	2,269	2,027	-241	-10.6%
49.4%	2,108	2,004	-104	-4.9%
50.6%	2,039	1,909	-129	-6.4%
51.9%	1,921	1,876	-45	-2.3%
53.1%	1,909	1,873	-36	-1.9%
54.3%	1,873	1,862	-11	-0.6%
55.6%	1,855	1,855	0	0.0%
56.8%	1,850	1,850	0	0.0%
58.0%	1,839	1,833	-6	-0.3%
59.3%	1,833	1,725	-108	-5.9%
60.5%	1,725	1,722	-3	-0.2%
61.7%	1,722	1,693	-29	-1.7%
63.0%	1,693	1,688	-5	-0.3%
64.2%	1,683	1,678	-5	-0.3%
65.4%	1,678	1,668	-9	-0.6%
66.7%	1,668	1,661	-7	-0.4%
67.9%	1,661	1,653	-8	-0.5%
69.1%	1,660	1,650	-10	-0.6%
70.4%	1,653	1,635	-19	-1.1%
71.6%	1,650	1,618	-33	-2.0%
72.8%	1,618	1,610	-8	-0.5%
74.1%	1,606	1,606	0	0.0%
75.3%	1,597	1,540	-57	-3.6%
76.5%	1,590	1,533	-57	-3.6%
77.8%	1,540	1,520	-20	-1.3%
79.0%	1,520	1,455	-65	-4.3%
80.2%	1,518	1,407	-111	-7.3%
81.5%	1,493	801	-692	-46.4%
82.7%	1,356	800	-556	-41.0%
84.0%	800	744	-56	-7.1%
85.2%	744	614	-129	-17.4%
86.4%	614	550	-64	-10.4%
87.7%	550	481	-69	-12.6%
88.9%	488	435	-52	-10.7%
90.1%	484	427	-58	-11.9%
91.4%	435	407	-28	-6.5%
92.6%	427	358	-69	-16.2%
93.8%	407	354	-53	-13.0%
95.1%	354	289	-65	-18.2%
96.3%	262	263	1	0.5%
97.5%	226	236	10	4.3%
98.8%	201	226	25	12.6%
100.0%	88	68	-20	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,585	4,600	15	0.3%
24.7%	4,583	4,600	17	0.4%
25.9%	4,583	4,600	17	0.4%
27.2%	4,582	4,600	18	0.4%
28.4%	4,582	4,584	2	0.0%
29.6%	4,582	4,583	1	0.0%
30.9%	4,582	4,583	1	0.0%
32.1%	4,582	4,583	1	0.0%
33.3%	4,581	4,583	2	0.0%
34.6%	4,581	4,583	2	0.0%
35.8%	4,506	4,582	76	1.7%
37.0%	4,448	4,582	134	3.0%
38.3%	4,381	4,582	201	4.6%
39.5%	4,378	4,582	204	4.7%
40.7%	4,306	4,581	275	6.4%
42.0%	4,301	4,575	274	6.4%
43.2%	4,260	4,500	240	5.6%
44.4%	4,217	4,236	18	0.4%
45.7%	4,173	4,211	38	0.9%
46.9%	4,156	4,167	11	0.3%
48.1%	3,837	4,103	266	6.9%
49.4%	3,800	4,062	263	6.9%
50.6%	3,767	3,933	167	4.4%
51.9%	3,616	3,828	212	5.9%
53.1%	3,609	3,686	78	2.2%
54.3%	3,526	3,632	105	3.0%
55.6%	3,447	3,487	39	1.1%
56.8%	3,415	3,475	60	1.8%
58.0%	3,338	3,468	130	3.9%
59.3%	3,281	3,357	77	2.3%
60.5%	3,249	3,342	93	2.9%
61.7%	3,145	3,289	144	4.6%
63.0%	3,111	3,244	133	4.3%
64.2%	3,078	3,186	108	3.5%
65.4%	3,062	3,155	93	3.0%
66.7%	3,050	3,126	76	2.5%
67.9%	3,047	3,122	75	2.5%
69.1%	2,971	3,112	141	4.7%
70.4%	2,963	3,110	147	5.0%
71.6%	2,898	2,929	31	1.1%
72.8%	2,795	2,884	90	3.2%
74.1%	2,773	2,863	90	3.3%
75.3%	2,718	2,784	66	2.4%
76.5%	2,678	2,727	50	1.9%
77.8%	2,611	2,678	66	2.5%
79.0%	2,416	2,641	225	9.3%
80.2%	2,358	2,601	243	10.3%
81.5%	2,263	2,514	251	11.1%
82.7%	2,073	2,406	333	16.0%
84.0%	2,037	2,373	336	16.5%
85.2%	2,009	2,292	284	14.1%
86.4%	1,829	2,291	462	25.3%
87.7%	1,788	2,053	265	14.8%
88.9%	1,711	1,580	-130	-7.6%
90.1%	1,519	1,504	-15	-1.0%
91.4%	1,459	1,273	-186	-12.8%
92.6%	1,299	1,111	-188	-14.5%
93.8%	1,230	1,094	-136	-11.0%
95.1%	800	1,069	269	33.7%
96.3%	800	991	191	23.9%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,600	4,600	0	0.0%
25.9%	4,600	4,600	0	0.0%
27.2%	4,600	4,600	0	0.0%
28.4%	4,600	4,600	0	0.0%
29.6%	4,600	4,600	0	0.0%
30.9%	4,600	4,600	0	0.0%
32.1%	4,600	4,600	0	0.0%
33.3%	4,600	4,600	0	0.0%
34.6%	4,600	4,600	0	0.0%
35.8%	4,600	4,600	0	0.0%
37.0%	4,600	4,600	0	0.0%
38.3%	4,600	4,600	0	0.0%
39.5%	4,600	4,600	0	0.0%
40.7%	4,600	4,600	0	0.0%
42.0%	4,600	4,600	0	0.0%
43.2%	4,600	4,600	0	0.0%
44.4%	4,600	4,600	0	0.0%
45.7%	4,600	4,600	0	0.0%
46.9%	4,537	4,600	64	1.4%
48.1%	4,523	4,600	77	1.7%
49.4%	4,424	4,600	176	4.0%
50.6%	4,295	4,600	305	7.1%
51.9%	4,183	4,600	417	10.0%
53.1%	4,174	4,600	426	10.2%
54.3%	4,141	4,600	459	11.1%
55.6%	4,136	4,600	464	11.2%
56.8%	3,932	4,582	650	16.5%
58.0%	3,737	4,572	834	22.3%
59.3%	3,672	4,418	746	20.3%
60.5%	3,464	4,338	873	25.2%
61.7%	3,210	4,113	903	28.1%
63.0%	3,193	4,111	918	28.7%
64.2%	3,110	3,854	744	23.9%
65.4%	3,097	3,838	741	23.9%
66.7%	3,065	3,700	634	20.7%
67.9%	3,025	3,632	607	20.1%
69.1%	2,870	3,498	628	21.9%
70.4%	2,866	3,464	599	20.9%
71.6%	2,806	3,462	656	23.4%
72.8%	2,793	3,382	589	21.1%
74.1%	2,740	3,381	641	23.4%
75.3%	2,698	3,240	542	20.1%
76.5%	2,577	3,238	661	25.7%
77.8%	2,575	3,213	638	24.8%
79.0%	2,511	3,121	610	24.3%
80.2%	2,431	2,998	567	23.3%
81.5%	2,305	2,998	693	30.1%
82.7%	2,276	2,985	709	31.2%
84.0%	2,221	2,920	699	31.5%
85.2%	2,179	2,867	688	31.6%
86.4%	2,145	2,819	673	31.4%
87.7%	2,103	2,721	617	29.3%
88.9%	1,969	2,634	665	33.8%
90.1%	1,708	2,621	913	53.5%
91.4%	1,602	2,433	831	51.9%
92.6%	1,474	2,368	894	60.7%
93.8%	1,471	2,331	860	58.5%
95.1%	1,240	2,188	948	76.4%
96.3%	1,240	2,150	911	73.5%
97.5%	1,239	1,726	487	39.3%
98.8%	800	1,718	918	114.8%
100.0%	800	1,340	540	67.5%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,592	4,600	8	0.2%
24.7%	4,569	4,600	31	0.7%
25.9%	4,533	4,600	67	1.5%
27.2%	4,517	4,600	83	1.8%
28.4%	4,373	4,600	227	5.2%
29.6%	4,209	4,600	391	9.3%
30.9%	4,151	4,600	449	10.8%
32.1%	4,147	4,600	453	10.9%
33.3%	4,133	4,600	467	11.3%
34.6%	4,114	4,600	486	11.8%
35.8%	4,113	4,600	487	11.8%
37.0%	4,060	4,600	540	13.3%
38.3%	3,998	4,600	602	15.1%
39.5%	3,984	4,600	616	15.5%
40.7%	3,974	4,600	626	15.7%
42.0%	3,965	4,600	635	16.0%
43.2%	3,875	4,600	725	18.7%
44.4%	3,868	4,597	730	18.9%
45.7%	3,863	4,594	731	18.9%
46.9%	3,854	4,525	671	17.4%
48.1%	3,847	4,505	658	17.1%
49.4%	3,832	4,461	629	16.4%
50.6%	3,729	4,443	714	19.2%
51.9%	3,675	4,394	719	19.6%
53.1%	3,612	4,286	674	18.7%
54.3%	3,552	4,265	713	20.1%
55.6%	3,549	4,259	710	20.0%
56.8%	3,527	4,219	691	19.6%
58.0%	3,473	4,216	743	21.4%
59.3%	3,307	4,213	907	27.4%
60.5%	3,271	4,046	775	23.7%
61.7%	3,232	3,951	719	22.2%
63.0%	3,172	3,891	720	22.7%
64.2%	3,155	3,888	733	23.2%
65.4%	3,137	3,808	671	21.4%
66.7%	3,098	3,760	662	21.4%
67.9%	3,058	3,759	702	22.9%
69.1%	2,984	3,725	741	24.8%
70.4%	2,945	3,664	719	24.4%
71.6%	2,944	3,655	711	24.2%
72.8%	2,924	3,655	731	25.0%
74.1%	2,902	3,601	699	24.1%
75.3%	2,854	3,581	727	25.5%
76.5%	2,843	3,522	679	23.9%
77.8%	2,838	3,458	620	21.9%
79.0%	2,825	3,427	603	21.3%
80.2%	2,777	3,400	623	22.4%
81.5%	2,717	3,293	576	21.2%
82.7%	2,693	3,226	533	19.8%
84.0%	2,680	3,079	399	14.9%
85.2%	2,674	2,972	298	11.1%
86.4%	2,574	2,841	267	10.4%
87.7%	2,506	2,840	334	13.3%
88.9%	2,425	2,612	187	7.7%
90.1%	2,321	2,511	189	8.1%
91.4%	2,220	2,444	224	10.1%
92.6%	2,157	2,421	263	12.2%
93.8%	2,099	2,330	231	11.0%
95.1%	1,999	2,239	241	12.0%
96.3%	800	1,337	537	67.1%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	600	-200	-25.0%

Figure SW-38-b
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Probability of Exceedance

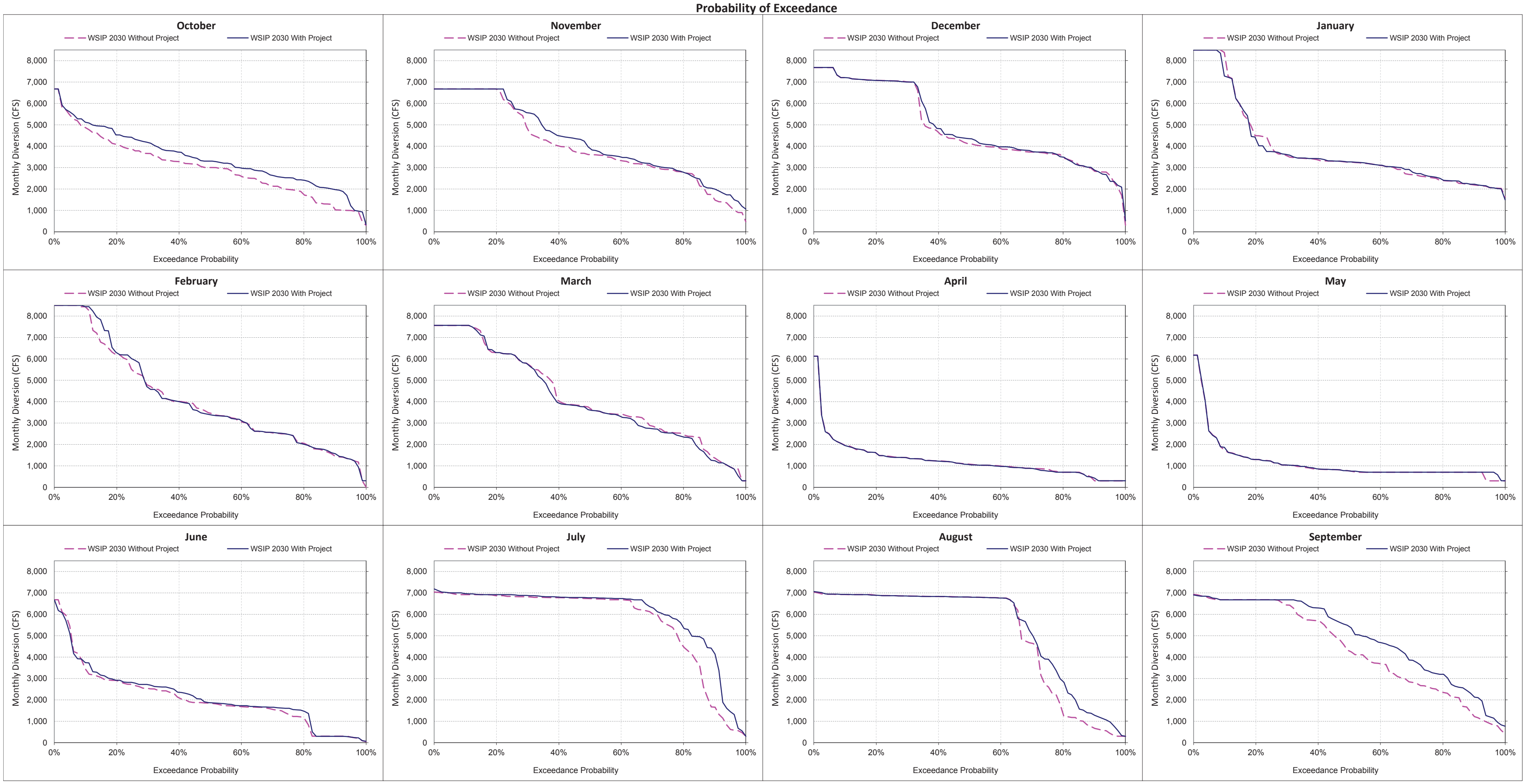


Table SW-38-b

Banks Pumping Plant (SWP and CVP), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	5,799	5,915	116	2.0%
3.7%	5,704	5,716	12	0.2%
4.9%	5,461	5,615	155	2.8%
6.2%	5,269	5,481	212	4.0%
7.4%	5,189	5,283	94	1.8%
8.6%	4,945	5,281	336	6.8%
9.9%	4,877	5,119	242	5.0%
11.1%	4,770	5,089	319	6.7%
12.3%	4,635	4,987	353	7.6%
13.6%	4,623	4,959	336	7.3%
14.8%	4,458	4,941	483	10.8%
16.0%	4,340	4,926	585	13.5%
17.3%	4,303	4,860	556	12.9%
18.5%	4,137	4,829	692	16.7%
19.8%	4,095	4,534	439	10.7%
21.0%	4,040	4,527	487	12.0%
22.2%	3,953	4,457	505	12.8%
23.5%	3,897	4,438	541	13.9%
24.7%	3,886	4,420	534	13.7%
25.9%	3,785	4,318	533	14.1%
27.2%	3,783	4,272	489	12.9%
28.4%	3,676	4,231	555	15.1%
29.6%	3,667	4,191	523	14.3%
30.9%	3,659	4,137	479	13.1%
32.1%	3,528	4,037	509	14.4%
33.3%	3,501	3,958	457	13.0%
34.6%	3,364	3,854	490	14.6%
35.8%	3,350	3,800	450	13.4%
37.0%	3,333	3,792	459	13.8%
38.3%	3,297	3,775	477	14.5%
39.5%	3,288	3,727	438	13.3%
40.7%	3,273	3,716	443	13.6%
42.0%	3,195	3,568	373	11.7%
43.2%	3,184	3,540	356	11.2%
44.4%	3,174	3,481	306	9.6%
45.7%	3,169	3,437	268	8.5%
46.9%	3,062	3,327	266	8.7%
48.1%	3,009	3,307	298	9.9%
49.4%	3,008	3,305	297	9.9%
50.6%	3,007	3,302	295	9.8%
51.9%	3,004	3,278	275	9.1%
53.1%	2,964	3,241	277	9.4%
54.3%	2,960	3,212	252	8.5%
55.6%	2,947	3,205	258	8.7%
56.8%	2,846	3,170	324	11.4%
58.0%	2,665	3,017	352	13.2%
59.3%	2,647	3,007	359	13.6%
60.5%	2,562	2,966	404	15.8%
61.7%	2,523	2,952	429	17.0%
63.0%	2,506	2,949	443	17.7%
64.2%	2,498	2,880	382	15.3%
65.4%	2,423	2,858	435	18.0%
66.7%	2,279	2,846	567	24.9%
67.9%	2,260	2,768	507	22.4%
69.1%	2,158	2,660	502	23.3%
70.4%	2,131	2,625	494	23.2%
71.6%	2,129	2,575	446	21.0%
72.8%	2,045	2,556	511	25.0%
74.1%	1,996	2,528	532	26.7%
75.3%	1,979	2,527	548	27.7%
76.5%	1,960	2,513	553	28.2%
77.8%	1,930	2,432	501	26.0%
79.0%	1,891	2,427	536	28.3%
80.2%	1,714	2,405	691	40.3%
81.5%	1,682	2,360	679	40.4%
82.7%	1,616	2,264	648	40.1%
84.0%	1,352	2,142	790	58.4%
85.2%	1,349	2,080	731	54.2%
86.4%	1,306	2,074	768	58.8%
87.7%	1,299	2,047	748	57.6%
88.9%	1,288	2,012	724	56.2%
90.1%	1,023	1,968	945	92.4%
91.4%	1,019	1,951	931	91.4%
92.6%	1,011	1,891	880	87.0%
93.8%	1,000	1,709	709	70.9%
95.1%	997	1,221	224	22.4%
96.3%	968	1,000	32	3.3%
97.5%	931	969	38	4.1%
98.8%	474	926	452	95.2%
100.0%	300	332	32	10.5%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,604	6,680	76	1.2%
22.2%	6,184	6,680	496	8.0%
23.5%	6,072	6,185	113	1.9%
24.7%	5,930	6,093	162	2.7%
25.9%	5,667	5,745	78	1.4%
27.2%	5,550	5,719	169	3.0%
28.4%	5,432	5,670	238	4.4%
29.6%	4,912	5,570	657	13.4%
30.9%	4,571	5,548	977	21.4%
32.1%	4,492	5,500	1,008	22.4%
33.3%	4,415	5,334	919	20.8%
34.6%	4,302	4,994	692	16.1%
35.8%	4,292	4,751	458	10.7%
37.0%	4,187	4,718	532	12.7%
38.3%	4,083	4,621	538	13.2%
39.5%	4,027	4,502	475	11.8%
40.7%	3,983	4,464	481	12.1%
42.0%	3,975	4,437	463	11.6%
43.2%	3,954	4,412	458	11.6%
44.4%	3,780	4,385	605	16.0%
45.7%	3,723	4,353	630	16.9%
46.9%	3,676	4,322	646	17.6%
48.1%	3,668	4,237	569	15.5%
49.4%	3,613	3,974	361	10.0%
50.6%	3,605	3,831	226	6.3%
51.9%	3,603	3,803	200	5.5%
53.1%	3,582	3,742	160	4.5%
54.3%	3,571	3,615	44	1.2%
55.6%	3,501	3,588	87	2.5%
56.8%	3,481	3,568	87	2.5%
58.0%	3,394	3,544	150	4.4%
59.3%	3,341	3,524	183	5.5%
60.5%	3,313	3,474	161	4.9%
61.7%	3,292	3,470	178	5.4%
63.0%	3,213	3,421	208	6.5%
64.2%	3,188	3,388	199	6.3%
65.4%	3,186	3,298	112	3.5%
66.7%	3,162	3,227	64	2.0%
67.9%	3,149	3,214	64	2.0%
69.1%	3,103	3,202	98	3.2%
70.4%	3,009	3,096	87	2.9%
71.6%	2,999	3,062	63	2.1%
72.8%	2,935	3,032	97	3.3%
74.1%	2,920	3,003	83	2.8%
75.3%	2,912	2,984	73	2.5%
76.5%	2,895	2,966	71	2.5%
77.8%	2,822	2,869	48	1.7%
79.0%	2,812	2,829	17	0.6%
80.2%	2,765	2,770	5	0.2%
81.5%	2,737	2,707	-29	-1.1%
82.7%	2,715	2,606	-109	-4.0%
84.0%	2,558	2,521	-37	-1.5%
85.2%	2,148	2,464	316	14.7%
86.4%	2,075	2,127	52	2.5%
87.7%	1,753	2,058	304	17.3%
88.9%	1,742	2,039	297	17.0%
90.1%	1,480	1,991	511	34.5%
91.4%	1,405	1,910	505	35.9%
92.6%	1,397	1,814	417	29.8%
93.8%	1,356	1,732	376	27.7%
95.1%	1,171	1,727	556	47.5%
96.3%	1,008	1,499	491	48.7%
97.5%	906	1,427	521	57.5%
98.8%	898	1,197	299	33.2%
100.0%	470	1,056	585	124.5%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,678	7,678	0	0.0%
1.2%	7,678	7,678	0	0.0%
2.5%	7,678	7,678	0	0.0%
3.7%	7,678	7,678	0	0.0%
4.9%	7,678	7,678	0	0.0%
6.2%	7,678	7,678	0	0.0%
7.4%	7,328	7,328	0	0.0%
8.6%	7,210	7,210	0	0.0%
9.9%	7,208	7,208	0	0.0%
11.1%	7,204	7,204	0	0.0%
12.3%	7,148	7,148	0	0.0%
13.6%	7,142	7,142	0	0.0%
14.8%	7,125	7,125	0	0.0%
16.0%	7,112	7,112	0	0.0%
17.3%	7,106	7,089	-17	-0.2%
18.5%	7,089	7,086	-3	0.0%
19.8%	7,086	7,077	-9	-0.1%
21.0%	7,077	7,072	-5	-0.1%
22.2%	7,072	7,065	-8	-0.1%
23.5%	7,065	7,063	-2	0.0%
24.7%	7,063	7,054	-9	-0.1%
25.9%	7,054	7,053	-1	0.0%
27.2%	7,053	7,042	-11	-0.2%
28.4%	7,042	7,016	-26	-0.4%
29.6%	7,016	7,005	-11	-0.2%
30.9%	7,004	7,004	0	0.0%
32.1%	6,999	6,999	0	0.0%
33.3%	6,606	6,775	169	2.6%
34.6%	5,212	6,123	911	17.5%
35.8%	4,936	5,750	813	16.5%
37.0%	4,849	5,120	272	5.6%
38.3%	4,834	5,041	206	4.3%
39.5%	4,717	4,834	117	2.5%
40.7%	4,547	4,824	277	6.1%
42.0%	4,501	4,560	59	1.3%
43.2%	4,381	4,553	171	3.9%
44.4%	4,365	4,540	175	4.0%
45.7%	4,348	4,431	83	1.9%
46.9%	4,281	4,414	134	3.1%
48.1%	4,185	4,381	196	4.7%
49.4%	4,120	4,363	243	5.9%
50.6%	4,108	4,348	241	5.9%
51.9%	4,056	4,281	224	5.5%
53.1%	4,029	4,140	111	2.8%
54.3%	4,023	4,108	85	2.1%
55.6%	3,985	4,087	103	2.6%
56.8%	3,971	4,074	102	2.6%
58.0%	3,970	4,029	58	1.5%
59.3%	3,931	3,975	44	1.1%
60.5%	3,859	3,971	112	2.9%
61.7%	3,857	3,970	113	2.9%
63.0%	3,846	3,962	117	3.0%
64.2%	3,827	3,921	94	2.4%
65.4%	3,804	3,846	42	1.1%
66.7%	3,795	3,821	26	0.7%
67.9%	3,747	3,811	64	1.7%
69.1%	3,732	3,804	72	1.9%
70.4%	3,729	3,747	18	0.5%
71.6%	3,727	3,732	5	0.1%
72.8%	3,706	3,730	23	0.6%
74.1%	3,688	3,729	41	1.1%
75.3%	3,639	3,697	59	1.6%
76.5%	3,637	3,688	51	1.4%
77.8%	3,624	3,639	15	0.4%
79.0%	3,617	3,514	-102	-2.8%
80.2%	3,440	3,492	51	1.5%
81.5%	3,395	3,364	-32	-0.9%
82.7%	3,324	3,276	-48	-1.4%
84.0%	3,262	3,156	-106	-3.2%
85.2%	3,108	3,100	-8	-0.3%
86.4%	3,077	3,090	13	0.4%
87.7%	2,997	3,022	25	0.9%
88.9%	2,984	3,009	25	0.8%
90.1%	2,832	2,876	44	1.5%
91.4%	2,814	2,814	0	0.0%
92.6%	2,799	2,693	-106	-3.8%
93.8%	2,795	2,677	-119	-4.2%
95.1%	2,638	2,359	-279	-10.6%
96.3%	2,322	2,357	35	1.5%
97.5%	2,077	2,173	95	4.6%
98.8%	1,708	2,097	389	22.8%
100.0%	300	516	216	71.9%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,500	8,348	-152	-1.8%
9.9%	8,383	7,288	-1,095	-13.1%
11.1%	7,260	7,218	-41	-0.6%
12.3%	7,166	7,166	0	0.0%
13.6%	6,236	6,236	0	0.0%
14.8%	5,970	5,969	0	0.0%
16.0%	5,457	5,676	219	4.0%
17.3%	5,266	5,433	167	3.2%
18.5%	4,926	4,457	-470	-9.5%
19.8%	4,494	4,436	-59	-1.3%
21.0%	4,490	4,022	-468	-10.4%
22.2%	4,457	4,020	-437	-9.8%
23.5%	4,441	3,754	-687	-15.5%
24.7%	4,022	3,751	-271	-6.7%
25.9%	3,760	3,746	-13	-0.4%
27.2%	3,646	3,715	69	1.9%
28.4%	3,619	3,646	27	0.8%
29.6%	3,579	3,619	40	1.1%
30.9%	3,495	3,579	83	2.4%
32.1%	3,474	3,495	21	0.6%
33.3%	3,449	3,453	4	0.1%
34.6%	3,444	3,447	3	0.1%
35.8%	3,429	3,447	18	0.5%
37.0%	3,428	3,429	2	0.0%
38.3%	3,410	3,429	19	0.6%
39.5%	3,381	3,424	43	1.3%
40.7%	3,324	3,410	87	2.6%
42.0%	3,319	3,377	58	1.8%
43.2%	3,309	3,319	10	0.3%
44.4%	3,308	3,313	5	0.2%
45.7%	3,304	3,310	5	0.2%
46.9%	3,300	3,305	4	0.1%
48.1%	3,277	3,296	19	0.6%
49.4%	3,262	3,270	8	0.3%
50.6%	3,260	3,263	3	0.1%
51.9%	3,242	3,254	12	0.4%
53.1%	3,234	3,250	16	0.5%
54.3%	3,207	3,234	27	0.8%
55.6%	3,193	3,207	14	0.4%
56.8%	3,179	3,172	-8	-0.2%
58.0%	3,149	3,149	0	0.0%
59.3%	3,110	3,125	15	0.5%
60.5%	3,097	3,110	13	0.4%
61.7%	3,056	3,056	0	0.0%
63.0%	3,046	3,046	0	0.0%
64.2%	3,005	3,041	36	1.2%
65.4%	2,917	3,019	102	3.5%
66.7%	2,915	3,005	90	3.1%
67.9%	2,718	2,917	200	7.3%
69.1%	2,686	2,915	229	8.5%
70.4%	2,670	2,782	112	4.2%
71.6%	2,646	2,719	73	2.8%
72.8%	2,602	2,718	115	4.4%
74.1%	2,583	2,646	63	2.4%
75.3%	2,554	2,603	49	1.9%
76.5%	2,528	2,583	55	2.2%
77.8%	2,502	2,554	52	2.1%
79.0%	2,405	2,502	96	4.0%
80.2%	2,392	2,405	13	0.5%
81.5%	2,380	2,392	12	0.5%
82.7%	2,380	2,380	0	0.0%
84.0%	2,372	2,380	7	0.3%
85.2%	2,263	2,372	109	4.8%
86.4%	2,258	2,265	7	0.3%
87.7%	2,225	2,260	35	1.6%
88.9%	2,220	2,225	5	0.2%
90.1%	2,193	2,220	27	1.2%
91.4%	2,170	2,194	24	1.1%
92.6%	2,155	2,170	16	0.7%
93.8%	2,128	2,155	26	1.2%
95.1%	2,068	2,068	0	0.0%
96.3%	2,055	2,051	-3	-0.2%
97.5%	2,040	2,024	-16	-0.8%
98.8%	2,030	2,002	-27	-1.3%
100.0%	1,643	1,499	-144	-8.8%

Table SW-38-b

Banks Pumping Plant (SWP and CVP), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,437	8,500	63	0.7%
9.9%	8,437	8,437	0	0.0%
11.1%	8,259	8,437	179	2.2%
12.3%	7,329	8,233	905	12.3%
13.6%	7,201	7,952	751	10.4%
14.8%	6,785	7,835	1,050	15.5%
16.0%	6,694	7,329	634	9.5%
17.3%	6,505	7,312	807	12.4%
18.5%	6,311	6,530	219	3.5%
19.8%	6,192	6,311	118	1.9%
21.0%	6,178	6,199	20	0.3%
22.2%	6,037	6,181	144	2.4%
23.5%	5,958	6,178	220	3.7%
24.7%	5,518	6,012	494	8.9%
25.9%	5,344	5,936	591	11.1%
27.2%	5,287	5,820	533	10.1%
28.4%	5,203	5,192	-11	-0.2%
29.6%	4,792	4,710	-81	-1.7%
30.9%	4,710	4,576	-135	-2.9%
32.1%	4,576	4,566	-10	-0.2%
33.3%	4,570	4,441	-129	-2.8%
34.6%	4,441	4,149	-292	-6.6%
35.8%	4,135	4,144	9	0.2%
37.0%	4,086	4,086	0	0.0%
38.3%	4,009	4,052	43	1.1%
39.5%	4,007	4,009	2	0.1%
40.7%	4,005	3,973	-32	-0.8%
42.0%	3,973	3,946	-28	-0.7%
43.2%	3,946	3,916	-30	-0.7%
44.4%	3,922	3,630	-292	-7.4%
45.7%	3,702	3,586	-115	-3.1%
46.9%	3,670	3,484	-186	-5.1%
48.1%	3,586	3,442	-145	-4.0%
49.4%	3,485	3,406	-79	-2.3%
50.6%	3,442	3,376	-66	-1.9%
51.9%	3,376	3,347	-28	-0.8%
53.1%	3,347	3,337	-10	-0.3%
54.3%	3,337	3,319	-19	-0.6%
55.6%	3,319	3,311	-8	-0.2%
56.8%	3,243	3,212	-31	-1.0%
58.0%	3,212	3,190	-22	-0.7%
59.3%	3,074	3,182	108	3.5%
60.5%	3,041	3,074	32	1.1%
61.7%	2,996	2,996	0	0.0%
63.0%	2,870	2,755	-115	-4.0%
64.2%	2,619	2,619	0	0.0%
65.4%	2,615	2,615	0	0.0%
66.7%	2,581	2,607	26	1.0%
67.9%	2,570	2,570	0	0.0%
69.1%	2,566	2,566	0	0.0%
70.4%	2,529	2,561	32	1.3%
71.6%	2,525	2,536	11	0.4%
72.8%	2,500	2,517	17	0.7%
74.1%	2,499	2,499	0	0.0%
75.3%	2,460	2,460	0	0.0%
76.5%	2,415	2,415	0	0.0%
77.8%	2,158	2,081	-77	-3.6%
79.0%	2,081	2,046	-35	-1.7%
80.2%	2,046	2,006	-40	-1.9%
81.5%	1,952	1,952	0	0.0%
82.7%	1,805	1,863	57	3.2%
84.0%	1,790	1,805	16	0.9%
85.2%	1,771	1,790	19	1.0%
86.4%	1,708	1,771	63	3.7%
87.7%	1,647	1,708	61	3.7%
88.9%	1,568	1,610	42	2.7%
90.1%	1,441	1,568	127	8.8%
91.4%	1,418	1,441	23	1.6%
92.6%	1,406	1,418	12	0.9%
93.8%	1,347	1,347	0	0.0%
95.1%	1,310	1,310	0	0.0%
96.3%	1,228	1,228	0	0.0%
97.5%	1,176	930	-246	-20.9%
98.8%	300	300	0	0.0%
100.0%	7	300	293	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,561	7,561	0	0.0%
1.2%	7,561	7,561	0	0.0%
2.5%	7,561	7,561	0	0.0%
3.7%	7,561	7,561	0	0.0%
4.9%	7,561	7,561	0	0.0%
6.2%	7,561	7,561	0	0.0%
7.4%	7,561	7,561	0	0.0%
8.6%	7,561	7,561	0	0.0%
9.9%	7,561	7,561	0	0.0%
11.1%	7,561	7,561	0	0.0%
12.3%	7,485	7,485	0	0.0%
13.6%	7,418	7,318	-100	-1.3%
14.8%	7,318	7,122	-196	-2.7%
16.0%	6,766	7,067	301	4.4%
17.3%	6,448	6,448	0	0.0%
18.5%	6,309	6,429	120	1.9%
19.8%	6,296	6,295	-1	0.0%
21.0%	6,287	6,288	1	0.0%
22.2%	6,241	6,242	0	0.0%
23.5%	6,234	6,235	1	0.0%
24.7%	6,233	6,234	1	0.0%
25.9%	6,160	6,160	0	0.0%
27.2%	5,950	5,964	14	0.2%
28.4%	5,820	5,820	0	0.0%
29.6%	5,795	5,795	0	0.0%
30.9%	5,678	5,634	-43	-0.8%
32.1%	5,505	5,505	0	0.0%
33.3%	5,484	5,202	-281	-5.1%
34.6%	5,314	5,055	-259	-4.9%
35.8%	5,227	4,852	-375	-7.2%
37.0%	5,055	4,499	-555	-11.0%
38.3%	4,852	4,219	-633	-13.0%
39.5%	4,080	3,961	-119	-2.9%
40.7%	3,961	3,893	-69	-1.7%
42.0%	3,893	3,871	-22	-0.6%
43.2%	3,871	3,859	-12	-0.3%
44.4%	3,859	3,833	-26	-0.7%
45.7%	3,835	3,825	-10	-0.3%
46.9%	3,825	3,777	-47	-1.2%
48.1%	3,777	3,757	-21	-0.5%
49.4%	3,757	3,623	-134	-3.6%
50.6%	3,623	3,595	-28	-0.8%
51.9%	3,577	3,577	0	0.0%
53.1%	3,548	3,548	0	0.0%
54.3%	3,479	3,479	0	0.0%
55.6%	3,445	3,445	0	0.0%
56.8%	3,437	3,406	-31	-0.9%
58.0%	3,417	3,404	-13	-0.4%
59.3%	3,406	3,346	-61	-1.8%
60.5%	3,404	3,257	-147	-4.3%
61.7%	3,346	3,252	-94	-2.8%
63.0%	3,295	3,217	-79	-2.4%
64.2%	3,295	3,108	-187	-5.7%
65.4%	3,286	2,888	-398	-12.1%
66.7%	3,252	2,844	-408	-12.6%
67.9%	3,108	2,770	-339	-10.9%
69.1%	2,888	2,758	-130	-4.5%
70.4%	2,844	2,725	-119	-4.2%
71.6%	2,758	2,715	-43	-1.6%
72.8%	2,715	2,581	-134	-4.9%
74.1%	2,583	2,543	-41	-1.6%
75.3%	2,581	2,536	-45	-1.7%
76.5%	2,551	2,531	-20	-0.8%
77.8%	2,536	2,438	-98	-3.9%
79.0%	2,531	2,385	-146	-5.8%
80.2%	2,438	2,343	-95	-3.9%
81.5%	2,385	2,327	-58	-2.4%
82.7%	2,376	2,283	-94	-3.9%
84.0%	2,343	1,981	-362	-15.4%
85.2%	2,327	1,774	-554	-23.8%
86.4%	1,774	1,662	-112	-6.3%
87.7%	1,662	1,447	-215	-12.9%
88.9%	1,447	1,262	-185	-12.8%
90.1%	1,359	1,235	-124	-9.1%
91.4%	1,235	1,143	-92	-7.5%
92.6%	1,139	1,139	0	0.0%
93.8%	1,039	1,039	0	0.0%
95.1%	943	943	0	0.0%
96.3%	857	852	-4	-0.5%
97.5%	852	531	-321	-37.7%
98.8%	300	309	9	2.9%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,125	6,125	0	0.0%
1.2%	6,125	6,125	0	0.0%
2.5%	3,367	3,364	-2	-0.1%
3.7%	2,622	2,599	-23	-0.9%
4.9%	2,489	2,485	-4	-0.2%
6.2%	2,249	2,250	1	0.0%
7.4%	2,137	2,129	-8	-0.4%
8.6%	2,057	2,049	-8	-0.4%
9.9%	1,973	1,952	-21	-1.1%
11.1%	1,952	1,902	-50	-2.6%
12.3%	1,862	1,855	-8	-0.4%
13.6%	1,768	1,800	33	1.9%
14.8%	1,761	1,768	7	0.4%
16.0%	1,744	1,737	-8	-0.4%
17.3%	1,639	1,639	0	0.0%
18.5%	1,637	1,632	-5	-0.3%
19.8%	1,624	1,624	0	0.0%
21.0%	1,485	1,485	0	0.0%
22.2%	1,477	1,477	0	0.0%
23.5%	1,456	1,429	-27	-1.9%
24.7%	1,437	1,411	-27	-1.9%
25.9%	1,411	1,395	-16	-1.1%
27.2%	1,395	1,394	-1	-0.1%
28.4%	1,394	1,391	-2	-0.2%
29.6%	1,391	1,389	-3	-0.2%
30.9%	1,340	1,340	0	0.0%
32.1%	1,335	1,335	0	0.0%
33.3%	1,329	1,329	0	0.0%
34.6%	1,323	1,320	-3	-0.3%
35.8%	1,254	1,254	0	0.0%
37.0%	1,252	1,248	-4	-0.3%
38.3%	1,237	1,235	-2	-0.2%
39.5%	1,235	1,230	-5	-0.4%
40.7%	1,230	1,218	-11	-0.9%
42.0%	1,218	1,201	-17	-1.4%
43.2%	1,195	1,195	0	0.0%
44.4%	1,175	1,175	0	0.0%
45.7%	1,130	1,130	0	0.0%
46.9%	1,114	1,114	0	0.0%
48.1%	1,104	1,086	-18	-1.7%
49.4%	1,086	1,070	-16	-1.4%
50.6%	1,070	1,046	-24	-2.3%
51.9%	1,046	1,038	-7	-0.7%
53.1%	1,038	1,030	-9	-0.8%
54.3%	1,030	1,029	-1	0.0%
55.6%	1,029	1,028	-1	-0.1%
56.8%	1,028	1,014	-14	-1.4%
58.0%	1,014	999	-15	-1.4%
59.3%	1,007	980	-27	-2.7%
60.5%	980	974	-6	-0.6%
61.7%	974	967	-7	-0.7%
63.0%	967	938	-29	-3.0%
64.2%	938	924	-14	-1.5%
65.4%	924	923	-1	-0.1%
66.7%	923	911	-12	-1.3%
67.9%	892	892	0	0.0%
69.1%	892	892	0	0.0%
70.4%	881	872	-9	-1.1%
71.6%	872	840	-32	-3.7%
72.8%	868	792	-76	-8.7%
74.1%	852	773	-79	-9.3%
75.3%	840	757	-84	-9.9%
76.5%	757	745	-12	-1.6%
77.8%	745	700	-45	-6.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	682	-18	-2.6%
86.4%	612	616	5	0.7%
87.7%	582	500	-82	-14.1%
88.9%	473	489	17	3.5%
90.1%	300	421	121	40.5%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,177	6,177	0	0.0%
1.2%	6,177	6,177	0	0.0%
2.5%	4,995	5,093	97	1.9%
3.7%	4,049	4,046	-3	-0.1%
4.9%	2,637	2,626	-11	-0.4%
6.2%	2,439	2,428	-11	-0.4%
7.4%	2,316	2,304	-11	-0.5%
8.6%	1,901	1,896	-5	-0.3%
9.9%	1,736	1,863	127	7.3%
11.1%	1,634	1,623	-11	-0.7%
12.3%	1,602	1,591	-11	-0.7%
13.6%	1,544	1,533	-11	-0.7%
14.8%	1,487	1,476	-11	-0.7%
16.0%	1,420	1,420	0	0.0%
17.3%	1,390	1,390	0	0.0%
18.5%	1,314	1,315	1	0.1%
19.8%	1,298	1,298	0	0.0%
21.0%	1,295	1,295	0	0.0%
22.2%	1,256	1,245	-12	-0.9%
23.5%	1,249	1,238	-11	-0.9%
24.7%	1,232	1,220	-12	-0.9%
25.9%	1,126	1,140	15	1.3%
27.2%	1,111	1,126	15	1.3%
28.4%	1,041	1,041	1	0.1%
29.6%	1,038	1,041	4	0.4%
30.9%	1,025	1,037	13	1.2%
32.1%	1,023	1,025	2	0.2%
33.3%	975	1,024	48	5.0%
34.6%	968	975	7	0.8%
35.8%	921	968	47	5.1%
37.0%	909	921	12	1.3%
38.3%	867	909	42	4.8%
39.5%	849	867	18	2.1%
40.7%	841	849	8	1.0%
42.0%	837	841	4	0.4%
43.2%	832	837	4	0.5%
44.4%	831	831	0	0.0%
45.7%	821	821	0	0.0%
46.9%	816	816	0	0.0%
48.1%	782	782	0	0.0%
49.4%	776	778	2	0.3%
50.6%	754	755	1	0.1%
51.9%	716	754	38	5.2%
53.1%	700	725	25	3.6%
54.3%	700	711	11	1.6%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	340	700	360	106.1%
95.1%	300	700	400	133.3%
96.3%	300	700	400	133.3%
97.5%	300	578	278	92.7%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-38-b

Banks Pumping Plant (SWP and CVP), Monthly Diversion

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,179	-501	-7.5%
2.5%	6,111	6,064	-46	-0.8%
3.7%	5,959	5,714	-245	-4.1%
4.9%	5,455	5,119	-336	-6.2%
6.2%	4,262	4,161	-101	-2.4%
7.4%	4,183	3,917	-265	-6.3%
8.6%	3,907	3,907	0	0.0%
9.9%	3,452	3,741	289	8.4%
11.1%	3,202	3,729	527	16.4%
12.3%	3,170	3,318	148	4.7%
13.6%	3,118	3,297	179	5.7%
14.8%	3,055	3,158	103	3.4%
16.0%	2,951	3,117	166	5.6%
17.3%	2,930	3,018	87	3.0%
18.5%	2,912	2,981	69	2.4%
19.8%	2,911	2,917	6	0.2%
21.0%	2,853	2,911	58	2.0%
22.2%	2,776	2,828	52	1.9%
23.5%	2,730	2,823	93	3.4%
24.7%	2,727	2,823	96	3.5%
25.9%	2,665	2,786	120	4.5%
27.2%	2,618	2,727	109	4.2%
28.4%	2,545	2,722	177	7.0%
29.6%	2,543	2,721	177	7.0%
30.9%	2,514	2,691	177	7.0%
32.1%	2,509	2,622	113	4.5%
33.3%	2,439	2,614	175	7.2%
34.6%	2,424	2,605	181	7.5%
35.8%	2,423	2,596	174	7.2%
37.0%	2,352	2,547	195	8.3%
38.3%	2,312	2,509	197	8.5%
39.5%	2,128	2,353	225	10.6%
40.7%	2,039	2,340	301	14.8%
42.0%	2,005	2,310	305	15.2%
43.2%	1,909	2,262	352	18.5%
44.4%	1,878	2,188	309	16.5%
45.7%	1,876	2,049	173	9.2%
46.9%	1,873	2,039	166	8.8%
48.1%	1,855	1,909	54	2.9%
49.4%	1,850	1,873	23	1.2%
50.6%	1,833	1,855	22	1.2%
51.9%	1,816	1,850	35	1.9%
53.1%	1,770	1,833	63	3.5%
54.3%	1,733	1,825	92	5.3%
55.6%	1,725	1,800	75	4.4%
56.8%	1,722	1,789	67	3.9%
58.0%	1,705	1,737	32	1.9%
59.3%	1,693	1,727	34	2.0%
60.5%	1,678	1,725	47	2.8%
61.7%	1,668	1,722	54	3.2%
63.0%	1,663	1,693	30	1.8%
64.2%	1,661	1,688	27	1.6%
65.4%	1,653	1,678	25	1.5%
66.7%	1,650	1,668	18	1.1%
67.9%	1,618	1,661	43	2.6%
69.1%	1,590	1,653	63	4.0%
70.4%	1,540	1,650	111	7.2%
71.6%	1,520	1,635	115	7.5%
72.8%	1,493	1,618	125	8.4%
74.1%	1,396	1,610	215	15.4%
75.3%	1,312	1,606	294	22.4%
76.5%	1,222	1,540	318	26.0%
77.8%	1,222	1,533	311	25.4%
79.0%	1,206	1,520	314	26.1%
80.2%	1,122	1,455	333	29.7%
81.5%	827	1,365	538	65.0%
82.7%	300	503	203	67.8%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	289	-11	-3.5%
95.1%	262	262	0	-0.2%
96.3%	226	236	10	4.3%
97.5%	201	226	25	12.6%
98.8%	90	86	-4	
100.0%	47	68	20	

July				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,039	7,180	141	2.0%
1.2%	7,030	7,111	81	1.2%
2.5%	7,005	7,039	34	0.5%
3.7%	7,005	7,030	25	0.4%
4.9%	7,005	7,005	0	0.0%
6.2%	6,959	7,005	46	0.7%
7.4%	6,926	7,005	79	1.1%
8.6%	6,922	7,005	83	1.2%
9.9%	6,922	6,970	48	0.7%
11.1%	6,922	6,959	37	0.5%
12.3%	6,922	6,959	37	0.5%
13.6%	6,922	6,926	4	0.1%
14.8%	6,922	6,922	0	0.0%
16.0%	6,921	6,922	1	0.0%
17.3%	6,913	6,922	9	0.1%
18.5%	6,905	6,922	18	0.3%
19.8%	6,871	6,922	52	0.8%
21.0%	6,869	6,922	53	0.8%
22.2%	6,868	6,922	55	0.8%
23.5%	6,837	6,921	84	1.2%
24.7%	6,836	6,913	77	1.1%
25.9%	6,828	6,907	79	1.2%
27.2%	6,825	6,882	57	0.8%
28.4%	6,824	6,879	55	0.8%
29.6%	6,819	6,876	57	0.8%
30.9%	6,808	6,869	61	0.9%
32.1%	6,792	6,868	76	1.1%
33.3%	6,790	6,855	65	1.0%
34.6%	6,790	6,836	46	0.7%
35.8%	6,788	6,825	37	0.5%
37.0%	6,782	6,824	41	0.6%
38.3%	6,779	6,819	40	0.6%
39.5%	6,778	6,808	30	0.4%
40.7%	6,778	6,799	21	0.3%
42.0%	6,773	6,792	19	0.3%
43.2%	6,766	6,790	24	0.4%
44.4%	6,760	6,790	30	0.4%
45.7%	6,756	6,788	32	0.5%
46.9%	6,752	6,782	30	0.4%
48.1%	6,738	6,779	40	0.6%
49.4%	6,734	6,778	44	0.7%
50.6%	6,731	6,778	47	0.7%
51.9%	6,718	6,773	55	0.8%
53.1%	6,716	6,766	49	0.7%
54.3%	6,711	6,760	50	0.7%
55.6%	6,680	6,752	72	1.1%
56.8%	6,680	6,749	69	1.0%
58.0%	6,680	6,738	58	0.9%
59.3%	6,680	6,734	54	0.8%
60.5%	6,680	6,731	51	0.8%
61.7%	6,660	6,718	57	0.9%
63.0%	6,648	6,716	68	1.0%
64.2%	6,296	6,680	384	6.1%
65.4%	6,225	6,680	455	7.3%
66.7%	6,205	6,680	475	7.6%
67.9%	6,171	6,487	317	5.1%
69.1%	6,124	6,360	236	3.9%
70.4%	5,994	6,290	296	4.9%
71.6%	5,994	6,114	121	2.0%
72.8%	5,695	6,060	366	6.4%
74.1%	5,559	5,971	412	7.4%
75.3%	5,480	5,949	469	8.6%
76.5%	5,382	5,815	433	8.1%
77.8%	5,093	5,766	673	13.2%
79.0%	4,671	5,613	942	20.2%
80.2%	4,444	5,334	890	20.0%
81.5%	4,290	5,287	997	23.2%
82.7%	4,125	4,973	848	20.6%
84.0%	3,844	4,961	1,117	29.1%
85.2%	3,592	4,954	1,363	37.9%
86.4%	2,598	4,849	2,251	86.6%
87.7%	2,124	4,440	2,316	109.0%
88.9%	1,671	4,417	2,746	164.3%
90.1%	1,658	4,144	2,486	150.0%
91.4%	1,322	3,376	2,054	155.3%
92.6%	1,147	1,889	742	64.7%
93.8%	831	1,607	777	93.5%
95.1%	614	1,454	840	136.7%
96.3%	579	1,315	736	127.0%
97.5%	558	676	118	21.1%
98.8%	469	548	79	16.9%
100.0%	300	300	0	0.0%

August				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,039	7,063	24	0.3%
1.2%	7,005	7,039	34	0.5%
2.5%	6,959	7,020	62	0.9%
3.7%	6,938	6,959	21	0.3%
4.9%	6,938	6,938	0	0.0%
6.2%	6,937	6,938	0	0.0%
7.4%	6,926	6,937	12	0.2%
8.6%	6,925	6,926	1	0.0%
9.9%	6,925	6,925	0	0.0%
11.1%	6,922	6,925	2	0.0%
12.3%	6,922	6,922	0	0.0%
13.6%	6,922	6,922	0	0.0%
14.8%	6,922	6,922	0	0.0%
16.0%	6,921	6,921	0	0.0%
17.3%	6,919	6,919	0	0.0%
18.5%	6,918	6,894	-24	-0.3%
19.8%	6,894	6,888	-6	-0.1%
21.0%	6,876	6,876	0	0.0%
22.2%	6,874	6,874	0	0.0%
23.5%	6,873	6,873	0	0.0%
24.7%	6,871	6,871	0	0.0%
25.9%	6,868	6,864	-3	0.0%
27.2%	6,864	6,860	-4	-0.1%
28.4%	6,860	6,859	-2	0.0%
29.6%	6,859	6,855	-3	0.0%
30.9%	6,855	6,850	-5	-0.1%
32.1%	6,850	6,848	-3	0.0%
33.3%	6,848	6,845	-2	0.0%
34.6%	6,845	6,839	-6	-0.1%
35.8%	6,839	6,833	-6	-0.1%
37.0%	6,833	6,832	-1	0.0%
38.3%	6,832	6,830	-1	0.0%
39.5%	6,830	6,829	-1	0.0%
40.7%	6,829	6,829	0	0.0%
42.0%	6,829	6,828	-1	0.0%
43.2%	6,828	6,825	-2	0.0%
44.4%	6,825	6,814	-11	-0.2%
45.7%	6,814	6,813	-1	0.0%
46.9%	6,813	6,806	-7	-0.1%
48.1%	6,806	6,806	0	0.0%
49.4%	6,806	6,805	-1	0.0%
50.6%	6,805	6,800	-5	-0.1%
51.9%	6,800	6,798	-3	0.0%
53.1%	6,798	6,793	-5	-0.1%
54.3%	6,793	6,789	-4	-0.1%
55.6%	6,789	6,779	-9	-0.1%
56.8%	6,779	6,776	-3	0.0%
58.0%	6,776	6,774	-2	0.0%
59.3%	6,774	6,759	-15	-0.2%
60.5%	6,759	6,757	-3	0.0%
61.7%	6,757	6,745	-12	-0.2%
63.0%	6,680	6,680	0	0.0%
64.2%	6,422	6,534	112	1.7%
65.4%	6,188	5,798	-390	-6.3%
66.7%	4,812	5,729	917	19.1%
67.9%	4,749	5,661	912	19.2%
69.1%	4,670	5,256	586	12.5%
70.4%	4,634	4,978	344	7.4%
71.6%	4,491	4,603	112	2.5%
72.8%	3,159	4,045	886	28.0%
74.1%	2,740	3,911	1,171	42.7%
75.3%	2,597	3,897	1,301	50.1%
76.5%	2,289	3,662	1,374	60.0%
77.8%	2,230	3,369	1,140	51.1%
79.0%	1,804	2,985	1,180	65.4%
80.2%	1,221	2,824	1,603	131.3%
81.5%	1,209	2,321	1,112	92.0%
82.7%	1,177	2,232	1,055	89.7%
84.0%	1,174	1,999	825	70.3%
85.2%	1,024	1,569	545	53.2%
86.4%	1,003	1,522	519	51.8%
87.7%	838	1,402	564	67.3%
88.9%	760	1,381	621	81.6%
90.1%	667	1,282	616	92.4%
91.4%	625	1,209	584	93.4%
92.6%	579	1,134	555	95.8%
93.8%	558	1,065	507	91.0%
95.1%	430	960	530	123.3%
96.3%	333	773	441	132.5%
97.5%	300	579	279	93.1%
98.8%	300	334	34	11.2%
100.0%	300	300	0	0.0%

September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,930	6,909	-21	-0.3%
1.2%	6,910	6,866	-44	-0.6%
2.5%	6,859	6,851	-8	-0.1%
3.7%	6,841	6,843	2	0.0%
4.9%	6,761	6,835	75	1.1%
6.2%	6,716	6,761	45	0.7%
7.4%	6,682	6,735	52	0.8%
8.6%	6,680	6,681	1	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,656	6,680	24	0.4%
28.4%	6,542	6,680	138	2.1%
29.6%	6,435	6,680	245	3.8%
30.9%	6,427	6,680	253	3.9%
32.1%	6,286	6,680	394	6.3%
33.3%	5,992	6,629	637	10.6%
34.6%	5,885	6,613	728	12.4%
35.8%	5,737	6,488	751	13.1%
37.0%	5,734	6,375	641	11.2%
38.3%	5,718	6,311	593	10.4%
39.5%	5,705	6,296	591	10.4%
40.7%	5,650	6,284	634	11.2%
42.0%	5,501	6,251	750	13.6%
43.2%	5,259	5,886	627	11.9%
44.4%	5,098	5,792	693	13.6%
45.7%	4,936	5,701	766	15.5%
46.9%	4,815	5,618	803	16.7%
48.1%	4,593	5,553	960	20.9%
49.4%	4,326	5,487	1,161	26.8%
50.6%	4,241	5,368	1,127	26.6%
51.9%	4,113	5,056	943	22.9%
53.1%	4,108	5,041	933	22.7%
54.3%	4,102	4,977	875	21.3%
55.6%	3,935	4,950	1,014	25.8%
56.8%	3,779	4,853	1,074	28.4%
58.0%	3,721	4,811	1,090	29.3%
59.3%	3,710	4,697	988	26.6%
60.5%	3,669	4,660	991	27.0%
61.7%	3,655	4,620	965	26.4%
63.0%	3,262	4,538	1,276	39.1%
64.2%	3,230	4,492	1,262	39.1%
65.4%	3,088	4,414	1,326	42.9%
66.7%	3,026	4,285	1,259	41.6%
67.9%	2,982	4,150	1,168	39.2%
69.1%	2,839	3,860	1,021	35.9%
70.4%	2,814	3,849	1,035	36.8%
71.6%	2,770	3,750	981	35.4%
72.8%	2,667	3,629	962	36.1%
74.1%	2,659	3,406	747	28.1%
75.3%	2,601	3,350	750	28.8%
76.5%	2,533	3,272	739	29.2%
77.8%	2,507	3,227	720	28.7%
79.0%	2,382	3,199	817	34.3%
80.2%	2,341	3,196	855	36.5%
81.5%	2,307	3,029	723	31.3%
82.7%	2,137	2,726	589	27.6%
84.0%	2,125	2,633	508	23.9%
85.2%	2,098	2,594	497	23.7%
86.4%	1,694	2,568	874	51.6%
87.7%	1,664	2,443	779	46.8%
88.9%	1,434	2,305	871	60.7%
90.1%	1,221	2,125	904	74.0%
91.4%	1,160	2,106	947	81.6%
92.6%	1,057	1,940	883	83.5%
93.8%	980	1,267	287	29.3%
95.1%	898	1,201	303	33.8%
96.3%	824	1,143	319	38.8%
97.5%	785	956	172	21.9%
98.8%	568	834	266	46.7%
100.0%	418	768	349	83.5%

Figure SW-39-b
Banks Pumping Plant (SWP), Monthly Diversion
Probability of Exceedance

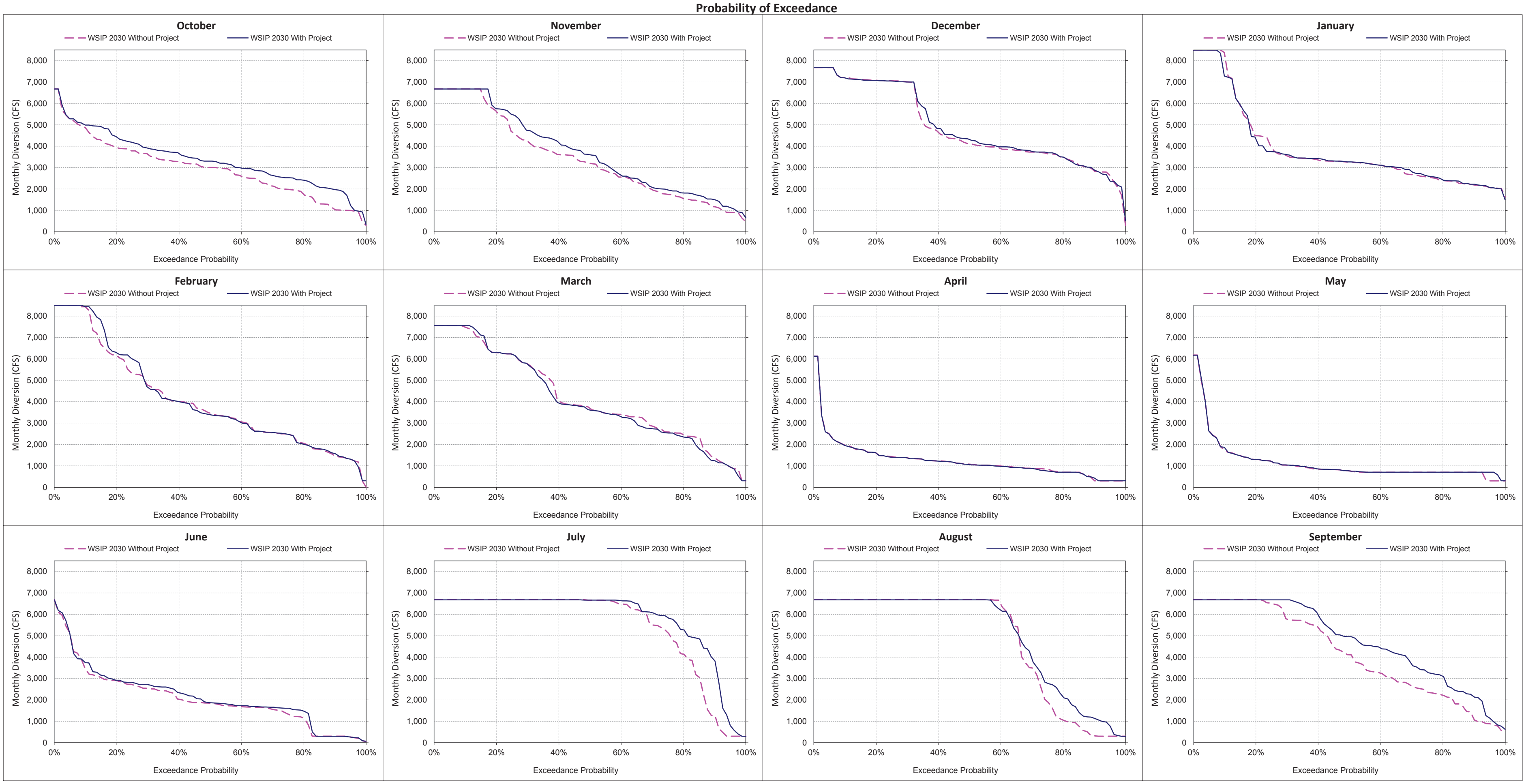


Table SW-39-b

Banks Pumping Plant (SWP), Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	5,704	5,915	211	3.7%
3.7%	5,461	5,481	21	0.4%
4.9%	5,269	5,283	14	0.3%
6.2%	5,189	5,281	91	1.8%
7.4%	5,039	5,119	80	1.6%
8.6%	4,945	5,089	144	2.9%
9.9%	4,877	4,989	112	2.3%
11.1%	4,635	4,987	353	7.6%
12.3%	4,458	4,959	501	11.2%
13.6%	4,331	4,941	610	14.1%
14.8%	4,303	4,926	622	14.5%
16.0%	4,137	4,829	692	16.7%
17.3%	4,095	4,809	714	17.4%
18.5%	4,025	4,534	509	12.6%
19.8%	3,953	4,457	505	12.8%
21.0%	3,897	4,318	422	10.8%
22.2%	3,886	4,272	386	9.9%
23.5%	3,880	4,231	352	9.1%
24.7%	3,785	4,191	405	10.7%
25.9%	3,783	4,137	354	9.4%
27.2%	3,676	4,093	417	11.4%
28.4%	3,667	3,958	290	7.9%
29.6%	3,659	3,921	262	7.2%
30.9%	3,528	3,879	351	9.9%
32.1%	3,501	3,854	353	10.1%
33.3%	3,404	3,800	395	11.6%
34.6%	3,364	3,792	428	12.7%
35.8%	3,350	3,763	413	12.3%
37.0%	3,333	3,727	394	11.8%
38.3%	3,297	3,716	419	12.7%
39.5%	3,288	3,708	419	12.8%
40.7%	3,273	3,580	307	9.4%
42.0%	3,195	3,540	345	10.8%
43.2%	3,184	3,481	297	9.3%
44.4%	3,174	3,450	276	8.7%
45.7%	3,169	3,437	268	8.5%
46.9%	3,062	3,327	266	8.7%
48.1%	3,009	3,307	298	9.9%
49.4%	3,008	3,305	297	9.9%
50.6%	3,007	3,302	295	9.8%
51.9%	3,004	3,278	275	9.1%
53.1%	2,964	3,212	248	8.4%
54.3%	2,960	3,205	245	8.3%
55.6%	2,947	3,170	223	7.6%
56.8%	2,846	3,134	288	10.1%
58.0%	2,665	3,017	352	13.2%
59.3%	2,647	3,007	359	13.6%
60.5%	2,562	2,966	404	15.8%
61.7%	2,523	2,952	429	17.0%
63.0%	2,506	2,949	443	17.7%
64.2%	2,498	2,880	382	15.3%
65.4%	2,423	2,858	435	18.0%
66.7%	2,279	2,846	567	24.9%
67.9%	2,260	2,768	507	22.4%
69.1%	2,158	2,660	502	23.3%
70.4%	2,131	2,625	494	23.2%
71.6%	2,045	2,575	530	25.9%
72.8%	2,003	2,556	553	27.6%
74.1%	1,996	2,528	532	26.7%
75.3%	1,979	2,527	548	27.7%
76.5%	1,960	2,513	553	28.2%
77.8%	1,930	2,432	501	26.0%
79.0%	1,891	2,427	536	28.3%
80.2%	1,714	2,405	691	40.3%
81.5%	1,682	2,360	679	40.4%
82.7%	1,616	2,264	648	40.1%
84.0%	1,352	2,142	790	58.4%
85.2%	1,306	2,080	774	59.2%
86.4%	1,299	2,074	775	59.7%
87.7%	1,288	2,047	758	58.9%
88.9%	1,154	2,012	858	74.3%
90.1%	1,023	1,968	945	92.4%
91.4%	1,019	1,951	931	91.4%
92.6%	1,011	1,891	880	87.0%
93.8%	1,000	1,709	709	70.9%
95.1%	997	1,221	224	22.4%
96.3%	968	1,000	32	3.3%
97.5%	931	969	38	4.1%
98.8%	474	926	452	95.2%
100.0%	300	332	32	10.5%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,217	6,680	463	7.4%
17.3%	5,915	6,680	765	12.9%
18.5%	5,788	5,928	140	2.4%
19.8%	5,667	5,752	85	1.5%
21.0%	5,432	5,745	313	5.8%
22.2%	5,409	5,719	310	5.7%
23.5%	5,263	5,670	406	7.7%
24.7%	4,704	5,500	796	16.9%
25.9%	4,571	5,435	863	18.9%
27.2%	4,415	5,281	866	19.6%
28.4%	4,302	4,994	692	16.1%
29.6%	4,292	4,751	458	10.7%
30.9%	4,121	4,721	599	14.5%
32.1%	3,983	4,621	637	16.0%
33.3%	3,954	4,502	548	13.8%
34.6%	3,921	4,437	516	13.2%
35.8%	3,842	4,412	571	14.9%
37.0%	3,780	4,385	605	16.0%
38.3%	3,723	4,322	598	16.1%
39.5%	3,613	4,237	624	17.3%
40.7%	3,603	4,061	458	12.7%
42.0%	3,603	4,042	439	12.2%
43.2%	3,582	3,942	360	10.0%
44.4%	3,571	3,868	297	8.3%
45.7%	3,394	3,831	437	12.9%
46.9%	3,292	3,803	511	15.5%
48.1%	3,280	3,627	347	10.6%
49.4%	3,213	3,615	403	12.5%
50.6%	3,188	3,588	399	12.5%
51.9%	3,162	3,568	405	12.8%
53.1%	2,912	3,227	315	10.8%
54.3%	2,895	3,202	307	10.6%
55.6%	2,822	3,104	282	10.0%
56.8%	2,737	2,966	230	8.4%
58.0%	2,715	2,829	114	4.2%
59.3%	2,561	2,707	146	5.7%
60.5%	2,558	2,606	48	1.9%
61.7%	2,535	2,605	70	2.7%
63.0%	2,483	2,521	38	1.5%
64.2%	2,314	2,499	185	8.0%
65.4%	2,290	2,464	174	7.6%
66.7%	2,235	2,324	89	4.0%
67.9%	2,075	2,294	219	10.6%
69.1%	2,036	2,127	91	4.5%
70.4%	1,937	2,058	120	6.2%
71.6%	1,890	2,017	127	6.7%
72.8%	1,790	2,006	216	12.1%
74.1%	1,770	1,991	221	12.5%
75.3%	1,745	1,953	208	11.9%
76.5%	1,742	1,910	168	9.6%
77.8%	1,657	1,906	249	15.0%
79.0%	1,625	1,826	201	12.3%
80.2%	1,532	1,814	282	18.4%
81.5%	1,520	1,814	293	19.3%
82.7%	1,480	1,790	309	20.9%
84.0%	1,474	1,727	253	17.2%
85.2%	1,405	1,689	284	20.2%
86.4%	1,397	1,638	241	17.2%
87.7%	1,356	1,535	179	13.2%
88.9%	1,183	1,531	348	29.4%
90.1%	1,171	1,499	328	28.0%
91.4%	1,115	1,427	311	27.9%
92.6%	1,008	1,199	192	19.0%
93.8%	912	1,197	285	31.2%
95.1%	906	1,131	225	24.8%
96.3%	898	1,056	158	17.5%
97.5%	892	933	41	4.6%
98.8%	640	905	265	41.4%
100.0%	470	647	177	37.5%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,678	7,678	0	0.0%
1.2%	7,678	7,678	0	0.0%
2.5%	7,678	7,678	0	0.0%
3.7%	7,678	7,678	0	0.0%
4.9%	7,678	7,678	0	0.0%
6.2%	7,678	7,678	0	0.0%
7.4%	7,328	7,328	0	0.0%
8.6%	7,210	7,208	-2	0.0%
9.9%	7,208	7,204	-4	0.0%
11.1%	7,204	7,148	-56	-0.8%
12.3%	7,148	7,142	-6	-0.1%
13.6%	7,142	7,125	-17	-0.2%
14.8%	7,125	7,112	-13	-0.2%
16.0%	7,112	7,089	-24	-0.3%
17.3%	7,106	7,086	-20	-0.3%
18.5%	7,089	7,077	-12	-0.2%
19.8%	7,086	7,072	-14	-0.2%
21.0%	7,077	7,065	-12	-0.2%
22.2%	7,072	7,063	-9	-0.1%
23.5%	7,065	7,054	-10	-0.1%
24.7%	7,063	7,053	-10	-0.1%
25.9%	7,054	7,042	-12	-0.2%
27.2%	7,053	7,022	-31	-0.4%
28.4%	7,042	7,016	-26	-0.4%
29.6%	7,016	7,005	-11	-0.2%
30.9%	7,004	7,004	0	0.0%
32.1%	6,999	6,999	0	0.0%
33.3%	5,743	6,107	364	6.3%
34.6%	5,212	5,889	677	13.0%
35.8%	4,936	5,750	813	16.5%
37.0%	4,849	5,120	272	5.6%
38.3%	4,834	5,041	206	4.3%
39.5%	4,717	4,834	117	2.5%
40.7%	4,547	4,824	277	6.1%
42.0%	4,501	4,560	59	1.3%
43.2%	4,381	4,553	171	3.9%
44.4%	4,365	4,540	175	4.0%
45.7%	4,348	4,431	83	1.9%
46.9%	4,281	4,381	101	2.4%
48.1%	4,185	4,363	177	4.2%
49.4%	4,120	4,348	229	5.5%
50.6%	4,108	4,281	173	4.2%
51.9%	4,056	4,255	199	4.9%
53.1%	4,029	4,140	111	2.8%
54.3%	4,023	4,108	85	2.1%
55.6%	3,985	4,087	103	2.6%
56.8%	3,971	4,074	102	2.6%
58.0%	3,970	4,029	58	1.5%
59.3%	3,931	3,975	44	1.1%
60.5%	3,859	3,971	112	2.9%
61.7%	3,857	3,970	113	2.9%
63.0%	3,846	3,962	117	3.0%
64.2%	3,827	3,921	94	2.4%
65.4%	3,804	3,846	42	1.1%
66.7%	3,795	3,821	26	0.7%
67.9%	3,747	3,811	64	1.7%
69.1%	3,732	3,804	72	1.9%
70.4%	3,729	3,747	18	0.5%
71.6%	3,727	3,732	5	0.1%
72.8%	3,706	3,730	23	0.6%
74.1%	3,688	3,729	41	1.1%
75.3%	3,639	3,697	59	1.6%
76.5%	3,637	3,688	51	1.4%
77.8%	3,624	3,639	15	0.4%
79.0%	3,505	3,514	10	0.3%
80.2%	3,440	3,492	51	1.5%
81.5%	3,395	3,364	-32	-0.9%
82.7%	3,324	3,276	-48	-1.4%
84.0%	3,262	3,156	-106	-3.2%
85.2%	3,108	3,100	-8	-0.3%
86.4%	3,077	3,090	13	0.4%
87.7%	2,997	3,022	25	0.9%
88.9%	2,984	3,009	25	0.8%
90.1%	2,832	2,876	44	1.5%
91.4%	2,814	2,814	0	0.0%
92.6%	2,799	2,693	-106	-3.8%
93.8%	2,795	2,677	-119	-4.2%
95.1%	2,638	2,359	-279	-10.6%
96.3%	2,322	2,357	35	1.5%
97.5%	2,077	2,173	95	4.6%
98.8%	1,708	2,097	389	22.8%
100.0%	300	516	216	71.9%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,500	8,348	-152	-1.8%
9.9%	8,383	7,288	-1,095	-13.1%
11.1%	7,260	7,218	-41	-0.6%
12.3%	7,166	7,166	0	0.0%
13.6%	6,236	6,236	0	0.0%
14.8%	5,970	5,969	0	0.0%
16.0%	5,457	5,676	219	4.0%
17.3%	5,266	5,433	167	3.2%
18.5%	4,926	4,457	-470	-9.5%
19.8%	4,494	4,436	-59	-1.3%
21.0%	4,490	4,022	-468	-10.4%
22.2%	4,457	4,020	-437	-9.8%
23.5%	4,441	3,754	-687	-15.5%
24.7%	4,022	3,751	-271	-6.7%
25.9%	3,760	3,746	-13	-0.4%
27.2%	3,646	3,715	69	1.9%
28.4%	3,619	3,646	27	0.8%
29.6%	3,579	3,619	40	1.1%
30.9%	3,495	3,579	83	2.4%
32.1%	3,474	3,495	21	0.6%
33.3%	3,449	3,453	4	0.1%
34.6%	3,444	3,447	3	0.1%
35.8%	3,429	3,447	18	0.5%
37.0%	3,428	3,429	2	0.0%
38.3%	3,410	3,429	19	0.6%
39.5%	3,381	3,424	43	1.3%
40.7%	3,324	3,410	87	2.6%
42.0%	3,319	3,377	58	1.8%
43.2%	3,309	3,319	10	0.3%
44.4%	3,308	3,313	5	0.2%
45.7%	3,304	3,310	5	0.2%
46.9%	3,300	3,305	4	0.1%
48.1%	3,277	3,296	19	0.6%
49.4%	3,262	3,270	8	0.3%
50.6%	3,260	3,263	3	0.1%
51.9%	3,242	3,254	12	0.4%
53.1%	3,234	3,250	16	0.5%
54.3%	3,207	3,234	27	0.8%
55.6%	3,193	3,207	14	0.4%
56.8%	3,179	3,172	-8	-0.2%
58.0%	3,149	3,149	0	0.0%
59.3%	3,110	3,125	15	0.5%
60.5%	3,097	3,110	13	0.4%
61.7%	3,056	3,056	0	0.0%
63.0%	3,046	3,046	0	0.0%
64.2%	3,005	3,041	36	1.2%
65.4%	2,917	3,019	102	3.5%
66.7%	2,915	3,005	90	3.1%
67.9%	2,718	2,917	200	7.3%
69.1%	2,686	2,915	229	8.5%
70.4%	2,670	2,782	112	4.2%
71.6%	2,646	2,719	73	2.8%
72.8%	2,602	2,718	115	4.4%
74.1%	2,583	2,646	63	2.4%
75.3%	2,554	2,603	49	1.9%
76.5%	2,528	2,583	55	2.2%
77.8%	2,502	2,554	52	2.1%
79.0%	2,405	2,502	96	4.0%
80.2%	2,392	2,405	13	0.5%
81.5%	2,380	2,392	12	0.5%
82.7%	2,380	2,380	0	0.0%
84.0%	2,372	2,380	7	0.3%
85.2%	2,263	2,372	109	4.8%
86.4%	2,258	2,265	7	0.3%
87.7%	2,225	2,260	35	1.6%
88.9%	2,220	2,225	5	0.2%
90.1%	2,193	2,220	27	1.2%
91.4%	2,170	2,194	24	1.1%
92.6%	2,155	2,170	16	0.7%
93.8%	2,128	2,155	26	1.2%
95.1%	2,068	2,068	0	0.0%
96.3%	2,055	2,051	-3	-0.2%
97.5%	2,040	2,024	-16	-0.8%
98.8%	2,030	2,002	-27	-1.3%
100.0%	1,643	1,499	-144	-8.8%

Table SW-39-b

Banks Pumping Plant (SWP), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,437	8,500	63	0.7%
9.9%	8,437	8,437	0	0.0%
11.1%	8,259	8,437	179	2.2%
12.3%	7,329	8,233	905	12.3%
13.6%	7,201	7,952	751	10.4%
14.8%	6,694	7,835	1,140	17.0%
16.0%	6,505	7,329	824	12.7%
17.3%	6,311	6,530	219	3.5%
18.5%	6,192	6,369	177	2.9%
19.8%	6,178	6,311	132	2.1%
21.0%	6,037	6,199	162	2.7%
22.2%	5,958	6,181	223	3.7%
23.5%	5,518	6,178	660	12.0%
24.7%	5,344	6,012	667	12.5%
25.9%	5,287	5,936	649	12.3%
27.2%	5,269	5,820	551	10.5%
28.4%	5,203	5,192	-11	-0.2%
29.6%	4,792	4,710	-81	-1.7%
30.9%	4,710	4,576	-135	-2.9%
32.1%	4,576	4,566	-10	-0.2%
33.3%	4,570	4,441	-129	-2.8%
34.6%	4,441	4,149	-292	-6.6%
35.8%	4,135	4,144	9	0.2%
37.0%	4,086	4,086	0	0.0%
38.3%	4,009	4,052	43	1.1%
39.5%	4,007	4,009	2	0.1%
40.7%	4,005	3,973	-32	-0.8%
42.0%	3,973	3,946	-28	-0.7%
43.2%	3,946	3,916	-30	-0.7%
44.4%	3,922	3,630	-292	-7.4%
45.7%	3,702	3,586	-115	-3.1%
46.9%	3,670	3,484	-186	-5.1%
48.1%	3,586	3,442	-145	-4.0%
49.4%	3,485	3,406	-79	-2.3%
50.6%	3,442	3,376	-66	-1.9%
51.9%	3,376	3,347	-28	-0.8%
53.1%	3,347	3,337	-10	-0.3%
54.3%	3,337	3,319	-19	-0.6%
55.6%	3,319	3,311	-8	-0.2%
56.8%	3,243	3,212	-31	-1.0%
58.0%	3,212	3,182	-30	-0.9%
59.3%	3,074	3,074	0	0.0%
60.5%	3,041	2,983	-58	-1.9%
61.7%	2,996	2,968	-27	-0.9%
63.0%	2,870	2,755	-115	-4.0%
64.2%	2,619	2,619	0	0.0%
65.4%	2,615	2,615	0	0.0%
66.7%	2,581	2,607	26	1.0%
67.9%	2,570	2,570	0	0.0%
69.1%	2,566	2,566	0	0.0%
70.4%	2,529	2,561	32	1.3%
71.6%	2,525	2,536	11	0.4%
72.8%	2,500	2,517	17	0.7%
74.1%	2,499	2,499	0	0.0%
75.3%	2,460	2,460	0	0.0%
76.5%	2,415	2,415	0	0.0%
77.8%	2,158	2,081	-77	-3.6%
79.0%	2,081	2,046	-35	-1.7%
80.2%	2,046	2,006	-40	-1.9%
81.5%	1,952	1,952	0	0.0%
82.7%	1,805	1,863	57	3.2%
84.0%	1,790	1,805	16	0.9%
85.2%	1,771	1,790	19	1.0%
86.4%	1,708	1,771	63	3.7%
87.7%	1,647	1,708	61	3.7%
88.9%	1,568	1,610	42	2.7%
90.1%	1,441	1,568	127	8.8%
91.4%	1,418	1,441	23	1.6%
92.6%	1,406	1,418	12	0.9%
93.8%	1,347	1,347	0	0.0%
95.1%	1,310	1,310	0	0.0%
96.3%	1,228	1,228	0	0.0%
97.5%	1,176	930	-246	-20.9%
98.8%	300	300	0	0.0%
100.0%	7	300	293	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,561	7,561	0	0.0%
1.2%	7,561	7,561	0	0.0%
2.5%	7,561	7,561	0	0.0%
3.7%	7,561	7,561	0	0.0%
4.9%	7,561	7,561	0	0.0%
6.2%	7,561	7,561	0	0.0%
7.4%	7,561	7,561	0	0.0%
8.6%	7,561	7,561	0	0.0%
9.9%	7,485	7,561	75	1.0%
11.1%	7,418	7,561	143	1.9%
12.3%	7,318	7,485	167	2.3%
13.6%	7,043	7,318	275	3.9%
14.8%	7,003	7,122	119	1.7%
16.0%	6,766	7,067	301	4.4%
17.3%	6,448	6,448	0	0.0%
18.5%	6,309	6,308	0	0.0%
19.8%	6,296	6,295	-1	0.0%
21.0%	6,287	6,288	1	0.0%
22.2%	6,241	6,242	0	0.0%
23.5%	6,234	6,235	1	0.0%
24.7%	6,233	6,234	1	0.0%
25.9%	6,160	6,160	0	0.0%
27.2%	5,950	5,964	14	0.2%
28.4%	5,820	5,820	0	0.0%
29.6%	5,795	5,795	0	0.0%
30.9%	5,678	5,634	-43	-0.8%
32.1%	5,505	5,505	0	0.0%
33.3%	5,484	5,202	-281	-5.1%
34.6%	5,314	5,055	-259	-4.9%
35.8%	5,227	4,852	-375	-7.2%
37.0%	5,055	4,499	-555	-11.0%
38.3%	4,852	4,219	-633	-13.0%
39.5%	4,080	3,961	-119	-2.9%
40.7%	3,961	3,893	-69	-1.7%
42.0%	3,893	3,871	-22	-0.6%
43.2%	3,871	3,859	-12	-0.3%
44.4%	3,859	3,833	-26	-0.7%
45.7%	3,835	3,825	-10	-0.3%
46.9%	3,825	3,777	-47	-1.2%
48.1%	3,777	3,757	-21	-0.5%
49.4%	3,757	3,623	-134	-3.6%
50.6%	3,623	3,595	-28	-0.8%
51.9%	3,577	3,577	0	0.0%
53.1%	3,548	3,548	0	0.0%
54.3%	3,479	3,479	0	0.0%
55.6%	3,445	3,445	0	0.0%
56.8%	3,437	3,406	-31	-0.9%
58.0%	3,417	3,404	-13	-0.4%
59.3%	3,406	3,346	-61	-1.8%
60.5%	3,404	3,257	-147	-4.3%
61.7%	3,346	3,252	-94	-2.8%
63.0%	3,295	3,217	-79	-2.4%
64.2%	3,295	3,108	-187	-5.7%
65.4%	3,286	2,888	-398	-12.1%
66.7%	3,252	2,844	-408	-12.6%
67.9%	3,108	2,770	-339	-10.9%
69.1%	2,888	2,758	-130	-4.5%
70.4%	2,844	2,725	-119	-4.2%
71.6%	2,758	2,715	-43	-1.6%
72.8%	2,715	2,581	-134	-4.9%
74.1%	2,583	2,543	-41	-1.6%
75.3%	2,581	2,536	-45	-1.7%
76.5%	2,551	2,531	-20	-0.8%
77.8%	2,536	2,438	-98	-3.9%
79.0%	2,531	2,385	-146	-5.8%
80.2%	2,438	2,343	-95	-3.9%
81.5%	2,385	2,327	-58	-2.4%
82.7%	2,376	2,283	-94	-3.9%
84.0%	2,343	1,981	-362	-15.4%
85.2%	2,327	1,774	-554	-23.8%
86.4%	1,774	1,662	-112	-6.3%
87.7%	1,662	1,447	-215	-12.9%
88.9%	1,447	1,262	-185	-12.8%
90.1%	1,359	1,235	-124	-9.1%
91.4%	1,235	1,143	-92	-7.5%
92.6%	1,139	1,139	0	0.0%
93.8%	1,039	1,039	0	0.0%
95.1%	943	943	0	0.0%
96.3%	857	852	-4	-0.5%
97.5%	852	531	-321	-37.7%
98.8%	300	309	9	2.9%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,125	6,125	0	0.0%
1.2%	6,125	6,125	0	0.0%
2.5%	3,367	3,364	-2	-0.1%
3.7%	2,622	2,599	-23	-0.9%
4.9%	2,489	2,485	-4	-0.2%
6.2%	2,249	2,250	1	0.0%
7.4%	2,137	2,129	-8	-0.4%
8.6%	2,057	2,049	-8	-0.4%
9.9%	1,973	1,952	-21	-1.1%
11.1%	1,952	1,902	-50	-2.6%
12.3%	1,862	1,855	-8	-0.4%
13.6%	1,768	1,800	33	1.9%
14.8%	1,761	1,768	7	0.4%
16.0%	1,744	1,737	-8	-0.4%
17.3%	1,639	1,639	0	0.0%
18.5%	1,637	1,632	-5	-0.3%
19.8%	1,624	1,624	0	0.0%
21.0%	1,485	1,485	0	0.0%
22.2%	1,477	1,477	0	0.0%
23.5%	1,456	1,429	-27	-1.9%
24.7%	1,437	1,411	-27	-1.9%
25.9%	1,411	1,395	-16	-1.1%
27.2%	1,395	1,394	-1	-0.1%
28.4%	1,394	1,391	-2	-0.2%
29.6%	1,391	1,389	-3	-0.2%
30.9%	1,340	1,340	0	0.0%
32.1%	1,335	1,335	0	0.0%
33.3%	1,329	1,329	0	0.0%
34.6%	1,323	1,320	-3	-0.3%
35.8%	1,254	1,254	0	0.0%
37.0%	1,252	1,248	-4	-0.3%
38.3%	1,237	1,235	-2	-0.2%
39.5%	1,235	1,230	-5	-0.4%
40.7%	1,230	1,218	-11	-0.9%
42.0%	1,218	1,201	-17	-1.4%
43.2%	1,195	1,195	0	0.0%
44.4%	1,175	1,175	0	0.0%
45.7%	1,130	1,130	0	0.0%
46.9%	1,114	1,114	0	0.0%
48.1%	1,104	1,086	-18	-1.7%
49.4%	1,086	1,070	-16	-1.4%
50.6%	1,070	1,046	-24	-2.3%
51.9%	1,046	1,038	-7	-0.7%
53.1%	1,038	1,030	-9	-0.8%
54.3%	1,030	1,029	-1	0.0%
55.6%	1,029	1,028	-1	-0.1%
56.8%	1,028	1,014	-14	-1.4%
58.0%	1,014	999	-15	-1.4%
59.3%	1,007	980	-27	-2.7%
60.5%	980	974	-6	-0.6%
61.7%	974	967	-7	-0.7%
63.0%	967	938	-29	-3.0%
64.2%	938	924	-14	-1.5%
65.4%	924	923	-1	-0.1%
66.7%	923	911	-12	-1.3%
67.9%	892	892	0	0.0%
69.1%	892	892	0	0.0%
70.4%	881	872	-9	-1.1%
71.6%	872	840	-32	-3.7%
72.8%	868	792	-76	-8.7%
74.1%	852	773	-79	-9.3%
75.3%	840	757	-84	-9.9%
76.5%	757	745	-12	-1.6%
77.8%	745	700	-45	-6.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	682	-18	-2.6%
86.4%	612	616	5	0.7%
87.7%	582	500	-82	-14.1%
88.9%	473	489	17	3.5%
90.1%	300	421	121	40.5%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,177	6,177	0	0.0%
1.2%	6,177	6,177	0	0.0%
2.5%	4,995	5,093	97	1.9%
3.7%	4,049	4,046	-3	-0.1%
4.9%	2,637	2,626	-11	-0.4%
6.2%	2,439	2,428	-11	-0.4%
7.4%	2,316	2,304	-11	-0.5%
8.6%	1,901	1,896	-5	-0.3%
9.9%	1,736	1,863	127	7.3%
11.1%	1,634	1,623	-11	-0.7%
12.3%	1,602	1,591	-11	-0.7%
13.6%	1,544	1,533	-11	-0.7%
14.8%	1,487	1,476	-11	-0.7%
16.0%	1,420	1,420	0	0.0%
17.3%	1,390	1,390	0	0.0%
18.5%	1,314	1,315	1	0.1%
19.8%	1,298	1,298	0	0.0%
21.0%	1,295	1,295	0	0.0%
22.2%	1,256	1,245	-12	-0.9%
23.5%	1,249	1,238	-11	-0.9%
24.7%	1,232	1,220	-12	-0.9%
25.9%	1,126	1,140	15	1.3%
27.2%	1,111	1,126	15	1.3%
28.4%	1,041	1,041	1	0.1%
29.6%	1,038	1,041	4	0.4%
30.9%	1,025	1,037	13	1.2%
32.1%	1,023	1,025	2	0.2%
33.3%	975	1,024	48	5.0%
34.6%	968	975	7	0.8%
35.8%	921	968	47	5.1%
37.0%	909	921	12	1.3%
38.3%	867	909	42	4.8%
39.5%	849	867	18	2.1%
40.7%	841	849	8	1.0%
42.0%	837	841	4	0.4%
43.2%	832	837	4	0.5%
44.4%	831	831	0	0.0%
45.7%	821	821	0	0.0%
46.9%	816	816	0	0.0%
48.1%	782	782	0	0.0%
49.4%	776	778	2	0.3%
50.6%	754	755	1	0.1%
51.9%	716	754	38	5.2%
53.1%	700	725	25	3.6%
54.3%	700	711	11	1.6%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	340	700	360	106.1%
95.1%	300	700	400	133.3%
96.3%	300	700	400	133.3%
97.5%	300	578	278	92.7%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-39-b
Banks Pumping Plant (SWP), Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,111	6,179	68	1.1%
2.5%	5,959	6,064	105	1.8%
3.7%	5,455	5,714	260	4.8%
4.9%	5,121	5,119	-3	-0.1%
6.2%	4,262	4,161	-101	-2.4%
7.4%	4,183	3,917	-265	-6.3%
8.6%	3,907	3,907	0	0.0%
9.9%	3,452	3,741	289	8.4%
11.1%	3,202	3,729	527	16.4%
12.3%	3,170	3,318	148	4.7%
13.6%	3,118	3,297	179	5.7%
14.8%	3,055	3,158	103	3.4%
16.0%	2,951	3,117	166	5.6%
17.3%	2,930	3,018	87	3.0%
18.5%	2,912	2,981	69	2.4%
19.8%	2,911	2,917	6	0.2%
21.0%	2,853	2,911	58	2.0%
22.2%	2,776	2,828	52	1.9%
23.5%	2,730	2,823	93	3.4%
24.7%	2,727	2,823	96	3.5%
25.9%	2,665	2,786	120	4.5%
27.2%	2,618	2,727	109	4.2%
28.4%	2,545	2,722	177	7.0%
29.6%	2,543	2,721	177	7.0%
30.9%	2,514	2,691	177	7.0%
32.1%	2,509	2,622	113	4.5%
33.3%	2,439	2,614	175	7.2%
34.6%	2,424	2,605	181	7.5%
35.8%	2,423	2,596	174	7.2%
37.0%	2,352	2,547	195	8.3%
38.3%	2,312	2,509	197	8.5%
39.5%	2,039	2,340	301	14.8%
40.7%	2,005	2,310	305	15.2%
42.0%	1,956	2,262	306	15.6%
43.2%	1,909	2,188	278	14.6%
44.4%	1,878	2,181	303	16.1%
45.7%	1,876	2,049	173	9.2%
46.9%	1,873	2,039	166	8.8%
48.1%	1,855	1,909	54	2.9%
49.4%	1,850	1,873	23	1.2%
50.6%	1,833	1,855	22	1.2%
51.9%	1,816	1,850	35	1.9%
53.1%	1,770	1,833	63	3.5%
54.3%	1,733	1,825	92	5.3%
55.6%	1,725	1,800	75	4.4%
56.8%	1,722	1,789	67	3.9%
58.0%	1,705	1,737	32	1.9%
59.3%	1,693	1,727	34	2.0%
60.5%	1,678	1,725	47	2.8%
61.7%	1,668	1,722	54	3.2%
63.0%	1,663	1,693	30	1.8%
64.2%	1,661	1,688	27	1.6%
65.4%	1,653	1,678	25	1.5%
66.7%	1,650	1,668	18	1.1%
67.9%	1,618	1,661	43	2.6%
69.1%	1,590	1,653	63	4.0%
70.4%	1,540	1,650	111	7.2%
71.6%	1,520	1,635	115	7.5%
72.8%	1,493	1,618	125	8.4%
74.1%	1,396	1,610	215	15.4%
75.3%	1,312	1,606	294	22.4%
76.5%	1,222	1,540	318	26.0%
77.8%	1,222	1,533	311	25.4%
79.0%	1,206	1,520	314	26.1%
80.2%	1,122	1,455	333	29.7%
81.5%	827	1,365	538	65.0%
82.7%	300	503	203	67.8%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	289	-11	-3.5%
95.1%	262	262	0	-0.2%
96.3%	226	236	10	4.3%
97.5%	201	226	25	12.6%
98.8%	90	86	-4	
100.0%	47	68	20	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,680	6,680	0	0.0%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,680	6,680	0	0.0%
35.8%	6,680	6,680	0	0.0%
37.0%	6,680	6,680	0	0.0%
38.3%	6,680	6,680	0	0.0%
39.5%	6,680	6,680	0	0.0%
40.7%	6,680	6,680	0	0.0%
42.0%	6,680	6,680	0	0.0%
43.2%	6,680	6,680	0	0.0%
44.4%	6,680	6,680	0	0.0%
45.7%	6,680	6,680	0	0.0%
46.9%	6,680	6,680	0	0.0%
48.1%	6,680	6,666	-14	-0.2%
49.4%	6,663	6,663	0	0.0%
50.6%	6,663	6,663	0	0.0%
51.9%	6,663	6,663	0	0.0%
53.1%	6,662	6,662	0	0.0%
54.3%	6,662	6,662	0	0.0%
55.6%	6,633	6,662	29	0.4%
56.8%	6,630	6,662	32	0.5%
58.0%	6,571	6,661	90	1.4%
59.3%	6,494	6,657	163	2.5%
60.5%	6,478	6,627	148	2.3%
61.7%	6,464	6,625	161	2.5%
63.0%	6,296	6,611	316	5.0%
64.2%	6,225	6,535	310	5.0%
65.4%	6,205	6,487	282	4.5%
66.7%	6,124	6,135	11	0.2%
67.9%	6,113	6,114	2	0.0%
69.1%	5,559	6,102	543	9.8%
70.4%	5,493	6,060	568	10.3%
71.6%	5,480	5,971	491	9.0%
72.8%	5,382	5,949	567	10.5%
74.1%	5,272	5,930	657	12.5%
75.3%	5,093	5,815	723	14.2%
76.5%	4,776	5,766	990	20.7%
77.8%	4,671	5,581	911	19.5%
79.0%	4,165	5,287	1,122	26.9%
80.2%	4,125	5,271	1,145	27.8%
81.5%	3,882	4,973	1,091	28.1%
82.7%	3,844	4,926	1,082	28.1%
84.0%	3,177	4,896	1,720	54.1%
85.2%	3,040	4,849	1,809	59.5%
86.4%	2,246	4,417	2,170	96.6%
87.7%	1,550	4,399	2,849	183.8%
88.9%	1,276	4,018	2,742	214.9%
90.1%	1,254	3,819	2,565	204.5%
91.4%	652	2,800	2,148	329.3%
92.6%	477	1,610	1,133	237.6%
93.8%	300	1,289	989	329.6%
95.1%	300	788	488	162.6%
96.3%	300	569	269	89.8%
97.5%	300	404	104	34.7%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,680	6,680	0	0.0%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,680	6,680	0	0.0%
35.8%	6,680	6,680	0	0.0%
37.0%	6,680	6,680	0	0.0%
38.3%	6,680	6,680	0	0.0%
39.5%	6,680	6,680	0	0.0%
40.7%	6,680	6,680	0	0.0%
42.0%	6,680	6,680	0	0.0%
43.2%	6,680	6,680	0	0.0%
44.4%	6,680	6,680	0	0.0%
45.7%	6,680	6,680	0	0.0%
46.9%	6,680	6,680	0	0.0%
48.1%	6,680	6,680	0	0.0%
49.4%	6,680	6,680	0	0.0%
50.6%	6,680	6,680	0	0.0%
51.9%	6,680	6,680	0	0.0%
53.1%	6,680	6,680	0	0.0%
54.3%	6,680	6,680	0	0.0%
55.6%	6,680	6,680	0	0.0%
56.8%	6,680	6,660	-20	-0.3%
58.0%	6,662	6,419	-243	-3.7%
59.3%	6,660	6,257	-403	-6.1%
60.5%	6,330	6,147	-183	-2.9%
61.7%	6,139	6,139	0	0.0%
63.0%	6,010	5,802	-208	-3.5%
64.2%	5,455	5,342	-113	-2.1%
65.4%	5,408	5,103	-306	-5.7%
66.7%	4,014	4,695	681	17.0%
67.9%	3,733	4,448	716	19.2%
69.1%	3,511	4,283	772	22.0%
70.4%	3,484	3,770	286	8.2%
71.6%	3,143	3,520	377	12.0%
72.8%	2,592	3,262	670	25.8%
74.1%	2,030	2,837	806	39.7%
75.3%	1,867	2,763	896	48.0%
76.5%	1,610	2,709	1,099	68.3%
77.8%	1,209	2,587	1,378	114.0%
79.0%	1,118	2,303	1,185	106.0%
80.2%	1,036	2,091	1,054	101.8%
81.5%	975	2,041	1,066	109.4%
82.7%	942	1,781	839	89.1%
84.0%	934	1,674	739	79.1%
85.2%	760	1,402	642	84.5%
86.4%	571	1,244	673	117.7%
87.7%	513	1,209	696	135.6%
88.9%	333	1,197	864	259.8%
90.1%	316	1,134	818	258.4%
91.4%	300	1,055	755	251.8%
92.6%	300	986	686	228.7%
93.8%	300	960	660	219.9%
95.1%	300	773	473	157.8%
96.3%	300	386	86	28.5%
97.5%	300	334	34	11.2%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,656	6,680	24	0.4%
23.5%	6,542	6,680	138	2.1%
24.7%	6,524	6,680	156	2.4%
25.9%	6,475	6,680	205	3.2%
27.2%	6,427	6,680	253	3.9%
28.4%	6,286	6,680	394	6.3%
29.6%	5,789	6,680	891	15.4%
30.9%	5,737	6,680	943	16.4%
32.1%	5,722	6,613	890	15.6%
33.3%	5,718	6,558	840	14.7%
34.6%	5,715	6,488	773	13.5%
35.8%	5,650	6,375	725	12.8%
37.0%	5,549	6,311	762	13.7%
38.3%	5,501	6,278	778	14.1%
39.5%	5,483	6,088	605	11.0%
40.7%	5,234	5,792	558	10.7%
42.0%	5,098	5,553	455	8.9%
43.2%	4,936	5,405	469	9.5%
44.4%	4,593	5,250	657	14.3%
45.7%	4,380	5,056	675	15.4%
46.9%	4,326	5,041	715	16.5%
48.1%	4,229	4,977	749	17.7%
49.4%	4,113	4,958	845	20.6%
50.6%	4,102	4,950	847	20.7%
51.9%	3,772	4,886	1,114	29.5%
53.1%	3,721	4,697	976	26.2%
54.3%	3,655	4,563	909	24.9%
55.6%	3,380	4,544	1,164	34.4%
56.8%	3,333	4,538	1,205	36.1%
58.0%	3,306	4,498	1,192	36.0%
59.3%	3,279	4,477	1,198	36.6%
60.5%	3,230	4,382	1,152	35.7%
61.7%	3,088	4,370	1,282	41.5%
63.0%	3,081	4,290	1,209	39.3%
64.2%	2,982	4,203	1,221	41.0%
65.4%	2,839	4,150	1,311	46.2%
66.7%	2,820	4,103	1,282	45.5%
67.9%	2,817	4,069	1,252	44.5%
69.1%	2,733	3,849	1,116	40.8%
70.4%	2,601	3,597	996	38.3%
71.6%	2,557	3,530	972	38.0%
72.8%	2,520	3,414	895	35.5%
74.1%	2,486	3,406	921	37.0%
75.3%	2,341	3,272	931	39.7%
76.5%	2,323	3,227	903	38.9%
77.8%	2,286	3,199	913	39.9%
79.0%	2,256	3,167	911	40.4%
80.2%	2,203	3,091	888	40.3%
81.5%	2,125	2,633	508	23.9%
82.7%	2,116	2,568	451	21.3%
84.0%	1,809	2,443	634	35.1%
85.2%	1,807	2,396	589	32.6%
86.4%	1,694	2,390	696	41.1%
87.7%	1,453	2,280	827	56.9%
88.9%	1,434	2,264	830	57.9%
90.1%	1,057	2,125	1,068	101.0%
91.4%	980	2,106	1,126	114.8%
92.6%	977	1,940	963	98.5%
93.8%	898	1,267	370	41.2%
95.1%	885	1,143	259	29.2%
96.3%	824	979	155	18.8%
97.5%	785	834	49	6.3%
98.8%	568	768	199	35.0%
100.0%	418	626	208	49.8%

Figure SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

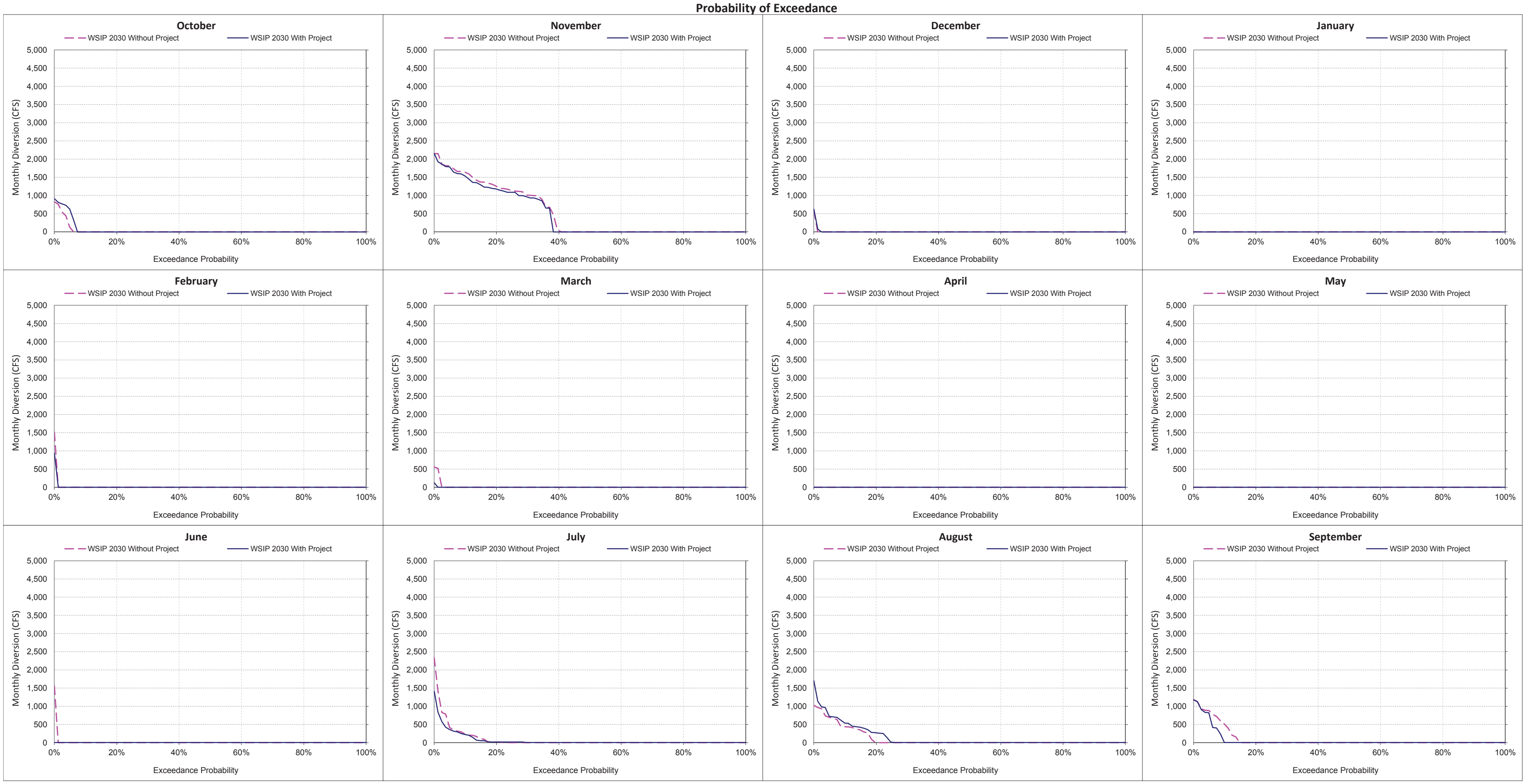


Table SW-40-b

Banks Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	824	907	83	10.0%
1.2%	760	812	52	6.9%
2.5%	542	764	222	41.0%
3.7%	439	730	291	66.3%
4.9%	126	626	501	397.7%
6.2%	0	326	326	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,151	2,151	0	0.0%
1.2%	2,151	1,929	-222	-10.3%
2.5%	1,860	1,862	2	0.1%
3.7%	1,817	1,794	-23	-1.3%
4.9%	1,817	1,787	-30	-1.7%
6.2%	1,737	1,644	-94	-5.4%
7.4%	1,661	1,599	-61	-3.7%
8.6%	1,659	1,596	-63	-3.8%
9.9%	1,640	1,538	-102	-6.2%
11.1%	1,593	1,451	-142	-8.9%
12.3%	1,501	1,360	-141	-9.4%
13.6%	1,417	1,352	-66	-4.6%
14.8%	1,370	1,292	-77	-5.6%
16.0%	1,368	1,230	-138	-10.1%
17.3%	1,338	1,221	-117	-8.7%
18.5%	1,309	1,193	-116	-8.8%
19.8%	1,265	1,177	-87	-6.9%
21.0%	1,193	1,146	-47	-4.0%
22.2%	1,190	1,121	-69	-5.8%
23.5%	1,171	1,091	-80	-6.8%
24.7%	1,145	1,091	-54	-4.7%
25.9%	1,121	1,085	-36	-3.2%
27.2%	1,111	996	-115	-10.4%
28.4%	1,098	993	-105	-9.6%
29.6%	1,010	970	-41	-4.0%
30.9%	1,005	933	-72	-7.2%
32.1%	995	928	-67	-6.8%
33.3%	990	893	-97	-9.8%
34.6%	892	853	-40	-4.4%
35.8%	688	654	-34	-5.0%
37.0%	672	651	-21	-3.1%
38.3%	463	0	-463	-100.0%
39.5%	61	0	-61	-100.0%
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	589	623	34	5.8%
1.2%	0	73	73	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-40-b

Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,516	943	-573	-37.8%
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	558	120	-438	-78.4%
1.2%	518	0	-518	-100.0%
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

June					July					August					September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,559	0	-1,559	-100.0%	0.0%	2,340	1,409	-931	-39.8%	0.0%	1,022	1,704	682	66.7%	0.0%	1,184	1,176	-9	-0.7%
1.2%	0	0	0		1.2%	1,408	847	-560	-39.8%	1.2%	966	1,141	175	18.1%	1.2%	1,129	1,132	2	0.2%
2.5%	0	0	0		2.5%	831	578	-253	-30.5%	2.5%	931	978	47	5.0%	2.5%	931	907	-24	-2.6%
3.7%	0	0	0		3.7%	782	422	-360	-46.0%	3.7%	734	963	229	31.1%	3.7%	891	833	-57	-6.4%
4.9%	0	0	0		4.9%	417	360	-56	-13.5%	4.9%	695	724	28	4.1%	4.9%	881	821	-61	-6.9%
6.2%	0	0	0		6.2%	354	318	-36	-10.1%	6.2%	670	709	39	5.8%	6.2%	780	417	-363	-46.6%
7.4%	0	0	0		7.4%	317	298	-19	-6.0%	7.4%	636	694	58	9.1%	7.4%	717	402	-315	-44.0%
8.6%	0	0	0		8.6%	297	251	-46	-15.5%	8.6%	444	618	174	39.1%	8.6%	599	240	-359	-59.9%
9.9%	0	0	0		9.9%	236	224	-12	-5.2%	9.9%	438	541	103	23.4%	9.9%	514	0	-514	-100.0%
11.1%	0	0	0		11.1%	205	202	-4	-1.8%	11.1%	433	533	100	23.1%	11.1%	398	0	-398	-100.0%
12.3%	0	0	0		12.3%	202	145	-57	-28.2%	12.3%	415	454	39	9.4%	12.3%	205	0	-205	-100.0%
13.6%	0	0	0		13.6%	169	69	-100	-59.3%	13.6%	377	437	60	15.9%	13.6%	156	0	-156	-100.0%
14.8%	0	0	0		14.8%	109	55	-54	-49.4%	14.8%	350	423	72	20.7%	14.8%	0	0	0	
16.0%	0	0	0		16.0%	90	53	-37	-40.9%	16.0%	295	394	99	33.6%	16.0%	0	0	0	
17.3%	0	0	0		17.3%	18	23	5	30.4%	17.3%	267	361	94	35.4%	17.3%	0	0	0	
18.5%	0	0	0		18.5%	18	19	1	8.4%	18.5%	90	281	191	211.3%	18.5%	0	0	0	
19.8%	0	0	0		19.8%	17	18	1	7.0%	19.8%	0	272	272		19.8%	0	0	0	
21.0%	0	0	0		21.0%	17	18	1	6.7%	21.0%	0	261	261		21.0%	0	0	0	
22.2%	0	0	0		22.2%	0	18	18		22.2%	0	252	252		22.2%	0	0	0	
23.5%	0	0	0		23.5%	0	18	18		23.5%	0	138	138		23.5%	0	0	0	
24.7%	0	0	0		24.7%	0	17	17		24.7%	0	20	20		24.7%	0	0	0	
25.9%	0	0	0		25.9%	0	17	17		25.9%	0	0	0		25.9%	0	0	0	
27.2%	0	0	0		27.2%	0	17	17		27.2%	0	0	0		27.2%	0	0	0	
28.4%	0	0	0		28.4%	0	14	14		28.4%	0	0	0		28.4%	0	0	0	
29.6%	0	0	0		29.6%	0	0	0		29.6%	0	0	0		29.6%	0	0	0	
30.9%	0	0	0		30.9%	0	0	0		30.9%	0	0	0		30.9%	0	0	0	
32.1%	0	0	0		32.1%	0	0	0		32.1%	0	0	0		32.1%	0	0	0	
33.3%	0	0	0		33.3%	0	0	0		33.3%	0	0	0		33.3%	0	0	0	
34.6%	0	0	0		34.6%	0	0	0		34.6%	0	0	0		34.6%	0	0	0	
35.8%	0	0	0		35.8%	0	0	0		35.8%	0	0	0		35.8%	0	0	0	
37.0%	0	0	0		37.0%	0	0	0		37.0%	0	0	0		37.0%	0	0	0	
38.3%	0	0	0		38.3%	0	0	0		38.3%	0	0	0		38.3%	0	0	0	
39.5%	0	0	0		39.5%	0	0	0		39.5%	0	0	0		39.5%	0	0	0	
40.7%	0	0	0		40.7%	0	0	0		40.7%	0	0	0		40.7%	0	0	0	
42.0%	0	0	0		42.0%	0	0	0		42.0%	0	0	0		42.0%	0	0	0	
43.2%	0	0	0		43.2%	0	0	0		43.2%	0	0	0		43.2%	0	0	0	
44.4%	0	0	0		44.4%	0	0	0		44.4%	0	0	0		44.4%	0	0	0	
45.7%	0	0	0		45.7%	0	0	0		45.7%	0	0	0		45.7%	0	0	0	
46.9%	0	0	0		46.9%	0	0	0		46.9%	0	0	0		46.9%	0	0	0	
48.1%	0	0	0		48.1%	0	0	0		48.1%	0	0	0		48.1%	0	0	0	
49.4%	0	0	0		49.4%	0	0	0		49.4%	0	0	0		49.4%	0	0	0	
50.6%	0	0	0		50.6%	0	0	0		50.6%	0	0	0		50.6%	0	0	0	
51.9%	0	0	0		51.9%	0	0	0		51.9%	0	0	0		51.9%	0	0	0	
53.1%	0	0	0		53.1%	0	0	0		53.1%	0	0	0		53.1%	0	0	0	
54.3%	0	0	0		54.3%	0	0	0		54.3%	0	0	0		54.3%	0	0	0	
55.6%	0	0	0		55.6%	0	0	0		55.6%	0	0	0		55.6%	0	0	0	
56.8%	0	0	0		56.8%	0	0	0		56.8%	0	0	0		56.8%	0	0	0	
58.0%	0	0	0		58.0%	0	0	0		58.0%	0	0	0		58.0%	0	0	0	
59.3%	0	0	0		59.3%	0	0	0		59.3%	0	0	0		59.3%	0	0	0	
60.5%	0	0	0		60.5%	0	0	0		60.5%	0	0	0		60.5%	0	0	0	
61.7%	0	0	0		61.7%	0	0	0		61.7%	0	0	0		61.7%	0	0	0	
63.0%	0	0	0		63.0%	0	0	0		63.0%	0	0	0		63.0%	0	0	0	
64.2%	0	0	0		64.2%	0	0	0		64.2%	0	0	0		64.2%	0	0	0	
65.4%	0	0	0		65.4%	0	0	0		65.4%	0	0	0		65.4%	0	0	0	
66.7%	0	0	0		66.7%	0	0	0		66.7%	0	0	0		66.7%	0	0	0	
67.9%	0	0	0		67.9%	0	0	0		67.9%	0	0	0		67.9%	0	0	0	
69.1%	0	0	0		69.1%	0	0	0		69.1%	0	0	0		69.1%	0	0	0	
70.4%	0	0	0		70.4%	0	0	0		70.4%	0	0	0		70.4%	0	0	0	
71.6%	0	0	0		71.6%	0	0	0		71.6%	0	0	0		71.6%	0	0	0	
72.8%	0	0	0		72.8%	0	0	0		72.8%	0	0	0		72.8%	0	0	0	
74.1%	0	0	0		74.1%	0	0	0		74.1%	0	0	0		74.1%	0	0	0	
75.3%	0	0	0		75.3%	0	0	0		75.3%	0	0	0		75.3%	0	0	0	
76.5%	0	0	0		76.5%	0	0	0		76.5%	0	0	0		76.5%	0	0	0	
77.8%	0	0	0		77.8%	0	0	0		77.8%	0	0	0		77.8%	0	0	0	
79.0%	0	0	0		79.0%	0	0	0		79.0%	0	0	0		79.0%	0	0	0	
80.2%	0	0	0		80.2%	0	0	0		80.2%	0	0	0		80.2%	0	0	0	
81.5%	0	0	0		81.5%	0	0	0		81.5%	0	0	0		81.5%	0	0	0	
82.7%	0	0	0		82.7%	0	0	0		82.7%	0	0	0		82.7%	0	0	0	
84.0%	0	0	0		84.0%	0	0	0		84.0%	0	0	0		84.0%	0	0	0	
85.2%	0	0	0		85.2%	0	0	0		85.2%	0	0	0		85.2%	0	0	0	
86.4%	0	0	0		86.4%	0	0	0		86.4%	0	0	0		86.4%	0	0	0	
87.7%	0	0	0		87.7%	0	0	0		87.7%	0	0	0		87.7%	0	0	0	
88.9%	0	0	0		88.9%	0	0	0		88.9%	0	0	0		88.9%	0	0	0	
90.1%	0	0	0		90.1%	0	0	0		90.1%	0	0	0		90.1%	0	0	0	
91.4%	0	0	0		91.4%	0	0	0		91.4%	0	0	0		91.4%	0	0	0	
92.6%	0	0	0		92.6%	0	0	0		92.6%	0	0	0		92.6%	0	0	0	
93.8%	0	0	0		93.8%	0	0	0		93.8%	0	0	0		93.8%	0	0	0	
95.1%	0	0	0		95.1%	0	0	0		95.1%	0	0	0		95.1%	0	0	0	
96.3%	0	0	0		96.3%	0	0	0		96.3%	0	0	0		96.3%	0	0	0	
97.5%	0	0	0		97.5%	0	0	0		97.5%	0	0	0		97.5%	0	0	0	
98.8%	0	0	0		98.8%	0	0	0		98.8%	0	0	0		98.8%	0	0	0	
100.0%	0	0	0		100.0%	0	0	0		100.0%	0	0	0		100.0%	0	0	0	

Figure SW-41-b
San Luis Reservoir (SWP and CVP), End of Month Storage
Probability of Exceedance

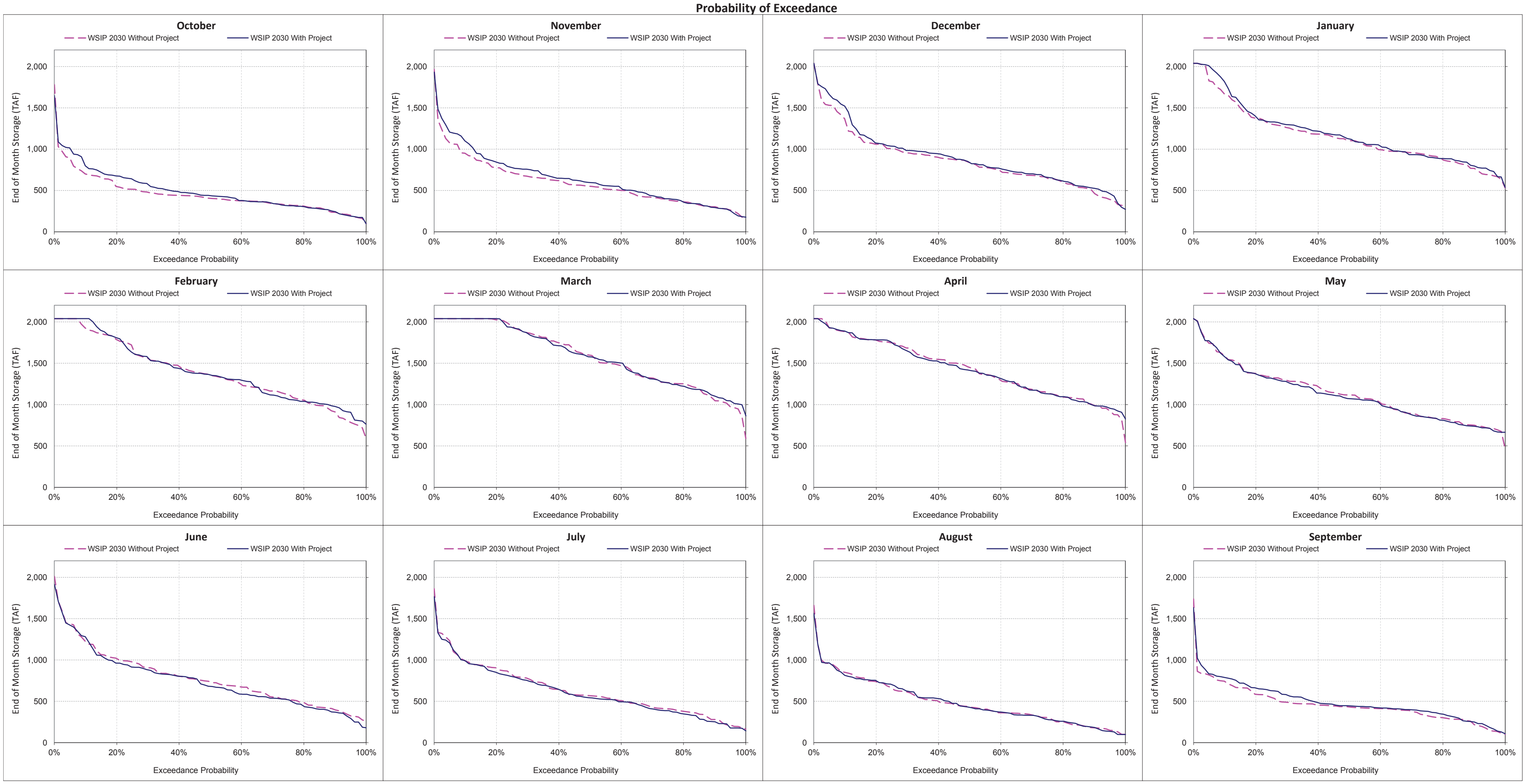


Table SW-41-b

San Luis Reservoir (SWP and CVP), End of Month Storage

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,780	1,651	-129	-7.3%
1.2%	1,032	1,088	55	5.4%
2.5%	975	1,044	69	7.1%
3.7%	908	1,021	112	12.4%
4.9%	895	1,016	121	13.5%
6.2%	794	940	146	18.3%
7.4%	765	935	170	22.2%
8.6%	738	910	171	23.2%
9.9%	700	799	99	14.1%
11.1%	688	764	76	11.0%
12.3%	682	761	79	11.6%
13.6%	676	749	73	10.8%
14.8%	661	724	63	9.6%
16.0%	641	699	58	9.0%
17.3%	639	690	51	7.9%
18.5%	622	686	65	10.4%
19.8%	549	678	129	23.5%
21.0%	539	674	135	25.0%
22.2%	526	653	128	24.3%
23.5%	517	649	131	25.4%
24.7%	515	642	127	24.7%
25.9%	514	618	103	20.1%
27.2%	496	599	104	20.9%
28.4%	486	590	104	21.5%
29.6%	482	584	102	21.2%
30.9%	470	548	78	16.5%
32.1%	467	539	72	15.4%
33.3%	457	527	70	15.3%
34.6%	454	524	70	15.3%
35.8%	446	512	65	14.6%
37.0%	445	502	57	12.8%
38.3%	443	491	48	10.8%
39.5%	442	488	46	10.4%
40.7%	440	475	35	7.9%
42.0%	438	474	36	8.2%
43.2%	437	468	31	7.1%
44.4%	433	466	33	7.6%
45.7%	431	458	27	6.3%
46.9%	424	443	19	4.5%
48.1%	415	441	26	6.2%
49.4%	408	441	33	8.1%
50.6%	403	435	32	8.0%
51.9%	402	430	28	7.1%
53.1%	395	428	33	8.3%
54.3%	394	425	31	7.8%
55.6%	385	421	36	9.2%
56.8%	381	412	32	8.3%
58.0%	379	408	28	7.5%
59.3%	376	378	2	0.6%
60.5%	375	377	2	0.6%
61.7%	374	371	-2	-0.6%
63.0%	371	366	-5	-1.3%
64.2%	369	365	-4	-1.0%
65.4%	368	364	-4	-1.2%
66.7%	366	364	-2	-0.6%
67.9%	356	363	7	1.9%
69.1%	346	352	6	1.7%
70.4%	340	340	-1	-0.2%
71.6%	335	336	1	0.2%
72.8%	334	326	-8	-2.5%
74.1%	326	317	-8	-2.6%
75.3%	324	317	-7	-2.3%
76.5%	319	314	-5	-1.5%
77.8%	319	310	-9	-2.8%
79.0%	318	310	-8	-2.6%
80.2%	310	303	-7	-2.2%
81.5%	298	290	-8	-2.7%
82.7%	292	286	-6	-2.0%
84.0%	290	283	-7	-2.5%
85.2%	290	279	-11	-3.8%
86.4%	276	270	-6	-2.0%
87.7%	254	267	13	5.2%
88.9%	237	253	16	6.7%
90.1%	236	243	6	2.7%
91.4%	226	217	-9	-3.9%
92.6%	214	208	-6	-2.6%
93.8%	212	201	-11	-5.2%
95.1%	200	189	-11	-5.7%
96.3%	181	183	2	1.0%
97.5%	171	174	3	1.8%
98.8%	162	173	11	6.9%
100.0%	100	100	0	0.0%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,966	1,932	-35	-1.8%
1.2%	1,351	1,486	136	10.0%
2.5%	1,237	1,372	135	11.0%
3.7%	1,130	1,294	165	14.6%
4.9%	1,077	1,208	131	12.2%
6.2%	1,063	1,193	131	12.3%
7.4%	1,059	1,186	127	12.0%
8.6%	956	1,159	204	21.3%
9.9%	951	1,099	148	15.6%
11.1%	922	1,067	145	15.7%
12.3%	916	1,020	104	11.3%
13.6%	868	949	82	9.4%
14.8%	860	942	82	9.5%
16.0%	839	890	51	6.1%
17.3%	831	874	42	5.1%
18.5%	786	861	75	9.5%
19.8%	775	845	70	9.1%
21.0%	774	832	57	7.4%
22.2%	744	828	84	11.3%
23.5%	720	792	71	9.9%
24.7%	720	780	61	8.4%
25.9%	704	768	63	9.0%
27.2%	698	764	66	9.5%
28.4%	679	759	80	11.7%
29.6%	675	759	84	12.5%
30.9%	665	751	86	13.0%
32.1%	658	741	83	12.7%
33.3%	656	739	83	12.7%
34.6%	649	695	46	7.1%
35.8%	647	686	39	6.0%
37.0%	629	674	45	7.2%
38.3%	626	662	36	5.8%
39.5%	621	648	27	4.4%
40.7%	617	647	30	4.8%
42.0%	593	646	53	9.0%
43.2%	573	644	71	12.4%
44.4%	571	628	57	9.9%
45.7%	566	623	58	10.2%
46.9%	565	617	52	9.2%
48.1%	559	605	46	8.2%
49.4%	553	597	44	8.0%
50.6%	549	596	47	8.6%
51.9%	543	593	50	9.3%
53.1%	540	574	34	6.2%
54.3%	520	559	39	7.6%
55.6%	514	556	41	8.1%
56.8%	512	553	42	8.1%
58.0%	511	551	40	7.8%
59.3%	503	551	47	9.4%
60.5%	500	512	12	2.4%
61.7%	499	502	4	0.7%
63.0%	472	502	30	6.4%
64.2%	455	497	42	9.2%
65.4%	434	481	47	10.9%
66.7%	428	478	50	11.7%
67.9%	422	466	44	10.5%
69.1%	422	440	19	4.5%
70.4%	413	434	22	5.2%
71.6%	410	423	12	3.0%
72.8%	401	418	16	4.1%
74.1%	396	400	4	0.9%
75.3%	382	399	17	4.5%
76.5%	377	395	18	4.8%
77.8%	371	391	20	5.4%
79.0%	369	379	10	2.7%
80.2%	362	355	-7	-1.8%
81.5%	358	345	-13	-3.6%
82.7%	345	344	-1	-0.4%
84.0%	338	341	3	1.0%
85.2%	323	337	14	4.4%
86.4%	314	315	1	0.4%
87.7%	312	312	1	0.2%
88.9%	304	298	-6	-2.1%
90.1%	304	294	-10	-3.3%
91.4%	290	283	-7	-2.5%
92.6%	280	282	1	0.5%
93.8%	276	276	0	-0.1%
95.1%	263	254	-9	-3.3%
96.3%	249	221	-28	-11.2%
97.5%	220	192	-29	-13.0%
98.8%	177	183	6	3.4%
100.0%	168	178	11	6.3%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	1,797	1,791	-6	-0.3%
2.5%	1,593	1,756	164	10.3%
3.7%	1,542	1,733	191	12.4%
4.9%	1,531	1,663	133	8.7%
6.2%	1,528	1,614	85	5.6%
7.4%	1,455	1,594	138	9.5%
8.6%	1,418	1,547	129	9.1%
9.9%	1,369	1,520	151	11.0%
11.1%	1,218	1,450	232	19.0%
12.3%	1,211	1,296	85	7.0%
13.6%	1,145	1,245	99	8.7%
14.8%	1,143	1,176	32	2.8%
16.0%	1,083	1,168	85	7.8%
17.3%	1,077	1,143	65	6.1%
18.5%	1,072	1,120	47	4.4%
19.8%	1,061	1,076	15	1.4%
21.0%	1,060	1,067	7	0.7%
22.2%	1,054	1,062	8	0.7%
23.5%	1,010	1,044	34	3.4%
24.7%	1,007	1,037	30	3.0%
25.9%	1,006	1,035	28	2.8%
27.2%	988	1,014	26	2.7%
28.4%	966	1,014	47	4.9%
29.6%	957	986	29	3.0%
30.9%	952	984	32	3.4%
32.1%	942	982	39	4.2%
33.3%	942	974	31	3.3%
34.6%	939	971	32	3.4%
35.8%	928	968	40	4.3%
37.0%	926	951	26	2.8%
38.3%	910	949	39	4.3%
39.5%	905	945	40	4.5%
40.7%	893	941	48	5.4%
42.0%	885	925	40	4.5%
43.2%	883	914	31	3.5%
44.4%	878	903	25	2.8%
45.7%	871	877	6	0.7%
46.9%	870	877	7	0.8%
48.1%	867	869	2	0.3%
49.4%	846	853	7	0.8%
50.6%	828	824	-4	-0.5%
51.9%	814	824	10	1.2%
53.1%	783	813	30	3.8%
54.3%	781	812	31	4.0%
55.6%	775	785	10	1.3%
56.8%	770	778	8	1.1%
58.0%	759	773	14	1.9%
59.3%	753	770	17	2.2%
60.5%	719	758	39	5.4%
61.7%	719	748	30	4.2%
63.0%	710	737	28	3.9%
64.2%	704	726	22	3.1%
65.4%	697	720	23	3.3%
66.7%	694	719	25	3.6%
67.9%	684	704	19	2.8%
69.1%	684	703	19	2.8%
70.4%	683	701	17	2.5%
71.6%	679	694	14	2.1%
72.8%	668	691	23	3.4%
74.1%	666	663	-3	-0.5%
75.3%	642	657	15	2.3%
76.5%	642	652	11	1.7%
77.8%	634	631	-3	-0.5%
79.0%	616	622	6	1.0%
80.2%	594	610	15	2.6%
81.5%	579	605	26	4.4%
82.7%	577	588	11	2.0%
84.0%	545	560	15	2.8%
85.2%	537	554	18	3.3%
86.4%	535	551	16	3.0%
87.7%	525	542	17	3.2%
88.9%	514	532	18	3.5%
90.1%	462	527	65	14.0%
91.4%	435	516	81	18.7%
92.6%	418	490	73	17.4%
93.8%	408	485	77	18.9%
95.1%	391	461	70	18.0%
96.3%	384	431	48	12.4%
97.5%	330	346	16	4.7%
98.8%	320	298	-21	-6.7%
100.0%	317	270	-47	-14.8%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,026	2,027	1	0.0%
3.7%	2,026	2,023	-2	-0.1%
4.9%	1,826	2,010	184	10.1%
6.2%	1,813	1,962	149	8.2%
7.4%	1,753	1,924	172	9.8%
8.6%	1,723	1,874	151	8.8%
9.9%	1,669	1,819	150	9.0%
11.1%	1,652	1,735	83	5.0%
12.3%	1,598	1,636	38	2.4%
13.6%	1,570	1,629	59	3.8%
14.8%	1,507	1,567	61	4.0%
16.0%	1,453	1,511	58	4.0%
17.3%	1,445	1,459	15	1.0%
18.5%	1,387	1,435	48	3.5%
19.8%	1,375	1,406	31	2.2%
21.0%	1,375	1,356	-19	-1.4%
22.2%	1,357	1,350	-7	-0.5%
23.5%	1,326	1,335	10	0.7%
24.7%	1,305	1,330	24	1.8%
25.9%	1,297	1,329	32	2.5%
27.2%	1,289	1,324	35	2.7%
28.4%	1,283	1,309	26	2.0%
29.6%	1,264	1,298	34	2.7%
30.9%	1,254	1,295	41	3.3%
32.1%	1,235	1,293	58	4.7%
33.3%	1,229	1,276	46	3.8%
34.6%	1,218	1,264	46	3.8%
35.8%	1,215	1,257	41	3.4%
37.0%	1,188	1,241	53	4.4%
38.3%	1,185	1,221	36	3.0%
39.5%	1,183	1,220	38	3.2%
40.7%	1,183	1,214	31	2.6%
42.0%	1,176	1,190	14	1.2%
43.2%	1,172	1,190	18	1.5%
44.4%	1,154	1,179	26	2.2%
45.7%	1,136	1,173	37	3.3%
46.9%	1,128	1,171	43	3.8%
48.1%	1,128	1,152	24	2.1%
49.4%	1,106	1,127	21	1.9%
50.6%	1,102	1,118	16	1.5%
51.9%	1,102	1,092	-10	-0.9%
53.1%	1,083	1,084	0	0.0%
54.3%	1,063	1,082	19	1.8%
55.6%	1,040	1,056	16	1.5%
56.8%	1,038	1,055	17	1.7%
58.0%	1,034	1,055	21	2.0%
59.3%	996	1,053	58	5.8%
60.5%	991	1,023	32	3.3%
61.7%	981	1,021	40	4.1%
63.0%	976	1,001	25	2.5%
64.2%	975	978	3	0.3%
65.4%	972	976	4	0.4%
66.7%	968	971	3	0.3%
67.9%	965	967	2	0.2%
69.1%	959	934	-25	-2.6%
70.4%	958	934	-24	-2.5%
71.6%	953	933	-20	-2.1%
72.8%	945	931	-15	-1.5%
74.1%	938	922	-16	-1.7%
75.3%	928	902	-26	-2.8%
76.5%	917	900	-17	-1.9%
77.8%	913	893	-21	-2.3%
79.0%	895	887	-8	-0.8%
80.2%	867	886	19	2.1%
81.5%	856	884	28	3.3%
82.7%	849	883	34	4.0%
84.0%	846	866	20	2.3%
85.2%	827	859	32	3.8%
86.4%	818	846	28	3.5%
87.7%	814	843	29	3.5%
88.9%	768	804	36	4.7%
90.1%	767	797	30	3.8%
91.4%	735	777	42	5.7%
92.6%	702	771	69	9.8%
93.8%	693	770	77	11.2%
95.1%	692	743	51	7.4%
96.3%	678	729	51	7.5%
97.5%	668	668	1	0.1%
98.8%	634	664	29	4.6%
100.0%	532	540	8	1.4%

Table SW-41-b
San Luis Reservoir (SWP and CVP), End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,039	2,039	0	0.0%
4.9%	2,039	2,039	0	0.0%
6.2%	2,039	2,039	0	0.0%
7.4%	2,039	2,039	0	0.0%
8.6%	1,973	2,039	66	3.3%
9.9%	1,926	2,039	113	5.9%
11.1%	1,902	2,039	137	7.2%
12.3%	1,890	2,002	112	5.9%
13.6%	1,869	1,942	73	3.9%
14.8%	1,862	1,898	36	1.9%
16.0%	1,847	1,881	34	1.8%
17.3%	1,841	1,838	-3	-0.1%
18.5%	1,831	1,829	-2	-0.1%
19.8%	1,790	1,812	22	1.2%
21.0%	1,767	1,794	28	1.6%
22.2%	1,761	1,739	-22	-1.3%
23.5%	1,743	1,675	-68	-3.9%
24.7%	1,722	1,636	-87	-5.0%
25.9%	1,609	1,606	-3	-0.2%
27.2%	1,592	1,600	8	0.5%
28.4%	1,577	1,586	9	0.6%
29.6%	1,570	1,582	13	0.8%
30.9%	1,536	1,531	-5	-0.3%
32.1%	1,532	1,524	-8	-0.5%
33.3%	1,525	1,524	-1	0.0%
34.6%	1,507	1,509	2	0.1%
35.8%	1,505	1,498	-8	-0.5%
37.0%	1,488	1,485	-3	-0.2%
38.3%	1,478	1,448	-30	-2.0%
39.5%	1,476	1,440	-36	-2.4%
40.7%	1,444	1,432	-12	-0.8%
42.0%	1,431	1,401	-30	-2.1%
43.2%	1,412	1,390	-22	-1.6%
44.4%	1,401	1,381	-19	-1.4%
45.7%	1,387	1,379	-8	-0.6%
46.9%	1,381	1,378	-3	-0.2%
48.1%	1,373	1,367	-5	-0.4%
49.4%	1,367	1,364	-3	-0.2%
50.6%	1,350	1,351	2	0.1%
51.9%	1,342	1,351	9	0.7%
53.1%	1,331	1,336	5	0.3%
54.3%	1,317	1,323	6	0.4%
55.6%	1,301	1,309	8	0.6%
56.8%	1,296	1,306	11	0.8%
58.0%	1,282	1,303	20	1.6%
59.3%	1,262	1,301	39	3.1%
60.5%	1,230	1,289	59	4.8%
61.7%	1,225	1,282	57	4.7%
63.0%	1,216	1,278	62	5.1%
64.2%	1,208	1,216	8	0.7%
65.4%	1,208	1,209	1	0.1%
66.7%	1,186	1,145	-41	-3.4%
67.9%	1,180	1,133	-47	-4.0%
69.1%	1,164	1,119	-45	-3.9%
70.4%	1,164	1,114	-50	-4.3%
71.6%	1,159	1,104	-55	-4.8%
72.8%	1,142	1,087	-55	-4.8%
74.1%	1,130	1,078	-51	-4.5%
75.3%	1,121	1,060	-61	-5.5%
76.5%	1,084	1,059	-25	-2.3%
77.8%	1,071	1,051	-20	-1.9%
79.0%	1,061	1,038	-23	-2.2%
80.2%	1,053	1,038	-15	-1.4%
81.5%	1,018	1,031	13	1.3%
82.7%	1,014	1,029	15	1.5%
84.0%	993	1,022	29	2.9%
85.2%	987	1,011	23	2.4%
86.4%	987	1,007	20	2.0%
87.7%	956	1,002	46	4.8%
88.9%	925	987	62	6.7%
90.1%	910	975	65	7.1%
91.4%	843	959	116	13.8%
92.6%	834	926	92	11.0%
93.8%	807	913	106	13.1%
95.1%	784	908	124	15.8%
96.3%	765	813	48	6.3%
97.5%	748	806	58	7.7%
98.8%	719	800	80	11.2%
100.0%	590	763	173	29.3%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,039	2,039	0	0.0%
4.9%	2,039	2,039	0	0.0%
6.2%	2,039	2,039	0	0.0%
7.4%	2,039	2,039	0	0.0%
8.6%	2,039	2,039	0	0.0%
9.9%	2,039	2,039	0	0.0%
11.1%	2,039	2,039	0	0.0%
12.3%	2,039	2,039	0	0.0%
13.6%	2,039	2,039	0	0.0%
14.8%	2,039	2,039	0	0.0%
16.0%	2,039	2,039	0	0.0%
17.3%	2,039	2,039	0	0.0%
18.5%	2,037	2,039	2	0.1%
19.8%	2,026	2,039	13	0.6%
21.0%	2,020	2,035	16	0.8%
22.2%	2,014	1,996	-18	-0.9%
23.5%	1,988	1,938	-50	-2.5%
24.7%	1,954	1,937	-17	-0.9%
25.9%	1,923	1,922	-2	-0.1%
27.2%	1,906	1,916	10	0.5%
28.4%	1,888	1,882	-6	-0.3%
29.6%	1,871	1,871	0	0.0%
30.9%	1,861	1,840	-21	-1.1%
32.1%	1,846	1,820	-26	-1.4%
33.3%	1,833	1,812	-21	-1.1%
34.6%	1,814	1,801	-13	-0.7%
35.8%	1,813	1,797	-16	-0.9%
37.0%	1,770	1,762	-7	-0.4%
38.3%	1,769	1,720	-50	-2.8%
39.5%	1,752	1,715	-37	-2.1%
40.7%	1,743	1,711	-32	-1.8%
42.0%	1,723	1,688	-36	-2.1%
43.2%	1,723	1,646	-76	-4.4%
44.4%	1,683	1,628	-55	-3.3%
45.7%	1,640	1,618	-22	-1.3%
46.9%	1,628	1,609	-19	-1.2%
48.1%	1,608	1,601	-7	-0.4%
49.4%	1,601	1,579	-22	-1.4%
50.6%	1,593	1,575	-18	-1.1%
51.9%	1,548	1,562	14	0.9%
53.1%	1,507	1,543	36	2.4%
54.3%	1,503	1,539	37	2.4%
55.6%	1,502	1,516	14	0.9%
56.8%	1,496	1,515	19	1.3%
58.0%	1,491	1,512	21	1.4%
59.3%	1,478	1,506	28	1.9%
60.5%	1,465	1,501	35	2.4%
61.7%	1,455	1,429	-26	-1.8%
63.0%	1,423	1,402	-21	-1.5%
64.2%	1,363	1,384	22	1.6%
65.4%	1,361	1,379	17	1.3%
66.7%	1,337	1,347	10	0.7%
67.9%	1,325	1,333	8	0.6%
69.1%	1,324	1,311	-13	-1.0%
70.4%	1,319	1,307	-11	-0.9%
71.6%	1,300	1,300	0	0.0%
72.8%	1,270	1,276	6	0.5%
74.1%	1,269	1,269	0	0.0%
75.3%	1,264	1,262	-2	-0.1%
76.5%	1,256	1,244	-12	-0.9%
77.8%	1,254	1,244	-10	-0.8%
79.0%	1,253	1,227	-26	-2.0%
80.2%	1,251	1,220	-31	-2.4%
81.5%	1,237	1,203	-34	-2.7%
82.7%	1,217	1,188	-29	-2.4%
84.0%	1,206	1,184	-21	-1.8%
85.2%	1,186	1,182	-4	-0.3%
86.4%	1,133	1,170	38	3.3%
87.7%	1,119	1,151	33	2.9%
88.9%	1,089	1,119	30	2.7%
90.1%	1,046	1,101	55	5.3%
91.4%	1,045	1,082	37	3.6%
92.6%	1,032	1,076	44	4.2%
93.8%	1,017	1,047	30	3.0%
95.1%	973	1,045	73	7.5%
96.3%	962	1,013	51	5.3%
97.5%	948	1,008	60	6.4%
98.8%	852	998	147	17.2%
100.0%	590	863	273	46.3%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,006	-33	-1.6%
3.7%	2,011	1,977	-35	-1.7%
4.9%	1,927	1,931	3	0.2%
6.2%	1,924	1,924	0	0.0%
7.4%	1,899	1,908	9	0.5%
8.6%	1,890	1,896	6	0.3%
9.9%	1,883	1,889	6	0.3%
11.1%	1,875	1,871	-4	-0.2%
12.3%	1,818	1,868	50	2.8%
13.6%	1,805	1,817	12	0.7%
14.8%	1,801	1,793	-8	-0.5%
16.0%	1,796	1,788	-8	-0.4%
17.3%	1,785	1,787	2	0.1%
18.5%	1,784	1,786	1	0.1%
19.8%	1,783	1,784	2	0.1%
21.0%	1,766	1,782	16	0.9%
22.2%	1,759	1,782	22	1.3%
23.5%	1,758	1,780	22	1.2%
24.7%	1,749	1,762	13	0.8%
25.9%	1,742	1,723	-19	-1.1%
27.2%	1,715	1,709	-6	-0.4%
28.4%	1,707	1,676	-31	-1.8%
29.6%	1,685	1,655	-30	-1.8%
30.9%	1,683	1,631	-52	-3.1%
32.1%	1,647	1,593	-53	-3.2%
33.3%	1,605	1,572	-32	-2.0%
34.6%	1,603	1,563	-39	-2.5%
35.8%	1,576	1,550	-26	-1.7%
37.0%	1,558	1,534	-23	-1.5%
38.3%	1,553	1,530	-23	-1.5%
39.5%	1,548	1,527	-21	-1.4%
40.7%	1,544	1,508	-36	-2.4%
42.0%	1,541	1,506	-35	-2.3%
43.2%	1,503	1,480	-23	-1.5%
44.4%	1,502	1,477	-25	-1.7%
45.7%	1,502	1,470	-31	-2.1%
46.9%	1,491	1,435	-56	-3.8%
48.1%	1,480	1,426	-54	-3.7%
49.4%	1,457	1,417	-40	-2.7%
50.6%	1,440	1,409	-31	-2.2%
51.9%	1,429	1,402	-27	-1.9%
53.1%	1,374	1,381	7	0.5%
54.3%	1,364	1,379	16	1.1%
55.6%	1,363	1,355	-9	-0.6%
56.8%	1,354	1,352	-2	-0.1%
58.0%	1,330	1,344	15	1.1%
59.3%	1,309	1,323	14	1.1%
60.5%	1,281	1,309	28	2.2%
61.7%	1,275	1,288	14	1.1%
63.0%	1,266	1,279	12	1.0%
64.2%	1,256	1,278	22	1.8%
65.4%	1,254	1,231	-23	-1.8%
66.7%	1,205	1,212	7	0.6%
67.9%	1,196	1,211	15	1.2%
69.1%	1,189	1,177	-11	-0.9%
70.4%	1,182	1,175	-7	-0.6%
71.6%	1,167	1,175	8	0.7%
72.8%	1,156	1,144	-12	-1.1%
74.1%	1,154	1,132	-22	-1.9%
75.3%	1,136	1,130	-6	-0.5%
76.5%	1,126	1,126	0	0.0%
77.8%	1,118	1,107	-11	-0.9%
79.0%	1,095	1,096	1	0.1%
80.2%	1,090	1,094	4	0.4%
81.5%	1,086	1,089	3	0.3%
82.7%	1,083	1,059	-23	-2.1%
84.0%	1,077	1,051	-25	-2.4%
85.2%	1,070	1,037	-33	-3.1%
86.4%	1,068	1,036	-32	-3.0%
87.7%	1,014	1,025	11	1.1%
88.9%	1,008	1,001	-8	-0.8%
90.1%	986	986	0	0.0%
91.4%	983	984	0	0.0%
92.6%	956	982	26	2.7%
93.8%	956	974	18	1.9%
95.1%	922	954	31	3.4%
96.3%	880	944	65	7.4%
97.5%	877	924	47	5.3%
98.8%	817	906	89	10.9%
100.0%	540	825	285	52.7%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,012	2,009	-2	-0.1%
2.5%	1,883	1,873	-10	-0.5%
3.7%	1,795	1,774	-21	-1.2%
4.9%	1,742	1,773	31	1.8%
6.2%	1,735	1,731	-3	-0.2%
7.4%	1,641	1,688	47	2.9%
8.6%	1,629	1,623	-6	-0.4%
9.9%	1,593	1,583	-10	-0.6%
11.1%	1,545	1,540	-5	-0.3%
12.3%	1,540	1,526	-15	-0.9%
13.6%	1,523	1,485	-38	-2.5%
14.8%	1,491	1,481	-10	-0.7%
16.0%	1,417	1,404	-13	-0.9%
17.3%	1,383	1,390	7	0.5%
18.5%	1,382	1,384	3	0.2%
19.8%	1,377	1,374	-4	-0.3%
21.0%	1,358	1,355	-3	-0.2%
22.2%	1,352	1,340	-12	-0.9%
23.5%	1,341	1,323	-18	-1.4%
24.7%	1,339	1,322	-17	-1.2%
25.9%	1,323	1,310	-13	-1.0%
27.2%	1,323	1,295	-27	-2.1%
28.4%	1,304	1,283	-22	-1.7%
29.6%	1,297	1,281	-16	-1.2%
30.9%	1,281	1,257	-24	-1.8%
32.1%	1,280	1,244	-36	-2.8%
33.3%	1,280	1,242	-38	-2.9%
34.6%	1,274	1,221	-53	-4.2%
35.8%	1,261	1,214	-47	-3.7%
37.0%	1,240	1,213	-27	-2.2%
38.3%	1,238	1,190	-48	-3.9%
39.5%	1,230	1,141	-89	-7.2%
40.7%	1,197	1,140	-58	-4.8%
42.0%	1,174	1,134	-40	-3.4%
43.2%	1,155	1,125	-30	-2.6%
44.4%	1,147	1,118	-29	-2.5%
45.7%	1,146	1,108	-38	-3.3%
46.9%	1,127	1,106	-22	-1.9%
48.1%	1,119	1,087	-32	-2.8%
49.4%	1,117	1,073	-44	-4.0%
50.6%	1,116	1,071	-45	-4.0%
51.9%	1,114	1,068	-47	-4.2%
53.1%	1,080	1,064	-16	-1.5%
54.3%	1,075	1,056	-19	-1.8%
55.6%	1,071	1,054	-17	-1.6%
56.8%	1,069	1,051	-19	-1.7%
58.0%	1,055	1,044	-12	-1.1%
59.3%	1,040	1,030	-10	-1.0%
60.5%	1,006	987	-19	-1.9%
61.7%	1,000	973	-26	-2.6%
63.0%	980	963	-18	-1.8%
64.2%	944	952	8	0.8%
65.4%	936	941	5	0.5%
66.7%	919	913	-6	-0.7%
67.9%	899	907	8	0.9%
69.1%	895	889	-5	-0.6%
70.4%	891	871	-19	-2.2%
71.6%	880	861	-19	-2.1%
72.8%	855	860	5	0.6%
74.1%	854	850	-3	-0.4%
75.3%	851	844	-7	-0.8%
76.5%	840	837	-3	-0.4%
77.8%	832	834	2	0.2%
79.0%	831	814	-17	-2.0%
80.2%	831	811	-19	-2.3%
81.5%	820	798	-22	-2.7%
82.7%	808	784	-25	-3.1%
84.0%	792	781	-11	-1.4%
85.2%	792	759	-33	-4.2%
86.4%	762	752	-10	-1.3%
87.7%	756	744	-13	-1.7%
88.9%	754	740	-14	-1.9%
90.1%	751	736	-15	-2.0%
91.4%	737	731	-7	-0.9%
92.6%	735	720	-15	-2.0%
93.8%	721	718	-4	-0.5%
95.1%	713	712	-1	-0.2%
96.3%	710	682	-28	-3.9%
97.5%	695	669	-26	-3.7%
98.8%	675	667	-8	-1.2%
100.0%	464	665	201	43.3%

Table SW-41-b
San Luis Reservoir (SWP and CVP), End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,012	1,917	-96	-4.8%
1.2%	1,714	1,708	-5	-0.3%
2.5%	1,593	1,573	-19	-1.2%
3.7%	1,450	1,448	-3	-0.2%
4.9%	1,439	1,422	-17	-1.2%
6.2%	1,425	1,399	-26	-1.8%
7.4%	1,318	1,347	29	2.2%
8.6%	1,281	1,294	13	1.0%
9.9%	1,227	1,281	54	4.4%
11.1%	1,191	1,213	23	1.9%
12.3%	1,189	1,138	-51	-4.3%
13.6%	1,112	1,059	-53	-4.7%
14.8%	1,067	1,057	-11	-1.0%
16.0%	1,060	1,023	-37	-3.5%
17.3%	1,038	999	-39	-3.8%
18.5%	1,029	992	-37	-3.6%
19.8%	1,022	962	-60	-5.8%
21.0%	995	961	-34	-3.4%
22.2%	990	945	-45	-4.6%
23.5%	989	941	-48	-4.8%
24.7%	979	914	-65	-6.7%
25.9%	967	911	-55	-5.7%
27.2%	952	910	-42	-4.4%
28.4%	917	898	-19	-2.1%
29.6%	907	883	-23	-2.5%
30.9%	904	875	-29	-3.3%
32.1%	890	846	-45	-5.0%
33.3%	843	835	-9	-1.0%
34.6%	839	831	-8	-0.9%
35.8%	838	827	-11	-1.3%
37.0%	825	824	-1	-0.1%
38.3%	825	815	-10	-1.2%
39.5%	806	805	-1	-0.1%
40.7%	800	801	1	0.1%
42.0%	796	799	3	0.4%
43.2%	775	786	11	1.4%
44.4%	772	782	10	1.3%
45.7%	765	771	6	0.7%
46.9%	756	712	-44	-5.8%
48.1%	748	697	-50	-6.7%
49.4%	742	681	-61	-8.2%
50.6%	726	680	-46	-6.4%
51.9%	725	670	-55	-7.6%
53.1%	706	667	-39	-5.5%
54.3%	696	662	-35	-5.0%
55.6%	693	638	-55	-7.9%
56.8%	689	636	-53	-7.7%
58.0%	685	608	-77	-11.3%
59.3%	677	588	-88	-13.1%
60.5%	671	585	-86	-12.9%
61.7%	671	584	-87	-12.9%
63.0%	625	573	-52	-8.3%
64.2%	620	570	-50	-8.0%
65.4%	613	556	-57	-9.3%
66.7%	610	555	-55	-9.0%
67.9%	588	555	-33	-5.7%
69.1%	557	539	-18	-3.2%
70.4%	550	537	-13	-2.4%
71.6%	548	535	-13	-2.4%
72.8%	529	529	1	0.2%
74.1%	528	525	-4	-0.7%
75.3%	515	517	2	0.4%
76.5%	515	487	-28	-5.4%
77.8%	508	470	-38	-7.5%
79.0%	484	465	-19	-4.0%
80.2%	481	433	-48	-9.9%
81.5%	454	428	-26	-5.7%
82.7%	453	421	-32	-7.1%
84.0%	431	410	-21	-4.8%
85.2%	427	403	-24	-5.7%
86.4%	425	403	-22	-5.1%
87.7%	417	393	-24	-5.7%
88.9%	414	372	-42	-10.2%
90.1%	396	367	-29	-7.3%
91.4%	385	358	-27	-7.1%
92.6%	367	356	-12	-3.1%
93.8%	345	321	-24	-6.9%
95.1%	323	293	-30	-9.2%
96.3%	319	249	-70	-22.0%
97.5%	309	248	-61	-19.8%
98.8%	275	186	-89	-32.3%
100.0%	258	181	-77	-29.8%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,862	1,766	-95	-5.1%
1.2%	1,333	1,330	-3	-0.2%
2.5%	1,321	1,252	-69	-5.2%
3.7%	1,279	1,240	-39	-3.1%
4.9%	1,233	1,206	-28	-2.3%
6.2%	1,100	1,118	18	1.6%
7.4%	1,064	1,069	6	0.6%
8.6%	1,016	1,001	-15	-1.4%
9.9%	991	992	1	0.1%
11.1%	973	956	-17	-1.7%
12.3%	945	949	4	0.4%
13.6%	944	943	-2	-0.2%
14.8%	937	929	-8	-0.8%
16.0%	936	924	-12	-1.3%
17.3%	917	878	-40	-4.3%
18.5%	910	865	-45	-4.9%
19.8%	906	852	-53	-5.9%
21.0%	879	834	-45	-5.1%
22.2%	871	822	-48	-5.5%
23.5%	866	815	-51	-5.9%
24.7%	831	803	-28	-3.4%
25.9%	796	793	-2	-0.3%
27.2%	794	776	-18	-2.3%
28.4%	787	761	-26	-3.3%
29.6%	781	756	-25	-3.3%
30.9%	762	740	-23	-3.0%
32.1%	737	729	-7	-1.0%
33.3%	732	706	-26	-3.6%
34.6%	727	696	-30	-4.2%
35.8%	705	693	-13	-1.8%
37.0%	657	678	21	3.2%
38.3%	648	667	19	3.0%
39.5%	645	650	4	0.6%
40.7%	633	631	-2	-0.3%
42.0%	629	605	-24	-3.8%
43.2%	584	587	4	0.6%
44.4%	581	582	1	0.2%
45.7%	578	563	-15	-2.6%
46.9%	575	561	-14	-2.4%
48.1%	575	551	-24	-4.2%
49.4%	570	546	-24	-4.3%
50.6%	566	542	-23	-4.1%
51.9%	562	536	-26	-4.6%
53.1%	559	528	-30	-5.4%
54.3%	550	525	-25	-4.5%
55.6%	538	524	-15	-2.7%
56.8%	537	522	-15	-2.8%
58.0%	522	515	-7	-1.3%
59.3%	510	493	-17	-3.3%
60.5%	506	493	-13	-2.5%
61.7%	501	492	-8	-1.7%
63.0%	479	492	13	2.8%
64.2%	477	480	3	0.6%
65.4%	472	460	-12	-2.6%
66.7%	471	448	-23	-4.8%
67.9%	456	427	-29	-6.4%
69.1%	440	412	-28	-6.3%
70.4%	426	406	-20	-4.6%
71.6%	417	397	-20	-4.8%
72.8%	415	390	-25	-6.1%
74.1%	410	388	-22	-5.3%
75.3%	408	387	-21	-5.2%
76.5%	404	373	-32	-7.8%
77.8%	392	368	-24	-6.0%
79.0%	384	352	-33	-8.5%
80.2%	378	348	-30	-7.9%
81.5%	372	341	-31	-8.2%
82.7%	365	330	-35	-9.6%
84.0%	360	327	-33	-9.1%
85.2%	343	283	-60	-17.5%
86.4%	340	281	-60	-17.5%
87.7%	309	259	-51	-16.4%
88.9%	280	254	-26	-9.2%
90.1%	280	251	-28	-10.1%
91.4%	275	230	-45	-16.4%
92.6%	236	230	-6	-2.7%
93.8%	215	227	12	5.6%
95.1%	212	178	-35	-16.3%
96.3%	197	177	-20	-10.2%
97.5%	195	176	-18	-9.4%
98.8%	182	174	-7	-4.1%
100.0%	164	141	-23	-13.8%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,661	1,564	-97	-5.8%
1.2%	1,191	1,195	4	0.4%
2.5%	995	970	-25	-2.5%
3.7%	962	966	4	0.4%
4.9%	958	964	6	0.6%
6.2%	942	930	-12	-1.3%
7.4%	906	877	-29	-3.2%
8.6%	862	855	-7	-0.8%
9.9%	852	815	-37	-4.3%
11.1%	841	801	-40	-4.7%
12.3%	826	792	-34	-4.1%
13.6%	795	775	-20	-2.5%
14.8%	785	773	-12	-1.5%
16.0%	782	762	-20	-2.5%
17.3%	745	762	17	2.2%
18.5%	745	754	9	1.3%
19.8%	740	754	14	1.8%
21.0%	726	725	-1	-0.1%
22.2%	720	722	2	0.3%
23.5%	688	711	23	3.4%
24.7%	667	707	40	5.9%
25.9%	635	689	54	8.6%
27.2%	624	657	33	5.3%
28.4%	622	652	30	4.8%
29.6%	617	626	10	1.6%
30.9%	603	617	14	2.4%
32.1%	577	613	36	6.2%
33.3%	545	550	4	0.8%
34.6%	538	545	7	1.4%
35.8%	522	543	20	3.9%
37.0%	521	541	20	3.8%
38.3%	513	540	27	5.3%
39.5%	509	536	27	5.4%
40.7%	484	529	45	9.3%
42.0%	483	505	22	4.7%
43.2%	477	499	22	4.6%
44.4%	472	476	4	0.9%
45.7%	448	476	27	6.1%
46.9%	448	444	-4	-1.0%
48.1%	440	437	-3	-0.8%
49.4%	439	432	-7	-1.6%
50.6%	426	422	-4	-0.9%
51.9%	422	410	-13	-3.0%
53.1%	414	409	-5	-1.1%
54.3%	405	398	-8	-1.9%
55.6%	405	393	-12	-3.0%
56.8%	387	387	-1	-0.2%
58.0%	377	378	1	0.3%
59.3%	362	371	9	2.4%
60.5%	361	369	8	2.1%
61.7%	361	364	3	0.8%
63.0%	361	355	-6	-1.6%
64.2%	356	336	-20	-5.7%
65.4%	355	335	-21	-5.8%
66.7%	350	333	-16	-4.7%
67.9%	348	331	-17	-4.8%
69.1%	342	331	-11	-3.3%
70.4%	331	329	-2	-0.6%
71.6%	326	322	-4	-1.3%
72.8%	307	305	-2	-0.5%
74.1%	305	287	-18	-6.0%
75.3%	304	278	-26	-8.6%
76.5%	277	275	-2	-0.7%
77.8%	252	266	14	5.7%
79.0%	251	260	9	3.6%
80.2%	250	260	10	3.8%
81.5%	236	247	11	4.7%
82.7%	220	240	20	9.0%
84.0%	214	234	19	9.1%
85.2%	213	214	1	0.5%
86.4%	205	198	-6	-3.1%
87.7%	189	197	8	4.4%
88.9%	182	190	8	4.5%
90.1%	179	184	5	2.6%
91.4%	176	163	-13	-7.2%
92.6%	174	145	-29	-16.6%
93.8%	166	138	-28	-16.7%
95.1%	148	137	-11	-7.6%
96.3%	146	130	-16	-10.7%
97.5%	130	100	-30	-23.2%
98.8%	100	100	0	0.0%
100.0%	100	100	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,738	1,632	-105	-6.1%
1.2%	863	1,021	158	18.4%
2.5%	836	935	99	11.9%
3.7%	835	888	53	6.4%
4.9%	819	832	13	1.6%
6.2%	798	828	29	3.7%
7.4%	758	806	48	6.3%
8.6%	748	799	50	6.7%
9.9%	743	790	46	6.2%
11.1%	712	779	67	9.4%
12.3%	691	771	80	11.5%
13.6%	667	753	86	12.9%
14.8%	664	721	57	8.6%
16.0%	663	719	56	8.5%
17.3%	660	696	36	5.5%
18.5%	624	666	41	6.6%
19.8%	585	665	79	13.6%
21.0%	581	650	69	11.9%
22.2%	581	649	68	11.7%
23.5%	567	640	73	12.9%
24.7%	551	629	78	14.2%
25.9%	535	625	90	16.7%
27.2%	501	619	119	23.7%
28.4%	492	585	93	18.9%
29.6%	490	583	93	19.1%
30.9%	485	562	77	16.0%
32.1%	476	554	79	16.5%
33.3%	472	554	82	17.4%
34.6%	470	549	79	16.8%
35.8%	470	528	58	12.3%
37.0%	469	512	42	9.0%
38.3%	469	501	32	6.9%
39.5%	455	487	32	7.0%
40.7%	454	476	22	4.8%
42.0%	453	473	20	4.5%
43.2%	449	470	21	4.7%
44.4%	445	466	20	4.6%
45.7%	443	453	10	2.3%
46.9%	436	448	11	2.6%
48.1%	436	447	11	2.6%
49.4%	435	447	11	2.6%
50.6%	429	443	14	3.3%
51.9%	426	440	14	3.3%
53.1%	421	437	15	3.6%
54.3%	420	437	16	3.9%
55.6%	417	435	17	4.2%
56.8%	415	433	18	4.3%
58.0%	415	427	12	2.9%
59.3%	412	423	10	2.5%
60.5%	412	419	7	1.7%
61.7%	409	418	9	2.1%
63.0%	408	416	8	2.1%
64.2%	405	409	4	0.9%
65.4%	398	409	11	2.8%
66.7%	393	405	12	3.1%
67.9%	392	399	7	1.8%
69.1%	390	398	9	2.3%
70.4%	375	398	23	6.0%
71.6%	366	392	26	7.0%
72.8%	344	383	40	11.6%
74.1%	336	381	45	13.5%
75.3%	323	379	56	17.5%
76.5%	313	365	52	16.5%
77.8%	306	362	56	18.4%
79.0%	305	350	45	14.6%
80.2%	300	345	45	14.9%
81.5%	293	328	35	12.1%
82.7%	284	317	33	11.6%
84.0%	284	308	24	8.6%
85.2%	282	297	15	5.2%
86.4%	280	264	-16	-5.8%
87.7%	266	257	-9	-3.4%
88.9%	259	254	-5	-1.9%
90.1%	216	249	33	15.1%
91.4%	207	231	25	11.9%
92.6%	196	231	35	18.1%
93.8%	175	208	34	19.5%
95.1%	145	183	38	26.2%
96.3%	140	166	26	18.8%
97.5%	134	141	7	5.1%
98.8%	114	130	16	14.3%
100.0%	100	107	7	6.9%

Figure SW-42-b
San Luis Reservoir (SWP and CVP), End of Month Elevation
Probability of Exceedance

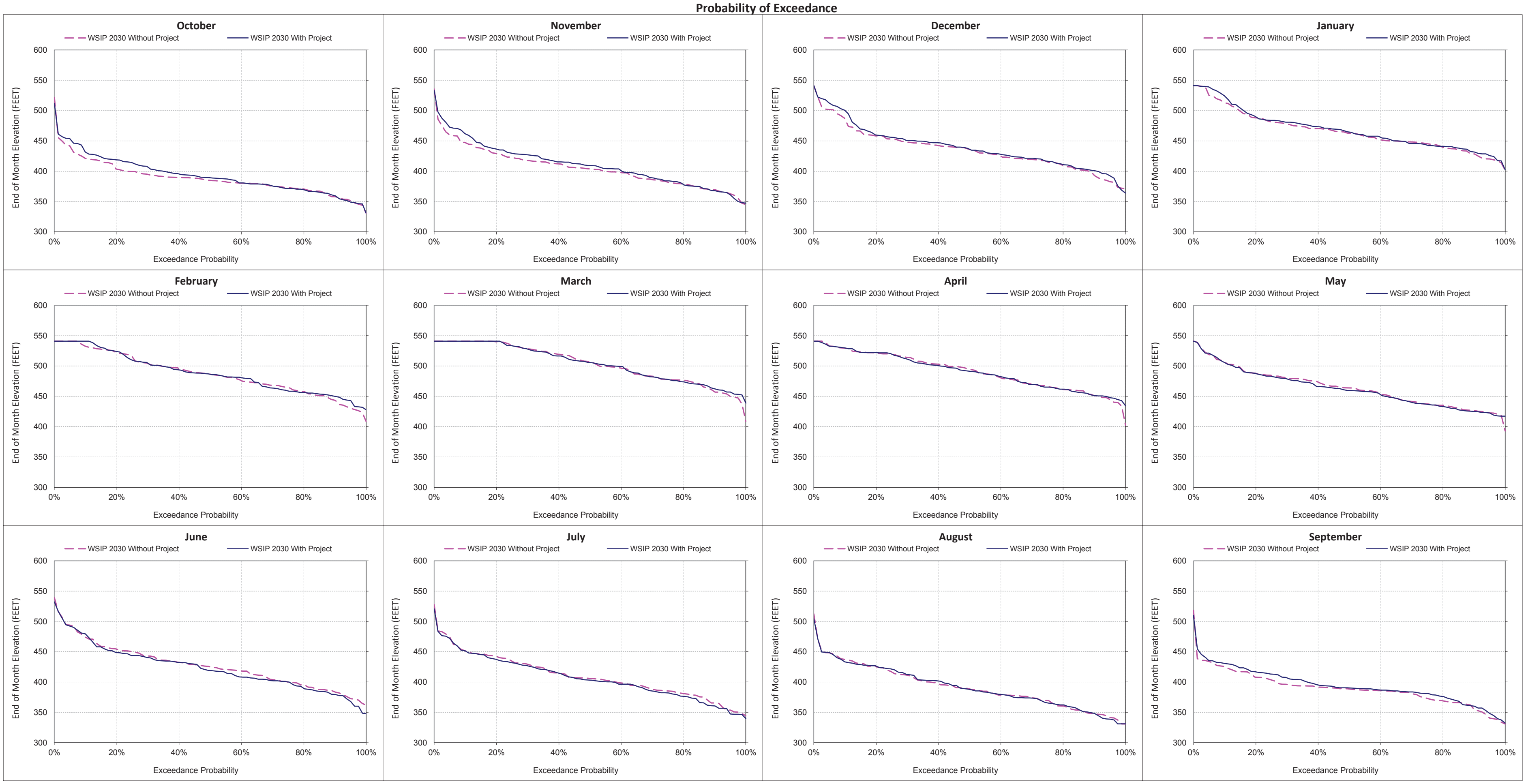


Table SW-42-b

San Luis Reservoir (SWP and CVP), End of Month Elevation

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	522	512	-10	-1.9%
1.2%	456	461	5	1.2%
2.5%	450	457	7	1.5%
3.7%	443	454	11	2.5%
4.9%	442	454	12	2.8%
6.2%	431	446	15	3.5%
7.4%	428	446	18	4.1%
8.6%	425	443	18	4.2%
9.9%	421	432	11	2.5%
11.1%	420	428	8	2.0%
12.3%	419	428	9	2.1%
13.6%	419	426	8	1.9%
14.8%	417	424	7	1.7%
16.0%	414	421	7	1.6%
17.3%	414	420	6	1.4%
18.5%	412	420	7	1.8%
19.8%	404	419	15	3.7%
21.0%	402	418	16	3.9%
22.2%	401	416	15	3.8%
23.5%	400	415	16	3.9%
24.7%	399	415	15	3.8%
25.9%	399	412	13	3.1%
27.2%	397	410	13	3.2%
28.4%	396	409	13	3.3%
29.6%	395	408	13	3.2%
30.9%	394	403	10	2.5%
32.1%	393	402	9	2.3%
33.3%	392	401	9	2.3%
34.6%	392	401	9	2.3%
35.8%	390	399	9	2.2%
37.0%	390	398	7	1.9%
38.3%	390	396	6	1.6%
39.5%	390	396	6	1.6%
40.7%	390	394	5	1.2%
42.0%	389	394	5	1.2%
43.2%	389	393	4	1.1%
44.4%	389	393	4	1.1%
45.7%	388	392	4	0.9%
46.9%	387	390	3	0.7%
48.1%	386	390	4	0.9%
49.4%	385	390	5	1.2%
50.6%	384	389	5	1.2%
51.9%	384	388	4	1.0%
53.1%	383	388	5	1.2%
54.3%	383	387	4	1.1%
55.6%	382	387	5	1.3%
56.8%	381	386	5	1.2%
58.0%	381	385	4	1.1%
59.3%	381	381	0	0.1%
60.5%	380	381	0	0.1%
61.7%	380	380	0	-0.1%
63.0%	380	379	-1	-0.2%
64.2%	379	379	-1	-0.1%
65.4%	379	379	-1	-0.2%
66.7%	379	379	0	-0.1%
67.9%	378	379	1	0.3%
69.1%	376	377	1	0.2%
70.4%	375	375	0	0.0%
71.6%	374	375	0	0.0%
72.8%	374	373	-1	-0.3%
74.1%	373	372	-1	-0.4%
75.3%	373	372	-1	-0.3%
76.5%	372	371	-1	-0.2%
77.8%	372	370	-1	-0.4%
79.0%	372	370	-1	-0.4%
80.2%	370	369	-1	-0.3%
81.5%	369	367	-1	-0.4%
82.7%	368	367	-1	-0.3%
84.0%	367	366	-1	-0.3%
85.2%	367	365	-2	-0.5%
86.4%	365	364	-1	-0.3%
87.7%	361	363	2	0.6%
88.9%	358	361	3	0.8%
90.1%	358	359	1	0.3%
91.4%	356	355	-2	-0.4%
92.6%	354	353	-1	-0.3%
93.8%	354	352	-2	-0.6%
95.1%	351	349	-2	-0.6%
96.3%	348	348	0	0.1%
97.5%	346	346	1	0.2%
98.8%	344	346	2	0.6%
100.0%	331	331	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	536	533	-3	-0.5%
1.2%	486	498	12	2.5%
2.5%	475	488	12	2.6%
3.7%	465	481	16	3.3%
4.9%	460	473	13	2.7%
6.2%	459	471	13	2.8%
7.4%	458	470	12	2.7%
8.6%	448	468	20	4.5%
9.9%	447	462	15	3.3%
11.1%	445	459	14	3.2%
12.3%	444	454	10	2.3%
13.6%	439	447	8	1.9%
14.8%	438	447	8	1.9%
16.0%	436	441	5	1.2%
17.3%	435	440	4	1.0%
18.5%	430	438	8	1.8%
19.8%	429	437	7	1.7%
21.0%	429	435	6	1.4%
22.2%	426	435	9	2.1%
23.5%	423	431	8	1.8%
24.7%	423	430	7	1.5%
25.9%	422	428	7	1.6%
27.2%	421	428	7	1.7%
28.4%	419	428	9	2.1%
29.6%	418	428	9	2.2%
30.9%	417	427	10	2.3%
32.1%	416	426	9	2.2%
33.3%	416	425	9	2.2%
34.6%	415	421	5	1.3%
35.8%	415	420	4	1.1%
37.0%	413	418	5	1.2%
38.3%	413	417	4	1.0%
39.5%	412	415	3	0.8%
40.7%	412	415	3	0.8%
42.0%	409	415	6	1.5%
43.2%	407	415	8	2.1%
44.4%	406	413	7	1.6%
45.7%	406	412	7	1.7%
46.9%	406	412	6	1.5%
48.1%	405	410	6	1.4%
49.4%	404	409	5	1.3%
50.6%	404	409	6	1.4%
51.9%	403	409	6	1.5%
53.1%	403	407	4	1.0%
54.3%	400	405	5	1.2%
55.6%	399	404	5	1.3%
56.8%	399	404	5	1.3%
58.0%	399	404	5	1.2%
59.3%	398	404	6	1.5%
60.5%	397	399	2	0.4%
61.7%	397	398	0	0.1%
63.0%	394	398	4	1.0%
64.2%	392	397	5	1.4%
65.4%	389	395	6	1.6%
66.7%	388	395	7	1.7%
67.9%	387	393	6	1.6%
69.1%	387	390	3	0.7%
70.4%	386	389	3	0.8%
71.6%	385	387	2	0.5%
72.8%	384	387	2	0.6%
74.1%	383	384	1	0.1%
75.3%	381	384	2	0.7%
76.5%	381	383	3	0.7%
77.8%	380	383	3	0.8%
79.0%	380	381	1	0.4%
80.2%	378	377	-1	-0.3%
81.5%	378	376	-2	-0.5%
82.7%	376	376	0	-0.1%
84.0%	375	375	0	0.1%
85.2%	373	375	2	0.6%
86.4%	371	371	0	0.1%
87.7%	371	371	0	0.0%
88.9%	369	368	-1	-0.3%
90.1%	369	368	-2	-0.4%
91.4%	367	366	-1	-0.3%
92.6%	366	366	0	0.1%
93.8%	365	365	0	0.0%
95.1%	363	361	-1	-0.4%
96.3%	360	355	-5	-1.4%
97.5%	355	350	-5	-1.5%
98.8%	347	348	1	0.3%
100.0%	345	347	2	0.6%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	523	523	0	-0.1%
2.5%	507	520	13	2.6%
3.7%	503	518	15	3.1%
4.9%	502	513	11	2.2%
6.2%	501	509	7	1.4%
7.4%	495	507	12	2.4%
8.6%	492	503	11	2.3%
9.9%	487	501	13	2.7%
11.1%	474	495	21	4.5%
12.3%	473	481	8	1.7%
13.6%	467	476	9	2.0%
14.8%	466	470	3	0.7%
16.0%	461	469	8	1.8%
17.3%	460	466	6	1.4%
18.5%	460	464	5	1.0%
19.8%	458	460	2	0.3%
21.0%	458	459	1	0.2%
22.2%	458	459	1	0.2%
23.5%	453	457	3	0.7%
24.7%	453	456	3	0.7%
25.9%	453	456	3	0.6%
27.2%	451	454	3	0.6%
28.4%	449	454	5	1.1%
29.6%	448	451	3	0.6%
30.9%	448	451	3	0.7%
32.1%	447	451	4	0.9%
33.3%	447	450	3	0.7%
34.6%	446	449	3	0.7%
35.8%	445	449	4	0.9%
37.0%	445	448	3	0.6%
38.3%	443	447	4	0.9%
39.5%	443	447	4	0.9%
40.7%	442	446	5	1.1%
42.0%	441	445	4	0.9%
43.2%	441	444	3	0.7%
44.4%	440	443	3	0.6%
45.7%	439	440	1	0.1%
46.9%	439	440	1	0.2%
48.1%	439	439	0	0.1%
49.4%	437	438	1	0.2%
50.6%	435	435	0	-0.1%
51.9%	433	434	1	0.2%
53.1%	430	433	3	0.7%
54.3%	430	433	3	0.8%
55.6%	429	430	1	0.2%
56.8%	429	430	1	0.2%
58.0%	428	429	2	0.4%
59.3%	427	429	2	0.4%
60.5%	423	427	4	1.0%
61.7%	423	426	3	0.8%
63.0%	422	425	3	0.7%
64.2%	422	424	2	0.6%
65.4%	421	423	3	0.6%
66.7%	421	423	3	0.6%
67.9%	419	422	2	0.5%
69.1%	419	421	2	0.5%
70.4%	419	421	2	0.5%
71.6%	419	420	2	0.4%
72.8%	418	420	3	0.6%
74.1%	417	417	0	-0.1%
75.3%	415	416	2	0.4%
76.5%	415	416	1	0.3%
77.8%	414	413	0	-0.1%
79.0%	412	412	1	0.2%
80.2%	409	411	2	0.4%
81.5%	407	410	3	0.7%
82.7%	407	408	1	0.3%
84.0%	403	405	2	0.5%
85.2%	402	404	2	0.5%
86.4%	402	404	2	0.5%
87.7%	401	403	2	0.5%
88.9%	399	402	2	0.6%
90.1%	393	401	8	2.1%
91.4%	389	400	11	2.7%
92.6%	386	396	10	2.5%
93.8%	385	396	10	2.7%
95.1%	383	392	10	2.5%
96.3%	382	388	7	1.8%
97.5%	374	376	2	0.6%
98.8%	372	369	-3	-0.9%
100.0%	372	364	-8	-2.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	540	540	0	0.0%
3.7%	540	540	0	0.0%
4.9%	525	539	14	2.6%
6.2%	524	535	11	2.1%
7.4%	520	533	13	2.5%
8.6%	517	529	12	2.2%
9.9%	513	525	12	2.3%
11.1%	512	518	7	1.3%
12.3%	507	510	3	0.6%
13.6%	505	510	5	1.0%
14.8%	500	505	5	1.0%
16.0%	495	500	5	1.0%
17.3%	494	495	1	0.3%
18.5%	489	493	4	0.9%
19.8%	488	491	3	0.6%
21.0%	488	486	-2	-0.3%
22.2%	486	486	-1	-0.1%
23.5%	484	484	1	0.2%
24.7%	482	484	2	0.5%
25.9%	481	484	3	0.6%
27.2%	480	483	3	0.7%
28.4%	480	482	2	0.5%
29.6%	478	481	3	0.7%
30.9%	477	481	4	0.8%
32.1%	475	481	5	1.1%
33.3%	475	479	4	0.9%
34.6%	473	478	4	0.9%
35.8%	473	477	4	0.8%
37.0%	471	476	5	1.1%
38.3%	470	474	3	0.7%
39.5%	470	474	4	0.8%
40.7%	470	473	3	0.6%
42.0%	470	471	1	0.3%
43.2%	469	471	2	0.4%
44.4%	467	470	2	0.5%
45.7%	466	469	4	0.8%
46.9%	465	469	4	0.9%
48.1%	465	467	2	0.5%
49.4%	463	465	2	0.4%
50.6%	462	464	2	0.3%
51.9%	462	461	-1	-0.2%
53.1%	461	461	0	0.0%
54.3%	459	460	2	0.4%
55.6%	456	458	2	0.3%
56.8%	456	458	2	0.4%
58.0%	456	458	2	0.4%
59.3%	452	458	6	1.3%
60.5%	452	455	3	0.7%
61.7%	450	454	4	0.9%
63.0%	450	452	2	0.5%
64.2%	450	450	0	0.1%
65.4%	450	450	0	0.1%
66.7%	449	449	0	0.1%
67.9%	449	449	0	0.0%
69.1%	448	446	-3	-0.6%
70.4%	448	446	-2	-0.5%
71.6%	448	446	-2	-0.5%
72.8%	447	445	-1	-0.3%
74.1%	446	445	-2	-0.4%
75.3%	445	443	-3	-0.6%
76.5%	444	442	-2	-0.4%
77.8%	444	442	-2	-0.5%
79.0%	442	441	-1	-0.2%
80.2%	439	441	2	0.4%
81.5%	438	441	3	0.7%
82.7%	437	441	4	0.8%
84.0%	437	439	2	0.5%
85.2%	435	438	3	0.8%
86.4%	434	437	3	0.7%
87.7%	433	436	3	0.7%
88.9%	429	432	4	0.9%
90.1%	428	432	3	0.7%
91.4%	425	430	4	1.1%
92.6%	421	429	7	1.8%
93.8%	420	429	8	2.0%
95.1%	420	426	6	1.3%
96.3%	419	424	6	1.3%
97.5%	418	418	0	0.0%
98.8%	414	417	3	0.8%
100.0%	402	403	1	0.2%

Table SW-42-b

San Luis Reservoir (SWP and CVP), End of Month Elevation

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	541	541	0	0.0%
4.9%	541	541	0	0.0%
6.2%	541	541	0	0.0%
7.4%	541	541	0	0.0%
8.6%	536	541	5	0.9%
9.9%	533	541	8	1.6%
11.1%	531	541	10	1.9%
12.3%	530	538	8	1.6%
13.6%	528	534	5	1.0%
14.8%	528	531	3	0.5%
16.0%	527	529	3	0.5%
17.3%	526	526	0	0.0%
18.5%	526	525	0	0.0%
19.8%	522	524	2	0.3%
21.0%	521	523	2	0.4%
22.2%	520	519	-2	-0.3%
23.5%	519	513	-5	-1.0%
24.7%	517	510	-7	-1.3%
25.9%	508	508	0	0.0%
27.2%	507	507	1	0.1%
28.4%	505	506	1	0.2%
29.6%	505	506	1	0.2%
30.9%	502	502	0	-0.1%
32.1%	502	501	-1	-0.1%
33.3%	501	501	0	0.0%
34.6%	500	500	0	0.0%
35.8%	499	499	-1	-0.1%
37.0%	498	498	0	-0.1%
38.3%	497	495	-3	-0.5%
39.5%	497	494	-3	-0.6%
40.7%	494	493	-1	-0.2%
42.0%	493	490	-3	-0.5%
43.2%	491	489	-2	-0.4%
44.4%	490	489	-2	-0.4%
45.7%	489	488	-1	-0.1%
46.9%	489	488	0	-0.1%
48.1%	488	487	0	-0.1%
49.4%	487	487	0	-0.1%
50.6%	486	486	0	0.0%
51.9%	485	486	1	0.2%
53.1%	484	484	0	0.1%
54.3%	483	483	1	0.1%
55.6%	481	482	1	0.2%
56.8%	481	482	1	0.2%
58.0%	480	481	2	0.4%
59.3%	478	481	4	0.8%
60.5%	475	480	6	1.2%
61.7%	474	480	5	1.1%
63.0%	473	479	6	1.2%
64.2%	473	473	1	0.2%
65.4%	473	473	0	0.0%
66.7%	470	467	-4	-0.8%
67.9%	470	465	-4	-1.0%
69.1%	468	464	-4	-0.9%
70.4%	468	464	-5	-1.0%
71.6%	468	463	-5	-1.1%
72.8%	466	461	-5	-1.1%
74.1%	465	460	-5	-1.1%
75.3%	464	458	-6	-1.3%
76.5%	461	458	-2	-0.5%
77.8%	459	457	-2	-0.4%
79.0%	458	456	-2	-0.5%
80.2%	458	456	-1	-0.3%
81.5%	454	455	1	0.3%
82.7%	454	455	2	0.3%
84.0%	452	455	3	0.6%
85.2%	451	453	2	0.5%
86.4%	451	453	2	0.4%
87.7%	448	453	5	1.0%
88.9%	445	451	6	1.4%
90.1%	443	450	7	1.5%
91.4%	436	448	12	2.7%
92.6%	436	445	9	2.2%
93.8%	433	444	11	2.5%
95.1%	430	443	13	3.0%
96.3%	428	433	5	1.2%
97.5%	426	433	6	1.4%
98.8%	423	432	9	2.0%
100.0%	409	428	19	4.8%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	541	541	0	0.0%
4.9%	541	541	0	0.0%
6.2%	541	541	0	0.0%
7.4%	541	541	0	0.0%
8.6%	541	541	0	0.0%
9.9%	541	541	0	0.0%
11.1%	541	541	0	0.0%
12.3%	541	541	0	0.0%
13.6%	541	541	0	0.0%
14.8%	541	541	0	0.0%
16.0%	541	541	0	0.0%
17.3%	541	541	0	0.0%
18.5%	541	541	0	0.0%
19.8%	540	541	1	0.2%
21.0%	540	541	1	0.2%
22.2%	539	538	-1	-0.3%
23.5%	537	534	-4	-0.7%
24.7%	535	533	-1	-0.2%
25.9%	532	532	0	0.0%
27.2%	531	532	1	0.1%
28.4%	530	529	0	-0.1%
29.6%	529	529	0	0.0%
30.9%	528	526	-2	-0.3%
32.1%	527	525	-2	-0.4%
33.3%	526	524	-2	-0.3%
34.6%	524	523	-1	-0.2%
35.8%	524	523	-1	-0.2%
37.0%	521	520	-1	-0.1%
38.3%	521	517	-4	-0.7%
39.5%	520	517	-3	-0.6%
40.7%	519	516	-2	-0.5%
42.0%	517	514	-3	-0.5%
43.2%	517	511	-6	-1.2%
44.4%	514	510	-4	-0.9%
45.7%	511	509	-2	-0.3%
46.9%	510	508	-2	-0.3%
48.1%	508	507	-1	-0.1%
49.4%	507	506	-2	-0.4%
50.6%	507	505	-2	-0.3%
51.9%	503	504	1	0.2%
53.1%	500	503	3	0.6%
54.3%	499	502	3	0.6%
55.6%	499	500	1	0.2%
56.8%	499	500	2	0.3%
58.0%	498	500	2	0.4%
59.3%	497	499	2	0.5%
60.5%	496	499	3	0.6%
61.7%	495	493	-2	-0.5%
63.0%	492	490	-2	-0.4%
64.2%	487	489	2	0.4%
65.4%	487	488	2	0.3%
66.7%	485	485	1	0.2%
67.9%	483	484	1	0.2%
69.1%	483	482	-1	-0.2%
70.4%	483	482	-1	-0.2%
71.6%	481	481	0	0.0%
72.8%	478	479	1	0.1%
74.1%	478	478	0	0.0%
75.3%	478	478	0	0.0%
76.5%	477	476	-1	-0.2%
77.8%	477	476	-1	-0.2%
79.0%	477	474	-2	-0.5%
80.2%	477	474	-3	-0.6%
81.5%	475	472	-3	-0.7%
82.7%	473	471	-3	-0.6%
84.0%	472	470	-2	-0.4%
85.2%	470	470	0	-0.1%
86.4%	465	469	4	0.8%
87.7%	464	467	3	0.7%
88.9%	461	464	3	0.6%
90.1%	457	462	5	1.2%
91.4%	457	461	4	0.8%
92.6%	456	460	4	0.9%
93.8%	454	457	3	0.7%
95.1%	450	457	7	1.6%
96.3%	449	454	5	1.1%
97.5%	447	453	6	1.4%
98.8%	437	452	15	3.4%
100.0%	409	439	30	7.3%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	539	-2	-0.5%
3.7%	539	536	-3	-0.5%
4.9%	533	533	0	0.0%
6.2%	533	533	0	0.0%
7.4%	531	531	1	0.1%
8.6%	530	530	0	0.1%
9.9%	529	530	0	0.1%
11.1%	529	529	0	-0.1%
12.3%	525	528	4	0.7%
13.6%	524	525	1	0.2%
14.8%	523	523	-1	-0.1%
16.0%	523	522	-1	-0.1%
17.3%	522	522	0	0.0%
18.5%	522	522	0	0.0%
19.8%	522	522	0	0.0%
21.0%	521	522	1	0.2%
22.2%	520	522	2	0.3%
23.5%	520	522	2	0.3%
24.7%	519	520	1	0.2%
25.9%	519	517	-1	-0.3%
27.2%	517	516	-1	-0.1%
28.4%	516	514	-2	-0.5%
29.6%	514	512	-2	-0.5%
30.9%	514	510	-4	-0.8%
32.1%	511	507	-4	-0.9%
33.3%	508	505	-3	-0.5%
34.6%	508	504	-3	-0.6%
35.8%	505	503	-2	-0.4%
37.0%	504	502	-2	-0.4%
38.3%	504	502	-2	-0.4%
39.5%	503	501	-2	-0.4%
40.7%	503	500	-3	-0.6%
42.0%	502	499	-3	-0.6%
43.2%	499	497	-2	-0.4%
44.4%	499	497	-2	-0.4%
45.7%	499	496	-3	-0.5%
46.9%	498	493	-5	-1.0%
48.1%	497	493	-5	-1.0%
49.4%	495	492	-3	-0.7%
50.6%	494	491	-3	-0.6%
51.9%	493	490	-2	-0.5%
53.1%	488	489	1	0.1%
54.3%	487	488	1	0.3%
55.6%	487	486	-1	-0.2%
56.8%	486	486	0	0.0%
58.0%	484	485	1	0.3%
59.3%	482	483	1	0.3%
60.5%	479	482	3	0.5%
61.7%	479	480	1	0.3%
63.0%	478	479	1	0.2%
64.2%	477	479	2	0.4%
65.4%	477	475	-2	-0.4%
66.7%	472	473	1	0.1%
67.9%	471	473	1	0.3%
69.1%	471	470	-1	-0.2%
70.4%	470	469	-1	-0.1%
71.6%	469	469	1	0.2%
72.8%	468	466	-1	-0.3%
74.1%	467	465	-2	-0.5%
75.3%	466	465	-1	-0.1%
76.5%	465	465	0	0.0%
77.8%	464	463	-1	-0.2%
79.0%	462	462	0	0.0%
80.2%	461	462	0	0.1%
81.5%	461	461	0	0.1%
82.7%	461	458	-2	-0.5%
84.0%	460	457	-2	-0.5%
85.2%	459	456	-3	-0.7%
86.4%	459	456	-3	-0.7%
87.7%	454	455	1	0.2%
88.9%	453	452	-1	-0.2%
90.1%	451	451	0	0.0%
91.4%	451	451	0	0.0%
92.6%	448	451	3	0.6%
93.8%	448	450	2	0.4%
95.1%	445	448	3	0.7%
96.3%	440	447	7	1.5%
97.5%	440	445	5	1.1%
98.8%	434	443	9	2.1%
100.0%	403	435	32	8.0%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	539	539	0	0.0%
2.5%	530	529	-1	-0.1%
3.7%	523	521	-2	-0.3%
4.9%	519	521	2	0.5%
6.2%	518	518	0	-0.1%
7.4%	511	515	4	0.7%
8.6%	510	509	0	-0.1%
9.9%	507	506	-1	-0.2%
11.1%	503	502	0	-0.1%
12.3%	502	501	-1	-0.2%
13.6%	501	498	-3	-0.6%
14.8%	498	497	-1	-0.2%
16.0%	492	491	-1	-0.2%
17.3%	489	489	1	0.1%
18.5%	489	489	0	0.0%
19.8%	488	488	0	-0.1%
21.0%	486	486	0	-0.1%
22.2%	486	485	-1	-0.2%
23.5%	485	483	-2	-0.3%
24.7%	485	483	-2	-0.3%
25.9%	483	482	-1	-0.2%
27.2%	483	481	-3	-0.5%
28.4%	482	480	-2	-0.4%
29.6%	481	479	-1	-0.3%
30.9%	479	477	-2	-0.5%
32.1%	479	476	-3	-0.7%
33.3%	479	476	-3	-0.7%
34.6%	479	474	-5	-1.0%
35.8%	478	473	-4	-0.9%
37.0%	476	473	-3	-0.5%
38.3%	475	471	-5	-0.9%
39.5%	475	466	-8	-1.8%
40.7%	472	466	-6	-1.2%
42.0%	469	466	-4	-0.8%
43.2%	468	465	-3	-0.6%
44.4%	467	464	-3	-0.6%
45.7%	467	463	-4	-0.8%
46.9%	465	463	-2	-0.5%
48.1%	464	461	-3	-0.7%
49.4%	464	460	-4	-0.9%
50.6%	464	459	-4	-0.9%
51.9%	464	459	-5	-1.0%
53.1%	460	459	-2	-0.3%
54.3%	460	458	-2	-0.4%
55.6%	459	458	-2	-0.4%
56.8%	459	457	-2	-0.4%
58.0%	458	457	-1	-0.2%
59.3%	456	455	-1	-0.2%
60.5%	453	451	-2	-0.4%
61.7%	452	450	-3	-0.6%
63.0%	450	449	-2	-0.4%
64.2%	447	448	1	0.2%
65.4%	446	446	0	0.1%
66.7%	444	444	-1	-0.1%
67.9%	442	443	1	0.2%
69.1%	442	441	-1	-0.1%
70.4%	441	439	-2	-0.4%
71.6%	440	438	-2	-0.4%
72.8%	438	438	1	0.1%
74.1%	438	437	0	-0.1%
75.3%	437	437	-1	-0.2%
76.5%	436	436	0	-0.1%
77.8%	435	435	0	0.0%
79.0%	435	433	-2	-0.4%
80.2%	435	433	-2	-0.5%
81.5%	434	432	-2	-0.5%
82.7%	433	430	-3	-0.6%
84.0%	431	430	-1	-0.3%
85.2%	431	428	-4	-0.8%
86.4%	428	427	-1	-0.3%
87.7%	427	426	-1	-0.3%
88.9%	427	425	-2	-0.4%
90.1%	427	425	-2	-0.4%
91.4%	425	425	-1	-0.2%
92.6%	425	423	-2	-0.4%
93.8%	424	423	0	-0.1%
95.1%	423	422	0	0.0%
96.3%	422	419	-3	-0.7%
97.5%	421	418	-3	-0.7%
98.8%	418	417	-1	-0.2%
100.0%	393	417	24	6.2%

Table SW-42-b

San Luis Reservoir (SWP and CVP), End of Month Elevation

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	539	532	-7	-1.3%
1.2%	517	516	0	-0.1%
2.5%	507	505	-2	-0.3%
3.7%	495	494	0	0.0%
4.9%	494	492	-2	-0.3%
6.2%	492	490	-2	-0.5%
7.4%	483	485	3	0.5%
8.6%	479	481	1	0.3%
9.9%	474	479	5	1.1%
11.1%	471	473	2	0.5%
12.3%	471	466	-5	-1.0%
13.6%	463	458	-5	-1.1%
14.8%	459	458	-1	-0.2%
16.0%	458	455	-4	-0.8%
17.3%	456	452	-4	-0.8%
18.5%	455	452	-4	-0.8%
19.8%	455	449	-6	-1.3%
21.0%	452	448	-3	-0.8%
22.2%	451	447	-5	-1.0%
23.5%	451	446	-5	-1.1%
24.7%	450	444	-7	-1.5%
25.9%	449	443	-6	-1.2%
27.2%	448	443	-4	-1.0%
28.4%	444	442	-2	-0.4%
29.6%	443	441	-2	-0.5%
30.9%	443	440	-3	-0.7%
32.1%	441	437	-5	-1.0%
33.3%	436	436	-1	-0.2%
34.6%	436	435	-1	-0.2%
35.8%	436	435	-1	-0.3%
37.0%	435	435	0	0.0%
38.3%	435	434	-1	-0.2%
39.5%	433	432	0	0.0%
40.7%	432	432	0	0.0%
42.0%	432	432	0	0.1%
43.2%	429	430	1	0.3%
44.4%	429	430	1	0.3%
45.7%	428	429	1	0.1%
46.9%	427	422	-5	-1.1%
48.1%	426	421	-5	-1.3%
49.4%	426	419	-7	-1.6%
50.6%	424	419	-5	-1.2%
51.9%	424	418	-6	-1.4%
53.1%	422	417	-4	-1.0%
54.3%	421	417	-4	-0.9%
55.6%	420	414	-6	-1.5%
56.8%	420	414	-6	-1.4%
58.0%	420	411	-9	-2.1%
59.3%	419	408	-10	-2.4%
60.5%	418	408	-10	-2.4%
61.7%	418	408	-10	-2.4%
63.0%	413	407	-6	-1.5%
64.2%	412	406	-6	-1.4%
65.4%	411	404	-7	-1.7%
66.7%	411	404	-7	-1.6%
67.9%	408	404	-4	-1.0%
69.1%	405	402	-2	-0.5%
70.4%	404	402	-2	-0.4%
71.6%	403	402	-2	-0.4%
72.8%	401	401	0	0.0%
74.1%	401	401	0	-0.1%
75.3%	399	400	0	0.1%
76.5%	399	396	-4	-0.9%
77.8%	398	394	-5	-1.2%
79.0%	395	393	-3	-0.6%
80.2%	395	389	-6	-1.6%
81.5%	391	388	-4	-0.9%
82.7%	391	387	-4	-1.1%
84.0%	388	385	-3	-0.7%
85.2%	388	384	-3	-0.9%
86.4%	387	384	-3	-0.8%
87.7%	386	383	-3	-0.9%
88.9%	386	380	-6	-1.6%
90.1%	383	379	-4	-1.1%
91.4%	382	378	-4	-1.1%
92.6%	379	377	-2	-0.5%
93.8%	376	372	-4	-1.0%
95.1%	372	368	-5	-1.3%
96.3%	372	360	-12	-3.1%
97.5%	370	360	-10	-2.8%
98.8%	365	349	-16	-4.4%
100.0%	362	348	-14	-3.9%

July				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	528	521	-7	-1.4%
1.2%	484	484	0	0.0%
2.5%	483	477	-6	-1.3%
3.7%	479	476	-4	-0.8%
4.9%	475	472	-3	-0.6%
6.2%	462	464	2	0.4%
7.4%	459	459	1	0.1%
8.6%	454	453	-1	-0.3%
9.9%	452	452	0	0.0%
11.1%	450	448	-2	-0.4%
12.3%	447	447	0	0.1%
13.6%	447	447	0	0.0%
14.8%	446	445	-1	-0.2%
16.0%	446	445	-1	-0.3%
17.3%	444	440	-4	-0.9%
18.5%	443	439	-5	-1.0%
19.8%	443	437	-5	-1.2%
21.0%	440	436	-5	-1.1%
22.2%	439	434	-5	-1.1%
23.5%	439	434	-5	-1.2%
24.7%	435	432	-3	-0.7%
25.9%	431	431	0	-0.1%
27.2%	431	429	-2	-0.5%
28.4%	431	428	-3	-0.6%
29.6%	430	427	-3	-0.6%
30.9%	428	425	-2	-0.6%
32.1%	425	424	-1	-0.2%
33.3%	425	422	-3	-0.7%
34.6%	424	421	-3	-0.8%
35.8%	422	420	-1	-0.3%
37.0%	416	419	2	0.6%
38.3%	415	417	2	0.5%
39.5%	415	415	0	0.1%
40.7%	414	413	0	-0.1%
42.0%	413	410	-3	-0.7%
43.2%	408	408	0	0.1%
44.4%	407	408	0	0.0%
45.7%	407	405	-2	-0.4%
46.9%	407	405	-2	-0.4%
48.1%	407	404	-3	-0.7%
49.4%	406	403	-3	-0.7%
50.6%	406	403	-3	-0.7%
51.9%	405	402	-3	-0.8%
53.1%	405	401	-4	-0.9%
54.3%	404	401	-3	-0.8%
55.6%	402	400	-2	-0.5%
56.8%	402	400	-2	-0.5%
58.0%	400	399	-1	-0.2%
59.3%	399	397	-2	-0.5%
60.5%	398	397	-2	-0.4%
61.7%	398	397	-1	-0.3%
63.0%	395	396	2	0.4%
64.2%	395	395	0	0.1%
65.4%	394	392	-2	-0.4%
66.7%	394	391	-3	-0.8%
67.9%	392	388	-4	-1.0%
69.1%	390	386	-4	-1.0%
70.4%	388	385	-3	-0.7%
71.6%	386	384	-3	-0.7%
72.8%	386	383	-4	-0.9%
74.1%	385	382	-3	-0.8%
75.3%	385	382	-3	-0.8%
76.5%	385	380	-5	-1.2%
77.8%	383	379	-3	-0.9%
79.0%	382	377	-5	-1.3%
80.2%	381	376	-4	-1.2%
81.5%	380	375	-5	-1.2%
82.7%	379	374	-5	-1.4%
84.0%	378	373	-5	-1.3%
85.2%	376	366	-10	-2.5%
86.4%	375	366	-10	-2.5%
87.7%	370	362	-8	-2.3%
88.9%	366	361	-4	-1.2%
90.1%	365	361	-5	-1.3%
91.4%	365	357	-8	-2.2%
92.6%	358	357	-1	-0.3%
93.8%	354	356	2	0.6%
95.1%	354	347	-7	-1.9%
96.3%	351	347	-4	-1.1%
97.5%	350	347	-4	-1.0%
98.8%	348	346	-1	-0.4%
100.0%	344	340	-5	-1.3%

August				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	512	504	-8	-1.5%
1.2%	471	471	0	0.1%
2.5%	452	449	-2	-0.6%
3.7%	449	449	0	0.1%
4.9%	448	449	1	0.1%
6.2%	447	445	-1	-0.3%
7.4%	443	440	-3	-0.7%
8.6%	438	438	-1	-0.2%
9.9%	437	433	-4	-0.9%
11.1%	436	432	-4	-1.0%
12.3%	435	431	-4	-0.8%
13.6%	431	429	-2	-0.5%
14.8%	430	429	-1	-0.3%
16.0%	430	428	-2	-0.5%
17.3%	426	428	2	0.4%
18.5%	426	427	1	0.2%
19.8%	426	427	1	0.3%
21.0%	424	424	0	0.0%
22.2%	423	424	0	0.1%
23.5%	420	422	3	0.6%
24.7%	417	422	4	1.1%
25.9%	414	420	6	1.5%
27.2%	413	416	4	0.9%
28.4%	412	416	3	0.8%
29.6%	412	413	1	0.3%
30.9%	410	412	2	0.4%
32.1%	407	411	4	1.0%
33.3%	403	404	1	0.1%
34.6%	402	403	1	0.2%
35.8%	400	403	3	0.6%
37.0%	400	403	2	0.6%
38.3%	399	403	3	0.9%
39.5%	399	402	3	0.9%
40.7%	395	401	6	1.4%
42.0%	395	398	3	0.7%
43.2%	395	397	3	0.7%
44.4%	394	394	1	0.1%
45.7%	391	394	4	0.9%
46.9%	391	390	-1	-0.2%
48.1%	390	389	0	-0.1%
49.4%	389	388	-1	-0.2%
50.6%	388	387	-1	-0.1%
51.9%	387	385	-2	-0.5%
53.1%	386	385	-1	-0.2%
54.3%	385	384	-1	-0.3%
55.6%	385	383	-2	-0.5%
56.8%	382	382	0	0.0%
58.0%	381	381	0	0.0%
59.3%	378	380	1	0.3%
60.5%	378	379	1	0.3%
61.7%	378	379	0	0.1%
63.0%	378	377	-1	-0.2%
64.2%	378	375	-3	-0.8%
65.4%	377	374	-3	-0.8%
66.7%	377	374	-3	-0.7%
67.9%	376	374	-3	-0.7%
69.1%	376	374	-2	-0.5%
70.4%	374	374	0	-0.1%
71.6%	373	372	-1	-0.2%
72.8%	370	370	0	-0.1%
74.1%	370	367	-3	-0.8%
75.3%	369	365	-4	-1.2%
76.5%	365	365	0	-0.1%
77.8%	361	363	2	0.7%
79.0%	361	362	2	0.4%
80.2%	360	362	2	0.5%
81.5%	358	360	2	0.6%
82.7%	355	359	4	1.0%
84.0%	354	358	4	1.0%
85.2%	354	354	0	0.1%
86.4%	352	351	-1	-0.3%
87.7%	349	351	2	0.5%
88.9%	348	350	2	0.5%
90.1%	347	348	1	0.3%
91.4%	347	344	-3	-0.7%
92.6%	346	341	-6	-1.7%
93.8%	345	339	-6	-1.6%
95.1%	341	339	-2	-0.7%
96.3%	341	337	-3	-1.0%
97.5%	337	331	-7	-1.9%
98.8%	331	331	0	0.0%
100.0%	331	331	0	0.0%

September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	518	510	-8	-1.6%
1.2%	439	455	16	3.6%
2.5%	436	446	10	2.3%
3.7%	436	441	5	1.3%
4.9%	434	435	1	0.3%
6.2%	432	435	3	0.7%
7.4%	427	433	5	1.2%
8.6%	426	432	5	1.3%
9.9%	426	431	5	1.2%
11.1%	422	430	7	1.7%
12.3%	420	429	9	2.1%
13.6%	417	427	9	2.3%
14.8%	417	423	6	1.5%
16.0%	417	423	6	1.5%
17.3%	417	421	4	1.0%
18.5%	413	417	5	1.1%
19.8%	408	417	9	2.3%
21.0%	408	416	8	2.0%
22.2%	407	415	8	1.9%
23.5%	406	414	9	2.1%
24.7%	404	413	9	2.3%
25.9%	402	413	11	2.7%
27.2%	398	412	14	3.6%
28.4%	396	408	12	2.9%
29.6%	396	408	12	2.9%
30.9%	396	405	10	2.5%
32.1%	394	404	10	2.5%
33.3%	394	404	10	2.6%
34.6%	394	404	10	2.5%
35.8%	394	401	7	1.9%
37.0%	394	399	5	1.4%
38.3%	393	398	4	1.1%
39.5%	392	396	4	1.1%
40.7%	392	394	3	0.7%
42.0%	391	394	3	0.7%
43.2%	391	394	3	0.7%
44.4%	390	393	3	0.7%
45.7%	390	391	1	0.4%
46.9%	389	391	2	0.4%
48.1%	389	391	2	0.4%
49.4%	389	390	2	0.4%
50.6%	388	390	2	0.5%
51.9%	388	390	2	0.5%
53.1%	387	389	2	0.5%
54.3%	387	389	2	0.6%
55.6%	386	389	2	0.6%
56.8%	386	389	2	0.6%
58.0%	386	388	2	0.4%
59.3%	386	387	1	0.4%
60.5%	386	387	1	0.3%
61.7%	385	387	1	0.3%
63.0%	385	386	1	0.3%
64.2%	385	385	1	0.1%
65.4%	384	385	2	0.4%
66.7%	383	385	2	0.5%
67.9%	383	384	1	0.3%
69.1%	383	384	1	0.3%
70.4%	380	384	3	0.9%
71.6%	379	383	4	1.0%
72.8%	376	382	6	1.6%
74.1%	374	381	7	1.8%
75.3%	372	381	9	2.3%
76.5%	371	379	8	2.1%
77.8%	370	378	9	2.4%
79.0%	370	377	7	1.9%
80.2%	369	376	7	1.9%
81.5%	368	373	6	1.5%
82.7%	366	372	5	1.5%
84.0%	366	370	4	1.1%
85.2%	366	368	2	0.7%
86.4%	366	363	-3	-0.7%
87.7%	363	362	-2	-0.4%
88.9%	362	361	-1	-0.2%
90.1%	354	360	6	1.7%
91.4%	353	357	4	1.3%
92.6%	351	357	7	1.9%
93.8%	346	353	6	1.9%
95.1%	340	348	8	2.2%
96.3%	339	345	5	1.6%
97.5%	338	340	1	0.4%
98.8%	334	337	3	1.0%
100.0%	331	332	2	0.5%

Figure SW-43-b
San Luis Reservoir (SWP and CVP), End of Month Area
Probability of Exceedance

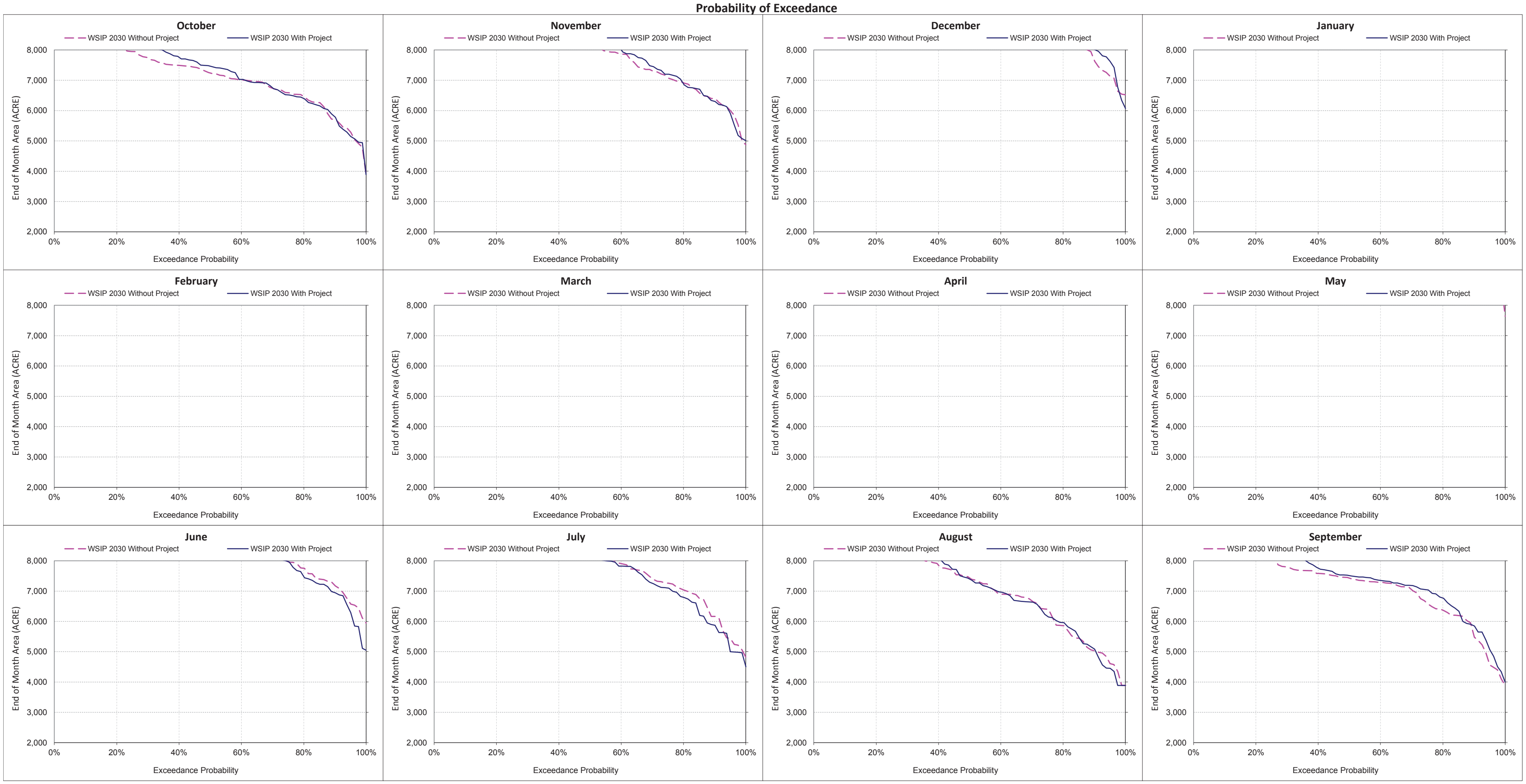


Table SW-43-b

San Luis Reservoir (SWP and CVP), End of Month Area

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,130	11,840	-290	-2.4%
1.2%	10,060	10,240	180	1.8%
2.5%	9,870	10,098	228	2.3%
3.7%	9,642	10,023	380	3.9%
4.9%	9,596	10,008	412	4.3%
6.2%	9,230	9,752	521	5.6%
7.4%	9,118	9,734	616	6.8%
8.6%	9,013	9,647	635	7.0%
9.9%	8,856	9,247	391	4.4%
11.1%	8,805	9,115	310	3.5%
12.3%	8,778	9,103	326	3.7%
13.6%	8,753	9,054	302	3.4%
14.8%	8,685	8,954	269	3.1%
16.0%	8,594	8,849	254	3.0%
17.3%	8,587	8,810	224	2.6%
18.5%	8,506	8,797	290	3.4%
19.8%	8,139	8,761	621	7.6%
21.0%	8,087	8,742	655	8.1%
22.2%	8,012	8,652	640	8.0%
23.5%	7,964	8,630	666	8.4%
24.7%	7,953	8,601	649	8.2%
25.9%	7,948	8,488	540	6.8%
27.2%	7,837	8,397	560	7.1%
28.4%	7,777	8,353	576	7.4%
29.6%	7,756	8,324	567	7.3%
30.9%	7,682	8,134	453	5.9%
32.1%	7,662	8,087	425	5.5%
33.3%	7,597	8,019	422	5.6%
34.6%	7,580	8,003	423	5.6%
35.8%	7,527	7,933	405	5.4%
37.0%	7,517	7,873	357	4.7%
38.3%	7,506	7,812	306	4.1%
39.5%	7,497	7,791	294	3.9%
40.7%	7,486	7,710	225	3.0%
42.0%	7,473	7,707	234	3.1%
43.2%	7,466	7,669	203	2.7%
44.4%	7,439	7,657	218	2.9%
45.7%	7,421	7,603	182	2.5%
46.9%	7,375	7,504	130	1.8%
48.1%	7,313	7,491	179	2.4%
49.4%	7,257	7,488	231	3.2%
50.6%	7,223	7,452	229	3.2%
51.9%	7,213	7,417	204	2.8%
53.1%	7,167	7,403	236	3.3%
54.3%	7,155	7,378	223	3.1%
55.6%	7,089	7,351	262	3.7%
56.8%	7,053	7,289	236	3.4%
58.0%	7,042	7,256	214	3.0%
59.3%	7,017	7,034	17	0.2%
60.5%	7,009	7,027	18	0.3%
61.7%	6,998	6,981	-18	-0.3%
63.0%	6,981	6,942	-39	-0.6%
64.2%	6,960	6,930	-30	-0.4%
65.4%	6,958	6,923	-35	-0.5%
66.7%	6,939	6,922	-17	-0.2%
67.9%	6,856	6,912	56	0.8%
69.1%	6,771	6,821	50	0.7%
70.4%	6,726	6,719	-7	-0.1%
71.6%	6,683	6,690	7	0.1%
72.8%	6,673	6,600	-73	-1.1%
74.1%	6,597	6,522	-76	-1.1%
75.3%	6,587	6,520	-67	-1.0%
76.5%	6,538	6,494	-44	-0.7%
77.8%	6,537	6,457	-80	-1.2%
79.0%	6,529	6,452	-77	-1.2%
80.2%	6,451	6,387	-64	-1.0%
81.5%	6,344	6,267	-78	-1.2%
82.7%	6,288	6,231	-57	-0.9%
84.0%	6,267	6,195	-72	-1.1%
85.2%	6,263	6,155	-108	-1.7%
86.4%	6,127	6,070	-57	-0.9%
87.7%	5,900	6,038	138	2.3%
88.9%	5,720	5,893	174	3.0%
90.1%	5,707	5,778	71	1.2%
91.4%	5,593	5,492	-101	-1.8%
92.6%	5,453	5,386	-66	-1.2%
93.8%	5,426	5,295	-131	-2.4%
95.1%	5,288	5,147	-141	-2.7%
96.3%	5,042	5,065	23	0.5%
97.5%	4,917	4,957	40	0.8%
98.8%	4,793	4,942	149	3.1%
100.0%	3,889	3,889	0	0.0%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,528	12,452	-76	-0.6%
1.2%	11,049	11,427	378	3.4%
2.5%	10,709	11,111	402	3.8%
3.7%	10,376	10,883	507	4.9%
4.9%	10,206	10,621	414	4.1%
6.2%	10,160	10,575	415	4.1%
7.4%	10,147	10,551	404	4.0%
8.6%	9,806	10,469	663	6.8%
9.9%	9,789	10,278	490	5.0%
11.1%	9,689	10,173	484	5.0%
12.3%	9,668	10,019	351	3.6%
13.6%	9,499	9,784	285	3.0%
14.8%	9,473	9,760	287	3.0%
16.0%	9,396	9,579	183	1.9%
17.3%	9,368	9,521	153	1.6%
18.5%	9,197	9,474	277	3.0%
19.8%	9,156	9,420	263	2.9%
21.0%	9,153	9,369	216	2.4%
22.2%	9,033	9,355	322	3.6%
23.5%	8,939	9,220	281	3.1%
24.7%	8,936	9,176	240	2.7%
25.9%	8,872	9,127	255	2.9%
27.2%	8,847	9,115	268	3.0%
28.4%	8,767	9,095	328	3.7%
29.6%	8,746	9,093	347	4.0%
30.9%	8,702	9,062	360	4.1%
32.1%	8,671	9,022	351	4.0%
33.3%	8,662	9,013	352	4.1%
34.6%	8,631	8,833	203	2.3%
35.8%	8,623	8,796	172	2.0%
37.0%	8,539	8,744	204	2.4%
38.3%	8,525	8,690	165	1.9%
39.5%	8,503	8,628	126	1.5%
40.7%	8,485	8,623	138	1.6%
42.0%	8,366	8,618	253	3.0%
43.2%	8,265	8,610	345	4.2%
44.4%	8,256	8,533	277	3.4%
45.7%	8,229	8,513	285	3.5%
46.9%	8,225	8,484	259	3.1%
48.1%	8,191	8,424	233	2.8%
49.4%	8,159	8,385	226	2.8%
50.6%	8,141	8,383	242	3.0%
51.9%	8,106	8,367	261	3.2%
53.1%	8,093	8,271	178	2.2%
54.3%	7,979	8,194	215	2.7%
55.6%	7,947	8,176	229	2.9%
56.8%	7,932	8,163	231	2.9%
58.0%	7,928	8,151	223	2.8%
59.3%	7,884	8,150	266	3.4%
60.5%	7,863	7,934	71	0.9%
61.7%	7,856	7,878	22	0.3%
63.0%	7,692	7,878	185	2.4%
64.2%	7,586	7,847	261	3.4%
65.4%	7,440	7,749	308	4.1%
66.7%	7,400	7,728	328	4.4%
67.9%	7,357	7,655	298	4.0%
69.1%	7,357	7,487	130	1.8%
70.4%	7,294	7,446	152	2.1%
71.6%	7,275	7,365	89	1.2%
72.8%	7,210	7,329	119	1.7%
74.1%	7,170	7,198	28	0.4%
75.3%	7,066	7,197	131	1.8%
76.5%	7,025	7,164	140	2.0%
77.8%	6,976	7,132	157	2.2%
79.0%	6,965	7,043	78	1.1%
80.2%	6,907	6,852	-54	-0.8%
81.5%	6,875	6,767	-108	-1.6%
82.7%	6,767	6,755	-12	-0.2%
84.0%	6,702	6,729	28	0.4%
85.2%	6,576	6,701	124	1.9%
86.4%	6,488	6,499	11	0.2%
87.7%	6,471	6,477	6	0.1%
88.9%	6,399	6,339	-59	-0.9%
90.1%	6,398	6,302	-96	-1.5%
91.4%	6,271	6,201	-70	-1.1%
92.6%	6,171	6,185	14	0.2%
93.8%	6,133	6,131	-2	0.0%
95.1%	5,996	5,905	-90	-1.5%
96.3%	5,843	5,531	-312	-5.3%
97.5%	5,527	5,183	-344	-6.2%
98.8%	5,001	5,077	77	1.5%
100.0%	4,875	5,013	138	2.8%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,166	12,153	-13	-0.1%
2.5%	11,699	12,077	378	3.2%
3.7%	11,571	12,025	455	3.9%
4.9%	11,542	11,868	325	2.8%
6.2%	11,536	11,750	213	1.8%
7.4%	11,343	11,701	359	3.2%
8.6%	11,239	11,584	345	3.1%
9.9%	11,100	11,514	414	3.7%
11.1%	10,653	11,328	676	6.3%
12.3%	10,630	10,889	259	2.4%
13.6%	10,424	10,733	309	3.0%
14.8%	10,419	10,521	102	1.0%
16.0%	10,226	10,496	270	2.6%
17.3%	10,208	10,416	209	2.0%
18.5%	10,192	10,343	151	1.5%
19.8%	10,153	10,203	50	0.5%
21.0%	10,151	10,175	24	0.2%
22.2%	10,132	10,158	25	0.2%
23.5%	9,987	10,099	112	1.1%
24.7%	9,979	10,078	99	1.0%
25.9%	9,975	10,068	93	0.9%
27.2%	9,912	10,000	88	0.9%
28.4%	9,842	10,000	158	1.6%
29.6%	9,809	9,906	97	1.0%
30.9%	9,792	9,901	109	1.1%
32.1%	9,760	9,893	133	1.4%
33.3%	9,760	9,865	106	1.1%
34.6%	9,747	9,856	109	1.1%
35.8%	9,711	9,847	136	1.4%
37.0%	9,703	9,791	88	0.9%
38.3%	9,647	9,781	134	1.4%
39.5%	9,631	9,770	139	1.4%
40.7%	9,587	9,754	167	1.7%
42.0%	9,562	9,701	139	1.5%
43.2%	9,554	9,663	109	1.1%
44.4%	9,537	9,625	88	0.9%
45.7%	9,511	9,533	22	0.2%
46.9%	9,507	9,532	25	0.3%
48.1%	9,496	9,505	9	0.1%
49.4%	9,422	9,447	25	0.3%
50.6%	9,357	9,342	-15	-0.2%
51.9%	9,305	9,341	36	0.4%
53.1%	9,187	9,300	113	1.2%
54.3%	9,180	9,297	117	1.3%
55.6%	9,157	9,195	38	0.4%
56.8%	9,137	9,169	32	0.4%
58.0%	9,093	9,149	55	0.6%
59.3%	9,071	9,136	65	0.7%
60.5%	8,935	9,091	156	1.7%
61.7%	8,932	9,052	121	1.3%
63.0%	8,894	9,008	113	1.3%
64.2%	8,872	8,961	89	1.0%
65.4%	8,841	8,936	95	1.1%
66.7%	8,831	8,934	103	1.2%
67.9%	8,788	8,870	82	0.9%
69.1%	8,786	8,867	81	0.9%
70.4%	8,783	8,857	74	0.8%
71.6%	8,766	8,828	62	0.7%
72.8%	8,718	8,817	98	1.1%
74.1%	8,709	8,695	-14	-0.2%
75.3%	8,602	8,669	67	0.8%
76.5%	8,599	8,647	48	0.6%
77.8%	8,563	8,548	-15	-0.2%
79.0%	8,480	8,510	30	0.4%
80.2%	8,373	8,448	75	0.9%
81.5%	8,298	8,426	128	1.5%
82.7%	8,287	8,345	57	0.7%
84.0%	8,117	8,199	82	1.0%
85.2%	8,073	8,169	95	1.2%
86.4%	8,064	8,150	87	1.1%
87.7%	8,010	8,104	94	1.2%
88.9%	7,947	8,049	103	1.3%
90.1%	7,629	8,018	389	5.1%
91.4%	7,447	7,957	510	6.8%
92.6%	7,329	7,805	476	6.5%
93.8%	7,261	7,774	514	7.1%
95.1%	7,133	7,625	491	6.9%
96.3%	7,077	7,424	347	4.9%
97.5%	6,640	6,773	134	2.0%
98.8%	6,542	6,345	-198	-3.0%
100.0%	6,523	6,072	-451	-6.9%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,664	12,666	2	0.0%
3.7%	12,664	12,658	-6	0.0%
4.9%	12,228	12,628	400	3.3%
6.2%	12,200	12,519	319	2.6%
7.4%	12,069	12,436	367	3.0%
8.6%	12,005	12,330	325	2.7%
9.9%	11,881	12,213	332	2.8%
11.1%	11,842	12,030	188	1.6%
12.3%	11,711	11,803	92	0.8%
13.6%	11,642	11,787	145	1.2%
14.8%	11,480	11,636	156	1.4%
16.0%	11,337	11,492	155	1.4%
17.3%	11,314	11,354	40	0.4%
18.5%	11,152	11,287	135	1.2%
19.8%	11,120	11,206	87	0.8%
21.0%	11,118	11,064	-54	-0.5%
22.2%	11,068	11,047	-21	-0.2%
23.5%	10,975	11,004	28	0.3%
24.7%	10,916	10,987	71	0.7%
25.9%	10,891	10,987	95	0.9%
27.2%	10,866	10,969	103	0.9%
28.4%	10,850	10,926	77	0.7%
29.6%	10,791	10,895	103	1.0%
30.9%	10,761	10,884	123	1.1%
32.1%	10,703	10,878	174	1.6%
33.3%	10,687	10,827	141	1.3%
34.6%	10,650	10,792	142	1.3%
35.8%	10,643	10,770	127	1.2%
37.0%	10,559	10,721	163	1.5%
38.3%	10,550	10,662	112	1.1%
39.5%	10,542	10,659	117	1.1%
40.7%	10,542	10,639	97	0.9%
42.0%	10,522	10,565	43	0.4%
43.2%	10,508	10,563	56	0.5%
44.4%	10,451	10,531	81	0.8%
45.7%	10,395	10,513	118	1.1%
46.9%	10,370	10,506	135	1.3%
48.1%	10,370	10,445	75	0.7%
49.4%	10,301	10,367	66	0.6%
50.6%	10,288	10,339	51	0.5%
51.9%	10,286	10,254	-33	-0.3%
53.1%	10,227	10,228	1	0.0%
54.3%	10,161	10,222	61	0.6%
55.6%	10,087	10,137	51	0.5%
56.8%	10,079	10,136	57	0.6%
58.0%	10,067	10,135	67	0.7%
59.3%	9,939	10,130	191	1.9%
60.5%	9,925	10,032	107	1.1%
61.7%	9,890	10,024	134	1.4%
63.0%	9,874	9,956	82	0.8%
64.2%	9,872	9,880	9	0.1%
65.4%	9,861	9,875	14	0.1%
66.7%	9,847	9,856	9	0.1%
67.9%	9,837	9,843	6	0.1%
69.1%	9,817	9,732	-85	-0.9%
70.4%	9,814	9,732	-82	-0.8%
71.6%	9,795	9,726	-69	-0.7%
72.8%	9,770	9,720	-50	-0.5%
74.1%	9,745	9,689	-56	-0.6%
75.3%	9,709	9,620	-89	-0.9%
76.5%	9,674	9,614	-61	-0.6%
77.8%	9,660	9,588	-72	-0.7%
79.0%	9,595	9,568	-26	-0.3%
80.2%	9,497	9,563	66	0.7%
81.5%	9,458	9,558	99	1.1%
82.7%	9,433	9,554	121	1.3%
84.0%	9,423	9,494	71	0.8%
85.2%	9,352	9,467	115	1.2%
86.4%	9,318	9,422	104	1.1%
87.7%	9,305	9,410	106	1.1%
88.9%	9,131	9,268	137	1.5%
90.1%	9,127	9,240	113	1.2%
91.4%	9,001	9,164	164	1.8%
92.6%	8,863	9,140	277	3.1%
93.8%	8,825	9,138	313	3.5%
95.1%	8,819	9,029	210	2.4%
96.3%	8,761	8,974	213	2.4%
97.5%	8,715	8,718	3	0.0%
98.8%	8,564	8,697	133	1.6%
100.0%	8,049	8,091	42	0.5%

Table SW-43-b

San Luis Reservoir (SWP and CVP), End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,696	12,696	0	0.0%
4.9%	12,696	12,696	0	0.0%
6.2%	12,696	12,696	0	0.0%
7.4%	12,696	12,696	0	0.0%
8.6%	12,543	12,696	152	1.2%
9.9%	12,440	12,696	255	2.1%
11.1%	12,387	12,696	308	2.5%
12.3%	12,363	12,609	246	2.0%
13.6%	12,318	12,475	156	1.3%
14.8%	12,304	12,380	77	0.6%
16.0%	12,272	12,344	72	0.6%
17.3%	12,259	12,254	-6	0.0%
18.5%	12,238	12,233	-5	0.0%
19.8%	12,150	12,197	47	0.4%
21.0%	12,100	12,160	60	0.5%
22.2%	12,088	12,039	-49	-0.4%
23.5%	12,049	11,895	-154	-1.3%
24.7%	12,003	11,803	-200	-1.7%
25.9%	11,738	11,732	-6	-0.1%
27.2%	11,697	11,716	19	0.2%
28.4%	11,660	11,683	23	0.2%
29.6%	11,642	11,674	32	0.3%
30.9%	11,557	11,544	-13	-0.1%
32.1%	11,546	11,526	-19	-0.2%
33.3%	11,527	11,525	-1	0.0%
34.6%	11,482	11,487	5	0.0%
35.8%	11,476	11,456	-20	-0.2%
37.0%	11,431	11,422	-9	-0.1%
38.3%	11,405	11,323	-81	-0.7%
39.5%	11,399	11,301	-98	-0.9%
40.7%	11,311	11,279	-32	-0.3%
42.0%	11,276	11,191	-84	-0.7%
43.2%	11,224	11,161	-62	-0.6%
44.4%	11,191	11,137	-55	-0.5%
45.7%	11,153	11,130	-23	-0.2%
46.9%	11,135	11,126	-9	-0.1%
48.1%	11,112	11,097	-15	-0.1%
49.4%	11,095	11,087	-8	-0.1%
50.6%	11,045	11,050	5	0.0%
51.9%	11,023	11,050	27	0.2%
53.1%	10,992	11,005	13	0.1%
54.3%	10,951	10,967	17	0.2%
55.6%	10,904	10,927	23	0.2%
56.8%	10,887	10,919	32	0.3%
58.0%	10,846	10,907	61	0.6%
59.3%	10,785	10,903	118	1.1%
60.5%	10,687	10,865	179	1.7%
61.7%	10,672	10,846	174	1.6%
63.0%	10,645	10,834	189	1.8%
64.2%	10,622	10,647	25	0.2%
65.4%	10,622	10,625	3	0.0%
66.7%	10,551	10,424	-128	-1.2%
67.9%	10,533	10,386	-147	-1.4%
69.1%	10,483	10,340	-143	-1.4%
70.4%	10,483	10,325	-158	-1.5%
71.6%	10,469	10,294	-175	-1.7%
72.8%	10,415	10,239	-176	-1.7%
74.1%	10,375	10,211	-164	-1.6%
75.3%	10,348	10,151	-197	-1.9%
76.5%	10,228	10,148	-80	-0.8%
77.8%	10,186	10,120	-66	-0.6%
79.0%	10,154	10,080	-74	-0.7%
80.2%	10,127	10,079	-47	-0.5%
81.5%	10,012	10,056	44	0.4%
82.7%	9,999	10,049	50	0.5%
84.0%	9,930	10,026	96	1.0%
85.2%	9,912	9,990	78	0.8%
86.4%	9,910	9,976	67	0.7%
87.7%	9,807	9,960	153	1.6%
88.9%	9,699	9,910	211	2.2%
90.1%	9,648	9,870	221	2.3%
91.4%	9,411	9,818	407	4.3%
92.6%	9,378	9,705	326	3.5%
93.8%	9,279	9,659	380	4.1%
95.1%	9,191	9,642	451	4.9%
96.3%	9,116	9,300	184	2.0%
97.5%	9,052	9,275	223	2.5%
98.8%	8,934	9,250	316	3.5%
100.0%	8,351	9,108	757	9.1%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,696	12,696	0	0.0%
4.9%	12,696	12,696	0	0.0%
6.2%	12,696	12,696	0	0.0%
7.4%	12,696	12,696	0	0.0%
8.6%	12,696	12,696	0	0.0%
9.9%	12,696	12,696	0	0.0%
11.1%	12,696	12,696	0	0.0%
12.3%	12,696	12,696	0	0.0%
13.6%	12,696	12,696	0	0.0%
14.8%	12,696	12,696	0	0.0%
16.0%	12,696	12,696	0	0.0%
17.3%	12,696	12,696	0	0.0%
18.5%	12,691	12,696	5	0.0%
19.8%	12,665	12,696	31	0.2%
21.0%	12,649	12,687	38	0.3%
22.2%	12,636	12,594	-42	-0.3%
23.5%	12,577	12,466	-111	-0.9%
24.7%	12,501	12,464	-38	-0.3%
25.9%	12,434	12,431	-4	0.0%
27.2%	12,397	12,418	22	0.2%
28.4%	12,360	12,347	-13	-0.1%
29.6%	12,322	12,323	0	0.0%
30.9%	12,302	12,257	-45	-0.4%
32.1%	12,271	12,215	-55	-0.5%
33.3%	12,242	12,197	-44	-0.4%
34.6%	12,201	12,173	-27	-0.2%
35.8%	12,200	12,165	-35	-0.3%
37.0%	12,107	12,091	-16	-0.1%
38.3%	12,106	11,997	-109	-0.9%
39.5%	12,068	11,985	-83	-0.7%
40.7%	12,048	11,978	-70	-0.6%
42.0%	12,005	11,924	-81	-0.7%
43.2%	12,003	11,828	-175	-1.5%
44.4%	11,913	11,784	-129	-1.1%
45.7%	11,812	11,760	-52	-0.4%
46.9%	11,784	11,738	-46	-0.4%
48.1%	11,736	11,719	-16	-0.1%
49.4%	11,719	11,665	-55	-0.5%
50.6%	11,700	11,655	-45	-0.4%
51.9%	11,588	11,623	35	0.3%
53.1%	11,482	11,575	93	0.8%
54.3%	11,470	11,565	95	0.8%
55.6%	11,469	11,506	36	0.3%
56.8%	11,452	11,502	51	0.4%
58.0%	11,438	11,494	56	0.5%
59.3%	11,403	11,478	75	0.7%
60.5%	11,370	11,465	94	0.8%
61.7%	11,343	11,272	-72	-0.6%
63.0%	11,255	11,195	-60	-0.5%
64.2%	11,083	11,145	62	0.6%
65.4%	11,079	11,129	50	0.5%
66.7%	11,009	11,038	28	0.3%
67.9%	10,973	10,997	24	0.2%
69.1%	10,972	10,933	-38	-0.4%
70.4%	10,955	10,922	-33	-0.3%
71.6%	10,899	10,899	1	0.0%
72.8%	10,809	10,828	19	0.2%
74.1%	10,806	10,806	1	0.0%
75.3%	10,791	10,786	-5	0.0%
76.5%	10,767	10,732	-35	-0.3%
77.8%	10,762	10,731	-30	-0.3%
79.0%	10,758	10,680	-78	-0.7%
80.2%	10,752	10,658	-94	-0.9%
81.5%	10,709	10,606	-103	-1.0%
82.7%	10,649	10,560	-89	-0.8%
84.0%	10,613	10,547	-66	-0.6%
85.2%	10,552	10,540	-12	-0.1%
86.4%	10,384	10,503	119	1.1%
87.7%	10,340	10,443	103	1.0%
88.9%	10,246	10,340	95	0.9%
90.1%	10,106	10,285	178	1.8%
91.4%	10,103	10,224	121	1.2%
92.6%	10,059	10,202	143	1.4%
93.8%	10,011	10,110	99	1.0%
95.1%	9,862	10,103	241	2.4%
96.3%	9,827	9,998	171	1.7%
97.5%	9,777	9,981	203	2.1%
98.8%	9,442	9,948	506	5.4%
100.0%	8,352	9,484	1,132	13.5%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,617	-78	-0.6%
3.7%	12,630	12,551	-79	-0.6%
4.9%	12,443	12,450	7	0.1%
6.2%	12,436	12,436	0	0.0%
7.4%	12,383	12,402	19	0.2%
8.6%	12,363	12,377	13	0.1%
9.9%	12,349	12,361	12	0.1%
11.1%	12,331	12,324	-8	-0.1%
12.3%	12,211	12,317	106	0.9%
13.6%	12,183	12,209	26	0.2%
14.8%	12,174	12,156	-18	-0.1%
16.0%	12,163	12,146	-17	-0.1%
17.3%	12,139	12,144	5	0.0%
18.5%	12,138	12,141	3	0.0%
19.8%	12,134	12,138	3	0.0%
21.0%	12,098	12,133	35	0.3%
22.2%	12,084	12,132	48	0.4%
23.5%	12,081	12,128	48	0.4%
24.7%	12,061	12,090	29	0.2%
25.9%	12,046	12,004	-42	-0.3%
27.2%	11,986	11,972	-15	-0.1%
28.4%	11,968	11,897	-71	-0.6%
29.6%	11,918	11,849	-69	-0.6%
30.9%	11,914	11,791	-123	-1.0%
32.1%	11,829	11,701	-128	-1.1%
33.3%	11,728	11,648	-80	-0.7%
34.6%	11,724	11,626	-98	-0.8%
35.8%	11,657	11,591	-66	-0.6%
37.0%	11,612	11,552	-59	-0.5%
38.3%	11,600	11,540	-60	-0.5%
39.5%	11,588	11,534	-54	-0.5%
40.7%	11,577	11,483	-94	-0.8%
42.0%	11,569	11,478	-92	-0.8%
43.2%	11,470	11,409	-61	-0.5%
44.4%	11,468	11,402	-67	-0.6%
45.7%	11,468	11,384	-84	-0.7%
46.9%	11,440	11,287	-153	-1.3%
48.1%	11,410	11,262	-148	-1.3%
49.4%	11,347	11,238	-109	-1.0%
50.6%	11,302	11,215	-87	-0.8%
51.9%	11,270	11,195	-75	-0.7%
53.1%	11,115	11,136	21	0.2%
54.3%	11,086	11,131	45	0.4%
55.6%	11,084	11,060	-25	-0.2%
56.8%	11,057	11,053	-5	0.0%
58.0%	10,988	11,031	43	0.4%
59.3%	10,927	10,968	41	0.4%
60.5%	10,842	10,925	83	0.8%
61.7%	10,824	10,865	41	0.4%
63.0%	10,799	10,836	37	0.3%
64.2%	10,767	10,834	68	0.6%
65.4%	10,761	10,692	-69	-0.6%
66.7%	10,612	10,632	21	0.2%
67.9%	10,582	10,628	46	0.4%
69.1%	10,560	10,526	-35	-0.3%
70.4%	10,540	10,518	-22	-0.2%
71.6%	10,492	10,517	25	0.2%
72.8%	10,459	10,420	-39	-0.4%
74.1%	10,453	10,384	-69	-0.7%
75.3%	10,396	10,378	-18	-0.2%
76.5%	10,363	10,363	1	0.0%
77.8%	10,337	10,303	-34	-0.3%
79.0%	10,266	10,268	2	0.0%
80.2%	10,248	10,262	14	0.1%
81.5%	10,236	10,245	9	0.1%
82.7%	10,225	10,150	-75	-0.7%
84.0%	10,205	10,123	-82	-0.8%
85.2%	10,183	10,076	-107	-1.1%
86.4%	10,176	10,073	-103	-1.0%
87.7%	9,999	10,036	37	0.4%
88.9%	9,982	9,956	-26	-0.3%
90.1%	9,907	9,908	1	0.0%
91.4%	9,899	9,899	1	0.0%
92.6%	9,806	9,893	88	0.9%
93.8%	9,805	9,866	60	0.6%
95.1%	9,691	9,799	107	1.1%
96.3%	9,542	9,767	225	2.4%
97.5%	9,533	9,695	163	1.7%
98.8%	9,314	9,633	320	3.4%
100.0%	8,093	9,346	1,253	15.5%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,631	12,626	-5	0.0%
2.5%	12,349	12,327	-22	-0.2%
3.7%	12,162	12,116	-46	-0.4%
4.9%	12,046	12,114	68	0.6%
6.2%	12,030	12,023	-7	-0.1%
7.4%	11,816	11,926	110	0.9%
8.6%	11,787	11,773	-14	-0.1%
9.9%	11,700	11,675	-25	-0.2%
11.1%	11,579	11,566	-13	-0.1%
12.3%	11,567	11,530	-37	-0.3%
13.6%	11,523	11,424	-99	-0.9%
14.8%	11,438	11,411	-27	-0.2%
16.0%	11,237	11,201	-37	-0.3%
17.3%	11,142	11,161	19	0.2%
18.5%	11,138	11,145	7	0.1%
19.8%	11,125	11,115	-10	-0.1%
21.0%	11,069	11,061	-8	-0.1%
22.2%	11,052	11,017	-36	-0.3%
23.5%	11,020	10,967	-53	-0.5%
24.7%	11,014	10,965	-49	-0.4%
25.9%	10,967	10,929	-38	-0.3%
27.2%	10,966	10,885	-81	-0.7%
28.4%	10,912	10,848	-64	-0.6%
29.6%	10,890	10,842	-48	-0.4%
30.9%	10,842	10,771	-71	-0.7%
32.1%	10,841	10,732	-109	-1.0%
33.3%	10,839	10,725	-113	-1.0%
34.6%	10,823	10,661	-161	-1.5%
35.8%	10,782	10,639	-143	-1.3%
37.0%	10,720	10,637	-83	-0.8%
38.3%	10,713	10,566	-147	-1.4%
39.5%	10,688	10,410	-278	-2.6%
40.7%	10,588	10,407	-181	-1.7%
42.0%	10,514	10,389	-125	-1.2%
43.2%	10,455	10,359	-96	-0.9%
44.4%	10,429	10,337	-91	-0.9%
45.7%	10,425	10,306	-119	-1.1%
46.9%	10,368	10,298	-70	-0.7%
48.1%	10,341	10,239	-102	-1.0%
49.4%	10,335	10,192	-142	-1.4%
50.6%	10,332	10,188	-144	-1.4%
51.9%	10,326	10,176	-150	-1.4%
53.1%	10,217	10,164	-53	-0.5%
54.3%	10,199	10,137	-62	-0.6%
55.6%	10,187	10,133	-55	-0.5%
56.8%	10,181	10,121	-60	-0.6%
58.0%	10,136	10,099	-38	-0.4%
59.3%	10,085	10,052	-33	-0.3%
60.5%	9,973	9,910	-63	-0.6%
61.7%	9,953	9,865	-89	-0.9%
63.0%	9,888	9,829	-59	-0.6%
64.2%	9,765	9,792	27	0.3%
65.4%	9,738	9,754	16	0.2%
66.7%	9,681	9,659	-22	-0.2%
67.9%	9,609	9,637	27	0.3%
69.1%	9,595	9,576	-19	-0.2%
70.4%	9,581	9,513	-68	-0.7%
71.6%	9,544	9,477	-66	-0.7%
72.8%	9,454	9,473	19	0.2%
74.1%	9,450	9,438	-12	-0.1%
75.3%	9,439	9,414	-25	-0.3%
76.5%	9,399	9,388	-11	-0.1%
77.8%	9,369	9,376	7	0.1%
79.0%	9,366	9,305	-61	-0.7%
80.2%	9,365	9,294	-71	-0.8%
81.5%	9,327	9,244	-83	-0.9%
82.7%	9,282	9,189	-93	-1.0%
84.0%	9,222	9,178	-44	-0.5%
85.2%	9,220	9,093	-128	-1.4%
86.4%	9,106	9,067	-39	-0.4%
87.7%	9,084	9,033	-51	-0.6%
88.9%	9,075	9,018	-58	-0.6%
90.1%	9,062	9,003	-59	-0.6%
91.4%	9,008	8,981	-27	-0.3%
92.6%	8,998	8,937	-61	-0.7%
93.8%	8,943	8,929	-15	-0.2%
95.1%	8,910	8,905	-6	-0.1%
96.3%	8,896	8,779	-117	-1.3%
97.5%	8,832	8,720	-112	-1.3%
98.8%	8,747	8,711	-36	-0.4%
100.0%	7,643	8,704	1,061	13.9%

Table SW-43-b
San Luis Reservoir (SWP and CVP), End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,632	12,420	-212	-1.7%
1.2%	11,983	11,971	-12	-0.1%
2.5%	11,699	11,651	-48	-0.4%
3.7%	11,330	11,323	-7	-0.1%
4.9%	11,300	11,252	-47	-0.4%
6.2%	11,260	11,187	-72	-0.6%
7.4%	10,953	11,037	84	0.8%
8.6%	10,842	10,882	40	0.4%
9.9%	10,678	10,843	165	1.5%
11.1%	10,567	10,637	70	0.7%
12.3%	10,561	10,403	-159	-1.5%
13.6%	10,317	10,148	-170	-1.6%
14.8%	10,175	10,141	-35	-0.3%
16.0%	10,152	10,031	-121	-1.2%
17.3%	10,079	9,951	-129	-1.3%
18.5%	10,049	9,928	-121	-1.2%
19.8%	10,027	9,827	-200	-2.0%
21.0%	9,937	9,822	-115	-1.2%
22.2%	9,922	9,769	-153	-1.5%
23.5%	9,917	9,755	-162	-1.6%
24.7%	9,884	9,662	-222	-2.2%
25.9%	9,842	9,652	-189	-1.9%
27.2%	9,794	9,650	-144	-1.5%
28.4%	9,673	9,607	-66	-0.7%
29.6%	9,636	9,555	-81	-0.8%
30.9%	9,629	9,525	-104	-1.1%
32.1%	9,579	9,420	-159	-1.7%
33.3%	9,412	9,381	-31	-0.3%
34.6%	9,395	9,366	-28	-0.3%
35.8%	9,391	9,352	-39	-0.4%
37.0%	9,345	9,343	-2	0.0%
38.3%	9,345	9,309	-36	-0.4%
39.5%	9,275	9,270	-4	0.0%
40.7%	9,252	9,254	2	0.0%
42.0%	9,237	9,249	12	0.1%
43.2%	9,157	9,198	41	0.4%
44.4%	9,146	9,184	39	0.4%
45.7%	9,119	9,141	22	0.2%
46.9%	9,083	8,905	-177	-2.0%
48.1%	9,049	8,844	-206	-2.3%
49.4%	9,029	8,775	-253	-2.8%
50.6%	8,962	8,769	-194	-2.2%
51.9%	8,957	8,724	-232	-2.6%
53.1%	8,878	8,712	-166	-1.9%
54.3%	8,839	8,690	-149	-1.7%
55.6%	8,825	8,583	-242	-2.7%
56.8%	8,806	8,571	-236	-2.7%
58.0%	8,793	8,442	-351	-4.0%
59.3%	8,754	8,343	-411	-4.7%
60.5%	8,732	8,328	-404	-4.6%
61.7%	8,732	8,325	-407	-4.7%
63.0%	8,524	8,268	-256	-3.0%
64.2%	8,497	8,252	-245	-2.9%
65.4%	8,464	8,177	-287	-3.4%
66.7%	8,450	8,174	-276	-3.3%
67.9%	8,344	8,173	-171	-2.1%
69.1%	8,181	8,084	-97	-1.2%
70.4%	8,145	8,075	-70	-0.9%
71.6%	8,134	8,064	-71	-0.9%
72.8%	8,029	8,033	5	0.1%
74.1%	8,026	8,006	-20	-0.2%
75.3%	7,953	7,965	13	0.2%
76.5%	7,950	7,784	-166	-2.1%
77.8%	7,909	7,678	-231	-2.9%
79.0%	7,767	7,645	-121	-1.6%
80.2%	7,750	7,439	-311	-4.0%
81.5%	7,577	7,403	-174	-2.3%
82.7%	7,571	7,350	-220	-2.9%
84.0%	7,420	7,272	-147	-2.0%
85.2%	7,396	7,223	-174	-2.3%
86.4%	7,378	7,222	-156	-2.1%
87.7%	7,326	7,151	-175	-2.4%
88.9%	7,302	6,984	-318	-4.4%
90.1%	7,170	6,947	-223	-3.1%
91.4%	7,089	6,872	-218	-3.1%
92.6%	6,947	6,853	-94	-1.4%
93.8%	6,762	6,556	-206	-3.0%
95.1%	6,573	6,296	-277	-4.2%
96.3%	6,537	5,845	-692	-10.6%
97.5%	6,447	5,833	-614	-9.5%
98.8%	6,116	5,111	-1,005	-16.4%
100.0%	5,946	5,050	-896	-15.1%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,303	12,100	-204	-1.7%
1.2%	10,997	10,990	-8	-0.1%
2.5%	10,961	10,754	-207	-1.9%
3.7%	10,838	10,718	-119	-1.1%
4.9%	10,699	10,614	-85	-0.8%
6.2%	10,281	10,337	56	0.5%
7.4%	10,163	10,182	19	0.2%
8.6%	10,007	9,958	-49	-0.5%
9.9%	9,924	9,927	3	0.0%
11.1%	9,863	9,807	-56	-0.6%
12.3%	9,770	9,783	13	0.1%
13.6%	9,767	9,761	-6	-0.1%
14.8%	9,741	9,714	-27	-0.3%
16.0%	9,739	9,698	-42	-0.4%
17.3%	9,674	9,535	-139	-1.4%
18.5%	9,649	9,491	-158	-1.6%
19.8%	9,634	9,444	-189	-2.0%
21.0%	9,540	9,378	-162	-1.7%
22.2%	9,510	9,335	-175	-1.8%
23.5%	9,494	9,307	-186	-2.0%
24.7%	9,366	9,261	-105	-1.1%
25.9%	9,235	9,226	-9	-0.1%
27.2%	9,229	9,159	-70	-0.8%
28.4%	9,202	9,101	-101	-1.1%
29.6%	9,181	9,082	-99	-1.1%
30.9%	9,107	9,017	-90	-1.0%
32.1%	9,005	8,976	-29	-0.3%
33.3%	8,987	8,878	-108	-1.2%
34.6%	8,966	8,840	-126	-1.4%
35.8%	8,878	8,824	-53	-0.6%
37.0%	8,670	8,762	91	1.1%
38.3%	8,626	8,711	86	1.0%
39.5%	8,616	8,635	19	0.2%
40.7%	8,560	8,552	-8	-0.1%
42.0%	8,541	8,429	-113	-1.3%
43.2%	8,321	8,339	18	0.2%
44.4%	8,307	8,312	5	0.1%
45.7%	8,292	8,215	-77	-0.9%
46.9%	8,276	8,206	-70	-0.8%
48.1%	8,275	8,150	-125	-1.5%
49.4%	8,252	8,123	-128	-1.6%
50.6%	8,229	8,104	-125	-1.5%
51.9%	8,209	8,071	-138	-1.7%
53.1%	8,192	8,027	-165	-2.0%
54.3%	8,147	8,010	-136	-1.7%
55.6%	8,082	8,000	-81	-1.0%
56.8%	8,073	7,990	-83	-1.0%
58.0%	7,992	7,954	-38	-0.5%
59.3%	7,924	7,824	-101	-1.3%
60.5%	7,897	7,821	-76	-1.0%
61.7%	7,868	7,818	-50	-0.6%
63.0%	7,735	7,817	82	1.1%
64.2%	7,723	7,742	18	0.2%
65.4%	7,693	7,616	-77	-1.0%
66.7%	7,686	7,540	-146	-1.9%
67.9%	7,590	7,394	-197	-2.6%
69.1%	7,484	7,292	-192	-2.6%
70.4%	7,385	7,244	-141	-1.9%
71.6%	7,325	7,178	-147	-2.0%
72.8%	7,311	7,124	-187	-2.6%
74.1%	7,273	7,113	-160	-2.2%
75.3%	7,260	7,101	-159	-2.2%
76.5%	7,233	6,992	-241	-3.3%
77.8%	7,140	6,956	-183	-2.6%
79.0%	7,083	6,820	-263	-3.7%
80.2%	7,032	6,790	-243	-3.5%
81.5%	6,987	6,735	-252	-3.6%
82.7%	6,928	6,633	-295	-4.3%
84.0%	6,888	6,611	-277	-4.0%
85.2%	6,748	6,197	-550	-8.2%
86.4%	6,727	6,177	-550	-8.2%
87.7%	6,451	5,949	-502	-7.8%
88.9%	6,166	5,901	-266	-4.3%
90.1%	6,165	5,872	-293	-4.8%
91.4%	6,115	5,633	-482	-7.9%
92.6%	5,703	5,633	-71	-1.2%
93.8%	5,464	5,605	141	2.6%
95.1%	5,432	5,003	-429	-7.9%
96.3%	5,243	4,989	-254	-4.9%
97.5%	5,217	4,984	-233	-4.5%
98.8%	5,059	4,962	-97	-1.9%
100.0%	4,819	4,508	-312	-6.5%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,862	11,627	-235	-2.0%
1.2%	10,568	10,581	13	0.1%
2.5%	9,937	9,854	-84	-0.8%
3.7%	9,826	9,839	13	0.1%
4.9%	9,814	9,834	20	0.2%
6.2%	9,757	9,716	-41	-0.4%
7.4%	9,634	9,532	-101	-1.1%
8.6%	9,479	9,455	-23	-0.2%
9.9%	9,442	9,307	-135	-1.4%
11.1%	9,403	9,256	-147	-1.6%
12.3%	9,349	9,223	-126	-1.3%
13.6%	9,232	9,154	-77	-0.8%
14.8%	9,194	9,148	-46	-0.5%
16.0%	9,182	9,107	-76	-0.8%
17.3%	9,039	9,105	66	0.7%
18.5%	9,039	9,076	37	0.4%
19.8%	9,020	9,073	54	0.6%
21.0%	8,962	8,959	-3	0.0%
22.2%	8,937	8,946	9	0.1%
23.5%	8,803	8,901	98	1.1%
24.7%	8,712	8,882	170	1.9%
25.9%	8,567	8,809	242	2.8%
27.2%	8,517	8,667	150	1.8%
28.4%	8,509	8,645	137	1.6%
29.6%	8,482	8,528	47	0.5%
30.9%	8,414	8,483	69	0.8%
32.1%	8,287	8,463	176	2.1%
33.3%	8,121	8,143	22	0.3%
34.6%	8,081	8,121	40	0.5%
35.8%	7,994	8,106	112	1.4%
37.0%	7,984	8,096	112	1.4%
38.3%	7,938	8,090	153	1.9%
39.5%	7,916	8,071	155	2.0%
40.7%	7,766	8,028	262	3.4%
42.0%	7,761	7,896	135	1.7%
43.2%	7,726	7,861	134	1.7%
44.4%	7,694	7,720	25	0.3%
45.7%	7,539	7,716	176	2.3%
46.9%	7,538	7,509	-30	-0.4%
48.1%	7,485	7,463	-22	-0.3%
49.4%	7,477	7,429	-48	-0.6%
50.6%	7,388	7,362	-26	-0.3%
51.9%	7,362	7,271	-91	-1.2%
53.1%	7,302	7,269	-33	-0.5%
54.3%	7,241	7,184	-57	-0.8%
55.6%	7,241	7,149	-91	-1.3%
56.8%	7,104	7,100	-5	-0.1%
58.0%	7,028	7,036	8	0.1%
59.3%	6,904	6,975	71	1.0%
60.5%	6,898	6,959	61	0.9%
61.7%	6,895	6,918	23	0.3%
63.0%	6,894	6,846	-48	-0.7%
64.2%	6,861	6,691	-170	-2.5%
65.4%	6,851	6,677	-174	-2.5%
66.7%	6,803	6,663	-140	-2.1%
67.9%	6,794	6,649	-145	-2.1%
69.1%	6,744	6,645	-99	-1.5%
70.4%	6,648	6,631	-17	-0.3%
71.6%	6,603	6,564	-38	-0.6%
72.8%	6,426	6,411	-15	-0.2%
74.1%	6,409	6,234	-174	-2.7%
75.3%	6,399	6,146	-253	-4.0%
76.5%	6,141	6,121	-20	-0.3%
77.8%	5,877	6,029	152	2.6%
79.0%	5,870	5,966	96	1.6%
80.2%	5,858	5,960	102	1.7%
81.5%	5,702	5,825	123	2.2%
82.7%	5,525	5,750	225	4.1%
84.0%	5,454	5,677	224	4.1%
85.2%	5,442	5,455	12	0.2%
86.4%	5,341	5,265	-76	-1.4%
87.7%	5,146	5,249	103	2.0%
88.9%	5,062	5,165	103	2.0%
90.1%	5,026	5,087	61	1.2%
91.4%	4,981	4,813	-168	-3.4%
92.6%	4,956	4,565	-391	-7.9%
93.8%	4,845	4,461	-384	-7.9%
95.1%	4,608	4,449	-159	-3.5%
96.3%	4,575	4,351	-224	-4.9%
97.5%	4,349	3,889	-460	-10.6%
98.8%	3,889	3,889	0	0.0%
100.0%	3,889	3,889	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,037	11,795	-242	-2.0%
1.2%	9,483	10,025	542	5.7%
2.5%	9,386	9,736	350	3.7%
3.7%	9,380	9,570	190	2.0%
4.9%	9,321	9,370	50	0.5%
6.2%	9,245	9,354	109	1.2%
7.4%	9,090	9,273	182	2.0%
8.6%	9,052	9,247	195	2.2%
9.9%	9,032	9,212	180	2.0%
11.1%	8,904	9,171	267	3.0%
12.3%	8,817	9,140	323	3.7%
13.6%	8,713	9,072	359	4.1%
14.8%	8,698	8,940	242	2.8%
16.0%	8,695	8,934	239	2.7%
17.3%	8,683	8,839	157	1.8%
18.5%	8,519	8,706	187	2.2%
19.8%	8,328	8,702	374	4.5%
21.0%	8,309	8,639	330	4.0%
22.2%	8,307	8,633	326	3.9%
23.5%	8,237	8,592	356	4.3%
24.7%	8,149	8,540	390	4.8%
25.9%	8,065	8,521	455	5.6%
27.2%	7,867	8,495	628	8.0%
28.4%	7,815	8,327	512	6.5%
29.6%	7,803	8,319	516	6.6%
30.9%	7,771	8,209	438	5.6%
32.1%	7,715	8,168	452	5.9%
33.3%	7,692	8,167	476	6.2%
34.6%	7,682	8,141	460	6.0%
35.8%	7,680	8,024	344	4.5%
37.0%	7,676	7,931	256	3.3%
38.3%	7,672	7,871	199	2.6%
39.5%	7,583	7,783	200	2.6%
40.7%	7,580	7,720	140	1.8%
42.0%	7,571	7,701	130	1.7%
43.2%	7,546	7,682	136	1.8%
44.4%	7,520	7,653	133	1.8%
45.7%	7,504	7,572	68	0.9%
46.9%	7,460	7,536	76	1.0%
48.1%	7,456	7,533	77	1.0%
49.4%	7,452	7,528	76	1.0%
50.6%	7,407	7,503	96	1.3%
51.9%	7,385	7,481	96	1.3%
53.1%	7,356	7,462	106	1.4%
54.3%	7,347	7,462	114	1.6%
55.6%	7,327	7,449	122	1.7%
56.8%	7,312	7,438	126	1.7%
58.0%	7,307	7,391	85	1.2%
59.3%	7,292	7,366	74	1.0%
60.5%	7,290	7,342	51	0.7%
61.7%	7,268	7,330	62	0.8%
63.0%	7,259	7,320	60	0.8%
64.2%	7,241	7,268	27	0.4%
65.4%	7,186	7,267	82	1.1%
66.7%	7,146	7,237	91	1.3%
67.9%	7,140	7,194	54	0.8%
69.1%	7,123	7,189	66	0.9%
70.4%	7,013	7,186	173	2.5%
71.6%	6,942	7,143	201	2.9%
72.8%	6,753	7,074	321	4.8%
74.1%	6,685	7,057	373	5.6%
75.3%	6,570	7,042	471	7.2%
76.5%	6,483	6,927	443	6.8%
77.8%	6,415	6,906	491	7.7%
79.0%	6,413	6,807	394	6.1%
80.2%	6,361	6,762	401	6.3%
81.5%	6,293	6,620	326	5.2%
82.7%	6,205	6,517	312	5.0%
84.0%	6,204	6,436	232	3.7%
85.2%	6,191	6,334	143	2.3%
86.4%	6,169	6,005	-164	-2.7%
87.7%	6,029	5,935	-93	-1.5%
88.9%	5,955	5,903	-51	-0.9%
90.1%	5,481	5,849	368	6.7%
91.4%	5,368	5,654	286	5.3%
92.6%	5,230	5,648	418	8.0%
93.8%	4,962	5,386	424	8.6%
95.1%	4,562	5,071	510	11.2%
96.3%	4,485	4,848	363	8.1%
97.5%	4,401	4,499	98	2.2%
98.8%	4,101	4,344	244	5.9%
100.0%	3,889	3,997	108	2.8%

Figure SW-44-b
San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

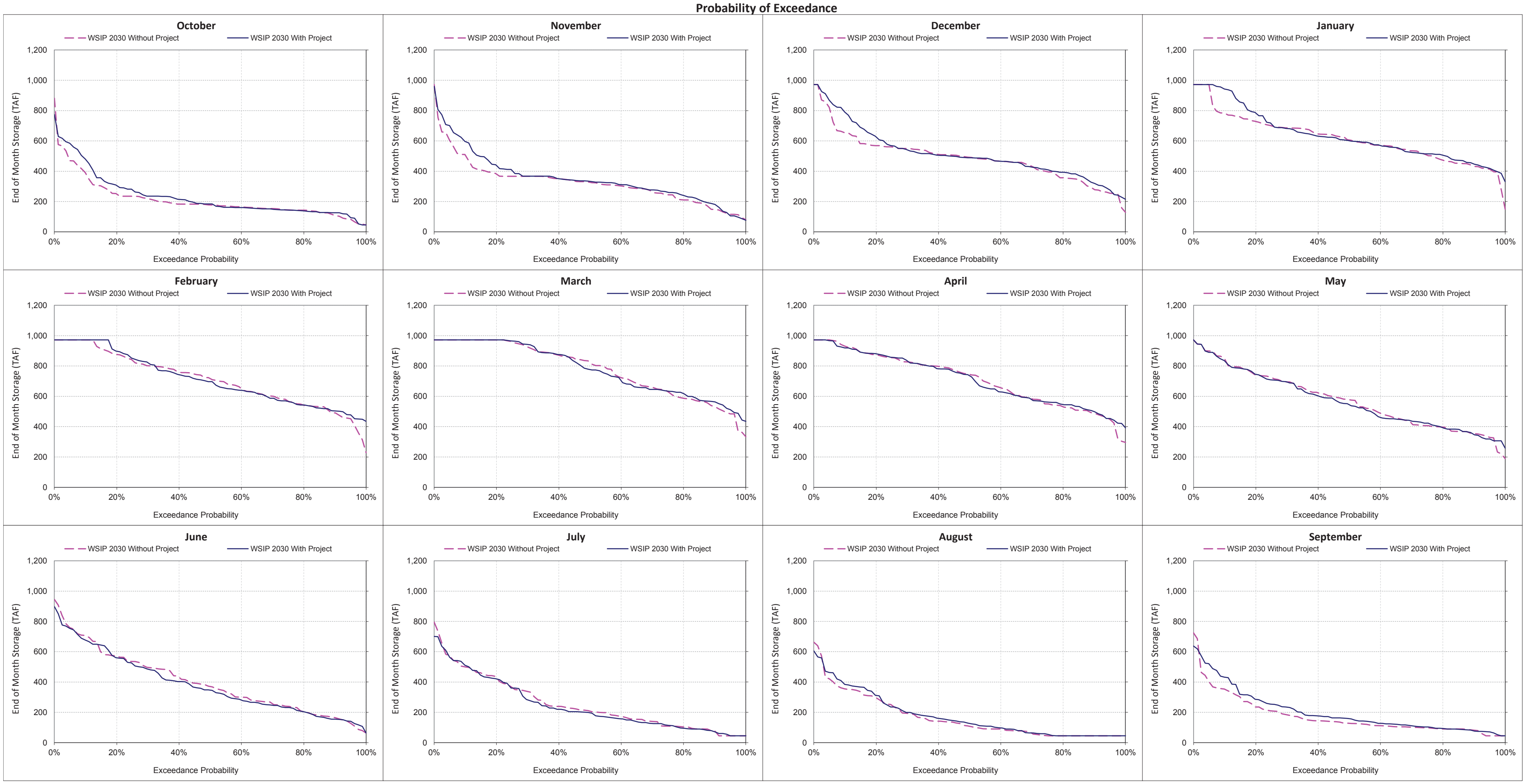


Table SW-44-b
San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	882	775	-107	-12.1%
1.2%	576	630	54	9.4%
2.5%	567	617	51	8.9%
3.7%	535	594	59	11.0%
4.9%	470	586	116	24.7%
6.2%	468	559	91	19.4%
7.4%	440	544	104	23.7%
8.6%	418	504	86	20.7%
9.9%	391	480	89	22.7%
11.1%	346	451	104	30.2%
12.3%	311	409	98	31.4%
13.6%	306	357	51	16.6%
14.8%	304	357	53	17.5%
16.0%	291	332	41	14.2%
17.3%	276	321	44	16.0%
18.5%	254	316	62	24.2%
19.8%	253	309	56	22.0%
21.0%	235	293	58	24.5%
22.2%	235	291	56	23.7%
23.5%	235	283	47	20.2%
24.7%	235	282	47	20.2%
25.9%	235	262	27	11.5%
27.2%	233	259	25	10.9%
28.4%	225	243	19	8.4%
29.6%	221	235	14	6.4%
30.9%	215	235	20	9.3%
32.1%	208	235	27	12.7%
33.3%	200	235	35	17.4%
34.6%	199	235	36	17.9%
35.8%	198	234	36	18.0%
37.0%	191	232	41	21.3%
38.3%	188	224	35	18.8%
39.5%	183	215	32	17.5%
40.7%	183	213	30	16.4%
42.0%	183	212	29	15.7%
43.2%	183	202	19	10.1%
44.4%	183	196	12	6.8%
45.7%	183	188	5	2.7%
46.9%	183	188	5	2.7%
48.1%	181	185	4	2.0%
49.4%	178	183	5	3.0%
50.6%	177	183	6	3.6%
51.9%	177	168	-8	-4.7%
53.1%	171	167	-5	-2.7%
54.3%	171	163	-9	-5.0%
55.6%	171	162	-9	-5.0%
56.8%	168	162	-6	-3.7%
58.0%	166	160	-5	-3.1%
59.3%	165	160	-5	-3.0%
60.5%	164	160	-4	-2.5%
61.7%	161	158	-3	-1.9%
63.0%	161	157	-4	-2.4%
64.2%	160	156	-4	-2.5%
65.4%	156	153	-3	-1.8%
66.7%	155	152	-3	-2.0%
67.9%	154	152	-2	-1.3%
69.1%	154	151	-3	-1.8%
70.4%	153	148	-5	-3.3%
71.6%	152	146	-6	-4.0%
72.8%	148	145	-3	-1.8%
74.1%	145	144	-1	-0.5%
75.3%	144	143	-1	-0.8%
76.5%	143	143	1	0.4%
77.8%	143	142	-1	-0.5%
79.0%	142	140	-3	-2.0%
80.2%	142	138	-5	-3.3%
81.5%	142	135	-8	-5.3%
82.7%	138	133	-5	-3.5%
84.0%	135	133	-3	-1.9%
85.2%	127	128	0	0.3%
86.4%	126	128	2	1.3%
87.7%	125	127	2	1.4%
88.9%	116	126	10	8.5%
90.1%	107	126	19	17.9%
91.4%	103	126	23	22.0%
92.6%	90	119	29	32.4%
93.8%	85	117	32	37.8%
95.1%	83	94	11	13.6%
96.3%	66	90	24	36.5%
97.5%	52	52	-1	-1.2%
98.8%	51	45	-6	-12.0%
100.0%	45	45	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	960	-12	-1.2%
1.2%	754	807	53	7.0%
2.5%	659	774	115	17.4%
3.7%	657	708	51	7.8%
4.9%	604	701	96	15.9%
6.2%	563	655	92	16.4%
7.4%	518	639	121	23.5%
8.6%	511	624	113	22.1%
9.9%	510	596	86	16.9%
11.1%	468	586	118	25.1%
12.3%	426	531	106	24.8%
13.6%	415	506	91	21.9%
14.8%	409	498	89	21.8%
16.0%	404	496	92	22.8%
17.3%	395	474	79	20.0%
18.5%	392	446	54	13.8%
19.8%	385	443	59	15.2%
21.0%	367	417	50	13.7%
22.2%	367	416	49	13.4%
23.5%	367	411	44	12.1%
24.7%	367	411	44	12.1%
25.9%	367	385	18	5.0%
27.2%	367	384	17	4.7%
28.4%	367	367	1	0.2%
29.6%	367	367	0	0.0%
30.9%	367	367	0	0.0%
32.1%	367	367	0	0.0%
33.3%	367	367	0	0.0%
34.6%	367	367	0	0.0%
35.8%	364	367	3	0.8%
37.0%	358	367	9	2.5%
38.3%	353	363	10	2.7%
39.5%	351	352	1	0.3%
40.7%	349	349	0	0.1%
42.0%	346	345	-2	-0.5%
43.2%	342	343	1	0.3%
44.4%	338	341	2	0.7%
45.7%	332	338	6	1.9%
46.9%	331	337	5	1.6%
48.1%	331	336	5	1.4%
49.4%	330	334	5	1.4%
50.6%	324	331	7	2.1%
51.9%	323	328	4	1.4%
53.1%	316	327	12	3.7%
54.3%	312	327	15	4.7%
55.6%	310	325	15	4.9%
56.8%	310	324	14	4.6%
58.0%	307	321	14	4.7%
59.3%	305	313	8	2.7%
60.5%	301	311	10	3.4%
61.7%	296	311	15	4.9%
63.0%	290	304	14	4.8%
64.2%	288	297	9	3.2%
65.4%	286	290	4	1.5%
66.7%	285	289	4	1.4%
67.9%	283	282	0	0.0%
69.1%	274	277	3	1.3%
70.4%	259	276	18	6.8%
71.6%	256	275	19	7.4%
72.8%	255	267	12	4.9%
74.1%	246	266	20	8.2%
75.3%	244	260	16	6.5%
76.5%	244	260	16	6.5%
77.8%	215	255	40	18.5%
79.0%	212	246	34	16.0%
80.2%	210	239	29	13.6%
81.5%	210	231	21	9.9%
82.7%	203	228	25	12.5%
84.0%	194	222	28	14.6%
85.2%	191	209	19	9.9%
86.4%	188	199	12	6.2%
87.7%	171	193	22	13.2%
88.9%	149	187	38	25.7%
90.1%	147	180	33	22.3%
91.4%	144	161	18	12.2%
92.6%	132	136	4	2.7%
93.8%	122	128	6	4.9%
95.1%	116	106	-10	-8.4%
96.3%	115	105	-11	-9.1%
97.5%	113	97	-16	-14.4%
98.8%	93	87	-7	-7.2%
100.0%	79	76	-4	-4.8%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	870	925	55	6.3%
3.7%	859	911	53	6.1%
4.9%	821	868	47	5.7%
6.2%	724	840	116	16.0%
7.4%	668	822	154	23.1%
8.6%	664	821	158	23.7%
9.9%	654	791	137	20.9%
11.1%	651	770	119	18.3%
12.3%	635	729	95	14.9%
13.6%	631	720	89	14.1%
14.8%	582	691	108	18.6%
16.0%	582	678	96	16.4%
17.3%	578	656	78	13.5%
18.5%	571	646	75	13.1%
19.8%	569	631	62	10.8%
21.0%	569	607	38	6.7%
22.2%	564	601	38	6.7%
23.5%	561	578	17	2.9%
24.7%	561	569	8	1.5%
25.9%	559	566	8	1.3%
27.2%	550	550	0	0.0%
28.4%	550	550	0	0.0%
29.6%	550	544	-6	-1.1%
30.9%	549	533	-16	-2.8%
32.1%	545	531	-14	-2.6%
33.3%	544	521	-22	-4.1%
34.6%	539	517	-22	-4.1%
35.8%	538	517	-21	-3.9%
37.0%	524	516	-8	-1.5%
38.3%	517	511	-6	-1.2%
39.5%	512	505	-7	-1.3%
40.7%	509	504	-5	-1.0%
42.0%	509	504	-5	-1.0%
43.2%	508	501	-7	-1.4%
44.4%	506	499	-8	-1.5%
45.7%	505	498	-7	-1.3%
46.9%	500	493	-7	-1.5%
48.1%	497	491	-5	-1.1%
49.4%	492	490	-3	-0.6%
50.6%	491	488	-3	-0.6%
51.9%	484	487	3	0.7%
53.1%	483	487	4	0.8%
54.3%	481	486	4	0.9%
55.6%	479	485	6	1.2%
56.8%	478	478	0	0.1%
58.0%	468	469	1	0.3%
59.3%	467	467	0	0.0%
60.5%	465	466	1	0.2%
61.7%	464	464	0	0.0%
63.0%	461	462	1	0.3%
64.2%	460	458	-1	-0.3%
65.4%	459	458	-1	-0.3%
66.7%	459	450	-8	-1.8%
67.9%	448	432	-16	-3.6%
69.1%	440	430	-10	-2.2%
70.4%	429	425	-3	-0.8%
71.6%	411	424	13	3.1%
72.8%	403	415	12	3.0%
74.1%	401	413	12	2.9%
75.3%	395	409	14	3.5%
76.5%	395	400	5	1.3%
77.8%	377	399	22	5.7%
79.0%	357	392	35	9.9%
80.2%	357	392	36	10.0%
81.5%	353	390	37	10.6%
82.7%	352	383	32	9.1%
84.0%	349	382	33	9.6%
85.2%	344	370	26	7.6%
86.4%	326	362	36	11.1%
87.7%	303	345	42	13.9%
88.9%	295	328	33	11.3%
90.1%	278	319	41	14.6%
91.4%	275	308	32	11.8%
92.6%	265	304	40	15.0%
93.8%	262	291	29	10.9%
95.1%	255	276	21	8.2%
96.3%	253	245	-8	-3.1%
97.5%	252	243	-9	-3.5%
98.8%	158	229	71	45.1%
100.0%	129	215	86	67.2%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	828	972	144	17.3%
7.4%	796	960	164	20.6%
8.6%	785	956	172	21.9%
9.9%	784	943	159	20.3%
11.1%	771	938	167	21.7%
12.3%	769	929	160	20.8%
13.6%	762	880	118	15.5%
14.8%	759	857	98	12.9%
16.0%	746	850	104	13.9%
17.3%	745	806	61	8.2%
18.5%	734	794	59	8.1%
19.8%	730	788	58	8.0%
21.0%	723	767	44	6.0%
22.2%	714	766	52	7.3%
23.5%	707	724	18	2.5%
24.7%	702	719	18	2.5%
25.9%	694	691	-3	-0.4%
27.2%	691	688	-2	-0.3%
28.4%	689	687	-2	-0.3%
29.6%	686	683	-3	-0.4%
30.9%	685	681	-4	-0.7%
32.1%	685	673	-11	-1.6%
33.3%	684	658	-26	-3.7%
34.6%	683	655	-28	-4.0%
35.8%	679	649	-30	-4.4%
37.0%	674	646	-28	-4.2%
38.3%	658	640	-18	-2.7%
39.5%	647	632	-14	-2.2%
40.7%	644	629	-15	-2.4%
42.0%	644	628	-16	-2.5%
43.2%	643	625	-18	-2.8%
44.4%	641	624	-17	-2.6%
45.7%	633	620	-12	-1.9%
46.9%	628	609	-19	-3.0%
48.1%	628	607	-21	-3.4%
49.4%	608	604	-4	-0.7%
50.6%	604	598	-6	-0.9%
51.9%	594	597	2	0.4%
53.1%	592	594	2	0.3%
54.3%	588	592	3	0.6%
55.6%	587	591	4	0.7%
56.8%	578	584	6	1.0%
58.0%	573	575	2	0.4%
59.3%	571	575	4	0.6%
60.5%	571	567	-4	-0.7%
61.7%	568	565	-3	-0.5%
63.0%	567	559	-7	-1.3%
64.2%	563	557	-5	-0.9%
65.4%	550	555	6	1.0%
66.7%	545	546	1	0.1%
67.9%	544	531	-13	-2.4%
69.1%	535	526	-9	-1.7%
70.4%	534	523	-12	-2.2%
71.6%	533	521	-13	-2.3%
72.8%	523	517	-5	-1.0%
74.1%	513	515	2	0.3%
75.3%	503	514	12	2.3%
76.5%	502	514	12	2.4%
77.8%	489	511	23	4.6%
79.0%	479	511	32	6.7%
80.2%	472	504	33	6.9%
81.5%	465	498	33	7.2%
82.7%	463	481	17	3.8%
84.0%	453	473	20	4.5%
85.2%	452	472	20	4.4%
86.4%	451	470	19	4.3%
87.7%	450	457	8	1.7%
88.9%	442	456	14	3.2%
90.1%	432	447	15	3.4%
91.4%	430	442	12	2.7%
92.6%	420	431	11	2.7%
93.8%	419	425	7	1.6%
95.1%	413	419	5	1.2%
96.3%	397	407	11	2.7%
97.5%	395	397	2	0.5%
98.8%	277	386	109	39.4%
100.0%	150	331	181	120.9%

Table SW-44-b
San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	972	0	0.0%
8.6%	972	972	0	0.0%
9.9%	972	972	0	0.0%
11.1%	972	972	0	0.0%
12.3%	972	972	0	0.0%
13.6%	929	972	43	4.6%
14.8%	914	972	58	6.3%
16.0%	906	972	66	7.2%
17.3%	897	972	75	8.4%
18.5%	884	913	29	3.3%
19.8%	877	899	22	2.5%
21.0%	874	894	21	2.4%
22.2%	863	882	19	2.2%
23.5%	850	874	24	2.8%
24.7%	844	852	9	1.0%
25.9%	821	844	23	2.8%
27.2%	814	835	21	2.6%
28.4%	813	830	17	2.1%
29.6%	802	827	25	3.2%
30.9%	801	810	9	1.1%
32.1%	798	805	8	1.0%
33.3%	796	771	-25	-3.1%
34.6%	793	769	-24	-3.0%
35.8%	789	768	-21	-2.6%
37.0%	782	764	-18	-2.3%
38.3%	778	754	-24	-3.0%
39.5%	762	744	-18	-2.3%
40.7%	757	739	-18	-2.3%
42.0%	757	732	-24	-3.2%
43.2%	755	731	-24	-3.2%
44.4%	749	718	-30	-4.0%
45.7%	743	713	-30	-4.0%
46.9%	740	708	-32	-4.3%
48.1%	724	704	-19	-2.7%
49.4%	723	697	-27	-3.7%
50.6%	710	696	-14	-1.9%
51.9%	705	673	-32	-4.5%
53.1%	699	660	-39	-5.5%
54.3%	697	656	-41	-5.9%
55.6%	681	650	-30	-4.5%
56.8%	677	649	-28	-4.2%
58.0%	673	644	-29	-4.3%
59.3%	663	641	-22	-3.3%
60.5%	642	639	-3	-0.4%
61.7%	633	631	-2	-0.3%
63.0%	632	630	-2	-0.4%
64.2%	626	627	1	0.1%
65.4%	620	615	-4	-0.7%
66.7%	614	613	-1	-0.1%
67.9%	603	602	-1	-0.2%
69.1%	602	588	-15	-2.4%
70.4%	600	587	-12	-2.1%
71.6%	589	573	-16	-2.7%
72.8%	582	569	-13	-2.2%
74.1%	581	569	-11	-1.9%
75.3%	563	564	1	0.2%
76.5%	562	558	-4	-0.7%
77.8%	550	547	-4	-0.7%
79.0%	548	543	-5	-1.0%
80.2%	540	543	3	0.6%
81.5%	539	537	-2	-0.3%
82.7%	534	534	-1	-0.2%
84.0%	533	523	-9	-1.8%
85.2%	532	522	-10	-1.8%
86.4%	531	519	-11	-2.2%
87.7%	512	519	7	1.4%
88.9%	491	505	14	2.9%
90.1%	491	504	13	2.7%
91.4%	475	501	27	5.6%
92.6%	459	499	40	8.6%
93.8%	457	480	23	5.1%
95.1%	452	477	25	5.5%
96.3%	407	453	45	11.1%
97.5%	359	450	91	25.3%
98.8%	314	448	134	42.6%
100.0%	228	434	206	90.4%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	972	0	0.0%
8.6%	972	972	0	0.0%
9.9%	972	972	0	0.0%
11.1%	972	972	0	0.0%
12.3%	972	972	0	0.0%
13.6%	972	972	0	0.0%
14.8%	972	972	0	0.0%
16.0%	972	972	0	0.0%
17.3%	972	972	0	0.0%
18.5%	972	972	0	0.0%
19.8%	972	972	0	0.0%
21.0%	972	972	0	0.0%
22.2%	972	972	0	0.0%
23.5%	966	968	2	0.2%
24.7%	962	965	3	0.4%
25.9%	953	965	12	1.3%
27.2%	946	961	15	1.6%
28.4%	941	945	5	0.5%
29.6%	929	944	15	1.6%
30.9%	918	940	22	2.4%
32.1%	907	929	22	2.4%
33.3%	893	893	1	0.1%
34.6%	892	888	-4	-0.5%
35.8%	890	887	-3	-0.4%
37.0%	887	886	-1	-0.1%
38.3%	879	884	4	0.5%
39.5%	874	877	3	0.3%
40.7%	866	875	8	0.9%
42.0%	863	870	7	0.8%
43.2%	860	857	-2	-0.3%
44.4%	856	837	-19	-2.2%
45.7%	842	822	-20	-2.3%
46.9%	841	804	-37	-4.4%
48.1%	836	786	-50	-6.0%
49.4%	834	778	-56	-6.7%
50.6%	812	774	-38	-4.6%
51.9%	803	774	-29	-3.6%
53.1%	803	769	-34	-4.2%
54.3%	800	754	-45	-5.6%
55.6%	781	746	-36	-4.5%
56.8%	778	733	-44	-5.7%
58.0%	742	729	-13	-1.8%
59.3%	728	724	-4	-0.5%
60.5%	720	690	-30	-4.2%
61.7%	717	682	-35	-4.9%
63.0%	705	680	-24	-3.4%
64.2%	692	662	-30	-4.3%
65.4%	682	660	-22	-3.3%
66.7%	670	657	-12	-1.8%
67.9%	667	657	-9	-1.4%
69.1%	662	646	-17	-2.5%
70.4%	657	645	-12	-1.8%
71.6%	648	645	-3	-0.4%
72.8%	645	642	-3	-0.5%
74.1%	643	637	-6	-1.0%
75.3%	627	633	6	1.0%
76.5%	608	631	23	3.8%
77.8%	597	627	30	5.0%
79.0%	591	626	35	5.8%
80.2%	586	617	31	5.2%
81.5%	583	600	16	2.8%
82.7%	580	599	19	3.3%
84.0%	572	588	16	2.9%
85.2%	567	574	7	1.3%
86.4%	567	570	4	0.6%
87.7%	557	568	11	2.0%
88.9%	539	567	28	5.2%
90.1%	532	563	31	5.9%
91.4%	517	551	34	6.7%
92.6%	505	542	38	7.4%
93.8%	493	521	28	5.7%
95.1%	484	512	28	5.9%
96.3%	484	493	9	1.8%
97.5%	368	488	119	32.4%
98.8%	362	443	80	22.2%
100.0%	334	435	101	30.3%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	968	-4	-0.5%
6.2%	968	965	-3	-0.3%
7.4%	963	931	-32	-3.3%
8.6%	943	926	-17	-1.8%
9.9%	932	920	-12	-1.3%
11.1%	923	920	-3	-0.3%
12.3%	922	911	-11	-1.2%
13.6%	911	909	-3	-0.3%
14.8%	892	892	-1	-0.1%
16.0%	886	887	1	0.1%
17.3%	885	884	-1	-0.1%
18.5%	877	884	7	0.8%
19.8%	874	882	8	0.9%
21.0%	870	876	7	0.8%
22.2%	863	871	8	1.0%
23.5%	859	865	6	0.7%
24.7%	856	857	1	0.2%
25.9%	853	856	3	0.3%
27.2%	842	853	11	1.3%
28.4%	828	852	24	2.9%
29.6%	827	839	12	1.5%
30.9%	826	821	-5	-0.6%
32.1%	821	818	-3	-0.4%
33.3%	815	817	2	0.2%
34.6%	807	810	3	0.4%
35.8%	806	805	-1	-0.1%
37.0%	802	800	-3	-0.3%
38.3%	800	798	-2	-0.2%
39.5%	799	782	-17	-2.1%
40.7%	796	781	-15	-1.9%
42.0%	791	780	-11	-1.4%
43.2%	787	780	-8	-1.0%
44.4%	777	766	-11	-1.4%
45.7%	768	756	-12	-1.5%
46.9%	758	753	-6	-0.8%
48.1%	751	744	-7	-0.9%
49.4%	748	743	-6	-0.8%
50.6%	741	728	-13	-1.7%
51.9%	739	697	-42	-5.6%
53.1%	727	670	-57	-7.8%
54.3%	701	660	-41	-5.9%
55.6%	692	654	-38	-5.5%
56.8%	681	649	-33	-4.8%
58.0%	668	648	-20	-3.0%
59.3%	661	629	-32	-4.8%
60.5%	652	628	-25	-3.8%
61.7%	648	624	-24	-3.7%
63.0%	631	619	-12	-2.0%
64.2%	612	608	-4	-0.7%
65.4%	610	604	-6	-1.0%
66.7%	597	594	-3	-0.5%
67.9%	593	592	-1	-0.1%
69.1%	591	590	-1	-0.2%
70.4%	580	572	-8	-1.4%
71.6%	579	569	-10	-1.7%
72.8%	576	569	-7	-1.2%
74.1%	550	563	13	2.3%
75.3%	550	562	13	2.3%
76.5%	543	560	17	3.2%
77.8%	542	560	18	3.3%
79.0%	539	550	10	1.9%
80.2%	529	544	15	2.9%
81.5%	525	544	19	3.5%
82.7%	524	544	20	3.8%
84.0%	509	535	26	5.0%
85.2%	508	533	25	4.9%
86.4%	508	519	11	2.2%
87.7%	506	512	6	1.2%
88.9%	493	508	15	2.9%
90.1%	488	499	11	2.3%
91.4%	478	485	6	1.3%
92.6%	470	476	6	1.3%
93.8%	463	454	-8	-1.8%
95.1%	447	454	7	1.6%
96.3%	424	441	17	4.0%
97.5%	322	422	100	31.1%
98.8%	303	422	119	39.1%
100.0%	296	392	96	32.3%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	945	945	0	0.0%
2.5%	943	942	-1	-0.1%
3.7%	900	899	-1	-0.1%
4.9%	899	890	-9	-1.0%
6.2%	898	889	-8	-0.9%
7.4%	867	864	-2	-0.3%
8.6%	865	847	-17	-2.0%
9.9%	852	835	-16	-1.9%
11.1%	802	808	7	0.9%
12.3%	801	790	-11	-1.3%
13.6%	795	788	-7	-0.9%
14.8%	793	786	-7	-0.9%
16.0%	780	780	0	0.0%
17.3%	775	778	3	0.3%
18.5%	759	766	6	0.9%
19.8%	742	746	5	0.7%
21.0%	738	742	4	0.5%
22.2%	735	728	-7	-1.0%
23.5%	733	715	-19	-2.6%
24.7%	727	708	-19	-2.5%
25.9%	715	708	-7	-1.0%
27.2%	710	706	-5	-0.7%
28.4%	700	699	-1	-0.1%
29.6%	696	697	1	0.2%
30.9%	694	689	-5	-0.8%
32.1%	684	686	1	0.2%
33.3%	665	649	-16	-2.4%
34.6%	663	649	-15	-2.2%
35.8%	649	629	-20	-3.1%
37.0%	633	619	-15	-2.3%
38.3%	627	614	-12	-1.9%
39.5%	626	606	-20	-3.2%
40.7%	617	597	-19	-3.1%
42.0%	615	591	-25	-4.0%
43.2%	604	589	-15	-2.5%
44.4%	600	589	-11	-1.8%
45.7%	593	572	-21	-3.6%
46.9%	590	558	-31	-5.3%
48.1%	582	554	-28	-4.8%
49.4%	579	552	-28	-4.8%
50.6%	575	538	-37	-6.4%
51.9%	573	533	-40	-7.0%
53.1%	531	525	-7	-1.2%
54.3%	530	523	-7	-1.4%
55.6%	520	506	-14	-2.8%
56.8%	519	502	-18	-3.4%
58.0%	508	487	-21	-4.2%
59.3%	494	465	-29	-5.9%
60.5%	484	456	-27	-5.7%
61.7%	476	453	-22	-4.7%
63.0%	469	452	-17	-3.6%
64.2%	460	451	-8	-1.8%
65.4%	455	449	-6	-1.3%
66.7%	449	447	-2	-0.5%
67.9%	442	443	1	0.2%
69.1%	441	442	0	0.1%
70.4%	412	435	23	5.6%
71.6%	412	432	21	5.0%
72.8%	409	429	20	5.0%
74.1%	407	423	16	4.0%
75.3%	407	423	16	4.0%
76.5%	401	410	9	2.4%
77.8%	400	406	6	1.6%
79.0%	399	400	1	0.3%
80.2%	396	391	-5	-1.2%
81.5%	394	384	-10	-2.4%
82.7%	370	384	14	3.7%
84.0%	369	383	14	3.9%
85.2%	368	382	14	3.7%
86.4%	367	368	1	0.3%
87.7%	367	367	-1	-0.2%
88.9%	357	362	5	1.4%
90.1%	354	346	-8	-2.2%
91.4%	351	343	-8	-2.4%
92.6%	345	327	-19	-5.4%
93.8%	339	318	-20	-6.0%
95.1%	328	318	-10	-3.1%
96.3%	326	307	-19	-5.9%
97.5%	233	307	74	31.8%
98.8%	221	306	86	39.0%
100.0%	189	259	70	36.9%

Table SW-44-b

San Luis Reservoir (CVP), End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	945	898	-47	-5.0%
1.2%	908	850	-58	-6.4%
2.5%	840	776	-64	-7.6%
3.7%	785	770	-15	-1.9%
4.9%	759	754	-5	-0.7%
6.2%	749	744	-5	-0.6%
7.4%	719	714	-4	-0.6%
8.6%	710	689	-21	-2.9%
9.9%	707	677	-30	-4.2%
11.1%	695	667	-28	-4.0%
12.3%	668	650	-18	-2.7%
13.6%	667	649	-18	-2.7%
14.8%	600	645	45	7.5%
16.0%	581	640	59	10.1%
17.3%	579	610	30	5.3%
18.5%	574	576	2	0.3%
19.8%	574	560	-14	-2.5%
21.0%	564	557	-8	-1.3%
22.2%	563	556	-7	-1.3%
23.5%	537	529	-7	-1.3%
24.7%	536	526	-10	-1.8%
25.9%	535	505	-30	-5.6%
27.2%	529	500	-29	-5.5%
28.4%	510	498	-12	-2.3%
29.6%	497	487	-10	-2.1%
30.9%	494	480	-14	-2.8%
32.1%	491	476	-16	-3.2%
33.3%	487	458	-29	-6.0%
34.6%	484	427	-57	-11.8%
35.8%	483	413	-70	-14.5%
37.0%	474	412	-63	-13.2%
38.3%	441	408	-34	-7.6%
39.5%	440	403	-37	-8.4%
40.7%	418	402	-15	-3.7%
42.0%	415	402	-13	-3.2%
43.2%	402	387	-15	-3.8%
44.4%	394	368	-26	-6.5%
45.7%	392	363	-29	-7.4%
46.9%	387	359	-28	-7.3%
48.1%	383	349	-34	-8.9%
49.4%	373	349	-24	-6.4%
50.6%	368	344	-24	-6.5%
51.9%	357	330	-27	-7.4%
53.1%	349	326	-24	-6.8%
54.3%	344	319	-24	-7.1%
55.6%	328	304	-24	-7.4%
56.8%	321	294	-27	-8.5%
58.0%	301	291	-11	-3.6%
59.3%	300	287	-13	-4.3%
60.5%	299	277	-23	-7.5%
61.7%	298	273	-26	-8.6%
63.0%	282	266	-15	-5.5%
64.2%	277	265	-11	-4.1%
65.4%	274	263	-12	-4.3%
66.7%	272	253	-18	-6.7%
67.9%	268	251	-18	-6.7%
69.1%	268	250	-19	-6.9%
70.4%	251	246	-5	-1.8%
71.6%	249	245	-4	-1.5%
72.8%	248	236	-12	-4.8%
74.1%	240	232	-9	-3.5%
75.3%	239	231	-8	-3.4%
76.5%	233	226	-7	-2.8%
77.8%	231	212	-19	-8.2%
79.0%	209	208	-1	-0.4%
80.2%	202	203	0	0.2%
81.5%	198	196	-1	-0.6%
82.7%	187	187	0	0.1%
84.0%	183	174	-9	-5.0%
85.2%	180	170	-10	-5.4%
86.4%	175	167	-8	-4.6%
87.7%	173	160	-14	-8.0%
88.9%	169	155	-14	-8.0%
90.1%	164	154	-10	-6.1%
91.4%	157	153	-4	-2.6%
92.6%	149	151	2	1.4%
93.8%	143	143	0	0.1%
95.1%	127	142	15	11.5%
96.3%	109	125	16	14.7%
97.5%	87	117	31	35.6%
98.8%	80	106	27	33.3%
100.0%	63	64	1	1.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	795	701	-93	-11.8%
1.2%	734	699	-35	-4.7%
2.5%	656	636	-20	-3.0%
3.7%	584	610	26	4.4%
4.9%	572	565	-7	-1.3%
6.2%	543	541	-2	-0.3%
7.4%	534	541	8	1.4%
8.6%	505	537	31	6.2%
9.9%	500	511	11	2.2%
11.1%	496	501	5	1.0%
12.3%	486	476	-10	-2.0%
13.6%	464	474	10	2.2%
14.8%	462	446	-16	-3.5%
16.0%	449	434	-16	-3.5%
17.3%	443	430	-13	-2.9%
18.5%	442	425	-17	-3.8%
19.8%	437	423	-15	-3.3%
21.0%	403	415	12	3.0%
22.2%	390	399	8	2.1%
23.5%	386	392	6	1.5%
24.7%	369	360	-9	-2.3%
25.9%	350	360	9	2.7%
27.2%	348	356	8	2.3%
28.4%	345	308	-38	-10.9%
29.6%	339	285	-54	-15.9%
30.9%	333	276	-57	-17.1%
32.1%	303	267	-35	-11.7%
33.3%	281	267	-15	-5.3%
34.6%	279	243	-36	-12.9%
35.8%	252	243	-10	-3.8%
37.0%	243	229	-13	-5.5%
38.3%	240	229	-11	-4.7%
39.5%	239	220	-19	-7.9%
40.7%	239	220	-19	-7.9%
42.0%	234	214	-20	-8.7%
43.2%	228	205	-24	-10.3%
44.4%	226	205	-22	-9.6%
45.7%	221	204	-17	-7.8%
46.9%	215	202	-13	-5.8%
48.1%	214	201	-13	-5.9%
49.4%	211	200	-12	-5.5%
50.6%	204	194	-10	-5.1%
51.9%	202	177	-25	-12.3%
53.1%	199	173	-26	-13.1%
54.3%	198	172	-26	-13.0%
55.6%	198	168	-30	-15.2%
56.8%	183	166	-17	-9.3%
58.0%	180	161	-18	-10.2%
59.3%	175	157	-18	-10.1%
60.5%	171	156	-15	-8.9%
61.7%	164	150	-14	-8.6%
63.0%	157	149	-7	-4.7%
64.2%	154	142	-12	-8.0%
65.4%	154	135	-18	-11.9%
66.7%	153	133	-20	-13.2%
67.9%	142	132	-10	-7.3%
69.1%	142	127	-14	-10.1%
70.4%	139	126	-13	-9.4%
71.6%	138	125	-13	-9.4%
72.8%	110	125	15	13.6%
74.1%	109	116	7	6.6%
75.3%	109	114	4	4.1%
76.5%	108	112	4	3.5%
77.8%	108	104	-4	-3.3%
79.0%	106	97	-9	-8.7%
80.2%	103	94	-9	-8.6%
81.5%	103	92	-11	-10.5%
82.7%	94	90	-4	-4.3%
84.0%	90	90	0	-0.5%
85.2%	90	90	0	0.0%
86.4%	90	86	-4	-4.2%
87.7%	89	81	-9	-9.6%
88.9%	79	80	1	1.2%
90.1%	75	71	-4	-5.4%
91.4%	45	61	16	34.5%
92.6%	45	60	15	33.0%
93.8%	45	56	11	25.0%
95.1%	45	45	0	0.0%
96.3%	45	45	0	0.0%
97.5%	45	45	0	0.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	663	605	-58	-8.7%
1.2%	639	566	-74	-11.5%
2.5%	572	559	-13	-2.3%
3.7%	432	471	39	9.1%
4.9%	421	464	43	10.2%
6.2%	401	461	60	15.0%
7.4%	375	420	45	12.0%
8.6%	362	410	48	13.2%
9.9%	355	384	29	8.2%
11.1%	351	380	29	8.3%
12.3%	351	373	23	6.5%
13.6%	346	370	25	7.1%
14.8%	337	366	29	8.6%
16.0%	314	365	51	16.3%
17.3%	310	345	35	11.4%
18.5%	309	340	31	10.0%
19.8%	299	312	13	4.4%
21.0%	283	310	26	9.2%
22.2%	267	262	-5	-2.0%
23.5%	255	249	-6	-2.5%
24.7%	251	236	-15	-6.1%
25.9%	234	235	1	0.5%
27.2%	224	226	2	1.1%
28.4%	196	211	16	8.0%
29.6%	194	199	5	2.6%
30.9%	190	199	9	4.6%
32.1%	186	190	4	2.1%
33.3%	167	186	19	11.6%
34.6%	165	181	16	9.8%
35.8%	159	178	19	11.7%
37.0%	145	173	28	19.2%
38.3%	142	170	27	19.3%
39.5%	141	161	20	14.0%
40.7%	141	158	17	12.1%
42.0%	138	156	17	12.6%
43.2%	136	150	14	10.3%
44.4%	135	146	11	7.8%
45.7%	130	143	13	10.3%
46.9%	126	137	11	8.9%
48.1%	114	135	22	19.2%
49.4%	110	130	20	17.8%
50.6%	105	125	20	18.8%
51.9%	99	121	21	21.5%
53.1%	96	111	15	15.7%
54.3%	91	110	19	20.6%
55.6%	91	109	18	19.6%
56.8%	90	108	18	20.3%
58.0%	90	101	11	12.3%
59.3%	90	98	8	8.5%
60.5%	90	96	6	6.5%
61.7%	81	90	9	10.9%
63.0%	80	90	10	12.3%
64.2%	78	87	9	11.7%
65.4%	78	80	3	3.3%
66.7%	77	80	3	3.4%
67.9%	75	65	-9	-12.4%
69.1%	73	63	-10	-13.6%
70.4%	56	63	7	12.2%
71.6%	54	61	7	13.1%
72.8%	50	60	10	20.2%
74.1%	47	59	12	24.4%
75.3%	45	53	8	18.1%
76.5%	45	46	1	2.4%
77.8%	45	45	0	0.0%
79.0%	45	45	0	0.0%
80.2%	45	45	0	0.0%
81.5%	45	45	0	0.0%
82.7%	45	45	0	0.0%
84.0%	45	45	0	0.0%
85.2%	45	45	0	0.0%
86.4%	45	45	0	0.0%
87.7%	45	45	0	0.0%
88.9%	45	45	0	0.0%
90.1%	45	45	0	0.0%
91.4%	45	45	0	0.0%
92.6%	45	45	0	0.0%
93.8%	45	45	0	0.0%
95.1%	45	45	0	0.0%
96.3%	45	45	0	0.0%
97.5%	45	45	0	0.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	724	638	-86	-11.8%
1.2%	686	619	-67	-9.8%
2.5%	464	572	109	23.4%
3.7%	444	525	81	18.2%
4.9%	402	521	119	29.6%
6.2%	368	488	120	32.7%
7.4%	362	477	116	32.0%
8.6%	357	439	82	23.1%
9.9%	354	432	79	22.2%
11.1%	341	429	88	25.6%
12.3%	330	386	57	17.1%
13.6%	315	385	69	22.0%
14.8%	303	319	15	5.1%
16.0%	271	315	44	16.3%
17.3%	271	315	44	16.4%
18.5%	258	307	49	19.1%
19.8%	235	287	52	22.1%
21.0%	235	283	48	20.6%
22.2%	221	271	50	22.7%
23.5%	214	259	45	20.8%
24.7%	210	254	45	21.2%
25.9%	208	252	44	21.2%
27.2%	206	247	41	20.1%
28.4%	191	238	47	24.7%
29.6%	185	235	50	26.9%
30.9%	180	232	52	28.9%
32.1%	174	221	48	27.4%
33.3%	172	203	31	18.3%
34.6%	162	202	40	24.5%
35.8%	152	182	31	20.2%
37.0%	149	179	31	20.5%
38.3%	145	178	33	22.5%
39.5%	144	176	32	22.2%
40.7%	144	176	32	22.3%
42.0%	143	172	29	20.5%
43.2%	141	172	31	22.1%
44.4%	139	164	25	17.7%
45.7%	139	164	25	18.1%
46.9%	135	163	28	20.6%
48.1%	129	162	33	25.7%
49.4%	128	160	32	25.0%
50.6%	126	156	29	23.2%
51.9%	126	147	21	16.7%
53.1%	125	143	18	14.2%
54.3%	122	143	20	16.4%
55.6%	121	141	20	16.5%
56.8%	115	137	22	19.0%
58.0%	113	134	21	19.0%
59.3%	112	127	14	12.8%
60.5%	111	127	15	13.7%
61.7%	110	124	15	13.5%
63.0%	108	124	16	14.9%
64.2%	106	122	17	15.9%
65.4%	105	121	16	15.3%
66.7%	105	118	13	12.7%
67.9%	104	117	12	11.7%
69.1%	102	114	11	10.8%
70.4%	101	109	9	8.8%
71.6%	100	107	7	6.6%
72.8%	99	105	6	5.6%
74.1%	98	103	5	5.4%
75.3%	98	103	5	5.3%
76.5%	95	99	4	3.9%
77.8%	93	95	1	1.6%
79.0%	90	95	5	5.2%
80.2%	90	94	4	4.3%
81.5%	90	90	0	0.0%
82.7%	90	90	0	-0.1%
84.0%	90	89	-1	-1.2%
85.2%	90	88	-2	-1.8%
86.4%	90	86	-4	-4.9%
87.7%	87	84	-3	-3.5%
88.9%	85	82	-2	-2.8%
90.1%	82	76	-6	-7.8%
91.4%	79	75	-4	-5.5%
92.6%	59	74	16	26.8%
93.8%	45	73	28	62.7%
95.1%	45	71	26	57.9%
96.3%	45	65	20	43.6%
97.5%	45	52	7	15.3%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

Figure SW-45-b
San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

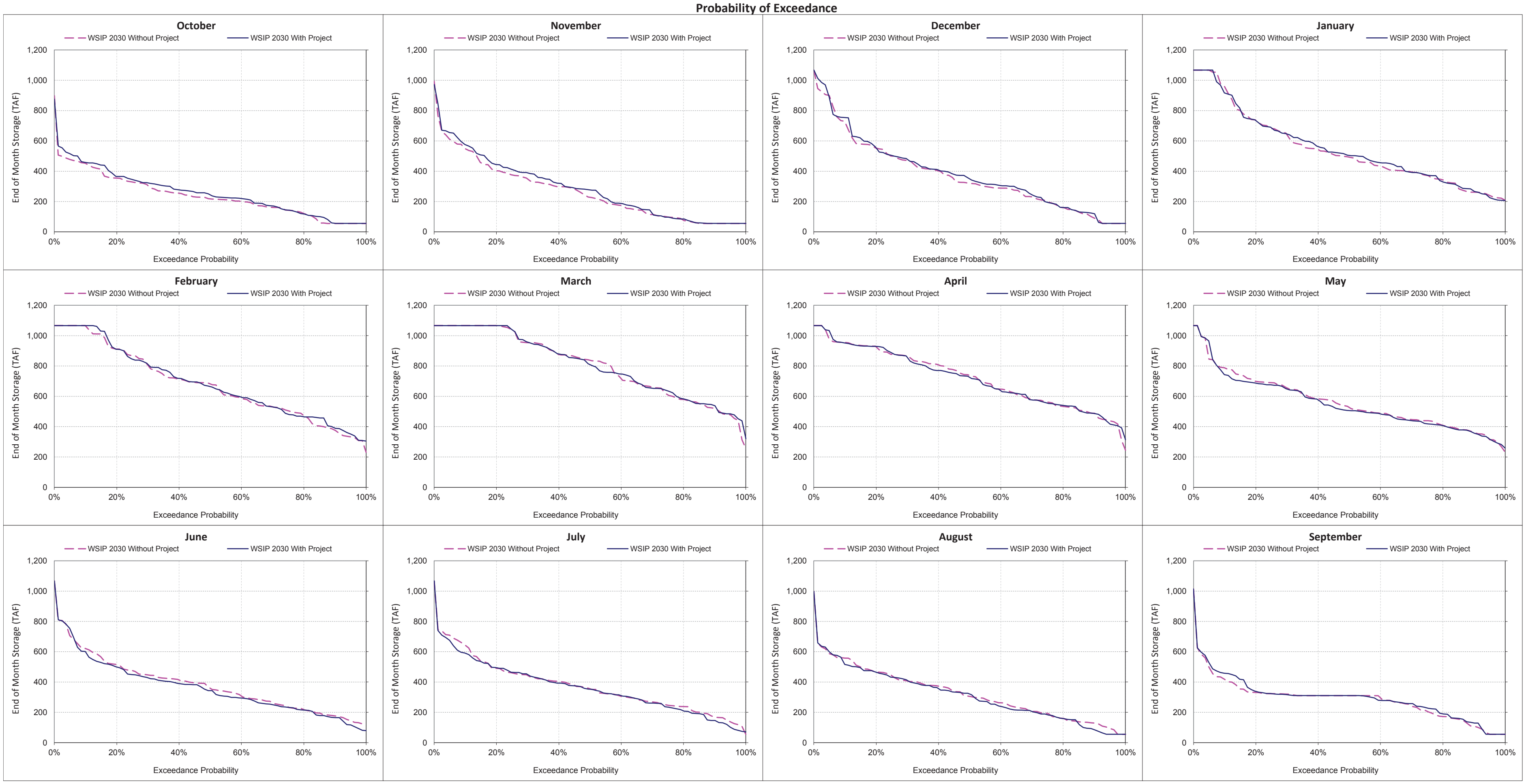


Table SW-45-b

San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	898	876	-23	-2.5%
1.2%	507	566	59	11.6%
2.5%	499	553	55	10.9%
3.7%	487	526	39	7.9%
4.9%	478	517	39	8.1%
6.2%	471	502	31	6.7%
7.4%	467	500	33	7.1%
8.6%	456	463	6	1.4%
9.9%	453	457	4	0.9%
11.1%	439	455	16	3.7%
12.3%	426	454	28	6.7%
13.6%	419	449	31	7.3%
14.8%	414	441	27	6.5%
16.0%	367	439	71	19.4%
17.3%	360	405	45	12.5%
18.5%	356	387	31	8.8%
19.8%	355	366	11	3.2%
21.0%	354	366	12	3.5%
22.2%	342	366	24	6.9%
23.5%	334	354	21	6.2%
24.7%	330	347	17	5.2%
25.9%	326	339	14	4.2%
27.2%	323	334	11	3.4%
28.4%	321	325	4	1.4%
29.6%	312	325	13	4.1%
30.9%	289	319	30	10.3%
32.1%	282	317	34	12.2%
33.3%	270	311	41	15.0%
34.6%	270	306	37	13.5%
35.8%	268	302	35	13.0%
37.0%	262	300	38	14.6%
38.3%	257	283	26	10.0%
39.5%	257	278	22	8.4%
40.7%	253	274	22	8.5%
42.0%	243	273	30	12.3%
43.2%	242	270	28	11.6%
44.4%	231	267	35	15.2%
45.7%	229	258	29	12.7%
46.9%	229	257	28	12.4%
48.1%	228	257	29	12.8%
49.4%	219	250	32	14.4%
50.6%	216	236	20	9.3%
51.9%	215	231	15	7.2%
53.1%	213	228	15	6.9%
54.3%	212	227	15	7.0%
55.6%	211	226	15	7.3%
56.8%	209	223	14	6.9%
58.0%	203	223	19	9.6%
59.3%	203	221	18	8.9%
60.5%	197	219	22	11.1%
61.7%	197	216	18	9.3%
63.0%	193	209	17	8.6%
64.2%	180	189	9	4.9%
65.4%	172	188	17	9.7%
66.7%	171	188	17	9.6%
67.9%	166	175	10	6.0%
69.1%	162	172	10	6.2%
70.4%	161	170	9	5.4%
71.6%	161	163	3	1.8%
72.8%	160	151	-9	-5.6%
74.1%	144	144	0	0.2%
75.3%	142	143	1	0.6%
76.5%	140	138	-1	-1.0%
77.8%	136	130	-5	-4.0%
79.0%	130	121	-8	-6.2%
80.2%	119	117	-2	-1.6%
81.5%	114	108	-6	-5.3%
82.7%	103	106	4	3.4%
84.0%	86	102	15	17.7%
85.2%	58	99	41	70.6%
86.4%	58	95	37	63.7%
87.7%	55	82	27	49.0%
88.9%	55	59	4	6.8%
90.1%	55	55	0	0.0%
91.4%	55	55	0	0.0%
92.6%	55	55	0	0.0%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	994	972	-22	-2.3%
1.2%	766	847	81	10.6%
2.5%	662	671	9	1.3%
3.7%	640	667	27	4.2%
4.9%	611	654	43	7.0%
6.2%	597	651	54	9.1%
7.4%	579	623	43	7.5%
8.6%	578	597	20	3.4%
9.9%	549	576	27	4.9%
11.1%	537	565	28	5.3%
12.3%	530	552	22	4.1%
13.6%	502	518	16	3.1%
14.8%	458	507	49	10.7%
16.0%	444	504	60	13.6%
17.3%	443	475	31	7.1%
18.5%	414	452	39	9.4%
19.8%	403	444	41	10.1%
21.0%	402	443	42	10.3%
22.2%	393	426	33	8.4%
23.5%	388	424	36	9.2%
24.7%	377	413	36	9.5%
25.9%	372	406	34	9.2%
27.2%	370	395	25	6.8%
28.4%	362	391	29	8.1%
29.6%	355	391	36	10.0%
30.9%	335	384	49	14.7%
32.1%	328	381	52	16.0%
33.3%	327	359	32	9.7%
34.6%	322	357	35	11.0%
35.8%	316	348	32	10.0%
37.0%	313	348	35	11.0%
38.3%	304	327	24	7.8%
39.5%	298	321	23	7.7%
40.7%	298	320	22	7.5%
42.0%	298	299	1	0.4%
43.2%	293	296	3	1.1%
44.4%	289	292	4	1.3%
45.7%	276	285	9	3.4%
46.9%	261	283	22	8.4%
48.1%	245	281	37	15.0%
49.4%	230	278	48	20.7%
50.6%	226	275	49	21.6%
51.9%	220	274	54	24.6%
53.1%	213	250	37	17.3%
54.3%	204	226	22	10.7%
55.6%	188	219	32	16.8%
56.8%	184	198	14	7.5%
58.0%	180	190	10	5.6%
59.3%	176	189	13	7.5%
60.5%	174	187	13	7.5%
61.7%	155	176	21	13.9%
63.0%	153	175	21	14.0%
64.2%	148	168	20	13.5%
65.4%	144	160	16	11.2%
66.7%	143	149	6	4.2%
67.9%	124	146	23	18.3%
69.1%	115	145	30	26.4%
70.4%	114	111	-3	-2.5%
71.6%	106	107	1	0.6%
72.8%	103	105	2	1.7%
74.1%	101	97	-4	-3.8%
75.3%	96	97	1	0.7%
76.5%	95	90	-5	-5.4%
77.8%	93	86	-7	-7.2%
79.0%	88	86	-3	-3.3%
80.2%	73	84	11	14.6%
81.5%	72	74	2	2.3%
82.7%	64	68	3	5.2%
84.0%	61	59	-1	-2.1%
85.2%	55	59	4	6.9%
86.4%	55	58	3	5.6%
87.7%	55	55	0	0.0%
88.9%	55	55	0	0.0%
90.1%	55	55	0	0.0%
91.4%	55	55	0	0.0%
92.6%	55	55	0	0.0%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	946	1,012	66	7.0%
2.5%	925	986	61	6.6%
3.7%	906	970	64	7.1%
4.9%	900	889	-11	-1.2%
6.2%	825	776	-50	-6.0%
7.4%	759	761	2	0.2%
8.6%	734	756	22	3.0%
9.9%	730	754	24	3.3%
11.1%	671	752	81	12.0%
12.3%	619	631	12	2.0%
13.6%	582	627	45	7.8%
14.8%	580	621	41	7.1%
16.0%	578	598	20	3.5%
17.3%	577	596	20	3.4%
18.5%	572	583	11	1.9%
19.8%	554	561	8	1.4%
21.0%	547	526	-21	-3.9%
22.2%	544	524	-21	-3.8%
23.5%	516	512	-4	-0.8%
24.7%	501	507	6	1.2%
25.9%	499	499	-1	-0.1%
27.2%	483	494	11	2.2%
28.4%	474	487	13	2.7%
29.6%	472	483	11	2.4%
30.9%	470	465	-5	-1.1%
32.1%	447	463	16	3.6%
33.3%	425	447	22	5.2%
34.6%	421	429	8	1.8%
35.8%	416	428	12	2.8%
37.0%	415	415	0	0.0%
38.3%	410	414	4	0.9%
39.5%	405	412	7	1.6%
40.7%	398	402	4	0.9%
42.0%	374	400	26	6.8%
43.2%	373	395	22	5.9%
44.4%	359	383	24	6.7%
45.7%	330	374	44	13.4%
46.9%	327	373	46	14.0%
48.1%	326	372	46	14.0%
49.4%	322	356	34	10.5%
50.6%	319	341	22	6.9%
51.9%	317	333	15	4.9%
53.1%	308	327	19	6.0%
54.3%	301	320	19	6.3%
55.6%	297	315	17	5.9%
56.8%	293	315	21	7.2%
58.0%	289	312	23	8.0%
59.3%	289	308	19	6.6%
60.5%	289	304	16	5.4%
61.7%	288	303	15	5.2%
63.0%	285	301	16	5.8%
64.2%	275	300	25	9.0%
65.4%	273	286	13	4.7%
66.7%	254	280	26	10.4%
67.9%	233	276	43	18.3%
69.1%	233	254	21	8.9%
70.4%	230	240	11	4.7%
71.6%	217	230	13	6.0%
72.8%	211	226	15	7.3%
74.1%	208	200	-8	-3.8%
75.3%	196	192	-4	-1.9%
76.5%	189	187	-1	-0.7%
77.8%	178	182	3	2.0%
79.0%	162	162	0	0.3%
80.2%	160	160	0	0.3%
81.5%	149	160	11	7.5%
82.7%	146	146	0	0.3%
84.0%	141	142	1	1.0%
85.2%	129	131	2	1.5%
86.4%	119	129	11	9.0%
87.7%	118	127	9	7.6%
88.9%	102	123	21	21.0%
90.1%	89	119	30	33.2%
91.4%	78	63	-15	-19.6%
92.6%	55	55	0	0.6%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,054	1,067	13	1.2%
7.4%	1,054	990	-64	-6.0%
8.6%	978	969	-10	-1.0%
9.9%	961	917	-45	-4.6%
11.1%	914	909	-5	-0.5%
12.3%	872	902	31	3.5%
13.6%	808	847	39	4.8%
14.8%	803	818	16	1.9%
16.0%	777	756	-21	-2.7%
17.3%	764	747	-17	-2.2%
18.5%	741	745	3	0.4%
19.8%	739	740	0	0.1%
21.0%	718	718	0	0.0%
22.2%	704	697	-7	-1.0%
23.5%	701	695	-6	-0.9%
24.7%	682	691	9	1.3%
25.9%	680	671	-9	-1.3%
27.2%	667	665	-2	-0.2%
28.4%	656	652	-4	-0.6%
29.6%	652	648	-4	-0.6%
30.9%	614	640	26	4.2%
32.1%	588	623	35	6.0%
33.3%	581	622	41	7.0%
34.6%	576	608	32	5.6%
35.8%	555	599	44	7.9%
37.0%	552	596	45	8.1%
38.3%	550	586	37	6.6%
39.5%	549	566	17	3.2%
40.7%	534	558	24	4.6%
42.0%	532	552	19	3.6%
43.2%	525	526	1	0.3%
44.4%	514	526	12	2.4%
45.7%	504	523	19	3.7%
46.9%	502	520	18	3.6%
48.1%	498	516	17	3.5%
49.4%	495	506	10	2.1%
50.6%	490	503	12	2.5%
51.9%	486	503	17	3.5%
53.1%	461	498	37	8.0%
54.3%	460	497	38	8.2%
55.6%	458	482	24	5.3%
56.8%	457	470	13	2.8%
58.0%	440	463	24	5.4%
59.3%	436	457	22	5.0%
60.5%	431	455	24	5.7%
61.7%	419	455	36	8.6%
63.0%	408	451	43	10.4%
64.2%	408	445	37	9.1%
65.4%	405	431	26	6.4%
66.7%	404	430	26	6.5%
67.9%	401	400	-1	-0.2%
69.1%	399	394	-4	-1.1%
70.4%	393	392	-1	-0.4%
71.6%	391	391	0	0.0%
72.8%	383	386	3	0.8%
74.1%	375	379	4	1.2%
75.3%	371	373	2	0.5%
76.5%	355	372	17	4.7%
77.8%	349	371	22	6.3%
79.0%	347	338	-10	-2.8%
80.2%	341	327	-14	-4.1%
81.5%	327	321	-6	-1.8%
82.7%	323	318	-5	-1.7%
84.0%	321	315	-6	-1.9%
85.2%	283	301	18	6.3%
86.4%	274	287	13	4.7%
87.7%	266	285	18	6.9%
88.9%	262	283	22	8.3%
90.1%	262	267	5	1.9%
91.4%	261	261	0	0.0%
92.6%	257	251	-6	-2.3%
93.8%	251	248	-3	-1.2%
95.1%	239	225	-14	-6.0%
96.3%	229	217	-12	-5.0%
97.5%	225	209	-16	-6.9%
98.8%	222	208	-14	-6.3%
100.0%	208	206	-2	-1.2%

Table SW-45-b

San Luis Reservoir (SWP), End of Month Storage

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,038	1,067	29	2.8%
12.3%	1,012	1,067	55	5.4%
13.6%	1,012	1,061	49	4.8%
14.8%	1,012	1,030	18	1.8%
16.0%	987	1,029	42	4.2%
17.3%	930	970	41	4.4%
18.5%	918	926	8	0.9%
19.8%	912	910	-2	-0.2%
21.0%	911	909	-3	-0.3%
22.2%	904	900	-3	-0.4%
23.5%	875	863	-12	-1.4%
24.7%	869	847	-22	-2.6%
25.9%	868	840	-28	-3.3%
27.2%	849	839	-10	-1.2%
28.4%	846	830	-15	-1.8%
29.6%	815	819	4	0.5%
30.9%	782	792	10	1.3%
32.1%	771	791	20	2.6%
33.3%	764	791	27	3.5%
34.6%	750	776	26	3.5%
35.8%	727	772	45	6.2%
37.0%	722	759	37	5.1%
38.3%	722	729	7	1.0%
39.5%	715	719	4	0.5%
40.7%	711	718	7	1.0%
42.0%	704	707	3	0.4%
43.2%	696	697	1	0.1%
44.4%	694	696	2	0.2%
45.7%	691	694	4	0.6%
46.9%	690	686	-4	-0.6%
48.1%	689	673	-16	-2.3%
49.4%	687	667	-20	-2.9%
50.6%	677	660	-17	-2.4%
51.9%	675	649	-25	-3.8%
53.1%	639	643	4	0.6%
54.3%	610	627	17	2.7%
55.6%	605	622	17	2.7%
56.8%	604	610	6	1.0%
58.0%	597	604	8	1.3%
59.3%	593	598	5	0.9%
60.5%	583	591	8	1.4%
61.7%	579	591	12	2.1%
63.0%	561	580	19	3.4%
64.2%	558	571	14	2.4%
65.4%	540	559	19	3.5%
66.7%	537	558	20	3.8%
67.9%	536	535	-1	-0.2%
69.1%	535	532	-3	-0.6%
70.4%	528	529	1	0.1%
71.6%	527	525	-2	-0.4%
72.8%	521	514	-7	-1.4%
74.1%	510	489	-22	-4.2%
75.3%	503	479	-24	-4.8%
76.5%	496	477	-19	-3.8%
77.8%	491	469	-23	-4.6%
79.0%	489	469	-20	-4.1%
80.2%	470	464	-6	-1.3%
81.5%	454	464	9	2.1%
82.7%	420	464	44	10.5%
84.0%	406	460	54	13.2%
85.2%	404	457	54	13.3%
86.4%	400	457	57	14.4%
87.7%	392	406	14	3.5%
88.9%	387	401	14	3.6%
90.1%	375	388	13	3.5%
91.4%	356	387	31	8.6%
92.6%	341	374	33	9.8%
93.8%	337	362	25	7.5%
95.1%	333	352	19	5.7%
96.3%	328	338	11	3.3%
97.5%	309	310	1	0.5%
98.8%	308	309	1	0.4%
100.0%	230	305	74	32.3%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,067	1,067	0	0.0%
12.3%	1,067	1,067	0	0.0%
13.6%	1,067	1,067	0	0.0%
14.8%	1,067	1,067	0	0.0%
16.0%	1,067	1,067	0	0.0%
17.3%	1,067	1,067	0	0.0%
18.5%	1,067	1,067	0	0.0%
19.8%	1,067	1,067	0	0.0%
21.0%	1,065	1,067	2	0.2%
22.2%	1,059	1,067	8	0.7%
23.5%	1,054	1,067	13	1.2%
24.7%	1,042	1,045	3	0.3%
25.9%	1,026	1,025	-1	-0.1%
27.2%	960	976	16	1.7%
28.4%	957	975	17	1.8%
29.6%	954	961	7	0.7%
30.9%	954	952	-2	-0.2%
32.1%	954	944	-10	-1.0%
33.3%	949	942	-7	-0.8%
34.6%	945	933	-12	-1.2%
35.8%	929	925	-4	-0.5%
37.0%	907	913	6	0.7%
38.3%	899	899	0	0.0%
39.5%	877	882	5	0.6%
40.7%	873	876	3	0.4%
42.0%	873	875	2	0.3%
43.2%	871	857	-14	-1.6%
44.4%	867	854	-13	-1.5%
45.7%	858	850	-8	-0.9%
46.9%	852	846	-6	-0.6%
48.1%	844	840	-4	-0.5%
49.4%	841	815	-25	-3.0%
50.6%	835	802	-33	-3.9%
51.9%	834	795	-39	-4.6%
53.1%	831	769	-63	-7.5%
54.3%	820	760	-60	-7.3%
55.6%	816	758	-58	-7.1%
56.8%	798	758	-40	-5.0%
58.0%	745	755	10	1.4%
59.3%	734	748	14	1.9%
60.5%	705	746	41	5.9%
61.7%	703	739	36	5.2%
63.0%	700	731	31	4.4%
64.2%	698	702	5	0.6%
65.4%	681	687	6	0.9%
66.7%	670	677	8	1.2%
67.9%	669	660	-9	-1.4%
69.1%	666	656	-10	-1.5%
70.4%	656	652	-4	-0.6%
71.6%	656	652	-4	-0.6%
72.8%	654	651	-3	-0.4%
74.1%	621	642	21	3.4%
75.3%	606	633	27	4.5%
76.5%	600	623	23	3.9%
77.8%	589	600	11	1.8%
79.0%	580	588	8	1.4%
80.2%	579	581	2	0.4%
81.5%	572	575	3	0.5%
82.7%	564	565	2	0.3%
84.0%	563	553	-10	-1.8%
85.2%	551	552	1	0.2%
86.4%	547	551	5	0.9%
87.7%	527	548	21	4.0%
88.9%	524	546	22	4.2%
90.1%	520	537	17	3.3%
91.4%	503	493	-10	-2.0%
92.6%	485	490	5	1.0%
93.8%	480	485	5	1.0%
95.1%	478	484	6	1.3%
96.3%	454	477	23	5.1%
97.5%	441	452	11	2.4%
98.8%	313	439	126	40.4%
100.0%	256	321	65	25.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,066	-1	-0.1%
3.7%	1,039	1,039	0	0.0%
4.9%	977	1,034	57	5.8%
6.2%	961	977	16	1.7%
7.4%	958	958	-1	-0.1%
8.6%	956	957	0	0.0%
9.9%	955	951	-4	-0.4%
11.1%	953	949	-4	-0.4%
12.3%	942	942	0	0.0%
13.6%	940	936	-3	-0.3%
14.8%	936	934	-3	-0.3%
16.0%	934	932	-2	-0.2%
17.3%	933	931	-2	-0.2%
18.5%	931	929	-2	-0.2%
19.8%	931	929	-2	-0.2%
21.0%	907	928	21	2.3%
22.2%	893	923	30	3.4%
23.5%	892	902	10	1.1%
24.7%	878	891	13	1.5%
25.9%	876	877	1	0.1%
27.2%	873	871	-2	-0.2%
28.4%	871	869	-2	-0.2%
29.6%	867	866	-1	-0.2%
30.9%	855	832	-23	-2.6%
32.1%	835	820	-15	-1.8%
33.3%	831	814	-17	-2.0%
34.6%	829	808	-21	-2.5%
35.8%	824	801	-24	-2.9%
37.0%	815	784	-32	-3.9%
38.3%	815	774	-42	-5.1%
39.5%	811	771	-40	-4.9%
40.7%	801	771	-31	-3.8%
42.0%	799	765	-34	-4.2%
43.2%	780	758	-22	-2.9%
44.4%	777	752	-25	-3.2%
45.7%	770	749	-21	-2.7%
46.9%	753	736	-17	-2.3%
48.1%	743	734	-9	-1.2%
49.4%	742	732	-10	-1.3%
50.6%	732	718	-14	-2.0%
51.9%	729	714	-15	-2.0%
53.1%	706	710	4	0.5%
54.3%	693	679	-14	-2.0%
55.6%	686	669	-17	-2.5%
56.8%	682	667	-15	-2.2%
58.0%	648	650	2	0.3%
59.3%	648	647	-2	-0.2%
60.5%	646	631	-16	-2.4%
61.7%	641	628	-13	-2.1%
63.0%	631	622	-9	-1.4%
64.2%	623	622	-1	-0.1%
65.4%	608	618	10	1.7%
66.7%	605	613	8	1.3%
67.9%	591	612	21	3.6%
69.1%	586	579	-7	-1.3%
70.4%	577	575	-1	-0.2%
71.6%	574	575	1	0.2%
72.8%	574	567	-8	-1.3%
74.1%	565	561	-4	-0.7%
75.3%	561	553	-8	-1.3%
76.5%	556	552	-5	-0.8%
77.8%	537	546	8	1.6%
79.0%	536	543	7	1.3%
80.2%	533	540	6	1.2%
81.5%	530	536	6	1.2%
82.7%	527	536	9	1.6%
84.0%	524	532	8	1.5%
85.2%	508	504	-4	-0.9%
86.4%	505	497	-8	-1.6%
87.7%	498	490	-8	-1.6%
88.9%	489	490	1	0.2%
90.1%	488	486	-2	-0.4%
91.4%	457	482	25	5.5%
92.6%	448	462	14	3.1%
93.8%	445	438	-8	-1.7%
95.1%	438	416	-22	-5.0%
96.3%	432	411	-20	-4.7%
97.5%	417	407	-10	-2.5%
98.8%	308	391	84	27.2%
100.0%	244	313	69	28.1%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	994	994	0	0.0%
3.7%	986	984	-2	-0.2%
4.9%	845	965	120	14.2%
6.2%	842	842	0	0.0%
7.4%	803	804	1	0.1%
8.6%	792	776	-16	-2.0%
9.9%	789	743	-45	-5.7%
11.1%	777	738	-40	-5.1%
12.3%	775	715	-60	-7.7%
13.6%	748	706	-42	-5.6%
14.8%	743	704	-39	-5.2%
16.0%	736	698	-38	-5.1%
17.3%	718	695	-23	-3.2%
18.5%	714	691	-22	-3.1%
19.8%	699	689	-11	-1.5%
21.0%	695	683	-12	-1.7%
22.2%	694	682	-12	-1.8%
23.5%	691	676	-15	-2.1%
24.7%	690	676	-15	-2.1%
25.9%	689	673	-16	-2.3%
27.2%	675	672	-3	-0.4%
28.4%	674	667	-7	-1.0%
29.6%	659	651	-8	-1.3%
30.9%	646	642	-4	-0.6%
32.1%	645	640	-5	-0.7%
33.3%	642	637	-5	-0.8%
34.6%	621	630	9	1.5%
35.8%	611	595	-16	-2.6%
37.0%	596	588	-8	-1.4%
38.3%	589	584	-5	-0.9%
39.5%	586	582	-3	-0.5%
40.7%	582	566	-16	-2.7%
42.0%	579	543	-37	-6.3%
43.2%	576	543	-34	-5.9%
44.4%	574	534	-40	-6.9%
45.7%	556	521	-35	-6.3%
46.9%	546	516	-31	-5.6%
48.1%	539	510	-29	-5.3%
49.4%	534	506	-28	-5.2%
50.6%	519	506	-13	-2.5%
51.9%	511	505	-6	-1.2%
53.1%	509	501	-8	-1.6%
54.3%	505	497	-8	-1.6%
55.6%	502	494	-8	-1.6%
56.8%	498	492	-6	-1.2%
58.0%	492	490	-2	-0.4%
59.3%	490	488	-2	-0.5%
60.5%	488	481	-7	-1.4%
61.7%	486	478	-8	-1.6%
63.0%	476	475	-1	-0.2%
64.2%	463	461	-2	-0.5%
65.4%	463	450	-13	-2.8%
66.7%	460	447	-13	-2.8%
67.9%	450	445	-5	-1.1%
69.1%	448	441	-7	-1.5%
70.4%	446	438	-8	-1.7%
71.6%	445	437	-8	-1.8%
72.8%	439	435	-4	-0.9%
74.1%	439	421	-18	-4.1%
75.3%	439	418	-21	-4.8%
76.5%	436	416	-20	-4.6%
77.8%	423	412	-11	-2.6%
79.0%	415	410	-5	-1.2%
80.2%	406	406	-1	-0.2%
81.5%	401	397	-4	-1.0%
82.7%	396	390	-6	-1.5%
84.0%	392	383	-9	-2.2%
85.2%	383	379	-4	-1.1%
86.4%	380	378	-1	-0.4%
87.7%	378	377	-1	-0.3%
88.9%	370	367	-3	-0.8%
90.1%	360	356	-4	-1.1%
91.4%	353	349	-3	-1.0%
92.6%	351	337	-15	-4.2%
93.8%	344	336	-7	-2.1%
95.1%	314	317	3	0.9%
96.3%	313	303	-9	-3.0%
97.5%	297	291	-6	-2.0%
98.8%	268	283	15	5.6%
100.0%	232	259	27	11.6%

Table SW-45-b

San Luis Reservoir (SWP), End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	808	810	2	0.2%
2.5%	806	804	-2	-0.2%
3.7%	783	783	0	-0.1%
4.9%	706	755	48	6.8%
6.2%	680	694	14	2.0%
7.4%	654	630	-24	-3.7%
8.6%	626	604	-22	-3.6%
9.9%	622	602	-20	-3.1%
11.1%	612	564	-48	-7.8%
12.3%	595	549	-46	-7.8%
13.6%	586	536	-50	-8.5%
14.8%	568	530	-38	-6.7%
16.0%	538	522	-16	-2.9%
17.3%	523	518	-4	-0.8%
18.5%	519	511	-9	-1.7%
19.8%	516	500	-16	-3.1%
21.0%	509	494	-14	-2.8%
22.2%	485	482	-3	-0.6%
23.5%	479	452	-27	-5.6%
24.7%	478	450	-29	-6.0%
25.9%	470	448	-22	-4.7%
27.2%	452	442	-10	-2.2%
28.4%	451	436	-15	-3.4%
29.6%	448	431	-17	-3.8%
30.9%	444	422	-22	-5.0%
32.1%	443	421	-23	-5.1%
33.3%	430	412	-18	-4.2%
34.6%	426	408	-19	-4.4%
35.8%	425	405	-19	-4.6%
37.0%	423	403	-20	-4.6%
38.3%	421	398	-23	-5.4%
39.5%	417	392	-26	-6.1%
40.7%	407	387	-20	-4.9%
42.0%	407	385	-22	-5.3%
43.2%	400	385	-15	-3.7%
44.4%	396	382	-14	-3.5%
45.7%	393	382	-11	-2.7%
46.9%	392	369	-23	-5.9%
48.1%	391	354	-37	-9.4%
49.4%	367	344	-23	-6.3%
50.6%	351	343	-8	-2.2%
51.9%	348	318	-30	-8.7%
53.1%	342	311	-31	-9.0%
54.3%	341	307	-33	-9.8%
55.6%	335	305	-31	-9.2%
56.8%	332	299	-33	-10.0%
58.0%	326	299	-27	-8.2%
59.3%	318	295	-23	-7.1%
60.5%	300	294	-6	-2.0%
61.7%	297	290	-7	-2.4%
63.0%	290	285	-5	-1.9%
64.2%	289	275	-14	-4.8%
65.4%	284	262	-22	-7.6%
66.7%	281	260	-22	-7.7%
67.9%	274	256	-19	-6.8%
69.1%	273	254	-19	-6.9%
70.4%	258	248	-10	-3.8%
71.6%	254	243	-10	-4.1%
72.8%	248	236	-12	-4.8%
74.1%	244	236	-9	-3.5%
75.3%	232	233	0	0.2%
76.5%	227	230	3	1.3%
77.8%	227	221	-6	-2.8%
79.0%	227	216	-10	-4.6%
80.2%	216	214	-2	-0.8%
81.5%	210	212	2	1.0%
82.7%	209	207	-3	-1.3%
84.0%	196	182	-14	-7.2%
85.2%	195	178	-17	-8.8%
86.4%	183	178	-5	-2.5%
87.7%	182	172	-11	-5.8%
88.9%	179	167	-12	-6.9%
90.1%	176	166	-11	-6.0%
91.4%	172	164	-7	-4.3%
92.6%	165	144	-21	-12.9%
93.8%	152	120	-33	-21.6%
95.1%	145	117	-28	-19.0%
96.3%	134	105	-28	-21.0%
97.5%	131	94	-38	-28.8%
98.8%	124	81	-43	-35.0%
100.0%	116	80	-37	-31.4%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	746	741	-5	-0.7%
2.5%	737	709	-28	-3.7%
3.7%	713	694	-19	-2.6%
4.9%	710	675	-35	-4.9%
6.2%	689	640	-49	-7.2%
7.4%	677	610	-67	-10.0%
8.6%	661	596	-65	-9.9%
9.9%	644	591	-53	-8.3%
11.1%	624	581	-43	-6.9%
12.3%	574	559	-15	-2.7%
13.6%	568	541	-27	-4.7%
14.8%	541	536	-5	-0.9%
16.0%	534	524	-10	-1.8%
17.3%	523	522	-1	-0.2%
18.5%	491	497	5	1.1%
19.8%	490	495	5	1.0%
21.0%	490	491	1	0.2%
22.2%	473	490	17	3.6%
23.5%	465	479	14	3.0%
24.7%	462	465	3	0.7%
25.9%	456	462	6	1.4%
27.2%	451	462	12	2.6%
28.4%	450	455	6	1.3%
29.6%	448	455	7	1.6%
30.9%	434	438	5	1.0%
32.1%	429	432	3	0.7%
33.3%	421	427	6	1.3%
34.6%	421	419	-2	-0.4%
35.8%	415	414	-1	-0.3%
37.0%	410	401	-8	-2.0%
38.3%	406	398	-8	-2.0%
39.5%	405	393	-12	-2.9%
40.7%	402	392	-9	-2.3%
42.0%	399	390	-9	-2.2%
43.2%	389	377	-12	-3.1%
44.4%	385	376	-9	-2.3%
45.7%	371	373	2	0.6%
46.9%	370	371	1	0.2%
48.1%	366	359	-7	-2.0%
49.4%	360	353	-7	-1.9%
50.6%	351	352	1	0.3%
51.9%	351	345	-6	-1.8%
53.1%	328	341	13	3.8%
54.3%	326	327	1	0.4%
55.6%	323	324	2	0.5%
56.8%	323	323	1	0.2%
58.0%	318	316	-2	-0.5%
59.3%	311	316	5	1.6%
60.5%	302	308	5	1.8%
61.7%	301	305	4	1.4%
63.0%	297	300	3	1.0%
64.2%	294	294	0	0.0%
65.4%	282	288	7	2.3%
66.7%	281	282	2	0.5%
67.9%	273	263	-10	-3.5%
69.1%	272	262	-10	-3.7%
70.4%	268	260	-7	-2.7%
71.6%	264	259	-5	-2.1%
72.8%	255	258	4	1.5%
74.1%	251	237	-13	-5.3%
75.3%	246	234	-12	-5.0%
76.5%	244	228	-16	-6.5%
77.8%	241	223	-18	-7.6%
79.0%	239	219	-20	-8.3%
80.2%	238	207	-31	-13.0%
81.5%	237	207	-30	-12.8%
82.7%	211	195	-16	-7.8%
84.0%	202	192	-10	-5.0%
85.2%	201	191	-10	-5.1%
86.4%	194	186	-8	-4.0%
87.7%	191	149	-42	-22.0%
88.9%	177	147	-30	-16.8%
90.1%	167	147	-20	-12.2%
91.4%	165	133	-33	-19.8%
92.6%	164	132	-33	-20.0%
93.8%	150	120	-30	-19.8%
95.1%	137	102	-35	-25.4%
96.3%	125	88	-37	-29.6%
97.5%	119	81	-37	-31.5%
98.8%	107	74	-33	-30.7%
100.0%	55	70	15	28.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	998	998	0	0.0%
1.2%	658	658	0	0.0%
2.5%	632	636	5	0.7%
3.7%	619	631	12	2.0%
4.9%	587	600	14	2.3%
6.2%	579	579	0	0.0%
7.4%	562	576	14	2.5%
8.6%	561	564	2	0.4%
9.9%	558	515	-43	-7.7%
11.1%	557	511	-47	-8.4%
12.3%	542	503	-39	-7.1%
13.6%	511	500	-11	-2.1%
14.8%	500	495	-6	-1.1%
16.0%	486	476	-11	-2.2%
17.3%	485	475	-9	-2.0%
18.5%	476	475	-1	-0.1%
19.8%	467	466	-1	-0.3%
21.0%	465	458	-7	-1.5%
22.2%	463	453	-10	-2.2%
23.5%	457	446	-10	-2.3%
24.7%	447	433	-14	-3.2%
25.9%	428	431	3	0.7%
27.2%	416	427	11	2.7%
28.4%	412	422	10	2.3%
29.6%	409	416	7	1.6%
30.9%	403	399	-4	-0.9%
32.1%	403	394	-9	-2.3%
33.3%	400	389	-11	-2.6%
34.6%	390	381	-9	-2.4%
35.8%	381	378	-3	-0.9%
37.0%	378	377	-1	-0.2%
38.3%	377	365	-13	-3.4%
39.5%	375	364	-11	-2.9%
40.7%	369	346	-23	-6.2%
42.0%	367	346	-21	-5.8%
43.2%	360	344	-17	-4.7%
44.4%	342	334	-7	-2.1%
45.7%	336	333	-3	-0.8%
46.9%	336	331	-4	-1.3%
48.1%	310	326	15	4.9%
49.4%	307	325	18	5.8%
50.6%	303	315	13	4.2%
51.9%	298	291	-6	-2.1%
53.1%	296	274	-22	-7.4%
54.3%	294	274	-20	-6.8%
55.6%	282	272	-10	-3.7%
56.8%	272	255	-18	-6.4%
58.0%	271	254	-17	-6.4%
59.3%	263	242	-21	-8.1%
60.5%	262	238	-25	-9.4%
61.7%	257	230	-27	-10.4%
63.0%	243	221	-22	-8.9%
64.2%	236	217	-19	-8.2%
65.4%	232	215	-17	-7.4%
66.7%	227	214	-13	-5.8%
67.9%	224	214	-11	-4.7%
69.1%	210	213	3	1.5%
70.4%	206	202	-4	-2.0%
71.6%	205	198	-7	-3.5%
72.8%	197	189	-7	-3.8%
74.1%	196	189	-7	-3.8%
75.3%	191	181	-9	-4.9%
76.5%	172	179	7	4.1%
77.8%	169	169	0	0.1%
79.0%	162	161	0	-0.3%
80.2%	159	157	-2	-1.2%
81.5%	146	152	7	4.5%
82.7%	144	152	8	5.7%
84.0%	142	152	10	6.7%
85.2%	137	119	-18	-13.2%
86.4%	135	100	-35	-25.7%
87.7%	134	94	-40	-29.9%
88.9%	131	93	-38	-29.0%
90.1%	129	85	-44	-33.9%
91.4%	124	74	-50	-40.2%
92.6%	109	64	-46	-41.8%
93.8%	103	55	-48	-46.8%
95.1%	93	55	-38	-40.9%
96.3%	85	55	-30	-35.4%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,014	1,014	0	0.0%
1.2%	626	626	0	-0.1%
2.5%	584	597	13	2.3%
3.7%	561	577	16	2.8%
4.9%	498	531	32	6.5%
6.2%	455	488	33	7.2%
7.4%	435	473	38	8.8%
8.6%	433	462	29	6.7%
9.9%	419	459	40	9.6%
11.1%	402	457	55	13.7%
12.3%	399	449	50	12.5%
13.6%	382	441	59	15.5%
14.8%	354	418	64	18.0%
16.0%	353	414	61	17.4%
17.3%	335	366	32	9.5%
18.5%	332	350	18	5.4%
19.8%	331	340	8	2.4%
21.0%	330	334	4	1.1%
22.2%	325	329	4	1.3%
23.5%	324	324	0	0.1%
24.7%	323	324	0	0.1%
25.9%	323	321	-2	-0.6%
27.2%	322	320	-3	-0.8%
28.4%	322	320	-2	-0.6%
29.6%	321	318	-3	-1.0%
30.9%	320	314	-5	-1.7%
32.1%	315	310	-5	-1.5%
33.3%	310	310	0	0.0%
34.6%	310	310	0	0.0%
35.8%	310	310	0	0.0%
37.0%	310	310	0	0.0%
38.3%	310	310	0	0.0%
39.5%	310	310	0	0.0%
40.7%	310	310	0	0.0%
42.0%	310	310	0	0.0%
43.2%	310	310	0	0.0%
44.4%	310	310	0	0.0%
45.7%	310	310	0	0.0%
46.9%	310	310	0	0.0%
48.1%	310	310	0	0.0%
49.4%	310	310	0	0.0%
50.6%	310	310	0	0.0%
51.9%	310	310	0	0.0%
53.1%	310	310	0	0.0%
54.3%	310	309	-1	-0.3%
55.6%	310	306	-4	-1.3%
56.8%	310	300	-10	-3.2%
58.0%	310	295	-15	-4.9%
59.3%	310	280	-30	-9.5%
60.5%	285	278	-7	-2.5%
61.7%	280	278	-2	-0.9%
63.0%	279	277	-1	-0.4%
64.2%	270	271	1	0.3%
65.4%	263	267	4	1.6%
66.7%	262	264	1	0.5%
67.9%	257	260	3	1.3%
69.1%	254	258	4	1.6%
70.4%	238	257	19	8.1%
71.6%	233	240	7	3.1%
72.8%	216	239	23	10.8%
74.1%	215	234	19	8.6%
75.3%	203	226	23	11.2%
76.5%	194	223	28	14.6%
77.8%	181	222	41	22.5%
79.0%	174	194	20	11.7%
80.2%	172	188	16	9.6%
81.5%	171	188	16	9.5%
82.7%	162	163	2	1.0%
84.0%	158	161	3	1.7%
85.2%	155	160	6	3.8%
86.4%	149	155	7	4.4%
87.7%	130	138	8	6.5%
88.9%	110	135	25	22.6%
90.1%	108	130	21	19.7%
91.4%	100	129	29	28.8%
92.6%	89	90	2	1.7%
93.8%	66	55	-11	-16.6%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

Sacramento-San Joaquin Delta Operations

Summary Tables and Bar Charts

Table SW-30-a
Sacramento River below Hood, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	10,769	14,464	23,749	35,717	43,225	36,124	20,758	11,827	13,024	18,677	13,160	16,704
WSIP 2070 With Project	11,189	14,618	23,046	34,403	42,168	34,947	20,525	11,844	13,402	19,188	13,762	17,771
Difference	420	154	-703	-1,314	-1,057	-1,176	-232	18	378	511	602	1,067
Percent Difference[3]	3.9%	1.1%	-3.0%	-3.7%	-2.4%	-3.3%	-1.1%	0.1%	2.9%	2.7%	4.6%	6.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	13,010	17,640	27,403	58,490	65,044	54,371	33,586	13,884	14,752	20,999	15,052	27,130
WSIP 2070 With Project	13,765	17,254	25,909	57,654	64,578	53,786	33,375	13,744	14,985	21,067	15,438	27,068
Difference	754	-386	-1,493	-836	-466	-585	-211	-140	234	68	387	-63
Percent Difference	5.8%	-2.2%	-5.4%	-1.4%	-0.7%	-1.1%	-0.6%	-1.0%	1.6%	0.3%	2.6%	-0.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	12,912	17,333	21,091	45,071	60,608	44,667	19,954	13,311	14,001	22,272	15,345	20,807
WSIP 2070 With Project	13,464	17,459	20,721	43,492	59,740	43,166	19,348	13,197	14,093	23,049	15,912	20,568
Difference	552	126	-370	-1,579	-868	-1,502	-606	-115	92	778	567	-238
Percent Difference	4.3%	0.7%	-1.8%	-3.5%	-1.4%	-3.4%	-3.0%	-0.9%	0.7%	3.5%	3.7%	-1.1%
Below Normal (15.9%)												
WSIP 2070 Without Project	9,338	15,858	28,009	28,074	31,335	29,958	17,088	11,829	13,035	21,299	14,328	11,210
WSIP 2070 With Project	10,126	16,347	28,580	25,626	30,266	27,998	16,975	11,668	13,455	21,670	14,887	13,195
Difference	788	489	571	-2,447	-1,069	-1,960	-113	-160	420	371	559	1,986
Percent Difference	8.4%	3.1%	2.0%	-8.7%	-3.4%	-6.5%	-0.7%	-1.4%	3.2%	1.7%	3.9%	17.7%
Dry (24.4%)												
WSIP 2070 Without Project	9,822	12,146	23,653	18,177	28,591	24,810	12,979	10,648	12,145	16,229	10,746	9,990
WSIP 2070 With Project	9,958	12,556	23,412	16,902	26,403	23,038	12,642	11,060	12,723	17,114	12,026	12,460
Difference	136	410	-241	-1,276	-2,188	-1,771	-336	411	578	884	1,281	2,470
Percent Difference	1.4%	3.4%	-1.0%	-7.0%	-7.7%	-7.1%	-2.6%	3.9%	4.8%	5.4%	11.9%	24.7%
Critical (14.6%)												
WSIP 2070 Without Project	7,076	7,307	13,812	15,311	17,286	14,291	10,639	7,969	9,838	11,588	9,819	7,492
WSIP 2070 With Project	6,725	7,867	12,367	14,369	16,673	13,974	10,749	7,986	10,414	12,346	9,832	8,873
Difference	-351	560	-1,445	-943	-613	-317	110	18	576	758	13	1,381
Percent Difference	-5.0%	7.7%	-10.5%	-6.2%	-3.5%	-2.2%	1.0%	0.2%	5.9%	6.5%	0.1%	18.4%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-31-a
Yolo Bypass, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	145	198	4,415	16,387	21,977	11,678	2,512	110	83	48	111	102
WSIP 2070 With Project	320	190	4,130	15,772	21,148	10,994	2,359	109	83	69	282	344
Difference	176	-8	-285	-615	-830	-684	-153	0	0	21	171	242
Percent Difference[3]			-6.5%	-3.8%	-3.8%	-5.9%	-6.1%					
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	87	229	5,255	45,154	51,837	31,217	6,942	140	120	48	147	167
WSIP 2070 With Project	394	198	5,194	43,694	50,604	29,750	6,545	139	120	48	357	522
Difference	306	-31	-61	-1,461	-1,233	-1,467	-397	-1	0	0	210	354
Percent Difference			-1.2%	-3.2%	-2.4%	-4.7%	-5.7%					
Above Normal (13.4%)												
WSIP 2070 Without Project	35	159	2,379	12,344	32,290	8,356	947	196	65	48	98	67
WSIP 2070 With Project	265	139	1,951	11,580	30,562	7,847	750	196	65	174	240	345
Difference	229	-20	-427	-764	-1,728	-509	-197	0	0	126	142	278
Percent Difference			-18.0%	-6.2%	-5.4%	-6.1%	-20.8%					
Below Normal (15.9%)												
WSIP 2070 Without Project	48	229	3,748	1,976	3,139	1,489	614	66	67	48	118	91
WSIP 2070 With Project	282	233	3,284	1,761	2,210	1,392	610	66	67	76	268	379
Difference	234	3	-464	-215	-929	-97	-5	0	0	27	150	288
Percent Difference		1.4%	-12.4%	-10.9%	-29.6%	-6.5%	-0.7%				127.1%	
Dry (24.4%)												
WSIP 2070 Without Project	403	263	7,272	226	2,689	1,559	292	76	67	48	61	61
WSIP 2070 With Project	440	280	6,789	161	2,455	1,097	292	76	67	48	274	225
Difference	37	17	-483	-64	-233	-462	0	0	0	0	213	164
Percent Difference	9.2%	6.5%	-6.6%	-28.5%	-8.7%	-29.6%	0.0%					
Critical (14.6%)												
WSIP 2070 Without Project	41	24	425	310	384	291	107	68	64	48	120	75
WSIP 2070 With Project	53	24	305	312	366	135	107	68	64	48	185	121
Difference	11	0	-120	2	-18	-156	0	0	0	0	65	45
Percent Difference	27.1%	-0.6%	-28.3%	0.8%	-4.7%	-53.7%	0.0%	0.0%	0.0%	0.0%	54.3%	60.5%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

Table SW-32-a
Sacramento River at Rio Vista, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	6,473	10,681	23,503	46,796	58,829	41,974	19,091	8,633	7,128	10,446	7,194	11,099
WSIP 2070 With Project	6,999	10,758	22,538	45,035	57,074	40,261	18,734	8,647	7,441	10,870	7,768	11,988
Difference	526	78	-965	-1,761	-1,755	-1,713	-357	14	313	424	573	889
Percent Difference[3]	8.1%	0.7%	-4.1%	-3.8%	-3.0%	-4.1%	-1.9%	0.2%	4.4%	4.1%	8.0%	8.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	8,204	13,707	27,498	95,923	107,895	77,618	34,793	10,467	8,382	11,992	8,482	20,907
WSIP 2070 With Project	9,229	13,269	25,992	93,733	106,256	75,640	34,212	10,344	8,708	12,038	8,951	21,041
Difference	1,025	-437	-1,506	-2,190	-1,639	-1,978	-581	-124	326	46	469	133
Percent Difference	12.5%	-3.2%	-5.5%	-2.3%	-1.5%	-2.5%	-1.7%	-1.2%	3.9%	0.4%	5.5%	0.6%
Above Normal (13.4%)												
WSIP 2070 Without Project	8,017	13,241	19,030	51,055	84,667	45,975	16,792	10,012	7,806	12,837	8,667	12,486
WSIP 2070 With Project	8,740	13,372	18,202	48,915	82,183	44,157	16,066	9,911	7,870	13,928	9,192	12,605
Difference	723	131	-827	-2,141	-2,484	-1,819	-726	-101	64	1,092	525	118
Percent Difference	9.0%	1.0%	-4.3%	-4.2%	-2.9%	-4.0%	-4.3%	-1.0%	0.8%	8.5%	6.1%	0.9%
Below Normal (15.9%)												
WSIP 2070 Without Project	5,022	11,801	26,641	25,475	29,398	26,357	13,937	8,586	7,088	12,185	7,988	6,106
WSIP 2070 With Project	5,844	12,161	26,638	23,125	27,536	24,546	13,831	8,446	7,379	12,461	8,513	7,724
Difference	822	360	-3	-2,349	-1,862	-1,812	-107	-140	291	276	525	1,618
Percent Difference	16.4%	3.1%	0.0%	-9.2%	-6.3%	-6.9%	-0.8%	-1.6%	4.1%	2.3%	6.6%	26.5%
Dry (24.4%)												
WSIP 2070 Without Project	6,030	8,492	26,342	15,000	26,655	21,925	10,081	7,557	6,465	8,814	5,510	5,282
WSIP 2070 With Project	6,149	8,799	25,619	13,823	24,510	19,918	9,784	7,912	6,863	9,411	6,579	7,086
Difference	119	307	-723	-1,177	-2,145	-2,007	-297	355	398	597	1,069	1,804
Percent Difference	2.0%	3.6%	-2.7%	-7.8%	-8.0%	-9.2%	-2.9%	4.7%	6.2%	6.8%	19.4%	34.1%
Critical (14.6%)												
WSIP 2070 Without Project	3,617	4,211	10,815	12,542	14,338	11,411	7,775	5,241	4,940	5,740	5,000	3,679
WSIP 2070 With Project	3,241	4,667	9,453	11,722	13,768	10,967	7,871	5,256	5,336	6,245	5,070	4,597
Difference	-376	456	-1,362	-820	-570	-444	96	15	396	505	71	918
Percent Difference	-10.4%	10.8%	-12.6%	-6.5%	-4.0%	-3.9%	1.2%	0.3%	8.0%	8.8%	1.4%	25.0%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

Table SW-33-a
Sacramento/San Joaquin River Delta, Monthly Outflow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Outflow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	7,754	10,742	25,856	56,001	71,602	53,124	28,858	14,055	8,169	9,249	4,369	10,125
WSIP 2070 With Project	8,058	10,623	24,544	54,089	69,784	51,313	28,436	13,995	8,470	9,277	4,637	10,536
Difference	304	-119	-1,312	-1,912	-1,818	-1,812	-422	-60	301	28	268	411
Percent Difference[3]	3.9%	-1.1%	-5.1%	-3.4%	-2.5%	-3.4%	-1.5%	-0.4%	3.7%	0.3%	6.1%	4.1%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	10,697	15,615	30,503	118,044	131,907	101,202	53,090	21,136	10,177	12,158	4,000	21,214
WSIP 2070 With Project	11,064	15,181	28,660	115,794	130,392	99,021	52,458	20,910	10,374	12,119	4,213	21,451
Difference	367	-434	-1,843	-2,251	-1,516	-2,182	-631	-225	197	-39	213	237
Percent Difference	3.4%	-2.8%	-6.0%	-1.9%	-1.1%	-2.2%	-1.2%	-1.1%	1.9%	-0.3%		1.1%
Above Normal (13.4%)												
WSIP 2070 Without Project	8,878	12,100	17,493	60,774	104,346	56,760	26,907	15,536	8,039	13,271	4,050	12,457
WSIP 2070 With Project	9,238	11,897	16,667	58,621	101,743	55,114	26,095	15,397	8,118	13,671	4,147	12,706
Difference	360	-203	-826	-2,152	-2,603	-1,646	-812	-139	79	400	97	248
Percent Difference	4.1%	-1.7%	-4.7%	-3.5%	-2.5%	-2.9%	-3.0%	-0.9%	1.0%	3.0%	2.4%	2.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	5,691	10,838	31,345	29,246	35,077	31,715	21,553	12,730	7,598	9,741	4,299	3,258
WSIP 2070 With Project	6,450	10,946	30,413	26,612	33,158	29,942	21,444	12,460	7,820	9,765	4,430	3,963
Difference	759	109	-932	-2,633	-1,918	-1,774	-109	-270	223	24	131	705
Percent Difference	13.3%	1.0%	-3.0%	-9.0%	-5.5%	-5.6%	-0.5%	-2.1%	2.9%	0.2%	3.1%	21.6%
Dry (24.4%)												
WSIP 2070 Without Project	6,665	7,274	29,616	15,807	32,236	26,374	14,807	9,608	7,134	5,937	4,858	3,105
WSIP 2070 With Project	6,876	6,889	29,015	14,530	29,720	24,049	14,353	9,921	7,630	5,826	5,343	3,626
Difference	212	-385	-602	-1,277	-2,515	-2,325	-454	313	496	-111	485	522
Percent Difference	3.2%	-5.3%	-2.0%	-8.1%	-7.8%	-8.8%	-3.1%	3.3%	6.9%	-1.9%	10.0%	16.8%
Critical (14.6%)												
WSIP 2070 Without Project	4,399	4,612	11,242	13,176	16,105	13,400	9,476	6,202	6,282	4,250	4,722	3,104
WSIP 2070 With Project	4,175	5,454	9,037	11,942	15,621	13,053	9,580	6,180	6,773	4,317	5,053	3,535
Difference	-224	842	-2,205	-1,234	-484	-347	104	-22	492	67	331	431
Percent Difference	-5.1%	18.2%	-19.6%	-9.4%	-3.0%	-2.6%	1.1%	-0.4%	7.8%	1.6%	7.0%	13.9%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

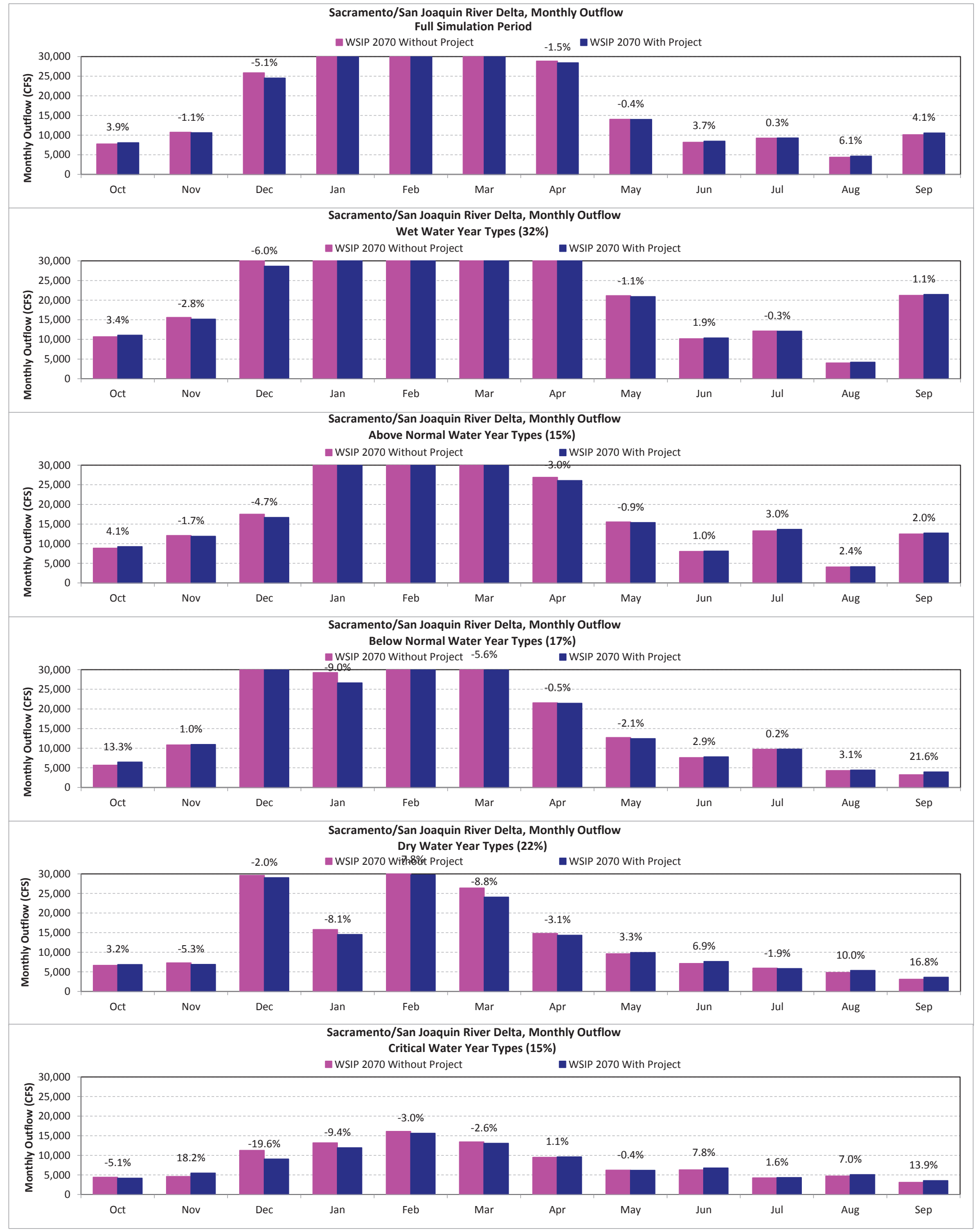


Table SW-34-a
Delta Cross Channel, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	4,055	3,716	4,565	5,740	6,700	5,792	3,827	2,684	4,936	7,127	5,304	5,182
WSIP 2070 With Project	4,111	3,776	4,539	5,572	6,565	5,642	3,797	2,687	4,999	7,236	5,503	5,591
Difference	56	60	-25	-168	-135	-150	-30	2	63	109	199	409
Percent Difference[3]	1.4%	1.6%	-0.6%	-2.9%	-2.0%	-2.6%	-0.8%	0.1%	1.3%	1.5%	3.7%	7.9%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	4,463	3,902	5,049	8,653	9,491	8,126	5,467	2,948	5,460	7,894	5,929	5,843
WSIP 2070 With Project	4,499	3,922	4,996	8,546	9,431	8,051	5,440	2,930	5,369	7,916	6,057	6,001
Difference	36	20	-53	-107	-60	-75	-27	-18	-92	22	128	158
Percent Difference	0.8%	0.5%	-1.0%	-1.2%	-0.6%	-0.9%	-0.5%	-0.6%	-1.7%	0.3%	2.2%	2.7%
Above Normal (13.4%)												
WSIP 2070 Without Project	4,528	3,963	4,326	6,936	8,924	6,885	3,724	2,874	5,233	8,315	6,026	7,830
WSIP 2070 With Project	4,586	3,938	4,360	6,734	8,813	6,693	3,646	2,860	5,261	8,127	6,213	7,752
Difference	59	-25	34	-202	-111	-192	-78	-15	28	-188	187	-79
Percent Difference	1.3%	-0.6%	0.8%	-2.9%	-1.2%	-2.8%	-2.1%	-0.5%	0.5%	-2.3%	3.1%	-1.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	3,949	4,014	5,050	4,762	5,180	5,003	3,357	2,685	4,940	7,993	5,690	4,660
WSIP 2070 With Project	4,148	4,135	5,155	4,449	5,043	4,753	3,343	2,664	5,067	8,116	5,875	5,316
Difference	199	120	105	-313	-137	-251	-14	-21	127	123	185	656
Percent Difference	5.0%	3.0%	2.1%	-6.6%	-2.6%	-5.0%	-0.4%	-0.8%	2.6%	1.5%	3.2%	14.1%
Dry (24.4%)												
WSIP 2070 Without Project	3,832	3,642	4,507	3,497	4,829	4,345	2,832	2,534	4,669	6,318	4,506	4,257
WSIP 2070 With Project	3,882	3,753	4,507	3,334	4,549	4,118	2,789	2,586	4,845	6,610	4,930	5,073
Difference	50	111	0	-163	-280	-227	-43	53	175	292	423	816
Percent Difference	1.3%	3.0%	0.0%	-4.7%	-5.8%	-5.2%	-1.5%	2.1%	3.8%	4.6%	9.4%	19.2%
Critical (14.6%)												
WSIP 2070 Without Project	3,223	2,888	3,305	3,130	3,383	3,000	2,533	2,191	3,970	4,785	4,200	3,431
WSIP 2070 With Project	3,178	2,959	3,102	3,010	3,304	2,959	2,547	2,193	4,144	5,035	4,204	3,888
Difference	-45	71	-203	-121	-78	-41	14	2	175	250	4	456
Percent Difference	-1.4%	2.5%	-6.1%	-3.9%	-2.3%	-1.4%	0.6%	0.1%	4.4%	5.2%	0.1%	13.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

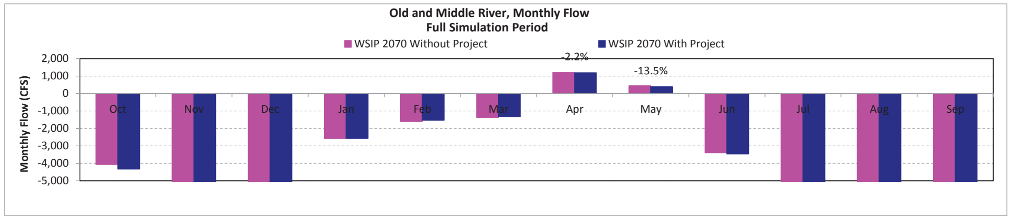
Table SW-35-a
Old and Middle River, Monthly Flow
Long-term Average and Average by Water Year Type

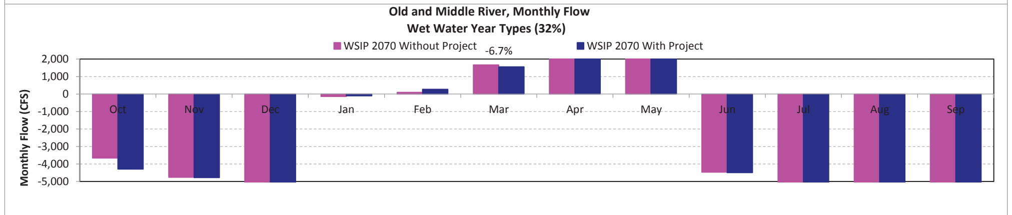
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	-4,059	-5,583	-5,063	-2,578	-1,591	-1,381	1,213	441	-3,396	-6,946	-7,346	-6,409
WSIP 2070 With Project	-4,322	-5,816	-5,355	-2,568	-1,526	-1,332	1,186	382	-3,462	-7,412	-7,825	-7,229
Difference	-263	-232	-291	9	66	48	-27	-59	-66	-466	-479	-820
Percent Difference[3]							-2.2%	-13.5%				
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	-3,659	-4,766	-5,714	-144	101	1,666	3,493	2,216	-4,472	-6,842	-9,674	-6,326
WSIP 2070 With Project	-4,292	-4,779	-5,972	-104	273	1,554	3,481	2,151	-4,495	-6,940	-10,045	-6,376
Difference	-632	-13	-259	40	172	-111	-12	-64	-23	-98	-371	-49
Percent Difference						-6.7%	-0.3%	-2.9%				
Above Normal (13.4%)												
WSIP 2070 Without Project	-5,257	-6,363	-7,450	-2,685	-535	-3,261	1,384	578	-4,537	-6,364	-9,611	-7,675
WSIP 2070 With Project	-5,668	-6,662	-7,461	-2,487	-540	-2,894	1,383	584	-4,550	-6,809	-10,248	-7,466
Difference	-411	-299	-11	198	-4	368	-2	7	-13	-446	-637	209
Percent Difference							-0.1%	1.1%				
Below Normal (15.9%)												
WSIP 2070 Without Project	-4,472	-7,348	-4,287	-3,511	-2,900	-3,896	477	-121	-3,304	-8,682	-8,350	-7,520
WSIP 2070 With Project	-4,706	-7,679	-5,223	-3,511	-2,819	-3,639	487	-218	-3,485	-9,006	-8,887	-8,950
Difference	-235	-331	-937	0	80	258	10	-97	-181	-324	-537	-1,429
Percent Difference							2.2%					
Dry (24.4%)												
WSIP 2070 Without Project	-4,305	-6,230	-4,220	-4,414	-2,574	-2,286	-90	-754	-2,666	-7,559	-4,517	-6,442
WSIP 2070 With Project	-4,278	-6,969	-4,114	-4,371	-2,662	-2,369	-190	-834	-2,738	-8,498	-5,477	-8,371
Difference	27	-739	106	43	-88	-83	-99	-81	-72	-938	-960	-1,929
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	-3,226	-3,442	-3,844	-3,511	-2,799	-1,878	-788	-846	-1,296	-4,690	-3,745	-3,938
WSIP 2070 With Project	-3,087	-3,162	-4,426	-3,771	-2,659	-1,753	-789	-879	-1,369	-5,329	-3,503	-4,845
Difference	139	279	-582	-260	140	125	-1	-33	-73	-639	242	-906
Percent Difference												

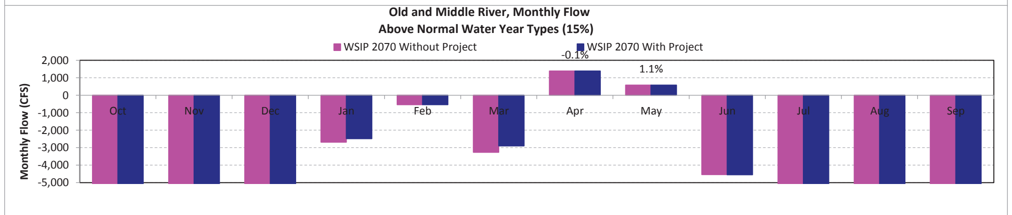
1 Based on the 82-year simulation period

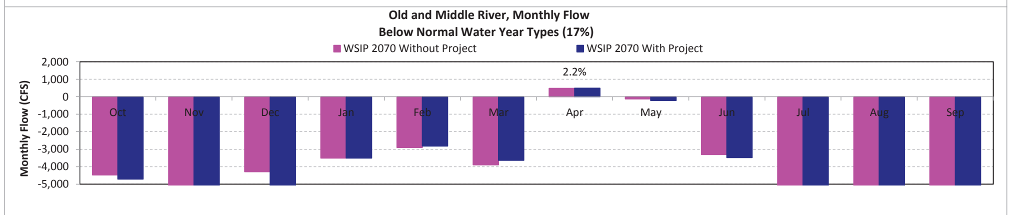
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

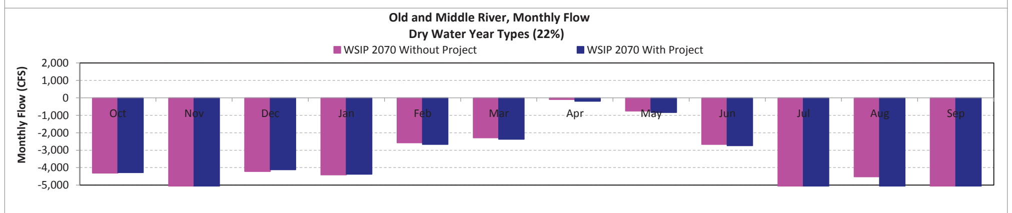
3 Relative difference of the monthly average











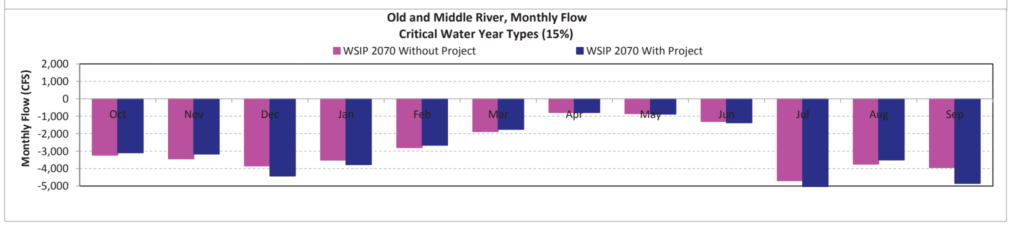


Table SW-36-a
Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	4,636	6,355	7,939	6,942	7,362	6,854	2,631	2,256	3,858	7,111	7,647	7,154
WSIP 2070 With Project	4,918	6,590	8,264	6,927	7,287	6,796	2,657	2,312	3,926	7,602	8,163	8,045
Difference	281	236	325	-14	-74	-57	26	56	68	492	517	891
Percent Difference[3]	6.1%	3.7%	4.1%	-0.2%	-1.0%	-0.8%	1.0%	2.5%	1.8%	6.9%	6.8%	12.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	4,417	5,702	9,514	9,519	10,959	9,440	3,647	3,388	6,082	7,664	10,400	7,292
WSIP 2070 With Project	5,094	5,713	9,793	9,463	10,762	9,552	3,636	3,424	6,098	7,770	10,791	7,351
Difference	677	12	278	-56	-197	112	-11	36	16	107	390	59
Percent Difference	15.3%	0.2%	2.9%	-0.6%	-1.8%	1.2%	-0.3%	1.1%	0.3%	1.4%	3.8%	0.8%
Above Normal (13.4%)												
WSIP 2070 Without Project	5,713	7,386	9,143	6,291	8,980	9,382	2,680	1,748	5,187	6,767	10,272	8,741
WSIP 2070 With Project	6,132	7,695	9,167	6,101	8,986	9,007	2,677	1,746	5,200	7,216	10,899	8,534
Difference	419	309	23	-190	6	-374	-3	-2	13	449	627	-206
Percent Difference	7.3%	4.2%	0.3%	-3.0%	0.1%	-4.0%	-0.1%	-0.1%	0.3%	6.6%	6.1%	-2.4%
Below Normal (15.9%)												
WSIP 2070 Without Project	5,020	8,339	8,137	5,498	5,546	7,133	2,543	2,038	3,318	8,667	8,638	8,297
WSIP 2070 With Project	5,261	8,638	9,188	5,476	5,458	6,850	2,537	2,148	3,514	9,012	9,219	9,865
Difference	240	299	1,051	-22	-88	-283	-6	110	196	345	581	1,568
Percent Difference	4.8%	3.6%	12.9%	-0.4%	-1.6%	-4.0%	-0.2%	5.4%	5.9%	4.0%	6.7%	18.9%
Dry (24.4%)												
WSIP 2070 Without Project	4,808	6,906	6,899	6,173	4,929	4,246	2,066	1,752	2,464	7,393	4,457	7,111
WSIP 2070 With Project	4,773	7,675	6,794	6,122	5,027	4,337	2,191	1,842	2,541	8,387	5,500	9,192
Difference	-35	768	-106	-51	98	91	125	90	78	994	1,043	2,081
Percent Difference	-0.7%	11.1%	-1.5%	-0.8%	2.0%	2.1%	6.0%	5.1%	3.2%	13.4%	23.4%	29.3%
Critical (14.6%)												
WSIP 2070 Without Project	3,422	3,754	4,941	4,799	4,105	2,976	1,422	1,346	729	4,072	3,516	4,232
WSIP 2070 With Project	3,292	3,450	5,576	5,105	3,952	2,840	1,423	1,382	806	4,759	3,258	5,217
Difference	-130	-303	635	306	-153	-137	1	36	77	687	-259	985
Percent Difference	-3.8%	-8.1%	12.9%	6.4%	-3.7%	-4.6%	0.0%	2.7%	10.6%	16.9%	-7.4%	23.3%

1 Based on the 82-year simulation period

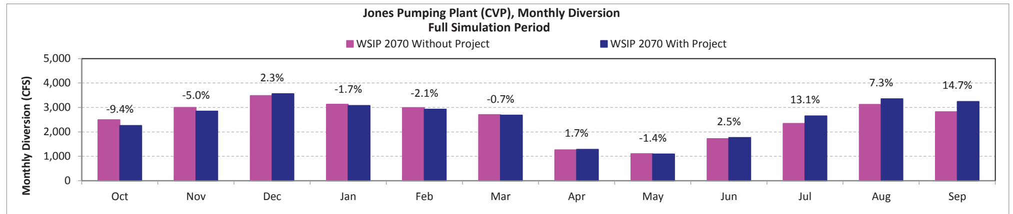
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

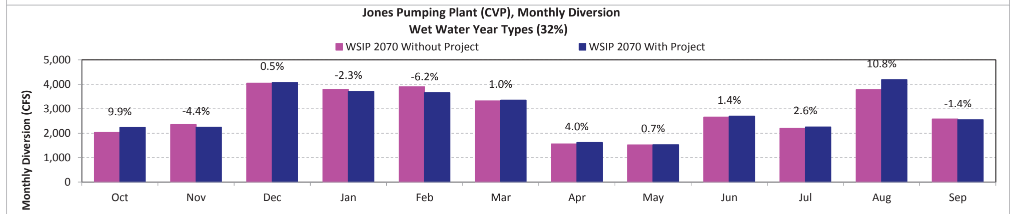
3 Relative difference of the monthly average

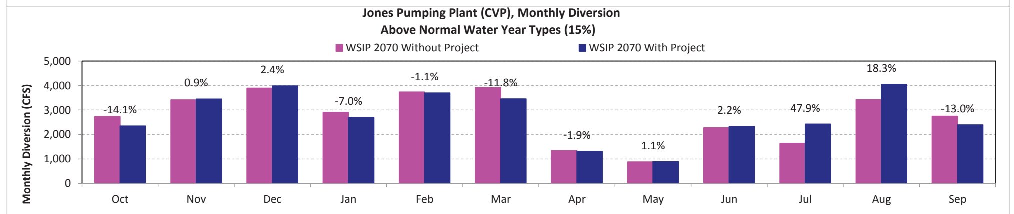
Table SW-37-a
Jones Pumping Plant (CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

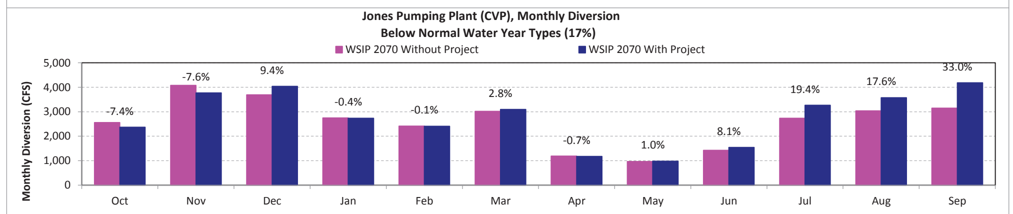
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	2,497	2,998	3,487	3,133	2,992	2,706	1,263	1,110	1,727	2,348	3,123	2,826
WSIP 2070 With Project	2,262	2,848	3,566	3,080	2,928	2,686	1,284	1,094	1,771	2,654	3,352	3,243
Difference	-236	-150	79	-53	-63	-20	22	-15	44	307	229	417
Percent Difference[3]	-9.4%	-5.0%	2.3%	-1.7%	-2.1%	-0.7%	1.7%	-1.4%	2.5%	13.1%	7.3%	14.7%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	2,028	2,351	4,050	3,792	3,896	3,320	1,557	1,518	2,658	2,198	3,776	2,581
WSIP 2070 With Project	2,230	2,247	4,071	3,704	3,656	3,354	1,619	1,529	2,696	2,254	4,184	2,546
Difference	202	-104	21	-87	-240	34	63	11	38	56	408	-35
Percent Difference	9.9%	-4.4%	0.5%	-2.3%	-6.2%	1.0%	4.0%	0.7%	1.4%	2.6%	10.8%	-1.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	2,733	3,418	3,892	2,903	3,737	3,914	1,341	879	2,276	1,640	3,425	2,749
WSIP 2070 With Project	2,347	3,450	3,985	2,700	3,696	3,454	1,315	889	2,327	2,425	4,051	2,391
Difference	-387	32	93	-203	-41	-460	-26	10	51	785	627	-358
Percent Difference	-14.1%	0.9%	2.4%	-7.0%	-1.1%	-11.8%	-1.9%	1.1%	2.2%	47.9%	18.3%	-13.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,556	4,081	3,690	2,749	2,411	3,015	1,188	968	1,427	2,735	3,040	3,145
WSIP 2070 With Project	2,366	3,770	4,037	2,738	2,410	3,098	1,180	978	1,544	3,264	3,574	4,184
Difference	-190	-310	347	-11	-2	84	-8	10	116	529	534	1,039
Percent Difference	-7.4%	-7.6%	9.4%	-0.4%	-0.1%	2.8%	-0.7%	1.0%	8.1%	19.4%	17.6%	33.0%
Dry (24.4%)												
WSIP 2070 Without Project	2,948	3,401	3,104	3,108	2,307	1,985	1,107	961	1,160	2,904	2,429	3,113
WSIP 2070 With Project	2,322	3,382	2,909	3,071	2,386	2,030	1,142	873	1,194	3,189	2,422	4,178
Difference	-627	-19	-195	-37	79	45	35	-88	33	284	-7	1,064
Percent Difference	-21.3%	-0.6%	-6.3%	-1.2%	3.4%	2.3%	3.1%	-9.2%	2.9%	9.8%	-0.3%	34.2%
Critical (14.6%)												
WSIP 2070 Without Project	2,482	2,170	2,315	2,372	2,119	1,137	896	839	474	1,976	2,680	2,601
WSIP 2070 With Project	2,039	1,707	2,672	2,459	2,114	1,183	882	837	465	2,182	2,219	2,953
Difference	-443	-463	357	87	-5	46	-14	-2	-9	206	-461	352
Percent Difference	-17.9%	-21.3%	15.4%	3.7%	-0.2%	4.1%	-1.6%	-0.2%	-1.9%	10.4%	-17.2%	13.5%

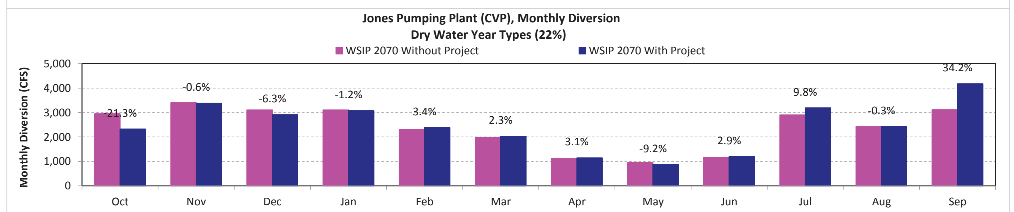
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











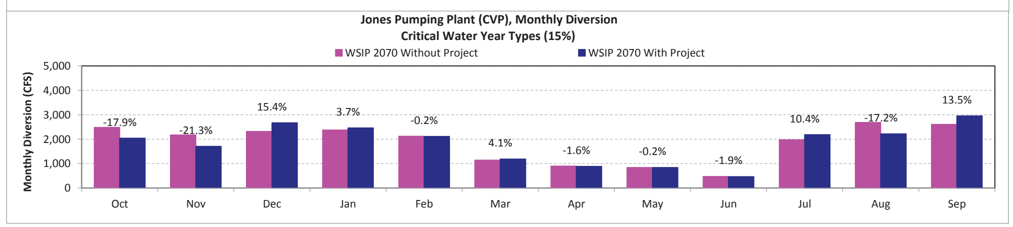


Table SW-38-a
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	2,139	3,357	4,452	3,809	4,370	4,147	1,368	1,147	2,131	4,763	4,523	4,328
WSIP 2070 With Project	2,656	3,742	4,698	3,848	4,359	4,110	1,372	1,218	2,155	4,948	4,811	4,802
Difference	517	386	246	39	-11	-38	4	71	24	185	288	475
Percent Difference[3]	24.2%	11.5%	5.5%	1.0%	-0.2%	-0.9%	0.3%	6.2%	1.1%	3.9%	6.4%	11.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	2,389	3,350	5,465	5,727	7,063	6,120	2,091	1,871	3,424	5,466	6,625	4,711
WSIP 2070 With Project	2,864	3,466	5,722	5,759	7,106	6,197	2,017	1,895	3,402	5,516	6,607	4,805
Difference	476	115	257	32	43	78	-74	24	-22	50	-18	94
Percent Difference	19.9%	3.4%	4.7%	0.6%	0.6%	1.3%	-3.5%	1.3%	-0.6%	0.9%	-0.3%	2.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	2,980	3,968	5,252	3,388	5,244	5,467	1,339	869	2,911	5,127	6,848	5,991
WSIP 2070 With Project	3,785	4,246	5,182	3,401	5,290	5,553	1,362	857	2,874	4,792	6,848	6,143
Difference	805	277	-70	13	47	86	23	-12	-38	-335	0	152
Percent Difference	27.0%	7.0%	-1.3%	0.4%	0.9%	1.6%	1.7%	-1.4%	-1.3%	-6.5%	0.0%	2.5%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,464	4,258	4,446	2,749	3,135	4,118	1,355	1,070	1,891	5,933	5,598	5,152
WSIP 2070 With Project	2,894	4,868	5,150	2,738	3,048	3,752	1,357	1,171	1,970	5,748	5,645	5,680
Difference	430	610	704	-11	-86	-367	2	100	80	-184	46	528
Percent Difference	17.5%	14.3%	15.8%	-0.4%	-2.8%	-8.9%	0.2%	9.4%	4.2%	-3.1%	0.8%	10.3%
Dry (24.4%)												
WSIP 2070 Without Project	1,860	3,505	3,795	3,065	2,621	2,261	959	791	1,303	4,489	2,027	3,998
WSIP 2070 With Project	2,452	4,293	3,885	3,051	2,641	2,307	1,049	970	1,348	5,198	3,077	5,015
Difference	592	787	90	-14	19	46	90	178	44	709	1,050	1,017
Percent Difference	31.8%	22.5%	2.4%	-0.5%	0.7%	2.0%	9.4%	22.6%	3.4%	15.8%	51.8%	25.4%
Critical (14.6%)												
WSIP 2070 Without Project	940	1,584	2,626	2,427	1,986	1,839	526	507	255	2,096	836	1,630
WSIP 2070 With Project	1,253	1,743	2,904	2,646	1,837	1,656	541	545	341	2,576	1,039	2,264
Difference	313	159	278	219	-148	-183	15	38	86	481	203	633
Percent Difference	33.3%	10.1%	10.6%	9.0%	-7.5%	-10.0%	2.8%	7.5%	33.6%	22.9%	24.3%	38.9%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

Table SW-39-a
Banks Pumping Plant (SWP), Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	2,139	2,895	4,439	3,809	4,358	4,130	1,368	1,147	2,131	4,639	4,214	4,218
WSIP 2070 With Project	2,646	3,302	4,671	3,847	4,348	4,104	1,372	1,218	2,150	4,797	4,495	4,722
Difference	508	407	232	38	-10	-26	4	71	19	158	281	504
Percent Difference[3]	23.7%	14.1%	5.2%	1.0%	-0.2%	-0.6%	0.3%	6.2%	0.9%	3.4%	6.7%	11.9%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	2,389	2,395	5,434	5,727	7,041	6,080	2,091	1,871	3,424	5,421	6,332	4,711
WSIP 2070 With Project	2,864	2,582	5,707	5,759	7,090	6,196	2,017	1,895	3,385	5,449	6,270	4,786
Difference	476	186	273	32	48	116	-74	24	-39	29	-61	76
Percent Difference	19.9%	7.8%	5.0%	0.6%	0.7%	1.9%	-3.5%	1.3%	-1.1%	0.5%	-1.0%	1.6%
Above Normal (13.4%)												
WSIP 2070 Without Project	2,980	2,935	5,242	3,388	5,244	5,467	1,339	869	2,911	5,094	6,674	5,991
WSIP 2070 With Project	3,785	3,296	5,140	3,401	5,290	5,553	1,362	857	2,874	4,699	6,680	6,143
Difference	805	362	-102	13	47	86	23	-12	-38	-395	6	152
Percent Difference	27.0%	12.3%	-1.9%	0.4%	0.9%	1.6%	1.7%	-1.4%	-1.3%	-7.7%	0.1%	2.5%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,464	4,130	4,446	2,749	3,135	4,103	1,355	1,070	1,891	5,795	5,069	4,831
WSIP 2070 With Project	2,870	4,764	5,063	2,738	3,022	3,752	1,357	1,171	1,970	5,577	5,251	5,559
Difference	406	635	617	-11	-113	-352	2	100	80	-218	182	728
Percent Difference	16.5%	15.4%	13.9%	-0.4%	-3.6%	-8.6%	0.2%	9.4%	4.2%	-3.8%	3.6%	15.1%
Dry (24.4%)												
WSIP 2070 Without Project	1,860	3,505	3,795	3,065	2,614	2,253	959	791	1,303	4,223	1,682	3,802
WSIP 2070 With Project	2,427	4,230	3,873	3,051	2,634	2,297	1,049	970	1,348	4,929	2,650	4,847
Difference	568	725	78	-14	19	44	90	178	44	706	968	1,045
Percent Difference	30.5%	20.7%	2.0%	-0.5%	0.7%	1.9%	9.4%	22.6%	3.4%	16.7%	57.6%	27.5%
Critical (14.6%)												
WSIP 2070 Without Project	938	1,584	2,616	2,427	1,963	1,838	526	507	251	1,967	663	1,553
WSIP 2070 With Project	1,253	1,737	2,904	2,640	1,837	1,637	541	545	341	2,406	900	2,164
Difference	315	153	288	213	-126	-201	15	38	90	439	237	611
Percent Difference	33.6%	9.7%	11.0%	8.8%	-6.4%	-10.9%	2.8%	7.5%	35.8%	22.3%	35.8%	39.3%

1 Based on the 82-year simulation period

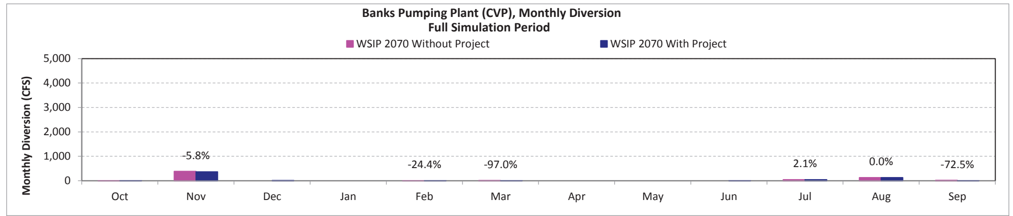
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

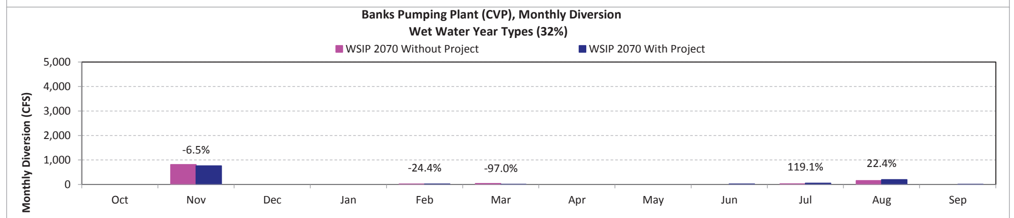
3 Relative difference of the monthly average

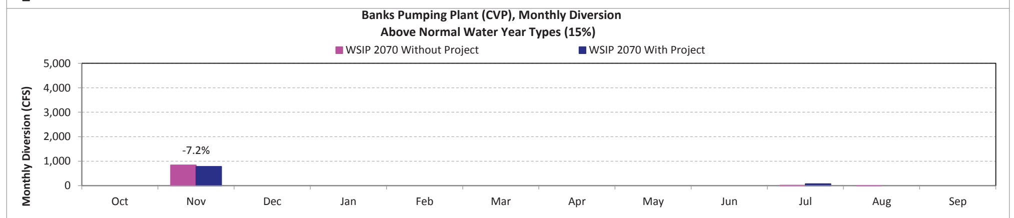
Table SW-40-a
Banks Pumping Plant (CVP), Monthly Diversion
Long-term Average and Average by Water Year Type

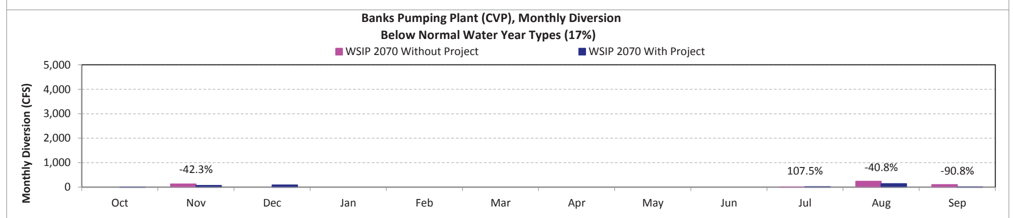
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	390	0	0	7	13	0	0	0	47	134	23
WSIP 2070 With Project	3	367	17	0	5	0	0	0	5	48	134	6
Difference	3	-23	17	0	-2	-12	0	0	5	1	0	-16
Percent Difference[3]		-5.8%			-24.4%	-97.0%				2.1%	0.0%	-72.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	811	0	0	22	40	0	0	0	24	160	0
WSIP 2070 With Project	0	758	0	0	16	1	0	0	17	52	195	7
Difference	0	-53	0	0	-5	-38	0	0	17	28	36	7
Percent Difference		-6.5%			-24.4%	-97.0%				119.1%	22.4%	
Above Normal (13.4%)												
WSIP 2070 Without Project	0	841	0	0	0	0	0	0	0	19	4	0
WSIP 2070 With Project	0	780	0	0	0	0	0	0	0	73	0	0
Difference	0	-60	0	0	0	0	0	0	0	54	-4	0
Percent Difference		-7.2%										
Below Normal (15.9%)												
WSIP 2070 Without Project	0	126	0	0	0	0	0	0	0	8	239	100
WSIP 2070 With Project	2	73	87	0	0	0	0	0	0	16	141	9
Difference	2	-53	87	0	0	0	0	0	0	8	-98	-90
Percent Difference		-42.3%								107.5%	-40.8%	-90.8%
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	136	151	28
WSIP 2070 With Project	12	44	12	0	0	0	0	0	0	55	183	10
Difference	12	44	12	0	0	0	0	0	0	-81	32	-18
Percent Difference										-59.7%	21.1%	-62.8%
Critical (14.6%)												
WSIP 2070 Without Project	2	0	0	0	0	0	0	0	0	20	55	0
WSIP 2070 With Project	0	0	0	0	0	0	0	0	0	42	34	0
Difference	-2	0	0	0	0	0	0	0	0	22	-21	0
Percent Difference	-100.0%									113.2%	-38.4%	

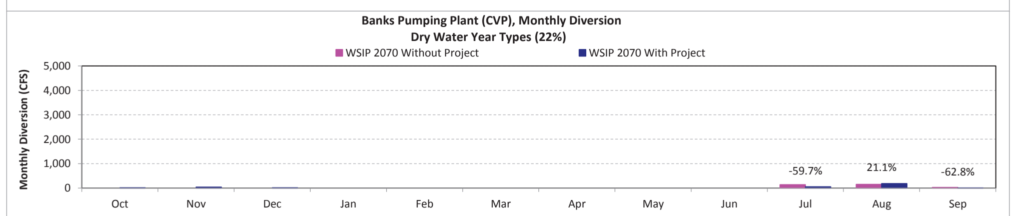
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











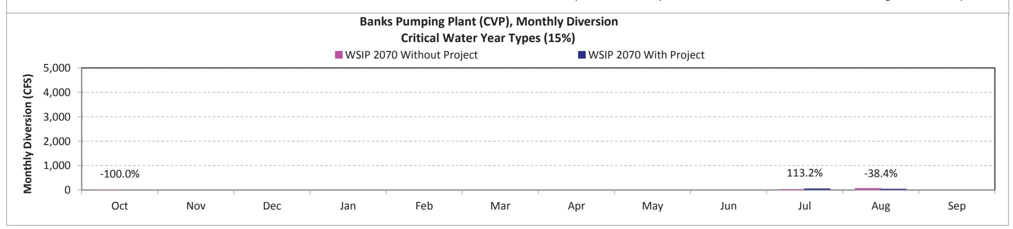


Table SW-41-a
San Luis Reservoir (SWP and CVP), End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	427	528	782	1,092	1,357	1,549	1,450	1,198	877	681	535	500
WSIP 2070 With Project	449	549	806	1,109	1,367	1,547	1,440	1,179	843	658	525	522
Difference	21	21	24	18	10	-1	-9	-19	-34	-23	-10	22
Percent Difference[3]	5.0%	3.9%	3.1%	1.6%	0.7%	-0.1%	-0.6%	-1.6%	-3.9%	-3.4%	-1.8%	4.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	516	480	738	1,323	1,718	1,946	1,822	1,548	1,241	937	810	695
WSIP 2070 With Project	537	497	772	1,306	1,692	1,933	1,805	1,526	1,212	911	801	679
Difference	21	17	34	-17	-26	-13	-18	-22	-28	-26	-9	-16
Percent Difference	4.0%	3.6%	4.6%	-1.3%	-1.5%	-0.7%	-1.0%	-1.4%	-2.3%	-2.8%	-1.1%	-2.3%
Above Normal (13.4%)												
WSIP 2070 Without Project	441	496	763	1,032	1,400	1,734	1,589	1,238	884	575	510	505
WSIP 2070 With Project	440	514	774	1,095	1,444	1,736	1,584	1,222	855	555	520	489
Difference	0	18	10	63	44	3	-5	-16	-28	-20	9	-16
Percent Difference	-0.1%	3.6%	1.4%	6.1%	3.1%	0.2%	-0.3%	-1.3%	-3.2%	-3.5%	1.8%	-3.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	496	726	998	1,026	1,211	1,479	1,384	1,119	757	653	553	566
WSIP 2070 With Project	545	776	1,097	1,051	1,222	1,453	1,353	1,088	721	619	535	621
Difference	49	49	99	25	11	-25	-31	-30	-36	-34	-18	55
Percent Difference	9.9%	6.8%	9.9%	2.4%	0.9%	-1.7%	-2.2%	-2.7%	-4.8%	-5.2%	-3.2%	9.7%
Dry (24.4%)												
WSIP 2070 Without Project	342	553	811	1,045	1,209	1,304	1,234	1,016	691	587	327	339
WSIP 2070 With Project	380	601	809	1,043	1,217	1,304	1,219	979	624	550	321	420
Difference	38	48	-2	-2	8	1	-14	-36	-66	-37	-6	81
Percent Difference	11.2%	8.7%	-0.2%	-0.2%	0.7%	0.0%	-1.1%	-3.6%	-9.6%	-6.3%	-1.8%	23.8%
Critical (14.6%)												
WSIP 2070 Without Project	291	404	615	793	942	1,001	944	793	522	411	288	273
WSIP 2070 With Project	276	359	593	868	1,000	1,045	983	820	528	428	261	277
Difference	-15	-45	-22	76	57	44	38	27	7	17	-28	5
Percent Difference	-5.2%	-11.2%	-3.6%	9.5%	6.1%	4.4%	4.0%	3.4%	1.3%	4.2%	-9.6%	1.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

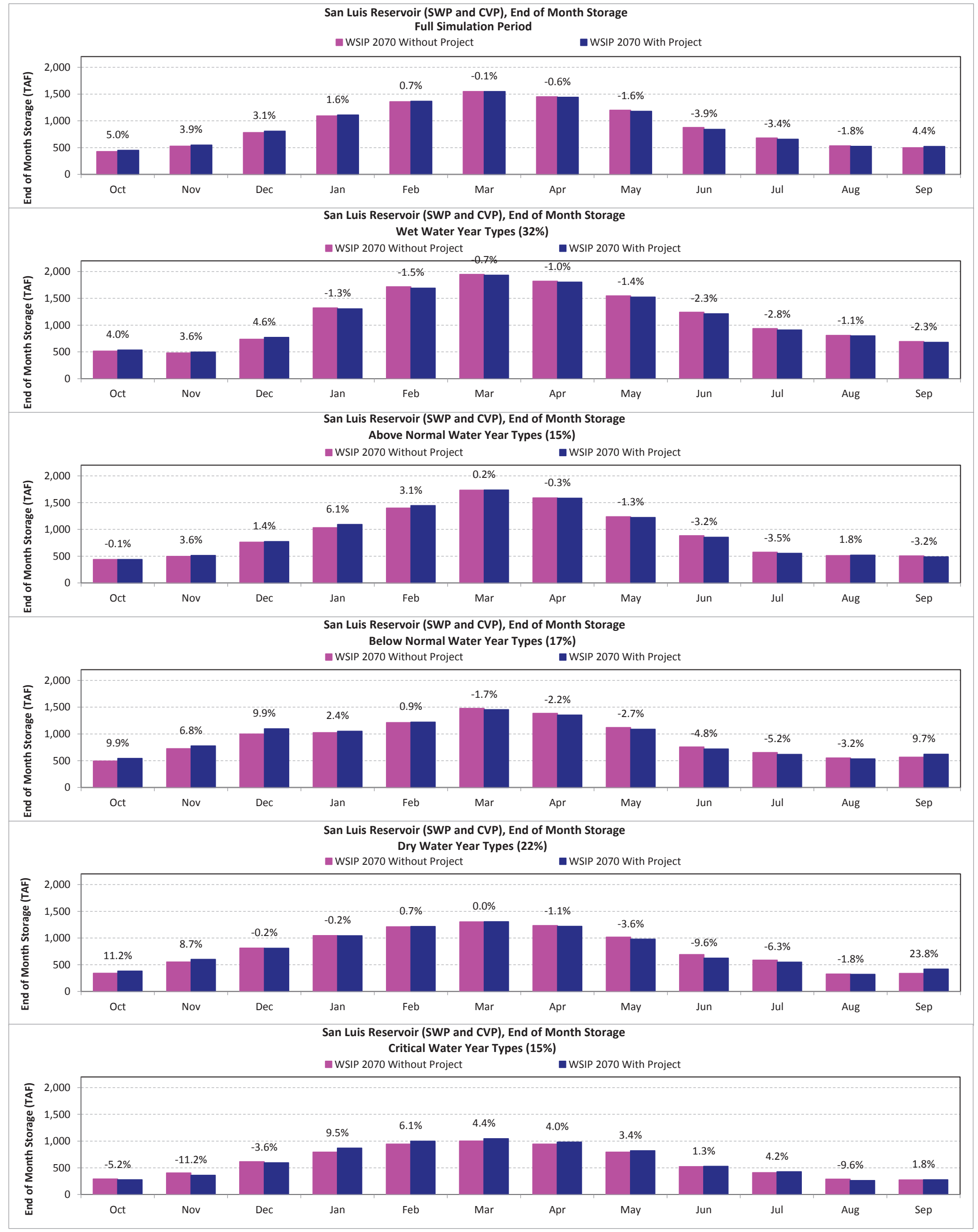


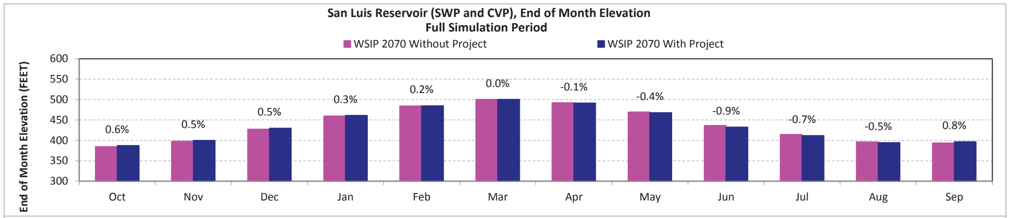
Table SW-42-a
San Luis Reservoir (SWP and CVP), End of Month Elevation
Long-term Average and Average by Water Year Type

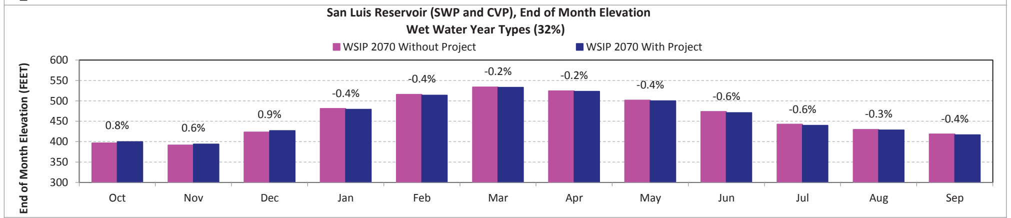
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	385	398	427	459	484	500	492	469	436	414	396	394
WSIP 2070 With Project	387	400	430	461	485	500	491	468	433	412	394	397
Difference	2	2	2	2	1	0	-1	-2	-4	-3	-2	3
Percent Difference[3]	0.6%	0.5%	0.5%	0.3%	0.2%	0.0%	-0.1%	-0.4%	-0.9%	-0.7%	-0.5%	0.8%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	397	391	423	481	516	534	524	502	473	443	430	418
WSIP 2070 With Project	400	394	427	479	514	533	523	500	471	440	429	417
Difference	3	2	4	-2	-2	-1	-1	-2	-3	-3	-1	-2
Percent Difference	0.8%	0.6%	0.9%	-0.4%	-0.4%	-0.2%	-0.2%	-0.4%	-0.6%	-0.6%	-0.3%	-0.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	388	394	426	454	489	517	506	474	439	401	394	397
WSIP 2070 With Project	387	396	427	459	492	517	505	473	436	398	394	394
Difference	-1	2	1	6	3	0	0	-1	-3	-3	0	-3
Percent Difference	-0.3%	0.6%	0.3%	1.2%	0.7%	0.0%	-0.1%	-0.3%	-0.7%	-0.7%	0.0%	-0.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	394	422	450	454	472	495	487	462	423	411	399	403
WSIP 2070 With Project	400	426	459	457	473	493	484	459	419	407	396	409
Difference	6	4	9	3	1	-2	-3	-3	-4	-4	-3	6
Percent Difference	1.4%	0.9%	2.0%	0.6%	0.2%	-0.4%	-0.6%	-0.6%	-0.8%	-1.0%	-0.7%	1.5%
Dry (24.4%)												
WSIP 2070 Without Project	373	402	430	456	471	480	474	453	418	406	370	373
WSIP 2070 With Project	377	407	430	455	472	480	473	449	410	401	368	384
Difference	4	6	-1	0	1	0	-1	-4	-8	-5	-2	11
Percent Difference	1.0%	1.4%	-0.1%	-0.1%	0.1%	0.0%	-0.3%	-0.8%	-2.0%	-1.2%	-0.5%	3.0%
Critical (14.6%)												
WSIP 2070 Without Project	364	382	409	429	446	452	446	430	399	384	366	362
WSIP 2070 With Project	363	376	406	437	451	456	450	433	399	387	361	364
Difference	-2	-6	-3	8	5	4	4	3	0	2	-5	2
Percent Difference	-0.5%	-1.6%	-0.7%	1.9%	1.1%	0.9%	0.8%	0.6%	0.1%	0.6%	-1.3%	0.4%

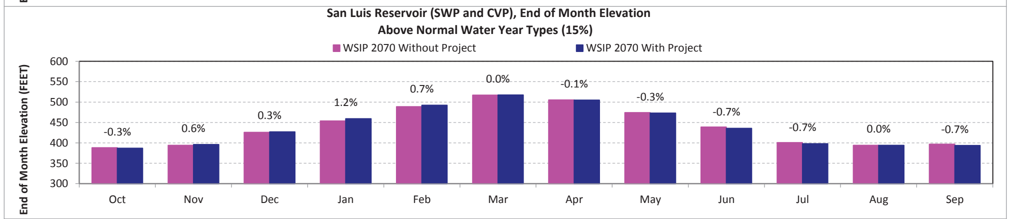
1 Based on the 82-year simulation period

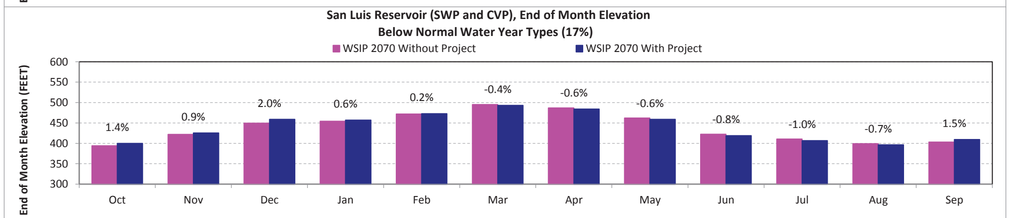
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

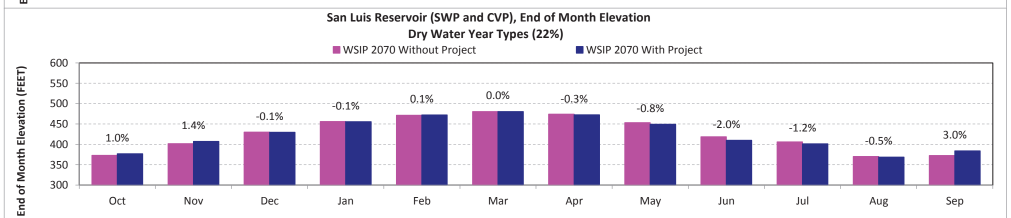
3 Relative difference of the monthly average











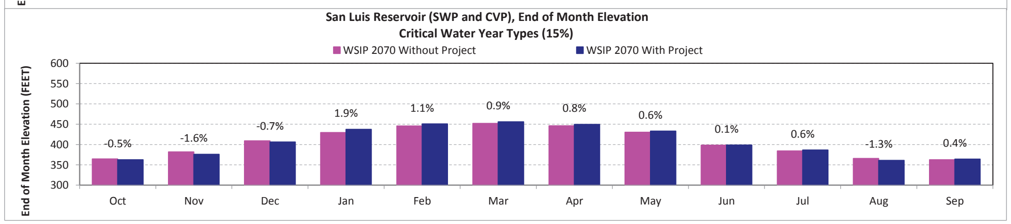


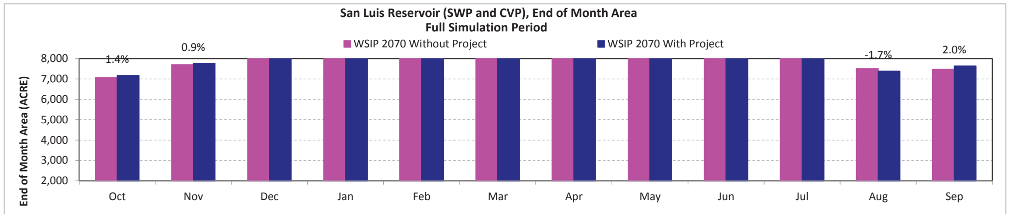
Table SW-43-a
San Luis Reservoir (SWP and CVP), End of Month Area
Long-term Average and Average by Water Year Type

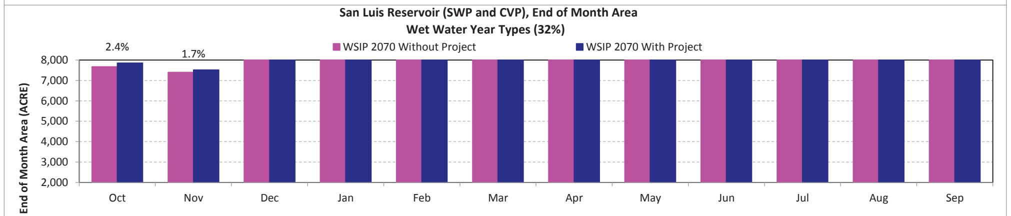
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	7,070	7,699	8,956	10,143	10,954	11,454	11,199	10,471	9,250	8,363	7,511	7,484
WSIP 2070 With Project	7,171	7,771	9,027	10,195	10,971	11,457	11,180	10,412	9,093	8,244	7,383	7,635
Difference	101	73	72	52	18	3	-19	-59	-157	-118	-127	151
Percent Difference[3]	1.4%	0.9%	0.8%	0.5%	0.2%	0.0%	-0.2%	-0.6%	-1.7%	-1.4%	-1.7%	2.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	7,672	7,396	8,837	10,863	11,949	12,476	12,197	11,519	10,593	9,487	9,006	8,640
WSIP 2070 With Project	7,853	7,519	8,976	10,787	11,881	12,452	12,164	11,464	10,514	9,388	8,951	8,563
Difference	181	123	139	-75	-68	-24	-33	-55	-78	-99	-54	-77
Percent Difference	2.4%	1.7%	1.6%	-0.7%	-0.6%	-0.2%	-0.3%	-0.5%	-0.7%	-1.0%	-0.6%	-0.9%
Above Normal (13.4%)												
WSIP 2070 Without Project	7,339	7,540	8,910	9,966	11,125	11,988	11,638	10,664	9,407	7,673	7,444	7,755
WSIP 2070 With Project	7,240	7,639	8,980	10,140	11,226	11,991	11,625	10,616	9,296	7,535	7,396	7,571
Difference	-99	98	70	173	102	4	-13	-48	-111	-138	-48	-184
Percent Difference	-1.3%	1.3%	0.8%	1.7%	0.9%	0.0%	-0.1%	-0.4%	-1.2%	-1.8%	-0.6%	-2.4%
Below Normal (15.9%)												
WSIP 2070 Without Project	7,570	8,788	9,788	10,007	10,582	11,304	11,050	10,225	8,661	8,173	7,691	7,991
WSIP 2070 With Project	7,802	8,832	10,081	10,092	10,609	11,243	10,958	10,120	8,547	7,992	7,528	8,236
Difference	232	44	293	85	26	-61	-92	-105	-114	-181	-163	244
Percent Difference	3.1%	0.5%	3.0%	0.9%	0.2%	-0.5%	-0.8%	-1.0%	-1.3%	-2.2%	-2.1%	3.1%
Dry (24.4%)												
WSIP 2070 Without Project	6,480	7,922	9,035	10,045	10,556	10,852	10,646	9,953	8,661	8,127	6,317	6,455
WSIP 2070 With Project	6,603	8,148	9,002	10,028	10,572	10,856	10,604	9,822	8,268	7,900	6,168	7,036
Difference	123	226	-32	-16	16	4	-42	-132	-393	-227	-149	581
Percent Difference	1.9%	2.9%	-0.4%	-0.2%	0.1%	0.0%	-0.4%	-1.3%	-4.5%	-2.8%	-2.4%	9.0%
Critical (14.6%)												
WSIP 2070 Without Project	5,962	6,948	8,221	9,058	9,706	9,915	9,716	9,151	7,815	7,157	6,126	5,894
WSIP 2070 With Project	5,892	6,663	8,083	9,350	9,825	10,044	9,840	9,244	7,795	7,265	5,843	6,028
Difference	-69	-285	-137	292	119	129	124	92	-20	108	-283	135
Percent Difference	-1.2%	-4.1%	-1.7%	3.2%	1.2%	1.3%	1.3%	1.0%	-0.3%	1.5%	-4.6%	2.3%

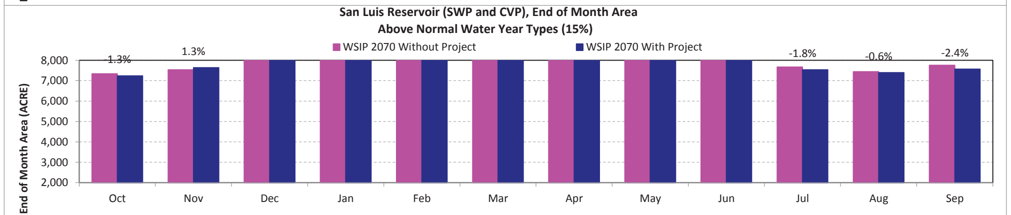
1 Based on the 82-year simulation period

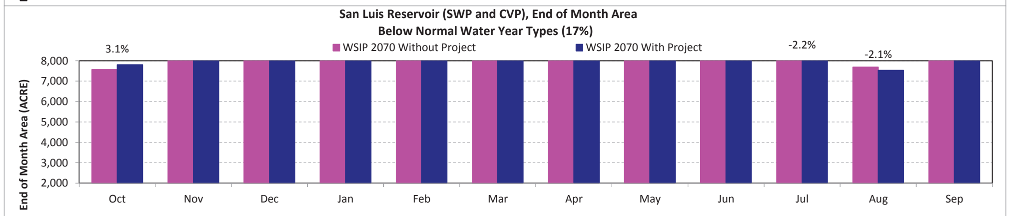
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

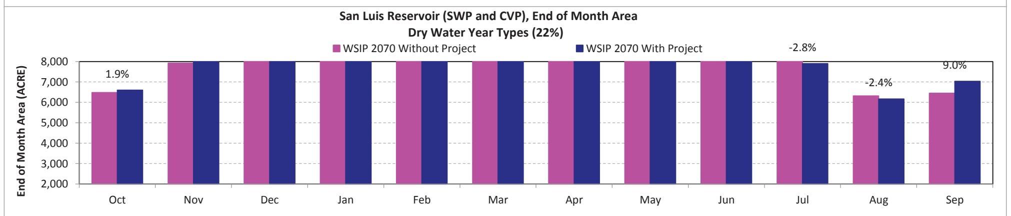
3 Relative difference of the monthly average











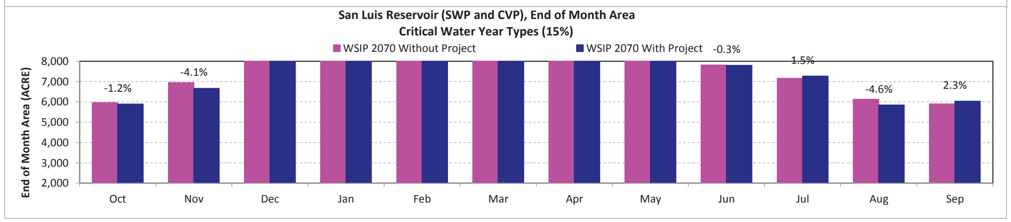


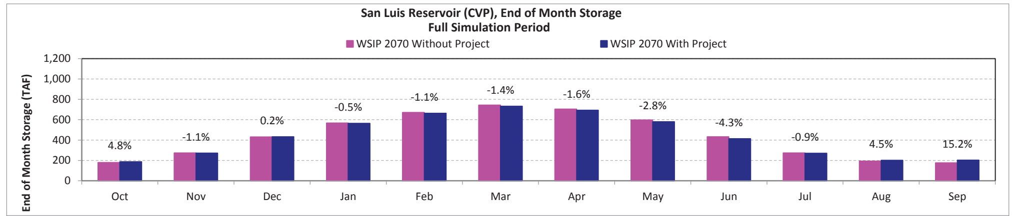
Table SW-44-a
San Luis Reservoir (CVP), End of Month Storage
Long-term Average and Average by Water Year Type

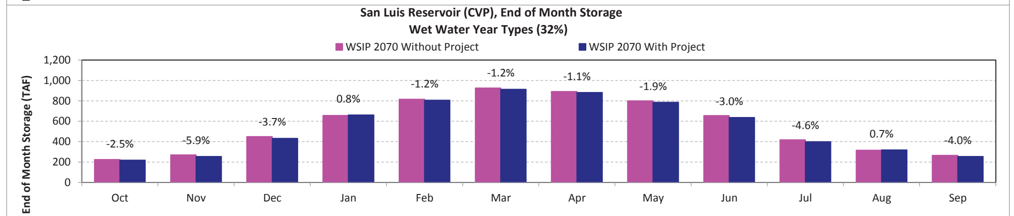
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	179	274	431	567	671	743	705	597	432	274	193	177
WSIP 2070 With Project	188	272	432	564	664	732	694	580	414	271	202	204
Difference	9	-3	1	-3	-7	-11	-11	-17	-19	-2	9	27
Percent Difference[3]	4.8%	-1.1%	0.2%	-0.5%	-1.1%	-1.4%	-1.6%	-2.8%	-4.3%	-0.9%	4.5%	15.2%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	224	271	449	657	815	925	891	801	656	418	316	265
WSIP 2070 With Project	219	255	433	662	806	914	881	785	636	399	318	254
Difference	-6	-16	-16	5	-10	-11	-10	-15	-19	-19	2	-11
Percent Difference	-2.5%	-5.9%	-3.7%	0.8%	-1.2%	-1.2%	-1.1%	-1.9%	-3.0%	-4.6%	0.7%	-4.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	148	259	429	547	692	848	808	675	493	249	166	129
WSIP 2070 With Project	149	258	432	578	719	846	802	662	476	272	224	158
Difference	1	-1	3	31	27	-2	-6	-13	-17	23	58	29
Percent Difference	0.5%	-0.3%	0.8%	5.7%	3.9%	-0.2%	-0.7%	-1.9%	-3.5%	9.2%	35.0%	22.6%
Below Normal (15.9%)												
WSIP 2070 Without Project	192	357	532	546	611	696	662	546	368	252	181	189
WSIP 2070 With Project	265	406	601	544	608	696	659	537	357	262	217	280
Difference	73	49	69	-2	-3	0	-3	-9	-11	11	35	91
Percent Difference	38.1%	13.7%	12.9%	-0.3%	-0.5%	0.0%	-0.4%	-1.7%	-3.1%	4.3%	19.4%	48.0%
Dry (24.4%)												
WSIP 2070 Without Project	151	274	415	547	610	630	589	468	290	203	110	119
WSIP 2070 With Project	161	283	413	507	575	597	557	428	254	190	99	168
Difference	9	9	-3	-39	-35	-34	-33	-40	-36	-13	-11	49
Percent Difference	6.1%	3.4%	-0.6%	-7.2%	-5.8%	-5.4%	-5.5%	-8.6%	-12.6%	-6.4%	-10.1%	41.2%
Critical (14.6%)												
WSIP 2070 Without Project	143	208	312	448	509	491	447	355	198	124	104	113
WSIP 2070 With Project	119	154	280	456	516	501	456	363	202	139	87	113
Difference	-24	-54	-32	8	7	10	9	8	5	15	-17	0
Percent Difference	-17.0%	-25.7%	-10.1%	1.7%	1.4%	2.0%	2.0%	2.4%	2.3%	12.0%	-16.5%	0.4%

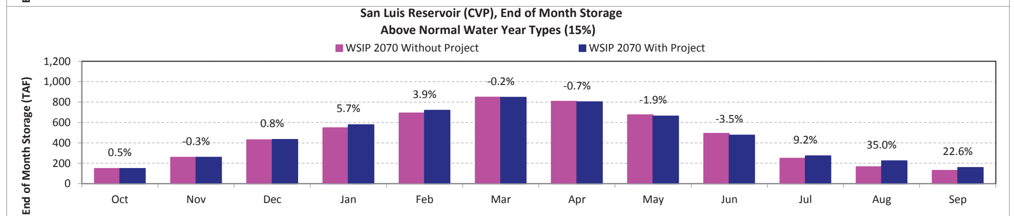
1 Based on the 82-year simulation period

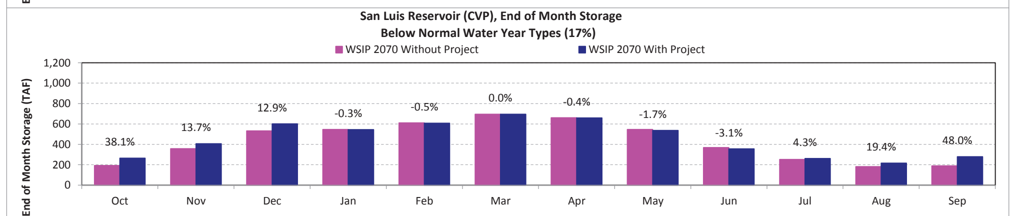
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

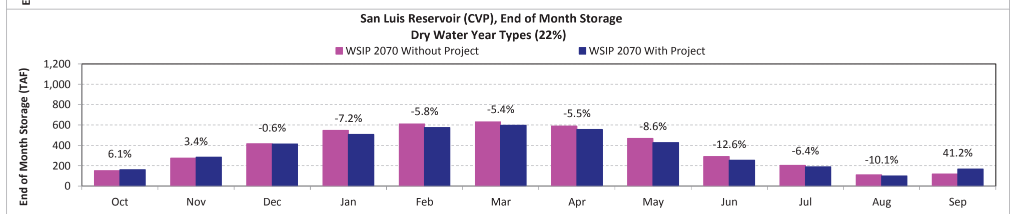
3 Relative difference of the monthly average











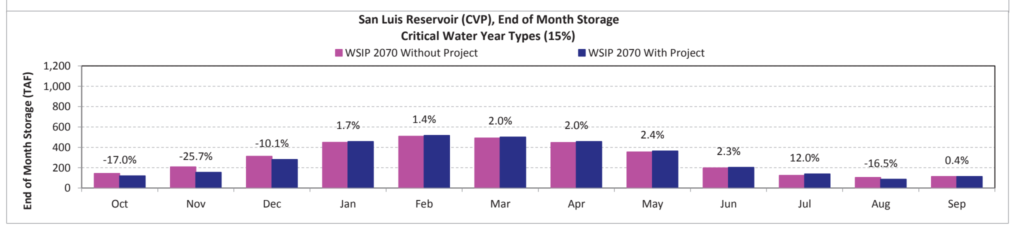


Table SW-45-a
San Luis Reservoir (SWP), End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	248	254	351	524	686	806	745	601	445	407	341	324
WSIP 2070 With Project	261	277	374	545	703	815	746	599	429	387	323	319
Difference	13	24	23	21	17	9	2	-2	-15	-21	-19	-5
Percent Difference[3]	5.1%	9.4%	6.6%	3.9%	2.5%	1.2%	0.3%	-0.4%	-3.4%	-5.0%	-5.4%	-1.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	292	209	288	666	903	1,021	931	747	585	519	494	429
WSIP 2070 With Project	318	242	339	644	887	1,019	924	740	576	512	483	424
Difference	26	33	51	-22	-16	-2	-8	-7	-9	-7	-11	-5
Percent Difference	9.0%	15.8%	17.5%	-3.3%	-1.8%	-0.2%	-0.8%	-0.9%	-1.5%	-1.3%	-2.2%	-1.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	293	238	334	485	708	886	782	563	391	326	344	376
WSIP 2070 With Project	291	256	341	517	725	890	783	560	380	283	295	331
Difference	-1	19	7	32	16	4	1	-3	-11	-43	-49	-45
Percent Difference	-0.4%	7.8%	2.1%	6.6%	2.3%	0.5%	0.1%	-0.5%	-2.9%	-13.3%	-14.2%	-12.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	304	369	466	480	600	783	722	572	389	401	371	377
WSIP 2070 With Project	279	369	496	507	614	757	694	551	364	357	319	341
Difference	-24	0	30	27	15	-25	-29	-21	-25	-45	-53	-36
Percent Difference	-8.0%	0.1%	6.4%	5.6%	2.4%	-3.2%	-4.0%	-3.7%	-6.4%	-11.1%	-14.2%	-9.5%
Dry (24.4%)												
WSIP 2070 Without Project	191	279	395	498	600	674	644	547	400	384	216	221
WSIP 2070 With Project	220	318	396	536	643	708	663	551	371	360	222	253
Difference	29	39	1	37	43	34	18	4	-30	-24	5	32
Percent Difference	15.2%	14.0%	0.2%	7.5%	7.2%	5.1%	2.9%	0.7%	-7.5%	-6.3%	2.4%	14.5%
Critical (14.6%)												
WSIP 2070 Without Project	148	196	303	345	433	509	497	439	324	287	184	160
WSIP 2070 With Project	157	205	313	413	483	544	527	458	326	289	174	164
Difference	9	8	9	68	50	34	29	19	2	3	-10	4
Percent Difference	6.1%	4.3%	3.1%	19.7%	11.5%	6.7%	5.9%	4.3%	0.7%	0.9%	-5.6%	2.7%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

Sacramento-San Joaquin Delta Operations

Exceedance Probability Charts and Tables

Figure SW-30-b
Sacramento River below Hood, Monthly Flow
Probability of Exceedance

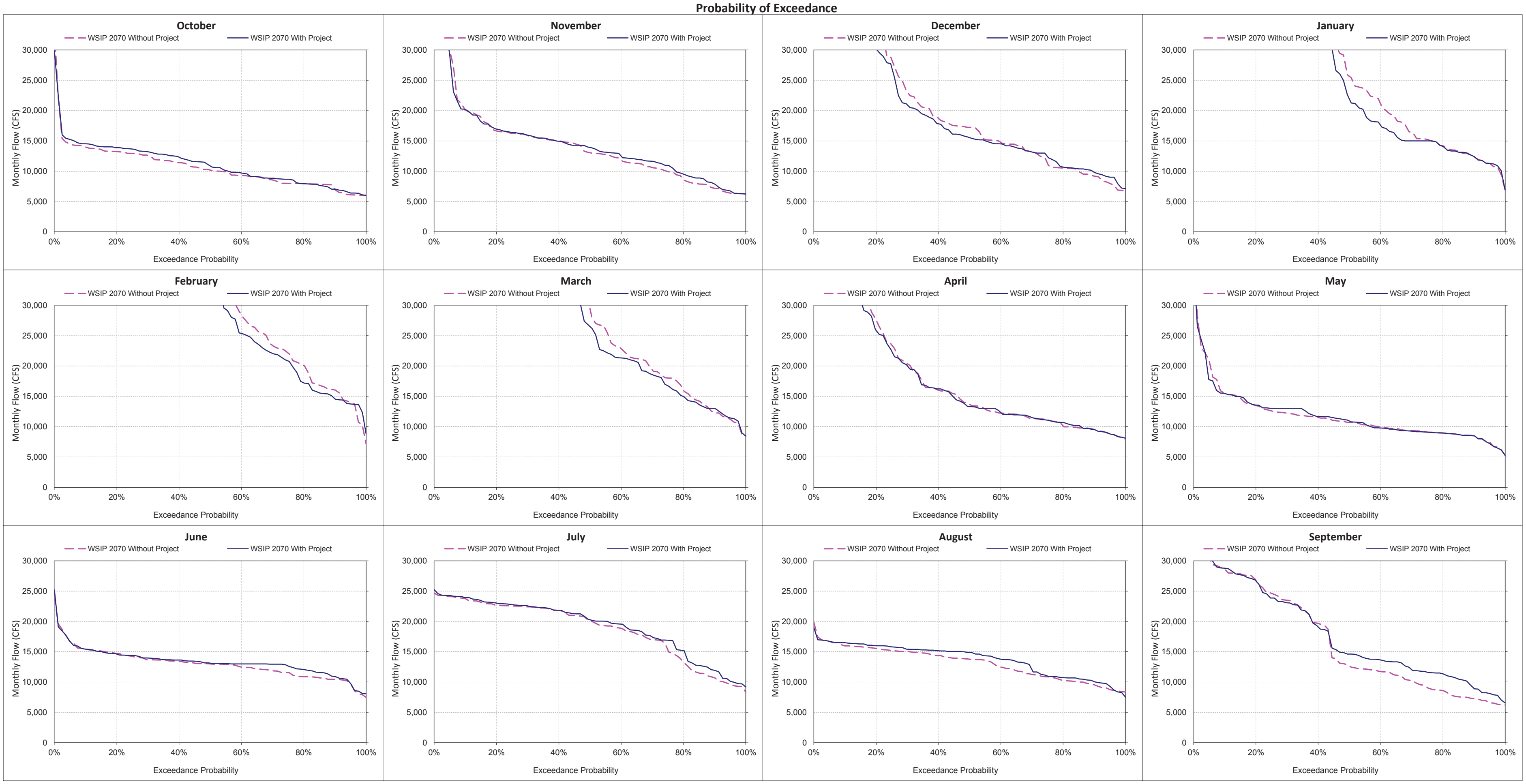


Table SW-30-b

Sacramento River below Hood, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,448	29,845	-3,604	-10.8%
1.2%	22,223	22,405	183	0.8%
2.5%	15,425	15,971	546	3.5%
3.7%	14,813	15,424	611	4.1%
4.9%	14,492	15,279	787	5.4%
6.2%	14,305	15,042	737	5.2%
7.4%	14,276	14,713	437	3.1%
8.6%	14,231	14,550	320	2.2%
9.9%	14,008	14,542	534	3.8%
11.1%	13,802	14,502	700	5.1%
12.3%	13,745	14,365	620	4.5%
13.6%	13,717	14,164	448	3.3%
14.8%	13,618	14,062	445	3.3%
16.0%	13,325	14,038	713	5.3%
17.3%	13,297	14,032	735	5.5%
18.5%	13,282	14,028	746	5.6%
19.8%	13,267	13,898	631	4.8%
21.0%	13,195	13,891	696	5.3%
22.2%	13,152	13,769	617	4.7%
23.5%	12,949	13,720	771	6.0%
24.7%	12,942	13,686	743	5.7%
25.9%	12,941	13,571	630	4.9%
27.2%	12,841	13,328	486	3.8%
28.4%	12,660	13,302	642	5.1%
29.6%	12,653	13,250	597	4.7%
30.9%	12,503	13,114	610	4.9%
32.1%	11,913	12,947	1,034	8.7%
33.3%	11,882	12,827	945	8.0%
34.6%	11,824	12,818	994	8.4%
35.8%	11,746	12,736	990	8.4%
37.0%	11,719	12,582	863	7.4%
38.3%	11,531	12,539	1,008	8.7%
39.5%	11,410	12,452	1,042	9.1%
40.7%	11,385	12,155	769	6.8%
42.0%	11,308	11,971	663	5.9%
43.2%	10,870	11,794	924	8.5%
44.4%	10,701	11,596	895	8.4%
45.7%	10,675	11,595	920	8.6%
46.9%	10,469	11,556	1,088	10.4%
48.1%	10,270	11,477	1,206	11.7%
49.4%	10,262	11,078	816	8.0%
50.6%	10,100	10,671	571	5.6%
51.9%	10,024	10,615	591	5.9%
53.1%	10,010	10,577	567	5.7%
54.3%	9,912	10,198	286	2.9%
55.6%	9,904	10,051	148	1.5%
56.8%	9,353	9,842	489	5.2%
58.0%	9,351	9,830	479	5.1%
59.3%	9,284	9,792	508	5.5%
60.5%	9,282	9,671	390	4.2%
61.7%	9,243	9,576	334	3.6%
63.0%	9,103	9,154	51	0.6%
64.2%	9,096	9,125	28	0.3%
65.4%	9,063	9,116	53	0.6%
66.7%	9,006	8,874	-132	-1.5%
67.9%	8,687	8,867	180	2.1%
69.1%	8,617	8,856	239	2.8%
70.4%	8,536	8,834	299	3.5%
71.6%	8,305	8,740	435	5.2%
72.8%	8,006	8,713	708	8.8%
74.1%	8,002	8,680	678	8.5%
75.3%	7,992	8,679	687	8.6%
76.5%	7,990	8,547	558	7.0%
77.8%	7,988	8,069	81	1.0%
79.0%	7,967	7,975	8	0.1%
80.2%	7,936	7,957	21	0.3%
81.5%	7,904	7,914	9	0.1%
82.7%	7,888	7,855	-34	-0.4%
84.0%	7,882	7,835	-48	-0.6%
85.2%	7,854	7,640	-214	-2.7%
86.4%	7,826	7,570	-257	-3.3%
87.7%	7,786	7,411	-375	-4.8%
88.9%	7,771	7,040	-732	-9.4%
90.1%	6,909	7,032	124	1.8%
91.4%	6,497	6,870	373	5.7%
92.6%	6,415	6,821	406	6.3%
93.8%	6,164	6,603	439	7.1%
95.1%	6,108	6,415	307	5.0%
96.3%	6,086	6,398	312	5.1%
97.5%	6,070	6,342	272	4.5%
98.8%	6,029	6,109	79	1.3%
100.0%	6,016	6,016	0	0.0%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,559	38,629	-5,930	-13.3%
1.2%	39,825	38,129	-1,696	-4.3%
2.5%	38,795	37,969	-825	-2.1%
3.7%	33,771	33,660	-111	-0.3%
4.9%	30,071	29,383	-688	-2.3%
6.2%	27,354	23,086	-4,267	-15.6%
7.4%	21,823	21,569	-254	-1.2%
8.6%	21,229	20,266	-963	-4.5%
9.9%	20,173	20,229	56	0.3%
11.1%	19,778	19,843	65	0.3%
12.3%	19,692	19,290	-403	-2.0%
13.6%	19,318	19,244	-75	-0.4%
14.8%	19,051	18,250	-801	-4.2%
16.0%	18,147	17,791	-355	-2.0%
17.3%	17,846	17,781	-65	-0.4%
18.5%	16,921	17,280	359	2.1%
19.8%	16,676	16,991	316	1.9%
21.0%	16,526	16,863	337	2.0%
22.2%	16,508	16,614	106	0.6%
23.5%	16,471	16,532	61	0.4%
24.7%	16,252	16,422	170	1.0%
25.9%	16,235	16,357	122	0.8%
27.2%	16,126	16,238	113	0.7%
28.4%	16,122	16,197	76	0.5%
29.6%	15,990	15,975	-15	-0.1%
30.9%	15,686	15,855	169	1.1%
32.1%	15,596	15,699	103	0.7%
33.3%	15,480	15,489	9	0.1%
34.6%	15,407	15,469	63	0.4%
35.8%	15,292	15,441	149	1.0%
37.0%	15,157	15,223	67	0.4%
38.3%	15,135	15,149	13	0.1%
39.5%	14,993	14,974	-19	-0.1%
40.7%	14,950	14,917	-33	-0.2%
42.0%	14,803	14,675	-128	-0.9%
43.2%	14,740	14,393	-347	-2.4%
44.4%	14,683	14,295	-388	-2.6%
45.7%	14,431	14,281	-150	-1.0%
46.9%	14,255	14,269	13	0.1%
48.1%	13,291	14,252	961	7.2%
49.4%	13,109	13,957	848	6.5%
50.6%	12,988	13,832	844	6.5%
51.9%	12,930	13,656	726	5.6%
53.1%	12,906	13,272	366	2.8%
54.3%	12,793	13,176	384	3.0%
55.6%	12,787	13,120	333	2.6%
56.8%	12,504	13,025	521	4.2%
58.0%	12,274	12,998	724	5.9%
59.3%	12,191	12,970	780	6.4%
60.5%	11,626	12,210	584	5.0%
61.7%	11,486	12,174	687	6.0%
63.0%	11,361	12,104	743	6.5%
64.2%	11,312	12,062	750	6.6%
65.4%	11,292	11,903	611	5.4%
66.7%	11,181	11,869	688	6.2%
67.9%	10,745	11,696	952	8.9%
69.1%	10,737	11,685	948	8.8%
70.4%	10,568	11,637	1,070	10.1%
71.6%	10,499	11,397	898	8.6%
72.8%	10,330	11,262	932	9.0%
74.1%	10,087	11,000	913	9.1%
75.3%	9,897	10,947	1,050	10.6%
76.5%	9,861	10,513	652	6.6%
77.8%	9,409	9,879	470	5.0%
79.0%	9,262	9,716	454	4.9%
80.2%	8,501	9,480	979	11.5%
81.5%	8,252	9,225	974	11.8%
82.7%	8,051	9,058	1,007	12.5%
84.0%	7,981	8,890	908	11.4%
85.2%	7,883	8,882	999	12.7%
86.4%	7,860	8,753	893	11.4%
87.7%	7,802	8,231	430	5.5%
88.9%	7,309	8,148	839	11.5%
90.1%	7,172	7,876	703	9.8%
91.4%	7,146	7,354	207	2.9%
92.6%	6,713	6,943	229	3.4%
93.8%	6,512	6,867	356	5.5%
95.1%	6,380	6,724	344	5.4%
96.3%	6,379	6,360	-18	-0.3%
97.5%	6,309	6,326	17	0.3%
98.8%	6,285	6,309	24	0.4%
100.0%	6,254	6,239	-15	-0.2%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,296	81,276	-20	0.0%
1.2%	78,631	78,385	-246	-0.3%
2.5%	73,619	73,286	-333	-0.5%
3.7%	70,538	70,128	-410	-0.6%
4.9%	67,023	66,714	-309	-0.5%
6.2%	62,885	61,711	-1,175	-1.9%
7.4%	61,024	56,356	-4,668	-7.7%
8.6%	56,601	55,334	-1,267	-2.2%
9.9%	55,226	54,839	-386	-0.7%
11.1%	54,829	53,964	-865	-1.6%
12.3%	43,996	43,585	-411	-0.9%
13.6%	43,908	43,020	-887	-2.0%
14.8%	38,611	37,673	-939	-2.4%
16.0%	38,177	35,374	-2,802	-7.3%
17.3%	37,118	32,889	-4,229	-11.4%
18.5%	34,616	32,740	-1,876	-5.4%
19.8%	34,077	30,391	-3,686	-10.8%
21.0%	32,698	29,555	-3,143	-9.6%
22.2%	32,174	28,954	-3,221	-10.0%
23.5%	28,972	27,869	-1,104	-3.8%
24.7%	28,828	27,766	-1,062	-3.7%
25.9%	27,192	25,397	-1,795	-6.6%
27.2%	25,643	22,473	-3,170	-12.4%
28.4%	24,930	21,289	-3,642	-14.6%
29.6%	23,382	21,119	-2,263	-9.7%
30.9%	22,447	20,479	-1,968	-8.8%
32.1%	22,301	20,386	-1,915	-8.6%
33.3%	21,325	20,101	-1,224	-5.7%
34.6%	20,624	19,483	-1,140	-5.5%
35.8%	20,430	19,245	-1,185	-5.8%
37.0%	20,364	18,910	-1,454	-7.1%
38.3%	19,091	18,614	-477	-2.5%
39.5%	18,968	17,867	-1,101	-5.8%
40.7%	18,369	17,735	-633	-3.4%
42.0%	18,162	17,005	-1,156	-6.4%
43.2%	17,885	16,851	-1,034	-5.8%
44.4%	17,570	16,135	-1,435	-8.2%
45.7%	17,485	16,110	-1,375	-7.9%
46.9%	17,407	16,026	-1,381	-7.9%
48.1%	17,355	15,818	-1,538	-8.9%
49.4%	17,231	15,648	-1,583	-9.2%
50.6%	17,225	15,416	-1,809	-10.5%
51.9%	17,143	15,281	-1,862	-10.9%
53.1%	16,492	15,194	-1,298	-7.9%
54.3%	15,360	15,192	-168	-1.1%
55.6%	15,163	14,936	-227	-1.5%
56.8%	15,133	14,715	-417	-2.8%
58.0%	15,077	14,544	-533	-3.5%
59.3%	14,994	14,521	-473	-3.2%
60.5%	14,588	14,505	-83	-0.6%
61.7%	14,478	14,197	-281	-1.9%
63.0%	14,461	14,192	-269	-1.9%
64.2%	14,459	14,033	-426	-2.9%
65.4%	14,217	13,791	-427	-3.0%
66.7%	14,187	13,739	-448	-3.2%
67.9%	13,371	13,414	44	0.3%
69.1%	13,316	13,308	-8	-0.1%
70.4%	13,173	13,128	-45	-0.3%
71.6%	12,865	13,000	135	1.0%
72.8%	12,409	13,000	591	4.8%
74.1%	12,345	13,000	655	5.3%
75.3%	10,919	12,242	1,323	12.1%
76.5%	10,675	11,923	1,249	11.7%
77.8%	10,587	11,571	984	9.3%
79.0%	10,565	10,800	235	2.2%
80.2%	10,514	10,630	116	1.1%
81.5%	10,469	10,577	108	1.0%
82.7%	10,467	10,563	96	0.9%
84.0%	10,415	10,454	38	0.4%
85.2%	9,918	10,384	467	4.7%
86.4%	9,521	10,362	841	8.8%
87.7%	9,517	10,270	753	7.9%
88.9%	9,324	10,147	823	8.8%
90.1%	9,182	9,803	621	6.8%
91.4%	9,075	9,587	513	5.7%
92.6%	8,422	9,396	974	11.6%
93.8%	8,250	9,161	912	11.1%
95.1%	7,971	9,025	1,054	13.2%
96.3%	7,702	9,023	1,321	17.2%
97.5%	6,887	7,927	1,040	15.1%
98.8%	6,854	7,204	349	5.1%
100.0%	6,694	7,109	415	6.2%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,411	81,204	-207	-0.3%
1.2%	80,561	80,495	-66	-0.1%
2.5%	79,720	79,933	213	0.3%
3.7%	78,123	78,099	-24	0.0%
4.9%	77,791	77,779	-12	0.0%
6.2%	76,838	76,836	-2	0.0%
7.4%	76,821	76,413	-408	-0.5%
8.6%	72,819	71,967	-851	-1.2%
9.9%	71,836	71,379	-458	-0.6%
11.1%	71,317	71,228	-90	-0.1%
12.3%	70,759	70,933	174	0.2%
13.6%	69,658	69,574	-84	-0.1%
14.8%	69,411	68,000	-1,411	-2.0%
16.0%	68,693	67,764	-928	-1.4%
17.3%	67,888	66,585	-1,303	-1.9%
18.5%	66,422	65,781	-641	-1.0%
19.8%	63,622	63,671	49	0.1%
21.0%	63,216	63,326	110	0.2%
22.2%	63,164	61,315	-1,849	-2.9%
23.5%	60,561	60,052	-508	-0.8%
24.7%	60,296	59,300	-996	-1.7%
25.9%	58,795	57,692	-1,103	-1.9%
27.2%	54,727	53,159	-1,568	-2.9%
28.4%	50,405	50,293	-112	-0.2%
29.6%	46,738	45,542	-1,196	-2.6%
30.9%	45,164	44,822	-342	-0.8%
32.1%	44,252	44,501	249	0.6%
33.3%	43,566	42,449	-1,117	-2.6%
34.6%	37,947	34,877	-3,071	-8.1%
35.8%	36,778	34,567	-2,210	-6.0%
37.0%	36,730	34,339	-2,391	-6.5%
38.3%	35,513	33,882	-1,631	-4.6%
39.5%	35,233	31,747	-3,487	-9.9%
40.7%	35,202	31,710	-3,491	-9.9%
42.0%	34,430	31,496	-2,934	-8.5%
43.2%	33,420	30,305	-3,116	-9.3%
44.4%	32,157	30,237	-1,920	-6.0%
45.7%	30,772	26,615	-4,157	-13.5%
46.9%	29,451	26,034	-3,417	-11.6%
48.1%	29,168	24,957	-4,211	-14.4%
49.4%	25,911	22,623	-3,288	-12.7%
50.6%	25,411	21,250	-4,162	-16.4%
51.9%	24,043	21,177	-2,867	-11.9%
53.1%	23,884	20,443	-3,441	-14.4%
54.3%	23,722	20,240	-3,482	-14.7%
55.6%	23,315	18,856	-4,459	-19.1%
56.8%	22,405	18,310	-4,095	-18.3%
58.0%	22,206	18,162	-4,044	-18.2%
59.3%	21,981	18,127	-3,854	-17.5%
60.5%	20,563	17,230	-3,333	-16.2%
61.7%	20,018	17,054	-2,963	-14.8%
63.0%	19,452	16,555	-2,897	-14.9%
64.2%	19,236	16,402	-2,833	-14.7%
65.4%	18,235	15,550	-2,685	-14.7%
66.7%	18,102	15,148	-2,954	-16.3%
67.9%	17,671	15,000	-2,671	-15.1%
69.1%	16,515	15,000	-1,515	-9.2%
70.4%	16,378	15,000	-1,378	-8.4%
71.6%	15,376	15,000	-376	-2.4%
72.8%	15,357	15,000	-357	-2.3%
74.1%	15,350	15,000	-350	-2.3%
75.3%	15,192	15,000	-192	-1.3%
76.5%	14,917	15,000	83	0.6%
77.8%	14,879	14,882	3	0.0%
79.0%	14,289	14,339	50	0.4%
80.2%	14,155	14,008	-147	-1.0%
81.5%	13,695	13,468	-226	-1.7%
82.7%	13,521	13,318	-203	-1.5%
84.0%	13,480	13,317	-163	-1.2%
85.2%	13,216	13,106	-110	-0.8%
86.4%	12,943	13,102	158	1.2%
87.7%	12,940	13,043	103	0.8%
88.9%	12,682	12,703	21	0.2%
90.1%	12,323	12,411	87	0.7%
91.4%	11,949	11,840	-109	-0.9%
92.6%	11,746	11,790	44	0.4%
93.8%	11,331	11,341	11	0.1%
95.1%	11,271	11,266	-5	0.0%
96.3%	10,755	11,188	433	4.0%
97.5%	10,733	10,899	165	1.5%
98.8%	9,393	10,091	698	7.4%
100.0%	6,860	6,928	68	1.0%

Table SW-30-b
Sacramento River below Hood, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	82,494	82,467	-27	0.0%
1.2%	82,304	82,291	-13	0.0%
2.5%	81,985	81,989	4	0.0%
3.7%	81,917	81,864	-53	-0.1%
4.9%	80,029	80,059	30	0.0%
6.2%	79,778	79,808	30	0.0%
7.4%	78,602	78,575	-27	0.0%
8.6%	77,331	77,444	113	0.1%
9.9%	76,807	76,879	72	0.1%
11.1%	75,542	75,204	-338	-0.4%
12.3%	74,820	74,834	15	0.0%
13.6%	74,504	74,287	-217	-0.3%
14.8%	73,776	73,831	56	0.1%
16.0%	73,498	73,491	-7	0.0%
17.3%	73,211	72,345	-866	-1.2%
18.5%	71,713	71,508	-205	-0.3%
19.8%	71,378	70,969	-409	-0.6%
21.0%	69,104	68,387	-717	-1.0%
22.2%	68,695	67,726	-970	-1.4%
23.5%	67,623	66,139	-1,484	-2.2%
24.7%	67,270	65,999	-1,271	-1.9%
25.9%	64,792	64,786	-6	0.0%
27.2%	64,791	64,569	-223	-0.3%
28.4%	64,659	63,494	-1,165	-1.8%
29.6%	63,829	62,804	-1,025	-1.6%
30.9%	57,219	56,260	-959	-1.7%
32.1%	56,876	55,297	-1,579	-2.8%
33.3%	53,909	53,855	-54	-0.1%
34.6%	53,347	53,272	-75	-0.1%
35.8%	52,611	52,469	-142	-0.3%
37.0%	51,683	51,554	-129	-0.2%
38.3%	51,657	51,399	-258	-0.5%
39.5%	51,330	49,578	-1,752	-3.4%
40.7%	49,667	48,637	-1,030	-2.1%
42.0%	49,664	46,132	-3,532	-7.1%
43.2%	48,663	45,679	-2,984	-6.1%
44.4%	46,554	45,546	-1,008	-2.2%
45.7%	44,433	44,560	127	0.3%
46.9%	43,950	44,447	496	1.1%
48.1%	42,859	43,761	902	2.1%
49.4%	41,193	39,377	-1,817	-4.4%
50.6%	37,981	35,399	-2,582	-6.8%
51.9%	37,039	34,426	-2,613	-7.1%
53.1%	35,900	33,737	-2,163	-6.0%
54.3%	34,276	29,589	-4,687	-13.7%
55.6%	32,938	29,134	-3,804	-11.5%
56.8%	32,226	28,040	-4,186	-13.0%
58.0%	30,203	27,741	-2,462	-8.2%
59.3%	29,009	25,443	-3,567	-12.3%
60.5%	28,051	25,276	-2,775	-9.9%
61.7%	27,292	25,031	-2,261	-8.3%
63.0%	26,579	24,724	-1,855	-7.0%
64.2%	26,393	24,026	-2,367	-9.0%
65.4%	25,645	23,593	-2,052	-8.0%
66.7%	25,493	23,004	-2,489	-9.8%
67.9%	25,075	22,601	-2,474	-9.9%
69.1%	23,706	22,260	-1,446	-6.1%
70.4%	23,243	21,979	-1,264	-5.4%
71.6%	22,935	21,871	-1,065	-4.6%
72.8%	22,924	21,445	-1,479	-6.5%
74.1%	22,506	21,015	-1,491	-6.6%
75.3%	22,004	20,737	-1,267	-5.8%
76.5%	20,880	19,778	-1,102	-5.3%
77.8%	20,636	18,968	-1,669	-8.1%
79.0%	20,352	17,458	-2,894	-14.2%
80.2%	20,018	17,163	-2,855	-14.3%
81.5%	18,865	17,107	-1,758	-9.3%
82.7%	17,210	16,017	-1,193	-6.9%
84.0%	17,089	15,789	-1,300	-7.6%
85.2%	16,807	15,555	-1,252	-7.5%
86.4%	16,570	15,469	-1,100	-6.6%
87.7%	16,240	15,391	-850	-5.2%
88.9%	16,163	15,099	-1,064	-6.6%
90.1%	16,022	14,522	-1,500	-9.4%
91.4%	15,568	14,404	-1,164	-7.5%
92.6%	14,424	14,389	-35	-0.2%
93.8%	14,225	13,810	-415	-2.9%
95.1%	13,971	13,718	-253	-1.8%
96.3%	13,748	13,661	-88	-0.6%
97.5%	10,749	13,653	2,905	27.0%
98.8%	10,278	12,327	2,050	19.9%
100.0%	7,132	8,854	1,723	24.2%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	80,093	80,081	-12	0.0%
1.2%	77,434	77,211	-223	-0.3%
2.5%	77,215	76,975	-240	-0.3%
3.7%	77,047	76,826	-221	-0.3%
4.9%	76,301	75,876	-425	-0.6%
6.2%	75,346	75,347	1	0.0%
7.4%	73,469	72,939	-530	-0.7%
8.6%	67,288	67,291	3	0.0%
9.9%	66,653	66,548	-105	-0.2%
11.1%	65,749	64,681	-1,068	-1.6%
12.3%	64,678	63,992	-686	-1.1%
13.6%	63,922	63,721	-201	-0.3%
14.8%	63,109	63,106	-3	0.0%
16.0%	63,034	63,037	3	0.0%
17.3%	60,819	59,329	-1,491	-2.5%
18.5%	59,066	59,218	152	0.3%
19.8%	58,679	58,680	1	0.0%
21.0%	58,363	58,358	-6	0.0%
22.2%	56,000	55,987	-14	0.0%
23.5%	55,419	54,824	-595	-1.1%
24.7%	55,101	53,194	-1,907	-3.5%
25.9%	52,399	49,847	-2,552	-4.9%
27.2%	52,070	49,390	-2,680	-5.1%
28.4%	50,584	48,831	-1,752	-3.5%
29.6%	50,452	47,166	-3,286	-6.5%
30.9%	48,863	46,259	-2,603	-5.3%
32.1%	47,463	46,094	-1,369	-2.9%
33.3%	45,863	43,647	-2,215	-4.8%
34.6%	44,377	42,532	-1,845	-4.2%
35.8%	44,171	41,976	-2,196	-5.0%
37.0%	43,558	41,016	-2,542	-5.8%
38.3%	42,869	39,160	-3,709	-8.7%
39.5%	38,778	38,610	-168	-0.4%
40.7%	38,455	37,939	-517	-1.3%
42.0%	35,427	34,891	-536	-1.5%
43.2%	35,294	33,320	-1,974	-5.6%
44.4%	34,332	30,845	-3,486	-10.2%
45.7%	33,755	30,660	-3,095	-9.2%
46.9%	33,365	30,260	-3,105	-9.3%
48.1%	32,804	27,371	-5,433	-16.6%
49.4%	30,918	26,805	-4,112	-13.3%
50.6%	27,964	26,175	-1,789	-6.4%
51.9%	27,014	25,179	-1,835	-6.8%
53.1%	26,747	22,741	-4,006	-15.0%
54.3%	26,703	22,518	-4,185	-15.7%
55.6%	25,476	22,170	-3,306	-13.0%
56.8%	23,798	21,896	-1,902	-8.0%
58.0%	23,333	21,445	-1,888	-8.1%
59.3%	23,206	21,375	-1,831	-7.9%
60.5%	22,615	21,328	-1,287	-5.7%
61.7%	22,019	21,215	-804	-3.7%
63.0%	21,432	21,007	-426	-2.0%
64.2%	21,265	20,852	-413	-1.9%
65.4%	21,195	20,593	-603	-2.8%
66.7%	21,090	19,199	-1,891	-9.0%
67.9%	20,866	19,134	-1,732	-8.3%
69.1%	19,912	18,731	-1,181	-5.9%
70.4%	19,114	18,484	-630	-3.3%
71.6%	19,061	18,293	-768	-4.0%
72.8%	18,576	18,118	-458	-2.5%
74.1%	18,073	16,981	-1,092	-6.0%
75.3%	18,011	16,640	-1,371	-7.6%
76.5%	18,005	16,142	-1,863	-10.3%
77.8%	17,551	15,886	-1,665	-9.5%
79.0%	16,914	15,215	-1,698	-10.0%
80.2%	15,810	14,915	-896	-5.7%
81.5%	15,435	14,316	-1,119	-7.2%
82.7%	14,720	14,160	-560	-3.8%
84.0%	14,418	14,026	-392	-2.7%
85.2%	14,183	13,565	-617	-4.4%
86.4%	13,663	13,253	-410	-3.0%
87.7%	13,273	13,000	-273	-2.1%
88.9%	12,567	13,000	433	3.4%
90.1%	12,265	13,000	735	6.0%
91.4%	12,251	12,543	292	2.4%
92.6%	11,662	12,075	413	3.5%
93.8%	11,586	11,650	64	0.6%
95.1%	11,197	11,432	234	2.1%
96.3%	10,720	11,304	584	5.5%
97.5%	10,569	10,913	344	3.3%
98.8%	8,672	8,936	264	3.0%
100.0%	8,619	8,433	-186	-2.2%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	78,079	77,986	-93	-0.1%
1.2%	77,833	77,825	-8	0.0%
2.5%	69,534	69,050	-484	-0.7%
3.7%	55,136	54,708	-428	-0.8%
4.9%	53,456	53,451	-5	0.0%
6.2%	52,127	51,972	-155	-0.3%
7.4%	51,266	51,201	-66	-0.1%
8.6%	51,051	49,593	-1,458	-2.9%
9.9%	49,621	48,564	-1,057	-2.1%
11.1%	48,374	48,396	22	0.0%
12.3%	40,354	37,374	-2,979	-7.4%
13.6%	32,719	32,074	-645	-2.0%
14.8%	31,780	31,165	-615	-1.9%
16.0%	31,268	29,161	-2,108	-6.7%
17.3%	30,829	28,869	-1,960	-6.4%
18.5%	28,889	28,201	-688	-2.4%
19.8%	27,865	26,026	-1,839	-6.6%
21.0%	26,475	25,216	-1,259	-4.8%
22.2%	25,402	25,024	-378	-1.5%
23.5%	23,877	23,683	-194	-0.8%
24.7%	23,681	22,769	-912	-3.9%
25.9%	22,872	21,517	-1,356	-5.9%
27.2%	21,252	21,257	5	0.0%
28.4%	20,925	20,546	-379	-1.8%
29.6%	20,473	20,251	-222	-1.1%
30.9%	20,095	19,493	-602	-3.0%
32.1%	18,915	19,444	529	2.8%
33.3%	18,825	18,764	-61	-0.3%
34.6%	17,655	16,895	-759	-4.3%
35.8%	16,470	16,808	339	2.1%
37.0%	16,436	16,453	17	0.1%
38.3%	16,434	16,376	-58	-0.4%
39.5%	16,107	16,231	124	0.8%
40.7%	15,882	16,202	319	2.0%
42.0%	15,876	15,960	84	0.5%
43.2%	15,856	15,763	-92	-0.6%
44.4%	15,487	15,057	-430	-2.8%
45.7%	15,326	14,426	-901	-5.9%
46.9%	14,537	14,224	-313	-2.2%
48.1%	14,021	13,877	-144	-1.0%
49.4%	13,961	13,330	-630	-4.5%
50.6%	13,433	13,294	-139	-1.0%
51.9%	13,403	13,225	-178	-1.3%
53.1%	13,378	13,000	-378	-2.8%
54.3%	13,086	13,000	-86	-0.7%
55.6%	12,716	13,000	284	2.2%
56.8%	12,504	13,000	496	4.0%
58.0%	12,467	13,000	533	4.3%
59.3%	12,257	12,676	419	3.4%
60.5%	12,236	12,063	-173	-1.4%
61.7%	12,165	12,029	-137	-1.1%
63.0%	12,073	12,019	-54	-0.4%
64.2%	12,063	11,953	-110	-0.9%
65.4%	12,013	11,940	-73	-0.6%
66.7%	11,920	11,920	0	0.0%
67.9%	11,725	11,892	168	1.4%
69.1%	11,406	11,669	263	2.3%
70.4%	11,364	11,436	72	0.6%
71.6%	11,279	11,354	75	0.7%
72.8%	11,265	11,153	-112	-1.0%
74.1%	11,245	11,139	-106	-0.9%
75.3%	11,064	11,024	-40	-0.4%
76.5%	10,901	10,886	-15	-0.1%
77.8%	10,857	10,726	-131	-1.2%
79.0%	10,675	10,695	19	0.2%
80.2%	9,978	10,667	688	6.9%
81.5%	9,972	10,424	451	4.5%
82.7%	9,945	10,269	324	3.3%
84.0%	9,887	10,203	317	3.2%
85.2%	9,791	10,176	386	3.9%
86.4%	9,781	9,725	-56	-0.6%
87.7%	9,765	9,700	-65	-0.7%
88.9%	9,701	9,568	-133	-1.4%
90.1%	9,515	9,515	0	0.0%
91.4%	9,262	9,195	-67	-0.7%
92.6%	9,216	9,165	-51	-0.6%
93.8%	9,012	9,085	73	0.8%
95.1%	8,773	8,773	0	0.0%
96.3%	8,686	8,634	-52	-0.6%
97.5%	8,415	8,345	-70	-0.8%
98.8%	8,155	8,270	116	1.4%
100.0%	7,758	8,102	344	4.4%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	40,442	37,711	-2,731	-6.8%
1.2%	28,288	26,485	-1,803	-6.4%
2.5%	23,021	24,300	1,279	5.6%
3.7%	22,152	22,195	43	0.2%
4.9%	21,020	17,741	-3,279	-15.6%
6.2%	18,167	17,540	-627	-3.5%
7.4%	17,799	15,947	-1,853	-10.4%
8.6%	15,918	15,528	-391	-2.5%
9.9%	15,511	15,509	-2	0.0%
11.1%	15,275	15,274	-1	0.0%
12.3%	15,258	15,258	0	0.0%
13.6%	15,145	14,983	-162	-1.1%
14.8%	14,826	14,982	157	1.1%
16.0%	14,143	14,756	613	4.3%
17.3%	13,758	14,043	286	2.1%
18.5%	13,703	13,758	55	0.4%
19.8%	13,509	13,587	78	0.6%
21.0%	13,378	13,535	158	1.2%
22.2%	12,929	13,079	150	1.2%
23.5%	12,798	13,076	278	2.2%
24.7%	12,638	13,000	362	2.9%
25.9%	12,459	13,000	541	4.3%
27.2%	12,375	13,000	625	5.0%
28.4%	12,351	13,000	649	5.3%
29.6%	12,249	13,000	751	6.1%
30.9%	12,141	13,000	859	7.1%
32.1%	12,090	13,000	910	7.5%
33.3%	11,897	13,000	1,103	9.3%
34.6%	11,880	13,000	1,120	9.4%
35.8%	11,777	12,619	842	7.1%
37.0%	11,691	12,144	453	3.9%
38.3%	11,646	11,883	237	2.0%
39.5%	11,598	11,693	95	0.8%
40.7%	11,421	11,691	270	2.4%
42.0%	11,419	11,646	227	2.0%
43.2%	11,362	11,638	276	2.4%
44.4%	11,083	11,527	444	4.0%
45.7%	10,980	11,378	397	3.6%
46.9%	10,896	11,282	386	3.5%
48.1%	10,886	11,170	284	2.6%
49.4%	10,705	11,087	381	3.6%
50.6%	10,671	10,787	117	1.1%
51.9%	10,663	10,748	86	0.8%
53.1%	10,510	10,716	206	2.0%
54.3%	10,308	10,662	354	3.4%
55.6%	10,296	10,272	-23	-0.2%
56.8%	10,282	10,025	-257	-2.5%
58.0%	10,083	9,801	-283	-2.8%
59.3%	10,028	9,787	-241	-2.4%
60.5%	9,849	9,762	-87	-0.9%
61.7%	9,807	9,697	-110	-1.1%
63.0%	9,710	9,573	-137	-1.4%
64.2%	9,665	9,572	-93	-1.0%
65.4%	9,662	9,474	-187	-1.9%
66.7%	9,474	9,347	-127	-1.3%
67.9%	9,401	9,345	-56	-0.6%
69.1%	9,347	9,301	-46	-0.5%
70.4%	9,346	9,240	-106	-1.1%
71.6%	9,301	9,149	-152	-1.6%
72.8%	9,257	9,145	-112	-1.2%
74.1%	9,159	9,125	-33	-0.4%
75.3%	9,099	9,093	-7	-0.1%
76.5%	9,081	9,043	-38	-0.4%
77.8%	9,013	9,009	-3	0.0%
79.0%	9,005	8,956	-49	-0.5%
80.2%	8,954	8,940	-14	-0.2%
81.5%	8,889	8,844	-45	-0.5%
82.7%	8,869	8,835	-34	-0.4%
84.0%	8,795	8,795	0	0.0%
85.2%	8,673	8,675	2	0.0%
86.4%	8,622	8,579	-43	-0.5%
87.7%	8,575	8,570	-5	-0.1%
88.9%	8,565	8,537	-28	-0.3%
90.1%	8,487	8,474	-13	-0.1%
91.4%	7,987	7,991	5	0.1%
92.6%	7,969	7,990	22	0.3%
93.8%	7,559	7,514	-45	-0.6%
95.1%	7,416	7,196	-220	-3.0%
96.3%	6,703	6,705	2	0.0%
97.5%	6,693	6,463	-230	-3.4%
98.8%	6,147	6,181	35	0.6%
100.0%	5,274	5,255	-19	-0.4%

Table SW-30-b
Sacramento River below Hood, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,175	25,178	1,003	4.1%
1.2%	19,589	19,115	-474	-2.4%
2.5%	18,690	18,430	-261	-1.4%
3.7%	17,667	17,731	64	0.4%
4.9%	16,698	16,743	45	0.3%
6.2%	16,420	16,033	-387	-2.4%
7.4%	15,624	15,946	322	2.1%
8.6%	15,562	15,561	-1	0.0%
9.9%	15,414	15,429	15	0.1%
11.1%	15,312	15,398	86	0.6%
12.3%	15,219	15,291	72	0.5%
13.6%	15,174	15,095	-80	-0.5%
14.8%	15,117	15,025	-92	-0.6%
16.0%	15,032	14,889	-143	-1.0%
17.3%	14,906	14,737	-169	-1.1%
18.5%	14,834	14,734	-99	-0.7%
19.8%	14,734	14,668	-66	-0.4%
21.0%	14,661	14,433	-228	-1.6%
22.2%	14,408	14,432	24	0.2%
23.5%	14,359	14,402	43	0.3%
24.7%	14,274	14,377	103	0.7%
25.9%	14,103	14,374	271	1.9%
27.2%	14,019	14,227	208	1.5%
28.4%	13,975	13,988	13	0.1%
29.6%	13,671	13,951	280	2.1%
30.9%	13,670	13,925	254	1.9%
32.1%	13,659	13,884	226	1.7%
33.3%	13,645	13,861	216	1.6%
34.6%	13,640	13,732	93	0.7%
35.8%	13,585	13,670	86	0.6%
37.0%	13,478	13,661	183	1.4%
38.3%	13,475	13,640	165	1.2%
39.5%	13,425	13,639	214	1.6%
40.7%	13,403	13,627	223	1.7%
42.0%	13,249	13,480	231	1.7%
43.2%	13,180	13,478	298	2.3%
44.4%	13,168	13,472	304	2.3%
45.7%	13,058	13,436	378	2.9%
46.9%	13,047	13,342	295	2.3%
48.1%	13,023	13,179	156	1.2%
49.4%	13,015	13,168	154	1.2%
50.6%	12,963	13,087	124	1.0%
51.9%	12,961	13,058	97	0.7%
53.1%	12,949	13,056	107	0.8%
54.3%	12,934	13,047	113	0.9%
55.6%	12,932	13,015	83	0.6%
56.8%	12,857	13,000	143	1.1%
58.0%	12,776	13,000	224	1.8%
59.3%	12,535	13,000	465	3.7%
60.5%	12,432	13,000	568	4.6%
61.7%	12,421	13,000	579	4.7%
63.0%	12,399	13,000	601	4.8%
64.2%	12,186	13,000	814	6.7%
65.4%	12,178	13,000	822	6.8%
66.7%	12,078	13,000	922	7.6%
67.9%	12,051	13,000	949	7.9%
69.1%	11,944	12,963	1,019	8.5%
70.4%	11,834	12,955	1,121	9.5%
71.6%	11,796	12,934	1,138	9.6%
72.8%	11,572	12,932	1,359	11.7%
74.1%	11,561	12,857	1,296	11.2%
75.3%	11,560	12,579	1,019	8.8%
76.5%	11,112	12,399	1,287	11.6%
77.8%	10,964	12,186	1,223	11.2%
79.0%	10,897	12,131	1,233	11.3%
80.2%	10,875	12,048	1,173	10.8%
81.5%	10,869	11,923	1,054	9.7%
82.7%	10,840	11,845	1,005	9.3%
84.0%	10,785	11,634	849	7.9%
85.2%	10,681	11,559	878	8.2%
86.4%	10,648	11,548	900	8.5%
87.7%	10,472	11,365	893	8.5%
88.9%	10,448	10,995	547	5.2%
90.1%	10,447	10,897	450	4.3%
91.4%	10,415	10,648	233	2.2%
92.6%	10,328	10,548	219	2.1%
93.8%	10,204	10,448	245	2.4%
95.1%	9,718	9,718	0	0.0%
96.3%	8,541	8,583	42	0.5%
97.5%	8,065	8,476	411	5.1%
98.8%	7,906	8,122	216	2.7%
100.0%	7,474	8,049	575	7.7%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,677	25,238	560	2.3%
1.2%	24,306	24,567	261	1.1%
2.5%	24,306	24,319	14	0.1%
3.7%	24,179	24,306	127	0.5%
4.9%	24,099	24,306	206	0.9%
6.2%	24,089	24,164	76	0.3%
7.4%	23,909	24,134	225	0.9%
8.6%	23,863	24,113	250	1.0%
9.9%	23,813	23,928	115	0.5%
11.1%	23,436	23,925	488	2.1%
12.3%	23,393	23,708	315	1.3%
13.6%	23,386	23,654	268	1.1%
14.8%	23,210	23,491	281	1.2%
16.0%	22,984	23,229	245	1.1%
17.3%	22,914	23,178	264	1.2%
18.5%	22,890	23,126	237	1.0%
19.8%	22,647	23,063	416	1.8%
21.0%	22,631	22,924	293	1.3%
22.2%	22,596	22,898	302	1.3%
23.5%	22,594	22,882	288	1.3%
24.7%	22,566	22,773	207	0.9%
25.9%	22,533	22,708	175	0.8%
27.2%	22,527	22,651	124	0.5%
28.4%	22,521	22,639	119	0.5%
29.6%	22,409	22,598	188	0.8%
30.9%	22,408	22,430	22	0.1%
32.1%	22,316	22,401	86	0.4%
33.3%	22,232	22,332	100	0.4%
34.6%	22,213	22,304	91	0.4%
35.8%	22,197	22,230	32	0.1%
37.0%	22,052	22,142	90	0.4%
38.3%	21,835	21,874	39	0.2%
39.5%	21,826	21,854	28	0.1%
40.7%	21,753	21,837	84	0.4%
42.0%	21,438	21,511	73	0.3%
43.2%	21,030	21,424	394	1.9%
44.4%	21,004	21,298	295	1.4%
45.7%	20,941	21,253	312	1.5%
46.9%	20,879	21,235	356	1.7%
48.1%	20,779	20,844	66	0.3%
49.4%	20,229	20,343	114	0.6%
50.6%	20,004	20,175	171	0.9%
51.9%	19,672	20,067	395	2.0%
53.1%	19,363	20,059	696	3.6%
54.3%	19,308	20,036	728	3.8%
55.6%	19,256	19,987	731	3.8%
56.8%	19,244	19,701	457	2.4%
58.0%	18,959	19,640	681	3.6%
59.3%	18,949	19,570	620	3.3%
60.5%	18,787	19,534	746	4.0%
61.7%	18,362	18,963	601	3.3%
63.0%	18,317	18,574	257	1.4%
64.2%	18,143	18,541	398	2.2%
65.4%	17,813	18,492	680	3.8%
66.7%	17,769	18,307	538	3.0%
67.9%	17,347	17,721	375	2.2%
69.1%	17,066	17,707	641	3.8%
70.4%	17,005	17,294	289	1.7%
71.6%	16,925	17,180	256	1.5%
72.8%	16,881	16,945	65	0.4%
74.1%	16,361	16,933	572	3.5%
75.3%	14,948	16,897	1,949	13.0%
76.5%	14,687	16,860	2,173	14.8%
77.8%	14,378	15,340	962	6.7%
79.0%	13,890	15,275	1,384	10.0%
80.2%	13,157	15,185	2,028	15.4%
81.5%	12,576	13,399	823	6.5%
82.7%	11,873	13,138	1,266	10.7%
84.0%	11,656	12,756	1,100	9.4%
85.2%	11,437	12,746	1,309	11.4%
86.4%	11,407	12,615	1,208	10.6%
87.7%	11,014	12,465	1,451	13.2%
88.9%	10,868	12,049	1,181	10.9%
90.1%	10,667	11,925	1,258	11.8%
91.4%	10,102	11,678	1,576	15.6%
92.6%	10,060	10,588	528	5.3%
93.8%	9,852	10,586	734	7.4%
95.1%	9,542	10,121	580	6.1%
96.3%	9,373	9,930	557	5.9%
97.5%	9,278	9,732	454	4.9%
98.8%	9,269	9,697	428	4.6%
100.0%	8,312	9,169	857	10.3%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,866	18,974	-892	-4.5%
1.2%	17,447	16,964	-483	-2.8%
2.5%	16,963	16,923	-40	-0.2%
3.7%	16,769	16,880	111	0.7%
4.9%	16,716	16,716	0	0.0%
6.2%	16,487	16,579	92	0.6%
7.4%	16,479	16,551	72	0.4%
8.6%	16,176	16,482	306	1.9%
9.9%	15,968	16,480	512	3.2%
11.1%	15,965	16,400	434	2.7%
12.3%	15,954	16,378	423	2.7%
13.6%	15,871	16,320	449	2.8%
14.8%	15,827	16,286	459	2.9%
16.0%	15,762	16,275	513	3.3%
17.3%	15,699	16,069	370	2.4%
18.5%	15,642	16,065	423	2.7%
19.8%	15,558	15,976	418	2.7%
21.0%	15,448	15,976	528	3.4%
22.2%	15,330	15,965	635	4.1%
23.5%	15,294	15,956	662	4.3%
24.7%	15,214	15,827	613	4.0%
25.9%	15,155	15,762	607	4.0%
27.2%	15,085	15,703	618	4.1%
28.4%	15,033	15,679	645	4.3%
29.6%	15,030	15,421	390	2.6%
30.9%	14,993	15,391	397	2.7%
32.1%	14,890	15,378	488	3.3%
33.3%	14,885	15,372	487	3.3%
34.6%	14,804	15,300	496	3.4%
35.8%	14,768	15,291	523	3.5%
37.0%	14,634	15,273	639	4.4%
38.3%	14,443	15,267	824	5.7%
39.5%	14,362	15,161	799	5.6%
40.7%	14,350	15,128	778	5.4%
42.0%	14,123	15,112	988	7.0%
43.2%	14,063	15,060	997	7.1%
44.4%	13,941	15,053	1,111	8.0%
45.7%	13,937	15,034	1,097	7.9%
46.9%	13,927	15,026	1,099	7.9%
48.1%	13,852	14,993	1,142	8.2%
49.4%	13,795	14,872	1,077	7.8%
50.6%	13,728	14,862	1,134	8.3%
51.9%	13,727	14,634	908	6.6%
53.1%	13,690	14,613	923	6.7%
54.3%	13,653	14,356	704	5.2%
55.6%	13,546	14,322	776	5.7%
56.8%	13,330	14,266	936	7.0%
58.0%	12,888	14,031	1,143	8.9%
59.3%	12,482	13,846	1,364	10.9%
60.5%	12,440	13,725	1,284	10.3%
61.7%	12,247	13,717	1,471	12.0%
63.0%	12,186	13,687	1,501	12.3%
64.2%	12,008	13,541	1,533	12.8%
65.4%	11,782	13,288	1,506	12.8%
66.7%	11,731	13,245	1,514	12.9%
67.9%	11,381	13,095	1,713	15.1%
69.1%	11,367	12,895	1,528	13.4%
70.4%	11,206	11,664	458	4.1%
71.6%	11,172	11,644	472	4.2%
72.8%	10,971	11,291	320	2.9%
74.1%	10,867	11,165	297	2.7%
75.3%	10,855	10,940	85	0.8%
76.5%	10,741	10,900	159	1.5%
77.8%	10,606	10,894	288	2.7%
79.0%	10,391	10,763	372	3.6%
80.2%	10,239	10,709	470	4.6%
81.5%	10,190	10,681	491	4.8%
82.7%	10,153	10,680	527	5.2%
84.0%	10,055	10,670	615	6.1%
85.2%	9,996	10,487	491	4.9%
86.4%	9,972	10,465	493	4.9%
87.7%	9,771	10,343	572	5.9%
88.9%	9,738	10,269	532	5.5%
90.1%	9,502	10,036	534	5.6%
91.4%	9,260	9,890	629	6.8%
92.6%	9,065	9,832	767	8.5%
93.8%	9,035	9,714	680	7.5%
95.1%	8,723	9,246	523	6.0%
96.3%	8,638	8,656	18	0.2%
97.5%	8,540	8,345	-195	-2.3%
98.8%	8,412	8,262	-150	-1.8%
100.0%	8,356	7,495	-862	-10.3%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,900	31,864	-36	-0.1%
1.2%	31,025	31,450	425	1.4%
2.5%	30,576	31,271	695	2.3%
3.7%	30,531	30,820	289	0.9%
4.9%	30,411	30,267	-143	-0.5%
6.2%	29,340	29,921	581	2.0%
7.4%	29,226	29,005	-221	-0.8%
8.6%	28,915	28,842	-73	-0.3%
9.9%	28,720	28,791	71	0.2%
11.1%	27,992	28,700	708	2.5%
12.3%	27,965	28,329	364	1.3%
13.6%	27,924	27,843	-81	-0.3%
14.8%	27,891	27,725	-166	-0.6%
16.0%	27,641	27,597	-44	-0.2%
17.3%	27,598	27,229	-369	-1.3%
18.5%	27,565	27,066	-500	-1.8%
19.8%	26,954	26,861	-93	-0.3%
21.0%	26,021	26,140	119	0.5%
22.2%	25,568	24,745	-822	-3.2%
23.5%	24,718	24,550	-168	-0.7%
24.7%	24,706	23,874	-832	-3.4%
25.9%	24,454	23,841	-613	-2.5%
27.2%	24,161	23,297	-863	-3.6%
28.4%	23,600	23,285	-315	-1.3%
29.6%	23,519	23,106	-413	-1.8%
30.9%	23,441	23,060	-381	-1.6%
32.1%	22,978	22,735	-244	-1.1%
33.3%	22,752	22,725	-27	-0.1%
34.6%	22,264	21,872	-392	-1.8%
35.8%	21,715	21,760	45	0.2%
37.0%	21,159	21,217	58	0.3%
38.3%	19,791	19,760	-31	-0.2%
39.5%	19,742	19,320	-422	-2.1%
40.7%	19,545	18,741	-803	-4.1%
42.0%	19,376	18,662	-714	-3.7%
43.2%	18,696	18,400	-296	-1.6%
44.4%	13,993	15,618	1,625	11.6%
45.7%	13,883	15,333	1,450	10.4%
46.9%	13,100	14,908	1,808	13.8%
48.1%	13,043	14,883	1,840	14.1%
49.4%	12,849	14,624	1,775	13.8%
50.6%	12,446	14,608	2,163	17.4%
51.9%	12,335	14,559	2,224	18.0%
53.1%	12,181	14,351	2,170	17.8%
54.3%	12,176	14,057	1,881	15.4%
55.6%	12,129	13,897	1,768	14.6%
56.8%	12,017	13,768	1,751	14.6%
58.0%	12,003	13,737	1,734	14.4%
59.3%	11,799	13,700	1,901	16.1%
60.5%	11,690	13,594	1,904	16.3%
61.7%	11,664	13,399	1,735	14.9%
63.0%	11,571	13,358	1,787	15.4%
64.2%	11,192	13,313	2,122	19.0%
65.4%	11,097	13,313	2,216	20.0%
66.7%	10,983	13,169	2,186	19.9%
67.9%	10,422	12,633	2,211	21.2%
69.1%	10,304	12,416	2,113	20.5%
70.4%	10,178	11,877	1,699	16.7%
71.6%	9,789	11,866	2,077	21.2%
72.8%	9,536	11,805	2,269	23.8%
74.1%	9,475	11,735	2,259	23.8%
75.3%	8,993	11,568	2,575	28.6%
76.5%	8,798	11,540	2,742	31.2%
77.8%	8,680	11,490	2,810	32.4%
79.0%	8,664	11,489	2,826	32.6%
80.2%	8,568	11,325	2,757	32.2%
81.5%	8,227	11,000	2,773	33.7%
82.7%	7,812	10,909	3,096	39.6%
84.0%	7,634	10,697	3,064	40.1%
85.2%	7,558	10,458	2,900	38.4%
86.4%	7,494	10,353	2,859	38.2%
87.7%	7,486	10,170	2,684	35.9%
88.9%	7,334	9,457	2,122	28.9%
90.1%	7,250	8,879	1,629	22.5%
91.4%	7,166	8,837	1,671	23.3%
92.6%	6,966	8,249	1,284	18.4%
93.8%	6,911	8,216	1,305	18.9%
95.1%	6,556	8,110	1,554	23.7%
96.3%	6,527	7,881	1,354	20.7%
97.5%	6,337	7,793	1,456	23.0%
98.8%	6,276	7,041	764	12.2%
100.0%	6,218	6,561	343	5.5%

Figure SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

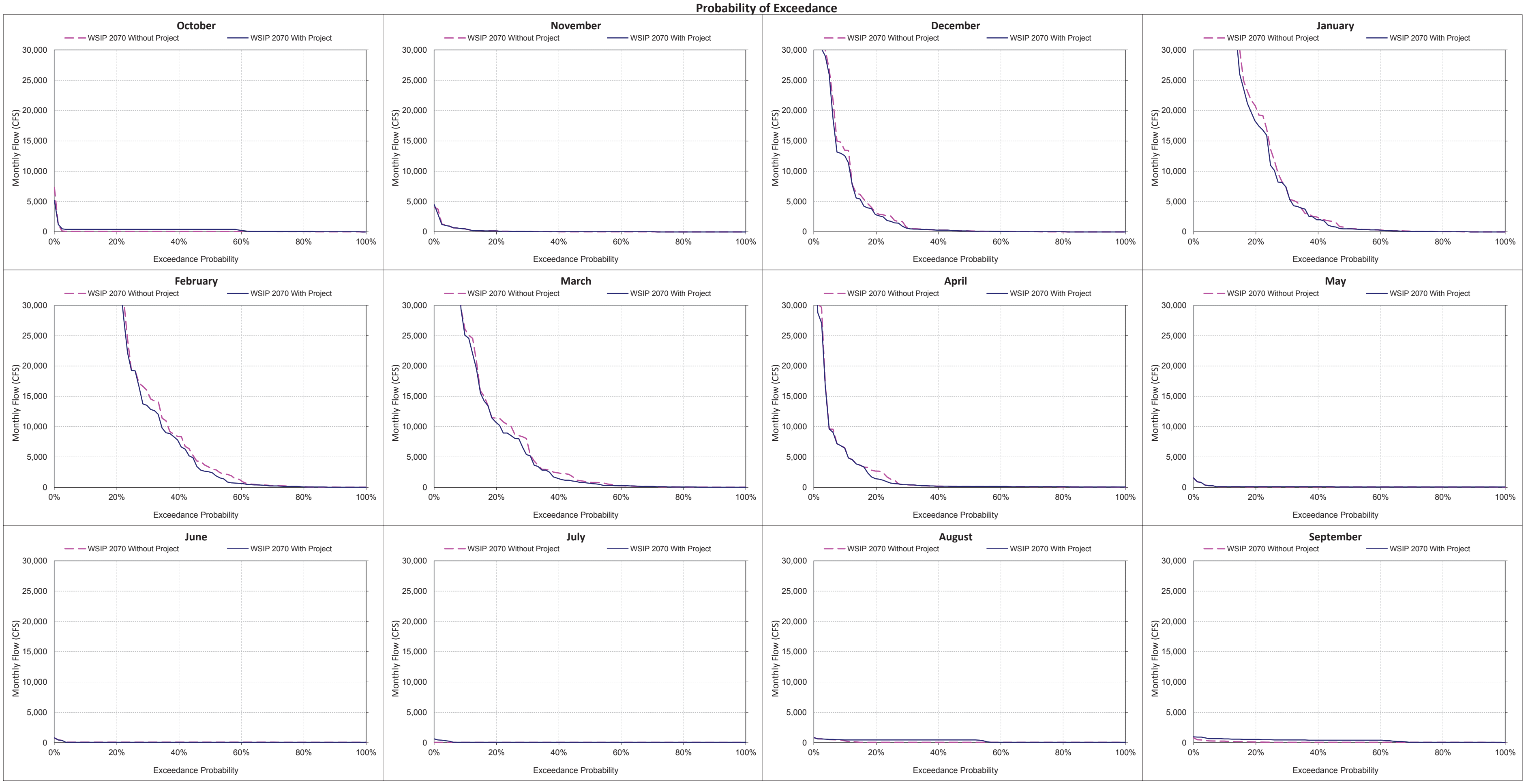


Table SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,331	5,153	-2,179	-29.7%
1.2%	1,201	1,201	0	0.0%
2.5%	138	486	348	251.8%
3.7%	93	405	311	333.6%
4.9%	86	404	317	367.2%
6.2%	76	390	314	413.1%
7.4%	64	390	326	508.2%
8.6%	63	390	327	515.8%
9.9%	63	390	327	516.6%
11.1%	63	390	327	516.6%
12.3%	63	390	327	516.6%
13.6%	63	390	327	516.6%
14.8%	63	390	327	520.9%
16.0%	63	390	327	520.9%
17.3%	63	390	328	523.1%
18.5%	62	390	329	532.0%
19.8%	62	390	329	534.3%
21.0%	61	390	329	536.5%
22.2%	61	390	329	538.8%
23.5%	61	390	329	538.8%
24.7%	61	390	330	543.5%
25.9%	60	390	330	545.9%
27.2%	60	390	330	550.6%
28.4%	59	390	331	557.9%
29.6%	58	390	333	575.5%
30.9%	58	390	333	577.9%
32.1%	56	390	334	593.9%
33.3%	54	390	336	617.1%
34.6%	54	390	336	619.4%
35.8%	54	390	336	622.3%
37.0%	54	390	337	625.2%
38.3%	53	390	337	631.2%
39.5%	53	390	337	634.3%
40.7%	53	390	337	637.2%
42.0%	53	390	338	643.3%
43.2%	52	390	338	648.5%
44.4%	52	390	338	653.1%
45.7%	50	390	340	676.0%
46.9%	49	390	342	702.6%
48.1%	46	390	344	751.1%
49.4%	45	390	345	759.1%
50.6%	45	390	346	771.7%
51.9%	45	390	346	776.2%
53.1%	44	390	346	789.1%
54.3%	43	390	347	798.5%
55.6%	43	390	347	803.1%
56.8%	42	390	348	821.7%
58.0%	42	390	348	824.4%
59.3%	40	298	258	639.1%
60.5%	40	192	152	381.3%
61.7%	39	93	54	136.3%
63.0%	38	76	38	100.3%
64.2%	38	63	25	65.9%
65.4%	37	63	26	69.9%
66.7%	37	63	26	71.1%
67.9%	36	62	26	70.7%
69.1%	30	61	32	105.8%
70.4%	29	61	32	109.8%
71.6%	26	61	35	132.9%
72.8%	24	60	37	153.8%
74.1%	22	54	31	139.2%
75.3%	20	53	33	165.0%
76.5%	18	53	35	189.1%
77.8%	17	53	36	209.5%
79.0%	16	50	35	221.0%
80.2%	15	46	31	214.9%
81.5%	14	45	31	225.8%
82.7%	12	44	32	256.9%
84.0%	12	43	32	264.7%
85.2%	11	40	30	273.2%
86.4%	9	40	31	363.6%
87.7%	8	37	28	336.5%
88.9%	6	36	30	
90.1%	5	26	21	
91.4%	4	19	14	
92.6%	3	14	11	
93.8%	3	11	8	
95.1%	2	6	4	
96.3%	1	4	3	
97.5%	0	3	3	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,071	4,454	383	9.4%
1.2%	3,748	2,948	-800	-21.4%
2.5%	1,272	1,209	-63	-5.0%
3.7%	1,168	1,052	-116	-9.9%
4.9%	933	933	0	0.0%
6.2%	655	655	0	0.0%
7.4%	652	627	-25	-3.9%
8.6%	551	551	0	0.0%
9.9%	489	489	0	0.0%
11.1%	353	353	0	0.0%
12.3%	213	213	0	0.0%
13.6%	197	197	0	0.0%
14.8%	187	187	0	0.0%
16.0%	165	165	0	0.0%
17.3%	160	160	0	0.0%
18.5%	156	156	0	0.0%
19.8%	151	151	0	0.0%
21.0%	121	127	6	5.3%
22.2%	109	109	0	0.0%
23.5%	97	97	0	0.0%
24.7%	90	81	-10	-10.6%
25.9%	81	66	-15	-18.7%
27.2%	66	62	-3	-5.1%
28.4%	51	51	0	0.0%
29.6%	50	50	0	0.0%
30.9%	49	49	0	0.0%
32.1%	37	37	0	0.0%
33.3%	36	36	0	0.0%
34.6%	35	35	0	0.0%
35.8%	35	35	0	0.0%
37.0%	25	31	6	23.0%
38.3%	24	25	1	4.9%
39.5%	20	19	-2	-7.8%
40.7%	12	10	-2	-16.6%
42.0%	10	10	0	
43.2%	10	10	0	
44.4%	10	10	0	
45.7%	10	10	0	
46.9%	10	9	0	
48.1%	9	9	-1	
49.4%	9	9	0	
50.6%	9	8	0	
51.9%	8	8	0	
53.1%	8	8	-1	
54.3%	7	7	0	
55.6%	7	7	0	
56.8%	7	7	0	
58.0%	7	7	0	
59.3%	6	6	0	
60.5%	5	5	0	
61.7%	5	5	0	
63.0%	5	5	0	
64.2%	5	5	0	
65.4%	3	5	2	
66.7%	2	4	2	
67.9%	2	3	1	
69.1%	1	2	0	
70.4%	0	1	1	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	82,657	85,353	2,696	3.3%
1.2%	49,472	46,760	-2,712	-5.5%
2.5%	33,968	30,177	-3,791	-11.2%
3.7%	29,937	29,003	-935	-3.1%
4.9%	26,784	25,965	-819	-3.1%
6.2%	21,612	18,579	-3,033	-14.0%
7.4%	14,989	13,177	-1,811	-12.1%
8.6%	14,787	12,941	-1,847	-12.5%
9.9%	13,473	12,545	-927	-6.9%
11.1%	13,415	11,418	-1,996	-14.9%
12.3%	7,794	7,718	-76	-1.0%
13.6%	6,397	5,570	-826	-12.9%
14.8%	6,168	5,424	-744	-12.1%
16.0%	5,371	4,220	-1,151	-21.4%
17.3%	4,654	3,961	-693	-14.9%
18.5%	4,024	3,831	-193	-4.8%
19.8%	3,205	2,841	-364	-11.4%
21.0%	2,860	2,631	-229	-8.0%
22.2%	2,817	2,474	-343	-12.2%
23.5%	2,614	1,873	-741	-28.3%
24.7%	2,611	1,734	-877	-33.6%
25.9%	1,856	1,498	-358	-19.3%
27.2%	1,715	1,426	-288	-16.8%
28.4%	1,711	913	-798	-46.6%
29.6%	800	605	-195	-24.4%
30.9%	605	503	-102	-16.9%
32.1%	503	470	-33	-6.5%
33.3%	470	442	-28	-5.9%
34.6%	442	411	-31	-7.0%
35.8%	411	375	-36	-8.8%
37.0%	350	350	0	0.0%
38.3%	349	330	-19	-5.4%
39.5%	330	294	-36	-10.8%
40.7%	285	285	0	0.0%
42.0%	280	265	-15	-5.2%
43.2%	265	261	-4	-1.7%
44.4%	230	195	-34	-15.0%
45.7%	192	192	0	
46.9%	178	158	-20	
48.1%	158	138	-20	
49.4%	138	135	-3	
50.6%	135	126	-9	
51.9%	122	122	0	
53.1%	107	107	0	
54.3%	102	102	0	
55.6%	93	93	0	
56.8%	81	91	10	
58.0%	70	70	0	
59.3%	63	63	0	
60.5%	57	57	0	
61.7%	55	55	0	
63.0%	52	42	-9	
64.2%	42	42	0	
65.4%	42	41	-2	
66.7%	41	37	-3	
67.9%	34	34	0	
69.1%	24	31	8	
70.4%	23	23	0	
71.6%	13	13	0	
72.8%	10	10	0	
74.1%	8	10	1	
75.3%	0	8	8	
76.5%	0	8	8	
77.8%	0	7	7	
79.0%	0	5	5	
80.2%	0	1	1	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	179,562	179,754	192	0.1%
1.2%	158,761	157,807	-953	-0.6%
2.5%	131,052	126,155	-4,897	-3.7%
3.7%	113,156	110,797	-2,359	-2.1%
4.9%	88,762	84,898	-3,863	-4.4%
6.2%	80,051	78,875	-1,176	-1.5%
7.4%	69,412	64,786	-4,625	-6.7%
8.6%	65,233	63,373	-1,860	-2.9%
9.9%	53,758	50,204	-3,553	-6.6%
11.1%	50,055	49,614	-441	-0.9%
12.3%	47,461	48,773	1,312	2.8%
13.6%	32,571	33,118	547	1.7%
14.8%	30,073	26,031	-4,041	-13.4%
16.0%	24,963	23,635	-1,328	-5.3%
17.3%	23,191	21,153	-2,038	-8.8%
18.5%	21,693	19,655	-2,038	-9.4%
19.8%	20,842	18,304	-2,538	-12.2%
21.0%	19,247	17,440	-1,807	-9.4%
22.2%	19,214	16,785	-2,430	-12.6%
23.5%	17,017	15,946	-1,071	-6.3%
24.7%	13,667	10,978	-2,688	-19.7%
25.9%	11,780	10,125	-1,656	-14.1%
27.2%	9,605	8,191	-1,415	-14.7%
28.4%	8,274	8,173	-102	-1.2%
29.6%	7,442	7,412	-30	-0.4%
30.9%	5,341	5,349	8	0.2%
32.1%	5,176	4,317	-859	-16.6%
33.3%	4,873	4,178	-695	-14.3%
34.6%	3,913	3,921	8	0.2%
35.8%	3,032	3,740	707	23.3%
37.0%	2,942	2,547	-395	-13.4%
38.3%	2,539	2,463	-76	-3.0%
39.5%	2,455	1,990	-464	-18.9%
40.7%	2,142	1,982	-160	-7.5%
42.0%	1,973	1,780	-193	-9.8%
43.2%	1,822	1,085	-737	-40.5%
44.4%	1,725	858	-867	-50.2%
45.7%	1,531	792	-739	-48.3%
46.9%	849	517	-332	-39.1%
48.1%	792	493	-299	
49.4%	517	490	-28	
50.6%	500	475	-26	
51.9%	490	444	-46	
53.1%	447	397	-50	
54.3%	397	374	-23	
55.6%	374	371	-3	
56.8%	371	342	-30	
58.0%	342	327	-15	
59.3%	327	326	-1	
60.5%	281	218	-63	
61.7%	218	197	-21	
63.0%	197	187	-10	
64.2%	187	166	-21	
65.4%	186	132	-54	
66.7%	166	128	-37	
67.9%	128	102	-26	
69.1%	121	70	-51	
70.4%	70	63	-7	
71.6%	63	62	-2	
72.8%	61	61	0	
74.1%	59	59	0	
75.3%	50	56	6	
76.5%	37	50	13	
77.8%	31	37	7	
79.0%	28	31	3	
80.2%	26	26	0	
81.5%	26	23	-3	
82.7%	23	21	-2	
84.0%	21	21	0	
85.2%	14	14	0	
86.4%	7	13	7	
87.7%	2	7	5	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	184,556	186,555	1,998	1.1%
1.2%	146,295	142,488	-3,807	-2.6%
2.5%	136,546	134,388	-2,158	-1.6%
3.7%	121,991	120,040	-1,951	-1.6%
4.9%	112,996	112,839	-157	-0.1%
6.2%	100,805	100,727	-79	-0.1%
7.4%	97,758	92,925	-4,832	-4.9%
8.6%	84,992	84,572	-420	-0.5%
9.9%	68,514	69,036	522	0.8%
11.1%	65,917	63,577	-2,340	-3.6%
12.3%	57,160	57,589	429	0.8%
13.6%	50,471	50,594	123	0.2%
14.8%	49,918	48,052	-1,866	-3.7%
16.0%	49,844	44,802	-5,043	-10.1%
17.3%	48,383	43,953	-4,430	-9.2%
18.5%	45,258	42,330	-2,928	-6.5%
19.8%	43,944	42,263	-1,681	-3.8%
21.0%	36,176	34,399	-1,777	-4.9%
22.2%	30,992	27,920	-3,072	-9.9%
23.5%	24,480	22,181	-2,299	-9.4%
24.7%	19,332	19,248	-84	-0.4%
25.9%	19,204	19,214	11	0.1%
27.2%	17,139	16,609	-531	-3.1%
28.4%	16,653	13,752	-2,901	-17.4%
29.6%	16,017	13,518	-2,499	-15.6%
30.9%	14,571	12,859	-1,712	-11.8%
32.1%	14,224	12,607	-1,618	-11.4%
33.3%	14,157	12,036	-2,121	-15.0%
34.6%	11,382	9,745	-1,636	-14.4%
35.8%	10,960	9,007	-1,953	-17.8%
37.0%	9,193	8,867	-326	-3.5%
38.3%	8,768	8,338	-430	-4.9%
39.5%	8,389	7,794	-596	-7.1%
40.7%	8,351	6,656	-1,696	-20.3%
42.0%	6,736	6,284	-452	-6.7%
43.2%	6,367	5,177	-1,190	-18.7%
44.4%	5,271	4,866	-405	-7.7%
45.7%	4,336	3,447	-889	-20.5%
46.9%	4,272	2,828	-1,444	-33.8%
48.1%	3,684	2,640	-1,044	-28.3%
49.4%	3,373	2,585	-788	-23.4%
50.6%	2,946	2,418	-528	-17.9%
51.9%	2,887	1,890	-997	-34.5%
53.1%	2,410	1,553	-857	-35.6%
54.3%	2,175	1,365	-811	-37.3%
55.6%	2,122	879	-1,243	-58.6%
56.8%	1,882	744	-1,139	-60.5%
58.0%	1,365	671	-694	-50.8%
59.3%	1,316	629	-686	-52.2%
60.5%	879	596	-283	
61.7%	629	468	-161	
63.0%	524	425	-99	
64.2%	468	389	-79	
65.4%	389	389	0	
66.7%	389	355	-34	
67.9%	355	303	-52	
69.1%	303	229	-74	
70.4%	229	227	-2	
71.6%	227	219	-8	
72.8%	223	193	-31	
74.1%	219	137	-82	
75.3%	137	125	-12	
76.5%	125	123	-2	
77.8%	112	112	0	
79.0%	110	85	-25	
80.2%	85	55	-30	
81.5%	55	52	-3	
82.7%	52	41	-11	
84.0%	41	26	-15	
85.2%	26	26	0	
86.4%	26	26	0	
87.7%	26	22	-4	
88.9%	22	22	0	
90.1%	19	19	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	172,138	172,298	159	0.1%
1.2%	152,170	147,335	-4,835	-3.2%
2.5%	97,556	91,658	-5,898	-6.0%
3.7%	65,984	59,612	-6,371	-9.7%
4.9%	57,343	53,293	-4,051	-7.1%
6.2%	53,282	51,766	-1,516	-2.8%
7.4%	43,667	38,199	-5,468	-12.5%
8.6%	29,413	29,387	-26	-0.1%
9.9%	26,086	25,082	-1,004	-3.8%
11.1%	25,067	24,576	-491	-2.0%
12.3%	24,564	21,981	-2,583	-10.5%
13.6%	20,774	19,450	-1,324	-6.4%
14.8%	15,914	15,540	-375	-2.4%
16.0%	15,017	14,247	-771	-5.1%
17.3%	13,461	13,459	-3	0.0%
18.5%	11,464	11,439	-25	-0.2%
19.8%	11,426	10,758	-668	-5.8%
21.0%	11,377	10,203	-1,174	-10.3%
22.2%	10,765	8,955	-1,809	-16.8%
23.5%	10,367	8,954	-1,413	-13.6%
24.7%	10,047	8,525	-1,522	-15.1%
25.9%	8,683	8,039	-644	-7.4%
27.2%	8,516	7,996	-520	-6.1%
28.4%	8,325	6,568	-1,757	-21.1%
29.6%	8,034	5,377	-2,657	-33.1%
30.9%	5,297	5,168	-128	-2.4%
32.1%	4,306	3,623	-683	-15.9%
33.3%	3,623	3,417	-207	-5.7%
34.6%	2,984	2,838	-146	-4.9%
35.8%	2,937	2,827	-110	-3.7%
37.0%	2,835	2,485	-349	-12.3%
38.3%	2,485	1,724	-761	-30.6%
39.5%	2,394	1,488	-906	-37.9%
40.7%	2,283	1,307	-977	-42.8%
42.0%	2,241	1,169	-1,071	-47.8%
43.2%	2,138	1,153	-985	-46.1%
44.4%	1,749	1,028	-721	-41.2%
45.7%	1,169	953	-216	-18.5%
46.9%	1,079	780	-299	-27.7%
48.1%	982	778	-204	-20.7%
49.4%	865	696	-169	-19.5%
50.6%	780	585	-195	-25.0%
51.9%	778	549	-229	-29.5%
53.1%	766	478	-288	-37.6%
54.3%	696	315	-381	-54.8%
55.6%	537	313	-224	
56.8%	464	306	-158	
58.0%	313	268	-44	
59.3%	257	257	0	
60.5%	244	244	0	
61.7%	220	242	22	
63.0%	218	220	2	
64.2%	169	218	48	
65.4%	148	169	22	
66.7%	131	148	17	
67.9%	130	130	0	
69.1%	119	119	0	
70.4%	113	113	0	
71.6%	80	80	0	
72.8%	77	77	0	
74.1%	72	72	0	
75.3%	65	65	0	
76.5%	62	62	0	
77.8%	50	50	0	
79.0%	49	49	0	
80.2%	47	47	0	
81.5%	45	45	0	
82.7%	36	36	0	
84.0%	30	28	-2	
85.2%	28	19	-9	
86.4%	19	13	-6	
87.7%	13	7	-6	
88.9%	7	7	0	
90.1%	7	7	0	
91.4%	7	4	-3	
92.6%	4	2	-1	
93.8%	2	0	-2	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	43,233	43,197	-36	-0.1%
1.2%	30,198	28,817	-1,380	-4.6%
2.5%	29,685	27,060	-2,625	-8.8%
3.7%	16,679	16,657	-22	-0.1%
4.9%	9,610	9,611	1	0.0%
6.2%	9,571	9,035	-537	-5.6%
7.4%	7,196	7,196	0	0.0%
8.6%	6,851	6,848	-3	0.0%
9.9%	6,542	6,483	-59	-0.9%
11.1%	4,846	4,846	0	0.0%
12.3%	4,558	4,558	0	0.0%
13.6%	3,892	3,875	-17	-0.4%
14.8%	3,642	3,639	-2	-0.1%
16.0%	3,336	3,336	0	0.0%
17.3%	3,271	2,393	-877	-26.8%
18.5%	2,814	1,712	-1,102	-39.2%
19.8%	2,670	1,402	-1,268	-47.5%
21.0%	2,662	1,315	-1,347	-50.6%
22.2%	2,393	1,179	-1,215	-50.7%
23.5%	1,712	899	-813	-47.5%
24.7%	1,315	668	-647	-49.2%
25.9%	1,179	590	-589	-49.9%
27.2%	558	558	0	0.0%
28.4%	445	445	0	0.0%
29.6%	418	418	0	0.0%
30.9%	388	388	0	0.0%
32.1%	385	385	0	0.0%
33.3%	283	283	0	0.0%
34.6%	272	272	0	0.0%
35.8%	250	250	0	0.0%
37.0%	218	218	0	0.0%
38.3%	198	198	0	0.0%
39.5%	187	187	0	0.0%
40.7%	176	176	0	0.0%
42.0%	167	167	0	0.0%
43.2%	159	159	0	0.0%
44.4%	150	150	0	0.0%
45.7%	142	142	0	0.0%
46.9%	139	139	0	0.0%
48.1%	139	139	0	0.0%
49.4%	131	131	0	0.0%
50.6%	123	123	0	
51.9%	120	120	0	
53.1%	119	119	0	
54.3%	119	119	0	
55.6%	116	116	0	
56.8%	115	115	0	
58.0%	114	114	0	
59.3%	112	112	0	
60.5%	111	111	0	
61.7%	111	111	0	
63.0%	109	109	0	
64.2%	103	103	0	
65.4%	99	99	0	
66.7%	95	95	0	
67.9%	95	95	0	
69.1%	90	90	0	
70.4%	87	87	0	
71.6%	86	86	0	
72.8%	85	85	0	
74.1%	85	85	0	
75.3%	82	82	0	
76.5%	81	81	0	
77.8%	78	78	0	
79.0%	76	76	0	
80.2%	72	72	0	
81.5%	71	71	0	
82.7%	65	65	0	
84.0%	64	64	0	
85.2%	62	62	0	
86.4%	58	58	0	
87.7%	56	56	0	
88.9%	55	55	0	
90.1%	55	55	0	
91.4%	55	55	0	
92.6%	54	54	0	
93.8%	50	50	0	
95.1%	49	49	0	
96.3%	45	45	0	
97.5%	43	43	0	
98.8%	42	42	0	
100.0%	41	41	0	

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,544	1,545	1	0.0%
1.2%	899	899	0	0.0%
2.5%	817	781	-36	-4.4%
3.7%	355	355	0	0.0%
4.9%	278	278	0	0.0%
6.2%	248	248	0	0.0%
7.4%	82	82	0	0.0%
8.6%	80	80	0	0.0%
9.9%	80	80	0	0.0%
11.1%	79	79	0	0.0%
12.3%	78	78	0	0.0%
13.6%	78	78	0	0.0%
14.8%	78	78	0	0.0%
16.0%	77	77	0	0.0%
17.3%	77	77	0	0.0%
18.5%	77	77	0	0.0%
19.8%	76	76	0	0.0%
21.0%	75	75	0	0.0%
22.2%	74	74	0	0.0%
23.5%	73	73	0	0.0%
24.7%	73	73	0	0.0%
25.9%	73	73	0	0.0%
27.2%	72	72	0	0.0%
28.4%	72	72	0	0.0%
29.6%	71	71	0	0.0%
30.9%	71	71	0	0.0%
32.1%	71	71	0	0.0%
33.3%	70	70	0	0.0%
34.6%	70	70	0	0.0%
35.8%	70	70	0	0.0%
37.0%	70	70	0	0.0%
38.3%	69	69	0	0.0%
39.5%	69	69	0	0.0%
40.7%	69	69	0	0.0%
42.0%	68	68	0	0.0%
43.2%	68	68	0	0.0%
44.4%	68	68	0	0.0%
45.7%	68	68	0	0.0%
46.9%	67	67	0	0.0%
48.1%	67	67	0	0.0%
49.4%	66	66	0	0.0%
50.6%	66	66	0	0.0%
51.9%	65	65	0	0.0%
53.1%	65	65	0	0.0%
54.3%	64	64	0	0.0%
55.6%	64	64	0	0.0%
56.8%	64	64	0	0.0%
58.0%	64	64	0	0.0%
59.3%	64	64	0	0.0%
60.5%	63	63	0	0.0%
61.7%	63	63	0	0.0%
63.0%	63	63	0	0.0%
64.2%	63	63	0	0.0%
65.4%	63	63	0	0.0%
66.7%	62	62	0	0.0%
67.9%	62	62	0	0.0%
69.1%	62	62	0	0.0%
70.4%	61	61	0	0.0%
71.6%	61	61	0	0.0%
72.8%	60	60	0	0.0%
74.1%	59	59	0	0.0%
75.3%	58	58	0	0.0%
76.5%	58	58	0	0.0%
77.8%	58	58	0	0.0%
79.0%	57	57	0	0.0%
80.2%	56	56	0	0.0%
81.5%	55	55	0	0.0%
82.7%	55	55	0	0.0%
84.0%	54	54	0	0.0%
85.2%	53	53	0	0.0%
86.4%	53	53	0	0.0%
87.7%	53	53	0	0.0%
88.9%	53	53	0	0.0%
90.1%	52	52	0	0.0%
91.4%	52	52	0	0.0%
92.6%	50	50	0	0.0%
93.8%	47	47	0	0.0%
95.1%	46	46	0	0.0%
96.3%	45	45	0	0.0%
97.5%	40	40	0	0.0%
98.8%	26	26	0	0.0%
100.0%	25	25	0	0.0%

Table SW-31-b
Yolo Bypass, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	788	788	0	0.0%
1.2%	449	449	0	0.0%
2.5%	366	366	0	0.0%
3.7%	68	68	0	0.0%
4.9%	68	68	0	0.0%
6.2%	68	68	0	0.0%
7.4%	68	68	0	0.0%
8.6%	68	68	0	0.0%
9.9%	68	68	0	0.0%
11.1%	68	68	0	0.0%
12.3%	68	68	0	0.0%
13.6%	68	68	0	0.0%
14.8%	68	68	0	0.0%
16.0%	68	68	0	0.0%
17.3%	68	68	0	0.0%
18.5%	68	68	0	0.0%
19.8%	68	68	0	0.0%
21.0%	68	68	0	0.0%
22.2%	68	68	0	0.0%
23.5%	68	68	0	0.0%
24.7%	68	68	0	0.0%
25.9%	68	68	0	0.0%
27.2%	68	68	0	0.0%
28.4%	68	68	0	0.0%
29.6%	68	68	0	0.0%
30.9%	68	68	0	0.0%
32.1%	68	68	0	0.0%
33.3%	68	68	0	0.0%
34.6%	68	68	0	0.0%
35.8%	68	68	0	0.0%
37.0%	68	68	0	0.0%
38.3%	68	68	0	0.0%
39.5%	68	68	0	0.0%
40.7%	68	68	0	0.0%
42.0%	68	68	0	0.0%
43.2%	68	68	0	0.0%
44.4%	68	68	0	0.0%
45.7%	67	67	0	0.0%
46.9%	67	67	0	0.0%
48.1%	67	67	0	0.0%
49.4%	67	67	0	0.0%
50.6%	67	67	0	0.0%
51.9%	67	67	0	0.0%
53.1%	67	67	0	0.0%
54.3%	67	67	0	0.0%
55.6%	67	67	0	0.0%
56.8%	67	67	0	0.0%
58.0%	67	67	0	0.0%
59.3%	67	67	0	0.0%
60.5%	67	67	0	0.0%
61.7%	66	66	0	0.0%
63.0%	66	66	0	0.0%
64.2%	66	66	0	0.0%
65.4%	66	66	0	0.0%
66.7%	66	66	0	0.0%
67.9%	66	66	0	0.0%
69.1%	66	66	0	0.0%
70.4%	66	66	0	0.0%
71.6%	65	65	0	0.0%
72.8%	65	65	0	0.0%
74.1%	65	65	0	0.0%
75.3%	65	65	0	0.0%
76.5%	65	65	0	0.0%
77.8%	65	65	0	0.0%
79.0%	65	65	0	0.0%
80.2%	64	64	0	0.0%
81.5%	63	63	0	0.0%
82.7%	63	63	0	0.0%
84.0%	63	63	0	0.0%
85.2%	63	63	0	0.0%
86.4%	63	63	0	0.0%
87.7%	63	63	0	0.0%
88.9%	63	63	0	0.0%
90.1%	62	62	0	0.0%
91.4%	62	62	0	0.0%
92.6%	61	61	0	0.0%
93.8%	59	59	0	0.0%
95.1%	57	57	0	0.0%
96.3%	57	57	0	0.0%
97.5%	56	56	0	0.0%
98.8%	56	56	0	0.0%
100.0%	53	53	0	0.0%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	48	604	556	
1.2%	48	429	381	791.1%
2.5%	48	405	357	741.1%
3.7%	48	327	279	579.0%
4.9%	48	219	171	355.1%
6.2%	48	48	0	0.0%
7.4%	48	48	0	0.0%
8.6%	48	48	0	0.0%
9.9%	48	48	0	0.0%
11.1%	48	48	0	0.0%
12.3%	48	48	0	0.0%
13.6%	48	48	0	0.0%
14.8%	48	48	0	0.0%
16.0%	48	48	0	0.0%
17.3%	48	48	0	0.0%
18.5%	48	48	0	0.0%
19.8%	48	48	0	0.0%
21.0%	48	48	0	0.0%
22.2%	48	48	0	0.0%
23.5%	48	48	0	0.0%
24.7%	48	48	0	0.0%
25.9%	48	48	0	0.0%
27.2%	48	48	0	0.0%
28.4%	48	48	0	0.0%
29.6%	48	48	0	0.0%
30.9%	48	48	0	0.0%
32.1%	48	48	0	0.0%
33.3%	48	48	0	0.0%
34.6%	48	48	0	0.0%
35.8%	48	48	0	0.0%
37.0%	48	48	0	0.0%
38.3%	48	48	0	0.0%
39.5%	48	48	0	0.0%
40.7%	48	48	0	0.0%
42.0%	48	48	0	0.0%
43.2%	48	48	0	0.0%
44.4%	48	48	0	0.0%
45.7%	48	48	0	0.0%
46.9%	48	48	0	0.0%
48.1%	48	48	0	0.0%
49.4%	48	48	0	0.0%
50.6%	48	48	0	0.0%
51.9%	48	48	0	0.0%
53.1%	48	48	0	0.0%
54.3%	48	48	0	0.0%
55.6%	48	48	0	0.0%
56.8%	48	48	0	0.0%
58.0%	48	48	0	0.0%
59.3%	48	48	0	0.0%
60.5%	48	48	0	0.0%
61.7%	48	48	0	0.0%
63.0%	48	48	0	0.0%
64.2%	48	48	0	0.0%
65.4%	48	48	0	0.0%
66.7%	48	48	0	0.0%
67.9%	48	48	0	0.0%
69.1%	48	48	0	0.0%
70.4%	48	48	0	0.0%
71.6%	48	48	0	0.0%
72.8%	48	48	0	0.0%
74.1%	48	48	0	0.0%
75.3%	48	48	0	0.0%
76.5%	48	48	0	0.0%
77.8%	48	48	0	0.0%
79.0%	48	48	0	0.0%
80.2%	48	48	0	0.0%
81.5%	48	48	0	0.0%
82.7%	48	48	0	0.0%
84.0%	48	48	0	0.0%
85.2%	48	48	0	0.0%
86.4%	48	48	0	0.0%
87.7%	48	48	0	0.0%
88.9%	48	48	0	0.0%
90.1%	48	48	0	0.0%
91.4%	48	48	0	0.0%
92.6%	48	48	0	0.0%
93.8%	48	48	0	0.0%
95.1%	48	48	0	0.0%
96.3%	48	48	0	0.0%
97.5%	47	47	0	0.0%
98.8%	47	47	0	0.0%
100.0%	41	41	0	0.0%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	839	839	0	0.0%
1.2%	628	628	0	0.0%
2.5%	610	610	0	0.0%
3.7%	549	576	27	4.8%
4.9%	502	549	47	9.3%
6.2%	486	516	30	6.2%
7.4%	466	502	36	7.8%
8.6%	431	486	55	12.7%
9.9%	302	466	164	54.2%
11.1%	186	450	265	142.6%
12.3%	164	445	281	170.9%
13.6%	126	445	320	254.6%
14.8%	60	445	385	644.2%
16.0%	55	445	390	711.1%
17.3%	55	445	390	711.1%
18.5%	55	445	390	711.1%
19.8%	55	445	390	711.1%
21.0%	55	445	390	711.1%
22.2%	55	445	390	711.1%
23.5%	55	445	390	711.1%
24.7%	55	445	390	711.1%
25.9%	55	445	390	711.1%
27.2%	55	445	390	711.1%
28.4%	55	445	390	711.1%
29.6%	55	445	390	711.1%
30.9%	55	445	390	711.1%
32.1%	55	445	390	711.1%
33.3%	55	445	390	711.1%
34.6%	55	445	390	711.1%
35.8%	55	445	390	711.1%
37.0%	55	445	390	711.1%
38.3%	55	445	390	711.1%
39.5%	55	445	390	711.1%
40.7%	55	445	390	711.1%
42.0%	55	445	390	710.9%
43.2%	55	445	390	710.9%
44.4%	55	445	390	710.6%
45.7%	55	445	390	710.4%
46.9%	55	445	390	709.9%
48.1%	55	444	389	709.4%
49.4%	55	444	389	709.4%
50.6%	55	439	385	700.7%
51.9%	55	431	376	685.5%
53.1%	55	408	353	644.0%
54.3%	55	302	247	450.7%
55.6%	55	164	109	199.4%
56.8%	55	55	0	0.0%
58.0%	55	55	0	0.0%
59.3%	55	55	0	0.0%
60.5%	55	55	0	0.0%
61.7%	55	55	0	0.0%
63.0%	55	55	0	0.0%
64.2%	55	55	0	0.0%
65.4%	55	55	0	0.0%
66.7%	55	55	0	0.0%
67.9%	55	55	0	0.0%
69.1%	55	55	0	0.0%
70.4%	55	55	0	0.0%
71.6%	55	55	0	0.0%
72.8%	55	55	0	0.0%
74.1%	55	55	0	0.0%
75.3%	55	55	0	0.3%
76.5%	55	55	0	0.3%
77.8%	55	55	0	0.3%
79.0%	55	55	0	0.3%
80.2%	55	55	0	0.3%
81.5%	55	55	0	0.3%
82.7%	55	55	0	0.5%
84.0%	55	55	0	0.5%
85.2%	54	55	0	0.5%
86.4%	54	55	0	0.6%
87.7%	54	55	0	0.6%
88.9%	54	55	1	1.0%
90.1%	54	55	1	1.2%
91.4%	54	54	0	0.8%
92.6%	54	54	1	1.3%
93.8%	54	54	0	0.0%
95.1%	53	54	0	0.6%
96.3%	52	53	1	1.8%
97.5%	50	52	2	4.6%
98.8%	49	50	1	2.0%
100.0%	42	42	0	0.0%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	806	955	149	18.5%
1.2%	486	921	435	89.6%
2.5%	441	918	477	108.2%
3.7%	366	806	440	120.3%
4.9%	279	666	387	138.6%
6.2%	274	663	390	142.5%
7.4%	268	655	387	144.3%
8.6%	251	654	403	160.1%
9.9%	251	607	357	142.2%
11.1%	204	605	401	196.7%
12.3%	192	565	373	194.3%
13.6%	162	558	396	245.2%
14.8%	154	557	402	260.8%
16.0%	153	544	391	254.6%
17.3%	141	532	391	277.6%
18.5%	128	525	397	309.2%
19.8%	114	517	403	354.4%
21.0%	96	513	418	436.7%
22.2%	89	499	410	459.1%
23.5%	72	493	421	587.9%
24.7%	67	475	408	612.0%
25.9%	60	463	403	674.9%
27.2%	59	463	403	680.0%
28.4%	59	463	403	680.4%
29.6%	59	463	403	680.4%
30.9%	59	455	396	667.7%
32.1%	59	445	386	650.7%
33.3%	59	441	382	643.7%
34.6%	59	430	371	625.1%
35.8%	59	424	365	616.0%
37.0%	59	408	349	588.8%
38.3%	59	403	344	580.4%
39.5%	59	403	344	580.4%
40.7%	59	403	344	580.4%
42.0%	59	403	344	580.4%
43.2%	59	403	344	580.4%
44.4%	59	403	344	580.4%
45.7%	59	403	344	580.4%
46.9%	59	403	344	580.4%
48.1%	59	403	344	580.4%
49.4%	59	403	344	580.4%
50.6%	59	403	344	580.4%
51.9%	59	403	344	580.4%
53.1%	59	403	344	580.4%
54.3%	59	403	344	580.4%
55.6%	59	403	344	580.4%
56.8%	59	403	344	580.4%
58.0%	59	403	344	580.4%
59.3%	59	403	344	580.4%
60.5%	59	387	327	552.3%
61.7%	59	326	267	450.9%
63.0%	59	317	258	436.5%
64.2%	59	246	187	316.1%
65.4%	59	206	147	249.1%
66.7%	59	184	125	211.6%
67.9%	59	146	87	147.5%
69.1%	59	59	1	1.2%
70.4%	59	59	1	1.2%
71.6%	58	59	1	1.6%
72.8%	58	59	1	1.6%
74.1%	58	59	1	1.6%
75.3%	58	59	1	2.1%
76.5%	57	59	2	3.4%
77.8%	57	59	2	3.8%
79.0%	57	59	3	4.8%
80.2%	57	59	3	4.8%
81.5%	56	59	3	6.1%
82.7%	55	59	4	6.9%
84.0%	55	59	4	7.5%
85.2%	55	59	4	7.8%
86.4%	55	59	4	8.0%
87.7%	55	59	4	8.0%
88.9%	54	58	5	8.7%
90.1%	53	58	6	11.1%
91.4%	52	57	6	10.6%
92.6%	51	57	6	11.4%
93.8%	49	57	8	15.9%
95.1%	46	55	9	20.6%
96.3%	45	55	10	22.0%
97.5%	24	54	30	127.4%
98.8%	23	46	23	97.4%
100.0%	20	24	3	16.6%

Figure SW-32-b
Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

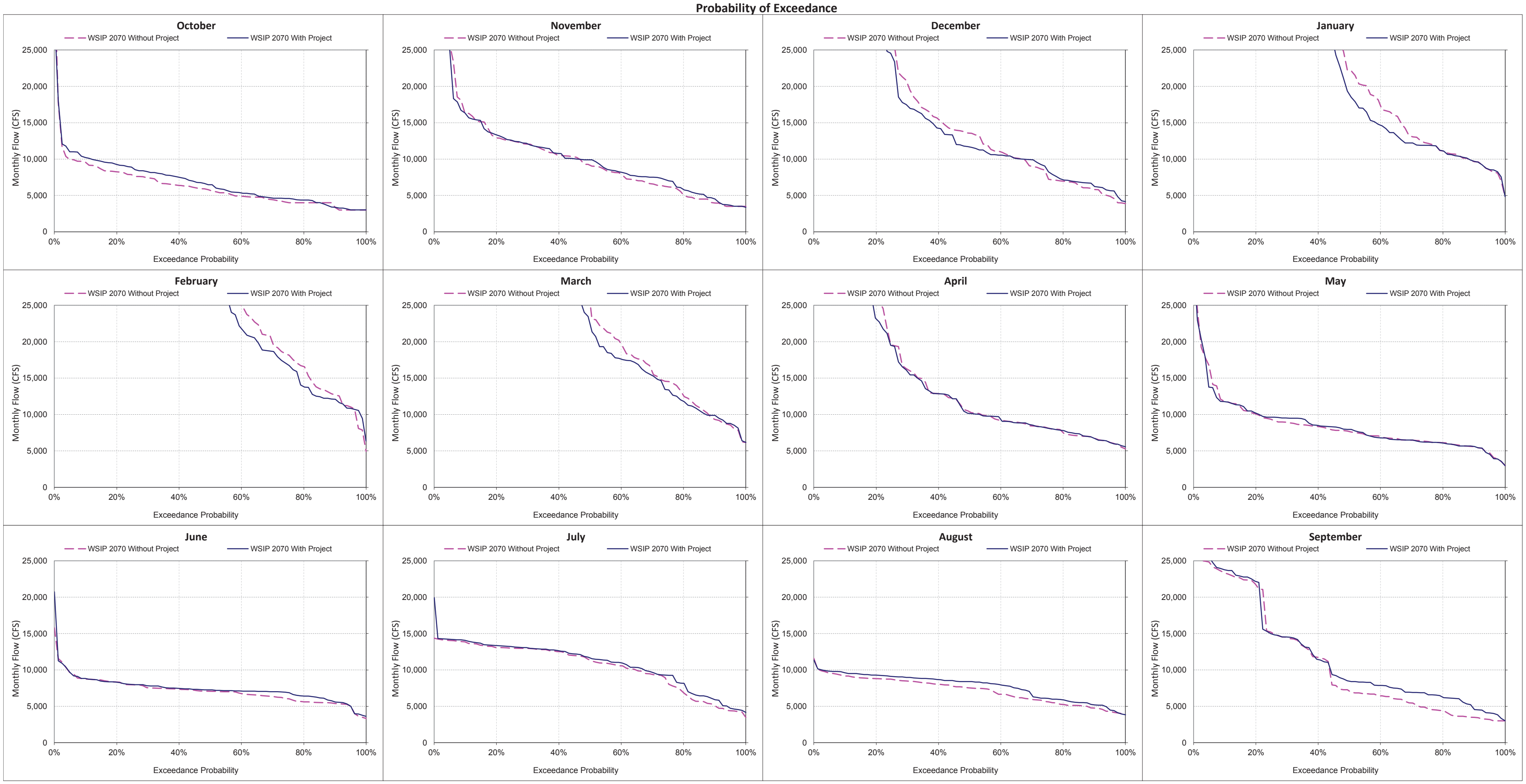


Table SW-32-b
Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,273	29,951	-5,321	-15.1%
1.2%	17,851	18,011	159	0.9%
2.5%	11,717	12,086	369	3.2%
3.7%	10,365	11,785	1,420	13.7%
4.9%	9,941	11,017	1,075	10.8%
6.2%	9,912	11,009	1,097	11.1%
7.4%	9,705	10,970	1,265	13.0%
8.6%	9,691	10,397	707	7.3%
9.9%	9,606	10,233	626	6.5%
11.1%	9,147	10,128	981	10.7%
12.3%	9,125	9,945	820	9.0%
13.6%	8,977	9,831	854	9.5%
14.8%	8,666	9,731	1,065	12.3%
16.0%	8,400	9,562	1,162	13.8%
17.3%	8,352	9,503	1,151	13.8%
18.5%	8,326	9,460	1,133	13.6%
19.8%	8,256	9,285	1,029	12.5%
21.0%	8,215	9,166	951	11.6%
22.2%	8,139	9,098	959	11.8%
23.5%	7,896	8,966	1,070	13.5%
24.7%	7,859	8,897	1,038	13.2%
25.9%	7,614	8,540	926	12.2%
27.2%	7,604	8,406	802	10.5%
28.4%	7,579	8,404	825	10.9%
29.6%	7,439	8,277	838	11.3%
30.9%	7,380	8,165	785	10.6%
32.1%	7,295	8,154	859	11.8%
33.3%	6,841	8,042	1,202	17.6%
34.6%	6,652	7,967	1,315	19.8%
35.8%	6,625	7,812	1,187	17.9%
37.0%	6,553	7,750	1,196	18.3%
38.3%	6,490	7,636	1,146	17.7%
39.5%	6,395	7,550	1,155	18.1%
40.7%	6,359	7,435	1,076	16.9%
42.0%	6,281	7,341	1,060	16.9%
43.2%	6,260	7,099	840	13.4%
44.4%	6,128	6,957	829	13.5%
45.7%	6,021	6,814	793	13.2%
46.9%	5,932	6,764	833	14.0%
48.1%	5,910	6,655	744	12.6%
49.4%	5,798	6,490	692	11.9%
50.6%	5,597	6,462	865	15.5%
51.9%	5,512	6,010	498	9.0%
53.1%	5,375	5,908	533	9.9%
54.3%	5,370	5,817	447	8.3%
55.6%	5,307	5,641	333	6.3%
56.8%	5,116	5,492	377	7.4%
58.0%	4,940	5,438	498	10.1%
59.3%	4,924	5,416	491	10.0%
60.5%	4,884	5,310	426	8.7%
61.7%	4,833	5,282	448	9.3%
63.0%	4,787	5,227	440	9.2%
64.2%	4,772	5,200	428	9.0%
65.4%	4,756	4,919	163	3.4%
66.7%	4,750	4,844	94	2.0%
67.9%	4,516	4,773	257	5.7%
69.1%	4,467	4,689	222	5.0%
70.4%	4,396	4,628	232	5.3%
71.6%	4,285	4,623	339	7.9%
72.8%	4,225	4,605	380	9.0%
74.1%	4,091	4,593	502	12.3%
75.3%	4,000	4,591	591	14.8%
76.5%	4,000	4,500	500	12.5%
77.8%	4,000	4,409	409	10.2%
79.0%	4,000	4,378	378	9.4%
80.2%	4,000	4,369	369	9.2%
81.5%	4,000	4,361	361	9.0%
82.7%	4,000	4,292	292	7.3%
84.0%	4,000	4,000	0	0.0%
85.2%	4,000	4,000	0	0.0%
86.4%	4,000	3,833	-167	-4.2%
87.7%	4,000	3,610	-390	-9.7%
88.9%	4,000	3,391	-609	-15.2%
90.1%	3,331	3,364	33	1.0%
91.4%	3,000	3,272	272	9.1%
92.6%	3,000	3,249	249	8.3%
93.8%	3,000	3,173	173	5.8%
95.1%	3,000	3,000	0	0.0%
96.3%	3,000	3,000	0	0.0%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,258	35,286	-5,972	-14.5%
1.2%	34,707	33,008	-1,699	-4.9%
2.5%	33,057	32,497	-559	-1.7%
3.7%	32,211	32,312	101	0.3%
4.9%	25,880	25,321	-559	-2.2%
6.2%	23,372	18,330	-5,041	-21.6%
7.4%	18,552	17,866	-686	-3.7%
8.6%	18,089	16,712	-1,376	-7.6%
9.9%	16,307	16,356	49	0.3%
11.1%	16,287	15,688	-599	-3.7%
12.3%	15,857	15,506	-351	-2.2%
13.6%	15,197	15,402	205	1.4%
14.8%	15,143	15,310	168	1.1%
16.0%	15,111	14,165	-946	-6.3%
17.3%	14,221	13,736	-486	-3.4%
18.5%	13,302	13,571	269	2.0%
19.8%	12,928	13,362	435	3.4%
21.0%	12,882	13,195	313	2.4%
22.2%	12,706	12,976	269	2.1%
23.5%	12,568	12,666	98	0.8%
24.7%	12,560	12,627	66	0.5%
25.9%	12,420	12,445	25	0.2%
27.2%	12,292	12,411	119	1.0%
28.4%	12,118	12,208	90	0.7%
29.6%	12,066	12,189	123	1.0%
30.9%	12,038	11,934	-104	-0.9%
32.1%	11,786	11,773	-13	-0.1%
33.3%	11,642	11,671	28	0.2%
34.6%	11,373	11,603	231	2.0%
35.8%	11,162	11,501	339	3.0%
37.0%	10,904	11,449	545	5.0%
38.3%	10,867	10,868	1	0.0%
39.5%	10,549	10,780	231	2.2%
40.7%	10,494	10,767	273	2.6%
42.0%	10,440	10,120	-321	-3.1%
43.2%	10,419	10,099	-320	-3.1%
44.4%	10,353	10,063	-290	-2.8%
45.7%	10,241	10,008	-233	-2.3%
46.9%	9,933	9,981	48	0.5%
48.1%	9,284	9,908	624	6.7%
49.4%	9,271	9,892	621	6.7%
50.6%	9,038	9,889	851	9.4%
51.9%	9,009	9,659	649	7.2%
53.1%	8,915	9,278	363	4.1%
54.3%	8,665	8,865	201	2.3%
55.6%	8,338	8,581	244	2.9%
56.8%	8,254	8,463	209	2.5%
58.0%	8,148	8,390	241	3.0%
59.3%	8,137	8,261	124	1.5%
60.5%	7,755	8,152	397	5.1%
61.7%	7,268	8,014	745	10.3%
63.0%	7,231	7,769	538	7.4%
64.2%	7,156	7,715	559	7.8%
65.4%	7,023	7,624	602	8.6%
66.7%	7,014	7,597	583	8.3%
67.9%	6,826	7,571	745	10.9%
69.1%	6,638	7,521	883	13.3%
70.4%	6,571	7,493	922	14.0%
71.6%	6,407	7,483	1,076	16.8%
72.8%	6,369	7,383	1,014	15.9%
74.1%	6,257	7,206	948	15.2%
75.3%	6,174	6,999	825	13.4%
76.5%	6,134	6,925	791	12.9%
77.8%	5,952	6,169	218	3.7%
79.0%	5,577	6,093	516	9.3%
80.2%	4,968	5,775	807	16.3%
81.5%	4,792	5,660	868	18.1%
82.7%	4,737	5,423	686	14.5%
84.0%	4,500	5,289	789	17.5%
85.2%	4,500	5,190	690	15.3%
86.4%	4,500	5,161	661	14.7%
87.7%	4,500	4,729	229	5.1%
88.9%	4,034	4,689	655	16.2%
90.1%	3,956	4,500	544	13.7%
91.4%	3,948	4,067	120	3.0%
92.6%	3,664	3,750	86	2.3%
93.8%	3,500	3,732	232	6.6%
95.1%	3,500	3,665	165	4.7%
96.3%	3,500	3,500	0	0.0%
97.5%	3,500	3,500	0	0.0%
98.8%	3,500	3,500	0	0.0%
100.0%	3,500	3,380	-120	-3.4%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	152,931	155,610	2,679	1.8%
1.2%	97,209	93,743	-3,466	-3.6%
2.5%	97,208	93,126	-4,081	-4.2%
3.7%	82,645	80,821	-1,825	-2.2%
4.9%	82,256	78,865	-3,391	-4.1%
6.2%	75,295	74,262	-1,033	-1.4%
7.4%	70,717	69,974	-743	-1.1%
8.6%	68,653	66,066	-2,588	-3.8%
9.9%	67,282	64,059	-3,223	-4.8%
11.1%	56,533	54,960	-1,573	-2.8%
12.3%	54,941	50,946	-3,995	-7.3%
13.6%	51,117	49,339	-1,778	-3.5%
14.8%	37,870	34,824	-3,045	-8.0%
16.0%	35,257	33,584	-1,673	-4.7%
17.3%	35,247	32,298	-2,949	-8.4%
18.5%	34,268	31,222	-3,046	-8.9%
19.8%	33,641	30,656	-2,985	-8.9%
21.0%	33,454	29,076	-4,378	-13.1%
22.2%	28,656	27,152	-1,504	-5.2%
23.5%	27,145	24,828	-2,317	-8.5%
24.7%	26,651	24,578	-2,074	-7.8%
25.9%	25,394	23,378	-2,016	-7.9%
27.2%	21,872	18,537	-3,335	-15.2%
28.4%	21,312	17,782	-3,530	-16.6%
29.6%	20,840	17,481	-3,359	-16.1%
30.9%	19,472	16,974	-2,499	-12.8%
32.1%	18,514	16,860	-1,655	-8.9%
33.3%	17,931	16,541	-1,390	-7.7%
34.6%	17,106	16,255	-851	-5.0%
35.8%	16,841	15,591	-1,250	-7.4%
37.0%	16,498	15,311	-1,188	-7.2%
38.3%	15,859	14,872	-987	-6.2%
39.5%	15,663	14,298	-1,365	-8.7%
40.7%	15,208	14,174	-1,034	-6.8%
42.0%	14,726	13,405	-1,321	-9.0%
43.2%	14,290	13,356	-934	-6.5%
44.4%	14,059	13,321	-738	-5.2%
45.7%	13,967	12,019	-1,947	-13.9%
46.9%	13,898	11,959	-1,939	-14.0%
48.1%	13,774	11,803	-1,971	-14.3%
49.4%	13,588	11,714	-1,874	-13.8%
50.6%	13,544	11,601	-1,942	-14.3%
51.9%	13,332	11,458	-1,874	-14.1%
53.1%	13,250	11,265	-1,985	-15.0%
54.3%	12,064	11,264	-801	-6.6%
55.6%	12,023	10,896	-1,127	-9.4%
56.8%	11,332	10,622	-710	-6.3%
58.0%	11,105	10,603	-502	-4.5%
59.3%	11,088	10,542	-545	-4.9%
60.5%	10,918	10,532	-386	-3.5%
61.7%	10,664	10,441	-222	-2.1%
63.0%	10,452	10,430	-22	-0.2%
64.2%	10,170	10,151	-19	-0.2%
65.4%	10,118	10,048	-70	-0.7%
66.7%	10,023	10,014	-9	-0.1%
67.9%	9,819	9,987	168	1.7%
69.1%	9,082	9,925	842	9.3%
70.4%	8,981	9,883	902	10.0%
71.6%	8,874	9,557	683	7.7%
72.8%	8,645	9,257	612	7.1%
74.1%	8,495	9,055	561	6.6%
75.3%	7,226	8,253	1,027	14.2%
76.5%	7,138	7,907	769	10.8%
77.8%	7,094	7,620	527	7.4%
79.0%	7,005	7,303	297	4.2%
80.2%	6,960	7,103	143	2.0%
81.5%	6,862	7,087	225	3.3%
82.7%	6,849	6,982	132	1.9%
84.0%	6,730	6,903	174	2.6%
85.2%	6,330	6,823	493	7.8%
86.4%	6,060	6,775	715	11.8%
87.7%	6,043	6,741	698	11.5%
88.9%	6,001	6,680	679	11.3%
90.1%	5,818	6,225	406	7.0%
91.4%	5,791	6,154	362	6.3%
92.6%	5,171	6,095	924	17.9%
93.8%	5,033	5,775	742	14.7%
95.1%	4,886	5,637	751	15.4%
96.3%	4,587	5,633	1,047	22.8%
97.5%	3,998	4,842	844	21.1%
98.8%	3,977	4,271	294	7.4%
100.0%	3,880	4,152	272	7.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	247,010	247,201	191	0.1%
1.2%	226,849	225,885	-964	-0.4%
2.5%	200,575	195,863	-4,712	-2.3%
3.7%	176,828	174,391	-2,437	-1.4%
4.9%	151,744	148,357	-3,386	-2.2%
6.2%	149,591	147,482	-2,109	-1.4%
7.4%	139,861	133,642	-6,219	-4.4%
8.6%	133,607	133,139	-468	-0.4%
9.9%	117,309	113,013	-4,296	-3.7%
11.1%	111,574	110,672	-903	-0.8%
12.3%	108,367	110,219	1,852	1.7%
13.6%	97,212	92,815	-4,397	-4.5%
14.8%	90,464	91,153	689	0.8%
16.0%	84,247	81,400	-2,847	-3.4%
17.3%	79,744	74,427	-5,317	-6.7%
18.5%	77,398	73,010	-4,388	-5.7%
19.8%	73,878	72,871	-1,006	-1.4%
21.0%	73,319	70,831	-2,488	-3.4%
22.2%	71,542	69,401	-2,141	-3.0%
23.5%	61,248	60,184	-1,063	-1.7%
24.7%	60,498	58,734	-1,764	-2.9%
25.9%	60,440	57,622	-2,818	-4.7%
27.2%	58,735	55,711	-3,023	-5.1%
28.4%	54,961	53,304	-1,657	-3.0%
29.6%	52,590	50,685	-1,905	-3.6%
30.9%	50,106	49,978	-128	-0.3%
32.1%	43,764	42,389	-1,374	-3.1%
33.3%	40,277	40,502	225	0.6%
34.6%	40,009	39,959	-50	-0.1%
35.8%	35,658	33,738	-1,920	-5.4%
37.0%	34,030	31,321	-2,709	-8.0%
38.3%	34,019	31,299	-2,720	-8.0%
39.5%	33,818	31,182	-2,636	-7.8%
40.7%	33,135	29,231	-3,904	-11.8%
42.0%	31,828	28,180	-3,649	-11.5%
43.2%	30,342	27,301	-3,041	-10.0%
44.4%	29,766	26,721	-3,045	-10.2%
45.7%	27,895	24,280	-3,616	-13.0%
46.9%	26,156	22,730	-3,426	-13.1%
48.1%	24,793	21,121	-3,673	-14.8%
49.4%	22,212	19,354	-2,859	-12.9%
50.6%	22,143	18,514	-3,629	-16.4%
51.9%	21,498	17,905	-3,593	-16.7%
53.1%	20,336	17,035	-3,301	-16.2%
54.3%	20,175	17,003	-3,172	-15.7%
55.6%	20,094	16,448	-3,647	-18.1%
56.8%	18,886	15,315	-3,571	-18.9%
58.0%	18,664	15,137	-3,527	-18.9%
59.3%	18,140	14,779	-3,361	-18.5%
60.5%	16,790	14,569	-2,222	-13.2%
61.7%	16,649	14,171	-2,478	-14.9%
63.0%	16,507	13,658	-2,849	-17.3%
64.2%	16,073	13,629	-2,444	-15.2%
65.4%	15,883	13,162	-2,721	-17.1%
66.7%	14,903	12,638	-2,265	-15.2%
67.9%	14,232	12,236	-1,996	-14.0%
69.1%	13,226	12,214	-1,012	-7.7%
70.4%	13,061	12,210	-851	-6.5%
71.6%	13,000	11,919	-1,081	-8.3%
72.8%	12,547	11,907	-640	-5.1%
74.1%	12,265	11,905	-360	-2.9%
75.3%	12,166	11,903	-263	-2.2%
76.5%	11,995	11,859	-136	-1.1%
77.8%	11,835	11,827	-8	-0.1%
79.0%	11,183	11,228	44	0.4%
80.2%	11,107	11,106	-1	0.0%
81.5%	10,833	10,636	-197	-1.8%
82.7%	10,717	10,621	-96	-0.9%
84.0%	10,681	10,470	-211	-2.0%
85.2%	10,505	10,392	-112	-1.1%
86.4%	10,141	10,272	132	1.3%
87.7%	10,115	10,138	23	0.2%
88.9%	9,834	9,853	18	0.2%
90.1%	9,644	9,697	53	0.5%
91.4%	9,621	9,576	-45	-0.5%
92.6%	9,203	9,213	10	0.1%
93.8%	8,742	8,751	9	0.1%
95.1%	8,503	8,538	36	0.4%
96.3%	8,141	8,512	370	4.5%
97.5%	8,124	8,249	125	1.5%
98.8%	6,940	7,548	609	8.8%
100.0%	4,779	4,839	59	1.2%

Table SW-32-b

Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	257,761	259,735	1,975	0.8%
1.2%	214,569	210,860	-3,709	-1.7%
2.5%	204,185	202,090	-2,096	-1.0%
3.7%	193,935	191,938	-1,997	-1.0%
4.9%	176,201	176,037	-164	-0.1%
6.2%	172,248	172,173	-75	0.0%
7.4%	166,130	161,274	-4,856	-2.9%
8.6%	156,689	156,258	-431	-0.3%
9.9%	132,574	133,145	571	0.4%
11.1%	128,519	127,337	-1,182	-0.9%
12.3%	126,882	125,999	-883	-0.7%
13.6%	119,674	117,908	-1,766	-1.5%
14.8%	114,983	115,118	136	0.1%
16.0%	110,963	106,822	-4,141	-3.7%
17.3%	108,962	105,736	-3,225	-3.0%
18.5%	108,625	104,088	-4,537	-4.2%
19.8%	107,398	103,220	-4,178	-3.9%
21.0%	102,301	100,228	-2,072	-2.0%
22.2%	88,906	84,726	-4,181	-4.7%
23.5%	83,281	80,137	-3,145	-3.8%
24.7%	74,455	74,461	6	0.0%
25.9%	73,451	72,725	-726	-1.0%
27.2%	69,666	66,418	-3,248	-4.7%
28.4%	69,052	66,193	-2,858	-4.1%
29.6%	66,766	64,656	-2,110	-3.2%
30.9%	65,506	64,114	-1,392	-2.1%
32.1%	64,520	61,418	-3,101	-4.8%
33.3%	62,486	58,921	-3,565	-5.7%
34.6%	59,324	57,936	-1,388	-2.3%
35.8%	58,771	55,561	-3,210	-5.5%
37.0%	53,988	54,211	223	0.4%
38.3%	53,119	53,890	771	1.5%
39.5%	50,556	48,710	-1,846	-3.7%
40.7%	50,507	46,689	-3,818	-7.6%
42.0%	49,052	46,658	-2,394	-4.9%
43.2%	48,542	45,440	-3,103	-6.4%
44.4%	46,837	42,533	-4,304	-9.2%
45.7%	41,422	39,884	-1,539	-3.7%
46.9%	39,541	39,426	-114	-0.3%
48.1%	39,344	37,779	-1,564	-4.0%
49.4%	38,257	35,884	-2,373	-6.2%
50.6%	37,768	35,759	-2,009	-5.3%
51.9%	35,692	32,369	-3,323	-9.3%
53.1%	31,067	30,010	-1,057	-3.4%
54.3%	30,456	28,029	-2,427	-8.0%
55.6%	30,447	25,979	-4,467	-14.7%
56.8%	27,673	24,022	-3,651	-13.2%
58.0%	27,230	23,705	-3,525	-12.9%
59.3%	25,264	22,193	-3,071	-12.2%
60.5%	24,764	21,527	-3,237	-13.1%
61.7%	23,758	20,889	-2,869	-12.1%
63.0%	23,364	20,705	-2,658	-11.4%
64.2%	22,733	20,532	-2,200	-9.7%
65.4%	22,326	19,823	-2,503	-11.2%
66.7%	21,027	18,849	-2,178	-10.4%
67.9%	20,927	18,785	-2,142	-10.2%
69.1%	20,883	18,712	-2,170	-10.4%
70.4%	19,437	18,665	-772	-4.0%
71.6%	19,196	17,947	-1,249	-6.5%
72.8%	18,658	17,426	-1,232	-6.6%
74.1%	18,367	17,067	-1,300	-7.1%
75.3%	18,144	16,741	-1,404	-7.7%
76.5%	17,552	16,174	-1,378	-7.9%
77.8%	17,084	15,903	-1,180	-6.9%
79.0%	16,721	14,069	-2,653	-15.9%
80.2%	16,562	13,781	-2,781	-16.8%
81.5%	15,296	13,719	-1,577	-10.3%
82.7%	14,485	12,771	-1,714	-11.8%
84.0%	13,811	12,527	-1,284	-9.3%
85.2%	13,532	12,452	-1,080	-8.0%
86.4%	13,412	12,241	-1,171	-8.7%
87.7%	13,135	12,234	-902	-6.9%
88.9%	12,845	12,144	-701	-5.5%
90.1%	12,682	12,104	-577	-4.6%
91.4%	12,550	11,638	-912	-7.3%
92.6%	11,239	11,436	197	1.8%
93.8%	11,220	10,896	-324	-2.9%
95.1%	11,036	10,842	-194	-1.8%
96.3%	10,764	10,687	-76	-0.7%
97.5%	8,079	10,548	2,469	30.6%
98.8%	7,878	9,455	1,577	20.0%
100.0%	4,932	6,351	1,419	28.8%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	239,593	239,748	155	0.1%
1.2%	219,231	214,334	-4,897	-2.2%
2.5%	166,777	160,868	-5,909	-3.5%
3.7%	132,758	125,856	-6,902	-5.2%
4.9%	120,633	118,265	-2,368	-2.0%
6.2%	118,253	114,593	-3,660	-3.1%
7.4%	109,544	103,705	-5,838	-5.3%
8.6%	82,992	80,154	-2,837	-3.4%
9.9%	80,140	79,058	-1,081	-1.3%
11.1%	79,041	78,815	-226	-0.3%
12.3%	78,846	77,354	-1,492	-1.9%
13.6%	75,112	73,613	-1,499	-2.0%
14.8%	73,917	73,451	-466	-0.6%
16.0%	69,102	69,117	16	0.0%
17.3%	67,002	66,996	-6	0.0%
18.5%	63,285	60,985	-2,300	-3.6%
19.8%	62,112	60,823	-1,290	-2.1%
21.0%	60,697	59,475	-1,221	-2.0%
22.2%	58,410	58,392	-19	0.0%
23.5%	57,926	57,932	6	0.0%
24.7%	56,982	53,907	-3,075	-5.4%
25.9%	56,269	50,793	-5,475	-9.7%
27.2%	53,111	50,094	-3,017	-5.7%
28.4%	51,143	48,171	-2,971	-5.8%
29.6%	49,361	44,222	-5,139	-10.4%
30.9%	48,092	43,999	-4,093	-8.5%
32.1%	41,578	41,901	324	0.8%
33.3%	41,247	40,825	-422	-1.0%
34.6%	40,564	37,178	-3,386	-8.3%
35.8%	40,094	36,357	-3,737	-9.3%
37.0%	39,537	35,797	-3,740	-9.5%
38.3%	38,823	35,185	-3,638	-9.4%
39.5%	35,635	35,048	-588	-1.6%
40.7%	35,191	34,156	-1,036	-2.9%
42.0%	31,311	30,818	-493	-1.6%
43.2%	30,129	27,783	-2,346	-7.8%
44.4%	29,301	25,871	-3,431	-11.7%
45.7%	29,036	25,751	-3,285	-11.3%
46.9%	28,778	25,624	-3,153	-11.0%
48.1%	28,162	24,039	-4,123	-14.6%
49.4%	27,822	23,465	-4,356	-15.7%
50.6%	23,139	21,349	-1,790	-7.7%
51.9%	23,029	20,710	-2,319	-10.1%
53.1%	22,244	19,338	-2,906	-13.1%
54.3%	21,848	19,329	-2,519	-11.5%
55.6%	21,328	18,517	-2,811	-13.2%
56.8%	21,139	18,400	-2,740	-13.0%
58.0%	20,453	17,806	-2,647	-12.9%
59.3%	20,202	17,711	-2,491	-12.3%
60.5%	19,340	17,540	-1,801	-9.3%
61.7%	18,338	17,430	-907	-4.9%
63.0%	18,322	17,415	-907	-4.9%
64.2%	17,852	17,175	-677	-3.8%
65.4%	17,631	16,858	-773	-4.4%
66.7%	17,617	16,268	-1,349	-7.7%
67.9%	17,065	15,825	-1,240	-7.3%
69.1%	16,726	15,536	-1,190	-7.1%
70.4%	15,473	15,260	-214	-1.4%
71.6%	15,232	14,822	-410	-2.7%
72.8%	14,773	14,661	-113	-0.8%
74.1%	14,568	13,449	-1,118	-7.7%
75.3%	14,526	13,373	-1,153	-7.9%
76.5%	14,317	12,651	-1,666	-11.6%
77.8%	13,991	12,520	-1,471	-10.5%
79.0%	13,314	12,032	-1,282	-9.6%
80.2%	12,454	11,772	-682	-5.5%
81.5%	12,224	11,280	-944	-7.7%
82.7%	11,768	11,163	-605	-5.1%
84.0%	11,252	10,887	-365	-3.2%
85.2%	10,938	10,515	-423	-3.9%
86.4%	10,571	10,159	-412	-3.9%
87.7%	10,176	9,907	-269	-2.6%
88.9%	9,575	9,880	305	3.2%
90.1%	9,314	9,880	565	6.1%
91.4%	9,196	9,479	283	3.1%
92.6%	8,870	9,230	360	4.1%
93.8%	8,706	8,761	56	0.6%
95.1%	8,557	8,761	204	2.4%
96.3%	8,025	8,535	510	6.4%
97.5%	7,848	8,148	300	3.8%
98.8%	6,240	6,395	155	2.5%
100.0%	6,156	6,180	24	0.4%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	109,932	109,889	-43	0.0%
1.2%	97,289	95,828	-1,461	-1.5%
2.5%	89,480	86,433	-3,046	-3.4%
3.7%	58,778	58,732	-47	-0.1%
4.9%	54,137	53,761	-376	-0.7%
6.2%	52,984	52,928	-56	-0.1%
7.4%	52,525	50,786	-1,739	-3.3%
8.6%	50,980	49,819	-1,161	-2.3%
9.9%	48,756	48,750	-6	0.0%
11.1%	42,362	42,382	19	0.0%
12.3%	38,444	35,846	-2,598	-6.8%
13.6%	29,779	28,723	-1,057	-3.5%
14.8%	29,723	27,868	-1,855	-6.2%
16.0%	29,454	27,029	-2,424	-8.2%
17.3%	28,740	26,661	-2,079	-7.2%
18.5%	26,257	26,259	2	0.0%
19.8%	25,595	23,236	-2,360	-9.2%
21.0%	25,528	22,723	-2,805	-11.0%
22.2%	24,563	21,742	-2,821	-11.5%
23.5%	21,904	21,151	-753	-3.4%
24.7%	19,590	19,500	-90	-0.5%
25.9%	19,441	19,350	-91	-0.5%
27.2%	19,345	17,228	-2,117	-10.9%
28.4%	16,712	16,536	-176	-1.1%
29.6%	16,313	16,130	-183	-1.1%
30.9%	15,993	15,458	-535	-3.3%
32.1%	15,712	15,430	-282	-1.8%
33.3%	15,034	14,981	-53	-0.4%
34.6%	14,968	14,611	-358	-2.4%
35.8%	14,443	13,547	-897	-6.2%
37.0%	12,970	13,230	260	2.0%
38.3%	12,935	12,892	-42	-0.3%
39.5%	12,875	12,888	13	0.1%
40.7%	12,842	12,824	-17	-0.1%
42.0%	12,731	12,799	68	0.5%
43.2%	12,324	12,662	339	2.7%
44.4%	12,269	12,178	-91	-0.7%
45.7%	12,061	12,170	109	0.9%
46.9%	11,414	11,317	-97	-0.8%
48.1%	10,687	10,436	-252	-2.4%
49.4%	10,509	10,162	-347	-3.3%
50.6%	10,229	10,120	-108	-1.1%
51.9%	10,216	10,062	-154	-1.5%
53.1%	10,126	10,037	-89	-0.9%
54.3%	9,879	9,822	-57	-0.6%
55.6%	9,841	9,773	-68	-0.7%
56.8%	9,717	9,766	49	0.5%
58.0%	9,388	9,749	361	3.8%
59.3%	9,245	9,711	465	5.0%
60.5%	9,186	9,056	-130	-1.4%
61.7%	9,101	9,052	-49	-0.5%
63.0%	9,021	9,021	0	0.0%
64.2%	8,961	8,875	-87	-1.0%
65.4%	8,928	8,846	-82	-0.9%
66.7%	8,835	8,835	0	0.0%
67.9%	8,710	8,829	118	1.4%
69.1%	8,458	8,647	190	2.2%
70.4%	8,415	8,520	105	1.2%
71.6%	8,405	8,358	-47	-0.6%
72.8%	8,293	8,306	13	0.2%
74.1%	8,275	8,195	-80	-1.0%
75.3%	8,119	8,088	-31	-0.4%
76.5%	7,984	8,009	25	0.3%
77.8%	7,980	7,903	-77	-1.0%
79.0%	7,927	7,831	-96	-1.2%
80.2%	7,401	7,762	361	4.9%
81.5%	7,259	7,573	314	4.3%
82.7%	7,175	7,474	300	4.2%
84.0%	7,099	7,376	276	3.9%
85.2%	7,081	7,347	266	3.8%
86.4%	7,011	7,065	53	0.8%
87.7%	7,007	6,976	-31	-0.4%
88.9%	6,936	6,934	-1	0.0%
90.1%	6,719	6,719	0	0.0%
91.4%	6,528	6,472	-56	-0.9%
92.6%	6,430	6,470	40	0.6%
93.8%	6,410	6,385	-25	-0.4%
95.1%	6,149	6,149	0	0.0%
96.3%	6,013	5,967	-46	-0.8%
97.5%	5,826	5,927	102	1.7%
98.8%	5,485	5,700	215	3.9%
100.0%	5,277	5,577	300	5.7%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	34,481	32,064	-2,417	-7.0%
1.2%	24,523	22,951	-1,572	-6.4%
2.5%	19,229	20,344	1,115	5.8%
3.7%	17,861	17,899	37	0.2%
4.9%	16,751	13,749	-3,002	-17.9%
6.2%	14,120	13,713	-408	-2.9%
7.4%	13,939	12,326	-1,613	-11.6%
8.6%	12,098	11,817	-281	-2.3%
9.9%	11,819	11,757	-62	-0.5%
11.1%	11,705	11,705	-1	0.0%
12.3%	11,523	11,523	0	0.0%
13.6%	11,483	11,341	-142	-1.2%
14.8%	11,166	11,310	145	1.3%
16.0%	10,563	11,105	543	5.1%
17.3%	10,463	10,486	23	0.2%
18.5%	10,245	10,475	231	2.3%
19.8%	10,118	10,245	127	1.3%
21.0%	9,910	10,017	106	1.1%
22.2%	9,566	9,744	179	1.9%
23.5%	9,478	9,636	158	1.7%
24.7%	9,362	9,628	266	2.8%
25.9%	9,166	9,621	455	5.0%
27.2%	8,976	9,593	617	6.9%
28.4%	8,973	9,530	557	6.2%
29.6%	8,949	9,515	566	6.3%
30.9%	8,850	9,501	651	7.4%
32.1%	8,781	9,488	707	8.0%
33.3%	8,644	9,474	830	9.6%
34.6%	8,591	9,441	849	9.9%
35.8%	8,561	9,322	761	8.9%
37.0%	8,496	8,807	312	3.7%
38.3%	8,420	8,547	126	1.5%
39.5%	8,375	8,532	157	1.9%
40.7%	8,306	8,420	114	1.4%
42.0%	8,197	8,368	171	2.1%
43.2%	8,054	8,359	305	3.8%
44.4%	7,885	8,318	433	5.5%
45.7%	7,828	8,292	464	5.9%
46.9%	7,818	8,165	347	4.4%
48.1%	7,791	7,974	183	2.4%
49.4%	7,730	7,961	231	3.0%
50.6%	7,589	7,958	370	4.9%
51.9%	7,527	7,723	196	2.6%
53.1%	7,442	7,587	144	1.9%
54.3%	7,367	7,536	169	2.3%
55.6%	7,158	7,160	2	0.0%
56.8%	7,083	7,027	-56	-0.8%
58.0%	7,078	6,880	-198	-2.8%
59.3%	7,066	6,816	-250	-3.5%
60.5%	6,892	6,777	-115	-1.7%
61.7%	6,773	6,764	-9	-0.1%
63.0%	6,745	6,601	-144	-2.1%
64.2%	6,694	6,574	-120	-1.8%
65.4%	6,676	6,544	-132	-2.0%
66.7%	6,507	6,540	33	0.5%
67.9%	6,503	6,507	4	0.1%
69.1%	6,483	6,503	20	0.3%
70.4%	6,466	6,483	17	0.3%
71.6%	6,431	6,341	-90	-1.4%
72.8%	6,416	6,254	-162	-2.5%
74.1%	6,327	6,223	-104	-1.6%
75.3%	6,271	6,211	-60	-1.0%
76.5%	6,184	6,189	5	0.1%
77.8%	6,163	6,184	21	0.3%
79.0%	6,142	6,146	4	0.1%
80.2%	6,111	6,082	-29	-0.5%
81.5%	6,089	5,951	-137	-2.3%
82.7%	5,910	5,910	0	0.0%
84.0%	5,858	5,818	-39	-0.7%
85.2%	5,789	5,682	-108	-1.9%
86.4%	5,697	5,673	-24	-0.4%
87.7%	5,665	5,667	2	0.0%
88.9%	5,609	5,660	52	0.9%
90.1%	5,592	5,595	3	0.1%
91.4%	5,427	5,426	-1	0.0%
92.6%	5,357	5,376	19	0.4%
93.8%	4,835	4,790	-45	-0.9%
95.1%	4,705	4,519	-186	-4.0%
96.3%	4,086	3,913	-173	-4.2%
97.5%	3,912	3,886	-26	-0.7%
98.8%	3,534	3,564	30	0.9%
100.0%	2,986	2,969	-17	-0.6%

Table SW-32-b
Sacramento River at Rio Vista, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,791	20,722	4,931	31.2%
1.2%	11,570	11,240	-330	-2.9%
2.5%	11,082	10,900	-182	-1.6%
3.7%	10,334	10,379	45	0.4%
4.9%	9,648	9,679	31	0.3%
6.2%	9,437	9,167	-269	-2.9%
7.4%	8,881	9,105	224	2.5%
8.6%	8,822	8,822	0	0.0%
9.9%	8,738	8,820	82	0.9%
11.1%	8,730	8,715	-15	-0.2%
12.3%	8,676	8,687	11	0.1%
13.6%	8,653	8,636	-17	-0.2%
14.8%	8,632	8,465	-167	-1.9%
16.0%	8,511	8,403	-108	-1.3%
17.3%	8,421	8,367	-54	-0.6%
18.5%	8,364	8,348	-16	-0.2%
19.8%	8,343	8,309	-34	-0.4%
21.0%	8,309	8,266	-44	-0.5%
22.2%	8,004	8,121	116	1.5%
23.5%	7,974	8,043	69	0.9%
24.7%	7,971	8,015	44	0.6%
25.9%	7,955	7,979	24	0.3%
27.2%	7,946	7,970	23	0.3%
28.4%	7,833	7,965	132	1.7%
29.6%	7,556	7,831	275	3.6%
30.9%	7,517	7,794	277	3.7%
32.1%	7,510	7,786	276	3.7%
33.3%	7,476	7,786	310	4.2%
34.6%	7,457	7,648	191	2.6%
35.8%	7,432	7,552	120	1.6%
37.0%	7,407	7,510	103	1.4%
38.3%	7,398	7,510	111	1.5%
39.5%	7,383	7,464	81	1.1%
40.7%	7,317	7,443	126	1.7%
42.0%	7,310	7,406	96	1.3%
43.2%	7,282	7,382	100	1.4%
44.4%	7,243	7,316	73	1.0%
45.7%	7,155	7,310	156	2.2%
46.9%	7,096	7,284	187	2.6%
48.1%	7,083	7,256	173	2.4%
49.4%	7,071	7,245	175	2.5%
50.6%	7,062	7,243	181	2.6%
51.9%	7,050	7,178	127	1.8%
53.1%	7,010	7,177	167	2.4%
54.3%	7,006	7,162	156	2.2%
55.6%	7,006	7,154	149	2.1%
56.8%	7,001	7,148	147	2.1%
58.0%	6,978	7,098	120	1.7%
59.3%	6,805	7,096	291	4.3%
60.5%	6,701	7,091	390	5.8%
61.7%	6,634	7,085	451	6.8%
63.0%	6,596	7,084	487	7.4%
64.2%	6,572	7,071	499	7.6%
65.4%	6,521	7,055	534	8.2%
66.7%	6,466	7,050	584	9.0%
67.9%	6,413	7,024	612	9.5%
69.1%	6,385	7,006	621	9.7%
70.4%	6,329	7,001	672	10.6%
71.6%	6,240	6,990	751	12.0%
72.8%	6,217	6,978	762	12.2%
74.1%	6,058	6,922	864	14.3%
75.3%	6,024	6,877	853	14.2%
76.5%	5,830	6,596	766	13.1%
77.8%	5,673	6,521	848	15.0%
79.0%	5,665	6,440	775	13.7%
80.2%	5,605	6,404	798	14.2%
81.5%	5,602	6,395	793	14.2%
82.7%	5,545	6,337	792	14.3%
84.0%	5,524	6,239	715	12.9%
85.2%	5,509	6,134	625	11.3%
86.4%	5,500	6,109	609	11.1%
87.7%	5,494	5,861	367	6.7%
88.9%	5,451	5,743	293	5.4%
90.1%	5,381	5,588	206	3.8%
91.4%	5,342	5,545	204	3.8%
92.6%	5,309	5,494	184	3.5%
93.8%	5,263	5,342	78	1.5%
95.1%	5,011	5,011	0	0.0%
96.3%	3,987	3,963	-24	-0.6%
97.5%	3,623	3,941	318	8.8%
98.8%	3,491	3,775	283	8.1%
100.0%	3,323	3,611	288	8.7%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,358	19,907	5,549	38.6%
1.2%	14,245	14,306	61	0.4%
2.5%	14,139	14,291	153	1.1%
3.7%	14,090	14,245	155	1.1%
4.9%	14,049	14,201	152	1.1%
6.2%	14,018	14,173	155	1.1%
7.4%	13,960	14,139	179	1.3%
8.6%	13,898	14,127	229	1.7%
9.9%	13,859	14,073	214	1.5%
11.1%	13,635	13,911	276	2.0%
12.3%	13,614	13,830	216	1.6%
13.6%	13,578	13,752	175	1.3%
14.8%	13,398	13,671	273	2.0%
16.0%	13,332	13,454	122	0.9%
17.3%	13,257	13,434	177	1.3%
18.5%	13,241	13,407	166	1.3%
19.8%	13,079	13,372	293	2.2%
21.0%	13,068	13,334	266	2.0%
22.2%	13,058	13,274	216	1.7%
23.5%	13,028	13,264	236	1.8%
24.7%	12,983	13,195	212	1.6%
25.9%	12,982	13,124	142	1.1%
27.2%	12,971	13,119	149	1.1%
28.4%	12,962	13,074	112	0.9%
29.6%	12,962	13,071	109	0.8%
30.9%	12,933	12,948	15	0.1%
32.1%	12,897	12,922	25	0.2%
33.3%	12,807	12,908	101	0.8%
34.6%	12,784	12,872	88	0.7%
35.8%	12,783	12,855	72	0.6%
37.0%	12,642	12,736	94	0.7%
38.3%	12,616	12,735	119	0.9%
39.5%	12,518	12,668	151	1.2%
40.7%	12,507	12,563	56	0.4%
42.0%	12,349	12,536	187	1.5%
43.2%	12,043	12,301	258	2.1%
44.4%	11,997	12,225	229	1.9%
45.7%	11,943	12,176	233	1.9%
46.9%	11,903	12,098	196	1.6%
48.1%	11,787	11,841	54	0.5%
49.4%	11,459	11,740	281	2.5%
50.6%	11,232	11,535	303	2.7%
51.9%	11,072	11,447	375	3.4%
53.1%	10,964	11,435	472	4.3%
54.3%	10,934	11,352	417	3.8%
55.6%	10,901	11,330	428	3.9%
56.8%	10,808	11,086	277	2.6%
58.0%	10,698	11,051	354	3.3%
59.3%	10,572	11,024	452	4.3%
60.5%	10,548	10,941	393	3.7%
61.7%	10,228	10,700	473	4.6%
63.0%	10,153	10,361	208	2.1%
64.2%	10,089	10,350	261	2.6%
65.4%	9,863	10,329	466	4.7%
66.7%	9,822	10,191	369	3.8%
67.9%	9,492	9,889	398	4.2%
69.1%	9,462	9,797	335	3.5%
70.4%	9,342	9,615	272	2.9%
71.6%	9,304	9,381	77	0.8%
72.8%	9,247	9,333	86	0.9%
74.1%	8,950	9,303	352	3.9%
75.3%	8,023	9,267	1,244	15.5%
76.5%	7,791	9,258	1,467	18.8%
77.8%	7,616	8,286	670	8.8%
79.0%	7,279	8,184	905	12.4%
80.2%	6,781	8,156	1,375	20.3%
81.5%	6,389	7,001	611	9.6%
82.7%	5,932	6,768	836	14.1%
84.0%	5,683	6,530	847	14.9%
85.2%	5,667	6,437	770	13.6%
86.4%	5,649	6,430	781	13.8%
87.7%	5,401	6,314	913	16.9%
88.9%	5,336	6,127	791	14.8%
90.1%	5,045	5,896	851	16.9%
91.4%	4,724	5,814	1,090	23.1%
92.6%	4,716	5,082	366	7.8%
93.8%	4,439	5,041	603	13.6%
95.1%	4,388	4,726	338	7.7%
96.3%	4,353	4,619	266	6.1%
97.5%	4,260	4,546	286	6.7%
98.8%	4,206	4,421	215	5.1%
100.0%	3,470	4,138	668	19.3%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,578	11,371	-207	-1.8%
1.2%	10,063	10,130	66	0.7%
2.5%	9,877	10,010	133	1.3%
3.7%	9,739	9,896	157	1.6%
4.9%	9,545	9,819	273	2.9%
6.2%	9,506	9,804	298	3.1%
7.4%	9,408	9,799	391	4.2%
8.6%	9,298	9,745	447	4.8%
9.9%	9,159	9,612	453	4.9%
11.1%	9,152	9,516	364	4.0%
12.3%	9,028	9,502	474	5.3%
13.6%	8,971	9,494	522	5.8%
14.8%	8,910	9,441	531	6.0%
16.0%	8,883	9,372	490	5.5%
17.3%	8,847	9,362	514	5.8%
18.5%	8,836	9,298	463	5.2%
19.8%	8,810	9,298	487	5.5%
21.0%	8,795	9,238	442	5.0%
22.2%	8,746	9,217	471	5.4%
23.5%	8,743	9,196	453	5.2%
24.7%	8,738	9,117	378	4.3%
25.9%	8,647	9,083	436	5.0%
27.2%	8,563	9,029	466	5.4%
28.4%	8,507	9,027	520	6.1%
29.6%	8,477	8,970	493	5.8%
30.9%	8,436	8,970	534	6.3%
32.1%	8,417	8,896	479	5.7%
33.3%	8,337	8,856	519	6.2%
34.6%	8,266	8,820	554	6.7%
35.8%	8,211	8,808	597	7.3%
37.0%	8,175	8,795	620	7.6%
38.3%	8,082	8,738	657	8.1%
39.5%	8,034	8,679	645	8.0%
40.7%	8,001	8,638	637	8.0%
42.0%	7,938	8,543	605	7.6%
43.2%	7,929	8,541	611	7.7%
44.4%	7,763	8,524	760	9.8%
45.7%	7,682	8,423	741	9.6%
46.9%	7,679	8,398	719	9.4%
48.1%	7,621	8,390	768	10.1%
49.4%	7,543	8,387	844	11.2%
50.6%	7,503	8,385	882	11.8%
51.9%	7,463	8,329	866	11.6%
53.1%	7,460	8,321	862	11.5%
54.3%	7,441	8,229	788	10.6%
55.6%	7,381	8,213	832	11.3%
56.8%	7,272	8,127	856	11.8%
58.0%	6,928	8,083	1,155	16.7%
59.3%	6,650	8,007	1,357	20.4%
60.5%	6,644	7,882	1,238	18.6%
61.7%	6,628	7,830	1,202	18.1%
63.0%	6,457	7,750	1,292	20.0%
64.2%	6,309	7,533	1,224	19.4%
65.4%	6,172	7,463	1,290	20.9%
66.7%	6,170	7,305	1,135	18.4%
67.9%	6,060	7,218	1,158	19.1%
69.1%	6,017	7,037	1,020	17.0%
70.4%	5,921	6,299	378	6.4%
71.6%	5,882	6,210	328	5.6%
72.8%	5,829	6,128	298	5.1%
74.1%	5,656	6,119	463	8.2%
75.3%	5,603	6,078	475	8.5%
76.5%	5,494	5,984	490	8.9%
77.8%	5,466	5,981	515	9.4%
79.0%	5,277	5,940	663	12.6%
80.2%	5,234	5,857	623	11.9%
81.5%	5,134	5,708	574	11.2%
82.7%	5,116	5,599	484	9.5%
84.0%	5,115	5,540	425	8.3%
85.2%	5,109	5,517	408	8.0%
86.4%	5,055	5,515	460	9.1%
87.7%	4,992	5,486	493	9.9%
88.9%	4,784	5,251	467	9.8%
90.1%	4,747	5,199	452	9.5%
91.4%	4,706	5,161	455	9.7%
92.6%	4,572	5,159	587	12.8%
93.8%	4,323	4,941	618	14.3%
95.1%	4,310	4,491	181	4.2%
96.3%	4,152	4,389	237	5.7%
97.5%	4,083	4,133	50	1.2%
98.8%	3,992	3,947	-45	-1.1%
100.0%	3,873	3,843	-29	-0.8%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,151	26,523	372	1.4%
1.2%	25,379	26,096	717	2.8%
2.5%	25,020	25,986	966	3.9%
3.7%	24,954	25,636	682	2.7%
4.9%	24,845	25,576	731	2.9%
6.2%	24,157	24,783	627	2.6%
7.4%	23,911	24,108	197	0.8%
8.6%	23,626	23,952	326	1.4%
9.9%	23,345	23,778	433	1.9%
11.1%	23,172	23,672	500	2.2%
12.3%	22,951	23,648	697	3.0%
13.6%	22,719	23,015	297	1.3%
14.8%	22,665	22,908	243	1.1%
16.0%	22,393	22,779	386	1.7%
17.3%	22,363	22,758	395	1.8%
18.5%	22,351	22,530	179	0.8%
19.8%	21,843	22,201	357	1.6%
21.0%	21,133	22,016	883	4.2%
22.2%	21,064	15,611	-5,454	-25.9%
23.5%	15,365	15,311	-54	-0.4%
24.7%	15,212	14,991	-221	-1.5%
25.9%	14,914	14,832	-82	-0.5%
27.2%	14,706	14,731	25	0.2%
28.4%	14,544	14,548	4	0.0%
29.6%	14,505	14,532	26	0.2%
30.9%	14,306	14,487	181	1.3%
32.1%	14,249	14,377	128	0.9%
33.3%	14,074	14,191	118	0.8%
34.6%	13,425	13,582	156	1.2%
35.8%	13,101	13,131	30	0.2%
37.0%	12,750	13,068	318	2.5%
38.3%	11,824	12,120	296	2.5%
39.5%	11,765	11,482	-283	-2.4%
40.7%	11,632	11,372	-260	-2.2%
42.0%	11,506	11,121	-385	-3.3%
43.2%	11,167	11,028	-139	-1.2%
44.4%	7,930	9,367	1,437	18.1%
45.7%	7,857	9,232	1,375	17.5%
46.9%	7,359	8,943	1,584	21.5%
48.1%	7,271	8,755	1,485	20.4%
49.4%	7,266	8,503	1,237	17.0%
50.6%	6,912	8,412	1,500	21.7%
51.9%	6,837	8,381	1,544	22.6%
53.1%	6,834	8,326	1,491	21.8%
54.3%	6,744	8,309	1,565	23.2%
55.6%	6,732	8,306	1,574	23.4%
56.8%	6,677	8,299	1,622	24.3%
58.0%	6,674	7,902	1,228	18.4%
59.3%	6,438	7,855	1,417	22.0%
60.5%	6,437	7,851	1,414	22.0%
61.7%	6,339	7,843	1,504	23.7%
63.0%	6,326	7,621	1,295	20.5%
64.2%	6,053	7,501	1,448	23.9%
65.4%	5,989	7,474	1,485	24.8%
66.7%	5,953	7,377	1,425	23.9%
67.9%	5,673	6,951	1,278	22.5%
69.1%	5,477	6,934	1,458	26.6%
70.4%	5,436	6,913	1,476	27.2%
71.6%	5,125	6,905	1,780	34.7%
72.8%	4,897	6,872	1,975	40.3%
74.1%	4,887	6,852	1,965	40.2%
75.3%	4,672	6,580	1,909	40.9%
76.5%	4,533	6,568	2,034	44.9%
77.8%	4,493	6,555	2,061	45.9%
79.0%	4,427	6,477	2,050	46.3%
80.2%	4,399	6,194	1,795	40.8%
81.5%	4,090	6,133	2,043	50.0%
82.7%	3,781	6,127	2,346	62.0%
84.0%	3,656	6,093	2,436	66.6%
85.2%	3,628	6,060	2,433	67.1%
86.4%	3,622	5,582	1,960	54.1%
87.7%	3,554	5,347	1,793	50.5%
88.9%	3,485	5,225	1,739	49.9%
90.1%	3,483	4,537	1,054	30.3%
91.4%	3,418	4,517	1,099	32.2%
92.6%	3,259	4,478	1,220	37.4%
93.8%	3,232	4,122	890	27.5%
95.1%	3,176	4,065	889	28.0%
96.3%	3,000	3,994	994	33.1%
97.5%	3,000	3,844	844	28.1%
98.8%	3,000	3,327	327	10.9%
100.0%	3,000	3,020	20	0.7%

Figure SW-33-b
Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

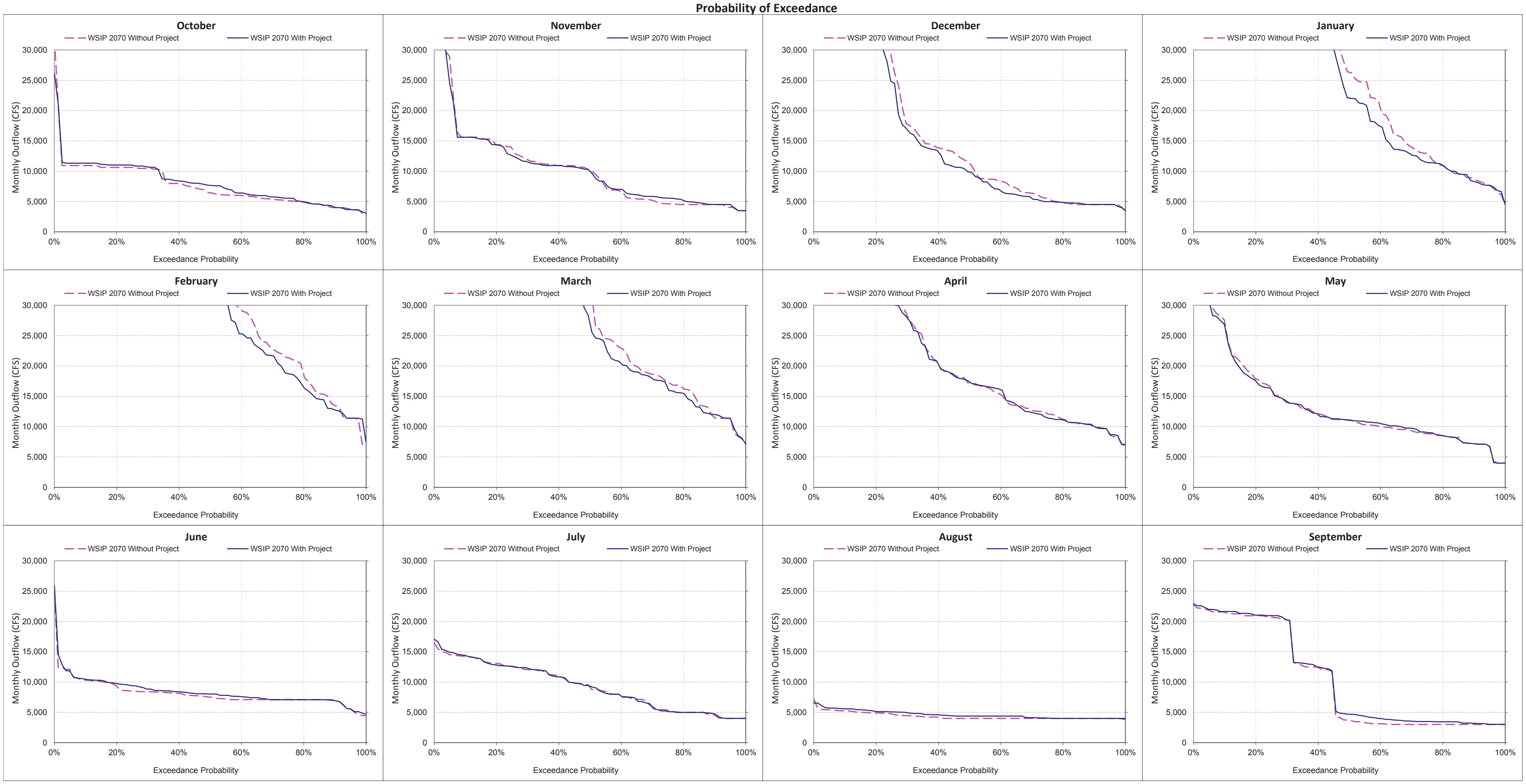


Table SW-33-b

Sacramento/San Joaquin River Delta, Monthly Outflow
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,928	26,174	-5,754	-18.0%
1.2%	20,938	20,938	0	0.0%
2.5%	10,938	11,484	547	5.0%
3.7%	10,938	11,328	390	3.6%
4.9%	10,938	11,328	390	3.6%
6.2%	10,938	11,328	390	3.6%
7.4%	10,938	11,328	390	3.6%
8.6%	10,938	11,328	390	3.6%
9.9%	10,938	11,328	390	3.6%
11.1%	10,938	11,328	390	3.6%
12.3%	10,938	11,328	390	3.6%
13.6%	10,938	11,328	390	3.6%
14.8%	10,625	11,172	547	5.1%
16.0%	10,625	11,119	494	4.7%
17.3%	10,625	11,015	390	3.7%
18.5%	10,625	11,015	390	3.7%
19.8%	10,625	11,015	390	3.7%
21.0%	10,625	11,015	390	3.7%
22.2%	10,625	11,015	390	3.7%
23.5%	10,625	11,015	390	3.7%
24.7%	10,625	11,015	390	3.7%
25.9%	10,625	10,859	234	2.2%
27.2%	10,469	10,859	390	3.7%
28.4%	10,469	10,859	390	3.7%
29.6%	10,469	10,703	234	2.2%
30.9%	10,469	10,625	156	1.5%
32.1%	10,313	10,625	313	3.0%
33.3%	10,313	10,313	0	0.0%
34.6%	10,051	8,763	-1,288	-12.8%
35.8%	8,125	8,689	564	6.9%
37.0%	7,969	8,676	708	8.9%
38.3%	7,969	8,515	547	6.9%
39.5%	7,969	8,398	430	5.4%
40.7%	7,969	8,359	390	4.9%
42.0%	7,656	8,286	630	8.2%
43.2%	7,500	8,125	625	8.3%
44.4%	7,344	8,047	703	9.6%
45.7%	7,188	8,047	859	12.0%
46.9%	7,031	7,945	914	13.0%
48.1%	6,969	7,813	844	12.1%
49.4%	6,468	7,701	1,233	19.1%
50.6%	6,400	7,645	1,245	19.5%
51.9%	6,238	7,578	1,340	21.5%
53.1%	6,128	7,578	1,450	23.7%
54.3%	6,098	7,251	1,153	18.9%
55.6%	6,056	7,037	982	16.2%
56.8%	6,039	6,931	891	14.8%
58.0%	6,019	6,425	406	6.8%
59.3%	6,002	6,418	416	6.9%
60.5%	5,989	6,401	412	6.9%
61.7%	5,912	6,224	312	5.3%
63.0%	5,826	6,107	282	4.8%
64.2%	5,816	6,064	248	4.3%
65.4%	5,554	5,990	436	7.9%
66.7%	5,525	5,987	463	8.4%
67.9%	5,478	5,986	508	9.3%
69.1%	5,421	5,749	328	6.0%
70.4%	5,395	5,741	346	6.4%
71.6%	5,277	5,715	438	8.3%
72.8%	5,256	5,650	394	7.5%
74.1%	5,155	5,549	394	7.6%
75.3%	5,108	5,545	437	8.6%
76.5%	5,085	5,526	441	8.7%
77.8%	4,975	5,099	124	2.5%
79.0%	4,940	5,015	75	1.5%
80.2%	4,912	4,946	34	0.7%
81.5%	4,688	4,807	119	2.5%
82.7%	4,599	4,609	10	0.2%
84.0%	4,584	4,594	9	0.2%
85.2%	4,565	4,572	8	0.2%
86.4%	4,309	4,390	81	1.9%
87.7%	4,288	4,390	103	2.4%
88.9%	4,000	4,301	301	7.5%
90.1%	4,000	4,000	0	0.0%
91.4%	4,000	4,000	0	0.0%
92.6%	4,000	3,886	-114	-2.8%
93.8%	3,863	3,664	-199	-5.2%
95.1%	3,757	3,663	-94	-2.5%
96.3%	3,673	3,600	-74	-2.0%
97.5%	3,644	3,585	-59	-1.6%
98.8%	3,070	3,327	258	8.4%
100.0%	3,000	3,075	75	2.5%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	51,874	45,072	-6,802	-13.1%
1.2%	43,814	42,940	-874	-2.0%
2.5%	32,752	30,831	-1,921	-5.9%
3.7%	29,747	29,907	161	0.5%
4.9%	28,929	24,591	-4,338	-15.0%
6.2%	22,153	21,305	-848	-3.8%
7.4%	16,449	15,625	-824	-5.0%
8.6%	15,625	15,625	0	0.0%
9.9%	15,625	15,625	0	0.0%
11.1%	15,625	15,625	0	0.0%
12.3%	15,625	15,625	0	0.0%
13.6%	15,625	15,469	-156	-1.0%
14.8%	15,469	15,313	-156	-1.0%
16.0%	15,313	15,313	0	0.0%
17.3%	15,313	15,156	-156	-1.0%
18.5%	15,313	14,398	-914	-6.0%
19.8%	14,398	14,346	-52	-0.4%
21.0%	14,346	14,296	-50	-0.3%
22.2%	14,296	14,031	-265	-1.9%
23.5%	14,045	12,906	-1,139	-8.1%
24.7%	14,031	12,642	-1,388	-9.9%
25.9%	12,906	12,334	-572	-4.4%
27.2%	12,642	12,028	-614	-4.9%
28.4%	12,334	11,656	-678	-5.5%
29.6%	12,028	11,618	-409	-3.4%
30.9%	11,656	11,352	-304	-2.6%
32.1%	11,618	11,237	-382	-3.3%
33.3%	11,352	11,179	-174	-1.5%
34.6%	11,237	11,021	-216	-1.9%
35.8%	11,179	10,938	-241	-2.2%
37.0%	11,094	10,938	-156	-1.4%
38.3%	11,021	10,938	-83	-0.8%
39.5%	10,938	10,938	0	0.0%
40.7%	10,938	10,938	0	0.0%
42.0%	10,938	10,781	-156	-1.4%
43.2%	10,938	10,781	-156	-1.4%
44.4%	10,938	10,713	-225	-2.1%
45.7%	10,781	10,619	-162	-1.5%
46.9%	10,711	10,490	-220	-2.1%
48.1%	10,619	10,346	-273	-2.6%
49.4%	10,316	10,316	0	0.0%
50.6%	10,011	9,656	-355	-3.5%
51.9%	9,439	8,786	-653	-6.9%
53.1%	8,786	8,364	-422	-4.8%
54.3%	7,950	8,364	414	5.2%
55.6%	6,997	7,513	516	7.4%
56.8%	6,945	7,168	224	3.2%
58.0%	6,902	7,035	133	1.9%
59.3%	6,781	7,021	240	3.5%
60.5%	6,494	6,960	467	7.2%
61.7%	5,652	6,357	705	12.5%
63.0%	5,547	6,236	689	12.4%
64.2%	5,545	6,137	591	10.7%
65.4%	5,412	6,089	677	12.5%
66.7%	5,397	5,930	533	9.9%
67.9%	5,392	5,848	457	8.5%
69.1%	5,288	5,837	549	10.4%
70.4%	5,163	5,835	672	13.0%
71.6%	4,858	5,764	905	18.6%
72.8%	4,688	5,631	943	20.1%
74.1%	4,635	5,583	948	20.5%
75.3%	4,607	5,548	941	20.4%
76.5%	4,590	5,542	952	20.7%
77.8%	4,566	5,418	852	18.7%
79.0%	4,506	5,369	863	19.1%
80.2%	4,500	5,096	596	13.3%
81.5%	4,500	4,950	450	10.0%
82.7%	4,500	4,941	441	9.8%
84.0%	4,500	4,865	365	8.1%
85.2%	4,500	4,779	279	6.2%
86.4%	4,500	4,688	188	4.2%
87.7%	4,500	4,578	78	1.7%
88.9%	4,500	4,500	0	0.0%
90.1%	4,500	4,500	0	0.0%
91.4%	4,500	4,500	0	0.0%
92.6%	4,500	4,500	0	0.0%
93.8%	4,059	4,500	441	10.9%
95.1%	4,051	4,500	449	11.1%
96.3%	3,986	3,903	-83	-2.1%
97.5%	3,518	3,500	-18	-0.5%
98.8%	3,500	3,500	0	0.0%
100.0%	3,500	3,500	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	194,775	197,381	2,606	1.3%
1.2%	143,606	140,030	-3,576	-2.5%
2.5%	122,174	120,300	-1,874	-1.5%
3.7%	122,165	119,582	-2,582	-2.1%
4.9%	106,169	102,045	-4,124	-3.9%
6.2%	92,804	88,230	-4,574	-4.9%
7.4%	91,674	88,171	-3,502	-3.8%
8.6%	85,661	84,474	-1,186	-1.4%
9.9%	80,368	79,292	-1,076	-1.3%
11.1%	77,142	77,150	9	0.0%
12.3%	64,405	58,026	-6,378	-9.9%
13.6%	54,397	52,494	-1,903	-3.5%
14.8%	42,568	37,792	-4,776	-11.2%
16.0%	39,187	37,739	-1,448	-3.7%
17.3%	38,379	35,813	-2,566	-6.7%
18.5%	36,872	33,592	-3,280	-8.9%
19.8%	35,795	32,509	-3,286	-9.2%
21.0%	34,964	30,827	-4,137	-11.8%
22.2%	31,595	30,008	-1,586	-5.0%
23.5%	31,006	28,092	-2,914	-9.4%
24.7%	29,265	24,873	-4,392	-15.0%
25.9%	26,234	24,485	-1,749	-6.7%
27.2%	24,167	19,343	-4,825	-20.0%
28.4%	20,533	17,688	-2,845	-13.9%
29.6%	17,854	17,072	-782	-4.4%
30.9%	17,495	16,295	-1,200	-6.9%
32.1%	17,050	16,009	-1,041	-6.1%
33.3%	16,183	15,050	-1,133	-7.0%
34.6%	15,427	14,200	-1,226	-7.9%
35.8%	14,540	13,915	-625	-4.3%
37.0%	14,497	13,736	-760	-5.2%
38.3%	14,282	13,592	-690	-4.8%
39.5%	13,906	13,474	-432	-3.1%
40.7%	13,779	12,704	-1,075	-7.8%
42.0%	13,583	11,179	-2,405	-17.7%
43.2%	13,401	11,054	-2,347	-17.5%
44.4%	13,268	10,823	-2,445	-18.4%
45.7%	12,713	10,645	-2,068	-16.3%
46.9%	12,275	10,642	-1,633	-13.3%
48.1%	11,901	10,464	-1,437	-12.1%
49.4%	11,579	9,908	-1,671	-14.4%
50.6%	10,923	9,843	-1,079	-9.9%
51.9%	9,760	9,076	-684	-7.0%
53.1%	8,795	8,932	137	1.6%
54.3%	8,792	8,255	-537	-6.1%
55.6%	8,765	8,228	-537	-6.1%
56.8%	8,662	7,565	-1,097	-12.7%
58.0%	8,654	7,094	-1,560	-18.0%
59.3%	8,364	7,058	-1,306	-15.6%
60.5%	8,305	6,566	-1,738	-20.9%
61.7%	8,121	6,325	-1,796	-22.1%
63.0%	7,496	6,267	-1,229	-16.4%
64.2%	7,371	6,210	-1,160	-15.7%
65.4%	7,095	6,073	-1,023	-14.4%
66.7%	6,508	5,910	-598	-9.2%
67.9%	6,471	5,838	-633	-9.8%
69.1%	6,417	5,838	-579	-9.0%
70.4%	6,346	5,384	-962	-15.2%
71.6%	6,203	5,349	-854	-13.8%
72.8%	5,766	5,109	-657	-11.4%
74.1%	5,586	5,002	-584	-10.4%
75.3%	5,533	5,000	-533	-9.6%
76.5%	5,077	4,973	-104	-2.1%
77.8%	5,014	4,920	-94	-1.9%
79.0%	4,894	4,906	12	0.2%
80.2%	4,778	4,806	27	0.6%
81.5%	4,743	4,788	44	0.9%
82.7%	4,611	4,755	144	3.1%
84.0%	4,508	4,748	240	5.3%
85.2%	4,500	4,743	243	5.4%
86.4%	4,500	4,611	111	2.5%
87.7%	4,500	4,500	0	0.0%
88.9%	4,500	4,500	0	0.0%
90.1%	4,500	4,500	0	0.0%
91.4%	4,500	4,500	0	0.0%
92.6%	4,500	4,500	0	0.0%
93.8%	4,500	4,500	0	0.0%
95.1%	4,500	4,500	0	0.0%
96.3%	4,500	4,500	0	0.0%
97.5%	4,500	4,237	-263	-5.9%
98.8%	4,032	4,003	-29	-0.7%
100.0%	3,500	3,500	0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	349,454	349,600	145	0.0%
1.2%	266,847	265,835	-1,012	-0.4%
2.5%	242,940	238,148	-4,793	-2.0%
3.7%	203,299	198,964	-4,335	-2.1%
4.9%	196,131	193,691	-2,440	-1.2%
6.2%	168,505	165,743	-2,762	-1.6%
7.4%	166,985	162,228	-4,757	-2.8%
8.6%	154,861	154,372	-489	-0.3%
9.9%	139,255	139,852	597	0.4%
11.1%	130,215	127,578	-2,638	-2.0%
12.3%	128,944	125,788	-3,156	-2.4%
13.6%	121,461	122,844	1,383	1.1%
14.8%	119,031	117,067	-1,964	-1.6%
16.0%	115,208	108,870	-6,338	-5.5%
17.3%	104,056	101,086	-2,970	-2.9%
18.5%	94,160	91,053	-3,108	-3.3%
19.8%	90,505	90,055	-451	-0.5%
21.0%	89,407	85,275	-4,133	-4.6%
22.2%	85,665	82,598	-3,067	-3.6%
23.5%	77,118	78,454	1,336	1.7%
24.7%	70,828	67,847	-2,981	-4.2%
25.9%	68,733	67,409	-1,324	-1.9%
27.2%	66,696	66,058	-637	-1.0%
28.4%	65,804	62,580	-3,224	-4.9%
29.6%	64,278	62,481	-1,798	-2.8%
30.9%	61,364	59,389	-1,975	-3.2%
32.1%	52,139	54,383	2,244	4.3%
33.3%	51,843	48,860	-2,983	-5.8%
34.6%	48,742	47,988	-754	-1.5%
35.8%	42,491	39,951	-2,541	-6.0%
37.0%	41,941	39,409	-2,532	-6.0%
38.3%	39,834	36,348	-3,487	-8.8%
39.5%	39,246	36,241	-3,005	-7.7%
40.7%	38,949	35,836	-3,113	-8.0%
42.0%	38,330	34,873	-3,458	-9.0%
43.2%	35,478	31,692	-3,786	-10.7%
44.4%	35,183	31,293	-3,890	-11.1%
45.7%	32,934	28,788	-4,146	-12.6%
46.9%	30,213	26,350	-3,863	-12.8%
48.1%	28,174	24,050	-4,124	-14.6%
49.4%	26,408	22,096	-4,312	-16.3%
50.6%	26,257	22,010	-4,248	-16.2%
51.9%	25,289	21,976	-3,313	-13.1%
53.1%	24,802	21,251	-3,551	-14.3%
54.3%	24,787	21,172	-3,615	-14.6%
55.6%	24,772	20,863	-3,909	-15.8%
56.8%	22,181	18,210	-3,971	-17.9%
58.0%	22,064	18,152	-3,911	-17.7%
59.3%	21,645	17,565	-4,080	-18.8%
60.5%	19,482	17,260	-2,222	-11.4%
61.7%	19,243	15,173	-4,070	-21.1%
63.0%	18,096	14,633	-3,463	-19.1%
64.2%	16,077	13,645	-2,431	-15.1%
65.4%	15,901	13,594	-2,307	-14.5%
66.7%	15,660	13,478	-2,181	-13.9%
67.9%	14,705	13,342	-1,363	-9.3%
69.1%	14,203	12,968	-1,236	-8.7%
70.4%	13,844	12,617	-1,227	-8.9%
71.6%	13,362	12,509	-853	-6.4%
72.8%	13,090	11,875	-1,215	-9.3%
74.1%	12,974	11,569	-1,405	-10.8%
75.3%	12,947	11,425	-1,523	-11.8%
76.5%	11,906	11,423	-482	-4.1%
77.8%	11,342	11,343	2	0.0%
79.0%	11,072	11,259	187	1.7%
80.2%	10,878	10,880	2	0.0%
81.5%	10,301	10,351	50	0.5%
82.7%	9,933	10,000	67	0.7%
84.0%	9,611	9,982	371	3.9%
85.2%	9,584	9,531	-52	-0.5%
86.4%	9,542	9,464	-77	-0.8%
87.7%	8,982	9,450	468	5.2%
88.9%	8,918	8,435	-483	-5.4%
90.1%	8,676	8,296	-380	-4.4%
91.4%	8,385	8,114	-271	-3.2%
92.6%	8,171	7,834	-337	-4.1%
93.8%	7,818	7,678	-140	-1.8%
95.1%	7,656	7,667	11	0.1%
96.3%	7,128	7,379	252	3.5%
97.5%	6,566	6,790	224	3.4%
98.8%	6,102	6,640	538	8.8%
100.0%	4,500	4,500	0	0.0%

Table SW-33-b

Sacramento/San Joaquin River Delta, Monthly Outflow

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	294,849	296,774	1,925	0.7%
1.2%	270,834	267,112	-3,722	-1.4%
2.5%	265,999	263,872	-2,127	-0.8%
3.7%	233,686	233,484	-202	-0.1%
4.9%	208,081	206,423	-1,657	-0.8%
6.2%	205,912	206,077	164	0.1%
7.4%	203,369	203,156	-214	-0.1%
8.6%	181,167	176,308	-4,860	-2.7%
9.9%	178,305	175,730	-2,574	-1.4%
11.1%	175,700	173,929	-1,771	-1.0%
12.3%	164,505	165,282	777	0.5%
13.6%	164,166	165,033	867	0.5%
14.8%	142,739	142,877	138	0.1%
16.0%	136,423	129,407	-7,016	-5.1%
17.3%	127,675	125,941	-1,734	-1.4%
18.5%	127,002	123,590	-3,412	-2.7%
19.8%	125,660	123,528	-2,131	-1.7%
21.0%	123,664	121,809	-1,855	-1.5%
22.2%	108,043	103,866	-4,177	-3.9%
23.5%	106,146	102,846	-3,300	-3.1%
24.7%	97,193	93,733	-3,460	-3.6%
25.9%	88,120	87,955	-165	-0.2%
27.2%	87,976	87,371	-605	-0.7%
28.4%	81,580	78,950	-2,630	-3.2%
29.6%	78,650	78,296	-354	-0.4%
30.9%	78,449	77,064	-1,385	-1.8%
32.1%	78,024	76,219	-1,805	-2.3%
33.3%	72,797	70,812	-1,984	-2.7%
34.6%	72,198	69,565	-2,633	-3.6%
35.8%	69,848	66,081	-3,767	-5.4%
37.0%	64,212	63,195	-1,017	-1.6%
38.3%	63,623	60,991	-2,632	-4.1%
39.5%	60,931	59,562	-1,369	-2.2%
40.7%	60,283	57,983	-2,300	-3.8%
42.0%	59,851	56,102	-3,749	-6.3%
43.2%	58,382	56,025	-2,357	-4.0%
44.4%	57,584	55,383	-2,201	-3.8%
45.7%	55,425	53,555	-1,869	-3.4%
46.9%	48,038	48,239	201	0.4%
48.1%	47,826	45,417	-2,409	-5.0%
49.4%	47,332	44,440	-2,892	-6.1%
50.6%	44,964	43,644	-1,320	-2.9%
51.9%	44,145	43,007	-1,138	-2.6%
53.1%	43,822	41,179	-2,643	-6.0%
54.3%	35,534	30,411	-5,123	-14.4%
55.6%	33,876	30,399	-3,478	-10.3%
56.8%	31,034	27,581	-3,453	-11.1%
58.0%	30,271	27,194	-3,077	-10.2%
59.3%	29,515	25,314	-4,201	-14.2%
60.5%	29,010	25,229	-3,781	-13.0%
61.7%	28,820	24,662	-4,158	-14.4%
63.0%	28,045	24,634	-3,412	-12.2%
64.2%	26,733	23,523	-3,210	-12.0%
65.4%	25,031	23,081	-1,950	-7.8%
66.7%	23,979	22,625	-1,354	-5.6%
67.9%	23,956	21,834	-2,122	-8.9%
69.1%	23,166	21,759	-1,407	-6.1%
70.4%	22,668	21,675	-993	-4.4%
71.6%	22,281	20,495	-1,786	-8.0%
72.8%	22,000	19,922	-2,078	-9.4%
74.1%	21,469	18,826	-2,643	-12.3%
75.3%	21,315	18,685	-2,630	-12.3%
76.5%	21,026	18,586	-2,440	-11.6%
77.8%	20,785	18,083	-2,702	-13.0%
79.0%	20,425	17,265	-3,160	-15.5%
80.2%	18,088	16,290	-1,798	-9.9%
81.5%	17,443	15,893	-1,550	-8.9%
82.7%	16,680	15,273	-1,407	-8.4%
84.0%	15,695	14,642	-1,053	-6.7%
85.2%	15,399	14,495	-904	-5.9%
86.4%	15,372	14,412	-960	-6.2%
87.7%	14,975	13,021	-1,954	-13.0%
88.9%	13,796	12,967	-829	-6.0%
90.1%	13,414	12,695	-719	-5.4%
91.4%	13,183	12,564	-619	-4.7%
92.6%	11,660	12,147	488	4.2%
93.8%	11,400	11,400	0	0.0%
95.1%	11,400	11,400	0	0.0%
96.3%	11,400	11,400	0	0.0%
97.5%	11,145	11,400	255	2.3%
98.8%	7,100	11,205	4,105	57.8%
100.0%	7,100	7,468	368	5.2%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	325,639	325,821	182	0.1%
1.2%	277,412	272,486	-4,925	-1.8%
2.5%	237,006	231,010	-5,996	-2.5%
3.7%	182,334	174,873	-7,461	-4.1%
4.9%	143,616	137,165	-6,451	-4.5%
6.2%	138,275	132,718	-5,557	-4.0%
7.4%	132,606	132,618	12	0.0%
8.6%	105,616	101,409	-4,208	-4.0%
9.9%	102,842	98,956	-3,886	-3.8%
11.1%	100,076	98,160	-1,915	-1.9%
12.3%	98,143	97,815	-327	-0.3%
13.6%	96,404	96,331	-73	-0.1%
14.8%	95,232	95,247	15	0.0%
16.0%	94,984	94,923	-61	-0.1%
17.3%	92,337	92,288	-48	-0.1%
18.5%	91,599	92,021	423	0.5%
19.8%	84,458	82,331	-2,127	-2.5%
21.0%	79,491	78,318	-1,173	-1.5%
22.2%	73,968	74,266	298	0.4%
23.5%	73,958	73,309	-649	-0.9%
24.7%	71,986	69,967	-2,019	-2.8%
25.9%	70,512	67,332	-3,180	-4.5%
27.2%	69,502	66,198	-3,305	-4.8%
28.4%	67,326	63,642	-3,683	-5.5%
29.6%	62,983	57,629	-5,354	-8.5%
30.9%	59,554	53,838	-5,715	-9.6%
32.1%	56,332	52,434	-3,898	-6.9%
33.3%	46,624	47,245	620	1.3%
34.6%	46,278	44,166	-2,112	-4.6%
35.8%	45,854	43,005	-2,849	-6.2%
37.0%	44,613	42,449	-2,164	-4.8%
38.3%	43,685	41,127	-2,559	-5.9%
39.5%	43,610	40,906	-2,704	-6.2%
40.7%	42,615	38,456	-4,159	-9.8%
42.0%	39,156	36,246	-2,910	-7.4%
43.2%	36,847	35,243	-1,604	-4.4%
44.4%	35,805	33,458	-2,347	-6.6%
45.7%	34,411	32,757	-1,654	-4.8%
46.9%	33,820	32,312	-1,509	-4.5%
48.1%	33,664	29,560	-4,104	-12.2%
49.4%	33,546	28,387	-5,159	-15.4%
50.6%	31,589	25,493	-6,096	-19.3%
51.9%	26,261	24,590	-1,671	-6.4%
53.1%	26,124	24,472	-1,651	-6.3%
54.3%	24,590	24,201	-389	-1.6%
55.6%	24,486	22,374	-2,112	-8.6%
56.8%	24,303	21,266	-3,037	-12.5%
58.0%	23,767	20,915	-2,852	-12.0%
59.3%	23,127	20,816	-2,311	-10.0%
60.5%	22,830	20,137	-2,692	-11.8%
61.7%	22,122	20,089	-2,033	-9.2%
63.0%	20,570	19,247	-1,323	-6.4%
64.2%	20,137	19,024	-1,113	-5.5%
65.4%	19,786	19,016	-770	-3.9%
66.7%	19,199	18,557	-642	-3.3%
67.9%	18,994	18,480	-514	-2.7%
69.1%	18,734	18,292	-442	-2.4%
70.4%	18,603	17,761	-842	-4.5%
71.6%	18,480	17,645	-835	-4.5%
72.8%	18,190	17,598	-591	-3.2%
74.1%	17,635	17,391	-244	-1.4%
75.3%	17,282	15,958	-1,324	-7.7%
76.5%	16,852	15,859	-993	-5.9%
77.8%	16,847	15,638	-1,209	-7.2%
79.0%	16,745	15,595	-1,150	-6.9%
80.2%	16,197	15,444	-753	-4.6%
81.5%	16,105	14,571	-1,534	-9.5%
82.7%	15,765	14,243	-1,522	-9.7%
84.0%	14,673	13,254	-1,419	-9.7%
85.2%	13,519	13,226	-293	-2.2%
86.4%	13,397	12,337	-1,060	-7.9%
87.7%	13,246	12,214	-1,031	-7.8%
88.9%	11,980	12,059	79	0.7%
90.1%	11,400	11,973	573	5.0%
91.4%	11,400	11,857	457	4.0%
92.6%	11,400	11,464	64	0.6%
93.8%	11,400	11,400	0	0.0%
95.1%	11,400	11,400	0	0.0%
96.3%	8,908	9,688	780	8.8%
97.5%	8,369	8,510	141	1.7%
98.8%	7,977	8,077	101	1.3%
100.0%	7,100	7,100	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	157,369	157,180	-189	-0.1%
1.2%	145,774	144,633	-1,141	-0.8%
2.5%	112,577	109,469	-3,108	-2.8%
3.7%	84,340	83,859	-480	-0.6%
4.9%	81,845	81,724	-120	-0.1%
6.2%	78,734	78,683	-50	-0.1%
7.4%	72,414	71,614	-800	-1.1%
8.6%	71,828	69,343	-2,486	-3.5%
9.9%	67,306	67,299	-7	0.0%
11.1%	67,234	67,197	-37	-0.1%
12.3%	58,921	55,912	-3,010	-5.1%
13.6%	50,943	48,507	-2,436	-4.8%
14.8%	48,966	45,650	-3,317	-6.8%
16.0%	44,001	43,981	-20	0.0%
17.3%	43,371	41,246	-2,124	-4.9%
18.5%	38,621	38,526	-95	-0.2%
19.8%	38,523	35,576	-2,947	-7.7%
21.0%	37,073	35,514	-1,560	-4.2%
22.2%	35,763	35,419	-343	-1.0%
23.5%	35,664	34,445	-1,219	-3.4%
24.7%	33,048	32,054	-994	-3.0%
25.9%	31,753	30,025	-1,728	-5.4%
27.2%	30,295	29,960	-335	-1.1%
28.4%	29,954	28,812	-1,142	-3.8%
29.6%	28,656	28,156	-500	-1.7%
30.9%	27,431	27,310	-121	-0.4%
32.1%	26,587	25,858	-729	-2.7%
33.3%	25,642	25,719	77	0.3%
34.6%	25,284	23,760	-1,525	-6.0%
35.8%	23,058	23,256	198	0.9%
37.0%	22,144	21,092	-1,052	-4.8%
38.3%	21,242	20,969	-274	-1.3%
39.5%	20,804	20,777	-27	-0.1%
40.7%	19,502	19,547	45	0.2%
42.0%	19,143	19,225	82	0.4%
43.2%	18,874	19,033	158	0.8%
44.4%	18,819	18,587	-231	-1.2%
45.7%	18,350	18,100	-250	-1.4%
46.9%	18,100	17,928	-172	-0.9%
48.1%	18,047	17,854	-193	-1.1%
49.4%	17,237	17,611	374	2.2%
50.6%	17,108	17,129	21	0.1%
51.9%	16,871	17,024	153	0.9%
53.1%	16,813	16,815	3	0.0%
54.3%	16,507	16,745	238	1.4%
55.6%	16,475	16,623	148	0.9%
56.8%	16,231	16,513	282	1.7%
58.0%	15,638	16,343	705	4.5%
59.3%	15,475	16,225	750	4.8%
60.5%	15,125	16,008	883	5.8%
61.7%	14,167	14,325	158	1.1%
63.0%	13,650	14,152	502	3.7%
64.2%	13,523	13,917	393	2.9%
65.4%	13,410	13,457	47	0.3%
66.7%	13,407	13,001	-406	-3.0%
67.9%	13,042	12,481	-561	-4.3%
69.1%	13,013	12,459	-553	-4.2%
70.4%	12,604	12,295	-309	-2.5%
71.6%	12,533	12,113	-420	-3.3%
72.8%	12,503	12,031	-472	-3.8%
74.1%	12,404	11,620	-784	-6.3%
75.3%	12,031	11,400	-631	-5.2%
76.5%	12,004	11,288	-716	-6.0%
77.8%	11,792	11,153	-639	-5.4%
79.0%	11,400	11,153	-247	-2.2%
80.2%	11,153	11,070	-83	-0.7%
81.5%	10,995	10,737	-258	-2.3%
82.7%	10,660	10,660	0	0.0%
84.0%	10,660	10,660	0	0.0%
85.2%	10,469	10,621	152	1.5%
86.4%	10,413	10,469	55	0.5%
87.7%	10,389	10,413	24	0.2%
88.9%	10,251	10,389	138	1.3%
90.1%	9,892	9,954	62	0.6%
91.4%	9,882	9,706	-176	-1.8%
92.6%	9,798	9,688	-110	-1.1%
93.8%	9,673	9,673	0	0.0%
95.1%	8,591	8,685	94	1.1%
96.3%	8,356	8,672	317	3.8%
97.5%	8,336	8,534	198	2.4%
98.8%	7,100	7,100	0	0.0%
100.0%	6,765	7,046	281	4.2%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	60,327	57,513	-2,815	-4.7%
1.2%	44,862	46,060	1,197	2.7%
2.5%	36,133	36,108	-26	-0.1%
3.7%	32,490	31,993	-497	-1.5%
4.9%	30,128	30,791	663	2.2%
6.2%	29,448	28,326	-1,122	-3.8%
7.4%	28,646	28,163	-484	-1.7%
8.6%	28,169	27,496	-673	-2.4%
9.9%	27,614	26,894	-719	-2.6%
11.1%	23,978	23,652	-326	-1.4%
12.3%	21,761	21,788	27	0.1%
13.6%	21,440	20,583	-856	-4.0%
14.8%	20,813	19,748	-1,065	-5.1%
16.0%	20,051	18,879	-1,172	-5.8%
17.3%	19,199	18,464	-735	-3.8%
18.5%	18,879	17,975	-904	-4.8%
19.8%	17,904	17,670	-234	-1.3%
21.0%	17,669	16,892	-777	-4.4%
22.2%	17,148	16,573	-575	-3.4%
23.5%	16,981	16,418	-563	-3.3%
24.7%	16,573	16,367	-206	-1.2%
25.9%	15,169	15,141	-28	-0.2%
27.2%	15,091	14,876	-214	-1.4%
28.4%	14,685	14,685	0	0.0%
29.6%	14,024	14,309	286	2.0%
30.9%	13,841	13,851	10	0.1%
32.1%	13,770	13,844	74	0.5%
33.3%	13,659	13,681	22	0.2%
34.6%	13,025	13,564	539	4.1%
35.8%	12,956	12,869	-87	-0.7%
37.0%	12,936	12,690	-246	-1.9%
38.3%	12,468	12,258	-210	-1.7%
39.5%	12,266	12,219	-47	-0.4%
40.7%	12,016	11,656	-360	-3.0%
42.0%	11,856	11,622	-234	-2.0%
43.2%	11,549	11,568	19	0.2%
44.4%	11,199	11,315	116	1.0%
45.7%	11,193	11,312	119	1.1%
46.9%	11,161	11,258	97	0.9%
48.1%	11,138	11,161	23	0.2%
49.4%	11,125	11,080	-45	-0.4%
50.6%	11,095	11,009	-86	-0.8%
51.9%	10,683	10,946	263	2.5%
53.1%	10,598	10,917	319	3.0%
54.3%	10,339	10,915	576	5.6%
55.6%	10,297	10,741	443	4.3%
56.8%	10,267	10,732	465	4.5%
58.0%	10,198	10,639	441	4.3%
59.3%	10,102	10,636	534	5.3%
60.5%	10,009	10,464	455	4.5%
61.7%	9,897	10,322	425	4.3%
63.0%	9,874	10,163	289	2.9%
64.2%	9,746	10,136	390	4.0%
65.4%	9,585	10,102	518	5.4%
66.7%	9,539	9,961	422	4.4%
67.9%	9,518	9,775	257	2.7%
69.1%	9,496	9,746	250	2.6%
70.4%	9,245	9,737	492	5.3%
71.6%	9,065	9,543	478	5.3%
72.8%	8,995	9,132	137	1.5%
74.1%	8,852	9,097	245	2.8%
75.3%	8,833	9,002	169	1.9%
76.5%	8,807	8,998	192	2.2%
77.8%	8,590	8,688	98	1.1%
79.0%	8,536	8,589	52	0.6%
80.2%	8,483	8,476	-7	-0.1%
81.5%	8,385	8,331	-54	-0.6%
82.7%	8,316	8,248	-68	-0.8%
84.0%	8,215	8,210	-5	-0.1%
85.2%	8,210	7,884	-326	-4.0%
86.4%	7,377	7,377	0	0.0%
87.7%	7,295	7,261	-34	-0.5%
88.9%	7,239	7,239	0	0.0%
90.1%	7,158	7,202	44	0.6%
91.4%	7,100	7,100	0	0.0%
92.6%	7,100	7,100	0	0.0%
93.8%	7,100	7,100	0	0.0%
95.1%	6,719	6,719	0	0.0%
96.3%	4,284	4,054	-230	-5.4%
97.5%	4,000	4,000	0	0.0%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

Table SW-33-b

Sacramento/San Joaquin River Delta, Monthly Outflow

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,953	25,902	949	3.8%
1.2%	12,371	14,507	2,136	17.3%
2.5%	12,354	12,811	456	3.7%
3.7%	12,109	11,868	-241	-2.0%
4.9%	12,087	11,826	-260	-2.2%
6.2%	10,797	10,750	-47	-0.4%
7.4%	10,686	10,653	-33	-0.3%
8.6%	10,355	10,583	228	2.2%
9.9%	10,302	10,453	151	1.5%
11.1%	10,276	10,363	87	0.8%
12.3%	10,198	10,354	155	1.5%
13.6%	10,167	10,275	108	1.1%
14.8%	10,125	10,274	149	1.5%
16.0%	9,952	10,167	215	2.2%
17.3%	9,935	9,914	-21	-0.2%
18.5%	9,746	9,863	116	1.2%
19.8%	9,445	9,761	316	3.3%
21.0%	8,731	9,651	920	10.5%
22.2%	8,593	9,624	1,031	12.0%
23.5%	8,579	9,528	950	11.1%
24.7%	8,489	9,405	916	10.8%
25.9%	8,483	9,377	895	10.5%
27.2%	8,442	9,226	784	9.3%
28.4%	8,412	9,103	691	8.2%
29.6%	8,402	8,836	434	5.2%
30.9%	8,379	8,834	455	5.4%
32.1%	8,350	8,624	274	3.3%
33.3%	8,332	8,590	258	3.1%
34.6%	8,327	8,587	260	3.1%
35.8%	8,255	8,551	296	3.6%
37.0%	8,218	8,547	329	4.0%
38.3%	8,163	8,427	264	3.2%
39.5%	8,145	8,401	255	3.1%
40.7%	8,115	8,350	235	2.9%
42.0%	7,813	8,321	509	6.5%
43.2%	7,803	8,174	371	4.8%
44.4%	7,766	8,139	373	4.8%
45.7%	7,728	8,078	350	4.5%
46.9%	7,695	8,062	367	4.8%
48.1%	7,625	8,048	423	5.5%
49.4%	7,530	8,040	510	6.8%
50.6%	7,490	8,035	545	7.3%
51.9%	7,295	8,023	728	10.0%
53.1%	7,284	7,821	537	7.4%
54.3%	7,243	7,813	569	7.9%
55.6%	7,161	7,801	640	8.9%
56.8%	7,100	7,660	560	7.9%
58.0%	7,100	7,625	525	7.4%
59.3%	7,100	7,625	525	7.4%
60.5%	7,100	7,530	430	6.1%
61.7%	7,100	7,502	402	5.7%
63.0%	7,100	7,422	322	4.5%
64.2%	7,100	7,420	320	4.5%
65.4%	7,100	7,404	304	4.3%
66.7%	7,100	7,249	149	2.1%
67.9%	7,100	7,226	126	1.8%
69.1%	7,100	7,100	0	0.0%
70.4%	7,100	7,100	0	0.0%
71.6%	7,100	7,100	0	0.0%
72.8%	7,100	7,100	0	0.0%
74.1%	7,100	7,100	0	0.0%
75.3%	7,100	7,100	0	0.0%
76.5%	7,100	7,100	0	0.0%
77.8%	7,100	7,100	0	0.0%
79.0%	7,100	7,100	0	0.0%
80.2%	7,100	7,100	0	0.0%
81.5%	7,100	7,100	0	0.0%
82.7%	7,100	7,100	0	0.0%
84.0%	7,100	7,100	0	0.0%
85.2%	7,100	7,100	0	0.0%
86.4%	7,100	7,100	0	0.0%
87.7%	7,031	7,100	69	1.0%
88.9%	6,965	7,100	135	1.9%
90.1%	6,888	6,888	0	0.0%
91.4%	6,765	6,765	0	0.0%
92.6%	6,273	6,273	0	0.0%
93.8%	5,625	5,625	0	0.0%
95.1%	5,550	5,550	0	0.0%
96.3%	4,982	5,130	148	3.0%
97.5%	4,700	5,092	392	8.4%
98.8%	4,453	4,871	418	9.4%
100.0%	4,444	4,683	239	5.4%

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,457	17,035	579	3.5%
1.2%	15,486	16,646	1,160	7.5%
2.5%	14,959	15,385	427	2.9%
3.7%	14,919	15,197	278	1.9%
4.9%	14,495	14,930	434	3.0%
6.2%	14,482	14,822	340	2.3%
7.4%	14,360	14,576	216	1.5%
8.6%	14,292	14,491	199	1.4%
9.9%	14,253	14,390	138	1.0%
11.1%	14,143	14,197	54	0.4%
12.3%	14,075	14,117	42	0.3%
13.6%	13,924	13,982	57	0.4%
14.8%	13,615	13,824	209	1.5%
16.0%	13,355	13,327	-28	-0.2%
17.3%	13,217	13,072	-145	-1.1%
18.5%	13,092	12,915	-177	-1.4%
19.8%	13,062	12,820	-242	-1.9%
21.0%	13,027	12,670	-357	-2.7%
22.2%	12,768	12,669	-99	-0.8%
23.5%	12,644	12,652	8	0.1%
24.7%	12,597	12,612	15	0.1%
25.9%	12,540	12,445	-94	-0.8%
27.2%	12,372	12,376	4	0.0%
28.4%	12,197	12,367	170	1.4%
29.6%	12,053	12,349	296	2.5%
30.9%	12,041	12,124	82	0.7%
32.1%	12,014	12,041	27	0.2%
33.3%	11,906	11,989	83	0.7%
34.6%	11,898	11,938	41	0.3%
35.8%	11,520	11,822	302	2.6%
37.0%	11,232	11,141	-91	-0.8%
38.3%	11,160	10,983	-177	-1.6%
39.5%	11,093	10,865	-228	-2.1%
40.7%	10,802	10,862	60	0.6%
42.0%	10,675	10,559	-116	-1.1%
43.2%	10,015	9,928	-86	-0.9%
44.4%	9,890	9,925	35	0.4%
45.7%	9,779	9,786	7	0.1%
46.9%	9,686	9,770	84	0.9%
48.1%	9,666	9,453	-214	-2.2%
49.4%	9,519	9,421	-99	-1.0%
50.6%	8,760	9,190	431	4.9%
51.9%	8,747	9,061	314	3.6%
53.1%	8,649	8,598	-51	-0.6%
54.3%	8,488	8,269	-220	-2.6%
55.6%	8,485	8,053	-432	-5.1%
56.8%	8,025	8,000	-25	-0.3%
58.0%	8,000	8,000	0	0.0%
59.3%	8,000	8,000	0	0.0%
60.5%	7,615	7,523	-92	-1.2%
61.7%	7,576	7,522	-55	-0.7%
63.0%	7,343	7,513	170	2.3%
64.2%	7,318	7,442	124	1.7%
65.4%	7,144	6,784	-359	-5.0%
66.7%	7,129	6,764	-365	-5.1%
67.9%	6,964	6,572	-392	-5.6%
69.1%	6,174	6,456	282	4.6%
70.4%	5,875	5,569	-307	-5.2%
71.6%	5,517	5,453	-64	-1.2%
72.8%	5,480	5,249	-231	-4.2%
74.1%	5,449	5,246	-203	-3.7%
75.3%	5,302	5,103	-199	-3.8%
76.5%	5,115	5,095	-19	-0.4%
77.8%	5,072	5,000	-72	-1.4%
79.0%	5,004	5,000	-4	-0.1%
80.2%	5,001	5,000	-1	0.0%
81.5%	5,000	5,000	0	0.0%
82.7%	5,000	5,000	0	0.0%
84.0%	5,000	5,000	0	0.0%
85.2%	5,000	5,000	0	0.0%
86.4%	5,000	5,000	0	0.0%
87.7%	4,733	4,881	148	3.1%
88.9%	4,655	4,871	216	4.6%
90.1%	4,492	4,742	249	5.5%
91.4%	4,052	4,255	203	5.0%
92.6%	4,000	4,056	56	1.4%
93.8%	4,000	4,000	0	0.0%
95.1%	4,000	4,000	0	0.0%
96.3%	4,000	4,000	0	0.0%
97.5%	4,000	4,000	0	0.0%
98.8%	4,000	4,000	0	0.0%
100.0%	4,000	4,000	0	0.0%

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,146	6,543	-603	-8.4%
1.2%	5,670	6,526	856	15.1%
2.5%	5,474	6,110	636	11.6%
3.7%	5,419	5,736	317	5.8%
4.9%	5,417	5,702	285	5.3%
6.2%	5,368	5,699	331	6.2%
7.4%	5,303	5,652	349	6.6%
8.6%	5,270	5,637	367	7.0%
9.9%	5,269	5,572	303	5.8%
11.1%	5,247	5,566	319	6.1%
12.3%	5,152	5,561	409	7.9%
13.6%	5,051	5,470	418	8.3%
14.8%	5,016	5,409	393	7.8%
16.0%	5,009	5,392	383	7.6%
17.3%	4,938	5,339	400	8.1%
18.5%	4,937	5,261	324	6.6%
19.8%	4,898	5,155	256	5.2%
21.0%	4,884	5,132	247	5.1%
22.2%	4,877	5,102	225	4.6%
23.5%	4,848	5,095	246	5.1%
24.7%	4,763	5,083	321	6.7%
25.9%	4,608	5,077	470	10.2%
27.2%	4,550	5,038	488	10.7%
28.4%	4,474	5,014	540	12.1%
29.6%	4,471	5,000	529	11.8%
30.9%	4,443	4,840	397	8.9%
32.1%	4,403	4,822	419	9.5%
33.3%	4,344	4,804	460	10.6%
34.6%	4,318	4,751	433	10.0%
35.8%	4,241	4,649	407	9.6%
37.0%	4,230	4,632	403	9.5%
38.3%	4,226	4,600	374	8.8%
39.5%	4,185	4,581	395	9.4%
40.7%	4,123	4,536	413	10.0%
42.0%	4,000	4,510	510	12.8%
43.2%	4,000	4,470	470	11.7%
44.4%	4,000	4,444	444	11.1%
45.7%	4,000	4,390	390	9.8%
46.9%	4,000	4,390	390	9.8%
48.1%	4,000	4,390	390	9.8%
49.4%	4,000	4,390	390	9.8%
50.6%	4,000	4,390	390	9.8%
51.9%	4,000	4,390	390	9.8%
53.1%	4,000	4,390	390	9.8%
54.3%	4,000	4,390	390	9.8%
55.6%	4,000	4,390	390	9.8%
56.8%	4,000	4,390	390	9.8%
58.0%	4,000	4,390	390	9.8%
59.3%	4,000	4,390	390	9.8%
60.5%	4,000	4,390	390	9.8%
61.7%	4,000	4,390	390	9.8%
63.0%	4,000	4,390	390	9.8%
64.2%	4,000	4,390	390	9.8%
65.4%	4,000	4,390	390	9.8%
66.7%	4,000	4,390	390	9.8%
67.9%	4,000	4,152	152	3.8%
69.1%	4,000	4,133	133	3.3%
70.4%	4,000	4,124	124	3.1%
71.6%	4,000	4,103	103	2.6%
72.8%	4,000	4,090	90	2.2%
74.1%	4,000	4,070	70	1.8%
75.3%	4,000	4,054	54	1.4%
76.5%	4,000	4,000	0	0.0%
77.8%	4,000	4,000	0	0.0%
79.0%	4,000	4,000	0	0.0%
80.2%	4,000	4,000	0	0.0%
81.5%	4,000	4,000	0	0.0%
82.7%	4,000	4,000	0	0.0%
84.0%	4,000	4,000	0	0.0%
85.2%	4,000	4,000	0	0.0%
86.4%	4,000	4,000	0	0.0%
87.7%	4,000	4,000	0	0.0%
88.9%	4,000	4,000	0	0.0%
90.1%	4,000	4,000	0	0.0%
91.4%	4,000	4,000	0	0.0%
92.6%	4,000	4,000	0	0.0%
93.8%	4,000	4,000	0	0.0%
95.1%	4,000	4,000	0	0.0%
96.3%	4,000	4,000	0	0.0%
97.5%	3,971	4,000	29	0.7%
98.8%	3,931	4,000	69	1.7%
100.0%	3,794	4,000	206	5.4%

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Outflow (CFS)	WSIP 2070 With Project Monthly Outflow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	22,813	22,903	91	0.4%
1.2%	22,188	22,591	403	1.8%
2.5%	22,188	22,591	403	1.8%
3.7%	22,031	22,278	247	1.1%
4.9%	21,875	21,966	91	0.4%
6.2%	21,563	21,966	403	1.9%
7.4%	21,563	21,875	313	1.4%
8.6%	21,563	21,653	91	0.4%
9.9%	21,563	21,653	91	0.4%
11.1%	21,250	21,653	403	1.9%
12.3%	21,250	21,653	403	1.9%
13.6%	21,250	21,653	403	1.9%
14.8%	21,250	21,341	91	0.4%
16.0%	20,938	21,341	403	1.9%
17.3%	20,938	21,341	403	1.9%
18.5%	20,938	21,250	313	1.5%
19.8%	20,938	21,028	91	0.4%
21.0%	20,938	21,028	91	0.4%
22.2%	20,938	21,028	91	0.4%
23.5%	20,781	20,938	156	0.8%
24.7%	20,781	20,938	156	0.8%
25.9%	20,625	20,938	313	1.5%
27.2%	20,625	20,938	313	1.5%
28.4%	20,313	20,716	403	2.0%
29.6%	20,313	20,313	0	0.0%
30.9%	20,156	20,156	0	0.0%
32.1%	13,281	13,216	-65	-0.5%
33.3%	12,969	13,216	247	1.9%
34.6%	12,813	13,125	313	2.4%
35.8%	12,500	13,060	560	4.5%
37.0%	12,500	12,966	466	3.7%
38.3%	12,500	12,903	403	3.2%
39.5%	12,500	12,500	0	0.0%
40.7%	12,188	12,435	247	2.0%
42.0%	12,031	12,278	247	2.1%
43.2%	12,031	12,188	156	1.3%
44.4%	11,719	11,875	156	1.3%
45.7%	4,246	5,166	920	21.7%
46.9%	4,155	4,872	717	17.3%
48.1%	3,745	4,794	1,049	28.0%
49.4%	3,739	4,700	960	25.7%
50.6%	3,625	4,672	1,047	28.9%
51.9%	3,459	4,633	1,174	34.0%
53.1%	3,453	4,512	1,059	30.7%
54.3%	3,421	4,423	1,001	29.3%
55.6%	3,246	4,312	1,066	32.9%
56.8%	3,165	4,155	990	31.3%
58.0%	3,136	4,127	991	31.6%
59.3%	3,114	3,995	881	28.3%
60.5%	3,110	3,974	864	27.8%
61.7%	3,072	3,832	761	24.8%
63.0%	3,009	3,808	799	26.6%
64.2%	3,000	3,746	746	24.9%
65.4%	3,000	3,696	696	23.2%
66.7%	3,000	3,646	646	21.5%
67.9%	3,000	3,582	582	19.4%
69.1%	3,000	3,579	579	19.3%
70.4%	3,000	3,525	525	17.5%
71.6%	3,000	3,500	500	16.7%
72.8%	3,000	3,492	492	16.4%
74.1%	3,000	3,485	485	16.2%
75.3%	3,000	3,473	473	15.8%
76.5%	3,000	3,470	470	15.7%
77.8%	3,000	3,453	453	15.1%
79.0%	3,000	3,452	452	15.1%
80.2%	3,000	3,437	437	14.6%
81.5%	3,000	3,435	435	14.5%
82.7%	3,000	3,426	426	14.2%
84.0%	3,000	3,423	423	14.1%
85.2%	3,000	3,399	399	13.3%
86.4%	3,000	3,247	247	8.2%
87.7%	3,000	3,240	240	8.0%
88.9%	3,000	3,207	207	6.9%
90.1%	3,000	3,190	190	6.3%
91.4%	3,000	3,137	137	4.6%
92.6%	3,000	3,131	131	4.4%
93.8%	3,000	3,086	86	2.9%
95.1%	3,000	3,030	30	1.0%
96.3%	3,000	3,000	0	0.0%
97.5%	3,000	3,000	0	0.0%
98.8%	3,000	3,000	0	0.0%
100.0%	3,000	3,000	0	0.0%

Figure SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

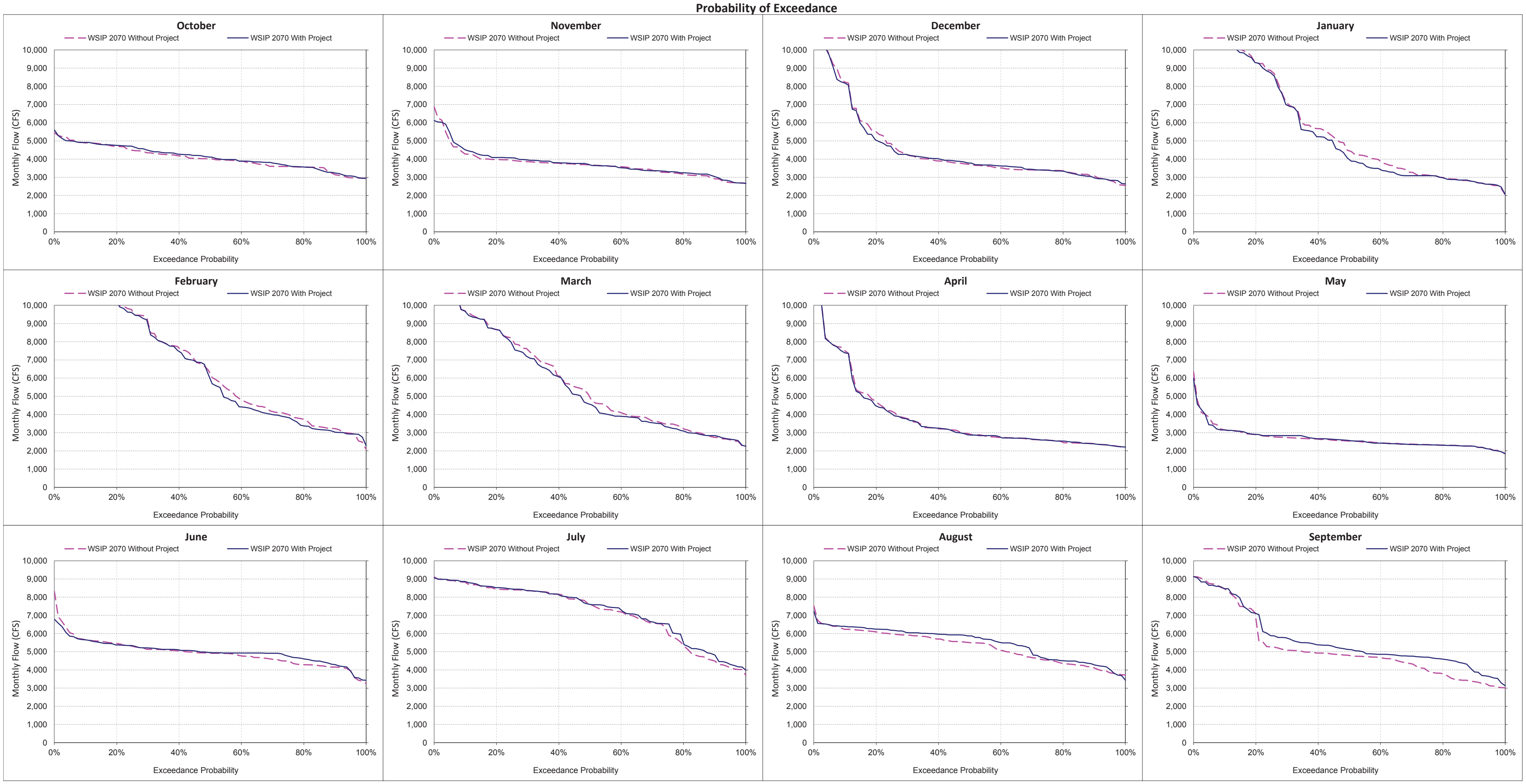


Table SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,450	5,594	144	2.6%
1.2%	5,301	5,289	-13	-0.2%
2.5%	5,232	5,133	-99	-1.9%
3.7%	5,232	5,015	-216	-4.1%
4.9%	5,045	5,007	-38	-0.8%
6.2%	5,038	4,989	-49	-1.0%
7.4%	4,924	4,923	-1	0.0%
8.6%	4,920	4,921	2	0.0%
9.9%	4,892	4,920	28	0.6%
11.1%	4,891	4,911	20	0.4%
12.3%	4,884	4,875	-8	-0.2%
13.6%	4,863	4,828	-35	-0.7%
14.8%	4,837	4,807	-30	-0.6%
16.0%	4,828	4,787	-41	-0.8%
17.3%	4,766	4,787	21	0.4%
18.5%	4,718	4,774	56	1.2%
19.8%	4,702	4,755	53	1.1%
21.0%	4,692	4,748	56	1.2%
22.2%	4,682	4,737	54	1.2%
23.5%	4,548	4,712	164	3.6%
24.7%	4,492	4,710	218	4.9%
25.9%	4,466	4,643	176	3.9%
27.2%	4,458	4,579	122	2.7%
28.4%	4,429	4,575	146	3.3%
29.6%	4,349	4,499	150	3.4%
30.9%	4,346	4,451	104	2.4%
32.1%	4,299	4,402	103	2.4%
33.3%	4,293	4,398	105	2.4%
34.6%	4,263	4,352	89	2.1%
35.8%	4,255	4,352	97	2.3%
37.0%	4,231	4,338	108	2.5%
38.3%	4,228	4,325	97	2.3%
39.5%	4,185	4,277	92	2.2%
40.7%	4,169	4,266	97	2.3%
42.0%	4,166	4,244	78	1.9%
43.2%	4,054	4,240	186	4.6%
44.4%	4,046	4,208	162	4.0%
45.7%	4,044	4,204	160	4.0%
46.9%	4,023	4,188	165	4.1%
48.1%	4,023	4,151	129	3.2%
49.4%	4,014	4,120	106	2.6%
50.6%	4,010	4,105	95	2.4%
51.9%	3,964	4,037	74	1.9%
53.1%	3,961	4,009	47	1.2%
54.3%	3,951	3,981	30	0.8%
55.6%	3,947	3,971	24	0.6%
56.8%	3,932	3,969	38	1.0%
58.0%	3,927	3,968	41	1.0%
59.3%	3,892	3,888	-4	-0.1%
60.5%	3,883	3,886	2	0.1%
61.7%	3,826	3,882	56	1.5%
63.0%	3,803	3,875	72	1.9%
64.2%	3,776	3,849	73	1.9%
65.4%	3,724	3,844	119	3.2%
66.7%	3,700	3,835	135	3.6%
67.9%	3,686	3,824	138	3.7%
69.1%	3,601	3,824	222	6.2%
70.4%	3,600	3,780	180	5.0%
71.6%	3,597	3,747	150	4.2%
72.8%	3,596	3,700	105	2.9%
74.1%	3,595	3,678	83	2.3%
75.3%	3,588	3,622	34	0.9%
76.5%	3,578	3,591	13	0.4%
77.8%	3,568	3,585	17	0.5%
79.0%	3,566	3,571	5	0.1%
80.2%	3,562	3,559	-3	-0.1%
81.5%	3,560	3,551	-9	-0.3%
82.7%	3,551	3,545	-6	-0.2%
84.0%	3,542	3,480	-61	-1.7%
85.2%	3,537	3,405	-133	-3.8%
86.4%	3,524	3,332	-192	-5.4%
87.7%	3,332	3,282	-50	-1.5%
88.9%	3,239	3,279	41	1.3%
90.1%	3,133	3,226	92	2.9%
91.4%	3,102	3,210	107	3.5%
92.6%	3,076	3,138	62	2.0%
93.8%	2,993	3,076	83	2.8%
95.1%	2,974	3,070	96	3.2%
96.3%	2,967	3,051	85	2.8%
97.5%	2,961	2,974	13	0.4%
98.8%	2,948	2,947	-1	0.0%
100.0%	2,944	2,944	0	0.0%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,871	6,112	-758	-11.0%
1.2%	6,265	6,049	-217	-3.5%
2.5%	6,134	6,028	-106	-1.7%
3.7%	5,491	5,908	417	7.6%
4.9%	5,018	5,477	459	9.1%
6.2%	4,677	4,930	253	5.4%
7.4%	4,670	4,802	132	2.8%
8.6%	4,443	4,669	227	5.1%
9.9%	4,280	4,517	237	5.5%
11.1%	4,271	4,445	174	4.1%
12.3%	4,247	4,396	149	3.5%
13.6%	4,135	4,298	162	3.9%
14.8%	4,013	4,228	215	5.4%
16.0%	4,006	4,199	193	4.8%
17.3%	4,002	4,197	195	4.9%
18.5%	3,980	4,092	112	2.8%
19.8%	3,977	4,090	113	2.8%
21.0%	3,969	4,087	118	3.0%
22.2%	3,966	4,084	118	3.0%
23.5%	3,963	4,075	112	2.8%
24.7%	3,927	4,069	141	3.6%
25.9%	3,917	4,060	143	3.7%
27.2%	3,887	3,989	102	2.6%
28.4%	3,865	3,977	112	2.9%
29.6%	3,861	3,956	95	2.5%
30.9%	3,851	3,932	81	2.1%
32.1%	3,833	3,930	98	2.5%
33.3%	3,831	3,923	92	2.4%
34.6%	3,804	3,894	90	2.4%
35.8%	3,801	3,893	92	2.4%
37.0%	3,788	3,883	95	2.5%
38.3%	3,787	3,808	22	0.6%
39.5%	3,782	3,806	24	0.6%
40.7%	3,752	3,796	44	1.2%
42.0%	3,744	3,787	43	1.1%
43.2%	3,743	3,768	26	0.7%
44.4%	3,742	3,764	22	0.6%
45.7%	3,703	3,763	60	1.6%
46.9%	3,701	3,759	58	1.6%
48.1%	3,697	3,756	59	1.6%
49.4%	3,690	3,718	28	0.8%
50.6%	3,680	3,653	-27	-0.7%
51.9%	3,658	3,639	-19	-0.5%
53.1%	3,649	3,636	-13	-0.3%
54.3%	3,620	3,633	13	0.4%
55.6%	3,618	3,630	12	0.3%
56.8%	3,608	3,601	-8	-0.2%
58.0%	3,608	3,600	-8	-0.2%
59.3%	3,591	3,536	-55	-1.5%
60.5%	3,573	3,520	-52	-1.5%
61.7%	3,559	3,506	-53	-1.5%
63.0%	3,515	3,446	-69	-2.0%
64.2%	3,463	3,445	-18	-0.5%
65.4%	3,459	3,435	-24	-0.7%
66.7%	3,454	3,387	-67	-1.9%
67.9%	3,442	3,382	-60	-1.8%
69.1%	3,441	3,365	-76	-2.2%
70.4%	3,361	3,363	2	0.1%
71.6%	3,336	3,355	19	0.6%
72.8%	3,278	3,345	67	2.0%
74.1%	3,272	3,329	57	1.7%
75.3%	3,263	3,310	47	1.4%
76.5%	3,234	3,297	62	1.9%
77.8%	3,234	3,290	57	1.8%
79.0%	3,197	3,249	51	1.6%
80.2%	3,167	3,243	77	2.4%
81.5%	3,126	3,233	107	3.4%
82.7%	3,107	3,218	110	3.6%
84.0%	3,100	3,192	92	3.0%
85.2%	3,098	3,182	85	2.7%
86.4%	3,094	3,180	85	2.8%
87.7%	3,079	3,170	91	3.0%
88.9%	2,949	3,098	149	5.0%
90.1%	2,914	3,039	125	4.3%
91.4%	2,907	2,961	55	1.9%
92.6%	2,793	2,853	60	2.2%
93.8%	2,740	2,833	93	3.4%
95.1%	2,705	2,796	90	3.3%
96.3%	2,705	2,700	-5	-0.2%
97.5%	2,687	2,691	4	0.2%
98.8%	2,680	2,687	6	0.2%
100.0%	2,672	2,668	-4	-0.1%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,570	11,567	-3	0.0%
1.2%	11,229	11,197	-31	-0.3%
2.5%	10,588	10,545	-43	-0.4%
3.7%	10,194	10,141	-52	-0.5%
4.9%	9,744	9,705	-39	-0.4%
6.2%	9,215	9,065	-150	-1.6%
7.4%	8,977	8,380	-597	-6.7%
8.6%	8,411	8,249	-162	-1.9%
9.9%	8,235	8,186	-49	-0.6%
11.1%	8,184	8,074	-111	-1.4%
12.3%	6,799	6,746	-53	-0.8%
13.6%	6,788	6,674	-114	-1.7%
14.8%	6,110	5,990	-120	-2.0%
16.0%	6,055	5,696	-358	-5.9%
17.3%	5,919	5,378	-541	-9.1%
18.5%	5,599	5,359	-240	-4.3%
19.8%	5,530	5,059	-471	-8.5%
21.0%	5,354	4,952	-402	-7.5%
22.2%	5,287	4,875	-412	-7.8%
23.5%	4,877	4,736	-141	-2.9%
24.7%	4,859	4,723	-136	-2.8%
25.9%	4,650	4,420	-230	-4.9%
27.2%	4,452	4,266	-186	-4.2%
28.4%	4,360	4,260	-101	-2.3%
29.6%	4,246	4,256	10	0.2%
30.9%	4,186	4,199	13	0.3%
32.1%	4,162	4,169	7	0.2%
33.3%	4,043	4,145	102	2.5%
34.6%	4,024	4,116	92	2.3%
35.8%	4,008	4,088	80	2.0%
37.0%	4,007	4,046	39	1.0%
38.3%	3,941	4,038	96	2.4%
39.5%	3,899	4,030	131	3.4%
40.7%	3,896	3,994	97	2.5%
42.0%	3,885	3,933	48	1.2%
43.2%	3,844	3,930	87	2.3%
44.4%	3,810	3,920	111	2.9%
45.7%	3,785	3,895	110	2.9%
46.9%	3,776	3,867	91	2.4%
48.1%	3,741	3,845	105	2.8%
49.4%	3,721	3,791	70	1.9%
50.6%	3,679	3,779	100	2.7%
51.9%	3,659	3,690	31	0.9%
53.1%	3,648	3,687	39	1.1%
54.3%	3,635	3,678	43	1.2%
55.6%	3,614	3,677	63	1.7%
56.8%	3,598	3,677	79	2.2%
58.0%	3,544	3,644	100	2.8%
59.3%	3,521	3,633	112	3.2%
60.5%	3,510	3,612	103	2.9%
61.7%	3,462	3,612	150	4.3%
63.0%	3,459	3,590	131	3.8%
64.2%	3,435	3,577	142	4.1%
65.4%	3,420	3,560	141	4.1%
66.7%	3,419	3,553	134	3.9%
67.9%	3,416	3,443	27	0.8%
69.1%	3,408	3,440	32	0.9%
70.4%	3,405	3,432	27	0.8%
71.6%	3,398	3,406	8	0.2%
72.8%	3,397	3,405	8	0.2%
74.1%	3,392	3,402	11	0.3%
75.3%	3,392	3,395	3	0.1%
76.5%	3,381	3,367	-13	-0.4%
77.8%	3,376	3,352	-23	-0.7%
79.0%	3,370	3,347	-23	-0.7%
80.2%	3,359	3,327	-32	-1.0%
81.5%	3,281	3,267	-14	-0.4%
82.7%	3,250	3,225	-25	-0.8%
84.0%	3,203	3,177	-26	-0.8%
85.2%	3,186	3,122	-64	-2.0%
86.4%	3,163	3,084	-79	-2.5%
87.7%	3,162	3,054	-108	-3.4%
88.9%	3,088	3,054	-35	-1.1%
90.1%	3,065	2,966	-99	-3.2%
91.4%	2,958	2,918	-40	-1.4%
92.6%	2,922	2,912	-9	-0.3%
93.8%	2,884	2,888	4	0.1%
95.1%	2,823	2,835	12	0.4%
96.3%	2,764	2,835	71	2.6%
97.5%	2,585	2,813	228	8.8%
98.8%	2,578	2,654	77	3.0%
100.0%	2,543	2,634	91	3.6%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,584	11,558	-27	-0.2%
1.2%	11,476	11,467	-8	-0.1%
2.5%	11,368	11,395	27	0.2%
3.7%	11,164	11,161	-3	0.0%
4.9%	11,121	11,120	-2	0.0%
6.2%	10,999	10,999	0	0.0%
7.4%	10,997	10,945	-52	-0.5%
8.6%	10,485	10,376	-109	-1.0%
9.9%	10,360	10,301	-59	-0.6%
11.1%	10,293	10,282	-11	-0.1%
12.3%	10,222	10,244	22	0.2%
13.6%	10,081	10,070	-11	-0.1%
14.8%	10,049	9,869	-180	-1.8%
16.0%	9,958	9,839	-119	-1.2%
17.3%	9,855	9,688	-167	-1.7%
18.5%	9,667	9,585	-82	-0.8%
19.8%	9,309	9,315	6	0.1%
21.0%	9,257	9,271	14	0.2%
22.2%	9,250	9,014	-236	-2.6%
23.5%	8,918	8,852	-65	-0.7%
24.7%	8,884	8,756	-127	-1.4%
25.9%	8,692	8,551	-141	-1.6%
27.2%	8,171	7,971	-201	-2.5%
28.4%	7,619	7,604	-14	-0.2%
29.6%	7,150	6,997	-153	-2.1%
30.9%	6,948	6,905	-44	-0.6%
32.1%	6,832	6,863	32	0.5%
33.3%	6,744	6,601	-143	-2.1%
34.6%	6,025	5,633	-393	-6.5%
35.8%	5,876	5,593	-283	-4.8%
37.0%	5,870	5,564	-306	-5.2%
38.3%	5,714	5,505	-209	-3.7%
39.5%	5,678	5,232	-446	-7.9%
40.7%	5,674	5,228	-447	-7.9%
42.0%	5,575	5,200	-375	-6.7%
43.2%	5,446	5,048	-398	-7.3%
44.4%	5,285	5,039	-246	-4.6%
45.7%	5,108	4,576	-532	-10.4%
46.9%	4,939	4,502	-437	-8.9%
48.1%	4,902	4,364	-539	-11.0%
49.4%	4,486	4,065	-421	-9.4%
50.6%	4,422	3,890	-532	-12.0%
51.9%	4,247	3,880	-367	-8.6%
53.1%	4,227	3,786	-440	-10.4%
54.3%	4,206	3,760	-445	-10.6%
55.6%	4,154	3,584	-570	-13.7%
56.8%	4,037	3,514	-524	-13.0%
58.0%	4,012	3,495	-517	-12.9%
59.3%	3,983	3,490	-493	-12.4%
60.5%	3,802	3,376	-426	-11.2%
61.7%	3,732	3,353	-379	-10.2%
63.0%	3,660	3,289	-371	-10.1%
64.2%	3,632	3,270	-362	-10.0%
65.4%	3,504	3,161	-343	-9.8%
66.7%	3,487	3,109	-378	-10.8%
67.9%	3,432	3,090	-342	-10.0%
69.1%	3,284	3,090	-194	-5.9%
70.4%	3,267	3,090	-176	-5.4%
71.6%	3,138	3,090	-48	-1.5%
72.8%	3,136	3,090	-46	-1.5%
74.1%	3,135	3,090	-45	-1.4%
75.3%	3,115	3,090	-25	-0.8%
76.5%	3,080	3,090	11	0.3%
77.8%	3,075	3,075	0	0.0%
79.0%	2,999	3,006	6	0.2%
80.2%	2,982	2,963	-19	-0.6%
81.5%	2,923	2,894	-29	-1.0%
82.7%	2,901	2,875	-26	-0.9%
84.0%	2,896	2,875	-21	-0.7%
85.2%	2,862	2,848	-14	-0.5%
86.4%	2,827	2,848	20	0.7%
87.7%	2,827	2,840	13	0.5%
88.9%	2,794	2,797	3	0.1%
90.1%	2,748	2,759	11	0.4%
91.4%	2,700	2,686	-14	-0.5%
92.6%	2,674	2,680	6	0.2%
93.8%	2,621	2,622	1	0.1%
95.1%	2,613	2,613	-1	0.0%
96.3%	2,547	2,603	55	2.2%
97.5%	2,545	2,566	21	0.8%
98.8%	2,373	2,462	89	3.8%
100.0%	2,049	2,058	9	0.4%

Table SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,723	11,719	-3	0.0%
1.2%	11,699	11,697	-2	0.0%
2.5%	11,658	11,658	1	0.0%
3.7%	11,649	11,642	-7	-0.1%
4.9%	11,408	11,411	4	0.0%
6.2%	11,375	11,379	4	0.0%
7.4%	11,225	11,222	-3	0.0%
8.6%	11,062	11,077	14	0.1%
9.9%	10,995	11,005	9	0.1%
11.1%	10,834	10,790	-43	-0.4%
12.3%	10,741	10,743	2	0.0%
13.6%	10,701	10,673	-28	-0.3%
14.8%	10,608	10,615	7	0.1%
16.0%	10,572	10,571	-1	0.0%
17.3%	10,535	10,425	-111	-1.1%
18.5%	10,344	10,318	-26	-0.3%
19.8%	10,301	10,249	-52	-0.5%
21.0%	10,010	9,918	-92	-0.9%
22.2%	9,958	9,834	-124	-1.2%
23.5%	9,821	9,631	-190	-1.9%
24.7%	9,776	9,613	-163	-1.7%
25.9%	9,459	9,458	-1	0.0%
27.2%	9,459	9,430	-29	-0.3%
28.4%	9,442	9,293	-149	-1.6%
29.6%	9,336	9,204	-131	-1.4%
30.9%	8,490	8,367	-123	-1.4%
32.1%	8,446	8,244	-202	-2.4%
33.3%	8,067	8,060	-7	-0.1%
34.6%	7,995	7,985	-10	-0.1%
35.8%	7,901	7,883	-18	-0.2%
37.0%	7,782	7,766	-16	-0.2%
38.3%	7,779	7,746	-33	-0.4%
39.5%	7,737	7,513	-224	-2.9%
40.7%	7,524	7,392	-132	-1.8%
42.0%	7,524	7,072	-452	-6.0%
43.2%	7,396	7,014	-382	-5.2%
44.4%	7,126	6,997	-129	-1.8%
45.7%	6,855	6,871	16	0.2%
46.9%	6,793	6,857	63	0.9%
48.1%	6,653	6,769	115	1.7%
49.4%	6,440	6,208	-232	-3.6%
50.6%	6,030	5,699	-330	-5.5%
51.9%	5,909	5,575	-334	-5.7%
53.1%	5,763	5,487	-277	-4.8%
54.3%	5,556	4,956	-599	-10.8%
55.6%	5,385	4,898	-487	-9.0%
56.8%	5,293	4,758	-535	-10.1%
58.0%	5,035	4,720	-315	-6.3%
59.3%	4,882	4,426	-456	-9.3%
60.5%	4,760	4,405	-355	-7.5%
61.7%	4,662	4,373	-289	-6.2%
63.0%	4,571	4,334	-237	-5.2%
64.2%	4,547	4,245	-303	-6.7%
65.4%	4,452	4,189	-262	-5.9%
66.7%	4,432	4,114	-318	-7.2%
67.9%	4,379	4,062	-316	-7.2%
69.1%	4,204	4,019	-185	-4.4%
70.4%	4,145	3,983	-162	-3.9%
71.6%	4,105	3,969	-136	-3.3%
72.8%	4,104	3,915	-189	-4.6%
74.1%	4,050	3,860	-191	-4.7%
75.3%	3,986	3,824	-162	-4.1%
76.5%	3,842	3,701	-141	-3.7%
77.8%	3,811	3,598	-213	-5.6%
79.0%	3,775	3,405	-370	-9.8%
80.2%	3,732	3,367	-365	-9.8%
81.5%	3,585	3,360	-225	-6.3%
82.7%	3,373	3,220	-153	-4.5%
84.0%	3,357	3,191	-166	-5.0%
85.2%	3,321	3,161	-160	-4.8%
86.4%	3,291	3,150	-141	-4.3%
87.7%	3,249	3,140	-109	-3.3%
88.9%	3,239	3,103	-136	-4.2%
90.1%	3,221	3,029	-192	-6.0%
91.4%	3,163	3,014	-149	-4.7%
92.6%	3,017	3,012	-5	-0.1%
93.8%	2,991	2,938	-53	-1.8%
95.1%	2,959	2,926	-32	-1.1%
96.3%	2,930	2,919	-11	-0.4%
97.5%	2,547	2,918	371	14.6%
98.8%	2,486	2,748	262	10.5%
100.0%	2,084	2,304	220	10.6%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,416	11,414	-2	0.0%
1.2%	11,076	11,047	-29	-0.3%
2.5%	11,048	11,017	-31	-0.3%
3.7%	11,026	10,998	-28	-0.3%
4.9%	10,931	10,876	-54	-0.5%
6.2%	10,809	10,809	0	0.0%
7.4%	10,568	10,501	-68	-0.6%
8.6%	9,778	9,778	0	0.0%
9.9%	9,697	9,683	-13	-0.1%
11.1%	9,581	9,444	-137	-1.4%
12.3%	9,444	9,356	-88	-0.9%
13.6%	9,347	9,322	-26	-0.3%
14.8%	9,243	9,243	0	0.0%
16.0%	9,234	9,234	0	0.0%
17.3%	8,951	8,760	-191	-2.1%
18.5%	8,726	8,746	19	0.2%
19.8%	8,677	8,677	0	0.0%
21.0%	8,636	8,636	-1	0.0%
22.2%	8,334	8,333	-2	0.0%
23.5%	8,260	8,184	-76	-0.9%
24.7%	8,219	7,975	-244	-3.0%
25.9%	7,874	7,547	-326	-4.1%
27.2%	7,832	7,489	-343	-4.4%
28.4%	7,641	7,417	-224	-2.9%
29.6%	7,625	7,204	-420	-5.5%
30.9%	7,421	7,088	-333	-4.5%
32.1%	7,242	7,067	-175	-2.4%
33.3%	7,038	6,754	-283	-4.0%
34.6%	6,848	6,612	-236	-3.4%
35.8%	6,821	6,540	-281	-4.1%
37.0%	6,743	6,418	-325	-4.8%
38.3%	6,655	6,180	-474	-7.1%
39.5%	6,132	6,110	-22	-0.4%
40.7%	6,090	6,024	-66	-1.1%
42.0%	5,703	5,634	-69	-1.2%
43.2%	5,686	5,433	-252	-4.4%
44.4%	5,563	5,117	-446	-8.0%
45.7%	5,489	5,093	-396	-7.2%
46.9%	5,439	5,042	-397	-7.3%
48.1%	5,367	4,673	-695	-12.9%
49.4%	5,126	4,600	-526	-10.3%
50.6%	4,748	4,520	-229	-4.8%
51.9%	4,627	4,392	-235	-5.1%
53.1%	4,593	4,080	-512	-11.2%
54.3%	4,587	4,052	-535	-11.7%
55.6%	4,430	4,007	-423	-9.5%
56.8%	4,216	3,972	-243	-5.8%
58.0%	4,156	3,915	-241	-5.8%
59.3%	4,140	3,906	-234	-5.7%
60.5%	4,064	3,900	-165	-4.1%
61.7%	3,988	3,885	-103	-2.6%
63.0%	3,913	3,859	-54	-1.4%
64.2%	3,892	3,839	-53	-1.4%
65.4%	3,883	3,806	-77	-2.0%
66.7%	3,869	3,627	-242	-6.2%
67.9%	3,841	3,619	-221	-5.8%
69.1%	3,719	3,567	-151	-4.1%
70.4%	3,617	3,536	-81	-2.2%
71.6%	3,610	3,512	-98	-2.7%
72.8%	3,548	3,489	-59	-1.7%
74.1%	3,483	3,344	-140	-4.0%
75.3%	3,475	3,300	-175	-5.0%
76.5%	3,475	3,236	-238	-6.9%
77.8%	3,417	3,204	-213	-6.2%
79.0%	3,335	3,118	-217	-6.5%
80.2%	3,194	3,079	-115	-3.6%
81.5%	3,146	3,003	-143	-4.5%
82.7%	3,054	2,983	-72	-2.3%
84.0%	3,016	2,966	-50	-1.7%
85.2%	2,986	2,907	-79	-2.6%
86.4%	2,919	2,867	-52	-1.8%
87.7%	2,869	2,835	-35	-1.2%
88.9%	2,779	2,835	55	2.0%
90.1%	2,741	2,835	94	3.4%
91.4%	2,739	2,776	37	1.4%
92.6%	2,663	2,716	53	2.0%
93.8%	2,654	2,662	8	0.3%
95.1%	2,604	2,634	30	1.2%
96.3%	2,543	2,618	75	2.9%
97.5%	2,524	2,568	44	1.7%
98.8%	2,281	2,315	34	1.5%
100.0%	2,274	2,250	-24	-1.0%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,158	11,146	-12	-0.1%
1.2%	11,127	11,126	-1	0.0%
2.5%	10,065	10,003	-62	-0.6%
3.7%	8,224	8,169	-55	-0.7%
4.9%	8,009	8,008	-1	0.0%
6.2%	7,839	7,819	-20	-0.3%
7.4%	7,729	7,720	-8	-0.1%
8.6%	7,701	7,515	-187	-2.4%
9.9%	7,518	7,383	-135	-1.8%
11.1%	7,359	7,362	3	0.0%
12.3%	6,333	5,952	-381	-6.0%
13.6%	5,357	5,274	-82	-1.5%
14.8%	5,236	5,158	-79	-1.5%
16.0%	5,171	4,901	-270	-5.2%
17.3%	5,115	4,864	-251	-4.9%
18.5%	4,867	4,779	-88	-1.8%
19.8%	4,736	4,500	-235	-5.0%
21.0%	4,558	4,397	-161	-3.5%
22.2%	4,421	4,372	-48	-1.1%
23.5%	4,226	4,201	-25	-0.6%
24.7%	4,201	4,084	-117	-2.8%
25.9%	4,097	3,924	-173	-4.2%
27.2%	3,890	3,891	1	0.0%
28.4%	3,848	3,800	-49	-1.3%
29.6%	3,790	3,762	-28	-0.7%
30.9%	3,742	3,665	-77	-2.1%
32.1%	3,591	3,659	68	1.9%
33.3%	3,579	3,572	-8	-0.2%
34.6%	3,430	3,333	-97	-2.8%
35.8%	3,278	3,322	43	1.3%
37.0%	3,274	3,276	2	0.1%
38.3%	3,274	3,266	-7	-0.2%
39.5%	3,232	3,248	16	0.5%
40.7%	3,203	3,244	41	1.3%
42.0%	3,202	3,213	11	0.3%
43.2%	3,200	3,188	-12	-0.4%
44.4%	3,153	3,098	-55	-1.7%
45.7%	3,132	3,017	-115	-3.7%
46.9%	3,031	2,991	-40	-1.3%
48.1%	2,965	2,947	-18	-0.6%
49.4%	2,957	2,877	-81	-2.7%
50.6%	2,890	2,872	-18	-0.6%
51.9%	2,886	2,863	-23	-0.8%
53.1%	2,883	2,835	-48	-1.7%
54.3%	2,845	2,835	-11	-0.4%
55.6%	2,798	2,835	36	1.3%
56.8%	2,771	2,835	63	2.3%
58.0%	2,766	2,835	68	2.5%
59.3%	2,740	2,793	54	2.0%
60.5%	2,737	2,715	-22	-0.8%
61.7%	2,728	2,710	-17	-0.6%
63.0%	2,716	2,709	-7	-0.3%
64.2%	2,715	2,701	-14	-0.5%
65.4%	2,708	2,699	-9	-0.3%
66.7%	2,696	2,696	0	0.0%
67.9%	2,671	2,693	21	0.8%
69.1%	2,631	2,664	34	1.3%
70.4%	2,625	2,634	9	0.3%
71.6%	2,614	2,624	10	0.4%
72.8%	2,613	2,598	-14	-0.5%
74.1%	2,610	2,596	-14	-0.5%
75.3%	2,587	2,582	-5	-0.2%
76.5%	2,566	2,564	-2	-0.1%
77.8%	2,560	2,544	-17	-0.7%
79.0%	2,537	2,540	2	0.1%
80.2%	2,448	2,536	88	3.6%
81.5%	2,447	2,505	58	2.4%
82.7%	2,444	2,485	41	1.7%
84.0%	2,436	2,477	40	1.7%
85.2%	2,424	2,473	49	2.0%
86.4%	2,423	2,416	-7	-0.3%
87.7%	2,421	2,412	-8	-0.3%
88.9%	2,413	2,396	-17	-0.7%
90.1%	2,389	2,389	0	0.0%
91.4%	2,356	2,348	-9	-0.4%
92.6%	2,350	2,344	-7	-0.3%
93.8%	2,324	2,334	9	0.4%
95.1%	2,294	2,294	0	0.0%
96.3%	2,283	2,276	-7	-0.3%
97.5%	2,248	2,239	-9	-0.4%
98.8%	2,215	2,230	15	0.7%
100.0%	2,164	2,208	44	2.0%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,344	5,995	-349	-5.5%
1.2%	4,790	4,559	-231	-4.8%
2.5%	4,116	4,280	164	4.0%
3.7%	4,005	4,011	5	0.1%
4.9%	3,860	3,441	-419	-10.9%
6.2%	3,495	3,415	-80	-2.3%
7.4%	3,448	3,211	-237	-6.9%
8.6%	3,208	3,158	-50	-1.6%
9.9%	3,156	3,155	0	0.0%
11.1%	3,125	3,125	0	0.0%
12.3%	3,123	3,123	0	0.0%
13.6%	3,109	3,088	-21	-0.7%
14.8%	3,068	3,088	20	0.7%
16.0%	2,981	3,059	78	2.6%
17.3%	2,931	2,968	37	1.2%
18.5%	2,924	2,931	7	0.2%
19.8%	2,900	2,910	10	0.3%
21.0%	2,883	2,903	20	0.7%
22.2%	2,825	2,845	19	0.7%
23.5%	2,809	2,844	36	1.3%
24.7%	2,788	2,835	46	1.7%
25.9%	2,765	2,835	69	2.5%
27.2%	2,755	2,835	80	2.9%
28.4%	2,751	2,835	83	3.0%
29.6%	2,738	2,835	96	3.5%
30.9%	2,725	2,835	110	4.0%
32.1%	2,718	2,835	116	4.3%
33.3%	2,693	2,835	141	5.2%
34.6%	2,691	2,835	143	5.3%
35.8%	2,678	2,786	108	4.0%
37.0%	2,667	2,725	58	2.2%
38.3%	2,661	2,692	30	1.1%
39.5%	2,655	2,667	12	0.5%
40.7%	2,633	2,667	35	1.3%
42.0%	2,632	2,661	29	1.1%
43.2%	2,625	2,660	35	1.3%
44.4%	2,589	2,646	57	2.2%
45.7%	2,576	2,627	51	2.0%
46.9%	2,565	2,615	49	1.9%
48.1%	2,564	2,600	36	1.4%
49.4%	2,541	2,590	49	1.9%
50.6%	2,537	2,551	15	0.6%
51.9%	2,536	2,547	11	0.4%
53.1%	2,516	2,542	26	1.0%
54.3%	2,490	2,535	45	1.8%
55.6%	2,489	2,486	-3	-0.1%
56.8%	2,487	2,454	-33	-1.3%
58.0%	2,461	2,425	-36	-1.5%
59.3%	2,454	2,424	-31	-1.3%
60.5%	2,432	2,420	-11	-0.5%
61.7%	2,426	2,412	-14	-0.6%
63.0%	2,414	2,396	-18	-0.7%
64.2%	2,408	2,396	-12	-0.5%
65.4%	2,408	2,384	-24	-1.0%
66.7%	2,384	2,367	-16	-0.7%
67.9%	2,374	2,367	-7	-0.3%
69.1%	2,367	2,361	-6	-0.2%
70.4%	2,367	2,354	-14	-0.6%
71.6%	2,361	2,342	-19	-0.8%
72.8%	2,356	2,341	-14	-0.6%
74.1%	2,343	2,339	-4	-0.2%
75.3%	2,336	2,335	-1	0.0%
76.5%	2,333	2,328	-5	-0.2%
77.8%	2,325	2,324	0	0.0%
79.0%	2,323	2,317	-6	-0.3%
80.2%	2,317	2,315	-2	-0.1%
81.5%	2,309	2,303	-6	-0.2%
82.7%	2,306	2,302	-4	-0.2%
84.0%	2,297	2,297	0	0.0%
85.2%	2,281	2,281	0	0.0%
86.4%	2,275	2,269	-5	-0.2%
87.7%	2,269	2,268	-1	0.0%
88.9%	2,267	2,264	-4	-0.2%
90.1%	2,257	2,256	-2	-0.1%
91.4%	2,193	2,194	1	0.0%
92.6%	2,191	2,194	3	0.1%
93.8%	2,139	2,133	-6	-0.3%
95.1%	2,120	2,092	-28	-1.3%
96.3%	2,029	2,029	0	0.0%
97.5%	2,028	1,998	-29	-1.5%
98.8%	1,958	1,962	4	0.2%
100.0%	1,846	1,844	-2	-0.1%

Table SW-34-b
Delta Cross Channel, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,319	6,784	-1,535	-18.5%
1.2%	6,928	6,576	-352	-5.1%
2.5%	6,655	6,364	-291	-4.4%
3.7%	6,345	6,065	-280	-4.4%
4.9%	6,051	5,849	-202	-3.3%
6.2%	5,967	5,823	-144	-2.4%
7.4%	5,725	5,706	-19	-0.3%
8.6%	5,706	5,666	-40	-0.7%
9.9%	5,661	5,657	-5	-0.1%
11.1%	5,631	5,624	-6	-0.1%
12.3%	5,602	5,564	-38	-0.7%
13.6%	5,589	5,543	-45	-0.8%
14.8%	5,571	5,502	-69	-1.2%
16.0%	5,545	5,456	-89	-1.6%
17.3%	5,507	5,455	-52	-0.9%
18.5%	5,485	5,435	-50	-0.9%
19.8%	5,455	5,364	-91	-1.7%
21.0%	5,433	5,364	-69	-1.3%
22.2%	5,356	5,354	-2	0.0%
23.5%	5,341	5,347	6	0.1%
24.7%	5,316	5,346	30	0.6%
25.9%	5,264	5,301	38	0.7%
27.2%	5,238	5,229	-9	-0.2%
28.4%	5,225	5,218	-7	-0.1%
29.6%	5,133	5,209	77	1.5%
30.9%	5,132	5,197	65	1.3%
32.1%	5,129	5,190	61	1.2%
33.3%	5,125	5,151	27	0.5%
34.6%	5,123	5,132	9	0.2%
35.8%	5,106	5,130	23	0.5%
37.0%	5,074	5,123	49	1.0%
38.3%	5,073	5,123	50	1.0%
39.5%	5,058	5,119	61	1.2%
40.7%	5,051	5,075	23	0.5%
42.0%	5,005	5,074	69	1.4%
43.2%	4,983	5,072	89	1.8%
44.4%	4,980	5,061	81	1.6%
45.7%	4,947	5,033	86	1.7%
46.9%	4,943	4,983	40	0.8%
48.1%	4,936	4,980	44	0.9%
49.4%	4,933	4,955	22	0.4%
50.6%	4,918	4,947	29	0.6%
51.9%	4,917	4,946	29	0.6%
53.1%	4,913	4,943	30	0.6%
54.3%	4,909	4,934	25	0.5%
55.6%	4,908	4,929	21	0.4%
56.8%	4,886	4,929	43	0.9%
58.0%	4,861	4,929	68	1.4%
59.3%	4,788	4,929	141	2.9%
60.5%	4,757	4,929	172	3.6%
61.7%	4,753	4,929	176	3.7%
63.0%	4,747	4,929	182	3.8%
64.2%	4,682	4,929	247	5.3%
65.4%	4,679	4,929	250	5.3%
66.7%	4,649	4,929	280	6.0%
67.9%	4,641	4,918	277	6.0%
69.1%	4,609	4,915	307	6.7%
70.4%	4,575	4,909	334	7.3%
71.6%	4,564	4,908	345	7.5%
72.8%	4,496	4,886	390	8.7%
74.1%	4,492	4,801	309	6.9%
75.3%	4,492	4,747	255	5.7%
76.5%	4,356	4,682	326	7.5%
77.8%	4,311	4,665	354	8.2%
79.0%	4,291	4,640	349	8.1%
80.2%	4,284	4,602	318	7.4%
81.5%	4,282	4,579	296	6.9%
82.7%	4,274	4,515	241	5.6%
84.0%	4,257	4,492	235	5.5%
85.2%	4,225	4,489	263	6.2%
86.4%	4,215	4,433	218	5.2%
87.7%	4,162	4,392	230	5.5%
88.9%	4,155	4,321	166	4.0%
90.1%	4,154	4,291	137	3.3%
91.4%	4,145	4,215	71	1.7%
92.6%	4,118	4,185	67	1.6%
93.8%	4,081	4,155	74	1.8%
95.1%	3,933	3,933	0	0.0%
96.3%	3,576	3,589	13	0.4%
97.5%	3,432	3,556	125	3.6%
98.8%	3,383	3,449	65	1.9%
100.0%	3,252	3,427	174	5.4%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,109	9,073	-37	-0.4%
1.2%	8,987	8,991	5	0.1%
2.5%	8,987	8,987	0	0.0%
3.7%	8,945	8,987	42	0.5%
4.9%	8,918	8,940	22	0.2%
6.2%	8,915	8,930	15	0.2%
7.4%	8,856	8,923	67	0.8%
8.6%	8,840	8,862	21	0.2%
9.9%	8,824	8,861	37	0.4%
11.1%	8,699	8,789	90	1.0%
12.3%	8,685	8,771	86	1.0%
13.6%	8,683	8,717	35	0.4%
14.8%	8,625	8,631	6	0.1%
16.0%	8,550	8,614	64	0.7%
17.3%	8,527	8,597	70	0.8%
18.5%	8,519	8,576	57	0.7%
19.8%	8,438	8,530	92	1.1%
21.0%	8,433	8,521	88	1.0%
22.2%	8,422	8,516	95	1.1%
23.5%	8,421	8,480	59	0.7%
24.7%	8,412	8,459	47	0.6%
25.9%	8,401	8,440	39	0.5%
27.2%	8,399	8,436	37	0.4%
28.4%	8,397	8,422	25	0.3%
29.6%	8,360	8,367	7	0.1%
30.9%	8,360	8,357	-2	0.0%
32.1%	8,329	8,334	5	0.1%
33.3%	8,301	8,325	24	0.3%
34.6%	8,295	8,301	5	0.1%
35.8%	8,290	8,272	-18	-0.2%
37.0%	8,242	8,183	-59	-0.7%
38.3%	8,170	8,177	6	0.1%
39.5%	8,167	8,171	4	0.0%
40.7%	8,143	8,063	-80	-1.0%
42.0%	8,039	8,034	-5	-0.1%
43.2%	7,904	7,993	89	1.1%
44.4%	7,896	7,978	83	1.0%
45.7%	7,875	7,972	97	1.2%
46.9%	7,854	7,843	-11	-0.1%
48.1%	7,821	7,677	-144	-1.8%
49.4%	7,640	7,622	-18	-0.2%
50.6%	7,565	7,586	21	0.3%
51.9%	7,456	7,583	128	1.7%
53.1%	7,353	7,576	222	3.0%
54.3%	7,335	7,560	224	3.1%
55.6%	7,318	7,465	147	2.0%
56.8%	7,314	7,445	131	1.8%
58.0%	7,220	7,422	202	2.8%
59.3%	7,217	7,410	193	2.7%
60.5%	7,163	7,221	58	0.8%
61.7%	7,023	7,093	70	1.0%
63.0%	7,008	7,082	74	1.1%
64.2%	6,950	7,066	115	1.7%
65.4%	6,841	7,005	163	2.4%
66.7%	6,827	6,811	-16	-0.2%
67.9%	6,687	6,806	119	1.8%
69.1%	6,595	6,670	75	1.1%
70.4%	6,574	6,632	58	0.9%
71.6%	6,548	6,555	7	0.1%
72.8%	6,533	6,551	17	0.3%
74.1%	6,362	6,539	177	2.8%
75.3%	5,895	6,527	632	10.7%
76.5%	5,809	6,024	216	3.7%
77.8%	5,707	6,003	296	5.2%
79.0%	5,545	5,973	428	7.7%
80.2%	5,303	5,383	80	1.5%
81.5%	5,111	5,297	186	3.6%
82.7%	4,879	5,170	292	6.0%
84.0%	4,807	5,167	360	7.5%
85.2%	4,735	5,124	389	8.2%
86.4%	4,725	5,074	349	7.4%
87.7%	4,595	4,937	342	7.4%
88.9%	4,547	4,896	349	7.7%
90.1%	4,480	4,814	334	7.5%
91.4%	4,294	4,454	160	3.7%
92.6%	4,280	4,454	174	4.1%
93.8%	4,211	4,400	189	4.5%
95.1%	4,109	4,300	192	4.7%
96.3%	4,053	4,237	184	4.5%
97.5%	4,021	4,171	150	3.7%
98.8%	4,019	4,160	141	3.5%
100.0%	3,702	3,985	283	7.6%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,520	7,225	-295	-3.9%
1.2%	6,720	6,561	-160	-2.4%
2.5%	6,561	6,547	-13	-0.2%
3.7%	6,496	6,533	37	0.6%
4.9%	6,479	6,479	0	0.0%
6.2%	6,403	6,434	30	0.5%
7.4%	6,401	6,424	24	0.4%
8.6%	6,301	6,402	101	1.6%
9.9%	6,232	6,401	169	2.7%
11.1%	6,231	6,374	143	2.3%
12.3%	6,227	6,367	140	2.2%
13.6%	6,200	6,348	148	2.4%
14.8%	6,185	6,337	152	2.5%
16.0%	6,164	6,333	170	2.8%
17.3%	6,143	6,265	122	2.0%
18.5%	6,124	6,264	140	2.3%
19.8%	6,096	6,235	138	2.3%
21.0%	6,060	6,234	174	2.9%
22.2%	6,021	6,231	210	3.5%
23.5%	6,009	6,228	219	3.6%
24.7%	5,983	6,185	203	3.4%
25.9%	5,963	6,164	201	3.4%
27.2%	5,940	6,144	204	3.4%
28.4%	5,923	6,136	213	3.6%
29.6%	5,922	6,051	129	2.2%
30.9%	5,910	6,041	131	2.2%
32.1%	5,876	6,037	161	2.7%
33.3%	5,874	6,035	161	2.7%
34.6%	5,847	6,011	164	2.8%
35.8%	5,835	6,008	173	3.0%
37.0%	5,791	6,002	211	3.6%
38.3%	5,728	6,000	272	4.8%
39.5%	5,701	5,965	264	4.6%
40.7%	5,697	5,954	257	4.5%
42.0%	5,622	5,949	326	5.8%
43.2%	5,602	5,932	330	5.9%
44.4%	5,562	5,930	367	6.6%
45.7%	5,561	5,923	362	6.5%
46.9%	5,557	5,921	363	6.5%
48.1%	5,533	5,910	377	6.8%
49.4%	5,514	5,870	356	6.5%
50.6%	5,492	5,866	375	6.8%
51.9%	5,491	5,791	300	5.5%
53.1%	5,479	5,784	305	5.6%
54.3%	5,467	5,699	232	4.3%
55.6%	5,432	5,688	256	4.7%
56.8%	5,360	5,670	309	5.8%
58.0%	5,214	5,592	378	7.2%
59.3%	5,080	5,531	451	8.9%
60.5%	5,066	5,491	424	8.4%
61.7%	5,002	5,488	486	9.7%
63.0%	4,982	5,478	496	10.0%
64.2%	4,923	5,430	507	10.3%
65.4%	4,849	5,346	497	10.3%
66.7%	4,832	5,332	500	10.4%
67.9%	4,716	5,282	566	12.0%
69.1%	4,712	5,217	505	10.7%
70.4%	4,659	4,810	151	3.2%
71.6%	4,647	4,803	156	3.4%
72.8%	4,581	4,687	106	2.3%
74.1%	4,547	4,645	98	2.2%
75.3%	4,542	4,571	28	0.6%
76.5%	4,505	4,557	52	1.2%
77.8%	4,460	4,555	95	2.1%
79.0%	4,389	4,512	123	2.8%
80.2%	4,339	4,494	155	3.6%
81.5%	4,323	4,485	162	3.7%
82.7%	4,311	4,485	174	4.0%
84.0%	4,278	4,481	203	4.7%
85.2%	4,259	4,421	162	3.8%
86.4%	4,251	4,414	163	3.8%
87.7%	4,184	4,373	189	4.5%
88.9%	4,173	4,349	176	4.2%
90.1%	4,096	4,272	176	4.3%
91.4%	4,016	4,224	208	5.2%
92.6%	3,951	4,205	254	6.4%
93.8%	3,941	4,166	225	5.7%
95.1%	3,838	4,011	173	4.5%
96.3%	3,810	3,816	6	0.2%
97.5%	3,778	3,713	-64	-1.7%
98.8%	3,735	3,686	-50	-1.3%
100.0%	3,717	3,432	-285	-7.7%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,123	9,132	9	0.1%
1.2%	9,119	9,067	-51	-0.6%
2.5%	9,036	8,844	-192	-2.1%
3.7%	8,939	8,833	-106	-1.2%
4.9%	8,753	8,653	-100	-1.1%
6.2%	8,727	8,649	-77	-0.9%
7.4%	8,701	8,590	-111	-1.3%
8.6%	8,548	8,575	27	0.3%
9.9%	8,473	8,468	-6	-0.1%
11.1%	8,312	8,464	152	1.8%
12.3%	8,131	8,183	52	0.6%
13.6%	7,947	8,146	199	2.5%
14.8%	7,495	7,966	471	6.3%
16.0%	7,479	7,485	6	0.1%
17.3%	7,414	7,339	-74	-1.0%
18.5%	7,358	7,148	-210	-2.8%
19.8%	7,133	7,122	-11	-0.2%
21.0%	5,579	7,035	1,456	26.1%
22.2%	5,543	6,116	573	10.3%
23.5%	5,284	6,022	738	14.0%
24.7%	5,265	5,882	616	11.7%
25.9%	5,252	5,873	622	11.8%
27.2%	5,201	5,788	587	11.3%
28.4%	5,140	5,783	643	12.5%
29.6%	5,082	5,766	684	13.5%
30.9%	5,077	5,697	621	12.2%
32.1%	5,068	5,600	532	10.5%
33.3%	5,061	5,548	486	9.6%
34.6%	5,031	5,505	474	9.4%
35.8%	4,981	5,495	514	10.3%
37.0%	4,979	5,482	504	10.1%
38.3%	4,963	5,448	484	9.8%
39.5%	4,926	5,383	456	9.3%
40.7%	4,924	5,369	445	9.0%
42.0%	4,922	5,355	433	8.8%
43.2%	4,910	5,355	445	9.1%
44.4%	4,870	5,307	437	9.0%
45.7%	4,854	5,247	393	8.1%
46.9%	4,845	5,194	349	7.2%
48.1%	4,819	5,171	353	7.3%
49.4%	4,810	5,130	320	6.7%
50.6%	4,779	5,114	335	7.0%
51.9%	4,752	5,058	306	6.4%
53.1%	4,749	5,043	294	6.2%
54.3%	4,743	4,999	255	5.4%
55.6%	4,739	4,882	143	3.0%
56.8%	4,707	4,880	173	3.7%
58.0%	4,702	4,876	175	3.7%
59.3%	4,697	4,861	163	3.5%
60.5%	4,654	4,856	203	4.4%
61.7%	4,623	4,854	232	5.0%
63.0%	4,619	4,843	223	4.8%
64.2%	4,585	4,833	248	5.4%
65.4%	4,500	4,795	295	6.6%
66.7%	4,442	4,778	336	7.6%
67.9%	4,399	4,769	369	8.4%
69.1%	4,360	4,752	392	9.0%
70.4%	4,319	4,752	433	10.0%
71.6%	4,190	4,733	543	13.0%
72.8%	4,107	4,718	611	14.9%
74.1%	4,087	4,701	615	15.0%
75.3%	3,927	4,698	770	19.6%
76.5%	3,863	4,654	792	20.5%
77.8%	3,824	4,633	810	21.2%
79.0%	3,818	4,607	789	20.7%
80.2%	3,787	4,590	804	21.2%
81.5%	3,674	4,560	886	24.1%
82.7%	3,537	4,515	978	27.6%
84.0%	3,478	4,490	1,012	29.1%
85.2%	3,453	4,411	958	27.7%
86.4%	3,432	4,377	945	27.5%
87.7%	3,429	4,316	887	25.9%
88.9%	3,379	4,080	701	20.8%
90.1%	3,351	3,890	538	16.1%
91.4%	3,324	3,876	552	16.6%
92.6%	3,257	3,682	424	13.0%
93.8%	3,239	3,671	431	13.3%
95.1%	3,122	3,635	513	16.4%
96.3%	3,112	3,560	447	14.4%
97.5%	3,050	3,531	481	15.8%
98.8%	3,030	3,282	252	8.3%
100.0%	3,010	3,124	113	3.8%

Figure SW-35-b
Old and Middle River, Monthly Flow
Probability of Exceedance

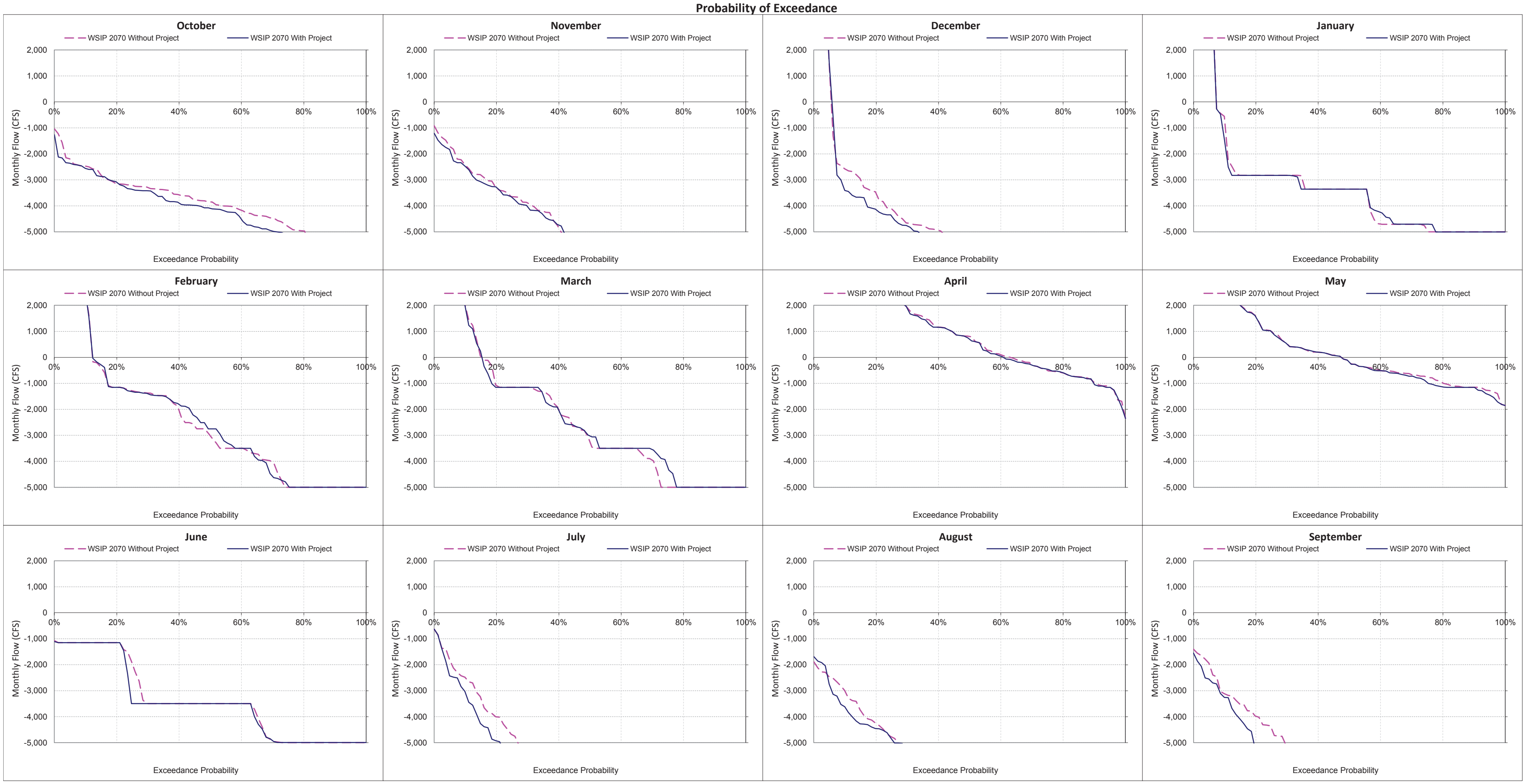


Table SW-35-b
Old and Middle River, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,034	-1,258	-224	
1.2%	-1,224	-2,116	-892	
2.5%	-1,555	-2,159	-604	
3.7%	-2,147	-2,336	-189	
4.9%	-2,192	-2,362	-170	
6.2%	-2,385	-2,411	-26	
7.4%	-2,423	-2,430	-7	
8.6%	-2,468	-2,455	13	
9.9%	-2,468	-2,561	-93	
11.1%	-2,502	-2,594	-92	
12.3%	-2,581	-2,600	-19	
13.6%	-2,585	-2,833	-249	
14.8%	-2,799	-2,869	-70	
16.0%	-2,965	-2,880	84	
17.3%	-2,992	-2,989	3	
18.5%	-3,056	-3,034	23	
19.8%	-3,147	-3,063	85	
21.0%	-3,157	-3,187	-31	
22.2%	-3,164	-3,234	-70	
23.5%	-3,192	-3,334	-142	
24.7%	-3,192	-3,360	-168	
25.9%	-3,251	-3,400	-149	
27.2%	-3,258	-3,411	-154	
28.4%	-3,262	-3,413	-151	
29.6%	-3,277	-3,417	-140	
30.9%	-3,336	-3,427	-90	
32.1%	-3,345	-3,526	-181	
33.3%	-3,367	-3,636	-269	
34.6%	-3,372	-3,640	-268	
35.8%	-3,391	-3,797	-406	
37.0%	-3,408	-3,836	-429	
38.3%	-3,547	-3,838	-291	
39.5%	-3,562	-3,856	-294	
40.7%	-3,603	-3,950	-347	
42.0%	-3,612	-3,963	-350	
43.2%	-3,625	-3,965	-340	
44.4%	-3,744	-3,973	-228	
45.7%	-3,776	-3,983	-207	
46.9%	-3,801	-4,012	-210	
48.1%	-3,809	-4,074	-266	
49.4%	-3,846	-4,077	-230	
50.6%	-3,854	-4,116	-262	
51.9%	-3,956	-4,128	-172	
53.1%	-3,979	-4,133	-154	
54.3%	-4,003	-4,182	-178	
55.6%	-4,008	-4,238	-230	
56.8%	-4,021	-4,246	-226	
58.0%	-4,075	-4,253	-178	
59.3%	-4,138	-4,396	-258	
60.5%	-4,195	-4,610	-416	
61.7%	-4,276	-4,735	-458	
63.0%	-4,292	-4,746	-454	
64.2%	-4,362	-4,809	-447	
65.4%	-4,380	-4,830	-450	
66.7%	-4,386	-4,881	-495	
67.9%	-4,401	-4,885	-484	
69.1%	-4,462	-4,949	-488	
70.4%	-4,471	-4,983	-512	
71.6%	-4,566	-5,003	-437	
72.8%	-4,615	-5,022	-408	
74.1%	-4,724	-5,086	-362	
75.3%	-4,825	-5,127	-302	
76.5%	-4,918	-5,233	-315	
77.8%	-4,938	-5,324	-386	
79.0%	-4,955	-5,413	-457	
80.2%	-4,968	-5,487	-520	
81.5%	-5,350	-5,512	-162	
82.7%	-5,499	-5,686	-187	
84.0%	-5,535	-5,723	-188	
85.2%	-5,592	-5,891	-299	
86.4%	-5,603	-5,908	-304	
87.7%	-5,612	-5,927	-315	
88.9%	-5,720	-5,930	-210	
90.1%	-5,778	-5,993	-214	
91.4%	-5,800	-5,993	-193	
92.6%	-5,950	-6,247	-297	
93.8%	-6,055	-6,333	-277	
95.1%	-6,063	-6,439	-376	
96.3%	-6,207	-6,769	-562	
97.5%	-6,455	-7,528	-1,073	
98.8%	-8,209	-8,253	-44	
100.0%	-10,225	-10,199	26	

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-915	-1,212	-297	
1.2%	-1,194	-1,473	-279	
2.5%	-1,362	-1,637	-275	
3.7%	-1,473	-1,752	-279	
4.9%	-1,707	-1,833	-125	
6.2%	-1,820	-2,271	-451	
7.4%	-2,197	-2,337	-140	
8.6%	-2,223	-2,338	-115	
9.9%	-2,419	-2,469	-51	
11.1%	-2,566	-2,612	-46	
12.3%	-2,755	-2,860	-105	
13.6%	-2,788	-3,010	-222	
14.8%	-2,798	-3,065	-267	
16.0%	-2,915	-3,138	-223	
17.3%	-3,032	-3,205	-173	
18.5%	-3,048	-3,253	-205	
19.8%	-3,286	-3,269	18	
21.0%	-3,403	-3,398	5	
22.2%	-3,427	-3,580	-152	
23.5%	-3,488	-3,584	-97	
24.7%	-3,643	-3,651	-8	
25.9%	-3,655	-3,778	-123	
27.2%	-3,665	-3,924	-259	
28.4%	-3,855	-3,959	-103	
29.6%	-3,864	-3,972	-108	
30.9%	-3,948	-4,162	-214	
32.1%	-4,038	-4,175	-138	
33.3%	-4,175	-4,187	-12	
34.6%	-4,183	-4,291	-108	
35.8%	-4,249	-4,463	-214	
37.0%	-4,259	-4,535	-276	
38.3%	-4,571	-4,570	1	
39.5%	-4,748	-4,714	34	
40.7%	-5,009	-4,773	236	
42.0%	-5,199	-5,106	93	
43.2%	-5,233	-5,112	122	
44.4%	-5,291	-5,123	168	
45.7%	-5,638	-5,350	287	
46.9%	-5,698	-5,373	325	
48.1%	-5,756	-5,672	84	
49.4%	-5,819	-5,978	-159	
50.6%	-5,901	-5,993	-93	
51.9%	-5,946	-6,029	-82	
53.1%	-6,028	-6,029	-1	
54.3%	-6,031	-6,207	-175	
55.6%	-6,110	-6,218	-108	
56.8%	-6,138	-6,317	-179	
58.0%	-6,209	-6,424	-216	
59.3%	-6,320	-6,460	-140	
60.5%	-6,391	-6,462	-71	
61.7%	-6,445	-6,516	-72	
63.0%	-6,477	-6,525	-48	
64.2%	-6,515	-6,563	-48	
65.4%	-6,608	-6,580	27	
66.7%	-6,644	-6,771	-128	
67.9%	-6,683	-6,835	-153	
69.1%	-6,794	-6,867	-73	
70.4%	-6,886	-7,062	-176	
71.6%	-6,914	-7,318	-404	
72.8%	-6,955	-7,743	-788	
74.1%	-7,067	-7,803	-736	
75.3%	-7,082	-8,213	-1,131	
76.5%	-7,351	-8,233	-882	
77.8%	-7,489	-8,291	-802	
79.0%	-7,691	-8,304	-613	
80.2%	-8,139	-8,458	-319	
81.5%	-8,149	-8,637	-487	
82.7%	-8,227	-8,749	-521	
84.0%	-8,274	-8,828	-554	
85.2%	-8,290	-8,876	-586	
86.4%	-8,304	-8,918	-614	
87.7%	-8,441	-8,930	-489	
88.9%	-8,466	-9,122	-656	
90.1%	-8,867	-9,544	-676	
91.4%	-9,036	-9,981	-945	
92.6%	-9,070	-10,026	-956	
93.8%	-9,359	-10,166	-807	
95.1%	-10,156	-10,298	-142	
96.3%	-10,166	-10,308	-142	
97.5%	-10,265	-10,343	-78	
98.8%	-10,311	-10,371	-60	
100.0%	-10,328	-10,414	-86	

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,981	12,299	-1,682	-12.0%
1.2%	11,620	11,620	0	0.0%
2.5%	7,739	7,695	-44	-0.6%
3.7%	4,487	4,481	-6	-0.1%
4.9%	1,433	1,541	108	7.5%
6.2%	-1,306	-569	737	
7.4%	-2,364	-2,814	-449	
8.6%	-2,445	-2,993	-548	
9.9%	-2,573	-3,410	-837	
11.1%	-2,654	-3,442	-788	
12.3%	-2,681	-3,592	-910	
13.6%	-2,797	-3,668	-871	
14.8%	-2,946	-3,670	-724	
16.0%	-3,288	-3,685	-397	
17.3%	-3,351	-4,046	-695	
18.5%	-3,426	-4,090	-664	
19.8%	-3,457	-4,123	-666	
21.0%	-3,793	-4,247	-453	
22.2%	-3,836	-4,312	-476	
23.5%	-4,072	-4,346	-274	
24.7%	-4,084	-4,346	-262	
25.9%	-4,225	-4,541	-316	
27.2%	-4,412	-4,671	-259	
28.4%	-4,496	-4,740	-245	
29.6%	-4,656	-4,753	-97	
30.9%	-4,672	-4,822	-150	
32.1%	-4,720	-4,969	-249	
33.3%	-4,734	-4,982	-248	
34.6%	-4,749	-5,110	-362	
35.8%	-4,810	-5,177	-367	
37.0%	-4,886	-5,519	-632	
38.3%	-4,895	-5,752	-857	
39.5%	-4,926	-5,871	-944	
40.7%	-4,969	-5,871	-902	
42.0%	-5,132	-5,871	-739	
43.2%	-5,134	-5,871	-737	
44.4%	-5,614	-5,871	-257	
45.7%	-5,853	-5,871	-18	
46.9%	-5,871	-5,871	0	
48.1%	-5,871	-5,871	0	
49.4%	-5,871	-5,871	0	
50.6%	-5,871	-5,871	0	
51.9%	-5,871	-5,871	0	
53.1%	-5,871	-5,871	0	
54.3%	-5,871	-5,871	0	
55.6%	-5,871	-5,871	0	
56.8%	-5,871	-5,871	0	
58.0%	-5,871	-5,871	0	
59.3%	-5,871	-5,871	0	
60.5%	-5,871	-5,871	0	
61.7%	-5,871	-5,871	0	
63.0%	-5,871	-5,871	0	
64.2%	-5,871	-5,871	0	
65.4%	-5,871	-5,871	0	
66.7%	-5,871	-5,871	0	
67.9%	-5,871	-6,195	-324	
69.1%	-5,871	-6,261	-390	
70.4%	-5,871	-6,638	-767	
71.6%	-5,871	-6,780	-909	
72.8%	-5,875	-6,792	-918	
74.1%	-6,146	-6,988	-842	
75.3%	-6,655	-7,090	-435	
76.5%	-6,789	-7,693	-904	
77.8%	-6,897	-7,882	-985	
79.0%	-7,718	-8,238	-520	
80.2%	-8,275	-8,305	-30	
81.5%	-8,363	-8,496	-133	
82.7%	-8,533	-8,857	-324	
84.0%	-9,109	-8,994	115	
85.2%	-9,197	-9,141	56	
86.4%	-9,297	-9,281	16	
87.7%	-9,334	-9,307	27	
88.9%	-9,567	-9,365	202	
90.1%	-9,574	-9,512	61	
91.4%	-9,620	-9,567	53	
92.6%	-9,681	-9,587	94	
93.8%	-9,684	-9,620	64	
95.1%	-9,704	-9,681	22	
96.3%	-9,707	-9,684	23	
97.5%	-9,712	-9,704	9	
98.8%	-9,879	-9,777	102	
100.0%	-9,899	-9,856	43	

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	38,613	38,584	-29	-0.1%
1.2%	14,814	14,722	-92	-0.6%
2.5%	10,943	10,934	-9	-0.1%
3.7%	4,914	5,372	459	9.3%
4.9%	4,742	4,810	68	1.4%
6.2%	3,412	3,381	-31	-0.9%
7.4%	-275	-275	0	
8.6%	-437	-468	-31	
9.9%	-553	-1,426	-873	
11.1%	-2,241	-2,510	-269	
12.3%	-2,488	-2,823	-334	
13.6%	-2,758	-2,823	-65	
14.8%	-2,823	-2,823	0	
16.0%	-2,823	-2,823	0	
17.3%	-2,823	-2,823	0	
18.5%	-2,823	-2,823	0	
19.8%	-2,823	-2,823	0	
21.0%	-2,823	-2,823	0	
22.2%	-2,823	-2,823	0	
23.5%	-2,823	-2,823	0	
24.7%	-2,823	-2,823	0	
25.9%	-2,823	-2,823	0	
27.2%	-2,823	-2,823	0	
28.4%	-2,823	-2,823	0	
29.6%	-2,823	-2,823	0	
30.9%	-2,823	-2,823	0	
32.1%	-2,823	-2,843	-20	
33.3%	-2,823	-2,887	-65	
34.6%	-2,839	-3,355	-516	
35.8%	-3,355	-3,355	0	
37.0%	-3,355	-3,355	0	
38.3%	-3,355	-3,355	0	
39.5%	-3,355	-3,355	0	
40.7%	-3,355	-3,355	0	
42.0%	-3,355	-3,355	0	
43.2%	-3,355	-3,355	0	
44.4%	-3,355	-3,355	0	
45.7%	-3,355	-3,355	0	
46.9%	-3,355	-3,355	0	
48.1%	-3,355	-3,355	0	
49.4%	-3,355	-3,355	0	
50.6%	-3,355	-3,355	0	
51.9%	-3,355	-3,355	0	
53.1%	-3,355	-3,355	0	
54.3%	-3,355	-3,355	0	
55.6%	-3,355	-3,355	0	
56.8%	-4,214	-4,075	138	
58.0%	-4,541	-4,163	378	
59.3%	-4,689	-4,215	475	
60.5%	-4,710	-4,277	433	
61.7%	-4,710	-4,432	278	
63.0%	-4,710	-4,468	242	
64.2%	-4,710	-4,700	10	
65.4%	-4,710	-4,710	0	
66.7%	-4,710	-4,710	0	
67.9%	-4,710	-4,710	0	
69.1%	-4,710	-4,710	0	
70.4%	-4,710	-4,710	0	
71.6%	-4,710	-4,710	0	
72.8%	-4,710	-4,710	0	
74.1%	-4,761	-4,710	51	
75.3%	-5,000	-4,710	290	
76.5%	-5,000	-4,719	281	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

Table SW-35-b

Old and Middle River, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,003	18,899	-104	-0.5%
1.2%	15,190	15,169	-22	-0.1%
2.5%	14,915	14,896	-19	-0.1%
3.7%	13,604	13,578	-26	-0.2%
4.9%	11,269	12,164	895	7.9%
6.2%	11,071	11,066	-5	0.0%
7.4%	5,111	5,741	629	12.3%
8.6%	4,392	4,361	-32	-0.7%
9.9%	2,577	2,544	-32	-1.3%
11.1%	1,575	1,544	-32	-2.0%
12.3%	-172	-35	137	
13.6%	-208	-172	36	
14.8%	-366	-281	85	
16.0%	-582	-382	201	
17.3%	-1,088	-1,120	-33	
18.5%	-1,150	-1,150	0	
19.8%	-1,150	-1,150	0	
21.0%	-1,150	-1,150	0	
22.2%	-1,183	-1,183	0	
23.5%	-1,243	-1,282	-39	
24.7%	-1,282	-1,315	-33	
25.9%	-1,315	-1,341	-26	
27.2%	-1,341	-1,347	-7	
28.4%	-1,347	-1,372	-25	
29.6%	-1,372	-1,380	-8	
30.9%	-1,380	-1,446	-66	
32.1%	-1,446	-1,467	-22	
33.3%	-1,467	-1,479	-11	
34.6%	-1,476	-1,479	-3	
35.8%	-1,479	-1,510	-31	
37.0%	-1,610	-1,610	0	
38.3%	-1,778	-1,732	46	
39.5%	-1,871	-1,778	93	
40.7%	-2,310	-1,871	440	
42.0%	-2,509	-1,881	628	
43.2%	-2,509	-1,952	557	
44.4%	-2,554	-2,214	340	
45.7%	-2,750	-2,310	440	
46.9%	-2,750	-2,509	241	
48.1%	-2,750	-2,509	241	
49.4%	-2,924	-2,750	174	
50.6%	-3,117	-2,750	367	
51.9%	-3,289	-2,750	539	
53.1%	-3,500	-2,948	552	
54.3%	-3,500	-3,214	286	
55.6%	-3,500	-3,300	200	
56.8%	-3,500	-3,375	125	
58.0%	-3,500	-3,500	0	
59.3%	-3,500	-3,500	0	
60.5%	-3,500	-3,500	0	
61.7%	-3,578	-3,500	78	
63.0%	-3,670	-3,500	170	
64.2%	-3,702	-3,806	-105	
65.4%	-3,732	-3,951	-219	
66.7%	-3,930	-3,974	-44	
67.9%	-3,952	-4,063	-110	
69.1%	-3,974	-4,468	-493	
70.4%	-4,063	-4,631	-569	
71.6%	-4,444	-4,662	-218	
72.8%	-4,729	-4,729	0	
74.1%	-5,000	-4,790	210	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	32,446	32,484	39	0.1%
1.2%	24,456	24,385	-72	-0.3%
2.5%	14,603	14,591	-12	-0.1%
3.7%	12,423	11,983	-440	-3.5%
4.9%	7,611	7,578	-33	-0.4%
6.2%	6,175	6,149	-26	-0.4%
7.4%	5,006	6,134	1,128	22.5%
8.6%	2,134	2,071	-63	-2.9%
9.9%	2,037	2,008	-29	-1.4%
11.1%	1,436	1,230	-206	-14.4%
12.3%	1,230	1,089	-141	-11.4%
13.6%	698	540	-158	-22.6%
14.8%	59	247	189	321.6%
16.0%	-108	-346	-237	
17.3%	-116	-641	-524	
18.5%	-346	-1,016	-671	
19.8%	-1,070	-1,150	-80	
21.0%	-1,150	-1,150	0	
22.2%	-1,150	-1,150	0	
23.5%	-1,150	-1,150	0	
24.7%	-1,150	-1,150	0	
25.9%	-1,150	-1,150	0	
27.2%	-1,150	-1,150	0	
28.4%	-1,150	-1,150	0	
29.6%	-1,150	-1,150	0	
30.9%	-1,150	-1,150	0	
32.1%	-1,226	-1,150	75	
33.3%	-1,301	-1,152	149	
34.6%	-1,320	-1,325	-5	
35.8%	-1,359	-1,736	-377	
37.0%	-1,473	-1,830	-356	
38.3%	-1,759	-1,903	-144	
39.5%	-1,903	-1,916	-13	
40.7%	-2,223	-2,237	-14	
42.0%	-2,276	-2,551	-275	
43.2%	-2,315	-2,580	-265	
44.4%	-2,652	-2,592	60	
45.7%	-2,669	-2,669	0	
46.9%	-2,787	-2,713	73	
48.1%	-2,810	-2,815	-5	
49.4%	-3,065	-2,995	69	
50.6%	-3,453	-3,065	389	
51.9%	-3,500	-3,067	433	
53.1%	-3,500	-3,500	0	
54.3%	-3,500	-3,500	0	
55.6%	-3,500	-3,500	0	
56.8%	-3,500	-3,500	0	
58.0%	-3,500	-3,500	0	
59.3%	-3,500	-3,500	0	
60.5%	-3,500	-3,500	0	
61.7%	-3,500	-3,500	0	
63.0%	-3,500	-3,500	0	
64.2%	-3,500	-3,500	0	
65.4%	-3,552	-3,500	52	
66.7%	-3,709	-3,500	209	
67.9%	-3,887	-3,500	387	
69.1%	-3,894	-3,500	394	
70.4%	-3,985	-3,568	417	
71.6%	-4,411	-3,728	683	
72.8%	-5,000	-3,890	1,110	
74.1%	-5,000	-3,933	1,067	
75.3%	-5,000	-4,341	659	
76.5%	-5,000	-4,469	531	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,332	13,216	-116	-0.9%
1.2%	12,710	13,042	333	2.6%
2.5%	6,458	6,421	-36	-0.6%
3.7%	6,274	6,244	-29	-0.5%
4.9%	5,218	5,063	-155	-3.0%
6.2%	4,918	4,890	-28	-0.6%
7.4%	3,956	3,926	-29	-0.7%
8.6%	3,424	3,424	0	0.0%
9.9%	3,280	3,276	-5	-0.1%
11.1%	3,186	3,186	0	0.0%
12.3%	2,951	2,925	-26	-0.9%
13.6%	2,935	2,920	-15	-0.5%
14.8%	2,817	2,802	-15	-0.6%
16.0%	2,747	2,747	0	0.0%
17.3%	2,486	2,486	0	0.0%
18.5%	2,445	2,445	0	0.0%
19.8%	2,372	2,356	-15	-0.7%
21.0%	2,348	2,348	0	0.0%
22.2%	2,326	2,326	0	0.0%
23.5%	2,253	2,239	-15	-0.6%
24.7%	2,192	2,192	0	0.0%
25.9%	2,190	2,189	0	0.0%
27.2%	2,187	2,187	0	0.0%
28.4%	2,080	2,080	0	0.0%
29.6%	1,961	1,961	0	0.0%
30.9%	1,785	1,672	-113	-6.3%
32.1%	1,672	1,620	-52	-3.1%
33.3%	1,635	1,594	-41	-2.5%
34.6%	1,594	1,485	-110	-6.9%
35.8%	1,485	1,440	-44	-3.0%
37.0%	1,440	1,272	-169	-11.7%
38.3%	1,272	1,161	-110	-8.7%
39.5%	1,161	1,160	-1	-0.1%
40.7%	1,160	1,154	-6	-0.5%
42.0%	1,135	1,135	0	0.0%
43.2%	1,063	1,064	0	0.0%
44.4%	988	988	0	0.0%
45.7%	860	860	0	0.0%
46.9%	840	840	0	0.0%
48.1%	820	817	-2	-0.3%
49.4%	817	754	-64	-7.8%
50.6%	785	635	-150	-19.1%
51.9%	602	602	0	0.0%
53.1%	564	564	0	0.0%
54.3%	461	279	-183	-39.6%
55.6%	277	239	-38	-13.7%
56.8%	249	138	-111	-44.5%
58.0%	150	135	-15	-9.9%
59.3%	135	77	-59	-43.5%
60.5%	77	24	-53	-68.7%
61.7%	24	-71	-95	
63.0%	2	-72	-74	
64.2%	-45	-132	-87	
65.4%	-110	-189	-79	
66.7%	-132	-197	-65	
67.9%	-189	-235	-46	
69.1%	-197	-260	-63	
70.4%	-321	-321	-1	
71.6%	-349	-350	-1	
72.8%	-414	-414	0	
74.1%	-463	-432	31	
75.3%	-521	-463	59	
76.5%	-529	-521	8	
77.8%	-552	-529	23	
79.0%	-573	-552	20	
80.2%	-608	-608	0	
81.5%	-677	-677	0	
82.7%	-724	-724	0	
84.0%	-744	-744	0	
85.2%	-746	-765	-18	
86.4%	-765	-772	-7	
87.7%	-792	-829	-37	
88.9%	-848	-830	18	
90.1%	-982	-1,055	-73	
91.4%	-1,055	-1,101	-45	
92.6%	-1,098	-1,109	-10	
93.8%	-1,101	-1,150	-50	
95.1%	-1,150	-1,150	0	
96.3%	-1,267	-1,267	0	
97.5%	-1,641	-1,550	90	
98.8%	-1,691	-1,899	-208	
100.0%	-2,353	-2,352	0	

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,321	6,611	-709	-9.7%
1.2%	6,533	6,480	-54	-0.8%
2.5%	6,097	5,873	-224	-3.7%
3.7%	5,700	5,462	-238	-4.2%
4.9%	5,218	5,190	-29	-0.5%
6.2%	3,642	3,599	-43	-1.2%
7.4%	3,612	3,587	-25	-0.7%
8.6%	3,334	3,271	-63	-1.9%
9.9%	3,041	3,020	-21	-0.7%
11.1%	2,464	2,464	0	0.0%
12.3%	2,415	2,402	-14	-0.6%
13.6%	2,197	2,176	-20	-0.9%
14.8%	2,022	2,022	0	0.0%
16.0%	1,906	1,883	-23	-1.2%
17.3%	1,767	1,745	-22	-1.2%
18.5%	1,734	1,712	-22	-1.3%
19.8%	1,614	1,614	0	0.0%
21.0%	1,350	1,351	0	0.0%
22.2%	1,055	1,056	1	0.1%
23.5%	1,053	1,032	-21	-2.0%
24.7%	1,024	1,024	0	0.0%
25.9%	896	857	-38	-4.3%
27.2%	849	759	-90	-10.6%
28.4%	652	652	0	0.0%
29.6%	569	557	-12	-2.1%
30.9%	415	415	0	0.0%
32.1%	400	400	0	0.0%
33.3%	388	388	0	0.1%
34.6%	364	364	0	0.0%
35.8%	300	300	0	0.0%
37.0%	236	271	35	14.9%
38.3%	203	236	33	16.0%
39.5%	201	203	2	0.9%
40.7%	190	190	0	-0.1%
42.0%	177	177	0	0.0%
43.2%	132	132	0	0.0%
44.4%	85	83	-2	-2.8%
45.7%	83	60	-23	-27.9%
46.9%	48	48	0	0.3%
48.1%	-69	-69	0	
49.4%	-108	-108	0	
50.6%	-253	-270	-17	
51.9%	-271	-271	0	
53.1%	-345	-345	0	
54.3%	-361	-361	0	
55.6%	-386	-386	0	
56.8%	-402	-461	-59	
58.0%	-461	-507	-46	
59.3%	-476	-512	-36	
60.5%	-524	-521	3	
61.7%	-524	-524	0	
63.0%	-525	-593	-68	
64.2%	-545	-609	-63	
65.4%	-589	-618	-30	
66.7%	-593	-658	-65	
67.9%	-619	-688	-69	
69.1%	-624	-724	-100	
70.4%	-688	-727	-39	
71.6%	-691	-788	-97	
72.8%	-724	-807	-82	
74.1%	-726	-878	-152	
75.3%	-779	-1,006	-228	
76.5%	-788	-1,039	-251	
77.8%	-878	-1,090	-212	
79.0%	-909	-1,110	-201	
80.2%	-1,005	-1,149	-144	
81.5%	-1,039	-1,150	-112	
82.7%	-1,090	-1,150	-60	
84.0%	-1,110	-1,150	-40	
85.2%	-1,117	-1,150	-34	
86.4%	-1,150	-1,150	0	
87.7%	-1,150	-1,150	0	
88.9%	-1,150	-1,150	0	
90.1%	-1,150	-1,150	0	
91.4%	-1,150	-1,264	-114	
92.6%	-1,184	-1,285	-100	
93.8%	-1,264	-1,394	-129	
95.1%	-1,281	-1,459	-178	
96.3%	-1,331	-1,549	-217	
97.5%	-1,395	-1,711	-316	
98.8%	-1,809	-1,805	4	
100.0%	-1,853	-1,853	0	

Table SW-35-b

Old and Middle River, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,073	-1,115	-41	
1.2%	-1,150	-1,150	0	
2.5%	-1,150	-1,150	0	
3.7%	-1,150	-1,150	0	
4.9%	-1,150	-1,150	0	
6.2%	-1,150	-1,150	0	
7.4%	-1,150	-1,150	0	
8.6%	-1,150	-1,150	0	
9.9%	-1,150	-1,150	0	
11.1%	-1,150	-1,150	0	
12.3%	-1,150	-1,150	0	
13.6%	-1,150	-1,150	0	
14.8%	-1,150	-1,150	0	
16.0%	-1,150	-1,150	0	
17.3%	-1,150	-1,150	0	
18.5%	-1,150	-1,150	0	
19.8%	-1,150	-1,150	0	
21.0%	-1,150	-1,150	0	
22.2%	-1,421	-1,458	-38	
23.5%	-1,503	-2,354	-852	
24.7%	-1,865	-3,500	-1,635	
25.9%	-2,280	-3,500	-1,220	
27.2%	-2,627	-3,500	-873	
28.4%	-3,361	-3,500	-139	
29.6%	-3,500	-3,500	0	
30.9%	-3,500	-3,500	0	
32.1%	-3,500	-3,500	0	
33.3%	-3,500	-3,500	0	
34.6%	-3,500	-3,500	0	
35.8%	-3,500	-3,500	0	
37.0%	-3,500	-3,500	0	
38.3%	-3,500	-3,500	0	
39.5%	-3,500	-3,500	0	
40.7%	-3,500	-3,500	0	
42.0%	-3,500	-3,500	0	
43.2%	-3,500	-3,500	0	
44.4%	-3,500	-3,500	0	
45.7%	-3,500	-3,500	0	
46.9%	-3,500	-3,500	0	
48.1%	-3,500	-3,500	0	
49.4%	-3,500	-3,500	0	
50.6%	-3,500	-3,500	0	
51.9%	-3,500	-3,500	0	
53.1%	-3,500	-3,500	0	
54.3%	-3,500	-3,500	0	
55.6%	-3,500	-3,500	0	
56.8%	-3,500	-3,500	0	
58.0%	-3,500	-3,500	0	
59.3%	-3,500	-3,500	0	
60.5%	-3,500	-3,500	0	
61.7%	-3,500	-3,500	0	
63.0%	-3,500	-3,500	0	
64.2%	-3,720	-3,993	-273	
65.4%	-4,076	-4,294	-218	
66.7%	-4,396	-4,475	-78	
67.9%	-4,775	-4,798	-22	
69.1%	-4,866	-4,848	18	
70.4%	-4,957	-4,960	-3	
71.6%	-4,974	-5,000	-26	
72.8%	-4,999	-5,000	-1	
74.1%	-5,000	-5,000	0	
75.3%	-5,000	-5,000	0	
76.5%	-5,000	-5,000	0	
77.8%	-5,000	-5,000	0	
79.0%	-5,000	-5,000	0	
80.2%	-5,000	-5,000	0	
81.5%	-5,000	-5,000	0	
82.7%	-5,000	-5,000	0	
84.0%	-5,000	-5,000	0	
85.2%	-5,000	-5,000	0	
86.4%	-5,000	-5,000	0	
87.7%	-5,000	-5,000	0	
88.9%	-5,000	-5,000	0	
90.1%	-5,000	-5,000	0	
91.4%	-5,000	-5,000	0	
92.6%	-5,000	-5,000	0	
93.8%	-5,000	-5,000	0	
95.1%	-5,000	-5,000	0	
96.3%	-5,000	-5,000	0	
97.5%	-5,000	-5,000	0	
98.8%	-5,000	-5,000	0	
100.0%	-5,000	-5,000	0	

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-633	-632	1	
1.2%	-852	-852	0	
2.5%	-1,370	-1,378	-7	
3.7%	-1,378	-1,847	-469	
4.9%	-1,802	-2,428	-626	
6.2%	-2,126	-2,484	-358	
7.4%	-2,296	-2,512	-217	
8.6%	-2,423	-2,837	-414	
9.9%	-2,481	-3,024	-543	
11.1%	-2,654	-3,449	-795	
12.3%	-2,703	-3,555	-852	
13.6%	-3,054	-3,912	-858	
14.8%	-3,230	-4,270	-1,039	
16.0%	-3,659	-4,382	-723	
17.3%	-3,830	-4,426	-596	
18.5%	-3,873	-4,869	-996	
19.8%	-4,004	-4,928	-923	
21.0%	-4,019	-4,962	-943	
22.2%	-4,288	-5,281	-993	
23.5%	-4,472	-5,717	-1,245	
24.7%	-4,675	-5,751	-1,076	
25.9%	-4,755	-5,806	-1,051	
27.2%	-5,083	-5,834	-751	
28.4%	-5,400	-6,288	-888	
29.6%	-5,810	-6,382	-572	
30.9%	-5,965	-6,596	-631	
32.1%	-6,089	-6,863	-774	
33.3%	-6,089	-6,872	-783	
34.6%	-6,195	-6,902	-707	
35.8%	-6,439	-7,128	-689	
37.0%	-6,678	-7,155	-477	
38.3%	-6,770	-7,167	-397	
39.5%	-6,937	-7,167	-230	
40.7%	-6,999	-7,246	-247	
42.0%	-7,037	-7,372	-335	
43.2%	-7,121	-7,573	-452	
44.4%	-7,249	-7,671	-422	
45.7%	-7,413	-7,917	-504	
46.9%	-7,559	-7,956	-396	
48.1%	-7,602	-8,137	-535	
49.4%	-7,704	-8,160	-456	
50.6%	-7,856	-8,255	-398	
51.9%	-7,971	-8,271	-300	
53.1%	-8,071	-8,286	-215	
54.3%	-8,125	-8,305	-179	
55.6%	-8,137	-8,507	-370	
56.8%	-8,273	-8,630	-356	
58.0%	-8,370	-8,639	-269	
59.3%	-8,415	-8,666	-251	
60.5%	-8,456	-8,693	-237	
61.7%	-8,465	-8,706	-241	
63.0%	-8,490	-8,857	-366	
64.2%	-8,549	-8,864	-314	
65.4%	-8,592	-8,960	-368	
66.7%	-8,639	-9,035	-396	
67.9%	-8,646	-9,047	-401	
69.1%	-8,686	-9,076	-390	
70.4%	-8,705	-9,092	-387	
71.6%	-8,738	-9,130	-392	
72.8%	-8,842	-9,281	-438	
74.1%	-9,106	-9,314	-208	
75.3%	-9,134	-9,454	-320	
76.5%	-9,159	-9,486	-327	
77.8%	-9,332	-9,544	-213	
79.0%	-9,368	-9,620	-252	
80.2%	-9,402	-9,676	-274	
81.5%	-9,414	-9,778	-364	
82.7%	-9,425	-9,825	-401	
84.0%	-9,459	-9,857	-398	
85.2%	-9,762	-9,913	-151	
86.4%	-9,780	-9,936	-156	
87.7%	-9,825	-10,039	-214	
88.9%	-9,833	-10,149	-316	
90.1%	-9,849	-10,219	-370	
91.4%	-10,008	-10,505	-497	
92.6%	-10,021	-10,547	-526	
93.8%	-10,453	-10,837	-384	
95.1%	-10,617	-11,134	-517	
96.3%	-10,752	-11,313	-561	
97.5%	-10,856	-11,347	-491	
98.8%	-11,568	-11,594	-25	
100.0%	-11,693	-11,693	0	

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,888	-1,692	197	
1.2%	-2,116	-1,865	251	
2.5%	-2,278	-1,917	360	
3.7%	-2,293	-2,036	258	
4.9%	-2,475	-2,748	-272	
6.2%	-2,522	-3,143	-621	
7.4%	-2,663	-3,209	-547	
8.6%	-2,815	-3,532	-717	
9.9%	-2,989	-3,618	-628	
11.1%	-3,294	-3,840	-545	
12.3%	-3,382	-4,004	-622	
13.6%	-3,411	-4,172	-761	
14.8%	-3,732	-4,273	-541	
16.0%	-3,949	-4,285	-335	
17.3%	-4,084	-4,310	-227	
18.5%	-4,131	-4,399	-268	
19.8%	-4,243	-4,458	-215	
21.0%	-4,344	-4,468	-124	
22.2%	-4,479	-4,528	-49	
23.5%	-4,663	-4,612	51	
24.7%	-4,766	-4,818	-53	
25.9%	-4,838	-5,014	-176	
27.2%	-5,019	-5,016	4	
28.4%	-5,058	-5,036	22	
29.6%	-5,277	-5,780	-503	
30.9%	-5,755	-6,861	-1,106	
32.1%	-5,839	-7,010	-1,172	
33.3%	-5,848	-7,221	-1,373	
34.6%	-5,892	-7,272	-1,380	
35.8%	-6,181	-7,315	-1,134	
37.0%	-6,244	-7,339	-1,095	
38.3%	-6,252	-7,909	-1,657	
39.5%	-6,687	-7,920	-1,233	
40.7%	-7,086	-8,112	-1,027	
42.0%	-7,388	-8,342	-955	
43.2%	-7,444	-8,393	-949	
44.4%	-7,515	-8,436	-920	
45.7%	-7,961	-8,537	-576	
46.9%	-7,990	-8,595	-605	
48.1%	-8,061	-8,709	-647	
49.4%	-8,115	-8,735	-620	
50.6%	-8,117	-8,767	-650	
51.9%	-8,250	-8,782	-532	
53.1%	-8,487	-8,844	-357	
54.3%	-8,539	-8,852	-313	
55.6%	-8,579	-8,973	-394	
56.8%	-8,596	-9,311	-715	
58.0%	-8,605	-9,314	-709	
59.3%	-8,768	-9,454	-687	
60.5%	-8,897	-9,455	-559	
61.7%	-8,926	-9,478	-552	
63.0%	-9,070	-9,609	-539	
64.2%	-9,320	-9,772	-452	
65.4%	-9,414	-9,864	-450	
66.7%	-9,451	-9,868	-417	
67.9%	-9,495	-10,114	-619	
69.1%	-9,530	-10,145	-614	
70.4%	-9,556	-10,285	-729	
71.6%	-9,567	-10,308	-741	
72.8%	-9,742	-10,439	-697	
74.1%	-9,818	-10,455	-637	
75.3%	-9,825	-10,556	-730	
76.5%	-9,925	-10,560	-635	
77.8%	-9,968	-10,589	-620	
79.0%	-10,218	-10,599	-381	
80.2%	-10,285	-10,615	-330	
81.5%	-10,308	-10,657	-349	
82.7%	-10,422	-10,666	-244	
84.0%	-10,437	-10,695	-258	
85.2%	-10,439	-10,720	-281	
86.4%	-10,455	-10,790	-335	
87.7%	-10,485	-10,791	-306	
88.9%	-10,556	-10,794	-239	
90.1%	-10,588	-10,827	-239	
91.4%	-10,590	-10,835	-245	
92.6%	-10,720	-10,857	-137	
93.8%	-10,794	-10,885	-91	
95.1%	-10,900	-10,899	1	
96.3%	-10,907	-10,907	0	
97.5%	-10,923	-10,923	0	
98.8%	-10,924	-10,924	0	
100.0%	-10,998	-10,998	0	

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	-1,404	-1,552	-148	
1.2%	-1,555	-1,859	-305	
2.5%	-1,646	-2,064	-417	
3.7%	-1,784	-2,508	-724	
4.9%	-1,945	-2,545	-601	
6.2%	-2,393	-2,701	-308	
7.4%	-2,466	-2,740	-273	
8.6%	-3,033	-3,107	-75	
9.9%	-3,115	-3,262	-147	
11.1%	-3,179	-3,270	-90	
12.3%	-3,202	-3,681	-479	
13.6%	-3,370	-3,909	-539	
14.8%	-3,513	-4,073	-559	
16.0%	-3,514	-4,254	-739	
17.3%	-3,774	-4,470	-697	
18.5%	-3,783	-4,566	-783	
19.8%	-3,974	-5,208	-1,234	
21.0%	-4,023	-5,546	-1,523	
22.2%	-4,310	-5,714	-1,404	
23.5%	-4,325	-5,727	-1,402	
24.7%	-4,353	-5,980	-1,627	
25.9%	-4,724	-6,023	-1,300	
27.2%	-4,747	-6,319	-1,572	
28.4%	-4,754	-6,386	-1,632	
29.6%	-5,088	-6,539	-1,451	
30.9%	-5,216	-6,571	-1,355	
32.1%	-5,489	-6,655	-1,166	
33.3%	-5,517	-6,661	-1,144	
34.6%	-5,663	-6,723	-1,059	
35.8%	-5,728	-6,771	-1,042	
37.0%	-5,811	-6,804	-993	
38.3%	-5,927	-6,828	-902	
39.5%	-6,089	-6,829	-741	
40.7%	-6,163	-7,001	-838	
42.0%	-6,208	-7,165	-957	
43.2%	-6,241	-7,269	-1,028	
44.4%	-6,299	-7,329	-1,031	
45.7%	-6,328	-7,378	-1,050	
46.9%	-6,652	-7,477	-825	
48.1%	-6,702	-7,557	-855	
49.4%	-6,771	-7,648	-877	
50.6%	-6,772	-7,785	-1,014	
51.9%	-6,846	-7,855	-1,010	
53.1%	-6,886	-7,933	-1,047	
54.3%	-6,916	-7,980	-1,064	
55.6%	-7,025	-8,001	-976	
56.8%	-7,179	-8,029	-851	
58.0%	-7,182	-8,165	-983	
59.3%	-7,288	-8,173	-885	
60.5%	-7,369	-8,203	-834	
61.7%	-7,507	-8,260	-753	
63.0%	-7,550	-8,486	-936	
64.2%	-7,595	-8,505	-910	
65.4%	-7,647	-8,525	-878	
66.7%	-7,778	-8,636	-858	
67.9%	-7,800	-8,859	-1,059	
69.1%	-7,833	-8,881	-1,048	
70.4%	-8,070	-8,948	-878	
71.6%	-8,157	-8,982	-825	
72.8%	-8,204	-9,007	-803	
74.1%	-8,208	-9,214	-1,006	
75.3%	-8,372	-9,305	-934	
76.5%	-8,472	-9,381	-909	
77.8%	-8,521	-9,413	-892	
79.0%	-8,541	-9,545	-1,003	
80.2%	-8,596	-9,549	-953	
81.5%	-8,700	-9,698	-998	
82.7%	-8,856	-9,731	-874	
84.0%	-8,882	-9,780	-898	
85.2%	-8,989	-9,785	-795	
86.4%	-9,016	-9,785	-769	
87.7%	-9,090	-9,850	-760	
88.9%	-9,115	-9,920	-805	
90.1%	-9,191	-9,953	-762	
91.4%	-9,568	-9,998	-429	
92.6%	-9,656	-10,091	-436	
93.8%	-9,972	-10,097	-125	
95.1%	-10,129	-10,143	-14	
96.3%	-10,143	-10,362	-219	
97.5%	-10,324	-10,383	-58	
98.8%	-10,383	-10,461	-78	
100.0%	-10,455	-10,464	-9	

Figure SW-36-b
Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Probability of Exceedance

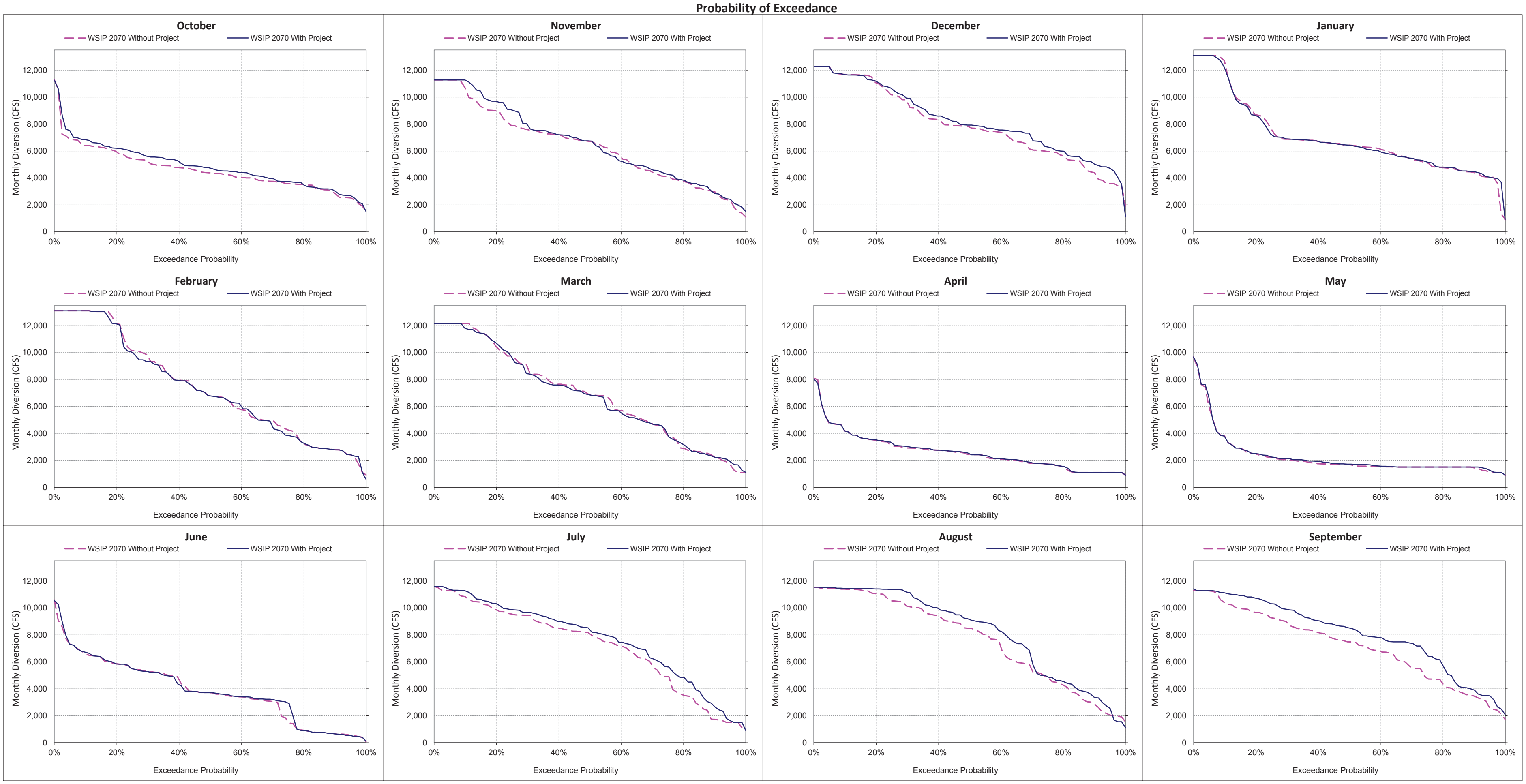


Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,252	-28	-0.2%
1.2%	10,597	10,609	11	0.1%
2.5%	7,246	8,667	1,421	19.6%
3.7%	7,123	7,617	494	6.9%
4.9%	6,888	7,522	634	9.2%
6.2%	6,837	6,998	161	2.4%
7.4%	6,807	6,992	184	2.7%
8.6%	6,550	6,876	326	5.0%
9.9%	6,409	6,850	441	6.9%
11.1%	6,401	6,800	398	6.2%
12.3%	6,358	6,624	266	4.2%
13.6%	6,327	6,596	268	4.2%
14.8%	6,284	6,531	247	3.9%
16.0%	6,236	6,372	137	2.2%
17.3%	6,160	6,352	192	3.1%
18.5%	6,071	6,227	156	2.6%
19.8%	5,973	6,211	238	4.0%
21.0%	5,742	6,191	449	7.8%
22.2%	5,721	6,128	407	7.1%
23.5%	5,518	6,083	565	10.2%
24.7%	5,448	5,956	508	9.3%
25.9%	5,393	5,906	513	9.5%
27.2%	5,363	5,871	509	9.5%
28.4%	5,348	5,720	372	6.9%
29.6%	5,317	5,615	298	5.6%
30.9%	5,052	5,564	512	10.1%
32.1%	4,993	5,553	560	11.2%
33.3%	4,928	5,545	618	12.5%
34.6%	4,926	5,522	596	12.1%
35.8%	4,913	5,398	484	9.9%
37.0%	4,909	5,363	455	9.3%
38.3%	4,789	5,358	568	11.9%
39.5%	4,777	5,280	503	10.5%
40.7%	4,756	5,084	328	6.9%
42.0%	4,734	4,922	187	4.0%
43.2%	4,712	4,904	192	4.1%
44.4%	4,614	4,896	282	6.1%
45.7%	4,557	4,880	323	7.1%
46.9%	4,445	4,853	408	9.2%
48.1%	4,407	4,788	381	8.6%
49.4%	4,386	4,760	373	8.5%
50.6%	4,369	4,696	326	7.5%
51.9%	4,329	4,596	267	6.2%
53.1%	4,327	4,540	213	4.9%
54.3%	4,274	4,522	248	5.8%
55.6%	4,240	4,514	274	6.5%
56.8%	4,202	4,484	282	6.7%
58.0%	4,071	4,483	412	10.1%
59.3%	4,044	4,402	358	8.9%
60.5%	4,026	4,397	371	9.2%
61.7%	4,007	4,378	371	9.2%
63.0%	4,006	4,272	266	6.6%
64.2%	3,946	4,170	225	5.7%
65.4%	3,837	4,159	322	8.4%
66.7%	3,792	4,120	328	8.7%
67.9%	3,778	4,031	254	6.7%
69.1%	3,758	3,958	200	5.3%
70.4%	3,747	3,943	195	5.2%
71.6%	3,690	3,775	86	2.3%
72.8%	3,687	3,750	63	1.7%
74.1%	3,593	3,736	143	4.0%
75.3%	3,571	3,725	154	4.3%
76.5%	3,558	3,696	138	3.9%
77.8%	3,538	3,667	128	3.6%
79.0%	3,522	3,664	141	4.0%
80.2%	3,504	3,439	-65	-1.9%
81.5%	3,475	3,345	-130	-3.7%
82.7%	3,461	3,321	-140	-4.0%
84.0%	3,201	3,290	89	2.8%
85.2%	3,184	3,212	28	0.9%
86.4%	3,122	3,189	66	2.1%
87.7%	3,113	3,179	66	2.1%
88.9%	3,022	3,170	148	4.9%
90.1%	2,841	3,016	175	6.1%
91.4%	2,572	2,776	204	7.9%
92.6%	2,552	2,735	183	7.2%
93.8%	2,541	2,706	165	6.5%
95.1%	2,524	2,685	162	6.4%
96.3%	2,372	2,502	130	5.5%
97.5%	2,088	2,209	121	5.8%
98.8%	1,936	2,067	131	6.8%
100.0%	1,469	1,516	47	3.2%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,280	0	0.0%
1.2%	11,280	11,280	0	0.0%
2.5%	11,280	11,280	0	0.0%
3.7%	11,280	11,280	0	0.0%
4.9%	11,280	11,280	0	0.0%
6.2%	11,280	11,280	0	0.0%
7.4%	11,280	11,280	0	0.0%
8.6%	11,155	11,280	125	1.1%
9.9%	10,711	11,280	569	5.3%
11.1%	9,980	11,133	1,153	11.6%
12.3%	9,883	10,883	1,000	10.1%
13.6%	9,685	10,523	838	8.7%
14.8%	9,317	10,457	1,140	12.2%
16.0%	9,179	9,931	752	8.2%
17.3%	9,033	9,796	763	8.4%
18.5%	9,020	9,694	675	7.5%
19.8%	9,000	9,692	691	7.7%
21.0%	8,903	9,603	700	7.9%
22.2%	8,402	9,578	1,176	14.0%
23.5%	8,136	9,095	959	11.8%
24.7%	7,909	9,061	1,151	14.6%
25.9%	7,868	8,959	1,091	13.9%
27.2%	7,751	8,863	1,112	14.3%
28.4%	7,681	8,068	387	5.0%
29.6%	7,597	8,041	444	5.8%
30.9%	7,552	7,629	77	1.0%
32.1%	7,547	7,544	-3	0.0%
33.3%	7,445	7,541	96	1.3%
34.6%	7,361	7,515	153	2.1%
35.8%	7,269	7,500	231	3.2%
37.0%	7,268	7,361	93	1.3%
38.3%	7,244	7,336	92	1.3%
39.5%	7,176	7,222	46	0.6%
40.7%	7,161	7,204	43	0.6%
42.0%	6,989	7,181	192	2.8%
43.2%	6,918	7,140	222	3.2%
44.4%	6,905	6,993	88	1.3%
45.7%	6,871	6,983	113	1.6%
46.9%	6,773	6,822	49	0.7%
48.1%	6,768	6,754	-14	-0.2%
49.4%	6,726	6,747	22	0.3%
50.6%	6,690	6,732	42	0.6%
51.9%	6,529	6,415	-114	-1.8%
53.1%	6,470	6,292	-178	-2.7%
54.3%	6,301	5,880	-422	-6.7%
55.6%	6,228	5,827	-400	-6.4%
56.8%	5,903	5,642	-261	-4.4%
58.0%	5,887	5,596	-292	-5.0%
59.3%	5,749	5,290	-459	-8.0%
60.5%	5,403	5,217	-186	-3.4%
61.7%	5,366	5,083	-283	-5.3%
63.0%	5,086	5,055	-30	-0.6%
64.2%	4,947	4,963	16	0.3%
65.4%	4,727	4,940	212	4.5%
66.7%	4,701	4,914	213	4.5%
67.9%	4,570	4,850	280	6.1%
69.1%	4,553	4,688	134	2.9%
70.4%	4,369	4,579	211	4.8%
71.6%	4,293	4,559	265	6.2%
72.8%	4,151	4,432	281	6.8%
74.1%	4,119	4,316	196	4.8%
75.3%	4,082	4,252	171	4.2%
76.5%	3,917	4,218	301	7.7%
77.8%	3,883	3,927	44	1.1%
79.0%	3,785	3,878	93	2.5%
80.2%	3,725	3,831	106	2.9%
81.5%	3,650	3,674	25	0.7%
82.7%	3,494	3,597	103	2.9%
84.0%	3,259	3,587	328	10.0%
85.2%	3,252	3,459	207	6.4%
86.4%	3,139	3,418	278	8.9%
87.7%	3,074	3,365	291	9.5%
88.9%	3,036	3,035	-1	0.0%
90.1%	2,951	2,847	-104	-3.5%
91.4%	2,688	2,794	105	3.9%
92.6%	2,448	2,580	131	5.4%
93.8%	2,389	2,462	73	3.1%
95.1%	2,339	2,418	79	3.4%
96.3%	1,793	2,111	318	17.7%
97.5%	1,500	1,990	490	32.7%
98.8%	1,384	1,813	429	31.0%
100.0%	1,100	1,500	400	36.4%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,278	12,278	0	0.0%
1.2%	12,278	12,278	0	0.0%
2.5%	12,278	12,278	0	0.0%
3.7%	12,278	12,278	0	0.0%
4.9%	12,278	12,278	0	0.0%
6.2%	11,824	11,804	-20	-0.2%
7.4%	11,748	11,765	18	0.1%
8.6%	11,717	11,748	31	0.3%
9.9%	11,689	11,663	-25	-0.2%
11.1%	11,686	11,654	-31	-0.3%
12.3%	11,663	11,648	-15	-0.1%
13.6%	11,654	11,642	-12	-0.1%
14.8%	11,648	11,616	-32	-0.3%
16.0%	11,642	11,596	-47	-0.4%
17.3%	11,616	11,300	-316	-2.7%
18.5%	11,498	11,284	-213	-1.9%
19.8%	11,086	11,205	119	1.1%
21.0%	10,965	11,043	77	0.7%
22.2%	10,713	10,829	116	1.1%
23.5%	10,495	10,787	292	2.8%
24.7%	10,185	10,689	504	5.0%
25.9%	10,137	10,454	318	3.1%
27.2%	10,054	10,254	200	2.0%
28.4%	9,812	10,185	372	3.8%
29.6%	9,803	9,928	124	1.3%
30.9%	9,233	9,920	687	7.4%
32.1%	9,195	9,486	292	3.2%
33.3%	9,046	9,351	305	3.4%
34.6%	8,711	9,195	484	5.6%
35.8%	8,508	9,046	538	6.3%
37.0%	8,400	8,711	311	3.7%
38.3%	8,373	8,677	304	3.6%
39.5%	8,351	8,603	252	3.0%
40.7%	8,199	8,596	397	4.8%
42.0%	7,943	8,467	524	6.6%
43.2%	7,936	8,378	442	5.6%
44.4%	7,892	8,224	333	4.2%
45.7%	7,872	8,199	327	4.2%
46.9%	7,865	7,991	125	1.6%
48.1%	7,847	7,943	96	1.2%
49.4%	7,838	7,936	99	1.3%
50.6%	7,705	7,925	220	2.9%
51.9%	7,688	7,892	203	2.6%
53.1%	7,663	7,847	184	2.4%
54.3%	7,561	7,838	277	3.7%
55.6%	7,477	7,705	228	3.0%
56.8%	7,457	7,688	231	3.1%
58.0%	7,443	7,645	202	2.7%
59.3%	7,407	7,561	153	2.1%
60.5%	7,375	7,557	182	2.5%
61.7%	7,198	7,551	353	4.9%
63.0%	6,959	7,488	530	7.6%
64.2%	6,728	7,472	745	11.1%
65.4%	6,675	7,457	783	11.7%
66.7%	6,655	7,422	767	11.5%
67.9%	6,571	7,333	762	11.6%
69.1%	6,169	7,331	1,163	18.9%
70.4%	6,072	6,759	687	11.3%
71.6%	6,065	6,728	662	10.9%
72.8%	6,020	6,688	668	11.1%
74.1%	5,997	6,351	354	5.9%
75.3%	5,953	6,291	338	5.7%
76.5%	5,915	6,212	297	5.0%
77.8%	5,891	6,039	148	2.5%
79.0%	5,711	6,003	292	5.1%
80.2%	5,642	5,986	344	6.1%
81.5%	5,353	5,657	304	5.7%
82.7%	5,315	5,616	301	5.7%
84.0%	5,309	5,587	278	5.2%
85.2%	5,265	5,572	306	5.8%
86.4%	4,937	5,307	370	7.5%
87.7%	4,540	5,239	699	15.4%
88.9%	4,443	5,205	762	17.1%
90.1%	4,393	5,015	622	14.2%
91.4%	3,882	4,927	1,045	26.9%
92.6%	3,834	4,831	998	26.0%
93.8%	3,601	4,831	1,229	34.1%
95.1%	3,590	4,715	1,125	31.4%
96.3%	3,584	4,502	918	25.6%
97.5%	3,426	4,050	624	18.2%
98.8%	3,380	3,526	145	4.3%
100.0%	1,928	1,118	-809	-42.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,100	13,100	0	0.0%
1.2%	13,100	13,100	0	0.0%
2.5%	13,100	13,100	0	0.0%
3.7%	13,100	13,100	0	0.0%
4.9%	13,100	13,100	0	0.0%
6.2%	13,100	13,100	0	0.0%
7.4%	13,100	12,943	-157	-1.2%
8.6%	12,950	12,700	-250	-1.9%
9.9%	12,719	12,202	-517	-4.1%
11.1%	11,427	11,442	15	0.1%
12.3%	10,600	10,576	-24	-0.2%
13.6%	9,973	9,827	-146	-1.5%
14.8%	9,761	9,542	-219	-2.2%
16.0%	9,542	9,447	-95	-1.0%
17.3%	9,471	9,291	-180	-1.9%
18.5%	9,073	8,706	-368	-4.1%
19.8%	8,706	8,650	-56	-0.6%
21.0%	8,650	8,524	-126	-1.5%
22.2%	8,556	8,177	-379	-4.4%
23.5%	8,177	7,740	-437	-5.3%
24.7%	7,740	7,279	-461	-6.0%
25.9%	7,280	7,069	-211	-2.9%
27.2%	7,023	7,047	24	0.3%
28.4%	6,901	7,023	122	1.8%
29.6%	6,884	6,903	19	0.3%
30.9%	6,881	6,883	3	0.0%
32.1%	6,875	6,858	-17	-0.2%
33.3%	6,848	6,855	7	0.1%
34.6%	6,827	6,848	20	0.3%
35.8%	6,806	6,828	22	0.3%
37.0%	6,806	6,807	1	0.0%
38.3%	6,806	6,750	-56	-0.8%
39.5%	6,746	6,747	0	0.0%
40.7%	6,646	6,646	0	0.0%
42.0%	6,638	6,638	0	0.0%
43.2%	6,601	6,613	12	0.2%
44.4%	6,601	6,572	-29	-0.4%
45.7%	6,572	6,539	-33	-0.5%
46.9%	6,539	6,489	-50	-0.8%
48.1%	6,453	6,470	17	0.3%
49.4%	6,442	6,443	1	0.0%
50.6%	6,429	6,429	0	0.0%
51.9%	6,390	6,339	-52	-0.8%
53.1%	6,338	6,312	-26	-0.4%
54.3%	6,312	6,251	-61	-1.0%
55.6%	6,288	6,141	-147	-2.3%
56.8%	6,275	6,091	-184	-2.9%
58.0%	6,247	6,046	-201	-3.2%
59.3%	6,198	6,025	-173	-2.8%
60.5%	6,091	5,881	-210	-3.4%
61.7%	6,041	5,827	-214	-3.6%
63.0%	5,907	5,779	-128	-2.2%
64.2%	5,827	5,750	-76	-1.3%
65.4%	5,660	5,620	-39	-0.7%
66.7%	5,630	5,572	-58	-1.0%
67.9%	5,572	5,563	-9	-0.2%
69.1%	5,469	5,475	6	0.1%
70.4%	5,339	5,469	130	2.4%
71.6%	5,322	5,339	17	0.3%
72.8%	5,253	5,322	69	1.3%
74.1%	5,151	5,253	102	2.0%
75.3%	5,108	5,151	44	0.9%
76.5%	4,841	5,108	267	5.5%
77.8%	4,811	4,841	30	0.6%
79.0%	4,784	4,811	26	0.5%
80.2%	4,759	4,800	40	0.8%
81.5%	4,742	4,784	43	0.9%
82.7%	4,714	4,759	46	1.0%
84.0%	4,661	4,742	81	1.7%
85.2%	4,570	4,530	-40	-0.9%
86.4%	4,509	4,513	4	0.1%
87.7%	4,459	4,509	51	1.1%
88.9%	4,450	4,455	5	0.1%
90.1%	4,397	4,450	54	1.2%
91.4%	4,306	4,394	88	2.0%
92.6%	4,118	4,306	187	4.6%
93.8%	4,080	4,114	34	0.8%
95.1%	4,058	4,060	3	0.1%
96.3%	4,053	4,006	-47	-1.2%
97.5%	3,598	3,956	358	10.0%
98.8%	1,333	3,691	2,358	176.9%
100.0%	900	900	0	0.0%

Table SW-36-b
Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,100	13,100	0	0.0%
1.2%	13,100	13,100	0	0.0%
2.5%	13,100	13,100	0	0.0%
3.7%	13,100	13,100	0	0.0%
4.9%	13,100	13,100	0	0.0%
6.2%	13,100	13,100	0	0.0%
7.4%	13,100	13,100	0	0.0%
8.6%	13,100	13,100	0	0.0%
9.9%	13,100	13,100	0	0.0%
11.1%	13,100	13,100	0	0.0%
12.3%	13,100	13,037	-63	-0.5%
13.6%	13,037	13,037	0	0.0%
14.8%	13,037	13,037	0	0.0%
16.0%	13,037	13,037	0	0.0%
17.3%	13,037	12,628	-409	-3.1%
18.5%	12,650	12,163	-486	-3.8%
19.8%	12,165	12,133	-32	-0.3%
21.0%	12,080	12,051	-28	-0.2%
22.2%	11,066	10,418	-648	-5.9%
23.5%	10,418	10,101	-317	-3.0%
24.7%	10,155	10,035	-120	-1.2%
25.9%	10,127	9,823	-304	-3.0%
27.2%	10,094	9,454	-640	-6.3%
28.4%	9,959	9,453	-506	-5.1%
29.6%	9,854	9,329	-524	-5.3%
30.9%	9,338	9,326	-12	-0.1%
32.1%	9,326	9,129	-196	-2.1%
33.3%	9,071	9,071	0	0.0%
34.6%	9,030	8,598	-431	-4.8%
35.8%	8,561	8,561	0	0.0%
37.0%	8,302	8,302	0	0.0%
38.3%	8,036	7,973	-63	-0.8%
39.5%	7,973	7,932	-41	-0.5%
40.7%	7,930	7,899	-31	-0.4%
42.0%	7,899	7,889	-10	-0.1%
43.2%	7,889	7,677	-212	-2.7%
44.4%	7,494	7,494	0	0.0%
45.7%	7,188	7,188	0	0.0%
46.9%	7,170	7,173	3	0.0%
48.1%	7,049	7,054	5	0.1%
49.4%	6,800	6,800	0	0.0%
50.6%	6,751	6,751	0	0.0%
51.9%	6,728	6,728	0	0.0%
53.1%	6,708	6,656	-52	-0.8%
54.3%	6,656	6,625	-31	-0.5%
55.6%	6,480	6,480	0	0.0%
56.8%	6,235	6,303	68	1.1%
58.0%	5,818	6,252	433	7.4%
59.3%	5,816	6,235	419	7.2%
60.5%	5,739	5,818	79	1.4%
61.7%	5,693	5,816	123	2.2%
63.0%	5,251	5,579	328	6.2%
64.2%	5,136	5,251	115	2.2%
65.4%	5,091	4,998	-93	-1.8%
66.7%	4,998	4,975	-23	-0.5%
67.9%	4,964	4,957	-7	-0.1%
69.1%	4,957	4,919	-38	-0.8%
70.4%	4,912	4,342	-570	-11.6%
71.6%	4,598	4,248	-350	-7.6%
72.8%	4,522	4,164	-358	-7.9%
74.1%	4,342	3,875	-467	-10.8%
75.3%	4,221	3,826	-395	-9.4%
76.5%	4,164	3,752	-412	-9.9%
77.8%	3,826	3,725	-102	-2.7%
79.0%	3,392	3,392	0	0.0%
80.2%	3,175	3,241	66	2.1%
81.5%	3,121	3,125	3	0.1%
82.7%	2,970	2,960	-11	-0.4%
84.0%	2,942	2,942	0	0.0%
85.2%	2,898	2,898	0	0.0%
86.4%	2,898	2,898	0	0.0%
87.7%	2,860	2,860	0	0.0%
88.9%	2,817	2,817	0	0.0%
90.1%	2,781	2,781	0	0.0%
91.4%	2,772	2,767	-5	-0.2%
92.6%	2,698	2,698	0	0.0%
93.8%	2,437	2,437	0	0.0%
95.1%	2,405	2,405	0	0.0%
96.3%	2,248	2,313	65	2.9%
97.5%	1,738	2,248	510	29.4%
98.8%	1,100	1,100	0	0.0%
100.0%	918	607	-311	-33.9%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,161	12,161	0	0.0%
1.2%	12,161	12,161	0	0.0%
2.5%	12,161	12,161	0	0.0%
3.7%	12,161	12,161	0	0.0%
4.9%	12,161	12,161	0	0.0%
6.2%	12,161	12,161	0	0.0%
7.4%	12,161	12,161	0	0.0%
8.6%	12,161	12,161	0	0.0%
9.9%	12,161	11,802	-359	-3.0%
11.1%	12,161	11,714	-446	-3.7%
12.3%	11,844	11,711	-133	-1.1%
13.6%	11,721	11,494	-226	-1.9%
14.8%	11,434	11,434	0	0.0%
16.0%	11,401	11,401	0	0.0%
17.3%	11,189	11,189	0	0.0%
18.5%	10,911	10,911	0	0.0%
19.8%	10,480	10,726	246	2.4%
21.0%	10,187	10,480	293	2.9%
22.2%	10,058	10,188	130	1.3%
23.5%	9,751	10,063	312	3.2%
24.7%	9,746	9,751	5	0.1%
25.9%	9,556	9,250	-305	-3.2%
27.2%	9,250	9,164	-87	-0.9%
28.4%	9,109	9,082	-27	-0.3%
29.6%	9,082	8,438	-644	-7.1%
30.9%	8,400	8,400	0	0.0%
32.1%	8,395	8,302	-93	-1.1%
33.3%	8,390	8,130	-260	-3.1%
34.6%	8,279	7,835	-444	-5.4%
35.8%	8,130	7,743	-387	-4.8%
37.0%	7,835	7,649	-187	-2.4%
38.3%	7,684	7,592	-92	-1.2%
39.5%	7,649	7,591	-58	-0.8%
40.7%	7,649	7,572	-77	-1.0%
42.0%	7,592	7,507	-86	-1.1%
43.2%	7,591	7,369	-222	-2.9%
44.4%	7,576	7,219	-357	-4.7%
45.7%	7,219	7,168	-52	-0.7%
46.9%	7,153	7,153	0	0.0%
48.1%	7,123	6,958	-165	-2.3%
49.4%	6,916	6,873	-43	-0.6%
50.6%	6,873	6,821	-52	-0.8%
51.9%	6,821	6,808	-14	-0.2%
53.1%	6,817	6,743	-74	-1.1%
54.3%	6,808	6,691	-117	-1.7%
55.6%	6,691	5,775	-916	-13.7%
56.8%	6,416	5,695	-721	-11.2%
58.0%	5,775	5,695	-80	-1.4%
59.3%	5,695	5,670	-25	-0.4%
60.5%	5,670	5,429	-240	-4.2%
61.7%	5,429	5,286	-144	-2.6%
63.0%	5,390	5,170	-220	-4.1%
64.2%	5,311	5,161	-150	-2.8%
65.4%	5,161	5,054	-107	-2.1%
66.7%	5,054	4,944	-110	-2.2%
67.9%	4,944	4,827	-117	-2.4%
69.1%	4,823	4,770	-54	-1.1%
70.4%	4,654	4,654	0	0.0%
71.6%	4,594	4,645	51	1.1%
72.8%	4,583	4,583	0	0.0%
74.1%	4,118	4,321	203	4.9%
75.3%	3,733	3,733	0	0.0%
76.5%	3,729	3,556	-173	-4.7%
77.8%	3,485	3,428	-57	-1.6%
79.0%	2,919	3,291	372	12.7%
80.2%	2,887	3,143	256	8.9%
81.5%	2,747	2,919	172	6.3%
82.7%	2,730	2,666	-63	-2.3%
84.0%	2,666	2,656	-11	-0.4%
85.2%	2,656	2,524	-132	-5.0%
86.4%	2,535	2,517	-18	-0.7%
87.7%	2,524	2,412	-111	-4.4%
88.9%	2,412	2,328	-85	-3.5%
90.1%	2,214	2,219	5	0.2%
91.4%	2,144	2,214	70	3.3%
92.6%	1,990	2,144	153	7.7%
93.8%	1,886	2,079	193	10.2%
95.1%	1,652	1,886	233	14.1%
96.3%	1,248	1,684	437	35.0%
97.5%	1,100	1,652	552	50.2%
98.8%	1,100	1,248	148	13.4%
100.0%	1,100	1,100	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,098	8,057	-42	-0.5%
1.2%	7,975	7,700	-275	-3.5%
2.5%	6,170	6,164	-6	-0.1%
3.7%	5,312	5,296	-16	-0.3%
4.9%	4,724	4,790	66	1.4%
6.2%	4,705	4,724	19	0.4%
7.4%	4,674	4,689	15	0.3%
8.6%	4,667	4,649	-17	-0.4%
9.9%	4,190	4,174	-16	-0.4%
11.1%	4,125	4,107	-17	-0.4%
12.3%	3,867	3,865	-3	-0.1%
13.6%	3,865	3,863	-2	0.0%
14.8%	3,686	3,686	0	0.0%
16.0%	3,606	3,624	18	0.5%
17.3%	3,534	3,606	72	2.0%
18.5%	3,533	3,534	1	0.0%
19.8%	3,495	3,533	38	1.1%
21.0%	3,477	3,467	-10	-0.3%
22.2%	3,381	3,450	69	2.1%
23.5%	3,365	3,365	1	0.0%
24.7%	3,119	3,349	230	7.4%
25.9%	3,056	3,119	63	2.1%
27.2%	3,046	3,090	44	1.4%
28.4%	2,982	3,056	74	2.5%
29.6%	2,921	3,046	125	4.3%
30.9%	2,912	2,982	70	2.4%
32.1%	2,904	2,956	53	1.8%
33.3%	2,895	2,921	26	0.9%
34.6%	2,880	2,912	32	1.1%
35.8%	2,802	2,880	78	2.8%
37.0%	2,766	2,879	113	4.1%
38.3%	2,763	2,766	3	0.1%
39.5%	2,757	2,764	6	0.2%
40.7%	2,739	2,757	18	0.7%
42.0%	2,697	2,724	28	1.0%
43.2%	2,674	2,697	23	0.8%
44.4%	2,646	2,674	28	1.1%
45.7%	2,602	2,646	44	1.7%
46.9%	2,594	2,636	42	1.6%
48.1%	2,544	2,594	50	2.0%
49.4%	2,423	2,538	115	4.8%
50.6%	2,417	2,417	0	0.0%
51.9%	2,416	2,413	-3	-0.1%
53.1%	2,413	2,402	-11	-0.5%
54.3%	2,375	2,375	0	0.0%
55.6%	2,213	2,322	110	5.0%
56.8%	2,128	2,213	84	4.0%
58.0%	2,115	2,128	13	0.6%
59.3%	2,083	2,121	38	1.8%
60.5%	2,082	2,115	33	1.6%
61.7%	2,060	2,082	23	1.1%
63.0%	2,006	2,067	61	3.0%
64.2%	1,993	2,060	67	3.4%
65.4%	1,983	2,020	37	1.9%
66.7%	1,901	1,993	92	4.9%
67.9%	1,860	1,901	40	2.2%
69.1%	1,784	1,860	77	4.3%
70.4%	1,778	1,784	6	0.3%
71.6%	1,776	1,776	0	0.0%
72.8%	1,758	1,766	8	0.5%
74.1%	1,747	1,736	-11	-0.6%
75.3%	1,711	1,711	0	0.0%
76.5%	1,710	1,710	0	0.0%
77.8%	1,622	1,622	0	0.0%
79.0%	1,584	1,584	0	0.0%
80.2%	1,473	1,550	76	5.2%
81.5%	1,266	1,410	145	11.4%
82.7%	1,133	1,162	29	2.5%
84.0%	1,100	1,128	28	2.5%
85.2%	1,100	1,100	0	0.0%
86.4%	1,100	1,100	0	0.0%
87.7%	1,100	1,100	0	0.0%
88.9%	1,100	1,100	0	0.0%
90.1%	1,100	1,100	0	0.0%
91.4%	1,100	1,100	0	0.0%
92.6%	1,100	1,100	0	0.0%
93.8%	1,100	1,100	0	0.0%
95.1%	1,100	1,100	0	0.0%
96.3%	1,100	1,100	0	0.0%
97.5%	1,100	1,100	0	0.0%
98.8%	1,100	1,100	0	0.0%
100.0%	900	900	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,664	9,664	0	0.0%
1.2%	8,938	9,109	171	1.9%
2.5%	7,629	7,636	7	0.1%
3.7%	7,441	7,622	182	2.4%
4.9%	5,953	6,693	740	12.4%
6.2%	5,041	5,025	-16	-0.3%
7.4%	4,184	4,160	-24	-0.6%
8.6%	3,869	3,848	-22	-0.6%
9.9%	3,825	3,804	-22	-0.6%
11.1%	3,308	3,300	-8	-0.3%
12.3%	3,147	3,147	0	0.0%
13.6%	2,919	2,919	0	0.0%
14.8%	2,908	2,907	0	0.0%
16.0%	2,802	2,781	-21	-0.7%
17.3%	2,528	2,696	168	6.6%
18.5%	2,527	2,529	1	0.0%
19.8%	2,494	2,504	10	0.4%
21.0%	2,394	2,471	77	3.2%
22.2%	2,390	2,394	4	0.2%
23.5%	2,252	2,367	116	5.1%
24.7%	2,222	2,252	30	1.4%
25.9%	2,114	2,222	108	5.1%
27.2%	2,109	2,150	41	2.0%
28.4%	2,050	2,121	71	3.4%
29.6%	2,048	2,115	67	3.3%
30.9%	2,042	2,112	69	3.4%
32.1%	1,999	2,050	51	2.6%
33.3%	1,951	2,048	97	5.0%
34.6%	1,937	2,042	106	5.5%
35.8%	1,917	1,999	82	4.3%
37.0%	1,842	1,951	109	5.9%
38.3%	1,800	1,941	141	7.8%
39.5%	1,747	1,937	190	10.9%
40.7%	1,737	1,917	179	10.3%
42.0%	1,732	1,842	110	6.3%
43.2%	1,725	1,835	110	6.4%
44.4%	1,709	1,779	70	4.1%
45.7%	1,695	1,748	53	3.1%
46.9%	1,689	1,737	48	2.9%
48.1%	1,682	1,732	50	3.0%
49.4%	1,681	1,725	44	2.6%
50.6%	1,661	1,709	48	2.9%
51.9%	1,591	1,695	104	6.5%
53.1%	1,570	1,689	120	7.6%
54.3%	1,568	1,682	114	7.3%
55.6%	1,566	1,681	115	7.3%
56.8%	1,565	1,661	96	6.1%
58.0%	1,562	1,590	28	1.8%
59.3%	1,554	1,576	22	1.4%
60.5%	1,550	1,562	12	0.8%
61.7%	1,520	1,555	35	2.3%
63.0%	1,516	1,521	5	0.3%
64.2%	1,511	1,516	5	0.3%
65.4%	1,504	1,511	7	0.5%
66.7%	1,500	1,504	4	0.3%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,500	1,500	0	0.0%
77.8%	1,500	1,500	0	0.0%
79.0%	1,500	1,500	0	0.0%
80.2%	1,500	1,500	0	0.0%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,500	1,500	0	0.0%
90.1%	1,433	1,500	67	4.7%
91.4%	1,389	1,500	111	8.0%
92.6%	1,259	1,455	195	15.5%
93.8%	1,222	1,391	169	13.8%
95.1%	1,131	1,252	121	10.7%
96.3%	1,100	1,112	12	1.1%
97.5%	1,100	1,100	0	0.0%
98.8%	1,100	1,100	0	0.0%
100.0%	900	900	0	0.0%

Table SW-36-b

Total Banks Pumping Plant (SWP and CVP) and Jones Pumping Plant (CVP) , Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,590	10,545	-45	-0.4%
1.2%	9,089	10,248	1,159	12.8%
2.5%	8,613	8,990	378	4.4%
3.7%	7,729	7,973	245	3.2%
4.9%	7,318	7,318	0	0.0%
6.2%	7,241	7,235	-6	-0.1%
7.4%	6,981	6,933	-48	-0.7%
8.6%	6,788	6,788	0	0.0%
9.9%	6,628	6,706	79	1.2%
11.1%	6,483	6,628	145	2.2%
12.3%	6,476	6,433	-43	-0.7%
13.6%	6,419	6,420	1	0.0%
14.8%	6,381	6,381	0	0.0%
16.0%	6,061	6,151	90	1.5%
17.3%	6,006	6,061	55	0.9%
18.5%	5,915	6,006	91	1.5%
19.8%	5,850	5,850	0	0.0%
21.0%	5,820	5,830	9	0.2%
22.2%	5,783	5,820	37	0.6%
23.5%	5,752	5,752	0	0.0%
24.7%	5,501	5,502	0	0.0%
25.9%	5,445	5,445	0	0.0%
27.2%	5,425	5,339	-86	-1.6%
28.4%	5,339	5,314	-25	-0.5%
29.6%	5,312	5,277	-35	-0.7%
30.9%	5,277	5,227	-51	-1.0%
32.1%	5,227	5,208	-19	-0.4%
33.3%	5,207	5,207	0	0.0%
34.6%	5,180	5,049	-132	-2.5%
35.8%	5,049	4,977	-72	-1.4%
37.0%	4,977	4,941	-36	-0.7%
38.3%	4,941	4,885	-56	-1.1%
39.5%	4,884	4,356	-528	-10.8%
40.7%	4,356	4,201	-155	-3.6%
42.0%	4,201	3,814	-387	-9.2%
43.2%	3,814	3,813	-2	0.0%
44.4%	3,813	3,801	-11	-0.3%
45.7%	3,789	3,789	0	0.0%
46.9%	3,718	3,719	1	0.0%
48.1%	3,716	3,715	-1	0.0%
49.4%	3,708	3,708	0	0.0%
50.6%	3,699	3,699	0	0.0%
51.9%	3,606	3,667	62	1.7%
53.1%	3,598	3,606	7	0.2%
54.3%	3,585	3,598	13	0.4%
55.6%	3,482	3,585	103	3.0%
56.8%	3,446	3,482	36	1.1%
58.0%	3,441	3,446	4	0.1%
59.3%	3,402	3,442	40	1.2%
60.5%	3,393	3,402	8	0.2%
61.7%	3,383	3,393	10	0.3%
63.0%	3,263	3,384	120	3.7%
64.2%	3,235	3,263	29	0.9%
65.4%	3,226	3,247	21	0.7%
66.7%	3,193	3,235	41	1.3%
67.9%	3,099	3,226	127	4.1%
69.1%	3,078	3,220	143	4.6%
70.4%	3,040	3,194	154	5.1%
71.6%	3,001	3,099	98	3.3%
72.8%	1,960	3,078	1,117	57.0%
74.1%	1,849	3,039	1,190	64.3%
75.3%	1,450	2,905	1,455	100.4%
76.5%	1,417	1,929	512	36.1%
77.8%	1,002	1,002	0	0.0%
79.0%	948	912	-36	-3.8%
80.2%	911	900	-11	-1.3%
81.5%	850	850	0	0.0%
82.7%	781	781	0	0.0%
84.0%	766	766	0	0.0%
85.2%	764	764	0	0.0%
86.4%	760	760	0	0.0%
87.7%	705	698	-8	-1.1%
88.9%	698	684	-14	-2.1%
90.1%	684	638	-46	-6.7%
91.4%	638	633	-5	-0.7%
92.6%	633	596	-37	-5.9%
93.8%	603	528	-75	-12.5%
95.1%	538	522	-16	-3.0%
96.3%	522	458	-64	-12.3%
97.5%	453	453	0	0.0%
98.8%	400	400	0	0.0%
100.0%	52	96	45	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,605	11,612	6	0.1%
1.2%	11,505	11,605	100	0.9%
2.5%	11,314	11,597	283	2.5%
3.7%	11,310	11,505	195	1.7%
4.9%	11,292	11,376	85	0.7%
6.2%	11,280	11,314	34	0.3%
7.4%	11,082	11,310	228	2.1%
8.6%	10,891	11,292	401	3.7%
9.9%	10,848	11,280	432	4.0%
11.1%	10,638	11,164	526	4.9%
12.3%	10,489	10,940	450	4.3%
13.6%	10,454	10,664	210	2.0%
14.8%	10,436	10,650	214	2.1%
16.0%	10,250	10,527	277	2.7%
17.3%	10,205	10,485	280	2.7%
18.5%	10,014	10,343	329	3.3%
19.8%	9,895	10,335	441	4.5%
21.0%	9,736	10,177	440	4.5%
22.2%	9,734	9,975	240	2.5%
23.5%	9,599	9,921	322	3.4%
24.7%	9,560	9,877	317	3.3%
25.9%	9,493	9,855	361	3.8%
27.2%	9,470	9,827	356	3.8%
28.4%	9,468	9,677	209	2.2%
29.6%	9,459	9,664	205	2.2%
30.9%	9,444	9,654	209	2.2%
32.1%	9,072	9,592	520	5.7%
33.3%	8,961	9,526	565	6.3%
34.6%	8,860	9,411	551	6.2%
35.8%	8,853	9,343	490	5.5%
37.0%	8,696	9,213	517	5.9%
38.3%	8,536	9,155	619	7.3%
39.5%	8,514	9,001	487	5.7%
40.7%	8,477	8,980	503	5.9%
42.0%	8,390	8,916	525	6.3%
43.2%	8,358	8,813	455	5.4%
44.4%	8,275	8,797	522	6.3%
45.7%	8,271	8,734	463	5.6%
46.9%	8,228	8,590	362	4.4%
48.1%	8,194	8,561	367	4.5%
49.4%	8,174	8,519	345	4.2%
50.6%	7,951	8,202	251	3.2%
51.9%	7,816	8,174	358	4.6%
53.1%	7,708	8,100	392	5.1%
54.3%	7,513	8,040	528	7.0%
55.6%	7,461	7,945	484	6.5%
56.8%	7,443	7,893	450	6.1%
58.0%	7,308	7,784	476	6.5%
59.3%	7,165	7,458	293	4.1%
60.5%	7,138	7,436	298	4.2%
61.7%	7,016	7,347	331	4.7%
63.0%	6,750	7,297	547	8.1%
64.2%	6,599	7,129	529	8.0%
65.4%	6,311	7,000	689	10.9%
66.7%	6,280	6,936	657	10.5%
67.9%	6,197	6,893	695	11.2%
69.1%	6,045	6,298	253	4.2%
70.4%	5,595	6,218	622	11.1%
71.6%	5,379	6,071	692	12.9%
72.8%	4,965	5,945	980	19.7%
74.1%	4,920	5,659	739	15.0%
75.3%	4,900	5,607	707	14.4%
76.5%	3,953	5,276	1,322	33.4%
77.8%	3,761	5,019	1,257	33.4%
79.0%	3,622	4,849	1,227	33.9%
80.2%	3,506	4,841	1,335	38.1%
81.5%	3,451	4,504	1,053	30.5%
82.7%	3,439	4,492	1,053	30.6%
84.0%	2,940	3,925	985	33.5%
85.2%	2,749	3,793	1,044	38.0%
86.4%	2,503	3,327	824	32.9%
87.7%	2,402	3,047	646	26.9%
88.9%	1,739	2,931	1,192	68.6%
90.1%	1,730	2,643	913	52.8%
91.4%	1,674	2,431	758	45.3%
92.6%	1,624	2,336	712	43.8%
93.8%	1,500	1,778	278	18.5%
95.1%	1,500	1,627	127	8.4%
96.3%	1,500	1,500	0	0.0%
97.5%	1,495	1,500	5	0.3%
98.8%	1,100	1,500	400	36.4%
100.0%	1,100	872	-228	-20.8%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,537	11,538	1	0.0%
1.2%	11,526	11,537	12	0.1%
2.5%	11,453	11,526	73	0.6%
3.7%	11,445	11,522	77	0.7%
4.9%	11,433	11,520	88	0.8%
6.2%	11,433	11,518	85	0.7%
7.4%	11,426	11,464	39	0.3%
8.6%	11,404	11,461	57	0.5%
9.9%	11,399	11,453	54	0.5%
11.1%	11,380	11,445	65	0.6%
12.3%	11,373	11,433	59	0.5%
13.6%	11,372	11,433	61	0.5%
14.8%	11,341	11,432	91	0.8%
16.0%	11,280	11,428	148	1.3%
17.3%	11,271	11,426	155	1.4%
18.5%	11,107	11,423	316	2.8%
19.8%	11,058	11,404	346	3.1%
21.0%	11,032	11,404	372	3.4%
22.2%	11,023	11,399	376	3.4%
23.5%	10,749	11,393	644	6.0%
24.7%	10,523	11,380	857	8.1%
25.9%	10,515	11,373	858	8.2%
27.2%	10,483	11,372	889	8.5%
28.4%	10,481	11,341	860	8.2%
29.6%	10,147	11,188	1,041	10.3%
30.9%	10,086	11,116	1,030	10.2%
32.1%	10,033	10,762	729	7.3%
33.3%	10,029	10,666	637	6.4%
34.6%	9,946	10,447	500	5.0%
35.8%	9,589	10,218	629	6.6%
37.0%	9,549	10,173	624	6.5%
38.3%	9,480	10,032	553	5.8%
39.5%	9,445	10,020	575	6.1%
40.7%	9,296	9,831	534	5.7%
42.0%	9,053	9,821	768	8.5%
43.2%	9,015	9,715	700	7.8%
44.4%	8,953	9,670	718	8.0%
45.7%	8,883	9,485	603	6.8%
46.9%	8,857	9,479	622	7.0%
48.1%	8,525	9,251	727	8.5%
49.4%	8,497	9,201	704	8.3%
50.6%	8,474	9,072	598	7.1%
51.9%	8,372	9,018	646	7.7%
53.1%	8,237	8,966	729	8.9%
54.3%	8,038	8,946	908	11.3%
55.6%	8,012	8,885	874	10.9%
56.8%	7,693	8,821	1,128	14.7%
58.0%	7,667	8,691	1,024	13.4%
59.3%	7,627	8,324	696	9.1%
60.5%	6,753	8,208	1,455	21.6%
61.7%	6,369	7,972	1,603	25.2%
63.0%	6,179	7,672	1,494	24.2%
64.2%	6,121	7,482	1,361	22.2%
65.4%	5,937	7,350	1,413	23.8%
66.7%	5,911	7,337	1,426	24.1%
67.9%	5,874	7,102	1,228	20.9%
69.1%	5,821	6,857	1,036	17.8%
70.4%	5,208	5,757	549	10.5%
71.6%	5,207	5,124	-83	-1.6%
72.8%	5,124	5,006	-119	-2.3%
74.1%	4,952	5,001	49	1.0%
75.3%	4,774	4,859	84	1.8%
76.5%	4,521	4,824	303	6.7%
77.8%	4,480	4,618	138	3.1%
79.0%	4,376	4,616	240	5.5%
80.2%	4,248	4,511	264	6.2%
81.5%	4,076	4,371	295	7.2%
82.7%	3,736	4,344	608	16.3%
84.0%	3,700	4,084	384	10.4%
85.2%	3,498	3,882	384	11.0%
86.4%	3,187	3,823	636	19.9%
87.7%	3,035	3,736	700	23.1%
88.9%	3,011	3,600	589	19.6%
90.1%	2,850	3,344	494	17.3%
91.4%	2,611	3,322	711	27.2%
92.6%	2,260	2,971	712	31.5%
93.8%	2,179	2,747	568	26.1%
95.1%	2,038	2,539	500	24.6%
96.3%	2,025	1,688	-337	-16.6%
97.5%	1,967	1,542	-425	-21.6%
98.8%	1,910	1,542	-367	-19.2%
100.0%	1,541	1,128	-413	-26.8%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,280	11,415	135	1.2%
1.2%	11,280	11,280	0	0.0%
2.5%	11,280	11,280	0	0.0%
3.7%	11,280	11,280	0	0.0%
4.9%	11,270	11,280	10	0.1%
6.2%	11,239	11,275	36	0.3%
7.4%	11,091	11,242	151	1.4%
8.6%	10,608	11,146	539	5.1%
9.9%	10,408	11,121	713	6.9%
11.1%	10,284	11,052	768	7.5%
12.3%	10,219	11,007	788	7.7%
13.6%	10,008	10,997	988	9.9%
14.8%	9,950	10,928	979	9.8%
16.0%	9,933	10,904	971	9.8%
17.3%	9,909	10,823	913	9.2%
18.5%	9,741	10,818	1,077	11.1%
19.8%	9,673	10,732	1,059	10.9%
21.0%	9,657	10,684	1,027	10.6%
22.2%	9,585	10,576	991	10.3%
23.5%	9,506	10,459	953	10.0%
24.7%	9,278	10,322	1,044	11.3%
25.9%	9,234	10,294	1,060	11.5%
27.2%	9,134	10,132	998	10.9%
28.4%	9,057	9,947	890	9.8%
29.6%	9,000	9,903	904	10.0%
30.9%	8,686	9,850	1,164	13.4%
32.1%	8,593	9,836	1,243	14.5%
33.3%	8,471	9,590	1,119	13.2%
34.6%	8,434	9,500	1,066	12.6%
35.8%	8,375	9,283	908	10.8%
37.0%	8,369	9,261	893	10.7%
38.3%	8,306	9,117	811	9.8%
39.5%	8,205	9,055	850	10.4%
40.7%	8,130	9,025	895	11.0%
42.0%	8,100	8,868	768	9.5%
43.2%	7,868	8,837	969	12.3%
44.4%	7,765	8,809	1,044	13.4%
45.7%	7,664	8,711	1,047	13.7%
46.9%	7,584	8,663	1,079	14.2%
48.1%	7,572	8,632	1,060	14.0%
49.4%	7,486	8,531	1,045	14.0%
50.6%	7,480	8,486	1,006	13.4%
51.9%	7,480	8,387	907	12.1%
53.1%	7,227	8,227	1,000	13.8%
54.3%	7,192	7,926	734	10.2%
55.6%	7,113	7,923	810	11.4%
56.8%	6,916	7,871	955	13.8%
58.0%	6,864	7,844	980	14.3%
59.3%	6,839	7,805	966	14.1%
60.5%	6,725	7,764	1,039	15.5%
61.7%	6,716	7,580	864	12.9%
63.0%	6,650	7,504	854	12.8%
64.2%	6,520	7,480	960	14.7%
65.4%	6,136	7,480	1,344	21.9%
66.7%	6,096	7,480	1,384	22.7%
67.9%	5,981	7,480	1,499	25.1%
69.1%	5,707	7,404	1,698	29.8%
70.4%	5,518	7,374	1,856	33.6%
71.6%	5,504	7,175	1,671	30.4%
72.8%	5,493	7,174	1,681	30.6%
74.1%	4,948	6,767	1,820	36.8%
75.3%	4,725	6,410	1,685	35.7%
76.5%	4,717	6,379	1,662	35.2%
77.8%	4,704	6,204	1,500	31.9%
79.0%	4,698	6,161	1,463	31.1%
80.2%	4,286	5,635	1,349	31.5%
81.5%	4,090	5,097	1,007	24.6%
82.7%	4,055	4,971	916	22.6%
84.0%	3,850	4,505	655	17.0%
85.2%	3,782	4,175	393	10.4%
86.4%	3,676	4,085	409	11.1%
87.7%	3,555	4,067	512	14.4%
88.9%	3,539	3,995	456	12.9%
90.1%	3,453	3,899	446	12.9%
91.4%	3,323	3,607	284	8.6%
92.6%	3,178	3,515	337	10.6%
93.8%	3,091	3,498	407	13.2%
95.1%	2,557	3,481	924	36.1%
96.3%	2,474	3,182	708	28.6%
97.5%	2,405	2,643	238	9.9%
98.8%	2,099	2,487	388	18.5%
100.0%	1,731	2,096	366	21.1%

Figure SW-37-b
Jones Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

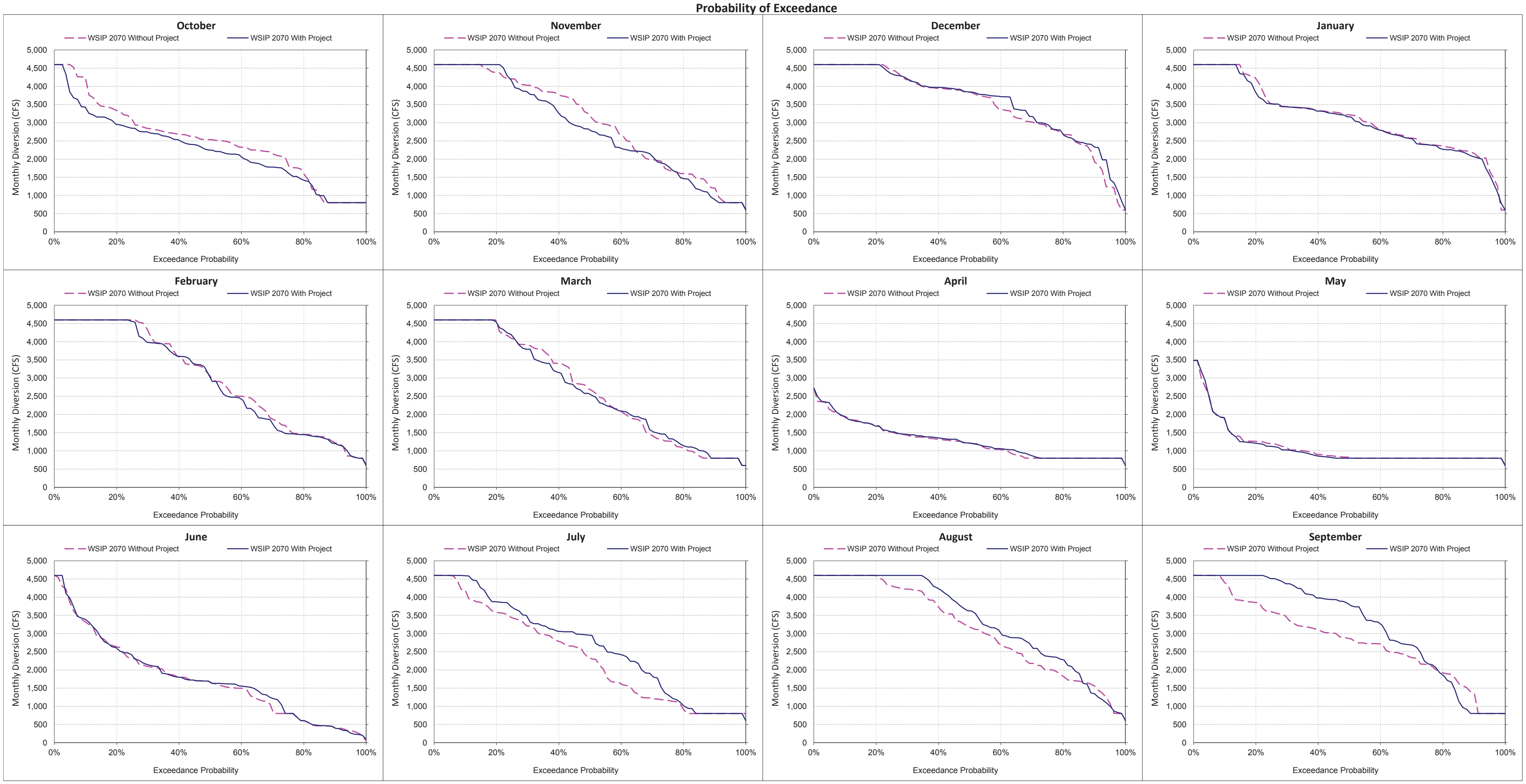


Table SW-37-b

Jones Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,338	-262	-5.7%
4.9%	4,600	3,851	-749	-16.3%
6.2%	4,523	3,684	-839	-18.6%
7.4%	4,265	3,643	-623	-14.6%
8.6%	4,260	3,440	-820	-19.2%
9.9%	4,259	3,430	-830	-19.5%
11.1%	3,758	3,259	-499	-13.3%
12.3%	3,696	3,221	-476	-12.9%
13.6%	3,555	3,157	-398	-11.2%
14.8%	3,459	3,156	-303	-8.8%
16.0%	3,447	3,155	-292	-8.5%
17.3%	3,430	3,107	-323	-9.4%
18.5%	3,396	3,066	-330	-9.7%
19.8%	3,342	2,958	-384	-11.5%
21.0%	3,313	2,943	-371	-11.2%
22.2%	3,220	2,916	-303	-9.4%
23.5%	3,204	2,879	-325	-10.1%
24.7%	3,124	2,847	-277	-8.9%
25.9%	2,936	2,844	-92	-3.1%
27.2%	2,935	2,767	-168	-5.7%
28.4%	2,884	2,752	-132	-4.6%
29.6%	2,848	2,750	-98	-3.4%
30.9%	2,834	2,714	-120	-4.2%
32.1%	2,818	2,704	-114	-4.0%
33.3%	2,797	2,696	-101	-3.6%
34.6%	2,768	2,641	-126	-4.6%
35.8%	2,734	2,629	-105	-3.8%
37.0%	2,720	2,599	-121	-4.4%
38.3%	2,708	2,545	-163	-6.0%
39.5%	2,688	2,534	-154	-5.7%
40.7%	2,673	2,487	-185	-6.9%
42.0%	2,672	2,436	-236	-8.8%
43.2%	2,633	2,406	-227	-8.6%
44.4%	2,628	2,398	-230	-8.8%
45.7%	2,598	2,390	-208	-8.0%
46.9%	2,545	2,335	-210	-8.3%
48.1%	2,541	2,282	-259	-10.2%
49.4%	2,535	2,250	-285	-11.2%
50.6%	2,533	2,245	-288	-11.4%
51.9%	2,514	2,208	-305	-12.1%
53.1%	2,504	2,207	-297	-11.9%
54.3%	2,501	2,176	-325	-13.0%
55.6%	2,480	2,146	-334	-13.5%
56.8%	2,445	2,135	-309	-12.7%
58.0%	2,382	2,134	-248	-10.4%
59.3%	2,329	2,116	-213	-9.1%
60.5%	2,328	2,020	-307	-13.2%
61.7%	2,314	1,979	-336	-14.5%
63.0%	2,251	1,912	-339	-15.0%
64.2%	2,250	1,896	-354	-15.8%
65.4%	2,241	1,878	-363	-16.2%
66.7%	2,224	1,840	-384	-17.3%
67.9%	2,211	1,791	-420	-19.0%
69.1%	2,203	1,783	-420	-19.1%
70.4%	2,129	1,783	-346	-16.3%
71.6%	2,098	1,767	-331	-15.8%
72.8%	2,076	1,761	-315	-15.2%
74.1%	2,051	1,691	-360	-17.6%
75.3%	1,788	1,595	-193	-10.8%
76.5%	1,765	1,526	-239	-13.5%
77.8%	1,760	1,520	-240	-13.7%
79.0%	1,731	1,462	-269	-15.6%
80.2%	1,567	1,408	-159	-10.2%
81.5%	1,432	1,387	-45	-3.1%
82.7%	1,169	1,264	95	8.1%
84.0%	1,152	1,033	-119	-10.3%
85.2%	992	998	7	0.7%
86.4%	818	993	175	21.4%
87.7%	801	800	-1	-0.1%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,500	4,600	100	2.2%
17.3%	4,477	4,600	123	2.7%
18.5%	4,401	4,600	199	4.5%
19.8%	4,382	4,600	218	5.0%
21.0%	4,375	4,600	225	5.2%
22.2%	4,260	4,515	254	6.0%
23.5%	4,212	4,294	82	1.9%
24.7%	4,208	4,181	-28	-0.7%
25.9%	4,200	3,961	-240	-5.7%
27.2%	4,068	3,933	-135	-3.3%
28.4%	4,049	3,874	-176	-4.3%
29.6%	4,031	3,864	-167	-4.2%
30.9%	4,027	3,777	-250	-6.2%
32.1%	3,976	3,770	-205	-5.2%
33.3%	3,955	3,636	-319	-8.1%
34.6%	3,868	3,610	-258	-6.7%
35.8%	3,861	3,602	-259	-6.7%
37.0%	3,842	3,542	-299	-7.8%
38.3%	3,841	3,471	-370	-9.6%
39.5%	3,799	3,314	-485	-12.8%
40.7%	3,738	3,183	-556	-14.9%
42.0%	3,727	3,138	-589	-15.8%
43.2%	3,687	3,014	-672	-18.2%
44.4%	3,666	2,955	-711	-19.4%
45.7%	3,508	2,917	-591	-16.8%
46.9%	3,497	2,892	-605	-17.3%
48.1%	3,310	2,833	-476	-14.4%
49.4%	3,253	2,828	-425	-13.1%
50.6%	3,123	2,768	-355	-11.4%
51.9%	3,019	2,744	-276	-9.1%
53.1%	3,005	2,668	-336	-11.2%
54.3%	2,963	2,661	-302	-10.2%
55.6%	2,951	2,625	-327	-11.1%
56.8%	2,909	2,597	-312	-10.7%
58.0%	2,908	2,330	-577	-19.9%
59.3%	2,701	2,319	-382	-14.1%
60.5%	2,645	2,280	-366	-13.8%
61.7%	2,507	2,260	-247	-9.8%
63.0%	2,478	2,229	-248	-10.0%
64.2%	2,266	2,220	-47	-2.1%
65.4%	2,164	2,218	54	2.5%
66.7%	2,125	2,208	83	3.9%
67.9%	2,018	2,188	170	8.4%
69.1%	1,988	2,154	167	8.4%
70.4%	1,983	2,041	58	2.9%
71.6%	1,960	1,925	-35	-1.8%
72.8%	1,944	1,893	-51	-2.6%
74.1%	1,741	1,863	122	7.0%
75.3%	1,695	1,786	91	5.4%
76.5%	1,647	1,684	37	2.2%
77.8%	1,642	1,646	4	0.3%
79.0%	1,607	1,486	-121	-7.5%
80.2%	1,601	1,457	-145	-9.0%
81.5%	1,589	1,452	-136	-8.6%
82.7%	1,586	1,336	-250	-15.8%
84.0%	1,477	1,188	-289	-19.6%
85.2%	1,458	1,158	-300	-20.6%
86.4%	1,456	1,107	-349	-24.0%
87.7%	1,337	1,094	-244	-18.2%
88.9%	1,213	952	-261	-21.5%
90.1%	1,200	882	-318	-26.5%
91.4%	950	800	-150	-15.8%
92.6%	856	800	-56	-6.5%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	600	600	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,597	-3	-0.1%
22.2%	4,597	4,523	-74	-1.6%
23.5%	4,523	4,431	-92	-2.0%
24.7%	4,439	4,355	-84	-1.9%
25.9%	4,429	4,314	-114	-2.6%
27.2%	4,355	4,301	-54	-1.2%
28.4%	4,254	4,277	23	0.5%
29.6%	4,186	4,227	40	1.0%
30.9%	4,175	4,147	-29	-0.7%
32.1%	4,099	4,126	26	0.6%
33.3%	4,062	4,099	37	0.9%
34.6%	4,014	4,008	-5	-0.1%
35.8%	3,971	4,008	36	0.9%
37.0%	3,968	3,975	7	0.2%
38.3%	3,965	3,971	6	0.1%
39.5%	3,946	3,970	24	0.6%
40.7%	3,943	3,968	25	0.6%
42.0%	3,936	3,962	27	0.7%
43.2%	3,923	3,946	22	0.6%
44.4%	3,919	3,944	25	0.6%
45.7%	3,900	3,923	23	0.6%
46.9%	3,900	3,919	19	0.5%
48.1%	3,853	3,865	12	0.3%
49.4%	3,844	3,853	8	0.2%
50.6%	3,831	3,844	13	0.3%
51.9%	3,780	3,822	42	1.1%
53.1%	3,739	3,780	42	1.1%
54.3%	3,729	3,779	50	1.3%
55.6%	3,704	3,763	59	1.6%
56.8%	3,688	3,744	57	1.5%
58.0%	3,492	3,736	244	7.0%
59.3%	3,382	3,729	346	10.2%
60.5%	3,364	3,715	352	10.5%
61.7%	3,337	3,711	374	11.2%
63.0%	3,328	3,709	381	11.4%
64.2%	3,164	3,379	215	6.8%
65.4%	3,124	3,364	240	7.7%
66.7%	3,112	3,344	232	7.5%
67.9%	3,036	3,342	306	10.1%
69.1%	3,033	3,176	143	4.7%
70.4%	3,010	3,163	154	5.1%
71.6%	2,978	3,002	24	0.8%
72.8%	2,958	3,001	43	1.5%
74.1%	2,946	2,978	33	1.1%
75.3%	2,833	2,933	100	3.5%
76.5%	2,821	2,831	10	0.4%
77.8%	2,794	2,808	14	0.5%
79.0%	2,747	2,798	51	1.9%
80.2%	2,676	2,654	-23	-0.9%
81.5%	2,670	2,603	-68	-2.5%
82.7%	2,658	2,580	-78	-2.9%
84.0%	2,473	2,502	29	1.2%
85.2%	2,421	2,469	48	2.0%
86.4%	2,376	2,453	77	3.2%
87.7%	2,371	2,416	45	1.9%
88.9%	2,222	2,412	190	8.6%
90.1%	1,916	2,332	416	21.7%
91.4%	1,850	2,316	466	25.2%
92.6%	1,678	1,981	303	18.1%
93.8%	1,239	1,978	739	59.7%
95.1%	1,236	1,441	205	16.6%
96.3%	1,213	1,343	130	10.7%
97.5%	803	1,122	319	39.7%
98.8%	600	845	245	40.9%
100.0%	600	600	0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,353	-247	-5.4%
16.0%	4,353	4,325	-28	-0.6%
17.3%	4,325	4,158	-167	-3.9%
18.5%	4,278	4,089	-189	-4.4%
19.8%	4,240	3,870	-370	-8.7%
21.0%	4,089	3,702	-386	-9.4%
22.2%	3,870	3,639	-231	-6.0%
23.5%	3,640	3,534	-106	-2.9%
24.7%	3,526	3,524	-3	-0.1%
25.9%	3,512	3,512	1	0.0%
27.2%	3,451	3,512	61	1.8%
28.4%	3,442	3,451	9	0.3%
29.6%	3,440	3,442	1	0.0%
30.9%	3,438	3,429	-9	-0.2%
32.1%	3,424	3,427	4	0.1%
33.3%	3,414	3,424	10	0.3%
34.6%	3,403	3,414	11	0.3%
35.8%	3,403	3,404	1	0.0%
37.0%	3,403	3,375	-28	-0.8%
38.3%	3,373	3,373	0	0.0%
39.5%	3,327	3,323	-4	-0.1%
40.7%	3,323	3,319	-4	-0.1%
42.0%	3,319	3,307	-12	-0.4%
43.2%	3,301	3,270	-31	-0.9%
44.4%	3,300	3,258	-42	-1.3%
45.7%	3,286	3,245	-41	-1.3%
46.9%	3,270	3,221	-48	-1.5%
48.1%	3,227	3,214	-12	-0.4%
49.4%	3,221	3,166	-55	-1.7%
50.6%	3,214	3,156	-58	-1.8%
51.9%	3,195	3,046	-150	-4.7%
53.1%	3,156	3,023	-133	-4.2%
54.3%	3,046	2,934	-112	-3.7%
55.6%	3,021	2,913	-107	-3.6%
56.8%	3,008	2,912	-96	-3.2%
58.0%	2,913	2,850	-63	-2.2%
59.3%	2,830	2,810	-20	-0.7%
60.5%	2,786	2,786	0	0.0%
61.7%	2,746	2,734	-12	-0.4%
63.0%	2,734	2,703	-31	-1.1%
64.2%	2,722	2,669	-53	-1.9%
65.4%	2,669	2,661	-8	-0.3%
66.7%	2,661	2,627	-34	-1.3%
67.9%	2,627	2,589	-37	-1.4%
69.1%	2,576	2,576	0	0.0%
70.4%	2,575	2,554	-21	-0.8%
71.6%	2,554	2,420	-133	-5.2%
72.8%	2,420	2,405	-15	-0.6%
74.1%	2,405	2,400	-5	-0.2%
75.3%	2,395	2,392	-3	-0.1%
76.5%	2,392	2,380	-13	-0.5%
77.8%	2,380	2,371	-9	-0.4%
79.0%	2,371	2,291	-79	-3.4%
80.2%	2,357	2,265	-92	-3.9%
81.5%	2,330	2,257	-74	-3.2%
82.7%	2,316	2,255	-62	-2.7%
84.0%	2,285	2,228	-57	-2.5%
85.2%	2,255	2,225	-30	-1.3%
86.4%	2,229	2,197	-33	-1.5%
87.7%	2,225	2,153	-72	-3.2%
88.9%	2,198	2,094	-104	-4.8%
90.1%	2,153	2,057	-96	-4.5%
91.4%	2,059	2,030	-29	-1.4%
92.6%	2,040	2,003	-37	-1.8%
93.8%	2,029	1,744	-285	-14.0%
95.1%	1,663	1,552	-111	-6.7%
96.3%	1,478	1,327	-151	-10.2%
97.5%	1,261	1,078	-183	-14.5%
98.8%	600	791	191	31.9%
100.0%	600	600	0	0.0%

Table SW-37-b

Jones Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,600	4,600	0	0.0%
22.2%	4,600	4,600	0	0.0%
23.5%	4,600	4,600	0	0.0%
24.7%	4,600	4,565	-35	-0.8%
25.9%	4,600	4,536	-64	-1.4%
27.2%	4,536	4,151	-385	-8.5%
28.4%	4,515	4,097	-418	-9.3%
29.6%	4,366	3,987	-380	-8.7%
30.9%	4,151	3,973	-178	-4.3%
32.1%	3,986	3,966	-21	-0.5%
33.3%	3,965	3,950	-16	-0.4%
34.6%	3,950	3,944	-5	-0.1%
35.8%	3,947	3,864	-83	-2.1%
37.0%	3,944	3,747	-197	-5.0%
38.3%	3,747	3,656	-92	-2.4%
39.5%	3,594	3,602	8	0.2%
40.7%	3,585	3,594	9	0.3%
42.0%	3,400	3,587	187	5.5%
43.2%	3,376	3,539	163	4.8%
44.4%	3,364	3,400	36	1.1%
45.7%	3,354	3,376	22	0.6%
46.9%	3,328	3,364	36	1.1%
48.1%	3,240	3,313	73	2.2%
49.4%	3,118	3,118	0	0.0%
50.6%	2,977	2,909	-68	-2.3%
51.9%	2,909	2,908	-1	0.0%
53.1%	2,908	2,703	-205	-7.0%
54.3%	2,846	2,550	-297	-10.4%
55.6%	2,721	2,499	-222	-8.2%
56.8%	2,568	2,479	-89	-3.5%
58.0%	2,512	2,477	-35	-1.4%
59.3%	2,501	2,460	-41	-1.6%
60.5%	2,499	2,390	-109	-4.4%
61.7%	2,479	2,171	-308	-12.4%
63.0%	2,456	2,168	-288	-11.7%
64.2%	2,372	2,082	-290	-12.2%
65.4%	2,238	1,913	-325	-14.5%
66.7%	2,171	1,898	-273	-12.6%
67.9%	2,082	1,876	-206	-9.9%
69.1%	1,913	1,862	-51	-2.7%
70.4%	1,858	1,696	-162	-8.7%
71.6%	1,816	1,562	-253	-13.9%
72.8%	1,718	1,535	-183	-10.6%
74.1%	1,696	1,480	-216	-12.7%
75.3%	1,561	1,471	-90	-5.7%
76.5%	1,485	1,466	-19	-1.3%
77.8%	1,471	1,456	-15	-1.0%
79.0%	1,459	1,449	-9	-0.6%
80.2%	1,449	1,449	0	0.0%
81.5%	1,449	1,430	-19	-1.3%
82.7%	1,430	1,408	-22	-1.5%
84.0%	1,408	1,390	-18	-1.3%
85.2%	1,390	1,384	-7	-0.5%
86.4%	1,386	1,349	-37	-2.7%
87.7%	1,349	1,323	-26	-1.9%
88.9%	1,280	1,219	-62	-4.8%
90.1%	1,219	1,202	-16	-1.3%
91.4%	1,202	1,156	-46	-3.8%
92.6%	1,124	1,124	0	0.0%
93.8%	860	1,015	155	18.0%
95.1%	859	864	5	0.5%
96.3%	818	828	10	1.3%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	618	600	-18	-3.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,555	-45	-1.0%
21.0%	4,283	4,386	103	2.4%
22.2%	4,200	4,333	133	3.2%
23.5%	4,173	4,241	68	1.6%
24.7%	4,097	4,200	103	2.5%
25.9%	4,065	4,065	0	0.0%
27.2%	3,931	3,918	-13	-0.3%
28.4%	3,924	3,824	-100	-2.5%
29.6%	3,918	3,796	-122	-3.1%
30.9%	3,891	3,796	-96	-2.5%
32.1%	3,824	3,522	-302	-7.9%
33.3%	3,796	3,479	-317	-8.4%
34.6%	3,796	3,439	-357	-9.4%
35.8%	3,692	3,411	-281	-7.6%
37.0%	3,610	3,404	-206	-5.7%
38.3%	3,411	3,209	-201	-5.9%
39.5%	3,408	3,166	-243	-7.1%
40.7%	3,404	3,128	-276	-8.1%
42.0%	3,346	2,887	-458	-13.7%
43.2%	3,294	2,848	-447	-13.6%
44.4%	2,887	2,835	-53	-1.8%
45.7%	2,848	2,715	-133	-4.7%
46.9%	2,835	2,672	-163	-5.8%
48.1%	2,818	2,585	-233	-8.3%
49.4%	2,715	2,580	-134	-4.9%
50.6%	2,656	2,527	-129	-4.8%
51.9%	2,580	2,472	-108	-4.2%
53.1%	2,472	2,323	-150	-6.0%
54.3%	2,445	2,292	-154	-6.3%
55.6%	2,292	2,235	-57	-2.5%
56.8%	2,223	2,201	-22	-1.0%
58.0%	2,159	2,156	-3	-0.1%
59.3%	2,147	2,108	-39	-1.8%
60.5%	2,049	2,089	41	2.0%
61.7%	1,991	2,071	80	4.0%
63.0%	1,896	1,991	95	5.0%
64.2%	1,878	1,940	61	3.3%
65.4%	1,866	1,939	73	3.9%
66.7%	1,784	1,887	103	5.8%
67.9%	1,521	1,866	345	22.7%
69.1%	1,460	1,586	126	8.7%
70.4%	1,398	1,521	123	8.8%
71.6%	1,333	1,494	160	12.0%
72.8%	1,328	1,463	135	10.2%
74.1%	1,270	1,460	189	14.9%
75.3%	1,268	1,333	65	5.1%
76.5%	1,262	1,328	66	5.2%
77.8%	1,119	1,262	143	12.8%
79.0%	1,107	1,187	81	7.3%
80.2%	1,072	1,131	59	5.6%
81.5%	1,004	1,109	105	10.5%
82.7%	989	1,107	118	11.9%
84.0%	935	1,072	137	14.7%
85.2%	851	1,010	158	18.6%
86.4%	800	997	197	24.6%
87.7%	800	943	143	17.9%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	600	600	0	0.0%
100.0%	600	600	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,722	2,722	0	0.0%
1.2%	2,362	2,480	117	5.0%
2.5%	2,352	2,362	10	0.4%
3.7%	2,333	2,345	11	0.5%
4.9%	2,146	2,325	179	8.3%
6.2%	2,080	2,177	97	4.7%
7.4%	2,062	2,054	-9	-0.4%
8.6%	1,973	1,992	19	1.0%
9.9%	1,952	1,931	-21	-1.1%
11.1%	1,905	1,868	-37	-1.9%
12.3%	1,850	1,843	-7	-0.4%
13.6%	1,843	1,812	-31	-1.7%
14.8%	1,803	1,803	0	0.0%
16.0%	1,767	1,767	0	0.0%
17.3%	1,767	1,767	0	0.0%
18.5%	1,738	1,733	-5	-0.3%
19.8%	1,709	1,683	-27	-1.6%
21.0%	1,682	1,674	-8	-0.5%
22.2%	1,560	1,575	15	1.0%
23.5%	1,528	1,560	31	2.1%
24.7%	1,523	1,528	5	0.3%
25.9%	1,491	1,523	32	2.1%
27.2%	1,460	1,478	18	1.2%
28.4%	1,456	1,460	4	0.3%
29.6%	1,440	1,456	16	1.1%
30.9%	1,410	1,440	30	2.1%
32.1%	1,383	1,440	56	4.1%
33.3%	1,382	1,412	30	2.2%
34.6%	1,379	1,410	31	2.3%
35.8%	1,370	1,383	13	1.0%
37.0%	1,348	1,382	33	2.5%
38.3%	1,337	1,379	42	3.1%
39.5%	1,323	1,362	39	3.0%
40.7%	1,322	1,348	27	2.0%
42.0%	1,297	1,337	40	3.1%
43.2%	1,294	1,323	29	2.2%
44.4%	1,272	1,322	49	3.9%
45.7%	1,270	1,318	48	3.8%
46.9%	1,262	1,269	7	0.5%
48.1%	1,235	1,223	-12	-1.0%
49.4%	1,214	1,221	7	0.6%
50.6%	1,207	1,207	0	0.0%
51.9%	1,196	1,187	-9	-0.8%
53.1%	1,191	1,163	-29	-2.4%
54.3%	1,106	1,138	32	2.9%
55.6%	1,064	1,119	55	5.2%
56.8%	1,058	1,106	49	4.6%
58.0%	1,042	1,064	22	2.2%
59.3%	1,041	1,063	22	2.1%
60.5%	1,030	1,058	28	2.7%
61.7%	1,023	1,041	18	1.8%
63.0%	950	1,034	83	8.8%
64.2%	900	1,030	130	14.4%
65.4%	892	980	88	9.9%
66.7%	855	950	95	11.1%
67.9%	800	934	134	16.7%
69.1%	800	892	92	11.5%
70.4%	800	855	55	6.9%
71.6%	800	819	19	2.4%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	600	600	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,487	3,487	0	0.0%
1.2%	3,487	3,487	0	0.0%
2.5%	3,006	3,195	189	6.3%
3.7%	2,761	2,932	171	6.2%
4.9%	2,521	2,513	-8	-0.3%
6.2%	2,092	2,080	-12	-0.6%
7.4%	1,977	1,995	18	0.9%
8.6%	1,935	1,924	-11	-0.6%
9.9%	1,913	1,902	-11	-0.6%
11.1%	1,574	1,574	0	0.0%
12.3%	1,459	1,459	0	0.0%
13.6%	1,411	1,391	-20	-1.4%
14.8%	1,401	1,255	-146	-10.4%
16.0%	1,270	1,252	-18	-1.4%
17.3%	1,266	1,236	-31	-2.4%
18.5%	1,265	1,224	-41	-3.2%
19.8%	1,264	1,216	-48	-3.8%
21.0%	1,254	1,197	-57	-4.6%
22.2%	1,247	1,184	-63	-5.1%
23.5%	1,216	1,130	-86	-7.0%
24.7%	1,200	1,126	-74	-6.2%
25.9%	1,195	1,111	-84	-7.0%
27.2%	1,162	1,100	-62	-5.3%
28.4%	1,126	1,025	-101	-9.0%
29.6%	1,111	1,024	-87	-7.8%
30.9%	1,025	1,021	-4	-0.4%
32.1%	1,024	999	-25	-2.4%
33.3%	1,021	976	-45	-4.4%
34.6%	1,009	968	-41	-4.0%
35.8%	997	949	-49	-4.9%
37.0%	976	921	-55	-5.6%
38.3%	968	889	-79	-8.2%
39.5%	904	866	-38	-4.2%
40.7%	900	848	-53	-5.8%
42.0%	885	845	-40	-4.5%
43.2%	869	830	-38	-4.4%
44.4%	866	812	-54	-6.3%
45.7%	848	800	-48	-5.6%
46.9%	845	800	-45	-5.3%
48.1%	831	800	-31	-3.7%
49.4%	830	800	-30	-3.7%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	600	600	0	0.0%

Table SW-37-b

Jones Pumping Plant (CVP), Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,544	4,600	56	1.2%
2.5%	4,306	4,600	294	6.8%
3.7%	4,224	4,108	-115	-2.7%
4.9%	3,867	3,987	120	3.1%
6.2%	3,621	3,734	113	3.1%
7.4%	3,491	3,467	-24	-0.7%
8.6%	3,394	3,424	31	0.9%
9.9%	3,322	3,394	72	2.2%
11.1%	3,245	3,314	69	2.1%
12.3%	3,190	3,190	0	0.0%
13.6%	2,925	3,076	151	5.2%
14.8%	2,892	2,910	18	0.6%
16.0%	2,833	2,774	-59	-2.1%
17.3%	2,722	2,722	0	0.0%
18.5%	2,675	2,639	-36	-1.3%
19.8%	2,639	2,613	-25	-1.0%
21.0%	2,613	2,522	-92	-3.5%
22.2%	2,471	2,473	3	0.1%
23.5%	2,348	2,471	123	5.2%
24.7%	2,318	2,423	104	4.5%
25.9%	2,313	2,291	-22	-1.0%
27.2%	2,154	2,266	111	5.2%
28.4%	2,139	2,196	58	2.7%
29.6%	2,100	2,148	47	2.3%
30.9%	2,080	2,123	43	2.1%
32.1%	2,072	2,101	29	1.4%
33.3%	2,044	2,095	50	2.5%
34.6%	2,025	1,906	-118	-5.8%
35.8%	1,906	1,894	-12	-0.6%
37.0%	1,873	1,858	-16	-0.8%
38.3%	1,858	1,823	-35	-1.9%
39.5%	1,810	1,799	-11	-0.6%
40.7%	1,799	1,792	-7	-0.4%
42.0%	1,792	1,741	-51	-2.9%
43.2%	1,741	1,723	-18	-1.0%
44.4%	1,721	1,721	0	0.0%
45.7%	1,701	1,701	0	0.0%
46.9%	1,697	1,700	3	0.2%
48.1%	1,693	1,697	4	0.2%
49.4%	1,692	1,692	0	0.0%
50.6%	1,632	1,632	0	0.0%
51.9%	1,617	1,631	14	0.9%
53.1%	1,575	1,629	54	3.4%
54.3%	1,549	1,624	75	4.8%
55.6%	1,520	1,617	97	6.4%
56.8%	1,517	1,613	96	6.3%
58.0%	1,501	1,610	110	7.3%
59.3%	1,495	1,559	64	4.3%
60.5%	1,494	1,549	55	3.7%
61.7%	1,452	1,538	86	6.0%
63.0%	1,284	1,519	235	18.3%
64.2%	1,246	1,489	244	19.6%
65.4%	1,186	1,414	229	19.3%
66.7%	1,150	1,327	177	15.4%
67.9%	1,138	1,314	176	15.5%
69.1%	1,066	1,248	181	17.0%
70.4%	800	1,212	412	51.5%
71.6%	800	1,177	377	47.1%
72.8%	800	1,047	247	30.9%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	702	702	0	0.0%
79.0%	611	612	0	0.0%
80.2%	600	600	0	0.0%
81.5%	550	550	0	0.0%
82.7%	481	496	15	3.1%
84.0%	466	481	15	3.3%
85.2%	464	466	1	0.3%
86.4%	460	464	4	0.9%
87.7%	459	460	1	0.2%
88.9%	453	449	-3	-0.8%
90.1%	405	398	-8	-1.9%
91.4%	398	384	-14	-3.6%
92.6%	384	338	-46	-11.9%
93.8%	338	333	-5	-1.4%
95.1%	333	261	-72	-21.7%
96.3%	303	229	-75	-24.6%
97.5%	261	226	-35	-13.3%
98.8%	200	200	0	0.0%
100.0%	52	96	45	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,583	4,600	17	0.4%
7.4%	4,464	4,600	136	3.0%
8.6%	4,218	4,600	382	9.1%
9.9%	4,211	4,591	380	9.0%
11.1%	3,958	4,581	624	15.8%
12.3%	3,927	4,472	545	13.9%
13.6%	3,873	4,457	584	15.1%
14.8%	3,862	4,263	402	10.4%
16.0%	3,810	4,196	386	10.1%
17.3%	3,737	4,019	282	7.6%
18.5%	3,627	3,876	249	6.9%
19.8%	3,589	3,874	285	7.9%
21.0%	3,570	3,861	291	8.1%
22.2%	3,557	3,856	299	8.4%
23.5%	3,525	3,847	322	9.1%
24.7%	3,444	3,744	300	8.7%
25.9%	3,407	3,671	264	7.7%
27.2%	3,377	3,626	249	7.4%
28.4%	3,322	3,512	190	5.7%
29.6%	3,215	3,497	282	8.8%
30.9%	3,202	3,310	108	3.4%
32.1%	3,145	3,269	124	3.9%
33.3%	3,008	3,269	261	8.7%
34.6%	2,981	3,218	236	7.9%
35.8%	2,964	3,197	233	7.9%
37.0%	2,941	3,129	189	6.4%
38.3%	2,851	3,112	261	9.2%
39.5%	2,799	3,062	263	9.4%
40.7%	2,764	3,057	292	10.6%
42.0%	2,702	3,052	351	13.0%
43.2%	2,660	3,052	393	14.8%
44.4%	2,654	3,048	394	14.8%
45.7%	2,619	2,983	364	13.9%
46.9%	2,618	2,976	358	13.7%
48.1%	2,449	2,968	519	21.2%
49.4%	2,341	2,956	616	26.3%
50.6%	2,304	2,952	648	28.1%
51.9%	2,288	2,732	444	19.4%
53.1%	2,131	2,663	532	25.0%
54.3%	2,016	2,660	643	31.9%
55.6%	1,778	2,491	713	40.1%
56.8%	1,678	2,487	810	48.3%
58.0%	1,661	2,452	791	47.6%
59.3%	1,654	2,434	780	47.2%
60.5%	1,592	2,409	817	51.3%
61.7%	1,568	2,365	797	50.8%
63.0%	1,535	2,236	701	45.7%
64.2%	1,391	2,232	841	60.5%
65.4%	1,331	2,177	845	63.5%
66.7%	1,244	1,990	746	60.0%
67.9%	1,231	1,917	686	55.7%
69.1%	1,229	1,910	681	55.4%
70.4%	1,203	1,804	601	49.9%
71.6%	1,202	1,778	577	48.0%
72.8%	1,181	1,531	350	29.6%
74.1%	1,180	1,363	183	15.5%
75.3%	1,155	1,303	148	12.8%
76.5%	1,136	1,213	77	6.8%
77.8%	1,123	1,180	57	5.1%
79.0%	1,054	1,104	50	4.8%
80.2%	888	999	110	12.4%
81.5%	800	941	141	17.7%
82.7%	800	940	140	17.5%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	600	-200	-25.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,600	4,600	0	0.0%
8.6%	4,600	4,600	0	0.0%
9.9%	4,600	4,600	0	0.0%
11.1%	4,600	4,600	0	0.0%
12.3%	4,600	4,600	0	0.0%
13.6%	4,600	4,600	0	0.0%
14.8%	4,600	4,600	0	0.0%
16.0%	4,600	4,600	0	0.0%
17.3%	4,600	4,600	0	0.0%
18.5%	4,600	4,600	0	0.0%
19.8%	4,600	4,600	0	0.0%
21.0%	4,524	4,600	76	1.7%
22.2%	4,474	4,600	126	2.8%
23.5%	4,343	4,600	257	5.9%
24.7%	4,317	4,600	283	6.6%
25.9%	4,282	4,600	318	7.4%
27.2%	4,260	4,600	340	8.0%
28.4%	4,230	4,600	370	8.7%
29.6%	4,221	4,600	379	9.0%
30.9%	4,221	4,600	379	9.0%
32.1%	4,197	4,600	403	9.6%
33.3%	4,188	4,600	412	9.8%
34.6%	4,169	4,600	431	10.3%
35.8%	4,031	4,530	500	12.4%
37.0%	3,922	4,451	528	13.5%
38.3%	3,917	4,304	388	9.9%
39.5%	3,790	4,265	475	12.5%
40.7%	3,651	4,197	546	15.0%
42.0%	3,561	4,114	553	15.5%
43.2%	3,539	4,044	505	14.3%
44.4%	3,538	3,935	397	11.2%
45.7%	3,343	3,866	523	15.6%
46.9%	3,331	3,768	437	13.1%
48.1%	3,263	3,690	427	13.1%
49.4%	3,198	3,624	426	13.3%
50.6%	3,156	3,622	466	14.8%
51.9%	3,111	3,547	436	14.0%
53.1%	3,111	3,388	277	8.9%
54.3%	3,022	3,248	226	7.5%
55.6%	2,978	3,210	231	7.8%
56.8%	2,947	3,164	217	7.4%
58.0%	2,876	3,156	281	9.8%
59.3%	2,735	3,098	362	13.2%
60.5%	2,664	2,954	291	10.9%
61.7%	2,617	2,932	315	12.0%
63.0%	2,592	2,892	300	11.6%
64.2%	2,530	2,888	357	14.1%
65.4%	2,460	2,883	424	17.2%
66.7%	2,447	2,866	418	17.1%
67.9%	2,263	2,797	534	23.6%
69.1%	2,181	2,734	552	25.3%
70.4%	2,179	2,595	416	19.1%
71.6%	2,130	2,592	462	21.7%
72.8%	2,115	2,458	342	16.2%
74.1%	2,006	2,385	379	18.9%
75.3%	2,004	2,369	365	18.2%
76.5%	2,003	2,360	357	17.8%
77.8%	1,960	2,350	391	19.9%
79.0%	1,880	2,299	418	22.2%
80.2%	1,810	2,274	464	25.6%
81.5%	1,725	2,123	399	23.1%
82.7%	1,703	2,093	390	22.9%
84.0%	1,702	1,963	261	15.3%
85.2%	1,691	1,901	210	12.4%
86.4%	1,667	1,627	-40	-2.4%
87.7%	1,646	1,606	-40	-2.4%
88.9%	1,610	1,369	-240	-14.9%
90.1%	1,554	1,344	-211	-13.5%
91.4%	1,436	1,242	-194	-13.5%
92.6%	1,364	1,178	-186	-13.6%
93.8%	1,241	1,091	-150	-12.1%
95.1%	1,071	1,004	-67	-6.3%
96.3%	810	865	55	6.8%
97.5%	800	828	28	3.5%
98.8%	800	800	0	0.0%
100.0%	800	600	-200	-25.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,600	4,600	0	0.0%
1.2%	4,600	4,600	0	0.0%
2.5%	4,600	4,600	0	0.0%
3.7%	4,600	4,600	0	0.0%
4.9%	4,600	4,600	0	0.0%
6.2%	4,600	4,600	0	0.0%
7.4%	4,590	4,600	10	0.2%
8.6%	4,559	4,600	41	0.9%
9.9%	4,411	4,600	189	4.3%
11.1%	4,318	4,600	282	6.5%
12.3%	4,071	4,600	529	13.0%
13.6%	3,928	4,600	672	17.1%
14.8%	3,919	4,600	681	17.4%
16.0%	3,903	4,600	697	17.8%
17.3%	3,871	4,600	729	18.8%
18.5%	3,871	4,600	729	18.8%
19.8%	3,854	4,600	746	19.4%
21.0%	3,850	4,600	750	19.5%
22.2%	3,688	4,595	907	24.6%
23.5%	3,612	4,562	950	26.3%
24.7%	3,605	4,513	908	25.2%
25.9%	3,576	4,511	935	26.1%
27.2%	3,543	4,476	932	26.3%
28.4%	3,539	4,430	891	25.2%
29.6%	3,475	4,372	897	25.8%
30.9%	3,345	4,372	1,027	30.7%
32.1%	3,281	4,317	1,036	31.6%
33.3%	3,222	4,248	1,027	31.9%
34.6%	3,201	4,231	1,029	32.2%
35.8%	3,193	4,097	904	28.3%
37.0%	3,171	4,076	905	28.6%
38.3%	3,145	4,064	918	29.2%
39.5%	3,116	3,975	859	27.6%
40.7%	3,075	3,975	900	29.3%
42.0%	3,029	3,953	924	30.5%
43.2%	3,023	3,944	921	30.5%
44.4%	3,022	3,934	912	30.2%
45.7%	3,000	3,932	932	31.1%
46.9%	2,911	3,889	978	33.6%
48.1%	2,899	3,881	982	33.9%
49.4%	2,873	3,833	960	33.4%
50.6%	2,852	3,765	913	32.0%
51.9%	2,784	3,738	953	34.2%
53.1%	2,743	3,732	989	36.1%
54.3%	2,743	3,526	784	28.6%
55.6%	2,723	3,366	643	23.6%
56.8%	2,722	3,364	641	23.6%
58.0%	2,722	3,325	602	22.1%
59.3%	2,717	3,310	593	21.8%
60.5%	2,717	3,230	513	18.9%
61.7%	2,540	3,044	505	19.9%
63.0%	2,492	2,820	328	13.2%
64.2%	2,479	2,815	336	13.6%
65.4%	2,478	2,775	297	12.0%
66.7%	2,443	2,722	279	11.4%
67.9%	2,431	2,706	274	11.3%
69.1%	2,362	2,690	328	13.9%
70.4%	2,329	2,677	348	14.9%
71.6%	2,325	2,621	295	12.7%
72.8%	2,163	2,479	316	14.6%
74.1%	2,157	2,246	88	4.1%
75.3%	2,146	2,161	15	0.7%
76.5%	2,097	2,143	45	2.2%
77.8%	2,006	2,065	59	2.9%
79.0%	1,973	1,919	-54	-2.7%
80.2%	1,909	1,843	-66	-3.5%
81.5%	1,892	1,710	-182	-9.6%
82.7%	1,878	1,665	-213	-11.3%
84.0%	1,771	1,446	-324	-18.3%
85.2%	1,618	1,131	-488	-30.1%
86.4%	1,561	968	-594	-38.0%
87.7%	1,510	916	-594	-39.3%
88.9%	1,404	800	-604	-43.0%
90.1%	1,350	800	-550	-40.7%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

Figure SW-38-b
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Probability of Exceedance

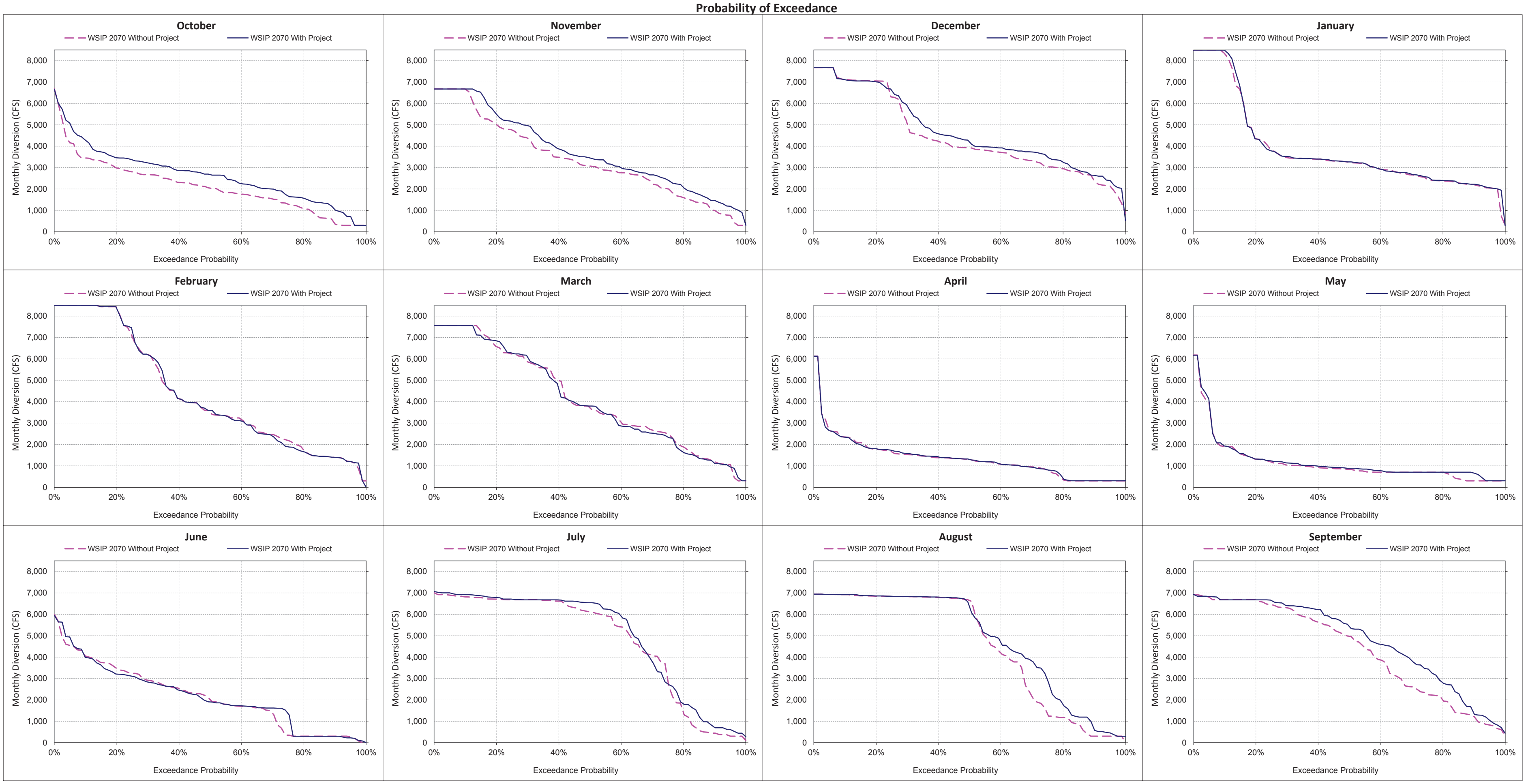


Table SW-38-b

Banks Pumping Plant (SWP and CVP), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,652	-28	-0.4%
1.2%	5,997	6,009	11	0.2%
2.5%	5,271	5,731	460	8.7%
3.7%	4,452	5,227	774	17.4%
4.9%	4,164	5,086	922	22.1%
6.2%	4,122	4,687	565	13.7%
7.4%	3,625	4,515	890	24.6%
8.6%	3,454	4,448	995	28.8%
9.9%	3,452	4,284	832	24.1%
11.1%	3,438	4,158	720	20.9%
12.3%	3,365	3,860	495	14.7%
13.6%	3,361	3,766	405	12.0%
14.8%	3,319	3,736	417	12.6%
16.0%	3,244	3,707	463	14.3%
17.3%	3,207	3,597	390	12.1%
18.5%	3,108	3,530	422	13.6%
19.8%	2,992	3,459	468	15.6%
21.0%	2,958	3,454	496	16.8%
22.2%	2,890	3,451	561	19.4%
23.5%	2,849	3,430	581	20.4%
24.7%	2,807	3,378	571	20.3%
25.9%	2,793	3,315	521	18.7%
27.2%	2,713	3,309	596	22.0%
28.4%	2,676	3,269	593	22.2%
29.6%	2,673	3,231	558	20.9%
30.9%	2,671	3,192	522	19.5%
32.1%	2,661	3,158	497	18.7%
33.3%	2,631	3,131	500	19.0%
34.6%	2,513	3,073	560	22.3%
35.8%	2,499	3,069	570	22.8%
37.0%	2,460	3,035	575	23.4%
38.3%	2,383	2,925	542	22.8%
39.5%	2,313	2,867	553	23.9%
40.7%	2,300	2,864	564	24.5%
42.0%	2,291	2,860	569	24.8%
43.2%	2,288	2,857	569	24.9%
44.4%	2,203	2,805	602	27.3%
45.7%	2,189	2,801	613	28.0%
46.9%	2,141	2,755	614	28.7%
48.1%	2,126	2,701	575	27.0%
49.4%	2,058	2,698	640	31.1%
50.6%	2,024	2,654	630	31.1%
51.9%	2,023	2,653	630	31.1%
53.1%	1,922	2,651	729	37.9%
54.3%	1,838	2,639	801	43.6%
55.6%	1,836	2,441	605	32.9%
56.8%	1,836	2,432	597	32.5%
58.0%	1,801	2,389	587	32.6%
59.3%	1,772	2,276	504	28.4%
60.5%	1,756	2,232	476	27.1%
61.7%	1,744	2,224	480	27.6%
63.0%	1,696	2,194	498	29.4%
64.2%	1,676	2,150	474	28.3%
65.4%	1,636	2,062	427	26.1%
66.7%	1,593	2,033	440	27.6%
67.9%	1,592	2,022	430	27.0%
69.1%	1,570	2,014	444	28.3%
70.4%	1,523	1,996	473	31.0%
71.6%	1,501	1,923	422	28.1%
72.8%	1,358	1,910	552	40.7%
74.1%	1,346	1,755	409	30.4%
75.3%	1,271	1,638	367	28.8%
76.5%	1,244	1,628	384	30.9%
77.8%	1,212	1,617	405	33.4%
79.0%	1,135	1,602	467	41.2%
80.2%	1,067	1,554	487	45.7%
81.5%	1,058	1,491	433	40.9%
82.7%	940	1,411	471	50.1%
84.0%	792	1,379	587	74.2%
85.2%	654	1,377	723	110.6%
86.4%	640	1,342	702	109.8%
87.7%	630	1,326	696	110.4%
88.9%	603	1,210	608	100.8%
90.1%	349	1,015	666	190.7%
91.4%	326	947	621	190.2%
92.6%	300	902	602	200.6%
93.8%	300	719	419	139.6%
95.1%	300	716	416	138.6%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,555	6,680	125	1.9%
12.3%	6,094	6,680	586	9.6%
13.6%	5,704	6,584	879	15.4%
14.8%	5,380	6,533	1,153	21.4%
16.0%	5,283	6,283	1,000	18.9%
17.3%	5,267	5,923	656	12.4%
18.5%	5,158	5,766	608	11.8%
19.8%	5,048	5,537	490	9.7%
21.0%	4,894	5,331	437	8.9%
22.2%	4,811	5,222	410	8.5%
23.5%	4,797	5,196	400	8.3%
24.7%	4,780	5,173	393	8.2%
25.9%	4,691	5,100	409	8.7%
27.2%	4,500	5,092	591	13.1%
28.4%	4,433	5,003	570	12.9%
29.6%	4,409	4,978	569	12.9%
30.9%	4,283	4,930	647	15.1%
32.1%	3,955	4,665	711	18.0%
33.3%	3,841	4,525	685	17.8%
34.6%	3,824	4,312	488	12.8%
35.8%	3,809	4,186	377	9.9%
37.0%	3,799	4,154	356	9.4%
38.3%	3,510	4,038	529	15.1%
39.5%	3,491	3,899	408	11.7%
40.7%	3,474	3,836	362	10.4%
42.0%	3,426	3,770	345	10.1%
43.2%	3,409	3,651	242	7.1%
44.4%	3,361	3,602	241	7.2%
45.7%	3,276	3,565	289	8.8%
46.9%	3,138	3,513	374	11.9%
48.1%	3,103	3,511	408	13.2%
49.4%	3,083	3,472	389	12.6%
50.6%	3,061	3,428	366	12.0%
51.9%	3,037	3,378	341	11.2%
53.1%	2,951	3,370	419	14.2%
54.3%	2,891	3,363	472	16.3%
55.6%	2,875	3,186	311	10.8%
56.8%	2,845	3,155	310	10.9%
58.0%	2,842	3,078	236	8.3%
59.3%	2,767	3,060	293	10.6%
60.5%	2,762	2,957	195	7.1%
61.7%	2,761	2,933	172	6.2%
63.0%	2,701	2,915	213	7.9%
64.2%	2,670	2,847	177	6.6%
65.4%	2,658	2,793	135	5.1%
66.7%	2,614	2,764	150	5.7%
67.9%	2,495	2,750	256	10.3%
69.1%	2,404	2,666	262	10.9%
70.4%	2,221	2,659	438	19.7%
71.6%	2,184	2,620	436	20.0%
72.8%	2,046	2,546	500	24.4%
74.1%	2,027	2,493	466	23.0%
75.3%	2,002	2,391	388	19.4%
76.5%	1,823	2,279	455	25.0%
77.8%	1,683	2,235	552	32.8%
79.0%	1,648	2,218	570	34.6%
80.2%	1,589	2,045	456	28.7%
81.5%	1,518	1,920	402	26.5%
82.7%	1,474	1,886	412	28.0%
84.0%	1,388	1,807	419	30.2%
85.2%	1,369	1,740	371	27.1%
86.4%	1,351	1,662	311	23.0%
87.7%	1,292	1,584	292	22.6%
88.9%	1,027	1,466	439	42.7%
90.1%	993	1,457	464	46.7%
91.4%	866	1,378	511	59.0%
92.6%	815	1,311	496	60.8%
93.8%	784	1,211	427	54.4%
95.1%	772	1,190	418	54.1%
96.3%	429	1,087	659	153.5%
97.5%	300	1,013	713	237.6%
98.8%	300	900	600	200.0%
100.0%	300	300	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,678	7,678	0	0.0%
1.2%	7,678	7,678	0	0.0%
2.5%	7,678	7,678	0	0.0%
3.7%	7,678	7,678	0	0.0%
4.9%	7,678	7,678	0	0.0%
6.2%	7,678	7,678	0	0.0%
7.4%	7,224	7,165	-58	-0.8%
8.6%	7,148	7,148	0	0.0%
9.9%	7,117	7,112	-5	-0.1%
11.1%	7,112	7,072	-40	-0.6%
12.3%	7,089	7,063	-25	-0.4%
13.6%	7,086	7,059	-27	-0.4%
14.8%	7,072	7,057	-15	-0.2%
16.0%	7,065	7,054	-10	-0.1%
17.3%	7,063	7,048	-15	-0.2%
18.5%	7,058	7,042	-16	-0.2%
19.8%	7,054	7,016	-39	-0.5%
21.0%	7,048	6,996	-53	-0.7%
22.2%	7,042	6,853	-189	-2.7%
23.5%	7,016	6,700	-316	-4.5%
24.7%	6,311	6,681	370	5.9%
25.9%	6,284	6,422	137	2.2%
27.2%	6,193	6,357	163	2.6%
28.4%	5,585	6,063	478	8.6%
29.6%	5,212	5,965	753	14.4%
30.9%	4,633	5,654	1,021	22.0%
32.1%	4,597	5,407	810	17.6%
33.3%	4,523	5,320	797	17.6%
34.6%	4,500	5,061	561	12.5%
35.8%	4,404	4,886	482	11.0%
37.0%	4,355	4,850	495	11.4%
38.3%	4,289	4,663	374	8.7%
39.5%	4,254	4,597	343	8.1%
40.7%	4,186	4,549	363	8.7%
42.0%	4,175	4,523	347	8.3%
43.2%	4,099	4,502	403	9.8%
44.4%	3,971	4,464	493	12.4%
45.7%	3,968	4,400	432	10.9%
46.9%	3,946	4,355	410	10.4%
48.1%	3,936	4,301	366	9.3%
49.4%	3,923	4,282	358	9.1%
50.6%	3,919	4,099	181	4.6%
51.9%	3,853	3,985	133	3.4%
53.1%	3,844	3,983	139	3.6%
54.3%	3,831	3,971	140	3.7%
55.6%	3,803	3,968	165	4.3%
56.8%	3,780	3,962	182	4.8%
58.0%	3,739	3,946	207	5.5%
59.3%	3,729	3,923	195	5.2%
60.5%	3,704	3,919	215	5.8%
61.7%	3,688	3,853	165	4.5%
63.0%	3,577	3,844	267	7.5%
64.2%	3,477	3,822	345	9.9%
65.4%	3,415	3,780	365	10.7%
66.7%	3,408	3,779	371	10.9%
67.9%	3,364	3,744	380	11.3%
69.1%	3,337	3,736	399	11.9%
70.4%	3,328	3,729	401	12.0%
71.6%	3,259	3,711	452	13.9%
72.8%	3,207	3,655	448	14.0%
74.1%	3,057	3,623	566	18.5%
75.3%	3,036	3,459	424	14.0%
76.5%	3,033	3,379	347	11.4%
77.8%	3,010	3,364	354	11.8%
79.0%	2,958	3,344	386	13.1%
80.2%	2,946	3,234	288	9.8%
81.5%	2,877	3,176	298	10.4%
82.7%	2,826	3,002	176	6.2%
84.0%	2,821	2,946	125	4.4%
85.2%	2,798	2,859	61	2.2%
86.4%	2,676	2,808	132	4.9%
87.7%	2,670	2,786	117	4.4%
88.9%	2,658	2,654	-4	-0.1%
90.1%	2,351	2,638	288	12.2%
91.4%	2,222	2,604	382	17.2%
92.6%	2,185	2,603	417	19.1%
93.8%	2,169	2,416	246	11.3%
95.1%	2,144	2,399	255	11.9%
96.3%	1,920	2,183	263	13.7%
97.5%	1,668	2,072	404	24.2%
98.8%	1,328	2,033	706	53.2%
100.0%	856	518	-337	-39.4%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,500	8,500	0	0.0%
9.9%	8,350	8,500	150	1.8%
11.1%	8,119	8,343	224	2.8%
12.3%	7,657	8,100	443	5.8%
13.6%	6,827	7,446	619	9.1%
14.8%	6,678	6,842	164	2.5%
16.0%	6,000	5,976	-24	-0.4%
17.3%	4,942	4,942	0	0.0%
18.5%	4,871	4,847	-24	-0.5%
19.8%	4,353	4,353	0	0.0%
21.0%	4,325	4,325	0	0.0%
22.2%	4,278	4,089	-189	-4.4%
23.5%	4,089	3,870	-219	-5.3%
24.7%	3,870	3,788	-83	-2.1%
25.9%	3,763	3,749	-14	-0.4%
27.2%	3,640	3,639	-1	0.0%
28.4%	3,512	3,534	23	0.7%
29.6%	3,476	3,524	48	1.4%
30.9%	3,451	3,512	61	1.8%
32.1%	3,442	3,451	9	0.3%
33.3%	3,440	3,442	1	0.0%
34.6%	3,438	3,429	-9	-0.2%
35.8%	3,424	3,427	4	0.1%
37.0%	3,414	3,424	10	0.3%
38.3%	3,403	3,414	11	0.3%
39.5%	3,403	3,406	3	0.1%
40.7%	3,403	3,404	1	0.0%
42.0%	3,373	3,375	2	0.1%
43.2%	3,323	3,373	50	1.5%
44.4%	3,319	3,323	4	0.1%
45.7%	3,301	3,319	18	0.6%
46.9%	3,300	3,307	6	0.2%
48.1%	3,286	3,291	5	0.1%
49.4%	3,270	3,272	2	0.1%
50.6%	3,227	3,270	43	1.3%
51.9%	3,221	3,245	23	0.7%
53.1%	3,214	3,221	7	0.2%
54.3%	3,195	3,214	19	0.6%
55.6%	3,156	3,156	0	0.0%
56.8%	3,046	3,046	0	0.0%
58.0%	3,021	3,023	2	0.1%
59.3%	2,948	2,958	10	0.3%
60.5%	2,913	2,913	0	0.0%
61.7%	2,899	2,845	-54	-1.8%
63.0%	2,884	2,838	-47	-1.6%
64.2%	2,830	2,810	-20	-0.7%
65.4%	2,786	2,786	0	0.0%
66.7%	2,734	2,772	38	1.4%
67.9%	2,720	2,767	47	1.7%
69.1%	2,669	2,734	65	2.4%
70.4%	2,661	2,669	8	0.3%
71.6%	2,627	2,661	34	1.3%
72.8%	2,576	2,627	51	2.0%
74.1%	2,554	2,576	22	0.9%
75.3%	2,420	2,554	133	5.5%
76.5%	2,405	2,420	15	0.6%
77.8%	2,392	2,405	13	0.5%
79.0%	2,390	2,404	14	0.6%
80.2%	2,380	2,400	20	0.8%
81.5%	2,371	2,392	21	0.9%
82.7%	2,357	2,380	23	1.0%
84.0%	2,330	2,371	40	1.7%
85.2%	2,285	2,265	-20	-0.9%
86.4%	2,255	2,257	2	0.1%
87.7%	2,229	2,255	25	1.1%
88.9%	2,225	2,228	2	0.1%
90.1%	2,198	2,225	27	1.2%
91.4%	2,153	2,197	44	2.0%
92.6%	2,120	2,153	33	1.6%
93.8%	2,059	2,093	34	1.6%
95.1%	2,048	2,057	9	0.4%
96.3%	2,040	2,030	-10	-0.5%
97.5%	2,029	2,003	-26	-1.3%
98.8%	733	1,947	1,214	165.6%
100.0%	300	300	0	0.0%

Table SW-38-b
Banks Pumping Plant (SWP and CVP), Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,500	8,500	0	0.0%
9.9%	8,500	8,500	0	0.0%
11.1%	8,500	8,500	0	0.0%
12.3%	8,500	8,500	0	0.0%
13.6%	8,500	8,500	0	0.0%
14.8%	8,437	8,437	0	0.0%
16.0%	8,437	8,437	0	0.0%
17.3%	8,437	8,437	0	0.0%
18.5%	8,437	8,437	0	0.0%
19.8%	8,437	8,437	0	0.0%
21.0%	8,050	8,028	-21	-0.3%
22.2%	7,565	7,563	-2	0.0%
23.5%	7,480	7,533	53	0.7%
24.7%	7,133	7,451	319	4.5%
25.9%	6,703	6,751	48	0.7%
27.2%	6,466	6,393	-74	-1.1%
28.4%	6,231	6,226	-5	-0.1%
29.6%	6,221	6,221	0	0.0%
30.9%	6,147	6,121	-25	-0.4%
32.1%	5,818	6,005	186	3.2%
33.3%	5,527	5,818	291	5.3%
34.6%	4,960	5,462	502	10.1%
35.8%	4,738	4,729	-8	-0.2%
37.0%	4,536	4,565	29	0.6%
38.3%	4,515	4,536	21	0.5%
39.5%	4,151	4,151	0	0.0%
40.7%	4,104	4,111	7	0.2%
42.0%	3,986	3,987	0	0.0%
43.2%	3,965	3,966	1	0.0%
44.4%	3,950	3,950	0	0.0%
45.7%	3,944	3,944	0	0.0%
46.9%	3,747	3,747	0	0.0%
48.1%	3,594	3,702	108	3.0%
49.4%	3,585	3,594	9	0.3%
50.6%	3,400	3,587	187	5.5%
51.9%	3,376	3,400	24	0.7%
53.1%	3,364	3,376	12	0.3%
54.3%	3,354	3,364	10	0.3%
55.6%	3,328	3,313	-15	-0.5%
56.8%	3,242	3,189	-53	-1.6%
58.0%	3,240	3,118	-122	-3.8%
59.3%	3,238	3,117	-121	-3.7%
60.5%	3,118	3,075	-43	-1.4%
61.7%	2,909	2,909	0	0.0%
63.0%	2,908	2,908	0	0.0%
64.2%	2,846	2,648	-199	-7.0%
65.4%	2,578	2,507	-72	-2.8%
66.7%	2,568	2,499	-69	-2.7%
67.9%	2,499	2,479	-20	-0.8%
69.1%	2,479	2,460	-19	-0.8%
70.4%	2,456	2,349	-107	-4.3%
71.6%	2,375	2,171	-204	-8.6%
72.8%	2,273	2,082	-192	-8.4%
74.1%	2,226	1,913	-313	-14.0%
75.3%	2,171	1,876	-295	-13.6%
76.5%	2,082	1,862	-220	-10.5%
77.8%	1,983	1,775	-208	-10.5%
79.0%	1,913	1,696	-217	-11.4%
80.2%	1,696	1,649	-47	-2.7%
81.5%	1,561	1,562	2	0.1%
82.7%	1,485	1,480	-5	-0.4%
84.0%	1,471	1,471	0	0.0%
85.2%	1,449	1,449	0	0.0%
86.4%	1,449	1,449	0	0.0%
87.7%	1,430	1,430	0	0.0%
88.9%	1,408	1,408	0	0.0%
90.1%	1,390	1,390	0	0.0%
91.4%	1,386	1,384	-2	-0.2%
92.6%	1,349	1,349	0	0.0%
93.8%	1,219	1,219	0	0.0%
95.1%	1,202	1,202	0	0.0%
96.3%	1,124	1,156	32	2.9%
97.5%	879	1,124	245	27.9%
98.8%	300	300	0	0.0%
100.0%	300	7	-293	-97.5%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,561	7,561	0	0.0%
1.2%	7,561	7,561	0	0.0%
2.5%	7,561	7,561	0	0.0%
3.7%	7,561	7,561	0	0.0%
4.9%	7,561	7,561	0	0.0%
6.2%	7,561	7,561	0	0.0%
7.4%	7,561	7,561	0	0.0%
8.6%	7,561	7,561	0	0.0%
9.9%	7,561	7,561	0	0.0%
11.1%	7,561	7,561	0	0.0%
12.3%	7,561	7,561	0	0.0%
13.6%	7,561	7,114	-446	-5.9%
14.8%	7,337	7,111	-227	-3.1%
16.0%	7,121	6,929	-192	-2.7%
17.3%	7,020	6,894	-126	-1.8%
18.5%	6,801	6,878	77	1.1%
19.8%	6,589	6,854	264	4.0%
21.0%	6,511	6,801	290	4.5%
22.2%	6,291	6,589	298	4.7%
23.5%	6,286	6,311	26	0.4%
24.7%	6,236	6,280	44	0.7%
25.9%	6,231	6,237	6	0.1%
27.2%	6,134	6,231	97	1.6%
28.4%	6,127	6,182	55	0.9%
29.6%	5,880	6,171	291	4.9%
30.9%	5,816	5,880	63	1.1%
32.1%	5,752	5,802	50	0.9%
33.3%	5,587	5,728	141	2.5%
34.6%	5,585	5,632	47	0.8%
35.8%	5,573	5,516	-58	-1.0%
37.0%	5,558	5,151	-407	-7.3%
38.3%	5,151	4,997	-154	-3.0%
39.5%	5,006	4,856	-150	-3.0%
40.7%	4,956	4,200	-756	-15.3%
42.0%	4,200	4,170	-30	-0.7%
43.2%	4,065	4,065	0	0.0%
44.4%	3,918	4,019	102	2.6%
45.7%	3,824	3,918	93	2.4%
46.9%	3,820	3,824	5	0.1%
48.1%	3,796	3,818	21	0.6%
49.4%	3,796	3,796	1	0.0%
50.6%	3,622	3,796	174	4.8%
51.9%	3,610	3,781	171	4.7%
53.1%	3,475	3,606	130	3.8%
54.3%	3,411	3,479	68	2.0%
55.6%	3,408	3,411	2	0.1%
56.8%	3,404	3,404	0	0.0%
58.0%	3,346	3,178	-168	-5.0%
59.3%	3,167	2,887	-280	-8.8%
60.5%	2,949	2,848	-102	-3.5%
61.7%	2,929	2,835	-94	-3.2%
63.0%	2,887	2,828	-60	-2.1%
64.2%	2,870	2,715	-155	-5.4%
65.4%	2,848	2,715	-133	-4.7%
66.7%	2,847	2,585	-262	-9.2%
67.9%	2,835	2,580	-254	-9.0%
69.1%	2,715	2,540	-174	-6.4%
70.4%	2,656	2,527	-129	-4.8%
71.6%	2,609	2,491	-118	-4.5%
72.8%	2,580	2,472	-108	-4.2%
74.1%	2,551	2,424	-126	-5.0%
75.3%	2,472	2,323	-150	-6.0%
76.5%	2,292	2,292	0	0.0%
77.8%	2,035	1,866	-169	-8.3%
79.0%	1,947	1,717	-230	-11.8%
80.2%	1,866	1,612	-254	-13.6%
81.5%	1,735	1,557	-178	-10.3%
82.7%	1,612	1,528	-85	-5.2%
84.0%	1,462	1,460	-2	-0.1%
85.2%	1,460	1,333	-127	-8.7%
86.4%	1,333	1,328	-5	-0.4%
87.7%	1,328	1,279	-49	-3.7%
88.9%	1,262	1,262	0	0.0%
90.1%	1,190	1,109	-81	-6.8%
91.4%	1,107	1,107	0	0.0%
92.6%	1,086	1,072	-14	-1.3%
93.8%	1,072	1,052	-20	-1.8%
95.1%	1,052	943	-109	-10.4%
96.3%	448	884	437	97.5%
97.5%	300	448	148	49.3%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,125	6,125	0	0.0%
1.2%	6,125	6,125	0	0.0%
2.5%	3,448	3,443	-6	-0.2%
3.7%	3,166	2,816	-350	-11.1%
4.9%	2,650	2,641	-9	-0.3%
6.2%	2,598	2,613	15	0.6%
7.4%	2,594	2,471	-123	-4.8%
8.6%	2,362	2,362	0	0.0%
9.9%	2,352	2,345	-8	-0.3%
11.1%	2,333	2,325	-9	-0.4%
12.3%	2,285	2,182	-103	-4.5%
13.6%	2,104	2,054	-50	-2.4%
14.8%	2,087	1,996	-91	-4.3%
16.0%	2,062	1,903	-160	-7.7%
17.3%	1,843	1,843	0	0.0%
18.5%	1,803	1,812	9	0.5%
19.8%	1,767	1,803	36	2.0%
21.0%	1,767	1,767	0	0.0%
22.2%	1,738	1,767	28	1.6%
23.5%	1,704	1,759	55	3.2%
24.7%	1,682	1,733	51	3.0%
25.9%	1,575	1,683	107	6.8%
27.2%	1,560	1,674	115	7.4%
28.4%	1,543	1,597	54	3.5%
29.6%	1,528	1,575	47	3.1%
30.9%	1,523	1,560	37	2.4%
32.1%	1,516	1,528	12	0.8%
33.3%	1,491	1,523	32	2.1%
34.6%	1,460	1,478	18	1.2%
35.8%	1,456	1,460	4	0.3%
37.0%	1,440	1,456	16	1.1%
38.3%	1,394	1,440	46	3.3%
39.5%	1,383	1,440	56	4.1%
40.7%	1,382	1,383	1	0.1%
42.0%	1,379	1,382	3	0.2%
43.2%	1,370	1,379	9	0.7%
44.4%	1,348	1,362	14	1.0%
45.7%	1,339	1,348	9	0.7%
46.9%	1,337	1,337	0	0.0%
48.1%	1,323	1,323	0	0.0%
49.4%	1,297	1,318	21	1.6%
50.6%	1,272	1,269	-3	-0.3%
51.9%	1,226	1,264	38	3.1%
53.1%	1,207	1,207	0	0.0%
54.3%	1,206	1,203	-3	-0.3%
55.6%	1,193	1,193	0	0.0%
56.8%	1,183	1,187	4	0.4%
58.0%	1,106	1,182	76	6.9%
59.3%	1,093	1,106	14	1.3%
60.5%	1,064	1,064	0	0.0%
61.7%	1,058	1,058	0	0.0%
63.0%	1,042	1,041	0	0.0%
64.2%	1,041	1,034	-7	-0.7%
65.4%	1,030	1,030	0	0.0%
66.7%	978	976	-2	-0.2%
67.9%	976	966	-10	-1.0%
69.1%	958	950	-8	-0.8%
70.4%	950	936	-15	-1.5%
71.6%	947	892	-55	-5.8%
72.8%	892	857	-35	-3.9%
74.1%	855	855	0	0.0%
75.3%	784	798	14	1.8%
76.5%	673	784	111	16.4%
77.8%	626	750	124	19.9%
79.0%	466	610	145	31.1%
80.2%	333	362	29	8.7%
81.5%	300	328	28	9.3%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,177	6,177	0	0.0%
1.2%	6,177	6,177	0	0.0%
2.5%	4,434	4,698	263	5.9%
3.7%	4,142	4,441	299	7.2%
4.9%	3,976	4,135	160	4.0%
6.2%	2,521	2,513	-8	-0.3%
7.4%	2,092	2,080	-12	-0.6%
8.6%	1,935	2,076	141	7.3%
9.9%	1,913	1,924	11	0.6%
11.1%	1,899	1,902	3	0.2%
12.3%	1,898	1,807	-91	-4.8%
13.6%	1,728	1,729	0	0.0%
14.8%	1,574	1,574	0	0.0%
16.0%	1,510	1,566	56	3.7%
17.3%	1,459	1,459	0	0.0%
18.5%	1,401	1,391	-10	-0.7%
19.8%	1,314	1,321	7	0.5%
21.0%	1,309	1,315	6	0.5%
22.2%	1,264	1,312	48	3.8%
23.5%	1,247	1,252	5	0.4%
24.7%	1,195	1,236	41	3.4%
25.9%	1,126	1,202	76	6.7%
27.2%	1,117	1,197	80	7.1%
28.4%	1,111	1,184	73	6.6%
29.6%	1,042	1,141	99	9.5%
30.9%	1,025	1,126	101	9.8%
32.1%	1,024	1,117	93	9.1%
33.3%	1,021	1,111	90	8.8%
34.6%	1,002	1,035	33	3.3%
35.8%	976	1,025	49	5.1%
37.0%	968	1,024	56	5.8%
38.3%	947	1,021	74	7.8%
39.5%	925	999	74	8.0%
40.7%	909	976	67	7.4%
42.0%	900	968	68	7.6%
43.2%	882	948	66	7.4%
44.4%	881	937	56	6.4%
45.7%	869	925	56	6.5%
46.9%	866	921	55	6.3%
48.1%	848	909	61	7.2%
49.4%	845	889	45	5.3%
50.6%	830	882	52	6.2%
51.9%	791	881	90	11.4%
53.1%	768	866	99	12.8%
54.3%	762	848	85	11.2%
55.6%	720	845	125	17.3%
56.8%	711	830	119	16.8%
58.0%	704	790	86	12.2%
59.3%	700	776	76	10.8%
60.5%	700	762	62	8.9%
61.7%	700	721	21	2.9%
63.0%	700	711	11	1.6%
64.2%	700	704	4	0.6%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	633	700	67	10.6%
82.7%	589	700	111	18.8%
84.0%	422	700	278	65.9%
85.2%	388	700	312	80.5%
86.4%	355	700	345	97.0%
87.7%	300	700	400	133.3%
88.9%	300	700	400	133.3%
90.1%	300	655	355	118.2%
91.4%	300	591	291	96.9%
92.6%	300	452	152	50.8%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-38-b

Banks Pumping Plant (SWP and CVP), Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,990	5,945	-45	-0.7%
1.2%	5,676	5,648	-28	-0.5%
2.5%	4,952	5,633	681	13.8%
3.7%	4,597	4,952	355	7.7%
4.9%	4,544	4,944	400	8.8%
6.2%	4,489	4,516	27	0.6%
7.4%	4,339	4,390	52	1.2%
8.6%	4,306	4,375	68	1.6%
9.9%	4,050	3,987	-63	-1.6%
11.1%	3,996	3,963	-32	-0.8%
12.3%	3,953	3,913	-40	-1.0%
13.6%	3,862	3,729	-133	-3.4%
14.8%	3,748	3,647	-101	-2.7%
16.0%	3,732	3,467	-265	-7.1%
17.3%	3,731	3,394	-337	-9.0%
18.5%	3,621	3,314	-307	-8.5%
19.8%	3,491	3,209	-281	-8.1%
21.0%	3,394	3,190	-203	-6.0%
22.2%	3,370	3,185	-186	-5.5%
23.5%	3,295	3,143	-152	-4.6%
24.7%	3,240	3,113	-127	-3.9%
25.9%	3,238	3,076	-162	-5.0%
27.2%	3,190	2,973	-218	-6.8%
28.4%	2,988	2,910	-78	-2.6%
29.6%	2,925	2,840	-84	-2.9%
30.9%	2,895	2,806	-89	-3.1%
32.1%	2,859	2,783	-76	-2.7%
33.3%	2,806	2,722	-83	-3.0%
34.6%	2,722	2,685	-37	-1.4%
35.8%	2,639	2,639	0	0.0%
37.0%	2,613	2,620	7	0.3%
38.3%	2,566	2,613	47	1.8%
39.5%	2,561	2,471	-91	-3.5%
40.7%	2,471	2,425	-45	-1.8%
42.0%	2,426	2,372	-54	-2.2%
43.2%	2,332	2,293	-38	-1.7%
44.4%	2,319	2,265	-54	-2.3%
45.7%	2,299	2,234	-66	-2.9%
46.9%	2,278	2,101	-177	-7.8%
48.1%	2,214	1,979	-235	-10.6%
49.4%	2,100	1,906	-194	-9.2%
50.6%	1,915	1,894	-21	-1.1%
51.9%	1,906	1,866	-41	-2.1%
53.1%	1,858	1,858	0	0.0%
54.3%	1,799	1,799	0	0.0%
55.6%	1,792	1,792	0	0.0%
56.8%	1,741	1,741	0	0.0%
58.0%	1,721	1,728	8	0.4%
59.3%	1,701	1,723	22	1.3%
60.5%	1,697	1,721	24	1.4%
61.7%	1,692	1,701	9	0.5%
63.0%	1,692	1,697	5	0.3%
64.2%	1,632	1,692	60	3.7%
65.4%	1,618	1,635	16	1.0%
66.7%	1,617	1,632	14	0.9%
67.9%	1,520	1,624	104	6.8%
69.1%	1,501	1,617	117	7.8%
70.4%	1,307	1,613	306	23.4%
71.6%	826	1,610	784	95.0%
72.8%	676	1,610	934	138.2%
74.1%	351	1,519	1,169	333.3%
75.3%	348	1,296	948	272.5%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	261	-39	-13.0%
93.8%	300	229	-71	-23.7%
95.1%	261	226	-35	-13.3%
96.3%	200	200	0	0.0%
97.5%	79	100	21	
98.8%	0	79	79	
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,005	7,066	61	0.9%
1.2%	6,922	7,030	108	1.6%
2.5%	6,922	7,005	83	1.2%
3.7%	6,921	7,005	84	1.2%
4.9%	6,897	7,005	108	1.6%
6.2%	6,869	6,959	90	1.3%
7.4%	6,850	6,922	72	1.1%
8.6%	6,840	6,922	83	1.2%
9.9%	6,815	6,922	107	1.6%
11.1%	6,808	6,921	113	1.7%
12.3%	6,796	6,905	109	1.6%
13.6%	6,784	6,879	94	1.4%
14.8%	6,776	6,869	93	1.4%
16.0%	6,757	6,849	91	1.4%
17.3%	6,714	6,808	94	1.4%
18.5%	6,713	6,797	84	1.3%
19.8%	6,710	6,782	73	1.1%
21.0%	6,707	6,776	69	1.0%
22.2%	6,692	6,714	22	0.3%
23.5%	6,680	6,710	30	0.4%
24.7%	6,680	6,707	27	0.4%
25.9%	6,680	6,692	12	0.2%
27.2%	6,680	6,692	12	0.2%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,661	6,680	19	0.3%
35.8%	6,659	6,680	21	0.3%
37.0%	6,644	6,680	36	0.5%
38.3%	6,619	6,680	61	0.9%
39.5%	6,617	6,671	54	0.8%
40.7%	6,617	6,658	42	0.6%
42.0%	6,486	6,611	125	1.9%
43.2%	6,365	6,609	244	3.8%
44.4%	6,327	6,609	282	4.5%
45.7%	6,292	6,599	307	4.9%
46.9%	6,199	6,571	372	6.0%
48.1%	6,163	6,558	395	6.4%
49.4%	6,128	6,547	420	6.9%
50.6%	6,111	6,547	436	7.1%
51.9%	6,050	6,513	463	7.7%
53.1%	6,009	6,464	455	7.6%
54.3%	5,950	6,256	306	5.1%
55.6%	5,913	6,236	323	5.5%
56.8%	5,895	6,200	305	5.2%
58.0%	5,480	6,093	613	11.2%
59.3%	5,422	6,050	628	11.6%
60.5%	5,397	5,829	432	8.0%
61.7%	5,245	5,766	521	9.9%
63.0%	4,973	5,271	298	6.0%
64.2%	4,640	4,952	312	6.7%
65.4%	4,579	4,859	280	6.1%
66.7%	4,295	4,476	181	4.2%
67.9%	4,165	4,255	91	2.2%
69.1%	4,120	3,978	-142	-3.5%
70.4%	4,054	3,690	-364	-9.0%
71.6%	4,035	3,310	-725	-18.0%
72.8%	3,750	3,286	-465	-12.4%
74.1%	3,696	2,840	-856	-23.2%
75.3%	2,639	2,705	66	2.5%
76.5%	2,140	2,627	487	22.7%
77.8%	1,859	2,385	527	28.3%
79.0%	1,852	1,906	54	2.9%
80.2%	1,294	1,793	499	38.6%
81.5%	1,200	1,792	592	49.3%
82.7%	824	1,644	820	99.5%
84.0%	700	1,536	836	119.4%
85.2%	558	1,182	625	112.0%
86.4%	500	978	478	95.5%
87.7%	488	973	486	99.6%
88.9%	446	827	380	85.2%
90.1%	443	700	257	58.1%
91.4%	384	700	316	82.2%
92.6%	377	700	323	85.8%
93.8%	372	628	256	68.9%
95.1%	300	614	314	104.6%
96.3%	300	524	224	74.7%
97.5%	300	442	142	47.2%
98.8%	300	440	140	46.6%
100.0%	104	272	167	

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,938	6,938	0	0.0%
1.2%	6,938	6,938	0	0.0%
2.5%	6,937	6,937	0	0.0%
3.7%	6,926	6,926	0	0.0%
4.9%	6,925	6,925	0	0.0%
6.2%	6,925	6,925	0	0.0%
7.4%	6,922	6,922	0	0.0%
8.6%	6,920	6,922	2	0.0%
9.9%	6,919	6,922	3	0.0%
11.1%	6,918	6,920	2	0.0%
12.3%	6,876	6,919	43	0.6%
13.6%	6,873	6,918	45	0.7%
14.8%	6,867	6,876	10	0.1%
16.0%	6,864	6,873	9	0.1%
17.3%	6,861	6,867	5	0.1%
18.5%	6,854	6,864	11	0.2%
19.8%	6,853	6,861	9	0.1%
21.0%	6,851	6,853	1	0.0%
22.2%	6,849	6,851	2	0.0%
23.5%	6,845	6,849	4	0.1%
24.7%	6,833	6,845	12	0.2%
25.9%	6,833	6,833	0	0.0%
27.2%	6,832	6,833	0	0.0%
28.4%	6,827	6,832	5	0.1%
29.6%	6,826	6,828	3	0.0%
30.9%	6,823	6,827	5	0.1%
32.1%	6,823	6,826	3	0.0%
33.3%	6,823	6,823	0	0.0%
34.6%	6,811	6,823	11	0.2%
35.8%	6,804	6,823	18	0.3%
37.0%	6,804	6,811	7	0.1%
38.3%	6,799	6,804	5	0.1%
39.5%	6,793	6,804	12	0.2%
40.7%	6,780	6,799	19	0.3%
42.0%	6,773	6,793	19	0.3%
43.2%	6,772	6,780	9	0.1%
44.4%	6,752	6,773	22	0.3%
45.7%	6,746	6,772	25	0.4%
46.9%	6,741	6,752	10	0.2%
48.1%	6,693	6,741	48	0.7%
49.4%	6,680	6,588	-92	-1.4%
50.6%	6,602	6,066	-536	-8.1%
51.9%	5,923	5,803	-120	-2.0%
53.1%	5,508	5,618	110	2.0%
54.3%	5,064	5,160	96	1.9%
55.6%	4,880	5,080	201	4.1%
56.8%	4,559	4,968	410	9.0%
58.0%	4,473	4,958	485	10.8%
59.3%	4,296	4,879	583	13.6%
60.5%	4,117	4,558	440	10.7%
61.7%	4,056	4,550	493	12.2%
63.0%	3,881	4,366	486	12.5%
64.2%	3,774	4,259	484	12.8%
65.4%	3,772	4,201	429	11.4%
66.7%	3,505	4,141	636	18.1%
67.9%	2,673	3,943	1,270	47.5%
69.1%	2,387	3,904	1,517	63.5%
70.4%	2,066	3,774	1,708	82.7%
71.6%	1,898	3,507	1,609	84.8%
72.8%	1,835	3,480	1,645	89.6%
74.1%	1,629	3,247	1,617	99.3%
75.3%	1,240	2,820	1,579	127.3%
76.5%	1,238	2,258	1,020	82.4%
77.8%	1,200	2,067	867	72.2%
79.0%	1,177	1,993	816	69.3%
80.2%	1,176	1,717	542	46.1%
81.5%	1,159	1,577	418	36.1%
82.7%	942	1,287	345	36.6%
84.0%	890	1,231	342	38.4%
85.2%	864	1,199	335	38.7%
86.4%	579	1,195	616	106.3%
87.7%	419	1,192	772	184.2%
88.9%	300	983	683	227.7%
90.1%	300	579	279	93.1%
91.4%	300	514	214	71.2%
92.6%	300	510	210	70.1%
93.8%	300	473	173	57.8%
95.1%	300	451	151	50.3%
96.3%	300	373	73	24.5%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	0	300	300	

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,930	6,933	2	0.0%
1.2%	6,915	6,851	-64	-0.9%
2.5%	6,875	6,843	-32	-0.5%
3.7%	6,868	6,843	-25	-0.4%
4.9%	6,803	6,838	36	0.5%
6.2%	6,680	6,815	135	2.0%
7.4%	6,680	6,804	124	1.9%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,605	6,680	75	1.1%
22.2%	6,569	6,680	111	1.7%
23.5%	6,477	6,680	203	3.1%
24.7%	6,465	6,666	201	3.1%
25.9%	6,414	6,567	153	2.4%
27.2%	6,333	6,546	213	3.4%
28.4%	6,321	6,526	205	3.2%
29.6%	6,313	6,407	94	1.5%
30.9%	6,282	6,400	118	1.9%
32.1%	6,180	6,397	217	3.5%
33.3%	5,993	6,375	381	6.4%
34.6%	5,925	6,369	444	7.5%
35.8%	5,874	6,308	434	7.4%
37.0%	5,864	6,304	440	7.5%
38.3%	5,722	6,258	536	9.4%
39.5%	5,652	6,224	572	10.1%
40.7%	5,608	6,223	615	11.0%
42.0%	5,514	5,951	437	7.9%
43.2%	5,488	5,922	434	7.9%
44.4%	5,363	5,800	437	8.1%
45.7%	5,219	5,794	575	11.0%
46.9%	5,150	5,716	566	11.0%
48.1%	5,069	5,579	510	10.1%
49.4%	4,984	5,531	547	11.0%
50.6%	4,960	5,325	365	7.4%
51.9%	4,741	5,303	562	11.9%
53.1%	4,704	5,303	599	12.7%
54.3%	4,531	5,237	706	15.6%
55.6%	4,350	4,990	640	14.7%
56.8%	4,319	4,761	442	10.2%
58.0%	3,993	4,683	690	17.3%
59.3%	3,888	4,614	727	18.7%
60.5%	3,846	4,588	742	19.3%
61.7%	3,716	4,542	826	22.2%
63.0%	3,239	4,511	1,272	39.3%
64.2%	3,176	4,425	1,249	39.3%
65.4%	3,082	4,268	1,186	38.5%
66.7%	2,966	4,161	1,195	40.3%
67.9%	2,653	4,063	1,410	53.1%
69.1%	2,621	3,958	1,336	51.0%
70.4%	2,607	3,787	1,180	45.2%
71.6%	2,505	3,648	1,143	45.6%
72.8%	2,375	3,635	1,260	53.1%
74.1%	2,348	3,470	1,122	47.8%
75.3%	2,239	3,441	1,202	53.7%
76.5%	2,225	3,244	1,019	45.8%
77.8%	2,206	3,164	958	43.4%
79.0%	2,178	2,913	735	33.8%
80.2%	1,941	2,769	827	42.6%
81.5%	1,924	2,715	791	41.1%
82.7%	1,685	2,698	1,013	60.1%
84.0%	1,407	2,382	975	69.3%
85.2%	1,392	2,281	889	63.8%
86.4%	1,368	1,924	556	40.6%
87.7%	1,332	1,695	363	27.2%
88.9%	1,299	1,686	387	29.8%
90.1%	1,207	1,319	112	9.3%
91.4%	963	1,296	333	34.5%
92.6%	931	1,274	343	36.9%
93.8%	853	1,197	344	40.4%
95.1%	822	1,034	212	25.8%
96.3%	787	901	115	14.6%
97.5%	654	822	168	25.7%
98.8%	612	704	92	15.0%
100.0%	300	437	137	45.5%

Figure SW-39-b
Banks Pumping Plant (SWP), Monthly Diversion
Probability of Exceedance

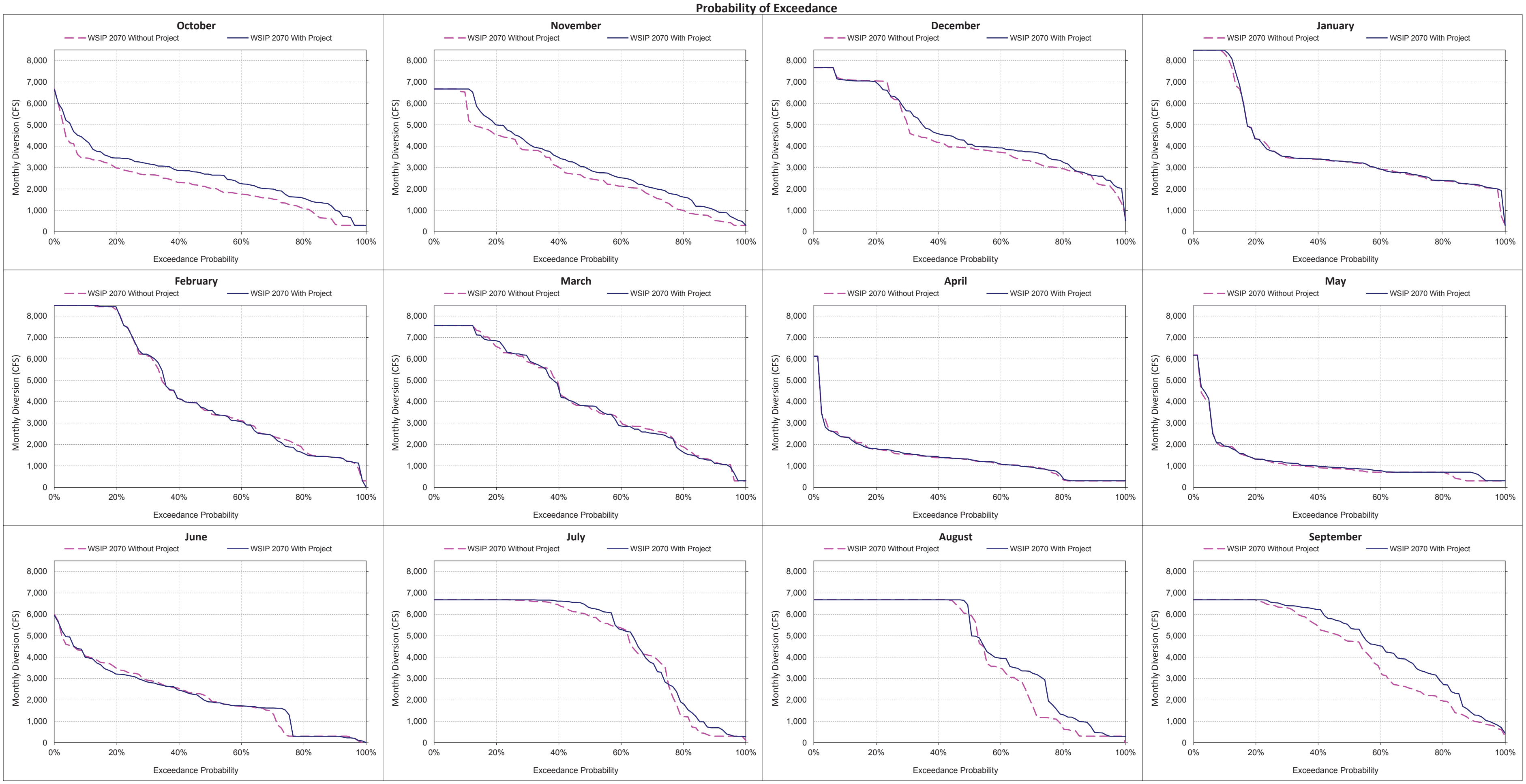


Table SW-39-b

Banks Pumping Plant (SWP), Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,652	-28	-0.4%
1.2%	5,997	6,009	11	0.2%
2.5%	5,271	5,731	460	8.7%
3.7%	4,452	5,227	774	17.4%
4.9%	4,164	5,086	922	22.1%
6.2%	4,122	4,687	565	13.7%
7.4%	3,625	4,515	890	24.6%
8.6%	3,454	4,448	995	28.8%
9.9%	3,452	4,284	832	24.1%
11.1%	3,438	4,158	720	20.9%
12.3%	3,365	3,860	495	14.7%
13.6%	3,361	3,766	405	12.0%
14.8%	3,319	3,736	417	12.6%
16.0%	3,244	3,597	353	10.9%
17.3%	3,207	3,530	323	10.1%
18.5%	3,108	3,459	352	11.3%
19.8%	2,992	3,454	462	15.5%
21.0%	2,958	3,451	493	16.7%
22.2%	2,890	3,430	540	18.7%
23.5%	2,849	3,428	579	20.3%
24.7%	2,807	3,378	571	20.3%
25.9%	2,793	3,284	491	17.6%
27.2%	2,713	3,269	556	20.5%
28.4%	2,676	3,231	555	20.8%
29.6%	2,673	3,192	519	19.4%
30.9%	2,671	3,158	487	18.3%
32.1%	2,661	3,131	470	17.7%
33.3%	2,631	3,073	441	16.8%
34.6%	2,513	3,069	556	22.1%
35.8%	2,499	3,067	567	22.7%
37.0%	2,460	3,035	575	23.4%
38.3%	2,383	2,925	542	22.8%
39.5%	2,313	2,867	553	23.9%
40.7%	2,300	2,864	564	24.5%
42.0%	2,291	2,860	569	24.8%
43.2%	2,288	2,857	569	24.9%
44.4%	2,203	2,805	602	27.3%
45.7%	2,189	2,801	613	28.0%
46.9%	2,141	2,755	614	28.7%
48.1%	2,126	2,701	575	27.0%
49.4%	2,058	2,698	640	31.1%
50.6%	2,024	2,654	630	31.1%
51.9%	2,023	2,653	630	31.1%
53.1%	1,922	2,651	729	37.9%
54.3%	1,838	2,639	801	43.6%
55.6%	1,836	2,441	605	32.9%
56.8%	1,836	2,432	597	32.5%
58.0%	1,801	2,389	587	32.6%
59.3%	1,772	2,276	504	28.4%
60.5%	1,756	2,232	476	27.1%
61.7%	1,744	2,224	480	27.6%
63.0%	1,696	2,194	498	29.4%
64.2%	1,676	2,150	474	28.3%
65.4%	1,636	2,062	427	26.1%
66.7%	1,593	2,033	440	27.6%
67.9%	1,592	2,022	430	27.0%
69.1%	1,570	2,014	444	28.3%
70.4%	1,523	1,996	473	31.0%
71.6%	1,501	1,923	422	28.1%
72.8%	1,358	1,910	552	40.7%
74.1%	1,346	1,755	409	30.4%
75.3%	1,271	1,638	367	28.8%
76.5%	1,244	1,628	384	30.9%
77.8%	1,212	1,617	405	33.4%
79.0%	1,135	1,602	467	41.2%
80.2%	1,067	1,554	487	45.7%
81.5%	1,058	1,491	433	40.9%
82.7%	940	1,411	471	50.1%
84.0%	792	1,379	587	74.2%
85.2%	654	1,377	723	110.6%
86.4%	640	1,342	702	109.8%
87.7%	630	1,326	696	110.4%
88.9%	603	1,210	608	100.8%
90.1%	349	1,015	666	190.7%
91.4%	300	947	647	215.6%
92.6%	300	719	419	139.6%
93.8%	300	716	416	138.6%
95.1%	300	661	361	120.4%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,555	6,680	125	1.9%
9.9%	6,537	6,680	143	2.2%
11.1%	5,193	6,680	1,487	28.6%
12.3%	5,032	6,533	1,501	29.8%
13.6%	4,918	5,882	964	19.6%
14.8%	4,894	5,623	729	14.9%
16.0%	4,811	5,445	633	13.2%
17.3%	4,780	5,331	551	11.5%
18.5%	4,670	5,196	527	11.3%
19.8%	4,511	5,003	492	10.9%
21.0%	4,500	4,980	480	10.7%
22.2%	4,433	4,978	544	12.3%
23.5%	4,409	4,758	348	7.9%
24.7%	4,365	4,693	327	7.5%
25.9%	4,326	4,525	200	4.6%
27.2%	3,955	4,471	517	13.1%
28.4%	3,841	4,346	505	13.2%
29.6%	3,827	4,186	359	9.4%
30.9%	3,824	4,055	231	6.0%
32.1%	3,809	3,962	153	4.0%
33.3%	3,799	3,920	121	3.2%
34.6%	3,709	3,891	183	4.9%
35.8%	3,491	3,789	298	8.5%
37.0%	3,474	3,770	296	8.5%
38.3%	3,138	3,602	463	14.8%
39.5%	3,061	3,511	449	14.7%
40.7%	2,951	3,419	468	15.8%
42.0%	2,761	3,378	617	22.3%
43.2%	2,725	3,275	551	20.2%
44.4%	2,701	3,264	563	20.8%
45.7%	2,683	3,186	503	18.7%
46.9%	2,670	3,062	392	14.7%
48.1%	2,540	3,041	501	19.7%
49.4%	2,495	2,943	448	18.0%
50.6%	2,467	2,847	380	15.4%
51.9%	2,440	2,793	352	14.4%
53.1%	2,406	2,764	358	14.9%
54.3%	2,404	2,758	354	14.7%
55.6%	2,228	2,750	522	23.4%
56.8%	2,221	2,658	437	19.7%
58.0%	2,184	2,584	401	18.3%
59.3%	2,136	2,546	410	19.2%
60.5%	2,133	2,514	381	17.9%
61.7%	2,074	2,493	419	20.2%
63.0%	2,072	2,439	368	17.7%
64.2%	2,046	2,365	318	15.6%
65.4%	2,043	2,225	182	8.9%
66.7%	1,955	2,218	263	13.5%
67.9%	1,823	2,131	308	16.9%
69.1%	1,734	2,085	351	20.2%
70.4%	1,648	2,045	397	24.1%
71.6%	1,557	2,000	444	28.5%
72.8%	1,518	1,973	455	30.0%
74.1%	1,388	1,920	531	38.3%
75.3%	1,330	1,807	477	35.9%
76.5%	1,175	1,762	587	50.0%
77.8%	1,069	1,740	671	62.7%
79.0%	1,027	1,662	634	61.7%
80.2%	993	1,620	627	63.1%
81.5%	866	1,584	718	82.8%
82.7%	852	1,466	614	72.1%
84.0%	815	1,196	381	46.7%
85.2%	810	1,190	380	46.9%
86.4%	784	1,187	402	51.3%
87.7%	772	1,130	358	46.3%
88.9%	670	1,087	417	62.3%
90.1%	522	1,013	491	94.2%
91.4%	509	911	402	79.0%
92.6%	478	900	422	88.4%
93.8%	435	891	456	104.9%
95.1%	429	727	298	69.4%
96.3%	300	641	341	113.8%
97.5%	300	539	239	79.7%
98.8%	300	487	187	62.3%
100.0%	300	300	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,678	7,678	0	0.0%
1.2%	7,678	7,678	0	0.0%
2.5%	7,678	7,678	0	0.0%
3.7%	7,678	7,678	0	0.0%
4.9%	7,678	7,678	0	0.0%
6.2%	7,678	7,678	0	0.0%
7.4%	7,224	7,148	-76	-1.0%
8.6%	7,148	7,112	-35	-0.5%
9.9%	7,117	7,096	-21	-0.3%
11.1%	7,112	7,072	-40	-0.6%
12.3%	7,089	7,063	-25	-0.4%
13.6%	7,086	7,059	-27	-0.4%
14.8%	7,072	7,057	-15	-0.2%
16.0%	7,065	7,054	-10	-0.1%
17.3%	7,063	7,048	-15	-0.2%
18.5%	7,058	7,042	-16	-0.2%
19.8%	7,054	7,016	-39	-0.5%
21.0%	7,048	6,853	-195	-2.8%
22.2%	7,042	6,643	-399	-5.7%
23.5%	7,016	6,611	-404	-5.8%
24.7%	6,311	6,352	41	0.7%
25.9%	6,180	6,330	150	2.4%
27.2%	6,175	6,180	5	0.1%
28.4%	5,585	5,905	321	5.7%
29.6%	5,212	5,654	441	8.5%
30.9%	4,597	5,647	1,049	22.8%
32.1%	4,523	5,407	884	19.5%
33.3%	4,500	5,320	820	18.2%
34.6%	4,423	5,061	638	14.4%
35.8%	4,404	4,850	446	10.1%
37.0%	4,355	4,792	437	10.0%
38.3%	4,254	4,663	409	9.6%
39.5%	4,186	4,597	411	9.8%
40.7%	4,175	4,549	374	9.0%
42.0%	4,099	4,523	423	10.3%
43.2%	3,971	4,502	531	13.4%
44.4%	3,970	4,464	494	12.4%
45.7%	3,968	4,355	387	9.8%
46.9%	3,946	4,301	356	9.0%
48.1%	3,936	4,282	346	8.8%
49.4%	3,923	4,099	176	4.5%
50.6%	3,919	4,095	176	4.5%
51.9%	3,853	3,985	133	3.4%
53.1%	3,844	3,983	139	3.6%
54.3%	3,831	3,971	140	3.7%
55.6%	3,803	3,968	165	4.3%
56.8%	3,780	3,962	182	4.8%
58.0%	3,739	3,946	207	5.5%
59.3%	3,729	3,923	195	5.2%
60.5%	3,704	3,919	215	5.8%
61.7%	3,688	3,853	165	4.5%
63.0%	3,577	3,844	267	7.5%
64.2%	3,477	3,822	345	9.9%
65.4%	3,415	3,780	365	10.7%
66.7%	3,364	3,779	415	12.3%
67.9%	3,337	3,744	407	12.2%
69.1%	3,328	3,736	408	12.3%
70.4%	3,259	3,729	470	14.4%
71.6%	3,207	3,711	504	15.7%
72.8%	3,135	3,655	519	16.6%
74.1%	3,057	3,623	566	18.5%
75.3%	3,036	3,459	424	14.0%
76.5%	3,033	3,379	347	11.4%
77.8%	3,010	3,364	354	11.8%
79.0%	2,958	3,344	386	13.1%
80.2%	2,946	3,234	288	9.8%
81.5%	2,877	3,176	298	10.4%
82.7%	2,826	3,002	176	6.2%
84.0%	2,821	2,859	38	1.4%
85.2%	2,798	2,808	10	0.4%
86.4%	2,676	2,786	110	4.1%
87.7%	2,670	2,707	37	1.4%
88.9%	2,658	2,654	-4	-0.1%
90.1%	2,351	2,638	288	12.2%
91.4%	2,222	2,604	382	17.2%
92.6%	2,185	2,603	417	19.1%
93.8%	2,169	2,416	246	11.3%
95.1%	2,144	2,399	255	11.9%
96.3%	1,920	2,183	263	13.7%
97.5%	1,668	2,072	404	24.2%
98.8%	1,328	2,033	706	53.2%
100.0%	736	518	-219	-29.7%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,500	8,500	0	0.0%
9.9%	8,350	8,500	150	1.8%
11.1%	8,119	8,343	224	2.8%
12.3%	7,657	8,100	443	5.8%
13.6%	6,827	7,446	619	9.1%
14.8%	6,678	6,842	164	2.5%
16.0%	6,000	5,976	-24	-0.4%
17.3%	4,942	4,942	0	0.0%
18.5%	4,871	4,847	-24	-0.5%
19.8%	4,353	4,353	0	0.0%
21.0%	4,325	4,325	0	0.0%
22.2%	4,278	4,089	-189	-4.4%
23.5%	4,089	3,870	-219	-5.3%
24.7%	3,870	3,788	-83	-2.1%
25.9%	3,763	3,749	-14	-0.4%
27.2%	3,640	3,639	-1	0.0%
28.4%	3,512	3,534	23	0.7%
29.6%	3,476	3,524	48	1.4%
30.9%	3,451	3,512	61	1.8%
32.1%	3,442	3,451	9	0.3%
33.3%	3,440	3,442	1	0.0%
34.6%	3,438	3,429	-9	-0.2%
35.8%	3,424	3,427	4	0.1%
37.0%	3,414	3,424	10	0.3%
38.3%	3,403	3,414	11	0.3%
39.5%	3,403	3,406	3	0.1%
40.7%	3,403	3,404	1	0.0%
42.0%	3,373	3,375	2	0.1%
43.2%	3,323	3,373	50	1.5%
44.4%	3,319	3,323	4	0.1%
45.7%	3,301	3,319	18	0.6%
46.9%	3,300	3,307	6	0.2%
48.1%	3,286	3,291	5	0.1%
49.4%	3,270	3,272	2	0.1%
50.6%	3,227	3,270	43	1.3%
51.9%	3,221	3,245	23	0.7%
53.1%	3,214	3,221	7	0.2%
54.3%	3,195	3,214	19	0.6%
55.6%	3,156	3,156	0	0.0%
56.8%	3,046	3,046	0	0.0%
58.0%	3,021	3,023	2	0.1%
59.3%	2,948	2,958	10	0.3%
60.5%	2,913	2,913	0	0.0%
61.7%	2,899	2,845	-54	-1.8%
63.0%	2,884	2,810	-74	-2.6%
64.2%	2,830	2,788	-41	-1.5%
65.4%	2,786	2,786	0	0.0%
66.7%	2,734	2,772	38	1.4%
67.9%	2,720	2,767	47	1.7%
69.1%	2,669	2,734	65	2.4%
70.4%	2,661	2,669	8	0.3%
71.6%	2,627	2,661	34	1.3%
72.8%	2,576	2,627	51	2.0%
74.1%	2,554	2,576	22	0.9%
75.3%	2,420	2,554	133	5.5%
76.5%	2,405	2,420	15	0.6%
77.8%	2,392	2,405	13	0.5%
79.0%	2,390	2,404	14	0.6%
80.2%	2,380	2,400	20	0.8%
81.5%	2,371	2,392	21	0.9%
82.7%	2,357	2,380	23	1.0%
84.0%	2,330	2,371	40	1.7%
85.2%	2,285	2,265	-20	-0.9%
86.4%	2,255	2,257	2	0.1%
87.7%	2,229	2,255	25	1.1%
88.9%	2,225	2,228	2	0.1%
90.1%	2,198	2,225	27	1.2%
91.4%	2,153	2,197	44	2.0%
92.6%	2,120	2,153	33	1.6%
93.8%	2,059	2,093	34	1.6%
95.1%	2,048	2,057	9	0.4%
96.3%	2,040	2,030	-10	-0.5%
97.5%	2,029	2,003	-26	-1.3%
98.8%	733	1,932	1,199	163.6%
100.0%	300	300	0	0.0%

Table SW-39-b

Banks Pumping Plant (SWP), Monthly Diversion

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,500	8,500	0	0.0%
1.2%	8,500	8,500	0	0.0%
2.5%	8,500	8,500	0	0.0%
3.7%	8,500	8,500	0	0.0%
4.9%	8,500	8,500	0	0.0%
6.2%	8,500	8,500	0	0.0%
7.4%	8,500	8,500	0	0.0%
8.6%	8,500	8,500	0	0.0%
9.9%	8,500	8,500	0	0.0%
11.1%	8,500	8,500	0	0.0%
12.3%	8,500	8,500	0	0.0%
13.6%	8,437	8,500	63	0.7%
14.8%	8,437	8,437	0	0.0%
16.0%	8,437	8,437	0	0.0%
17.3%	8,437	8,437	0	0.0%
18.5%	8,437	8,437	0	0.0%
19.8%	8,293	8,437	144	1.7%
21.0%	8,050	8,028	-21	-0.3%
22.2%	7,565	7,563	-2	0.0%
23.5%	7,480	7,451	-28	-0.4%
24.7%	7,133	7,108	-25	-0.4%
25.9%	6,703	6,751	48	0.7%
27.2%	6,231	6,393	162	2.6%
28.4%	6,221	6,226	5	0.1%
29.6%	6,147	6,221	74	1.2%
30.9%	6,110	6,121	11	0.2%
32.1%	5,818	6,005	186	3.2%
33.3%	5,527	5,818	291	5.3%
34.6%	4,960	5,462	502	10.1%
35.8%	4,738	4,729	-8	-0.2%
37.0%	4,536	4,565	29	0.6%
38.3%	4,515	4,536	21	0.5%
39.5%	4,151	4,151	0	0.0%
40.7%	4,104	4,111	7	0.2%
42.0%	3,986	3,987	0	0.0%
43.2%	3,965	3,966	1	0.0%
44.4%	3,950	3,950	0	0.0%
45.7%	3,944	3,944	0	0.0%
46.9%	3,747	3,747	0	0.0%
48.1%	3,594	3,702	108	3.0%
49.4%	3,585	3,594	9	0.3%
50.6%	3,400	3,587	187	5.5%
51.9%	3,376	3,400	24	0.7%
53.1%	3,364	3,376	12	0.3%
54.3%	3,354	3,364	10	0.3%
55.6%	3,328	3,313	-15	-0.5%
56.8%	3,242	3,118	-124	-3.8%
58.0%	3,240	3,117	-123	-3.8%
59.3%	3,118	3,075	-43	-1.4%
60.5%	3,096	3,047	-49	-1.6%
61.7%	2,909	2,909	0	0.0%
63.0%	2,908	2,908	0	0.0%
64.2%	2,846	2,648	-199	-7.0%
65.4%	2,568	2,507	-61	-2.4%
66.7%	2,499	2,499	0	0.0%
67.9%	2,479	2,479	0	0.0%
69.1%	2,456	2,460	3	0.1%
70.4%	2,375	2,349	-26	-1.1%
71.6%	2,310	2,171	-139	-6.0%
72.8%	2,273	2,082	-192	-8.4%
74.1%	2,226	1,913	-313	-14.0%
75.3%	2,171	1,876	-295	-13.6%
76.5%	2,082	1,862	-220	-10.5%
77.8%	1,983	1,696	-287	-14.5%
79.0%	1,913	1,649	-264	-13.8%
80.2%	1,696	1,562	-134	-7.9%
81.5%	1,561	1,480	-81	-5.2%
82.7%	1,485	1,471	-14	-0.9%
84.0%	1,471	1,449	-22	-1.5%
85.2%	1,449	1,449	0	0.0%
86.4%	1,449	1,430	-19	-1.3%
87.7%	1,430	1,427	-3	-0.2%
88.9%	1,408	1,408	0	0.0%
90.1%	1,390	1,390	0	0.0%
91.4%	1,386	1,384	-2	-0.2%
92.6%	1,349	1,349	0	0.0%
93.8%	1,219	1,219	0	0.0%
95.1%	1,202	1,202	0	0.0%
96.3%	1,124	1,156	32	2.9%
97.5%	879	1,124	245	27.9%
98.8%	300	300	0	0.0%
100.0%	300	7	-293	-97.5%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,561	7,561	0	0.0%
1.2%	7,561	7,561	0	0.0%
2.5%	7,561	7,561	0	0.0%
3.7%	7,561	7,561	0	0.0%
4.9%	7,561	7,561	0	0.0%
6.2%	7,561	7,561	0	0.0%
7.4%	7,561	7,561	0	0.0%
8.6%	7,561	7,561	0	0.0%
9.9%	7,561	7,561	0	0.0%
11.1%	7,561	7,561	0	0.0%
12.3%	7,561	7,561	0	0.0%
13.6%	7,337	7,114	-223	-3.0%
14.8%	7,284	7,111	-173	-2.4%
16.0%	7,028	6,929	-100	-1.4%
17.3%	7,020	6,878	-142	-2.0%
18.5%	6,801	6,863	62	0.9%
19.8%	6,589	6,854	264	4.0%
21.0%	6,511	6,801	290	4.5%
22.2%	6,291	6,589	298	4.7%
23.5%	6,286	6,311	26	0.4%
24.7%	6,236	6,280	44	0.7%
25.9%	6,231	6,237	6	0.1%
27.2%	6,134	6,231	97	1.6%
28.4%	6,127	6,182	55	0.9%
29.6%	5,880	6,171	291	4.9%
30.9%	5,816	5,880	63	1.1%
32.1%	5,752	5,802	50	0.9%
33.3%	5,587	5,728	141	2.5%
34.6%	5,585	5,632	47	0.8%
35.8%	5,573	5,516	-58	-1.0%
37.0%	5,558	5,151	-407	-7.3%
38.3%	5,151	4,997	-154	-3.0%
39.5%	5,006	4,856	-150	-3.0%
40.7%	4,293	4,200	-94	-2.2%
42.0%	4,200	4,170	-30	-0.7%
43.2%	4,065	4,065	0	0.0%
44.4%	3,918	4,019	102	2.6%
45.7%	3,824	3,918	93	2.4%
46.9%	3,820	3,824	5	0.1%
48.1%	3,796	3,818	21	0.6%
49.4%	3,796	3,796	1	0.0%
50.6%	3,622	3,796	174	4.8%
51.9%	3,610	3,781	171	4.7%
53.1%	3,475	3,606	130	3.8%
54.3%	3,411	3,479	68	2.0%
55.6%	3,408	3,411	2	0.1%
56.8%	3,404	3,404	0	0.0%
58.0%	3,346	3,178	-168	-5.0%
59.3%	3,167	2,887	-280	-8.8%
60.5%	2,949	2,848	-102	-3.5%
61.7%	2,887	2,835	-53	-1.8%
63.0%	2,870	2,828	-43	-1.5%
64.2%	2,848	2,715	-132	-4.6%
65.4%	2,847	2,715	-133	-4.7%
66.7%	2,835	2,585	-250	-8.8%
67.9%	2,734	2,580	-153	-5.6%
69.1%	2,715	2,540	-174	-6.4%
70.4%	2,656	2,527	-129	-4.8%
71.6%	2,609	2,491	-118	-4.5%
72.8%	2,580	2,472	-108	-4.2%
74.1%	2,551	2,424	-126	-5.0%
75.3%	2,472	2,323	-150	-6.0%
76.5%	2,292	2,292	0	0.0%
77.8%	2,035	1,866	-169	-8.3%
79.0%	1,947	1,717	-230	-11.8%
80.2%	1,866	1,612	-254	-13.6%
81.5%	1,735	1,528	-207	-11.9%
82.7%	1,612	1,508	-104	-6.5%
84.0%	1,462	1,460	-2	-0.1%
85.2%	1,460	1,333	-127	-8.7%
86.4%	1,333	1,328	-5	-0.4%
87.7%	1,328	1,279	-49	-3.7%
88.9%	1,262	1,262	0	0.0%
90.1%	1,190	1,109	-81	-6.8%
91.4%	1,107	1,107	0	0.0%
92.6%	1,072	1,072	0	0.0%
93.8%	1,064	1,052	-12	-1.1%
95.1%	1,052	943	-109	-10.4%
96.3%	300	654	354	117.9%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,125	6,125	0	0.0%
1.2%	6,125	6,125	0	0.0%
2.5%	3,448	3,443	-6	-0.2%
3.7%	3,166	2,816	-350	-11.1%
4.9%	2,650	2,641	-9	-0.3%
6.2%	2,598	2,613	15	0.6%
7.4%	2,594	2,471	-123	-4.8%
8.6%	2,362	2,362	0	0.0%
9.9%	2,352	2,345	-8	-0.3%
11.1%	2,333	2,325	-9	-0.4%
12.3%	2,285	2,182	-103	-4.5%
13.6%	2,104	2,054	-50	-2.4%
14.8%	2,087	1,996	-91	-4.3%
16.0%	2,062	1,903	-160	-7.7%
17.3%	1,843	1,843	0	0.0%
18.5%	1,803	1,812	9	0.5%
19.8%	1,767	1,803	36	2.0%
21.0%	1,767	1,767	0	0.0%
22.2%	1,738	1,767	28	1.6%
23.5%	1,704	1,759	55	3.2%
24.7%	1,682	1,733	51	3.0%
25.9%	1,575	1,683	107	6.8%
27.2%	1,560	1,674	115	7.4%
28.4%	1,543	1,597	54	3.5%
29.6%	1,528	1,575	47	3.1%
30.9%	1,523	1,560	37	2.4%
32.1%	1,516	1,528	12	0.8%
33.3%	1,491	1,523	32	2.1%
34.6%	1,460	1,478	18	1.2%
35.8%	1,456	1,460	4	0.3%
37.0%	1,440	1,456	16	1.1%
38.3%	1,394	1,440	46	3.3%
39.5%	1,383	1,440	56	4.1%
40.7%	1,382	1,383	1	0.1%
42.0%	1,379	1,382	3	0.2%
43.2%	1,370	1,379	9	0.7%
44.4%	1,348	1,362	14	1.0%
45.7%	1,339	1,348	9	0.7%
46.9%	1,337	1,337	0	0.0%
48.1%	1,323	1,323	0	0.0%
49.4%	1,297	1,318	21	1.6%
50.6%	1,272	1,269	-3	-0.3%
51.9%	1,226	1,264	38	3.1%
53.1%	1,207	1,207	0	0.0%
54.3%	1,206	1,203	-3	-0.3%
55.6%	1,193	1,193	0	0.0%
56.8%	1,183	1,187	4	0.4%
58.0%	1,106	1,182	76	6.9%
59.3%	1,093	1,106	14	1.3%
60.5%	1,064	1,064	0	0.0%
61.7%	1,058	1,058	0	0.0%
63.0%	1,042	1,041	0	0.0%
64.2%	1,041	1,034	-7	-0.7%
65.4%	1,030	1,030	0	0.0%
66.7%	978	976	-2	-0.2%
67.9%	976	966	-10	-1.0%
69.1%	958	950	-8	-0.8%
70.4%	950	936	-15	-1.5%
71.6%	947	892	-55	-5.8%
72.8%	892	857	-35	-3.9%
74.1%	855	855	0	0.0%
75.3%	784	798	14	1.8%
76.5%	673	784	111	16.4%
77.8%	626	750	124	19.9%
79.0%	466	610	145	31.1%
80.2%	333	362	29	8.7%
81.5%	300	328	28	9.3%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,177	6,177	0	0.0%
1.2%	6,177	6,177	0	0.0%
2.5%	4,434	4,698	263	5.9%
3.7%	4,142	4,441	299	7.2%
4.9%	3,976	4,135	160	4.0%
6.2%	2,521	2,513	-8	-0.3%
7.4%	2,092	2,080	-12	-0.6%
8.6%	1,935	2,076	141	7.3%
9.9%	1,913	1,924	11	0.6%
11.1%	1,899	1,902	3	0.2%
12.3%	1,898	1,807	-91	-4.8%
13.6%	1,728	1,729	0	0.0%
14.8%	1,574	1,574	0	0.0%
16.0%	1,510	1,566	56	3.7%
17.3%	1,459	1,459	0	0.0%
18.5%	1,401	1,391	-10	-0.7%
19.8%	1,314	1,321	7	0.5%
21.0%	1,309	1,315	6	0.5%
22.2%	1,264	1,312	48	3.8%
23.5%	1,247	1,252	5	0.4%
24.7%	1,195	1,236	41	3.4%
25.9%	1,126	1,202	76	6.7%
27.2%	1,117	1,197	80	7.1%
28.4%	1,111	1,184	73	6.6%
29.6%	1,042	1,141	99	9.5%
30.9%	1,025	1,126	101	9.8%
32.1%	1,024	1,117	93	9.1%
33.3%	1,021	1,111	90	8.8%
34.6%	1,002	1,035	33	3.3%
35.8%	976	1,025	49	5.1%
37.0%	968	1,024	56	5.8%
38.3%	947	1,021	74	7.8%
39.5%	925	999	74	8.0%
40.7%	909	976	67	7.4%
42.0%	900	968	68	7.6%
43.2%	882	948	66	7.4%
44.4%	881	937	56	6.4%
45.7%	869	925	56	6.5%
46.9%	866	921	55	6.3%
48.1%	848	909	61	7.2%
49.4%	845	889	45	5.3%
50.6%	830	882	52	6.2%
51.9%	791	881	90	11.4%
53.1%	768	866	99	12.8%
54.3%	762	848	85	11.2%
55.6%	720	845	125	17.3%
56.8%	711	830	119	16.8%
58.0%	704	790	86	12.2%
59.3%	700	776	76	10.8%
60.5%	700	762	62	8.9%
61.7%	700	721	21	2.9%
63.0%	700	711	11	1.6%
64.2%	700	704	4	0.6%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	633	700	67	10.6%
82.7%	589	700	111	18.8%
84.0%	422	700	278	65.9%
85.2%	388	700	312	80.5%
86.4%	355	700	345	97.0%
87.7%	300	700	400	133.3%
88.9%	300	700	400	133.3%
90.1%	300	655	355	118.2%
91.4%	300	591	291	96.9%
92.6%	300	452	152	50.8%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-39-b

Banks Pumping Plant (SWP), Monthly Diversion

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,990	5,945	-45	-0.7%
1.2%	5,676	5,633	-43	-0.8%
2.5%	4,952	5,206	254	5.1%
3.7%	4,597	4,952	355	7.7%
4.9%	4,544	4,944	400	8.8%
6.2%	4,489	4,516	27	0.6%
7.4%	4,339	4,390	52	1.2%
8.6%	4,306	4,375	68	1.6%
9.9%	4,050	3,987	-63	-1.6%
11.1%	3,996	3,963	-32	-0.8%
12.3%	3,953	3,913	-40	-1.0%
13.6%	3,862	3,729	-133	-3.4%
14.8%	3,748	3,647	-101	-2.7%
16.0%	3,732	3,467	-265	-7.1%
17.3%	3,731	3,394	-337	-9.0%
18.5%	3,621	3,314	-307	-8.5%
19.8%	3,491	3,209	-281	-8.1%
21.0%	3,394	3,190	-203	-6.0%
22.2%	3,370	3,185	-186	-5.5%
23.5%	3,295	3,143	-152	-4.6%
24.7%	3,240	3,113	-127	-3.9%
25.9%	3,238	3,076	-162	-5.0%
27.2%	3,190	2,973	-218	-6.8%
28.4%	2,988	2,910	-78	-2.6%
29.6%	2,925	2,840	-84	-2.9%
30.9%	2,895	2,806	-89	-3.1%
32.1%	2,859	2,783	-76	-2.7%
33.3%	2,806	2,722	-83	-3.0%
34.6%	2,722	2,685	-37	-1.4%
35.8%	2,639	2,639	0	0.0%
37.0%	2,613	2,620	7	0.3%
38.3%	2,566	2,613	47	1.8%
39.5%	2,561	2,471	-91	-3.5%
40.7%	2,471	2,425	-45	-1.8%
42.0%	2,426	2,372	-54	-2.2%
43.2%	2,332	2,293	-38	-1.7%
44.4%	2,319	2,265	-54	-2.3%
45.7%	2,299	2,234	-66	-2.9%
46.9%	2,278	2,101	-177	-7.8%
48.1%	2,214	1,979	-235	-10.6%
49.4%	2,100	1,906	-194	-9.2%
50.6%	1,915	1,894	-21	-1.1%
51.9%	1,906	1,866	-41	-2.1%
53.1%	1,858	1,858	0	0.0%
54.3%	1,799	1,799	0	0.0%
55.6%	1,792	1,792	0	0.0%
56.8%	1,741	1,741	0	0.0%
58.0%	1,721	1,728	8	0.4%
59.3%	1,701	1,723	22	1.3%
60.5%	1,697	1,721	24	1.4%
61.7%	1,692	1,701	9	0.5%
63.0%	1,692	1,697	5	0.3%
64.2%	1,632	1,692	60	3.7%
65.4%	1,618	1,635	16	1.0%
66.7%	1,617	1,632	14	0.9%
67.9%	1,520	1,624	104	6.8%
69.1%	1,501	1,617	117	7.8%
70.4%	1,307	1,613	306	23.4%
71.6%	826	1,610	784	95.0%
72.8%	676	1,610	934	138.2%
74.1%	351	1,519	1,169	333.3%
75.3%	300	1,296	996	332.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	261	-39	-13.0%
93.8%	300	229	-71	-23.7%
95.1%	261	226	-35	-13.3%
96.3%	200	200	0	0.0%
97.5%	79	100	21	
98.8%	0	79	79	
100.0%	0	0	0	

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,673	6,680	7	0.1%
25.9%	6,664	6,680	16	0.2%
27.2%	6,661	6,680	19	0.3%
28.4%	6,655	6,680	25	0.4%
29.6%	6,644	6,680	36	0.5%
30.9%	6,619	6,680	61	0.9%
32.1%	6,600	6,672	73	1.1%
33.3%	6,597	6,664	66	1.0%
34.6%	6,596	6,663	67	1.0%
35.8%	6,578	6,662	84	1.3%
37.0%	6,557	6,658	102	1.5%
38.3%	6,486	6,651	166	2.6%
39.5%	6,463	6,609	146	2.3%
40.7%	6,365	6,609	244	3.8%
42.0%	6,327	6,599	272	4.3%
43.2%	6,199	6,590	391	6.3%
44.4%	6,128	6,558	430	7.0%
45.7%	6,111	6,551	440	7.2%
46.9%	6,059	6,547	488	8.1%
48.1%	6,033	6,464	431	7.1%
49.4%	5,950	6,331	381	6.4%
50.6%	5,851	6,274	423	7.2%
51.9%	5,850	6,256	405	6.9%
53.1%	5,684	6,200	516	9.1%
54.3%	5,587	6,116	528	9.5%
55.6%	5,569	6,093	523	9.4%
56.8%	5,480	6,074	594	10.8%
58.0%	5,422	5,504	82	1.5%
59.3%	5,397	5,319	-78	-1.4%
60.5%	5,332	5,271	-61	-1.1%
61.7%	5,245	5,198	-47	-0.9%
63.0%	4,579	5,170	590	12.9%
64.2%	4,360	4,859	499	11.4%
65.4%	4,165	4,476	311	7.5%
66.7%	4,152	4,249	98	2.4%
67.9%	4,120	3,963	-157	-3.8%
69.1%	4,070	3,778	-292	-7.2%
70.4%	4,035	3,690	-345	-8.6%
71.6%	3,885	3,310	-574	-14.8%
72.8%	3,696	3,286	-411	-11.1%
74.1%	3,552	2,840	-711	-20.0%
75.3%	2,639	2,705	66	2.5%
76.5%	2,140	2,627	487	22.7%
77.8%	1,771	2,385	615	34.7%
79.0%	1,294	1,906	613	47.4%
80.2%	1,217	1,792	575	47.3%
81.5%	1,200	1,536	336	28.0%
82.7%	731	1,402	671	91.8%
84.0%	700	1,224	524	74.8%
85.2%	457	978	521	113.8%
86.4%	446	973	527	118.1%
87.7%	377	731	354	93.9%
88.9%	300	700	400	133.3%
90.1%	300	700	400	133.3%
91.4%	300	700	400	133.3%
92.6%	300	591	291	97.1%
93.8%	300	410	110	36.7%
95.1%	300	356	56	18.7%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	104	272	167	

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,680	6,680	0	0.0%
22.2%	6,680	6,680	0	0.0%
23.5%	6,680	6,680	0	0.0%
24.7%	6,680	6,680	0	0.0%
25.9%	6,680	6,680	0	0.0%
27.2%	6,680	6,680	0	0.0%
28.4%	6,680	6,680	0	0.0%
29.6%	6,680	6,680	0	0.0%
30.9%	6,680	6,680	0	0.0%
32.1%	6,680	6,680	0	0.0%
33.3%	6,680	6,680	0	0.0%
34.6%	6,680	6,680	0	0.0%
35.8%	6,680	6,680	0	0.0%
37.0%	6,680	6,680	0	0.0%
38.3%	6,680	6,680	0	0.0%
39.5%	6,680	6,680	0	0.0%
40.7%	6,680	6,680	0	0.0%
42.0%	6,680	6,680	0	0.0%
43.2%	6,663	6,680	17	0.2%
44.4%	6,635	6,680	45	0.7%
45.7%	6,449	6,680	231	3.6%
46.9%	6,281	6,680	399	6.3%
48.1%	6,054	6,656	602	9.9%
49.4%	6,033	6,443	411	6.8%
50.6%	5,923	4,986	-937	-15.8%
51.9%	5,641	4,978	-663	-11.8%
53.1%	4,639	4,897	258	5.6%
54.3%	4,505	4,578	73	1.6%
55.6%	3,698	4,254	556	15.0%
56.8%	3,574	4,132	559	15.6%
58.0%	3,569	3,998	429	12.0%
59.3%	3,500	3,958	458	13.1%
60.5%	3,445	3,933	489	14.2%
61.7%	3,218	3,927	709	22.0%
63.0%	3,050	3,554	504	16.5%
64.2%	3,049	3,504	455	14.9%
65.4%	2,914	3,474	560	19.2%
66.7%	2,868	3,355	487	17.0%
67.9%	2,494	3,347	853	34.2%
69.1%	2,066	3,335	1,269	61.4%
70.4%	1,663	3,236	1,572	94.5%
71.6%	1,200	3,183	1,983	165.2%
72.8%	1,177	3,067	1,890	160.5%
74.1%	1,176	2,937	1,761	149.8%
75.3%	1,159	1,950	791	68.2%
76.5%	1,112	1,781	669	60.1%
77.8%	1,098	1,570	472	43.0%
79.0%	915	1,335	420	45.8%
80.2%	622	1,287	665	106.9%
81.5%	609	1,199	590	96.8%
82.7%	565	1,192	627	111.1%
84.0%	554	1,106	552	99.6%
85.2%	312	985	673	215.7%
86.4%	300	975	675	224.9%
87.7%	300	953	653	217.5%
88.9%	300	741	441	146.9%
90.1%	300	473	173	57.8%
91.4%	300	462	162	53.8%
92.6%	300	451	151	50.3%
93.8%	300	362	62	20.7%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	0	300	300	

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,680	6,680	0	0.0%
1.2%	6,680	6,680	0	0.0%
2.5%	6,680	6,680	0	0.0%
3.7%	6,680	6,680	0	0.0%
4.9%	6,680	6,680	0	0.0%
6.2%	6,680	6,680	0	0.0%
7.4%	6,680	6,680	0	0.0%
8.6%	6,680	6,680	0	0.0%
9.9%	6,680	6,680	0	0.0%
11.1%	6,680	6,680	0	0.0%
12.3%	6,680	6,680	0	0.0%
13.6%	6,680	6,680	0	0.0%
14.8%	6,680	6,680	0	0.0%
16.0%	6,680	6,680	0	0.0%
17.3%	6,680	6,680	0	0.0%
18.5%	6,680	6,680	0	0.0%
19.8%	6,680	6,680	0	0.0%
21.0%	6,605	6,680	75	1.1%
22.2%	6,569	6,680	111	1.7%
23.5%	6,477	6,666	189	2.9%
24.7%	6,425	6,567	142	2.2%
25.9%	6,414	6,546	133	2.1%
27.2%	6,333	6,526	192	3.0%
28.4%	6,321	6,471	150	2.4%
29.6%	6,313	6,407	94	1.5%
30.9%	6,282	6,400	118	1.9%
32.1%	6,180	6,397	217	3.5%
33.3%	5,993	6,375	381	6.4%
34.6%	5,925	6,335	411	6.9%
35.8%	5,874	6,308	434	7.4%
37.0%	5,722	6,304	582	10.2%
38.3%	5,608	6,258	650	11.6%
39.5%	5,500	6,224	724	13.2%
40.7%	5,266	6,223	957	18.2%
42.0%	5,219	5,951	732	14.0%
43.2%	5,167	5,800	632	12.2%
44.4%	5,113	5,794	681	13.3%
45.7%	5,069	5,716	647	12.8%
46.9%	5,001	5,680	679	13.6%
48.1%	4,838	5,579	741	15.3%
49.4%	4,747	5,531	783	16.5%
50.6%	4,741	5,325	583	12.3%
51.9%	4,715	5,303	588	12.5%
53.1%	4,704	5,303	599	12.7%
54.3%	4,350	4,990	640	14.7%
55.6%	4,195	4,761	566	13.5%
56.8%	3,993	4,614	621	15.6%
58.0%	3,716	4,588	872	23.5%
59.3%	3,597	4,541	943	26.2%
60.5%	3,176	4,504	1,329	41.8%
61.7%	3,130	4,237	1,107	35.4%
63.0%	2,895	4,217	1,322	45.7%
64.2%	2,716	4,176	1,459	53.7%
65.4%	2,687	3,958	1,271	47.3%
66.7%	2,653	3,923	1,270	47.9%
67.9%	2,621	3,911	1,289	49.2%
69.1%	2,551	3,784	1,233	48.3%
70.4%	2,505	3,710	1,204	48.1%
71.6%	2,425	3,459	1,034	42.7%
72.8%	2,375	3,363	988	41.6%
74.1%	2,239	3,317	1,078	48.1%
75.3%	2,207	3,244	1,037	47.0%
76.5%	2,206	3,191	985	44.6%
77.8%	2,178	3,164	987	45.3%
79.0%	1,985	2,913	928	46.8%
80.2%	1,941	2,715	774	39.9%
81.5%	1,924	2,698	774	40.2%
82.7%	1,685	2,382	697	41.4%
84.0%	1,392	2,305	913	65.6%
85.2%	1,368	2,281	913	66.7%
86.4%	1,299	1,686	387	29.8%
87.7%	1,207	1,594	387	32.1%
88.9%	1,060	1,438	377	35.6%
90.1%	996	1,296	300	30.1%
91.4%	963	1,274	311	32.3%
92.6%	931	1,189	258	27.7%
93.8%	853	1,034	181	21.2%
95.1%	822	983	161	19.5%
96.3%	787	901	115	14.6%
97.5%	654	822	168	25.7%
98.8%	612	704	92	15.0%
100.0%	300	437	137	45.5%

Figure SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

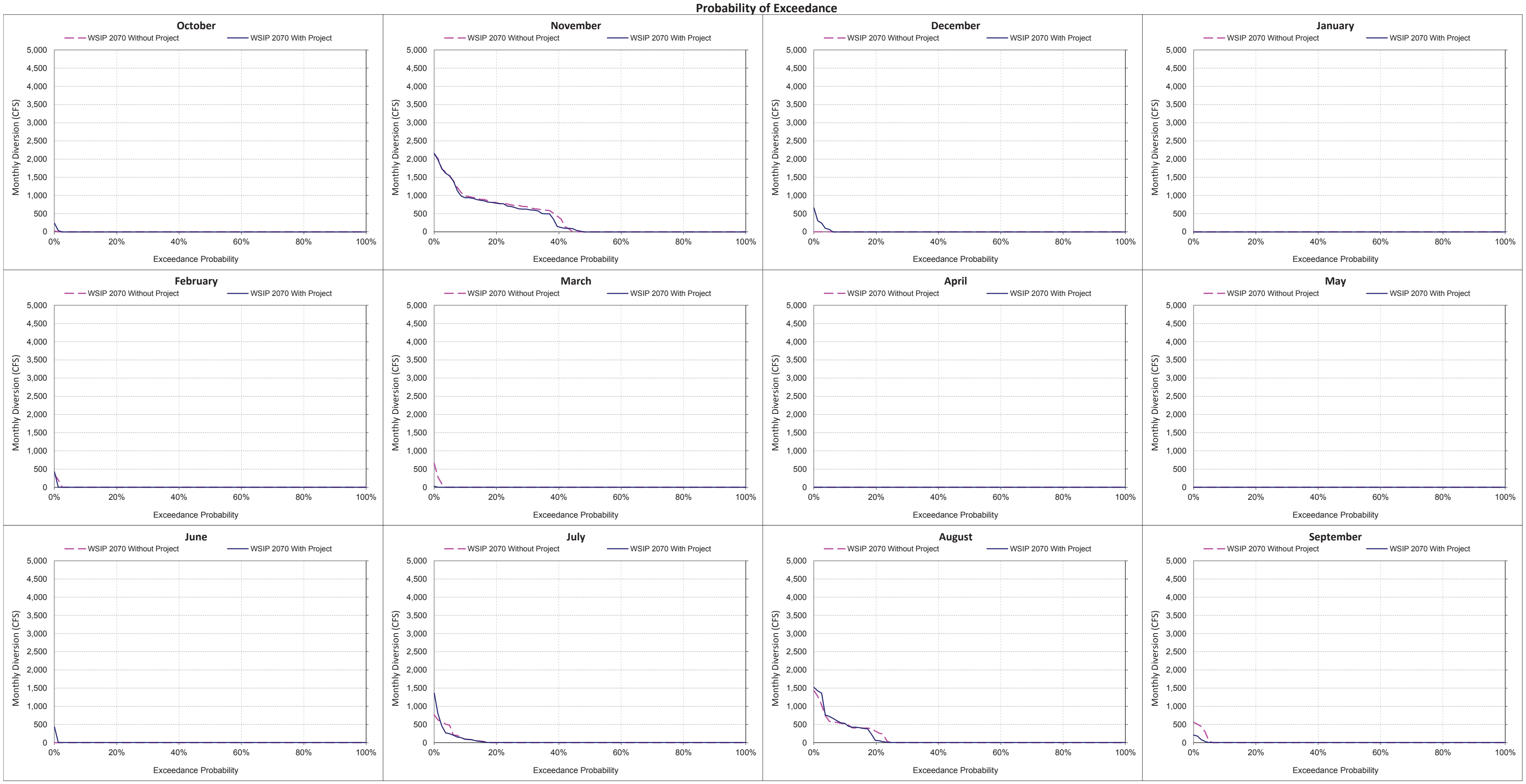


Table SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26	241	214	815.6%
1.2%	0	30	30	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,151	2,151	0	0.0%
1.2%	2,010	1,987	-23	-1.1%
2.5%	1,734	1,737	3	0.2%
3.7%	1,636	1,608	-28	-1.7%
4.9%	1,533	1,547	14	0.9%
6.2%	1,401	1,397	-5	-0.3%
7.4%	1,225	1,128	-97	-7.9%
8.6%	1,083	990	-92	-8.5%
9.9%	985	941	-44	-4.5%
11.1%	971	939	-32	-3.3%
12.3%	944	922	-22	-2.3%
13.6%	937	891	-46	-4.9%
14.8%	891	868	-23	-2.6%
16.0%	890	853	-37	-4.2%
17.3%	855	814	-41	-4.8%
18.5%	808	811	3	0.3%
19.8%	808	788	-20	-2.4%
21.0%	776	777	1	0.1%
22.2%	772	773	1	0.1%
23.5%	768	707	-61	-8.0%
24.7%	742	696	-47	-6.3%
25.9%	723	669	-54	-7.4%
27.2%	722	632	-90	-12.5%
28.4%	697	627	-70	-10.1%
29.6%	695	625	-70	-10.1%
30.9%	657	604	-53	-8.0%
32.1%	635	599	-36	-5.7%
33.3%	623	572	-52	-8.3%
34.6%	602	507	-96	-15.9%
35.8%	596	497	-99	-16.6%
37.0%	585	495	-90	-15.3%
38.3%	509	350	-159	-31.2%
39.5%	432	147	-285	-65.9%
40.7%	348	120	-228	-65.6%
42.0%	143	99	-44	-30.7%
43.2%	83	94	10	12.2%
44.4%	0	93	93	
45.7%	0	41	41	
46.9%	0	14	14	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	659	659	
1.2%	0	305	305	
2.5%	0	239	239	
3.7%	0	94	94	
4.9%	0	69	69	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	356	426	69	19.5%
1.2%	207	0	-207	-100.0%
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	662	31	-631	-95.3%
1.2%	277	0	-277	-100.0%
2.5%	92	0	-92	-100.0%
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-40-b
Banks Pumping Plant (CVP), Monthly Diversion
Probability of Exceedance

June					July					August					September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	441	441		0.0%	767	1,361	594	77.4%	0.0%	1,435	1,524	89	6.2%	0.0%	561	209	-352	-62.8%
1.2%	0	0	0		1.2%	621	801	180	29.1%	1.2%	1,278	1,422	144	11.2%	1.2%	509	182	-326	-64.2%
2.5%	0	0	0		2.5%	576	460	-116	-20.1%	2.5%	1,039	1,358	319	30.7%	2.5%	446	84	-362	-81.1%
3.7%	0	0	0		3.7%	505	266	-240	-47.4%	3.7%	741	760	19	2.6%	3.7%	299	34	-265	-88.6%
4.9%	0	0	0		4.9%	480	244	-236	-49.2%	4.9%	590	721	131	22.2%	4.9%	40	0	-40	-100.0%
6.2%	0	0	0		6.2%	208	203	-6	-2.8%	6.2%	560	668	108	19.3%	6.2%	0	0	0	
7.4%	0	0	0		7.4%	200	151	-49	-24.4%	7.4%	556	601	45	8.0%	7.4%	0	0	0	
8.6%	0	0	0		8.6%	143	142	-1	-0.8%	8.6%	533	546	13	2.5%	8.6%	0	0	0	
9.9%	0	0	0		9.9%	94	96	3	2.9%	9.9%	517	529	12	2.3%	9.9%	0	0	0	
11.1%	0	0	0		11.1%	84	86	2	2.0%	11.1%	482	451	-30	-6.3%	11.1%	0	0	0	
12.3%	0	0	0		12.3%	82	76	-6	-6.8%	12.3%	407	425	18	4.5%	12.3%	0	0	0	
13.6%	0	0	0		13.6%	53	43	-11	-19.8%	13.6%	406	424	17	4.3%	13.6%	0	0	0	
14.8%	0	0	0		14.8%	42	29	-13	-31.3%	14.8%	401	407	6	1.4%	14.8%	0	0	0	
16.0%	0	0	0		16.0%	30	18	-12	-40.8%	16.0%	399	390	-9	-2.2%	16.0%	0	0	0	
17.3%	0	0	0		17.3%	7	0	-7	-100.0%	17.3%	399	380	-19	-4.7%	17.3%	0	0	0	
18.5%	0	0	0		18.5%	0	0	0		18.5%	384	230	-154	-40.1%	18.5%	0	0	0	
19.8%	0	0	0		19.8%	0	0	0		19.8%	317	57	-260	-82.1%	19.8%	0	0	0	
21.0%	0	0	0		21.0%	0	0	0		21.0%	262	55	-207	-79.2%	21.0%	0	0	0	
22.2%	0	0	0		22.2%	0	0	0		22.2%	231	24	-208	-89.7%	22.2%	0	0	0	
23.5%	0	0	0		23.5%	0	0	0		23.5%	45	10	-35	-77.7%	23.5%	0	0	0	
24.7%	0	0	0		24.7%	0	0	0		24.7%	0	0	0		24.7%	0	0	0	
25.9%	0	0	0		25.9%	0	0	0		25.9%	0	0	0		25.9%	0	0	0	
27.2%	0	0	0		27.2%	0	0	0		27.2%	0	0	0		27.2%	0	0	0	
28.4%	0	0	0		28.4%	0	0	0		28.4%	0	0	0		28.4%	0	0	0	
29.6%	0	0	0		29.6%	0	0	0		29.6%	0	0	0		29.6%	0	0	0	
30.9%	0	0	0		30.9%	0	0	0		30.9%	0	0	0		30.9%	0	0	0	
32.1%	0	0	0		32.1%	0	0	0		32.1%	0	0	0		32.1%	0	0	0	
33.3%	0	0	0		33.3%	0	0	0		33.3%	0	0	0		33.3%	0	0	0	
34.6%	0	0	0		34.6%	0	0	0		34.6%	0	0	0		34.6%	0	0	0	
35.8%	0	0	0		35.8%	0	0	0		35.8%	0	0	0		35.8%	0	0	0	
37.0%	0	0	0		37.0%	0	0	0		37.0%	0	0	0		37.0%	0	0	0	
38.3%	0	0	0		38.3%	0	0	0		38.3%	0	0	0		38.3%	0	0	0	
39.5%	0	0	0		39.5%	0	0	0		39.5%	0	0	0		39.5%	0	0	0	
40.7%	0	0	0		40.7%	0	0	0		40.7%	0	0	0		40.7%	0	0	0	
42.0%	0	0	0		42.0%	0	0	0		42.0%	0	0	0		42.0%	0	0	0	
43.2%	0	0	0		43.2%	0	0	0		43.2%	0	0	0		43.2%	0	0	0	
44.4%	0	0	0		44.4%	0	0	0		44.4%	0	0	0		44.4%	0	0	0	
45.7%	0	0	0		45.7%	0	0	0		45.7%	0	0	0		45.7%	0	0	0	
46.9%	0	0	0		46.9%	0	0	0		46.9%	0	0	0		46.9%	0	0	0	
48.1%	0	0	0		48.1%	0	0	0		48.1%	0	0	0		48.1%	0	0	0	
49.4%	0	0	0		49.4%	0	0	0		49.4%	0	0	0		49.4%	0	0	0	
50.6%	0	0	0		50.6%	0	0	0		50.6%	0	0	0		50.6%	0	0	0	
51.9%	0	0	0		51.9%	0	0	0		51.9%	0	0	0		51.9%	0	0	0	
53.1%	0	0	0		53.1%	0	0	0		53.1%	0	0	0		53.1%	0	0	0	
54.3%	0	0	0		54.3%	0	0	0		54.3%	0	0	0		54.3%	0	0	0	
55.6%	0	0	0		55.6%	0	0	0		55.6%	0	0	0		55.6%	0	0	0	
56.8%	0	0	0		56.8%	0	0	0		56.8%	0	0	0		56.8%	0	0	0	
58.0%	0	0	0		58.0%	0	0	0		58.0%	0	0	0		58.0%	0	0	0	
59.3%	0	0	0		59.3%	0	0	0		59.3%	0	0	0		59.3%	0	0	0	
60.5%	0	0	0		60.5%	0	0	0		60.5%	0	0	0		60.5%	0	0	0	
61.7%	0	0	0		61.7%	0	0	0		61.7%	0	0	0		61.7%	0	0	0	
63.0%	0	0	0		63.0%	0	0	0		63.0%	0	0	0		63.0%	0	0	0	
64.2%	0	0	0		64.2%	0	0	0		64.2%	0	0	0		64.2%	0	0	0	
65.4%	0	0	0		65.4%	0	0	0		65.4%	0	0	0		65.4%	0	0	0	
66.7%	0	0	0		66.7%	0	0	0		66.7%	0	0	0		66.7%	0	0	0	
67.9%	0	0	0		67.9%	0	0	0		67.9%	0	0	0		67.9%	0	0	0	
69.1%	0	0	0		69.1%	0	0	0		69.1%	0	0	0		69.1%	0	0	0	
70.4%	0	0	0		70.4%	0	0	0		70.4%	0	0	0		70.4%	0	0	0	
71.6%	0	0	0		71.6%	0	0	0		71.6%	0	0	0		71.6%	0	0	0	
72.8%	0	0	0		72.8%	0	0	0		72.8%	0	0	0		72.8%	0	0	0	
74.1%	0	0	0		74.1%	0	0	0		74.1%	0	0	0		74.1%	0	0	0	
75.3%	0	0	0		75.3%	0	0	0		75.3%	0	0	0		75.3%	0	0	0	
76.5%	0	0	0		76.5%	0	0	0		76.5%	0	0	0		76.5%	0	0	0	
77.8%	0	0	0		77.8%	0	0	0		77.8%	0	0	0		77.8%	0	0	0	
79.0%	0	0	0		79.0%	0	0	0		79.0%	0	0	0		79.0%	0	0	0	
80.2%	0	0	0		80.2%	0	0	0		80.2%	0	0	0		80.2%	0	0	0	
81.5%	0	0	0		81.5%	0	0	0		81.5%	0	0	0		81.5%	0	0	0	
82.7%	0	0	0		82.7%	0	0	0		82.7%	0	0	0		82.7%	0	0	0	
84.0%	0	0	0		84.0%	0	0	0		84.0%	0	0	0		84.0%	0	0	0	
85.2%	0	0	0		85.2%	0	0	0		85.2%	0	0	0		85.2%	0	0	0	
86.4%	0	0	0		86.4%	0	0	0		86.4%	0	0	0		86.4%	0	0	0	
87.7%	0	0	0		87.7%	0	0	0		87.7%	0	0	0		87.7%	0	0	0	
88.9%	0	0	0		88.9%	0	0	0		88.9%	0	0	0		88.9%	0	0	0	
90.1%	0	0	0		90.1%	0	0	0		90.1%	0	0	0		90.1%	0	0	0	
91.4%	0	0	0		91.4%	0	0	0		91.4%	0	0	0		91.4%	0	0	0	
92.6%	0	0	0		92.6%	0	0	0		92.6%	0	0	0		92.6%	0	0	0	
93.8%	0	0	0		93.8%	0	0	0		93.8%	0	0	0		93.8%	0	0	0	
95.1%	0	0	0		95.1%	0	0	0		95.1%	0	0	0		95.1%	0	0	0	
96.3%	0	0	0		96.3%	0	0	0		96.3%	0	0	0		96.3%	0	0	0	
97.5%	0	0	0		97.5%	0	0	0		97.5%	0	0	0		97.5%	0	0	0	
98.8%	0	0	0		98.8%	0	0	0		98.8%	0	0	0		98.8%	0	0	0	
100.0%	0	0	0		100.0%	0	0	0		100.0%	0	0	0		100.0%	0	0	0	

Figure SW-41-b
San Luis Reservoir (SWP and CVP), End of Month Storage
Probability of Exceedance

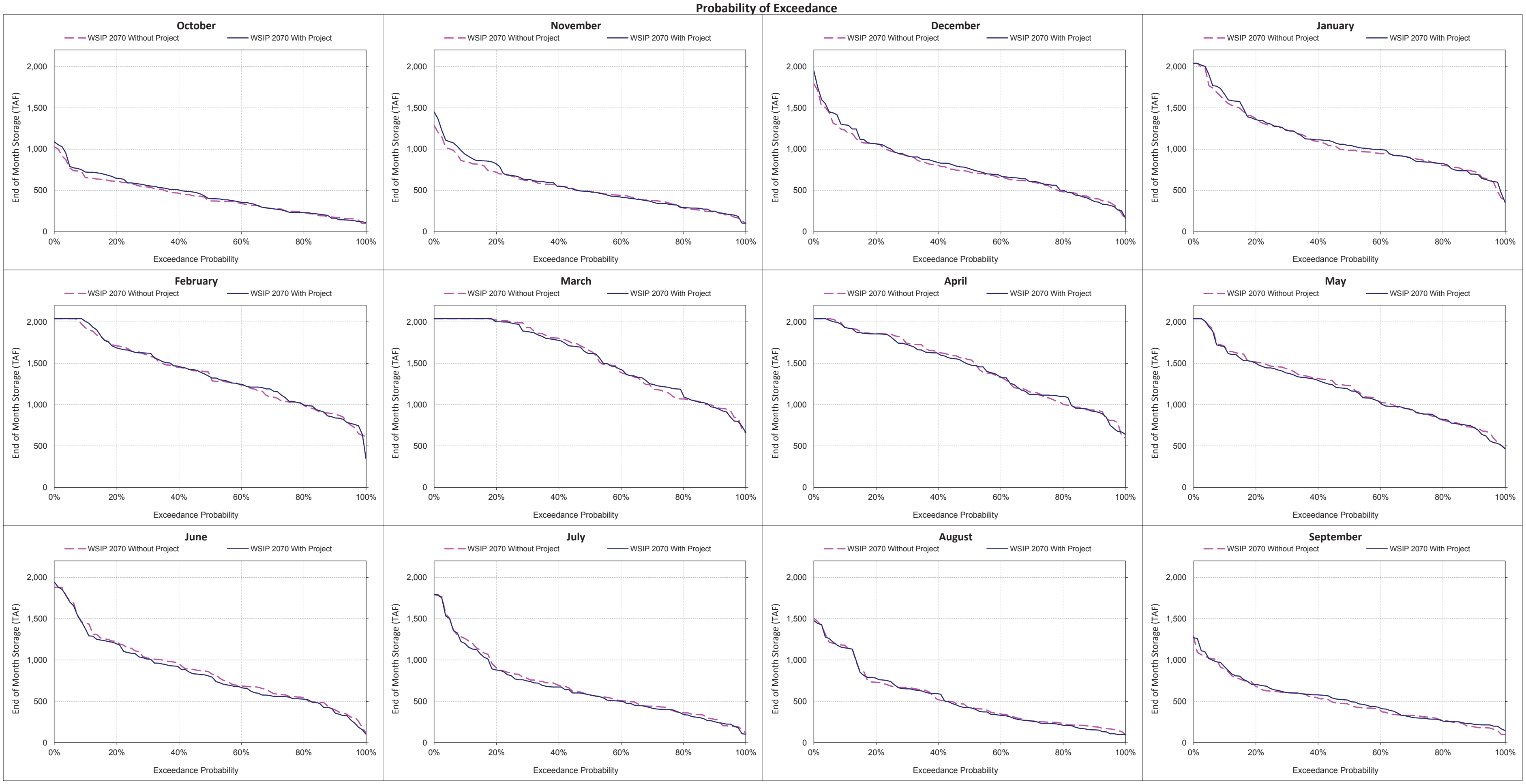


Table SW-41-b
San Luis Reservoir (SWP and CVP), End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,030	1,089	59	5.7%
1.2%	1,001	1,054	53	5.3%
2.5%	919	1,028	109	11.8%
3.7%	870	953	83	9.6%
4.9%	773	793	20	2.6%
6.2%	739	773	34	4.5%
7.4%	736	766	30	4.1%
8.6%	734	752	18	2.5%
9.9%	658	724	66	10.0%
11.1%	651	721	71	10.8%
12.3%	646	719	73	11.3%
13.6%	639	713	74	11.6%
14.8%	636	707	71	11.2%
16.0%	634	695	61	9.6%
17.3%	622	684	62	10.0%
18.5%	613	672	59	9.6%
19.8%	612	649	37	6.0%
21.0%	607	644	38	6.2%
22.2%	596	637	41	6.9%
23.5%	594	593	-1	-0.2%
24.7%	584	592	8	1.4%
25.9%	571	585	13	2.3%
27.2%	554	579	24	4.4%
28.4%	553	574	21	3.8%
29.6%	543	561	18	3.2%
30.9%	541	553	12	2.3%
32.1%	519	552	33	6.3%
33.3%	519	537	19	3.6%
34.6%	513	533	20	3.8%
35.8%	495	526	31	6.3%
37.0%	484	514	29	6.1%
38.3%	472	513	41	8.6%
39.5%	470	512	41	8.8%
40.7%	457	498	41	8.9%
42.0%	451	492	40	8.9%
43.2%	450	488	38	8.5%
44.4%	437	482	45	10.2%
45.7%	432	472	40	9.3%
46.9%	432	457	25	5.9%
48.1%	419	434	14	3.4%
49.4%	376	403	27	7.2%
50.6%	373	401	29	7.7%
51.9%	373	401	28	7.5%
53.1%	370	396	26	7.1%
54.3%	370	389	19	5.1%
55.6%	370	387	18	4.8%
56.8%	367	377	10	2.7%
58.0%	362	372	10	2.8%
59.3%	349	362	14	3.9%
60.5%	339	355	16	4.7%
61.7%	329	353	24	7.4%
63.0%	323	342	19	5.9%
64.2%	321	333	13	4.0%
65.4%	319	312	-7	-2.3%
66.7%	300	298	-2	-0.8%
67.9%	290	290	0	0.0%
69.1%	282	283	0	0.2%
70.4%	281	278	-3	-1.2%
71.6%	279	271	-8	-3.0%
72.8%	274	266	-8	-3.0%
74.1%	254	252	-3	-1.1%
75.3%	248	236	-12	-4.8%
76.5%	248	235	-13	-5.4%
77.8%	247	234	-13	-5.2%
79.0%	241	234	-7	-3.0%
80.2%	233	232	-1	-0.4%
81.5%	221	231	11	4.8%
82.7%	217	221	4	1.7%
84.0%	208	219	10	5.0%
85.2%	195	212	17	8.6%
86.4%	193	207	14	7.0%
87.7%	185	201	16	8.7%
88.9%	179	166	-13	-7.4%
90.1%	175	164	-11	-6.4%
91.4%	170	147	-23	-13.6%
92.6%	162	145	-17	-10.4%
93.8%	158	143	-16	-9.9%
95.1%	158	139	-19	-12.1%
96.3%	157	135	-22	-14.0%
97.5%	140	124	-16	-11.2%
98.8%	100	119	19	19.4%
100.0%	100	110	10	10.2%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,288	1,449	162	12.6%
1.2%	1,204	1,369	165	13.7%
2.5%	1,146	1,229	83	7.2%
3.7%	1,021	1,110	89	8.7%
4.9%	1,004	1,091	87	8.7%
6.2%	986	1,076	91	9.2%
7.4%	935	1,034	99	10.6%
8.6%	861	984	123	14.2%
9.9%	852	940	88	10.3%
11.1%	842	912	70	8.3%
12.3%	824	883	60	7.3%
13.6%	820	863	43	5.2%
14.8%	814	863	49	6.0%
16.0%	797	859	61	7.7%
17.3%	740	855	115	15.5%
18.5%	734	845	110	15.0%
19.8%	723	828	105	14.5%
21.0%	702	790	88	12.6%
22.2%	697	704	8	1.1%
23.5%	695	687	-8	-1.2%
24.7%	676	682	6	0.8%
25.9%	662	676	14	2.0%
27.2%	640	665	25	3.9%
28.4%	631	638	7	1.2%
29.6%	620	632	12	1.9%
30.9%	618	632	13	2.1%
32.1%	608	617	8	1.4%
33.3%	588	612	24	4.0%
34.6%	584	611	27	4.6%
35.8%	577	602	26	4.5%
37.0%	576	594	18	3.1%
38.3%	576	594	18	3.1%
39.5%	554	552	-2	-0.4%
40.7%	551	548	-3	-0.5%
42.0%	543	544	2	0.3%
43.2%	542	523	-19	-3.5%
44.4%	526	520	-6	-1.2%
45.7%	505	501	-4	-0.8%
46.9%	501	496	-5	-0.9%
48.1%	492	493	1	0.2%
49.4%	492	493	1	0.2%
50.6%	487	478	-9	-1.9%
51.9%	479	477	-2	-0.3%
53.1%	470	466	-4	-0.9%
54.3%	457	459	2	0.5%
55.6%	456	445	-11	-2.5%
56.8%	452	432	-20	-4.3%
58.0%	447	430	-17	-3.9%
59.3%	444	425	-19	-4.2%
60.5%	439	417	-23	-5.1%
61.7%	437	412	-25	-5.7%
63.0%	422	403	-19	-4.5%
64.2%	409	402	-8	-1.9%
65.4%	398	390	-8	-2.1%
66.7%	387	388	2	0.4%
67.9%	386	378	-8	-2.0%
69.1%	381	372	-9	-2.4%
70.4%	378	355	-23	-6.1%
71.6%	375	343	-32	-8.6%
72.8%	369	343	-26	-7.0%
74.1%	362	343	-20	-5.5%
75.3%	349	334	-15	-4.2%
76.5%	334	328	-6	-1.8%
77.8%	332	326	-7	-2.0%
79.0%	300	295	-6	-1.8%
80.2%	287	293	6	2.3%
81.5%	280	292	12	4.3%
82.7%	274	288	14	5.3%
84.0%	267	288	21	7.8%
85.2%	263	284	21	8.0%
86.4%	255	274	20	7.7%
87.7%	247	274	26	10.7%
88.9%	245	250	5	2.2%
90.1%	242	249	7	3.0%
91.4%	236	227	-9	-3.8%
92.6%	221	226	5	2.1%
93.8%	201	215	14	6.9%
95.1%	199	208	8	4.2%
96.3%	177	203	26	14.5%
97.5%	167	188	22	12.9%
98.8%	137	105	-32	-23.2%
100.0%	100	105	5	5.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,793	1,949	156	8.7%
1.2%	1,707	1,745	38	2.2%
2.5%	1,519	1,600	81	5.3%
3.7%	1,505	1,551	46	3.1%
4.9%	1,441	1,451	10	0.7%
6.2%	1,315	1,439	125	9.5%
7.4%	1,292	1,416	124	9.6%
8.6%	1,244	1,303	59	4.7%
9.9%	1,232	1,296	64	5.2%
11.1%	1,191	1,289	98	8.2%
12.3%	1,189	1,246	57	4.8%
13.6%	1,127	1,245	118	10.4%
14.8%	1,092	1,121	28	2.6%
16.0%	1,075	1,115	40	3.7%
17.3%	1,074	1,078	4	0.3%
18.5%	1,072	1,070	-2	-0.2%
19.8%	1,065	1,067	2	0.2%
21.0%	1,059	1,060	1	0.1%
22.2%	1,025	1,049	24	2.3%
23.5%	994	1,021	27	2.7%
24.7%	976	1,004	28	2.9%
25.9%	964	964	0	0.0%
27.2%	944	950	6	0.6%
28.4%	936	947	11	1.1%
29.6%	926	920	-6	-0.7%
30.9%	916	909	-7	-0.7%
32.1%	901	907	6	0.6%
33.3%	863	906	43	5.0%
34.6%	850	881	31	3.6%
35.8%	836	875	39	4.6%
37.0%	820	871	50	6.1%
38.3%	813	856	43	5.3%
39.5%	812	844	32	4.0%
40.7%	791	832	40	5.1%
42.0%	789	829	41	5.1%
43.2%	761	827	66	8.7%
44.4%	758	812	54	7.1%
45.7%	746	794	49	6.5%
46.9%	745	788	42	5.7%
48.1%	738	785	46	6.3%
49.4%	733	771	38	5.2%
50.6%	715	754	39	5.5%
51.9%	710	738	28	3.9%
53.1%	709	729	20	2.9%
54.3%	704	717	13	1.9%
55.6%	693	703	10	1.4%
56.8%	684	697	13	1.9%
58.0%	676	693	18	2.6%
59.3%	659	690	30	4.6%
60.5%	656	666	10	1.5%
61.7%	648	665	18	2.8%
63.0%	631	656	26	4.1%
64.2%	629	654	25	3.9%
65.4%	620	652	31	5.1%
66.7%	620	644	24	3.8%
67.9%	618	643	24	4.0%
69.1%	616	612	-4	-0.6%
70.4%	598	609	11	1.9%
71.6%	592	604	13	2.1%
72.8%	581	589	7	1.3%
74.1%	566	575	9	1.5%
75.3%	557	574	17	3.0%
76.5%	524	564	41	7.8%
77.8%	511	562	51	10.0%
79.0%	490	504	14	3.0%
80.2%	483	502	19	3.9%
81.5%	480	476	-4	-0.7%
82.7%	478	471	-7	-1.4%
84.0%	466	444	-23	-4.8%
85.2%	447	439	-8	-1.8%
86.4%	435	423	-12	-2.7%
87.7%	432	408	-24	-5.5%
88.9%	403	387	-16	-4.1%
90.1%	401	366	-35	-8.7%
91.4%	398	359	-38	-9.6%
92.6%	376	334	-42	-11.1%
93.8%	369	332	-37	-10.0%
95.1%	356	319	-37	-10.4%
96.3%	326	305	-21	-6.5%
97.5%	292	265	-27	-9.1%
98.8%	221	254	33	14.8%
100.0%	148	164	17	11.3%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	1,993	2,018	25	1.3%
3.7%	1,982	2,002	20	1.0%
4.9%	1,768	1,908	141	8.0%
6.2%	1,739	1,769	30	1.8%
7.4%	1,688	1,762	74	4.4%
8.6%	1,643	1,735	92	5.6%
9.9%	1,593	1,668	74	4.7%
11.1%	1,552	1,597	44	2.9%
12.3%	1,529	1,586	57	3.7%
13.6%	1,516	1,580	64	4.2%
14.8%	1,497	1,578	81	5.4%
16.0%	1,454	1,491	37	2.5%
17.3%	1,412	1,392	-19	-1.4%
18.5%	1,403	1,379	-23	-1.6%
19.8%	1,377	1,362	-15	-1.1%
21.0%	1,334	1,349	15	1.1%
22.2%	1,315	1,346	31	2.4%
23.5%	1,298	1,316	18	1.4%
24.7%	1,285	1,303	18	1.4%
25.9%	1,280	1,275	-5	-0.4%
27.2%	1,277	1,273	-5	-0.4%
28.4%	1,250	1,262	13	1.0%
29.6%	1,235	1,230	-5	-0.4%
30.9%	1,225	1,220	-4	-0.3%
32.1%	1,220	1,219	0	0.0%
33.3%	1,185	1,187	2	0.2%
34.6%	1,180	1,166	-14	-1.2%
35.8%	1,159	1,127	-32	-2.8%
37.0%	1,134	1,121	-13	-1.1%
38.3%	1,104	1,119	16	1.4%
39.5%	1,095	1,112	17	1.6%
40.7%	1,082	1,112	30	2.8%
42.0%	1,073	1,108	34	3.2%
43.2%	1,048	1,107	59	5.6%
44.4%	1,037	1,093	56	5.4%
45.7%	1,034	1,071	37	3.6%
46.9%	1,000	1,059	59	5.9%
48.1%	993	1,059	66	6.6%
49.4%	986	1,048	62	6.3%
50.6%	986	1,042	57	5.7%
51.9%	985	1,032	47	4.7%
53.1%	969	1,019	50	5.2%
54.3%	969	1,013	44	4.5%
55.6%	967	1,011	44	4.5%
56.8%	965	1,002	37	3.8%
58.0%	956	998	42	4.3%
59.3%	951	995	44	4.7%
60.5%	946	992	47	4.9%
61.7%	945	986	41	4.4%
63.0%	944	945	0	0.0%
64.2%	925	925	0	0.0%
65.4%	921	921	0	0.0%
66.7%	919	918	-1	-0.1%
67.9%	911	912	2	0.2%
69.1%	901	898	-3	-0.3%
70.4%	900	877	-22	-2.5%
71.6%	881	850	-31	-3.5%
72.8%	875	848	-27	-3.1%
74.1%	864	847	-17	-2.0%
75.3%	859	844	-16	-1.8%
76.5%	838	843	5	0.6%
77.8%	832	834	2	0.3%
79.0%	812	827	15	1.8%
80.2%	802	823	21	2.6%
81.5%	800	807	7	0.9%
82.7%	783	764	-19	-2.5%
84.0%	779	749	-31	-3.9%
85.2%	775	740	-35	-4.5%
86.4%	754	739	-15	-2.0%
87.7%	748	739	-9	-1.3%
88.9%	739	699	-40	-5.4%
90.1%	729	699	-30	-4.1%
91.4%	717	694	-23	-3.2%
92.6%	656	646	-10	-1.6%
93.8%	644	634	-10	-1.6%
95.1%	632	618	-14	-2.2%
96.3%	598	608	10	1.7%
97.5%	489	603	114	23.2%
98.8%	409	468	59	14.5%
100.0%	381	357	-24	-6.3%

Table SW-41-b

San Luis Reservoir (SWP and CVP), End of Month Storage

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,039	2,039	0	0.0%
4.9%	2,039	2,039	0	0.0%
6.2%	2,039	2,039	0	0.0%
7.4%	2,033	2,039	6	0.3%
8.6%	1,979	2,039	60	3.0%
9.9%	1,930	2,009	79	4.1%
11.1%	1,900	1,983	83	4.3%
12.3%	1,888	1,938	49	2.6%
13.6%	1,841	1,905	64	3.5%
14.8%	1,825	1,833	8	0.4%
16.0%	1,780	1,777	-3	-0.2%
17.3%	1,764	1,757	-6	-0.4%
18.5%	1,723	1,712	-12	-0.7%
19.8%	1,713	1,688	-25	-1.5%
21.0%	1,706	1,677	-29	-1.7%
22.2%	1,695	1,662	-33	-1.9%
23.5%	1,679	1,659	-20	-1.2%
24.7%	1,648	1,644	-4	-0.2%
25.9%	1,637	1,631	-7	-0.4%
27.2%	1,636	1,627	-9	-0.6%
28.4%	1,616	1,626	10	0.6%
29.6%	1,602	1,621	19	1.2%
30.9%	1,579	1,620	41	2.6%
32.1%	1,575	1,563	-12	-0.7%
33.3%	1,523	1,548	26	1.7%
34.6%	1,500	1,522	21	1.4%
35.8%	1,480	1,507	27	1.8%
37.0%	1,476	1,502	26	1.8%
38.3%	1,470	1,469	-1	-0.1%
39.5%	1,450	1,465	15	1.0%
40.7%	1,447	1,453	6	0.4%
42.0%	1,438	1,443	4	0.3%
43.2%	1,427	1,426	-1	-0.1%
44.4%	1,410	1,423	13	0.9%
45.7%	1,407	1,417	10	0.7%
46.9%	1,407	1,390	-17	-1.2%
48.1%	1,399	1,373	-26	-1.9%
49.4%	1,394	1,347	-47	-3.4%
50.6%	1,286	1,322	36	2.8%
51.9%	1,282	1,321	39	3.0%
53.1%	1,282	1,299	17	1.4%
54.3%	1,277	1,292	15	1.2%
55.6%	1,273	1,283	10	0.8%
56.8%	1,269	1,261	-8	-0.7%
58.0%	1,266	1,258	-8	-0.6%
59.3%	1,243	1,249	7	0.5%
60.5%	1,234	1,241	7	0.6%
61.7%	1,223	1,218	-5	-0.4%
63.0%	1,195	1,212	18	1.5%
64.2%	1,187	1,212	24	2.0%
65.4%	1,166	1,212	46	3.9%
66.7%	1,162	1,205	43	3.7%
67.9%	1,113	1,191	77	7.0%
69.1%	1,091	1,189	98	9.0%
70.4%	1,090	1,161	70	6.4%
71.6%	1,075	1,156	81	7.5%
72.8%	1,043	1,114	71	6.8%
74.1%	1,041	1,082	41	4.0%
75.3%	1,031	1,039	8	0.8%
76.5%	1,030	1,039	8	0.8%
77.8%	1,029	1,025	-4	-0.4%
79.0%	1,021	1,018	-2	-0.2%
80.2%	986	992	6	0.6%
81.5%	961	986	25	2.6%
82.7%	956	981	26	2.7%
84.0%	935	939	4	0.4%
85.2%	909	926	16	1.8%
86.4%	900	912	12	1.3%
87.7%	899	863	-36	-4.0%
88.9%	893	853	-40	-4.4%
90.1%	880	838	-42	-4.8%
91.4%	869	835	-35	-4.0%
92.6%	851	823	-28	-3.3%
93.8%	789	784	-5	-0.6%
95.1%	752	773	21	2.8%
96.3%	722	759	37	5.1%
97.5%	649	744	95	14.6%
98.8%	626	639	13	2.0%
100.0%	615	341	-274	-44.5%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,039	2,039	0	0.0%
4.9%	2,039	2,039	0	0.0%
6.2%	2,039	2,039	0	0.0%
7.4%	2,039	2,039	0	0.0%
8.6%	2,039	2,039	0	0.0%
9.9%	2,039	2,039	0	0.0%
11.1%	2,039	2,039	0	0.0%
12.3%	2,039	2,039	0	0.0%
13.6%	2,039	2,039	0	0.0%
14.8%	2,039	2,039	0	0.0%
16.0%	2,039	2,039	0	0.0%
17.3%	2,039	2,038	-1	0.0%
18.5%	2,035	2,036	1	0.1%
19.8%	2,022	2,003	-20	-1.0%
21.0%	2,022	2,002	-20	-1.0%
22.2%	2,015	2,000	-15	-0.7%
23.5%	2,013	1,999	-14	-0.7%
24.7%	1,996	1,988	-8	-0.4%
25.9%	1,995	1,978	-17	-0.9%
27.2%	1,991	1,970	-21	-1.1%
28.4%	1,988	1,890	-98	-4.9%
29.6%	1,933	1,887	-45	-2.3%
30.9%	1,932	1,877	-55	-2.9%
32.1%	1,887	1,869	-18	-0.9%
33.3%	1,862	1,841	-21	-1.1%
34.6%	1,861	1,826	-35	-1.9%
35.8%	1,837	1,800	-36	-2.0%
37.0%	1,812	1,794	-17	-1.0%
38.3%	1,807	1,789	-18	-1.0%
39.5%	1,805	1,781	-24	-1.3%
40.7%	1,796	1,769	-27	-1.5%
42.0%	1,784	1,741	-43	-2.4%
43.2%	1,765	1,710	-56	-3.2%
44.4%	1,740	1,708	-32	-1.8%
45.7%	1,738	1,702	-36	-2.1%
46.9%	1,713	1,694	-19	-1.1%
48.1%	1,689	1,644	-45	-2.7%
49.4%	1,660	1,621	-40	-2.4%
50.6%	1,638	1,619	-19	-1.1%
51.9%	1,594	1,614	21	1.3%
53.1%	1,514	1,562	48	3.2%
54.3%	1,483	1,498	14	1.0%
55.6%	1,478	1,493	15	1.0%
56.8%	1,476	1,466	-10	-0.7%
58.0%	1,472	1,458	-14	-1.0%
59.3%	1,401	1,433	32	2.3%
60.5%	1,378	1,417	38	2.8%
61.7%	1,368	1,362	-6	-0.5%
63.0%	1,348	1,351	3	0.2%
64.2%	1,333	1,346	13	0.9%
65.4%	1,323	1,328	4	0.3%
66.7%	1,278	1,323	45	3.6%
67.9%	1,244	1,292	49	3.9%
69.1%	1,241	1,253	12	0.9%
70.4%	1,185	1,242	58	4.9%
71.6%	1,180	1,229	49	4.1%
72.8%	1,173	1,221	47	4.0%
74.1%	1,151	1,215	64	5.5%
75.3%	1,138	1,208	70	6.1%
76.5%	1,100	1,194	94	8.5%
77.8%	1,073	1,189	116	10.8%
79.0%	1,069	1,185	116	10.9%
80.2%	1,068	1,091	22	2.1%
81.5%	1,058	1,075	17	1.6%
82.7%	1,056	1,052	-4	-0.3%
84.0%	1,042	1,041	-1	-0.1%
85.2%	1,038	1,026	-12	-1.2%
86.4%	1,008	1,022	14	1.4%
87.7%	1,000	1,012	12	1.2%
88.9%	996	972	-24	-2.4%
90.1%	974	965	-9	-0.9%
91.4%	957	944	-13	-1.4%
92.6%	953	923	-29	-3.1%
93.8%	945	910	-35	-3.7%
95.1%	929	851	-79	-8.5%
96.3%	843	799	-44	-5.2%
97.5%	838	798	-40	-4.8%
98.8%	706	737	32	4.5%
100.0%	656	660	4	0.6%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,039	2,039	0	0.0%
4.9%	2,039	2,023	-16	-0.8%
6.2%	2,031	2,002	-29	-1.4%
7.4%	2,012	1,996	-16	-0.8%
8.6%	1,993	1,973	-20	-1.0%
9.9%	1,934	1,935	1	0.0%
11.1%	1,931	1,922	-9	-0.5%
12.3%	1,916	1,918	2	0.1%
13.6%	1,912	1,878	-34	-1.8%
14.8%	1,887	1,871	-16	-0.9%
16.0%	1,868	1,862	-6	-0.3%
17.3%	1,866	1,857	-9	-0.5%
18.5%	1,860	1,856	-4	-0.2%
19.8%	1,857	1,854	-4	-0.2%
21.0%	1,856	1,854	-2	-0.1%
22.2%	1,856	1,853	-3	-0.1%
23.5%	1,854	1,847	-6	-0.4%
24.7%	1,853	1,821	-32	-1.7%
25.9%	1,832	1,780	-52	-2.8%
27.2%	1,823	1,743	-80	-4.4%
28.4%	1,806	1,742	-65	-3.6%
29.6%	1,745	1,729	-16	-0.9%
30.9%	1,734	1,713	-21	-1.2%
32.1%	1,730	1,698	-32	-1.9%
33.3%	1,725	1,663	-63	-3.6%
34.6%	1,724	1,659	-64	-3.7%
35.8%	1,680	1,634	-46	-2.7%
37.0%	1,656	1,628	-27	-1.6%
38.3%	1,653	1,625	-27	-1.7%
39.5%	1,641	1,625	-16	-1.0%
40.7%	1,626	1,599	-27	-1.7%
42.0%	1,619	1,589	-30	-1.9%
43.2%	1,602	1,567	-36	-2.2%
44.4%	1,591	1,555	-36	-2.2%
45.7%	1,590	1,554	-36	-2.2%
46.9%	1,566	1,541	-25	-1.6%
48.1%	1,565	1,512	-53	-3.4%
49.4%	1,545	1,492	-53	-3.4%
50.6%	1,539	1,477	-62	-4.1%
51.9%	1,488	1,472	-15	-1.0%
53.1%	1,423	1,457	34	2.4%
54.3%	1,388	1,456	68	4.9%
55.6%	1,382	1,399	17	1.3%
56.8%	1,380	1,387	8	0.5%
58.0%	1,360	1,376	17	1.2%
59.3%	1,333	1,347	14	1.0%
60.5%	1,323	1,326	2	0.2%
61.7%	1,293	1,324	30	2.4%
63.0%	1,252	1,259	7	0.6%
64.2%	1,205	1,244	39	3.2%
65.4%	1,197	1,206	8	0.7%
66.7%	1,194	1,174	-20	-1.7%
67.9%	1,184	1,162	-22	-1.8%
69.1%	1,153	1,124	-29	-2.5%
70.4%	1,150	1,123	-27	-2.3%
71.6%	1,143	1,121	-21	-1.9%
72.8%	1,123	1,115	-8	-0.7%
74.1%	1,082	1,115	32	3.0%
75.3%	1,082	1,113	31	2.8%
76.5%	1,064	1,112	47	4.4%
77.8%	1,041	1,107	66	6.3%
79.0%	1,026	1,098	73	7.1%
80.2%	999	1,098	99	9.9%
81.5%	993	1,085	92	9.2%
82.7%	981	987	6	0.6%
84.0%	968	956	-12	-1.3%
85.2%	968	954	-14	-1.5%
86.4%	939	950	11	1.2%
87.7%	936	949	13	1.4%
88.9%	936	922	-14	-1.5%
90.1%	932	916	-16	-1.7%
91.4%	928	907	-21	-2.2%
92.6%	912	887	-25	-2.8%
93.8%	821	846	25	3.0%
95.1%	809	749	-60	-7.4%
96.3%	806	711	-96	-11.9%
97.5%	779	676	-103	-13.2%
98.8%	620	669	49	7.9%
100.0%	593	640	46	7.8%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,039	2,039	0	0.0%
1.2%	2,039	2,039	0	0.0%
2.5%	2,039	2,039	0	0.0%
3.7%	2,012	2,009	-3	-0.2%
4.9%	1,955	1,944	-11	-0.5%
6.2%	1,914	1,890	-24	-1.3%
7.4%	1,737	1,722	-15	-0.9%
8.6%	1,725	1,709	-16	-0.9%
9.9%	1,707	1,700	-7	-0.4%
11.1%	1,643	1,615	-28	-1.7%
12.3%	1,641	1,607	-34	-2.1%
13.6%	1,626	1,606	-20	-1.2%
14.8%	1,616	1,567	-49	-3.0%
16.0%	1,611	1,533	-78	-4.8%
17.3%	1,533	1,530	-3	-0.2%
18.5%	1,518	1,522	4	0.3%
19.8%	1,517	1,508	-10	-0.6%
21.0%	1,508	1,478	-30	-2.0%
22.2%	1,506	1,460	-46	-3.1%
23.5%	1,484	1,445	-40	-2.7%
24.7%	1,466	1,444	-22	-1.5%
25.9%	1,461	1,434	-27	-1.9%
27.2%	1,456	1,418	-38	-2.6%
28.4%	1,453	1,406	-47	-3.2%
29.6%	1,436	1,384	-52	-3.6%
30.9%	1,422	1,375	-47	-3.3%
32.1%	1,402	1,359	-43	-3.1%
33.3%	1,369	1,336	-33	-2.4%
34.6%	1,354	1,331	-23	-1.7%
35.8%	1,349	1,328	-21	-1.6%
37.0%	1,338	1,318	-20	-1.5%
38.3%	1,323	1,313	-9	-0.7%
39.5%	1,321	1,300	-20	-1.5%
40.7%	1,308	1,281	-27	-2.1%
42.0%	1,306	1,266	-40	-3.1%
43.2%	1,293	1,250	-44	-3.4%
44.4%	1,293	1,243	-50	-3.9%
45.7%	1,244	1,210	-34	-2.7%
46.9%	1,241	1,203	-39	-3.1%
48.1%	1,237	1,201	-36	-2.9%
49.4%	1,229	1,192	-37	-3.0%
50.6%	1,227	1,166	-61	-5.0%
51.9%	1,168	1,161	-7	-0.6%
53.1%	1,154	1,132	-21	-1.9%
54.3%	1,110	1,084	-26	-2.3%
55.6%	1,090	1,080	-10	-0.9%
56.8%	1,089	1,076	-13	-1.2%
58.0%	1,084	1,062	-23	-2.1%
59.3%	1,042	1,043	1	0.1%
60.5%	1,024	1,003	-21	-2.1%
61.7%	1,020	984	-37	-3.6%
63.0%	1,009	980	-29	-2.8%
64.2%	996	979	-17	-1.7%
65.4%	968	978	10	1.0%
66.7%	966	970	4	0.4%
67.9%	953	955	2	0.2%
69.1%	951	944	-7	-0.7%
70.4%	919	936	17	1.9%
71.6%	900	903	3	0.3%
72.8%	893	894	0	0.0%
74.1%	882	886	3	0.4%
75.3%	878	884	6	0.7%
76.5%	862	882	20	2.4%
77.8%	858	854	-4	-0.5%
79.0%	823	826	3	0.4%
80.2%	808	822	14	1.7%
81.5%	797	812	15	1.9%
82.7%	787	776	-11	-1.4%
84.0%	781	771	-10	-1.3%
85.2%	772	763	-10	-1.2%
86.4%	736	759	24	3.2%
87.7%	731	750	19	2.6%
88.9%	730	744	15	2.0%
90.1%	719	719	-1	-0.1%
91.4%	715	690	-25	-3.5%
92.6%	681	637	-44	-6.5%
93.8%	675	622	-53	-7.8%
95.1%	658	561	-97	-14.7%
96.3%	594	541	-53	-8.9%
97.5%	542	532	-10	-1.9%
98.8%	506	509	3	0.7%
100.0%	466	463	-3	-0.7%

Table SW-41-b

San Luis Reservoir (SWP and CVP), End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,881	1,942	60	3.2%
1.2%	1,877	1,881	4	0.2%
2.5%	1,877	1,855	-22	-1.2%
3.7%	1,783	1,784	1	0.0%
4.9%	1,713	1,704	-9	-0.5%
6.2%	1,689	1,657	-32	-1.9%
7.4%	1,543	1,538	-4	-0.3%
8.6%	1,460	1,467	7	0.5%
9.9%	1,450	1,379	-71	-4.9%
11.1%	1,434	1,290	-144	-10.0%
12.3%	1,313	1,287	-27	-2.0%
13.6%	1,308	1,250	-58	-4.4%
14.8%	1,268	1,243	-25	-2.0%
16.0%	1,257	1,235	-21	-1.7%
17.3%	1,248	1,221	-26	-2.1%
18.5%	1,229	1,217	-13	-1.0%
19.8%	1,229	1,200	-28	-2.3%
21.0%	1,192	1,180	-12	-1.0%
22.2%	1,179	1,102	-78	-6.6%
23.5%	1,143	1,090	-53	-4.6%
24.7%	1,142	1,082	-60	-5.2%
25.9%	1,110	1,078	-32	-2.9%
27.2%	1,103	1,036	-67	-6.0%
28.4%	1,043	1,027	-15	-1.5%
29.6%	1,025	1,011	-14	-1.4%
30.9%	1,019	1,010	-9	-0.9%
32.1%	1,010	962	-48	-4.7%
33.3%	1,007	961	-46	-4.6%
34.6%	1,000	954	-47	-4.7%
35.8%	987	942	-45	-4.6%
37.0%	982	932	-51	-5.2%
38.3%	975	929	-46	-4.7%
39.5%	969	925	-44	-4.6%
40.7%	930	887	-43	-4.7%
42.0%	894	886	-8	-0.9%
43.2%	893	854	-40	-4.4%
44.4%	886	834	-52	-5.9%
45.7%	877	829	-48	-5.5%
46.9%	869	825	-44	-5.1%
48.1%	868	820	-48	-5.5%
49.4%	859	809	-50	-5.8%
50.6%	827	792	-35	-4.3%
51.9%	820	739	-82	-9.9%
53.1%	778	722	-56	-7.2%
54.3%	752	703	-49	-6.5%
55.6%	743	698	-45	-6.0%
56.8%	709	687	-22	-3.1%
58.0%	697	678	-19	-2.8%
59.3%	687	677	-10	-1.5%
60.5%	685	659	-26	-3.8%
61.7%	681	656	-25	-3.6%
63.0%	676	625	-51	-7.6%
64.2%	675	603	-72	-10.7%
65.4%	669	598	-71	-10.6%
66.7%	655	577	-78	-11.9%
67.9%	644	576	-67	-10.5%
69.1%	618	570	-48	-7.7%
70.4%	592	560	-32	-5.5%
71.6%	586	559	-27	-4.6%
72.8%	582	559	-23	-3.9%
74.1%	578	556	-22	-3.9%
75.3%	560	552	-9	-1.5%
76.5%	559	532	-27	-4.8%
77.8%	553	531	-22	-4.0%
79.0%	551	530	-21	-3.8%
80.2%	542	527	-15	-2.8%
81.5%	501	516	16	3.1%
82.7%	497	489	-8	-1.6%
84.0%	489	488	-1	-0.2%
85.2%	483	471	-13	-2.7%
86.4%	482	424	-58	-12.0%
87.7%	445	424	-21	-4.6%
88.9%	413	414	1	0.3%
90.1%	396	357	-38	-9.7%
91.4%	369	344	-25	-6.8%
92.6%	359	328	-31	-8.7%
93.8%	344	327	-18	-5.1%
95.1%	308	275	-33	-10.8%
96.3%	308	237	-71	-23.0%
97.5%	260	188	-72	-27.7%
98.8%	183	154	-29	-15.7%
100.0%	113	103	-9	-8.4%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,793	1,791	-2	-0.1%
1.2%	1,778	1,791	12	0.7%
2.5%	1,766	1,749	-17	-1.0%
3.7%	1,561	1,535	-27	-1.7%
4.9%	1,504	1,502	-2	-0.1%
6.2%	1,363	1,354	-9	-0.7%
7.4%	1,304	1,325	22	1.7%
8.6%	1,282	1,221	-61	-4.7%
9.9%	1,260	1,201	-60	-4.7%
11.1%	1,229	1,152	-77	-6.2%
12.3%	1,200	1,131	-69	-5.8%
13.6%	1,147	1,128	-20	-1.7%
14.8%	1,120	1,072	-49	-4.3%
16.0%	1,083	1,033	-51	-4.7%
17.3%	1,068	1,012	-55	-5.2%
18.5%	959	892	-67	-7.0%
19.8%	912	881	-30	-3.3%
21.0%	878	873	-5	-0.6%
22.2%	868	863	-6	-0.6%
23.5%	852	822	-29	-3.4%
24.7%	843	810	-33	-3.9%
25.9%	829	770	-60	-7.2%
27.2%	827	761	-66	-8.0%
28.4%	790	760	-30	-3.8%
29.6%	783	748	-35	-4.5%
30.9%	758	739	-19	-2.5%
32.1%	756	723	-33	-4.4%
33.3%	746	719	-27	-3.7%
34.6%	741	695	-46	-6.2%
35.8%	726	684	-42	-5.8%
37.0%	724	677	-47	-6.6%
38.3%	722	674	-47	-6.6%
39.5%	699	674	-26	-3.7%
40.7%	684	672	-12	-1.8%
42.0%	682	642	-39	-5.7%
43.2%	663	641	-22	-3.3%
44.4%	620	602	-19	-3.0%
45.7%	616	600	-15	-2.5%
46.9%	612	600	-12	-2.0%
48.1%	597	592	-6	-0.9%
49.4%	575	582	8	1.4%
50.6%	572	571	-1	-0.1%
51.9%	563	562	-2	-0.3%
53.1%	560	556	-4	-0.7%
54.3%	554	541	-13	-2.4%
55.6%	547	512	-35	-6.4%
56.8%	537	511	-26	-4.9%
58.0%	522	507	-15	-2.8%
59.3%	511	505	-6	-1.1%
60.5%	505	500	-5	-1.1%
61.7%	502	476	-26	-5.2%
63.0%	496	476	-20	-4.1%
64.2%	493	454	-40	-8.1%
65.4%	467	448	-19	-4.1%
66.7%	451	446	-5	-1.0%
67.9%	442	438	-5	-1.0%
69.1%	441	426	-15	-3.5%
70.4%	441	412	-29	-6.6%
71.6%	437	406	-31	-7.0%
72.8%	432	404	-27	-6.3%
74.1%	429	401	-28	-6.5%
75.3%	405	399	-6	-1.5%
76.5%	387	396	9	2.3%
77.8%	371	378	7	1.9%
79.0%	369	358	-11	-2.9%
80.2%	360	336	-24	-6.7%
81.5%	359	333	-27	-7.4%
82.7%	342	316	-26	-7.5%
84.0%	341	310	-31	-9.0%
85.2%	341	303	-38	-11.0%
86.4%	332	289	-44	-13.2%
87.7%	298	269	-28	-9.5%
88.9%	291	264	-27	-9.3%
90.1%	281	253	-28	-9.9%
91.4%	274	240	-34	-12.5%
92.6%	204	235	30	14.9%
93.8%	203	226	22	11.1%
95.1%	198	225	28	13.9%
96.3%	193	200	7	3.5%
97.5%	192	181	-11	-5.6%
98.8%	160	107	-53	-33.0%
100.0%	115	102	-13	-11.3%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,507	1,475	-32	-2.1%
1.2%	1,464	1,441	-23	-1.6%
2.5%	1,415	1,426	11	0.8%
3.7%	1,313	1,279	-35	-2.6%
4.9%	1,214	1,259	45	3.7%
6.2%	1,204	1,216	12	1.0%
7.4%	1,197	1,181	-17	-1.4%
8.6%	1,181	1,158	-24	-2.0%
9.9%	1,180	1,147	-33	-2.8%
11.1%	1,139	1,142	3	0.3%
12.3%	1,133	1,131	-2	-0.1%
13.6%	979	992	13	1.3%
14.8%	863	851	-12	-1.4%
16.0%	857	810	-47	-5.5%
17.3%	747	789	43	5.7%
18.5%	735	788	54	7.3%
19.8%	731	784	53	7.2%
21.0%	727	761	33	4.6%
22.2%	715	758	43	6.0%
23.5%	702	752	50	7.2%
24.7%	686	739	53	7.8%
25.9%	675	699	24	3.6%
27.2%	670	664	-6	-0.9%
28.4%	670	655	-15	-2.3%
29.6%	670	651	-18	-2.7%
30.9%	666	650	-16	-2.4%
32.1%	653	640	-14	-2.1%
33.3%	645	632	-13	-2.0%
34.6%	642	625	-16	-2.5%
35.8%	634	609	-26	-4.1%
37.0%	611	598	-13	-2.1%
38.3%	571	594	23	4.0%
39.5%	525	594	68	13.0%
40.7%	511	585	75	14.6%
42.0%	506	505	-1	-0.1%
43.2%	500	493	-7	-1.4%
44.4%	497	472	-25	-5.1%
45.7%	473	457	-16	-3.4%
46.9%	469	438	-31	-6.6%
48.1%	468	426	-41	-8.9%
49.4%	426	424	-2	-0.5%
50.6%	422	419	-3	-0.6%
51.9%	414	404	-10	-2.5%
53.1%	409	377	-32	-7.7%
54.3%	408	373	-35	-8.5%
55.6%	394	370	-23	-5.9%
56.8%	368	344	-24	-6.4%
58.0%	357	339	-18	-5.0%
59.3%	353	335	-19	-5.3%
60.5%	342	328	-15	-4.3%
61.7%	340	326	-14	-4.2%
63.0%	318	313	-5	-1.7%
64.2%	312	292	-19	-6.2%
65.4%	296	281	-15	-5.0%
66.7%	291	275	-16	-5.4%
67.9%	272	269	-2	-0.9%
69.1%	263	267	5	1.7%
70.4%	262	257	-6	-2.1%
71.6%	260	254	-6	-2.3%
72.8%	253	234	-19	-7.4%
74.1%	249	234	-15	-6.2%
75.3%	248	232	-16	-6.3%
76.5%	247	231	-16	-6.3%
77.8%	246	228	-18	-7.1%
79.0%	238	219	-19	-8.0%
80.2%	231	210	-22	-9.3%
81.5%	216	208	-8	-3.6%
82.7%	213	205	-7	-3.4%
84.0%	212	188	-24	-11.5%
85.2%	211	175	-35	-16.8%
86.4%	209	171	-38	-18.3%
87.7%	202	161	-41	-20.3%
88.9%	198	154	-44	-22.3%
90.1%	192	154	-37	-19.6%
91.4%	188	152	-36	-18.9%
92.6%	173	132	-41	-23.9%
93.8%	169	130	-39	-22.9%
95.1%	167	109	-58	-34.5%
96.3%	159	109	-50	-31.6%
97.5%	146	100	-46	-31.4%
98.8%	134	100	-34	-25.1%
100.0%	100	100	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,290	1,270	-20	-1.5%
1.2%	1,092	1,261	169	15.4%
2.5%	1,063	1,111	48	4.5%
3.7%	1,048	1,097	49	4.7%
4.9%	1,022	1,019	-3	-0.3%
6.2%	1,014	997	-17	-1.7%
7.4%	1,009	977	-32	-3.2%
8.6%	913	971	58	6.4%
9.9%	894	921	28	3.1%
11.1%	859	875	16	1.9%
12.3%	806	829	23	2.9%
13.6%	781	809	28	3.6%
14.8%	771	806	35	4.5%
16.0%	750	763	13	1.7%
17.3%	742	742	-1	-0.1%
18.5%	741	708	-33	-4.5%
19.8%	686	705	19	2.7%
21.0%	662	700	37	5.6%
22.2%	638	688	50	7.8%
23.5%	627	684	57	9.0%
24.7%	624	655	31	4.9%
25.9%	622	639	17	2.8%
27.2%	616	631	15	2.5%
28.4%	608	621	12	2.0%
29.6%	604	609	5	0.8%
30.9%	602	605	3	0.5%
32.1%	600	602	2	0.3%
33.3%	596	601	5	0.9%
34.6%	592	591	-1	-0.2%
35.8%	588	585	-4	-0.6%
37.0%	558	584	26	4.7%
38.3%	557	579	22	3.9%
39.5%	545	578	33	6.1%
40.7%	530	576	46	8.6%
42.0%	530	571	41	7.8%
43.2%	522	567	46	8.7%
44.4%	493	541	48	9.8%
45.7%	480	528	48	10.0%
46.9%	474	521	47	9.9%
48.1%	473	520	48	10.1%
49.4%	470	516	46	9.9%
50.6%	442	494	52	11.8%
51.9%	433	491	59	13.6%
53.1%	425	468	43	10.1%
54.3%	420	461	41	9.8%
55.6%	418	453	35	8.4%
56.8%	418	437	19	4.6%
58.0%	414	436	23	5.5%
59.3%	413	427	15	3.5%
60.5%	372	408	36	9.7%
61.7%	367	405	38	10.4%
63.0%	343	389	47	13.6%
64.2%	342	382	41	11.9%
65.4%	337	360	23	6.8%
66.7%	333	332	-1	-0.2%
67.9%	331	325	-7	-2.0%
69.1%	330	315	-15	-4.5%
70.4%	329	302	-27	-8.2%
71.6%	326	299	-27	-8.3%
72.8%	319	296	-23	-7.2%
74.1%	313	296	-16	-5.2%
75.3%	308	286	-22	-7.2%
76.5%	302	285	-17	-5.5%
77.8%	297	285	-12	-4.1%
79.0%	278	274	-4	-1.3%
80.2%	274	259	-14	-5.3%
81.5%	262	257	-5	-1.9%
82.7%	251	255	3	1.3%
84.0%	245	253	8	3.2%
85.2%	244	253	10	3.9%
86.4%	230	240	10	4.2%
87.7%	202	230	28	13.7%
88.9%	201	230	29	14.5%
90.1%	191	221	31	16.1%
91.4%	182	219	37	20.3%
92.6%	180	214	35	19.3%
93.8%	179	214	35	19.4%
95.1%	177	214	37	20.7%
96.3%	162	200	38	23.5%
97.5%	147	199	52	35.3%
98.8%	100	168	68	67.9%
100.0%	100	145	45	45.0%

Figure SW-42-b
San Luis Reservoir (SWP and CVP), End of Month Elevation
Probability of Exceedance

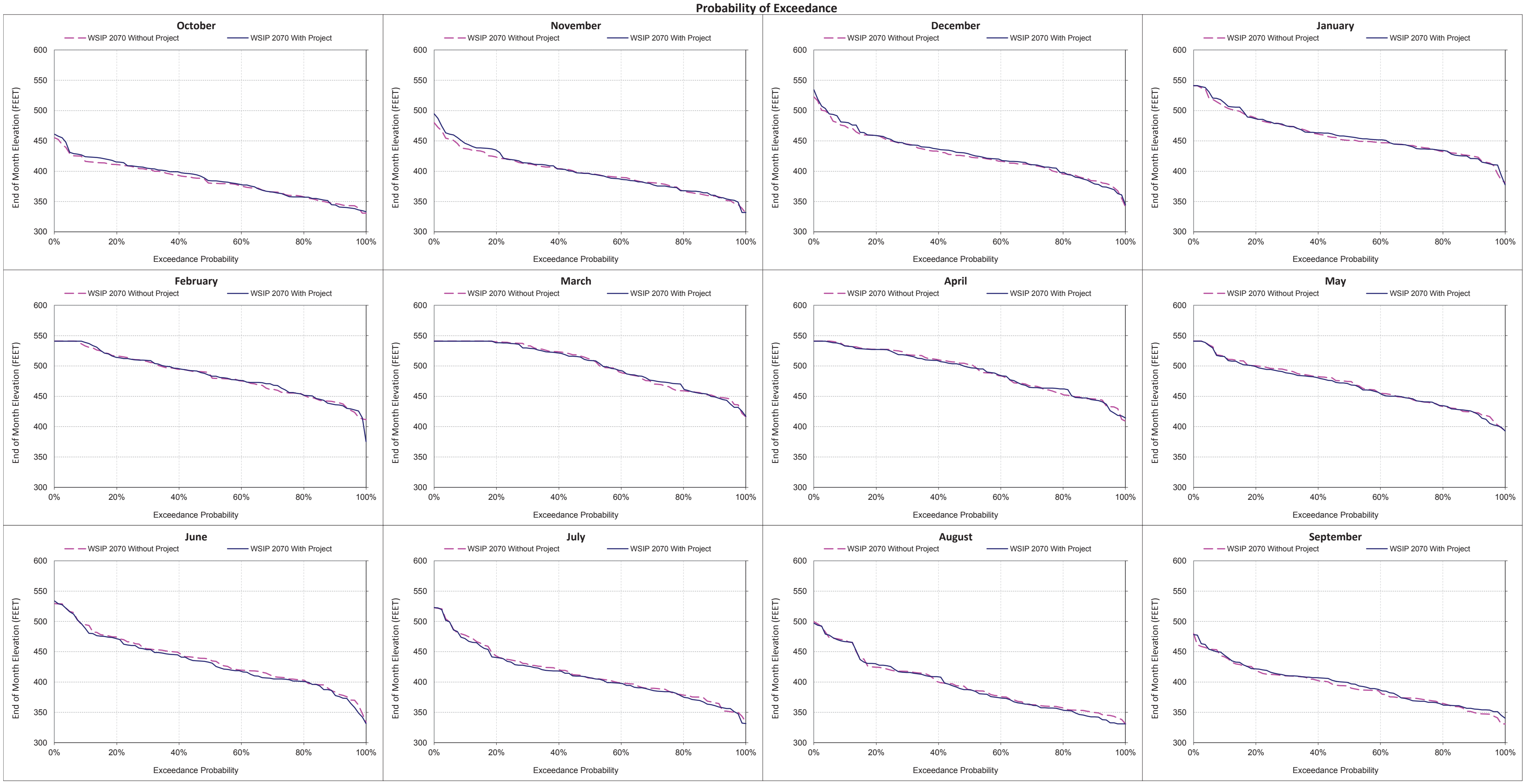


Table SW-42-b

San Luis Reservoir (SWP and CVP), End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	455	461	6	1.3%
1.2%	452	458	5	1.2%
2.5%	444	455	11	2.4%
3.7%	439	448	8	1.9%
4.9%	429	431	2	0.5%
6.2%	425	429	4	0.8%
7.4%	425	428	3	0.8%
8.6%	425	427	2	0.5%
9.9%	416	424	7	1.8%
11.1%	416	423	8	1.9%
12.3%	415	423	8	2.0%
13.6%	414	423	8	2.0%
14.8%	414	422	8	1.9%
16.0%	414	421	7	1.7%
17.3%	412	419	7	1.7%
18.5%	411	418	7	1.6%
19.8%	411	415	4	1.0%
21.0%	411	415	4	1.1%
22.2%	409	414	5	1.2%
23.5%	409	409	0	0.0%
24.7%	408	409	1	0.2%
25.9%	406	408	2	0.4%
27.2%	404	407	3	0.7%
28.4%	404	407	3	0.6%
29.6%	403	405	2	0.5%
30.9%	403	404	2	0.4%
32.1%	400	404	4	1.0%
33.3%	400	402	2	0.6%
34.6%	399	402	2	0.6%
35.8%	397	401	4	1.0%
37.0%	395	399	4	1.0%
38.3%	394	399	5	1.3%
39.5%	394	399	5	1.4%
40.7%	392	397	5	1.4%
42.0%	391	396	5	1.4%
43.2%	391	396	5	1.3%
44.4%	389	395	6	1.5%
45.7%	388	394	5	1.4%
46.9%	388	392	3	0.9%
48.1%	387	389	2	0.5%
49.4%	380	384	4	1.0%
50.6%	380	384	4	1.1%
51.9%	380	384	4	1.1%
53.1%	380	383	4	1.0%
54.3%	380	382	3	0.7%
55.6%	380	382	3	0.7%
56.8%	379	381	1	0.4%
58.0%	379	380	2	0.4%
59.3%	376	379	2	0.5%
60.5%	375	377	2	0.7%
61.7%	373	377	4	1.0%
63.0%	373	376	3	0.8%
64.2%	372	374	2	0.5%
65.4%	372	371	-1	-0.3%
66.7%	369	369	0	-0.1%
67.9%	367	367	0	0.0%
69.1%	366	366	0	0.0%
70.4%	366	365	-1	-0.1%
71.6%	365	364	-1	-0.4%
72.8%	365	363	-1	-0.4%
74.1%	361	361	0	-0.1%
75.3%	360	358	-2	-0.6%
76.5%	360	358	-2	-0.7%
77.8%	360	358	-2	-0.6%
79.0%	359	358	-1	-0.4%
80.2%	357	357	0	-0.1%
81.5%	355	357	2	0.5%
82.7%	355	355	1	0.2%
84.0%	353	355	2	0.5%
85.2%	350	354	3	0.9%
86.4%	350	353	3	0.7%
87.7%	348	352	3	0.9%
88.9%	347	345	-3	-0.8%
90.1%	347	344	-2	-0.6%
91.4%	346	341	-5	-1.3%
92.6%	344	340	-3	-1.0%
93.8%	343	340	-3	-0.9%
95.1%	343	339	-4	-1.1%
96.3%	343	338	-5	-1.3%
97.5%	339	336	-3	-1.0%
98.8%	331	335	4	1.3%
100.0%	331	333	2	0.7%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	480	495	15	3.0%
1.2%	472	487	15	3.2%
2.5%	467	475	8	1.7%
3.7%	454	463	9	1.9%
4.9%	453	461	9	1.9%
6.2%	451	460	9	2.0%
7.4%	446	456	10	2.2%
8.6%	438	451	12	2.8%
9.9%	437	446	9	2.1%
11.1%	436	444	7	1.6%
12.3%	434	441	6	1.4%
13.6%	434	439	4	1.0%
14.8%	433	438	5	1.2%
16.0%	432	438	6	1.5%
17.3%	426	438	12	2.9%
18.5%	425	437	12	2.8%
19.8%	424	435	11	2.6%
21.0%	421	431	10	2.3%
22.2%	421	422	1	0.2%
23.5%	421	420	-1	-0.2%
24.7%	419	419	1	0.2%
25.9%	417	418	2	0.4%
27.2%	414	417	3	0.7%
28.4%	413	414	1	0.2%
29.6%	412	413	1	0.3%
30.9%	412	413	2	0.4%
32.1%	411	412	1	0.2%
33.3%	408	411	3	0.7%
34.6%	408	411	3	0.8%
35.8%	407	410	3	0.8%
37.0%	407	409	2	0.5%
38.3%	407	409	2	0.5%
39.5%	404	404	0	-0.1%
40.7%	404	404	0	-0.1%
42.0%	403	403	0	0.0%
43.2%	403	400	-2	-0.6%
44.4%	401	400	-1	-0.2%
45.7%	398	398	-1	-0.1%
46.9%	398	397	-1	-0.1%
48.1%	396	397	0	0.0%
49.4%	396	397	0	0.0%
50.6%	396	395	-1	-0.3%
51.9%	395	395	0	-0.1%
53.1%	394	393	-1	-0.1%
54.3%	392	392	0	0.1%
55.6%	392	390	-2	-0.4%
56.8%	391	388	-3	-0.7%
58.0%	391	388	-2	-0.6%
59.3%	390	388	-3	-0.7%
60.5%	389	386	-3	-0.8%
61.7%	389	386	-3	-0.9%
63.0%	387	384	-3	-0.7%
64.2%	385	384	-1	-0.3%
65.4%	384	383	-1	-0.3%
66.7%	382	382	0	0.1%
67.9%	382	381	-1	-0.3%
69.1%	381	380	-1	-0.4%
70.4%	381	377	-3	-0.9%
71.6%	380	376	-5	-1.3%
72.8%	379	376	-4	-1.0%
74.1%	379	376	-3	-0.8%
75.3%	376	374	-2	-0.6%
76.5%	374	373	-1	-0.3%
77.8%	374	373	-1	-0.3%
79.0%	369	368	-1	-0.2%
80.2%	367	368	1	0.3%
81.5%	366	368	2	0.5%
82.7%	365	367	2	0.7%
84.0%	363	367	3	1.0%
85.2%	363	366	4	1.0%
86.4%	361	365	3	0.9%
87.7%	360	364	5	1.3%
88.9%	359	360	1	0.3%
90.1%	359	360	1	0.4%
91.4%	358	356	-2	-0.4%
92.6%	355	356	1	0.2%
93.8%	352	354	3	0.7%
95.1%	351	353	2	0.4%
96.3%	347	352	5	1.4%
97.5%	345	349	4	1.2%
98.8%	339	332	-7	-2.0%
100.0%	331	332	1	0.3%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	523	534	12	2.2%
1.2%	516	519	3	0.6%
2.5%	501	507	7	1.3%
3.7%	499	503	4	0.8%
4.9%	494	495	1	0.2%
6.2%	483	494	11	2.3%
7.4%	480	492	11	2.3%
8.6%	476	481	5	1.2%
9.9%	475	481	6	1.3%
11.1%	471	480	9	1.9%
12.3%	471	476	5	1.1%
13.6%	465	476	11	2.4%
14.8%	461	464	3	0.6%
16.0%	460	464	4	0.8%
17.3%	460	460	0	0.1%
18.5%	460	459	0	0.0%
19.8%	459	459	0	0.0%
21.0%	458	458	0	0.0%
22.2%	455	457	2	0.5%
23.5%	452	454	3	0.6%
24.7%	450	453	3	0.6%
25.9%	449	449	0	0.0%
27.2%	447	447	1	0.1%
28.4%	446	447	1	0.2%
29.6%	445	444	-1	-0.1%
30.9%	444	443	-1	-0.2%
32.1%	442	443	1	0.1%
33.3%	438	443	4	1.0%
34.6%	437	440	3	0.7%
35.8%	436	440	4	0.9%
37.0%	434	439	5	1.2%
38.3%	433	438	4	1.0%
39.5%	433	437	3	0.8%
40.7%	431	435	4	1.0%
42.0%	431	435	4	1.0%
43.2%	428	435	7	1.6%
44.4%	427	433	6	1.3%
45.7%	426	431	5	1.2%
46.9%	426	431	5	1.1%
48.1%	425	430	5	1.2%
49.4%	425	429	4	1.0%
50.6%	423	427	4	1.0%
51.9%	422	425	3	0.7%
53.1%	422	424	2	0.5%
54.3%	422	423	1	0.3%
55.6%	420	421	1	0.3%
56.8%	419	421	1	0.3%
58.0%	418	420	2	0.5%
59.3%	417	420	3	0.8%
60.5%	416	417	1	0.3%
61.7%	415	417	2	0.5%
63.0%	413	416	3	0.7%
64.2%	413	416	3	0.7%
65.4%	412	416	4	0.9%
66.7%	412	415	3	0.7%
67.9%	412	415	3	0.7%
69.1%	412	411	0	-0.1%
70.4%	410	411	1	0.3%
71.6%	409	410	1	0.4%
72.8%	408	408	1	0.2%
74.1%	406	407	1	0.3%
75.3%	405	407	2	0.5%
76.5%	400	406	5	1.3%
77.8%	399	405	6	1.6%
79.0%	396	398	2	0.5%
80.2%	395	398	2	0.6%
81.5%	395	394	0	-0.1%
82.7%	395	394	-1	-0.2%
84.0%	393	390	-3	-0.8%
85.2%	390	389	-1	-0.3%
86.4%	389	387	-2	-0.4%
87.7%	389	385	-3	-0.8%
88.9%	384	382	-2	-0.6%
90.1%	384	379	-5	-1.3%
91.4%	384	378	-6	-1.5%
92.6%	381	374	-6	-1.7%
93.8%	380	374	-6	-1.5%
95.1%	378	372	-6	-1.5%
96.3%	373	370	-3	-0.9%
97.5%	367	363	-4	-1.2%
98.8%	355	361	6	1.6%
100.0%	341	344	3	1.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	538	539	2	0.4%
3.7%	537	538	2	0.3%
4.9%	521	531	11	2.0%
6.2%	519	521	2	0.5%
7.4%	515	520	6	1.1%
8.6%	511	518	7	1.4%
9.9%	507	513	6	1.2%
11.1%	503	507	4	0.7%
12.3%	502	506	5	0.9%
13.6%	500	506	5	1.1%
14.8%	499	506	7	1.4%
16.0%	495	498	3	0.6%
17.3%	491	490	-2	-0.4%
18.5%	490	488	-2	-0.4%
19.8%	488	487	-1	-0.3%
21.0%	484	486	1	0.3%
22.2%	483	485	3	0.6%
23.5%	481	483	2	0.3%
24.7%	480	481	2	0.3%
25.9%	479	479	0	-0.1%
27.2%	479	479	0	-0.1%
28.4%	476	478	1	0.3%
29.6%	475	475	0	-0.1%
30.9%	474	474	0	-0.1%
32.1%	474	474	0	0.0%
33.3%	470	471	0	0.0%
34.6%	470	469	-1	-0.3%
35.8%	468	465	-3	-0.7%
37.0%	466	464	-1	-0.3%
38.3%	463	464	2	0.3%
39.5%	462	463	2	0.4%
40.7%	460	463	3	0.6%
42.0%	460	463	3	0.7%
43.2%	457	463	6	1.3%
44.4%	456	462	5	1.2%
45.7%	456	459	4	0.8%
46.9%	452	458	6	1.3%
48.1%	452	458	6	1.4%
49.4%	451	457	6	1.4%
50.6%	451	457	6	1.2%
51.9%	451	456	5	1.0%
53.1%	449	454	5	1.1%
54.3%	449	454	4	1.0%
55.6%	449	453	4	1.0%
56.8%	449	453	4	0.8%
58.0%	448	452	4	0.9%
59.3%	448	452	4	1.0%
60.5%	447	452	5	1.0%
61.7%	447	451	4	0.9%
63.0%	447	447	0	0.0%
64.2%	445	445	0	0.0%
65.4%	444	445	0	0.0%
66.7%	444	444	0	0.0%
67.9%	443	444	0	0.0%
69.1%	442	442	0	-0.1%
70.4%	442	440	-2	-0.5%
71.6%	440	437	-3	-0.7%
72.8%	440	437	-3	-0.6%
74.1%	439	437	-2	-0.4%
75.3%	438	437	-2	-0.4%
76.5%	436	436	1	0.1%
77.8%	435	436	0	0.1%
79.0%	433	435	2	0.4%
80.2%	432	434	2	0.5%
81.5%	432	433	1	0.2%
82.7%	430	428	-2	-0.5%
84.0%	430	426	-3	-0.8%
85.2%	429	425	-4	-0.9%
86.4%	427	425	-2	-0.4%
87.7%	426	425	-1	-0.2%
88.9%	425	421	-4	-1.0%
90.1%	424	421	-3	-0.8%
91.4%	423	420	-3	-0.6%
92.6%	416	415	-1	-0.3%
93.8%	415	414	-1	-0.3%
95.1%	413	412	-2	-0.4%
96.3%	410	411	1	0.3%
97.5%	396	410	14	3.5%
98.8%	385	393	8	2.1%
100.0%	381	378	-4	-0.9%

Table SW-42-b

San Luis Reservoir (SWP and CVP), End of Month Elevation
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	541	541	0	0.0%
4.9%	541	541	0	0.0%
6.2%	541	541	0	0.0%
7.4%	541	541	0	0.1%
8.6%	537	541	4	0.8%
9.9%	533	539	6	1.1%
11.1%	531	537	6	1.2%
12.3%	530	534	4	0.7%
13.6%	526	531	5	0.9%
14.8%	525	526	1	0.1%
16.0%	522	521	0	0.0%
17.3%	520	520	0	-0.1%
18.5%	517	516	-1	-0.2%
19.8%	516	514	-2	-0.4%
21.0%	516	514	-2	-0.4%
22.2%	515	512	-3	-0.5%
23.5%	514	512	-2	-0.3%
24.7%	511	511	0	-0.1%
25.9%	510	510	-1	-0.1%
27.2%	510	510	-1	-0.1%
28.4%	509	510	1	0.2%
29.6%	508	509	2	0.3%
30.9%	506	509	3	0.7%
32.1%	505	504	-1	-0.2%
33.3%	501	503	2	0.4%
34.6%	499	501	2	0.4%
35.8%	497	500	2	0.5%
37.0%	497	499	2	0.4%
38.3%	496	496	0	0.0%
39.5%	495	496	1	0.3%
40.7%	494	495	1	0.1%
42.0%	494	494	0	0.1%
43.2%	493	493	0	0.0%
44.4%	491	492	1	0.2%
45.7%	491	492	1	0.2%
46.9%	491	489	-2	-0.3%
48.1%	490	488	-2	-0.5%
49.4%	490	485	-4	-0.9%
50.6%	480	483	3	0.7%
51.9%	480	483	4	0.7%
53.1%	480	481	2	0.3%
54.3%	479	480	1	0.3%
55.6%	479	480	1	0.2%
56.8%	478	478	-1	-0.2%
58.0%	478	477	-1	-0.2%
59.3%	476	476	1	0.1%
60.5%	475	476	1	0.1%
61.7%	474	474	0	-0.1%
63.0%	471	473	2	0.4%
64.2%	471	473	2	0.5%
65.4%	469	473	4	0.9%
66.7%	468	472	4	0.9%
67.9%	464	471	7	1.6%
69.1%	461	471	9	2.0%
70.4%	461	468	7	1.5%
71.6%	460	468	8	1.7%
72.8%	457	464	7	1.5%
74.1%	456	461	4	0.9%
75.3%	455	456	1	0.2%
76.5%	455	456	1	0.2%
77.8%	455	455	0	-0.1%
79.0%	454	454	0	-0.1%
80.2%	451	452	1	0.1%
81.5%	448	451	3	0.6%
82.7%	448	451	3	0.6%
84.0%	446	446	0	0.1%
85.2%	443	445	2	0.4%
86.4%	442	444	1	0.3%
87.7%	442	438	-4	-0.8%
88.9%	442	438	-4	-0.9%
90.1%	440	436	-4	-1.0%
91.4%	439	436	-4	-0.8%
92.6%	437	434	-3	-0.7%
93.8%	431	430	0	-0.1%
95.1%	427	429	2	0.5%
96.3%	424	428	4	0.9%
97.5%	415	426	11	2.5%
98.8%	413	414	1	0.3%
100.0%	412	375	-36	-8.8%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	541	541	0	0.0%
4.9%	541	541	0	0.0%
6.2%	541	541	0	0.0%
7.4%	541	541	0	0.0%
8.6%	541	541	0	0.0%
9.9%	541	541	0	0.0%
11.1%	541	541	0	0.0%
12.3%	541	541	0	0.0%
13.6%	541	541	0	0.0%
14.8%	541	541	0	0.0%
16.0%	541	541	0	0.0%
17.3%	541	541	0	0.0%
18.5%	541	541	0	0.0%
19.8%	540	538	-1	-0.3%
21.0%	540	538	-2	-0.3%
22.2%	539	538	-1	-0.2%
23.5%	539	538	-1	-0.2%
24.7%	538	537	-1	-0.1%
25.9%	538	536	-1	-0.2%
27.2%	537	536	-2	-0.3%
28.4%	537	530	-7	-1.4%
29.6%	533	530	-3	-0.6%
30.9%	533	529	-4	-0.8%
32.1%	530	528	-1	-0.3%
33.3%	528	526	-2	-0.3%
34.6%	528	525	-3	-0.5%
35.8%	526	523	-3	-0.5%
37.0%	524	523	-1	-0.3%
38.3%	524	522	-1	-0.3%
39.5%	524	522	-2	-0.3%
40.7%	523	521	-2	-0.4%
42.0%	522	519	-3	-0.6%
43.2%	521	516	-4	-0.8%
44.4%	519	516	-3	-0.5%
45.7%	518	516	-3	-0.6%
46.9%	516	515	-1	-0.3%
48.1%	515	511	-4	-0.7%
49.4%	512	509	-3	-0.6%
50.6%	511	509	-2	-0.3%
51.9%	507	509	2	0.3%
53.1%	500	504	4	0.8%
54.3%	498	499	1	0.2%
55.6%	497	498	1	0.3%
56.8%	497	496	-1	-0.2%
58.0%	497	495	-1	-0.2%
59.3%	490	493	3	0.6%
60.5%	488	492	3	0.7%
61.7%	487	487	-1	-0.1%
63.0%	486	486	0	0.1%
64.2%	484	485	1	0.2%
65.4%	483	484	0	0.1%
66.7%	479	483	4	0.9%
67.9%	476	480	5	1.0%
69.1%	476	477	1	0.2%
70.4%	470	476	5	1.2%
71.6%	470	475	5	1.0%
72.8%	469	474	4	1.0%
74.1%	467	473	6	1.3%
75.3%	466	473	7	1.4%
76.5%	462	471	9	2.0%
77.8%	460	471	11	2.4%
79.0%	459	470	11	2.4%
80.2%	459	461	2	0.5%
81.5%	458	460	2	0.4%
82.7%	458	458	0	-0.1%
84.0%	457	456	0	0.0%
85.2%	456	455	-1	-0.3%
86.4%	453	455	1	0.3%
87.7%	452	454	1	0.3%
88.9%	452	450	-2	-0.5%
90.1%	450	449	-1	-0.2%
91.4%	448	447	-1	-0.3%
92.6%	448	445	-3	-0.7%
93.8%	447	443	-4	-0.8%
95.1%	445	437	-8	-1.8%
96.3%	436	432	-5	-1.1%
97.5%	436	432	-4	-1.0%
98.8%	422	425	3	0.8%
100.0%	416	417	0	0.1%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	541	541	0	0.0%
4.9%	541	540	-1	-0.2%
6.2%	540	538	-2	-0.4%
7.4%	539	538	-1	-0.2%
8.6%	538	536	-2	-0.3%
9.9%	533	533	0	0.0%
11.1%	533	532	-1	-0.1%
12.3%	532	532	0	0.0%
13.6%	532	529	-3	-0.5%
14.8%	530	529	-1	-0.2%
16.0%	528	528	0	-0.1%
17.3%	528	527	-1	-0.1%
18.5%	528	527	0	-0.1%
19.8%	528	527	0	-0.1%
21.0%	527	527	0	0.0%
22.2%	527	527	0	0.0%
23.5%	527	527	0	-0.1%
24.7%	527	525	-2	-0.5%
25.9%	526	522	-4	-0.7%
27.2%	525	519	-6	-1.2%
28.4%	524	519	-5	-0.9%
29.6%	519	518	-1	-0.2%
30.9%	518	517	-2	-0.3%
32.1%	518	515	-3	-0.5%
33.3%	517	513	-5	-1.0%
34.6%	517	512	-5	-1.0%
35.8%	514	510	-4	-0.7%
37.0%	512	510	-2	-0.4%
38.3%	512	509	-2	-0.4%
39.5%	511	509	-1	-0.3%
40.7%	510	507	-2	-0.4%
42.0%	509	506	-2	-0.5%
43.2%	508	505	-3	-0.6%
44.4%	507	504	-3	-0.6%
45.7%	507	504	-3	-0.6%
46.9%	505	503	-2	-0.4%
48.1%	505	500	-4	-0.9%
49.4%	503	498	-5	-0.9%
50.6%	502	497	-5	-1.1%
51.9%	498	497	-1	-0.3%
53.1%	492	495	3	0.6%
54.3%	489	495	6	1.2%
55.6%	489	490	2	0.3%
56.8%	488	489	1	0.1%
58.0%	487	488	1	0.3%
59.3%	484	485	1	0.3%
60.5%	483	484	0	0.0%
61.7%	481	483	3	0.6%
63.0%	477	477	1	0.1%
64.2%	472	476	4	0.8%
65.4%	472	472	1	0.2%
66.7%	471	469	-2	-0.4%
67.9%	470	468	-2	-0.4%
69.1%	467	465	-3	-0.6%
70.4%	467	464	-3	-0.6%
71.6%	466	464	-2	-0.4%
72.8%	464	464	-1	-0.2%
74.1%	461	464	3	0.7%
75.3%	460	463	3	0.6%
76.5%	459	463	5	1.0%
77.8%	456	463	6	1.4%
79.0%	455	462	7	1.6%
80.2%	452	462	10	2.1%
81.5%	452	461	9	2.0%
82.7%	451	451	1	0.1%
84.0%	449	448	-1	-0.3%
85.2%	449	448	-1	-0.3%
86.4%	446	447	1	0.3%
87.7%	446	447	1	0.3%
88.9%	446	445	-1	-0.3%
90.1%	446	444	-2	-0.4%
91.4%	445	443	-2	-0.5%
92.6%	444	441	-3	-0.6%
93.8%	434	437	3	0.6%
95.1%	433	426	-6	-1.5%
96.3%	433	422	-10	-2.4%
97.5%	430	418	-11	-2.6%
98.8%	412	418	6	1.4%
100.0%	409	414	5	1.3%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	541	541	0	0.0%
1.2%	541	541	0	0.0%
2.5%	541	541	0	0.0%
3.7%	539	539	0	0.0%
4.9%	535	534	-1	-0.1%
6.2%	532	530	-2	-0.3%
7.4%	518	517	-1	-0.2%
8.6%	517	516	-1	-0.2%
9.9%	516	515	-1	-0.1%
11.1%	511	509	-2	-0.4%
12.3%	511	508	-3	-0.5%
13.6%	510	508	-2	-0.3%
14.8%	509	505	-4	-0.8%
16.0%	508	502	-7	-1.3%
17.3%	502	502	0	-0.1%
18.5%	501	501	0	0.1%
19.8%	500	500	-1	-0.2%
21.0%	500	497	-3	-0.5%
22.2%	500	496	-4	-0.8%
23.5%	498	494	-3	-0.7%
24.7%	496	494	-2	-0.4%
25.9%	496	493	-2	-0.5%
27.2%	495	492	-3	-0.7%
28.4%	495	491	-4	-0.8%
29.6%	493	489	-5	-0.9%
30.9%	492	488	-4	-0.8%
32.1%	490	487	-4	-0.8%
33.3%	487	484	-3	-0.6%
34.6%	486	484	-2	-0.4%
35.8%	486	484	-2	-0.4%
37.0%	485	483	-2	-0.4%
38.3%	483	482	-1	-0.2%
39.5%	483	481	-2	-0.4%
40.7%	482	479	-3	-0.5%
42.0%	482	478	-4	-0.8%
43.2%	481	477	-4	-0.8%
44.4%	481	476	-5	-1.0%
45.7%	476	473	-3	-0.7%
46.9%	476	472	-4	-0.8%
48.1%	475	472	-3	-0.7%
49.4%	475	471	-4	-0.7%
50.6%	474	469	-6	-1.2%
51.9%	469	468	-1	-0.1%
53.1%	467	465	-2	-0.4%
54.3%	463	461	-3	-0.5%
55.6%	461	460	-1	-0.2%
56.8%	461	460	-1	-0.3%
58.0%	461	459	-2	-0.5%
59.3%	457	457	0	0.0%
60.5%	455	453	-2	-0.5%
61.7%	454	451	-4	-0.8%
63.0%	453	450	-3	-0.6%
64.2%	452	450	-2	-0.4%
65.4%	449	450	1	0.2%
66.7%	449	449	0	0.1%
67.9%	448	448	0	0.0%
69.1%	447	447	-1	-0.2%
70.4%	444	446	2	0.4%
71.6%	442	443	0	0.1%
72.8%	442	442	0	0.0%
74.1%	441	441	0	0.1%
75.3%	440	441	1	0.1%
76.5%	438	440	2	0.5%
77.8%	438	438	0	-0.1%
79.0%	434	435	0	0.1%
80.2%	433	434	1	0.3%
81.5%	432	433	2	0.4%
82.7%	431	429	-1	-0.3%
84.0%	430	429	-1	-0.2%
85.2%	429	428	-1	-0.2%
86.4%	425	428	3	0.6%
87.7%	425	427	2	0.5%
88.9%	424	426	2	0.4%
90.1%	423	423	0	0.0%
91.4%	423	420	-3	-0.7%
92.6%	419	414	-5	-1.2%
93.8%	418	412	-6	-1.4%
95.1%	416	405	-11	-2.7%
96.3%	409	403	-6	-1.6%
97.5%	403	402	-1	-0.3%
98.8%	398	399	0	0.1%
100.0%	393	393	0	-0.1%

Table SW-42-b
San Luis Reservoir (SWP and CVP), End of Month Elevation
Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	529	534	4	0.8%
1.2%	529	529	0	0.1%
2.5%	529	527	-2	-0.3%
3.7%	522	522	0	0.0%
4.9%	517	516	-1	-0.1%
6.2%	515	512	-3	-0.5%
7.4%	503	502	0	-0.1%
8.6%	496	496	1	0.1%
9.9%	495	488	-6	-1.3%
11.1%	493	480	-13	-2.6%
12.3%	482	480	-2	-0.5%
13.6%	482	477	-5	-1.1%
14.8%	478	476	-2	-0.5%
16.0%	477	475	-2	-0.4%
17.3%	476	474	-2	-0.5%
18.5%	475	473	-1	-0.3%
19.8%	475	472	-3	-0.6%
21.0%	471	470	-1	-0.3%
22.2%	470	462	-7	-1.6%
23.5%	466	461	-5	-1.1%
24.7%	466	460	-6	-1.2%
25.9%	463	460	-3	-0.7%
27.2%	463	456	-7	-1.4%
28.4%	457	455	-1	-0.3%
29.6%	455	454	-1	-0.3%
30.9%	454	453	-1	-0.2%
32.1%	453	449	-5	-1.1%
33.3%	453	448	-5	-1.0%
34.6%	452	448	-5	-1.0%
35.8%	451	447	-5	-1.0%
37.0%	451	446	-5	-1.1%
38.3%	450	445	-5	-1.0%
39.5%	449	445	-4	-1.0%
40.7%	445	441	-4	-1.0%
42.0%	442	441	-1	-0.2%
43.2%	442	438	-4	-0.9%
44.4%	441	435	-5	-1.2%
45.7%	440	435	-5	-1.1%
46.9%	439	435	-5	-1.0%
48.1%	439	434	-5	-1.1%
49.4%	438	433	-5	-1.2%
50.6%	435	431	-4	-0.9%
51.9%	434	425	-9	-2.0%
53.1%	430	424	-6	-1.4%
54.3%	427	421	-5	-1.2%
55.6%	426	421	-5	-1.1%
56.8%	422	420	-2	-0.6%
58.0%	421	419	-2	-0.5%
59.3%	420	419	-1	-0.3%
60.5%	419	417	-3	-0.7%
61.7%	419	416	-3	-0.7%
63.0%	419	413	-6	-1.4%
64.2%	418	410	-8	-2.0%
65.4%	418	410	-8	-2.0%
66.7%	416	407	-9	-2.2%
67.9%	415	407	-8	-1.9%
69.1%	412	406	-6	-1.4%
70.4%	409	405	-4	-1.0%
71.6%	408	405	-3	-0.8%
72.8%	408	405	-3	-0.7%
74.1%	407	404	-3	-0.7%
75.3%	405	404	-1	-0.3%
76.5%	405	402	-3	-0.8%
77.8%	404	401	-3	-0.7%
79.0%	404	401	-3	-0.6%
80.2%	403	401	-2	-0.5%
81.5%	398	400	2	0.5%
82.7%	397	396	-1	-0.3%
84.0%	396	396	0	0.0%
85.2%	395	394	-2	-0.4%
86.4%	395	387	-8	-2.0%
87.7%	390	387	-3	-0.7%
88.9%	386	386	0	0.0%
90.1%	383	378	-6	-1.5%
91.4%	380	376	-4	-1.0%
92.6%	378	373	-5	-1.3%
93.8%	376	373	-3	-0.7%
95.1%	370	365	-5	-1.5%
96.3%	370	358	-12	-3.2%
97.5%	362	349	-13	-3.6%
98.8%	348	342	-6	-1.6%
100.0%	334	332	-2	-0.6%

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	523	523	0	0.0%
1.2%	522	523	1	0.2%
2.5%	521	519	-1	-0.3%
3.7%	504	502	-2	-0.4%
4.9%	499	499	0	0.0%
6.2%	487	486	-1	-0.2%
7.4%	482	484	2	0.4%
8.6%	480	474	-6	-1.2%
9.9%	477	472	-6	-1.2%
11.1%	475	467	-7	-1.5%
12.3%	472	465	-7	-1.4%
13.6%	467	465	-2	-0.4%
14.8%	464	459	-5	-1.0%
16.0%	461	456	-5	-1.1%
17.3%	459	454	-5	-1.2%
18.5%	448	441	-7	-1.5%
19.8%	444	440	-3	-0.7%
21.0%	440	440	-1	-0.1%
22.2%	439	438	-1	-0.1%
23.5%	437	434	-3	-0.7%
24.7%	436	433	-3	-0.8%
25.9%	435	429	-6	-1.5%
27.2%	435	428	-7	-1.6%
28.4%	431	428	-3	-0.7%
29.6%	430	426	-4	-0.9%
30.9%	427	425	-2	-0.5%
32.1%	427	424	-4	-0.8%
33.3%	426	423	-3	-0.7%
34.6%	426	421	-5	-1.2%
35.8%	424	419	-5	-1.1%
37.0%	424	419	-5	-1.2%
38.3%	424	418	-5	-1.2%
39.5%	421	418	-3	-0.7%
40.7%	419	418	-1	-0.3%
42.0%	419	415	-4	-1.1%
43.2%	417	415	-3	-0.6%
44.4%	412	410	-2	-0.5%
45.7%	412	410	-2	-0.4%
46.9%	411	410	-1	-0.3%
48.1%	409	409	-1	-0.2%
49.4%	407	408	1	0.2%
50.6%	406	406	0	0.0%
51.9%	405	405	0	0.0%
53.1%	405	405	0	-0.1%
54.3%	404	403	-2	-0.4%
55.6%	403	399	-4	-1.1%
56.8%	402	399	-3	-0.8%
58.0%	400	398	-2	-0.5%
59.3%	399	398	-1	-0.2%
60.5%	398	397	-1	-0.2%
61.7%	398	394	-3	-0.9%
63.0%	397	394	-3	-0.7%
64.2%	397	391	-5	-1.3%
65.4%	393	391	-3	-0.7%
66.7%	391	390	-1	-0.2%
67.9%	390	389	-1	-0.2%
69.1%	390	388	-2	-0.5%
70.4%	390	386	-4	-1.0%
71.6%	389	385	-4	-1.1%
72.8%	388	385	-4	-1.0%
74.1%	388	384	-4	-1.0%
75.3%	385	384	-1	-0.2%
76.5%	382	383	1	0.3%
77.8%	380	381	1	0.3%
79.0%	379	378	-2	-0.4%
80.2%	378	374	-4	-1.0%
81.5%	378	374	-4	-1.1%
82.7%	375	371	-4	-1.1%
84.0%	375	370	-5	-1.3%
85.2%	375	369	-6	-1.6%
86.4%	374	367	-7	-1.9%
87.7%	368	364	-5	-1.3%
88.9%	367	363	-5	-1.2%
90.1%	366	361	-5	-1.3%
91.4%	365	359	-6	-1.6%
92.6%	352	358	6	1.6%
93.8%	352	356	4	1.2%
95.1%	351	356	5	1.5%
96.3%	350	351	1	0.4%
97.5%	350	348	-2	-0.6%
98.8%	344	332	-11	-3.2%
100.0%	334	331	-3	-0.9%

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	500	497	-3	-0.5%
1.2%	496	494	-2	-0.4%
2.5%	492	493	1	0.2%
3.7%	482	479	-3	-0.7%
4.9%	473	477	4	0.9%
6.2%	472	473	1	0.2%
7.4%	472	470	-2	-0.3%
8.6%	470	468	-2	-0.5%
9.9%	470	467	-3	-0.7%
11.1%	466	466	0	0.1%
12.3%	465	465	0	0.0%
13.6%	450	452	1	0.3%
14.8%	439	437	-1	-0.3%
16.0%	438	433	-5	-1.1%
17.3%	426	431	5	1.1%
18.5%	425	431	6	1.4%
19.8%	425	430	6	1.3%
21.0%	424	428	4	0.9%
22.2%	423	428	5	1.1%
23.5%	421	427	5	1.3%
24.7%	420	425	6	1.4%
25.9%	418	421	3	0.6%
27.2%	418	417	-1	-0.2%
28.4%	418	416	-2	-0.4%
29.6%	418	416	-2	-0.5%
30.9%	417	416	-2	-0.4%
32.1%	416	414	-2	-0.4%
33.3%	415	414	-1	-0.4%
34.6%	415	413	-2	-0.4%
35.8%	414	411	-3	-0.7%
37.0%	411	410	-2	-0.4%
38.3%	406	409	3	0.7%
39.5%	401	409	8	2.1%
40.7%	399	408	9	2.3%
42.0%	398	398	0	0.0%
43.2%	397	397	-1	-0.2%
44.4%	397	394	-3	-0.8%
45.7%	394	392	-2	-0.5%
46.9%	393	389	-4	-1.1%
48.1%	393	388	-6	-1.4%
49.4%	388	387	0	-0.1%
50.6%	387	387	0	-0.1%
51.9%	386	385	-1	-0.4%
53.1%	385	381	-5	-1.2%
54.3%	385	380	-5	-1.3%
55.6%	383	380	-3	-0.9%
56.8%	379	376	-4	-0.9%
58.0%	378	375	-3	-0.7%
59.3%	377	374	-3	-0.8%
60.5%	376	373	-2	-0.6%
61.7%	375	373	-2	-0.6%
63.0%	372	371	-1	-0.2%
64.2%	371	368	-3	-0.8%
65.4%	368	366	-2	-0.7%
66.7%	367	365	-3	-0.7%
67.9%	364	364	0	-0.1%
69.1%	363	363	1	0.2%
70.4%	363	362	-1	-0.3%
71.6%	362	361	-1	-0.3%
72.8%	361	358	-3	-0.9%
74.1%	360	358	-3	-0.8%
75.3%	360	357	-3	-0.8%
76.5%	360	357	-3	-0.8%
77.8%	360	357	-3	-0.9%
79.0%	358	355	-3	-1.0%
80.2%	357	353	-4	-1.1%
81.5%	354	353	-1	-0.4%
82.7%	354	352	-1	-0.4%
84.0%	354	349	-5	-1.3%
85.2%	353	347	-7	-1.9%
86.4%	353	346	-7	-2.1%
87.7%	352	344	-8	-2.3%
88.9%	351	342	-9	-2.5%
90.1%	350	342	-7	-2.1%
91.4%	349	342	-7	-2.0%
92.6%	346	338	-8	-2.4%
93.8%	345	337	-8	-2.3%
95.1%	345	333	-12	-3.5%
96.3%	343	333	-11	-3.1%
97.5%	341	331	-10	-2.9%
98.8%	338	331	-7	-2.1%
100.0%	331	331	0	0.0%

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	480	478	-2	-0.4%
1.2%	461	478	16	3.5%
2.5%	459	463	5	1.0%
3.7%	457	462	5	1.1%
4.9%	455	454	0	-0.1%
6.2%	454	452	-2	-0.4%
7.4%	453	450	-3	-0.7%
8.6%	444	450	6	1.3%
9.9%	442	445	3	0.6%
11.1%	438	440	2	0.4%
12.3%	433	435	2	0.6%
13.6%	430	433	3	0.7%
14.8%	429	433	4	0.9%
16.0%	427	428	1	0.3%
17.3%	426	426	0	0.0%
18.5%	426	422	-4	-0.9%
19.8%	420	422	2	0.5%
21.0%	417	421	4	1.0%
22.2%	414	420	6	1.4%
23.5%	413	419	6	1.6%
24.7%	413	416	4	0.9%
25.9%	412	414	2	0.5%
27.2%	412	413	2	0.4%
28.4%	411	412	1	0.3%
29.6%	410	411	1	0.1%
30.9%	410	410	0	0.1%
32.1%	410	410	0	0.1%
33.3%	409	410	1	0.1%
34.6%	409	409	0	0.0%
35.8%	408	408	0	-0.1%
37.0%	405	408	3	0.8%
38.3%	405	407	3	0.7%
39.5%	403	407	4	1.0%
40.7%	401	407	6	1.4%
42.0%	401	406	5	1.3%
43.2%	400	406	6	1.4%
44.4%	397	403	6	1.5%
45.7%	395	401	6	1.6%
46.9%	394	400	6	1.5%
48.1%	394	400	6	1.6%
49.4%	394	400	6	1.5%
50.6%	390	397	7	1.8%
51.9%	389	396	8	2.0%
53.1%	388	393	6	1.5%
54.3%	387	392	6	1.4%
55.6%	387	391	5	1.2%
56.8%	387	389	3	0.7%
58.0%	386	389	3	0.8%
59.3%	386	388	2	0.5%
60.5%	380	385	5	1.4%
61.7%	379	385	6	1.5%
63.0%	376	382	7	1.8%
64.2%	375	381	6	1.6%
65.4%	375	378	3	0.9%
66.7%	374	374	0	0.0%
67.9%	374	373	-1	-0.3%
69.1%	374	371	-2	-0.6%
70.4%	374	369	-4	-1.1%
71.6%	373	369	-4	-1.2%
72.8%	372	368	-4	-1.0%
74.1%	371	368	-3	-0.7%
75.3%	370	367	-4	-1.0%
76.5%	369	366	-3	-0.7%
77.8%	368	366	-2	-0.5%
79.0%	365	365	-1	-0.2%
80.2%	364	362	-2	-0.7%
81.5%	362	362	-1	-0.2%
82.7%	361	361	1	0.2%
84.0%	360	361	1	0.4%
85.2%	359	361	2	0.5%
86.4%	357	359	2	0.5%
87.7%	352	357	5	1.4%
88.9%	351	357	5	1.5%
90.1%	350	355	6	1.6%
91.4%	348	355	7	2.0%
92.6%	347	354	7	1.9%
93.8%	347	354	7	1.9%
95.1%	347	354	7	2.0%
96.3%	344	351	7	2.2%
97.5%	341	351	10	3.0%
98.8%	331	345	14	4.3%
100.0%	331	340	10	2.9%

Figure SW-43-b
San Luis Reservoir (SWP and CVP), End of Month Area
Probability of Exceedance

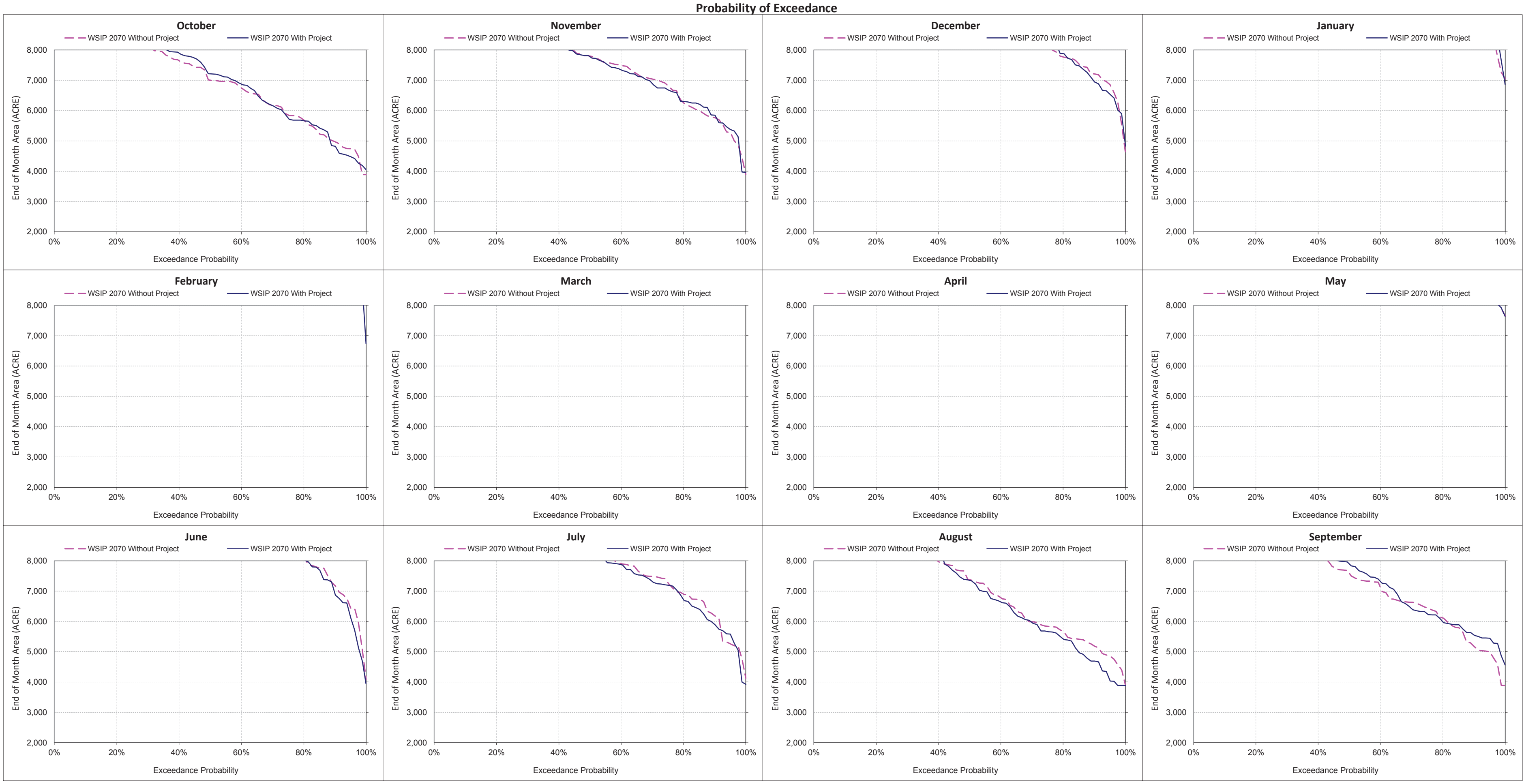


Table SW-43-b
San Luis Reservoir (SWP and CVP), End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,052	10,244	192	1.9%
1.2%	9,956	10,132	176	1.8%
2.5%	9,680	10,045	366	3.8%
3.7%	9,508	9,797	289	3.0%
4.9%	9,150	9,225	76	0.8%
6.2%	9,017	9,149	132	1.5%
7.4%	9,003	9,123	120	1.3%
8.6%	8,995	9,067	72	0.8%
9.9%	8,672	8,953	281	3.2%
11.1%	8,639	8,942	303	3.5%
12.3%	8,620	8,935	316	3.7%
13.6%	8,585	8,909	324	3.8%
14.8%	8,571	8,884	312	3.6%
16.0%	8,563	8,833	270	3.2%
17.3%	8,508	8,788	279	3.3%
18.5%	8,465	8,733	269	3.2%
19.8%	8,459	8,631	172	2.0%
21.0%	8,434	8,611	177	2.1%
22.2%	8,381	8,578	197	2.4%
23.5%	8,373	8,367	-6	-0.1%
24.7%	8,323	8,363	40	0.5%
25.9%	8,258	8,326	68	0.8%
27.2%	8,169	8,296	127	1.6%
28.4%	8,160	8,269	109	1.3%
29.6%	8,109	8,203	94	1.2%
30.9%	8,095	8,162	67	0.8%
32.1%	7,976	8,156	180	2.3%
33.3%	7,972	8,076	105	1.3%
34.6%	7,942	8,054	111	1.4%
35.8%	7,832	8,013	181	2.3%
37.0%	7,768	7,943	175	2.3%
38.3%	7,695	7,941	246	3.2%
39.5%	7,681	7,931	251	3.3%
40.7%	7,597	7,851	254	3.3%
42.0%	7,560	7,813	253	3.3%
43.2%	7,552	7,794	242	3.2%
44.4%	7,466	7,754	289	3.9%
45.7%	7,429	7,694	265	3.6%
46.9%	7,426	7,595	169	2.3%
48.1%	7,339	7,440	100	1.4%
49.4%	7,015	7,221	206	2.9%
50.6%	6,992	7,212	219	3.1%
51.9%	6,991	7,205	214	3.1%
53.1%	6,968	7,171	203	2.9%
54.3%	6,968	7,115	147	2.1%
55.6%	6,967	7,104	137	2.0%
56.8%	6,949	7,027	78	1.1%
58.0%	6,909	6,990	81	1.2%
59.3%	6,797	6,909	112	1.6%
60.5%	6,711	6,846	135	2.0%
61.7%	6,623	6,830	207	3.1%
63.0%	6,576	6,743	167	2.5%
64.2%	6,552	6,665	113	1.7%
65.4%	6,539	6,471	-68	-1.0%
66.7%	6,366	6,344	-21	-0.3%
67.9%	6,267	6,267	0	0.0%
69.1%	6,193	6,197	4	0.1%
70.4%	6,182	6,150	-33	-0.5%
71.6%	6,159	6,075	-85	-1.4%
72.8%	6,112	6,028	-84	-1.4%
74.1%	5,905	5,874	-30	-0.5%
75.3%	5,839	5,709	-130	-2.2%
76.5%	5,837	5,688	-148	-2.5%
77.8%	5,829	5,687	-142	-2.4%
79.0%	5,765	5,684	-81	-1.4%
80.2%	5,672	5,660	-11	-0.2%
81.5%	5,532	5,653	121	2.2%
82.7%	5,487	5,529	42	0.8%
84.0%	5,385	5,507	122	2.3%
85.2%	5,221	5,425	204	3.9%
86.4%	5,202	5,368	165	3.2%
87.7%	5,095	5,295	199	3.9%
88.9%	5,021	4,846	-174	-3.5%
90.1%	4,967	4,818	-149	-3.0%
91.4%	4,906	4,592	-314	-6.4%
92.6%	4,793	4,562	-231	-4.8%
93.8%	4,745	4,528	-217	-4.6%
95.1%	4,745	4,478	-266	-5.6%
96.3%	4,728	4,419	-309	-6.5%
97.5%	4,488	4,261	-227	-5.1%
98.8%	3,889	4,189	300	7.7%
100.0%	3,889	4,049	160	4.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,863	11,327	464	4.3%
1.2%	10,609	11,101	492	4.6%
2.5%	10,426	10,685	258	2.5%
3.7%	10,024	10,312	288	2.9%
4.9%	9,966	10,252	286	2.9%
6.2%	9,907	10,205	298	3.0%
7.4%	9,736	10,068	332	3.4%
8.6%	9,477	9,900	424	4.5%
9.9%	9,443	9,752	308	3.3%
11.1%	9,408	9,655	247	2.6%
12.3%	9,339	9,555	216	2.3%
13.6%	9,326	9,483	157	1.7%
14.8%	9,304	9,481	177	1.9%
16.0%	9,241	9,467	225	2.4%
17.3%	9,019	9,454	435	4.8%
18.5%	8,996	9,417	421	4.7%
19.8%	8,951	9,356	405	4.5%
21.0%	8,863	9,215	352	4.0%
22.2%	8,841	8,873	32	0.4%
23.5%	8,834	8,799	-36	-0.4%
24.7%	8,754	8,779	25	0.3%
25.9%	8,693	8,752	60	0.7%
27.2%	8,592	8,705	113	1.3%
28.4%	8,548	8,583	35	0.4%
29.6%	8,500	8,555	54	0.6%
30.9%	8,490	8,553	62	0.7%
32.1%	8,442	8,483	40	0.5%
33.3%	8,342	8,458	116	1.4%
34.6%	8,324	8,456	132	1.6%
35.8%	8,285	8,414	129	1.6%
37.0%	8,283	8,372	89	1.1%
38.3%	8,280	8,370	90	1.1%
39.5%	8,167	8,154	-12	-0.2%
40.7%	8,152	8,136	-16	-0.2%
42.0%	8,106	8,114	8	0.1%
43.2%	8,102	7,996	-106	-1.3%
44.4%	8,016	7,979	-36	-0.5%
45.7%	7,892	7,867	-25	-0.3%
46.9%	7,868	7,840	-28	-0.4%
48.1%	7,816	7,821	5	0.1%
49.4%	7,815	7,820	5	0.1%
50.6%	7,787	7,730	-57	-0.7%
51.9%	7,735	7,725	-10	-0.1%
53.1%	7,683	7,657	-26	-0.3%
54.3%	7,597	7,611	14	0.2%
55.6%	7,590	7,516	-74	-1.0%
56.8%	7,561	7,430	-132	-1.7%
58.0%	7,530	7,413	-117	-1.6%
59.3%	7,510	7,381	-129	-1.7%
60.5%	7,479	7,322	-156	-2.1%
61.7%	7,463	7,288	-175	-2.3%
63.0%	7,357	7,221	-136	-1.9%
64.2%	7,270	7,213	-57	-0.8%
65.4%	7,188	7,126	-62	-0.9%
66.7%	7,101	7,113	12	0.2%
67.9%	7,094	7,034	-60	-0.8%
69.1%	7,059	6,987	-72	-1.0%
70.4%	7,033	6,848	-184	-2.6%
71.6%	7,013	6,748	-265	-3.8%
72.8%	6,959	6,746	-213	-3.1%
74.1%	6,909	6,745	-164	-2.4%
75.3%	6,797	6,672	-126	-1.8%
76.5%	6,672	6,618	-53	-0.8%
77.8%	6,656	6,596	-59	-0.9%
79.0%	6,367	6,314	-53	-0.8%
80.2%	6,235	6,298	63	1.0%
81.5%	6,167	6,285	118	1.9%
82.7%	6,107	6,251	144	2.4%
84.0%	6,038	6,247	209	3.5%
85.2%	5,995	6,209	214	3.6%
86.4%	5,908	6,110	202	3.4%
87.7%	5,828	6,105	276	4.7%
88.9%	5,799	5,858	59	1.0%
90.1%	5,766	5,845	79	1.4%
91.4%	5,700	5,599	-101	-1.8%
92.6%	5,539	5,591	52	0.9%
93.8%	5,297	5,463	166	3.1%
95.1%	5,275	5,376	100	1.9%
96.3%	5,000	5,323	323	6.5%
97.5%	4,860	5,139	279	5.7%
98.8%	4,448	3,971	-477	-10.7%
100.0%	3,889	3,968	79	2.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,157	12,490	333	2.7%
1.2%	11,968	12,054	85	0.7%
2.5%	11,514	11,717	203	1.8%
3.7%	11,476	11,595	119	1.0%
4.9%	11,304	11,332	28	0.2%
6.2%	10,943	11,299	356	3.3%
7.4%	10,877	11,235	358	3.3%
8.6%	10,732	10,909	177	1.7%
9.9%	10,694	10,888	194	1.8%
11.1%	10,569	10,868	299	2.8%
12.3%	10,561	10,736	175	1.7%
13.6%	10,368	10,735	367	3.5%
14.8%	10,256	10,347	91	0.9%
16.0%	10,200	10,328	128	1.3%
17.3%	10,197	10,209	12	0.1%
18.5%	10,191	10,184	-7	-0.1%
19.8%	10,168	10,173	5	0.1%
21.0%	10,147	10,150	3	0.0%
22.2%	10,038	10,116	78	0.8%
23.5%	9,935	10,023	89	0.9%
24.7%	9,873	9,967	94	1.0%
25.9%	9,834	9,833	-1	0.0%
27.2%	9,766	9,786	20	0.2%
28.4%	9,738	9,775	36	0.4%
29.6%	9,705	9,684	-21	-0.2%
30.9%	9,668	9,645	-23	-0.2%
32.1%	9,618	9,638	20	0.2%
33.3%	9,481	9,634	153	1.6%
34.6%	9,437	9,546	109	1.2%
35.8%	9,385	9,525	139	1.5%
37.0%	9,327	9,510	183	2.0%
38.3%	9,300	9,458	158	1.7%
39.5%	9,297	9,416	119	1.3%
40.7%	9,219	9,370	150	1.6%
42.0%	9,208	9,360	152	1.6%
43.2%	9,102	9,352	250	2.7%
44.4%	9,088	9,295	207	2.3%
45.7%	9,042	9,231	189	2.1%
46.9%	9,039	9,204	165	1.8%
48.1%	9,012	9,193	181	2.0%
49.4%	8,990	9,141	151	1.7%
50.6%	8,916	9,074	157	1.8%
51.9%	8,896	9,010	114	1.3%
53.1%	8,891	8,974	84	0.9%
54.3%	8,871	8,926	55	0.6%
55.6%	8,825	8,867	42	0.5%
56.8%	8,788	8,844	56	0.6%
58.0%	8,751	8,827	75	0.9%
59.3%	8,679	8,810	132	1.5%
60.5%	8,663	8,707	44	0.5%
61.7%	8,626	8,706	80	0.9%
63.0%	8,548	8,665	117	1.4%
64.2%	8,542	8,655	113	1.3%
65.4%	8,499	8,644	145	1.7%
66.7%	8,498	8,608	109	1.3%
67.9%	8,490	8,604	114	1.3%
69.1%	8,477	8,458	-19	-0.2%
70.4%	8,394	8,448	54	0.6%
71.6%	8,360	8,422	62	0.7%
72.8%	8,308	8,345	37	0.4%
74.1%	8,232	8,278	45	0.5%
75.3%	8,184	8,270	86	1.1%
76.5%	8,000	8,222	222	2.8%
77.8%	7,930	8,211	281	3.5%
79.0%	7,802	7,889	86	1.1%
80.2%	7,762	7,875	113	1.5%
81.5%	7,742	7,720	-22	-0.3%
82.7%	7,728	7,686	-41	-0.5%
84.0%	7,657	7,510	-147	-1.9%
85.2%	7,529	7,474	-55	-0.7%
86.4%	7,449	7,367	-83	-1.1%
87.7%	7,431	7,263	-167	-2.3%
88.9%	7,223	7,100	-123	-1.7%
90.1%	7,210	6,941	-269	-3.7%
91.4%	7,184	6,885	-298	-4.2%
92.6%	7,016	6,671	-345	-4.9%
93.8%	6,963	6,654	-309	-4.4%
95.1%	6,856	6,536	-319	-4.7%
96.3%	6,602	6,410	-192	-2.9%
97.5%	6,284	6,019	-266	-4.2%
98.8%	5,538	5,901	363	6.6%
100.0%	4,597	4,826	228	5.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,587	12,645	58	0.5%
3.7%	12,562	12,609	47	0.4%
4.9%	12,102	12,402	300	2.5%
6.2%	12,039	12,106	67	0.6%
7.4%	11,926	12,090	164	1.4%
8.6%	11,820	12,030	210	1.8%
9.9%	11,700	11,878	178	1.5%
11.1%	11,599	11,709	110	1.0%
12.3%	11,540	11,683	143	1.2%
13.6%	11,505	11,667	162	1.4%
14.8%	11,456	11,663	208	1.8%
16.0%	11,339	11,438	99	0.9%
17.3%	11,223	11,168	-55	-0.5%
18.5%	11,197	11,131	-65	-0.6%
19.8%	11,125	11,081	-44	-0.4%
21.0%	10,999	11,043	44	0.4%
22.2%	10,943	11,035	92	0.8%
23.5%	10,893	10,948	54	0.5%
24.7%	10,856	10,908	53	0.5%
25.9%	10,840	10,826	-14	-0.1%
27.2%	10,831	10,817	-14	-0.1%
28.4%	10,748	10,787	39	0.4%
29.6%	10,703	10,688	-15	-0.1%
30.9%	10,672	10,658	-13	-0.1%
32.1%	10,656	10,655	-1	0.0%
33.3%	10,549	10,556	7	0.1%
34.6%	10,534	10,490	-44	-0.4%
35.8%	10,468	10,365	-102	-1.0%
37.0%	10,389	10,347	-41	-0.4%
38.3%	10,292	10,342	50	0.5%
39.5%	10,264	10,319	55	0.5%
40.7%	10,221	10,318	97	0.9%
42.0%	10,194	10,305	111	1.1%
43.2%	10,113	10,302	189	1.9%
44.4%	10,078	10,259	181	1.8%
45.7%	10,065	10,186	121	1.2%
46.9%	9,954	10,149	195	2.0%
48.1%	9,930	10,147	216	2.2%
49.4%	9,907	10,112	205	2.1%
50.6%	9,907	10,094	187	1.9%
51.9%	9,905	10,060	155	1.6%
53.1%	9,851	10,018	167	1.7%
54.3%	9,849	9,996	147	1.5%
55.6%	9,843	9,990	146	1.5%
56.8%	9,836	9,960	124	1.3%
58.0%	9,806	9,946	140	1.4%
59.3%	9,790	9,939	149	1.5%
60.5%	9,772	9,929	157	1.6%
61.7%	9,769	9,908	139	1.4%
63.0%	9,766	9,768	1	0.0%
64.2%	9,700	9,701	1	0.0%
65.4%	9,687	9,688	1	0.0%
66.7%	9,679	9,675	-4	0.0%
67.9%	9,651	9,656	5	0.1%
69.1%	9,615	9,606	-9	-0.1%
70.4%	9,613	9,534	-79	-0.8%
71.6%	9,546	9,435	-111	-1.2%
72.8%	9,525	9,428	-97	-1.0%
74.1%	9,488	9,427	-61	-0.6%
75.3%	9,470	9,413	-57	-0.6%
76.5%	9,391	9,410	18	0.2%
77.8%	9,369	9,377	8	0.1%
79.0%	9,296	9,351	55	0.6%
80.2%	9,258	9,337	79	0.9%
81.5%	9,252	9,279	27	0.3%
82.7%	9,187	9,113	-75	-0.8%
84.0%	9,173	9,053	-120	-1.3%
85.2%	9,155	9,018	-138	-1.5%
86.4%	9,074	9,014	-60	-0.7%
87.7%	9,052	9,014	-38	-0.4%
88.9%	9,017	8,852	-165	-1.8%
90.1%	8,974	8,850	-124	-1.4%
91.4%	8,924	8,828	-96	-1.1%
92.6%	8,665	8,619	-46	-0.5%
93.8%	8,611	8,563	-48	-0.6%
95.1%	8,555	8,489	-66	-0.8%
96.3%	8,391	8,441	50	0.6%
97.5%	7,798	8,415	617	7.9%
98.8%	7,265	7,667	403	5.5%
100.0%	7,057	6,866	-191	-2.7%

Table SW-43-b

San Luis Reservoir (SWP and CVP), End of Month Area

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,696	12,696	0	0.0%
4.9%	12,696	12,696	0	0.0%
6.2%	12,696	12,696	0	0.0%
7.4%	12,682	12,696	14	0.1%
8.6%	12,555	12,696	140	1.1%
9.9%	12,449	12,624	175	1.4%
11.1%	12,385	12,565	180	1.5%
12.3%	12,359	12,465	105	0.9%
13.6%	12,259	12,394	135	1.1%
14.8%	12,225	12,242	16	0.1%
16.0%	12,129	12,122	-7	-0.1%
17.3%	12,094	12,080	-14	-0.1%
18.5%	12,004	11,978	-26	-0.2%
19.8%	11,980	11,924	-56	-0.5%
21.0%	11,966	11,900	-66	-0.6%
22.2%	11,941	11,865	-76	-0.6%
23.5%	11,905	11,858	-47	-0.4%
24.7%	11,832	11,823	-9	-0.1%
25.9%	11,807	11,791	-16	-0.1%
27.2%	11,803	11,781	-22	-0.2%
28.4%	11,756	11,779	24	0.2%
29.6%	11,723	11,768	45	0.4%
30.9%	11,665	11,764	99	0.8%
32.1%	11,655	11,625	-29	-0.3%
33.3%	11,522	11,588	67	0.6%
34.6%	11,464	11,520	56	0.5%
35.8%	11,409	11,482	72	0.6%
37.0%	11,399	11,468	69	0.6%
38.3%	11,383	11,380	-3	0.0%
39.5%	11,329	11,369	40	0.4%
40.7%	11,319	11,336	17	0.2%
42.0%	11,296	11,308	11	0.1%
43.2%	11,264	11,261	-3	0.0%
44.4%	11,218	11,255	37	0.3%
45.7%	11,209	11,236	27	0.2%
46.9%	11,209	11,160	-48	-0.4%
48.1%	11,186	11,112	-74	-0.7%
49.4%	11,172	11,038	-134	-1.2%
50.6%	10,857	10,964	106	1.0%
51.9%	10,847	10,963	116	1.1%
53.1%	10,846	10,898	52	0.5%
54.3%	10,831	10,876	45	0.4%
55.6%	10,819	10,849	30	0.3%
56.8%	10,808	10,782	-26	-0.2%
58.0%	10,798	10,774	-24	-0.2%
59.3%	10,728	10,747	20	0.2%
60.5%	10,702	10,723	21	0.2%
61.7%	10,667	10,651	-16	-0.1%
63.0%	10,580	10,634	54	0.5%
64.2%	10,556	10,632	75	0.7%
65.4%	10,490	10,632	142	1.4%
66.7%	10,477	10,611	134	1.3%
67.9%	10,324	10,568	244	2.4%
69.1%	10,252	10,563	311	3.0%
70.4%	10,249	10,473	224	2.2%
71.6%	10,201	10,459	257	2.5%
72.8%	10,095	10,324	229	2.3%
74.1%	10,089	10,223	135	1.3%
75.3%	10,055	10,082	27	0.3%
76.5%	10,054	10,082	27	0.3%
77.8%	10,049	10,037	-12	-0.1%
79.0%	10,022	10,014	-8	-0.1%
80.2%	9,908	9,927	20	0.2%
81.5%	9,823	9,907	84	0.9%
82.7%	9,805	9,891	86	0.9%
84.0%	9,734	9,747	13	0.1%
85.2%	9,645	9,702	57	0.6%
86.4%	9,614	9,655	40	0.4%
87.7%	9,609	9,481	-128	-1.3%
88.9%	9,589	9,448	-141	-1.5%
90.1%	9,543	9,393	-150	-1.6%
91.4%	9,505	9,380	-126	-1.3%
92.6%	9,439	9,337	-102	-1.1%
93.8%	9,209	9,192	-18	-0.2%
95.1%	9,066	9,150	84	0.9%
96.3%	8,947	9,094	147	1.6%
97.5%	8,634	9,035	401	4.6%
98.8%	8,527	8,585	58	0.7%
100.0%	8,474	6,735	-1,740	-20.5%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,696	12,696	0	0.0%
4.9%	12,696	12,696	0	0.0%
6.2%	12,696	12,696	0	0.0%
7.4%	12,696	12,696	0	0.0%
8.6%	12,696	12,696	0	0.0%
9.9%	12,696	12,696	0	0.0%
11.1%	12,696	12,696	0	0.0%
12.3%	12,696	12,696	0	0.0%
13.6%	12,696	12,696	0	0.0%
14.8%	12,696	12,696	0	0.0%
16.0%	12,696	12,696	0	0.0%
17.3%	12,696	12,694	-2	0.0%
18.5%	12,685	12,688	3	0.0%
19.8%	12,656	12,610	-46	-0.4%
21.0%	12,655	12,608	-47	-0.4%
22.2%	12,639	12,604	-35	-0.3%
23.5%	12,634	12,601	-32	-0.3%
24.7%	12,594	12,576	-18	-0.1%
25.9%	12,593	12,553	-39	-0.3%
27.2%	12,583	12,535	-48	-0.4%
28.4%	12,577	12,364	-213	-1.7%
29.6%	12,454	12,357	-97	-0.8%
30.9%	12,454	12,336	-118	-0.9%
32.1%	12,356	12,318	-38	-0.3%
33.3%	12,304	12,260	-44	-0.4%
34.6%	12,301	12,226	-75	-0.6%
35.8%	12,250	12,173	-77	-0.6%
37.0%	12,197	12,160	-37	-0.3%
38.3%	12,187	12,149	-38	-0.3%
39.5%	12,182	12,131	-51	-0.4%
40.7%	12,162	12,105	-57	-0.5%
42.0%	12,138	12,044	-94	-0.8%
43.2%	12,097	11,974	-123	-1.0%
44.4%	12,041	11,970	-72	-0.6%
45.7%	12,038	11,956	-81	-0.7%
46.9%	11,981	11,939	-42	-0.4%
48.1%	11,927	11,822	-106	-0.9%
49.4%	11,861	11,767	-94	-0.8%
50.6%	11,809	11,764	-45	-0.4%
51.9%	11,701	11,751	50	0.4%
53.1%	11,499	11,623	124	1.1%
54.3%	11,419	11,457	38	0.3%
55.6%	11,404	11,444	39	0.3%
56.8%	11,399	11,372	-27	-0.2%
58.0%	11,389	11,350	-38	-0.3%
59.3%	11,194	11,282	88	0.8%
60.5%	11,128	11,236	109	1.0%
61.7%	11,099	11,081	-18	-0.2%
63.0%	11,040	11,049	10	0.1%
64.2%	10,997	11,034	37	0.3%
65.4%	10,969	10,981	12	0.1%
66.7%	10,833	10,968	135	1.2%
67.9%	10,730	10,877	147	1.4%
69.1%	10,722	10,758	36	0.3%
70.4%	10,548	10,726	178	1.7%
71.6%	10,533	10,684	151	1.4%
72.8%	10,513	10,659	147	1.4%
74.1%	10,443	10,642	199	1.9%
75.3%	10,403	10,621	218	2.1%
76.5%	10,280	10,577	297	2.9%
77.8%	10,193	10,562	369	3.6%
79.0%	10,181	10,550	369	3.6%
80.2%	10,178	10,250	72	0.7%
81.5%	10,144	10,200	56	0.6%
82.7%	10,137	10,125	-12	-0.1%
84.0%	10,092	10,088	-4	0.0%
85.2%	10,079	10,039	-40	-0.4%
86.4%	9,980	10,028	48	0.5%
87.7%	9,954	9,994	40	0.4%
88.9%	9,941	9,860	-81	-0.8%
90.1%	9,867	9,837	-31	-0.3%
91.4%	9,809	9,765	-45	-0.5%
92.6%	9,794	9,694	-100	-1.0%
93.8%	9,770	9,649	-121	-1.2%
95.1%	9,716	9,438	-277	-2.9%
96.3%	9,412	9,249	-163	-1.7%
97.5%	9,392	9,243	-149	-1.6%
98.8%	8,878	9,007	129	1.5%
100.0%	8,664	8,680	16	0.2%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,696	12,696	0	0.0%
4.9%	12,696	12,656	-39	-0.3%
6.2%	12,675	12,608	-67	-0.5%
7.4%	12,632	12,595	-37	-0.3%
8.6%	12,589	12,543	-46	-0.4%
9.9%	12,457	12,459	2	0.0%
11.1%	12,451	12,432	-19	-0.2%
12.3%	12,418	12,422	3	0.0%
13.6%	12,410	12,337	-73	-0.6%
14.8%	12,357	12,322	-35	-0.3%
16.0%	12,315	12,304	-12	-0.1%
17.3%	12,312	12,292	-19	-0.2%
18.5%	12,299	12,291	-8	-0.1%
19.8%	12,294	12,286	-8	-0.1%
21.0%	12,291	12,286	-5	0.0%
22.2%	12,290	12,285	-6	0.0%
23.5%	12,286	12,272	-14	-0.1%
24.7%	12,286	12,217	-68	-0.6%
25.9%	12,240	12,129	-110	-0.9%
27.2%	12,221	12,049	-172	-1.4%
28.4%	12,185	12,045	-140	-1.1%
29.6%	12,052	12,016	-35	-0.3%
30.9%	12,029	11,982	-47	-0.4%
32.1%	12,019	11,947	-72	-0.6%
33.3%	12,009	11,866	-142	-1.2%
34.6%	12,006	11,859	-147	-1.2%
35.8%	11,908	11,800	-108	-0.9%
37.0%	11,850	11,786	-65	-0.5%
38.3%	11,843	11,778	-65	-0.6%
39.5%	11,815	11,777	-38	-0.3%
40.7%	11,780	11,714	-66	-0.6%
42.0%	11,763	11,689	-74	-0.6%
43.2%	11,723	11,634	-88	-0.8%
44.4%	11,694	11,606	-89	-0.8%
45.7%	11,693	11,603	-89	-0.8%
46.9%	11,634	11,570	-63	-0.5%
48.1%	11,630	11,494	-136	-1.2%
49.4%	11,580	11,442	-138	-1.2%
50.6%	11,564	11,400	-164	-1.4%
51.9%	11,430	11,389	-41	-0.4%
53.1%	11,255	11,348	92	0.8%
54.3%	11,155	11,344	189	1.7%
55.6%	11,138	11,187	49	0.4%
56.8%	11,132	11,153	21	0.2%
58.0%	11,074	11,122	48	0.4%
59.3%	10,996	11,037	41	0.4%
60.5%	10,968	10,975	7	0.1%
61.7%	10,880	10,970	90	0.8%
63.0%	10,756	10,777	21	0.2%
64.2%	10,611	10,731	120	1.1%
65.4%	10,587	10,613	26	0.2%
66.7%	10,577	10,514	-63	-0.6%
67.9%	10,545	10,477	-68	-0.6%
69.1%	10,449	10,358	-91	-0.9%
70.4%	10,439	10,354	-85	-0.8%
71.6%	10,417	10,349	-68	-0.7%
72.8%	10,355	10,329	-26	-0.2%
74.1%	10,224	10,328	104	1.0%
75.3%	10,223	10,321	99	1.0%
76.5%	10,166	10,318	152	1.5%
77.8%	10,089	10,302	212	2.1%
79.0%	10,039	10,275	236	2.4%
80.2%	9,951	10,273	322	3.2%
81.5%	9,931	10,231	300	3.0%
82.7%	9,891	9,912	21	0.2%
84.0%	9,848	9,807	-42	-0.4%
85.2%	9,847	9,798	-49	-0.5%
86.4%	9,747	9,785	38	0.4%
87.7%	9,740	9,784	44	0.5%
88.9%	9,738	9,690	-48	-0.5%
90.1%	9,724	9,669	-55	-0.6%
91.4%	9,710	9,638	-72	-0.7%
92.6%	9,656	9,568	-88	-0.9%
93.8%	9,332	9,422	90	1.0%
95.1%	9,285	9,054	-232	-2.5%
96.3%	9,276	8,899	-376	-4.1%
97.5%	9,170	8,752	-418	-4.6%
98.8%	8,500	8,723	223	2.6%
100.0%	8,369	8,591	221	2.6%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,696	12,696	0	0.0%
1.2%	12,696	12,696	0	0.0%
2.5%	12,696	12,696	0	0.0%
3.7%	12,631	12,623	-7	-0.1%
4.9%	12,502	12,479	-23	-0.2%
6.2%	12,415	12,363	-51	-0.4%
7.4%	12,036	12,002	-34	-0.3%
8.6%	12,009	11,973	-35	-0.3%
9.9%	11,968	11,953	-15	-0.1%
11.1%	11,820	11,754	-66	-0.6%
12.3%	11,816	11,735	-81	-0.7%
13.6%	11,781	11,732	-49	-0.4%
14.8%	11,755	11,635	-120	-1.0%
16.0%	11,744	11,549	-195	-1.7%
17.3%	11,550	11,542	-8	-0.1%
18.5%	11,509	11,521	11	0.1%
19.8%	11,507	11,483	-25	-0.2%
21.0%	11,484	11,404	-80	-0.7%
22.2%	11,479	11,356	-124	-1.1%
23.5%	11,421	11,314	-107	-0.9%
24.7%	11,372	11,313	-59	-0.5%
25.9%	11,358	11,284	-75	-0.7%
27.2%	11,345	11,240	-104	-0.9%
28.4%	11,337	11,207	-130	-1.1%
29.6%	11,290	11,144	-146	-1.3%
30.9%	11,250	11,118	-132	-1.2%
32.1%	11,196	11,073	-123	-1.1%
33.3%	11,100	11,006	-94	-0.9%
34.6%	11,059	10,990	-68	-0.6%
35.8%	11,043	10,982	-61	-0.6%
37.0%	11,012	10,953	-59	-0.5%
38.3%	10,967	10,939	-27	-0.3%
39.5%	10,961	10,901	-60	-0.5%
40.7%	10,923	10,842	-81	-0.7%
42.0%	10,917	10,797	-120	-1.1%
43.2%	10,880	10,748	-132	-1.2%
44.4%	10,879	10,727	-152	-1.4%
45.7%	10,731	10,626	-105	-1.0%
46.9%	10,722	10,604	-118	-1.1%
48.1%	10,708	10,597	-111	-1.0%
49.4%	10,686	10,571	-115	-1.1%
50.6%	10,679	10,489	-190	-1.8%
51.9%	10,496	10,475	-21	-0.2%
53.1%	10,451	10,383	-68	-0.6%
54.3%	10,314	10,230	-84	-0.8%
55.6%	10,249	10,217	-32	-0.3%
56.8%	10,246	10,204	-42	-0.4%
58.0%	10,230	10,157	-73	-0.7%
59.3%	10,092	10,097	4	0.0%
60.5%	10,033	9,963	-70	-0.7%
61.7%	10,021	9,899	-122	-1.2%
63.0%	9,983	9,887	-96	-1.0%
64.2%	9,941	9,884	-56	-0.6%
65.4%	9,848	9,881	34	0.3%
66.7%	9,841	9,854	13	0.1%
67.9%	9,795	9,802	7	0.1%
69.1%	9,789	9,765	-24	-0.2%
70.4%	9,680	9,739	59	0.6%
71.6%	9,615	9,625	11	0.1%
72.8%	9,590	9,591	1	0.0%
74.1%	9,552	9,564	12	0.1%
75.3%	9,535	9,558	22	0.2%
76.5%	9,478	9,550	73	0.8%
77.8%	9,464	9,449	-15	-0.2%
79.0%	9,336	9,348	12	0.1%
80.2%	9,283	9,335	52	0.6%
81.5%	9,240	9,298	58	0.6%
82.7%	9,201	9,159	-42	-0.5%
84.0%	9,180	9,141	-38	-0.4%
85.2%	9,145	9,108	-37	-0.4%
86.4%	9,001	9,095	94	1.0%
87.7%	8,983	9,060	76	0.9%
88.9%	8,977	9,037	59	0.7%
90.1%	8,935	8,932	-3	0.0%
91.4%	8,918	8,813	-105	-1.2%
92.6%	8,773	8,577	-196	-2.2%
93.8%	8,747	8,507	-239	-2.7%
95.1%	8,674	8,205	-469	-5.4%
96.3%	8,370	8,095	-275	-3.3%
97.5%	8,102	8,046	-55	-0.7%
98.8%	7,899	7,919	20	0.3%
100.0%	7,657	7,637	-20	-0.3%

Table SW-43-b

San Luis Reservoir (SWP and CVP), End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,345	12,474	129	1.0%
1.2%	12,335	12,344	9	0.1%
2.5%	12,335	12,288	-46	-0.4%
3.7%	12,136	12,137	2	0.0%
4.9%	11,982	11,961	-21	-0.2%
6.2%	11,928	11,853	-75	-0.6%
7.4%	11,574	11,563	-11	-0.1%
8.6%	11,357	11,376	19	0.2%
9.9%	11,329	11,131	-198	-1.7%
11.1%	11,285	10,871	-414	-3.7%
12.3%	10,939	10,860	-79	-0.7%
13.6%	10,923	10,748	-175	-1.6%
14.8%	10,804	10,727	-77	-0.7%
16.0%	10,770	10,705	-65	-0.6%
17.3%	10,742	10,662	-80	-0.7%
18.5%	10,686	10,647	-39	-0.4%
19.8%	10,684	10,597	-87	-0.8%
21.0%	10,572	10,533	-39	-0.4%
22.2%	10,532	10,286	-246	-2.3%
23.5%	10,418	10,249	-169	-1.6%
24.7%	10,413	10,222	-191	-1.8%
25.9%	10,313	10,209	-103	-1.0%
27.2%	10,291	10,075	-216	-2.1%
28.4%	10,094	10,045	-50	-0.5%
29.6%	10,038	9,992	-46	-0.5%
30.9%	10,016	9,986	-30	-0.3%
32.1%	9,986	9,825	-160	-1.6%
33.3%	9,978	9,823	-155	-1.6%
34.6%	9,955	9,798	-157	-1.6%
35.8%	9,912	9,760	-152	-1.5%
37.0%	9,894	9,723	-172	-1.7%
38.3%	9,869	9,713	-156	-1.6%
39.5%	9,851	9,701	-150	-1.5%
40.7%	9,717	9,567	-151	-1.5%
42.0%	9,593	9,566	-27	-0.3%
43.2%	9,590	9,450	-141	-1.5%
44.4%	9,564	9,377	-187	-2.0%
45.7%	9,534	9,360	-174	-1.8%
46.9%	9,503	9,343	-160	-1.7%
48.1%	9,499	9,326	-173	-1.8%
49.4%	9,468	9,286	-183	-1.9%
50.6%	9,353	9,221	-132	-1.4%
51.9%	9,327	9,014	-314	-3.4%
53.1%	9,170	8,948	-222	-2.4%
54.3%	9,066	8,867	-198	-2.2%
55.6%	9,030	8,848	-183	-2.0%
56.8%	8,893	8,801	-92	-1.0%
58.0%	8,844	8,761	-82	-0.9%
59.3%	8,800	8,755	-45	-0.5%
60.5%	8,789	8,677	-113	-1.3%
61.7%	8,773	8,664	-109	-1.2%
63.0%	8,753	8,522	-230	-2.6%
64.2%	8,748	8,417	-331	-3.8%
65.4%	8,722	8,393	-330	-3.8%
66.7%	8,660	8,288	-372	-4.3%
67.9%	8,609	8,284	-325	-3.8%
69.1%	8,487	8,250	-237	-2.8%
70.4%	8,364	8,198	-166	-2.0%
71.6%	8,332	8,194	-138	-1.7%
72.8%	8,312	8,193	-119	-1.4%
74.1%	8,292	8,176	-116	-1.4%
75.3%	8,201	8,155	-46	-0.6%
76.5%	8,195	8,049	-146	-1.8%
77.8%	8,161	8,042	-119	-1.5%
79.0%	8,151	8,035	-116	-1.4%
80.2%	8,102	8,018	-84	-1.0%
81.5%	7,868	7,960	92	1.2%
82.7%	7,846	7,799	-47	-0.6%
84.0%	7,798	7,791	-7	-0.1%
85.2%	7,764	7,684	-80	-1.0%
86.4%	7,755	7,376	-379	-4.9%
87.7%	7,514	7,373	-141	-1.9%
88.9%	7,295	7,304	8	0.1%
90.1%	7,168	6,868	-300	-4.2%
91.4%	6,962	6,756	-206	-3.0%
92.6%	6,880	6,614	-267	-3.9%
93.8%	6,758	6,605	-152	-2.3%
95.1%	6,440	6,118	-322	-5.0%
96.3%	6,436	5,715	-721	-11.2%
97.5%	5,959	5,132	-827	-13.9%
98.8%	5,068	4,687	-381	-7.5%
100.0%	4,086	3,939	-147	-3.6%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,157	12,154	-4	0.0%
1.2%	12,125	12,152	27	0.2%
2.5%	12,099	12,061	-38	-0.3%
3.7%	11,621	11,553	-68	-0.6%
4.9%	11,474	11,468	-5	0.0%
6.2%	11,084	11,058	-26	-0.2%
7.4%	10,910	10,975	65	0.6%
8.6%	10,846	10,662	-184	-1.7%
9.9%	10,780	10,597	-183	-1.7%
11.1%	10,685	10,447	-238	-2.2%
12.3%	10,596	10,379	-217	-2.0%
13.6%	10,431	10,368	-63	-0.6%
14.8%	10,345	10,189	-156	-1.5%
16.0%	10,227	10,062	-165	-1.6%
17.3%	10,176	9,995	-181	-1.8%
18.5%	9,815	9,585	-230	-2.3%
19.8%	9,654	9,548	-106	-1.1%
21.0%	9,536	9,517	-19	-0.2%
22.2%	9,501	9,481	-20	-0.2%
23.5%	9,442	9,335	-107	-1.1%
24.7%	9,410	9,291	-120	-1.3%
25.9%	9,361	9,136	-225	-2.4%
27.2%	9,354	9,103	-251	-2.7%
28.4%	9,214	9,099	-116	-1.3%
29.6%	9,187	9,050	-137	-1.5%
30.9%	9,091	9,014	-77	-0.8%
32.1%	9,084	8,951	-133	-1.5%
33.3%	9,044	8,933	-111	-1.2%
34.6%	9,022	8,832	-190	-2.1%
35.8%	8,963	8,785	-177	-2.0%
37.0%	8,955	8,755	-200	-2.2%
38.3%	8,944	8,743	-200	-2.2%
39.5%	8,851	8,741	-110	-1.2%
40.7%	8,787	8,733	-54	-0.6%
42.0%	8,776	8,602	-174	-2.0%
43.2%	8,696	8,596	-100	-1.1%
44.4%	8,500	8,411	-89	-1.0%
45.7%	8,478	8,403	-75	-0.9%
46.9%	8,460	8,401	-59	-0.7%
48.1%	8,389	8,362	-27	-0.3%
49.4%	8,275	8,314	40	0.5%
50.6%	8,262	8,258	-4	0.0%
51.9%	8,215	8,207	-8	-0.1%
53.1%	8,201	8,180	-21	-0.3%
54.3%	8,167	8,094	-73	-0.9%
55.6%	8,128	7,932	-196	-2.4%
56.8%	8,075	7,926	-149	-1.8%
58.0%	7,993	7,907	-85	-1.1%
59.3%	7,927	7,892	-34	-0.4%
60.5%	7,893	7,862	-32	-0.4%
61.7%	7,876	7,717	-159	-2.0%
63.0%	7,839	7,715	-124	-1.6%
64.2%	7,825	7,575	-250	-3.2%
65.4%	7,662	7,537	-125	-1.6%
66.7%	7,557	7,527	-31	-0.4%
67.9%	7,500	7,469	-31	-0.4%
69.1%	7,490	7,385	-105	-1.4%
70.4%	7,489	7,288	-201	-2.7%
71.6%	7,464	7,247	-217	-2.9%
72.8%	7,427	7,233	-194	-2.6%
74.1%	7,407	7,208	-199	-2.7%
75.3%	7,238	7,194	-44	-0.6%
76.5%	7,102	7,170	68	1.0%
77.8%	6,980	7,036	55	0.8%
79.0%	6,958	6,873	-85	-1.2%
80.2%	6,888	6,687	-201	-2.9%
81.5%	6,884	6,659	-225	-3.3%
82.7%	6,736	6,510	-227	-3.4%
84.0%	6,732	6,459	-273	-4.1%
85.2%	6,730	6,393	-336	-5.0%
86.4%	6,656	6,252	-404	-6.1%
87.7%	6,339	6,059	-280	-4.4%
88.9%	6,274	6,003	-271	-4.3%
90.1%	6,178	5,890	-287	-4.7%
91.4%	6,108	5,746	-361	-5.9%
92.6%	5,336	5,690	354	6.6%
93.8%	5,323	5,587	265	5.0%
95.1%	5,258	5,585	327	6.2%
96.3%	5,196	5,280	84	1.6%
97.5%	5,187	5,051	-137	-2.6%
98.8%	4,768	4,002	-766	-16.1%
100.0%	4,123	3,923	-201	-4.9%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,482	11,397	-85	-0.7%
1.2%	11,366	11,303	-63	-0.6%
2.5%	11,233	11,263	30	0.3%
3.7%	10,939	10,836	-103	-0.9%
4.9%	10,641	10,778	137	1.3%
6.2%	10,607	10,644	37	0.4%
7.4%	10,588	10,536	-52	-0.5%
8.6%	10,537	10,463	-74	-0.7%
9.9%	10,534	10,430	-104	-1.0%
11.1%	10,404	10,414	10	0.1%
12.3%	10,385	10,380	-5	0.0%
13.6%	9,884	9,927	42	0.4%
14.8%	9,482	9,439	-43	-0.5%
16.0%	9,462	9,291	-172	-1.8%
17.3%	9,045	9,212	167	1.8%
18.5%	8,997	9,207	210	2.3%
19.8%	8,983	9,191	207	2.3%
21.0%	8,968	9,101	133	1.5%
22.2%	8,919	9,092	173	1.9%
23.5%	8,863	9,068	205	2.3%
24.7%	8,795	9,016	222	2.5%
25.9%	8,747	8,851	103	1.2%
27.2%	8,727	8,701	-25	-0.3%
28.4%	8,726	8,658	-68	-0.8%
29.6%	8,724	8,643	-81	-0.9%
30.9%	8,709	8,637	-73	-0.8%
32.1%	8,652	8,589	-62	-0.7%
33.3%	8,616	8,556	-60	-0.7%
34.6%	8,598	8,524	-74	-0.9%
35.8%	8,566	8,444	-122	-1.4%
37.0%	8,456	8,393	-63	-0.7%
38.3%	8,256	8,372	116	1.4%
39.5%	8,011	8,371	360	4.5%
40.7%	7,927	8,329	403	5.1%
42.0%	7,898	7,893	-4	-0.1%
43.2%	7,863	7,821	-42	-0.5%
44.4%	7,846	7,691	-155	-2.0%
45.7%	7,699	7,595	-104	-1.4%
46.9%	7,673	7,469	-204	-2.7%
48.1%	7,664	7,389	-276	-3.6%
49.4%	7,390	7,375	-14	-0.2%
50.6%	7,358	7,339	-19	-0.3%
51.9%	7,306	7,231	-75	-1.0%
53.1%	7,266	7,028	-239	-3.3%
54.3%	7,258	6,995	-263	-3.6%
55.6%	7,154	6,974	-180	-2.5%
56.8%	6,954	6,759	-195	-2.8%
58.0%	6,868	6,717	-151	-2.2%
59.3%	6,836	6,675	-160	-2.3%
60.5%	6,744	6,615	-129	-1.9%
61.7%	6,725	6,600	-125	-1.9%
63.0%	6,530	6,480	-49	-0.8%
64.2%	6,471	6,289	-182	-2.8%
65.4%	6,320	6,177	-143	-2.3%
66.7%	6,276	6,120	-156	-2.5%
67.9%	6,083	6,059	-24	-0.4%
69.1%	5,991	6,038	47	0.8%
70.4%	5,988	5,929	-59	-1.0%
71.6%	5,963	5,899	-64	-1.1%
72.8%	5,889	5,685	-204	-3.5%
74.1%	5,851	5,681	-169	-2.9%
75.3%	5,834	5,661	-173	-3.0%
76.5%	5,826	5,653	-173	-3.0%
77.8%	5,810	5,615	-195	-3.4%
79.0%	5,722	5,505	-217	-3.8%
80.2%	5,653	5,403	-250	-4.4%
81.5%	5,477	5,385	-92	-1.7%
82.7%	5,436	5,349	-87	-1.6%
84.0%	5,431	5,132	-299	-5.5%
85.2%	5,411	4,969	-442	-8.2%
86.4%	5,394	4,914	-480	-8.9%
87.7%	5,312	4,785	-527	-9.9%
88.9%	5,263	4,688	-575	-10.9%
90.1%	5,179	4,687	-492	-9.5%
91.4%	5,132	4,663	-469	-9.1%
92.6%	4,940	4,369	-571	-11.6%
93.8%	4,892	4,353	-539	-11.0%
95.1%	4,859	4,032	-827	-17.0%
96.3%	4,756	4,028	-729	-15.3%
97.5%	4,573	3,889	-684	-15.0%
98.8%	4,398	3,889	-509	-11.6%
100.0%	3,889	3,889	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,869	10,810	-59	-0.5%
1.2%	10,256	10,783	526	5.1%
2.5%	10,161	10,317	156	1.5%
3.7%	10,111	10,270	159	1.6%
4.9%	10,027	10,016	-11	-0.1%
6.2%	10,002	9,945	-56	-0.6%
7.4%	9,983	9,877	-106	-1.1%
8.6%	9,657	9,857	200	2.1%
9.9%	9,591	9,688	97	1.0%
11.1%	9,469	9,527	58	0.6%
12.3%	9,273	9,359	86	0.9%
13.6%	9,178	9,284	105	1.1%
14.8%	9,141	9,273	132	1.4%
16.0%	9,060	9,111	50	0.6%
17.3%	9,028	9,026	-2	0.0%
18.5%	9,022	8,886	-136	-1.5%
19.8%	8,796	8,874	79	0.9%
21.0%	8,692	8,853	160	1.8%
22.2%	8,582	8,804	222	2.6%
23.5%	8,532	8,785	253	3.0%
24.7%	8,519	8,659	140	1.6%
25.9%	8,507	8,587	80	0.9%
27.2%	8,479	8,551	72	0.9%
28.4%	8,443	8,501	58	0.7%
29.6%	8,420	8,443	23	0.3%
30.9%	8,411	8,425	14	0.2%
32.1%	8,402	8,412	10	0.1%
33.3%	8,382	8,407	25	0.3%
34.6%	8,363	8,357	-5	-0.1%
35.8%	8,344	8,325	-18	-0.2%
37.0%	8,187	8,322	135	1.6%
38.3%	8,183	8,297	114	1.4%
39.5%	8,117	8,291	174	2.1%
40.7%	8,038	8,283	245	3.0%
42.0%	8,038	8,258	220	2.7%
43.2%	7,991	8,238	247	3.1%
44.4%	7,823	8,100	276	3.5%
45.7%	7,743	8,025	283	3.6%
46.9%	7,706	7,987	281	3.6%
48.1%	7,696	7,981	285	3.7%
49.4%	7,681	7,960	279	3.6%
50.6%	7,499	7,831	332	4.4%
51.9%	7,433	7,812	379	5.1%
53.1%	7,381	7,667	287	3.9%
54.3%	7,347	7,625	278	3.8%
55.6%	7,332	7,570	239	3.3%
56.8%	7,331	7,464	133	1.8%
58.0%	7,300	7,459	159	2.2%
59.3%	7,296	7,398	103	1.4%
60.5%	6,987	7,260	273	3.9%
61.7%	6,947	7,241	294	4.2%
63.0%	6,745	7,120	375	5.6%
64.2%	6,735	7,066	330	4.9%
65.4%	6,695	6,888	193	2.9%
66.7%	6,659	6,653	-6	-0.1%
67.9%	6,649	6,590	-59	-0.9%
69.1%	6,635	6,502	-133	-2.0%
70.4%	6,631	6,385	-246	-3.7%
71.6%	6,599	6,351	-248	-3.8%
72.8%	6,541	6,328	-213	-3.3%
74.1%	6,479	6,327	-152	-2.3%
75.3%	6,437	6,226	-211	-3.3%
76.5%	6,377	6,216	-161	-2.5%
77.8%	6,331	6,213	-118	-1.9%
79.0%	6,146	6,108	-38	-0.6%
80.2%	6,104	5,956	-149	-2.4%
81.5%	5,984	5,932	-52	-0.9%
82.7%	5,872	5,908	36	0.6%
84.0%	5,808	5,893	85	1.5%
85.2%	5,788	5,892	104	1.8%
86.4%	5,642	5,750	108	1.9%
87.7%	5,311	5,636	325	6.1%
88.9%	5,294	5,636	342	6.5%
90.1%	5,167	5,535	369	7.1%
91.4%	5,055	5,507	452	8.9%
92.6%	5,029	5,456	427	8.5%
93.8%	5,021	5,450	429	8.6%
95.1%	4,994	5,447	453	9.1%
96.3%	4,793	5,282	489	10.2%
97.5%	4,595	5,276	681	14.8%
98.8%	3,889	4,875	986	25.4%
100.0%	3,889	4,562	673	17.3%

Figure SW-44-b
San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

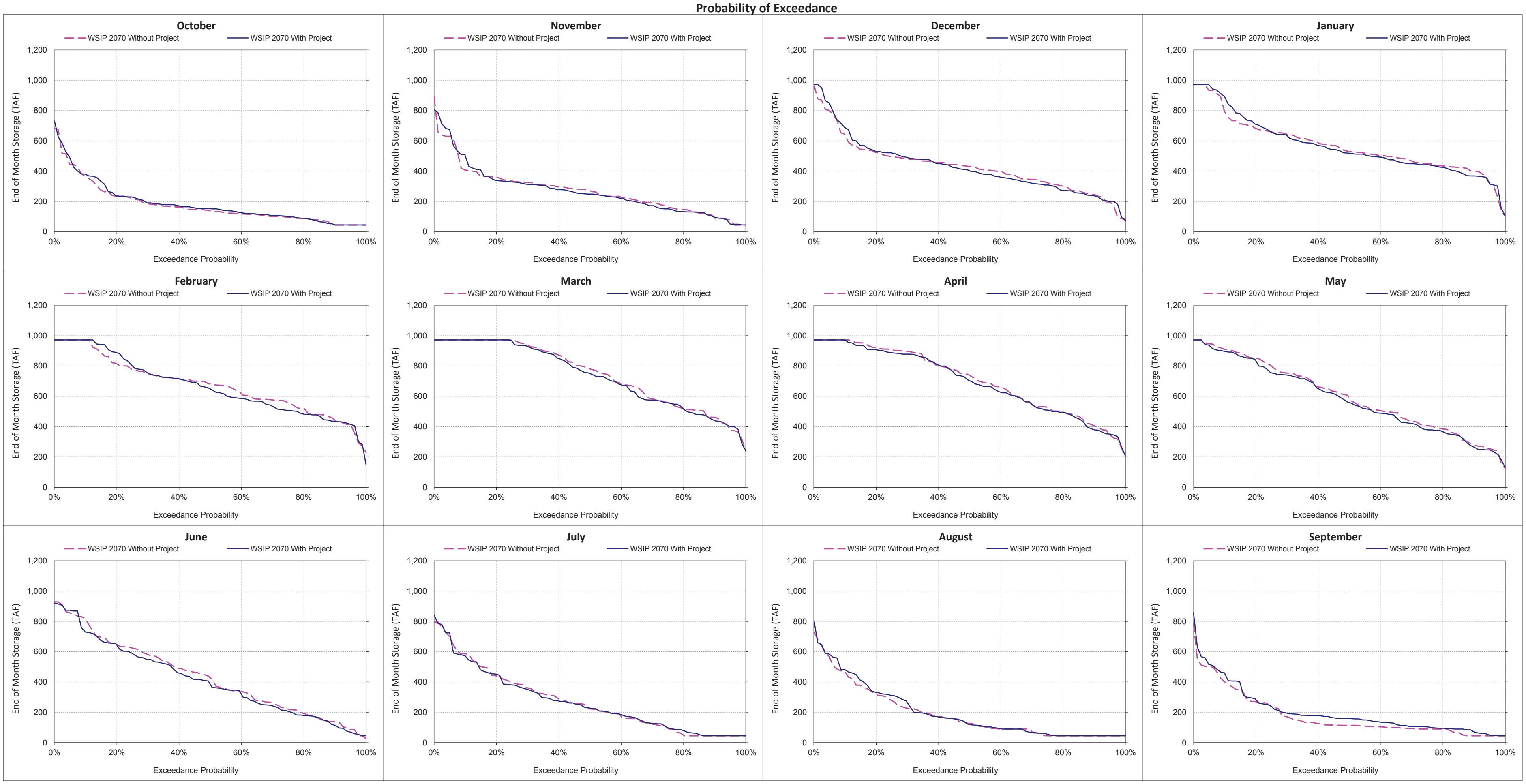


Table SW-44-b
San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	684	732	47	6.9%
1.2%	675	625	-49	-7.3%
2.5%	519	585	67	12.8%
3.7%	513	528	15	2.9%
4.9%	444	491	47	10.7%
6.2%	444	427	-17	-3.8%
7.4%	428	402	-26	-6.1%
8.6%	384	383	-1	-0.2%
9.9%	364	381	17	4.6%
11.1%	351	370	18	5.2%
12.3%	333	368	35	10.5%
13.6%	304	358	53	17.6%
14.8%	277	335	58	21.1%
16.0%	264	314	50	19.0%
17.3%	263	264	1	0.4%
18.5%	240	261	21	8.8%
19.8%	235	238	3	1.2%
21.0%	235	235	0	0.0%
22.2%	233	235	2	1.0%
23.5%	230	231	1	0.5%
24.7%	222	230	8	3.5%
25.9%	214	223	9	4.3%
27.2%	210	215	5	2.2%
28.4%	195	208	14	7.2%
29.6%	186	191	5	2.5%
30.9%	183	191	8	4.1%
32.1%	179	186	7	3.9%
33.3%	178	183	5	3.0%
34.6%	171	181	10	5.9%
35.8%	169	179	10	6.0%
37.0%	166	179	13	7.8%
38.3%	165	179	13	8.1%
39.5%	164	173	9	5.5%
40.7%	163	168	4	2.5%
42.0%	152	166	13	8.8%
43.2%	149	165	16	10.7%
44.4%	149	160	12	8.0%
45.7%	148	156	8	5.2%
46.9%	147	155	8	5.7%
48.1%	144	155	11	7.5%
49.4%	140	153	13	9.1%
50.6%	138	152	14	10.0%
51.9%	134	152	18	13.5%
53.1%	132	148	16	12.0%
54.3%	128	140	11	8.7%
55.6%	123	139	16	13.1%
56.8%	123	138	15	12.6%
58.0%	121	134	13	10.6%
59.3%	121	128	7	5.9%
60.5%	118	124	6	5.1%
61.7%	116	120	4	3.2%
63.0%	115	119	4	3.8%
64.2%	114	119	5	4.1%
65.4%	114	116	3	2.3%
66.7%	109	116	7	6.5%
67.9%	106	115	9	8.8%
69.1%	103	110	6	6.1%
70.4%	102	109	6	6.3%
71.6%	102	107	5	4.8%
72.8%	100	105	4	4.2%
74.1%	98	104	5	5.5%
75.3%	93	99	6	6.5%
76.5%	90	99	9	9.5%
77.8%	90	93	3	2.9%
79.0%	90	90	0	0.0%
80.2%	89	90	1	1.4%
81.5%	85	84	-1	-1.5%
82.7%	81	80	-1	-0.7%
84.0%	79	75	-5	-6.1%
85.2%	78	65	-12	-15.8%
86.4%	72	64	-8	-11.1%
87.7%	71	55	-15	-21.9%
88.9%	45	54	9	19.1%
90.1%	45	45	0	0.5%
91.4%	45	45	0	0.0%
92.6%	45	45	0	0.0%
93.8%	45	45	0	0.0%
95.1%	45	45	0	0.0%
96.3%	45	45	0	0.0%
97.5%	45	45	0	0.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

November				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	889	805	-84	-9.5%
1.2%	657	787	130	19.8%
2.5%	639	713	74	11.6%
3.7%	631	683	52	8.2%
4.9%	631	676	45	7.2%
6.2%	614	568	-46	-7.5%
7.4%	534	534	0	0.0%
8.6%	420	511	91	21.6%
9.9%	408	509	102	25.0%
11.1%	405	433	28	6.9%
12.3%	401	420	20	4.9%
13.6%	397	411	15	3.7%
14.8%	367	410	43	11.8%
16.0%	367	367	0	0.0%
17.3%	367	367	0	0.0%
18.5%	363	350	-13	-3.5%
19.8%	363	338	-24	-6.7%
21.0%	354	337	-18	-5.0%
22.2%	345	335	-10	-2.8%
23.5%	338	333	-5	-1.5%
24.7%	337	330	-7	-2.0%
25.9%	331	327	-4	-1.1%
27.2%	331	324	-6	-1.9%
28.4%	329	319	-11	-3.3%
29.6%	327	315	-12	-3.7%
30.9%	327	313	-14	-4.2%
32.1%	319	313	-6	-2.0%
33.3%	310	309	-1	-0.3%
34.6%	309	307	-2	-0.8%
35.8%	308	304	-4	-1.2%
37.0%	306	288	-18	-5.8%
38.3%	304	288	-17	-5.5%
39.5%	297	279	-18	-6.1%
40.7%	296	278	-18	-6.0%
42.0%	294	276	-18	-6.0%
43.2%	288	271	-18	-6.1%
44.4%	285	265	-20	-6.9%
45.7%	281	256	-25	-8.8%
46.9%	280	252	-28	-10.0%
48.1%	279	250	-29	-10.4%
49.4%	278	248	-29	-10.6%
50.6%	266	248	-17	-6.5%
51.9%	263	248	-15	-5.6%
53.1%	243	243	0	0.0%
54.3%	241	238	-3	-1.3%
55.6%	236	234	-2	-0.6%
56.8%	235	231	-4	-1.7%
58.0%	235	230	-5	-2.1%
59.3%	234	223	-11	-4.9%
60.5%	224	220	-4	-2.0%
61.7%	223	209	-14	-6.2%
63.0%	217	205	-12	-5.7%
64.2%	213	201	-12	-5.4%
65.4%	204	194	-11	-5.3%
66.7%	196	190	-7	-3.3%
67.9%	194	183	-11	-5.9%
69.1%	192	172	-20	-10.4%
70.4%	190	172	-18	-9.4%
71.6%	188	160	-28	-15.1%
72.8%	177	153	-24	-13.4%
74.1%	175	152	-23	-13.2%
75.3%	161	151	-10	-6.0%
76.5%	157	144	-13	-8.4%
77.8%	151	136	-14	-9.6%
79.0%	149	134	-15	-10.1%
80.2%	148	133	-15	-9.9%
81.5%	144	132	-12	-8.7%
82.7%	136	131	-5	-3.8%
84.0%	128	130	2	1.5%
85.2%	124	127	3	2.6%
86.4%	122	127	5	3.8%
87.7%	114	112	-2	-1.9%
88.9%	113	106	-7	-5.9%
90.1%	90	95	5	5.2%
91.4%	90	90	0	0.0%
92.6%	90	90	0	0.0%
93.8%	82	80	-2	-1.9%
95.1%	78	51	-27	-34.5%
96.3%	45	50	5	11.5%
97.5%	45	50	5	11.2%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

December				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	878	972	94	10.7%
2.5%	870	951	81	9.4%
3.7%	807	866	59	7.3%
4.9%	802	851	50	6.2%
6.2%	773	792	19	2.4%
7.4%	738	740	2	0.3%
8.6%	654	717	63	9.7%
9.9%	645	690	45	7.0%
11.1%	591	674	83	14.1%
12.3%	572	605	32	5.6%
13.6%	565	599	34	6.1%
14.8%	545	572	27	4.9%
16.0%	544	571	27	5.0%
17.3%	541	553	11	2.1%
18.5%	537	544	7	1.3%
19.8%	525	532	7	1.4%
21.0%	519	529	10	1.9%
22.2%	508	524	16	3.2%
23.5%	502	522	21	4.1%
24.7%	498	521	23	4.7%
25.9%	494	516	22	4.6%
27.2%	490	505	15	3.0%
28.4%	487	497	11	2.2%
29.6%	485	493	8	1.7%
30.9%	479	485	6	1.3%
32.1%	479	482	3	0.6%
33.3%	479	481	2	0.5%
34.6%	468	478	10	2.2%
35.8%	467	476	9	1.9%
37.0%	464	475	11	2.4%
38.3%	460	461	1	0.2%
39.5%	457	450	-6	-1.4%
40.7%	456	450	-6	-1.4%
42.0%	456	445	-11	-2.4%
43.2%	444	442	-3	-0.6%
44.4%	444	426	-18	-4.0%
45.7%	443	421	-22	-5.0%
46.9%	439	416	-23	-5.2%
48.1%	436	411	-25	-5.6%
49.4%	433	408	-25	-5.7%
50.6%	429	397	-32	-7.5%
51.9%	425	396	-29	-6.8%
53.1%	413	387	-26	-6.3%
54.3%	410	380	-30	-7.2%
55.6%	408	380	-29	-7.0%
56.8%	406	379	-28	-6.8%
58.0%	402	367	-35	-8.6%
59.3%	399	364	-35	-8.8%
60.5%	396	359	-37	-9.4%
61.7%	381	355	-26	-6.9%
63.0%	378	352	-26	-6.9%
64.2%	375	345	-31	-8.1%
65.4%	362	341	-21	-5.9%
66.7%	349	332	-17	-4.9%
67.9%	349	332	-17	-5.0%
69.1%	347	324	-23	-6.6%
70.4%	346	320	-27	-7.7%
71.6%	343	316	-27	-7.9%
72.8%	334	314	-20	-6.0%
74.1%	330	309	-21	-6.4%
75.3%	321	308	-12	-3.8%
76.5%	314	303	-11	-3.5%
77.8%	313	295	-18	-5.8%
79.0%	306	277	-28	-9.3%
80.2%	300	274	-26	-8.7%
81.5%	292	271	-21	-7.3%
82.7%	271	270	-1	-0.3%
84.0%	271	258	-13	-4.8%
85.2%	270	256	-14	-5.1%
86.4%	260	255	-5	-2.0%
87.7%	253	242	-11	-4.2%
88.9%	248	240	-8	-3.2%
90.1%	246	237	-9	-3.5%
91.4%	234	229	-5	-2.0%
92.6%	229	209	-20	-8.6%
93.8%	198	204	7	3.5%
95.1%	197	200	3	1.5%
96.3%	169	199	30	17.8%
97.5%	93	180	87	94.6%
98.8%	89	95	7	7.4%
100.0%	76	78	3	3.5%

January				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	968	972	4	0.4%
4.9%	933	972	39	4.1%
6.2%	932	943	12	1.2%
7.4%	915	935	20	2.2%
8.6%	893	914	21	2.3%
9.9%	797	895	99	12.4%
11.1%	756	841	86	11.4%
12.3%	733	825	91	12.5%
13.6%	733	786	53	7.2%
14.8%	713	782	69	9.7%
16.0%	710	757	47	6.6%
17.3%	704	735	31	4.3%
18.5%	701	731	31	4.4%
19.8%	685	711	26	3.8%
21.0%	675	703	28	4.2%
22.2%	671	690	19	2.9%
23.5%	667	678	11	1.6%
24.7%	660	663	3	0.5%
25.9%	656	648	-8	-1.2%
27.2%	655	644	-11	-1.7%
28.4%	653	642	-11	-1.7%
29.6%	645	642	-3	-0.4%
30.9%	643	617	-26	-4.1%
32.1%	637	608	-29	-4.6%
33.3%	622	603	-19	-3.0%
34.6%	616	593	-23	-3.7%
35.8%	615	588	-28	-4.5%
37.0%	605	587	-19	-3.1%
38.3%	600	586	-14	-2.4%
39.5%	594	573	-21	-3.6%
40.7%	581	568	-12	-2.1%
42.0%	578	565	-14	-2.3%
43.2%	575	549	-25	-4.4%
44.4%	571	543	-27	-4.8%
45.7%	569	542	-27	-4.7%
46.9%	556	535	-21	-3.8%
48.1%	540	521	-19	-3.5%
49.4%	533	519	-14	-2.6%
50.6%	528	518	-10	-1.9%
51.9%	527	514	-13	-2.5%
53.1%	524	513	-11	-2.1%
54.3%	521	512	-9	-1.8%
55.6%	517	505	-13	-2.5%
56.8%	513	500	-13	-2.5%
58.0%	511	497	-14	-2.7%
59.3%	505	494	-10	-2.1%
60.5%	505	492	-13	-2.5%
61.7%	500	483	-17	-3.3%
63.0%	498	475	-22	-4.5%
64.2%	497	475	-22	-4.5%
65.4%	488	463	-25	-5.1%
66.7%	485	457	-27	-5.7%
67.9%	482	453	-29	-6.1%
69.1%	476	450	-26	-5.4%
70.4%	463	449	-14	-2.9%
71.6%	457	448	-9	-2.0%
72.8%	453	442	-11	-2.5%
74.1%	452	442	-10	-2.2%
75.3%	449	442	-7	-1.6%
76.5%	447	437	-10	-2.2%
77.8%	439	434	-5	-1.1%
79.0%	436	428	-9	-1.9%
80.2%	435	426	-9	-2.1%
81.5%	433	418	-16	-3.6%
82.7%	428	407	-21	-5.0%
84.0%	428	403	-25	-5.9%
85.2%	424	394	-29	-7.0%
86.4%	423	385	-39	-9.1%
87.7%	419	370	-49	-11.8%
88.9%	402	369	-33	-8.2%
90.1%	400	369	-31	-7.8%
91.4%	400	368	-32	-8.1%
92.6%	383	364	-19	-4.9%
93.8%	372	360	-12	-3.3%
95.1%	314	316	2	0.5%
96.3%	305	309	5	1.5%
97.5%	232	302	71	30.4%
98.8%	138	158	19	13.7%
100.0%	101	108	7	6.5%

Table SW-44-b
San Luis Reservoir (CVP), End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	972	0	0.0%
8.6%	972	972	0	0.0%
9.9%	972	972	0	0.0%
11.1%	972	972	0	0.0%
12.3%	924	972	48	5.2%
13.6%	912	945	33	3.7%
14.8%	893	943	50	5.7%
16.0%	866	942	76	8.8%
17.3%	863	907	44	5.0%
18.5%	821	894	73	8.9%
19.8%	817	891	73	9.0%
21.0%	802	879	78	9.7%
22.2%	801	847	46	5.8%
23.5%	799	833	34	4.3%
24.7%	779	806	27	3.5%
25.9%	775	783	8	1.0%
27.2%	765	780	14	1.9%
28.4%	765	776	10	1.3%
29.6%	748	758	11	1.4%
30.9%	746	744	-1	-0.2%
32.1%	737	740	2	0.3%
33.3%	733	736	3	0.4%
34.6%	726	728	2	0.2%
35.8%	726	725	-1	-0.1%
37.0%	722	723	2	0.2%
38.3%	719	719	0	0.0%
39.5%	717	719	2	0.3%
40.7%	713	711	-1	-0.2%
42.0%	711	706	-5	-0.7%
43.2%	710	697	-13	-1.8%
44.4%	700	692	-8	-1.1%
45.7%	700	689	-11	-1.6%
46.9%	698	666	-32	-4.6%
48.1%	697	662	-35	-5.0%
49.4%	683	655	-28	-4.1%
50.6%	681	642	-39	-5.8%
51.9%	674	627	-47	-7.0%
53.1%	674	623	-50	-7.5%
54.3%	670	616	-54	-8.1%
55.6%	669	599	-70	-10.5%
56.8%	655	594	-61	-9.4%
58.0%	642	591	-51	-7.9%
59.3%	633	588	-45	-7.2%
60.5%	608	585	-22	-3.7%
61.7%	607	581	-26	-4.2%
63.0%	595	570	-25	-4.2%
64.2%	583	569	-15	-2.5%
65.4%	582	568	-14	-2.4%
66.7%	580	564	-16	-2.8%
67.9%	580	547	-33	-5.7%
69.1%	578	543	-35	-6.0%
70.4%	575	530	-45	-7.8%
71.6%	574	516	-59	-10.2%
72.8%	573	513	-60	-10.4%
74.1%	568	509	-59	-10.4%
75.3%	549	507	-42	-7.7%
76.5%	543	503	-40	-7.4%
77.8%	525	502	-23	-4.4%
79.0%	519	488	-31	-6.0%
80.2%	517	482	-35	-6.9%
81.5%	486	481	-5	-1.1%
82.7%	482	477	-5	-1.1%
84.0%	480	477	-3	-0.6%
85.2%	479	468	-11	-2.3%
86.4%	478	446	-32	-6.7%
87.7%	467	443	-24	-5.2%
88.9%	461	437	-24	-5.2%
90.1%	440	434	-6	-1.3%
91.4%	439	432	-8	-1.8%
92.6%	423	430	7	1.6%
93.8%	415	422	7	1.8%
95.1%	413	415	2	0.6%
96.3%	357	405	49	13.6%
97.5%	292	302	10	3.6%
98.8%	274	281	7	2.4%
100.0%	230	150	-79	-34.5%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	972	0	0.0%
8.6%	972	972	0	0.0%
9.9%	972	972	0	0.0%
11.1%	972	972	0	0.0%
12.3%	972	972	0	0.0%
13.6%	972	972	0	0.0%
14.8%	972	972	0	0.0%
16.0%	972	972	0	0.0%
17.3%	972	972	0	0.0%
18.5%	972	972	0	0.0%
19.8%	972	972	0	0.0%
21.0%	972	972	0	0.0%
22.2%	972	972	0	0.0%
23.5%	972	972	0	0.0%
24.7%	972	971	-1	-0.1%
25.9%	968	940	-27	-2.8%
27.2%	955	936	-20	-2.1%
28.4%	948	935	-13	-1.4%
29.6%	946	933	-13	-1.4%
30.9%	928	921	-7	-0.8%
32.1%	924	911	-13	-1.4%
33.3%	921	909	-12	-1.3%
34.6%	904	893	-11	-1.2%
35.8%	897	886	-10	-1.1%
37.0%	895	881	-14	-1.6%
38.3%	887	877	-10	-1.2%
39.5%	876	853	-22	-2.6%
40.7%	866	843	-23	-2.6%
42.0%	850	832	-18	-2.1%
43.2%	827	813	-14	-1.7%
44.4%	826	792	-34	-4.1%
45.7%	802	785	-16	-2.0%
46.9%	801	772	-29	-3.6%
48.1%	795	759	-37	-4.6%
49.4%	785	755	-30	-3.8%
50.6%	777	744	-33	-4.2%
51.9%	770	733	-37	-4.8%
53.1%	753	731	-21	-2.9%
54.3%	749	731	-18	-2.4%
55.6%	745	714	-31	-4.1%
56.8%	725	701	-24	-3.3%
58.0%	694	698	3	0.5%
59.3%	691	681	-10	-1.4%
60.5%	677	672	-5	-0.7%
61.7%	674	671	-3	-0.4%
63.0%	671	635	-36	-5.4%
64.2%	665	632	-33	-4.9%
65.4%	657	596	-61	-9.3%
66.7%	635	586	-49	-7.7%
67.9%	607	577	-31	-5.1%
69.1%	584	576	-8	-1.4%
70.4%	582	575	-7	-1.2%
71.6%	574	572	-2	-0.4%
72.8%	570	568	-2	-0.3%
74.1%	563	558	-4	-0.8%
75.3%	558	557	-1	-0.2%
76.5%	541	550	8	1.5%
77.8%	532	547	15	2.8%
79.0%	525	536	11	2.1%
80.2%	517	512	-5	-1.0%
81.5%	512	496	-16	-3.2%
82.7%	512	493	-18	-3.6%
84.0%	508	481	-27	-5.2%
85.2%	505	480	-26	-5.1%
86.4%	504	478	-26	-5.1%
87.7%	465	467	2	0.4%
88.9%	462	451	-12	-2.5%
90.1%	462	438	-24	-5.2%
91.4%	449	434	-15	-3.4%
92.6%	422	429	7	1.7%
93.8%	416	410	-6	-1.4%
95.1%	375	398	24	6.4%
96.3%	374	398	25	6.6%
97.5%	364	383	18	5.1%
98.8%	314	285	-29	-9.2%
100.0%	236	242	7	2.8%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	972	972	0	0.0%
4.9%	972	972	0	0.0%
6.2%	972	972	0	0.0%
7.4%	972	972	0	0.0%
8.6%	972	972	0	0.0%
9.9%	972	972	0	0.0%
11.1%	972	955	-17	-1.8%
12.3%	965	952	-13	-1.3%
13.6%	953	936	-18	-1.9%
14.8%	953	936	-17	-1.8%
16.0%	953	933	-20	-2.1%
17.3%	937	908	-29	-3.1%
18.5%	926	907	-19	-2.0%
19.8%	920	907	-13	-1.5%
21.0%	916	904	-12	-1.3%
22.2%	912	900	-12	-1.3%
23.5%	912	891	-20	-2.2%
24.7%	911	889	-23	-2.5%
25.9%	903	884	-18	-2.0%
27.2%	901	883	-18	-2.0%
28.4%	900	879	-21	-2.3%
29.6%	895	878	-17	-1.9%
30.9%	895	878	-17	-1.9%
32.1%	889	876	-12	-1.4%
33.3%	889	868	-21	-2.3%
34.6%	880	860	-20	-2.3%
35.8%	830	857	27	3.2%
37.0%	829	835	6	0.7%
38.3%	825	827	1	0.2%
39.5%	799	810	11	1.4%
40.7%	798	799	1	0.1%
42.0%	792	799	7	0.9%
43.2%	782	786	4	0.5%
44.4%	776	768	-8	-1.0%
45.7%	773	736	-37	-4.8%
46.9%	753	736	-17	-2.3%
48.1%	746	731	-15	-2.0%
49.4%	746	709	-37	-5.0%
50.6%	729	698	-32	-4.4%
51.9%	717	682	-35	-4.9%
53.1%	699	676	-23	-3.3%
54.3%	692	666	-26	-3.8%
55.6%	688	665	-22	-3.2%
56.8%	683	664	-19	-2.8%
58.0%	667	646	-21	-3.1%
59.3%	663	632	-31	-4.7%
60.5%	657	623	-34	-5.1%
61.7%	645	622	-22	-3.4%
63.0%	624	609	-14	-2.3%
64.2%	605	604	-1	-0.1%
65.4%	599	594	-6	-0.9%
66.7%	586	585	-1	-0.2%
67.9%	565	564	-1	-0.2%
69.1%	565	563	-2	-0.3%
70.4%	538	541	2	0.4%
71.6%	533	523	-10	-1.9%
72.8%	532	520	-12	-2.2%
74.1%	532	511	-21	-4.0%
75.3%	527	509	-18	-3.4%
76.5%	504	500	-4	-0.7%
77.8%	503	499	-3	-0.6%
79.0%	501	495	-6	-1.1%
80.2%	494	494	1	0.1%
81.5%	484	485	1	0.1%
82.7%	482	476	-6	-1.3%
84.0%	473	460	-13	-2.7%
85.2%	467	450	-17	-3.7%
86.4%	445	433	-12	-2.6%
87.7%	424	397	-27	-6.5%
88.9%	415	387	-28	-6.8%
90.1%	405	379	-26	-6.5%
91.4%	391	377	-14	-3.6%
92.6%	380	364	-16	-4.2%
93.8%	376	352	-24	-6.4%
95.1%	345	351	6	1.9%
96.3%	325	344	19	5.9%
97.5%	317	333	16	5.0%
98.8%	257	266	9	3.5%
100.0%	199	205	7	3.3%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	972	972	0	0.0%
1.2%	972	972	0	0.0%
2.5%	972	972	0	0.0%
3.7%	951	942	-9	-1.0%
4.9%	947	937	-10	-1.0%
6.2%	945	914	-31	-3.3%
7.4%	924	905	-19	-2.1%
8.6%	921	902	-18	-2.0%
9.9%	911	896	-15	-1.6%
11.1%	909	893	-17	-1.9%
12.3%	903	891	-12	-1.3%
13.6%	890	880	-10	-1.1%
14.8%	886	867	-20	-2.2%
16.0%	880	859	-22	-2.5%
17.3%	861	852	-9	-1.1%
18.5%	854	851	-4	-0.4%
19.8%	853	844	-8	-1.0%
21.0%	847	799	-48	-5.7%
22.2%	832	798	-33	-4.0%
23.5%	815	781	-34	-4.2%
24.7%	806	756	-49	-6.1%
25.9%	783	749	-34	-4.3%
27.2%	765	745	-20	-2.6%
28.4%	758	744	-14	-1.9%
29.6%	754	740	-14	-1.8%
30.9%	753	737	-16	-2.1%
32.1%	751	731	-20	-2.6%
33.3%	734	724	-10	-1.4%
34.6%	733	716	-17	-2.3%
35.8%	731	715	-16	-2.2%
37.0%	712	700	-12	-1.7%
38.3%	698	691	-7	-1.1%
39.5%	664	656	-8	-1.2%
40.7%	661	643	-17	-2.6%
42.0%	653	630	-24	-3.7%
43.2%	652	624	-27	-4.2%
44.4%	635	622	-14	-2.1%
45.7%	631	611	-20	-3.1%
46.9%	617	594	-22	-3.6%
48.1%	614	580	-34	-5.6%
49.4%	607	563	-44	-7.2%
50.6%	569	555	-14	-2.5%
51.9%	557	540	-17	-3.0%
53.1%	541	534	-7	-1.2%
54.3%	536	520	-16	-3.0%
55.6%	532	518	-14	-2.7%
56.8%	512	511	0	0.0%
58.0%	511	492	-18	-3.6%
59.3%	509	489	-20	-3.9%
60.5%	503	488	-15	-2.9%
61.7%	499	485	-15	-2.9%
63.0%	496	481	-15	-3.1%
64.2%	494	478	-16	-3.3%
65.4%	492	452	-40	-8.2%
66.7%	459	428	-32	-6.9%
67.9%	452	427	-25	-5.5%
69.1%	439	423	-16	-3.6%
70.4%	437	420	-16	-3.8%
71.6%	430	413	-17	-4.0%
72.8%	413	393	-20	-4.8%
74.1%	409	382	-28	-6.8%
75.3%	405	378	-27	-6.6%
76.5%	403	378	-25	-6.3%
77.8%	392	375	-17	-4.3%
79.0%	390	375	-15	-3.9%
80.2%	384	365	-19	-4.9%
81.5%	381	353	-28	-7.3%
82.7%	362	350	-13	-3.5%
84.0%	355	345	-10	-2.8%
85.2%	344	340	-3	-1.0%
86.4%	310	321	11	3.4%
87.7%	303	295	-9	-2.8%
88.9%	289	275	-14	-4.8%
90.1%	278	264	-14	-4.9%
91.4%	272	250	-21	-7.9%
92.6%	270	250	-20	-7.3%
93.8%	260	246	-13	-5.1%
95.1%	254	246	-8	-3.3%
96.3%	246	234	-12	-4.7%
97.5%	243	217	-25	-10.4%
98.8%	156	181	25	16.1%
100.0%	125	132	6	5.1%

Table SW-44-b

San Luis Reservoir (CVP), End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	929	921	-8	-0.8%
1.2%	928	915	-14	-1.5%
2.5%	910	907	-4	-0.4%
3.7%	864	875	11	1.2%
4.9%	857	875	18	2.1%
6.2%	849	869	20	2.4%
7.4%	836	869	33	4.0%
8.6%	832	760	-72	-8.6%
9.9%	819	731	-88	-10.8%
11.1%	774	727	-47	-6.1%
12.3%	737	719	-18	-2.4%
13.6%	699	702	3	0.4%
14.8%	697	675	-22	-3.2%
16.0%	696	662	-34	-4.9%
17.3%	665	659	-7	-1.0%
18.5%	654	657	3	0.5%
19.8%	651	654	2	0.3%
21.0%	634	615	-20	-3.1%
22.2%	633	603	-29	-4.6%
23.5%	632	603	-28	-4.5%
24.7%	625	591	-35	-5.5%
25.9%	620	576	-43	-7.0%
27.2%	613	562	-51	-8.3%
28.4%	595	560	-35	-5.8%
29.6%	584	549	-35	-6.0%
30.9%	574	548	-26	-4.5%
32.1%	572	532	-40	-7.0%
33.3%	560	532	-28	-5.1%
34.6%	541	525	-16	-3.0%
35.8%	539	519	-20	-3.7%
37.0%	521	511	-10	-1.9%
38.3%	503	484	-19	-3.8%
39.5%	489	462	-27	-5.5%
40.7%	489	456	-32	-6.6%
42.0%	477	441	-36	-7.6%
43.2%	477	437	-39	-8.3%
44.4%	466	419	-47	-10.0%
45.7%	464	417	-47	-10.1%
46.9%	453	415	-38	-8.4%
48.1%	449	410	-39	-8.7%
49.4%	439	407	-32	-7.4%
50.6%	416	363	-53	-12.7%
51.9%	373	362	-11	-3.0%
53.1%	364	359	-5	-1.5%
54.3%	361	353	-8	-2.2%
55.6%	349	348	-1	-0.3%
56.8%	344	347	3	1.0%
58.0%	340	347	7	2.1%
59.3%	335	345	9	2.8%
60.5%	335	301	-34	-10.3%
61.7%	328	297	-31	-9.4%
63.0%	317	278	-38	-12.0%
64.2%	283	273	-9	-3.3%
65.4%	275	260	-16	-5.7%
66.7%	274	250	-24	-8.9%
67.9%	268	249	-18	-6.8%
69.1%	267	247	-20	-7.4%
70.4%	256	240	-16	-6.1%
71.6%	248	232	-16	-6.6%
72.8%	231	214	-17	-7.5%
74.1%	230	213	-17	-7.5%
75.3%	218	204	-14	-6.2%
76.5%	217	196	-21	-9.6%
77.8%	215	182	-33	-15.3%
79.0%	199	182	-17	-8.6%
80.2%	191	179	-12	-6.4%
81.5%	180	177	-3	-1.6%
82.7%	175	176	0	0.1%
84.0%	169	168	0	-0.2%
85.2%	156	164	7	4.7%
86.4%	140	146	6	3.9%
87.7%	140	143	3	2.2%
88.9%	139	121	-18	-13.3%
90.1%	137	114	-23	-17.0%
91.4%	135	96	-38	-28.5%
92.6%	103	94	-9	-8.7%
93.8%	99	76	-23	-22.9%
95.1%	86	70	-16	-18.8%
96.3%	86	59	-27	-31.0%
97.5%	45	53	8	18.6%
98.8%	45	45	0	0.0%
100.0%	25	45	20	77.1%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	796	841	45	5.7%
1.2%	795	787	-9	-1.1%
2.5%	761	780	19	2.5%
3.7%	727	724	-2	-0.3%
4.9%	699	724	25	3.6%
6.2%	644	591	-54	-8.4%
7.4%	602	585	-18	-2.9%
8.6%	587	579	-7	-1.3%
9.9%	586	574	-12	-2.1%
11.1%	584	546	-39	-6.6%
12.3%	542	534	-8	-1.5%
13.6%	532	531	-1	-0.2%
14.8%	502	480	-22	-4.4%
16.0%	498	469	-29	-5.8%
17.3%	492	461	-31	-6.3%
18.5%	444	454	10	2.3%
19.8%	442	453	11	2.5%
21.0%	433	445	12	2.7%
22.2%	418	386	-32	-7.6%
23.5%	411	385	-26	-6.3%
24.7%	400	380	-20	-5.0%
25.9%	390	380	-10	-2.7%
27.2%	385	369	-16	-4.2%
28.4%	384	360	-24	-6.2%
29.6%	362	354	-8	-2.2%
30.9%	359	344	-15	-4.2%
32.1%	340	335	-5	-1.6%
33.3%	326	326	0	0.0%
34.6%	325	297	-29	-8.8%
35.8%	316	295	-21	-6.7%
37.0%	312	292	-20	-6.4%
38.3%	312	278	-34	-10.9%
39.5%	295	276	-18	-6.2%
40.7%	281	271	-10	-3.5%
42.0%	277	271	-6	-2.3%
43.2%	263	263	0	-0.1%
44.4%	261	263	1	0.4%
45.7%	260	253	-7	-2.6%
46.9%	258	251	-7	-2.9%
48.1%	252	234	-18	-7.0%
49.4%	224	230	6	2.5%
50.6%	221	225	4	1.7%
51.9%	220	223	3	1.1%
53.1%	214	208	-6	-2.8%
54.3%	206	208	2	1.0%
55.6%	199	205	6	2.9%
56.8%	197	193	-4	-2.1%
58.0%	195	191	-3	-1.7%
59.3%	193	189	-4	-1.9%
60.5%	160	180	20	12.6%
61.7%	159	172	13	8.0%
63.0%	159	170	11	6.9%
64.2%	158	167	8	5.4%
65.4%	151	155	4	2.6%
66.7%	136	144	8	5.6%
67.9%	131	132	1	0.8%
69.1%	125	129	4	3.3%
70.4%	121	128	6	5.2%
71.6%	116	124	8	6.8%
72.8%	113	124	11	9.7%
74.1%	108	111	2	2.3%
75.3%	90	94	4	4.8%
76.5%	90	90	0	0.0%
77.8%	70	87	17	24.9%
79.0%	64	86	22	33.7%
80.2%	45	78	33	74.0%
81.5%	45	68	23	50.3%
82.7%	45	65	20	43.7%
84.0%	45	62	17	38.3%
85.2%	45	52	7	16.1%
86.4%	45	45	0	0.8%
87.7%	45	45	0	0.0%
88.9%	45	45	0	0.0%
90.1%	45	45	0	0.0%
91.4%	45	45	0	0.0%
92.6%	45	45	0	0.0%
93.8%	45	45	0	0.0%
95.1%	45	45	0	0.0%
96.3%	45	45	0	0.0%
97.5%	45	45	0	0.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	733	811	78	10.7%
1.2%	683	659	-24	-3.5%
2.5%	640	647	7	1.1%
3.7%	594	590	-4	-0.7%
4.9%	567	584	17	3.0%
6.2%	508	564	56	11.1%
7.4%	485	560	74	15.4%
8.6%	474	484	10	2.1%
9.9%	471	482	10	2.2%
11.1%	433	467	34	7.9%
12.3%	422	459	37	8.8%
13.6%	379	449	69	18.3%
14.8%	379	414	35	9.2%
16.0%	367	398	31	8.5%
17.3%	353	375	22	6.2%
18.5%	338	341	3	0.9%
19.8%	320	332	12	3.8%
21.0%	310	328	19	6.0%
22.2%	308	321	13	4.4%
23.5%	298	320	22	7.3%
24.7%	280	312	32	11.4%
25.9%	267	309	42	15.9%
27.2%	240	298	58	24.4%
28.4%	237	284	48	20.2%
29.6%	228	275	47	20.5%
30.9%	224	237	13	5.6%
32.1%	223	200	-23	-10.2%
33.3%	215	198	-18	-8.3%
34.6%	200	196	-4	-2.1%
35.8%	197	193	-5	-2.3%
37.0%	192	182	-10	-5.1%
38.3%	178	171	-6	-3.6%
39.5%	173	171	-2	-1.1%
40.7%	173	166	-6	-3.7%
42.0%	163	164	1	0.7%
43.2%	162	162	0	0.2%
44.4%	161	158	-2	-1.5%
45.7%	160	155	-4	-2.7%
46.9%	135	150	15	11.2%
48.1%	134	141	7	5.1%
49.4%	128	122	-5	-4.1%
50.6%	127	117	-9	-7.4%
51.9%	115	116	2	1.3%
53.1%	108	115	6	5.9%
54.3%	106	108	1	1.3%
55.6%	100	103	3	3.3%
56.8%	96	103	7	7.4%
58.0%	93	99	7	7.1%
59.3%	91	95	4	4.3%
60.5%	90	90	0	0.0%
61.7%	90	90	0	0.0%
63.0%	90	90	0	0.0%
64.2%	90	90	0	0.0%
65.4%	90	90	0	0.0%
66.7%	90	90	0	0.0%
67.9%	90	75	-15	-16.1%
69.1%	90	70	-20	-22.2%
70.4%	65	68	3	5.0%
71.6%	64	63	0	-0.8%
72.8%	58	62	4	7.7%
74.1%	46	61	15	33.2%
75.3%	45	54	9	19.5%
76.5%	45	48	3	5.8%
77.8%	45	45	0	0.0%
79.0%	45	45	0	0.0%
80.2%	45	45	0	0.0%
81.5%	45	45	0	0.0%
82.7%	45	45	0	0.0%
84.0%	45	45	0	0.0%
85.2%	45	45	0	0.0%
86.4%	45	45	0	0.0%
87.7%	45	45	0	0.0%
88.9%	45	45	0	0.0%
90.1%	45	45	0	0.0%
91.4%	45	45	0	0.0%
92.6%	45	45	0	0.0%
93.8%	45	45	0	0.0%
95.1%	45	45	0	0.0%
96.3%	45	45	0	0.0%
97.5%	45	45	0	0.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	791	858	66	8.4%
1.2%	553	630	77	13.9%
2.5%	512	568	56	10.9%
3.7%	503	559	55	11.0%
4.9%	502	515	13	2.6%
6.2%	499	509	10	2.0%
7.4%	469	487	19	4.0%
8.6%	428	467	38	9.0%
9.9%	403	461	58	14.5%
11.1%	384	408	25	6.4%
12.3%	369	407	38	10.4%
13.6%	352	406	54	15.5%
14.8%	349	403	54	15.5%
16.0%	329	311	-17	-5.3%
17.3%	279	299	20	7.0%
18.5%	273	296	23	8.5%
19.8%	271	290	19	7.0%
21.0%	267	260	-6	-2.4%
22.2%	264	256	-8	-2.9%
23.5%	261	253	-8	-3.2%
24.7%	242	244	2	0.8%
25.9%	231	220	-11	-4.8%
27.2%	226	213	-13	-5.8%
28.4%	176	201	25	14.0%
29.6%	172	196	23	13.5%
30.9%	165	190	25	15.2%
32.1%	152	190	37	24.4%
33.3%	150	188	38	25.4%
34.6%	143	181	38	26.9%
35.8%	134	181	47	35.1%
37.0%	133	179	47	35.1%
38.3%	132	179	47	35.5%
39.5%	128	178	50	39.3%
40.7%	124	177	53	42.8%
42.0%	117	174	57	48.3%
43.2%	117	171	55	46.9%
44.4%	116	165	49	41.8%
45.7%	115	161	46	40.4%
46.9%	115	161	46	40.0%
48.1%	114	159	45	39.0%
49.4%	114	159	45	39.1%
50.6%	114	159	44	38.9%
51.9%	114	157	43	37.7%
53.1%	113	156	43	37.7%
54.3%	112	150	38	34.1%
55.6%	107	149	42	39.2%
56.8%	107	145	38	35.5%
58.0%	106	139	33	31.1%
59.3%	105	138	33	31.9%
60.5%	104	135	31	29.6%
61.7%	101	134	33	32.5%
63.0%	100	131	31	31.1%
64.2%	100	129	29	29.0%
65.4%	98	116	18	18.2%
66.7%	96	114	18	19.0%
67.9%	95	113	18	18.5%
69.1%	93	107	14	15.0%
70.4%	92	107	15	16.0%
71.6%	90	106	16	17.5%
72.8%	90	105	15	16.9%
74.1%	90	105	15	16.5%
75.3%	90	104	14	15.3%
76.5%	90	99	9	9.5%
77.8%	90	96	6	6.8%
79.0%	90	95	5	5.7%
80.2%	90	95	5	5.3%
81.5%	88	93	4	4.8%
82.7%	76	92	16	21.4%
84.0%	66	90	24	36.3%
85.2%	65	90	25	38.8%
86.4%	51	90	39	75.3%
87.7%	45	84	39	86.5%
88.9%	45	84	39	86.1%
90.1%	45	69	24	53.5%
91.4%	45	64	19	41.6%
92.6%	45	61	16	35.9%
93.8%	45	59	14	31.6%
95.1%	45	49	4	9.2%
96.3%	45	48	3	6.9%
97.5%	45	45	0	0.0%
98.8%	45	45	0	0.0%
100.0%	45	45	0	0.0%

Figure SW-45-b
San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

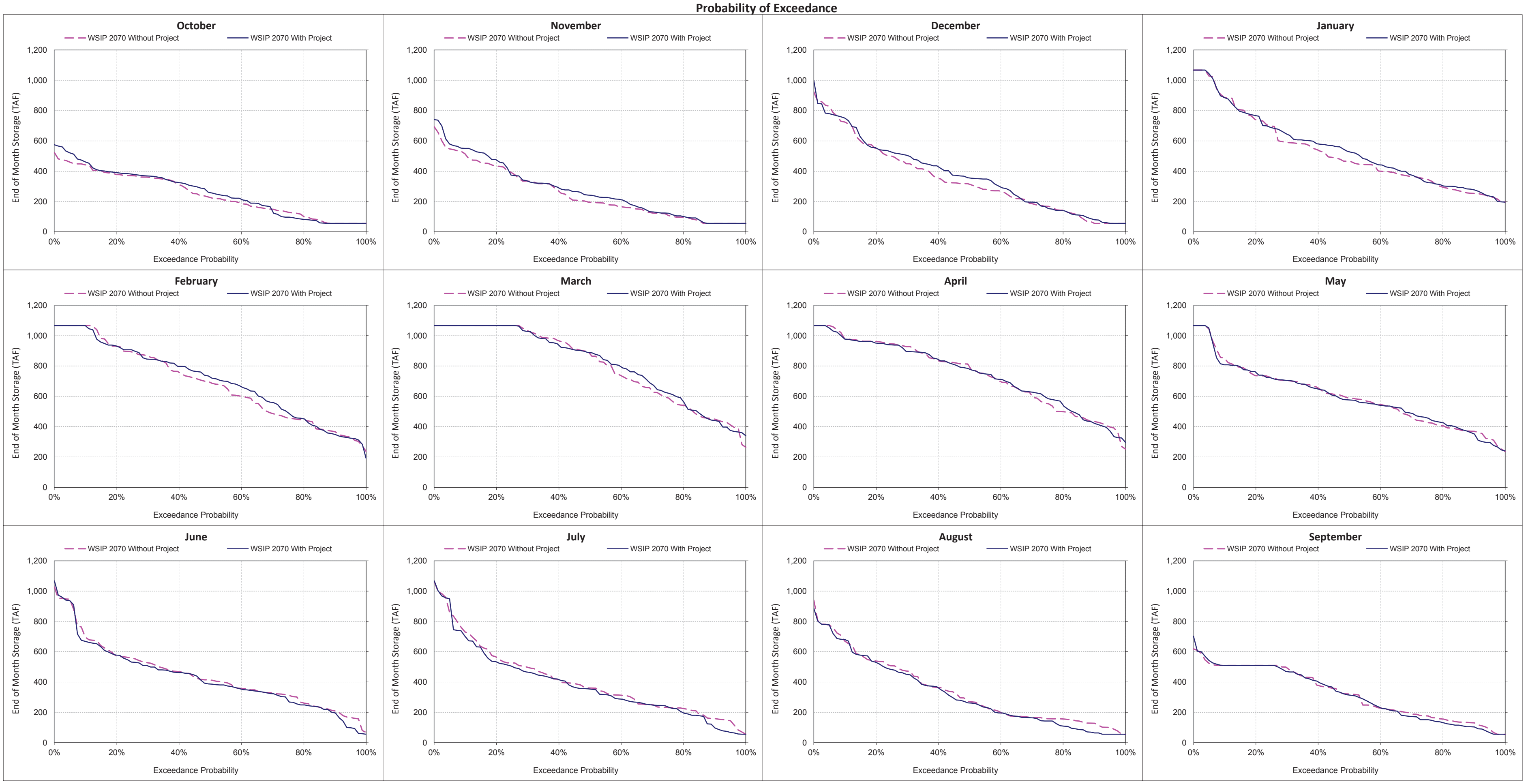


Table SW-45-b

San Luis Reservoir (SWP), End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	523	575	51	9.8%
1.2%	482	566	84	17.4%
2.5%	475	561	86	18.0%
3.7%	471	533	62	13.2%
4.9%	460	522	62	13.4%
6.2%	451	512	62	13.7%
7.4%	449	481	32	7.1%
8.6%	448	474	26	5.8%
9.9%	442	462	20	4.5%
11.1%	441	454	13	2.9%
12.3%	406	422	16	4.1%
13.6%	405	410	5	1.3%
14.8%	404	404	0	0.0%
16.0%	392	402	10	2.5%
17.3%	389	397	7	1.9%
18.5%	389	395	6	1.4%
19.8%	378	392	14	3.6%
21.0%	378	388	10	2.6%
22.2%	372	384	12	3.3%
23.5%	372	384	12	3.3%
24.7%	370	381	11	3.0%
25.9%	370	378	8	2.3%
27.2%	362	374	12	3.3%
28.4%	361	372	10	2.8%
29.6%	361	370	9	2.4%
30.9%	359	367	8	2.3%
32.1%	355	366	11	3.0%
33.3%	352	361	9	2.5%
34.6%	349	357	8	2.3%
35.8%	347	346	-1	-0.4%
37.0%	342	339	-3	-1.0%
38.3%	334	330	-4	-1.2%
39.5%	313	327	13	4.3%
40.7%	306	322	16	5.2%
42.0%	290	318	28	9.6%
43.2%	272	308	35	13.0%
44.4%	253	303	50	20.0%
45.7%	251	298	46	18.5%
46.9%	237	288	51	21.4%
48.1%	237	286	49	20.6%
49.4%	230	261	31	13.4%
50.6%	223	255	33	14.7%
51.9%	220	250	30	13.8%
53.1%	219	243	25	11.3%
54.3%	211	238	28	13.1%
55.6%	209	237	28	13.2%
56.8%	200	224	24	11.7%
58.0%	200	222	22	11.1%
59.3%	193	222	29	15.2%
60.5%	184	210	26	14.1%
61.7%	182	207	24	13.2%
63.0%	169	190	21	12.4%
64.2%	168	189	21	12.6%
65.4%	161	188	27	16.7%
66.7%	157	174	16	10.4%
67.9%	152	171	18	11.9%
69.1%	150	167	17	11.2%
70.4%	148	122	-26	-17.5%
71.6%	140	115	-25	-17.8%
72.8%	140	100	-39	-28.3%
74.1%	134	97	-37	-27.3%
75.3%	128	97	-30	-23.8%
76.5%	125	94	-32	-25.3%
77.8%	122	88	-35	-28.3%
79.0%	117	85	-32	-27.2%
80.2%	97	82	-15	-15.9%
81.5%	95	79	-16	-16.4%
82.7%	85	77	-8	-9.5%
84.0%	82	74	-8	-10.3%
85.2%	78	59	-19	-24.1%
86.4%	64	58	-6	-9.7%
87.7%	57	55	-2	-3.1%
88.9%	55	55	0	0.0%
90.1%	55	55	0	0.0%
91.4%	55	55	0	0.0%
92.6%	55	55	0	0.0%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	694	740	46	6.6%
1.2%	657	736	80	12.1%
2.5%	601	699	98	16.3%
3.7%	557	614	57	10.2%
4.9%	547	580	32	5.9%
6.2%	543	569	26	4.7%
7.4%	535	564	29	5.4%
8.6%	532	553	21	4.0%
9.9%	515	551	36	7.0%
11.1%	483	550	67	13.9%
12.3%	473	540	67	14.1%
13.6%	473	528	56	11.8%
14.8%	459	523	64	13.9%
16.0%	454	520	66	14.6%
17.3%	452	500	48	10.7%
18.5%	441	477	36	8.2%
19.8%	434	477	43	10.0%
21.0%	432	459	27	6.2%
22.2%	428	455	28	6.5%
23.5%	404	421	17	4.3%
24.7%	392	374	-18	-4.6%
25.9%	377	370	-6	-1.6%
27.2%	352	368	16	4.6%
28.4%	335	341	5	1.6%
29.6%	335	338	2	0.7%
30.9%	334	329	-5	-1.5%
32.1%	328	323	-4	-1.2%
33.3%	318	322	3	1.1%
34.6%	318	321	3	0.9%
35.8%	317	320	3	0.8%
37.0%	317	315	-1	-0.5%
38.3%	295	304	9	2.9%
39.5%	277	296	18	6.6%
40.7%	255	281	26	10.4%
42.0%	248	277	29	11.5%
43.2%	227	276	49	21.6%
44.4%	209	266	57	27.3%
45.7%	208	266	58	27.8%
46.9%	205	260	56	27.1%
48.1%	204	245	41	20.2%
49.4%	197	243	46	23.5%
50.6%	194	241	47	24.2%
51.9%	193	236	43	22.3%
53.1%	191	228	37	19.1%
54.3%	190	227	37	19.7%
55.6%	179	227	48	26.9%
56.8%	177	221	44	24.9%
58.0%	176	216	40	22.6%
59.3%	165	215	50	30.4%
60.5%	164	210	46	27.9%
61.7%	161	198	38	23.5%
63.0%	159	180	22	13.7%
64.2%	153	174	22	14.1%
65.4%	150	164	13	8.9%
66.7%	148	159	11	7.1%
67.9%	131	147	16	12.1%
69.1%	128	132	4	3.2%
70.4%	123	131	8	6.2%
71.6%	122	127	5	4.4%
72.8%	121	125	4	2.9%
74.1%	120	124	4	3.0%
75.3%	107	123	15	14.4%
76.5%	101	113	12	11.5%
77.8%	97	106	9	9.2%
79.0%	96	105	9	9.0%
80.2%	96	101	5	4.8%
81.5%	92	94	2	2.0%
82.7%	84	91	7	8.2%
84.0%	79	91	12	14.5%
85.2%	71	76	5	6.5%
86.4%	55	61	6	10.7%
87.7%	55	55	0	0.0%
88.9%	55	55	0	0.0%
90.1%	55	55	0	0.0%
91.4%	55	55	0	0.0%
92.6%	55	55	0	0.0%
93.8%	55	55	0	0.0%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	924	998	74	8.1%
1.2%	861	847	-14	-1.6%
2.5%	860	844	-15	-1.8%
3.7%	836	784	-52	-6.2%
4.9%	829	779	-50	-6.0%
6.2%	787	773	-14	-1.7%
7.4%	765	766	1	0.1%
8.6%	730	759	29	3.9%
9.9%	725	750	25	3.5%
11.1%	712	734	22	3.1%
12.3%	694	694	1	0.1%
13.6%	629	690	61	9.6%
14.8%	603	629	27	4.5%
16.0%	580	597	18	3.1%
17.3%	578	570	-8	-1.4%
18.5%	574	557	-18	-3.1%
19.8%	550	556	6	1.2%
21.0%	543	542	-1	-0.2%
22.2%	517	539	22	4.3%
23.5%	504	538	34	6.7%
24.7%	502	528	26	5.2%
25.9%	492	519	27	5.4%
27.2%	474	516	42	8.9%
28.4%	470	511	41	8.7%
29.6%	450	507	57	12.6%
30.9%	449	498	49	10.8%
32.1%	433	479	46	10.7%
33.3%	417	473	56	13.5%
34.6%	416	455	38	9.2%
35.8%	411	449	38	9.3%
37.0%	397	445	48	12.1%
38.3%	371	436	66	17.8%
39.5%	355	436	81	22.9%
40.7%	349	419	70	19.9%
42.0%	328	404	76	23.1%
43.2%	324	404	79	24.5%
44.4%	324	375	51	15.9%
45.7%	323	373	50	15.6%
46.9%	319	369	51	15.9%
48.1%	318	367	48	15.2%
49.4%	318	357	39	12.3%
50.6%	309	353	44	14.4%
51.9%	299	353	54	18.0%
53.1%	291	351	60	20.6%
54.3%	281	349	68	24.2%
55.6%	280	349	69	24.6%
56.8%	271	339	68	24.9%
58.0%	271	317	46	16.8%
59.3%	271	302	31	11.6%
60.5%	267	290	22	8.4%
61.7%	252	285	33	13.3%
63.0%	235	274	39	16.7%
64.2%	220	247	27	12.1%
65.4%	219	233	14	6.4%
66.7%	217	215	-2	-0.9%
67.9%	212	198	-15	-6.8%
69.1%	189	196	7	3.9%
70.4%	184	196	12	6.5%
71.6%	177	194	17	9.5%
72.8%	175	170	-5	-2.8%
74.1%	169	167	-2	-1.0%
75.3%	168	153	-15	-9.2%
76.5%	163	151	-12	-7.4%
77.8%	146	141	-5	-3.2%
79.0%	142	140	-3	-2.0%
80.2%	142	139	-4	-2.5%
81.5%	128	129	1	0.7%
82.7%	123	117	-5	-4.4%
84.0%	116	112	-4	-3.4%
85.2%	103	110	7	7.1%
86.4%	85	107	21	24.9%
87.7%	69	96	27	39.3%
88.9%	67	86	19	27.9%
90.1%	55	79	24	43.9%
91.4%	55	78	23	42.2%
92.6%	55	63	8	14.9%
93.8%	55	61	6	10.5%
95.1%	55	55	0	0.0%
96.3%	55	55	0	0.0%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,028	1,046	18	1.7%
6.2%	1,024	1,013	-11	-1.1%
7.4%	942	949	6	0.7%
8.6%	908	898	-10	-1.1%
9.9%	887	885	-2	-0.2%
11.1%	883	875	-8	-0.9%
12.3%	882	847	-35	-4.0%
13.6%	809	819	10	1.2%
14.8%	806	796	-10	-1.3%
16.0%	803	788	-15	-1.8%
17.3%	774	780	6	0.8%
18.5%	765	774	9	1.2%
19.8%	742	768	26	3.5%
21.0%	733	763	30	4.1%
22.2%	732	701	-30	-4.2%
23.5%	707	700	-7	-1.0%
24.7%	698	689	-9	-1.2%
25.9%	696	683	-14	-2.0%
27.2%	601	676	76	12.6%
28.4%	596	663	67	11.3%
29.6%	590	648	58	9.8%
30.9%	588	636	47	8.1%
32.1%	587	610	23	4.0%
33.3%	584	608	24	4.1%
34.6%	581	608	26	4.5%
35.8%	580	603	22	3.9%
37.0%	571	602	31	5.3%
38.3%	551	598	47	8.5%
39.5%	543	582	38	7.1%
40.7%	532	577	45	8.6%
42.0%	526	576	50	9.5%
43.2%	495	572	77	15.6%
44.4%	492	569	77	15.7%
45.7%	486	563	77	15.8%
46.9%	481	560	79	16.5%
48.1%	466	546	80	17.1%
49.4%	466	532	65	14.0%
50.6%	463	525	62	13.4%
51.9%	451	519	68	15.0%
53.1%	446	505	59	13.2%
54.3%	444	483	39	8.7%
55.6%	444	478	34	7.7%
56.8%	444	464	20	4.6%
58.0%	440	454	14	3.2%
59.3%	401	443	42	10.5%
60.5%	400	442	42	10.4%
61.7%	399	429	30	7.5%
63.0%	395	424	29	7.3%
64.2%	392	420	28	7.1%
65.4%	383	408	25	6.6%
66.7%	376	400	24	6.4%
67.9%	373	399	27	7.2%
69.1%	367	378	12	3.1%
70.4%	367	373	6	1.7%
71.6%	362	360	-2	-0.5%
72.8%	356	350	-6	-1.7%
74.1%	350	331	-19	-5.5%
75.3%	345	324	-20	-5.9%
76.5%	333	323	-10	-3.1%
77.8%	312	317	5	1.6%
79.0%	301	312	11	3.7%
80.2%	293	302	9	3.0%
81.5%	288	301	13	4.5%
82.7%	280	301	21	7.4%
84.0%	277	299	21	7.7%
85.2%	270	292	22	8.2%
86.4%	266	292	26	9.9%
87.7%	257	283	26	10.0%
88.9%	255	282	27	10.7%
90.1%	253	276	23	9.1%
91.4%	252	269	17	6.6%
92.6%	247	257	10	4.0%
93.8%	242	242	0	0.1%
95.1%	228	235	7	2.9%
96.3%	227	231	4	1.8%
97.5%	216	200	-17	-7.7%
98.8%	197	197	0	-0.2%
100.0%	197	197	-1	-0.3%

Table SW-45-b
San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,067	1,047	-20	-1.9%
12.3%	1,061	1,040	-22	-2.0%
13.6%	1,040	978	-63	-6.0%
14.8%	981	958	-23	-2.3%
16.0%	979	948	-31	-3.2%
17.3%	948	939	-9	-0.9%
18.5%	932	937	5	0.6%
19.8%	931	933	2	0.2%
21.0%	928	922	-6	-0.6%
22.2%	898	908	9	1.0%
23.5%	896	907	11	1.2%
24.7%	894	907	13	1.5%
25.9%	886	898	12	1.4%
27.2%	875	888	13	1.5%
28.4%	873	854	-20	-2.3%
29.6%	870	846	-24	-2.8%
30.9%	857	844	-13	-1.6%
32.1%	854	844	-10	-1.2%
33.3%	837	838	2	0.2%
34.6%	833	830	-4	-0.5%
35.8%	820	829	9	1.2%
37.0%	775	820	45	5.9%
38.3%	765	819	54	7.1%
39.5%	765	798	33	4.3%
40.7%	749	797	49	6.5%
42.0%	735	796	61	8.3%
43.2%	730	777	48	6.5%
44.4%	723	767	44	6.1%
45.7%	716	763	48	6.7%
46.9%	707	759	52	7.4%
48.1%	700	740	40	5.7%
49.4%	698	734	35	5.1%
50.6%	685	719	34	5.0%
51.9%	680	716	36	5.3%
53.1%	678	706	28	4.1%
54.3%	670	701	31	4.6%
55.6%	649	698	49	7.5%
56.8%	609	684	75	12.3%
58.0%	607	682	75	12.3%
59.3%	603	670	68	11.2%
60.5%	599	658	58	9.7%
61.7%	592	648	56	9.5%
63.0%	587	635	48	8.1%
64.2%	553	633	80	14.4%
65.4%	552	601	49	8.9%
66.7%	522	595	73	14.0%
67.9%	504	570	66	13.1%
69.1%	492	562	70	14.2%
70.4%	484	558	73	15.1%
71.6%	478	546	68	14.2%
72.8%	472	515	43	9.2%
74.1%	462	505	43	9.3%
75.3%	454	486	32	7.1%
76.5%	453	466	13	3.0%
77.8%	448	457	9	2.1%
79.0%	446	455	9	1.9%
80.2%	443	449	7	1.5%
81.5%	437	424	-13	-3.0%
82.7%	433	410	-23	-5.3%
84.0%	385	402	17	4.4%
85.2%	383	383	0	-0.1%
86.4%	381	375	-6	-1.5%
87.7%	374	358	-16	-4.2%
88.9%	371	355	-17	-4.5%
90.1%	366	347	-18	-5.0%
91.4%	345	337	-9	-2.6%
92.6%	341	333	-8	-2.3%
93.8%	334	329	-5	-1.5%
95.1%	334	323	-11	-3.3%
96.3%	309	321	12	3.8%
97.5%	302	312	10	3.3%
98.8%	272	282	10	3.5%
100.0%	237	191	-46	-19.2%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,067	1,067	0	0.0%
12.3%	1,067	1,067	0	0.0%
13.6%	1,067	1,067	0	0.0%
14.8%	1,067	1,067	0	0.0%
16.0%	1,067	1,067	0	0.0%
17.3%	1,067	1,067	0	0.0%
18.5%	1,067	1,067	0	0.0%
19.8%	1,067	1,067	0	0.0%
21.0%	1,067	1,067	0	0.0%
22.2%	1,067	1,067	0	0.0%
23.5%	1,067	1,067	0	0.0%
24.7%	1,067	1,067	0	0.0%
25.9%	1,067	1,067	0	0.0%
27.2%	1,067	1,064	-3	-0.3%
28.4%	1,050	1,034	-16	-1.5%
29.6%	1,037	1,029	-8	-0.8%
30.9%	1,024	1,027	3	0.3%
32.1%	1,016	1,002	-14	-1.4%
33.3%	1,003	986	-17	-1.7%
34.6%	989	981	-8	-0.8%
35.8%	986	980	-6	-0.6%
37.0%	983	956	-27	-2.8%
38.3%	983	953	-30	-3.1%
39.5%	970	946	-24	-2.5%
40.7%	961	922	-39	-4.0%
42.0%	957	921	-36	-3.8%
43.2%	939	915	-24	-2.5%
44.4%	913	909	-4	-0.4%
45.7%	910	904	-6	-0.7%
46.9%	904	903	-2	-0.2%
48.1%	899	897	-2	-0.3%
49.4%	896	888	-8	-0.9%
50.6%	865	886	22	2.5%
51.9%	864	877	13	1.5%
53.1%	828	869	41	5.0%
54.3%	826	842	16	2.0%
55.6%	802	837	35	4.4%
56.8%	802	812	10	1.2%
58.0%	747	809	62	8.2%
59.3%	743	805	61	8.3%
60.5%	730	787	57	7.8%
61.7%	717	780	64	8.9%
63.0%	711	762	50	7.1%
64.2%	697	761	64	9.2%
65.4%	693	743	49	7.1%
66.7%	666	738	72	10.8%
67.9%	659	716	57	8.7%
69.1%	657	691	34	5.2%
70.4%	626	672	46	7.3%
71.6%	625	645	20	3.2%
72.8%	608	639	31	5.1%
74.1%	596	626	31	5.2%
75.3%	588	620	32	5.4%
76.5%	565	611	46	8.1%
77.8%	548	597	49	8.9%
79.0%	543	590	47	8.7%
80.2%	541	559	18	3.3%
81.5%	528	514	-14	-2.6%
82.7%	506	509	2	0.5%
84.0%	484	507	23	4.7%
85.2%	470	485	16	3.3%
86.4%	459	468	9	2.0%
87.7%	457	454	-3	-0.6%
88.9%	453	443	-11	-2.3%
90.1%	449	439	-10	-2.1%
91.4%	440	435	-5	-1.0%
92.6%	432	397	-35	-8.1%
93.8%	429	396	-32	-7.5%
95.1%	411	375	-37	-8.9%
96.3%	395	369	-26	-6.7%
97.5%	392	365	-26	-6.8%
98.8%	281	359	78	27.8%
100.0%	264	339	75	28.5%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,051	-16	-1.5%
6.2%	1,059	1,030	-29	-2.7%
7.4%	1,040	1,024	-16	-1.5%
8.6%	1,021	1,001	-20	-2.0%
9.9%	980	977	-3	-0.3%
11.1%	978	976	-2	-0.2%
12.3%	973	970	-3	-0.3%
13.6%	972	966	-5	-0.6%
14.8%	966	963	-3	-0.3%
16.0%	964	963	-1	-0.1%
17.3%	963	962	-1	-0.1%
18.5%	963	962	-1	-0.1%
19.8%	962	952	-10	-1.1%
21.0%	959	949	-10	-1.1%
22.2%	956	949	-7	-0.8%
23.5%	948	942	-6	-0.6%
24.7%	947	940	-7	-0.7%
25.9%	944	938	-6	-0.7%
27.2%	937	938	0	0.0%
28.4%	934	920	-14	-1.5%
29.6%	928	896	-32	-3.5%
30.9%	928	896	-32	-3.5%
32.1%	915	893	-22	-2.4%
33.3%	895	893	-2	-0.3%
34.6%	886	890	4	0.4%
35.8%	885	887	2	0.2%
37.0%	854	875	21	2.5%
38.3%	850	852	2	0.3%
39.5%	837	847	10	1.1%
40.7%	830	834	4	0.5%
42.0%	829	833	4	0.5%
43.2%	827	821	-6	-0.7%
44.4%	823	813	-10	-1.2%
45.7%	820	805	-14	-1.7%
46.9%	815	793	-21	-2.6%
48.1%	814	790	-24	-2.9%
49.4%	813	784	-29	-3.6%
50.6%	772	774	2	0.2%
51.9%	770	767	-2	-0.3%
53.1%	753	755	2	0.3%
54.3%	752	749	-2	-0.3%
55.6%	741	747	6	0.8%
56.8%	728	744	16	2.2%
58.0%	721	716	-5	-0.6%
59.3%	703	713	10	1.4%
60.5%	692	710	18	2.6%
61.7%	691	698	7	1.0%
63.0%	667	690	22	3.4%
64.2%	664	666	2	0.4%
65.4%	650	652	1	0.2%
66.7%	634	635	1	0.2%
67.9%	629	633	4	0.6%
69.1%	629	630	2	0.3%
70.4%	591	626	35	5.9%
71.6%	588	622	34	5.7%
72.8%	567	616	49	8.6%
74.1%	554	598	44	7.9%
75.3%	551	583	32	5.8%
76.5%	535	578	43	8.0%
77.8%	501	574	73	14.6%
79.0%	499	568	69	13.9%
80.2%	498	534	35	7.1%
81.5%	494	516	22	4.5%
82.7%	492	502	11	2.1%
84.0%	467	491	23	5.0%
85.2%	464	478	13	2.9%
86.4%	459	446	-13	-2.9%
87.7%	445	437	-8	-1.8%
88.9%	436	433	-3	-0.6%
90.1%	433	421	-13	-3.0%
91.4%	428	413	-15	-3.5%
92.6%	420	403	-17	-4.0%
93.8%	407	396	-12	-2.9%
95.1%	398	370	-27	-6.9%
96.3%	391	334	-57	-14.6%
97.5%	364	327	-37	-10.1%
98.8%	269	325	56	20.9%
100.0%	252	296	44	17.4%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,044	1,051	8	0.7%
6.2%	963	953	-11	-1.1%
7.4%	908	854	-54	-6.0%
8.6%	857	815	-41	-4.8%
9.9%	852	809	-43	-5.1%
11.1%	822	808	-14	-1.7%
12.3%	813	804	-9	-1.1%
13.6%	797	804	7	0.8%
14.8%	792	797	5	0.6%
16.0%	787	775	-12	-1.5%
17.3%	770	773	3	0.4%
18.5%	751	764	13	1.8%
19.8%	736	763	27	3.7%
21.0%	735	740	4	0.6%
22.2%	735	739	4	0.6%
23.5%	733	724	-9	-1.3%
24.7%	725	723	-2	-0.3%
25.9%	720	713	-7	-1.0%
27.2%	710	709	-1	-0.1%
28.4%	706	709	3	0.4%
29.6%	705	706	2	0.2%
30.9%	703	703	0	0.0%
32.1%	698	699	1	0.2%
33.3%	696	687	-9	-1.3%
34.6%	681	681	0	0.0%
35.8%	678	680	2	0.3%
37.0%	677	663	-13	-1.9%
38.3%	670	655	-14	-2.2%
39.5%	661	651	-10	-1.5%
40.7%	645	644	-1	-0.2%
42.0%	623	641	18	2.9%
43.2%	618	623	5	0.8%
44.4%	616	608	-9	-1.4%
45.7%	610	603	-7	-1.1%
46.9%	609	587	-22	-3.6%
48.1%	600	578	-22	-3.6%
49.4%	591	578	-13	-2.2%
50.6%	588	576	-13	-2.2%
51.9%	584	574	-9	-1.6%
53.1%	581	562	-18	-3.2%
54.3%	578	557	-21	-3.6%
55.6%	569	557	-12	-2.1%
56.8%	563	551	-12	-2.2%
58.0%	553	550	-3	-0.6%
59.3%	546	543	-2	-0.4%
60.5%	544	539	-5	-0.9%
61.7%	538	536	-1	-0.2%
63.0%	537	536	-1	-0.2%
64.2%	522	529	7	1.4%
65.4%	515	526	10	2.0%
66.7%	487	521	34	7.0%
67.9%	482	494	12	2.4%
69.1%	474	492	18	3.9%
70.4%	455	487	32	7.0%
71.6%	442	471	29	6.5%
72.8%	438	466	28	6.3%
74.1%	435	462	28	6.4%
75.3%	426	456	30	6.9%
76.5%	423	440	17	3.9%
77.8%	413	435	21	5.2%
79.0%	405	430	25	6.2%
80.2%	405	424	19	4.7%
81.5%	392	406	15	3.7%
82.7%	391	406	15	3.9%
84.0%	386	401	15	3.9%
85.2%	380	388	7	2.0%
86.4%	374	378	4	1.1%
87.7%	371	372	0	0.1%
88.9%	369	362	-7	-2.0%
90.1%	369	351	-18	-4.9%
91.4%	362	311	-51	-14.2%
92.6%	354	301	-53	-15.1%
93.8%	322	297	-25	-7.7%
95.1%	321	297	-25	-7.8%
96.3%	311	275	-35	-11.4%
97.5%	272	266	-6	-2.2%
98.8%	252	246	-6	-2.3%
100.0%	236	239	3	1.2%

Table SW-45-b

San Luis Reservoir (SWP), End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,027	1,067	40	3.9%
1.2%	953	973	20	2.1%
2.5%	952	960	8	0.8%
3.7%	948	940	-8	-0.8%
4.9%	947	937	-10	-1.0%
6.2%	881	909	28	3.2%
7.4%	770	717	-53	-6.9%
8.6%	764	676	-88	-11.5%
9.9%	696	669	-27	-3.9%
11.1%	679	661	-18	-2.6%
12.3%	676	656	-20	-2.9%
13.6%	675	652	-23	-3.4%
14.8%	641	635	-6	-1.0%
16.0%	626	609	-17	-2.8%
17.3%	611	598	-13	-2.1%
18.5%	594	586	-8	-1.3%
19.8%	572	578	6	1.0%
21.0%	567	577	9	1.6%
22.2%	566	558	-8	-1.5%
23.5%	563	546	-17	-3.0%
24.7%	559	532	-27	-4.8%
25.9%	552	530	-22	-4.0%
27.2%	542	526	-16	-2.9%
28.4%	533	509	-24	-4.5%
29.6%	528	509	-19	-3.6%
30.9%	524	499	-25	-4.8%
32.1%	514	498	-16	-3.1%
33.3%	501	480	-22	-4.3%
34.6%	495	480	-15	-3.1%
35.8%	487	479	-8	-1.7%
37.0%	478	472	-6	-1.2%
38.3%	471	465	-6	-1.4%
39.5%	469	464	-6	-1.2%
40.7%	467	463	-4	-0.9%
42.0%	457	459	1	0.3%
43.2%	457	456	-1	-0.2%
44.4%	439	449	10	2.4%
45.7%	425	439	14	3.3%
46.9%	418	414	-4	-0.9%
48.1%	415	393	-21	-5.1%
49.4%	414	388	-26	-6.2%
50.6%	411	385	-26	-6.3%
51.9%	406	383	-23	-5.7%
53.1%	402	380	-22	-5.5%
54.3%	399	380	-19	-4.7%
55.6%	394	375	-19	-4.9%
56.8%	382	371	-11	-3.0%
58.0%	362	364	2	0.6%
59.3%	359	358	-1	-0.3%
60.5%	357	349	-7	-2.1%
61.7%	357	347	-9	-2.6%
63.0%	348	345	-3	-0.9%
64.2%	348	341	-7	-1.9%
65.4%	338	338	0	0.0%
66.7%	332	334	3	0.8%
67.9%	330	329	-1	-0.3%
69.1%	330	324	-6	-1.7%
70.4%	325	323	-2	-0.7%
71.6%	322	312	-10	-3.1%
72.8%	320	303	-17	-5.3%
74.1%	316	301	-15	-4.7%
75.3%	311	268	-43	-13.8%
76.5%	304	266	-38	-12.5%
77.8%	302	256	-45	-15.0%
79.0%	267	249	-17	-6.5%
80.2%	260	248	-11	-4.4%
81.5%	257	244	-13	-5.2%
82.7%	242	240	-3	-1.1%
84.0%	239	239	-1	-0.2%
85.2%	233	233	0	0.0%
86.4%	225	221	-4	-2.0%
87.7%	223	220	-3	-1.2%
88.9%	214	201	-13	-6.0%
90.1%	209	196	-13	-6.3%
91.4%	198	163	-35	-17.9%
92.6%	178	142	-36	-20.0%
93.8%	169	101	-68	-40.3%
95.1%	165	98	-67	-40.7%
96.3%	160	94	-67	-41.6%
97.5%	157	61	-96	-61.3%
98.8%	80	58	-22	-27.2%
100.0%	68	55	-13	-18.7%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	998	1,004	6	0.6%
2.5%	983	969	-14	-1.4%
3.7%	959	957	-2	-0.2%
4.9%	860	950	90	10.5%
6.2%	836	746	-89	-10.7%
7.4%	799	741	-58	-7.2%
8.6%	762	739	-23	-3.0%
9.9%	731	703	-28	-3.8%
11.1%	721	672	-48	-6.7%
12.3%	695	670	-25	-3.6%
13.6%	673	633	-40	-6.0%
14.8%	636	630	-6	-1.0%
16.0%	624	590	-34	-5.5%
17.3%	616	557	-59	-9.6%
18.5%	574	537	-37	-6.5%
19.8%	567	534	-33	-5.8%
21.0%	548	523	-26	-4.7%
22.2%	534	519	-15	-2.8%
23.5%	527	513	-13	-2.5%
24.7%	526	505	-21	-4.1%
25.9%	525	493	-32	-6.1%
27.2%	509	488	-21	-4.2%
28.4%	504	473	-31	-6.2%
29.6%	499	467	-33	-6.5%
30.9%	492	463	-29	-5.9%
32.1%	488	456	-32	-6.5%
33.3%	470	445	-25	-5.3%
34.6%	463	443	-20	-4.3%
35.8%	452	438	-14	-3.1%
37.0%	451	431	-20	-4.5%
38.3%	421	422	1	0.2%
39.5%	419	421	2	0.4%
40.7%	397	409	12	2.9%
42.0%	396	406	10	2.4%
43.2%	394	380	-14	-3.6%
44.4%	392	369	-23	-5.8%
45.7%	387	361	-26	-6.6%
46.9%	381	357	-23	-6.2%
48.1%	366	356	-10	-2.7%
49.4%	361	356	-5	-1.3%
50.6%	360	352	-8	-2.3%
51.9%	359	349	-10	-2.8%
53.1%	342	318	-23	-6.8%
54.3%	338	318	-20	-6.0%
55.6%	323	315	-8	-2.3%
56.8%	316	308	-8	-2.4%
58.0%	315	292	-23	-7.3%
59.3%	314	288	-27	-8.5%
60.5%	312	287	-25	-8.0%
61.7%	310	278	-32	-10.3%
63.0%	303	270	-32	-10.6%
64.2%	287	268	-19	-6.8%
65.4%	256	266	11	4.3%
66.7%	255	260	5	2.1%
67.9%	252	254	2	1.0%
69.1%	251	251	0	0.0%
70.4%	249	247	-1	-0.6%
71.6%	236	246	10	4.3%
72.8%	234	245	12	5.0%
74.1%	233	244	10	4.3%
75.3%	231	234	3	1.4%
76.5%	231	225	-6	-2.6%
77.8%	230	224	-5	-2.4%
79.0%	229	205	-24	-10.3%
80.2%	224	195	-29	-13.0%
81.5%	220	189	-30	-13.8%
82.7%	212	181	-32	-15.0%
84.0%	210	180	-30	-14.3%
85.2%	183	177	-6	-3.2%
86.4%	182	173	-9	-4.7%
87.7%	163	124	-38	-23.6%
88.9%	159	123	-36	-22.8%
90.1%	158	96	-62	-39.1%
91.4%	154	87	-67	-43.6%
92.6%	153	77	-76	-49.5%
93.8%	148	75	-73	-49.5%
95.1%	145	68	-77	-53.3%
96.3%	115	65	-50	-43.7%
97.5%	84	57	-27	-31.8%
98.8%	70	55	-15	-21.5%
100.0%	55	55	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	940	885	-54	-5.8%
1.2%	806	802	-4	-0.5%
2.5%	782	781	0	0.0%
3.7%	781	780	-1	-0.2%
4.9%	776	777	2	0.2%
6.2%	759	719	-40	-5.3%
7.4%	724	688	-36	-5.0%
8.6%	709	682	-26	-3.7%
9.9%	671	680	9	1.3%
11.1%	654	670	17	2.5%
12.3%	642	597	-45	-7.0%
13.6%	587	582	-5	-0.9%
14.8%	580	578	-2	-0.3%
16.0%	565	573	9	1.5%
17.3%	547	573	26	4.7%
18.5%	543	538	-5	-0.9%
19.8%	539	532	-7	-1.3%
21.0%	536	519	-17	-3.2%
22.2%	535	502	-33	-6.3%
23.5%	516	490	-26	-5.0%
24.7%	507	484	-23	-4.6%
25.9%	507	478	-28	-5.6%
27.2%	489	464	-24	-5.0%
28.4%	478	462	-16	-3.4%
29.6%	473	451	-21	-4.5%
30.9%	471	448	-22	-4.8%
32.1%	438	427	-11	-2.6%
33.3%	437	412	-25	-5.7%
34.6%	386	386	-1	-0.2%
35.8%	383	377	-6	-1.7%
37.0%	369	374	5	1.4%
38.3%	367	372	5	1.3%
39.5%	364	369	6	1.5%
40.7%	363	349	-13	-3.7%
42.0%	348	334	-14	-3.9%
43.2%	339	314	-25	-7.4%
44.4%	336	299	-37	-11.0%
45.7%	325	281	-44	-13.4%
46.9%	296	280	-16	-5.3%
48.1%	295	272	-23	-7.8%
49.4%	273	263	-10	-3.8%
50.6%	269	260	-9	-3.4%
51.9%	267	257	-9	-3.5%
53.1%	251	247	-3	-1.3%
54.3%	241	236	-5	-2.3%
55.6%	230	232	2	1.0%
56.8%	217	223	5	2.5%
58.0%	215	201	-14	-6.4%
59.3%	207	196	-11	-5.5%
60.5%	192	196	4	1.9%
61.7%	186	189	3	1.5%
63.0%	176	181	5	2.8%
64.2%	175	175	0	0.2%
65.4%	174	174	0	-0.1%
66.7%	173	167	-6	-3.3%
67.9%	171	166	-5	-2.7%
69.1%	168	165	-3	-1.7%
70.4%	166	163	-3	-1.7%
71.6%	166	158	-7	-4.3%
72.8%	164	144	-20	-12.3%
74.1%	159	143	-16	-10.1%
75.3%	158	142	-16	-9.9%
76.5%	157	142	-15	-9.7%
77.8%	157	126	-31	-20.0%
79.0%	157	111	-46	-29.1%
80.2%	156	109	-47	-29.9%
81.5%	153	107	-46	-30.0%
82.7%	152	96	-57	-37.3%
84.0%	145	91	-54	-37.0%
85.2%	142	87	-56	-39.2%
86.4%	135	85	-49	-36.6%
87.7%	129	72	-58	-44.5%
88.9%	129	69	-60	-46.5%
90.1%	128	64	-64	-49.8%
91.4%	114	64	-50	-44.0%
92.6%	102	55	-47	-46.1%
93.8%	102	55	-47	-45.8%
95.1%	101	55	-46	-45.4%
96.3%	89	55	-34	-37.9%
97.5%	77	55	-22	-28.3%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	619	702	83	13.5%
1.2%	609	603	-5	-0.8%
2.5%	589	600	11	1.8%
3.7%	546	569	23	4.2%
4.9%	524	543	19	3.6%
6.2%	515	527	12	2.4%
7.4%	510	518	8	1.6%
8.6%	510	510	0	0.1%
9.9%	510	510	0	0.0%
11.1%	510	510	0	0.0%
12.3%	510	510	0	0.0%
13.6%	510	510	0	0.0%
14.8%	510	510	0	0.0%
16.0%	510	510	0	0.0%
17.3%	510	510	0	0.0%
18.5%	510	510	0	0.0%
19.8%	510	510	0	0.0%
21.0%	510	510	0	0.0%
22.2%	510	510	0	0.0%
23.5%	510	510	0	0.0%
24.7%	510	510	0	0.0%
25.9%	510	510	0	0.0%
27.2%	510	498	-12	-2.3%
28.4%	499	485	-14	-2.9%
29.6%	498	469	-29	-5.9%
30.9%	480	467	-12	-2.6%
32.1%	468	467	-1	-0.2%
33.3%	454	452	-2	-0.4%
34.6%	440	448	8	1.7%
35.8%	431	426	-5	-1.1%
37.0%	431	422	-8	-1.9%
38.3%	429	412	-17	-3.9%
39.5%	380	406	26	6.9%
40.7%	373	392	19	5.1%
42.0%	368	383	15	4.1%
43.2%	365	372	6	1.7%
44.4%	360	367	8	2.2%
45.7%	357	340	-17	-4.7%
46.9%	332	333	1	0.3%
48.1%	322	322	0	0.0%
49.4%	322	315	-6	-1.9%
50.6%	320	313	-7	-2.2%
51.9%	318	309	-9	-2.7%
53.1%	314	298	-16	-5.1%
54.3%	248	288	40	16.0%
55.6%	248	276	28	11.3%
56.8%	247	263	15	6.2%
58.0%	240	248	8	3.4%
59.3%	230	238	8	3.3%
60.5%	228	226	-2	-0.8%
61.7%	219	224	5	2.1%
63.0%	218	214	-4	-1.7%
64.2%	215	210	-5	-2.3%
65.4%	209	208	-1	-0.4%
66.7%	205	180	-25	-12.2%
67.9%	200	177	-23	-11.4%
69.1%	198	174	-24	-12.2%
70.4%	188	172	-16	-8.5%
71.6%	187	170	-17	-8.8%
72.8%	178	152	-26	-14.8%
74.1%	178	151	-26	-14.8%
75.3%	176	151	-25	-14.4%
76.5%	165	147	-18	-10.9%
77.8%	164	139	-24	-14.9%
79.0%	157	138	-19	-11.9%
80.2%	155	131	-24	-15.6%
81.5%	148	124	-24	-16.0%
82.7%	146	121	-25	-16.9%
84.0%	139	115	-24	-17.3%
85.2%	136	115	-21	-15.4%
86.4%	135	110	-25	-18.4%
87.7%	134	105	-29	-21.4%
88.9%	132	105	-27	-20.4%
90.1%	130	103	-27	-20.8%
91.4%	117	91	-26	-22.0%
92.6%	111	91	-21	-18.5%
93.8%	102	78	-25	-24.3%
95.1%	88	65	-22	-25.3%
96.3%	67	55	-12	-17.4%
97.5%	55	55	0	0.0%
98.8%	55	55	0	0.0%
100.0%	55	55	0	0.0%

SWP Deliveries

DCR 2015 Without Project
1-State Water Project (SWP) Allocations
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Table A Allocation (EO May)	M&I Service Table A Allocation (EO May)	FRSA Settlement Contract Allocation (EO May)
	Long-term		
Full Simulation Period[1]	63%	63%	96%
	Water Year Types[2]		
Wet	84%	84%	100%
Above Normal	75%	75%	100%
Below Normal	64%	64%	100%
Dry	48%	48%	100%
Critical	28%	28%	75%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project
2-State Water Project (SWP) Delivery Operations
Long-term Average and Average by Water Year Type

Analysis Period	SWP Table A Delivery (w/o Art 56) (Jan-Dec, TAF)	SWP Article 56 Delivery (Jan-Dec, TAF)	SWP Article 21 Delivery (Jan-Dec, TAF)
	Long-term		
Full Simulation Period[1]	2,499	82	57
	Water Year Types[2]		
Wet	3,269	106	82
Above Normal	2,957	70	112
Below Normal	2,593	99	44
Dry	1,939	64	20
Critical	1,140	46	23

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project
3-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Jan-Dec, TAF)	M&I Service Deliveries (Jan-Dec, TAF)	Total Ag and M&I Service Deliveries (Jan-Dec, TAF)
	Long-term		
Full Simulation Period[1]	653	1,984	2,638
	Water Year Types[2]		
Wet	889	2,567	3,456
Above Normal	805	2,334	3,140
Below Normal	663	2,074	2,737
Dry	462	1,560	2,023
Critical	275	934	1,209

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project
4-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	FRSA Settlement (Jan-Dec, TAF)
	Long-term
Full Simulation Period[1]	947
	Water Year Types[2]
Wet	975
Above Normal	983
Below Normal	980
Dry	986
Critical	757

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project
5-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region M&I Service (Jan-Dec, TAF)	San Joaquin River Hydrologic Region Ag Service (Jan-Dec, TAF)	San Francisco Bay Hydrologic Region M&I Service (Jan-Dec, TAF)	Central Coast Hydrologic Region M&I Service (Jan-Dec, TAF)	Tulare Lake Hydrologic Region Ag Service (Jan-Dec, TAF)	Tulare Lake Hydrologic Region M&I Service (Jan-Dec, TAF)	South Lahonton Hydrologic Region M&I Service (Jan-Dec, TAF)	South Coast Hydrologic Region Ag Service (Jan-Dec, TAF)	South Coast Hydrologic Region M&I Service (Jan-Dec, TAF)
					Long-term				
Full Simulation Period[1]	31	4	212	43	641	83	275	8	1,340
					Water Year Types[2]				
Wet	37	5	274	59	874	112	362	11	1,723
Above Normal	36	4	253	52	791	100	324	10	1,569
Below Normal	34	4	222	45	651	85	285	8	1,403
Dry	27	3	164	32	454	61	212	6	1,065
Critical	16	1	97	18	271	36	126	3	640

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

With Project deliveries and allocation to SWP would be similar to Without Project

CVP Deliveries - Without Project (DCR 2015)

DCR 2015 Without Project

1-Central Valley Project (CVP) Allocation

Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	61%	50%	86%	80%	97%	97%	97%
Water Year Types[2]							
Wet	93%	78%	99%	94%	100%	100%	100%
Above Normal	85%	62%	97%	86%	100%	100%	100%
Below Normal	56%	42%	85%	77%	100%	100%	100%
Dry	38%	33%	78%	74%	99%	99%	99%
Critical	13%	13%	61%	61%	83%	85%	83%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project

2-Central Valley Project (CVP) Contract Deliveries

Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	1,172	498	1,669	2,792	565
Water Year Types[2]					
Wet	1,809	513	2,322	2,805	590
Above Normal	1,484	509	1,993	2,819	586
Below Normal	1,015	486	1,501	2,852	587
Dry	772	494	1,266	2,841	567
Critical	287	472	759	2,597	462

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	432	0
Water Year Types[2]		
Wet	453	0
Above Normal	449	0
Below Normal	450	0
Dry	432	0
Critical	348	0

period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project

4-Central Valley Project (CVP) Contract Deliveries

Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region			San Joaquin River Hydrologic Region			San Francisco Bay Hydrologic Region		Tulare Lake Hydrologic Region
	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Settlement (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Exchange (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	216	202	1,940	302	16	852	37	280	617
Water Year Types[2]									
Wet	324	227	1,930	472	19	875	58	268	954
Above Normal	301	227	1,944	373	17	875	46	265	764
Below Normal	198	203	1,977	254	15	874	31	268	532
Dry	135	185	1,977	199	15	864	24	294	413
Critical	46	148	1,856	76	12	741	9	312	156

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project

5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region		San Joaquin River Hydrologic Region		Tulare Lake Hydrologic Region	
	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	159	0	261	0	12	0
Water Year Types[2]						
Wet	172	0	269	0	12	0
Above Normal	168	0	269	0	12	0
Below Normal	170	0	268	0	12	0
Dry	155	0	265	0	12	0
Critical	114	0	224	0	10	0

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

CVP Deliveries - With Project

DCR 2015 With Project

1-Central Valley Project (CVP) Allocation

Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	62%	50%	86%	81%	97%	97%	97%
Water Year Types[2]							
Wet	93%	78%	99%	94%	100%	100%	100%
Above Normal	87%	61%	97%	86%	100%	100%	100%
Below Normal	57%	43%	85%	77%	100%	100%	100%
Dry	39%	34%	79%	75%	99%	99%	99%
Critical	13%	13%	61%	61%	83%	85%	83%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 With Project

2-Central Valley Project (CVP) Contract Deliveries

Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	1,176	497	1,673	2,794	571
Water Year Types[2]					
Wet	1,803	513	2,316	2,805	593
Above Normal	1,486	509	1,995	2,821	590
Below Normal	1,033	485	1,518	2,852	595
Dry	787	494	1,281	2,839	577
Critical	284	471	755	2,609	469

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 With Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	438	37
Water Year Types[2]		
Wet	456	59
Above Normal	452	48
Below Normal	457	30
Dry	442	24
Critical	355	5

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 With Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Ag Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region M&I Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region Settlement (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Ag Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region M&I Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Exchange (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region Ag Service (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region M&I Service (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	219	201	1,941	303	16	852	37	280	617
Water Year Types[2]									
Wet	323	226	1,930	473	19	875	58	268	949
Above Normal	308	226	1,946	372	17	875	45	266	761
Below Normal	203	202	1,977	259	15	875	32	268	538
Dry	140	184	1,975	202	15	864	25	295	419
Critical	48	147	1,869	77	12	741	9	311	151

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 With Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Sacramento River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	165	1	261	29	12	7
Water Year Types[2]						
Wet	175	1	269	48	12	11
Above Normal	171	1	269	38	12	9
Below Normal	177	1	268	24	12	6
Dry	165	0	264	19	12	4
Critical	121	0	223	4	10	1

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

CVP Deliveries - Comparison

Difference: DCR 2015 With Project minus DCR 2015 Without Project
1-Central Valley Project (CVP) Allocation
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	1%	0%	0%	0%	0%	0%	0%
Water Year Types[2]							
Wet	0%	0%	0%	0%	0%	0%	0%
Above Normal	2%	0%	0%	0%	0%	0%	0%
Below Normal	2%	1%	1%	0%	0%	0%	0%
Dry	1%	0%	1%	1%	0%	0%	0%
Critical	0%	0%	0%	0%	0%	0%	0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: DCR 2015 With Project minus DCR 2015 Without Project
2-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	4	-1	4	2	6
Water Year Types[2]					
Wet	-5	-1	-6	0	3
Above Normal	3	0	2	2	3
Below Normal	18	-1	17	0	7
Dry	14	0	14	-2	10
Critical	-3	-1	-4	12	7

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

DCR 2015 Without Project

Difference: DCR 2015 With Project minus DCR 2015 Without Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	6	37
Water Year Types[2]		
Wet	3	59
Above Normal	3	48
Below Normal	7	30
Dry	10	24
Critical	7	5

period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: DCR 2015 With Project minus DCR 2015 Without Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Ag Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region M&I Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region Settlement (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Ag Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region M&I Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Exchange (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region Ag Service (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region M&I Service (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	3	-1	2	2	0	0	0	0	0
Water Year Types[2]									
Wet	-1	-1	0	0	0	0	0	0	-5
Above Normal	7	0	2	-1	0	0	0	0	-3
Below Normal	5	-1	0	5	0	0	1	0	7
Dry	5	-1	-2	3	0	0	0	1	6
Critical	1	-1	12	1	0	0	0	0	-5

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: DCR 2015 With Project minus DCR 2015 Without Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Sacramento River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	6	1	0	29	0	7
Water Year Types[2]						
Wet	3	1	0	48	0	11
Above Normal	3	1	0	38	0	9
Below Normal	7	1	0	24	0	6
Dry	10	0	0	19	0	4
Critical	8	0	-1	4	0	1

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Sites Reservoir Benefits

Difference: DCR 2015 With Project minus DCR 2015 Without Project
1-Sites Deliveries to Sacramento Valley Members

Long-term Average and Average by Water Year Type

Analysis Period	(Mar-Feb, TAF)
Long-term	
Full Simulation Period[1]	96
Water Year Types[2]	
Wet	23
Above Normal	71
Below Normal	127
Dry	162
Critical	146

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Includes Sites delivery to TCCA members, GCID, RD108, County of Colusa, and Western Canal WD

Difference: DCR 2015 With Project minus DCR 2015 Without Project
2-Sites Deliveries to South of Delta Members
Long-term Average and Average by Water Year Type

Analysis Period	M&I (Jan-Dec, TAF)	Ag (Jan-Dec, TAF)	Total (Jan-Dec, TAF)
Long-term			
Full Simulation Period[1]	66	20	86
Water Year Types[2]			
Wet	1	0	1
Above Normal	-6	-2	-8
Below Normal	12	4	15
Dry	204	62	266
Critical	129	39	169

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Accounts for 18% deduction for carriage water for Delta Export

SWP Deliveries

WSIP 2030 Without Project
1-State Water Project (SWP) Allocations
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Table A Allocation (EO May)	M&I Service Table A Allocation (EO May)	FRSA Settlement Contract Allocation (EO May)
	Long-term		
Full Simulation Period[1]	62%	62%	96%
	Water Year Types[2]		
Wet (30%)	86%	86%	100%
Above Normal (15%)	74%	74%	100%
Below Normal (21%)	60%	60%	100%
Dry (20%)	44%	44%	94%
Critical (15%)	25%	25%	83%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project
2-State Water Project (SWP) Delivery Operations
Long-term Average and Average by Water Year Type

Analysis Period	SWP Table A Delivery (w/o Art 56) (Jan-Dec, TAF)	SWP Article 56 Delivery (Jan-Dec, TAF)	SWP Article 21 Delivery (Jan-Dec, TAF)
	Long-term		
Full Simulation Period[1]	2,443	65	65
	Water Year Types[2]		
Wet (30%)	3,315	65	120
Above Normal (15%)	2,912	70	87
Below Normal (21%)	2,434	91	54
Dry (20%)	1,819	47	15
Critical (15%)	1,044	49	12

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project
3-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Jan-Dec, TAF)	M&I Service Deliveries (Jan-Dec, TAF)	Total Ag and M&I Service Deliveries (Jan-Dec, TAF)
	Long-term		
Full Simulation Period[1]	645	1,928	2,573
	Water Year Types[2]		
Wet (30%)	923	2,577	3,500
Above Normal (15%)	766	2,302	3,068
Below Normal (21%)	625	1,954	2,579
Dry (20%)	443	1,438	1,881
Critical (15%)	252	853	1,105

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project
4-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	FRSA Settlement (Jan-Dec, TAF)
	Long-term
Full Simulation Period[1]	946
	Water Year Types[2]
Wet (30%)	975
Above Normal (15%)	983
Below Normal (21%)	980
Dry (20%)	937
Critical (15%)	817

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project
5-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

	Sacramento River Hydrologic Region	San Joaquin River Hydrologic Region	San Francisco Bay Hydrologic Region	Central Coast Hydrologic Region	Tulare Lake Hydrologic Region		South Lahonton Hydrologic Region	South Coast Hydrologic Region	
Analysis Period	M&I Service (Jan-Dec, TAF)	Ag Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	Ag Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	Ag Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)
				Long-term					
Full Simulation Period[1]	31	3	209	43	633	82	269	8	1,296
				Water Year Types[2]					
Wet (30%)	37	5	279	60	906	115	368	11	1,720
Above Normal (15%)	36	4	250	51	752	97	319	9	1,550
Below Normal (21%)	33	3	214	42	614	80	267	8	1,319
Dry (20%)	25	2	155	31	435	59	198	6	970
Critical (15%)	15	1	89	17	248	33	115	3	583

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

With Project deliveries and allocation to SWP would be similar to Without Project

CVP Deliveries - Without Project (WSIP 2030)

WSIP 2030 Without Project
1-Central Valley Project (CVP) Allocation
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	47%	44%	78%	77%	98%	98%	98%
Water Year Types[2]							
Wet (30%)	75%	71%	91%	90%	100%	100%	100%
Above Normal (15%)	65%	57%	90%	82%	100%	100%	100%
Below Normal (21%)	44%	39%	76%	74%	100%	100%	100%
Dry (20%)	24%	23%	68%	67%	100%	100%	100%
Critical (15%)	11%	11%	60%	60%	88%	88%	88%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project
2-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	1,004	477	1,481	2,805	568
Water Year Types[2]					
Wet (30%)	1,617	491	2,108	2,800	588
Above Normal (15%)	1,300	488	1,788	2,831	584
Below Normal (21%)	898	463	1,361	2,836	585
Dry (20%)	517	469	986	2,869	572
Critical (15%)	258	468	726	2,659	485

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	433	0
Water Year Types[2]		
Wet (30%)	450	0
Above Normal (15%)	447	0
Below Normal (21%)	447	0
Dry (20%)	434	0
Critical (15%)	365	0

period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Ag Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region M&I Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region Settlement (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Ag Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region M&I Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Exchange (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region Ag Service (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region M&I Service (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	168	187	1,945	265	15	859	32	274	539
Water Year Types[2]									
Wet (30%)	262	211	1,926	430	18	875	53	262	872
Above Normal (15%)	231	212	1,957	342	16	874	41	260	685
Below Normal (21%)	155	184	1,961	231	15	874	29	264	483
Dry (20%)	85	167	1,996	135	13	873	17	288	280
Critical (15%)	41	146	1,885	69	12	774	8	310	140

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Sacramento River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	158	0	263	0	12	0
Water Year Types[2]						
Wet (30%)	170	0	268	0	12	0
Above Normal (15%)	166	0	268	0	12	0
Below Normal (21%)	167	0	268	0	12	0
Dry (20%)	155	0	267	0	12	0
Critical (15%)	120	0	234	0	11	0

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

CVP Deliveries - With Project

WSIP 2030 With Project
1-Central Valley Project (CVP) Allocation
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	48%	44%	78%	76%	98%	98%	98%
Water Year Types[2]							
Wet (30%)	75%	71%	91%	89%	100%	100%	100%
Above Normal (15%)	65%	55%	91%	82%	100%	100%	100%
Below Normal (21%)	44%	37%	75%	74%	100%	100%	100%
Dry (20%)	25%	23%	68%	68%	100%	100%	100%
Critical (15%)	12%	12%	59%	59%	88%	88%	88%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 With Project
2-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	996	475	1,472	2,808	576
Water Year Types[2]					
Wet (30%)	1,608	490	2,098	2,799	591
Above Normal (15%)	1,280	488	1,768	2,833	587
Below Normal (21%)	871	461	1,331	2,837	593
Dry (20%)	529	468	997	2,867	586
Critical (15%)	263	464	727	2,685	498

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 With Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	441	35
Water Year Types[2]		
Wet (30%)	454	53
Above Normal (15%)	450	47
Below Normal (21%)	456	38
Dry (20%)	448	21
Critical (15%)	377	1

period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 With Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Ag Service (Mar-Feb, TAF)	 M&I Service (Mar-Feb, TAF)	 Settlement (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Ag Service (Mar-Feb, TAF)	 M&I Service (Mar-Feb, TAF)	 Exchange (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region Ag Service (Mar-Feb, TAF)	 M&I Service (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	168	186	1,949	263	15	859	32	274	533
Water Year Types[2]									
Wet (30%)	261	210	1,925	428	18	875	53	262	865
Above Normal (15%)	231	212	1,958	335	16	875	41	260	673
Below Normal (21%)	154	183	1,962	225	15	875	28	263	464
Dry (20%)	88	166	1,994	139	13	873	17	288	285
Critical (15%)	41	142	1,910	70	12	774	8	310	144

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 With Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	 Refuge L4 - Sites (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	 Refuge L4 - Sites (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L2 (Mar-Feb, TAF)	 Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	166	1	263	28	12	6
Water Year Types[2]						
Wet (30%)	173	1	268	42	12	10
Above Normal (15%)	170	1	267	37	12	9
Below Normal (21%)	176	1	268	30	12	7
Dry (20%)	169	0	267	17	12	4
Critical (15%)	131	0	235	1	11	0

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

CVP Deliveries - Comparison

Difference: WSIP 2030 With Project minus WSIP 2030 Without Project
1-Central Valley Project (CVP) Allocation
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
				Long-term			
Full Simulation Period[1]	0%	0%	0%	0%	0%	0%	0%
				Water Year Types[2]			
Wet (30%)	0%	0%	0%	0%	0%	0%	0%
Above Normal (15%)	0%	-1%	1%	0%	0%	0%	0%
Below Normal (21%)	0%	-1%	0%	0%	0%	0%	0%
Dry (20%)	1%	1%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: WSIP 2030 With Project minus WSIP 2030 Without Project
2-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
			Long-term		
Full Simulation Period[1]	-8	-2	-10	4	8
			Water Year Types[2]		
Wet (30%)	-9	-1	-10	-1	3
Above Normal (15%)	-20	0	-20	1	3
Below Normal (21%)	-27	-2	-30	1	9
Dry (20%)	12	-1	11	-2	14
Critical (15%)	5	-4	2	26	12

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2030 Without Project

Difference: WSIP 2030 With Project minus WSIP 2030 Without Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
	Long-term	
Full Simulation Period[1]	8	35
	Water Year Types[2]	
Wet (30%)	3	53
Above Normal (15%)	3	47
Below Normal (21%)	9	38
Dry (20%)	14	21
Critical (15%)	12	1

period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: WSIP 2030 With Project minus WSIP 2030 Without Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region			San Joaquin River Hydrologic Region			San Francisco Bay Hydrologic Region		Tulare Lake Hydrologic Region
	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Settlement (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Exchange (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	0	-1	3	-2	0	0	0	0	-6
Water Year Types[2]									
Wet (30%)	-1	-1	-1	-1	0	0	0	0	-6
Above Normal (15%)	-1	0	1	-7	0	0	-1	0	-12
Below Normal (21%)	-1	-2	1	-7	0	0	-1	-1	-19
Dry (20%)	2	-1	-2	4	0	0	0	0	5
Critical (15%)	1	-4	26	1	0	0	0	0	4

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: WSIP 2030 With Project minus WSIP 2030 Without Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region		San Joaquin River Hydrologic Region		Tulare Lake Hydrologic Region	
	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	8	1	0	28	0	6
Water Year Types[2]						
Wet (30%)	3	1	0	42	0	10
Above Normal (15%)	4	1	-1	37	0	9
Below Normal (21%)	9	1	0	30	0	7
Dry (20%)	14	0	0	17	0	4
Critical (15%)	11	0	1	1	0	0

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Sites Reservoir Benefits

Difference: WSIP 2030 With Project minus WSIP 2030 Without Project

1-Sites Deliveries to Sacramento Valley Members

Long-term Average and Average by Water Year Type

Analysis Period	Sacramento Valley (Mar-Feb, TAF)
Long-term	
Full Simulation Period[1]	129
Water Year Types[2]	
Wet (30%)	62
Above Normal (15%)	118
Below Normal (21%)	155
Dry (20%)	186
Critical (15%)	165

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Includes Sites delivery to TCCA members, GCID, RD108, County of Colusa, and Western Canal WD

Difference: WSIP 2030 With Project minus WSIP 2030 Without Project

2-Sites Deliveries to South of Delta Members

Long-term Average and Average by Water Year Type

Analysis Period	M&I (Jan-Dec, TAF)	Ag (Jan-Dec, TAF)	Total (Jan-Dec, TAF)
Long-term			
Full Simulation Period[1]	76	23	99
Water Year Types[2]			
Wet (30%)	6	2	8
Above Normal (15%)	-2	-1	-2
Below Normal (21%)	77	23	100
Dry (20%)	171	52	223
Critical (15%)	163	50	213

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Accounts for 18% deduction for carriage water for Delta Export

SWP Deliveries

WSIP 2070 Without Project
1-State Water Project (SWP) Allocations
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Table A Allocation (EO May)	M&I Service Table A Allocation (EO May)	FRSA Settlement Contract Allocation (EO May)
Long-term			
Full Simulation Period[1]	57%	57%	91%
Water Year Types[2]			
Wet (32%)	81%	81%	100%
Above Normal (13%)	73%	73%	100%
Below Normal (16%)	56%	56%	94%
Dry (24%)	37%	37%	88%
Critical (15%)	20%	20%	67%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project
2-State Water Project (SWP) Delivery Operations
Long-term Average and Average by Water Year Type

Analysis Period	SWP Table A Delivery (w/o Art 56) (Jan-Dec, TAF)	SWP Article 56 Delivery (Jan-Dec, TAF)	SWP Article 21 Delivery (Jan-Dec, TAF)
Long-term			
Full Simulation Period[1]	2,262	63	72
Water Year Types[2]			
Wet (32%)	3,165	66	159
Above Normal (13%)	2,834	53	81
Below Normal (16%)	2,268	94	33
Dry (24%)	1,534	60	17
Critical (15%)	819	29	12

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project
3-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Jan-Dec, TAF)	M&I Service Deliveries (Jan-Dec, TAF)	Total Ag and M&I Service Deliveries (Jan-Dec, TAF)
Long-term			
Full Simulation Period[1]	597	1,801	2,398
Water Year Types[2]			
Wet (32%)	894	2,496	3,390
Above Normal (13%)	741	2,227	2,968
Below Normal (16%)	564	1,831	2,395
Dry (24%)	370	1,241	1,611
Critical (15%)	195	666	861

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project
4-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	FRSA Settlement (Jan-Dec, TAF)
Long-term	
Full Simulation Period[1]	906
Water Year Types[2]	
Wet (32%)	975
Above Normal (13%)	983
Below Normal (16%)	934
Dry (24%)	887
Critical (15%)	680

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project
5-State Water Project (SWP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region	San Joaquin River Hydrologic Region	San Francisco Bay Hydrologic Region	Central Coast Hydrologic Region	Tulare Lake Hydrologic Region		South Lahonton Hydrologic Region	South Coast Hydrologic Region	
	M&I Service (Jan-Dec, TAF)	Ag Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	Ag Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)	Ag Service (Jan-Dec, TAF)	M&I Service (Jan-Dec, TAF)
Long-term									
Full Simulation Period[1]	29	3	198	39	586	75	248	7	1,211
Water Year Types[2]									
Wet (32%)	37	5	269	57	878	108	349	11	1,676
Above Normal (13%)	36	4	247	51	728	97	308	9	1,488
Below Normal (16%)	31	3	199	38	554	74	249	7	1,240
Dry (24%)	22	2	142	25	363	49	168	5	834
Critical (15%)	12	1	78	13	191	26	89	2	448

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

With Project deliveries and allocation to SWP would be similar to Without Project

CVP Deliveries - Without Project (WSIP 2070)

WSIP 2070 Without Project

1-Central Valley Project (CVP) Allocation

Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	30%	29%	71%	71%	98%	98%	98%
Water Year Types[2]							
Wet (32%)	52%	52%	83%	83%	100%	100%	100%
Below Normal (16%)	38%	37%	75%	75%	100%	100%	100%
Below Normal (16%)	25%	24%	71%	71%	100%	100%	100%
Dry (24%)	14%	14%	63%	63%	100%	100%	100%
Critical (15%)	4%	4%	54%	54%	88%	88%	88%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project

2-Central Valley Project (CVP) Contract Deliveries

Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	662	452	1,115	2,799	563
Water Year Types[2]					
Wet (32%)	1,171	465	1,636	2,802	585
Above Normal (13%)	842	449	1,291	2,832	585
Below Normal (16%)	531	449	981	2,840	581
Dry (24%)	317	448	765	2,871	565
Critical (15%)	83	439	523	2,612	472

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	429	0
Water Year Types[2]		
Wet (32%)	448	0
Above Normal (13%)	447	0
Below Normal (16%)	443	0
Dry (24%)	428	0
Critical (15%)	352	0

period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Ag Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region M&I Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region Settlement (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Ag Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region M&I Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Exchange (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region Ag Service (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region M&I Service (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	105	172	1,941	176	14	859	21	267	360
Water Year Types[2]									
Wet (32%)	181	195	1,928	311	17	874	38	254	641
Above Normal (13%)	134	185	1,958	224	15	874	27	249	458
Below Normal (16%)	90	173	1,967	141	14	873	17	262	284
Dry (24%)	50	155	1,997	84	13	874	10	280	173
Critical (15%)	13	130	1,839	22	10	773	3	299	46

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Sacramento River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	156	0	261	0	12	0
Water Year Types[2]						
Wet (32%)	168	0	267	0	12	0
Above Normal (13%)	167	0	268	0	12	0
Below Normal (16%)	165	0	266	0	12	0
Dry (24%)	151	0	265	0	12	0
Critical (15%)	115	0	226	0	10	0

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

CVP Deliveries - With Project

WSIP 2070 With Project
1-Central Valley Project (CVP) Allocation
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	30%	29%	71%	71%	98%	98%	98%
Water Year Types[2]							
Wet (32%)	52%	52%	84%	84%	100%	100%	100%
Above Normal (13%)	37%	37%	75%	75%	100%	100%	100%
Below Normal (16%)	26%	24%	72%	71%	100%	100%	100%
Dry (24%)	14%	13%	63%	62%	100%	100%	100%
Critical (15%)	4%	4%	54%	54%	88%	88%	88%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 With Project
2-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	664	452	1,117	2,800	573
Water Year Types[2]					
Wet (32%)	1,183	467	1,650	2,799	590
Above Normal (13%)	835	448	1,283	2,829	590
Below Normal (16%)	542	449	990	2,835	592
Dry (24%)	301	445	746	2,867	579
Critical (15%)	85	442	526	2,635	484

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 With Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	438	31
Water Year Types[2]		
Wet (32%)	452	51
Above Normal (13%)	452	41
Below Normal (16%)	455	30
Dry (24%)	441	17
Critical (15%)	364	1

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 With Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Ag Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region M&I Service (Mar-Feb, TAF)	Sacramento River Hydrologic Region Settlement (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Ag Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region M&I Service (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Exchange (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region Ag Service (Mar-Feb, TAF)	San Francisco Bay Hydrologic Region M&I Service (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	105	171	1,940	176	14	859	22	268	361
Water Year Types[2]									
Wet (32%)	182	196	1,924	315	17	874	39	255	648
Above Normal (13%)	133	183	1,955	222	15	874	27	250	454
Below Normal (16%)	92	173	1,961	143	14	874	18	262	289
Dry (24%)	49	153	1,993	81	12	874	10	280	162
Critical (15%)	13	130	1,861	22	11	773	3	301	47

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 With Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Sacramento River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L2 (Mar-Feb, TAF)	San Joaquin River Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L2 (Mar-Feb, TAF)	Tulare Lake Hydrologic Region Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	164	1	261	25	12	6
Water Year Types[2]						
Wet (32%)	172	1	268	41	12	9
Above Normal (13%)	172	1	268	33	12	7
Below Normal (16%)	176	1	267	24	12	5
Dry (24%)	164	0	265	14	12	3
Critical (15%)	125	0	229	1	11	0

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

CVP Deliveries - Comparison

Difference: WSIP 2070 With Project minus WSIP 2070 Without Project
1-Central Valley Project (CVP) Allocation
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Allocation (EO May)	SOD Ag Service Allocation (EO May)	M&I Service Allocation (EO May)	SOD M&I Service Allocation (EO May)	Settlement Contract Allocation (EO May)	Exchange Contract Allocation (EO May)	Refuge Level 2 Contract Allocation (EO May)
Long-term							
Full Simulation Period[1]	0%	0%	0%	0%	0%	0%	0%
Water Year Types[2]							
Wet (32%)	1%	1%	1%	1%	0%	0%	0%
Above Normal (13%)	0%	0%	0%	0%	0%	0%	0%
Below Normal (16%)	1%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	-1%	0%	-1%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: WSIP 2070 With Project minus WSIP 2070 Without Project
2-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Ag Service Deliveries (Mar-Feb, TAF)	M&I Service Deliveries (Mar-Feb, TAF)	Total Ag and M&I Service Deliveries (Mar-Feb, TAF)	Total Settlement and Exchange Deliveries (Mar-Feb, TAF)	Total Refuge Level 2 and 4 Supplies (Mar-Feb, TAF)
Long-term					
Full Simulation Period[1]	2	0	2	0	9
Water Year Types[2]					
Wet (32%)	12	2	14	-3	5
Above Normal (13%)	-7	-1	-8	-3	5
Below Normal (16%)	10	-1	10	-5	12
Dry (24%)	-15	-3	-19	-4	14
Critical (15%)	1	2	4	23	13

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

WSIP 2070 Without Project

Difference: WSIP 2070 With Project minus WSIP 2070 Without Project

3-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)

Long-term Average and Average by Water Year Type

Analysis Period	Total Refuge Level 2 Supplies (Mar-Feb, TAF)	Total Refuge Level 4 Sites Supplies (Mar-Feb, TAF)
Long-term		
Full Simulation Period[1]	9	31
Water Year Types[2]		
Wet (32%)	5	51
Above Normal (13%)	5	41
Below Normal (16%)	12	30
Dry (24%)	14	17
Critical (15%)	13	1

period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: WSIP 2070 With Project minus WSIP 2070 Without Project
4-Central Valley Project (CVP) Contract Deliveries
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region			San Joaquin River Hydrologic Region			San Francisco Bay Hydrologic Region		Tulare Lake Hydrologic Region
	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Settlement (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Exchange (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)	M&I Service (Mar-Feb, TAF)	Ag Service (Mar-Feb, TAF)
Long-term									
Full Simulation Period[1]	0	-1	0	1	0	0	0	1	1
Water Year Types[2]									
Wet (32%)	1	1	-4	4	0	0	1	1	7
Above Normal (13%)	-1	-1	-3	-3	0	0	0	1	-4
Below Normal (16%)	2	-1	-5	3	0	1	0	0	5
Dry (24%)	-1	-3	-4	-3	0	0	0	0	-11
Critical (15%)	0	-1	23	0	0	0	0	2	1

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Difference: WSIP 2070 With Project minus WSIP 2070 Without Project
5-Refuge Water Supplies (CVP Contract, Sites and Acquisitions Supplies)
Long-term Average and Average by Water Year Type

Analysis Period	Sacramento River Hydrologic Region		San Joaquin River Hydrologic Region		Tulare Lake Hydrologic Region	
	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)	Refuge L2 (Mar-Feb, TAF)	Refuge L4 - Sites (Mar-Feb, TAF)
Long-term						
Full Simulation Period[1]	8	1	1	25	0	6
Water Year Types[2]						
Wet (32%)	4	1	0	41	0	9
Above Normal (13%)	5	1	0	33	0	7
Below Normal (16%)	11	1	0	24	0	5
Dry (24%)	13	0	0	14	0	3
Critical (15%)	10	0	3	1	0	0

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

Sites Reservoir Benefits

Difference: WSIP 2070 With Project minus WSIP 2070 Without Project

1-Sites Deliveries to Sacramento Valley Members

Long-term Average and Average by Water Year Type

Analysis Period	(Mar-Feb, TAF)
Long-term	
Full Simulation Period[1]	155
Water Year Types[2]	
Wet (32%)	110
Above Normal (13%)	178
Below Normal (16%)	182
Dry (24%)	190
Critical (15%)	143

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Includes Sites delivery to TCCA members, GCID, RD108, County of Colusa, and Western Canal WD

Difference: WSIP 2070 With Project minus WSIP 2070 Without Project

2-Sites Deliveries to South of Delta Members

Long-term Average and Average by Water Year Type

Analysis Period	M&I (Jan-Dec, TAF)	Ag (Jan-Dec, TAF)	Total (Jan-Dec, TAF)
Long-term			
Full Simulation Period[1]	85	26	112
Water Year Types[2]			
Wet (32%)	1	0	1
Above Normal (13%)	22	7	29
Below Normal (16%)	56	17	73
Dry (24%)	226	69	295
Critical (15%)	119	36	155

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Accounts for 18% deduction for carriage water for Delta Export

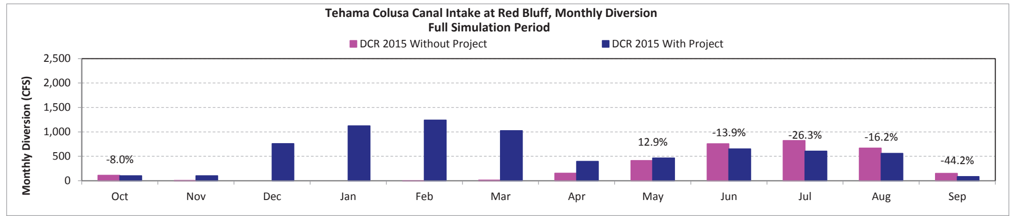
Sites Reservoir Project Operations

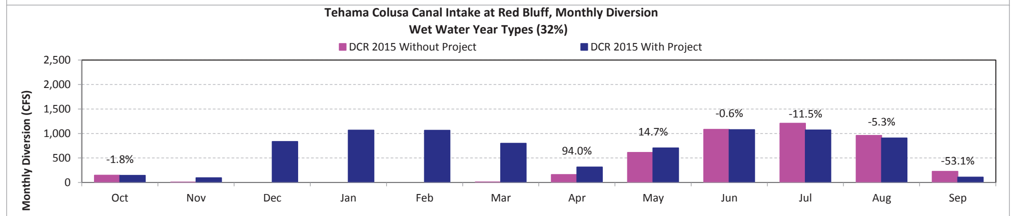
Summary Tables and Bar Charts

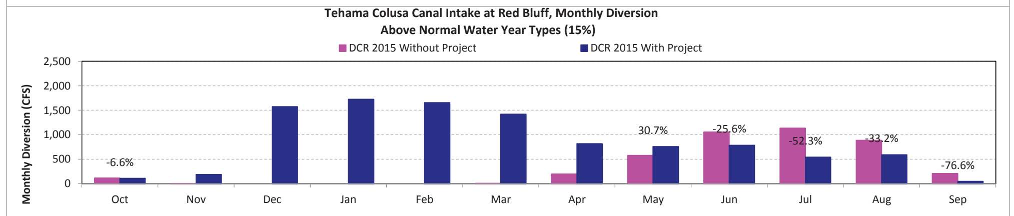
Table OP-01-a
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Long-term Average and Average by Water Year Type

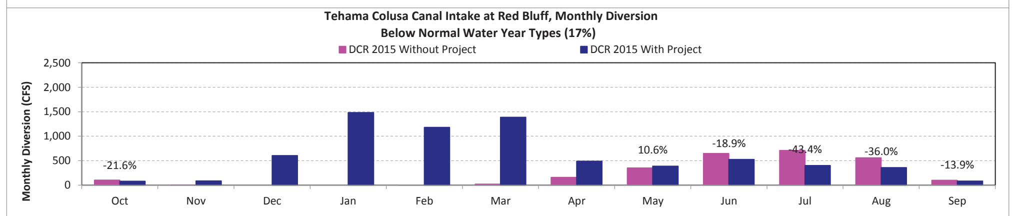
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	112	6	0	0	2	13	153	412	758	821	669	151
DCR 2015 With Project	103	101	759	1,123	1,242	1,027	395	465	652	605	561	84
Difference	-9	95	759	1,123	1,239	1,014	242	53	-105	-216	-108	-67
Percent Difference[3]	-8.0%							12.9%	-13.9%	-26.3%	-16.2%	-44.2%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	146	7	0	0	0	10	162	613	1,083	1,209	959	227
DCR 2015 With Project	143	93	836	1,066	1,065	800	314	703	1,076	1,071	908	107
Difference	-3	86	836	1,066	1,065	790	152	90	-7	-139	-51	-121
Percent Difference	-1.8%						94.0%	14.7%	-0.6%	-11.5%	-5.3%	-53.1%
Above Normal (14.6%)												
DCR 2015 Without Project	116	4	0	0	0	6	196	579	1,055	1,134	885	206
DCR 2015 With Project	108	188	1,573	1,725	1,656	1,420	816	757	785	541	591	48
Difference	-8	184	1,573	1,725	1,656	1,413	619	178	-270	-592	-294	-158
Percent Difference	-6.6%							30.7%	-25.6%	-52.3%	-33.2%	-76.6%
Below Normal (17.1%)												
DCR 2015 Without Project	103	4	0	0	1	23	161	352	648	708	558	99
DCR 2015 With Project	81	87	606	1,483	1,181	1,388	491	390	526	401	357	85
Difference	-22	82	606	1,483	1,180	1,365	331	37	-123	-308	-201	-14
Percent Difference	-21.6%							10.6%	-18.9%	-43.4%	-36.0%	-13.9%
Dry (22%)												
DCR 2015 Without Project	97	6	0	0	4	12	149	233	508	491	400	99
DCR 2015 With Project	84	118	471	883	1,368	1,121	346	185	323	350	326	85
Difference	-12	112	471	883	1,364	1,110	198	-48	-185	-141	-74	-14
Percent Difference	-12.9%						133.0%	-20.6%	-36.3%	-28.8%	-18.5%	-14.2%
Critical (14.6%)												
DCR 2015 Without Project	66	11	0	0	6	16	89	148	258	296	359	71
DCR 2015 With Project	63	23	388	584	1,091	565	112	165	243	283	369	71
Difference	-3	12	388	584	1,084	548	23	17	-15	-13	10	0
Percent Difference	-4.4%						25.4%	11.3%	-6.0%	-4.5%	2.7%	0.2%

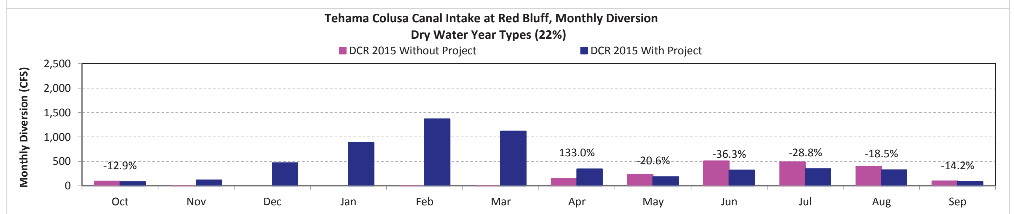
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











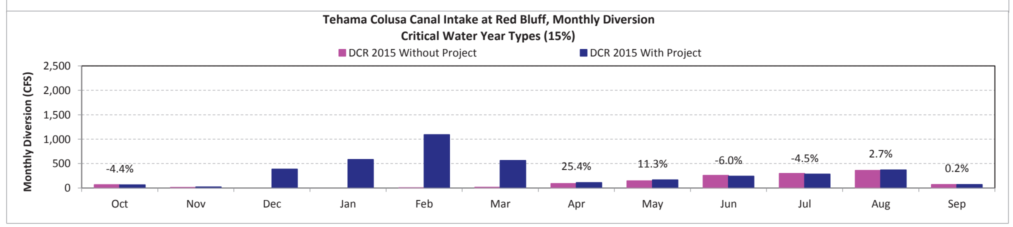


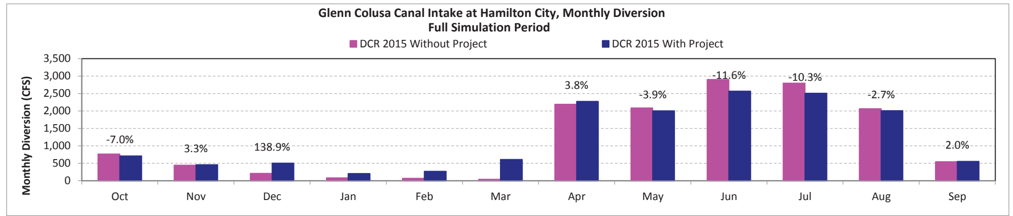
Table OP-02-a
Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Long-term Average and Average by Water Year Type

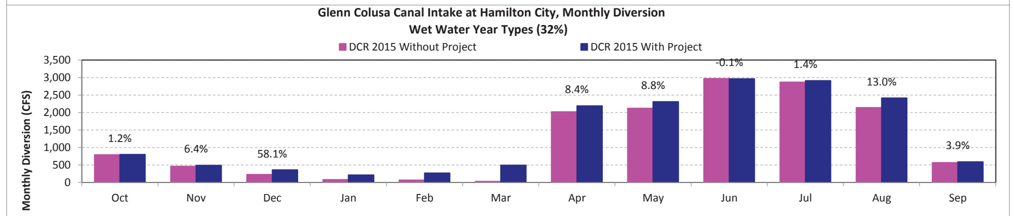
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	767	446	211	83	68	40	2,190	2,085	2,903	2,798	2,066	545
DCR 2015 With Project	713	461	504	207	271	612	2,274	2,004	2,567	2,509	2,010	556
Difference	-54	15	293	123	204	572	84	-81	-336	-288	-56	11
Percent Difference[3]	-7.0%	3.3%	138.9%				3.8%	-3.9%	-11.6%	-10.3%	-2.7%	2.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	793	461	228	80	67	31	2,022	2,122	2,969	2,870	2,139	569
DCR 2015 With Project	802	490	361	216	270	496	2,193	2,308	2,965	2,911	2,417	591
Difference	9	29	133	135	202	465	170	186	-4	41	278	22
Percent Difference	1.2%	6.4%	58.1%				8.4%	8.8%	-0.1%	1.4%	13.0%	3.9%
Above Normal (14.6%)												
DCR 2015 Without Project	779	453	207	73	65	26	2,160	2,078	2,984	2,868	2,146	573
DCR 2015 With Project	862	536	824	296	352	899	2,561	2,345	2,640	2,577	2,140	568
Difference	83	83	617	223	287	873	401	268	-344	-291	-7	-5
Percent Difference	10.7%	18.3%					18.6%	12.9%	-11.5%	-10.1%	-0.3%	-0.8%
Below Normal (17.1%)												
DCR 2015 Without Project	780	461	201	89	68	45	2,302	2,182	2,952	2,874	2,152	564
DCR 2015 With Project	649	430	612	231	286	734	2,669	2,168	2,404	2,429	1,798	544
Difference	-131	-31	411	142	218	689	367	-14	-548	-445	-354	-20
Percent Difference	-16.8%	-6.7%					15.9%	-0.7%	-18.6%	-15.5%	-16.5%	-3.6%
Dry (22%)												
DCR 2015 Without Project	784	430	223	86	69	43	2,317	2,145	2,958	2,859	2,103	539
DCR 2015 With Project	625	450	543	147	273	698	2,250	1,721	2,347	2,363	1,973	587
Difference	-159	19	320	61	204	655	-66	-424	-611	-495	-130	48
Percent Difference	-20.3%	4.5%	143.3%				-2.9%	-19.8%	-20.7%	-17.3%	-6.2%	9.0%
Critical (14.6%)												
DCR 2015 Without Project	660	415	170	89	68	64	2,264	1,811	2,541	2,392	1,672	455
DCR 2015 With Project	580	377	307	160	174	305	1,741	1,239	2,153	1,886	1,302	438
Difference	-80	-38	137	71	106	241	-524	-571	-388	-506	-370	-17
Percent Difference	-12.1%	-9.1%	80.6%				-23.1%	-31.6%	-15.3%	-21.2%	-22.1%	-3.8%

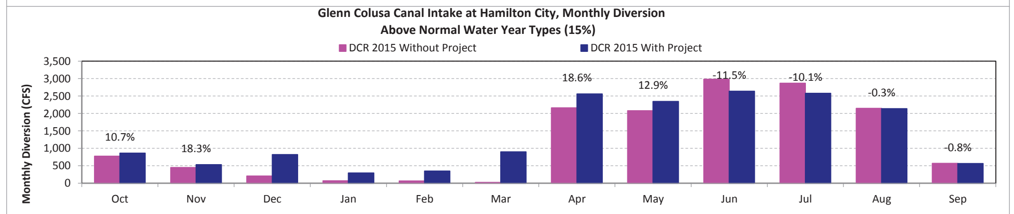
1 Based on the 82-year simulation period

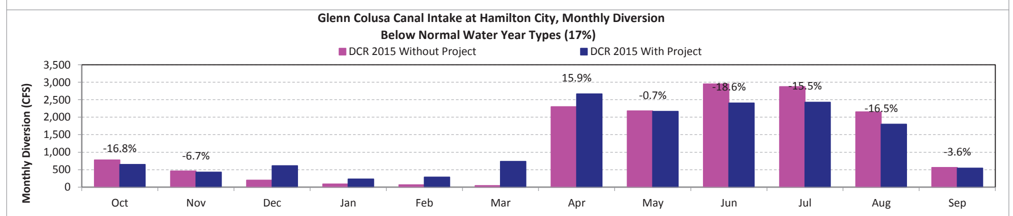
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

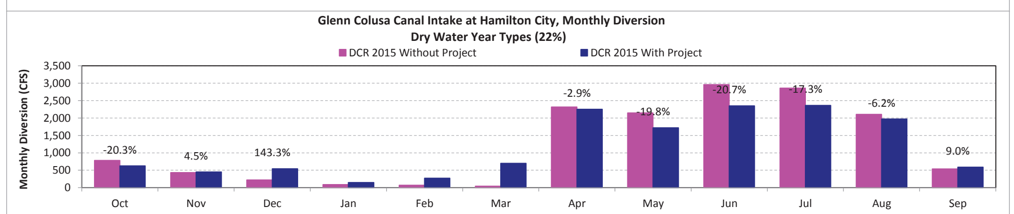
3 Relative difference of the monthly average











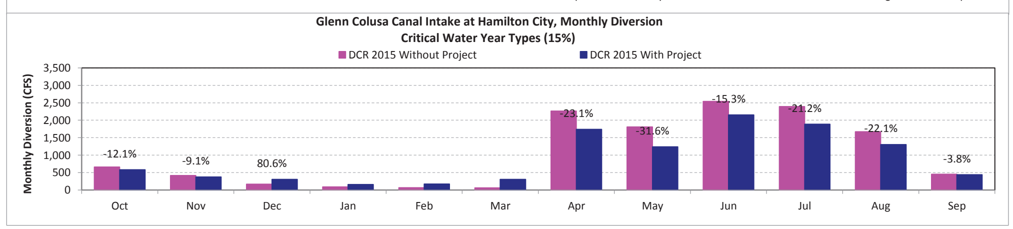


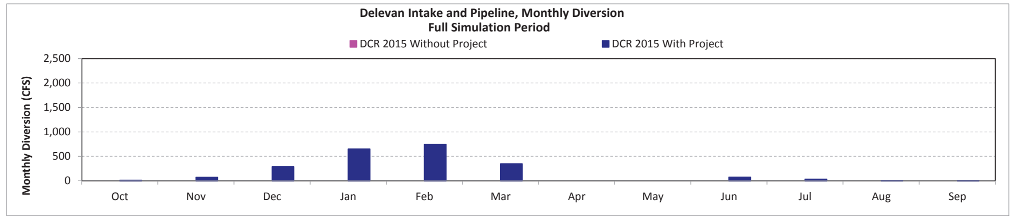
Table OP-03-a
Delevan Intake and Pipeline, Monthly Diversion
Long-term Average and Average by Water Year Type

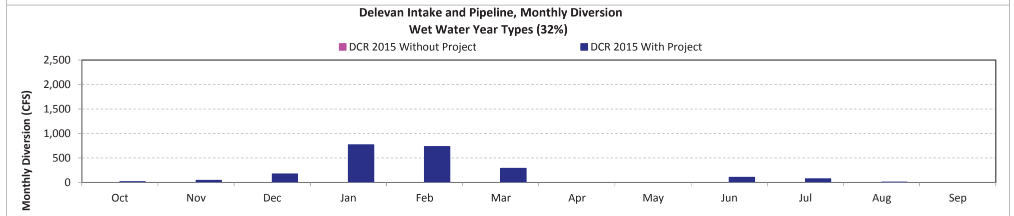
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	11	72	289	651	744	346	0	0	74	32	5	2
Difference	11	72	289	651	744	346	0	0	74	32	5	2
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	15	42	175	770	732	288	0	0	103	75	7	0
Difference	15	42	175	770	732	288	0	0	103	75	7	0
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	31	301	723	1,044	1,160	623	0	0	180	0	16	0
Difference	31	301	723	1,044	1,160	623	0	0	180	0	16	0
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	0	14	432	777	652	332	0	0	81	0	0	0
Difference	0	14	432	777	652	332	0	0	81	0	0	0
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	10	44	145	346	790	310	0	0	0	22	0	11
Difference	10	44	145	346	790	310	0	0	0	22	0	11
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	0	17	156	312	392	267	0	0	10	25	0	0
Difference	0	17	156	312	392	267	0	0	10	25	0	0
Percent Difference												

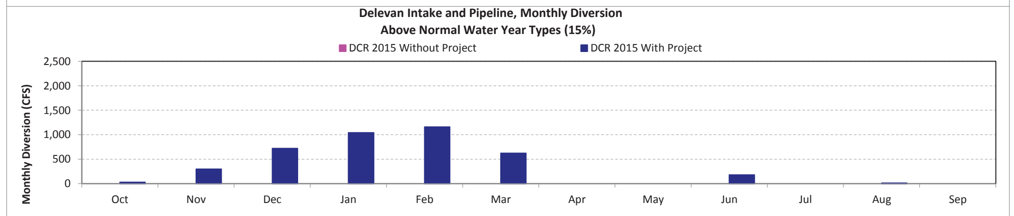
1 Based on the 82-year simulation period

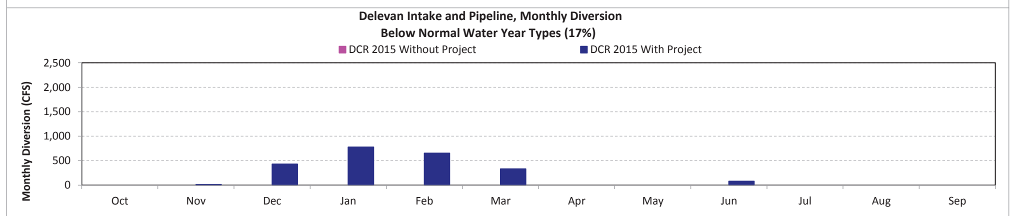
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

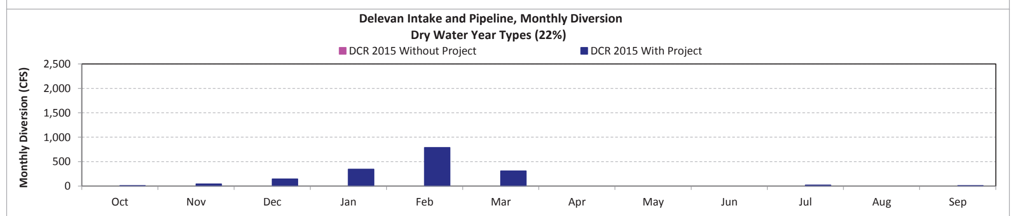
3 Relative difference of the monthly average











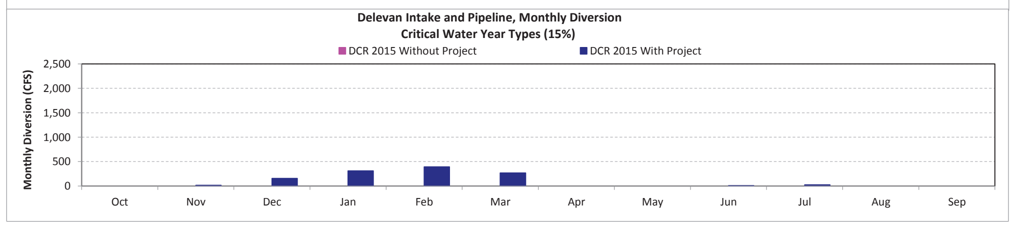
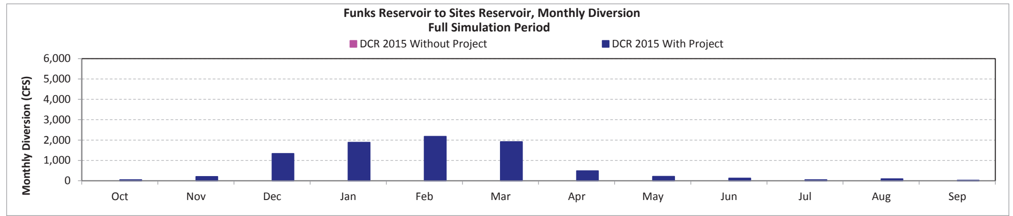
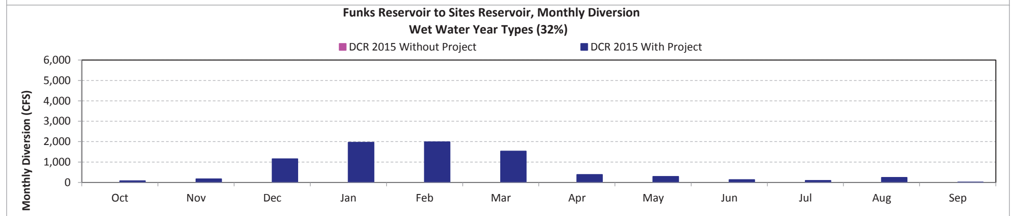


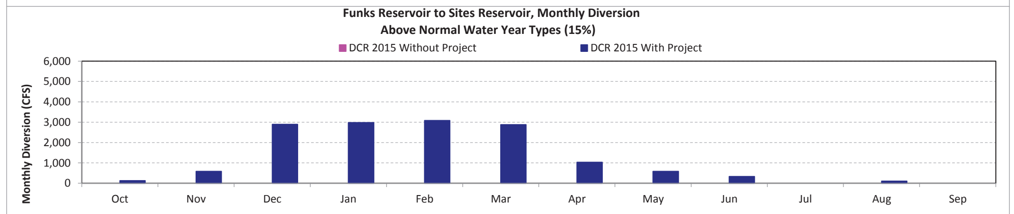
Table OP-04-a
Funks Reservoir to Sites Reservoir, Monthly Diversion
Long-term Average and Average by Water Year Type

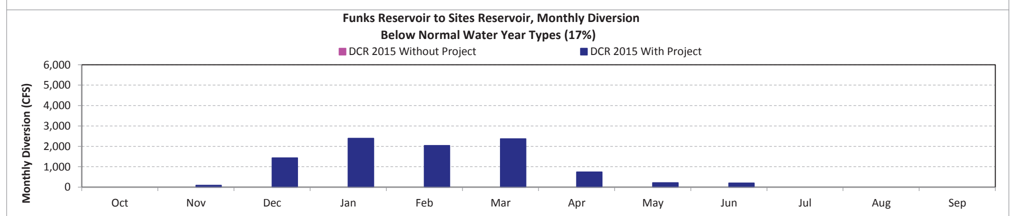
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	47	208	1,339	1,891	2,179	1,916	491	215	129	46	98	24
Difference	47	208	1,339	1,891	2,179	1,916	491	215	129	46	98	24
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	80	172	1,155	1,962	1,987	1,529	388	288	137	96	244	13
Difference	80	172	1,155	1,962	1,987	1,529	388	288	137	96	244	13
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	133	581	2,894	2,980	3,088	2,882	1,032	589	333	0	107	0
Difference	133	581	2,894	2,980	3,088	2,882	1,032	589	333	0	107	0
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	0	89	1,435	2,392	2,037	2,368	745	219	201	0	0	0
Difference	0	89	1,435	2,392	2,037	2,368	745	219	201	0	0	0
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	10	223	925	1,289	2,350	2,055	402	0	0	50	21	81
Difference	10	223	925	1,289	2,350	2,055	402	0	0	50	21	81
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	0	28	689	965	1,594	1,052	10	0	19	32	2	12
Difference	0	28	689	965	1,594	1,052	10	0	19	32	2	12
Percent Difference												

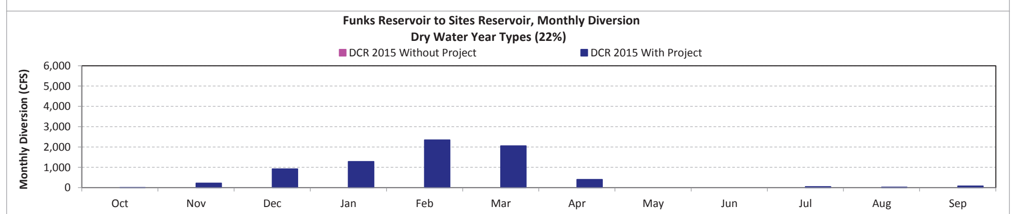
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











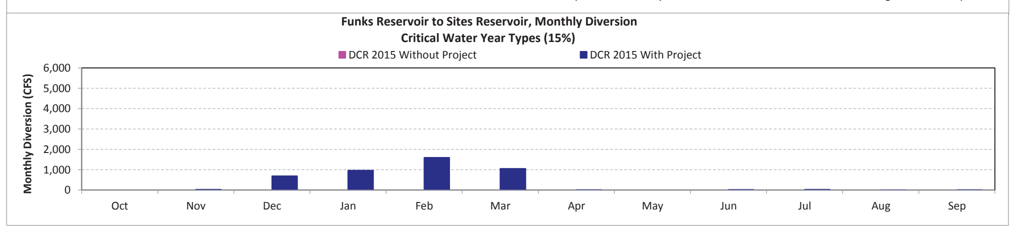


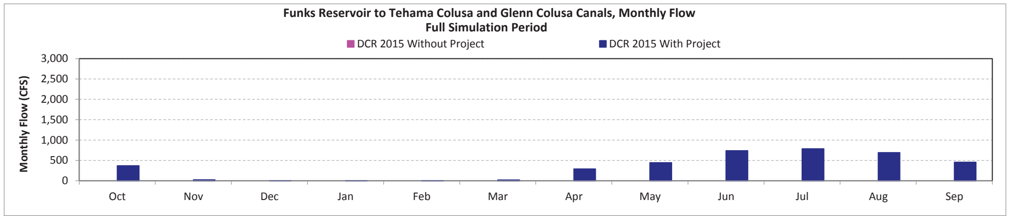
Table OP-05-a
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Long-term Average and Average by Water Year Type

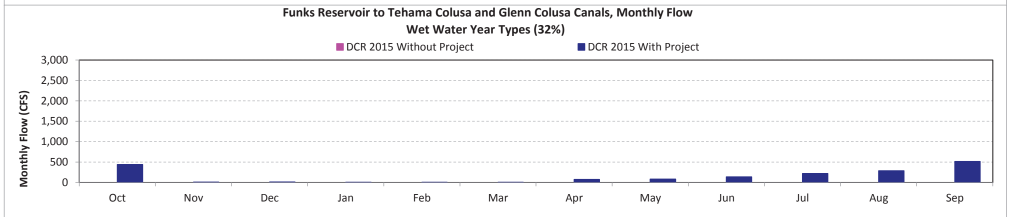
Analysis Period	Monthly Flow (CFS) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	369	24	6	0	2	20	291	447	741	785	692	456
Difference	369	24	6	0	2	20	291	447	741	785	692	456
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	438	9	13	1	0	3	76	83	136	219	286	513
Difference	438	9	13	1	0	3	76	83	136	219	286	513
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	350	18	0	0	0	4	85	243	858	1,019	877	644
Difference	350	18	0	0	0	4	85	243	858	1,019	877	644
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	415	18	0	0	5	17	155	444	1,085	1,081	1,118	463
Difference	415	18	0	0	5	17	155	444	1,085	1,081	1,118	463
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	392	44	0	0	1	19	451	775	1,216	1,126	820	408
Difference	392	44	0	0	1	19	451	775	1,216	1,126	820	408
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	150	38	12	0	6	77	881	949	821	918	701	208
Difference	150	38	12	0	6	77	881	949	821	918	701	208
Percent Difference												

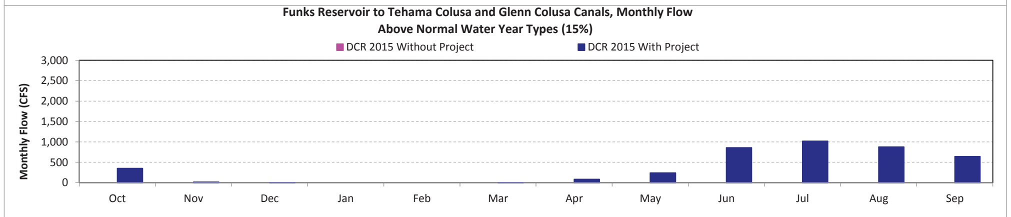
1 Based on the 82-year simulation period

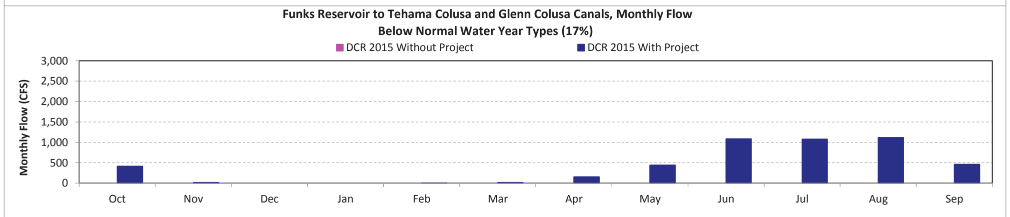
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

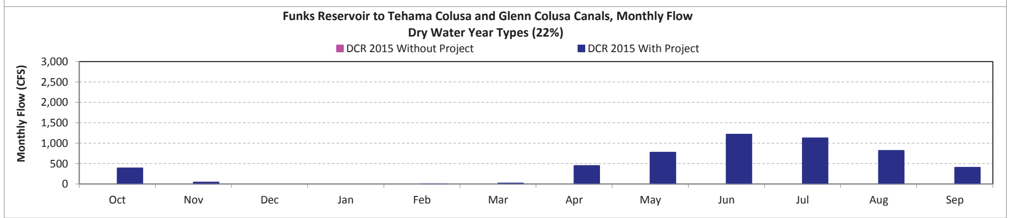
3 Relative difference of the monthly average











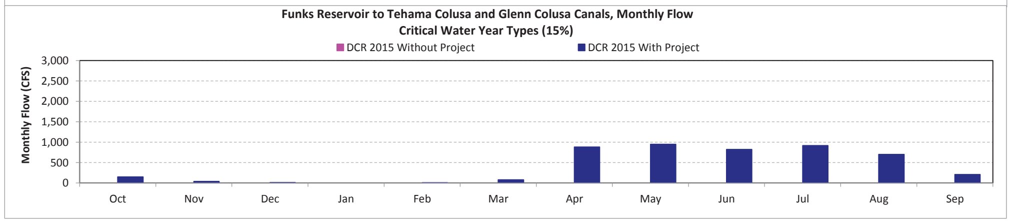


Table OP-06-a
Funks Reservoir to Deleven Pipeline, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	435	232	47	10	18	52	33	90	897	860	575	613
Difference	435	232	47	10	18	52	33	90	897	860	575	613
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	183	190	45	33	17	23	0	0	290	359	34	441
Difference	183	190	45	33	17	23	0	0	290	359	34	441
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	114	125	12	0	0	12	0	0	883	822	395	760
Difference	114	125	12	0	0	12	0	0	883	822	395	760
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	510	129	0	0	38	0	0	0	1,337	1,393	1,018	607
Difference	510	129	0	0	38	0	0	0	1,337	1,393	1,018	607
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	867	377	112	0	0	0	16	22	1,486	1,333	1,015	807
Difference	867	377	112	0	0	0	16	22	1,486	1,333	1,015	807
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	565	332	43	0	40	294	202	578	830	652	752	552
Difference	565	332	43	0	40	294	202	578	830	652	752	552
Percent Difference												

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

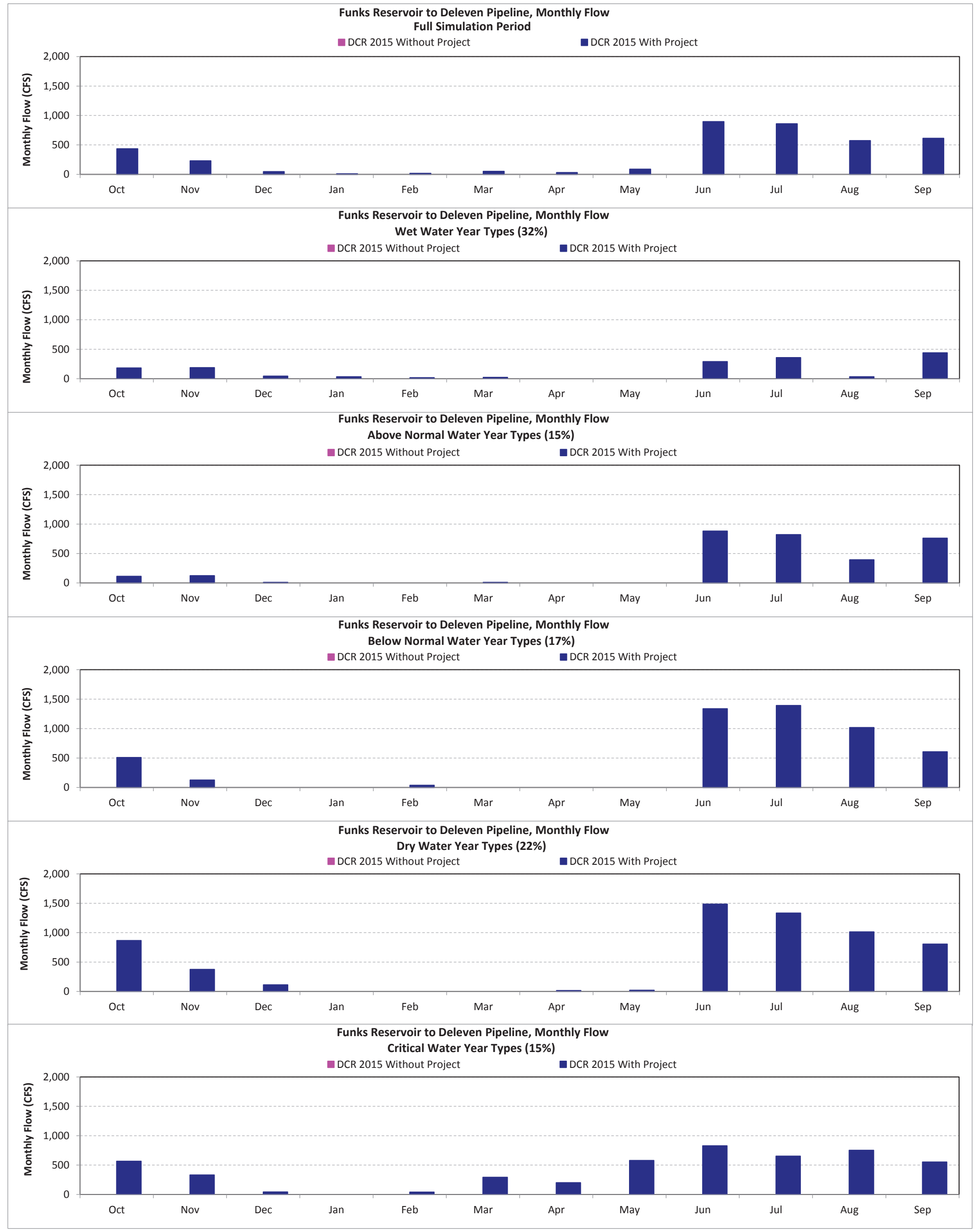


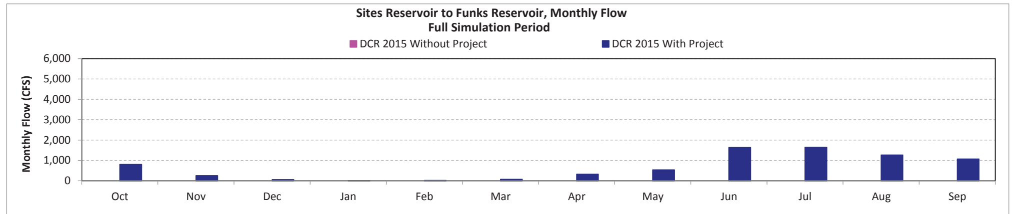
Table OP-07-a
Sites Reservoir to Funks Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

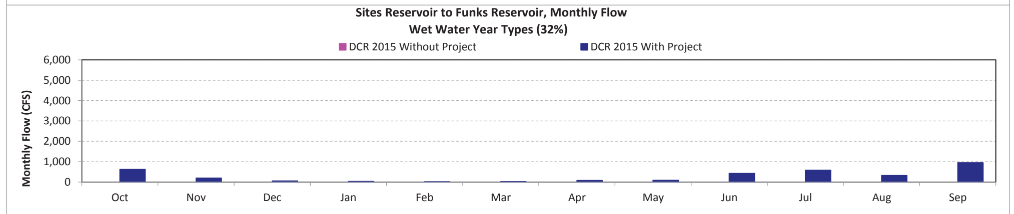
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	804	255	53	11	20	72	324	536	1,638	1,645	1,268	1,069
Difference	804	255	53	11	20	72	324	536	1,638	1,645	1,268	1,069
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	621	199	58	34	18	26	76	83	427	578	320	954
Difference	621	199	58	34	18	26	76	83	427	578	320	954
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	464	143	12	0	0	16	85	243	1,741	1,842	1,272	1,404
Difference	464	143	12	0	0	16	85	243	1,741	1,842	1,272	1,404
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	926	147	0	0	42	17	155	444	2,422	2,474	2,136	1,070
Difference	926	147	0	0	42	17	155	444	2,422	2,474	2,136	1,070
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	1,259	420	112	0	1	19	466	797	2,702	2,459	1,835	1,215
Difference	1,259	420	112	0	1	19	466	797	2,702	2,459	1,835	1,215
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	716	369	55	0	46	371	1,082	1,528	1,651	1,570	1,452	761
Difference	716	369	55	0	46	371	1,082	1,528	1,651	1,570	1,452	761
Percent Difference												

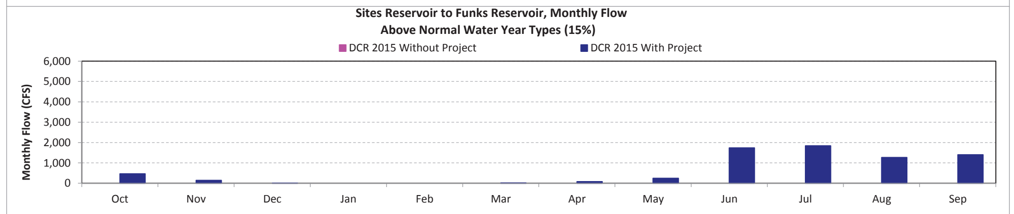
1 Based on the 82-year simulation period

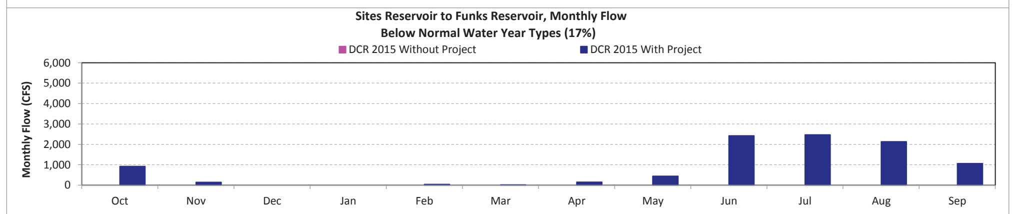
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

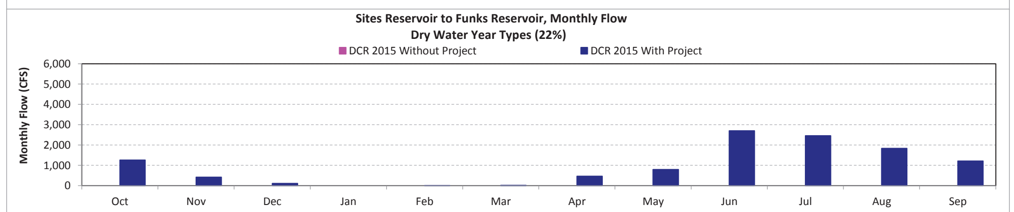
3 Relative difference of the monthly average











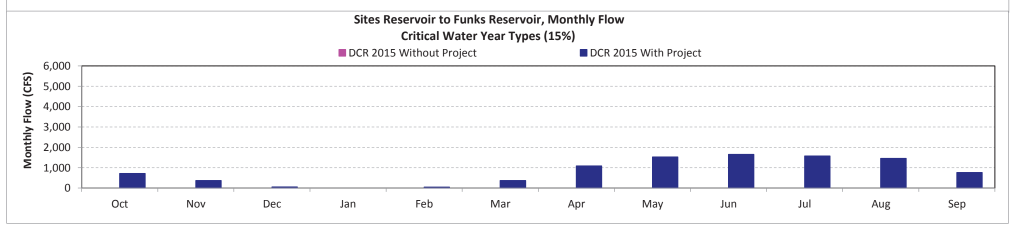


Table OP-09-a
Sites Reservoir, End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	1,043	1,041	1,122	1,240	1,363	1,476	1,475	1,449	1,351	1,243	1,164	1,096
Difference	1,043	1,041	1,122	1,240	1,363	1,476	1,475	1,449	1,351	1,243	1,164	1,096
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	1,614	1,613	1,683	1,572	1,684	1,777	1,787	1,793	1,767	1,727	1,713	1,650
Difference	1,614	1,613	1,683	1,572	1,684	1,777	1,787	1,793	1,767	1,727	1,713	1,650
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	1,220	1,246	1,427	1,252	1,429	1,605	1,640	1,655	1,563	1,439	1,359	1,269
Difference	1,220	1,246	1,427	1,252	1,429	1,605	1,640	1,655	1,563	1,439	1,359	1,269
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	848	845	936	1,149	1,262	1,405	1,436	1,416	1,276	1,114	976	907
Difference	848	845	936	1,149	1,262	1,405	1,436	1,416	1,276	1,114	976	907
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	710	699	751	1,120	1,252	1,377	1,361	1,306	1,137	980	861	789
Difference	710	699	751	1,120	1,252	1,377	1,361	1,306	1,137	980	861	789
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	356	336	376	796	884	924	847	748	646	544	450	402
Difference	356	336	376	796	884	924	847	748	646	544	450	402
Percent Difference												

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

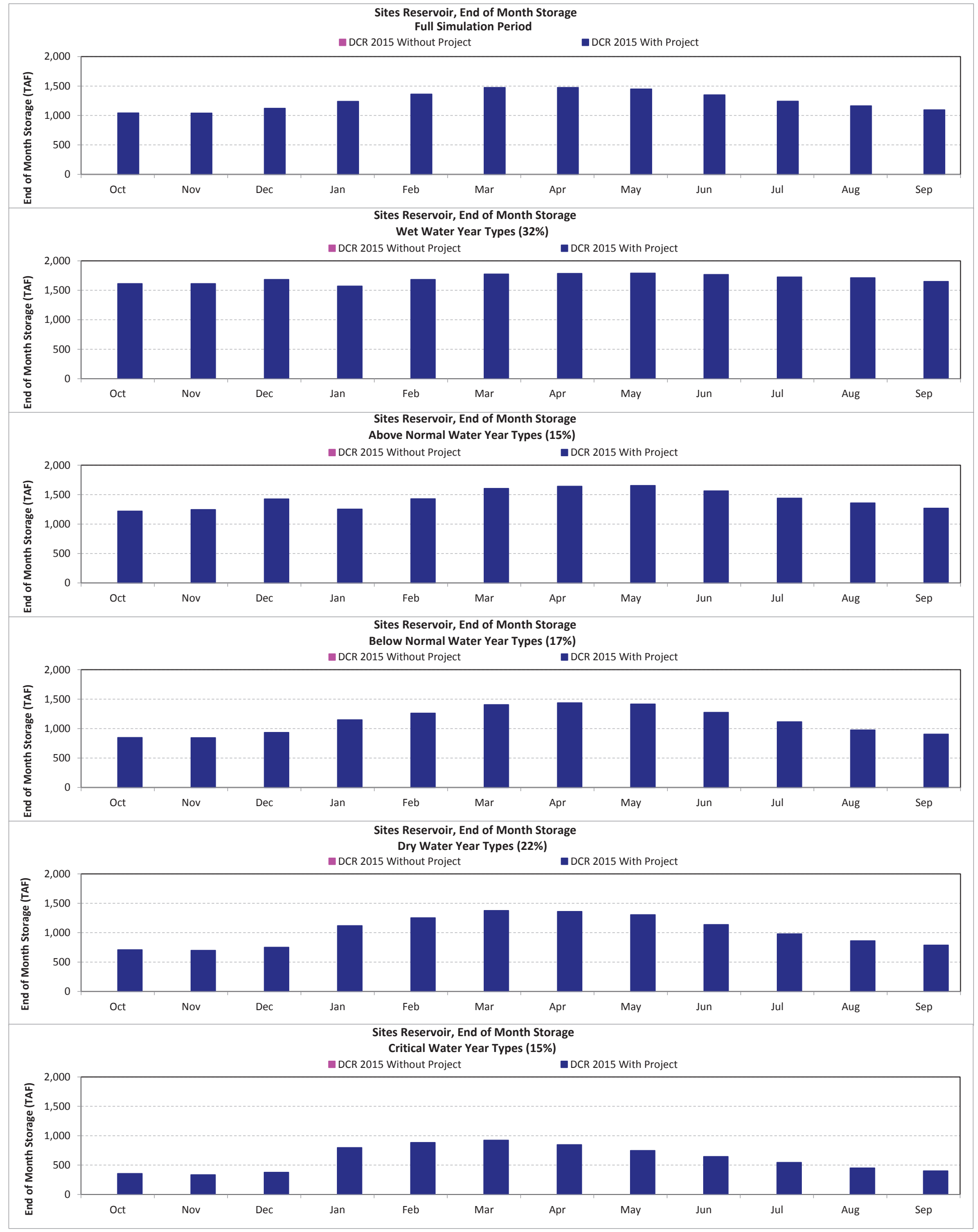


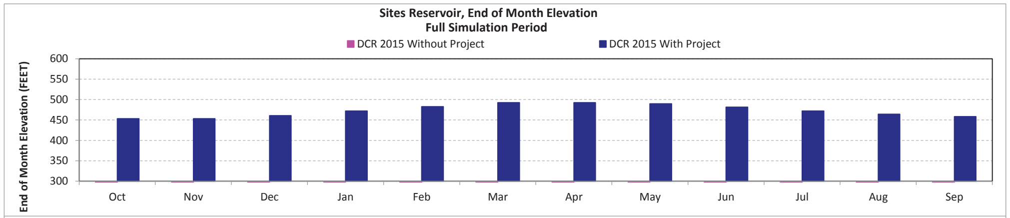
Table OP-10-a
Sites Reservoir, End of Month Elevation
Long-term Average and Average by Water Year Type

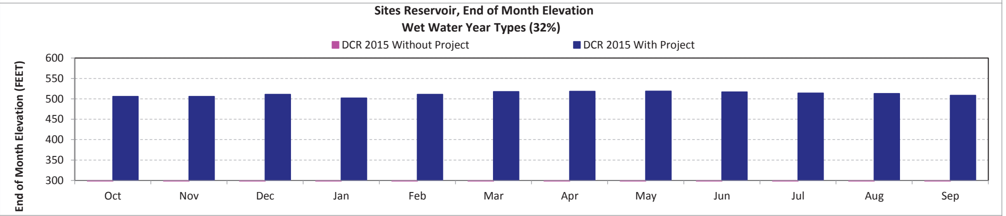
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	453	453	461	472	483	493	493	490	482	472	464	458
Difference	453	453	461	472	483	493	493	490	482	472	464	458
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	506	506	511	502	511	518	518	519	517	514	513	508
Difference	506	506	511	502	511	518	518	519	517	514	513	508
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	475	477	491	474	489	504	507	509	502	492	486	479
Difference	475	477	491	474	489	504	507	509	502	492	486	479
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	440	440	449	464	474	488	491	490	478	465	452	446
Difference	440	440	449	464	474	488	491	490	478	465	452	446
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	425	424	429	462	474	485	484	480	465	451	440	433
Difference	425	424	429	462	474	485	484	480	465	451	440	433
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	377	375	383	430	439	444	436	425	413	400	389	383
Difference	377	375	383	430	439	444	436	425	413	400	389	383
Percent Difference												

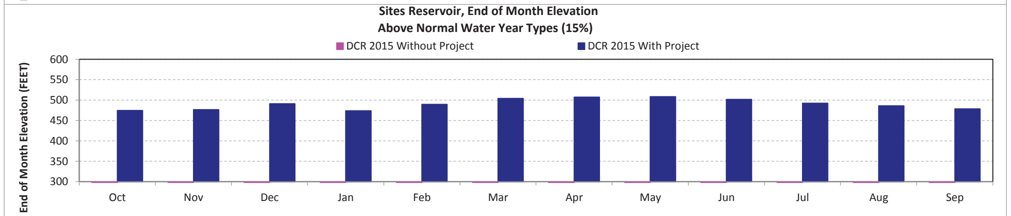
1 Based on the 82-year simulation period

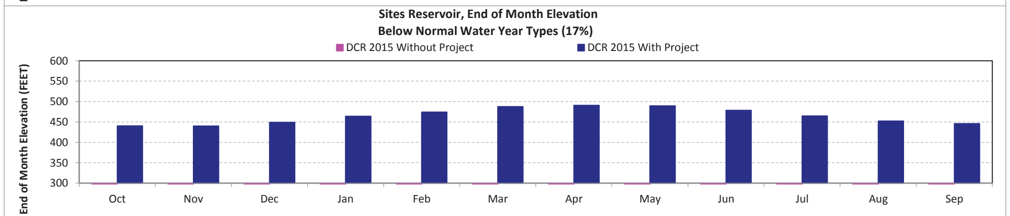
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

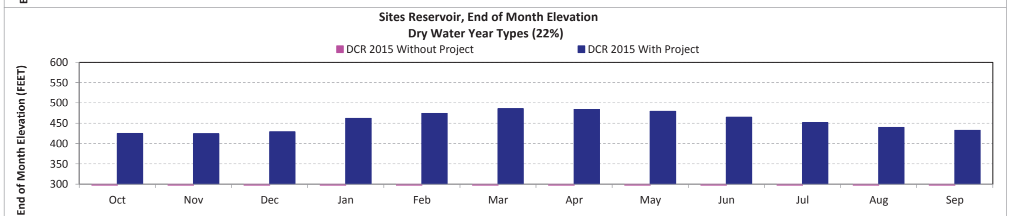
3 Relative difference of the monthly average











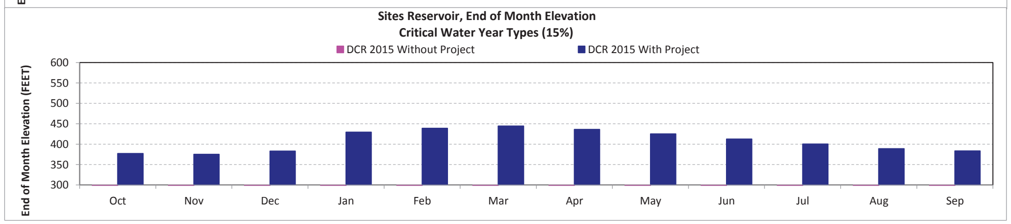


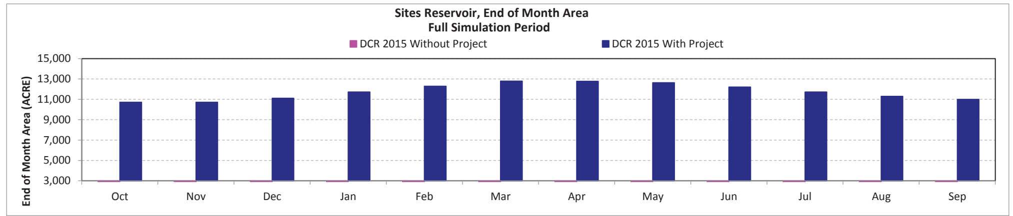
Table OP-11-a
Sites Reservoir, End of Month Area
Long-term Average and Average by Water Year Type

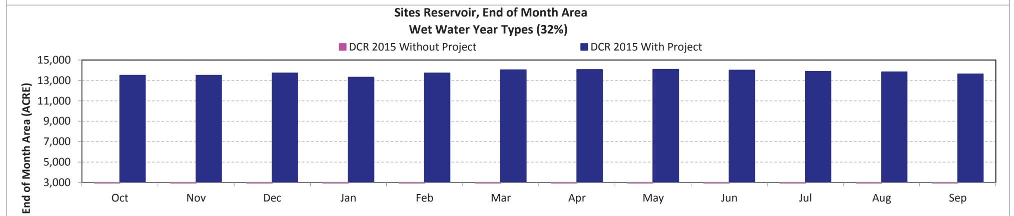
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	10,725	10,713	11,112	11,727	12,291	12,800	12,786	12,641	12,213	11,723	11,306	11,001
Difference	10,725	10,713	11,112	11,727	12,291	12,800	12,786	12,641	12,213	11,723	11,306	11,001
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	13,500	13,498	13,723	13,307	13,717	14,030	14,063	14,083	14,001	13,871	13,825	13,620
Difference	13,500	13,498	13,723	13,307	13,717	14,030	14,063	14,083	14,001	13,871	13,825	13,620
Percent Difference												
Above Normal (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	12,044	12,140	12,821	11,844	12,653	13,395	13,544	13,613	13,312	12,884	12,582	12,238
Difference	12,044	12,140	12,821	11,844	12,653	13,395	13,544	13,613	13,312	12,884	12,582	12,238
Percent Difference												
Below Normal (17.1%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	10,204	10,199	10,694	11,312	11,840	12,572	12,766	12,716	12,189	11,508	10,847	10,498
Difference	10,204	10,199	10,694	11,312	11,840	12,572	12,766	12,716	12,189	11,508	10,847	10,498
Percent Difference												
Dry (22%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	9,237	9,209	9,495	11,240	11,909	12,468	12,425	12,178	11,451	10,717	10,067	9,693
Difference	9,237	9,209	9,495	11,240	11,909	12,468	12,425	12,178	11,451	10,717	10,067	9,693
Percent Difference												
Critical (14.6%)												
DCR 2015 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
DCR 2015 With Project	6,232	6,111	6,660	9,403	9,939	10,304	9,827	9,153	8,410	7,667	6,963	6,641
Difference	6,232	6,111	6,660	9,403	9,939	10,304	9,827	9,153	8,410	7,667	6,963	6,641
Percent Difference												

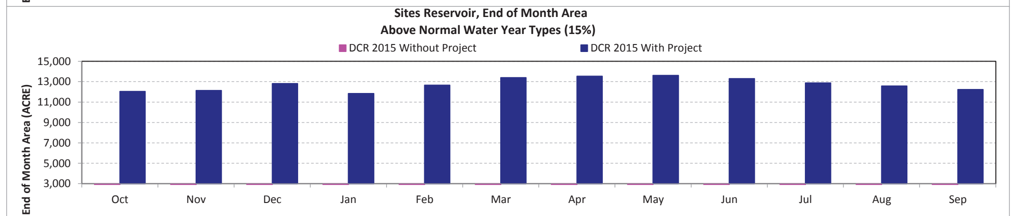
1 Based on the 82-year simulation period

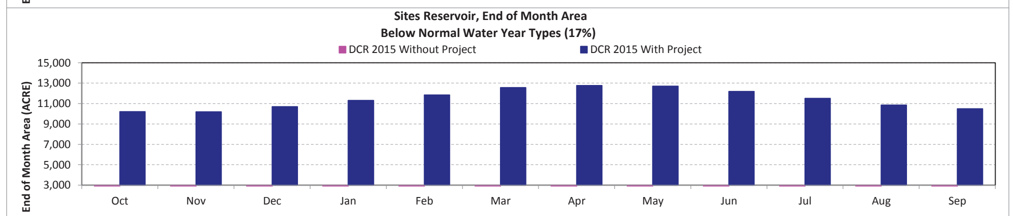
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

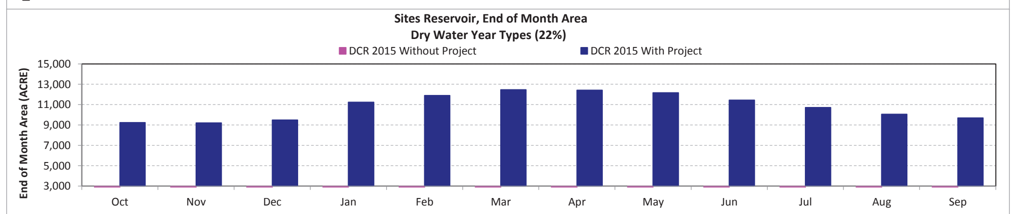
3 Relative difference of the monthly average

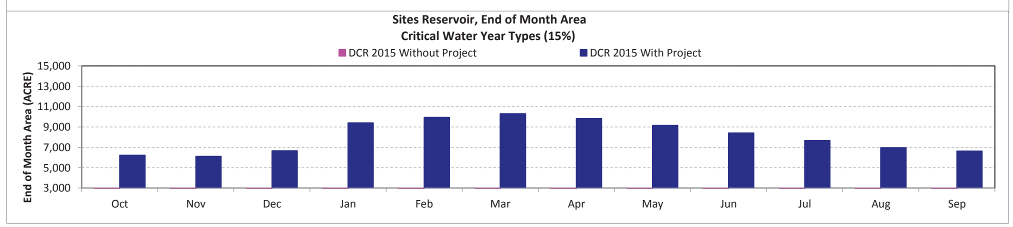












Sites Reservoir Project Operations

Exceedance Probability Charts and Tables

Figure OP-01-b
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Probability of Exceedance

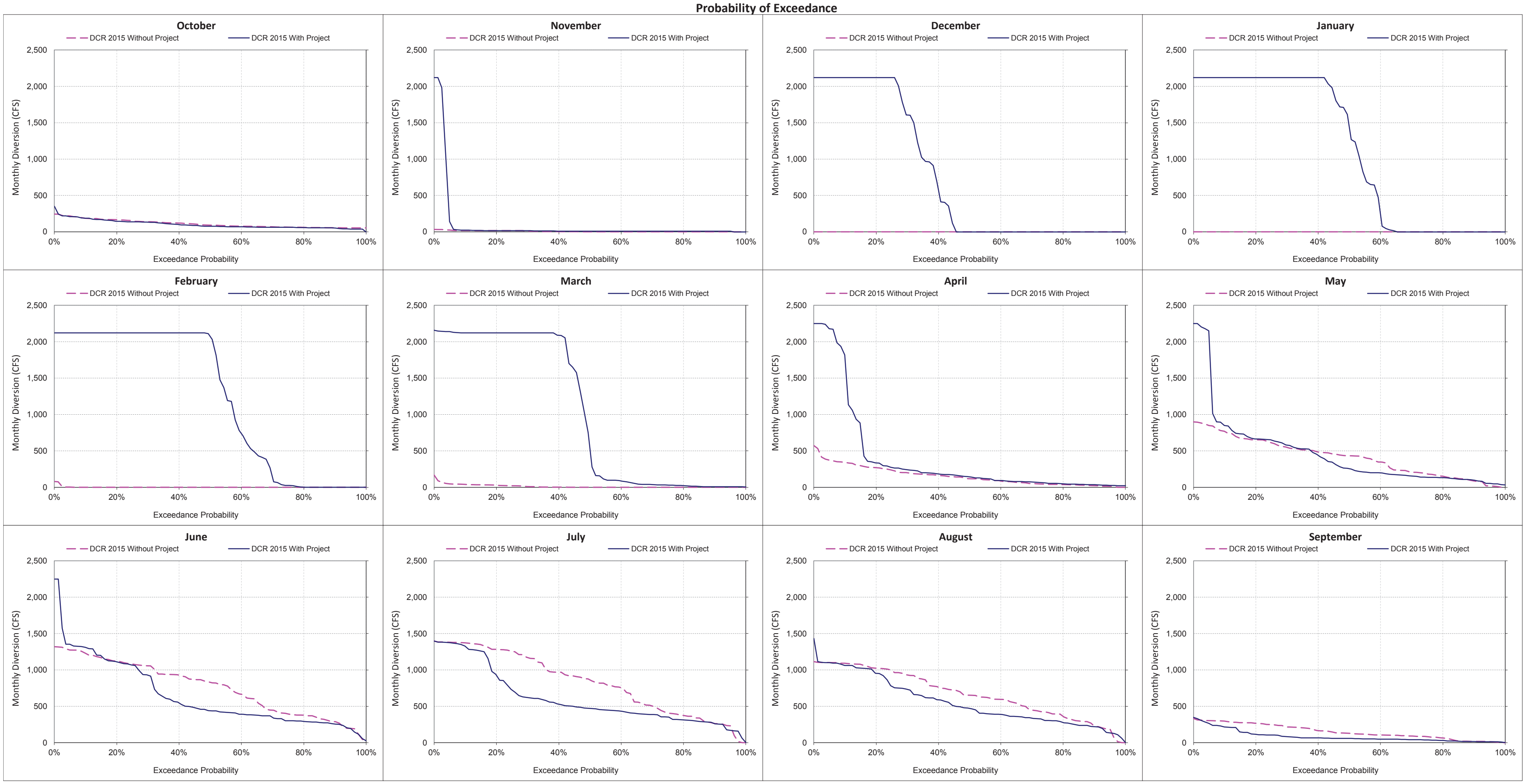


Table OP-01-b

Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	244	352	108	44.2%
1.2%	243	243	0	0.0%
2.5%	225	220	-5	-2.2%
3.7%	220	218	-2	-0.9%
4.9%	218	208	-10	-4.4%
6.2%	208	208	0	0.0%
7.4%	207	207	0	0.0%
8.6%	196	191	-5	-2.7%
9.9%	187	186	0	-0.2%
11.1%	184	186	2	1.0%
12.3%	182	173	-10	-5.2%
13.6%	182	171	-11	-6.2%
14.8%	172	168	-4	-2.5%
16.0%	170	164	-7	-4.0%
17.3%	169	158	-11	-6.2%
18.5%	169	154	-15	-8.7%
19.8%	167	146	-21	-12.6%
21.0%	163	144	-19	-11.7%
22.2%	161	141	-21	-12.9%
23.5%	158	138	-20	-12.5%
24.7%	155	138	-17	-11.0%
25.9%	144	136	-8	-5.3%
27.2%	143	136	-7	-4.8%
28.4%	140	132	-7	-5.1%
29.6%	139	132	-7	-5.0%
30.9%	139	129	-10	-6.9%
32.1%	136	129	-7	-5.4%
33.3%	133	123	-10	-7.5%
34.6%	129	121	-8	-6.2%
35.8%	125	114	-11	-8.6%
37.0%	124	109	-15	-12.4%
38.3%	124	104	-19	-15.6%
39.5%	121	102	-19	-15.6%
40.7%	120	94	-27	-22.2%
42.0%	114	93	-21	-18.3%
43.2%	113	90	-24	-20.9%
44.4%	108	88	-21	-19.2%
45.7%	104	86	-19	-17.8%
46.9%	97	81	-16	-16.4%
48.1%	94	78	-16	-17.1%
49.4%	93	76	-17	-18.5%
50.6%	92	76	-16	-17.4%
51.9%	91	76	-16	-17.4%
53.1%	88	75	-13	-14.7%
54.3%	86	74	-11	-13.3%
55.6%	81	71	-10	-12.0%
56.8%	81	70	-11	-13.3%
58.0%	79	70	-9	-11.5%
59.3%	78	70	-8	-10.3%
60.5%	76	69	-8	-10.1%
61.7%	76	67	-10	-12.5%
63.0%	76	66	-10	-13.2%
64.2%	74	65	-9	-12.6%
65.4%	73	64	-9	-12.5%
66.7%	72	63	-9	-11.9%
67.9%	71	63	-8	-11.5%
69.1%	70	63	-7	-10.5%
70.4%	68	63	-5	-7.6%
71.6%	65	62	-3	-4.6%
72.8%	65	62	-4	-5.9%
74.1%	65	61	-4	-5.8%
75.3%	64	61	-3	-5.1%
76.5%	63	61	-3	-4.0%
77.8%	63	61	-3	-4.4%
79.0%	63	59	-4	-6.9%
80.2%	61	59	-2	-3.1%
81.5%	61	56	-4	-6.9%
82.7%	59	56	-3	-4.6%
84.0%	59	55	-3	-5.8%
85.2%	59	55	-3	-5.9%
86.4%	58	54	-4	-6.2%
87.7%	56	54	-2	-3.9%
88.9%	56	54	-2	-3.8%
90.1%	56	53	-3	-5.9%
91.4%	56	46	-10	-18.1%
92.6%	55	42	-14	-24.5%
93.8%	54	40	-14	-25.8%
95.1%	54	39	-15	-28.0%
96.3%	54	38	-16	-29.2%
97.5%	54	38	-16	-29.4%
98.8%	54	36	-18	-33.3%
100.0%	54	0	-54	-100.0%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33	2,121	2,088	
1.2%	32	2,121	2,089	
2.5%	31	1,982	1,951	
3.7%	26	1,059	1,033	
4.9%	25	140	116	470.1%
6.2%	19	33	14	72.8%
7.4%	19	26	7	39.3%
8.6%	18	24	6	33.8%
9.9%	18	23	6	31.5%
11.1%	18	23	5	30.3%
12.3%	18	18	1	4.9%
13.6%	17	18	1	7.5%
14.8%	17	18	1	6.2%
16.0%	17	18	1	4.5%
17.3%	17	18	1	3.6%
18.5%	17	17	0	0.0%
19.8%	17	17	0	0.0%
21.0%	17	17	0	0.0%
22.2%	17	17	0	0.0%
23.5%	17	17	0	0.0%
24.7%	17	17	0	0.0%
25.9%	17	17	0	0.0%
27.2%	17	17	0	0.0%
28.4%	17	17	0	-0.2%
29.6%	9	17	8	94.7%
30.9%	8	15	7	80.4%
32.1%	7	12	5	76.8%
33.3%	6	12	6	88.0%
34.6%	4	12	8	217.5%
35.8%	4	11	8	217.0%
37.0%	3	11	8	278.7%
38.3%	3	11	8	296.9%
39.5%	3	11	8	321.2%
40.7%	2	11	8	367.2%
42.0%	2	10	8	433.9%
43.2%	2	10	8	436.3%
44.4%	1	10	9	646.1%
45.7%	1	10	9	734.2%
46.9%	0	10	9	
48.1%	0	9	9	
49.4%	0	8	8	
50.6%	0	8	8	
51.9%	0	8	8	
53.1%	0	8	8	
54.3%	0	8	8	
55.6%	0	8	8	
56.8%	0	8	8	
58.0%	0	8	8	
59.3%	0	8	8	
60.5%	0	8	8	
61.7%	0	8	8	
63.0%	0	8	8	
64.2%	0	8	8	
65.4%	0	8	8	
66.7%	0	8	8	
67.9%	0	8	8	
69.1%	0	8	8	
70.4%	0	8	8	
71.6%	0	8	8	
72.8%	0	8	8	
74.1%	0	8	8	
75.3%	0	8	8	
76.5%	0	8	8	
77.8%	0	8	8	
79.0%	0	8	8	
80.2%	0	8	8	
81.5%	0	8	8	
82.7%	0	8	8	
84.0%	0	8	8	
85.2%	0	8	8	
86.4%	0	8	8	
87.7%	0	8	8	
88.9%	0	8	8	
90.1%	0	8	8	
91.4%	0	8	8	
92.6%	0	8	8	
93.8%	0	8	8	
95.1%	0	8	8	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,121	2,121	
1.2%	0	2,121	2,121	
2.5%	0	2,121	2,121	
3.7%	0	2,121	2,121	
4.9%	0	2,121	2,121	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,008	2,008	
28.4%	0	1,781	1,781	
29.6%	0	1,608	1,608	
30.9%	0	1,602	1,602	
32.1%	0	1,500	1,500	
33.3%	0	1,227	1,227	
34.6%	0	1,027	1,027	
35.8%	0	968	968	
37.0%	0	963	963	
38.3%	0	911	911	
39.5%	0	691	691	
40.7%	0	411	411	
42.0%	0	404	404	
43.2%	0	356	356	
44.4%	0	119	119	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,121	2,121	
1.2%	0	2,121	2,121	
2.5%	0	2,121	2,121	
3.7%	0	2,121	2,121	
4.9%	0	2,121	2,121	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	2,121	2,121	
32.1%	0	2,121	2,121	
33.3%	0	2,121	2,121	
34.6%	0	2,121	2,121	
35.8%	0	2,121	2,121	
37.0%	0	2,121	2,121	
38.3%	0	2,121	2,121	
39.5%	0	2,121	2,121	
40.7%	0	2,121	2,121	
42.0%	0	2,121	2,121	
43.2%	0	2,036	2,036	
44.4%	0	1,983	1,983	
45.7%	0	1,805	1,805	
46.9%	0	1,716	1,716	
48.1%	0	1,712	1,712	
49.4%	0	1,614	1,614	
50.6%	0	1,268	1,268	
51.9%	0	1,236	1,236	
53.1%	0	1,044	1,044	
54.3%	0	828	828	
55.6%	0	687	687	
56.8%	0	651	651	
58.0%	0	643	643	
59.3%	0	474	474	
60.5%	0	76	76	
61.7%	0	43	43	
63.0%	0	27	27	
64.2%	0	18	18	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-01-b

Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	79	2,121	2,042	
1.2%	75	2,121	2,046	
2.5%	11	2,121	2,111	
3.7%	3	2,121	2,118	
4.9%	3	2,121	2,119	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	2,121	2,121	
32.1%	0	2,121	2,121	
33.3%	0	2,121	2,121	
34.6%	0	2,121	2,121	
35.8%	0	2,121	2,121	
37.0%	0	2,121	2,121	
38.3%	0	2,121	2,121	
39.5%	0	2,121	2,121	
40.7%	0	2,121	2,121	
42.0%	0	2,121	2,121	
43.2%	0	2,121	2,121	
44.4%	0	2,121	2,121	
45.7%	0	2,121	2,121	
46.9%	0	2,121	2,121	
48.1%	0	2,121	2,121	
49.4%	0	2,112	2,112	
50.6%	0	2,031	2,031	
51.9%	0	1,815	1,815	
53.1%	0	1,475	1,475	
54.3%	0	1,370	1,370	
55.6%	0	1,190	1,190	
56.8%	0	1,180	1,180	
58.0%	0	926	926	
59.3%	0	780	780	
60.5%	0	707	707	
61.7%	0	602	602	
63.0%	0	530	530	
64.2%	0	484	484	
65.4%	0	433	433	
66.7%	0	410	410	
67.9%	0	385	385	
69.1%	0	268	268	
70.4%	0	75	75	
71.6%	0	65	65	
72.8%	0	36	36	
74.1%	0	26	26	
75.3%	0	25	25	
76.5%	0	20	20	
77.8%	0	11	11	
79.0%	0	3	3	
80.2%	0	2	2	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	166	2,159	1,992	
1.2%	90	2,148	2,058	
2.5%	69	2,143	2,074	
3.7%	52	2,140	2,088	
4.9%	46	2,140	2,093	
6.2%	44	2,130	2,086	
7.4%	43	2,124	2,081	
8.6%	42	2,123	2,081	
9.9%	40	2,123	2,083	
11.1%	36	2,122	2,086	
12.3%	35	2,121	2,086	
13.6%	34	2,121	2,087	
14.8%	34	2,121	2,087	
16.0%	33	2,121	2,088	
17.3%	32	2,121	2,089	
18.5%	31	2,121	2,090	
19.8%	30	2,121	2,091	
21.0%	25	2,121	2,097	
22.2%	23	2,121	2,098	
23.5%	22	2,121	2,100	
24.7%	21	2,121	2,101	
25.9%	20	2,121	2,101	
27.2%	20	2,121	2,102	
28.4%	17	2,121	2,104	
29.6%	10	2,121	2,111	
30.9%	8	2,121	2,113	
32.1%	8	2,121	2,113	
33.3%	5	2,121	2,116	
34.6%	4	2,121	2,118	
35.8%	3	2,121	2,118	
37.0%	2	2,121	2,119	
38.3%	2	2,121	2,119	
39.5%	2	2,091	2,089	
40.7%	1	2,088	2,086	
42.0%	1	2,055	2,054	
43.2%	1	1,702	1,701	
44.4%	1	1,651	1,650	
45.7%	1	1,576	1,576	
46.9%	1	1,311	1,311	
48.1%	0	1,034	1,034	
49.4%	0	754	754	
50.6%	0	278	278	
51.9%	0	159	159	
53.1%	0	157	157	
54.3%	0	115	115	
55.6%	0	97	97	
56.8%	0	95	95	
58.0%	0	95	95	
59.3%	0	93	93	
60.5%	0	82	82	
61.7%	0	77	77	
63.0%	0	64	64	
64.2%	0	52	52	
65.4%	0	45	45	
66.7%	0	41	41	
67.9%	0	39	39	
69.1%	0	38	38	
70.4%	0	35	35	
71.6%	0	33	33	
72.8%	0	32	32	
74.1%	0	31	31	
75.3%	0	30	30	
76.5%	0	29	29	
77.8%	0	25	25	
79.0%	0	25	25	
80.2%	0	23	23	
81.5%	0	20	20	
82.7%	0	16	16	
84.0%	0	13	13	
85.2%	0	10	10	
86.4%	0	9	9	
87.7%	0	8	8	
88.9%	0	8	8	
90.1%	0	8	8	
91.4%	0	8	8	
92.6%	0	8	8	
93.8%	0	8	8	
95.1%	0	8	8	
96.3%	0	8	8	
97.5%	0	8	8	
98.8%	0	8	8	
100.0%	0	5	5	

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	573	2,250	1,677	292.6%
1.2%	532	2,250	1,718	322.8%
2.5%	414	2,250	1,836	443.1%
3.7%	387	2,240	1,854	479.5%
4.9%	374	2,179	1,806	483.3%
6.2%	363	2,170	1,807	498.1%
7.4%	351	1,988	1,637	466.4%
8.6%	349	1,936	1,587	455.1%
9.9%	343	1,818	1,475	429.9%
11.1%	334	1,133	799	239.0%
12.3%	328	1,060	732	223.0%
13.6%	305	935	630	206.6%
14.8%	299	885	587	196.3%
16.0%	286	426	141	49.3%
17.3%	275	358	83	30.1%
18.5%	274	349	74	27.1%
19.8%	270	334	64	23.7%
21.0%	266	330	65	24.3%
22.2%	255	296	41	16.2%
23.5%	249	294	44	17.8%
24.7%	239	274	35	14.7%
25.9%	225	265	40	17.7%
27.2%	206	263	57	27.8%
28.4%	203	251	48	23.8%
29.6%	203	244	42	20.6%
30.9%	194	236	42	21.6%
32.1%	186	230	45	24.0%
33.3%	184	224	40	22.0%
34.6%	180	201	22	12.0%
35.8%	177	200	23	12.9%
37.0%	172	195	23	13.3%
38.3%	172	194	22	12.8%
39.5%	165	184	19	11.5%
40.7%	160	180	20	12.7%
42.0%	156	176	19	12.4%
43.2%	148	174	25	17.0%
44.4%	146	172	26	17.6%
45.7%	141	164	23	16.6%
46.9%	141	157	16	11.4%
48.1%	132	149	17	12.7%
49.4%	118	145	28	23.7%
50.6%	118	141	24	20.1%
51.9%	117	130	13	11.0%
53.1%	116	128	12	10.5%
54.3%	104	121	17	16.2%
55.6%	103	117	15	14.6%
56.8%	100	116	16	15.7%
58.0%	93	94	1	1.4%
59.3%	92	93	1	0.8%
60.5%	82	92	10	12.7%
61.7%	79	87	8	10.4%
63.0%	78	82	4	5.2%
64.2%	72	80	7	10.1%
65.4%	64	78	15	22.9%
66.7%	63	78	14	22.8%
67.9%	61	76	16	25.7%
69.1%	52	76	24	46.1%
70.4%	51	70	19	36.4%
71.6%	47	67	19	40.9%
72.8%	45	66	21	46.5%
74.1%	43	62	19	42.8%
75.3%	40	54	14	33.9%
76.5%	40	53	13	32.8%
77.8%	39	52	13	32.0%
79.0%	37	50	13	33.4%
80.2%	36	47	11	30.2%
81.5%	35	45	10	27.6%
82.7%	35	44	10	28.4%
84.0%	34	44	9	26.4%
85.2%	30	40	10	33.6%
86.4%	29	40	11	39.8%
87.7%	28	37	10	34.7%
88.9%	23	36	13	56.4%
90.1%	22	35	13	61.1%
91.4%	21	33	12	57.8%
92.6%	16	29	13	83.7%
93.8%	15	29	13	86.2%
95.1%	14	27	13	97.0%
96.3%	8	27	19	245.0%
97.5%	1	23	22	
98.8%	0	22	22	
100.0%	0	21	21	

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	898	2,250	1,352	150.5%
1.2%	894	2,250	1,356	151.6%
2.5%	883	2,206	1,323	149.8%
3.7%	868	2,179	1,311	151.0%
4.9%	848	2,151	1,303	153.5%
6.2%	842	1,012	171	20.3%
7.4%	803	898	95	11.9%
8.6%	780	895	116	14.8%
9.9%	770	848	78	10.2%
11.1%	741	842	101	13.6%
12.3%	736	780	44	6.0%
13.6%	698	741	42	6.1%
14.8%	675	736	61	9.0%
16.0%	670	733	63	9.4%
17.3%	665	694	29	4.4%
18.5%	654	675	21	3.2%
19.8%	652	665	13	1.9%
21.0%	652	662	11	1.6%
22.2%	651	659	8	1.2%
23.5%	635	655	21	3.2%
24.7%	615	652	36	5.9%
25.9%	599	635	35	5.9%
27.2%	575	624	49	8.5%
28.4%	563	609	45	8.1%
29.6%	553	583	30	5.4%
30.9%	536	575	38	7.2%
32.1%	529	551	22	4.2%
33.3%	529	534	5	0.9%
34.6%	515	529	14	2.7%
35.8%	513	529	16	3.2%
37.0%	508	526	18	3.6%
38.3%	506	477	-29	-5.8%
39.5%	489	454	-35	-7.1%
40.7%	477	416	-61	-12.8%
42.0%	475	391	-84	-17.7%
43.2%	474	353	-121	-25.5%
44.4%	459	348	-112	-24.3%
45.7%	454	309	-145	-32.0%
46.9%	444	281	-162	-36.6%
48.1%	437	262	-175	-40.0%
49.4%	433	259	-174	-40.2%
50.6%	433	249	-184	-42.5%
51.9%	430	229	-201	-46.8%
53.1%	429	218	-211	-49.2%
54.3%	416	211	-205	-49.3%
55.6%	401	208	-192	-48.0%
56.8%	391	201	-191	-48.7%
58.0%	367	200	-167	-45.4%
59.3%	347	200	-147	-42.4%
60.5%	346	198	-148	-42.8%
61.7%	333	185	-148	-44.4%
63.0%	267	179	-88	-33.0%
64.2%	239	175	-64	-26.7%
65.4%	236	171	-65	-27.5%
66.7%	233	169	-64	-27.4%
67.9%	230	164	-66	-28.7%
69.1%	215	159	-56	-26.0%
70.4%	206	154	-52	-25.3%
71.6%	204	151	-53	-26.1%
72.8%	200	141	-59	-29.5%
74.1%	194	140	-54	-27.7%
75.3%	180	136	-44	-24.3%
76.5%	176	136	-40	-22.6%
77.8%	167	135	-32	-19.2%
79.0%	156	132	-24	-15.5%
80.2%	149	131	-17	-11.7%
81.5%	137	127	-9	-6.9%
82.7%	130	121	-9	-6.9%
84.0%	128	118	-10	-7.8%
85.2%	118	111	-7	-6.0%
86.4%	115	109	-7	-5.8%
87.7%	109	106	-3	-2.7%
88.9%	95	103	8	8.5%
90.1%	85	95	10	11.8%
91.4%	78	84	6	8.3%
92.6%	77	83	6	7.2%
93.8%	20	52	32	
95.1%	18	52	34	
96.3%	16	47	31	
97.5%	10	46	36	
98.8%	0	37	37	
100.0%	0	33	33	

Table OP-01-b

Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,319	2,250	931	70.6%
1.2%	1,315	2,250	935	71.1%
2.5%	1,311	1,574	263	20.0%
3.7%	1,290	1,354	63	4.9%
4.9%	1,274	1,353	79	6.2%
6.2%	1,272	1,328	56	4.4%
7.4%	1,272	1,325	53	4.2%
8.6%	1,257	1,321	64	5.1%
9.9%	1,230	1,311	81	6.6%
11.1%	1,202	1,293	91	7.6%
12.3%	1,200	1,290	90	7.5%
13.6%	1,182	1,202	20	1.7%
14.8%	1,171	1,200	29	2.5%
16.0%	1,148	1,148	0	0.0%
17.3%	1,144	1,127	-17	-1.5%
18.5%	1,127	1,121	-6	-0.5%
19.8%	1,121	1,115	-6	-0.5%
21.0%	1,115	1,100	-15	-1.4%
22.2%	1,100	1,084	-16	-1.4%
23.5%	1,089	1,081	-8	-0.7%
24.7%	1,084	1,067	-17	-1.6%
25.9%	1,073	1,060	-13	-1.2%
27.2%	1,066	992	-74	-6.9%
28.4%	1,060	938	-122	-11.5%
29.6%	1,057	933	-124	-11.8%
30.9%	1,055	913	-142	-13.4%
32.1%	1,008	733	-275	-27.3%
33.3%	943	674	-269	-28.6%
34.6%	943	640	-303	-32.1%
35.8%	938	607	-331	-35.3%
37.0%	937	597	-341	-36.4%
38.3%	936	566	-370	-39.5%
39.5%	933	559	-375	-40.1%
40.7%	917	525	-392	-42.7%
42.0%	906	502	-404	-44.6%
43.2%	875	499	-376	-43.0%
44.4%	870	486	-384	-44.1%
45.7%	865	474	-391	-45.2%
46.9%	865	459	-406	-46.9%
48.1%	847	457	-391	-46.1%
49.4%	836	442	-394	-47.2%
50.6%	821	435	-386	-47.0%
51.9%	820	435	-384	-46.9%
53.1%	798	423	-375	-47.0%
54.3%	796	418	-378	-47.5%
55.6%	778	415	-362	-46.6%
56.8%	726	412	-314	-43.2%
58.0%	691	409	-282	-40.8%
59.3%	670	391	-279	-41.7%
60.5%	660	389	-272	-41.2%
61.7%	614	383	-231	-37.6%
63.0%	607	382	-225	-37.0%
64.2%	603	378	-225	-37.4%
65.4%	541	378	-164	-30.2%
66.7%	509	370	-139	-27.3%
67.9%	459	370	-89	-19.5%
69.1%	449	369	-80	-17.8%
70.4%	445	338	-107	-24.0%
71.6%	420	330	-91	-21.6%
72.8%	408	329	-79	-19.4%
74.1%	404	302	-101	-25.1%
75.3%	391	300	-91	-23.3%
76.5%	384	300	-85	-22.0%
77.8%	379	298	-81	-21.3%
79.0%	379	297	-82	-21.5%
80.2%	377	290	-87	-23.1%
81.5%	370	285	-84	-22.9%
82.7%	369	285	-84	-22.9%
84.0%	350	284	-66	-18.9%
85.2%	328	276	-52	-15.9%
86.4%	321	273	-48	-15.1%
87.7%	306	272	-33	-10.9%
88.9%	289	263	-26	-9.1%
90.1%	289	256	-33	-11.3%
91.4%	268	249	-19	-6.9%
92.6%	222	237	15	7.0%
93.8%	197	205	8	4.0%
95.1%	197	195	-1	-0.5%
96.3%	191	143	-48	-25.3%
97.5%	114	116	2	2.1%
98.8%	47	54	7	14.3%
100.0%	0	26	26	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,397	1,397	0	0.0%
1.2%	1,384	1,383	-1	-0.1%
2.5%	1,383	1,380	-3	-0.2%
3.7%	1,382	1,379	-3	-0.2%
4.9%	1,380	1,375	-5	-0.4%
6.2%	1,379	1,367	-12	-0.8%
7.4%	1,378	1,361	-17	-1.2%
8.6%	1,375	1,350	-25	-1.8%
9.9%	1,373	1,330	-43	-3.1%
11.1%	1,367	1,283	-84	-6.2%
12.3%	1,361	1,278	-82	-6.0%
13.6%	1,356	1,273	-83	-6.1%
14.8%	1,350	1,259	-91	-6.7%
16.0%	1,330	1,249	-81	-6.1%
17.3%	1,311	1,158	-153	-11.7%
18.5%	1,283	980	-302	-23.6%
19.8%	1,282	938	-345	-26.9%
21.0%	1,278	856	-422	-33.0%
22.2%	1,278	855	-423	-33.1%
23.5%	1,273	794	-479	-37.6%
24.7%	1,259	733	-526	-41.8%
25.9%	1,249	694	-556	-44.5%
27.2%	1,211	647	-563	-46.5%
28.4%	1,210	629	-581	-48.0%
29.6%	1,174	622	-552	-47.0%
30.9%	1,158	613	-545	-47.0%
32.1%	1,155	609	-546	-47.3%
33.3%	1,107	608	-499	-45.1%
34.6%	1,097	592	-505	-46.0%
35.8%	1,007	578	-429	-42.6%
37.0%	975	558	-417	-42.8%
38.3%	971	555	-416	-42.8%
39.5%	968	532	-436	-45.0%
40.7%	968	522	-446	-46.1%
42.0%	934	508	-426	-45.6%
43.2%	920	503	-417	-45.3%
44.4%	918	502	-417	-45.4%
45.7%	907	489	-419	-46.1%
46.9%	899	486	-413	-46.0%
48.1%	878	478	-401	-45.6%
49.4%	877	472	-405	-46.2%
50.6%	848	470	-378	-44.6%
51.9%	828	464	-364	-44.0%
53.1%	819	453	-366	-44.7%
54.3%	818	449	-369	-45.1%
55.6%	791	446	-346	-43.7%
56.8%	784	444	-339	-43.3%
58.0%	767	439	-329	-42.8%
59.3%	764	436	-329	-43.0%
60.5%	750	431	-319	-42.6%
61.7%	690	420	-270	-39.2%
63.0%	676	407	-270	-39.9%
64.2%	560	405	-154	-27.6%
65.4%	556	396	-160	-28.8%
66.7%	542	394	-148	-27.4%
67.9%	517	391	-127	-24.5%
69.1%	514	385	-128	-25.0%
70.4%	498	385	-113	-22.7%
71.6%	474	383	-91	-19.2%
72.8%	441	356	-85	-19.3%
74.1%	419	354	-65	-15.5%
75.3%	405	351	-54	-13.3%
76.5%	399	319	-80	-20.0%
77.8%	392	319	-73	-18.6%
79.0%	379	316	-63	-16.6%
80.2%	372	310	-62	-16.6%
81.5%	363	307	-56	-15.4%
82.7%	362	304	-58	-16.1%
84.0%	340	298	-41	-12.2%
85.2%	338	289	-49	-14.4%
86.4%	299	285	-14	-4.7%
87.7%	286	283	-2	-0.9%
88.9%	275	278	3	1.1%
90.1%	261	259	-2	-0.7%
91.4%	260	256	-5	-1.8%
92.6%	254	251	-4	-1.5%
93.8%	235	177	-58	-24.8%
95.1%	231	169	-62	-26.8%
96.3%	95	163	67	70.8%
97.5%	16	160	144	
98.8%	0	62	62	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,114	1,431	317	28.5%
1.2%	1,103	1,114	10	0.9%
2.5%	1,103	1,102	-1	0.0%
3.7%	1,102	1,102	0	0.0%
4.9%	1,101	1,100	-1	-0.1%
6.2%	1,100	1,095	-6	-0.5%
7.4%	1,100	1,091	-9	-0.8%
8.6%	1,092	1,080	-12	-1.1%
9.9%	1,091	1,062	-29	-2.7%
11.1%	1,086	1,060	-26	-2.4%
12.3%	1,083	1,060	-23	-2.1%
13.6%	1,080	1,028	-52	-4.8%
14.8%	1,078	1,024	-54	-5.0%
16.0%	1,062	1,020	-42	-3.9%
17.3%	1,048	1,017	-30	-2.9%
18.5%	1,028	1,012	-17	-1.6%
19.8%	1,024	954	-71	-6.9%
21.0%	1,021	950	-72	-7.0%
22.2%	1,017	923	-94	-9.2%
23.5%	1,012	864	-148	-14.6%
24.7%	1,000	783	-217	-21.7%
25.9%	963	756	-207	-21.5%
27.2%	963	749	-214	-22.2%
28.4%	954	745	-208	-21.8%
29.6%	934	737	-197	-21.1%
30.9%	923	721	-202	-21.9%
32.1%	922	661	-262	-28.4%
33.3%	884	656	-228	-25.8%
34.6%	876	646	-230	-26.3%
35.8%	865	617	-248	-28.6%
37.0%	785	616	-169	-21.5%
38.3%	777	613	-164	-21.1%
39.5%	770	588	-182	-23.6%
40.7%	749	588	-162	-21.6%
42.0%	745	568	-177	-23.7%
43.2%	732	554	-178	-24.3%
44.4%	724	513	-211	-29.2%
45.7%	717	499	-219	-30.5%
46.9%	699	493	-207	-29.6%
48.1%	653	481	-172	-26.4%
49.4%	653	477	-176	-26.9%
50.6%	651	465	-186	-28.6%
51.9%	648	452	-196	-30.3%
53.1%	627	403	-224	-35.7%
54.3%	625	403	-222	-35.6%
55.6%	621	397	-224	-36.1%
56.8%	610	393	-217	-35.5%
58.0%	598	392	-206	-34.5%
59.3%	596	390	-206	-34.6%
60.5%	595	387	-208	-35.0%
61.7%	590	375	-215	-36.5%
63.0%	563	361	-202	-35.9%
64.2%	551	361	-190	-34.4%
65.4%	539	358	-181	-33.6%
66.7%	508	355	-153	-30.2%
67.9%	498	345	-153	-30.7%
69.1%	454	343	-111	-24.5%
70.4%	445	335	-110	-24.8%
71.6%	438	329	-110	-25.0%
72.8%	427	325	-102	-24.0%
74.1%	424	306	-118	-27.8%
75.3%	413	303	-109	-26.5%
76.5%	395	303	-92	-23.3%
77.8%	393	302	-91	-23.1%
79.0%	393	290	-102	-26.1%
80.2%	352	271	-81	-23.1%
81.5%	332	270	-62	-18.6%
82.7%	318	260	-59	-18.4%
84.0%	303	246	-56	-18.6%
85.2%	297	237	-60	-20.2%
86.4%	290	237	-53	-18.2%
87.7%	289	236	-54	-18.6%
88.9%	268	224	-45	-16.6%
90.1%	223	219	-3	-1.6%
91.4%	220	215	-5	-2.1%
92.6%	203	194	-9	-4.5%
93.8%	188	139	-49	-25.9%
95.1%	184	134	-51	-27.5%
96.3%	70	127	57	81.4%
97.5%	13	108	95	
98.8%	0	62	62	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	332	349	16	4.9%
1.2%	312	331	19	6.0%
2.5%	309	304	-6	-1.8%
3.7%	304	282	-22	-7.2%
4.9%	304	266	-37	-12.3%
6.2%	301	238	-63	-20.8%
7.4%	299	236	-63	-21.0%
8.6%	298	229	-69	-23.2%
9.9%	296	214	-82	-27.6%
11.1%	288	211	-77	-26.7%
12.3%	280	208	-72	-25.8%
13.6%	280	207	-73	-26.1%
14.8%	275	149	-126	-45.8%
16.0%	275	140	-135	-49.1%
17.3%	273	139	-134	-49.2%
18.5%	273	119	-155	-56.6%
19.8%	266	115	-151	-56.8%
21.0%	264	110	-154	-58.4%
22.2%	260	108	-152	-58.4%
23.5%	251	106	-144	-57.5%
24.7%	248	106	-142	-57.1%
25.9%	245	103	-142	-58.0%
27.2%	237	103	-134	-56.5%
28.4%	236	88	-148	-62.8%
29.6%	215	84	-131	-61.0%
30.9%	214	79	-135	-63.1%
32.1%	212	77	-135	-63.7%
33.3%	210	74	-136	-64.7%
34.6%	206	67	-139	-67.4%
35.8%	201	67	-134	-66.8%
37.0%	196	66	-130	-66.5%
38.3%	183	65	-117	-64.2%
39.5%	167	65	-102	-60.9%
40.7%	162	65	-98	-60.2%
42.0%	162	62	-99	-61.6%
43.2%	156	62	-94	-60.3%
44.4%	147	60	-87	-59.1%
45.7%	135	58	-77	-56.8%
46.9%	133	58	-76	-56.7%
48.1%	132	57	-74	-56.4%
49.4%	130	57	-73	-56.0%
50.6%	127	57	-70	-55.4%
51.9%	121	56	-65	-53.4%
53.1%	119	54	-65	-54.6%
54.3%	117	53	-64	-54.7%
55.6%	116	51	-65	-55.8%
56.8%	110	50	-60	-54.3%
58.0%	107	50	-56	-52.8%
59.3%	105	48	-57	-53.8%
60.5%	105	48	-56	-53.7%
61.7%	104	47	-57	-54.6%
63.0%	103	47	-56	-54.2%
64.2%	102	47	-55	-54.2%
65.4%	101	46	-55	-54.0%
66.7%	96	44	-52	-54.3%
67.9%	95	43	-52	-54.7%
69.1%	91	41	-50	-55.1%
70.4%	90	41	-50	-54.8%
71.6%	86	41	-46	-53.0%
72.8%	86	39	-47	-54.3%
74.1%	86	37	-48	-56.4%
75.3%	80	37	-43	-53.7%
76.5%	74	34	-40	-53.8%
77.8%	74	33	-41	-55.3%
79.0%	68	30	-38	-56.4%
80.2%	64	28	-35	-55.4%
81.5%	58	23	-35	-60.2%
82.7%	44	23	-21	-47.7%
84.0%	30	21	-9	-29.9%
85.2%	21	19	-2	-7.5%
86.4%	20	17	-3	-17.1%
87.7%	20	16	-4	-18.2%
88.9%	17	14	-2	-14.6%
90.1%	17	14	-2	-13.4%
91.4%	17	14	-3	-18.0%
92.6%	16	13	-3	-19.6%
93.8%	15	13	-2	-14.5%
95.1%	13	12	-1	-8.2%
96.3%	11	12	2	14.5%
97.5%	6	11	5	
98.8%	0	10	10	
100.0%	0	0	0	

Figure OP-02-b
Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Probability of Exceedance

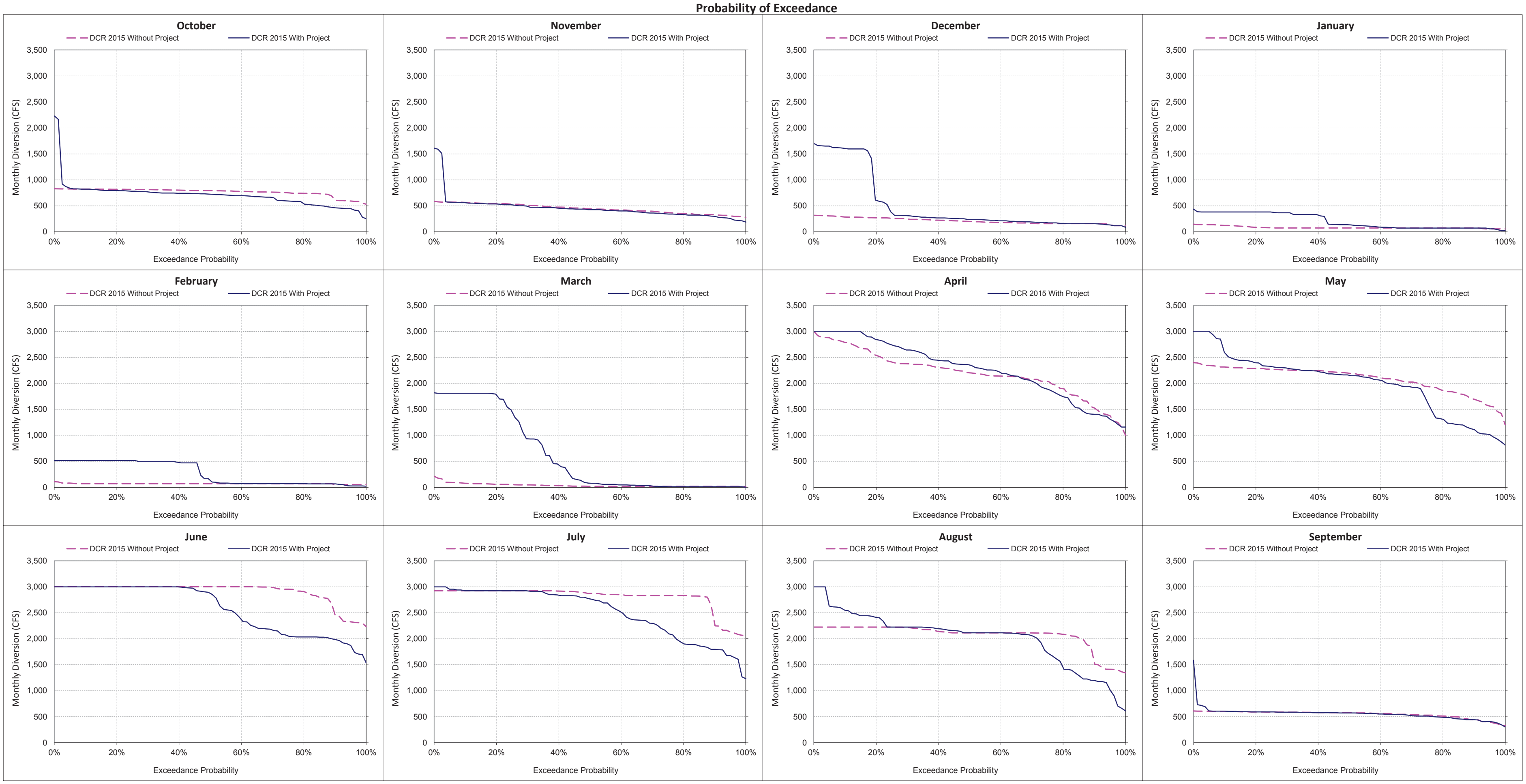


Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	829	2,230	1,401	169.0%
1.2%	828	2,166	1,338	161.6%
2.5%	826	921	95	11.4%
3.7%	825	872	47	5.7%
4.9%	825	839	14	1.7%
6.2%	823	828	4	0.5%
7.4%	823	826	3	0.4%
8.6%	823	822	-1	-0.2%
9.9%	822	821	-1	-0.1%
11.1%	822	820	-2	-0.2%
12.3%	822	816	-6	-0.7%
13.6%	821	812	-9	-1.1%
14.8%	821	803	-18	-2.2%
16.0%	821	799	-22	-2.7%
17.3%	820	796	-24	-2.9%
18.5%	819	796	-23	-2.8%
19.8%	819	794	-25	-3.0%
21.0%	819	791	-27	-3.4%
22.2%	818	790	-28	-3.4%
23.5%	816	787	-29	-3.6%
24.7%	816	782	-33	-4.1%
25.9%	815	780	-35	-4.3%
27.2%	815	777	-38	-4.7%
28.4%	814	775	-39	-4.8%
29.6%	813	770	-42	-5.2%
30.9%	812	761	-51	-6.3%
32.1%	811	759	-52	-6.4%
33.3%	809	750	-60	-7.4%
34.6%	809	749	-59	-7.3%
35.8%	807	748	-59	-7.3%
37.0%	806	747	-59	-7.3%
38.3%	805	747	-58	-7.2%
39.5%	803	743	-59	-7.4%
40.7%	802	743	-59	-7.3%
42.0%	799	741	-57	-7.2%
43.2%	796	739	-57	-7.2%
44.4%	796	738	-58	-7.3%
45.7%	795	735	-60	-7.6%
46.9%	794	734	-61	-7.6%
48.1%	793	730	-64	-8.0%
49.4%	792	726	-65	-8.2%
50.6%	791	724	-67	-8.5%
51.9%	791	718	-72	-9.1%
53.1%	790	718	-73	-9.2%
54.3%	787	711	-76	-9.7%
55.6%	787	709	-78	-9.9%
56.8%	787	701	-86	-10.9%
58.0%	781	699	-82	-10.5%
59.3%	779	696	-83	-10.6%
60.5%	778	695	-83	-10.7%
61.7%	777	693	-84	-10.8%
63.0%	773	688	-85	-11.0%
64.2%	772	678	-94	-12.2%
65.4%	768	677	-91	-11.8%
66.7%	767	672	-96	-12.5%
67.9%	767	669	-98	-12.8%
69.1%	765	667	-98	-12.8%
70.4%	764	657	-107	-14.0%
71.6%	761	602	-159	-20.9%
72.8%	760	601	-159	-20.9%
74.1%	754	596	-158	-21.0%
75.3%	749	593	-157	-20.9%
76.5%	743	589	-154	-20.8%
77.8%	743	587	-156	-21.0%
79.0%	742	584	-158	-21.3%
80.2%	741	532	-209	-28.2%
81.5%	741	527	-214	-28.9%
82.7%	739	518	-221	-29.9%
84.0%	738	513	-225	-30.5%
85.2%	734	504	-230	-31.3%
86.4%	727	495	-232	-32.0%
87.7%	722	481	-241	-33.4%
88.9%	693	474	-219	-31.6%
90.1%	607	461	-146	-24.1%
91.4%	602	458	-144	-23.9%
92.6%	601	452	-149	-24.8%
93.8%	596	448	-148	-24.9%
95.1%	593	447	-146	-24.6%
96.3%	587	415	-172	-29.3%
97.5%	584	409	-175	-29.9%
98.8%	553	284	-269	-48.6%
100.0%	532	253	-279	-52.5%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	586	1,609	1,023	174.8%
1.2%	577	1,590	1,013	175.4%
2.5%	572	1,511	940	164.4%
3.7%	571	577	6	1.0%
4.9%	571	571	0	0.0%
6.2%	571	569	-2	-0.4%
7.4%	571	567	-4	-0.7%
8.6%	569	563	-6	-1.1%
9.9%	566	562	-4	-0.7%
11.1%	564	553	-11	-2.0%
12.3%	560	552	-8	-1.5%
13.6%	555	545	-10	-1.8%
14.8%	551	542	-8	-1.5%
16.0%	550	540	-10	-1.8%
17.3%	548	537	-11	-2.0%
18.5%	546	536	-10	-1.8%
19.8%	546	536	-10	-1.8%
21.0%	545	530	-15	-2.7%
22.2%	544	524	-20	-3.6%
23.5%	539	524	-14	-2.7%
24.7%	533	521	-12	-2.2%
25.9%	529	514	-15	-2.9%
27.2%	529	501	-29	-5.4%
28.4%	522	500	-23	-4.4%
29.6%	516	498	-17	-3.4%
30.9%	508	474	-34	-6.8%
32.1%	507	473	-34	-6.8%
33.3%	501	470	-30	-6.0%
34.6%	501	466	-34	-6.8%
35.8%	482	466	-16	-3.3%
37.0%	481	466	-15	-3.1%
38.3%	479	465	-13	-2.8%
39.5%	475	457	-18	-3.8%
40.7%	474	450	-24	-5.1%
42.0%	474	449	-25	-5.2%
43.2%	465	444	-21	-4.5%
44.4%	458	442	-15	-3.4%
45.7%	457	438	-19	-4.2%
46.9%	457	437	-20	-4.4%
48.1%	450	435	-15	-3.4%
49.4%	443	429	-14	-3.1%
50.6%	438	429	-9	-2.0%
51.9%	438	426	-12	-2.8%
53.1%	436	426	-11	-2.4%
54.3%	435	415	-21	-4.7%
55.6%	428	412	-16	-3.7%
56.8%	426	412	-14	-3.2%
58.0%	421	405	-16	-3.8%
59.3%	420	402	-18	-4.2%
60.5%	420	401	-19	-4.6%
61.7%	417	400	-17	-4.1%
63.0%	411	400	-11	-2.7%
64.2%	408	387	-21	-5.1%
65.4%	405	381	-24	-5.8%
66.7%	401	378	-23	-5.8%
67.9%	400	368	-33	-8.1%
69.1%	398	362	-36	-9.1%
70.4%	396	361	-35	-8.8%
71.6%	386	357	-29	-7.4%
72.8%	379	356	-23	-6.0%
74.1%	376	349	-27	-7.1%
75.3%	369	344	-25	-6.8%
76.5%	364	342	-22	-6.1%
77.8%	357	339	-18	-5.1%
79.0%	353	338	-15	-4.3%
80.2%	351	331	-20	-5.6%
81.5%	349	325	-24	-6.9%
82.7%	346	323	-23	-6.7%
84.0%	333	323	-10	-3.1%
85.2%	331	322	-9	-2.7%
86.4%	331	318	-13	-3.8%
87.7%	330	313	-17	-5.2%
88.9%	330	304	-27	-8.1%
90.1%	329	298	-31	-9.4%
91.4%	322	277	-45	-14.0%
92.6%	318	273	-45	-14.1%
93.8%	318	269	-48	-15.2%
95.1%	306	257	-49	-16.0%
96.3%	299	229	-70	-23.4%
97.5%	298	216	-82	-27.5%
98.8%	285	213	-72	-25.2%
100.0%	278	185	-92	-33.3%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	318	1,702	1,385	435.9%
1.2%	316	1,663	1,347	426.2%
2.5%	314	1,655	1,341	426.5%
3.7%	310	1,651	1,341	432.0%
4.9%	306	1,649	1,343	439.4%
6.2%	304	1,620	1,316	433.5%
7.4%	298	1,619	1,321	443.9%
8.6%	292	1,614	1,322	452.0%
9.9%	284	1,604	1,320	464.2%
11.1%	284	1,597	1,313	462.3%
12.3%	283	1,597	1,314	464.7%
13.6%	282	1,597	1,315	465.5%
14.8%	281	1,597	1,316	468.3%
16.0%	277	1,597	1,320	477.0%
17.3%	272	1,558	1,286	472.1%
18.5%	271	1,410	1,139	420.0%
19.8%	270	613	343	126.9%
21.0%	268	587	318	118.6%
22.2%	268	569	301	112.5%
23.5%	268	528	260	97.0%
24.7%	263	387	124	47.2%
25.9%	259	318	59	22.6%
27.2%	255	316	61	23.9%
28.4%	254	314	60	23.6%
29.6%	253	310	57	22.6%
30.9%	240	306	66	27.4%
32.1%	239	298	59	24.5%
33.3%	239	292	54	22.5%
34.6%	237	284	48	20.1%
35.8%	235	284	49	20.8%
37.0%	231	272	41	17.7%
38.3%	225	271	46	20.7%
39.5%	224	268	44	19.9%
40.7%	222	268	46	20.6%
42.0%	222	265	43	19.4%
43.2%	216	263	47	21.6%
44.4%	212	259	47	22.1%
45.7%	212	255	43	20.4%
46.9%	209	254	45	21.4%
48.1%	204	253	49	23.9%
49.4%	201	239	38	18.7%
50.6%	197	239	42	21.2%
51.9%	194	237	43	22.1%
53.1%	193	236	42	21.8%
54.3%	189	231	42	22.5%
55.6%	185	229	45	24.3%
56.8%	184	225	41	22.2%
58.0%	183	222	39	21.6%
59.3%	181	215	34	18.8%
60.5%	180	212	32	17.6%
61.7%	179	210	31	17.1%
63.0%	179	204	26	14.4%
64.2%	175	201	26	15.1%
65.4%	172	199	27	15.9%
66.7%	171	197	26	15.0%
67.9%	171	194	22	13.1%
69.1%	161	193	32	19.8%
70.4%	161	189	28	17.4%
71.6%	159	185	26	16.4%
72.8%	158	183	25	15.7%
74.1%	158	180	22	14.2%
75.3%	158	172	14	8.8%
76.5%	158	171	14	8.6%
77.8%	158	171	14	8.6%
79.0%	158	161	4	2.4%
80.2%	158	161	3	2.0%
81.5%	158	159	1	0.5%
82.7%	158	158	0	0.0%
84.0%	158	158	0	0.0%
85.2%	158	158	0	0.0%
86.4%	158	158	0	0.0%
87.7%	158	158	0	0.0%
88.9%	158	158	0	0.0%
90.1%	158	158	0	0.0%
91.4%	158	152	-6	-3.7%
92.6%	158	145	-13	-7.9%
93.8%	152	138	-14	-8.9%
95.1%	138	131	-7	-5.0%
96.3%	119	119	0	0.0%
97.5%	119	119	0	0.0%
98.8%	119	119	0	0.0%
100.0%	119	86	-33	-27.5%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	147	436	290	197.7%
1.2%	141	387	246	175.4%
2.5%	141	384	243	173.1%
3.7%	139	384	244	175.4%
4.9%	137	384	246	179.5%
6.2%	137	384	247	181.1%
7.4%	133	384	250	187.9%
8.6%	127	384	256	201.4%
9.9%	122	384	262	214.3%
11.1%	122	384	262	214.3%
12.3%	120	384	264	220.6%
13.6%	114	384	270	236.4%
14.8%	108	384	276	255.1%
16.0%	105	384	279	266.6%
17.3%	102	384	282	277.5%
18.5%	91	384	292	320.3%
19.8%	87	384	297	339.9%
21.0%	87	384	297	342.0%
22.2%	82	384	301	366.3%
23.5%	80	384	303	377.2%
24.7%	78	384	306	391.9%
25.9%	75	373	298	398.8%
27.2%	75	365	291	388.4%
28.4%	75	365	291	388.4%
29.6%	75	365	291	388.4%
30.9%	75	365	291	388.4%
32.1%	75	332	258	344.2%
33.3%	75	332	258	344.2%
34.6%	75	332	258	344.2%
35.8%	75	332	258	344.2%
37.0%	75	332	258	344.2%
38.3%	75	332	258	344.2%
39.5%	75	332	258	344.2%
40.7%	75	306	231	308.7%
42.0%	75	298	223	297.9%
43.2%	75	147	72	95.9%
44.4%	75	141	66	87.9%
45.7%	75	141	66	87.9%
46.9%	75	139	65	86.2%
48.1%	75	137	63	83.6%
49.4%	75	137	62	82.5%
50.6%	75	133	59	78.2%
51.9%	75	122	47	63.2%
53.1%	75	122	47	63.2%
54.3%	75	120	45	60.0%
55.6%	75	114	39	52.5%
56.8%	75	108	33	44.5%
58.0%	75	102	27	35.9%
59.3%	75	93	18	24.2%
60.5%	75	87	12	16.6%
61.7%	75	87	12	16.1%
63.0%	75	82	7	10.0%
64.2%	75	80	6	7.5%
65.4%	75	75	0	0.0%
66.7%	75	75	0	0.0%
67.9%	75	75	0	0.0%
69.1%	75	75	0	0.0%
70.4%	75	75	0	0.0%
71.6%	75	75	0	0.0%
72.8%	75	75	0	0.0%
74.1%	75	75	0	0.0%
75.3%	75	75	0	0.0%
76.5%	75	75	0	0.0%
77.8%	75	75	0	0.0%
79.0%	75	75	0	0.0%
80.2%	75	75	0	0.0%
81.5%	75	75	0	0.0%
82.7%	75	75	0	0.0%
84.0%	75	75	0	0.0%
85.2%	75	75	0	0.0%
86.4%	75	75	0	0.0%
87.7%	75	75	0	0.0%
88.9%	75	75	0	0.0%
90.1%	75	75	0	0.0%
91.4%	75	75	0	0.0%
92.6%	63	75	12	18.6%
93.8%	56	75	18	32.5%
95.1%	56	56	0	0.0%
96.3%	56	56	0	0.0%
97.5%	56	40	-16	-28.7%
98.8%	56	23	-33	-58.8%
100.0%	56	23	-33	-58.8%

Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	107	513	406	380.9%
1.2%	103	513	411	400.0%
2.5%	83	513	430	520.3%
3.7%	81	513	432	534.2%
4.9%	80	513	433	541.7%
6.2%	74	513	439	590.2%
7.4%	68	513	445	650.0%
8.6%	68	513	445	650.0%
9.9%	68	513	445	650.0%
11.1%	68	513	445	650.0%
12.3%	68	513	445	650.0%
13.6%	68	513	445	650.0%
14.8%	68	513	445	650.0%
16.0%	68	513	445	650.0%
17.3%	68	513	445	650.0%
18.5%	68	513	445	650.0%
19.8%	68	513	445	650.0%
21.0%	68	513	445	650.0%
22.2%	68	513	445	650.0%
23.5%	68	513	445	650.0%
24.7%	68	513	445	650.0%
25.9%	68	513	445	650.0%
27.2%	68	496	428	625.5%
28.4%	68	496	428	625.5%
29.6%	68	496	428	625.5%
30.9%	68	496	428	625.5%
32.1%	68	495	427	624.1%
33.3%	68	495	427	624.1%
34.6%	68	495	427	624.1%
35.8%	68	495	427	624.1%
37.0%	68	495	427	624.1%
38.3%	68	495	427	624.1%
39.5%	68	479	411	600.5%
40.7%	68	471	402	587.8%
42.0%	68	471	402	587.8%
43.2%	68	471	402	587.8%
44.4%	68	471	402	587.8%
45.7%	68	471	402	587.8%
46.9%	68	230	161	235.8%
48.1%	68	165	97	141.6%
49.4%	68	164	96	139.7%
50.6%	68	100	32	46.7%
51.9%	68	94	26	38.0%
53.1%	68	83	14	21.0%
54.3%	68	80	12	16.9%
55.6%	68	80	11	16.5%
56.8%	68	74	6	8.7%
58.0%	68	68	0	0.0%
59.3%	68	68	0	0.0%
60.5%	68	68	0	0.0%
61.7%	68	68	0	0.0%
63.0%	68	68	0	0.0%
64.2%	68	68	0	0.0%
65.4%	68	68	0	0.0%
66.7%	68	68	0	0.0%
67.9%	68	68	0	0.0%
69.1%	68	68	0	0.0%
70.4%	66	68	2	3.6%
71.6%	66	68	2	3.6%
72.8%	66	68	2	3.6%
74.1%	66	68	2	3.6%
75.3%	66	68	2	3.6%
76.5%	66	68	2	3.6%
77.8%	66	68	2	3.6%
79.0%	66	68	2	3.6%
80.2%	66	68	2	3.6%
81.5%	66	66	0	0.0%
82.7%	66	66	0	0.0%
84.0%	66	66	0	0.0%
85.2%	66	66	0	0.0%
86.4%	66	66	0	0.0%
87.7%	66	66	0	0.0%
88.9%	66	66	0	0.0%
90.1%	52	66	14	27.8%
91.4%	52	54	3	5.1%
92.6%	52	52	0	0.0%
93.8%	52	31	-21	-39.9%
95.1%	52	27	-25	-48.5%
96.3%	52	26	-26	-50.2%
97.5%	52	26	-26	-50.2%
98.8%	50	26	-24	-48.5%
100.0%	50	19	-30	-61.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	212	1,819	1,608	759.4%
1.2%	176	1,809	1,633	929.2%
2.5%	162	1,807	1,644	
3.7%	98	1,807	1,709	
4.9%	94	1,807	1,713	
6.2%	90	1,807	1,717	
7.4%	90	1,807	1,717	
8.6%	84	1,807	1,722	
9.9%	77	1,807	1,730	
11.1%	74	1,807	1,733	
12.3%	69	1,807	1,737	
13.6%	69	1,807	1,737	
14.8%	69	1,807	1,738	
16.0%	66	1,807	1,740	
17.3%	66	1,807	1,741	
18.5%	61	1,802	1,740	
19.8%	58	1,792	1,734	
21.0%	58	1,697	1,639	
22.2%	56	1,691	1,635	
23.5%	56	1,545	1,489	
24.7%	50	1,490	1,440	
25.9%	48	1,345	1,298	
27.2%	47	1,265	1,219	
28.4%	46	1,062	1,016	
29.6%	46	934	888	
30.9%	45	931	886	
32.1%	44	930	886	
33.3%	41	910	870	
34.6%	40	814	774	
35.8%	33	616	583	
37.0%	32	608	576	
38.3%	32	452	420	
39.5%	30	448	418	
40.7%	30	393	363	
42.0%	25	382	357	
43.2%	25	266	241	975.4%
44.4%	22	171	149	675.4%
45.7%	22	150	128	579.4%
46.9%	22	136	114	518.3%
48.1%	22	94	72	330.9%
49.4%	20	78	59	301.5%
50.6%	20	74	54	277.9%
51.9%	20	73	54	276.4%
53.1%	20	67	47	242.5%
54.3%	20	55	36	183.6%
55.6%	20	54	35	177.2%
56.8%	20	53	34	171.8%
58.0%	20	53	34	171.8%
59.3%	20	47	27	138.8%
60.5%	20	46	27	136.4%
61.7%	20	46	27	136.4%
63.0%	20	42	23	117.5%
64.2%	20	39	20	101.0%
65.4%	20	37	17	89.2%
66.7%	20	33	13	66.9%
67.9%	20	32	13	65.7%
69.1%	20	31	12	60.8%
70.4%	20	22	3	14.5%
71.6%	20	16	-3	-16.9%
72.8%	20	15	-4	-21.7%
74.1%	20	14	-6	-28.8%
75.3%	20	11	-8	-41.7%
76.5%	20	11	-8	-41.7%
77.8%	20	11	-8	-41.7%
79.0%	20	11	-8	-41.7%
80.2%	20	11	-8	-41.7%
81.5%	20	11	-8	-41.7%
82.7%	20	11	-8	-41.7%
84.0%	20	11	-8	-41.7%
85.2%	20	11	-8	-41.7%
86.4%	20	11	-8	-41.7%
87.7%	20	11	-8	-41.7%
88.9%	20	11	-8	-41.7%
90.1%	20	11	-8	-41.7%
91.4%	20	11	-8	-41.7%
92.6%	20	11	-8	-41.7%
93.8%	20	11	-8	-41.7%
95.1%	20	11	-8	-41.7%
96.3%	20	11	-8	-41.7%
97.5%	20	11	-8	-41.7%
98.8%	15	11	-3	-22.7%
100.0%	15	0	-15	-100.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	2,918	3,000	82	2.8%
2.5%	2,885	3,000	115	4.0%
3.7%	2,883	3,000	117	4.1%
4.9%	2,877	3,000	123	4.3%
6.2%	2,838	3,000	162	5.7%
7.4%	2,832	3,000	168	5.9%
8.6%	2,813	3,000	187	6.6%
9.9%	2,789	3,000	211	7.6%
11.1%	2,786	3,000	214	7.7%
12.3%	2,749	3,000	251	9.1%
13.6%	2,717	3,000	283	10.4%
14.8%	2,674	3,000	326	12.2%
16.0%	2,666	2,945	280	10.5%
17.3%	2,660	2,897	237	8.9%
18.5%	2,585	2,892	306	11.9%
19.8%	2,543	2,844	301	11.8%
21.0%	2,518	2,832	313	12.4%
22.2%	2,484	2,813	329	13.2%
23.5%	2,433	2,771	338	13.9%
24.7%	2,414	2,745	330	13.7%
25.9%	2,395	2,723	328	13.7%
27.2%	2,380	2,705	325	13.7%
28.4%	2,379	2,672	292	12.3%
29.6%	2,377	2,643	266	11.2%
30.9%	2,374	2,643	269	11.3%
32.1%	2,366	2,630	264	11.1%
33.3%	2,364	2,609	246	10.4%
34.6%	2,363	2,585	222	9.4%
35.8%	2,353	2,557	204	8.7%
37.0%	2,347	2,478	132	5.6%
38.3%	2,323	2,449	126	5.4%
39.5%	2,310	2,448	138	6.0%
40.7%	2,299	2,438	139	6.1%
42.0%	2,291	2,430	140	6.1%
43.2%	2,283	2,430	147	6.4%
44.4%	2,267	2,380	113	5.0%
45.7%	2,248	2,372	124	5.5%
46.9%	2,239	2,366	127	5.7%
48.1%	2,235	2,363	128	5.7%
49.4%	2,205	2,360	154	7.0%
50.6%	2,200	2,343	143	6.5%
51.9%	2,189	2,304	115	5.2%
53.1%	2,181	2,292	111	5.1%
54.3%	2,173	2,275	101	4.7%
55.6%	2,151	2,259	107	5.0%
56.8%	2,144	2,258	114	5.3%
58.0%	2,142	2,250	108	5.0%
59.3%	2,141	2,227	86	4.0%
60.5%	2,139	2,188	49	2.3%
61.7%	2,136	2,187	51	2.4%
63.0%	2,135	2,155	20	0.9%
64.2%	2,130	2,141	10	0.5%
65.4%	2,130	2,138	8	0.4%
66.7%	2,116	2,093	-24	-1.1%
67.9%	2,090	2,074	-16	-0.8%
69.1%	2,080	2,062	-18	-0.9%
70.4%	2,077	2,030	-47	-2.3%
71.6%	2,077	1,991	-86	-4.2%
72.8%	2,042	1,933	-109	-5.3%
74.1%	2,042	1,904	-138	-6.8%
75.3%	2,034	1,883	-151	-7.4%
76.5%	1,983	1,848	-135	-6.8%
77.8%	1,967	1,809	-158	-8.0%
79.0%	1,903	1,769	-134	-7.0%
80.2%	1,895	1,738	-157	-8.3%
81.5%	1,809	1,721	-88	-4.9%
82.7%	1,777	1,615	-162	-9.1%
84.0%	1,768	1,533	-235	-13.3%
85.2%	1,747	1,522	-225	-12.9%
86.4%	1,662	1,460	-201	-12.1%
87.7%	1,659	1,418	-241	-14.5%
88.9%	1,555	1,407	-148	-9.5%
90.1%	1,522	1,403	-119	-7.8%
91.4%	1,466	1,402	-64	-4.4%
92.6%	1,418	1,375	-43	-3.0%
93.8%	1,402	1,367	-35	-2.5%
95.1%	1,375	1,309	-66	-4.8%
96.3%	1,271	1,271	0	0.0%
97.5%	1,249	1,211	-38	-3.0%
98.8%	1,158	1,160	2	0.1%
100.0%	1,002	1,158	156	15.5%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,397	3,000	603	25.1%
1.2%	2,392	3,000	608	25.4%
2.5%	2,369	3,000	631	26.6%
3.7%	2,346	3,000	654	27.9%
4.9%	2,346	3,000	654	27.9%
6.2%	2,338	2,943	604	25.8%
7.4%	2,331	2,859	528	22.7%
8.6%	2,315	2,850	535	23.1%
9.9%	2,315	2,597	283	12.2%
11.1%	2,310	2,513	203	8.8%
12.3%	2,299	2,480	181	7.9%
13.6%	2,299	2,456	157	6.8%
14.8%	2,299	2,442	143	6.2%
16.0%	2,296	2,442	145	6.3%
17.3%	2,289	2,434	145	6.3%
18.5%	2,289	2,422	133	5.8%
19.8%	2,289	2,396	108	4.7%
21.0%	2,289	2,391	102	4.5%
22.2%	2,284	2,338	54	2.4%
23.5%	2,274	2,331	57	2.5%
24.7%	2,274	2,326	52	2.3%
25.9%	2,266	2,310	44	1.9%
27.2%	2,266	2,302	36	1.6%
28.4%	2,261	2,299	39	1.7%
29.6%	2,258	2,296	38	1.7%
30.9%	2,255	2,284	29	1.3%
32.1%	2,252	2,274	21	0.9%
33.3%	2,250	2,266	16	0.7%
34.6%	2,250	2,251	1	0.0%
35.8%	2,247	2,248	1	0.0%
37.0%	2,245	2,245	0	0.0%
38.3%	2,245	2,241	-4	-0.2%
39.5%	2,242	2,237	-5	-0.2%
40.7%	2,242	2,219	-23	-1.0%
42.0%	2,237	2,206	-32	-1.4%
43.2%	2,222	2,183	-39	-1.7%
44.4%	2,219	2,180	-39	-1.7%
45.7%	2,213	2,171	-42	-1.9%
46.9%	2,211	2,165	-46	-2.1%
48.1%	2,206	2,164	-41	-1.9%
49.4%	2,198	2,163	-35	-1.6%
50.6%	2,185	2,146	-40	-1.8%
51.9%	2,185	2,145	-40	-1.8%
53.1%	2,165	2,143	-22	-1.0%
54.3%	2,162	2,123	-39	-1.8%
55.6%	2,147	2,118	-29	-1.3%
56.8%	2,141	2,101	-41	-1.9%
58.0%	2,133	2,070	-63	-2.9%
59.3%	2,118	2,066	-52	-2.4%
60.5%	2,100	2,051	-49	-2.3%
61.7%	2,086	2,006	-81	-3.9%
63.0%	2,086	1,991	-95	-4.6%
64.2%	2,076	1,986	-90	-4.4%
65.4%	2,066	1,975	-91	-4.4%
66.7%	2,045	1,946	-99	-4.8%
67.9%	2,032	1,938	-94	-4.6%
69.1%	2,025	1,937	-88	-4.4%
70.4%	2,024	1,921	-103	-5.1%
71.6%	2,007	1,920	-86	-4.3%
72.8%	1,990	1,898	-92	-4.6%
74.1%	1,944	1,760	-184	-9.5%
75.3%	1,937	1,604	-333	-17.2%
76.5%	1,926	1,456	-469	-24.4%
77.8%	1,921	1,334	-587	-30.5%
79.0%	1,882	1,323	-559	-29.7%
80.2%	1,856	1,303	-553	-29.8%
81.5%	1,843	1,231	-611	-33.2%
82.7%	1,840	1,226	-614	-33.4%
84.0%	1,825	1,212	-612	-33.6%
85.2%	1,797	1,202	-594	-33.1%
86.4%	1,790	1,201	-589	-32.9%
87.7%	1,762	1,159	-603	-34.2%
88.9%	1,709	1,128	-581	-34.0%
90.1%	1,692	1,110	-583	-34.4%
91.4%	1,667	1,049	-618	-37.1%
92.6%	1,642	1,029	-612	-37.3%
93.8%	1,586	1,024	-562	-35.4%
95.1%	1,562	1,016	-546	-35.0%
96.3%	1,547	962	-586	-37.8%
97.5%	1,456	923	-533	-36.6%
98.8%	1,422	872	-550	-38.7%
100.0%	1,202	816	-387	-32.1%

Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	3,000	3,000	0	0.0%
2.5%	3,000	3,000	0	0.0%
3.7%	3,000	3,000	0	0.0%
4.9%	3,000	3,000	0	0.0%
6.2%	3,000	3,000	0	0.0%
7.4%	3,000	3,000	0	0.0%
8.6%	3,000	3,000	0	0.0%
9.9%	3,000	3,000	0	0.0%
11.1%	3,000	3,000	0	0.0%
12.3%	3,000	3,000	0	0.0%
13.6%	3,000	3,000	0	0.0%
14.8%	3,000	3,000	0	0.0%
16.0%	3,000	3,000	0	0.0%
17.3%	3,000	3,000	0	0.0%
18.5%	3,000	3,000	0	0.0%
19.8%	3,000	3,000	0	0.0%
21.0%	3,000	3,000	0	0.0%
22.2%	3,000	3,000	0	0.0%
23.5%	3,000	3,000	0	0.0%
24.7%	3,000	3,000	0	0.0%
25.9%	3,000	3,000	0	0.0%
27.2%	3,000	3,000	0	0.0%
28.4%	3,000	3,000	0	0.0%
29.6%	3,000	3,000	0	0.0%
30.9%	3,000	3,000	0	0.0%
32.1%	3,000	3,000	0	0.0%
33.3%	3,000	3,000	0	0.0%
34.6%	3,000	3,000	0	0.0%
35.8%	3,000	3,000	0	0.0%
37.0%	3,000	3,000	0	0.0%
38.3%	3,000	2,998	-2	-0.1%
39.5%	3,000	2,998	-2	-0.1%
40.7%	3,000	2,996	-4	-0.1%
42.0%	3,000	2,985	-15	-0.5%
43.2%	3,000	2,979	-21	-0.7%
44.4%	3,000	2,973	-27	-0.9%
45.7%	3,000	2,924	-76	-2.5%
46.9%	3,000	2,912	-88	-2.9%
48.1%	3,000	2,905	-95	-3.2%
49.4%	3,000	2,891	-109	-3.6%
50.6%	3,000	2,852	-148	-4.9%
51.9%	3,000	2,785	-215	-7.2%
53.1%	3,000	2,627	-373	-12.4%
54.3%	3,000	2,565	-435	-14.5%
55.6%	3,000	2,554	-446	-14.9%
56.8%	3,000	2,544	-456	-15.2%
58.0%	3,000	2,496	-504	-16.8%
59.3%	3,000	2,417	-583	-19.4%
60.5%	3,000	2,330	-670	-22.3%
61.7%	3,000	2,324	-676	-22.5%
63.0%	3,000	2,261	-739	-24.6%
64.2%	2,998	2,236	-762	-25.4%
65.4%	2,998	2,200	-799	-26.6%
66.7%	2,996	2,199	-797	-26.6%
67.9%	2,996	2,191	-805	-26.9%
69.1%	2,988	2,185	-802	-26.9%
70.4%	2,985	2,159	-826	-27.7%
71.6%	2,964	2,151	-812	-27.4%
72.8%	2,953	2,087	-866	-29.3%
74.1%	2,953	2,076	-877	-29.7%
75.3%	2,953	2,044	-909	-30.8%
76.5%	2,950	2,040	-910	-30.8%
77.8%	2,918	2,037	-881	-30.2%
79.0%	2,915	2,037	-879	-30.1%
80.2%	2,905	2,037	-868	-29.9%
81.5%	2,865	2,037	-828	-28.9%
82.7%	2,840	2,036	-804	-28.3%
84.0%	2,827	2,033	-794	-28.1%
85.2%	2,792	2,031	-761	-27.3%
86.4%	2,787	2,029	-758	-27.2%
87.7%	2,776	2,021	-756	-27.2%
88.9%	2,685	2,002	-683	-25.4%
90.1%	2,439	1,986	-454	-18.6%
91.4%	2,434	1,964	-470	-19.3%
92.6%	2,338	1,920	-418	-17.9%
93.8%	2,330	1,905	-425	-18.2%
95.1%	2,326	1,869	-457	-19.7%
96.3%	2,315	1,734	-581	-25.1%
97.5%	2,310	1,706	-605	-26.2%
98.8%	2,296	1,697	-600	-26.1%
100.0%	2,236	1,539	-697	-31.2%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,923	3,000	77	2.6%
1.2%	2,923	3,000	77	2.6%
2.5%	2,923	3,000	77	2.6%
3.7%	2,923	3,000	77	2.6%
4.9%	2,923	2,954	31	1.0%
6.2%	2,923	2,953	30	1.0%
7.4%	2,923	2,937	14	0.5%
8.6%	2,923	2,937	14	0.5%
9.9%	2,923	2,923	0	0.0%
11.1%	2,923	2,923	0	0.0%
12.3%	2,923	2,923	0	0.0%
13.6%	2,923	2,923	0	0.0%
14.8%	2,923	2,923	0	0.0%
16.0%	2,923	2,923	0	0.0%
17.3%	2,923	2,923	0	0.0%
18.5%	2,923	2,923	0	0.0%
19.8%	2,923	2,923	0	0.0%
21.0%	2,923	2,923	0	0.0%
22.2%	2,923	2,923	0	0.0%
23.5%	2,923	2,923	0	0.0%
24.7%	2,923	2,923	0	0.0%
25.9%	2,923	2,923	0	0.0%
27.2%	2,923	2,923	0	0.0%
28.4%	2,923	2,923	0	0.0%
29.6%	2,923	2,923	0	0.0%
30.9%	2,923	2,914	-9	-0.3%
32.1%	2,923	2,913	-10	-0.4%
33.3%	2,923	2,913	-10	-0.4%
34.6%	2,923	2,911	-13	-0.4%
35.8%	2,923	2,876	-48	-1.6%
37.0%	2,923	2,851	-73	-2.5%
38.3%	2,923	2,847	-76	-2.6%
39.5%	2,918	2,841	-77	-2.6%
40.7%	2,915	2,828	-87	-3.0%
42.0%	2,914	2,828	-86	-3.0%
43.2%	2,913	2,828	-85	-2.9%
44.4%	2,910	2,828	-82	-2.8%
45.7%	2,902	2,823	-80	-2.7%
46.9%	2,895	2,800	-95	-3.3%
48.1%	2,888	2,797	-91	-3.1%
49.4%	2,873	2,774	-99	-3.4%
50.6%	2,872	2,757	-116	-4.0%
51.9%	2,869	2,739	-130	-4.5%
53.1%	2,866	2,728	-138	-4.8%
54.3%	2,853	2,690	-163	-5.7%
55.6%	2,852	2,688	-163	-5.7%
56.8%	2,851	2,620	-232	-8.1%
58.0%	2,851	2,573	-277	-9.7%
59.3%	2,849	2,540	-309	-10.9%
60.5%	2,847	2,495	-352	-12.4%
61.7%	2,828	2,414	-414	-14.6%
63.0%	2,828	2,380	-448	-15.8%
64.2%	2,828	2,363	-465	-16.4%
65.4%	2,828	2,360	-468	-16.5%
66.7%	2,828	2,352	-476	-16.8%
67.9%	2,828	2,348	-480	-17.0%
69.1%	2,828	2,299	-528	-18.7%
70.4%	2,828	2,297	-531	-18.8%
71.6%	2,828	2,259	-569	-20.1%
72.8%	2,828	2,198	-630	-22.3%
74.1%	2,828	2,166	-662	-23.4%
75.3%	2,828	2,093	-735	-26.0%
76.5%	2,828	2,074	-754	-26.7%
77.8%	2,828	1,992	-836	-29.6%
79.0%	2,828	1,939	-889	-31.4%
80.2%	2,828	1,899	-929	-32.9%
81.5%	2,828	1,891	-937	-33.1%
82.7%	2,823	1,889	-933	-33.1%
84.0%	2,823	1,886	-937	-33.2%
85.2%	2,820	1,859	-961	-34.1%
86.4%	2,810	1,851	-959	-34.1%
87.7%	2,799	1,836	-963	-34.4%
88.9%	2,635	1,796	-839	-31.8%
90.1%	2,247	1,794	-453	-20.2%
91.4%	2,244	1,791	-453	-20.2%
92.6%	2,163	1,787	-376	-17.4%
93.8%	2,162	1,674	-488	-22.6%
95.1%	2,128	1,673	-455	-21.4%
96.3%	2,110	1,642	-468	-22.2%
97.5%	2,082	1,607	-475	-22.8%
98.8%	2,067	1,263	-803	-38.9%
100.0%	2,064	1,228	-835	-40.5%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,224	3,000	776	34.9%
1.2%	2,224	3,000	776	34.9%
2.5%	2,224	3,000	776	34.9%
3.7%	2,224	3,000	776	34.9%
4.9%	2,224	2,627	403	18.1%
6.2%	2,224	2,616	392	17.6%
7.4%	2,224	2,608	384	17.3%
8.6%	2,224	2,593	370	16.6%
9.9%	2,224	2,548	324	14.6%
11.1%	2,224	2,541	317	14.2%
12.3%	2,224	2,485	261	11.7%
13.6%	2,224	2,480	256	11.5%
14.8%	2,224	2,444	220	9.9%
16.0%	2,224	2,443	219	9.8%
17.3%	2,224	2,443	219	9.8%
18.5%	2,224	2,435	211	9.5%
19.8%	2,224	2,413	189	8.5%
21.0%	2,224	2,404	180	8.1%
22.2%	2,224	2,339	115	5.2%
23.5%	2,224	2,224	0	0.0%
24.7%	2,224	2,224	0	0.0%
25.9%	2,221	2,224	3	0.1%
27.2%	2,221	2,224	3	0.1%
28.4%	2,221	2,224	3	0.1%
29.6%	2,214	2,224	10	0.5%
30.9%	2,211	2,224	13	0.6%
32.1%	2,203	2,224	21	0.9%
33.3%	2,198	2,224	26	1.2%
34.6%	2,178	2,223	45	2.1%
35.8%	2,177	2,221	44	2.0%
37.0%	2,175	2,216	42	1.9%
38.3%	2,170	2,211	42	1.9%
39.5%	2,145	2,194	49	2.3%
40.7%	2,133	2,189	56	2.6%
42.0%	2,129	2,178	49	2.3%
43.2%	2,119	2,163	44	2.1%
44.4%	2,114	2,157	44	2.1%
45.7%	2,114	2,153	39	1.9%
46.9%	2,114	2,144	30	1.4%
48.1%	2,114	2,114	0	0.0%
49.4%	2,114	2,114	0	0.0%
50.6%	2,114	2,114	0	0.0%
51.9%	2,114	2,114	0	0.0%
53.1%	2,114	2,114	0	0.0%
54.3%	2,114	2,114	0	0.0%
55.6%	2,114	2,114	0	0.0%
56.8%	2,114	2,114	0	0.0%
58.0%	2,114	2,114	0	0.0%
59.3%	2,114	2,114	0	0.0%
60.5%	2,114	2,114	0	0.0%
61.7%	2,114	2,109	-5	-0.2%
63.0%	2,114	2,109	-5	-0.2%
64.2%	2,114	2,103	-10	-0.5%
65.4%	2,114	2,101	-13	-0.6%
66.7%	2,114	2,084	-30	-1.4%
67.9%	2,114	2,083	-31	-1.5%
69.1%	2,114	2,074	-40	-1.9%
70.4%	2,111	2,048	-63	-3.0%
71.6%	2,109	2,012	-97	-4.6%
72.8%	2,109	1,926	-183	-8.7%
74.1%	2,109	1,773	-335	-15.9%
75.3%	2,107	1,716	-392	-18.6%
76.5%	2,103	1,670	-433	-20.6%
77.8%	2,101	1,617	-484	-23.0%
79.0%	2,093	1,567	-526	-25.1%
80.2%	2,083	1,413	-670	-32.2%
81.5%	2,074	1,410	-663	-32.0%
82.7%	2,053	1,397	-655	-31.9%
84.0%	2,048	1,342	-706	-34.5%
85.2%	2,010	1,285	-725	-36.1%
86.4%	1,989	1,228	-761	-38.3%
87.7%	1,883	1,226	-657	-34.9%
88.9%	1,854	1,201	-653	-35.2%
90.1%	1,511	1,193	-318	-21.1%
91.4%	1,496	1,178	-318	-21.3%
92.6%	1,440	1,176	-264	-18.4%
93.8%	1,413	1,156	-257	-18.2%
95.1%	1,411	1,012	-398	-28.2%
96.3%	1,410	900	-510	-36.2%
97.5%	1,397	707	-690	-49.4%
98.8%	1,364	660	-704	-51.6%
100.0%	1,342	612	-730	-54.4%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	609	1,585	976	160.1%
1.2%	607	733	126	20.8%
2.5%	607	718	111	18.3%
3.7%	606	690	84	13.8%
4.9%	605	609	4	0.7%
6.2%	604	607	3	0.5%
7.4%	601	607	6	1.0%
8.6%	600	606	6	1.0%
9.9%	599	605	6	1.0%
11.1%	599	604	5	0.8%
12.3%	597	600	3	0.6%
13.6%	597	599	3	0.4%
14.8%	595	599	4	0.7%
16.0%	593	597	4	0.6%
17.3%	592	595	2	0.4%
18.5%	591	593	2	0.3%
19.8%	591	592	2	0.3%
21.0%	590	591	1	0.2%
22.2%	590	591	0	0.1%
23.5%	590	590	1	0.1%
24.7%	590	590	1	0.1%
25.9%	589	590	1	0.2%
27.2%	588	589	1	0.1%
28.4%	588	588	0	0.0%
29.6%	587	588	1	0.2%
30.9%	586	587	0	0.0%
32.1%	586	586	1	0.1%
33.3%	585	586	0	0.0%
34.6%	585	583	-1	-0.2%
35.8%	584	582	-2	-0.3%
37.0%	583	580	-4	-0.6%
38.3%	583	578	-5	-0.8%
39.5%	580	578	-2	-0.4%
40.7%	578	577	-1	-0.2%
42.0%	578	577	-1	-0.2%
43.2%	578	576	-2	-0.3%
44.4%	577	575	-1	-0.3%
45.7%	577	575	-2	-0.3%
46.9%	576	573	-3	-0.4%
48.1%	575	572	-3	-0.5%
49.4%	575	572	-3	-0.5%
50.6%	573	571	-2	-0.3%
51.9%	572	570	-3	-0.5%
53.1%	572	568	-4	-0.7%
54.3%	571	565	-6	-1.1%
55.6%	571	561	-10	-1.8%
56.8%	568	561	-7	-1.3%
58.0%	563	560	-4	-0.6%
59.3%	563	553	-9	-1.7%
60.5%	561	551	-10	-1.8%
61.7%	561	546	-15	-2.7%
63.0%	561	545	-16	-2.9%
64.2%	550	544	-7	-1.2%
65.4%	546	543	-3	-0.5%
66.7%	546	541	-5	-0.9%
67.9%	545	535	-10	-1.9%
69.1%	543	527	-16	-3.0%
70.4%	535	516	-19	-3.6%
71.6%	535	511	-24	-4.4%
72.8%	534	511	-23	-4.4%
74.1%	528	510	-19	-3.5%
75.3%	528	509	-19	-3.6%
76.5%	528	503	-25	-4.8%
77.8%	516	498	-18	-3.6%
79.0%	513	491	-22	-4.3%
80.2%	512	487	-25	-4.9%
81.5%	509	484	-24	-4.8%
82.7%	498	476	-22	-4.3%
84.0%	497	459	-38	-7.6%
85.2%	494	454	-40	-8.1%
86.4%	461	454	-8	-1.7%
87.7%	460	444	-16	-3.5%
88.9%	442	442	0	0.0%
90.1%	439	441	2	0.4%
91.4%	437	436	0	0.0%
92.6%	406	406	0	0.1%
93.8%	404	406	1	0.3%
95.1%	396	404	8	2.1%
96.3%	378	396	18	4.8%
97.5%	363	378	15	4.0%
98.8%	327	346	19	5.8%
100.0%	325	304	-21	-6.6%

Figure OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

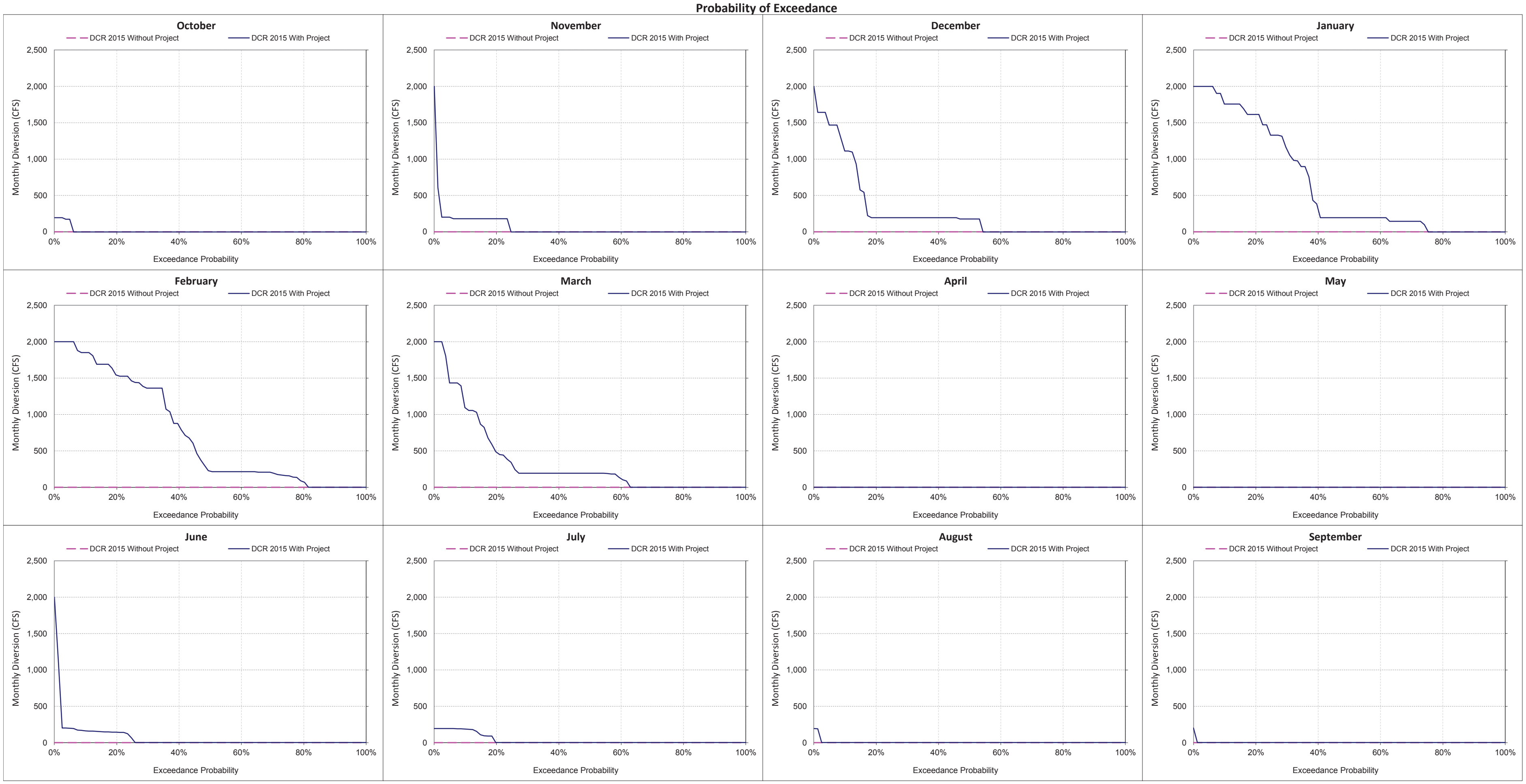


Table OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	194	194	
1.2%	0	194	194	
2.5%	0	194	194	
3.7%	0	174	174	
4.9%	0	174	174	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	607	607	
2.5%	0	200	200	
3.7%	0	200	200	
4.9%	0	200	200	
6.2%	0	179	179	
7.4%	0	179	179	
8.6%	0	179	179	
9.9%	0	179	179	
11.1%	0	179	179	
12.3%	0	179	179	
13.6%	0	179	179	
14.8%	0	179	179	
16.0%	0	179	179	
17.3%	0	179	179	
18.5%	0	179	179	
19.8%	0	179	179	
21.0%	0	179	179	
22.2%	0	179	179	
23.5%	0	179	179	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	1,644	1,644	
2.5%	0	1,644	1,644	
3.7%	0	1,644	1,644	
4.9%	0	1,467	1,467	
6.2%	0	1,467	1,467	
7.4%	0	1,467	1,467	
8.6%	0	1,289	1,289	
9.9%	0	1,111	1,111	
11.1%	0	1,111	1,111	
12.3%	0	1,098	1,098	
13.6%	0	933	933	
14.8%	0	578	578	
16.0%	0	544	544	
17.3%	0	221	221	
18.5%	0	194	194	
19.8%	0	194	194	
21.0%	0	194	194	
22.2%	0	194	194	
23.5%	0	194	194	
24.7%	0	194	194	
25.9%	0	194	194	
27.2%	0	194	194	
28.4%	0	194	194	
29.6%	0	194	194	
30.9%	0	194	194	
32.1%	0	194	194	
33.3%	0	194	194	
34.6%	0	194	194	
35.8%	0	194	194	
37.0%	0	194	194	
38.3%	0	194	194	
39.5%	0	194	194	
40.7%	0	194	194	
42.0%	0	194	194	
43.2%	0	194	194	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	178	178	
48.1%	0	178	178	
49.4%	0	178	178	
50.6%	0	178	178	
51.9%	0	178	178	
53.1%	0	178	178	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	2,000	2,000	
6.2%	0	2,000	2,000	
7.4%	0	1,902	1,902	
8.6%	0	1,902	1,902	
9.9%	0	1,758	1,758	
11.1%	0	1,758	1,758	
12.3%	0	1,758	1,758	
13.6%	0	1,758	1,758	
14.8%	0	1,758	1,758	
16.0%	0	1,693	1,693	
17.3%	0	1,615	1,615	
18.5%	0	1,615	1,615	
19.8%	0	1,615	1,615	
21.0%	0	1,615	1,615	
22.2%	0	1,471	1,471	
23.5%	0	1,471	1,471	
24.7%	0	1,328	1,328	
25.9%	0	1,328	1,328	
27.2%	0	1,328	1,328	
28.4%	0	1,315	1,315	
29.6%	0	1,165	1,165	
30.9%	0	1,054	1,054	
32.1%	0	983	983	
33.3%	0	975	975	
34.6%	0	898	898	
35.8%	0	898	898	
37.0%	0	754	754	
38.3%	0	432	432	
39.5%	0	383	383	
40.7%	0	194	194	
42.0%	0	194	194	
43.2%	0	194	194	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	194	194	
48.1%	0	194	194	
49.4%	0	194	194	
50.6%	0	194	194	
51.9%	0	194	194	
53.1%	0	194	194	
54.3%	0	194	194	
55.6%	0	194	194	
56.8%	0	194	194	
58.0%	0	194	194	
59.3%	0	194	194	
60.5%	0	194	194	
61.7%	0	194	194	
63.0%	0	143	143	
64.2%	0	143	143	
65.4%	0	143	143	
66.7%	0	143	143	
67.9%	0	143	143	
69.1%	0	143	143	
70.4%	0	143	143	
71.6%	0	143	143	
72.8%	0	143	143	
74.1%	0	98	98	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	2,000	2,000	
6.2%	0	2,000	2,000	
7.4%	0	1,880	1,880	
8.6%	0	1,852	1,852	
9.9%	0	1,852	1,852	
11.1%	0	1,850	1,850	
12.3%	0	1,807	1,807	
13.6%	0	1,689	1,689	
14.8%	0	1,689	1,689	
16.0%	0	1,689	1,689	
17.3%	0	1,689	1,689	
18.5%	0	1,638	1,638	
19.8%	0	1,544	1,544	
21.0%	0	1,527	1,527	
22.2%	0	1,527	1,527	
23.5%	0	1,527	1,527	
24.7%	0	1,463	1,463	
25.9%	0	1,442	1,442	
27.2%	0	1,436	1,436	
28.4%	0	1,388	1,388	
29.6%	0	1,364	1,364	
30.9%	0	1,364	1,364	
32.1%	0	1,364	1,364	
33.3%	0	1,364	1,364	
34.6%	0	1,364	1,364	
35.8%	0	1,075	1,075	
37.0%	0	1,039	1,039	
38.3%	0	877	877	
39.5%	0	877	877	
40.7%	0	787	787	
42.0%	0	714	714	
43.2%	0	678	678	
44.4%	0	606	606	
45.7%	0	464	464	
46.9%	0	376	376	
48.1%	0	304	304	
49.4%	0	227	227	
50.6%	0	214	214	
51.9%	0	214	214	
53.1%	0	214	214	
54.3%	0	214	214	
55.6%	0	214	214	
56.8%	0	214	214	
58.0%	0	214	214	
59.3%	0	214	214	
60.5%	0	214	214	
61.7%	0	214	214	
63.0%	0	214	214	
64.2%	0	214	214	
65.4%	0	207	207	
66.7%	0	207	207	
67.9%	0	207	207	
69.1%	0	207	207	
70.4%	0	192	192	
71.6%	0	175	175	
72.8%	0	169	169	
74.1%	0	163	163	
75.3%	0	156	156	
76.5%	0	139	139	
77.8%	0	135	135	
79.0%	0	89	89	
80.2%	0	67	67	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	1,806	1,806	
4.9%	0	1,434	1,434	
6.2%	0	1,434	1,434	
7.4%	0	1,434	1,434	
8.6%	0	1,394	1,394	
9.9%	0	1,096	1,096	
11.1%	0	1,056	1,056	
12.3%	0	1,056	1,056	
13.6%	0	1,030	1,030	
14.8%	0	867	867	
16.0%	0	824	824	
17.3%	0	679	679	
18.5%	0	589	589	
19.8%	0	489	489	
21.0%	0	450	450	
22.2%	0	443	443	
23.5%	0	384	384	
24.7%	0	343	343	
25.9%	0	243	243	
27.2%	0	194	194	
28.4%	0	194	194	
29.6%	0	194	194	
30.9%	0	194	194	
32.1%	0	194	194	
33.3%	0	194	194	
34.6%	0	194	194	
35.8%	0	194	194	
37.0%	0	194	194	
38.3%	0	194	194	
39.5%	0	194	194	
40.7%	0	194	194	
42.0%	0	194	194	
43.2%	0	194	194	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	194	194	
48.1%	0	194	194	
49.4%	0	194	194	
50.6%	0	194	194	
51.9%	0	194	194	
53.1%	0	194	194	
54.3%	0	194	194	
55.6%	0	189	189	
56.8%	0	181	181	
58.0%	0	181	181	
59.3%	0	140	140	
60.5%	0	104	104	
61.7%	0	85	85	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

Percent Exceedance Probability (%)	June: DCR 2015 Without Project Monthly Diversion (CFS)	June: DCR 2015 With Project Monthly Diversion (CFS)	June: Absolute Difference (CFS)	June: Relative Difference (%)	July: DCR 2015 Without Project Monthly Diversion (CFS)	July: DCR 2015 With Project Monthly Diversion (CFS)	July: Absolute Difference (CFS)	July: Relative Difference (%)	August: DCR 2015 Without Project Monthly Diversion (CFS)	August: DCR 2015 With Project Monthly Diversion (CFS)	August: Absolute Difference (CFS)	August: Relative Difference (%)	September: DCR 2015 Without Project Monthly Diversion (CFS)	September: DCR 2015 With Project Monthly Diversion (CFS)	September: Absolute Difference (CFS)	September: Relative Difference (%)
0.0%	0	2,000	2,000		0	194	194		0	194	194		0	200	200	
1.2%	0	1,137	1,137		0	194	194		0	190	190		0	0	0	
2.5%	0	200	200		0	194	194		0	0	0		0	0	0	
3.7%	0	200	200		0	194	194		0	0	0		0	0	0	
4.9%	0	197	197		0	194	194		0	0	0		0	0	0	
6.2%	0	193	193		0	194	194		0	0	0		0	0	0	
7.4%	0	172	172		0	190	190		0	0	0		0	0	0	
8.6%	0	169	169		0	190	190		0	0	0		0	0	0	
9.9%	0	162	162		0	187	187		0	0	0		0	0	0	
11.1%	0	160	160		0	183	183		0	0	0		0	0	0	
12.3%	0	159	159		0	180	180		0	0	0		0	0	0	
13.6%	0	154	154		0	153	153		0	0	0		0	0	0	
14.8%	0	150	150		0	107	107		0	0	0		0	0	0	
16.0%	0	148	148		0	93	93		0	0	0		0	0	0	
17.3%	0	146	146		0	92	92		0	0	0		0	0	0	
18.5%	0	146	146		0	91	91		0	0	0		0	0	0	
19.8%	0	145	145		0	0	0		0	0	0		0	0	0	
21.0%	0	141	141		0	0	0		0	0	0		0	0	0	
22.2%	0	141	141		0	0	0		0	0	0		0	0	0	
23.5%	0	122	122		0	0	0		0	0	0		0	0	0	
24.7%	0	67	67		0	0	0		0	0	0		0	0	0	
25.9%	0	0	0		0	0	0		0	0	0		0	0	0	
27.2%	0	0	0		0	0	0		0	0	0		0	0	0	
28.4%	0	0	0		0	0	0		0	0	0		0	0	0	
29.6%	0	0	0		0	0	0		0	0	0		0	0	0	
30.9%	0	0	0		0	0	0		0	0	0		0	0	0	
32.1%	0	0	0		0	0	0		0	0	0		0	0	0	
33.3%	0	0	0		0	0	0		0	0	0		0	0	0	
34.6%	0	0	0		0	0	0		0	0	0		0	0	0	
35.8%	0	0	0		0	0	0		0	0	0		0	0	0	
37.0%	0	0	0		0	0	0		0	0	0		0	0	0	
38.3%	0	0	0		0	0	0		0	0	0		0	0	0	
39.5%	0	0	0		0	0	0		0	0	0		0	0	0	
40.7%	0	0	0		0	0	0		0	0	0		0	0	0	
42.0%	0	0	0		0	0	0		0	0	0		0	0	0	
43.2%	0	0	0		0	0	0		0	0	0		0	0	0	
44.4%	0	0	0		0	0	0		0	0	0		0	0	0	
45.7%	0	0	0		0	0	0		0	0	0		0	0	0	
46.9%	0	0	0		0	0	0		0	0	0		0	0	0	
48.1%	0	0	0		0	0	0		0	0	0		0	0	0	
49.4%	0	0	0		0	0	0		0	0	0		0	0	0	
50.6%	0	0	0		0	0	0		0	0	0		0	0	0	
51.9%	0	0	0		0	0	0		0	0	0		0	0	0	
53.1%	0	0	0		0	0	0		0	0	0		0	0	0	
54.3%	0	0	0		0	0	0		0	0	0		0	0	0	
55.6%	0	0	0		0	0	0		0	0	0		0	0	0	
56.8%	0	0	0		0	0	0		0	0	0		0	0	0	
58.0%	0	0	0		0	0	0		0	0	0		0	0	0	
59.3%	0	0	0		0	0	0		0	0	0		0	0	0	
60.5%	0	0	0		0	0	0		0	0	0		0	0	0	
61.7%	0	0	0		0	0	0		0	0	0		0	0	0	
63.0%	0	0	0		0	0	0		0	0	0		0	0	0	
64.2%	0	0	0		0	0	0		0	0	0		0	0	0	
65.4%	0	0	0		0	0	0		0	0	0		0	0	0	
66.7%	0	0	0		0	0	0		0	0	0		0	0	0	
67.9%	0	0	0		0	0	0		0	0	0		0	0	0	
69.1%	0	0	0		0	0	0		0	0	0		0	0	0	
70.4%	0	0	0		0	0	0		0	0	0		0	0	0	
71.6%	0	0	0		0	0	0		0	0	0		0	0	0	
72.8%	0	0	0		0	0	0		0	0	0		0	0	0	
74.1%	0	0	0		0	0	0		0	0	0		0	0	0	
75.3%	0	0	0		0	0	0		0	0	0		0	0	0	
76.5%	0	0	0		0	0	0		0	0	0		0	0	0	
77.8%	0	0	0		0	0	0		0	0	0		0	0	0	
79.0%	0	0	0		0	0	0		0	0	0		0	0	0	
80.2%	0	0	0		0	0	0		0	0	0		0	0	0	
81.5%	0	0	0		0	0	0		0	0	0		0	0	0	
82.7%	0	0	0		0	0	0		0	0	0		0	0	0	
84.0%	0	0	0		0	0	0		0	0	0		0	0	0	
85.2%	0	0	0		0	0	0		0	0	0		0	0	0	
86.4%	0	0	0		0	0	0		0	0	0		0	0	0	
87.7%	0	0	0		0	0	0		0	0	0		0	0	0	
88.9%	0	0	0		0	0	0		0	0	0		0	0	0	
90.1%	0	0	0		0	0	0		0	0	0		0	0	0	
91.4%	0	0	0		0	0	0		0	0	0		0	0	0	
92.6%	0	0	0		0	0	0		0	0	0		0	0	0	
93.8%	0	0	0		0	0	0		0	0	0		0	0	0	
95.1%	0	0	0		0	0	0		0	0	0		0	0	0	
96.3%	0	0	0		0	0	0		0	0	0		0	0	0	
97.5%	0	0	0		0	0	0		0	0	0		0	0	0	
98.8%	0	0	0		0	0	0		0	0	0		0	0	0	
100.0%	0	0	0		0	0	0		0	0	0		0	0	0	

Figure OP-04-b
Funks Reservoir to Sites Reservoir, Monthly Diversion
Probability of Exceedance

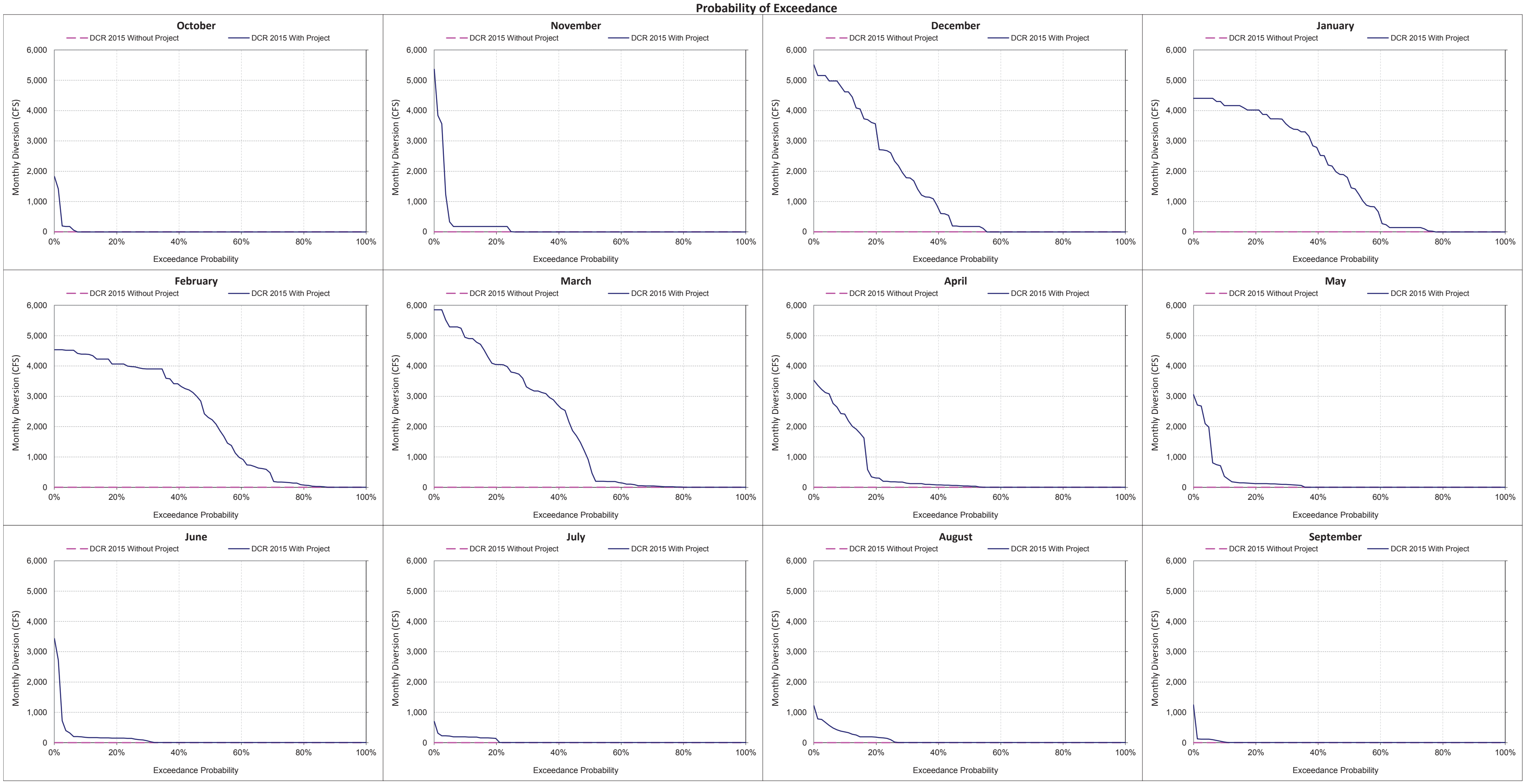


Table OP-04-b

Funks Reservoir to Sites Reservoir, Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,829	1,829	
1.2%	0	1,419	1,419	
2.5%	0	194	194	
3.7%	0	174	174	
4.9%	0	174	174	
6.2%	0	54	54	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	5,366	5,366	
1.2%	0	3,836	3,836	
2.5%	0	3,566	3,566	
3.7%	0	1,240	1,240	
4.9%	0	330	330	
6.2%	0	179	179	
7.4%	0	179	179	
8.6%	0	179	179	
9.9%	0	179	179	
11.1%	0	179	179	
12.3%	0	179	179	
13.6%	0	179	179	
14.8%	0	179	179	
16.0%	0	179	179	
17.3%	0	179	179	
18.5%	0	179	179	
19.8%	0	179	179	
21.0%	0	179	179	
22.2%	0	179	179	
23.5%	0	179	179	
24.7%	0	8	8	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	5,511	5,511	
1.2%	0	5,155	5,155	
2.5%	0	5,155	5,155	
3.7%	0	5,155	5,155	
4.9%	0	4,978	4,978	
6.2%	0	4,978	4,978	
7.4%	0	4,978	4,978	
8.6%	0	4,800	4,800	
9.9%	0	4,622	4,622	
11.1%	0	4,622	4,622	
12.3%	0	4,444	4,444	
13.6%	0	4,089	4,089	
14.8%	0	4,055	4,055	
16.0%	0	3,732	3,732	
17.3%	0	3,705	3,705	
18.5%	0	3,612	3,612	
19.8%	0	3,569	3,569	
21.0%	0	2,714	2,714	
22.2%	0	2,697	2,697	
23.5%	0	2,676	2,676	
24.7%	0	2,610	2,610	
25.9%	0	2,334	2,334	
27.2%	0	2,182	2,182	
28.4%	0	1,957	1,957	
29.6%	0	1,785	1,785	
30.9%	0	1,780	1,780	
32.1%	0	1,679	1,679	
33.3%	0	1,408	1,408	
34.6%	0	1,211	1,211	
35.8%	0	1,152	1,152	
37.0%	0	1,147	1,147	
38.3%	0	1,096	1,096	
39.5%	0	878	878	
40.7%	0	600	600	
42.0%	0	594	594	
43.2%	0	546	546	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	178	178	
48.1%	0	178	178	
49.4%	0	178	178	
50.6%	0	178	178	
51.9%	0	178	178	
53.1%	0	178	178	
54.3%	0	118	118	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,403	4,403	
1.2%	0	4,403	4,403	
2.5%	0	4,403	4,403	
3.7%	0	4,403	4,403	
4.9%	0	4,403	4,403	
6.2%	0	4,403	4,403	
7.4%	0	4,305	4,305	
8.6%	0	4,305	4,305	
9.9%	0	4,161	4,161	
11.1%	0	4,161	4,161	
12.3%	0	4,161	4,161	
13.6%	0	4,161	4,161	
14.8%	0	4,161	4,161	
16.0%	0	4,096	4,096	
17.3%	0	4,018	4,018	
18.5%	0	4,018	4,018	
19.8%	0	4,018	4,018	
21.0%	0	4,018	4,018	
22.2%	0	3,874	3,874	
23.5%	0	3,874	3,874	
24.7%	0	3,731	3,731	
25.9%	0	3,731	3,731	
27.2%	0	3,731	3,731	
28.4%	0	3,718	3,718	
29.6%	0	3,568	3,568	
30.9%	0	3,457	3,457	
32.1%	0	3,386	3,386	
33.3%	0	3,377	3,377	
34.6%	0	3,300	3,300	
35.8%	0	3,300	3,300	
37.0%	0	3,157	3,157	
38.3%	0	2,835	2,835	
39.5%	0	2,786	2,786	
40.7%	0	2,520	2,520	
42.0%	0	2,512	2,512	
43.2%	0	2,209	2,209	
44.4%	0	2,171	2,171	
45.7%	0	1,980	1,980	
46.9%	0	1,893	1,893	
48.1%	0	1,889	1,889	
49.4%	0	1,791	1,791	
50.6%	0	1,448	1,448	
51.9%	0	1,418	1,418	
53.1%	0	1,227	1,227	
54.3%	0	1,013	1,013	
55.6%	0	874	874	
56.8%	0	838	838	
58.0%	0	830	830	
59.3%	0	663	663	
60.5%	0	268	268	
61.7%	0	236	236	
63.0%	0	143	143	
64.2%	0	143	143	
65.4%	0	143	143	
66.7%	0	143	143	
67.9%	0	143	143	
69.1%	0	143	143	
70.4%	0	143	143	
71.6%	0	143	143	
72.8%	0	143	143	
74.1%	0	98	98	
75.3%	0	27	27	
76.5%	0	17	17	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-04-b

Funks Reservoir to Sites Reservoir, Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,536	4,536	
1.2%	0	4,536	4,536	
2.5%	0	4,536	4,536	
3.7%	0	4,521	4,521	
4.9%	0	4,521	4,521	
6.2%	0	4,521	4,521	
7.4%	0	4,416	4,416	
8.6%	0	4,388	4,388	
9.9%	0	4,388	4,388	
11.1%	0	4,386	4,386	
12.3%	0	4,343	4,343	
13.6%	0	4,225	4,225	
14.8%	0	4,225	4,225	
16.0%	0	4,225	4,225	
17.3%	0	4,225	4,225	
18.5%	0	4,065	4,065	
19.8%	0	4,063	4,063	
21.0%	0	4,063	4,063	
22.2%	0	4,063	4,063	
23.5%	0	3,999	3,999	
24.7%	0	3,978	3,978	
25.9%	0	3,972	3,972	
27.2%	0	3,938	3,938	
28.4%	0	3,909	3,909	
29.6%	0	3,900	3,900	
30.9%	0	3,900	3,900	
32.1%	0	3,900	3,900	
33.3%	0	3,900	3,900	
34.6%	0	3,900	3,900	
35.8%	0	3,596	3,596	
37.0%	0	3,575	3,575	
38.3%	0	3,413	3,413	
39.5%	0	3,413	3,413	
40.7%	0	3,323	3,323	
42.0%	0	3,250	3,250	
43.2%	0	3,214	3,214	
44.4%	0	3,127	3,127	
45.7%	0	3,000	3,000	
46.9%	0	2,840	2,840	
48.1%	0	2,426	2,426	
49.4%	0	2,305	2,305	
50.6%	0	2,225	2,225	
51.9%	0	2,079	2,079	
53.1%	0	1,869	1,869	
54.3%	0	1,675	1,675	
55.6%	0	1,457	1,457	
56.8%	0	1,375	1,375	
58.0%	0	1,131	1,131	
59.3%	0	987	987	
60.5%	0	914	914	
61.7%	0	739	739	
63.0%	0	732	732	
64.2%	0	686	686	
65.4%	0	632	632	
66.7%	0	620	620	
67.9%	0	588	588	
69.1%	0	480	480	
70.4%	0	192	192	
71.6%	0	175	175	
72.8%	0	169	169	
74.1%	0	163	163	
75.3%	0	156	156	
76.5%	0	139	139	
77.8%	0	135	135	
79.0%	0	89	89	
80.2%	0	67	67	
81.5%	0	64	64	
82.7%	0	35	35	
84.0%	0	26	26	
85.2%	0	25	25	
86.4%	0	20	20	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	5,852	5,852	
1.2%	0	5,852	5,852	
2.5%	0	5,852	5,852	
3.7%	0	5,518	5,518	
4.9%	0	5,286	5,286	
6.2%	0	5,286	5,286	
7.4%	0	5,286	5,286	
8.6%	0	5,246	5,246	
9.9%	0	4,948	4,948	
11.1%	0	4,908	4,908	
12.3%	0	4,908	4,908	
13.6%	0	4,782	4,782	
14.8%	0	4,719	4,719	
16.0%	0	4,531	4,531	
17.3%	0	4,295	4,295	
18.5%	0	4,095	4,095	
19.8%	0	4,046	4,046	
21.0%	0	4,046	4,046	
22.2%	0	4,040	4,040	
23.5%	0	3,984	3,984	
24.7%	0	3,803	3,803	
25.9%	0	3,776	3,776	
27.2%	0	3,735	3,735	
28.4%	0	3,593	3,593	
29.6%	0	3,316	3,316	
30.9%	0	3,239	3,239	
32.1%	0	3,178	3,178	
33.3%	0	3,172	3,172	
34.6%	0	3,123	3,123	
35.8%	0	3,087	3,087	
37.0%	0	2,965	2,965	
38.3%	0	2,883	2,883	
39.5%	0	2,729	2,729	
40.7%	0	2,601	2,601	
42.0%	0	2,533	2,533	
43.2%	0	2,161	2,161	
44.4%	0	1,870	1,870	
45.7%	0	1,691	1,691	
46.9%	0	1,484	1,484	
48.1%	0	1,209	1,209	
49.4%	0	921	921	
50.6%	0	459	459	
51.9%	0	196	196	
53.1%	0	194	194	
54.3%	0	194	194	
55.6%	0	189	189	
56.8%	0	189	189	
58.0%	0	189	189	
59.3%	0	155	155	
60.5%	0	140	140	
61.7%	0	106	106	
63.0%	0	104	104	
64.2%	0	85	85	
65.4%	0	55	55	
66.7%	0	49	49	
67.9%	0	44	44	
69.1%	0	43	43	
70.4%	0	41	41	
71.6%	0	35	35	
72.8%	0	26	26	
74.1%	0	16	16	
75.3%	0	16	16	
76.5%	0	15	15	
77.8%	0	8	8	
79.0%	0	8	8	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	3,527	3,527	
1.2%	0	3,362	3,362	
2.5%	0	3,224	3,224	
3.7%	0	3,122	3,122	
4.9%	0	3,078	3,078	
6.2%	0	2,764	2,764	
7.4%	0	2,649	2,649	
8.6%	0	2,431	2,431	
9.9%	0	2,414	2,414	
11.1%	0	2,188	2,188	
12.3%	0	2,009	2,009	
13.6%	0	1,922	1,922	
14.8%	0	1,778	1,778	
16.0%	0	1,631	1,631	
17.3%	0	583	583	
18.5%	0	347	347	
19.8%	0	305	305	
21.0%	0	303	303	
22.2%	0	197	197	
23.5%	0	197	197	
24.7%	0	184	184	
25.9%	0	182	182	
27.2%	0	173	173	
28.4%	0	170	170	
29.6%	0	141	141	
30.9%	0	120	120	
32.1%	0	118	118	
33.3%	0	118	118	
34.6%	0	117	117	
35.8%	0	96	96	
37.0%	0	95	95	
38.3%	0	82	82	
39.5%	0	79	79	
40.7%	0	74	74	
42.0%	0	73	73	
43.2%	0	68	68	
44.4%	0	65	65	
45.7%	0	57	57	
46.9%	0	53	53	
48.1%	0	44	44	
49.4%	0	41	41	
50.6%	0	38	38	
51.9%	0	37	37	
53.1%	0	7	7	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	3,059	3,059	
1.2%	0	2,717	2,717	
2.5%	0	2,680	2,680	
3.7%	0	2,093	2,093	
4.9%	0	1,987	1,987	
6.2%	0	802	802	
7.4%	0	748	748	
8.6%	0	708	708	
9.9%	0	359	359	
11.1%	0	268	268	
12.3%	0	182	182	
13.6%	0	167	167	
14.8%	0	146	146	
16.0%	0	144	144	
17.3%	0	139	139	
18.5%	0	127	127	
19.8%	0	124	124	
21.0%	0	123	123	
22.2%	0	122	122	
23.5%	0	120	120	
24.7%	0	110	110	
25.9%	0	108	108	
27.2%	0	105	105	
28.4%	0	94	94	
29.6%	0	91	91	
30.9%	0	84	84	
32.1%	0	77	77	
33.3%	0	72	72	
34.6%	0	59	59	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-04-b

Funks Reservoir to Sites Reservoir, Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	3,438	3,438	
1.2%	0	2,723	2,723	
2.5%	0	723	723	
3.7%	0	400	400	
4.9%	0	323	323	
6.2%	0	197	197	
7.4%	0	197	197	
8.6%	0	193	193	
9.9%	0	172	172	
11.1%	0	169	169	
12.3%	0	163	163	
13.6%	0	162	162	
14.8%	0	160	160	
16.0%	0	159	159	
17.3%	0	154	154	
18.5%	0	150	150	
19.8%	0	148	148	
21.0%	0	146	146	
22.2%	0	145	145	
23.5%	0	141	141	
24.7%	0	141	141	
25.9%	0	115	115	
27.2%	0	97	97	
28.4%	0	87	87	
29.6%	0	67	67	
30.9%	0	26	26	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	698	698	
1.2%	0	310	310	
2.5%	0	225	225	
3.7%	0	224	224	
4.9%	0	220	220	
6.2%	0	194	194	
7.4%	0	190	190	
8.6%	0	190	190	
9.9%	0	190	190	
11.1%	0	187	187	
12.3%	0	183	183	
13.6%	0	180	180	
14.8%	0	160	160	
16.0%	0	158	158	
17.3%	0	158	158	
18.5%	0	153	153	
19.8%	0	143	143	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,223	1,223	
1.2%	0	783	783	
2.5%	0	765	765	
3.7%	0	675	675	
4.9%	0	572	572	
6.2%	0	483	483	
7.4%	0	424	424	
8.6%	0	378	378	
9.9%	0	353	353	
11.1%	0	326	326	
12.3%	0	276	276	
13.6%	0	250	250	
14.8%	0	191	191	
16.0%	0	190	190	
17.3%	0	190	190	
18.5%	0	190	190	
19.8%	0	184	184	
21.0%	0	164	164	
22.2%	0	157	157	
23.5%	0	143	143	
24.7%	0	99	99	
25.9%	0	21	21	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,248	1,248	
1.2%	0	120	120	
2.5%	0	117	117	
3.7%	0	111	111	
4.9%	0	111	111	
6.2%	0	98	98	
7.4%	0	71	71	
8.6%	0	49	49	
9.9%	0	25	25	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-05-b
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Probability of Exceedance

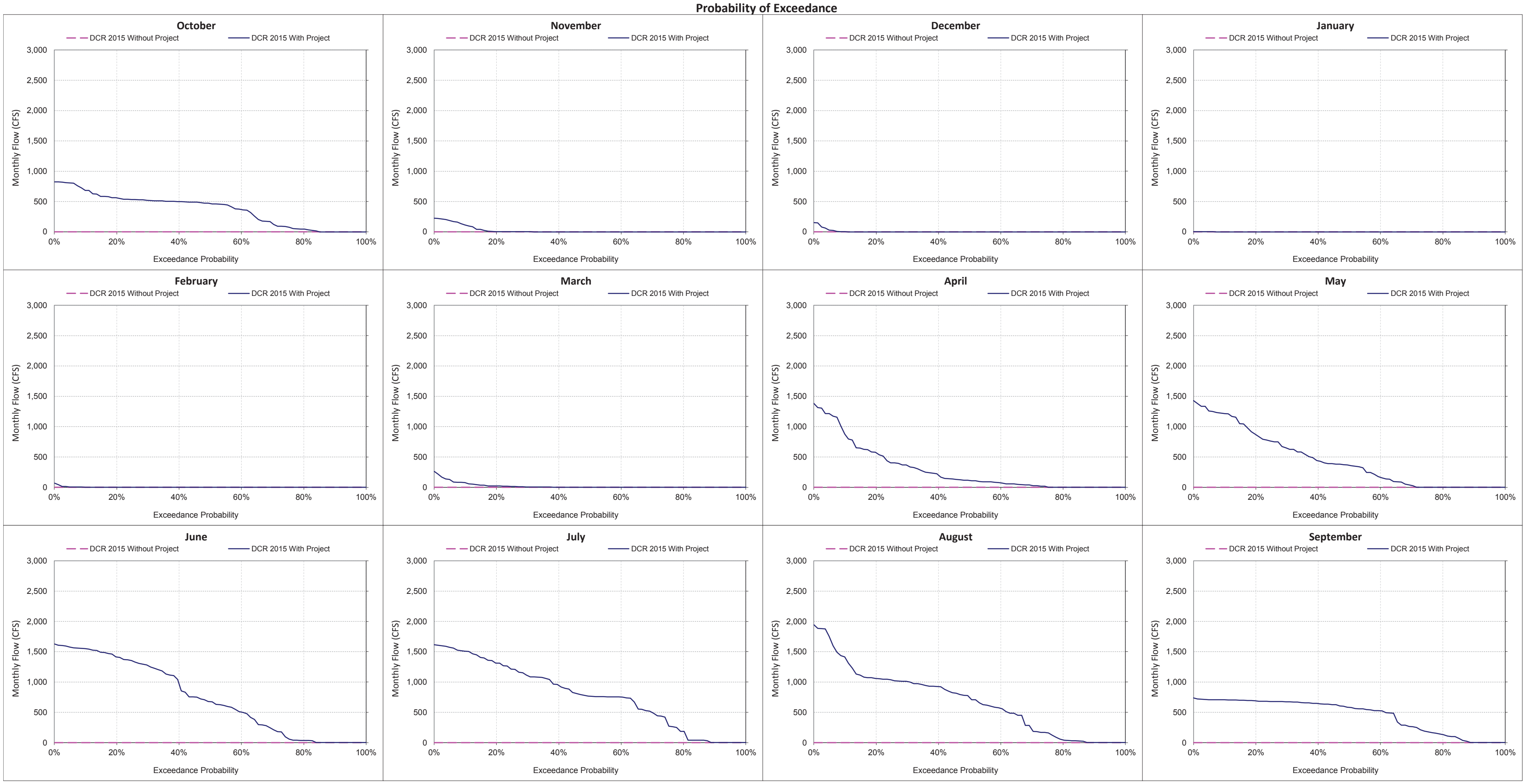


Table OP-05-b

Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	825	825	
1.2%	0	824	824	
2.5%	0	821	821	
3.7%	0	811	811	
4.9%	0	805	805	
6.2%	0	805	805	
7.4%	0	761	761	
8.6%	0	725	725	
9.9%	0	681	681	
11.1%	0	681	681	
12.3%	0	626	626	
13.6%	0	622	622	
14.8%	0	585	585	
16.0%	0	582	582	
17.3%	0	580	580	
18.5%	0	563	563	
19.8%	0	563	563	
21.0%	0	549	549	
22.2%	0	537	537	
23.5%	0	536	536	
24.7%	0	532	532	
25.9%	0	531	531	
27.2%	0	530	530	
28.4%	0	530	530	
29.6%	0	519	519	
30.9%	0	515	515	
32.1%	0	513	513	
33.3%	0	512	512	
34.6%	0	510	510	
35.8%	0	505	505	
37.0%	0	504	504	
38.3%	0	501	501	
39.5%	0	501	501	
40.7%	0	500	500	
42.0%	0	496	496	
43.2%	0	491	491	
44.4%	0	490	490	
45.7%	0	489	489	
46.9%	0	484	484	
48.1%	0	474	474	
49.4%	0	471	471	
50.6%	0	462	462	
51.9%	0	460	460	
53.1%	0	455	455	
54.3%	0	451	451	
55.6%	0	444	444	
56.8%	0	414	414	
58.0%	0	377	377	
59.3%	0	375	375	
60.5%	0	360	360	
61.7%	0	359	359	
63.0%	0	319	319	
64.2%	0	261	261	
65.4%	0	205	205	
66.7%	0	178	178	
67.9%	0	173	173	
69.1%	0	170	170	
70.4%	0	122	122	
71.6%	0	92	92	
72.8%	0	91	91	
74.1%	0	87	87	
75.3%	0	76	76	
76.5%	0	53	53	
77.8%	0	47	47	
79.0%	0	46	46	
80.2%	0	43	43	
81.5%	0	31	31	
82.7%	0	23	23	
84.0%	0	14	14	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	224	224	
1.2%	0	221	221	
2.5%	0	212	212	
3.7%	0	205	205	
4.9%	0	186	186	
6.2%	0	171	171	
7.4%	0	162	162	
8.6%	0	136	136	
9.9%	0	112	112	
11.1%	0	96	96	
12.3%	0	83	83	
13.6%	0	39	39	
14.8%	0	39	39	
16.0%	0	22	22	
17.3%	0	12	12	
18.5%	0	6	6	
19.8%	0	4	4	
21.0%	0	4	4	
22.2%	0	3	3	
23.5%	0	3	3	
24.7%	0	2	2	
25.9%	0	1	1	
27.2%	0	1	1	
28.4%	0	1	1	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	154	154	
1.2%	0	146	146	
2.5%	0	77	77	
3.7%	0	61	61	
4.9%	0	28	28	
6.2%	0	22	22	
7.4%	0	7	7	
8.6%	0	2	2	
9.9%	0	2	2	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4	4	
1.2%	0	4	4	
2.5%	0	4	4	
3.7%	0	4	4	
4.9%	0	3	3	
6.2%	0	3	3	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-05-b
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	69	69	
1.2%	0	45	45	
2.5%	0	14	14	
3.7%	0	12	12	
4.9%	0	3	3	
6.2%	0	3	3	
7.4%	0	3	3	
8.6%	0	3	3	
9.9%	0	1	1	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	263	263	
1.2%	0	218	218	
2.5%	0	166	166	
3.7%	0	136	136	
4.9%	0	130	130	
6.2%	0	85	85	
7.4%	0	83	83	
8.6%	0	82	82	
9.9%	0	78	78	
11.1%	0	54	54	
12.3%	0	50	50	
13.6%	0	42	42	
14.8%	0	36	36	
16.0%	0	34	34	
17.3%	0	20	20	
18.5%	0	20	20	
19.8%	0	20	20	
21.0%	0	20	20	
22.2%	0	17	17	
23.5%	0	16	16	
24.7%	0	13	13	
25.9%	0	12	12	
27.2%	0	8	8	
28.4%	0	7	7	
29.6%	0	7	7	
30.9%	0	6	6	
32.1%	0	5	5	
33.3%	0	4	4	
34.6%	0	3	3	
35.8%	0	3	3	
37.0%	0	3	3	
38.3%	0	2	2	
39.5%	0	2	2	
40.7%	0	1	1	
42.0%	0	1	1	
43.2%	0	1	1	
44.4%	0	1	1	
45.7%	0	1	1	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,382	1,382	
1.2%	0	1,314	1,314	
2.5%	0	1,304	1,304	
3.7%	0	1,215	1,215	
4.9%	0	1,214	1,214	
6.2%	0	1,172	1,172	
7.4%	0	1,158	1,158	
8.6%	0	1,011	1,011	
9.9%	0	878	878	
11.1%	0	794	794	
12.3%	0	781	781	
13.6%	0	653	653	
14.8%	0	648	648	
16.0%	0	624	624	
17.3%	0	623	623	
18.5%	0	581	581	
19.8%	0	580	580	
21.0%	0	537	537	
22.2%	0	514	514	
23.5%	0	438	438	
24.7%	0	405	405	
25.9%	0	401	401	
27.2%	0	392	392	
28.4%	0	370	370	
29.6%	0	368	368	
30.9%	0	332	332	
32.1%	0	327	327	
33.3%	0	305	305	
34.6%	0	275	275	
35.8%	0	250	250	
37.0%	0	239	239	
38.3%	0	232	232	
39.5%	0	224	224	
40.7%	0	169	169	
42.0%	0	147	147	
43.2%	0	142	142	
44.4%	0	136	136	
45.7%	0	128	128	
46.9%	0	124	124	
48.1%	0	117	117	
49.4%	0	114	114	
50.6%	0	109	109	
51.9%	0	108	108	
53.1%	0	94	94	
54.3%	0	92	92	
55.6%	0	89	89	
56.8%	0	89	89	
58.0%	0	81	81	
59.3%	0	79	79	
60.5%	0	70	70	
61.7%	0	56	56	
63.0%	0	56	56	
64.2%	0	54	54	
65.4%	0	48	48	
66.7%	0	43	43	
67.9%	0	40	40	
69.1%	0	38	38	
70.4%	0	26	26	
71.6%	0	25	25	
72.8%	0	18	18	
74.1%	0	17	17	
75.3%	0	2	2	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,431	1,431	
1.2%	0	1,381	1,381	
2.5%	0	1,337	1,337	
3.7%	0	1,335	1,335	
4.9%	0	1,259	1,259	
6.2%	0	1,249	1,249	
7.4%	0	1,232	1,232	
8.6%	0	1,223	1,223	
9.9%	0	1,216	1,216	
11.1%	0	1,211	1,211	
12.3%	0	1,169	1,169	
13.6%	0	1,154	1,154	
14.8%	0	1,049	1,049	
16.0%	0	1,046	1,046	
17.3%	0	979	979	
18.5%	0	915	915	
19.8%	0	877	877	
21.0%	0	833	833	
22.2%	0	792	792	
23.5%	0	780	780	
24.7%	0	761	761	
25.9%	0	750	750	
27.2%	0	748	748	
28.4%	0	672	672	
29.6%	0	649	649	
30.9%	0	624	624	
32.1%	0	623	623	
33.3%	0	583	583	
34.6%	0	583	583	
35.8%	0	543	543	
37.0%	0	507	507	
38.3%	0	488	488	
39.5%	0	442	442	
40.7%	0	429	429	
42.0%	0	404	404	
43.2%	0	391	391	
44.4%	0	389	389	
45.7%	0	382	382	
46.9%	0	380	380	
48.1%	0	373	373	
49.4%	0	368	368	
50.6%	0	357	357	
51.9%	0	349	349	
53.1%	0	339	339	
54.3%	0	322	322	
55.6%	0	246	246	
56.8%	0	245	245	
58.0%	0	213	213	
59.3%	0	177	177	
60.5%	0	153	153	
61.7%	0	139	139	
63.0%	0	134	134	
64.2%	0	93	93	
65.4%	0	91	91	
66.7%	0	86	86	
67.9%	0	53	53	
69.1%	0	39	39	
70.4%	0	27	27	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-05-b

Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,629	1,629	
1.2%	0	1,606	1,606	
2.5%	0	1,604	1,604	
3.7%	0	1,593	1,593	
4.9%	0	1,577	1,577	
6.2%	0	1,564	1,564	
7.4%	0	1,562	1,562	
8.6%	0	1,555	1,555	
9.9%	0	1,550	1,550	
11.1%	0	1,541	1,541	
12.3%	0	1,527	1,527	
13.6%	0	1,522	1,522	
14.8%	0	1,493	1,493	
16.0%	0	1,486	1,486	
17.3%	0	1,471	1,471	
18.5%	0	1,460	1,460	
19.8%	0	1,412	1,412	
21.0%	0	1,404	1,404	
22.2%	0	1,371	1,371	
23.5%	0	1,368	1,368	
24.7%	0	1,356	1,356	
25.9%	0	1,329	1,329	
27.2%	0	1,309	1,309	
28.4%	0	1,293	1,293	
29.6%	0	1,280	1,280	
30.9%	0	1,246	1,246	
32.1%	0	1,227	1,227	
33.3%	0	1,206	1,206	
34.6%	0	1,181	1,181	
35.8%	0	1,133	1,133	
37.0%	0	1,114	1,114	
38.3%	0	1,106	1,106	
39.5%	0	1,041	1,041	
40.7%	0	854	854	
42.0%	0	834	834	
43.2%	0	755	755	
44.4%	0	753	753	
45.7%	0	750	750	
46.9%	0	720	720	
48.1%	0	708	708	
49.4%	0	679	679	
50.6%	0	672	672	
51.9%	0	631	631	
53.1%	0	625	625	
54.3%	0	616	616	
55.6%	0	599	599	
56.8%	0	585	585	
58.0%	0	549	549	
59.3%	0	513	513	
60.5%	0	499	499	
61.7%	0	477	477	
63.0%	0	418	418	
64.2%	0	381	381	
65.4%	0	296	296	
66.7%	0	294	294	
67.9%	0	281	281	
69.1%	0	244	244	
70.4%	0	213	213	
71.6%	0	180	180	
72.8%	0	176	176	
74.1%	0	96	96	
75.3%	0	57	57	
76.5%	0	42	42	
77.8%	0	42	42	
79.0%	0	36	36	
80.2%	0	35	35	
81.5%	0	34	34	
82.7%	0	31	31	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,617	1,617	
1.2%	0	1,607	1,607	
2.5%	0	1,598	1,598	
3.7%	0	1,589	1,589	
4.9%	0	1,573	1,573	
6.2%	0	1,559	1,559	
7.4%	0	1,525	1,525	
8.6%	0	1,516	1,516	
9.9%	0	1,510	1,510	
11.1%	0	1,506	1,506	
12.3%	0	1,464	1,464	
13.6%	0	1,449	1,449	
14.8%	0	1,407	1,407	
16.0%	0	1,399	1,399	
17.3%	0	1,359	1,359	
18.5%	0	1,355	1,355	
19.8%	0	1,310	1,310	
21.0%	0	1,310	1,310	
22.2%	0	1,267	1,267	
23.5%	0	1,263	1,263	
24.7%	0	1,213	1,213	
25.9%	0	1,211	1,211	
27.2%	0	1,161	1,161	
28.4%	0	1,151	1,151	
29.6%	0	1,116	1,116	
30.9%	0	1,085	1,085	
32.1%	0	1,084	1,084	
33.3%	0	1,078	1,078	
34.6%	0	1,074	1,074	
35.8%	0	1,061	1,061	
37.0%	0	1,042	1,042	
38.3%	0	965	965	
39.5%	0	962	962	
40.7%	0	918	918	
42.0%	0	898	898	
43.2%	0	885	885	
44.4%	0	828	828	
45.7%	0	810	810	
46.9%	0	792	792	
48.1%	0	780	780	
49.4%	0	766	766	
50.6%	0	765	765	
51.9%	0	759	759	
53.1%	0	758	758	
54.3%	0	757	757	
55.6%	0	757	757	
56.8%	0	757	757	
58.0%	0	756	756	
59.3%	0	755	755	
60.5%	0	751	751	
61.7%	0	740	740	
63.0%	0	732	732	
64.2%	0	669	669	
65.4%	0	555	555	
66.7%	0	549	549	
67.9%	0	527	527	
69.1%	0	519	519	
70.4%	0	486	486	
71.6%	0	442	442	
72.8%	0	439	439	
74.1%	0	421	421	
75.3%	0	272	272	
76.5%	0	262	262	
77.8%	0	250	250	
79.0%	0	185	185	
80.2%	0	184	184	
81.5%	0	41	41	
82.7%	0	41	41	
84.0%	0	41	41	
85.2%	0	40	40	
86.4%	0	38	38	
87.7%	0	30	30	
88.9%	0	2	2	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,945	1,945	
1.2%	0	1,887	1,887	
2.5%	0	1,881	1,881	
3.7%	0	1,878	1,878	
4.9%	0	1,751	1,751	
6.2%	0	1,600	1,600	
7.4%	0	1,490	1,490	
8.6%	0	1,434	1,434	
9.9%	0	1,412	1,412	
11.1%	0	1,312	1,312	
12.3%	0	1,232	1,232	
13.6%	0	1,133	1,133	
14.8%	0	1,115	1,115	
16.0%	0	1,082	1,082	
17.3%	0	1,072	1,072	
18.5%	0	1,072	1,072	
19.8%	0	1,057	1,057	
21.0%	0	1,053	1,053	
22.2%	0	1,047	1,047	
23.5%	0	1,044	1,044	
24.7%	0	1,039	1,039	
25.9%	0	1,019	1,019	
27.2%	0	1,016	1,016	
28.4%	0	1,011	1,011	
29.6%	0	1,011	1,011	
30.9%	0	999	999	
32.1%	0	973	973	
33.3%	0	972	972	
34.6%	0	959	959	
35.8%	0	945	945	
37.0%	0	932	932	
38.3%	0	931	931	
39.5%	0	928	928	
40.7%	0	920	920	
42.0%	0	877	877	
43.2%	0	848	848	
44.4%	0	825	825	
45.7%	0	813	813	
46.9%	0	792	792	
48.1%	0	780	780	
49.4%	0	777	777	
50.6%	0	709	709	
51.9%	0	707	707	
53.1%	0	658	658	
54.3%	0	627	627	
55.6%	0	616	616	
56.8%	0	600	600	
58.0%	0	582	582	
59.3%	0	577	577	
60.5%	0	557	557	
61.7%	0	510	510	
63.0%	0	486	486	
64.2%	0	484	484	
65.4%	0	453	453	
66.7%	0	453	453	
67.9%	0	286	286	
69.1%	0	283	283	
70.4%	0	187	187	
71.6%	0	180	180	
72.8%	0	170	170	
74.1%	0	167	167	
75.3%	0	162	162	
76.5%	0	122	122	
77.8%	0	86	86	
79.0%	0	57	57	
80.2%	0	41	41	
81.5%	0	35	35	
82.7%	0	33	33	
84.0%	0	32	32	
85.2%	0	26	26	
86.4%	0	25	25	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	738	738	
1.2%	0	721	721	
2.5%	0	715	715	
3.7%	0	714	714	
4.9%	0	709	709	
6.2%	0	709	709	
7.4%	0	708	708	
8.6%	0	707	707	
9.9%	0	707	707	
11.1%	0	705	705	
12.3%	0	705	705	
13.6%	0	705	705	
14.8%	0	700	700	
16.0%	0	698	698	
17.3%	0	696	696	
18.5%	0	695	695	
19.8%	0	692	692	
21.0%	0	683	683	
22.2%	0	683	683	
23.5%	0	682	682	
24.7%	0	679	679	
25.9%	0	679	679	
27.2%	0	679	679	
28.4%	0	677	677	
29.6%	0	675	675	
30.9%	0	672	672	
32.1%	0	670	670	
33.3%	0	669	669	
34.6%	0	660	660	
35.8%	0	659	659	
37.0%	0	657	657	
38.3%	0	647	647	
39.5%	0	646	646	
40.7%	0	639	639	
42.0%	0	637	637	
43.2%	0	635	635	
44.4%	0	628	628	
45.7%	0	628	628	
46.9%	0	604	604	
48.1%	0	602	602	
49.4%	0	582	582	
50.6%	0	578	578	
51.9%	0	562	562	
53.1%	0	560	560	
54.3%	0	557	557	
55.6%	0	544	544	
56.8%	0	540	540	
58.0%	0	527	527	
59.3%	0	526	526	
60.5%	0	524	524	
61.7%	0	494	494	
63.0%	0	492	492	
64.2%	0	485	485	
65.4%	0	339	339	
66.7%	0	291	291	
67.9%	0	289	289	
69.1%	0	267	267	
70.4%	0	262	262	
71.6%	0	250	250	
72.8%	0	211	211	
74.1%	0	190	190	
75.3%	0	178	178	
76.5%	0	166	166	
77.8%	0	154	154	
79.0%	0	145	145	
80.2%	0	129	129	
81.5%	0	109	109	
82.7%	0	99	99	
84.0%	0	99	99	
85.2%	0	70	70	
86.4%	0	34	34	
87.7%	0	25	25	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-06-b
Funks Reservoir to Deleven Pipeline, Monthly Flow
Probability of Exceedance

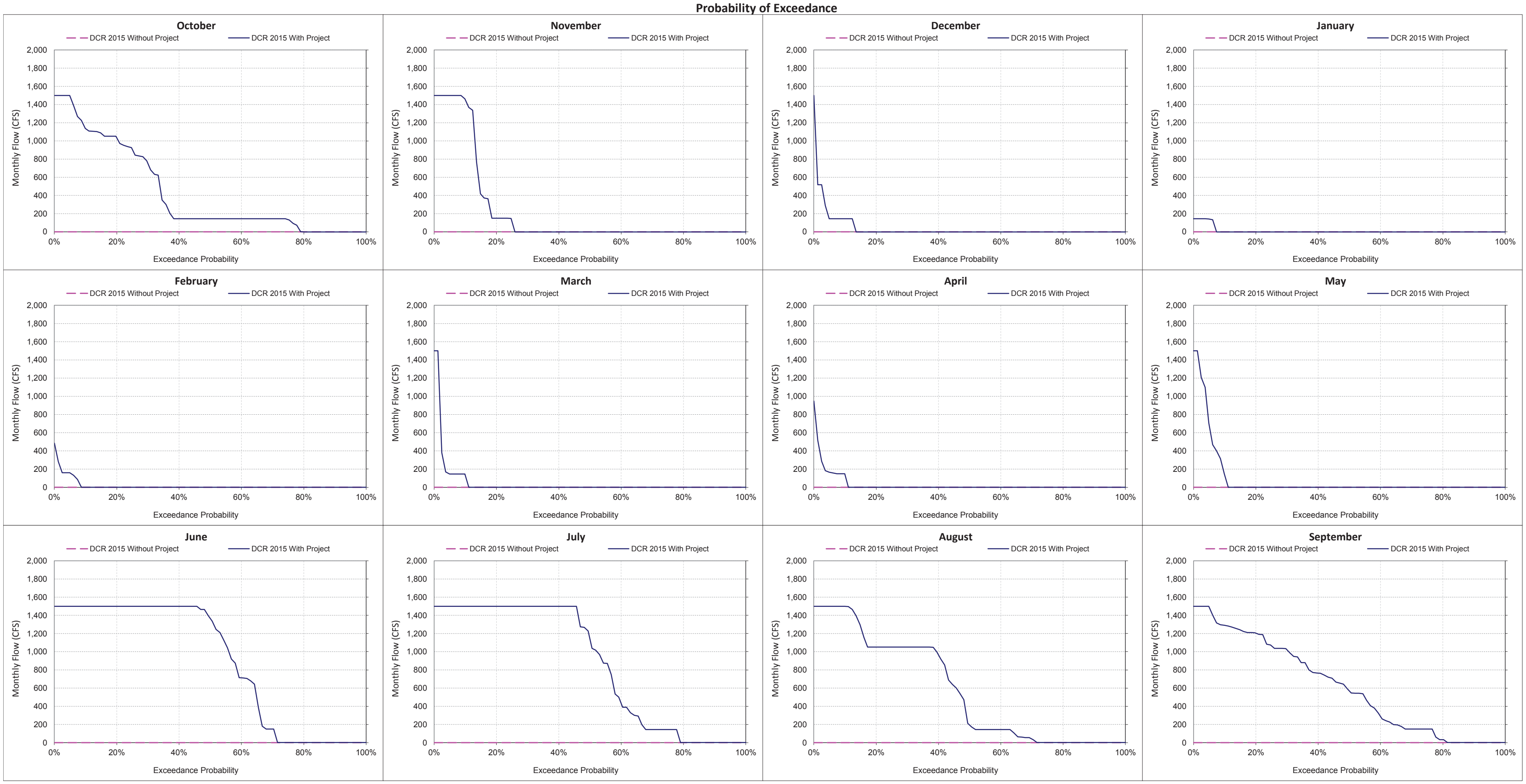


Table OP-06-b

Funks Reservoir to Deleven Pipeline, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,388	1,388	
7.4%	0	1,267	1,267	
8.6%	0	1,226	1,226	
9.9%	0	1,137	1,137	
11.1%	0	1,109	1,109	
12.3%	0	1,105	1,105	
13.6%	0	1,103	1,103	
14.8%	0	1,090	1,090	
16.0%	0	1,051	1,051	
17.3%	0	1,051	1,051	
18.5%	0	1,051	1,051	
19.8%	0	1,051	1,051	
21.0%	0	971	971	
22.2%	0	951	951	
23.5%	0	938	938	
24.7%	0	927	927	
25.9%	0	843	843	
27.2%	0	836	836	
28.4%	0	827	827	
29.6%	0	780	780	
30.9%	0	681	681	
32.1%	0	631	631	
33.3%	0	623	623	
34.6%	0	350	350	
35.8%	0	302	302	
37.0%	0	205	205	
38.3%	0	145	145	
39.5%	0	145	145	
40.7%	0	145	145	
42.0%	0	145	145	
43.2%	0	145	145	
44.4%	0	145	145	
45.7%	0	145	145	
46.9%	0	145	145	
48.1%	0	145	145	
49.4%	0	145	145	
50.6%	0	145	145	
51.9%	0	145	145	
53.1%	0	145	145	
54.3%	0	145	145	
55.6%	0	145	145	
56.8%	0	145	145	
58.0%	0	145	145	
59.3%	0	145	145	
60.5%	0	145	145	
61.7%	0	145	145	
63.0%	0	145	145	
64.2%	0	145	145	
65.4%	0	145	145	
66.7%	0	145	145	
67.9%	0	145	145	
69.1%	0	145	145	
70.4%	0	145	145	
71.6%	0	145	145	
72.8%	0	145	145	
74.1%	0	145	145	
75.3%	0	129	129	
76.5%	0	93	93	
77.8%	0	74	74	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,462	1,462	
11.1%	0	1,369	1,369	
12.3%	0	1,338	1,338	
13.6%	0	766	766	
14.8%	0	417	417	
16.0%	0	374	374	
17.3%	0	364	364	
18.5%	0	150	150	
19.8%	0	150	150	
21.0%	0	150	150	
22.2%	0	150	150	
23.5%	0	150	150	
24.7%	0	148	148	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	519	519	
2.5%	0	518	518	
3.7%	0	288	288	
4.9%	0	145	145	
6.2%	0	145	145	
7.4%	0	145	145	
8.6%	0	145	145	
9.9%	0	145	145	
11.1%	0	145	145	
12.3%	0	143	143	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	145	145	
1.2%	0	145	145	
2.5%	0	145	145	
3.7%	0	145	145	
4.9%	0	141	141	
6.2%	0	131	131	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-06-b

Funks Reservoir to Deleven Pipeline, Monthly Flow

Probability of Exceedance

February					March					April					May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	484	484		0.0%	0	1,500	1,500		0.0%	0	946	946		0.0%	0	1,500	1,500	
1.2%	0	282	282		1.2%	0	1,500	1,500		1.2%	0	516	516		1.2%	0	1,500	1,500	
2.5%	0	161	161		2.5%	0	379	379		2.5%	0	286	286		2.5%	0	1,208	1,208	
3.7%	0	161	161		3.7%	0	168	168		3.7%	0	182	182		3.7%	0	1,100	1,100	
4.9%	0	161	161		4.9%	0	145	145		4.9%	0	167	167		4.9%	0	706	706	
6.2%	0	131	131		6.2%	0	145	145		6.2%	0	158	158		6.2%	0	468	468	
7.4%	0	87	87		7.4%	0	145	145		7.4%	0	150	150		7.4%	0	399	399	
8.6%	0	0	0		8.6%	0	145	145		8.6%	0	150	150		8.6%	0	315	315	
9.9%	0	0	0		9.9%	0	145	145		9.9%	0	150	150		9.9%	0	145	145	
11.1%	0	0	0		11.1%	0	0	0		11.1%	0	0	0		11.1%	0	0	0	
12.3%	0	0	0		12.3%	0	0	0		12.3%	0	0	0		12.3%	0	0	0	
13.6%	0	0	0		13.6%	0	0	0		13.6%	0	0	0		13.6%	0	0	0	
14.8%	0	0	0		14.8%	0	0	0		14.8%	0	0	0		14.8%	0	0	0	
16.0%	0	0	0		16.0%	0	0	0		16.0%	0	0	0		16.0%	0	0	0	
17.3%	0	0	0		17.3%	0	0	0		17.3%	0	0	0		17.3%	0	0	0	
18.5%	0	0	0		18.5%	0	0	0		18.5%	0	0	0		18.5%	0	0	0	
19.8%	0	0	0		19.8%	0	0	0		19.8%	0	0	0		19.8%	0	0	0	
21.0%	0	0	0		21.0%	0	0	0		21.0%	0	0	0		21.0%	0	0	0	
22.2%	0	0	0		22.2%	0	0	0		22.2%	0	0	0		22.2%	0	0	0	
23.5%	0	0	0		23.5%	0	0	0		23.5%	0	0	0		23.5%	0	0	0	
24.7%	0	0	0		24.7%	0	0	0		24.7%	0	0	0		24.7%	0	0	0	
25.9%	0	0	0		25.9%	0	0	0		25.9%	0	0	0		25.9%	0	0	0	
27.2%	0	0	0		27.2%	0	0	0		27.2%	0	0	0		27.2%	0	0	0	
28.4%	0	0	0		28.4%	0	0	0		28.4%	0	0	0		28.4%	0	0	0	
29.6%	0	0	0		29.6%	0	0	0		29.6%	0	0	0		29.6%	0	0	0	
30.9%	0	0	0		30.9%	0	0	0		30.9%	0	0	0		30.9%	0	0	0	
32.1%	0	0	0		32.1%	0	0	0		32.1%	0	0	0		32.1%	0	0	0	
33.3%	0	0	0		33.3%	0	0	0		33.3%	0	0	0		33.3%	0	0	0	
34.6%	0	0	0		34.6%	0	0	0		34.6%	0	0	0		34.6%	0	0	0	
35.8%	0	0	0		35.8%	0	0	0		35.8%	0	0	0		35.8%	0	0	0	
37.0%	0	0	0		37.0%	0	0	0		37.0%	0	0	0		37.0%	0	0	0	
38.3%	0	0	0		38.3%	0	0	0		38.3%	0	0	0		38.3%	0	0	0	
39.5%	0	0	0		39.5%	0	0	0		39.5%	0	0	0		39.5%	0	0	0	
40.7%	0	0	0		40.7%	0	0	0		40.7%	0	0	0		40.7%	0	0	0	
42.0%	0	0	0		42.0%	0	0	0		42.0%	0	0	0		42.0%	0	0	0	
43.2%	0	0	0		43.2%	0	0	0		43.2%	0	0	0		43.2%	0	0	0	
44.4%	0	0	0		44.4%	0	0	0		44.4%	0	0	0		44.4%	0	0	0	
45.7%	0	0	0		45.7%	0	0	0		45.7%	0	0	0		45.7%	0	0	0	
46.9%	0	0	0		46.9%	0	0	0		46.9%	0	0	0		46.9%	0	0	0	
48.1%	0	0	0		48.1%	0	0	0		48.1%	0	0	0		48.1%	0	0	0	
49.4%	0	0	0		49.4%	0	0	0		49.4%	0	0	0		49.4%	0	0	0	
50.6%	0	0	0		50.6%	0	0	0		50.6%	0	0	0		50.6%	0	0	0	
51.9%	0	0	0		51.9%	0	0	0		51.9%	0	0	0		51.9%	0	0	0	
53.1%	0	0	0		53.1%	0	0	0		53.1%	0	0	0		53.1%	0	0	0	
54.3%	0	0	0		54.3%	0	0	0		54.3%	0	0	0		54.3%	0	0	0	
55.6%	0	0	0		55.6%	0	0	0		55.6%	0	0	0		55.6%	0	0	0	
56.8%	0	0	0		56.8%	0	0	0		56.8%	0	0	0		56.8%	0	0	0	
58.0%	0	0	0		58.0%	0	0	0		58.0%	0	0	0		58.0%	0	0	0	
59.3%	0	0	0		59.3%	0	0	0		59.3%	0	0	0		59.3%	0	0	0	
60.5%	0	0	0		60.5%	0	0	0		60.5%	0	0	0		60.5%	0	0	0	
61.7%	0	0	0		61.7%	0	0	0		61.7%	0	0	0		61.7%	0	0	0	
63.0%	0	0	0		63.0%	0	0	0		63.0%	0	0	0		63.0%	0	0	0	
64.2%	0	0	0		64.2%	0	0	0		64.2%	0	0	0		64.2%	0	0	0	
65.4%	0	0	0		65.4%	0	0	0		65.4%	0	0	0		65.4%	0	0	0	
66.7%	0	0	0		66.7%	0	0	0		66.7%	0	0	0		66.7%	0	0	0	
67.9%	0	0	0		67.9%	0	0	0		67.9%	0	0	0		67.9%	0	0	0	
69.1%	0	0	0		69.1%	0	0	0		69.1%	0	0	0		69.1%	0	0	0	
70.4%	0	0	0		70.4%	0	0	0		70.4%	0	0	0		70.4%	0	0	0	
71.6%	0	0	0		71.6%	0	0	0		71.6%	0	0	0		71.6%	0	0	0	
72.8%	0	0	0		72.8%	0	0	0		72.8%	0	0	0		72.8%	0	0	0	
74.1%	0	0	0		74.1%	0	0	0		74.1%	0	0	0		74.1%	0	0	0	
75.3%	0	0	0		75.3%	0	0	0		75.3%	0	0	0		75.3%	0	0	0	
76.5%	0	0	0		76.5%	0	0	0		76.5%	0	0	0		76.5%	0	0	0	
77.8%	0	0	0		77.8%	0	0	0		77.8%	0	0	0		77.8%	0	0	0	
79.0%	0	0	0		79.0%	0	0	0		79.0%	0	0	0		79.0%	0	0	0	
80.2%	0	0	0		80.2%	0	0	0		80.2%	0	0	0		80.2%	0	0	0	
81.5%	0	0	0		81.5%	0	0	0		81.5%	0	0	0		81.5%	0	0	0	
82.7%	0	0	0		82.7%	0	0	0		82.7%	0	0	0		82.7%	0	0	0	
84.0%	0	0	0		84.0%	0	0	0		84.0%	0	0	0		84.0%	0	0	0	
85.2%	0	0	0		85.2%	0	0	0		85.2%	0	0	0		85.2%	0	0	0	
86.4%	0	0	0		86.4%	0	0	0		86.4%	0	0	0		86.4%	0	0	0	
87.7%	0	0	0		87.7%	0	0	0		87.7%	0	0	0		87.7%	0	0	0	
88.9%	0	0	0		88.9%	0	0	0		88.9%	0	0	0		88.9%	0	0	0	
90.1%	0	0	0		90.1%	0	0	0		90.1%	0	0	0		90.1%	0	0	0	
91.4%	0	0	0		91.4%	0	0	0		91.4%	0	0	0		91.4%	0	0	0	
92.6%	0	0	0		92.6%	0	0	0		92.6%	0	0	0		92.6%	0	0	0	
93.8%	0	0	0		93.8%	0	0	0		93.8%	0	0	0		93.8%	0	0	0	
95.1%	0	0	0		95.1%	0	0	0		95.1%	0	0	0		95.1%	0	0	0	
96.3%	0	0	0		96.3%	0	0	0		96.3%	0	0	0		96.3%	0	0	0	
97.5%	0	0	0		97.5%	0	0	0		97.5%	0	0	0		97.5%	0	0	0	
98.8%	0	0	0		98.8%	0	0	0		98.8%	0	0	0		98.8%	0	0	0	
100.0%	0	0	0		100.0%	0	0	0		100.0%	0	0	0		100.0%	0	0	0	

Table OP-06-b
Funks Reservoir to Deleven Pipeline, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,500	1,500	
18.5%	0	1,500	1,500	
19.8%	0	1,500	1,500	
21.0%	0	1,500	1,500	
22.2%	0	1,500	1,500	
23.5%	0	1,500	1,500	
24.7%	0	1,500	1,500	
25.9%	0	1,500	1,500	
27.2%	0	1,500	1,500	
28.4%	0	1,500	1,500	
29.6%	0	1,500	1,500	
30.9%	0	1,500	1,500	
32.1%	0	1,500	1,500	
33.3%	0	1,500	1,500	
34.6%	0	1,500	1,500	
35.8%	0	1,500	1,500	
37.0%	0	1,500	1,500	
38.3%	0	1,500	1,500	
39.5%	0	1,500	1,500	
40.7%	0	1,500	1,500	
42.0%	0	1,500	1,500	
43.2%	0	1,500	1,500	
44.4%	0	1,500	1,500	
45.7%	0	1,500	1,500	
46.9%	0	1,466	1,466	
48.1%	0	1,465	1,465	
49.4%	0	1,396	1,396	
50.6%	0	1,338	1,338	
51.9%	0	1,245	1,245	
53.1%	0	1,211	1,211	
54.3%	0	1,124	1,124	
55.6%	0	1,042	1,042	
56.8%	0	919	919	
58.0%	0	875	875	
59.3%	0	715	715	
60.5%	0	711	711	
61.7%	0	705	705	
63.0%	0	681	681	
64.2%	0	644	644	
65.4%	0	389	389	
66.7%	0	180	180	
67.9%	0	150	150	
69.1%	0	150	150	
70.4%	0	150	150	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,500	1,500	
18.5%	0	1,500	1,500	
19.8%	0	1,500	1,500	
21.0%	0	1,500	1,500	
22.2%	0	1,500	1,500	
23.5%	0	1,500	1,500	
24.7%	0	1,500	1,500	
25.9%	0	1,500	1,500	
27.2%	0	1,500	1,500	
28.4%	0	1,500	1,500	
29.6%	0	1,500	1,500	
30.9%	0	1,500	1,500	
32.1%	0	1,500	1,500	
33.3%	0	1,500	1,500	
34.6%	0	1,500	1,500	
35.8%	0	1,500	1,500	
37.0%	0	1,500	1,500	
38.3%	0	1,500	1,500	
39.5%	0	1,500	1,500	
40.7%	0	1,500	1,500	
42.0%	0	1,500	1,500	
43.2%	0	1,500	1,500	
44.4%	0	1,500	1,500	
45.7%	0	1,500	1,500	
46.9%	0	1,275	1,275	
48.1%	0	1,267	1,267	
49.4%	0	1,228	1,228	
50.6%	0	1,037	1,037	
51.9%	0	1,016	1,016	
53.1%	0	967	967	
54.3%	0	875	875	
55.6%	0	870	870	
56.8%	0	750	750	
58.0%	0	535	535	
59.3%	0	500	500	
60.5%	0	389	389	
61.7%	0	388	388	
63.0%	0	330	330	
64.2%	0	301	301	
65.4%	0	293	293	
66.7%	0	198	198	
67.9%	0	145	145	
69.1%	0	145	145	
70.4%	0	145	145	
71.6%	0	145	145	
72.8%	0	145	145	
74.1%	0	145	145	
75.3%	0	145	145	
76.5%	0	145	145	
77.8%	0	145	145	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,495	1,495	
12.3%	0	1,465	1,465	
13.6%	0	1,392	1,392	
14.8%	0	1,298	1,298	
16.0%	0	1,158	1,158	
17.3%	0	1,051	1,051	
18.5%	0	1,051	1,051	
19.8%	0	1,051	1,051	
21.0%	0	1,051	1,051	
22.2%	0	1,051	1,051	
23.5%	0	1,051	1,051	
24.7%	0	1,051	1,051	
25.9%	0	1,051	1,051	
27.2%	0	1,051	1,051	
28.4%	0	1,051	1,051	
29.6%	0	1,051	1,051	
30.9%	0	1,051	1,051	
32.1%	0	1,051	1,051	
33.3%	0	1,051	1,051	
34.6%	0	1,051	1,051	
35.8%	0	1,051	1,051	
37.0%	0	1,051	1,051	
38.3%	0	1,049	1,049	
39.5%	0	998	998	
40.7%	0	921	921	
42.0%	0	855	855	
43.2%	0	690	690	
44.4%	0	639	639	
45.7%	0	600	600	
46.9%	0	542	542	
48.1%	0	471	471	
49.4%	0	214	214	
50.6%	0	171	171	
51.9%	0	145	145	
53.1%	0	145	145	
54.3%	0	145	145	
55.6%	0	145	145	
56.8%	0	145	145	
58.0%	0	145	145	
59.3%	0	145	145	
60.5%	0	145	145	
61.7%	0	145	145	
63.0%	0	145	145	
64.2%	0	106	106	
65.4%	0	63	63	
66.7%	0	61	61	
67.9%	0	57	57	
69.1%	0	56	56	
70.4%	0	33	33	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,403	1,403	
7.4%	0	1,318	1,318	
8.6%	0	1,297	1,297	
9.9%	0	1,291	1,291	
11.1%	0	1,283	1,283	
12.3%	0	1,271	1,271	
13.6%	0	1,258	1,258	
14.8%	0	1,241	1,241	
16.0%	0	1,223	1,223	
17.3%	0	1,212	1,212	
18.5%	0	1,211	1,211	
19.8%	0	1,209	1,209	
21.0%	0	1,191	1,191	
22.2%	0	1,189	1,189	
23.5%	0	1,082	1,082	
24.7%	0	1,075	1,075	
25.9%	0	1,036	1,036	
27.2%	0	1,036	1,036	
28.4%	0	1,036	1,036	
29.6%	0	1,035	1,035	
30.9%	0	989	989	
32.1%	0	948	948	
33.3%	0	942	942	
34.6%	0	879	879	
35.8%	0	879	879	
37.0%	0	800	800	
38.3%	0	770	770	
39.5%	0	766	766	
40.7%	0	764	764	
42.0%	0	743	743	
43.2%	0	719	719	
44.4%	0	708	708	
45.7%	0	667	667	
46.9%	0	654	654	
48.1%	0	643	643	
49.4%	0	592	592	
50.6%	0	546	546	
51.9%	0	543	543	
53.1%	0	542	542	
54.3%	0	539	539	
55.6%	0	468	468	
56.8%	0	406	406	
58.0%	0	381	381	
59.3%	0	325	325	
60.5%	0	260	260	
61.7%	0	242	242	
63.0%	0	226	226	
64.2%	0	198	198	
65.4%	0	196	196	
66.7%	0	177	177	
67.9%	0	150	150	
69.1%	0	150	150	
70.4%	0	150	150	
71.6%	0	150	150	
72.8%	0	150	150	
74.1%	0	150	150	
75.3%	0	150	150	
76.5%	0	150	150	
77.8%	0	61	61	
79.0%	0	34	34	
80.2%	0	32	32	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

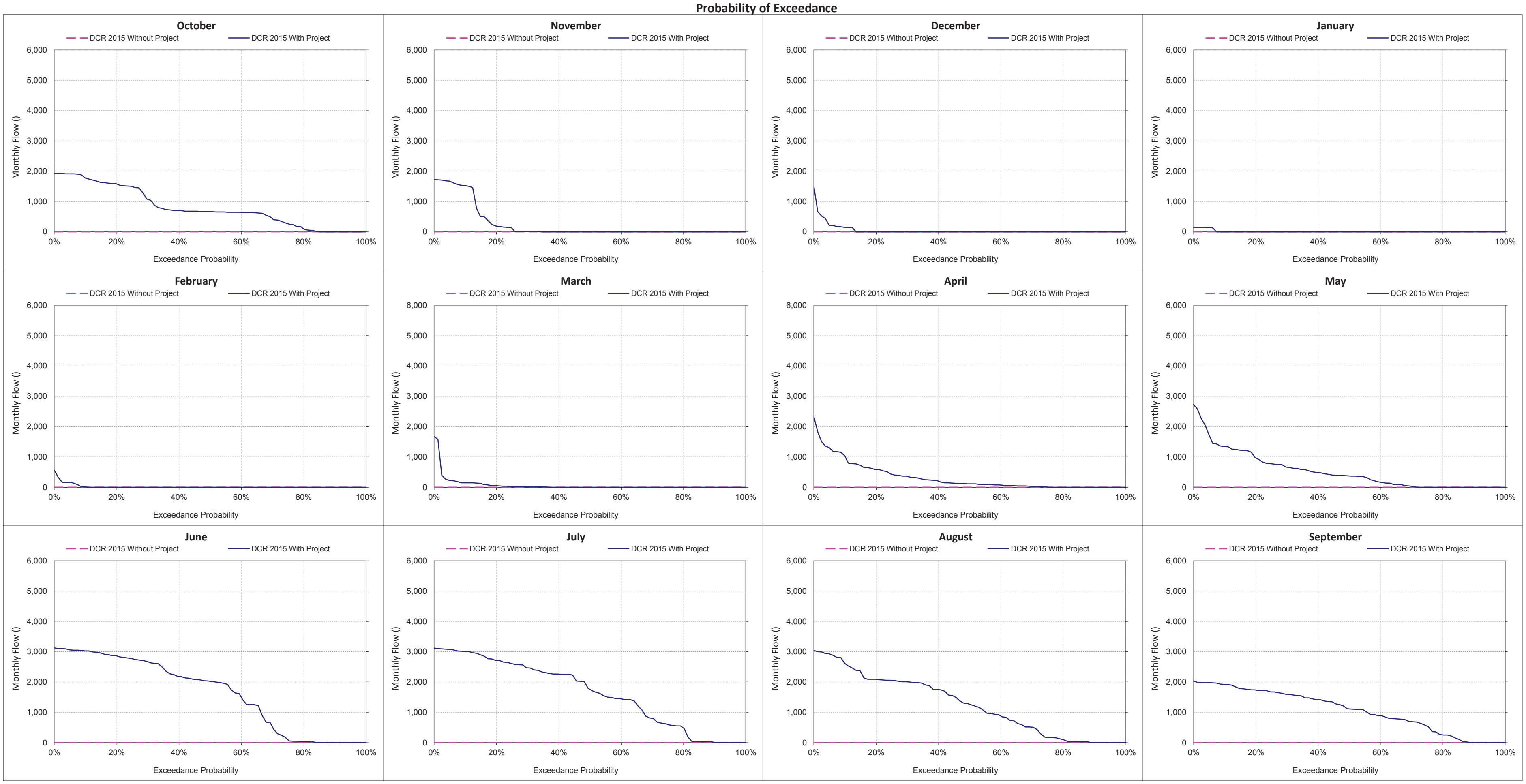


Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,933	1,933	
1.2%	0	1,930	1,930	
2.5%	0	1,924	1,924	
3.7%	0	1,914	1,914	
4.9%	0	1,914	1,914	
6.2%	0	1,911	1,911	
7.4%	0	1,908	1,908	
8.6%	0	1,877	1,877	
9.9%	0	1,776	1,776	
11.1%	0	1,743	1,743	
12.3%	0	1,711	1,711	
13.6%	0	1,673	1,673	
14.8%	0	1,632	1,632	
16.0%	0	1,622	1,622	
17.3%	0	1,604	1,604	
18.5%	0	1,598	1,598	
19.8%	0	1,592	1,592	
21.0%	0	1,535	1,535	
22.2%	0	1,523	1,523	
23.5%	0	1,507	1,507	
24.7%	0	1,507	1,507	
25.9%	0	1,461	1,461	
27.2%	0	1,455	1,455	
28.4%	0	1,290	1,290	
29.6%	0	1,085	1,085	
30.9%	0	1,041	1,041	
32.1%	0	879	879	
33.3%	0	801	801	
34.6%	0	771	771	
35.8%	0	731	731	
37.0%	0	728	728	
38.3%	0	708	708	
39.5%	0	708	708	
40.7%	0	694	694	
42.0%	0	681	681	
43.2%	0	677	677	
44.4%	0	677	677	
45.7%	0	677	677	
46.9%	0	675	675	
48.1%	0	675	675	
49.4%	0	664	664	
50.6%	0	660	660	
51.9%	0	659	659	
53.1%	0	657	657	
54.3%	0	655	655	
55.6%	0	650	650	
56.8%	0	646	646	
58.0%	0	646	646	
59.3%	0	645	645	
60.5%	0	642	642	
61.7%	0	636	636	
63.0%	0	635	635	
64.2%	0	634	634	
65.4%	0	619	619	
66.7%	0	616	616	
67.9%	0	544	544	
69.1%	0	505	505	
70.4%	0	395	395	
71.6%	0	390	390	
72.8%	0	350	350	
74.1%	0	297	297	
75.3%	0	252	252	
76.5%	0	232	232	
77.8%	0	176	176	
79.0%	0	173	173	
80.2%	0	76	76	
81.5%	0	53	53	
82.7%	0	47	47	
84.0%	0	14	14	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,721	1,721	
1.2%	0	1,712	1,712	
2.5%	0	1,705	1,705	
3.7%	0	1,686	1,686	
4.9%	0	1,671	1,671	
6.2%	0	1,612	1,612	
7.4%	0	1,562	1,562	
8.6%	0	1,539	1,539	
9.9%	0	1,531	1,531	
11.1%	0	1,503	1,503	
12.3%	0	1,462	1,462	
13.6%	0	772	772	
14.8%	0	500	500	
16.0%	0	500	500	
17.3%	0	374	374	
18.5%	0	246	246	
19.8%	0	189	189	
21.0%	0	172	172	
22.2%	0	162	162	
23.5%	0	154	154	
24.7%	0	152	152	
25.9%	0	3	3	
27.2%	0	2	2	
28.4%	0	1	1	
29.6%	0	1	1	
30.9%	0	1	1	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	665	665	
2.5%	0	519	519	
3.7%	0	443	443	
4.9%	0	222	222	
6.2%	0	206	206	
7.4%	0	173	173	
8.6%	0	167	167	
9.9%	0	153	153	
11.1%	0	147	147	
12.3%	0	145	145	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	149	149	
1.2%	0	149	149	
2.5%	0	149	149	
3.7%	0	148	148	
4.9%	0	144	144	
6.2%	0	135	135	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	553	553	
1.2%	0	327	327	
2.5%	0	164	164	
3.7%	0	164	164	
4.9%	0	162	162	
6.2%	0	135	135	
7.4%	0	90	90	
8.6%	0	14	14	
9.9%	0	12	12	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,666	1,666	
1.2%	0	1,582	1,582	
2.5%	0	396	396	
3.7%	0	263	263	
4.9%	0	227	227	
6.2%	0	218	218	
7.4%	0	188	188	
8.6%	0	146	146	
9.9%	0	146	146	
11.1%	0	146	146	
12.3%	0	146	146	
13.6%	0	136	136	
14.8%	0	130	130	
16.0%	0	85	85	
17.3%	0	78	78	
18.5%	0	54	54	
19.8%	0	50	50	
21.0%	0	42	42	
22.2%	0	36	36	
23.5%	0	34	34	
24.7%	0	20	20	
25.9%	0	20	20	
27.2%	0	20	20	
28.4%	0	16	16	
29.6%	0	13	13	
30.9%	0	12	12	
32.1%	0	8	8	
33.3%	0	7	7	
34.6%	0	7	7	
35.8%	0	6	6	
37.0%	0	5	5	
38.3%	0	4	4	
39.5%	0	3	3	
40.7%	0	3	3	
42.0%	0	3	3	
43.2%	0	2	2	
44.4%	0	2	2	
45.7%	0	1	1	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,328	2,328	
1.2%	0	1,821	1,821	
2.5%	0	1,501	1,501	
3.7%	0	1,365	1,365	
4.9%	0	1,314	1,314	
6.2%	0	1,178	1,178	
7.4%	0	1,172	1,172	
8.6%	0	1,158	1,158	
9.9%	0	1,036	1,036	
11.1%	0	794	794	
12.3%	0	781	781	
13.6%	0	774	774	
14.8%	0	731	731	
16.0%	0	653	653	
17.3%	0	648	648	
18.5%	0	623	623	
19.8%	0	583	583	
21.0%	0	580	580	
22.2%	0	537	537	
23.5%	0	514	514	
24.7%	0	438	438	
25.9%	0	405	405	
27.2%	0	392	392	
28.4%	0	370	370	
29.6%	0	368	368	
30.9%	0	332	332	
32.1%	0	327	327	
33.3%	0	305	305	
34.6%	0	275	275	
35.8%	0	250	250	
37.0%	0	239	239	
38.3%	0	232	232	
39.5%	0	224	224	
40.7%	0	169	169	
42.0%	0	147	147	
43.2%	0	142	142	
44.4%	0	136	136	
45.7%	0	128	128	
46.9%	0	124	124	
48.1%	0	117	117	
49.4%	0	114	114	
50.6%	0	109	109	
51.9%	0	108	108	
53.1%	0	94	94	
54.3%	0	92	92	
55.6%	0	89	89	
56.8%	0	89	89	
58.0%	0	81	81	
59.3%	0	79	79	
60.5%	0	70	70	
61.7%	0	56	56	
63.0%	0	56	56	
64.2%	0	54	54	
65.4%	0	48	48	
66.7%	0	43	43	
67.9%	0	40	40	
69.1%	0	38	38	
70.4%	0	26	26	
71.6%	0	25	25	
72.8%	0	18	18	
74.1%	0	17	17	
75.3%	0	2	2	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,732	2,732	
1.2%	0	2,589	2,589	
2.5%	0	2,269	2,269	
3.7%	0	2,043	2,043	
4.9%	0	1,746	1,746	
6.2%	0	1,446	1,446	
7.4%	0	1,431	1,431	
8.6%	0	1,364	1,364	
9.9%	0	1,346	1,346	
11.1%	0	1,335	1,335	
12.3%	0	1,259	1,259	
13.6%	0	1,249	1,249	
14.8%	0	1,223	1,223	
16.0%	0	1,216	1,216	
17.3%	0	1,211	1,211	
18.5%	0	1,154	1,154	
19.8%	0	979	979	
21.0%	0	915	915	
22.2%	0	833	833	
23.5%	0	792	792	
24.7%	0	780	780	
25.9%	0	761	761	
27.2%	0	750	750	
28.4%	0	748	748	
29.6%	0	672	672	
30.9%	0	649	649	
32.1%	0	624	624	
33.3%	0	623	623	
34.6%	0	583	583	
35.8%	0	583	583	
37.0%	0	543	543	
38.3%	0	507	507	
39.5%	0	488	488	
40.7%	0	484	484	
42.0%	0	442	442	
43.2%	0	429	429	
44.4%	0	404	404	
45.7%	0	391	391	
46.9%	0	389	389	
48.1%	0	382	382	
49.4%	0	380	380	
50.6%	0	373	373	
51.9%	0	368	368	
53.1%	0	357	357	
54.3%	0	349	349	
55.6%	0	322	322	
56.8%	0	245	245	
58.0%	0	213	213	
59.3%	0	177	177	
60.5%	0	153	153	
61.7%	0	139	139	
63.0%	0	134	134	
64.2%	0	93	93	
65.4%	0	91	91	
66.7%	0	86	86	
67.9%	0	53	53	
69.1%	0	39	39	
70.4%	0	27	27	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,129	3,129	
1.2%	0	3,106	3,106	
2.5%	0	3,104	3,104	
3.7%	0	3,093	3,093	
4.9%	0	3,064	3,064	
6.2%	0	3,055	3,055	
7.4%	0	3,050	3,050	
8.6%	0	3,041	3,041	
9.9%	0	3,027	3,027	
11.1%	0	3,022	3,022	
12.3%	0	2,993	2,993	
13.6%	0	2,986	2,986	
14.8%	0	2,960	2,960	
16.0%	0	2,912	2,912	
17.3%	0	2,904	2,904	
18.5%	0	2,871	2,871	
19.8%	0	2,868	2,868	
21.0%	0	2,829	2,829	
22.2%	0	2,809	2,809	
23.5%	0	2,793	2,793	
24.7%	0	2,780	2,780	
25.9%	0	2,746	2,746	
27.2%	0	2,727	2,727	
28.4%	0	2,706	2,706	
29.6%	0	2,681	2,681	
30.9%	0	2,633	2,633	
32.1%	0	2,614	2,614	
33.3%	0	2,606	2,606	
34.6%	0	2,497	2,497	
35.8%	0	2,354	2,354	
37.0%	0	2,273	2,273	
38.3%	0	2,250	2,250	
39.5%	0	2,185	2,185	
40.7%	0	2,179	2,179	
42.0%	0	2,131	2,131	
43.2%	0	2,125	2,125	
44.4%	0	2,092	2,092	
45.7%	0	2,085	2,085	
46.9%	0	2,065	2,065	
48.1%	0	2,044	2,044	
49.4%	0	2,037	2,037	
50.6%	0	2,013	2,013	
51.9%	0	1,999	1,999	
53.1%	0	1,977	1,977	
54.3%	0	1,953	1,953	
55.6%	0	1,918	1,918	
56.8%	0	1,740	1,740	
58.0%	0	1,640	1,640	
59.3%	0	1,621	1,621	
60.5%	0	1,397	1,397	
61.7%	0	1,256	1,256	
63.0%	0	1,255	1,255	
64.2%	0	1,254	1,254	
65.4%	0	1,222	1,222	
66.7%	0	895	895	
67.9%	0	672	672	
69.1%	0	670	670	
70.4%	0	444	444	
71.6%	0	296	296	
72.8%	0	246	246	
74.1%	0	176	176	
75.3%	0	57	57	
76.5%	0	42	42	
77.8%	0	42	42	
79.0%	0	36	36	
80.2%	0	35	35	
81.5%	0	34	34	
82.7%	0	31	31	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,117	3,117	
1.2%	0	3,107	3,107	
2.5%	0	3,098	3,098	
3.7%	0	3,089	3,089	
4.9%	0	3,073	3,073	
6.2%	0	3,059	3,059	
7.4%	0	3,025	3,025	
8.6%	0	3,016	3,016	
9.9%	0	3,010	3,010	
11.1%	0	3,006	3,006	
12.3%	0	2,964	2,964	
13.6%	0	2,949	2,949	
14.8%	0	2,899	2,899	
16.0%	0	2,855	2,855	
17.3%	0	2,767	2,767	
18.5%	0	2,763	2,763	
19.8%	0	2,713	2,713	
21.0%	0	2,711	2,711	
22.2%	0	2,661	2,661	
23.5%	0	2,651	2,651	
24.7%	0	2,616	2,616	
25.9%	0	2,585	2,585	
27.2%	0	2,574	2,574	
28.4%	0	2,561	2,561	
29.6%	0	2,465	2,465	
30.9%	0	2,462	2,462	
32.1%	0	2,398	2,398	
33.3%	0	2,385	2,385	
34.6%	0	2,328	2,328	
35.8%	0	2,310	2,310	
37.0%	0	2,280	2,280	
38.3%	0	2,266	2,266	
39.5%	0	2,265	2,265	
40.7%	0	2,257	2,257	
42.0%	0	2,256	2,256	
43.2%	0	2,255	2,255	
44.4%	0	2,232	2,232	
45.7%	0	2,033	2,033	
46.9%	0	2,024	2,024	
48.1%	0	2,019	2,019	
49.4%	0	1,795	1,795	
50.6%	0	1,718	1,718	
51.9%	0	1,666	1,666	
53.1%	0	1,632	1,632	
54.3%	0	1,552	1,552	
55.6%	0	1,504	1,504	
56.8%	0	1,490	1,490	
58.0%	0	1,456	1,456	
59.3%	0	1,455	1,455	
60.5%	0	1,431	1,431	
61.7%	0	1,419	1,419	
63.0%	0	1,414	1,414	
64.2%	0	1,372	1,372	
65.4%	0	1,201	1,201	
66.7%	0	1,084	1,084	
67.9%	0	873	873	
69.1%	0	814	814	
70.4%	0	792	792	
71.6%	0	672	672	
72.8%	0	650	650	
74.1%	0	631	631	
75.3%	0	587	587	
76.5%	0	566	566	
77.8%	0	555	555	
79.0%	0	551	551	
80.2%	0	470	470	
81.5%	0	184	184	
82.7%	0	41	41	
84.0%	0	41	41	
85.2%	0	41	41	
86.4%	0	40	40	
87.7%	0	38	38	
88.9%	0	30	30	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,038	3,038	
1.2%	0	2,996	2,996	
2.5%	0	2,990	2,990	
3.7%	0	2,938	2,938	
4.9%	0	2,934	2,934	
6.2%	0	2,876	2,876	
7.4%	0	2,812	2,812	
8.6%	0	2,802	2,802	
9.9%	0	2,615	2,615	
11.1%	0	2,525	2,525	
12.3%	0	2,462	2,462	
13.6%	0	2,385	2,385	
14.8%	0	2,377	2,377	
16.0%	0	2,134	2,134	
17.3%	0	2,096	2,096	
18.5%	0	2,095	2,095	
19.8%	0	2,091	2,091	
21.0%	0	2,077	2,077	
22.2%	0	2,070	2,070	
23.5%	0	2,062	2,062	
24.7%	0	2,057	2,057	
25.9%	0	2,051	2,051	
27.2%	0	2,023	2,023	
28.4%	0	2,010	2,010	
29.6%	0	2,010	2,010	
30.9%	0	1,996	1,996	
32.1%	0	1,983	1,983	
33.3%	0	1,979	1,979	
34.6%	0	1,968	1,968	
35.8%	0	1,900	1,900	
37.0%	0	1,880	1,880	
38.3%	0	1,761	1,761	
39.5%	0	1,759	1,759	
40.7%	0	1,745	1,745	
42.0%	0	1,697	1,697	
43.2%	0	1,573	1,573	
44.4%	0	1,557	1,557	
45.7%	0	1,487	1,487	
46.9%	0	1,377	1,377	
48.1%	0	1,306	1,306	
49.4%	0	1,286	1,286	
50.6%	0	1,243	1,243	
51.9%	0	1,199	1,199	
53.1%	0	1,156	1,156	
54.3%	0	1,077	1,077	
55.6%	0	970	970	
56.8%	0	958	958	
58.0%	0	937	937	
59.3%	0	922	922	
60.5%	0	855	855	
61.7%	0	836	836	
63.0%	0	729	729	
64.2%	0	721	721	
65.4%	0	627	627	
66.7%	0	593	593	
67.9%	0	516	516	
69.1%	0	513	513	
70.4%	0	509	509	
71.6%	0	429	429	
72.8%	0	286	286	
74.1%	0	180	180	
75.3%	0	170	170	
76.5%	0	167	167	
77.8%	0	162	162	
79.0%	0	122	122	
80.2%	0	86	86	
81.5%	0	41	41	
82.7%	0	35	35	
84.0%	0	33	33	
85.2%	0	32	32	
86.4%	0	26	26	
87.7%	0	25	25	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow ()	DCR 2015 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,032	2,032	
1.2%	0	1,992	1,992	
2.5%	0	1,992	1,992	
3.7%	0	1,980	1,980	
4.9%	0	1,980	1,980	
6.2%	0	1,970	1,970	
7.4%	0	1,966	1,966	
8.6%	0	1,930	1,930	
9.9%	0	1,920	1,920	
11.1%	0	1,916	1,916	
12.3%	0	1,898	1,898	
13.6%	0	1,836	1,836	
14.8%	0	1,784	1,784	
16.0%	0	1,780	1,780	
17.3%	0	1,762	1,762	
18.5%	0	1,744	1,744	
19.8%	0	1,741	1,741	
21.0%	0	1,717	1,717	
22.2%	0	1,715	1,715	
23.5%	0	1,715	1,715	
24.7%	0	1,675	1,675	
25.9%	0	1,674	1,674	
27.2%	0	1,645	1,645	
28.4%	0	1,629	1,629	
29.6%	0	1,599	1,599	
30.9%	0	1,587	1,587	
32.1%	0	1,574	1,574	
33.3%	0	1,550	1,550	
34.6%	0	1,544	1,544	
35.8%	0	1,478	1,478	
37.0%	0	1,477	1,477	
38.3%	0	1,443	1,443	
39.5%	0	1,417	1,417	
40.7%	0	1,417	1,417	
42.0%	0	1,369	1,369	
43.2%	0	1,359	1,359	
44.4%	0	1,345	1,345	
45.7%	0	1,278	1,278	
46.9%	0	1,249	1,249	
48.1%	0	1,211	1,211	
49.4%	0	1,114	1,114	
50.6%	0	1,110	1,110	
51.9%	0	1,103	1,103	
53.1%	0	1,101	1,101	
54.3%	0	1,088	1,088	
55.6%	0	1,017	1,017	
56.8%	0	930	930	
58.0%	0	925	925	
59.3%	0	886	886	
60.5%	0	881	881	
61.7%	0	835	835	
63.0%	0	796	796	
64.2%	0	787	787	
65.4%	0	778	778	
66.7%	0	778	778	
67.9%	0	758	758	
69.1%	0	694	694	
70.4%	0	690	690	
71.6%	0	677	677	
72.8%	0	641	641	
74.1%	0	589	589	
75.3%	0	527	527	
76.5%	0	361	361	
77.8%	0	355	355	
79.0%	0	267	267	
80.2%	0	250	250	
81.5%	0	250	250	
82.7%	0	220	220	
84.0%	0	154	154	
85.2%	0	109	109	
86.4%	0	34	34	
87.7%	0	25	25	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-08-b
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Probability of Exceedance

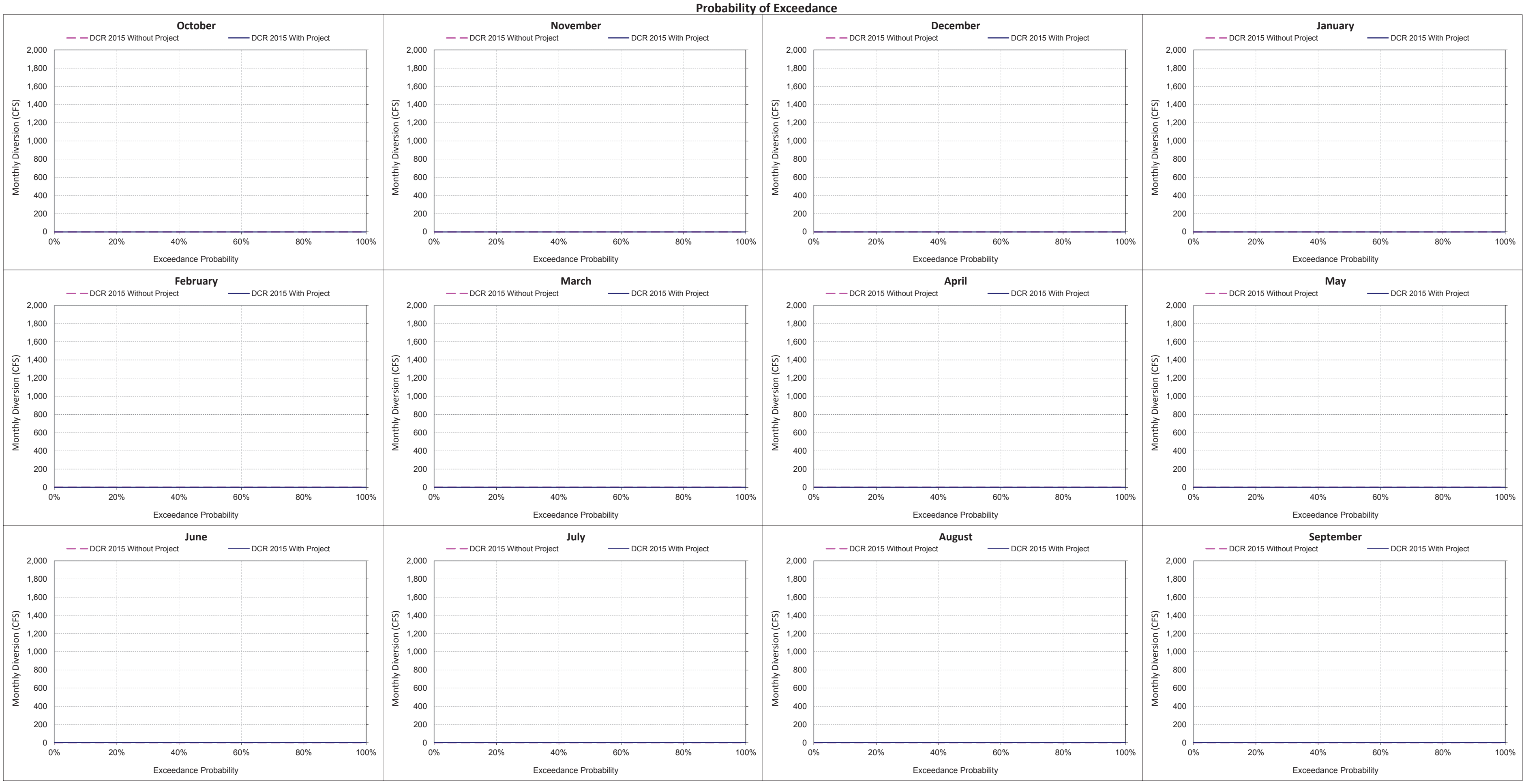


Table OP-08-b
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-08-b

Delevan Intake and Pipeline (to Local Use), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-08-b
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Diversion (CFS)	DCR 2015 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

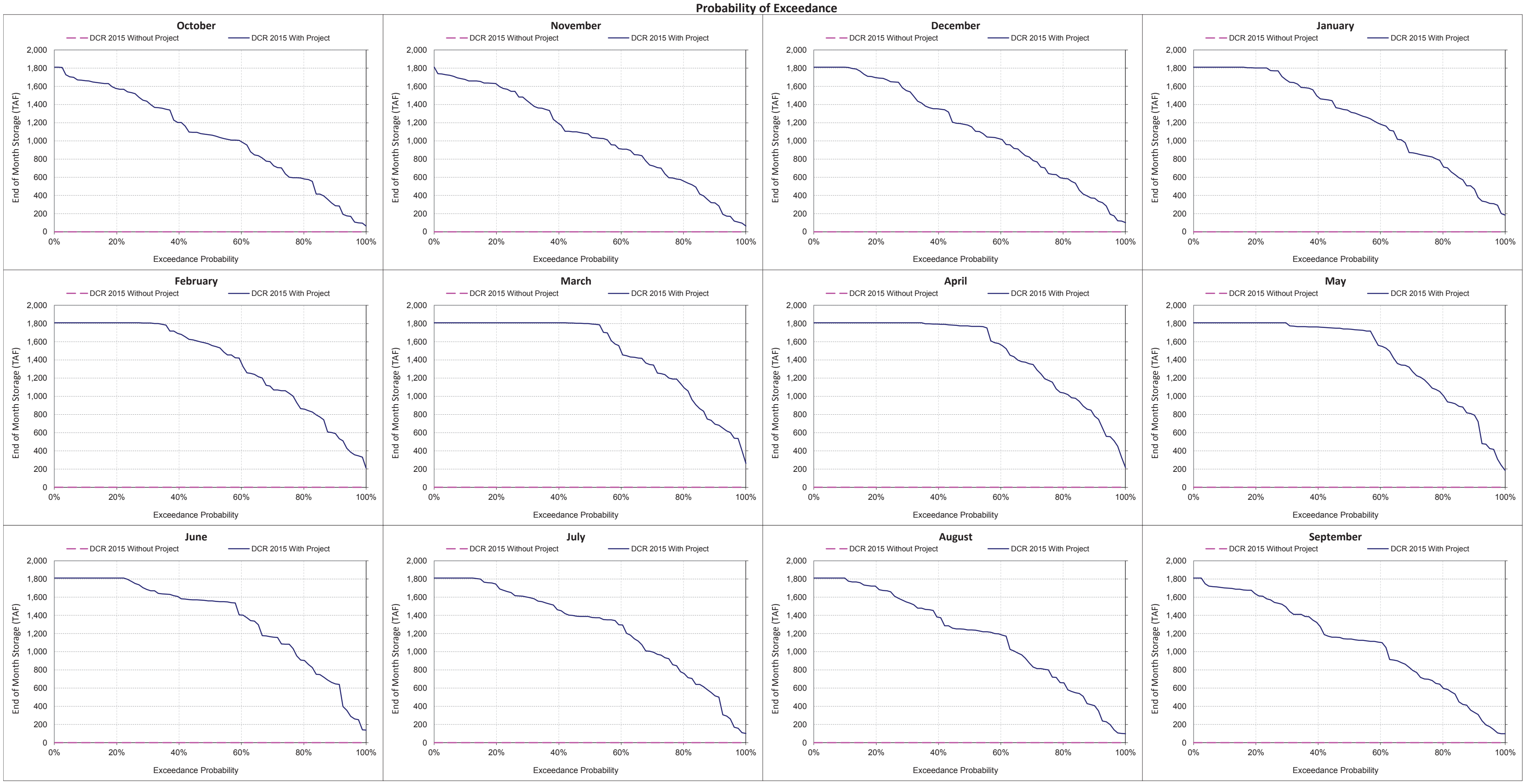


Table OP-09-b

Sites Reservoir, End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,807	1,807	
3.7%	0	1,727	1,727	
4.9%	0	1,706	1,706	
6.2%	0	1,699	1,699	
7.4%	0	1,671	1,671	
8.6%	0	1,669	1,669	
9.9%	0	1,662	1,662	
11.1%	0	1,661	1,661	
12.3%	0	1,647	1,647	
13.6%	0	1,643	1,643	
14.8%	0	1,638	1,638	
16.0%	0	1,632	1,632	
17.3%	0	1,631	1,631	
18.5%	0	1,597	1,597	
19.8%	0	1,576	1,576	
21.0%	0	1,569	1,569	
22.2%	0	1,568	1,568	
23.5%	0	1,540	1,540	
24.7%	0	1,532	1,532	
25.9%	0	1,520	1,520	
27.2%	0	1,481	1,481	
28.4%	0	1,449	1,449	
29.6%	0	1,436	1,436	
30.9%	0	1,399	1,399	
32.1%	0	1,368	1,368	
33.3%	0	1,367	1,367	
34.6%	0	1,361	1,361	
35.8%	0	1,349	1,349	
37.0%	0	1,340	1,340	
38.3%	0	1,230	1,230	
39.5%	0	1,203	1,203	
40.7%	0	1,202	1,202	
42.0%	0	1,162	1,162	
43.2%	0	1,097	1,097	
44.4%	0	1,095	1,095	
45.7%	0	1,095	1,095	
46.9%	0	1,080	1,080	
48.1%	0	1,075	1,075	
49.4%	0	1,070	1,070	
50.6%	0	1,064	1,064	
51.9%	0	1,050	1,050	
53.1%	0	1,038	1,038	
54.3%	0	1,026	1,026	
55.6%	0	1,017	1,017	
56.8%	0	1,010	1,010	
58.0%	0	1,007	1,007	
59.3%	0	1,007	1,007	
60.5%	0	980	980	
61.7%	0	955	955	
63.0%	0	882	882	
64.2%	0	847	847	
65.4%	0	839	839	
66.7%	0	813	813	
67.9%	0	779	779	
69.1%	0	773	773	
70.4%	0	725	725	
71.6%	0	705	705	
72.8%	0	702	702	
74.1%	0	639	639	
75.3%	0	602	602	
76.5%	0	596	596	
77.8%	0	594	594	
79.0%	0	591	591	
80.2%	0	581	581	
81.5%	0	574	574	
82.7%	0	556	556	
84.0%	0	416	416	
85.2%	0	416	416	
86.4%	0	396	396	
87.7%	0	357	357	
88.9%	0	319	319	
90.1%	0	288	288	
91.4%	0	285	285	
92.6%	0	193	193	
93.8%	0	174	174	
95.1%	0	170	170	
96.3%	0	107	107	
97.5%	0	97	97	
98.8%	0	97	97	
100.0%	0	64	64	

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,739	1,739	
2.5%	0	1,737	1,737	
3.7%	0	1,728	1,728	
4.9%	0	1,721	1,721	
6.2%	0	1,711	1,711	
7.4%	0	1,693	1,693	
8.6%	0	1,685	1,685	
9.9%	0	1,676	1,676	
11.1%	0	1,661	1,661	
12.3%	0	1,660	1,660	
13.6%	0	1,659	1,659	
14.8%	0	1,655	1,655	
16.0%	0	1,637	1,637	
17.3%	0	1,636	1,636	
18.5%	0	1,633	1,633	
19.8%	0	1,630	1,630	
21.0%	0	1,596	1,596	
22.2%	0	1,576	1,576	
23.5%	0	1,569	1,569	
24.7%	0	1,545	1,545	
25.9%	0	1,545	1,545	
27.2%	0	1,483	1,483	
28.4%	0	1,482	1,482	
29.6%	0	1,448	1,448	
30.9%	0	1,413	1,413	
32.1%	0	1,381	1,381	
33.3%	0	1,364	1,364	
34.6%	0	1,359	1,359	
35.8%	0	1,346	1,346	
37.0%	0	1,333	1,333	
38.3%	0	1,238	1,238	
39.5%	0	1,202	1,202	
40.7%	0	1,172	1,172	
42.0%	0	1,107	1,107	
43.2%	0	1,106	1,106	
44.4%	0	1,099	1,099	
45.7%	0	1,099	1,099	
46.9%	0	1,090	1,090	
48.1%	0	1,082	1,082	
49.4%	0	1,077	1,077	
50.6%	0	1,037	1,037	
51.9%	0	1,035	1,035	
53.1%	0	1,030	1,030	
54.3%	0	1,025	1,025	
55.6%	0	1,011	1,011	
56.8%	0	956	956	
58.0%	0	954	954	
59.3%	0	913	913	
60.5%	0	910	910	
61.7%	0	908	908	
63.0%	0	894	894	
64.2%	0	850	850	
65.4%	0	846	846	
66.7%	0	837	837	
67.9%	0	781	781	
69.1%	0	736	736	
70.4%	0	722	722	
71.6%	0	706	706	
72.8%	0	701	701	
74.1%	0	639	639	
75.3%	0	595	595	
76.5%	0	592	592	
77.8%	0	581	581	
79.0%	0	576	576	
80.2%	0	556	556	
81.5%	0	534	534	
82.7%	0	518	518	
84.0%	0	492	492	
85.2%	0	416	416	
86.4%	0	396	396	
87.7%	0	357	357	
88.9%	0	322	322	
90.1%	0	319	319	
91.4%	0	285	285	
92.6%	0	192	192	
93.8%	0	174	174	
95.1%	0	170	170	
96.3%	0	117	117	
97.5%	0	106	106	
98.8%	0	96	96	
100.0%	0	64	64	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,808	1,808	
12.3%	0	1,796	1,796	
13.6%	0	1,791	1,791	
14.8%	0	1,767	1,767	
16.0%	0	1,734	1,734	
17.3%	0	1,711	1,711	
18.5%	0	1,709	1,709	
19.8%	0	1,697	1,697	
21.0%	0	1,692	1,692	
22.2%	0	1,687	1,687	
23.5%	0	1,670	1,670	
24.7%	0	1,652	1,652	
25.9%	0	1,649	1,649	
27.2%	0	1,646	1,646	
28.4%	0	1,586	1,586	
29.6%	0	1,554	1,554	
30.9%	0	1,540	1,540	
32.1%	0	1,492	1,492	
33.3%	0	1,438	1,438	
34.6%	0	1,417	1,417	
35.8%	0	1,383	1,383	
37.0%	0	1,366	1,366	
38.3%	0	1,355	1,355	
39.5%	0	1,355	1,355	
40.7%	0	1,349	1,349	
42.0%	0	1,344	1,344	
43.2%	0	1,317	1,317	
44.4%	0	1,205	1,205	
45.7%	0	1,194	1,194	
46.9%	0	1,192	1,192	
48.1%	0	1,182	1,182	
49.4%	0	1,175	1,175	
50.6%	0	1,154	1,154	
51.9%	0	1,106	1,106	
53.1%	0	1,102	1,102	
54.3%	0	1,081	1,081	
55.6%	0	1,043	1,043	
56.8%	0	1,040	1,040	
58.0%	0	1,037	1,037	
59.3%	0	1,026	1,026	
60.5%	0	1,014	1,014	
61.7%	0	960	960	
63.0%	0	959	959	
64.2%	0	918	918	
65.4%	0	912	912	
66.7%	0	872	872	
67.9%	0	838	838	
69.1%	0	822	822	
70.4%	0	783	783	
71.6%	0	769	769	
72.8%	0	711	711	
74.1%	0	704	704	
75.3%	0	641	641	
76.5%	0	631	631	
77.8%	0	628	628	
79.0%	0	594	594	
80.2%	0	587	587	
81.5%	0	583	583	
82.7%	0	556	556	
84.0%	0	536	536	
85.2%	0	459	459	
86.4%	0	416	416	
87.7%	0	396	396	
88.9%	0	373	373	
90.1%	0	370	370	
91.4%	0	337	337	
92.6%	0	322	322	
93.8%	0	285	285	
95.1%	0	193	193	
96.3%	0	175	175	
97.5%	0	120	120	
98.8%	0	118	118	
100.0%	0	102	102	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,805	1,805	
18.5%	0	1,804	1,804	
19.8%	0	1,802	1,802	
21.0%	0	1,802	1,802	
22.2%	0	1,801	1,801	
23.5%	0	1,801	1,801	
24.7%	0	1,774	1,774	
25.9%	0	1,771	1,771	
27.2%	0	1,769	1,769	
28.4%	0	1,708	1,708	
29.6%	0	1,673	1,673	
30.9%	0	1,646	1,646	
32.1%	0	1,641	1,641	
33.3%	0	1,625	1,625	
34.6%	0	1,589	1,589	
35.8%	0	1,587	1,587	
37.0%	0	1,581	1,581	
38.3%	0	1,562	1,562	
39.5%	0	1,496	1,496	
40.7%	0	1,462	1,462	
42.0%	0	1,457	1,457	
43.2%	0	1,450	1,450	
44.4%	0	1,442	1,442	
45.7%	0	1,367	1,367	
46.9%	0	1,357	1,357	
48.1%	0	1,346	1,346	
49.4%	0	1,340	1,340	
50.6%	0	1,314	1,314	
51.9%	0	1,305	1,305	
53.1%	0	1,289	1,289	
54.3%	0	1,272	1,272	
55.6%	0	1,260	1,260	
56.8%	0	1,244	1,244	
58.0%	0	1,218	1,218	
59.3%	0	1,195	1,195	
60.5%	0	1,177	1,177	
61.7%	0	1,164	1,164	
63.0%	0	1,118	1,118	
64.2%	0	1,107	1,107	
65.4%	0	1,018	1,018	
66.7%	0	1,011	1,011	
67.9%	0	982	982	
69.1%	0	872	872	
70.4%	0	869	869	
71.6%	0	860	860	
72.8%	0	848	848	
74.1%	0	840	840	
75.3%	0	831	831	
76.5%	0	824	824	
77.8%	0	804	804	
79.0%	0	785	785	
80.2%	0	713	713	
81.5%	0	704	704	
82.7%	0	657	657	
84.0%	0	628	628	
85.2%	0	596	596	
86.4%	0	572	572	
87.7%	0	507	507	
88.9%	0	506	506	
90.1%	0	471	471	
91.4%	0	379	379	
92.6%	0	339	339	
93.8%	0	330	330	
95.1%	0	314	314	
96.3%	0	309	309	
97.5%	0	292	292	
98.8%	0	202	202	
100.0%	0	185	185	

Table OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,810	1,810	
25.9%	0	1,810	1,810	
27.2%	0	1,810	1,810	
28.4%	0	1,806	1,806	
29.6%	0	1,805	1,805	
30.9%	0	1,805	1,805	
32.1%	0	1,801	1,801	
33.3%	0	1,801	1,801	
34.6%	0	1,791	1,791	
35.8%	0	1,782	1,782	
37.0%	0	1,718	1,718	
38.3%	0	1,717	1,717	
39.5%	0	1,693	1,693	
40.7%	0	1,679	1,679	
42.0%	0	1,654	1,654	
43.2%	0	1,626	1,626	
44.4%	0	1,622	1,622	
45.7%	0	1,608	1,608	
46.9%	0	1,597	1,597	
48.1%	0	1,588	1,588	
49.4%	0	1,579	1,579	
50.6%	0	1,559	1,559	
51.9%	0	1,547	1,547	
53.1%	0	1,531	1,531	
54.3%	0	1,485	1,485	
55.6%	0	1,456	1,456	
56.8%	0	1,455	1,455	
58.0%	0	1,424	1,424	
59.3%	0	1,421	1,421	
60.5%	0	1,328	1,328	
61.7%	0	1,258	1,258	
63.0%	0	1,252	1,252	
64.2%	0	1,241	1,241	
65.4%	0	1,215	1,215	
66.7%	0	1,202	1,202	
67.9%	0	1,121	1,121	
69.1%	0	1,112	1,112	
70.4%	0	1,071	1,071	
71.6%	0	1,070	1,070	
72.8%	0	1,062	1,062	
74.1%	0	1,061	1,061	
75.3%	0	1,032	1,032	
76.5%	0	1,002	1,002	
77.8%	0	931	931	
79.0%	0	864	864	
80.2%	0	859	859	
81.5%	0	841	841	
82.7%	0	828	828	
84.0%	0	797	797	
85.2%	0	774	774	
86.4%	0	743	743	
87.7%	0	609	609	
88.9%	0	604	604	
90.1%	0	591	591	
91.4%	0	533	533	
92.6%	0	512	512	
93.8%	0	427	427	
95.1%	0	385	385	
96.3%	0	355	355	
97.5%	0	347	347	
98.8%	0	330	330	
100.0%	0	211	211	

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,810	1,810	
25.9%	0	1,810	1,810	
27.2%	0	1,810	1,810	
28.4%	0	1,810	1,810	
29.6%	0	1,810	1,810	
30.9%	0	1,810	1,810	
32.1%	0	1,810	1,810	
33.3%	0	1,810	1,810	
34.6%	0	1,810	1,810	
35.8%	0	1,810	1,810	
37.0%	0	1,810	1,810	
38.3%	0	1,810	1,810	
39.5%	0	1,810	1,810	
40.7%	0	1,810	1,810	
42.0%	0	1,809	1,809	
43.2%	0	1,805	1,805	
44.4%	0	1,805	1,805	
45.7%	0	1,804	1,804	
46.9%	0	1,803	1,803	
48.1%	0	1,801	1,801	
49.4%	0	1,801	1,801	
50.6%	0	1,794	1,794	
51.9%	0	1,792	1,792	
53.1%	0	1,785	1,785	
54.3%	0	1,704	1,704	
55.6%	0	1,696	1,696	
56.8%	0	1,611	1,611	
58.0%	0	1,576	1,576	
59.3%	0	1,558	1,558	
60.5%	0	1,454	1,454	
61.7%	0	1,448	1,448	
63.0%	0	1,431	1,431	
64.2%	0	1,431	1,431	
65.4%	0	1,421	1,421	
66.7%	0	1,418	1,418	
67.9%	0	1,366	1,366	
69.1%	0	1,350	1,350	
70.4%	0	1,344	1,344	
71.6%	0	1,257	1,257	
72.8%	0	1,251	1,251	
74.1%	0	1,238	1,238	
75.3%	0	1,200	1,200	
76.5%	0	1,191	1,191	
77.8%	0	1,190	1,190	
79.0%	0	1,140	1,140	
80.2%	0	1,092	1,092	
81.5%	0	1,058	1,058	
82.7%	0	963	963	
84.0%	0	908	908	
85.2%	0	864	864	
86.4%	0	836	836	
87.7%	0	751	751	
88.9%	0	737	737	
90.1%	0	694	694	
91.4%	0	682	682	
92.6%	0	650	650	
93.8%	0	619	619	
95.1%	0	601	601	
96.3%	0	539	539	
97.5%	0	535	535	
98.8%	0	402	402	
100.0%	0	262	262	

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,810	1,810	
25.9%	0	1,810	1,810	
27.2%	0	1,810	1,810	
28.4%	0	1,810	1,810	
29.6%	0	1,810	1,810	
30.9%	0	1,810	1,810	
32.1%	0	1,810	1,810	
33.3%	0	1,810	1,810	
34.6%	0	1,810	1,810	
35.8%	0	1,797	1,797	
37.0%	0	1,797	1,797	
38.3%	0	1,794	1,794	
39.5%	0	1,794	1,794	
40.7%	0	1,793	1,793	
42.0%	0	1,792	1,792	
43.2%	0	1,785	1,785	
44.4%	0	1,783	1,783	
45.7%	0	1,781	1,781	
46.9%	0	1,776	1,776	
48.1%	0	1,775	1,775	
49.4%	0	1,773	1,773	
50.6%	0	1,770	1,770	
51.9%	0	1,768	1,768	
53.1%	0	1,768	1,768	
54.3%	0	1,765	1,765	
55.6%	0	1,752	1,752	
56.8%	0	1,609	1,609	
58.0%	0	1,589	1,589	
59.3%	0	1,580	1,580	
60.5%	0	1,557	1,557	
61.7%	0	1,523	1,523	
63.0%	0	1,452	1,452	
64.2%	0	1,436	1,436	
65.4%	0	1,398	1,398	
66.7%	0	1,381	1,381	
67.9%	0	1,375	1,375	
69.1%	0	1,359	1,359	
70.4%	0	1,348	1,348	
71.6%	0	1,290	1,290	
72.8%	0	1,247	1,247	
74.1%	0	1,193	1,193	
75.3%	0	1,176	1,176	
76.5%	0	1,155	1,155	
77.8%	0	1,082	1,082	
79.0%	0	1,046	1,046	
80.2%	0	1,036	1,036	
81.5%	0	1,018	1,018	
82.7%	0	985	985	
84.0%	0	978	978	
85.2%	0	946	946	
86.4%	0	892	892	
87.7%	0	858	858	
88.9%	0	848	848	
90.1%	0	781	781	
91.4%	0	747	747	
92.6%	0	653	653	
93.8%	0	561	561	
95.1%	0	555	555	
96.3%	0	510	510	
97.5%	0	451	451	
98.8%	0	329	329	
100.0%	0	217	217	

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,810	1,810	
25.9%	0	1,810	1,810	
27.2%	0	1,810	1,810	
28.4%	0	1,810	1,810	
29.6%	0	1,810	1,810	
30.9%	0	1,774	1,774	
32.1%	0	1,772	1,772	
33.3%	0	1,767	1,767	
34.6%	0	1,767	1,767	
35.8%	0	1,767	1,767	
37.0%	0	1,763	1,763	
38.3%	0	1,763	1,763	
39.5%	0	1,762	1,762	
40.7%	0	1,759	1,759	
42.0%	0	1,757	1,757	
43.2%	0	1,755	1,755	
44.4%	0	1,753	1,753	
45.7%	0	1,750	1,750	
46.9%	0	1,748	1,748	
48.1%	0	1,741	1,741	
49.4%	0	1,741	1,741	
50.6%	0	1,737	1,737	
51.9%	0	1,733	1,733	
53.1%	0	1,728	1,728	
54.3%	0	1,726	1,726	
55.6%	0	1,718	1,718	
56.8%	0	1,717	1,717	
58.0%	0	1,639	1,639	
59.3%	0	1,561	1,561	
60.5%	0	1,550	1,550	
61.7%	0	1,528	1,528	
63.0%	0	1,496	1,496	
64.2%	0	1,422	1,422	
65.4%	0	1,361	1,361	
66.7%	0	1,344	1,344	
67.9%	0	1,340	1,340	
69.1%	0	1,320	1,320	
70.4%	0	1,269	1,269	
71.6%	0	1,226	1,226	
72.8%	0	1,209	1,209	
74.1%	0	1,182	1,182	
75.3%	0	1,140	1,140	
76.5%	0	1,089	1,089	
77.8%	0	1,077	1,077	
79.0%	0	1,054	1,054	
80.2%	0	1,003	1,003	
81.5%	0	938	938	
82.7%	0	930	930	
84.0%	0	918	918	
85.2%	0	892	892	
86.4%	0	880	880	
87.7%	0	819	819	
88.9%	0	810	810	
90.1%	0	795	795	
91.4%	0	721	721	
92.6%	0	481	481	
93.8%	0	475	475	
95.1%	0	425	425	
96.3%	0	418	418	
97.5%	0	308	308	
98.8%	0	243	243	
100.0%	0	185	185	

Table OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,797	1,797	
24.7%	0	1,773	1,773	
25.9%	0	1,751	1,751	
27.2%	0	1,736	1,736	
28.4%	0	1,704	1,704	
29.6%	0	1,686	1,686	
30.9%	0	1,671	1,671	
32.1%	0	1,670	1,670	
33.3%	0	1,643	1,643	
34.6%	0	1,637	1,637	
35.8%	0	1,634	1,634	
37.0%	0	1,632	1,632	
38.3%	0	1,616	1,616	
39.5%	0	1,609	1,609	
40.7%	0	1,583	1,583	
42.0%	0	1,580	1,580	
43.2%	0	1,572	1,572	
44.4%	0	1,572	1,572	
45.7%	0	1,570	1,570	
46.9%	0	1,568	1,568	
48.1%	0	1,565	1,565	
49.4%	0	1,560	1,560	
50.6%	0	1,560	1,560	
51.9%	0	1,554	1,554	
53.1%	0	1,552	1,552	
54.3%	0	1,551	1,551	
55.6%	0	1,547	1,547	
56.8%	0	1,540	1,540	
58.0%	0	1,538	1,538	
59.3%	0	1,404	1,404	
60.5%	0	1,402	1,402	
61.7%	0	1,373	1,373	
63.0%	0	1,342	1,342	
64.2%	0	1,337	1,337	
65.4%	0	1,296	1,296	
66.7%	0	1,176	1,176	
67.9%	0	1,175	1,175	
69.1%	0	1,164	1,164	
70.4%	0	1,160	1,160	
71.6%	0	1,157	1,157	
72.8%	0	1,085	1,085	
74.1%	0	1,084	1,084	
75.3%	0	1,082	1,082	
76.5%	0	1,035	1,035	
77.8%	0	954	954	
79.0%	0	908	908	
80.2%	0	903	903	
81.5%	0	861	861	
82.7%	0	826	826	
84.0%	0	752	752	
85.2%	0	749	749	
86.4%	0	721	721	
87.7%	0	688	688	
88.9%	0	662	662	
90.1%	0	647	647	
91.4%	0	640	640	
92.6%	0	397	397	
93.8%	0	355	355	
95.1%	0	289	289	
96.3%	0	261	261	
97.5%	0	251	251	
98.8%	0	142	142	
100.0%	0	138	138	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,805	1,805	
14.8%	0	1,799	1,799	
16.0%	0	1,764	1,764	
17.3%	0	1,760	1,760	
18.5%	0	1,757	1,757	
19.8%	0	1,746	1,746	
21.0%	0	1,690	1,690	
22.2%	0	1,675	1,675	
23.5%	0	1,662	1,662	
24.7%	0	1,652	1,652	
25.9%	0	1,615	1,615	
27.2%	0	1,615	1,615	
28.4%	0	1,609	1,609	
29.6%	0	1,602	1,602	
30.9%	0	1,595	1,595	
32.1%	0	1,582	1,582	
33.3%	0	1,557	1,557	
34.6%	0	1,551	1,551	
35.8%	0	1,537	1,537	
37.0%	0	1,524	1,524	
38.3%	0	1,512	1,512	
39.5%	0	1,461	1,461	
40.7%	0	1,451	1,451	
42.0%	0	1,420	1,420	
43.2%	0	1,403	1,403	
44.4%	0	1,398	1,398	
45.7%	0	1,390	1,390	
46.9%	0	1,389	1,389	
48.1%	0	1,388	1,388	
49.4%	0	1,387	1,387	
50.6%	0	1,378	1,378	
51.9%	0	1,374	1,374	
53.1%	0	1,374	1,374	
54.3%	0	1,354	1,354	
55.6%	0	1,352	1,352	
56.8%	0	1,352	1,352	
58.0%	0	1,344	1,344	
59.3%	0	1,297	1,297	
60.5%	0	1,294	1,294	
61.7%	0	1,203	1,203	
63.0%	0	1,181	1,181	
64.2%	0	1,143	1,143	
65.4%	0	1,116	1,116	
66.7%	0	1,078	1,078	
67.9%	0	1,008	1,008	
69.1%	0	1,006	1,006	
70.4%	0	993	993	
71.6%	0	971	971	
72.8%	0	964	964	
74.1%	0	935	935	
75.3%	0	923	923	
76.5%	0	857	857	
77.8%	0	845	845	
79.0%	0	779	779	
80.2%	0	761	761	
81.5%	0	714	714	
82.7%	0	707	707	
84.0%	0	641	641	
85.2%	0	640	640	
86.4%	0	614	614	
87.7%	0	584	584	
88.9%	0	551	551	
90.1%	0	516	516	
91.4%	0	500	500	
92.6%	0	306	306	
93.8%	0	293	293	
95.1%	0	260	260	
96.3%	0	170	170	
97.5%	0	159	159	
98.8%	0	110	110	
100.0%	0	101	101	

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,776	1,776	
12.3%	0	1,769	1,769	
13.6%	0	1,768	1,768	
14.8%	0	1,760	1,760	
16.0%	0	1,734	1,734	
17.3%	0	1,728	1,728	
18.5%	0	1,723	1,723	
19.8%	0	1,721	1,721	
21.0%	0	1,683	1,683	
22.2%	0	1,674	1,674	
23.5%	0	1,670	1,670	
24.7%	0	1,658	1,658	
25.9%	0	1,611	1,611	
27.2%	0	1,588	1,588	
28.4%	0	1,569	1,569	
29.6%	0	1,548	1,548	
30.9%	0	1,534	1,534	
32.1%	0	1,516	1,516	
33.3%	0	1,479	1,479	
34.6%	0	1,479	1,479	
35.8%	0	1,466	1,466	
37.0%	0	1,463	1,463	
38.3%	0	1,455	1,455	
39.5%	0	1,382	1,382	
40.7%	0	1,375	1,375	
42.0%	0	1,287	1,287	
43.2%	0	1,284	1,284	
44.4%	0	1,259	1,259	
45.7%	0	1,252	1,252	
46.9%	0	1,250	1,250	
48.1%	0	1,249	1,249	
49.4%	0	1,241	1,241	
50.6%	0	1,240	1,240	
51.9%	0	1,236	1,236	
53.1%	0	1,228	1,228	
54.3%	0	1,219	1,219	
55.6%	0	1,219	1,219	
56.8%	0	1,213	1,213	
58.0%	0	1,201	1,201	
59.3%	0	1,196	1,196	
60.5%	0	1,182	1,182	
61.7%	0	1,171	1,171	
63.0%	0	1,027	1,027	
64.2%	0	1,009	1,009	
65.4%	0	986	986	
66.7%	0	966	966	
67.9%	0	928	928	
69.1%	0	878	878	
70.4%	0	831	831	
71.6%	0	815	815	
72.8%	0	814	814	
74.1%	0	805	805	
75.3%	0	801	801	
76.5%	0	720	720	
77.8%	0	716	716	
79.0%	0	662	662	
80.2%	0	657	657	
81.5%	0	581	581	
82.7%	0	563	563	
84.0%	0	549	549	
85.2%	0	539	539	
86.4%	0	510	510	
87.7%	0	430	430	
88.9%	0	418	418	
90.1%	0	406	406	
91.4%	0	349	349	
92.6%	0	237	237	
93.8%	0	228	228	
95.1%	0	198	198	
96.3%	0	141	141	
97.5%	0	107	107	
98.8%	0	100	100	
100.0%	0	99	99	

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,746	1,746	
4.9%	0	1,721	1,721	
6.2%	0	1,717	1,717	
7.4%	0	1,715	1,715	
8.6%	0	1,708	1,708	
9.9%	0	1,703	1,703	
11.1%	0	1,698	1,698	
12.3%	0	1,696	1,696	
13.6%	0	1,688	1,688	
14.8%	0	1,687	1,687	
16.0%	0	1,680	1,680	
17.3%	0	1,676	1,676	
18.5%	0	1,676	1,676	
19.8%	0	1,639	1,639	
21.0%	0	1,613	1,613	
22.2%	0	1,611	1,611	
23.5%	0	1,583	1,583	
24.7%	0	1,570	1,570	
25.9%	0	1,542	1,542	
27.2%	0	1,533	1,533	
28.4%	0	1,521	1,521	
29.6%	0	1,494	1,494	
30.9%	0	1,443	1,443	
32.1%	0	1,412	1,412	
33.3%	0	1,411	1,411	
34.6%	0	1,410	1,410	
35.8%	0	1,388	1,388	
37.0%	0	1,385	1,385	
38.3%	0	1,347	1,347	
39.5%	0	1,323	1,323	
40.7%	0	1,274	1,274	
42.0%	0	1,188	1,188	
43.2%	0	1,171	1,171	
44.4%	0	1,161	1,161	
45.7%	0	1,161	1,161	
46.9%	0	1,156	1,156	
48.1%	0	1,143	1,143	
49.4%	0	1,140	1,140	
50.6%	0	1,140	1,140	
51.9%	0	1,132	1,132	
53.1%	0	1,127	1,127	
54.3%	0	1,127	1,127	
55.6%	0	1,121	1,121	
56.8%	0	1,115	1,115	
58.0%	0	1,115	1,115	
59.3%	0	1,104	1,104	
60.5%	0	1,101	1,101	
61.7%	0	1,047	1,047	
63.0%	0	916	916	
64.2%	0	907	907	
65.4%	0	899	899	
66.7%	0	881	881	
67.9%	0	864	864	
69.1%	0	827	827	
70.4%	0	795	795	
71.6%	0	773	773	
72.8%	0	716	716	
74.1%	0	701	701	
75.3%	0	698	698	
76.5%	0	682	682	
77.8%	0	651	651	
79.0%	0	642	642	
80.2%	0	596	596	
81.5%	0	587	587	
82.7%	0	557	557	
84.0%	0	535	535	
85.2%	0	448	448	
86.4%	0	421	421	
87.7%	0	412	412	
88.9%	0	357	357	
90.1%	0	331	331	
91.4%	0	310	310	
92.6%	0	240	240	
93.8%	0	195	195	
95.1%	0	176	176	
96.3%	0	144	144	
97.5%	0	108	108	
98.8%	0	98	98	
100.0%	0	97	97	

Figure OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

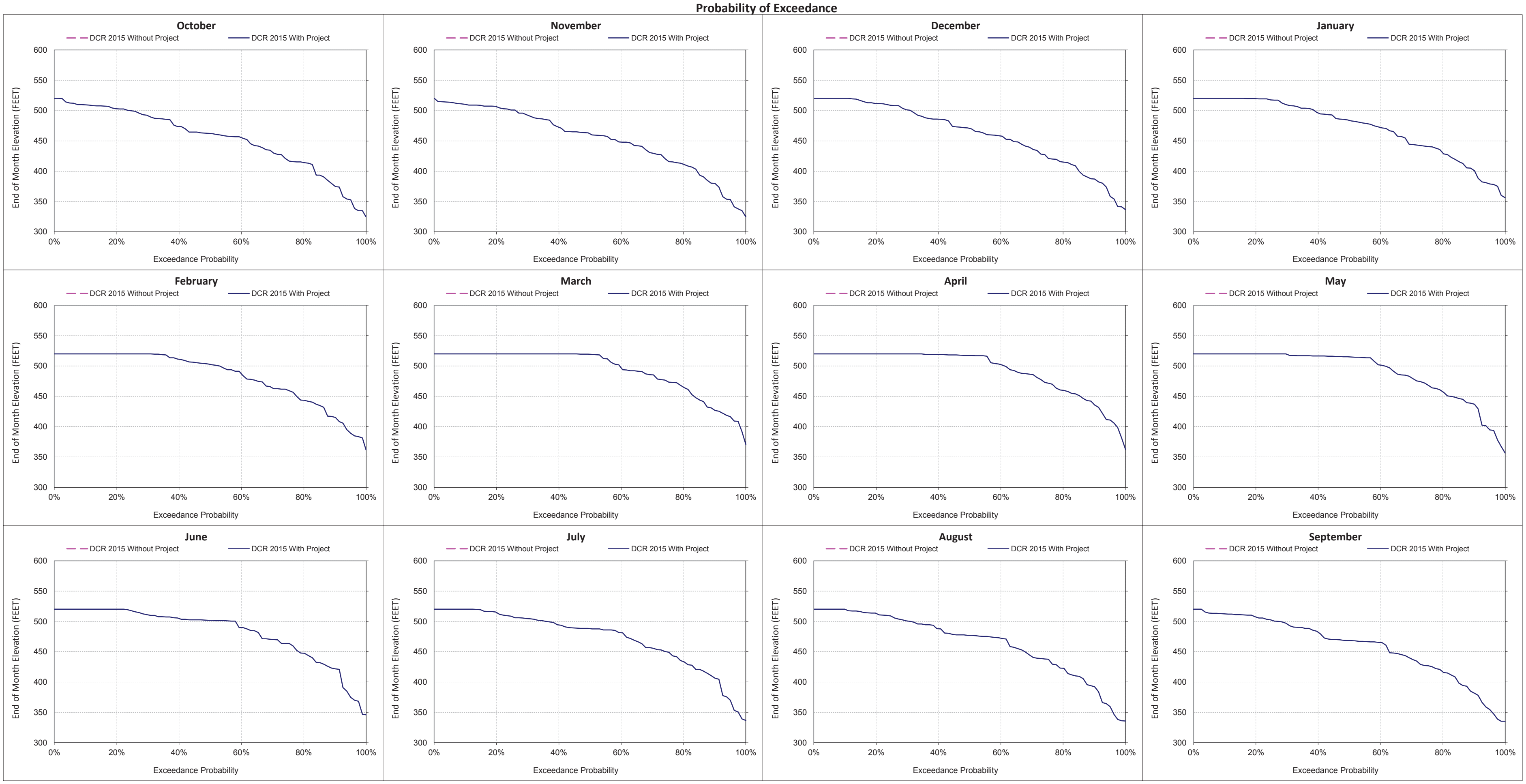


Table OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	514	514	
4.9%	0	513	513	
6.2%	0	512	512	
7.4%	0	510	510	
8.6%	0	510	510	
9.9%	0	509	509	
11.1%	0	509	509	
12.3%	0	508	508	
13.6%	0	508	508	
14.8%	0	508	508	
16.0%	0	507	507	
17.3%	0	507	507	
18.5%	0	505	505	
19.8%	0	503	503	
21.0%	0	503	503	
22.2%	0	503	503	
23.5%	0	500	500	
24.7%	0	500	500	
25.9%	0	499	499	
27.2%	0	496	496	
28.4%	0	493	493	
29.6%	0	492	492	
30.9%	0	490	490	
32.1%	0	487	487	
33.3%	0	487	487	
34.6%	0	487	487	
35.8%	0	486	486	
37.0%	0	485	485	
38.3%	0	476	476	
39.5%	0	474	474	
40.7%	0	474	474	
42.0%	0	470	470	
43.2%	0	465	465	
44.4%	0	465	465	
45.7%	0	465	465	
46.9%	0	463	463	
48.1%	0	463	463	
49.4%	0	462	462	
50.6%	0	462	462	
51.9%	0	461	461	
53.1%	0	460	460	
54.3%	0	459	459	
55.6%	0	458	458	
56.8%	0	457	457	
58.0%	0	457	457	
59.3%	0	457	457	
60.5%	0	454	454	
61.7%	0	452	452	
63.0%	0	445	445	
64.2%	0	442	442	
65.4%	0	441	441	
66.7%	0	439	439	
67.9%	0	435	435	
69.1%	0	435	435	
70.4%	0	430	430	
71.6%	0	428	428	
72.8%	0	427	427	
74.1%	0	421	421	
75.3%	0	416	416	
76.5%	0	416	416	
77.8%	0	416	416	
79.0%	0	415	415	
80.2%	0	414	414	
81.5%	0	413	413	
82.7%	0	411	411	
84.0%	0	394	394	
85.2%	0	393	393	
86.4%	0	391	391	
87.7%	0	385	385	
88.9%	0	380	380	
90.1%	0	375	375	
91.4%	0	374	374	
92.6%	0	358	358	
93.8%	0	354	354	
95.1%	0	353	353	
96.3%	0	338	338	
97.5%	0	335	335	
98.8%	0	335	335	
100.0%	0	325	325	

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	515	515	
2.5%	0	515	515	
3.7%	0	514	514	
4.9%	0	514	514	
6.2%	0	513	513	
7.4%	0	512	512	
8.6%	0	511	511	
9.9%	0	510	510	
11.1%	0	509	509	
12.3%	0	509	509	
13.6%	0	509	509	
14.8%	0	509	509	
16.0%	0	508	508	
17.3%	0	507	507	
18.5%	0	507	507	
19.8%	0	507	507	
21.0%	0	505	505	
22.2%	0	503	503	
23.5%	0	503	503	
24.7%	0	501	501	
25.9%	0	501	501	
27.2%	0	496	496	
28.4%	0	496	496	
29.6%	0	493	493	
30.9%	0	491	491	
32.1%	0	488	488	
33.3%	0	487	487	
34.6%	0	486	486	
35.8%	0	485	485	
37.0%	0	484	484	
38.3%	0	477	477	
39.5%	0	474	474	
40.7%	0	471	471	
42.0%	0	466	466	
43.2%	0	466	466	
44.4%	0	465	465	
45.7%	0	465	465	
46.9%	0	464	464	
48.1%	0	464	464	
49.4%	0	463	463	
50.6%	0	460	460	
51.9%	0	460	460	
53.1%	0	459	459	
54.3%	0	459	459	
55.6%	0	457	457	
56.8%	0	452	452	
58.0%	0	452	452	
59.3%	0	448	448	
60.5%	0	448	448	
61.7%	0	448	448	
63.0%	0	446	446	
64.2%	0	442	442	
65.4%	0	442	442	
66.7%	0	441	441	
67.9%	0	435	435	
69.1%	0	431	431	
70.4%	0	429	429	
71.6%	0	428	428	
72.8%	0	427	427	
74.1%	0	421	421	
75.3%	0	416	416	
76.5%	0	415	415	
77.8%	0	414	414	
79.0%	0	413	413	
80.2%	0	411	411	
81.5%	0	408	408	
82.7%	0	407	407	
84.0%	0	403	403	
85.2%	0	393	393	
86.4%	0	391	391	
87.7%	0	385	385	
88.9%	0	380	380	
90.1%	0	380	380	
91.4%	0	374	374	
92.6%	0	358	358	
93.8%	0	354	354	
95.1%	0	353	353	
96.3%	0	341	341	
97.5%	0	338	338	
98.8%	0	335	335	
100.0%	0	324	324	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	519	519	
13.6%	0	519	519	
14.8%	0	517	517	
16.0%	0	515	515	
17.3%	0	513	513	
18.5%	0	513	513	
19.8%	0	512	512	
21.0%	0	512	512	
22.2%	0	511	511	
23.5%	0	510	510	
24.7%	0	509	509	
25.9%	0	508	508	
27.2%	0	508	508	
28.4%	0	504	504	
29.6%	0	502	502	
30.9%	0	500	500	
32.1%	0	497	497	
33.3%	0	493	493	
34.6%	0	491	491	
35.8%	0	488	488	
37.0%	0	487	487	
38.3%	0	486	486	
39.5%	0	486	486	
40.7%	0	486	486	
42.0%	0	485	485	
43.2%	0	483	483	
44.4%	0	474	474	
45.7%	0	473	473	
46.9%	0	473	473	
48.1%	0	472	472	
49.4%	0	471	471	
50.6%	0	470	470	
51.9%	0	466	466	
53.1%	0	465	465	
54.3%	0	463	463	
55.6%	0	460	460	
56.8%	0	460	460	
58.0%	0	460	460	
59.3%	0	459	459	
60.5%	0	458	458	
61.7%	0	453	453	
63.0%	0	452	452	
64.2%	0	449	449	
65.4%	0	448	448	
66.7%	0	444	444	
67.9%	0	441	441	
69.1%	0	440	440	
70.4%	0	436	436	
71.6%	0	434	434	
72.8%	0	428	428	
74.1%	0	428	428	
75.3%	0	421	421	
76.5%	0	420	420	
77.8%	0	420	420	
79.0%	0	416	416	
80.2%	0	415	415	
81.5%	0	414	414	
82.7%	0	411	411	
84.0%	0	409	409	
85.2%	0	400	400	
86.4%	0	394	394	
87.7%	0	391	391	
88.9%	0	387	387	
90.1%	0	387	387	
91.4%	0	382	382	
92.6%	0	380	380	
93.8%	0	374	374	
95.1%	0	358	358	
96.3%	0	354	354	
97.5%	0	342	342	
98.8%	0	341	341	
100.0%	0	337	337	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	518	518	
25.9%	0	517	517	
27.2%	0	517	517	
28.4%	0	513	513	
29.6%	0	510	510	
30.9%	0	508	508	
32.1%	0	508	508	
33.3%	0	507	507	
34.6%	0	504	504	
35.8%	0	504	504	
37.0%	0	503	503	
38.3%	0	502	502	
39.5%	0	497	497	
40.7%	0	494	494	
42.0%	0	494	494	
43.2%	0	493	493	
44.4%	0	493	493	
45.7%	0	487	487	
46.9%	0	486	486	
48.1%	0	485	485	
49.4%	0	485	485	
50.6%	0	483	483	
51.9%	0	482	482	
53.1%	0	481	481	
54.3%	0	480	480	
55.6%	0	479	479	
56.8%	0	477	477	
58.0%	0	475	475	
59.3%	0	473	473	
60.5%	0	472	472	
61.7%	0	470	470	
63.0%	0	467	467	
64.2%	0	466	466	
65.4%	0	458	458	
66.7%	0	457	457	
67.9%	0	455	455	
69.1%	0	444	444	
70.4%	0	444	444	
71.6%	0	443	443	
72.8%	0	442	442	
74.1%	0	441	441	
75.3%	0	441	441	
76.5%	0	440	440	
77.8%	0	438	438	
79.0%	0	436	436	
80.2%	0	428	428	
81.5%	0	428	428	
82.7%	0	423	423	
84.0%	0	420	420	
85.2%	0	416	416	
86.4%	0	413	413	
87.7%	0	405	405	
88.9%	0	405	405	
90.1%	0	401	401	
91.4%	0	388	388	
92.6%	0	383	383	
93.8%	0	381	381	
95.1%	0	379	379	
96.3%	0	378	378	
97.5%	0	375	375	
98.8%	0	360	360	
100.0%	0	356	356	

Table OP-10-b

Sites Reservoir, End of Month Elevation

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	520	520	
32.1%	0	520	520	
33.3%	0	520	520	
34.6%	0	519	519	
35.8%	0	518	518	
37.0%	0	513	513	
38.3%	0	513	513	
39.5%	0	512	512	
40.7%	0	511	511	
42.0%	0	509	509	
43.2%	0	507	507	
44.4%	0	506	506	
45.7%	0	505	505	
46.9%	0	505	505	
48.1%	0	504	504	
49.4%	0	503	503	
50.6%	0	502	502	
51.9%	0	501	501	
53.1%	0	500	500	
54.3%	0	496	496	
55.6%	0	494	494	
56.8%	0	494	494	
58.0%	0	491	491	
59.3%	0	491	491	
60.5%	0	484	484	
61.7%	0	478	478	
63.0%	0	478	478	
64.2%	0	477	477	
65.4%	0	475	475	
66.7%	0	474	474	
67.9%	0	467	467	
69.1%	0	466	466	
70.4%	0	463	463	
71.6%	0	462	462	
72.8%	0	462	462	
74.1%	0	462	462	
75.3%	0	459	459	
76.5%	0	456	456	
77.8%	0	450	450	
79.0%	0	444	444	
80.2%	0	443	443	
81.5%	0	442	442	
82.7%	0	440	440	
84.0%	0	437	437	
85.2%	0	435	435	
86.4%	0	432	432	
87.7%	0	417	417	
88.9%	0	417	417	
90.1%	0	415	415	
91.4%	0	408	408	
92.6%	0	406	406	
93.8%	0	395	395	
95.1%	0	389	389	
96.3%	0	385	385	
97.5%	0	384	384	
98.8%	0	381	381	
100.0%	0	362	362	

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	520	520	
32.1%	0	520	520	
33.3%	0	520	520	
34.6%	0	520	520	
35.8%	0	520	520	
37.0%	0	520	520	
38.3%	0	520	520	
39.5%	0	520	520	
40.7%	0	520	520	
42.0%	0	520	520	
43.2%	0	520	520	
44.4%	0	520	520	
45.7%	0	520	520	
46.9%	0	520	520	
48.1%	0	520	520	
49.4%	0	520	520	
50.6%	0	519	519	
51.9%	0	519	519	
53.1%	0	518	518	
54.3%	0	512	512	
55.6%	0	512	512	
56.8%	0	506	506	
58.0%	0	503	503	
59.3%	0	502	502	
60.5%	0	494	494	
61.7%	0	493	493	
63.0%	0	492	492	
64.2%	0	492	492	
65.4%	0	491	491	
66.7%	0	491	491	
67.9%	0	487	487	
69.1%	0	486	486	
70.4%	0	485	485	
71.6%	0	478	478	
72.8%	0	478	478	
74.1%	0	477	477	
75.3%	0	473	473	
76.5%	0	473	473	
77.8%	0	473	473	
79.0%	0	468	468	
80.2%	0	464	464	
81.5%	0	462	462	
82.7%	0	453	453	
84.0%	0	448	448	
85.2%	0	444	444	
86.4%	0	441	441	
87.7%	0	432	432	
88.9%	0	431	431	
90.1%	0	427	427	
91.4%	0	425	425	
92.6%	0	422	422	
93.8%	0	418	418	
95.1%	0	416	416	
96.3%	0	409	409	
97.5%	0	409	409	
98.8%	0	391	391	
100.0%	0	370	370	

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	520	520	
32.1%	0	520	520	
33.3%	0	520	520	
34.6%	0	520	520	
35.8%	0	519	519	
37.0%	0	519	519	
38.3%	0	519	519	
39.5%	0	519	519	
40.7%	0	519	519	
42.0%	0	519	519	
43.2%	0	518	518	
44.4%	0	518	518	
45.7%	0	518	518	
46.9%	0	518	518	
48.1%	0	518	518	
49.4%	0	518	518	
50.6%	0	517	517	
51.9%	0	517	517	
53.1%	0	517	517	
54.3%	0	517	517	
55.6%	0	516	516	
56.8%	0	506	506	
58.0%	0	504	504	
59.3%	0	503	503	
60.5%	0	502	502	
61.7%	0	499	499	
63.0%	0	494	494	
64.2%	0	492	492	
65.4%	0	489	489	
66.7%	0	488	488	
67.9%	0	488	488	
69.1%	0	486	486	
70.4%	0	486	486	
71.6%	0	481	481	
72.8%	0	477	477	
74.1%	0	473	473	
75.3%	0	471	471	
76.5%	0	470	470	
77.8%	0	464	464	
79.0%	0	460	460	
80.2%	0	460	460	
81.5%	0	458	458	
82.7%	0	455	455	
84.0%	0	454	454	
85.2%	0	451	451	
86.4%	0	446	446	
87.7%	0	443	443	
88.9%	0	442	442	
90.1%	0	436	436	
91.4%	0	432	432	
92.6%	0	422	422	
93.8%	0	412	412	
95.1%	0	411	411	
96.3%	0	406	406	
97.5%	0	398	398	
98.8%	0	381	381	
100.0%	0	363	363	

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	518	518	
32.1%	0	517	517	
33.3%	0	517	517	
34.6%	0	517	517	
35.8%	0	517	517	
37.0%	0	517	517	
38.3%	0	517	517	
39.5%	0	517	517	
40.7%	0	516	516	
42.0%	0	516	516	
43.2%	0	516	516	
44.4%	0	516	516	
45.7%	0	516	516	
46.9%	0	516	516	
48.1%	0	515	515	
49.4%	0	515	515	
50.6%	0	515	515	
51.9%	0	515	515	
53.1%	0	514	514	
54.3%	0	514	514	
55.6%	0	513	513	
56.8%	0	513	513	
58.0%	0	508	508	
59.3%	0	502	502	
60.5%	0	501	501	
61.7%	0	500	500	
63.0%	0	497	497	
64.2%	0	491	491	
65.4%	0	487	487	
66.7%	0	485	485	
67.9%	0	485	485	
69.1%	0	483	483	
70.4%	0	479	479	
71.6%	0	476	476	
72.8%	0	474	474	
74.1%	0	472	472	
75.3%	0	468	468	
76.5%	0	464	464	
77.8%	0	463	463	
79.0%	0	461	461	
80.2%	0	457	457	
81.5%	0	451	451	
82.7%	0	450	450	
84.0%	0	449	449	
85.2%	0	446	446	
86.4%	0	445	445	
87.7%	0	440	440	
88.9%	0	439	439	
90.1%	0	437	437	
91.4%	0	429	429	
92.6%	0	402	402	
93.8%	0	402	402	
95.1%	0	395	395	
96.3%	0	394	394	
97.5%	0	378	378	
98.8%	0	367	367	
100.0%	0	356	356	

Table OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	519	519	
24.7%	0	517	517	
25.9%	0	516	516	
27.2%	0	515	515	
28.4%	0	512	512	
29.6%	0	511	511	
30.9%	0	510	510	
32.1%	0	510	510	
33.3%	0	508	508	
34.6%	0	508	508	
35.8%	0	507	507	
37.0%	0	507	507	
38.3%	0	506	506	
39.5%	0	505	505	
40.7%	0	504	504	
42.0%	0	503	503	
43.2%	0	503	503	
44.4%	0	503	503	
45.7%	0	503	503	
46.9%	0	503	503	
48.1%	0	502	502	
49.4%	0	502	502	
50.6%	0	502	502	
51.9%	0	501	501	
53.1%	0	501	501	
54.3%	0	501	501	
55.6%	0	501	501	
56.8%	0	500	500	
58.0%	0	500	500	
59.3%	0	490	490	
60.5%	0	490	490	
61.7%	0	488	488	
63.0%	0	485	485	
64.2%	0	485	485	
65.4%	0	481	481	
66.7%	0	471	471	
67.9%	0	471	471	
69.1%	0	470	470	
70.4%	0	470	470	
71.6%	0	470	470	
72.8%	0	464	464	
74.1%	0	464	464	
75.3%	0	464	464	
76.5%	0	460	460	
77.8%	0	452	452	
79.0%	0	448	448	
80.2%	0	447	447	
81.5%	0	443	443	
82.7%	0	440	440	
84.0%	0	432	432	
85.2%	0	432	432	
86.4%	0	429	429	
87.7%	0	426	426	
88.9%	0	423	423	
90.1%	0	422	422	
91.4%	0	421	421	
92.6%	0	391	391	
93.8%	0	385	385	
95.1%	0	375	375	
96.3%	0	370	370	
97.5%	0	368	368	
98.8%	0	347	347	
100.0%	0	346	346	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	519	519	
16.0%	0	517	517	
17.3%	0	517	517	
18.5%	0	516	516	
19.8%	0	515	515	
21.0%	0	511	511	
22.2%	0	510	510	
23.5%	0	509	509	
24.7%	0	509	509	
25.9%	0	506	506	
27.2%	0	506	506	
28.4%	0	506	506	
29.6%	0	505	505	
30.9%	0	504	504	
32.1%	0	503	503	
33.3%	0	502	502	
34.6%	0	501	501	
35.8%	0	500	500	
37.0%	0	499	499	
38.3%	0	498	498	
39.5%	0	494	494	
40.7%	0	494	494	
42.0%	0	491	491	
43.2%	0	490	490	
44.4%	0	489	489	
45.7%	0	489	489	
46.9%	0	489	489	
48.1%	0	489	489	
49.4%	0	489	489	
50.6%	0	488	488	
51.9%	0	488	488	
53.1%	0	488	488	
54.3%	0	486	486	
55.6%	0	486	486	
56.8%	0	486	486	
58.0%	0	485	485	
59.3%	0	482	482	
60.5%	0	481	481	
61.7%	0	474	474	
63.0%	0	472	472	
64.2%	0	469	469	
65.4%	0	466	466	
66.7%	0	463	463	
67.9%	0	457	457	
69.1%	0	457	457	
70.4%	0	456	456	
71.6%	0	454	454	
72.8%	0	453	453	
74.1%	0	450	450	
75.3%	0	449	449	
76.5%	0	443	443	
77.8%	0	442	442	
79.0%	0	435	435	
80.2%	0	433	433	
81.5%	0	429	429	
82.7%	0	428	428	
84.0%	0	421	421	
85.2%	0	421	421	
86.4%	0	418	418	
87.7%	0	414	414	
88.9%	0	411	411	
90.1%	0	406	406	
91.4%	0	404	404	
92.6%	0	378	378	
93.8%	0	375	375	
95.1%	0	370	370	
96.3%	0	353	353	
97.5%	0	351	351	
98.8%	0	339	339	
100.0%	0	336	336	

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	518	518	
12.3%	0	517	517	
13.6%	0	517	517	
14.8%	0	517	517	
16.0%	0	515	515	
17.3%	0	514	514	
18.5%	0	514	514	
19.8%	0	514	514	
21.0%	0	511	511	
22.2%	0	510	510	
23.5%	0	510	510	
24.7%	0	509	509	
25.9%	0	506	506	
27.2%	0	504	504	
28.4%	0	503	503	
29.6%	0	501	501	
30.9%	0	500	500	
32.1%	0	499	499	
33.3%	0	496	496	
34.6%	0	496	496	
35.8%	0	495	495	
37.0%	0	495	495	
38.3%	0	494	494	
39.5%	0	488	488	
40.7%	0	488	488	
42.0%	0	481	481	
43.2%	0	481	481	
44.4%	0	478	478	
45.7%	0	478	478	
46.9%	0	478	478	
48.1%	0	478	478	
49.4%	0	477	477	
50.6%	0	477	477	
51.9%	0	477	477	
53.1%	0	476	476	
54.3%	0	475	475	
55.6%	0	475	475	
56.8%	0	475	475	
58.0%	0	474	474	
59.3%	0	473	473	
60.5%	0	472	472	
61.7%	0	471	471	
63.0%	0	459	459	
64.2%	0	457	457	
65.4%	0	455	455	
66.7%	0	453	453	
67.9%	0	450	450	
69.1%	0	445	445	
70.4%	0	441	441	
71.6%	0	439	439	
72.8%	0	439	439	
74.1%	0	438	438	
75.3%	0	438	438	
76.5%	0	429	429	
77.8%	0	429	429	
79.0%	0	423	423	
80.2%	0	423	423	
81.5%	0	414	414	
82.7%	0	412	412	
84.0%	0	410	410	
85.2%	0	409	409	
86.4%	0	406	406	
87.7%	0	396	396	
88.9%	0	394	394	
90.1%	0	392	392	
91.4%	0	384	384	
92.6%	0	366	366	
93.8%	0	365	365	
95.1%	0	359	359	
96.3%	0	346	346	
97.5%	0	338	338	
98.8%	0	336	336	
100.0%	0	336	336	

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	516	516	
4.9%	0	514	514	
6.2%	0	513	513	
7.4%	0	513	513	
8.6%	0	513	513	
9.9%	0	512	512	
11.1%	0	512	512	
12.3%	0	512	512	
13.6%	0	511	511	
14.8%	0	511	511	
16.0%	0	511	511	
17.3%	0	510	510	
18.5%	0	510	510	
19.8%	0	508	508	
21.0%	0	506	506	
22.2%	0	506	506	
23.5%	0	504	504	
24.7%	0	503	503	
25.9%	0	501	501	
27.2%	0	500	500	
28.4%	0	499	499	
29.6%	0	497	497	
30.9%	0	493	493	
32.1%	0	491	491	
33.3%	0	490	490	
34.6%	0	490	490	
35.8%	0	489	489	
37.0%	0	488	488	
38.3%	0	485	485	
39.5%	0	484	484	
40.7%	0	480	480	
42.0%	0	473	473	
43.2%	0	471	471	
44.4%	0	470	470	
45.7%	0	470	470	
46.9%	0	470	470	
48.1%	0	469	469	
49.4%	0	468	468	
50.6%	0	468	468	
51.9%	0	468	468	
53.1%	0	467	467	
54.3%	0	467	467	
55.6%	0	467	467	
56.8%	0	466	466	
58.0%	0	466	466	
59.3%	0	465	465	
60.5%	0	465	465	
61.7%	0	461	461	
63.0%	0	448	448	
64.2%	0	448	448	
65.4%	0	447	447	
66.7%	0	445	445	
67.9%	0	444	444	
69.1%	0	440	440	
70.4%	0	437	437	
71.6%	0	435	435	
72.8%	0	429	429	
74.1%	0	427	427	
75.3%	0	427	427	
76.5%	0	425	425	
77.8%	0	422	422	
79.0%	0	421	421	
80.2%	0	416	416	
81.5%	0	415	415	
82.7%	0	411	411	
84.0%	0	409	409	
85.2%	0	398	398	
86.4%	0	394	394	
87.7%	0	393	393	
88.9%	0	385	385	
90.1%	0	381	381	
91.4%	0	378	378	
92.6%	0	367	367	
93.8%	0	359	359	
95.1%	0	354	354	
96.3%	0	347	347	
97.5%	0	339	339	
98.8%	0	335	335	
100.0%	0	335	335	

Figure OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

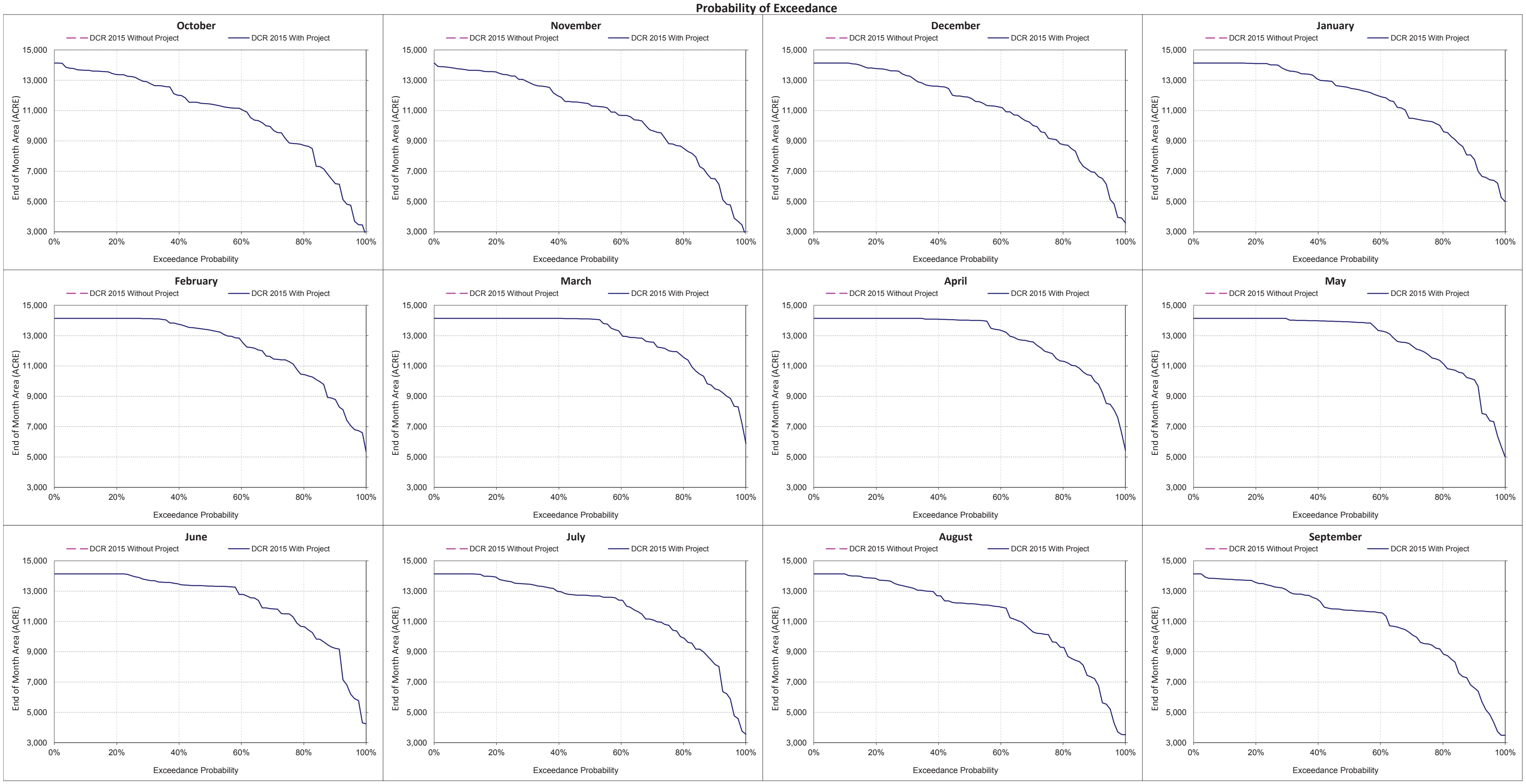


Table OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,127	14,127	
3.7%	0	13,873	13,873	
4.9%	0	13,804	13,804	
6.2%	0	13,782	13,782	
7.4%	0	13,692	13,692	
8.6%	0	13,685	13,685	
9.9%	0	13,662	13,662	
11.1%	0	13,659	13,659	
12.3%	0	13,614	13,614	
13.6%	0	13,602	13,602	
14.8%	0	13,586	13,586	
16.0%	0	13,567	13,567	
17.3%	0	13,564	13,564	
18.5%	0	13,454	13,454	
19.8%	0	13,386	13,386	
21.0%	0	13,365	13,365	
22.2%	0	13,362	13,362	
23.5%	0	13,271	13,271	
24.7%	0	13,247	13,247	
25.9%	0	13,202	13,202	
27.2%	0	13,061	13,061	
28.4%	0	12,946	12,946	
29.6%	0	12,900	12,900	
30.9%	0	12,767	12,767	
32.1%	0	12,653	12,653	
33.3%	0	12,649	12,649	
34.6%	0	12,627	12,627	
35.8%	0	12,585	12,585	
37.0%	0	12,555	12,555	
38.3%	0	12,124	12,124	
39.5%	0	12,011	12,011	
40.7%	0	12,007	12,007	
42.0%	0	11,837	11,837	
43.2%	0	11,559	11,559	
44.4%	0	11,552	11,552	
45.7%	0	11,552	11,552	
46.9%	0	11,486	11,486	
48.1%	0	11,464	11,464	
49.4%	0	11,443	11,443	
50.6%	0	11,418	11,418	
51.9%	0	11,360	11,360	
53.1%	0	11,307	11,307	
54.3%	0	11,248	11,248	
55.6%	0	11,204	11,204	
56.8%	0	11,169	11,169	
58.0%	0	11,157	11,157	
59.3%	0	11,153	11,153	
60.5%	0	11,022	11,022	
61.7%	0	10,899	10,899	
63.0%	0	10,543	10,543	
64.2%	0	10,377	10,377	
65.4%	0	10,335	10,335	
66.7%	0	10,198	10,198	
67.9%	0	9,994	9,994	
69.1%	0	9,963	9,963	
70.4%	0	9,678	9,678	
71.6%	0	9,558	9,558	
72.8%	0	9,541	9,541	
74.1%	0	9,164	9,164	
75.3%	0	8,872	8,872	
76.5%	0	8,828	8,828	
77.8%	0	8,805	8,805	
79.0%	0	8,785	8,785	
80.2%	0	8,699	8,699	
81.5%	0	8,644	8,644	
82.7%	0	8,486	8,486	
84.0%	0	7,315	7,315	
85.2%	0	7,313	7,313	
86.4%	0	7,149	7,149	
87.7%	0	6,817	6,817	
88.9%	0	6,492	6,492	
90.1%	0	6,171	6,171	
91.4%	0	6,138	6,138	
92.6%	0	5,127	5,127	
93.8%	0	4,832	4,832	
95.1%	0	4,762	4,762	
96.3%	0	3,701	3,701	
97.5%	0	3,473	3,473	
98.8%	0	3,460	3,460	
100.0%	0	2,710	2,710	

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	13,909	13,909	
2.5%	0	13,902	13,902	
3.7%	0	13,876	13,876	
4.9%	0	13,853	13,853	
6.2%	0	13,820	13,820	
7.4%	0	13,764	13,764	
8.6%	0	13,738	13,738	
9.9%	0	13,709	13,709	
11.1%	0	13,659	13,659	
12.3%	0	13,656	13,656	
13.6%	0	13,655	13,655	
14.8%	0	13,639	13,639	
16.0%	0	13,583	13,583	
17.3%	0	13,581	13,581	
18.5%	0	13,571	13,571	
19.8%	0	13,560	13,560	
21.0%	0	13,452	13,452	
22.2%	0	13,387	13,387	
23.5%	0	13,364	13,364	
24.7%	0	13,287	13,287	
25.9%	0	13,287	13,287	
27.2%	0	13,067	13,067	
28.4%	0	13,066	13,066	
29.6%	0	12,941	12,941	
30.9%	0	12,818	12,818	
32.1%	0	12,700	12,700	
33.3%	0	12,640	12,640	
34.6%	0	12,621	12,621	
35.8%	0	12,574	12,574	
37.0%	0	12,529	12,529	
38.3%	0	12,161	12,161	
39.5%	0	12,005	12,005	
40.7%	0	11,880	11,880	
42.0%	0	11,601	11,601	
43.2%	0	11,596	11,596	
44.4%	0	11,569	11,569	
45.7%	0	11,569	11,569	
46.9%	0	11,531	11,531	
48.1%	0	11,496	11,496	
49.4%	0	11,475	11,475	
50.6%	0	11,302	11,302	
51.9%	0	11,294	11,294	
53.1%	0	11,267	11,267	
54.3%	0	11,244	11,244	
55.6%	0	11,173	11,173	
56.8%	0	10,908	10,908	
58.0%	0	10,898	10,898	
59.3%	0	10,699	10,699	
60.5%	0	10,683	10,683	
61.7%	0	10,673	10,673	
63.0%	0	10,602	10,602	
64.2%	0	10,389	10,389	
65.4%	0	10,372	10,372	
66.7%	0	10,327	10,327	
67.9%	0	10,006	10,006	
69.1%	0	9,743	9,743	
70.4%	0	9,661	9,661	
71.6%	0	9,562	9,562	
72.8%	0	9,535	9,535	
74.1%	0	9,167	9,167	
75.3%	0	8,819	8,819	
76.5%	0	8,794	8,794	
77.8%	0	8,696	8,696	
79.0%	0	8,654	8,654	
80.2%	0	8,486	8,486	
81.5%	0	8,303	8,303	
82.7%	0	8,173	8,173	
84.0%	0	7,949	7,949	
85.2%	0	7,313	7,313	
86.4%	0	7,144	7,144	
87.7%	0	6,818	6,818	
88.9%	0	6,522	6,522	
90.1%	0	6,496	6,496	
91.4%	0	6,135	6,135	
92.6%	0	5,118	5,118	
93.8%	0	4,822	4,822	
95.1%	0	4,766	4,766	
96.3%	0	3,907	3,907	
97.5%	0	3,688	3,688	
98.8%	0	3,456	3,456	
100.0%	0	2,703	2,703	

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,132	14,132	
12.3%	0	14,095	14,095	
13.6%	0	14,077	14,077	
14.8%	0	14,000	14,000	
16.0%	0	13,893	13,893	
17.3%	0	13,821	13,821	
18.5%	0	13,814	13,814	
19.8%	0	13,774	13,774	
21.0%	0	13,760	13,760	
22.2%	0	13,743	13,743	
23.5%	0	13,690	13,690	
24.7%	0	13,632	13,632	
25.9%	0	13,621	13,621	
27.2%	0	13,611	13,611	
28.4%	0	13,419	13,419	
29.6%	0	13,318	13,318	
30.9%	0	13,270	13,270	
32.1%	0	13,103	13,103	
33.3%	0	12,908	12,908	
34.6%	0	12,830	12,830	
35.8%	0	12,709	12,709	
37.0%	0	12,648	12,648	
38.3%	0	12,607	12,607	
39.5%	0	12,607	12,607	
40.7%	0	12,586	12,586	
42.0%	0	12,567	12,567	
43.2%	0	12,469	12,469	
44.4%	0	12,019	12,019	
45.7%	0	11,971	11,971	
46.9%	0	11,965	11,965	
48.1%	0	11,921	11,921	
49.4%	0	11,893	11,893	
50.6%	0	11,801	11,801	
51.9%	0	11,596	11,596	
53.1%	0	11,580	11,580	
54.3%	0	11,491	11,491	
55.6%	0	11,328	11,328	
56.8%	0	11,314	11,314	
58.0%	0	11,300	11,300	
59.3%	0	11,246	11,246	
60.5%	0	11,190	11,190	
61.7%	0	10,924	10,924	
63.0%	0	10,920	10,920	
64.2%	0	10,720	10,720	
65.4%	0	10,692	10,692	
66.7%	0	10,495	10,495	
67.9%	0	10,330	10,330	
69.1%	0	10,251	10,251	
70.4%	0	10,019	10,019	
71.6%	0	9,938	9,938	
72.8%	0	9,593	9,593	
74.1%	0	9,551	9,551	
75.3%	0	9,177	9,177	
76.5%	0	9,118	9,118	
77.8%	0	9,093	9,093	
79.0%	0	8,811	8,811	
80.2%	0	8,750	8,750	
81.5%	0	8,714	8,714	
82.7%	0	8,493	8,493	
84.0%	0	8,325	8,325	
85.2%	0	7,678	7,678	
86.4%	0	7,316	7,316	
87.7%	0	7,145	7,145	
88.9%	0	6,956	6,956	
90.1%	0	6,930	6,930	
91.4%	0	6,647	6,647	
92.6%	0	6,522	6,522	
93.8%	0	6,138	6,138	
95.1%	0	5,132	5,132	
96.3%	0	4,835	4,835	
97.5%	0	3,954	3,954	
98.8%	0	3,911	3,911	
100.0%	0	3,584	3,584	

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,136	14,136	
17.3%	0	14,122	14,122	
18.5%	0	14,118	14,118	
19.8%	0	14,113	14,113	
21.0%	0	14,111	14,111	
22.2%	0	14,110	14,110	
23.5%	0	14,109	14,109	
24.7%	0	14,021	14,021	
25.9%	0	14,014	14,014	
27.2%	0	14,008	14,008	
28.4%	0	13,809	13,809	
29.6%	0	13,697	13,697	
30.9%	0	13,610	13,610	
32.1%	0	13,597	13,597	
33.3%	0	13,544	13,544	
34.6%	0	13,428	13,428	
35.8%	0	13,421	13,421	
37.0%	0	13,402	13,402	
38.3%	0	13,341	13,341	
39.5%	0	13,115	13,115	
40.7%	0	12,994	12,994	
42.0%	0	12,976	12,976	
43.2%	0	12,950	12,950	
44.4%	0	12,923	12,923	
45.7%	0	12,650	12,650	
46.9%	0	12,613	12,613	
48.1%	0	12,577	12,577	
49.4%	0	12,553	12,553	
50.6%	0	12,459	12,459	
51.9%	0	12,428	12,428	
53.1%	0	12,368	12,368	
54.3%	0	12,305	12,305	
55.6%	0	12,252	12,252	
56.8%	0	12,187	12,187	
58.0%	0	12,074	12,074	
59.3%	0	11,975	11,975	
60.5%	0	11,899	11,899	
61.7%	0	11,843	11,843	
63.0%	0	11,649	11,649	
64.2%	0	11,604	11,604	
65.4%	0	11,210	11,210	
66.7%	0	11,175	11,175	
67.9%	0	11,031	11,031	
69.1%	0	10,498	10,498	
70.4%	0	10,484	10,484	
71.6%	0	10,437	10,437	
72.8%	0	10,382	10,382	
74.1%	0	10,341	10,341	
75.3%	0	10,296	10,296	
76.5%	0	10,264	10,264	
77.8%	0	10,147	10,147	
79.0%	0	10,031	10,031	
80.2%	0	9,606	9,606	
81.5%	0	9,550	9,550	
82.7%	0	9,273	9,273	
84.0%	0	9,094	9,094	
85.2%	0	8,821	8,821	
86.4%	0	8,625	8,625	
87.7%	0	8,082	8,082	
88.9%	0	8,069	8,069	
90.1%	0	7,773	7,773	
91.4%	0	7,005	7,005	
92.6%	0	6,663	6,663	
93.8%	0	6,591	6,591	
95.1%	0	6,441	6,441	
96.3%	0	6,394	6,394	
97.5%	0	6,209	6,209	
98.8%	0	5,274	5,274	
100.0%	0	4,997	4,997	

Table OP-11-b

Sites Reservoir, End of Month Area

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,137	14,137	
25.9%	0	14,137	14,137	
27.2%	0	14,137	14,137	
28.4%	0	14,126	14,126	
29.6%	0	14,122	14,122	
30.9%	0	14,121	14,121	
32.1%	0	14,110	14,110	
33.3%	0	14,110	14,110	
34.6%	0	14,077	14,077	
35.8%	0	14,048	14,048	
37.0%	0	13,842	13,842	
38.3%	0	13,839	13,839	
39.5%	0	13,761	13,761	
40.7%	0	13,718	13,718	
42.0%	0	13,638	13,638	
43.2%	0	13,549	13,549	
44.4%	0	13,534	13,534	
45.7%	0	13,489	13,489	
46.9%	0	13,454	13,454	
48.1%	0	13,427	13,427	
49.4%	0	13,395	13,395	
50.6%	0	13,332	13,332	
51.9%	0	13,294	13,294	
53.1%	0	13,242	13,242	
54.3%	0	13,077	13,077	
55.6%	0	12,972	12,972	
56.8%	0	12,967	12,967	
58.0%	0	12,855	12,855	
59.3%	0	12,847	12,847	
60.5%	0	12,510	12,510	
61.7%	0	12,246	12,246	
63.0%	0	12,219	12,219	
64.2%	0	12,172	12,172	
65.4%	0	12,063	12,063	
66.7%	0	12,006	12,006	
67.9%	0	11,661	11,661	
69.1%	0	11,625	11,625	
70.4%	0	11,449	11,449	
71.6%	0	11,444	11,444	
72.8%	0	11,410	11,410	
74.1%	0	11,406	11,406	
75.3%	0	11,279	11,279	
76.5%	0	11,133	11,133	
77.8%	0	10,785	10,785	
79.0%	0	10,460	10,460	
80.2%	0	10,434	10,434	
81.5%	0	10,345	10,345	
82.7%	0	10,281	10,281	
84.0%	0	10,101	10,101	
85.2%	0	9,964	9,964	
86.4%	0	9,785	9,785	
87.7%	0	8,930	8,930	
88.9%	0	8,888	8,888	
90.1%	0	8,783	8,783	
91.4%	0	8,298	8,298	
92.6%	0	8,118	8,118	
93.8%	0	7,411	7,411	
95.1%	0	7,051	7,051	
96.3%	0	6,805	6,805	
97.5%	0	6,731	6,731	
98.8%	0	6,592	6,592	
100.0%	0	5,365	5,365	

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,137	14,137	
25.9%	0	14,137	14,137	
27.2%	0	14,137	14,137	
28.4%	0	14,137	14,137	
29.6%	0	14,137	14,137	
30.9%	0	14,137	14,137	
32.1%	0	14,137	14,137	
33.3%	0	14,137	14,137	
34.6%	0	14,137	14,137	
35.8%	0	14,137	14,137	
37.0%	0	14,137	14,137	
38.3%	0	14,137	14,137	
39.5%	0	14,137	14,137	
40.7%	0	14,136	14,136	
42.0%	0	14,134	14,134	
43.2%	0	14,123	14,123	
44.4%	0	14,122	14,122	
45.7%	0	14,120	14,120	
46.9%	0	14,116	14,116	
48.1%	0	14,110	14,110	
49.4%	0	14,110	14,110	
50.6%	0	14,086	14,086	
51.9%	0	14,082	14,082	
53.1%	0	14,059	14,059	
54.3%	0	13,798	13,798	
55.6%	0	13,773	13,773	
56.8%	0	13,501	13,501	
58.0%	0	13,386	13,386	
59.3%	0	13,330	13,330	
60.5%	0	12,965	12,965	
61.7%	0	12,941	12,941	
63.0%	0	12,882	12,882	
64.2%	0	12,880	12,880	
65.4%	0	12,844	12,844	
66.7%	0	12,835	12,835	
67.9%	0	12,646	12,646	
69.1%	0	12,591	12,591	
70.4%	0	12,567	12,567	
71.6%	0	12,239	12,239	
72.8%	0	12,215	12,215	
74.1%	0	12,159	12,159	
75.3%	0	11,997	11,997	
76.5%	0	11,959	11,959	
77.8%	0	11,956	11,956	
79.0%	0	11,742	11,742	
80.2%	0	11,539	11,539	
81.5%	0	11,395	11,395	
82.7%	0	10,942	10,942	
84.0%	0	10,672	10,672	
85.2%	0	10,456	10,456	
86.4%	0	10,322	10,322	
87.7%	0	9,831	9,831	
88.9%	0	9,749	9,749	
90.1%	0	9,495	9,495	
91.4%	0	9,424	9,424	
92.6%	0	9,233	9,233	
93.8%	0	9,014	9,014	
95.1%	0	8,866	8,866	
96.3%	0	8,344	8,344	
97.5%	0	8,315	8,315	
98.8%	0	7,194	7,194	
100.0%	0	5,900	5,900	

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,137	14,137	
25.9%	0	14,137	14,137	
27.2%	0	14,137	14,137	
28.4%	0	14,137	14,137	
29.6%	0	14,137	14,137	
30.9%	0	14,137	14,137	
32.1%	0	14,137	14,137	
33.3%	0	14,137	14,137	
34.6%	0	14,137	14,137	
35.8%	0	14,096	14,096	
37.0%	0	14,095	14,095	
38.3%	0	14,087	14,087	
39.5%	0	14,086	14,086	
40.7%	0	14,083	14,083	
42.0%	0	14,080	14,080	
43.2%	0	14,057	14,057	
44.4%	0	14,051	14,051	
45.7%	0	14,046	14,046	
46.9%	0	14,028	14,028	
48.1%	0	14,025	14,025	
49.4%	0	14,020	14,020	
50.6%	0	14,009	14,009	
51.9%	0	14,002	14,002	
53.1%	0	14,002	14,002	
54.3%	0	13,995	13,995	
55.6%	0	13,951	13,951	
56.8%	0	13,493	13,493	
58.0%	0	13,428	13,428	
59.3%	0	13,399	13,399	
60.5%	0	13,327	13,327	
61.7%	0	13,213	13,213	
63.0%	0	12,959	12,959	
64.2%	0	12,900	12,900	
65.4%	0	12,761	12,761	
66.7%	0	12,700	12,700	
67.9%	0	12,681	12,681	
69.1%	0	12,621	12,621	
70.4%	0	12,583	12,583	
71.6%	0	12,372	12,372	
72.8%	0	12,198	12,198	
74.1%	0	11,970	11,970	
75.3%	0	11,894	11,894	
76.5%	0	11,808	11,808	
77.8%	0	11,496	11,496	
79.0%	0	11,341	11,341	
80.2%	0	11,297	11,297	
81.5%	0	11,206	11,206	
82.7%	0	11,048	11,048	
84.0%	0	11,015	11,015	
85.2%	0	10,855	10,855	
86.4%	0	10,594	10,594	
87.7%	0	10,429	10,429	
88.9%	0	10,381	10,381	
90.1%	0	10,010	10,010	
91.4%	0	9,804	9,804	
92.6%	0	9,247	9,247	
93.8%	0	8,528	8,528	
95.1%	0	8,482	8,482	
96.3%	0	8,099	8,099	
97.5%	0	7,608	7,608	
98.8%	0	6,585	6,585	
100.0%	0	5,426	5,426	

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,137	14,137	
25.9%	0	14,137	14,137	
27.2%	0	14,137	14,137	
28.4%	0	14,137	14,137	
29.6%	0	14,137	14,137	
30.9%	0	14,021	14,021	
32.1%	0	14,016	14,016	
33.3%	0	14,001	14,001	
34.6%	0	14,000	14,000	
35.8%	0	14,000	14,000	
37.0%	0	13,989	13,989	
38.3%	0	13,986	13,986	
39.5%	0	13,984	13,984	
40.7%	0	13,975	13,975	
42.0%	0	13,969	13,969	
43.2%	0	13,962	13,962	
44.4%	0	13,954	13,954	
45.7%	0	13,945	13,945	
46.9%	0	13,940	13,940	
48.1%	0	13,918	13,918	
49.4%	0	13,915	13,915	
50.6%	0	13,903	13,903	
51.9%	0	13,891	13,891	
53.1%	0	13,876	13,876	
54.3%	0	13,869	13,869	
55.6%	0	13,844	13,844	
56.8%	0	13,839	13,839	
58.0%	0	13,589	13,589	
59.3%	0	13,337	13,337	
60.5%	0	13,305	13,305	
61.7%	0	13,233	13,233	
63.0%	0	13,116	13,116	
64.2%	0	12,848	12,848	
65.4%	0	12,627	12,627	
66.7%	0	12,568	12,568	
67.9%	0	12,553	12,553	
69.1%	0	12,480	12,480	
70.4%	0	12,293	12,293	
71.6%	0	12,108	12,108	
72.8%	0	12,036	12,036	
74.1%	0	11,923	11,923	
75.3%	0	11,741	11,741	
76.5%	0	11,524	11,524	
77.8%	0	11,473	11,473	
79.0%	0	11,374	11,374	
80.2%	0	11,136	11,136	
81.5%	0	10,818	10,818	
82.7%	0	10,780	10,780	
84.0%	0	10,720	10,720	
85.2%	0	10,592	10,592	
86.4%	0	10,537	10,537	
87.7%	0	10,235	10,235	
88.9%	0	10,179	10,179	
90.1%	0	10,088	10,088	
91.4%	0	9,654	9,654	
92.6%	0	7,858	7,858	
93.8%	0	7,808	7,808	
95.1%	0	7,386	7,386	
96.3%	0	7,328	7,328	
97.5%	0	6,380	6,380	
98.8%	0	5,704	5,704	
100.0%	0	5,004	5,004	

Table OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,097	14,097	
24.7%	0	14,018	14,018	
25.9%	0	13,949	13,949	
27.2%	0	13,900	13,900	
28.4%	0	13,799	13,799	
29.6%	0	13,740	13,740	
30.9%	0	13,692	13,692	
32.1%	0	13,690	13,690	
33.3%	0	13,601	13,601	
34.6%	0	13,584	13,584	
35.8%	0	13,574	13,574	
37.0%	0	13,566	13,566	
38.3%	0	13,516	13,516	
39.5%	0	13,492	13,492	
40.7%	0	13,410	13,410	
42.0%	0	13,401	13,401	
43.2%	0	13,375	13,375	
44.4%	0	13,373	13,373	
45.7%	0	13,367	13,367	
46.9%	0	13,362	13,362	
48.1%	0	13,353	13,353	
49.4%	0	13,336	13,336	
50.6%	0	13,335	13,335	
51.9%	0	13,315	13,315	
53.1%	0	13,310	13,310	
54.3%	0	13,308	13,308	
55.6%	0	13,293	13,293	
56.8%	0	13,272	13,272	
58.0%	0	13,264	13,264	
59.3%	0	12,785	12,785	
60.5%	0	12,778	12,778	
61.7%	0	12,674	12,674	
63.0%	0	12,560	12,560	
64.2%	0	12,544	12,544	
65.4%	0	12,394	12,394	
66.7%	0	11,897	11,897	
67.9%	0	11,890	11,890	
69.1%	0	11,846	11,846	
70.4%	0	11,827	11,827	
71.6%	0	11,814	11,814	
72.8%	0	11,509	11,509	
74.1%	0	11,502	11,502	
75.3%	0	11,496	11,496	
76.5%	0	11,292	11,292	
77.8%	0	10,897	10,897	
79.0%	0	10,674	10,674	
80.2%	0	10,650	10,650	
81.5%	0	10,444	10,444	
82.7%	0	10,272	10,272	
84.0%	0	9,835	9,835	
85.2%	0	9,818	9,818	
86.4%	0	9,654	9,654	
87.7%	0	9,456	9,456	
88.9%	0	9,303	9,303	
90.1%	0	9,214	9,214	
91.4%	0	9,171	9,171	
92.6%	0	7,150	7,150	
93.8%	0	6,801	6,801	
95.1%	0	6,183	6,183	
96.3%	0	5,893	5,893	
97.5%	0	5,788	5,788	
98.8%	0	4,309	4,309	
100.0%	0	4,242	4,242	

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,122	14,122	
14.8%	0	14,103	14,103	
16.0%	0	13,990	13,990	
17.3%	0	13,978	13,978	
18.5%	0	13,969	13,969	
19.8%	0	13,931	13,931	
21.0%	0	13,753	13,753	
22.2%	0	13,706	13,706	
23.5%	0	13,662	13,662	
24.7%	0	13,630	13,630	
25.9%	0	13,512	13,512	
27.2%	0	13,511	13,511	
28.4%	0	13,494	13,494	
29.6%	0	13,470	13,470	
30.9%	0	13,447	13,447	
32.1%	0	13,405	13,405	
33.3%	0	13,327	13,327	
34.6%	0	13,307	13,307	
35.8%	0	13,261	13,261	
37.0%	0	13,217	13,217	
38.3%	0	13,174	13,174	
39.5%	0	12,991	12,991	
40.7%	0	12,953	12,953	
42.0%	0	12,840	12,840	
43.2%	0	12,782	12,782	
44.4%	0	12,764	12,764	
45.7%	0	12,735	12,735	
46.9%	0	12,729	12,729	
48.1%	0	12,728	12,728	
49.4%	0	12,722	12,722	
50.6%	0	12,689	12,689	
51.9%	0	12,675	12,675	
53.1%	0	12,675	12,675	
54.3%	0	12,602	12,602	
55.6%	0	12,598	12,598	
56.8%	0	12,598	12,598	
58.0%	0	12,566	12,566	
59.3%	0	12,400	12,400	
60.5%	0	12,388	12,388	
61.7%	0	12,012	12,012	
63.0%	0	11,919	11,919	
64.2%	0	11,756	11,756	
65.4%	0	11,640	11,640	
66.7%	0	11,478	11,478	
67.9%	0	11,159	11,159	
69.1%	0	11,151	11,151	
70.4%	0	11,086	11,086	
71.6%	0	10,977	10,977	
72.8%	0	10,945	10,945	
74.1%	0	10,803	10,803	
75.3%	0	10,746	10,746	
76.5%	0	10,424	10,424	
77.8%	0	10,367	10,367	
79.0%	0	9,997	9,997	
80.2%	0	9,891	9,891	
81.5%	0	9,610	9,610	
82.7%	0	9,568	9,568	
84.0%	0	9,179	9,179	
85.2%	0	9,171	9,171	
86.4%	0	8,977	8,977	
87.7%	0	8,722	8,722	
88.9%	0	8,451	8,451	
90.1%	0	8,154	8,154	
91.4%	0	8,018	8,018	
92.6%	0	6,364	6,364	
93.8%	0	6,226	6,226	
95.1%	0	5,883	5,883	
96.3%	0	4,768	4,768	
97.5%	0	4,579	4,579	
98.8%	0	3,767	3,767	
100.0%	0	3,563	3,563	

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,028	14,028	
12.3%	0	14,006	14,006	
13.6%	0	14,004	14,004	
14.8%	0	13,978	13,978	
16.0%	0	13,894	13,894	
17.3%	0	13,876	13,876	
18.5%	0	13,859	13,859	
19.8%	0	13,854	13,854	
21.0%	0	13,729	13,729	
22.2%	0	13,702	13,702	
23.5%	0	13,690	13,690	
24.7%	0	13,651	13,651	
25.9%	0	13,499	13,499	
27.2%	0	13,424	13,424	
28.4%	0	13,365	13,365	
29.6%	0	13,299	13,299	
30.9%	0	13,252	13,252	
32.1%	0	13,186	13,186	
33.3%	0	13,056	13,056	
34.6%	0	13,053	13,053	
35.8%	0	13,006	13,006	
37.0%	0	12,998	12,998	
38.3%	0	12,966	12,966	
39.5%	0	12,706	12,706	
40.7%	0	12,678	12,678	
42.0%	0	12,361	12,361	
43.2%	0	12,352	12,352	
44.4%	0	12,250	12,250	
45.7%	0	12,219	12,219	
46.9%	0	12,211	12,211	
48.1%	0	12,206	12,206	
49.4%	0	12,173	12,173	
50.6%	0	12,170	12,170	
51.9%	0	12,152	12,152	
53.1%	0	12,115	12,115	
54.3%	0	12,081	12,081	
55.6%	0	12,078	12,078	
56.8%	0	12,052	12,052	
58.0%	0	12,003	12,003	
59.3%	0	11,979	11,979	
60.5%	0	11,920	11,920	
61.7%	0	11,876	11,876	
63.0%	0	11,251	11,251	
64.2%	0	11,163	11,163	
65.4%	0	11,053	11,053	
66.7%	0	10,954	10,954	
67.9%	0	10,771	10,771	
69.1%	0	10,527	10,527	
70.4%	0	10,297	10,297	
71.6%	0	10,212	10,212	
72.8%	0	10,202	10,202	
74.1%	0	10,149	10,149	
75.3%	0	10,127	10,127	
76.5%	0	9,650	9,650	
77.8%	0	9,623	9,623	
79.0%	0	9,301	9,301	
80.2%	0	9,273	9,273	
81.5%	0	8,696	8,696	
82.7%	0	8,548	8,548	
84.0%	0	8,433	8,433	
85.2%	0	8,349	8,349	
86.4%	0	8,101	8,101	
87.7%	0	7,435	7,435	
88.9%	0	7,334	7,334	
90.1%	0	7,226	7,226	
91.4%	0	6,748	6,748	
92.6%	0	5,634	5,634	
93.8%	0	5,546	5,546	
95.1%	0	5,211	5,211	
96.3%	0	4,286	4,286	
97.5%	0	3,704	3,704	
98.8%	0	3,534	3,534	
100.0%	0	3,519	3,519	

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	13,934	13,934	
4.9%	0	13,852	13,852	
6.2%	0	13,838	13,838	
7.4%	0	13,832	13,832	
8.6%	0	13,810	13,810	
9.9%	0	13,795	13,795	
11.1%	0	13,778	13,778	
12.3%	0	13,773	13,773	
13.6%	0	13,746	13,746	
14.8%	0	13,743	13,743	
16.0%	0	13,721	13,721	
17.3%	0	13,709	13,709	
18.5%	0	13,708	13,708	
19.8%	0	13,588	13,588	
21.0%	0	13,507	13,507	
22.2%	0	13,499	13,499	
23.5%	0	13,409	13,409	
24.7%	0	13,368	13,368	
25.9%	0	13,279	13,279	
27.2%	0	13,248	13,248	
28.4%	0	13,207	13,207	
29.6%	0	13,107	13,107	
30.9%	0	12,925	12,925	
32.1%	0	12,813	12,813	
33.3%	0	12,808	12,808	
34.6%	0	12,805	12,805	
35.8%	0	12,725	12,725	
37.0%	0	12,716	12,716	
38.3%	0	12,580	12,580	
39.5%	0	12,493	12,493	
40.7%	0	12,313	12,313	
42.0%	0	11,949	11,949	
43.2%	0	11,873	11,873	
44.4%	0	11,832	11,832	
45.7%	0	11,830	11,830	
46.9%	0	11,812	11,812	
48.1%	0	11,754	11,754	
49.4%	0	11,743	11,743	
50.6%	0	11,742	11,742	
51.9%	0	11,709	11,709	
53.1%	0	11,686	11,686	
54.3%	0	11,686	11,686	
55.6%	0	11,661	11,661	
56.8%	0	11,636	11,636	
58.0%	0	11,636	11,636	
59.3%	0	11,590	11,590	
60.5%	0	11,576	11,576	
61.7%	0	11,346	11,346	
63.0%	0	10,709	10,709	
64.2%	0	10,670	10,670	
65.4%	0	10,630	10,630	
66.7%	0	10,539	10,539	
67.9%	0	10,457	10,457	
69.1%	0	10,279	10,279	
70.4%	0	10,089	10,089	
71.6%	0	9,958	9,958	
72.8%	0	9,625	9,625	
74.1%	0	9,536	9,536	
75.3%	0	9,516	9,516	
76.5%	0	9,421	9,421	
77.8%	0	9,239	9,239	
79.0%	0	9,184	9,184	
80.2%	0	8,824	8,824	
81.5%	0	8,745	8,745	
82.7%	0	8,501	8,501	
84.0%	0	8,310	8,310	
85.2%	0	7,582	7,582	
86.4%	0	7,356	7,356	
87.7%	0	7,281	7,281	
88.9%	0	6,816	6,816	
90.1%	0	6,600	6,600	
91.4%	0	6,396	6,396	
92.6%	0	5,670	5,670	
93.8%	0	5,161	5,161	
95.1%	0	4,863	4,863	
96.3%	0	4,340	4,340	
97.5%	0	3,728	3,728	
98.8%	0	3,489	3,489	
100.0%	0	3,481	3,481	

Sites Reservoir Project Operations

Summary Tables and Bar Charts

Table OP-01-a
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	100	6	0	0	2	10	97	296	614	646	520	101
WSIP 2030 With Project	171	174	772	1,235	1,346	1,054	340	275	540	505	453	62
Difference	72	167	772	1,235	1,344	1,044	243	-21	-75	-141	-67	-39
Percent Difference[3]	71.7%							-7.2%	-12.1%	-21.8%	-12.8%	-38.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	130	7	0	0	0	6	86	441	900	997	793	154
WSIP 2030 With Project	139	168	946	1,359	1,178	809	452	357	886	885	763	88
Difference	9	162	946	1,359	1,178	802	366	-84	-13	-112	-30	-66
Percent Difference	7.3%							-19.0%	-1.5%	-11.3%	-3.7%	-42.9%
Above Normal (14.6%)												
WSIP 2030 Without Project	107	4	0	0	0	5	148	415	843	889	687	144
WSIP 2030 With Project	276	484	1,408	1,537	1,736	1,127	372	401	643	460	508	55
Difference	169	480	1,408	1,537	1,736	1,123	224	-14	-200	-429	-180	-89
Percent Difference								-3.3%	-23.7%	-48.2%	-26.2%	-61.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	99	5	0	0	0	11	115	266	549	570	449	67
WSIP 2030 With Project	80	10	125	1,349	1,125	1,281	533	297	405	362	327	55
Difference	-19	4	125	1,349	1,125	1,269	418	31	-145	-208	-122	-12
Percent Difference	-19.1%							11.6%	-26.4%	-36.5%	-27.2%	-17.9%
Dry (19.5%)												
WSIP 2030 Without Project	74	4	0	0	5	6	77	142	356	304	241	47
WSIP 2030 With Project	326	185	663	1,147	1,797	1,319	127	122	296	292	217	45
Difference	251	181	663	1,147	1,793	1,313	50	-20	-60	-12	-25	-2
Percent Difference							65.1%	-14.4%	-16.9%	-3.8%	-10.2%	-4.0%
Critical (14.6%)												
WSIP 2030 Without Project	65	12	0	0	6	27	72	124	229	238	256	67
WSIP 2030 With Project	57	92	838	627	1,016	817	85	150	232	247	247	48
Difference	-8	80	838	627	1,010	790	14	26	4	9	-9	-19
Percent Difference	-12.7%						18.9%	20.8%	1.5%	3.8%	-3.5%	-28.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

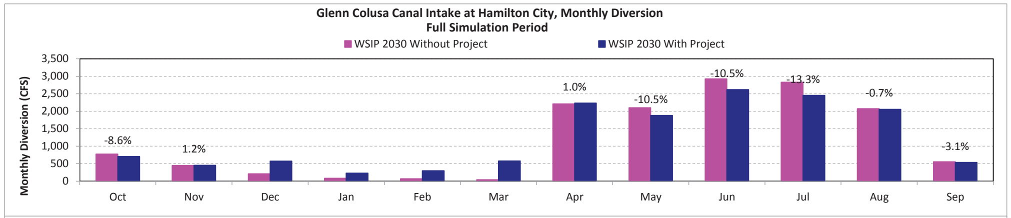
Table OP-02-a
Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Long-term Average and Average by Water Year Type

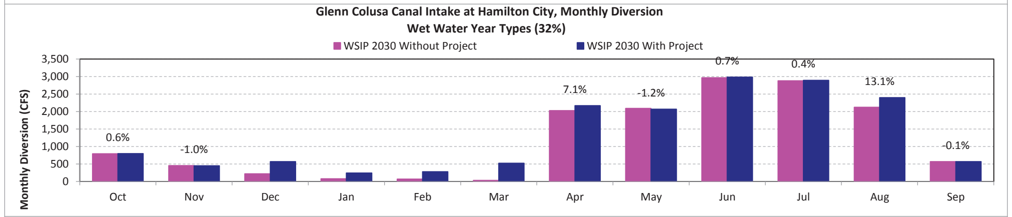
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	775	450	212	85	68	40	2,213	2,099	2,927	2,830	2,071	553
WSIP 2030 With Project	708	456	576	232	301	578	2,236	1,879	2,620	2,454	2,057	536
Difference	-67	5	364	147	233	538	23	-221	-308	-375	-15	-17
Percent Difference[3]	-8.6%	1.2%					1.0%	-10.5%	-10.5%	-13.3%	-0.7%	-3.1%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	793	453	219	78	67	31	2,025	2,090	2,964	2,879	2,122	570
WSIP 2030 With Project	798	448	570	245	278	522	2,168	2,066	2,986	2,892	2,399	570
Difference	5	-4	351	167	210	492	144	-24	21	13	277	-1
Percent Difference	0.6%	-1.0%					7.1%	-1.2%	0.7%	0.4%	13.1%	-0.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	784	466	219	84	66	27	2,181	2,105	2,983	2,898	2,134	588
WSIP 2030 With Project	722	568	807	298	333	585	2,366	1,952	2,475	2,205	1,904	580
Difference	-62	101	588	214	267	558	185	-153	-508	-693	-230	-8
Percent Difference	-8.0%	21.7%					8.5%	-7.3%	-17.0%	-23.9%	-10.8%	-1.3%
Below Normal (20.7%)												
WSIP 2030 Without Project	790	460	214	89	68	43	2,258	2,162	2,970	2,870	2,151	541
WSIP 2030 With Project	612	416	299	241	293	684	2,617	2,006	2,524	2,161	2,129	508
Difference	-177	-44	84	152	225	640	359	-156	-445	-709	-22	-33
Percent Difference	-22.5%	-9.5%	39.3%				15.9%	-7.2%	-15.0%	-24.7%	-1.0%	-6.1%
Dry (19.5%)												
WSIP 2030 Without Project	784	440	218	86	69	44	2,366	2,203	2,997	2,881	2,155	569
WSIP 2030 With Project	779	466	666	206	382	726	2,168	1,879	2,557	2,455	1,962	547
Difference	-5	27	449	120	312	681	-198	-325	-440	-426	-193	-22
Percent Difference	-0.6%	6.0%					-8.4%	-14.7%	-14.7%	-14.8%	-8.9%	-3.9%
Critical (14.6%)												
WSIP 2030 Without Project	695	429	176	92	69	64	2,367	1,886	2,643	2,532	1,678	479
WSIP 2030 With Project	550	401	628	161	219	341	1,794	1,238	2,220	2,206	1,519	447
Difference	-145	-28	452	69	150	277	-573	-649	-423	-326	-160	-31
Percent Difference	-20.9%	-6.6%					-24.2%	-34.4%	-16.0%	-12.9%	-9.5%	-6.6%

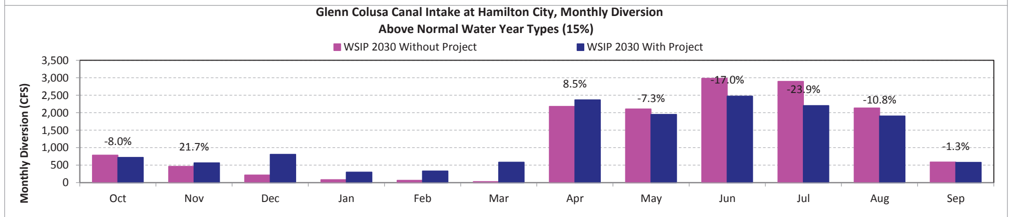
1 Based on the 82-year simulation period

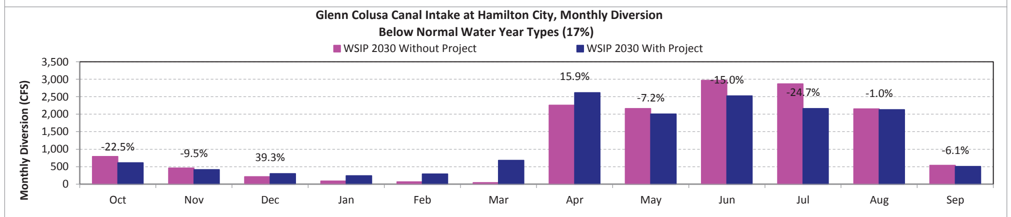
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

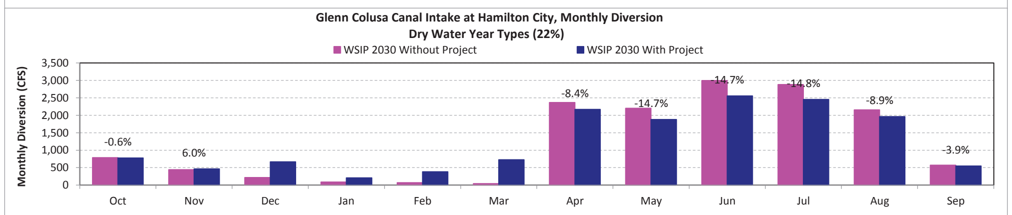
3 Relative difference of the monthly average











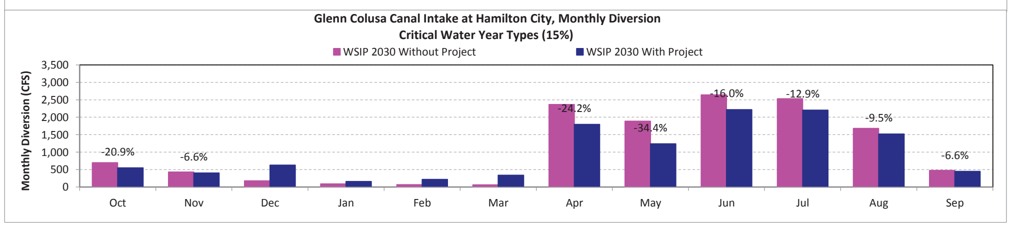


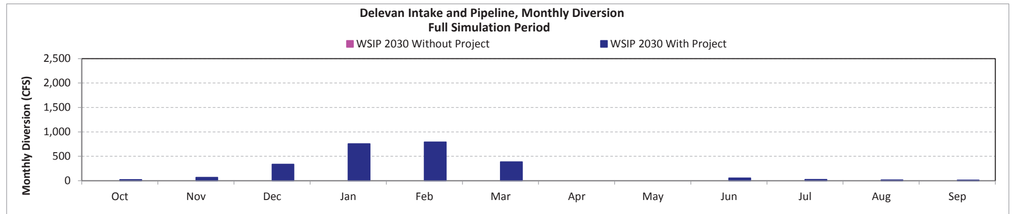
Table OP-03-a
Delevan Intake and Pipeline, Monthly Diversion
Long-term Average and Average by Water Year Type

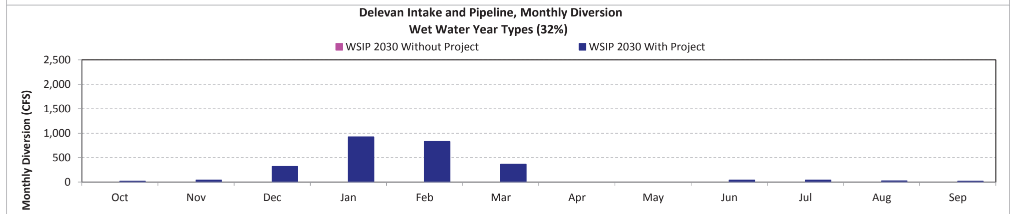
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	24	69	339	758	794	386	0	0	57	28	16	12
Difference	24	69	339	758	794	386	0	0	57	28	16	12
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	15	40	318	923	827	362	0	0	40	41	23	16
Difference	15	40	318	923	827	362	0	0	40	41	23	16
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	263	644	1,050	889	487	0	0	130	0	0	0
Difference	0	263	644	1,050	889	487	0	0	130	0	0	0
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	118	710	668	374	0	0	33	10	45	0
Difference	0	0	118	710	668	374	0	0	33	10	45	0
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	98	70	387	656	1,042	404	0	0	69	33	0	12
Difference	98	70	387	656	1,042	404	0	0	69	33	0	12
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	33	325	327	479	326	0	0	34	48	0	33
Difference	0	33	325	327	479	326	0	0	34	48	0	33
Percent Difference												

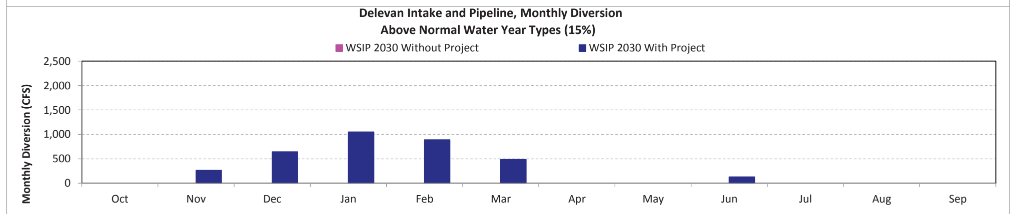
1 Based on the 82-year simulation period

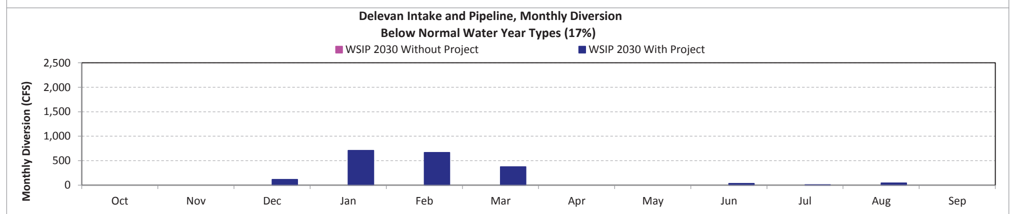
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

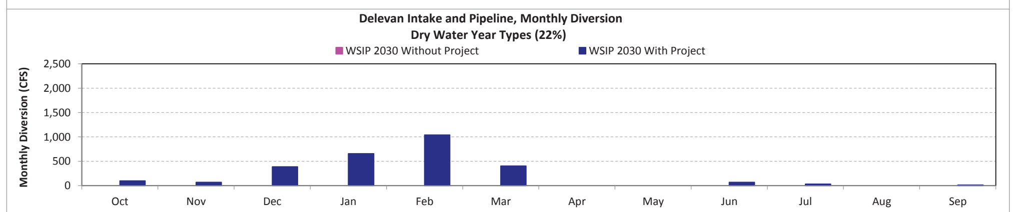
3 Relative difference of the monthly average











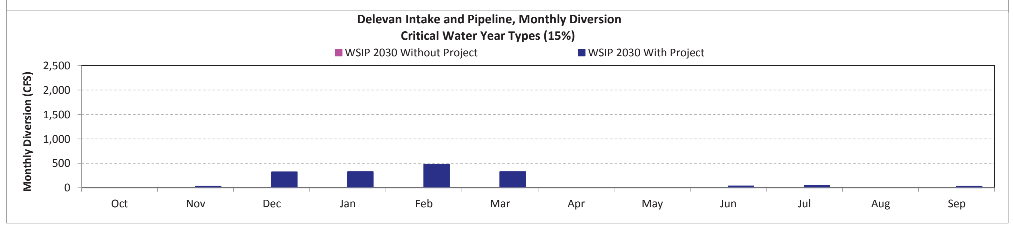


Table OP-04-a
Funks Reservoir to Sites Reservoir, Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	155	265	1,466	2,134	2,362	1,952	467	120	119	40	117	19
Difference	155	265	1,466	2,134	2,362	1,952	467	120	119	40	117	19
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	87	206	1,601	2,438	2,203	1,642	624	125	103	56	226	16
Difference	87	206	1,601	2,438	2,203	1,642	624	125	103	56	226	16
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	185	837	2,638	2,789	2,877	2,151	458	240	282	0	96	0
Difference	185	837	2,638	2,789	2,877	2,151	458	240	282	0	96	0
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	324	2,204	2,011	2,267	865	221	91	11	162	0
Difference	0	0	324	2,204	2,011	2,267	865	221	91	11	162	0
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	521	325	1,484	1,924	3,132	2,378	152	0	99	61	1	50
Difference	521	325	1,484	1,924	3,132	2,378	152	0	99	61	1	50
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	113	1,607	1,024	1,647	1,385	3	6	59	60	0	33
Difference	0	113	1,607	1,024	1,647	1,385	3	6	59	60	0	33
Percent Difference												

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

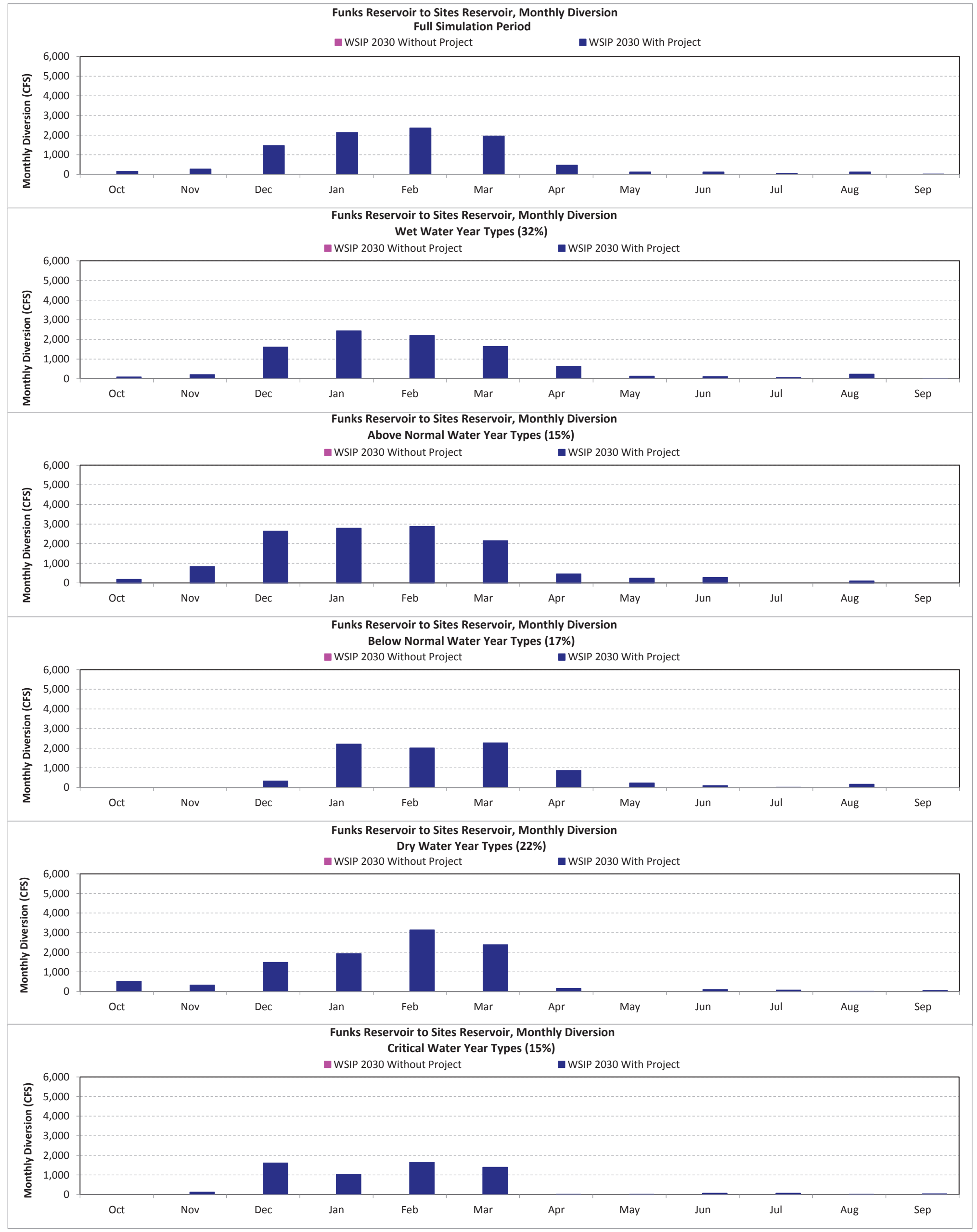
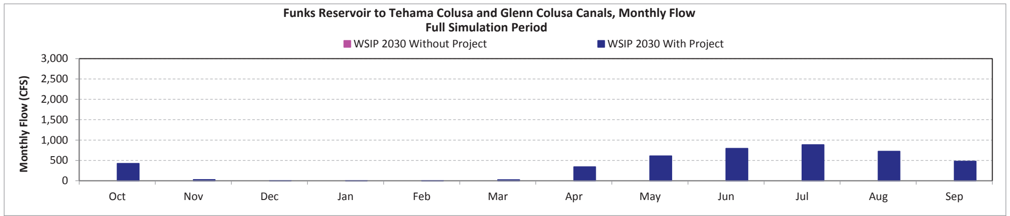
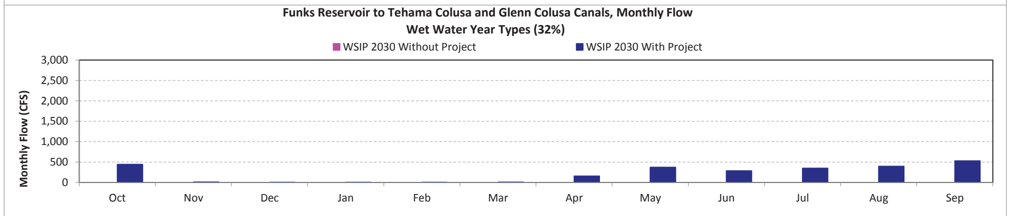


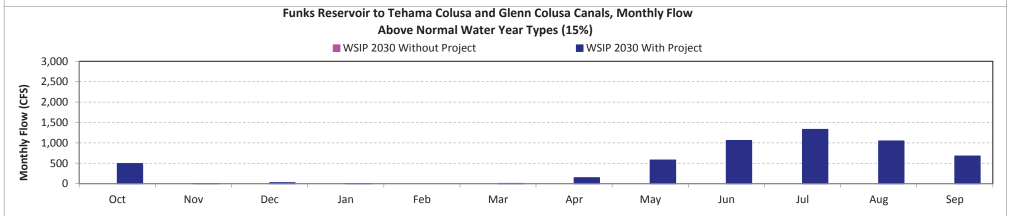
Table OP-05-a
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Long-term Average and Average by Water Year Type

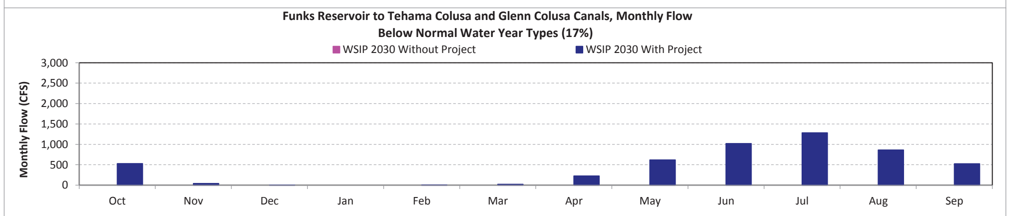
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	423	27	5	1	2	23	344	612	794	886	722	482
Difference	423	27	5	1	2	23	344	612	794	886	722	482
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	446	11	1	3	0	6	155	372	285	349	395	530
Difference	446	11	1	3	0	6	155	372	285	349	395	530
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	493	0	24	1	0	4	149	580	1,058	1,330	1,047	679
Difference	493	0	24	1	0	4	149	580	1,058	1,330	1,047	679
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	528	44	1	0	6	24	227	618	1,019	1,282	861	525
Difference	528	44	1	0	6	24	227	618	1,019	1,282	861	525
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	405	52	1	0	0	24	478	701	1,035	1,029	900	428
Difference	405	52	1	0	0	24	478	701	1,035	1,029	900	428
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	185	30	2	0	6	74	921	1,014	949	811	646	196
Difference	185	30	2	0	6	74	921	1,014	949	811	646	196
Percent Difference												

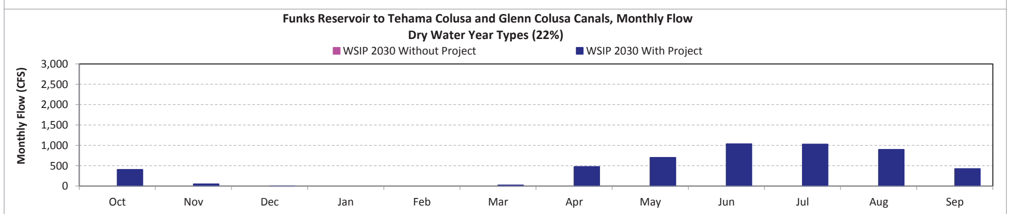
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











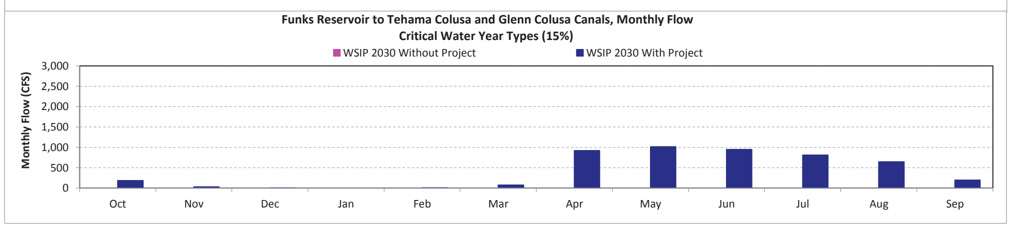


Table OP-06-a
Funks Reservoir to Deleven Pipeline, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	530	250	35	11	77	43	40	71	835	866	555	695
Difference	530	250	35	11	77	43	40	71	835	866	555	695
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	194	70	29	24	18	33	0	0	385	389	54	392
Difference	194	70	29	24	18	33	0	0	385	389	54	392
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	338	125	12	23	0	39	0	0	1,133	1,126	455	932
Difference	338	125	12	23	0	39	0	0	1,133	1,126	455	932
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	671	192	9	0	175	16	0	0	1,221	1,272	730	851
Difference	671	192	9	0	175	16	0	0	1,221	1,272	730	851
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	858	528	57	0	0	18	0	0	844	1,219	1,024	900
Difference	858	528	57	0	0	18	0	0	844	1,219	1,024	900
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	786	461	78	0	241	140	271	483	914	555	824	592
Difference	786	461	78	0	241	140	271	483	914	555	824	592
Percent Difference												

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

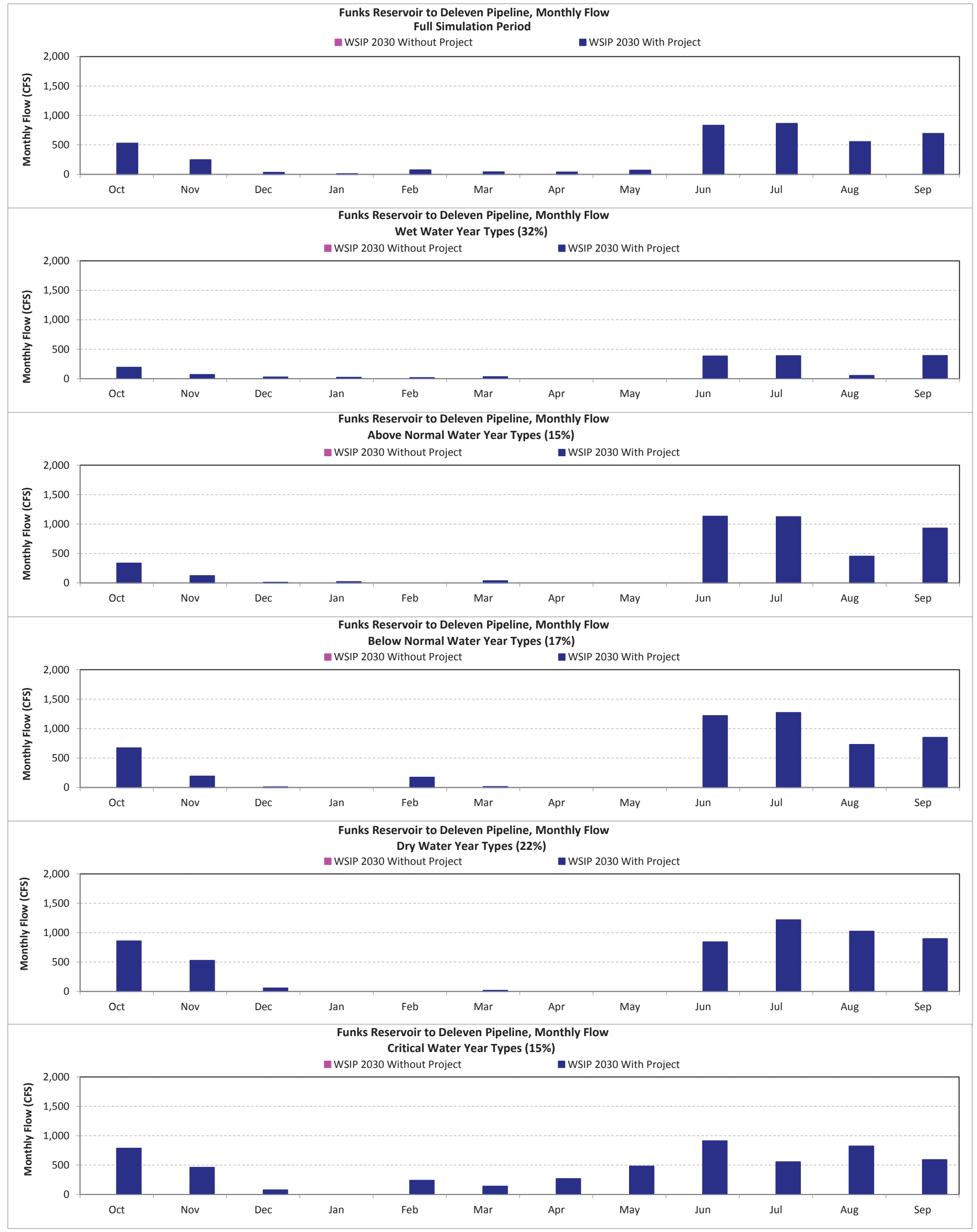
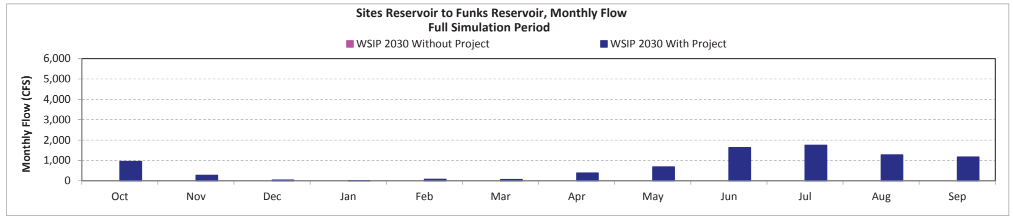
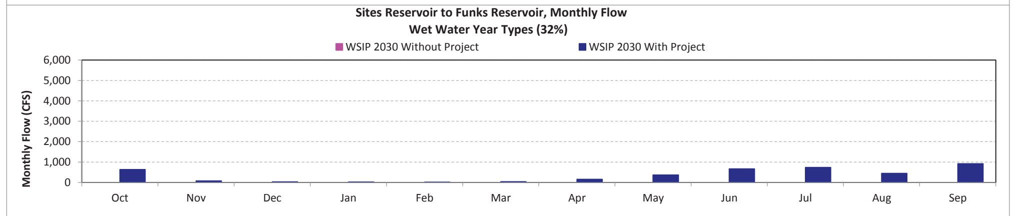


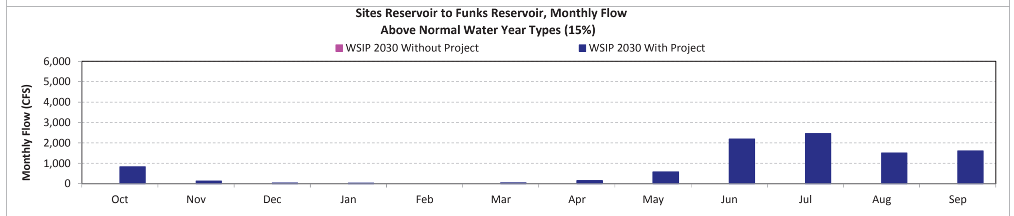
Table OP-07-a
Sites Reservoir to Funks Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

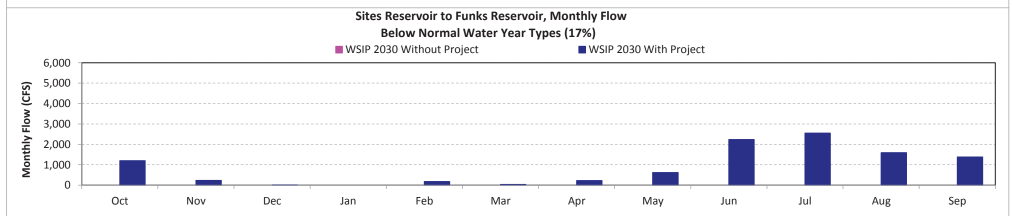
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	954	277	40	12	79	66	384	682	1,628	1,753	1,277	1,176
Difference	954	277	40	12	79	66	384	682	1,628	1,753	1,277	1,176
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	640	81	30	27	18	39	155	372	670	738	449	921
Difference	640	81	30	27	18	39	155	372	670	738	449	921
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	831	125	36	24	0	43	149	580	2,191	2,456	1,502	1,611
Difference	831	125	36	24	0	43	149	580	2,191	2,456	1,502	1,611
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	1,199	236	9	0	180	40	227	618	2,240	2,554	1,592	1,376
Difference	1,199	236	9	0	180	40	227	618	2,240	2,554	1,592	1,376
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	1,263	579	59	0	0	41	478	701	1,879	2,248	1,924	1,327
Difference	1,263	579	59	0	0	41	478	701	1,879	2,248	1,924	1,327
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	970	490	80	0	247	213	1,192	1,498	1,863	1,366	1,470	788
Difference	970	490	80	0	247	213	1,192	1,498	1,863	1,366	1,470	788
Percent Difference												

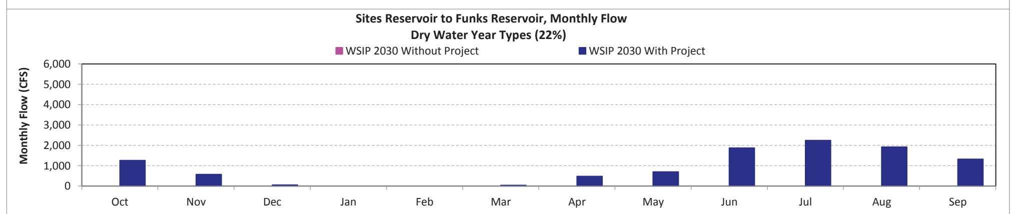
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











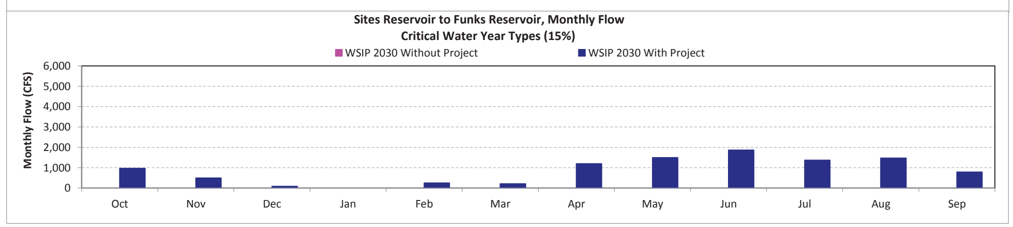
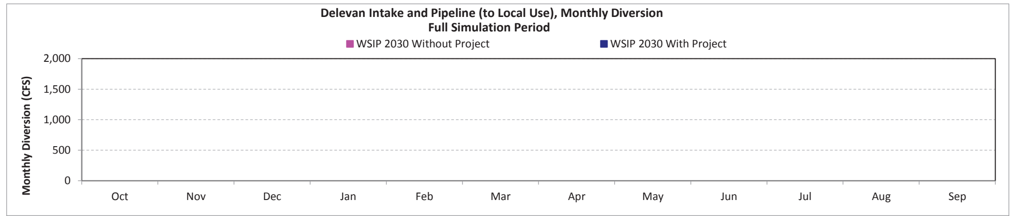
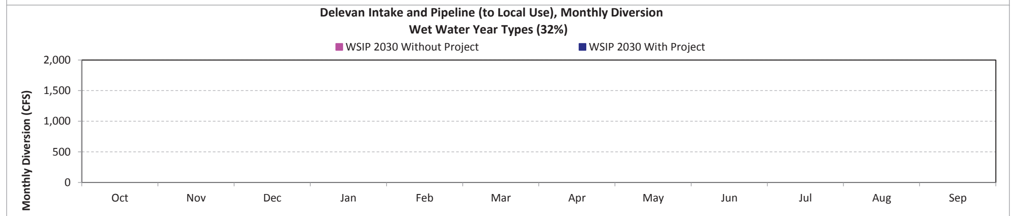


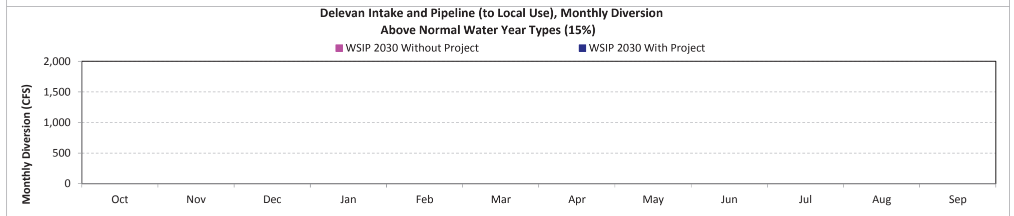
Table OP-08-a
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Long-term Average and Average by Water Year Type

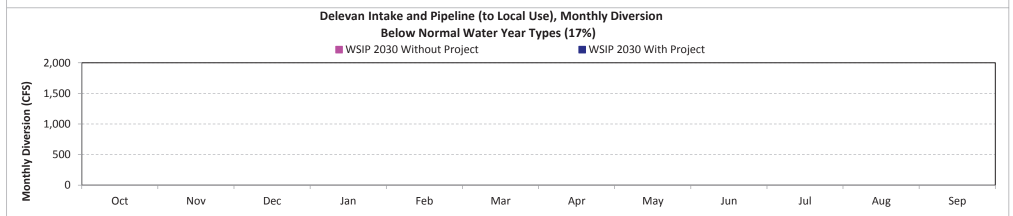
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												

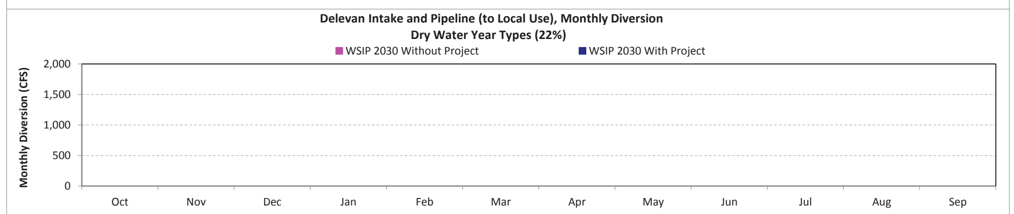
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











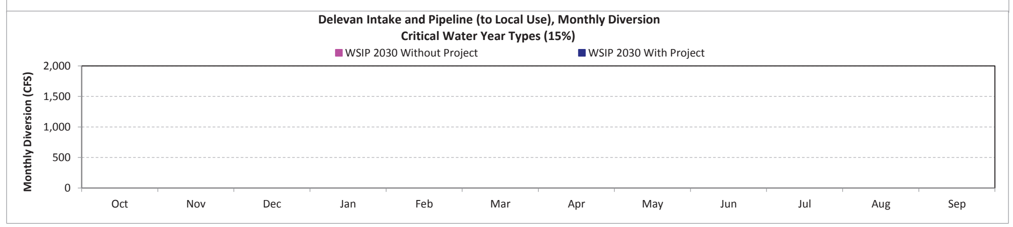


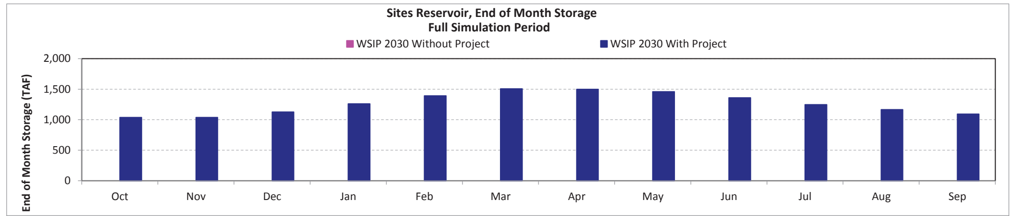
Table OP-09-a
Sites Reservoir, End of Month Storage
Long-term Average and Average by Water Year Type

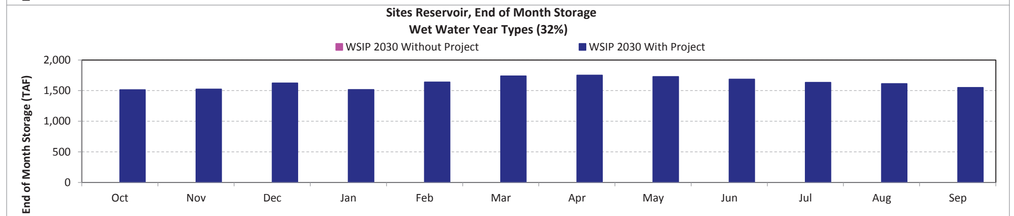
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	1,038	1,038	1,128	1,261	1,391	1,506	1,500	1,459	1,361	1,246	1,167	1,093
Difference	1,038	1,038	1,128	1,261	1,391	1,506	1,500	1,459	1,361	1,246	1,167	1,093
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	1,515	1,523	1,623	1,517	1,641	1,740	1,751	1,730	1,688	1,636	1,613	1,552
Difference	1,515	1,523	1,623	1,517	1,641	1,740	1,751	1,730	1,688	1,636	1,613	1,552
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	1,136	1,178	1,341	1,398	1,563	1,692	1,707	1,680	1,558	1,397	1,302	1,200
Difference	1,136	1,178	1,341	1,398	1,563	1,692	1,707	1,680	1,558	1,397	1,302	1,200
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	943	929	951	1,266	1,369	1,506	1,535	1,504	1,368	1,202	1,106	1,019
Difference	943	929	951	1,266	1,369	1,506	1,535	1,504	1,368	1,202	1,106	1,019
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	797	783	873	1,068	1,245	1,388	1,358	1,309	1,195	1,052	926	845
Difference	797	783	873	1,068	1,245	1,388	1,358	1,309	1,195	1,052	926	845
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	402	379	475	842	921	992	906	810	696	608	512	464
Difference	402	379	475	842	921	992	906	810	696	608	512	464
Percent Difference												

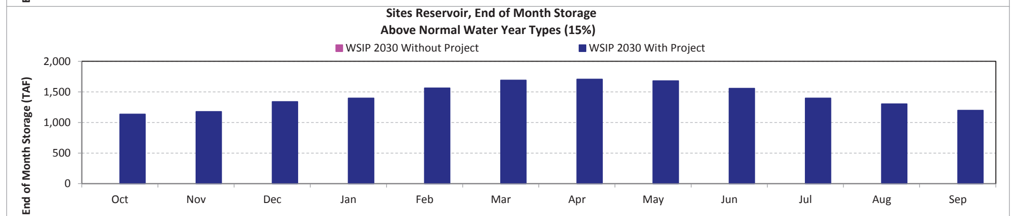
1 Based on the 82-year simulation period

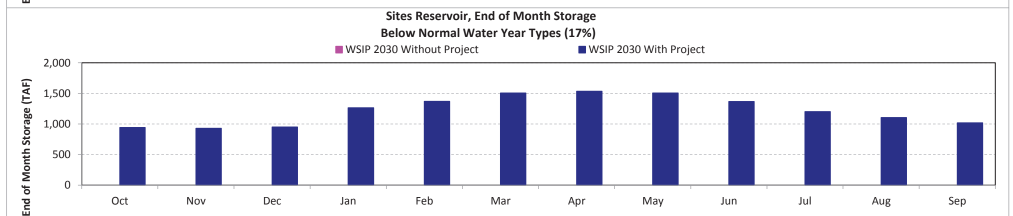
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

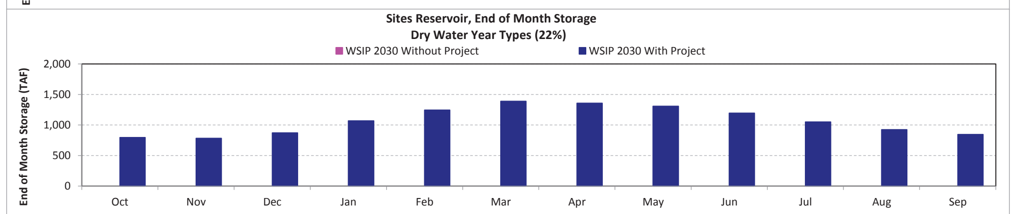
3 Relative difference of the monthly average











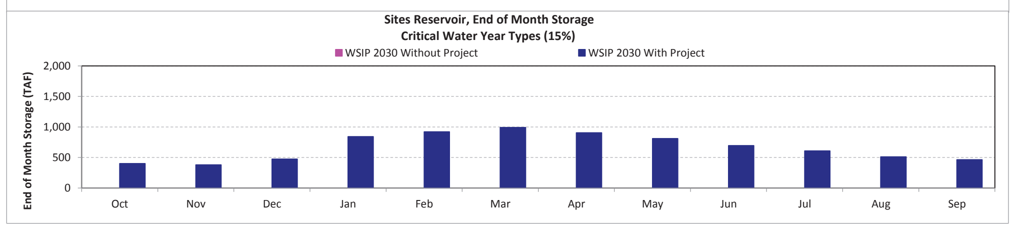


Table OP-10-a
Sites Reservoir, End of Month Elevation
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	455	454	463	475	486	496	495	492	484	474	466	460
Difference	455	454	463	475	486	496	495	492	484	474	466	460
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	498	499	506	497	507	515	516	514	511	507	506	501
Difference	498	499	506	497	507	515	516	514	511	507	506	501
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	468	471	484	487	501	511	512	511	502	489	481	473
Difference	468	471	484	487	501	511	512	511	502	489	481	473
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	449	448	450	475	483	495	499	496	486	472	464	456
Difference	449	448	450	475	483	495	499	496	486	472	464	456
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	434	432	442	459	475	487	484	480	470	458	445	438
Difference	434	432	442	459	475	487	484	480	470	458	445	438
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	386	384	399	438	446	454	446	436	423	413	400	394
Difference	386	384	399	438	446	454	446	436	423	413	400	394
Percent Difference												

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

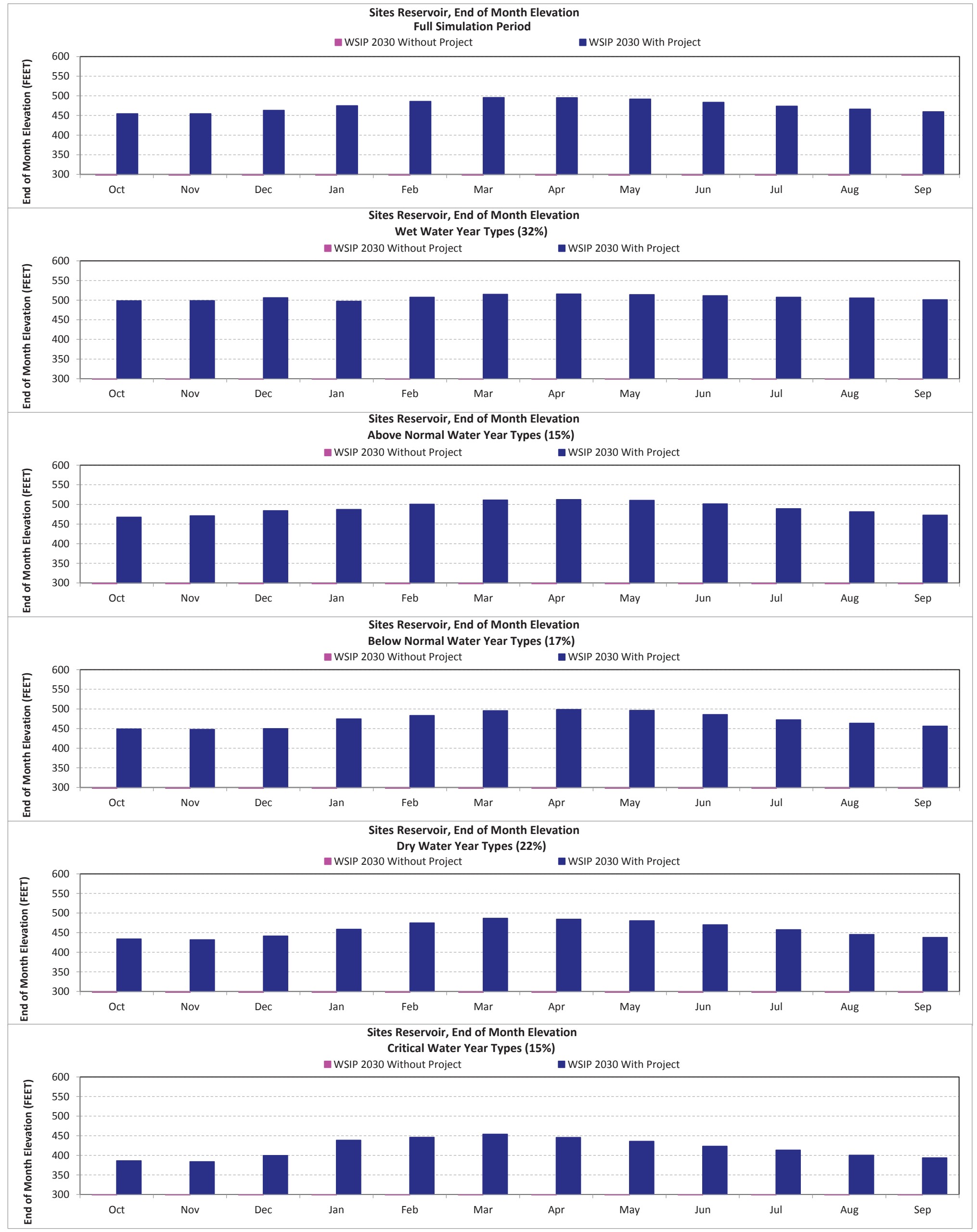


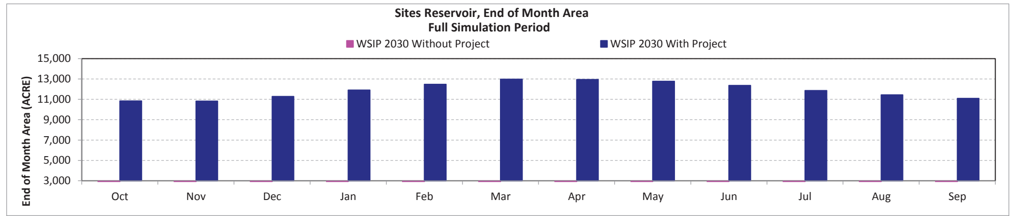
Table OP-11-a
Sites Reservoir, End of Month Area
Long-term Average and Average by Water Year Type

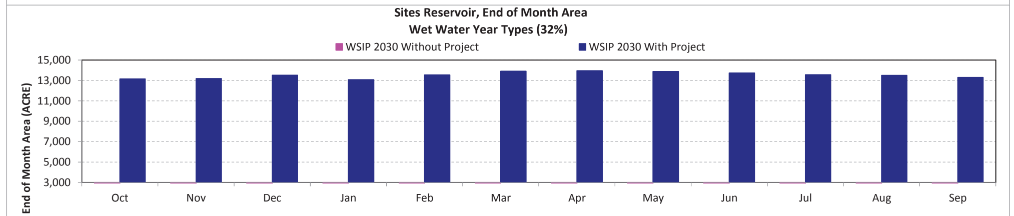
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	10,844	10,824	11,293	11,918	12,474	12,981	12,951	12,774	12,365	11,868	11,451	11,105
Difference	10,844	10,824	11,293	11,918	12,474	12,981	12,951	12,774	12,365	11,868	11,451	11,105
Percent Difference[3]												
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	13,160	13,187	13,512	13,071	13,547	13,903	13,948	13,878	13,740	13,567	13,491	13,288
Difference	13,160	13,187	13,512	13,071	13,547	13,903	13,948	13,878	13,740	13,567	13,491	13,288
Percent Difference												
Above Normal (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	11,676	11,847	12,492	12,563	13,223	13,718	13,780	13,706	13,306	12,731	12,359	11,944
Difference	11,676	11,847	12,492	12,563	13,223	13,718	13,780	13,706	13,306	12,731	12,359	11,944
Percent Difference												
Below Normal (20.7%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	10,686	10,624	10,719	11,867	12,275	12,945	13,120	13,029	12,547	11,875	11,432	11,048
Difference	10,686	10,624	10,719	11,867	12,275	12,945	13,120	13,029	12,547	11,875	11,432	11,048
Percent Difference												
Dry (19.5%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	9,761	9,658	10,202	11,105	11,964	12,564	12,450	12,240	11,731	11,044	10,384	9,956
Difference	9,761	9,658	10,202	11,105	11,964	12,564	12,450	12,240	11,731	11,044	10,384	9,956
Percent Difference												
Critical (14.6%)												
WSIP 2030 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2030 With Project	6,857	6,716	7,735	10,029	10,454	10,932	10,473	9,893	9,149	8,553	7,741	7,332
Difference	6,857	6,716	7,735	10,029	10,454	10,932	10,473	9,893	9,149	8,553	7,741	7,332
Percent Difference												

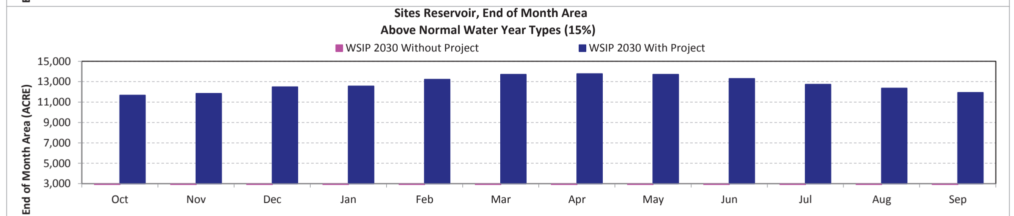
1 Based on the 82-year simulation period

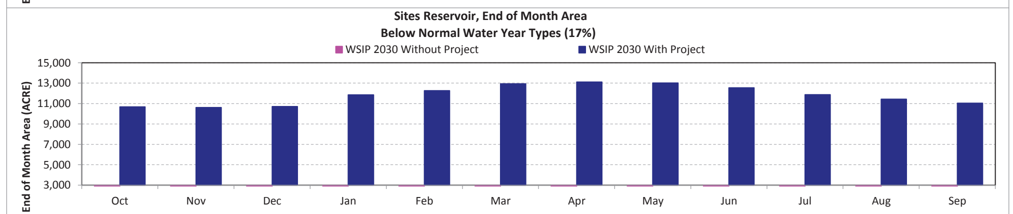
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

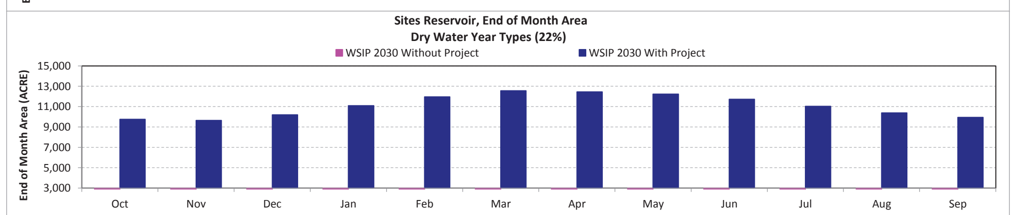
3 Relative difference of the monthly average

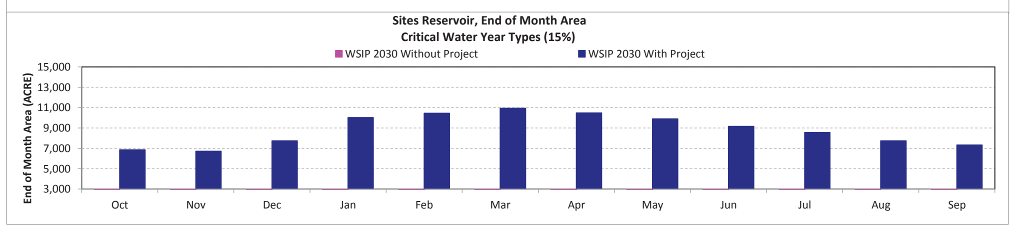












Sites Reservoir Project Operations

Exceedance Probability Charts and Tables

Figure OP-01-b
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Probability of Exceedance

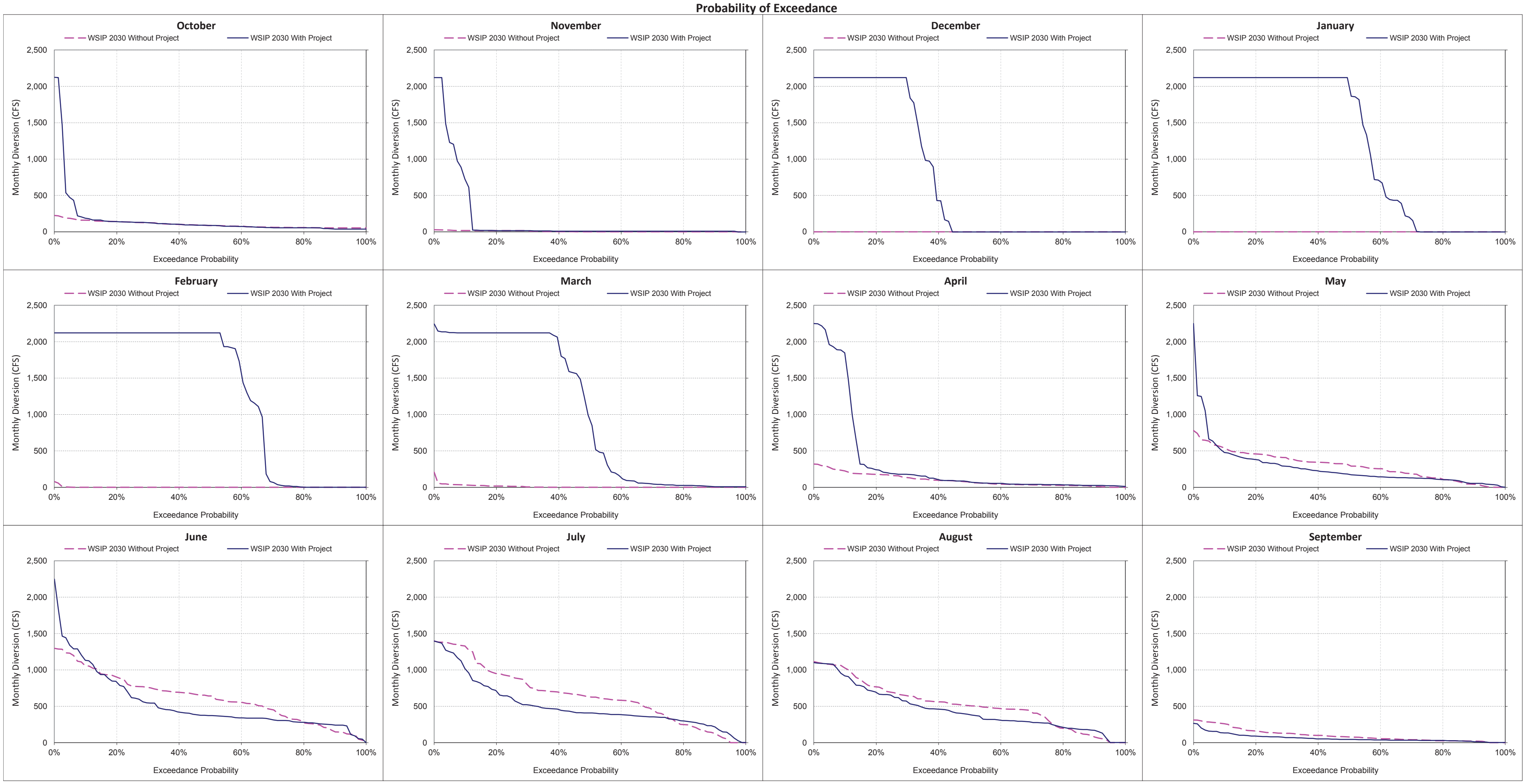


Table OP-01-b

Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	225	2,124	1,899	844.0%
1.2%	220	2,121	1,901	863.9%
2.5%	204	1,465	1,261	617.4%
3.7%	188	538	349	185.5%
4.9%	187	472	285	152.8%
6.2%	177	433	256	144.5%
7.4%	166	220	54	32.6%
8.6%	161	204	43	26.6%
9.9%	160	187	27	16.7%
11.1%	158	179	20	12.8%
12.3%	153	164	11	7.4%
13.6%	148	162	14	9.5%
14.8%	147	161	14	9.8%
16.0%	145	148	3	2.0%
17.3%	142	146	4	2.5%
18.5%	142	143	0	0.2%
19.8%	142	142	0	-0.1%
21.0%	142	136	-6	-3.9%
22.2%	136	136	0	-0.1%
23.5%	136	134	-1	-0.9%
24.7%	133	134	1	0.4%
25.9%	129	130	2	1.2%
27.2%	128	129	1	0.9%
28.4%	127	129	2	1.5%
29.6%	126	128	1	1.0%
30.9%	124	124	0	-0.3%
32.1%	124	121	-3	-2.3%
33.3%	114	113	-1	-0.7%
34.6%	111	112	1	1.1%
35.8%	108	112	4	4.1%
37.0%	107	107	0	-0.2%
38.3%	104	105	0	0.4%
39.5%	101	104	3	3.0%
40.7%	100	101	0	0.2%
42.0%	99	95	-3	-3.5%
43.2%	98	95	-3	-3.4%
44.4%	95	94	-1	-0.7%
45.7%	95	91	-4	-3.9%
46.9%	91	91	0	-0.2%
48.1%	89	90	1	1.0%
49.4%	87	86	-1	-0.7%
50.6%	87	86	-1	-1.0%
51.9%	86	86	0	0.0%
53.1%	85	84	-1	-1.2%
54.3%	84	78	-5	-6.3%
55.6%	81	78	-3	-3.3%
56.8%	78	77	-1	-1.1%
58.0%	78	77	-1	-1.3%
59.3%	78	75	-3	-3.8%
60.5%	78	72	-5	-6.9%
61.7%	71	71	0	0.1%
63.0%	68	70	2	3.1%
64.2%	67	66	0	-0.5%
65.4%	67	62	-5	-7.6%
66.7%	66	61	-5	-7.5%
67.9%	66	59	-6	-9.7%
69.1%	63	59	-4	-6.5%
70.4%	62	57	-5	-7.8%
71.6%	61	57	-4	-6.9%
72.8%	61	57	-4	-6.8%
74.1%	60	57	-3	-5.7%
75.3%	60	56	-3	-5.2%
76.5%	59	56	-4	-6.0%
77.8%	59	55	-4	-7.3%
79.0%	59	55	-4	-6.9%
80.2%	58	54	-4	-6.5%
81.5%	57	54	-3	-4.8%
82.7%	57	54	-3	-4.4%
84.0%	56	54	-2	-2.8%
85.2%	55	54	-1	-1.5%
86.4%	55	46	-9	-16.4%
87.7%	55	46	-9	-16.4%
88.9%	54	43	-12	-21.2%
90.1%	54	39	-15	-27.8%
91.4%	54	39	-15	-28.5%
92.6%	54	38	-16	-30.4%
93.8%	54	37	-17	-31.0%
95.1%	54	37	-17	-32.1%
96.3%	54	36	-18	-33.3%
97.5%	54	36	-18	-33.3%
98.8%	54	36	-18	-33.3%
100.0%	54	36	-18	-33.3%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	29	2,121	2,093	
1.2%	27	2,121	2,094	
2.5%	26	2,121	2,095	
3.7%	24	1,487	1,463	
4.9%	23	1,228	1,205	
6.2%	19	1,203	1,184	
7.4%	19	971	953	
8.6%	18	891	873	
9.9%	18	724	707	
11.1%	17	612	595	
12.3%	17	23	6	33.0%
13.6%	17	23	6	32.9%
14.8%	17	20	3	16.4%
16.0%	17	19	2	9.2%
17.3%	17	18	1	6.9%
18.5%	17	18	1	5.9%
19.8%	17	18	1	5.0%
21.0%	17	17	0	0.0%
22.2%	17	17	0	0.0%
23.5%	17	17	0	0.0%
24.7%	17	17	0	0.0%
25.9%	17	17	0	0.0%
27.2%	17	17	0	0.0%
28.4%	17	17	0	-2.2%
29.6%	17	16	-1	-8.1%
30.9%	8	15	7	79.8%
32.1%	8	14	6	69.3%
33.3%	7	12	6	84.2%
34.6%	5	11	6	110.6%
35.8%	4	11	8	214.1%
37.0%	3	11	8	297.4%
38.3%	3	11	8	292.5%
39.5%	2	10	8	430.0%
40.7%	2	10	8	431.6%
42.0%	2	10	8	422.9%
43.2%	1	10	9	656.2%
44.4%	1	10	8	710.6%
45.7%	1	9	8	834.4%
46.9%	1	9	8	
48.1%	0	9	9	
49.4%	0	8	8	
50.6%	0	8	8	
51.9%	0	8	8	
53.1%	0	8	8	
54.3%	0	8	8	
55.6%	0	8	8	
56.8%	0	8	8	
58.0%	0	8	8	
59.3%	0	8	8	
60.5%	0	8	8	
61.7%	0	8	8	
63.0%	0	8	8	
64.2%	0	8	8	
65.4%	0	8	8	
66.7%	0	8	8	
67.9%	0	8	8	
69.1%	0	8	8	
70.4%	0	8	8	
71.6%	0	8	8	
72.8%	0	8	8	
74.1%	0	8	8	
75.3%	0	8	8	
76.5%	0	8	8	
77.8%	0	8	8	
79.0%	0	8	8	
80.2%	0	8	8	
81.5%	0	8	8	
82.7%	0	8	8	
84.0%	0	8	8	
85.2%	0	8	8	
86.4%	0	8	8	
87.7%	0	8	8	
88.9%	0	8	8	
90.1%	0	8	8	
91.4%	0	8	8	
92.6%	0	8	8	
93.8%	0	8	8	
95.1%	0	8	8	
96.3%	0	8	8	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,121	2,121	
1.2%	0	2,121	2,121	
2.5%	0	2,121	2,121	
3.7%	0	2,121	2,121	
4.9%	0	2,121	2,121	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	1,838	1,838	
32.1%	0	1,773	1,773	
33.3%	0	1,487	1,487	
34.6%	0	1,175	1,175	
35.8%	0	984	984	
37.0%	0	971	971	
38.3%	0	893	893	
39.5%	0	430	430	
40.7%	0	427	427	
42.0%	0	165	165	
43.2%	0	144	144	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,121	2,121	
1.2%	0	2,121	2,121	
2.5%	0	2,121	2,121	
3.7%	0	2,121	2,121	
4.9%	0	2,121	2,121	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	2,121	2,121	
32.1%	0	2,121	2,121	
33.3%	0	2,121	2,121	
34.6%	0	2,121	2,121	
35.8%	0	2,121	2,121	
37.0%	0	2,121	2,121	
38.3%	0	2,121	2,121	
39.5%	0	2,121	2,121	
40.7%	0	2,121	2,121	
42.0%	0	2,121	2,121	
43.2%	0	2,121	2,121	
44.4%	0	2,121	2,121	
45.7%	0	2,121	2,121	
46.9%	0	2,121	2,121	
48.1%	0	2,121	2,121	
49.4%	0	2,121	2,121	
50.6%	0	1,863	1,863	
51.9%	0	1,857	1,857	
53.1%	0	1,818	1,818	
54.3%	0	1,469	1,469	
55.6%	0	1,332	1,332	
56.8%	0	1,057	1,057	
58.0%	0	720	720	
59.3%	0	712	712	
60.5%	0	671	671	
61.7%	0	480	480	
63.0%	0	444	444	
64.2%	0	435	435	
65.4%	0	434	434	
66.7%	0	390	390	
67.9%	0	221	221	
69.1%	0	200	200	
70.4%	0	156	156	
71.6%	0	6	6	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-01-b

Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	78	2,121	2,043	
1.2%	57	2,121	2,065	
2.5%	11	2,121	2,110	
3.7%	4	2,121	2,117	
4.9%	2	2,121	2,119	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	2,121	2,121	
32.1%	0	2,121	2,121	
33.3%	0	2,121	2,121	
34.6%	0	2,121	2,121	
35.8%	0	2,121	2,121	
37.0%	0	2,121	2,121	
38.3%	0	2,121	2,121	
39.5%	0	2,121	2,121	
40.7%	0	2,121	2,121	
42.0%	0	2,121	2,121	
43.2%	0	2,121	2,121	
44.4%	0	2,121	2,121	
45.7%	0	2,121	2,121	
46.9%	0	2,121	2,121	
48.1%	0	2,121	2,121	
49.4%	0	2,121	2,121	
50.6%	0	2,121	2,121	
51.9%	0	2,121	2,121	
53.1%	0	2,121	2,121	
54.3%	0	1,935	1,935	
55.6%	0	1,932	1,932	
56.8%	0	1,918	1,918	
58.0%	0	1,905	1,905	
59.3%	0	1,735	1,735	
60.5%	0	1,438	1,438	
61.7%	0	1,298	1,298	
63.0%	0	1,192	1,192	
64.2%	0	1,154	1,154	
65.4%	0	1,108	1,108	
66.7%	0	966	966	
67.9%	0	182	182	
69.1%	0	79	79	
70.4%	0	65	65	
71.6%	0	36	36	
72.8%	0	26	26	
74.1%	0	18	18	
75.3%	0	18	18	
76.5%	0	12	12	
77.8%	0	10	10	
79.0%	0	4	4	
80.2%	0	2	2	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	207	2,242	2,035	983.7%
1.2%	55	2,147	2,092	
2.5%	46	2,137	2,091	
3.7%	46	2,136	2,090	
4.9%	38	2,126	2,088	
6.2%	37	2,126	2,089	
7.4%	35	2,123	2,087	
8.6%	34	2,122	2,089	
9.9%	31	2,122	2,091	
11.1%	29	2,121	2,093	
12.3%	27	2,121	2,095	
13.6%	25	2,121	2,096	
14.8%	25	2,121	2,097	
16.0%	24	2,121	2,097	
17.3%	18	2,121	2,103	
18.5%	17	2,121	2,104	
19.8%	17	2,121	2,104	
21.0%	16	2,121	2,105	
22.2%	16	2,121	2,105	
23.5%	15	2,121	2,107	
24.7%	13	2,121	2,108	
25.9%	12	2,121	2,109	
27.2%	11	2,121	2,110	
28.4%	11	2,121	2,111	
29.6%	5	2,121	2,116	
30.9%	5	2,121	2,116	
32.1%	2	2,121	2,119	
33.3%	2	2,121	2,120	
34.6%	1	2,121	2,120	
35.8%	1	2,121	2,120	
37.0%	1	2,121	2,120	
38.3%	1	2,089	2,088	
39.5%	1	2,064	2,063	
40.7%	1	1,802	1,801	
42.0%	1	1,768	1,768	
43.2%	0	1,590	1,590	
44.4%	0	1,575	1,575	
45.7%	0	1,561	1,561	
46.9%	0	1,485	1,485	
48.1%	0	1,245	1,245	
49.4%	0	993	993	
50.6%	0	850	850	
51.9%	0	516	516	
53.1%	0	483	483	
54.3%	0	470	470	
55.6%	0	305	305	
56.8%	0	212	212	
58.0%	0	198	198	
59.3%	0	163	163	
60.5%	0	113	113	
61.7%	0	95	95	
63.0%	0	91	91	
64.2%	0	86	86	
65.4%	0	58	58	
66.7%	0	58	58	
67.9%	0	52	52	
69.1%	0	50	50	
70.4%	0	44	44	
71.6%	0	40	40	
72.8%	0	40	40	
74.1%	0	34	34	
75.3%	0	33	33	
76.5%	0	32	32	
77.8%	0	26	26	
79.0%	0	25	25	
80.2%	0	25	25	
81.5%	0	25	25	
82.7%	0	25	25	
84.0%	0	23	23	
85.2%	0	20	20	
86.4%	0	20	20	
87.7%	0	16	16	
88.9%	0	9	9	
90.1%	0	9	9	
91.4%	0	8	8	
92.6%	0	8	8	
93.8%	0	8	8	
95.1%	0	8	8	
96.3%	0	8	8	
97.5%	0	8	8	
98.8%	0	8	8	
100.0%	0	8	8	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	319	2,250	1,931	605.5%
1.2%	317	2,247	1,930	609.6%
2.5%	298	2,219	1,921	645.5%
3.7%	295	2,163	1,868	632.5%
4.9%	274	1,963	1,689	615.7%
6.2%	250	1,934	1,684	672.8%
7.4%	241	1,889	1,648	682.3%
8.6%	235	1,886	1,651	703.2%
9.9%	225	1,849	1,623	720.7%
11.1%	208	1,472	1,264	607.9%
12.3%	192	988	796	415.6%
13.6%	189	646	457	242.0%
14.8%	186	319	134	71.8%
16.0%	184	314	130	70.5%
17.3%	184	267	83	45.3%
18.5%	179	259	80	45.0%
19.8%	178	241	64	35.8%
21.0%	176	236	60	34.0%
22.2%	173	208	35	20.4%
23.5%	172	199	27	15.8%
24.7%	163	188	24	15.0%
25.9%	158	185	27	16.8%
27.2%	158	179	21	13.4%
28.4%	141	179	38	26.8%
29.6%	134	178	44	33.0%
30.9%	129	176	47	36.9%
32.1%	118	172	54	45.5%
33.3%	114	162	48	41.8%
34.6%	113	153	40	35.1%
35.8%	113	153	40	35.6%
37.0%	103	127	23	22.5%
38.3%	99	123	25	25.1%
39.5%	96	110	13	13.6%
40.7%	94	95	1	1.1%
42.0%	93	93	0	0.0%
43.2%	92	92	-1	-0.8%
44.4%	89	92	2	2.4%
45.7%	86	87	1	1.2%
46.9%	83	87	4	5.1%
48.1%	78	86	9	11.1%
49.4%	75	79	4	5.7%
50.6%	62	67	5	8.4%
51.9%	61	66	5	8.4%
53.1%	59	60	1	2.4%
54.3%	56	57	1	2.2%
55.6%	54	56	2	4.0%
56.8%	49	55	6	12.0%
58.0%	46	55	9	19.7%
59.3%	45	53	9	19.7%
60.5%	42	53	10	24.0%
61.7%	42	45	3	7.0%
63.0%	40	44	5	12.0%
64.2%	36	44	8	20.7%
65.4%	36	44	8	20.7%
66.7%	36	41	5	15.1%
67.9%	36	40	5	12.7%
69.1%	34	40	6	18.3%
70.4%	33	39	6	17.6%
71.6%	33	39	6	18.4%
72.8%	30	39	8	27.5%
74.1%	30	37	7	24.2%
75.3%	28	37	9	30.2%
76.5%	28	36	9	30.8%
77.8%	28	36	9	31.5%
79.0%	26	36	10	36.8%
80.2%	26	33	8	29.1%
81.5%	26	33	7	27.2%
82.7%	24	31	8	32.3%
84.0%	24	28	4	18.6%
85.2%	23	27	4	17.3%
86.4%	22	27	5	22.6%
87.7%	22	27	5	23.2%
88.9%	15	27	11	74.2%
90.1%	11	27	16	139.9%
91.4%	11	27	16	154.3%
92.6%	6	27	21	335.7%
93.8%	6	23	17	297.1%
95.1%	0	23	23	
96.3%	0	22	22	
97.5%	0	17	17	
98.8%	0	15	15	
100.0%	0	9	9	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	780	2,250	1,470	188.6%
1.2%	741	1,259	518	69.9%
2.5%	653	1,250	597	91.6%
3.7%	647	1,051	404	62.5%
4.9%	635	665	30	4.7%
6.2%	584	635	51	8.7%
7.4%	575	575	0	0.0%
8.6%	560	520	-40	-7.1%
9.9%	541	477	-64	-11.8%
11.1%	514	471	-42	-8.2%
12.3%	491	453	-38	-7.7%
13.6%	487	434	-53	-10.9%
14.8%	478	416	-62	-12.9%
16.0%	475	402	-73	-15.4%
17.3%	464	391	-74	-15.9%
18.5%	461	389	-71	-15.4%
19.8%	459	381	-78	-17.0%
21.0%	455	373	-82	-17.9%
22.2%	451	339	-112	-24.9%
23.5%	445	339	-106	-23.9%
24.7%	435	329	-106	-24.4%
25.9%	418	329	-89	-21.3%
27.2%	416	316	-100	-24.1%
28.4%	409	291	-118	-28.8%
29.6%	408	291	-117	-28.7%
30.9%	381	286	-95	-24.9%
32.1%	381	271	-109	-28.8%
33.3%	367	266	-101	-27.4%
34.6%	360	253	-106	-29.5%
35.8%	354	252	-102	-28.7%
37.0%	347	243	-104	-30.1%
38.3%	346	232	-115	-33.2%
39.5%	344	230	-114	-33.1%
40.7%	343	216	-127	-36.9%
42.0%	340	213	-127	-37.4%
43.2%	337	212	-125	-37.1%
44.4%	330	205	-125	-37.8%
45.7%	324	199	-125	-38.7%
46.9%	324	193	-131	-40.4%
48.1%	322	184	-138	-42.8%
49.4%	315	184	-131	-41.6%
50.6%	290	172	-118	-40.8%
51.9%	290	169	-120	-41.5%
53.1%	289	165	-124	-42.9%
54.3%	282	161	-121	-42.9%
55.6%	269	156	-113	-42.0%
56.8%	260	150	-110	-42.3%
58.0%	258	150	-108	-42.0%
59.3%	255	142	-113	-44.2%
60.5%	255	141	-113	-44.6%
61.7%	231	138	-94	-40.4%
63.0%	215	137	-78	-36.4%
64.2%	214	134	-80	-37.5%
65.4%	212	133	-79	-37.2%
66.7%	206	133	-73	-35.6%
67.9%	193	131	-62	-32.0%
69.1%	190	130	-60	-31.8%
70.4%	182	128	-53	-29.5%
71.6%	179	125	-54	-30.2%
72.8%	151	125	-26	-17.3%
74.1%	144	123	-21	-14.6%
75.3%	138	123	-15	-11.2%
76.5%	129	119	-10	-7.9%
77.8%	128	110	-18	-14.3%
79.0%	125	107	-18	-14.2%
80.2%	106	104	-2	-2.3%
81.5%	104	102	-1	-1.2%
82.7%	95	101	6	6.3%
84.0%	89	95	6	7.3%
85.2%	74	89	14	19.2%
86.4%	62	74	12	19.8%
87.7%	45	61	16	35.2%
88.9%	43	55	11	25.9%
90.1%	41	52	11	27.3%
91.4%	38	52	15	38.4%
92.6%	22	52	31	141.3%
93.8%	11	42	30	
95.1%	0	39	39	
96.3%	0	35	35	
97.5%	0	29	29	
98.8%	0	7	7	
100.0%	0	0	0	

Table OP-01-b
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,297	2,250	953	73.5%
1.2%	1,287	1,838	550	42.7%
2.5%	1,285	1,466	181	14.1%
3.7%	1,235	1,444	210	17.0%
4.9%	1,230	1,338	108	8.8%
6.2%	1,198	1,290	93	7.7%
7.4%	1,121	1,289	168	15.0%
8.6%	1,110	1,202	92	8.3%
9.9%	1,057	1,132	75	7.1%
11.1%	1,052	1,127	74	7.0%
12.3%	1,022	1,076	53	5.2%
13.6%	1,017	980	-37	-3.6%
14.8%	945	938	-7	-0.8%
16.0%	938	937	-1	-0.1%
17.3%	931	882	-49	-5.3%
18.5%	925	847	-79	-8.5%
19.8%	905	845	-60	-6.6%
21.0%	884	785	-99	-11.2%
22.2%	872	771	-101	-11.5%
23.5%	802	696	-106	-13.2%
24.7%	780	618	-162	-20.8%
25.9%	773	610	-163	-21.1%
27.2%	771	596	-175	-22.7%
28.4%	769	560	-209	-27.1%
29.6%	761	548	-213	-28.0%
30.9%	753	543	-210	-27.9%
32.1%	739	542	-197	-26.6%
33.3%	728	479	-248	-34.1%
34.6%	714	464	-249	-34.9%
35.8%	711	456	-256	-35.9%
37.0%	704	450	-254	-36.1%
38.3%	695	441	-253	-36.5%
39.5%	693	423	-270	-39.0%
40.7%	690	414	-276	-40.0%
42.0%	684	409	-276	-40.3%
43.2%	681	405	-276	-40.5%
44.4%	670	390	-281	-41.9%
45.7%	661	385	-276	-41.8%
46.9%	653	377	-276	-42.3%
48.1%	653	377	-276	-42.3%
49.4%	642	373	-269	-41.9%
50.6%	641	373	-269	-41.9%
51.9%	596	369	-227	-38.1%
53.1%	588	364	-224	-38.2%
54.3%	581	362	-219	-37.6%
55.6%	565	358	-206	-36.5%
56.8%	560	355	-205	-36.7%
58.0%	559	345	-214	-38.3%
59.3%	558	342	-217	-38.8%
60.5%	551	340	-211	-38.3%
61.7%	539	337	-201	-37.4%
63.0%	536	337	-200	-37.2%
64.2%	530	336	-194	-36.6%
65.4%	508	335	-172	-33.9%
66.7%	504	335	-169	-33.5%
67.9%	471	334	-137	-29.1%
69.1%	461	322	-138	-30.0%
70.4%	449	311	-138	-30.7%
71.6%	407	306	-101	-24.9%
72.8%	374	305	-69	-18.3%
74.1%	361	304	-57	-15.9%
75.3%	329	300	-28	-8.5%
76.5%	322	286	-36	-11.2%
77.8%	320	284	-36	-11.3%
79.0%	303	281	-22	-7.3%
80.2%	270	280	10	3.8%
81.5%	263	271	8	3.0%
82.7%	260	271	11	4.4%
84.0%	251	267	16	6.3%
85.2%	242	257	15	6.2%
86.4%	209	255	46	22.0%
87.7%	204	251	47	23.3%
88.9%	171	247	76	44.6%
90.1%	148	241	93	63.1%
91.4%	146	241	95	65.2%
92.6%	142	240	98	69.0%
93.8%	120	228	109	90.9%
95.1%	116	114	-3	-2.2%
96.3%	114	93	-21	-18.1%
97.5%	48	54	6	12.4%
98.8%	34	48	14	40.8%
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,397	1,397	0	0.0%
1.2%	1,383	1,383	0	0.0%
2.5%	1,381	1,367	-14	-1.0%
3.7%	1,380	1,273	-107	-7.8%
4.9%	1,367	1,249	-118	-8.6%
6.2%	1,353	1,234	-119	-8.8%
7.4%	1,350	1,169	-181	-13.4%
8.6%	1,336	1,124	-212	-15.9%
9.9%	1,330	1,020	-310	-23.3%
11.1%	1,273	956	-317	-24.9%
12.3%	1,249	854	-396	-31.7%
13.6%	1,090	841	-249	-22.9%
14.8%	1,086	817	-268	-24.7%
16.0%	1,039	783	-256	-24.6%
17.3%	991	773	-217	-21.9%
18.5%	969	734	-235	-24.3%
19.8%	951	717	-235	-24.7%
21.0%	949	654	-295	-31.1%
22.2%	932	645	-287	-30.8%
23.5%	921	644	-277	-30.1%
24.7%	911	622	-289	-31.7%
25.9%	888	572	-316	-35.6%
27.2%	880	548	-332	-37.7%
28.4%	871	523	-348	-40.0%
29.6%	811	521	-289	-35.7%
30.9%	756	514	-241	-31.9%
32.1%	746	505	-241	-32.4%
33.3%	717	499	-219	-30.5%
34.6%	716	479	-238	-33.2%
35.8%	712	472	-240	-33.7%
37.0%	704	469	-235	-33.4%
38.3%	701	466	-235	-33.5%
39.5%	698	461	-237	-33.9%
40.7%	685	443	-242	-35.3%
42.0%	681	438	-243	-35.7%
43.2%	676	431	-245	-36.2%
44.4%	666	423	-243	-36.5%
45.7%	663	412	-252	-37.9%
46.9%	654	412	-242	-37.0%
48.1%	643	409	-234	-36.4%
49.4%	631	408	-224	-35.4%
50.6%	626	407	-219	-35.0%
51.9%	626	404	-222	-35.5%
53.1%	613	398	-214	-35.0%
54.3%	603	397	-206	-34.2%
55.6%	599	394	-205	-34.2%
56.8%	592	388	-204	-34.4%
58.0%	586	386	-200	-34.2%
59.3%	584	386	-198	-34.0%
60.5%	581	382	-199	-34.3%
61.7%	578	379	-199	-34.4%
63.0%	571	377	-194	-33.9%
64.2%	559	370	-188	-33.7%
65.4%	550	366	-184	-33.5%
66.7%	512	360	-152	-29.7%
67.9%	486	357	-129	-26.5%
69.1%	475	355	-120	-25.2%
70.4%	445	354	-92	-20.6%
71.6%	408	352	-56	-13.7%
72.8%	401	348	-52	-13.0%
74.1%	378	347	-31	-8.2%
75.3%	333	326	-7	-2.0%
76.5%	319	322	3	1.1%
77.8%	281	316	34	12.1%
79.0%	252	301	49	19.4%
80.2%	247	296	49	19.7%
81.5%	245	291	46	18.7%
82.7%	224	282	58	25.7%
84.0%	207	275	68	33.0%
85.2%	180	261	81	45.3%
86.4%	171	255	84	49.3%
87.7%	147	234	87	59.5%
88.9%	142	232	89	62.7%
90.1%	126	216	90	71.4%
91.4%	95	176	81	84.7%
92.6%	67	147	80	118.9%
93.8%	52	145	92	177.4%
95.1%	0	108	108	
96.3%	0	62	62	
97.5%	0	26	26	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,114	1,101	-13	-1.1%
1.2%	1,102	1,093	-9	-0.8%
2.5%	1,091	1,088	-4	-0.3%
3.7%	1,081	1,087	6	0.6%
4.9%	1,078	1,081	3	0.3%
6.2%	1,070	1,078	8	0.7%
7.4%	1,062	1,021	-41	-3.9%
8.6%	1,062	954	-108	-10.2%
9.9%	1,028	917	-111	-10.8%
11.1%	1,000	907	-93	-9.3%
12.3%	952	851	-100	-10.5%
13.6%	895	791	-104	-11.6%
14.8%	873	785	-87	-10.0%
16.0%	829	767	-62	-7.5%
17.3%	791	723	-68	-8.6%
18.5%	770	711	-59	-7.6%
19.8%	768	698	-71	-9.2%
21.0%	762	665	-97	-12.8%
22.2%	738	661	-77	-10.4%
23.5%	703	661	-42	-5.9%
24.7%	693	655	-38	-5.4%
25.9%	685	623	-63	-9.2%
27.2%	664	617	-47	-7.1%
28.4%	656	577	-79	-12.1%
29.6%	647	572	-75	-11.6%
30.9%	637	534	-104	-16.3%
32.1%	635	522	-113	-17.8%
33.3%	603	511	-92	-15.2%
34.6%	603	491	-112	-18.5%
35.8%	572	472	-101	-17.6%
37.0%	572	465	-107	-18.6%
38.3%	565	464	-101	-17.9%
39.5%	560	462	-99	-17.6%
40.7%	560	457	-103	-18.5%
42.0%	557	454	-103	-18.6%
43.2%	543	445	-98	-18.0%
44.4%	530	421	-109	-20.5%
45.7%	528	409	-119	-22.6%
46.9%	522	403	-119	-22.8%
48.1%	514	399	-115	-22.4%
49.4%	511	392	-119	-23.3%
50.6%	504	379	-125	-24.8%
51.9%	504	371	-133	-26.4%
53.1%	500	366	-134	-26.8%
54.3%	489	323	-166	-33.9%
55.6%	485	318	-167	-34.4%
56.8%	482	318	-164	-34.1%
58.0%	474	317	-157	-33.1%
59.3%	470	312	-159	-33.8%
60.5%	464	306	-158	-34.0%
61.7%	462	305	-157	-34.1%
63.0%	460	301	-159	-34.5%
64.2%	460	300	-160	-34.9%
65.4%	456	295	-161	-35.4%
66.7%	455	292	-163	-35.8%
67.9%	450	290	-160	-35.6%
69.1%	445	287	-158	-35.4%
70.4%	406	278	-128	-31.6%
71.6%	404	277	-127	-31.4%
72.8%	379	274	-105	-27.7%
74.1%	355	269	-86	-24.2%
75.3%	302	268	-34	-11.3%
76.5%	254	249	-6	-2.2%
77.8%	225	233	8	3.5%
79.0%	201	218	17	8.5%
80.2%	196	210	14	7.3%
81.5%	194	198	5	2.6%
82.7%	179	198	19	10.6%
84.0%	142	192	49	34.5%
85.2%	136	185	48	35.4%
86.4%	117	180	63	53.6%
87.7%	114	178	65	57.0%
88.9%	100	172	71	70.7%
90.1%	76	168	92	120.6%
91.4%	62	153	91	145.1%
92.6%	54	130	76	142.4%
93.8%	42	62	21	49.6%
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	311	264	-47	-15.2%
1.2%	309	260	-50	-16.0%
2.5%	298	203	-96	-32.1%
3.7%	286	174	-112	-39.2%
4.9%	284	159	-125	-44.0%
6.2%	279	155	-124	-44.5%
7.4%	275	153	-122	-44.2%
8.6%	266	136	-130	-48.8%
9.9%	260	135	-125	-48.2%
11.1%	251	134	-117	-46.7%
12.3%	212	122	-90	-42.5%
13.6%	206	114	-92	-44.8%
14.8%	199	101	-98	-49.3%
16.0%	180	100	-80	-44.3%
17.3%	168	97	-71	-42.4%
18.5%	165	91	-73	-44.5%
19.8%	161	90	-71	-44.3%
21.0%	155	87	-69	-44.2%
22.2%	147	84	-63	-42.9%
23.5%	139	83	-56	-40.2%
24.7%	138	81	-57	-41.1%
25.9%	136	79	-57	-42.0%
27.2%	131	79	-52	-39.8%
28.4%	130	78	-52	-40.0%
29.6%	129	68	-60	-46.8%
30.9%	128	68	-60	-47.0%
32.1%	124	68	-57	-45.6%
33.3%	117	66	-51	-43.7%
34.6%	111	65	-45	-41.0%
35.8%	109	62	-47	-43.2%
37.0%	102	58	-45	-43.7%
38.3%	102	57	-44	-43.6%
39.5%	100	51	-49	-49.2%
40.7%	100	51	-49	-49.2%
42.0%	99	50	-48	-49.0%
43.2%	90	50	-40	-44.4%
44.4%	87	47	-40	-45.5%
45.7%	84	47	-37	-44.5%
46.9%	83	46	-37	-44.6%
48.1%	82	45	-37	-45.3%
49.4%	79	44	-35	-44.5%
50.6%	77	44	-33	-43.1%
51.9%	75	43	-31	-41.8%
53.1%	74	41	-33	-44.1%
54.3%	68	41	-27	-40.1%
55.6%	66	40	-26	-40.1%
56.8%	64	39	-24	-38.3%
58.0%	61	37	-24	-38.9%
59.3%	56	37	-19	-33.5%
60.5%	54	37	-16	-30.7%
61.7%	53	35	-18	-33.1%
63.0%	53	35	-18	-33.4%
64.2%	49	35	-15	-29.7%
65.4%	48	34	-14	-28.7%
66.7%	44	34	-10	-22.8%
67.9%	43	33	-10	-22.3%
69.1%	41	33	-8	-19.8%
70.4%	41	32	-9	-21.1%
71.6%	39	32	-7	-18.9%
72.8%	37	32	-5	-14.8%
74.1%	35	32	-3	-9.5%
75.3%	33	31	-1	-4.1%
76.5%	31	31	0	-0.4%
77.8%	27	31	4	15.9%
79.0%	26	30	4	14.6%
80.2%	25	29	4	14.8%
81.5%	25	27	2	8.3%
82.7%	25	27	2	8.0%
84.0%	25	27	2	7.8%
85.2%	24	23	-1	-4.5%
86.4%	23	21	-2	-7.6%
87.7%	22	21	-1	-5.1%
88.9%	22	18	-4	-17.2%
90.1%	21	12	-9	-43.0%
91.4%	19	11	-9	-45.0%
92.6%	18	10	-8	-43.9%
93.8%	10	8	-2	-22.1%
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-02-b
Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Probability of Exceedance

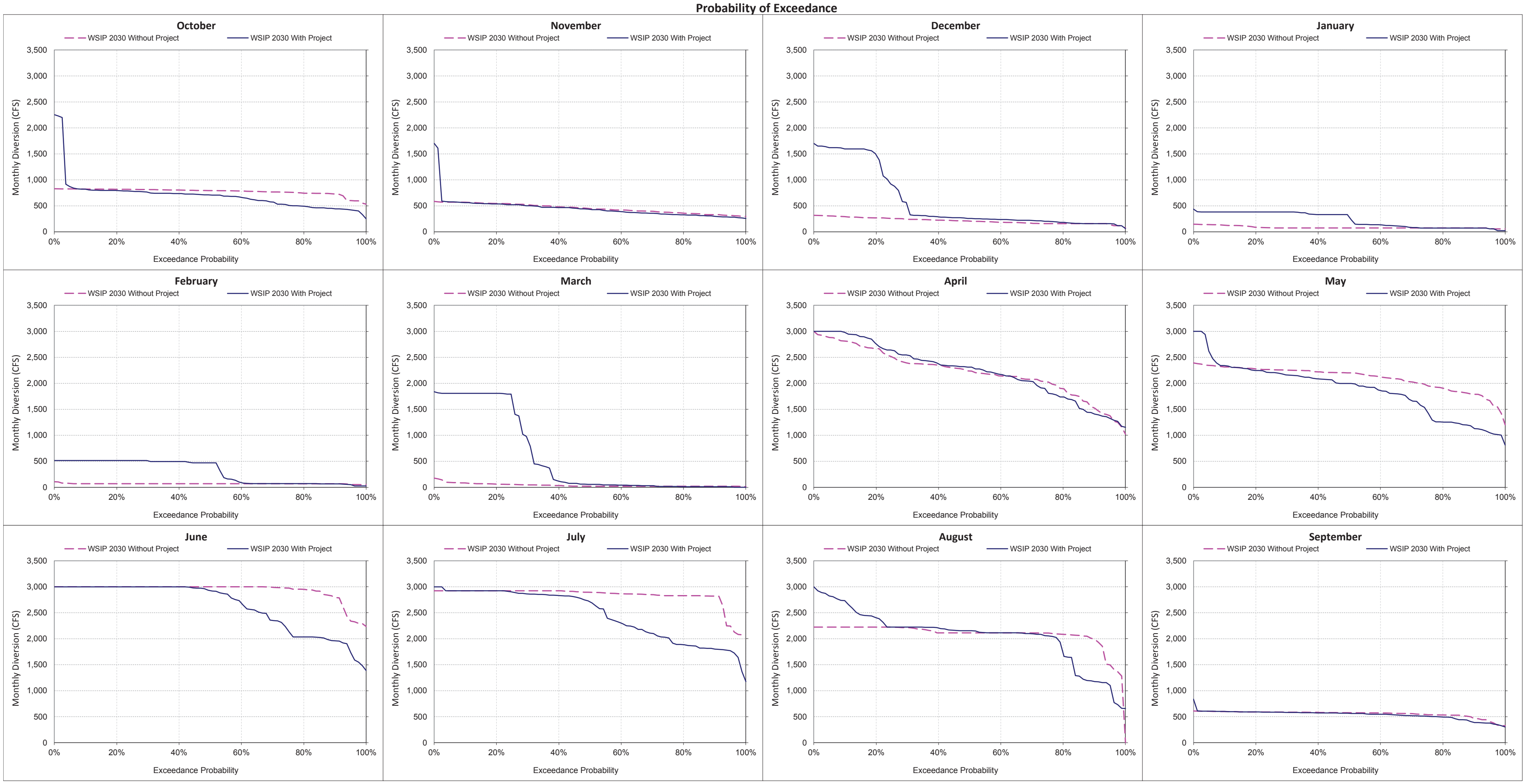


Table OP-02-b
Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	829	2,257	1,428	172.3%
1.2%	828	2,230	1,402	169.4%
2.5%	826	2,201	1,375	166.4%
3.7%	825	916	90	11.0%
4.9%	825	872	47	5.7%
6.2%	825	839	14	1.7%
7.4%	823	826	3	0.4%
8.6%	823	823	0	0.0%
9.9%	823	821	-2	-0.2%
11.1%	822	806	-16	-2.0%
12.3%	822	803	-19	-2.3%
13.6%	822	803	-19	-2.3%
14.8%	821	799	-23	-2.7%
16.0%	821	799	-23	-2.8%
17.3%	821	796	-25	-3.0%
18.5%	820	795	-25	-3.1%
19.8%	819	794	-25	-3.0%
21.0%	819	791	-28	-3.4%
22.2%	819	787	-32	-3.9%
23.5%	818	785	-33	-4.1%
24.7%	816	780	-36	-4.4%
25.9%	816	779	-37	-4.5%
27.2%	815	776	-39	-4.8%
28.4%	815	770	-44	-5.4%
29.6%	814	768	-46	-5.7%
30.9%	813	748	-64	-7.9%
32.1%	812	743	-69	-8.5%
33.3%	809	742	-67	-8.3%
34.6%	809	742	-67	-8.3%
35.8%	807	741	-66	-8.2%
37.0%	806	741	-65	-8.1%
38.3%	806	738	-68	-8.4%
39.5%	805	737	-68	-8.5%
40.7%	803	736	-67	-8.3%
42.0%	802	729	-73	-9.1%
43.2%	799	727	-72	-9.0%
44.4%	799	727	-72	-9.0%
45.7%	796	721	-76	-9.5%
46.9%	796	715	-81	-10.2%
48.1%	795	714	-81	-10.2%
49.4%	795	712	-82	-10.3%
50.6%	794	709	-85	-10.7%
51.9%	793	709	-85	-10.7%
53.1%	792	707	-85	-10.7%
54.3%	791	688	-103	-13.0%
55.6%	791	688	-103	-13.0%
56.8%	790	680	-110	-13.9%
58.0%	787	679	-108	-13.7%
59.3%	787	674	-113	-14.3%
60.5%	787	656	-130	-16.6%
61.7%	781	648	-133	-17.1%
63.0%	779	626	-153	-19.7%
64.2%	778	619	-159	-20.4%
65.4%	777	602	-176	-22.6%
66.7%	773	601	-172	-22.2%
67.9%	772	596	-176	-22.8%
69.1%	768	579	-189	-24.6%
70.4%	767	574	-193	-25.2%
71.6%	767	533	-234	-30.5%
72.8%	765	531	-234	-30.5%
74.1%	764	527	-237	-31.0%
75.3%	761	506	-255	-33.5%
76.5%	760	504	-256	-33.7%
77.8%	754	504	-250	-33.1%
79.0%	749	497	-253	-33.7%
80.2%	743	493	-250	-33.7%
81.5%	743	481	-262	-35.2%
82.7%	742	468	-274	-36.9%
84.0%	741	464	-277	-37.4%
85.2%	741	462	-279	-37.6%
86.4%	739	461	-277	-37.6%
87.7%	738	452	-286	-38.7%
88.9%	734	450	-283	-38.6%
90.1%	727	443	-284	-39.1%
91.4%	722	443	-280	-38.7%
92.6%	693	436	-257	-37.1%
93.8%	602	434	-168	-27.9%
95.1%	601	424	-177	-29.4%
96.3%	596	410	-187	-31.3%
97.5%	596	404	-192	-32.2%
98.8%	553	335	-218	-39.5%
100.0%	532	253	-279	-52.5%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	586	1,702	1,117	190.7%
1.2%	577	1,609	1,031	178.6%
2.5%	572	593	21	3.8%
3.7%	571	579	8	1.4%
4.9%	571	577	6	1.0%
6.2%	571	575	3	0.6%
7.4%	571	571	0	0.1%
8.6%	571	569	-2	-0.3%
9.9%	569	562	-7	-1.3%
11.1%	566	561	-5	-0.9%
12.3%	564	552	-12	-2.2%
13.6%	560	547	-13	-2.4%
14.8%	555	545	-10	-1.8%
16.0%	551	542	-8	-1.5%
17.3%	548	540	-8	-1.5%
18.5%	546	537	-9	-1.6%
19.8%	546	537	-8	-1.5%
21.0%	545	536	-10	-1.7%
22.2%	544	530	-14	-2.6%
23.5%	543	524	-19	-3.5%
24.7%	539	524	-14	-2.7%
25.9%	533	523	-9	-1.7%
27.2%	529	521	-8	-1.6%
28.4%	529	514	-15	-2.9%
29.6%	522	501	-22	-4.2%
30.9%	516	501	-15	-3.0%
32.1%	508	498	-10	-1.9%
33.3%	507	494	-13	-2.5%
34.6%	502	474	-28	-5.6%
35.8%	501	474	-27	-5.4%
37.0%	501	473	-28	-5.6%
38.3%	482	470	-12	-2.4%
39.5%	481	466	-14	-3.0%
40.7%	479	466	-13	-2.7%
42.0%	475	466	-9	-1.9%
43.2%	474	465	-9	-1.9%
44.4%	474	457	-17	-3.5%
45.7%	465	450	-15	-3.1%
46.9%	457	444	-13	-2.9%
48.1%	457	444	-13	-2.9%
49.4%	450	437	-14	-3.0%
50.6%	443	429	-14	-3.1%
51.9%	438	427	-11	-2.5%
53.1%	438	426	-12	-2.8%
54.3%	436	412	-24	-5.6%
55.6%	435	401	-35	-7.9%
56.8%	428	400	-28	-6.6%
58.0%	421	400	-21	-5.0%
59.3%	420	390	-30	-7.3%
60.5%	420	387	-33	-7.8%
61.7%	417	378	-40	-9.5%
63.0%	411	370	-40	-9.8%
64.2%	408	370	-38	-9.4%
65.4%	401	368	-33	-8.3%
66.7%	400	361	-39	-9.8%
67.9%	398	360	-38	-9.6%
69.1%	397	357	-40	-10.0%
70.4%	396	356	-40	-10.0%
71.6%	386	350	-36	-9.3%
72.8%	379	344	-34	-9.1%
74.1%	378	342	-36	-9.5%
75.3%	376	339	-37	-10.0%
76.5%	369	331	-38	-10.4%
77.8%	368	331	-38	-10.2%
79.0%	364	329	-35	-9.7%
80.2%	357	329	-28	-8.0%
81.5%	353	325	-28	-8.0%
82.7%	351	323	-28	-8.0%
84.0%	349	322	-27	-7.7%
85.2%	346	313	-33	-9.4%
86.4%	333	310	-23	-6.9%
87.7%	331	307	-24	-7.2%
88.9%	331	306	-25	-7.5%
90.1%	330	298	-33	-9.9%
91.4%	330	290	-40	-12.1%
92.6%	322	289	-32	-10.0%
93.8%	318	289	-29	-9.1%
95.1%	318	282	-35	-11.2%
96.3%	309	281	-28	-9.0%
97.5%	306	270	-36	-11.8%
98.8%	299	268	-30	-10.2%
100.0%	298	257	-41	-13.6%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	318	1,702	1,385	435.9%
1.2%	316	1,651	1,335	422.5%
2.5%	314	1,649	1,334	424.3%
3.7%	310	1,641	1,330	428.5%
4.9%	306	1,623	1,317	431.0%
6.2%	304	1,620	1,316	433.5%
7.4%	298	1,619	1,321	443.9%
8.6%	296	1,614	1,318	444.6%
9.9%	292	1,597	1,305	446.1%
11.1%	284	1,597	1,313	461.5%
12.3%	284	1,597	1,313	462.3%
13.6%	282	1,597	1,315	465.5%
14.8%	277	1,597	1,320	477.0%
16.0%	272	1,597	1,325	486.3%
17.3%	271	1,577	1,306	481.7%
18.5%	270	1,558	1,288	476.4%
19.8%	268	1,505	1,236	460.6%
21.0%	268	1,382	1,114	415.7%
22.2%	268	1,077	809	301.9%
23.5%	263	1,018	755	287.0%
24.7%	259	919	660	254.7%
25.9%	255	878	623	244.1%
27.2%	254	795	540	212.5%
28.4%	253	579	326	128.9%
29.6%	242	567	325	133.9%
30.9%	240	329	90	37.3%
32.1%	239	318	79	32.9%
33.3%	239	316	77	32.4%
34.6%	237	314	78	32.8%
35.8%	235	310	75	32.0%
37.0%	231	299	68	29.3%
38.3%	228	298	70	30.6%
39.5%	225	292	68	30.1%
40.7%	224	284	60	26.9%
42.0%	222	282	60	27.0%
43.2%	222	278	56	25.1%
44.4%	216	272	56	25.9%
45.7%	213	271	58	27.4%
46.9%	212	270	58	27.4%
48.1%	212	268	56	26.5%
49.4%	209	259	50	23.7%
50.6%	204	255	51	24.9%
51.9%	201	254	53	26.3%
53.1%	201	253	52	25.8%
54.3%	197	249	52	26.6%
55.6%	194	249	55	28.3%
56.8%	193	242	49	25.3%
58.0%	189	240	51	26.9%
59.3%	185	239	55	29.5%
60.5%	184	239	55	29.9%
61.7%	181	237	56	31.1%
63.0%	180	231	51	28.5%
64.2%	179	228	48	27.0%
65.4%	179	225	46	25.8%
66.7%	175	224	49	27.9%
67.9%	171	222	51	29.7%
69.1%	171	222	50	29.5%
70.4%	161	216	55	33.9%
71.6%	161	213	52	32.2%
72.8%	159	212	53	33.6%
74.1%	158	204	46	29.5%
75.3%	158	201	44	27.7%
76.5%	158	197	39	24.9%
77.8%	158	194	36	22.9%
79.0%	158	185	27	17.0%
80.2%	158	180	22	14.2%
81.5%	158	171	14	8.6%
82.7%	158	165	8	4.8%
84.0%	158	161	4	2.4%
85.2%	158	161	3	2.0%
86.4%	158	159	1	0.5%
87.7%	158	158	0	0.0%
88.9%	158	158	0	0.0%
90.1%	158	158	0	0.0%
91.4%	158	158	0	0.0%
92.6%	158	158	0	0.0%
93.8%	158	158	0	0.0%
95.1%	138	158	20	14.3%
96.3%	119	155	35	29.8%
97.5%	119	119	0	0.0%
98.8%	119	119	0	0.0%
100.0%	73	65	-8	-11.2%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	147	436	290	197.7%
1.2%	144	387	243	168.5%
2.5%	141	384	243	173.1%
3.7%	141	384	243	173.1%
4.9%	139	384	244	175.4%
6.2%	137	384	246	179.5%
7.4%	137	384	247	181.1%
8.6%	133	384	250	187.9%
9.9%	127	384	256	201.4%
11.1%	122	384	262	214.3%
12.3%	122	384	262	214.3%
13.6%	121	384	262	216.4%
14.8%	120	384	264	220.6%
16.0%	114	384	270	236.4%
17.3%	108	384	276	255.1%
18.5%	102	384	282	277.5%
19.8%	87	384	297	339.9%
21.0%	87	384	297	342.0%
22.2%	82	384	301	366.3%
23.5%	80	384	303	377.2%
24.7%	78	384	306	391.9%
25.9%	75	384	309	413.0%
27.2%	75	384	309	413.0%
28.4%	75	384	309	413.0%
29.6%	75	384	309	413.0%
30.9%	75	384	309	413.0%
32.1%	75	384	309	413.0%
33.3%	75	379	304	406.3%
34.6%	75	365	291	388.4%
35.8%	75	365	291	388.4%
37.0%	75	342	268	357.7%
38.3%	75	335	260	347.7%
39.5%	75	332	258	344.2%
40.7%	75	332	258	344.2%
42.0%	75	332	258	344.2%
43.2%	75	332	258	344.2%
44.4%	75	332	258	344.2%
45.7%	75	332	258	344.2%
46.9%	75	332	258	344.2%
48.1%	75	332	258	344.2%
49.4%	75	332	258	344.2%
50.6%	75	231	156	208.4%
51.9%	75	147	72	95.9%
53.1%	75	142	67	90.0%
54.3%	75	141	66	87.9%
55.6%	75	141	66	87.9%
56.8%	75	139	65	86.2%
58.0%	75	137	63	83.6%
59.3%	75	137	62	82.5%
60.5%	75	133	59	78.2%
61.7%	75	122	47	63.2%
63.0%	75	122	47	63.2%
64.2%	75	120	45	60.0%
65.4%	75	114	39	52.5%
66.7%	75	108	33	44.5%
67.9%	75	102	27	35.9%
69.1%	75	87	12	16.1%
70.4%	75	82	7	10.0%
71.6%	75	80	6	7.5%
72.8%	75	75	0	0.0%
74.1%	75	75	0	0.0%
75.3%	75	75	0	0.0%
76.5%	75	75	0	0.0%
77.8%	75	75	0	0.0%
79.0%	75	75	0	0.0%
80.2%	75	75	0	0.0%
81.5%	75	75	0	0.0%
82.7%	75	75	0	0.0%
84.0%	75	75	0	0.0%
85.2%	75	75	0	0.0%
86.4%	75	75	0	0.0%
87.7%	75	75	0	0.0%
88.9%	75	75	0	0.0%
90.1%	75	75	0	0.0%
91.4%	75	75	0	0.0%
92.6%	75	75	0	0.0%
93.8%	75	75	0	0.0%
95.1%	63	56	-7	-10.5%
96.3%	56	56	0	0.0%
97.5%	56	24	-32	-57.1%
98.8%	56	23	-33	-58.8%
100.0%	56	23	-33	-58.8%

Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	107	513	406	380.9%
1.2%	103	513	411	400.0%
2.5%	81	513	432	534.2%
3.7%	80	513	433	541.7%
4.9%	74	513	439	590.2%
6.2%	68	513	445	650.0%
7.4%	68	513	445	650.0%
8.6%	68	513	445	650.0%
9.9%	68	513	445	650.0%
11.1%	68	513	445	650.0%
12.3%	68	513	445	650.0%
13.6%	68	513	445	650.0%
14.8%	68	513	445	650.0%
16.0%	68	513	445	650.0%
17.3%	68	513	445	650.0%
18.5%	68	513	445	650.0%
19.8%	68	513	445	650.0%
21.0%	68	513	445	650.0%
22.2%	68	513	445	650.0%
23.5%	68	513	445	650.0%
24.7%	68	513	445	650.0%
25.9%	68	513	445	650.0%
27.2%	68	513	445	650.0%
28.4%	68	513	445	650.0%
29.6%	68	513	445	650.0%
30.9%	68	496	428	625.5%
32.1%	68	496	428	625.5%
33.3%	68	496	428	625.5%
34.6%	68	495	427	624.1%
35.8%	68	495	427	624.1%
37.0%	68	495	427	624.1%
38.3%	68	495	427	624.1%
39.5%	68	495	427	624.1%
40.7%	68	495	427	624.1%
42.0%	68	495	427	624.1%
43.2%	68	479	411	600.5%
44.4%	68	471	402	587.8%
45.7%	68	471	402	587.8%
46.9%	68	471	402	587.8%
48.1%	68	471	402	587.8%
49.4%	68	471	402	587.8%
50.6%	68	471	402	587.8%
51.9%	68	471	402	587.8%
53.1%	68	320	251	367.4%
54.3%	68	186	118	172.1%
55.6%	68	159	91	132.9%
56.8%	68	157	89	129.9%
58.0%	68	135	67	97.2%
59.3%	68	100	32	46.7%
60.5%	68	80	12	16.9%
61.7%	68	74	6	8.7%
63.0%	68	68	0	0.0%
64.2%	68	68	0	0.0%
65.4%	68	68	0	0.0%
66.7%	68	68	0	0.0%
67.9%	68	68	0	0.0%
69.1%	68	68	0	0.0%
70.4%	68	68	0	0.0%
71.6%	68	68	0	0.0%
72.8%	68	68	0	0.0%
74.1%	66	68	2	3.6%
75.3%	66	68	2	3.6%
76.5%	66	68	2	3.6%
77.8%	66	68	2	3.6%
79.0%	66	68	2	3.6%
80.2%	66	68	2	3.6%
81.5%	66	68	2	3.6%
82.7%	66	68	2	3.6%
84.0%	66	68	2	3.6%
85.2%	66	66	0	0.0%
86.4%	66	66	0	0.0%
87.7%	66	66	0	0.0%
88.9%	66	66	0	0.0%
90.1%	66	66	0	0.0%
91.4%	66	63	-3	-4.0%
92.6%	66	62	-4	-5.5%
93.8%	62	54	-8	-12.9%
95.1%	52	50	-2	-3.0%
96.3%	52	26	-26	-50.2%
97.5%	52	26	-26	-50.2%
98.8%	50	26	-24	-48.5%
100.0%	50	26	-24	-48.7%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	176	1,838	1,662	945.4%
1.2%	162	1,819	1,657	
2.5%	143	1,807	1,663	
3.7%	98	1,807	1,709	
4.9%	94	1,807	1,713	
6.2%	90	1,807	1,717	
7.4%	90	1,807	1,717	
8.6%	84	1,807	1,722	
9.9%	84	1,807	1,723	
11.1%	77	1,807	1,730	
12.3%	74	1,807	1,733	
13.6%	69	1,807	1,737	
14.8%	69	1,807	1,737	
16.0%	69	1,807	1,738	
17.3%	66	1,807	1,740	
18.5%	66	1,807	1,741	
19.8%	61	1,807	1,745	
21.0%	58	1,807	1,748	
22.2%	58	1,802	1,744	
23.5%	56	1,793	1,737	
24.7%	56	1,793	1,737	
25.9%	54	1,403	1,349	
27.2%	50	1,371	1,321	
28.4%	48	1,019	971	
29.6%	46	979	933	
30.9%	46	790	744	
32.1%	45	449	404	897.0%
33.3%	44	438	394	894.1%
34.6%	41	415	375	925.0%
35.8%	40	393	352	872.7%
37.0%	40	372	332	825.9%
38.3%	33	150	117	358.1%
39.5%	32	128	95	294.1%
40.7%	32	105	72	224.4%
42.0%	25	94	69	277.5%
43.2%	25	77	52	210.9%
44.4%	22	76	54	245.9%
45.7%	22	74	52	234.7%
46.9%	22	61	39	176.9%
48.1%	22	60	38	175.5%
49.4%	20	55	36	183.6%
50.6%	20	54	35	177.2%
51.9%	20	53	34	171.8%
53.1%	20	53	34	171.8%
54.3%	20	46	27	136.4%
55.6%	20	46	27	136.4%
56.8%	20	44	25	127.3%
58.0%	20	44	24	124.6%
59.3%	20	42	23	117.5%
60.5%	20	42	22	112.8%
61.7%	20	39	20	101.0%
63.0%	20	37	18	92.1%
64.2%	20	37	17	89.2%
65.4%	20	35	15	77.4%
66.7%	20	31	12	61.0%
67.9%	20	30	11	53.9%
69.1%	20	30	11	53.9%
70.4%	20	30	11	53.9%
71.6%	20	17	-3	-15.0%
72.8%	20	16	-3	-16.9%
74.1%	20	16	-3	-16.9%
75.3%	20	14	-6	-28.8%
76.5%	20	14	-6	-29.1%
77.8%	20	14	-6	-30.2%
79.0%	20	11	-8	-41.7%
80.2%	20	11	-8	-41.7%
81.5%	20	11	-8	-41.7%
82.7%	20	11	-8	-41.7%
84.0%	20	11	-8	-41.7%
85.2%	20	11	-8	-41.7%
86.4%	20	11	-8	-41.7%
87.7%	20	11	-8	-41.7%
88.9%	20	11	-8	-41.7%
90.1%	20	11	-8	-41.7%
91.4%	20	11	-8	-41.7%
92.6%	20	11	-8	-41.7%
93.8%	20	11	-8	-41.7%
95.1%	20	11	-8	-41.7%
96.3%	20	0	-20	-100.0%
97.5%	20	0	-20	-100.0%
98.8%	15	0	-15	-100.0%
100.0%	15	0	-15	-100.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	2,937	3,000	63	2.2%
2.5%	2,926	3,000	74	2.5%
3.7%	2,905	3,000	95	3.3%
4.9%	2,883	3,000	117	4.1%
6.2%	2,877	3,000	123	4.3%
7.4%	2,851	3,000	149	5.2%
8.6%	2,818	3,000	182	6.4%
9.9%	2,813	2,981	168	6.0%
11.1%	2,806	2,945	140	5.0%
12.3%	2,789	2,943	154	5.5%
13.6%	2,768	2,937	169	6.1%
14.8%	2,717	2,903	186	6.8%
16.0%	2,706	2,897	191	7.0%
17.3%	2,685	2,873	189	7.0%
18.5%	2,680	2,851	171	6.4%
19.8%	2,666	2,771	105	4.0%
21.0%	2,666	2,708	42	1.6%
22.2%	2,585	2,665	80	3.1%
23.5%	2,543	2,643	100	3.9%
24.7%	2,518	2,640	121	4.8%
25.9%	2,484	2,625	141	5.7%
27.2%	2,433	2,559	126	5.2%
28.4%	2,414	2,545	130	5.4%
29.6%	2,395	2,545	150	6.2%
30.9%	2,380	2,531	151	6.4%
32.1%	2,379	2,472	93	3.9%
33.3%	2,377	2,467	90	3.8%
34.6%	2,374	2,440	66	2.8%
35.8%	2,366	2,438	72	3.1%
37.0%	2,364	2,426	62	2.6%
38.3%	2,363	2,414	51	2.2%
39.5%	2,353	2,392	39	1.7%
40.7%	2,347	2,350	4	0.2%
42.0%	2,323	2,346	23	1.0%
43.2%	2,310	2,339	29	1.3%
44.4%	2,299	2,335	36	1.6%
45.7%	2,291	2,332	41	1.8%
46.9%	2,283	2,324	41	1.8%
48.1%	2,267	2,321	54	2.4%
49.4%	2,239	2,313	74	3.3%
50.6%	2,235	2,310	75	3.4%
51.9%	2,205	2,279	73	3.3%
53.1%	2,197	2,275	78	3.5%
54.3%	2,189	2,258	69	3.1%
55.6%	2,181	2,222	42	1.9%
56.8%	2,173	2,218	45	2.1%
58.0%	2,171	2,198	27	1.2%
59.3%	2,144	2,176	32	1.5%
60.5%	2,141	2,169	28	1.3%
61.7%	2,139	2,142	4	0.2%
63.0%	2,136	2,140	5	0.2%
64.2%	2,130	2,110	-21	-1.0%
65.4%	2,130	2,074	-56	-2.7%
66.7%	2,090	2,052	-38	-1.8%
67.9%	2,080	2,045	-34	-1.7%
69.1%	2,077	2,042	-35	-1.7%
70.4%	2,077	2,031	-46	-2.2%
71.6%	2,076	1,955	-121	-5.8%
72.8%	2,042	1,914	-128	-6.3%
74.1%	2,034	1,903	-131	-6.4%
75.3%	2,023	1,809	-214	-10.6%
76.5%	1,983	1,798	-185	-9.3%
77.8%	1,967	1,779	-188	-9.5%
79.0%	1,903	1,740	-163	-8.5%
80.2%	1,895	1,739	-156	-8.2%
81.5%	1,809	1,699	-110	-6.1%
82.7%	1,777	1,687	-90	-5.1%
84.0%	1,768	1,659	-109	-6.1%
85.2%	1,747	1,516	-232	-13.3%
86.4%	1,659	1,498	-161	-9.7%
87.7%	1,643	1,443	-199	-12.1%
88.9%	1,555	1,436	-119	-7.6%
90.1%	1,522	1,407	-115	-7.6%
91.4%	1,466	1,395	-71	-4.9%
92.6%	1,418	1,367	-51	-3.6%
93.8%	1,402	1,357	-45	-3.2%
95.1%	1,375	1,325	-50	-3.7%
96.3%	1,271	1,288	17	1.4%
97.5%	1,249	1,271	21	1.7%
98.8%	1,158	1,172	14	1.2%
100.0%	1,021	1,151	130	12.7%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,392	3,000	608	25.4%
1.2%	2,379	3,000	621	26.1%
2.5%	2,369	3,000	631	26.6%
3.7%	2,351	2,943	592	25.2%
4.9%	2,346	2,622	276	11.8%
6.2%	2,340	2,479	138	5.9%
7.4%	2,331	2,391	60	2.6%
8.6%	2,325	2,340	16	0.7%
9.9%	2,315	2,340	25	1.1%
11.1%	2,315	2,331	16	0.7%
12.3%	2,315	2,305	-9	-0.4%
13.6%	2,305	2,305	0	0.0%
14.8%	2,299	2,299	0	0.0%
16.0%	2,296	2,285	-12	-0.5%
17.3%	2,289	2,284	-5	-0.2%
18.5%	2,289	2,258	-31	-1.3%
19.8%	2,278	2,247	-31	-1.4%
21.0%	2,274	2,245	-29	-1.3%
22.2%	2,266	2,241	-25	-1.1%
23.5%	2,266	2,211	-55	-2.4%
24.7%	2,265	2,206	-59	-2.6%
25.9%	2,261	2,206	-55	-2.4%
27.2%	2,258	2,195	-63	-2.8%
28.4%	2,258	2,184	-74	-3.3%
29.6%	2,255	2,163	-92	-4.1%
30.9%	2,252	2,155	-97	-4.3%
32.1%	2,250	2,150	-100	-4.5%
33.3%	2,248	2,146	-102	-4.5%
34.6%	2,248	2,133	-114	-5.1%
35.8%	2,245	2,118	-127	-5.7%
37.0%	2,245	2,115	-130	-5.8%
38.3%	2,226	2,096	-131	-5.9%
39.5%	2,222	2,085	-137	-6.1%
40.7%	2,219	2,084	-135	-6.1%
42.0%	2,211	2,078	-133	-6.0%
43.2%	2,209	2,072	-137	-6.2%
44.4%	2,209	2,067	-142	-6.4%
45.7%	2,206	2,006	-201	-9.1%
46.9%	2,206	2,000	-206	-9.3%
48.1%	2,206	1,997	-208	-9.5%
49.4%	2,201	1,996	-205	-9.3%
50.6%	2,201	1,995	-206	-9.4%
51.9%	2,198	1,988	-211	-9.6%
53.1%	2,185	1,950	-235	-10.8%
54.3%	2,172	1,950	-223	-10.3%
55.6%	2,162	1,926	-236	-10.9%
56.8%	2,147	1,924	-223	-10.4%
58.0%	2,141	1,921	-220	-10.3%
59.3%	2,133	1,874	-259	-12.1%
60.5%	2,118	1,851	-267	-12.6%
61.7%	2,107	1,846	-261	-12.4%
63.0%	2,100	1,808	-292	-13.9%
64.2%	2,086	1,803	-283	-13.6%
65.4%	2,086	1,797	-290	-13.9%
66.7%	2,076	1,787	-289	-13.9%
67.9%	2,038	1,766	-272	-13.4%
69.1%	2,032	1,695	-338	-16.6%
70.4%	2,025	1,658	-367	-18.1%
71.6%	2,007	1,653	-354	-17.6%
72.8%	2,004	1,575	-428	-21.4%
74.1%	1,983	1,536	-448	-22.6%
75.3%	1,950	1,422	-528	-27.1%
76.5%	1,937	1,295	-642	-33.1%
77.8%	1,926	1,258	-668	-34.7%
79.0%	1,921	1,257	-664	-34.6%
80.2%	1,903	1,255	-648	-34.0%
81.5%	1,882	1,254	-627	-33.3%
82.7%	1,851	1,252	-599	-32.4%
84.0%	1,843	1,239	-603	-32.8%
85.2%	1,840	1,226	-614	-33.4%
86.4%	1,825	1,202	-622	-34.1%
87.7%	1,815	1,201	-614	-33.8%
88.9%	1,797	1,185	-611	-34.0%
90.1%	1,790	1,128	-662	-37.0%
91.4%	1,787	1,125	-661	-37.0%
92.6%	1,762	1,110	-652	-37.0%
93.8%	1,692	1,082	-611	-36.1%
95.1%	1,668	1,049	-619	-37.1%
96.3%	1,562	1,024	-538	-34.4%
97.5%	1,547	1,016	-531	-34.3%
98.8%	1,422	1,003	-419	-29.5%
100.0%	1,202	816	-387	-32.1%

Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	3,000	3,000	0	0.0%
2.5%	3,000	3,000	0	0.0%
3.7%	3,000	3,000	0	0.0%
4.9%	3,000	3,000	0	0.0%
6.2%	3,000	3,000	0	0.0%
7.4%	3,000	3,000	0	0.0%
8.6%	3,000	3,000	0	0.0%
9.9%	3,000	3,000	0	0.0%
11.1%	3,000	3,000	0	0.0%
12.3%	3,000	3,000	0	0.0%
13.6%	3,000	3,000	0	0.0%
14.8%	3,000	3,000	0	0.0%
16.0%	3,000	3,000	0	0.0%
17.3%	3,000	3,000	0	0.0%
18.5%	3,000	3,000	0	0.0%
19.8%	3,000	3,000	0	0.0%
21.0%	3,000	3,000	0	0.0%
22.2%	3,000	3,000	0	0.0%
23.5%	3,000	3,000	0	0.0%
24.7%	3,000	3,000	0	0.0%
25.9%	3,000	3,000	0	0.0%
27.2%	3,000	3,000	0	0.0%
28.4%	3,000	3,000	0	0.0%
29.6%	3,000	3,000	0	0.0%
30.9%	3,000	3,000	0	0.0%
32.1%	3,000	3,000	0	0.0%
33.3%	3,000	3,000	0	0.0%
34.6%	3,000	3,000	0	0.0%
35.8%	3,000	3,000	0	0.0%
37.0%	3,000	3,000	0	0.0%
38.3%	3,000	3,000	0	0.0%
39.5%	3,000	3,000	0	0.0%
40.7%	3,000	2,998	-2	-0.1%
42.0%	3,000	2,998	-2	-0.1%
43.2%	3,000	2,996	-4	-0.1%
44.4%	3,000	2,978	-22	-0.7%
45.7%	3,000	2,974	-26	-0.9%
46.9%	3,000	2,973	-27	-0.9%
48.1%	3,000	2,961	-39	-1.3%
49.4%	3,000	2,935	-65	-2.2%
50.6%	3,000	2,916	-84	-2.8%
51.9%	3,000	2,915	-85	-2.8%
53.1%	3,000	2,882	-118	-3.9%
54.3%	3,000	2,871	-129	-4.3%
55.6%	3,000	2,860	-140	-4.7%
56.8%	3,000	2,785	-215	-7.2%
58.0%	3,000	2,752	-248	-8.3%
59.3%	3,000	2,731	-269	-9.0%
60.5%	3,000	2,646	-354	-11.8%
61.7%	3,000	2,576	-424	-14.1%
63.0%	3,000	2,564	-436	-14.5%
64.2%	3,000	2,555	-445	-14.8%
65.4%	3,000	2,512	-488	-16.3%
66.7%	3,000	2,492	-508	-16.9%
67.9%	2,998	2,490	-508	-16.9%
69.1%	2,996	2,358	-637	-21.3%
70.4%	2,988	2,347	-641	-21.4%
71.6%	2,985	2,342	-643	-21.5%
72.8%	2,982	2,312	-670	-22.5%
74.1%	2,977	2,235	-742	-24.9%
75.3%	2,974	2,131	-843	-28.4%
76.5%	2,953	2,037	-916	-31.0%
77.8%	2,953	2,037	-916	-31.0%
79.0%	2,953	2,037	-916	-31.0%
80.2%	2,950	2,036	-914	-31.0%
81.5%	2,940	2,036	-904	-30.7%
82.7%	2,940	2,034	-906	-30.8%
84.0%	2,918	2,031	-887	-30.4%
85.2%	2,915	2,023	-892	-30.6%
86.4%	2,851	2,015	-836	-29.3%
87.7%	2,840	1,985	-855	-30.1%
88.9%	2,827	1,966	-862	-30.5%
90.1%	2,792	1,960	-832	-29.8%
91.4%	2,787	1,954	-833	-29.9%
92.6%	2,610	1,920	-690	-26.4%
93.8%	2,434	1,907	-527	-21.7%
95.1%	2,338	1,734	-604	-25.8%
96.3%	2,326	1,589	-737	-31.7%
97.5%	2,296	1,551	-745	-32.4%
98.8%	2,292	1,478	-814	-35.5%
100.0%	2,236	1,392	-844	-37.7%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,923	3,000	77	2.6%
1.2%	2,923	3,000	77	2.6%
2.5%	2,923	3,000	77	2.6%
3.7%	2,923	2,923	0	0.0%
4.9%	2,923	2,923	0	0.0%
6.2%	2,923	2,923	0	0.0%
7.4%	2,923	2,923	0	0.0%
8.6%	2,923	2,923	0	0.0%
9.9%	2,923	2,923	0	0.0%
11.1%	2,923	2,923	0	0.0%
12.3%	2,923	2,923	0	0.0%
13.6%	2,923	2,923	0	0.0%
14.8%	2,923	2,923	0	0.0%
16.0%	2,923	2,923	0	0.0%
17.3%	2,923	2,923	0	0.0%
18.5%	2,923	2,923	0	0.0%
19.8%	2,923	2,923	0	0.0%
21.0%	2,923	2,923	0	0.0%
22.2%	2,923	2,923	0	0.0%
23.5%	2,923	2,913	-10	-0.4%
24.7%	2,923	2,902	-21	-0.7%
25.9%	2,923	2,891	-32	-1.1%
27.2%	2,923	2,874	-49	-1.7%
28.4%	2,923	2,874	-49	-1.7%
29.6%	2,923	2,866	-57	-2.0%
30.9%	2,923	2,860	-64	-2.2%
32.1%	2,923	2,859	-64	-2.2%
33.3%	2,923	2,852	-71	-2.4%
34.6%	2,923	2,852	-71	-2.4%
35.8%	2,923	2,851	-73	-2.5%
37.0%	2,923	2,841	-82	-2.8%
38.3%	2,923	2,839	-85	-2.9%
39.5%	2,923	2,832	-91	-3.1%
40.7%	2,923	2,828	-95	-3.3%
42.0%	2,915	2,823	-93	-3.2%
43.2%	2,913	2,822	-91	-3.1%
44.4%	2,913	2,813	-100	-3.4%
45.7%	2,905	2,798	-107	-3.7%
46.9%	2,902	2,777	-126	-4.3%
48.1%	2,895	2,749	-146	-5.0%
49.4%	2,895	2,730	-165	-5.7%
50.6%	2,893	2,690	-203	-7.0%
51.9%	2,891	2,635	-255	-8.8%
53.1%	2,889	2,577	-311	-10.8%
54.3%	2,883	2,576	-307	-10.6%
55.6%	2,878	2,396	-482	-16.7%
56.8%	2,874	2,368	-506	-17.6%
58.0%	2,872	2,344	-527	-18.4%
59.3%	2,866	2,320	-545	-19.0%
60.5%	2,865	2,291	-574	-20.0%
61.7%	2,863	2,249	-614	-21.4%
63.0%	2,862	2,244	-618	-21.6%
64.2%	2,861	2,225	-635	-22.2%
65.4%	2,859	2,181	-678	-23.7%
66.7%	2,858	2,179	-679	-23.7%
67.9%	2,851	2,133	-719	-25.2%
69.1%	2,849	2,110	-740	-26.0%
70.4%	2,847	2,098	-749	-26.3%
71.6%	2,839	2,055	-783	-27.6%
72.8%	2,837	2,035	-802	-28.3%
74.1%	2,828	2,032	-796	-28.1%
75.3%	2,828	2,016	-812	-28.7%
76.5%	2,828	1,914	-914	-32.3%
77.8%	2,828	1,891	-937	-33.1%
79.0%	2,828	1,890	-938	-33.2%
80.2%	2,828	1,884	-944	-33.4%
81.5%	2,828	1,871	-957	-33.8%
82.7%	2,828	1,863	-965	-34.1%
84.0%	2,828	1,862	-966	-34.2%
85.2%	2,828	1,821	-1,007	-35.6%
86.4%	2,823	1,820	-1,002	-35.5%
87.7%	2,823	1,815	-1,008	-35.7%
88.9%	2,821	1,815	-1,006	-35.7%
90.1%	2,820	1,802	-1,018	-36.1%
91.4%	2,818	1,796	-1,022	-36.3%
92.6%	2,635	1,788	-848	-32.2%
93.8%	2,247	1,778	-469	-20.9%
95.1%	2,244	1,769	-475	-21.2%
96.3%	2,128	1,725	-403	-18.9%
97.5%	2,082	1,640	-443	-21.3%
98.8%	2,076	1,365	-711	-34.3%
100.0%	2,064	1,176	-888	-43.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,224	3,000	776	34.9%
1.2%	2,224	2,923	699	31.4%
2.5%	2,224	2,890	666	29.9%
3.7%	2,224	2,874	650	29.2%
4.9%	2,224	2,824	600	27.0%
6.2%	2,224	2,811	587	26.4%
7.4%	2,224	2,770	546	24.6%
8.6%	2,224	2,738	514	23.1%
9.9%	2,224	2,736	512	23.0%
11.1%	2,224	2,659	435	19.6%
12.3%	2,224	2,590	366	16.4%
13.6%	2,224	2,508	284	12.8%
14.8%	2,224	2,462	238	10.7%
16.0%	2,224	2,451	227	10.2%
17.3%	2,224	2,443	219	9.8%
18.5%	2,224	2,438	214	9.6%
19.8%	2,224	2,408	184	8.3%
21.0%	2,224	2,386	162	7.3%
22.2%	2,224	2,312	88	3.9%
23.5%	2,224	2,224	0	0.0%
24.7%	2,224	2,224	0	0.0%
25.9%	2,221	2,224	3	0.1%
27.2%	2,219	2,224	5	0.2%
28.4%	2,214	2,224	10	0.5%
29.6%	2,214	2,224	10	0.5%
30.9%	2,211	2,224	13	0.6%
32.1%	2,203	2,224	21	0.9%
33.3%	2,187	2,224	37	1.7%
34.6%	2,186	2,223	38	1.7%
35.8%	2,175	2,221	47	2.1%
37.0%	2,159	2,221	63	2.9%
38.3%	2,152	2,219	67	3.1%
39.5%	2,114	2,214	100	4.7%
40.7%	2,114	2,196	82	3.9%
42.0%	2,114	2,191	78	3.7%
43.2%	2,114	2,171	57	2.7%
44.4%	2,114	2,163	49	2.3%
45.7%	2,114	2,159	46	2.2%
46.9%	2,114	2,153	39	1.9%
48.1%	2,114	2,153	39	1.9%
49.4%	2,114	2,153	39	1.9%
50.6%	2,114	2,152	38	1.8%
51.9%	2,114	2,152	38	1.8%
53.1%	2,114	2,124	11	0.5%
54.3%	2,114	2,117	4	0.2%
55.6%	2,114	2,114	0	0.0%
56.8%	2,114	2,114	0	0.0%
58.0%	2,114	2,114	0	0.0%
59.3%	2,114	2,114	0	0.0%
60.5%	2,114	2,114	0	0.0%
61.7%	2,114	2,114	0	0.0%
63.0%	2,114	2,114	0	0.0%
64.2%	2,114	2,114	0	0.0%
65.4%	2,114	2,113	-1	0.0%
66.7%	2,114	2,108	-6	-0.3%
67.9%	2,114	2,101	-13	-0.6%
69.1%	2,111	2,099	-12	-0.6%
70.4%	2,111	2,094	-17	-0.8%
71.6%	2,111	2,083	-29	-1.4%
72.8%	2,109	2,083	-26	-1.2%
74.1%	2,109	2,058	-50	-2.4%
75.3%	2,109	2,053	-56	-2.6%
76.5%	2,101	2,043	-58	-2.8%
77.8%	2,093	2,023	-70	-3.3%
79.0%	2,088	1,934	-154	-7.4%
80.2%	2,083	1,661	-421	-20.2%
81.5%	2,083	1,647	-436	-20.9%
82.7%	2,074	1,642	-432	-20.8%
84.0%	2,067	1,292	-775	-37.5%
85.2%	2,065	1,282	-782	-37.9%
86.4%	2,053	1,219	-834	-40.6%
87.7%	2,048	1,193	-855	-41.7%
88.9%	2,010	1,191	-819	-40.8%
90.1%	1,989	1,176	-814	-40.9%
91.4%	1,930	1,173	-757	-39.2%
92.6%	1,854	1,158	-697	-37.6%
93.8%	1,511	1,156	-356	-23.5%
95.1%	1,496	1,101	-395	-26.4%
96.3%	1,411	774	-637	-45.2%
97.5%	1,364	733	-632	-46.3%
98.8%	1,282	660	-622	-48.5%
100.0%	0	657	657	

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	609	837	227	37.3%
1.2%	607	609	3	0.4%
2.5%	607	607	0	0.0%
3.7%	606	607	1	0.1%
4.9%	605	606	1	0.1%
6.2%	601	605	5	0.8%
7.4%	600	604	4	0.6%
8.6%	599	600	1	0.1%
9.9%	599	599	1	0.1%
11.1%	597	599	2	0.3%
12.3%	597	597	0	0.0%
13.6%	595	597	2	0.4%
14.8%	593	593	0	0.0%
16.0%	592	592	0	0.0%
17.3%	591	591	0	0.0%
18.5%	591	591	0	0.0%
19.8%	590	590	0	0.0%
21.0%	590	590	0	-0.1%
22.2%	590	589	-1	-0.2%
23.5%	590	588	-2	-0.3%
24.7%	590	587	-3	-0.5%
25.9%	589	586	-2	-0.4%
27.2%	588	586	-1	-0.2%
28.4%	588	585	-3	-0.5%
29.6%	587	583	-4	-0.7%
30.9%	586	582	-4	-0.7%
32.1%	586	581	-5	-0.9%
33.3%	585	580	-5	-0.9%
34.6%	585	577	-8	-1.4%
35.8%	585	576	-8	-1.4%
37.0%	584	576	-8	-1.4%
38.3%	583	575	-9	-1.5%
39.5%	583	573	-10	-1.6%
40.7%	581	572	-8	-1.4%
42.0%	580	572	-8	-1.4%
43.2%	578	571	-7	-1.2%
44.4%	578	571	-7	-1.3%
45.7%	578	570	-8	-1.4%
46.9%	577	567	-10	-1.8%
48.1%	577	564	-12	-2.1%
49.4%	576	564	-12	-2.2%
50.6%	576	563	-12	-2.2%
51.9%	575	563	-13	-2.2%
53.1%	575	562	-13	-2.2%
54.3%	573	560	-13	-2.3%
55.6%	572	551	-21	-3.7%
56.8%	572	548	-24	-4.2%
58.0%	571	547	-25	-4.3%
59.3%	571	547	-25	-4.4%
60.5%	571	547	-24	-4.3%
61.7%	570	546	-24	-4.2%
63.0%	568	541	-27	-4.7%
64.2%	563	535	-29	-5.1%
65.4%	563	531	-31	-5.6%
66.7%	561	527	-34	-6.0%
67.9%	561	524	-37	-6.6%
69.1%	560	523	-37	-6.7%
70.4%	558	516	-42	-7.5%
71.6%	550	515	-35	-6.3%
72.8%	546	513	-32	-5.9%
74.1%	543	511	-32	-5.8%
75.3%	537	506	-31	-5.8%
76.5%	535	503	-32	-6.0%
77.8%	535	502	-33	-6.1%
79.0%	532	498	-34	-6.4%
80.2%	532	494	-38	-7.1%
81.5%	530	489	-41	-7.6%
82.7%	528	489	-40	-7.5%
84.0%	528	460	-69	-13.0%
85.2%	528	442	-86	-16.3%
86.4%	516	441	-76	-14.6%
87.7%	509	435	-74	-14.5%
88.9%	498	404	-93	-18.8%
90.1%	461	388	-74	-16.0%
91.4%	460	386	-74	-16.0%
92.6%	442	379	-62	-14.1%
93.8%	441	379	-62	-14.0%
95.1%	404	378	-27	-6.6%
96.3%	378	357	-21	-5.5%
97.5%	336	346	10	2.9%
98.8%	327	327	0	0.0%
100.0%	325	304	-21	-6.6%

Figure OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

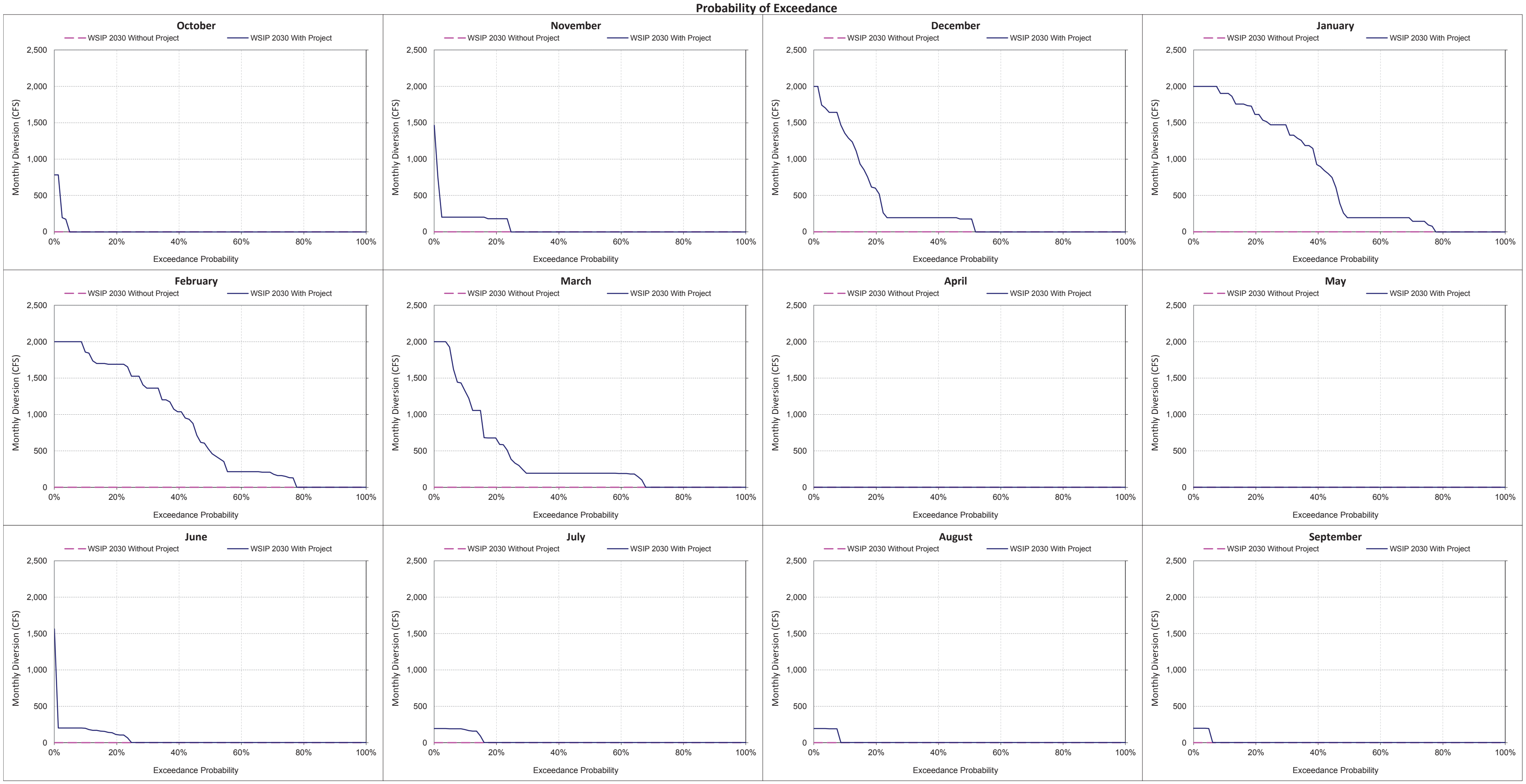


Table OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	784	784	
1.2%	0	784	784	
2.5%	0	194	194	
3.7%	0	174	174	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,463	1,463	
1.2%	0	748	748	
2.5%	0	200	200	
3.7%	0	200	200	
4.9%	0	200	200	
6.2%	0	200	200	
7.4%	0	200	200	
8.6%	0	200	200	
9.9%	0	200	200	
11.1%	0	200	200	
12.3%	0	200	200	
13.6%	0	200	200	
14.8%	0	200	200	
16.0%	0	200	200	
17.3%	0	179	179	
18.5%	0	179	179	
19.8%	0	179	179	
21.0%	0	179	179	
22.2%	0	179	179	
23.5%	0	179	179	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	1,743	1,743	
3.7%	0	1,704	1,704	
4.9%	0	1,644	1,644	
6.2%	0	1,644	1,644	
7.4%	0	1,644	1,644	
8.6%	0	1,467	1,467	
9.9%	0	1,358	1,358	
11.1%	0	1,289	1,289	
12.3%	0	1,238	1,238	
13.6%	0	1,111	1,111	
14.8%	0	933	933	
16.0%	0	856	856	
17.3%	0	756	756	
18.5%	0	614	614	
19.8%	0	602	602	
21.0%	0	519	519	
22.2%	0	263	263	
23.5%	0	194	194	
24.7%	0	194	194	
25.9%	0	194	194	
27.2%	0	194	194	
28.4%	0	194	194	
29.6%	0	194	194	
30.9%	0	194	194	
32.1%	0	194	194	
33.3%	0	194	194	
34.6%	0	194	194	
35.8%	0	194	194	
37.0%	0	194	194	
38.3%	0	194	194	
39.5%	0	194	194	
40.7%	0	194	194	
42.0%	0	194	194	
43.2%	0	194	194	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	178	178	
48.1%	0	178	178	
49.4%	0	178	178	
50.6%	0	178	178	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	2,000	2,000	
6.2%	0	2,000	2,000	
7.4%	0	2,000	2,000	
8.6%	0	1,902	1,902	
9.9%	0	1,902	1,902	
11.1%	0	1,902	1,902	
12.3%	0	1,864	1,864	
13.6%	0	1,758	1,758	
14.8%	0	1,758	1,758	
16.0%	0	1,758	1,758	
17.3%	0	1,736	1,736	
18.5%	0	1,728	1,728	
19.8%	0	1,615	1,615	
21.0%	0	1,615	1,615	
22.2%	0	1,536	1,536	
23.5%	0	1,516	1,516	
24.7%	0	1,471	1,471	
25.9%	0	1,471	1,471	
27.2%	0	1,471	1,471	
28.4%	0	1,471	1,471	
29.6%	0	1,471	1,471	
30.9%	0	1,328	1,328	
32.1%	0	1,328	1,328	
33.3%	0	1,286	1,286	
34.6%	0	1,257	1,257	
35.8%	0	1,185	1,185	
37.0%	0	1,185	1,185	
38.3%	0	1,147	1,147	
39.5%	0	925	925	
40.7%	0	898	898	
42.0%	0	844	844	
43.2%	0	800	800	
44.4%	0	746	746	
45.7%	0	608	608	
46.9%	0	391	391	
48.1%	0	257	257	
49.4%	0	194	194	
50.6%	0	194	194	
51.9%	0	194	194	
53.1%	0	194	194	
54.3%	0	194	194	
55.6%	0	194	194	
56.8%	0	194	194	
58.0%	0	194	194	
59.3%	0	194	194	
60.5%	0	194	194	
61.7%	0	194	194	
63.0%	0	194	194	
64.2%	0	194	194	
65.4%	0	194	194	
66.7%	0	194	194	
67.9%	0	194	194	
69.1%	0	194	194	
70.4%	0	143	143	
71.6%	0	143	143	
72.8%	0	143	143	
74.1%	0	143	143	
75.3%	0	96	96	
76.5%	0	78	78	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	2,000	2,000	
6.2%	0	2,000	2,000	
7.4%	0	2,000	2,000	
8.6%	0	2,000	2,000	
9.9%	0	1,857	1,857	
11.1%	0	1,843	1,843	
12.3%	0	1,735	1,735	
13.6%	0	1,701	1,701	
14.8%	0	1,701	1,701	
16.0%	0	1,701	1,701	
17.3%	0	1,689	1,689	
18.5%	0	1,689	1,689	
19.8%	0	1,689	1,689	
21.0%	0	1,689	1,689	
22.2%	0	1,689	1,689	
23.5%	0	1,654	1,654	
24.7%	0	1,527	1,527	
25.9%	0	1,527	1,527	
27.2%	0	1,527	1,527	
28.4%	0	1,407	1,407	
29.6%	0	1,364	1,364	
30.9%	0	1,364	1,364	
32.1%	0	1,364	1,364	
33.3%	0	1,364	1,364	
34.6%	0	1,202	1,202	
35.8%	0	1,202	1,202	
37.0%	0	1,174	1,174	
38.3%	0	1,075	1,075	
39.5%	0	1,039	1,039	
40.7%	0	1,039	1,039	
42.0%	0	954	954	
43.2%	0	936	936	
44.4%	0	877	877	
45.7%	0	714	714	
46.9%	0	617	617	
48.1%	0	606	606	
49.4%	0	530	530	
50.6%	0	462	462	
51.9%	0	425	425	
53.1%	0	389	389	
54.3%	0	354	354	
55.6%	0	214	214	
56.8%	0	214	214	
58.0%	0	214	214	
59.3%	0	214	214	
60.5%	0	214	214	
61.7%	0	214	214	
63.0%	0	214	214	
64.2%	0	214	214	
65.4%	0	214	214	
66.7%	0	208	208	
67.9%	0	207	207	
69.1%	0	207	207	
70.4%	0	177	177	
71.6%	0	163	163	
72.8%	0	163	163	
74.1%	0	150	150	
75.3%	0	131	131	
76.5%	0	128	128	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	1,924	1,924	
6.2%	0	1,622	1,622	
7.4%	0	1,445	1,445	
8.6%	0	1,434	1,434	
9.9%	0	1,327	1,327	
11.1%	0	1,225	1,225	
12.3%	0	1,056	1,056	
13.6%	0	1,056	1,056	
14.8%	0	1,056	1,056	
16.0%	0	683	683	
17.3%	0	679	679	
18.5%	0	679	679	
19.8%	0	679	679	
21.0%	0	588	588	
22.2%	0	587	587	
23.5%	0	510	510	
24.7%	0	387	387	
25.9%	0	331	331	
27.2%	0	301	301	
28.4%	0	244	244	
29.6%	0	194	194	
30.9%	0	194	194	
32.1%	0	194	194	
33.3%	0	194	194	
34.6%	0	194	194	
35.8%	0	194	194	
37.0%	0	194	194	
38.3%	0	194	194	
39.5%	0	194	194	
40.7%	0	194	194	
42.0%	0	194	194	
43.2%	0	194	194	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	194	194	
48.1%	0	194	194	
49.4%	0	194	194	
50.6%	0	194	194	
51.9%	0	194	194	
53.1%	0	194	194	
54.3%	0	194	194	
55.6%	0	194	194	
56.8%	0	194	194	
58.0%	0	194	194	
59.3%	0	189	189	
60.5%	0	189	189	
61.7%	0	189	189	
63.0%	0	184	184	
64.2%	0	181	181	
65.4%	0	141	141	
66.7%	0	99	99	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-03-b

Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,564	1,564	
1.2%	0	200	200	
2.5%	0	200	200	
3.7%	0	200	200	
4.9%	0	200	200	
6.2%	0	200	200	
7.4%	0	200	200	
8.6%	0	200	200	
9.9%	0	197	197	
11.1%	0	179	179	
12.3%	0	170	170	
13.6%	0	168	168	
14.8%	0	157	157	
16.0%	0	155	155	
17.3%	0	141	141	
18.5%	0	137	137	
19.8%	0	111	111	
21.0%	0	104	104	
22.2%	0	104	104	
23.5%	0	67	67	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	194	194	
1.2%	0	194	194	
2.5%	0	194	194	
3.7%	0	194	194	
4.9%	0	190	190	
6.2%	0	190	190	
7.4%	0	190	190	
8.6%	0	190	190	
9.9%	0	181	181	
11.1%	0	167	167	
12.3%	0	160	160	
13.6%	0	157	157	
14.8%	0	92	92	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	194	194	
1.2%	0	194	194	
2.5%	0	194	194	
3.7%	0	194	194	
4.9%	0	190	190	
6.2%	0	190	190	
7.4%	0	190	190	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	197	197	
1.2%	0	197	197	
2.5%	0	197	197	
3.7%	0	197	197	
4.9%	0	196	196	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-04-b
Funks Reservoir to Sites Reservoir, Monthly Diversion
Probability of Exceedance

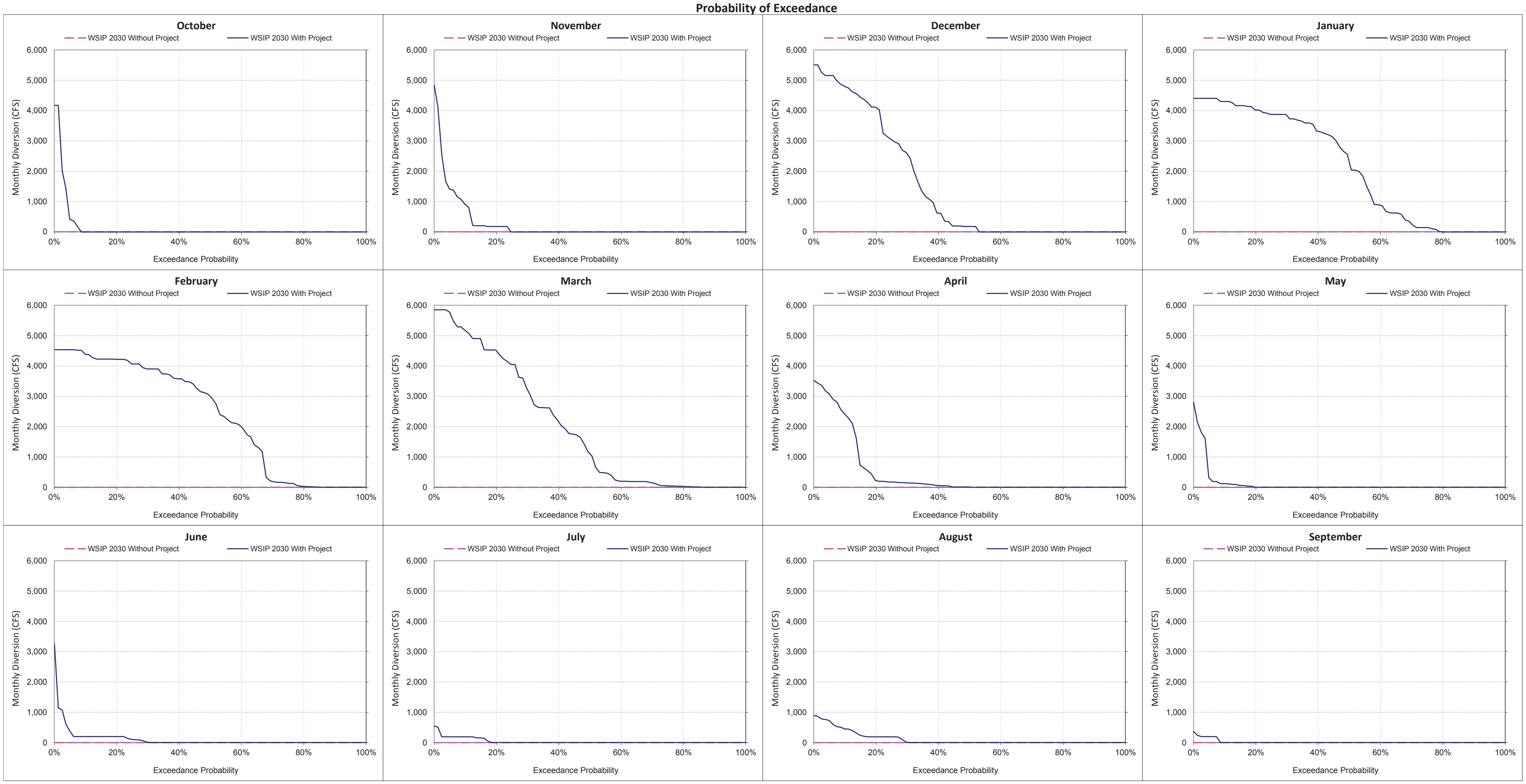


Table OP-04-b

Funks Reservoir to Sites Reservoir, Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,171	4,171	
1.2%	0	4,171	4,171	
2.5%	0	2,013	2,013	
3.7%	0	1,441	1,441	
4.9%	0	411	411	
6.2%	0	363	363	
7.4%	0	174	174	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,829	4,829	
1.2%	0	4,114	4,114	
2.5%	0	2,539	2,539	
3.7%	0	1,664	1,664	
4.9%	0	1,408	1,408	
6.2%	0	1,374	1,374	
7.4%	0	1,153	1,153	
8.6%	0	1,074	1,074	
9.9%	0	909	909	
11.1%	0	798	798	
12.3%	0	214	214	
13.6%	0	200	200	
14.8%	0	200	200	
16.0%	0	200	200	
17.3%	0	179	179	
18.5%	0	179	179	
19.8%	0	179	179	
21.0%	0	179	179	
22.2%	0	179	179	
23.5%	0	179	179	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	5,511	5,511	
1.2%	0	5,511	5,511	
2.5%	0	5,254	5,254	
3.7%	0	5,155	5,155	
4.9%	0	5,155	5,155	
6.2%	0	5,155	5,155	
7.4%	0	4,978	4,978	
8.6%	0	4,869	4,869	
9.9%	0	4,800	4,800	
11.1%	0	4,749	4,749	
12.3%	0	4,622	4,622	
13.6%	0	4,571	4,571	
14.8%	0	4,444	4,444	
16.0%	0	4,367	4,367	
17.3%	0	4,267	4,267	
18.5%	0	4,125	4,125	
19.8%	0	4,113	4,113	
21.0%	0	4,030	4,030	
22.2%	0	3,250	3,250	
23.5%	0	3,149	3,149	
24.7%	0	3,061	3,061	
25.9%	0	2,965	2,965	
27.2%	0	2,918	2,918	
28.4%	0	2,695	2,695	
29.6%	0	2,614	2,614	
30.9%	0	2,431	2,431	
32.1%	0	2,013	2,013	
33.3%	0	1,665	1,665	
34.6%	0	1,357	1,357	
35.8%	0	1,168	1,168	
37.0%	0	1,078	1,078	
38.3%	0	962	962	
39.5%	0	619	619	
40.7%	0	616	616	
42.0%	0	357	357	
43.2%	0	336	336	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	194	194	
48.1%	0	178	178	
49.4%	0	178	178	
50.6%	0	178	178	
51.9%	0	178	178	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,403	4,403	
1.2%	0	4,403	4,403	
2.5%	0	4,403	4,403	
3.7%	0	4,403	4,403	
4.9%	0	4,403	4,403	
6.2%	0	4,403	4,403	
7.4%	0	4,403	4,403	
8.6%	0	4,305	4,305	
9.9%	0	4,305	4,305	
11.1%	0	4,305	4,305	
12.3%	0	4,267	4,267	
13.6%	0	4,161	4,161	
14.8%	0	4,161	4,161	
16.0%	0	4,161	4,161	
17.3%	0	4,139	4,139	
18.5%	0	4,131	4,131	
19.8%	0	4,018	4,018	
21.0%	0	4,018	4,018	
22.2%	0	3,939	3,939	
23.5%	0	3,919	3,919	
24.7%	0	3,874	3,874	
25.9%	0	3,874	3,874	
27.2%	0	3,874	3,874	
28.4%	0	3,874	3,874	
29.6%	0	3,874	3,874	
30.9%	0	3,731	3,731	
32.1%	0	3,731	3,731	
33.3%	0	3,688	3,688	
34.6%	0	3,660	3,660	
35.8%	0	3,587	3,587	
37.0%	0	3,587	3,587	
38.3%	0	3,549	3,549	
39.5%	0	3,327	3,327	
40.7%	0	3,300	3,300	
42.0%	0	3,247	3,247	
43.2%	0	3,203	3,203	
44.4%	0	3,149	3,149	
45.7%	0	3,011	3,011	
46.9%	0	2,794	2,794	
48.1%	0	2,660	2,660	
49.4%	0	2,556	2,556	
50.6%	0	2,038	2,038	
51.9%	0	2,032	2,032	
53.1%	0	1,994	1,994	
54.3%	0	1,840	1,840	
55.6%	0	1,512	1,512	
56.8%	0	1,240	1,240	
58.0%	0	906	906	
59.3%	0	899	899	
60.5%	0	858	858	
61.7%	0	668	668	
63.0%	0	633	633	
64.2%	0	624	624	
65.4%	0	623	623	
66.7%	0	580	580	
67.9%	0	392	392	
69.1%	0	348	348	
70.4%	0	219	219	
71.6%	0	143	143	
72.8%	0	143	143	
74.1%	0	143	143	
75.3%	0	143	143	
76.5%	0	96	96	
77.8%	0	78	78	
79.0%	0	6	6	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-04-b

Funks Reservoir to Sites Reservoir, Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,536	4,536	
1.2%	0	4,536	4,536	
2.5%	0	4,536	4,536	
3.7%	0	4,536	4,536	
4.9%	0	4,536	4,536	
6.2%	0	4,536	4,536	
7.4%	0	4,521	4,521	
8.6%	0	4,521	4,521	
9.9%	0	4,379	4,379	
11.1%	0	4,378	4,378	
12.3%	0	4,271	4,271	
13.6%	0	4,225	4,225	
14.8%	0	4,225	4,225	
16.0%	0	4,225	4,225	
17.3%	0	4,225	4,225	
18.5%	0	4,225	4,225	
19.8%	0	4,222	4,222	
21.0%	0	4,222	4,222	
22.2%	0	4,222	4,222	
23.5%	0	4,190	4,190	
24.7%	0	4,063	4,063	
25.9%	0	4,063	4,063	
27.2%	0	4,063	4,063	
28.4%	0	3,943	3,943	
29.6%	0	3,900	3,900	
30.9%	0	3,900	3,900	
32.1%	0	3,900	3,900	
33.3%	0	3,900	3,900	
34.6%	0	3,738	3,738	
35.8%	0	3,738	3,738	
37.0%	0	3,710	3,710	
38.3%	0	3,596	3,596	
39.5%	0	3,575	3,575	
40.7%	0	3,575	3,575	
42.0%	0	3,490	3,490	
43.2%	0	3,472	3,472	
44.4%	0	3,413	3,413	
45.7%	0	3,250	3,250	
46.9%	0	3,153	3,153	
48.1%	0	3,127	3,127	
49.4%	0	3,066	3,066	
50.6%	0	2,925	2,925	
51.9%	0	2,747	2,747	
53.1%	0	2,398	2,398	
54.3%	0	2,338	2,338	
55.6%	0	2,234	2,234	
56.8%	0	2,130	2,130	
58.0%	0	2,114	2,114	
59.3%	0	2,066	2,066	
60.5%	0	1,932	1,932	
61.7%	0	1,734	1,734	
63.0%	0	1,657	1,657	
64.2%	0	1,394	1,394	
65.4%	0	1,311	1,311	
66.7%	0	1,170	1,170	
67.9%	0	331	331	
69.1%	0	214	214	
70.4%	0	177	177	
71.6%	0	163	163	
72.8%	0	163	163	
74.1%	0	150	150	
75.3%	0	131	131	
76.5%	0	128	128	
77.8%	0	64	64	
79.0%	0	35	35	
80.2%	0	26	26	
81.5%	0	18	18	
82.7%	0	18	18	
84.0%	0	9	9	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	5,852	5,852	
1.2%	0	5,852	5,852	
2.5%	0	5,852	5,852	
3.7%	0	5,852	5,852	
4.9%	0	5,776	5,776	
6.2%	0	5,474	5,474	
7.4%	0	5,286	5,286	
8.6%	0	5,286	5,286	
9.9%	0	5,179	5,179	
11.1%	0	5,077	5,077	
12.3%	0	4,908	4,908	
13.6%	0	4,908	4,908	
14.8%	0	4,908	4,908	
16.0%	0	4,535	4,535	
17.3%	0	4,531	4,531	
18.5%	0	4,531	4,531	
19.8%	0	4,531	4,531	
21.0%	0	4,362	4,362	
22.2%	0	4,239	4,239	
23.5%	0	4,153	4,153	
24.7%	0	4,050	4,050	
25.9%	0	4,046	4,046	
27.2%	0	3,630	3,630	
28.4%	0	3,603	3,603	
29.6%	0	3,287	3,287	
30.9%	0	3,037	3,037	
32.1%	0	2,726	2,726	
33.3%	0	2,639	2,639	
34.6%	0	2,630	2,630	
35.8%	0	2,619	2,619	
37.0%	0	2,616	2,616	
38.3%	0	2,377	2,377	
39.5%	0	2,227	2,227	
40.7%	0	2,034	2,034	
42.0%	0	1,935	1,935	
43.2%	0	1,773	1,773	
44.4%	0	1,751	1,751	
45.7%	0	1,729	1,729	
46.9%	0	1,641	1,641	
48.1%	0	1,418	1,418	
49.4%	0	1,169	1,169	
50.6%	0	1,027	1,027	
51.9%	0	662	662	
53.1%	0	488	488	
54.3%	0	478	478	
55.6%	0	465	465	
56.8%	0	396	396	
58.0%	0	243	243	
59.3%	0	203	203	
60.5%	0	196	196	
61.7%	0	194	194	
63.0%	0	189	189	
64.2%	0	189	189	
65.4%	0	189	189	
66.7%	0	189	189	
67.9%	0	189	189	
69.1%	0	161	161	
70.4%	0	141	141	
71.6%	0	99	99	
72.8%	0	56	56	
74.1%	0	51	51	
75.3%	0	47	47	
76.5%	0	44	44	
77.8%	0	35	35	
79.0%	0	32	32	
80.2%	0	25	25	
81.5%	0	16	16	
82.7%	0	15	15	
84.0%	0	8	8	
85.2%	0	8	8	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	3,527	3,527	
1.2%	0	3,431	3,431	
2.5%	0	3,362	3,362	
3.7%	0	3,181	3,181	
4.9%	0	3,078	3,078	
6.2%	0	2,903	2,903	
7.4%	0	2,805	2,805	
8.6%	0	2,558	2,558	
9.9%	0	2,416	2,416	
11.1%	0	2,290	2,290	
12.3%	0	2,109	2,109	
13.6%	0	1,633	1,633	
14.8%	0	728	728	
16.0%	0	634	634	
17.3%	0	546	546	
18.5%	0	441	441	
19.8%	0	221	221	
21.0%	0	197	197	
22.2%	0	197	197	
23.5%	0	178	178	
24.7%	0	173	173	
25.9%	0	168	168	
27.2%	0	159	159	
28.4%	0	151	151	
29.6%	0	148	148	
30.9%	0	135	135	
32.1%	0	134	134	
33.3%	0	126	126	
34.6%	0	117	117	
35.8%	0	105	105	
37.0%	0	92	92	
38.3%	0	74	74	
39.5%	0	65	65	
40.7%	0	51	51	
42.0%	0	49	49	
43.2%	0	43	43	
44.4%	0	8	8	
45.7%	0	8	8	
46.9%	0	8	8	
48.1%	0	8	8	
49.4%	0	6	6	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,813	2,813	
1.2%	0	2,148	2,148	
2.5%	0	1,814	1,814	
3.7%	0	1,613	1,613	
4.9%	0	319	319	
6.2%	0	190	190	
7.4%	0	190	190	
8.6%	0	122	122	
9.9%	0	120	120	
11.1%	0	108	108	
12.3%	0	94	94	
13.6%	0	94	94	
14.8%	0	64	64	
16.0%	0	62	62	
17.3%	0	36	36	
18.5%	0	36	36	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-04-b
Funks Reservoir to Sites Reservoir, Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	3,282	3,282	
1.2%	0	1,149	1,149	
2.5%	0	1,071	1,071	
3.7%	0	622	622	
4.9%	0	388	388	
6.2%	0	200	200	
7.4%	0	200	200	
8.6%	0	200	200	
9.9%	0	200	200	
11.1%	0	197	197	
12.3%	0	197	197	
13.6%	0	197	197	
14.8%	0	197	197	
16.0%	0	197	197	
17.3%	0	197	197	
18.5%	0	197	197	
19.8%	0	197	197	
21.0%	0	197	197	
22.2%	0	197	197	
23.5%	0	141	141	
24.7%	0	102	102	
25.9%	0	100	100	
27.2%	0	87	87	
28.4%	0	67	67	
29.6%	0	16	16	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	548	548	
1.2%	0	508	508	
2.5%	0	194	194	
3.7%	0	194	194	
4.9%	0	190	190	
6.2%	0	190	190	
7.4%	0	190	190	
8.6%	0	190	190	
9.9%	0	190	190	
11.1%	0	190	190	
12.3%	0	190	190	
13.6%	0	160	160	
14.8%	0	158	158	
16.0%	0	141	141	
17.3%	0	44	44	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	892	892	
1.2%	0	869	869	
2.5%	0	783	783	
3.7%	0	765	765	
4.9%	0	734	734	
6.2%	0	604	604	
7.4%	0	522	522	
8.6%	0	511	511	
9.9%	0	448	448	
11.1%	0	448	448	
12.3%	0	398	398	
13.6%	0	318	318	
14.8%	0	247	247	
16.0%	0	207	207	
17.3%	0	194	194	
18.5%	0	190	190	
19.8%	0	190	190	
21.0%	0	190	190	
22.2%	0	190	190	
23.5%	0	190	190	
24.7%	0	190	190	
25.9%	0	190	190	
27.2%	0	183	183	
28.4%	0	96	96	
29.6%	0	9	9	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	368	368	
1.2%	0	241	241	
2.5%	0	197	197	
3.7%	0	197	197	
4.9%	0	197	197	
6.2%	0	197	197	
7.4%	0	193	193	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-05-b
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Probability of Exceedance

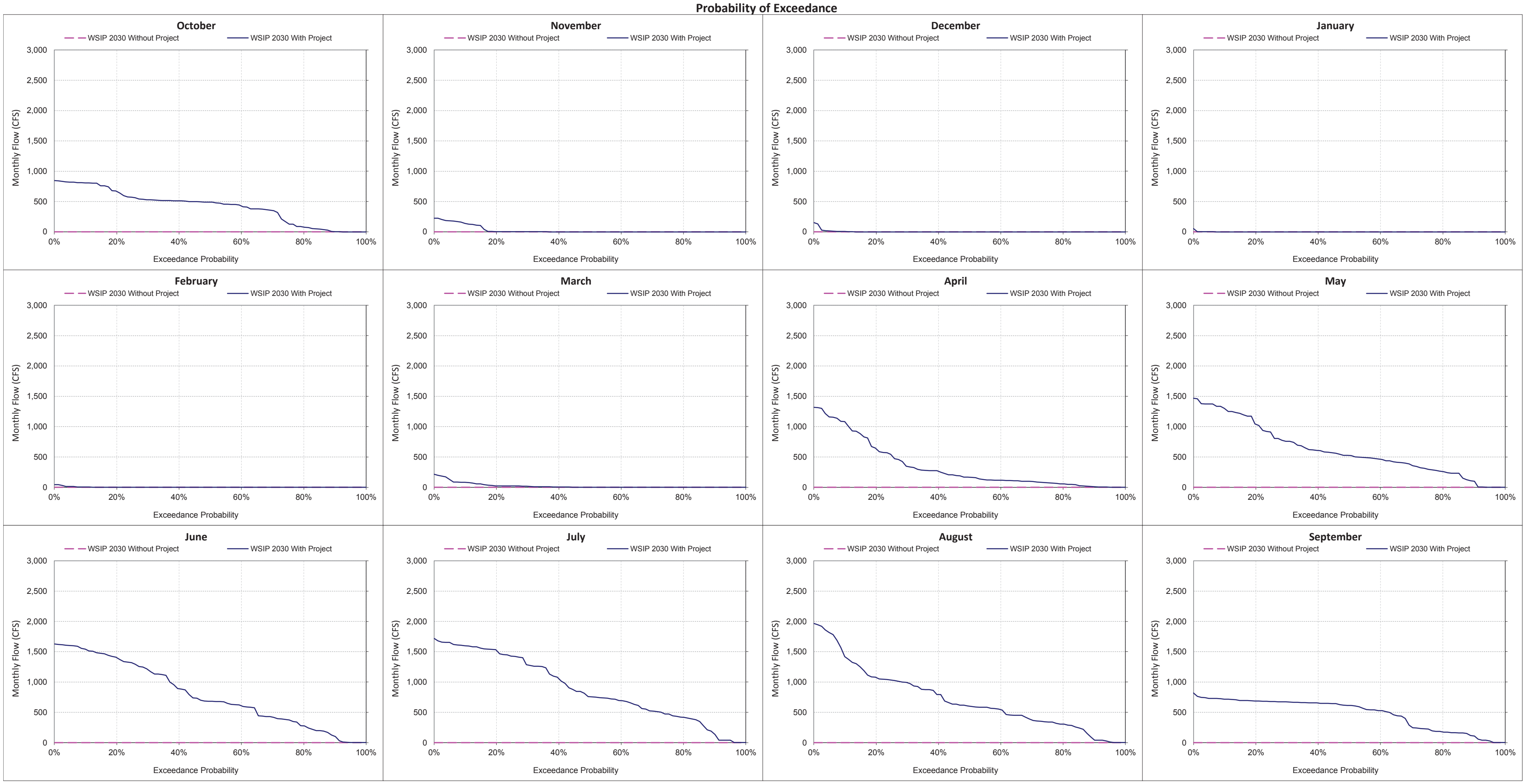


Table OP-05-b

Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	844	844	
1.2%	0	839	839	
2.5%	0	834	834	
3.7%	0	825	825	
4.9%	0	821	821	
6.2%	0	818	818	
7.4%	0	810	810	
8.6%	0	810	810	
9.9%	0	807	807	
11.1%	0	806	806	
12.3%	0	805	805	
13.6%	0	801	801	
14.8%	0	762	762	
16.0%	0	761	761	
17.3%	0	741	741	
18.5%	0	680	680	
19.8%	0	674	674	
21.0%	0	641	641	
22.2%	0	597	597	
23.5%	0	577	577	
24.7%	0	572	572	
25.9%	0	564	564	
27.2%	0	541	541	
28.4%	0	536	536	
29.6%	0	529	529	
30.9%	0	527	527	
32.1%	0	526	526	
33.3%	0	520	520	
34.6%	0	517	517	
35.8%	0	517	517	
37.0%	0	516	516	
38.3%	0	512	512	
39.5%	0	512	512	
40.7%	0	512	512	
42.0%	0	509	509	
43.2%	0	498	498	
44.4%	0	497	497	
45.7%	0	497	497	
46.9%	0	495	495	
48.1%	0	491	491	
49.4%	0	490	490	
50.6%	0	488	488	
51.9%	0	479	479	
53.1%	0	472	472	
54.3%	0	456	456	
55.6%	0	454	454	
56.8%	0	453	453	
58.0%	0	451	451	
59.3%	0	444	444	
60.5%	0	411	411	
61.7%	0	410	410	
63.0%	0	379	379	
64.2%	0	377	377	
65.4%	0	377	377	
66.7%	0	374	374	
67.9%	0	364	364	
69.1%	0	356	356	
70.4%	0	351	351	
71.6%	0	319	319	
72.8%	0	213	213	
74.1%	0	171	171	
75.3%	0	128	128	
76.5%	0	125	125	
77.8%	0	87	87	
79.0%	0	87	87	
80.2%	0	76	76	
81.5%	0	70	70	
82.7%	0	52	52	
84.0%	0	51	51	
85.2%	0	43	43	
86.4%	0	36	36	
87.7%	0	28	28	
88.9%	0	5	5	
90.1%	0	2	2	
91.4%	0	1	1	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	224	224	
1.2%	0	223	223	
2.5%	0	202	202	
3.7%	0	186	186	
4.9%	0	181	181	
6.2%	0	176	176	
7.4%	0	171	171	
8.6%	0	159	159	
9.9%	0	141	141	
11.1%	0	126	126	
12.3%	0	124	124	
13.6%	0	108	108	
14.8%	0	103	103	
16.0%	0	43	43	
17.3%	0	6	6	
18.5%	0	6	6	
19.8%	0	4	4	
21.0%	0	3	3	
22.2%	0	3	3	
23.5%	0	3	3	
24.7%	0	3	3	
25.9%	0	1	1	
27.2%	0	1	1	
28.4%	0	1	1	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	151	151	
1.2%	0	133	133	
2.5%	0	28	28	
3.7%	0	20	20	
4.9%	0	17	17	
6.2%	0	9	9	
7.4%	0	8	8	
8.6%	0	5	5	
9.9%	0	5	5	
11.1%	0	2	2	
12.3%	0	2	2	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	54	54	
1.2%	0	4	4	
2.5%	0	4	4	
3.7%	0	4	4	
4.9%	0	4	4	
6.2%	0	4	4	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-05-b

Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	43	43	
1.2%	0	43	43	
2.5%	0	32	32	
3.7%	0	14	14	
4.9%	0	13	13	
6.2%	0	13	13	
7.4%	0	3	3	
8.6%	0	3	3	
9.9%	0	3	3	
11.1%	0	3	3	
12.3%	0	2	2	
13.6%	0	1	1	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	215	215	
1.2%	0	199	199	
2.5%	0	183	183	
3.7%	0	173	173	
4.9%	0	129	129	
6.2%	0	87	87	
7.4%	0	85	85	
8.6%	0	82	82	
9.9%	0	82	82	
11.1%	0	77	77	
12.3%	0	69	69	
13.6%	0	54	54	
14.8%	0	54	54	
16.0%	0	44	44	
17.3%	0	36	36	
18.5%	0	30	30	
19.8%	0	21	21	
21.0%	0	21	21	
22.2%	0	20	20	
23.5%	0	20	20	
24.7%	0	20	20	
25.9%	0	20	20	
27.2%	0	20	20	
28.4%	0	18	18	
29.6%	0	17	17	
30.9%	0	12	12	
32.1%	0	9	9	
33.3%	0	9	9	
34.6%	0	9	9	
35.8%	0	8	8	
37.0%	0	7	7	
38.3%	0	7	7	
39.5%	0	6	6	
40.7%	0	6	6	
42.0%	0	5	5	
43.2%	0	4	4	
44.4%	0	2	2	
45.7%	0	1	1	
46.9%	0	1	1	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,317	1,317	
1.2%	0	1,314	1,314	
2.5%	0	1,303	1,303	
3.7%	0	1,216	1,216	
4.9%	0	1,162	1,162	
6.2%	0	1,156	1,156	
7.4%	0	1,138	1,138	
8.6%	0	1,088	1,088	
9.9%	0	1,084	1,084	
11.1%	0	1,004	1,004	
12.3%	0	928	928	
13.6%	0	925	925	
14.8%	0	885	885	
16.0%	0	832	832	
17.3%	0	815	815	
18.5%	0	670	670	
19.8%	0	647	647	
21.0%	0	587	587	
22.2%	0	574	574	
23.5%	0	571	571	
24.7%	0	546	546	
25.9%	0	471	471	
27.2%	0	460	460	
28.4%	0	425	425	
29.6%	0	346	346	
30.9%	0	334	334	
32.1%	0	325	325	
33.3%	0	296	296	
34.6%	0	284	284	
35.8%	0	279	279	
37.0%	0	276	276	
38.3%	0	274	274	
39.5%	0	274	274	
40.7%	0	248	248	
42.0%	0	227	227	
43.2%	0	205	205	
44.4%	0	204	204	
45.7%	0	194	194	
46.9%	0	188	188	
48.1%	0	168	168	
49.4%	0	168	168	
50.6%	0	162	162	
51.9%	0	157	157	
53.1%	0	137	137	
54.3%	0	128	128	
55.6%	0	119	119	
56.8%	0	119	119	
58.0%	0	118	118	
59.3%	0	117	117	
60.5%	0	117	117	
61.7%	0	114	114	
63.0%	0	113	113	
64.2%	0	108	108	
65.4%	0	106	106	
66.7%	0	98	98	
67.9%	0	98	98	
69.1%	0	97	97	
70.4%	0	93	93	
71.6%	0	86	86	
72.8%	0	82	82	
74.1%	0	78	78	
75.3%	0	73	73	
76.5%	0	69	69	
77.8%	0	63	63	
79.0%	0	57	57	
80.2%	0	54	54	
81.5%	0	48	48	
82.7%	0	47	47	
84.0%	0	44	44	
85.2%	0	27	27	
86.4%	0	21	21	
87.7%	0	16	16	
88.9%	0	14	14	
90.1%	0	11	11	
91.4%	0	6	6	
92.6%	0	6	6	
93.8%	0	6	6	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,467	1,467	
1.2%	0	1,458	1,458	
2.5%	0	1,379	1,379	
3.7%	0	1,374	1,374	
4.9%	0	1,372	1,372	
6.2%	0	1,372	1,372	
7.4%	0	1,336	1,336	
8.6%	0	1,335	1,335	
9.9%	0	1,300	1,300	
11.1%	0	1,252	1,252	
12.3%	0	1,248	1,248	
13.6%	0	1,233	1,233	
14.8%	0	1,220	1,220	
16.0%	0	1,196	1,196	
17.3%	0	1,174	1,174	
18.5%	0	1,174	1,174	
19.8%	0	1,043	1,043	
21.0%	0	1,019	1,019	
22.2%	0	936	936	
23.5%	0	920	920	
24.7%	0	913	913	
25.9%	0	804	804	
27.2%	0	803	803	
28.4%	0	773	773	
29.6%	0	759	759	
30.9%	0	758	758	
32.1%	0	739	739	
33.3%	0	694	694	
34.6%	0	687	687	
35.8%	0	649	649	
37.0%	0	622	622	
38.3%	0	615	615	
39.5%	0	608	608	
40.7%	0	603	603	
42.0%	0	584	584	
43.2%	0	579	579	
44.4%	0	571	571	
45.7%	0	563	563	
46.9%	0	545	545	
48.1%	0	528	528	
49.4%	0	526	526	
50.6%	0	522	522	
51.9%	0	500	500	
53.1%	0	495	495	
54.3%	0	494	494	
55.6%	0	488	488	
56.8%	0	484	484	
58.0%	0	475	475	
59.3%	0	468	468	
60.5%	0	460	460	
61.7%	0	437	437	
63.0%	0	435	435	
64.2%	0	422	422	
65.4%	0	412	412	
66.7%	0	406	406	
67.9%	0	399	399	
69.1%	0	387	387	
70.4%	0	356	356	
71.6%	0	342	342	
72.8%	0	323	323	
74.1%	0	311	311	
75.3%	0	296	296	
76.5%	0	289	289	
77.8%	0	277	277	
79.0%	0	267	267	
80.2%	0	257	257	
81.5%	0	241	241	
82.7%	0	233	233	
84.0%	0	232	232	
85.2%	0	230	230	
86.4%	0	151	151	
87.7%	0	126	126	
88.9%	0	106	106	
90.1%	0	99	99	
91.4%	0	5	5	
92.6%	0	3	3	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-05-b

Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,629	1,629	
1.2%	0	1,621	1,621	
2.5%	0	1,615	1,615	
3.7%	0	1,608	1,608	
4.9%	0	1,603	1,603	
6.2%	0	1,597	1,597	
7.4%	0	1,592	1,592	
8.6%	0	1,556	1,556	
9.9%	0	1,543	1,543	
11.1%	0	1,513	1,513	
12.3%	0	1,507	1,507	
13.6%	0	1,485	1,485	
14.8%	0	1,473	1,473	
16.0%	0	1,465	1,465	
17.3%	0	1,440	1,440	
18.5%	0	1,422	1,422	
19.8%	0	1,409	1,409	
21.0%	0	1,373	1,373	
22.2%	0	1,338	1,338	
23.5%	0	1,330	1,330	
24.7%	0	1,322	1,322	
25.9%	0	1,296	1,296	
27.2%	0	1,255	1,255	
28.4%	0	1,246	1,246	
29.6%	0	1,218	1,218	
30.9%	0	1,169	1,169	
32.1%	0	1,131	1,131	
33.3%	0	1,131	1,131	
34.6%	0	1,125	1,125	
35.8%	0	1,111	1,111	
37.0%	0	1,000	1,000	
38.3%	0	957	957	
39.5%	0	893	893	
40.7%	0	885	885	
42.0%	0	869	869	
43.2%	0	792	792	
44.4%	0	739	739	
45.7%	0	732	732	
46.9%	0	698	698	
48.1%	0	686	686	
49.4%	0	684	684	
50.6%	0	681	681	
51.9%	0	680	680	
53.1%	0	678	678	
54.3%	0	675	675	
55.6%	0	647	647	
56.8%	0	631	631	
58.0%	0	625	625	
59.3%	0	624	624	
60.5%	0	597	597	
61.7%	0	589	589	
63.0%	0	586	586	
64.2%	0	576	576	
65.4%	0	443	443	
66.7%	0	437	437	
67.9%	0	431	431	
69.1%	0	428	428	
70.4%	0	417	417	
71.6%	0	397	397	
72.8%	0	390	390	
74.1%	0	383	383	
75.3%	0	372	372	
76.5%	0	350	350	
77.8%	0	340	340	
79.0%	0	281	281	
80.2%	0	276	276	
81.5%	0	244	244	
82.7%	0	221	221	
84.0%	0	199	199	
85.2%	0	198	198	
86.4%	0	191	191	
87.7%	0	171	171	
88.9%	0	128	128	
90.1%	0	99	99	
91.4%	0	31	31	
92.6%	0	11	11	
93.8%	0	6	6	
95.1%	0	2	2	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,718	1,718	
1.2%	0	1,678	1,678	
2.5%	0	1,658	1,658	
3.7%	0	1,654	1,654	
4.9%	0	1,653	1,653	
6.2%	0	1,620	1,620	
7.4%	0	1,612	1,612	
8.6%	0	1,609	1,609	
9.9%	0	1,600	1,600	
11.1%	0	1,593	1,593	
12.3%	0	1,583	1,583	
13.6%	0	1,582	1,582	
14.8%	0	1,558	1,558	
16.0%	0	1,548	1,548	
17.3%	0	1,542	1,542	
18.5%	0	1,540	1,540	
19.8%	0	1,534	1,534	
21.0%	0	1,466	1,466	
22.2%	0	1,454	1,454	
23.5%	0	1,448	1,448	
24.7%	0	1,429	1,429	
25.9%	0	1,424	1,424	
27.2%	0	1,412	1,412	
28.4%	0	1,402	1,402	
29.6%	0	1,287	1,287	
30.9%	0	1,274	1,274	
32.1%	0	1,262	1,262	
33.3%	0	1,260	1,260	
34.6%	0	1,254	1,254	
35.8%	0	1,233	1,233	
37.0%	0	1,133	1,133	
38.3%	0	1,098	1,098	
39.5%	0	1,082	1,082	
40.7%	0	1,018	1,018	
42.0%	0	977	977	
43.2%	0	906	906	
44.4%	0	878	878	
45.7%	0	846	846	
46.9%	0	845	845	
48.1%	0	813	813	
49.4%	0	757	757	
50.6%	0	756	756	
51.9%	0	750	750	
53.1%	0	741	741	
54.3%	0	737	737	
55.6%	0	734	734	
56.8%	0	722	722	
58.0%	0	714	714	
59.3%	0	697	697	
60.5%	0	692	692	
61.7%	0	677	677	
63.0%	0	656	656	
64.2%	0	630	630	
65.4%	0	612	612	
66.7%	0	562	562	
67.9%	0	554	554	
69.1%	0	524	524	
70.4%	0	520	520	
71.6%	0	509	509	
72.8%	0	501	501	
74.1%	0	474	474	
75.3%	0	472	472	
76.5%	0	441	441	
77.8%	0	433	433	
79.0%	0	423	423	
80.2%	0	417	417	
81.5%	0	406	406	
82.7%	0	389	389	
84.0%	0	379	379	
85.2%	0	350	350	
86.4%	0	274	274	
87.7%	0	212	212	
88.9%	0	188	188	
90.1%	0	135	135	
91.4%	0	41	41	
92.6%	0	41	41	
93.8%	0	41	41	
95.1%	0	38	38	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,969	1,969	
1.2%	0	1,947	1,947	
2.5%	0	1,920	1,920	
3.7%	0	1,862	1,862	
4.9%	0	1,817	1,817	
6.2%	0	1,784	1,784	
7.4%	0	1,689	1,689	
8.6%	0	1,568	1,568	
9.9%	0	1,417	1,417	
11.1%	0	1,375	1,375	
12.3%	0	1,322	1,322	
13.6%	0	1,304	1,304	
14.8%	0	1,253	1,253	
16.0%	0	1,189	1,189	
17.3%	0	1,113	1,113	
18.5%	0	1,083	1,083	
19.8%	0	1,079	1,079	
21.0%	0	1,051	1,051	
22.2%	0	1,046	1,046	
23.5%	0	1,043	1,043	
24.7%	0	1,033	1,033	
25.9%	0	1,026	1,026	
27.2%	0	1,011	1,011	
28.4%	0	1,000	1,000	
29.6%	0	995	995	
30.9%	0	975	975	
32.1%	0	937	937	
33.3%	0	925	925	
34.6%	0	877	877	
35.8%	0	874	874	
37.0%	0	873	873	
38.3%	0	864	864	
39.5%	0	796	796	
40.7%	0	793	793	
42.0%	0	688	688	
43.2%	0	661	661	
44.4%	0	637	637	
45.7%	0	634	634	
46.9%	0	620	620	
48.1%	0	620	620	
49.4%	0	604	604	
50.6%	0	595	595	
51.9%	0	586	586	
53.1%	0	585	585	
54.3%	0	584	584	
55.6%	0	583	583	
56.8%	0	567	567	
58.0%	0	561	561	
59.3%	0	555	555	
60.5%	0	538	538	
61.7%	0	463	463	
63.0%	0	457	457	
64.2%	0	453	453	
65.4%	0	452	452	
66.7%	0	452	452	
67.9%	0	420	420	
69.1%	0	391	391	
70.4%	0	364	364	
71.6%	0	355	355	
72.8%	0	353	353	
74.1%	0	342	342	
75.3%	0	342	342	
76.5%	0	339	339	
77.8%	0	319	319	
79.0%	0	308	308	
80.2%	0	308	308	
81.5%	0	291	291	
82.7%	0	283	283	
84.0%	0	257	257	
85.2%	0	241	241	
86.4%	0	219	219	
87.7%	0	152	152	
88.9%	0	90	90	
90.1%	0	41	41	
91.4%	0	41	41	
92.6%	0	39	39	
93.8%	0	26	26	
95.1%	0	9	9	
96.3%	0	3	3	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	819	819	
1.2%	0	766	766	
2.5%	0	747	747	
3.7%	0	744	744	
4.9%	0	731	731	
6.2%	0	728	728	
7.4%	0	727	727	
8.6%	0	727	727	
9.9%	0	717	717	
11.1%	0	717	717	
12.3%	0	713	713	
13.6%	0	707	707	
14.8%	0	697	697	
16.0%	0	695	695	
17.3%	0	695	695	
18.5%	0	693	693	
19.8%	0	686	686	
21.0%	0	685	685	
22.2%	0	682	682	
23.5%	0	682	682	
24.7%	0	677	677	
25.9%	0	676	676	
27.2%	0	674	674	
28.4%	0	672	672	
29.6%	0	672	672	
30.9%	0	668	668	
32.1%	0	667	667	
33.3%	0	665	665	
34.6%	0	663	663	
35.8%	0	661	661	
37.0%	0	656	656	
38.3%	0	655	655	
39.5%	0	655	655	
40.7%	0	650	650	
42.0%	0	649	649	
43.2%	0	647	647	
44.4%	0	644	644	
45.7%	0	644	644	
46.9%	0	628	628	
48.1%	0	617	617	
49.4%	0	614	614	
50.6%	0	612	612	
51.9%	0	607	607	
53.1%	0	591	591	
54.3%	0	568	568	
55.6%	0	544	544	
56.8%	0	543	543	
58.0%	0	542	542	
59.3%	0	527	527	
60.5%	0	526	526	
61.7%	0	513	513	
63.0%	0	500	500	
64.2%	0	460	460	
65.4%	0	444	444	
66.7%	0	438	438	
67.9%	0	399	399	
69.1%	0	290	290	
70.4%	0	246	246	
71.6%	0	240	240	
72.8%	0	233	233	
74.1%	0	231	231	
75.3%	0	226	226	
76.5%	0	194	194	
77.8%	0	187	187	
79.0%	0	185	185	
80.2%	0	175	175	
81.5%	0	173	173	
82.7%	0	165	165	
84.0%	0	164	164	
85.2%	0	161	161	
86.4%	0	161	161	
87.7%	0	153	153	
88.9%	0	119	119	
90.1%	0	110	110	
91.4%	0	57	57	
92.6%	0	42	42	
93.8%	0	40	40	
95.1%	0	27	27	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-06-b
Funks Reservoir to Deleven Pipeline, Monthly Flow
Probability of Exceedance

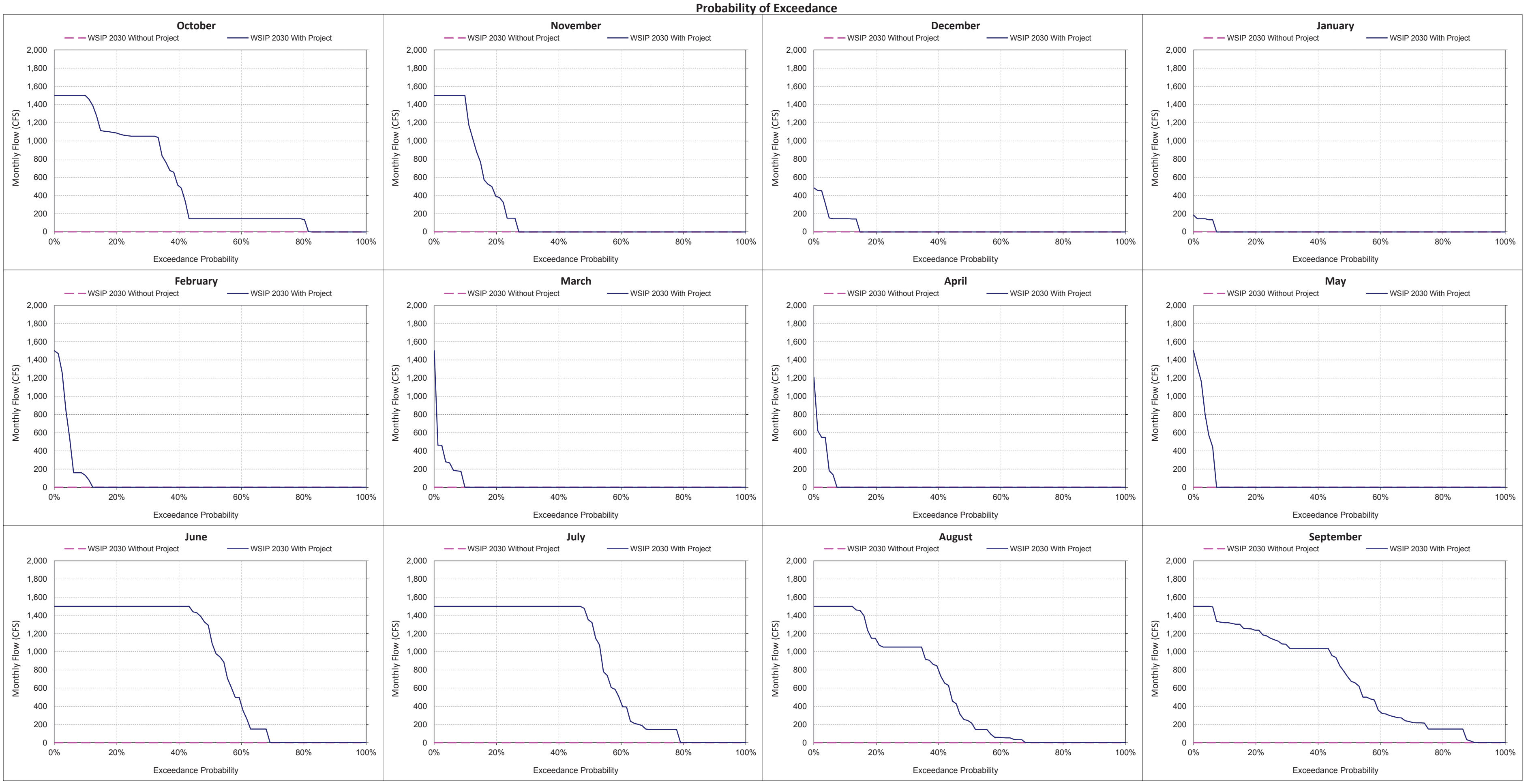


Table OP-06-b

Funks Reservoir to Deleven Pipeline, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,498	1,498	
11.1%	0	1,459	1,459	
12.3%	0	1,388	1,388	
13.6%	0	1,271	1,271	
14.8%	0	1,116	1,116	
16.0%	0	1,105	1,105	
17.3%	0	1,103	1,103	
18.5%	0	1,095	1,095	
19.8%	0	1,090	1,090	
21.0%	0	1,075	1,075	
22.2%	0	1,063	1,063	
23.5%	0	1,056	1,056	
24.7%	0	1,052	1,052	
25.9%	0	1,051	1,051	
27.2%	0	1,051	1,051	
28.4%	0	1,051	1,051	
29.6%	0	1,051	1,051	
30.9%	0	1,051	1,051	
32.1%	0	1,051	1,051	
33.3%	0	1,038	1,038	
34.6%	0	835	835	
35.8%	0	763	763	
37.0%	0	676	676	
38.3%	0	654	654	
39.5%	0	514	514	
40.7%	0	482	482	
42.0%	0	339	339	
43.2%	0	145	145	
44.4%	0	145	145	
45.7%	0	145	145	
46.9%	0	145	145	
48.1%	0	145	145	
49.4%	0	145	145	
50.6%	0	145	145	
51.9%	0	145	145	
53.1%	0	145	145	
54.3%	0	145	145	
55.6%	0	145	145	
56.8%	0	145	145	
58.0%	0	145	145	
59.3%	0	145	145	
60.5%	0	145	145	
61.7%	0	145	145	
63.0%	0	145	145	
64.2%	0	145	145	
65.4%	0	145	145	
66.7%	0	145	145	
67.9%	0	145	145	
69.1%	0	145	145	
70.4%	0	145	145	
71.6%	0	145	145	
72.8%	0	145	145	
74.1%	0	145	145	
75.3%	0	145	145	
76.5%	0	145	145	
77.8%	0	145	145	
79.0%	0	145	145	
80.2%	0	132	132	
81.5%	0	1	1	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,177	1,177	
12.3%	0	1,030	1,030	
13.6%	0	881	881	
14.8%	0	770	770	
16.0%	0	572	572	
17.3%	0	524	524	
18.5%	0	499	499	
19.8%	0	392	392	
21.0%	0	374	374	
22.2%	0	324	324	
23.5%	0	150	150	
24.7%	0	150	150	
25.9%	0	149	149	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	484	484	
1.2%	0	454	454	
2.5%	0	453	453	
3.7%	0	313	313	
4.9%	0	152	152	
6.2%	0	145	145	
7.4%	0	145	145	
8.6%	0	145	145	
9.9%	0	145	145	
11.1%	0	145	145	
12.3%	0	142	142	
13.6%	0	141	141	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	185	185	
1.2%	0	145	145	
2.5%	0	145	145	
3.7%	0	145	145	
4.9%	0	134	134	
6.2%	0	132	132	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-06-b
Funks Reservoir to Deleven Pipeline, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,470	1,470	
2.5%	0	1,258	1,258	
3.7%	0	853	853	
4.9%	0	536	536	
6.2%	0	161	161	
7.4%	0	161	161	
8.6%	0	161	161	
9.9%	0	131	131	
11.1%	0	81	81	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	463	463	
2.5%	0	463	463	
3.7%	0	280	280	
4.9%	0	268	268	
6.2%	0	186	186	
7.4%	0	179	179	
8.6%	0	174	174	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,211	1,211	
1.2%	0	621	621	
2.5%	0	549	549	
3.7%	0	547	547	
4.9%	0	184	184	
6.2%	0	138	138	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,323	1,323	
2.5%	0	1,165	1,165	
3.7%	0	799	799	
4.9%	0	573	573	
6.2%	0	441	441	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-06-b

Funks Reservoir to Deleven Pipeline, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,500	1,500	
18.5%	0	1,500	1,500	
19.8%	0	1,500	1,500	
21.0%	0	1,500	1,500	
22.2%	0	1,500	1,500	
23.5%	0	1,500	1,500	
24.7%	0	1,500	1,500	
25.9%	0	1,500	1,500	
27.2%	0	1,500	1,500	
28.4%	0	1,500	1,500	
29.6%	0	1,500	1,500	
30.9%	0	1,500	1,500	
32.1%	0	1,500	1,500	
33.3%	0	1,500	1,500	
34.6%	0	1,500	1,500	
35.8%	0	1,500	1,500	
37.0%	0	1,500	1,500	
38.3%	0	1,500	1,500	
39.5%	0	1,500	1,500	
40.7%	0	1,500	1,500	
42.0%	0	1,500	1,500	
43.2%	0	1,500	1,500	
44.4%	0	1,440	1,440	
45.7%	0	1,429	1,429	
46.9%	0	1,388	1,388	
48.1%	0	1,327	1,327	
49.4%	0	1,291	1,291	
50.6%	0	1,090	1,090	
51.9%	0	978	978	
53.1%	0	944	944	
54.3%	0	885	885	
55.6%	0	706	706	
56.8%	0	605	605	
58.0%	0	498	498	
59.3%	0	498	498	
60.5%	0	351	351	
61.7%	0	259	259	
63.0%	0	150	150	
64.2%	0	150	150	
65.4%	0	150	150	
66.7%	0	150	150	
67.9%	0	150	150	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,500	1,500	
18.5%	0	1,500	1,500	
19.8%	0	1,500	1,500	
21.0%	0	1,500	1,500	
22.2%	0	1,500	1,500	
23.5%	0	1,500	1,500	
24.7%	0	1,500	1,500	
25.9%	0	1,500	1,500	
27.2%	0	1,500	1,500	
28.4%	0	1,500	1,500	
29.6%	0	1,500	1,500	
30.9%	0	1,500	1,500	
32.1%	0	1,500	1,500	
33.3%	0	1,500	1,500	
34.6%	0	1,500	1,500	
35.8%	0	1,500	1,500	
37.0%	0	1,500	1,500	
38.3%	0	1,500	1,500	
39.5%	0	1,500	1,500	
40.7%	0	1,500	1,500	
42.0%	0	1,500	1,500	
43.2%	0	1,500	1,500	
44.4%	0	1,500	1,500	
45.7%	0	1,500	1,500	
46.9%	0	1,500	1,500	
48.1%	0	1,477	1,477	
49.4%	0	1,354	1,354	
50.6%	0	1,320	1,320	
51.9%	0	1,148	1,148	
53.1%	0	1,075	1,075	
54.3%	0	779	779	
55.6%	0	736	736	
56.8%	0	606	606	
58.0%	0	587	587	
59.3%	0	506	506	
60.5%	0	394	394	
61.7%	0	393	393	
63.0%	0	236	236	
64.2%	0	212	212	
65.4%	0	200	200	
66.7%	0	188	188	
67.9%	0	150	150	
69.1%	0	145	145	
70.4%	0	145	145	
71.6%	0	145	145	
72.8%	0	145	145	
74.1%	0	145	145	
75.3%	0	145	145	
76.5%	0	145	145	
77.8%	0	145	145	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,459	1,459	
14.8%	0	1,454	1,454	
16.0%	0	1,395	1,395	
17.3%	0	1,238	1,238	
18.5%	0	1,147	1,147	
19.8%	0	1,147	1,147	
21.0%	0	1,072	1,072	
22.2%	0	1,051	1,051	
23.5%	0	1,051	1,051	
24.7%	0	1,051	1,051	
25.9%	0	1,051	1,051	
27.2%	0	1,051	1,051	
28.4%	0	1,051	1,051	
29.6%	0	1,051	1,051	
30.9%	0	1,051	1,051	
32.1%	0	1,051	1,051	
33.3%	0	1,051	1,051	
34.6%	0	1,051	1,051	
35.8%	0	918	918	
37.0%	0	906	906	
38.3%	0	859	859	
39.5%	0	845	845	
40.7%	0	731	731	
42.0%	0	656	656	
43.2%	0	630	630	
44.4%	0	459	459	
45.7%	0	426	426	
46.9%	0	314	314	
48.1%	0	255	255	
49.4%	0	243	243	
50.6%	0	215	215	
51.9%	0	145	145	
53.1%	0	145	145	
54.3%	0	145	145	
55.6%	0	145	145	
56.8%	0	91	91	
58.0%	0	59	59	
59.3%	0	58	58	
60.5%	0	54	54	
61.7%	0	54	54	
63.0%	0	53	53	
64.2%	0	35	35	
65.4%	0	32	32	
66.7%	0	32	32	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,494	1,494	
7.4%	0	1,333	1,333	
8.6%	0	1,324	1,324	
9.9%	0	1,318	1,318	
11.1%	0	1,318	1,318	
12.3%	0	1,310	1,310	
13.6%	0	1,304	1,304	
14.8%	0	1,301	1,301	
16.0%	0	1,258	1,258	
17.3%	0	1,254	1,254	
18.5%	0	1,252	1,252	
19.8%	0	1,238	1,238	
21.0%	0	1,237	1,237	
22.2%	0	1,184	1,184	
23.5%	0	1,175	1,175	
24.7%	0	1,148	1,148	
25.9%	0	1,130	1,130	
27.2%	0	1,116	1,116	
28.4%	0	1,087	1,087	
29.6%	0	1,082	1,082	
30.9%	0	1,036	1,036	
32.1%	0	1,036	1,036	
33.3%	0	1,036	1,036	
34.6%	0	1,036	1,036	
35.8%	0	1,036	1,036	
37.0%	0	1,036	1,036	
38.3%	0	1,036	1,036	
39.5%	0	1,036	1,036	
40.7%	0	1,036	1,036	
42.0%	0	1,036	1,036	
43.2%	0	1,036	1,036	
44.4%	0	958	958	
45.7%	0	936	936	
46.9%	0	846	846	
48.1%	0	793	793	
49.4%	0	730	730	
50.6%	0	676	676	
51.9%	0	657	657	
53.1%	0	620	620	
54.3%	0	501	501	
55.6%	0	500	500	
56.8%	0	481	481	
58.0%	0	470	470	
59.3%	0	358	358	
60.5%	0	321	321	
61.7%	0	314	314	
63.0%	0	299	299	
64.2%	0	287	287	
65.4%	0	276	276	
66.7%	0	271	271	
67.9%	0	240	240	
69.1%	0	232	232	
70.4%	0	220	220	
71.6%	0	218	218	
72.8%	0	217	217	
74.1%	0	214	214	
75.3%	0	150	150	
76.5%	0	150	150	
77.8%	0	150	150	
79.0%	0	150	150	
80.2%	0	150	150	
81.5%	0	150	150	
82.7%	0	150	150	
84.0%	0	150	150	
85.2%	0	150	150	
86.4%	0	150	150	
87.7%	0	32	32	
88.9%	0	20	20	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

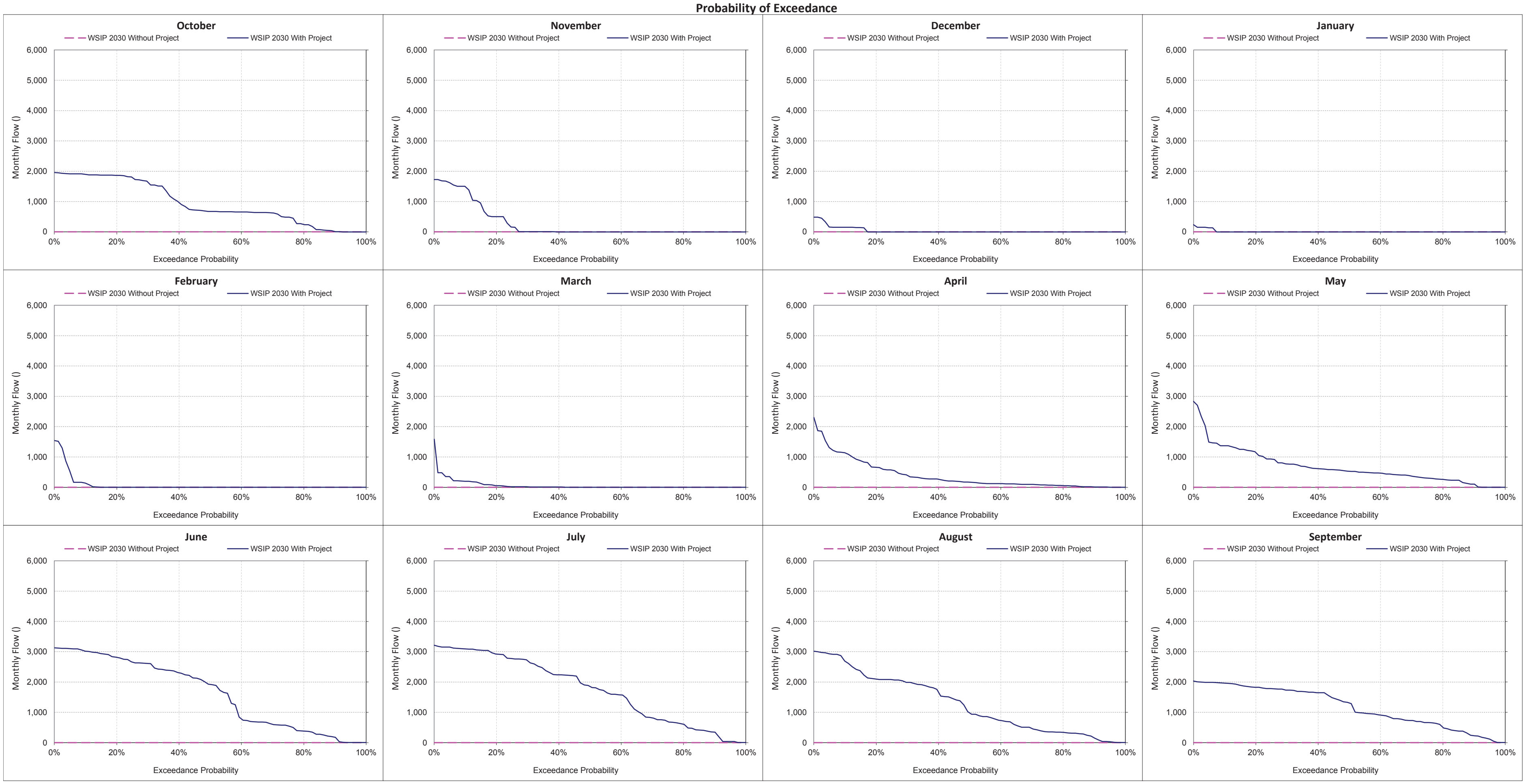


Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

Percent Exceedance Probability	October: WSIP 2030 Without Project Monthly Flow ()	October: WSIP 2030 With Project Monthly Flow ()	October: Absolute Difference ()	October: Relative Difference (%)	November: WSIP 2030 Without Project Monthly Flow ()	November: WSIP 2030 With Project Monthly Flow ()	November: Absolute Difference ()	November: Relative Difference (%)	December: WSIP 2030 Without Project Monthly Flow ()	December: WSIP 2030 With Project Monthly Flow ()	December: Absolute Difference ()	December: Relative Difference (%)	January: WSIP 2030 Without Project Monthly Flow ()	January: WSIP 2030 With Project Monthly Flow ()	January: Absolute Difference ()	January: Relative Difference (%)
0.0%	0	1,960	1,960		0	1,724	1,724		0	484	484		0	239	239	
1.2%	0	1,944	1,944		0	1,723	1,723		0	482	482		0	149	149	
2.5%	0	1,930	1,930		0	1,681	1,681		0	453	453		0	149	149	
3.7%	0	1,923	1,923		0	1,671	1,671		0	333	333		0	149	149	
4.9%	0	1,914	1,914		0	1,624	1,624		0	162	162		0	137	137	
6.2%	0	1,911	1,911		0	1,543	1,543		0	154	154		0	135	135	
7.4%	0	1,910	1,910		0	1,503	1,503		0	154	154		0	0	0	
8.6%	0	1,910	1,910		0	1,500	1,500		0	152	152		0	0	0	
9.9%	0	1,899	1,899		0	1,500	1,500		0	151	151		0	0	0	
11.1%	0	1,879	1,879		0	1,379	1,379		0	151	151		0	0	0	
12.3%	0	1,877	1,877		0	1,040	1,040		0	150	150		0	0	0	
13.6%	0	1,876	1,876		0	1,036	1,036		0	144	144		0	0	0	
14.8%	0	1,874	1,874		0	956	956		0	143	143		0	0	0	
16.0%	0	1,873	1,873		0	675	675		0	133	133		0	0	0	
17.3%	0	1,872	1,872		0	527	527		0	0	0		0	0	0	
18.5%	0	1,869	1,869		0	500	500		0	0	0		0	0	0	
19.8%	0	1,866	1,866		0	500	500		0	0	0		0	0	0	
21.0%	0	1,858	1,858		0	500	500		0	0	0		0	0	0	
22.2%	0	1,852	1,852		0	500	500		0	0	0		0	0	0	
23.5%	0	1,823	1,823		0	291	291		0	0	0		0	0	0	
24.7%	0	1,813	1,813		0	155	155		0	0	0		0	0	0	
25.9%	0	1,723	1,723		0	153	153		0	0	0		0	0	0	
27.2%	0	1,713	1,713		0	3	3		0	0	0		0	0	0	
28.4%	0	1,692	1,692		0	3	3		0	0	0		0	0	0	
29.6%	0	1,671	1,671		0	1	1		0	0	0		0	0	0	
30.9%	0	1,543	1,543		0	1	1		0	0	0		0	0	0	
32.1%	0	1,542	1,542		0	0	0		0	0	0		0	0	0	
33.3%	0	1,509	1,509		0	0	0		0	0	0		0	0	0	
34.6%	0	1,508	1,508		0	0	0		0	0	0		0	0	0	
35.8%	0	1,357	1,357		0	0	0		0	0	0		0	0	0	
37.0%	0	1,174	1,174		0	0	0		0	0	0		0	0	0	
38.3%	0	1,080	1,080		0	0	0		0	0	0		0	0	0	
39.5%	0	1,005	1,005		0	0	0		0	0	0		0	0	0	
40.7%	0	906	906		0	0	0		0	0	0		0	0	0	
42.0%	0	834	834		0	0	0		0	0	0		0	0	0	
43.2%	0	742	742		0	0	0		0	0	0		0	0	0	
44.4%	0	722	722		0	0	0		0	0	0		0	0	0	
45.7%	0	717	717		0	0	0		0	0	0		0	0	0	
46.9%	0	709	709		0	0	0		0	0	0		0	0	0	
48.1%	0	687	687		0	0	0		0	0	0		0	0	0	
49.4%	0	675	675		0	0	0		0	0	0		0	0	0	
50.6%	0	673	673		0	0	0		0	0	0		0	0	0	
51.9%	0	671	671		0	0	0		0	0	0		0	0	0	
53.1%	0	665	665		0	0	0		0	0	0		0	0	0	
54.3%	0	662	662		0	0	0		0	0	0		0	0	0	
55.6%	0	662	662		0	0	0		0	0	0		0	0	0	
56.8%	0	661	661		0	0	0		0	0	0		0	0	0	
58.0%	0	658	658		0	0	0		0	0	0		0	0	0	
59.3%	0	658	658		0	0	0		0	0	0		0	0	0	
60.5%	0	657	657		0	0	0		0	0	0		0	0	0	
61.7%	0	655	655		0	0	0		0	0	0		0	0	0	
63.0%	0	643	643		0	0	0		0	0	0		0	0	0	
64.2%	0	642	642		0	0	0		0	0	0		0	0	0	
65.4%	0	642	642		0	0	0		0	0	0		0	0	0	
66.7%	0	640	640		0	0	0		0	0	0		0	0	0	
67.9%	0	635	635		0	0	0		0	0	0		0	0	0	
69.1%	0	633	633		0	0	0		0	0	0		0	0	0	
70.4%	0	618	618		0	0	0		0	0	0		0	0	0	
71.6%	0	586	586		0	0	0		0	0	0		0	0	0	
72.8%	0	501	501		0	0	0		0	0	0		0	0	0	
74.1%	0	484	484		0	0	0		0	0	0		0	0	0	
75.3%	0	480	480		0	0	0		0	0	0		0	0	0	
76.5%	0	453	453		0	0	0		0	0	0		0	0	0	
77.8%	0	273	273		0	0	0		0	0	0		0	0	0	
79.0%	0	271	271		0	0	0		0	0	0		0	0	0	
80.2%	0	232	232		0	0	0		0	0	0		0	0	0	
81.5%	0	232	232		0	0	0		0	0	0		0	0	0	
82.7%	0	173	173		0	0	0		0	0	0		0	0	0	
84.0%	0	76	76		0	0	0		0	0	0		0	0	0	
85.2%	0	70	70		0	0	0		0	0	0		0	0	0	
86.4%	0	52	52		0	0	0		0	0	0		0	0	0	
87.7%	0	51	51		0	0	0		0	0	0		0	0	0	
88.9%	0	36	36		0	0	0		0	0	0		0	0	0	
90.1%	0	5	5		0	0	0		0	0	0		0	0	0	
91.4%	0	1	1		0	0	0		0	0	0		0	0	0	
92.6%	0	0	0		0	0	0		0	0	0		0	0	0	
93.8%	0	0	0		0	0	0		0	0	0		0	0	0	
95.1%	0	0	0		0	0	0		0	0	0		0	0	0	
96.3%	0	0	0		0	0	0		0	0	0		0	0	0	
97.5%	0	0	0		0	0	0		0	0	0		0	0	0	
98.8%	0	0	0		0	0	0		0	0	0		0	0	0	
100.0%	0	0	0		0	0	0		0	0	0		0	0	0	

Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,543	1,543	
1.2%	0	1,512	1,512	
2.5%	0	1,290	1,290	
3.7%	0	866	866	
4.9%	0	536	536	
6.2%	0	164	164	
7.4%	0	164	164	
8.6%	0	163	163	
9.9%	0	135	135	
11.1%	0	84	84	
12.3%	0	14	14	
13.6%	0	13	13	
14.8%	0	1	1	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,582	1,582	
1.2%	0	484	484	
2.5%	0	484	484	
3.7%	0	355	355	
4.9%	0	349	349	
6.2%	0	215	215	
7.4%	0	215	215	
8.6%	0	206	206	
9.9%	0	199	199	
11.1%	0	194	194	
12.3%	0	183	183	
13.6%	0	173	173	
14.8%	0	129	129	
16.0%	0	85	85	
17.3%	0	82	82	
18.5%	0	77	77	
19.8%	0	54	54	
21.0%	0	54	54	
22.2%	0	44	44	
23.5%	0	30	30	
24.7%	0	21	21	
25.9%	0	21	21	
27.2%	0	20	20	
28.4%	0	18	18	
29.6%	0	17	17	
30.9%	0	12	12	
32.1%	0	9	9	
33.3%	0	9	9	
34.6%	0	9	9	
35.8%	0	8	8	
37.0%	0	7	7	
38.3%	0	7	7	
39.5%	0	6	6	
40.7%	0	6	6	
42.0%	0	5	5	
43.2%	0	4	4	
44.4%	0	2	2	
45.7%	0	1	1	
46.9%	0	1	1	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,300	2,300	
1.2%	0	1,865	1,865	
2.5%	0	1,850	1,850	
3.7%	0	1,545	1,545	
4.9%	0	1,314	1,314	
6.2%	0	1,216	1,216	
7.4%	0	1,162	1,162	
8.6%	0	1,156	1,156	
9.9%	0	1,138	1,138	
11.1%	0	1,084	1,084	
12.3%	0	1,004	1,004	
13.6%	0	928	928	
14.8%	0	885	885	
16.0%	0	832	832	
17.3%	0	815	815	
18.5%	0	670	670	
19.8%	0	655	655	
21.0%	0	647	647	
22.2%	0	587	587	
23.5%	0	574	574	
24.7%	0	571	571	
25.9%	0	546	546	
27.2%	0	460	460	
28.4%	0	425	425	
29.6%	0	412	412	
30.9%	0	346	346	
32.1%	0	334	334	
33.3%	0	325	325	
34.6%	0	296	296	
35.8%	0	284	284	
37.0%	0	279	279	
38.3%	0	276	276	
39.5%	0	274	274	
40.7%	0	248	248	
42.0%	0	227	227	
43.2%	0	205	205	
44.4%	0	204	204	
45.7%	0	194	194	
46.9%	0	188	188	
48.1%	0	168	168	
49.4%	0	168	168	
50.6%	0	162	162	
51.9%	0	157	157	
53.1%	0	137	137	
54.3%	0	128	128	
55.6%	0	119	119	
56.8%	0	119	119	
58.0%	0	118	118	
59.3%	0	117	117	
60.5%	0	117	117	
61.7%	0	114	114	
63.0%	0	113	113	
64.2%	0	108	108	
65.4%	0	106	106	
66.7%	0	98	98	
67.9%	0	98	98	
69.1%	0	97	97	
70.4%	0	93	93	
71.6%	0	86	86	
72.8%	0	82	82	
74.1%	0	78	78	
75.3%	0	73	73	
76.5%	0	69	69	
77.8%	0	63	63	
79.0%	0	57	57	
80.2%	0	54	54	
81.5%	0	48	48	
82.7%	0	47	47	
84.0%	0	44	44	
85.2%	0	27	27	
86.4%	0	21	21	
87.7%	0	16	16	
88.9%	0	14	14	
90.1%	0	11	11	
91.4%	0	6	6	
92.6%	0	6	6	
93.8%	0	6	6	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,836	2,836	
1.2%	0	2,703	2,703	
2.5%	0	2,339	2,339	
3.7%	0	2,031	2,031	
4.9%	0	1,487	1,487	
6.2%	0	1,467	1,467	
7.4%	0	1,458	1,458	
8.6%	0	1,374	1,374	
9.9%	0	1,372	1,372	
11.1%	0	1,372	1,372	
12.3%	0	1,335	1,335	
13.6%	0	1,300	1,300	
14.8%	0	1,252	1,252	
16.0%	0	1,248	1,248	
17.3%	0	1,220	1,220	
18.5%	0	1,196	1,196	
19.8%	0	1,174	1,174	
21.0%	0	1,043	1,043	
22.2%	0	1,019	1,019	
23.5%	0	936	936	
24.7%	0	935	935	
25.9%	0	920	920	
27.2%	0	804	804	
28.4%	0	803	803	
29.6%	0	773	773	
30.9%	0	759	759	
32.1%	0	758	758	
33.3%	0	739	739	
34.6%	0	694	694	
35.8%	0	687	687	
37.0%	0	649	649	
38.3%	0	622	622	
39.5%	0	615	615	
40.7%	0	608	608	
42.0%	0	603	603	
43.2%	0	584	584	
44.4%	0	579	579	
45.7%	0	571	571	
46.9%	0	563	563	
48.1%	0	545	545	
49.4%	0	528	528	
50.6%	0	526	526	
51.9%	0	522	522	
53.1%	0	500	500	
54.3%	0	495	495	
55.6%	0	488	488	
56.8%	0	484	484	
58.0%	0	475	475	
59.3%	0	468	468	
60.5%	0	460	460	
61.7%	0	437	437	
63.0%	0	435	435	
64.2%	0	422	422	
65.4%	0	412	412	
66.7%	0	406	406	
67.9%	0	399	399	
69.1%	0	387	387	
70.4%	0	356	356	
71.6%	0	342	342	
72.8%	0	323	323	
74.1%	0	311	311	
75.3%	0	296	296	
76.5%	0	289	289	
77.8%	0	277	277	
79.0%	0	267	267	
80.2%	0	257	257	
81.5%	0	241	241	
82.7%	0	233	233	
84.0%	0	232	232	
85.2%	0	230	230	
86.4%	0	151	151	
87.7%	0	126	126	
88.9%	0	106	106	
90.1%	0	99	99	
91.4%	0	5	5	
92.6%	0	3	3	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-07-b

Sites Reservoir to Funks Reservoir, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,129	3,129	
1.2%	0	3,121	3,121	
2.5%	0	3,115	3,115	
3.7%	0	3,108	3,108	
4.9%	0	3,103	3,103	
6.2%	0	3,097	3,097	
7.4%	0	3,092	3,092	
8.6%	0	3,056	3,056	
9.9%	0	3,013	3,013	
11.1%	0	3,007	3,007	
12.3%	0	2,985	2,985	
13.6%	0	2,973	2,973	
14.8%	0	2,940	2,940	
16.0%	0	2,922	2,922	
17.3%	0	2,909	2,909	
18.5%	0	2,838	2,838	
19.8%	0	2,822	2,822	
21.0%	0	2,796	2,796	
22.2%	0	2,755	2,755	
23.5%	0	2,746	2,746	
24.7%	0	2,669	2,669	
25.9%	0	2,631	2,631	
27.2%	0	2,631	2,631	
28.4%	0	2,625	2,625	
29.6%	0	2,611	2,611	
30.9%	0	2,606	2,606	
32.1%	0	2,457	2,457	
33.3%	0	2,428	2,428	
34.6%	0	2,419	2,419	
35.8%	0	2,393	2,393	
37.0%	0	2,385	2,385	
38.3%	0	2,369	2,369	
39.5%	0	2,318	2,318	
40.7%	0	2,291	2,291	
42.0%	0	2,239	2,239	
43.2%	0	2,221	2,221	
44.4%	0	2,131	2,131	
45.7%	0	2,125	2,125	
46.9%	0	2,086	2,086	
48.1%	0	2,011	2,011	
49.4%	0	1,928	1,928	
50.6%	0	1,917	1,917	
51.9%	0	1,884	1,884	
53.1%	0	1,724	1,724	
54.3%	0	1,659	1,659	
55.6%	0	1,628	1,628	
56.8%	0	1,295	1,295	
58.0%	0	1,251	1,251	
59.3%	0	839	839	
60.5%	0	742	742	
61.7%	0	732	732	
63.0%	0	698	698	
64.2%	0	686	686	
65.4%	0	680	680	
66.7%	0	678	678	
67.9%	0	675	675	
69.1%	0	624	624	
70.4%	0	597	597	
71.6%	0	587	587	
72.8%	0	581	581	
74.1%	0	576	576	
75.3%	0	542	542	
76.5%	0	500	500	
77.8%	0	397	397	
79.0%	0	390	390	
80.2%	0	383	383	
81.5%	0	372	372	
82.7%	0	349	349	
84.0%	0	281	281	
85.2%	0	276	276	
86.4%	0	249	249	
87.7%	0	221	221	
88.9%	0	198	198	
90.1%	0	171	171	
91.4%	0	31	31	
92.6%	0	11	11	
93.8%	0	6	6	
95.1%	0	2	2	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,218	3,218	
1.2%	0	3,178	3,178	
2.5%	0	3,158	3,158	
3.7%	0	3,154	3,154	
4.9%	0	3,153	3,153	
6.2%	0	3,120	3,120	
7.4%	0	3,112	3,112	
8.6%	0	3,100	3,100	
9.9%	0	3,093	3,093	
11.1%	0	3,083	3,083	
12.3%	0	3,082	3,082	
13.6%	0	3,058	3,058	
14.8%	0	3,048	3,048	
16.0%	0	3,042	3,042	
17.3%	0	3,040	3,040	
18.5%	0	2,966	2,966	
19.8%	0	2,924	2,924	
21.0%	0	2,912	2,912	
22.2%	0	2,902	2,902	
23.5%	0	2,787	2,787	
24.7%	0	2,774	2,774	
25.9%	0	2,762	2,762	
27.2%	0	2,760	2,760	
28.4%	0	2,754	2,754	
29.6%	0	2,733	2,733	
30.9%	0	2,633	2,633	
32.1%	0	2,598	2,598	
33.3%	0	2,518	2,518	
34.6%	0	2,477	2,477	
35.8%	0	2,378	2,378	
37.0%	0	2,313	2,313	
38.3%	0	2,250	2,250	
39.5%	0	2,237	2,237	
40.7%	0	2,234	2,234	
42.0%	0	2,229	2,229	
43.2%	0	2,222	2,222	
44.4%	0	2,214	2,214	
45.7%	0	2,197	2,197	
46.9%	0	1,972	1,972	
48.1%	0	1,908	1,908	
49.4%	0	1,889	1,889	
50.6%	0	1,821	1,821	
51.9%	0	1,809	1,809	
53.1%	0	1,754	1,754	
54.3%	0	1,723	1,723	
55.6%	0	1,635	1,635	
56.8%	0	1,599	1,599	
58.0%	0	1,593	1,593	
59.3%	0	1,582	1,582	
60.5%	0	1,574	1,574	
61.7%	0	1,472	1,472	
63.0%	0	1,262	1,262	
64.2%	0	1,106	1,106	
65.4%	0	1,020	1,020	
66.7%	0	956	956	
67.9%	0	846	846	
69.1%	0	834	834	
70.4%	0	806	806	
71.6%	0	758	758	
72.8%	0	756	756	
74.1%	0	741	741	
75.3%	0	677	677	
76.5%	0	670	670	
77.8%	0	654	654	
79.0%	0	630	630	
80.2%	0	606	606	
81.5%	0	486	486	
82.7%	0	474	474	
84.0%	0	423	423	
85.2%	0	417	417	
86.4%	0	406	406	
87.7%	0	379	379	
88.9%	0	357	357	
90.1%	0	350	350	
91.4%	0	188	188	
92.6%	0	41	41	
93.8%	0	41	41	
95.1%	0	41	41	
96.3%	0	38	38	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,020	3,020	
1.2%	0	2,998	2,998	
2.5%	0	2,971	2,971	
3.7%	0	2,965	2,965	
4.9%	0	2,932	2,932	
6.2%	0	2,917	2,917	
7.4%	0	2,913	2,913	
8.6%	0	2,875	2,875	
9.9%	0	2,689	2,689	
11.1%	0	2,613	2,613	
12.3%	0	2,506	2,506	
13.6%	0	2,421	2,421	
14.8%	0	2,379	2,379	
16.0%	0	2,233	2,233	
17.3%	0	2,135	2,135	
18.5%	0	2,115	2,115	
19.8%	0	2,102	2,102	
21.0%	0	2,086	2,086	
22.2%	0	2,084	2,084	
23.5%	0	2,084	2,084	
24.7%	0	2,083	2,083	
25.9%	0	2,067	2,067	
27.2%	0	2,063	2,063	
28.4%	0	2,038	2,038	
29.6%	0	1,993	1,993	
30.9%	0	1,988	1,988	
32.1%	0	1,953	1,953	
33.3%	0	1,925	1,925	
34.6%	0	1,915	1,915	
35.8%	0	1,881	1,881	
37.0%	0	1,835	1,835	
38.3%	0	1,811	1,811	
39.5%	0	1,757	1,757	
40.7%	0	1,539	1,539	
42.0%	0	1,519	1,519	
43.2%	0	1,508	1,508	
44.4%	0	1,459	1,459	
45.7%	0	1,406	1,406	
46.9%	0	1,381	1,381	
48.1%	0	1,241	1,241	
49.4%	0	1,019	1,019	
50.6%	0	937	937	
51.9%	0	934	934	
53.1%	0	887	887	
54.3%	0	863	863	
55.6%	0	859	859	
56.8%	0	828	828	
58.0%	0	782	782	
59.3%	0	740	740	
60.5%	0	721	721	
61.7%	0	694	694	
63.0%	0	688	688	
64.2%	0	604	604	
65.4%	0	555	555	
66.7%	0	511	511	
67.9%	0	510	510	
69.1%	0	506	506	
70.4%	0	453	453	
71.6%	0	420	420	
72.8%	0	391	391	
74.1%	0	364	364	
75.3%	0	355	355	
76.5%	0	353	353	
77.8%	0	342	342	
79.0%	0	342	342	
80.2%	0	339	339	
81.5%	0	319	319	
82.7%	0	308	308	
84.0%	0	308	308	
85.2%	0	291	291	
86.4%	0	283	283	
87.7%	0	241	241	
88.9%	0	219	219	
90.1%	0	152	152	
91.4%	0	90	90	
92.6%	0	41	41	
93.8%	0	41	41	
95.1%	0	26	26	
96.3%	0	9	9	
97.5%	0	3	3	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow ()	WSIP 2030 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,031	2,031	
1.2%	0	2,003	2,003	
2.5%	0	2,000	2,000	
3.7%	0	1,993	1,993	
4.9%	0	1,986	1,986	
6.2%	0	1,985	1,985	
7.4%	0	1,980	1,980	
8.6%	0	1,972	1,972	
9.9%	0	1,960	1,960	
11.1%	0	1,957	1,957	
12.3%	0	1,944	1,944	
13.6%	0	1,934	1,934	
14.8%	0	1,894	1,894	
16.0%	0	1,871	1,871	
17.3%	0	1,855	1,855	
18.5%	0	1,833	1,833	
19.8%	0	1,829	1,829	
21.0%	0	1,826	1,826	
22.2%	0	1,799	1,799	
23.5%	0	1,784	1,784	
24.7%	0	1,781	1,781	
25.9%	0	1,772	1,772	
27.2%	0	1,764	1,764	
28.4%	0	1,763	1,763	
29.6%	0	1,733	1,733	
30.9%	0	1,731	1,731	
32.1%	0	1,726	1,726	
33.3%	0	1,691	1,691	
34.6%	0	1,686	1,686	
35.8%	0	1,685	1,685	
37.0%	0	1,665	1,665	
38.3%	0	1,664	1,664	
39.5%	0	1,650	1,650	
40.7%	0	1,648	1,648	
42.0%	0	1,644	1,644	
43.2%	0	1,563	1,563	
44.4%	0	1,485	1,485	
45.7%	0	1,438	1,438	
46.9%	0	1,398	1,398	
48.1%	0	1,348	1,348	
49.4%	0	1,331	1,331	
50.6%	0	1,285	1,285	
51.9%	0	1,007	1,007	
53.1%	0	985	985	
54.3%	0	977	977	
55.6%	0	961	961	
56.8%	0	954	954	
58.0%	0	948	948	
59.3%	0	921	921	
60.5%	0	905	905	
61.7%	0	888	888	
63.0%	0	845	845	
64.2%	0	794	794	
65.4%	0	794	794	
66.7%	0	778	778	
67.9%	0	741	741	
69.1%	0	733	733	
70.4%	0	727	727	
71.6%	0	694	694	
72.8%	0	693	693	
74.1%	0	663	663	
75.3%	0	662	662	
76.5%	0	650	650	
77.8%	0	634	634	
79.0%	0	600	600	
80.2%	0	486	486	
81.5%	0	457	457	
82.7%	0	412	412	
84.0%	0	398	398	
85.2%	0	381	381	
86.4%	0	378	378	
87.7%	0	323	323	
88.9%	0	240	240	
90.1%	0	226	226	
91.4%	0	220	220	
92.6%	0	175	175	
93.8%	0	153	153	
95.1%	0	119	119	
96.3%	0	42	42	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-08-b
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Probability of Exceedance

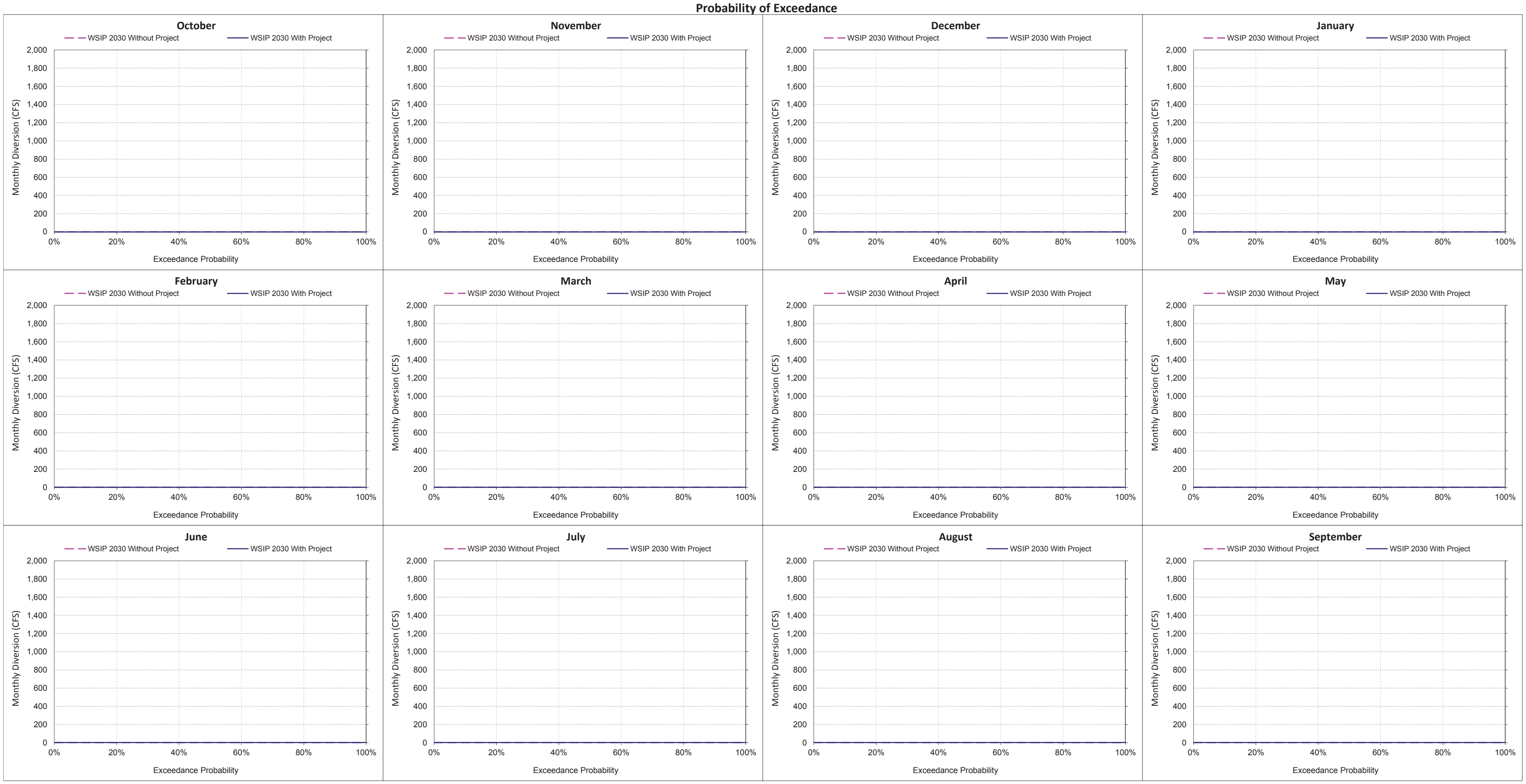


Table OP-08-b

Delevan Intake and Pipeline (to Local Use), Monthly Diversion

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-08-b

Delevan Intake and Pipeline (to Local Use), Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-08-b

Delevan Intake and Pipeline (to Local Use), Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Diversion (CFS)	WSIP 2030 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

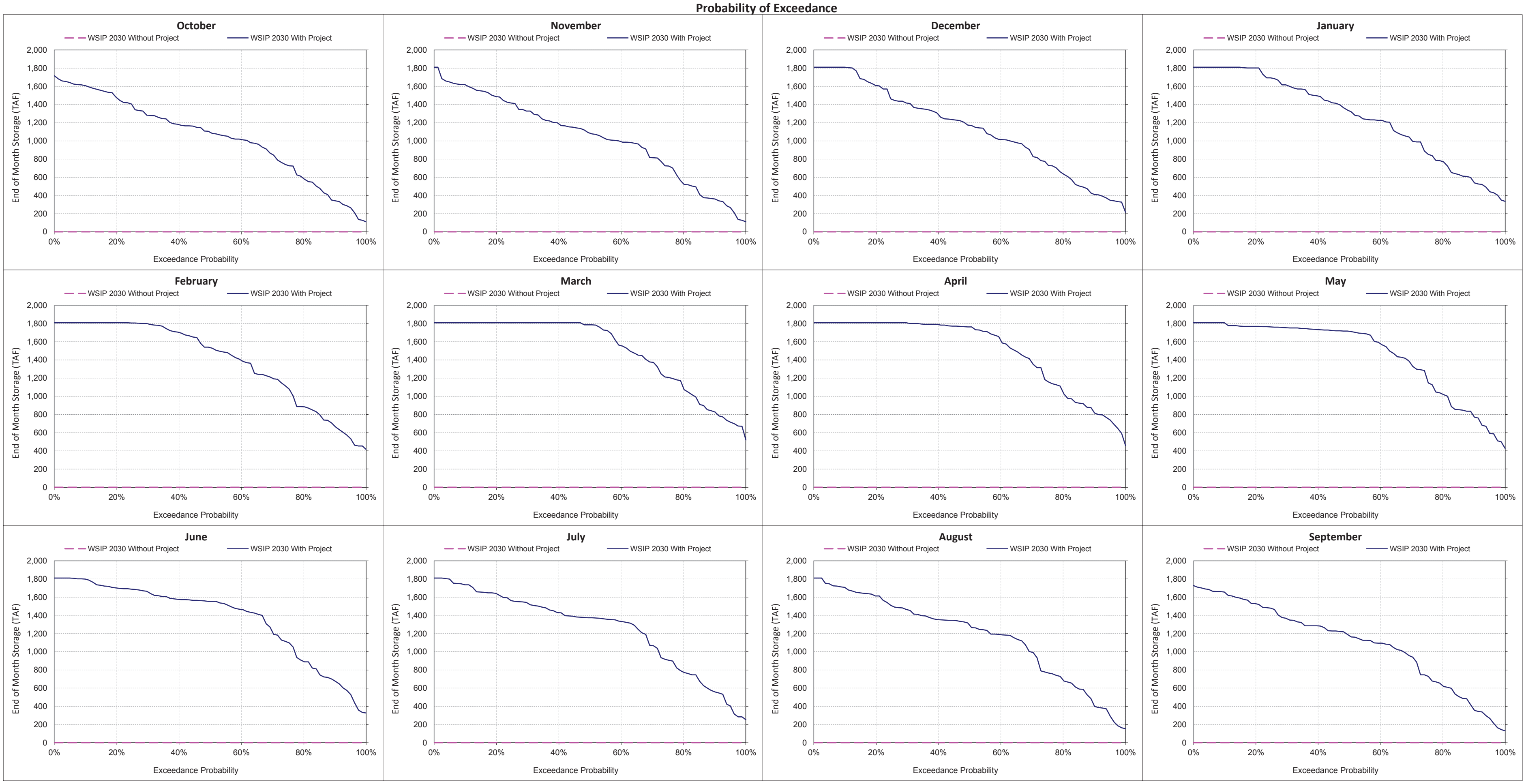


Table OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,718	1,718	
1.2%	0	1,683	1,683	
2.5%	0	1,659	1,659	
3.7%	0	1,655	1,655	
4.9%	0	1,641	1,641	
6.2%	0	1,624	1,624	
7.4%	0	1,620	1,620	
8.6%	0	1,618	1,618	
9.9%	0	1,607	1,607	
11.1%	0	1,595	1,595	
12.3%	0	1,580	1,580	
13.6%	0	1,568	1,568	
14.8%	0	1,557	1,557	
16.0%	0	1,545	1,545	
17.3%	0	1,534	1,534	
18.5%	0	1,532	1,532	
19.8%	0	1,483	1,483	
21.0%	0	1,445	1,445	
22.2%	0	1,422	1,422	
23.5%	0	1,420	1,420	
24.7%	0	1,406	1,406	
25.9%	0	1,343	1,343	
27.2%	0	1,333	1,333	
28.4%	0	1,330	1,330	
29.6%	0	1,283	1,283	
30.9%	0	1,281	1,281	
32.1%	0	1,277	1,277	
33.3%	0	1,261	1,261	
34.6%	0	1,246	1,246	
35.8%	0	1,242	1,242	
37.0%	0	1,202	1,202	
38.3%	0	1,190	1,190	
39.5%	0	1,183	1,183	
40.7%	0	1,171	1,171	
42.0%	0	1,166	1,166	
43.2%	0	1,165	1,165	
44.4%	0	1,164	1,164	
45.7%	0	1,149	1,149	
46.9%	0	1,146	1,146	
48.1%	0	1,108	1,108	
49.4%	0	1,106	1,106	
50.6%	0	1,082	1,082	
51.9%	0	1,078	1,078	
53.1%	0	1,067	1,067	
54.3%	0	1,056	1,056	
55.6%	0	1,050	1,050	
56.8%	0	1,030	1,030	
58.0%	0	1,020	1,020	
59.3%	0	1,020	1,020	
60.5%	0	1,013	1,013	
61.7%	0	1,006	1,006	
63.0%	0	979	979	
64.2%	0	974	974	
65.4%	0	963	963	
66.7%	0	932	932	
67.9%	0	912	912	
69.1%	0	865	865	
70.4%	0	842	842	
71.6%	0	788	788	
72.8%	0	764	764	
74.1%	0	742	742	
75.3%	0	727	727	
76.5%	0	725	725	
77.8%	0	626	626	
79.0%	0	612	612	
80.2%	0	578	578	
81.5%	0	551	551	
82.7%	0	547	547	
84.0%	0	505	505	
85.2%	0	478	478	
86.4%	0	429	429	
87.7%	0	409	409	
88.9%	0	351	351	
90.1%	0	341	341	
91.4%	0	333	333	
92.6%	0	302	302	
93.8%	0	287	287	
95.1%	0	265	265	
96.3%	0	210	210	
97.5%	0	137	137	
98.8%	0	128	128	
100.0%	0	110	110	

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,686	1,686	
3.7%	0	1,660	1,660	
4.9%	0	1,648	1,648	
6.2%	0	1,633	1,633	
7.4%	0	1,624	1,624	
8.6%	0	1,619	1,619	
9.9%	0	1,619	1,619	
11.1%	0	1,596	1,596	
12.3%	0	1,579	1,579	
13.6%	0	1,555	1,555	
14.8%	0	1,552	1,552	
16.0%	0	1,544	1,544	
17.3%	0	1,532	1,532	
18.5%	0	1,504	1,504	
19.8%	0	1,488	1,488	
21.0%	0	1,483	1,483	
22.2%	0	1,446	1,446	
23.5%	0	1,426	1,426	
24.7%	0	1,417	1,417	
25.9%	0	1,410	1,410	
27.2%	0	1,345	1,345	
28.4%	0	1,344	1,344	
29.6%	0	1,330	1,330	
30.9%	0	1,329	1,329	
32.1%	0	1,292	1,292	
33.3%	0	1,287	1,287	
34.6%	0	1,244	1,244	
35.8%	0	1,225	1,225	
37.0%	0	1,219	1,219	
38.3%	0	1,202	1,202	
39.5%	0	1,200	1,200	
40.7%	0	1,168	1,168	
42.0%	0	1,167	1,167	
43.2%	0	1,156	1,156	
44.4%	0	1,153	1,153	
45.7%	0	1,143	1,143	
46.9%	0	1,138	1,138	
48.1%	0	1,120	1,120	
49.4%	0	1,092	1,092	
50.6%	0	1,076	1,076	
51.9%	0	1,071	1,071	
53.1%	0	1,058	1,058	
54.3%	0	1,033	1,033	
55.6%	0	1,015	1,015	
56.8%	0	1,009	1,009	
58.0%	0	1,007	1,007	
59.3%	0	1,001	1,001	
60.5%	0	987	987	
61.7%	0	987	987	
63.0%	0	982	982	
64.2%	0	975	975	
65.4%	0	966	966	
66.7%	0	930	930	
67.9%	0	913	913	
69.1%	0	817	817	
70.4%	0	814	814	
71.6%	0	813	813	
72.8%	0	775	775	
74.1%	0	726	726	
75.3%	0	725	725	
76.5%	0	701	701	
77.8%	0	626	626	
79.0%	0	564	564	
80.2%	0	522	522	
81.5%	0	518	518	
82.7%	0	504	504	
84.0%	0	495	495	
85.2%	0	408	408	
86.4%	0	374	374	
87.7%	0	371	371	
88.9%	0	366	366	
90.1%	0	362	362	
91.4%	0	340	340	
92.6%	0	333	333	
93.8%	0	287	287	
95.1%	0	266	266	
96.3%	0	209	209	
97.5%	0	137	137	
98.8%	0	128	128	
100.0%	0	110	110	

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,805	1,805	
12.3%	0	1,802	1,802	
13.6%	0	1,772	1,772	
14.8%	0	1,685	1,685	
16.0%	0	1,677	1,677	
17.3%	0	1,652	1,652	
18.5%	0	1,633	1,633	
19.8%	0	1,610	1,610	
21.0%	0	1,607	1,607	
22.2%	0	1,571	1,571	
23.5%	0	1,570	1,570	
24.7%	0	1,462	1,462	
25.9%	0	1,446	1,446	
27.2%	0	1,438	1,438	
28.4%	0	1,436	1,436	
29.6%	0	1,418	1,418	
30.9%	0	1,413	1,413	
32.1%	0	1,367	1,367	
33.3%	0	1,360	1,360	
34.6%	0	1,355	1,355	
35.8%	0	1,348	1,348	
37.0%	0	1,339	1,339	
38.3%	0	1,325	1,325	
39.5%	0	1,308	1,308	
40.7%	0	1,259	1,259	
42.0%	0	1,242	1,242	
43.2%	0	1,239	1,239	
44.4%	0	1,234	1,234	
45.7%	0	1,229	1,229	
46.9%	0	1,223	1,223	
48.1%	0	1,206	1,206	
49.4%	0	1,174	1,174	
50.6%	0	1,170	1,170	
51.9%	0	1,147	1,147	
53.1%	0	1,143	1,143	
54.3%	0	1,141	1,141	
55.6%	0	1,081	1,081	
56.8%	0	1,067	1,067	
58.0%	0	1,036	1,036	
59.3%	0	1,017	1,017	
60.5%	0	1,015	1,015	
61.7%	0	1,013	1,013	
63.0%	0	1,001	1,001	
64.2%	0	989	989	
65.4%	0	977	977	
66.7%	0	970	970	
67.9%	0	931	931	
69.1%	0	905	905	
70.4%	0	827	827	
71.6%	0	819	819	
72.8%	0	783	783	
74.1%	0	775	775	
75.3%	0	729	729	
76.5%	0	726	726	
77.8%	0	703	703	
79.0%	0	661	661	
80.2%	0	632	632	
81.5%	0	606	606	
82.7%	0	576	576	
84.0%	0	520	520	
85.2%	0	503	503	
86.4%	0	492	492	
87.7%	0	475	475	
88.9%	0	427	427	
90.1%	0	409	409	
91.4%	0	406	406	
92.6%	0	392	392	
93.8%	0	372	372	
95.1%	0	348	348	
96.3%	0	341	341	
97.5%	0	333	333	
98.8%	0	328	328	
100.0%	0	214	214	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,804	1,804	
17.3%	0	1,803	1,803	
18.5%	0	1,802	1,802	
19.8%	0	1,802	1,802	
21.0%	0	1,802	1,802	
22.2%	0	1,734	1,734	
23.5%	0	1,694	1,694	
24.7%	0	1,693	1,693	
25.9%	0	1,686	1,686	
27.2%	0	1,668	1,668	
28.4%	0	1,616	1,616	
29.6%	0	1,615	1,615	
30.9%	0	1,598	1,598	
32.1%	0	1,582	1,582	
33.3%	0	1,571	1,571	
34.6%	0	1,570	1,570	
35.8%	0	1,566	1,566	
37.0%	0	1,511	1,511	
38.3%	0	1,502	1,502	
39.5%	0	1,497	1,497	
40.7%	0	1,487	1,487	
42.0%	0	1,447	1,447	
43.2%	0	1,439	1,439	
44.4%	0	1,419	1,419	
45.7%	0	1,415	1,415	
46.9%	0	1,397	1,397	
48.1%	0	1,366	1,366	
49.4%	0	1,341	1,341	
50.6%	0	1,319	1,319	
51.9%	0	1,280	1,280	
53.1%	0	1,274	1,274	
54.3%	0	1,244	1,244	
55.6%	0	1,238	1,238	
56.8%	0	1,232	1,232	
58.0%	0	1,232	1,232	
59.3%	0	1,227	1,227	
60.5%	0	1,225	1,225	
61.7%	0	1,209	1,209	
63.0%	0	1,205	1,205	
64.2%	0	1,115	1,115	
65.4%	0	1,089	1,089	
66.7%	0	1,069	1,069	
67.9%	0	1,055	1,055	
69.1%	0	1,043	1,043	
70.4%	0	994	994	
71.6%	0	990	990	
72.8%	0	988	988	
74.1%	0	888	888	
75.3%	0	851	851	
76.5%	0	838	838	
77.8%	0	787	787	
79.0%	0	784	784	
80.2%	0	770	770	
81.5%	0	723	723	
82.7%	0	652	652	
84.0%	0	641	641	
85.2%	0	628	628	
86.4%	0	612	612	
87.7%	0	611	611	
88.9%	0	597	597	
90.1%	0	538	538	
91.4%	0	528	528	
92.6%	0	522	522	
93.8%	0	491	491	
95.1%	0	440	440	
96.3%	0	429	429	
97.5%	0	405	405	
98.8%	0	351	351	
100.0%	0	336	336	

Table OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,807	1,807	
25.9%	0	1,805	1,805	
27.2%	0	1,804	1,804	
28.4%	0	1,801	1,801	
29.6%	0	1,801	1,801	
30.9%	0	1,790	1,790	
32.1%	0	1,784	1,784	
33.3%	0	1,780	1,780	
34.6%	0	1,773	1,773	
35.8%	0	1,747	1,747	
37.0%	0	1,722	1,722	
38.3%	0	1,712	1,712	
39.5%	0	1,707	1,707	
40.7%	0	1,694	1,694	
42.0%	0	1,674	1,674	
43.2%	0	1,666	1,666	
44.4%	0	1,653	1,653	
45.7%	0	1,646	1,646	
46.9%	0	1,579	1,579	
48.1%	0	1,542	1,542	
49.4%	0	1,540	1,540	
50.6%	0	1,531	1,531	
51.9%	0	1,507	1,507	
53.1%	0	1,495	1,495	
54.3%	0	1,486	1,486	
55.6%	0	1,480	1,480	
56.8%	0	1,453	1,453	
58.0%	0	1,427	1,427	
59.3%	0	1,409	1,409	
60.5%	0	1,383	1,383	
61.7%	0	1,370	1,370	
63.0%	0	1,365	1,365	
64.2%	0	1,252	1,252	
65.4%	0	1,242	1,242	
66.7%	0	1,241	1,241	
67.9%	0	1,226	1,226	
69.1%	0	1,213	1,213	
70.4%	0	1,192	1,192	
71.6%	0	1,188	1,188	
72.8%	0	1,148	1,148	
74.1%	0	1,115	1,115	
75.3%	0	1,077	1,077	
76.5%	0	1,005	1,005	
77.8%	0	889	889	
79.0%	0	887	887	
80.2%	0	884	884	
81.5%	0	871	871	
82.7%	0	852	852	
84.0%	0	831	831	
85.2%	0	796	796	
86.4%	0	739	739	
87.7%	0	735	735	
88.9%	0	707	707	
90.1%	0	666	666	
91.4%	0	634	634	
92.6%	0	605	605	
93.8%	0	575	575	
95.1%	0	534	534	
96.3%	0	462	462	
97.5%	0	455	455	
98.8%	0	453	453	
100.0%	0	417	417	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,810	1,810	
25.9%	0	1,810	1,810	
27.2%	0	1,810	1,810	
28.4%	0	1,810	1,810	
29.6%	0	1,810	1,810	
30.9%	0	1,810	1,810	
32.1%	0	1,810	1,810	
33.3%	0	1,810	1,810	
34.6%	0	1,810	1,810	
35.8%	0	1,810	1,810	
37.0%	0	1,810	1,810	
38.3%	0	1,810	1,810	
39.5%	0	1,810	1,810	
40.7%	0	1,810	1,810	
42.0%	0	1,810	1,810	
43.2%	0	1,810	1,810	
44.4%	0	1,810	1,810	
45.7%	0	1,810	1,810	
46.9%	0	1,810	1,810	
48.1%	0	1,786	1,786	
49.4%	0	1,785	1,785	
50.6%	0	1,785	1,785	
51.9%	0	1,784	1,784	
53.1%	0	1,761	1,761	
54.3%	0	1,730	1,730	
55.6%	0	1,724	1,724	
56.8%	0	1,688	1,688	
58.0%	0	1,619	1,619	
59.3%	0	1,565	1,565	
60.5%	0	1,552	1,552	
61.7%	0	1,529	1,529	
63.0%	0	1,495	1,495	
64.2%	0	1,476	1,476	
65.4%	0	1,453	1,453	
66.7%	0	1,449	1,449	
67.9%	0	1,407	1,407	
69.1%	0	1,377	1,377	
70.4%	0	1,373	1,373	
71.6%	0	1,324	1,324	
72.8%	0	1,246	1,246	
74.1%	0	1,211	1,211	
75.3%	0	1,207	1,207	
76.5%	0	1,196	1,196	
77.8%	0	1,181	1,181	
79.0%	0	1,171	1,171	
80.2%	0	1,074	1,074	
81.5%	0	1,047	1,047	
82.7%	0	1,018	1,018	
84.0%	0	993	993	
85.2%	0	909	909	
86.4%	0	898	898	
87.7%	0	853	853	
88.9%	0	840	840	
90.1%	0	827	827	
91.4%	0	785	785	
92.6%	0	774	774	
93.8%	0	735	735	
95.1%	0	717	717	
96.3%	0	699	699	
97.5%	0	674	674	
98.8%	0	672	672	
100.0%	0	519	519	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,810	1,810	
25.9%	0	1,810	1,810	
27.2%	0	1,810	1,810	
28.4%	0	1,810	1,810	
29.6%	0	1,810	1,810	
30.9%	0	1,801	1,801	
32.1%	0	1,801	1,801	
33.3%	0	1,799	1,799	
34.6%	0	1,794	1,794	
35.8%	0	1,793	1,793	
37.0%	0	1,792	1,792	
38.3%	0	1,791	1,791	
39.5%	0	1,791	1,791	
40.7%	0	1,784	1,784	
42.0%	0	1,784	1,784	
43.2%	0	1,774	1,774	
44.4%	0	1,771	1,771	
45.7%	0	1,770	1,770	
46.9%	0	1,769	1,769	
48.1%	0	1,767	1,767	
49.4%	0	1,764	1,764	
50.6%	0	1,762	1,762	
51.9%	0	1,733	1,733	
53.1%	0	1,729	1,729	
54.3%	0	1,714	1,714	
55.6%	0	1,710	1,710	
56.8%	0	1,687	1,687	
58.0%	0	1,673	1,673	
59.3%	0	1,659	1,659	
60.5%	0	1,585	1,585	
61.7%	0	1,574	1,574	
63.0%	0	1,531	1,531	
64.2%	0	1,509	1,509	
65.4%	0	1,486	1,486	
66.7%	0	1,456	1,456	
67.9%	0	1,432	1,432	
69.1%	0	1,415	1,415	
70.4%	0	1,352	1,352	
71.6%	0	1,316	1,316	
72.8%	0	1,314	1,314	
74.1%	0	1,185	1,185	
75.3%	0	1,160	1,160	
76.5%	0	1,137	1,137	
77.8%	0	1,127	1,127	
79.0%	0	1,113	1,113	
80.2%	0	1,025	1,025	
81.5%	0	977	977	
82.7%	0	972	972	
84.0%	0	932	932	
85.2%	0	926	926	
86.4%	0	919	919	
87.7%	0	880	880	
88.9%	0	875	875	
90.1%	0	816	816	
91.4%	0	800	800	
92.6%	0	796	796	
93.8%	0	768	768	
95.1%	0	739	739	
96.3%	0	691	691	
97.5%	0	647	647	
98.8%	0	594	594	
100.0%	0	461	461	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,778	1,778	
12.3%	0	1,777	1,777	
13.6%	0	1,777	1,777	
14.8%	0	1,772	1,772	
16.0%	0	1,769	1,769	
17.3%	0	1,769	1,769	
18.5%	0	1,768	1,768	
19.8%	0	1,768	1,768	
21.0%	0	1,768	1,768	
22.2%	0	1,766	1,766	
23.5%	0	1,765	1,765	
24.7%	0	1,764	1,764	
25.9%	0	1,761	1,761	
27.2%	0	1,759	1,759	
28.4%	0	1,756	1,756	
29.6%	0	1,755	1,755	
30.9%	0	1,752	1,752	
32.1%	0	1,752	1,752	
33.3%	0	1,751	1,751	
34.6%	0	1,747	1,747	
35.8%	0	1,745	1,745	
37.0%	0	1,741	1,741	
38.3%	0	1,738	1,738	
39.5%	0	1,734	1,734	
40.7%	0	1,732	1,732	
42.0%	0	1,730	1,730	
43.2%	0	1,729	1,729	
44.4%	0	1,725	1,725	
45.7%	0	1,721	1,721	
46.9%	0	1,720	1,720	
48.1%	0	1,718	1,718	
49.4%	0	1,718	1,718	
50.6%	0	1,713	1,713	
51.9%	0	1,704	1,704	
53.1%	0	1,696	1,696	
54.3%	0	1,693	1,693	
55.6%	0	1,688	1,688	
56.8%	0	1,672	1,672	
58.0%	0	1,604	1,604	
59.3%	0	1,596	1,596	
60.5%	0	1,566	1,566	
61.7%	0	1,547	1,547	
63.0%	0	1,499	1,499	
64.2%	0	1,471	1,471	
65.4%	0	1,434	1,434	
66.7%	0	1,430	1,430	
67.9%	0	1,419	1,419	
69.1%	0	1,385	1,385	
70.4%	0	1,330	1,330	
71.6%	0	1,299	1,299	
72.8%	0	1,293	1,293	
74.1%	0	1,284	1,284	
75.3%	0	1,148	1,148	
76.5%	0	1,128	1,128	
77.8%	0	1,048	1,048	
79.0%	0	1,038	1,038	
80.2%	0	1,019	1,019	
81.5%	0	1,003	1,003	
82.7%	0	887	887	
84.0%	0	857	857	
85.2%	0	852	852	
86.4%	0	846	846	
87.7%	0	837	837	
88.9%	0	835	835	
90.1%	0	770	770	
91.4%	0	762	762	
92.6%	0	681	681	
93.8%	0	670	670	
95.1%	0	590	590	
96.3%	0	587	587	
97.5%	0	511	511	
98.8%	0	500	500	
100.0%	0	428	428	

Table OP-09-b

Sites Reservoir, End of Month Storage

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,806	1,806	
7.4%	0	1,801	1,801	
8.6%	0	1,801	1,801	
9.9%	0	1,800	1,800	
11.1%	0	1,786	1,786	
12.3%	0	1,766	1,766	
13.6%	0	1,737	1,737	
14.8%	0	1,729	1,729	
16.0%	0	1,721	1,721	
17.3%	0	1,719	1,719	
18.5%	0	1,709	1,709	
19.8%	0	1,701	1,701	
21.0%	0	1,695	1,695	
22.2%	0	1,694	1,694	
23.5%	0	1,693	1,693	
24.7%	0	1,688	1,688	
25.9%	0	1,685	1,685	
27.2%	0	1,679	1,679	
28.4%	0	1,669	1,669	
29.6%	0	1,665	1,665	
30.9%	0	1,640	1,640	
32.1%	0	1,619	1,619	
33.3%	0	1,615	1,615	
34.6%	0	1,609	1,609	
35.8%	0	1,608	1,608	
37.0%	0	1,588	1,588	
38.3%	0	1,581	1,581	
39.5%	0	1,575	1,575	
40.7%	0	1,574	1,574	
42.0%	0	1,572	1,572	
43.2%	0	1,571	1,571	
44.4%	0	1,565	1,565	
45.7%	0	1,564	1,564	
46.9%	0	1,563	1,563	
48.1%	0	1,559	1,559	
49.4%	0	1,554	1,554	
50.6%	0	1,554	1,554	
51.9%	0	1,553	1,553	
53.1%	0	1,537	1,537	
54.3%	0	1,532	1,532	
55.6%	0	1,512	1,512	
56.8%	0	1,493	1,493	
58.0%	0	1,476	1,476	
59.3%	0	1,468	1,468	
60.5%	0	1,463	1,463	
61.7%	0	1,443	1,443	
63.0%	0	1,433	1,433	
64.2%	0	1,425	1,425	
65.4%	0	1,412	1,412	
66.7%	0	1,398	1,398	
67.9%	0	1,307	1,307	
69.1%	0	1,270	1,270	
70.4%	0	1,192	1,192	
71.6%	0	1,182	1,182	
72.8%	0	1,130	1,130	
74.1%	0	1,115	1,115	
75.3%	0	1,097	1,097	
76.5%	0	1,052	1,052	
77.8%	0	936	936	
79.0%	0	908	908	
80.2%	0	889	889	
81.5%	0	889	889	
82.7%	0	819	819	
84.0%	0	811	811	
85.2%	0	745	745	
86.4%	0	724	724	
87.7%	0	717	717	
88.9%	0	702	702	
90.1%	0	674	674	
91.4%	0	645	645	
92.6%	0	604	604	
93.8%	0	576	576	
95.1%	0	528	528	
96.3%	0	437	437	
97.5%	0	358	358	
98.8%	0	333	333	
100.0%	0	327	327	

July				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,804	1,804	
4.9%	0	1,799	1,799	
6.2%	0	1,753	1,753	
7.4%	0	1,750	1,750	
8.6%	0	1,748	1,748	
9.9%	0	1,737	1,737	
11.1%	0	1,735	1,735	
12.3%	0	1,708	1,708	
13.6%	0	1,658	1,658	
14.8%	0	1,655	1,655	
16.0%	0	1,654	1,654	
17.3%	0	1,649	1,649	
18.5%	0	1,646	1,646	
19.8%	0	1,642	1,642	
21.0%	0	1,620	1,620	
22.2%	0	1,596	1,596	
23.5%	0	1,594	1,594	
24.7%	0	1,563	1,563	
25.9%	0	1,553	1,553	
27.2%	0	1,549	1,549	
28.4%	0	1,547	1,547	
29.6%	0	1,541	1,541	
30.9%	0	1,516	1,516	
32.1%	0	1,507	1,507	
33.3%	0	1,503	1,503	
34.6%	0	1,491	1,491	
35.8%	0	1,481	1,481	
37.0%	0	1,458	1,458	
38.3%	0	1,450	1,450	
39.5%	0	1,431	1,431	
40.7%	0	1,427	1,427	
42.0%	0	1,397	1,397	
43.2%	0	1,393	1,393	
44.4%	0	1,391	1,391	
45.7%	0	1,382	1,382	
46.9%	0	1,380	1,380	
48.1%	0	1,377	1,377	
49.4%	0	1,374	1,374	
50.6%	0	1,374	1,374	
51.9%	0	1,372	1,372	
53.1%	0	1,367	1,367	
54.3%	0	1,362	1,362	
55.6%	0	1,358	1,358	
56.8%	0	1,353	1,353	
58.0%	0	1,352	1,352	
59.3%	0	1,337	1,337	
60.5%	0	1,332	1,332	
61.7%	0	1,323	1,323	
63.0%	0	1,315	1,315	
64.2%	0	1,292	1,292	
65.4%	0	1,246	1,246	
66.7%	0	1,208	1,208	
67.9%	0	1,191	1,191	
69.1%	0	1,071	1,071	
70.4%	0	1,065	1,065	
71.6%	0	1,037	1,037	
72.8%	0	934	934	
74.1%	0	918	918	
75.3%	0	906	906	
76.5%	0	899	899	
77.8%	0	823	823	
79.0%	0	791	791	
80.2%	0	773	773	
81.5%	0	759	759	
82.7%	0	746	746	
84.0%	0	745	745	
85.2%	0	675	675	
86.4%	0	627	627	
87.7%	0	601	601	
88.9%	0	574	574	
90.1%	0	557	557	
91.4%	0	547	547	
92.6%	0	531	531	
93.8%	0	424	424	
95.1%	0	404	404	
96.3%	0	316	316	
97.5%	0	285	285	
98.8%	0	284	284	
100.0%	0	251	251	

August				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,752	1,752	
4.9%	0	1,749	1,749	
6.2%	0	1,726	1,726	
7.4%	0	1,723	1,723	
8.6%	0	1,712	1,712	
9.9%	0	1,706	1,706	
11.1%	0	1,678	1,678	
12.3%	0	1,668	1,668	
13.6%	0	1,653	1,653	
14.8%	0	1,649	1,649	
16.0%	0	1,643	1,643	
17.3%	0	1,638	1,638	
18.5%	0	1,633	1,633	
19.8%	0	1,614	1,614	
21.0%	0	1,613	1,613	
22.2%	0	1,566	1,566	
23.5%	0	1,542	1,542	
24.7%	0	1,510	1,510	
25.9%	0	1,490	1,490	
27.2%	0	1,486	1,486	
28.4%	0	1,482	1,482	
29.6%	0	1,465	1,465	
30.9%	0	1,452	1,452	
32.1%	0	1,412	1,412	
33.3%	0	1,411	1,411	
34.6%	0	1,396	1,396	
35.8%	0	1,394	1,394	
37.0%	0	1,375	1,375	
38.3%	0	1,362	1,362	
39.5%	0	1,353	1,353	
40.7%	0	1,350	1,350	
42.0%	0	1,347	1,347	
43.2%	0	1,345	1,345	
44.4%	0	1,344	1,344	
45.7%	0	1,342	1,342	
46.9%	0	1,334	1,334	
48.1%	0	1,328	1,328	
49.4%	0	1,316	1,316	
50.6%	0	1,267	1,267	
51.9%	0	1,264	1,264	
53.1%	0	1,245	1,245	
54.3%	0	1,243	1,243	
55.6%	0	1,234	1,234	
56.8%	0	1,195	1,195	
58.0%	0	1,195	1,195	
59.3%	0	1,190	1,190	
60.5%	0	1,186	1,186	
61.7%	0	1,183	1,183	
63.0%	0	1,180	1,180	
64.2%	0	1,153	1,153	
65.4%	0	1,135	1,135	
66.7%	0	1,119	1,119	
67.9%	0	1,078	1,078	
69.1%	0	1,004	1,004	
70.4%	0	992	992	
71.6%	0	936	936	
72.8%	0	789	789	
74.1%	0	779	779	
75.3%	0	765	765	
76.5%	0	758	758	
77.8%	0	739	739	
79.0%	0	729	729	
80.2%	0	678	678	
81.5%	0	667	667	
82.7%	0	656	656	
84.0%	0	611	611	
85.2%	0	590	590	
86.4%	0	587	587	
87.7%	0	526	526	
88.9%	0	482	482	
90.1%	0	397	397	
91.4%	0	387	387	
92.6%	0	381	381	
93.8%	0	372	372	
95.1%	0	291	291	
96.3%	0	227	227	
97.5%	0	188	188	
98.8%	0	165	165	
100.0%	0	154	154	

September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,727	1,727	
1.2%	0	1,710	1,710	
2.5%	0	1,701	1,701	
3.7%	0	1,691	1,691	
4.9%	0	1,685	1,685	
6.2%	0	1,666	1,666	
7.4%	0	1,663	1,663	
8.6%	0	1,661	1,661	
9.9%	0	1,658	1,658	
11.1%	0	1,620	1,620	
12.3%	0	1,613	1,613	
13.6%	0	1,600	1,600	
14.8%	0	1,591	1,591	
16.0%	0	1,577	1,577	
17.3%	0	1,567	1,567	
18.5%	0	1,531	1,531	
19.8%	0	1,530	1,530	
21.0%	0	1,520	1,520	
22.2%	0	1,489	1,489	
23.5%	0	1,485	1,485	
24.7%	0	1,480	1,480	
25.9%	0	1,465	1,465	
27.2%	0	1,404	1,404	
28.4%	0	1,377	1,377	
29.6%	0	1,368	1,368	
30.9%	0	1,349	1,349	
32.1%	0	1,345	1,345	
33.3%	0	1,328	1,328	
34.6%	0	1,321	1,321	
35.8%	0	1,287	1,287	
37.0%	0	1,286	1,286	
38.3%	0	1,286	1,286	
39.5%	0	1,285	1,285	
40.7%	0	1,281	1,281	
42.0%	0	1,264	1,264	
43.2%	0	1,231	1,231	
44.4%	0	1,229	1,229	
45.7%	0	1,228	1,228	
46.9%	0	1,222	1,222	
48.1%	0	1,218	1,218	
49.4%	0	1,190	1,190	
50.6%	0	1,164	1,164	
51.9%	0	1,160	1,160	
53.1%	0	1,142	1,142	
54.3%	0	1,127	1,127	
55.6%	0	1,126	1,126	
56.8%	0	1,123	1,123	
58.0%	0	1,097	1,097	
59.3%	0	1,095	1,095	
60.5%	0	1,093	1,093	
61.7%	0	1,083	1,083	
63.0%	0	1,081	1,081	
64.2%	0	1,046	1,046	
65.4%	0	1,021	1,021	
66.7%	0	1,013	1,013	
67.9%	0	988	988	
69.1%	0	957	957	
70.4%	0	939	939	
71.6%	0	886	886	
72.8%	0	747	747	
74.1%	0	745	745	
75.3%	0	729	729	
76.5%	0	677	677	
77.8%	0	670	670	
79.0%	0	654	654	
80.2%	0	617	617	
81.5%	0	608	608	
82.7%	0	596	596	
84.0%	0	534	534	
85.2%	0	507	507	
86.4%	0	486	486	
87.7%	0	484	484	
88.9%	0	418	418	
90.1%	0	356	356	
91.4%	0	344	344	
92.6%	0	339	339	
93.8%	0	298	298	
95.1%	0	266	266	
96.3%	0	211	211	
97.5%	0	162	162	
98.8%	0	143	143	
100.0%	0	129	129	

Figure OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

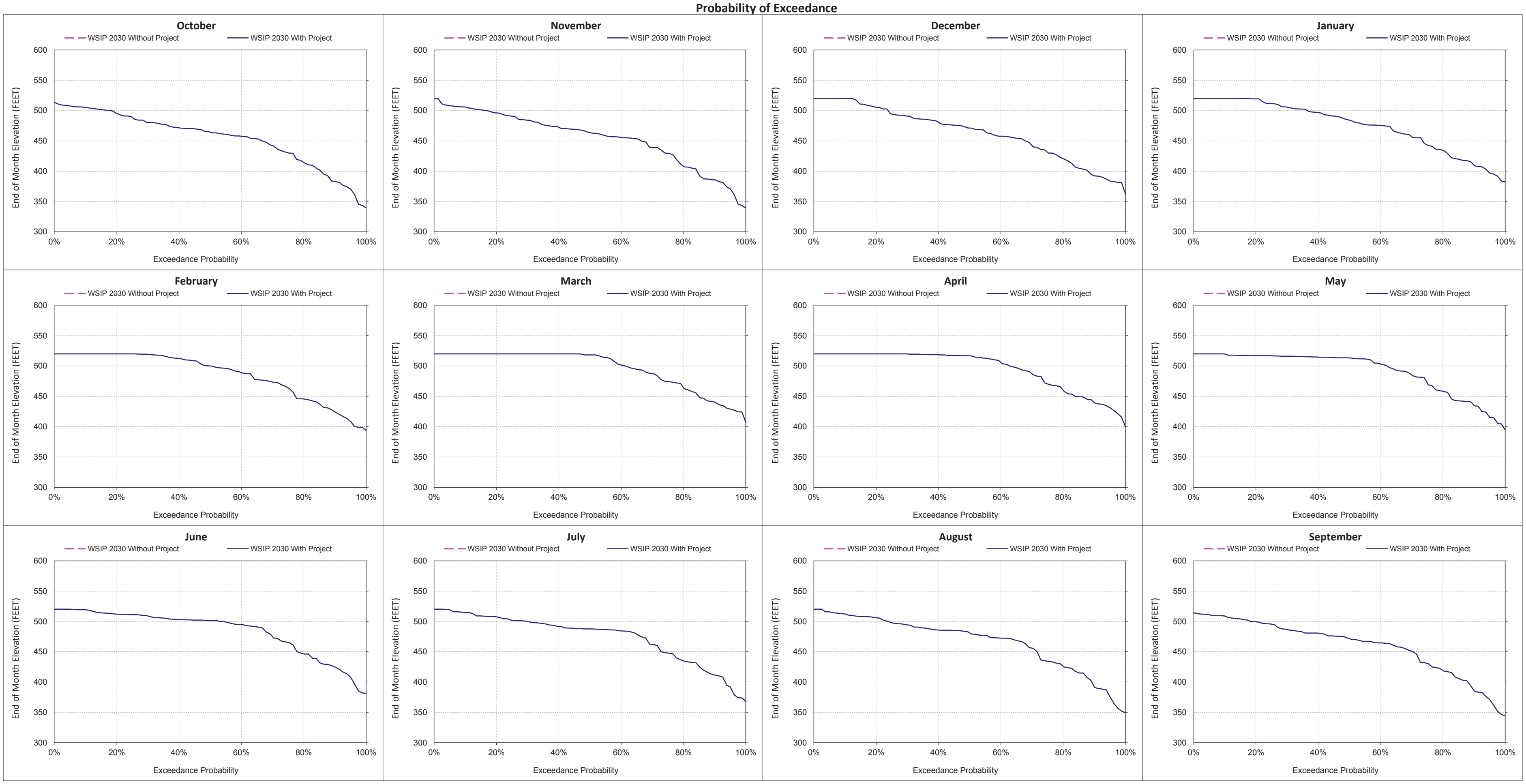


Table OP-10-b

Sites Reservoir, End of Month Elevation

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	513	513	
1.2%	0	511	511	
2.5%	0	509	509	
3.7%	0	509	509	
4.9%	0	508	508	
6.2%	0	507	507	
7.4%	0	506	506	
8.6%	0	506	506	
9.9%	0	505	505	
11.1%	0	504	504	
12.3%	0	503	503	
13.6%	0	503	503	
14.8%	0	502	502	
16.0%	0	501	501	
17.3%	0	500	500	
18.5%	0	500	500	
19.8%	0	496	496	
21.0%	0	493	493	
22.2%	0	491	491	
23.5%	0	491	491	
24.7%	0	490	490	
25.9%	0	485	485	
27.2%	0	484	484	
28.4%	0	484	484	
29.6%	0	480	480	
30.9%	0	480	480	
32.1%	0	480	480	
33.3%	0	479	479	
34.6%	0	477	477	
35.8%	0	477	477	
37.0%	0	474	474	
38.3%	0	473	473	
39.5%	0	472	472	
40.7%	0	471	471	
42.0%	0	471	471	
43.2%	0	471	471	
44.4%	0	470	470	
45.7%	0	469	469	
46.9%	0	469	469	
48.1%	0	466	466	
49.4%	0	466	466	
50.6%	0	464	464	
51.9%	0	463	463	
53.1%	0	462	462	
54.3%	0	461	461	
55.6%	0	461	461	
56.8%	0	459	459	
58.0%	0	458	458	
59.3%	0	458	458	
60.5%	0	457	457	
61.7%	0	457	457	
63.0%	0	454	454	
64.2%	0	454	454	
65.4%	0	453	453	
66.7%	0	450	450	
67.9%	0	448	448	
69.1%	0	444	444	
70.4%	0	442	442	
71.6%	0	436	436	
72.8%	0	434	434	
74.1%	0	431	431	
75.3%	0	430	430	
76.5%	0	430	430	
77.8%	0	419	419	
79.0%	0	418	418	
80.2%	0	414	414	
81.5%	0	411	411	
82.7%	0	410	410	
84.0%	0	405	405	
85.2%	0	402	402	
86.4%	0	395	395	
87.7%	0	392	392	
88.9%	0	384	384	
90.1%	0	383	383	
91.4%	0	382	382	
92.6%	0	377	377	
93.8%	0	374	374	
95.1%	0	371	371	
96.3%	0	362	362	
97.5%	0	345	345	
98.8%	0	344	344	
100.0%	0	339	339	

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	511	511	
3.7%	0	509	509	
4.9%	0	508	508	
6.2%	0	507	507	
7.4%	0	507	507	
8.6%	0	506	506	
9.9%	0	506	506	
11.1%	0	505	505	
12.3%	0	503	503	
13.6%	0	502	502	
14.8%	0	501	501	
16.0%	0	501	501	
17.3%	0	500	500	
18.5%	0	498	498	
19.8%	0	496	496	
21.0%	0	496	496	
22.2%	0	493	493	
23.5%	0	492	492	
24.7%	0	491	491	
25.9%	0	490	490	
27.2%	0	485	485	
28.4%	0	485	485	
29.6%	0	484	484	
30.9%	0	484	484	
32.1%	0	481	481	
33.3%	0	481	481	
34.6%	0	477	477	
35.8%	0	476	476	
37.0%	0	475	475	
38.3%	0	474	474	
39.5%	0	474	474	
40.7%	0	471	471	
42.0%	0	471	471	
43.2%	0	470	470	
44.4%	0	469	469	
45.7%	0	469	469	
46.9%	0	468	468	
48.1%	0	467	467	
49.4%	0	464	464	
50.6%	0	463	463	
51.9%	0	463	463	
53.1%	0	461	461	
54.3%	0	459	459	
55.6%	0	458	458	
56.8%	0	457	457	
58.0%	0	457	457	
59.3%	0	456	456	
60.5%	0	455	455	
61.7%	0	455	455	
63.0%	0	455	455	
64.2%	0	454	454	
65.4%	0	453	453	
66.7%	0	450	450	
67.9%	0	448	448	
69.1%	0	439	439	
70.4%	0	439	439	
71.6%	0	439	439	
72.8%	0	435	435	
74.1%	0	430	430	
75.3%	0	430	430	
76.5%	0	427	427	
77.8%	0	419	419	
79.0%	0	412	412	
80.2%	0	407	407	
81.5%	0	407	407	
82.7%	0	405	405	
84.0%	0	404	404	
85.2%	0	392	392	
86.4%	0	388	388	
87.7%	0	387	387	
88.9%	0	386	386	
90.1%	0	386	386	
91.4%	0	383	383	
92.6%	0	382	382	
93.8%	0	374	374	
95.1%	0	371	371	
96.3%	0	361	361	
97.5%	0	346	346	
98.8%	0	344	344	
100.0%	0	339	339	

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	517	517	
14.8%	0	511	511	
16.0%	0	510	510	
17.3%	0	509	509	
18.5%	0	507	507	
19.8%	0	506	506	
21.0%	0	505	505	
22.2%	0	503	503	
23.5%	0	503	503	
24.7%	0	494	494	
25.9%	0	493	493	
27.2%	0	493	493	
28.4%	0	492	492	
29.6%	0	491	491	
30.9%	0	491	491	
32.1%	0	487	487	
33.3%	0	486	486	
34.6%	0	486	486	
35.8%	0	486	486	
37.0%	0	485	485	
38.3%	0	484	484	
39.5%	0	482	482	
40.7%	0	478	478	
42.0%	0	477	477	
43.2%	0	477	477	
44.4%	0	476	476	
45.7%	0	476	476	
46.9%	0	475	475	
48.1%	0	474	474	
49.4%	0	471	471	
50.6%	0	471	471	
51.9%	0	469	469	
53.1%	0	469	469	
54.3%	0	469	469	
55.6%	0	463	463	
56.8%	0	462	462	
58.0%	0	460	460	
59.3%	0	458	458	
60.5%	0	458	458	
61.7%	0	457	457	
63.0%	0	456	456	
64.2%	0	455	455	
65.4%	0	454	454	
66.7%	0	453	453	
67.9%	0	450	450	
69.1%	0	447	447	
70.4%	0	440	440	
71.6%	0	439	439	
72.8%	0	436	436	
74.1%	0	435	435	
75.3%	0	430	430	
76.5%	0	430	430	
77.8%	0	427	427	
79.0%	0	423	423	
80.2%	0	420	420	
81.5%	0	417	417	
82.7%	0	413	413	
84.0%	0	407	407	
85.2%	0	405	405	
86.4%	0	404	404	
87.7%	0	402	402	
88.9%	0	395	395	
90.1%	0	392	392	
91.4%	0	392	392	
92.6%	0	390	390	
93.8%	0	387	387	
95.1%	0	384	384	
96.3%	0	383	383	
97.5%	0	382	382	
98.8%	0	381	381	
100.0%	0	362	362	

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	515	515	
23.5%	0	512	512	
24.7%	0	512	512	
25.9%	0	511	511	
27.2%	0	510	510	
28.4%	0	506	506	
29.6%	0	506	506	
30.9%	0	505	505	
32.1%	0	504	504	
33.3%	0	503	503	
34.6%	0	503	503	
35.8%	0	502	502	
37.0%	0	498	498	
38.3%	0	498	498	
39.5%	0	497	497	
40.7%	0	496	496	
42.0%	0	493	493	
43.2%	0	493	493	
44.4%	0	491	491	
45.7%	0	491	491	
46.9%	0	489	489	
48.1%	0	487	487	
49.4%	0	485	485	
50.6%	0	483	483	
51.9%	0	480	480	
53.1%	0	480	480	
54.3%	0	477	477	
55.6%	0	477	477	
56.8%	0	476	476	
58.0%	0	476	476	
59.3%	0	476	476	
60.5%	0	476	476	
61.7%	0	474	474	
63.0%	0	474	474	
64.2%	0	466	466	
65.4%	0	464	464	
66.7%	0	462	462	
67.9%	0	461	461	
69.1%	0	460	460	
70.4%	0	456	456	
71.6%	0	455	455	
72.8%	0	455	455	
74.1%	0	446	446	
75.3%	0	442	442	
76.5%	0	441	441	
77.8%	0	436	436	
79.0%	0	436	436	
80.2%	0	434	434	
81.5%	0	430	430	
82.7%	0	422	422	
84.0%	0	421	421	
85.2%	0	420	420	
86.4%	0	418	418	
87.7%	0	418	418	
88.9%	0	416	416	
90.1%	0	409	409	
91.4%	0	408	408	
92.6%	0	407	407	
93.8%	0	403	403	
95.1%	0	397	397	
96.3%	0	395	395	
97.5%	0	392	392	
98.8%	0	384	384	
100.0%	0	382	382	

Table OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	519	519	
32.1%	0	518	518	
33.3%	0	518	518	
34.6%	0	517	517	
35.8%	0	516	516	
37.0%	0	514	514	
38.3%	0	513	513	
39.5%	0	513	513	
40.7%	0	512	512	
42.0%	0	510	510	
43.2%	0	510	510	
44.4%	0	509	509	
45.7%	0	508	508	
46.9%	0	503	503	
48.1%	0	501	501	
49.4%	0	500	500	
50.6%	0	500	500	
51.9%	0	498	498	
53.1%	0	497	497	
54.3%	0	496	496	
55.6%	0	496	496	
56.8%	0	494	494	
58.0%	0	492	492	
59.3%	0	490	490	
60.5%	0	488	488	
61.7%	0	487	487	
63.0%	0	487	487	
64.2%	0	478	478	
65.4%	0	477	477	
66.7%	0	477	477	
67.9%	0	476	476	
69.1%	0	475	475	
70.4%	0	473	473	
71.6%	0	472	472	
72.8%	0	469	469	
74.1%	0	466	466	
75.3%	0	463	463	
76.5%	0	457	457	
77.8%	0	446	446	
79.0%	0	446	446	
80.2%	0	446	446	
81.5%	0	444	444	
82.7%	0	443	443	
84.0%	0	441	441	
85.2%	0	437	437	
86.4%	0	431	431	
87.7%	0	431	431	
88.9%	0	428	428	
90.1%	0	424	424	
91.4%	0	420	420	
92.6%	0	417	417	
93.8%	0	413	413	
95.1%	0	408	408	
96.3%	0	400	400	
97.5%	0	399	399	
98.8%	0	399	399	
100.0%	0	394	394	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	520	520	
32.1%	0	520	520	
33.3%	0	520	520	
34.6%	0	520	520	
35.8%	0	520	520	
37.0%	0	520	520	
38.3%	0	520	520	
39.5%	0	520	520	
40.7%	0	520	520	
42.0%	0	520	520	
43.2%	0	520	520	
44.4%	0	520	520	
45.7%	0	520	520	
46.9%	0	520	520	
48.1%	0	518	518	
49.4%	0	518	518	
50.6%	0	518	518	
51.9%	0	518	518	
53.1%	0	517	517	
54.3%	0	514	514	
55.6%	0	514	514	
56.8%	0	511	511	
58.0%	0	506	506	
59.3%	0	502	502	
60.5%	0	501	501	
61.7%	0	500	500	
63.0%	0	497	497	
64.2%	0	496	496	
65.4%	0	494	494	
66.7%	0	493	493	
67.9%	0	490	490	
69.1%	0	488	488	
70.4%	0	488	488	
71.6%	0	484	484	
72.8%	0	477	477	
74.1%	0	474	474	
75.3%	0	474	474	
76.5%	0	473	473	
77.8%	0	472	472	
79.0%	0	471	471	
80.2%	0	463	463	
81.5%	0	461	461	
82.7%	0	458	458	
84.0%	0	456	456	
85.2%	0	448	448	
86.4%	0	447	447	
87.7%	0	443	443	
88.9%	0	442	442	
90.1%	0	440	440	
91.4%	0	436	436	
92.6%	0	435	435	
93.8%	0	431	431	
95.1%	0	429	429	
96.3%	0	427	427	
97.5%	0	424	424	
98.8%	0	424	424	
100.0%	0	407	407	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	520	520	
32.1%	0	520	520	
33.3%	0	519	519	
34.6%	0	519	519	
35.8%	0	519	519	
37.0%	0	519	519	
38.3%	0	519	519	
39.5%	0	519	519	
40.7%	0	518	518	
42.0%	0	518	518	
43.2%	0	518	518	
44.4%	0	517	517	
45.7%	0	517	517	
46.9%	0	517	517	
48.1%	0	517	517	
49.4%	0	517	517	
50.6%	0	517	517	
51.9%	0	515	515	
53.1%	0	514	514	
54.3%	0	513	513	
55.6%	0	513	513	
56.8%	0	511	511	
58.0%	0	510	510	
59.3%	0	509	509	
60.5%	0	504	504	
61.7%	0	503	503	
63.0%	0	500	500	
64.2%	0	498	498	
65.4%	0	496	496	
66.7%	0	494	494	
67.9%	0	492	492	
69.1%	0	491	491	
70.4%	0	486	486	
71.6%	0	483	483	
72.8%	0	483	483	
74.1%	0	472	472	
75.3%	0	470	470	
76.5%	0	468	468	
77.8%	0	467	467	
79.0%	0	466	466	
80.2%	0	459	459	
81.5%	0	454	454	
82.7%	0	454	454	
84.0%	0	450	450	
85.2%	0	449	449	
86.4%	0	449	449	
87.7%	0	445	445	
88.9%	0	445	445	
90.1%	0	439	439	
91.4%	0	437	437	
92.6%	0	437	437	
93.8%	0	434	434	
95.1%	0	431	431	
96.3%	0	426	426	
97.5%	0	422	422	
98.8%	0	416	416	
100.0%	0	400	400	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	518	518	
12.3%	0	518	518	
13.6%	0	518	518	
14.8%	0	517	517	
16.0%	0	517	517	
17.3%	0	517	517	
18.5%	0	517	517	
19.8%	0	517	517	
21.0%	0	517	517	
22.2%	0	517	517	
23.5%	0	517	517	
24.7%	0	517	517	
25.9%	0	517	517	
27.2%	0	516	516	
28.4%	0	516	516	
29.6%	0	516	516	
30.9%	0	516	516	
32.1%	0	516	516	
33.3%	0	516	516	
34.6%	0	516	516	
35.8%	0	515	515	
37.0%	0	515	515	
38.3%	0	515	515	
39.5%	0	515	515	
40.7%	0	514	514	
42.0%	0	514	514	
43.2%	0	514	514	
44.4%	0	514	514	
45.7%	0	514	514	
46.9%	0	514	514	
48.1%	0	513	513	
49.4%	0	513	513	
50.6%	0	513	513	
51.9%	0	512	512	
53.1%	0	512	512	
54.3%	0	512	512	
55.6%	0	511	511	
56.8%	0	510	510	
58.0%	0	505	505	
59.3%	0	505	505	
60.5%	0	502	502	
61.7%	0	501	501	
63.0%	0	497	497	
64.2%	0	495	495	
65.4%	0	492	492	
66.7%	0	492	492	
67.9%	0	491	491	
69.1%	0	488	488	
70.4%	0	484	484	
71.6%	0	482	482	
72.8%	0	481	481	
74.1%	0	481	481	
75.3%	0	469	469	
76.5%	0	467	467	
77.8%	0	461	461	
79.0%	0	460	460	
80.2%	0	458	458	
81.5%	0	457	457	
82.7%	0	446	446	
84.0%	0	443	443	
85.2%	0	443	443	
86.4%	0	442	442	
87.7%	0	441	441	
88.9%	0	441	441	
90.1%	0	434	434	
91.4%	0	434	434	
92.6%	0	425	425	
93.8%	0	424	424	
95.1%	0	415	415	
96.3%	0	415	415	
97.5%	0	406	406	
98.8%	0	405	405	
100.0%	0	395	395	

Table OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	519	519	
8.6%	0	519	519	
9.9%	0	519	519	
11.1%	0	518	518	
12.3%	0	517	517	
13.6%	0	515	515	
14.8%	0	514	514	
16.0%	0	514	514	
17.3%	0	514	514	
18.5%	0	513	513	
19.8%	0	512	512	
21.0%	0	512	512	
22.2%	0	512	512	
23.5%	0	512	512	
24.7%	0	511	511	
25.9%	0	511	511	
27.2%	0	511	511	
28.4%	0	510	510	
29.6%	0	510	510	
30.9%	0	508	508	
32.1%	0	506	506	
33.3%	0	506	506	
34.6%	0	505	505	
35.8%	0	505	505	
37.0%	0	504	504	
38.3%	0	503	503	
39.5%	0	503	503	
40.7%	0	503	503	
42.0%	0	503	503	
43.2%	0	503	503	
44.4%	0	502	502	
45.7%	0	502	502	
46.9%	0	502	502	
48.1%	0	502	502	
49.4%	0	502	502	
50.6%	0	501	501	
51.9%	0	501	501	
53.1%	0	500	500	
54.3%	0	500	500	
55.6%	0	498	498	
56.8%	0	497	497	
58.0%	0	495	495	
59.3%	0	495	495	
60.5%	0	495	495	
61.7%	0	493	493	
63.0%	0	492	492	
64.2%	0	492	492	
65.4%	0	491	491	
66.7%	0	489	489	
67.9%	0	482	482	
69.1%	0	479	479	
70.4%	0	473	473	
71.6%	0	472	472	
72.8%	0	468	468	
74.1%	0	466	466	
75.3%	0	465	465	
76.5%	0	461	461	
77.8%	0	450	450	
79.0%	0	448	448	
80.2%	0	446	446	
81.5%	0	446	446	
82.7%	0	439	439	
84.0%	0	439	439	
85.2%	0	432	432	
86.4%	0	430	430	
87.7%	0	429	429	
88.9%	0	427	427	
90.1%	0	424	424	
91.4%	0	421	421	
92.6%	0	417	417	
93.8%	0	413	413	
95.1%	0	408	408	
96.3%	0	396	396	
97.5%	0	385	385	
98.8%	0	382	382	
100.0%	0	381	381	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	519	519	
6.2%	0	516	516	
7.4%	0	516	516	
8.6%	0	516	516	
9.9%	0	515	515	
11.1%	0	515	515	
12.3%	0	513	513	
13.6%	0	509	509	
14.8%	0	509	509	
16.0%	0	509	509	
17.3%	0	508	508	
18.5%	0	508	508	
19.8%	0	508	508	
21.0%	0	506	506	
22.2%	0	505	505	
23.5%	0	504	504	
24.7%	0	502	502	
25.9%	0	501	501	
27.2%	0	501	501	
28.4%	0	501	501	
29.6%	0	501	501	
30.9%	0	499	499	
32.1%	0	498	498	
33.3%	0	498	498	
34.6%	0	497	497	
35.8%	0	496	496	
37.0%	0	494	494	
38.3%	0	493	493	
39.5%	0	492	492	
40.7%	0	492	492	
42.0%	0	489	489	
43.2%	0	489	489	
44.4%	0	489	489	
45.7%	0	488	488	
46.9%	0	488	488	
48.1%	0	488	488	
49.4%	0	488	488	
50.6%	0	488	488	
51.9%	0	487	487	
53.1%	0	487	487	
54.3%	0	487	487	
55.6%	0	486	486	
56.8%	0	486	486	
58.0%	0	486	486	
59.3%	0	485	485	
60.5%	0	484	484	
61.7%	0	484	484	
63.0%	0	483	483	
64.2%	0	481	481	
65.4%	0	477	477	
66.7%	0	474	474	
67.9%	0	473	473	
69.1%	0	463	463	
70.4%	0	462	462	
71.6%	0	460	460	
72.8%	0	450	450	
74.1%	0	449	449	
75.3%	0	448	448	
76.5%	0	447	447	
77.8%	0	440	440	
79.0%	0	437	437	
80.2%	0	435	435	
81.5%	0	433	433	
82.7%	0	432	432	
84.0%	0	432	432	
85.2%	0	425	425	
86.4%	0	419	419	
87.7%	0	416	416	
88.9%	0	413	413	
90.1%	0	411	411	
91.4%	0	410	410	
92.6%	0	408	408	
93.8%	0	395	395	
95.1%	0	392	392	
96.3%	0	379	379	
97.5%	0	374	374	
98.8%	0	374	374	
100.0%	0	368	368	

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	516	516	
4.9%	0	516	516	
6.2%	0	514	514	
7.4%	0	514	514	
8.6%	0	513	513	
9.9%	0	513	513	
11.1%	0	511	511	
12.3%	0	510	510	
13.6%	0	509	509	
14.8%	0	508	508	
16.0%	0	508	508	
17.3%	0	508	508	
18.5%	0	507	507	
19.8%	0	506	506	
21.0%	0	506	506	
22.2%	0	502	502	
23.5%	0	501	501	
24.7%	0	498	498	
25.9%	0	497	497	
27.2%	0	496	496	
28.4%	0	496	496	
29.6%	0	495	495	
30.9%	0	494	494	
32.1%	0	491	491	
33.3%	0	490	490	
34.6%	0	489	489	
35.8%	0	489	489	
37.0%	0	488	488	
38.3%	0	487	487	
39.5%	0	486	486	
40.7%	0	486	486	
42.0%	0	485	485	
43.2%	0	485	485	
44.4%	0	485	485	
45.7%	0	485	485	
46.9%	0	484	484	
48.1%	0	484	484	
49.4%	0	483	483	
50.6%	0	479	479	
51.9%	0	479	479	
53.1%	0	477	477	
54.3%	0	477	477	
55.6%	0	476	476	
56.8%	0	473	473	
58.0%	0	473	473	
59.3%	0	473	473	
60.5%	0	472	472	
61.7%	0	472	472	
63.0%	0	472	472	
64.2%	0	470	470	
65.4%	0	468	468	
66.7%	0	467	467	
67.9%	0	463	463	
69.1%	0	457	457	
70.4%	0	456	456	
71.6%	0	450	450	
72.8%	0	436	436	
74.1%	0	435	435	
75.3%	0	434	434	
76.5%	0	433	433	
77.8%	0	431	431	
79.0%	0	430	430	
80.2%	0	425	425	
81.5%	0	424	424	
82.7%	0	422	422	
84.0%	0	418	418	
85.2%	0	415	415	
86.4%	0	415	415	
87.7%	0	408	408	
88.9%	0	402	402	
90.1%	0	391	391	
91.4%	0	389	389	
92.6%	0	389	389	
93.8%	0	387	387	
95.1%	0	375	375	
96.3%	0	364	364	
97.5%	0	357	357	
98.8%	0	352	352	
100.0%	0	349	349	

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	514	514	
1.2%	0	513	513	
2.5%	0	512	512	
3.7%	0	511	511	
4.9%	0	511	511	
6.2%	0	510	510	
7.4%	0	509	509	
8.6%	0	509	509	
9.9%	0	509	509	
11.1%	0	506	506	
12.3%	0	506	506	
13.6%	0	505	505	
14.8%	0	504	504	
16.0%	0	503	503	
17.3%	0	502	502	
18.5%	0	500	500	
19.8%	0	500	500	
21.0%	0	499	499	
22.2%	0	497	497	
23.5%	0	496	496	
24.7%	0	496	496	
25.9%	0	495	495	
27.2%	0	490	490	
28.4%	0	488	488	
29.6%	0	487	487	
30.9%	0	486	486	
32.1%	0	485	485	
33.3%	0	484	484	
34.6%	0	483	483	
35.8%	0	481	481	
37.0%	0	481	481	
38.3%	0	481	481	
39.5%	0	481	481	
40.7%	0	480	480	
42.0%	0	479	479	
43.2%	0	476	476	
44.4%	0	476	476	
45.7%	0	476	476	
46.9%	0	475	475	
48.1%	0	475	475	
49.4%	0	473	473	
50.6%	0	470	470	
51.9%	0	470	470	
53.1%	0	469	469	
54.3%	0	467	467	
55.6%	0	467	467	
56.8%	0	467	467	
58.0%	0	465	465	
59.3%	0	465	465	
60.5%	0	464	464	
61.7%	0	464	464	
63.0%	0	463	463	
64.2%	0	460	460	
65.4%	0	458	458	
66.7%	0	457	457	
67.9%	0	455	455	
69.1%	0	452	452	
70.4%	0	451	451	
71.6%	0	446	446	
72.8%	0	432	432	
74.1%	0	432	432	
75.3%	0	430	430	
76.5%	0	425	425	
77.8%	0	424	424	
79.0%	0	422	422	
80.2%	0	418	418	
81.5%	0	417	417	
82.7%	0	416	416	
84.0%	0	409	409	
85.2%	0	405	405	
86.4%	0	403	403	
87.7%	0	403	403	
88.9%	0	394	394	
90.1%	0	385	385	
91.4%	0	383	383	
92.6%	0	383	383	
93.8%	0	376	376	
95.1%	0	371	371	
96.3%	0	362	362	
97.5%	0	351	351	
98.8%	0	347	347	
100.0%	0	344	344	

Figure OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

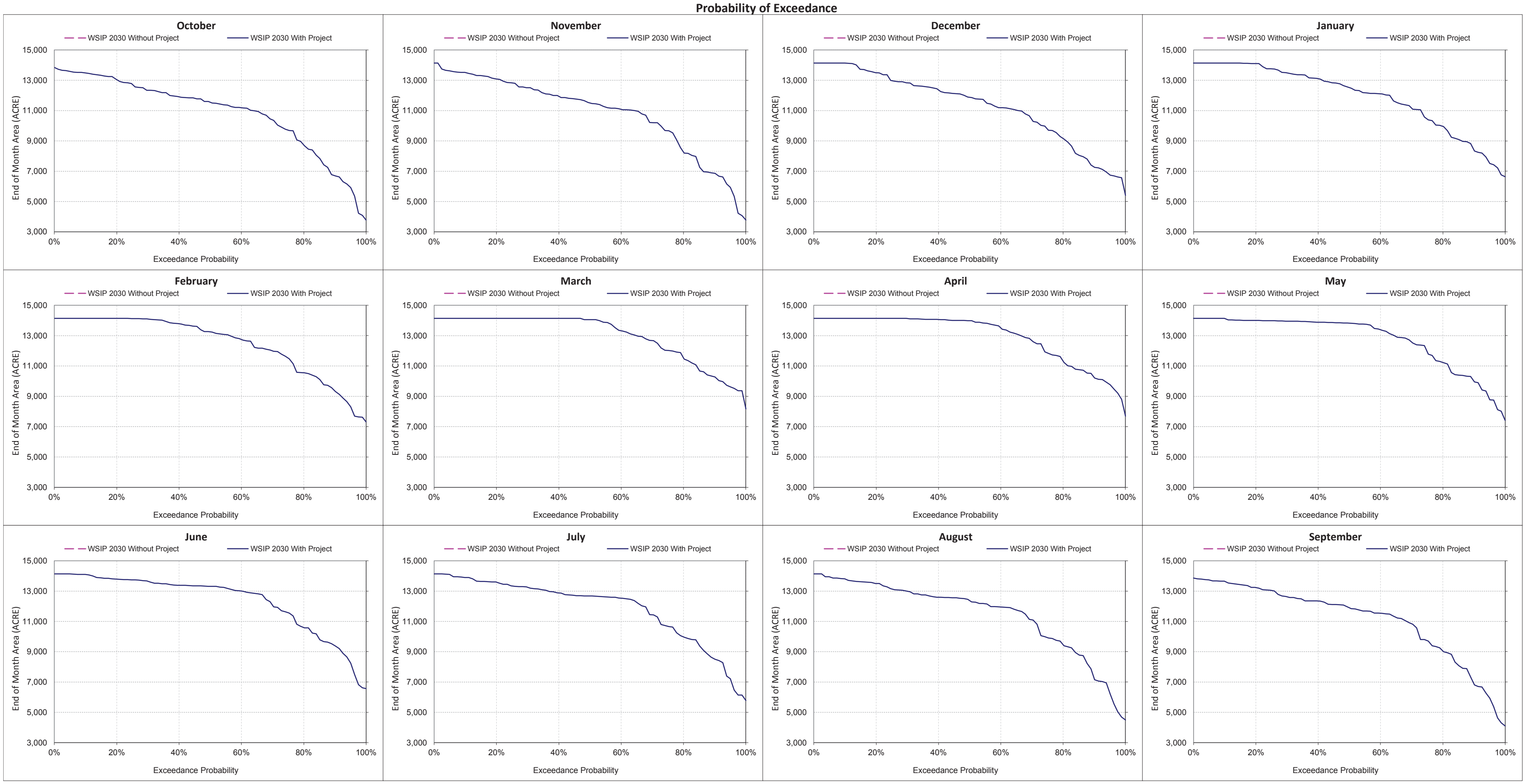


Table OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	13,842	13,842	
1.2%	0	13,730	13,730	
2.5%	0	13,654	13,654	
3.7%	0	13,640	13,640	
4.9%	0	13,597	13,597	
6.2%	0	13,541	13,541	
7.4%	0	13,527	13,527	
8.6%	0	13,521	13,521	
9.9%	0	13,486	13,486	
11.1%	0	13,447	13,447	
12.3%	0	13,399	13,399	
13.6%	0	13,361	13,361	
14.8%	0	13,326	13,326	
16.0%	0	13,289	13,289	
17.3%	0	13,252	13,252	
18.5%	0	13,246	13,246	
19.8%	0	13,070	13,070	
21.0%	0	12,931	12,931	
22.2%	0	12,850	12,850	
23.5%	0	12,842	12,842	
24.7%	0	12,790	12,790	
25.9%	0	12,563	12,563	
27.2%	0	12,527	12,527	
28.4%	0	12,516	12,516	
29.6%	0	12,347	12,347	
30.9%	0	12,342	12,342	
32.1%	0	12,328	12,328	
33.3%	0	12,257	12,257	
34.6%	0	12,192	12,192	
35.8%	0	12,179	12,179	
37.0%	0	12,007	12,007	
38.3%	0	11,956	11,956	
39.5%	0	11,927	11,927	
40.7%	0	11,873	11,873	
42.0%	0	11,853	11,853	
43.2%	0	11,849	11,849	
44.4%	0	11,843	11,843	
45.7%	0	11,782	11,782	
46.9%	0	11,768	11,768	
48.1%	0	11,604	11,604	
49.4%	0	11,599	11,599	
50.6%	0	11,496	11,496	
51.9%	0	11,477	11,477	
53.1%	0	11,430	11,430	
54.3%	0	11,384	11,384	
55.6%	0	11,360	11,360	
56.8%	0	11,265	11,265	
58.0%	0	11,217	11,217	
59.3%	0	11,217	11,217	
60.5%	0	11,184	11,184	
61.7%	0	11,152	11,152	
63.0%	0	11,021	11,021	
64.2%	0	10,995	10,995	
65.4%	0	10,942	10,942	
66.7%	0	10,789	10,789	
67.9%	0	10,691	10,691	
69.1%	0	10,464	10,464	
70.4%	0	10,350	10,350	
71.6%	0	10,052	10,052	
72.8%	0	9,906	9,906	
74.1%	0	9,775	9,775	
75.3%	0	9,690	9,690	
76.5%	0	9,674	9,674	
77.8%	0	9,075	9,075	
79.0%	0	8,963	8,963	
80.2%	0	8,670	8,670	
81.5%	0	8,449	8,449	
82.7%	0	8,410	8,410	
84.0%	0	8,058	8,058	
85.2%	0	7,835	7,835	
86.4%	0	7,422	7,422	
87.7%	0	7,256	7,256	
88.9%	0	6,768	6,768	
90.1%	0	6,684	6,684	
91.4%	0	6,618	6,618	
92.6%	0	6,316	6,316	
93.8%	0	6,164	6,164	
95.1%	0	5,926	5,926	
96.3%	0	5,353	5,353	
97.5%	0	4,219	4,219	
98.8%	0	4,080	4,080	
100.0%	0	3,783	3,783	

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	13,739	13,739	
3.7%	0	13,655	13,655	
4.9%	0	13,620	13,620	
6.2%	0	13,571	13,571	
7.4%	0	13,541	13,541	
8.6%	0	13,526	13,526	
9.9%	0	13,524	13,524	
11.1%	0	13,450	13,450	
12.3%	0	13,398	13,398	
13.6%	0	13,321	13,321	
14.8%	0	13,311	13,311	
16.0%	0	13,285	13,285	
17.3%	0	13,244	13,244	
18.5%	0	13,144	13,144	
19.8%	0	13,088	13,088	
21.0%	0	13,068	13,068	
22.2%	0	12,937	12,937	
23.5%	0	12,863	12,863	
24.7%	0	12,832	12,832	
25.9%	0	12,806	12,806	
27.2%	0	12,570	12,570	
28.4%	0	12,569	12,569	
29.6%	0	12,516	12,516	
30.9%	0	12,513	12,513	
32.1%	0	12,380	12,380	
33.3%	0	12,362	12,362	
34.6%	0	12,185	12,185	
35.8%	0	12,106	12,106	
37.0%	0	12,078	12,078	
38.3%	0	12,005	12,005	
39.5%	0	11,999	11,999	
40.7%	0	11,863	11,863	
42.0%	0	11,857	11,857	
43.2%	0	11,810	11,810	
44.4%	0	11,796	11,796	
45.7%	0	11,757	11,757	
46.9%	0	11,733	11,733	
48.1%	0	11,656	11,656	
49.4%	0	11,539	11,539	
50.6%	0	11,471	11,471	
51.9%	0	11,447	11,447	
53.1%	0	11,393	11,393	
54.3%	0	11,284	11,284	
55.6%	0	11,193	11,193	
56.8%	0	11,164	11,164	
58.0%	0	11,153	11,153	
59.3%	0	11,124	11,124	
60.5%	0	11,058	11,058	
61.7%	0	11,058	11,058	
63.0%	0	11,034	11,034	
64.2%	0	11,001	11,001	
65.4%	0	10,957	10,957	
66.7%	0	10,780	10,780	
67.9%	0	10,698	10,698	
69.1%	0	10,222	10,222	
70.4%	0	10,204	10,204	
71.6%	0	10,197	10,197	
72.8%	0	9,974	9,974	
74.1%	0	9,684	9,684	
75.3%	0	9,674	9,674	
76.5%	0	9,532	9,532	
77.8%	0	9,074	9,074	
79.0%	0	8,558	8,558	
80.2%	0	8,203	8,203	
81.5%	0	8,173	8,173	
82.7%	0	8,050	8,050	
84.0%	0	7,979	7,979	
85.2%	0	7,251	7,251	
86.4%	0	6,965	6,965	
87.7%	0	6,940	6,940	
88.9%	0	6,896	6,896	
90.1%	0	6,864	6,864	
91.4%	0	6,678	6,678	
92.6%	0	6,616	6,616	
93.8%	0	6,165	6,165	
95.1%	0	5,944	5,944	
96.3%	0	5,344	5,344	
97.5%	0	4,222	4,222	
98.8%	0	4,077	4,077	
100.0%	0	3,773	3,773	

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,123	14,123	
12.3%	0	14,113	14,113	
13.6%	0	14,016	14,016	
14.8%	0	13,736	13,736	
16.0%	0	13,712	13,712	
17.3%	0	13,631	13,631	
18.5%	0	13,571	13,571	
19.8%	0	13,497	13,497	
21.0%	0	13,485	13,485	
22.2%	0	13,370	13,370	
23.5%	0	13,367	13,367	
24.7%	0	12,991	12,991	
25.9%	0	12,936	12,936	
27.2%	0	12,905	12,905	
28.4%	0	12,900	12,900	
29.6%	0	12,833	12,833	
30.9%	0	12,815	12,815	
32.1%	0	12,651	12,651	
33.3%	0	12,625	12,625	
34.6%	0	12,609	12,609	
35.8%	0	12,582	12,582	
37.0%	0	12,549	12,549	
38.3%	0	12,498	12,498	
39.5%	0	12,439	12,439	
40.7%	0	12,249	12,249	
42.0%	0	12,179	12,179	
43.2%	0	12,165	12,165	
44.4%	0	12,142	12,142	
45.7%	0	12,121	12,121	
46.9%	0	12,097	12,097	
48.1%	0	12,023	12,023	
49.4%	0	11,887	11,887	
50.6%	0	11,868	11,868	
51.9%	0	11,774	11,774	
53.1%	0	11,757	11,757	
54.3%	0	11,748	11,748	
55.6%	0	11,490	11,490	
56.8%	0	11,431	11,431	
58.0%	0	11,296	11,296	
59.3%	0	11,202	11,202	
60.5%	0	11,195	11,195	
61.7%	0	11,185	11,185	
63.0%	0	11,126	11,126	
64.2%	0	11,067	11,067	
65.4%	0	11,007	11,007	
66.7%	0	10,974	10,974	
67.9%	0	10,784	10,784	
69.1%	0	10,657	10,657	
70.4%	0	10,280	10,280	
71.6%	0	10,230	10,230	
72.8%	0	10,021	10,021	
74.1%	0	9,972	9,972	
75.3%	0	9,700	9,700	
76.5%	0	9,680	9,680	
77.8%	0	9,546	9,546	
79.0%	0	9,296	9,296	
80.2%	0	9,128	9,128	
81.5%	0	8,912	8,912	
82.7%	0	8,654	8,654	
84.0%	0	8,188	8,188	
85.2%	0	8,042	8,042	
86.4%	0	7,953	7,953	
87.7%	0	7,810	7,810	
88.9%	0	7,403	7,403	
90.1%	0	7,252	7,252	
91.4%	0	7,228	7,228	
92.6%	0	7,115	7,115	
93.8%	0	6,943	6,943	
95.1%	0	6,741	6,741	
96.3%	0	6,688	6,688	
97.5%	0	6,619	6,619	
98.8%	0	6,571	6,571	
100.0%	0	5,401	5,401	

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,118	14,118	
17.3%	0	14,115	14,115	
18.5%	0	14,113	14,113	
19.8%	0	14,112	14,112	
21.0%	0	14,111	14,111	
22.2%	0	13,893	13,893	
23.5%	0	13,765	13,765	
24.7%	0	13,764	13,764	
25.9%	0	13,739	13,739	
27.2%	0	13,681	13,681	
28.4%	0	13,514	13,514	
29.6%	0	13,513	13,513	
30.9%	0	13,459	13,459	
32.1%	0	13,406	13,406	
33.3%	0	13,372	13,372	
34.6%	0	13,367	13,367	
35.8%	0	13,356	13,356	
37.0%	0	13,171	13,171	
38.3%	0	13,138	13,138	
39.5%	0	13,121	13,121	
40.7%	0	13,084	13,084	
42.0%	0	12,940	12,940	
43.2%	0	12,910	12,910	
44.4%	0	12,839	12,839	
45.7%	0	12,823	12,823	
46.9%	0	12,760	12,760	
48.1%	0	12,646	12,646	
49.4%	0	12,557	12,557	
50.6%	0	12,479	12,479	
51.9%	0	12,338	12,338	
53.1%	0	12,315	12,315	
54.3%	0	12,187	12,187	
55.6%	0	12,162	12,162	
56.8%	0	12,134	12,134	
58.0%	0	12,133	12,133	
59.3%	0	12,114	12,114	
60.5%	0	12,103	12,103	
61.7%	0	12,036	12,036	
63.0%	0	12,022	12,022	
64.2%	0	11,635	11,635	
65.4%	0	11,526	11,526	
66.7%	0	11,438	11,438	
67.9%	0	11,381	11,381	
69.1%	0	11,327	11,327	
70.4%	0	11,090	11,090	
71.6%	0	11,073	11,073	
72.8%	0	11,062	11,062	
74.1%	0	10,577	10,577	
75.3%	0	10,395	10,395	
76.5%	0	10,329	10,329	
77.8%	0	10,043	10,043	
79.0%	0	10,025	10,025	
80.2%	0	9,942	9,942	
81.5%	0	9,666	9,666	
82.7%	0	9,246	9,246	
84.0%	0	9,181	9,181	
85.2%	0	9,095	9,095	
86.4%	0	8,962	8,962	
87.7%	0	8,947	8,947	
88.9%	0	8,831	8,831	
90.1%	0	8,342	8,342	
91.4%	0	8,253	8,253	
92.6%	0	8,203	8,203	
93.8%	0	7,947	7,947	
95.1%	0	7,514	7,514	
96.3%	0	7,419	7,419	
97.5%	0	7,223	7,223	
98.8%	0	6,767	6,767	
100.0%	0	6,645	6,645	

Table OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,129	14,129	
25.9%	0	14,123	14,123	
27.2%	0	14,118	14,118	
28.4%	0	14,110	14,110	
29.6%	0	14,110	14,110	
30.9%	0	14,073	14,073	
32.1%	0	14,055	14,055	
33.3%	0	14,042	14,042	
34.6%	0	14,020	14,020	
35.8%	0	13,934	13,934	
37.0%	0	13,857	13,857	
38.3%	0	13,825	13,825	
39.5%	0	13,807	13,807	
40.7%	0	13,764	13,764	
42.0%	0	13,703	13,703	
43.2%	0	13,674	13,674	
44.4%	0	13,634	13,634	
45.7%	0	13,612	13,612	
46.9%	0	13,398	13,398	
48.1%	0	13,278	13,278	
49.4%	0	13,272	13,272	
50.6%	0	13,240	13,240	
51.9%	0	13,155	13,155	
53.1%	0	13,112	13,112	
54.3%	0	13,080	13,080	
55.6%	0	13,058	13,058	
56.8%	0	12,959	12,959	
58.0%	0	12,866	12,866	
59.3%	0	12,803	12,803	
60.5%	0	12,708	12,708	
61.7%	0	12,662	12,662	
63.0%	0	12,642	12,642	
64.2%	0	12,221	12,221	
65.4%	0	12,177	12,177	
66.7%	0	12,172	12,172	
67.9%	0	12,110	12,110	
69.1%	0	12,055	12,055	
70.4%	0	11,963	11,963	
71.6%	0	11,946	11,946	
72.8%	0	11,775	11,775	
74.1%	0	11,638	11,638	
75.3%	0	11,475	11,475	
76.5%	0	11,145	11,145	
77.8%	0	10,578	10,578	
79.0%	0	10,571	10,571	
80.2%	0	10,555	10,555	
81.5%	0	10,492	10,492	
82.7%	0	10,398	10,398	
84.0%	0	10,297	10,297	
85.2%	0	10,097	10,097	
86.4%	0	9,761	9,761	
87.7%	0	9,736	9,736	
88.9%	0	9,572	9,572	
90.1%	0	9,325	9,325	
91.4%	0	9,136	9,136	
92.6%	0	8,898	8,898	
93.8%	0	8,646	8,646	
95.1%	0	8,304	8,304	
96.3%	0	7,699	7,699	
97.5%	0	7,643	7,643	
98.8%	0	7,628	7,628	
100.0%	0	7,318	7,318	

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,137	14,137	
25.9%	0	14,137	14,137	
27.2%	0	14,137	14,137	
28.4%	0	14,137	14,137	
29.6%	0	14,137	14,137	
30.9%	0	14,137	14,137	
32.1%	0	14,137	14,137	
33.3%	0	14,137	14,137	
34.6%	0	14,137	14,137	
35.8%	0	14,137	14,137	
37.0%	0	14,137	14,137	
38.3%	0	14,137	14,137	
39.5%	0	14,137	14,137	
40.7%	0	14,137	14,137	
42.0%	0	14,137	14,137	
43.2%	0	14,137	14,137	
44.4%	0	14,137	14,137	
45.7%	0	14,137	14,137	
46.9%	0	14,137	14,137	
48.1%	0	14,061	14,061	
49.4%	0	14,058	14,058	
50.6%	0	14,057	14,057	
51.9%	0	14,054	14,054	
53.1%	0	13,982	13,982	
54.3%	0	13,882	13,882	
55.6%	0	13,862	13,862	
56.8%	0	13,747	13,747	
58.0%	0	13,526	13,526	
59.3%	0	13,350	13,350	
60.5%	0	13,311	13,311	
61.7%	0	13,234	13,234	
63.0%	0	13,112	13,112	
64.2%	0	13,045	13,045	
65.4%	0	12,959	12,959	
66.7%	0	12,946	12,946	
67.9%	0	12,793	12,793	
69.1%	0	12,688	12,688	
70.4%	0	12,673	12,673	
71.6%	0	12,494	12,494	
72.8%	0	12,195	12,195	
74.1%	0	12,047	12,047	
75.3%	0	12,029	12,029	
76.5%	0	11,983	11,983	
77.8%	0	11,918	11,918	
79.0%	0	11,876	11,876	
80.2%	0	11,461	11,461	
81.5%	0	11,346	11,346	
82.7%	0	11,207	11,207	
84.0%	0	11,086	11,086	
85.2%	0	10,678	10,678	
86.4%	0	10,623	10,623	
87.7%	0	10,406	10,406	
88.9%	0	10,343	10,343	
90.1%	0	10,276	10,276	
91.4%	0	10,031	10,031	
92.6%	0	9,969	9,969	
93.8%	0	9,735	9,735	
95.1%	0	9,628	9,628	
96.3%	0	9,524	9,524	
97.5%	0	9,373	9,373	
98.8%	0	9,362	9,362	
100.0%	0	8,176	8,176	

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,137	14,137	
25.9%	0	14,137	14,137	
27.2%	0	14,137	14,137	
28.4%	0	14,137	14,137	
29.6%	0	14,137	14,137	
30.9%	0	14,110	14,110	
32.1%	0	14,108	14,108	
33.3%	0	14,104	14,104	
34.6%	0	14,087	14,087	
35.8%	0	14,084	14,084	
37.0%	0	14,079	14,079	
38.3%	0	14,077	14,077	
39.5%	0	14,076	14,076	
40.7%	0	14,056	14,056	
42.0%	0	14,056	14,056	
43.2%	0	14,023	14,023	
44.4%	0	14,014	14,014	
45.7%	0	14,011	14,011	
46.9%	0	14,006	14,006	
48.1%	0	13,999	13,999	
49.4%	0	13,992	13,992	
50.6%	0	13,984	13,984	
51.9%	0	13,891	13,891	
53.1%	0	13,879	13,879	
54.3%	0	13,832	13,832	
55.6%	0	13,819	13,819	
56.8%	0	13,745	13,745	
58.0%	0	13,698	13,698	
59.3%	0	13,652	13,652	
60.5%	0	13,417	13,417	
61.7%	0	13,382	13,382	
63.0%	0	13,243	13,243	
64.2%	0	13,162	13,162	
65.4%	0	13,081	13,081	
66.7%	0	12,973	12,973	
67.9%	0	12,886	12,886	
69.1%	0	12,825	12,825	
70.4%	0	12,598	12,598	
71.6%	0	12,468	12,468	
72.8%	0	12,461	12,461	
74.1%	0	11,934	11,934	
75.3%	0	11,826	11,826	
76.5%	0	11,731	11,731	
77.8%	0	11,688	11,688	
79.0%	0	11,628	11,628	
80.2%	0	11,241	11,241	
81.5%	0	11,009	11,009	
82.7%	0	10,986	10,986	
84.0%	0	10,791	10,791	
85.2%	0	10,759	10,759	
86.4%	0	10,727	10,727	
87.7%	0	10,536	10,536	
88.9%	0	10,511	10,511	
90.1%	0	10,212	10,212	
91.4%	0	10,119	10,119	
92.6%	0	10,100	10,100	
93.8%	0	9,932	9,932	
95.1%	0	9,757	9,757	
96.3%	0	9,475	9,475	
97.5%	0	9,212	9,212	
98.8%	0	8,806	8,806	
100.0%	0	7,690	7,690	

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,035	14,035	
12.3%	0	14,033	14,033	
13.6%	0	14,032	14,032	
14.8%	0	14,017	14,017	
16.0%	0	14,008	14,008	
17.3%	0	14,005	14,005	
18.5%	0	14,004	14,004	
19.8%	0	14,004	14,004	
21.0%	0	14,003	14,003	
22.2%	0	13,997	13,997	
23.5%	0	13,994	13,994	
24.7%	0	13,991	13,991	
25.9%	0	13,982	13,982	
27.2%	0	13,976	13,976	
28.4%	0	13,966	13,966	
29.6%	0	13,963	13,963	
30.9%	0	13,952	13,952	
32.1%	0	13,952	13,952	
33.3%	0	13,947	13,947	
34.6%	0	13,935	13,935	
35.8%	0	13,930	13,930	
37.0%	0	13,916	13,916	
38.3%	0	13,907	13,907	
39.5%	0	13,895	13,895	
40.7%	0	13,888	13,888	
42.0%	0	13,882	13,882	
43.2%	0	13,878	13,878	
44.4%	0	13,864	13,864	
45.7%	0	13,853	13,853	
46.9%	0	13,850	13,850	
48.1%	0	13,844	13,844	
49.4%	0	13,841	13,841	
50.6%	0	13,826	13,826	
51.9%	0	13,797	13,797	
53.1%	0	13,772	13,772	
54.3%	0	13,762	13,762	
55.6%	0	13,745	13,745	
56.8%	0	13,694	13,694	
58.0%	0	13,478	13,478	
59.3%	0	13,451	13,451	
60.5%	0	13,354	13,354	
61.7%	0	13,294	13,294	
63.0%	0	13,127	13,127	
64.2%	0	13,025	13,025	
65.4%	0	12,892	12,892	
66.7%	0	12,876	12,876	
67.9%	0	12,839	12,839	
69.1%	0	12,717	12,717	
70.4%	0	12,518	12,518	
71.6%	0	12,406	12,406	
72.8%	0	12,386	12,386	
74.1%	0	12,350	12,350	
75.3%	0	11,775	11,775	
76.5%	0	11,691	11,691	
77.8%	0	11,351	11,351	
79.0%	0	11,306	11,306	
80.2%	0	11,214	11,214	
81.5%	0	11,135	11,135	
82.7%	0	10,570	10,570	
84.0%	0	10,425	10,425	
85.2%	0	10,401	10,401	
86.4%	0	10,373	10,373	
87.7%	0	10,328	10,328	
88.9%	0	10,317	10,317	
90.1%	0	9,945	9,945	
91.4%	0	9,896	9,896	
92.6%	0	9,415	9,415	
93.8%	0	9,353	9,353	
95.1%	0	8,776	8,776	
96.3%	0	8,747	8,747	
97.5%	0	8,112	8,112	
98.8%	0	8,022	8,022	
100.0%	0	7,416	7,416	

Table OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,126	14,126	
7.4%	0	14,108	14,108	
8.6%	0	14,108	14,108	
9.9%	0	14,107	14,107	
11.1%	0	14,062	14,062	
12.3%	0	13,996	13,996	
13.6%	0	13,905	13,905	
14.8%	0	13,879	13,879	
16.0%	0	13,851	13,851	
17.3%	0	13,845	13,845	
18.5%	0	13,814	13,814	
19.8%	0	13,789	13,789	
21.0%	0	13,770	13,770	
22.2%	0	13,765	13,765	
23.5%	0	13,762	13,762	
24.7%	0	13,745	13,745	
25.9%	0	13,737	13,737	
27.2%	0	13,718	13,718	
28.4%	0	13,687	13,687	
29.6%	0	13,672	13,672	
30.9%	0	13,592	13,592	
32.1%	0	13,524	13,524	
33.3%	0	13,513	13,513	
34.6%	0	13,493	13,493	
35.8%	0	13,488	13,488	
37.0%	0	13,426	13,426	
38.3%	0	13,402	13,402	
39.5%	0	13,385	13,385	
40.7%	0	13,380	13,380	
42.0%	0	13,375	13,375	
43.2%	0	13,371	13,371	
44.4%	0	13,351	13,351	
45.7%	0	13,349	13,349	
46.9%	0	13,345	13,345	
48.1%	0	13,333	13,333	
49.4%	0	13,317	13,317	
50.6%	0	13,316	13,316	
51.9%	0	13,314	13,314	
53.1%	0	13,263	13,263	
54.3%	0	13,244	13,244	
55.6%	0	13,174	13,174	
56.8%	0	13,106	13,106	
58.0%	0	13,042	13,042	
59.3%	0	13,015	13,015	
60.5%	0	12,997	12,997	
61.7%	0	12,924	12,924	
63.0%	0	12,889	12,889	
64.2%	0	12,859	12,859	
65.4%	0	12,814	12,814	
66.7%	0	12,764	12,764	
67.9%	0	12,434	12,434	
69.1%	0	12,296	12,296	
70.4%	0	11,965	11,965	
71.6%	0	11,924	11,924	
72.8%	0	11,698	11,698	
74.1%	0	11,635	11,635	
75.3%	0	11,559	11,559	
76.5%	0	11,365	11,365	
77.8%	0	10,808	10,808	
79.0%	0	10,674	10,674	
80.2%	0	10,582	10,582	
81.5%	0	10,580	10,580	
82.7%	0	10,232	10,232	
84.0%	0	10,188	10,188	
85.2%	0	9,794	9,794	
86.4%	0	9,673	9,673	
87.7%	0	9,628	9,628	
88.9%	0	9,537	9,537	
90.1%	0	9,373	9,373	
91.4%	0	9,203	9,203	
92.6%	0	8,895	8,895	
93.8%	0	8,658	8,658	
95.1%	0	8,254	8,254	
96.3%	0	7,487	7,487	
97.5%	0	6,830	6,830	
98.8%	0	6,618	6,618	
100.0%	0	6,565	6,565	

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,120	14,120	
4.9%	0	14,103	14,103	
6.2%	0	13,956	13,956	
7.4%	0	13,944	13,944	
8.6%	0	13,938	13,938	
9.9%	0	13,902	13,902	
11.1%	0	13,899	13,899	
12.3%	0	13,812	13,812	
13.6%	0	13,652	13,652	
14.8%	0	13,641	13,641	
16.0%	0	13,637	13,637	
17.3%	0	13,621	13,621	
18.5%	0	13,613	13,613	
19.8%	0	13,598	13,598	
21.0%	0	13,527	13,527	
22.2%	0	13,451	13,451	
23.5%	0	13,444	13,444	
24.7%	0	13,345	13,345	
25.9%	0	13,312	13,312	
27.2%	0	13,301	13,301	
28.4%	0	13,295	13,295	
29.6%	0	13,276	13,276	
30.9%	0	13,187	13,187	
32.1%	0	13,154	13,154	
33.3%	0	13,141	13,141	
34.6%	0	13,096	13,096	
35.8%	0	13,062	13,062	
37.0%	0	12,979	12,979	
38.3%	0	12,950	12,950	
39.5%	0	12,881	12,881	
40.7%	0	12,866	12,866	
42.0%	0	12,760	12,760	
43.2%	0	12,745	12,745	
44.4%	0	12,736	12,736	
45.7%	0	12,704	12,704	
46.9%	0	12,698	12,698	
48.1%	0	12,687	12,687	
49.4%	0	12,678	12,678	
50.6%	0	12,676	12,676	
51.9%	0	12,668	12,668	
53.1%	0	12,650	12,650	
54.3%	0	12,632	12,632	
55.6%	0	12,616	12,616	
56.8%	0	12,599	12,599	
58.0%	0	12,598	12,598	
59.3%	0	12,542	12,542	
60.5%	0	12,526	12,526	
61.7%	0	12,492	12,492	
63.0%	0	12,463	12,463	
64.2%	0	12,379	12,379	
65.4%	0	12,193	12,193	
66.7%	0	12,033	12,033	
67.9%	0	11,959	11,959	
69.1%	0	11,447	11,447	
70.4%	0	11,424	11,424	
71.6%	0	11,302	11,302	
72.8%	0	10,797	10,797	
74.1%	0	10,722	10,722	
75.3%	0	10,661	10,661	
76.5%	0	10,626	10,626	
77.8%	0	10,256	10,256	
79.0%	0	10,065	10,065	
80.2%	0	9,960	9,960	
81.5%	0	9,878	9,878	
82.7%	0	9,799	9,799	
84.0%	0	9,796	9,796	
85.2%	0	9,382	9,382	
86.4%	0	9,081	9,081	
87.7%	0	8,864	8,864	
88.9%	0	8,644	8,644	
90.1%	0	8,502	8,502	
91.4%	0	8,416	8,416	
92.6%	0	8,275	8,275	
93.8%	0	7,385	7,385	
95.1%	0	7,211	7,211	
96.3%	0	6,460	6,460	
97.5%	0	6,139	6,139	
98.8%	0	6,132	6,132	
100.0%	0	5,785	5,785	

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	13,952	13,952	
4.9%	0	13,942	13,942	
6.2%	0	13,868	13,868	
7.4%	0	13,858	13,858	
8.6%	0	13,825	13,825	
9.9%	0	13,806	13,806	
11.1%	0	13,714	13,714	
12.3%	0	13,682	13,682	
13.6%	0	13,635	13,635	
14.8%	0	13,621	13,621	
16.0%	0	13,603	13,603	
17.3%	0	13,587	13,587	
18.5%	0	13,570	13,570	
19.8%	0	13,510	13,510	
21.0%	0	13,506	13,506	
22.2%	0	13,355	13,355	
23.5%	0	13,278	13,278	
24.7%	0	13,166	13,166	
25.9%	0	13,095	13,095	
27.2%	0	13,078	13,078	
28.4%	0	13,065	13,065	
29.6%	0	13,002	13,002	
30.9%	0	12,958	12,958	
32.1%	0	12,814	12,814	
33.3%	0	12,810	12,810	
34.6%	0	12,754	12,754	
35.8%	0	12,747	12,747	
37.0%	0	12,680	12,680	
38.3%	0	12,634	12,634	
39.5%	0	12,598	12,598	
40.7%	0	12,588	12,588	
42.0%	0	12,579	12,579	
43.2%	0	12,572	12,572	
44.4%	0	12,567	12,567	
45.7%	0	12,561	12,561	
46.9%	0	12,533	12,533	
48.1%	0	12,511	12,511	
49.4%	0	12,467	12,467	
50.6%	0	12,282	12,282	
51.9%	0	12,269	12,269	
53.1%	0	12,192	12,192	
54.3%	0	12,182	12,182	
55.6%	0	12,143	12,143	
56.8%	0	11,977	11,977	
58.0%	0	11,977	11,977	
59.3%	0	11,956	11,956	
60.5%	0	11,938	11,938	
61.7%	0	11,925	11,925	
63.0%	0	11,915	11,915	
64.2%	0	11,799	11,799	
65.4%	0	11,721	11,721	
66.7%	0	11,655	11,655	
67.9%	0	11,478	11,478	
69.1%	0	11,141	11,141	
70.4%	0	11,083	11,083	
71.6%	0	10,807	10,807	
72.8%	0	10,055	10,055	
74.1%	0	9,994	9,994	
75.3%	0	9,912	9,912	
76.5%	0	9,873	9,873	
77.8%	0	9,759	9,759	
79.0%	0	9,700	9,700	
80.2%	0	9,396	9,396	
81.5%	0	9,332	9,332	
82.7%	0	9,265	9,265	
84.0%	0	8,950	8,950	
85.2%	0	8,771	8,771	
86.4%	0	8,751	8,751	
87.7%	0	8,234	8,234	
88.9%	0	7,869	7,869	
90.1%	0	7,156	7,156	
91.4%	0	7,069	7,069	
92.6%	0	7,022	7,022	
93.8%	0	6,940	6,940	
95.1%	0	6,205	6,205	
96.3%	0	5,535	5,535	
97.5%	0	5,052	5,052	
98.8%	0	4,682	4,682	
100.0%	0	4,498	4,498	

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	13,870	13,870	
1.2%	0	13,819	13,819	
2.5%	0	13,788	13,788	
3.7%	0	13,755	13,755	
4.9%	0	13,736	13,736	
6.2%	0	13,675	13,675	
7.4%	0	13,667	13,667	
8.6%	0	13,660	13,660	
9.9%	0	13,649	13,649	
11.1%	0	13,528	13,528	
12.3%	0	13,507	13,507	
13.6%	0	13,465	13,465	
14.8%	0	13,436	13,436	
16.0%	0	13,392	13,392	
17.3%	0	13,357	13,357	
18.5%	0	13,243	13,243	
19.8%	0	13,239	13,239	
21.0%	0	13,202	13,202	
22.2%	0	13,091	13,091	
23.5%	0	13,076	13,076	
24.7%	0	13,057	13,057	
25.9%	0	13,003	13,003	
27.2%	0	12,784	12,784	
28.4%	0	12,687	12,687	
29.6%	0	12,653	12,653	
30.9%	0	12,585	12,585	
32.1%	0	12,571	12,571	
33.3%	0	12,509	12,509	
34.6%	0	12,485	12,485	
35.8%	0	12,361	12,361	
37.0%	0	12,358	12,358	
38.3%	0	12,358	12,358	
39.5%	0	12,354	12,354	
40.7%	0	12,341	12,341	
42.0%	0	12,271	12,271	
43.2%	0	12,132	12,132	
44.4%	0	12,121	12,121	
45.7%	0	12,116	12,116	
46.9%	0	12,093	12,093	
48.1%	0	12,077	12,077	
49.4%	0	11,956	11,956	
50.6%	0	11,845	11,845	
51.9%	0	11,827	11,827	
53.1%	0	11,752	11,752	
54.3%	0	11,687	11,687	
55.6%	0	11,685	11,685	
56.8%	0	11,672	11,672	
58.0%	0	11,559	11,559	
59.3%	0	11,552	11,552	
60.5%	0	11,541	11,541	
61.7%	0	11,499	11,499	
63.0%	0	11,489	11,489	
64.2%	0	11,342	11,342	
65.4%	0	11,226	11,226	
66.7%	0	11,183	11,183	
67.9%	0	11,061	11,061	
69.1%	0	10,909	10,909	
70.4%	0	10,822	10,822	
71.6%	0	10,566	10,566	
72.8%	0	9,805	9,805	
74.1%	0	9,796	9,796	
75.3%	0	9,699	9,699	
76.5%	0	9,390	9,390	
77.8%	0	9,350	9,350	
79.0%	0	9,258	9,258	
80.2%	0	9,005	9,005	
81.5%	0	8,925	8,925	
82.7%	0	8,826	8,826	
84.0%	0	8,307	8,307	
85.2%	0	8,075	8,075	
86.4%	0	7,905	7,905	
87.7%	0	7,882	7,882	
88.9%	0	7,334	7,334	
90.1%	0	6,812	6,812	
91.4%	0	6,707	6,707	
92.6%	0	6,668	6,668	
93.8%	0	6,274	6,274	
95.1%	0	5,940	5,940	
96.3%	0	5,371	5,371	
97.5%	0	4,639	4,639	
98.8%	0	4,317	4,317	
100.0%	0	4,097	4,097	

Sites Reservoir Project Operations

Summary Tables and Bar Charts

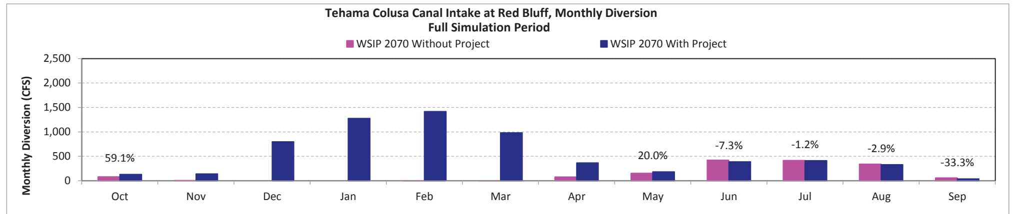
Table OP-01-a
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Long-term Average and Average by Water Year Type

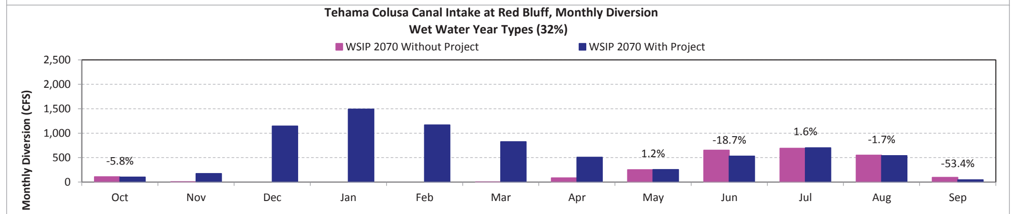
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	83	6	0	0	1	5	80	153	422	417	340	58
WSIP 2070 With Project	132	142	799	1,276	1,420	981	368	184	391	412	330	39
Difference	49	136	799	1,276	1,419	977	288	31	-31	-5	-10	-19
Percent Difference[3]	59.1%							20.0%	-7.3%	-1.2%	-2.9%	-33.3%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	107	6	0	0	0	3	86	252	650	690	549	96
WSIP 2070 With Project	100	173	1,147	1,493	1,170	825	508	255	529	701	540	45
Difference	-6	167	1,147	1,493	1,170	821	421	3	-121	11	-9	-51
Percent Difference	-5.8%							1.2%	-18.7%	1.6%	-1.7%	-53.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	85	4	0	0	0	3	116	202	540	567	433	43
WSIP 2070 With Project	324	322	965	1,682	1,887	1,382	641	269	546	378	395	31
Difference	238	318	965	1,682	1,887	1,379	525	67	7	-189	-38	-12
Percent Difference								33.3%	1.2%	-33.3%	-8.7%	-27.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	78	5	0	0	1	4	89	104	363	322	253	49
WSIP 2070 With Project	63	11	326	1,670	1,497	1,280	457	164	407	301	241	40
Difference	-16	6	326	1,670	1,497	1,276	367	60	44	-20	-12	-9
Percent Difference	-20.0%							57.9%	12.1%	-6.4%	-4.6%	-18.1%
Dry (24.4%)												
WSIP 2070 Without Project	70	4	0	0	2	3	72	79	262	214	170	38
WSIP 2070 With Project	162	164	530	923	1,697	1,187	176	103	263	274	164	38
Difference	92	159	530	923	1,694	1,184	104	25	0	61	-5	0
Percent Difference	132.1%						143.6%	31.3%	0.1%	28.3%	-3.1%	-0.7%
Critical (14.6%)												
WSIP 2070 Without Project	58	11	0	0	3	13	34	72	149	128	178	34
WSIP 2070 With Project	52	13	853	598	991	289	39	107	149	163	187	34
Difference	-6	2	853	598	987	276	5	35	0	35	9	0
Percent Difference	-10.1%	13.5%					15.6%	48.5%	-0.2%	27.6%	5.2%	-1.2%

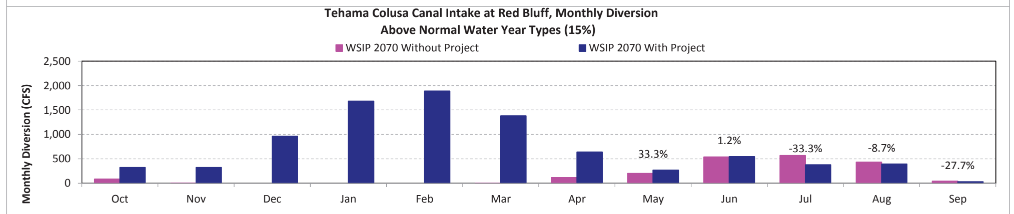
1 Based on the 82-year simulation period

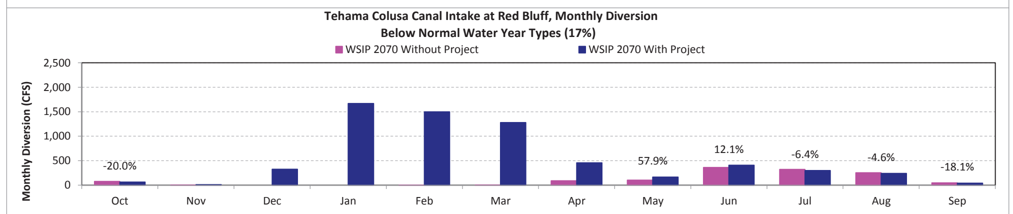
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

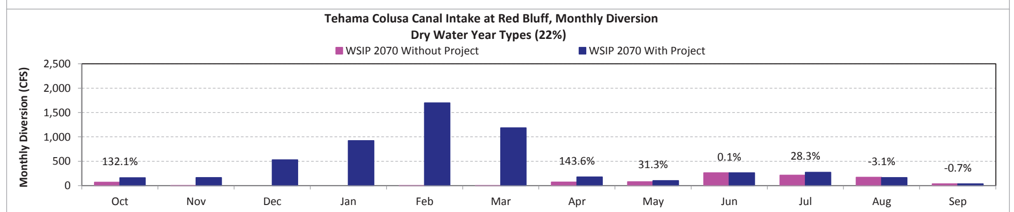
3 Relative difference of the monthly average











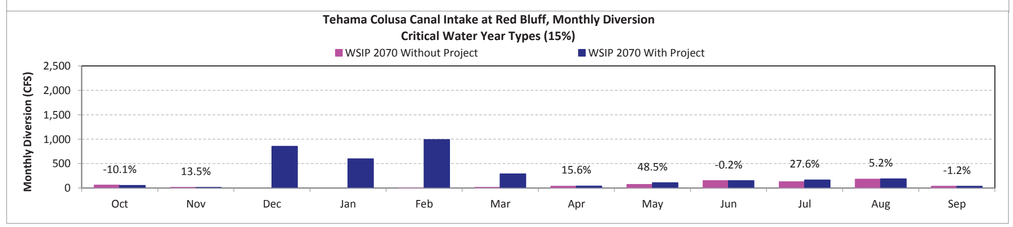


Table OP-02-a
Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	775	451	212	85	68	40	2,215	2,106	2,928	2,806	2,067	551
WSIP 2070 With Project	651	471	631	249	318	645	2,295	1,819	2,597	2,449	2,116	509
Difference	-124	20	419	164	250	605	80	-288	-331	-357	49	-42
Percent Difference[3]	-16.0%	4.4%					3.6%	-13.7%	-11.3%	-12.7%	2.4%	-7.7%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	795	458	222	78	67	30	2,011	2,088	2,968	2,890	2,121	569
WSIP 2070 With Project	731	540	784	265	302	586	2,329	1,910	2,979	2,923	2,442	509
Difference	-64	81	562	187	234	556	317	-178	11	33	321	-60
Percent Difference	-8.0%	17.7%					15.8%	-8.5%	0.4%	1.1%	15.1%	-10.5%
Above Normal (13.4%)												
WSIP 2070 Without Project	780	464	226	80	66	27	2,171	2,116	2,967	2,897	2,113	587
WSIP 2070 With Project	636	535	616	324	383	748	2,402	2,001	2,404	2,087	2,213	490
Difference	-144	71	390	243	317	721	231	-115	-563	-810	99	-97
Percent Difference	-18.5%	15.3%					10.6%	-5.4%	-19.0%	-28.0%	4.7%	-16.6%
Below Normal (15.9%)												
WSIP 2070 Without Project	787	443	192	87	69	48	2,351	2,190	2,974	2,865	2,137	554
WSIP 2070 With Project	611	377	405	321	308	665	2,609	2,005	2,310	2,168	2,186	522
Difference	-176	-66	213	234	239	617	258	-185	-664	-697	49	-31
Percent Difference	-22.4%	-14.9%	110.7%				11.0%	-8.5%	-22.3%	-24.3%	2.3%	-5.7%
Dry (24.4%)												
WSIP 2070 Without Project	787	452	225	90	69	42	2,324	2,198	2,995	2,880	2,159	546
WSIP 2070 With Project	658	446	575	191	355	919	2,276	1,789	2,565	2,502	2,062	543
Difference	-129	-6	350	101	286	877	-49	-409	-430	-378	-97	-4
Percent Difference	-16.4%	-1.3%					-2.1%	-18.6%	-14.4%	-13.1%	-4.5%	-0.7%
Critical (14.6%)												
WSIP 2070 Without Project	695	430	176	92	69	64	2,369	1,893	2,643	2,354	1,675	482
WSIP 2070 With Project	526	406	654	165	245	201	1,814	1,299	2,311	1,970	1,333	452
Difference	-169	-24	477	73	175	138	-555	-594	-332	-384	-342	-30
Percent Difference	-24.3%	-5.5%					-23.4%	-31.4%	-12.6%	-16.3%	-20.4%	-6.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table OP-03-a
Delevan Intake and Pipeline, Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	17	55	388	844	844	493	0	0	41	37	21	2
Difference	17	55	388	844	844	493	0	0	41	37	21	2
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	51	521	1,034	896	585	0	0	28	59	22	0
Difference	0	51	521	1,034	896	585	0	0	28	59	22	0
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	151	500	1,123	1,178	514	0	0	18	0	35	0
Difference	0	151	500	1,123	1,178	514	0	0	18	0	35	0
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	239	1,111	770	391	0	0	39	15	44	0
Difference	0	0	239	1,111	770	391	0	0	39	15	44	0
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	61	57	270	566	898	549	0	0	69	39	10	0
Difference	61	57	270	566	898	549	0	0	69	39	10	0
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	14	32	354	351	416	292	0	0	42	48	0	16
Difference	14	32	354	351	416	292	0	0	42	48	0	16
Percent Difference												

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

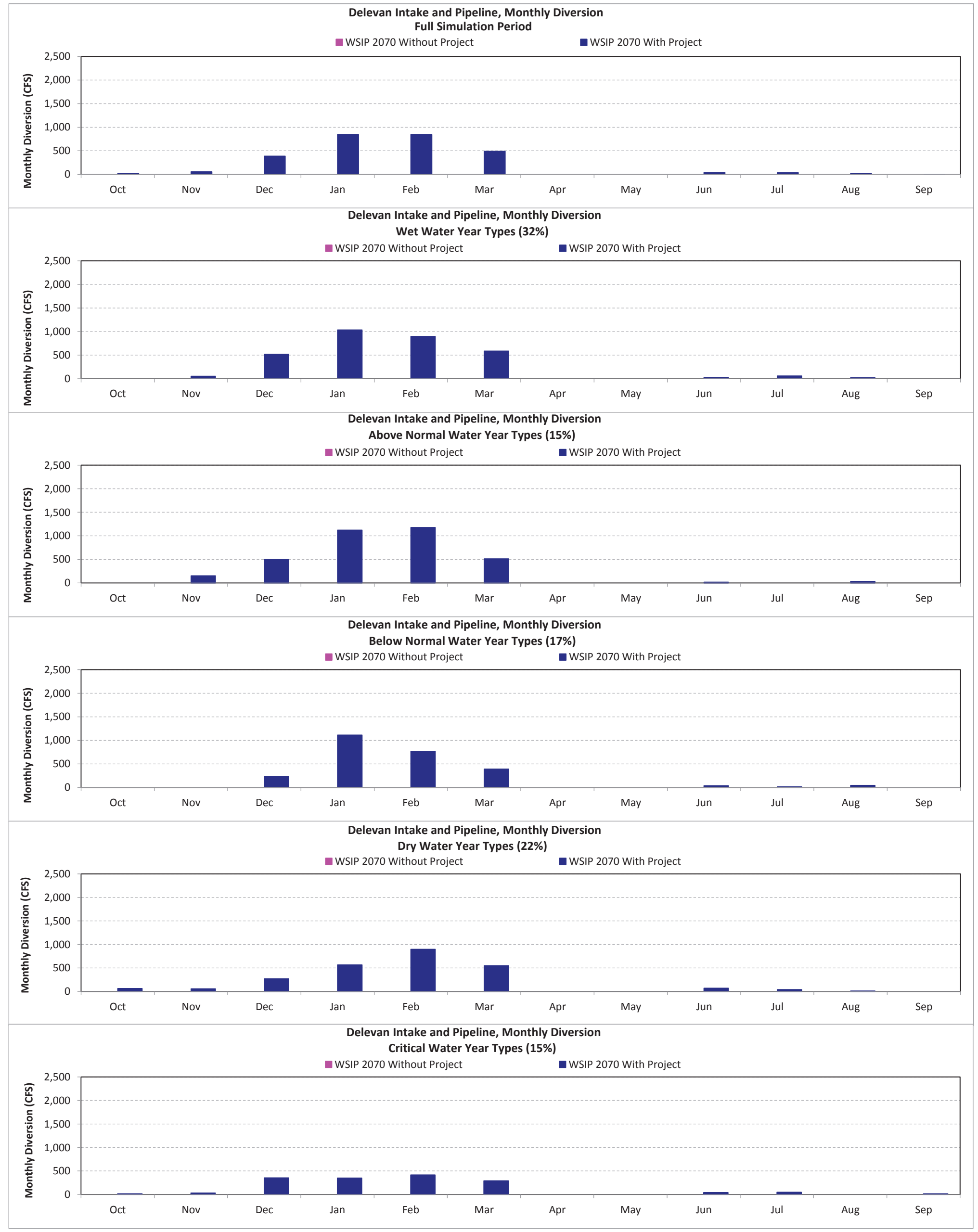


Table OP-04-a
Funks Reservoir to Sites Reservoir, Monthly Diversion
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	93	247	1,598	2,274	2,502	2,059	573	111	106	82	159	16
Difference	93	247	1,598	2,274	2,502	2,059	573	111	106	82	159	16
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	310	2,217	2,698	2,287	1,947	799	134	58	149	246	0
Difference	0	310	2,217	2,698	2,287	1,947	799	134	58	149	246	0
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	261	575	1,840	3,036	3,361	2,591	850	211	196	0	247	0
Difference	261	575	1,840	3,036	3,361	2,591	850	211	196	0	247	0
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	779	2,997	2,490	2,266	781	191	181	24	212	0
Difference	0	0	779	2,997	2,490	2,266	781	191	181	24	212	0
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	231	275	1,148	1,586	2,868	2,590	322	35	98	83	29	56
Difference	231	275	1,148	1,586	2,868	2,590	322	35	98	83	29	56
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	14	32	1,669	1,019	1,587	705	23	8	57	75	50	16
Difference	14	32	1,669	1,019	1,587	705	23	8	57	75	50	16
Percent Difference												

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

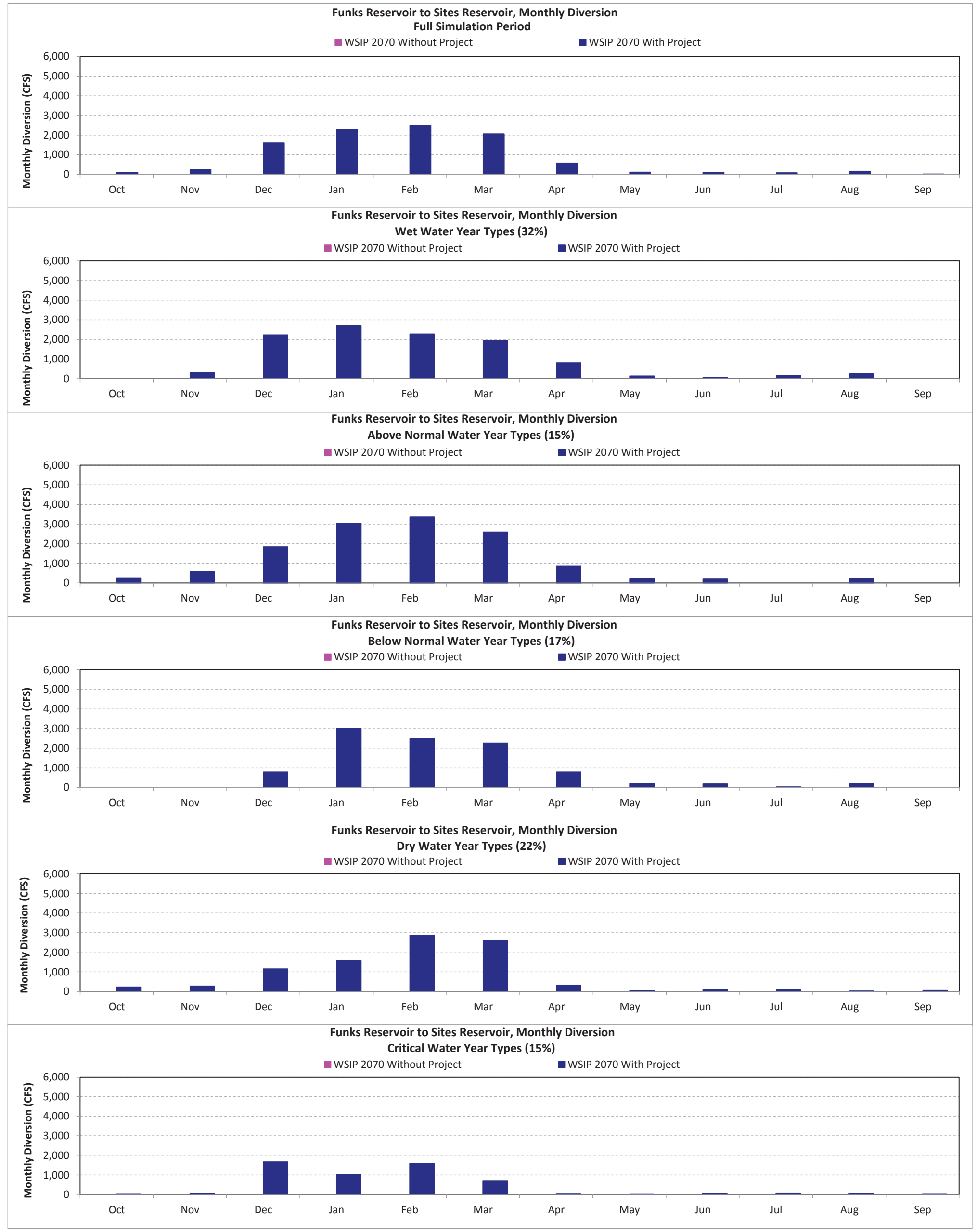


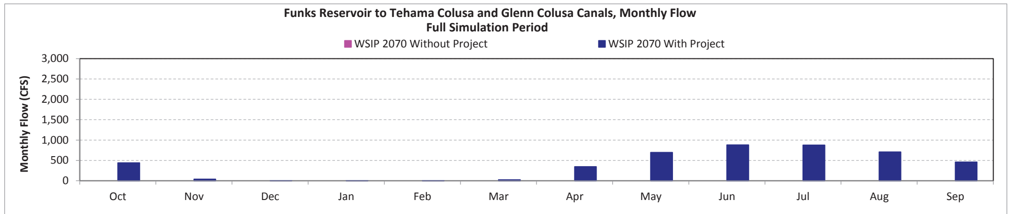
Table OP-05-a
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Long-term Average and Average by Water Year Type

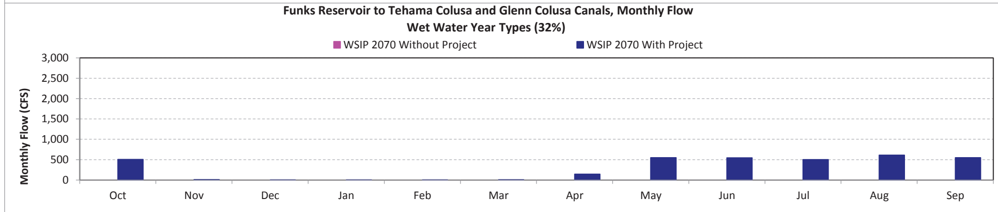
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	443	39	6	0	3	25	348	696	883	877	706	461
Difference	443	39	6	0	3	25	348	696	883	877	706	461
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	505	11	3	0	0	6	143	550	545	504	613	551
Difference	505	11	3	0	0	6	143	550	545	504	613	551
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	480	42	2	0	0	4	197	582	1,123	1,436	790	565
Difference	480	42	2	0	0	4	197	582	1,123	1,436	790	565
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	536	61	9	0	5	29	282	677	1,251	1,246	784	539
Difference	536	61	9	0	5	29	282	677	1,251	1,246	784	539
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	421	67	13	0	2	26	424	804	1,010	896	779	390
Difference	421	67	13	0	2	26	424	804	1,010	896	779	390
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	208	22	0	0	11	77	878	956	784	741	626	205
Difference	208	22	0	0	11	77	878	956	784	741	626	205
Percent Difference												

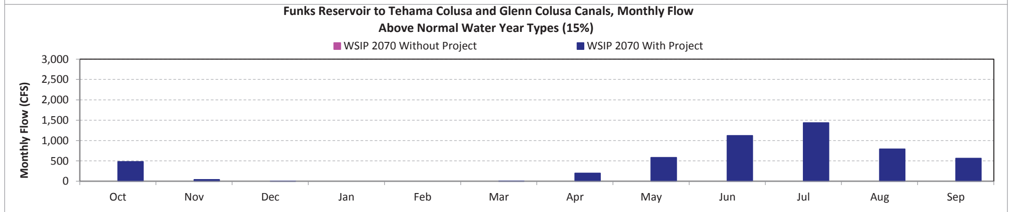
1 Based on the 82-year simulation period

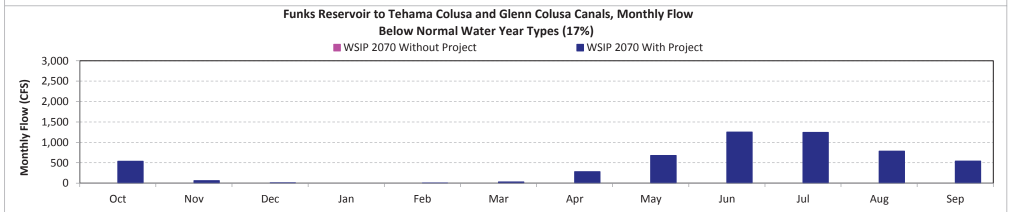
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

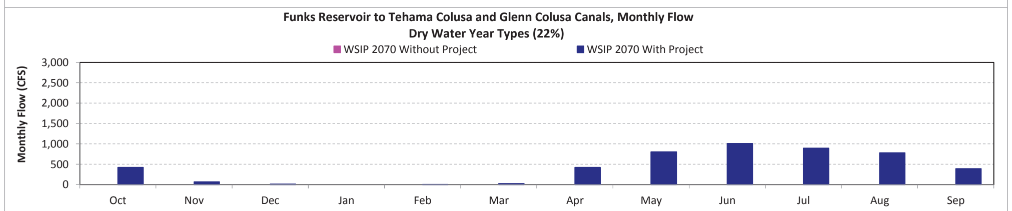
3 Relative difference of the monthly average











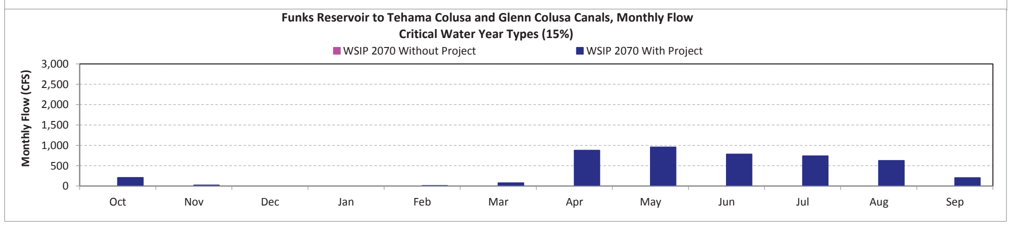
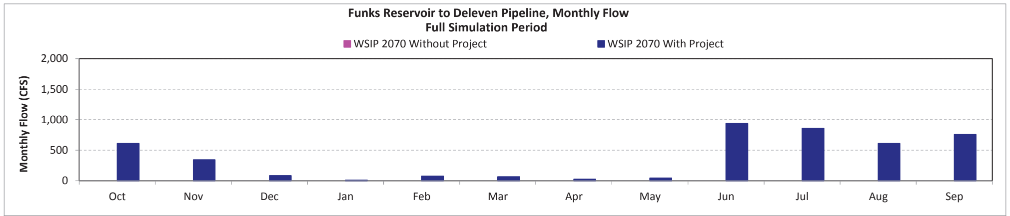
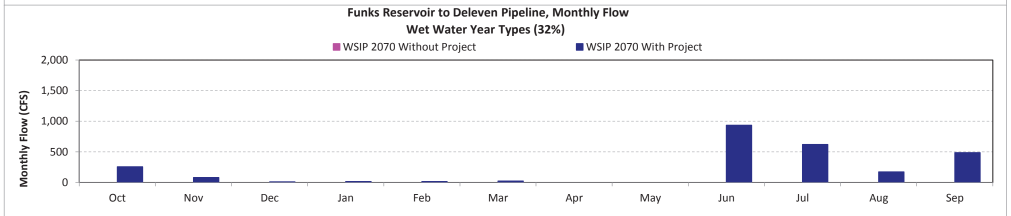


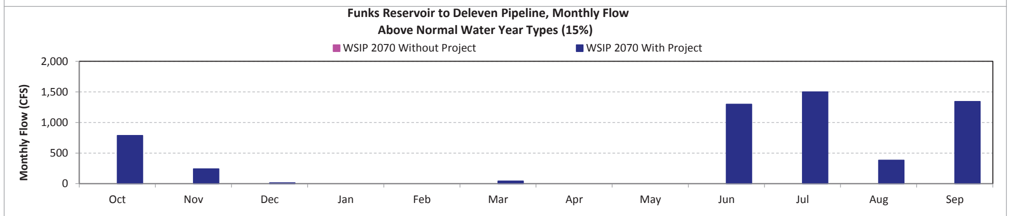
Table OP-06-a
Funks Reservoir to Deleven Pipeline, Monthly Flow
Long-term Average and Average by Water Year Type

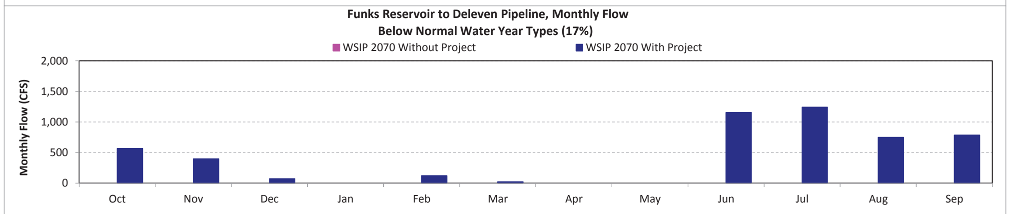
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	610	345	85	11	75	66	27	46	939	859	610	759
Difference	610	345	85	11	75	66	27	46	939	859	610	759
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	256	82	11	17	15	23	0	0	935	620	173	487
Difference	256	82	11	17	15	23	0	0	935	620	173	487
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	787	241	13	0	0	42	0	0	1,298	1,500	382	1,342
Difference	787	241	13	0	0	42	0	0	1,298	1,500	382	1,342
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	569	398	73	0	122	23	0	0	1,154	1,240	748	784
Difference	569	398	73	0	122	23	0	0	1,154	1,240	748	784
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	1,068	652	203	0	16	110	0	0	825	825	1,098	783
Difference	1,068	652	203	0	16	110	0	0	825	825	1,098	783
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	499	439	125	40	324	158	187	312	575	432	805	746
Difference	499	439	125	40	324	158	187	312	575	432	805	746
Percent Difference												

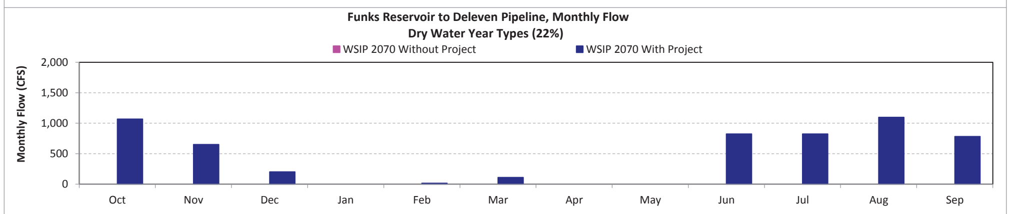
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











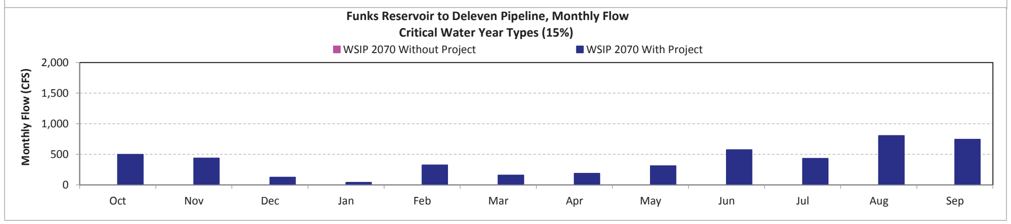


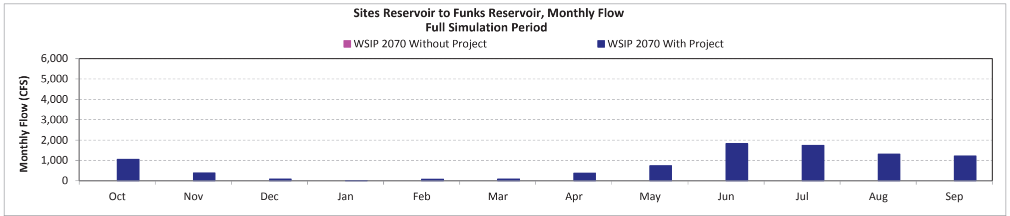
Table OP-07-a
Sites Reservoir to Funks Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

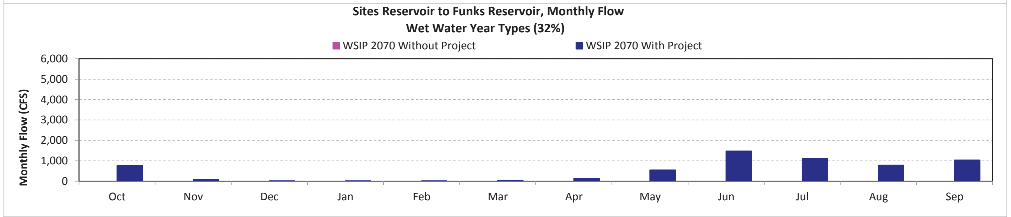
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	1,053	383	90	11	78	91	376	741	1,821	1,736	1,317	1,220
Difference	1,053	383	90	11	78	91	376	741	1,821	1,736	1,317	1,220
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	761	93	14	17	15	28	143	550	1,479	1,124	786	1,037
Difference	761	93	14	17	15	28	143	550	1,479	1,124	786	1,037
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	1,266	283	16	0	0	46	197	582	2,421	2,936	1,173	1,907
Difference	1,266	283	16	0	0	46	197	582	2,421	2,936	1,173	1,907
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	1,105	459	81	0	127	52	282	677	2,405	2,486	1,532	1,323
Difference	1,105	459	81	0	127	52	282	677	2,405	2,486	1,532	1,323
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	1,489	719	217	0	17	136	424	804	1,835	1,721	1,877	1,173
Difference	1,489	719	217	0	17	136	424	804	1,835	1,721	1,877	1,173
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	707	461	125	40	336	236	1,065	1,267	1,358	1,173	1,431	950
Difference	707	461	125	40	336	236	1,065	1,267	1,358	1,173	1,431	950
Percent Difference												

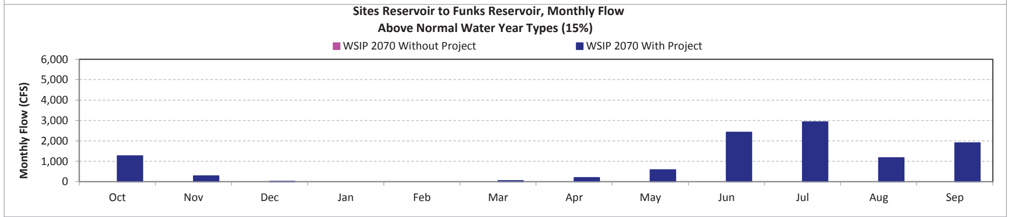
1 Based on the 82-year simulation period

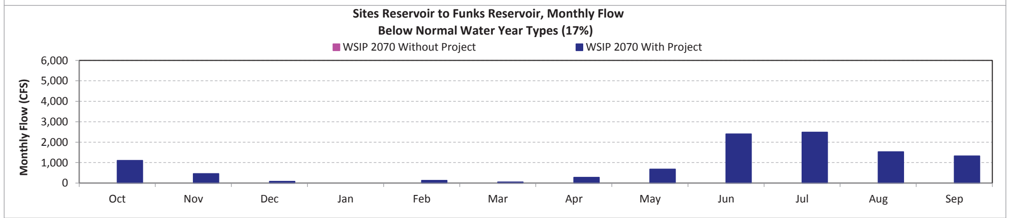
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

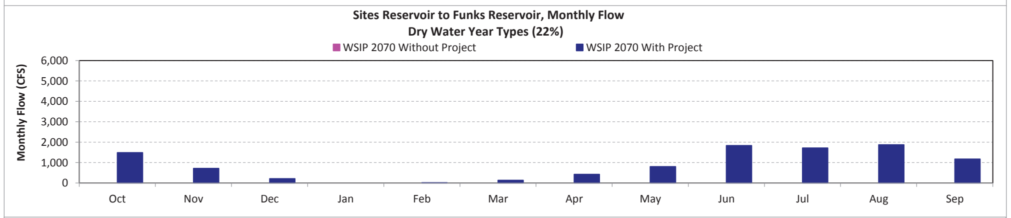
3 Relative difference of the monthly average











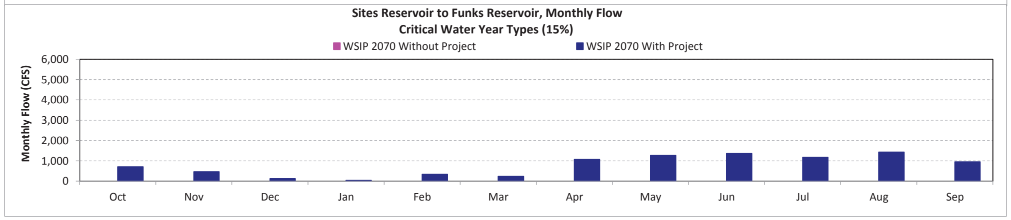
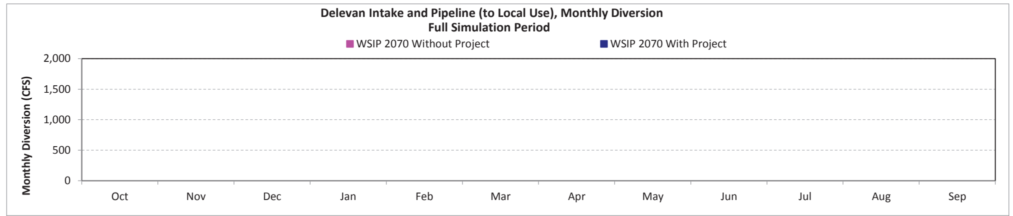
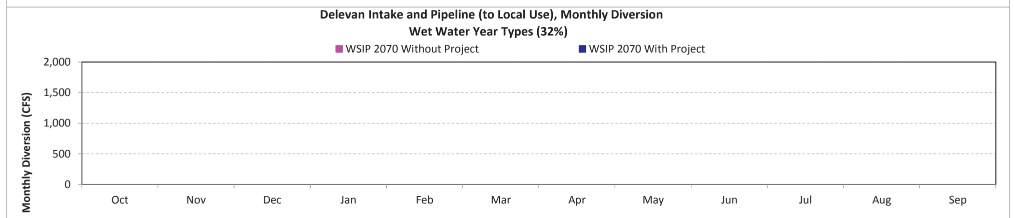


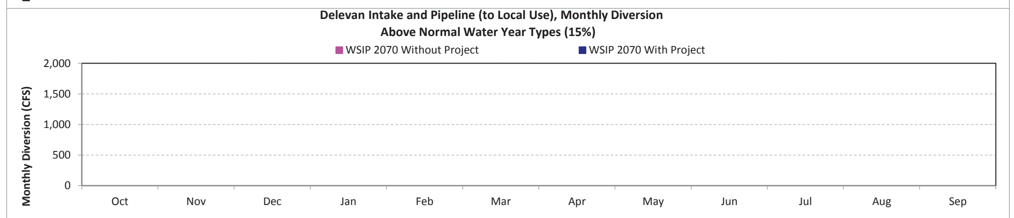
Table OP-08-a
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Long-term Average and Average by Water Year Type

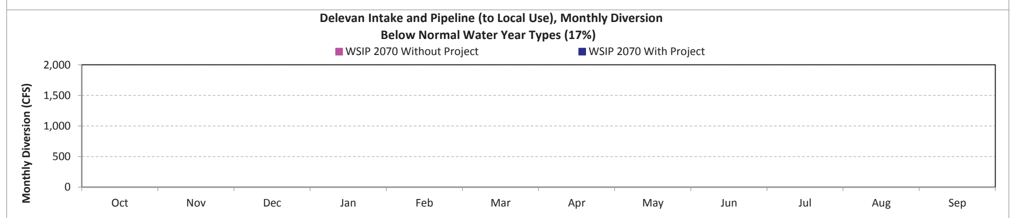
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Diversion (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	0	0	0	0	0	0	0	0	0	0	0	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference												

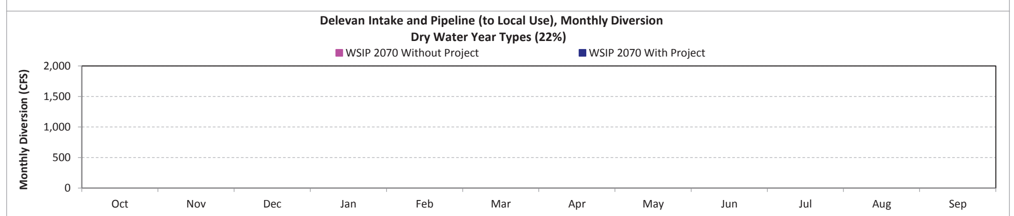
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











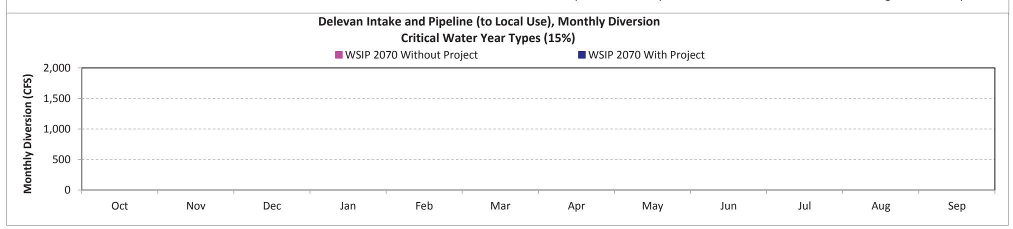


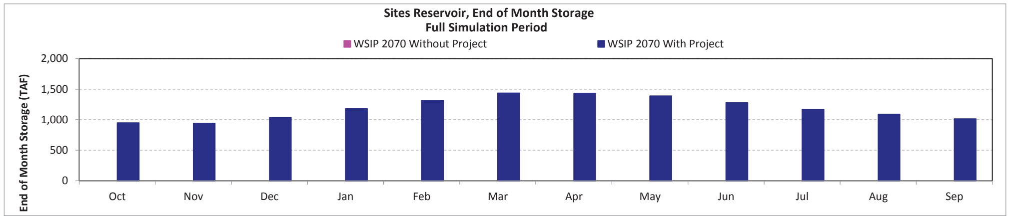
Table OP-09-a
Sites Reservoir, End of Month Storage
Long-term Average and Average by Water Year Type

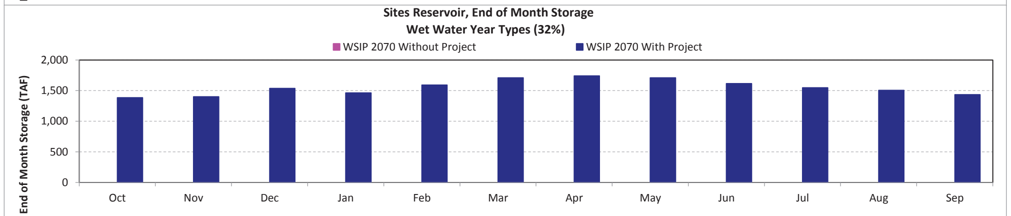
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	949	942	1,037	1,178	1,316	1,436	1,435	1,390	1,280	1,169	1,090	1,013
Difference	949	942	1,037	1,178	1,316	1,436	1,435	1,390	1,280	1,169	1,090	1,013
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	1,386	1,400	1,539	1,464	1,593	1,712	1,742	1,710	1,617	1,547	1,505	1,436
Difference	1,386	1,400	1,539	1,464	1,593	1,712	1,742	1,710	1,617	1,547	1,505	1,436
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	1,021	1,039	1,153	1,286	1,479	1,634	1,651	1,622	1,482	1,291	1,226	1,107
Difference	1,021	1,039	1,153	1,286	1,479	1,634	1,651	1,622	1,482	1,291	1,226	1,107
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	878	852	898	1,181	1,314	1,449	1,459	1,423	1,282	1,121	1,033	948
Difference	878	852	898	1,181	1,314	1,449	1,459	1,423	1,282	1,121	1,033	948
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	783	757	817	1,033	1,193	1,344	1,329	1,276	1,165	1,055	934	862
Difference	783	757	817	1,033	1,193	1,344	1,329	1,276	1,165	1,055	934	862
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	288	262	358	700	770	798	719	637	555	481	391	332
Difference	288	262	358	700	770	798	719	637	555	481	391	332
Percent Difference												

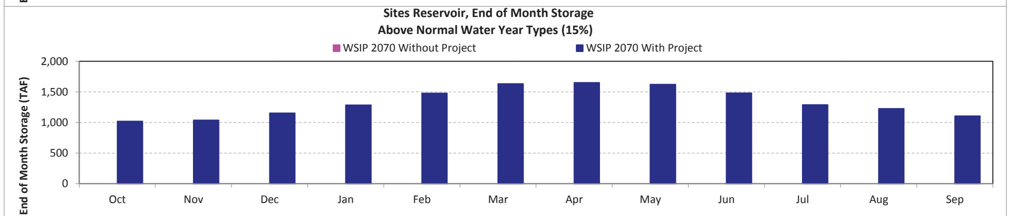
1 Based on the 82-year simulation period

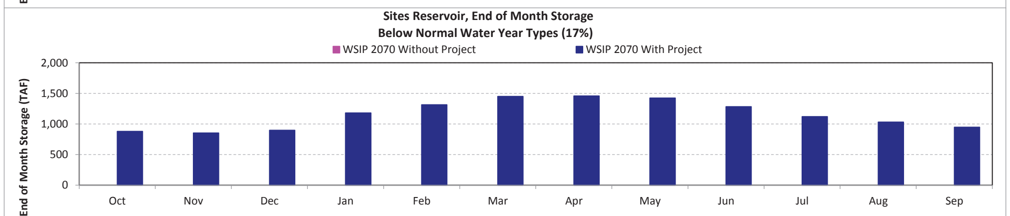
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

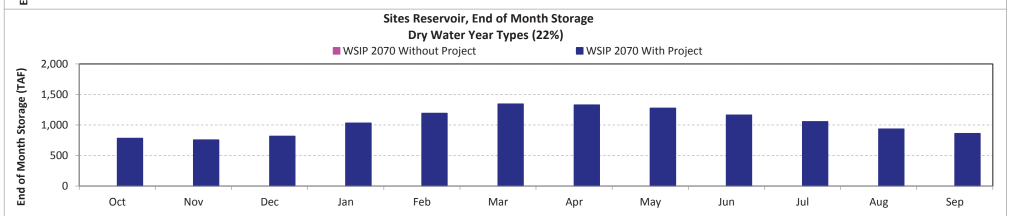
3 Relative difference of the monthly average











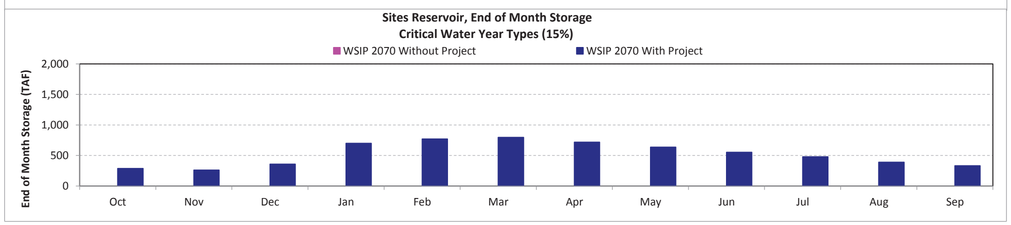


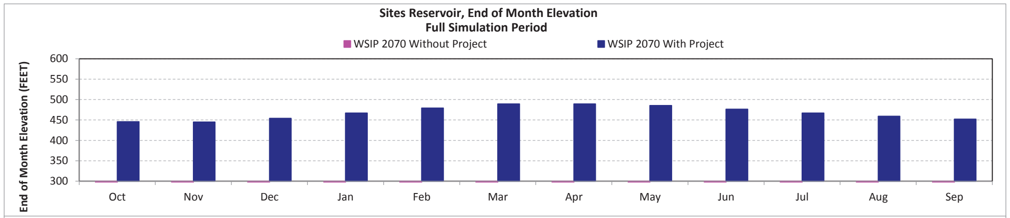
Table OP-10-a
Sites Reservoir, End of Month Elevation
Long-term Average and Average by Water Year Type

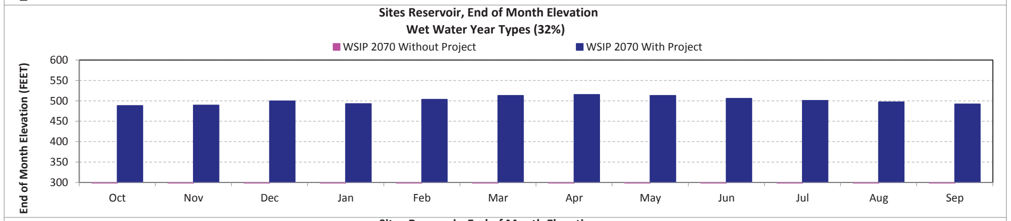
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	446	445	454	467	479	490	489	485	476	467	459	452
Difference	446	445	454	467	479	490	489	485	476	467	459	452
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	488	489	500	493	503	513	515	513	506	501	497	492
Difference	488	489	500	493	503	513	515	513	506	501	497	492
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	457	459	468	478	494	507	508	506	495	480	475	465
Difference	457	459	468	478	494	507	508	506	495	480	475	465
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	443	440	445	467	478	491	492	490	479	465	457	449
Difference	443	440	445	467	478	491	492	490	479	465	457	449
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	433	431	436	456	471	483	482	478	468	459	448	442
Difference	433	431	436	456	471	483	482	478	468	459	448	442
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	369	366	383	421	430	434	425	415	406	397	383	375
Difference	369	366	383	421	430	434	425	415	406	397	383	375
Percent Difference												

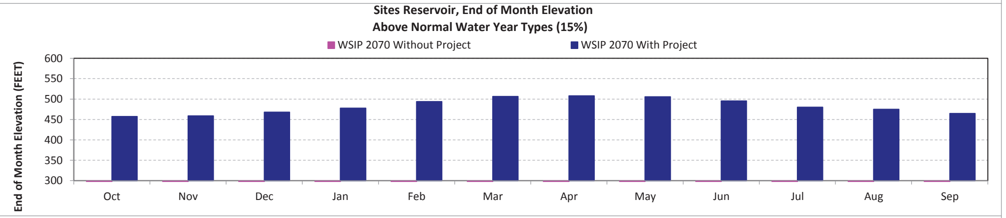
1 Based on the 82-year simulation period

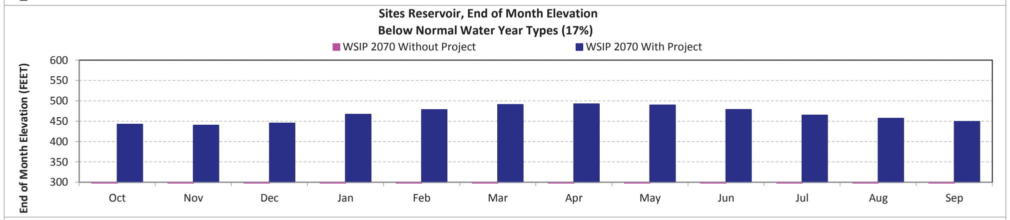
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

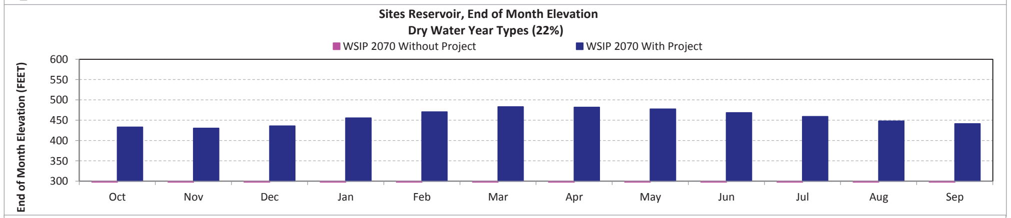
3 Relative difference of the monthly average











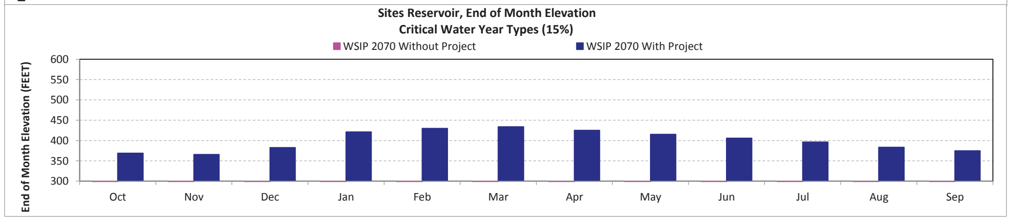


Table OP-11-a
Sites Reservoir, End of Month Area
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	10,364	10,299	10,798	11,499	12,132	12,651	12,637	12,423	11,987	11,515	11,091	10,708
Difference	10,364	10,299	10,798	11,499	12,132	12,651	12,637	12,423	11,987	11,515	11,091	10,708
Percent Difference[3]												
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	12,694	12,738	13,217	12,846	13,368	13,807	13,913	13,810	13,506	13,265	13,119	12,878
Difference	12,694	12,738	13,217	12,846	13,368	13,807	13,913	13,810	13,506	13,265	13,119	12,878
Percent Difference												
Above Normal (13.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	11,135	11,203	11,651	12,075	12,884	13,505	13,581	13,486	13,020	12,307	12,054	11,531
Difference	11,135	11,203	11,651	12,075	12,884	13,505	13,581	13,486	13,020	12,307	12,054	11,531
Percent Difference												
Below Normal (15.9%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	10,279	10,147	10,487	11,442	12,025	12,719	12,831	12,706	12,180	11,500	11,067	10,640
Difference	10,279	10,147	10,487	11,442	12,025	12,719	12,831	12,706	12,180	11,500	11,067	10,640
Percent Difference												
Dry (24.4%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	9,747	9,599	9,885	10,970	11,744	12,368	12,345	12,125	11,663	11,202	10,597	10,242
Difference	9,747	9,599	9,885	10,970	11,744	12,368	12,345	12,125	11,663	11,202	10,597	10,242
Percent Difference												
Critical (14.6%)												
WSIP 2070 Without Project	0	0	0	0	0	0	0	0	0	0	0	0
WSIP 2070 With Project	5,730	5,516	6,634	8,997	9,524	9,759	9,281	8,632	8,076	7,536	6,665	6,103
Difference	5,730	5,516	6,634	8,997	9,524	9,759	9,281	8,632	8,076	7,536	6,665	6,103
Percent Difference												

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Sites Reservoir Project Operations

Exceedance Probability Charts and Tables

Figure OP-01-b
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Probability of Exceedance

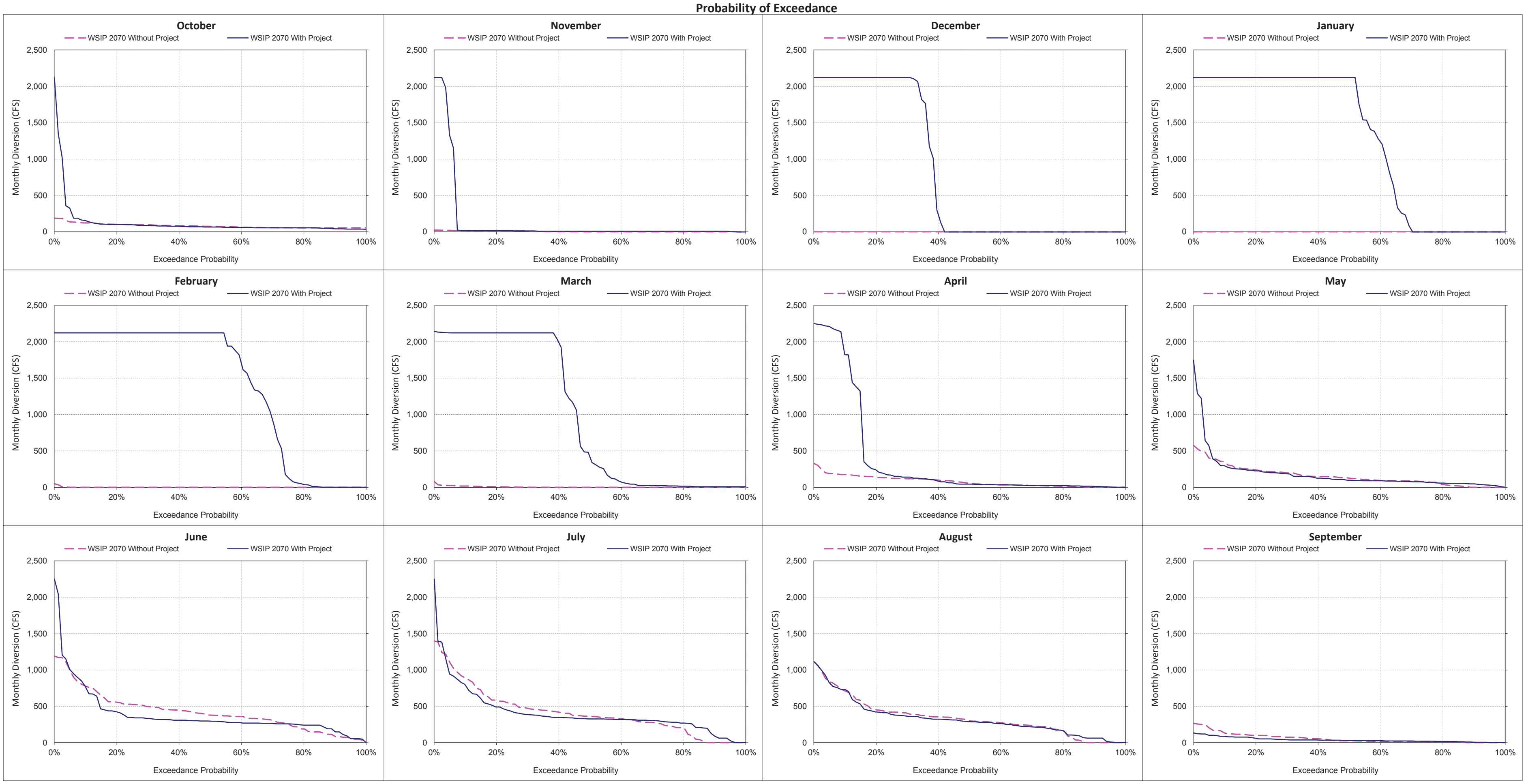


Table OP-01-b
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	189	2,121	1,933	
1.2%	187	1,346	1,160	621.7%
2.5%	185	1,018	833	451.3%
3.7%	157	359	202	128.5%
4.9%	136	325	189	139.1%
6.2%	134	187	52	39.1%
7.4%	131	186	55	41.8%
8.6%	124	162	39	31.2%
9.9%	123	156	34	27.4%
11.1%	122	136	14	11.4%
12.3%	118	123	5	4.1%
13.6%	114	118	4	3.6%
14.8%	110	107	-3	-2.6%
16.0%	106	104	-2	-1.7%
17.3%	106	103	-3	-2.5%
18.5%	104	103	-1	-1.2%
19.8%	103	103	0	-0.1%
21.0%	103	101	-2	-1.9%
22.2%	102	100	-2	-1.9%
23.5%	101	98	-3	-3.0%
24.7%	100	97	-4	-3.8%
25.9%	100	94	-6	-5.7%
27.2%	100	88	-12	-11.7%
28.4%	98	87	-11	-11.0%
29.6%	97	86	-11	-11.3%
30.9%	96	83	-13	-13.9%
32.1%	93	83	-10	-10.9%
33.3%	88	81	-6	-7.1%
34.6%	87	80	-8	-8.8%
35.8%	87	79	-9	-9.8%
37.0%	86	77	-10	-11.1%
38.3%	85	76	-10	-11.4%
39.5%	85	75	-10	-11.7%
40.7%	84	75	-9	-10.9%
42.0%	82	73	-10	-11.8%
43.2%	82	71	-11	-13.3%
44.4%	81	70	-11	-13.7%
45.7%	80	68	-12	-14.4%
46.9%	79	68	-11	-13.5%
48.1%	77	67	-10	-12.6%
49.4%	76	67	-9	-12.2%
50.6%	75	66	-8	-11.3%
51.9%	75	64	-10	-13.6%
53.1%	73	64	-9	-11.7%
54.3%	72	64	-9	-12.0%
55.6%	70	63	-6	-9.2%
56.8%	70	62	-7	-10.3%
58.0%	68	61	-7	-10.6%
59.3%	64	61	-3	-4.8%
60.5%	63	59	-4	-6.1%
61.7%	62	57	-5	-7.9%
63.0%	61	57	-3	-5.6%
64.2%	61	56	-5	-7.8%
65.4%	60	56	-5	-8.0%
66.7%	58	55	-3	-5.6%
67.9%	58	55	-3	-5.2%
69.1%	58	54	-3	-5.6%
70.4%	57	54	-3	-5.3%
71.6%	56	54	-2	-3.1%
72.8%	56	54	-2	-3.0%
74.1%	56	54	-1	-2.3%
75.3%	55	54	-1	-2.3%
76.5%	55	54	-1	-1.7%
77.8%	55	54	-1	-1.6%
79.0%	55	54	0	-0.9%
80.2%	54	54	0	-0.1%
81.5%	54	54	0	-0.1%
82.7%	54	54	0	-0.1%
84.0%	54	54	0	-0.1%
85.2%	54	53	-1	-1.6%
86.4%	54	48	-6	-11.7%
87.7%	54	47	-7	-13.7%
88.9%	54	44	-10	-19.3%
90.1%	54	42	-12	-22.7%
91.4%	54	41	-13	-23.6%
92.6%	54	40	-14	-26.7%
93.8%	54	38	-17	-30.8%
95.1%	54	37	-18	-32.4%
96.3%	54	36	-18	-33.3%
97.5%	54	36	-18	-33.3%
98.8%	54	36	-18	-33.3%
100.0%	54	32	-22	-40.4%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24	2,121	2,097	
1.2%	23	2,121	2,098	
2.5%	22	2,121	2,099	
3.7%	21	1,983	1,962	
4.9%	21	1,330	1,309	
6.2%	18	1,149	1,131	
7.4%	18	23	6	32.5%
8.6%	17	21	4	25.7%
9.9%	17	20	3	20.6%
11.1%	17	17	0	0.0%
12.3%	17	17	0	0.0%
13.6%	17	17	0	0.0%
14.8%	17	17	0	0.0%
16.0%	17	17	0	0.0%
17.3%	17	17	0	0.0%
18.5%	17	17	0	0.0%
19.8%	17	17	0	0.0%
21.0%	17	17	0	0.0%
22.2%	17	17	0	0.0%
23.5%	17	17	0	0.0%
24.7%	17	15	-2	-8.9%
25.9%	17	14	-3	-16.3%
27.2%	17	14	-3	-19.3%
28.4%	17	13	-4	-23.5%
29.6%	17	12	-5	-31.0%
30.9%	4	11	7	173.4%
32.1%	4	11	7	176.2%
33.3%	3	11	7	229.1%
34.6%	2	10	7	296.3%
35.8%	2	10	8	477.6%
37.0%	1	10	8	575.8%
38.3%	1	9	8	607.7%
39.5%	1	9	8	671.4%
40.7%	1	9	8	740.2%
42.0%	1	9	8	
43.2%	1	9	8	
44.4%	0	8	8	
45.7%	0	8	8	
46.9%	0	8	8	
48.1%	0	8	8	
49.4%	0	8	8	
50.6%	0	8	8	
51.9%	0	8	8	
53.1%	0	8	8	
54.3%	0	8	8	
55.6%	0	8	8	
56.8%	0	8	8	
58.0%	0	8	8	
59.3%	0	8	8	
60.5%	0	8	8	
61.7%	0	8	8	
63.0%	0	8	8	
64.2%	0	8	8	
65.4%	0	8	8	
66.7%	0	8	8	
67.9%	0	8	8	
69.1%	0	8	8	
70.4%	0	8	8	
71.6%	0	8	8	
72.8%	0	8	8	
74.1%	0	8	8	
75.3%	0	8	8	
76.5%	0	8	8	
77.8%	0	8	8	
79.0%	0	8	8	
80.2%	0	8	8	
81.5%	0	8	8	
82.7%	0	8	8	
84.0%	0	8	8	
85.2%	0	8	8	
86.4%	0	8	8	
87.7%	0	8	8	
88.9%	0	8	8	
90.1%	0	8	8	
91.4%	0	8	8	
92.6%	0	8	8	
93.8%	0	8	8	
95.1%	0	2	2	
96.3%	0	2	2	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,121	2,121	
1.2%	0	2,121	2,121	
2.5%	0	2,121	2,121	
3.7%	0	2,121	2,121	
4.9%	0	2,121	2,121	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	2,121	2,121	
32.1%	0	2,102	2,102	
33.3%	0	2,066	2,066	
34.6%	0	1,823	1,823	
35.8%	0	1,766	1,766	
37.0%	0	1,175	1,175	
38.3%	0	1,010	1,010	
39.5%	0	303	303	
40.7%	0	126	126	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,121	2,121	
1.2%	0	2,121	2,121	
2.5%	0	2,121	2,121	
3.7%	0	2,121	2,121	
4.9%	0	2,121	2,121	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	2,121	2,121	
32.1%	0	2,121	2,121	
33.3%	0	2,121	2,121	
34.6%	0	2,121	2,121	
35.8%	0	2,121	2,121	
37.0%	0	2,121	2,121	
38.3%	0	2,121	2,121	
39.5%	0	2,121	2,121	
40.7%	0	2,121	2,121	
42.0%	0	2,121	2,121	
43.2%	0	2,121	2,121	
44.4%	0	2,121	2,121	
45.7%	0	2,121	2,121	
46.9%	0	2,121	2,121	
48.1%	0	2,121	2,121	
49.4%	0	2,121	2,121	
50.6%	0	2,121	2,121	
51.9%	0	2,121	2,121	
53.1%	0	1,752	1,752	
54.3%	0	1,541	1,541	
55.6%	0	1,536	1,536	
56.8%	0	1,408	1,408	
58.0%	0	1,381	1,381	
59.3%	0	1,280	1,280	
60.5%	0	1,204	1,204	
61.7%	0	1,006	1,006	
63.0%	0	808	808	
64.2%	0	628	628	
65.4%	0	332	332	
66.7%	0	259	259	
67.9%	0	234	234	
69.1%	0	81	81	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-01-b
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	49	2,121	2,073	
1.2%	34	2,121	2,087	
2.5%	7	2,121	2,115	
3.7%	4	2,121	2,118	
4.9%	1	2,121	2,120	
6.2%	0	2,121	2,121	
7.4%	0	2,121	2,121	
8.6%	0	2,121	2,121	
9.9%	0	2,121	2,121	
11.1%	0	2,121	2,121	
12.3%	0	2,121	2,121	
13.6%	0	2,121	2,121	
14.8%	0	2,121	2,121	
16.0%	0	2,121	2,121	
17.3%	0	2,121	2,121	
18.5%	0	2,121	2,121	
19.8%	0	2,121	2,121	
21.0%	0	2,121	2,121	
22.2%	0	2,121	2,121	
23.5%	0	2,121	2,121	
24.7%	0	2,121	2,121	
25.9%	0	2,121	2,121	
27.2%	0	2,121	2,121	
28.4%	0	2,121	2,121	
29.6%	0	2,121	2,121	
30.9%	0	2,121	2,121	
32.1%	0	2,121	2,121	
33.3%	0	2,121	2,121	
34.6%	0	2,121	2,121	
35.8%	0	2,121	2,121	
37.0%	0	2,121	2,121	
38.3%	0	2,121	2,121	
39.5%	0	2,121	2,121	
40.7%	0	2,121	2,121	
42.0%	0	2,121	2,121	
43.2%	0	2,121	2,121	
44.4%	0	2,121	2,121	
45.7%	0	2,121	2,121	
46.9%	0	2,121	2,121	
48.1%	0	2,121	2,121	
49.4%	0	2,121	2,121	
50.6%	0	2,121	2,121	
51.9%	0	2,121	2,121	
53.1%	0	2,121	2,121	
54.3%	0	2,121	2,121	
55.6%	0	1,941	1,941	
56.8%	0	1,939	1,939	
58.0%	0	1,878	1,878	
59.3%	0	1,819	1,819	
60.5%	0	1,614	1,614	
61.7%	0	1,571	1,571	
63.0%	0	1,449	1,449	
64.2%	0	1,336	1,336	
65.4%	0	1,323	1,323	
66.7%	0	1,276	1,276	
67.9%	0	1,173	1,173	
69.1%	0	1,045	1,045	
70.4%	0	874	874	
71.6%	0	656	656	
72.8%	0	530	530	
74.1%	0	174	174	
75.3%	0	120	120	
76.5%	0	75	75	
77.8%	0	61	61	
79.0%	0	52	52	
80.2%	0	36	36	
81.5%	0	32	32	
82.7%	0	12	12	
84.0%	0	10	10	
85.2%	0	4	4	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	80	2,144	2,064	
1.2%	34	2,131	2,098	
2.5%	28	2,130	2,103	
3.7%	27	2,124	2,097	
4.9%	24	2,124	2,099	
6.2%	23	2,124	2,101	
7.4%	18	2,122	2,104	
8.6%	17	2,122	2,105	
9.9%	16	2,122	2,105	
11.1%	16	2,121	2,105	
12.3%	15	2,121	2,106	
13.6%	12	2,121	2,109	
14.8%	11	2,121	2,110	
16.0%	9	2,121	2,112	
17.3%	9	2,121	2,112	
18.5%	8	2,121	2,113	
19.8%	7	2,121	2,114	
21.0%	7	2,121	2,115	
22.2%	5	2,121	2,116	
23.5%	5	2,121	2,117	
24.7%	3	2,121	2,119	
25.9%	2	2,121	2,119	
27.2%	2	2,121	2,119	
28.4%	1	2,121	2,120	
29.6%	1	2,121	2,120	
30.9%	1	2,121	2,120	
32.1%	1	2,121	2,121	
33.3%	1	2,121	2,121	
34.6%	0	2,121	2,121	
35.8%	0	2,121	2,121	
37.0%	0	2,121	2,121	
38.3%	0	2,121	2,121	
39.5%	0	2,034	2,034	
40.7%	0	1,922	1,922	
42.0%	0	1,311	1,311	
43.2%	0	1,222	1,222	
44.4%	0	1,168	1,168	
45.7%	0	1,061	1,061	
46.9%	0	563	563	
48.1%	0	485	485	
49.4%	0	483	483	
50.6%	0	339	339	
51.9%	0	311	311	
53.1%	0	275	275	
54.3%	0	258	258	
55.6%	0	165	165	
56.8%	0	124	124	
58.0%	0	113	113	
59.3%	0	86	86	
60.5%	0	64	64	
61.7%	0	53	53	
63.0%	0	44	44	
64.2%	0	44	44	
65.4%	0	25	25	
66.7%	0	25	25	
67.9%	0	25	25	
69.1%	0	25	25	
70.4%	0	25	25	
71.6%	0	23	23	
72.8%	0	23	23	
74.1%	0	20	20	
75.3%	0	20	20	
76.5%	0	19	19	
77.8%	0	19	19	
79.0%	0	16	16	
80.2%	0	15	15	
81.5%	0	13	13	
82.7%	0	12	12	
84.0%	0	9	9	
85.2%	0	9	9	
86.4%	0	9	9	
87.7%	0	8	8	
88.9%	0	8	8	
90.1%	0	8	8	
91.4%	0	8	8	
92.6%	0	8	8	
93.8%	0	8	8	
95.1%	0	8	8	
96.3%	0	8	8	
97.5%	0	8	8	
98.8%	0	8	8	
100.0%	0	8	8	

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	328	2,250	1,922	586.4%
1.2%	302	2,241	1,939	642.2%
2.5%	246	2,231	1,985	806.3%
3.7%	200	2,218	2,019	
4.9%	190	2,210	2,020	
6.2%	186	2,179	1,993	
7.4%	183	2,159	1,977	
8.6%	174	2,141	1,967	
9.9%	173	1,822	1,649	951.4%
11.1%	173	1,818	1,645	949.6%
12.3%	167	1,442	1,275	764.3%
13.6%	161	1,379	1,218	755.6%
14.8%	152	1,325	1,173	774.3%
16.0%	151	348	197	130.3%
17.3%	148	298	150	101.1%
18.5%	148	256	108	73.0%
19.8%	138	244	106	76.9%
21.0%	135	203	68	50.0%
22.2%	131	192	62	47.3%
23.5%	130	171	41	31.5%
24.7%	123	167	44	35.3%
25.9%	122	150	27	22.5%
27.2%	121	149	28	23.0%
28.4%	121	141	20	16.7%
29.6%	117	139	22	18.7%
30.9%	117	138	21	17.6%
32.1%	116	126	9	8.1%
33.3%	115	125	9	8.2%
34.6%	115	119	5	4.0%
35.8%	111	117	6	5.6%
37.0%	106	107	1	1.0%
38.3%	105	105	0	0.0%
39.5%	100	91	-9	-9.2%
40.7%	94	76	-18	-18.8%
42.0%	92	74	-18	-19.9%
43.2%	90	62	-27	-30.6%
44.4%	87	59	-28	-31.8%
45.7%	75	48	-27	-36.2%
46.9%	73	44	-29	-39.5%
48.1%	64	43	-21	-32.6%
49.4%	57	42	-15	-26.5%
50.6%	53	42	-11	-21.2%
51.9%	46	40	-6	-13.0%
53.1%	45	38	-7	-14.7%
54.3%	39	37	-1	-3.1%
55.6%	38	36	-2	-5.0%
56.8%	36	36	-1	-1.6%
58.0%	36	36	0	-1.0%
59.3%	36	34	-1	-4.1%
60.5%	36	34	-2	-5.2%
61.7%	36	34	-2	-6.0%
63.0%	35	32	-3	-9.4%
64.2%	32	31	-1	-2.0%
65.4%	29	28	-1	-4.4%
66.7%	29	27	-2	-6.1%
67.9%	29	27	-2	-6.0%
69.1%	25	27	2	8.9%
70.4%	24	27	3	11.7%
71.6%	22	27	5	23.2%
72.8%	22	27	5	23.5%
74.1%	21	27	6	30.1%
75.3%	18	27	9	48.8%
76.5%	17	26	9	53.3%
77.8%	17	24	7	43.9%
79.0%	16	24	8	50.5%
80.2%	15	23	8	53.0%
81.5%	15	22	7	47.8%
82.7%	13	20	7	49.8%
84.0%	9	19	10	108.5%
85.2%	8	17	9	120.1%
86.4%	7	15	8	113.0%
87.7%	0	13	13	
88.9%	0	13	13	
90.1%	0	12	12	
91.4%	0	12	12	
92.6%	0	8	8	
93.8%	0	8	8	
95.1%	0	5	5	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	575	1,746	1,171	203.7%
1.2%	529	1,287	757	143.1%
2.5%	493	1,225	732	148.5%
3.7%	485	643	159	32.7%
4.9%	400	575	175	43.6%
6.2%	400	393	-6	-1.5%
7.4%	383	359	-24	-6.3%
8.6%	356	298	-58	-16.3%
9.9%	353	297	-56	-15.7%
11.1%	303	271	-32	-10.5%
12.3%	296	261	-35	-11.9%
13.6%	265	253	-12	-4.4%
14.8%	265	250	-15	-5.5%
16.0%	254	248	-6	-2.5%
17.3%	253	237	-16	-6.3%
18.5%	244	235	-9	-3.7%
19.8%	240	224	-16	-6.5%
21.0%	231	223	-8	-3.4%
22.2%	225	210	-14	-6.4%
23.5%	216	206	-9	-4.3%
24.7%	214	202	-13	-5.9%
25.9%	214	200	-13	-6.3%
27.2%	210	197	-13	-6.1%
28.4%	206	189	-17	-8.4%
29.6%	200	185	-15	-7.7%
30.9%	197	181	-16	-8.4%
32.1%	195	152	-44	-22.4%
33.3%	179	150	-30	-16.7%
34.6%	164	149	-15	-8.9%
35.8%	154	148	-6	-3.8%
37.0%	151	147	-4	-2.9%
38.3%	150	140	-10	-6.6%
39.5%	148	125	-23	-15.5%
40.7%	147	125	-22	-15.1%
42.0%	146	123	-24	-16.1%
43.2%	146	122	-24	-16.2%
44.4%	145	109	-35	-24.5%
45.7%	141	108	-33	-23.3%
46.9%	134	106	-28	-20.7%
48.1%	130	106	-23	-18.0%
49.4%	129	97	-32	-25.0%
50.6%	122	95	-27	-22.0%
51.9%	119	92	-27	-22.8%
53.1%	118	92	-26	-22.0%
54.3%	105	90	-15	-14.6%
55.6%	104	89	-15	-14.7%
56.8%	100	89	-11	-11.5%
58.0%	99	89	-10	-10.2%
59.3%	95	88	-7	-7.1%
60.5%	91	88	-3	-3.8%
61.7%	91	88	-3	-3.8%
63.0%	89	85	-4	-5.0%
64.2%	89	84	-4	-5.0%
65.4%	89	84	-5	-5.6%
66.7%	89	82	-6	-7.3%
67.9%	88	78	-11	-11.9%
69.1%	87	77	-10	-11.6%
70.4%	86	75	-11	-12.3%
71.6%	84	75	-10	-11.6%
72.8%	81	74	-6	-7.9%
74.1%	79	72	-7	-9.2%
75.3%	73	64	-9	-12.4%
76.5%	70	64	-6	-8.5%
77.8%	68	62	-5	-7.7%
79.0%	39	57	18	44.9%
80.2%	37	56	20	53.7%
81.5%	29	52	23	80.6%
82.7%	24	52	28	117.7%
84.0%	21	52	32	152.6%
85.2%	17	52	35	200.0%
86.4%	14	52	38	274.3%
87.7%	13	51	38	288.8%
88.9%	0	48	48	
90.1%	0	46	46	
91.4%	0	39	39	
92.6%	0	36	36	
93.8%	0	33	33	
95.1%	0	30	30	
96.3%	0	25	25	
97.5%	0	19	19	
98.8%	0	9	9	
100.0%	0	0	0	

Table OP-01-b
Tehama Colusa Canal Intake at Red Bluff, Monthly Diversion
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,190	2,250	1,060	89.0%
1.2%	1,170	2,043	872	74.5%
2.5%	1,169	1,202	33	2.8%
3.7%	1,110	1,151	41	3.7%
4.9%	1,001	1,009	8	0.8%
6.2%	899	948	49	5.5%
7.4%	840	896	56	6.6%
8.6%	805	849	43	5.4%
9.9%	779	773	-6	-0.8%
11.1%	759	673	-86	-11.3%
12.3%	750	669	-81	-10.7%
13.6%	702	639	-62	-8.9%
14.8%	655	464	-191	-29.2%
16.0%	615	452	-163	-26.5%
17.3%	563	438	-124	-22.1%
18.5%	562	438	-123	-22.0%
19.8%	558	425	-133	-23.8%
21.0%	551	410	-141	-25.6%
22.2%	530	383	-147	-27.7%
23.5%	530	349	-181	-34.2%
24.7%	528	346	-182	-34.5%
25.9%	522	342	-180	-34.5%
27.2%	522	340	-182	-34.9%
28.4%	513	339	-174	-33.9%
29.6%	496	333	-163	-32.8%
30.9%	491	330	-161	-32.9%
32.1%	485	321	-164	-33.8%
33.3%	484	320	-164	-33.8%
34.6%	459	320	-139	-30.3%
35.8%	454	319	-134	-29.6%
37.0%	452	314	-138	-30.6%
38.3%	449	309	-140	-31.1%
39.5%	448	309	-139	-31.1%
40.7%	439	308	-132	-30.0%
42.0%	437	307	-130	-29.7%
43.2%	429	305	-124	-28.9%
44.4%	419	302	-117	-27.8%
45.7%	407	299	-107	-26.4%
46.9%	403	299	-105	-25.9%
48.1%	394	298	-96	-24.3%
49.4%	380	298	-83	-21.7%
50.6%	377	295	-83	-21.9%
51.9%	376	293	-82	-21.9%
53.1%	373	290	-83	-22.2%
54.3%	369	287	-82	-22.2%
55.6%	368	281	-87	-23.6%
56.8%	361	276	-85	-23.6%
58.0%	360	275	-85	-23.5%
59.3%	360	275	-85	-23.6%
60.5%	360	271	-89	-24.8%
61.7%	337	270	-67	-19.9%
63.0%	333	270	-63	-18.8%
64.2%	332	270	-62	-18.8%
65.4%	329	269	-61	-18.4%
66.7%	326	266	-60	-18.4%
67.9%	321	266	-55	-17.2%
69.1%	316	265	-50	-15.9%
70.4%	302	260	-42	-13.9%
71.6%	279	258	-21	-7.5%
72.8%	274	258	-17	-6.1%
74.1%	267	257	-10	-3.8%
75.3%	250	257	7	2.7%
76.5%	220	255	35	15.9%
77.8%	218	250	33	15.1%
79.0%	189	243	54	28.7%
80.2%	188	241	53	28.3%
81.5%	154	241	87	56.4%
82.7%	148	241	93	63.1%
84.0%	148	241	93	63.1%
85.2%	148	241	93	63.1%
86.4%	130	217	87	67.0%
87.7%	116	190	73	63.0%
88.9%	114	190	76	66.4%
90.1%	83	147	64	76.7%
91.4%	83	147	64	76.9%
92.6%	74	114	40	53.6%
93.8%	73	93	20	27.0%
95.1%	62	54	-8	-13.1%
96.3%	48	54	6	12.4%
97.5%	48	53	5	11.0%
98.8%	34	48	14	40.8%
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,397	2,250	853	61.1%
1.2%	1,383	1,397	14	1.0%
2.5%	1,239	1,383	144	11.6%
3.7%	1,218	1,158	-59	-4.9%
4.9%	1,108	944	-164	-14.8%
6.2%	1,025	915	-110	-10.7%
7.4%	970	873	-97	-10.0%
8.6%	920	828	-92	-10.0%
9.9%	891	799	-92	-10.3%
11.1%	863	719	-143	-16.6%
12.3%	831	671	-160	-19.2%
13.6%	746	663	-83	-11.1%
14.8%	732	611	-121	-16.5%
16.0%	648	548	-100	-15.4%
17.3%	630	534	-96	-15.2%
18.5%	585	516	-70	-11.9%
19.8%	585	489	-95	-16.3%
21.0%	569	489	-81	-14.2%
22.2%	568	464	-104	-18.3%
23.5%	550	448	-102	-18.5%
24.7%	530	433	-97	-18.4%
25.9%	529	412	-118	-22.2%
27.2%	486	406	-81	-16.6%
28.4%	484	393	-91	-18.8%
29.6%	477	387	-90	-18.9%
30.9%	463	383	-80	-17.3%
32.1%	458	379	-79	-17.2%
33.3%	455	378	-77	-17.0%
34.6%	445	364	-81	-18.2%
35.8%	444	363	-80	-18.1%
37.0%	438	355	-84	-19.1%
38.3%	431	349	-82	-19.0%
39.5%	422	348	-74	-17.5%
40.7%	414	347	-67	-16.1%
42.0%	405	342	-63	-15.5%
43.2%	404	340	-64	-15.9%
44.4%	377	340	-37	-9.8%
45.7%	371	332	-40	-10.6%
46.9%	369	328	-41	-11.1%
48.1%	363	328	-35	-9.7%
49.4%	363	327	-36	-9.8%
50.6%	362	327	-35	-9.6%
51.9%	357	327	-30	-8.5%
53.1%	351	326	-25	-7.2%
54.3%	347	324	-23	-6.5%
55.6%	341	321	-19	-5.7%
56.8%	339	321	-18	-5.4%
58.0%	338	320	-18	-5.3%
59.3%	333	320	-13	-3.9%
60.5%	326	319	-7	-2.1%
61.7%	318	318	0	0.1%
63.0%	313	317	4	1.3%
64.2%	309	316	8	2.5%
65.4%	290	309	19	6.4%
66.7%	283	307	24	8.5%
67.9%	280	307	27	9.7%
69.1%	277	306	30	10.7%
70.4%	274	303	29	10.5%
71.6%	271	302	31	11.5%
72.8%	258	295	37	14.3%
74.1%	237	286	48	20.4%
75.3%	228	282	54	23.7%
76.5%	224	281	58	25.8%
77.8%	207	281	74	35.7%
79.0%	207	271	64	30.7%
80.2%	203	268	64	31.7%
81.5%	113	264	151	134.0%
82.7%	95	257	162	170.1%
84.0%	46	207	161	345.8%
85.2%	41	207	166	403.6%
86.4%	17	200	182	
87.7%	0	199	199	
88.9%	0	127	127	
90.1%	0	88	88	
91.4%	0	62	62	
92.6%	0	62	62	
93.8%	0	62	62	
95.1%	0	26	26	
96.3%	0	6	6	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,114	1,114	0	0.0%
1.2%	1,062	1,062	0	0.0%
2.5%	990	994	4	0.4%
3.7%	885	930	45	5.1%
4.9%	839	827	-13	-1.5%
6.2%	819	773	-45	-5.5%
7.4%	783	756	-27	-3.4%
8.6%	735	733	-2	-0.2%
9.9%	713	732	18	2.6%
11.1%	691	704	14	2.0%
12.3%	663	592	-71	-10.7%
13.6%	596	560	-36	-6.1%
14.8%	584	534	-50	-8.5%
16.0%	532	463	-69	-12.9%
17.3%	507	447	-59	-11.7%
18.5%	460	438	-22	-4.8%
19.8%	452	424	-28	-6.2%
21.0%	446	419	-27	-6.0%
22.2%	439	411	-28	-6.3%
23.5%	421	411	-11	-2.5%
24.7%	420	391	-29	-7.0%
25.9%	419	379	-40	-9.6%
27.2%	418	377	-40	-9.7%
28.4%	411	374	-36	-8.9%
29.6%	409	365	-44	-10.8%
30.9%	391	360	-31	-7.9%
32.1%	388	359	-29	-7.5%
33.3%	386	358	-28	-7.2%
34.6%	372	341	-31	-8.2%
35.8%	370	336	-34	-9.2%
37.0%	362	328	-34	-9.5%
38.3%	355	324	-31	-8.9%
39.5%	355	324	-31	-8.9%
40.7%	354	322	-32	-9.1%
42.0%	350	317	-32	-9.3%
43.2%	350	316	-34	-9.6%
44.4%	344	313	-31	-8.9%
45.7%	337	311	-26	-7.8%
46.9%	326	302	-24	-7.5%
48.1%	323	295	-28	-8.7%
49.4%	301	291	-10	-3.3%
50.6%	297	287	-9	-3.1%
51.9%	294	287	-7	-2.4%
53.1%	290	281	-9	-3.2%
54.3%	290	279	-11	-3.9%
55.6%	289	277	-12	-4.1%
56.8%	281	277	-4	-1.6%
58.0%	279	266	-13	-4.8%
59.3%	277	261	-16	-5.7%
60.5%	272	260	-11	-4.2%
61.7%	261	253	-8	-3.2%
63.0%	260	251	-9	-3.5%
64.2%	250	238	-12	-4.9%
65.4%	248	232	-16	-6.3%
66.7%	244	224	-20	-8.3%
67.9%	243	223	-20	-8.1%
69.1%	237	218	-19	-8.1%
70.4%	229	214	-15	-6.6%
71.6%	223	212	-11	-5.1%
72.8%	220	211	-9	-4.1%
74.1%	220	204	-15	-7.0%
75.3%	219	193	-26	-11.8%
76.5%	189	186	-3	-1.5%
77.8%	182	172	-10	-5.7%
79.0%	179	171	-7	-4.0%
80.2%	162	157	-5	-3.0%
81.5%	90	106	16	18.0%
82.7%	76	105	29	38.8%
84.0%	37	100	63	171.6%
85.2%	33	93	60	183.3%
86.4%	14	70	56	
87.7%	0	62	62	
88.9%	0	62	62	
90.1%	0	62	62	
91.4%	0	62	62	
92.6%	0	62	62	
93.8%	0	19	19	
95.1%	0	7	7	
96.3%	0	5	5	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	266	132	-134	-50.4%
1.2%	257	124	-133	-51.6%
2.5%	251	120	-131	-52.1%
3.7%	251	118	-132	-52.8%
4.9%	205	102	-102	-50.1%
6.2%	172	101	-71	-41.1%
7.4%	164	98	-66	-40.2%
8.6%	164	88	-76	-46.2%
9.9%	133	88	-46	-34.2%
11.1%	120	81	-39	-32.4%
12.3%	120	79	-40	-33.8%
13.6%	116	76	-40	-34.7%
14.8%	116	75	-41	-35.1%
16.0%	113	75	-38	-33.9%
17.3%	106	75	-32	-29.8%
18.5%	100	70	-30	-30.1%
19.8%	100	61	-39	-39.2%
21.0%	100	52	-48	-47.7%
22.2%	98	52	-46	-47.2%
23.5%	98	50	-48	-48.6%
24.7%	86	50	-36	-41.8%
25.9%	83	48	-35	-42.3%
27.2%	82	44	-38	-45.9%
28.4%	82	44	-37	-45.9%
29.6%	75	41	-34	-45.6%
30.9%	75	37	-37	-50.1%
32.1%	74	37	-37	-50.0%
33.3%	74	37	-36	-49.5%
34.6%	69	37	-32	-46.4%
35.8%	65	37	-28	-42.6%
37.0%	56	37	-18	-33.0%
38.3%	55	37	-19	-34.1%
39.5%	54	36	-19	-34.6%
40.7%	51	34	-17	-33.5%
42.0%	49	33	-16	-33.4%
43.2%	41	32	-9	-21.8%
44.4%	32	32	1	2.3%
45.7%	27	32	5	18.7%
46.9%	27	32	5	19.2%
48.1%	27	31	4	15.6%
49.4%	26	30	4	15.0%
50.6%	26	30	4	16.0%
51.9%	25	29	5	19.1%
53.1%	24	29	5	22.7%
54.3%	23	28	6	25.1%
55.6%	21	26	5	23.4%
56.8%	21	26	5	25.3%
58.0%	20	25	5	25.7%
59.3%	20	25	6	27.9%
60.5%	19	25	6	32.4%
61.7%	18	25	6	33.4%
63.0%	18	24	6	33.9%
64.2%	18	24	6	33.2%
65.4%	18	24	6	34.8%
66.7%	17	24	7	37.8%
67.9%	17	24	6	37.8%
69.1%	17	23	6	34.4%
70.4%	17	23	6	35.3%
71.6%	17	21	4	25.3%
72.8%	17	20	4	23.1%
74.1%	17	20	4	21.8%
75.3%	16	19	3	16.2%
76.5%	16	18	3	17.0%
77.8%	15	17	2	12.6%
79.0%	15	17	2	10.1%
80.2%	15	15	1	3.5%
81.5%	15	15	1	5.0%
82.7%	14	15	1	9.1%
84.0%	14	14	1	5.3%
85.2%	12	12	0	-0.9%
86.4%	5	11	6	104.0%
87.7%	0	10	10	
88.9%	0	9	9	
90.1%	0	6	6	
91.4%	0	6	6	
92.6%	0	5	5	
93.8%	0	5	5	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-02-b
Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion
Probability of Exceedance

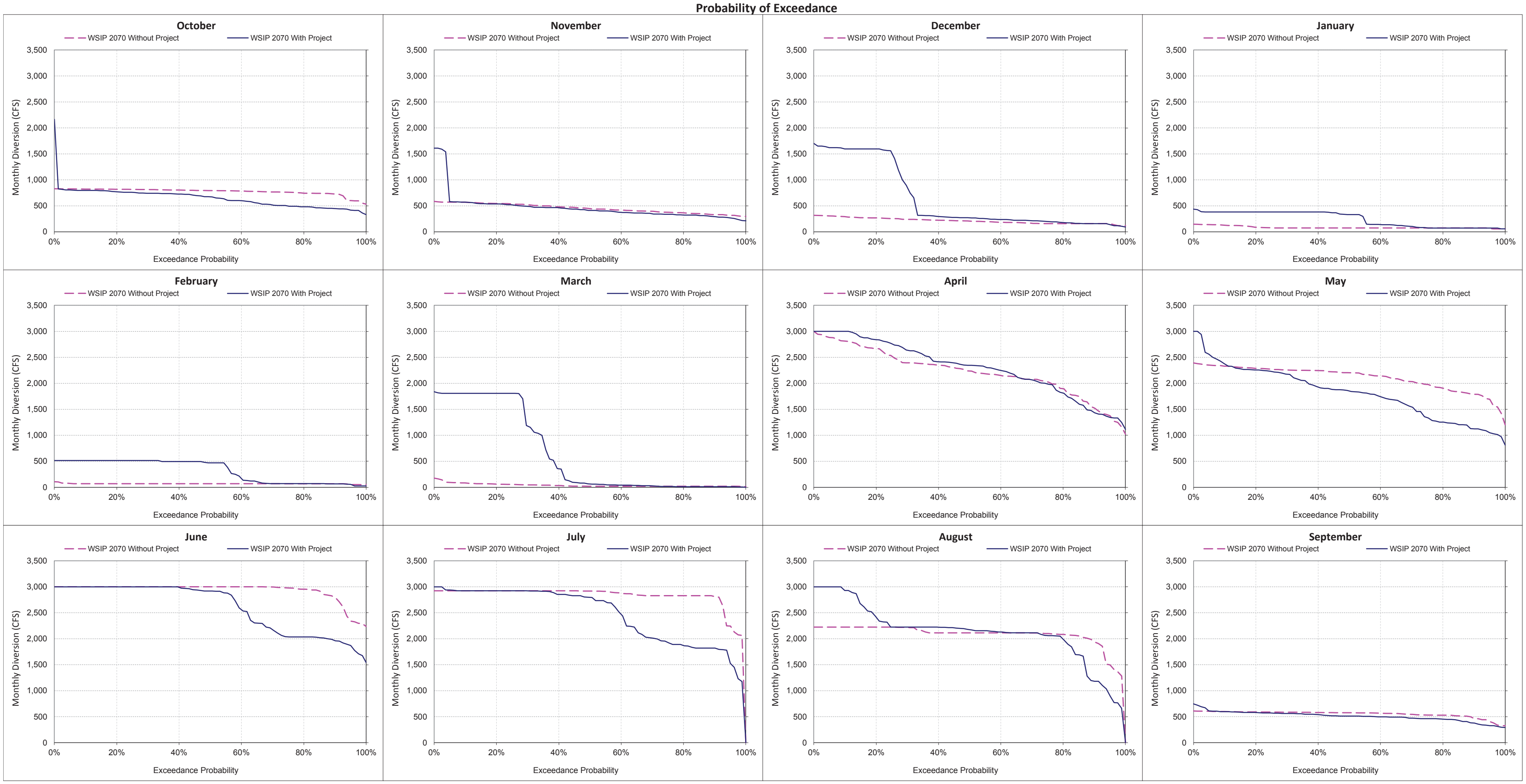


Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	829	2,166	1,337	161.3%
1.2%	828	828	0	0.0%
2.5%	826	819	-7	-0.9%
3.7%	825	807	-18	-2.2%
4.9%	825	805	-20	-2.5%
6.2%	825	803	-23	-2.7%
7.4%	823	799	-25	-3.0%
8.6%	823	799	-25	-3.0%
9.9%	823	799	-24	-3.0%
11.1%	822	796	-26	-3.2%
12.3%	822	796	-26	-3.1%
13.6%	822	794	-27	-3.3%
14.8%	821	791	-30	-3.6%
16.0%	821	790	-32	-3.8%
17.3%	821	788	-32	-3.9%
18.5%	820	779	-41	-5.0%
19.8%	819	772	-47	-5.8%
21.0%	819	767	-52	-6.3%
22.2%	819	762	-56	-6.9%
23.5%	818	761	-57	-6.9%
24.7%	816	760	-56	-6.8%
25.9%	816	757	-59	-7.2%
27.2%	815	749	-66	-8.1%
28.4%	815	748	-66	-8.1%
29.6%	814	742	-73	-8.9%
30.9%	813	741	-71	-8.8%
32.1%	812	741	-71	-8.7%
33.3%	809	740	-70	-8.6%
34.6%	809	738	-71	-8.7%
35.8%	807	736	-71	-8.8%
37.0%	806	735	-71	-8.8%
38.3%	806	730	-76	-9.4%
39.5%	805	729	-76	-9.4%
40.7%	803	727	-75	-9.4%
42.0%	802	722	-79	-9.9%
43.2%	799	721	-78	-9.8%
44.4%	799	709	-89	-11.2%
45.7%	796	698	-98	-12.3%
46.9%	796	691	-105	-13.2%
48.1%	795	679	-116	-14.6%
49.4%	795	677	-117	-14.8%
50.6%	794	674	-120	-15.1%
51.9%	793	654	-139	-17.5%
53.1%	792	647	-144	-18.2%
54.3%	791	636	-155	-19.6%
55.6%	791	606	-185	-23.4%
56.8%	790	603	-187	-23.6%
58.0%	787	603	-185	-23.5%
59.3%	787	601	-186	-23.6%
60.5%	787	596	-191	-24.3%
61.7%	781	588	-193	-24.7%
63.0%	779	584	-195	-25.0%
64.2%	778	560	-218	-28.0%
65.4%	777	553	-225	-28.9%
66.7%	773	531	-242	-31.3%
67.9%	772	530	-241	-31.3%
69.1%	768	527	-240	-31.3%
70.4%	767	511	-257	-33.4%
71.6%	767	509	-258	-33.6%
72.8%	765	507	-258	-33.7%
74.1%	764	506	-258	-33.8%
75.3%	761	494	-267	-35.1%
76.5%	760	493	-267	-35.1%
77.8%	754	493	-261	-34.6%
79.0%	749	484	-266	-35.4%
80.2%	743	481	-262	-35.2%
81.5%	743	481	-262	-35.2%
82.7%	742	477	-265	-35.7%
84.0%	741	464	-277	-37.4%
85.2%	741	461	-280	-37.8%
86.4%	739	455	-283	-38.3%
87.7%	738	452	-286	-38.7%
88.9%	734	450	-283	-38.6%
90.1%	727	445	-282	-38.7%
91.4%	722	443	-280	-38.7%
92.6%	693	441	-252	-36.4%
93.8%	602	435	-167	-27.7%
95.1%	601	417	-184	-30.6%
96.3%	596	412	-184	-30.9%
97.5%	596	411	-185	-31.1%
98.8%	553	363	-189	-34.2%
100.0%	532	335	-197	-37.1%

November				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	586	1,610	1,024	174.9%
1.2%	577	1,609	1,031	178.6%
2.5%	572	1,589	1,018	178.1%
3.7%	571	1,542	971	169.9%
4.9%	571	579	8	1.4%
6.2%	571	575	4	0.6%
7.4%	571	575	4	0.6%
8.6%	571	571	1	0.1%
9.9%	569	571	2	0.4%
11.1%	566	569	3	0.5%
12.3%	564	562	-2	-0.4%
13.6%	560	546	-14	-2.5%
14.8%	555	542	-13	-2.3%
16.0%	551	540	-11	-2.0%
17.3%	548	537	-11	-2.0%
18.5%	546	537	-9	-1.7%
19.8%	546	536	-10	-1.8%
21.0%	545	536	-10	-1.8%
22.2%	544	533	-11	-2.0%
23.5%	543	524	-19	-3.5%
24.7%	539	521	-18	-3.3%
25.9%	533	514	-19	-3.5%
27.2%	529	501	-29	-5.4%
28.4%	529	498	-31	-5.8%
29.6%	522	492	-30	-5.7%
30.9%	516	486	-30	-5.9%
32.1%	508	474	-34	-6.8%
33.3%	507	473	-34	-6.8%
34.6%	502	470	-32	-6.4%
35.8%	501	466	-34	-6.8%
37.0%	501	466	-35	-6.9%
38.3%	482	465	-17	-3.6%
39.5%	481	465	-16	-3.4%
40.7%	479	457	-22	-4.5%
42.0%	475	450	-25	-5.2%
43.2%	474	444	-30	-6.4%
44.4%	474	437	-37	-7.8%
45.7%	465	435	-30	-6.4%
46.9%	457	429	-28	-6.1%
48.1%	457	426	-31	-6.9%
49.4%	450	412	-38	-8.4%
50.6%	443	412	-32	-7.1%
51.9%	438	412	-26	-6.0%
53.1%	438	402	-35	-8.1%
54.3%	436	401	-35	-8.1%
55.6%	435	400	-35	-8.1%
56.8%	428	400	-29	-6.7%
58.0%	421	387	-33	-7.9%
59.3%	420	378	-43	-10.1%
60.5%	417	372	-45	-10.7%
61.7%	412	370	-42	-10.3%
63.0%	411	368	-43	-10.5%
64.2%	408	364	-44	-10.7%
65.4%	401	362	-39	-9.7%
66.7%	400	361	-39	-9.8%
67.9%	398	357	-41	-10.2%
69.1%	397	356	-41	-10.3%
70.4%	396	344	-51	-13.0%
71.6%	386	343	-43	-11.0%
72.8%	379	342	-36	-9.6%
74.1%	378	338	-40	-10.6%
75.3%	376	338	-38	-10.2%
76.5%	373	337	-36	-9.5%
77.8%	369	329	-41	-11.0%
79.0%	368	326	-42	-11.4%
80.2%	364	325	-40	-10.9%
81.5%	357	323	-35	-9.7%
82.7%	353	323	-30	-8.6%
84.0%	351	322	-29	-8.2%
85.2%	349	313	-36	-10.2%
86.4%	346	313	-33	-9.6%
87.7%	339	307	-32	-9.6%
88.9%	333	298	-35	-10.6%
90.1%	331	290	-41	-12.3%
91.4%	330	281	-49	-14.9%
92.6%	330	281	-49	-14.8%
93.8%	322	278	-44	-13.6%
95.1%	318	268	-50	-15.7%
96.3%	318	257	-60	-19.0%
97.5%	306	236	-70	-23.0%
98.8%	299	218	-81	-27.1%
100.0%	298	213	-85	-28.6%

December				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	318	1,702	1,385	435.9%
1.2%	316	1,651	1,335	422.5%
2.5%	314	1,649	1,334	424.3%
3.7%	310	1,641	1,330	428.5%
4.9%	306	1,623	1,317	431.0%
6.2%	304	1,620	1,316	433.5%
7.4%	298	1,619	1,321	443.9%
8.6%	296	1,614	1,318	444.6%
9.9%	292	1,597	1,305	446.1%
11.1%	284	1,597	1,313	462.3%
12.3%	282	1,597	1,315	465.5%
13.6%	277	1,597	1,320	477.0%
14.8%	272	1,597	1,325	486.3%
16.0%	271	1,597	1,326	488.9%
17.3%	270	1,597	1,327	490.7%
18.5%	268	1,597	1,329	495.1%
19.8%	268	1,597	1,329	496.0%
21.0%	268	1,597	1,329	496.0%
22.2%	263	1,577	1,314	499.4%
23.5%	259	1,565	1,306	503.9%
24.7%	255	1,558	1,303	510.8%
25.9%	254	1,413	1,158	455.5%
27.2%	253	1,185	932	368.2%
28.4%	242	1,003	760	313.7%
29.6%	240	895	655	273.0%
30.9%	239	747	507	212.2%
32.1%	239	656	417	174.7%
33.3%	237	318	81	34.2%
34.6%	235	316	81	34.4%
35.8%	231	314	83	35.8%
37.0%	228	310	83	36.2%
38.3%	225	306	81	36.0%
39.5%	224	298	74	32.9%
40.7%	222	292	70	31.6%
42.0%	222	290	68	30.6%
43.2%	219	282	64	29.1%
44.4%	216	279	63	29.1%
45.7%	213	277	64	30.0%
46.9%	212	272	60	28.3%
48.1%	212	271	59	28.0%
49.4%	209	270	61	29.1%
50.6%	204	268	64	31.4%
51.9%	201	268	67	33.0%
53.1%	201	259	58	28.6%
54.3%	197	255	58	29.5%
55.6%	194	254	61	31.2%
56.8%	193	242	49	25.3%
58.0%	189	240	51	26.9%
59.3%	185	239	55	29.5%
60.5%	184	239	55	29.9%
61.7%	181	237	56	31.1%
63.0%	180	231	51	28.5%
64.2%	179	225	45	25.2%
65.4%	179	224	45	25.4%
66.7%	175	222	47	27.0%
67.9%	171	222	50	29.5%
69.1%	171	216	45	26.2%
70.4%	161	213	51	31.8%
71.6%	161	212	51	31.6%
72.8%	159	210	51	32.2%
74.1%	158	201	44	27.7%
75.3%	158	197	39	24.9%
76.5%	158	194	36	22.9%
77.8%	158	193	36	22.6%
79.0%	158	185	27	17.0%
80.2%	158	180	22	14.0%
81.5%	158	171	14	8.6%
82.7%	158	171	13	8.3%
84.0%	158	161	4	2.4%
85.2%	158	161	3	2.0%
86.4%	158	159	1	0.5%
87.7%	158	158	0	0.0%
88.9%	158	158	0	0.0%
90.1%	158	158	0	0.0%
91.4%	158	158	0	0.0%
92.6%	158	158	0	0.0%
93.8%	158	158	0	0.0%
95.1%	158	138	-19	-12.3%
96.3%	138	119	-19	-13.7%
97.5%	119	119	0	0.0%
98.8%	119	106	-13	-10.8%
100.0%	119	92	-27	-22.9%

January				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	147	436	290	197.7%
1.2%	144	429	285	197.4%
2.5%	141	387	246	175.4%
3.7%	141	384	243	173.1%
4.9%	139	384	244	175.4%
6.2%	137	384	246	179.5%
7.4%	137	384	247	181.1%
8.6%	133	384	250	187.9%
9.9%	127	384	256	201.4%
11.1%	122	384	262	214.3%
12.3%	122	384	262	214.3%
13.6%	121	384	262	216.4%
14.8%	120	384	264	220.6%
16.0%	114	384	270	236.4%
17.3%	108	384	276	255.1%
18.5%	102	384	282	277.5%
19.8%	87	384	297	339.9%
21.0%	87	384	297	342.0%
22.2%	82	384	301	366.3%
23.5%	80	384	303	377.2%
24.7%	78	384	306	391.9%
25.9%	75	384	309	413.0%
27.2%	75	384	309	413.0%
28.4%	75	384	309	413.0%
29.6%	75	384	309	413.0%
30.9%	75	384	309	413.0%
32.1%	75	384	309	413.0%
33.3%	75	384	309	413.0%
34.6%	75	384	309	413.0%
35.8%	75	384	309	413.0%
37.0%	75	384	309	413.0%
38.3%	75	384	309	413.0%
39.5%	75	384	309	413.0%
40.7%	75	384	309	413.0%
42.0%	75	384	309	413.0%
43.2%	75	379	304	406.3%
44.4%	75	365	291	388.4%
45.7%	75	365	291	388.4%
46.9%	75	344	269	359.7%
48.1%	75	335	260	347.7%
49.4%	75	332	258	344.2%
50.6%	75	332	258	344.2%
51.9%	75	332	258	344.2%
53.1%	75	332	258	344.2%
54.3%	75	299	224	299.4%
55.6%	75	147	72	95.9%
56.8%	75	144	69	92.7%
58.0%	75	141	66	87.9%
59.3%	75	141	66	87.9%
60.5%	75	139	65	86.2%
61.7%	75	137	63	83.6%
63.0%	75	137	62	82.5%
64.2%	75	133	59	78.2%
65.4%	75	122	47	63.2%
66.7%	75	122	47	63.2%
67.9%	75	114	39	52.5%
69.1%	75	108	33	44.5%
70.4%	75	102	27	35.9%
71.6%	75	87	12	16.1%
72.8%	75	82	7	10.0%
74.1%	75	80	6	7.5%
75.3%	75	75	0	0.0%
76.5%	75	75	0	0.0%
77.8%	75	75	0	0.0%
79.0%	75	75	0	0.0%
80.2%	75	75	0	0.0%
81.5%	75	75	0	0.0%
82.7%	75	75	0	0.0%
84.0%	75	75	0	0.0%
85.2%	75	75	0	0.0%
86.4%	75	75	0	0.0%
87.7%	75	75	0	0.0%
88.9%	75	75	0	0.0%
90.1%	75	75	0	0.0%
91.4%	75	75	0	0.0%
92.6%	75	75	0	0.0%
93.8%	75	75	0	0.0%
95.1%	63	75	12	18.6%
96.3%	56	75	18	32.5%
97.5%	56	75	18	32.5%
98.8%	56	56	0	0.0%
100.0%	56	56	0	0.0%

Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	107	513	406	380.9%
1.2%	103	513	411	400.0%
2.5%	81	513	432	534.2%
3.7%	80	513	433	541.7%
4.9%	74	513	439	590.2%
6.2%	68	513	445	650.0%
7.4%	68	513	445	650.0%
8.6%	68	513	445	650.0%
9.9%	68	513	445	650.0%
11.1%	68	513	445	650.0%
12.3%	68	513	445	650.0%
13.6%	68	513	445	650.0%
14.8%	68	513	445	650.0%
16.0%	68	513	445	650.0%
17.3%	68	513	445	650.0%
18.5%	68	513	445	650.0%
19.8%	68	513	445	650.0%
21.0%	68	513	445	650.0%
22.2%	68	513	445	650.0%
23.5%	68	513	445	650.0%
24.7%	68	513	445	650.0%
25.9%	68	513	445	650.0%
27.2%	68	513	445	650.0%
28.4%	68	513	445	650.0%
29.6%	68	513	445	650.0%
30.9%	68	513	445	650.0%
32.1%	68	513	445	650.0%
33.3%	68	513	445	650.0%
34.6%	68	496	428	625.5%
35.8%	68	496	428	625.5%
37.0%	68	496	428	625.5%
38.3%	68	495	427	624.1%
39.5%	68	495	427	624.1%
40.7%	68	495	427	624.1%
42.0%	68	495	427	624.1%
43.2%	68	495	427	624.1%
44.4%	68	495	427	624.1%
45.7%	68	495	427	624.1%
46.9%	68	495	427	624.1%
48.1%	68	479	411	600.5%
49.4%	68	471	402	587.8%
50.6%	68	471	402	587.8%
51.9%	68	471	402	587.8%
53.1%	68	471	402	587.8%
54.3%	68	471	402	587.8%
55.6%	68	385	317	462.7%
56.8%	68	265	196	286.6%
58.0%	68	252	184	269.0%
59.3%	68	214	145	212.1%
60.5%	68	133	65	94.7%
61.7%	68	130	62	90.0%
63.0%	68	123	54	79.3%
64.2%	68	118	50	72.5%
65.4%	68	100	32	46.7%
66.7%	68	80	12	16.9%
67.9%	68	74	6	8.7%
69.1%	68	73	4	6.4%
70.4%	68	68	0	0.0%
71.6%	68	68	0	0.0%
72.8%	68	68	0	0.0%
74.1%	66	68	2	3.6%
75.3%	66	68	2	3.6%
76.5%	66	68	2	3.6%
77.8%	66	68	2	3.6%
79.0%	66	68	2	3.6%
80.2%	66	68	2	3.6%
81.5%	66	68	2	3.6%
82.7%	66	68	2	3.6%
84.0%	66	68	2	3.6%
85.2%	66	68	2	3.6%
86.4%	66	68	2	3.6%
87.7%	66	66	0	0.0%
88.9%	66	66	0	0.0%
90.1%	66	66	0	0.0%
91.4%	66	66	0	0.0%
92.6%	66	66	0	0.0%
93.8%	62	62	0	0.0%
95.1%	52	54	3	5.1%
96.3%	52	26	-26	-50.2%
97.5%	52	26	-26	-50.2%
98.8%	50	26	-24	-48.5%
100.0%	50	26	-24	-48.8%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	176	1,838	1,662	945.4%
1.2%	162	1,819	1,657	
2.5%	143	1,807	1,663	
3.7%	98	1,807	1,709	
4.9%	94	1,807	1,713	
6.2%	90	1,807	1,717	
7.4%	90	1,807	1,717	
8.6%	84	1,807	1,722	
9.9%	84	1,807	1,723	
11.1%	77	1,807	1,730	
12.3%	74	1,807	1,733	
13.6%	69	1,807	1,737	
14.8%	69	1,807	1,737	
16.0%	69	1,807	1,738	
17.3%	66	1,807	1,740	
18.5%	66	1,807	1,741	
19.8%	61	1,807	1,745	
21.0%	58	1,807	1,748	
22.2%	58	1,807	1,749	
23.5%	56	1,807	1,750	
24.7%	56	1,807	1,750	
25.9%	54	1,807	1,752	
27.2%	50	1,802	1,752	
28.4%	48	1,704	1,656	
29.6%	46	1,189	1,143	
30.9%	46	1,155	1,109	
32.1%	45	1,060	1,015	
33.3%	44	1,041	997	
34.6%	41	1,000	959	
35.8%	40	720	680	
37.0%	40	546	505	
38.3%	33	520	487	
39.5%	32	358	326	
40.7%	32	349	316	981.8%
42.0%	25	143	118	477.0%
43.2%	25	128	103	416.6%
44.4%	22	94	72	324.3%
45.7%	22	90	68	309.5%
46.9%	22	82	60	272.0%
48.1%	22	78	57	260.2%
49.4%	20	63	44	223.6%
50.6%	20	61	41	211.8%
51.9%	20	60	40	207.2%
53.1%	20	55	36	183.6%
54.3%	20	53	34	171.8%
55.6%	20	46	27	136.4%
56.8%	20	46	27	136.4%
58.0%	20	44	24	124.6%
59.3%	20	42	23	117.5%
60.5%	20	42	23	115.6%
61.7%	20	42	22	112.8%
63.0%	20	39	20	101.0%
64.2%	20	37	18	92.1%
65.4%	20	36	16	84.4%
66.7%	20	31	11	56.6%
67.9%	20	30	11	53.9%
69.1%	20	30	11	53.9%
70.4%	20	23	4	18.5%
71.6%	20	21	2	9.5%
72.8%	20	17	-3	-15.0%
74.1%	20	16	-3	-16.9%
75.3%	20	16	-3	-16.9%
76.5%	20	14	-6	-28.8%
77.8%	20	11	-8	-41.7%
79.0%	20	11	-8	-41.7%
80.2%	20	11	-8	-41.7%
81.5%	20	11	-8	-41.7%
82.7%	20	11	-8	-41.7%
84.0%	20	11	-8	-41.7%
85.2%	20	11	-8	-41.7%
86.4%	20	11	-8	-41.7%
87.7%	20	11	-8	-41.7%
88.9%	20	11	-8	-41.7%
90.1%	20	11	-8	-41.7%
91.4%	20	11	-8	-41.7%
92.6%	20	11	-8	-41.7%
93.8%	20	11	-8	-41.7%
95.1%	20	11	-8	-41.7%
96.3%	20	11	-8	-41.7%
97.5%	20	7	-13	-66.2%
98.8%	15	5	-10	-66.2%
100.0%	15	0	-15	-100.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	2,945	3,000	55	1.9%
2.5%	2,937	3,000	63	2.2%
3.7%	2,905	3,000	95	3.3%
4.9%	2,883	3,000	117	4.1%
6.2%	2,877	3,000	123	4.3%
7.4%	2,851	3,000	149	5.2%
8.6%	2,818	3,000	182	6.4%
9.9%	2,813	3,000	187	6.6%
11.1%	2,806	3,000	194	6.9%
12.3%	2,789	2,981	192	6.9%
13.6%	2,768	2,951	183	6.6%
14.8%	2,717	2,897	180	6.6%
16.0%	2,706	2,877	171	6.3%
17.3%	2,685	2,874	189	7.0%
18.5%	2,680	2,851	171	6.4%
19.8%	2,666	2,842	176	6.6%
21.0%	2,666	2,837	171	6.4%
22.2%	2,605	2,810	206	7.9%
23.5%	2,543	2,797	255	10.0%
24.7%	2,538	2,771	234	9.2%
25.9%	2,484	2,736	252	10.1%
27.2%	2,452	2,727	276	11.2%
28.4%	2,398	2,689	290	12.1%
29.6%	2,395	2,643	247	10.3%
30.9%	2,395	2,625	230	9.6%
32.1%	2,393	2,625	232	9.7%
33.3%	2,385	2,599	215	9.0%
34.6%	2,380	2,571	192	8.0%
35.8%	2,377	2,527	150	6.3%
37.0%	2,364	2,512	148	6.3%
38.3%	2,363	2,429	66	2.8%
39.5%	2,353	2,414	62	2.6%
40.7%	2,347	2,411	65	2.8%
42.0%	2,342	2,410	68	2.9%
43.2%	2,318	2,406	88	3.8%
44.4%	2,310	2,398	88	3.8%
45.7%	2,291	2,386	95	4.2%
46.9%	2,283	2,369	86	3.8%
48.1%	2,267	2,353	86	3.8%
49.4%	2,239	2,346	107	4.8%
50.6%	2,235	2,345	110	4.9%
51.9%	2,205	2,343	137	6.2%
53.1%	2,197	2,339	142	6.5%
54.3%	2,189	2,332	143	6.5%
55.6%	2,181	2,302	121	5.5%
56.8%	2,173	2,298	125	5.7%
58.0%	2,171	2,279	108	5.0%
59.3%	2,160	2,256	96	4.4%
60.5%	2,144	2,243	99	4.6%
61.7%	2,139	2,229	90	4.2%
63.0%	2,136	2,197	61	2.9%
64.2%	2,130	2,174	44	2.1%
65.4%	2,130	2,110	-21	-1.0%
66.7%	2,090	2,092	2	0.1%
67.9%	2,080	2,079	-1	0.0%
69.1%	2,077	2,076	-1	-0.1%
70.4%	2,077	2,064	-13	-0.6%
71.6%	2,076	2,037	-39	-1.9%
72.8%	2,053	2,006	-47	-2.3%
74.1%	2,042	2,004	-38	-1.9%
75.3%	2,023	1,981	-41	-2.1%
76.5%	1,986	1,974	-12	-0.6%
77.8%	1,983	1,869	-114	-5.7%
79.0%	1,903	1,829	-74	-3.9%
80.2%	1,895	1,809	-86	-4.5%
81.5%	1,809	1,740	-69	-3.8%
82.7%	1,777	1,714	-63	-3.5%
84.0%	1,768	1,655	-112	-6.4%
85.2%	1,747	1,597	-151	-8.6%
86.4%	1,659	1,578	-81	-4.9%
87.7%	1,643	1,490	-153	-9.3%
88.9%	1,555	1,479	-75	-4.8%
90.1%	1,522	1,432	-91	-6.0%
91.4%	1,466	1,407	-59	-4.0%
92.6%	1,418	1,402	-16	-1.1%
93.8%	1,402	1,367	-35	-2.5%
95.1%	1,375	1,341	-34	-2.4%
96.3%	1,271	1,335	64	5.0%
97.5%	1,249	1,334	85	6.8%
98.8%	1,158	1,248	90	7.8%
100.0%	1,021	1,116	94	9.2%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,392	3,000	608	25.4%
1.2%	2,379	3,000	621	26.1%
2.5%	2,369	2,943	574	24.2%
3.7%	2,356	2,598	242	10.3%
4.9%	2,351	2,559	208	8.9%
6.2%	2,346	2,501	155	6.6%
7.4%	2,340	2,468	128	5.5%
8.6%	2,340	2,424	84	3.6%
9.9%	2,331	2,378	47	2.0%
11.1%	2,330	2,331	1	0.0%
12.3%	2,315	2,326	11	0.5%
13.6%	2,315	2,291	-24	-1.0%
14.8%	2,307	2,284	-23	-1.0%
16.0%	2,305	2,268	-37	-1.6%
17.3%	2,299	2,267	-31	-1.4%
18.5%	2,296	2,263	-34	-1.5%
19.8%	2,289	2,258	-31	-1.3%
21.0%	2,286	2,255	-31	-1.4%
22.2%	2,284	2,247	-37	-1.6%
23.5%	2,278	2,241	-38	-1.6%
24.7%	2,274	2,232	-42	-1.8%
25.9%	2,266	2,219	-47	-2.1%
27.2%	2,265	2,214	-52	-2.3%
28.4%	2,261	2,196	-64	-2.8%
29.6%	2,258	2,177	-81	-3.6%
30.9%	2,255	2,172	-82	-3.7%
32.1%	2,252	2,105	-148	-6.6%
33.3%	2,250	2,081	-169	-7.5%
34.6%	2,250	2,059	-191	-8.5%
35.8%	2,250	2,051	-199	-8.8%
37.0%	2,248	1,989	-259	-11.5%
38.3%	2,248	1,967	-281	-12.5%
39.5%	2,247	1,935	-312	-13.9%
40.7%	2,245	1,914	-331	-14.7%
42.0%	2,242	1,905	-337	-15.0%
43.2%	2,226	1,900	-326	-14.7%
44.4%	2,222	1,882	-339	-15.3%
45.7%	2,219	1,876	-343	-15.5%
46.9%	2,211	1,876	-335	-15.2%
48.1%	2,206	1,874	-332	-15.0%
49.4%	2,206	1,861	-344	-15.6%
50.6%	2,203	1,845	-358	-16.3%
51.9%	2,201	1,837	-364	-16.5%
53.1%	2,198	1,833	-366	-16.6%
54.3%	2,172	1,818	-354	-16.3%
55.6%	2,170	1,815	-355	-16.4%
56.8%	2,159	1,790	-369	-17.1%
58.0%	2,147	1,787	-360	-16.8%
59.3%	2,141	1,757	-384	-17.9%
60.5%	2,141	1,733	-408	-19.0%
61.7%	2,133	1,707	-426	-20.0%
63.0%	2,107	1,691	-416	-19.8%
64.2%	2,086	1,683	-404	-19.4%
65.4%	2,086	1,674	-412	-19.8%
66.7%	2,066	1,633	-432	-20.9%
67.9%	2,038	1,596	-441	-21.7%
69.1%	2,035	1,564	-471	-23.1%
70.4%	2,032	1,540	-492	-24.2%
71.6%	2,007	1,459	-547	-27.3%
72.8%	2,004	1,458	-546	-27.2%
74.1%	1,983	1,357	-626	-31.6%
75.3%	1,977	1,335	-642	-32.5%
76.5%	1,950	1,285	-665	-34.1%
77.8%	1,926	1,273	-653	-33.9%
79.0%	1,921	1,255	-666	-34.7%
80.2%	1,903	1,254	-649	-34.1%
81.5%	1,882	1,239	-642	-34.1%
82.7%	1,851	1,231	-620	-33.5%
84.0%	1,843	1,226	-616	-33.5%
85.2%	1,840	1,202	-638	-34.7%
86.4%	1,825	1,202	-622	-34.1%
87.7%	1,815	1,201	-614	-33.8%
88.9%	1,797	1,128	-669	-37.2%
90.1%	1,790	1,125	-664	-37.1%
91.4%	1,787	1,125	-662	-37.0%
92.6%	1,762	1,102	-659	-37.4%
93.8%	1,708	1,091	-617	-36.1%
95.1%	1,692	1,051	-642	-37.9%
96.3%	1,562	1,027	-535	-34.2%
97.5%	1,547	1,016	-531	-34.3%
98.8%	1,422	975	-446	-31.4%
100.0%	1,202	816	-387	-32.1%

Table OP-02-b

Glenn Colusa Canal Intake at Hamilton City, Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	3,000	3,000	0	0.0%
2.5%	3,000	3,000	0	0.0%
3.7%	3,000	3,000	0	0.0%
4.9%	3,000	3,000	0	0.0%
6.2%	3,000	3,000	0	0.0%
7.4%	3,000	3,000	0	0.0%
8.6%	3,000	3,000	0	0.0%
9.9%	3,000	3,000	0	0.0%
11.1%	3,000	3,000	0	0.0%
12.3%	3,000	3,000	0	0.0%
13.6%	3,000	3,000	0	0.0%
14.8%	3,000	3,000	0	0.0%
16.0%	3,000	3,000	0	0.0%
17.3%	3,000	3,000	0	0.0%
18.5%	3,000	3,000	0	0.0%
19.8%	3,000	3,000	0	0.0%
21.0%	3,000	3,000	0	0.0%
22.2%	3,000	3,000	0	0.0%
23.5%	3,000	3,000	0	0.0%
24.7%	3,000	3,000	0	0.0%
25.9%	3,000	3,000	0	0.0%
27.2%	3,000	3,000	0	0.0%
28.4%	3,000	3,000	0	0.0%
29.6%	3,000	3,000	0	0.0%
30.9%	3,000	3,000	0	0.0%
32.1%	3,000	3,000	0	0.0%
33.3%	3,000	3,000	0	0.0%
34.6%	3,000	3,000	0	0.0%
35.8%	3,000	3,000	0	0.0%
37.0%	3,000	3,000	0	0.0%
38.3%	3,000	2,998	-2	-0.1%
39.5%	3,000	2,998	-2	-0.1%
40.7%	3,000	2,972	-28	-0.9%
42.0%	3,000	2,967	-33	-1.1%
43.2%	3,000	2,962	-38	-1.3%
44.4%	3,000	2,944	-56	-1.9%
45.7%	3,000	2,940	-60	-2.0%
46.9%	3,000	2,927	-73	-2.4%
48.1%	3,000	2,920	-80	-2.7%
49.4%	3,000	2,917	-83	-2.8%
50.6%	3,000	2,916	-84	-2.8%
51.9%	3,000	2,915	-85	-2.8%
53.1%	3,000	2,915	-85	-2.8%
54.3%	3,000	2,884	-116	-3.9%
55.6%	3,000	2,877	-123	-4.1%
56.8%	3,000	2,840	-160	-5.3%
58.0%	3,000	2,730	-270	-9.0%
59.3%	3,000	2,591	-409	-13.6%
60.5%	3,000	2,532	-468	-15.6%
61.7%	3,000	2,522	-478	-15.9%
63.0%	3,000	2,355	-645	-21.5%
64.2%	3,000	2,307	-693	-23.1%
65.4%	3,000	2,299	-701	-23.4%
66.7%	3,000	2,296	-704	-23.5%
67.9%	2,998	2,222	-776	-25.9%
69.1%	2,998	2,207	-791	-26.4%
70.4%	2,996	2,162	-834	-27.8%
71.6%	2,988	2,108	-879	-29.4%
72.8%	2,985	2,066	-919	-30.8%
74.1%	2,979	2,041	-939	-31.5%
75.3%	2,977	2,037	-940	-31.6%
76.5%	2,974	2,037	-937	-31.5%
77.8%	2,961	2,037	-924	-31.2%
79.0%	2,953	2,037	-916	-31.0%
80.2%	2,953	2,037	-916	-31.0%
81.5%	2,950	2,036	-914	-31.0%
82.7%	2,940	2,034	-906	-30.8%
84.0%	2,940	2,029	-911	-31.0%
85.2%	2,915	2,021	-895	-30.7%
86.4%	2,851	2,015	-836	-29.3%
87.7%	2,840	2,002	-839	-29.5%
88.9%	2,827	1,988	-839	-29.7%
90.1%	2,792	1,960	-832	-29.8%
91.4%	2,712	1,954	-758	-28.0%
92.6%	2,610	1,920	-690	-26.4%
93.8%	2,434	1,894	-540	-22.2%
95.1%	2,338	1,870	-468	-20.0%
96.3%	2,326	1,773	-553	-23.8%
97.5%	2,296	1,710	-586	-25.5%
98.8%	2,292	1,677	-615	-26.8%
100.0%	2,236	1,543	-693	-31.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,923	3,000	77	2.6%
1.2%	2,923	3,000	77	2.6%
2.5%	2,923	3,000	77	2.6%
3.7%	2,923	2,941	17	0.6%
4.9%	2,923	2,938	15	0.5%
6.2%	2,923	2,931	8	0.3%
7.4%	2,923	2,923	0	0.0%
8.6%	2,923	2,923	0	0.0%
9.9%	2,923	2,923	0	0.0%
11.1%	2,923	2,923	0	0.0%
12.3%	2,923	2,923	0	0.0%
13.6%	2,923	2,923	0	0.0%
14.8%	2,923	2,923	0	0.0%
16.0%	2,923	2,923	0	0.0%
17.3%	2,923	2,923	0	0.0%
18.5%	2,923	2,923	0	0.0%
19.8%	2,923	2,923	0	0.0%
21.0%	2,923	2,923	0	0.0%
22.2%	2,923	2,923	0	0.0%
23.5%	2,923	2,923	0	0.0%
24.7%	2,923	2,923	0	0.0%
25.9%	2,923	2,923	0	0.0%
27.2%	2,923	2,923	0	0.0%
28.4%	2,923	2,923	0	0.0%
29.6%	2,923	2,921	-2	-0.1%
30.9%	2,923	2,918	-5	-0.2%
32.1%	2,923	2,918	-5	-0.2%
33.3%	2,923	2,918	-5	-0.2%
34.6%	2,923	2,913	-10	-0.4%
35.8%	2,923	2,913	-10	-0.4%
37.0%	2,923	2,908	-15	-0.5%
38.3%	2,923	2,887	-36	-1.2%
39.5%	2,923	2,852	-71	-2.4%
40.7%	2,923	2,852	-71	-2.4%
42.0%	2,923	2,852	-71	-2.4%
43.2%	2,923	2,841	-83	-2.8%
44.4%	2,923	2,828	-95	-3.3%
45.7%	2,923	2,828	-95	-3.3%
46.9%	2,918	2,828	-90	-3.1%
48.1%	2,918	2,802	-116	-4.0%
49.4%	2,918	2,798	-120	-4.1%
50.6%	2,918	2,795	-123	-4.2%
51.9%	2,915	2,735	-180	-6.2%
53.1%	2,915	2,733	-182	-6.2%
54.3%	2,913	2,733	-180	-6.2%
55.6%	2,913	2,693	-220	-7.6%
56.8%	2,895	2,690	-205	-7.1%
58.0%	2,888	2,611	-277	-9.6%
59.3%	2,883	2,518	-365	-12.7%
60.5%	2,871	2,438	-433	-15.1%
61.7%	2,866	2,244	-622	-21.7%
63.0%	2,866	2,241	-625	-21.8%
64.2%	2,851	2,223	-627	-22.0%
65.4%	2,840	2,115	-725	-25.5%
66.7%	2,836	2,087	-750	-26.4%
67.9%	2,828	2,032	-796	-28.1%
69.1%	2,828	2,018	-810	-28.6%
70.4%	2,828	2,009	-819	-29.0%
71.6%	2,828	1,993	-835	-29.5%
72.8%	2,828	1,961	-867	-30.7%
74.1%	2,828	1,957	-871	-30.8%
75.3%	2,828	1,918	-910	-32.2%
76.5%	2,828	1,889	-939	-33.2%
77.8%	2,828	1,889	-939	-33.2%
79.0%	2,828	1,888	-940	-33.2%
80.2%	2,828	1,863	-965	-34.1%
81.5%	2,828	1,862	-966	-34.2%
82.7%	2,828	1,833	-995	-35.2%
84.0%	2,828	1,821	-1,007	-35.6%
85.2%	2,828	1,821	-1,007	-35.6%
86.4%	2,828	1,820	-1,008	-35.6%
87.7%	2,828	1,820	-1,008	-35.6%
88.9%	2,828	1,820	-1,008	-35.6%
90.1%	2,810	1,819	-991	-35.3%
91.4%	2,799	1,795	-1,005	-35.9%
92.6%	2,635	1,788	-848	-32.2%
93.8%	2,247	1,778	-469	-20.9%
95.1%	2,244	1,523	-722	-32.2%
96.3%	2,128	1,452	-677	-31.8%
97.5%	2,076	1,228	-848	-40.8%
98.8%	2,064	1,176	-888	-43.0%
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,224	3,000	776	34.9%
1.2%	2,224	3,000	776	34.9%
2.5%	2,224	3,000	776	34.9%
3.7%	2,224	3,000	776	34.9%
4.9%	2,224	3,000	776	34.9%
6.2%	2,224	3,000	776	34.9%
7.4%	2,224	3,000	776	34.9%
8.6%	2,224	3,000	776	34.9%
9.9%	2,224	2,930	706	31.7%
11.1%	2,224	2,928	704	31.6%
12.3%	2,224	2,890	666	29.9%
13.6%	2,224	2,869	645	29.0%
14.8%	2,224	2,677	453	20.4%
16.0%	2,224	2,613	389	17.5%
17.3%	2,224	2,536	312	14.0%
18.5%	2,224	2,521	297	13.4%
19.8%	2,224	2,434	210	9.4%
21.0%	2,224	2,339	115	5.2%
22.2%	2,224	2,322	98	4.4%
23.5%	2,224	2,319	96	4.3%
24.7%	2,224	2,224	0	0.0%
25.9%	2,224	2,224	0	0.0%
27.2%	2,219	2,224	5	0.2%
28.4%	2,219	2,224	5	0.2%
29.6%	2,219	2,224	5	0.2%
30.9%	2,214	2,224	10	0.5%
32.1%	2,214	2,224	10	0.5%
33.3%	2,163	2,224	61	2.8%
34.6%	2,159	2,224	65	3.0%
35.8%	2,130	2,224	94	4.4%
37.0%	2,114	2,224	110	5.2%
38.3%	2,114	2,224	110	5.2%
39.5%	2,114	2,224	110	5.2%
40.7%	2,114	2,219	105	5.0%
42.0%	2,114	2,219	105	5.0%
43.2%	2,114	2,216	102	4.8%
44.4%	2,114	2,214	100	4.7%
45.7%	2,114	2,203	90	4.2%
46.9%	2,114	2,202	88	4.2%
48.1%	2,114	2,195	81	3.8%
49.4%	2,114	2,178	65	3.1%
50.6%	2,114	2,171	57	2.7%
51.9%	2,114	2,153	39	1.9%
53.1%	2,114	2,153	39	1.9%
54.3%	2,114	2,153	39	1.9%
55.6%	2,114	2,153	39	1.9%
56.8%	2,114	2,143	29	1.4%
58.0%	2,114	2,142	28	1.3%
59.3%	2,114	2,132	18	0.9%
60.5%	2,114	2,129	16	0.7%
61.7%	2,114	2,118	4	0.2%
63.0%	2,114	2,114	0	0.0%
64.2%	2,114	2,114	0	0.0%
65.4%	2,114	2,114	0	0.0%
66.7%	2,114	2,114	0	0.0%
67.9%	2,113	2,114	1	0.0%
69.1%	2,111	2,114	3	0.1%
70.4%	2,111	2,114	3	0.1%
71.6%	2,111	2,114	3	0.1%
72.8%	2,109	2,083	-26	-1.2%
74.1%	2,101	2,063	-38	-1.8%
75.3%	2,101	2,062	-39	-1.8%
76.5%	2,093	2,059	-34	-1.6%
77.8%	2,088	2,053	-35	-1.7%
79.0%	2,083	2,049	-33	-1.6%
80.2%	2,083	1,973	-109	-5.3%
81.5%	2,074	1,896	-178	-8.6%
82.7%	2,067	1,846	-221	-10.7%
84.0%	2,064	1,695	-370	-17.9%
85.2%	2,053	1,689	-364	-17.7%
86.4%	2,025	1,663	-362	-17.9%
87.7%	2,010	1,282	-728	-36.2%
88.9%	1,989	1,193	-796	-40.0%
90.1%	1,937	1,179	-759	-39.2%
91.4%	1,907	1,178	-728	-38.2%
92.6%	1,854	1,101	-753	-40.6%
93.8%	1,511	1,034	-477	-31.6%
95.1%	1,496	898	-599	-40.0%
96.3%	1,411	774	-637	-45.2%
97.5%	1,364	764	-600	-44.0%
98.8%	1,282	660	-622	-48.5%
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	609	746	137	22.4%
1.2%	607	723	116	19.2%
2.5%	607	690	84	13.8%
3.7%	606	670	64	10.5%
4.9%	605	609	4	0.7%
6.2%	601	607	6	1.0%
7.4%	600	605	5	0.8%
8.6%	599	597	-3	-0.4%
9.9%	599	597	-2	-0.4%
11.1%	597	594	-3	-0.4%
12.3%	597	591	-6	-1.0%
13.6%	593	590	-3	-0.5%
14.8%	592	585	-7	-1.3%
16.0%	591	584	-7	-1.3%
17.3%	591	582	-9	-1.4%
18.5%	590	582	-8	-1.4%
19.8%	590	581	-10	-1.6%
21.0%	590	577	-13	-2.2%
22.2%	590	572	-18	-3.0%
23.5%	590	571	-18	-3.1%
24.7%	589	571	-18	-3.0%
25.9%	588	566	-22	-3.7%
27.2%	587	564	-22	-3.8%
28.4%	586	562	-24	-4.1%
29.6%	586	561	-25	-4.2%
30.9%	585	561	-25	-4.2%
32.1%	585	560	-25	-4.2%
33.3%	585	557	-28	-4.8%
34.6%	584	555	-28	-4.9%
35.8%	583	548	-36	-6.1%
37.0%	583	548	-35	-6.0%
38.3%	582	547	-35	-5.9%
39.5%	581	541	-40	-6.9%
40.7%	580	535	-45	-7.7%
42.0%	578	528	-50	-8.6%
43.2%	578	522	-55	-9.6%
44.4%	578	516	-62	-10.7%
45.7%	577	515	-62	-10.8%
46.9%	577	514	-63	-10.9%
48.1%	576	513	-63	-11.0%
49.4%	576	513	-63	-10.9%
50.6%	575	512	-63	-11.0%
51.9%	575	512	-63	-11.0%
53.1%	572	512	-61	-10.6%
54.3%	572	509	-63	-11.0%
55.6%	571	509	-63	-11.0%
56.8%	571	506	-66	-11.5%
58.0%	571	503	-68	-11.9%
59.3%	568	497	-71	-12.4%
60.5%	564	497	-66	-11.8%
61.7%	563	494	-69	-12.3%
63.0%	563	493	-69	-12.3%
64.2%	561	492	-69	-12.3%
65.4%	561	491	-70	-12.4%
66.7%	556	491	-64	-11.6%
67.9%	550	487	-63	-11.5%
69.1%	546	473	-72	-13.2%
70.4%	543	473	-70	-12.8%
71.6%	537	467	-70	-13.0%
72.8%	535	464	-71	-13.3%
74.1%	532	462	-70	-13.2%
75.3%	530	461	-68	-12.9%
76.5%	530	461	-69	-12.9%
77.8%	528	460	-69	-13.0%
79.0%	528	455	-74	-13.9%
80.2%	528	453	-75	-14.2%
81.5%	528	448	-80	-15.1%
82.7%	527	446	-81	-15.3%
84.0%	516	441	-76	-14.7%
85.2%	516	427	-89	-17.3%
86.4%	512	405	-107	-20.9%
87.7%	509	404	-104	-20.5%
88.9%	498	382	-116	-23.2%
90.1%	461	378	-84	-18.1%
91.4%	460	355	-105	-22.7%
92.6%	442	341	-101	-22.9%
93.8%	441	338	-102	-23.2%
95.1%	404	327	-78	-19.2%
96.3%	378	325	-53	-14.0%
97.5%	336	313	-23	-6.8%
98.8%	327	298	-29	-8.8%
100.0%	325	290	-35	-10.9%

Figure OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

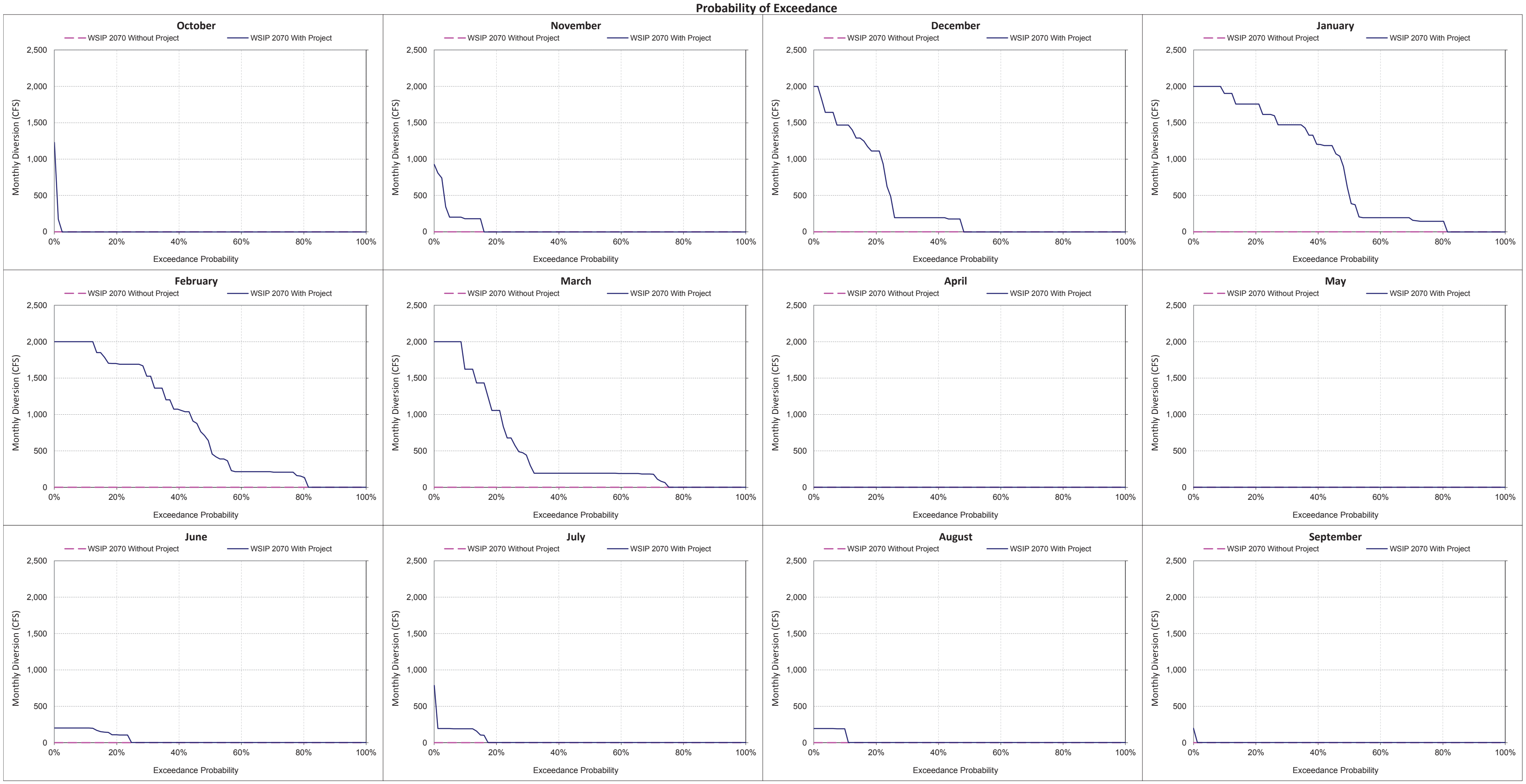


Table OP-03-b

Delevan Intake and Pipeline, Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,230	1,230	
1.2%	0	174	174	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	927	927	
1.2%	0	809	809	
2.5%	0	740	740	
3.7%	0	343	343	
4.9%	0	200	200	
6.2%	0	200	200	
7.4%	0	200	200	
8.6%	0	200	200	
9.9%	0	179	179	
11.1%	0	179	179	
12.3%	0	179	179	
13.6%	0	179	179	
14.8%	0	179	179	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	1,822	1,822	
3.7%	0	1,644	1,644	
4.9%	0	1,644	1,644	
6.2%	0	1,644	1,644	
7.4%	0	1,467	1,467	
8.6%	0	1,467	1,467	
9.9%	0	1,467	1,467	
11.1%	0	1,467	1,467	
12.3%	0	1,399	1,399	
13.6%	0	1,289	1,289	
14.8%	0	1,289	1,289	
16.0%	0	1,248	1,248	
17.3%	0	1,172	1,172	
18.5%	0	1,111	1,111	
19.8%	0	1,111	1,111	
21.0%	0	1,111	1,111	
22.2%	0	933	933	
23.5%	0	624	624	
24.7%	0	486	486	
25.9%	0	194	194	
27.2%	0	194	194	
28.4%	0	194	194	
29.6%	0	194	194	
30.9%	0	194	194	
32.1%	0	194	194	
33.3%	0	194	194	
34.6%	0	194	194	
35.8%	0	194	194	
37.0%	0	194	194	
38.3%	0	194	194	
39.5%	0	194	194	
40.7%	0	194	194	
42.0%	0	194	194	
43.2%	0	178	178	
44.4%	0	178	178	
45.7%	0	178	178	
46.9%	0	178	178	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	2,000	2,000	
6.2%	0	2,000	2,000	
7.4%	0	2,000	2,000	
8.6%	0	2,000	2,000	
9.9%	0	1,902	1,902	
11.1%	0	1,902	1,902	
12.3%	0	1,902	1,902	
13.6%	0	1,758	1,758	
14.8%	0	1,758	1,758	
16.0%	0	1,758	1,758	
17.3%	0	1,758	1,758	
18.5%	0	1,758	1,758	
19.8%	0	1,758	1,758	
21.0%	0	1,758	1,758	
22.2%	0	1,615	1,615	
23.5%	0	1,615	1,615	
24.7%	0	1,615	1,615	
25.9%	0	1,596	1,596	
27.2%	0	1,471	1,471	
28.4%	0	1,471	1,471	
29.6%	0	1,471	1,471	
30.9%	0	1,471	1,471	
32.1%	0	1,471	1,471	
33.3%	0	1,471	1,471	
34.6%	0	1,471	1,471	
35.8%	0	1,430	1,430	
37.0%	0	1,328	1,328	
38.3%	0	1,328	1,328	
39.5%	0	1,205	1,205	
40.7%	0	1,199	1,199	
42.0%	0	1,185	1,185	
43.2%	0	1,185	1,185	
44.4%	0	1,185	1,185	
45.7%	0	1,072	1,072	
46.9%	0	1,041	1,041	
48.1%	0	898	898	
49.4%	0	611	611	
50.6%	0	387	387	
51.9%	0	374	374	
53.1%	0	204	204	
54.3%	0	194	194	
55.6%	0	194	194	
56.8%	0	194	194	
58.0%	0	194	194	
59.3%	0	194	194	
60.5%	0	194	194	
61.7%	0	194	194	
63.0%	0	194	194	
64.2%	0	194	194	
65.4%	0	194	194	
66.7%	0	194	194	
67.9%	0	194	194	
69.1%	0	194	194	
70.4%	0	158	158	
71.6%	0	152	152	
72.8%	0	143	143	
74.1%	0	143	143	
75.3%	0	143	143	
76.5%	0	143	143	
77.8%	0	143	143	
79.0%	0	143	143	
80.2%	0	143	143	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-03-b
Delevan Intake and Pipeline, Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	2,000	2,000	
6.2%	0	2,000	2,000	
7.4%	0	2,000	2,000	
8.6%	0	2,000	2,000	
9.9%	0	2,000	2,000	
11.1%	0	2,000	2,000	
12.3%	0	2,000	2,000	
13.6%	0	1,852	1,852	
14.8%	0	1,852	1,852	
16.0%	0	1,785	1,785	
17.3%	0	1,705	1,705	
18.5%	0	1,701	1,701	
19.8%	0	1,701	1,701	
21.0%	0	1,689	1,689	
22.2%	0	1,689	1,689	
23.5%	0	1,689	1,689	
24.7%	0	1,689	1,689	
25.9%	0	1,689	1,689	
27.2%	0	1,689	1,689	
28.4%	0	1,668	1,668	
29.6%	0	1,527	1,527	
30.9%	0	1,527	1,527	
32.1%	0	1,364	1,364	
33.3%	0	1,364	1,364	
34.6%	0	1,364	1,364	
35.8%	0	1,202	1,202	
37.0%	0	1,202	1,202	
38.3%	0	1,075	1,075	
39.5%	0	1,075	1,075	
40.7%	0	1,056	1,056	
42.0%	0	1,039	1,039	
43.2%	0	1,039	1,039	
44.4%	0	911	911	
45.7%	0	877	877	
46.9%	0	763	763	
48.1%	0	714	714	
49.4%	0	642	642	
50.6%	0	455	455	
51.9%	0	418	418	
53.1%	0	389	389	
54.3%	0	389	389	
55.6%	0	364	364	
56.8%	0	229	229	
58.0%	0	214	214	
59.3%	0	214	214	
60.5%	0	214	214	
61.7%	0	214	214	
63.0%	0	214	214	
64.2%	0	214	214	
65.4%	0	214	214	
66.7%	0	214	214	
67.9%	0	214	214	
69.1%	0	214	214	
70.4%	0	207	207	
71.6%	0	207	207	
72.8%	0	207	207	
74.1%	0	207	207	
75.3%	0	207	207	
76.5%	0	207	207	
77.8%	0	163	163	
79.0%	0	154	154	
80.2%	0	133	133	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,000	2,000	
1.2%	0	2,000	2,000	
2.5%	0	2,000	2,000	
3.7%	0	2,000	2,000	
4.9%	0	2,000	2,000	
6.2%	0	2,000	2,000	
7.4%	0	2,000	2,000	
8.6%	0	2,000	2,000	
9.9%	0	1,622	1,622	
11.1%	0	1,622	1,622	
12.3%	0	1,622	1,622	
13.6%	0	1,434	1,434	
14.8%	0	1,434	1,434	
16.0%	0	1,434	1,434	
17.3%	0	1,246	1,246	
18.5%	0	1,056	1,056	
19.8%	0	1,056	1,056	
21.0%	0	1,056	1,056	
22.2%	0	835	835	
23.5%	0	679	679	
24.7%	0	679	679	
25.9%	0	575	575	
27.2%	0	490	490	
28.4%	0	474	474	
29.6%	0	441	441	
30.9%	0	301	301	
32.1%	0	194	194	
33.3%	0	194	194	
34.6%	0	194	194	
35.8%	0	194	194	
37.0%	0	194	194	
38.3%	0	194	194	
39.5%	0	194	194	
40.7%	0	194	194	
42.0%	0	194	194	
43.2%	0	194	194	
44.4%	0	194	194	
45.7%	0	194	194	
46.9%	0	194	194	
48.1%	0	194	194	
49.4%	0	194	194	
50.6%	0	194	194	
51.9%	0	194	194	
53.1%	0	194	194	
54.3%	0	194	194	
55.6%	0	194	194	
56.8%	0	194	194	
58.0%	0	194	194	
59.3%	0	189	189	
60.5%	0	189	189	
61.7%	0	189	189	
63.0%	0	189	189	
64.2%	0	189	189	
65.4%	0	189	189	
66.7%	0	181	181	
67.9%	0	181	181	
69.1%	0	181	181	
70.4%	0	180	180	
71.6%	0	110	110	
72.8%	0	82	82	
74.1%	0	65	65	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-03-b

Delevan Intake and Pipeline, Monthly Diversion

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	200	200	
1.2%	0	200	200	
2.5%	0	200	200	
3.7%	0	200	200	
4.9%	0	200	200	
6.2%	0	200	200	
7.4%	0	200	200	
8.6%	0	200	200	
9.9%	0	200	200	
11.1%	0	200	200	
12.3%	0	197	197	
13.6%	0	168	168	
14.8%	0	153	153	
16.0%	0	144	144	
17.3%	0	141	141	
18.5%	0	110	110	
19.8%	0	107	107	
21.0%	0	104	104	
22.2%	0	104	104	
23.5%	0	104	104	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	787	787	
1.2%	0	194	194	
2.5%	0	194	194	
3.7%	0	194	194	
4.9%	0	194	194	
6.2%	0	190	190	
7.4%	0	190	190	
8.6%	0	190	190	
9.9%	0	190	190	
11.1%	0	190	190	
12.3%	0	190	190	
13.6%	0	158	158	
14.8%	0	106	106	
16.0%	0	101	101	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	194	194	
1.2%	0	194	194	
2.5%	0	194	194	
3.7%	0	194	194	
4.9%	0	194	194	
6.2%	0	194	194	
7.4%	0	190	190	
8.6%	0	190	190	
9.9%	0	190	190	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	197	197	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-04-b
Funks Reservoir to Sites Reservoir, Monthly Diversion
Probability of Exceedance

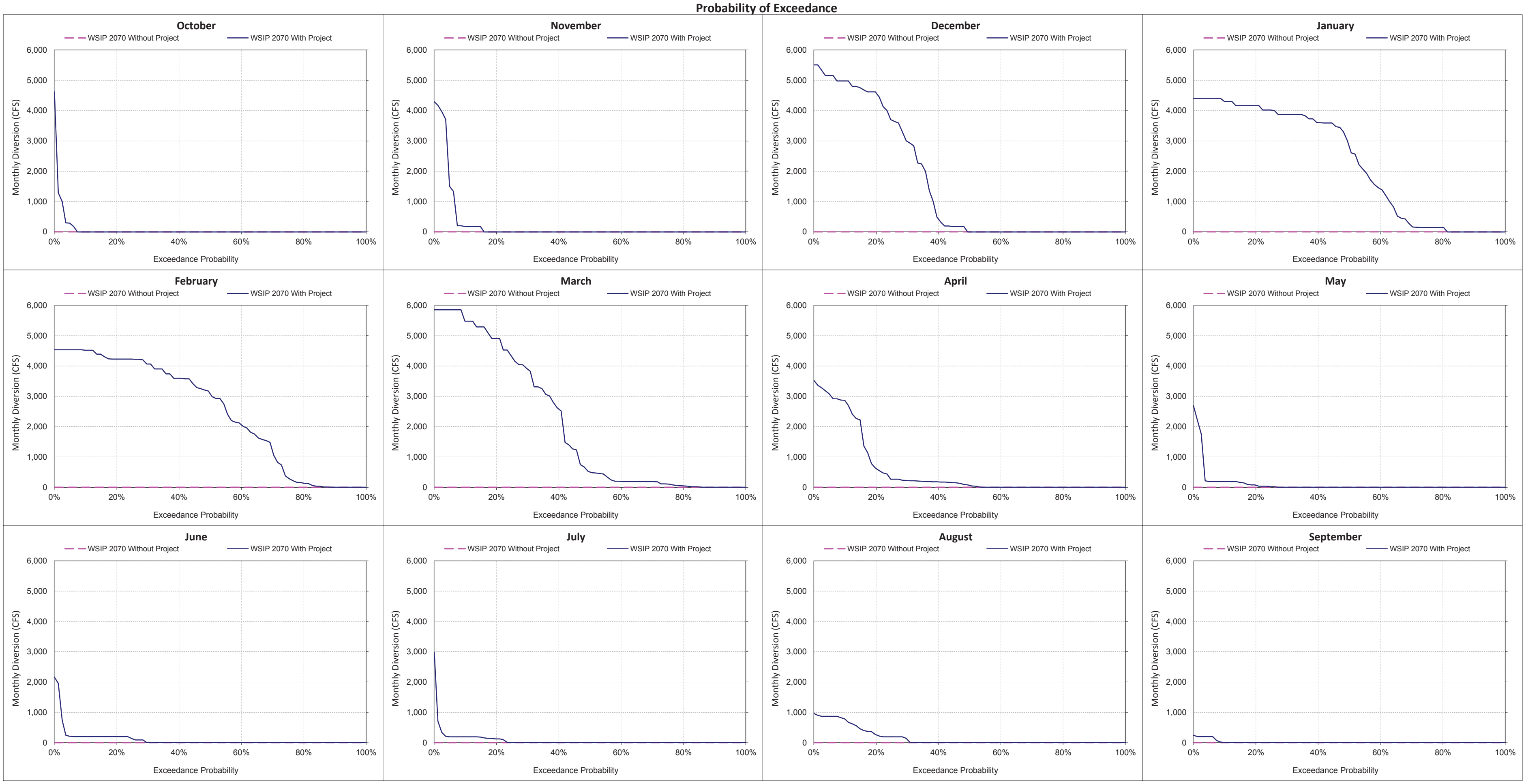


Table OP-04-b

Funks Reservoir to Sites Reservoir, Monthly Diversion

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,617	4,617	
1.2%	0	1,289	1,289	
2.5%	0	1,000	1,000	
3.7%	0	298	298	
4.9%	0	284	284	
6.2%	0	174	174	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,293	4,293	
1.2%	0	4,175	4,175	
2.5%	0	3,969	3,969	
3.7%	0	3,709	3,709	
4.9%	0	1,500	1,500	
6.2%	0	1,329	1,329	
7.4%	0	200	200	
8.6%	0	200	200	
9.9%	0	179	179	
11.1%	0	179	179	
12.3%	0	179	179	
13.6%	0	179	179	
14.8%	0	179	179	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	5,511	5,511	
1.2%	0	5,511	5,511	
2.5%	0	5,333	5,333	
3.7%	0	5,155	5,155	
4.9%	0	5,155	5,155	
6.2%	0	5,155	5,155	
7.4%	0	4,978	4,978	
8.6%	0	4,978	4,978	
9.9%	0	4,978	4,978	
11.1%	0	4,978	4,978	
12.3%	0	4,800	4,800	
13.6%	0	4,800	4,800	
14.8%	0	4,759	4,759	
16.0%	0	4,683	4,683	
17.3%	0	4,622	4,622	
18.5%	0	4,622	4,622	
19.8%	0	4,622	4,622	
21.0%	0	4,444	4,444	
22.2%	0	4,135	4,135	
23.5%	0	4,000	4,000	
24.7%	0	3,705	3,705	
25.9%	0	3,645	3,645	
27.2%	0	3,594	3,594	
28.4%	0	3,301	3,301	
29.6%	0	2,998	2,998	
30.9%	0	2,923	2,923	
32.1%	0	2,842	2,842	
33.3%	0	2,274	2,274	
34.6%	0	2,239	2,239	
35.8%	0	1,998	1,998	
37.0%	0	1,357	1,357	
38.3%	0	1,000	1,000	
39.5%	0	493	493	
40.7%	0	318	318	
42.0%	0	194	194	
43.2%	0	194	194	
44.4%	0	178	178	
45.7%	0	178	178	
46.9%	0	178	178	
48.1%	0	178	178	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,403	4,403	
1.2%	0	4,403	4,403	
2.5%	0	4,403	4,403	
3.7%	0	4,403	4,403	
4.9%	0	4,403	4,403	
6.2%	0	4,403	4,403	
7.4%	0	4,403	4,403	
8.6%	0	4,403	4,403	
9.9%	0	4,305	4,305	
11.1%	0	4,305	4,305	
12.3%	0	4,305	4,305	
13.6%	0	4,161	4,161	
14.8%	0	4,161	4,161	
16.0%	0	4,161	4,161	
17.3%	0	4,161	4,161	
18.5%	0	4,161	4,161	
19.8%	0	4,161	4,161	
21.0%	0	4,161	4,161	
22.2%	0	4,018	4,018	
23.5%	0	4,018	4,018	
24.7%	0	4,018	4,018	
25.9%	0	3,999	3,999	
27.2%	0	3,874	3,874	
28.4%	0	3,874	3,874	
29.6%	0	3,874	3,874	
30.9%	0	3,874	3,874	
32.1%	0	3,874	3,874	
33.3%	0	3,874	3,874	
34.6%	0	3,874	3,874	
35.8%	0	3,833	3,833	
37.0%	0	3,731	3,731	
38.3%	0	3,731	3,731	
39.5%	0	3,608	3,608	
40.7%	0	3,602	3,602	
42.0%	0	3,588	3,588	
43.2%	0	3,587	3,587	
44.4%	0	3,587	3,587	
45.7%	0	3,475	3,475	
46.9%	0	3,444	3,444	
48.1%	0	3,300	3,300	
49.4%	0	3,013	3,013	
50.6%	0	2,607	2,607	
51.9%	0	2,564	2,564	
53.1%	0	2,211	2,211	
54.3%	0	2,070	2,070	
55.6%	0	1,928	1,928	
56.8%	0	1,719	1,719	
58.0%	0	1,560	1,560	
59.3%	0	1,461	1,461	
60.5%	0	1,386	1,386	
61.7%	0	1,190	1,190	
63.0%	0	994	994	
64.2%	0	815	815	
65.4%	0	522	522	
66.7%	0	450	450	
67.9%	0	425	425	
69.1%	0	273	273	
70.4%	0	158	158	
71.6%	0	152	152	
72.8%	0	143	143	
74.1%	0	143	143	
75.3%	0	143	143	
76.5%	0	143	143	
77.8%	0	143	143	
79.0%	0	143	143	
80.2%	0	143	143	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-04-b
Funks Reservoir to Sites Reservoir, Monthly Diversion
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4,536	4,536	
1.2%	0	4,536	4,536	
2.5%	0	4,536	4,536	
3.7%	0	4,536	4,536	
4.9%	0	4,536	4,536	
6.2%	0	4,536	4,536	
7.4%	0	4,536	4,536	
8.6%	0	4,536	4,536	
9.9%	0	4,521	4,521	
11.1%	0	4,521	4,521	
12.3%	0	4,521	4,521	
13.6%	0	4,388	4,388	
14.8%	0	4,388	4,388	
16.0%	0	4,306	4,306	
17.3%	0	4,241	4,241	
18.5%	0	4,225	4,225	
19.8%	0	4,225	4,225	
21.0%	0	4,225	4,225	
22.2%	0	4,225	4,225	
23.5%	0	4,225	4,225	
24.7%	0	4,225	4,225	
25.9%	0	4,222	4,222	
27.2%	0	4,222	4,222	
28.4%	0	4,204	4,204	
29.6%	0	4,063	4,063	
30.9%	0	4,063	4,063	
32.1%	0	3,900	3,900	
33.3%	0	3,900	3,900	
34.6%	0	3,900	3,900	
35.8%	0	3,738	3,738	
37.0%	0	3,738	3,738	
38.3%	0	3,596	3,596	
39.5%	0	3,596	3,596	
40.7%	0	3,592	3,592	
42.0%	0	3,575	3,575	
43.2%	0	3,575	3,575	
44.4%	0	3,413	3,413	
45.7%	0	3,284	3,284	
46.9%	0	3,250	3,250	
48.1%	0	3,206	3,206	
49.4%	0	3,178	3,178	
50.6%	0	2,991	2,991	
51.9%	0	2,925	2,925	
53.1%	0	2,925	2,925	
54.3%	0	2,750	2,750	
55.6%	0	2,416	2,416	
56.8%	0	2,200	2,200	
58.0%	0	2,152	2,152	
59.3%	0	2,126	2,126	
60.5%	0	2,015	2,015	
61.7%	0	1,954	1,954	
63.0%	0	1,812	1,812	
64.2%	0	1,758	1,758	
65.4%	0	1,624	1,624	
66.7%	0	1,577	1,577	
67.9%	0	1,544	1,544	
69.1%	0	1,477	1,477	
70.4%	0	1,065	1,065	
71.6%	0	826	826	
72.8%	0	739	739	
74.1%	0	378	378	
75.3%	0	282	282	
76.5%	0	214	214	
77.8%	0	163	163	
79.0%	0	154	154	
80.2%	0	133	133	
81.5%	0	118	118	
82.7%	0	60	60	
84.0%	0	35	35	
85.2%	0	31	31	
86.4%	0	12	12	
87.7%	0	9	9	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	5,852	5,852	
1.2%	0	5,852	5,852	
2.5%	0	5,852	5,852	
3.7%	0	5,852	5,852	
4.9%	0	5,852	5,852	
6.2%	0	5,852	5,852	
7.4%	0	5,852	5,852	
8.6%	0	5,852	5,852	
9.9%	0	5,474	5,474	
11.1%	0	5,474	5,474	
12.3%	0	5,474	5,474	
13.6%	0	5,286	5,286	
14.8%	0	5,286	5,286	
16.0%	0	5,286	5,286	
17.3%	0	5,097	5,097	
18.5%	0	4,908	4,908	
19.8%	0	4,908	4,908	
21.0%	0	4,908	4,908	
22.2%	0	4,531	4,531	
23.5%	0	4,531	4,531	
24.7%	0	4,342	4,342	
25.9%	0	4,153	4,153	
27.2%	0	4,046	4,046	
28.4%	0	4,039	4,039	
29.6%	0	3,929	3,929	
30.9%	0	3,824	3,824	
32.1%	0	3,312	3,312	
33.3%	0	3,308	3,308	
34.6%	0	3,254	3,254	
35.8%	0	3,061	3,061	
37.0%	0	3,011	3,011	
38.3%	0	2,796	2,796	
39.5%	0	2,624	2,624	
40.7%	0	2,516	2,516	
42.0%	0	1,483	1,483	
43.2%	0	1,395	1,395	
44.4%	0	1,270	1,270	
45.7%	0	1,236	1,236	
46.9%	0	743	743	
48.1%	0	665	665	
49.4%	0	521	521	
50.6%	0	478	478	
51.9%	0	475	475	
53.1%	0	458	458	
54.3%	0	434	434	
55.6%	0	332	332	
56.8%	0	241	241	
58.0%	0	202	202	
59.3%	0	194	194	
60.5%	0	189	189	
61.7%	0	189	189	
63.0%	0	189	189	
64.2%	0	189	189	
65.4%	0	189	189	
66.7%	0	189	189	
67.9%	0	189	189	
69.1%	0	189	189	
70.4%	0	189	189	
71.6%	0	180	180	
72.8%	0	115	115	
74.1%	0	110	110	
75.3%	0	104	104	
76.5%	0	82	82	
77.8%	0	65	65	
79.0%	0	53	53	
80.2%	0	44	44	
81.5%	0	33	33	
82.7%	0	16	16	
84.0%	0	15	15	
85.2%	0	8	8	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	3,527	3,527	
1.2%	0	3,362	3,362	
2.5%	0	3,280	3,280	
3.7%	0	3,181	3,181	
4.9%	0	3,078	3,078	
6.2%	0	2,920	2,920	
7.4%	0	2,917	2,917	
8.6%	0	2,878	2,878	
9.9%	0	2,867	2,867	
11.1%	0	2,693	2,693	
12.3%	0	2,416	2,416	
13.6%	0	2,266	2,266	
14.8%	0	2,223	2,223	
16.0%	0	1,355	1,355	
17.3%	0	1,145	1,145	
18.5%	0	781	781	
19.8%	0	632	632	
21.0%	0	549	549	
22.2%	0	476	476	
23.5%	0	440	440	
24.7%	0	265	265	
25.9%	0	265	265	
27.2%	0	262	262	
28.4%	0	230	230	
29.6%	0	227	227	
30.9%	0	217	217	
32.1%	0	211	211	
33.3%	0	210	210	
34.6%	0	197	197	
35.8%	0	188	188	
37.0%	0	187	187	
38.3%	0	182	182	
39.5%	0	176	176	
40.7%	0	171	171	
42.0%	0	170	170	
43.2%	0	162	162	
44.4%	0	156	156	
45.7%	0	142	142	
46.9%	0	133	133	
48.1%	0	95	95	
49.4%	0	76	76	
50.6%	0	43	43	
51.9%	0	31	31	
53.1%	0	8	8	
54.3%	0	1	1	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,685	2,685	
1.2%	0	2,219	2,219	
2.5%	0	1,754	1,754	
3.7%	0	216	216	
4.9%	0	190	190	
6.2%	0	190	190	
7.4%	0	190	190	
8.6%	0	190	190	
9.9%	0	190	190	
11.1%	0	190	190	
12.3%	0	190	190	
13.6%	0	190	190	
14.8%	0	160	160	
16.0%	0	147	147	
17.3%	0	94	94	
18.5%	0	78	78	
19.8%	0	77	77	
21.0%	0	36	36	
22.2%	0	36	36	
23.5%	0	36	36	
24.7%	0	22	22	
25.9%	0	20	20	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-04-b

Funks Reservoir to Sites Reservoir, Monthly Diversion

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,158	2,158	
1.2%	0	1,954	1,954	
2.5%	0	736	736	
3.7%	0	243	243	
4.9%	0	208	208	
6.2%	0	204	204	
7.4%	0	200	200	
8.6%	0	200	200	
9.9%	0	200	200	
11.1%	0	200	200	
12.3%	0	200	200	
13.6%	0	197	197	
14.8%	0	197	197	
16.0%	0	197	197	
17.3%	0	197	197	
18.5%	0	197	197	
19.8%	0	197	197	
21.0%	0	197	197	
22.2%	0	197	197	
23.5%	0	197	197	
24.7%	0	141	141	
25.9%	0	92	92	
27.2%	0	92	92	
28.4%	0	92	92	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	2,979	2,979	
1.2%	0	703	703	
2.5%	0	336	336	
3.7%	0	209	209	
4.9%	0	194	194	
6.2%	0	190	190	
7.4%	0	190	190	
8.6%	0	190	190	
9.9%	0	190	190	
11.1%	0	190	190	
12.3%	0	190	190	
13.6%	0	190	190	
14.8%	0	187	187	
16.0%	0	158	158	
17.3%	0	141	141	
18.5%	0	139	139	
19.8%	0	127	127	
21.0%	0	126	126	
22.2%	0	97	97	
23.5%	0	13	13	
24.7%	0	7	7	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	959	959	
1.2%	0	901	901	
2.5%	0	871	871	
3.7%	0	869	869	
4.9%	0	869	869	
6.2%	0	869	869	
7.4%	0	869	869	
8.6%	0	828	828	
9.9%	0	783	783	
11.1%	0	675	675	
12.3%	0	617	617	
13.6%	0	561	561	
14.8%	0	459	459	
16.0%	0	394	394	
17.3%	0	375	375	
18.5%	0	361	361	
19.8%	0	271	271	
21.0%	0	221	221	
22.2%	0	190	190	
23.5%	0	190	190	
24.7%	0	190	190	
25.9%	0	190	190	
27.2%	0	190	190	
28.4%	0	190	190	
29.6%	0	143	143	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	242	242	
1.2%	0	197	197	
2.5%	0	197	197	
3.7%	0	197	197	
4.9%	0	197	197	
6.2%	0	197	197	
7.4%	0	74	74	
8.6%	0	24	24	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-05-b
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Probability of Exceedance

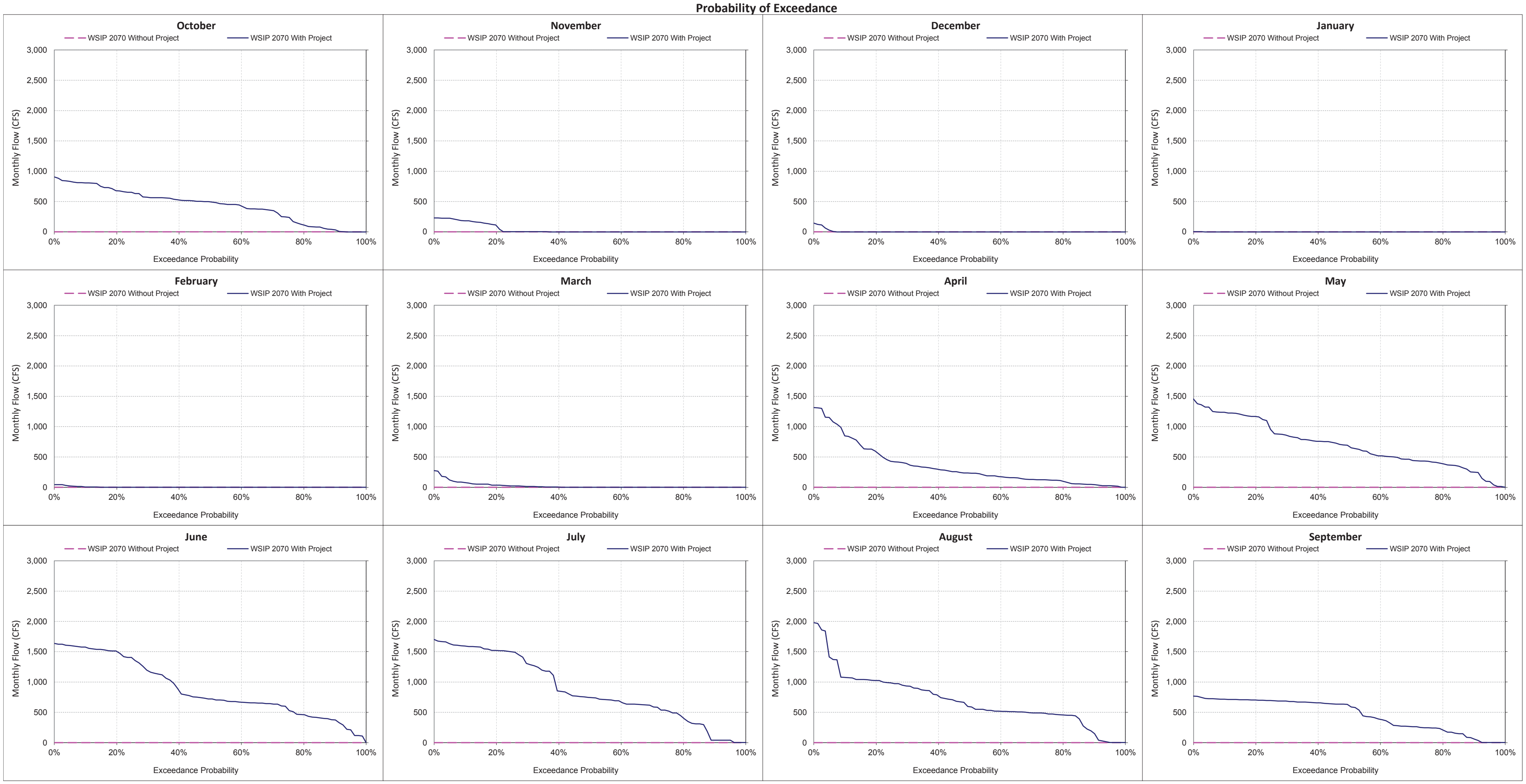


Table OP-05-b

Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	905	905	
1.2%	0	884	884	
2.5%	0	846	846	
3.7%	0	843	843	
4.9%	0	833	833	
6.2%	0	821	821	
7.4%	0	812	812	
8.6%	0	809	809	
9.9%	0	807	807	
11.1%	0	806	806	
12.3%	0	804	804	
13.6%	0	801	801	
14.8%	0	750	750	
16.0%	0	729	729	
17.3%	0	728	728	
18.5%	0	711	711	
19.8%	0	677	677	
21.0%	0	673	673	
22.2%	0	663	663	
23.5%	0	654	654	
24.7%	0	652	652	
25.9%	0	633	633	
27.2%	0	630	630	
28.4%	0	575	575	
29.6%	0	571	571	
30.9%	0	565	565	
32.1%	0	565	565	
33.3%	0	564	564	
34.6%	0	562	562	
35.8%	0	560	560	
37.0%	0	555	555	
38.3%	0	537	537	
39.5%	0	528	528	
40.7%	0	522	522	
42.0%	0	517	517	
43.2%	0	515	515	
44.4%	0	511	511	
45.7%	0	502	502	
46.9%	0	501	501	
48.1%	0	500	500	
49.4%	0	497	497	
50.6%	0	489	489	
51.9%	0	480	480	
53.1%	0	465	465	
54.3%	0	462	462	
55.6%	0	453	453	
56.8%	0	451	451	
58.0%	0	450	450	
59.3%	0	445	445	
60.5%	0	413	413	
61.7%	0	381	381	
63.0%	0	379	379	
64.2%	0	377	377	
65.4%	0	375	375	
66.7%	0	374	374	
67.9%	0	365	365	
69.1%	0	358	358	
70.4%	0	351	351	
71.6%	0	312	312	
72.8%	0	250	250	
74.1%	0	247	247	
75.3%	0	238	238	
76.5%	0	168	168	
77.8%	0	147	147	
79.0%	0	125	125	
80.2%	0	111	111	
81.5%	0	87	87	
82.7%	0	82	82	
84.0%	0	81	81	
85.2%	0	80	80	
86.4%	0	59	59	
87.7%	0	44	44	
88.9%	0	41	41	
90.1%	0	32	32	
91.4%	0	4	4	
92.6%	0	2	2	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	230	230	
1.2%	0	228	228	
2.5%	0	225	225	
3.7%	0	223	223	
4.9%	0	223	223	
6.2%	0	211	211	
7.4%	0	201	201	
8.6%	0	185	185	
9.9%	0	184	184	
11.1%	0	181	181	
12.3%	0	171	171	
13.6%	0	162	162	
14.8%	0	157	157	
16.0%	0	142	142	
17.3%	0	134	134	
18.5%	0	124	124	
19.8%	0	115	115	
21.0%	0	40	40	
22.2%	0	4	4	
23.5%	0	4	4	
24.7%	0	4	4	
25.9%	0	3	3	
27.2%	0	3	3	
28.4%	0	3	3	
29.6%	0	2	2	
30.9%	0	1	1	
32.1%	0	1	1	
33.3%	0	1	1	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	142	142	
1.2%	0	122	122	
2.5%	0	114	114	
3.7%	0	61	61	
4.9%	0	26	26	
6.2%	0	6	6	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	4	4	
1.2%	0	4	4	
2.5%	0	3	3	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-05-b
Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	43	43	
1.2%	0	43	43	
2.5%	0	43	43	
3.7%	0	32	32	
4.9%	0	20	20	
6.2%	0	18	18	
7.4%	0	15	15	
8.6%	0	14	14	
9.9%	0	3	3	
11.1%	0	3	3	
12.3%	0	3	3	
13.6%	0	3	3	
14.8%	0	2	2	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	272	272	
1.2%	0	264	264	
2.5%	0	181	181	
3.7%	0	173	173	
4.9%	0	122	122	
6.2%	0	100	100	
7.4%	0	85	85	
8.6%	0	85	85	
9.9%	0	77	77	
11.1%	0	69	69	
12.3%	0	54	54	
13.6%	0	54	54	
14.8%	0	52	52	
16.0%	0	51	51	
17.3%	0	50	50	
18.5%	0	36	36	
19.8%	0	35	35	
21.0%	0	34	34	
22.2%	0	29	29	
23.5%	0	26	26	
24.7%	0	21	21	
25.9%	0	20	20	
27.2%	0	20	20	
28.4%	0	17	17	
29.6%	0	15	15	
30.9%	0	13	13	
32.1%	0	13	13	
33.3%	0	9	9	
34.6%	0	8	8	
35.8%	0	7	7	
37.0%	0	6	6	
38.3%	0	6	6	
39.5%	0	3	3	
40.7%	0	2	2	
42.0%	0	1	1	
43.2%	0	1	1	
44.4%	0	1	1	
45.7%	0	1	1	
46.9%	0	1	1	
48.1%	0	1	1	
49.4%	0	1	1	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,314	1,314	
1.2%	0	1,312	1,312	
2.5%	0	1,301	1,301	
3.7%	0	1,156	1,156	
4.9%	0	1,153	1,153	
6.2%	0	1,078	1,078	
7.4%	0	1,039	1,039	
8.6%	0	990	990	
9.9%	0	849	849	
11.1%	0	841	841	
12.3%	0	808	808	
13.6%	0	778	778	
14.8%	0	702	702	
16.0%	0	632	632	
17.3%	0	630	630	
18.5%	0	628	628	
19.8%	0	597	597	
21.0%	0	544	544	
22.2%	0	491	491	
23.5%	0	455	455	
24.7%	0	428	428	
25.9%	0	419	419	
27.2%	0	417	417	
28.4%	0	406	406	
29.6%	0	393	393	
30.9%	0	363	363	
32.1%	0	351	351	
33.3%	0	346	346	
34.6%	0	335	335	
35.8%	0	332	332	
37.0%	0	321	321	
38.3%	0	308	308	
39.5%	0	301	301	
40.7%	0	289	289	
42.0%	0	283	283	
43.2%	0	271	271	
44.4%	0	259	259	
45.7%	0	257	257	
46.9%	0	245	245	
48.1%	0	234	234	
49.4%	0	234	234	
50.6%	0	232	232	
51.9%	0	230	230	
53.1%	0	222	222	
54.3%	0	205	205	
55.6%	0	190	190	
56.8%	0	190	190	
58.0%	0	187	187	
59.3%	0	176	176	
60.5%	0	170	170	
61.7%	0	165	165	
63.0%	0	161	161	
64.2%	0	157	157	
65.4%	0	156	156	
66.7%	0	143	143	
67.9%	0	134	134	
69.1%	0	129	129	
70.4%	0	128	128	
71.6%	0	125	125	
72.8%	0	123	123	
74.1%	0	123	123	
75.3%	0	118	118	
76.5%	0	118	118	
77.8%	0	118	118	
79.0%	0	111	111	
80.2%	0	93	93	
81.5%	0	77	77	
82.7%	0	59	59	
84.0%	0	54	54	
85.2%	0	54	54	
86.4%	0	50	50	
87.7%	0	47	47	
88.9%	0	46	46	
90.1%	0	43	43	
91.4%	0	35	35	
92.6%	0	26	26	
93.8%	0	26	26	
95.1%	0	24	24	
96.3%	0	21	21	
97.5%	0	19	19	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,453	1,453	
1.2%	0	1,377	1,377	
2.5%	0	1,362	1,362	
3.7%	0	1,324	1,324	
4.9%	0	1,322	1,322	
6.2%	0	1,249	1,249	
7.4%	0	1,241	1,241	
8.6%	0	1,239	1,239	
9.9%	0	1,237	1,237	
11.1%	0	1,226	1,226	
12.3%	0	1,225	1,225	
13.6%	0	1,220	1,220	
14.8%	0	1,209	1,209	
16.0%	0	1,191	1,191	
17.3%	0	1,178	1,178	
18.5%	0	1,169	1,169	
19.8%	0	1,166	1,166	
21.0%	0	1,160	1,160	
22.2%	0	1,116	1,116	
23.5%	0	1,100	1,100	
24.7%	0	952	952	
25.9%	0	881	881	
27.2%	0	880	880	
28.4%	0	874	874	
29.6%	0	859	859	
30.9%	0	839	839	
32.1%	0	826	826	
33.3%	0	817	817	
34.6%	0	788	788	
35.8%	0	786	786	
37.0%	0	779	779	
38.3%	0	766	766	
39.5%	0	759	759	
40.7%	0	757	757	
42.0%	0	753	753	
43.2%	0	753	753	
44.4%	0	740	740	
45.7%	0	727	727	
46.9%	0	706	706	
48.1%	0	699	699	
49.4%	0	694	694	
50.6%	0	652	652	
51.9%	0	640	640	
53.1%	0	625	625	
54.3%	0	601	601	
55.6%	0	597	597	
56.8%	0	554	554	
58.0%	0	537	537	
59.3%	0	519	519	
60.5%	0	519	519	
61.7%	0	509	509	
63.0%	0	504	504	
64.2%	0	501	501	
65.4%	0	494	494	
66.7%	0	466	466	
67.9%	0	464	464	
69.1%	0	461	461	
70.4%	0	440	440	
71.6%	0	437	437	
72.8%	0	434	434	
74.1%	0	433	433	
75.3%	0	428	428	
76.5%	0	416	416	
77.8%	0	410	410	
79.0%	0	397	397	
80.2%	0	384	384	
81.5%	0	370	370	
82.7%	0	366	366	
84.0%	0	361	361	
85.2%	0	346	346	
86.4%	0	321	321	
87.7%	0	300	300	
88.9%	0	253	253	
90.1%	0	248	248	
91.4%	0	243	243	
92.6%	0	146	146	
93.8%	0	101	101	
95.1%	0	96	96	
96.3%	0	39	39	
97.5%	0	14	14	
98.8%	0	11	11	
100.0%	0	0	0	

Table OP-05-b

Funks Reservoir to Tehama Colusa and Glenn Colusa Canals, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,635	1,635	
1.2%	0	1,624	1,624	
2.5%	0	1,623	1,623	
3.7%	0	1,607	1,607	
4.9%	0	1,605	1,605	
6.2%	0	1,595	1,595	
7.4%	0	1,586	1,586	
8.6%	0	1,579	1,579	
9.9%	0	1,576	1,576	
11.1%	0	1,554	1,554	
12.3%	0	1,545	1,545	
13.6%	0	1,540	1,540	
14.8%	0	1,537	1,537	
16.0%	0	1,528	1,528	
17.3%	0	1,515	1,515	
18.5%	0	1,513	1,513	
19.8%	0	1,512	1,512	
21.0%	0	1,472	1,472	
22.2%	0	1,417	1,417	
23.5%	0	1,405	1,405	
24.7%	0	1,404	1,404	
25.9%	0	1,353	1,353	
27.2%	0	1,318	1,318	
28.4%	0	1,262	1,262	
29.6%	0	1,197	1,197	
30.9%	0	1,160	1,160	
32.1%	0	1,144	1,144	
33.3%	0	1,133	1,133	
34.6%	0	1,120	1,120	
35.8%	0	1,064	1,064	
37.0%	0	1,033	1,033	
38.3%	0	980	980	
39.5%	0	890	890	
40.7%	0	803	803	
42.0%	0	789	789	
43.2%	0	778	778	
44.4%	0	756	756	
45.7%	0	753	753	
46.9%	0	741	741	
48.1%	0	732	732	
49.4%	0	722	722	
50.6%	0	721	721	
51.9%	0	705	705	
53.1%	0	702	702	
54.3%	0	698	698	
55.6%	0	681	681	
56.8%	0	680	680	
58.0%	0	679	679	
59.3%	0	669	669	
60.5%	0	663	663	
61.7%	0	659	659	
63.0%	0	656	656	
64.2%	0	656	656	
65.4%	0	654	654	
66.7%	0	652	652	
67.9%	0	645	645	
69.1%	0	642	642	
70.4%	0	636	636	
71.6%	0	635	635	
72.8%	0	607	607	
74.1%	0	603	603	
75.3%	0	527	527	
76.5%	0	512	512	
77.8%	0	470	470	
79.0%	0	462	462	
80.2%	0	459	459	
81.5%	0	434	434	
82.7%	0	422	422	
84.0%	0	415	415	
85.2%	0	408	408	
86.4%	0	398	398	
87.7%	0	395	395	
88.9%	0	378	378	
90.1%	0	372	372	
91.4%	0	327	327	
92.6%	0	292	292	
93.8%	0	219	219	
95.1%	0	211	211	
96.3%	0	117	117	
97.5%	0	115	115	
98.8%	0	107	107	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,702	1,702	
1.2%	0	1,676	1,676	
2.5%	0	1,667	1,667	
3.7%	0	1,664	1,664	
4.9%	0	1,631	1,631	
6.2%	0	1,610	1,610	
7.4%	0	1,606	1,606	
8.6%	0	1,597	1,597	
9.9%	0	1,593	1,593	
11.1%	0	1,587	1,587	
12.3%	0	1,587	1,587	
13.6%	0	1,583	1,583	
14.8%	0	1,579	1,579	
16.0%	0	1,549	1,549	
17.3%	0	1,545	1,545	
18.5%	0	1,522	1,522	
19.8%	0	1,521	1,521	
21.0%	0	1,518	1,518	
22.2%	0	1,515	1,515	
23.5%	0	1,509	1,509	
24.7%	0	1,501	1,501	
25.9%	0	1,491	1,491	
27.2%	0	1,450	1,450	
28.4%	0	1,409	1,409	
29.6%	0	1,309	1,309	
30.9%	0	1,284	1,284	
32.1%	0	1,269	1,269	
33.3%	0	1,245	1,245	
34.6%	0	1,196	1,196	
35.8%	0	1,180	1,180	
37.0%	0	1,179	1,179	
38.3%	0	1,109	1,109	
39.5%	0	855	855	
40.7%	0	846	846	
42.0%	0	838	838	
43.2%	0	803	803	
44.4%	0	773	773	
45.7%	0	768	768	
46.9%	0	758	758	
48.1%	0	756	756	
49.4%	0	745	745	
50.6%	0	741	741	
51.9%	0	736	736	
53.1%	0	717	717	
54.3%	0	713	713	
55.6%	0	707	707	
56.8%	0	703	703	
58.0%	0	692	692	
59.3%	0	689	689	
60.5%	0	657	657	
61.7%	0	637	637	
63.0%	0	637	637	
64.2%	0	635	635	
65.4%	0	630	630	
66.7%	0	628	628	
67.9%	0	622	622	
69.1%	0	620	620	
70.4%	0	588	588	
71.6%	0	583	583	
72.8%	0	538	538	
74.1%	0	536	536	
75.3%	0	520	520	
76.5%	0	491	491	
77.8%	0	489	489	
79.0%	0	447	447	
80.2%	0	397	397	
81.5%	0	349	349	
82.7%	0	317	317	
84.0%	0	312	312	
85.2%	0	309	309	
86.4%	0	296	296	
87.7%	0	184	184	
88.9%	0	41	41	
90.1%	0	41	41	
91.4%	0	41	41	
92.6%	0	41	41	
93.8%	0	41	41	
95.1%	0	39	39	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,980	1,980	
1.2%	0	1,969	1,969	
2.5%	0	1,860	1,860	
3.7%	0	1,842	1,842	
4.9%	0	1,414	1,414	
6.2%	0	1,370	1,370	
7.4%	0	1,365	1,365	
8.6%	0	1,079	1,079	
9.9%	0	1,076	1,076	
11.1%	0	1,072	1,072	
12.3%	0	1,069	1,069	
13.6%	0	1,044	1,044	
14.8%	0	1,042	1,042	
16.0%	0	1,042	1,042	
17.3%	0	1,039	1,039	
18.5%	0	1,031	1,031	
19.8%	0	1,027	1,027	
21.0%	0	1,023	1,023	
22.2%	0	998	998	
23.5%	0	992	992	
24.7%	0	987	987	
25.9%	0	975	975	
27.2%	0	973	973	
28.4%	0	949	949	
29.6%	0	936	936	
30.9%	0	931	931	
32.1%	0	899	899	
33.3%	0	898	898	
34.6%	0	872	872	
35.8%	0	861	861	
37.0%	0	858	858	
38.3%	0	800	800	
39.5%	0	789	789	
40.7%	0	741	741	
42.0%	0	728	728	
43.2%	0	717	717	
44.4%	0	709	709	
45.7%	0	681	681	
46.9%	0	674	674	
48.1%	0	665	665	
49.4%	0	598	598	
50.6%	0	586	586	
51.9%	0	551	551	
53.1%	0	550	550	
54.3%	0	549	549	
55.6%	0	532	532	
56.8%	0	532	532	
58.0%	0	521	521	
59.3%	0	518	518	
60.5%	0	516	516	
61.7%	0	514	514	
63.0%	0	512	512	
64.2%	0	510	510	
65.4%	0	508	508	
66.7%	0	505	505	
67.9%	0	504	504	
69.1%	0	492	492	
70.4%	0	491	491	
71.6%	0	489	489	
72.8%	0	489	489	
74.1%	0	486	486	
75.3%	0	475	475	
76.5%	0	471	471	
77.8%	0	464	464	
79.0%	0	460	460	
80.2%	0	454	454	
81.5%	0	452	452	
82.7%	0	451	451	
84.0%	0	442	442	
85.2%	0	390	390	
86.4%	0	278	278	
87.7%	0	224	224	
88.9%	0	195	195	
90.1%	0	149	149	
91.4%	0	41	41	
92.6%	0	29	29	
93.8%	0	16	16	
95.1%	0	1	1	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	769	769	
1.2%	0	766	766	
2.5%	0	748	748	
3.7%	0	730	730	
4.9%	0	727	727	
6.2%	0	725	725	
7.4%	0	721	721	
8.6%	0	718	718	
9.9%	0	715	715	
11.1%	0	713	713	
12.3%	0	713	713	
13.6%	0	712	712	
14.8%	0	709	709	
16.0%	0	707	707	
17.3%	0	707	707	
18.5%	0	704	704	
19.8%	0	702	702	
21.0%	0	699	699	
22.2%	0	699	699	
23.5%	0	695	695	
24.7%	0	694	694	
25.9%	0	692	692	
27.2%	0	688	688	
28.4%	0	688	688	
29.6%	0	685	685	
30.9%	0	679	679	
32.1%	0	677	677	
33.3%	0	669	669	
34.6%	0	669	669	
35.8%	0	669	669	
37.0%	0	666	666	
38.3%	0	663	663	
39.5%	0	659	659	
40.7%	0	655	655	
42.0%	0	648	648	
43.2%	0	642	642	
44.4%	0	640	640	
45.7%	0	637	637	
46.9%	0	636	636	
48.1%	0	635	635	
49.4%	0	630	630	
50.6%	0	586	586	
51.9%	0	580	580	
53.1%	0	536	536	
54.3%	0	442	442	
55.6%	0	430	430	
56.8%	0	427	427	
58.0%	0	412	412	
59.3%	0	393	393	
60.5%	0	380	380	
61.7%	0	361	361	
63.0%	0	327	327	
64.2%	0	286	286	
65.4%	0	279	279	
66.7%	0	273	273	
67.9%	0	270	270	
69.1%	0	266	266	
70.4%	0	263	263	
71.6%	0	263	263	
72.8%	0	250	250	
74.1%	0	247	247	
75.3%	0	246	246	
76.5%	0	243	243	
77.8%	0	242	242	
79.0%	0	231	231	
80.2%	0	205	205	
81.5%	0	174	174	
82.7%	0	173	173	
84.0%	0	157	157	
85.2%	0	149	149	
86.4%	0	147	147	
87.7%	0	85	85	
88.9%	0	82	82	
90.1%	0	59	59	
91.4%	0	34	34	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-06-b
Funks Reservoir to Deleven Pipeline, Monthly Flow
Probability of Exceedance

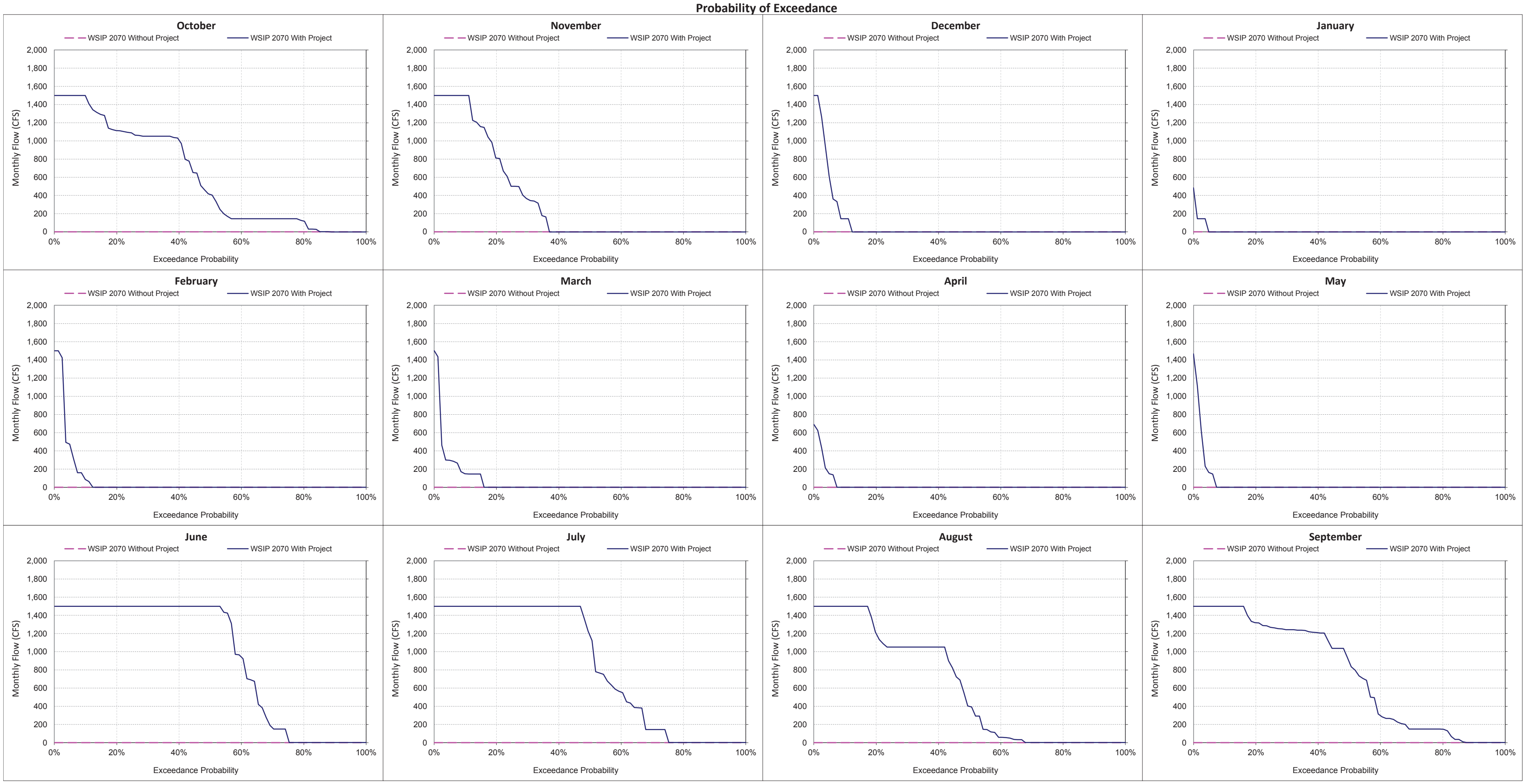


Table OP-06-b

Funks Reservoir to Deleven Pipeline, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,408	1,408	
12.3%	0	1,341	1,341	
13.6%	0	1,315	1,315	
14.8%	0	1,292	1,292	
16.0%	0	1,279	1,279	
17.3%	0	1,139	1,139	
18.5%	0	1,125	1,125	
19.8%	0	1,116	1,116	
21.0%	0	1,111	1,111	
22.2%	0	1,103	1,103	
23.5%	0	1,095	1,095	
24.7%	0	1,090	1,090	
25.9%	0	1,063	1,063	
27.2%	0	1,060	1,060	
28.4%	0	1,052	1,052	
29.6%	0	1,051	1,051	
30.9%	0	1,051	1,051	
32.1%	0	1,051	1,051	
33.3%	0	1,051	1,051	
34.6%	0	1,051	1,051	
35.8%	0	1,051	1,051	
37.0%	0	1,051	1,051	
38.3%	0	1,038	1,038	
39.5%	0	1,030	1,030	
40.7%	0	972	972	
42.0%	0	799	799	
43.2%	0	778	778	
44.4%	0	653	653	
45.7%	0	646	646	
46.9%	0	510	510	
48.1%	0	464	464	
49.4%	0	418	418	
50.6%	0	403	403	
51.9%	0	333	333	
53.1%	0	246	246	
54.3%	0	199	199	
55.6%	0	170	170	
56.8%	0	145	145	
58.0%	0	145	145	
59.3%	0	145	145	
60.5%	0	145	145	
61.7%	0	145	145	
63.0%	0	145	145	
64.2%	0	145	145	
65.4%	0	145	145	
66.7%	0	145	145	
67.9%	0	145	145	
69.1%	0	145	145	
70.4%	0	145	145	
71.6%	0	145	145	
72.8%	0	145	145	
74.1%	0	145	145	
75.3%	0	145	145	
76.5%	0	145	145	
77.8%	0	145	145	
79.0%	0	127	127	
80.2%	0	115	115	
81.5%	0	31	31	
82.7%	0	30	30	
84.0%	0	27	27	
85.2%	0	1	1	
86.4%	0	1	1	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,225	1,225	
13.6%	0	1,205	1,205	
14.8%	0	1,157	1,157	
16.0%	0	1,148	1,148	
17.3%	0	1,042	1,042	
18.5%	0	982	982	
19.8%	0	812	812	
21.0%	0	806	806	
22.2%	0	669	669	
23.5%	0	609	609	
24.7%	0	501	501	
25.9%	0	500	500	
27.2%	0	497	497	
28.4%	0	403	403	
29.6%	0	366	366	
30.9%	0	343	343	
32.1%	0	338	338	
33.3%	0	316	316	
34.6%	0	177	177	
35.8%	0	164	164	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,259	1,259	
3.7%	0	945	945	
4.9%	0	610	610	
6.2%	0	362	362	
7.4%	0	333	333	
8.6%	0	145	145	
9.9%	0	145	145	
11.1%	0	145	145	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	484	484	
1.2%	0	145	145	
2.5%	0	145	145	
3.7%	0	145	145	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-06-b

Funks Reservoir to Deleven Pipeline, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,425	1,425	
3.7%	0	493	493	
4.9%	0	474	474	
6.2%	0	311	311	
7.4%	0	161	161	
8.6%	0	161	161	
9.9%	0	87	87	
11.1%	0	63	63	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,434	1,434	
2.5%	0	463	463	
3.7%	0	300	300	
4.9%	0	296	296	
6.2%	0	286	286	
7.4%	0	265	265	
8.6%	0	170	170	
9.9%	0	150	150	
11.1%	0	146	146	
12.3%	0	145	145	
13.6%	0	145	145	
14.8%	0	145	145	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	690	690	
1.2%	0	624	624	
2.5%	0	432	432	
3.7%	0	215	215	
4.9%	0	150	150	
6.2%	0	138	138	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,466	1,466	
1.2%	0	1,112	1,112	
2.5%	0	622	622	
3.7%	0	231	231	
4.9%	0	163	163	
6.2%	0	145	145	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-06-b
Funks Reservoir to Deleven Pipeline, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,500	1,500	
18.5%	0	1,500	1,500	
19.8%	0	1,500	1,500	
21.0%	0	1,500	1,500	
22.2%	0	1,500	1,500	
23.5%	0	1,500	1,500	
24.7%	0	1,500	1,500	
25.9%	0	1,500	1,500	
27.2%	0	1,500	1,500	
28.4%	0	1,500	1,500	
29.6%	0	1,500	1,500	
30.9%	0	1,500	1,500	
32.1%	0	1,500	1,500	
33.3%	0	1,500	1,500	
34.6%	0	1,500	1,500	
35.8%	0	1,500	1,500	
37.0%	0	1,500	1,500	
38.3%	0	1,500	1,500	
39.5%	0	1,500	1,500	
40.7%	0	1,500	1,500	
42.0%	0	1,500	1,500	
43.2%	0	1,500	1,500	
44.4%	0	1,500	1,500	
45.7%	0	1,500	1,500	
46.9%	0	1,500	1,500	
48.1%	0	1,500	1,500	
49.4%	0	1,500	1,500	
50.6%	0	1,500	1,500	
51.9%	0	1,500	1,500	
53.1%	0	1,500	1,500	
54.3%	0	1,434	1,434	
55.6%	0	1,426	1,426	
56.8%	0	1,311	1,311	
58.0%	0	970	970	
59.3%	0	965	965	
60.5%	0	922	922	
61.7%	0	703	703	
63.0%	0	692	692	
64.2%	0	675	675	
65.4%	0	422	422	
66.7%	0	384	384	
67.9%	0	279	279	
69.1%	0	189	189	
70.4%	0	150	150	
71.6%	0	150	150	
72.8%	0	150	150	
74.1%	0	150	150	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,500	1,500	
18.5%	0	1,500	1,500	
19.8%	0	1,500	1,500	
21.0%	0	1,500	1,500	
22.2%	0	1,500	1,500	
23.5%	0	1,500	1,500	
24.7%	0	1,500	1,500	
25.9%	0	1,500	1,500	
27.2%	0	1,500	1,500	
28.4%	0	1,500	1,500	
29.6%	0	1,500	1,500	
30.9%	0	1,500	1,500	
32.1%	0	1,500	1,500	
33.3%	0	1,500	1,500	
34.6%	0	1,500	1,500	
35.8%	0	1,500	1,500	
37.0%	0	1,500	1,500	
38.3%	0	1,500	1,500	
39.5%	0	1,500	1,500	
40.7%	0	1,500	1,500	
42.0%	0	1,500	1,500	
43.2%	0	1,500	1,500	
44.4%	0	1,500	1,500	
45.7%	0	1,500	1,500	
46.9%	0	1,500	1,500	
48.1%	0	1,365	1,365	
49.4%	0	1,225	1,225	
50.6%	0	1,123	1,123	
51.9%	0	779	779	
53.1%	0	765	765	
54.3%	0	751	751	
55.6%	0	678	678	
56.8%	0	636	636	
58.0%	0	588	588	
59.3%	0	566	566	
60.5%	0	550	550	
61.7%	0	449	449	
63.0%	0	435	435	
64.2%	0	385	385	
65.4%	0	385	385	
66.7%	0	381	381	
67.9%	0	145	145	
69.1%	0	145	145	
70.4%	0	145	145	
71.6%	0	145	145	
72.8%	0	145	145	
74.1%	0	144	144	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,500	1,500	
18.5%	0	1,376	1,376	
19.8%	0	1,217	1,217	
21.0%	0	1,135	1,135	
22.2%	0	1,088	1,088	
23.5%	0	1,051	1,051	
24.7%	0	1,051	1,051	
25.9%	0	1,051	1,051	
27.2%	0	1,051	1,051	
28.4%	0	1,051	1,051	
29.6%	0	1,051	1,051	
30.9%	0	1,051	1,051	
32.1%	0	1,051	1,051	
33.3%	0	1,051	1,051	
34.6%	0	1,051	1,051	
35.8%	0	1,051	1,051	
37.0%	0	1,051	1,051	
38.3%	0	1,051	1,051	
39.5%	0	1,051	1,051	
40.7%	0	1,051	1,051	
42.0%	0	1,051	1,051	
43.2%	0	900	900	
44.4%	0	824	824	
45.7%	0	724	724	
46.9%	0	688	688	
48.1%	0	551	551	
49.4%	0	404	404	
50.6%	0	392	392	
51.9%	0	293	293	
53.1%	0	291	291	
54.3%	0	146	146	
55.6%	0	145	145	
56.8%	0	119	119	
58.0%	0	113	113	
59.3%	0	59	59	
60.5%	0	59	59	
61.7%	0	56	56	
63.0%	0	50	50	
64.2%	0	35	35	
65.4%	0	33	33	
66.7%	0	32	32	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,500	1,500	
3.7%	0	1,500	1,500	
4.9%	0	1,500	1,500	
6.2%	0	1,500	1,500	
7.4%	0	1,500	1,500	
8.6%	0	1,500	1,500	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,500	1,500	
13.6%	0	1,500	1,500	
14.8%	0	1,500	1,500	
16.0%	0	1,500	1,500	
17.3%	0	1,398	1,398	
18.5%	0	1,332	1,332	
19.8%	0	1,318	1,318	
21.0%	0	1,318	1,318	
22.2%	0	1,288	1,288	
23.5%	0	1,284	1,284	
24.7%	0	1,269	1,269	
25.9%	0	1,263	1,263	
27.2%	0	1,255	1,255	
28.4%	0	1,251	1,251	
29.6%	0	1,244	1,244	
30.9%	0	1,243	1,243	
32.1%	0	1,243	1,243	
33.3%	0	1,238	1,238	
34.6%	0	1,237	1,237	
35.8%	0	1,234	1,234	
37.0%	0	1,219	1,219	
38.3%	0	1,213	1,213	
39.5%	0	1,212	1,212	
40.7%	0	1,207	1,207	
42.0%	0	1,204	1,204	
43.2%	0	1,120	1,120	
44.4%	0	1,036	1,036	
45.7%	0	1,036	1,036	
46.9%	0	1,036	1,036	
48.1%	0	1,036	1,036	
49.4%	0	936	936	
50.6%	0	834	834	
51.9%	0	796	796	
53.1%	0	736	736	
54.3%	0	707	707	
55.6%	0	687	687	
56.8%	0	500	500	
58.0%	0	493	493	
59.3%	0	315	315	
60.5%	0	283	283	
61.7%	0	266	266	
63.0%	0	266	266	
64.2%	0	254	254	
65.4%	0	227	227	
66.7%	0	208	208	
67.9%	0	200	200	
69.1%	0	150	150	
70.4%	0	150	150	
71.6%	0	150	150	
72.8%	0	150	150	
74.1%	0	150	150	
75.3%	0	150	150	
76.5%	0	150	150	
77.8%	0	150	150	
79.0%	0	150	150	
80.2%	0	146	146	
81.5%	0	130	130	
82.7%	0	66	66	
84.0%	0	36	36	
85.2%	0	36	36	
86.4%	0	9	9	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

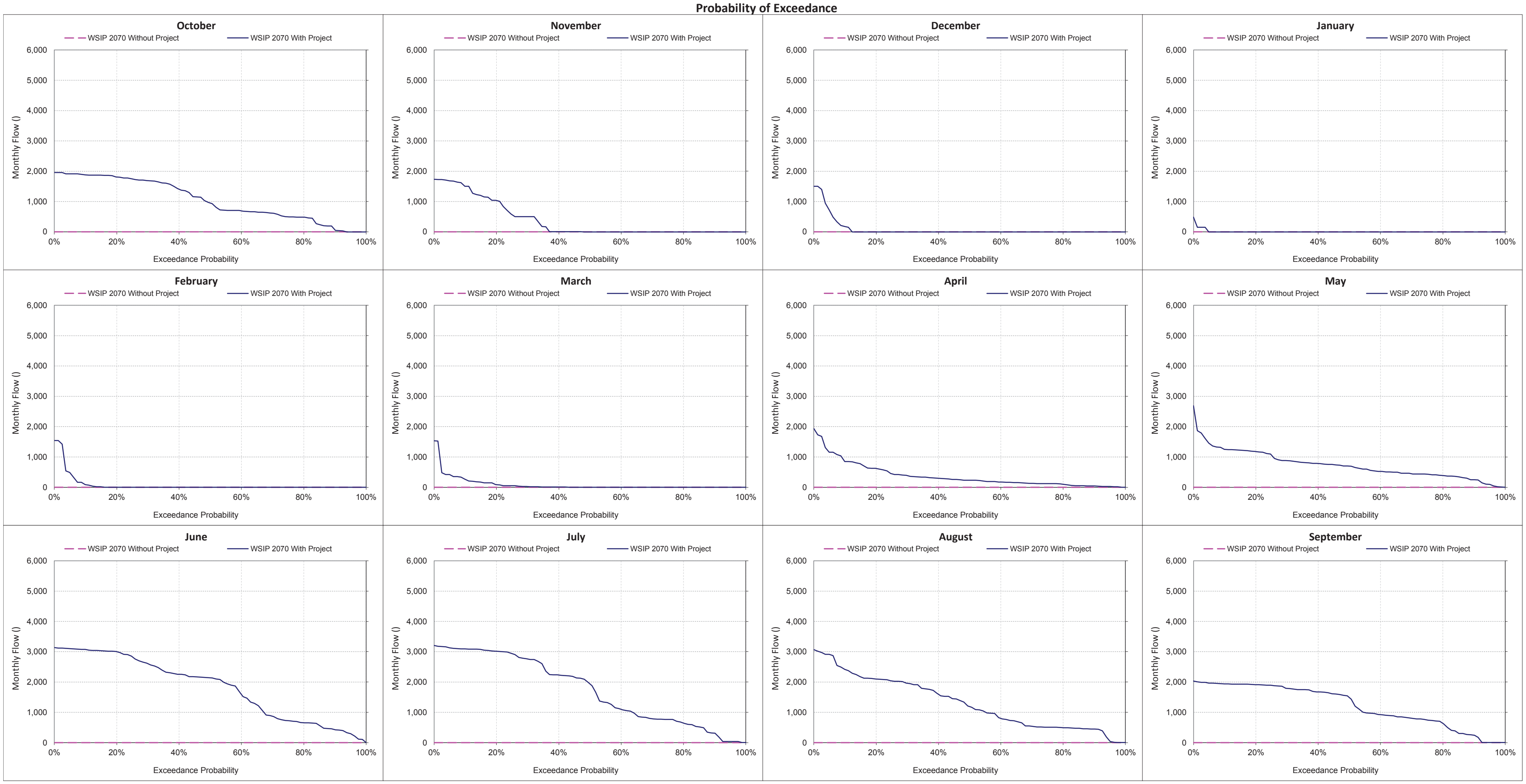


Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,959	1,959	
1.2%	0	1,957	1,957	
2.5%	0	1,957	1,957	
3.7%	0	1,913	1,913	
4.9%	0	1,910	1,910	
6.2%	0	1,910	1,910	
7.4%	0	1,910	1,910	
8.6%	0	1,898	1,898	
9.9%	0	1,879	1,879	
11.1%	0	1,875	1,875	
12.3%	0	1,874	1,874	
13.6%	0	1,872	1,872	
14.8%	0	1,870	1,870	
16.0%	0	1,861	1,861	
17.3%	0	1,860	1,860	
18.5%	0	1,851	1,851	
19.8%	0	1,812	1,812	
21.0%	0	1,801	1,801	
22.2%	0	1,780	1,780	
23.5%	0	1,773	1,773	
24.7%	0	1,747	1,747	
25.9%	0	1,724	1,724	
27.2%	0	1,707	1,707	
28.4%	0	1,706	1,706	
29.6%	0	1,694	1,694	
30.9%	0	1,682	1,682	
32.1%	0	1,672	1,672	
33.3%	0	1,647	1,647	
34.6%	0	1,613	1,613	
35.8%	0	1,605	1,605	
37.0%	0	1,568	1,568	
38.3%	0	1,504	1,504	
39.5%	0	1,423	1,423	
40.7%	0	1,376	1,376	
42.0%	0	1,357	1,357	
43.2%	0	1,294	1,294	
44.4%	0	1,162	1,162	
45.7%	0	1,156	1,156	
46.9%	0	1,145	1,145	
48.1%	0	1,035	1,035	
49.4%	0	975	975	
50.6%	0	928	928	
51.9%	0	808	808	
53.1%	0	720	720	
54.3%	0	716	716	
55.6%	0	710	710	
56.8%	0	710	710	
58.0%	0	709	709	
59.3%	0	706	706	
60.5%	0	682	682	
61.7%	0	673	673	
63.0%	0	667	667	
64.2%	0	661	661	
65.4%	0	646	646	
66.7%	0	645	645	
67.9%	0	642	642	
69.1%	0	625	625	
70.4%	0	615	615	
71.6%	0	579	579	
72.8%	0	529	529	
74.1%	0	504	504	
75.3%	0	495	495	
76.5%	0	490	490	
77.8%	0	484	484	
79.0%	0	484	484	
80.2%	0	484	484	
81.5%	0	462	462	
82.7%	0	450	450	
84.0%	0	270	270	
85.2%	0	232	232	
86.4%	0	204	204	
87.7%	0	195	195	
88.9%	0	195	195	
90.1%	0	44	44	
91.4%	0	41	41	
92.6%	0	32	32	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,730	1,730	
1.2%	0	1,723	1,723	
2.5%	0	1,723	1,723	
3.7%	0	1,711	1,711	
4.9%	0	1,681	1,681	
6.2%	0	1,671	1,671	
7.4%	0	1,642	1,642	
8.6%	0	1,624	1,624	
9.9%	0	1,500	1,500	
11.1%	0	1,500	1,500	
12.3%	0	1,271	1,271	
13.6%	0	1,225	1,225	
14.8%	0	1,205	1,205	
16.0%	0	1,150	1,150	
17.3%	0	1,145	1,145	
18.5%	0	1,042	1,042	
19.8%	0	1,037	1,037	
21.0%	0	1,007	1,007	
22.2%	0	837	837	
23.5%	0	709	709	
24.7%	0	588	588	
25.9%	0	501	501	
27.2%	0	500	500	
28.4%	0	500	500	
29.6%	0	500	500	
30.9%	0	500	500	
32.1%	0	500	500	
33.3%	0	338	338	
34.6%	0	177	177	
35.8%	0	166	166	
37.0%	0	4	4	
38.3%	0	4	4	
39.5%	0	4	4	
40.7%	0	2	2	
42.0%	0	1	1	
43.2%	0	1	1	
44.4%	0	1	1	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,500	1,500	
1.2%	0	1,500	1,500	
2.5%	0	1,402	1,402	
3.7%	0	945	945	
4.9%	0	724	724	
6.2%	0	484	484	
7.4%	0	333	333	
8.6%	0	206	206	
9.9%	0	172	172	
11.1%	0	151	151	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	484	484	
1.2%	0	149	149	
2.5%	0	149	149	
3.7%	0	149	149	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,543	1,543	
1.2%	0	1,543	1,543	
2.5%	0	1,425	1,425	
3.7%	0	536	536	
4.9%	0	492	492	
6.2%	0	325	325	
7.4%	0	164	164	
8.6%	0	164	164	
9.9%	0	90	90	
11.1%	0	66	66	
12.3%	0	32	32	
13.6%	0	20	20	
14.8%	0	15	15	
16.0%	0	2	2	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,534	1,534	
1.2%	0	1,520	1,520	
2.5%	0	484	484	
3.7%	0	418	418	
4.9%	0	417	417	
6.2%	0	354	354	
7.4%	0	350	350	
8.6%	0	333	333	
9.9%	0	264	264	
11.1%	0	206	206	
12.3%	0	201	201	
13.6%	0	181	181	
14.8%	0	173	173	
16.0%	0	146	146	
17.3%	0	146	146	
18.5%	0	146	146	
19.8%	0	85	85	
21.0%	0	77	77	
22.2%	0	54	54	
23.5%	0	54	54	
24.7%	0	52	52	
25.9%	0	50	50	
27.2%	0	35	35	
28.4%	0	29	29	
29.6%	0	26	26	
30.9%	0	21	21	
32.1%	0	17	17	
33.3%	0	15	15	
34.6%	0	13	13	
35.8%	0	13	13	
37.0%	0	9	9	
38.3%	0	8	8	
39.5%	0	7	7	
40.7%	0	6	6	
42.0%	0	6	6	
43.2%	0	3	3	
44.4%	0	2	2	
45.7%	0	1	1	
46.9%	0	1	1	
48.1%	0	1	1	
49.4%	0	1	1	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	1,936	1,936	
1.2%	0	1,733	1,733	
2.5%	0	1,680	1,680	
3.7%	0	1,314	1,314	
4.9%	0	1,156	1,156	
6.2%	0	1,153	1,153	
7.4%	0	1,078	1,078	
8.6%	0	1,039	1,039	
9.9%	0	849	849	
11.1%	0	847	847	
12.3%	0	841	841	
13.6%	0	808	808	
14.8%	0	778	778	
16.0%	0	702	702	
17.3%	0	630	630	
18.5%	0	628	628	
19.8%	0	628	628	
21.0%	0	597	597	
22.2%	0	578	578	
23.5%	0	544	544	
24.7%	0	455	455	
25.9%	0	419	419	
27.2%	0	417	417	
28.4%	0	406	406	
29.6%	0	393	393	
30.9%	0	363	363	
32.1%	0	351	351	
33.3%	0	346	346	
34.6%	0	335	335	
35.8%	0	332	332	
37.0%	0	321	321	
38.3%	0	308	308	
39.5%	0	301	301	
40.7%	0	289	289	
42.0%	0	283	283	
43.2%	0	271	271	
44.4%	0	259	259	
45.7%	0	257	257	
46.9%	0	245	245	
48.1%	0	234	234	
49.4%	0	234	234	
50.6%	0	232	232	
51.9%	0	230	230	
53.1%	0	222	222	
54.3%	0	205	205	
55.6%	0	190	190	
56.8%	0	190	190	
58.0%	0	187	187	
59.3%	0	176	176	
60.5%	0	170	170	
61.7%	0	165	165	
63.0%	0	161	161	
64.2%	0	157	157	
65.4%	0	156	156	
66.7%	0	143	143	
67.9%	0	134	134	
69.1%	0	129	129	
70.4%	0	128	128	
71.6%	0	125	125	
72.8%	0	123	123	
74.1%	0	123	123	
75.3%	0	118	118	
76.5%	0	118	118	
77.8%	0	118	118	
79.0%	0	111	111	
80.2%	0	93	93	
81.5%	0	77	77	
82.7%	0	59	59	
84.0%	0	54	54	
85.2%	0	54	54	
86.4%	0	50	50	
87.7%	0	47	47	
88.9%	0	46	46	
90.1%	0	43	43	
91.4%	0	35	35	
92.6%	0	26	26	
93.8%	0	26	26	
95.1%	0	24	24	
96.3%	0	21	21	
97.5%	0	19	19	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,691	2,691	
1.2%	0	1,865	1,865	
2.5%	0	1,791	1,791	
3.7%	0	1,608	1,608	
4.9%	0	1,453	1,453	
6.2%	0	1,362	1,362	
7.4%	0	1,324	1,324	
8.6%	0	1,322	1,322	
9.9%	0	1,249	1,249	
11.1%	0	1,241	1,241	
12.3%	0	1,239	1,239	
13.6%	0	1,237	1,237	
14.8%	0	1,225	1,225	
16.0%	0	1,220	1,220	
17.3%	0	1,209	1,209	
18.5%	0	1,191	1,191	
19.8%	0	1,178	1,178	
21.0%	0	1,166	1,166	
22.2%	0	1,160	1,160	
23.5%	0	1,116	1,116	
24.7%	0	1,100	1,100	
25.9%	0	952	952	
27.2%	0	904	904	
28.4%	0	881	881	
29.6%	0	880	880	
30.9%	0	874	874	
32.1%	0	859	859	
33.3%	0	839	839	
34.6%	0	826	826	
35.8%	0	817	817	
37.0%	0	803	803	
38.3%	0	788	788	
39.5%	0	786	786	
40.7%	0	779	779	
42.0%	0	766	766	
43.2%	0	757	757	
44.4%	0	753	753	
45.7%	0	740	740	
46.9%	0	727	727	
48.1%	0	706	706	
49.4%	0	699	699	
50.6%	0	694	694	
51.9%	0	652	652	
53.1%	0	625	625	
54.3%	0	601	601	
55.6%	0	597	597	
56.8%	0	554	554	
58.0%	0	537	537	
59.3%	0	519	519	
60.5%	0	519	519	
61.7%	0	509	509	
63.0%	0	504	504	
64.2%	0	501	501	
65.4%	0	494	494	
66.7%	0	466	466	
67.9%	0	464	464	
69.1%	0	461	461	
70.4%	0	440	440	
71.6%	0	437	437	
72.8%	0	434	434	
74.1%	0	433	433	
75.3%	0	428	428	
76.5%	0	416	416	
77.8%	0	410	410	
79.0%	0	397	397	
80.2%	0	384	384	
81.5%	0	370	370	
82.7%	0	366	366	
84.0%	0	361	361	
85.2%	0	346	346	
86.4%	0	321	321	
87.7%	0	300	300	
88.9%	0	253	253	
90.1%	0	248	248	
91.4%	0	243	243	
92.6%	0	146	146	
93.8%	0	101	101	
95.1%	0	96	96	
96.3%	0	39	39	
97.5%	0	14	14	
98.8%	0	11	11	
100.0%	0	0	0	

Table OP-07-b
Sites Reservoir to Funks Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,135	3,135	
1.2%	0	3,124	3,124	
2.5%	0	3,123	3,123	
3.7%	0	3,107	3,107	
4.9%	0	3,105	3,105	
6.2%	0	3,095	3,095	
7.4%	0	3,086	3,086	
8.6%	0	3,079	3,079	
9.9%	0	3,076	3,076	
11.1%	0	3,054	3,054	
12.3%	0	3,045	3,045	
13.6%	0	3,040	3,040	
14.8%	0	3,037	3,037	
16.0%	0	3,028	3,028	
17.3%	0	3,015	3,015	
18.5%	0	3,013	3,013	
19.8%	0	3,012	3,012	
21.0%	0	2,972	2,972	
22.2%	0	2,917	2,917	
23.5%	0	2,905	2,905	
24.7%	0	2,853	2,853	
25.9%	0	2,762	2,762	
27.2%	0	2,697	2,697	
28.4%	0	2,660	2,660	
29.6%	0	2,620	2,620	
30.9%	0	2,564	2,564	
32.1%	0	2,533	2,533	
33.3%	0	2,480	2,480	
34.6%	0	2,390	2,390	
35.8%	0	2,326	2,326	
37.0%	0	2,303	2,303	
38.3%	0	2,278	2,278	
39.5%	0	2,256	2,256	
40.7%	0	2,253	2,253	
42.0%	0	2,241	2,241	
43.2%	0	2,180	2,180	
44.4%	0	2,179	2,179	
45.7%	0	2,169	2,169	
46.9%	0	2,159	2,159	
48.1%	0	2,156	2,156	
49.4%	0	2,145	2,145	
50.6%	0	2,136	2,136	
51.9%	0	2,103	2,103	
53.1%	0	2,085	2,085	
54.3%	0	1,992	1,992	
55.6%	0	1,938	1,938	
56.8%	0	1,895	1,895	
58.0%	0	1,872	1,872	
59.3%	0	1,692	1,692	
60.5%	0	1,517	1,517	
61.7%	0	1,468	1,468	
63.0%	0	1,343	1,343	
64.2%	0	1,294	1,294	
65.4%	0	1,220	1,220	
66.7%	0	1,068	1,068	
67.9%	0	914	914	
69.1%	0	894	894	
70.4%	0	856	856	
71.6%	0	790	790	
72.8%	0	757	757	
74.1%	0	732	732	
75.3%	0	721	721	
76.5%	0	702	702	
77.8%	0	698	698	
79.0%	0	663	663	
80.2%	0	656	656	
81.5%	0	654	654	
82.7%	0	642	642	
84.0%	0	635	635	
85.2%	0	558	558	
86.4%	0	470	470	
87.7%	0	462	462	
88.9%	0	459	459	
90.1%	0	422	422	
91.4%	0	415	415	
92.6%	0	398	398	
93.8%	0	327	327	
95.1%	0	292	292	
96.3%	0	219	219	
97.5%	0	117	117	
98.8%	0	107	107	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,202	3,202	
1.2%	0	3,176	3,176	
2.5%	0	3,167	3,167	
3.7%	0	3,164	3,164	
4.9%	0	3,131	3,131	
6.2%	0	3,110	3,110	
7.4%	0	3,106	3,106	
8.6%	0	3,097	3,097	
9.9%	0	3,093	3,093	
11.1%	0	3,087	3,087	
12.3%	0	3,087	3,087	
13.6%	0	3,083	3,083	
14.8%	0	3,079	3,079	
16.0%	0	3,049	3,049	
17.3%	0	3,045	3,045	
18.5%	0	3,021	3,021	
19.8%	0	3,015	3,015	
21.0%	0	3,009	3,009	
22.2%	0	3,001	3,001	
23.5%	0	2,991	2,991	
24.7%	0	2,950	2,950	
25.9%	0	2,909	2,909	
27.2%	0	2,809	2,809	
28.4%	0	2,784	2,784	
29.6%	0	2,769	2,769	
30.9%	0	2,745	2,745	
32.1%	0	2,743	2,743	
33.3%	0	2,679	2,679	
34.6%	0	2,609	2,609	
35.8%	0	2,355	2,355	
37.0%	0	2,245	2,245	
38.3%	0	2,241	2,241	
39.5%	0	2,236	2,236	
40.7%	0	2,217	2,217	
42.0%	0	2,213	2,213	
43.2%	0	2,207	2,207	
44.4%	0	2,189	2,189	
45.7%	0	2,137	2,137	
46.9%	0	2,123	2,123	
48.1%	0	2,088	2,088	
49.4%	0	1,991	1,991	
50.6%	0	1,879	1,879	
51.9%	0	1,667	1,667	
53.1%	0	1,370	1,370	
54.3%	0	1,341	1,341	
55.6%	0	1,325	1,325	
56.8%	0	1,264	1,264	
58.0%	0	1,148	1,148	
59.3%	0	1,126	1,126	
60.5%	0	1,084	1,084	
61.7%	0	1,055	1,055	
63.0%	0	1,041	1,041	
64.2%	0	968	968	
65.4%	0	859	859	
66.7%	0	846	846	
67.9%	0	838	838	
69.1%	0	803	803	
70.4%	0	779	779	
71.6%	0	775	775	
72.8%	0	773	773	
74.1%	0	768	768	
75.3%	0	766	766	
76.5%	0	765	765	
77.8%	0	703	703	
79.0%	0	677	677	
80.2%	0	637	637	
81.5%	0	606	606	
82.7%	0	592	592	
84.0%	0	536	536	
85.2%	0	520	520	
86.4%	0	489	489	
87.7%	0	349	349	
88.9%	0	317	317	
90.1%	0	312	312	
91.4%	0	184	184	
92.6%	0	41	41	
93.8%	0	41	41	
95.1%	0	41	41	
96.3%	0	41	41	
97.5%	0	39	39	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	3,068	3,068	
1.2%	0	3,020	3,020	
2.5%	0	2,977	2,977	
3.7%	0	2,914	2,914	
4.9%	0	2,911	2,911	
6.2%	0	2,870	2,870	
7.4%	0	2,542	2,542	
8.6%	0	2,492	2,492	
9.9%	0	2,417	2,417	
11.1%	0	2,372	2,372	
12.3%	0	2,289	2,289	
13.6%	0	2,248	2,248	
14.8%	0	2,181	2,181	
16.0%	0	2,127	2,127	
17.3%	0	2,123	2,123	
18.5%	0	2,120	2,120	
19.8%	0	2,098	2,098	
21.0%	0	2,095	2,095	
22.2%	0	2,086	2,086	
23.5%	0	2,078	2,078	
24.7%	0	2,039	2,039	
25.9%	0	2,027	2,027	
27.2%	0	2,021	2,021	
28.4%	0	2,016	2,016	
29.6%	0	1,964	1,964	
30.9%	0	1,949	1,949	
32.1%	0	1,913	1,913	
33.3%	0	1,910	1,910	
34.6%	0	1,792	1,792	
35.8%	0	1,778	1,778	
37.0%	0	1,760	1,760	
38.3%	0	1,724	1,724	
39.5%	0	1,630	1,630	
40.7%	0	1,542	1,542	
42.0%	0	1,529	1,529	
43.2%	0	1,525	1,525	
44.4%	0	1,451	1,451	
45.7%	0	1,442	1,442	
46.9%	0	1,390	1,390	
48.1%	0	1,335	1,335	
49.4%	0	1,214	1,214	
50.6%	0	1,168	1,168	
51.9%	0	1,091	1,091	
53.1%	0	1,086	1,086	
54.3%	0	1,044	1,044	
55.6%	0	982	982	
56.8%	0	972	972	
58.0%	0	964	964	
59.3%	0	824	824	
60.5%	0	785	785	
61.7%	0	767	767	
63.0%	0	733	733	
64.2%	0	724	724	
65.4%	0	688	688	
66.7%	0	651	651	
67.9%	0	550	550	
69.1%	0	549	549	
70.4%	0	532	532	
71.6%	0	518	518	
72.8%	0	514	514	
74.1%	0	512	512	
75.3%	0	510	510	
76.5%	0	508	508	
77.8%	0	505	505	
79.0%	0	504	504	
80.2%	0	492	492	
81.5%	0	489	489	
82.7%	0	486	486	
84.0%	0	475	475	
85.2%	0	471	471	
86.4%	0	460	460	
87.7%	0	454	454	
88.9%	0	452	452	
90.1%	0	451	451	
91.4%	0	442	442	
92.6%	0	390	390	
93.8%	0	195	195	
95.1%	0	41	41	
96.3%	0	16	16	
97.5%	0	1	1	
98.8%	0	0	0	
100.0%	0	0	0	

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow ()	WSIP 2070 With Project Monthly Flow ()	Absolute Difference ()	Relative Difference (%)
0.0%	0	2,031	2,031	
1.2%	0	2,003	2,003	
2.5%	0	1,991	1,991	
3.7%	0	1,986	1,986	
4.9%	0	1,968	1,968	
6.2%	0	1,961	1,961	
7.4%	0	1,956	1,956	
8.6%	0	1,949	1,949	
9.9%	0	1,942	1,942	
11.1%	0	1,940	1,940	
12.3%	0	1,934	1,934	
13.6%	0	1,931	1,931	
14.8%	0	1,930	1,930	
16.0%	0	1,930	1,930	
17.3%	0	1,927	1,927	
18.5%	0	1,921	1,921	
19.8%	0	1,913	1,913	
21.0%	0	1,912	1,912	
22.2%	0	1,900	1,900	
23.5%	0	1,894	1,894	
24.7%	0	1,893	1,893	
25.9%	0	1,880	1,880	
27.2%	0	1,872	1,872	
28.4%	0	1,861	1,861	
29.6%	0	1,789	1,789	
30.9%	0	1,786	1,786	
32.1%	0	1,763	1,763	
33.3%	0	1,750	1,750	
34.6%	0	1,748	1,748	
35.8%	0	1,746	1,746	
37.0%	0	1,745	1,745	
38.3%	0	1,691	1,691	
39.5%	0	1,673	1,673	
40.7%	0	1,671	1,671	
42.0%	0	1,661	1,661	
43.2%	0	1,645	1,645	
44.4%	0	1,617	1,617	
45.7%	0	1,603	1,603	
46.9%	0	1,585	1,585	
48.1%	0	1,559	1,559	
49.4%	0	1,542	1,542	
50.6%	0	1,433	1,433	
51.9%	0	1,200	1,200	
53.1%	0	1,104	1,104	
54.3%	0	1,002	1,002	
55.6%	0	979	979	
56.8%	0	969	969	
58.0%	0	960	960	
59.3%	0	930	930	
60.5%	0	919	919	
61.7%	0	904	904	
63.0%	0	890	890	
64.2%	0	883	883	
65.4%	0	852	852	
66.7%	0	849	849	
67.9%	0	830	830	
69.1%	0	819	819	
70.4%	0	798	798	
71.6%	0	786	786	
72.8%	0	780	780	
74.1%	0	769	769	
75.3%	0	743	743	
76.5%	0	730	730	
77.8%	0	716	716	
79.0%	0	706	706	
80.2%	0	623	623	
81.5%	0	497	497	
82.7%	0	403	403	
84.0%	0	388	388	
85.2%	0	307	307	
86.4%	0	299	299	
87.7%	0	266	266	
88.9%	0	263	263	
90.1%	0	247	247	
91.4%	0	174	174	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-08-b
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Probability of Exceedance

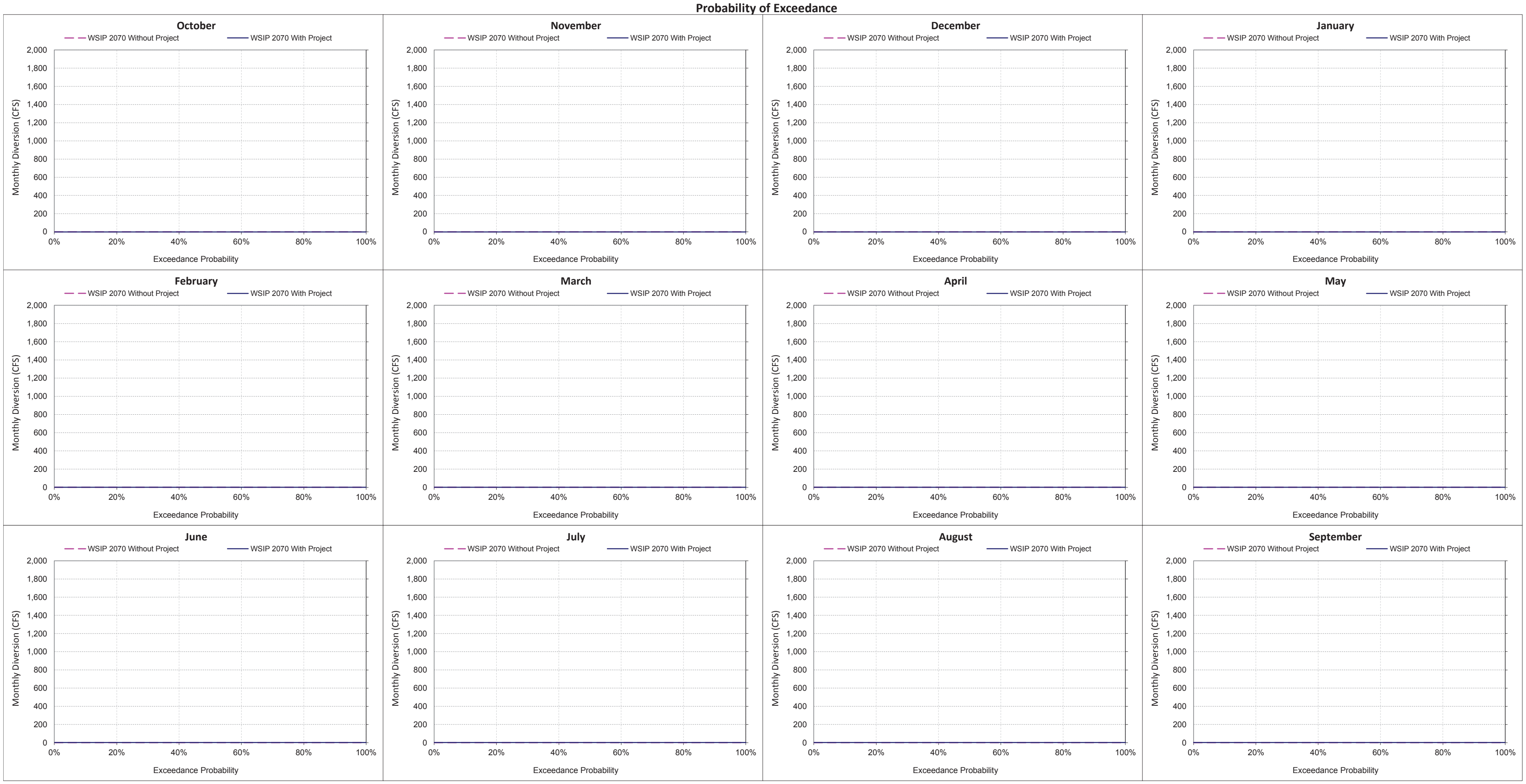


Table OP-08-b

Delevan Intake and Pipeline (to Local Use), Monthly Diversion

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-08-b
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table OP-08-b
Delevan Intake and Pipeline (to Local Use), Monthly Diversion
Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Diversion (CFS)	WSIP 2070 With Project Monthly Diversion (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	0	0	0	
1.2%	0	0	0	
2.5%	0	0	0	
3.7%	0	0	0	
4.9%	0	0	0	
6.2%	0	0	0	
7.4%	0	0	0	
8.6%	0	0	0	
9.9%	0	0	0	
11.1%	0	0	0	
12.3%	0	0	0	
13.6%	0	0	0	
14.8%	0	0	0	
16.0%	0	0	0	
17.3%	0	0	0	
18.5%	0	0	0	
19.8%	0	0	0	
21.0%	0	0	0	
22.2%	0	0	0	
23.5%	0	0	0	
24.7%	0	0	0	
25.9%	0	0	0	
27.2%	0	0	0	
28.4%	0	0	0	
29.6%	0	0	0	
30.9%	0	0	0	
32.1%	0	0	0	
33.3%	0	0	0	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Figure OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

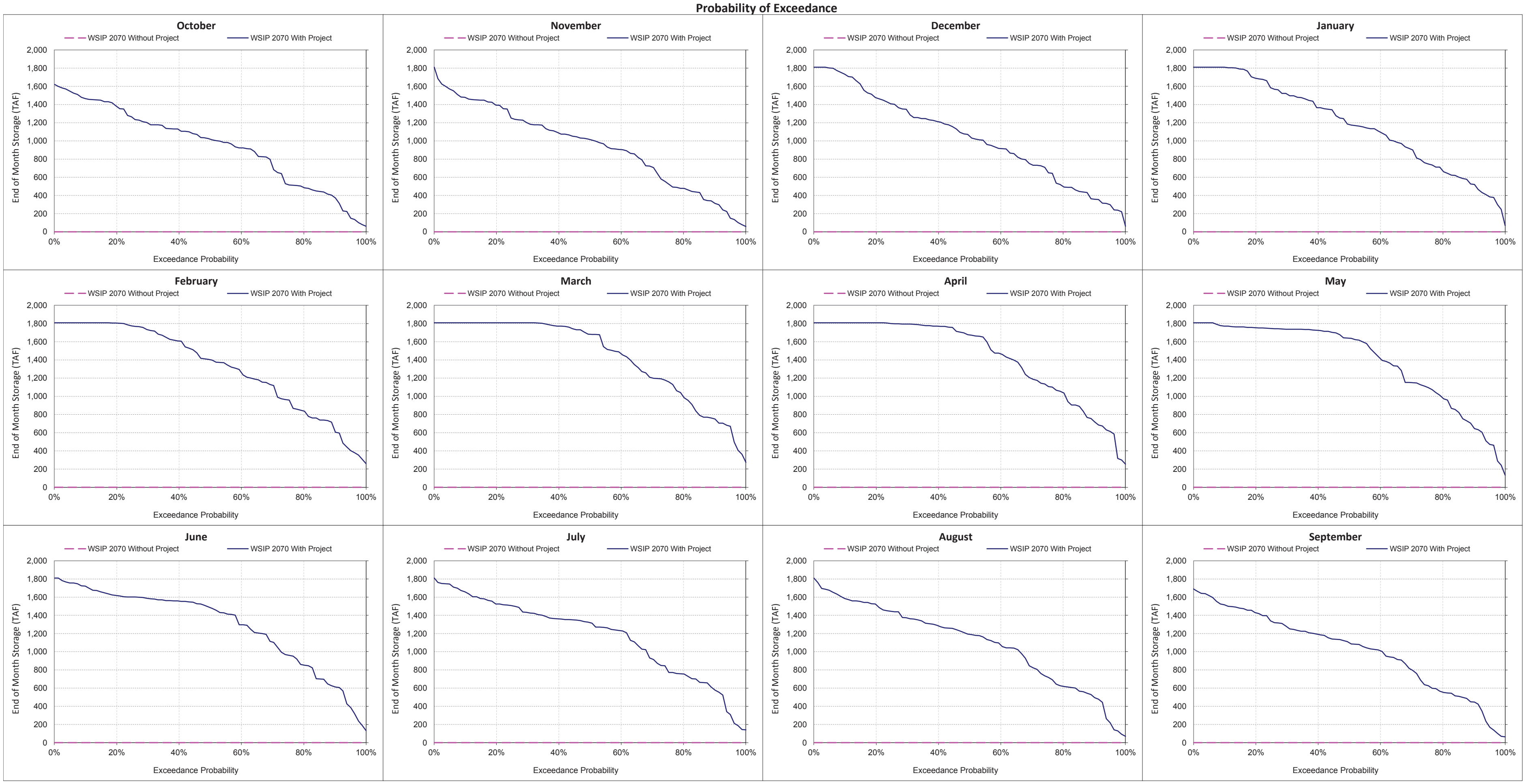


Table OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,622	1,622	
1.2%	0	1,600	1,600	
2.5%	0	1,581	1,581	
3.7%	0	1,570	1,570	
4.9%	0	1,550	1,550	
6.2%	0	1,524	1,524	
7.4%	0	1,511	1,511	
8.6%	0	1,481	1,481	
9.9%	0	1,464	1,464	
11.1%	0	1,456	1,456	
12.3%	0	1,453	1,453	
13.6%	0	1,450	1,450	
14.8%	0	1,447	1,447	
16.0%	0	1,431	1,431	
17.3%	0	1,431	1,431	
18.5%	0	1,420	1,420	
19.8%	0	1,386	1,386	
21.0%	0	1,355	1,355	
22.2%	0	1,353	1,353	
23.5%	0	1,279	1,279	
24.7%	0	1,266	1,266	
25.9%	0	1,235	1,235	
27.2%	0	1,229	1,229	
28.4%	0	1,211	1,211	
29.6%	0	1,202	1,202	
30.9%	0	1,179	1,179	
32.1%	0	1,178	1,178	
33.3%	0	1,177	1,177	
34.6%	0	1,172	1,172	
35.8%	0	1,137	1,137	
37.0%	0	1,136	1,136	
38.3%	0	1,132	1,132	
39.5%	0	1,131	1,131	
40.7%	0	1,106	1,106	
42.0%	0	1,105	1,105	
43.2%	0	1,101	1,101	
44.4%	0	1,080	1,080	
45.7%	0	1,072	1,072	
46.9%	0	1,036	1,036	
48.1%	0	1,034	1,034	
49.4%	0	1,025	1,025	
50.6%	0	1,011	1,011	
51.9%	0	1,002	1,002	
53.1%	0	997	997	
54.3%	0	984	984	
55.6%	0	982	982	
56.8%	0	966	966	
58.0%	0	933	933	
59.3%	0	925	925	
60.5%	0	923	923	
61.7%	0	914	914	
63.0%	0	912	912	
64.2%	0	882	882	
65.4%	0	828	828	
66.7%	0	826	826	
67.9%	0	823	823	
69.1%	0	798	798	
70.4%	0	683	683	
71.6%	0	652	652	
72.8%	0	642	642	
74.1%	0	528	528	
75.3%	0	517	517	
76.5%	0	512	512	
77.8%	0	509	509	
79.0%	0	504	504	
80.2%	0	484	484	
81.5%	0	478	478	
82.7%	0	461	461	
84.0%	0	448	448	
85.2%	0	444	444	
86.4%	0	438	438	
87.7%	0	416	416	
88.9%	0	405	405	
90.1%	0	372	372	
91.4%	0	313	313	
92.6%	0	229	229	
93.8%	0	224	224	
95.1%	0	151	151	
96.3%	0	137	137	
97.5%	0	100	100	
98.8%	0	80	80	
100.0%	0	60	60	

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,684	1,684	
2.5%	0	1,625	1,625	
3.7%	0	1,601	1,601	
4.9%	0	1,570	1,570	
6.2%	0	1,550	1,550	
7.4%	0	1,512	1,512	
8.6%	0	1,482	1,482	
9.9%	0	1,481	1,481	
11.1%	0	1,461	1,461	
12.3%	0	1,455	1,455	
13.6%	0	1,451	1,451	
14.8%	0	1,450	1,450	
16.0%	0	1,449	1,449	
17.3%	0	1,429	1,429	
18.5%	0	1,425	1,425	
19.8%	0	1,393	1,393	
21.0%	0	1,392	1,392	
22.2%	0	1,354	1,354	
23.5%	0	1,351	1,351	
24.7%	0	1,252	1,252	
25.9%	0	1,237	1,237	
27.2%	0	1,232	1,232	
28.4%	0	1,227	1,227	
29.6%	0	1,202	1,202	
30.9%	0	1,183	1,183	
32.1%	0	1,178	1,178	
33.3%	0	1,177	1,177	
34.6%	0	1,175	1,175	
35.8%	0	1,134	1,134	
37.0%	0	1,117	1,117	
38.3%	0	1,112	1,112	
39.5%	0	1,095	1,095	
40.7%	0	1,074	1,074	
42.0%	0	1,074	1,074	
43.2%	0	1,065	1,065	
44.4%	0	1,052	1,052	
45.7%	0	1,045	1,045	
46.9%	0	1,031	1,031	
48.1%	0	1,028	1,028	
49.4%	0	1,021	1,021	
50.6%	0	1,008	1,008	
51.9%	0	998	998	
53.1%	0	981	981	
54.3%	0	970	970	
55.6%	0	933	933	
56.8%	0	916	916	
58.0%	0	913	913	
59.3%	0	908	908	
60.5%	0	903	903	
61.7%	0	892	892	
63.0%	0	863	863	
64.2%	0	856	856	
65.4%	0	819	819	
66.7%	0	793	793	
67.9%	0	726	726	
69.1%	0	722	722	
70.4%	0	707	707	
71.6%	0	641	641	
72.8%	0	580	580	
74.1%	0	554	554	
75.3%	0	524	524	
76.5%	0	492	492	
77.8%	0	488	488	
79.0%	0	479	479	
80.2%	0	479	479	
81.5%	0	462	462	
82.7%	0	444	444	
84.0%	0	439	439	
85.2%	0	432	432	
86.4%	0	356	356	
87.7%	0	345	345	
88.9%	0	342	342	
90.1%	0	313	313	
91.4%	0	298	298	
92.6%	0	242	242	
93.8%	0	225	225	
95.1%	0	151	151	
96.3%	0	136	136	
97.5%	0	101	101	
98.8%	0	79	79	
100.0%	0	60	60	

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,802	1,802	
6.2%	0	1,799	1,799	
7.4%	0	1,775	1,775	
8.6%	0	1,753	1,753	
9.9%	0	1,734	1,734	
11.1%	0	1,709	1,709	
12.3%	0	1,703	1,703	
13.6%	0	1,662	1,662	
14.8%	0	1,628	1,628	
16.0%	0	1,558	1,558	
17.3%	0	1,529	1,529	
18.5%	0	1,515	1,515	
19.8%	0	1,478	1,478	
21.0%	0	1,462	1,462	
22.2%	0	1,448	1,448	
23.5%	0	1,427	1,427	
24.7%	0	1,409	1,409	
25.9%	0	1,404	1,404	
27.2%	0	1,365	1,365	
28.4%	0	1,353	1,353	
29.6%	0	1,350	1,350	
30.9%	0	1,287	1,287	
32.1%	0	1,258	1,258	
33.3%	0	1,256	1,256	
34.6%	0	1,247	1,247	
35.8%	0	1,246	1,246	
37.0%	0	1,233	1,233	
38.3%	0	1,226	1,226	
39.5%	0	1,214	1,214	
40.7%	0	1,206	1,206	
42.0%	0	1,187	1,187	
43.2%	0	1,177	1,177	
44.4%	0	1,157	1,157	
45.7%	0	1,133	1,133	
46.9%	0	1,096	1,096	
48.1%	0	1,077	1,077	
49.4%	0	1,071	1,071	
50.6%	0	1,033	1,033	
51.9%	0	1,020	1,020	
53.1%	0	1,012	1,012	
54.3%	0	1,009	1,009	
55.6%	0	961	961	
56.8%	0	952	952	
58.0%	0	934	934	
59.3%	0	918	918	
60.5%	0	914	914	
61.7%	0	911	911	
63.0%	0	865	865	
64.2%	0	861	861	
65.4%	0	821	821	
66.7%	0	799	799	
67.9%	0	795	795	
69.1%	0	751	751	
70.4%	0	733	733	
71.6%	0	732	732	
72.8%	0	726	726	
74.1%	0	708	708	
75.3%	0	650	650	
76.5%	0	644	644	
77.8%	0	535	535	
79.0%	0	521	521	
80.2%	0	493	493	
81.5%	0	490	490	
82.7%	0	490	490	
84.0%	0	461	461	
85.2%	0	445	445	
86.4%	0	439	439	
87.7%	0	434	434	
88.9%	0	364	364	
90.1%	0	357	357	
91.4%	0	356	356	
92.6%	0	316	316	
93.8%	0	313	313	
95.1%	0	298	298	
96.3%	0	242	242	
97.5%	0	238	238	
98.8%	0	221	221	
100.0%	0	60	60	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,804	1,804	
12.3%	0	1,804	1,804	
13.6%	0	1,801	1,801	
14.8%	0	1,791	1,791	
16.0%	0	1,788	1,788	
17.3%	0	1,767	1,767	
18.5%	0	1,705	1,705	
19.8%	0	1,691	1,691	
21.0%	0	1,682	1,682	
22.2%	0	1,676	1,676	
23.5%	0	1,662	1,662	
24.7%	0	1,587	1,587	
25.9%	0	1,569	1,569	
27.2%	0	1,562	1,562	
28.4%	0	1,523	1,523	
29.6%	0	1,523	1,523	
30.9%	0	1,498	1,498	
32.1%	0	1,497	1,497	
33.3%	0	1,480	1,480	
34.6%	0	1,478	1,478	
35.8%	0	1,464	1,464	
37.0%	0	1,444	1,444	
38.3%	0	1,438	1,438	
39.5%	0	1,366	1,366	
40.7%	0	1,364	1,364	
42.0%	0	1,355	1,355	
43.2%	0	1,348	1,348	
44.4%	0	1,342	1,342	
45.7%	0	1,277	1,277	
46.9%	0	1,251	1,251	
48.1%	0	1,246	1,246	
49.4%	0	1,185	1,185	
50.6%	0	1,174	1,174	
51.9%	0	1,168	1,168	
53.1%	0	1,162	1,162	
54.3%	0	1,156	1,156	
55.6%	0	1,143	1,143	
56.8%	0	1,136	1,136	
58.0%	0	1,135	1,135	
59.3%	0	1,108	1,108	
60.5%	0	1,087	1,087	
61.7%	0	1,062	1,062	
63.0%	0	1,009	1,009	
64.2%	0	1,001	1,001	
65.4%	0	984	984	
66.7%	0	973	973	
67.9%	0	935	935	
69.1%	0	918	918	
70.4%	0	900	900	
71.6%	0	811	811	
72.8%	0	795	795	
74.1%	0	760	760	
75.3%	0	745	745	
76.5%	0	734	734	
77.8%	0	712	712	
79.0%	0	712	712	
80.2%	0	660	660	
81.5%	0	643	643	
82.7%	0	625	625	
84.0%	0	620	620	
85.2%	0	601	601	
86.4%	0	586	586	
87.7%	0	577	577	
88.9%	0	527	527	
90.1%	0	522	522	
91.4%	0	466	466	
92.6%	0	432	432	
93.8%	0	411	411	
95.1%	0	382	382	
96.3%	0	379	379	
97.5%	0	297	297	
98.8%	0	247	247	
100.0%	0	69	69	

Table OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,807	1,807	
19.8%	0	1,807	1,807	
21.0%	0	1,803	1,803	
22.2%	0	1,801	1,801	
23.5%	0	1,785	1,785	
24.7%	0	1,775	1,775	
25.9%	0	1,769	1,769	
27.2%	0	1,766	1,766	
28.4%	0	1,757	1,757	
29.6%	0	1,734	1,734	
30.9%	0	1,724	1,724	
32.1%	0	1,718	1,718	
33.3%	0	1,682	1,682	
34.6%	0	1,673	1,673	
35.8%	0	1,649	1,649	
37.0%	0	1,627	1,627	
38.3%	0	1,619	1,619	
39.5%	0	1,609	1,609	
40.7%	0	1,608	1,608	
42.0%	0	1,545	1,545	
43.2%	0	1,530	1,530	
44.4%	0	1,513	1,513	
45.7%	0	1,478	1,478	
46.9%	0	1,417	1,417	
48.1%	0	1,413	1,413	
49.4%	0	1,408	1,408	
50.6%	0	1,399	1,399	
51.9%	0	1,376	1,376	
53.1%	0	1,372	1,372	
54.3%	0	1,371	1,371	
55.6%	0	1,344	1,344	
56.8%	0	1,320	1,320	
58.0%	0	1,310	1,310	
59.3%	0	1,295	1,295	
60.5%	0	1,236	1,236	
61.7%	0	1,209	1,209	
63.0%	0	1,201	1,201	
64.2%	0	1,190	1,190	
65.4%	0	1,182	1,182	
66.7%	0	1,155	1,155	
67.9%	0	1,151	1,151	
69.1%	0	1,131	1,131	
70.4%	0	1,118	1,118	
71.6%	0	990	990	
72.8%	0	974	974	
74.1%	0	964	964	
75.3%	0	959	959	
76.5%	0	867	867	
77.8%	0	858	858	
79.0%	0	849	849	
80.2%	0	835	835	
81.5%	0	778	778	
82.7%	0	763	763	
84.0%	0	761	761	
85.2%	0	740	740	
86.4%	0	740	740	
87.7%	0	732	732	
88.9%	0	716	716	
90.1%	0	606	606	
91.4%	0	596	596	
92.6%	0	485	485	
93.8%	0	443	443	
95.1%	0	404	404	
96.3%	0	381	381	
97.5%	0	355	355	
98.8%	0	307	307	
100.0%	0	260	260	

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,810	1,810	
24.7%	0	1,810	1,810	
25.9%	0	1,810	1,810	
27.2%	0	1,810	1,810	
28.4%	0	1,810	1,810	
29.6%	0	1,810	1,810	
30.9%	0	1,809	1,809	
32.1%	0	1,808	1,808	
33.3%	0	1,805	1,805	
34.6%	0	1,804	1,804	
35.8%	0	1,796	1,796	
37.0%	0	1,786	1,786	
38.3%	0	1,778	1,778	
39.5%	0	1,773	1,773	
40.7%	0	1,772	1,772	
42.0%	0	1,769	1,769	
43.2%	0	1,761	1,761	
44.4%	0	1,743	1,743	
45.7%	0	1,733	1,733	
46.9%	0	1,732	1,732	
48.1%	0	1,705	1,705	
49.4%	0	1,683	1,683	
50.6%	0	1,681	1,681	
51.9%	0	1,681	1,681	
53.1%	0	1,678	1,678	
54.3%	0	1,545	1,545	
55.6%	0	1,514	1,514	
56.8%	0	1,506	1,506	
58.0%	0	1,495	1,495	
59.3%	0	1,490	1,490	
60.5%	0	1,455	1,455	
61.7%	0	1,434	1,434	
63.0%	0	1,397	1,397	
64.2%	0	1,349	1,349	
65.4%	0	1,316	1,316	
66.7%	0	1,273	1,273	
67.9%	0	1,260	1,260	
69.1%	0	1,211	1,211	
70.4%	0	1,198	1,198	
71.6%	0	1,195	1,195	
72.8%	0	1,193	1,193	
74.1%	0	1,178	1,178	
75.3%	0	1,160	1,160	
76.5%	0	1,129	1,129	
77.8%	0	1,061	1,061	
79.0%	0	1,042	1,042	
80.2%	0	984	984	
81.5%	0	955	955	
82.7%	0	911	911	
84.0%	0	840	840	
85.2%	0	790	790	
86.4%	0	771	771	
87.7%	0	770	770	
88.9%	0	762	762	
90.1%	0	749	749	
91.4%	0	706	706	
92.6%	0	705	705	
93.8%	0	681	681	
95.1%	0	671	671	
96.3%	0	496	496	
97.5%	0	404	404	
98.8%	0	362	362	
100.0%	0	273	273	

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,810	1,810	
8.6%	0	1,810	1,810	
9.9%	0	1,810	1,810	
11.1%	0	1,810	1,810	
12.3%	0	1,810	1,810	
13.6%	0	1,810	1,810	
14.8%	0	1,810	1,810	
16.0%	0	1,810	1,810	
17.3%	0	1,810	1,810	
18.5%	0	1,810	1,810	
19.8%	0	1,810	1,810	
21.0%	0	1,810	1,810	
22.2%	0	1,810	1,810	
23.5%	0	1,805	1,805	
24.7%	0	1,799	1,799	
25.9%	0	1,799	1,799	
27.2%	0	1,797	1,797	
28.4%	0	1,795	1,795	
29.6%	0	1,794	1,794	
30.9%	0	1,793	1,793	
32.1%	0	1,793	1,793	
33.3%	0	1,790	1,790	
34.6%	0	1,782	1,782	
35.8%	0	1,778	1,778	
37.0%	0	1,778	1,778	
38.3%	0	1,772	1,772	
39.5%	0	1,772	1,772	
40.7%	0	1,769	1,769	
42.0%	0	1,768	1,768	
43.2%	0	1,760	1,760	
44.4%	0	1,759	1,759	
45.7%	0	1,715	1,715	
46.9%	0	1,707	1,707	
48.1%	0	1,696	1,696	
49.4%	0	1,679	1,679	
50.6%	0	1,672	1,672	
51.9%	0	1,663	1,663	
53.1%	0	1,661	1,661	
54.3%	0	1,653	1,653	
55.6%	0	1,599	1,599	
56.8%	0	1,513	1,513	
58.0%	0	1,475	1,475	
59.3%	0	1,474	1,474	
60.5%	0	1,461	1,461	
61.7%	0	1,433	1,433	
63.0%	0	1,415	1,415	
64.2%	0	1,397	1,397	
65.4%	0	1,376	1,376	
66.7%	0	1,316	1,316	
67.9%	0	1,242	1,242	
69.1%	0	1,206	1,206	
70.4%	0	1,186	1,186	
71.6%	0	1,176	1,176	
72.8%	0	1,143	1,143	
74.1%	0	1,136	1,136	
75.3%	0	1,107	1,107	
76.5%	0	1,103	1,103	
77.8%	0	1,067	1,067	
79.0%	0	1,057	1,057	
80.2%	0	1,037	1,037	
81.5%	0	941	941	
82.7%	0	905	905	
84.0%	0	904	904	
85.2%	0	889	889	
86.4%	0	836	836	
87.7%	0	767	767	
88.9%	0	757	757	
90.1%	0	720	720	
91.4%	0	684	684	
92.6%	0	672	672	
93.8%	0	631	631	
95.1%	0	613	613	
96.3%	0	586	586	
97.5%	0	318	318	
98.8%	0	301	301	
100.0%	0	253	253	

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,810	1,810	
3.7%	0	1,810	1,810	
4.9%	0	1,810	1,810	
6.2%	0	1,810	1,810	
7.4%	0	1,791	1,791	
8.6%	0	1,777	1,777	
9.9%	0	1,773	1,773	
11.1%	0	1,772	1,772	
12.3%	0	1,767	1,767	
13.6%	0	1,762	1,762	
14.8%	0	1,762	1,762	
16.0%	0	1,762	1,762	
17.3%	0	1,757	1,757	
18.5%	0	1,756	1,756	
19.8%	0	1,755	1,755	
21.0%	0	1,753	1,753	
22.2%	0	1,751	1,751	
23.5%	0	1,749	1,749	
24.7%	0	1,747	1,747	
25.9%	0	1,744	1,744	
27.2%	0	1,743	1,743	
28.4%	0	1,740	1,740	
29.6%	0	1,738	1,738	
30.9%	0	1,738	1,738	
32.1%	0	1,737	1,737	
33.3%	0	1,737	1,737	
34.6%	0	1,736	1,736	
35.8%	0	1,735	1,735	
37.0%	0	1,735	1,735	
38.3%	0	1,729	1,729	
39.5%	0	1,725	1,725	
40.7%	0	1,723	1,723	
42.0%	0	1,716	1,716	
43.2%	0	1,715	1,715	
44.4%	0	1,704	1,704	
45.7%	0	1,697	1,697	
46.9%	0	1,677	1,677	
48.1%	0	1,643	1,643	
49.4%	0	1,642	1,642	
50.6%	0	1,638	1,638	
51.9%	0	1,623	1,623	
53.1%	0	1,617	1,617	
54.3%	0	1,599	1,599	
55.6%	0	1,581	1,581	
56.8%	0	1,523	1,523	
58.0%	0	1,480	1,480	
59.3%	0	1,437	1,437	
60.5%	0	1,395	1,395	
61.7%	0	1,385	1,385	
63.0%	0	1,368	1,368	
64.2%	0	1,336	1,336	
65.4%	0	1,332	1,332	
66.7%	0	1,284	1,284	
67.9%	0	1,153	1,153	
69.1%	0	1,153	1,153	
70.4%	0	1,149	1,149	
71.6%	0	1,148	1,148	
72.8%	0	1,126	1,126	
74.1%	0	1,114	1,114	
75.3%	0	1,095	1,095	
76.5%	0	1,074	1,074	
77.8%	0	1,041	1,041	
79.0%	0	1,014	1,014	
80.2%	0	974	974	
81.5%	0	958	958	
82.7%	0	867	867	
84.0%	0	856	856	
85.2%	0	823	823	
86.4%	0	754	754	
87.7%	0	730	730	
88.9%	0	704	704	
90.1%	0	644	644	
91.4%	0	633	633	
92.6%	0	605	605	
93.8%	0	510	510	
95.1%	0	472	472	
96.3%	0	462	462	
97.5%	0	289	289	
98.8%	0	244	244	
100.0%	0	135	135	

Table OP-09-b
Sites Reservoir, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,810	1,810	
2.5%	0	1,783	1,783	
3.7%	0	1,768	1,768	
4.9%	0	1,758	1,758	
6.2%	0	1,755	1,755	
7.4%	0	1,747	1,747	
8.6%	0	1,725	1,725	
9.9%	0	1,721	1,721	
11.1%	0	1,699	1,699	
12.3%	0	1,676	1,676	
13.6%	0	1,674	1,674	
14.8%	0	1,659	1,659	
16.0%	0	1,647	1,647	
17.3%	0	1,637	1,637	
18.5%	0	1,624	1,624	
19.8%	0	1,620	1,620	
21.0%	0	1,613	1,613	
22.2%	0	1,605	1,605	
23.5%	0	1,602	1,602	
24.7%	0	1,602	1,602	
25.9%	0	1,602	1,602	
27.2%	0	1,600	1,600	
28.4%	0	1,597	1,597	
29.6%	0	1,589	1,589	
30.9%	0	1,581	1,581	
32.1%	0	1,578	1,578	
33.3%	0	1,570	1,570	
34.6%	0	1,569	1,569	
35.8%	0	1,562	1,562	
37.0%	0	1,561	1,561	
38.3%	0	1,560	1,560	
39.5%	0	1,558	1,558	
40.7%	0	1,554	1,554	
42.0%	0	1,554	1,554	
43.2%	0	1,549	1,549	
44.4%	0	1,544	1,544	
45.7%	0	1,527	1,527	
46.9%	0	1,526	1,526	
48.1%	0	1,511	1,511	
49.4%	0	1,493	1,493	
50.6%	0	1,475	1,475	
51.9%	0	1,456	1,456	
53.1%	0	1,430	1,430	
54.3%	0	1,428	1,428	
55.6%	0	1,414	1,414	
56.8%	0	1,410	1,410	
58.0%	0	1,403	1,403	
59.3%	0	1,296	1,296	
60.5%	0	1,296	1,296	
61.7%	0	1,292	1,292	
63.0%	0	1,250	1,250	
64.2%	0	1,212	1,212	
65.4%	0	1,206	1,206	
66.7%	0	1,200	1,200	
67.9%	0	1,192	1,192	
69.1%	0	1,114	1,114	
70.4%	0	1,104	1,104	
71.6%	0	1,048	1,048	
72.8%	0	994	994	
74.1%	0	969	969	
75.3%	0	959	959	
76.5%	0	951	951	
77.8%	0	920	920	
79.0%	0	860	860	
80.2%	0	852	852	
81.5%	0	845	845	
82.7%	0	824	824	
84.0%	0	703	703	
85.2%	0	699	699	
86.4%	0	698	698	
87.7%	0	646	646	
88.9%	0	626	626	
90.1%	0	611	611	
91.4%	0	605	605	
92.6%	0	570	570	
93.8%	0	427	427	
95.1%	0	386	386	
96.3%	0	319	319	
97.5%	0	239	239	
98.8%	0	186	186	
100.0%	0	132	132	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,762	1,762	
2.5%	0	1,751	1,751	
3.7%	0	1,748	1,748	
4.9%	0	1,745	1,745	
6.2%	0	1,710	1,710	
7.4%	0	1,698	1,698	
8.6%	0	1,674	1,674	
9.9%	0	1,658	1,658	
11.1%	0	1,637	1,637	
12.3%	0	1,606	1,606	
13.6%	0	1,606	1,606	
14.8%	0	1,584	1,584	
16.0%	0	1,583	1,583	
17.3%	0	1,565	1,565	
18.5%	0	1,555	1,555	
19.8%	0	1,526	1,526	
21.0%	0	1,526	1,526	
22.2%	0	1,516	1,516	
23.5%	0	1,514	1,514	
24.7%	0	1,508	1,508	
25.9%	0	1,500	1,500	
27.2%	0	1,488	1,488	
28.4%	0	1,436	1,436	
29.6%	0	1,435	1,435	
30.9%	0	1,424	1,424	
32.1%	0	1,423	1,423	
33.3%	0	1,407	1,407	
34.6%	0	1,401	1,401	
35.8%	0	1,388	1,388	
37.0%	0	1,372	1,372	
38.3%	0	1,364	1,364	
39.5%	0	1,362	1,362	
40.7%	0	1,359	1,359	
42.0%	0	1,354	1,354	
43.2%	0	1,353	1,353	
44.4%	0	1,351	1,351	
45.7%	0	1,347	1,347	
46.9%	0	1,342	1,342	
48.1%	0	1,332	1,332	
49.4%	0	1,325	1,325	
50.6%	0	1,314	1,314	
51.9%	0	1,271	1,271	
53.1%	0	1,270	1,270	
54.3%	0	1,267	1,267	
55.6%	0	1,263	1,263	
56.8%	0	1,245	1,245	
58.0%	0	1,239	1,239	
59.3%	0	1,235	1,235	
60.5%	0	1,230	1,230	
61.7%	0	1,209	1,209	
63.0%	0	1,124	1,124	
64.2%	0	1,110	1,110	
65.4%	0	1,065	1,065	
66.7%	0	1,028	1,028	
67.9%	0	1,023	1,023	
69.1%	0	930	930	
70.4%	0	916	916	
71.6%	0	871	871	
72.8%	0	849	849	
74.1%	0	845	845	
75.3%	0	773	773	
76.5%	0	771	771	
77.8%	0	760	760	
79.0%	0	758	758	
80.2%	0	753	753	
81.5%	0	728	728	
82.7%	0	704	704	
84.0%	0	701	701	
85.2%	0	662	662	
86.4%	0	660	660	
87.7%	0	658	658	
88.9%	0	613	613	
90.1%	0	577	577	
91.4%	0	556	556	
92.6%	0	524	524	
93.8%	0	339	339	
95.1%	0	310	310	
96.3%	0	211	211	
97.5%	0	186	186	
98.8%	0	145	145	
100.0%	0	141	141	

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,810	1,810	
1.2%	0	1,762	1,762	
2.5%	0	1,696	1,696	
3.7%	0	1,689	1,689	
4.9%	0	1,677	1,677	
6.2%	0	1,653	1,653	
7.4%	0	1,634	1,634	
8.6%	0	1,609	1,609	
9.9%	0	1,585	1,585	
11.1%	0	1,575	1,575	
12.3%	0	1,561	1,561	
13.6%	0	1,559	1,559	
14.8%	0	1,552	1,552	
16.0%	0	1,542	1,542	
17.3%	0	1,541	1,541	
18.5%	0	1,528	1,528	
19.8%	0	1,526	1,526	
21.0%	0	1,485	1,485	
22.2%	0	1,458	1,458	
23.5%	0	1,450	1,450	
24.7%	0	1,446	1,446	
25.9%	0	1,439	1,439	
27.2%	0	1,439	1,439	
28.4%	0	1,378	1,378	
29.6%	0	1,375	1,375	
30.9%	0	1,362	1,362	
32.1%	0	1,358	1,358	
33.3%	0	1,351	1,351	
34.6%	0	1,340	1,340	
35.8%	0	1,314	1,314	
37.0%	0	1,308	1,308	
38.3%	0	1,303	1,303	
39.5%	0	1,291	1,291	
40.7%	0	1,273	1,273	
42.0%	0	1,262	1,262	
43.2%	0	1,259	1,259	
44.4%	0	1,256	1,256	
45.7%	0	1,243	1,243	
46.9%	0	1,228	1,228	
48.1%	0	1,211	1,211	
49.4%	0	1,193	1,193	
50.6%	0	1,188	1,188	
51.9%	0	1,181	1,181	
53.1%	0	1,175	1,175	
54.3%	0	1,163	1,163	
55.6%	0	1,134	1,134	
56.8%	0	1,124	1,124	
58.0%	0	1,102	1,102	
59.3%	0	1,097	1,097	
60.5%	0	1,056	1,056	
61.7%	0	1,043	1,043	
63.0%	0	1,041	1,041	
64.2%	0	1,040	1,040	
65.4%	0	1,024	1,024	
66.7%	0	978	978	
67.9%	0	929	929	
69.1%	0	847	847	
70.4%	0	822	822	
71.6%	0	807	807	
72.8%	0	760	760	
74.1%	0	735	735	
75.3%	0	717	717	
76.5%	0	691	691	
77.8%	0	643	643	
79.0%	0	625	625	
80.2%	0	618	618	
81.5%	0	611	611	
82.7%	0	606	606	
84.0%	0	599	599	
85.2%	0	565	565	
86.4%	0	559	559	
87.7%	0	543	543	
88.9%	0	528	528	
90.1%	0	496	496	
91.4%	0	477	477	
92.6%	0	444	444	
93.8%	0	263	263	
95.1%	0	217	217	
96.3%	0	140	140	
97.5%	0	131	131	
98.8%	0	91	91	
100.0%	0	71	71	

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	0	1,689	1,689	
1.2%	0	1,664	1,664	
2.5%	0	1,642	1,642	
3.7%	0	1,638	1,638	
4.9%	0	1,618	1,618	
6.2%	0	1,596	1,596	
7.4%	0	1,553	1,553	
8.6%	0	1,526	1,526	
9.9%	0	1,515	1,515	
11.1%	0	1,498	1,498	
12.3%	0	1,495	1,495	
13.6%	0	1,490	1,490	
14.8%	0	1,479	1,479	
16.0%	0	1,474	1,474	
17.3%	0	1,457	1,457	
18.5%	0	1,456	1,456	
19.8%	0	1,432	1,432	
21.0%	0	1,420	1,420	
22.2%	0	1,397	1,397	
23.5%	0	1,397	1,397	
24.7%	0	1,340	1,340	
25.9%	0	1,320	1,320	
27.2%	0	1,318	1,318	
28.4%	0	1,311	1,311	
29.6%	0	1,282	1,282	
30.9%	0	1,252	1,252	
32.1%	0	1,245	1,245	
33.3%	0	1,235	1,235	
34.6%	0	1,227	1,227	
35.8%	0	1,226	1,226	
37.0%	0	1,208	1,208	
38.3%	0	1,204	1,204	
39.5%	0	1,195	1,195	
40.7%	0	1,186	1,186	
42.0%	0	1,180	1,180	
43.2%	0	1,154	1,154	
44.4%	0	1,139	1,139	
45.7%	0	1,137	1,137	
46.9%	0	1,135	1,135	
48.1%	0	1,122	1,122	
49.4%	0	1,110	1,110	
50.6%	0	1,086	1,086	
51.9%	0	1,084	1,084	
53.1%	0	1,081	1,081	
54.3%	0	1,056	1,056	
55.6%	0	1,042	1,042	
56.8%	0	1,030	1,030	
58.0%	0	1,027	1,027	
59.3%	0	1,020	1,020	
60.5%	0	1,003	1,003	
61.7%	0	950	950	
63.0%	0	943	943	
64.2%	0	938	938	
65.4%	0	914	914	
66.7%	0	908	908	
67.9%	0	868	868	
69.1%	0	817	817	
70.4%	0	795	795	
71.6%	0	759	759	
72.8%	0	688	688	
74.1%	0	637	637	
75.3%	0	626	626	
76.5%	0	599	599	
77.8%	0	594	594	
79.0%	0	566	566	
80.2%	0	551	551	
81.5%	0	545	545	
82.7%	0	542	542	
84.0%	0	515	515	
85.2%	0	509	509	
86.4%	0	496	496	
87.7%	0	485	485	
88.9%	0	448	448	
90.1%	0	446	446	
91.4%	0	424	424	
92.6%	0	346	346	
93.8%	0	236	236	
95.1%	0	169	169	
96.3%	0	138	138	
97.5%	0	102	102	
98.8%	0	69	69	
100.0%	0	63	63	

Figure OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

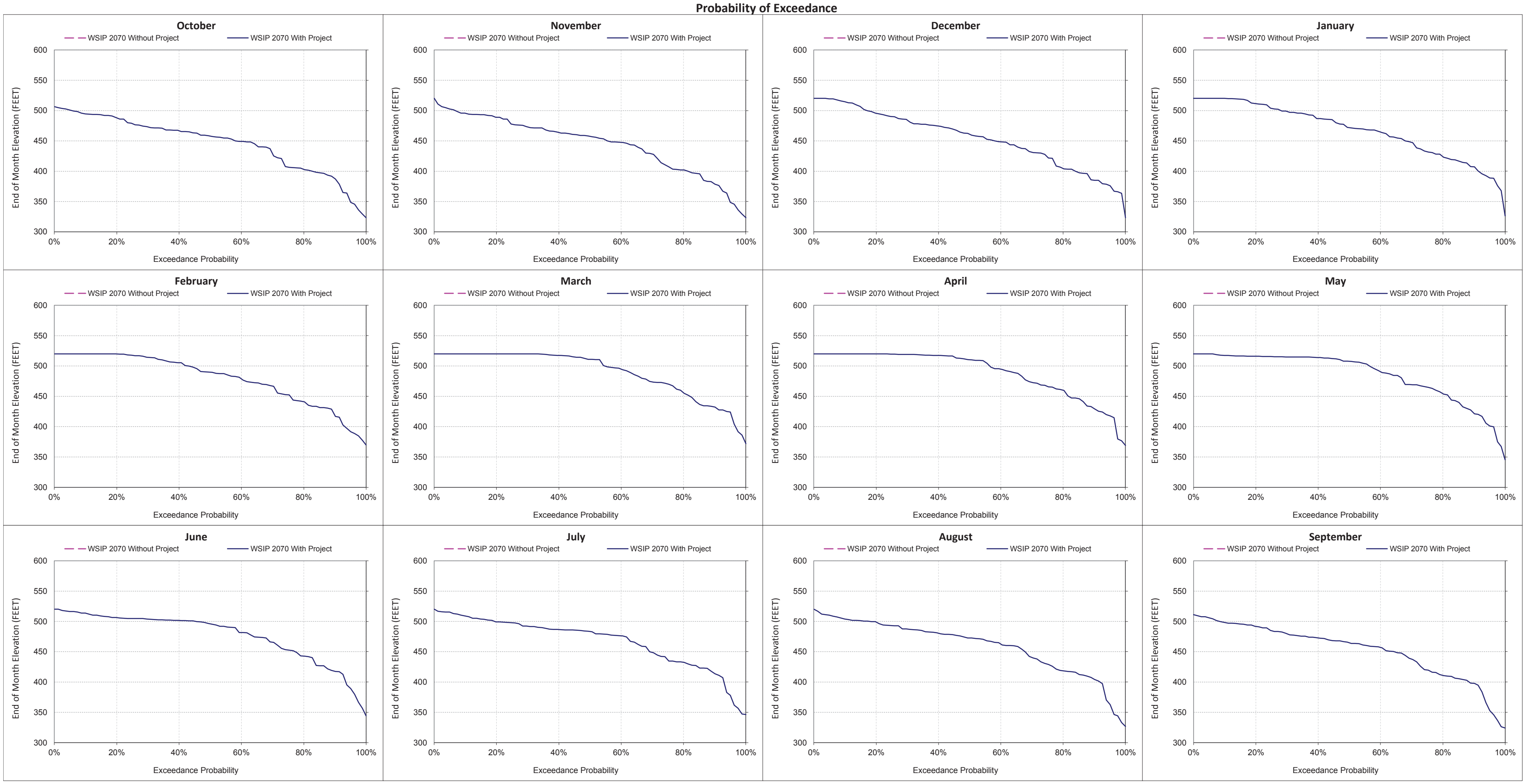


Table OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	506	506	
1.2%	0	505	505	
2.5%	0	503	503	
3.7%	0	503	503	
4.9%	0	501	501	
6.2%	0	499	499	
7.4%	0	498	498	
8.6%	0	496	496	
9.9%	0	495	495	
11.1%	0	494	494	
12.3%	0	494	494	
13.6%	0	494	494	
14.8%	0	493	493	
16.0%	0	492	492	
17.3%	0	492	492	
18.5%	0	491	491	
19.8%	0	489	489	
21.0%	0	486	486	
22.2%	0	486	486	
23.5%	0	480	480	
24.7%	0	479	479	
25.9%	0	476	476	
27.2%	0	476	476	
28.4%	0	474	474	
29.6%	0	474	474	
30.9%	0	472	472	
32.1%	0	472	472	
33.3%	0	472	472	
34.6%	0	471	471	
35.8%	0	468	468	
37.0%	0	468	468	
38.3%	0	468	468	
39.5%	0	468	468	
40.7%	0	466	466	
42.0%	0	465	465	
43.2%	0	465	465	
44.4%	0	463	463	
45.7%	0	463	463	
46.9%	0	460	460	
48.1%	0	459	459	
49.4%	0	459	459	
50.6%	0	457	457	
51.9%	0	456	456	
53.1%	0	456	456	
54.3%	0	455	455	
55.6%	0	455	455	
56.8%	0	453	453	
58.0%	0	450	450	
59.3%	0	449	449	
60.5%	0	449	449	
61.7%	0	448	448	
63.0%	0	448	448	
64.2%	0	445	445	
65.4%	0	440	440	
66.7%	0	440	440	
67.9%	0	440	440	
69.1%	0	437	437	
70.4%	0	425	425	
71.6%	0	422	422	
72.8%	0	421	421	
74.1%	0	408	408	
75.3%	0	406	406	
76.5%	0	406	406	
77.8%	0	406	406	
79.0%	0	405	405	
80.2%	0	403	403	
81.5%	0	402	402	
82.7%	0	400	400	
84.0%	0	398	398	
85.2%	0	397	397	
86.4%	0	397	397	
87.7%	0	394	394	
88.9%	0	392	392	
90.1%	0	387	387	
91.4%	0	379	379	
92.6%	0	365	365	
93.8%	0	364	364	
95.1%	0	349	349	
96.3%	0	346	346	
97.5%	0	336	336	
98.8%	0	329	329	
100.0%	0	323	323	

November				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	511	511	
2.5%	0	507	507	
3.7%	0	505	505	
4.9%	0	503	503	
6.2%	0	501	501	
7.4%	0	498	498	
8.6%	0	496	496	
9.9%	0	496	496	
11.1%	0	494	494	
12.3%	0	494	494	
13.6%	0	494	494	
14.8%	0	493	493	
16.0%	0	493	493	
17.3%	0	492	492	
18.5%	0	492	492	
19.8%	0	489	489	
21.0%	0	489	489	
22.2%	0	486	486	
23.5%	0	486	486	
24.7%	0	478	478	
25.9%	0	477	477	
27.2%	0	476	476	
28.4%	0	476	476	
29.6%	0	474	474	
30.9%	0	472	472	
32.1%	0	472	472	
33.3%	0	472	472	
34.6%	0	471	471	
35.8%	0	468	468	
37.0%	0	466	466	
38.3%	0	466	466	
39.5%	0	465	465	
40.7%	0	463	463	
42.0%	0	463	463	
43.2%	0	462	462	
44.4%	0	461	461	
45.7%	0	460	460	
46.9%	0	459	459	
48.1%	0	459	459	
49.4%	0	458	458	
50.6%	0	457	457	
51.9%	0	456	456	
53.1%	0	454	454	
54.3%	0	453	453	
55.6%	0	450	450	
56.8%	0	448	448	
58.0%	0	448	448	
59.3%	0	448	448	
60.5%	0	447	447	
61.7%	0	446	446	
63.0%	0	444	444	
64.2%	0	443	443	
65.4%	0	439	439	
66.7%	0	437	437	
67.9%	0	430	430	
69.1%	0	429	429	
70.4%	0	428	428	
71.6%	0	421	421	
72.8%	0	414	414	
74.1%	0	411	411	
75.3%	0	407	407	
76.5%	0	404	404	
77.8%	0	403	403	
79.0%	0	402	402	
80.2%	0	402	402	
81.5%	0	400	400	
82.7%	0	397	397	
84.0%	0	397	397	
85.2%	0	396	396	
86.4%	0	385	385	
87.7%	0	383	383	
88.9%	0	383	383	
90.1%	0	379	379	
91.4%	0	376	376	
92.6%	0	367	367	
93.8%	0	364	364	
95.1%	0	349	349	
96.3%	0	345	345	
97.5%	0	336	336	
98.8%	0	329	329	
100.0%	0	323	323	

December				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	519	519	
7.4%	0	518	518	
8.6%	0	516	516	
9.9%	0	515	515	
11.1%	0	513	513	
12.3%	0	512	512	
13.6%	0	509	509	
14.8%	0	507	507	
16.0%	0	502	502	
17.3%	0	500	500	
18.5%	0	499	499	
19.8%	0	496	496	
21.0%	0	494	494	
22.2%	0	493	493	
23.5%	0	492	492	
24.7%	0	490	490	
25.9%	0	490	490	
27.2%	0	487	487	
28.4%	0	486	486	
29.6%	0	486	486	
30.9%	0	481	481	
32.1%	0	478	478	
33.3%	0	478	478	
34.6%	0	477	477	
35.8%	0	477	477	
37.0%	0	476	476	
38.3%	0	476	476	
39.5%	0	475	475	
40.7%	0	474	474	
42.0%	0	472	472	
43.2%	0	472	472	
44.4%	0	470	470	
45.7%	0	468	468	
46.9%	0	465	465	
48.1%	0	463	463	
49.4%	0	463	463	
50.6%	0	459	459	
51.9%	0	458	458	
53.1%	0	457	457	
54.3%	0	457	457	
55.6%	0	453	453	
56.8%	0	452	452	
58.0%	0	450	450	
59.3%	0	449	449	
60.5%	0	448	448	
61.7%	0	448	448	
63.0%	0	444	444	
64.2%	0	443	443	
65.4%	0	440	440	
66.7%	0	437	437	
67.9%	0	437	437	
69.1%	0	432	432	
70.4%	0	431	431	
71.6%	0	430	430	
72.8%	0	430	430	
74.1%	0	428	428	
75.3%	0	422	422	
76.5%	0	421	421	
77.8%	0	409	409	
79.0%	0	407	407	
80.2%	0	404	404	
81.5%	0	403	403	
82.7%	0	403	403	
84.0%	0	400	400	
85.2%	0	398	398	
86.4%	0	397	397	
87.7%	0	396	396	
88.9%	0	386	386	
90.1%	0	385	385	
91.4%	0	385	385	
92.6%	0	379	379	
93.8%	0	379	379	
95.1%	0	376	376	
96.3%	0	367	367	
97.5%	0	366	366	
98.8%	0	363	363	
100.0%	0	323	323	

January				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	519	519	
16.0%	0	519	519	
17.3%	0	517	517	
18.5%	0	513	513	
19.8%	0	512	512	
21.0%	0	511	511	
22.2%	0	510	510	
23.5%	0	509	509	
24.7%	0	504	504	
25.9%	0	503	503	
27.2%	0	502	502	
28.4%	0	499	499	
29.6%	0	499	499	
30.9%	0	497	497	
32.1%	0	497	497	
33.3%	0	496	496	
34.6%	0	496	496	
35.8%	0	495	495	
37.0%	0	493	493	
38.3%	0	493	493	
39.5%	0	487	487	
40.7%	0	487	487	
42.0%	0	486	486	
43.2%	0	486	486	
44.4%	0	485	485	
45.7%	0	480	480	
46.9%	0	478	478	
48.1%	0	477	477	
49.4%	0	472	472	
50.6%	0	471	471	
51.9%	0	471	471	
53.1%	0	470	470	
54.3%	0	470	470	
55.6%	0	469	469	
56.8%	0	468	468	
58.0%	0	468	468	
59.3%	0	466	466	
60.5%	0	464	464	
61.7%	0	462	462	
63.0%	0	457	457	
64.2%	0	456	456	
65.4%	0	455	455	
66.7%	0	454	454	
67.9%	0	450	450	
69.1%	0	449	449	
70.4%	0	447	447	
71.6%	0	439	439	
72.8%	0	437	437	
74.1%	0	433	433	
75.3%	0	432	432	
76.5%	0	431	431	
77.8%	0	428	428	
79.0%	0	428	428	
80.2%	0	423	423	
81.5%	0	421	421	
82.7%	0	419	419	
84.0%	0	419	419	
85.2%	0	416	416	
86.4%	0	415	415	
87.7%	0	414	414	
88.9%	0	408	408	
90.1%	0	407	407	
91.4%	0	400	400	
92.6%	0	396	396	
93.8%	0	393	393	
95.1%	0	389	389	
96.3%	0	388	388	
97.5%	0	376	376	
98.8%	0	368	368	
100.0%	0	326	326	

Table OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	518	518	
24.7%	0	518	518	
25.9%	0	517	517	
27.2%	0	517	517	
28.4%	0	516	516	
29.6%	0	515	515	
30.9%	0	514	514	
32.1%	0	513	513	
33.3%	0	511	511	
34.6%	0	510	510	
35.8%	0	508	508	
37.0%	0	507	507	
38.3%	0	506	506	
39.5%	0	506	506	
40.7%	0	505	505	
42.0%	0	501	501	
43.2%	0	500	500	
44.4%	0	498	498	
45.7%	0	496	496	
46.9%	0	491	491	
48.1%	0	491	491	
49.4%	0	490	490	
50.6%	0	490	490	
51.9%	0	488	488	
53.1%	0	487	487	
54.3%	0	487	487	
55.6%	0	485	485	
56.8%	0	483	483	
58.0%	0	483	483	
59.3%	0	481	481	
60.5%	0	477	477	
61.7%	0	474	474	
63.0%	0	474	474	
64.2%	0	473	473	
65.4%	0	472	472	
66.7%	0	470	470	
67.9%	0	469	469	
69.1%	0	468	468	
70.4%	0	467	467	
71.6%	0	455	455	
72.8%	0	454	454	
74.1%	0	453	453	
75.3%	0	452	452	
76.5%	0	444	444	
77.8%	0	443	443	
79.0%	0	442	442	
80.2%	0	441	441	
81.5%	0	435	435	
82.7%	0	434	434	
84.0%	0	433	433	
85.2%	0	431	431	
86.4%	0	431	431	
87.7%	0	430	430	
88.9%	0	429	429	
90.1%	0	417	417	
91.4%	0	416	416	
92.6%	0	403	403	
93.8%	0	397	397	
95.1%	0	392	392	
96.3%	0	388	388	
97.5%	0	385	385	
98.8%	0	378	378	
100.0%	0	370	370	

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	520	520	
25.9%	0	520	520	
27.2%	0	520	520	
28.4%	0	520	520	
29.6%	0	520	520	
30.9%	0	520	520	
32.1%	0	520	520	
33.3%	0	520	520	
34.6%	0	520	520	
35.8%	0	519	519	
37.0%	0	518	518	
38.3%	0	518	518	
39.5%	0	517	517	
40.7%	0	517	517	
42.0%	0	517	517	
43.2%	0	517	517	
44.4%	0	515	515	
45.7%	0	515	515	
46.9%	0	515	515	
48.1%	0	513	513	
49.4%	0	511	511	
50.6%	0	511	511	
51.9%	0	511	511	
53.1%	0	511	511	
54.3%	0	501	501	
55.6%	0	498	498	
56.8%	0	498	498	
58.0%	0	497	497	
59.3%	0	497	497	
60.5%	0	494	494	
61.7%	0	492	492	
63.0%	0	489	489	
64.2%	0	486	486	
65.4%	0	483	483	
66.7%	0	480	480	
67.9%	0	479	479	
69.1%	0	474	474	
70.4%	0	473	473	
71.6%	0	473	473	
72.8%	0	473	473	
74.1%	0	472	472	
75.3%	0	470	470	
76.5%	0	467	467	
77.8%	0	462	462	
79.0%	0	460	460	
80.2%	0	455	455	
81.5%	0	452	452	
82.7%	0	448	448	
84.0%	0	441	441	
85.2%	0	436	436	
86.4%	0	434	434	
87.7%	0	434	434	
88.9%	0	434	434	
90.1%	0	432	432	
91.4%	0	428	428	
92.6%	0	428	428	
93.8%	0	425	425	
95.1%	0	424	424	
96.3%	0	404	404	
97.5%	0	392	392	
98.8%	0	386	386	
100.0%	0	372	372	

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	520	520	
8.6%	0	520	520	
9.9%	0	520	520	
11.1%	0	520	520	
12.3%	0	520	520	
13.6%	0	520	520	
14.8%	0	520	520	
16.0%	0	520	520	
17.3%	0	520	520	
18.5%	0	520	520	
19.8%	0	520	520	
21.0%	0	520	520	
22.2%	0	520	520	
23.5%	0	520	520	
24.7%	0	519	519	
25.9%	0	519	519	
27.2%	0	519	519	
28.4%	0	519	519	
29.6%	0	519	519	
30.9%	0	519	519	
32.1%	0	519	519	
33.3%	0	519	519	
34.6%	0	518	518	
35.8%	0	518	518	
37.0%	0	518	518	
38.3%	0	517	517	
39.5%	0	517	517	
40.7%	0	517	517	
42.0%	0	517	517	
43.2%	0	517	517	
44.4%	0	516	516	
45.7%	0	513	513	
46.9%	0	513	513	
48.1%	0	512	512	
49.4%	0	511	511	
50.6%	0	510	510	
51.9%	0	509	509	
53.1%	0	509	509	
54.3%	0	509	509	
55.6%	0	505	505	
56.8%	0	498	498	
58.0%	0	495	495	
59.3%	0	495	495	
60.5%	0	494	494	
61.7%	0	492	492	
63.0%	0	491	491	
64.2%	0	489	489	
65.4%	0	488	488	
66.7%	0	483	483	
67.9%	0	477	477	
69.1%	0	474	474	
70.4%	0	472	472	
71.6%	0	471	471	
72.8%	0	469	469	
74.1%	0	468	468	
75.3%	0	466	466	
76.5%	0	465	465	
77.8%	0	462	462	
79.0%	0	461	461	
80.2%	0	460	460	
81.5%	0	451	451	
82.7%	0	447	447	
84.0%	0	447	447	
85.2%	0	446	446	
86.4%	0	441	441	
87.7%	0	434	434	
88.9%	0	433	433	
90.1%	0	429	429	
91.4%	0	425	425	
92.6%	0	424	424	
93.8%	0	420	420	
95.1%	0	418	418	
96.3%	0	415	415	
97.5%	0	380	380	
98.8%	0	377	377	
100.0%	0	369	369	

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	520	520	
3.7%	0	520	520	
4.9%	0	520	520	
6.2%	0	520	520	
7.4%	0	519	519	
8.6%	0	518	518	
9.9%	0	517	517	
11.1%	0	517	517	
12.3%	0	517	517	
13.6%	0	517	517	
14.8%	0	517	517	
16.0%	0	517	517	
17.3%	0	516	516	
18.5%	0	516	516	
19.8%	0	516	516	
21.0%	0	516	516	
22.2%	0	516	516	
23.5%	0	516	516	
24.7%	0	516	516	
25.9%	0	515	515	
27.2%	0	515	515	
28.4%	0	515	515	
29.6%	0	515	515	
30.9%	0	515	515	
32.1%	0	515	515	
33.3%	0	515	515	
34.6%	0	515	515	
35.8%	0	515	515	
37.0%	0	515	515	
38.3%	0	514	514	
39.5%	0	514	514	
40.7%	0	514	514	
42.0%	0	513	513	
43.2%	0	513	513	
44.4%	0	512	512	
45.7%	0	512	512	
46.9%	0	511	511	
48.1%	0	508	508	
49.4%	0	508	508	
50.6%	0	508	508	
51.9%	0	507	507	
53.1%	0	506	506	
54.3%	0	505	505	
55.6%	0	503	503	
56.8%	0	499	499	
58.0%	0	496	496	
59.3%	0	492	492	
60.5%	0	489	489	
61.7%	0	488	488	
63.0%	0	487	487	
64.2%	0	485	485	
65.4%	0	484	484	
66.7%	0	481	481	
67.9%	0	470	470	
69.1%	0	470	470	
70.4%	0	469	469	
71.6%	0	469	469	
72.8%	0	467	467	
74.1%	0	466	466	
75.3%	0	465	465	
76.5%	0	463	463	
77.8%	0	460	460	
79.0%	0	458	458	
80.2%	0	454	454	
81.5%	0	452	452	
82.7%	0	444	444	
84.0%	0	443	443	
85.2%	0	440	440	
86.4%	0	433	433	
87.7%	0	430	430	
88.9%	0	428	428	
90.1%	0	421	421	
91.4%	0	420	420	
92.6%	0	417	417	
93.8%	0	406	406	
95.1%	0	401	401	
96.3%	0	400	400	
97.5%	0	375	375	
98.8%	0	367	367	
100.0%	0	345	345	

Table OP-10-b
Sites Reservoir, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	520	520	
2.5%	0	518	518	
3.7%	0	517	517	
4.9%	0	516	516	
6.2%	0	516	516	
7.4%	0	516	516	
8.6%	0	514	514	
9.9%	0	514	514	
11.1%	0	512	512	
12.3%	0	510	510	
13.6%	0	510	510	
14.8%	0	509	509	
16.0%	0	508	508	
17.3%	0	508	508	
18.5%	0	507	507	
19.8%	0	506	506	
21.0%	0	506	506	
22.2%	0	505	505	
23.5%	0	505	505	
24.7%	0	505	505	
25.9%	0	505	505	
27.2%	0	505	505	
28.4%	0	505	505	
29.6%	0	504	504	
30.9%	0	503	503	
32.1%	0	503	503	
33.3%	0	503	503	
34.6%	0	503	503	
35.8%	0	502	502	
37.0%	0	502	502	
38.3%	0	502	502	
39.5%	0	502	502	
40.7%	0	502	502	
42.0%	0	501	501	
43.2%	0	501	501	
44.4%	0	501	501	
45.7%	0	499	499	
46.9%	0	499	499	
48.1%	0	498	498	
49.4%	0	497	497	
50.6%	0	495	495	
51.9%	0	494	494	
53.1%	0	492	492	
54.3%	0	492	492	
55.6%	0	491	491	
56.8%	0	490	490	
58.0%	0	490	490	
59.3%	0	481	481	
60.5%	0	481	481	
61.7%	0	481	481	
63.0%	0	478	478	
64.2%	0	475	475	
65.4%	0	474	474	
66.7%	0	473	473	
67.9%	0	473	473	
69.1%	0	466	466	
70.4%	0	465	465	
71.6%	0	461	461	
72.8%	0	456	456	
74.1%	0	453	453	
75.3%	0	452	452	
76.5%	0	452	452	
77.8%	0	449	449	
79.0%	0	443	443	
80.2%	0	443	443	
81.5%	0	442	442	
82.7%	0	440	440	
84.0%	0	427	427	
85.2%	0	427	427	
86.4%	0	427	427	
87.7%	0	422	422	
88.9%	0	419	419	
90.1%	0	418	418	
91.4%	0	417	417	
92.6%	0	413	413	
93.8%	0	395	395	
95.1%	0	389	389	
96.3%	0	380	380	
97.5%	0	366	366	
98.8%	0	357	357	
100.0%	0	344	344	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	517	517	
2.5%	0	516	516	
3.7%	0	516	516	
4.9%	0	515	515	
6.2%	0	513	513	
7.4%	0	512	512	
8.6%	0	510	510	
9.9%	0	509	509	
11.1%	0	508	508	
12.3%	0	505	505	
13.6%	0	505	505	
14.8%	0	504	504	
16.0%	0	504	504	
17.3%	0	502	502	
18.5%	0	502	502	
19.8%	0	499	499	
21.0%	0	499	499	
22.2%	0	499	499	
23.5%	0	498	498	
24.7%	0	498	498	
25.9%	0	497	497	
27.2%	0	496	496	
28.4%	0	492	492	
29.6%	0	492	492	
30.9%	0	491	491	
32.1%	0	491	491	
33.3%	0	490	490	
34.6%	0	490	490	
35.8%	0	489	489	
37.0%	0	487	487	
38.3%	0	487	487	
39.5%	0	487	487	
40.7%	0	486	486	
42.0%	0	486	486	
43.2%	0	486	486	
44.4%	0	486	486	
45.7%	0	485	485	
46.9%	0	485	485	
48.1%	0	484	484	
49.4%	0	484	484	
50.6%	0	483	483	
51.9%	0	479	479	
53.1%	0	479	479	
54.3%	0	479	479	
55.6%	0	479	479	
56.8%	0	477	477	
58.0%	0	477	477	
59.3%	0	476	476	
60.5%	0	476	476	
61.7%	0	474	474	
63.0%	0	467	467	
64.2%	0	466	466	
65.4%	0	462	462	
66.7%	0	459	459	
67.9%	0	458	458	
69.1%	0	450	450	
70.4%	0	448	448	
71.6%	0	444	444	
72.8%	0	442	442	
74.1%	0	442	442	
75.3%	0	435	435	
76.5%	0	435	435	
77.8%	0	433	433	
79.0%	0	433	433	
80.2%	0	433	433	
81.5%	0	430	430	
82.7%	0	428	428	
84.0%	0	427	427	
85.2%	0	423	423	
86.4%	0	423	423	
87.7%	0	423	423	
88.9%	0	418	418	
90.1%	0	414	414	
91.4%	0	411	411	
92.6%	0	407	407	
93.8%	0	383	383	
95.1%	0	378	378	
96.3%	0	362	362	
97.5%	0	357	357	
98.8%	0	347	347	
100.0%	0	346	346	

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	520	520	
1.2%	0	517	517	
2.5%	0	512	512	
3.7%	0	511	511	
4.9%	0	510	510	
6.2%	0	509	509	
7.4%	0	507	507	
8.6%	0	505	505	
9.9%	0	504	504	
11.1%	0	503	503	
12.3%	0	502	502	
13.6%	0	502	502	
14.8%	0	501	501	
16.0%	0	501	501	
17.3%	0	501	501	
18.5%	0	500	500	
19.8%	0	499	499	
21.0%	0	496	496	
22.2%	0	494	494	
23.5%	0	494	494	
24.7%	0	493	493	
25.9%	0	493	493	
27.2%	0	493	493	
28.4%	0	488	488	
29.6%	0	488	488	
30.9%	0	487	487	
32.1%	0	486	486	
33.3%	0	486	486	
34.6%	0	485	485	
35.8%	0	483	483	
37.0%	0	482	482	
38.3%	0	482	482	
39.5%	0	481	481	
40.7%	0	480	480	
42.0%	0	479	479	
43.2%	0	478	478	
44.4%	0	478	478	
45.7%	0	477	477	
46.9%	0	476	476	
48.1%	0	474	474	
49.4%	0	473	473	
50.6%	0	473	473	
51.9%	0	472	472	
53.1%	0	471	471	
54.3%	0	470	470	
55.6%	0	468	468	
56.8%	0	467	467	
58.0%	0	465	465	
59.3%	0	465	465	
60.5%	0	461	461	
61.7%	0	460	460	
63.0%	0	460	460	
64.2%	0	460	460	
65.4%	0	458	458	
66.7%	0	454	454	
67.9%	0	450	450	
69.1%	0	442	442	
70.4%	0	440	440	
71.6%	0	438	438	
72.8%	0	433	433	
74.1%	0	431	431	
75.3%	0	429	429	
76.5%	0	426	426	
77.8%	0	421	421	
79.0%	0	419	419	
80.2%	0	418	418	
81.5%	0	418	418	
82.7%	0	417	417	
84.0%	0	416	416	
85.2%	0	412	412	
86.4%	0	411	411	
87.7%	0	410	410	
88.9%	0	408	408	
90.1%	0	404	404	
91.4%	0	402	402	
92.6%	0	397	397	
93.8%	0	370	370	
95.1%	0	363	363	
96.3%	0	346	346	
97.5%	0	344	344	
98.8%	0	333	333	
100.0%	0	327	327	

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	0	511	511	
1.2%	0	510	510	
2.5%	0	508	508	
3.7%	0	508	508	
4.9%	0	506	506	
6.2%	0	505	505	
7.4%	0	501	501	
8.6%	0	499	499	
9.9%	0	499	499	
11.1%	0	497	497	
12.3%	0	497	497	
13.6%	0	497	497	
14.8%	0	496	496	
16.0%	0	495	495	
17.3%	0	494	494	
18.5%	0	494	494	
19.8%	0	492	492	
21.0%	0	491	491	
22.2%	0	489	489	
23.5%	0	489	489	
24.7%	0	485	485	
25.9%	0	483	483	
27.2%	0	483	483	
28.4%	0	483	483	
29.6%	0	480	480	
30.9%	0	478	478	
32.1%	0	477	477	
33.3%	0	476	476	
34.6%	0	476	476	
35.8%	0	476	476	
37.0%	0	474	474	
38.3%	0	474	474	
39.5%	0	473	473	
40.7%	0	472	472	
42.0%	0	472	472	
43.2%	0	470	470	
44.4%	0	468	468	
45.7%	0	468	468	
46.9%	0	468	468	
48.1%	0	467	467	
49.4%	0	466	466	
50.6%	0	464	464	
51.9%	0	464	464	
53.1%	0	463	463	
54.3%	0	461	461	
55.6%	0	460	460	
56.8%	0	459	459	
58.0%	0	459	459	
59.3%	0	458	458	
60.5%	0	457	457	
61.7%	0	452	452	
63.0%	0	451	451	
64.2%	0	451	451	
65.4%	0	448	448	
66.7%	0	448	448	
67.9%	0	444	444	
69.1%	0	439	439	
70.4%	0	437	437	
71.6%	0	433	433	
72.8%	0	426	426	
74.1%	0	421	421	
75.3%	0	419	419	
76.5%	0	416	416	
77.8%	0	416	416	
79.0%	0	412	412	
80.2%	0	410	410	
81.5%	0	410	410	
82.7%	0	409	409	
84.0%	0	406	406	
85.2%	0	406	406	
86.4%	0	404	404	
87.7%	0	403	403	
88.9%	0	398	398	
90.1%	0	398	398	
91.4%	0	395	395	
92.6%	0	384	384	
93.8%	0	366	366	
95.1%	0	353	353	
96.3%	0	346	346	
97.5%	0	337	337	
98.8%	0	326	326	
100.0%	0	324	324	

Figure OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

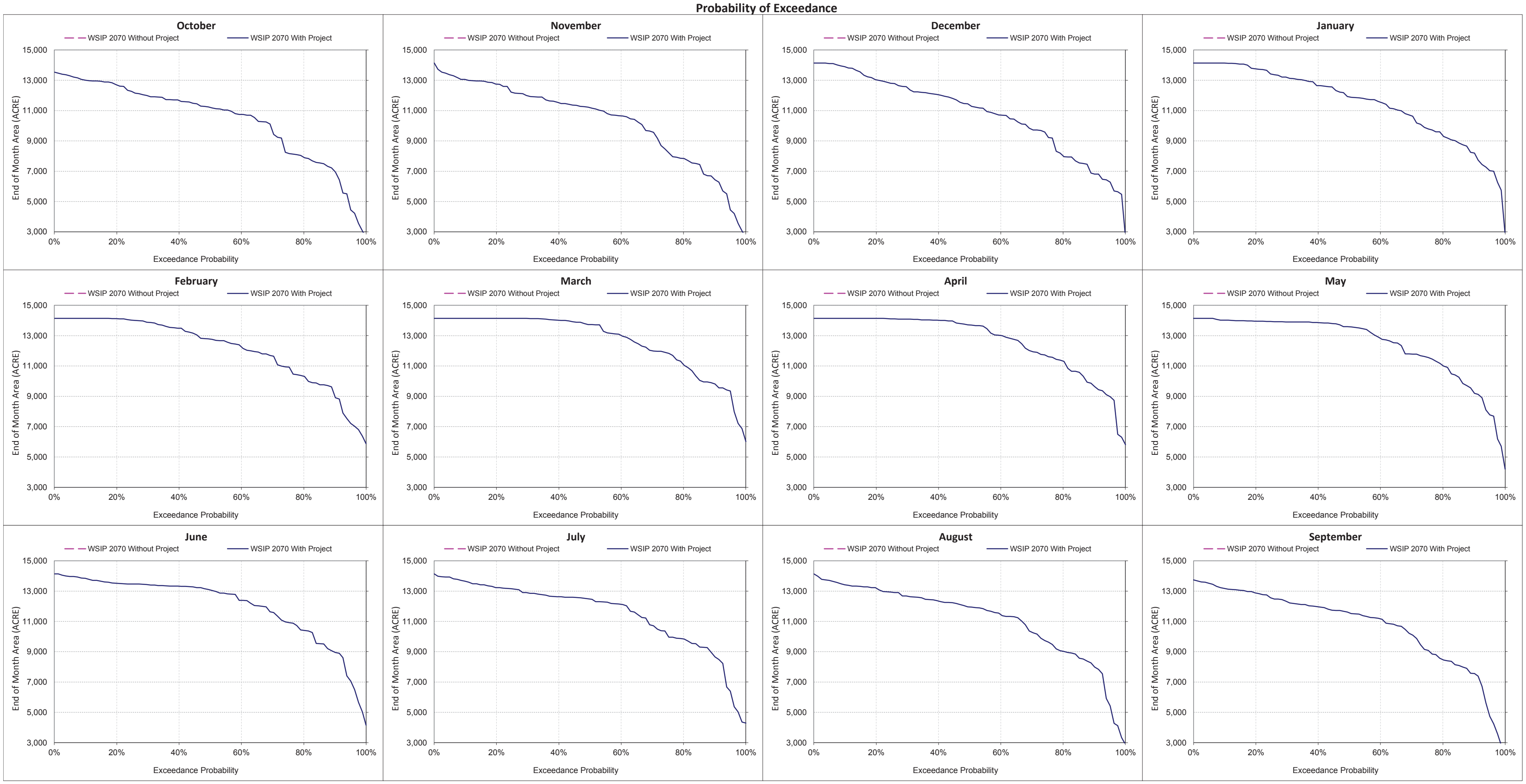


Table OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	13,535	13,535	
1.2%	0	13,465	13,465	
2.5%	0	13,403	13,403	
3.7%	0	13,368	13,368	
4.9%	0	13,302	13,302	
6.2%	0	13,217	13,217	
7.4%	0	13,171	13,171	
8.6%	0	13,061	13,061	
9.9%	0	13,001	13,001	
11.1%	0	12,971	12,971	
12.3%	0	12,961	12,961	
13.6%	0	12,951	12,951	
14.8%	0	12,941	12,941	
16.0%	0	12,883	12,883	
17.3%	0	12,880	12,880	
18.5%	0	12,842	12,842	
19.8%	0	12,721	12,721	
21.0%	0	12,607	12,607	
22.2%	0	12,599	12,599	
23.5%	0	12,335	12,335	
24.7%	0	12,280	12,280	
25.9%	0	12,148	12,148	
27.2%	0	12,123	12,123	
28.4%	0	12,045	12,045	
29.6%	0	12,007	12,007	
30.9%	0	11,907	11,907	
32.1%	0	11,905	11,905	
33.3%	0	11,902	11,902	
34.6%	0	11,878	11,878	
35.8%	0	11,728	11,728	
37.0%	0	11,723	11,723	
38.3%	0	11,710	11,710	
39.5%	0	11,703	11,703	
40.7%	0	11,599	11,599	
42.0%	0	11,594	11,594	
43.2%	0	11,578	11,578	
44.4%	0	11,485	11,485	
45.7%	0	11,454	11,454	
46.9%	0	11,297	11,297	
48.1%	0	11,285	11,285	
49.4%	0	11,241	11,241	
50.6%	0	11,173	11,173	
51.9%	0	11,132	11,132	
53.1%	0	11,106	11,106	
54.3%	0	11,041	11,041	
55.6%	0	11,033	11,033	
56.8%	0	10,955	10,955	
58.0%	0	10,796	10,796	
59.3%	0	10,753	10,753	
60.5%	0	10,743	10,743	
61.7%	0	10,703	10,703	
63.0%	0	10,693	10,693	
64.2%	0	10,546	10,546	
65.4%	0	10,281	10,281	
66.7%	0	10,270	10,270	
67.9%	0	10,256	10,256	
69.1%	0	10,109	10,109	
70.4%	0	9,428	9,428	
71.6%	0	9,242	9,242	
72.8%	0	9,185	9,185	
74.1%	0	8,256	8,256	
75.3%	0	8,159	8,159	
76.5%	0	8,121	8,121	
77.8%	0	8,094	8,094	
79.0%	0	8,049	8,049	
80.2%	0	7,881	7,881	
81.5%	0	7,831	7,831	
82.7%	0	7,691	7,691	
84.0%	0	7,585	7,585	
85.2%	0	7,549	7,549	
86.4%	0	7,502	7,502	
87.7%	0	7,316	7,316	
88.9%	0	7,217	7,217	
90.1%	0	6,945	6,945	
91.4%	0	6,435	6,435	
92.6%	0	5,557	5,557	
93.8%	0	5,507	5,507	
95.1%	0	4,453	4,453	
96.3%	0	4,226	4,226	
97.5%	0	3,550	3,550	
98.8%	0	3,067	3,067	
100.0%	0	2,617	2,617	

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	13,733	13,733	
2.5%	0	13,545	13,545	
3.7%	0	13,466	13,466	
4.9%	0	13,367	13,367	
6.2%	0	13,305	13,305	
7.4%	0	13,172	13,172	
8.6%	0	13,064	13,064	
9.9%	0	13,062	13,062	
11.1%	0	12,989	12,989	
12.3%	0	12,967	12,967	
13.6%	0	12,953	12,953	
14.8%	0	12,949	12,949	
16.0%	0	12,946	12,946	
17.3%	0	12,874	12,874	
18.5%	0	12,859	12,859	
19.8%	0	12,744	12,744	
21.0%	0	12,739	12,739	
22.2%	0	12,605	12,605	
23.5%	0	12,595	12,595	
24.7%	0	12,221	12,221	
25.9%	0	12,157	12,157	
27.2%	0	12,136	12,136	
28.4%	0	12,114	12,114	
29.6%	0	12,005	12,005	
30.9%	0	11,927	11,927	
32.1%	0	11,904	11,904	
33.3%	0	11,901	11,901	
34.6%	0	11,892	11,892	
35.8%	0	11,715	11,715	
37.0%	0	11,645	11,645	
38.3%	0	11,625	11,625	
39.5%	0	11,550	11,550	
40.7%	0	11,462	11,462	
42.0%	0	11,460	11,460	
43.2%	0	11,424	11,424	
44.4%	0	11,366	11,366	
45.7%	0	11,339	11,339	
46.9%	0	11,271	11,271	
48.1%	0	11,256	11,256	
49.4%	0	11,222	11,222	
50.6%	0	11,159	11,159	
51.9%	0	11,113	11,113	
53.1%	0	11,027	11,027	
54.3%	0	10,973	10,973	
55.6%	0	10,793	10,793	
56.8%	0	10,711	10,711	
58.0%	0	10,697	10,697	
59.3%	0	10,670	10,670	
60.5%	0	10,646	10,646	
61.7%	0	10,595	10,595	
63.0%	0	10,455	10,455	
64.2%	0	10,420	10,420	
65.4%	0	10,231	10,231	
66.7%	0	10,080	10,080	
67.9%	0	9,681	9,681	
69.1%	0	9,660	9,660	
70.4%	0	9,572	9,572	
71.6%	0	9,179	9,179	
72.8%	0	8,693	8,693	
74.1%	0	8,473	8,473	
75.3%	0	8,220	8,220	
76.5%	0	7,956	7,956	
77.8%	0	7,922	7,922	
79.0%	0	7,847	7,847	
80.2%	0	7,841	7,841	
81.5%	0	7,699	7,699	
82.7%	0	7,548	7,548	
84.0%	0	7,506	7,506	
85.2%	0	7,446	7,446	
86.4%	0	6,809	6,809	
87.7%	0	6,715	6,715	
88.9%	0	6,688	6,688	
90.1%	0	6,429	6,429	
91.4%	0	6,276	6,276	
92.6%	0	5,690	5,690	
93.8%	0	5,508	5,508	
95.1%	0	4,449	4,449	
96.3%	0	4,216	4,216	
97.5%	0	3,554	3,554	
98.8%	0	3,059	3,059	
100.0%	0	2,611	2,611	

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,112	14,112	
6.2%	0	14,101	14,101	
7.4%	0	14,024	14,024	
8.6%	0	13,954	13,954	
9.9%	0	13,896	13,896	
11.1%	0	13,815	13,815	
12.3%	0	13,796	13,796	
13.6%	0	13,663	13,663	
14.8%	0	13,554	13,554	
16.0%	0	13,329	13,329	
17.3%	0	13,233	13,233	
18.5%	0	13,183	13,183	
19.8%	0	13,051	13,051	
21.0%	0	12,992	12,992	
22.2%	0	12,942	12,942	
23.5%	0	12,868	12,868	
24.7%	0	12,802	12,802	
25.9%	0	12,783	12,783	
27.2%	0	12,644	12,644	
28.4%	0	12,599	12,599	
29.6%	0	12,588	12,588	
30.9%	0	12,361	12,361	
32.1%	0	12,244	12,244	
33.3%	0	12,239	12,239	
34.6%	0	12,198	12,198	
35.8%	0	12,193	12,193	
37.0%	0	12,138	12,138	
38.3%	0	12,109	12,109	
39.5%	0	12,060	12,060	
40.7%	0	12,023	12,023	
42.0%	0	11,943	11,943	
43.2%	0	11,900	11,900	
44.4%	0	11,815	11,815	
45.7%	0	11,711	11,711	
46.9%	0	11,554	11,554	
48.1%	0	11,473	11,473	
49.4%	0	11,448	11,448	
50.6%	0	11,281	11,281	
51.9%	0	11,219	11,219	
53.1%	0	11,179	11,179	
54.3%	0	11,165	11,165	
55.6%	0	10,929	10,929	
56.8%	0	10,886	10,886	
58.0%	0	10,797	10,797	
59.3%	0	10,722	10,722	
60.5%	0	10,703	10,703	
61.7%	0	10,686	10,686	
63.0%	0	10,464	10,464	
64.2%	0	10,445	10,445	
65.4%	0	10,246	10,246	
66.7%	0	10,117	10,117	
67.9%	0	10,092	10,092	
69.1%	0	9,833	9,833	
70.4%	0	9,726	9,726	
71.6%	0	9,721	9,721	
72.8%	0	9,682	9,682	
74.1%	0	9,578	9,578	
75.3%	0	9,233	9,233	
76.5%	0	9,194	9,194	
77.8%	0	8,316	8,316	
79.0%	0	8,197	8,197	
80.2%	0	7,961	7,961	
81.5%	0	7,936	7,936	
82.7%	0	7,936	7,936	
84.0%	0	7,692	7,692	
85.2%	0	7,555	7,555	
86.4%	0	7,506	7,506	
87.7%	0	7,462	7,462	
88.9%	0	6,873	6,873	
90.1%	0	6,817	6,817	
91.4%	0	6,812	6,812	
92.6%	0	6,465	6,465	
93.8%	0	6,430	6,430	
95.1%	0	6,275	6,275	
96.3%	0	5,694	5,694	
97.5%	0	5,653	5,653	
98.8%	0	5,469	5,469	
100.0%	0	2,621	2,621	

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,119	14,119	
12.3%	0	14,118	14,118	
13.6%	0	14,110	14,110	
14.8%	0	14,077	14,077	
16.0%	0	14,068	14,068	
17.3%	0	13,999	13,999	
18.5%	0	13,803	13,803	
19.8%	0	13,757	13,757	
21.0%	0	13,726	13,726	
22.2%	0	13,707	13,707	
23.5%	0	13,662	13,662	
24.7%	0	13,421	13,421	
25.9%	0	13,365	13,365	
27.2%	0	13,342	13,342	
28.4%	0	13,214	13,214	
29.6%	0	13,212	13,212	
30.9%	0	13,122	13,122	
32.1%	0	13,118	13,118	
33.3%	0	13,056	13,056	
34.6%	0	13,051	13,051	
35.8%	0	13,000	13,000	
37.0%	0	12,930	12,930	
38.3%	0	12,908	12,908	
39.5%	0	12,647	12,647	
40.7%	0	12,641	12,641	
42.0%	0	12,609	12,609	
43.2%	0	12,583	12,583	
44.4%	0	12,561	12,561	
45.7%	0	12,328	12,328	
46.9%	0	12,216	12,216	
48.1%	0	12,194	12,194	
49.4%	0	11,935	11,935	
50.6%	0	11,886	11,886	
51.9%	0	11,860	11,860	
53.1%	0	11,838	11,838	
54.3%	0	11,809	11,809	
55.6%	0	11,753	11,753	
56.8%	0	11,724	11,724	
58.0%	0	11,719	11,719	
59.3%	0	11,604	11,604	
60.5%	0	11,514	11,514	
61.7%	0	11,411	11,411	
63.0%	0	11,163	11,163	
64.2%	0	11,125	11,125	
65.4%	0	11,044	11,044	
66.7%	0	10,988	10,988	
67.9%	0	10,804	10,804	
69.1%	0	10,719	10,719	
70.4%	0	10,632	10,632	
71.6%	0	10,188	10,188	
72.8%	0	10,089	10,089	
74.1%	0	9,885	9,885	
75.3%	0	9,794	9,794	
76.5%	0	9,729	9,729	
77.8%	0	9,600	9,600	
79.0%	0	9,599	9,599	
80.2%	0	9,291	9,291	
81.5%	0	9,193	9,193	
82.7%	0	9,066	9,066	
84.0%	0	9,027	9,027	
85.2%	0	8,870	8,870	
86.4%	0	8,737	8,737	
87.7%	0	8,666	8,666	
88.9%	0	8,247	8,247	
90.1%	0	8,204	8,204	
91.4%	0	7,731	7,731	
92.6%	0	7,446	7,446	
93.8%	0	7,271	7,271	
95.1%	0	7,032	7,032	
96.3%	0	7,002	7,002	
97.5%	0	6,269	6,269	
98.8%	0	5,745	5,745	
100.0%	0	2,830	2,830	

Table OP-11-b

Sites Reservoir, End of Month Area

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,129	14,129	
19.8%	0	14,127	14,127	
21.0%	0	14,115	14,115	
22.2%	0	14,109	14,109	
23.5%	0	14,058	14,058	
24.7%	0	14,027	14,027	
25.9%	0	14,007	14,007	
27.2%	0	13,997	13,997	
28.4%	0	13,967	13,967	
29.6%	0	13,893	13,893	
30.9%	0	13,862	13,862	
32.1%	0	13,842	13,842	
33.3%	0	13,728	13,728	
34.6%	0	13,699	13,699	
35.8%	0	13,620	13,620	
37.0%	0	13,551	13,551	
38.3%	0	13,524	13,524	
39.5%	0	13,493	13,493	
40.7%	0	13,489	13,489	
42.0%	0	13,287	13,287	
43.2%	0	13,237	13,237	
44.4%	0	13,175	13,175	
45.7%	0	13,050	13,050	
46.9%	0	12,832	12,832	
48.1%	0	12,815	12,815	
49.4%	0	12,798	12,798	
50.6%	0	12,766	12,766	
51.9%	0	12,682	12,682	
53.1%	0	12,670	12,670	
54.3%	0	12,664	12,664	
55.6%	0	12,569	12,569	
56.8%	0	12,481	12,481	
58.0%	0	12,447	12,447	
59.3%	0	12,392	12,392	
60.5%	0	12,154	12,154	
61.7%	0	12,036	12,036	
63.0%	0	12,000	12,000	
64.2%	0	11,956	11,956	
65.4%	0	11,923	11,923	
66.7%	0	11,807	11,807	
67.9%	0	11,791	11,791	
69.1%	0	11,704	11,704	
70.4%	0	11,648	11,648	
71.6%	0	11,073	11,073	
72.8%	0	10,995	10,995	
74.1%	0	10,944	10,944	
75.3%	0	10,919	10,919	
76.5%	0	10,472	10,472	
77.8%	0	10,428	10,428	
79.0%	0	10,384	10,384	
80.2%	0	10,317	10,317	
81.5%	0	9,988	9,988	
82.7%	0	9,903	9,903	
84.0%	0	9,889	9,889	
85.2%	0	9,767	9,767	
86.4%	0	9,764	9,764	
87.7%	0	9,718	9,718	
88.9%	0	9,621	9,621	
90.1%	0	8,912	8,912	
91.4%	0	8,822	8,822	
92.6%	0	7,895	7,895	
93.8%	0	7,538	7,538	
95.1%	0	7,212	7,212	
96.3%	0	7,016	7,016	
97.5%	0	6,803	6,803	
98.8%	0	6,365	6,365	
100.0%	0	5,882	5,882	

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,137	14,137	
24.7%	0	14,137	14,137	
25.9%	0	14,137	14,137	
27.2%	0	14,137	14,137	
28.4%	0	14,137	14,137	
29.6%	0	14,137	14,137	
30.9%	0	14,133	14,133	
32.1%	0	14,131	14,131	
33.3%	0	14,122	14,122	
34.6%	0	14,118	14,118	
35.8%	0	14,092	14,092	
37.0%	0	14,062	14,062	
38.3%	0	14,036	14,036	
39.5%	0	14,020	14,020	
40.7%	0	14,015	14,015	
42.0%	0	14,006	14,006	
43.2%	0	13,981	13,981	
44.4%	0	13,922	13,922	
45.7%	0	13,891	13,891	
46.9%	0	13,889	13,889	
48.1%	0	13,802	13,802	
49.4%	0	13,732	13,732	
50.6%	0	13,725	13,725	
51.9%	0	13,724	13,724	
53.1%	0	13,715	13,715	
54.3%	0	13,287	13,287	
55.6%	0	13,182	13,182	
56.8%	0	13,151	13,151	
58.0%	0	13,113	13,113	
59.3%	0	13,095	13,095	
60.5%	0	12,967	12,967	
61.7%	0	12,893	12,893	
63.0%	0	12,758	12,758	
64.2%	0	12,584	12,584	
65.4%	0	12,466	12,466	
66.7%	0	12,311	12,311	
67.9%	0	12,252	12,252	
69.1%	0	12,045	12,045	
70.4%	0	11,990	11,990	
71.6%	0	11,975	11,975	
72.8%	0	11,970	11,970	
74.1%	0	11,902	11,902	
75.3%	0	11,827	11,827	
76.5%	0	11,696	11,696	
77.8%	0	11,408	11,408	
79.0%	0	11,324	11,324	
80.2%	0	11,044	11,044	
81.5%	0	10,900	10,900	
82.7%	0	10,686	10,686	
84.0%	0	10,338	10,338	
85.2%	0	10,061	10,061	
86.4%	0	9,947	9,947	
87.7%	0	9,944	9,944	
88.9%	0	9,898	9,898	
90.1%	0	9,820	9,820	
91.4%	0	9,565	9,565	
92.6%	0	9,555	9,555	
93.8%	0	9,417	9,417	
95.1%	0	9,356	9,356	
96.3%	0	7,989	7,989	
97.5%	0	7,214	7,214	
98.8%	0	6,861	6,861	
100.0%	0	6,019	6,019	

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,137	14,137	
8.6%	0	14,137	14,137	
9.9%	0	14,137	14,137	
11.1%	0	14,137	14,137	
12.3%	0	14,137	14,137	
13.6%	0	14,137	14,137	
14.8%	0	14,137	14,137	
16.0%	0	14,137	14,137	
17.3%	0	14,137	14,137	
18.5%	0	14,137	14,137	
19.8%	0	14,137	14,137	
21.0%	0	14,137	14,137	
22.2%	0	14,137	14,137	
23.5%	0	14,121	14,121	
24.7%	0	14,104	14,104	
25.9%	0	14,102	14,102	
27.2%	0	14,097	14,097	
28.4%	0	14,091	14,091	
29.6%	0	14,088	14,088	
30.9%	0	14,084	14,084	
32.1%	0	14,083	14,083	
33.3%	0	14,074	14,074	
34.6%	0	14,048	14,048	
35.8%	0	14,037	14,037	
37.0%	0	14,036	14,036	
38.3%	0	14,016	14,016	
39.5%	0	14,016	14,016	
40.7%	0	14,007	14,007	
42.0%	0	14,003	14,003	
43.2%	0	13,977	13,977	
44.4%	0	13,973	13,973	
45.7%	0	13,835	13,835	
46.9%	0	13,806	13,806	
48.1%	0	13,773	13,773	
49.4%	0	13,717	13,717	
50.6%	0	13,694	13,694	
51.9%	0	13,665	13,665	
53.1%	0	13,659	13,659	
54.3%	0	13,633	13,633	
55.6%	0	13,460	13,460	
56.8%	0	13,175	13,175	
58.0%	0	13,040	13,040	
59.3%	0	13,037	13,037	
60.5%	0	12,991	12,991	
61.7%	0	12,890	12,890	
63.0%	0	12,822	12,822	
64.2%	0	12,759	12,759	
65.4%	0	12,682	12,682	
66.7%	0	12,468	12,468	
67.9%	0	12,178	12,178	
69.1%	0	12,024	12,024	
70.4%	0	11,939	11,939	
71.6%	0	11,894	11,894	
72.8%	0	11,757	11,757	
74.1%	0	11,725	11,725	
75.3%	0	11,602	11,602	
76.5%	0	11,583	11,583	
77.8%	0	11,432	11,432	
79.0%	0	11,388	11,388	
80.2%	0	11,302	11,302	
81.5%	0	10,835	10,835	
82.7%	0	10,656	10,656	
84.0%	0	10,654	10,654	
85.2%	0	10,581	10,581	
86.4%	0	10,321	10,321	
87.7%	0	9,927	9,927	
88.9%	0	9,868	9,868	
90.1%	0	9,645	9,645	
91.4%	0	9,433	9,433	
92.6%	0	9,364	9,364	
93.8%	0	9,117	9,117	
95.1%	0	8,970	8,970	
96.3%	0	8,741	8,741	
97.5%	0	6,485	6,485	
98.8%	0	6,302	6,302	
100.0%	0	5,809	5,809	

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,137	14,137	
3.7%	0	14,137	14,137	
4.9%	0	14,137	14,137	
6.2%	0	14,137	14,137	
7.4%	0	14,076	14,076	
8.6%	0	14,032	14,032	
9.9%	0	14,018	14,018	
11.1%	0	14,018	14,018	
12.3%	0	14,000	14,000	
13.6%	0	13,985	13,985	
14.8%	0	13,984	13,984	
16.0%	0	13,984	13,984	
17.3%	0	13,967	13,967	
18.5%	0	13,966	13,966	
19.8%	0	13,962	13,962	
21.0%	0	13,955	13,955	
22.2%	0	13,949	13,949	
23.5%	0	13,942	13,942	
24.7%	0	13,935	13,935	
25.9%	0	13,926	13,926	
27.2%	0	13,923	13,923	
28.4%	0	13,914	13,914	
29.6%	0	13,907	13,907	
30.9%	0	13,905	13,905	
32.1%	0	13,905	13,905	
33.3%	0	13,903	13,903	
34.6%	0	13,902	13,902	
35.8%	0	13,898	13,898	
37.0%	0	13,897	13,897	
38.3%	0	13,878	13,878	
39.5%	0	13,865	13,865	
40.7%	0	13,860	13,860	
42.0%	0	13,835	13,835	
43.2%	0	13,832	13,832	
44.4%	0	13,797	13,797	
45.7%	0	13,777	13,777	
46.9%	0	13,713	13,713	
48.1%	0	13,603	13,603	
49.4%	0	13,598	13,598	
50.6%	0	13,587	13,587	
51.9%	0	13,539	13,539	
53.1%	0	13,519	13,519	
54.3%	0	13,460	13,460	
55.6%	0	13,402	13,402	
56.8%	0	13,211	13,211	
58.0%	0	13,056	13,056	
59.3%	0	12,904	12,904	
60.5%	0	12,750	12,750	
61.7%	0	12,716	12,716	
63.0%	0	12,654	12,654	
64.2%	0	12,538	12,538	
65.4%	0	12,525	12,525	
66.7%	0	12,352	12,352	
67.9%	0	11,799	11,799	
69.1%	0	11,799	11,799	
70.4%	0	11,783	11,783	
71.6%	0	11,776	11,776	
72.8%	0	11,681	11,681	
74.1%	0	11,632	11,632	
75.3%	0	11,552	11,552	
76.5%	0	11,462	11,462	
77.8%	0	11,322	11,322	
79.0%	0	11,187	11,187	
80.2%	0	10,992	10,992	
81.5%	0	10,915	10,915	
82.7%	0	10,473	10,473	
84.0%	0	10,418	10,418	
85.2%	0	10,257	10,257	
86.4%	0	9,848	9,848	
87.7%	0	9,708	9,708	
88.9%	0	9,552	9,552	
90.1%	0	9,195	9,195	
91.4%	0	9,129	9,129	
92.6%	0	8,900	8,900	
93.8%	0	8,099	8,099	
95.1%	0	7,782	7,782	
96.3%	0	7,697	7,697	
97.5%	0	6,185	6,185	
98.8%	0	5,707	5,707	
100.0%	0	4,201	4,201	

Table OP-11-b
Sites Reservoir, End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	14,137	14,137	
2.5%	0	14,050	14,050	
3.7%	0	14,003	14,003	
4.9%	0	13,970	13,970	
6.2%	0	13,962	13,962	
7.4%	0	13,935	13,935	
8.6%	0	13,865	13,865	
9.9%	0	13,851	13,851	
11.1%	0	13,783	13,783	
12.3%	0	13,706	13,706	
13.6%	0	13,701	13,701	
14.8%	0	13,653	13,653	
16.0%	0	13,614	13,614	
17.3%	0	13,584	13,584	
18.5%	0	13,542	13,542	
19.8%	0	13,528	13,528	
21.0%	0	13,505	13,505	
22.2%	0	13,481	13,481	
23.5%	0	13,471	13,471	
24.7%	0	13,470	13,470	
25.9%	0	13,469	13,469	
27.2%	0	13,466	13,466	
28.4%	0	13,453	13,453	
29.6%	0	13,427	13,427	
30.9%	0	13,403	13,403	
32.1%	0	13,394	13,394	
33.3%	0	13,367	13,367	
34.6%	0	13,366	13,366	
35.8%	0	13,341	13,341	
37.0%	0	13,340	13,340	
38.3%	0	13,336	13,336	
39.5%	0	13,330	13,330	
40.7%	0	13,318	13,318	
42.0%	0	13,316	13,316	
43.2%	0	13,300	13,300	
44.4%	0	13,286	13,286	
45.7%	0	13,226	13,226	
46.9%	0	13,224	13,224	
48.1%	0	13,169	13,169	
49.4%	0	13,104	13,104	
50.6%	0	13,041	13,041	
51.9%	0	12,971	12,971	
53.1%	0	12,877	12,877	
54.3%	0	12,872	12,872	
55.6%	0	12,819	12,819	
56.8%	0	12,804	12,804	
58.0%	0	12,779	12,779	
59.3%	0	12,395	12,395	
60.5%	0	12,394	12,394	
61.7%	0	12,379	12,379	
63.0%	0	12,209	12,209	
64.2%	0	12,051	12,051	
65.4%	0	12,023	12,023	
66.7%	0	11,998	11,998	
67.9%	0	11,966	11,966	
69.1%	0	11,631	11,631	
70.4%	0	11,588	11,588	
71.6%	0	11,352	11,352	
72.8%	0	11,091	11,091	
74.1%	0	10,968	10,968	
75.3%	0	10,921	10,921	
76.5%	0	10,882	10,882	
77.8%	0	10,732	10,732	
79.0%	0	10,438	10,438	
80.2%	0	10,400	10,400	
81.5%	0	10,363	10,363	
82.7%	0	10,262	10,262	
84.0%	0	9,545	9,545	
85.2%	0	9,523	9,523	
86.4%	0	9,517	9,517	
87.7%	0	9,210	9,210	
88.9%	0	9,075	9,075	
90.1%	0	8,949	8,949	
91.4%	0	8,898	8,898	
92.6%	0	8,603	8,603	
93.8%	0	7,409	7,409	
95.1%	0	7,060	7,060	
96.3%	0	6,492	6,492	
97.5%	0	5,655	5,655	
98.8%	0	5,025	5,025	
100.0%	0	4,146	4,146	

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	13,985	13,985	
2.5%	0	13,950	13,950	
3.7%	0	13,939	13,939	
4.9%	0	13,931	13,931	
6.2%	0	13,816	13,816	
7.4%	0	13,780	13,780	
8.6%	0	13,701	13,701	
9.9%	0	13,650	13,650	
11.1%	0	13,584	13,584	
12.3%	0	13,484	13,484	
13.6%	0	13,483	13,483	
14.8%	0	13,414	13,414	
16.0%	0	13,410	13,410	
17.3%	0	13,353	13,353	
18.5%	0	13,320	13,320	
19.8%	0	13,224	13,224	
21.0%	0	13,223	13,223	
22.2%	0	13,187	13,187	
23.5%	0	13,179	13,179	
24.7%	0	13,157	13,157	
25.9%	0	13,129	13,129	
27.2%	0	13,086	13,086	
28.4%	0	12,901	12,901	
29.6%	0	12,895	12,895	
30.9%	0	12,856	12,856	
32.1%	0	12,851	12,851	
33.3%	0	12,794	12,794	
34.6%	0	12,773	12,773	
35.8%	0	12,725	12,725	
37.0%	0	12,667	12,667	
38.3%	0	12,639	12,639	
39.5%	0	12,632	12,632	
40.7%	0	12,623	12,623	
42.0%	0	12,603	12,603	
43.2%	0	12,602	12,602	
44.4%	0	12,594	12,594	
45.7%	0	12,579	12,579	
46.9%	0	12,562	12,562	
48.1%	0	12,523	12,523	
49.4%	0	12,499	12,499	
50.6%	0	12,458	12,458	
51.9%	0	12,299	12,299	
53.1%	0	12,296	12,296	
54.3%	0	12,284	12,284	
55.6%	0	12,266	12,266	
56.8%	0	12,189	12,189	
58.0%	0	12,166	12,166	
59.3%	0	12,145	12,145	
60.5%	0	12,124	12,124	
61.7%	0	12,034	12,034	
63.0%	0	11,675	11,675	
64.2%	0	11,613	11,613	
65.4%	0	11,423	11,423	
66.7%	0	11,256	11,256	
67.9%	0	11,232	11,232	
69.1%	0	10,782	10,782	
70.4%	0	10,710	10,710	
71.6%	0	10,491	10,491	
72.8%	0	10,387	10,387	
74.1%	0	10,365	10,365	
75.3%	0	9,959	9,959	
76.5%	0	9,952	9,952	
77.8%	0	9,885	9,885	
79.0%	0	9,872	9,872	
80.2%	0	9,844	9,844	
81.5%	0	9,695	9,695	
82.7%	0	9,551	9,551	
84.0%	0	9,531	9,531	
85.2%	0	9,303	9,303	
86.4%	0	9,289	9,289	
87.7%	0	9,281	9,281	
88.9%	0	8,965	8,965	
90.1%	0	8,663	8,663	
91.4%	0	8,486	8,486	
92.6%	0	8,221	8,221	
93.8%	0	6,671	6,671	
95.1%	0	6,401	6,401	
96.3%	0	5,371	5,371	
97.5%	0	5,023	5,023	
98.8%	0	4,356	4,356	
100.0%	0	4,289	4,289	

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	14,137	14,137	
1.2%	0	13,983	13,983	
2.5%	0	13,772	13,772	
3.7%	0	13,748	13,748	
4.9%	0	13,710	13,710	
6.2%	0	13,634	13,634	
7.4%	0	13,574	13,574	
8.6%	0	13,492	13,492	
9.9%	0	13,417	13,417	
11.1%	0	13,383	13,383	
12.3%	0	13,338	13,338	
13.6%	0	13,331	13,331	
14.8%	0	13,311	13,311	
16.0%	0	13,277	13,277	
17.3%	0	13,276	13,276	
18.5%	0	13,230	13,230	
19.8%	0	13,225	13,225	
21.0%	0	13,077	13,077	
22.2%	0	12,979	12,979	
23.5%	0	12,951	12,951	
24.7%	0	12,936	12,936	
25.9%	0	12,910	12,910	
27.2%	0	12,910	12,910	
28.4%	0	12,689	12,689	
29.6%	0	12,680	12,680	
30.9%	0	12,632	12,632	
32.1%	0	12,619	12,619	
33.3%	0	12,594	12,594	
34.6%	0	12,554	12,554	
35.8%	0	12,459	12,459	
37.0%	0	12,437	12,437	
38.3%	0	12,420	12,420	
39.5%	0	12,376	12,376	
40.7%	0	12,310	12,310	
42.0%	0	12,260	12,260	
43.2%	0	12,250	12,250	
44.4%	0	12,239	12,239	
45.7%	0	12,182	12,182	
46.9%	0	12,119	12,119	
48.1%	0	12,045	12,045	
49.4%	0	11,967	11,967	
50.6%	0	11,949	11,949	
51.9%	0	11,915	11,915	
53.1%	0	11,894	11,894	
54.3%	0	11,839	11,839	
55.6%	0	11,717	11,717	
56.8%	0	11,674	11,674	
58.0%	0	11,582	11,582	
59.3%	0	11,559	11,559	
60.5%	0	11,384	11,384	
61.7%	0	11,330	11,330	
63.0%	0	11,322	11,322	
64.2%	0	11,315	11,315	
65.4%	0	11,237	11,237	
66.7%	0	11,013	11,013	
67.9%	0	10,772	10,772	
69.1%	0	10,374	10,374	
70.4%	0	10,250	10,250	
71.6%	0	10,161	10,161	
72.8%	0	9,884	9,884	
74.1%	0	9,735	9,735	
75.3%	0	9,630	9,630	
76.5%	0	9,475	9,475	
77.8%	0	9,193	9,193	
79.0%	0	9,070	9,070	
80.2%	0	9,011	9,011	
81.5%	0	8,954	8,954	
82.7%	0	8,909	8,909	
84.0%	0	8,850	8,850	
85.2%	0	8,568	8,568	
86.4%	0	8,518	8,518	
87.7%	0	8,380	8,380	
88.9%	0	8,256	8,256	
90.1%	0	7,988	7,988	
91.4%	0	7,830	7,830	
92.6%	0	7,548	7,548	
93.8%	0	5,914	5,914	
95.1%	0	5,429	5,429	
96.3%	0	4,282	4,282	
97.5%	0	4,128	4,128	
98.8%	0	3,340	3,340	
100.0%	0	2,869	2,869	

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	0	13,750	13,750	
1.2%	0	13,670	13,670	
2.5%	0	13,600	13,600	
3.7%	0	13,588	13,588	
4.9%	0	13,523	13,523	
6.2%	0	13,451	13,451	
7.4%	0	13,314	13,314	
8.6%	0	13,225	13,225	
9.9%	0	13,184	13,184	
11.1%	0	13,123	13,123	
12.3%	0	13,112	13,112	
13.6%	0	13,094	13,094	
14.8%	0	13,053	13,053	
16.0%	0	13,037	13,037	
17.3%	0	12,976	12,976	
18.5%	0	12,971	12,971	
19.8%	0	12,884	12,884	
21.0%	0	12,841	12,841	
22.2%	0	12,759	12,759	
23.5%	0	12,758	12,758	
24.7%	0	12,555	12,555	
25.9%	0	12,480	12,480	
27.2%	0	12,473	12,473	
28.4%	0	12,449	12,449	
29.6%	0	12,346	12,346	
30.9%	0	12,220	12,220	
32.1%	0	12,189	12,189	
33.3%	0	12,145	12,145	
34.6%	0	12,111	12,111	
35.8%	0	12,111	12,111	
37.0%	0	12,031	12,031	
38.3%	0	12,013	12,013	
39.5%	0	11,979	11,979	
40.7%	0	11,940	11,940	
42.0%	0	11,914	11,914	
43.2%	0	11,803	11,803	
44.4%	0	11,736	11,736	
45.7%	0	11,728	11,728	
46.9%	0	11,723	11,723	
48.1%	0	11,664	11,664	
49.4%	0	11,615	11,615	
50.6%	0	11,514	11,514	
51.9%	0	11,503	11,503	
53.1%	0	11,490	11,490	
54.3%	0	11,383	11,383	
55.6%	0	11,323	11,323	
56.8%	0	11,268	11,268	
58.0%	0	11,250	11,250	
59.3%	0	11,217	11,217	
60.5%	0	11,134	11,134	
61.7%	0	10,877	10,877	
63.0%	0	10,842	10,842	
64.2%	0	10,820	10,820	
65.4%	0	10,704	10,704	
66.7%	0	10,673	10,673	
67.9%	0	10,479	10,479	
69.1%	0	10,219	10,219	
70.4%	0	10,094	10,094	
71.6%	0	9,878	9,878	
72.8%	0	9,458	9,458	
74.1%	0	9,153	9,153	
75.3%	0	9,079	9,079	
76.5%	0	8,848	8,848	
77.8%	0	8,811	8,811	
79.0%	0	8,576	8,576	
80.2%	0	8,446	8,446	
81.5%	0	8,396	8,396	
82.7%	0	8,371	8,371	
84.0%	0	8,141	8,141	
85.2%	0	8,095	8,095	
86.4%	0	7,989	7,989	
87.7%	0	7,896	7,896	
88.9%	0	7,584	7,584	
90.1%	0	7,568	7,568	
91.4%	0	7,384	7,384	
92.6%	0	6,723	6,723	
93.8%	0	5,631	5,631	
95.1%	0	4,742	4,742	
96.3%	0	4,248	4,248	
97.5%	0	3,576	3,576	
98.8%	0	2,831	2,831	
100.0%	0	2,687	2,687	

Trinity and Sacramento River Basin Operations

Summary Tables and Bar Charts

Table SW-01-a
Trinity Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1,336	1,345	1,396	1,459	1,569	1,693	1,842	1,835	1,798	1,660	1,522	1,401
DCR 2015 With Project	1,336	1,347	1,401	1,465	1,573	1,699	1,850	1,845	1,809	1,668	1,522	1,397
Difference	1	2	5	7	4	7	9	10	11	8	0	-4
Percent Difference[3]	0.0%	0.1%	0.3%	0.5%	0.2%	0.4%	0.5%	0.6%	0.6%	0.5%	0.0%	-0.3%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1,737	1,743	1,760	1,763	1,925	2,062	2,239	2,273	2,250	2,120	1,999	1,844
DCR 2015 With Project	1,721	1,726	1,750	1,759	1,914	2,060	2,239	2,273	2,249	2,116	1,984	1,828
Difference	-16	-16	-10	-4	-12	-3	0	0	-1	-4	-15	-16
Percent Difference	-0.9%	-0.9%	-0.6%	-0.2%	-0.6%	-0.1%	0.0%	0.0%	0.0%	-0.2%	-0.7%	-0.9%
Above Normal (14.6%)												
DCR 2015 Without Project	1,572	1,563	1,589	1,559	1,712	1,882	2,052	2,057	2,029	1,909	1,770	1,633
DCR 2015 With Project	1,576	1,572	1,603	1,590	1,743	1,915	2,086	2,091	2,056	1,936	1,770	1,628
Difference	4	9	14	31	31	33	34	34	27	27	0	-4
Percent Difference	0.3%	0.6%	0.9%	2.0%	1.8%	1.8%	1.6%	1.6%	1.3%	1.4%	0.0%	-0.3%
Below Normal (17.1%)												
DCR 2015 Without Project	1,241	1,273	1,356	1,360	1,434	1,530	1,704	1,687	1,646	1,511	1,370	1,267
DCR 2015 With Project	1,250	1,287	1,371	1,370	1,444	1,539	1,717	1,700	1,661	1,529	1,394	1,275
Difference	9	14	15	11	10	9	13	13	15	18	24	8
Percent Difference	0.7%	1.1%	1.1%	0.8%	0.7%	0.6%	0.8%	0.8%	0.9%	1.2%	1.8%	0.7%
Dry (22%)												
DCR 2015 Without Project	1,102	1,114	1,221	1,349	1,430	1,560	1,697	1,646	1,579	1,414	1,257	1,150
DCR 2015 With Project	1,098	1,113	1,222	1,353	1,432	1,561	1,698	1,649	1,591	1,418	1,257	1,146
Difference	-4	0	1	4	3	1	2	3	12	3	0	-4
Percent Difference	-0.4%	0.0%	0.1%	0.3%	0.2%	0.1%	0.1%	0.2%	0.8%	0.2%	0.0%	-0.3%
Critical (14.6%)												
DCR 2015 Without Project	691	697	725	980	1,021	1,091	1,149	1,119	1,091	957	814	741
DCR 2015 With Project	721	721	747	985	1,025	1,096	1,158	1,135	1,105	967	817	749
Difference	31	24	22	5	4	5	9	16	14	10	2	8
Percent Difference	4.5%	3.4%	3.1%	0.5%	0.4%	0.5%	0.8%	1.4%	1.3%	1.0%	0.3%	1.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

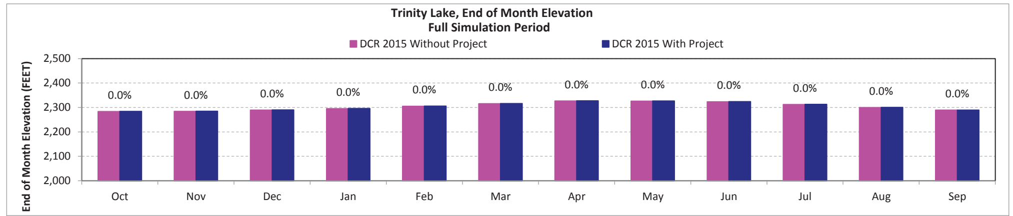
Table SW-02-a
Trinity Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

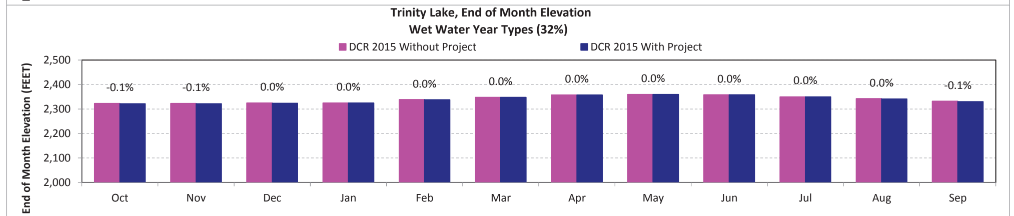
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	2,283	2,284	2,289	2,295	2,305	2,316	2,327	2,326	2,323	2,312	2,300	2,290
DCR 2015 With Project	2,284	2,285	2,290	2,296	2,306	2,317	2,328	2,327	2,324	2,313	2,300	2,290
Difference	1	1	1	1	1	1	1	1	1	1	0	0
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	2,323	2,323	2,325	2,325	2,338	2,348	2,358	2,360	2,358	2,350	2,342	2,332
DCR 2015 With Project	2,321	2,322	2,324	2,325	2,338	2,348	2,358	2,360	2,358	2,350	2,341	2,330
Difference	-1	-1	-1	0	-1	0	0	0	0	0	-1	-1
Percent Difference	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
Above Normal (14.6%)												
DCR 2015 Without Project	2,309	2,308	2,310	2,305	2,319	2,333	2,345	2,346	2,344	2,335	2,325	2,314
DCR 2015 With Project	2,309	2,309	2,311	2,309	2,323	2,336	2,347	2,348	2,346	2,338	2,325	2,313
Difference	0	1	1	4	4	3	3	3	3	2	0	0
Percent Difference	0.0%	0.0%	0.1%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
Below Normal (17.1%)												
DCR 2015 Without Project	2,277	2,280	2,287	2,286	2,293	2,301	2,317	2,316	2,313	2,302	2,289	2,279
DCR 2015 With Project	2,278	2,281	2,289	2,287	2,294	2,303	2,318	2,317	2,315	2,304	2,292	2,280
Difference	1	1	1	1	1	1	1	1	1	2	2	1
Percent Difference	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%
Dry (22%)												
DCR 2015 Without Project	2,264	2,265	2,275	2,285	2,293	2,306	2,318	2,314	2,308	2,293	2,279	2,269
DCR 2015 With Project	2,264	2,265	2,275	2,286	2,294	2,307	2,319	2,314	2,310	2,294	2,279	2,269
Difference	0	0	0	1	1	0	0	1	1	1	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Critical (14.6%)												
DCR 2015 Without Project	2,211	2,212	2,217	2,248	2,253	2,262	2,268	2,265	2,263	2,248	2,229	2,219
DCR 2015 With Project	2,217	2,217	2,221	2,248	2,253	2,262	2,269	2,267	2,264	2,249	2,230	2,221
Difference	6	4	3	0	0	1	1	2	1	1	1	1
Percent Difference	0.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%

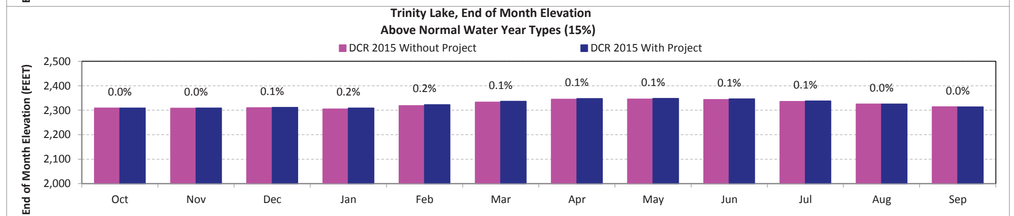
1 Based on the 82-year simulation period

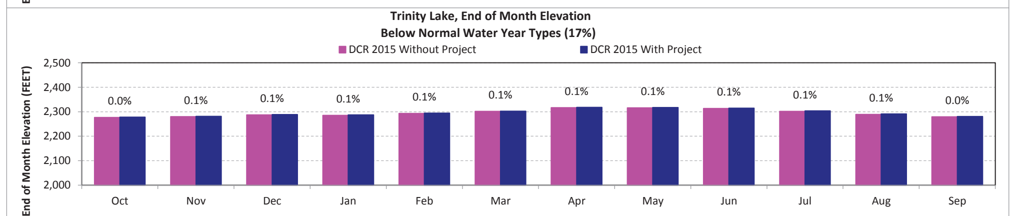
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

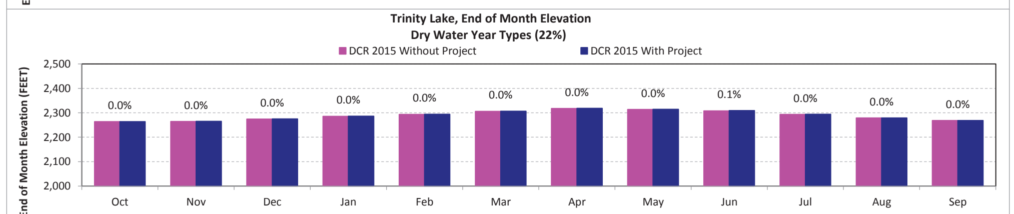
3 Relative difference of the monthly average











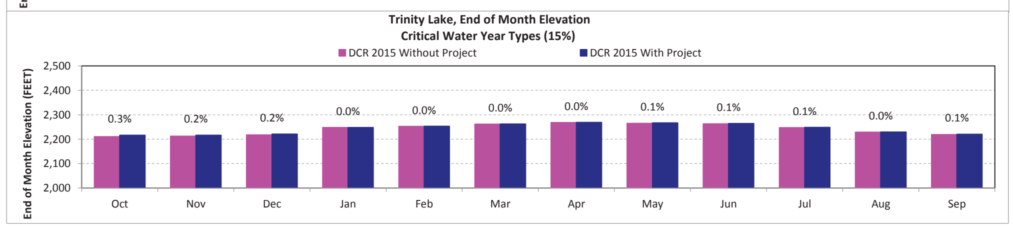


Table SW-03-a
Trinity Lake, End of Month Area
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	10,797	10,850	11,137	11,476	12,048	12,670	13,367	13,326	13,154	12,483	11,763	11,142
DCR 2015 With Project	10,820	10,880	11,179	11,530	12,086	12,715	13,416	13,382	13,214	12,533	11,775	11,133
Difference	23	29	42	54	38	45	50	56	60	49	12	-9
Percent Difference[3]	0.2%	0.3%	0.4%	0.5%	0.3%	0.4%	0.4%	0.4%	0.5%	0.4%	0.1%	-0.1%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	13,074	13,098	13,184	13,188	13,958	14,540	15,256	15,391	15,291	14,757	14,241	13,570
DCR 2015 With Project	12,992	13,020	13,135	13,169	13,909	14,531	15,256	15,392	15,287	14,740	14,175	13,490
Difference	-83	-78	-49	-20	-49	-9	0	1	-5	-17	-66	-80
Percent Difference	-0.6%	-0.6%	-0.4%	-0.1%	-0.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.5%	-0.6%
Above Normal (14.6%)												
DCR 2015 Without Project	12,252	12,198	12,332	12,037	12,824	13,675	14,431	14,477	14,363	13,846	13,218	12,564
DCR 2015 With Project	12,302	12,271	12,432	12,256	13,026	13,862	14,597	14,636	14,493	13,984	13,249	12,572
Difference	50	74	100	219	202	187	166	159	130	138	31	8
Percent Difference	0.4%	0.6%	0.8%	1.8%	1.6%	1.4%	1.1%	1.1%	0.9%	1.0%	0.2%	0.1%
Below Normal (17.1%)												
DCR 2015 Without Project	10,369	10,548	10,995	10,919	11,336	11,838	12,739	12,693	12,518	11,840	11,083	10,508
DCR 2015 With Project	10,433	10,636	11,087	10,995	11,403	11,895	12,813	12,760	12,596	11,947	11,231	10,567
Difference	64	88	92	76	68	57	74	67	78	107	148	58
Percent Difference	0.6%	0.8%	0.8%	0.7%	0.6%	0.5%	0.6%	0.5%	0.6%	0.9%	1.3%	0.6%
Dry (22%)												
DCR 2015 Without Project	9,542	9,612	10,216	10,904	11,376	12,106	12,800	12,550	12,226	11,375	10,479	9,834
DCR 2015 With Project	9,527	9,619	10,236	10,957	11,417	12,137	12,826	12,582	12,302	11,407	10,485	9,819
Difference	-14	7	20	52	41	30	25	32	76	32	5	-15
Percent Difference	-0.1%	0.1%	0.2%	0.5%	0.4%	0.2%	0.2%	0.3%	0.6%	0.3%	0.1%	-0.2%
Critical (14.6%)												
DCR 2015 Without Project	6,792	6,845	7,056	8,709	8,973	9,429	9,790	9,604	9,448	8,607	7,656	7,158
DCR 2015 With Project	7,027	7,025	7,211	8,736	8,995	9,457	9,839	9,699	9,532	8,669	7,673	7,218
Difference	234	180	156	27	22	28	49	96	84	62	17	60
Percent Difference	3.4%	2.6%	2.2%	0.3%	0.2%	0.3%	0.5%	1.0%	0.9%	0.7%	0.2%	0.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

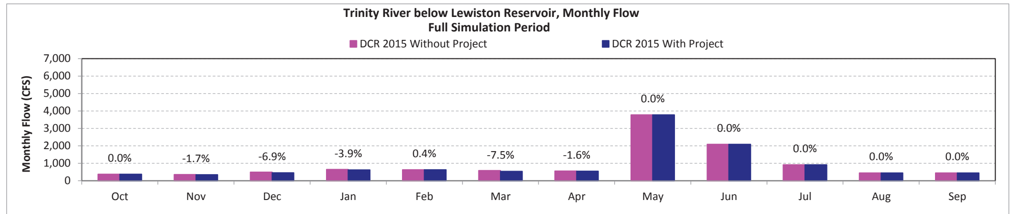
Table SW-04-a
Trinity River below Lewiston Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

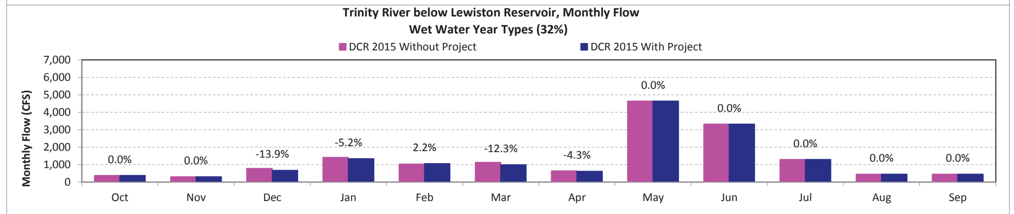
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	373	360	499	654	636	587	559	3,779	2,091	923	450	450
DCR 2015 With Project	373	354	464	629	639	543	550	3,779	2,091	923	450	450
Difference	0	-6	-34	-26	3	-44	-9	0	0	0	0	0
Percent Difference[3]	0.0%	-1.7%	-6.9%	-3.9%	0.4%	-7.5%	-1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	373	300	778	1,411	1,030	1,131	642	4,636	3,318	1,289	450	450
DCR 2015 With Project	373	300	670	1,337	1,053	993	614	4,636	3,318	1,289	450	450
Difference	0	0	-108	-74	22	-139	-28	0	0	0	0	0
Percent Difference	0.0%	0.0%	-13.9%	-5.2%	2.2%	-12.3%	-4.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (14.6%)												
DCR 2015 Without Project	373	713	621	316	760	436	469	4,462	2,488	1,048	450	450
DCR 2015 With Project	373	670	621	300	731	436	469	4,462	2,488	1,048	450	450
Difference	0	-43	0	-16	-29	0	0	0	0	0	0	0
Percent Difference	0.0%	-6.0%	0.0%	-4.9%	-3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (17.1%)												
DCR 2015 Without Project	373	300	300	300	517	319	507	3,774	1,672	869	450	450
DCR 2015 With Project	373	300	300	300	517	319	507	3,774	1,672	869	450	450
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (22%)												
DCR 2015 Without Project	373	300	300	300	300	300	529	3,216	1,251	667	450	450
DCR 2015 With Project	373	300	300	300	300	300	529	3,216	1,251	667	450	450
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
DCR 2015 Without Project	373	300	300	300	300	300	575	2,092	783	450	450	450
DCR 2015 With Project	373	300	300	300	300	300	575	2,092	783	450	450	450
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

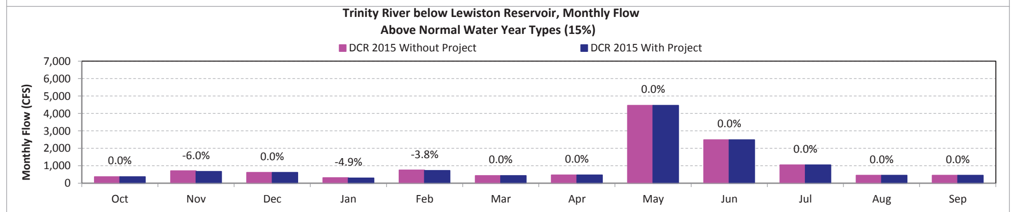
1 Based on the 82-year simulation period

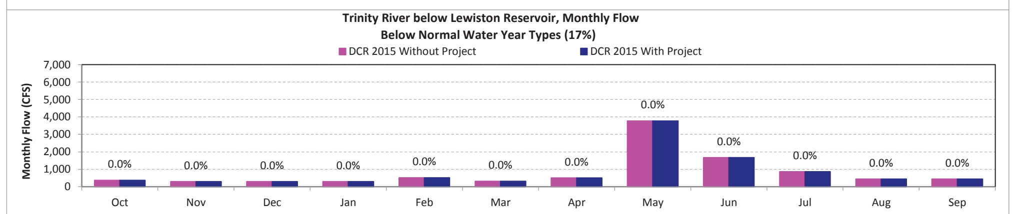
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

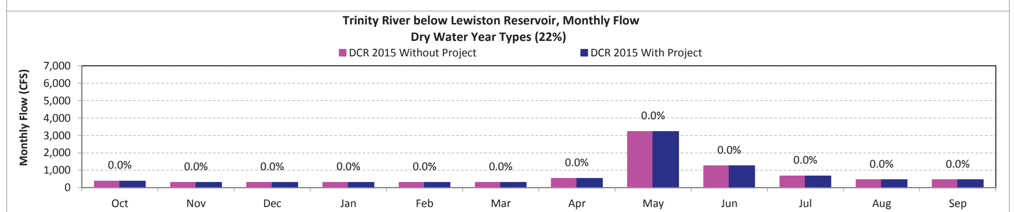
3 Relative difference of the monthly average











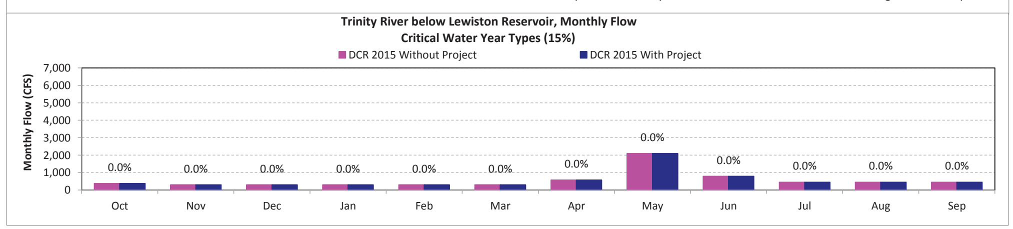


Table SW-05-a
Clear Creek Tunnel, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	964	353	292	446	92	274	409	190	563	1,795	1,888	1,659
DCR 2015 With Project	898	336	280	442	141	272	380	168	552	1,842	2,019	1,723
Difference	-66	-17	-13	-4	49	-2	-30	-23	-11	47	131	64
Percent Difference[3]	-6.8%	-4.9%	-4.4%	-0.8%	52.6%	-0.7%	-7.3%	-11.9%	-1.9%	2.6%	6.9%	3.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1,554	548	582	435	81	353	493	285	422	1,783	1,693	2,236
DCR 2015 With Project	1,551	547	587	431	197	342	479	281	444	1,836	1,867	2,261
Difference	-3	-1	5	-4	115	-11	-14	-4	22	53	174	25
Percent Difference	-0.2%	-0.2%	0.8%	-0.9%		-3.0%	-2.9%	-1.5%	5.2%	3.0%	10.3%	1.1%
Above Normal (14.6%)												
DCR 2015 Without Project	1,095	497	324	269	58	302	581	0	163	1,356	1,875	1,958
DCR 2015 With Project	1,014	454	253	231	79	274	571	0	273	1,348	2,313	2,038
Difference	-82	-43	-71	-39	21	-28	-10	0	109	-8	438	80
Percent Difference	-7.4%	-8.6%	-21.8%	-14.4%		-9.1%	-1.7%		67.1%	-0.6%	23.3%	4.1%
Below Normal (17.1%)												
DCR 2015 Without Project	536	186	83	328	76	400	304	68	559	1,609	1,912	1,342
DCR 2015 With Project	532	104	64	359	91	417	232	68	528	1,559	1,804	1,607
Difference	-3	-82	-19	30	15	18	-72	0	-32	-50	-108	265
Percent Difference	-0.6%	-44.2%	-22.6%	9.2%	19.2%	4.4%	-23.7%	0.0%	-5.7%	-3.1%	-5.7%	19.7%
Dry (22%)												
DCR 2015 Without Project	614	303	109	418	153	110	244	231	1,024	2,193	2,146	1,409
DCR 2015 With Project	619	241	89	402	175	130	238	209	872	2,332	2,203	1,474
Difference	5	-62	-20	-17	22	19	-5	-22	-152	139	56	65
Percent Difference	0.8%	-20.4%	-17.9%	-4.0%	14.1%	17.5%	-2.2%	-9.6%	-14.9%	6.3%	2.6%	4.6%
Critical (14.6%)												
DCR 2015 Without Project	579	60	152	823	78	172	427	257	578	1,879	1,908	856
DCR 2015 With Project	216	175	177	836	90	159	358	144	613	1,943	2,032	750
Difference	-363	115	24	12	13	-12	-69	-112	35	64	124	-106
Percent Difference	-62.7%		16.1%	1.5%	16.0%	-7.3%	-16.2%	-43.8%	6.1%	3.4%	6.5%	-12.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-06-a
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	187	187	189	197	197	191	191	265	181	85	85	148
DCR 2015 With Project	187	187	189	197	230	193	191	265	181	85	85	148
Difference	0	0	0	0	33	2	0	0	0	0	0	0
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	16.5%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	200	200	200	220	220	200	200	277	200	85	85	150
DCR 2015 With Project	200	200	200	220	327	205	200	277	200	85	85	150
Difference	0	0	0	0	108	5	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	49.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (14.6%)												
DCR 2015 Without Project	200	200	200	192	196	196	196	277	200	85	85	150
DCR 2015 With Project	200	200	200	192	196	196	196	277	200	85	85	150
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (17.1%)												
DCR 2015 Without Project	193	193	193	189	189	189	189	269	186	85	85	150
DCR 2015 With Project	193	193	193	189	189	189	189	269	186	85	85	150
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (22%)												
DCR 2015 Without Project	181	182	182	192	192	192	192	264	180	85	85	150
DCR 2015 With Project	181	182	182	192	184	192	192	264	180	85	85	150
Difference	0	0	0	0	-7	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	-3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
DCR 2015 Without Project	146	149	163	168	168	168	168	224	120	85	85	133
DCR 2015 With Project	146	149	163	168	168	168	168	224	120	85	85	133
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

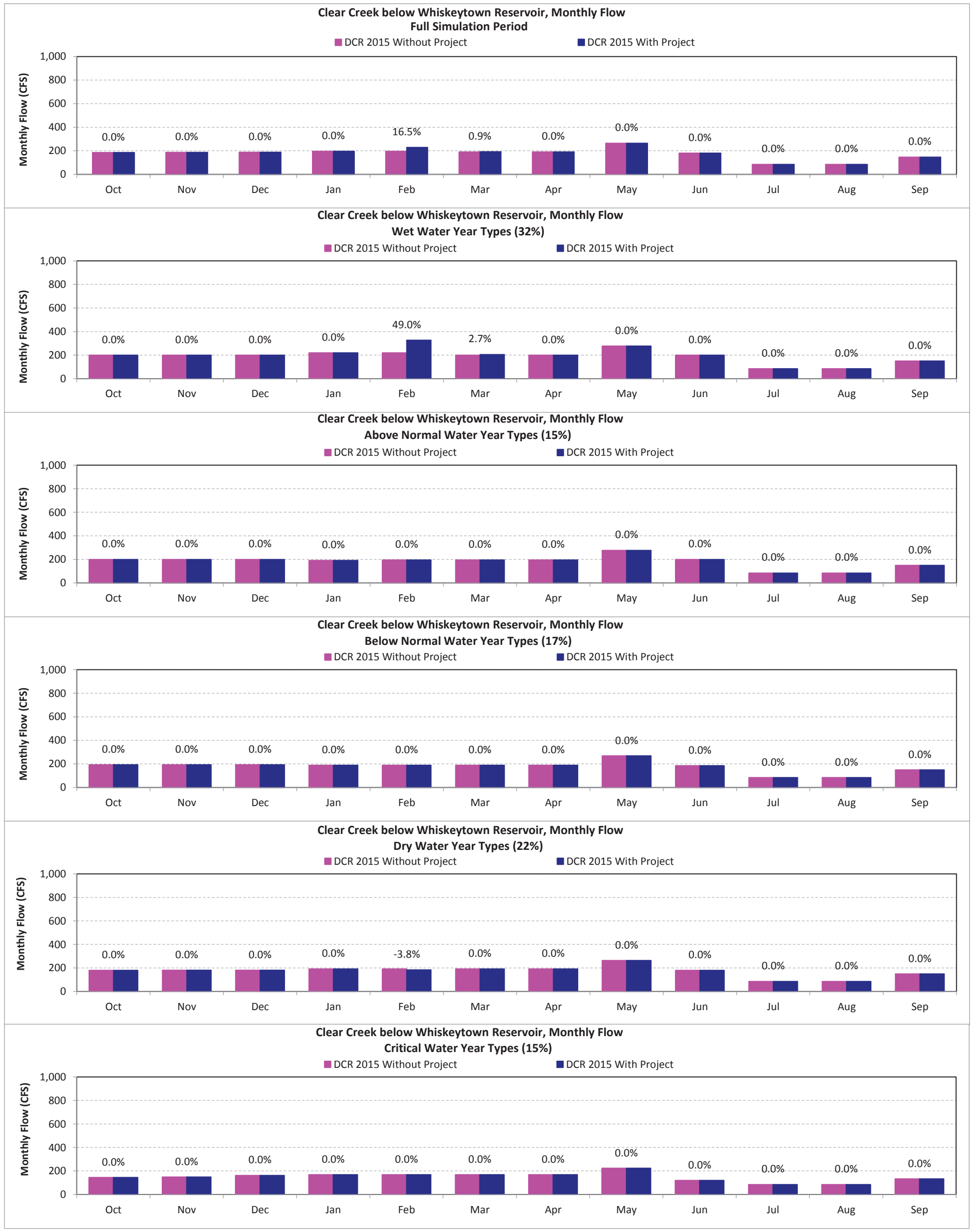


Table SW-07-a
Shasta Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	2,575	2,532	2,706	2,981	3,259	3,622	3,921	3,952	3,648	3,166	2,847	2,655
DCR 2015 With Project	2,698	2,639	2,790	3,053	3,301	3,676	3,983	4,023	3,762	3,292	2,986	2,779
Difference	123	108	84	72	42	53	61	71	115	126	139	124
Percent Difference[3]	4.8%	4.3%	3.1%	2.4%	1.3%	1.5%	1.6%	1.8%	3.1%	4.0%	4.9%	4.7%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	3,015	2,863	3,038	3,413	3,638	3,860	4,317	4,474	4,291	3,877	3,530	3,104
DCR 2015 With Project	3,041	2,870	3,041	3,428	3,593	3,851	4,318	4,473	4,278	3,852	3,530	3,113
Difference	26	7	4	15	-45	-10	1	-1	-13	-25	0	9
Percent Difference	0.9%	0.2%	0.1%	0.4%	-1.2%	-0.2%	0.0%	0.0%	-0.3%	-0.6%	0.0%	0.3%
Above Normal (14.6%)												
DCR 2015 Without Project	2,916	2,741	2,948	3,102	3,381	3,960	4,405	4,478	4,121	3,538	3,208	3,014
DCR 2015 With Project	3,067	2,895	3,013	3,173	3,418	3,996	4,437	4,482	4,201	3,649	3,374	3,201
Difference	151	154	65	71	36	37	31	4	79	111	166	187
Percent Difference	5.2%	5.6%	2.2%	2.3%	1.1%	0.9%	0.7%	0.1%	1.9%	3.2%	5.2%	6.2%
Below Normal (17.1%)												
DCR 2015 Without Project	2,809	2,886	2,970	2,933	3,285	3,684	4,056	4,075	3,733	3,235	2,918	2,848
DCR 2015 With Project	2,957	2,986	3,036	3,015	3,343	3,743	4,114	4,148	3,902	3,412	3,115	3,031
Difference	148	100	65	83	58	58	59	73	169	177	196	183
Percent Difference	5.3%	3.5%	2.2%	2.8%	1.8%	1.6%	1.4%	1.8%	4.5%	5.5%	6.7%	6.4%
Dry (22%)												
DCR 2015 Without Project	2,405	2,485	2,728	2,815	3,183	3,663	3,812	3,730	3,352	2,829	2,530	2,490
DCR 2015 With Project	2,563	2,621	2,843	2,889	3,247	3,732	3,888	3,822	3,521	3,030	2,719	2,630
Difference	158	136	115	74	64	69	76	92	170	202	189	140
Percent Difference	6.6%	5.5%	4.2%	2.6%	2.0%	1.9%	2.0%	2.5%	5.1%	7.1%	7.5%	5.6%
Critical (14.6%)												
DCR 2015 Without Project	1,261	1,261	1,403	2,230	2,400	2,636	2,588	2,486	2,126	1,677	1,398	1,343
DCR 2015 With Project	1,483	1,507	1,657	2,412	2,587	2,814	2,792	2,744	2,406	1,971	1,666	1,562
Difference	222	245	255	183	187	178	204	258	280	294	268	219
Percent Difference	17.6%	19.5%	18.2%	8.2%	7.8%	6.7%	7.9%	10.4%	13.1%	17.5%	19.1%	16.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

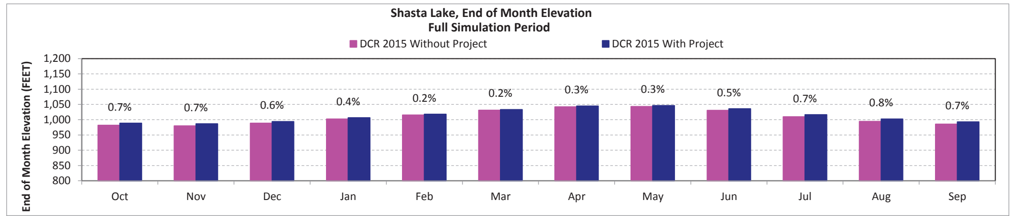
Table SW-08-a
Shasta Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

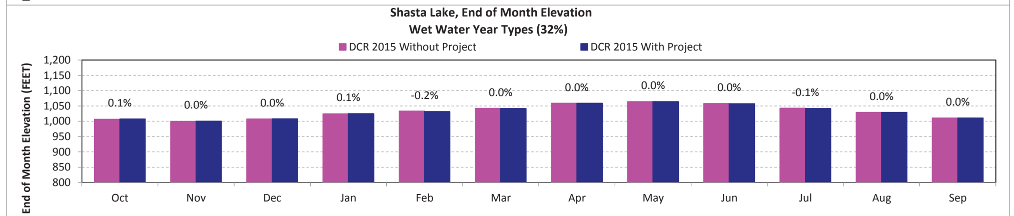
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	982	980	989	1,003	1,015	1,031	1,042	1,043	1,031	1,010	995	986
DCR 2015 With Project	989	987	994	1,007	1,018	1,033	1,045	1,046	1,036	1,017	1,003	993
Difference	7	7	5	4	3	2	3	3	5	7	8	7
Percent Difference[3]	0.7%	0.7%	0.6%	0.4%	0.2%	0.2%	0.3%	0.3%	0.5%	0.7%	0.8%	0.7%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1,006	1,000	1,008	1,024	1,033	1,042	1,059	1,064	1,058	1,042	1,029	1,010
DCR 2015 With Project	1,008	1,000	1,008	1,025	1,031	1,041	1,059	1,064	1,057	1,041	1,029	1,011
Difference	1	0	0	1	-2	0	0	0	0	-1	0	0
Percent Difference	0.1%	0.0%	0.0%	0.1%	-0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
Above Normal (14.6%)												
DCR 2015 Without Project	1,002	994	1,004	1,009	1,022	1,046	1,062	1,064	1,052	1,029	1,015	1,007
DCR 2015 With Project	1,009	1,001	1,006	1,013	1,024	1,047	1,063	1,064	1,054	1,034	1,022	1,015
Difference	7	7	3	4	2	1	1	0	3	5	7	8
Percent Difference	0.7%	0.7%	0.3%	0.4%	0.2%	0.1%	0.1%	0.0%	0.3%	0.4%	0.7%	0.8%
Below Normal (17.1%)												
DCR 2015 Without Project	997	1,000	1,004	1,000	1,016	1,033	1,049	1,050	1,037	1,016	1,002	999
DCR 2015 With Project	1,004	1,005	1,007	1,004	1,019	1,036	1,051	1,052	1,043	1,024	1,011	1,007
Difference	7	5	4	4	3	2	2	3	6	8	9	8
Percent Difference	0.7%	0.5%	0.4%	0.4%	0.3%	0.2%	0.2%	0.3%	0.6%	0.8%	0.9%	0.8%
Dry (22%)												
DCR 2015 Without Project	977	981	992	995	1,012	1,033	1,039	1,036	1,020	998	983	981
DCR 2015 With Project	985	988	998	999	1,015	1,036	1,042	1,040	1,028	1,007	993	988
Difference	8	7	6	4	3	3	3	4	7	9	9	7
Percent Difference	0.9%	0.7%	0.6%	0.4%	0.3%	0.3%	0.3%	0.4%	0.7%	0.9%	0.9%	0.7%
Critical (14.6%)												
DCR 2015 Without Project	897	898	910	964	974	988	985	980	960	931	909	904
DCR 2015 With Project	916	918	931	975	984	997	996	993	976	952	931	922
Difference	19	21	21	11	11	9	10	14	16	21	22	19
Percent Difference	2.1%	2.3%	2.3%	1.2%	1.1%	0.9%	1.0%	1.4%	1.7%	2.3%	2.4%	2.1%

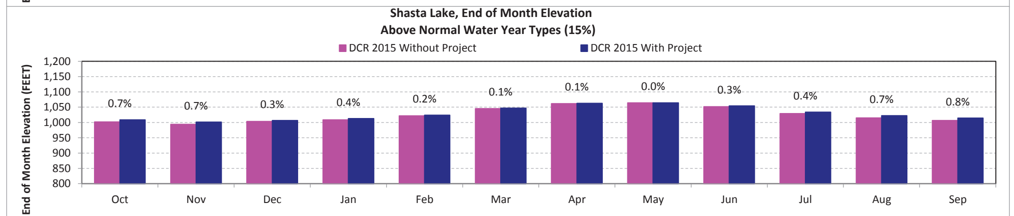
1 Based on the 82-year simulation period

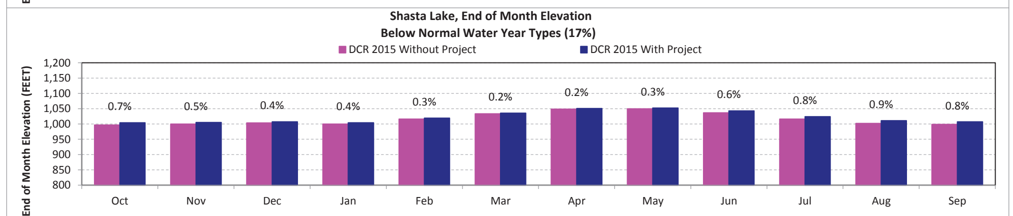
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

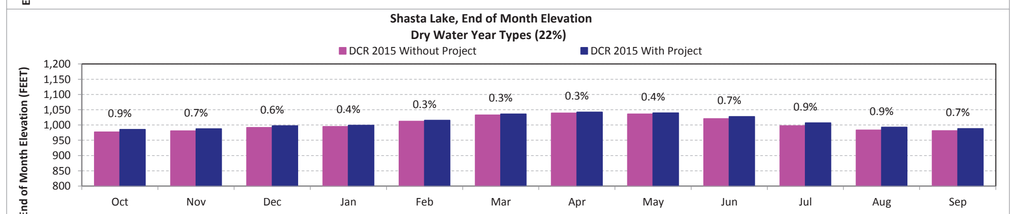
3 Relative difference of the monthly average











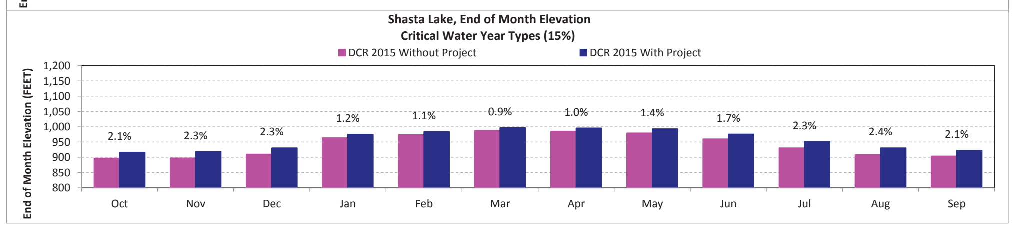


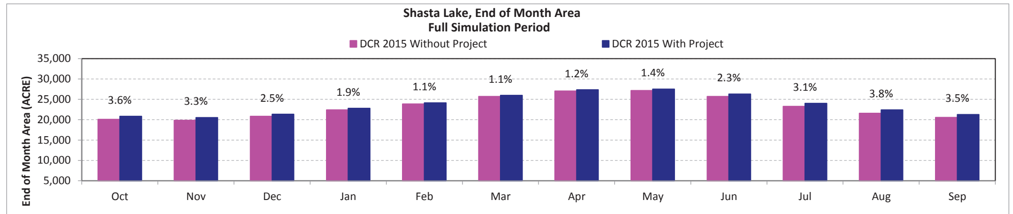
Table SW-09-a
Shasta Lake, End of Month Area
Long-term Average and Average by Water Year Type

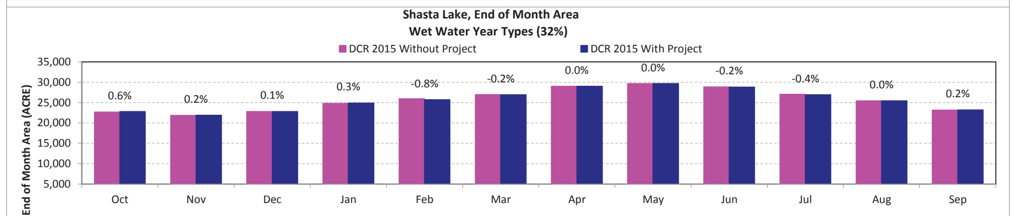
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	20,106	19,878	20,853	22,401	23,883	25,699	27,052	27,162	25,710	23,292	21,606	20,557
DCR 2015 With Project	20,834	20,529	21,373	22,820	24,137	25,981	27,364	27,530	26,302	24,020	22,420	21,286
Difference	728	651	521	419	254	282	313	368	592	728	814	729
Percent Difference[3]	3.6%	3.3%	2.5%	1.9%	1.1%	1.1%	1.2%	1.4%	2.3%	3.1%	3.8%	3.5%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	22,661	21,850	22,788	24,800	25,924	26,966	28,991	29,664	28,861	27,024	25,422	23,141
DCR 2015 With Project	22,801	21,889	22,808	24,878	25,711	26,914	28,994	29,659	28,816	26,925	25,423	23,187
Difference	140	39	20	79	-214	-51	3	-5	-45	-99	1	47
Percent Difference	0.6%	0.2%	0.1%	0.3%	-0.8%	-0.2%	0.0%	0.0%	-0.2%	-0.4%	0.0%	0.2%
Above Normal (14.6%)												
DCR 2015 Without Project	22,136	21,193	22,306	23,089	24,603	27,424	29,371	29,680	28,152	25,447	23,702	22,665
DCR 2015 With Project	22,949	22,030	22,657	23,491	24,809	27,592	29,504	29,699	28,492	26,014	24,591	23,664
Difference	813	837	351	402	207	168	134	19	340	567	888	1,000
Percent Difference	3.7%	3.9%	1.6%	1.7%	0.8%	0.6%	0.5%	0.1%	1.2%	2.2%	3.7%	4.4%
Below Normal (17.1%)												
DCR 2015 Without Project	21,541	21,944	22,393	22,127	24,023	25,986	27,788	27,897	26,350	23,825	22,139	21,761
DCR 2015 With Project	22,352	22,507	22,773	22,595	24,343	26,280	28,055	28,225	27,132	24,775	23,201	22,752
Difference	811	563	380	468	320	294	268	328	781	951	1,061	991
Percent Difference	3.8%	2.6%	1.7%	2.1%	1.3%	1.1%	1.0%	1.2%	3.0%	4.0%	4.8%	4.6%
Dry (22%)												
DCR 2015 Without Project	19,300	19,735	21,051	21,504	23,482	25,927	26,641	26,266	24,397	21,641	20,006	19,778
DCR 2015 With Project	20,199	20,508	21,701	21,935	23,836	26,283	27,006	26,711	25,251	22,734	21,053	20,559
Difference	899	772	650	431	354	356	364	445	853	1,094	1,048	781
Percent Difference	4.7%	3.9%	3.1%	2.0%	1.5%	1.4%	1.4%	1.7%	3.5%	5.1%	5.2%	4.0%
Critical (14.6%)												
DCR 2015 Without Project	12,078	12,096	13,112	18,181	19,179	20,556	20,287	19,710	17,660	14,903	13,020	12,617
DCR 2015 With Project	13,640	13,807	14,855	19,280	20,266	21,549	21,425	21,166	19,271	16,777	14,885	14,168
Difference	1,562	1,711	1,744	1,100	1,087	994	1,138	1,456	1,611	1,874	1,865	1,551
Percent Difference	12.9%	14.1%	13.3%	6.0%	5.7%	4.8%	5.6%	7.4%	9.1%	12.6%	14.3%	12.3%

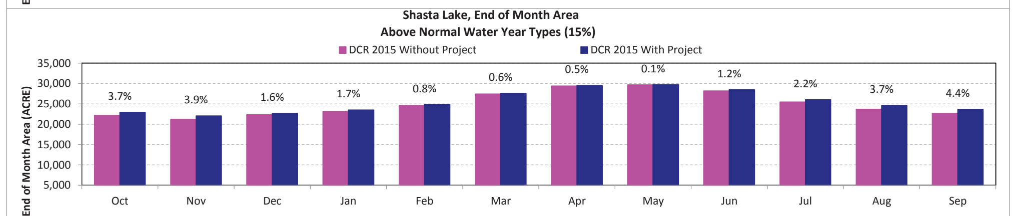
1 Based on the 82-year simulation period

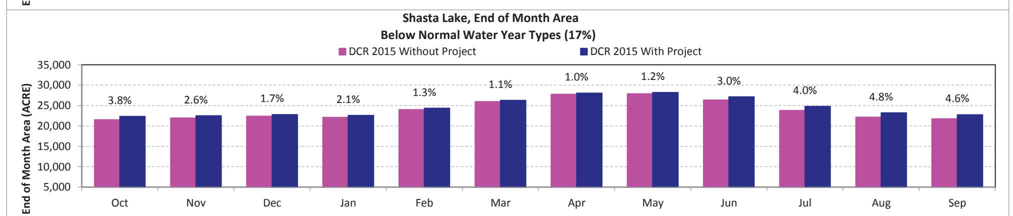
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

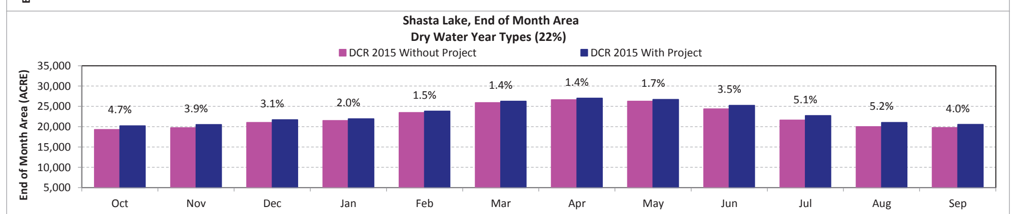
3 Relative difference of the monthly average











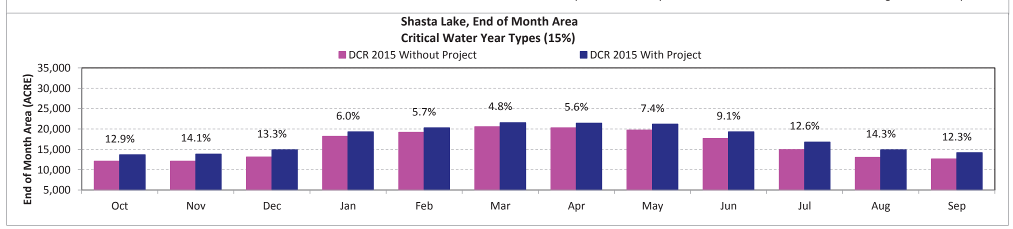


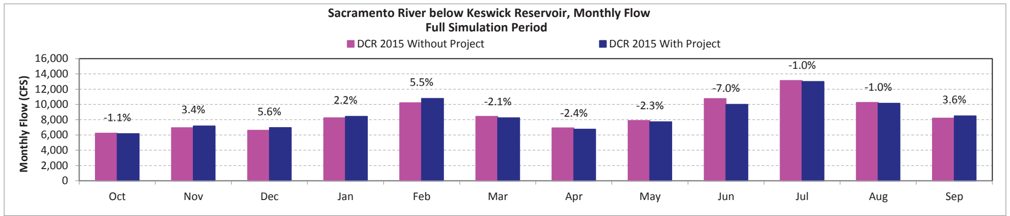
Table SW-10-a
Sacramento River below Keswick Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

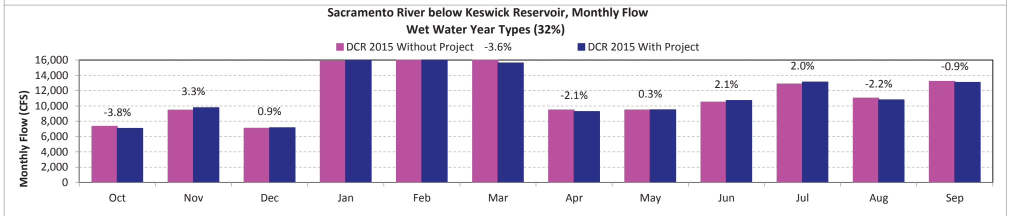
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	6,230	6,943	6,597	8,246	10,204	8,424	6,927	7,893	10,762	13,122	10,243	8,208
DCR 2015 With Project	6,163	7,181	6,967	8,427	10,768	8,245	6,759	7,712	10,010	12,990	10,138	8,501
Difference	-67	238	370	181	563	-180	-168	-181	-753	-132	-105	293
Percent Difference[3]	-1.1%	3.4%	5.6%	2.2%	5.5%	-2.1%	-2.4%	-2.3%	-7.0%	-1.0%	-1.0%	3.6%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	7,343	9,448	7,089	15,821	18,354	16,192	9,474	9,467	10,493	12,868	11,030	13,191
DCR 2015 With Project	7,064	9,762	7,151	16,271	19,444	15,608	9,272	9,493	10,711	13,123	10,791	13,071
Difference	-279	314	62	450	1,090	-584	-202	26	218	255	-239	-121
Percent Difference	-3.8%	3.3%	0.9%	2.8%	5.9%	-3.6%	-2.1%	0.3%	2.1%	2.0%	-2.2%	-0.9%
Above Normal (14.6%)												
DCR 2015 Without Project	6,382	10,153	6,306	7,449	14,219	7,944	6,079	7,764	11,277	14,391	10,473	8,699
DCR 2015 With Project	6,760	10,057	7,673	7,228	14,858	7,905	6,163	8,198	10,126	13,853	10,008	8,422
Difference	378	-96	1,367	-221	639	-40	84	434	-1,151	-538	-464	-277
Percent Difference	5.9%	-0.9%	21.7%	-3.0%	4.5%	-0.5%	1.4%	5.6%	-10.2%	-3.7%	-4.4%	-3.2%
Below Normal (17.1%)												
DCR 2015 Without Project	5,784	5,085	7,943	4,082	5,800	4,675	5,219	7,087	10,773	12,876	10,000	5,600
DCR 2015 With Project	6,345	5,801	8,489	4,387	6,279	4,693	5,148	6,847	9,121	12,688	9,562	6,082
Difference	561	716	546	305	479	18	-71	-240	-1,652	-188	-438	482
Percent Difference	9.7%	14.1%	6.9%	7.5%	8.3%	0.4%	-1.4%	-3.4%	-15.3%	-1.5%	-4.4%	8.6%
Dry (22%)												
DCR 2015 Without Project	5,573	4,576	7,104	3,881	3,624	3,770	5,581	7,176	11,252	13,672	9,834	5,051
DCR 2015 With Project	5,270	4,888	7,428	4,182	3,865	3,714	5,454	6,882	9,792	13,333	10,017	5,939
Difference	-303	313	324	300	241	-56	-127	-294	-1,460	-339	183	889
Percent Difference	-5.4%	6.8%	4.6%	7.7%	6.7%	-1.5%	-2.3%	-4.1%	-13.0%	-2.5%	1.9%	17.6%
Critical (14.6%)												
DCR 2015 Without Project	5,173	4,022	3,491	4,036	3,539	3,428	6,269	6,625	10,083	11,865	9,206	4,697
DCR 2015 With Project	4,743	3,761	3,395	3,713	3,468	3,569	5,750	5,620	9,738	11,674	9,706	5,345
Difference	-430	-260	-96	-323	-71	140	-518	-1,005	-346	-191	499	649
Percent Difference	-8.3%	-6.5%	-2.7%	-8.0%	-2.0%	4.1%	-8.3%	-15.2%	-3.4%	-1.6%	5.4%	13.8%

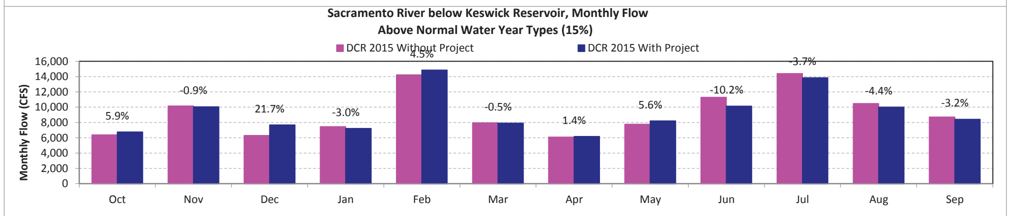
1 Based on the 82-year simulation period

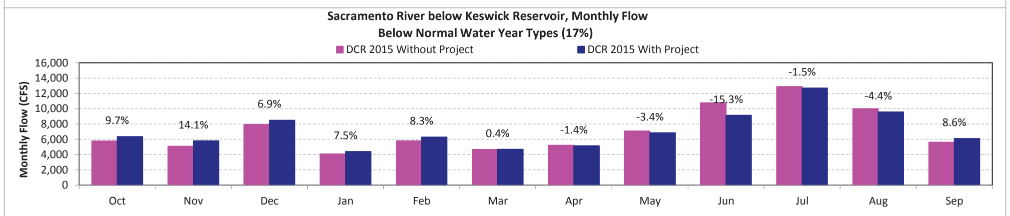
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

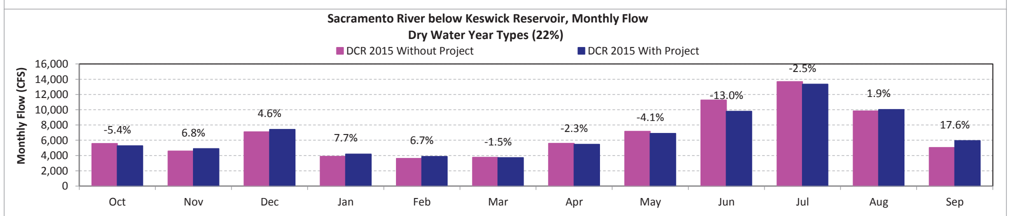
3 Relative difference of the monthly average











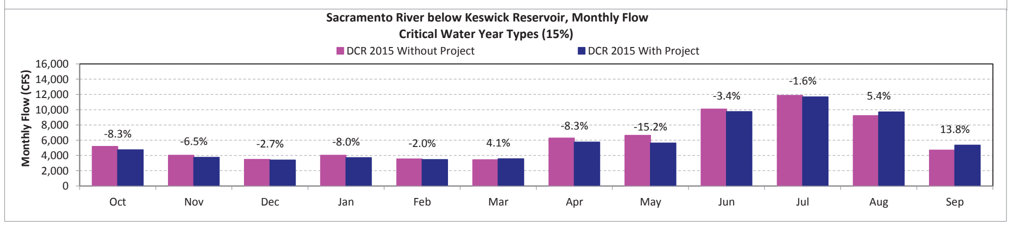


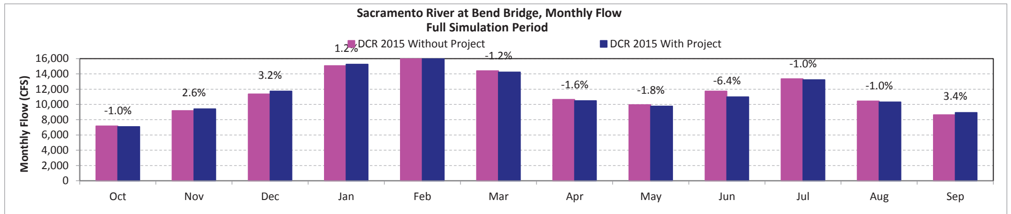
Table SW-11-a
Sacramento River at Bend Bridge, Monthly Flow
Long-term Average and Average by Water Year Type

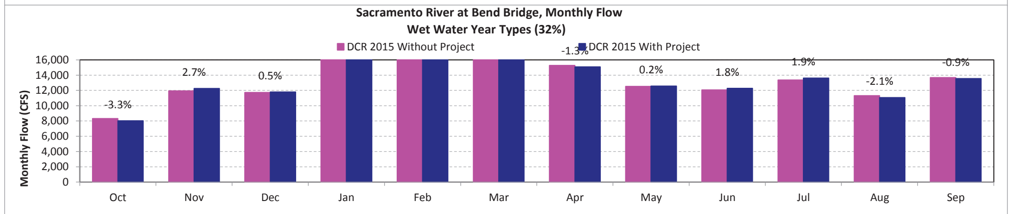
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	7,166	9,176	11,373	15,073	17,893	14,411	10,654	9,955	11,733	13,365	10,432	8,648
DCR 2015 With Project	7,096	9,416	11,741	15,253	18,489	14,231	10,489	9,776	10,983	13,236	10,325	8,940
Difference	-70	240	369	179	596	-179	-165	-179	-750	-129	-107	291
Percent Difference[3]	-1.0%	2.6%	3.2%	1.2%	3.3%	-1.2%	-1.6%	-1.8%	-6.4%	-1.0%	-1.0%	3.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	8,310	11,946	11,741	27,358	30,060	25,038	15,283	12,540	12,060	13,367	11,308	13,684
DCR 2015 With Project	8,033	12,263	11,800	27,807	31,256	24,457	15,087	12,567	12,282	13,622	11,068	13,565
Difference	-277	317	60	448	1,196	-581	-196	28	222	254	-240	-119
Percent Difference	-3.3%	2.7%	0.5%	1.6%	4.0%	-2.3%	-1.3%	0.2%	1.8%	1.9%	-2.1%	-0.9%
Above Normal (14.6%)												
DCR 2015 Without Project	7,437	12,453	11,219	15,887	23,338	15,455	10,427	10,110	12,162	14,490	10,633	9,149
DCR 2015 With Project	7,815	12,353	12,588	15,666	23,979	15,413	10,512	10,544	11,009	13,958	10,169	8,872
Difference	378	-100	1,368	-221	642	-42	85	434	-1,153	-532	-463	-277
Percent Difference	5.1%	-0.8%	12.2%	-1.4%	2.8%	-0.3%	0.8%	4.3%	-9.5%	-3.7%	-4.4%	-3.0%
Below Normal (17.1%)												
DCR 2015 Without Project	6,958	7,388	13,017	9,016	11,855	8,849	8,563	8,735	11,544	12,975	10,115	5,975
DCR 2015 With Project	7,512	8,100	13,559	9,319	12,332	8,866	8,493	8,495	9,893	12,796	9,672	6,456
Difference	554	711	542	303	478	17	-70	-240	-1,651	-179	-443	481
Percent Difference	8.0%	9.6%	4.2%	3.4%	4.0%	0.2%	-0.8%	-2.7%	-14.3%	-1.4%	-4.4%	8.0%
Dry (22%)												
DCR 2015 Without Project	6,409	6,815	12,881	7,042	8,923	8,298	7,782	8,557	11,859	13,785	9,996	5,514
DCR 2015 With Project	6,096	7,131	13,202	7,338	9,156	8,243	7,656	8,264	10,400	13,452	10,175	6,397
Difference	-312	317	321	296	233	-56	-125	-293	-1,459	-332	180	883
Percent Difference	-4.9%	4.6%	2.5%	4.2%	2.6%	-0.7%	-1.6%	-3.4%	-12.3%	-2.4%	1.8%	16.0%
Critical (14.6%)												
DCR 2015 Without Project	5,798	5,525	6,548	6,757	6,586	5,996	7,600	7,723	10,630	12,063	9,361	5,056
DCR 2015 With Project	5,363	5,270	6,455	6,433	6,518	6,136	7,079	6,722	10,291	11,870	9,857	5,697
Difference	-435	-255	-93	-324	-67	140	-520	-1,001	-338	-193	496	641
Percent Difference	-7.5%	-4.6%	-1.4%	-4.8%	-1.0%	2.3%	-6.8%	-13.0%	-3.2%	-1.6%	5.3%	12.7%

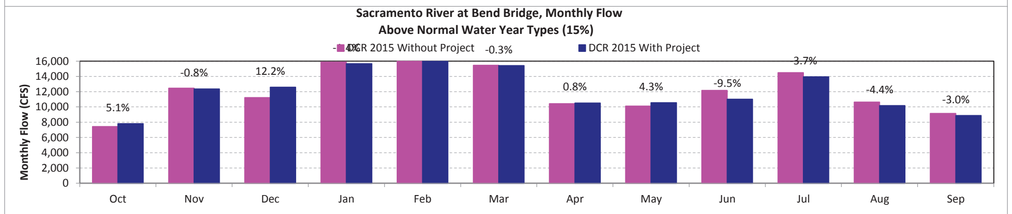
1 Based on the 82-year simulation period

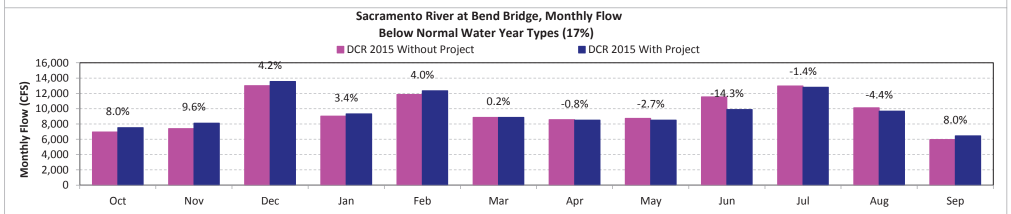
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

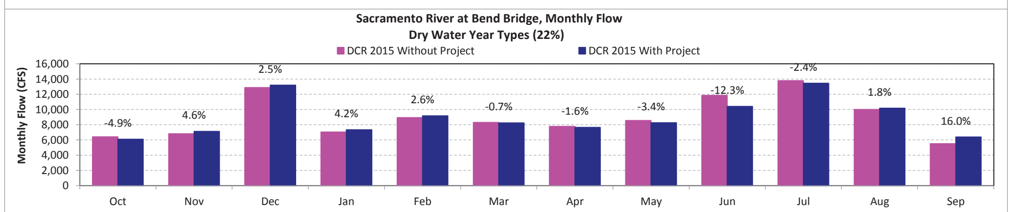
3 Relative difference of the monthly average











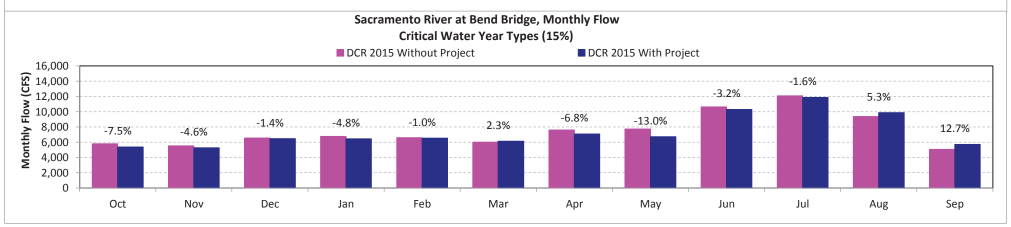


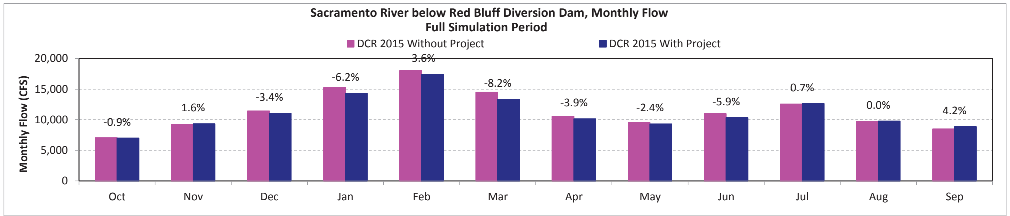
Table SW-12-a
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Long-term Average and Average by Water Year Type

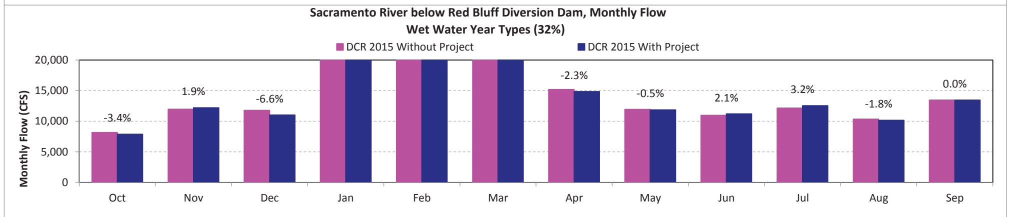
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	7,055	9,194	11,427	15,241	18,024	14,498	10,547	9,551	10,977	12,544	9,763	8,497
DCR 2015 With Project	6,994	9,339	11,037	14,297	17,381	13,305	10,140	9,318	10,332	12,631	9,764	8,855
Difference	-61	145	-390	-944	-643	-1,194	-407	-232	-645	87	1	358
Percent Difference[3]	-0.9%	1.6%	-3.4%	-6.2%	-3.6%	-8.2%	-3.9%	-2.4%	-5.9%	0.7%	0.0%	4.2%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	8,164	11,971	11,795	27,643	30,275	25,194	15,200	11,940	10,981	12,158	10,349	13,457
DCR 2015 With Project	7,889	12,202	11,019	27,024	30,407	23,822	14,852	11,877	11,209	12,551	10,160	13,458
Difference	-275	231	-776	-618	131	-1,371	-348	-62	228	393	-189	1
Percent Difference	-3.4%	1.9%	-6.6%	-2.2%	0.4%	-5.4%	-2.3%	-0.5%	2.1%	3.2%	-1.8%	0.0%
Above Normal (14.6%)												
DCR 2015 Without Project	7,321	12,466	11,267	16,133	23,534	15,575	10,289	9,539	11,109	13,357	9,748	8,943
DCR 2015 With Project	7,707	12,182	11,062	14,187	22,520	14,120	9,754	9,795	10,226	13,417	9,579	8,824
Difference	386	-284	-205	-1,946	-1,014	-1,456	-534	256	-883	60	-169	-119
Percent Difference	5.3%	-2.3%	-1.8%	-12.1%	-4.3%	-9.3%	-5.2%	2.7%	-8.0%	0.5%	-1.7%	-1.3%
Below Normal (17.1%)												
DCR 2015 Without Project	6,856	7,416	13,075	9,131	11,942	8,876	8,429	8,386	10,896	12,267	9,556	5,876
DCR 2015 With Project	7,432	8,045	13,011	7,951	11,240	7,528	8,029	8,109	9,368	12,395	9,315	6,371
Difference	576	629	-64	-1,180	-702	-1,348	-401	-277	-1,528	128	-242	494
Percent Difference	8.4%	8.5%	-0.5%	-12.9%	-5.9%	-15.2%	-4.8%	-3.3%	-14.0%	1.0%	-2.5%	8.4%
Dry (22%)												
DCR 2015 Without Project	6,312	6,830	12,955	7,115	8,991	8,357	7,658	8,328	11,351	13,294	9,595	5,415
DCR 2015 With Project	6,013	7,034	12,805	6,529	7,861	7,192	7,335	8,083	10,077	13,102	9,849	6,312
Difference	-300	204	-150	-587	-1,130	-1,165	-323	-245	-1,275	-191	254	897
Percent Difference	-4.7%	3.0%	-1.2%	-8.2%	-12.6%	-13.9%	-4.2%	-2.9%	-11.2%	-1.4%	2.6%	16.6%
Critical (14.6%)												
DCR 2015 Without Project	5,732	5,525	6,576	6,799	6,615	6,020	7,527	7,578	10,372	11,767	9,002	4,985
DCR 2015 With Project	5,300	5,258	6,095	5,891	5,463	5,611	6,984	6,560	10,049	11,587	9,489	5,626
Difference	-432	-267	-481	-908	-1,151	-409	-543	-1,017	-323	-180	487	641
Percent Difference	-7.5%	-4.8%	-7.3%	-13.4%	-17.4%	-6.8%	-7.2%	-13.4%	-3.1%	-1.5%	5.4%	12.9%

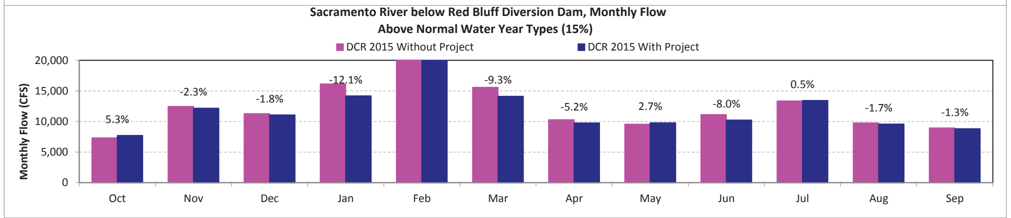
1 Based on the 82-year simulation period

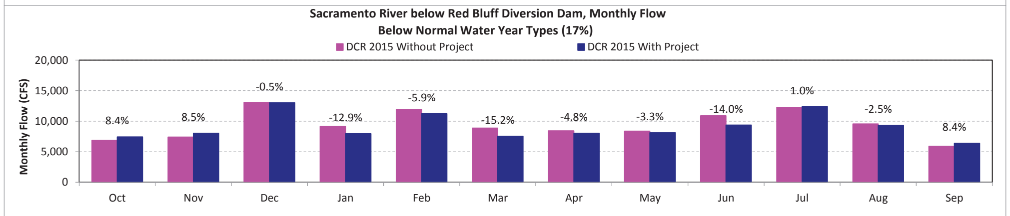
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

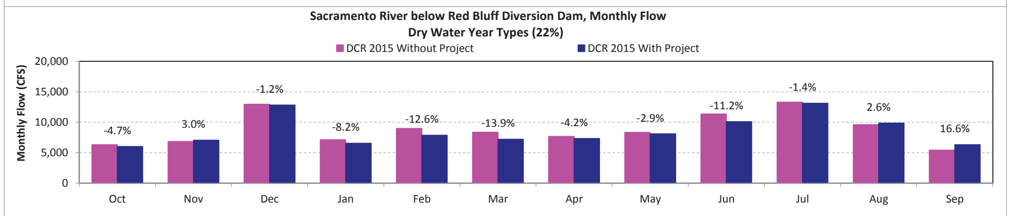
3 Relative difference of the monthly average











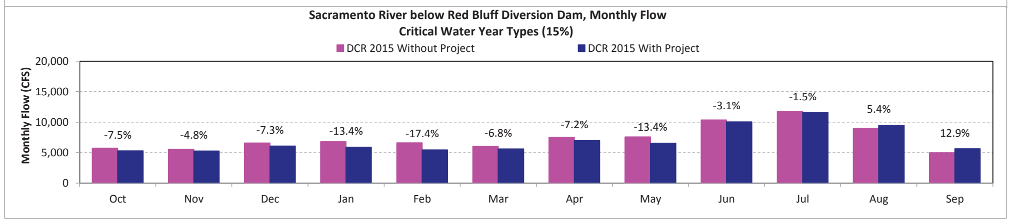


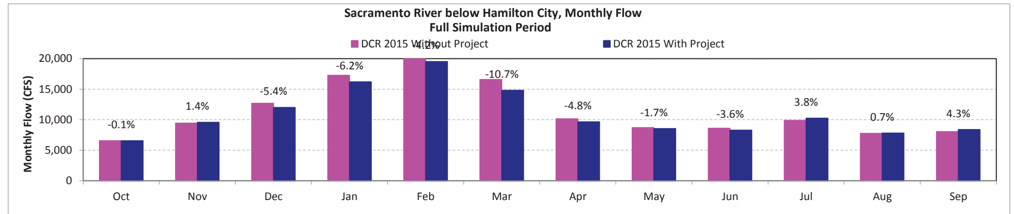
Table SW-13-a
Sacramento River below Hamilton City, Monthly Flow
Long-term Average and Average by Water Year Type

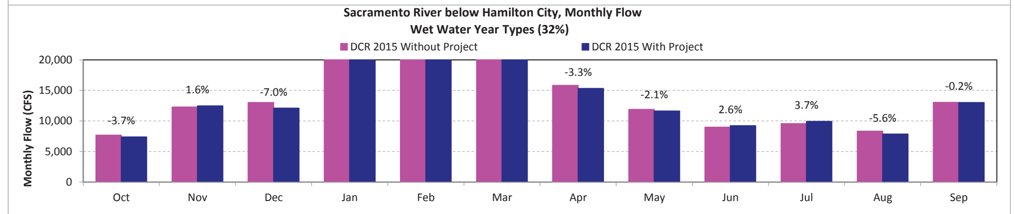
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	6,565	9,425	12,694	17,270	20,369	16,577	10,143	8,701	8,599	9,873	7,752	8,044
DCR 2015 With Project	6,557	9,555	12,011	16,203	19,522	14,812	9,652	8,550	8,290	10,249	7,809	8,391
Difference	-8	130	-683	-1,068	-847	-1,766	-492	-151	-309	375	57	347
Percent Difference[3]	-0.1%	1.4%	-5.4%	-6.2%	-4.2%	-10.7%	-4.8%	-1.7%	-3.6%	3.8%	0.7%	4.3%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	7,665	12,273	13,006	31,286	33,968	28,252	15,833	11,885	8,975	9,567	8,324	13,034
DCR 2015 With Project	7,381	12,475	12,097	30,533	33,897	26,415	15,314	11,637	9,208	9,919	7,858	13,013
Difference	-284	202	-909	-754	-71	-1,836	-519	-248	232	352	-466	-21
Percent Difference	-3.7%	1.6%	-7.0%	-2.4%	-0.2%	-6.5%	-3.3%	-2.1%	2.6%	3.7%	-5.6%	-0.2%
Above Normal (14.6%)												
DCR 2015 Without Project	6,852	12,744	12,568	18,757	26,660	18,247	10,178	8,888	8,721	10,599	7,645	8,482
DCR 2015 With Project	7,154	12,377	11,746	16,588	25,359	15,918	9,243	8,876	8,182	10,950	7,483	8,367
Difference	302	-367	-822	-2,169	-1,301	-2,329	-935	-11	-539	351	-163	-114
Percent Difference	4.4%	-2.9%	-6.5%	-11.6%	-4.9%	-12.8%	-9.2%	-0.1%	-6.2%	3.3%	-2.1%	-1.3%
Below Normal (17.1%)												
DCR 2015 Without Project	6,479	7,709	14,437	10,480	13,675	10,296	7,846	7,196	8,330	9,444	7,432	5,384
DCR 2015 With Project	7,186	8,368	13,961	9,158	12,755	8,258	7,078	6,933	7,350	10,018	7,545	5,899
Difference	707	660	-475	-1,322	-920	-2,038	-768	-263	-980	573	113	515
Percent Difference	10.9%	8.6%	-3.3%	-12.6%	-6.7%	-19.8%	-9.8%	-3.7%	-11.8%	6.1%	1.5%	9.6%
Dry (22%)												
DCR 2015 Without Project	5,745	7,072	14,590	7,913	10,382	9,934	6,532	6,838	8,599	10,472	7,512	4,942
DCR 2015 With Project	5,604	7,257	14,120	7,266	9,047	8,114	6,275	7,017	7,936	10,777	7,896	5,790
Difference	-141	185	-470	-648	-1,335	-1,820	-257	180	-663	304	384	848
Percent Difference	-2.5%	2.6%	-3.2%	-8.2%	-12.9%	-18.3%	-3.9%	2.6%	-7.7%	2.9%	5.1%	17.2%
Critical (14.6%)												
DCR 2015 Without Project	5,222	5,466	7,269	7,374	7,407	6,907	5,879	6,170	7,973	9,412	7,351	4,549
DCR 2015 With Project	4,870	5,237	6,651	6,396	6,150	6,257	5,860	5,724	8,038	9,739	8,207	5,207
Difference	-353	-230	-618	-979	-1,257	-649	-19	-446	65	326	857	658
Percent Difference	-6.8%	-4.2%	-8.5%	-13.3%	-17.0%	-9.4%	-0.3%	-7.2%	0.8%	3.5%	11.7%	14.5%

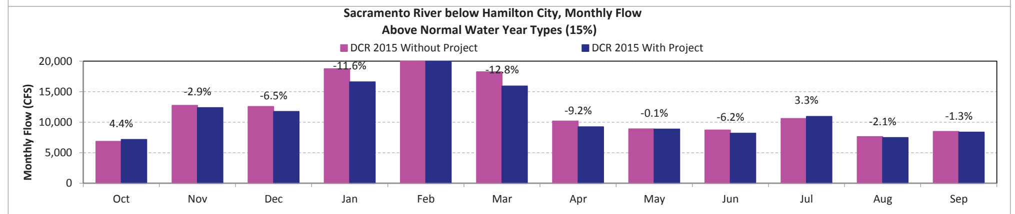
1 Based on the 82-year simulation period

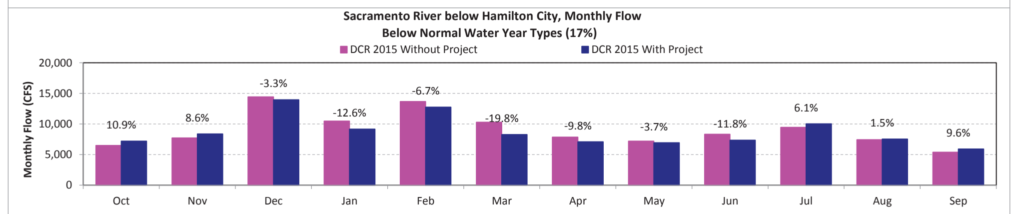
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

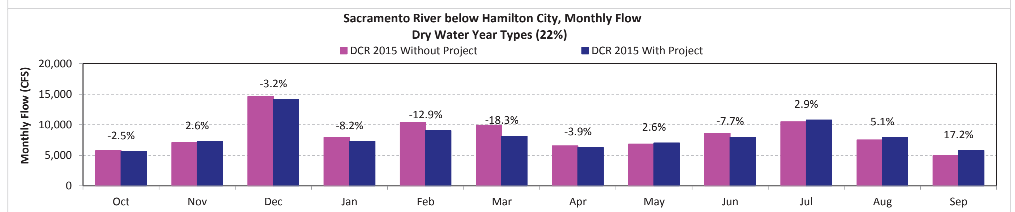
3 Relative difference of the monthly average











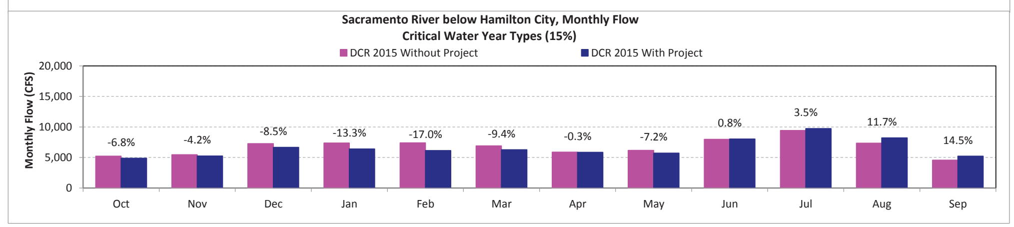


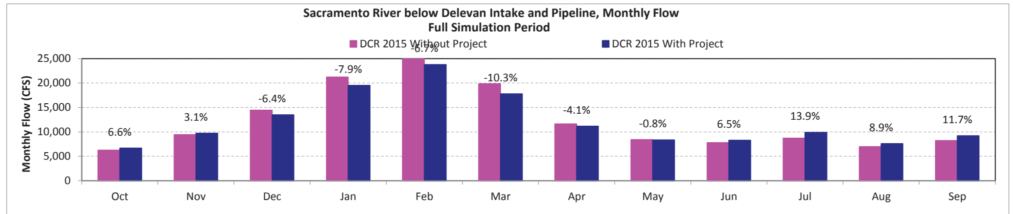
Table SW-14-a
Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Long-term Average and Average by Water Year Type

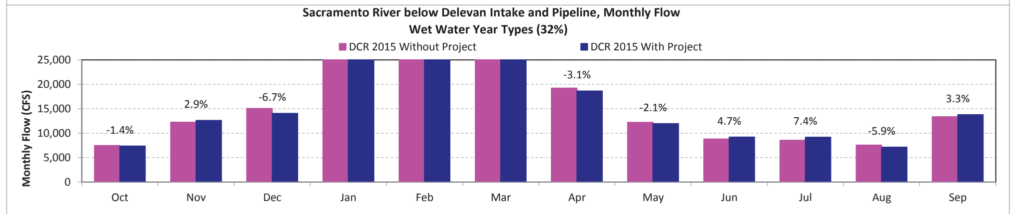
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	6,264	9,435	14,437	21,225	25,500	19,836	11,643	8,435	7,795	8,701	6,989	8,235
DCR 2015 With Project	6,678	9,726	13,513	19,540	23,792	17,796	11,164	8,368	8,303	9,908	7,608	9,195
Difference	414	291	-924	-1,684	-1,708	-2,040	-479	-67	509	1,207	620	961
Percent Difference[3]	6.6%	3.1%	-6.4%	-7.9%	-6.7%	-10.3%	-4.1%	-0.8%	6.5%	13.9%	8.9%	11.7%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	7,467	12,234	15,050	38,385	42,965	33,011	19,226	12,216	8,795	8,543	7,566	13,359
DCR 2015 With Project	7,362	12,592	14,038	36,959	41,725	30,953	18,628	11,965	9,210	9,172	7,123	13,794
Difference	-105	358	-1,012	-1,426	-1,240	-2,058	-598	-251	415	629	-443	436
Percent Difference	-1.4%	2.9%	-6.7%	-3.7%	-2.9%	-6.2%	-3.1%	-2.1%	4.7%	7.4%	-5.9%	3.3%
Above Normal (14.6%)												
DCR 2015 Without Project	6,641	12,896	14,268	24,306	32,498	23,457	11,952	9,002	7,828	9,225	6,924	8,689
DCR 2015 With Project	7,010	12,342	12,744	21,120	30,057	20,519	11,030	8,984	7,983	10,404	7,132	9,340
Difference	369	-554	-1,524	-3,186	-2,441	-2,938	-922	-18	155	1,180	208	651
Percent Difference	5.6%	-4.3%	-10.7%	-13.1%	-7.5%	-12.5%	-7.7%	-0.2%	2.0%	12.8%	3.0%	7.5%
Below Normal (17.1%)												
DCR 2015 Without Project	6,286	8,086	16,610	12,766	17,286	12,107	8,835	6,944	7,305	8,156	6,573	5,521
DCR 2015 With Project	7,496	8,839	15,674	10,669	15,750	9,739	8,066	6,675	7,571	10,136	7,687	6,642
Difference	1,210	753	-936	-2,098	-1,536	-2,368	-768	-269	266	1,980	1,114	1,121
Percent Difference	19.3%	9.3%	-5.6%	-16.4%	-8.9%	-19.6%	-8.7%	-3.9%	3.6%	24.3%	16.9%	20.3%
Dry (22%)												
DCR 2015 Without Project	5,274	6,973	16,252	9,452	13,280	12,094	6,627	5,867	7,352	9,295	6,620	5,037
DCR 2015 With Project	5,981	7,498	15,732	8,453	11,174	9,982	6,401	6,061	8,165	10,923	8,010	6,679
Difference	707	525	-520	-999	-2,106	-2,113	-226	194	813	1,628	1,390	1,642
Percent Difference	13.4%	7.5%	-3.2%	-10.6%	-15.9%	-17.5%	-3.4%	3.3%	11.1%	17.5%	21.0%	32.6%
Critical (14.6%)												
DCR 2015 Without Project	4,742	5,174	8,018	8,490	8,570	8,299	5,703	5,267	6,830	8,265	6,842	4,640
DCR 2015 With Project	4,955	5,279	7,295	7,202	6,979	7,691	5,883	5,394	7,721	9,215	8,444	5,841
Difference	213	105	-723	-1,288	-1,590	-608	181	126	891	951	1,603	1,200
Percent Difference	4.5%	2.0%	-9.0%	-15.2%	-18.6%	-7.3%	3.2%	2.4%	13.0%	11.5%	23.4%	25.9%

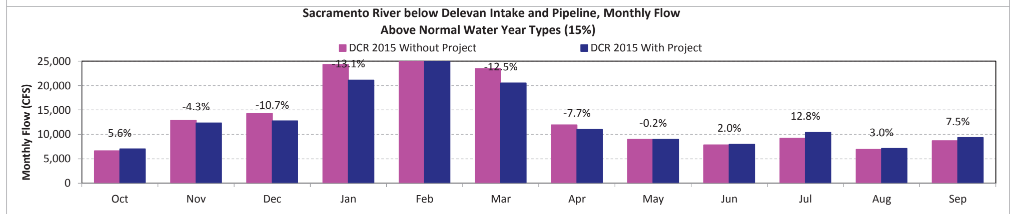
1 Based on the 82-year simulation period

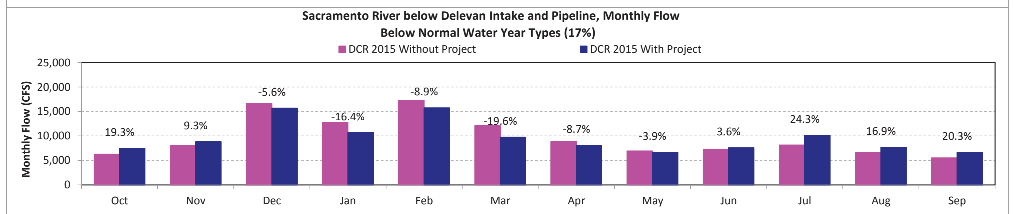
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

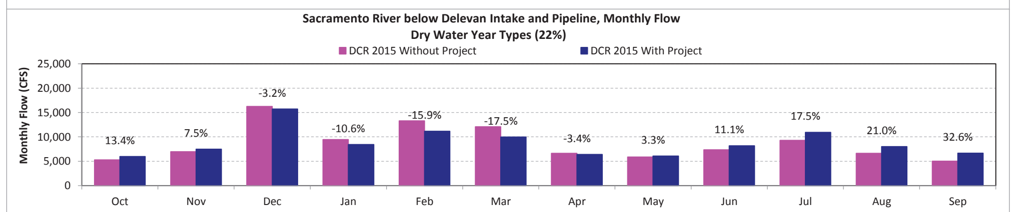
3 Relative difference of the monthly average











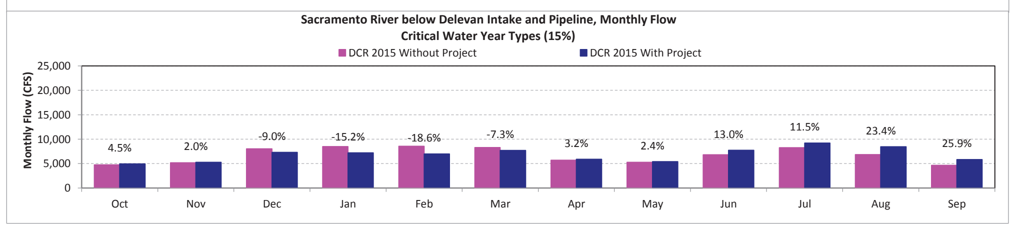


Table SW-15-a
Sacramento River at Wilken Slough, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	6,038	9,041	11,300	13,726	15,307	14,065	8,693	6,889	5,666	6,631	5,440	7,929
DCR 2015 With Project	6,442	9,314	10,756	12,752	14,298	12,659	8,413	6,839	6,166	7,818	6,028	8,890
Difference	405	274	-544	-973	-1,009	-1,406	-280	-50	500	1,187	588	961
Percent Difference[3]	6.7%	3.0%	-4.8%	-7.1%	-6.6%	-10.0%	-3.2%	-0.7%	8.8%	17.9%	10.8%	12.1%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	7,126	11,971	11,547	19,102	19,835	18,274	13,408	10,373	6,439	6,542	6,081	13,056
DCR 2015 With Project	7,017	12,235	11,092	18,591	19,491	17,405	13,209	10,211	6,858	7,157	5,625	13,521
Difference	-109	264	-456	-511	-344	-869	-199	-162	419	615	-456	465
Percent Difference	-1.5%	2.2%	-3.9%	-2.7%	-1.7%	-4.8%	-1.5%	-1.6%	6.5%	9.4%	-7.5%	3.6%
Above Normal (14.6%)												
DCR 2015 Without Project	6,398	11,234	12,089	16,397	19,083	17,496	10,180	7,341	5,803	7,161	5,372	8,394
DCR 2015 With Project	6,761	10,941	10,802	15,348	17,964	15,537	9,539	7,340	5,943	8,330	5,546	9,057
Difference	363	-293	-1,287	-1,049	-1,120	-1,958	-642	-1	141	1,169	174	663
Percent Difference	5.7%	-2.6%	-10.6%	-6.4%	-5.9%	-11.2%	-6.3%	0.0%	2.4%	16.3%	3.2%	7.9%
Below Normal (17.1%)												
DCR 2015 Without Project	6,128	7,992	12,665	12,208	14,406	11,950	7,080	5,589	5,303	6,057	5,017	5,221
DCR 2015 With Project	7,329	8,606	12,198	10,462	13,313	9,593	6,551	5,304	5,557	8,018	6,068	6,332
Difference	1,201	614	-467	-1,746	-1,092	-2,357	-529	-286	254	1,961	1,051	1,111
Percent Difference	19.6%	7.7%	-3.7%	-14.3%	-7.6%	-19.7%	-7.5%	-5.1%	4.8%	32.4%	20.9%	21.3%
Dry (22%)												
DCR 2015 Without Project	5,126	6,800	11,579	8,872	11,534	11,316	5,200	4,543	5,302	7,168	5,008	4,748
DCR 2015 With Project	5,812	7,295	11,450	8,074	10,035	9,684	4,992	4,721	6,097	8,768	6,356	6,372
Difference	686	495	-129	-798	-1,500	-1,632	-208	179	795	1,600	1,348	1,623
Percent Difference	13.4%	7.3%	-1.1%	-9.0%	-13.0%	-14.4%	-4.0%	3.9%	15.0%	22.3%	26.9%	34.2%
Critical (14.6%)												
DCR 2015 Without Project	4,584	5,082	7,966	8,456	8,429	8,108	4,111	3,922	4,825	6,157	5,261	4,284
DCR 2015 With Project	4,791	5,215	7,260	7,194	6,925	7,535	4,201	4,000	5,707	7,078	6,847	5,452
Difference	207	133	-706	-1,262	-1,504	-573	90	78	882	922	1,586	1,168
Percent Difference	4.5%	2.6%	-8.9%	-14.9%	-17.8%	-7.1%	2.2%	2.0%	18.3%	15.0%	30.1%	27.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-16-a
Sacramento River at Verona, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	9,139	12,543	18,608	26,679	32,463	27,863	19,287	15,258	12,672	15,121	11,577	15,465
DCR 2015 With Project	9,579	12,886	17,999	25,494	31,311	26,447	18,913	15,146	12,819	15,896	12,048	16,360
Difference	440	343	-609	-1,185	-1,152	-1,416	-374	-112	148	775	471	896
Percent Difference[3]	4.8%	2.7%	-3.3%	-4.4%	-3.5%	-5.1%	-1.9%	-0.7%	1.2%	5.1%	4.1%	5.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	11,342	16,347	20,875	43,554	49,682	42,945	31,911	25,577	17,675	15,894	12,653	24,522
DCR 2015 With Project	11,217	16,643	20,199	42,718	49,126	42,108	31,550	25,412	18,082	16,002	12,503	24,445
Difference	-126	296	-675	-836	-556	-837	-360	-165	407	109	-150	-78
Percent Difference	-1.1%	1.8%	-3.2%	-1.9%	-1.1%	-1.9%	-1.1%	-0.6%	2.3%	0.7%	-1.2%	-0.3%
Above Normal (14.6%)												
DCR 2015 Without Project	10,601	15,957	19,154	31,948	39,064	36,829	21,625	16,345	12,999	17,406	14,012	18,805
DCR 2015 With Project	11,088	15,702	17,798	30,138	37,791	34,826	20,913	16,326	13,061	18,145	13,939	19,339
Difference	487	-255	-1,356	-1,810	-1,273	-2,003	-712	-19	62	739	-73	534
Percent Difference	4.6%	-1.6%	-7.1%	-5.7%	-3.3%	-5.4%	-3.3%	-0.1%	0.5%	4.2%	-0.5%	2.8%
Below Normal (17.1%)												
DCR 2015 Without Project	9,894	11,717	21,748	18,815	26,373	19,526	13,880	10,967	10,759	16,147	13,767	11,786
DCR 2015 With Project	11,020	12,485	21,277	16,987	25,373	17,296	13,293	10,520	10,615	17,323	13,678	12,457
Difference	1,126	768	-472	-1,829	-1,000	-2,229	-587	-447	-144	1,176	-89	671
Percent Difference	11.4%	6.6%	-2.2%	-9.7%	-3.8%	-11.4%	-4.2%	-4.1%	-1.3%	7.3%	-0.6%	5.7%
Dry (22%)												
DCR 2015 Without Project	6,744	9,524	17,820	14,372	19,949	17,362	10,601	8,702	10,028	15,177	9,409	9,001
DCR 2015 With Project	7,551	10,134	17,755	13,530	18,210	15,430	10,331	8,899	9,897	16,595	10,897	11,212
Difference	807	610	-65	-842	-1,739	-1,932	-271	197	-130	1,418	1,488	2,211
Percent Difference	12.0%	6.4%	-0.4%	-5.9%	-8.7%	-11.1%	-2.6%	2.3%	-1.3%	9.3%	15.8%	24.6%
Critical (14.6%)												
DCR 2015 Without Project	5,615	6,379	10,671	12,485	14,432	11,698	8,932	6,651	7,703	9,878	7,505	6,487
DCR 2015 With Project	5,882	6,523	9,975	11,401	12,813	11,341	8,962	6,490	8,131	10,700	8,994	8,143
Difference	267	144	-696	-1,084	-1,620	-358	30	-161	428	823	1,489	1,656
Percent Difference	4.8%	2.3%	-6.5%	-8.7%	-11.2%	-3.1%	0.3%	-2.4%	5.6%	8.3%	19.8%	25.5%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

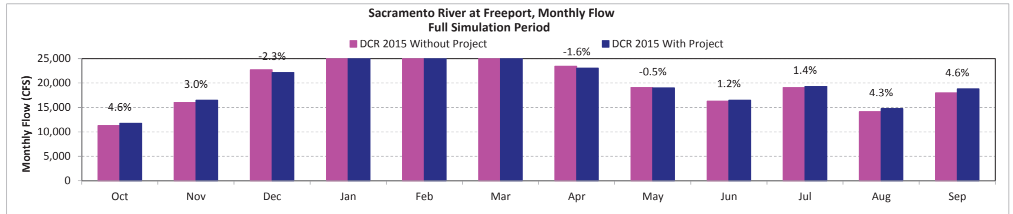
Table SW-17-a
Sacramento River at Freeport, Monthly Flow
Long-term Average and Average by Water Year Type

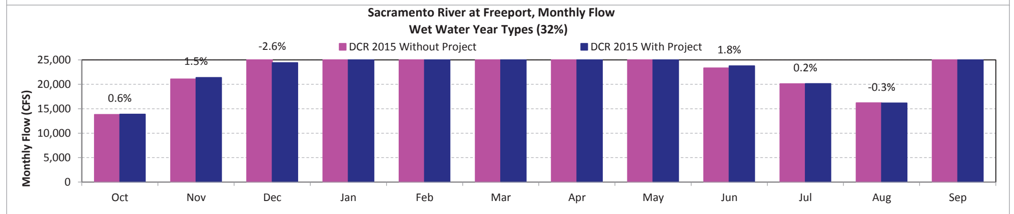
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	11,273	16,029	22,691	31,180	37,745	32,288	23,451	19,088	16,320	19,065	14,126	17,971
DCR 2015 With Project	11,789	16,505	22,176	30,050	36,593	30,912	23,077	18,988	16,517	19,323	14,734	18,799
Difference	517	476	-515	-1,130	-1,153	-1,376	-375	-100	198	259	607	827
Percent Difference[3]	4.6%	3.0%	-2.3%	-3.6%	-3.1%	-4.3%	-1.6%	-0.5%	1.2%	1.4%	4.3%	4.6%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	13,806	21,069	25,080	50,180	57,509	49,768	38,203	31,557	23,356	20,095	16,218	28,461
DCR 2015 With Project	13,892	21,391	24,438	49,383	56,916	48,936	37,845	31,393	23,767	20,131	16,165	28,105
Difference	86	321	-642	-797	-593	-831	-358	-164	411	35	-53	-356
Percent Difference	0.6%	1.5%	-2.6%	-1.6%	-1.0%	-1.7%	-0.9%	-0.5%	1.8%	0.2%	-0.3%	-1.3%
Above Normal (14.6%)												
DCR 2015 Without Project	12,461	19,357	23,429	37,712	45,441	42,526	25,988	20,631	16,382	22,210	16,610	22,005
DCR 2015 With Project	13,050	19,325	22,309	36,056	44,183	40,550	25,276	20,614	16,348	22,439	16,519	22,233
Difference	589	-32	-1,120	-1,656	-1,258	-1,976	-711	-17	-34	230	-91	228
Percent Difference	4.7%	-0.2%	-4.8%	-4.4%	-2.8%	-4.6%	-2.7%	-0.1%	-0.2%	1.0%	-0.5%	1.0%
Below Normal (17.1%)												
DCR 2015 Without Project	12,722	15,894	27,232	22,548	31,621	22,917	17,946	14,501	13,828	21,313	15,986	13,827
DCR 2015 With Project	13,755	16,996	26,857	20,820	30,632	20,691	17,428	14,083	13,933	21,434	16,234	14,581
Difference	1,033	1,102	-375	-1,728	-989	-2,226	-518	-418	105	122	248	754
Percent Difference	8.1%	6.9%	-1.4%	-7.7%	-3.1%	-9.7%	-2.9%	-2.9%	0.8%	0.6%	1.6%	5.5%
Dry (22%)												
DCR 2015 Without Project	8,642	12,231	21,869	17,115	23,066	20,189	13,358	10,980	12,613	18,491	11,600	10,476
DCR 2015 With Project	9,503	12,954	21,938	16,267	21,335	18,369	13,017	11,158	12,598	19,135	13,235	12,721
Difference	861	723	69	-849	-1,731	-1,819	-340	179	-15	643	1,635	2,245
Percent Difference	10.0%	5.9%	0.3%	-5.0%	-7.5%	-9.0%	-2.5%	1.6%	-0.1%	3.5%	14.1%	21.4%
Critical (14.6%)												
DCR 2015 Without Project	6,851	7,637	12,713	14,648	16,394	13,261	10,517	8,041	9,478	11,923	8,730	7,286
DCR 2015 With Project	7,109	7,853	12,040	13,599	14,811	12,958	10,559	7,952	9,873	12,277	10,345	9,236
Difference	259	217	-674	-1,049	-1,584	-303	42	-89	395	354	1,614	1,951
Percent Difference	3.8%	2.8%	-5.3%	-7.2%	-9.7%	-2.3%	0.4%	-1.1%	4.2%	3.0%	18.5%	26.8%

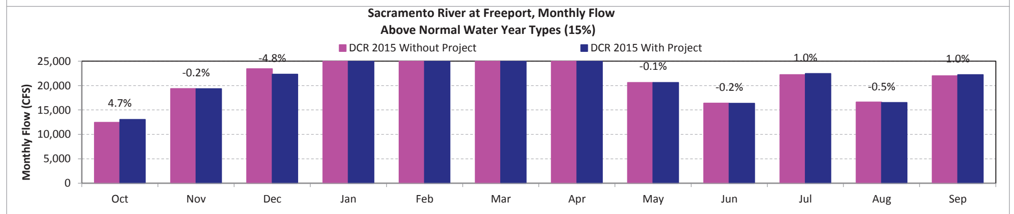
1 Based on the 82-year simulation period

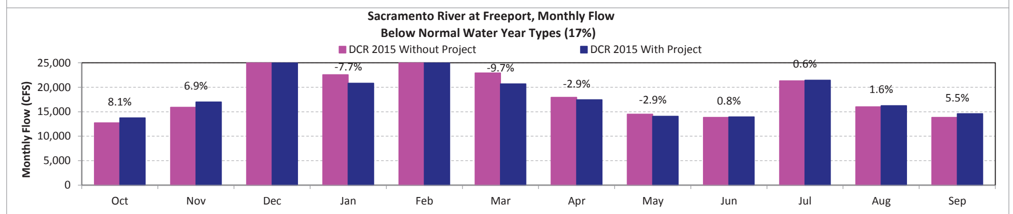
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

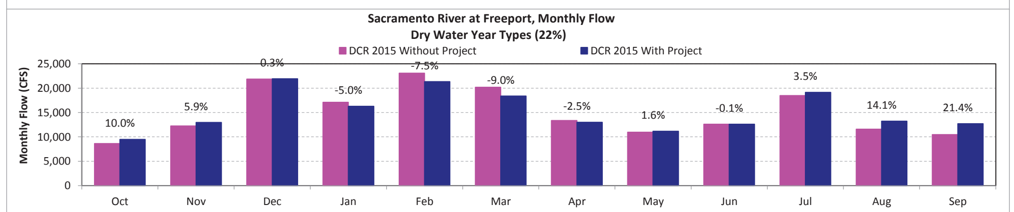
3 Relative difference of the monthly average











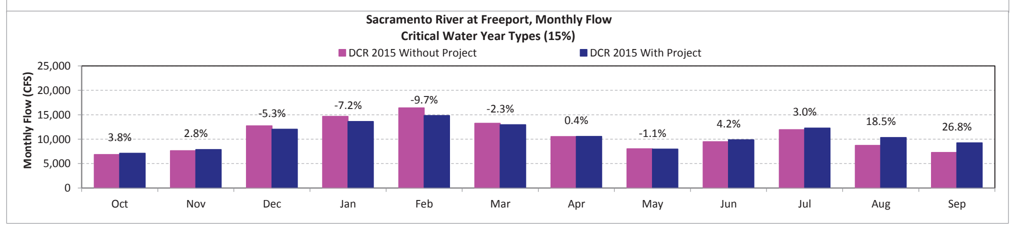


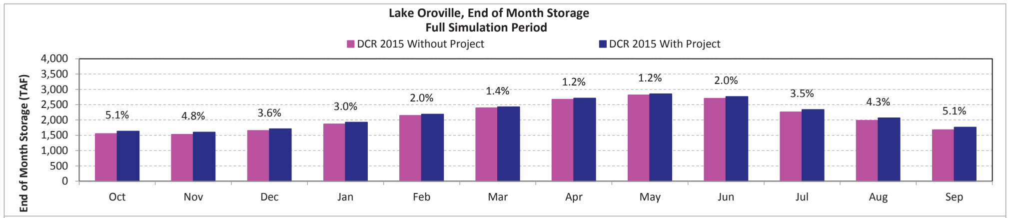
Table SW-18-a
Lake Oroville, End of Month Storage
Long-term Average and Average by Water Year Type

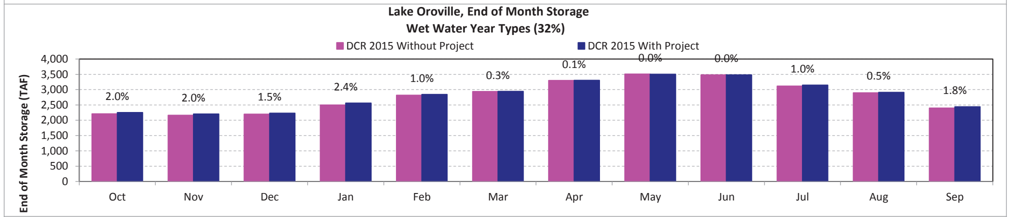
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1,552	1,528	1,649	1,867	2,144	2,394	2,674	2,814	2,707	2,257	1,982	1,677
DCR 2015 With Project	1,631	1,601	1,709	1,923	2,186	2,428	2,707	2,849	2,761	2,336	2,068	1,763
Difference	79	73	60	56	42	34	33	35	54	78	86	86
Percent Difference[3]	5.1%	4.8%	3.6%	3.0%	2.0%	1.4%	1.2%	1.2%	2.0%	3.5%	4.3%	5.1%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	2,211	2,161	2,200	2,499	2,816	2,936	3,302	3,507	3,484	3,117	2,899	2,398
DCR 2015 With Project	2,255	2,204	2,233	2,560	2,843	2,945	3,303	3,507	3,485	3,149	2,913	2,441
Difference	44	43	33	60	27	8	2	0	1	32	14	43
Percent Difference	2.0%	2.0%	1.5%	2.4%	1.0%	0.3%	0.1%	0.0%	0.0%	1.0%	0.5%	1.8%
Above Normal (14.6%)												
DCR 2015 Without Project	1,773	1,717	1,780	1,981	2,403	2,888	3,263	3,479	3,375	2,802	2,377	1,921
DCR 2015 With Project	1,821	1,764	1,821	2,037	2,427	2,890	3,269	3,483	3,383	2,834	2,424	1,976
Difference	48	47	41	56	24	2	6	4	8	32	47	55
Percent Difference	2.7%	2.7%	2.3%	2.8%	1.0%	0.1%	0.2%	0.1%	0.3%	1.1%	2.0%	2.9%
Below Normal (17.1%)												
DCR 2015 Without Project	1,346	1,330	1,526	1,726	2,032	2,321	2,699	2,915	2,796	2,205	1,741	1,468
DCR 2015 With Project	1,522	1,500	1,693	1,730	2,043	2,335	2,713	2,939	2,843	2,298	1,905	1,652
Difference	176	170	168	4	11	14	14	24	47	93	164	183
Percent Difference	13.1%	12.8%	11.0%	0.2%	0.6%	0.6%	0.5%	0.8%	1.7%	4.2%	9.4%	12.5%
Dry (22%)												
DCR 2015 Without Project	1,068	1,079	1,329	1,420	1,639	1,962	2,160	2,204	1,998	1,489	1,270	1,153
DCR 2015 With Project	1,160	1,159	1,378	1,515	1,736	2,061	2,262	2,304	2,149	1,643	1,415	1,258
Difference	93	80	50	95	97	99	102	100	151	154	145	104
Percent Difference	8.7%	7.4%	3.7%	6.7%	5.9%	5.0%	4.7%	4.5%	7.6%	10.4%	11.4%	9.0%
Critical (14.6%)												
DCR 2015 Without Project	868	870	951	1,217	1,317	1,456	1,468	1,444	1,315	1,064	948	898
DCR 2015 With Project	922	908	977	1,264	1,364	1,503	1,517	1,502	1,393	1,158	1,050	967
Difference	54	38	26	48	47	47	49	58	78	95	102	69
Percent Difference	6.2%	4.4%	2.8%	3.9%	3.6%	3.2%	3.3%	4.0%	5.9%	8.9%	10.8%	7.7%

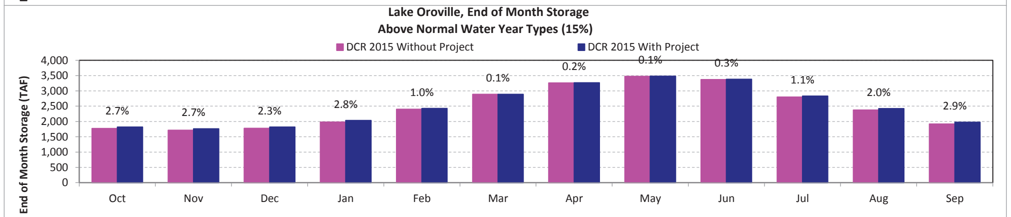
1 Based on the 82-year simulation period

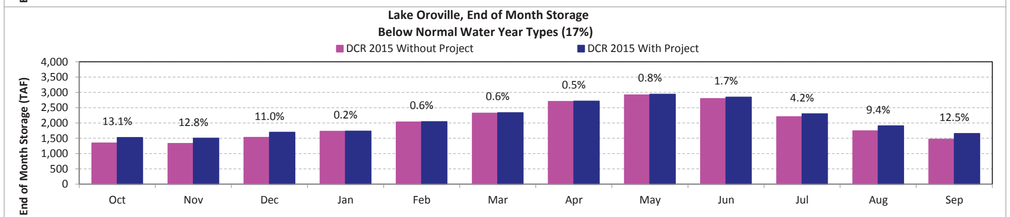
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

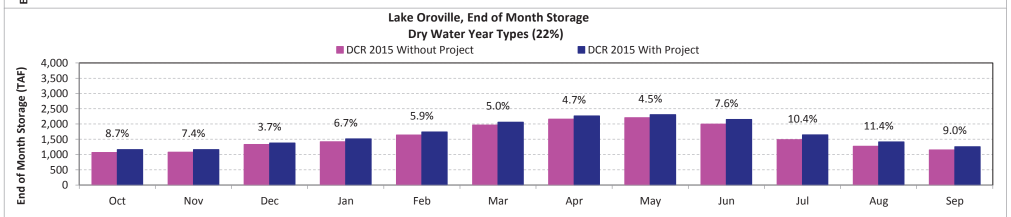
3 Relative difference of the monthly average











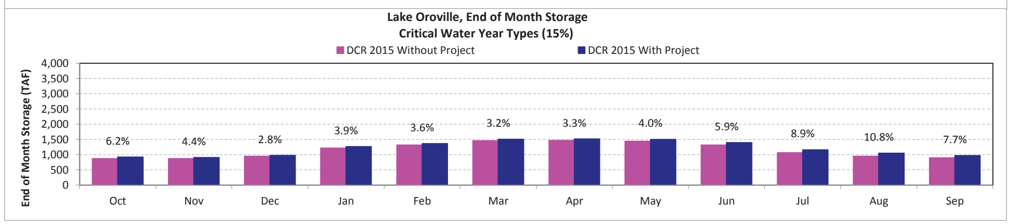


Table SW-19-a
Lake Oroville, End of Month Elevation
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	727	725	738	762	789	811	833	843	834	795	769	740
DCR 2015 With Project	737	734	745	768	793	815	836	846	839	803	779	751
Difference	10	9	7	6	4	3	3	3	5	8	10	11
Percent Difference[3]	1.4%	1.3%	1.0%	0.8%	0.5%	0.4%	0.4%	0.4%	0.6%	1.0%	1.3%	1.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	799	795	797	824	851	859	884	898	896	871	856	816
DCR 2015 With Project	804	800	801	830	853	859	884	898	896	873	857	820
Difference	5	5	4	6	2	1	0	0	0	2	1	5
Percent Difference	0.7%	0.7%	0.5%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.2%	0.1%	0.6%
Above Normal (14.6%)												
DCR 2015 Without Project	758	751	757	778	819	856	881	896	889	850	817	774
DCR 2015 With Project	763	756	761	783	820	856	882	896	889	852	822	780
Difference	5	5	5	5	1	0	0	0	1	2	5	6
Percent Difference	0.7%	0.7%	0.6%	0.6%	0.2%	0.0%	0.0%	0.0%	0.1%	0.3%	0.6%	0.8%
Below Normal (17.1%)												
DCR 2015 Without Project	709	707	728	749	781	808	842	857	849	802	755	724
DCR 2015 With Project	730	727	746	750	782	809	842	859	852	811	773	745
Difference	21	20	18	1	1	1	1	2	3	9	18	21
Percent Difference	3.0%	2.8%	2.5%	0.1%	0.1%	0.1%	0.1%	0.2%	0.4%	1.1%	2.4%	3.0%
Dry (22%)												
DCR 2015 Without Project	674	674	702	717	743	777	796	801	781	726	699	685
DCR 2015 With Project	686	684	708	728	753	786	805	809	795	743	717	698
Difference	12	10	7	11	10	9	9	9	14	17	18	13
Percent Difference	1.8%	1.5%	0.9%	1.6%	1.4%	1.2%	1.1%	1.1%	1.8%	2.4%	2.6%	1.9%
Critical (14.6%)												
DCR 2015 Without Project	641	642	655	691	703	720	721	719	703	671	653	646
DCR 2015 With Project	650	649	660	697	709	726	727	726	713	684	670	657
Difference	9	7	4	6	6	6	6	7	9	13	16	12
Percent Difference	1.4%	1.0%	0.7%	0.9%	0.8%	0.8%	0.8%	1.0%	1.3%	1.9%	2.5%	1.8%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

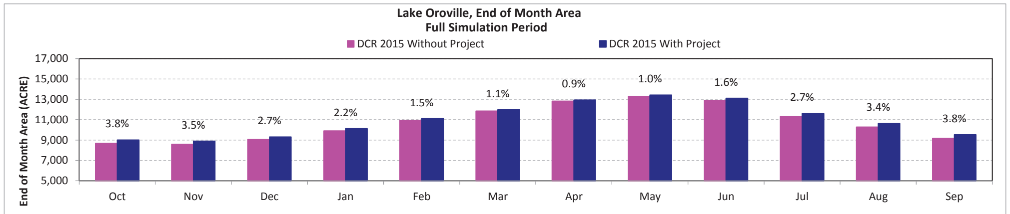
Table SW-20-a
Lake Oroville, End of Month Area
Long-term Average and Average by Water Year Type

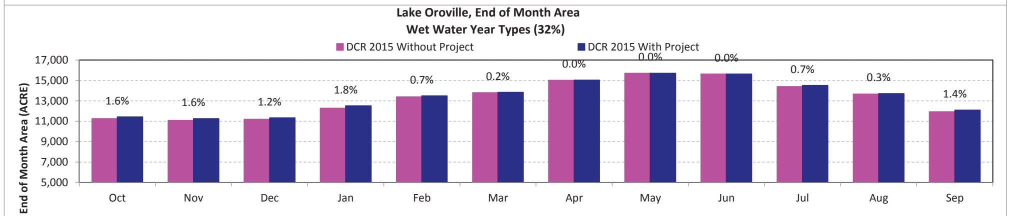
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	8,686	8,594	9,065	9,912	10,951	11,859	12,826	13,295	12,908	11,307	10,290	9,170
DCR 2015 With Project	9,015	8,893	9,306	10,129	11,110	11,985	12,947	13,423	13,109	11,607	10,637	9,523
Difference	329	299	241	217	159	126	121	128	200	300	347	353
Percent Difference[3]	3.8%	3.5%	2.7%	2.2%	1.5%	1.1%	0.9%	1.0%	1.6%	2.7%	3.4%	3.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	11,249	11,075	11,198	12,283	13,396	13,799	15,016	15,701	15,625	14,402	13,666	11,927
DCR 2015 With Project	11,427	11,250	11,331	12,508	13,489	13,827	15,022	15,700	15,628	14,508	13,713	12,095
Difference	177	175	132	226	93	28	6	-1	3	106	46	167
Percent Difference	1.6%	1.6%	1.2%	1.8%	0.7%	0.2%	0.0%	0.0%	0.0%	0.7%	0.3%	1.4%
Above Normal (14.6%)												
DCR 2015 Without Project	9,654	9,421	9,647	10,423	11,979	13,638	14,888	15,607	15,259	13,351	11,892	10,230
DCR 2015 With Project	9,843	9,609	9,810	10,620	12,057	13,646	14,907	15,622	15,287	13,457	12,069	10,445
Difference	188	188	163	197	78	8	19	15	28	106	177	214
Percent Difference	2.0%	2.0%	1.7%	1.9%	0.7%	0.1%	0.1%	0.1%	0.2%	0.8%	1.5%	2.1%
Below Normal (17.1%)												
DCR 2015 Without Project	7,950	7,877	8,639	9,403	10,581	11,641	12,996	13,726	13,324	11,280	9,540	8,456
DCR 2015 With Project	8,669	8,568	9,296	9,418	10,621	11,688	13,040	13,806	13,482	11,623	10,172	9,196
Difference	719	691	657	15	40	47	44	80	158	343	632	740
Percent Difference	9.0%	8.8%	7.6%	0.2%	0.4%	0.4%	0.3%	0.6%	1.2%	3.0%	6.6%	8.8%
Dry (22%)												
DCR 2015 Without Project	6,786	6,821	7,795	8,227	9,123	10,366	11,096	11,260	10,502	8,533	7,633	7,144
DCR 2015 With Project	7,177	7,150	8,003	8,613	9,501	10,730	11,457	11,613	11,054	9,140	8,234	7,581
Difference	392	329	208	386	377	364	362	353	552	607	602	437
Percent Difference	5.8%	4.8%	2.7%	4.7%	4.1%	3.5%	3.3%	3.1%	5.3%	7.1%	7.9%	6.1%
Critical (14.6%)												
DCR 2015 Without Project	5,871	5,890	6,264	7,387	7,797	8,367	8,416	8,320	7,795	6,748	6,235	6,007
DCR 2015 With Project	6,119	6,067	6,385	7,586	7,994	8,560	8,616	8,557	8,118	7,150	6,690	6,323
Difference	248	177	121	198	196	193	201	237	323	403	456	316
Percent Difference	4.2%	3.0%	1.9%	2.7%	2.5%	2.3%	2.4%	2.8%	4.1%	6.0%	7.3%	5.3%

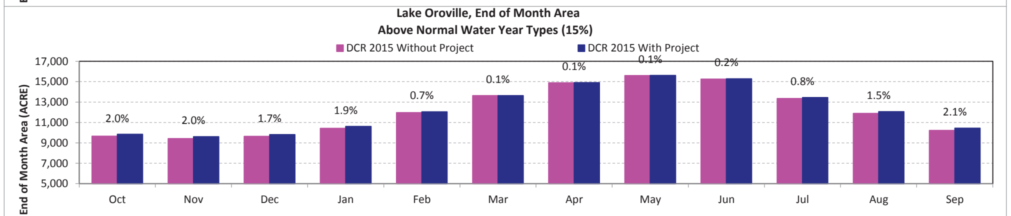
1 Based on the 82-year simulation period

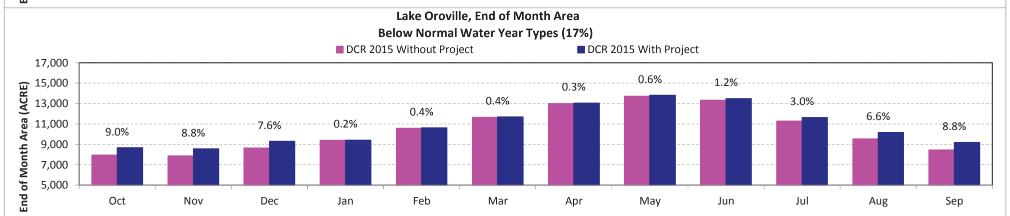
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

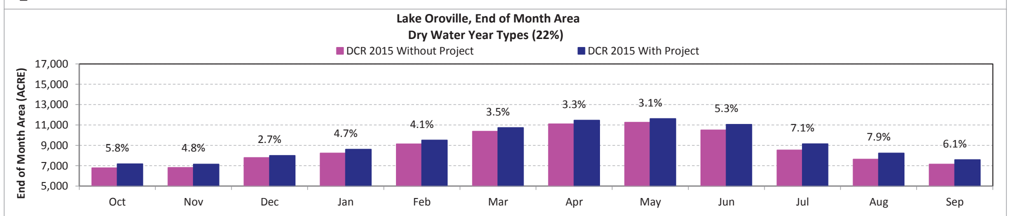
3 Relative difference of the monthly average











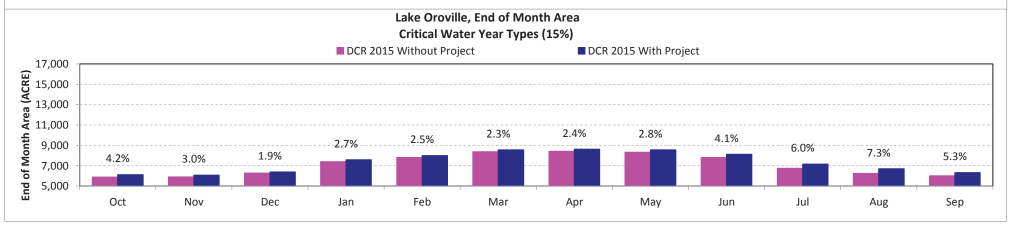


Table SW-21-a

Feather River at Thermalito Low Flow Channel, Monthly Flow

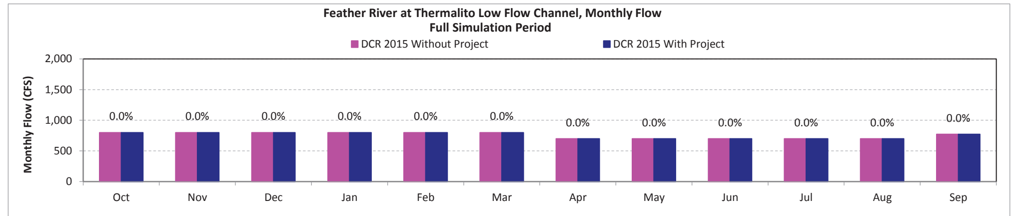
Long-term Average and Average by Water Year Type

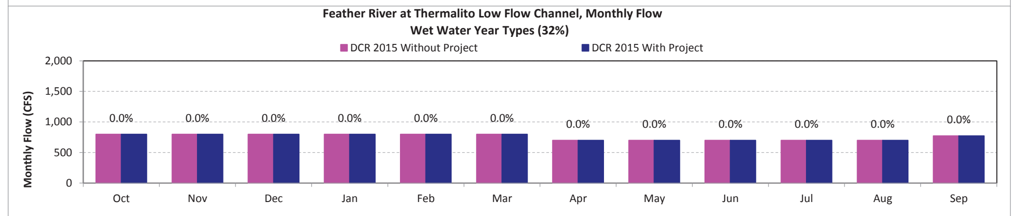
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
DCR 2015 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
DCR 2015 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (14.6%)												
DCR 2015 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
DCR 2015 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (17.1%)												
DCR 2015 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
DCR 2015 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (22%)												
DCR 2015 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
DCR 2015 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
DCR 2015 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
DCR 2015 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

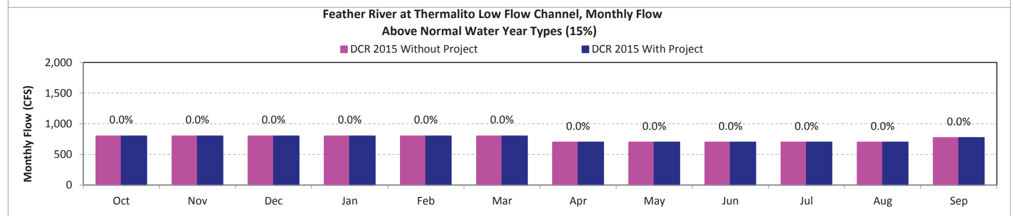
1 Based on the 82-year simulation period

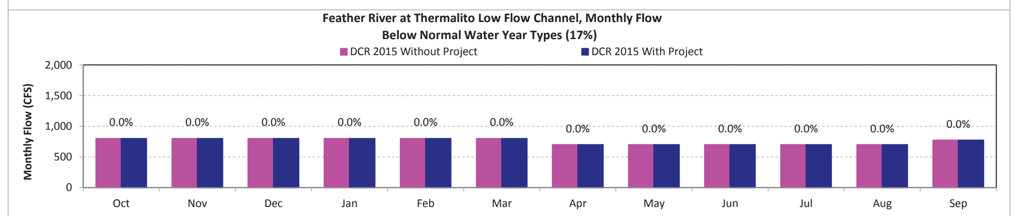
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

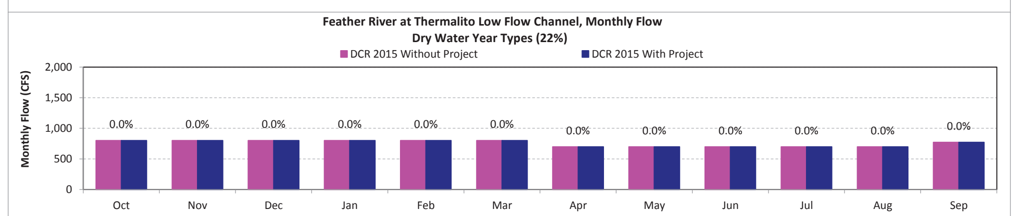
3 Relative difference of the monthly average











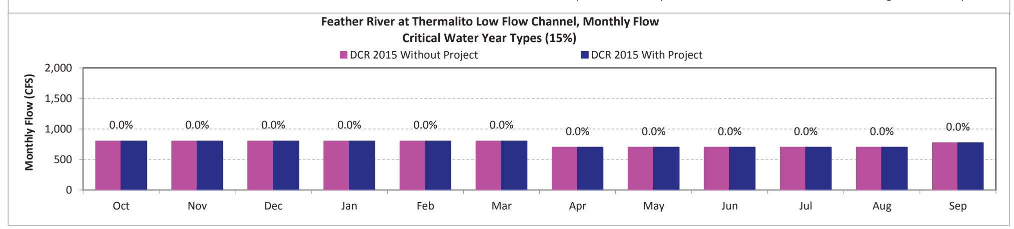


Table SW-22-a
Feather River below Thermalito, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	2,678	2,046	2,758	3,990	4,280	5,211	2,984	3,607	3,657	7,171	4,534	5,448
DCR 2015 With Project	2,749	2,073	2,900	4,062	4,526	5,360	2,984	3,553	3,293	6,762	4,400	5,397
Difference	71	27	142	73	246	150	0	-54	-365	-409	-134	-50
Percent Difference[3]	2.7%	1.3%	5.1%	1.8%	5.7%	2.9%	0.0%	-1.5%	-10.0%	-5.7%	-3.0%	-0.9%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	3,903	3,152	4,490	9,268	9,094	11,800	6,397	7,501	5,113	6,892	4,254	9,158
DCR 2015 With Project	3,885	3,166	4,635	9,331	9,688	12,106	6,501	7,525	5,077	6,368	4,541	8,659
Difference	-18	14	146	63	594	306	104	23	-36	-524	288	-500
Percent Difference	-0.5%	0.4%	3.2%	0.7%	6.5%	2.6%	1.6%	0.3%	-0.7%	-7.6%	6.8%	-5.5%
Above Normal (14.6%)												
DCR 2015 Without Project	3,671	2,357	2,898	2,181	3,649	4,328	2,022	3,059	3,352	9,102	6,987	7,999
DCR 2015 With Project	3,789	2,423	2,992	2,534	4,207	4,680	1,955	3,069	3,270	8,713	6,721	7,860
Difference	118	65	95	353	558	352	-67	10	-83	-388	-265	-139
Percent Difference	3.2%	2.8%	3.3%	16.2%	15.3%	8.1%	-3.3%	0.3%	-2.5%	-4.3%	-3.8%	-1.7%
Below Normal (17.1%)												
DCR 2015 Without Project	2,511	1,686	1,634	1,464	1,830	1,796	1,119	1,249	2,988	9,035	7,311	4,420
DCR 2015 With Project	2,644	1,708	1,710	1,464	1,689	1,759	1,119	1,069	2,579	8,285	6,145	3,989
Difference	133	22	76	0	-141	-37	0	-180	-409	-750	-1,166	-431
Percent Difference	5.3%	1.3%	4.7%	0.0%	-7.7%	-2.1%	0.0%	-14.4%	-13.7%	-8.3%	-15.9%	-9.7%
Dry (22%)												
DCR 2015 Without Project	1,411	1,239	1,772	1,395	1,566	1,455	1,259	1,582	3,282	7,305	3,086	1,937
DCR 2015 With Project	1,538	1,292	2,088	1,394	1,566	1,464	1,197	1,596	2,349	7,120	3,221	2,525
Difference	127	53	316	0	0	9	-62	14	-933	-186	135	588
Percent Difference	9.0%	4.3%	17.9%	0.0%	0.0%	0.6%	-4.9%	0.9%	-28.4%	-2.5%	4.4%	30.3%
Critical (14.6%)												
DCR 2015 Without Project	1,122	968	1,660	1,202	1,409	1,435	1,311	1,508	2,153	3,469	1,620	1,323
DCR 2015 With Project	1,184	955	1,655	1,210	1,409	1,472	1,249	1,266	1,699	3,353	1,507	1,821
Difference	62	-13	-5	8	0	37	-62	-242	-454	-116	-114	498
Percent Difference	5.5%	-1.4%	-0.3%	0.7%	0.0%	2.5%	-4.7%	-16.0%	-21.1%	-3.4%	-7.0%	37.7%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

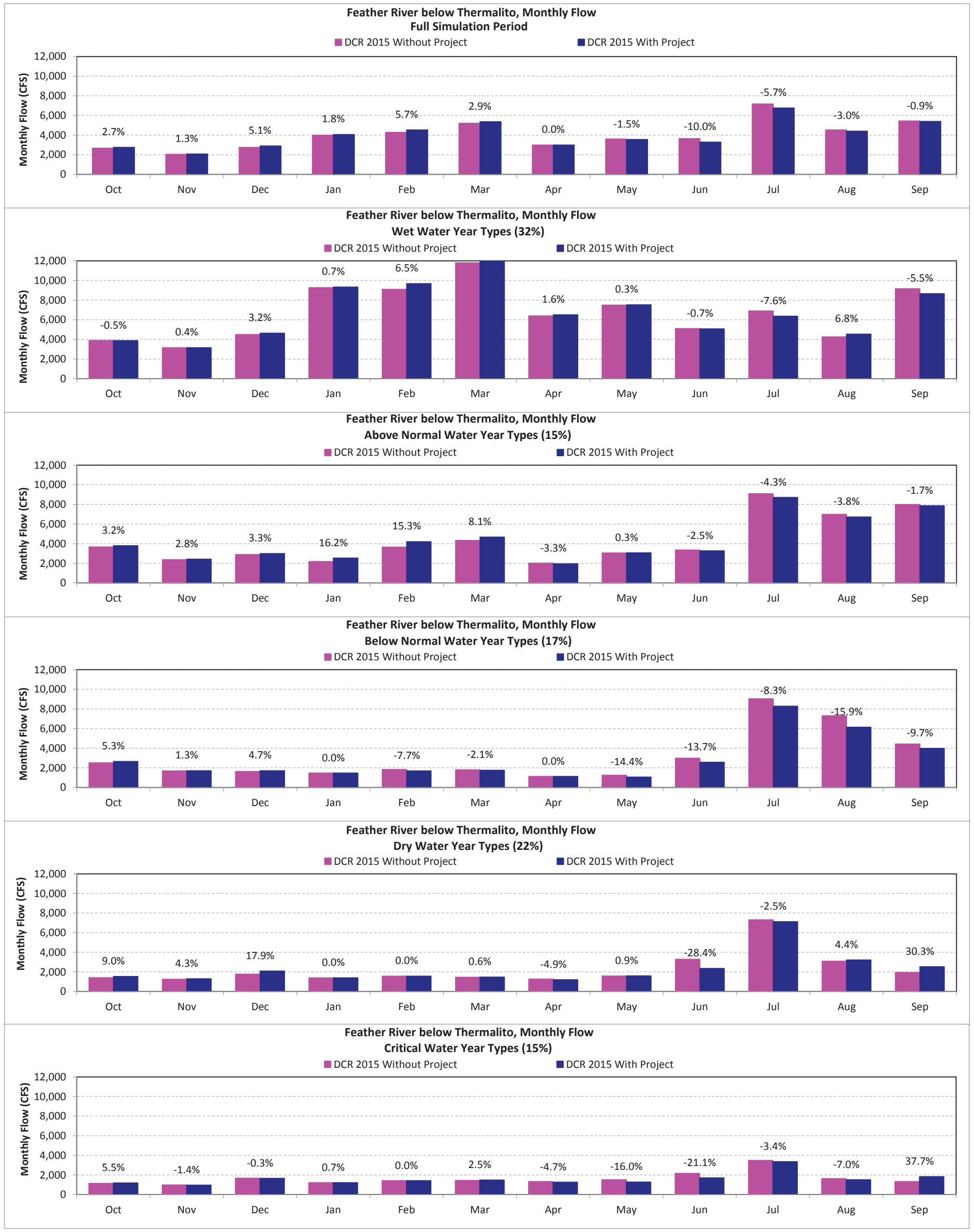


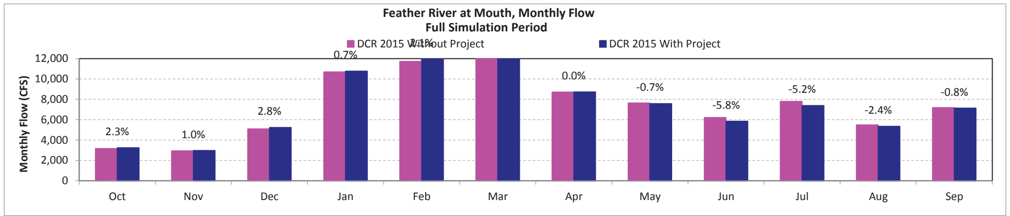
Table SW-23-a
Feather River at Mouth, Monthly Flow
Long-term Average and Average by Water Year Type

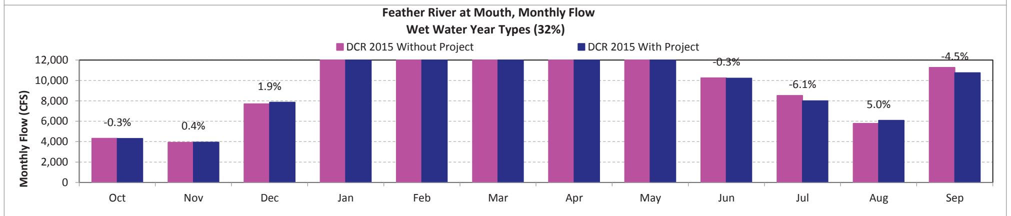
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	3,169	2,943	5,097	10,694	11,729	12,312	8,719	7,637	6,212	7,797	5,486	7,192
DCR 2015 With Project	3,241	2,971	5,238	10,766	11,974	12,464	8,720	7,584	5,850	7,392	5,354	7,138
Difference	72	28	141	72	245	152	1	-53	-361	-405	-133	-54
Percent Difference[3]	2.3%	1.0%	2.8%	0.7%	2.1%	1.2%	0.0%	-0.7%	-5.8%	-5.2%	-2.4%	-0.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	4,324	3,931	7,705	21,606	23,705	23,138	15,840	14,346	10,242	8,525	5,791	11,261
DCR 2015 With Project	4,309	3,946	7,851	21,668	24,300	23,442	15,943	14,371	10,210	8,007	6,079	10,757
Difference	-15	14	146	62	596	305	103	24	-32	-518	288	-505
Percent Difference	-0.3%	0.4%	1.9%	0.3%	2.5%	1.3%	0.7%	0.2%	-0.3%	-6.1%	5.0%	-4.5%
Above Normal (14.6%)												
DCR 2015 Without Project	4,163	3,293	4,190	10,203	11,094	16,633	9,626	7,785	6,420	9,643	7,992	9,944
DCR 2015 With Project	4,282	3,358	4,285	10,555	11,652	16,986	9,559	7,797	6,339	9,250	7,721	9,809
Difference	119	65	95	353	558	352	-66	12	-81	-393	-272	-136
Percent Difference	2.9%	2.0%	2.3%	3.5%	5.0%	2.1%	-0.7%	0.2%	-1.3%	-4.1%	-3.4%	-1.4%
Below Normal (17.1%)												
DCR 2015 Without Project	3,624	3,237	5,762	5,361	7,108	6,627	5,332	4,744	4,761	9,420	8,206	6,221
DCR 2015 With Project	3,758	3,257	5,834	5,362	6,968	6,591	5,332	4,564	4,355	8,659	7,036	5,789
Difference	134	21	72	1	-140	-36	0	-180	-406	-761	-1,170	-432
Percent Difference	3.7%	0.6%	1.2%	0.0%	-2.0%	-0.5%	0.0%	-3.8%	-8.5%	-8.1%	-14.3%	-6.9%
Dry (22%)												
DCR 2015 Without Project	1,775	2,214	3,663	4,248	4,210	4,595	4,134	3,641	3,988	7,267	3,713	3,763
DCR 2015 With Project	1,900	2,270	3,975	4,250	4,213	4,619	4,073	3,658	3,057	7,087	3,843	4,352
Difference	126	55	312	2	3	24	-60	17	-931	-180	130	588
Percent Difference	7.1%	2.5%	8.5%	0.0%	0.1%	0.5%	-1.5%	0.5%	-23.3%	-2.5%	3.5%	15.6%
Critical (14.6%)												
DCR 2015 Without Project	1,233	1,202	1,730	3,435	3,085	2,743	3,216	2,321	2,299	3,275	1,807	1,898
DCR 2015 With Project	1,294	1,192	1,726	3,438	3,072	2,774	3,157	2,082	1,850	3,181	1,717	2,379
Difference	60	-10	-4	3	-13	31	-59	-239	-449	-95	-89	481
Percent Difference	4.9%	-0.8%	-0.2%	0.1%	-0.4%	1.1%	-1.8%	-10.3%	-19.5%	-2.9%	-4.9%	25.4%

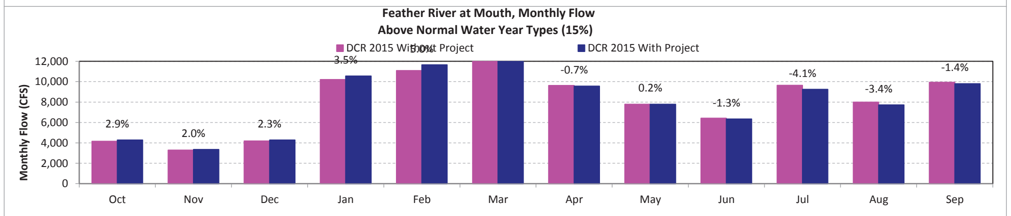
1 Based on the 82-year simulation period

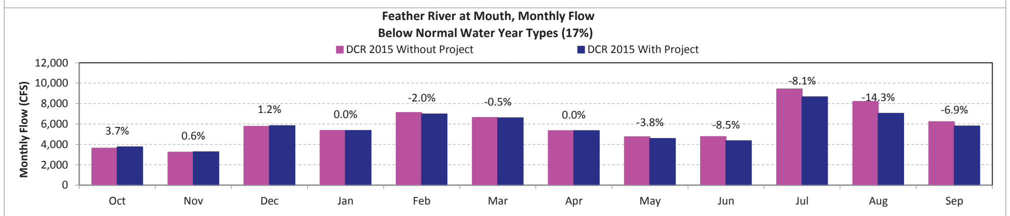
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

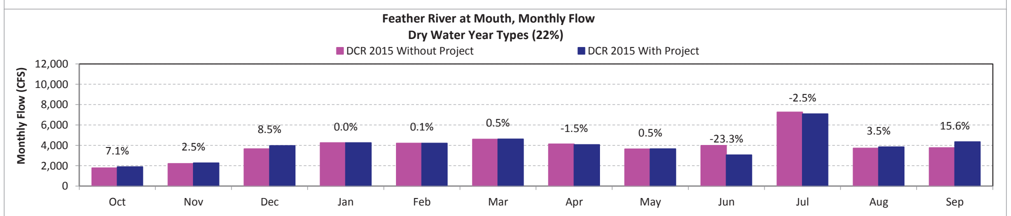
3 Relative difference of the monthly average











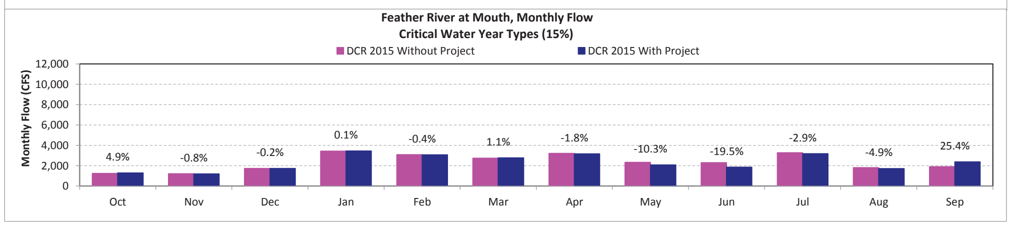


Table SW-24-a
Folsom Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	456	426	454	472	493	592	718	838	804	653	579	505
DCR 2015 With Project	479	441	463	478	498	596	722	841	804	684	602	532
Difference	23	15	9	6	6	4	4	3	0	31	23	27
Percent Difference[3]	5.0%	3.5%	2.0%	1.2%	1.2%	0.6%	0.5%	0.4%	0.0%	4.7%	3.9%	5.3%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	561	482	501	525	515	631	787	959	956	863	758	620
DCR 2015 With Project	566	484	502	525	515	631	787	959	956	867	756	635
Difference	4	3	1	0	0	0	0	0	0	4	-2	15
Percent Difference	0.8%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	-0.3%	2.4%
Above Normal (14.6%)												
DCR 2015 Without Project	483	444	479	507	532	642	787	955	923	718	643	532
DCR 2015 With Project	529	477	498	507	531	642	787	955	929	751	677	586
Difference	46	33	19	0	0	0	0	0	6	33	34	54
Percent Difference	9.6%	7.4%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	4.6%	5.3%	10.2%
Below Normal (17.1%)												
DCR 2015 Without Project	519	494	502	492	539	625	780	913	889	661	611	577
DCR 2015 With Project	547	502	506	495	542	628	779	910	871	707	637	599
Difference	28	8	4	3	3	3	-1	-3	-18	47	26	22
Percent Difference	5.4%	1.7%	0.8%	0.6%	0.6%	0.5%	-0.1%	-0.3%	-2.0%	7.1%	4.2%	3.8%
Dry (22%)												
DCR 2015 Without Project	380	395	423	440	483	590	693	765	686	517	450	426
DCR 2015 With Project	417	426	443	451	495	595	703	775	689	567	491	465
Difference	37	31	19	12	12	5	9	10	3	50	41	39
Percent Difference	9.6%	7.9%	4.6%	2.7%	2.5%	0.9%	1.3%	1.3%	0.4%	9.7%	9.2%	9.1%
Critical (14.6%)												
DCR 2015 Without Project	241	253	315	348	367	425	465	480	431	327	284	265
DCR 2015 With Project	253	260	321	367	385	440	479	489	442	366	316	278
Difference	12	7	6	19	18	15	14	9	11	39	32	13
Percent Difference	5.0%	2.8%	2.0%	5.4%	4.8%	3.4%	3.0%	1.9%	2.6%	11.8%	11.3%	4.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

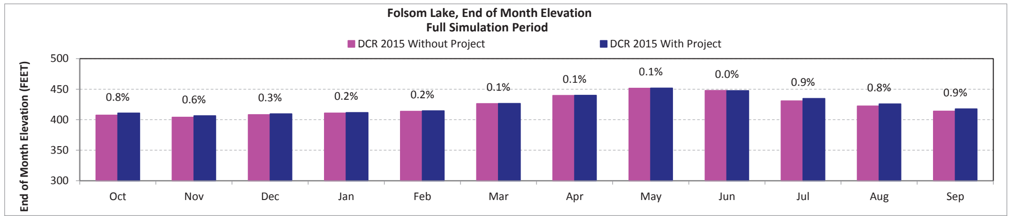
Table SW-25-a
Folsom Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

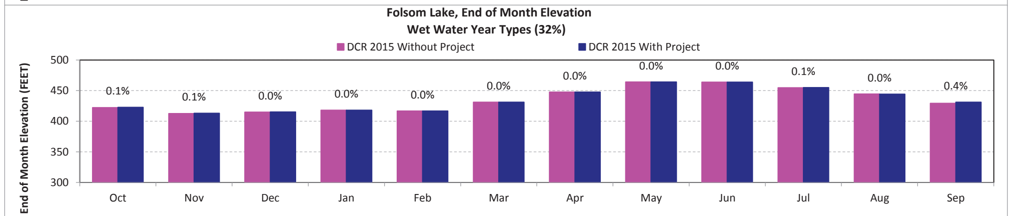
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	407	404	408	411	414	426	440	451	448	431	422	414
DCR 2015 With Project	411	406	410	412	414	427	440	452	448	435	426	418
Difference	3	2	1	1	1	0	0	0	0	4	3	4
Percent Difference[3]	0.8%	0.6%	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%	0.9%	0.8%	0.9%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	422	413	415	418	417	431	448	464	464	455	445	429
DCR 2015 With Project	423	413	415	418	417	431	448	464	464	455	444	431
Difference	1	0	0	0	0	0	0	0	0	0	0	2
Percent Difference	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%
Above Normal (14.6%)												
DCR 2015 Without Project	413	408	412	416	419	433	448	464	461	440	432	419
DCR 2015 With Project	419	412	415	416	419	433	448	464	461	444	436	426
Difference	6	4	2	0	0	0	0	0	1	4	4	7
Percent Difference	1.4%	1.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.8%	0.9%	1.6%
Below Normal (17.1%)												
DCR 2015 Without Project	417	414	415	414	420	430	447	460	457	434	428	424
DCR 2015 With Project	421	415	415	414	420	431	447	459	456	439	431	427
Difference	4	1	1	0	0	0	0	0	-2	5	3	3
Percent Difference	0.9%	0.2%	0.1%	0.1%	0.1%	0.1%	0.0%	-0.1%	-0.4%	1.1%	0.7%	0.6%
Dry (22%)												
DCR 2015 Without Project	399	401	405	407	413	426	437	445	436	416	408	405
DCR 2015 With Project	404	405	407	408	414	427	438	446	437	423	413	410
Difference	5	4	3	2	1	1	1	1	0	6	6	5
Percent Difference	1.3%	1.0%	0.6%	0.4%	0.4%	0.2%	0.2%	0.2%	0.1%	1.5%	1.4%	1.3%
Critical (14.6%)												
DCR 2015 Without Project	372	375	388	393	396	404	409	411	405	388	380	377
DCR 2015 With Project	376	378	389	396	398	406	411	412	406	395	387	381
Difference	4	3	1	3	3	2	1	1	1	7	7	4
Percent Difference	1.0%	0.7%	0.3%	0.7%	0.7%	0.4%	0.3%	0.1%	0.2%	1.7%	1.9%	1.0%

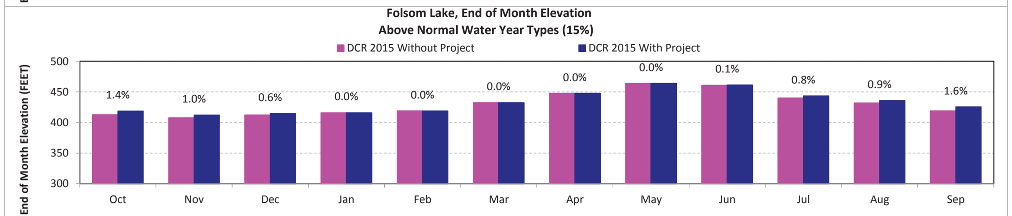
1 Based on the 82-year simulation period

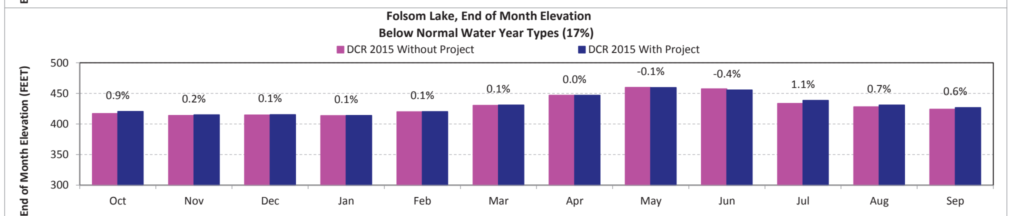
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

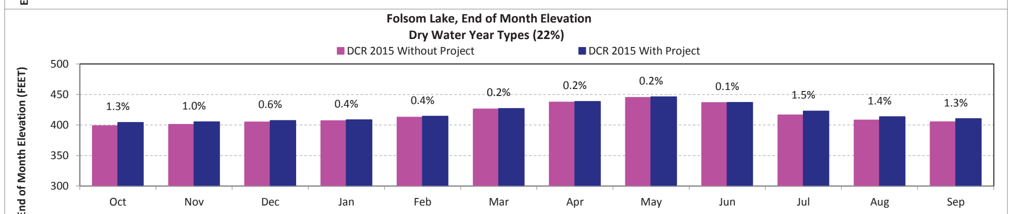
3 Relative difference of the monthly average











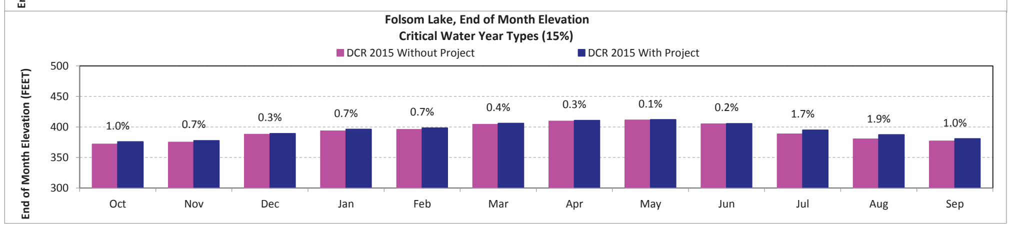


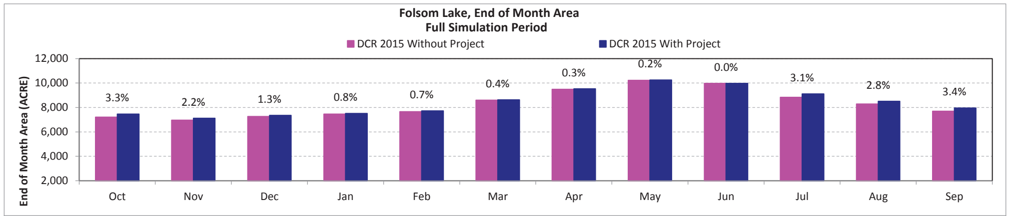
Table SW-26-a
Folsom Lake, End of Month Area
Long-term Average and Average by Water Year Type

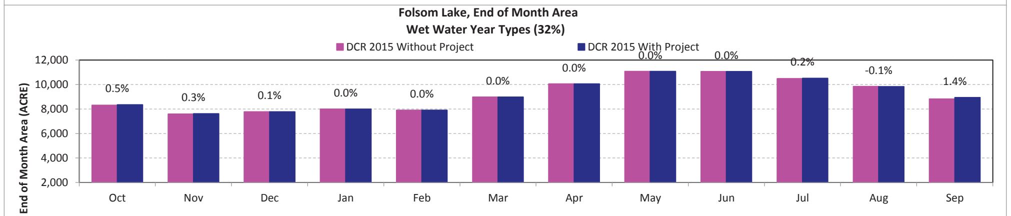
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	7,222	6,970	7,269	7,461	7,667	8,602	9,499	10,234	9,982	8,846	8,286	7,698
DCR 2015 With Project	7,464	7,127	7,361	7,521	7,724	8,637	9,530	10,252	9,984	9,118	8,518	7,958
Difference	242	157	92	60	57	35	31	18	1	271	233	260
Percent Difference[3]	3.3%	2.2%	1.3%	0.8%	0.7%	0.4%	0.3%	0.2%	0.0%	3.1%	2.8%	3.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	8,306	7,594	7,772	7,994	7,902	8,977	10,057	11,075	11,058	10,483	9,849	8,823
DCR 2015 With Project	8,346	7,619	7,782	7,992	7,902	8,977	10,057	11,075	11,057	10,508	9,835	8,947
Difference	40	25	10	-1	0	0	0	0	-1	24	-14	124
Percent Difference	0.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	-0.1%	1.4%
Above Normal (14.6%)												
DCR 2015 Without Project	7,591	7,229	7,559	7,830	8,058	9,072	10,053	11,052	10,864	9,523	8,983	8,060
DCR 2015 With Project	8,032	7,546	7,735	7,832	8,056	9,072	10,053	11,052	10,898	9,768	9,270	8,547
Difference	441	317	176	2	-2	0	0	0	34	244	287	487
Percent Difference	5.8%	4.4%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	2.6%	3.2%	6.0%
Below Normal (17.1%)												
DCR 2015 Without Project	7,908	7,687	7,740	7,660	8,122	8,916	10,011	10,801	10,659	9,091	8,711	8,436
DCR 2015 With Project	8,171	7,764	7,778	7,686	8,154	8,945	10,006	10,784	10,544	9,421	8,920	8,626
Difference	263	76	38	26	31	29	-5	-17	-114	331	208	190
Percent Difference	3.3%	1.0%	0.5%	0.3%	0.4%	0.3%	0.0%	-0.2%	-1.1%	3.6%	2.4%	2.3%
Dry (22%)												
DCR 2015 Without Project	6,554	6,723	6,999	7,154	7,599	8,594	9,361	9,860	9,295	7,852	7,227	7,027
DCR 2015 With Project	6,947	7,034	7,187	7,270	7,709	8,643	9,436	9,922	9,318	8,306	7,639	7,403
Difference	393	312	188	116	110	49	75	61	24	454	412	375
Percent Difference	6.0%	4.6%	2.7%	1.6%	1.5%	0.6%	0.8%	0.6%	0.3%	5.8%	5.7%	5.3%
Critical (14.6%)												
DCR 2015 Without Project	4,705	4,896	5,747	6,166	6,338	6,968	7,350	7,489	7,012	5,830	5,294	5,043
DCR 2015 With Project	4,933	5,039	5,849	6,371	6,526	7,098	7,452	7,541	7,088	6,319	5,765	5,279
Difference	228	143	102	206	188	130	102	51	77	489	471	236
Percent Difference	4.8%	2.9%	1.8%	3.3%	3.0%	1.9%	1.4%	0.7%	1.1%	8.4%	8.9%	4.7%

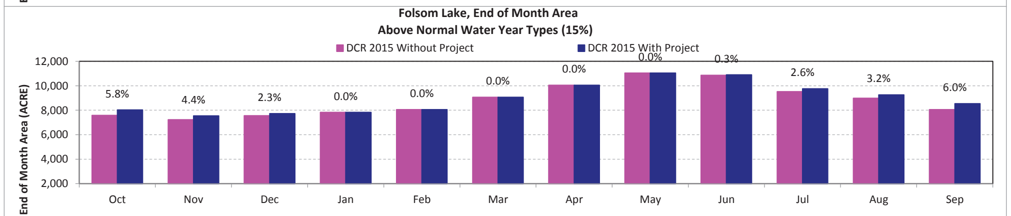
1 Based on the 82-year simulation period

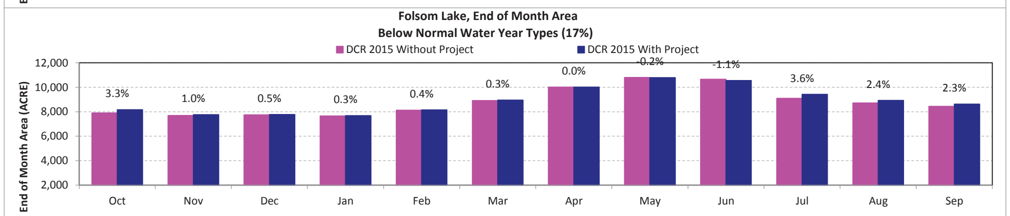
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

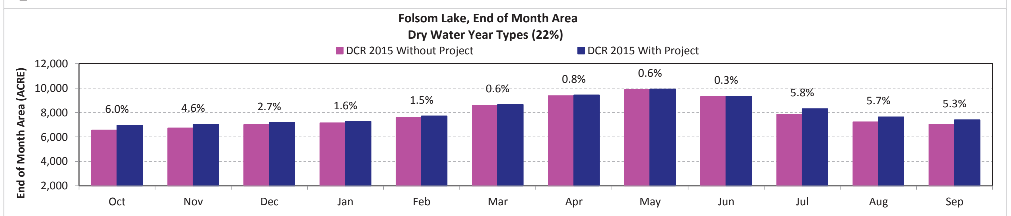
3 Relative difference of the monthly average











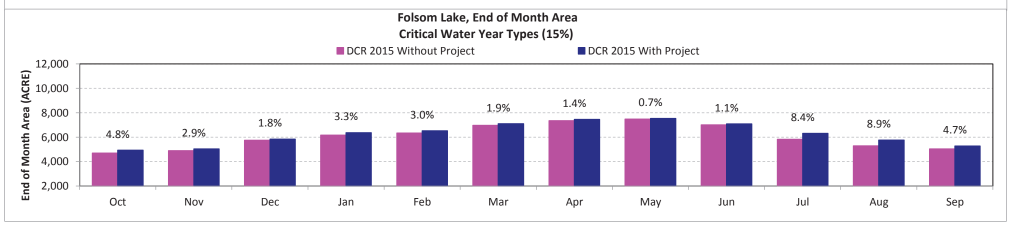


Table SW-27-a

American River below Nimbus Reservoir, Monthly Flow

Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1,659	2,670	3,317	4,509	5,207	4,040	3,398	3,365	3,192	3,578	2,143	2,244
DCR 2015 With Project	1,712	2,799	3,415	4,560	5,207	4,071	3,396	3,378	3,243	3,077	2,275	2,166
Difference	53	129	98	52	0	31	-2	12	51	-501	132	-78
Percent Difference[3]	3.2%	4.8%	3.0%	1.1%	0.0%	0.8%	-0.1%	0.4%	1.6%	-14.0%	6.2%	-3.5%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1,962	3,879	3,721	9,092	9,612	6,886	5,451	5,703	5,149	3,769	3,069	3,594
DCR 2015 With Project	2,136	3,906	3,745	9,129	9,609	6,886	5,450	5,703	5,153	3,698	3,169	3,307
Difference	174	27	24	36	-3	0	0	0	4	-72	100	-287
Percent Difference	8.9%	0.7%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	-1.9%	3.3%	-8.0%
Above Normal (14.6%)												
DCR 2015 Without Project	1,507	2,647	2,875	4,709	6,173	5,795	3,559	3,516	2,973	4,415	2,277	2,910
DCR 2015 With Project	1,579	2,871	3,112	4,851	6,179	5,791	3,559	3,516	2,877	3,967	2,255	2,575
Difference	72	224	237	142	7	-4	0	0	-96	-448	-22	-335
Percent Difference	4.8%	8.5%	8.2%	3.0%	0.1%	-0.1%	0.0%	0.0%	-3.2%	-10.1%	-1.0%	-11.5%
Below Normal (17.1%)												
DCR 2015 Without Project	2,051	3,173	4,087	2,337	3,956	2,584	3,206	2,962	2,415	4,692	1,771	1,582
DCR 2015 With Project	1,945	3,507	4,157	2,434	3,943	2,586	3,272	2,993	2,665	3,643	2,112	1,638
Difference	-105	334	70	96	-12	3	66	31	250	-1,049	340	56
Percent Difference	-5.1%	10.5%	1.7%	4.1%	-0.3%	0.1%	2.1%	1.0%	10.3%	-22.3%	19.2%	3.6%
Dry (22%)												
DCR 2015 Without Project	1,475	1,759	4,061	1,621	1,973	1,966	2,031	1,687	2,257	3,035	1,746	1,328
DCR 2015 With Project	1,512	1,858	4,248	1,610	1,967	2,073	1,962	1,670	2,373	2,262	1,870	1,360
Difference	37	99	187	-10	-5	107	-69	-18	116	-773	124	31
Percent Difference	2.5%	5.6%	4.6%	-0.6%	-0.3%	5.4%	-3.4%	-1.1%	5.1%	-25.5%	7.1%	2.4%
Critical (14.6%)												
DCR 2015 Without Project	973	852	870	1,242	1,010	930	1,067	1,138	1,481	1,841	1,030	798
DCR 2015 With Project	953	916	888	1,278	1,030	982	1,080	1,211	1,451	1,402	1,155	1,110
Difference	-20	63	18	36	21	52	13	74	-30	-440	124	312
Percent Difference	-2.1%	7.4%	2.1%	2.9%	2.1%	5.6%	1.2%	6.5%	-2.0%	-23.9%	12.1%	39.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

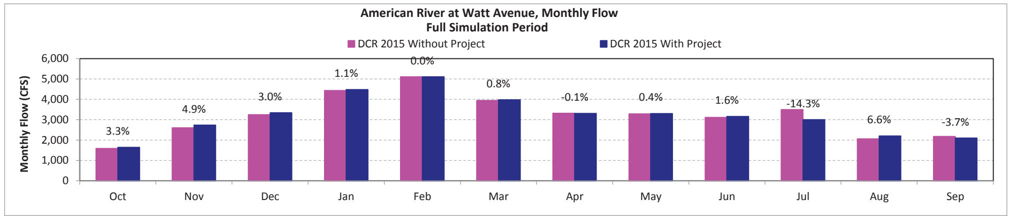
Table SW-28-a
American River at Watt Avenue, Monthly Flow
Long-term Average and Average by Water Year Type

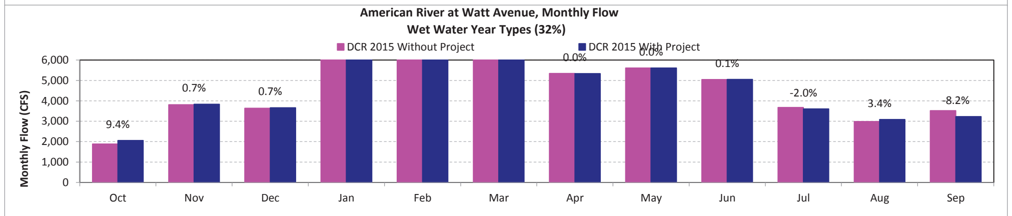
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1,593	2,606	3,247	4,433	5,114	3,950	3,315	3,290	3,114	3,503	2,064	2,176
DCR 2015 With Project	1,646	2,735	3,343	4,484	5,114	3,981	3,313	3,302	3,164	3,001	2,200	2,097
Difference	53	129	97	51	-1	31	-2	12	50	-502	136	-80
Percent Difference[3]	3.3%	4.9%	3.0%	1.1%	0.0%	0.8%	-0.1%	0.4%	1.6%	-14.3%	6.6%	-3.7%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1,883	3,812	3,640	8,994	9,475	6,757	5,340	5,608	5,048	3,677	2,989	3,517
DCR 2015 With Project	2,059	3,837	3,663	9,029	9,471	6,757	5,339	5,608	5,052	3,605	3,089	3,229
Difference	177	25	24	35	-3	0	0	0	4	-72	101	-288
Percent Difference	9.4%	0.7%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	-2.0%	3.4%	-8.2%
Above Normal (14.6%)												
DCR 2015 Without Project	1,436	2,584	2,805	4,640	6,081	5,700	3,466	3,442	2,894	4,341	2,191	2,841
DCR 2015 With Project	1,511	2,808	3,040	4,781	6,087	5,696	3,466	3,442	2,798	3,895	2,173	2,506
Difference	75	223	235	141	6	-4	0	0	-96	-447	-18	-335
Percent Difference	5.2%	8.6%	8.4%	3.0%	0.1%	-0.1%	0.0%	0.0%	-3.3%	-10.3%	-0.8%	-11.8%
Below Normal (17.1%)												
DCR 2015 Without Project	1,990	3,105	4,011	2,268	3,884	2,506	3,137	2,890	2,340	4,623	1,683	1,517
DCR 2015 With Project	1,884	3,440	4,078	2,363	3,871	2,509	3,203	2,919	2,589	3,573	2,032	1,570
Difference	-106	335	67	95	-13	3	66	30	249	-1,051	349	53
Percent Difference	-5.3%	10.8%	1.7%	4.2%	-0.3%	0.1%	2.1%	1.0%	10.6%	-22.7%	20.8%	3.5%
Dry (22%)												
DCR 2015 Without Project	1,417	1,697	3,999	1,558	1,906	1,902	1,965	1,623	2,193	2,967	1,672	1,264
DCR 2015 With Project	1,453	1,795	4,185	1,549	1,901	2,009	1,895	1,605	2,309	2,193	1,802	1,294
Difference	36	98	186	-10	-5	107	-70	-18	116	-774	131	29
Percent Difference	2.6%	5.8%	4.7%	-0.6%	-0.3%	5.6%	-3.6%	-1.1%	5.3%	-26.1%	7.8%	2.3%
Critical (14.6%)												
DCR 2015 Without Project	922	797	818	1,182	947	877	1,012	1,084	1,425	1,783	969	744
DCR 2015 With Project	897	860	835	1,217	968	928	1,024	1,156	1,392	1,343	1,096	1,052
Difference	-25	64	17	35	21	51	12	72	-32	-440	127	308
Percent Difference	-2.7%	8.0%	2.1%	2.9%	2.2%	5.9%	1.1%	6.7%	-2.3%	-24.7%	13.1%	41.4%

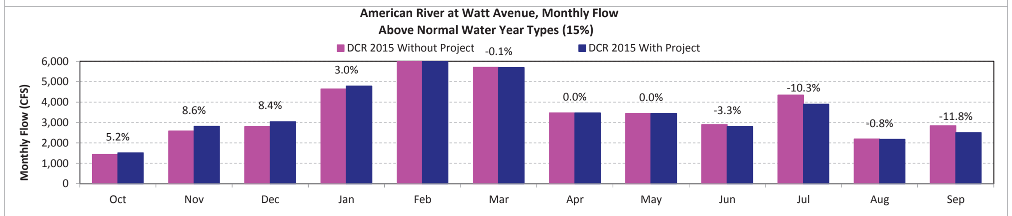
1 Based on the 82-year simulation period

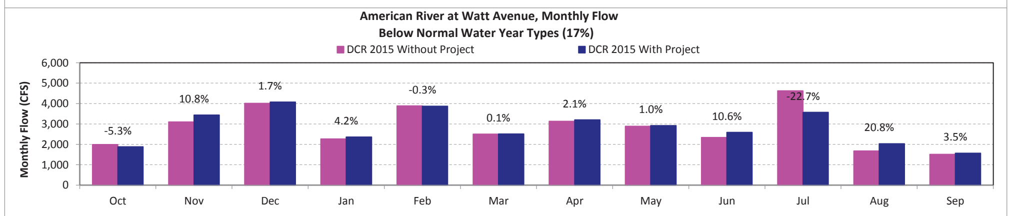
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

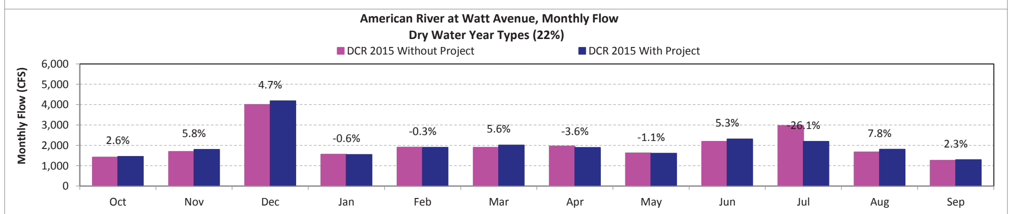
3 Relative difference of the monthly average











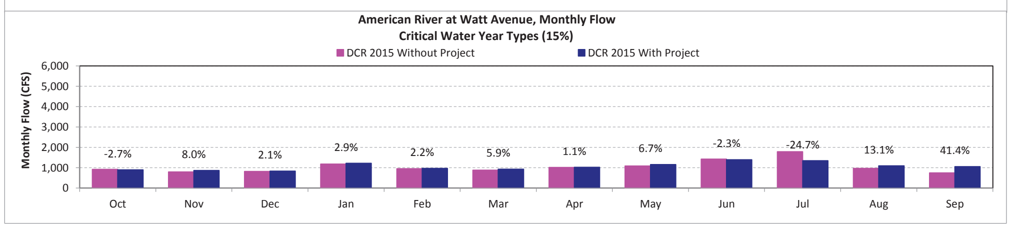


Table SW-29-a
American River at H Street, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1,479	2,504	3,177	4,352	5,018	3,847	3,116	3,026	2,811	2,991	1,767	1,944
DCR 2015 With Project	1,530	2,631	3,273	4,402	5,017	3,877	3,115	3,038	2,843	2,529	1,899	1,870
Difference	51	127	96	50	-2	31	-1	12	32	-462	132	-75
Percent Difference[3]	3.4%	5.1%	3.0%	1.2%	0.0%	0.8%	0.0%	0.4%	1.1%	-15.5%	7.4%	-3.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1,747	3,678	3,557	8,910	9,352	6,643	5,114	5,242	4,606	3,126	2,598	3,154
DCR 2015 With Project	1,908	3,700	3,581	8,945	9,349	6,643	5,114	5,242	4,609	3,038	2,674	2,884
Difference	161	22	24	35	-3	0	0	0	4	-88	76	-270
Percent Difference	9.2%	0.6%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	-2.8%	2.9%	-8.6%
Above Normal (14.6%)												
DCR 2015 Without Project	1,342	2,465	2,740	4,581	6,004	5,585	3,218	3,179	2,621	3,781	1,881	2,553
DCR 2015 With Project	1,417	2,688	2,970	4,722	6,010	5,580	3,218	3,179	2,525	3,335	1,890	2,202
Difference	75	223	229	141	6	-4	0	0	-96	-447	9	-350
Percent Difference	5.6%	9.0%	8.4%	3.1%	0.1%	-0.1%	0.0%	0.0%	-3.7%	-11.8%	0.5%	-13.7%
Below Normal (17.1%)												
DCR 2015 Without Project	1,866	3,013	3,923	2,183	3,784	2,398	2,910	2,570	2,049	4,066	1,435	1,368
DCR 2015 With Project	1,776	3,342	3,990	2,275	3,770	2,401	2,976	2,600	2,270	3,015	1,740	1,421
Difference	-91	330	67	91	-13	3	66	30	221	-1,051	305	53
Percent Difference	-4.9%	10.9%	1.7%	4.2%	-0.3%	0.1%	2.3%	1.2%	10.8%	-25.8%	21.2%	3.9%
Dry (22%)												
DCR 2015 Without Project	1,312	1,625	3,932	1,474	1,827	1,818	1,806	1,457	1,973	2,436	1,411	1,120
DCR 2015 With Project	1,349	1,723	4,118	1,464	1,818	1,925	1,743	1,440	2,027	1,785	1,557	1,162
Difference	36	98	186	-10	-9	107	-63	-18	54	-652	146	42
Percent Difference	2.8%	6.0%	4.7%	-0.7%	-0.5%	5.9%	-3.5%	-1.2%	2.7%	-26.7%	10.3%	3.7%
Critical (14.6%)												
DCR 2015 Without Project	835	725	791	1,093	869	782	887	960	1,258	1,487	776	623
DCR 2015 With Project	810	789	808	1,128	890	834	898	1,032	1,225	1,169	928	924
Difference	-25	64	17	35	21	51	12	72	-32	-318	152	301
Percent Difference	-3.0%	8.8%	2.1%	3.2%	2.4%	6.6%	1.3%	7.5%	-2.6%	-21.4%	19.6%	48.2%

1 Based on the 82-year simulation period

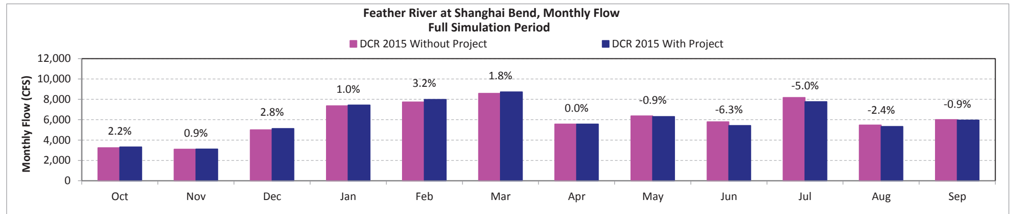
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

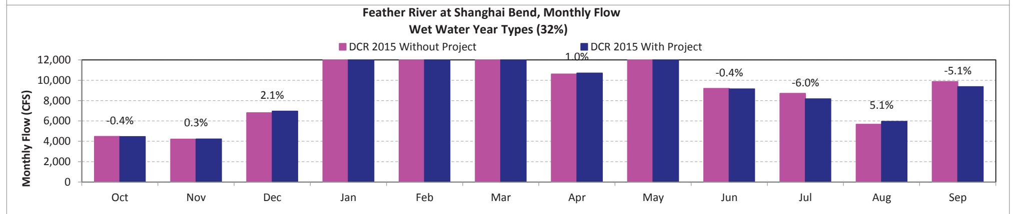
3 Relative difference of the monthly average

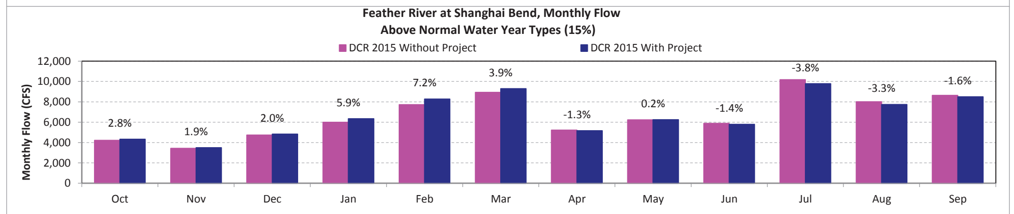
Table SW-46-a
Feather River at Shanghai Bend, Monthly Flow
Long-term Average and Average by Water Year Type

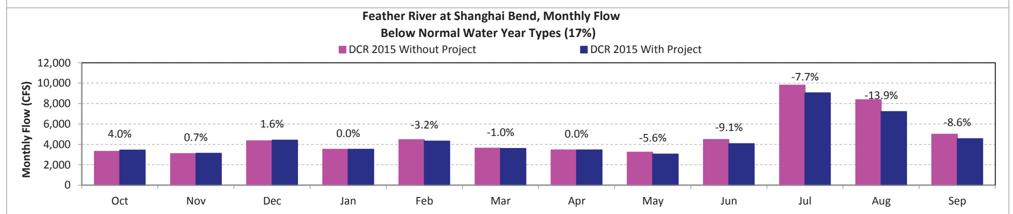
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	3,244	3,093	4,996	7,358	7,741	8,578	5,565	6,362	5,785	8,179	5,469	6,012
DCR 2015 With Project	3,315	3,121	5,135	7,430	7,985	8,730	5,566	6,308	5,421	7,770	5,338	5,959
Difference	71	28	139	72	244	152	0	-54	-365	-409	-131	-53
Percent Difference[3]	2.2%	0.9%	2.8%	1.0%	3.2%	1.8%	0.0%	-0.9%	-6.3%	-5.0%	-2.4%	-0.9%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	4,478	4,218	6,809	15,748	15,159	17,674	10,606	12,665	9,189	8,702	5,674	9,873
DCR 2015 With Project	4,460	4,232	6,955	15,811	15,753	17,980	10,710	12,688	9,154	8,178	5,961	9,374
Difference	-18	14	146	63	594	306	104	23	-36	-524	288	-500
Percent Difference	-0.4%	0.3%	2.1%	0.4%	3.9%	1.7%	1.0%	0.2%	-0.4%	-6.0%	5.1%	-5.1%
Above Normal (14.6%)												
DCR 2015 Without Project	4,217	3,437	4,737	5,993	7,723	8,940	5,225	6,231	5,881	10,176	8,011	8,634
DCR 2015 With Project	4,335	3,502	4,831	6,346	8,281	9,292	5,158	6,240	5,798	9,788	7,746	8,495
Difference	118	65	95	353	558	352	-67	10	-83	-388	-265	-139
Percent Difference	2.8%	1.9%	2.0%	5.9%	7.2%	3.9%	-1.3%	0.2%	-1.4%	-3.8%	-3.3%	-1.6%
Below Normal (17.1%)												
DCR 2015 Without Project	3,305	3,098	4,341	3,514	4,457	3,628	3,451	3,227	4,479	9,803	8,367	4,991
DCR 2015 With Project	3,438	3,120	4,413	3,514	4,316	3,591	3,451	3,046	4,070	9,053	7,202	4,560
Difference	133	22	72	0	-141	-37	0	-180	-409	-750	-1,166	-431
Percent Difference	4.0%	0.7%	1.6%	0.0%	-3.2%	-1.0%	0.0%	-5.6%	-9.1%	-7.7%	-13.9%	-8.6%
Dry (22%)												
DCR 2015 Without Project	1,906	2,237	4,689	2,564	3,152	3,167	2,582	2,619	4,011	7,794	3,631	2,401
DCR 2015 With Project	2,033	2,290	4,997	2,566	3,153	3,190	2,520	2,633	3,078	7,608	3,766	2,989
Difference	127	53	308	2	2	23	-62	14	-933	-186	134	588
Percent Difference	6.7%	2.4%	6.6%	0.1%	0.0%	0.7%	-2.4%	0.5%	-23.3%	-2.4%	3.7%	24.5%
Critical (14.6%)												
DCR 2015 Without Project	1,535	1,587	2,549	2,222	2,402	2,402	1,925	2,112	2,500	3,732	1,856	1,632
DCR 2015 With Project	1,597	1,577	2,544	2,223	2,387	2,431	1,863	1,870	2,045	3,615	1,764	2,111
Difference	62	-10	-5	1	-15	29	-62	-242	-454	-117	-93	480
Percent Difference	4.0%	-0.6%	-0.2%	0.0%	-0.6%	1.2%	-3.2%	-11.5%	-18.2%	-3.1%	-5.0%	29.4%

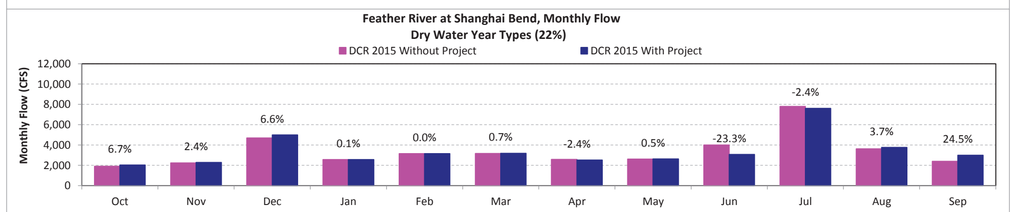
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











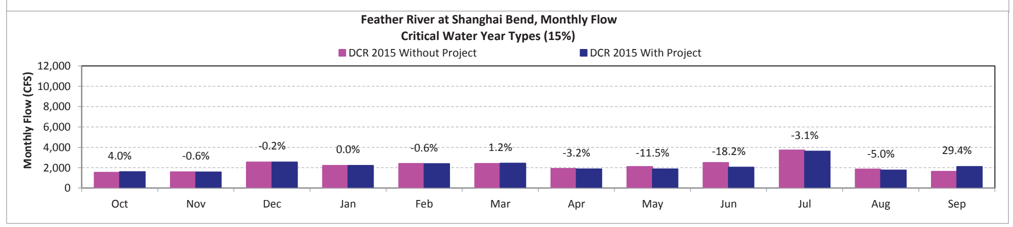


Table SW-47-a
American River at Mouth, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	1,479	2,504	3,177	4,352	5,018	3,847	3,116	3,026	2,811	2,991	1,767	1,944
DCR 2015 With Project	1,530	2,631	3,273	4,402	5,017	3,877	3,115	3,038	2,843	2,529	1,899	1,870
Difference	51	127	96	50	-2	31	-1	12	32	-462	132	-75
Percent Difference[3]	3.4%	5.1%	3.0%	1.2%	0.0%	0.8%	0.0%	0.4%	1.1%	-15.5%	7.4%	-3.8%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	1,747	3,678	3,557	8,910	9,352	6,643	5,114	5,242	4,606	3,126	2,598	3,154
DCR 2015 With Project	1,908	3,700	3,581	8,945	9,349	6,643	5,114	5,242	4,609	3,038	2,674	2,884
Difference	161	22	24	35	-3	0	0	0	4	-88	76	-270
Percent Difference	9.2%	0.6%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	-2.8%	2.9%	-8.6%
Above Normal (14.6%)												
DCR 2015 Without Project	1,342	2,465	2,740	4,581	6,004	5,585	3,218	3,179	2,621	3,781	1,881	2,553
DCR 2015 With Project	1,417	2,688	2,970	4,722	6,010	5,580	3,218	3,179	2,525	3,335	1,890	2,202
Difference	75	223	229	141	6	-4	0	0	-96	-447	9	-350
Percent Difference	5.6%	9.0%	8.4%	3.1%	0.1%	-0.1%	0.0%	0.0%	-3.7%	-11.8%	0.5%	-13.7%
Below Normal (17.1%)												
DCR 2015 Without Project	1,866	3,013	3,923	2,183	3,784	2,398	2,910	2,570	2,049	4,066	1,435	1,368
DCR 2015 With Project	1,776	3,342	3,990	2,275	3,770	2,401	2,976	2,600	2,270	3,015	1,740	1,421
Difference	-91	330	67	91	-13	3	66	30	221	-1,051	305	53
Percent Difference	-4.9%	10.9%	1.7%	4.2%	-0.3%	0.1%	2.3%	1.2%	10.8%	-25.8%	21.2%	3.9%
Dry (22%)												
DCR 2015 Without Project	1,312	1,625	3,932	1,474	1,827	1,818	1,806	1,457	1,973	2,436	1,411	1,120
DCR 2015 With Project	1,349	1,723	4,118	1,464	1,818	1,925	1,743	1,440	2,027	1,785	1,557	1,162
Difference	36	98	186	-10	-9	107	-63	-18	54	-652	146	42
Percent Difference	2.8%	6.0%	4.7%	-0.7%	-0.5%	5.9%	-3.5%	-1.2%	2.7%	-26.7%	10.3%	3.7%
Critical (14.6%)												
DCR 2015 Without Project	835	725	791	1,093	869	782	887	960	1,258	1,487	776	623
DCR 2015 With Project	810	789	808	1,128	890	834	898	1,032	1,225	1,169	928	924
Difference	-25	64	17	35	21	51	12	72	-32	-318	152	301
Percent Difference	-3.0%	8.8%	2.1%	3.2%	2.4%	6.6%	1.3%	7.5%	-2.6%	-21.4%	19.6%	48.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

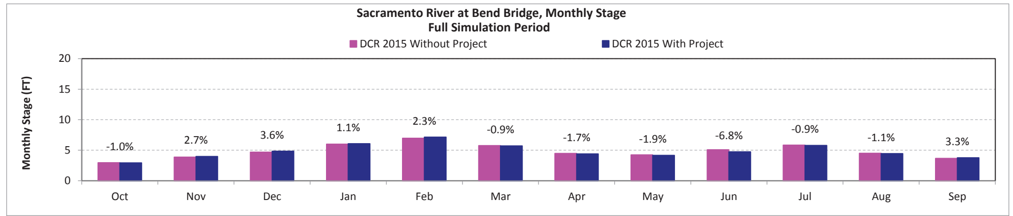
Table SW-53-a
Sacramento River at Bend Bridge, Monthly Stage
Long-term Average and Average by Water Year Type

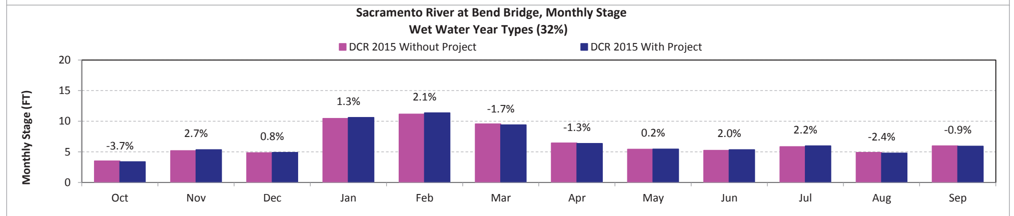
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	3	4	5	6	7	6	4	4	5	6	4	4
DCR 2015 With Project	3	4	5	6	7	6	4	4	5	6	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	-1.0%	2.7%	3.6%	1.1%	2.3%	-0.9%	-1.7%	-1.9%	-6.8%	-0.9%	-1.1%	3.3%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	3	5	5	10	11	10	6	5	5	6	5	6
DCR 2015 With Project	3	5	5	11	11	9	6	5	5	6	5	6
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-3.7%	2.7%	0.8%	1.3%	2.1%	-1.7%	-1.3%	0.2%	2.0%	2.2%	-2.4%	-0.9%
Above Normal (14.6%)												
DCR 2015 Without Project	3	5	5	7	9	7	4	4	5	6	5	4
DCR 2015 With Project	3	5	5	7	10	7	4	5	5	6	4	4
Difference	0	0	1	0	0	0	0	0	-1	0	0	0
Percent Difference	5.6%	-1.6%	12.9%	-1.1%	2.6%	-0.4%	0.9%	4.6%	-10.0%	-3.7%	-4.7%	-3.4%
Below Normal (17.1%)												
DCR 2015 Without Project	3	3	5	4	5	4	4	4	5	6	4	2
DCR 2015 With Project	3	3	6	4	5	4	4	4	4	6	4	3
Difference	0	0	0	0	0	0	0	0	-1	0	0	0
Percent Difference	8.8%	10.9%	4.4%	3.7%	3.9%	0.2%	-0.9%	-3.0%	-15.4%	-1.5%	-4.8%	8.4%
Dry (22%)												
DCR 2015 Without Project	3	3	5	3	4	3	3	4	5	6	4	2
DCR 2015 With Project	2	3	5	3	4	3	3	3	4	6	4	3
Difference	0	0	0	0	0	0	0	0	-1	0	0	0
Percent Difference	-5.2%	5.5%	3.0%	4.7%	2.8%	-0.8%	-1.8%	-3.6%	-13.1%	-2.3%	2.0%	17.1%
Critical (14.6%)												
DCR 2015 Without Project	2	2	3	3	3	2	3	3	5	5	4	2
DCR 2015 With Project	2	2	3	3	3	3	3	3	4	5	4	2
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-7.9%	-4.9%	-1.5%	-5.5%	-1.1%	2.4%	-7.7%	-14.2%	-3.6%	-1.6%	6.0%	13.4%

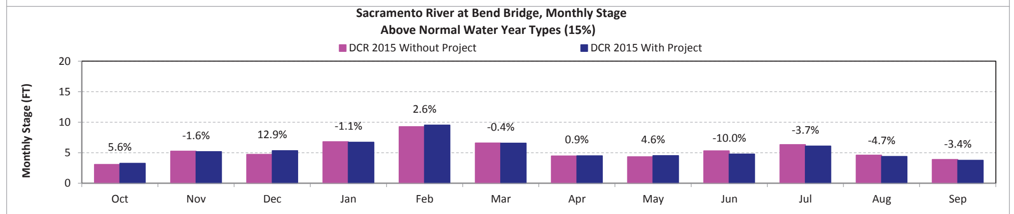
1 Based on the 82-year simulation period

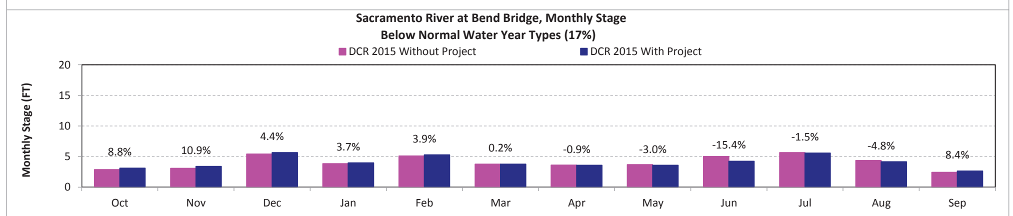
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

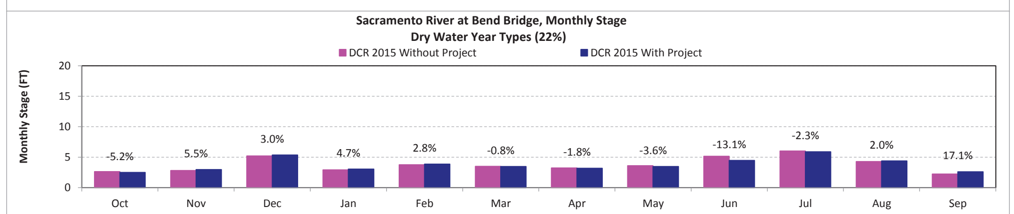
3 Relative difference of the monthly average











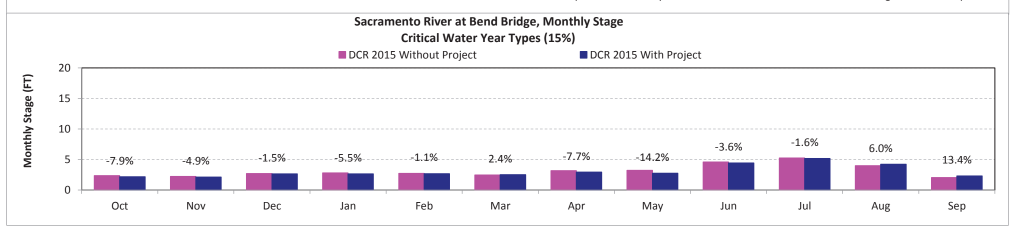


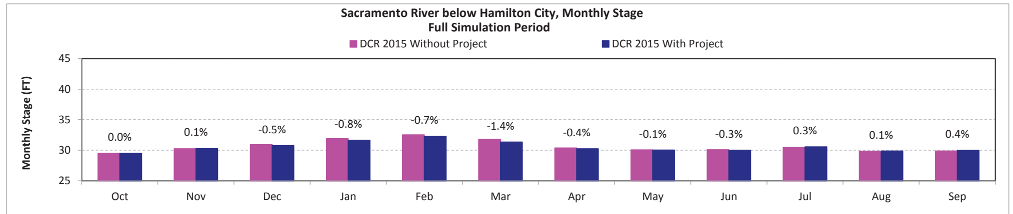
Table SW-54-a
Sacramento River below Hamilton City, Monthly Stage
Long-term Average and Average by Water Year Type

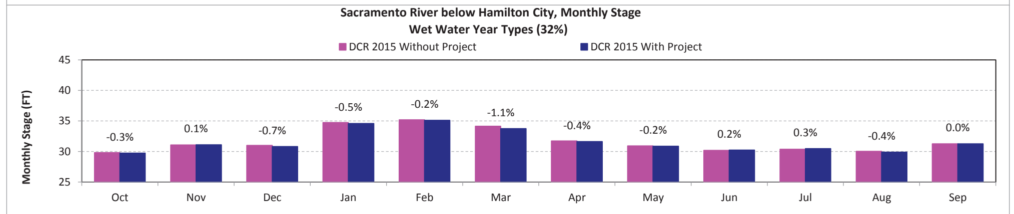
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	29	30	31	32	33	32	30	30	30	30	30	30
DCR 2015 With Project	29	30	31	32	32	31	30	30	30	31	30	30
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	0.0%	0.1%	-0.5%	-0.8%	-0.7%	-1.4%	-0.4%	-0.1%	-0.3%	0.3%	0.1%	0.4%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	30	31	31	35	35	34	32	31	30	30	30	31
DCR 2015 With Project	30	31	31	35	35	34	32	31	30	30	30	31
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.3%	0.1%	-0.7%	-0.5%	-0.2%	-1.1%	-0.4%	-0.2%	0.2%	0.3%	-0.4%	0.0%
Above Normal (14.6%)												
DCR 2015 Without Project	30	31	31	32	34	32	30	30	30	31	30	30
DCR 2015 With Project	30	31	31	32	34	32	30	30	30	31	30	30
Difference	0	0	0	0	0	-1	0	0	0	0	0	0
Percent Difference	0.3%	-0.3%	-0.7%	-1.5%	-0.9%	-1.8%	-0.8%	0.0%	-0.5%	0.3%	-0.2%	-0.1%
Below Normal (17.1%)												
DCR 2015 Without Project	29	30	31	31	31	31	30	30	30	30	30	29
DCR 2015 With Project	30	30	31	30	31	30	30	30	30	30	30	29
Difference	0	0	0	0	0	-1	0	0	0	0	0	0
Percent Difference	0.7%	0.6%	-0.3%	-1.1%	-0.7%	-1.9%	-0.7%	-0.2%	-1.0%	0.5%	0.1%	0.6%
Dry (22%)												
DCR 2015 Without Project	29	30	31	30	30	30	29	30	30	31	30	29
DCR 2015 With Project	29	30	31	30	30	30	29	30	30	31	30	29
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.2%	0.1%	-0.3%	-0.6%	-1.2%	-1.6%	-0.3%	0.2%	-0.6%	0.3%	0.4%	1.0%
Critical (14.6%)												
DCR 2015 Without Project	29	29	30	30	30	30	29	29	30	30	30	29
DCR 2015 With Project	29	29	30	29	29	29	29	29	30	30	30	29
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.4%	-0.3%	-0.6%	-0.9%	-1.3%	-0.6%	0.0%	-0.5%	0.0%	0.3%	0.9%	0.8%

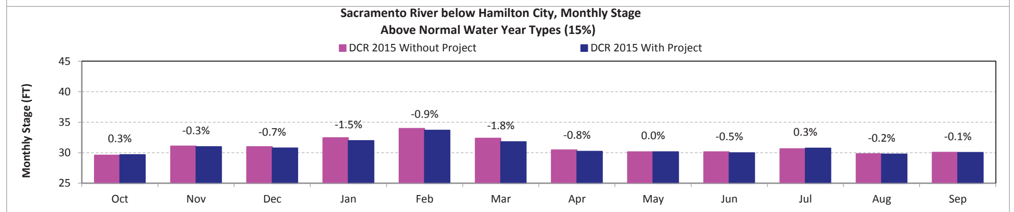
1 Based on the 82-year simulation period

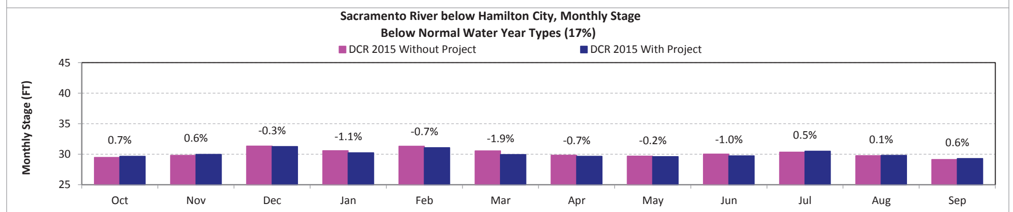
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

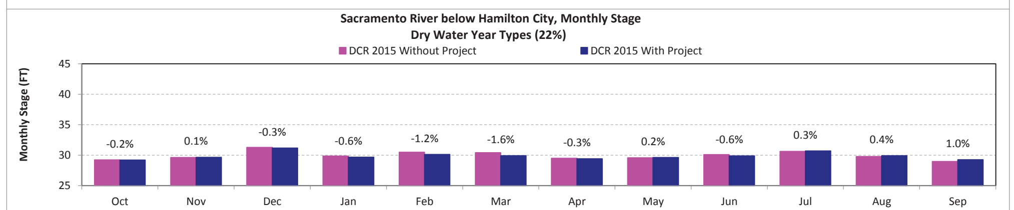
3 Relative difference of the monthly average











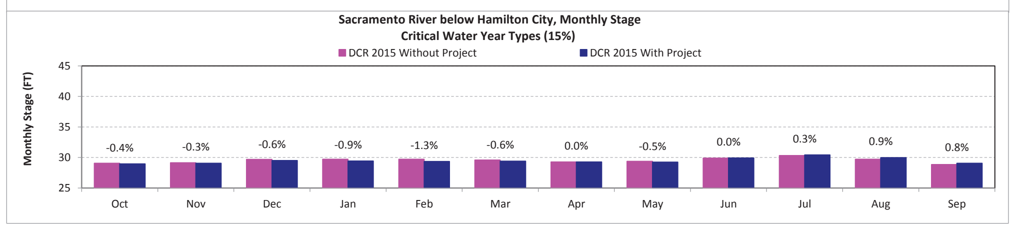


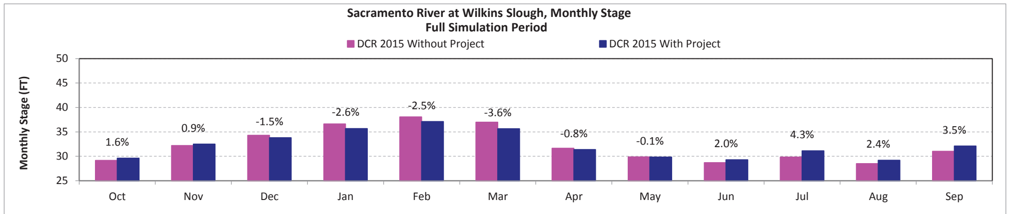
Table SW-56-a
Sacramento River at Wilkins Slough, Monthly Stage
Long-term Average and Average by Water Year Type

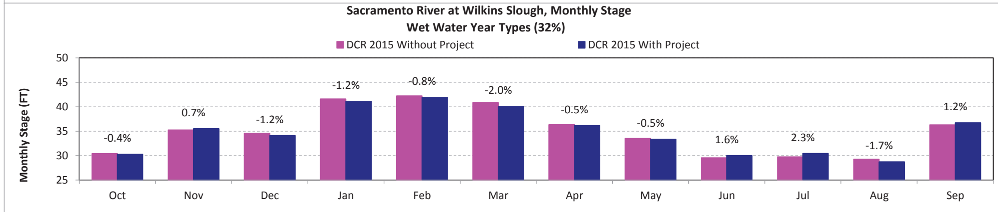
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	29	32	34	37	38	37	32	30	29	30	29	31
DCR 2015 With Project	30	33	34	36	37	36	31	30	29	31	29	32
Difference	0	0	0	-1	-1	-1	0	0	1	1	1	1
Percent Difference[3]	1.6%	0.9%	-1.5%	-2.6%	-2.5%	-3.6%	-0.8%	-0.1%	2.0%	4.3%	2.4%	3.5%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	30	35	35	42	42	41	36	34	30	30	29	36
DCR 2015 With Project	30	36	34	41	42	40	36	33	30	30	29	37
Difference	0	0	0	0	0	-1	0	0	0	1	-1	0
Percent Difference	-0.4%	0.7%	-1.2%	-1.2%	-0.8%	-2.0%	-0.5%	-0.5%	1.6%	2.3%	-1.7%	1.2%
Above Normal (14.6%)												
DCR 2015 Without Project	30	35	35	39	42	40	33	30	29	30	28	32
DCR 2015 With Project	30	34	34	38	41	38	33	30	29	32	29	32
Difference	0	0	-1	-1	-1	-2	-1	0	0	1	0	1
Percent Difference	1.3%	-0.9%	-3.5%	-2.6%	-2.5%	-4.6%	-1.8%	0.0%	0.6%	4.0%	0.7%	2.2%
Below Normal (17.1%)												
DCR 2015 Without Project	29	31	36	35	37	35	30	29	28	29	28	28
DCR 2015 With Project	31	32	35	34	36	33	30	28	29	31	29	30
Difference	1	1	0	-2	-1	-2	-1	0	0	2	1	1
Percent Difference	4.3%	2.0%	-1.1%	-4.6%	-2.7%	-6.7%	-1.7%	-0.9%	1.0%	7.2%	4.3%	4.5%
Dry (22%)												
DCR 2015 Without Project	28	30	35	32	35	34	28	27	28	30	28	28
DCR 2015 With Project	29	30	34	31	33	33	28	28	29	32	30	30
Difference	1	1	0	-1	-1	-2	0	0	1	2	2	2
Percent Difference	2.9%	1.9%	-0.2%	-2.5%	-4.3%	-4.6%	-0.8%	0.8%	3.2%	5.6%	5.7%	6.9%
Critical (14.6%)												
DCR 2015 Without Project	27	28	31	32	32	31	27	27	28	29	28	27
DCR 2015 With Project	28	28	31	30	30	31	27	27	29	30	30	29
Difference	0	0	-1	-1	-2	0	0	0	1	1	2	1
Percent Difference	0.9%	0.6%	-2.2%	-4.0%	-4.8%	-1.5%	0.4%	0.4%	3.9%	3.7%	6.6%	5.2%

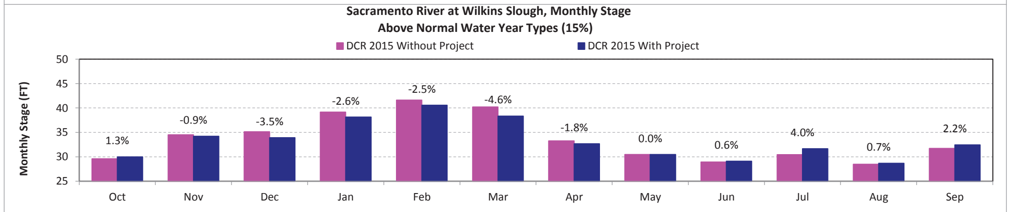
1 Based on the 82-year simulation period

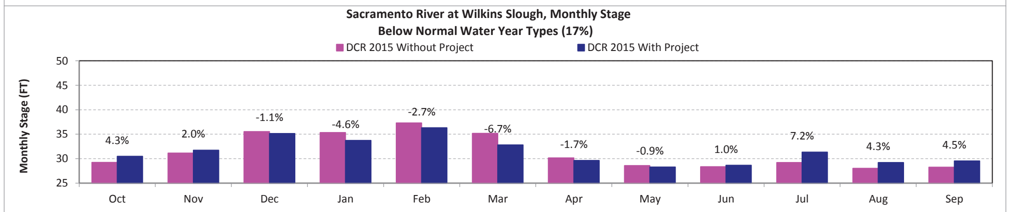
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

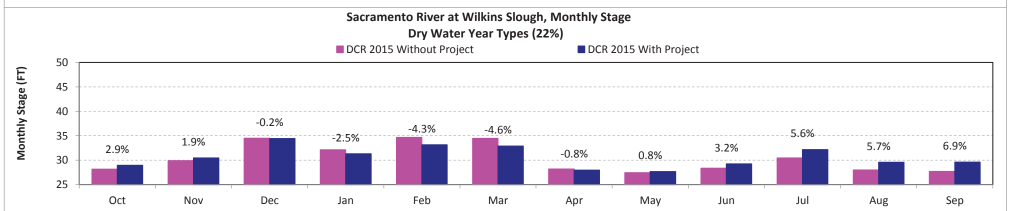
3 Relative difference of the monthly average











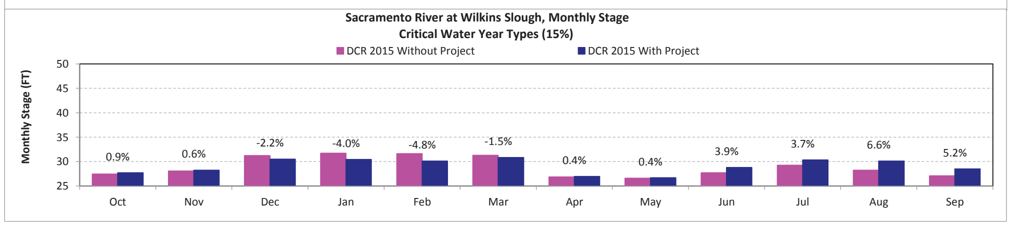


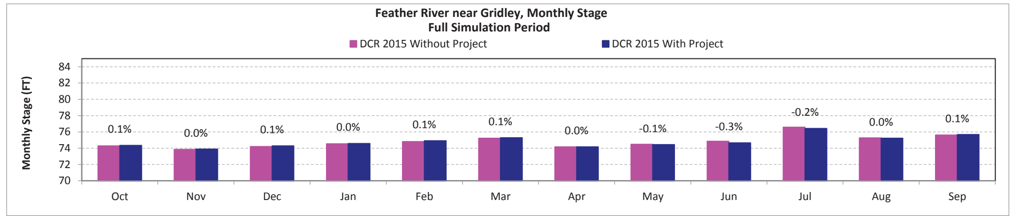
Table SW-57-a
Feather River near Gridley, Monthly Stage
Long-term Average and Average by Water Year Type

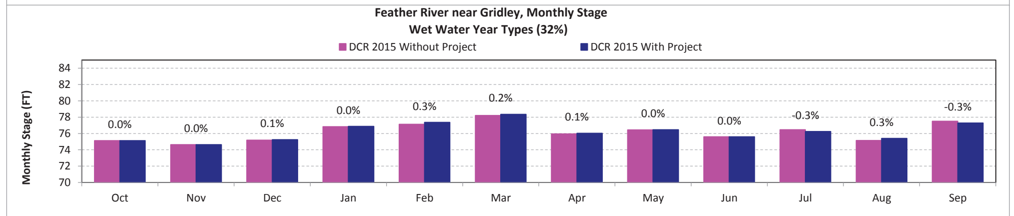
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	74	74	74	75	75	75	74	74	75	77	75	76
DCR 2015 With Project	74	74	74	75	75	75	74	74	75	76	75	76
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	-0.1%	-0.3%	-0.2%	0.0%	0.1%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	75	75	75	77	77	78	76	76	76	76	75	78
DCR 2015 With Project	75	75	75	77	77	78	76	76	76	76	75	77
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.1%	0.0%	0.3%	0.2%	0.1%	0.0%	0.0%	-0.3%	0.3%	-0.3%
Above Normal (14.6%)												
DCR 2015 Without Project	75	74	74	74	75	75	74	74	75	77	77	77
DCR 2015 With Project	75	74	75	74	75	75	74	74	75	77	76	77
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.1%	0.1%	0.1%	0.2%	0.3%	0.2%	-0.1%	0.0%	0.1%	-0.2%	-0.2%	-0.1%
Below Normal (17.1%)												
DCR 2015 Without Project	74	74	74	73	74	74	73	73	74	77	77	75
DCR 2015 With Project	74	74	74	73	74	74	73	73	74	77	76	75
Difference	0	0	0	0	0	0	0	0	0	0	-1	0
Percent Difference	0.1%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	-0.2%	-0.2%	-0.4%	-0.7%	-0.2%
Dry (22%)												
DCR 2015 Without Project	73	73	74	73	74	73	73	74	75	77	75	74
DCR 2015 With Project	74	73	74	73	74	73	73	74	74	77	75	74
Difference	0	0	0	0	0	0	0	0	-1	0	0	0
Percent Difference	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.8%	-0.1%	0.1%	0.6%
Critical (14.6%)												
DCR 2015 Without Project	73	73	74	73	73	73	73	73	74	75	74	73
DCR 2015 With Project	73	73	74	73	73	73	73	73	74	75	73	74
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.3%	-0.5%	-0.1%	-0.2%	0.6%

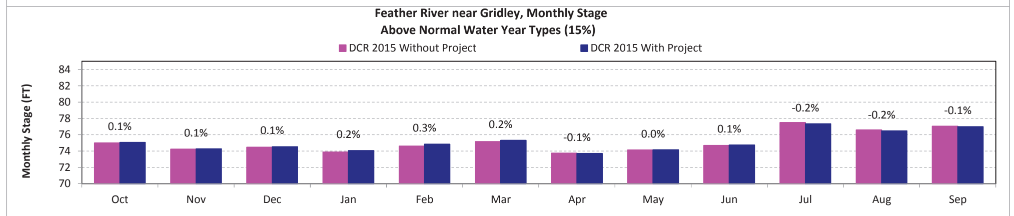
1 Based on the 82-year simulation period

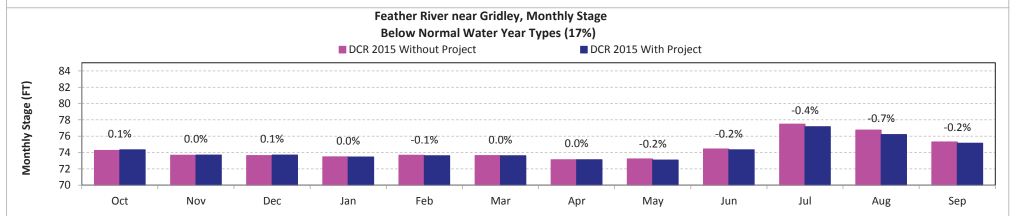
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

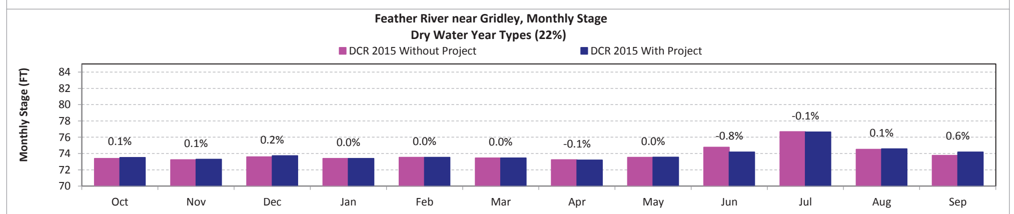
3 Relative difference of the monthly average











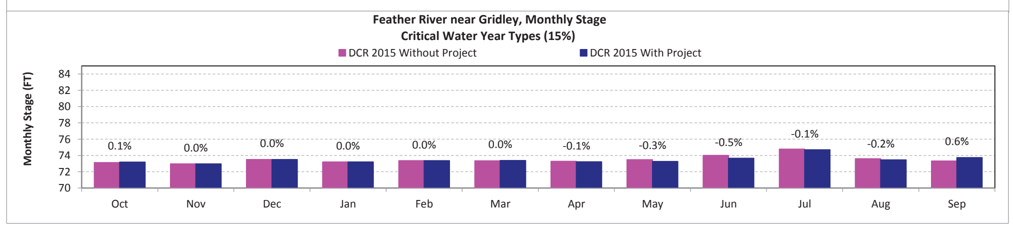


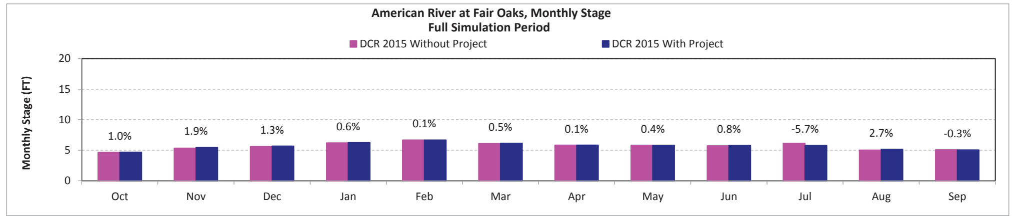
Table SW-58-a
American River at Fair Oaks, Monthly Stage
Long-term Average and Average by Water Year Type

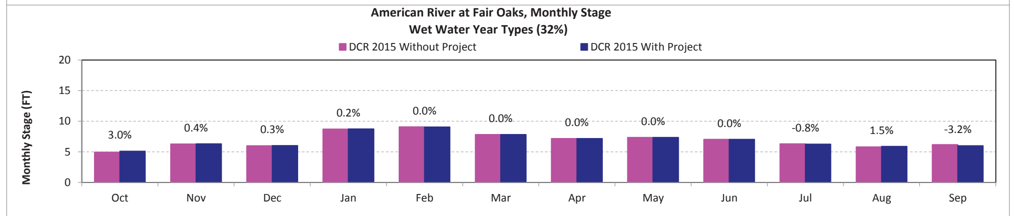
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	5	5	6	6	7	6	6	6	6	6	5	5
DCR 2015 With Project	5	5	6	6	7	6	6	6	6	6	5	5
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	1.0%	1.9%	1.3%	0.6%	0.1%	0.5%	0.1%	0.4%	0.8%	-5.7%	2.7%	-0.3%
Water Year Types[2]												
Wet (31.7%)												
DCR 2015 Without Project	5	6	6	9	9	8	7	7	7	6	6	6
DCR 2015 With Project	5	6	6	9	9	8	7	7	7	6	6	6
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	3.0%	0.4%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.8%	1.5%	-3.2%
Above Normal (14.6%)												
DCR 2015 Without Project	5	5	6	6	7	7	6	6	6	7	5	6
DCR 2015 With Project	5	6	6	7	7	7	6	6	6	6	5	5
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	1.5%	3.0%	2.9%	1.6%	0.1%	-0.1%	0.0%	0.0%	-1.4%	-4.2%	-0.3%	-3.8%
Below Normal (17.1%)												
DCR 2015 Without Project	5	6	6	5	6	5	6	6	5	7	5	5
DCR 2015 With Project	5	6	6	5	6	5	6	6	5	6	5	5
Difference	0	0	0	0	0	0	0	0	0	-1	0	0
Percent Difference	-2.0%	3.6%	0.9%	1.8%	-0.2%	0.1%	1.0%	0.7%	4.1%	-10.0%	6.2%	1.4%
Dry (22%)												
DCR 2015 Without Project	5	5	6	5	5	5	5	5	5	6	5	4
DCR 2015 With Project	5	5	6	5	5	5	5	5	5	5	5	4
Difference	0	0	0	0	0	0	0	0	0	-1	0	0
Percent Difference	1.0%	2.1%	2.2%	-0.3%	0.1%	1.9%	-0.9%	0.1%	1.9%	-10.3%	2.7%	1.3%
Critical (14.6%)												
DCR 2015 Without Project	4	4	4	4	4	4	4	4	4	5	4	4
DCR 2015 With Project	4	4	4	4	4	4	4	4	4	4	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.4%	2.1%	0.6%	0.7%	0.7%	2.2%	1.0%	2.5%	0.0%	-6.1%	5.5%	10.1%

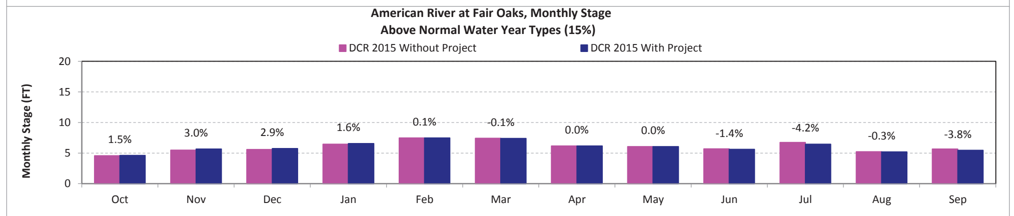
1 Based on the 82-year simulation period

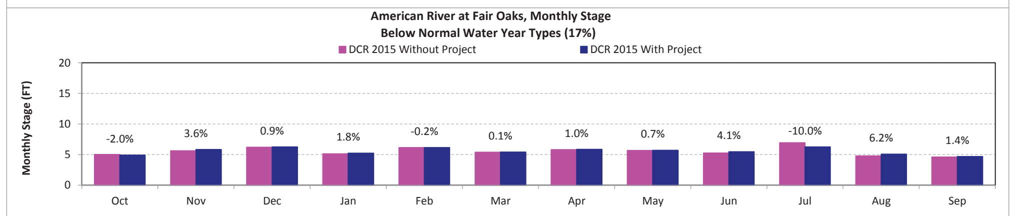
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

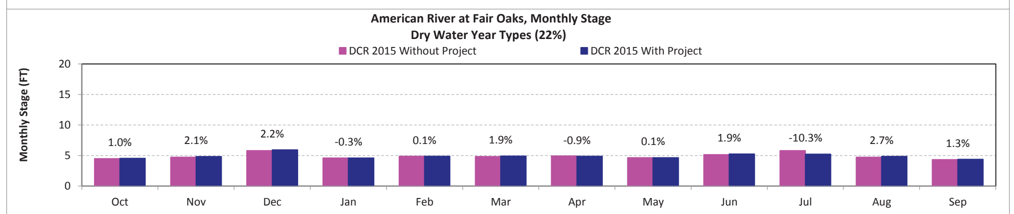
3 Relative difference of the monthly average

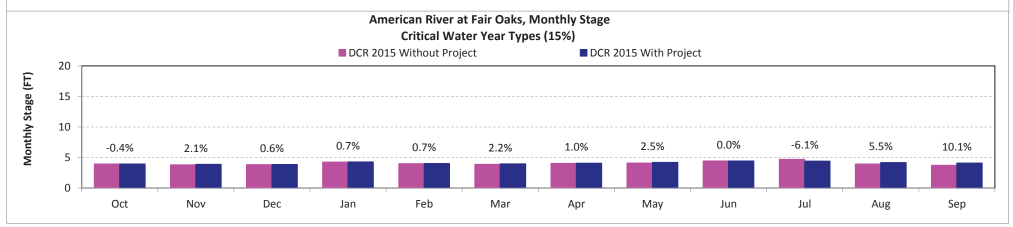












Trinity and Sacramento River Basin Operations

Exceedance Probability Charts and Tables

Figure SW-01-b
Trinity Lake, End of Month Storage
Probability of Exceedance

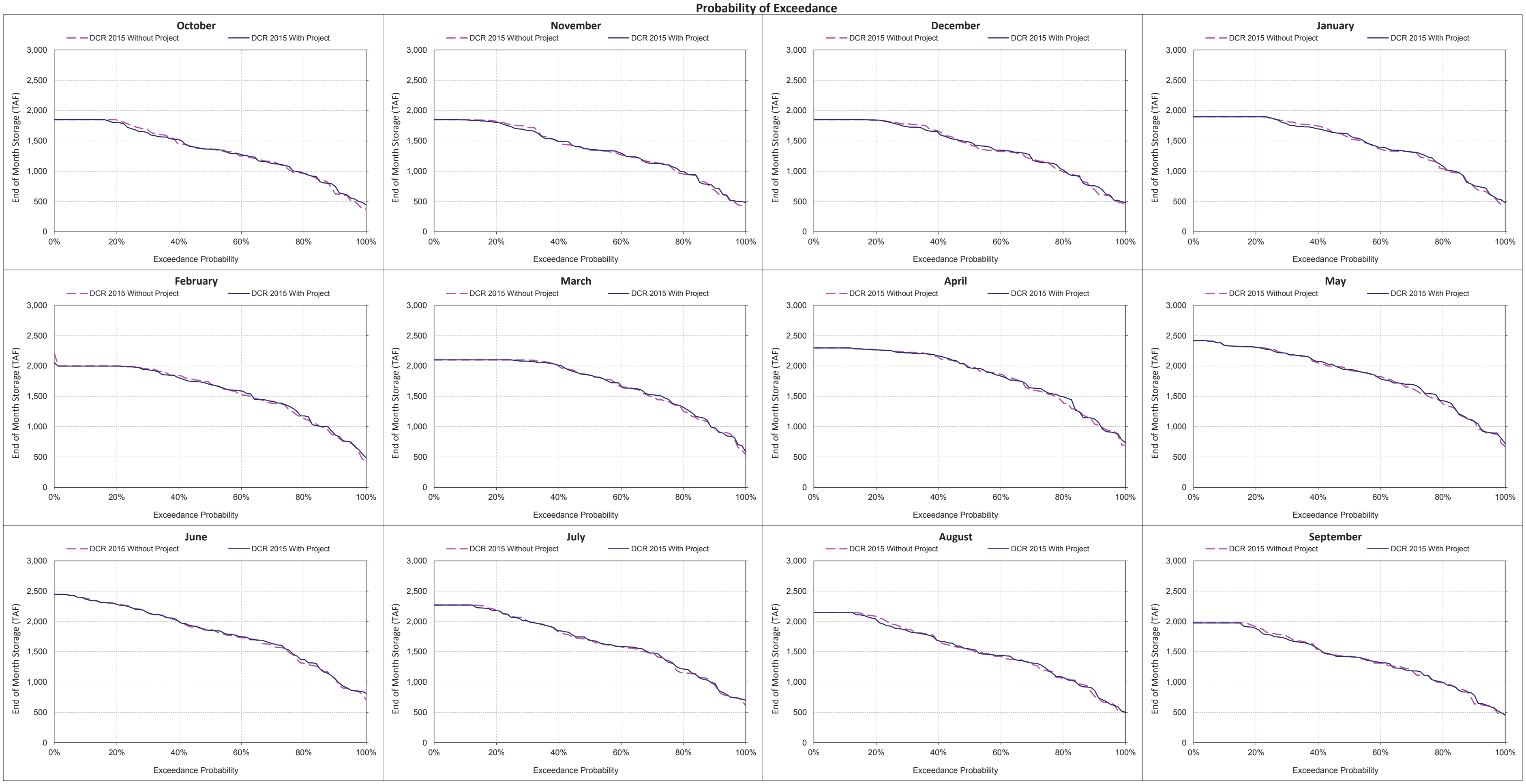


Table SW-01-b
Trinity Lake, End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,850	1,850	0	0.0%
1.2%	1,850	1,850	0	0.0%
2.5%	1,850	1,850	0	0.0%
3.7%	1,850	1,850	0	0.0%
4.9%	1,850	1,850	0	0.0%
6.2%	1,850	1,850	0	0.0%
7.4%	1,850	1,850	0	0.0%
8.6%	1,850	1,850	0	0.0%
9.9%	1,850	1,850	0	0.0%
11.1%	1,850	1,850	0	0.0%
12.3%	1,850	1,850	0	0.0%
13.6%	1,850	1,850	0	0.0%
14.8%	1,850	1,850	0	0.0%
16.0%	1,850	1,850	0	0.0%
17.3%	1,850	1,831	-19	-1.0%
18.5%	1,850	1,809	-41	-2.2%
19.8%	1,850	1,804	-46	-2.5%
21.0%	1,822	1,801	-21	-1.2%
22.2%	1,810	1,781	-28	-1.6%
23.5%	1,781	1,724	-57	-3.2%
24.7%	1,755	1,703	-53	-3.0%
25.9%	1,732	1,684	-48	-2.8%
27.2%	1,714	1,656	-59	-3.4%
28.4%	1,704	1,652	-51	-3.0%
29.6%	1,703	1,643	-60	-3.5%
30.9%	1,642	1,599	-43	-2.6%
32.1%	1,619	1,588	-31	-1.9%
33.3%	1,605	1,572	-32	-2.0%
34.6%	1,603	1,567	-36	-2.3%
35.8%	1,594	1,564	-30	-1.9%
37.0%	1,547	1,540	-7	-0.5%
38.3%	1,545	1,527	-18	-1.2%
39.5%	1,457	1,522	65	4.5%
40.7%	1,446	1,511	65	4.5%
42.0%	1,446	1,445	-2	-0.1%
43.2%	1,423	1,415	-7	-0.5%
44.4%	1,400	1,400	0	0.0%
45.7%	1,382	1,394	12	0.8%
46.9%	1,377	1,376	-1	-0.1%
48.1%	1,368	1,368	-1	0.0%
49.4%	1,368	1,364	-4	-0.3%
50.6%	1,361	1,363	1	0.1%
51.9%	1,353	1,363	9	0.7%
53.1%	1,342	1,351	9	0.7%
54.3%	1,322	1,346	24	1.8%
55.6%	1,319	1,306	-13	-1.0%
56.8%	1,319	1,291	-29	-2.2%
58.0%	1,312	1,290	-22	-1.7%
59.3%	1,253	1,287	33	2.6%
60.5%	1,253	1,266	13	1.0%
61.7%	1,241	1,255	13	1.1%
63.0%	1,225	1,240	14	1.2%
64.2%	1,207	1,233	26	2.1%
65.4%	1,206	1,171	-35	-2.9%
66.7%	1,179	1,164	-15	-1.3%
67.9%	1,166	1,158	-8	-0.7%
69.1%	1,161	1,137	-24	-2.1%
70.4%	1,156	1,122	-33	-2.9%
71.6%	1,126	1,120	-6	-0.5%
72.8%	1,098	1,109	11	1.0%
74.1%	1,076	1,093	17	1.6%
75.3%	1,020	1,076	56	5.4%
76.5%	981	1,005	24	2.4%
77.8%	981	994	13	1.3%
79.0%	971	985	14	1.5%
80.2%	959	960	1	0.1%
81.5%	951	938	-13	-1.4%
82.7%	916	918	2	0.2%
84.0%	886	916	30	3.3%
85.2%	851	828	-23	-2.7%
86.4%	847	805	-41	-4.9%
87.7%	818	803	-15	-1.8%
88.9%	729	793	65	8.9%
90.1%	623	748	125	20.1%
91.4%	622	642	20	3.2%
92.6%	604	627	23	3.8%
93.8%	604	610	6	1.0%
95.1%	507	560	52	10.3%
96.3%	500	541	41	8.2%
97.5%	447	502	54	12.1%
98.8%	377	484	107	28.3%
100.0%	376	445	68	18.2%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,850	1,850	0	0.0%
1.2%	1,850	1,850	0	0.0%
2.5%	1,850	1,850	0	0.0%
3.7%	1,850	1,850	0	0.0%
4.9%	1,850	1,850	0	0.0%
6.2%	1,850	1,850	0	0.0%
7.4%	1,850	1,850	0	0.0%
8.6%	1,850	1,845	-5	-0.3%
9.9%	1,850	1,845	-5	-0.3%
11.1%	1,850	1,843	-7	-0.4%
12.3%	1,850	1,840	-10	-0.5%
13.6%	1,845	1,837	-8	-0.5%
14.8%	1,845	1,832	-13	-0.7%
16.0%	1,843	1,830	-13	-0.7%
17.3%	1,840	1,821	-19	-1.0%
18.5%	1,837	1,816	-21	-1.1%
19.8%	1,826	1,806	-20	-1.1%
21.0%	1,807	1,799	-8	-0.4%
22.2%	1,805	1,776	-29	-1.6%
23.5%	1,778	1,754	-24	-1.3%
24.7%	1,774	1,735	-38	-2.2%
25.9%	1,757	1,707	-51	-2.9%
27.2%	1,754	1,697	-57	-3.2%
28.4%	1,753	1,693	-59	-3.4%
29.6%	1,723	1,677	-47	-2.7%
30.9%	1,720	1,671	-50	-2.9%
32.1%	1,719	1,658	-61	-3.6%
33.3%	1,655	1,624	-31	-1.9%
34.6%	1,577	1,568	-9	-0.6%
35.8%	1,573	1,541	-32	-2.0%
37.0%	1,552	1,539	-14	-0.9%
38.3%	1,522	1,532	10	0.6%
39.5%	1,505	1,497	-8	-0.5%
40.7%	1,450	1,493	43	3.0%
42.0%	1,440	1,487	47	3.2%
43.2%	1,436	1,483	47	3.3%
44.4%	1,428	1,424	-4	-0.3%
45.7%	1,407	1,407	0	0.0%
46.9%	1,398	1,406	8	0.6%
48.1%	1,369	1,371	2	0.2%
49.4%	1,352	1,369	17	1.3%
50.6%	1,349	1,354	5	0.4%
51.9%	1,343	1,354	11	0.8%
53.1%	1,337	1,346	9	0.7%
54.3%	1,335	1,344	9	0.7%
55.6%	1,328	1,339	11	0.8%
56.8%	1,315	1,337	22	1.7%
58.0%	1,310	1,332	22	1.7%
59.3%	1,282	1,313	31	2.4%
60.5%	1,262	1,285	23	1.8%
61.7%	1,260	1,243	-17	-1.3%
63.0%	1,237	1,239	2	0.2%
64.2%	1,228	1,238	10	0.8%
65.4%	1,219	1,226	7	0.6%
66.7%	1,171	1,194	23	1.9%
67.9%	1,170	1,147	-23	-1.9%
69.1%	1,153	1,132	-21	-1.8%
70.4%	1,151	1,131	-20	-1.8%
71.6%	1,137	1,127	-10	-0.8%
72.8%	1,129	1,123	-6	-0.5%
74.1%	1,127	1,107	-20	-1.7%
75.3%	1,103	1,103	0	0.0%
76.5%	1,041	1,071	30	2.8%
77.8%	981	1,047	66	6.7%
79.0%	965	994	29	3.0%
80.2%	951	989	38	4.0%
81.5%	944	944	1	0.1%
82.7%	937	939	2	0.2%
84.0%	935	938	3	0.3%
85.2%	837	814	-23	-2.7%
86.4%	831	790	-41	-5.0%
87.7%	801	786	-15	-1.8%
88.9%	712	777	65	9.1%
90.1%	681	720	39	5.7%
91.4%	616	718	102	16.5%
92.6%	614	618	4	0.7%
93.8%	595	605	9	1.6%
95.1%	498	519	21	4.3%
96.3%	492	510	18	3.6%
97.5%	443	500	57	13.0%
98.8%	435	500	65	14.9%
100.0%	403	488	84	20.9%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,850	1,850	0	0.0%
1.2%	1,850	1,850	0	0.0%
2.5%	1,850	1,850	0	0.0%
3.7%	1,850	1,850	0	0.0%
4.9%	1,850	1,850	0	0.0%
6.2%	1,850	1,850	0	0.0%
7.4%	1,850	1,850	0	0.0%
8.6%	1,850	1,850	0	0.0%
9.9%	1,850	1,850	0	0.0%
11.1%	1,850	1,850	0	0.0%
12.3%	1,850	1,850	0	0.0%
13.6%	1,850	1,850	0	0.0%
14.8%	1,850	1,850	0	0.0%
16.0%	1,850	1,850	0	0.0%
17.3%	1,850	1,846	-4	-0.2%
18.5%	1,850	1,845	-5	-0.3%
19.8%	1,847	1,841	-6	-0.3%
21.0%	1,836	1,841	5	0.3%
22.2%	1,835	1,830	-5	-0.3%
23.5%	1,823	1,815	-8	-0.4%
24.7%	1,818	1,806	-12	-0.7%
25.9%	1,809	1,789	-20	-1.1%
27.2%	1,794	1,769	-25	-1.4%
28.4%	1,780	1,751	-30	-1.7%
29.6%	1,779	1,737	-43	-2.4%
30.9%	1,779	1,728	-51	-2.9%
32.1%	1,774	1,728	-46	-2.6%
33.3%	1,767	1,727	-40	-2.3%
34.6%	1,759	1,713	-46	-2.6%
35.8%	1,755	1,679	-76	-4.3%
37.0%	1,700	1,664	-36	-2.1%
38.3%	1,685	1,660	-25	-1.5%
39.5%	1,671	1,659	-12	-0.7%
40.7%	1,645	1,593	-52	-3.1%
42.0%	1,582	1,577	-5	-0.3%
43.2%	1,579	1,550	-29	-1.8%
44.4%	1,561	1,529	-32	-2.1%
45.7%	1,511	1,526	15	1.0%
46.9%	1,496	1,504	9	0.6%
48.1%	1,473	1,495	22	1.5%
49.4%	1,465	1,489	24	1.6%
50.6%	1,427	1,471	44	3.1%
51.9%	1,409	1,427	18	1.3%
53.1%	1,361	1,418	57	4.2%
54.3%	1,359	1,415	55	4.1%
55.6%	1,348	1,409	61	4.5%
56.8%	1,345	1,392	48	3.5%
58.0%	1,335	1,352	17	1.3%
59.3%	1,327	1,347	20	1.5%
60.5%	1,325	1,346	21	1.6%
61.7%	1,321	1,336	15	1.1%
63.0%	1,319	1,334	16	1.2%
64.2%	1,309	1,315	6	0.5%
65.4%	1,295	1,312	17	1.3%
66.7%	1,286	1,304	17	1.3%
67.9%	1,237	1,294	57	4.6%
69.1%	1,209	1,272	64	5.3%
70.4%	1,199	1,176	-23	-1.9%
71.6%	1,177	1,162	-15	-1.3%
72.8%	1,164	1,140	-24	-2.1%
74.1%	1,162	1,140	-22	-1.9%
75.3%	1,136	1,138	2	0.2%
76.5%	1,086	1,130	45	4.1%
77.8%	1,039	1,110	70	6.8%
79.0%	1,014	1,048	35	3.4%
80.2%	983	1,012	29	2.9%
81.5%	976	955	-21	-2.1%
82.7%	953	933	-20	-2.1%
84.0%	929	929	0	0.0%
85.2%	928	914	-14	-1.5%
86.4%	827	804	-23	-2.7%
87.7%	816	774	-41	-5.1%
88.9%	728	761	33	4.6%
90.1%	696	759	63	9.1%
91.4%	619	738	118	19.1%
92.6%	609	691	82	13.5%
93.8%	605	613	8	1.3%
95.1%	591	608	16	2.8%
96.3%	522	522	0	0.0%
97.5%	496	520	24	4.9%
98.8%	480	500	20	4.3%
100.0%	431	484	53	12.3%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,900	1,900	0	0.0%
1.2%	1,900	1,900	0	0.0%
2.5%	1,900	1,900	0	0.0%
3.7%	1,900	1,900	0	0.0%
4.9%	1,900	1,900	0	0.0%
6.2%	1,900	1,900	0	0.0%
7.4%	1,900	1,900	0	0.0%
8.6%	1,900	1,900	0	0.0%
9.9%	1,900	1,900	0	0.0%
11.1%	1,900	1,900	0	0.0%
12.3%	1,900	1,900	0	0.0%
13.6%	1,900	1,900	0	0.0%
14.8%	1,900	1,900	0	0.0%
16.0%	1,900	1,900	0	0.0%
17.3%	1,900	1,900	0	0.0%
18.5%	1,900	1,900	0	0.0%
19.8%	1,900	1,900	0	0.0%
21.0%	1,900	1,900	0	0.0%
22.2%	1,900	1,900	0	0.0%
23.5%	1,900	1,895	-5	-0.3%
24.7%	1,869	1,881	12	0.7%
25.9%	1,863	1,862	0	0.0%
27.2%	1,850	1,843	-7	-0.4%
28.4%	1,836	1,804	-32	-1.8%
29.6%	1,835	1,790	-45	-2.4%
30.9%	1,812	1,759	-53	-2.9%
32.1%	1,808	1,754	-55	-3.0%
33.3%	1,784	1,739	-45	-2.5%
34.6%	1,778	1,739	-39	-2.2%
35.8%	1,775	1,733	-42	-2.4%
37.0%	1,767	1,730	-37	-2.1%
38.3%	1,759	1,718	-41	-2.4%
39.5%	1,751	1,700	-51	-2.9%
40.7%	1,739	1,692	-48	-2.7%
42.0%	1,712	1,674	-38	-2.2%
43.2%	1,694	1,660	-34	-2.0%
44.4%	1,648	1,643	-6	-0.3%
45.7%	1,632	1,633	1	0.1%
46.9%	1,630	1,626	-5	-0.3%
48.1%	1,597	1,626	29	1.8%
49.4%	1,565	1,622	57	3.7%
50.6%	1,523	1,567	44	2.9%
51.9%	1,519	1,548	29	1.9%
53.1%	1,514	1,542	28	1.9%
54.3%	1,475	1,509	34	2.3%
55.6%	1,464	1,472	8	0.5%
56.8%	1,439	1,443	4	0.3%
58.0%	1,402	1,422	20	1.4%
59.3%	1,376	1,397	20	1.5%
60.5%	1,355	1,395	40	3.0%
61.7%	1,341	1,384	43	3.2%
63.0%	1,334	1,354	20	1.5%
64.2%	1,331	1,348	18	1.3%
65.4%	1,329	1,348	19	1.4%
66.7%	1,329	1,344	15	1.1%
67.9%	1,328	1,329	2	0.1%
69.1%	1,326	1,323	-3	-0.2%
70.4%	1,320	1,314	-6	-0.4%
71.6%	1,290	1,312	22	1.7%
72.8%	1,231	1,284	53	4.3%
74.1%	1,221	1,266	45	3.7%
75.3%	1,188	1,231	43	3.6%
76.5%	1,169	1,218	48	4.1%
77.8%	1,164	1,154	-9	-0.8%
79.0%	1,051	1,120	69	6.6%
80.2%	1,039	1,076	37	3.6%
81.5%	1,000	1,014	14	1.4%
82.7%	985	1,011	26	2.7%
84.0%	976	995	19	1.9%
85.2%	974	977	2	0.2%
86.4%	945	931	-15	-1.6%
87.7%	836	813	-23	-2.7%
88.9%	800	794	-6	-0.7%
90.1%	733	759	26	3.6%
91.4%	688	747	59	8.5%
92.6%	680	732	52	7.6%
93.8%	666	721	54	8.2%
95.1%	614	618	4	0.7%
96.3%	585	581	-4	-0.6%
97.5%	507	541	34	6.7%
98.8%	442	527	86	19.4%
100.0%	428	481	53	12.4%

Table SW-01-b

Trinity Lake, End of Month Storage

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,208	2,050	-158	-7.2%
1.2%	2,000	2,000	0	0.0%
2.5%	2,000	2,000	0	0.0%
3.7%	2,000	2,000	0	0.0%
4.9%	2,000	2,000	0	0.0%
6.2%	2,000	2,000	0	0.0%
7.4%	2,000	2,000	0	0.0%
8.6%	2,000	2,000	0	0.0%
9.9%	2,000	2,000	0	0.0%
11.1%	2,000	2,000	0	0.0%
12.3%	2,000	2,000	0	0.0%
13.6%	2,000	2,000	0	0.0%
14.8%	2,000	2,000	0	0.0%
16.0%	2,000	2,000	0	0.0%
17.3%	2,000	2,000	0	0.0%
18.5%	2,000	2,000	0	0.0%
19.8%	2,000	2,000	0	0.0%
21.0%	2,000	2,000	0	0.0%
22.2%	1,993	1,991	-2	-0.1%
23.5%	1,992	1,988	-5	-0.2%
24.7%	1,991	1,985	-6	-0.3%
25.9%	1,988	1,980	-7	-0.4%
27.2%	1,985	1,972	-13	-0.7%
28.4%	1,957	1,942	-15	-0.7%
29.6%	1,956	1,942	-14	-0.7%
30.9%	1,949	1,929	-20	-1.0%
32.1%	1,944	1,922	-22	-1.2%
33.3%	1,914	1,906	-8	-0.4%
34.6%	1,910	1,857	-53	-2.8%
35.8%	1,889	1,855	-34	-1.8%
37.0%	1,849	1,850	2	0.1%
38.3%	1,842	1,848	6	0.3%
39.5%	1,841	1,809	-32	-1.8%
40.7%	1,837	1,795	-42	-2.3%
42.0%	1,802	1,769	-33	-1.8%
43.2%	1,797	1,752	-45	-2.5%
44.4%	1,778	1,747	-31	-1.8%
45.7%	1,766	1,743	-22	-1.3%
46.9%	1,764	1,740	-24	-1.4%
48.1%	1,750	1,726	-24	-1.4%
49.4%	1,740	1,703	-37	-2.1%
50.6%	1,679	1,690	11	0.6%
51.9%	1,675	1,674	-1	-0.1%
53.1%	1,661	1,651	-10	-0.6%
54.3%	1,619	1,635	16	1.0%
55.6%	1,596	1,610	14	0.9%
56.8%	1,593	1,603	10	0.6%
58.0%	1,583	1,600	17	1.1%
59.3%	1,530	1,590	60	3.9%
60.5%	1,522	1,583	61	4.0%
61.7%	1,514	1,543	29	1.9%
63.0%	1,499	1,539	40	2.7%
64.2%	1,474	1,452	-22	-1.5%
65.4%	1,454	1,448	-6	-0.4%
66.7%	1,434	1,448	14	0.9%
67.9%	1,410	1,436	26	1.8%
69.1%	1,391	1,419	29	2.1%
70.4%	1,386	1,418	32	2.3%
71.6%	1,375	1,391	15	1.1%
72.8%	1,375	1,389	14	1.0%
74.1%	1,351	1,360	9	0.6%
75.3%	1,270	1,337	67	5.3%
76.5%	1,245	1,299	54	4.3%
77.8%	1,194	1,254	60	5.0%
79.0%	1,154	1,179	24	2.1%
80.2%	1,129	1,177	48	4.2%
81.5%	1,108	1,158	50	4.5%
82.7%	1,062	1,029	-32	-3.0%
84.0%	1,044	1,018	-26	-2.5%
85.2%	1,002	1,004	2	0.2%
86.4%	991	1,003	11	1.1%
87.7%	951	1,002	52	5.4%
88.9%	873	930	57	6.6%
90.1%	855	861	6	0.7%
91.4%	805	833	27	3.4%
92.6%	756	764	8	1.0%
93.8%	753	757	4	0.6%
95.1%	727	750	24	3.3%
96.3%	692	671	-21	-3.0%
97.5%	591	624	34	5.7%
98.8%	464	549	86	18.4%
100.0%	429	482	53	12.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,100	2,100	0	0.0%
1.2%	2,100	2,100	0	0.0%
2.5%	2,100	2,100	0	0.0%
3.7%	2,100	2,100	0	0.0%
4.9%	2,100	2,100	0	0.0%
6.2%	2,100	2,100	0	0.0%
7.4%	2,100	2,100	0	0.0%
8.6%	2,100	2,100	0	0.0%
9.9%	2,100	2,100	0	0.0%
11.1%	2,100	2,100	0	0.0%
12.3%	2,100	2,100	0	0.0%
13.6%	2,100	2,100	0	0.0%
14.8%	2,100	2,100	0	0.0%
16.0%	2,100	2,100	0	0.0%
17.3%	2,100	2,100	0	0.0%
18.5%	2,100	2,100	0	0.0%
19.8%	2,100	2,100	0	0.0%
21.0%	2,100	2,100	0	0.0%
22.2%	2,100	2,100	0	0.0%
23.5%	2,100	2,100	0	0.0%
24.7%	2,100	2,100	0	0.0%
25.9%	2,100	2,095	-5	-0.2%
27.2%	2,100	2,084	-16	-0.8%
28.4%	2,100	2,079	-21	-1.0%
29.6%	2,100	2,078	-22	-1.0%
30.9%	2,096	2,076	-20	-0.9%
32.1%	2,094	2,072	-22	-1.0%
33.3%	2,079	2,055	-24	-1.2%
34.6%	2,076	2,054	-22	-1.1%
35.8%	2,067	2,053	-13	-0.6%
37.0%	2,054	2,044	-10	-0.5%
38.3%	2,044	2,036	-8	-0.4%
39.5%	2,016	2,017	1	0.0%
40.7%	1,967	2,005	38	1.9%
42.0%	1,957	1,965	9	0.4%
43.2%	1,946	1,933	-13	-0.7%
44.4%	1,934	1,912	-22	-1.1%
45.7%	1,905	1,898	-7	-0.3%
46.9%	1,871	1,870	-1	-0.1%
48.1%	1,867	1,861	-5	-0.3%
49.4%	1,858	1,851	-6	-0.3%
50.6%	1,826	1,838	12	0.7%
51.9%	1,816	1,817	1	0.0%
53.1%	1,815	1,813	-2	-0.1%
54.3%	1,779	1,787	8	0.4%
55.6%	1,777	1,754	-23	-1.3%
56.8%	1,771	1,725	-45	-2.6%
58.0%	1,728	1,723	-5	-0.3%
59.3%	1,672	1,722	50	3.0%
60.5%	1,652	1,638	-15	-0.9%
61.7%	1,650	1,637	-14	-0.8%
63.0%	1,643	1,635	-8	-0.5%
64.2%	1,620	1,627	7	0.4%
65.4%	1,612	1,621	9	0.6%
66.7%	1,558	1,602	45	2.9%
67.9%	1,533	1,546	13	0.9%
69.1%	1,505	1,527	22	1.4%
70.4%	1,497	1,522	26	1.7%
71.6%	1,445	1,517	72	5.0%
72.8%	1,443	1,507	64	4.5%
74.1%	1,428	1,472	44	3.1%
75.3%	1,413	1,445	32	2.3%
76.5%	1,376	1,379	3	0.2%
77.8%	1,343	1,362	19	1.4%
79.0%	1,326	1,345	19	1.4%
80.2%	1,245	1,308	64	5.1%
81.5%	1,232	1,272	41	3.3%
82.7%	1,170	1,230	60	5.1%
84.0%	1,150	1,169	19	1.7%
85.2%	1,105	1,155	50	4.6%
86.4%	1,100	1,144	44	4.0%
87.7%	1,086	1,106	20	1.9%
88.9%	989	988	-1	-0.1%
90.1%	977	978	0	0.0%
91.4%	913	910	-4	-0.4%
92.6%	905	894	-10	-1.1%
93.8%	899	849	-50	-5.5%
95.1%	878	837	-41	-4.7%
96.3%	797	828	31	3.9%
97.5%	652	702	50	7.7%
98.8%	617	686	69	11.2%
100.0%	531	584	53	10.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,300	2,300	0	0.0%
1.2%	2,300	2,300	0	0.0%
2.5%	2,300	2,300	0	0.0%
3.7%	2,300	2,300	0	0.0%
4.9%	2,300	2,300	0	0.0%
6.2%	2,300	2,300	0	0.0%
7.4%	2,300	2,300	0	0.0%
8.6%	2,300	2,300	0	0.0%
9.9%	2,300	2,300	0	0.0%
11.1%	2,300	2,300	0	0.0%
12.3%	2,293	2,293	0	0.0%
13.6%	2,283	2,283	0	0.0%
14.8%	2,283	2,283	0	0.0%
16.0%	2,278	2,278	0	0.0%
17.3%	2,276	2,276	0	0.0%
18.5%	2,269	2,272	3	0.1%
19.8%	2,266	2,269	3	0.1%
21.0%	2,262	2,266	4	0.2%
22.2%	2,259	2,260	1	0.1%
23.5%	2,257	2,257	0	0.0%
24.7%	2,254	2,255	1	0.0%
25.9%	2,243	2,234	-10	-0.4%
27.2%	2,242	2,225	-17	-0.8%
28.4%	2,234	2,220	-14	-0.6%
29.6%	2,226	2,218	-8	-0.4%
30.9%	2,225	2,218	-7	-0.3%
32.1%	2,225	2,205	-19	-0.9%
33.3%	2,218	2,205	-13	-0.6%
34.6%	2,218	2,204	-14	-0.6%
35.8%	2,205	2,202	-3	-0.1%
37.0%	2,191	2,195	4	0.2%
38.3%	2,165	2,191	26	1.2%
39.5%	2,161	2,169	8	0.4%
40.7%	2,117	2,161	45	2.1%
42.0%	2,102	2,138	36	1.7%
43.2%	2,102	2,123	21	1.0%
44.4%	2,093	2,096	3	0.1%
45.7%	2,067	2,089	22	1.1%
46.9%	2,043	2,041	-2	-0.1%
48.1%	2,032	2,040	7	0.4%
49.4%	1,998	1,978	-20	-1.0%
50.6%	1,985	1,964	-21	-1.1%
51.9%	1,973	1,961	-12	-0.6%
53.1%	1,918	1,960	41	2.2%
54.3%	1,917	1,944	26	1.4%
55.6%	1,910	1,895	-16	-0.8%
56.8%	1,890	1,891	1	0.1%
58.0%	1,888	1,861	-27	-1.4%
59.3%	1,871	1,843	-28	-1.5%
60.5%	1,859	1,827	-32	-1.7%
61.7%	1,810	1,803	-6	-0.3%
63.0%	1,808	1,769	-39	-2.2%
64.2%	1,790	1,768	-22	-1.2%
65.4%	1,764	1,756	-8	-0.5%
66.7%	1,759	1,748	-11	-0.6%
67.9%	1,651	1,718	67	4.1%
69.1%	1,619	1,641	23	1.4%
70.4%	1,597	1,633	36	2.3%
71.6%	1,593	1,632	40	2.5%
72.8%	1,583	1,626	43	2.7%
74.1%	1,549	1,582	34	2.2%
75.3%	1,539	1,553	13	0.9%
76.5%	1,523	1,541	19	1.2%
77.8%	1,488	1,534	46	3.1%
79.0%	1,450	1,504	54	3.7%
80.2%	1,383	1,491	108	7.8%
81.5%	1,379	1,465	86	6.2%
82.7%	1,295	1,441	145	11.2%
84.0%	1,286	1,272	-15	-1.1%
85.2%	1,260	1,245	-15	-1.2%
86.4%	1,189	1,153	-36	-3.0%
87.7%	1,160	1,146	-14	-1.2%
88.9%	1,133	1,143	10	0.9%
90.1%	1,042	1,126	84	8.1%
91.4%	1,022	1,069	46	4.5%
92.6%	988	958	-30	-3.1%
93.8%	947	917	-29	-3.1%
95.1%	936	912	-25	-2.6%
96.3%	928	899	-28	-3.1%
97.5%	866	886	21	2.4%
98.8%	700	782	82	11.7%
100.0%	684	737	53	7.7%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,420	2,420	0	0.0%
1.2%	2,420	2,420	0	0.0%
2.5%	2,420	2,420	0	0.0%
3.7%	2,420	2,420	0	0.0%
4.9%	2,411	2,411	0	0.0%
6.2%	2,410	2,410	0	0.0%
7.4%	2,386	2,386	0	0.0%
8.6%	2,384	2,384	0	0.0%
9.9%	2,339	2,343	4	0.2%
11.1%	2,333	2,333	0	0.0%
12.3%	2,329	2,330	1	0.0%
13.6%	2,325	2,325	0	0.0%
14.8%	2,324	2,324	0	0.0%
16.0%	2,321	2,321	0	0.0%
17.3%	2,318	2,318	0	0.0%
18.5%	2,318	2,318	0	0.0%
19.8%	2,310	2,310	0	0.0%
21.0%	2,309	2,301	-9	-0.4%
22.2%	2,301	2,292	-9	-0.4%
23.5%	2,292	2,272	-20	-0.9%
24.7%	2,277	2,271	-6	-0.3%
25.9%	2,272	2,239	-33	-1.4%
27.2%	2,234	2,220	-14	-0.6%
28.4%	2,222	2,219	-3	-0.1%
29.6%	2,215	2,213	-2	-0.1%
30.9%	2,185	2,185	0	0.0%
32.1%	2,183	2,183	0	0.0%
33.3%	2,173	2,173	0	0.0%
34.6%	2,163	2,171	8	0.4%
35.8%	2,157	2,163	6	0.3%
37.0%	2,156	2,150	-6	-0.3%
38.3%	2,077	2,100	23	1.1%
39.5%	2,061	2,077	17	0.8%
40.7%	2,040	2,075	35	1.7%
42.0%	2,022	2,061	39	1.9%
43.2%	1,999	2,029	30	1.5%
44.4%	1,998	2,027	28	1.4%
45.7%	1,997	1,993	-4	-0.2%
46.9%	1,987	1,969	-18	-0.9%
48.1%	1,980	1,941	-39	-2.0%
49.4%	1,930	1,939	9	0.5%
50.6%	1,923	1,937	14	0.7%
51.9%	1,915	1,928	13	0.7%
53.1%	1,911	1,910	-1	-0.1%
54.3%	1,894	1,896	2	0.1%
55.6%	1,890	1,882	-7	-0.4%
56.8%	1,866	1,870	4	0.2%
58.0%	1,838	1,855	17	0.9%
59.3%	1,825	1,809	-16	-0.9%
60.5%	1,820	1,778	-42	-2.3%
61.7%	1,782	1,768	-15	-0.8%
63.0%	1,782	1,754	-28	-1.6%
64.2%	1,748	1,722	-26	-1.5%
65.4%	1,713	1,722	9	0.5%
66.7%	1,709	1,714	5	0.3%
67.9%	1,655	1,699	45	2.7%
69.1%	1,653	1,697	44	2.7%
70.4%	1,623	1,693	70	4.3%
71.6%	1,590	1,674	83	5.3%
72.8%	1,547	1,630	83	5.3%
74.1%	1,543	1,555	12	0.8%
75.3%	1,501	1,547	46	3.1%
76.5%	1,472	1,541	70	4.7%
77.8%	1,465	1,529	63	4.3%
79.0%	1,430	1,433	2	0.2%
80.2%	1,368	1,426	58	4.2%
81.5%	1,344	1,409	65	4.8%
82.7%	1,323	1,384	61	4.6%
84.0%	1,302	1,287	-15	-1.1%
85.2%	1,197	1,211	14	1.2%
86.4%	1,165	1,183	18	1.5%
87.7%	1,155	1,135	-20	-1.7%
88.9%	1,125	1,112	-12	-1.1%
90.1%	1,090	1,083	-6	-0.6%
91.4%	961	1,045	84	8.7%
92.6%	951	930	-21	-2.2%
93.8%	897	910	13	1.5%
95.1%	896	905	9	1.0%
96.3%	896	884	-13	-1.4%
97.5%	894	878	-16	-1.8%
98.8%	723	805	82	11.3%
100.0%	672	724	53	7.8%

Table SW-01-b
Trinity Lake, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,447	2,447	0	0.0%
1.2%	2,447	2,447	0	0.0%
2.5%	2,447	2,447	0	0.0%
3.7%	2,447	2,447	0	0.0%
4.9%	2,431	2,430	-1	0.0%
6.2%	2,430	2,429	-1	0.0%
7.4%	2,401	2,399	-2	-0.1%
8.6%	2,397	2,397	0	0.0%
9.9%	2,384	2,367	-17	-0.7%
11.1%	2,367	2,354	-14	-0.6%
12.3%	2,354	2,342	-12	-0.5%
13.6%	2,340	2,340	0	0.0%
14.8%	2,315	2,315	0	0.0%
16.0%	2,315	2,314	-1	0.0%
17.3%	2,306	2,306	0	0.0%
18.5%	2,304	2,304	0	0.0%
19.8%	2,285	2,288	2	0.1%
21.0%	2,284	2,265	-19	-0.9%
22.2%	2,265	2,264	-1	0.0%
23.5%	2,264	2,248	-17	-0.7%
24.7%	2,226	2,226	0	0.0%
25.9%	2,211	2,204	-8	-0.3%
27.2%	2,204	2,196	-8	-0.4%
28.4%	2,187	2,187	0	0.0%
29.6%	2,151	2,149	-2	-0.1%
30.9%	2,124	2,124	0	0.0%
32.1%	2,114	2,114	0	0.0%
33.3%	2,113	2,113	0	0.0%
34.6%	2,100	2,100	0	0.0%
35.8%	2,073	2,066	-6	-0.3%
37.0%	2,043	2,055	12	0.6%
38.3%	2,036	2,053	17	0.8%
39.5%	2,013	2,016	3	0.1%
40.7%	1,971	1,971	0	0.0%
42.0%	1,948	1,965	17	0.9%
43.2%	1,917	1,935	18	0.9%
44.4%	1,900	1,922	22	1.1%
45.7%	1,900	1,917	17	0.9%
46.9%	1,888	1,890	2	0.1%
48.1%	1,873	1,859	-14	-0.7%
49.4%	1,864	1,854	-10	-0.5%
50.6%	1,861	1,852	-9	-0.5%
51.9%	1,834	1,845	11	0.6%
53.1%	1,795	1,844	49	2.7%
54.3%	1,787	1,807	20	1.1%
55.6%	1,772	1,788	17	0.9%
56.8%	1,764	1,785	20	1.2%
58.0%	1,759	1,772	13	0.7%
59.3%	1,734	1,753	19	1.1%
60.5%	1,731	1,743	12	0.7%
61.7%	1,722	1,738	16	0.9%
63.0%	1,710	1,698	-12	-0.7%
64.2%	1,703	1,698	-5	-0.3%
65.4%	1,680	1,694	14	0.8%
66.7%	1,636	1,688	52	3.2%
67.9%	1,629	1,666	37	2.3%
69.1%	1,623	1,646	23	1.4%
70.4%	1,581	1,629	48	3.0%
71.6%	1,572	1,612	40	2.6%
72.8%	1,567	1,609	41	2.6%
74.1%	1,556	1,547	-9	-0.6%
75.3%	1,486	1,527	40	2.7%
76.5%	1,456	1,456	0	0.0%
77.8%	1,368	1,431	62	4.6%
79.0%	1,315	1,372	57	4.3%
80.2%	1,308	1,371	63	4.8%
81.5%	1,287	1,317	31	2.4%
82.7%	1,273	1,316	43	3.4%
84.0%	1,263	1,308	46	3.6%
85.2%	1,233	1,218	-15	-1.2%
86.4%	1,173	1,165	-8	-0.6%
87.7%	1,170	1,143	-27	-2.3%
88.9%	1,098	1,108	10	0.9%
90.1%	1,051	1,044	-6	-0.6%
91.4%	944	984	40	4.2%
92.6%	900	934	33	3.7%
93.8%	900	903	3	0.3%
95.1%	870	865	-6	-0.7%
96.3%	857	852	-6	-0.7%
97.5%	854	845	-9	-1.1%
98.8%	791	843	52	6.6%
100.0%	712	815	104	14.6%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,270	2,270	0	0.0%
1.2%	2,270	2,270	0	0.0%
2.5%	2,270	2,270	0	0.0%
3.7%	2,270	2,270	0	0.0%
4.9%	2,270	2,270	0	0.0%
6.2%	2,270	2,270	0	0.0%
7.4%	2,270	2,270	0	0.0%
8.6%	2,270	2,270	0	0.0%
9.9%	2,270	2,270	0	0.0%
11.1%	2,270	2,270	0	0.0%
12.3%	2,270	2,269	-1	-0.1%
13.6%	2,268	2,226	-42	-1.9%
14.8%	2,262	2,224	-38	-1.7%
16.0%	2,255	2,220	-35	-1.5%
17.3%	2,220	2,216	-4	-0.2%
18.5%	2,216	2,187	-29	-1.3%
19.8%	2,187	2,176	-11	-0.5%
21.0%	2,176	2,170	-6	-0.3%
22.2%	2,125	2,125	0	0.0%
23.5%	2,119	2,119	0	0.0%
24.7%	2,090	2,071	-19	-0.9%
25.9%	2,071	2,067	-4	-0.2%
27.2%	2,067	2,052	-16	-0.8%
28.4%	2,067	2,013	-54	-2.6%
29.6%	2,014	2,012	-1	-0.1%
30.9%	1,989	1,989	0	0.0%
32.1%	1,977	1,977	0	0.0%
33.3%	1,964	1,964	0	0.0%
34.6%	1,956	1,956	0	0.0%
35.8%	1,931	1,933	1	0.1%
37.0%	1,925	1,920	-5	-0.2%
38.3%	1,891	1,904	13	0.7%
39.5%	1,839	1,849	10	0.6%
40.7%	1,809	1,842	33	1.8%
42.0%	1,791	1,830	39	2.2%
43.2%	1,777	1,821	43	2.4%
44.4%	1,742	1,772	30	1.7%
45.7%	1,726	1,743	17	1.0%
46.9%	1,716	1,742	27	1.6%
48.1%	1,712	1,742	30	1.7%
49.4%	1,685	1,700	15	0.9%
50.6%	1,681	1,682	1	0.1%
51.9%	1,646	1,676	31	1.9%
53.1%	1,641	1,646	6	0.3%
54.3%	1,622	1,626	4	0.3%
55.6%	1,613	1,621	8	0.5%
56.8%	1,611	1,614	3	0.2%
58.0%	1,589	1,595	6	0.4%
59.3%	1,587	1,592	4	0.3%
60.5%	1,576	1,584	8	0.5%
61.7%	1,565	1,579	14	0.9%
63.0%	1,561	1,578	17	1.1%
64.2%	1,551	1,572	21	1.4%
65.4%	1,541	1,558	16	1.1%
66.7%	1,503	1,553	50	3.4%
67.9%	1,498	1,513	15	1.0%
69.1%	1,484	1,480	-5	-0.3%
70.4%	1,481	1,477	-4	-0.3%
71.6%	1,417	1,474	57	4.0%
72.8%	1,403	1,417	14	1.0%
74.1%	1,361	1,371	9	0.7%
75.3%	1,357	1,322	-35	-2.6%
76.5%	1,313	1,313	0	0.0%
77.8%	1,190	1,252	62	5.2%
79.0%	1,158	1,222	64	5.5%
80.2%	1,151	1,211	60	5.2%
81.5%	1,147	1,204	56	4.9%
82.7%	1,138	1,150	12	1.0%
84.0%	1,138	1,123	-15	-1.3%
85.2%	1,077	1,066	-12	-1.1%
86.4%	1,073	1,043	-30	-2.8%
87.7%	1,058	1,035	-23	-2.2%
88.9%	988	995	7	0.8%
90.1%	945	977	32	3.3%
91.4%	835	860	24	2.9%
92.6%	793	826	33	4.2%
93.8%	776	795	18	2.3%
95.1%	753	751	-1	-0.2%
96.3%	740	748	7	1.0%
97.5%	737	734	-3	-0.4%
98.8%	699	717	18	2.6%
100.0%	604	700	96	15.9%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,150	2,150	0	0.0%
1.2%	2,150	2,150	0	0.0%
2.5%	2,150	2,150	0	0.0%
3.7%	2,150	2,150	0	0.0%
4.9%	2,150	2,150	0	0.0%
6.2%	2,150	2,150	0	0.0%
7.4%	2,150	2,150	0	0.0%
8.6%	2,150	2,150	0	0.0%
9.9%	2,150	2,150	0	0.0%
11.1%	2,150	2,150	0	0.0%
12.3%	2,150	2,150	0	0.0%
13.6%	2,146	2,112	-35	-1.6%
14.8%	2,138	2,109	-30	-1.4%
16.0%	2,112	2,098	-13	-0.6%
17.3%	2,103	2,074	-29	-1.4%
18.5%	2,098	2,054	-44	-2.1%
19.8%	2,086	2,044	-42	-2.0%
21.0%	2,055	1,979	-77	-3.7%
22.2%	2,038	1,958	-80	-3.9%
23.5%	1,998	1,927	-71	-3.5%
24.7%	1,957	1,922	-36	-1.8%
25.9%	1,949	1,890	-59	-3.0%
27.2%	1,927	1,881	-47	-2.4%
28.4%	1,892	1,872	-19	-1.0%
29.6%	1,872	1,857	-16	-0.8%
30.9%	1,868	1,825	-43	-2.3%
32.1%	1,837	1,816	-21	-1.1%
33.3%	1,816	1,806	-10	-0.5%
34.6%	1,808	1,797	-11	-0.6%
35.8%	1,797	1,788	-9	-0.5%
37.0%	1,778	1,771	-6	-0.4%
38.3%	1,776	1,750	-26	-1.4%
39.5%	1,686	1,692	6	0.4%
40.7%	1,644	1,668	23	1.4%
42.0%	1,628	1,666	38	2.3%
43.2%	1,613	1,647	33	2.1%
44.4%	1,592	1,643	51	3.2%
45.7%	1,579	1,596	17	1.1%
46.9%	1,568	1,592	25	1.6%
48.1%	1,563	1,561	-2	-0.1%
49.4%	1,534	1,552	18	1.1%
50.6%	1,530	1,536	7	0.4%
51.9%	1,495	1,528	32	2.2%
53.1%	1,495	1,471	-24	-1.6%
54.3%	1,476	1,463	-13	-0.9%
55.6%	1,467	1,461	-6	-0.4%
56.8%	1,460	1,451	-9	-0.6%
58.0%	1,428	1,445	17	1.2%
59.3%	1,423	1,442	19	1.3%
60.5%	1,415	1,439	24	1.7%
61.7%	1,382	1,430	47	3.4%
63.0%	1,375	1,426	51	3.7%
64.2%	1,372	1,376	5	0.3%
65.4%	1,370	1,357	-12	-0.9%
66.7%	1,363	1,355	-8	-0.6%
67.9%	1,336	1,339	3	0.2%
69.1%	1,329	1,318	-11	-0.8%
70.4%	1,283	1,311	28	2.2%
71.6%	1,268	1,309	41	3.2%
72.8%	1,197	1,283	86	7.2%
74.1%	1,193	1,237	45	3.7%
75.3%	1,180	1,191	11	0.9%
76.5%	1,175	1,143	-32	-2.7%
77.8%	1,073	1,092	19	1.7%
79.0%	1,072	1,091	19	1.8%
80.2%	1,054	1,073	19	1.8%
81.5%	1,049	1,032	-17	-1.7%
82.7%	1,032	1,028	-3	-0.3%
84.0%	1,029	1,006	-24	-2.3%
85.2%	968	945	-23	-2.4%
86.4%	960	922	-37	-3.9%
87.7%	937	918	-19	-2.0%
88.9%	845	910	65	7.7%
90.1%	761	861	99	13.1%
91.4%	720	737	17	2.4%
92.6%	675	708	33	4.9%
93.8%	660	679	19	2.9%
95.1%	654	635	-19	-2.9%
96.3%	631	612	-18	-2.9%
97.5%	527	591	64	12.2%
98.8%	511	522	11	2.1%
100.0%	510	500	-10	-1.9%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,975	1,975	0	0.0%
1.2%	1,975	1,975	0	0.0%
2.5%	1,975	1,975	0	0.0%
3.7%	1,975	1,975	0	0.0%
4.9%	1,975	1,975	0	0.0%
6.2%	1,975	1,975	0	0.0%
7.4%	1,975	1,975	0	0.0%
8.6%	1,975	1,975	0	0.0%
9.9%	1,975	1,975	0	0.0%
11.1%	1,975	1,975	0	0.0%
12.3%	1,975	1,975	0	0.0%
13.6%	1,975	1,975	0	0.0%
14.8%	1,975	1,975	0	0.0%
16.0%	1,975	1,925	-50	-2.5%
17.3%	1,968	1,910	-59	-3.0%
18.5%	1,942	1,906	-36	-1.8%
19.8%	1,919	1,888	-31	-1.6%
21.0%	1,901	1,859	-42	-2.2%
22.2%	1,870	1,793	-77	-4.1%
23.5%	1,820	1,784	-36	-2.0%
24.7%	1,810	1,778	-32	-1.8%
25.9%	1,798	1,746	-51	-2.9%
27.2%	1,784	1,744	-41	-2.3%
28.4%	1,778	1,734	-43	-2.4%
29.6%	1,764	1,718	-46	-2.6%
30.9%	1,731	1,688	-43	-2.5%
32.1%	1,691	1,672	-19	-1.1%
33.3%	1,682	1,661	-22	-1.3%
34.6%	1,672	1,653	-20	-1.2%
35.8%	1,659	1,646	-13	-0.8%
37.0%	1,636	1,627	-9	-0.6%
38.3%	1,631	1,602	-30	-1.8%
39.5%	1,541	1,565	24	1.6%
40.7%	1,503	1,525	22	1.5%
42.0%	1,485	1,472	-13	-0.9%
43.2%	1,454	1,471	18	1.2%
44.4%	1,449	1,453	4	0.3%
45.7%	1,444	1,429	-15	-1.1%
46.9%	1,438	1,425	-13	-0.9%
48.1%	1,424	1,423	-1	-0.1%
49.4%	1,424	1,422	-1	-0.1%
50.6%	1,422	1,416	-6	-0.4%
51.9%	1,416	1,408	-8	-0.5%
53.1%	1,382	1,408	26	1.9%
54.3%	1,382	1,389	7	0.5%
55.6%	1,379	1,357	-22	-1.6%
56.8%	1,355	1,349	-6	-0.4%
58.0%	1,314	1,343	29	2.2%
59.3%	1,314	1,328	15	1.1%
60.5%	1,308	1,317	10	0.7%
61.7%	1,286	1,315	29	2.3%
63.0%	1,270	1,302	33	2.6%
64.2%	1,261	1,233	-28	-2.2%
65.4%	1,257	1,230	-27	-2.1%
66.7%	1,250	1,226	-24	-1.9%
67.9%	1,223	1,202	-21	-1.7%
69.1%	1,218	1,187	-30	-2.5%
70.4%	1,170	1,183	12	1.1%
71.6%	1,113	1,182	69	6.2%
72.8%	1,112	1,168	56	5.1%
74.1%	1,110	1,107	-3	-0.3%
75.3%	1,108	1,107	-1	-0.1%
76.5%	1,025	1,036	11	1.1%
77.8%	1,005	1,020	15	1.4%
79.0%	997	1,009	12	1.2%
80.2%	990	991	1	0.1%
81.5%	967	950	-18	-1.8%
82.7%	948	942	-5	-0.5%
84.0%	913	924	11	1.2%
85.2%	884	861	-23	-2.6%
86.4%	878	837	-41	-4.7%
87.7%	851	836	-15	-1.7%
88.9%	762	827	65	8.5%
90.1%	638	779	141	22.1%
91.4%	636	649	13	2.1%
92.6%	622	643	21	3.4%
93.8%	611	624	13	2.1%
95.1%	607	597	-10	-1.6%
96.3%	589	571	-18	-3.1%
97.5%	487	529	42	8.6%
98.8%	482	493	11	2.2%
100.0%	453	460	7	1.5%

Figure SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

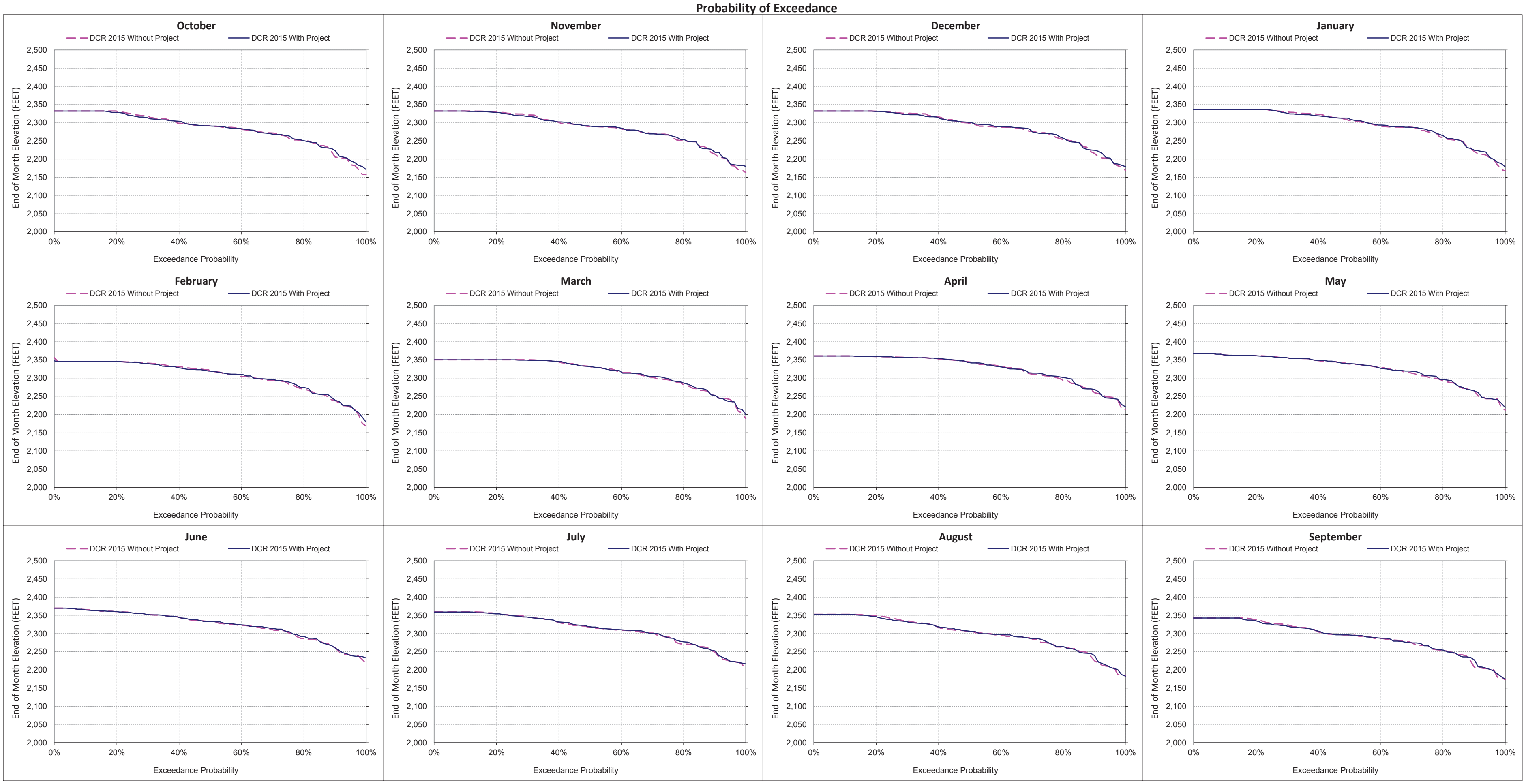


Table SW-02-b

Trinity Lake, End of Month Elevation

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,332	2,332	0	0.0%
2.5%	2,332	2,332	0	0.0%
3.7%	2,332	2,332	0	0.0%
4.9%	2,332	2,332	0	0.0%
6.2%	2,332	2,332	0	0.0%
7.4%	2,332	2,332	0	0.0%
8.6%	2,332	2,332	0	0.0%
9.9%	2,332	2,332	0	0.0%
11.1%	2,332	2,332	0	0.0%
12.3%	2,332	2,332	0	0.0%
13.6%	2,332	2,332	0	0.0%
14.8%	2,332	2,332	0	0.0%
16.0%	2,332	2,332	0	0.0%
17.3%	2,332	2,331	-2	-0.1%
18.5%	2,332	2,329	-3	-0.1%
19.8%	2,332	2,328	-4	-0.2%
21.0%	2,330	2,328	-2	-0.1%
22.2%	2,329	2,326	-2	-0.1%
23.5%	2,326	2,322	-5	-0.2%
24.7%	2,324	2,320	-4	-0.2%
25.9%	2,322	2,318	-4	-0.2%
27.2%	2,321	2,316	-5	-0.2%
28.4%	2,320	2,315	-4	-0.2%
29.6%	2,320	2,315	-5	-0.2%
30.9%	2,315	2,311	-4	-0.2%
32.1%	2,313	2,310	-3	-0.1%
33.3%	2,311	2,309	-3	-0.1%
34.6%	2,311	2,308	-3	-0.1%
35.8%	2,310	2,308	-3	-0.1%
37.0%	2,307	2,306	-1	0.0%
38.3%	2,306	2,305	-2	-0.1%
39.5%	2,299	2,304	5	0.2%
40.7%	2,298	2,304	5	0.2%
42.0%	2,298	2,298	0	0.0%
43.2%	2,296	2,295	-1	0.0%
44.4%	2,294	2,294	0	0.0%
45.7%	2,293	2,294	1	0.0%
46.9%	2,292	2,292	0	0.0%
48.1%	2,291	2,291	0	0.0%
49.4%	2,291	2,291	0	0.0%
50.6%	2,291	2,291	0	0.0%
51.9%	2,290	2,291	1	0.0%
53.1%	2,289	2,290	1	0.0%
54.3%	2,288	2,290	2	0.1%
55.6%	2,287	2,286	-1	0.0%
56.8%	2,287	2,285	-2	-0.1%
58.0%	2,287	2,285	-2	-0.1%
59.3%	2,281	2,285	3	0.1%
60.5%	2,281	2,283	1	0.1%
61.7%	2,280	2,281	1	0.1%
63.0%	2,279	2,280	1	0.1%
64.2%	2,277	2,279	3	0.1%
65.4%	2,277	2,273	-3	-0.2%
66.7%	2,274	2,272	-2	-0.1%
67.9%	2,273	2,272	-1	0.0%
69.1%	2,272	2,270	-2	-0.1%
70.4%	2,272	2,268	-3	-0.1%
71.6%	2,269	2,268	-1	0.0%
72.8%	2,266	2,267	1	0.0%
74.1%	2,264	2,265	2	0.1%
75.3%	2,257	2,264	6	0.3%
76.5%	2,253	2,256	3	0.1%
77.8%	2,253	2,254	1	0.1%
79.0%	2,252	2,253	2	0.1%
80.2%	2,250	2,250	0	0.0%
81.5%	2,249	2,248	-2	-0.1%
82.7%	2,245	2,246	0	0.0%
84.0%	2,242	2,245	3	0.2%
85.2%	2,238	2,234	-3	-0.1%
86.4%	2,237	2,231	-6	-0.3%
87.7%	2,233	2,231	-2	-0.1%
88.9%	2,220	2,229	9	0.4%
90.1%	2,205	2,223	18	0.8%
91.4%	2,205	2,208	3	0.1%
92.6%	2,202	2,206	3	0.2%
93.8%	2,202	2,203	1	0.0%
95.1%	2,184	2,195	11	0.5%
96.3%	2,183	2,191	8	0.4%
97.5%	2,172	2,183	11	0.5%
98.8%	2,158	2,179	22	1.0%
100.0%	2,158	2,171	14	0.6%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,332	2,332	0	0.0%
2.5%	2,332	2,332	0	0.0%
3.7%	2,332	2,332	0	0.0%
4.9%	2,332	2,332	0	0.0%
6.2%	2,332	2,332	0	0.0%
7.4%	2,332	2,332	0	0.0%
8.6%	2,332	2,332	0	0.0%
9.9%	2,332	2,332	0	0.0%
11.1%	2,332	2,332	-1	0.0%
12.3%	2,332	2,331	-1	0.0%
13.6%	2,332	2,331	-1	0.0%
14.8%	2,332	2,331	-1	0.0%
16.0%	2,332	2,331	-1	0.0%
17.3%	2,331	2,330	-2	-0.1%
18.5%	2,331	2,329	-2	-0.1%
19.8%	2,330	2,328	-2	-0.1%
21.0%	2,329	2,328	-1	0.0%
22.2%	2,328	2,326	-2	-0.1%
23.5%	2,326	2,324	-2	-0.1%
24.7%	2,326	2,322	-3	-0.1%
25.9%	2,324	2,320	-4	-0.2%
27.2%	2,324	2,319	-5	-0.2%
28.4%	2,324	2,319	-5	-0.2%
29.6%	2,321	2,318	-4	-0.2%
30.9%	2,321	2,317	-4	-0.2%
32.1%	2,321	2,316	-5	-0.2%
33.3%	2,316	2,313	-3	-0.1%
34.6%	2,309	2,308	-1	0.0%
35.8%	2,309	2,306	-3	-0.1%
37.0%	2,307	2,306	-1	-0.1%
38.3%	2,304	2,305	1	0.0%
39.5%	2,303	2,302	-1	0.0%
40.7%	2,298	2,302	4	0.2%
42.0%	2,297	2,301	4	0.2%
43.2%	2,297	2,301	4	0.2%
44.4%	2,296	2,296	0	0.0%
45.7%	2,295	2,295	0	0.0%
46.9%	2,294	2,295	1	0.0%
48.1%	2,292	2,292	0	0.0%
49.4%	2,290	2,292	1	0.1%
50.6%	2,290	2,290	0	0.0%
51.9%	2,289	2,290	1	0.0%
53.1%	2,289	2,290	1	0.0%
54.3%	2,289	2,289	1	0.0%
55.6%	2,288	2,289	1	0.0%
56.8%	2,287	2,289	2	0.1%
58.0%	2,287	2,288	2	0.1%
59.3%	2,284	2,287	3	0.1%
60.5%	2,282	2,284	2	0.1%
61.7%	2,282	2,280	-2	-0.1%
63.0%	2,280	2,280	0	0.0%
64.2%	2,279	2,280	1	0.0%
65.4%	2,278	2,279	1	0.0%
66.7%	2,273	2,275	2	0.1%
67.9%	2,273	2,271	-2	-0.1%
69.1%	2,271	2,269	-2	-0.1%
70.4%	2,271	2,269	-2	-0.1%
71.6%	2,270	2,269	-1	0.0%
72.8%	2,269	2,268	-1	0.0%
74.1%	2,269	2,267	-2	-0.1%
75.3%	2,266	2,266	0	0.0%
76.5%	2,260	2,263	3	0.1%
77.8%	2,253	2,260	7	0.3%
79.0%	2,251	2,254	3	0.1%
80.2%	2,249	2,254	4	0.2%
81.5%	2,249	2,249	0	0.0%
82.7%	2,248	2,248	0	0.0%
84.0%	2,248	2,248	0	0.0%
85.2%	2,236	2,232	-3	-0.1%
86.4%	2,235	2,229	-6	-0.3%
87.7%	2,231	2,228	-2	-0.1%
88.9%	2,218	2,227	9	0.4%
90.1%	2,213	2,219	6	0.3%
91.4%	2,204	2,219	15	0.7%
92.6%	2,204	2,204	1	0.0%
93.8%	2,201	2,203	1	0.1%
95.1%	2,182	2,187	4	0.2%
96.3%	2,181	2,185	4	0.2%
97.5%	2,171	2,183	12	0.5%
98.8%	2,169	2,183	13	0.6%
100.0%	2,163	2,180	17	0.8%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,332	2,332	0	0.0%
2.5%	2,332	2,332	0	0.0%
3.7%	2,332	2,332	0	0.0%
4.9%	2,332	2,332	0	0.0%
6.2%	2,332	2,332	0	0.0%
7.4%	2,332	2,332	0	0.0%
8.6%	2,332	2,332	0	0.0%
9.9%	2,332	2,332	0	0.0%
11.1%	2,332	2,332	0	0.0%
12.3%	2,332	2,332	0	0.0%
13.6%	2,332	2,332	0	0.0%
14.8%	2,332	2,332	0	0.0%
16.0%	2,332	2,332	0	0.0%
17.3%	2,332	2,332	0	0.0%
18.5%	2,332	2,332	0	0.0%
19.8%	2,332	2,332	0	0.0%
21.0%	2,331	2,331	0	0.0%
22.2%	2,331	2,331	0	0.0%
23.5%	2,330	2,329	-1	0.0%
24.7%	2,330	2,329	-1	0.0%
25.9%	2,329	2,327	-2	-0.1%
27.2%	2,327	2,325	-2	-0.1%
28.4%	2,326	2,324	-3	-0.1%
29.6%	2,326	2,323	-4	-0.2%
30.9%	2,326	2,322	-4	-0.2%
32.1%	2,326	2,322	-4	-0.2%
33.3%	2,325	2,322	-3	-0.1%
34.6%	2,324	2,321	-4	-0.2%
35.8%	2,324	2,318	-6	-0.3%
37.0%	2,319	2,316	-3	-0.1%
38.3%	2,318	2,316	-2	-0.1%
39.5%	2,317	2,316	-1	0.0%
40.7%	2,315	2,310	-4	-0.2%
42.0%	2,309	2,309	0	0.0%
43.2%	2,309	2,307	-2	-0.1%
44.4%	2,308	2,305	-3	-0.1%
45.7%	2,303	2,305	1	0.1%
46.9%	2,302	2,303	1	0.0%
48.1%	2,300	2,302	2	0.1%
49.4%	2,300	2,302	2	0.1%
50.6%	2,296	2,300	4	0.2%
51.9%	2,295	2,296	1	0.1%
53.1%	2,291	2,296	5	0.2%
54.3%	2,291	2,295	5	0.2%
55.6%	2,290	2,295	5	0.2%
56.8%	2,289	2,293	4	0.2%
58.0%	2,289	2,290	1	0.1%
59.3%	2,288	2,290	2	0.1%
60.5%	2,288	2,290	2	0.1%
61.7%	2,287	2,289	1	0.1%
63.0%	2,287	2,289	1	0.1%
64.2%	2,286	2,287	1	0.0%
65.4%	2,285	2,287	1	0.1%
66.7%	2,285	2,286	1	0.1%
67.9%	2,280	2,285	6	0.2%
69.1%	2,277	2,283	6	0.3%
70.4%	2,276	2,274	-2	-0.1%
71.6%	2,274	2,272	-1	-0.1%
72.8%	2,272	2,270	-2	-0.1%
74.1%	2,272	2,270	-2	-0.1%
75.3%	2,270	2,270	0	0.0%
76.5%	2,265	2,269	4	0.2%
77.8%	2,259	2,267	7	0.3%
79.0%	2,257	2,260	4	0.2%
80.2%	2,253	2,256	3	0.1%
81.5%	2,252	2,250	-2	-0.1%
82.7%	2,250	2,247	-2	-0.1%
84.0%	2,247	2,247	0	0.0%
85.2%	2,247	2,245	-2	-0.1%
86.4%	2,234	2,231	-3	-0.1%
87.7%	2,233	2,227	-6	-0.3%
88.9%	2,220	2,225	5	0.2%
90.1%	2,216	2,225	9	0.4%
91.4%	2,205	2,222	17	0.8%
92.6%	2,203	2,215	12	0.5%
93.8%	2,203	2,204	1	0.1%
95.1%	2,201	2,203	2	0.1%
96.3%	2,187	2,187	0	0.0%
97.5%	2,182	2,187	5	0.2%
98.8%	2,179	2,183	4	0.2%
100.0%	2,169	2,179	11	0.5%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,337	2,337	0	0.0%
1.2%	2,337	2,337	0	0.0%
2.5%	2,337	2,337	0	0.0%
3.7%	2,337	2,337	0	0.0%
4.9%	2,337	2,337	0	0.0%
6.2%	2,337	2,337	0	0.0%
7.4%	2,337	2,337	0	0.0%
8.6%	2,337	2,337	0	0.0%
9.9%	2,337	2,337	0	0.0%
11.1%	2,337	2,337	0	0.0%
12.3%	2,337	2,337	0	0.0%
13.6%	2,337	2,337	0	0.0%
14.8%	2,337	2,337	0	0.0%
16.0%	2,337	2,337	0	0.0%
17.3%	2,337	2,337	0	0.0%
18.5%	2,337	2,337	0	0.0%
19.8%	2,337	2,337	0	0.0%
21.0%	2,337	2,337	0	0.0%
22.2%	2,337	2,337	0	0.0%
23.5%	2,337	2,336	0	0.0%
24.7%	2,334	2,335	1	0.0%
25.9%	2,333	2,333	0	0.0%
27.2%	2,332	2,332	-1	0.0%
28.4%	2,331	2,328	-3	-0.1%
29.6%	2,331	2,327	-4	-0.2%
30.9%	2,329	2,325	-5	-0.2%
32.1%	2,329	2,324	-5	-0.2%
33.3%	2,327	2,323	-4	-0.2%
34.6%	2,326	2,323	-3	-0.1%
35.8%	2,326	2,322	-4	-0.2%
37.0%	2,325	2,322	-3	-0.1%
38.3%	2,325	2,321	-4	-0.2%
39.5%	2,324	2,320	-4	-0.2%
40.7%	2,323	2,319	-4	-0.2%
42.0%	2,321	2,317	-3	-0.1%
43.2%	2,319	2,316	-3	-0.1%
44.4%	2,315	2,315	0	0.0%
45.7%	2,314	2,314	0	0.0%
46.9%	2,314	2,313	0	0.0%
48.1%	2,311	2,313	2	0.1%
49.4%	2,308	2,313	5	0.2%
50.6%	2,305	2,308	4	0.2%
51.9%	2,304	2,307	2	0.1%
53.1%	2,304	2,306	2	0.1%
54.3%	2,300	2,303	3	0.1%
55.6%	2,300	2,300	1	0.0%
56.8%	2,297	2,298	0	0.0%
58.0%	2,294	2,296	2	0.1%
59.3%	2,292	2,294	2	0.1%
60.5%	2,290	2,294	3	0.1%
61.7%	2,289	2,293	4	0.2%
63.0%	2,289	2,290	2	0.1%
64.2%	2,288	2,290	1	0.1%
65.4%	2,288	2,290	2	0.1%
66.7%	2,288	2,289	1	0.1%
67.9%	2,288	2,288	0	0.0%
69.1%	2,288	2,288	0	0.0%
70.4%	2,287	2,287	0	0.0%
71.6%	2,285	2,287	2	0.1%
72.8%	2,279	2,284	5	0.2%
74.1%	2,278	2,283	4	0.2%
75.3%	2,275	2,279	4	0.2%
76.5%	2,273	2,278	5	0.2%
77.8%	2,272	2,271	-1	0.0%
79.0%	2,261	2,268	7	0.3%
80.2%	2,259	2,264	4	0.2%
81.5%	2,255	2,257	2	0.1%
82.7%	2,253	2,256	3	0.1%
84.0%	2,252	2,254	2	0.1%
85.2%	2,252	2,252	0	0.0%
86.4%	2,249	2,247	-2	-0.1%
87.7%	2,236	2,232	-3	-0.1%
88.9%	2,230	2,230	-1	0.0%
90.1%	2,221	2,225	4	0.2%
91.4%	2,214	2,223	8	0.4%
92.6%	2,213	2,221	7	0.3%
93.8%	2,211	2,219	8	0.4%
95.1%	2,204	2,204	1	0.0%
96.3%	2,200	2,199	-1	0.0%
97.5%	2,184	2,191	7	0.3%
98.8%	2,171	2,188	17	0.8%
100.0%	2,168	2,179	11	0.5%

Table SW-02-b

Trinity Lake, End of Month Elevation

Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,356	2,348	-8	-0.4%
1.2%	2,345	2,345	0	0.0%
2.5%	2,345	2,345	0	0.0%
3.7%	2,345	2,345	0	0.0%
4.9%	2,345	2,345	0	0.0%
6.2%	2,345	2,345	0	0.0%
7.4%	2,345	2,345	0	0.0%
8.6%	2,345	2,345	0	0.0%
9.9%	2,345	2,345	0	0.0%
11.1%	2,345	2,345	0	0.0%
12.3%	2,345	2,345	0	0.0%
13.6%	2,345	2,345	0	0.0%
14.8%	2,345	2,345	0	0.0%
16.0%	2,345	2,345	0	0.0%
17.3%	2,345	2,345	0	0.0%
18.5%	2,345	2,345	0	0.0%
19.8%	2,345	2,345	0	0.0%
21.0%	2,345	2,345	0	0.0%
22.2%	2,344	2,344	0	0.0%
23.5%	2,344	2,344	0	0.0%
24.7%	2,344	2,344	-1	0.0%
25.9%	2,344	2,343	-1	0.0%
27.2%	2,344	2,343	-1	0.0%
28.4%	2,341	2,340	-1	-0.1%
29.6%	2,341	2,340	-1	0.0%
30.9%	2,341	2,339	-2	-0.1%
32.1%	2,340	2,338	-2	-0.1%
33.3%	2,338	2,337	-1	0.0%
34.6%	2,337	2,333	-4	-0.2%
35.8%	2,336	2,333	-3	-0.1%
37.0%	2,332	2,332	0	0.0%
38.3%	2,332	2,332	0	0.0%
39.5%	2,331	2,329	-3	-0.1%
40.7%	2,331	2,328	-4	-0.2%
42.0%	2,328	2,325	-3	-0.1%
43.2%	2,328	2,324	-4	-0.2%
44.4%	2,326	2,324	-3	-0.1%
45.7%	2,325	2,323	-2	-0.1%
46.9%	2,325	2,323	-2	-0.1%
48.1%	2,324	2,322	-2	-0.1%
49.4%	2,323	2,320	-3	-0.1%
50.6%	2,318	2,319	1	0.0%
51.9%	2,317	2,317	0	0.0%
53.1%	2,316	2,315	-1	0.0%
54.3%	2,313	2,314	1	0.1%
55.6%	2,311	2,312	1	0.1%
56.8%	2,310	2,311	1	0.0%
58.0%	2,310	2,311	1	0.1%
59.3%	2,305	2,310	5	0.2%
60.5%	2,304	2,310	5	0.2%
61.7%	2,304	2,306	2	0.1%
63.0%	2,302	2,306	3	0.1%
64.2%	2,300	2,299	-2	-0.1%
65.4%	2,299	2,298	0	0.0%
66.7%	2,297	2,298	1	0.0%
67.9%	2,295	2,297	2	0.1%
69.1%	2,293	2,296	2	0.1%
70.4%	2,293	2,296	3	0.1%
71.6%	2,292	2,293	1	0.1%
72.8%	2,292	2,293	1	0.1%
74.1%	2,290	2,291	1	0.0%
75.3%	2,283	2,289	6	0.3%
76.5%	2,281	2,286	5	0.2%
77.8%	2,275	2,281	6	0.3%
79.0%	2,271	2,274	2	0.1%
80.2%	2,269	2,274	5	0.2%
81.5%	2,267	2,272	5	0.2%
82.7%	2,262	2,258	-4	-0.2%
84.0%	2,260	2,257	-3	-0.1%
85.2%	2,255	2,255	0	0.0%
86.4%	2,254	2,255	1	0.1%
87.7%	2,249	2,255	6	0.3%
88.9%	2,240	2,247	7	0.3%
90.1%	2,238	2,239	1	0.0%
91.4%	2,231	2,235	4	0.2%
92.6%	2,224	2,225	1	0.0%
93.8%	2,224	2,224	1	0.0%
95.1%	2,220	2,223	3	0.2%
96.3%	2,215	2,212	-3	-0.1%
97.5%	2,201	2,205	5	0.2%
98.8%	2,175	2,193	17	0.8%
100.0%	2,168	2,179	11	0.5%

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,350	2,350	0	0.0%
1.2%	2,350	2,350	0	0.0%
2.5%	2,350	2,350	0	0.0%
3.7%	2,350	2,350	0	0.0%
4.9%	2,350	2,350	0	0.0%
6.2%	2,350	2,350	0	0.0%
7.4%	2,350	2,350	0	0.0%
8.6%	2,350	2,350	0	0.0%
9.9%	2,350	2,350	0	0.0%
11.1%	2,350	2,350	0	0.0%
12.3%	2,350	2,350	0	0.0%
13.6%	2,350	2,350	0	0.0%
14.8%	2,350	2,350	0	0.0%
16.0%	2,350	2,350	0	0.0%
17.3%	2,350	2,350	0	0.0%
18.5%	2,350	2,350	0	0.0%
19.8%	2,350	2,350	0	0.0%
21.0%	2,350	2,350	0	0.0%
22.2%	2,350	2,350	0	0.0%
23.5%	2,350	2,350	0	0.0%
24.7%	2,350	2,350	0	0.0%
25.9%	2,350	2,350	0	0.0%
27.2%	2,350	2,349	-1	0.0%
28.4%	2,350	2,349	-1	0.0%
29.6%	2,350	2,349	-1	0.0%
30.9%	2,350	2,349	-1	0.0%
32.1%	2,350	2,349	-1	0.0%
33.3%	2,349	2,348	-1	-0.1%
34.6%	2,349	2,348	-1	-0.1%
35.8%	2,349	2,348	-1	0.0%
37.0%	2,348	2,347	-1	0.0%
38.3%	2,347	2,347	0	0.0%
39.5%	2,346	2,346	0	0.0%
40.7%	2,342	2,345	3	0.1%
42.0%	2,341	2,342	1	0.0%
43.2%	2,340	2,339	-1	0.0%
44.4%	2,339	2,338	-2	-0.1%
45.7%	2,337	2,336	-1	0.0%
46.9%	2,334	2,334	0	0.0%
48.1%	2,334	2,333	0	0.0%
49.4%	2,333	2,332	-1	0.0%
50.6%	2,330	2,331	1	0.0%
51.9%	2,329	2,329	0	0.0%
53.1%	2,329	2,329	0	0.0%
54.3%	2,326	2,327	1	0.0%
55.6%	2,326	2,324	-2	-0.1%
56.8%	2,326	2,322	-4	-0.2%
58.0%	2,322	2,321	0	0.0%
59.3%	2,317	2,321	4	0.2%
60.5%	2,315	2,314	-1	-0.1%
61.7%	2,315	2,314	-1	-0.1%
63.0%	2,315	2,314	-1	0.0%
64.2%	2,313	2,313	1	0.0%
65.4%	2,312	2,313	1	0.0%
66.7%	2,307	2,311	4	0.2%
67.9%	2,305	2,306	1	0.0%
69.1%	2,303	2,305	2	0.1%
70.4%	2,302	2,304	2	0.1%
71.6%	2,298	2,304	6	0.3%
72.8%	2,298	2,303	5	0.2%
74.1%	2,296	2,300	4	0.2%
75.3%	2,295	2,298	3	0.1%
76.5%	2,292	2,292	0	0.0%
77.8%	2,289	2,291	2	0.1%
79.0%	2,288	2,289	2	0.1%
80.2%	2,280	2,286	6	0.3%
81.5%	2,279	2,283	4	0.2%
82.7%	2,273	2,279	6	0.3%
84.0%	2,271	2,273	2	0.1%
85.2%	2,266	2,272	5	0.2%
86.4%	2,266	2,270	4	0.2%
87.7%	2,265	2,267	2	0.1%
88.9%	2,254	2,254	0	0.0%
90.1%	2,252	2,252	0	0.0%
91.4%	2,245	2,245	0	0.0%
92.6%	2,244	2,243	-1	-0.1%
93.8%	2,243	2,237	-6	-0.3%
95.1%	2,241	2,236	-5	-0.2%
96.3%	2,230	2,234	4	0.2%
97.5%	2,209	2,216	7	0.3%
98.8%	2,204	2,214	10	0.4%
100.0%	2,189	2,200	11	0.5%

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,361	2,361	0	0.0%
1.2%	2,361	2,361	0	0.0%
2.5%	2,361	2,361	0	0.0%
3.7%	2,361	2,361	0	0.0%
4.9%	2,361	2,361	0	0.0%
6.2%	2,361	2,361	0	0.0%
7.4%	2,361	2,361	0	0.0%
8.6%	2,361	2,361	0	0.0%
9.9%	2,361	2,361	0	0.0%
11.1%	2,361	2,361	0	0.0%
12.3%	2,361	2,361	0	0.0%
13.6%	2,360	2,360	0	0.0%
14.8%	2,360	2,360	0	0.0%
16.0%	2,360	2,360	0	0.0%
17.3%	2,360	2,360	0	0.0%
18.5%	2,359	2,359	0	0.0%
19.8%	2,359	2,359	0	0.0%
21.0%	2,359	2,359	0	0.0%
22.2%	2,359	2,359	0	0.0%
23.5%	2,359	2,359	0	0.0%
24.7%	2,359	2,359	0	0.0%
25.9%	2,358	2,357	-1	0.0%
27.2%	2,358	2,357	-1	0.0%
28.4%	2,357	2,357	-1	0.0%
29.6%	2,357	2,357	0	0.0%
30.9%	2,357	2,357	0	0.0%
32.1%	2,357	2,356	-1	0.0%
33.3%	2,357	2,356	-1	0.0%
34.6%	2,357	2,356	-1	0.0%
35.8%	2,356	2,356	0	0.0%
37.0%	2,355	2,355	0	0.0%
38.3%	2,354	2,355	1	0.1%
39.5%	2,354	2,354	0	0.0%
40.7%	2,351	2,354	2	0.1%
42.0%	2,350	2,352	2	0.1%
43.2%	2,350	2,352	1	0.0%
44.4%	2,350	2,350	0	0.0%
45.7%	2,349	2,350	1	0.0%
46.9%	2,347	2,347	0	0.0%
48.1%	2,347	2,347	0	0.0%
49.4%	2,345	2,343	-2	-0.1%
50.6%	2,344	2,342	-2	-0.1%
51.9%	2,343	2,342	-1	0.0%
53.1%	2,338	2,342	4	0.2%
54.3%	2,338	2,340	2	0.1%
55.6%	2,337	2,336	-1	-0.1%
56.8%	2,336	2,336	0	0.0%
58.0%	2,335	2,333	-2	-0.1%
59.3%	2,334	2,332	-2	-0.1%
60.5%	2,333	2,330	-3	-0.1%
61.7%	2,329	2,328	-1	0.0%
63.0%	2,329	2,325	-3	-0.1%
64.2%	2,327	2,325	-2	-0.1%
65.4%	2,325	2,324	-1	0.0%
66.7%	2,324	2,324	-1	0.0%
67.9%	2,315	2,321	6	0.2%
69.1%	2,313	2,315	2	0.1%
70.4%	2,311	2,314	3	0.1%
71.6%	2,310	2,314	3	0.1%
72.8%	2,310	2,313	4	0.2%
74.1%	2,307	2,310	3	0.1%
75.3%	2,306	2,307	1	0.0%
76.5%	2,304	2,306	2	0.1%
77.8%	2,302	2,305	4	0.2%
79.0%	2,298	2,303	5	0.2%
80.2%	2,293	2,302	9	0.4%
81.5%	2,292	2,300	7	0.3%
82.7%	2,285	2,298	12	0.5%
84.0%	2,285	2,283	-1	-0.1%
85.2%	2,282	2,281	-2	-0.1%
86.4%	2,275	2,271	-4	-0.2%
87.7%	2,272	2,271	-1	-0.1%
88.9%	2,269	2,270	1	0.0%
90.1%	2,260	2,269	9	0.4%
91.4%	2,258	2,263	5	0.2%
92.6%	2,254	2,250	-3	-0.2%
93.8%	2,249	2,246	-3	-0.1%
95.1%	2,248	2,245	-3	-0.1%
96.3%	2,247	2,243	-3	-0.1%
97.5%	2,240	2,242	2	0.1%
98.8%	2,216	2,228	12	0.5%
100.0%	2,214	2,221	8	0.3%

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,368	2,368	0	0.0%
1.2%	2,368	2,368	0	0.0%
2.5%	2,368	2,368	0	0.0%
3.7%	2,368	2,368	0	0.0%
4.9%	2,368	2,368	0	0.0%
6.2%	2,368	2,368	0	0.0%
7.4%	2,366	2,366	0	0.0%
8.6%	2,366	2,366	0	0.0%
9.9%	2,363	2,364	0	0.0%
11.1%	2,363	2,363	0	0.0%
12.3%	2,363	2,363	0	0.0%
13.6%	2,363	2,363	0	0.0%
14.8%	2,362	2,362	0	0.0%
16.0%	2,362	2,362	0	0.0%
17.3%	2,362	2,362	0	0.0%
18.5%	2,362	2,362	0	0.0%
19.8%	2,362	2,362	0	0.0%
21.0%	2,362	2,361	-1	0.0%
22.2%	2,361	2,361	0	0.0%
23.5%	2,361	2,359	-1	0.0%
24.7%	2,360	2,359	0	0.0%
25.9%	2,359	2,358	-2	-0.1%
27.2%	2,358	2,357	-1	0.0%
28.4%	2,357	2,357	0	0.0%
29.6%	2,356	2,356	0	0.0%
30.9%	2,355	2,355	0	0.0%
32.1%	2,355	2,355	0	0.0%
33.3%	2,354	2,354	0	0.0%
34.6%	2,354	2,354	0	0.0%
35.8%	2,353	2,354	0	0.0%
37.0%	2,353	2,353	0	0.0%
38.3%	2,349	2,350	1	0.1%
39.5%	2,348	2,349	1	0.0%
40.7%	2,347	2,349	2	0.1%
42.0%	2,346	2,348	2	0.1%
43.2%	2,345	2,347	2	0.1%
44.4%	2,345	2,346	2	0.1%
45.7%	2,345	2,344	0	0.0%
46.9%	2,344	2,342	-2	-0.1%
48.1%	2,343	2,340	-3	-0.1%
49.4%	2,339	2,340	1	0.0%
50.6%	2,338	2,340	1	0.1%
51.9%	2,338	2,339	1	0.0%
53.1%	2,337	2,337	0	0.0%
54.3%	2,336	2,336	0	0.0%
55.6%	2,336	2,335	-1	0.0%
56.8%	2,334	2,334	0	0.0%
58.0%	2,331	2,333	1	0.1%
59.3%	2,330	2,329	-1	-0.1%
60.5%	2,330	2,326	-4	-0.2%
61.7%	2,327	2,325	-1	-0.1%
63.0%	2,326	2,324	-2	-0.1%
64.2%	2,324	2,321	-2	-0.1%
65.4%	2,321	2,321	1	0.0%
66.7%	2,320	2,321	0	0.0%
67.9%	2,316	2,319	4	0.2%
69.1%	2,315	2,319	4	0.2%
70.4%	2,313	2,319	6	0.3%
71.6%	2,310	2,317	7	0.3%
72.8%	2,307	2,314	7	0.3%
74.1%	2,306	2,307	1	0.0%
75.3%	2,303	2,307	4	0.2%
76.5%	2,300	2,306	6	0.3%
77.8%	2,300	2,305	5	0.2%
79.0%	2,297	2,297	0	0.0%
80.2%	2,291	2,296	5	0.2%
81.5%	2,289	2,295	5	0.2%
82.7%	2,288	2,293	5	0.2%
84.0%	2,286	2,285	-1	-0.1%
85.2%	2,276	2,277	1	0.1%
86.4%	2,273	2,274	2	0.1%
87.7%	2,272	2,269	-2	-0.1%
88.9%	2,268	2,267	-1	-0.1%
90.1%	2,265	2,264	-1	0.0%
91.4%	2,251	2,260	10	0.4%
92.6%	2,249	2,247	-2	-0.1%
93.8%	2,243	2,245	1	0.1%
95.1%	2,243	2,244	1	0.0%
96.3%	2,243	2,242	-1	-0.1%
97.5%	2,243	2,241	-2	-0.1%
98.8%	2,219	2,231	12	0.5%
100.0%	2,212	2,220	8	0.3%

Table SW-02-b

Trinity Lake, End of Month Elevation

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,370	2,370	0	0.0%
1.2%	2,370	2,370	0	0.0%
2.5%	2,370	2,370	0	0.0%
3.7%	2,370	2,370	0	0.0%
4.9%	2,369	2,369	0	0.0%
6.2%	2,369	2,369	0	0.0%
7.4%	2,367	2,367	0	0.0%
8.6%	2,367	2,367	0	0.0%
9.9%	2,366	2,365	-1	0.0%
11.1%	2,365	2,364	-1	0.0%
12.3%	2,364	2,364	-1	0.0%
13.6%	2,363	2,363	0	0.0%
14.8%	2,362	2,362	0	0.0%
16.0%	2,362	2,362	0	0.0%
17.3%	2,361	2,361	0	0.0%
18.5%	2,361	2,361	0	0.0%
19.8%	2,360	2,360	0	0.0%
21.0%	2,360	2,359	-1	0.0%
22.2%	2,359	2,359	0	0.0%
23.5%	2,359	2,358	-1	0.0%
24.7%	2,357	2,357	0	0.0%
25.9%	2,356	2,356	0	0.0%
27.2%	2,356	2,355	0	0.0%
28.4%	2,355	2,355	0	0.0%
29.6%	2,353	2,353	0	0.0%
30.9%	2,352	2,352	0	0.0%
32.1%	2,351	2,351	0	0.0%
33.3%	2,351	2,351	0	0.0%
34.6%	2,350	2,350	0	0.0%
35.8%	2,349	2,349	0	0.0%
37.0%	2,347	2,348	1	0.0%
38.3%	2,347	2,348	1	0.0%
39.5%	2,346	2,346	0	0.0%
40.7%	2,343	2,343	0	0.0%
42.0%	2,341	2,342	1	0.1%
43.2%	2,338	2,339	1	0.1%
44.4%	2,337	2,338	2	0.1%
45.7%	2,337	2,338	1	0.1%
46.9%	2,335	2,336	0	0.0%
48.1%	2,334	2,333	-1	-0.1%
49.4%	2,333	2,333	-1	0.0%
50.6%	2,333	2,332	-1	0.0%
51.9%	2,331	2,332	1	0.0%
53.1%	2,328	2,332	4	0.2%
54.3%	2,327	2,329	2	0.1%
55.6%	2,326	2,327	1	0.1%
56.8%	2,325	2,327	2	0.1%
58.0%	2,325	2,326	1	0.0%
59.3%	2,322	2,324	2	0.1%
60.5%	2,322	2,323	1	0.0%
61.7%	2,321	2,323	1	0.1%
63.0%	2,320	2,319	-1	0.0%
64.2%	2,320	2,319	0	0.0%
65.4%	2,318	2,319	1	0.1%
66.7%	2,314	2,319	4	0.2%
67.9%	2,313	2,317	3	0.1%
69.1%	2,313	2,315	2	0.1%
70.4%	2,309	2,313	4	0.2%
71.6%	2,309	2,312	3	0.1%
72.8%	2,308	2,312	3	0.2%
74.1%	2,307	2,307	-1	0.0%
75.3%	2,301	2,305	3	0.1%
76.5%	2,299	2,299	0	0.0%
77.8%	2,291	2,297	5	0.2%
79.0%	2,287	2,292	5	0.2%
80.2%	2,286	2,292	5	0.2%
81.5%	2,285	2,287	3	0.1%
82.7%	2,283	2,287	4	0.2%
84.0%	2,282	2,286	4	0.2%
85.2%	2,279	2,278	-1	-0.1%
86.4%	2,273	2,273	-1	0.0%
87.7%	2,273	2,270	-3	-0.1%
88.9%	2,266	2,267	1	0.0%
90.1%	2,261	2,260	-1	0.0%
91.4%	2,249	2,253	5	0.2%
92.6%	2,244	2,247	4	0.2%
93.8%	2,244	2,244	0	0.0%
95.1%	2,240	2,240	-1	0.0%
96.3%	2,239	2,238	-1	0.0%
97.5%	2,238	2,237	-1	-0.1%
98.8%	2,229	2,237	7	0.3%
100.0%	2,218	2,233	15	0.7%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,359	2,359	0	0.0%
1.2%	2,359	2,359	0	0.0%
2.5%	2,359	2,359	0	0.0%
3.7%	2,359	2,359	0	0.0%
4.9%	2,359	2,359	0	0.0%
6.2%	2,359	2,359	0	0.0%
7.4%	2,359	2,359	0	0.0%
8.6%	2,359	2,359	0	0.0%
9.9%	2,359	2,359	0	0.0%
11.1%	2,359	2,359	0	0.0%
12.3%	2,359	2,359	0	0.0%
13.6%	2,359	2,357	-2	-0.1%
14.8%	2,359	2,357	-2	-0.1%
16.0%	2,359	2,357	-2	-0.1%
17.3%	2,357	2,357	0	0.0%
18.5%	2,357	2,355	-2	-0.1%
19.8%	2,355	2,354	-1	0.0%
21.0%	2,354	2,354	0	0.0%
22.2%	2,352	2,352	0	0.0%
23.5%	2,351	2,351	0	0.0%
24.7%	2,350	2,349	-1	0.0%
25.9%	2,349	2,349	0	0.0%
27.2%	2,349	2,348	-1	0.0%
28.4%	2,349	2,346	-3	-0.1%
29.6%	2,346	2,346	0	0.0%
30.9%	2,344	2,344	0	0.0%
32.1%	2,343	2,343	0	0.0%
33.3%	2,342	2,342	0	0.0%
34.6%	2,341	2,341	0	0.0%
35.8%	2,339	2,339	0	0.0%
37.0%	2,339	2,338	0	0.0%
38.3%	2,336	2,337	1	0.0%
39.5%	2,331	2,332	1	0.0%
40.7%	2,329	2,332	3	0.1%
42.0%	2,327	2,331	3	0.1%
43.2%	2,326	2,330	4	0.2%
44.4%	2,323	2,326	3	0.1%
45.7%	2,322	2,323	1	0.1%
46.9%	2,321	2,323	2	0.1%
48.1%	2,321	2,323	3	0.1%
49.4%	2,318	2,320	1	0.1%
50.6%	2,318	2,318	0	0.0%
51.9%	2,315	2,318	3	0.1%
53.1%	2,314	2,315	0	0.0%
54.3%	2,313	2,313	0	0.0%
55.6%	2,312	2,313	1	0.0%
56.8%	2,312	2,312	0	0.0%
58.0%	2,310	2,311	0	0.0%
59.3%	2,310	2,310	0	0.0%
60.5%	2,309	2,310	1	0.0%
61.7%	2,308	2,309	1	0.1%
63.0%	2,308	2,309	1	0.1%
64.2%	2,307	2,309	2	0.1%
65.4%	2,306	2,307	1	0.1%
66.7%	2,303	2,307	4	0.2%
67.9%	2,302	2,304	1	0.1%
69.1%	2,301	2,301	0	0.0%
70.4%	2,301	2,301	0	0.0%
71.6%	2,296	2,300	5	0.2%
72.8%	2,294	2,296	1	0.1%
74.1%	2,291	2,292	1	0.0%
75.3%	2,290	2,288	-3	-0.1%
76.5%	2,287	2,287	0	0.0%
77.8%	2,275	2,281	6	0.3%
79.0%	2,272	2,278	6	0.3%
80.2%	2,271	2,277	6	0.3%
81.5%	2,271	2,276	6	0.2%
82.7%	2,270	2,271	1	0.1%
84.0%	2,270	2,268	-2	-0.1%
85.2%	2,264	2,262	-1	-0.1%
86.4%	2,263	2,260	-3	-0.1%
87.7%	2,262	2,259	-3	-0.1%
88.9%	2,254	2,254	1	0.0%
90.1%	2,249	2,252	4	0.2%
91.4%	2,235	2,239	3	0.2%
92.6%	2,229	2,234	5	0.2%
93.8%	2,227	2,230	3	0.1%
95.1%	2,224	2,223	0	0.0%
96.3%	2,222	2,223	1	0.0%
97.5%	2,221	2,221	0	0.0%
98.8%	2,216	2,219	3	0.1%
100.0%	2,202	2,216	14	0.6%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,353	2,353	0	0.0%
1.2%	2,353	2,353	0	0.0%
2.5%	2,353	2,353	0	0.0%
3.7%	2,353	2,353	0	0.0%
4.9%	2,353	2,353	0	0.0%
6.2%	2,353	2,353	0	0.0%
7.4%	2,353	2,353	0	0.0%
8.6%	2,353	2,353	0	0.0%
9.9%	2,353	2,353	0	0.0%
11.1%	2,353	2,353	0	0.0%
12.3%	2,353	2,353	0	0.0%
13.6%	2,353	2,351	-2	-0.1%
14.8%	2,352	2,351	-2	-0.1%
16.0%	2,351	2,350	-1	0.0%
17.3%	2,351	2,349	-2	-0.1%
18.5%	2,350	2,348	-2	-0.1%
19.8%	2,350	2,347	-2	-0.1%
21.0%	2,348	2,343	-5	-0.2%
22.2%	2,347	2,341	-6	-0.2%
23.5%	2,345	2,339	-6	-0.3%
24.7%	2,341	2,338	-3	-0.1%
25.9%	2,341	2,336	-5	-0.2%
27.2%	2,339	2,335	-4	-0.2%
28.4%	2,336	2,334	-2	-0.1%
29.6%	2,334	2,333	-1	-0.1%
30.9%	2,334	2,330	-4	-0.2%
32.1%	2,331	2,329	-2	-0.1%
33.3%	2,329	2,329	-1	0.0%
34.6%	2,329	2,328	-1	0.0%
35.8%	2,328	2,327	-1	0.0%
37.0%	2,326	2,326	-1	0.0%
38.3%	2,326	2,324	-2	-0.1%
39.5%	2,318	2,319	1	0.0%
40.7%	2,315	2,317	2	0.1%
42.0%	2,313	2,317	3	0.1%
43.2%	2,312	2,315	3	0.1%
44.4%	2,310	2,315	4	0.2%
45.7%	2,309	2,311	1	0.1%
46.9%	2,308	2,310	2	0.1%
48.1%	2,308	2,308	0	0.0%
49.4%	2,305	2,307	1	0.1%
50.6%	2,305	2,306	1	0.0%
51.9%	2,302	2,305	3	0.1%
53.1%	2,302	2,300	-2	-0.1%
54.3%	2,301	2,299	-1	0.0%
55.6%	2,300	2,299	-1	0.0%
56.8%	2,299	2,298	-1	0.0%
58.0%	2,296	2,298	1	0.1%
59.3%	2,296	2,298	2	0.1%
60.5%	2,295	2,297	2	0.1%
61.7%	2,293	2,297	4	0.2%
63.0%	2,292	2,296	4	0.2%
64.2%	2,292	2,292	0	0.0%
65.4%	2,292	2,291	-1	0.0%
66.7%	2,291	2,290	-1	0.0%
67.9%	2,289	2,289	0	0.0%
69.1%	2,288	2,287	-1	0.0%
70.4%	2,284	2,287	2	0.1%
71.6%	2,283	2,286	4	0.2%
72.8%	2,276	2,284	9	0.4%
74.1%	2,275	2,280	4	0.2%
75.3%	2,274	2,275	1	0.0%
76.5%	2,273	2,270	-3	-0.1%
77.8%	2,263	2,265	2	0.1%
79.0%	2,263	2,265	2	0.1%
80.2%	2,261	2,263	2	0.1%
81.5%	2,261	2,259	-2	-0.1%
82.7%	2,259	2,258	0	0.0%
84.0%	2,258	2,256	-3	-0.1%
85.2%	2,251	2,249	-3	-0.1%
86.4%	2,250	2,246	-4	-0.2%
87.7%	2,248	2,246	-2	-0.1%
88.9%	2,237	2,245	8	0.4%
90.1%	2,225	2,239	14	0.6%
91.4%	2,219	2,221	2	0.1%
92.6%	2,213	2,217	5	0.2%
93.8%	2,210	2,213	3	0.1%
95.1%	2,210	2,207	-3	-0.1%
96.3%	2,206	2,204	-3	-0.1%
97.5%	2,188	2,201	12	0.6%
98.8%	2,185	2,187	2	0.1%
100.0%	2,185	2,183	-2	-0.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,343	2,343	0	0.0%
1.2%	2,343	2,343	0	0.0%
2.5%	2,343	2,343	0	0.0%
3.7%	2,343	2,343	0	0.0%
4.9%	2,343	2,343	0	0.0%
6.2%	2,343	2,343	0	0.0%
7.4%	2,343	2,343	0	0.0%
8.6%	2,343	2,343	0	0.0%
9.9%	2,343	2,343	0	0.0%
11.1%	2,343	2,343	0	0.0%
12.3%	2,343	2,343	0	0.0%
13.6%	2,343	2,343	0	0.0%
14.8%	2,343	2,343	0	0.0%
16.0%	2,343	2,339	-4	-0.2%
17.3%	2,342	2,337	-5	-0.2%
18.5%	2,340	2,337	-3	-0.1%
19.8%	2,338	2,335	-3	-0.1%
21.0%	2,337	2,333	-4	-0.2%
22.2%	2,334	2,327	-7	-0.3%
23.5%	2,330	2,327	-3	-0.1%
24.7%	2,329	2,326	-3	-0.1%
25.9%	2,328	2,323	-4	-0.2%
27.2%	2,327	2,323	-3	-0.1%
28.4%	2,326	2,322	-4	-0.2%
29.6%	2,325	2,321	-4	-0.2%
30.9%	2,322	2,319	-4	-0.2%
32.1%	2,319	2,317	-2	-0.1%
33.3%	2,318	2,316	-2	-0.1%
34.6%	2,317	2,315	-2	-0.1%
35.8%	2,316	2,315	-1	0.0%
37.0%	2,314	2,313	-1	0.0%
38.3%	2,314	2,311	-3	-0.1%
39.5%	2,306	2,308	2	0.1%
40.7%	2,303	2,305	2	0.1%
42.0%	2,301	2,300	-1	0.0%
43.2%	2,299	2,300	1	0.1%
44.4%	2,298	2,299	0	0.0%
45.7%	2,298	2,297	-1	-0.1%
46.9%	2,297	2,296	-1	0.0%
48.1%	2,296	2,296	0	0.0%
49.4%	2,296	2,296	0	0.0%
50.6%	2,296	2,295	0	0.0%
51.9%	2,295	2,295	-1	0.0%
53.1%	2,293	2,295	2	0.1%
54.3%	2,293	2,293	1	0.0%
55.6%	2,292	2,291	-2	-0.1%
56.8%	2,290	2,290	0	0.0%
58.0%	2,287	2,289	2	0.1%
59.3%	2,287	2,288	1	0.1%
60.5%	2,286	2,287	1	0.0%
61.7%	2,285	2,287	2	0.1%
63.0%	2,283	2,286	3	0.1%
64.2%	2,282	2,279	-3	-0.1%
65.4%	2,282	2,279	-3	-0.1%
66.7%	2,281	2,279	-2	-0.1%
67.9%	2,278	2,276	-2	-0.1%
69.1%	2,278	2,275	-3	-0.1%
70.4%	2,273	2,274	1	0.1%
71.6%	2,267	2,274	7	0.3%
72.8%	2,267	2,273	6	0.2%
74.1%	2,267	2,267	0	0.0%
75.3%	2,267	2,267	0	0.0%
76.5%	2,258	2,259	1	0.1%
77.8%	2,256	2,257	2	0.1%
79.0%	2,255	2,256	1	0.1%
80.2%	2,254	2,254	0	0.0%
81.5%	2,251	2,249	-2	-0.1%
82.7%	2,249	2,248	-1	0.0%
84.0%	2,245	2,246	1	0.1%
85.2%	2,242	2,239	-3	-0.1%
86.4%	2,241	2,236	-5	-0.2%
87.7%	2,238	2,236	-2	-0.1%
88.9%	2,225	2,234	9	0.4%
90.1%	2,207	2,227	20	0.9%
91.4%	2,207	2,209	2	0.1%
92.6%	2,205	2,208	3	0.1%
93.8%	2,203	2,205	2	0.1%
95.1%	2,203	2,201	-1	-0.1%
96.3%	2,200	2,197	-3	-0.1%
97.5%	2,180	2,189	9	0.4%
98.8%	2,179	2,181	2	0.1%
100.0%	2,173	2,175	1	0.1%

Figure SW-03-b
Trinity Lake, End of Month Area
Probability of Exceedance

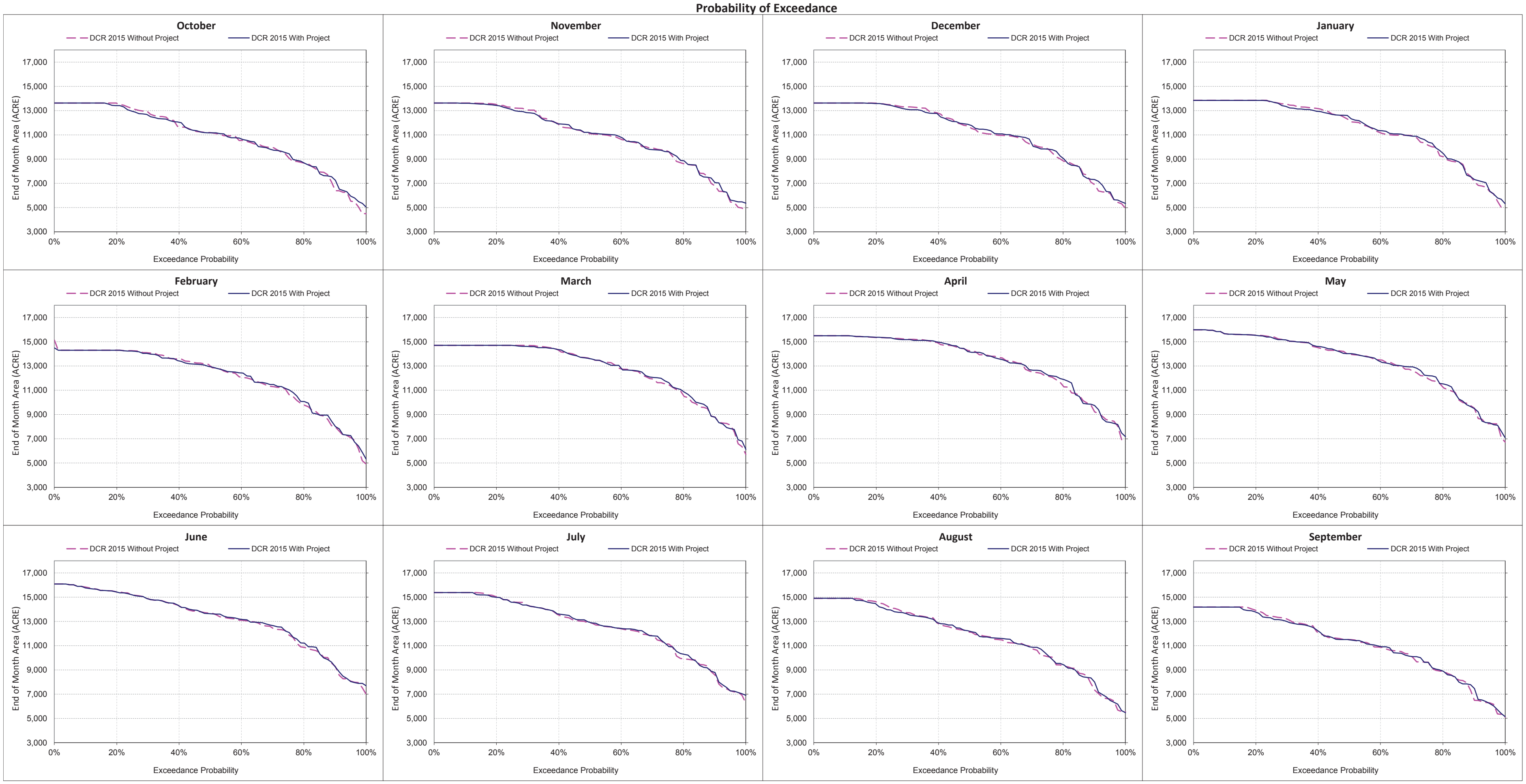


Table SW-03-b

Trinity Lake, End of Month Area

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,625	13,625	0	0.0%
1.2%	13,625	13,625	0	0.0%
2.5%	13,625	13,625	0	0.0%
3.7%	13,625	13,625	0	0.0%
4.9%	13,625	13,625	0	0.0%
6.2%	13,625	13,625	0	0.0%
7.4%	13,625	13,625	0	0.0%
8.6%	13,625	13,625	0	0.0%
9.9%	13,625	13,625	0	0.0%
11.1%	13,625	13,625	0	0.0%
12.3%	13,625	13,625	0	0.0%
13.6%	13,625	13,625	0	0.0%
14.8%	13,625	13,625	0	0.0%
16.0%	13,625	13,625	0	0.0%
17.3%	13,625	13,538	-87	-0.6%
18.5%	13,625	13,440	-185	-1.4%
19.8%	13,625	13,416	-209	-1.5%
21.0%	13,498	13,403	-95	-0.7%
22.2%	13,444	13,316	-128	-1.0%
23.5%	13,316	13,060	-256	-1.9%
24.7%	13,198	12,962	-237	-1.8%
25.9%	13,095	12,878	-216	-1.7%
27.2%	13,015	12,750	-264	-2.0%
28.4%	12,968	12,736	-232	-1.8%
29.6%	12,964	12,692	-272	-2.1%
30.9%	12,689	12,496	-192	-1.5%
32.1%	12,584	12,433	-152	-1.2%
33.3%	12,522	12,345	-177	-1.4%
34.6%	12,513	12,312	-201	-1.6%
35.8%	12,464	12,297	-167	-1.3%
37.0%	12,202	12,162	-40	-0.3%
38.3%	12,190	12,089	-101	-0.8%
39.5%	11,694	12,059	365	3.1%
40.7%	11,636	12,000	364	3.1%
42.0%	11,635	11,626	-9	-0.1%
43.2%	11,502	11,462	-40	-0.3%
44.4%	11,375	11,377	2	0.0%
45.7%	11,273	11,339	66	0.6%
46.9%	11,246	11,240	-6	-0.1%
48.1%	11,197	11,193	-3	0.0%
49.4%	11,196	11,173	-23	-0.2%
50.6%	11,157	11,166	8	0.1%
51.9%	11,112	11,164	53	0.5%
53.1%	11,046	11,099	53	0.5%
54.3%	10,934	11,070	136	1.2%
55.6%	10,922	10,849	-73	-0.7%
56.8%	10,921	10,760	-161	-1.5%
58.0%	10,879	10,756	-123	-1.1%
59.3%	10,536	10,737	202	1.9%
60.5%	10,532	10,613	81	0.8%
61.7%	10,461	10,543	82	0.8%
63.0%	10,362	10,451	89	0.9%
64.2%	10,251	10,410	159	1.5%
65.4%	10,243	10,028	-215	-2.1%
66.7%	10,074	9,979	-95	-0.9%
67.9%	9,993	9,946	-47	-0.5%
69.1%	9,964	9,815	-149	-1.5%
70.4%	9,929	9,725	-205	-2.1%
71.6%	9,746	9,709	-37	-0.4%
72.8%	9,575	9,644	68	0.7%
74.1%	9,435	9,543	108	1.1%
75.3%	9,067	9,434	368	4.1%
76.5%	8,807	8,965	157	1.8%
77.8%	8,806	8,891	85	1.0%
79.0%	8,738	8,832	94	1.1%
80.2%	8,660	8,664	3	0.0%
81.5%	8,605	8,517	-88	-1.0%
82.7%	8,375	8,390	15	0.2%
84.0%	8,174	8,371	197	2.4%
85.2%	7,939	7,785	-154	-1.9%
86.4%	7,909	7,630	-280	-3.5%
87.7%	7,714	7,615	-100	-1.3%
88.9%	7,109	7,548	439	6.2%
90.1%	6,391	7,242	851	13.3%
91.4%	6,383	6,519	136	2.1%
92.6%	6,263	6,420	157	2.5%
93.8%	6,262	6,304	42	0.7%
95.1%	5,528	5,940	412	7.5%
96.3%	5,471	5,795	324	5.9%
97.5%	5,058	5,484	426	8.4%
98.8%	4,507	5,345	838	18.6%
100.0%	4,499	5,036	537	11.9%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,625	13,625	0	0.0%
1.2%	13,625	13,625	0	0.0%
2.5%	13,625	13,625	0	0.0%
3.7%	13,625	13,625	0	0.0%
4.9%	13,625	13,625	0	0.0%
6.2%	13,625	13,625	0	0.0%
7.4%	13,625	13,625	0	0.0%
8.6%	13,625	13,604	-21	-0.2%
9.9%	13,625	13,603	-22	-0.2%
11.1%	13,625	13,596	-29	-0.2%
12.3%	13,625	13,579	-46	-0.3%
13.6%	13,604	13,566	-38	-0.3%
14.8%	13,603	13,543	-60	-0.4%
16.0%	13,596	13,537	-59	-0.4%
17.3%	13,579	13,494	-86	-0.6%
18.5%	13,566	13,472	-94	-0.7%
19.8%	13,516	13,426	-89	-0.7%
21.0%	13,433	13,397	-36	-0.3%
22.2%	13,423	13,294	-128	-1.0%
23.5%	13,300	13,192	-108	-0.8%
24.7%	13,282	13,108	-173	-1.3%
25.9%	13,208	12,980	-228	-1.7%
27.2%	13,192	12,936	-255	-1.9%
28.4%	13,188	12,921	-268	-2.0%
29.6%	13,054	12,844	-210	-1.6%
30.9%	13,041	12,817	-223	-1.7%
32.1%	13,037	12,762	-275	-2.1%
33.3%	12,746	12,608	-138	-1.1%
34.6%	12,369	12,321	-49	-0.4%
35.8%	12,348	12,168	-180	-1.5%
37.0%	12,231	12,154	-77	-0.6%
38.3%	12,064	12,118	54	0.4%
39.5%	11,967	11,921	-46	-0.4%
40.7%	11,658	11,900	241	2.1%
42.0%	11,599	11,862	263	2.3%
43.2%	11,575	11,840	265	2.3%
44.4%	11,530	11,510	-20	-0.2%
45.7%	11,414	11,416	2	0.0%
46.9%	11,365	11,411	46	0.4%
48.1%	11,201	11,213	12	0.1%
49.4%	11,105	11,201	96	0.9%
50.6%	11,087	11,117	29	0.3%
51.9%	11,054	11,116	62	0.6%
53.1%	11,020	11,073	53	0.5%
54.3%	11,007	11,059	52	0.5%
55.6%	10,972	11,032	60	0.6%
56.8%	10,898	11,021	123	1.1%
58.0%	10,868	10,990	123	1.1%
59.3%	10,709	10,885	175	1.6%
60.5%	10,590	10,730	140	1.3%
61.7%	10,576	10,472	-105	-1.0%
63.0%	10,431	10,446	15	0.1%
64.2%	10,380	10,443	62	0.6%
65.4%	10,322	10,368	46	0.4%
66.7%	10,028	10,167	140	1.4%
67.9%	10,019	9,878	-141	-1.4%
69.1%	9,916	9,787	-129	-1.3%
70.4%	9,903	9,777	-126	-1.3%
71.6%	9,813	9,754	-59	-0.6%
72.8%	9,763	9,728	-35	-0.4%
74.1%	9,752	9,631	-122	-1.2%
75.3%	9,602	9,602	-1	0.0%
76.5%	9,208	9,405	197	2.1%
77.8%	8,808	9,246	437	5.0%
79.0%	8,701	8,894	192	2.2%
80.2%	8,605	8,862	256	3.0%
81.5%	8,558	8,562	3	0.0%
82.7%	8,512	8,527	15	0.2%
84.0%	8,501	8,519	18	0.2%
85.2%	7,842	7,689	-154	-2.0%
86.4%	7,805	7,525	-280	-3.6%
87.7%	7,598	7,499	-99	-1.3%
88.9%	6,995	7,434	439	6.3%
90.1%	6,782	7,047	265	3.9%
91.4%	6,347	7,039	692	10.9%
92.6%	6,330	6,360	30	0.5%
93.8%	6,205	6,268	63	1.0%
95.1%	5,455	5,622	168	3.1%
96.3%	5,412	5,551	139	2.6%
97.5%	5,020	5,471	451	9.0%
98.8%	4,961	5,471	510	10.3%
100.0%	4,713	5,376	663	14.1%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,625	13,625	0	0.0%
1.2%	13,625	13,625	0	0.0%
2.5%	13,625	13,625	0	0.0%
3.7%	13,625	13,625	0	0.0%
4.9%	13,625	13,625	0	0.0%
6.2%	13,625	13,625	0	0.0%
7.4%	13,625	13,625	0	0.0%
8.6%	13,625	13,625	0	0.0%
9.9%	13,625	13,625	0	0.0%
11.1%	13,625	13,625	0	0.0%
12.3%	13,625	13,625	0	0.0%
13.6%	13,625	13,625	0	0.0%
14.8%	13,625	13,625	0	0.0%
16.0%	13,625	13,625	0	0.0%
17.3%	13,625	13,608	-17	-0.1%
18.5%	13,625	13,601	-24	-0.2%
19.8%	13,613	13,586	-26	-0.2%
21.0%	13,561	13,584	23	0.2%
22.2%	13,560	13,535	-24	-0.2%
23.5%	13,506	13,469	-37	-0.3%
24.7%	13,483	13,426	-56	-0.4%
25.9%	13,438	13,349	-90	-0.7%
27.2%	13,373	13,261	-112	-0.8%
28.4%	13,311	13,178	-134	-1.0%
29.6%	13,306	13,115	-192	-1.4%
30.9%	13,305	13,076	-229	-1.7%
32.1%	13,281	13,076	-206	-1.5%
33.3%	13,252	13,071	-181	-1.4%
34.6%	13,214	13,008	-206	-1.6%
35.8%	13,198	12,858	-340	-2.6%
37.0%	12,948	12,788	-160	-1.2%
38.3%	12,883	12,770	-113	-0.9%
39.5%	12,820	12,766	-54	-0.4%
40.7%	12,703	12,463	-240	-1.9%
42.0%	12,398	12,371	-27	-0.2%
43.2%	12,383	12,220	-163	-1.3%
44.4%	12,283	12,101	-181	-1.5%
45.7%	11,997	12,082	85	0.7%
46.9%	11,913	11,963	49	0.4%
48.1%	11,785	11,908	124	1.1%
49.4%	11,742	11,876	134	1.1%
50.6%	11,526	11,774	248	2.2%
51.9%	11,425	11,525	99	0.9%
53.1%	11,155	11,474	319	2.9%
54.3%	11,147	11,457	310	2.8%
55.6%	11,083	11,427	345	3.1%
56.8%	11,063	11,331	268	2.4%
58.0%	11,010	11,104	94	0.9%
59.3%	10,964	11,074	110	1.0%
60.5%	10,954	11,070	116	1.1%
61.7%	10,933	11,015	82	0.8%
63.0%	10,917	11,006	89	0.8%
64.2%	10,866	10,900	34	0.3%
65.4%	10,784	10,879	95	0.9%
66.7%	10,736	10,833	96	0.9%
67.9%	10,431	10,779	347	3.3%
69.1%	10,259	10,652	394	3.8%
70.4%	10,201	10,059	-142	-1.4%
71.6%	10,060	9,968	-92	-0.9%
72.8%	9,981	9,832	-149	-1.5%
74.1%	9,970	9,832	-138	-1.4%
75.3%	9,809	9,821	12	0.1%
76.5%	9,497	9,773	276	2.9%
77.8%	9,195	9,645	450	4.9%
79.0%	9,023	9,253	230	2.5%
80.2%	8,821	9,014	192	2.2%
81.5%	8,774	8,636	-138	-1.6%
82.7%	8,621	8,485	-135	-1.6%
84.0%	8,459	8,458	-1	0.0%
85.2%	8,455	8,361	-94	-1.1%
86.4%	7,775	7,621	-154	-2.0%
87.7%	7,699	7,419	-280	-3.6%
88.9%	7,102	7,327	226	3.2%
90.1%	6,888	7,316	428	6.2%
91.4%	6,368	7,169	802	12.6%
92.6%	6,296	6,852	556	8.8%
93.8%	6,272	6,326	54	0.9%
95.1%	6,177	6,289	111	1.8%
96.3%	5,645	5,647	1	0.0%
97.5%	5,436	5,627	191	3.5%
98.8%	5,311	5,471	161	3.0%
100.0%	4,927	5,343	416	8.4%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,850	13,850	0	0.0%
1.2%	13,850	13,850	0	0.0%
2.5%	13,850	13,850	0	0.0%
3.7%	13,850	13,850	0	0.0%
4.9%	13,850	13,850	0	0.0%
6.2%	13,850	13,850	0	0.0%
7.4%	13,850	13,850	0	0.0%
8.6%	13,850	13,850	0	0.0%
9.9%	13,850	13,850	0	0.0%
11.1%	13,850	13,850	0	0.0%
12.3%	13,850	13,850	0	0.0%
13.6%	13,850	13,850	0	0.0%
14.8%	13,850	13,850	0	0.0%
16.0%	13,850	13,850	0	0.0%
17.3%	13,850	13,850	0	0.0%
18.5%	13,850	13,850	0	0.0%
19.8%	13,850	13,850	0	0.0%
21.0%	13,850	13,850	0	0.0%
22.2%	13,850	13,850	0	0.0%
23.5%	13,850	13,826	-24	-0.2%
24.7%	13,709	13,763	55	0.4%
25.9%	13,681	13,679	-2	0.0%
27.2%	13,626	13,595	-31	-0.2%
28.4%	13,561	13,416	-145	-1.1%
29.6%	13,556	13,355	-201	-1.5%
30.9%	13,455	13,216	-239	-1.8%
32.1%	13,438	13,193	-245	-1.8%
33.3%	13,329	13,125	-203	-1.5%
34.6%	13,299	13,125	-174	-1.3%
35.8%	13,288	13,098	-190	-1.4%
37.0%	13,251	13,085	-166	-1.2%
38.3%	13,215	13,029	-186	-1.4%
39.5%	13,181	12,951	-231	-1.7%
40.7%	13,127	12,912	-214	-1.6%
42.0%	13,004	12,835	-170	-1.3%
43.2%	12,921	12,769	-152	-1.2%
44.4%	12,718	12,692	-26	-0.2%
45.7%	12,645	12,650	5	0.0%
46.9%	12,637	12,615	-22	-0.2%
48.1%	12,480	12,615	134	1.1%
49.4%	12,303	12,601	297	2.4%
50.6%	12,069	12,317	248	2.1%
51.9%	12,047	12,208	161	1.3%
53.1%	12,014	12,173	159	1.3%
54.3%	11,797	11,988	191	1.6%
55.6%	11,738	11,783	45	0.4%
56.8%	11,597	11,618	21	0.2%
58.0%	11,388	11,500	112	1.0%
59.3%	11,243	11,356	113	1.0%
60.5%	11,121	11,346	226	2.0%
61.7%	11,043	11,287	244	2.2%
63.0%	11,006	11,118	113	1.0%
64.2%	10,985	11,085	100	0.9%
65.4%	10,975	11,081	106	1.0%
66.7%	10,974	11,057	83	0.8%
67.9%	10,968	10,978	11	0.1%
69.1%	10,959	10,941	-18	-0.2%
70.4%	10,925	10,892	-33	-0.3%
71.6%	10,756	10,881	124	1.2%
72.8%	10,398	10,724	326	3.1%
74.1%	10,335	10,613	279	2.7%
75.3%	10,133	10,397	265	2.6%
76.5%	10,015	10,316	300	3.0%
77.8%	9,981	9,922	-59	-0.6%
79.0%	9,273	9,710	436	4.7%
80.2%	9,192	9,436	244	2.7%
81.5%	8,933	9,025	91	1.0%
82.7%	8,832	9,007	175	2.0%
84.0%	8,776	8,903	127	1.4%
85.2%	8,763	8,778	15	0.2%
86.4%	8,568	8,470	-98	-1.1%
87.7%	7,838	7,684	-154	-2.0%
88.9%	7,592	7,552	-40	-0.5%
90.1%	7,135	7,312	178	2.5%
91.4%	6,833	7,230	397	5.8%
92.6%	6,780	7,132	353	5.2%
93.8%	6,687	7,056	369	5.5%
95.1%	6,331	6,361	30	0.5%
96.3%	6,132	6,107	-25	-0.4%
97.5%	5,528	5,794	265	4.8%
98.8%	5,015	5,687	672	13.4%
100.0%	4,903	5,319	416	8.5%

Table SW-03-b

Trinity Lake, End of Month Area

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,133	14,501	-632	-4.2%
1.2%	14,300	14,300	0	0.0%
2.5%	14,300	14,300	0	0.0%
3.7%	14,300	14,300	0	0.0%
4.9%	14,300	14,300	0	0.0%
6.2%	14,300	14,300	0	0.0%
7.4%	14,300	14,300	0	0.0%
8.6%	14,300	14,300	0	0.0%
9.9%	14,300	14,300	0	0.0%
11.1%	14,300	14,300	0	0.0%
12.3%	14,300	14,300	0	0.0%
13.6%	14,300	14,300	0	0.0%
14.8%	14,300	14,300	0	0.0%
16.0%	14,300	14,300	0	0.0%
17.3%	14,300	14,300	0	0.0%
18.5%	14,300	14,300	0	0.0%
19.8%	14,300	14,300	0	0.0%
21.0%	14,300	14,300	0	0.0%
22.2%	14,268	14,259	-9	-0.1%
23.5%	14,265	14,244	-21	-0.1%
24.7%	14,259	14,232	-27	-0.2%
25.9%	14,244	14,212	-33	-0.2%
27.2%	14,232	14,173	-59	-0.4%
28.4%	14,106	14,040	-65	-0.5%
29.6%	14,100	14,039	-61	-0.4%
30.9%	14,070	13,980	-90	-0.6%
32.1%	14,049	13,948	-101	-0.7%
33.3%	13,913	13,879	-35	-0.2%
34.6%	13,896	13,659	-237	-1.7%
35.8%	13,800	13,648	-152	-1.1%
37.0%	13,619	13,627	8	0.1%
38.3%	13,589	13,614	25	0.2%
39.5%	13,585	13,440	-145	-1.1%
40.7%	13,568	13,378	-190	-1.4%
42.0%	13,410	13,260	-149	-1.1%
43.2%	13,387	13,184	-203	-1.5%
44.4%	13,302	13,162	-140	-1.1%
45.7%	13,245	13,145	-100	-0.8%
46.9%	13,236	13,128	-108	-0.8%
48.1%	13,175	13,069	-106	-0.8%
49.4%	13,129	12,964	-165	-1.3%
50.6%	12,858	12,905	48	0.4%
51.9%	12,837	12,832	-6	0.0%
53.1%	12,776	12,732	-45	-0.4%
54.3%	12,586	12,657	70	0.6%
55.6%	12,480	12,546	66	0.5%
56.8%	12,461	12,514	53	0.4%
58.0%	12,403	12,501	98	0.8%
59.3%	12,107	12,445	338	2.8%
60.5%	12,061	12,405	345	2.9%
61.7%	12,018	12,181	164	1.4%
63.0%	11,930	12,157	227	1.9%
64.2%	11,793	11,669	-124	-1.1%
65.4%	11,677	11,645	-32	-0.3%
66.7%	11,568	11,644	76	0.7%
67.9%	11,433	11,578	145	1.3%
69.1%	11,324	11,485	161	1.4%
70.4%	11,297	11,479	182	1.6%
71.6%	11,237	11,323	86	0.8%
72.8%	11,234	11,311	77	0.7%
74.1%	11,101	11,150	49	0.4%
75.3%	10,636	11,019	383	3.6%
76.5%	10,486	10,809	324	3.1%
77.8%	10,166	10,538	372	3.7%
79.0%	9,923	10,073	150	1.5%
80.2%	9,765	10,060	295	3.0%
81.5%	9,633	9,944	311	3.2%
82.7%	9,343	9,130	-214	-2.3%
84.0%	9,227	9,054	-173	-1.9%
85.2%	8,944	8,959	15	0.2%
86.4%	8,875	8,951	76	0.9%
87.7%	8,605	8,949	344	4.0%
88.9%	8,085	8,468	383	4.7%
90.1%	7,968	8,007	39	0.5%
91.4%	7,630	7,815	185	2.4%
92.6%	7,298	7,350	52	0.7%
93.8%	7,274	7,303	30	0.4%
95.1%	7,094	7,257	163	2.3%
96.3%	6,860	6,718	-141	-2.1%
97.5%	6,173	6,402	229	3.7%
98.8%	5,187	5,859	672	13.0%
100.0%	4,914	5,330	416	8.5%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,700	14,700	0	0.0%
1.2%	14,700	14,700	0	0.0%
2.5%	14,700	14,700	0	0.0%
3.7%	14,700	14,700	0	0.0%
4.9%	14,700	14,700	0	0.0%
6.2%	14,700	14,700	0	0.0%
7.4%	14,700	14,700	0	0.0%
8.6%	14,700	14,700	0	0.0%
9.9%	14,700	14,700	0	0.0%
11.1%	14,700	14,700	0	0.0%
12.3%	14,700	14,700	0	0.0%
13.6%	14,700	14,700	0	0.0%
14.8%	14,700	14,700	0	0.0%
16.0%	14,700	14,700	0	0.0%
17.3%	14,700	14,700	0	0.0%
18.5%	14,700	14,700	0	0.0%
19.8%	14,700	14,700	0	0.0%
21.0%	14,700	14,700	0	0.0%
22.2%	14,700	14,700	0	0.0%
23.5%	14,700	14,700	0	0.0%
24.7%	14,700	14,700	0	0.0%
25.9%	14,700	14,679	-21	-0.1%
27.2%	14,700	14,636	-64	-0.4%
28.4%	14,700	14,614	-86	-0.6%
29.6%	14,700	14,613	-87	-0.6%
30.9%	14,684	14,606	-78	-0.5%
32.1%	14,676	14,588	-88	-0.6%
33.3%	14,614	14,518	-96	-0.7%
34.6%	14,606	14,516	-90	-0.6%
35.8%	14,566	14,514	-53	-0.4%
37.0%	14,516	14,477	-39	-0.3%
38.3%	14,474	14,442	-32	-0.2%
39.5%	14,364	14,366	2	0.0%
40.7%	14,154	14,320	167	1.2%
42.0%	14,105	14,144	39	0.3%
43.2%	14,059	13,998	-61	-0.4%
44.4%	14,002	13,905	-97	-0.7%
45.7%	13,871	13,841	-30	-0.2%
46.9%	13,720	13,715	-6	0.0%
48.1%	13,700	13,676	-23	-0.2%
49.4%	13,660	13,631	-29	-0.2%
50.6%	13,518	13,572	54	0.4%
51.9%	13,474	13,477	3	0.0%
53.1%	13,468	13,456	-11	-0.1%
54.3%	13,308	13,343	36	0.3%
55.6%	13,299	13,193	-106	-0.8%
56.8%	13,268	13,064	-204	-1.5%
58.0%	13,075	13,052	-23	-0.2%
59.3%	12,822	13,049	227	1.8%
60.5%	12,736	12,669	-67	-0.5%
61.7%	12,727	12,665	-62	-0.5%
63.0%	12,692	12,656	-36	-0.3%
64.2%	12,588	12,620	32	0.3%
65.4%	12,555	12,596	41	0.3%
66.7%	12,262	12,510	248	2.0%
67.9%	12,122	12,196	73	0.6%
69.1%	11,967	12,089	122	1.0%
70.4%	11,918	12,062	145	1.2%
71.6%	11,627	12,033	405	3.5%
72.8%	11,617	11,979	362	3.1%
74.1%	11,530	11,779	249	2.2%
75.3%	11,446	11,626	181	1.6%
76.5%	11,243	11,258	15	0.1%
77.8%	11,053	11,161	108	1.0%
79.0%	10,958	11,066	108	1.0%
80.2%	10,481	10,859	378	3.6%
81.5%	10,400	10,651	251	2.4%
82.7%	10,019	10,388	370	3.7%
84.0%	9,892	10,013	121	1.2%
85.2%	9,616	9,928	312	3.2%
86.4%	9,586	9,857	271	2.8%
87.7%	9,498	9,624	126	1.3%
88.9%	8,862	8,857	-5	-0.1%
90.1%	8,783	8,784	1	0.0%
91.4%	8,355	8,331	-25	-0.3%
92.6%	8,297	8,229	-68	-0.8%
93.8%	8,260	7,927	-333	-4.0%
95.1%	8,122	7,845	-277	-3.4%
96.3%	7,573	7,783	210	2.8%
97.5%	6,588	6,927	340	5.2%
98.8%	6,348	6,816	468	7.4%
100.0%	5,714	6,125	411	7.2%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,500	15,500	0	0.0%
1.2%	15,500	15,500	0	0.0%
2.5%	15,500	15,500	0	0.0%
3.7%	15,500	15,500	0	0.0%
4.9%	15,500	15,500	0	0.0%
6.2%	15,500	15,500	0	0.0%
7.4%	15,500	15,500	0	0.0%
8.6%	15,500	15,500	0	0.0%
9.9%	15,500	15,500	0	0.0%
11.1%	15,500	15,500	0	0.0%
12.3%	15,473	15,473	0	0.0%
13.6%	15,433	15,433	0	0.0%
14.8%	15,433	15,433	0	0.0%
16.0%	15,412	15,412	0	0.0%
17.3%	15,402	15,402	0	0.0%
18.5%	15,375	15,387	12	0.1%
19.8%	15,363	15,375	13	0.1%
21.0%	15,346	15,363	16	0.1%
22.2%	15,336	15,342	6	0.0%
23.5%	15,330	15,330	0	0.0%
24.7%	15,316	15,318	2	0.0%
25.9%	15,274	15,235	-39	-0.3%
27.2%	15,269	15,199	-70	-0.5%
28.4%	15,235	15,179	-56	-0.4%
29.6%	15,205	15,173	-33	-0.2%
30.9%	15,199	15,170	-28	-0.2%
32.1%	15,198	15,121	-77	-0.5%
33.3%	15,173	15,120	-53	-0.4%
34.6%	15,170	15,116	-54	-0.4%
35.8%	15,121	15,110	-11	-0.1%
37.0%	15,064	15,082	17	0.1%
38.3%	14,961	15,064	103	0.7%
39.5%	14,946	14,976	30	0.2%
40.7%	14,766	14,946	179	1.2%
42.0%	14,709	14,854	145	1.0%
43.2%	14,708	14,793	85	0.6%
44.4%	14,673	14,684	11	0.1%
45.7%	14,567	14,654	87	0.6%
46.9%	14,471	14,463	-8	-0.1%
48.1%	14,428	14,458	30	0.2%
49.4%	14,290	14,202	-88	-0.6%
50.6%	14,231	14,137	-94	-0.7%
51.9%	14,178	14,125	-53	-0.4%
53.1%	13,932	14,119	186	1.3%
54.3%	13,927	14,046	118	0.9%
55.6%	13,896	13,825	-71	-0.5%
56.8%	13,803	13,808	5	0.0%
58.0%	13,795	13,675	-120	-0.9%
59.3%	13,718	13,592	-126	-0.9%
60.5%	13,664	13,520	-144	-1.1%
61.7%	13,443	13,415	-28	-0.2%
63.0%	13,436	13,260	-176	-1.3%
64.2%	13,355	13,255	-100	-0.7%
65.4%	13,238	13,202	-36	-0.3%
66.7%	13,214	13,166	-48	-0.4%
67.9%	12,728	13,031	303	2.4%
69.1%	12,585	12,687	102	0.8%
70.4%	12,483	12,649	166	1.3%
71.6%	12,459	12,646	187	1.5%
72.8%	12,402	12,617	215	1.7%
74.1%	12,212	12,401	189	1.5%
75.3%	12,158	12,233	75	0.6%
76.5%	12,066	12,171	104	0.9%
77.8%	11,872	12,130	258	2.2%
79.0%	11,657	11,960	303	2.6%
80.2%	11,278	11,884	607	5.4%
81.5%	11,260	11,743	484	4.3%
82.7%	10,786	11,603	818	7.6%
84.0%	10,736	10,649	-87	-0.8%
85.2%	10,577	10,484	-93	-0.9%
86.4%	10,136	9,915	-222	-2.2%
87.7%	9,955	9,869	-86	-0.9%
88.9%	9,788	9,853	65	0.7%
90.1%	9,214	9,749	535	5.8%
91.4%	9,082	9,390	308	3.4%
92.6%	8,853	8,652	-201	-2.3%
93.8%	8,579	8,383	-196	-2.3%
95.1%	8,508	8,344	-164	-1.9%
96.3%	8,450	8,261	-189	-2.2%
97.5%	8,037	8,177	139	1.7%
98.8%	6,914	7,472	557	8.1%
100.0%	6,808	7,165	358	5.3%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,980	15,980	0	0.0%
1.2%	15,980	15,980	0	0.0%
2.5%	15,980	15,980	0	0.0%
3.7%	15,980	15,980	0	0.0%
4.9%	15,944	15,944	0	0.0%
6.2%	15,941	15,941	0	0.0%
7.4%	15,843	15,843	0	0.0%
8.6%	15,835	15,835	0	0.0%
9.9%	15,656	15,671	15	0.1%
11.1%	15,632	15,632	0	0.0%
12.3%	15,618	15,620	2	0.0%
13.6%	15,601	15,601	0	0.0%
14.8%	15,595	15,595	0	0.0%
16.0%	15,582	15,582	0	0.0%
17.3%	15,572	15,572	0	0.0%
18.5%	15,571	15,571	0	0.0%
19.8%	15,541	15,541	0	0.0%
21.0%	15,537	15,502	-35	-0.2%
22.2%	15,502	15,466	-36	-0.2%
23.5%	15,466	15,386	-80	-0.5%
24.7%	15,407	15,384	-23	-0.2%
25.9%	15,386	15,255	-131	-0.9%
27.2%	15,238	15,182	-56	-0.4%
28.4%	15,186	15,174	-12	-0.1%
29.6%	15,160	15,153	-6	0.0%
30.9%	15,038	15,038	0	0.0%
32.1%	15,033	15,033	0	0.0%
33.3%	14,993	14,993	0	0.0%
34.6%	14,952	14,983	31	0.2%
35.8%	14,927	14,952	26	0.2%
37.0%	14,925	14,901	-25	-0.2%
38.3%	14,610	14,701	91	0.6%
39.5%	14,543	14,610	67	0.5%
40.7%	14,461	14,601	140	1.0%
42.0%	14,387	14,543	155	1.1%
43.2%	14,295	14,416	121	0.8%
44.4%	14,293	14,407	115	0.8%
45.7%	14,286	14,268	-18	-0.1%
46.9%	14,243	14,162	-81	-0.6%
48.1%	14,209	14,035	-174	-1.2%
49.4%	13,985	14,025	40	0.3%
50.6%	13,952	14,016	63	0.5%
51.9%	13,920	13,977	57	0.4%
53.1%	13,901	13,896	-5	0.0%
54.3%	13,821	13,830	9	0.1%
55.6%	13,803	13,770	-33	-0.2%
56.8%	13,698	13,716	18	0.1%
58.0%	13,570	13,646	77	0.6%
59.3%	13,511	13,439	-71	-0.5%
60.5%	13,490	13,301	-189	-1.4%
61.7%	13,321	13,254	-67	-0.5%
63.0%	13,318	13,191	-127	-1.0%
64.2%	13,168	13,051	-117	-0.9%
65.4%	13,009	13,048	38	0.3%
66.7%	12,991	13,015	24	0.2%
67.9%	12,745	12,947	201	1.6%
69.1%	12,737	12,937	200	1.6%
70.4%	12,603	12,919	316	2.5%
71.6%	12,445	12,832	387	3.1%
72.8%	12,204	12,635	431	3.5%
74.1%	12,181	12,247	67	0.5%
75.3%	11,943	12,203	259	2.2%
76.5%	11,779	12,171	392	3.3%
77.8%	11,743	12,099	356	3.0%
79.0%	11,546	11,559	13	0.1%
80.2%	11,195	11,519	325	2.9%
81.5%	11,061	11,425	364	3.3%
82.7%	10,943	11,288	345	3.1%
84.0%	10,822	10,738	-84	-0.8%
85.2%	10,189	10,275	85	0.8%
86.4%	9,989	10,099	110	1.1%
87.7%	9,926	9,802	-124	-1.3%
88.9%	9,737	9,660	-77	-0.8%
90.1%	9,521	9,481	-40	-0.4%
91.4%	8,672	9,231	560	6.5%
92.6%	8,604	8,467	-138	-1.6%
93.8%	8,245	8,332	87	1.1%
95.1%	8,243	8,301	57	0.7%
96.3%	8,241	8,157	-85	-1.0%
97.5%	8,228	8,120	-108	-1.3%
98.8%	7,072	7,627	555	7.9%
100.0%	6,724	7,080	357	5.3%

Table SW-03-b

Trinity Lake, End of Month Area

Probability of Exceedance

June				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	16,088	16,088	0	0.0%
1.2%	16,088	16,088	0	0.0%
2.5%	16,088	16,088	0	0.0%
3.7%	16,088	16,088	0	0.0%
4.9%	16,026	16,021	-5	0.0%
6.2%	16,021	16,017	-4	0.0%
7.4%	15,903	15,895	-8	-0.1%
8.6%	15,888	15,888	0	0.0%
9.9%	15,838	15,770	-68	-0.4%
11.1%	15,770	15,715	-54	-0.3%
12.3%	15,715	15,669	-46	-0.3%
13.6%	15,661	15,661	0	0.0%
14.8%	15,561	15,561	0	0.0%
16.0%	15,559	15,556	-3	0.0%
17.3%	15,526	15,526	0	0.0%
18.5%	15,518	15,518	0	0.0%
19.8%	15,442	15,451	9	0.1%
21.0%	15,436	15,358	-78	-0.5%
22.2%	15,358	15,356	-2	0.0%
23.5%	15,356	15,290	-66	-0.4%
24.7%	15,203	15,203	0	0.0%
25.9%	15,146	15,116	-30	-0.2%
27.2%	15,116	15,083	-33	-0.2%
28.4%	15,049	15,049	0	0.0%
29.6%	14,904	14,898	-6	0.0%
30.9%	14,797	14,797	0	0.0%
32.1%	14,755	14,755	0	0.0%
33.3%	14,751	14,751	0	0.0%
34.6%	14,700	14,700	0	0.0%
35.8%	14,590	14,565	-26	-0.2%
37.0%	14,472	14,518	46	0.3%
38.3%	14,445	14,512	67	0.5%
39.5%	14,352	14,362	10	0.1%
40.7%	14,170	14,170	0	0.0%
42.0%	14,065	14,141	76	0.5%
43.2%	13,926	14,005	79	0.6%
44.4%	13,852	13,950	97	0.7%
45.7%	13,851	13,926	75	0.5%
46.9%	13,795	13,803	8	0.1%
48.1%	13,727	13,665	-62	-0.5%
49.4%	13,688	13,644	-45	-0.3%
50.6%	13,673	13,634	-39	-0.3%
51.9%	13,554	13,603	48	0.4%
53.1%	13,379	13,600	221	1.7%
54.3%	13,342	13,431	89	0.7%
55.6%	13,273	13,348	75	0.6%
56.8%	13,239	13,331	92	0.7%
58.0%	13,215	13,274	59	0.4%
59.3%	13,104	13,189	85	0.6%
60.5%	13,091	13,144	52	0.4%
61.7%	13,050	13,122	72	0.5%
63.0%	12,995	12,942	-53	-0.4%
64.2%	12,962	12,941	-21	-0.2%
65.4%	12,860	12,923	63	0.5%
66.7%	12,662	12,898	236	1.9%
67.9%	12,629	12,797	168	1.3%
69.1%	12,603	12,708	104	0.8%
70.4%	12,393	12,630	237	1.9%
71.6%	12,340	12,552	212	1.7%
72.8%	12,317	12,538	222	1.8%
74.1%	12,252	12,203	-49	-0.4%
75.3%	11,860	12,087	227	1.9%
76.5%	11,689	11,688	-1	0.0%
77.8%	11,197	11,548	351	3.1%
79.0%	10,898	11,220	322	3.0%
80.2%	10,858	11,214	356	3.3%
81.5%	10,738	10,911	173	1.6%
82.7%	10,659	10,903	244	2.3%
84.0%	10,592	10,860	268	2.5%
85.2%	10,409	10,316	-92	-0.9%
86.4%	10,035	9,988	-47	-0.5%
87.7%	10,016	9,852	-164	-1.6%
88.9%	9,570	9,635	64	0.7%
90.1%	9,272	9,230	-43	-0.5%
91.4%	8,560	8,825	266	3.1%
92.6%	8,270	8,492	222	2.7%
93.8%	8,268	8,288	20	0.2%
95.1%	8,069	8,031	-38	-0.5%
96.3%	7,981	7,943	-38	-0.5%
97.5%	7,957	7,896	-61	-0.8%
98.8%	7,529	7,884	355	4.7%
100.0%	6,993	7,697	703	10.1%

July				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,380	15,380	0	0.0%
1.2%	15,380	15,380	0	0.0%
2.5%	15,380	15,380	0	0.0%
3.7%	15,380	15,380	0	0.0%
4.9%	15,380	15,380	0	0.0%
6.2%	15,380	15,380	0	0.0%
7.4%	15,380	15,380	0	0.0%
8.6%	15,380	15,380	0	0.0%
9.9%	15,380	15,380	0	0.0%
11.1%	15,380	15,380	0	0.0%
12.3%	15,380	15,375	-5	0.0%
13.6%	15,373	15,205	-168	-1.1%
14.8%	15,348	15,196	-151	-1.0%
16.0%	15,318	15,179	-139	-0.9%
17.3%	15,179	15,165	-15	-0.1%
18.5%	15,165	15,047	-118	-0.8%
19.8%	15,047	15,004	-43	-0.3%
21.0%	15,004	14,981	-23	-0.2%
22.2%	14,799	14,799	0	0.0%
23.5%	14,778	14,778	0	0.0%
24.7%	14,659	14,585	-75	-0.5%
25.9%	14,585	14,568	-17	-0.1%
27.2%	14,569	14,506	-63	-0.4%
28.4%	14,568	14,353	-216	-1.5%
29.6%	14,354	14,348	-6	0.0%
30.9%	14,250	14,250	0	0.0%
32.1%	14,198	14,198	0	0.0%
33.3%	14,139	14,139	0	0.0%
34.6%	14,100	14,100	0	0.0%
35.8%	13,990	13,996	6	0.0%
37.0%	13,963	13,942	-22	-0.2%
38.3%	13,810	13,867	57	0.4%
39.5%	13,575	13,622	47	0.3%
40.7%	13,439	13,587	148	1.1%
42.0%	13,359	13,535	176	1.3%
43.2%	13,298	13,493	194	1.5%
44.4%	13,139	13,273	134	1.0%
45.7%	13,068	13,144	76	0.6%
46.9%	13,021	13,141	120	0.9%
48.1%	13,004	13,139	135	1.0%
49.4%	12,881	12,950	70	0.5%
50.6%	12,864	12,870	6	0.0%
51.9%	12,706	12,844	139	1.1%
53.1%	12,684	12,709	25	0.2%
54.3%	12,599	12,618	19	0.2%
55.6%	12,557	12,593	36	0.3%
56.8%	12,548	12,562	15	0.1%
58.0%	12,440	12,471	32	0.3%
59.3%	12,429	12,454	25	0.2%
60.5%	12,364	12,410	46	0.4%
61.7%	12,304	12,384	80	0.6%
63.0%	12,281	12,375	93	0.8%
64.2%	12,223	12,343	120	1.0%
65.4%	12,169	12,261	92	0.8%
66.7%	11,952	12,235	283	2.4%
67.9%	11,927	12,011	84	0.7%
69.1%	11,849	11,823	-25	-0.2%
70.4%	11,832	11,807	-25	-0.2%
71.6%	11,470	11,790	320	2.8%
72.8%	11,391	11,469	78	0.7%
74.1%	11,157	11,210	53	0.5%
75.3%	11,131	10,934	-196	-1.8%
76.5%	10,885	10,885	-1	0.0%
77.8%	10,144	10,529	385	3.8%
79.0%	9,946	10,342	396	4.0%
80.2%	9,903	10,275	372	3.8%
81.5%	9,879	10,229	350	3.5%
82.7%	9,824	9,898	74	0.8%
84.0%	9,820	9,727	-93	-0.9%
85.2%	9,444	9,371	-74	-0.8%
86.4%	9,419	9,223	-196	-2.1%
87.7%	9,322	9,170	-152	-1.6%
88.9%	8,851	8,901	50	0.6%
90.1%	8,567	8,778	210	2.5%
91.4%	7,831	7,997	166	2.1%
92.6%	7,543	7,768	225	3.0%
93.8%	7,433	7,556	123	1.7%
95.1%	7,271	7,262	-9	-0.1%
96.3%	7,187	7,238	51	0.7%
97.5%	7,164	7,145	-19	-0.3%
98.8%	6,909	7,031	121	1.8%
100.0%	6,263	6,914	651	10.4%

August				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,900	14,900	0	0.0%
1.2%	14,900	14,900	0	0.0%
2.5%	14,900	14,900	0	0.0%
3.7%	14,900	14,900	0	0.0%
4.9%	14,900	14,900	0	0.0%
6.2%	14,900	14,900	0	0.0%
7.4%	14,900	14,900	0	0.0%
8.6%	14,900	14,900	0	0.0%
9.9%	14,900	14,900	0	0.0%
11.1%	14,900	14,900	0	0.0%
12.3%	14,900	14,900	0	0.0%
13.6%	14,886	14,747	-139	-0.9%
14.8%	14,854	14,735	-119	-0.8%
16.0%	14,747	14,693	-54	-0.4%
17.3%	14,713	14,597	-116	-0.8%
18.5%	14,693	14,517	-175	-1.2%
19.8%	14,642	14,475	-168	-1.1%
21.0%	14,521	14,203	-318	-2.2%
22.2%	14,452	14,109	-343	-2.4%
23.5%	14,293	13,974	-319	-2.2%
24.7%	14,108	13,947	-160	-1.1%
25.9%	14,071	13,805	-265	-1.9%
27.2%	13,974	13,762	-211	-1.5%
28.4%	13,812	13,725	-87	-0.6%
29.6%	13,725	13,655	-70	-0.5%
30.9%	13,706	13,514	-192	-1.4%
32.1%	13,565	13,471	-94	-0.7%
33.3%	13,471	13,427	-44	-0.3%
34.6%	13,436	13,385	-51	-0.4%
35.8%	13,385	13,346	-39	-0.3%
37.0%	13,299	13,270	-29	-0.2%
38.3%	13,291	13,176	-116	-0.9%
39.5%	12,888	12,915	28	0.2%
40.7%	12,699	12,804	106	0.8%
42.0%	12,627	12,796	169	1.3%
43.2%	12,560	12,710	149	1.2%
44.4%	12,456	12,694	238	1.9%
45.7%	12,382	12,477	95	0.8%
46.9%	12,318	12,456	138	1.1%
48.1%	12,292	12,283	-9	-0.1%
49.4%	12,131	12,230	99	0.8%
50.6%	12,106	12,143	37	0.3%
51.9%	11,911	12,092	181	1.5%
53.1%	11,910	11,772	-138	-1.2%
54.3%	11,801	11,730	-71	-0.6%
55.6%	11,752	11,716	-36	-0.3%
56.8%	11,712	11,664	-48	-0.4%
58.0%	11,532	11,629	97	0.8%
59.3%	11,503	11,609	106	0.9%
60.5%	11,460	11,594	134	1.2%
61.7%	11,276	11,542	267	2.4%
63.0%	11,233	11,522	289	2.6%
64.2%	11,217	11,242	25	0.2%
65.4%	11,205	11,135	-69	-0.6%
66.7%	11,167	11,122	-45	-0.4%
67.9%	11,014	11,031	17	0.2%
69.1%	10,976	10,916	-60	-0.5%
70.4%	10,717	10,873	155	1.5%
71.6%	10,628	10,865	237	2.2%
72.8%	10,188	10,718	530	5.2%
74.1%	10,159	10,435	276	2.7%
75.3%	10,083	10,151	68	0.7%
76.5%	10,049	9,852	-197	-2.0%
77.8%	9,421	9,537	116	1.2%
79.0%	9,414	9,533	119	1.3%
80.2%	9,290	9,418	127	1.4%
81.5%	9,262	9,145	-117	-1.3%
82.7%	9,145	9,121	-23	-0.3%
84.0%	9,130	8,971	-159	-1.7%
85.2%	8,719	8,567	-152	-1.7%
86.4%	8,664	8,417	-248	-2.9%
87.7%	8,515	8,388	-127	-1.5%
88.9%	7,895	8,331	436	5.5%
90.1%	7,331	8,006	674	9.2%
91.4%	7,047	7,163	116	1.6%
92.6%	6,742	6,965	224	3.3%
93.8%	6,643	6,773	130	2.0%
95.1%	6,602	6,474	-128	-1.9%
96.3%	6,445	6,320	-125	-1.9%
97.5%	5,685	6,178	493	8.7%
98.8%	5,556	5,640	85	1.5%
100.0%	5,547	5,471	-76	-1.4%

September				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,188	14,188	0	0.0%
1.2%	14,188	14,188	0	0.0%
2.5%	14,188	14,188	0	0.0%
3.7%	14,188	14,188	0	0.0%
4.9%	14,188	14,188	0	0.0%
6.2%	14,188	14,188	0	0.0%
7.4%	14,188	14,188	0	0.0%
8.6%	14,188	14,188	0	0.0%
9.9%	14,188	14,188	0	0.0%
11.1%	14,188	14,188	0	0.0%
12.3%	14,188	14,188	0	0.0%
13.6%	14,188	14,188	0	0.0%
14.8%	14,188	14,188	0	0.0%
16.0%	14,188	13,964	-224	-1.6%
17.3%	14,157	13,893	-264	-1.9%
18.5%	14,039	13,878	-161	-1.1%
19.8%	13,935	13,794	-141	-1.0%
21.0%	13,853	13,665	-188	-1.4%
22.2%	13,714	13,369	-345	-2.5%
23.5%	13,491	13,329	-161	-1.2%
24.7%	13,444	13,300	-145	-1.1%
25.9%	13,390	13,158	-231	-1.7%
27.2%	13,329	13,146	-183	-1.4%
28.4%	13,299	13,103	-196	-1.5%
29.6%	13,237	13,029	-208	-1.6%
30.9%	13,089	12,897	-192	-1.5%
32.1%	12,910	12,826	-84	-0.6%
33.3%	12,871	12,772	-99	-0.8%
34.6%	12,826	12,737	-89	-0.7%
35.8%	12,767	12,708	-60	-0.5%
37.0%	12,661	12,620	-41	-0.3%
38.3%	12,641	12,507	-134	-1.1%
39.5%	12,166	12,303	138	1.1%
40.7%	11,954	12,079	125	1.0%
42.0%	11,855	11,781	-74	-0.6%
43.2%	11,678	11,776	99	0.8%
44.4%	11,651	11,675	24	0.2%
45.7%	11,622	11,536	-85	-0.7%
46.9%	11,586	11,513	-73	-0.6%
48.1%	11,511	11,507	-5	0.0%
49.4%	11,508	11,500	-7	-0.1%
50.6%	11,499	11,467	-32	-0.3%
51.9%	11,464	11,420	-43	-0.4%
53.1%	11,275	11,420	145	1.3%
54.3%	11,274	11,312	38	0.3%
55.6%	11,259	11,135	-124	-1.1%
56.8%	11,122	11,089	-33	-0.3%
58.0%	10,891	11,054	164	1.5%
59.3%	10,889	10,972	84	0.8%
60.5%	10,856	10,910	54	0.5%
61.7%	10,734	10,900	165	1.5%
63.0%	10,636	10,826	191	1.8%
64.2%	10,583	10,410	-173	-1.6%
65.4%	10,555	10,391	-164	-1.6%
66.7%	10,514	10,364	-150	-1.4%
67.9%	10,350	10,220	-130	-1.3%
69.1%	10,313	10,125	-188	-1.8%
70.4%	10,021	10,099	77	0.8%
71.6%	9,666	10,095	430	4.4%
72.8%	9,661	10,009	348	3.6%
74.1%	9,651	9,632	-19	-0.2%
75.3%	9,632	9,629	-4	0.0%
76.5%	9,100	9,175	75	0.8%
77.8%	8,967	9,064	97	1.1%
79.0%	8,911	8,992	81	0.9%
80.2%	8,868	8,872	3	0.0%
81.5%	8,716	8,599	-118	-1.4%
82.7%	8,583	8,550	-34	-0.4%
84.0%	8,352	8,427	74	0.9%
85.2%	8,157	8,006	-151	-1.9%
86.4%	8,119	7,841	-278	-3.4%
87.7%	7,937	7,838	-100	-1.3%
88.9%	7,334	7,774	440	6.0%
90.1%	6,497	7,453	956	14.7%
91.4%	6,479	6,570	91	1.4%
92.6%	6,384	6,527	143	2.2%
93.8%	6,313	6,400	87	1.4%
95.1%	6,281	6,215	-66	-1.0%
96.3%	6,164	6,029	-135	-2.2%
97.5%	5,369	5,700	331	6.2%
98.8%	5,329	5,413	84	1.6%
100.0%	5,102	5,155	53	1.0%

Figure SW-04-b
Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

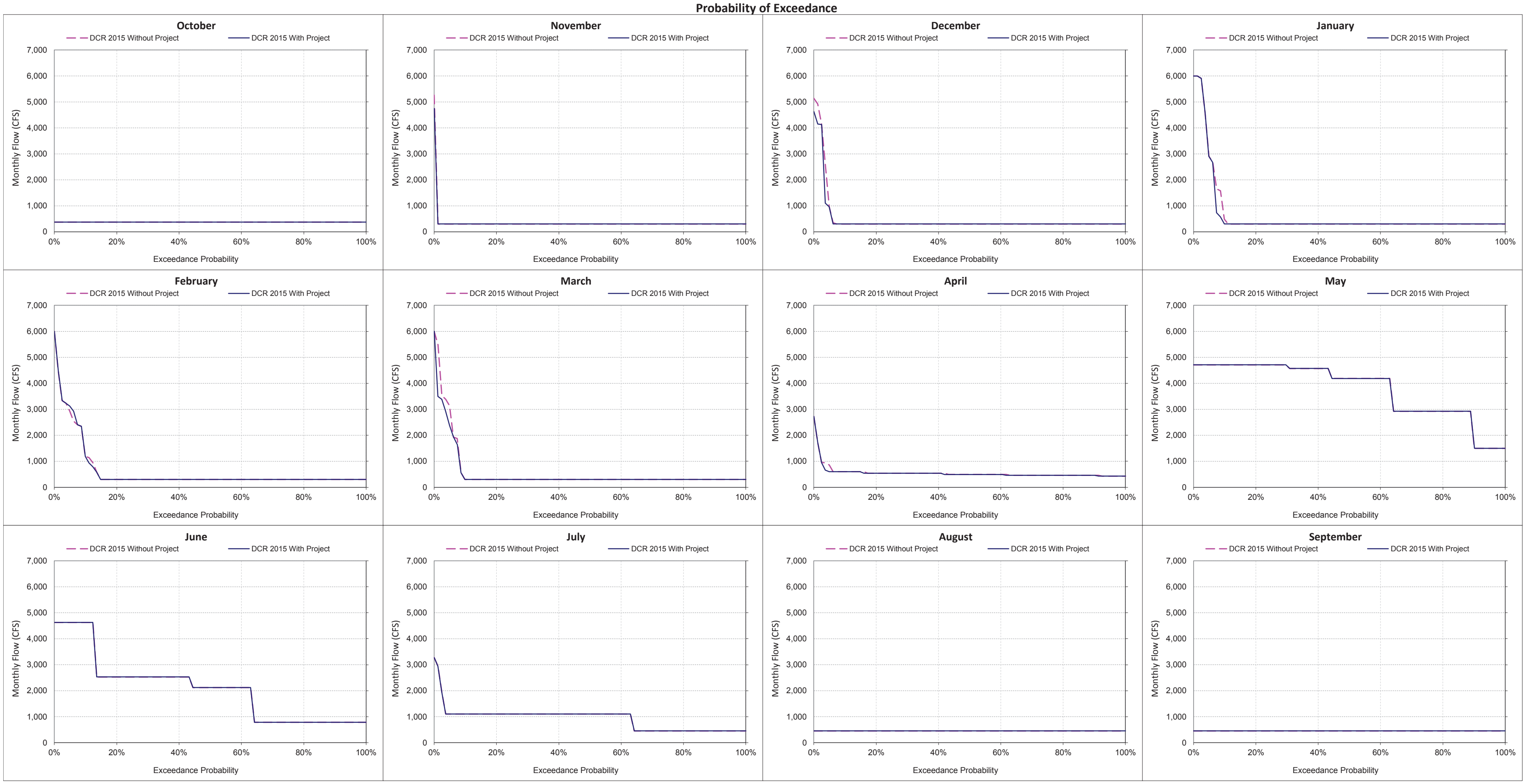


Table SW-04-b
Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

October					November					December					January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	373	373	0	0.0%	0.0%	5,261	4,745	-516	-9.8%	0.0%	5,139	4,627	-513	-10.0%	0.0%	6,000	6,000	0	0.0%
1.2%	373	373	0	0.0%	1.2%	300	300	0	0.0%	1.2%	4,922	4,150	-772	-15.7%	1.2%	6,000	6,000	0	0.0%
2.5%	373	373	0	0.0%	2.5%	300	300	0	0.0%	2.5%	4,150	4,133	-17	-0.4%	2.5%	5,907	5,907	0	0.0%
3.7%	373	373	0	0.0%	3.7%	300	300	0	0.0%	3.7%	2,557	1,106	-1,451	-56.8%	3.7%	4,568	4,568	0	0.0%
4.9%	373	373	0	0.0%	4.9%	300	300	0	0.0%	4.9%	964	964	0	0.0%	4.9%	2,908	2,908	0	0.0%
6.2%	373	373	0	0.0%	6.2%	300	300	0	0.0%	6.2%	349	300	-49	-14.1%	6.2%	2,670	2,670	0	0.0%
7.4%	373	373	0	0.0%	7.4%	300	300	0	0.0%	7.4%	300	300	0	0.0%	7.4%	1,650	739	-911	-55.2%
8.6%	373	373	0	0.0%	8.6%	300	300	0	0.0%	8.6%	300	300	0	0.0%	8.6%	1,578	576	-1,003	-63.5%
9.9%	373	373	0	0.0%	9.9%	300	300	0	0.0%	9.9%	300	300	0	0.0%	9.9%	486	300	-186	-38.3%
11.1%	373	373	0	0.0%	11.1%	300	300	0	0.0%	11.1%	300	300	0	0.0%	11.1%	300	300	0	0.0%
12.3%	373	373	0	0.0%	12.3%	300	300	0	0.0%	12.3%	300	300	0	0.0%	12.3%	300	300	0	0.0%
13.6%	373	373	0	0.0%	13.6%	300	300	0	0.0%	13.6%	300	300	0	0.0%	13.6%	300	300	0	0.0%
14.8%	373	373	0	0.0%	14.8%	300	300	0	0.0%	14.8%	300	300	0	0.0%	14.8%	300	300	0	0.0%
16.0%	373	373	0	0.0%	16.0%	300	300	0	0.0%	16.0%	300	300	0	0.0%	16.0%	300	300	0	0.0%
17.3%	373	373	0	0.0%	17.3%	300	300	0	0.0%	17.3%	300	300	0	0.0%	17.3%	300	300	0	0.0%
18.5%	373	373	0	0.0%	18.5%	300	300	0	0.0%	18.5%	300	300	0	0.0%	18.5%	300	300	0	0.0%
19.8%	373	373	0	0.0%	19.8%	300	300	0	0.0%	19.8%	300	300	0	0.0%	19.8%	300	300	0	0.0%
21.0%	373	373	0	0.0%	21.0%	300	300	0	0.0%	21.0%	300	300	0	0.0%	21.0%	300	300	0	0.0%
22.2%	373	373	0	0.0%	22.2%	300	300	0	0.0%	22.2%	300	300	0	0.0%	22.2%	300	300	0	0.0%
23.5%	373	373	0	0.0%	23.5%	300	300	0	0.0%	23.5%	300	300	0	0.0%	23.5%	300	300	0	0.0%
24.7%	373	373	0	0.0%	24.7%	300	300	0	0.0%	24.7%	300	300	0	0.0%	24.7%	300	300	0	0.0%
25.9%	373	373	0	0.0%	25.9%	300	300	0	0.0%	25.9%	300	300	0	0.0%	25.9%	300	300	0	0.0%
27.2%	373	373	0	0.0%	27.2%	300	300	0	0.0%	27.2%	300	300	0	0.0%	27.2%	300	300	0	0.0%
28.4%	373	373	0	0.0%	28.4%	300	300	0	0.0%	28.4%	300	300	0	0.0%	28.4%	300	300	0	0.0%
29.6%	373	373	0	0.0%	29.6%	300	300	0	0.0%	29.6%	300	300	0	0.0%	29.6%	300	300	0	0.0%
30.9%	373	373	0	0.0%	30.9%	300	300	0	0.0%	30.9%	300	300	0	0.0%	30.9%	300	300	0	0.0%
32.1%	373	373	0	0.0%	32.1%	300	300	0	0.0%	32.1%	300	300	0	0.0%	32.1%	300	300	0	0.0%
33.3%	373	373	0	0.0%	33.3%	300	300	0	0.0%	33.3%	300	300	0	0.0%	33.3%	300	300	0	0.0%
34.6%	373	373	0	0.0%	34.6%	300	300	0	0.0%	34.6%	300	300	0	0.0%	34.6%	300	300	0	0.0%
35.8%	373	373	0	0.0%	35.8%	300	300	0	0.0%	35.8%	300	300	0	0.0%	35.8%	300	300	0	0.0%
37.0%	373	373	0	0.0%	37.0%	300	300	0	0.0%	37.0%	300	300	0	0.0%	37.0%	300	300	0	0.0%
38.3%	373	373	0	0.0%	38.3%	300	300	0	0.0%	38.3%	300	300	0	0.0%	38.3%	300	300	0	0.0%
39.5%	373	373	0	0.0%	39.5%	300	300	0	0.0%	39.5%	300	300	0	0.0%	39.5%	300	300	0	0.0%
40.7%	373	373	0	0.0%	40.7%	300	300	0	0.0%	40.7%	300	300	0	0.0%	40.7%	300	300	0	0.0%
42.0%	373	373	0	0.0%	42.0%	300	300	0	0.0%	42.0%	300	300	0	0.0%	42.0%	300	300	0	0.0%
43.2%	373	373	0	0.0%	43.2%	300	300	0	0.0%	43.2%	300	300	0	0.0%	43.2%	300	300	0	0.0%
44.4%	373	373	0	0.0%	44.4%	300	300	0	0.0%	44.4%	300	300	0	0.0%	44.4%	300	300	0	0.0%
45.7%	373	373	0	0.0%	45.7%	300	300	0	0.0%	45.7%	300	300	0	0.0%	45.7%	300	300	0	0.0%
46.9%	373	373	0	0.0%	46.9%	300	300	0	0.0%	46.9%	300	300	0	0.0%	46.9%	300	300	0	0.0%
48.1%	373	373	0	0.0%	48.1%	300	300	0	0.0%	48.1%	300	300	0	0.0%	48.1%	300	300	0	0.0%
49.4%	373	373	0	0.0%	49.4%	300	300	0	0.0%	49.4%	300	300	0	0.0%	49.4%	300	300	0	0.0%
50.6%	373	373	0	0.0%	50.6%	300	300	0	0.0%	50.6%	300	300	0	0.0%	50.6%	300	300	0	0.0%
51.9%	373	373	0	0.0%	51.9%	300	300	0	0.0%	51.9%	300	300	0	0.0%	51.9%	300	300	0	0.0%
53.1%	373	373	0	0.0%	53.1%	300	300	0	0.0%	53.1%	300	300	0	0.0%	53.1%	300	300	0	0.0%
54.3%	373	373	0	0.0%	54.3%	300	300	0	0.0%	54.3%	300	300	0	0.0%	54.3%	300	300	0	0.0%
55.6%	373	373	0	0.0%	55.6%	300	300	0	0.0%	55.6%	300	300	0	0.0%	55.6%	300	300	0	0.0%
56.8%	373	373	0	0.0%	56.8%	300	300	0	0.0%	56.8%	300	300	0	0.0%	56.8%	300	300	0	0.0%
58.0%	373	373	0	0.0%	58.0%	300	300	0	0.0%	58.0%	300	300	0	0.0%	58.0%	300	300	0	0.0%
59.3%	373	373	0	0.0%	59.3%	300	300	0	0.0%	59.3%	300	300	0	0.0%	59.3%	300	300	0	0.0%
60.5%	373	373	0	0.0%	60.5%	300	300	0	0.0%	60.5%	300	300	0	0.0%	60.5%	300	300	0	0.0%
61.7%	373	373	0	0.0%	61.7%	300	300	0	0.0%	61.7%	300	300	0	0.0%	61.7%	300	300	0	0.0%
63.0%	373	373	0	0.0%	63.0%	300	300	0	0.0%	63.0%	300	300	0	0.0%	63.0%	300	300	0	0.0%
64.2%	373	373	0	0.0%	64.2%	300	300	0	0.0%	64.2%	300	300	0	0.0%	64.2%	300	300	0	0.0%
65.4%	373	373	0	0.0%	65.4%	300	300	0	0.0%	65.4%	300	300	0	0.0%	65.4%	300	300	0	0.0%
66.7%	373	373	0	0.0%	66.7%	300	300	0	0.0%	66.7%	300	300	0	0.0%	66.7%	300	300	0	0.0%
67.9%	373	373	0	0.0%	67.9%	300	300	0	0.0%	67.9%	300	300	0	0.0%	67.9%	300	300	0	0.0%
69.1%	373	373	0	0.0%	69.1%	300	300	0	0.0%	69.1%	300	300	0	0.0%	69.1%	300	300	0	0.0%
70.4%	373	373	0	0.0%	70.4%	300	300	0	0.0%	70.4%	300	300	0	0.0%	70.4%	300	300	0	0.0%
71.6%	373	373	0	0.0%	71.6%	300	300	0	0.0%	71.6%	300	300	0	0.0%	71.6%	300	300	0	0.0%
72.8%	373	373	0	0.0%	72.8%	300	300	0	0.0%	72.8%	300	300	0	0.0%	72.8%	300	300	0	0.0%
74.1%	373	373	0	0.0%	74.1%	300	300	0	0.0%	74.1%	300	300	0	0.0%	74.1%	300	300	0	0.0%
75.3%	373	373	0	0.0%	75.3%	300	300	0	0.0%	75.3%	300	300	0	0.0%	75.3%	300	300	0	0.0%
76.5%	373	373	0	0.0%	76.5%	300	300	0	0.0%	76.5%	300	300	0	0.0%	76.5%	300	300	0	0.0%
77.8%	373	373	0	0.0%	77.8%	300	300	0	0.0%	77.8%	300	300	0	0.0%	77.8%	300	300	0	0.0%
79.0%	373	373	0	0.0%	79.0%	300	300	0	0.0%	79.0%	300	300	0	0.0%	79.0%	300	300	0	0.0%
80.2%	373	373	0	0.0%	80.2%	300	300	0	0.0%	80.2%	300	300	0	0.0%	80.2%	300	300	0	0.0%
81.5%	373	373	0	0.0%	81.5%	300	300	0	0.0%	81.5%	300	300	0	0.0%	81.5%	300	300	0	0.0%
82.7%	373	373	0	0.0%	82.7%	300	300	0	0.0%	82.7%	300	300	0	0.0%	82.7%	300	300	0	0.0%
84.0%	373	373	0	0.0%	84.0%	300	300	0	0.0%	84.0%	300	300	0	0.0%	84.0%	300	300	0	0.0%
85.2%	373	373	0	0.0%	85.2%	300	300	0	0.0%	85.2%	300	300	0	0.0%	85.2%	300	300	0	0.0%
86.4%	373	373	0	0.0%	86.4%	300	300	0	0.0%	86.4%	300	300	0	0.0%	86.4%	300	300	0	0.0%
87.7%	373	373	0	0.0%	87.7%	300	300	0	0.0%	87.7%	300	300	0	0.0%	87.7%	300	300	0	0.0%
88.9%	373	373	0	0.0%	88.9%	300	300	0	0.0%	88.9%	300	300	0	0.0%	88.9%	300	300	0	0.0%
90.1%	373	373	0	0.0%	90.1%	300	300	0	0.0%	90.1%	300	300	0	0.0%	90.1%	300	300	0	0.0%
91.4%	373	373	0	0.0%	91.4%	300	300	0	0.0%	91.4%	300	300	0	0.0%	91.4%	300	300	0	0.0%
92.6%	373	373	0	0.0%	92.6%	300	300	0	0.0%	92.6%	300	300	0	0.0%	92.6%	300	300	0	0.0%
93.8%	373	373	0	0.0%	93.8%	300	300	0	0.0%	93.8%	300	300	0	0.0%	93.8%	300	300	0	0.0%
95.1%	373	373	0	0.0%	95.1%	300	300	0	0.0%	95.1%	300	300	0	0.0%	95.1%	300	300	0	0.0%
96.3%	373	373	0	0.0%	96.3%	300	300	0	0.0%	96.3%	300	300	0	0.0%	96.3%	300	300	0	0.0%
97.5%	373	373	0	0.0%	97.5%	300	300	0	0.0%	97.5%	300	300	0	0.0%	97.5%	300	300	0	0.0%
98.8%	373	373	0	0.0%	98.8%	300	300	0	0.0%	98.8%	300	300	0	0.0%	98.8%	300	300	0	0.0%
100.0%	373	373	0	0.0%	100.0%	300	300	0	0.0%	100.0%	300	300	0	0.0%	100.0%	300	300	0	0.0%

Table SW-04-b

Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	4,484	4,484	0	0.0%
2.5%	3,335	3,335	0	0.0%
3.7%	3,238	3,238	0	0.0%
4.9%	2,931	3,123	191	6.5%
6.2%	2,542	2,931	389	15.3%
7.4%	2,407	2,407	0	0.0%
8.6%	2,347	2,347	0	0.0%
9.9%	1,194	1,194	0	0.0%
11.1%	1,138	942	-197	-17.3%
12.3%	942	792	-150	-16.0%
13.6%	583	583	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	5,482	3,500	-1,982	-36.2%
2.5%	3,531	3,386	-145	-4.1%
3.7%	3,386	2,914	-472	-13.9%
4.9%	3,138	2,375	-763	-24.3%
6.2%	1,933	1,933	0	0.0%
7.4%	1,877	1,636	-241	-12.8%
8.6%	560	560	0	0.0%
9.9%	300	300	0	0.0%
11.1%	300	300	0	0.0%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,724	2,724	0	0.0%
1.2%	1,719	1,719	0	0.0%
2.5%	952	942	-10	-1.0%
3.7%	942	658	-284	-30.2%
4.9%	858	600	-258	-30.1%
6.2%	600	600	0	0.0%
7.4%	600	600	0	0.0%
8.6%	600	600	0	0.0%
9.9%	600	600	0	0.0%
11.1%	600	600	0	0.0%
12.3%	600	600	0	0.0%
13.6%	600	600	0	0.0%
14.8%	600	600	0	0.0%
16.0%	600	540	-60	-10.0%
17.3%	540	540	0	0.0%
18.5%	540	540	0	0.0%
19.8%	540	540	0	0.0%
21.0%	540	540	0	0.0%
22.2%	540	540	0	0.0%
23.5%	540	540	0	0.0%
24.7%	540	540	0	0.0%
25.9%	540	540	0	0.0%
27.2%	540	540	0	0.0%
28.4%	540	540	0	0.0%
29.6%	540	540	0	0.0%
30.9%	540	540	0	0.0%
32.1%	540	540	0	0.0%
33.3%	540	540	0	0.0%
34.6%	540	540	0	0.0%
35.8%	540	540	0	0.0%
37.0%	540	540	0	0.0%
38.3%	540	540	0	0.0%
39.5%	540	540	0	0.0%
40.7%	540	540	0	0.0%
42.0%	540	493	-47	-8.7%
43.2%	493	493	0	0.0%
44.4%	493	493	0	0.0%
45.7%	493	493	0	0.0%
46.9%	493	493	0	0.0%
48.1%	493	493	0	0.0%
49.4%	493	493	0	0.0%
50.6%	493	493	0	0.0%
51.9%	493	493	0	0.0%
53.1%	493	493	0	0.0%
54.3%	493	493	0	0.0%
55.6%	493	493	0	0.0%
56.8%	493	493	0	0.0%
58.0%	493	493	0	0.0%
59.3%	493	493	0	0.0%
60.5%	493	493	0	0.0%
61.7%	493	460	-33	-6.7%
63.0%	460	460	0	0.0%
64.2%	460	460	0	0.0%
65.4%	460	460	0	0.0%
66.7%	460	460	0	0.0%
67.9%	460	460	0	0.0%
69.1%	460	460	0	0.0%
70.4%	460	460	0	0.0%
71.6%	460	460	0	0.0%
72.8%	460	460	0	0.0%
74.1%	460	460	0	0.0%
75.3%	460	460	0	0.0%
76.5%	460	460	0	0.0%
77.8%	460	460	0	0.0%
79.0%	460	460	0	0.0%
80.2%	460	460	0	0.0%
81.5%	460	460	0	0.0%
82.7%	460	460	0	0.0%
84.0%	460	460	0	0.0%
85.2%	460	460	0	0.0%
86.4%	460	460	0	0.0%
87.7%	460	460	0	0.0%
88.9%	460	460	0	0.0%
90.1%	460	460	0	0.0%
91.4%	460	427	-33	-7.2%
92.6%	427	427	0	0.0%
93.8%	427	427	0	0.0%
95.1%	427	427	0	0.0%
96.3%	427	427	0	0.0%
97.5%	427	427	0	0.0%
98.8%	427	427	0	0.0%
100.0%	427	427	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,709	4,709	0	0.0%
1.2%	4,709	4,709	0	0.0%
2.5%	4,709	4,709	0	0.0%
3.7%	4,709	4,709	0	0.0%
4.9%	4,709	4,709	0	0.0%
6.2%	4,709	4,709	0	0.0%
7.4%	4,709	4,709	0	0.0%
8.6%	4,709	4,709	0	0.0%
9.9%	4,709	4,709	0	0.0%
11.1%	4,709	4,709	0	0.0%
12.3%	4,709	4,709	0	0.0%
13.6%	4,709	4,709	0	0.0%
14.8%	4,709	4,709	0	0.0%
16.0%	4,709	4,709	0	0.0%
17.3%	4,709	4,709	0	0.0%
18.5%	4,709	4,709	0	0.0%
19.8%	4,709	4,709	0	0.0%
21.0%	4,709	4,709	0	0.0%
22.2%	4,709	4,709	0	0.0%
23.5%	4,709	4,709	0	0.0%
24.7%	4,709	4,709	0	0.0%
25.9%	4,709	4,709	0	0.0%
27.2%	4,709	4,709	0	0.0%
28.4%	4,709	4,709	0	0.0%
29.6%	4,709	4,709	0	0.0%
30.9%	4,570	4,570	0	0.0%
32.1%	4,570	4,570	0	0.0%
33.3%	4,570	4,570	0	0.0%
34.6%	4,570	4,570	0	0.0%
35.8%	4,570	4,570	0	0.0%
37.0%	4,570	4,570	0	0.0%
38.3%	4,570	4,570	0	0.0%
39.5%	4,570	4,570	0	0.0%
40.7%	4,570	4,570	0	0.0%
42.0%	4,570	4,570	0	0.0%
43.2%	4,570	4,570	0	0.0%
44.4%	4,189	4,189	0	0.0%
45.7%	4,189	4,189	0	0.0%
46.9%	4,189	4,189	0	0.0%
48.1%	4,189	4,189	0	0.0%
49.4%	4,189	4,189	0	0.0%
50.6%	4,189	4,189	0	0.0%
51.9%	4,189	4,189	0	0.0%
53.1%	4,189	4,189	0	0.0%
54.3%	4,189	4,189	0	0.0%
55.6%	4,189	4,189	0	0.0%
56.8%	4,189	4,189	0	0.0%
58.0%	4,189	4,189	0	0.0%
59.3%	4,189	4,189	0	0.0%
60.5%	4,189	4,189	0	0.0%
61.7%	4,189	4,189	0	0.0%
63.0%	4,189	4,189	0	0.0%
64.2%	2,924	2,924	0	0.0%
65.4%	2,924	2,924	0	0.0%
66.7%	2,924	2,924	0	0.0%
67.9%	2,924	2,924	0	0.0%
69.1%	2,924	2,924	0	0.0%
70.4%	2,924	2,924	0	0.0%
71.6%	2,924	2,924	0	0.0%
72.8%	2,924	2,924	0	0.0%
74.1%	2,924	2,924	0	0.0%
75.3%	2,924	2,924	0	0.0%
76.5%	2,924	2,924	0	0.0%
77.8%	2,924	2,924	0	0.0%
79.0%	2,924	2,924	0	0.0%
80.2%	2,924	2,924	0	0.0%
81.5%	2,924	2,924	0	0.0%
82.7%	2,924	2,924	0	0.0%
84.0%	2,924	2,924	0	0.0%
85.2%	2,924	2,924	0	0.0%
86.4%	2,924	2,924	0	0.0%
87.7%	2,924	2,924	0	0.0%
88.9%	2,924	2,924	0	0.0%
90.1%	1,498	1,498	0	0.0%
91.4%	1,498	1,498	0	0.0%
92.6%	1,498	1,498	0	0.0%
93.8%	1,498	1,498	0	0.0%
95.1%	1,498	1,498	0	0.0%
96.3%	1,498	1,498	0	0.0%
97.5%	1,498	1,498	0	0.0%
98.8%	1,498	1,498	0	0.0%
100.0%	1,498	1,498	0	0.0%

Table SW-04-b
Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,626	4,626	0	0.0%
1.2%	4,626	4,626	0	0.0%
2.5%	4,626	4,626	0	0.0%
3.7%	4,626	4,626	0	0.0%
4.9%	4,626	4,626	0	0.0%
6.2%	4,626	4,626	0	0.0%
7.4%	4,626	4,626	0	0.0%
8.6%	4,626	4,626	0	0.0%
9.9%	4,626	4,626	0	0.0%
11.1%	4,626	4,626	0	0.0%
12.3%	4,626	4,626	0	0.0%
13.6%	2,526	2,526	0	0.0%
14.8%	2,526	2,526	0	0.0%
16.0%	2,526	2,526	0	0.0%
17.3%	2,526	2,526	0	0.0%
18.5%	2,526	2,526	0	0.0%
19.8%	2,526	2,526	0	0.0%
21.0%	2,526	2,526	0	0.0%
22.2%	2,526	2,526	0	0.0%
23.5%	2,526	2,526	0	0.0%
24.7%	2,526	2,526	0	0.0%
25.9%	2,526	2,526	0	0.0%
27.2%	2,526	2,526	0	0.0%
28.4%	2,526	2,526	0	0.0%
29.6%	2,526	2,526	0	0.0%
30.9%	2,526	2,526	0	0.0%
32.1%	2,526	2,526	0	0.0%
33.3%	2,526	2,526	0	0.0%
34.6%	2,526	2,526	0	0.0%
35.8%	2,526	2,526	0	0.0%
37.0%	2,526	2,526	0	0.0%
38.3%	2,526	2,526	0	0.0%
39.5%	2,526	2,526	0	0.0%
40.7%	2,526	2,526	0	0.0%
42.0%	2,526	2,526	0	0.0%
43.2%	2,526	2,526	0	0.0%
44.4%	2,120	2,120	0	0.0%
45.7%	2,120	2,120	0	0.0%
46.9%	2,120	2,120	0	0.0%
48.1%	2,120	2,120	0	0.0%
49.4%	2,120	2,120	0	0.0%
50.6%	2,120	2,120	0	0.0%
51.9%	2,120	2,120	0	0.0%
53.1%	2,120	2,120	0	0.0%
54.3%	2,120	2,120	0	0.0%
55.6%	2,120	2,120	0	0.0%
56.8%	2,120	2,120	0	0.0%
58.0%	2,120	2,120	0	0.0%
59.3%	2,120	2,120	0	0.0%
60.5%	2,120	2,120	0	0.0%
61.7%	2,120	2,120	0	0.0%
63.0%	2,120	2,120	0	0.0%
64.2%	783	783	0	0.0%
65.4%	783	783	0	0.0%
66.7%	783	783	0	0.0%
67.9%	783	783	0	0.0%
69.1%	783	783	0	0.0%
70.4%	783	783	0	0.0%
71.6%	783	783	0	0.0%
72.8%	783	783	0	0.0%
74.1%	783	783	0	0.0%
75.3%	783	783	0	0.0%
76.5%	783	783	0	0.0%
77.8%	783	783	0	0.0%
79.0%	783	783	0	0.0%
80.2%	783	783	0	0.0%
81.5%	783	783	0	0.0%
82.7%	783	783	0	0.0%
84.0%	783	783	0	0.0%
85.2%	783	783	0	0.0%
86.4%	783	783	0	0.0%
87.7%	783	783	0	0.0%
88.9%	783	783	0	0.0%
90.1%	783	783	0	0.0%
91.4%	783	783	0	0.0%
92.6%	783	783	0	0.0%
93.8%	783	783	0	0.0%
95.1%	783	783	0	0.0%
96.3%	783	783	0	0.0%
97.5%	783	783	0	0.0%
98.8%	783	783	0	0.0%
100.0%	783	783	0	0.0%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,274	3,274	0	0.0%
1.2%	2,942	2,942	0	0.0%
2.5%	1,942	1,942	0	0.0%
3.7%	1,102	1,102	0	0.0%
4.9%	1,102	1,102	0	0.0%
6.2%	1,102	1,102	0	0.0%
7.4%	1,102	1,102	0	0.0%
8.6%	1,102	1,102	0	0.0%
9.9%	1,102	1,102	0	0.0%
11.1%	1,102	1,102	0	0.0%
12.3%	1,102	1,102	0	0.0%
13.6%	1,102	1,102	0	0.0%
14.8%	1,102	1,102	0	0.0%
16.0%	1,102	1,102	0	0.0%
17.3%	1,102	1,102	0	0.0%
18.5%	1,102	1,102	0	0.0%
19.8%	1,102	1,102	0	0.0%
21.0%	1,102	1,102	0	0.0%
22.2%	1,102	1,102	0	0.0%
23.5%	1,102	1,102	0	0.0%
24.7%	1,102	1,102	0	0.0%
25.9%	1,102	1,102	0	0.0%
27.2%	1,102	1,102	0	0.0%
28.4%	1,102	1,102	0	0.0%
29.6%	1,102	1,102	0	0.0%
30.9%	1,102	1,102	0	0.0%
32.1%	1,102	1,102	0	0.0%
33.3%	1,102	1,102	0	0.0%
34.6%	1,102	1,102	0	0.0%
35.8%	1,102	1,102	0	0.0%
37.0%	1,102	1,102	0	0.0%
38.3%	1,102	1,102	0	0.0%
39.5%	1,102	1,102	0	0.0%
40.7%	1,102	1,102	0	0.0%
42.0%	1,102	1,102	0	0.0%
43.2%	1,102	1,102	0	0.0%
44.4%	1,102	1,102	0	0.0%
45.7%	1,102	1,102	0	0.0%
46.9%	1,102	1,102	0	0.0%
48.1%	1,102	1,102	0	0.0%
49.4%	1,102	1,102	0	0.0%
50.6%	1,102	1,102	0	0.0%
51.9%	1,102	1,102	0	0.0%
53.1%	1,102	1,102	0	0.0%
54.3%	1,102	1,102	0	0.0%
55.6%	1,102	1,102	0	0.0%
56.8%	1,102	1,102	0	0.0%
58.0%	1,102	1,102	0	0.0%
59.3%	1,102	1,102	0	0.0%
60.5%	1,102	1,102	0	0.0%
61.7%	1,102	1,102	0	0.0%
63.0%	1,102	1,102	0	0.0%
64.2%	450	450	0	0.0%
65.4%	450	450	0	0.0%
66.7%	450	450	0	0.0%
67.9%	450	450	0	0.0%
69.1%	450	450	0	0.0%
70.4%	450	450	0	0.0%
71.6%	450	450	0	0.0%
72.8%	450	450	0	0.0%
74.1%	450	450	0	0.0%
75.3%	450	450	0	0.0%
76.5%	450	450	0	0.0%
77.8%	450	450	0	0.0%
79.0%	450	450	0	0.0%
80.2%	450	450	0	0.0%
81.5%	450	450	0	0.0%
82.7%	450	450	0	0.0%
84.0%	450	450	0	0.0%
85.2%	450	450	0	0.0%
86.4%	450	450	0	0.0%
87.7%	450	450	0	0.0%
88.9%	450	450	0	0.0%
90.1%	450	450	0	0.0%
91.4%	450	450	0	0.0%
92.6%	450	450	0	0.0%
93.8%	450	450	0	0.0%
95.1%	450	450	0	0.0%
96.3%	450	450	0	0.0%
97.5%	450	450	0	0.0%
98.8%	450	450	0	0.0%
100.0%	450	450	0	0.0%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	450	450	0	0.0%
1.2%	450	450	0	0.0%
2.5%	450	450	0	0.0%
3.7%	450	450	0	0.0%
4.9%	450	450	0	0.0%
6.2%	450	450	0	0.0%
7.4%	450	450	0	0.0%
8.6%	450	450	0	0.0%
9.9%	450	450	0	0.0%
11.1%	450	450	0	0.0%
12.3%	450	450	0	0.0%
13.6%	450	450	0	0.0%
14.8%	450	450	0	0.0%
16.0%	450	450	0	0.0%
17.3%	450	450	0	0.0%
18.5%	450	450	0	0.0%
19.8%	450	450	0	0.0%
21.0%	450	450	0	0.0%
22.2%	450	450	0	0.0%
23.5%	450	450	0	0.0%
24.7%	450	450	0	0.0%
25.9%	450	450	0	0.0%
27.2%	450	450	0	0.0%
28.4%	450	450	0	0.0%
29.6%	450	450	0	0.0%
30.9%	450	450	0	0.0%
32.1%	450	450	0	0.0%
33.3%	450	450	0	0.0%
34.6%	450	450	0	0.0%
35.8%	450	450	0	0.0%
37.0%	450	450	0	0.0%
38.3%	450	450	0	0.0%
39.5%	450	450	0	0.0%
40.7%	450	450	0	0.0%
42.0%	450	450	0	0.0%
43.2%	450	450	0	0.0%
44.4%	450	450	0	0.0%
45.7%	450	450	0	0.0%
46.9%	450	450	0	0.0%
48.1%	450	450	0	0.0%
49.4%	450	450	0	0.0%
50.6%	450	450	0	0.0%
51.9%	450	450	0	0.0%
53.1%	450	450	0	0.0%
54.3%	450	450	0	0.0%
55.6%	450	450	0	0.0%
56.8%	450	450	0	0.0%
58.0%	450	450	0	0.0%
59.3%	450	450	0	0.0%
60.5%	450	450	0	0.0%
61.7%	450	450	0	0.0%
63.0%	450	450	0	0.0%
64.2%	450	450	0	0.0%
65.4%	450	450	0	0.0%
66.7%	450	450	0	0.0%
67.9%	450	450	0	0.0%
69.1%	450	450	0	0.0%
70.4%	450	450	0	0.0%
71.6%	450	450	0	0.0%
72.8%	450	450	0	0.0%
74.1%	450	450	0	0.0%
75.3%	450	450	0	0.0%
76.5%	450	450	0	0.0%
77.8%	450	450	0	0.0%
79.0%	450	450	0	0.0%
80.2%	450	450	0	0.0%
81.5%	450	450	0	0.0%
82.7%	450	450	0	0.0%
84.0%	450	450	0	0.0%
85.2%	450	450	0	0.0%
86.4%	450	450	0	0.0%
87.7%	450	450	0	0.0%
88.9%	450	450	0	0.0%
90.1%	450	450	0	0.0%
91.4%	450	450	0	0.0%
92.6%	450	450	0	0.0%
93.8%	450	450	0	0.0%
95.1%	450	450	0	0.0%
96.3%	450	450	0	0.0%
97.5%	450	450	0	0.0%
98.8%	450	450	0	0.0%
100.0%	450	450	0	0.0%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	450	450	0	0.0%
1.2%	450	450	0	0.0%
2.5%	450	450	0	0.0%
3.7%	450	450	0	0.0%
4.9%	450	450	0	0.0%
6.2%	450	450	0	0.0%
7.4%	450	450	0	0.0%
8.6%	450	450	0	0.0%
9.9%	450	450	0	0.0%
11.1%	450	450	0	0.0%
12.3%	450	450	0	0.0%
13.6%	450	450	0	0.0%
14.8%	450	450	0	0.0%
16.0%	450	450	0	0.0%
17.3%	450	450	0	0.0%
18.5%	450	450	0	0.0%
19.8%	450	450	0	0.0%
21.0%	450	450	0	0.0%
22.2%	450	450	0	0.0%
23.5%	450	450	0	0.0%
24.7%	450	450	0	0.0%
25.9%	450	450	0	0.0%
27.2%	450	450	0	0.0%
28.4%	450	450	0	0.0%
29.6%	450	450	0	0.0%
30.9%	450	450	0	0.0%
32.1%	450	450	0	0.0%
33.3%	450	450	0	0.0%
34.6%	450	450	0	0.0%
35.8%	450	450	0	0.0%
37.0%	450	450	0	0.0%
38.3%	450	450	0	0.0%
39.5%	450	450	0	0.0%
40.7%	450	450	0	0.0%
42.0%	450	450	0	0.0%
43.2%	450	450	0	0.0%
44.4%	450	450	0	0.0%
45.7%	450	450	0	0.0%
46.9%	450	450	0	0.0%
48.1%	450	450	0	0.0%
49.4%	450	450	0	0.0%
50.6%	450	450	0	0.0%
51.9%	450	450	0	0.0%
53.1%	450	450	0	0.0%
54.3%	450	450	0	0.0%
55.6%	450	450	0	0.0%
56.8%	450	450	0	0.0%
58.0%	450	450	0	0.0%
59.3%	450	450	0	0.0%
60.5%	450	450	0	0.0%
61.7%	450	450	0	0.0%
63.0%	450	450	0	0.0%
64.2%	450	450	0	0.0%
65.4%	450	450	0	0.0%
66.7%	450	450	0	0.0%
67.9%	450	450	0	0.0%
69.1%	450	450	0	0.0%
70.4%	450	450	0	0.0%
71.6%	450	450	0	0.0%
72.8%	450	450	0	0.0%
74.1%	450	450	0	0.0%
75.3%	450	450	0	0.0%
76.5%	450	450	0	0.0%
77.8%	450	450	0	0.0%
79.0%	450	450	0	0.0%
80.2%	450	450	0	0.0%
81.5%	450	450	0	0.0%
82.7%	450	450	0	0.0%
84.0%	450	450	0	0.0%
85.2%	450	450	0	0.0%
86.4%	450	450	0	0.0%
87.7%	450	450	0	0.0%
88.9%	450	450	0	0.0%
90.1%	450	450	0	0.0%
91.4%	450	450	0	0.0%
92.6%	450	450	0	0.0%
93.8%	450	450	0	0.0%
95.1%	450	450	0	0.0%
96.3%	450	450	0	0.0%
97.5%	450	450	0	0.0%
98.8%	450	450	0	0.0%
100.0%	450	450	0	0.0%

Figure SW-05-b
Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

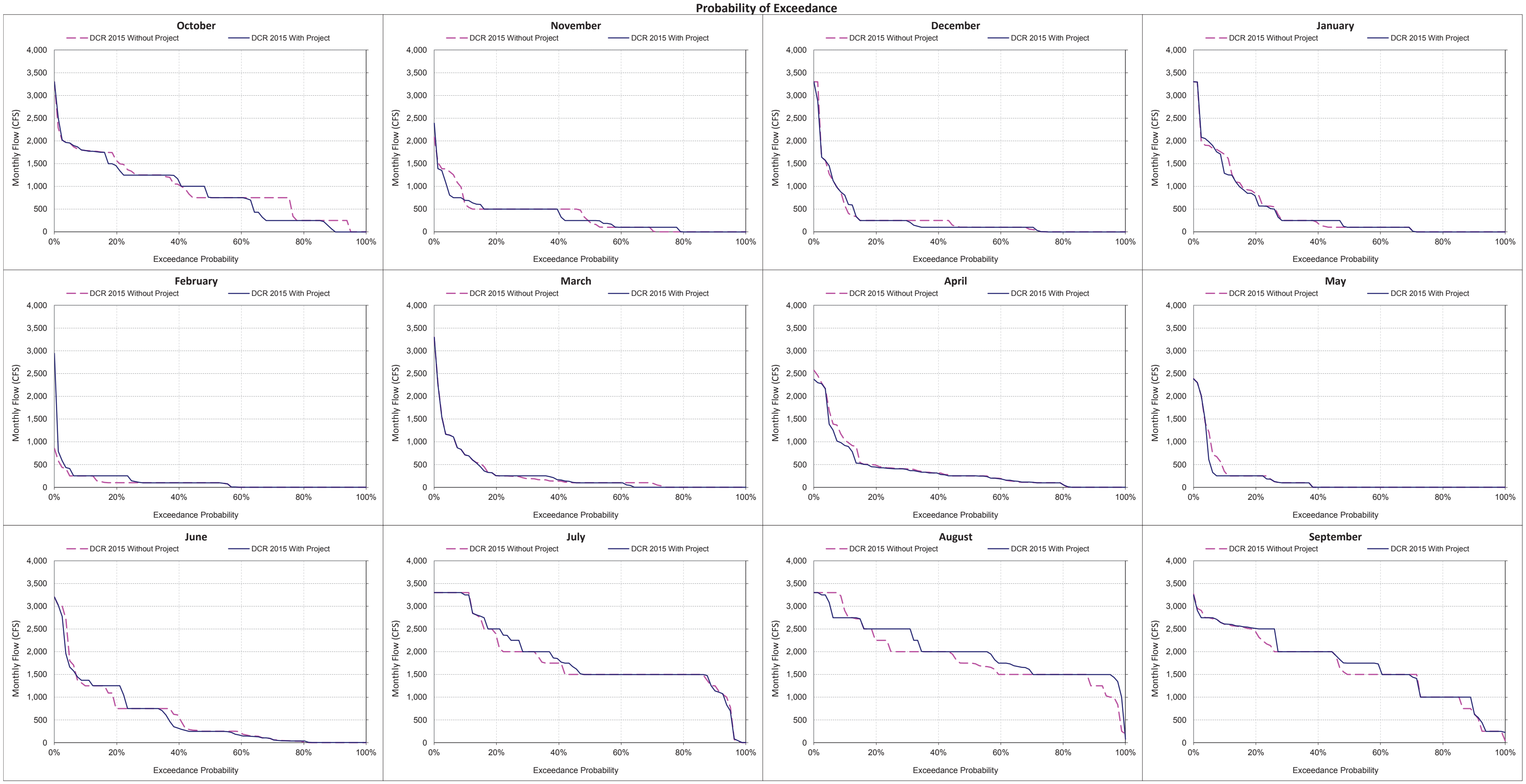


Table SW-05-b
Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	2,286	2,500	214	9.4%
2.5%	2,019	2,019	0	0.0%
3.7%	1,969	1,969	0	0.0%
4.9%	1,956	1,956	0	0.0%
6.2%	1,870	1,897	27	1.4%
7.4%	1,825	1,870	45	2.5%
8.6%	1,803	1,803	0	0.0%
9.9%	1,787	1,787	0	0.0%
11.1%	1,786	1,772	-14	-0.8%
12.3%	1,772	1,770	-2	-0.1%
13.6%	1,770	1,758	-12	-0.7%
14.8%	1,758	1,749	-9	-0.5%
16.0%	1,749	1,747	-2	-0.1%
17.3%	1,747	1,500	-247	-14.1%
18.5%	1,744	1,500	-244	-14.0%
19.8%	1,577	1,458	-119	-7.6%
21.0%	1,498	1,344	-154	-10.3%
22.2%	1,483	1,250	-233	-15.7%
23.5%	1,368	1,250	-118	-8.6%
24.7%	1,334	1,250	-84	-6.3%
25.9%	1,266	1,250	-16	-1.2%
27.2%	1,250	1,250	0	0.0%
28.4%	1,250	1,250	0	0.0%
29.6%	1,250	1,250	0	0.0%
30.9%	1,250	1,250	0	0.0%
32.1%	1,250	1,250	0	0.0%
33.3%	1,250	1,250	0	0.0%
34.6%	1,250	1,250	0	0.0%
35.8%	1,213	1,250	37	3.0%
37.0%	1,197	1,250	53	4.4%
38.3%	1,053	1,242	188	17.9%
39.5%	1,050	1,169	119	11.3%
40.7%	1,000	1,000	0	0.0%
42.0%	946	1,000	54	5.7%
43.2%	829	1,000	171	20.6%
44.4%	750	1,000	250	33.3%
45.7%	750	1,000	250	33.3%
46.9%	750	1,000	250	33.3%
48.1%	750	1,000	250	33.3%
49.4%	750	761	11	1.4%
50.6%	750	750	0	0.0%
51.9%	750	750	0	0.0%
53.1%	750	750	0	0.0%
54.3%	750	750	0	0.0%
55.6%	750	750	0	0.0%
56.8%	750	750	0	0.0%
58.0%	750	750	0	0.0%
59.3%	750	750	0	0.0%
60.5%	750	750	0	0.0%
61.7%	750	726	-24	-3.2%
63.0%	750	701	-49	-6.5%
64.2%	750	433	-317	-42.3%
65.4%	750	433	-317	-42.3%
66.7%	750	320	-430	-57.3%
67.9%	750	250	-500	-66.7%
69.1%	750	250	-500	-66.7%
70.4%	750	250	-500	-66.7%
71.6%	750	250	-500	-66.7%
72.8%	750	250	-500	-66.7%
74.1%	750	250	-500	-66.7%
75.3%	750	250	-500	-66.7%
76.5%	343	250	-93	-27.1%
77.8%	250	250	0	0.0%
79.0%	250	250	0	0.0%
80.2%	250	250	0	0.0%
81.5%	250	250	0	0.0%
82.7%	250	250	0	0.0%
84.0%	250	250	0	0.0%
85.2%	250	250	0	0.0%
86.4%	250	227	-23	-9.0%
87.7%	250	144	-106	-42.5%
88.9%	250	66	-184	-73.6%
90.1%	250	0	-250	-100.0%
91.4%	250	0	-250	-100.0%
92.6%	250	0	-250	-100.0%
93.8%	250	0	-250	-100.0%
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,082	2,387	305	14.7%
1.2%	1,522	1,389	-133	-8.7%
2.5%	1,389	1,352	-37	-2.7%
3.7%	1,384	1,086	-297	-21.5%
4.9%	1,326	810	-515	-38.9%
6.2%	1,255	750	-505	-40.3%
7.4%	1,086	750	-336	-31.0%
8.6%	986	750	-236	-23.9%
9.9%	606	696	90	14.8%
11.1%	539	687	148	27.5%
12.3%	500	635	135	26.9%
13.6%	500	606	106	21.3%
14.8%	500	600	100	20.0%
16.0%	500	500	0	0.0%
17.3%	500	500	0	0.0%
18.5%	500	500	0	0.0%
19.8%	500	500	0	0.0%
21.0%	500	500	0	0.0%
22.2%	500	500	0	0.0%
23.5%	500	500	0	0.0%
24.7%	500	500	0	0.0%
25.9%	500	500	0	0.0%
27.2%	500	500	0	0.0%
28.4%	500	500	0	0.0%
29.6%	500	500	0	0.0%
30.9%	500	500	0	0.0%
32.1%	500	500	0	0.0%
33.3%	500	500	0	0.0%
34.6%	500	500	0	0.0%
35.8%	500	500	0	0.0%
37.0%	500	500	0	0.0%
38.3%	500	500	0	0.0%
39.5%	500	500	0	0.0%
40.7%	500	325	-175	-35.0%
42.0%	500	250	-250	-50.0%
43.2%	500	250	-250	-50.0%
44.4%	500	250	-250	-50.0%
45.7%	500	250	-250	-50.0%
46.9%	479	250	-229	-47.8%
48.1%	326	250	-76	-23.3%
49.4%	250	250	0	0.0%
50.6%	171	250	79	46.3%
51.9%	162	250	88	53.9%
53.1%	106	242	136	129.0%
54.3%	103	187	84	81.9%
55.6%	100	185	85	85.3%
56.8%	100	166	66	65.7%
58.0%	100	106	6	5.5%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	100	0	0.0%
67.9%	100	100	0	0.0%
69.1%	100	100	0	0.0%
70.4%	10	100	90	
71.6%	1	100	99	
72.8%	0	100	100	
74.1%	0	100	100	
75.3%	0	100	100	
76.5%	0	100	100	
77.8%	0	100	100	
79.0%	0	1	1	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	2,875	-425	-12.9%
2.5%	1,642	1,642	0	0.0%
3.7%	1,571	1,571	0	0.0%
4.9%	1,272	1,451	179	14.1%
6.2%	1,127	1,127	0	0.0%
7.4%	980	980	0	0.0%
8.6%	877	877	0	0.0%
9.9%	588	810	221	37.6%
11.1%	404	602	198	49.0%
12.3%	357	588	231	64.8%
13.6%	336	336	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	250	250	0	0.0%
28.4%	250	250	0	0.0%
29.6%	250	250	0	0.0%
30.9%	250	206	-44	-17.7%
32.1%	250	146	-104	-41.5%
33.3%	250	121	-129	-51.6%
34.6%	250	103	-147	-58.9%
35.8%	250	103	-147	-59.0%
37.0%	250	102	-148	-59.1%
38.3%	250	102	-148	-59.1%
39.5%	250	101	-149	-59.5%
40.7%	250	100	-150	-60.0%
42.0%	250	100	-150	-60.0%
43.2%	250	100	-150	-60.0%
44.4%	146	100	-46	-31.6%
45.7%	121	100	-21	-17.4%
46.9%	103	100	-3	-2.7%
48.1%	103	100	-3	-2.5%
49.4%	102	100	-2	-2.2%
50.6%	102	100	-2	-2.1%
51.9%	101	100	-1	-1.1%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	100	0	0.0%
67.9%	100	100	0	0.0%
69.1%	59	100	41	68.5%
70.4%	48	100	52	107.3%
71.6%	35	31	-4	-10.4%
72.8%	3	3	0	
74.1%	0	3	3	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,295	3,295	0	0.0%
2.5%	1,985	2,078	93	4.7%
3.7%	1,904	2,054	150	7.9%
4.9%	1,898	1,985	87	4.6%
6.2%	1,836	1,898	62	3.4%
7.4%	1,814	1,761	-52	-2.9%
8.6%	1,761	1,708	-53	-3.0%
9.9%	1,708	1,286	-422	-24.7%
11.1%	1,617	1,251	-366	-22.6%
12.3%	1,256	1,250	-6	-0.5%
13.6%	1,100	1,100	0	0.0%
14.8%	1,082	993	-88	-8.2%
16.0%	945	924	-22	-2.3%
17.3%	923	849	-74	-8.0%
18.5%	911	849	-61	-6.7%
19.8%	849	796	-53	-6.2%
21.0%	792	566	-226	-28.5%
22.2%	566	566	0	0.0%
23.5%	566	565	-1	-0.2%
24.7%	565	513	-52	-9.2%
25.9%	549	500	-49	-9.0%
27.2%	377	321	-56	-14.8%
28.4%	250	250	0	0.0%
29.6%	250	250	0	0.0%
30.9%	250	250	0	0.0%
32.1%	250	250	0	0.0%
33.3%	250	250	0	0.0%
34.6%	250	250	0	0.0%
35.8%	250	250	0	0.0%
37.0%	250	250	0	0.0%
38.3%	250	250	0	0.0%
39.5%	216	250	34	15.7%
40.7%	137	250	113	82.6%
42.0%	123	250	127	103.2%
43.2%	103	250	147	143.3%
44.4%	103	250	147	143.6%
45.7%	100	250	150	150.0%
46.9%	100	250	150	150.0%
48.1%	100	125	25	25.4%
49.4%	100	103	3	2.8%
50.6%	100	103	3	2.6%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	100	0	0.0%
67.9%	100	100	0	0.0%
69.1%	100	100	0	0.0%
70.4%	15	15	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-05-b
Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	857	2,945	2,088	243.7%
1.2%	584	789	205	35.1%
2.5%	436	584	148	34.0%
3.7%	412	436	24	5.8%
4.9%	250	412	162	64.7%
6.2%	250	250	0	0.0%
7.4%	250	250	0	0.0%
8.6%	250	250	0	0.0%
9.9%	250	250	0	0.0%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	144	250	106	73.9%
14.8%	126	250	124	98.2%
16.0%	107	250	143	133.5%
17.3%	100	250	150	150.0%
18.5%	100	250	150	150.0%
19.8%	100	250	150	150.0%
21.0%	100	250	150	150.0%
22.2%	100	250	150	150.0%
23.5%	100	250	150	150.0%
24.7%	100	144	44	43.7%
25.9%	100	126	26	26.1%
27.2%	100	107	7	7.1%
28.4%	100	100	0	0.0%
29.6%	100	100	0	0.0%
30.9%	100	100	0	0.0%
32.1%	100	100	0	0.0%
33.3%	100	100	0	0.0%
34.6%	100	100	0	0.0%
35.8%	100	100	0	0.0%
37.0%	100	100	0	0.0%
38.3%	100	100	0	0.0%
39.5%	100	100	0	0.0%
40.7%	100	100	0	0.0%
42.0%	100	100	0	0.0%
43.2%	100	100	0	0.0%
44.4%	100	100	0	0.0%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	87	87	0	0.0%
55.6%	74	74	0	0.0%
56.8%	3	6	3	
58.0%	0	5	5	
59.3%	0	3	3	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	2,264	2,264	0	0.0%
2.5%	1,548	1,548	0	0.0%
3.7%	1,166	1,166	0	0.0%
4.9%	1,147	1,147	0	0.0%
6.2%	1,110	1,110	0	0.0%
7.4%	867	867	0	0.0%
8.6%	834	834	0	0.0%
9.9%	712	712	0	0.0%
11.1%	688	688	0	0.0%
12.3%	597	597	0	0.0%
13.6%	542	529	-13	-2.5%
14.8%	529	451	-78	-14.7%
16.0%	451	359	-92	-20.5%
17.3%	325	325	0	0.0%
18.5%	321	321	0	0.0%
19.8%	256	256	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	243	250	7	2.9%
25.9%	238	250	12	5.0%
27.2%	237	250	13	5.4%
28.4%	210	250	40	19.1%
29.6%	191	250	59	30.8%
30.9%	189	250	61	32.6%
32.1%	186	250	64	34.1%
33.3%	167	250	83	49.6%
34.6%	164	250	86	52.4%
35.8%	162	250	88	54.2%
37.0%	140	237	97	69.2%
38.3%	137	210	73	53.1%
39.5%	135	164	29	21.1%
40.7%	135	162	28	20.5%
42.0%	112	135	24	21.4%
43.2%	111	135	24	21.5%
44.4%	100	112	12	11.6%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	49	-51	-50.7%
63.0%	100	39	-61	-60.6%
64.2%	100	0	-100	-100.0%
65.4%	100	0	-100	-100.0%
66.7%	100	0	-100	-100.0%
67.9%	100	0	-100	-100.0%
69.1%	100	0	-100	-100.0%
70.4%	84	0	-84	-100.0%
71.6%	49	0	-49	-100.0%
72.8%	32	0	-32	-100.0%
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,574	2,373	-201	-7.8%
1.2%	2,460	2,297	-162	-6.6%
2.5%	2,297	2,274	-23	-1.0%
3.7%	2,166	2,166	0	0.0%
4.9%	1,681	1,390	-292	-17.4%
6.2%	1,390	1,254	-136	-9.8%
7.4%	1,368	1,018	-350	-25.6%
8.6%	1,174	979	-195	-16.6%
9.9%	1,042	920	-122	-11.7%
11.1%	979	899	-80	-8.2%
12.3%	915	782	-133	-14.6%
13.6%	901	530	-371	-41.1%
14.8%	542	525	-17	-3.1%
16.0%	505	505	0	0.0%
17.3%	505	499	-6	-1.2%
18.5%	499	453	-46	-9.2%
19.8%	490	444	-45	-9.3%
21.0%	453	428	-25	-5.4%
22.2%	444	426	-19	-4.2%
23.5%	428	418	-11	-2.5%
24.7%	426	413	-13	-3.0%
25.9%	418	408	-10	-2.4%
27.2%	413	403	-10	-2.4%
28.4%	408	403	-5	-1.1%
29.6%	403	393	-10	-2.6%
30.9%	403	365	-38	-9.4%
32.1%	393	363	-30	-7.6%
33.3%	365	350	-15	-4.1%
34.6%	350	331	-19	-5.5%
35.8%	331	329	-1	-0.4%
37.0%	329	314	-15	-4.7%
38.3%	314	313	-1	-0.3%
39.5%	313	312	-1	-0.3%
40.7%	312	281	-31	-10.0%
42.0%	281	277	-4	-1.3%
43.2%	277	250	-27	-9.8%
44.4%	250	250	0	0.0%
45.7%	250	250	0	0.0%
46.9%	250	250	0	0.0%
48.1%	250	250	0	0.0%
49.4%	250	250	0	0.0%
50.6%	250	250	0	0.0%
51.9%	250	250	0	0.0%
53.1%	250	247	-3	-1.0%
54.3%	250	247	-3	-1.1%
55.6%	247	237	-10	-4.2%
56.8%	201	201	0	0.0%
58.0%	200	200	0	0.0%
59.3%	197	189	-8	-4.2%
60.5%	189	177	-12	-6.3%
61.7%	152	157	5	3.2%
63.0%	139	152	13	9.4%
64.2%	133	139	5	3.9%
65.4%	115	133	19	16.3%
66.7%	112	115	3	2.3%
67.9%	112	112	0	0.1%
69.1%	110	112	2	1.9%
70.4%	105	110	5	4.3%
71.6%	100	100	0	0.0%
72.8%	100	100	0	0.0%
74.1%	100	100	0	0.0%
75.3%	100	100	0	0.0%
76.5%	100	100	0	0.0%
77.8%	100	100	0	0.0%
79.0%	100	100	0	0.0%
80.2%	47	47	0	0.0%
81.5%	0	14	14	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,388	2,388	0	0.0%
1.2%	2,302	2,302	0	0.0%
2.5%	2,012	2,012	0	0.0%
3.7%	1,425	1,480	54	3.8%
4.9%	1,210	609	-601	-49.7%
6.2%	717	324	-394	-54.9%
7.4%	675	250	-425	-63.0%
8.6%	564	250	-314	-55.7%
9.9%	352	250	-102	-28.9%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	181	-69	-27.8%
24.7%	181	177	-3	-1.7%
25.9%	123	123	0	0.0%
27.2%	108	108	0	0.0%
28.4%	100	100	0	0.0%
29.6%	100	100	0	0.0%
30.9%	100	100	0	0.0%
32.1%	100	100	0	0.0%
33.3%	100	100	0	0.0%
34.6%	100	100	0	0.0%
35.8%	100	100	0	0.0%
37.0%	100	100	0	0.0%
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-05-b
Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,203	3,203	0	0.0%
1.2%	3,023	3,023	0	0.0%
2.5%	3,017	2,777	-240	-8.0%
3.7%	2,718	1,957	-761	-28.0%
4.9%	1,799	1,663	-136	-7.6%
6.2%	1,706	1,577	-129	-7.5%
7.4%	1,374	1,447	73	5.3%
8.6%	1,318	1,374	56	4.2%
9.9%	1,250	1,374	124	9.9%
11.1%	1,250	1,374	124	9.9%
12.3%	1,250	1,250	0	0.0%
13.6%	1,250	1,250	0	0.0%
14.8%	1,250	1,250	0	0.0%
16.0%	1,250	1,250	0	0.0%
17.3%	1,092	1,250	158	14.4%
18.5%	1,092	1,250	158	14.5%
19.8%	750	1,250	500	66.7%
21.0%	750	1,250	500	66.7%
22.2%	750	1,049	299	39.8%
23.5%	750	750	0	0.0%
24.7%	750	750	0	0.0%
25.9%	750	750	0	0.0%
27.2%	750	750	0	0.0%
28.4%	750	750	0	0.0%
29.6%	750	750	0	0.0%
30.9%	750	750	0	0.0%
32.1%	750	750	0	0.0%
33.3%	750	750	0	0.0%
34.6%	750	705	-45	-5.9%
35.8%	750	610	-140	-18.7%
37.0%	750	464	-286	-38.2%
38.3%	623	349	-275	-44.1%
39.5%	610	321	-289	-47.4%
40.7%	464	291	-173	-37.2%
42.0%	321	270	-51	-16.0%
43.2%	289	250	-39	-13.5%
44.4%	275	250	-25	-9.2%
45.7%	270	250	-20	-7.2%
46.9%	250	250	0	0.0%
48.1%	250	250	0	0.0%
49.4%	250	250	0	0.0%
50.6%	250	250	0	0.0%
51.9%	250	250	0	0.0%
53.1%	250	250	0	0.0%
54.3%	250	250	0	0.0%
55.6%	250	245	-5	-2.2%
56.8%	250	223	-27	-11.0%
58.0%	250	182	-68	-27.0%
59.3%	245	167	-78	-31.8%
60.5%	182	147	-35	-19.2%
61.7%	167	143	-24	-14.1%
63.0%	147	141	-7	-4.6%
64.2%	143	133	-11	-7.3%
65.4%	141	125	-16	-11.1%
66.7%	107	107	0	0.0%
67.9%	106	106	0	0.0%
69.1%	93	93	0	0.0%
70.4%	59	57	-2	-3.9%
71.6%	57	47	-11	-18.5%
72.8%	47	43	-4	-8.5%
74.1%	43	42	-1	-2.3%
75.3%	42	37	-5	-12.2%
76.5%	36	36	0	0.0%
77.8%	35	35	0	0.0%
79.0%	34	34	0	0.0%
80.2%	8	34	26	
81.5%	0	8	8	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,300	3,300	0	0.0%
3.7%	3,300	3,300	0	0.0%
4.9%	3,300	3,300	0	0.0%
6.2%	3,300	3,300	0	0.0%
7.4%	3,300	3,300	0	0.0%
8.6%	3,300	3,300	0	0.0%
9.9%	3,300	3,250	-50	-1.5%
11.1%	3,300	3,247	-53	-1.6%
12.3%	2,846	2,846	0	0.0%
13.6%	2,808	2,808	0	0.0%
14.8%	2,750	2,783	33	1.2%
16.0%	2,500	2,750	250	10.0%
17.3%	2,500	2,500	0	0.0%
18.5%	2,500	2,500	0	0.0%
19.8%	2,400	2,500	100	4.2%
21.0%	2,065	2,500	435	21.1%
22.2%	2,000	2,365	365	18.2%
23.5%	2,000	2,361	361	18.1%
24.7%	2,000	2,250	250	12.5%
25.9%	2,000	2,250	250	12.5%
27.2%	2,000	2,250	250	12.5%
28.4%	2,000	2,000	0	0.0%
29.6%	2,000	2,000	0	0.0%
30.9%	2,000	2,000	0	0.0%
32.1%	2,000	2,000	0	0.0%
33.3%	1,896	2,000	104	5.5%
34.6%	1,770	2,000	230	13.0%
35.8%	1,750	2,000	250	14.3%
37.0%	1,750	2,000	250	14.3%
38.3%	1,750	1,864	114	6.5%
39.5%	1,750	1,849	99	5.6%
40.7%	1,750	1,770	20	1.1%
42.0%	1,500	1,750	250	16.7%
43.2%	1,500	1,750	250	16.7%
44.4%	1,500	1,672	172	11.5%
45.7%	1,500	1,615	115	7.7%
46.9%	1,500	1,516	16	1.1%
48.1%	1,500	1,500	0	0.0%
49.4%	1,500	1,500	0	0.0%
50.6%	1,500	1,500	0	0.0%
51.9%	1,500	1,500	0	0.0%
53.1%	1,500	1,500	0	0.0%
54.3%	1,500	1,500	0	0.0%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,500	1,500	0	0.0%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,500	1,500	0	0.0%
77.8%	1,500	1,500	0	0.0%
79.0%	1,500	1,500	0	0.0%
80.2%	1,500	1,500	0	0.0%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,481	1,500	19	1.3%
87.7%	1,363	1,474	111	8.1%
88.9%	1,250	1,250	0	0.0%
90.1%	1,250	1,137	-113	-9.0%
91.4%	1,130	1,111	-18	-1.6%
92.6%	1,065	1,073	8	0.8%
93.8%	1,000	831	-169	-16.9%
95.1%	772	701	-72	-9.3%
96.3%	66	80	14	
97.5%	29	43	14	
98.8%	0	0	0	
100.0%	0	0	0	

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,300	3,250	-50	-1.5%
3.7%	3,300	3,250	-50	-1.5%
4.9%	3,300	3,082	-218	-6.6%
6.2%	3,300	2,750	-550	-16.7%
7.4%	3,300	2,750	-550	-16.7%
8.6%	3,231	2,750	-481	-14.9%
9.9%	2,909	2,750	-159	-5.5%
11.1%	2,750	2,750	0	0.0%
12.3%	2,750	2,750	0	0.0%
13.6%	2,725	2,750	25	0.9%
14.8%	2,723	2,725	1	0.1%
16.0%	2,507	2,500	-7	-0.3%
17.3%	2,500	2,500	0	0.0%
18.5%	2,500	2,500	0	0.0%
19.8%	2,250	2,500	250	11.1%
21.0%	2,250	2,500	250	11.1%
22.2%	2,250	2,500	250	11.1%
23.5%	2,250	2,500	250	11.1%
24.7%	2,008	2,500	492	24.5%
25.9%	2,000	2,500	500	25.0%
27.2%	2,000	2,500	500	25.0%
28.4%	2,000	2,500	500	25.0%
29.6%	2,000	2,500	500	25.0%
30.9%	2,000	2,500	500	25.0%
32.1%	2,000	2,250	250	12.5%
33.3%	2,000	2,250	250	12.5%
34.6%	2,000	2,008	8	0.4%
35.8%	2,000	2,000	0	0.0%
37.0%	2,000	2,000	0	0.0%
38.3%	2,000	2,000	0	0.0%
39.5%	2,000	2,000	0	0.0%
40.7%	2,000	2,000	0	0.0%
42.0%	2,000	2,000	0	0.0%
43.2%	2,000	2,000	0	0.0%
44.4%	1,949	2,000	51	2.6%
45.7%	1,821	2,000	179	9.8%
46.9%	1,752	2,000	248	14.2%
48.1%	1,750	2,000	250	14.3%
49.4%	1,750	2,000	250	14.3%
50.6%	1,750	2,000	250	14.3%
51.9%	1,734	2,000	266	15.3%
53.1%	1,692	2,000	308	18.2%
54.3%	1,676	2,000	324	19.3%
55.6%	1,673	2,000	327	19.6%
56.8%	1,656	1,949	293	17.7%
58.0%	1,613	1,821	207	12.9%
59.3%	1,500	1,752	252	16.8%
60.5%	1,500	1,750	250	16.7%
61.7%	1,500	1,750	250	16.7%
63.0%	1,500	1,734	234	15.6%
64.2%	1,500	1,692	192	12.8%
65.4%	1,500	1,676	176	11.7%
66.7%	1,500	1,656	156	10.4%
67.9%	1,500	1,654	154	10.3%
69.1%	1,500	1,613	113	7.6%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,500	1,500	0	0.0%
77.8%	1,500	1,500	0	0.0%
79.0%	1,500	1,500	0	0.0%
80.2%	1,500	1,500	0	0.0%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,250	1,500	250	20.0%
90.1%	1,250	1,500	250	20.0%
91.4%	1,250	1,500	250	20.0%
92.6%	1,250	1,500	250	20.0%
93.8%	1,030	1,500	470	45.7%
95.1%	1,000	1,500	500	50.0%
96.3%	1,000	1,436	436	43.6%
97.5%	836	1,345	509	60.9%
98.8%	250	1,000	750	300.0%
100.0%	189	74	-116	-61.1%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,272	3,250	-22	-0.7%
1.2%	2,953	2,907	-46	-1.5%
2.5%	2,907	2,750	-157	-5.4%
3.7%	2,750	2,750	0	0.0%
4.9%	2,750	2,750	0	0.0%
6.2%	2,725	2,750	25	0.9%
7.4%	2,715	2,715	0	0.0%
8.6%	2,647	2,647	0	0.0%
9.9%	2,606	2,611	5	0.2%
11.1%	2,599	2,606	7	0.3%
12.3%	2,570	2,599	29	1.1%
13.6%	2,566	2,570	5	0.2%
14.8%	2,550	2,566	15	0.6%
16.0%	2,541	2,550	10	0.4%
17.3%	2,514	2,541	27	1.1%
18.5%	2,500	2,526	26	1.0%
19.8%	2,459	2,514	54	2.2%
21.0%	2,317	2,500	183	7.9%
22.2%	2,242	2,500	258	11.5%
23.5%	2,171	2,500	329	15.1%
24.7%	2,134	2,500	366	17.1%
25.9%	2,000	2,500	500	25.0%
27.2%	2,000	2,000	0	0.0%
28.4%	2,000	2,000	0	0.0%
29.6%	2,000	2,000	0	0.0%
30.9%	2,000	2,000	0	0.0%
32.1%	2,000	2,000	0	0.0%
33.3%	2,000	2,000	0	0.0%
34.6%	2,000	2,000	0	0.0%
35.8%	2,000	2,000	0	0.0%
37.0%	2,000	2,000	0	0.0%
38.3%	2,000	2,000	0	0.0%
39.5%	2,000	2,000	0	0.0%
40.7%	2,000	2,000	0	0.0%
42.0%	2,000	2,000	0	0.0%
43.2%	2,000	2,000	0	0.0%
44.4%	2,000	2,000	0	0.0%
45.7%	1,916	1,916	0	0.0%
46.9%	1,649	1,826	178	10.8%
48.1%	1,557	1,754	197	12.7%
49.4%	1,500	1,750	250	16.7%
50.6%	1,500	1,750	250	16.7%
51.9%	1,500	1,750	250	16.7%
53.1%	1,500	1,750	250	16.7%
54.3%	1,500	1,750	250	16.7%
55.6%	1,500	1,750	250	16.7%
56.8%	1,500	1,750	250	16.7%
58.0%	1,500	1,750	250	16.7%
59.3%	1,500	1,734	234	15.6%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,438	-62	-4.1%
71.6%	1,500	1,412	-88	-5.9%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	750	1,000	250	33.3%
87.7%	750	1,000	250	33.3%
88.9%	750	1,000	250	33.3%
90.1%	637	619	-18	-2.9%
91.4%	525	558	33	6.4%
92.6%	250	442	192	76.6%
93.8%	250	250	0	0.0%
95.1%	250	250	0	0.0%
96.3%	250	250	0	0.0%
97.5%	250	250	0	0.0%
98.8%	250	250	0	0.0%
100.0%	42	224	182	

Figure SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

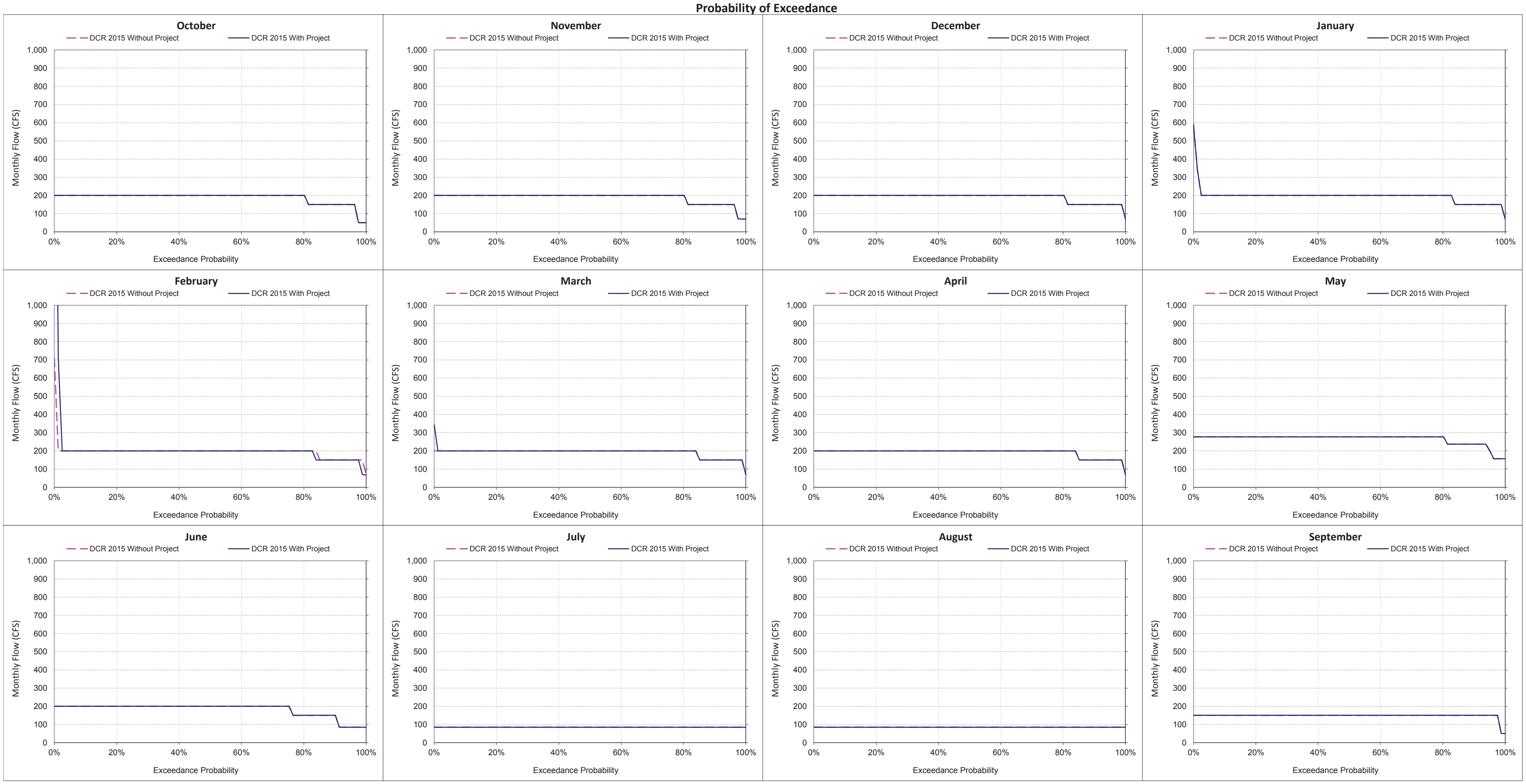


Table SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	50	50	0	0.0%
98.8%	50	50	0	0.0%
100.0%	50	50	0	0.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	70	70	0	0.0%
98.8%	70	70	0	0.0%
100.0%	70	70	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	70	70	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	588	588	0	0.0%
1.2%	344	344	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	70	70	0	0.0%

Table SW-06-b

Clear Creek below Whiskeytown Reservoir, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	710	3,000	2,290	322.8%
1.2%	200	710	510	254.8%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	150	-50	-25.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	70	-80	-53.3%
100.0%	70	68	-2	-3.5%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	343	143	71.5%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	200	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	70	70	0	0.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	200	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	70	70	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	277	277	0	0.0%
1.2%	277	277	0	0.0%
2.5%	277	277	0	0.0%
3.7%	277	277	0	0.0%
4.9%	277	277	0	0.0%
6.2%	277	277	0	0.0%
7.4%	277	277	0	0.0%
8.6%	277	277	0	0.0%
9.9%	277	277	0	0.0%
11.1%	277	277	0	0.0%
12.3%	277	277	0	0.0%
13.6%	277	277	0	0.0%
14.8%	277	277	0	0.0%
16.0%	277	277	0	0.0%
17.3%	277	277	0	0.0%
18.5%	277	277	0	0.0%
19.8%	277	277	0	0.0%
21.0%	277	277	0	0.0%
22.2%	277	277	0	0.0%
23.5%	277	277	0	0.0%
24.7%	277	277	0	0.0%
25.9%	277	277	0	0.0%
27.2%	277	277	0	0.0%
28.4%	277	277	0	0.0%
29.6%	277	277	0	0.0%
30.9%	277	277	0	0.0%
32.1%	277	277	0	0.0%
33.3%	277	277	0	0.0%
34.6%	277	277	0	0.0%
35.8%	277	277	0	0.0%
37.0%	277	277	0	0.0%
38.3%	277	277	0	0.0%
39.5%	277	277	0	0.0%
40.7%	277	277	0	0.0%
42.0%	277	277	0	0.0%
43.2%	277	277	0	0.0%
44.4%	277	277	0	0.0%
45.7%	277	277	0	0.0%
46.9%	277	277	0	0.0%
48.1%	277	277	0	0.0%
49.4%	277	277	0	0.0%
50.6%	277	277	0	0.0%
51.9%	277	277	0	0.0%
53.1%	277	277	0	0.0%
54.3%	277	277	0	0.0%
55.6%	277	277	0	0.0%
56.8%	277	277	0	0.0%
58.0%	277	277	0	0.0%
59.3%	277	277	0	0.0%
60.5%	277	277	0	0.0%
61.7%	277	277	0	0.0%
63.0%	277	277	0	0.0%
64.2%	277	277	0	0.0%
65.4%	277	277	0	0.0%
66.7%	277	277	0	0.0%
67.9%	277	277	0	0.0%
69.1%	277	277	0	0.0%
70.4%	277	277	0	0.0%
71.6%	277	277	0	0.0%
72.8%	277	277	0	0.0%
74.1%	277	277	0	0.0%
75.3%	277	277	0	0.0%
76.5%	277	277	0	0.0%
77.8%	277	277	0	0.0%
79.0%	277	277	0	0.0%
80.2%	277	277	0	0.0%
81.5%	237	237	0	0.0%
82.7%	237	237	0	0.0%
84.0%	237	237	0	0.0%
85.2%	237	237	0	0.0%
86.4%	237	237	0	0.0%
87.7%	237	237	0	0.0%
88.9%	237	237	0	0.0%
90.1%	237	237	0	0.0%
91.4%	237	237	0	0.0%
92.6%	237	237	0	0.0%
93.8%	237	237	0	0.0%
95.1%	200	200	0	0.0%
96.3%	156	156	0	0.0%
97.5%	156	156	0	0.0%
98.8%	156	156	0	0.0%
100.0%	156	156	0	0.0%

Table SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	150	150	0	0.0%
77.8%	150	150	0	0.0%
79.0%	150	150	0	0.0%
80.2%	150	150	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85	85	0	0.0%
1.2%	85	85	0	0.0%
2.5%	85	85	0	0.0%
3.7%	85	85	0	0.0%
4.9%	85	85	0	0.0%
6.2%	85	85	0	0.0%
7.4%	85	85	0	0.0%
8.6%	85	85	0	0.0%
9.9%	85	85	0	0.0%
11.1%	85	85	0	0.0%
12.3%	85	85	0	0.0%
13.6%	85	85	0	0.0%
14.8%	85	85	0	0.0%
16.0%	85	85	0	0.0%
17.3%	85	85	0	0.0%
18.5%	85	85	0	0.0%
19.8%	85	85	0	0.0%
21.0%	85	85	0	0.0%
22.2%	85	85	0	0.0%
23.5%	85	85	0	0.0%
24.7%	85	85	0	0.0%
25.9%	85	85	0	0.0%
27.2%	85	85	0	0.0%
28.4%	85	85	0	0.0%
29.6%	85	85	0	0.0%
30.9%	85	85	0	0.0%
32.1%	85	85	0	0.0%
33.3%	85	85	0	0.0%
34.6%	85	85	0	0.0%
35.8%	85	85	0	0.0%
37.0%	85	85	0	0.0%
38.3%	85	85	0	0.0%
39.5%	85	85	0	0.0%
40.7%	85	85	0	0.0%
42.0%	85	85	0	0.0%
43.2%	85	85	0	0.0%
44.4%	85	85	0	0.0%
45.7%	85	85	0	0.0%
46.9%	85	85	0	0.0%
48.1%	85	85	0	0.0%
49.4%	85	85	0	0.0%
50.6%	85	85	0	0.0%
51.9%	85	85	0	0.0%
53.1%	85	85	0	0.0%
54.3%	85	85	0	0.0%
55.6%	85	85	0	0.0%
56.8%	85	85	0	0.0%
58.0%	85	85	0	0.0%
59.3%	85	85	0	0.0%
60.5%	85	85	0	0.0%
61.7%	85	85	0	0.0%
63.0%	85	85	0	0.0%
64.2%	85	85	0	0.0%
65.4%	85	85	0	0.0%
66.7%	85	85	0	0.0%
67.9%	85	85	0	0.0%
69.1%	85	85	0	0.0%
70.4%	85	85	0	0.0%
71.6%	85	85	0	0.0%
72.8%	85	85	0	0.0%
74.1%	85	85	0	0.0%
75.3%	85	85	0	0.0%
76.5%	85	85	0	0.0%
77.8%	85	85	0	0.0%
79.0%	85	85	0	0.0%
80.2%	85	85	0	0.0%
81.5%	85	85	0	0.0%
82.7%	85	85	0	0.0%
84.0%	85	85	0	0.0%
85.2%	85	85	0	0.0%
86.4%	85	85	0	0.0%
87.7%	85	85	0	0.0%
88.9%	85	85	0	0.0%
90.1%	85	85	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85	85	0	0.0%
1.2%	85	85	0	0.0%
2.5%	85	85	0	0.0%
3.7%	85	85	0	0.0%
4.9%	85	85	0	0.0%
6.2%	85	85	0	0.0%
7.4%	85	85	0	0.0%
8.6%	85	85	0	0.0%
9.9%	85	85	0	0.0%
11.1%	85	85	0	0.0%
12.3%	85	85	0	0.0%
13.6%	85	85	0	0.0%
14.8%	85	85	0	0.0%
16.0%	85	85	0	0.0%
17.3%	85	85	0	0.0%
18.5%	85	85	0	0.0%
19.8%	85	85	0	0.0%
21.0%	85	85	0	0.0%
22.2%	85	85	0	0.0%
23.5%	85	85	0	0.0%
24.7%	85	85	0	0.0%
25.9%	85	85	0	0.0%
27.2%	85	85	0	0.0%
28.4%	85	85	0	0.0%
29.6%	85	85	0	0.0%
30.9%	85	85	0	0.0%
32.1%	85	85	0	0.0%
33.3%	85	85	0	0.0%
34.6%	85	85	0	0.0%
35.8%	85	85	0	0.0%
37.0%	85	85	0	0.0%
38.3%	85	85	0	0.0%
39.5%	85	85	0	0.0%
40.7%	85	85	0	0.0%
42.0%	85	85	0	0.0%
43.2%	85	85	0	0.0%
44.4%	85	85	0	0.0%
45.7%	85	85	0	0.0%
46.9%	85	85	0	0.0%
48.1%	85	85	0	0.0%
49.4%	85	85	0	0.0%
50.6%	85	85	0	0.0%
51.9%	85	85	0	0.0%
53.1%	85	85	0	0.0%
54.3%	85	85	0	0.0%
55.6%	85	85	0	0.0%
56.8%	85	85	0	0.0%
58.0%	85	85	0	0.0%
59.3%	85	85	0	0.0%
60.5%	85	85	0	0.0%
61.7%	85	85	0	0.0%
63.0%	85	85	0	0.0%
64.2%	85	85	0	0.0%
65.4%	85	85	0	0.0%
66.7%	85	85	0	0.0%
67.9%	85	85	0	0.0%
69.1%	85	85	0	0.0%
70.4%	85	85	0	0.0%
71.6%	85	85	0	0.0%
72.8%	85	85	0	0.0%
74.1%	85	85	0	0.0%
75.3%	85	85	0	0.0%
76.5%	85	85	0	0.0%
77.8%	85	85	0	0.0%
79.0%	85	85	0	0.0%
80.2%	85	85	0	0.0%
81.5%	85	85	0	0.0%
82.7%	85	85	0	0.0%
84.0%	85	85	0	0.0%
85.2%	85	85	0	0.0%
86.4%	85	85	0	0.0%
87.7%	85	85	0	0.0%
88.9%	85	85	0	0.0%
90.1%	85	85	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	150	150	0	0.0%
1.2%	150	150	0	0.0%
2.5%	150	150	0	0.0%
3.7%	150	150	0	0.0%
4.9%	150	150	0	0.0%
6.2%	150	150	0	0.0%
7.4%	150	150	0	0.0%
8.6%	150	150	0	0.0%
9.9%	150	150	0	0.0%
11.1%	150	150	0	0.0%
12.3%	150	150	0	0.0%
13.6%	150	150	0	0.0%
14.8%	150	150	0	0.0%
16.0%	150	150	0	0.0%
17.3%	150	150	0	0.0%
18.5%	150	150	0	0.0%
19.8%	150	150	0	0.0%
21.0%	150	150	0	0.0%
22.2%	150	150	0	0.0%
23.5%	150	150	0	0.0%
24.7%	150	150	0	0.0%
25.9%	150	150	0	0.0%
27.2%	150	150	0	0.0%
28.4%	150	150	0	0.0%
29.6%	150	150	0	0.0%
30.9%	150	150	0	0.0%
32.1%	150	150	0	0.0%
33.3%	150	150	0	0.0%
34.6%	150	150	0	0.0%
35.8%	150	150	0	0.0%
37.0%	150	150	0	0.0%
38.3%	150	150	0	0.0%
39.5%	150	150	0	0.0%
40.7%	150	150	0	0.0%
42.0%	150	150	0	0.0%
43.2%	150	150	0	0.0%
44.4%	150	150	0	0.0%
45.7%	150	150	0	0.0%
46.9%	150	150	0	0.0%
48.1%	150	150	0	0.0%
49.4%	150	150	0	0.0%
50.6%	150	150	0	0.0%
51.9%	150	150	0	0.0%
53.1%	150	150	0	0.0%
54.3%	150	150	0	0.0%
55.6%	150	150	0	0.0%
56.8%	150	150	0	0.0%
58.0%	150	150	0	0.0%
59.3%	150	150	0	0.0%
60.5%	150	150	0	0.0%
61.7%	150	150	0	0.0%
63.0%	150	150	0	0.0%
64.2%	150	150	0	0.0%
65.4%	150	150	0	0.0%
66.7%	150	150	0	0.0%
67.9%	150	150	0	0.0%
69.1%	150	150	0	0.0%
70.4%	150	150	0	0.0%
71.6%	150	150	0	0.0%
72.8%	150	150	0	0.0%
74.1%	150	150	0	0.0%
75.3%	150	150	0	0.0%
76.5%	150	150	0	0.0%
77.8%	150	150	0	0.0%
79.0%	150	150	0	0.0%
80.2%	150	150	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	50	50	0	0.0%
100.0%	50	50	0	0.0%

Figure SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

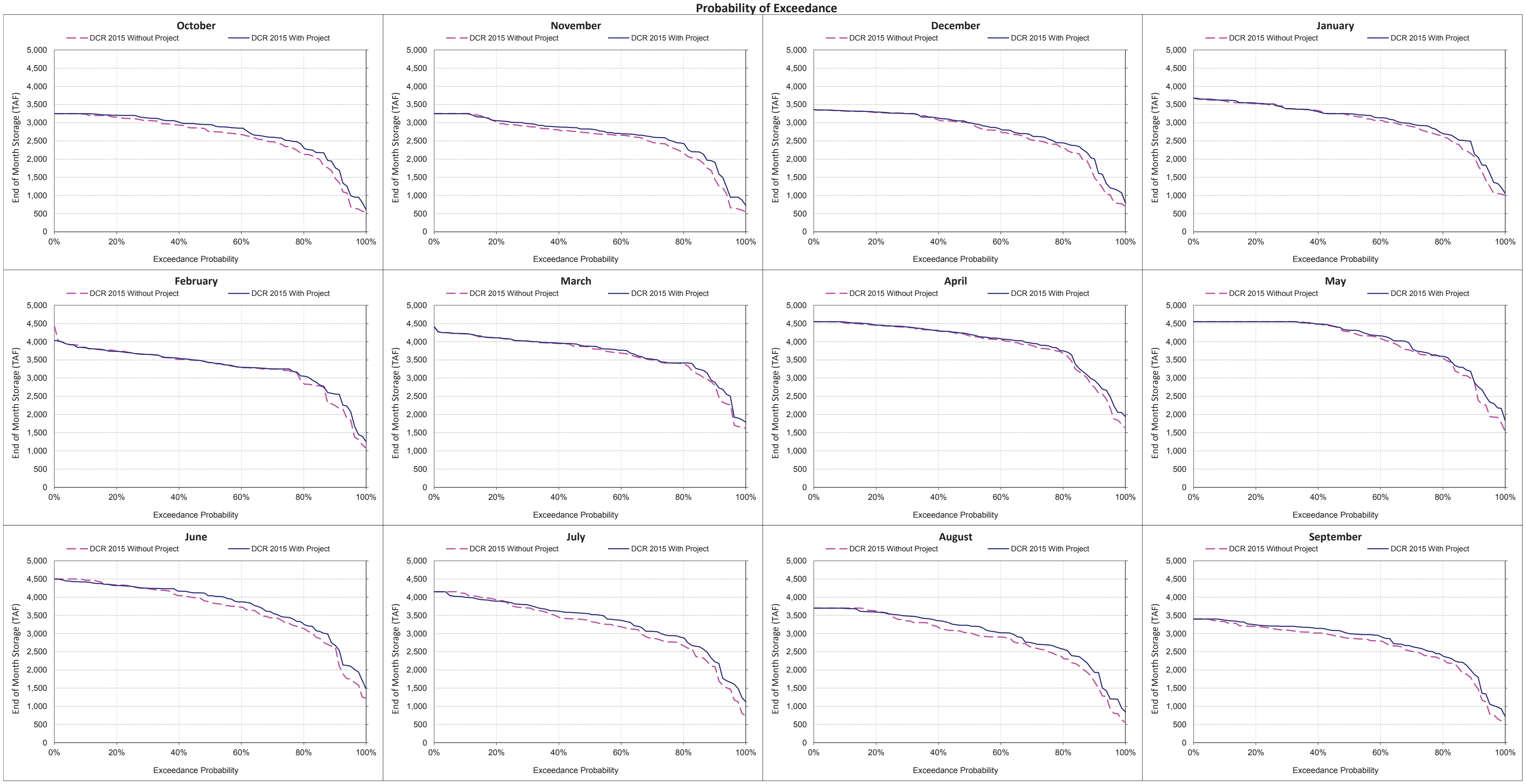


Table SW-07-b

Shasta Lake, End of Month Storage

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,250	3,250	0	0.0%
1.2%	3,250	3,250	0	0.0%
2.5%	3,250	3,250	0	0.0%
3.7%	3,250	3,250	0	0.0%
4.9%	3,250	3,250	0	0.0%
6.2%	3,250	3,250	0	0.0%
7.4%	3,248	3,250	2	0.1%
8.6%	3,242	3,250	8	0.3%
9.9%	3,237	3,250	13	0.4%
11.1%	3,200	3,250	50	1.6%
12.3%	3,200	3,242	42	1.3%
13.6%	3,200	3,238	38	1.2%
14.8%	3,200	3,224	24	0.7%
16.0%	3,200	3,216	16	0.5%
17.3%	3,193	3,214	21	0.7%
18.5%	3,160	3,205	45	1.4%
19.8%	3,157	3,204	46	1.5%
21.0%	3,136	3,203	67	2.1%
22.2%	3,121	3,200	79	2.5%
23.5%	3,119	3,200	81	2.6%
24.7%	3,113	3,200	87	2.8%
25.9%	3,108	3,197	89	2.9%
27.2%	3,092	3,162	70	2.3%
28.4%	3,066	3,146	80	2.6%
29.6%	3,064	3,132	68	2.2%
30.9%	3,059	3,120	61	2.0%
32.1%	3,050	3,120	70	2.3%
33.3%	3,043	3,112	69	2.3%
34.6%	2,976	3,077	101	3.4%
35.8%	2,969	3,060	91	3.1%
37.0%	2,964	3,056	92	3.1%
38.3%	2,945	3,055	110	3.7%
39.5%	2,939	3,025	86	2.9%
40.7%	2,931	2,995	64	2.2%
42.0%	2,924	2,981	58	2.0%
43.2%	2,864	2,980	116	4.0%
44.4%	2,859	2,977	118	4.1%
45.7%	2,857	2,961	104	3.6%
46.9%	2,852	2,954	102	3.6%
48.1%	2,843	2,951	108	3.8%
49.4%	2,762	2,948	186	6.7%
50.6%	2,759	2,946	187	6.8%
51.9%	2,750	2,904	153	5.6%
53.1%	2,748	2,890	141	5.1%
54.3%	2,731	2,885	154	5.7%
55.6%	2,715	2,876	161	5.9%
56.8%	2,708	2,867	159	5.9%
58.0%	2,695	2,856	161	6.0%
59.3%	2,678	2,854	176	6.6%
60.5%	2,668	2,853	186	7.0%
61.7%	2,638	2,773	135	5.1%
63.0%	2,619	2,709	91	3.5%
64.2%	2,584	2,658	74	2.9%
65.4%	2,546	2,650	104	4.1%
66.7%	2,538	2,634	95	3.8%
67.9%	2,500	2,612	111	4.5%
69.1%	2,477	2,604	127	5.1%
70.4%	2,477	2,601	124	5.0%
71.6%	2,422	2,587	165	6.8%
72.8%	2,414	2,578	163	6.8%
74.1%	2,346	2,518	171	7.3%
75.3%	2,343	2,506	164	7.0%
76.5%	2,303	2,486	183	8.0%
77.8%	2,242	2,476	234	10.5%
79.0%	2,169	2,419	250	11.5%
80.2%	2,127	2,286	160	7.5%
81.5%	2,125	2,259	133	6.3%
82.7%	2,091	2,252	161	7.7%
84.0%	2,034	2,183	149	7.3%
85.2%	1,985	2,179	194	9.8%
86.4%	1,807	2,172	366	20.2%
87.7%	1,763	1,964	200	11.4%
88.9%	1,679	1,947	268	16.0%
90.1%	1,461	1,761	300	20.6%
91.4%	1,357	1,693	337	24.8%
92.6%	1,096	1,340	244	22.2%
93.8%	1,068	1,261	192	18.0%
95.1%	686	996	310	45.2%
96.3%	650	950	300	46.2%
97.5%	628	950	322	51.2%
98.8%	564	802	238	42.2%
100.0%	550	613	63	11.4%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,252	3,252	0	0.0%
1.2%	3,252	3,252	0	0.0%
2.5%	3,252	3,252	0	0.0%
3.7%	3,252	3,252	0	0.0%
4.9%	3,252	3,252	0	0.0%
6.2%	3,252	3,252	0	0.0%
7.4%	3,252	3,252	0	0.0%
8.6%	3,252	3,252	0	0.0%
9.9%	3,252	3,252	0	0.0%
11.1%	3,252	3,241	-11	-0.3%
12.3%	3,252	3,207	-45	-1.4%
13.6%	3,217	3,162	-55	-1.7%
14.8%	3,198	3,157	-40	-1.3%
16.0%	3,156	3,149	-7	-0.2%
17.3%	3,134	3,120	-14	-0.5%
18.5%	3,074	3,069	-5	-0.2%
19.8%	3,033	3,058	25	0.8%
21.0%	2,974	3,053	78	2.6%
22.2%	2,973	3,040	67	2.2%
23.5%	2,947	3,037	90	3.1%
24.7%	2,943	3,011	69	2.3%
25.9%	2,943	3,011	68	2.3%
27.2%	2,928	3,009	81	2.8%
28.4%	2,911	2,997	86	3.0%
29.6%	2,910	2,982	72	2.5%
30.9%	2,888	2,969	80	2.8%
32.1%	2,885	2,961	76	2.6%
33.3%	2,873	2,930	58	2.0%
34.6%	2,840	2,928	88	3.1%
35.8%	2,837	2,899	63	2.2%
37.0%	2,831	2,898	67	2.4%
38.3%	2,814	2,893	79	2.8%
39.5%	2,809	2,886	77	2.7%
40.7%	2,782	2,882	100	3.6%
42.0%	2,780	2,881	100	3.6%
43.2%	2,778	2,873	95	3.4%
44.4%	2,765	2,863	98	3.6%
45.7%	2,758	2,862	104	3.8%
46.9%	2,745	2,830	85	3.1%
48.1%	2,731	2,829	98	3.6%
49.4%	2,726	2,825	99	3.6%
50.6%	2,702	2,821	119	4.4%
51.9%	2,699	2,809	110	4.1%
53.1%	2,685	2,769	84	3.1%
54.3%	2,685	2,765	80	3.0%
55.6%	2,680	2,732	51	1.9%
56.8%	2,674	2,730	56	2.1%
58.0%	2,658	2,711	53	2.0%
59.3%	2,657	2,711	54	2.0%
60.5%	2,655	2,693	38	1.4%
61.7%	2,643	2,691	48	1.8%
63.0%	2,630	2,686	56	2.1%
64.2%	2,604	2,680	75	2.9%
65.4%	2,601	2,657	56	2.2%
66.7%	2,581	2,656	76	2.9%
67.9%	2,521	2,639	118	4.7%
69.1%	2,490	2,620	129	5.2%
70.4%	2,452	2,604	152	6.2%
71.6%	2,446	2,593	147	6.0%
72.8%	2,424	2,592	168	6.9%
74.1%	2,422	2,585	163	6.7%
75.3%	2,360	2,524	164	6.9%
76.5%	2,305	2,495	190	8.2%
77.8%	2,269	2,453	184	8.1%
79.0%	2,218	2,444	225	10.2%
80.2%	2,154	2,421	268	12.4%
81.5%	2,070	2,257	187	9.0%
82.7%	2,034	2,205	170	8.4%
84.0%	2,014	2,204	190	9.5%
85.2%	1,969	2,192	223	11.3%
86.4%	1,881	2,127	246	13.1%
87.7%	1,748	1,963	215	12.3%
88.9%	1,687	1,957	271	16.0%
90.1%	1,433	1,911	478	33.4%
91.4%	1,258	1,586	328	26.1%
92.6%	1,217	1,493	276	22.7%
93.8%	1,038	1,223	186	17.9%
95.1%	659	950	291	44.1%
96.3%	656	950	294	44.7%
97.5%	626	950	324	51.7%
98.8%	595	876	282	47.4%
100.0%	550	727	177	32.1%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,360	3,360	0	0.0%
1.2%	3,353	3,350	-3	-0.1%
2.5%	3,349	3,349	0	0.0%
3.7%	3,349	3,349	0	0.0%
4.9%	3,346	3,347	1	0.0%
6.2%	3,338	3,346	8	0.2%
7.4%	3,335	3,338	3	0.1%
8.6%	3,328	3,335	7	0.2%
9.9%	3,322	3,328	6	0.2%
11.1%	3,319	3,322	3	0.1%
12.3%	3,317	3,319	2	0.1%
13.6%	3,316	3,317	1	0.0%
14.8%	3,316	3,317	1	0.0%
16.0%	3,310	3,316	6	0.2%
17.3%	3,306	3,310	4	0.1%
18.5%	3,291	3,306	15	0.4%
19.8%	3,285	3,293	8	0.2%
21.0%	3,276	3,291	15	0.5%
22.2%	3,276	3,285	9	0.3%
23.5%	3,269	3,276	7	0.2%
24.7%	3,267	3,267	0	0.0%
25.9%	3,266	3,265	-1	0.0%
27.2%	3,266	3,263	-3	-0.1%
28.4%	3,265	3,258	-7	-0.2%
29.6%	3,252	3,252	0	0.0%
30.9%	3,252	3,252	0	0.0%
32.1%	3,252	3,252	0	0.0%
33.3%	3,215	3,228	13	0.4%
34.6%	3,196	3,160	-36	-1.1%
35.8%	3,192	3,155	-37	-1.1%
37.0%	3,147	3,154	7	0.2%
38.3%	3,132	3,152	20	0.6%
39.5%	3,089	3,137	47	1.5%
40.7%	3,055	3,114	60	2.0%
42.0%	3,053	3,106	52	1.7%
43.2%	3,053	3,100	48	1.6%
44.4%	3,039	3,071	32	1.1%
45.7%	3,031	3,059	28	0.9%
46.9%	3,022	3,049	27	0.9%
48.1%	3,011	3,047	35	1.2%
49.4%	3,005	3,009	4	0.1%
50.6%	2,979	2,993	14	0.5%
51.9%	2,900	2,964	64	2.2%
53.1%	2,854	2,953	100	3.5%
54.3%	2,822	2,911	90	3.2%
55.6%	2,801	2,899	98	3.5%
56.8%	2,795	2,870	75	2.7%
58.0%	2,795	2,870	75	2.7%
59.3%	2,771	2,843	72	2.6%
60.5%	2,728	2,801	73	2.7%
61.7%	2,722	2,800	78	2.9%
63.0%	2,696	2,797	101	3.8%
64.2%	2,681	2,734	53	2.0%
65.4%	2,670	2,712	42	1.6%
66.7%	2,643	2,701	58	2.2%
67.9%	2,618	2,698	80	3.0%
69.1%	2,540	2,686	145	5.7%
70.4%	2,516	2,624	108	4.3%
71.6%	2,511	2,621	111	4.4%
72.8%	2,493	2,617	124	5.0%
74.1%	2,468	2,602	134	5.4%
75.3%	2,426	2,550	124	5.1%
76.5%	2,411	2,512	102	4.2%
77.8%	2,409	2,454	45	1.9%
79.0%	2,340	2,452	112	4.8%
80.2%	2,315	2,443	128	5.5%
81.5%	2,230	2,410	181	8.1%
82.7%	2,183	2,377	193	8.9%
84.0%	2,172	2,372	200	9.2%
85.2%	2,143	2,342	199	9.3%
86.4%	1,963	2,249	286	14.6%
87.7%	1,953	2,176	223	11.4%
88.9%	1,741	2,035	294	16.9%
90.1%	1,479	2,004	524	35.4%
91.4%	1,367	1,608	241	17.6%
92.6%	1,214	1,582	369	30.4%
93.8%	1,030	1,334	304	29.5%
95.1%	1,027	1,212	185	18.0%
96.3%	808	1,180	372	46.1%
97.5%	780	1,138	358	45.9%
98.8%	773	1,074	301	38.9%
100.0%	694	790	95	13.7%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,678	3,678	0	0.0%
1.2%	3,650	3,668	18	0.5%
2.5%	3,648	3,650	2	0.1%
3.7%	3,640	3,648	8	0.2%
4.9%	3,624	3,648	24	0.7%
6.2%	3,624	3,640	16	0.4%
7.4%	3,622	3,629	7	0.2%
8.6%	3,616	3,624	8	0.2%
9.9%	3,604	3,624	20	0.6%
11.1%	3,576	3,622	46	1.3%
12.3%	3,562	3,616	54	1.5%
13.6%	3,552	3,604	52	1.5%
14.8%	3,552	3,552	0	0.0%
16.0%	3,551	3,552	1	0.0%
17.3%	3,541	3,551	10	0.3%
18.5%	3,531	3,550	19	0.5%
19.8%	3,528	3,541	13	0.4%
21.0%	3,515	3,531	16	0.4%
22.2%	3,515	3,528	13	0.4%
23.5%	3,515	3,515	0	0.0%
24.7%	3,476	3,515	39	1.1%
25.9%	3,475	3,511	36	1.0%
27.2%	3,462	3,455	-7	-0.2%
28.4%	3,461	3,432	-29	-0.9%
29.6%	3,389	3,389	0	0.0%
30.9%	3,389	3,387	-2	-0.1%
32.1%	3,382	3,375	-7	-0.2%
33.3%	3,378	3,371	-7	-0.2%
34.6%	3,371	3,368	-3	-0.1%
35.8%	3,368	3,366	-2	-0.1%
37.0%	3,366	3,358	-8	-0.2%
38.3%	3,358	3,339	-20	-0.6%
39.5%	3,339	3,317	-22	-0.6%
40.7%	3,317	3,286	-31	-0.9%
42.0%	3,266	3,255	-11	-0.3%
43.2%	3,252	3,252	0	0.0%
44.4%	3,252	3,252	0	0.0%
45.7%	3,252	3,252	0	0.0%
46.9%	3,252	3,252	0	0.0%
48.1%	3,252	3,252	0	0.0%
49.4%	3,216	3,247	31	1.0%
50.6%	3,208	3,243	35	1.1%
51.9%	3,178	3,236	58	1.8%
53.1%	3,159	3,216	56	1.8%
54.3%	3,156	3,213	57	1.8%
55.6%	3,107	3,201	94	3.0%
56.8%	3,101	3,197	96	3.1%
58.0%	3,067	3,150	83	2.7%
59.3%	3,064	3,138	74	2.4%
60.5%	3,061	3,138	76	2.5%
61.7%	3,022	3,126	104	3.5%
63.0%	3,006	3,090	84	2.8%
64.2%	3,006	3,078	72	2.4%
65.4%	2,969	3,028	59	2.0%
66.7%	2,943	3,002	59	2.0%
67.9%	2,938	2,996	57	2.0%
69.1%	2,913	2,986	73	2.5%
70.4%	2,887	2,960	73	2.5%
71.6%	2,880	2,939	58	2.0%
72.8%	2,808	2,924	116	4.1%
74.1%	2,774	2,921	148	5.3%
75.3%	2,739	2,906	167	6.1%
76.5%	2,717	2,848	130	4.8%
77.8%	2,680	2,823	143	5.3%
79.0%	2,654	2,747	92	3.5%
80.2%	2,605	2,691	86	3.3%
81.5%	2,575	2,677	102	4.0%
82.7%	2,500	2,655	155	6.2%
84.0%	2,431	2,590	159	6.5%
85.2%	2,398	2,525	126	5.3%
86.4%	2,258	2,516	259	11.5%
87.7%	2,225	2,500	275	12.4%
88.9%	2,159	2,492	333	15.4%
90.1%	2,066	2,137	71	3.4%
91.4%	1,814	2,048	234	12.9%
92.6%	1,650	1,837	186	11.3%
93.8%	1,418	1,831	413	29.1%
95.1%	1,249	1,608	359	28.8%
96.3%	1,066	1,359	293	27.5%
97.5%	1,055	1,331	276	26.2%
98.8%	1,036	1,220	184	17.8%
100.0%	1,001	1,057	57	5.7%

Table SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,433	4,037	-396	-8.9%
1.2%	4,022	4,022	0	0.0%
2.5%	3,994	3,994	0	0.0%
3.7%	3,944	3,944	0	0.0%
4.9%	3,920	3,920	0	0.0%
6.2%	3,914	3,914	0	0.0%
7.4%	3,910	3,848	-62	-1.6%
8.6%	3,848	3,848	0	0.0%
9.9%	3,848	3,838	-10	-0.3%
11.1%	3,809	3,808	-1	0.0%
12.3%	3,805	3,805	0	0.0%
13.6%	3,800	3,794	-6	-0.2%
14.8%	3,794	3,777	-17	-0.4%
16.0%	3,777	3,772	-5	-0.1%
17.3%	3,772	3,743	-30	-0.8%
18.5%	3,772	3,739	-33	-0.9%
19.8%	3,743	3,737	-5	-0.1%
21.0%	3,739	3,731	-8	-0.2%
22.2%	3,737	3,713	-24	-0.7%
23.5%	3,713	3,702	-11	-0.3%
24.7%	3,694	3,694	0	0.0%
25.9%	3,675	3,675	0	0.0%
27.2%	3,661	3,669	8	0.2%
28.4%	3,654	3,661	7	0.2%
29.6%	3,654	3,654	0	0.0%
30.9%	3,648	3,654	6	0.2%
32.1%	3,638	3,636	-2	-0.1%
33.3%	3,636	3,628	-8	-0.2%
34.6%	3,570	3,588	18	0.5%
35.8%	3,567	3,570	3	0.1%
37.0%	3,560	3,567	7	0.2%
38.3%	3,530	3,560	30	0.8%
39.5%	3,516	3,554	38	1.1%
40.7%	3,516	3,531	15	0.4%
42.0%	3,509	3,530	21	0.6%
43.2%	3,503	3,516	13	0.4%
44.4%	3,493	3,503	10	0.3%
45.7%	3,487	3,498	11	0.3%
46.9%	3,480	3,480	0	0.0%
48.1%	3,462	3,462	0	0.0%
49.4%	3,431	3,431	0	0.0%
50.6%	3,423	3,423	0	0.0%
51.9%	3,392	3,405	13	0.4%
53.1%	3,391	3,403	13	0.4%
54.3%	3,376	3,368	-9	-0.3%
55.6%	3,354	3,359	5	0.2%
56.8%	3,331	3,350	20	0.6%
58.0%	3,321	3,315	-6	-0.2%
59.3%	3,292	3,301	9	0.3%
60.5%	3,288	3,299	10	0.3%
61.7%	3,288	3,292	4	0.1%
63.0%	3,282	3,292	10	0.3%
64.2%	3,280	3,288	8	0.2%
65.4%	3,272	3,282	10	0.3%
66.7%	3,252	3,276	24	0.7%
67.9%	3,252	3,270	18	0.5%
69.1%	3,252	3,253	1	0.0%
70.4%	3,252	3,252	0	0.0%
71.6%	3,249	3,252	3	0.1%
72.8%	3,230	3,252	22	0.7%
74.1%	3,210	3,252	42	1.3%
75.3%	3,208	3,252	44	1.4%
76.5%	3,148	3,184	36	1.1%
77.8%	3,146	3,164	18	0.6%
79.0%	2,944	3,063	119	4.0%
80.2%	2,832	3,052	220	7.8%
81.5%	2,832	3,021	189	6.7%
82.7%	2,814	2,945	131	4.6%
84.0%	2,793	2,887	95	3.4%
85.2%	2,785	2,814	29	1.0%
86.4%	2,752	2,778	26	1.0%
87.7%	2,313	2,604	291	12.6%
88.9%	2,297	2,579	283	12.3%
90.1%	2,238	2,560	322	14.4%
91.4%	2,170	2,555	385	17.7%
92.6%	2,142	2,251	109	5.1%
93.8%	1,892	2,232	340	17.9%
95.1%	1,844	2,077	234	12.7%
96.3%	1,381	1,674	293	21.2%
97.5%	1,311	1,447	136	10.4%
98.8%	1,171	1,397	227	19.3%
100.0%	1,073	1,257	184	17.2%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,411	4,411	0	0.0%
1.2%	4,280	4,280	0	0.0%
2.5%	4,253	4,253	0	0.0%
3.7%	4,249	4,249	0	0.0%
4.9%	4,246	4,246	0	0.0%
6.2%	4,229	4,229	0	0.0%
7.4%	4,226	4,226	0	0.0%
8.6%	4,226	4,226	0	0.0%
9.9%	4,221	4,221	0	0.0%
11.1%	4,221	4,215	-5	-0.1%
12.3%	4,199	4,193	-6	-0.1%
13.6%	4,162	4,162	0	0.0%
14.8%	4,129	4,156	27	0.7%
16.0%	4,124	4,129	5	0.1%
17.3%	4,118	4,124	6	0.1%
18.5%	4,111	4,118	7	0.2%
19.8%	4,106	4,106	0	0.0%
21.0%	4,105	4,105	0	0.0%
22.2%	4,086	4,086	0	0.0%
23.5%	4,071	4,084	13	0.3%
24.7%	4,063	4,071	8	0.2%
25.9%	4,033	4,033	0	0.0%
27.2%	4,030	4,030	0	0.0%
28.4%	4,022	4,022	0	0.0%
29.6%	4,021	4,021	0	0.0%
30.9%	4,010	4,010	0	0.0%
32.1%	4,000	4,000	0	0.0%
33.3%	3,980	4,000	20	0.5%
34.6%	3,976	3,983	8	0.2%
35.8%	3,970	3,980	10	0.3%
37.0%	3,965	3,976	11	0.3%
38.3%	3,956	3,970	13	0.3%
39.5%	3,953	3,965	12	0.3%
40.7%	3,948	3,956	8	0.2%
42.0%	3,940	3,953	13	0.3%
43.2%	3,940	3,949	9	0.2%
44.4%	3,883	3,944	61	1.6%
45.7%	3,880	3,940	60	1.5%
46.9%	3,874	3,899	24	0.6%
48.1%	3,873	3,883	10	0.3%
49.4%	3,860	3,880	20	0.5%
50.6%	3,807	3,874	67	1.8%
51.9%	3,797	3,873	76	2.0%
53.1%	3,795	3,839	44	1.2%
54.3%	3,756	3,804	48	1.3%
55.6%	3,732	3,803	70	1.9%
56.8%	3,715	3,795	80	2.2%
58.0%	3,705	3,785	79	2.1%
59.3%	3,696	3,769	73	2.0%
60.5%	3,681	3,768	87	2.4%
61.7%	3,667	3,756	89	2.4%
63.0%	3,645	3,686	41	1.1%
64.2%	3,598	3,660	62	1.7%
65.4%	3,575	3,609	33	0.9%
66.7%	3,547	3,584	37	1.1%
67.9%	3,534	3,541	7	0.2%
69.1%	3,504	3,534	30	0.9%
70.4%	3,499	3,517	18	0.5%
71.6%	3,482	3,504	22	0.6%
72.8%	3,435	3,443	8	0.2%
74.1%	3,417	3,435	19	0.5%
75.3%	3,416	3,419	3	0.1%
76.5%	3,416	3,417	1	0.0%
77.8%	3,416	3,417	1	0.0%
79.0%	3,404	3,416	12	0.4%
80.2%	3,386	3,416	30	0.9%
81.5%	3,328	3,416	88	2.6%
82.7%	3,205	3,399	194	6.0%
84.0%	3,140	3,269	129	4.1%
85.2%	3,086	3,237	150	4.9%
86.4%	3,017	3,210	193	6.4%
87.7%	2,964	3,140	176	5.9%
88.9%	2,897	2,949	52	1.8%
90.1%	2,793	2,882	89	3.2%
91.4%	2,481	2,735	254	10.2%
92.6%	2,337	2,689	352	15.1%
93.8%	2,288	2,552	265	11.6%
95.1%	2,270	2,503	233	10.3%
96.3%	1,702	1,927	225	13.2%
97.5%	1,670	1,904	234	14.0%
98.8%	1,644	1,854	210	12.8%
100.0%	1,629	1,792	163	10.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,552	4,552	0	0.0%
1.2%	4,552	4,552	0	0.0%
2.5%	4,552	4,552	0	0.0%
3.7%	4,552	4,552	0	0.0%
4.9%	4,552	4,552	0	0.0%
6.2%	4,552	4,552	0	0.0%
7.4%	4,546	4,552	6	0.1%
8.6%	4,541	4,552	11	0.2%
9.9%	4,519	4,546	27	0.6%
11.1%	4,503	4,528	25	0.6%
12.3%	4,501	4,519	17	0.4%
13.6%	4,500	4,512	12	0.3%
14.8%	4,491	4,512	21	0.5%
16.0%	4,479	4,503	24	0.5%
17.3%	4,476	4,500	24	0.5%
18.5%	4,461	4,479	18	0.4%
19.8%	4,456	4,461	5	0.1%
21.0%	4,451	4,456	5	0.1%
22.2%	4,439	4,451	12	0.3%
23.5%	4,434	4,436	2	0.0%
24.7%	4,432	4,434	2	0.0%
25.9%	4,418	4,427	9	0.2%
27.2%	4,406	4,426	20	0.5%
28.4%	4,404	4,421	18	0.4%
29.6%	4,397	4,407	9	0.2%
30.9%	4,389	4,398	9	0.2%
32.1%	4,382	4,384	1	0.0%
33.3%	4,341	4,372	31	0.7%
34.6%	4,333	4,367	33	0.8%
35.8%	4,331	4,341	11	0.2%
37.0%	4,330	4,329	-1	0.0%
38.3%	4,329	4,313	-16	-0.4%
39.5%	4,296	4,312	16	0.4%
40.7%	4,290	4,290	0	0.0%
42.0%	4,289	4,290	1	0.0%
43.2%	4,277	4,289	12	0.3%
44.4%	4,259	4,263	4	0.1%
45.7%	4,232	4,259	28	0.7%
46.9%	4,231	4,245	15	0.3%
48.1%	4,217	4,235	18	0.4%
49.4%	4,173	4,217	44	1.0%
50.6%	4,147	4,196	49	1.2%
51.9%	4,137	4,173	36	0.9%
53.1%	4,131	4,137	6	0.1%
54.3%	4,094	4,131	37	0.9%
55.6%	4,079	4,121	42	1.0%
56.8%	4,074	4,102	28	0.7%
58.0%	4,064	4,101	36	0.9%
59.3%	4,058	4,094	36	0.9%
60.5%	4,046	4,074	28	0.7%
61.7%	4,014	4,065	51	1.3%
63.0%	4,008	4,058	50	1.3%
64.2%	3,983	4,034	52	1.3%
65.4%	3,972	4,031	59	1.5%
66.7%	3,931	4,031	100	2.5%
67.9%	3,927	3,986	59	1.5%
69.1%	3,920	3,974	55	1.4%
70.4%	3,888	3,954	66	1.7%
71.6%	3,847	3,943	96	2.5%
72.8%	3,814	3,905	91	2.4%
74.1%	3,814	3,902	87	2.3%
75.3%	3,797	3,889	91	2.4%
76.5%	3,783	3,843	60	1.6%
77.8%	3,749	3,838	89	2.4%
79.0%	3,730	3,758	28	0.8%
80.2%	3,670	3,741	72	2.0%
81.5%	3,592	3,708	116	3.2%
82.7%	3,468	3,647	179	5.2%
84.0%	3,242	3,380	138	4.3%
85.2%	3,175	3,262	87	2.7%
86.4%	3,099	3,177	78	2.5%
87.7%	3,007	3,087	80	2.7%
88.9%	2,836	2,989	154	5.4%
90.1%	2,742	2,938	196	7.2%
91.4%	2,588	2,832	244	9.4%
92.6%	2,566	2,699	133	5.2%
93.8%	2,432	2,665	233	9.6%
95.1%	2,187	2,487	300	13.7%
96.3%	1,875	2,234	358	19.1%
97.5%	1,847	2,059	212	11.5%
98.8%	1,733	2,055	323	18.6%
100.0%	1,626	1,942	316	19.4%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,552	4,552	0	0.0%
1.2%	4,552	4,552	0	0.0%
2.5%	4,552	4,552	0	0.0%
3.7%	4,552	4,552	0	0.0%
4.9%	4,552	4,552	0	0.0%
6.2%	4,552	4,552	0	0.0%
7.4%	4,552	4,552	0	0.0%
8.6%	4,552	4,552	0	0.0%
9.9%	4,552	4,552	0	0.0%
11.1%	4,552	4,552	0	0.0%
12.3%	4,552	4,552	0	0.0%
13.6%	4,552	4,552	0	0.0%
14.8%	4,552	4,552	0	0.0%
16.0%	4,552	4,552	0	0.0%
17.3%	4,552	4,552	0	0.0%
18.5%	4,552	4,552	0	0.0%
19.8%	4,552	4,552	0	0.0%
21.0%	4,552	4,552	0	0.0%
22.2%	4,552	4,552	0	0.0%
23.5%	4,552	4,552	0	0.0%
24.7%	4,552	4,552	0	0.0%
25.9%	4,552	4,552	0	0.0%
27.2%	4,552	4,552	0	0.0%
28.4%	4,552	4,552	0	0.0%
29.6%	4,552	4,552	0	0.0%
30.9%	4,552	4,552	0	0.0%
32.1%	4,552	4,549	-3	-0.1%
33.3%	4,552	4,541	-11	-0.2%
34.6%	4,545	4,523	-22	-0.5%
35.8%	4,532	4,521	-11	-0.2%
37.0%	4,501	4,519	18	0.4%
38.3%	4,492	4,509	18	0.4%
39.5%	4,488	4,486	-2	-0.1%
40.7%	4,482	4,483	1	0.0%
42.0%	4,455	4,479	24	0.5%
43.2%	4,443	4,467	24	0.5%
44.4%	4,432	4,437	5	0.1%
45.7%	4,415	4,406	-9	-0.2%
46.9%	4,354	4,391	37	0.9%
48.1%	4,292	4,340	48	1.1%
49.4%	4,286	4,322	35	0.8%
50.6%	4,266	4,316	50	1.2%
51.9%	4,224	4,312	88	2.1%
53.1%	4,182	4,302	119	2.9%
54.3%	4,163	4,254	91	2.2%
55.6%	4,162	4,219	58	1.4%
56.8%	4,160	4,187	27	0.6%
58.0%	4,138	4,181	43	1.0%
59.3%	4,128	4,167	39	0.9%
60.5%	4,072	4,156	83	2.0%
61.7%	4,028	4,138	110	2.7%
63.0%	4,006	4,100	94	2.4%
64.2%	3,962	4,032	70	1.8%
65.4%	3,913	4,026	113	2.9%
66.7%	3,838	4,020	181	4.7%
67.9%	3,785	4,018	233	6.2%
69.1%	3,777	3,967	190	5.0%
70.4%	3,738	3,797	59	1.6%
71.6%	3,725	3,747	21	0.6%
72.8%	3,649	3,732	83	2.3%
74.1%	3,641	3,708	67	1.8%
75.3%	3,629	3,684	55	1.5%
76.5%	3,624	3,641	17	0.5%
77.8%	3,621	3,637	16	0.4%
79.0%	3,606	3,601	-5	-0.1%
80.2%	3,534	3,597	63	1.8%
81.5%	3,470	3,563	93	2.7%
82.7%	3,441	3,451	10	0.3%
84.0%	3,197	3,347	150	4.7%
85.2%	3,144	3,300	156	5.0%
86.4%	3,073	3,294	221	7.2%
87.7%	3,065	3,220	155	5.0%
88.9%	3,007	3,186	179	5.9%
90.1%	2,898	2,881	-17	-0.6%
91.4%	2,392	2,760	368	15.4%
92.6%	2,281	2,679	398	17.4%
93.8%	2,258	2,497	239	10.6%
95.1%	1,943	2,338	395	20.3%
96.3%	1,928	2,303	375	19.5%
97.5%	1,925	2,183	258	13.4%
98.8%	1,767	2,172	405	22.9%
100.0%	1,540	1,843	303	19.7%

Table SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,500	4,500	0	0.0%
1.2%	4,500	4,500	0	0.0%
2.5%	4,500	4,473	-27	-0.6%
3.7%	4,500	4,451	-49	-1.1%
4.9%	4,500	4,438	-62	-1.4%
6.2%	4,500	4,429	-71	-1.6%
7.4%	4,500	4,423	-77	-1.7%
8.6%	4,500	4,421	-79	-1.7%
9.9%	4,467	4,421	-46	-1.0%
11.1%	4,467	4,410	-57	-1.3%
12.3%	4,466	4,391	-75	-1.7%
13.6%	4,442	4,379	-63	-1.4%
14.8%	4,422	4,376	-46	-1.0%
16.0%	4,351	4,358	7	0.2%
17.3%	4,350	4,352	2	0.0%
18.5%	4,343	4,324	-19	-0.4%
19.8%	4,340	4,321	-20	-0.5%
21.0%	4,334	4,320	-14	-0.3%
22.2%	4,330	4,313	-17	-0.4%
23.5%	4,322	4,306	-16	-0.4%
24.7%	4,289	4,297	9	0.2%
25.9%	4,274	4,286	13	0.3%
27.2%	4,252	4,260	8	0.2%
28.4%	4,245	4,255	10	0.2%
29.6%	4,238	4,246	7	0.2%
30.9%	4,224	4,243	19	0.5%
32.1%	4,205	4,243	38	0.9%
33.3%	4,194	4,241	46	1.1%
34.6%	4,191	4,236	45	1.1%
35.8%	4,182	4,234	52	1.2%
37.0%	4,167	4,233	66	1.6%
38.3%	4,086	4,233	147	3.6%
39.5%	4,046	4,171	125	3.1%
40.7%	4,042	4,166	124	3.1%
42.0%	4,038	4,164	126	3.1%
43.2%	4,006	4,141	135	3.4%
44.4%	3,996	4,123	127	3.2%
45.7%	3,969	4,122	153	3.9%
46.9%	3,964	4,119	155	3.9%
48.1%	3,894	4,113	218	5.6%
49.4%	3,882	4,044	162	4.2%
50.6%	3,842	4,043	201	5.2%
51.9%	3,821	4,019	198	5.2%
53.1%	3,816	4,016	200	5.2%
54.3%	3,771	4,008	237	6.3%
55.6%	3,767	3,965	199	5.3%
56.8%	3,752	3,948	196	5.2%
58.0%	3,747	3,885	137	3.7%
59.3%	3,733	3,869	136	3.6%
60.5%	3,719	3,867	148	4.0%
61.7%	3,648	3,857	210	5.8%
63.0%	3,637	3,836	199	5.5%
64.2%	3,635	3,773	139	3.8%
65.4%	3,560	3,742	182	5.1%
66.7%	3,474	3,693	219	6.3%
67.9%	3,473	3,613	140	4.0%
69.1%	3,434	3,603	169	4.9%
70.4%	3,428	3,551	123	3.6%
71.6%	3,419	3,521	103	3.0%
72.8%	3,367	3,460	92	2.7%
74.1%	3,293	3,451	158	4.8%
75.3%	3,280	3,442	161	4.9%
76.5%	3,225	3,396	171	5.3%
77.8%	3,200	3,336	136	4.2%
79.0%	3,163	3,327	164	5.2%
80.2%	3,131	3,244	112	3.6%
81.5%	3,060	3,207	146	4.8%
82.7%	3,019	3,196	176	5.8%
84.0%	2,896	3,076	180	6.2%
85.2%	2,864	3,059	195	6.8%
86.4%	2,753	3,009	256	9.3%
87.7%	2,698	2,989	291	10.8%
88.9%	2,649	2,742	93	3.5%
90.1%	2,626	2,673	46	1.8%
91.4%	2,109	2,538	429	20.3%
92.6%	1,880	2,138	257	13.7%
93.8%	1,760	2,124	364	20.7%
95.1%	1,750	2,098	349	19.9%
96.3%	1,649	2,008	359	21.8%
97.5%	1,586	1,940	354	22.3%
98.8%	1,251	1,704	453	36.2%
100.0%	1,219	1,479	260	21.3%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,150	4,150	0	0.0%
1.2%	4,150	4,150	0	0.0%
2.5%	4,150	4,150	0	0.0%
3.7%	4,150	4,150	0	0.0%
4.9%	4,150	4,047	-103	-2.5%
6.2%	4,150	4,027	-123	-3.0%
7.4%	4,150	4,016	-134	-3.2%
8.6%	4,114	4,016	-98	-2.4%
9.9%	4,103	3,995	-109	-2.6%
11.1%	4,042	3,992	-50	-1.2%
12.3%	4,029	3,983	-46	-1.1%
13.6%	4,028	3,952	-76	-1.9%
14.8%	3,998	3,936	-62	-1.6%
16.0%	3,977	3,924	-53	-1.3%
17.3%	3,977	3,919	-58	-1.5%
18.5%	3,956	3,898	-58	-1.5%
19.8%	3,934	3,893	-42	-1.1%
21.0%	3,905	3,888	-17	-0.4%
22.2%	3,902	3,880	-22	-0.6%
23.5%	3,849	3,866	18	0.5%
24.7%	3,767	3,846	78	2.1%
25.9%	3,736	3,814	78	2.1%
27.2%	3,722	3,805	83	2.2%
28.4%	3,714	3,801	87	2.4%
29.6%	3,704	3,797	93	2.5%
30.9%	3,700	3,766	66	1.8%
32.1%	3,648	3,740	91	2.5%
33.3%	3,636	3,704	68	1.9%
34.6%	3,618	3,687	68	1.9%
35.8%	3,592	3,672	80	2.2%
37.0%	3,534	3,631	96	2.7%
38.3%	3,517	3,630	113	3.2%
39.5%	3,469	3,620	151	4.4%
40.7%	3,419	3,607	188	5.5%
42.0%	3,416	3,586	170	5.0%
43.2%	3,408	3,582	174	5.1%
44.4%	3,405	3,581	176	5.2%
45.7%	3,399	3,568	169	5.0%
46.9%	3,393	3,559	166	4.9%
48.1%	3,382	3,554	172	5.1%
49.4%	3,372	3,552	180	5.3%
50.6%	3,323	3,520	197	5.9%
51.9%	3,307	3,517	210	6.3%
53.1%	3,280	3,507	227	6.9%
54.3%	3,263	3,491	228	7.0%
55.6%	3,253	3,396	143	4.4%
56.8%	3,251	3,390	139	4.3%
58.0%	3,200	3,374	174	5.4%
59.3%	3,197	3,369	172	5.4%
60.5%	3,176	3,355	179	5.6%
61.7%	3,147	3,330	183	5.8%
63.0%	3,125	3,307	182	5.8%
64.2%	3,118	3,212	94	3.0%
65.4%	3,105	3,200	95	3.1%
66.7%	2,985	3,166	182	6.1%
67.9%	2,914	3,063	149	5.1%
69.1%	2,875	3,063	187	6.5%
70.4%	2,866	3,057	191	6.7%
71.6%	2,850	3,051	201	7.1%
72.8%	2,816	2,999	183	6.5%
74.1%	2,773	2,963	190	6.8%
75.3%	2,768	2,943	175	6.3%
76.5%	2,767	2,942	175	6.3%
77.8%	2,760	2,933	172	6.2%
79.0%	2,706	2,897	191	7.1%
80.2%	2,654	2,879	225	8.5%
81.5%	2,595	2,741	146	5.6%
82.7%	2,583	2,671	88	3.4%
84.0%	2,371	2,648	277	11.7%
85.2%	2,334	2,635	301	12.9%
86.4%	2,328	2,562	233	10.0%
87.7%	2,221	2,485	264	11.9%
88.9%	2,104	2,332	228	10.8%
90.1%	2,088	2,220	132	6.3%
91.4%	1,695	2,182	487	28.7%
92.6%	1,573	1,767	194	12.3%
93.8%	1,509	1,699	190	12.6%
95.1%	1,467	1,658	190	13.0%
96.3%	1,172	1,605	434	37.0%
97.5%	1,123	1,489	365	32.5%
98.8%	800	1,238	437	54.7%
100.0%	737	1,125	389	52.7%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,700	3,700	0	0.0%
1.2%	3,700	3,700	0	0.0%
2.5%	3,700	3,700	0	0.0%
3.7%	3,700	3,700	0	0.0%
4.9%	3,700	3,700	0	0.0%
6.2%	3,700	3,700	0	0.0%
7.4%	3,700	3,700	0	0.0%
8.6%	3,700	3,700	0	0.0%
9.9%	3,700	3,694	-6	-0.2%
11.1%	3,700	3,688	-12	-0.3%
12.3%	3,700	3,681	-19	-0.5%
13.6%	3,700	3,680	-20	-0.5%
14.8%	3,700	3,616	-84	-2.3%
16.0%	3,688	3,606	-82	-2.2%
17.3%	3,641	3,601	-40	-1.1%
18.5%	3,634	3,600	-34	-0.9%
19.8%	3,625	3,592	-33	-0.9%
21.0%	3,577	3,587	10	0.3%
22.2%	3,575	3,582	7	0.2%
23.5%	3,570	3,552	-18	-0.5%
24.7%	3,499	3,536	37	1.1%
25.9%	3,429	3,517	88	2.6%
27.2%	3,386	3,514	127	3.8%
28.4%	3,384	3,492	109	3.2%
29.6%	3,350	3,483	133	4.0%
30.9%	3,343	3,479	136	4.1%
32.1%	3,302	3,474	172	5.2%
33.3%	3,301	3,455	154	4.7%
34.6%	3,299	3,425	126	3.8%
35.8%	3,298	3,415	117	3.5%
37.0%	3,285	3,402	118	3.6%
38.3%	3,220	3,381	161	5.0%
39.5%	3,197	3,357	160	5.0%
40.7%	3,122	3,351	229	7.3%
42.0%	3,113	3,325	212	6.8%
43.2%	3,087	3,296	209	6.8%
44.4%	3,085	3,254	169	5.5%
45.7%	3,074	3,243	169	5.5%
46.9%	3,073	3,227	154	5.0%
48.1%	3,031	3,227	196	6.5%
49.4%	3,024	3,226	202	6.7%
50.6%	3,007	3,202	195	6.5%
51.9%	2,966	3,200	234	7.9%
53.1%	2,936	3,193	257	8.8%
54.3%	2,924	3,149	226	7.7%
55.6%	2,917	3,088	171	5.9%
56.8%	2,908	3,063	155	5.3%
58.0%	2,908	3,052	144	5.0%
59.3%	2,904	3,030	126	4.4%
60.5%	2,904	3,020	116	4.0%
61.7%	2,883	3,017	134	4.7%
63.0%	2,869	3,016	147	5.1%
64.2%	2,764	2,973	209	7.5%
65.4%	2,741	2,906	165	6.0%
66.7%	2,728	2,893	165	6.1%
67.9%	2,719	2,762	43	1.6%
69.1%	2,647	2,757	109	4.1%
70.4%	2,610	2,738	128	4.9%
71.6%	2,594	2,705	111	4.3%
72.8%	2,561	2,698	137	5.3%
74.1%	2,558	2,690	133	5.2%
75.3%	2,495	2,683	188	7.6%
76.5%	2,466	2,673	207	8.4%
77.8%	2,416	2,627	211	8.7%
79.0%	2,402	2,593	191	8.0%
80.2%	2,304	2,566	262	11.4%
81.5%	2,300	2,524	224	9.7%
82.7%	2,196	2,394	198	9.0%
84.0%	2,179	2,381	202	9.3%
85.2%	2,101	2,366	265	12.6%
86.4%	2,012	2,279	267	13.2%
87.7%	1,940	2,194	254	13.1%
88.9%	1,836	2,051	215	11.7%
90.1%	1,662	1,931	268	16.1%
91.4%	1,504	1,929	425	28.3%
92.6%	1,286	1,499	213	16.5%
93.8%	1,268	1,429	161	12.7%
95.1%	944	1,203	258	27.4%
96.3%	803	1,200	397	49.5%
97.5%	794	1,191	397	49.9%
98.8%	627	953	326	52.0%
100.0%	550	844	294	53.4%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,400	3,400	0	0.0%
1.2%	3,400	3,400	0	0.0%
2.5%	3,400	3,400	0	0.0%
3.7%	3,400	3,400	0	0.0%
4.9%	3,400	3,400	0	0.0%
6.2%	3,362	3,400	38	1.1%
7.4%	3,347	3,400	53	1.6%
8.6%	3,335	3,393	58	1.7%
9.9%	3,330	3,368	38	1.2%
11.1%	3,288	3,354	66	2.0%
12.3%	3,288	3,351	63	1.9%
13.6%	3,283	3,338	56	1.7%
14.8%	3,214	3,321	108	3.3%
16.0%	3,211	3,320	108	3.4%
17.3%	3,200	3,262	62	1.9%
18.5%	3,200	3,256	56	1.7%
19.8%	3,198	3,243	44	1.4%
21.0%	3,187	3,228	41	1.3%
22.2%	3,180	3,220	39	1.2%
23.5%	3,167	3,210	44	1.4%
24.7%	3,139	3,208	69	2.2%
25.9%	3,127	3,207	81	2.6%
27.2%	3,112	3,204	92	3.0%
28.4%	3,099	3,200	101	3.2%
29.6%	3,095	3,200	105	3.4%
30.9%	3,091	3,200	109	3.5%
32.1%	3,070	3,200	130	4.2%
33.3%	3,068	3,184	117	3.8%
34.6%	3,042	3,180	138	4.5%
35.8%	3,041	3,174	133	4.4%
37.0%	3,040	3,170	130	4.3%
38.3%	3,013	3,154	140	4.7%
39.5%	3,013	3,143	130	4.3%
40.7%	3,013	3,140	127	4.2%
42.0%	3,004	3,134	130	4.3%
43.2%	2,979	3,107	128	4.3%
44.4%	2,960	3,085	125	4.2%
45.7%	2,929	3,082	154	5.2%
46.9%	2,921	3,080	158	5.4%
48.1%	2,891	3,044	153	5.3%
49.4%	2,875	3,008	133	4.6%
50.6%	2,869	2,991	122	4.3%
51.9%	2,860	2,982	122	4.2%
53.1%	2,851	2,979	127	4.5%
54.3%	2,849	2,974	125	4.4%
55.6%	2,848	2,973	125	4.4%
56.8%	2,804	2,968	164	5.8%
58.0%	2,802	2,954	152	5.4%
59.3%	2,798	2,950	152	5.5%
60.5%	2,788	2,897	110	3.9%
61.7%	2,730	2,867	137	5.0%
63.0%	2,672	2,867	195	7.3%
64.2%	2,660	2,722	61	2.3%
65.4%	2,655	2,712	57	2.1%
66.7%	2,637	2,709	72	2.7%
67.9%	2,553	2,673	119	4.7%
69.1%	2,527	2,668	141	5.6%
70.4%	2,507	2,634	127	5.1%
71.6%	2,489	2,611	122	4.9%
72.8%	2,460	2,592	132	5.4%
74.1%	2,395	2,556	161	6.7%
75.3%	2,395	2,514	119	5.0%
76.5%	2,360	2,510	151	6.4%
77.8%	2,355	2,450	96	4.1%
79.0%	2,309	2,440	131	5.7%
80.2%	2,277	2,373	96	4.2%
81.5%	2,191	2,346	154	7.0%
82.7%	2,183	2,314	131	6.0%
84.0%	2,163	2,244	80	3.7%
85.2%	2,044	2,216	172	8.4%
86.4%	1,899	2,208	309	16.3%
87.7%	1,880	2,118	238	12.6%
88.9%	1,796	1,998	202	11.3%
90.1%	1,619	1,872	254	15.7%
91.4%	1,471	1,803	332	22.6%
92.6%	1,167	1,355	188	16.1%
93.8%	1,117	1,336	218	19.6%
95.1%	783	1,062	279	35.7%
96.3%	777	1,013	237	30.5%
97.5%	658	982	324	49.2%
98.8%	597	932	335	56.0%
100.0%	567	725	159	28.0%

Figure SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

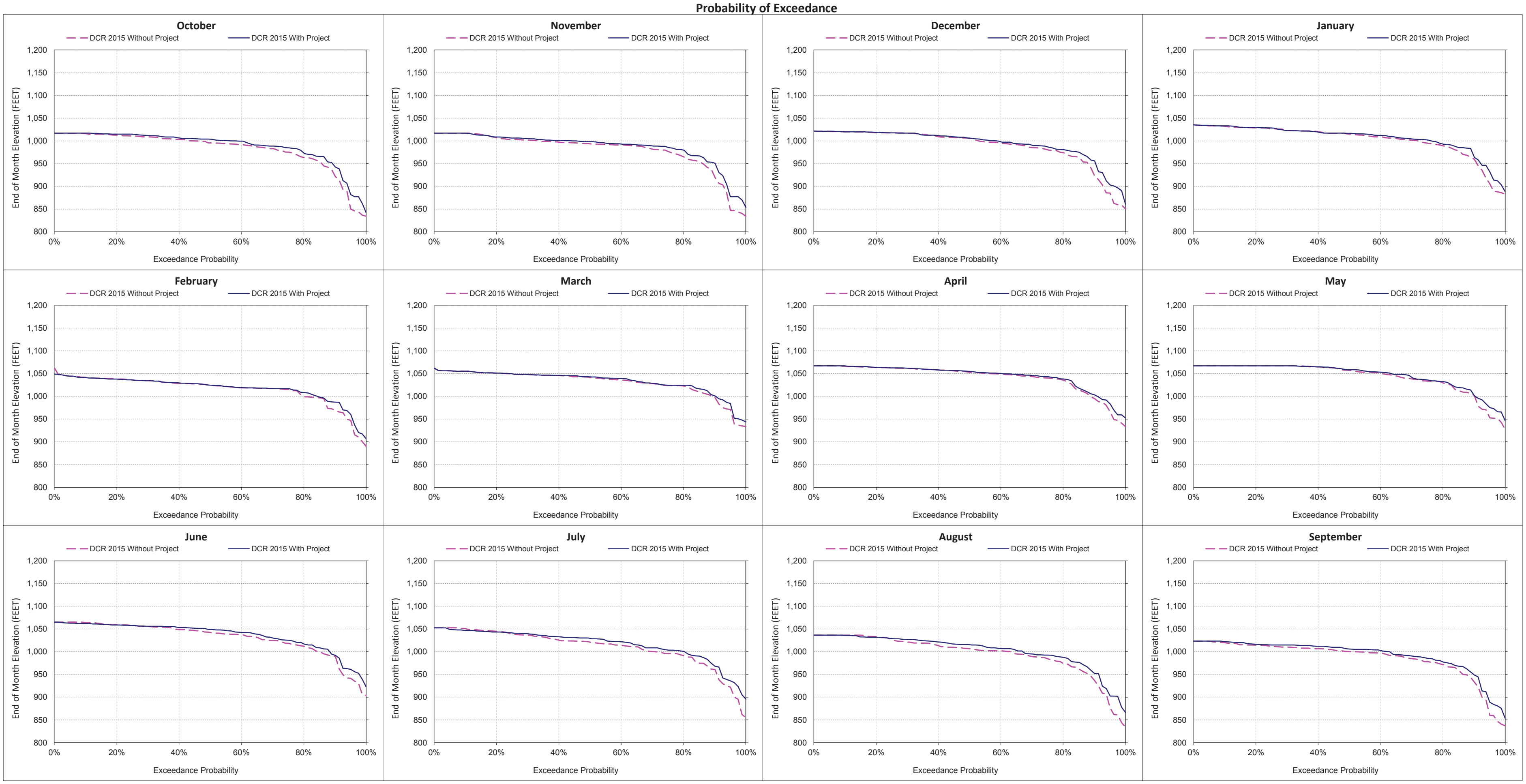


Table SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,017	1,017	0	0.0%
1.2%	1,017	1,017	0	0.0%
2.5%	1,017	1,017	0	0.0%
3.7%	1,017	1,017	0	0.0%
4.9%	1,017	1,017	0	0.0%
6.2%	1,017	1,017	0	0.0%
7.4%	1,017	1,017	0	0.0%
8.6%	1,017	1,017	0	0.0%
9.9%	1,016	1,017	1	0.1%
11.1%	1,015	1,017	2	0.2%
12.3%	1,015	1,017	2	0.2%
13.6%	1,015	1,016	2	0.2%
14.8%	1,015	1,016	1	0.1%
16.0%	1,015	1,015	1	0.1%
17.3%	1,014	1,015	1	0.1%
18.5%	1,013	1,015	2	0.2%
19.8%	1,013	1,015	2	0.2%
21.0%	1,012	1,015	3	0.3%
22.2%	1,011	1,015	3	0.3%
23.5%	1,011	1,015	3	0.3%
24.7%	1,011	1,015	4	0.4%
25.9%	1,011	1,015	4	0.4%
27.2%	1,010	1,013	3	0.3%
28.4%	1,009	1,012	3	0.3%
29.6%	1,009	1,012	3	0.3%
30.9%	1,009	1,011	3	0.3%
32.1%	1,008	1,011	3	0.3%
33.3%	1,008	1,011	3	0.3%
34.6%	1,005	1,009	4	0.4%
35.8%	1,005	1,009	4	0.4%
37.0%	1,004	1,008	4	0.4%
38.3%	1,004	1,008	5	0.5%
39.5%	1,003	1,007	4	0.4%
40.7%	1,003	1,006	3	0.3%
42.0%	1,003	1,005	3	0.3%
43.2%	1,000	1,005	5	0.5%
44.4%	1,000	1,005	5	0.5%
45.7%	1,000	1,004	5	0.5%
46.9%	1,000	1,004	4	0.4%
48.1%	999	1,004	5	0.5%
49.4%	996	1,004	8	0.8%
50.6%	996	1,004	8	0.8%
51.9%	995	1,002	7	0.7%
53.1%	995	1,001	6	0.6%
54.3%	994	1,001	7	0.7%
55.6%	994	1,001	7	0.7%
56.8%	993	1,000	7	0.7%
58.0%	993	1,000	7	0.7%
59.3%	992	1,000	8	0.8%
60.5%	992	1,000	8	0.8%
61.7%	990	996	6	0.6%
63.0%	989	993	4	0.4%
64.2%	988	991	3	0.3%
65.4%	986	991	5	0.5%
66.7%	986	990	4	0.4%
67.9%	984	989	5	0.5%
69.1%	983	989	6	0.6%
70.4%	983	989	6	0.6%
71.6%	980	988	8	0.9%
72.8%	979	988	8	0.9%
74.1%	975	985	10	1.0%
75.3%	975	985	9	1.0%
76.5%	973	983	10	1.1%
77.8%	969	983	13	1.4%
79.0%	965	980	14	1.5%
80.2%	963	972	9	0.9%
81.5%	963	970	8	0.8%
82.7%	961	970	9	0.9%
84.0%	958	966	8	0.9%
85.2%	955	966	11	1.2%
86.4%	945	966	21	2.2%
87.7%	942	954	11	1.2%
88.9%	937	953	15	1.6%
90.1%	921	942	21	2.3%
91.4%	914	938	25	2.7%
92.6%	893	913	20	2.2%
93.8%	890	907	17	1.9%
95.1%	850	882	32	3.8%
96.3%	846	877	31	3.7%
97.5%	844	877	33	4.0%
98.8%	837	862	25	3.0%
100.0%	834	842	8	1.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,017	1,017	0	0.0%
1.2%	1,017	1,017	0	0.0%
2.5%	1,017	1,017	0	0.0%
3.7%	1,017	1,017	0	0.0%
4.9%	1,017	1,017	0	0.0%
6.2%	1,017	1,017	0	0.0%
7.4%	1,017	1,017	0	0.0%
8.6%	1,017	1,017	0	0.0%
9.9%	1,017	1,017	0	0.0%
11.1%	1,017	1,017	0	0.0%
12.3%	1,017	1,015	-2	-0.2%
13.6%	1,015	1,013	-2	-0.2%
14.8%	1,015	1,013	-2	-0.2%
16.0%	1,013	1,013	0	0.0%
17.3%	1,012	1,011	-1	-0.1%
18.5%	1,009	1,009	0	0.0%
19.8%	1,008	1,009	1	0.1%
21.0%	1,005	1,008	3	0.3%
22.2%	1,005	1,008	3	0.3%
23.5%	1,004	1,008	4	0.4%
24.7%	1,004	1,007	3	0.3%
25.9%	1,004	1,007	3	0.3%
27.2%	1,003	1,006	4	0.3%
28.4%	1,002	1,006	4	0.4%
29.6%	1,002	1,005	3	0.3%
30.9%	1,001	1,005	3	0.3%
32.1%	1,001	1,004	3	0.3%
33.3%	1,001	1,003	3	0.3%
34.6%	999	1,003	4	0.4%
35.8%	999	1,002	3	0.3%
37.0%	999	1,002	3	0.3%
38.3%	998	1,001	3	0.3%
39.5%	998	1,001	3	0.3%
40.7%	997	1,001	4	0.4%
42.0%	997	1,001	4	0.4%
43.2%	996	1,001	4	0.4%
44.4%	996	1,000	4	0.4%
45.7%	996	1,000	4	0.5%
46.9%	995	999	4	0.4%
48.1%	994	999	4	0.4%
49.4%	994	998	4	0.4%
50.6%	993	998	5	0.5%
51.9%	993	998	5	0.5%
53.1%	992	996	4	0.4%
54.3%	992	996	3	0.3%
55.6%	992	994	2	0.2%
56.8%	992	994	2	0.2%
58.0%	991	994	2	0.2%
59.3%	991	994	2	0.2%
60.5%	991	993	2	0.2%
61.7%	991	993	2	0.2%
63.0%	990	992	2	0.2%
64.2%	989	992	3	0.3%
65.4%	989	991	2	0.2%
66.7%	988	991	3	0.3%
67.9%	985	990	5	0.5%
69.1%	984	990	6	0.6%
70.4%	981	989	7	0.8%
71.6%	981	988	7	0.7%
72.8%	980	988	8	0.9%
74.1%	980	988	8	0.8%
75.3%	976	985	9	0.9%
76.5%	973	984	11	1.1%
77.8%	971	981	10	1.1%
79.0%	968	981	13	1.3%
80.2%	965	980	15	1.6%
81.5%	960	970	11	1.1%
82.7%	958	967	10	1.0%
84.0%	957	967	11	1.1%
85.2%	954	967	13	1.3%
86.4%	949	963	14	1.5%
87.7%	942	954	12	1.3%
88.9%	938	953	15	1.6%
90.1%	919	951	31	3.4%
91.4%	907	931	24	2.7%
92.6%	904	924	20	2.2%
93.8%	886	904	18	2.0%
95.1%	847	877	30	3.6%
96.3%	847	877	31	3.6%
97.5%	844	877	34	4.0%
98.8%	840	870	29	3.5%
100.0%	834	854	20	2.4%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,022	1,022	0	0.0%
1.2%	1,021	1,021	0	0.0%
2.5%	1,021	1,021	0	0.0%
3.7%	1,021	1,021	0	0.0%
4.9%	1,021	1,021	0	0.0%
6.2%	1,021	1,021	0	0.0%
7.4%	1,021	1,021	0	0.0%
8.6%	1,020	1,021	0	0.0%
9.9%	1,020	1,020	0	0.0%
11.1%	1,020	1,020	0	0.0%
12.3%	1,020	1,020	0	0.0%
13.6%	1,020	1,020	0	0.0%
14.8%	1,020	1,020	0	0.0%
16.0%	1,020	1,020	0	0.0%
17.3%	1,019	1,020	0	0.0%
18.5%	1,019	1,019	1	0.1%
19.8%	1,018	1,019	0	0.0%
21.0%	1,018	1,019	1	0.1%
22.2%	1,018	1,018	0	0.0%
23.5%	1,018	1,018	0	0.0%
24.7%	1,018	1,018	0	0.0%
25.9%	1,018	1,018	0	0.0%
27.2%	1,018	1,017	0	0.0%
28.4%	1,018	1,017	0	0.0%
29.6%	1,017	1,017	0	0.0%
30.9%	1,017	1,017	0	0.0%
32.1%	1,017	1,017	0	0.0%
33.3%	1,015	1,016	1	0.1%
34.6%	1,015	1,013	-2	-0.2%
35.8%	1,014	1,013	-2	-0.2%
37.0%	1,012	1,013	0	0.0%
38.3%	1,012	1,013	1	0.1%
39.5%	1,010	1,012	2	0.2%
40.7%	1,008	1,011	3	0.3%
42.0%	1,008	1,011	2	0.2%
43.2%	1,008	1,010	2	0.2%
44.4%	1,008	1,009	1	0.1%
45.7%	1,007	1,009	1	0.1%
46.9%	1,007	1,008	1	0.1%
48.1%	1,007	1,008	2	0.2%
49.4%	1,006	1,006	0	0.0%
50.6%	1,005	1,006	1	0.1%
51.9%	1,002	1,004	3	0.3%
53.1%	1,000	1,004	4	0.4%
54.3%	998	1,002	4	0.4%
55.6%	997	1,002	4	0.4%
56.8%	997	1,000	3	0.3%
58.0%	997	1,000	3	0.3%
59.3%	996	999	3	0.3%
60.5%	994	997	3	0.3%
61.7%	994	997	3	0.3%
63.0%	993	997	4	0.4%
64.2%	992	994	2	0.2%
65.4%	992	994	2	0.2%
66.7%	991	993	3	0.3%
67.9%	989	993	3	0.4%
69.1%	986	992	6	0.6%
70.4%	985	990	5	0.5%
71.6%	985	990	5	0.5%
72.8%	984	989	6	0.6%
74.1%	982	989	6	0.7%
75.3%	980	987	7	0.7%
76.5%	979	985	6	0.6%
77.8%	979	982	3	0.3%
79.0%	975	981	6	0.7%
80.2%	974	981	7	0.7%
81.5%	969	979	10	1.1%
82.7%	966	977	11	1.1%
84.0%	966	977	11	1.2%
85.2%	964	975	11	1.2%
86.4%	954	970	16	1.7%
87.7%	953	966	13	1.3%
88.9%	941	958	17	1.8%
90.1%	923	956	33	3.6%
91.4%	915	932	18	1.9%
92.6%	903	930	27	3.0%
93.8%	886	912	27	3.0%
95.1%	885	903	18	2.0%
96.3%	863	901	38	4.4%
97.5%	860	897	37	4.3%
98.8%	859	890	31	3.6%
100.0%	851	861	10	1.2%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,035	1,035	0	0.0%
1.2%	1,034	1,035	1	0.1%
2.5%	1,034	1,034	0	0.0%
3.7%	1,034	1,034	0	0.0%
4.9%	1,033	1,034	1	0.1%
6.2%	1,033	1,034	1	0.1%
7.4%	1,033	1,033	0	0.0%
8.6%	1,033	1,033	0	0.0%
9.9%	1,032	1,033	1	0.1%
11.1%	1,031	1,033	2	0.2%
12.3%	1,030	1,033	2	0.2%
13.6%	1,030	1,032	2	0.2%
14.8%	1,030	1,030	0	0.0%
16.0%	1,030	1,030	0	0.0%
17.3%	1,030	1,030	0	0.0%
18.5%	1,029	1,030	1	0.1%
19.8%	1,029	1,030	1	0.1%
21.0%	1,028	1,029	1	0.1%
22.2%	1,028	1,029	1	0.1%
23.5%	1,028	1,028	0	0.0%
24.7%	1,027	1,028	2	0.2%
25.9%	1,027	1,028	2	0.2%
27.2%	1,026	1,026	0	0.0%
28.4%	1,026	1,025	-1	-0.1%
29.6%	1,023	1,023	0	0.0%
30.9%	1,023	1,023	0	0.0%
32.1%	1,023	1,022	0	0.0%
33.3%	1,022	1,022	0	0.0%
34.6%	1,022	1,022	0	0.0%
35.8%	1,022	1,022	0	0.0%
37.0%	1,022	1,022	0	0.0%
38.3%	1,022	1,021	-1	-0.1%
39.5%	1,021	1,020	-1	-0.1%
40.7%	1,020	1,018	-1	-0.1%
42.0%	1,018	1,017	0	0.0%
43.2%	1,017	1,017	0	0.0%
44.4%	1,017	1,017	0	0.0%
45.7%	1,017	1,017	0	0.0%
46.9%	1,017	1,017	0	0.0%
48.1%	1,017	1,017	0	0.0%
49.4%	1,015	1,017	1	0.1%
50.6%	1,015	1,017	2	0.2%
51.9%	1,014	1,016	3	0.2%
53.1%	1,013	1,015	2	0.2%
54.3%	1,013	1,015	2	0.2%
55.6%	1,011	1,015	4	0.4%
56.8%	1,010	1,015	4	0.4%
58.0%	1,009	1,013	4	0.4%
59.3%	1,009	1,012	3	0.3%
60.5%	1,009	1,012	3	0.3%
61.7%	1,007	1,012	5	0.4%
63.0%	1,006	1,010	4	0.4%
64.2%	1,006	1,009	3	0.3%
65.4%	1,005	1,007	3	0.3%
66.7%	1,004	1,006	3	0.3%
67.9%	1,003	1,006	2	0.2%
69.1%	1,002	1,005	3	0.3%
70.4%	1,001	1,004	3	0.3%
71.6%	1,001	1,003	3	0.3%
72.8%	998	1,003	5	0.5%
74.1%	996	1,003	6	0.6%
75.3%	995	1,002	7	0.7%
76.5%	994	999	6	0.6%
77.8%	992	998	6	0.6%
79.0%	991	995	4	0.4%
80.2%	989	993	4	0.4%
81.5%	988	992	4	0.4%
82.7%	984	991	7	0.7%
84.0%	980	988	8	0.8%
85.2%	978	985	7	0.7%
86.4%	970	985	15	1.5%
87.7%	969	984	16	1.6%
88.9%	965	984	19	2.0%
90.1%	960	964	4	0.4%
91.4%	945	959	13	1.4%
92.6%	935	947	11	1.2%
93.8%	918	946	28	3.0%
95.1%	906	932	26	2.9%
96.3%	889	914	25	2.8%
97.5%	888	912	24	2.7%
98.8%	886	904	18	2.0%
100.0%	883	889	6	0.7%

Table SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,063	1,049	-14	-1.3%
1.2%	1,048	1,048	0	0.0%
2.5%	1,047	1,047	0	0.0%
3.7%	1,045	1,045	0	0.0%
4.9%	1,044	1,044	0	0.0%
6.2%	1,044	1,044	0	0.0%
7.4%	1,044	1,042	-2	-0.2%
8.6%	1,042	1,042	0	0.0%
9.9%	1,042	1,041	0	0.0%
11.1%	1,040	1,040	0	0.0%
12.3%	1,040	1,040	0	0.0%
13.6%	1,040	1,040	0	0.0%
14.8%	1,040	1,039	-1	-0.1%
16.0%	1,039	1,039	0	0.0%
17.3%	1,039	1,038	-1	-0.1%
18.5%	1,039	1,038	-1	-0.1%
19.8%	1,038	1,038	0	0.0%
21.0%	1,038	1,038	0	0.0%
22.2%	1,038	1,037	-1	-0.1%
23.5%	1,037	1,037	0	0.0%
24.7%	1,036	1,036	0	0.0%
25.9%	1,035	1,035	0	0.0%
27.2%	1,035	1,035	0	0.0%
28.4%	1,034	1,035	0	0.0%
29.6%	1,034	1,034	0	0.0%
30.9%	1,034	1,034	0	0.0%
32.1%	1,034	1,034	0	0.0%
33.3%	1,034	1,033	0	0.0%
34.6%	1,031	1,032	1	0.1%
35.8%	1,031	1,031	0	0.0%
37.0%	1,030	1,031	0	0.0%
38.3%	1,029	1,030	1	0.1%
39.5%	1,028	1,030	2	0.2%
40.7%	1,028	1,029	1	0.1%
42.0%	1,028	1,029	1	0.1%
43.2%	1,028	1,028	1	0.1%
44.4%	1,027	1,028	0	0.0%
45.7%	1,027	1,028	0	0.0%
46.9%	1,027	1,027	0	0.0%
48.1%	1,026	1,026	0	0.0%
49.4%	1,025	1,025	0	0.0%
50.6%	1,024	1,024	0	0.0%
51.9%	1,023	1,024	1	0.1%
53.1%	1,023	1,024	1	0.1%
54.3%	1,022	1,022	0	0.0%
55.6%	1,021	1,022	0	0.0%
56.8%	1,020	1,021	1	0.1%
58.0%	1,020	1,020	0	0.0%
59.3%	1,019	1,019	0	0.0%
60.5%	1,019	1,019	0	0.0%
61.7%	1,019	1,019	0	0.0%
63.0%	1,018	1,019	0	0.0%
64.2%	1,018	1,019	0	0.0%
65.4%	1,018	1,018	0	0.0%
66.7%	1,017	1,018	1	0.1%
67.9%	1,017	1,018	1	0.1%
69.1%	1,017	1,017	0	0.0%
70.4%	1,017	1,017	0	0.0%
71.6%	1,017	1,017	0	0.0%
72.8%	1,016	1,017	1	0.1%
74.1%	1,015	1,017	2	0.2%
75.3%	1,015	1,017	2	0.2%
76.5%	1,012	1,014	2	0.2%
77.8%	1,012	1,013	1	0.1%
79.0%	1,004	1,009	5	0.5%
80.2%	999	1,008	10	1.0%
81.5%	999	1,007	8	0.8%
82.7%	998	1,004	6	0.6%
84.0%	997	1,001	4	0.4%
85.2%	997	998	1	0.1%
86.4%	995	996	1	0.1%
87.7%	974	989	15	1.6%
88.9%	973	988	15	1.6%
90.1%	969	987	18	1.8%
91.4%	965	987	21	2.2%
92.6%	964	970	6	0.6%
93.8%	950	969	19	2.0%
95.1%	947	960	13	1.4%
96.3%	916	937	21	2.3%
97.5%	911	920	10	1.1%
98.8%	900	917	17	1.8%
100.0%	890	907	16	1.8%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,062	1,062	0	0.0%
1.2%	1,057	1,057	0	0.0%
2.5%	1,056	1,056	0	0.0%
3.7%	1,056	1,056	0	0.0%
4.9%	1,056	1,056	0	0.0%
6.2%	1,055	1,055	0	0.0%
7.4%	1,055	1,055	0	0.0%
8.6%	1,055	1,055	0	0.0%
9.9%	1,055	1,055	0	0.0%
11.1%	1,055	1,055	0	0.0%
12.3%	1,054	1,054	0	0.0%
13.6%	1,053	1,053	0	0.0%
14.8%	1,052	1,053	1	0.1%
16.0%	1,052	1,052	0	0.0%
17.3%	1,051	1,052	0	0.0%
18.5%	1,051	1,051	0	0.0%
19.8%	1,051	1,051	0	0.0%
21.0%	1,051	1,051	0	0.0%
22.2%	1,050	1,050	0	0.0%
23.5%	1,050	1,050	0	0.0%
24.7%	1,050	1,050	0	0.0%
25.9%	1,048	1,048	0	0.0%
27.2%	1,048	1,048	0	0.0%
28.4%	1,048	1,048	0	0.0%
29.6%	1,048	1,048	0	0.0%
30.9%	1,048	1,048	0	0.0%
32.1%	1,047	1,047	0	0.0%
33.3%	1,047	1,047	1	0.1%
34.6%	1,046	1,047	0	0.0%
35.8%	1,046	1,047	0	0.0%
37.0%	1,046	1,046	0	0.0%
38.3%	1,046	1,046	0	0.0%
39.5%	1,046	1,046	0	0.0%
40.7%	1,045	1,046	0	0.0%
42.0%	1,045	1,046	0	0.0%
43.2%	1,045	1,045	0	0.0%
44.4%	1,043	1,045	2	0.2%
45.7%	1,043	1,045	2	0.2%
46.9%	1,043	1,044	1	0.1%
48.1%	1,043	1,043	0	0.0%
49.4%	1,042	1,043	1	0.1%
50.6%	1,040	1,043	2	0.2%
51.9%	1,040	1,043	3	0.3%
53.1%	1,040	1,042	2	0.2%
54.3%	1,039	1,040	2	0.2%
55.6%	1,038	1,040	3	0.2%
56.8%	1,037	1,040	3	0.3%
58.0%	1,037	1,040	3	0.3%
59.3%	1,036	1,039	3	0.3%
60.5%	1,036	1,039	3	0.3%
61.7%	1,035	1,039	4	0.3%
63.0%	1,034	1,036	2	0.2%
64.2%	1,032	1,035	3	0.3%
65.4%	1,031	1,032	1	0.1%
66.7%	1,030	1,031	2	0.2%
67.9%	1,029	1,030	0	0.0%
69.1%	1,028	1,029	1	0.1%
70.4%	1,028	1,029	1	0.1%
71.6%	1,027	1,028	1	0.1%
72.8%	1,025	1,025	0	0.0%
74.1%	1,024	1,025	1	0.1%
75.3%	1,024	1,024	0	0.0%
76.5%	1,024	1,024	0	0.0%
77.8%	1,024	1,024	0	0.0%
79.0%	1,024	1,024	1	0.1%
80.2%	1,023	1,024	1	0.1%
81.5%	1,020	1,024	4	0.4%
82.7%	1,015	1,023	8	0.8%
84.0%	1,012	1,018	6	0.6%
85.2%	1,010	1,016	7	0.6%
86.4%	1,007	1,015	8	0.8%
87.7%	1,004	1,012	8	0.8%
88.9%	1,002	1,004	2	0.2%
90.1%	997	1,001	4	0.4%
91.4%	983	995	11	1.2%
92.6%	975	993	18	1.8%
93.8%	972	987	15	1.5%
95.1%	971	984	13	1.4%
96.3%	939	952	13	1.4%
97.5%	937	950	14	1.4%
98.8%	935	948	13	1.4%
100.0%	934	944	10	1.1%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,066	1,067	1	0.1%
11.1%	1,065	1,066	1	0.1%
12.3%	1,065	1,066	1	0.1%
13.6%	1,065	1,066	0	0.0%
14.8%	1,065	1,066	1	0.1%
16.0%	1,064	1,065	1	0.1%
17.3%	1,064	1,065	1	0.1%
18.5%	1,064	1,064	1	0.1%
19.8%	1,064	1,064	0	0.0%
21.0%	1,063	1,064	0	0.0%
22.2%	1,063	1,063	0	0.0%
23.5%	1,063	1,063	0	0.0%
24.7%	1,063	1,063	0	0.0%
25.9%	1,062	1,063	0	0.0%
27.2%	1,062	1,062	1	0.1%
28.4%	1,062	1,062	1	0.1%
29.6%	1,061	1,062	0	0.0%
30.9%	1,061	1,061	0	0.0%
32.1%	1,061	1,061	0	0.0%
33.3%	1,059	1,061	1	0.1%
34.6%	1,059	1,060	1	0.1%
35.8%	1,059	1,059	0	0.0%
37.0%	1,059	1,059	0	0.0%
38.3%	1,059	1,058	-1	-0.1%
39.5%	1,058	1,058	1	0.1%
40.7%	1,058	1,058	0	0.0%
42.0%	1,058	1,058	0	0.0%
43.2%	1,057	1,058	0	0.0%
44.4%	1,057	1,057	0	0.0%
45.7%	1,056	1,057	1	0.1%
46.9%	1,056	1,056	1	0.0%
48.1%	1,055	1,056	1	0.1%
49.4%	1,053	1,055	2	0.1%
50.6%	1,053	1,054	2	0.2%
51.9%	1,052	1,053	1	0.1%
53.1%	1,052	1,052	0	0.0%
54.3%	1,051	1,052	1	0.1%
55.6%	1,050	1,052	2	0.1%
56.8%	1,050	1,051	1	0.1%
58.0%	1,050	1,051	1	0.1%
59.3%	1,049	1,051	1	0.1%
60.5%	1,049	1,050	1	0.1%
61.7%	1,048	1,050	2	0.2%
63.0%	1,048	1,049	2	0.2%
64.2%	1,047	1,048	2	0.2%
65.4%	1,046	1,048	2	0.2%
66.7%	1,045	1,048	4	0.3%
67.9%	1,045	1,047	2	0.2%
69.1%	1,044	1,046	2	0.2%
70.4%	1,043	1,046	2	0.2%
71.6%	1,042	1,045	3	0.3%
72.8%	1,041	1,044	3	0.3%
74.1%	1,041	1,044	3	0.3%
75.3%	1,040	1,043	3	0.3%
76.5%	1,039	1,042	2	0.2%
77.8%	1,038	1,041	3	0.3%
79.0%	1,038	1,039	1	0.1%
80.2%	1,035	1,038	3	0.3%
81.5%	1,032	1,037	5	0.5%
82.7%	1,026	1,034	8	0.8%
84.0%	1,017	1,023	6	0.6%
85.2%	1,014	1,017	4	0.4%
86.4%	1,010	1,014	3	0.3%
87.7%	1,006	1,010	3	0.3%
88.9%	999	1,006	7	0.7%
90.1%	995	1,003	9	0.9%
91.4%	988	999	11	1.1%
92.6%	987	993	6	0.6%
93.8%	980	991	11	1.1%
95.1%	966	983	17	1.8%
96.3%	949	969	20	2.1%
97.5%	947	959	12	1.3%
98.8%	941	959	18	1.9%
100.0%	934	953	19	2.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,067	1,067	0	0.0%
12.3%	1,067	1,067	0	0.0%
13.6%	1,067	1,067	0	0.0%
14.8%	1,067	1,067	0	0.0%
16.0%	1,067	1,067	0	0.0%
17.3%	1,067	1,067	0	0.0%
18.5%	1,067	1,067	0	0.0%
19.8%	1,067	1,067	0	0.0%
21.0%	1,067	1,067	0	0.0%
22.2%	1,067	1,067	0	0.0%
23.5%	1,067	1,067	0	0.0%
24.7%	1,067	1,067	0	0.0%
25.9%	1,067	1,067	0	0.0%
27.2%	1,067	1,067	0	0.0%
28.4%	1,067	1,067	0	0.0%
29.6%	1,067	1,067	0	0.0%
30.9%	1,067	1,067	0	0.0%
32.1%	1,067	1,067	0	0.0%
33.3%	1,067	1,067	0	0.0%
34.6%	1,067	1,066	-1	-0.1%
35.8%	1,066	1,066	0	0.0%
37.0%	1,065	1,066	1	0.1%
38.3%	1,065	1,065	1	0.1%
39.5%	1,065	1,065	0	0.0%
40.7%	1,065	1,065	0	0.0%
42.0%	1,064	1,064	1	0.1%
43.2%	1,063	1,064	1	0.1%
44.4%	1,063	1,063	0	0.0%
45.7%	1,062	1,062	0	0.0%
46.9%	1,060	1,061	1	0.1%
48.1%	1,058	1,059	2	0.2%
49.4%	1,058	1,059	1	0.1%
50.6%	1,057	1,059	2	0.2%
51.9%	1,055	1,058	3	0.3%
53.1%	1,054	1,058	4	0.4%
54.3%	1,053	1,056	3	0.3%
55.6%	1,053	1,055	2	0.2%
56.8%	1,053	1,054	1	0.1%
58.0%	1,052	1,054	2	0.1%
59.3%	1,052	1,053	1	0.1%
60.5%	1,050	1,053	3	0.3%
61.7%	1,048	1,052	4	0.4%
63.0%	1,047	1,051	3	0.3%
64.2%	1,046	1,048	2	0.2%
65.4%	1,044	1,048	4	0.4%
66.7%	1,041	1,048	6	0.6%
67.9%	1,040	1,048	8	0.8%
69.1%	1,039	1,046	7	0.7%
70.4%	1,038	1,040	2	0.2%
71.6%	1,037	1,038	1	0.1%
72.8%	1,034	1,038	3	0.3%
74.1%	1,034	1,037	3	0.3%
75.3%	1,033	1,036	2	0.2%
76.5%	1,033	1,034	1	0.1%
77.8%	1,033	1,034	1	0.1%
79.0%	1,032	1,032	0	0.0%
80.2%	1,029	1,032	3	0.3%
81.5%	1,026	1,031	4	0.4%
82.7%	1,025	1,026	0	0.0%
84.0%	1,015	1,021	7	0.6%
85.2%	1,012	1,019	7	0.7%
86.4%	1,009	1,019	10	1.0%
87.7%	1,009	1,016	7	0.7%
88.9%	1,006	1,014	8	0.8%
90.1%	1,002	1,001	-1	-0.1%
91.4%	978	996	18	1.8%
92.6%	972	992	20	2.1%
93.8%	970	984	14	1.4%
95.1%	953	975	22	2.3%
96.3%	952	973	21	2.2%
97.5%	952	966	15	1.5%
98.8%	943	966	23	2.4%
100.0%	927	947	20	2.1%

Table SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,065	1,065	0	0.0%
1.2%	1,065	1,065	0	0.0%
2.5%	1,065	1,064	-1	-0.1%
3.7%	1,065	1,063	-2	-0.2%
4.9%	1,065	1,063	-2	-0.2%
6.2%	1,065	1,063	-3	-0.2%
7.4%	1,065	1,062	-3	-0.3%
8.6%	1,065	1,062	-3	-0.3%
9.9%	1,064	1,062	-2	-0.2%
11.1%	1,064	1,062	-2	-0.2%
12.3%	1,064	1,061	-3	-0.3%
13.6%	1,063	1,061	-2	-0.2%
14.8%	1,062	1,061	-2	-0.2%
16.0%	1,060	1,060	0	0.0%
17.3%	1,060	1,060	0	0.0%
18.5%	1,060	1,059	-1	-0.1%
19.8%	1,059	1,059	-1	-0.1%
21.0%	1,059	1,059	-1	0.0%
22.2%	1,059	1,058	-1	-0.1%
23.5%	1,059	1,058	-1	-0.1%
24.7%	1,058	1,058	0	0.0%
25.9%	1,057	1,058	0	0.0%
27.2%	1,056	1,057	0	0.0%
28.4%	1,056	1,056	0	0.0%
29.6%	1,056	1,056	0	0.0%
30.9%	1,055	1,056	1	0.1%
32.1%	1,055	1,056	1	0.1%
33.3%	1,054	1,056	2	0.2%
34.6%	1,054	1,056	2	0.2%
35.8%	1,054	1,056	2	0.2%
37.0%	1,053	1,056	2	0.2%
38.3%	1,050	1,056	5	0.5%
39.5%	1,049	1,053	4	0.4%
40.7%	1,049	1,053	4	0.4%
42.0%	1,049	1,053	4	0.4%
43.2%	1,047	1,052	5	0.5%
44.4%	1,047	1,052	5	0.4%
45.7%	1,046	1,052	5	0.5%
46.9%	1,046	1,052	6	0.5%
48.1%	1,043	1,051	8	0.7%
49.4%	1,043	1,049	6	0.6%
50.6%	1,042	1,049	7	0.7%
51.9%	1,041	1,048	7	0.7%
53.1%	1,041	1,048	7	0.7%
54.3%	1,039	1,048	8	0.8%
55.6%	1,039	1,046	7	0.7%
56.8%	1,038	1,045	7	0.7%
58.0%	1,038	1,043	5	0.5%
59.3%	1,038	1,043	5	0.5%
60.5%	1,037	1,043	5	0.5%
61.7%	1,034	1,042	8	0.8%
63.0%	1,034	1,041	8	0.7%
64.2%	1,034	1,039	6	0.5%
65.4%	1,030	1,038	8	0.7%
66.7%	1,027	1,036	10	0.9%
67.9%	1,027	1,033	6	0.6%
69.1%	1,025	1,032	7	0.7%
70.4%	1,025	1,030	5	0.5%
71.6%	1,024	1,029	4	0.4%
72.8%	1,022	1,026	4	0.4%
74.1%	1,019	1,026	7	0.7%
75.3%	1,018	1,025	7	0.7%
76.5%	1,016	1,023	7	0.7%
77.8%	1,015	1,021	6	0.6%
79.0%	1,013	1,020	7	0.7%
80.2%	1,012	1,017	5	0.5%
81.5%	1,009	1,015	6	0.6%
82.7%	1,007	1,015	8	0.8%
84.0%	1,002	1,009	8	0.8%
85.2%	1,000	1,009	8	0.8%
86.4%	995	1,006	11	1.1%
87.7%	993	1,006	13	1.3%
88.9%	991	995	4	0.4%
90.1%	990	992	2	0.2%
91.4%	962	986	24	2.5%
92.6%	949	964	15	1.5%
93.8%	942	963	21	2.2%
95.1%	942	961	20	2.1%
96.3%	935	956	21	2.2%
97.5%	931	952	22	2.3%
98.8%	906	939	33	3.6%
100.0%	904	923	19	2.1%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,053	1,053	0	0.0%
1.2%	1,053	1,053	0	0.0%
2.5%	1,053	1,053	0	0.0%
3.7%	1,053	1,053	0	0.0%
4.9%	1,053	1,049	-4	-0.4%
6.2%	1,053	1,048	-4	-0.4%
7.4%	1,053	1,048	-5	-0.5%
8.6%	1,051	1,048	-4	-0.3%
9.9%	1,051	1,047	-4	-0.4%
11.1%	1,049	1,047	-2	-0.2%
12.3%	1,048	1,047	-2	-0.2%
13.6%	1,048	1,046	-3	-0.3%
14.8%	1,047	1,045	-2	-0.2%
16.0%	1,046	1,045	-2	-0.2%
17.3%	1,046	1,044	-2	-0.2%
18.5%	1,046	1,044	-2	-0.2%
19.8%	1,045	1,043	-1	-0.1%
21.0%	1,044	1,043	-1	-0.1%
22.2%	1,044	1,043	-1	-0.1%
23.5%	1,042	1,042	1	0.1%
24.7%	1,039	1,042	3	0.3%
25.9%	1,038	1,041	3	0.3%
27.2%	1,037	1,040	3	0.3%
28.4%	1,037	1,040	3	0.3%
29.6%	1,037	1,040	3	0.3%
30.9%	1,036	1,039	2	0.2%
32.1%	1,034	1,038	4	0.4%
33.3%	1,034	1,037	3	0.3%
34.6%	1,033	1,036	3	0.3%
35.8%	1,032	1,035	3	0.3%
37.0%	1,029	1,033	4	0.4%
38.3%	1,028	1,033	5	0.5%
39.5%	1,026	1,033	7	0.6%
40.7%	1,024	1,032	8	0.8%
42.0%	1,024	1,031	7	0.7%
43.2%	1,024	1,031	8	0.7%
44.4%	1,024	1,031	8	0.7%
45.7%	1,023	1,031	7	0.7%
46.9%	1,023	1,030	7	0.7%
48.1%	1,023	1,030	7	0.7%
49.4%	1,022	1,030	8	0.8%
50.6%	1,020	1,029	9	0.8%
51.9%	1,019	1,029	9	0.9%
53.1%	1,018	1,028	10	1.0%
54.3%	1,017	1,027	10	1.0%
55.6%	1,017	1,023	6	0.6%
56.8%	1,017	1,023	6	0.6%
58.0%	1,015	1,022	8	0.7%
59.3%	1,015	1,022	7	0.7%
60.5%	1,014	1,021	8	0.8%
61.7%	1,012	1,020	8	0.8%
63.0%	1,011	1,019	8	0.8%
64.2%	1,011	1,015	4	0.4%
65.4%	1,011	1,015	4	0.4%
66.7%	1,005	1,013	8	0.8%
67.9%	1,002	1,009	6	0.6%
69.1%	1,001	1,009	8	0.8%
70.4%	1,000	1,009	8	0.8%
71.6%	1,000	1,008	9	0.9%
72.8%	998	1,006	8	0.8%
74.1%	996	1,004	8	0.8%
75.3%	996	1,004	8	0.8%
76.5%	996	1,004	8	0.8%
77.8%	996	1,003	7	0.8%
79.0%	993	1,002	8	0.8%
80.2%	991	1,001	10	1.0%
81.5%	988	995	6	0.6%
82.7%	988	992	4	0.4%
84.0%	977	991	14	1.4%
85.2%	975	990	15	1.6%
86.4%	974	987	13	1.3%
87.7%	968	983	15	1.5%
88.9%	962	975	13	1.3%
90.1%	961	968	7	0.8%
91.4%	938	966	28	2.9%
92.6%	930	943	13	1.4%
93.8%	925	939	14	1.5%
95.1%	922	936	14	1.5%
96.3%	900	932	32	3.5%
97.5%	895	924	28	3.1%
98.8%	862	905	43	5.0%
100.0%	855	896	40	4.7%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,036	1,036	0	0.0%
1.2%	1,036	1,036	0	0.0%
2.5%	1,036	1,036	0	0.0%
3.7%	1,036	1,036	0	0.0%
4.9%	1,036	1,036	0	0.0%
6.2%	1,036	1,036	0	0.0%
7.4%	1,036	1,036	0	0.0%
8.6%	1,036	1,036	0	0.0%
9.9%	1,036	1,036	0	0.0%
11.1%	1,036	1,036	-1	-0.1%
12.3%	1,036	1,036	-1	-0.1%
13.6%	1,036	1,036	-1	-0.1%
14.8%	1,036	1,033	-4	-0.4%
16.0%	1,036	1,032	-4	-0.3%
17.3%	1,034	1,032	-2	-0.2%
18.5%	1,034	1,032	-1	-0.1%
19.8%	1,033	1,032	-1	-0.1%
21.0%	1,031	1,032	0	0.0%
22.2%	1,031	1,031	0	0.0%
23.5%	1,031	1,030	-1	-0.1%
24.7%	1,028	1,029	2	0.2%
25.9%	1,025	1,028	4	0.4%
27.2%	1,023	1,028	6	0.5%
28.4%	1,023	1,027	5	0.5%
29.6%	1,021	1,027	6	0.6%
30.9%	1,021	1,027	6	0.6%
32.1%	1,019	1,027	7	0.7%
33.3%	1,019	1,026	7	0.7%
34.6%	1,019	1,025	5	0.5%
35.8%	1,019	1,024	5	0.5%
37.0%	1,018	1,024	5	0.5%
38.3%	1,016	1,023	7	0.7%
39.5%	1,015	1,022	7	0.7%
40.7%	1,011	1,021	10	1.0%
42.0%	1,011	1,020	9	0.9%
43.2%	1,010	1,019	9	0.9%
44.4%	1,010	1,017	7	0.7%
45.7%	1,009	1,017	7	0.7%
46.9%	1,009	1,016	7	0.7%
48.1%	1,007	1,016	9	0.8%
49.4%	1,007	1,016	9	0.9%
50.6%	1,006	1,015	8	0.8%
51.9%	1,005	1,015	10	1.0%
53.1%	1,003	1,014	11	1.1%
54.3%	1,003	1,013	10	1.0%
55.6%	1,002	1,010	7	0.7%
56.8%	1,002	1,009	7	0.7%
58.0%	1,002	1,008	6	0.6%
59.3%	1,002	1,007	5	0.5%
60.5%	1,002	1,007	5	0.5%
61.7%	1,001	1,007	6	0.6%
63.0%	1,000	1,007	6	0.6%
64.2%	996	1,005	9	0.9%
65.4%	995	1,002	7	0.7%
66.7%	994	1,001	7	0.7%
67.9%	994	996	2	0.2%
69.1%	991	995	5	0.5%
70.4%	989	995	6	0.6%
71.6%	988	993	5	0.5%
72.8%	987	993	6	0.6%
74.1%	987	993	6	0.6%
75.3%	984	992	8	0.9%
76.5%	982	992	10	1.0%
77.8%	979	990	10	1.1%
79.0%	979	988	10	1.0%
80.2%	973	987	14	1.5%
81.5%	973	985	13	1.3%
82.7%	967	978	11	1.2%
84.0%	966	977	11	1.2%
85.2%	962	977	15	1.6%
86.4%	956	972	15	1.6%
87.7%	952	967	14	1.5%
88.9%	947	959	12	1.3%
90.1%	936	952	16	1.7%
91.4%	925	952	27	2.9%
92.6%	909	924	16	1.7%
93.8%	907	919	12	1.3%
95.1%	877	903	26	2.9%
96.3%	862	902	40	4.7%
97.5%	861	902	41	4.7%
98.8%	844	878	34	4.0%
100.0%	834	866	32	3.8%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,023	1,023	0	0.0%
1.2%	1,023	1,023	0	0.0%
2.5%	1,023	1,023	0	0.0%
3.7%	1,023	1,023	0	0.0%
4.9%	1,023	1,023	0	0.0%
6.2%	1,022	1,023	2	0.2%
7.4%	1,021	1,023	2	0.2%
8.6%	1,021	1,023	3	0.2%
9.9%	1,020	1,022	2	0.2%
11.1%	1,019	1,021	3	0.3%
12.3%	1,019	1,021	3	0.3%
13.6%	1,018	1,021	2	0.2%
14.8%	1,015	1,020	5	0.5%
16.0%	1,015	1,020	5	0.5%
17.3%	1,015	1,017	3	0.3%
18.5%	1,015	1,017	2	0.2%
19.8%	1,015	1,017	2	0.2%
21.0%	1,014	1,016	2	0.2%
22.2%	1,014	1,016	2	0.2%
23.5%	1,013	1,015	2	0.2%
24.7%	1,012	1,015	3	0.3%
25.9%	1,012	1,015	3	0.3%
27.2%	1,011	1,015	4	0.4%
28.4%	1,010	1,015	4	0.4%
29.6%	1,010	1,015	5	0.4%
30.9%	1,010	1,015	5	0.5%
32.1%	1,009	1,015	6	0.6%
33.3%	1,009	1,014	5	0.5%
34.6%	1,008	1,014	6	0.6%
35.8%	1,008	1,014	6	0.6%
37.0%	1,008	1,013	6	0.6%
38.3%	1,007	1,013	6	0.6%
39.5%	1,007	1,012	6	0.6%
40.7%	1,007	1,012	6	0.5%
42.0%	1,006	1,012	6	0.6%
43.2%	1,005	1,011	6	0.6%
44.4%	1,004	1,010	5	0.5%
45.7%	1,003	1,010	7	0.7%
46.9%	1,003	1,010	7	0.7%
48.1%	1,001	1,008	7	0.7%
49.4%	1,001	1,006	6	0.6%
50.6%	1,000	1,006	5	0.5%
51.9%	1,000	1,005	5	0.5%
53.1%	1,000	1,005	6	0.6%
54.3%	999	1,005	5	0.5%
55.6%	999	1,005	5	0.5%
56.8%	998	1,005	7	0.7%
58.0%	997	1,004	7	0.7%
59.3%	997	1,004	7	0.7%
60.5%	997	1,002	5	0.5%
61.7%	994	1,000	6	0.6%
63.0%	992	1,000	8	0.9%
64.2%	991	994	3	0.3%
65.4%	991	994	2	0.2%
66.7%	990	993	3	0.3%
67.9%	987	992	5	0.5%
69.1%	986	992	6	0.6%
70.4%	985	990	6	0.6%
71.6%	984	989	6	0.6%
72.8%	982	988	6	0.7%
74.1%	978	987	9	0.9%
75.3%	978	985	7	0.7%
76.5%	976	985	9	0.9%
77.8%	976	981	5	0.6%
79.0%	973	981	7	0.8%
80.2%	971	977	5	0.6%
81.5%	967	975	9	0.9%
82.7%	966	974	7	0.8%
84.0%	965	970	5	0.5%
85.2%	958	968	10	1.0%
86.4%	950	968	18	1.8%
87.7%	949	963	13	1.4%
88.9%	944	956	11	1.2%
90.1%	933	949	16	1.7%
91.4%	922	945	22	2.4%
92.6%	900	914	14	1.5%
93.8%	895	912	18	2.0%
95.1%	860	889	29	3.4%
96.3%	859	884	25	2.9%
97.5%	847	881	34	4.0%
98.8%	841	875	35	4.1%
100.0%	837	854	17	2.0%

Figure SW-09-b
Shasta Lake, End of Month Area
Probability of Exceedance

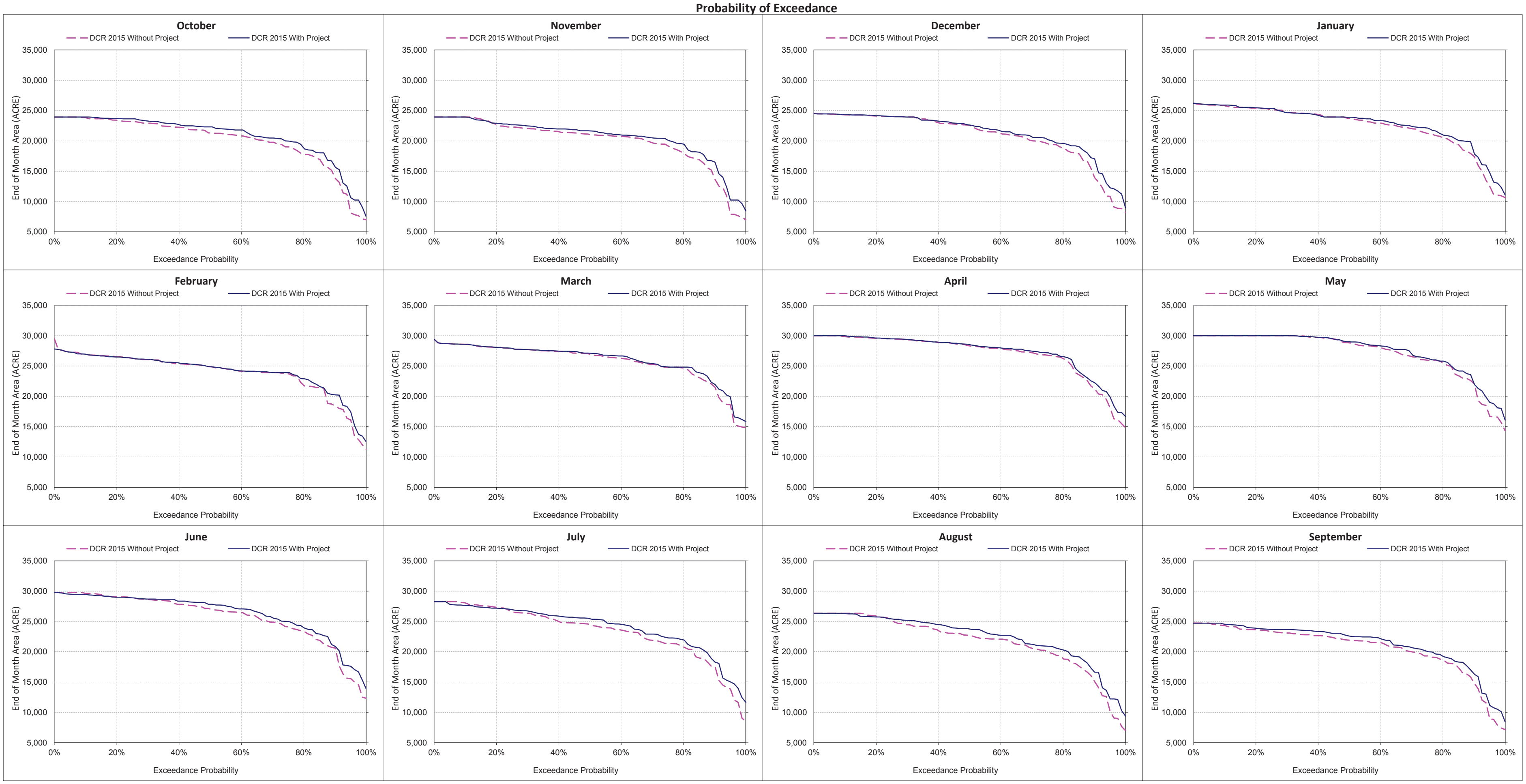


Table SW-09-b

Shasta Lake, End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	23,927	23,927	0	0.0%
1.2%	23,927	23,927	0	0.0%
2.5%	23,927	23,927	0	0.0%
3.7%	23,927	23,927	0	0.0%
4.9%	23,927	23,927	0	0.0%
6.2%	23,927	23,927	0	0.0%
7.4%	23,915	23,927	12	0.0%
8.6%	23,881	23,927	45	0.2%
9.9%	23,855	23,927	71	0.3%
11.1%	23,659	23,927	267	1.1%
12.3%	23,659	23,886	226	1.0%
13.6%	23,659	23,863	204	0.9%
14.8%	23,659	23,787	128	0.5%
16.0%	23,659	23,743	84	0.4%
17.3%	23,624	23,735	111	0.5%
18.5%	23,446	23,685	239	1.0%
19.8%	23,432	23,678	247	1.1%
21.0%	23,318	23,677	359	1.5%
22.2%	23,239	23,659	421	1.8%
23.5%	23,229	23,659	430	1.9%
24.7%	23,193	23,659	467	2.0%
25.9%	23,168	23,642	475	2.0%
27.2%	23,080	23,455	374	1.6%
28.4%	22,943	23,370	427	1.9%
29.6%	22,934	23,297	363	1.6%
30.9%	22,906	23,233	326	1.4%
32.1%	22,858	23,232	374	1.6%
33.3%	22,819	23,187	368	1.6%
34.6%	22,461	23,003	542	2.4%
35.8%	22,427	22,912	484	2.2%
37.0%	22,400	22,890	490	2.2%
38.3%	22,295	22,884	588	2.6%
39.5%	22,268	22,727	459	2.1%
40.7%	22,224	22,566	343	1.5%
42.0%	22,182	22,492	309	1.4%
43.2%	21,865	22,483	619	2.8%
44.4%	21,838	22,470	632	2.9%
45.7%	21,828	22,384	555	2.5%
46.9%	21,802	22,347	545	2.5%
48.1%	21,753	22,328	575	2.6%
49.4%	21,320	22,315	995	4.7%
50.6%	21,302	22,304	1,002	4.7%
51.9%	21,258	22,076	818	3.8%
53.1%	21,247	22,001	754	3.5%
54.3%	21,154	21,978	824	3.9%
55.6%	21,069	21,927	858	4.1%
56.8%	21,030	21,882	851	4.0%
58.0%	20,964	21,823	859	4.1%
59.3%	20,872	21,810	938	4.5%
60.5%	20,816	21,807	991	4.8%
61.7%	20,655	21,376	721	3.5%
63.0%	20,553	21,039	486	2.4%
64.2%	20,366	20,764	397	2.0%
65.4%	20,167	20,724	556	2.8%
66.7%	20,123	20,634	510	2.5%
67.9%	19,916	20,517	602	3.0%
69.1%	19,779	20,474	696	3.5%
70.4%	19,778	20,459	680	3.4%
71.6%	19,461	20,383	922	4.7%
72.8%	19,418	20,334	917	4.7%
74.1%	19,024	20,015	991	5.2%
75.3%	19,002	19,950	948	5.0%
76.5%	18,770	19,831	1,061	5.7%
77.8%	18,417	19,774	1,357	7.4%
79.0%	17,997	19,446	1,449	8.1%
80.2%	17,751	18,675	924	5.2%
81.5%	17,743	18,516	772	4.4%
82.7%	17,547	18,477	930	5.3%
84.0%	17,217	18,079	862	5.0%
85.2%	16,933	18,056	1,123	6.6%
86.4%	15,898	18,015	2,117	13.3%
87.7%	15,646	16,807	1,161	7.4%
88.9%	15,157	16,712	1,555	10.3%
90.1%	13,810	15,637	1,826	13.2%
91.4%	13,165	15,242	2,077	15.8%
92.6%	11,424	13,063	1,640	14.4%
93.8%	11,198	12,574	1,376	12.3%
95.1%	8,119	10,615	2,495	30.7%
96.3%	7,828	10,244	2,416	30.9%
97.5%	7,652	10,244	2,592	33.9%
98.8%	7,129	9,053	1,924	27.0%
100.0%	7,002	7,530	528	7.5%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	23,937	23,937	0	0.0%
1.2%	23,937	23,937	0	0.0%
2.5%	23,937	23,937	0	0.0%
3.7%	23,937	23,937	0	0.0%
4.9%	23,937	23,937	0	0.0%
6.2%	23,937	23,937	0	0.0%
7.4%	23,937	23,937	0	0.0%
8.6%	23,937	23,937	0	0.0%
9.9%	23,937	23,937	0	0.0%
11.1%	23,937	23,880	-57	-0.2%
12.3%	23,937	23,696	-241	-1.0%
13.6%	23,750	23,455	-295	-1.2%
14.8%	23,647	23,431	-216	-0.9%
16.0%	23,423	23,388	-35	-0.1%
17.3%	23,309	23,232	-76	-0.3%
18.5%	22,986	22,961	-26	-0.1%
19.8%	22,769	22,900	131	0.6%
21.0%	22,454	22,872	418	1.9%
22.2%	22,449	22,806	357	1.6%
23.5%	22,308	22,791	483	2.2%
24.7%	22,285	22,652	367	1.6%
25.9%	22,284	22,648	364	1.6%
27.2%	22,206	22,637	431	1.9%
28.4%	22,114	22,576	462	2.1%
29.6%	22,109	22,495	387	1.7%
30.9%	21,995	22,424	430	2.0%
32.1%	21,978	22,384	405	1.8%
33.3%	21,910	22,219	308	1.4%
34.6%	21,739	22,208	470	2.2%
35.8%	21,719	22,053	334	1.5%
37.0%	21,686	22,044	358	1.6%
38.3%	21,598	22,018	420	1.9%
39.5%	21,572	21,983	411	1.9%
40.7%	21,424	21,960	536	2.5%
42.0%	21,417	21,953	536	2.5%
43.2%	21,406	21,914	507	2.4%
44.4%	21,333	21,858	525	2.5%
45.7%	21,298	21,852	554	2.6%
46.9%	21,229	21,683	454	2.1%
48.1%	21,155	21,678	523	2.5%
49.4%	21,129	21,659	530	2.5%
50.6%	21,000	21,636	636	3.0%
51.9%	20,982	21,569	588	2.8%
53.1%	20,908	21,359	451	2.2%
54.3%	20,908	21,335	427	2.0%
55.6%	20,883	21,158	275	1.3%
56.8%	20,847	21,147	301	1.4%
58.0%	20,765	21,048	283	1.4%
59.3%	20,759	21,047	287	1.4%
60.5%	20,748	20,949	201	1.0%
61.7%	20,682	20,941	258	1.2%
63.0%	20,615	20,916	302	1.5%
64.2%	20,478	20,879	401	2.0%
65.4%	20,459	20,759	300	1.5%
66.7%	20,350	20,755	405	2.0%
67.9%	20,034	20,662	628	3.1%
69.1%	19,857	20,559	702	3.5%
70.4%	19,635	20,476	841	4.3%
71.6%	19,601	20,415	814	4.2%
72.8%	19,474	20,412	938	4.8%
74.1%	19,464	20,374	910	4.7%
75.3%	19,105	20,049	944	4.9%
76.5%	18,783	19,882	1,099	5.8%
77.8%	18,576	19,640	1,064	5.7%
79.0%	18,283	19,588	1,306	7.1%
80.2%	17,908	19,457	1,550	8.7%
81.5%	17,423	18,504	1,081	6.2%
82.7%	17,217	18,203	986	5.7%
84.0%	17,096	18,199	1,103	6.5%
85.2%	16,839	18,132	1,292	7.7%
86.4%	16,330	17,751	1,422	8.7%
87.7%	15,560	16,806	1,246	8.0%
88.9%	15,204	16,772	1,567	10.3%
90.1%	13,636	16,504	2,868	21.0%
91.4%	12,554	14,581	2,026	16.1%
92.6%	12,302	14,007	1,705	13.9%
93.8%	10,951	12,342	1,392	12.7%
95.1%	7,905	10,244	2,340	29.6%
96.3%	7,879	10,244	2,365	30.0%
97.5%	7,636	10,244	2,609	34.2%
98.8%	7,382	9,650	2,268	30.7%
100.0%	7,002	8,447	1,445	20.6%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	24,514	24,514	0	0.0%
1.2%	24,479	24,461	-18	-0.1%
2.5%	24,455	24,455	0	0.0%
3.7%	24,455	24,455	0	0.0%
4.9%	24,439	24,445	5	0.0%
6.2%	24,397	24,439	43	0.2%
7.4%	24,381	24,397	16	0.1%
8.6%	24,343	24,381	37	0.2%
9.9%	24,311	24,343	32	0.1%
11.1%	24,295	24,311	16	0.1%
12.3%	24,284	24,295	11	0.0%
13.6%	24,279	24,284	5	0.0%
14.8%	24,279	24,282	3	0.0%
16.0%	24,247	24,279	32	0.1%
17.3%	24,226	24,247	21	0.1%
18.5%	24,147	24,226	79	0.3%
19.8%	24,114	24,156	43	0.2%
21.0%	24,065	24,147	82	0.3%
22.2%	24,064	24,114	50	0.2%
23.5%	24,026	24,065	40	0.2%
24.7%	24,017	24,017	0	0.0%
25.9%	24,013	24,007	-6	0.0%
27.2%	24,012	23,996	-16	-0.1%
28.4%	24,007	23,969	-38	-0.2%
29.6%	23,938	23,938	0	0.0%
30.9%	23,937	23,937	0	0.0%
32.1%	23,937	23,937	0	0.0%
33.3%	23,740	23,810	71	0.3%
34.6%	23,639	23,447	-192	-0.8%
35.8%	23,615	23,419	-196	-0.8%
37.0%	23,374	23,413	39	0.2%
38.3%	23,298	23,403	104	0.4%
39.5%	23,069	23,321	252	1.1%
40.7%	22,883	23,202	318	1.4%
42.0%	22,876	23,155	279	1.2%
43.2%	22,872	23,127	255	1.1%
44.4%	22,799	22,972	174	0.8%
45.7%	22,758	22,905	148	0.6%
46.9%	22,708	22,854	146	0.6%
48.1%	22,652	22,841	189	0.8%
49.4%	22,616	22,638	23	0.1%
50.6%	22,479	22,555	76	0.3%
51.9%	22,057	22,398	340	1.5%
53.1%	21,809	22,342	533	2.4%
54.3%	21,638	22,117	478	2.2%
55.6%	21,525	22,052	526	2.4%
56.8%	21,496	21,897	401	1.9%
58.0%	21,495	21,895	400	1.9%
59.3%	21,365	21,751	386	1.8%
60.5%	21,135	21,527	392	1.9%
61.7%	21,106	21,523	417	2.0%
63.0%	20,965	21,506	541	2.6%
64.2%	20,884	21,168	284	1.4%
65.4%	20,827	21,053	226	1.1%
66.7%	20,685	20,994	308	1.5%
67.9%	20,549	20,975	426	2.1%
69.1%	20,135	20,912	777	3.9%
70.4%	20,005	20,580	575	2.9%
71.6%	19,975	20,568	593	3.0%
72.8%	19,874	20,545	671	3.4%
74.1%	19,727	20,465	738	3.7%
75.3%	19,486	20,189	703	3.6%
76.5%	19,395	19,985	590	3.0%
77.8%	19,385	19,647	262	1.4%
79.0%	18,989	19,638	649	3.4%
80.2%	18,844	19,585	741	3.9%
81.5%	18,348	19,394	1,045	5.7%
82.7%	18,080	19,200	1,120	6.2%
84.0%	18,014	19,172	1,158	6.4%
85.2%	17,845	18,999	1,154	6.5%
86.4%	16,805	18,462	1,657	9.9%
87.7%	16,747	18,039	1,292	7.7%
88.9%	15,520	17,220	1,700	11.0%
90.1%	13,923	17,039	3,115	22.4%
91.4%	13,232	14,721	1,489	11.3%
92.6%	12,282	14,559	2,277	18.5%
93.8%	10,889	13,025	2,136	19.6%
95.1%	10,863	12,273	1,410	13.0%
96.3%	9,098	12,074	2,976	32.7%
97.5%	8,878	11,762	2,884	32.5%
98.8%	8,819	11,242	2,423	27.5%
100.0%	8,186	8,952	766	9.4%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	26,215	26,215	0	0.0%
1.2%	26,063	26,160	96	0.4%
2.5%	26,053	26,063	11	0.0%
3.7%	26,011	26,053	42	0.2%
4.9%	25,926	26,053	127	0.5%
6.2%	25,925	26,011	86	0.3%
7.4%	25,914	25,950	36	0.1%
8.6%	25,882	25,926	44	0.2%
9.9%	25,818	25,925	107	0.4%
11.1%	25,669	25,914	245	1.0%
12.3%	25,593	25,882	289	1.1%
13.6%	25,540	25,818	278	1.1%
14.8%	25,540	25,540	0	0.0%
16.0%	25,535	25,540	5	0.0%
17.3%	25,481	25,535	53	0.2%
18.5%	25,428	25,527	99	0.4%
19.8%	25,412	25,481	69	0.3%
21.0%	25,343	25,428	84	0.3%
22.2%	25,343	25,412	68	0.3%
23.5%	25,342	25,343	1	0.0%
24.7%	25,133	25,342	209	0.8%
25.9%	25,130	25,322	192	0.8%
27.2%	25,059	25,024	-35	-0.1%
28.4%	25,056	24,899	-157	-0.6%
29.6%	24,671	24,669	-1	0.0%
30.9%	24,669	24,659	-10	0.0%
32.1%	24,631	24,596	-35	-0.1%
33.3%	24,612	24,573	-40	-0.2%
34.6%	24,573	24,557	-16	-0.1%
35.8%	24,557	24,546	-11	0.0%
37.0%	24,546	24,504	-43	-0.2%
38.3%	24,504	24,399	-104	-0.4%
39.5%	24,399	24,284	-115	-0.5%
40.7%	24,284	24,116	-168	-0.7%
42.0%	24,012	23,952	-60	-0.3%
43.2%	23,938	23,938	0	0.0%
44.4%	23,938	23,938	0	0.0%
45.7%	23,937	23,937	0	0.0%
46.9%	23,937	23,937	0	0.0%
48.1%	23,937	23,937	0	0.0%
49.4%	23,744	23,911	167	0.7%
50.6%	23,702	23,890	188	0.8%
51.9%	23,540	23,850	310	1.3%
53.1%	23,442	23,743	301	1.3%
54.3%	23,423	23,727	305	1.3%
55.6%	23,161	23,664	503	2.2%
56.8%	23,133	23,644	511	2.2%
58.0%	22,949	23,395	445	1.9%
59.3%	22,935	23,329	394	1.7%
60.5%	22,919	23,326	407	1.8%
61.7%	22,709	23,266	557	2.5%
63.0%	22,624	23,072	448	2.0%
64.2%	22,622	23,005	384	1.7%
65.4%	22,426	22,742	316	1.4%
66.7%	22,288	22,601	314	1.4%
67.9%	22,261	22,567	306	1.4%
69.1%	22,124	22,515	391	1.8%
70.4%	21,989	22,380	391	1.8%
71.6%	21,952	22,265	312	1.4%
72.8%	21,563	22,185	622	2.9%
74.1%	21,382	22,171	790	3.7%
75.3%	21,197	22,089	892	4.2%
76.5%	21,081	21,777	697	3.3%
77.8%	20,881	21,647	766	3.7%
79.0%	20,745	21,237	492	2.4%
80.2%	20,479	20,940	461	2.3%
81.5%	20,322	20,866	544	2.7%
82.7%	19,913	20,750	837	4.2%
84.0%	19,515	20,401	886	4.5%
85.2%	19,324	20,052	728	3.8%
86.4%	18,510	20,007	1,497	8.1%
87.7%	18,321	19,913	1,593	8.7%
88.9%	17,937	19,864	1,927	10.7%
90.1%	17,401	17,812	411	2.4%
91.4%	15,941	17,296	1,355	8.5%
92.6%	14,980	16,073	1,094	7.3%
93.8%	13,544	16,038	2,493	18.4%
95.1%	12,498	14,719	2,221	17.8%
96.3%	11,176	13,180	2,003	17.9%
97.5%	11,087	13,007	1,920	17.3%
98.8%	10,935	12,322	1,388	12.7%
100.0%	10,652	11,110	458	4.3%

Table SW-09-b
Shasta Lake, End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	29,490	27,790	-1,700	-5.8%
1.2%	27,726	27,726	0	0.0%
2.5%	27,607	27,607	0	0.0%
3.7%	27,391	27,391	0	0.0%
4.9%	27,288	27,288	0	0.0%
6.2%	27,262	27,262	0	0.0%
7.4%	27,243	26,979	-264	-1.0%
8.6%	26,979	26,979	0	0.0%
9.9%	26,979	26,936	-43	-0.2%
11.1%	26,810	26,807	-3	0.0%
12.3%	26,796	26,796	0	0.0%
13.6%	26,774	26,748	-26	-0.1%
14.8%	26,748	26,675	-73	-0.3%
16.0%	26,675	26,651	-23	-0.1%
17.3%	26,654	26,527	-127	-0.5%
18.5%	26,651	26,512	-140	-0.5%
19.8%	26,527	26,505	-22	-0.1%
21.0%	26,512	26,479	-32	-0.1%
22.2%	26,505	26,400	-105	-0.4%
23.5%	26,400	26,340	-60	-0.2%
24.7%	26,298	26,298	0	0.0%
25.9%	26,197	26,197	0	0.0%
27.2%	26,122	26,162	40	0.2%
28.4%	26,085	26,122	37	0.1%
29.6%	26,085	26,085	0	0.0%
30.9%	26,053	26,085	32	0.1%
32.1%	26,000	25,989	-11	0.0%
33.3%	25,989	25,944	-45	-0.2%
34.6%	25,634	25,732	98	0.4%
35.8%	25,620	25,634	14	0.1%
37.0%	25,583	25,620	37	0.1%
38.3%	25,422	25,583	160	0.6%
39.5%	25,348	25,551	203	0.8%
40.7%	25,347	25,426	79	0.3%
42.0%	25,310	25,422	112	0.4%
43.2%	25,279	25,348	69	0.3%
44.4%	25,225	25,279	53	0.2%
45.7%	25,195	25,254	59	0.2%
46.9%	25,155	25,155	0	0.0%
48.1%	25,059	25,059	0	0.0%
49.4%	24,893	24,893	0	0.0%
50.6%	24,851	24,851	0	0.0%
51.9%	24,687	24,755	68	0.3%
53.1%	24,678	24,745	67	0.3%
54.3%	24,602	24,556	-45	-0.2%
55.6%	24,481	24,510	28	0.1%
56.8%	24,357	24,461	105	0.4%
58.0%	24,305	24,271	-33	-0.1%
59.3%	24,151	24,199	48	0.2%
60.5%	24,131	24,186	55	0.2%
61.7%	24,130	24,151	21	0.1%
63.0%	24,095	24,150	55	0.2%
64.2%	24,086	24,130	44	0.2%
65.4%	24,044	24,095	51	0.2%
66.7%	23,938	24,064	126	0.5%
67.9%	23,937	24,031	94	0.4%
69.1%	23,937	23,944	7	0.0%
70.4%	23,937	23,938	1	0.0%
71.6%	23,923	23,937	14	0.1%
72.8%	23,821	23,937	116	0.5%
74.1%	23,715	23,937	222	0.9%
75.3%	23,703	23,937	234	1.0%
76.5%	23,380	23,572	191	0.8%
77.8%	23,370	23,465	95	0.4%
79.0%	22,294	22,928	634	2.8%
80.2%	21,695	22,869	1,174	5.4%
81.5%	21,694	22,705	1,011	4.7%
82.7%	21,598	22,296	698	3.2%
84.0%	21,483	21,988	505	2.4%
85.2%	21,445	21,598	153	0.7%
86.4%	21,264	21,405	141	0.7%
87.7%	18,831	20,474	1,644	8.7%
88.9%	18,735	20,343	1,609	8.6%
90.1%	18,397	20,240	1,844	10.0%
91.4%	18,001	20,212	2,211	12.3%
92.6%	17,841	18,472	631	3.5%
93.8%	16,394	18,360	1,966	12.0%
95.1%	16,113	17,466	1,353	8.4%
96.3%	13,316	15,126	1,809	13.6%
97.5%	12,885	13,724	839	6.5%
98.8%	12,018	13,417	1,399	11.6%
100.0%	11,231	12,549	1,317	11.7%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	29,394	29,394	0	0.0%
1.2%	28,833	28,833	0	0.0%
2.5%	28,715	28,715	0	0.0%
3.7%	28,700	28,700	0	0.0%
4.9%	28,687	28,687	0	0.0%
6.2%	28,614	28,614	0	0.0%
7.4%	28,603	28,603	0	0.0%
8.6%	28,601	28,601	0	0.0%
9.9%	28,580	28,580	0	0.0%
11.1%	28,579	28,556	-23	-0.1%
12.3%	28,484	28,458	-26	-0.1%
13.6%	28,326	28,326	0	0.0%
14.8%	28,185	28,302	117	0.4%
16.0%	28,163	28,185	22	0.1%
17.3%	28,138	28,163	25	0.1%
18.5%	28,109	28,138	29	0.1%
19.8%	28,086	28,086	0	0.0%
21.0%	28,082	28,082	0	0.0%
22.2%	28,001	28,001	0	0.0%
23.5%	27,936	27,993	57	0.2%
24.7%	27,902	27,936	34	0.1%
25.9%	27,773	27,773	0	0.0%
27.2%	27,760	27,760	0	0.0%
28.4%	27,726	27,726	0	0.0%
29.6%	27,723	27,723	0	0.0%
30.9%	27,674	27,674	0	0.0%
32.1%	27,631	27,631	0	0.0%
33.3%	27,546	27,631	86	0.3%
34.6%	27,527	27,560	34	0.1%
35.8%	27,501	27,546	45	0.2%
37.0%	27,481	27,527	45	0.2%
38.3%	27,444	27,501	56	0.2%
39.5%	27,430	27,481	51	0.2%
40.7%	27,410	27,444	35	0.1%
42.0%	27,374	27,430	56	0.2%
43.2%	27,374	27,414	40	0.1%
44.4%	27,129	27,390	261	1.0%
45.7%	27,117	27,374	256	0.9%
46.9%	27,093	27,197	104	0.4%
48.1%	27,086	27,130	43	0.2%
49.4%	27,030	27,115	86	0.3%
50.6%	26,805	27,093	288	1.1%
51.9%	26,759	27,086	327	1.2%
53.1%	26,752	26,942	190	0.7%
54.3%	26,584	26,788	204	0.8%
55.6%	26,483	26,785	302	1.1%
56.8%	26,409	26,752	343	1.3%
58.0%	26,360	26,707	347	1.3%
59.3%	26,310	26,642	331	1.3%
60.5%	26,228	26,635	407	1.6%
61.7%	26,155	26,584	429	1.6%
63.0%	26,037	26,256	219	0.8%
64.2%	25,787	26,119	331	1.3%
65.4%	25,665	25,844	179	0.7%
66.7%	25,513	25,713	200	0.8%
67.9%	25,444	25,481	37	0.1%
69.1%	25,283	25,444	161	0.6%
70.4%	25,259	25,355	96	0.4%
71.6%	25,165	25,283	118	0.5%
72.8%	24,915	24,956	41	0.2%
74.1%	24,816	24,915	99	0.4%
75.3%	24,813	24,828	15	0.1%
76.5%	24,813	24,819	5	0.0%
77.8%	24,813	24,816	3	0.0%
79.0%	24,748	24,813	66	0.3%
80.2%	24,653	24,813	161	0.7%
81.5%	24,346	24,813	468	1.9%
82.7%	23,689	24,724	1,035	4.4%
84.0%	23,337	24,026	689	3.0%
85.2%	23,052	23,855	803	3.5%
86.4%	22,681	23,711	1,030	4.5%
87.7%	22,396	23,337	941	4.2%
88.9%	22,042	22,318	276	1.3%
90.1%	21,485	21,960	474	2.2%
91.4%	19,801	21,174	1,373	6.9%
92.6%	18,970	20,932	1,962	10.3%
93.8%	18,685	20,200	1,515	8.1%
95.1%	18,581	19,932	1,352	7.3%
96.3%	15,294	16,598	1,304	8.5%
97.5%	15,101	16,465	1,363	9.0%
98.8%	14,939	16,174	1,235	8.3%
100.0%	14,846	15,811	965	6.5%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	30,000	30,000	0	0.0%
1.2%	30,000	30,000	0	0.0%
2.5%	30,000	30,000	0	0.0%
3.7%	30,000	30,000	0	0.0%
4.9%	30,000	30,000	0	0.0%
6.2%	30,000	30,000	0	0.0%
7.4%	29,974	30,000	26	0.1%
8.6%	29,953	30,000	46	0.2%
9.9%	29,857	29,974	117	0.4%
11.1%	29,788	29,897	109	0.4%
12.3%	29,782	29,857	75	0.3%
13.6%	29,776	29,828	52	0.2%
14.8%	29,737	29,826	89	0.3%
16.0%	29,686	29,788	101	0.3%
17.3%	29,675	29,776	101	0.3%
18.5%	29,607	29,686	79	0.3%
19.8%	29,588	29,607	20	0.1%
21.0%	29,568	29,588	20	0.1%
22.2%	29,516	29,568	52	0.2%
23.5%	29,493	29,502	8	0.0%
24.7%	29,484	29,493	9	0.0%
25.9%	29,426	29,465	39	0.1%
27.2%	29,372	29,459	87	0.3%
28.4%	29,362	29,438	76	0.3%
29.6%	29,336	29,376	40	0.1%
30.9%	29,299	29,339	40	0.1%
32.1%	29,272	29,278	6	0.0%
33.3%	29,096	29,229	132	0.5%
34.6%	29,062	29,204	142	0.5%
35.8%	29,051	29,096	45	0.2%
37.0%	29,048	29,042	-6	0.0%
38.3%	29,042	28,972	-70	-0.2%
39.5%	28,901	28,970	70	0.2%
40.7%	28,876	28,876	0	0.0%
42.0%	28,871	28,874	3	0.0%
43.2%	28,820	28,871	51	0.2%
44.4%	28,744	28,760	16	0.1%
45.7%	28,626	28,744	118	0.4%
46.9%	28,621	28,684	63	0.2%
48.1%	28,561	28,638	76	0.3%
49.4%	28,374	28,561	188	0.7%
50.6%	28,264	28,472	208	0.7%
51.9%	28,219	28,374	154	0.5%
53.1%	28,194	28,219	25	0.1%
54.3%	28,035	28,194	160	0.6%
55.6%	27,969	28,150	181	0.6%
56.8%	27,949	28,071	122	0.4%
58.0%	27,908	28,064	156	0.6%
59.3%	27,880	28,035	154	0.6%
60.5%	27,829	27,949	120	0.4%
61.7%	27,692	27,909	217	0.8%
63.0%	27,664	27,880	216	0.8%
64.2%	27,557	27,778	221	0.8%
65.4%	27,511	27,763	252	0.9%
66.7%	27,335	27,763	428	1.6%
67.9%	27,319	27,573	253	0.9%
69.1%	27,286	27,521	234	0.9%
70.4%	27,151	27,435	284	1.0%
71.6%	26,975	27,387	412	1.5%
72.8%	26,834	27,222	388	1.4%
74.1%	26,834	27,209	375	1.4%
75.3%	26,762	27,153	392	1.5%
76.5%	26,699	26,957	257	1.0%
77.8%	26,553	26,935	382	1.4%
79.0%	26,473	26,594	121	0.5%
80.2%	26,169	26,522	352	1.3%
81.5%	25,751	26,373	622	2.4%
82.7%	25,091	26,045	954	3.8%
84.0%	23,882	24,620	738	3.1%
85.2%	23,524	23,989	465	2.0%
86.4%	23,120	23,538	418	1.8%
87.7%	22,630	23,058	428	1.9%
88.9%	21,712	22,535	822	3.8%
90.1%	21,215	22,262	1,048	4.9%
91.4%	20,387	21,691	1,304	6.4%
92.6%	20,274	20,985	711	3.5%
93.8%	19,517	20,799	1,282	6.6%
95.1%	18,104	19,839	1,736	9.6%
96.3%	16,296	18,371	2,075	12.7%
97.5%	16,135	17,360	1,226	7.6%
98.8%	15,471	17,339	1,868	12.1%
100.0%	14,831	16,684	1,853	12.5%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	30,000	30,000	0	0.0%
1.2%	30,000	30,000	0	0.0%
2.5%	30,000	30,000	0	0.0%
3.7%	30,000	30,000	0	0.0%
4.9%	30,000	30,000	0	0.0%
6.2%	30,000	30,000	0	0.0%
7.4%	30,000	30,000	0	0.0%
8.6%	30,000	30,000	0	0.0%
9.9%	30,000	30,000	0	0.0%
11.1%	30,000	30,000	0	0.0%
12.3%	30,000	30,000	0	0.0%
13.6%	30,000	30,000	0	0.0%
14.8%	30,000	30,000	0	0.0%
16.0%	30,000	30,000	0	0.0%
17.3%	30,000	30,000	0	0.0%
18.5%	30,000	30,000	0	0.0%
19.8%	30,000	30,000	0	0.0%
21.0%	30,000	30,000	0	0.0%
22.2%	30,000	30,000	0	0.0%
23.5%	30,000	30,000	0	0.0%
24.7%	30,000	30,000	0	0.0%
25.9%	30,000	30,000	0	0.0%
27.2%	30,000	30,000	0	0.0%
28.4%	30,000	30,000	0	0.0%
29.6%	30,000	30,000	0	0.0%
30.9%	30,000	30,000	0	0.0%
32.1%	30,000	29,988	-12	0.0%
33.3%	30,000	29,954	-46	-0.2%
34.6%	29,971	29,875	-96	-0.3%
35.8%	29,912	29,865	-47	-0.2%
37.0%	29,782	29,857	75	0.3%
38.3%	29,741	29,816	75	0.3%
39.5%	29,725	29,715	-10	0.0%
40.7%	29,700	29,704	4	0.0%
42.0%	29,583	29,686	103	0.3%
43.2%	29,531	29,635	104	0.4%
44.4%	29,485	29,506	21	0.1%
45.7%	29,411	29,372	-39	-0.1%
46.9%	29,149	29,309	160	0.5%
48.1%	28,883	29,091	208	0.7%
49.4%	28,860	29,012	152	0.5%
50.6%	28,771	28,986	215	0.7%
51.9%	28,592	28,970	378	1.3%
53.1%	28,414	28,926	512	1.8%
54.3%	28,330	28,720	391	1.4%
55.6%	28,325	28,572	247	0.9%
56.8%	28,320	28,436	116	0.4%
58.0%	28,222	28,407	184	0.7%
59.3%	28,181	28,347	166	0.6%
60.5%	27,942	28,299	357	1.3%
61.7%	27,751	28,224	473	1.7%
63.0%	27,656	28,061	404	1.5%
64.2%	27,468	27,768	300	1.1%
65.4%	27,259	27,744	484	1.8%
66.7%	26,937	27,716	779	2.9%
67.9%	26,710	27,710	1,000	3.7%
69.1%	26,675	27,491	815	3.1%
70.4%	26,508	26,762	255	1.0%
71.6%	26,453	26,546	92	0.3%
72.8%	26,059	26,481	422	1.6%
74.1%	26,017	26,373	356	1.4%
75.3%	25,953	26,247	294	1.1%
76.5%	25,926	26,014	88	0.3%
77.8%	25,909	25,994	85	0.3%
79.0%	25,829	25,802	-27	-0.1%
80.2%	25,443	25,782	339	1.3%
81.5%	25,104	25,601	497	2.0%
82.7%	24,946	25,002	56	0.2%
84.0%	23,641	24,443	802	3.4%
85.2%	23,361	24,194	833	3.6%
86.4%	22,978	24,161	1,183	5.1%
87.7%	22,939	23,765	826	3.6%
88.9%	22,628	23,583	954	4.2%
90.1%	22,044	21,954	-90	-0.4%
91.4%	19,285	21,307	2,021	10.5%
92.6%	18,645	20,874	2,229	12.0%
93.8%	18,510	19,896	1,386	7.5%
95.1%	16,690	18,975	2,285	13.7%
96.3%	16,603	18,775	2,172	13.1%
97.5%	16,586	18,080	1,495	9.0%
98.8%	15,670	18,012	2,342	14.9%
100.0%	14,295	16,107	1,812	12.7%

Table SW-09-b
Shasta Lake, End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	29,776	29,776	0	0.0%
1.2%	29,776	29,776	0	0.0%
2.5%	29,776	29,659	-118	-0.4%
3.7%	29,776	29,565	-211	-0.7%
4.9%	29,776	29,509	-268	-0.9%
6.2%	29,776	29,473	-303	-1.0%
7.4%	29,776	29,445	-331	-1.1%
8.6%	29,776	29,440	-337	-1.1%
9.9%	29,636	29,439	-197	-0.7%
11.1%	29,634	29,391	-243	-0.8%
12.3%	29,632	29,311	-321	-1.1%
13.6%	29,527	29,256	-271	-0.9%
14.8%	29,442	29,244	-197	-0.7%
16.0%	29,136	29,167	31	0.1%
17.3%	29,131	29,140	9	0.0%
18.5%	29,104	29,021	-83	-0.3%
19.8%	29,091	29,007	-84	-0.3%
21.0%	29,064	29,002	-62	-0.2%
22.2%	29,046	28,975	-71	-0.2%
23.5%	29,013	28,945	-69	-0.2%
24.7%	28,870	28,907	37	0.1%
25.9%	28,805	28,860	55	0.2%
27.2%	28,711	28,746	35	0.1%
28.4%	28,683	28,727	44	0.2%
29.6%	28,653	28,685	32	0.1%
30.9%	28,593	28,675	82	0.3%
32.1%	28,512	28,674	163	0.6%
33.3%	28,465	28,665	199	0.7%
34.6%	28,451	28,643	192	0.7%
35.8%	28,413	28,636	223	0.8%
37.0%	28,347	28,633	285	1.0%
38.3%	28,000	28,631	632	2.3%
39.5%	27,829	28,366	537	1.9%
40.7%	27,809	28,342	532	1.9%
42.0%	27,796	28,334	539	1.9%
43.2%	27,658	28,236	579	2.1%
44.4%	27,613	28,157	544	2.0%
45.7%	27,497	28,153	656	2.4%
46.9%	27,478	28,141	663	2.4%
48.1%	27,177	28,115	937	3.4%
49.4%	27,123	27,820	696	2.6%
50.6%	26,953	27,815	862	3.2%
51.9%	26,862	27,711	849	3.2%
53.1%	26,842	27,700	857	3.2%
54.3%	26,647	27,665	1,018	3.8%
55.6%	26,630	27,483	853	3.2%
56.8%	26,567	27,408	841	3.2%
58.0%	26,548	27,136	588	2.2%
59.3%	26,485	27,068	584	2.2%
60.5%	26,424	27,060	636	2.4%
61.7%	26,050	27,020	969	3.7%
63.0%	25,996	26,928	931	3.6%
64.2%	25,981	26,659	677	2.6%
65.4%	25,581	26,524	943	3.7%
66.7%	25,123	26,295	1,172	4.7%
67.9%	25,117	25,864	747	3.0%
69.1%	24,907	25,810	903	3.6%
70.4%	24,877	25,532	655	2.6%
71.6%	24,828	25,377	549	2.2%
72.8%	24,554	25,047	493	2.0%
74.1%	24,156	25,000	844	3.5%
75.3%	24,089	24,952	863	3.6%
76.5%	23,791	24,706	915	3.8%
77.8%	23,659	24,385	725	3.1%
79.0%	23,462	24,339	878	3.7%
80.2%	23,292	23,892	601	2.6%
81.5%	22,914	23,695	781	3.4%
82.7%	22,695	23,637	942	4.2%
84.0%	22,037	22,997	960	4.4%
85.2%	21,865	22,904	1,039	4.8%
86.4%	21,270	22,638	1,368	6.4%
87.7%	20,979	22,533	1,554	7.4%
88.9%	20,717	21,214	497	2.4%
90.1%	20,594	20,842	248	1.2%
91.4%	17,647	20,121	2,474	14.0%
92.6%	16,325	17,816	1,491	9.1%
93.8%	15,629	17,735	2,105	13.5%
95.1%	15,568	17,588	2,019	13.0%
96.3%	14,969	17,064	2,095	14.0%
97.5%	14,582	16,670	2,088	14.3%
98.8%	12,511	15,304	2,793	22.3%
100.0%	12,316	13,922	1,606	13.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	28,275	28,275	0	0.0%
1.2%	28,275	28,275	0	0.0%
2.5%	28,275	28,275	0	0.0%
3.7%	28,275	28,273	-2	0.0%
4.9%	28,275	27,831	-444	-1.6%
6.2%	28,275	27,748	-527	-1.9%
7.4%	28,275	27,702	-573	-2.0%
8.6%	28,120	27,700	-420	-1.5%
9.9%	28,075	27,609	-466	-1.7%
11.1%	27,812	27,599	-212	-0.8%
12.3%	27,755	27,558	-196	-0.7%
13.6%	27,751	27,425	-327	-1.2%
14.8%	27,625	27,357	-268	-1.0%
16.0%	27,533	27,305	-228	-0.8%
17.3%	27,533	27,282	-251	-0.9%
18.5%	27,441	27,194	-247	-0.9%
19.8%	27,350	27,172	-178	-0.7%
21.0%	27,224	27,150	-74	-0.3%
22.2%	27,209	27,115	-93	-0.3%
23.5%	26,983	27,058	76	0.3%
24.7%	26,634	26,970	336	1.3%
25.9%	26,500	26,834	334	1.3%
27.2%	26,438	26,794	356	1.3%
28.4%	26,402	26,777	375	1.4%
29.6%	26,352	26,760	407	1.5%
30.9%	26,332	26,629	296	1.1%
32.1%	26,054	26,515	460	1.8%
33.3%	25,988	26,352	363	1.4%
34.6%	25,893	26,259	366	1.4%
35.8%	25,753	26,179	426	1.7%
37.0%	25,446	25,960	514	2.0%
38.3%	25,352	25,956	604	2.4%
39.5%	25,097	25,904	806	3.2%
40.7%	24,828	25,832	1,003	4.0%
42.0%	24,811	25,721	910	3.7%
43.2%	24,771	25,702	931	3.8%
44.4%	24,753	25,693	940	3.8%
45.7%	24,720	25,626	905	3.7%
46.9%	24,690	25,579	889	3.6%
48.1%	24,629	25,549	920	3.7%
49.4%	24,580	25,540	961	3.9%
50.6%	24,316	25,371	1,054	4.3%
51.9%	24,232	25,354	1,122	4.6%
53.1%	24,088	25,299	1,211	5.0%
54.3%	23,996	25,214	1,219	5.1%
55.6%	23,941	24,706	765	3.2%
56.8%	23,933	24,676	744	3.1%
58.0%	23,659	24,589	930	3.9%
59.3%	23,642	24,563	921	3.9%
60.5%	23,534	24,490	956	4.1%
61.7%	23,377	24,353	976	4.2%
63.0%	23,258	24,232	974	4.2%
64.2%	23,223	23,723	501	2.2%
65.4%	23,150	23,659	509	2.2%
66.7%	22,511	23,480	970	4.3%
67.9%	22,130	22,928	798	3.6%
69.1%	21,925	22,925	1,000	4.6%
70.4%	21,875	22,896	1,021	4.7%
71.6%	21,790	22,865	1,075	4.9%
72.8%	21,606	22,583	977	4.5%
74.1%	21,378	22,391	1,013	4.7%
75.3%	21,353	22,288	935	4.4%
76.5%	21,345	22,279	934	4.4%
77.8%	21,309	22,231	921	4.3%
79.0%	21,021	22,043	1,022	4.9%
80.2%	20,741	21,943	1,202	5.8%
81.5%	20,426	21,206	779	3.8%
82.7%	20,365	20,835	470	2.3%
84.0%	19,166	20,710	1,544	8.1%
85.2%	18,950	20,641	1,692	8.9%
86.4%	18,918	20,249	1,331	7.0%
87.7%	18,300	19,827	1,527	8.3%
88.9%	17,620	18,941	1,322	7.5%
90.1%	17,530	18,292	763	4.4%
91.4%	15,250	18,070	2,820	18.5%
92.6%	14,504	15,668	1,164	8.0%
93.8%	14,108	15,276	1,168	8.3%
95.1%	13,848	15,024	1,176	8.5%
96.3%	12,022	14,700	2,678	22.3%
97.5%	11,641	13,982	2,341	20.1%
98.8%	9,038	12,431	3,392	37.5%
100.0%	8,528	11,657	3,129	36.7%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	26,331	26,331	0	0.0%
1.2%	26,331	26,331	0	0.0%
2.5%	26,331	26,331	0	0.0%
3.7%	26,331	26,331	0	0.0%
4.9%	26,331	26,331	0	0.0%
6.2%	26,331	26,331	0	0.0%
7.4%	26,331	26,331	0	0.0%
8.6%	26,331	26,331	0	0.0%
9.9%	26,331	26,297	-34	-0.1%
11.1%	26,331	26,265	-66	-0.3%
12.3%	26,331	26,228	-102	-0.4%
13.6%	26,331	26,226	-104	-0.4%
14.8%	26,331	25,880	-451	-1.7%
16.0%	26,265	25,830	-436	-1.7%
17.3%	26,015	25,802	-213	-0.8%
18.5%	25,977	25,795	-182	-0.7%
19.8%	25,930	25,755	-175	-0.7%
21.0%	25,676	25,728	53	0.2%
22.2%	25,663	25,701	38	0.1%
23.5%	25,634	25,540	-94	-0.4%
24.7%	25,257	25,455	198	0.8%
25.9%	24,882	25,352	470	1.9%
27.2%	24,655	25,336	681	2.8%
28.4%	24,640	25,221	581	2.4%
29.6%	24,461	25,171	710	2.9%
30.9%	24,424	25,149	725	3.0%
32.1%	24,202	25,121	919	3.8%
33.3%	24,199	25,023	824	3.4%
34.6%	24,191	24,862	671	2.8%
35.8%	24,182	24,807	625	2.6%
37.0%	24,111	24,741	629	2.6%
38.3%	23,769	24,629	860	3.6%
39.5%	23,644	24,500	856	3.6%
40.7%	23,244	24,466	1,222	5.3%
42.0%	23,196	24,326	1,130	4.9%
43.2%	23,055	24,170	1,114	4.8%
44.4%	23,047	23,947	900	3.9%
45.7%	22,985	23,887	902	3.9%
46.9%	22,982	23,803	821	3.6%
48.1%	22,755	23,802	1,048	4.6%
49.4%	22,720	23,801	1,080	4.8%
50.6%	22,629	23,669	1,040	4.6%
51.9%	22,410	23,659	1,249	5.6%
53.1%	22,250	23,623	1,373	6.2%
54.3%	22,183	23,389	1,206	5.4%
55.6%	22,148	23,062	914	4.1%
56.8%	22,101	22,928	826	3.7%
58.0%	22,098	22,868	770	3.5%
59.3%	22,077	22,752	675	3.1%
60.5%	22,076	22,696	619	2.8%
61.7%	21,966	22,684	718	3.3%
63.0%	21,891	22,678	787	3.6%
64.2%	21,333	22,447	1,114	5.2%
65.4%	21,205	22,089	884	4.2%
66.7%	21,139	22,021	882	4.2%
67.9%	21,091	21,322	231	1.1%
69.1%	20,706	21,290	584	2.8%
70.4%	20,508	21,193	686	3.3%
71.6%	20,423	21,017	594	2.9%
72.8%	20,248	20,977	730	3.6%
74.1%	20,228	20,937	708	3.5%
75.3%	19,883	20,899	1,016	5.1%
76.5%	19,717	20,845	1,129	5.7%
77.8%	19,424	20,598	1,173	6.0%
79.0%	19,343	20,416	1,073	5.5%
80.2%	18,777	20,272	1,495	8.0%
81.5%	18,757	20,049	1,291	6.9%
82.7%	18,152	19,298	1,146	6.3%
84.0%	18,054	19,221	1,167	6.5%
85.2%	17,605	19,137	1,532	8.7%
86.4%	17,087	18,631	1,543	9.0%
87.7%	16,670	18,139	1,469	8.8%
88.9%	16,069	17,312	1,242	7.7%
90.1%	15,053	16,617	1,563	10.4%
91.4%	14,078	16,610	2,532	18.0%
92.6%	12,732	14,045	1,313	10.3%
93.8%	12,618	13,613	995	7.9%
95.1%	10,199	12,215	2,016	19.8%
96.3%	9,060	12,199	3,139	34.7%
97.5%	8,991	12,143	3,151	35.0%
98.8%	7,642	10,269	2,627	34.4%
100.0%	7,002	9,388	2,386	34.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	24,728	24,728	0	0.0%
1.2%	24,728	24,728	0	0.0%
2.5%	24,728	24,728	0	0.0%
3.7%	24,728	24,728	0	0.0%
4.9%	24,728	24,728	0	0.0%
6.2%	24,526	24,728	201	0.8%
7.4%	24,443	24,728	285	1.2%
8.6%	24,382	24,691	309	1.3%
9.9%	24,352	24,557	205	0.8%
11.1%	24,130	24,485	354	1.5%
12.3%	24,130	24,464	334	1.4%
13.6%	24,102	24,399	297	1.2%
14.8%	23,734	24,308	574	2.4%
16.0%	23,721	24,300	579	2.4%
17.3%	23,659	23,990	330	1.4%
18.5%	23,659	23,958	298	1.3%
19.8%	23,650	23,887	236	1.0%
21.0%	23,592	23,810	218	0.9%
22.2%	23,555	23,765	210	0.9%
23.5%	23,481	23,714	234	1.0%
24.7%	23,331	23,701	370	1.6%
25.9%	23,269	23,699	431	1.9%
27.2%	23,187	23,680	494	2.1%
28.4%	23,122	23,659	538	2.3%
29.6%	23,101	23,659	559	2.4%
30.9%	23,075	23,659	584	2.5%
32.1%	22,964	23,659	695	3.0%
33.3%	22,952	23,577	625	2.7%
34.6%	22,817	23,552	735	3.2%
35.8%	22,810	23,520	711	3.1%
37.0%	22,803	23,498	695	3.0%
38.3%	22,662	23,412	750	3.3%
39.5%	22,659	23,354	694	3.1%
40.7%	22,659	23,337	677	3.0%
42.0%	22,611	23,308	697	3.1%
43.2%	22,479	23,164	685	3.0%
44.4%	22,378	23,045	667	3.0%
45.7%	22,210	23,030	820	3.7%
46.9%	22,171	23,017	846	3.8%
48.1%	22,007	22,825	818	3.7%
49.4%	21,922	22,632	710	3.2%
50.6%	21,891	22,545	653	3.0%
51.9%	21,845	22,495	649	3.0%
53.1%	21,796	22,477	681	3.1%
54.3%	21,783	22,450	667	3.1%
55.6%	21,780	22,449	669	3.1%
56.8%	21,545	22,420	875	4.1%
58.0%	21,532	22,344	811	3.8%
59.3%	21,512	22,326	815	3.8%
60.5%	21,456	22,042	585	2.7%
61.7%	21,150	21,880	730	3.5%
63.0%	20,837	21,880	1,043	5.0%
64.2%	20,777	21,104	327	1.6%
65.4%	20,748	21,053	305	1.5%
66.7%	20,651	21,036	385	1.9%
67.9%	20,204	20,842	638	3.2%
69.1%	20,065	20,818	753	3.8%
70.4%	19,953	20,636	683	3.4%
71.6%	19,848	20,511	662	3.3%
72.8%	19,682	20,412	730	3.7%
74.1%	19,307	20,221	913	4.7%
75.3%	19,304	19,992	689	3.6%
76.5%	19,101	19,973	872	4.6%
77.8%	19,071	19,625	554	2.9%
79.0%	18,808	19,567	759	4.0%
80.2%	18,620	19,179	559	3.0%
81.5%	18,127	19,021	894	4.9%
82.7%	18,077	18,836	759	4.2%
84.0%	17,964	18,428	464	2.6%
85.2%	17,274	18,268	994	5.8%
86.4%	16,436	18,225	1,790	10.9%
87.7%	16,326	17,703	1,377	8.4%
88.9%	15,835	17,007	1,172	7.4%
90.1%	14,784	16,279	1,495	10.1%
91.4%	13,874	15,878	2,005	14.4%
92.6%	11,996	13,156	1,160	9.7%
93.8%	11,590	13,035	1,445	12.5%
95.1%	8,896	11,143	2,248	25.3%
96.3%	8,848	10,753	1,905	21.5%
97.5%	7,894	10,502	2,608	33.0%
98.8%	7,403	10,098	2,694	36.4%
100.0%	7,153	8,435	1,282	17.9%

Figure SW-10-b
Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

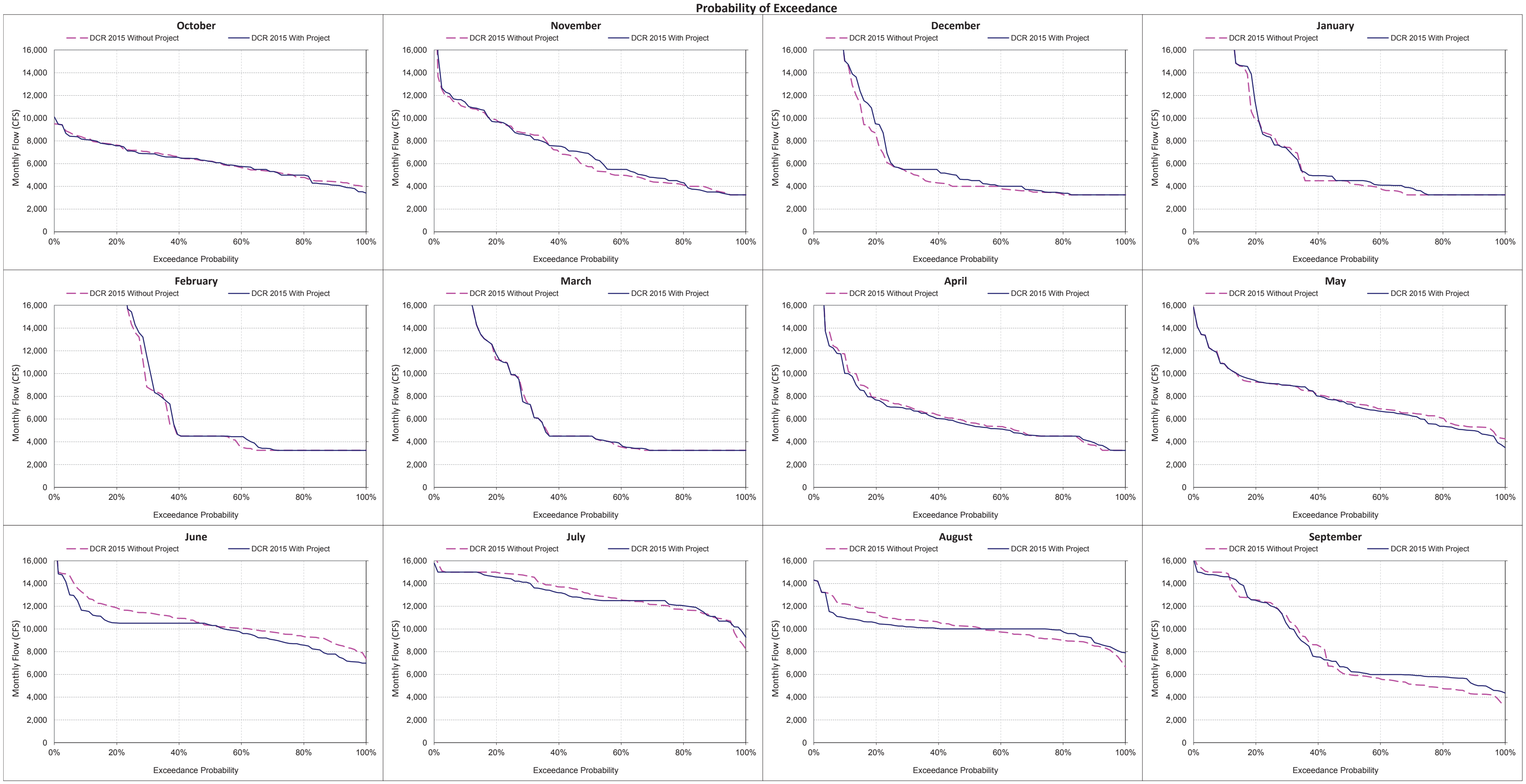


Table SW-10-b

Sacramento River below Keswick Reservoir, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,499	10,100	601	6.3%
1.2%	9,474	9,474	0	0.0%
2.5%	9,416	9,416	0	0.0%
3.7%	8,888	8,661	-227	-2.6%
4.9%	8,742	8,418	-324	-3.7%
6.2%	8,546	8,382	-164	-1.9%
7.4%	8,463	8,361	-102	-1.2%
8.6%	8,361	8,171	-191	-2.3%
9.9%	8,237	8,106	-131	-1.6%
11.1%	8,236	8,104	-132	-1.6%
12.3%	7,946	8,048	102	1.3%
13.6%	7,897	7,990	93	1.2%
14.8%	7,836	7,802	-34	-0.4%
16.0%	7,780	7,762	-18	-0.2%
17.3%	7,756	7,694	-62	-0.8%
18.5%	7,697	7,672	-26	-0.3%
19.8%	7,647	7,561	-86	-1.1%
21.0%	7,595	7,559	-36	-0.5%
22.2%	7,275	7,485	209	2.9%
23.5%	7,229	7,112	-116	-1.6%
24.7%	7,176	7,109	-67	-0.9%
25.9%	7,174	7,066	-108	-1.5%
27.2%	7,162	6,898	-263	-3.7%
28.4%	7,079	6,878	-202	-2.9%
29.6%	7,070	6,877	-193	-2.7%
30.9%	6,978	6,863	-115	-1.7%
32.1%	6,960	6,853	-107	-1.5%
33.3%	6,932	6,754	-178	-2.6%
34.6%	6,831	6,666	-165	-2.4%
35.8%	6,799	6,594	-205	-3.0%
37.0%	6,763	6,577	-185	-2.7%
38.3%	6,665	6,569	-96	-1.4%
39.5%	6,629	6,562	-67	-1.0%
40.7%	6,495	6,476	-19	-0.3%
42.0%	6,443	6,473	30	0.5%
43.2%	6,432	6,464	32	0.5%
44.4%	6,416	6,461	45	0.7%
45.7%	6,356	6,456	100	1.6%
46.9%	6,293	6,321	28	0.4%
48.1%	6,248	6,279	31	0.5%
49.4%	6,223	6,229	5	0.1%
50.6%	6,208	6,174	-34	-0.5%
51.9%	6,090	6,089	-2	0.0%
53.1%	6,036	6,085	49	0.8%
54.3%	5,886	5,965	79	1.3%
55.6%	5,851	5,888	37	0.6%
56.8%	5,793	5,875	82	1.4%
58.0%	5,793	5,828	36	0.6%
59.3%	5,696	5,754	58	1.0%
60.5%	5,625	5,741	117	2.1%
61.7%	5,569	5,730	160	2.9%
63.0%	5,450	5,694	243	4.5%
64.2%	5,448	5,500	52	1.0%
65.4%	5,418	5,500	82	1.5%
66.7%	5,398	5,500	102	1.9%
67.9%	5,361	5,500	139	2.6%
69.1%	5,335	5,318	-17	-0.3%
70.4%	5,300	5,301	1	0.0%
71.6%	5,235	5,204	-30	-0.6%
72.8%	5,156	5,000	-156	-3.0%
74.1%	5,091	5,000	-91	-1.8%
75.3%	5,062	5,000	-62	-1.2%
76.5%	4,998	5,000	2	0.0%
77.8%	4,793	5,000	207	4.3%
79.0%	4,790	5,000	210	4.4%
80.2%	4,782	4,991	209	4.4%
81.5%	4,648	4,901	253	5.4%
82.7%	4,530	4,288	-242	-5.3%
84.0%	4,482	4,286	-196	-4.4%
85.2%	4,479	4,228	-252	-5.6%
86.4%	4,464	4,224	-240	-5.4%
87.7%	4,454	4,198	-257	-5.8%
88.9%	4,434	4,122	-311	-7.0%
90.1%	4,412	4,093	-320	-7.2%
91.4%	4,404	4,070	-335	-7.6%
92.6%	4,324	3,976	-347	-8.0%
93.8%	4,318	3,899	-419	-9.7%
95.1%	4,192	3,876	-316	-7.5%
96.3%	4,093	3,806	-287	-7.0%
97.5%	4,071	3,537	-534	-13.1%
98.8%	4,000	3,526	-474	-11.9%
100.0%	3,746	3,415	-331	-8.8%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,898	28,078	2,180	8.4%
1.2%	13,648	15,682	2,034	14.9%
2.5%	12,539	12,659	120	1.0%
3.7%	11,896	12,298	402	3.4%
4.9%	11,894	12,168	274	2.3%
6.2%	11,467	11,696	230	2.0%
7.4%	11,450	11,640	190	1.7%
8.6%	11,089	11,631	542	4.9%
9.9%	10,974	11,425	451	4.1%
11.1%	10,931	11,008	77	0.7%
12.3%	10,829	10,931	102	0.9%
13.6%	10,797	10,877	81	0.7%
14.8%	10,569	10,756	187	1.8%
16.0%	10,497	10,700	203	1.9%
17.3%	10,105	10,096	-9	-0.1%
18.5%	9,939	9,705	-234	-2.4%
19.8%	9,879	9,671	-208	-2.1%
21.0%	9,622	9,669	47	0.5%
22.2%	9,536	9,612	76	0.8%
23.5%	9,344	9,408	64	0.7%
24.7%	9,300	9,105	-195	-2.1%
25.9%	8,864	8,742	-121	-1.4%
27.2%	8,797	8,616	-181	-2.1%
28.4%	8,717	8,589	-129	-1.5%
29.6%	8,683	8,497	-186	-2.1%
30.9%	8,601	8,461	-140	-1.6%
32.1%	8,515	8,111	-404	-4.7%
33.3%	8,505	8,092	-413	-4.9%
34.6%	8,433	7,972	-461	-5.5%
35.8%	8,042	7,840	-202	-2.5%
37.0%	7,575	7,588	13	0.2%
38.3%	7,233	7,563	330	4.6%
39.5%	7,187	7,548	361	5.0%
40.7%	6,826	7,517	692	10.1%
42.0%	6,811	7,418	608	8.9%
43.2%	6,758	7,121	363	5.4%
44.4%	6,648	7,111	464	7.0%
45.7%	6,460	7,090	629	9.7%
46.9%	6,041	7,030	989	16.4%
48.1%	5,878	6,953	1,074	18.3%
49.4%	5,739	6,912	1,173	20.4%
50.6%	5,730	6,658	929	16.2%
51.9%	5,358	6,349	991	18.5%
53.1%	5,321	6,259	938	17.6%
54.3%	5,293	5,926	633	12.0%
55.6%	5,281	5,503	222	4.2%
56.8%	5,070	5,500	430	8.5%
58.0%	4,994	5,500	506	10.1%
59.3%	4,985	5,500	515	10.3%
60.5%	4,980	5,500	520	10.4%
61.7%	4,954	5,500	546	11.0%
63.0%	4,889	5,331	442	9.0%
64.2%	4,845	5,246	400	8.3%
65.4%	4,826	5,066	240	5.0%
66.7%	4,728	5,019	291	6.2%
67.9%	4,596	4,950	354	7.7%
69.1%	4,473	4,809	336	7.5%
70.4%	4,379	4,774	394	9.0%
71.6%	4,367	4,736	369	8.5%
72.8%	4,350	4,704	354	8.1%
74.1%	4,331	4,698	367	8.5%
75.3%	4,279	4,500	221	5.2%
76.5%	4,269	4,500	231	5.4%
77.8%	4,242	4,500	258	6.1%
79.0%	4,204	4,369	165	3.9%
80.2%	4,101	4,295	194	4.7%
81.5%	4,000	3,870	-130	-3.2%
82.7%	4,000	3,751	-249	-6.2%
84.0%	4,000	3,723	-277	-6.9%
85.2%	4,000	3,684	-316	-7.9%
86.4%	3,991	3,585	-405	-10.2%
87.7%	3,885	3,514	-371	-9.5%
88.9%	3,758	3,499	-259	-6.9%
90.1%	3,618	3,498	-120	-3.3%
91.4%	3,547	3,481	-66	-1.9%
92.6%	3,481	3,391	-90	-2.6%
93.8%	3,408	3,330	-78	-2.3%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	27,019	26,034	-986	-3.6%
1.2%	24,622	22,951	-1,672	-6.8%
2.5%	22,565	22,565	0	0.0%
3.7%	22,258	22,258	0	0.0%
4.9%	22,160	21,890	-270	-1.2%
6.2%	20,314	20,314	0	0.0%
7.4%	18,567	18,063	-504	-2.7%
8.6%	18,063	17,942	-121	-0.7%
9.9%	15,051	15,051	0	0.0%
11.1%	14,560	14,717	157	1.1%
12.3%	12,898	13,883	985	7.6%
13.6%	11,997	13,615	1,618	13.5%
14.8%	11,307	12,392	1,085	9.6%
16.0%	9,429	11,550	2,121	22.5%
17.3%	9,405	11,307	1,902	20.2%
18.5%	8,872	10,903	2,031	22.9%
19.8%	8,704	9,504	800	9.2%
21.0%	7,446	9,445	1,999	26.8%
22.2%	6,907	8,699	1,792	26.0%
23.5%	6,096	6,907	811	13.3%
24.7%	5,916	6,078	161	2.7%
25.9%	5,668	5,730	61	1.1%
27.2%	5,642	5,642	0	0.0%
28.4%	5,543	5,500	-43	-0.8%
29.6%	5,316	5,500	184	3.5%
30.9%	5,214	5,500	286	5.5%
32.1%	5,021	5,500	479	9.5%
33.3%	4,953	5,500	547	11.0%
34.6%	4,779	5,500	721	15.1%
35.8%	4,498	5,500	1,002	22.3%
37.0%	4,402	5,500	1,098	24.9%
38.3%	4,378	5,500	1,122	25.6%
39.5%	4,315	5,489	1,174	27.2%
40.7%	4,279	5,178	899	21.0%
42.0%	4,252	5,163	911	21.4%
43.2%	4,179	5,113	934	22.4%
44.4%	4,000	5,024	1,024	25.6%
45.7%	4,000	4,982	982	24.6%
46.9%	4,000	4,616	616	15.4%
48.1%	4,000	4,602	602	15.1%
49.4%	4,000	4,599	599	15.0%
50.6%	4,000	4,500	500	12.5%
51.9%	4,000	4,500	500	12.5%
53.1%	4,000	4,500	500	12.5%
54.3%	4,000	4,240	240	6.0%
55.6%	4,000	4,216	216	5.4%
56.8%	4,000	4,146	146	3.7%
58.0%	4,000	4,140	140	3.5%
59.3%	4,000	4,030	30	0.7%
60.5%	3,764	4,000	236	6.3%
61.7%	3,744	4,000	256	6.8%
63.0%	3,707	4,000	293	7.9%
64.2%	3,690	4,000	310	8.4%
65.4%	3,650	4,000	350	9.6%
66.7%	3,612	4,000	388	10.7%
67.9%	3,609	3,744	135	3.7%
69.1%	3,599	3,707	108	3.0%
70.4%	3,494	3,682	188	5.4%
71.6%	3,493	3,642	149	4.3%
72.8%	3,490	3,609	119	3.4%
74.1%	3,472	3,494	23	0.7%
75.3%	3,471	3,493	22	0.6%
76.5%	3,458	3,490	32	0.9%
77.8%	3,439	3,472	32	0.9%
79.0%	3,388	3,439	52	1.5%
80.2%	3,251	3,392	141	4.3%
81.5%	3,250	3,380	130	4.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	52,735	52,735	0	0.0%
1.2%	38,615	38,615	0	0.0%
2.5%	34,203	34,203	0	0.0%
3.7%	30,587	30,587	0	0.0%
4.9%	28,115	28,125	10	0.0%
6.2%	24,756	25,153	397	1.6%
7.4%	22,963	22,348	-615	-2.7%
8.6%	20,927	20,927	0	0.0%
9.9%	19,053	19,053	0	0.0%
11.1%	18,323	18,323	0	0.0%
12.3%	17,893	18,262	369	2.1%
13.6%	14,826	14,826	0	0.0%
14.8%	14,598	14,650	51	0.4%
16.0%	14,544	14,598	55	0.4%
17.3%	13,878	14,544	665	4.8%
18.5%	10,603	13,878	3,275	30.9%
19.8%	9,852	11,523	1,671	17.0%
21.0%	9,739	9,702	-36	-0.4%
22.2%	8,782	8,604	-178	-2.0%
23.5%	8,659	8,407	-253	-2.9%
24.7%	8,540	8,333	-207	-2.4%
25.9%	8,333	7,628	-705	-8.5%
27.2%	7,628	7,626	-2	0.0%
28.4%	7,626	7,446	-180	-2.4%
29.6%	7,446	7,419	-27	-0.4%
30.9%	7,419	7,049	-370	-5.0%
32.1%	7,049	6,684	-365	-5.2%
33.3%	6,931	6,334	-597	-8.6%
34.6%	5,555	5,376	-180	-3.2%
35.8%	4,500	5,250	750	16.7%
37.0%	4,500	4,979	479	10.6%
38.3%	4,500	4,950	450	10.0%
39.5%	4,500	4,950	450	10.0%
40.7%	4,500	4,950	450	10.0%
42.0%	4,500	4,950	450	10.0%
43.2%	4,500	4,897	397	8.8%
44.4%	4,500	4,890	390	8.7%
45.7%	4,500	4,500	0	0.0%
46.9%	4,500	4,500	0	0.0%
48.1%	4,500	4,500	0	0.0%
49.4%	4,465	4,500	35	0.8%
50.6%	4,202	4,500	298	7.1%
51.9%	4,165	4,500	335	8.0%
53.1%	4,148	4,500	352	8.5%
54.3%	4,082	4,500	418	10.2%
55.6%	4,040	4,465	425	10.5%
56.8%	4,025	4,378	353	8.8%
58.0%	3,979	4,165	186	4.7%
59.3%	3,926	4,125	199	5.1%
60.5%	3,721	4,088	366	9.8%
61.7%	3,638	4,087	450	12.4%
63.0%	3,632	4,087	455	12.5%
64.2%	3,629	4,082	452	12.5%
65.4%	3,584	4,080	496	13.8%
66.7%	3,502	4,077	576	16.4%
67.9%	3,255	3,926	672	20.6%
69.1%	3,250	3,900	650	20.0%
70.4%	3,250	3,821	571	17.6%
71.6%	3,250	3,632	382	11.7%
72.8%	3,250	3,629	379	11.7%
74.1%	3,250	3,393	143	4.4%
75.3%	3,250	3,262	12	0.4%
76.5%	3,250	3,262	12	0.4%
77.8%	3,250	3,262	12	0.4%
79.0%	3,250	3,260	10	0.3%
80.2%	3,250	3,260	10	0.3%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

Table SW-10-b
Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,007	53,800	9,793	22.3%
1.2%	42,875	45,544	2,668	6.2%
2.5%	35,476	44,007	8,531	24.0%
3.7%	32,475	35,476	3,001	9.2%
4.9%	30,746	31,664	918	3.0%
6.2%	30,503	30,692	189	0.6%
7.4%	30,069	30,299	230	0.8%
8.6%	28,992	30,288	1,296	4.5%
9.9%	28,040	30,069	2,029	7.2%
11.1%	27,512	28,992	1,479	5.4%
12.3%	26,581	27,512	931	3.5%
13.6%	23,696	23,696	0	0.0%
14.8%	23,127	23,127	0	0.0%
16.0%	22,775	22,775	0	0.0%
17.3%	21,451	21,451	0	0.0%
18.5%	21,309	21,309	0	0.0%
19.8%	18,799	18,799	0	0.0%
21.0%	18,422	18,422	0	0.0%
22.2%	18,321	18,321	0	0.0%
23.5%	15,705	15,705	0	0.0%
24.7%	14,354	15,434	1,080	7.5%
25.9%	13,598	14,297	700	5.1%
27.2%	13,212	13,598	386	2.9%
28.4%	11,175	13,212	2,037	18.2%
29.6%	8,830	11,523	2,694	30.5%
30.9%	8,615	9,952	1,337	15.5%
32.1%	8,436	8,323	-113	-1.3%
33.3%	8,323	8,164	-159	-1.9%
34.6%	8,164	7,906	-258	-3.2%
35.8%	7,324	7,610	286	3.9%
37.0%	5,550	7,324	1,775	32.0%
38.3%	5,479	5,550	70	1.3%
39.5%	4,500	4,625	125	2.8%
40.7%	4,500	4,500	0	0.0%
42.0%	4,500	4,500	0	0.0%
43.2%	4,500	4,500	0	0.0%
44.4%	4,500	4,500	0	0.0%
45.7%	4,500	4,500	0	0.0%
46.9%	4,500	4,500	0	0.0%
48.1%	4,500	4,500	0	0.0%
49.4%	4,500	4,500	0	0.0%
50.6%	4,500	4,500	0	0.0%
51.9%	4,500	4,500	0	0.0%
53.1%	4,500	4,500	0	0.0%
54.3%	4,491	4,500	9	0.2%
55.6%	4,451	4,491	40	0.9%
56.8%	4,207	4,455	248	5.9%
58.0%	4,146	4,455	309	7.5%
59.3%	3,679	4,455	776	21.1%
60.5%	3,488	4,451	963	27.6%
61.7%	3,423	4,207	784	22.9%
63.0%	3,414	4,012	598	17.5%
64.2%	3,250	3,875	625	19.2%
65.4%	3,250	3,524	274	8.4%
66.7%	3,250	3,429	179	5.5%
67.9%	3,250	3,414	164	5.0%
69.1%	3,250	3,413	163	5.0%
70.4%	3,250	3,294	44	1.4%
71.6%	3,250	3,254	4	0.1%
72.8%	3,250	3,250	0	0.0%
74.1%	3,250	3,250	0	0.0%
75.3%	3,250	3,250	0	0.0%
76.5%	3,250	3,250	0	0.0%
77.8%	3,250	3,250	0	0.0%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	46,295	46,295	0	0.0%
1.2%	41,093	45,396	4,303	10.5%
2.5%	40,250	35,227	-5,023	-12.5%
3.7%	35,227	34,284	-943	-2.7%
4.9%	34,284	25,425	-8,859	-25.8%
6.2%	25,435	21,051	-4,384	-17.2%
7.4%	20,521	20,521	0	0.0%
8.6%	19,854	19,854	0	0.0%
9.9%	18,544	18,544	0	0.0%
11.1%	17,065	17,033	-32	-0.2%
12.3%	15,812	15,812	0	0.0%
13.6%	14,297	14,297	0	0.0%
14.8%	13,482	13,482	0	0.0%
16.0%	13,072	13,072	0	0.0%
17.3%	12,834	12,834	0	0.0%
18.5%	12,569	12,569	0	0.0%
19.8%	11,245	11,770	525	4.7%
21.0%	11,183	11,165	-17	-0.2%
22.2%	11,165	11,002	-163	-1.5%
23.5%	10,926	10,926	0	0.0%
24.7%	9,911	9,911	0	0.0%
25.9%	9,836	9,907	71	0.7%
27.2%	9,667	9,498	-170	-1.8%
28.4%	8,381	7,528	-853	-10.2%
29.6%	7,528	7,373	-156	-2.1%
30.9%	7,278	7,278	0	0.0%
32.1%	6,125	6,125	0	0.0%
33.3%	6,078	6,078	0	0.0%
34.6%	5,728	5,728	0	0.0%
35.8%	5,141	4,837	-303	-5.9%
37.0%	4,500	4,500	0	0.0%
38.3%	4,500	4,500	0	0.0%
39.5%	4,500	4,500	0	0.0%
40.7%	4,500	4,500	0	0.0%
42.0%	4,500	4,500	0	0.0%
43.2%	4,500	4,500	0	0.0%
44.4%	4,500	4,500	0	0.0%
45.7%	4,500	4,500	0	0.0%
46.9%	4,500	4,500	0	0.0%
48.1%	4,500	4,500	0	0.0%
49.4%	4,500	4,500	0	0.0%
50.6%	4,500	4,500	0	0.0%
51.9%	4,250	4,250	0	0.0%
53.1%	4,134	4,172	38	0.9%
54.3%	4,073	4,134	61	1.5%
55.6%	4,048	4,048	0	0.0%
56.8%	3,979	3,979	0	0.0%
58.0%	3,706	3,962	257	6.9%
59.3%	3,602	3,915	313	8.7%
60.5%	3,510	3,602	92	2.6%
61.7%	3,436	3,510	74	2.2%
63.0%	3,422	3,503	81	2.4%
64.2%	3,422	3,436	15	0.4%
65.4%	3,385	3,422	37	1.1%
66.7%	3,250	3,422	172	5.3%
67.9%	3,250	3,378	128	3.9%
69.1%	3,250	3,250	0	0.0%
70.4%	3,250	3,250	0	0.0%
71.6%	3,250	3,250	0	0.0%
72.8%	3,250	3,250	0	0.0%
74.1%	3,250	3,250	0	0.0%
75.3%	3,250	3,250	0	0.0%
76.5%	3,250	3,250	0	0.0%
77.8%	3,250	3,250	0	0.0%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,037	30,037	0	0.0%
1.2%	24,797	24,797	0	0.0%
2.5%	20,039	19,953	-86	-0.4%
3.7%	13,806	13,739	-67	-0.5%
4.9%	13,739	12,446	-1,293	-9.4%
6.2%	12,446	12,268	-178	-1.4%
7.4%	12,268	11,770	-499	-4.1%
8.6%	11,770	11,736	-33	-0.3%
9.9%	11,736	10,023	-1,713	-14.6%
11.1%	10,152	9,987	-165	-1.6%
12.3%	10,023	9,743	-281	-2.8%
13.6%	9,987	9,000	-987	-9.9%
14.8%	9,000	8,563	-437	-4.9%
16.0%	8,940	8,485	-455	-5.1%
17.3%	8,752	7,974	-778	-8.9%
18.5%	7,935	7,943	7	0.1%
19.8%	7,892	7,694	-198	-2.5%
21.0%	7,837	7,632	-204	-2.6%
22.2%	7,694	7,416	-279	-3.6%
23.5%	7,639	7,131	-508	-6.6%
24.7%	7,472	7,055	-416	-5.6%
25.9%	7,345	7,054	-292	-4.0%
27.2%	7,339	7,023	-317	-4.3%
28.4%	7,189	7,000	-189	-2.6%
29.6%	7,150	6,890	-261	-3.6%
30.9%	7,033	6,884	-149	-2.1%
32.1%	6,894	6,712	-182	-2.6%
33.3%	6,712	6,680	-32	-0.5%
34.6%	6,680	6,515	-165	-2.5%
35.8%	6,553	6,509	-44	-0.7%
37.0%	6,515	6,298	-217	-3.3%
38.3%	6,513	6,179	-335	-5.1%
39.5%	6,383	6,044	-339	-5.3%
40.7%	6,298	6,030	-268	-4.3%
42.0%	6,155	6,013	-142	-2.3%
43.2%	6,088	5,923	-165	-2.7%
44.4%	6,087	5,897	-190	-3.1%
45.7%	5,974	5,760	-214	-3.6%
46.9%	5,956	5,664	-292	-4.9%
48.1%	5,862	5,593	-270	-4.6%
49.4%	5,664	5,508	-156	-2.8%
50.6%	5,662	5,433	-229	-4.0%
51.9%	5,638	5,354	-284	-5.0%
53.1%	5,553	5,316	-237	-4.3%
54.3%	5,528	5,280	-248	-4.5%
55.6%	5,372	5,247	-125	-2.3%
56.8%	5,366	5,168	-197	-3.7%
58.0%	5,358	5,150	-208	-3.9%
59.3%	5,342	5,148	-194	-3.6%
60.5%	5,339	5,105	-235	-4.4%
61.7%	5,231	5,046	-185	-3.5%
63.0%	5,226	5,006	-220	-4.2%
64.2%	5,046	4,787	-259	-5.1%
65.4%	4,964	4,761	-203	-4.1%
66.7%	4,916	4,725	-191	-3.9%
67.9%	4,729	4,600	-129	-2.7%
69.1%	4,552	4,600	48	1.1%
70.4%	4,545	4,572	27	0.6%
71.6%	4,500	4,544	44	1.0%
72.8%	4,500	4,500	0	0.0%
74.1%	4,500	4,500	0	0.0%
75.3%	4,500	4,500	0	0.0%
76.5%	4,500	4,500	0	0.0%
77.8%	4,500	4,500	0	0.0%
79.0%	4,500	4,500	0	0.0%
80.2%	4,500	4,500	0	0.0%
81.5%	4,500	4,500	0	0.0%
82.7%	4,500	4,500	0	0.0%
84.0%	4,500	4,500	0	0.0%
85.2%	4,265	4,473	208	4.9%
86.4%	3,990	4,200	210	5.3%
87.7%	3,819	4,100	281	7.3%
88.9%	3,719	4,025	306	8.2%
90.1%	3,700	3,901	201	5.4%
91.4%	3,547	3,719	172	4.9%
92.6%	3,250	3,682	432	13.3%
93.8%	3,250	3,502	252	7.8%
95.1%	3,250	3,257	7	0.2%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,837	15,837	0	0.0%
1.2%	14,124	14,124	0	0.0%
2.5%	13,439	13,439	0	0.0%
3.7%	13,385	13,385	0	0.0%
4.9%	12,281	12,281	0	0.0%
6.2%	12,057	12,057	0	0.0%
7.4%	11,988	11,879	-108	-0.9%
8.6%	10,962	10,890	-72	-0.7%
9.9%	10,855	10,855	0	0.0%
11.1%	10,425	10,486	61	0.6%
12.3%	10,242	10,242	0	0.0%
13.6%	10,047	10,065	19	0.2%
14.8%	9,613	9,842	230	2.4%
16.0%	9,395	9,695	300	3.2%
17.3%	9,315	9,597	282	3.0%
18.5%	9,268	9,501	233	2.5%
19.8%	9,261	9,395	134	1.4%
21.0%	9,232	9,268	36	0.4%
22.2%	9,222	9,215	-7	-0.1%
23.5%	9,140	9,164	24	0.3%
24.7%	9,119	9,140	21	0.2%
25.9%	9,102	9,102	0	0.0%
27.2%	9,002	9,099	97	1.1%
28.4%	8,996	9,002	7	0.1%
29.6%	8,972	8,996	23	0.3%
30.9%	8,966	8,966	0	0.0%
32.1%	8,884	8,892	8	0.1%
33.3%	8,819	8,876	56	0.6%
34.6%	8,562	8,843	280	3.3%
35.8%	8,488	8,830	341	4.0%
37.0%	8,474	8,532	58	0.7%
38.3%	8,452	8,477	25	0.3%
39.5%	8,181	8,043	-139	-1.7%
40.7%	8,090	7,978	-112	-1.4%
42.0%	8,043	7,896	-147	-1.8%
43.2%	7,954	7,731	-222	-2.8%
44.4%	7,804	7,688	-116	-1.5%
45.7%	7,684	7,684	0	0.0%
46.9%	7,655	7,526	-129	-1.7%
48.1%	7,626	7,522	-104	-1.4%
49.4%	7,532	7,337	-195	-2.6%
50.6%	7,467	7,295	-172	-2.3%
51.9%	7,412	7,073	-339	-4.6%
53.1%	7,296	7,038	-258	-3.5%
54.3%	7,260	6,951	-309	-4.3%
55.6%	7,226	6,882	-344	-4.8%
56.8%	7,091	6,796	-295	-4.2%
58.0%	7,051	6,784	-267	-3.8%
59.3%	6,907	6,704	-203	-2.9%
60.5%	6,891	6,670	-221	-3.2%
61.7%	6,847	6,623	-224	-3.3%
63.0%	6,813	6,605	-208	-3.1%
64.2%	6,776	6,564	-212	-3.1%
65.4%	6,761	6,487	-274	-4.1%
66.7%	6,557	6,461	-96	-1.5%
67.9%	6,529	6,394	-136	-2.1%
69.1%	6,528	6,341	-187	-2.9%
70.4%	6,519	6,266	-253	-3.9%
71.6%	6,461	6,215	-246	-3.8%
72.8%	6,437	6,008	-429	-6.7%
74.1%	6,380	5,970	-409	-6.4%
75.3%	6,287	5,600	-687	-10.9%
76.5%	6,286	5,581	-705	-11.2%
77.8%	6,282	5,537	-745	-11.9%
79.0%	6,129	5,367	-762	-12.4%
80.2%	6,057	5,357	-700	-11.6%
81.5%	5,647	5,322	-326	-5.8%
82.7%	5,610	5,295	-315	-5.6%
84.0%	5,495	5,190	-305	-5.5%
85.2%	5,426	5,100	-326	-6.0%
86.4%	5,418	5,058	-361	-6.7%
87.7%	5,344	5,021	-322	-6.0%
88.9%	5,307	5,001	-306	-5.8%
90.1%	5,303	4,966	-336	-6.3%
91.4%	5,300	4,910	-390	-7.4%
92.6%	5,286	4,691	-595	-11.2%
93.8%	5,262	4,624	-638	-12.1%
95.1%	5,181	4,577	-603	-11.6%
96.3%	4,890	4,495	-394	-8.1%
97.5%	4,392	3,917	-474	-10.8%
98.8%	4,322	3,751	-571	-13.2%
100.0%	4,265	3,500	-765	-17.9%

Table SW-10-b
Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,859	19,859	0	0.0%
1.2%	15,000	14,846	-154	-1.0%
2.5%	14,882	14,747	-135	-0.9%
3.7%	14,846	14,171	-676	-4.6%
4.9%	14,684	13,001	-1,683	-11.5%
6.2%	14,071	12,962	-1,109	-7.9%
7.4%	13,587	12,499	-1,088	-8.0%
8.6%	13,288	11,644	-1,643	-12.4%
9.9%	13,034	11,596	-1,438	-11.0%
11.1%	12,659	11,534	-1,125	-8.9%
12.3%	12,586	11,208	-1,378	-10.9%
13.6%	12,260	11,141	-1,119	-9.1%
14.8%	12,245	11,127	-1,118	-9.1%
16.0%	12,146	10,806	-1,340	-11.0%
17.3%	12,058	10,657	-1,402	-11.6%
18.5%	11,964	10,566	-1,398	-11.7%
19.8%	11,878	10,537	-1,342	-11.3%
21.0%	11,743	10,500	-1,243	-10.6%
22.2%	11,657	10,500	-1,157	-9.9%
23.5%	11,643	10,500	-1,143	-9.8%
24.7%	11,606	10,500	-1,106	-9.5%
25.9%	11,491	10,500	-991	-8.6%
27.2%	11,447	10,500	-947	-8.3%
28.4%	11,446	10,500	-946	-8.3%
29.6%	11,425	10,500	-925	-8.1%
30.9%	11,391	10,500	-891	-7.8%
32.1%	11,337	10,500	-837	-7.4%
33.3%	11,267	10,500	-767	-6.8%
34.6%	11,213	10,500	-713	-6.4%
35.8%	11,184	10,500	-684	-6.1%
37.0%	11,135	10,500	-635	-5.7%
38.3%	10,963	10,500	-463	-4.2%
39.5%	10,944	10,500	-444	-4.1%
40.7%	10,939	10,500	-439	-4.0%
42.0%	10,929	10,500	-429	-3.9%
43.2%	10,791	10,500	-291	-2.7%
44.4%	10,783	10,500	-283	-2.6%
45.7%	10,587	10,500	-87	-0.8%
46.9%	10,583	10,500	-83	-0.8%
48.1%	10,363	10,500	137	1.3%
49.4%	10,341	10,387	46	0.4%
50.6%	10,320	10,308	-11	-0.1%
51.9%	10,216	10,300	84	0.8%
53.1%	10,200	10,121	-79	-0.8%
54.3%	10,177	10,000	-177	-1.7%
55.6%	10,153	9,935	-218	-2.1%
56.8%	10,113	9,900	-213	-2.1%
58.0%	10,096	9,855	-241	-2.4%
59.3%	10,081	9,784	-296	-2.9%
60.5%	10,058	9,608	-450	-4.5%
61.7%	10,039	9,599	-440	-4.4%
63.0%	9,986	9,535	-451	-4.5%
64.2%	9,917	9,412	-504	-5.1%
65.4%	9,879	9,221	-658	-6.7%
66.7%	9,821	9,212	-609	-6.2%
67.9%	9,821	9,210	-611	-6.2%
69.1%	9,753	9,100	-653	-6.7%
70.4%	9,712	9,056	-656	-6.8%
71.6%	9,672	8,974	-699	-7.2%
72.8%	9,596	8,900	-696	-7.2%
74.1%	9,540	8,800	-740	-7.8%
75.3%	9,534	8,724	-810	-8.5%
76.5%	9,523	8,716	-807	-8.5%
77.8%	9,415	8,700	-715	-7.6%
79.0%	9,412	8,610	-802	-8.5%
80.2%	9,310	8,573	-737	-7.9%
81.5%	9,293	8,508	-785	-8.4%
82.7%	9,280	8,256	-1,025	-11.0%
84.0%	9,259	8,216	-1,043	-11.3%
85.2%	9,179	8,159	-1,019	-11.1%
86.4%	9,176	7,900	-1,276	-13.9%
87.7%	9,018	7,800	-1,218	-13.5%
88.9%	8,844	7,793	-1,051	-11.9%
90.1%	8,679	7,785	-894	-10.3%
91.4%	8,575	7,518	-1,056	-12.3%
92.6%	8,510	7,417	-1,093	-12.8%
93.8%	8,361	7,180	-1,180	-14.1%
95.1%	8,311	7,143	-1,168	-14.1%
96.3%	8,194	7,100	-1,094	-13.4%
97.5%	7,929	7,093	-836	-10.5%
98.8%	7,925	7,000	-925	-11.7%
100.0%	7,384	7,000	-384	-5.2%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,550	15,775	-775	-4.7%
1.2%	15,775	15,000	-775	-4.9%
2.5%	15,115	15,000	-115	-0.8%
3.7%	15,000	15,000	0	0.0%
4.9%	15,000	15,000	0	0.0%
6.2%	15,000	15,000	0	0.0%
7.4%	15,000	15,000	0	0.0%
8.6%	15,000	15,000	0	0.0%
9.9%	15,000	15,000	0	0.0%
11.1%	15,000	15,000	0	0.0%
12.3%	15,000	15,000	0	0.0%
13.6%	15,000	15,000	0	0.0%
14.8%	15,000	14,926	-74	-0.5%
16.0%	15,000	14,756	-244	-1.6%
17.3%	15,000	14,690	-310	-2.1%
18.5%	15,000	14,640	-360	-2.4%
19.8%	15,000	14,566	-434	-2.9%
21.0%	14,930	14,556	-374	-2.5%
22.2%	14,903	14,497	-406	-2.7%
23.5%	14,870	14,466	-404	-2.7%
24.7%	14,844	14,406	-438	-3.0%
25.9%	14,834	14,207	-627	-4.2%
27.2%	14,787	14,204	-583	-3.9%
28.4%	14,756	14,122	-634	-4.3%
29.6%	14,687	14,118	-569	-3.9%
30.9%	14,625	13,992	-633	-4.3%
32.1%	14,549	13,616	-933	-6.4%
33.3%	14,147	13,592	-556	-3.9%
34.6%	14,047	13,527	-520	-3.7%
35.8%	13,889	13,431	-458	-3.3%
37.0%	13,877	13,412	-465	-3.4%
38.3%	13,862	13,299	-563	-4.1%
39.5%	13,724	13,198	-526	-3.8%
40.7%	13,694	13,182	-512	-3.7%
42.0%	13,690	13,085	-606	-4.4%
43.2%	13,641	12,904	-737	-5.4%
44.4%	13,549	12,814	-736	-5.4%
45.7%	13,507	12,807	-700	-5.2%
46.9%	13,356	12,765	-591	-4.4%
48.1%	13,196	12,653	-544	-4.1%
49.4%	13,145	12,652	-493	-3.8%
50.6%	12,964	12,617	-347	-2.7%
51.9%	12,955	12,561	-394	-3.0%
53.1%	12,895	12,523	-371	-2.9%
54.3%	12,868	12,500	-368	-2.9%
55.6%	12,810	12,500	-310	-2.4%
56.8%	12,739	12,500	-239	-1.9%
58.0%	12,722	12,500	-222	-1.7%
59.3%	12,650	12,500	-150	-1.2%
60.5%	12,522	12,500	-22	-0.2%
61.7%	12,508	12,500	-8	-0.1%
63.0%	12,473	12,500	27	0.2%
64.2%	12,416	12,500	84	0.7%
65.4%	12,415	12,500	85	0.7%
66.7%	12,407	12,500	93	0.8%
67.9%	12,307	12,500	193	1.6%
69.1%	12,158	12,500	342	2.8%
70.4%	12,148	12,500	352	2.9%
71.6%	12,144	12,500	356	2.9%
72.8%	12,082	12,500	418	3.5%
74.1%	12,075	12,500	425	3.5%
75.3%	12,028	12,184	156	1.3%
76.5%	11,768	12,133	365	3.1%
77.8%	11,753	12,097	345	2.9%
79.0%	11,742	12,094	352	3.0%
80.2%	11,690	12,036	346	3.0%
81.5%	11,658	11,994	336	2.9%
82.7%	11,641	11,946	305	2.6%
84.0%	11,628	11,903	275	2.4%
85.2%	11,499	11,700	201	1.7%
86.4%	11,348	11,500	152	1.3%
87.7%	11,320	11,203	-117	-1.0%
88.9%	11,089	11,100	11	0.1%
90.1%	10,994	11,095	100	0.9%
91.4%	10,929	10,700	-229	-2.1%
92.6%	10,896	10,700	-196	-1.8%
93.8%	10,775	10,689	-86	-0.8%
95.1%	10,703	10,580	-124	-1.2%
96.3%	9,686	10,200	514	5.3%
97.5%	9,094	10,179	1,085	11.9%
98.8%	8,723	9,788	1,065	12.2%
100.0%	8,246	9,281	1,035	12.6%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,298	14,298	0	0.0%
1.2%	14,207	14,207	0	0.0%
2.5%	13,238	13,232	-6	0.0%
3.7%	13,212	13,212	0	0.0%
4.9%	13,133	11,532	-1,601	-12.2%
6.2%	12,876	11,432	-1,444	-11.2%
7.4%	12,356	11,114	-1,241	-10.0%
8.6%	12,212	11,062	-1,150	-9.4%
9.9%	12,209	10,984	-1,225	-10.0%
11.1%	12,154	10,893	-1,261	-10.4%
12.3%	12,072	10,884	-1,188	-9.8%
13.6%	11,897	10,839	-1,058	-8.9%
14.8%	11,824	10,773	-1,051	-8.9%
16.0%	11,822	10,657	-1,165	-9.9%
17.3%	11,471	10,635	-837	-7.3%
18.5%	11,459	10,621	-838	-7.3%
19.8%	11,422	10,559	-864	-7.6%
21.0%	11,185	10,451	-734	-6.6%
22.2%	11,037	10,414	-623	-5.6%
23.5%	10,998	10,395	-603	-5.5%
24.7%	10,932	10,378	-554	-5.1%
25.9%	10,929	10,316	-613	-5.6%
27.2%	10,842	10,262	-579	-5.3%
28.4%	10,827	10,249	-578	-5.3%
29.6%	10,825	10,191	-634	-5.9%
30.9%	10,813	10,186	-628	-5.8%
32.1%	10,807	10,178	-629	-5.8%
33.3%	10,798	10,133	-665	-6.2%
34.6%	10,757	10,122	-635	-5.9%
35.8%	10,703	10,110	-593	-5.5%
37.0%	10,700	10,099	-601	-5.6%
38.3%	10,686	10,097	-590	-5.5%
39.5%	10,640	10,065	-575	-5.4%
40.7%	10,510	10,000	-510	-4.9%
42.0%	10,469	10,000	-469	-4.5%
43.2%	10,459	10,000	-459	-4.4%
44.4%	10,329	10,000	-329	-3.2%
45.7%	10,279	10,000	-279	-2.7%
46.9%	10,273	10,000	-273	-2.7%
48.1%	10,259	10,000	-259	-2.5%
49.4%	10,244	10,000	-244	-2.4%
50.6%	10,227	10,000	-227	-2.2%
51.9%	10,178	10,000	-178	-1.7%
53.1%	10,104	10,000	-104	-1.0%
54.3%	9,928	10,000	72	0.7%
55.6%	9,898	10,000	102	1.0%
56.8%	9,878	10,000	122	1.2%
58.0%	9,876	10,000	124	1.3%
59.3%	9,756	10,000	244	2.5%
60.5%	9,717	10,000	283	2.9%
61.7%	9,693	10,000	307	3.2%
63.0%	9,652	10,000	348	3.6%
64.2%	9,541	10,000	459	4.8%
65.4%	9,536	10,000	464	4.9%
66.7%	9,512	10,000	488	5.1%
67.9%	9,501	10,000	499	5.3%
69.1%	9,490	10,000	510	5.4%
70.4%	9,353	10,000	647	6.9%
71.6%	9,194	10,000	806	8.8%
72.8%	9,192	10,000	808	8.8%
74.1%	9,144	10,000	856	9.4%
75.3%	9,140	9,984	843	9.2%
76.5%	9,140	9,943	803	8.8%
77.8%	9,100	9,923	823	9.0%
79.0%	9,048	9,915	866	9.6%
80.2%	9,003	9,708	705	7.8%
81.5%	8,940	9,600	660	7.4%
82.7%	8,939	9,600	661	7.4%
84.0%	8,912	9,582	669	7.5%
85.2%	8,893	9,378	486	5.5%
86.4%	8,883	9,339	456	5.1%
87.7%	8,797	9,300	503	5.7%
88.9%	8,610	9,221	611	7.1%
90.1%	8,494	8,800	306	3.6%
91.4%	8,483	8,700	217	2.6%
92.6%	8,388	8,600	212	2.5%
93.8%	8,302	8,511	209	2.5%
95.1%	8,138	8,444	307	3.8%
96.3%	7,856	8,242	387	4.9%
97.5%	7,566	8,100	534	7.1%
98.8%	7,124	7,945	822	11.5%
100.0%	6,654	7,898	1,244	18.7%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,367	16,168	-199	-1.2%
1.2%	15,606	15,000	-606	-3.9%
2.5%	15,380	14,971	-408	-2.7%
3.7%	15,094	14,826	-268	-1.8%
4.9%	15,000	14,782	-218	-1.5%
6.2%	15,000	14,774	-226	-1.5%
7.4%	15,000	14,726	-274	-1.8%
8.6%	14,997	14,640	-357	-2.4%
9.9%	14,987	14,593	-394	-2.6%
11.1%	14,862	14,588	-275	-1.8%
12.3%	13,801	14,469	668	4.8%
13.6%	13,331	14,348	1,017	7.6%
14.8%	12,804	13,990	1,186	9.3%
16.0%	12,784	13,810	1,026	8.0%
17.3%	12,763	12,848	85	0.7%
18.5%	12,572	12,556	-17	-0.1%
19.8%	12,569	12,542	-27	-0.2%
21.0%	12,542	12,431	-111	-0.9%
22.2%	12,431	12,339	-92	-0.7%
23.5%	12,355	12,321	-34	-0.3%
24.7%	12,325	12,033	-292	-2.4%
25.9%	12,092	11,936	-156	-1.3%
27.2%	11,744	11,732	-12	-0.1%
28.4%	11,342	11,342	0	0.0%
29.6%	11,286	10,553	-733	-6.5%
30.9%	10,653	10,064	-589	-5.5%
32.1%	10,465	9,957	-509	-4.9%
33.3%	10,058	9,379	-679	-6.8%
34.6%	9,402	8,986	-416	-4.4%
35.8%	9,319	8,750	-569	-6.1%
37.0%	8,852	8,477	-375	-4.2%
38.3%	8,619	7,605	-1,014	-11.8%
39.5%	8,609	7,545	-1,064	-12.4%
40.7%	8,448	7,521	-927	-11.0%
42.0%	8,279	7,302	-977	-11.8%
43.2%	6,748	7,266	518	7.7%
44.4%	6,722	7,159	437	6.5%
45.7%	6,595	7,149	554	8.4%
46.9%	6,273	6,679	406	6.5%
48.1%	6,057	6,674	618	10.2%
49.4%	6,046	6,579	533	8.8%
50.6%	5,954	6,244	290	4.9%
51.9%	5,910	6,217	307	5.2%
53.1%	5,910	6,186	276	4.7%
54.3%	5,872	6,135	263	4.5%
55.6%	5,833	6,073	240	4.1%
56.8%	5,777	6,000	223	3.9%
58.0%	5,704	6,000	296	5.2%
59.3%	5,674	6,000	326	5.7%
60.5%	5,558	6,000	442	8.0%
61.7%	5,533	6,000	467	8.4%
63.0%	5,514	6,000	486	8.8%
64.2%	5,463	6,000	537	9.8%
65.4%	5,393	6,000	607	11.3%
66.7%	5,357	5,994	637	11.9%
67.9%	5,334	5,965	631	11.8%
69.1%	5,148	5,960	812	15.8%
70.4%	5,129	5,936	807	15.7%
71.6%	5,077	5,909	832	16.4%
72.8%	5,064	5,897	833	16.4%
74.1%	5,051	5,831	780	15.4%
75.3%	4,917	5,819	902	18.3%
76.5%	4,908	5,817	910	18.5%
77.8%	4,881	5,799	918	18.8%
79.0%	4,840	5,796	956	19.8%
80.2%	4,739	5,793	1,054	22.2%
81.5%	4,727	5,769	1,042	22.0%
82.7%	4,723	5,726	1,003	21.2%
84.0%	4,672	5,700	1,028	22.0%
85.2%	4,622	5,667	1,045	22.6%
86.4%	4,601	5,665	1,064	23.1%
87.7%	4,425	5,623	1,198	27.1%
88.9%	4,301	5,250	949	22.1%
90.1%	4,274	5,090	816	19.1%
91.4%	4,267	5,000	733	17.2%
92.6%	4,260	5,000	740	17.4%
93.8%	4,255	4,994	739	17.4%
95.1%	4,222	4,800	578	13.7%
96.3%	4,189	4,606	417	10.0%
97.5%	3,881	4,565	684	17.6%
98.8%	3,490	4,500	1,010	29.0%
100.0%	3,412	4,366	954	28.0%

Figure SW-11-b
Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

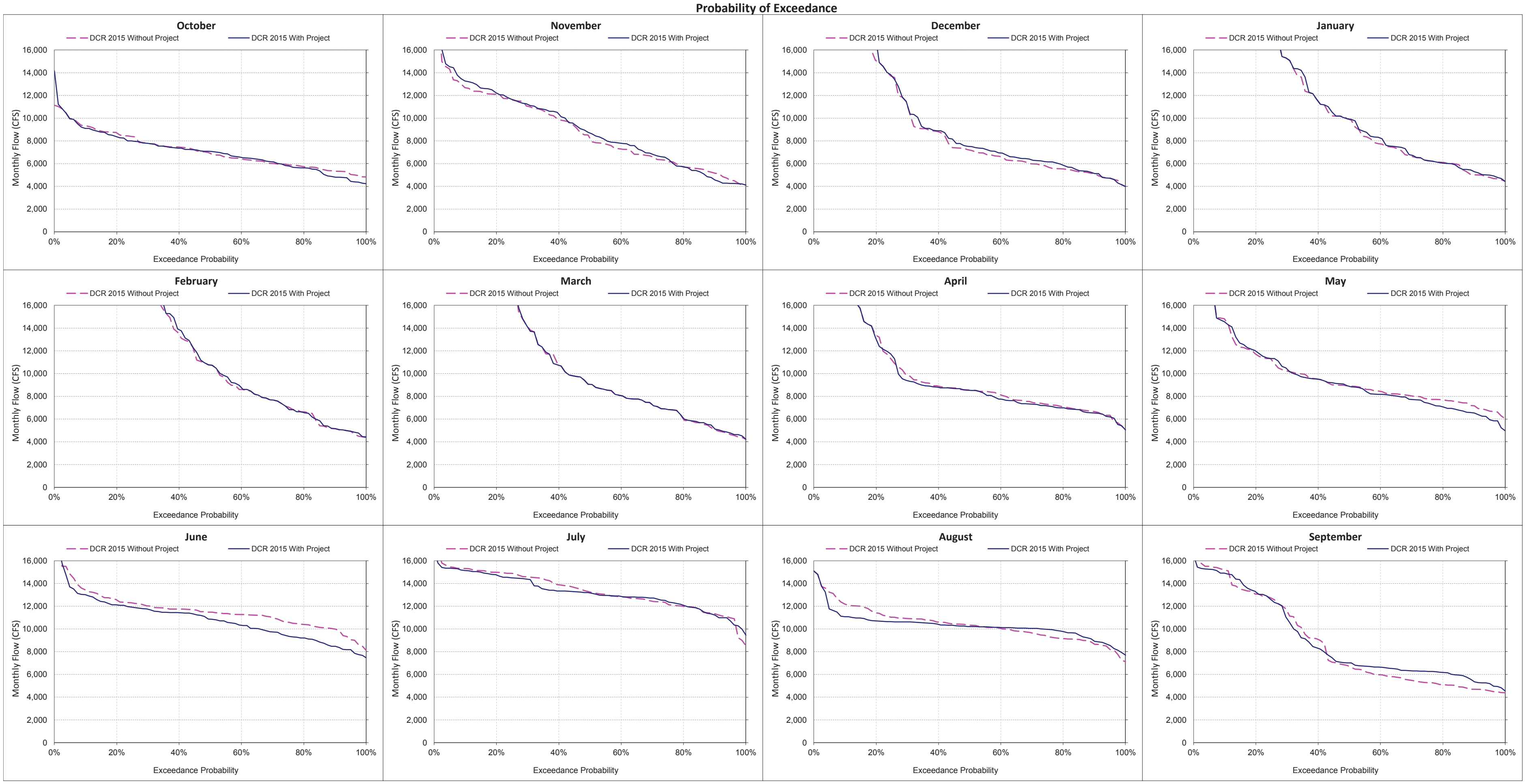


Table SW-11-b
Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,135	14,159	3,023	27.2%
1.2%	11,027	11,232	205	1.9%
2.5%	10,825	10,826	1	0.0%
3.7%	10,478	10,477	0	0.0%
4.9%	9,975	9,946	-29	-0.3%
6.2%	9,944	9,898	-45	-0.5%
7.4%	9,643	9,512	-131	-1.4%
8.6%	9,376	9,210	-166	-1.8%
9.9%	9,347	9,090	-257	-2.7%
11.1%	9,264	9,089	-175	-1.9%
12.3%	9,165	8,965	-200	-2.2%
13.6%	8,965	8,874	-91	-1.0%
14.8%	8,878	8,784	-95	-1.1%
16.0%	8,801	8,764	-37	-0.4%
17.3%	8,794	8,560	-234	-2.7%
18.5%	8,767	8,509	-258	-2.9%
19.8%	8,750	8,384	-366	-4.2%
21.0%	8,521	8,270	-251	-2.9%
22.2%	8,453	8,257	-196	-2.3%
23.5%	8,441	8,005	-436	-5.2%
24.7%	8,391	7,999	-392	-4.7%
25.9%	8,359	7,946	-413	-4.9%
27.2%	7,859	7,937	78	1.0%
28.4%	7,857	7,829	-28	-0.4%
29.6%	7,796	7,801	4	0.1%
30.9%	7,748	7,746	-2	0.0%
32.1%	7,729	7,708	-21	-0.3%
33.3%	7,606	7,548	-58	-0.8%
34.6%	7,575	7,539	-36	-0.5%
35.8%	7,506	7,510	4	0.1%
37.0%	7,482	7,438	-44	-0.6%
38.3%	7,476	7,406	-70	-0.9%
39.5%	7,473	7,374	-99	-1.3%
40.7%	7,440	7,363	-78	-1.0%
42.0%	7,401	7,247	-154	-2.1%
43.2%	7,364	7,243	-121	-1.6%
44.4%	7,262	7,227	-34	-0.5%
45.7%	7,124	7,206	82	1.1%
46.9%	7,056	7,107	51	0.7%
48.1%	7,037	7,098	62	0.9%
49.4%	6,977	7,094	117	1.7%
50.6%	6,822	7,065	243	3.6%
51.9%	6,760	7,018	258	3.8%
53.1%	6,753	6,974	221	3.3%
54.3%	6,611	6,895	284	4.3%
55.6%	6,570	6,867	297	4.5%
56.8%	6,503	6,676	173	2.7%
58.0%	6,480	6,633	153	2.4%
59.3%	6,461	6,581	121	1.9%
60.5%	6,392	6,510	118	1.9%
61.7%	6,341	6,501	160	2.5%
63.0%	6,313	6,471	158	2.5%
64.2%	6,250	6,430	180	2.9%
65.4%	6,239	6,377	138	2.2%
66.7%	6,222	6,340	118	1.9%
67.9%	6,110	6,214	104	1.7%
69.1%	6,026	6,167	141	2.3%
70.4%	6,017	6,150	133	2.2%
71.6%	5,974	6,017	43	0.7%
72.8%	5,971	5,965	-6	-0.1%
74.1%	5,943	5,832	-112	-1.9%
75.3%	5,883	5,782	-101	-1.7%
76.5%	5,866	5,673	-193	-3.3%
77.8%	5,839	5,655	-183	-3.1%
79.0%	5,776	5,638	-138	-2.4%
80.2%	5,722	5,623	-99	-1.7%
81.5%	5,698	5,595	-103	-1.8%
82.7%	5,697	5,511	-186	-3.3%
84.0%	5,660	5,498	-163	-2.9%
85.2%	5,530	5,348	-182	-3.3%
86.4%	5,467	5,050	-418	-7.6%
87.7%	5,386	4,917	-469	-8.7%
88.9%	5,373	4,865	-508	-9.5%
90.1%	5,326	4,802	-525	-9.8%
91.4%	5,325	4,796	-529	-9.9%
92.6%	5,312	4,773	-540	-10.2%
93.8%	5,296	4,767	-529	-10.0%
95.1%	5,041	4,437	-604	-12.0%
96.3%	5,009	4,392	-617	-12.3%
97.5%	4,948	4,379	-569	-11.5%
98.8%	4,845	4,288	-558	-11.5%
100.0%	4,829	4,234	-595	-12.3%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	34,721	36,890	2,168	6.2%
1.2%	20,315	22,350	2,034	10.0%
2.5%	14,989	16,089	1,101	7.3%
3.7%	14,538	14,788	250	1.7%
4.9%	14,329	14,539	209	1.5%
6.2%	13,376	14,451	1,076	8.0%
7.4%	13,303	13,775	472	3.5%
8.6%	13,011	13,472	461	3.5%
9.9%	12,688	13,285	597	4.7%
11.1%	12,628	13,211	583	4.6%
12.3%	12,372	13,124	753	6.1%
13.6%	12,370	12,964	594	4.8%
14.8%	12,354	12,665	311	2.5%
16.0%	12,224	12,613	390	3.2%
17.3%	12,140	12,583	443	3.7%
18.5%	12,121	12,500	379	3.1%
19.8%	12,102	12,251	150	1.2%
21.0%	12,067	12,073	6	0.0%
22.2%	11,743	12,047	304	2.6%
23.5%	11,721	11,846	125	1.1%
24.7%	11,634	11,687	53	0.5%
25.9%	11,551	11,564	13	0.1%
27.2%	11,507	11,436	-70	-0.6%
28.4%	11,497	11,303	-193	-1.7%
29.6%	11,074	11,258	184	1.7%
30.9%	10,992	11,111	119	1.1%
32.1%	10,834	11,069	235	2.2%
33.3%	10,830	10,865	35	0.3%
34.6%	10,714	10,821	107	1.0%
35.8%	10,543	10,746	203	1.9%
37.0%	10,289	10,605	316	3.1%
38.3%	10,217	10,596	378	3.7%
39.5%	9,943	10,503	560	5.6%
40.7%	9,826	10,121	295	3.0%
42.0%	9,760	10,004	244	2.5%
43.2%	9,675	9,598	-77	-0.8%
44.4%	9,446	9,586	140	1.5%
45.7%	9,131	9,316	185	2.0%
46.9%	8,733	9,075	342	3.9%
48.1%	8,536	8,954	418	4.9%
49.4%	8,524	8,748	224	2.6%
50.6%	7,919	8,627	708	8.9%
51.9%	7,843	8,428	584	7.4%
53.1%	7,815	8,355	540	6.9%
54.3%	7,774	8,194	420	5.4%
55.6%	7,692	7,975	283	3.7%
56.8%	7,586	7,880	293	3.9%
58.0%	7,334	7,877	543	7.4%
59.3%	7,312	7,821	510	7.0%
60.5%	7,267	7,770	503	6.9%
61.7%	7,258	7,760	502	6.9%
63.0%	7,163	7,595	432	6.0%
64.2%	6,828	7,587	760	11.1%
65.4%	6,821	7,271	450	6.6%
66.7%	6,794	7,165	371	5.5%
67.9%	6,737	6,956	219	3.3%
69.1%	6,695	6,923	228	3.4%
70.4%	6,566	6,790	224	3.4%
71.6%	6,363	6,688	325	5.1%
72.8%	6,340	6,600	259	4.1%
74.1%	6,309	6,565	256	4.1%
75.3%	6,164	6,366	202	3.3%
76.5%	6,159	6,044	-115	-1.9%
77.8%	5,978	5,794	-184	-3.1%
79.0%	5,799	5,759	-41	-0.7%
80.2%	5,687	5,730	42	0.7%
81.5%	5,666	5,622	-44	-0.8%
82.7%	5,629	5,400	-229	-4.1%
84.0%	5,579	5,394	-186	-3.3%
85.2%	5,544	5,277	-267	-4.8%
86.4%	5,493	5,114	-380	-6.9%
87.7%	5,326	4,848	-478	-9.0%
88.9%	5,255	4,794	-461	-8.8%
90.1%	5,154	4,548	-606	-11.8%
91.4%	5,113	4,439	-675	-13.2%
92.6%	4,850	4,280	-570	-11.7%
93.8%	4,733	4,280	-453	-9.6%
95.1%	4,538	4,260	-278	-6.1%
96.3%	4,493	4,256	-237	-5.3%
97.5%	4,285	4,241	-44	-1.0%
98.8%	4,114	4,210	96	2.3%
100.0%	4,099	4,118	19	0.5%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,830	41,148	-1,682	-3.9%
1.2%	42,053	41,062	-991	-2.4%
2.5%	35,016	34,995	-21	-0.1%
3.7%	34,923	34,921	-2	0.0%
4.9%	32,464	31,838	-627	-1.9%
6.2%	30,610	30,339	-271	-0.9%
7.4%	29,927	29,917	-10	0.0%
8.6%	29,701	29,696	-5	0.0%
9.9%	23,995	24,153	158	0.7%
11.1%	23,822	23,866	44	0.2%
12.3%	21,358	23,819	2,461	11.5%
13.6%	21,349	22,067	718	3.4%
14.8%	21,025	21,771	746	3.5%
16.0%	18,316	21,745	3,429	18.7%
17.3%	17,363	21,415	4,051	23.3%
18.5%	15,960	19,547	3,587	22.5%
19.8%	15,095	17,344	2,249	14.9%
21.0%	14,891	14,892	1	0.0%
22.2%	14,556	14,555	-1	0.0%
23.5%	14,046	14,036	-11	-0.1%
24.7%	13,715	13,820	105	0.8%
25.9%	13,581	13,409	-171	-1.3%
27.2%	11,966	12,765	799	6.7%
28.4%	11,860	11,846	-13	-0.1%
29.6%	11,470	11,466	-4	0.0%
30.9%	10,320	10,351	31	0.3%
32.1%	9,276	10,320	1,043	11.2%
33.3%	9,108	10,091	983	10.8%
34.6%	9,090	9,274	185	2.0%
35.8%	9,086	9,088	2	0.0%
37.0%	8,947	9,087	140	1.6%
38.3%	8,882	8,945	63	0.7%
39.5%	8,847	8,887	40	0.5%
40.7%	8,727	8,883	156	1.8%
42.0%	8,465	8,733	268	3.2%
43.2%	7,766	8,227	462	5.9%
44.4%	7,414	8,163	749	10.1%
45.7%	7,381	7,772	391	5.3%
46.9%	7,364	7,766	402	5.5%
48.1%	7,340	7,596	256	3.5%
49.4%	7,231	7,525	294	4.1%
50.6%	7,157	7,497	340	4.8%
51.9%	7,038	7,411	373	5.3%
53.1%	6,954	7,359	405	5.8%
54.3%	6,938	7,340	402	5.8%
55.6%	6,787	7,230	443	6.5%
56.8%	6,781	7,109	328	4.8%
58.0%	6,679	7,100	421	6.3%
59.3%	6,655	6,954	299	4.5%
60.5%	6,583	6,936	353	5.4%
61.7%	6,320	6,776	455	7.2%
63.0%	6,279	6,607	327	5.2%
64.2%	6,256	6,580	324	5.2%
65.4%	6,244	6,524	280	4.5%
66.7%	6,230	6,452	222	3.6%
67.9%	6,146	6,450	304	5.0%
69.1%	6,001	6,410	409	6.8%
70.4%	5,977	6,294	317	5.3%
71.6%	5,958	6,258	300	5.0%
72.8%	5,868	6,254	386	6.6%
74.1%	5,835	6,187	352	6.0%
75.3%	5,689	6,164	476	8.4%
76.5%	5,581	6,159	578	10.3%
77.8%	5,562	6,067	505	9.1%
79.0%	5,552	5,960	408	7.3%
80.2%	5,529	5,843	314	5.7%
81.5%	5,483	5,685	202	3.7%
82.7%	5,430	5,668	238	4.4%
84.0%	5,351	5,512	162	3.0%
85.2%	5,284	5,374	90	1.7%
86.4%	5,271	5,348	77	1.5%
87.7%	5,235	5,330	95	1.8%
88.9%	5,156	5,230	74	1.4%
90.1%	5,127	5,134	7	0.1%
91.4%	4,933	5,130	197	4.0%
92.6%	4,815	4,785	-30	-0.6%
93.8%	4,739	4,730	-9	-0.2%
95.1%	4,719	4,725	6	0.1%
96.3%	4,608	4,610	2	0.0%
97.5%	4,524	4,314	-211	-4.7%
98.8%	4,145	4,148	2	0.1%
100.0%	3,986	3,991	5	0.1%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	77,552	77,551	-1	0.0%
1.2%	57,071	57,074	4	0.0%
2.5%	51,782	51,793	10	0.0%
3.7%	50,604	50,606	3	0.0%
4.9%	44,002	44,012	9	0.0%
6.2%	40,418	43,200	2,782	6.9%
7.4%	40,203	40,571	368	0.9%
8.6%	34,679	39,807	5,128	14.8%
9.9%	31,948	31,954	7	0.0%
11.1%	30,495	30,490	-5	0.0%
12.3%	27,261	27,424	163	0.6%
13.6%	26,722	26,720	-2	0.0%
14.8%	26,525	26,531	6	0.0%
16.0%	26,505	26,282	-223	-0.8%
17.3%	26,295	24,026	-2,270	-8.6%
18.5%	23,529	23,531	1	0.0%
19.8%	22,724	22,724	0	0.0%
21.0%	20,141	19,970	-172	-0.9%
22.2%	19,935	19,936	1	0.0%
23.5%	18,766	18,702	-64	-0.3%
24.7%	18,720	18,519	-201	-1.1%
25.9%	17,202	17,073	-129	-0.8%
27.2%	17,040	16,987	-53	-0.3%
28.4%	15,417	15,419	2	0.0%
29.6%	15,304	15,300	-5	0.0%
30.9%	15,071	15,075	4	0.0%
32.1%	14,351	14,370	19	0.1%
33.3%	13,724	14,359	634	4.6%
34.6%	13,626	14,204	578	4.2%
35.8%	12,375	13,622	1,247	10.1%
37.0%	12,264	12,263	-1	0.0%
38.3%	12,144	12,155	11	0.1%
39.5%	11,660	11,662	2	0.0%
40.7%	11,235	11,230	-5	0.0%
42.0%	11,172	11,172	1	0.0%
43.2%	10,542	11,021	479	4.5%
44.4%	10,207	10,541	334	3.3%
45.7%	10,177	10,205	28	0.3%
46.9%	10,175	10,186	11	0.1%
48.1%	10,170	10,057	-113	-1.1%
49.4%	9,940	9,940	0	0.0%
50.6%	9,832	9,894	62	0.6%
51.9%	9,225	9,757	532	5.8%
53.1%	8,977	8,999	22	0.2%
54.3%	8,420	8,865	445	5.3%
55.6%	8,361	8,758	398	4.8%
56.8%	8,193	8,417	225	2.7%
58.0%	7,853	8,353	499	6.4%
59.3%	7,761	8,313	552	7.1%
60.5%	7,719	8,194	475	6.2%
61.7%	7,528	7,621	93	1.2%
63.0%	7,481	7,551	71	0.9%
64.2%	7,440	7,529	89	1.2%
65.4%	7,308	7,479	172	2.3%
66.7%	7,138	7,436	298	4.2%
67.9%	6,788	7,308	520	7.7%
69.1%	6,715	6,800	85	1.3%
70.4%	6,613	6,715	102	1.5%
71.6%	6,528	6,532	4	0.1%
72.8%	6,518	6,528	10	0.2%
74.1%	6,317	6,312	-4	-0.1%
75.3%	6,272	6,241	-31	-0.5%
76.5%	6,215	6,214	-1	0.0%
77.8%	6,153	6,154	1	0.0%
79.0%	6,131	6,094	-37	-0.6%
80.2%	6,109	6,029	-79	-1.3%
81.5%	6,023	6,019	-4	-0.1%
82.7%	6,021	5,988	-33	-0.5%
84.0%	5,978	5,892	-86	-1.4%
85.2%	5,891	5,658	-233	-4.0%
86.4%	5,461	5,500	39	0.7%
87.7%	5,287	5,489	203	3.8%
88.9%	5,052	5,454	402	8.0%
90.1%	5,015	5,291	276	5.5%
91.4%	5,008	5,195	187	3.7%
92.6%	4,995	5,024	29	0.6%
93.8%	4,848	5,006	157	3.2%
95.1%	4,793	5,000	207	4.3%
96.3%	4,686	4,922	236	5.0%
97.5%	4,670	4,793	123	2.6%
98.8%	4,584	4,682	98	2.1%
100.0%	4,441	4,439	-2	0.0%

Table SW-11-b

Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	73,753	87,112	13,360	18.1%
1.2%	63,651	73,747	10,096	15.9%
2.5%	62,988	66,315	3,328	5.3%
3.7%	55,342	55,342	0	0.0%
4.9%	48,198	49,747	1,549	3.2%
6.2%	46,049	48,204	2,155	4.7%
7.4%	45,499	45,446	-53	-0.1%
8.6%	43,857	43,880	23	0.1%
9.9%	43,349	43,569	220	0.5%
11.1%	41,315	43,349	2,034	4.9%
12.3%	40,874	42,035	1,161	2.8%
13.6%	39,605	39,610	5	0.0%
14.8%	37,770	37,776	7	0.0%
16.0%	32,922	32,925	3	0.0%
17.3%	32,834	32,834	1	0.0%
18.5%	30,989	30,992	3	0.0%
19.8%	29,875	29,880	5	0.0%
21.0%	27,916	27,920	4	0.0%
22.2%	27,192	27,192	1	0.0%
23.5%	24,261	25,345	1,084	4.5%
24.7%	24,237	24,239	2	0.0%
25.9%	23,283	23,602	319	1.4%
27.2%	21,361	23,282	1,922	9.0%
28.4%	20,820	21,707	887	4.3%
29.6%	20,716	20,816	101	0.5%
30.9%	18,133	20,716	2,582	14.2%
32.1%	16,595	17,714	1,120	6.7%
33.3%	16,374	17,108	734	4.5%
34.6%	15,797	16,547	751	4.8%
35.8%	15,289	15,290	0	0.0%
37.0%	14,935	15,264	328	2.2%
38.3%	13,932	14,936	1,004	7.2%
39.5%	13,647	13,934	287	2.1%
40.7%	13,108	13,765	656	5.0%
42.0%	12,926	13,115	190	1.5%
43.2%	12,811	12,921	110	0.9%
44.4%	12,313	12,310	-4	0.0%
45.7%	11,188	11,840	652	5.8%
46.9%	11,069	11,184	116	1.0%
48.1%	10,959	10,958	-2	0.0%
49.4%	10,773	10,772	-1	0.0%
50.6%	10,733	10,733	0	0.0%
51.9%	10,478	10,481	3	0.0%
53.1%	9,844	10,014	169	1.7%
54.3%	9,696	9,845	149	1.5%
55.6%	9,222	9,698	476	5.2%
56.8%	8,968	9,222	255	2.8%
58.0%	8,958	9,148	190	2.1%
59.3%	8,604	8,970	366	4.3%
60.5%	8,596	8,609	13	0.2%
61.7%	8,525	8,597	71	0.8%
63.0%	8,459	8,458	0	0.0%
64.2%	8,188	8,186	-2	0.0%
65.4%	8,083	8,093	10	0.1%
66.7%	7,893	7,895	2	0.0%
67.9%	7,840	7,843	3	0.0%
69.1%	7,685	7,685	0	0.0%
70.4%	7,660	7,663	2	0.0%
71.6%	7,579	7,579	1	0.0%
72.8%	7,361	7,362	1	0.0%
74.1%	7,150	7,151	1	0.0%
75.3%	7,025	6,835	-190	-2.7%
76.5%	6,836	6,828	-7	-0.1%
77.8%	6,829	6,639	-190	-2.8%
79.0%	6,639	6,638	-1	0.0%
80.2%	6,636	6,557	-79	-1.2%
81.5%	6,551	6,505	-46	-0.7%
82.7%	6,499	6,167	-332	-5.1%
84.0%	5,851	5,992	141	2.4%
85.2%	5,404	5,853	448	8.3%
86.4%	5,379	5,402	23	0.4%
87.7%	5,240	5,379	139	2.6%
88.9%	5,167	5,179	11	0.2%
90.1%	5,142	5,169	27	0.5%
91.4%	5,057	5,057	0	0.0%
92.6%	5,045	5,046	2	0.0%
93.8%	4,983	4,981	-2	0.0%
95.1%	4,919	4,923	4	0.1%
96.3%	4,673	4,837	164	3.5%
97.5%	4,498	4,773	274	6.1%
98.8%	4,445	4,448	3	0.1%
100.0%	4,376	4,423	47	1.1%

March				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	69,288	73,575	4,287	6.2%
1.2%	69,129	69,300	171	0.2%
2.5%	53,614	53,619	4	0.0%
3.7%	50,182	46,785	-3,397	-6.8%
4.9%	46,783	38,358	-8,425	-18.0%
6.2%	38,367	33,131	-5,236	-13.6%
7.4%	33,142	31,948	-1,193	-3.6%
8.6%	31,960	30,899	-1,061	-3.3%
9.9%	29,393	29,394	1	0.0%
11.1%	26,761	26,735	-26	-0.1%
12.3%	25,171	25,176	5	0.0%
13.6%	23,894	23,863	-31	-0.1%
14.8%	21,392	21,394	2	0.0%
16.0%	20,534	20,537	4	0.0%
17.3%	19,938	19,938	1	0.0%
18.5%	19,694	19,136	-558	-2.8%
19.8%	19,136	18,687	-449	-2.3%
21.0%	18,536	18,536	0	0.0%
22.2%	18,475	18,234	-240	-1.3%
23.5%	17,823	18,063	240	1.3%
24.7%	17,689	17,683	-6	0.0%
25.9%	17,373	17,374	1	0.0%
27.2%	15,413	15,758	345	2.2%
28.4%	14,807	14,810	3	0.0%
29.6%	14,263	14,263	0	0.0%
30.9%	13,823	13,729	-95	-0.7%
32.1%	13,661	13,661	0	0.0%
33.3%	12,562	12,564	1	0.0%
34.6%	12,345	12,345	0	0.0%
35.8%	11,746	11,899	153	1.3%
37.0%	11,704	11,703	-1	0.0%
38.3%	11,648	10,893	-756	-6.5%
39.5%	10,908	10,778	-130	-1.2%
40.7%	10,657	10,653	-5	0.0%
42.0%	10,159	10,164	5	0.1%
43.2%	9,873	9,873	0	0.0%
44.4%	9,804	9,809	5	0.1%
45.7%	9,745	9,747	2	0.0%
46.9%	9,699	9,692	-7	-0.1%
48.1%	9,426	9,426	1	0.0%
49.4%	9,066	9,064	-2	0.0%
50.6%	9,044	9,039	-5	-0.1%
51.9%	8,778	8,781	3	0.0%
53.1%	8,702	8,703	1	0.0%
54.3%	8,617	8,619	2	0.0%
55.6%	8,545	8,545	0	0.0%
56.8%	8,500	8,504	4	0.0%
58.0%	8,176	8,174	-2	0.0%
59.3%	8,097	8,103	6	0.1%
60.5%	8,020	8,024	4	0.0%
61.7%	7,826	7,826	0	0.0%
63.0%	7,776	7,773	-3	0.0%
64.2%	7,768	7,769	1	0.0%
65.4%	7,764	7,764	0	0.0%
66.7%	7,660	7,661	1	0.0%
67.9%	7,473	7,473	0	0.0%
69.1%	7,453	7,459	6	0.1%
70.4%	7,195	7,175	-20	-0.3%
71.6%	7,088	7,088	0	0.0%
72.8%	6,913	6,916	2	0.0%
74.1%	6,889	6,889	0	0.0%
75.3%	6,832	6,832	0	0.0%
76.5%	6,807	6,811	4	0.1%
77.8%	6,764	6,764	0	0.0%
79.0%	6,399	6,398	0	0.0%
80.2%	5,886	6,007	121	2.1%
81.5%	5,851	5,886	35	0.6%
82.7%	5,804	5,850	46	0.8%
84.0%	5,689	5,804	115	2.0%
85.2%	5,672	5,691	18	0.3%
86.4%	5,535	5,673	139	2.5%
87.7%	5,475	5,535	61	1.1%
88.9%	5,238	5,474	236	4.5%
90.1%	5,041	5,114	73	1.4%
91.4%	4,934	5,042	109	2.2%
92.6%	4,867	4,934	67	1.4%
93.8%	4,780	4,873	93	1.9%
95.1%	4,636	4,782	146	3.1%
96.3%	4,553	4,641	88	1.9%
97.5%	4,426	4,635	208	4.7%
98.8%	4,394	4,523	129	2.9%
100.0%	4,218	4,216	-2	-0.1%

April				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,237	41,238	1	0.0%
1.2%	33,742	33,744	2	0.0%
2.5%	24,735	24,738	3	0.0%
3.7%	23,685	23,602	-83	-0.4%
4.9%	22,403	22,525	122	0.5%
6.2%	22,085	18,007	-4,079	-18.5%
7.4%	17,949	17,949	0	0.0%
8.6%	17,618	17,620	3	0.0%
9.9%	17,586	17,589	3	0.0%
11.1%	16,929	16,930	1	0.0%
12.3%	16,888	16,895	7	0.0%
13.6%	16,211	16,212	1	0.0%
14.8%	15,752	15,754	1	0.0%
16.0%	14,581	14,583	3	0.0%
17.3%	14,337	14,346	8	0.1%
18.5%	14,180	14,189	9	0.1%
19.8%	13,401	13,201	-200	-1.5%
21.0%	13,200	12,390	-810	-6.1%
22.2%	11,964	12,146	181	1.5%
23.5%	11,719	11,965	246	2.1%
24.7%	11,308	11,722	414	3.7%
25.9%	10,888	11,308	420	3.9%
27.2%	10,582	9,944	-638	-6.0%
28.4%	10,332	9,539	-793	-7.7%
29.6%	9,858	9,405	-452	-4.6%
30.9%	9,764	9,315	-449	-4.6%
32.1%	9,445	9,262	-182	-1.9%
33.3%	9,443	9,117	-326	-3.5%
34.6%	9,263	8,985	-278	-3.0%
35.8%	9,187	8,930	-258	-2.8%
37.0%	9,158	8,901	-257	-2.8%
38.3%	8,930	8,830	-99	-1.1%
39.5%	8,925	8,800	-125	-1.4%
40.7%	8,837	8,753	-84	-1.0%
42.0%	8,796	8,750	-46	-0.5%
43.2%	8,744	8,743	-1	0.0%
44.4%	8,742	8,695	-47	-0.5%
45.7%	8,728	8,677	-51	-0.6%
46.9%	8,606	8,666	59	0.7%
48.1%	8,575	8,558	-18	-0.2%
49.4%	8,557	8,530	-27	-0.3%
50.6%	8,529	8,505	-24	-0.3%
51.9%	8,524	8,504	-20	-0.2%
53.1%	8,438	8,426	-12	-0.1%
54.3%	8,429	8,305	-124	-1.5%
55.6%	8,426	8,083	-343	-4.1%
56.8%	8,373	8,071	-303	-3.6%
58.0%	8,340	7,926	-414	-5.0%
59.3%	8,201	7,756	-445	-5.4%
60.5%	8,080	7,735	-345	-4.3%
61.7%	7,977	7,649	-328	-4.1%
63.0%	7,804	7,629	-175	-2.2%
64.2%	7,695	7,624	-71	-0.9%
65.4%	7,651	7,432	-219	-2.9%
66.7%	7,634	7,361	-273	-3.6%
67.9%	7,556	7,348	-208	-2.7%
69.1%	7,550	7,325	-226	-3.0%
70.4%	7,443	7,296	-147	-2.0%
71.6%	7,400	7,281	-119	-1.6%
72.8%	7,389	7,198	-190	-2.6%
74.1%	7,323	7,189	-134	-1.8%
75.3%	7,281	7,146	-135	-1.9%
76.5%	7,234	7,095	-139	-1.9%
77.8%	7,205	7,005	-200	-2.8%
79.0%	7,128	6,996	-133	-1.9%
80.2%	7,056	6,988	-68	-1.0%
81.5%	7,009	6,887	-122	-1.7%
82.7%	6,940	6,881	-58	-0.8%
84.0%	6,883	6,845	-37	-0.5%
85.2%	6,869	6,831	-39	-0.6%
86.4%	6,774	6,648	-126	-1.9%
87.7%	6,738	6,585	-153	-2.3%
88.9%	6,698	6,547	-151	-2.2%
90.1%	6,653	6,523	-131	-2.0%
91.4%	6,578	6,503	-75	-1.1%
92.6%	6,390	6,449	59	0.9%
93.8%	6,336	6,224	-111	-1.8%
95.1%	6,335	6,183	-152	-2.4%
96.3%	5,776	6,070	294	5.1%
97.5%	5,674	5,527	-147	-2.6%
98.8%	5,393	5,401	7	0.1%
100.0%	5,041	5,042	1	0.0%

May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	22,604	22,605	1	0.0%
1.2%	19,355	19,357	2	0.0%
2.5%	18,485	18,490	6	0.0%
3.7%	18,178	18,180	2	0.0%
4.9%	17,634	17,658	25	0.1%
6.2%	17,379	17,381	2	0.0%
7.4%	14,914	14,887	-27	-0.2%
8.6%	14,886	14,717	-170	-1.1%
9.9%	14,824	14,563	-261	-1.8%
11.1%	14,354	14,282	-72	-0.5%
12.3%	13,218	14,108	890	6.7%
13.6%	12,551	13,218	668	5.3%
14.8%	12,332	12,700	367	3.0%
16.0%	12,290	12,552	262	2.1%
17.3%	12,148	12,290	143	1.2%
18.5%	12,089	12,137	48	0.4%
19.8%	11,754	12,034	280	2.4%
21.0%	11,520	11,784	264	2.3%
22.2%	11,385	11,522	136	1.2%
23.5%	11,332	11,391	60	0.5%
24.7%	11,327	11,332	6	0.0%
25.9%	10,894	11,332	437	4.0%
27.2%	10,506	11,120	615	5.8%
28.4%	10,344	10,632	288	2.8%
29.6%	10,253	10,502	249	2.4%
30.9%	10,173	10,160	-13	-0.1%
32.1%	10,091	9,994	-96	-1.0%
33.3%	9,995	9,879	-116	-1.2%
34.6%	9,974	9,725	-249	-2.5%
35.8%	9,934	9,655	-279	-2.8%
37.0%	9,655	9,580	-74	-0.8%
38.3%	9,578	9,530	-48	-0.5%
39.5%	9,531	9,526	-5	0.0%
40.7%	9,472	9,474	2	0.0%
42.0%	9,372	9,362	-11	-0.1%
43.2%	9,170	9,213	44	0.5%
44.4%	9,015	9,202	187	2.1%
45.7%	9,003	9,122	119	1.3%
46.9%	8,980	9,102	122	1.4%
48.1%	8,976	9,093	116	1.3%
49.4%	8,914	8,933	19	0.2%
50.6%	8,887	8,829	-58	-0.7%
51.9%	8,875	8,804	-72	-0.8%
53.1%	8,832	8,763	-69	-0.8%
54.3%	8,727	8,643	-84	-1.0%
55.6%	8,601	8,390	-211	-2.5%
56.8%	8,596	8,207	-389	-4.5%
58.0%	8,486	8,199	-288	-3.4%
59.3%	8,468	8,181	-287	-3.4%
60.5%	8,409	8,165	-245	-2.9%
61.7%	8,262	8,156	-107	-1.3%
63.0%	8,228	8,101	-127	-1.5%
64.2%	8,226	8,047	-179	-2.2%
65.4%	8,210	8,011	-198	-2.4%
66.7%	8,155	7,948	-207	-2.5%
67.9%	8,119	7,938	-181	-2.2%
69.1%	8,079	7,730	-350	-4.3%
70.4%	8,019	7,710	-309	-3.9%
71.6%	8,005	7,689	-315	-3.9%
72.8%	7,967	7,659	-308	-3.9%
74.1%	7,814	7,468	-346	-4.4%
75.3%	7,754	7,399	-355	-4.6%
76.5%	7,727	7,287	-440	-5.7%
77.8%	7,725	7,168	-558	-7.2%
79.0%	7,713	7,136	-577	-7.5%
80.2%	7,687	7,060	-627	-8.2%
81.5%	7,625	6,934	-690	-9.1%
82.7%	7,609	6,929	-680	-8.9%
84.0%	7,539	6,873	-666	-8.8%
85.2%	7,492	6,771	-721	-9.6%
86.4%	7,426	6,709	-718	-9.7%
87.7%	7,416	6,591	-824	-11.1%
88.9%	7,194	6,581	-613	-8.5%
90.1%	7,168	6,530	-638	-8.9%
91.4%	6,924	6,391	-532	-7.7%
92.6%	6,898	6,252	-646	-9.4%
93.8%	6,810	6,231	-579	-8.5%
95.1%	6,700	5,938	-762	-11.4%
96.3%	6,655	5,855	-800	-12.0%
97.5%	6,616	5,837	-779	-11.8%
98.8%	6,273	5,223	-1,050	-16.7%
100.0%	6,037	4,982	-1,054	-17.5%

Table SW-11-b

Sacramento River at Bend Bridge, Monthly Flow

Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,100	25,101	1	0.0%
1.2%	17,370	17,367	-3	0.0%
2.5%	15,514	15,729	216	1.4%
3.7%	15,513	14,803	-709	-4.6%
4.9%	14,859	13,707	-1,152	-7.8%
6.2%	14,471	13,514	-957	-6.6%
7.4%	13,926	13,143	-783	-5.6%
8.6%	13,610	13,043	-567	-4.2%
9.9%	13,444	13,016	-428	-3.2%
11.1%	13,275	12,908	-367	-2.8%
12.3%	13,226	12,813	-414	-3.1%
13.6%	13,134	12,583	-551	-4.2%
14.8%	12,932	12,431	-500	-3.9%
16.0%	12,753	12,372	-382	-3.0%
17.3%	12,752	12,255	-497	-3.9%
18.5%	12,675	12,142	-533	-4.2%
19.8%	12,588	12,126	-462	-3.7%
21.0%	12,376	12,079	-297	-2.4%
22.2%	12,362	12,078	-284	-2.3%
23.5%	12,323	11,981	-342	-2.8%
24.7%	12,304	11,935	-369	-3.0%
25.9%	12,244	11,876	-367	-3.0%
27.2%	12,229	11,830	-399	-3.3%
28.4%	12,143	11,787	-356	-2.9%
29.6%	12,041	11,756	-285	-2.4%
30.9%	12,012	11,677	-335	-2.8%
32.1%	11,893	11,550	-342	-2.9%
33.3%	11,870	11,537	-333	-2.8%
34.6%	11,868	11,472	-396	-3.3%
35.8%	11,833	11,466	-367	-3.1%
37.0%	11,755	11,455	-300	-2.6%
38.3%	11,755	11,449	-306	-2.6%
39.5%	11,753	11,441	-313	-2.7%
40.7%	11,747	11,432	-314	-2.7%
42.0%	11,738	11,411	-327	-2.8%
43.2%	11,720	11,404	-315	-2.7%
44.4%	11,710	11,342	-368	-3.1%
45.7%	11,654	11,236	-418	-3.6%
46.9%	11,529	11,184	-345	-3.0%
48.1%	11,523	11,110	-413	-3.6%
49.4%	11,484	10,869	-615	-5.4%
50.6%	11,480	10,852	-628	-5.5%
51.9%	11,432	10,818	-614	-5.4%
53.1%	11,394	10,724	-670	-5.9%
54.3%	11,362	10,711	-651	-5.7%
55.6%	11,361	10,581	-780	-6.9%
56.8%	11,293	10,537	-756	-6.7%
58.0%	11,285	10,488	-797	-7.1%
59.3%	11,271	10,349	-923	-8.2%
60.5%	11,270	10,317	-954	-8.5%
61.7%	11,257	10,310	-947	-8.4%
63.0%	11,231	10,062	-1,170	-10.4%
64.2%	11,220	10,050	-1,170	-10.4%
65.4%	11,207	10,035	-1,172	-10.5%
66.7%	11,202	9,942	-1,261	-11.3%
67.9%	11,118	9,849	-1,269	-11.4%
69.1%	11,070	9,766	-1,304	-11.8%
70.4%	10,960	9,743	-1,217	-11.1%
71.6%	10,873	9,723	-1,150	-10.6%
72.8%	10,725	9,521	-1,204	-11.2%
74.1%	10,595	9,446	-1,149	-10.8%
75.3%	10,589	9,354	-1,236	-11.7%
76.5%	10,505	9,311	-1,193	-11.4%
77.8%	10,474	9,277	-1,196	-11.4%
79.0%	10,422	9,218	-1,204	-11.6%
80.2%	10,401	9,208	-1,193	-11.5%
81.5%	10,373	9,107	-1,266	-12.2%
82.7%	10,276	9,103	-1,174	-11.4%
84.0%	10,197	8,979	-1,218	-11.9%
85.2%	10,134	8,848	-1,285	-12.7%
86.4%	10,112	8,743	-1,368	-13.5%
87.7%	10,081	8,595	-1,485	-14.7%
88.9%	10,044	8,485	-1,560	-15.5%
90.1%	9,992	8,476	-1,515	-15.2%
91.4%	9,856	8,369	-1,487	-15.1%
92.6%	9,416	8,215	-1,201	-12.8%
93.8%	9,342	8,185	-1,157	-12.4%
95.1%	9,057	8,182	-875	-9.7%
96.3%	9,012	7,854	-1,158	-12.8%
97.5%	8,626	7,746	-880	-10.2%
98.8%	8,494	7,674	-820	-9.7%
100.0%	8,123	7,464	-660	-8.1%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,092	17,093	1	0.0%
1.2%	16,900	15,798	-1,102	-6.5%
2.5%	15,799	15,430	-369	-2.3%
3.7%	15,619	15,353	-267	-1.7%
4.9%	15,467	15,350	-117	-0.8%
6.2%	15,430	15,338	-92	-0.6%
7.4%	15,345	15,304	-41	-0.3%
8.6%	15,332	15,188	-144	-0.9%
9.9%	15,328	15,147	-181	-1.2%
11.1%	15,308	15,129	-179	-1.2%
12.3%	15,212	15,053	-159	-1.0%
13.6%	15,150	15,052	-98	-0.6%
14.8%	15,131	15,000	-131	-0.9%
16.0%	15,127	14,916	-211	-1.4%
17.3%	15,039	14,878	-161	-1.1%
18.5%	14,998	14,801	-197	-1.3%
19.8%	14,994	14,771	-224	-1.5%
21.0%	14,975	14,639	-336	-2.2%
22.2%	14,945	14,549	-396	-2.6%
23.5%	14,904	14,546	-357	-2.4%
24.7%	14,902	14,496	-406	-2.7%
25.9%	14,869	14,472	-397	-2.7%
27.2%	14,728	14,463	-265	-1.8%
28.4%	14,611	14,428	-183	-1.3%
29.6%	14,585	14,390	-195	-1.3%
30.9%	14,564	14,345	-219	-1.5%
32.1%	14,531	13,793	-738	-5.1%
33.3%	14,499	13,768	-732	-5.0%
34.6%	14,466	13,551	-915	-6.3%
35.8%	14,320	13,471	-849	-5.9%
37.0%	14,252	13,409	-843	-5.9%
38.3%	14,028	13,401	-627	-4.5%
39.5%	13,904	13,350	-554	-4.0%
40.7%	13,868	13,348	-520	-3.7%
42.0%	13,815	13,341	-474	-3.4%
43.2%	13,781	13,313	-468	-3.4%
44.4%	13,698	13,290	-408	-3.0%
45.7%	13,597	13,264	-333	-2.5%
46.9%	13,524	13,240	-284	-2.1%
48.1%	13,384	13,211	-173	-1.3%
49.4%	13,293	13,201	-92	-0.7%
50.6%	13,212	13,129	-83	-0.6%
51.9%	13,151	13,063	-87	-0.7%
53.1%	13,094	12,972	-121	-0.9%
54.3%	13,057	12,945	-112	-0.9%
55.6%	13,031	12,943	-88	-0.7%
56.8%	12,897	12,932	35	0.3%
58.0%	12,886	12,912	26	0.2%
59.3%	12,852	12,900	48	0.4%
60.5%	12,818	12,839	22	0.2%
61.7%	12,790	12,828	38	0.3%
63.0%	12,707	12,827	120	0.9%
64.2%	12,701	12,816	115	0.9%
65.4%	12,673	12,803	130	1.0%
66.7%	12,642	12,789	147	1.2%
67.9%	12,592	12,778	186	1.5%
69.1%	12,492	12,735	243	1.9%
70.4%	12,415	12,732	317	2.6%
71.6%	12,402	12,629	227	1.8%
72.8%	12,400	12,536	136	1.1%
74.1%	12,339	12,524	185	1.5%
75.3%	12,131	12,370	238	2.0%
76.5%	12,092	12,312	220	1.8%
77.8%	12,057	12,257	200	1.7%
79.0%	12,029	12,167	138	1.1%
80.2%	11,983	12,063	80	0.7%
81.5%	11,974	11,942	-32	-0.3%
82.7%	11,934	11,898	-36	-0.3%
84.0%	11,866	11,886	20	0.2%
85.2%	11,713	11,737	24	0.2%
86.4%	11,455	11,515	59	0.5%
87.7%	11,430	11,378	-52	-0.5%
88.9%	11,407	11,343	-64	-0.6%
90.1%	11,335	11,219	-116	-1.0%
91.4%	11,224	10,998	-227	-2.0%
92.6%	11,133	10,989	-143	-1.3%
93.8%	11,080	10,986	-94	-0.8%
95.1%	10,981	10,712	-269	-2.4%
96.3%	10,902	10,361	-541	-5.0%
97.5%	9,239	10,285	1,046	11.3%
98.8%	8,999	9,981	982	10.9%
100.0%	8,536	9,470	934	10.9%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,099	15,098	-1	0.0%
1.2%	14,801	14,801	1	0.0%
2.5%	13,745	13,743	-2	0.0%
3.7%	13,590	13,249	-341	-2.5%
4.9%	13,246	11,757	-1,489	-11.2%
6.2%	13,127	11,631	-1,495	-11.4%
7.4%	12,701	11,498	-1,203	-9.5%
8.6%	12,386	11,135	-1,251	-10.1%
9.9%	12,206	11,080	-1,126	-9.2%
11.1%	12,085	11,078	-1,007	-8.3%
12.3%	12,045	11,004	-1,041	-8.6%
13.6%	12,026	10,974	-1,052	-8.7%
14.8%	12,012	10,961	-1,051	-8.8%
16.0%	11,922	10,920	-1,002	-8.4%
17.3%	11,811	10,806	-1,004	-8.5%
18.5%	11,581	10,737	-844	-7.3%
19.8%	11,430	10,717	-713	-6.2%
21.0%	11,381	10,689	-692	-6.1%
22.2%	11,206	10,660	-546	-4.9%
23.5%	11,130	10,656	-473	-4.3%
24.7%	11,043	10,642	-400	-3.6%
25.9%	11,034	10,636	-398	-3.6%
27.2%	10,961	10,631	-330	-3.0%
28.4%	10,959	10,631	-329	-3.0%
29.6%	10,928	10,630	-298	-2.7%
30.9%	10,906	10,615	-291	-2.7%
32.1%	10,904	10,601	-303	-2.8%
33.3%	10,886	10,586	-300	-2.8%
34.6%	10,882	10,563	-319	-2.9%
35.8%	10,799	10,541	-259	-2.4%
37.0%	10,791	10,501	-290	-2.7%
38.3%	10,728	10,477	-251	-2.3%
39.5%	10,616	10,445	-171	-1.6%
40.7%	10,594	10,351	-242	-2.3%
42.0%	10,580	10,349	-231	-2.2%
43.2%	10,500	10,325	-175	-1.7%
44.4%	10,453	10,321	-133	-1.3%
45.7%	10,436	10,277	-159	-1.5%
46.9%	10,423	10,262	-161	-1.5%
48.1%	10,405	10,252	-154	-1.5%
49.4%	10,348	10,219	-129	-1.2%
50.6%	10,325	10,215	-110	-1.1%
51.9%	10,314	10,209	-105	-1.0%
53.1%	10,221	10,188	-33	-0.3%
54.3%	10,215	10,186	-29	-0.3%
55.6%	10,140	10,185	45	0.4%
56.8%	10,139	10,159	19	0.2%
58.0%	10,137	10,152	15	0.1%
59.3%	10,094	10,136	42	0.4%
60.5%	10,008	10,119	110	1.1%
61.7%	9,994	10,115	121	1.2%
63.0%	9,949	10,113	164	1.6%
64.2%	9,843	10,090	247	2.5%
65.4%	9,804	10,084	280	2.9%
66.7%	9,797	10,069	272	2.8%
67.9%	9,751	10,068	317	3.2%
69.1%	9,705	10,062	357	3.7%
70.4%	9,623	10,056	433	4.5%
71.6%	9,553	10,052	499	5.2%
72.8%	9,470	10,009	539	5.7%
74.1%	9,445	9,987	543	5.7%
75.3%	9,316	9,951	636	6.8%
76.5%	9,260	9,943	684	7.4%
77.8%	9,208	9,872	664	7.2%
79.0%	9,175	9,826	651	7.1%
80.2%	9,159	9,748	588	6.4%
81.5%	9,119	9,668	549	6.0%
82.7%	9,114	9,661	547	6.0%
84.0%	9,100	9,647	547	6.0%
85.2%	9,078	9,464	386	4.3%
86.4%	8,994	9,307	313	3.5%
87.7%	8,984	9,240	256	2.8%
88.9%	8,872	9,135	263	3.0%
90.1%	8,658	8,908	250	2.9%
91.4%	8,645	8,866	221	2.6%
92.6%	8,568	8,825	257	3.0%
93.8%	8,509	8,692	182	2.1%
95.1%	8,191	8,558	367	4.5%
96.3%	8,151	8,280	129	1.6%
97.5%	7,765	8,132	367	4.7%
98.8%	7,244	7,937	692	9.6%
100.0%	7,126	7,701	575	8.1%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,726	16,529	-197	-1.2%
1.2%	16,008	15,446	-562	-3.5%
2.5%	15,778	15,325	-453	-2.9%
3.7%	15,517	15,292	-224	-1.4%
4.9%	15,515	15,268	-247	-1.6%
6.2%	15,449	15,235	-214	-1.4%
7.4%	15,415	15,145	-271	-1.8%
8.6%	15,299	14,909	-390	-2.5%
9.9%	15,185	14,907	-279	-1.8%
11.1%	15,118	14,826	-292	-1.9%
12.3%	13,865	14,774	909	6.6%
13.6%	13,783	14,387	604	4.4%
14.8%	13,524	14,337	813	6.0%
16.0%	13,441	13,872	431	3.2%
17.3%	13,350	13,602	252	1.9%
18.5%	13,327	13,441	114	0.9%
19.8%	13,081	13,327	247	1.9%
21.0%	13,067	13,054	-14	-0.1%
22.2%	12,880	13,042	162	1.3%
23.5%	12,880	12,906	26	0.2%
24.7%	12,751	12,617	-134	-1.1%
25.9%	12,573	12,330	-243	-1.9%
27.2%	12,224	12,227	3	0.0%
28.4%	12,035	12,049	14	0.1%
29.6%	11,780	11,052	-728	-6.2%
30.9%	11,134	10,550	-584	-5.2%
32.1%	11,082	10,000	-1,082	-9.8%
33.3%	10,317	9,781	-536	-5.2%
34.6%	10,140	9,241	-899	-8.9%
35.8%	9,529	9,151	-378	-4.0%
37.0%	9,220	8,838	-382	-4.1%
38.3%	9,213	8,455	-758	-8.2%
39.5%	9,142	8,353	-790	-8.6%
40.7%	8,980	8,235	-745	-8.3%
42.0%	8,705	7,979	-726	-8.3%
43.2%	7,250	7,694	443	6.1%
44.4%	7,081	7,468	387	5.5%
45.7%	7,027	7,162	135	1.9%
46.9%	6,930	7,081	150	2.2%
48.1%	6,857	7,036	179	2.6%
49.4%	6,790	7,020	230	3.4%
50.6%	6,628	7,007	380	5.7%
51.9%	6,468	6,821	352	5.4%
53.1%	6,452	6,775	322	5.0%
54.3%	6,400	6,738	339	5.3%
55.6%	6,196	6,729	533	8.6%
56.8%	6,125	6,696	571	9.3%
58.0%	6,000	6,659	660	11.0%
59.3%	5,985	6,653	668	11.2%
60.5%	5,962	6,618	656	11.0%
61.7%	5,878	6,586	708	12.1%
63.0%	5,816	6,550	733	12.6%
64.2%	5,797	6,506	709	12.2%
65.4%	5,747	6,479	732	12.7%
66.7%	5,708	6,356	647	11.3%
67.9%	5,567	6,353	786	14.1%
69.1%	5,512	6,327	815	14.8%
70.4%	5,463	6,315	853	15.6%
71.6%	5,384	6,304	920	17.1%
72.8%	5,343	6,295	952	17.8%
74.1%	5,295	6,277	982	18.5%
75.3%	5,272	6,274	1,002	19.0%
76.5%	5,271	6,273	1,002	19.0%
77.8%	5,205	6,240	1,035	19.9%
79.0%	5,117	6,195	1,078	21.1%
80.2%	5,110	6,177	1,067	20.9%
81.5%	5,064	6,145	1,081	21.3%
82.7%	5,064	6,017	953	18.8%
84.0%	5,049	5,969	920	18.2%
85.2%	4,905	5,935	1,030	21.0%
86.4%	4,893	5,892	999	20.4%
87.7%	4,805	5,767	962	20.0%
88.9%	4,697	5,577	880	18.7%
90.1%	4,694	5,354	661	14.1%
91.4%	4,693	5,280	587	12.5%
92.6%	4,682	5,262	580	12.4%
93.8%	4,632	5,255	623	13.4%
95.1%	4,559	5,181	622	13.6%
96.3%	4,490	4,958	468	10.4%
97.5%	4,471	4,940	469	10.5%
98.8%	4,401	4,816	415	9.4%
100.0%	4,389	4,556	167	3.8%

Figure SW-12-b
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

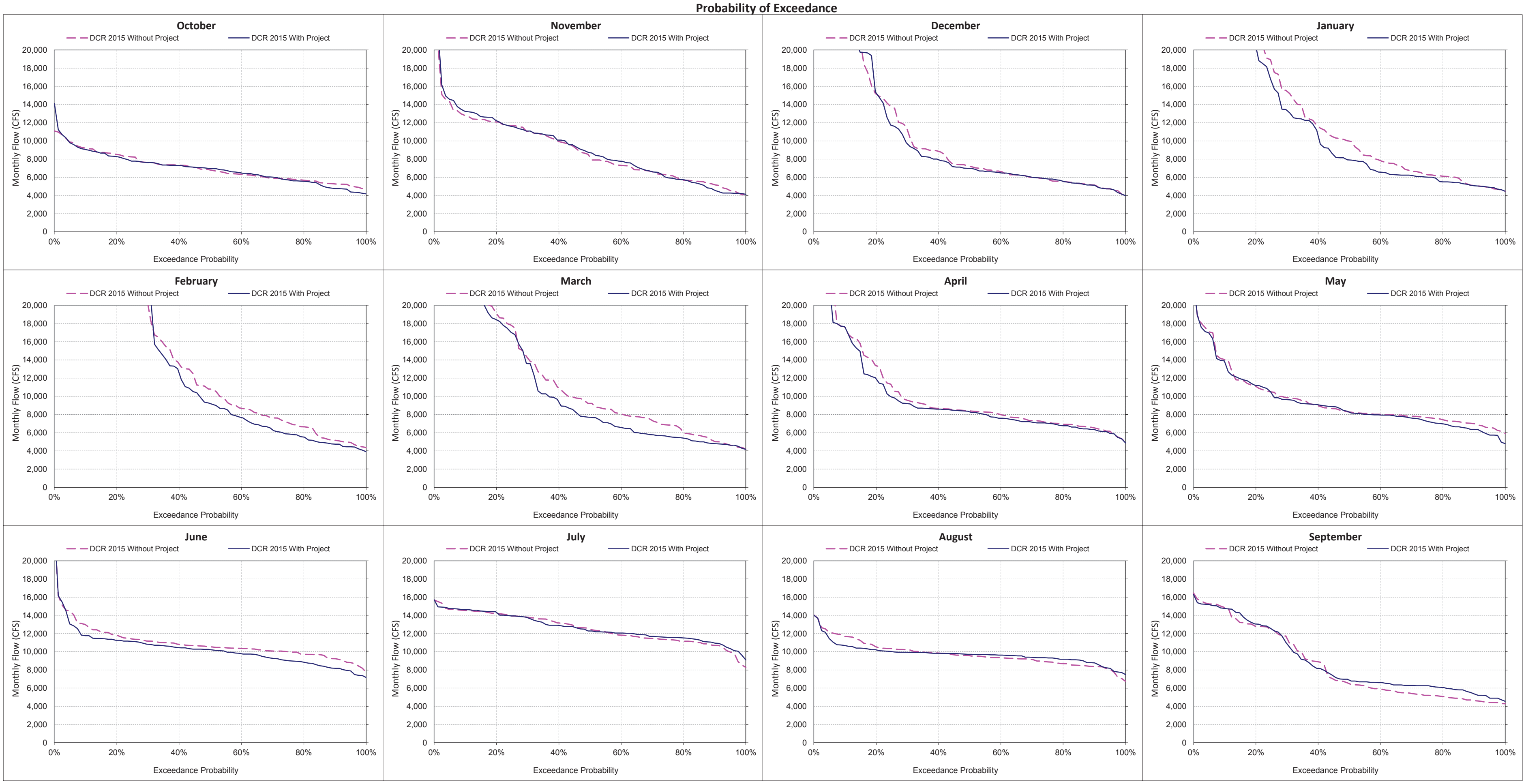


Table SW-12-b

Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,091	14,114	3,023	27.3%
1.2%	10,974	11,238	264	2.4%
2.5%	10,690	10,690	1	0.0%
3.7%	10,292	10,346	54	0.5%
4.9%	9,887	9,811	-76	-0.8%
6.2%	9,804	9,595	-210	-2.1%
7.4%	9,436	9,305	-131	-1.4%
8.6%	9,294	9,146	-148	-1.6%
9.9%	9,215	9,052	-162	-1.8%
11.1%	9,129	8,975	-154	-1.7%
12.3%	9,109	8,876	-233	-2.6%
13.6%	8,764	8,818	54	0.6%
14.8%	8,738	8,655	-82	-0.9%
16.0%	8,721	8,651	-70	-0.8%
17.3%	8,658	8,352	-306	-3.5%
18.5%	8,630	8,318	-312	-3.6%
19.8%	8,525	8,298	-227	-2.7%
21.0%	8,457	8,219	-238	-2.8%
22.2%	8,316	8,062	-254	-3.1%
23.5%	8,274	7,938	-336	-4.1%
24.7%	8,245	7,789	-456	-5.5%
25.9%	8,222	7,764	-458	-5.6%
27.2%	7,717	7,762	45	0.6%
28.4%	7,671	7,660	-11	-0.1%
29.6%	7,637	7,644	7	0.1%
30.9%	7,614	7,643	29	0.4%
32.1%	7,586	7,573	-14	-0.2%
33.3%	7,436	7,478	42	0.6%
34.6%	7,412	7,346	-65	-0.9%
35.8%	7,369	7,335	-34	-0.5%
37.0%	7,363	7,321	-42	-0.6%
38.3%	7,363	7,317	-46	-0.6%
39.5%	7,343	7,297	-46	-0.6%
40.7%	7,317	7,295	-22	-0.3%
42.0%	7,303	7,176	-127	-1.7%
43.2%	7,197	7,143	-54	-0.8%
44.4%	7,078	7,131	53	0.8%
45.7%	7,065	7,055	-10	-0.1%
46.9%	6,901	7,052	152	2.2%
48.1%	6,893	7,041	148	2.1%
49.4%	6,841	6,970	129	1.9%
50.6%	6,759	6,957	198	2.9%
51.9%	6,683	6,944	261	3.9%
53.1%	6,615	6,836	221	3.3%
54.3%	6,545	6,801	256	3.9%
55.6%	6,424	6,724	300	4.7%
56.8%	6,388	6,613	225	3.5%
58.0%	6,383	6,579	196	3.1%
59.3%	6,347	6,523	176	2.8%
60.5%	6,286	6,440	154	2.5%
61.7%	6,263	6,429	166	2.7%
63.0%	6,252	6,411	159	2.5%
64.2%	6,176	6,307	131	2.1%
65.4%	6,071	6,278	207	3.4%
66.7%	6,065	6,157	93	1.5%
67.9%	5,985	6,047	61	1.0%
69.1%	5,905	6,029	124	2.1%
70.4%	5,895	6,021	125	2.1%
71.6%	5,884	5,949	65	1.1%
72.8%	5,881	5,819	-62	-1.1%
74.1%	5,844	5,756	-88	-1.5%
75.3%	5,829	5,689	-140	-2.4%
76.5%	5,774	5,614	-161	-2.8%
77.8%	5,774	5,610	-164	-2.8%
79.0%	5,713	5,576	-137	-2.4%
80.2%	5,666	5,558	-107	-1.9%
81.5%	5,621	5,520	-102	-1.8%
82.7%	5,604	5,436	-167	-3.0%
84.0%	5,581	5,404	-177	-3.2%
85.2%	5,404	5,194	-210	-3.9%
86.4%	5,375	4,980	-395	-7.4%
87.7%	5,332	4,864	-468	-8.8%
88.9%	5,303	4,802	-501	-9.4%
90.1%	5,258	4,743	-515	-9.8%
91.4%	5,245	4,742	-502	-9.6%
92.6%	5,240	4,712	-528	-10.1%
93.8%	5,231	4,691	-540	-10.3%
95.1%	4,982	4,382	-600	-12.0%
96.3%	4,956	4,343	-613	-12.4%
97.5%	4,894	4,322	-572	-11.7%
98.8%	4,757	4,249	-509	-10.7%
100.0%	4,754	4,181	-573	-12.1%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	34,793	34,840	47	0.1%
1.2%	20,445	22,468	2,022	9.9%
2.5%	15,086	16,179	1,092	7.2%
3.7%	14,559	14,927	368	2.5%
4.9%	14,326	14,560	234	1.6%
6.2%	13,374	14,448	1,074	8.0%
7.4%	13,329	13,764	435	3.3%
8.6%	12,986	13,490	503	3.9%
9.9%	12,798	13,269	471	3.7%
11.1%	12,660	13,201	541	4.3%
12.3%	12,411	13,156	745	6.0%
13.6%	12,373	12,988	615	5.0%
14.8%	12,371	12,680	309	2.5%
16.0%	12,361	12,624	263	2.1%
17.3%	12,189	12,606	416	3.4%
18.5%	12,131	12,601	470	3.9%
19.8%	12,088	12,248	160	1.3%
21.0%	12,076	12,048	-28	-0.2%
22.2%	11,732	11,829	97	0.8%
23.5%	11,693	11,716	23	0.2%
24.7%	11,681	11,590	-92	-0.8%
25.9%	11,672	11,522	-150	-1.3%
27.2%	11,539	11,354	-185	-1.6%
28.4%	11,505	11,270	-235	-2.0%
29.6%	11,063	11,099	36	0.3%
30.9%	11,007	11,075	69	0.6%
32.1%	10,845	10,854	9	0.1%
33.3%	10,826	10,827	2	0.0%
34.6%	10,711	10,784	73	0.7%
35.8%	10,594	10,645	51	0.5%
37.0%	10,382	10,634	252	2.4%
38.3%	10,227	10,567	340	3.3%
39.5%	9,961	10,103	142	1.4%
40.7%	9,871	10,082	210	2.1%
42.0%	9,758	9,994	235	2.4%
43.2%	9,658	9,581	-77	-0.8%
44.4%	9,446	9,569	123	1.3%
45.7%	9,132	9,326	195	2.1%
46.9%	8,739	9,077	338	3.9%
48.1%	8,664	8,945	281	3.2%
49.4%	8,532	8,744	212	2.5%
50.6%	7,894	8,663	769	9.7%
51.9%	7,893	8,416	523	6.6%
53.1%	7,892	8,347	454	5.8%
54.3%	7,777	8,243	465	6.0%
55.6%	7,749	7,964	215	2.8%
56.8%	7,576	7,885	308	4.1%
58.0%	7,364	7,872	508	6.9%
59.3%	7,331	7,764	433	5.9%
60.5%	7,294	7,745	451	6.2%
61.7%	7,268	7,609	341	4.7%
63.0%	7,196	7,587	391	5.4%
64.2%	6,835	7,289	454	6.6%
65.4%	6,827	7,057	230	3.4%
66.7%	6,795	6,934	139	2.0%
67.9%	6,749	6,784	35	0.5%
69.1%	6,678	6,698	20	0.3%
70.4%	6,566	6,580	14	0.2%
71.6%	6,375	6,557	182	2.8%
72.8%	6,326	6,387	61	1.0%
74.1%	6,307	6,034	-273	-4.3%
75.3%	6,178	5,919	-260	-4.2%
76.5%	6,166	5,897	-269	-4.4%
77.8%	5,965	5,780	-185	-3.1%
79.0%	5,799	5,762	-37	-0.6%
80.2%	5,667	5,731	64	1.1%
81.5%	5,667	5,606	-61	-1.1%
82.7%	5,623	5,429	-195	-3.5%
84.0%	5,569	5,387	-182	-3.3%
85.2%	5,550	5,267	-283	-5.1%
86.4%	5,499	5,110	-388	-7.1%
87.7%	5,336	4,840	-496	-9.3%
88.9%	5,298	4,791	-507	-9.6%
90.1%	5,166	4,540	-626	-12.1%
91.4%	5,097	4,422	-675	-13.2%
92.6%	4,841	4,270	-571	-11.8%
93.8%	4,736	4,265	-471	-9.9%
95.1%	4,523	4,258	-266	-5.9%
96.3%	4,480	4,238	-242	-5.4%
97.5%	4,276	4,235	-41	-0.9%
98.8%	4,096	4,206	109	2.7%
100.0%	4,084	4,120	37	0.9%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	43,105	41,319	-1,786	-4.1%
1.2%	42,310	40,396	-1,913	-4.5%
2.5%	35,158	35,136	-21	-0.1%
3.7%	35,068	32,945	-2,123	-6.1%
4.9%	32,697	32,070	-627	-1.9%
6.2%	30,779	28,387	-2,392	-7.8%
7.4%	30,014	28,223	-1,791	-6.0%
8.6%	29,842	27,716	-2,126	-7.1%
9.9%	24,062	22,099	-1,963	-8.2%
11.1%	23,898	21,982	-1,916	-8.0%
12.3%	21,478	21,775	297	1.4%
13.6%	21,473	20,960	-513	-2.4%
14.8%	21,262	19,771	-1,491	-7.0%
16.0%	18,437	19,748	1,310	7.1%
17.3%	17,534	19,667	2,133	12.2%
18.5%	16,064	19,397	3,333	20.7%
19.8%	15,215	15,394	179	1.2%
21.0%	14,913	14,795	-118	-0.8%
22.2%	14,698	14,161	-538	-3.7%
23.5%	14,172	12,576	-1,595	-11.3%
24.7%	13,771	11,755	-2,016	-14.6%
25.9%	13,595	11,598	-1,997	-14.7%
27.2%	12,052	11,303	-749	-6.2%
28.4%	11,936	10,729	-1,207	-10.1%
29.6%	11,602	9,802	-1,800	-15.5%
30.9%	10,339	9,362	-977	-9.5%
32.1%	9,364	9,172	-192	-2.1%
33.3%	9,171	8,918	-253	-2.8%
34.6%	9,146	8,292	-854	-9.3%
35.8%	9,131	8,262	-870	-9.5%
37.0%	8,986	8,218	-768	-8.5%
38.3%	8,978	8,016	-962	-10.7%
39.5%	8,909	8,012	-897	-10.1%
40.7%	8,772	7,843	-930	-10.6%
42.0%	8,496	7,787	-709	-8.3%
43.2%	7,842	7,618	-225	-2.9%
44.4%	7,473	7,170	-303	-4.1%
45.7%	7,415	7,114	-301	-4.1%
46.9%	7,394	7,107	-287	-3.9%
48.1%	7,380	7,005	-376	-5.1%
49.4%	7,271	6,972	-299	-4.1%
50.6%	7,162	6,970	-192	-2.7%
51.9%	7,046	6,858	-188	-2.7%
53.1%	6,982	6,697	-285	-4.1%
54.3%	6,973	6,687	-285	-4.1%
55.6%	6,802	6,615	-187	-2.8%
56.8%	6,791	6,593	-198	-2.9%
58.0%	6,679	6,583	-96	-1.4%
59.3%	6,679	6,524	-155	-2.3%
60.5%	6,591	6,455	-136	-2.1%
61.7%	6,325	6,454	129	2.0%
63.0%	6,285	6,415	130	2.1%
64.2%	6,283	6,283	0	0.0%
65.4%	6,251	6,263	12	0.2%
66.7%	6,235	6,207	-28	-0.5%
67.9%	6,166	6,162	-4	-0.1%
69.1%	6,010	6,074	64	1.1%
70.4%	5,977	5,967	-10	-0.2%
71.6%	5,966	5,944	-22	-0.4%
72.8%	5,868	5,910	42	0.7%
74.1%	5,857	5,865	8	0.1%
75.3%	5,735	5,817	81	1.4%
76.5%	5,584	5,808	224	4.0%
77.8%	5,564	5,732	168	3.0%
79.0%	5,555	5,672	116	2.1%
80.2%	5,544	5,516	-28	-0.5%
81.5%	5,483	5,462	-21	-0.4%
82.7%	5,450	5,374	-76	-1.4%
84.0%	5,355	5,352	-2	0.0%
85.2%	5,305	5,338	33	0.6%
86.4%	5,274	5,246	-28	-0.5%
87.7%	5,250	5,149	-102	-1.9%
88.9%	5,165	5,145	-20	-0.4%
90.1%	5,142	5,134	-8	-0.2%
91.4%	4,937	4,859	-78	-1.6%
92.6%	4,820	4,790	-30	-0.6%
93.8%	4,740	4,732	-9	-0.2%
95.1%	4,726	4,731	5	0.1%
96.3%	4,610	4,612	2	0.0%
97.5%	4,528	4,317	-211	-4.7%
98.8%	4,148	4,150	2	0.1%
100.0%	3,987	3,993	5	0.1%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	78,103	78,102	-1	0.0%
1.2%	57,396	57,400	4	0.0%
2.5%	52,216	51,074	-1,142	-2.2%
3.7%	51,072	50,105	-966	-1.9%
4.9%	44,333	44,343	9	0.0%
6.2%	40,892	42,010	1,118	2.7%
7.4%	40,518	38,765	-1,753	-4.3%
8.6%	35,611	38,160	2,550	7.2%
9.9%	32,234	30,873	-1,361	-4.2%
11.1%	30,879	30,120	-759	-2.5%
12.3%	27,391	27,314	-77	-0.3%
13.6%	27,058	27,056	-2	0.0%
14.8%	26,888	24,774	-2,115	-7.9%
16.0%	26,869	24,451	-2,417	-9.0%
17.3%	26,586	23,631	-2,955	-11.1%
18.5%	23,630	22,034	-1,596	-6.8%
19.8%	22,960	20,839	-2,121	-9.2%
21.0%	20,631	18,826	-1,805	-8.7%
22.2%	20,459	18,510	-1,949	-9.5%
23.5%	19,116	18,166	-950	-5.0%
24.7%	18,938	16,798	-2,140	-11.3%
25.9%	17,528	15,671	-1,857	-10.6%
27.2%	17,337	15,278	-2,060	-11.9%
28.4%	15,608	13,482	-2,126	-13.6%
29.6%	15,568	13,449	-2,119	-13.6%
30.9%	15,209	13,091	-2,117	-13.9%
32.1%	14,572	12,547	-2,024	-13.9%
33.3%	14,022	12,458	-1,565	-11.2%
34.6%	13,982	12,429	-1,552	-11.1%
35.8%	12,563	12,271	-292	-2.3%
37.0%	12,430	12,266	-164	-1.3%
38.3%	12,272	11,856	-416	-3.4%
39.5%	11,747	11,183	-565	-4.8%
40.7%	11,393	9,628	-1,765	-15.5%
42.0%	11,209	9,267	-1,942	-17.3%
43.2%	10,749	9,214	-1,534	-14.3%
44.4%	10,489	8,627	-1,863	-17.8%
45.7%	10,312	8,189	-2,123	-20.6%
46.9%	10,273	8,161	-2,112	-20.6%
48.1%	10,170	8,135	-2,035	-20.0%
49.4%	10,009	7,923	-2,086	-20.8%
50.6%	9,945	7,888	-2,057	-20.7%
51.9%	9,344	7,829	-1,514	-16.2%
53.1%	9,034	7,755	-1,279	-14.2%
54.3%	8,460	7,750	-711	-8.4%
55.6%	8,387	7,451	-936	-11.2%
56.8%	8,368	6,874	-1,493	-17.8%
58.0%	8,046	6,784	-1,262	-15.7%
59.3%	7,930	6,575	-1,355	-17.1%
60.5%	7,755	6,547	-1,208	-15.6%
61.7%	7,623	6,486	-1,137	-14.9%
63.0%	7,536	6,325	-1,211	-16.1%
64.2%	7,521	6,289	-1,232	-16.4%
65.4%	7,313	6,271	-1,042	-14.3%
66.7%	7,226	6,248	-978	-13.5%
67.9%	6,862	6,245	-617	-9.0%
69.1%	6,767	6,239	-528	-7.8%
70.4%	6,660	6,179	-480	-7.2%
71.6%	6,619	6,098	-521	-7.9%
72.8%	6,533	6,081	-452	-6.9%
74.1%	6,329	6,032	-297	-4.7%
75.3%	6,276	6,015	-261	-4.2%
76.5%	6,246	5,997	-250	-4.0%
77.8%	6,178	5,896	-282	-4.6%
79.0%	6,161	5,531	-631	-10.2%
80.2%	6,113	5,503	-610	-10.0%
81.5%	6,083	5,489	-594	-9.8%
82.7%	6,026	5,477	-549	-9.1%
84.0%	6,006	5,411	-595	-9.9%
85.2%	5,895	5,398	-497	-8.4%
86.4%	5,484	5,291	-193	-3.5%
87.7%	5,287	5,226	-60	-1.1%
88.9%	5,127	5,136	9	0.2%
90.1%	5,083	5,060	-24	-0.5%
91.4%	5,039	5,031	-7	-0.1%
92.6%	4,999	5,010	11	0.2%
93.8%	4,941	4,941	0	0.0%
95.1%	4,894	4,905	12	0.2%
96.3%	4,726	4,860	134	2.8%
97.5%	4,698	4,693	-5	-0.1%
98.8%	4,598	4,636	38	0.8%
100.0%	4,463	4,461	-2	0.0%

Table SW-12-b

Sacramento River below Red Bluff Diversion Dam, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	74,359	87,903	13,544	18.2%
1.2%	64,194	74,353	10,159	15.8%
2.5%	63,778	64,737	959	1.5%
3.7%	55,709	55,644	-65	-0.1%
4.9%	48,310	47,896	-414	-0.9%
6.2%	46,320	46,196	-124	-0.3%
7.4%	45,747	45,308	-439	-1.0%
8.6%	44,221	43,526	-695	-1.6%
9.9%	43,526	42,255	-1,271	-2.9%
11.1%	41,586	42,123	537	1.3%
12.3%	41,094	41,718	625	1.5%
13.6%	39,850	37,743	-2,107	-5.3%
14.8%	38,292	36,177	-2,115	-5.5%
16.0%	33,024	32,946	-78	-0.2%
17.3%	32,946	30,906	-2,039	-6.2%
18.5%	31,202	29,084	-2,119	-6.8%
19.8%	30,230	28,114	-2,116	-7.0%
21.0%	28,067	27,344	-722	-2.6%
22.2%	27,344	25,950	-1,394	-5.1%
23.5%	24,485	23,448	-1,037	-4.2%
24.7%	24,349	22,229	-2,120	-8.7%
25.9%	23,544	21,863	-1,681	-7.1%
27.2%	21,517	21,742	225	1.0%
28.4%	20,930	21,422	491	2.3%
29.6%	20,839	20,927	88	0.4%
30.9%	18,394	20,839	2,444	13.3%
32.1%	16,772	15,711	-1,061	-6.3%
33.3%	16,492	15,151	-1,341	-8.1%
34.6%	15,992	14,603	-1,388	-8.7%
35.8%	15,465	14,028	-1,438	-9.3%
37.0%	15,153	13,344	-1,809	-11.9%
38.3%	14,026	13,337	-689	-4.9%
39.5%	13,811	13,033	-778	-5.6%
40.7%	13,198	11,832	-1,367	-10.4%
42.0%	13,024	11,084	-1,940	-14.9%
43.2%	12,999	10,898	-2,101	-16.2%
44.4%	12,523	10,526	-1,997	-15.9%
45.7%	11,242	10,398	-844	-7.5%
46.9%	11,184	9,834	-1,350	-12.1%
48.1%	11,123	9,349	-1,773	-15.9%
49.4%	10,802	9,279	-1,523	-14.1%
50.6%	10,787	9,118	-1,670	-15.5%
51.9%	10,523	9,000	-1,524	-14.5%
53.1%	9,985	8,681	-1,304	-13.1%
54.3%	9,832	8,665	-1,167	-11.9%
55.6%	9,304	8,500	-804	-8.6%
56.8%	9,063	7,979	-1,083	-12.0%
58.0%	9,045	7,865	-1,180	-13.0%
59.3%	8,725	7,732	-993	-11.4%
60.5%	8,658	7,611	-1,047	-12.1%
61.7%	8,612	7,346	-1,266	-14.7%
63.0%	8,500	7,113	-1,387	-16.3%
64.2%	8,217	6,944	-1,273	-15.5%
65.4%	8,132	6,883	-1,249	-15.4%
66.7%	7,916	6,695	-1,221	-15.4%
67.9%	7,882	6,685	-1,197	-15.2%
69.1%	7,692	6,542	-1,150	-15.0%
70.4%	7,621	6,213	-1,408	-18.5%
71.6%	7,611	6,094	-1,517	-19.9%
72.8%	7,381	6,036	-1,344	-18.2%
74.1%	7,213	5,882	-1,331	-18.5%
75.3%	7,064	5,864	-1,200	-17.0%
76.5%	6,883	5,796	-1,087	-15.8%
77.8%	6,858	5,764	-1,094	-16.0%
79.0%	6,657	5,574	-1,083	-16.3%
80.2%	6,643	5,501	-1,142	-17.2%
81.5%	6,584	5,184	-1,400	-21.3%
82.7%	6,551	5,174	-1,377	-21.0%
84.0%	5,888	5,026	-862	-14.6%
85.2%	5,454	4,926	-528	-9.7%
86.4%	5,408	4,910	-497	-9.2%
87.7%	5,284	4,847	-438	-8.3%
88.9%	5,177	4,779	-398	-7.7%
90.1%	5,158	4,742	-416	-8.1%
91.4%	5,093	4,736	-357	-7.0%
92.6%	4,997	4,482	-515	-10.3%
93.8%	4,983	4,463	-521	-10.5%
95.1%	4,922	4,454	-469	-9.5%
96.3%	4,684	4,420	-264	-5.6%
97.5%	4,505	4,215	-290	-6.4%
98.8%	4,450	4,082	-369	-8.3%
100.0%	4,373	3,903	-470	-10.7%

March				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	69,684	74,088	4,405	6.3%
1.2%	69,651	67,574	-2,076	-3.0%
2.5%	53,839	52,141	-1,698	-3.2%
3.7%	50,427	47,072	-3,355	-6.7%
4.9%	47,078	38,724	-8,354	-17.7%
6.2%	38,849	31,197	-7,652	-19.7%
7.4%	33,329	31,092	-2,236	-6.7%
8.6%	32,120	29,987	-2,133	-6.6%
9.9%	29,624	29,617	-7	0.0%
11.1%	27,031	25,360	-1,671	-6.2%
12.3%	25,391	24,884	-507	-2.0%
13.6%	23,904	23,849	-55	-0.2%
14.8%	21,576	21,421	-155	-0.7%
16.0%	20,581	20,055	-526	-2.6%
17.3%	20,062	19,208	-854	-4.3%
18.5%	19,902	18,629	-1,274	-6.4%
19.8%	19,217	18,463	-754	-3.9%
21.0%	18,637	18,234	-403	-2.2%
22.2%	18,596	17,807	-790	-4.2%
23.5%	18,002	17,480	-522	-2.9%
24.7%	17,829	17,045	-784	-4.4%
25.9%	17,504	16,774	-730	-4.2%
27.2%	15,250	15,714	464	3.0%
28.4%	15,029	15,024	-5	0.0%
29.6%	14,378	13,605	-773	-5.4%
30.9%	13,837	13,573	-264	-1.9%
32.1%	13,669	12,257	-1,412	-10.3%
33.3%	12,709	10,589	-2,120	-16.7%
34.6%	12,404	10,286	-2,118	-17.1%
35.8%	11,799	10,282	-1,517	-12.9%
37.0%	11,790	9,920	-1,870	-15.9%
38.3%	11,768	9,912	-1,856	-15.8%
39.5%	11,038	9,677	-1,360	-12.3%
40.7%	10,686	8,934	-1,752	-16.4%
42.0%	10,289	8,901	-1,388	-13.5%
43.2%	9,956	8,695	-1,261	-12.7%
44.4%	9,924	8,561	-1,364	-13.7%
45.7%	9,804	8,187	-1,617	-16.5%
46.9%	9,770	7,808	-1,962	-20.1%
48.1%	9,532	7,770	-1,762	-18.5%
49.4%	9,221	7,707	-1,514	-16.4%
50.6%	9,216	7,684	-1,531	-16.6%
51.9%	8,803	7,642	-1,162	-13.2%
53.1%	8,745	7,411	-1,334	-15.3%
54.3%	8,643	7,117	-1,526	-17.7%
55.6%	8,578	7,097	-1,481	-17.3%
56.8%	8,573	6,951	-1,622	-18.9%
58.0%	8,198	6,686	-1,512	-18.4%
59.3%	8,132	6,625	-1,507	-18.5%
60.5%	8,018	6,539	-1,479	-18.4%
61.7%	7,881	6,457	-1,424	-18.1%
63.0%	7,820	6,455	-1,365	-17.5%
64.2%	7,779	6,017	-1,762	-22.7%
65.4%	7,758	6,000	-1,758	-22.7%
66.7%	7,684	5,902	-1,783	-23.2%
67.9%	7,621	5,884	-1,737	-22.8%
69.1%	7,517	5,795	-1,722	-22.9%
70.4%	7,264	5,757	-1,507	-20.8%
71.6%	7,140	5,690	-1,450	-20.3%
72.8%	6,916	5,683	-1,233	-17.8%
74.1%	6,871	5,665	-1,206	-17.5%
75.3%	6,847	5,573	-1,274	-18.6%
76.5%	6,842	5,500	-1,342	-19.6%
77.8%	6,743	5,487	-1,256	-18.6%
79.0%	6,474	5,439	-1,034	-16.0%
80.2%	5,923	5,401	-521	-8.8%
81.5%	5,894	5,317	-577	-9.8%
82.7%	5,820	5,123	-697	-12.0%
84.0%	5,698	5,088	-610	-10.7%
85.2%	5,690	4,997	-693	-12.2%
86.4%	5,576	4,996	-579	-10.4%
87.7%	5,496	4,884	-612	-11.1%
88.9%	5,212	4,810	-402	-7.7%
90.1%	5,005	4,787	-218	-4.4%
91.4%	5,003	4,775	-228	-4.6%
92.6%	4,887	4,745	-142	-2.9%
93.8%	4,749	4,720	-29	-0.6%
95.1%	4,619	4,615	-4	-0.1%
96.3%	4,575	4,611	36	0.8%
97.5%	4,399	4,524	125	2.8%
98.8%	4,398	4,276	-122	-2.8%
100.0%	4,173	4,163	-10	-0.2%

April				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,372	41,126	-246	-0.6%
1.2%	33,812	33,814	2	0.0%
2.5%	24,792	24,796	3	0.0%
3.7%	23,674	23,591	-83	-0.4%
4.9%	22,547	22,669	122	0.5%
6.2%	22,182	18,103	-4,079	-18.4%
7.4%	18,003	18,002	-1	0.0%
8.6%	17,711	17,714	3	0.0%
9.9%	17,646	17,650	3	0.0%
11.1%	16,794	16,795	1	0.0%
12.3%	16,427	15,832	-596	-3.6%
13.6%	16,412	15,309	-1,104	-6.7%
14.8%	15,830	14,963	-867	-5.5%
16.0%	14,521	12,462	-2,059	-14.2%
17.3%	14,276	12,379	-1,897	-13.3%
18.5%	14,073	12,182	-1,891	-13.4%
19.8%	13,394	12,047	-1,347	-10.1%
21.0%	13,261	11,444	-1,817	-13.7%
22.2%	12,046	11,329	-717	-6.0%
23.5%	11,476	10,265	-1,211	-10.6%
24.7%	11,329	9,949	-1,380	-12.2%
25.9%	10,556	9,806	-750	-7.1%
27.2%	10,501	9,515	-986	-9.4%
28.4%	9,770	9,251	-519	-5.3%
29.6%	9,604	9,219	-384	-4.0%
30.9%	9,474	9,170	-304	-3.2%
32.1%	9,348	8,903	-444	-4.8%
33.3%	9,305	8,703	-602	-6.5%
34.6%	9,204	8,699	-505	-5.5%
35.8%	9,116	8,671	-445	-4.9%
37.0%	8,815	8,637	-178	-2.0%
38.3%	8,705	8,622	-82	-0.9%
39.5%	8,676	8,586	-90	-1.0%
40.7%	8,673	8,575	-98	-1.1%
42.0%	8,622	8,541	-81	-0.9%
43.2%	8,607	8,525	-82	-0.9%
44.4%	8,532	8,478	-53	-0.6%
45.7%	8,485	8,441	-44	-0.5%
46.9%	8,478	8,424	-54	-0.6%
48.1%	8,449	8,386	-62	-0.7%
49.4%	8,440	8,370	-70	-0.8%
50.6%	8,371	8,218	-153	-1.8%
51.9%	8,349	8,217	-132	-1.6%
53.1%	8,298	8,145	-152	-1.8%
54.3%	8,285	8,056	-228	-2.8%
55.6%	8,263	7,960	-304	-3.7%
56.8%	8,244	7,738	-506	-6.1%
58.0%	8,141	7,695	-445	-5.5%
59.3%	8,055	7,601	-453	-5.6%
60.5%	7,935	7,598	-337	-4.2%
61.7%	7,877	7,575	-302	-3.8%
63.0%	7,705	7,482	-222	-2.9%
64.2%	7,687	7,410	-277	-3.6%
65.4%	7,657	7,345	-311	-4.1%
66.7%	7,582	7,218	-364	-4.8%
67.9%	7,481	7,216	-265	-3.5%
69.1%	7,336	7,215	-121	-1.6%
70.4%	7,331	7,125	-206	-2.8%
71.6%	7,313	7,079	-233	-3.2%
72.8%	7,261	7,075	-186	-2.6%
74.1%	7,156	7,067	-89	-1.2%
75.3%	7,123	7,029	-95	-1.3%
76.5%	7,035	6,982	-53	-0.7%
77.8%	7,030	6,893	-137	-1.9%
79.0%	7,014	6,795	-219	-3.1%
80.2%	6,916	6,771	-145	-2.1%
81.5%	6,905	6,767	-137	-2.0%
82.7%	6,896	6,628	-269	-3.9%
84.0%	6,797	6,626	-170	-2.5%
85.2%	6,709	6,487	-222	-3.3%
86.4%	6,690	6,421	-269	-4.0%
87.7%	6,633	6,420	-212	-3.2%
88.9%	6,607	6,378	-229	-3.5%
90.1%	6,512	6,349	-164	-2.5%
91.4%	6,411	6,186	-225	-3.5%
92.6%	6,361	6,138	-223	-3.5%
93.8%	6,167	6,128	-39	-0.6%
95.1%	6,158	5,915	-243	-3.9%
96.3%	5,775	5,869	94	1.6%
97.5%	5,529	5,471	-57	-1.0%
98.8%	5,325	5,329	4	0.1%
100.0%	5,002	4,886	-115	-2.3%

May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	22,550	22,550	1	0.0%
1.2%	18,896	18,898	2	0.0%
2.5%	18,027	17,572	-455	-2.5%
3.7%	17,570	17,114	-456	-2.6%
4.9%	17,090	16,978	-111	-0.7%
6.2%	16,976	16,357	-619	-3.6%
7.4%	14,493	14,165	-328	-2.3%
8.6%	14,164	13,944	-220	-1.6%
9.9%	14,052	13,898	-154	-1.1%
11.1%	13,969	12,698	-1,271	-9.1%
12.3%	12,698	12,320	-377	-3.0%
13.6%	11,820	12,155	334	2.8%
14.8%	11,785	11,941	157	1.3%
16.0%	11,708	11,822	114	1.0%
17.3%	11,401	11,697	296	2.6%
18.5%	11,248	11,401	154	1.4%
19.8%	11,160	11,206	46	0.4%
21.0%	10,874	11,193	319	2.9%
22.2%	10,721	11,014	293	2.7%
23.5%	10,598	10,876	278	2.6%
24.7%	10,499	10,499	1	0.0%
25.9%	10,440	9,856	-584	-5.6%
27.2%	9,999	9,842	-157	-1.6%
28.4%	9,979	9,670	-309	-3.1%
29.6%	9,853	9,645	-208	-2.1%
30.9%	9,843	9,630	-213	-2.2%
32.1%	9,761	9,553	-208	-2.1%
33.3%	9,720	9,325	-395	-4.1%
34.6%	9,560	9,228	-331	-3.5%
35.8%	9,539	9,184	-354	-3.7%
37.0%	9,194	9,156	-37	-0.4%
38.3%	9,109	9,134	25	0.3%
39.5%	9,011	9,111	99	1.1%
40.7%	8,883	9,012	129	1.5%
42.0%	8,742	8,970	228	2.6%
43.2%	8,720	8,908	188	2.2%
44.4%	8,656	8,878	222	2.6%
45.7%	8,635	8,843	208	2.4%
46.9%	8,494	8,670	177	2.1%
48.1%	8,384	8,437	53	0.6%
49.4%	8,309	8,364	55	0.7%
50.6%	8,251	8,172	-79	-1.0%
51.9%	8,182	8,132	-51	-0.6%
53.1%	8,165	8,116	-48	-0.6%
54.3%	8,136	8,055	-81	-1.0%
55.6%	8,133	8,009	-124	-1.5%
56.8%	8,069	7,988	-81	-1.0%
58.0%	8,029	7,966	-62	-0.8%
59.3%	8,022	7,966	-56	-0.7%
60.5%	8,015	7,940	-75	-0.9%
61.7%	7,987	7,938	-49	-0.6%
63.0%	7,967	7,930	-36	-0.5%
64.2%	7,957	7,874	-82	-1.0%
65.4%	7,942	7,803	-139	-1.8%
66.7%	7,932	7,784	-149	-1.9%
67.9%	7,839	7,729	-111	-1.4%
69.1%	7,808	7,660	-148	-1.9%
70.4%	7,802	7,593	-209	-2.7%
71.6%	7,789	7,570	-219	-2.8%
72.8%	7,737	7,487	-250	-3.2%
74.1%	7,727	7,337	-391	-5.1%
75.3%	7,645	7,218	-427	-5.6%
76.5%	7,613	7,129	-484	-6.4%
77.8%	7,539	7,038	-501	-6.7%
79.0%	7,518	7,012	-505	-6.7%
80.2%	7,402	6,962	-440	-5.9%
81.5%	7,298	6,886	-412	-5.6%
82.7%	7,269	6,736	-533	-7.3%
84.0%	7,254	6,647	-607	-8.4%
85.2%	7,195	6,636	-559	-7.8%
86.4%	7,120	6,550	-570	-8.0%
87.7%	7,057	6,512	-544	-7.7%
88.9%	7,038	6,375	-663	-9.4%
90.1%	6,995	6,351	-643	-9.2%
91.4%	6,826	6,322	-504	-7.4%
92.6%	6,764	6,110	-654	-9.7%
93.8%	6,577	5,905	-672	-10.2%
95.1%	6,573	5,745	-827	-12.6%
96.3%	6,506	5,729	-777	-11.9%
97.5%	6,259	5,702	-556	-8.9%
98.8%	6,149	4,979	-1,170	-19.0%
100.0%	5,932	4,788	-1,145	-19.3%

Table SW-12-b
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,987	23,988	1	0.0%
1.2%	16,173	16,171	-3	0.0%
2.5%	15,145	15,458	313	2.1%
3.7%	14,576	14,541	-35	-0.2%
4.9%	14,475	13,055	-1,420	-9.8%
6.2%	14,081	12,859	-1,221	-8.7%
7.4%	13,180	12,526	-655	-5.0%
8.6%	13,107	11,819	-1,288	-9.8%
9.9%	12,996	11,783	-1,213	-9.3%
11.1%	12,667	11,758	-909	-7.2%
12.3%	12,416	11,494	-922	-7.4%
13.6%	12,409	11,463	-946	-7.6%
14.8%	12,211	11,451	-760	-6.2%
16.0%	12,126	11,437	-689	-5.7%
17.3%	12,111	11,367	-744	-6.1%
18.5%	11,884	11,355	-529	-4.4%
19.8%	11,852	11,247	-605	-5.1%
21.0%	11,685	11,242	-443	-3.8%
22.2%	11,527	11,175	-352	-3.1%
23.5%	11,494	11,157	-337	-2.9%
24.7%	11,419	11,136	-283	-2.5%
25.9%	11,361	11,110	-251	-2.2%
27.2%	11,346	11,043	-303	-2.7%
28.4%	11,264	10,940	-324	-2.9%
29.6%	11,174	10,824	-349	-3.1%
30.9%	11,165	10,795	-370	-3.3%
32.1%	11,141	10,727	-414	-3.7%
33.3%	11,040	10,719	-321	-2.9%
34.6%	11,011	10,693	-318	-2.9%
35.8%	10,987	10,618	-368	-3.4%
37.0%	10,972	10,611	-360	-3.3%
38.3%	10,957	10,503	-454	-4.1%
39.5%	10,827	10,466	-361	-3.3%
40.7%	10,805	10,442	-363	-3.4%
42.0%	10,725	10,437	-288	-2.7%
43.2%	10,684	10,346	-338	-3.2%
44.4%	10,681	10,285	-397	-3.7%
45.7%	10,657	10,274	-384	-3.6%
46.9%	10,636	10,273	-363	-3.4%
48.1%	10,609	10,260	-349	-3.3%
49.4%	10,550	10,244	-306	-2.9%
50.6%	10,521	10,187	-334	-3.2%
51.9%	10,469	10,129	-341	-3.3%
53.1%	10,467	10,101	-366	-3.5%
54.3%	10,461	10,083	-378	-3.6%
55.6%	10,420	9,940	-480	-4.6%
56.8%	10,399	9,931	-468	-4.5%
58.0%	10,396	9,849	-548	-5.3%
59.3%	10,374	9,830	-544	-5.2%
60.5%	10,364	9,753	-612	-5.9%
61.7%	10,358	9,751	-607	-5.9%
63.0%	10,304	9,739	-565	-5.5%
64.2%	10,301	9,707	-594	-5.8%
65.4%	10,205	9,628	-577	-5.7%
66.7%	10,199	9,482	-717	-7.0%
67.9%	10,112	9,394	-718	-7.1%
69.1%	10,096	9,303	-793	-7.9%
70.4%	10,074	9,258	-816	-8.1%
71.6%	10,066	9,234	-832	-8.3%
72.8%	10,066	9,117	-949	-9.4%
74.1%	10,020	9,049	-972	-9.7%
75.3%	9,978	9,010	-968	-9.7%
76.5%	9,960	8,961	-999	-10.0%
77.8%	9,957	8,953	-1,003	-10.1%
79.0%	9,739	8,919	-820	-8.4%
80.2%	9,714	8,843	-871	-9.0%
81.5%	9,704	8,738	-966	-10.0%
82.7%	9,703	8,716	-987	-10.2%
84.0%	9,676	8,568	-1,108	-11.5%
85.2%	9,674	8,471	-1,203	-12.4%
86.4%	9,600	8,396	-1,205	-12.6%
87.7%	9,287	8,292	-995	-10.7%
88.9%	9,249	8,190	-1,059	-11.4%
90.1%	9,229	8,178	-1,051	-11.4%
91.4%	9,148	8,175	-974	-10.6%
92.6%	9,035	8,041	-994	-11.0%
93.8%	8,836	7,936	-899	-10.2%
95.1%	8,801	7,898	-903	-10.3%
96.3%	8,691	7,477	-1,214	-14.0%
97.5%	8,431	7,398	-1,033	-12.3%
98.8%	8,189	7,378	-811	-9.9%
100.0%	7,745	7,164	-581	-7.5%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,696	15,697	1	0.0%
1.2%	15,516	14,942	-575	-3.7%
2.5%	15,344	14,908	-436	-2.8%
3.7%	14,771	14,869	98	0.7%
4.9%	14,653	14,734	81	0.6%
6.2%	14,642	14,728	86	0.6%
7.4%	14,614	14,699	84	0.6%
8.6%	14,569	14,647	77	0.5%
9.9%	14,544	14,627	83	0.6%
11.1%	14,522	14,610	88	0.6%
12.3%	14,497	14,574	78	0.5%
13.6%	14,429	14,555	126	0.9%
14.8%	14,423	14,491	68	0.5%
16.0%	14,417	14,449	33	0.2%
17.3%	14,312	14,415	103	0.7%
18.5%	14,248	14,414	166	1.2%
19.8%	14,230	14,388	158	1.1%
21.0%	14,178	14,032	-145	-1.0%
22.2%	14,122	14,024	-98	-0.7%
23.5%	14,087	13,984	-103	-0.7%
24.7%	13,929	13,950	21	0.2%
25.9%	13,916	13,931	15	0.1%
27.2%	13,901	13,875	-26	-0.2%
28.4%	13,868	13,863	-5	0.0%
29.6%	13,805	13,784	-21	-0.2%
30.9%	13,750	13,611	-138	-1.0%
32.1%	13,712	13,452	-260	-1.9%
33.3%	13,618	13,341	-278	-2.0%
34.6%	13,603	13,244	-359	-2.6%
35.8%	13,596	13,005	-592	-4.4%
37.0%	13,442	12,914	-528	-3.9%
38.3%	13,334	12,910	-424	-3.2%
39.5%	13,170	12,897	-273	-2.1%
40.7%	13,150	12,843	-307	-2.3%
42.0%	13,094	12,772	-321	-2.5%
43.2%	13,031	12,768	-263	-2.0%
44.4%	12,921	12,762	-159	-1.2%
45.7%	12,696	12,636	-60	-0.5%
46.9%	12,641	12,514	-127	-1.0%
48.1%	12,625	12,469	-155	-1.2%
49.4%	12,590	12,275	-315	-2.5%
50.6%	12,416	12,270	-146	-1.2%
51.9%	12,333	12,210	-122	-1.0%
53.1%	12,315	12,203	-112	-0.9%
54.3%	12,257	12,181	-76	-0.6%
55.6%	12,106	12,179	72	0.6%
56.8%	12,029	12,133	104	0.9%
58.0%	11,901	12,051	149	1.3%
59.3%	11,832	12,050	219	1.8%
60.5%	11,815	12,041	226	1.9%
61.7%	11,785	12,035	250	2.1%
63.0%	11,768	12,019	251	2.1%
64.2%	11,672	11,968	295	2.5%
65.4%	11,642	11,894	251	2.2%
66.7%	11,507	11,876	369	3.2%
67.9%	11,500	11,857	356	3.1%
69.1%	11,482	11,690	207	1.8%
70.4%	11,432	11,685	253	2.2%
71.6%	11,423	11,659	235	2.1%
72.8%	11,368	11,630	262	2.3%
74.1%	11,351	11,589	238	2.1%
75.3%	11,312	11,583	270	2.4%
76.5%	11,307	11,579	272	2.4%
77.8%	11,264	11,578	313	2.8%
79.0%	11,156	11,547	391	3.5%
80.2%	11,153	11,520	367	3.3%
81.5%	11,151	11,472	322	2.9%
82.7%	11,116	11,433	318	2.9%
84.0%	11,031	11,357	326	3.0%
85.2%	11,022	11,288	267	2.4%
86.4%	10,873	11,122	249	2.3%
87.7%	10,862	11,095	233	2.1%
88.9%	10,742	11,042	300	2.8%
90.1%	10,692	10,949	258	2.4%
91.4%	10,688	10,924	236	2.2%
92.6%	10,497	10,730	233	2.2%
93.8%	10,125	10,490	365	3.6%
95.1%	9,961	10,356	395	4.0%
96.3%	9,823	10,122	299	3.0%
97.5%	8,901	10,063	1,162	13.1%
98.8%	8,525	9,596	1,071	12.6%
100.0%	8,276	9,085	809	9.8%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,037	14,036	-1	0.0%
1.2%	13,687	13,687	1	0.0%
2.5%	12,654	12,312	-342	-2.7%
3.7%	12,510	12,147	-363	-2.9%
4.9%	12,144	11,467	-677	-5.6%
6.2%	12,040	11,043	-997	-8.3%
7.4%	11,947	10,769	-1,178	-9.9%
8.6%	11,882	10,752	-1,129	-9.5%
9.9%	11,673	10,685	-988	-8.5%
11.1%	11,652	10,603	-1,049	-9.0%
12.3%	11,611	10,567	-1,044	-9.0%
13.6%	11,429	10,411	-1,018	-8.9%
14.8%	11,260	10,386	-874	-7.8%
16.0%	10,921	10,365	-556	-5.1%
17.3%	10,856	10,304	-553	-5.1%
18.5%	10,821	10,224	-597	-5.5%
19.8%	10,565	10,218	-347	-3.3%
21.0%	10,406	10,127	-279	-2.7%
22.2%	10,383	10,075	-308	-3.0%
23.5%	10,364	10,043	-321	-3.1%
24.7%	10,358	10,028	-330	-3.2%
25.9%	10,306	9,981	-325	-3.2%
27.2%	10,245	9,954	-292	-2.8%
28.4%	10,243	9,944	-299	-2.9%
29.6%	10,221	9,928	-293	-2.9%
30.9%	10,186	9,926	-260	-2.6%
32.1%	10,041	9,925	-116	-1.2%
33.3%	10,022	9,912	-109	-1.1%
34.6%	10,005	9,909	-96	-1.0%
35.8%	9,928	9,900	-28	-0.3%
37.0%	9,923	9,860	-63	-0.6%
38.3%	9,914	9,829	-85	-0.9%
39.5%	9,868	9,822	-46	-0.5%
40.7%	9,828	9,819	-9	-0.1%
42.0%	9,816	9,814	-3	0.0%
43.2%	9,755	9,809	53	0.5%
44.4%	9,691	9,808	116	1.2%
45.7%	9,626	9,803	177	1.8%
46.9%	9,625	9,781	156	1.6%
48.1%	9,601	9,741	140	1.5%
49.4%	9,590	9,726	136	1.4%
50.6%	9,529	9,709	180	1.9%
51.9%	9,514	9,682	168	1.8%
53.1%	9,510	9,678	168	1.8%
54.3%	9,465	9,676	212	2.2%
55.6%	9,398	9,672	274	2.9%
56.8%	9,360	9,665	305	3.3%
58.0%	9,359	9,648	288	3.1%
59.3%	9,355	9,638	283	3.0%
60.5%	9,324	9,617	293	3.1%
61.7%	9,302	9,602	300	3.2%
63.0%	9,266	9,569	304	3.3%
64.2%	9,263	9,557	294	3.2%
65.4%	9,225	9,540	315	3.4%
66.7%	9,209	9,532	322	3.5%
67.9%	9,209	9,403	194	2.1%
69.1%	9,206	9,398	192	2.1%
70.4%	9,130	9,365	235	2.6%
71.6%	8,972	9,345	373	4.2%
72.8%	8,970	9,340	370	4.1%
74.1%	8,911	9,332	421	4.7%
75.3%	8,872	9,321	449	5.1%
76.5%	8,857	9,307	450	5.1%
77.8%	8,767	9,265	498	5.7%
79.0%	8,716	9,185	469	5.4%
80.2%	8,690	9,180	490	5.6%
81.5%	8,681	9,170	489	5.6%
82.7%	8,540	9,113	574	6.7%
84.0%	8,523	9,102	579	6.8%
85.2%	8,497	9,090	593	7.0%
86.4%	8,473	9,013	540	6.4%
87.7%	8,429	8,804	374	4.4%
88.9%	8,382	8,797	415	5.0%
90.1%	8,368	8,781	412	4.9%
91.4%	8,351	8,583	233	2.8%
92.6%	8,342	8,332	-10	-0.1%
93.8%	8,151	8,227	75	0.9%
95.1%	8,060	8,161	101	1.3%
96.3%	7,764	7,829	65	0.8%
97.5%	7,201	7,787	586	8.1%
98.8%	7,056	7,726	670	9.5%
100.0%	6,746	7,482	736	10.9%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,453	16,318	-135	-0.8%
1.2%	15,796	15,407	-390	-2.5%
2.5%	15,563	15,262	-301	-1.9%
3.7%	15,363	15,231	-132	-0.9%
4.9%	15,248	15,191	-57	-0.4%
6.2%	15,236	15,068	-169	-1.1%
7.4%	15,211	15,054	-157	-1.0%
8.6%	15,024	14,823	-201	-1.3%
9.9%	14,876	14,764	-112	-0.8%
11.1%	14,822	14,716	-106	-0.7%
12.3%	13,702	14,673	971	7.1%
13.6%	13,627	14,339	712	5.2%
14.8%	13,225	14,280	1,055	8.0%
16.0%	13,191	13,793	602	4.6%
17.3%	13,061	13,453	393	3.0%
18.5%	13,049	13,226	177	1.4%
19.8%	12,808	13,061	254	2.0%
21.0%	12,776	13,013	237	1.9%
22.2%	12,769	12,848	79	0.6%
23.5%	12,733	12,835	102	0.8%
24.7%	12,463	12,568	105	0.8%
25.9%	12,313	12,283	-30	-0.2%
27.2%	11,949	12,171	222	1.9%
28.4%	11,731	11,745	14	0.1%
29.6%	11,723	11,018	-705	-6.0%
30.9%	10,888	10,496	-392	-3.6%
32.1%	10,818	9,943	-875	-8.1%
33.3%	10,081	9,730	-351	-3.5%
34.6%	10,049	9,177	-872	-8.7%
35.8%	9,217	9,086	-131	-1.4%
37.0%	9,081	8,792	-290	-3.2%
38.3%	8,972	8,443	-530	-5.9%
39.5%	8,928	8,184	-744	-8.3%
40.7%	8,845	8,145	-700	-7.9%
42.0%	8,499	7,936	-564	-6.6%
43.2%	7,235	7,681	446	6.2%
44.4%	7,064	7,421	357	5.1%
45.7%	6,840	7,140	299	4.4%
46.9%	6,826	7,006	180	2.6%
48.1%	6,734	6,985	251	3.7%
49.4%	6,580	6,974	394	6.0%
50.6%	6,391	6,788	397	6.2%
51.9%	6,364	6,775	411	6.5%
53.1%	6,336	6,700	364	5.7%
54.3%	6,295	6,682	387	6.2%
55.6%	6,179	6,676	497	8.0%
56.8%	6,023	6,630	606	10.1%
58.0%	5,942	6,629	686	11.5%
59.3%	5,942	6,612	670	11.3%
60.5%	5,870	6,609	739	12.6%
61.7%	5,777	6,509	732	12.7%
63.0%	5,733	6,492	759	13.2%
64.2%	5,730	6,360	630	11.0%
65.4%	5,547	6,357	810	14.6%
66.7%	5,491	6,336	845	15.4%
67.9%	5,472	6,289	817	14.9%
69.1%	5,464	6,282	818	15.0%
70.4%	5,382	6,282	900	16.7%
71.6%	5,332	6,257	924	17.3%
72.8%	5,320	6,255	935	17.6%
74.1%	5,199	6,255	1,056	20.3%
75.3%	5,197	6,247	1,051	20.2%
76.5%	5,185	6,188	1,003	19.3%
77.8%	5,170	6,125	955	18.5%
79.0%	5,117	6,087	970	19.0%
80.2%	5,064	6,074	1,010	19.9%
81.5%	4,977	5,951	974	19.6%
82.7%	4,928	5,929	1,000	20.3%
84.0%	4,889	5,829	940	19.2%
85.2%	4,881	5,818	937	19.2%
86.4%	4,819	5,797	977	20.3%
87.7%	4,687	5,627	939	20.0%
88.9%	4,686	5,524	839	17.9%
90.1%	4,611	5,343	732	15.9%
91.4%	4,584	5,214	631	13.8%
92.6%	4,525	5,199	673	14.9%
93.8%	4,441	5,174	733	16.5%
95.1%	4,431	4,903	471	10.6%
96.3%	4,422	4,899	477	10.8%
97.5%	4,402	4,891	489	11.1%
98.8%	4,300	4,713	413	9.6%
100.0%	4,284	4,543	259	6.0%

Figure SW-13-b
Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

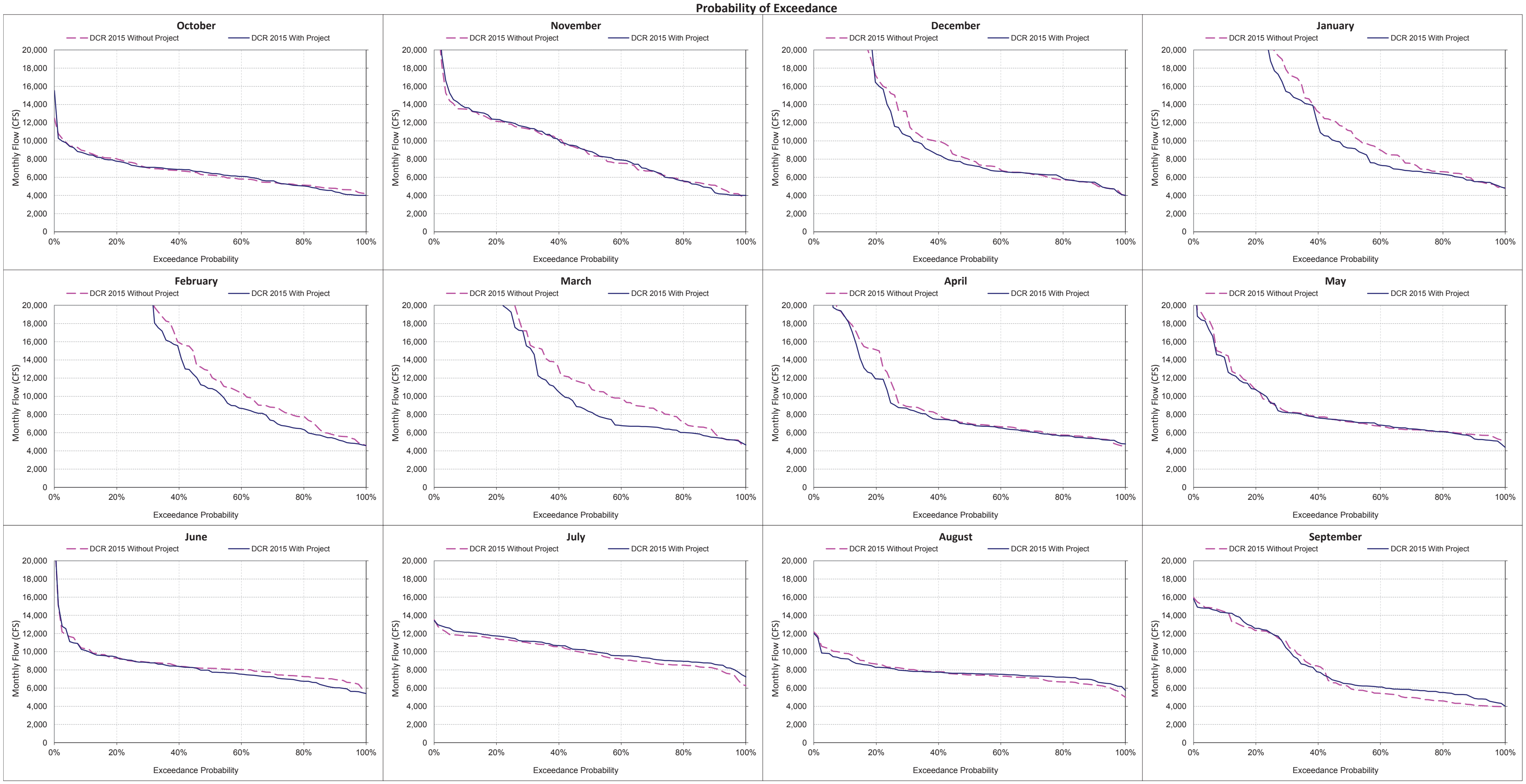


Table SW-13-b

Sacramento River below Hamilton City, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,507	15,530	3,023	24.2%
1.2%	10,818	10,280	-538	-5.0%
2.5%	10,280	9,985	-295	-2.9%
3.7%	9,857	9,796	-61	-0.6%
4.9%	9,412	9,392	-20	-0.2%
6.2%	9,401	9,259	-141	-1.5%
7.4%	9,283	8,837	-447	-4.8%
8.6%	8,982	8,755	-226	-2.5%
9.9%	8,886	8,597	-289	-3.3%
11.1%	8,692	8,452	-241	-2.8%
12.3%	8,553	8,423	-130	-1.5%
13.6%	8,350	8,205	-145	-1.7%
14.8%	8,309	8,166	-143	-1.7%
16.0%	8,148	7,970	-178	-2.2%
17.3%	8,125	7,931	-194	-2.4%
18.5%	8,117	7,931	-186	-2.3%
19.8%	8,049	7,771	-278	-3.5%
21.0%	7,923	7,718	-205	-2.6%
22.2%	7,799	7,632	-168	-2.2%
23.5%	7,669	7,529	-140	-1.8%
24.7%	7,634	7,318	-316	-4.1%
25.9%	7,535	7,261	-275	-3.6%
27.2%	7,305	7,169	-136	-1.9%
28.4%	7,189	7,122	-66	-0.9%
29.6%	7,064	7,097	33	0.5%
30.9%	6,980	7,088	108	1.5%
32.1%	6,943	7,081	138	2.0%
33.3%	6,929	7,077	148	2.1%
34.6%	6,887	7,044	157	2.3%
35.8%	6,840	6,942	102	1.5%
37.0%	6,788	6,913	124	1.8%
38.3%	6,775	6,902	127	1.9%
39.5%	6,756	6,872	115	1.7%
40.7%	6,697	6,852	155	2.3%
42.0%	6,661	6,840	179	2.7%
43.2%	6,616	6,828	212	3.2%
44.4%	6,555	6,693	138	2.1%
45.7%	6,523	6,643	121	1.8%
46.9%	6,320	6,626	306	4.8%
48.1%	6,260	6,557	297	4.7%
49.4%	6,257	6,500	243	3.9%
50.6%	6,232	6,401	168	2.7%
51.9%	6,193	6,396	203	3.3%
53.1%	6,078	6,361	282	4.6%
54.3%	6,055	6,246	191	3.2%
55.6%	5,927	6,210	283	4.8%
56.8%	5,920	6,161	241	4.1%
58.0%	5,879	6,152	273	4.6%
59.3%	5,810	6,104	294	5.1%
60.5%	5,800	6,093	293	5.1%
61.7%	5,779	6,074	294	5.1%
63.0%	5,775	5,967	192	3.3%
64.2%	5,702	5,910	208	3.7%
65.4%	5,566	5,844	278	5.0%
66.7%	5,467	5,678	211	3.9%
67.9%	5,450	5,608	158	2.9%
69.1%	5,449	5,604	155	2.9%
70.4%	5,414	5,600	186	3.4%
71.6%	5,370	5,396	26	0.5%
72.8%	5,287	5,297	10	0.2%
74.1%	5,279	5,277	-1	0.0%
75.3%	5,270	5,208	-62	-1.2%
76.5%	5,236	5,132	-104	-2.0%
77.8%	5,139	5,101	-38	-0.7%
79.0%	5,139	5,060	-79	-1.5%
80.2%	5,127	5,037	-89	-1.7%
81.5%	5,112	4,987	-126	-2.5%
82.7%	5,112	4,857	-255	-5.0%
84.0%	4,964	4,821	-143	-2.9%
85.2%	4,916	4,668	-248	-5.0%
86.4%	4,836	4,601	-235	-4.9%
87.7%	4,816	4,566	-249	-5.2%
88.9%	4,797	4,552	-245	-5.1%
90.1%	4,787	4,384	-403	-8.4%
91.4%	4,693	4,312	-382	-8.1%
92.6%	4,648	4,182	-466	-10.0%
93.8%	4,633	4,095	-539	-11.6%
95.1%	4,624	4,089	-535	-11.6%
96.3%	4,551	4,026	-525	-11.5%
97.5%	4,330	4,019	-311	-7.2%
98.8%	4,253	4,014	-240	-5.6%
100.0%	4,210	4,004	-206	-4.9%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	38,284	37,040	-1,244	-3.3%
1.2%	22,771	24,906	2,135	9.4%
2.5%	18,350	19,451	1,101	6.0%
3.7%	15,287	16,661	1,374	9.0%
4.9%	14,431	15,280	849	5.9%
6.2%	14,096	14,553	457	3.2%
7.4%	13,541	14,295	754	5.6%
8.6%	13,525	13,950	425	3.1%
9.9%	13,507	13,694	187	1.4%
11.1%	13,450	13,623	173	1.3%
12.3%	13,224	13,261	37	0.3%
13.6%	13,134	13,190	56	0.4%
14.8%	12,784	13,120	336	2.6%
16.0%	12,757	13,060	303	2.4%
17.3%	12,533	12,844	311	2.5%
18.5%	12,298	12,401	102	0.8%
19.8%	12,159	12,382	223	1.8%
21.0%	12,132	12,357	224	1.8%
22.2%	12,105	12,185	80	0.7%
23.5%	11,857	12,089	232	2.0%
24.7%	11,852	12,031	179	1.5%
25.9%	11,581	11,924	343	3.0%
27.2%	11,489	11,700	211	1.8%
28.4%	11,428	11,604	176	1.5%
29.6%	11,356	11,502	146	1.3%
30.9%	11,265	11,368	103	0.9%
32.1%	11,209	11,342	133	1.2%
33.3%	10,930	11,092	162	1.5%
34.6%	10,719	11,066	346	3.2%
35.8%	10,669	10,721	52	0.5%
37.0%	10,581	10,710	129	1.2%
38.3%	10,521	10,321	-200	-1.9%
39.5%	10,164	10,243	79	0.8%
40.7%	10,139	9,807	-333	-3.3%
42.0%	9,525	9,751	226	2.4%
43.2%	9,507	9,550	43	0.5%
44.4%	9,389	9,513	123	1.3%
45.7%	9,245	9,436	192	2.1%
46.9%	9,086	9,188	102	1.1%
48.1%	9,084	9,021	-62	-0.7%
49.4%	8,593	8,888	294	3.4%
50.6%	8,381	8,809	428	5.1%
51.9%	8,331	8,608	277	3.3%
53.1%	8,307	8,323	16	0.2%
54.3%	8,211	8,273	62	0.8%
55.6%	7,739	8,215	477	6.2%
56.8%	7,685	8,154	468	6.1%
58.0%	7,575	7,938	363	4.8%
59.3%	7,555	7,914	359	4.8%
60.5%	7,537	7,903	366	4.9%
61.7%	7,517	7,826	309	4.1%
63.0%	7,441	7,658	217	2.9%
64.2%	7,265	7,445	181	2.5%
65.4%	6,808	7,424	616	9.0%
66.7%	6,797	7,039	242	3.6%
67.9%	6,697	6,971	274	4.1%
69.1%	6,692	6,791	99	1.5%
70.4%	6,629	6,696	67	1.0%
71.6%	6,511	6,509	-2	0.0%
72.8%	6,275	6,404	129	2.1%
74.1%	6,192	6,013	-179	-2.9%
75.3%	5,942	5,944	3	0.0%
76.5%	5,932	5,917	-15	-0.2%
77.8%	5,883	5,752	-131	-2.2%
79.0%	5,842	5,646	-196	-3.4%
80.2%	5,511	5,571	60	1.1%
81.5%	5,492	5,525	34	0.6%
82.7%	5,433	5,264	-169	-3.1%
84.0%	5,432	5,224	-209	-3.8%
85.2%	5,394	5,131	-262	-4.9%
86.4%	5,300	4,910	-391	-7.4%
87.7%	5,233	4,891	-342	-6.5%
88.9%	5,147	4,814	-333	-6.5%
90.1%	5,122	4,290	-831	-16.2%
91.4%	4,892	4,186	-706	-14.4%
92.6%	4,693	4,163	-530	-11.3%
93.8%	4,511	4,114	-398	-8.8%
95.1%	4,240	4,033	-207	-4.9%
96.3%	4,210	4,032	-178	-4.2%
97.5%	4,191	4,019	-172	-4.1%
98.8%	3,891	4,018	127	3.3%
100.0%	3,851	4,014	163	4.2%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	48,725	47,735	-991	-2.0%
1.2%	48,649	45,940	-2,709	-5.6%
2.5%	39,834	39,208	-627	-1.6%
3.7%	38,855	38,833	-21	-0.1%
4.9%	38,664	35,102	-3,562	-9.2%
6.2%	35,064	31,419	-3,644	-10.4%
7.4%	34,010	31,360	-2,650	-7.8%
8.6%	33,151	30,445	-2,706	-8.2%
9.9%	27,063	24,671	-2,392	-8.8%
11.1%	26,327	24,136	-2,191	-8.3%
12.3%	24,855	23,496	-1,359	-5.5%
13.6%	24,846	23,080	-1,767	-7.1%
14.8%	23,922	22,764	-1,159	-4.8%
16.0%	21,161	21,706	545	2.6%
17.3%	20,042	21,055	1,013	5.1%
18.5%	18,809	20,703	1,894	10.1%
19.8%	17,253	16,463	-791	-4.6%
21.0%	16,548	15,996	-552	-3.3%
22.2%	16,007	15,684	-323	-2.0%
23.5%	15,802	14,014	-1,787	-11.3%
24.7%	15,225	13,268	-1,957	-12.9%
25.9%	15,047	11,591	-3,455	-23.0%
27.2%	13,352	11,494	-1,858	-13.9%
28.4%	13,272	10,803	-2,469	-18.6%
29.6%	13,257	10,590	-2,667	-20.1%
30.9%	11,492	10,456	-1,036	-9.0%
32.1%	11,040	9,950	-1,090	-9.9%
33.3%	10,802	9,861	-942	-8.7%
34.6%	10,459	9,684	-775	-7.4%
35.8%	10,265	9,176	-1,089	-10.6%
37.0%	10,126	8,984	-1,142	-11.3%
38.3%	10,041	8,744	-1,297	-12.9%
39.5%	9,949	8,524	-1,425	-14.3%
40.7%	9,909	8,372	-1,537	-15.5%
42.0%	9,713	8,131	-1,583	-16.3%
43.2%	9,439	7,931	-1,507	-16.0%
44.4%	8,582	7,825	-758	-8.8%
45.7%	8,410	7,754	-655	-7.8%
46.9%	8,329	7,744	-586	-7.0%
48.1%	8,154	7,500	-654	-8.0%
49.4%	8,029	7,368	-661	-8.2%
50.6%	7,825	7,332	-493	-6.3%
51.9%	7,721	7,244	-477	-6.2%
53.1%	7,359	7,192	-167	-2.3%
54.3%	7,315	6,993	-323	-4.4%
55.6%	7,249	6,911	-338	-4.7%
56.8%	7,239	6,743	-496	-6.9%
58.0%	7,183	6,706	-477	-6.6%
59.3%	6,990	6,663	-327	-4.7%
60.5%	6,708	6,657	-51	-0.8%
61.7%	6,636	6,586	-49	-0.7%
63.0%	6,571	6,551	-20	-0.3%
64.2%	6,555	6,530	-24	-0.4%
65.4%	6,551	6,530	-22	-0.3%
66.7%	6,528	6,522	-6	-0.1%
67.9%	6,471	6,471	0	0.0%
69.1%	6,432	6,436	4	0.1%
70.4%	6,306	6,368	61	1.0%
71.6%	6,299	6,343	44	0.7%
72.8%	6,247	6,328	82	1.3%
74.1%	6,129	6,295	167	2.7%
75.3%	5,983	6,275	292	4.9%
76.5%	5,867	6,272	406	6.9%
77.8%	5,810	6,255	444	7.6%
79.0%	5,724	6,057	333	5.8%
80.2%	5,704	5,807	103	1.8%
81.5%	5,701	5,713	12	0.2%
82.7%	5,689	5,655	-35	-0.6%
84.0%	5,669	5,604	-65	-1.2%
85.2%	5,524	5,519	-5	-0.1%
86.4%	5,515	5,517	3	0.0%
87.7%	5,456	5,487	31	0.6%
88.9%	5,430	5,475	45	0.8%
90.1%	5,256	5,454	198	3.8%
91.4%	4,978	5,220	242	4.9%
92.6%	4,911	4,916	6	0.1%
93.8%	4,832	4,801	-30	-0.6%
95.1%	4,750	4,741	-9	-0.2%
96.3%	4,713	4,715	2	0.0%
97.5%	4,559	4,348	-211	-4.6%
98.8%	4,105	4,108	2	0.1%
100.0%	3,970	4,016	46	1.2%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	87,528	87,526	-1	0.0%
1.2%	64,109	64,112	4	0.0%
2.5%	57,960	57,962	3	0.0%
3.7%	57,902	55,482	-2,420	-4.2%
4.9%	49,272	49,386	114	0.2%
6.2%	47,323	49,281	1,958	4.1%
7.4%	43,705	44,282	577	1.3%
8.6%	43,295	41,643	-1,653	-3.8%
9.9%	36,579	34,593	-1,987	-5.4%
11.1%	34,598	34,156	-442	-1.3%
12.3%	32,269	31,326	-943	-2.9%
13.6%	30,881	30,604	-276	-0.9%
14.8%	30,606	27,891	-2,715	-8.9%
16.0%	30,315	27,037	-3,278	-10.8%
17.3%	29,480	26,603	-2,877	-9.8%
18.5%	26,587	26,589	1	0.0%
19.8%	25,794	23,365	-2,430	-9.4%
21.0%	25,421	23,077	-2,344	-9.2%
22.2%	23,550	22,232	-1,318	-5.6%
23.5%	22,522	20,948	-1,574	-7.0%
24.7%	21,243	18,794	-2,449	-11.5%
25.9%	19,884	17,710	-2,174	-10.9%
27.2%	19,376	17,324	-2,052	-10.6%
28.4%	18,977	16,542	-2,435	-12.8%
29.6%	17,873	15,445	-2,428	-13.6%
30.9%	17,232	15,292	-1,940	-11.3%
32.1%	17,076	14,806	-2,270	-13.3%
33.3%	16,886	14,620	-2,266	-13.4%
34.6%	16,323	14,452	-1,872	-11.5%
35.8%	14,720	14,119	-601	-4.1%
37.0%	14,621	14,013	-608	-4.2%
38.3%	14,019	13,900	-119	-0.8%
39.5%	13,338	12,221	-1,117	-8.4%
40.7%	12,996	10,910	-2,086	-16.0%
42.0%	12,465	10,561	-1,904	-15.3%
43.2%	12,415	10,525	-1,890	-15.2%
44.4%	12,248	10,111	-2,137	-17.4%
45.7%	12,109	9,985	-2,125	-17.5%
46.9%	11,697	9,887	-1,810	-15.5%
48.1%	11,580	9,415	-2,165	-18.7%
49.4%	11,179	9,227	-1,953	-17.5%
50.6%	11,073	9,216	-1,857	-16.8%
51.9%	10,371	9,159	-1,211	-11.7%
53.1%	10,103	8,801	-1,302	-12.9%
54.3%	9,748	8,641	-1,107	-11.4%
55.6%	9,694	8,452	-1,242	-12.8%
56.8%	9,538	7,617	-1,921	-20.1%
58.0%	9,430	7,565	-1,864	-19.8%
59.3%	9,109	7,370	-1,738	-19.1%
60.5%	8,896	7,304	-1,593	-17.9%
61.7%	8,605	7,267	-1,338	-15.6%
63.0%	8,458	7,175	-1,283	-15.2%
64.2%	8,457	6,925	-1,532	-18.1%
65.4%	8,445	6,889	-1,556	-18.4%
66.7%	8,131	6,844	-1,287	-15.8%
67.9%	7,574	6,750	-824	-10.9%
69.1%	7,553	6,716	-838	-11.1%
70.4%	7,495	6,673	-822	-11.0%
71.6%	7,263	6,657	-606	-8.3%
72.8%	6,911	6,623	-288	-4.2%
74.1%	6,893	6,533	-360	-5.2%
75.3%	6,846	6,514	-332	-4.8%
76.5%	6,674	6,462	-212	-3.2%
77.8%	6,656	6,422	-234	-3.5%
79.0%	6,613	6,390	-224	-3.4%
80.2%	6,606	6,327	-279	-4.2%
81.5%	6,575	6,263	-312	-4.8%
82.7%	6,456	6,203	-253	-3.9%
84.0%	6,441	6,078	-363	-5.6%
85.2%	6,422	6,006	-416	-6.5%
86.4%	6,327	5,951	-377	-6.0%
87.7%	6,013	5,695	-318	-5.3%
88.9%	5,942	5,689	-253	-4.3%
90.1%	5,552	5,534	-18	-0.3%
91.4%	5,514	5,519	5	0.1%
92.6%	5,446	5,513	66	1.2%
93.8%	5,333	5,439	106	2.0%
95.1%	5,261	5,427	166	3.2%
96.3%	5,225	5,236	11	0.2%
97.5%	4,927	5,100	174	3.5%
98.8%	4,826	4,922	96	2.0%
100.0%	4,818	4,815	-2	0.0%

Table SW-13-b
Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,563	96,518	14,955	18.3%
1.2%	74,339	81,558	7,218	9.7%
2.5%	72,394	74,438	2,045	2.8%
3.7%	60,941	60,876	-65	-0.1%
4.9%	52,485	52,140	-345	-0.7%
6.2%	51,009	49,926	-1,083	-2.1%
7.4%	49,773	49,334	-439	-0.9%
8.6%	49,112	47,911	-1,201	-2.4%
9.9%	47,910	47,146	-764	-1.6%
11.1%	47,444	46,950	-494	-1.0%
12.3%	45,789	46,584	795	1.7%
13.6%	45,224	43,117	-2,107	-4.7%
14.8%	41,880	39,320	-2,559	-6.1%
16.0%	36,684	35,824	-861	-2.3%
17.3%	35,823	34,121	-1,701	-4.7%
18.5%	34,802	32,254	-2,548	-7.3%
19.8%	33,377	30,816	-2,561	-7.7%
21.0%	31,817	30,317	-1,500	-4.7%
22.2%	30,317	29,271	-1,046	-3.5%
23.5%	27,312	25,713	-1,599	-5.9%
24.7%	27,281	25,308	-1,973	-7.2%
25.9%	27,195	24,745	-2,450	-9.0%
27.2%	24,961	24,716	-245	-1.0%
28.4%	23,087	24,450	1,363	5.9%
29.6%	22,975	23,083	108	0.5%
30.9%	21,548	22,975	1,427	6.6%
32.1%	19,803	18,066	-1,736	-8.8%
33.3%	19,274	17,544	-1,730	-9.0%
34.6%	18,770	17,189	-1,581	-8.4%
35.8%	18,282	16,175	-2,107	-11.5%
37.0%	18,144	16,020	-2,124	-11.7%
38.3%	17,156	15,717	-1,439	-8.4%
39.5%	16,018	15,578	-440	-2.7%
40.7%	15,763	14,166	-1,597	-10.1%
42.0%	15,577	13,008	-2,570	-16.5%
43.2%	15,524	12,953	-2,570	-16.6%
44.4%	15,037	12,479	-2,559	-17.0%
45.7%	13,381	12,045	-1,336	-10.0%
46.9%	13,225	11,266	-1,959	-14.8%
48.1%	12,949	11,154	-1,795	-13.9%
49.4%	12,840	10,858	-1,982	-15.4%
50.6%	12,043	10,829	-1,214	-10.1%
51.9%	11,800	10,656	-1,144	-9.7%
53.1%	11,749	10,274	-1,475	-12.6%
54.3%	11,100	9,836	-1,264	-11.4%
55.6%	10,983	9,233	-1,750	-15.9%
56.8%	10,884	8,996	-1,888	-17.3%
58.0%	10,692	8,960	-1,732	-16.2%
59.3%	10,470	8,708	-1,762	-16.8%
60.5%	10,348	8,638	-1,711	-16.5%
61.7%	9,913	8,535	-1,379	-13.9%
63.0%	9,836	8,405	-1,431	-14.6%
64.2%	9,476	8,244	-1,232	-13.0%
65.4%	9,037	8,134	-904	-10.0%
66.7%	9,006	8,128	-878	-9.7%
67.9%	8,981	7,923	-1,058	-11.8%
69.1%	8,813	7,395	-1,418	-16.1%
70.4%	8,778	7,317	-1,461	-16.6%
71.6%	8,743	6,954	-1,788	-20.5%
72.8%	8,452	6,793	-1,659	-19.6%
74.1%	8,195	6,748	-1,447	-17.7%
75.3%	8,134	6,656	-1,478	-18.2%
76.5%	7,928	6,544	-1,384	-17.5%
77.8%	7,791	6,486	-1,306	-16.8%
79.0%	7,750	6,456	-1,294	-16.7%
80.2%	7,747	6,293	-1,454	-18.8%
81.5%	7,358	5,956	-1,401	-19.0%
82.7%	7,194	5,891	-1,303	-18.1%
84.0%	6,772	5,764	-1,009	-14.9%
85.2%	6,330	5,727	-603	-9.5%
86.4%	5,999	5,585	-414	-6.9%
87.7%	5,970	5,465	-505	-8.5%
88.9%	5,819	5,458	-361	-6.2%
90.1%	5,710	5,326	-384	-6.7%
91.4%	5,616	5,173	-443	-7.9%
92.6%	5,582	5,087	-495	-8.9%
93.8%	5,561	4,897	-664	-11.9%
95.1%	5,411	4,860	-552	-10.2%
96.3%	5,295	4,833	-462	-8.7%
97.5%	4,897	4,779	-118	-2.4%
98.8%	4,776	4,655	-121	-2.5%
100.0%	4,556	4,596	40	0.9%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	76,960	81,406	4,446	5.8%
1.2%	76,613	72,716	-3,897	-5.1%
2.5%	59,067	57,377	-1,690	-2.9%
3.7%	53,959	52,095	-1,864	-3.5%
4.9%	52,094	43,074	-9,019	-17.3%
6.2%	43,191	34,633	-8,558	-19.8%
7.4%	37,415	33,497	-3,919	-10.5%
8.6%	36,268	33,141	-3,128	-8.6%
9.9%	33,139	32,348	-791	-2.4%
11.1%	30,982	29,585	-1,397	-4.5%
12.3%	29,607	27,048	-2,559	-8.6%
13.6%	26,662	26,621	-41	-0.2%
14.8%	24,221	24,086	-135	-0.6%
16.0%	22,705	22,566	-138	-0.6%
17.3%	22,566	22,412	-154	-0.7%
18.5%	22,504	22,395	-109	-0.5%
19.8%	22,395	21,247	-1,148	-5.1%
21.0%	22,172	20,605	-1,568	-7.1%
22.2%	21,247	19,933	-1,314	-6.2%
23.5%	21,182	19,638	-1,543	-7.3%
24.7%	20,618	19,261	-1,357	-6.6%
25.9%	19,948	17,588	-2,360	-11.8%
27.2%	18,526	17,259	-1,267	-6.8%
28.4%	17,212	17,201	-12	-0.1%
29.6%	17,198	15,562	-1,636	-9.5%
30.9%	15,605	15,279	-327	-2.1%
32.1%	15,372	14,618	-754	-4.9%
33.3%	15,331	12,272	-3,058	-19.9%
34.6%	15,182	11,948	-3,234	-21.3%
35.8%	14,157	11,794	-2,363	-16.7%
37.0%	13,842	11,275	-2,567	-18.5%
38.3%	13,816	11,136	-2,681	-19.4%
39.5%	13,444	10,652	-2,792	-20.8%
40.7%	12,307	10,249	-2,059	-16.7%
42.0%	12,216	9,914	-2,301	-18.8%
43.2%	12,137	9,815	-2,322	-19.1%
44.4%	11,789	9,521	-2,268	-19.2%
45.7%	11,685	8,866	-2,819	-24.1%
46.9%	11,561	8,811	-2,750	-23.8%
48.1%	11,434	8,625	-2,809	-24.6%
49.4%	11,409	8,375	-3,034	-26.6%
50.6%	10,741	8,224	-2,517	-23.4%
51.9%	10,606	7,967	-2,639	-24.9%
53.1%	10,518	7,769	-2,749	-26.1%
54.3%	10,493	7,653	-2,839	-27.1%
55.6%	10,187	7,531	-2,656	-26.1%
56.8%	9,913	7,443	-2,470	-24.9%
58.0%	9,817	6,853	-2,965	-30.2%
59.3%	9,811	6,808	-3,002	-30.6%
60.5%	9,711	6,749	-2,962	-30.5%
61.7%	9,330	6,742	-2,588	-27.7%
63.0%	9,298	6,719	-2,579	-27.7%
64.2%	9,016	6,696	-2,320	-25.7%
65.4%	8,941	6,695	-2,246	-25.1%
66.7%	8,901	6,689	-2,212	-24.8%
67.9%	8,848	6,672	-2,176	-24.6%
69.1%	8,708	6,636	-2,072	-23.8%
70.4%	8,700	6,613	-2,087	-24.0%
71.6%	8,389	6,605	-1,785	-21.3%
72.8%	8,354	6,498	-1,855	-22.2%
74.1%	8,030	6,401	-1,629	-20.3%
75.3%	7,999	6,395	-1,604	-20.1%
76.5%	7,822	6,307	-1,514	-19.4%
77.8%	7,768	6,269	-1,499	-19.3%
79.0%	7,353	6,030	-1,323	-18.0%
80.2%	7,106	6,016	-1,090	-15.3%
81.5%	6,804	5,981	-823	-12.1%
82.7%	6,721	5,959	-762	-11.3%
84.0%	6,670	5,915	-755	-11.3%
85.2%	6,624	5,863	-761	-11.5%
86.4%	6,604	5,687	-917	-13.9%
87.7%	6,497	5,615	-882	-13.6%
88.9%	6,401	5,513	-888	-13.9%
90.1%	5,896	5,492	-404	-6.8%
91.4%	5,483	5,423	-60	-1.1%
92.6%	5,379	5,364	-15	-0.3%
93.8%	5,240	5,256	16	0.3%
95.1%	5,209	5,222	13	0.3%
96.3%	5,207	5,195	-12	-0.2%
97.5%	5,183	5,117	-66	-1.3%
98.8%	4,679	4,884	206	4.4%
100.0%	4,648	4,658	9	0.2%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,245	42,477	-1,768	-4.0%
1.2%	36,686	36,687	2	0.0%
2.5%	27,318	27,322	3	0.0%
3.7%	25,199	25,321	122	0.5%
4.9%	25,024	24,856	-168	-0.7%
6.2%	23,862	19,783	-4,079	-17.1%
7.4%	19,546	19,524	-22	-0.1%
8.6%	19,356	19,414	58	0.3%
9.9%	18,760	18,763	3	0.0%
11.1%	18,253	18,179	-74	-0.4%
12.3%	17,803	17,053	-750	-4.2%
13.6%	17,084	15,761	-1,323	-7.7%
14.8%	16,144	14,179	-1,965	-12.2%
16.0%	15,480	13,131	-2,348	-15.2%
17.3%	15,311	12,665	-2,647	-17.3%
18.5%	15,267	12,513	-2,755	-18.0%
19.8%	15,139	11,914	-3,224	-21.3%
21.0%	14,991	11,891	-3,100	-20.7%
22.2%	13,130	11,871	-1,259	-9.6%
23.5%	12,665	10,710	-1,954	-15.4%
24.7%	11,634	9,280	-2,355	-20.2%
25.9%	10,619	9,051	-1,568	-14.8%
27.2%	9,280	8,753	-528	-5.7%
28.4%	9,086	8,725	-360	-4.0%
29.6%	8,898	8,717	-181	-2.0%
30.9%	8,837	8,515	-323	-3.6%
32.1%	8,822	8,419	-402	-4.6%
33.3%	8,767	8,257	-510	-5.8%
34.6%	8,579	8,109	-470	-5.5%
35.8%	8,365	8,075	-290	-3.5%
37.0%	8,340	7,754	-586	-7.0%
38.3%	8,289	7,522	-768	-9.3%
39.5%	8,078	7,481	-597	-7.4%
40.7%	7,760	7,448	-311	-4.0%
42.0%	7,553	7,444	-109	-1.4%
43.2%	7,456	7,424	-33	-0.4%
44.4%	7,431	7,334	-97	-1.3%
45.7%	7,331	7,304	-27	-0.4%
46.9%	7,148	7,027	-121	-1.7%
48.1%	7,123	6,980	-144	-2.0%
49.4%	7,056	6,906	-149	-2.1%
50.6%	6,950	6,901	-49	-0.7%
51.9%	6,899	6,765	-134	-1.9%
53.1%	6,892	6,727	-165	-2.4%
54.3%	6,877	6,715	-163	-2.4%
55.6%	6,845	6,710	-135	-2.0%
56.8%	6,788	6,685	-102	-1.5%
58.0%	6,717	6,648	-69	-1.0%
59.3%	6,682	6,546	-136	-2.0%
60.5%	6,650	6,494	-155	-2.3%
61.7%	6,642	6,421	-221	-3.3%
63.0%	6,629	6,350	-278	-4.2%
64.2%	6,571	6,332	-238	-3.6%
65.4%	6,442	6,308	-134	-2.1%
66.7%	6,311	6,192	-119	-1.9%
67.9%	6,306	6,176	-130	-2.1%
69.1%	6,197	6,096	-101	-1.6%
70.4%	6,183	6,051	-132	-2.1%
71.6%	6,168	6,029	-139	-2.2%
72.8%	6,133	5,903	-230	-3.8%
74.1%	5,967	5,864	-103	-1.7%
75.3%	5,836	5,851	15	0.3%
76.5%	5,826	5,743	-83	-1.4%
77.8%	5,797	5,740	-57	-1.0%
79.0%	5,750	5,664	-86	-1.5%
80.2%	5,740	5,657	-83	-1.4%
81.5%	5,726	5,651	-74	-1.3%
82.7%	5,667	5,617	-50	-0.9%
84.0%	5,636	5,483	-153	-2.7%
85.2%	5,629	5,467	-163	-2.9%
86.4%	5,587	5,447	-140	-2.5%
87.7%	5,533	5,385	-148	-2.7%
88.9%	5,518	5,377	-141	-2.6%
90.1%	5,365	5,376	11	0.2%
91.4%	5,288	5,323	35	0.7%
92.6%	5,287	5,210	-77	-1.5%
93.8%	5,262	5,197	-65	-1.2%
95.1%	5,173	5,162	-11	-0.2%
96.3%	4,816	5,156	340	7.1%
97.5%	4,679	4,947	268	5.7%
98.8%	4,552	4,787	235	5.2%
100.0%	4,531	4,763	232	5.1%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,931	24,932	1	0.0%
1.2%	19,443	18,790	-652	-3.4%
2.5%	19,201	18,389	-812	-4.2%
3.7%	18,472	18,283	-189	-1.0%
4.9%	18,420	17,379	-1,041	-5.6%
6.2%	17,501	16,598	-903	-5.2%
7.4%	15,019	14,587	-433	-2.9%
8.6%	14,862	14,493	-368	-2.5%
9.9%	14,613	14,302	-311	-2.1%
11.1%	14,441	12,629	-1,813	-12.6%
12.3%	12,733	12,370	-363	-2.8%
13.6%	12,508	12,221	-286	-2.3%
14.8%	12,362	11,744	-618	-5.0%
16.0%	11,883	11,513	-370	-3.1%
17.3%	11,678	11,451	-227	-1.9%
18.5%	11,238	10,837	-400	-3.6%
19.8%	10,771	10,794	23	0.2%
21.0%	10,654	10,510	-144	-1.3%
22.2%	9,747	10,236	489	5.0%
23.5%	9,540	9,957	418	4.4%
24.7%	9,392	9,247	-145	-1.5%
25.9%	9,053	9,204	152	1.7%
27.2%	8,908	8,431	-477	-5.4%
28.4%	8,550	8,276	-273	-3.2%
29.6%	8,345	8,216	-129	-1.5%
30.9%	8,239	8,178	-61	-0.7%
32.1%	8,229	8,157	-72	-0.9%
33.3%	8,190	8,119	-71	-0.9%
34.6%	8,147	8,045	-102	-1.3%
35.8%	8,127	7,916	-211	-2.6%
37.0%	7,866	7,811	-55	-0.7%
38.3%	7,856	7,773	-83	-1.1%
39.5%	7,768	7,645	-123	-1.6%
40.7%	7,736	7,584	-152	-2.0%
42.0%	7,733	7,560	-173	-2.2%
43.2%	7,651	7,517	-134	-1.8%
44.4%	7,462	7,483	20	0.3%
45.7%	7,457	7,422	-35	-0.5%
46.9%	7,320	7,396	76	1.0%
48.1%	7,274	7,368	94	1.3%
49.4%	7,212	7,311	99	1.4%
50.6%	7,168	7,267	98	1.4%
51.9%	7,136	7,161	24	0.3%
53.1%	7,040	7,118	78	1.1%
54.3%	7,032	7,110	78	1.1%
55.6%	6,947	7,099	152	2.2%
56.8%	6,863	7,087	225	3.3%
58.0%	6,775	7,066	291	4.3%
59.3%	6,742	6,844	103	1.5%
60.5%	6,659	6,832	174	2.6%
61.7%	6,617	6,757	140	2.1%
63.0%	6,509	6,732	222	3.4%
64.2%	6,481	6,606	125	1.9%
65.4%	6,396	6,575	179	2.8%
66.7%	6,389	6,548	159	2.5%
67.9%	6,345	6,526	181	2.9%
69.1%	6,341	6,413	72	1.1%
70.4%	6,326	6,412	86	1.4%
71.6%	6,326	6,388	63	1.0%
72.8%	6,301	6,325	24	0.4%
74.1%	6,239	6,302	63	1.0%
75.3%	6,192	6,233	41	0.7%
76.5%	6,164	6,218	55	0.9%
77.8%	6,163	6,132	-30	-0.5%
79.0%	6,149	6,114	-35	-0.6%
80.2%	6,117	6,113	-4	-0.1%
81.5%	6,111	6,038	-73	-1.2%
82.7%	6,057	5,991	-66	-1.1%
84.0%	5,998	5,910	-88	-1.5%
85.2%	5,954	5,838	-117	-2.0%
86.4%	5,938	5,778	-160	-2.7%
87.7%	5,838	5,731	-107	-1.8%
88.9%	5,834	5,625	-209	-3.6%
90.1%	5,793	5,310	-483	-8.3%
91.4%	5,754	5,265	-489	-8.5%
92.6%	5,719	5,249	-470	-8.2%
93.8%	5,709	5,206	-502	-8.8%
95.1%	5,700	5,172	-528	-9.3%
96.3%	5,536	5,117	-419	-7.6%
97.5%	5,329	5,072	-256	-4.8%
98.8%	5,198	4,773	-425	-8.2%
100.0%	5,104	4,400	-704	-13.8%

Table SW-13-b

Sacramento River below Hamilton City, Monthly Flow

Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,296	23,296	1	0.0%
1.2%	15,173	15,171	-3	0.0%
2.5%	12,188	12,798	611	5.0%
3.7%	11,874	12,547	672	5.7%
4.9%	11,665	11,108	-557	-4.8%
6.2%	11,558	10,957	-602	-5.2%
7.4%	10,922	10,910	-12	-0.1%
8.6%	10,412	10,270	-142	-1.4%
9.9%	10,337	10,137	-201	-1.9%
11.1%	10,258	10,010	-248	-2.4%
12.3%	9,830	9,796	-34	-0.3%
13.6%	9,820	9,633	-187	-1.9%
14.8%	9,693	9,609	-84	-0.9%
16.0%	9,683	9,567	-116	-1.2%
17.3%	9,465	9,518	53	0.6%
18.5%	9,309	9,512	204	2.2%
19.8%	9,301	9,438	136	1.5%
21.0%	9,283	9,204	-79	-0.9%
22.2%	9,128	9,178	50	0.5%
23.5%	9,036	9,079	43	0.5%
24.7%	8,980	9,050	70	0.8%
25.9%	8,954	8,925	-29	-0.3%
27.2%	8,942	8,856	-86	-1.0%
28.4%	8,900	8,848	-52	-0.6%
29.6%	8,839	8,843	4	0.0%
30.9%	8,821	8,774	-47	-0.5%
32.1%	8,778	8,766	-12	-0.1%
33.3%	8,774	8,636	-138	-1.6%
34.6%	8,744	8,636	-108	-1.2%
35.8%	8,705	8,527	-178	-2.0%
37.0%	8,684	8,439	-245	-2.8%
38.3%	8,552	8,418	-134	-1.6%
39.5%	8,411	8,392	-20	-0.2%
40.7%	8,379	8,333	-46	-0.5%
42.0%	8,371	8,290	-81	-1.0%
43.2%	8,276	8,282	6	0.1%
44.4%	8,234	8,264	31	0.4%
45.7%	8,228	8,177	-51	-0.6%
46.9%	8,195	7,986	-209	-2.5%
48.1%	8,191	7,978	-213	-2.6%
49.4%	8,187	7,975	-211	-2.6%
50.6%	8,166	7,750	-416	-5.1%
51.9%	8,156	7,731	-425	-5.2%
53.1%	8,130	7,728	-401	-4.9%
54.3%	8,092	7,718	-373	-4.6%
55.6%	8,069	7,667	-402	-5.0%
56.8%	8,066	7,647	-419	-5.2%
58.0%	8,063	7,629	-434	-5.4%
59.3%	8,037	7,547	-491	-6.1%
60.5%	8,030	7,512	-518	-6.4%
61.7%	8,025	7,471	-554	-6.9%
63.0%	8,004	7,420	-585	-7.3%
64.2%	7,862	7,391	-471	-6.0%
65.4%	7,842	7,352	-490	-6.2%
66.7%	7,839	7,298	-541	-6.9%
67.9%	7,755	7,269	-486	-6.3%
69.1%	7,752	7,246	-506	-6.5%
70.4%	7,579	7,222	-357	-4.7%
71.6%	7,448	7,083	-364	-4.9%
72.8%	7,440	7,039	-401	-5.4%
74.1%	7,416	7,006	-411	-5.5%
75.3%	7,383	6,981	-402	-5.4%
76.5%	7,371	6,937	-435	-5.9%
77.8%	7,334	6,863	-471	-6.4%
79.0%	7,301	6,765	-536	-7.3%
80.2%	7,265	6,740	-525	-7.2%
81.5%	7,259	6,737	-522	-7.2%
82.7%	7,177	6,627	-549	-7.7%
84.0%	7,119	6,591	-528	-7.4%
85.2%	7,087	6,409	-677	-9.6%
86.4%	7,065	6,284	-781	-11.1%
87.7%	7,022	6,166	-855	-12.2%
88.9%	7,018	6,102	-916	-13.1%
90.1%	6,939	6,022	-917	-13.2%
91.4%	6,876	6,021	-855	-12.4%
92.6%	6,847	5,978	-869	-12.7%
93.8%	6,634	5,933	-702	-10.6%
95.1%	6,598	5,644	-954	-14.5%
96.3%	6,541	5,624	-917	-14.0%
97.5%	6,422	5,608	-814	-12.7%
98.8%	5,932	5,502	-429	-7.2%
100.0%	5,770	5,402	-368	-6.4%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,512	13,436	-76	-0.6%
1.2%	12,774	12,972	198	1.5%
2.5%	12,452	12,822	370	3.0%
3.7%	12,210	12,685	475	3.9%
4.9%	11,891	12,601	710	6.0%
6.2%	11,857	12,317	460	3.9%
7.4%	11,841	12,212	371	3.1%
8.6%	11,796	12,195	399	3.4%
9.9%	11,776	12,132	356	3.0%
11.1%	11,728	12,126	398	3.4%
12.3%	11,719	12,072	353	3.0%
13.6%	11,710	12,040	331	2.8%
14.8%	11,683	11,981	297	2.5%
16.0%	11,636	11,894	258	2.2%
17.3%	11,537	11,868	330	2.9%
18.5%	11,489	11,771	283	2.5%
19.8%	11,469	11,749	279	2.4%
21.0%	11,356	11,720	364	3.2%
22.2%	11,338	11,662	324	2.9%
23.5%	11,322	11,611	288	2.5%
24.7%	11,249	11,498	249	2.2%
25.9%	11,186	11,441	255	2.3%
27.2%	11,088	11,213	125	1.1%
28.4%	11,076	11,183	107	1.0%
29.6%	11,022	11,173	151	1.4%
30.9%	10,922	11,150	228	2.1%
32.1%	10,920	11,134	213	2.0%
33.3%	10,829	11,089	260	2.4%
34.6%	10,806	11,052	246	2.3%
35.8%	10,777	10,902	125	1.2%
37.0%	10,696	10,884	188	1.8%
38.3%	10,573	10,709	136	1.3%
39.5%	10,555	10,687	131	1.2%
40.7%	10,542	10,661	119	1.1%
42.0%	10,364	10,653	289	2.8%
43.2%	10,268	10,454	187	1.8%
44.4%	10,145	10,282	138	1.4%
45.7%	10,032	10,267	235	2.3%
46.9%	9,973	10,232	259	2.6%
48.1%	9,888	10,214	326	3.3%
49.4%	9,802	10,102	300	3.1%
50.6%	9,756	10,093	337	3.5%
51.9%	9,715	9,977	262	2.7%
53.1%	9,700	9,926	226	2.3%
54.3%	9,478	9,845	367	3.9%
55.6%	9,382	9,809	426	4.5%
56.8%	9,291	9,588	297	3.2%
58.0%	9,265	9,568	303	3.3%
59.3%	9,241	9,564	322	3.5%
60.5%	9,137	9,545	408	4.5%
61.7%	9,059	9,538	480	5.3%
63.0%	9,059	9,536	477	5.3%
64.2%	8,986	9,477	491	5.5%
65.4%	8,956	9,447	491	5.5%
66.7%	8,936	9,352	415	4.6%
67.9%	8,923	9,328	404	4.5%
69.1%	8,822	9,299	477	5.4%
70.4%	8,773	9,176	403	4.6%
71.6%	8,696	9,123	427	4.9%
72.8%	8,618	9,084	466	5.4%
74.1%	8,617	9,040	423	4.9%
75.3%	8,590	9,020	430	5.0%
76.5%	8,556	8,991	436	5.1%
77.8%	8,550	8,972	422	4.9%
79.0%	8,515	8,970	455	5.3%
80.2%	8,514	8,931	417	4.9%
81.5%	8,479	8,930	450	5.3%
82.7%	8,472	8,860	388	4.6%
84.0%	8,419	8,850	431	5.1%
85.2%	8,321	8,838	517	6.2%
86.4%	8,292	8,780	487	5.9%
87.7%	8,275	8,767	493	6.0%
88.9%	8,259	8,750	491	5.9%
90.1%	8,145	8,604	459	5.6%
91.4%	8,065	8,541	476	5.9%
92.6%	7,817	8,524	707	9.0%
93.8%	7,619	8,222	604	7.9%
95.1%	7,552	8,212	660	8.7%
96.3%	7,406	8,020	614	8.3%
97.5%	6,868	7,768	899	13.1%
98.8%	6,400	7,449	1,049	16.4%
100.0%	6,265	7,237	972	15.5%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,188	12,023	-165	-1.4%
1.2%	11,725	11,537	-188	-1.6%
2.5%	10,597	9,870	-726	-6.9%
3.7%	10,455	9,835	-620	-5.9%
4.9%	10,330	9,804	-526	-5.1%
6.2%	10,048	9,458	-590	-5.9%
7.4%	10,012	9,403	-609	-6.1%
8.6%	9,938	9,249	-689	-6.9%
9.9%	9,821	9,238	-584	-5.9%
11.1%	9,782	9,189	-593	-6.1%
12.3%	9,599	8,902	-697	-7.3%
13.6%	9,452	8,710	-742	-7.8%
14.8%	9,056	8,658	-397	-4.4%
16.0%	9,016	8,564	-451	-5.0%
17.3%	8,793	8,546	-246	-2.8%
18.5%	8,716	8,461	-256	-2.9%
19.8%	8,661	8,284	-377	-4.4%
21.0%	8,609	8,279	-330	-3.8%
22.2%	8,502	8,260	-242	-2.8%
23.5%	8,309	8,232	-77	-0.9%
24.7%	8,291	8,171	-120	-1.4%
25.9%	8,273	8,109	-164	-2.0%
27.2%	8,232	7,963	-268	-3.3%
28.4%	8,166	7,943	-223	-2.7%
29.6%	8,092	7,922	-170	-2.1%
30.9%	8,041	7,866	-175	-2.2%
32.1%	8,030	7,834	-196	-2.4%
33.3%	7,932	7,831	-101	-1.3%
34.6%	7,897	7,828	-70	-0.9%
35.8%	7,837	7,767	-69	-0.9%
37.0%	7,823	7,764	-58	-0.7%
38.3%	7,820	7,756	-65	-0.8%
39.5%	7,801	7,741	-60	-0.8%
40.7%	7,794	7,738	-56	-0.7%
42.0%	7,778	7,695	-83	-1.1%
43.2%	7,597	7,669	71	0.9%
44.4%	7,576	7,634	58	0.8%
45.7%	7,547	7,631	84	1.1%
46.9%	7,508	7,628	120	1.6%
48.1%	7,488	7,628	140	1.9%
49.4%	7,447	7,602	154	2.1%
50.6%	7,441	7,589	148	2.0%
51.9%	7,423	7,579	156	2.1%
53.1%	7,421	7,574	154	2.1%
54.3%	7,421	7,558	137	1.8%
55.6%	7,402	7,538	136	1.8%
56.8%	7,384	7,537	153	2.1%
58.0%	7,333	7,535	202	2.8%
59.3%	7,304	7,521	216	3.0%
60.5%	7,299	7,520	221	3.0%
61.7%	7,299	7,479	181	2.5%
63.0%	7,261	7,468	207	2.8%
64.2%	7,194	7,460	266	3.7%
65.4%	7,191	7,428	237	3.3%
66.7%	7,186	7,381	195	2.7%
67.9%	7,169	7,357	188	2.6%
69.1%	7,118	7,339	221	3.1%
70.4%	7,115	7,311	197	2.8%
71.6%	7,103	7,310	207	2.9%
72.8%	7,021	7,303	282	4.0%
74.1%	6,876	7,295	419	6.1%
75.3%	6,768	7,295	527	7.8%
76.5%	6,763	7,268	505	7.5%
77.8%	6,707	7,207	500	7.5%
79.0%	6,682	7,193	511	7.6%
80.2%	6,673	7,193	520	7.8%
81.5%	6,668	7,187	519	7.8%
82.7%	6,661	7,153	492	7.4%
84.0%	6,623	7,142	518	7.8%
85.2%	6,493	6,980	487	7.5%
86.4%	6,457	6,979	521	8.1%
87.7%	6,439	6,971	533	8.3%
88.9%	6,379	6,935	556	8.7%
90.1%	6,360	6,835	474	7.5%
91.4%	6,292	6,629	336	5.3%
92.6%	6,245	6,585	339	5.4%
93.8%	6,138	6,520	383	6.2%
95.1%	6,034	6,501	467	7.7%
96.3%	5,808	6,333	525	9.0%
97.5%	5,673	6,217	545	9.6%
98.8%	5,270	6,177	907	17.2%
100.0%	4,982	5,735	753	15.1%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,961	15,828	-133	-0.8%
1.2%	15,469	14,918	-551	-3.6%
2.5%	15,222	14,820	-402	-2.6%
3.7%	14,874	14,804	-70	-0.5%
4.9%	14,861	14,792	-69	-0.5%
6.2%	14,813	14,632	-181	-1.2%
7.4%	14,690	14,533	-157	-1.1%
8.6%	14,549	14,348	-201	-1.4%
9.9%	14,412	14,300	-112	-0.8%
11.1%	14,372	14,263	-109	-0.8%
12.3%	13,226	14,223	997	7.5%
13.6%	13,184	13,944	760	5.8%
14.8%	12,966	13,789	823	6.4%
16.0%	12,782	13,316	534	4.2%
17.3%	12,693	12,984	291	2.3%
18.5%	12,619	12,840	221	1.8%
19.8%	12,338	12,570	232	1.9%
21.0%	12,338	12,561	223	1.8%
22.2%	12,278	12,417	139	1.1%
23.5%	12,250	12,371	121	1.0%
24.7%	11,996	12,086	90	0.8%
25.9%	11,849	11,816	-33	-0.3%
27.2%	11,499	11,721	222	1.9%
28.4%	11,281	11,159	-122	-1.1%
29.6%	11,159	10,454	-705	-6.3%
30.9%	10,415	10,023	-392	-3.8%
32.1%	10,353	9,478	-875	-8.5%
33.3%	9,780	9,222	-558	-5.7%
34.6%	9,563	8,658	-904	-9.5%
35.8%	8,960	8,572	-387	-4.3%
37.0%	8,703	8,376	-327	-3.8%
38.3%	8,465	8,283	-182	-2.1%
39.5%	8,453	7,790	-662	-7.8%
40.7%	8,324	7,709	-615	-7.4%
42.0%	7,990	7,414	-576	-7.2%
43.2%	6,848	7,244	396	5.8%
44.4%	6,584	6,921	337	5.1%
45.7%	6,579	6,789	210	3.2%
46.9%	6,347	6,678	332	5.2%
48.1%	6,325	6,519	193	3.1%
49.4%	6,225	6,484	259	4.2%
50.6%	5,902	6,436	535	9.1%
51.9%	5,801	6,310	509	8.8%
53.1%	5,767	6,265	498	8.6%
54.3%	5,749	6,239	490	8.5%
55.6%	5,649	6,224	575	10.2%
56.8%	5,637	6,209	571	10.1%
58.0%	5,447	6,179	732	13.4%
59.3%	5,439	6,131	692	12.7%
60.5%	5,412	6,107	695	12.9%
61.7%	5,370	5,974	603	11.2%
63.0%	5,328	5,965	637	12.0%
64.2%	5,298	5,891	593	11.2%
65.4%	5,264	5,885	621	11.8%
66.7%	5,046	5,868	822	16.3%
67.9%	4,964	5,864	899	18.1%
69.1%	4,960	5,850	890	17.9%
70.4%	4,958	5,789	831	16.8%
71.6%	4,916	5,774	858	17.5%
72.8%	4,844	5,728	884	18.2%
74.1%	4,738	5,707	969	20.4%
75.3%	4,721	5,646	925	19.6%
76.5%	4,658	5,626	968	20.8%
77.8%	4,603	5,623	1,020	22.2%
79.0%	4,600	5,527	927	20.2%
80.2%	4,582	5,520	939	20.5%
81.5%	4,491	5,457	966	21.5%
82.7%	4,422	5,444	1,022	23.1%
84.0%	4,327	5,290	963	22.3%
85.2%	4,318	5,290	972	22.5%
86.4%	4,314	5,289	975	22.6%
87.7%	4,211	5,269	1,058	25.1%
88.9%	4,191	5,064	872	20.8%
90.1%	4,113	4,870	758	18.4%
91.4%	4,077	4,800	723	17.7%
92.6%	4,064	4,795	730	18.0%
93.8%	4,042	4,776	734	18.2%
95.1%	4,030	4,554	524	13.0%
96.3%	3,984	4,466	482	12.1%
97.5%	3,980	4,366	386	9.7%
98.8%	3,969	4,320	352	8.9%
100.0%	3,793	4,005	212	5.6%

Figure SW-14-b
Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Probability of Exceedance

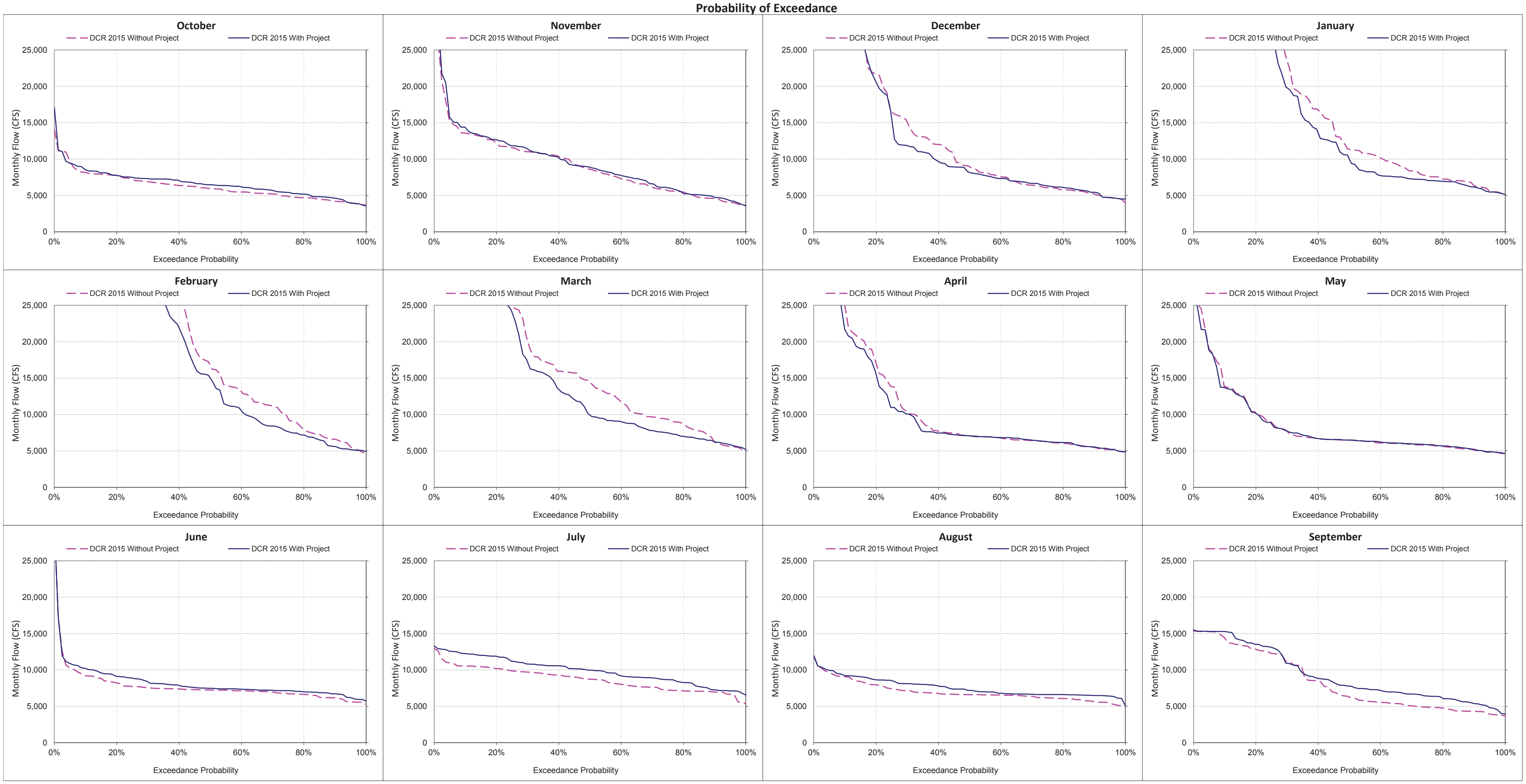


Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,051	17,073	3,022	21.5%
1.2%	11,257	11,175	-82	-0.7%
2.5%	11,112	11,055	-57	-0.5%
3.7%	10,966	9,734	-1,233	-11.2%
4.9%	9,726	9,444	-282	-2.9%
6.2%	8,887	9,309	422	4.7%
7.4%	8,447	9,005	558	6.6%
8.6%	8,223	8,986	763	9.3%
9.9%	8,178	8,544	366	4.5%
11.1%	8,033	8,377	345	4.3%
12.3%	7,961	8,372	411	5.2%
13.6%	7,956	8,327	370	4.7%
14.8%	7,915	8,120	205	2.6%
16.0%	7,861	8,115	254	3.2%
17.3%	7,851	8,044	193	2.5%
18.5%	7,807	7,802	-5	-0.1%
19.8%	7,791	7,755	-36	-0.5%
21.0%	7,627	7,690	63	0.8%
22.2%	7,426	7,534	107	1.4%
23.5%	7,383	7,533	150	2.0%
24.7%	7,266	7,502	235	3.2%
25.9%	7,051	7,396	346	4.9%
27.2%	7,042	7,356	314	4.5%
28.4%	6,948	7,339	391	5.6%
29.6%	6,902	7,315	412	6.0%
30.9%	6,844	7,277	433	6.3%
32.1%	6,794	7,269	475	7.0%
33.3%	6,664	7,268	604	9.1%
34.6%	6,663	7,258	595	8.9%
35.8%	6,560	7,258	698	10.6%
37.0%	6,532	7,239	708	10.8%
38.3%	6,476	7,120	644	9.9%
39.5%	6,382	7,107	724	11.4%
40.7%	6,363	6,912	550	8.6%
42.0%	6,318	6,861	543	8.6%
43.2%	6,282	6,848	567	9.0%
44.4%	6,241	6,762	521	8.3%
45.7%	6,230	6,629	398	6.4%
46.9%	6,067	6,620	554	9.1%
48.1%	6,058	6,514	456	7.5%
49.4%	5,960	6,487	526	8.8%
50.6%	5,958	6,465	507	8.5%
51.9%	5,900	6,403	503	8.5%
53.1%	5,891	6,367	476	8.1%
54.3%	5,705	6,357	652	11.4%
55.6%	5,666	6,351	685	12.1%
56.8%	5,527	6,304	777	14.1%
58.0%	5,496	6,256	761	13.8%
59.3%	5,479	6,254	775	14.1%
60.5%	5,478	6,126	648	11.8%
61.7%	5,464	6,072	608	11.1%
63.0%	5,395	6,065	670	12.4%
64.2%	5,314	5,916	601	11.3%
65.4%	5,300	5,875	576	10.9%
66.7%	5,293	5,862	569	10.8%
67.9%	5,271	5,807	537	10.2%
69.1%	5,233	5,761	528	10.1%
70.4%	5,202	5,653	452	8.7%
71.6%	5,182	5,522	341	6.6%
72.8%	4,946	5,478	532	10.8%
74.1%	4,941	5,458	517	10.5%
75.3%	4,848	5,402	554	11.4%
76.5%	4,787	5,273	486	10.2%
77.8%	4,732	5,259	527	11.1%
79.0%	4,713	5,202	489	10.4%
80.2%	4,702	5,202	500	10.6%
81.5%	4,675	5,117	441	9.4%
82.7%	4,667	4,871	204	4.4%
84.0%	4,547	4,844	297	6.5%
85.2%	4,520	4,818	298	6.6%
86.4%	4,424	4,784	360	8.1%
87.7%	4,401	4,775	373	8.5%
88.9%	4,271	4,694	423	9.9%
90.1%	4,195	4,613	417	9.9%
91.4%	4,169	4,506	337	8.1%
92.6%	4,142	4,423	281	6.8%
93.8%	4,067	4,080	13	0.3%
95.1%	3,951	3,990	39	1.0%
96.3%	3,904	3,923	18	0.5%
97.5%	3,790	3,886	96	2.5%
98.8%	3,748	3,705	-42	-1.1%
100.0%	3,663	3,542	-121	-3.3%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	40,736	37,469	-3,267	-8.0%
1.2%	26,324	29,926	3,602	13.7%
2.5%	20,663	21,782	1,119	5.4%
3.7%	18,055	20,514	2,459	13.6%
4.9%	15,158	15,760	603	4.0%
6.2%	14,775	15,077	302	2.0%
7.4%	14,451	15,029	578	4.0%
8.6%	13,617	14,395	778	5.7%
9.9%	13,577	14,391	815	6.0%
11.1%	13,498	13,804	307	2.3%
12.3%	13,415	13,555	141	1.0%
13.6%	13,260	13,469	208	1.6%
14.8%	13,157	13,215	59	0.4%
16.0%	13,007	13,145	138	1.1%
17.3%	12,696	13,005	309	2.4%
18.5%	12,669	12,704	36	0.3%
19.8%	12,321	12,678	357	2.9%
21.0%	11,789	12,495	706	6.0%
22.2%	11,742	12,477	735	6.3%
23.5%	11,726	12,112	386	3.3%
24.7%	11,578	11,836	257	2.2%
25.9%	11,494	11,814	319	2.8%
27.2%	11,227	11,727	500	4.5%
28.4%	11,088	11,693	604	5.4%
29.6%	11,024	11,510	486	4.4%
30.9%	10,990	11,132	142	1.3%
32.1%	10,930	10,954	24	0.2%
33.3%	10,827	10,902	76	0.7%
34.6%	10,752	10,771	19	0.2%
35.8%	10,717	10,705	-12	-0.1%
37.0%	10,559	10,487	-72	-0.7%
38.3%	10,546	10,385	-161	-1.5%
39.5%	10,443	10,324	-119	-1.1%
40.7%	10,175	9,948	-227	-2.2%
42.0%	10,102	9,865	-237	-2.3%
43.2%	9,982	9,294	-688	-6.9%
44.4%	9,345	9,190	-155	-1.7%
45.7%	9,175	9,114	-61	-0.7%
46.9%	9,024	9,047	24	0.3%
48.1%	8,769	9,010	241	2.7%
49.4%	8,646	8,942	296	3.4%
50.6%	8,546	8,799	253	3.0%
51.9%	8,373	8,673	300	3.6%
53.1%	8,212	8,463	251	3.1%
54.3%	7,993	8,358	364	4.6%
55.6%	7,944	8,241	297	3.7%
56.8%	7,656	8,163	507	6.6%
58.0%	7,638	7,913	275	3.6%
59.3%	7,418	7,843	425	5.7%
60.5%	7,247	7,696	449	6.2%
61.7%	7,126	7,584	458	6.4%
63.0%	7,054	7,485	431	6.1%
64.2%	6,772	7,317	545	8.0%
65.4%	6,594	7,309	714	10.8%
66.7%	6,588	7,159	571	8.7%
67.9%	6,570	7,058	488	7.4%
69.1%	6,209	6,614	406	6.5%
70.4%	6,089	6,576	487	8.0%
71.6%	5,920	6,183	263	4.4%
72.8%	5,886	6,119	233	4.0%
74.1%	5,819	6,110	291	5.0%
75.3%	5,632	6,050	418	7.4%
76.5%	5,593	5,893	300	5.4%
77.8%	5,546	5,762	215	3.9%
79.0%	5,530	5,556	26	0.5%
80.2%	5,428	5,220	-208	-3.8%
81.5%	5,186	5,220	34	0.7%
82.7%	5,088	5,117	29	0.6%
84.0%	4,840	5,106	266	5.5%
85.2%	4,712	5,070	358	7.6%
86.4%	4,666	5,036	369	7.9%
87.7%	4,631	4,978	347	7.5%
88.9%	4,615	4,936	321	7.0%
90.1%	4,569	4,716	147	3.2%
91.4%	4,449	4,679	230	5.2%
92.6%	4,193	4,628	435	10.4%
93.8%	4,097	4,462	365	8.9%
95.1%	4,049	4,252	202	5.0%
96.3%	3,972	4,184	212	5.3%
97.5%	3,794	3,984	190	5.0%
98.8%	3,758	3,774	16	0.4%
100.0%	3,609	3,603	-6	-0.2%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	61,768	59,732	-2,037	-3.3%
1.2%	53,655	52,660	-995	-1.9%
2.5%	44,005	43,953	-51	-0.1%
3.7%	43,533	41,914	-1,620	-3.7%
4.9%	42,536	39,536	-3,000	-7.1%
6.2%	40,017	38,054	-1,964	-4.9%
7.4%	39,174	33,297	-5,878	-15.0%
8.6%	33,833	30,000	-3,833	-11.3%
9.9%	31,862	30,000	-1,862	-5.8%
11.1%	30,648	27,108	-3,540	-11.6%
12.3%	29,066	27,076	-1,990	-6.8%
13.6%	28,071	26,838	-1,233	-4.4%
14.8%	28,063	26,292	-1,771	-6.3%
16.0%	27,403	25,481	-1,922	-7.0%
17.3%	22,606	23,604	998	4.4%
18.5%	22,011	21,937	-74	-0.3%
19.8%	21,658	20,791	-867	-4.0%
21.0%	21,531	19,704	-1,826	-8.5%
22.2%	19,918	19,140	-779	-3.9%
23.5%	19,106	18,768	-338	-1.8%
24.7%	16,584	16,582	-2	0.0%
25.9%	16,162	12,678	-3,484	-21.6%
27.2%	15,990	12,014	-3,976	-24.9%
28.4%	15,796	11,946	-3,850	-24.4%
29.6%	15,401	11,897	-3,504	-22.8%
30.9%	14,278	11,733	-2,545	-17.8%
32.1%	13,419	11,661	-1,758	-13.1%
33.3%	13,078	11,043	-2,035	-15.6%
34.6%	13,070	10,994	-2,076	-15.9%
35.8%	13,035	10,897	-2,138	-16.4%
37.0%	12,662	10,761	-1,901	-15.0%
38.3%	12,096	10,109	-1,987	-16.4%
39.5%	12,012	9,781	-2,231	-18.6%
40.7%	11,999	9,461	-2,538	-21.2%
42.0%	11,730	9,388	-2,342	-20.0%
43.2%	11,172	8,972	-2,200	-19.7%
44.4%	10,939	8,930	-2,010	-18.4%
45.7%	9,541	8,889	-652	-6.8%
46.9%	9,503	8,884	-619	-6.5%
48.1%	9,106	8,852	-253	-2.8%
49.4%	9,086	8,248	-838	-9.2%
50.6%	8,799	8,067	-732	-8.3%
51.9%	8,641	8,011	-630	-7.3%
53.1%	8,216	7,926	-290	-3.5%
54.3%	8,142	7,796	-345	-4.2%
55.6%	8,106	7,677	-429	-5.3%
56.8%	7,872	7,571	-302	-3.8%
58.0%	7,824	7,438	-386	-4.9%
59.3%	7,556	7,349	-207	-2.7%
60.5%	7,544	7,333	-211	-2.8%
61.7%	7,534	7,322	-212	-2.8%
63.0%	7,215	6,993	-221	-3.1%
64.2%	6,981	6,992	11	0.2%
65.4%	6,792	6,944	152	2.2%
66.7%	6,539	6,870	331	5.1%
67.9%	6,498	6,838	341	5.2%
69.1%	6,428	6,704	276	4.3%
70.4%	6,388	6,637	249	3.9%
71.6%	6,360	6,636	277	4.3%
72.8%	6,234	6,472	238	3.8%
74.1%	6,076	6,356	280	4.6%
75.3%	6,070	6,289	219	3.6%
76.5%	6,047	6,228	181	3.0%
77.8%	6,012	6,166	154	2.6%
79.0%	5,796	6,152	356	6.1%
80.2%	5,789	6,080	291	5.0%
81.5%	5,744	6,025	282	4.9%
82.7%	5,734	5,967	233	4.1%
84.0%	5,613	5,820	207	3.7%
85.2%	5,599	5,765	166	3.0%
86.4%	5,572	5,706	135	2.4%
87.7%	5,372	5,609	237	4.4%
88.9%	5,348	5,457	110	2.1%
90.1%	5,173	5,457	284	5.5%
91.4%	5,024	5,335	311	6.2%
92.6%	4,963	4,775	-188	-3.8%
93.8%	4,732	4,739	7	0.1%
95.1%	4,693	4,720	26	0.6%
96.3%	4,648	4,641	-7	-0.1%
97.5%	4,592	4,582	-10	-0.2%
98.8%	4,458	4,522	64	1.4%
100.0%	3,976	4,501	525	13.2%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	83,433	83,581	148	0.2%
1.2%	70,932	70,409	-523	-0.7%
2.5%	70,449	69,765	-685	-1.0%
3.7%	69,606	67,996	-1,610	-2.3%
4.9%	63,314	65,534	2,220	3.5%
6.2%	62,804	61,123	-1,681	-2.7%
7.4%	60,960	60,843	-116	-0.2%
8.6%	59,235	54,454	-4,781	-8.1%
9.9%	48,590	45,246	-3,344	-6.9%
11.1%	45,108	44,185	-924	-2.0%
12.3%	42,944	43,240	297	0.7%
13.6%	42,371	37,714	-4,657	-11.0%
14.8%	40,664	36,563	-4,100	-10.1%
16.0%	40,642	36,172	-4,470	-11.0%
17.3%	39,832	36,120	-3,712	-9.3%
18.5%	37,571	35,009	-2,561	-6.8%
19.8%	36,287	31,840	-4,447	-12.3%
21.0%	33,893	31,335	-2,558	-7.5%
22.2%	31,301	30,560	-741	-2.4%
23.5%	30,570	27,510	-3,060	-10.0%
24.7%	28,268	26,275	-1,993	-7.0%
25.9%	27,957	25,756	-2,201	-7.9%
27.2%	27,649	23,154	-4,495	-16.3%
28.4%	26,105	21,656	-4,449	-17.0%
29.6%	24,072	19,921	-4,151	-17.2%
30.9%	22,365	19,527	-2,838	-12.7%
32.1%	19,694	18,763	-931	-4.7%
33.3%	19,371	18,643	-728	-3.8%
34.6%	18,918	16,227	-2,691	-14.2%
35.8%	18,737	15,367	-3,370	-18.0%
37.0%	18,162	15,060	-3,102	-17.1%
38.3%	16,913	14,381	-2,533	-15.0%
39.5%	16,901	14,105	-2,796	-16.5%
40.7%	16,490	12,843	-3,647	-22.1%
42.0%	15,714	12,723	-2,991	-19.0%
43.2%	15,487	12,626	-2,861	-18.5%
44.4%	15,395	12,347	-3,048	-19.8%
45.7%	13,114	12,308	-806	-6.1%
46.9%	13,031	11,021	-2,010	-15.4%
48.1%	12,366	10,625	-1,741	-14.1%
49.4%	11,414	10,574	-840	-7.4%
50.6%	11,301	9,433	-1,868	-16.5%
51.9%	11,234	9,222	-2,012	-17.9%
53.1%	11,185	8,559	-2,626	-23.5%
54.3%	10,800	8,390	-2,410	-22.3%
55.6%	10,789	8,267	-2,522	-23.4%
56.8%	10,705	8,266	-2,439	-22.8%
58.0%	10,578	8,228	-2,350	-22.2%
59.3%	10,249	7,784	-2,465	-24.1%
60.5%	10,065	7,680	-2,384	-23.7%
61.7%	9,748	7,643	-2,105	-21.6%
63.0%	9,719	7,639	-2,080	-21.4%
64.2%	9,436	7,569	-1,867	-19.8%
65.4%	9,269	7,562	-1,706	-18.4%
66.7%	8,930	7,545	-1,386	-15.5%
67.9%	8,787	7,445	-1,342	-15.3%
69.1%	8,396	7,278	-1,118	-13.3%
70.4%	8,378	7,244	-1,134	-13.5%
71.6%	8,293	7,226	-1,067	-12.9%
72.8%	7,913	7,212	-702	-8.9%
74.1%	7,767	7,176	-591	-7.6%
75.3%	7,637	7,061	-576	-7.5%
76.5%	7,572	7,042	-530	-7.0%
77.8%	7,570	7,004	-566	-7.5%
79.0%	7,566	6,986	-580	-7.7%
80.2%	7,239	6,947	-291	-4.0%
81.5%	7,237	6,895	-342	-4.7%
82.7%	7,048	6,889	-159	-2.3%
84.0%	7,048	6,871	-177	-2.5%
85.2%	7,040	6,654	-386	-5.5%
86.4%	7,018	6,519	-498	-7.1%
87.7%	6,868	6,385	-483	-7.0%
88.9%	6,833	6,188	-645	-9.4%
90.1%	6,311	6,144	-167	-2.6%
91.4%	6,130	5,996	-134	-2.2%
92.6%	6,128	5,890	-238	-3.9%
93.8%	6,020	5,584	-436	-7.2%
95.1%	5,621	5,476	-145	-2.6%
96.3%	5,489	5,468	-21	-0.4%
97.5%	5,484	5,412	-73	-1.3%
98.8%	5,307	5,297	-10	-0.2%
100.0%	5,076	5,129	53	1.0%

Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	91,794	101,395	9,601	10.5%
1.2%	91,357	91,920	562	0.6%
2.5%	80,437	79,610	-827	-1.0%
3.7%	72,408	72,364	-44	-0.1%
4.9%	67,068	66,714	-354	-0.5%
6.2%	65,514	65,421	-93	-0.1%
7.4%	65,493	62,574	-2,919	-4.5%
8.6%	60,182	59,707	-475	-0.8%
9.9%	59,444	58,884	-560	-0.9%
11.1%	58,687	57,974	-713	-1.2%
12.3%	57,704	53,236	-4,469	-7.7%
13.6%	53,930	51,154	-2,776	-5.1%
14.8%	50,986	49,719	-1,267	-2.5%
16.0%	43,046	40,127	-2,919	-6.8%
17.3%	40,670	39,040	-1,630	-4.0%
18.5%	40,110	37,948	-2,162	-5.4%
19.8%	39,936	36,528	-3,407	-8.5%
21.0%	39,721	36,150	-3,571	-9.0%
22.2%	39,623	35,628	-3,995	-10.1%
23.5%	37,671	33,145	-4,526	-12.0%
24.7%	33,025	32,247	-777	-2.4%
25.9%	31,338	30,460	-878	-2.8%
27.2%	30,652	30,262	-391	-1.3%
28.4%	30,357	29,753	-604	-2.0%
29.6%	30,007	29,576	-431	-1.4%
30.9%	29,925	26,320	-3,605	-12.0%
32.1%	29,561	26,099	-3,462	-11.7%
33.3%	29,406	25,914	-3,491	-11.9%
34.6%	26,362	25,634	-728	-2.8%
35.8%	26,267	24,906	-1,361	-5.2%
37.0%	26,176	23,498	-2,679	-10.2%
38.3%	25,928	22,894	-3,035	-11.7%
39.5%	25,474	22,375	-3,099	-12.2%
40.7%	25,459	21,229	-4,229	-16.6%
42.0%	24,215	19,952	-4,263	-17.6%
43.2%	21,842	18,399	-3,442	-15.8%
44.4%	19,764	17,107	-2,656	-13.4%
45.7%	18,558	15,969	-2,588	-13.9%
46.9%	17,701	15,578	-2,123	-12.0%
48.1%	17,500	15,533	-1,967	-11.2%
49.4%	17,263	15,402	-1,861	-10.8%
50.6%	16,236	14,611	-1,625	-10.0%
51.9%	16,139	13,585	-2,554	-15.8%
53.1%	15,565	13,331	-2,234	-14.4%
54.3%	14,089	11,474	-2,615	-18.6%
55.6%	13,980	11,259	-2,721	-19.5%
56.8%	13,802	11,128	-2,674	-19.4%
58.0%	13,710	11,082	-2,627	-19.2%
59.3%	13,518	10,914	-2,604	-19.3%
60.5%	12,868	10,253	-2,615	-20.3%
61.7%	12,772	9,872	-2,900	-22.7%
63.0%	12,417	9,754	-2,664	-21.5%
64.2%	11,694	9,537	-2,157	-18.4%
65.4%	11,674	9,122	-2,552	-21.9%
66.7%	11,554	8,693	-2,861	-24.8%
67.9%	11,324	8,498	-2,826	-25.0%
69.1%	11,260	8,427	-2,833	-25.2%
70.4%	11,091	8,423	-2,669	-24.1%
71.6%	10,957	8,319	-2,638	-24.1%
72.8%	10,258	8,096	-2,162	-21.1%
74.1%	10,133	7,772	-2,361	-23.3%
75.3%	9,202	7,604	-1,598	-17.4%
76.5%	9,001	7,443	-1,558	-17.3%
77.8%	8,881	7,442	-1,439	-16.2%
79.0%	8,324	7,211	-1,113	-13.4%
80.2%	7,836	7,177	-659	-8.4%
81.5%	7,598	6,934	-664	-8.7%
82.7%	7,470	6,869	-601	-8.0%
84.0%	7,249	6,655	-594	-8.2%
85.2%	7,235	6,476	-758	-10.5%
86.4%	6,886	6,402	-484	-7.0%
87.7%	6,722	5,748	-973	-14.5%
88.9%	6,602	5,650	-952	-14.4%
90.1%	6,598	5,601	-997	-15.1%
91.4%	6,393	5,390	-1,003	-15.7%
92.6%	6,174	5,294	-881	-14.3%
93.8%	6,110	5,273	-837	-13.7%
95.1%	5,538	5,166	-372	-6.7%
96.3%	5,157	5,092	-65	-1.3%
97.5%	5,135	5,078	-57	-1.1%
98.8%	4,856	5,056	201	4.1%
100.0%	4,388	4,871	483	11.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	86,753	91,033	4,281	4.9%
1.2%	80,962	77,430	-3,532	-4.4%
2.5%	72,388	71,136	-1,252	-1.7%
3.7%	62,142	51,268	-10,874	-17.5%
4.9%	51,265	50,244	-1,021	-2.0%
6.2%	50,571	45,258	-5,313	-10.5%
7.4%	50,192	42,321	-7,871	-15.7%
8.6%	43,871	41,700	-2,172	-5.0%
9.9%	42,186	39,515	-2,671	-6.3%
11.1%	39,604	37,946	-1,657	-4.2%
12.3%	39,095	33,128	-5,968	-15.3%
13.6%	30,650	31,018	368	1.2%
14.8%	30,344	30,312	-32	-0.1%
16.0%	29,218	29,085	-133	-0.5%
17.3%	28,657	27,557	-1,100	-3.8%
18.5%	27,566	27,474	-92	-0.3%
19.8%	27,428	26,218	-1,210	-4.4%
21.0%	26,820	25,416	-1,404	-5.2%
22.2%	26,260	25,164	-1,096	-4.2%
23.5%	25,436	25,094	-341	-1.3%
24.7%	25,167	24,378	-789	-3.1%
25.9%	24,566	22,940	-1,625	-6.6%
27.2%	24,363	20,947	-3,416	-14.0%
28.4%	23,248	18,288	-4,960	-21.3%
29.6%	20,613	17,626	-2,987	-14.5%
30.9%	18,881	16,278	-2,604	-13.8%
32.1%	17,956	16,113	-1,844	-10.3%
33.3%	17,900	15,916	-1,984	-11.1%
34.6%	17,296	15,789	-1,507	-8.7%
35.8%	17,229	15,531	-1,698	-9.9%
37.0%	17,008	15,237	-1,771	-10.4%
38.3%	16,843	14,671	-2,172	-12.9%
39.5%	15,956	13,665	-2,291	-14.4%
40.7%	15,952	13,127	-2,825	-17.7%
42.0%	15,839	12,824	-3,014	-19.0%
43.2%	15,816	12,697	-3,119	-19.7%
44.4%	15,725	12,225	-3,501	-22.3%
45.7%	15,693	11,841	-3,852	-24.5%
46.9%	15,024	11,724	-3,300	-22.0%
48.1%	14,787	11,106	-3,681	-24.9%
49.4%	14,710	10,085	-4,625	-31.4%
50.6%	14,164	9,717	-4,447	-31.4%
51.9%	13,637	9,665	-3,971	-29.1%
53.1%	13,544	9,481	-4,062	-30.0%
54.3%	13,193	9,463	-3,729	-28.3%
55.6%	12,887	9,176	-3,711	-28.8%
56.8%	12,871	9,167	-3,704	-28.8%
58.0%	12,498	9,105	-3,393	-27.1%
59.3%	12,040	9,090	-2,949	-24.5%
60.5%	11,528	8,970	-2,558	-22.2%
61.7%	11,254	8,806	-2,448	-21.8%
63.0%	10,384	8,777	-1,607	-15.5%
64.2%	10,234	8,724	-1,509	-14.7%
65.4%	10,123	8,378	-1,745	-17.2%
66.7%	10,084	8,217	-1,867	-18.5%
67.9%	9,734	8,022	-1,712	-17.6%
69.1%	9,686	7,813	-1,873	-19.3%
70.4%	9,653	7,771	-1,882	-19.5%
71.6%	9,591	7,650	-1,941	-20.2%
72.8%	9,465	7,606	-1,860	-19.6%
74.1%	9,417	7,527	-1,890	-20.1%
75.3%	9,285	7,439	-1,847	-19.9%
76.5%	9,006	7,327	-1,678	-18.6%
77.8%	8,983	7,225	-1,758	-19.6%
79.0%	8,908	7,038	-1,870	-21.0%
80.2%	8,569	6,986	-1,583	-18.5%
81.5%	8,239	6,893	-1,345	-16.3%
82.7%	8,005	6,890	-1,115	-13.9%
84.0%	7,839	6,736	-1,103	-14.1%
85.2%	7,738	6,653	-1,084	-14.0%
86.4%	7,625	6,631	-994	-13.0%
87.7%	7,223	6,471	-752	-10.4%
88.9%	6,911	6,451	-460	-6.7%
90.1%	6,150	6,197	47	0.8%
91.4%	6,016	6,161	145	2.4%
92.6%	5,795	6,049	253	4.4%
93.8%	5,684	5,971	287	5.1%
95.1%	5,585	5,855	270	4.8%
96.3%	5,556	5,689	133	2.4%
97.5%	5,479	5,574	96	1.7%
98.8%	5,204	5,458	254	4.9%
100.0%	4,784	5,159	375	7.8%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	49,956	48,009	-1,947	-3.9%
1.2%	44,658	44,534	-123	-0.3%
2.5%	43,465	43,420	-45	-0.1%
3.7%	34,691	34,953	262	0.8%
4.9%	32,389	26,417	-5,972	-18.4%
6.2%	26,017	25,989	-28	-0.1%
7.4%	25,513	25,345	-169	-0.7%
8.6%	25,195	25,159	-36	-0.1%
9.9%	25,171	21,698	-3,473	-13.8%
11.1%	21,937	20,783	-1,155	-5.3%
12.3%	21,299	20,479	-820	-3.9%
13.6%	20,852	19,372	-1,480	-7.1%
14.8%	20,457	19,081	-1,376	-6.7%
16.0%	20,113	18,994	-1,119	-5.6%
17.3%	19,047	17,965	-1,083	-5.7%
18.5%	18,975	17,352	-1,624	-8.6%
19.8%	17,349	15,892	-1,458	-8.4%
21.0%	15,658	13,838	-1,821	-11.6%
22.2%	15,411	13,324	-2,087	-13.5%
23.5%	14,646	12,692	-1,954	-13.3%
24.7%	13,837	10,977	-2,860	-20.7%
25.9%	13,771	10,934	-2,837	-20.6%
27.2%	11,908	10,417	-1,491	-12.5%
28.4%	10,838	10,408	-430	-4.0%
29.6%	10,475	10,090	-385	-3.7%
30.9%	10,062	9,975	-87	-0.9%
32.1%	10,026	9,675	-350	-3.5%
33.3%	9,791	8,688	-1,103	-11.3%
34.6%	9,096	7,732	-1,364	-15.0%
35.8%	8,539	7,632	-907	-10.6%
37.0%	8,358	7,628	-730	-8.7%
38.3%	7,821	7,598	-223	-2.9%
39.5%	7,782	7,469	-313	-4.0%
40.7%	7,561	7,462	-99	-1.3%
42.0%	7,551	7,444	-107	-1.4%
43.2%	7,473	7,299	-174	-2.3%
44.4%	7,459	7,240	-219	-2.9%
45.7%	7,446	7,189	-257	-3.5%
46.9%	7,210	7,120	-90	-1.2%
48.1%	7,127	7,109	-18	-0.3%
49.4%	7,117	7,091	-26	-0.4%
50.6%	7,036	7,014	-22	-0.3%
51.9%	7,030	6,971	-60	-0.9%
53.1%	6,991	6,964	-27	-0.4%
54.3%	6,972	6,961	-11	-0.2%
55.6%	6,944	6,924	-20	-0.3%
56.8%	6,926	6,921	-5	-0.1%
58.0%	6,827	6,849	22	0.3%
59.3%	6,815	6,845	30	0.4%
60.5%	6,723	6,815	92	1.4%
61.7%	6,639	6,813	174	2.6%
63.0%	6,627	6,807	180	2.7%
64.2%	6,510	6,755	245	3.8%
65.4%	6,509	6,746	237	3.6%
66.7%	6,483	6,629	146	2.2%
67.9%	6,473	6,547	74	1.1%
69.1%	6,437	6,532	95	1.5%
70.4%	6,412	6,449	37	0.6%
71.6%	6,373	6,408	35	0.6%
72.8%	6,369	6,315	-53	-0.8%
74.1%	6,284	6,310	25	0.4%
75.3%	6,281	6,249	-32	-0.5%
76.5%	6,145	6,198	53	0.9%
77.8%	6,100	6,186	85	1.4%
79.0%	6,096	6,164	67	1.1%
80.2%	6,027	6,151	125	2.1%
81.5%	6,018	6,121	103	1.7%
82.7%	5,877	6,092	214	3.6%
84.0%	5,839	5,841	2	0.0%
85.2%	5,782	5,694	-88	-1.5%
86.4%	5,687	5,616	-71	-1.3%
87.7%	5,593	5,608	15	0.3%
88.9%	5,568	5,577	8	0.2%
90.1%	5,477	5,536	60	1.1%
91.4%	5,334	5,415	80	1.5%
92.6%	5,187	5,364	176	3.4%
93.8%	5,187	5,345	158	3.0%
95.1%	5,177	5,221	43	0.8%
96.3%	5,141	5,209	67	1.3%
97.5%	4,975	4,994	19	0.4%
98.8%	4,920	4,905	-15	-0.3%
100.0%	4,856	4,888	32	0.7%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,558	26,563	5	0.0%
1.2%	25,244	24,834	-411	-1.6%
2.5%	24,518	21,686	-2,832	-11.6%
3.7%	21,680	21,658	-21	-0.1%
4.9%	18,998	18,874	-124	-0.7%
6.2%	18,408	18,258	-150	-0.8%
7.4%	17,309	16,580	-730	-4.2%
8.6%	16,730	13,757	-2,973	-17.8%
9.9%	13,821	13,688	-133	-1.0%
11.1%	13,719	13,527	-192	-1.4%
12.3%	13,666	13,428	-238	-1.7%
13.6%	12,937	12,833	-104	-0.8%
14.8%	12,728	12,578	-150	-1.2%
16.0%	12,573	12,367	-206	-1.6%
17.3%	11,579	11,436	-143	-1.2%
18.5%	10,417	10,353	-65	-0.6%
19.8%	10,344	10,253	-91	-0.9%
21.0%	9,957	9,887	-70	-0.7%
22.2%	9,714	9,193	-522	-5.4%
23.5%	9,144	8,933	-212	-2.3%
24.7%	9,071	8,903	-168	-1.8%
25.9%	8,455	8,202	-253	-3.0%
27.2%	8,119	8,142	23	0.3%
28.4%	8,070	8,041	-29	-0.4%
29.6%	7,859	7,773	-86	-1.1%
30.9%	7,351	7,579	228	3.1%
32.1%	7,180	7,473	293	4.1%
33.3%	6,998	7,449	450	6.4%
34.6%	6,998	7,244	246	3.5%
35.8%	6,876	7,086	210	3.1%
37.0%	6,824	7,035	210	3.1%
38.3%	6,819	6,814	-6	-0.1%
39.5%	6,733	6,708	-25	-0.4%
40.7%	6,630	6,663	33	0.5%
42.0%	6,596	6,590	-7	-0.1%
43.2%	6,584	6,579	-5	-0.1%
44.4%	6,582	6,579	-3	0.0%
45.7%	6,529	6,571	42	0.6%
46.9%	6,514	6,552	39	0.6%
48.1%	6,509	6,496	-13	-0.2%
49.4%	6,484	6,494	10	0.2%
50.6%	6,480	6,476	-4	-0.1%
51.9%	6,464	6,435	-29	-0.4%
53.1%	6,398	6,374	-24	-0.4%
54.3%	6,373	6,357	-17	-0.3%
55.6%	6,317	6,330	13	0.2%
56.8%	6,265	6,325	61	1.0%
58.0%	6,177	6,301	124	2.0%
59.3%	6,102	6,277	175	2.9%
60.5%	6,097	6,163	66	1.1%
61.7%	6,067	6,121	54	0.9%
63.0%	6,043	6,100	56	0.9%
64.2%	6,029	6,084	55	0.9%
65.4%	6,018	6,081	63	1.0%
66.7%	6,015	6,078	63	1.0%
67.9%	5,978	6,005	27	0.5%
69.1%	5,905	5,976	72	1.2%
70.4%	5,872	5,969	97	1.7%
71.6%	5,827	5,922	95	1.6%
72.8%	5,825	5,906	81	1.4%
74.1%	5,819	5,871	52	0.9%
75.3%	5,814	5,868	54	0.9%
76.5%	5,764	5,859	95	1.7%
77.8%	5,696	5,752	56	1.0%
79.0%	5,674	5,711	37	0.7%
80.2%	5,625	5,690	65	1.2%
81.5%	5,520	5,672	153	2.8%
82.7%	5,499	5,572	73	1.3%
84.0%	5,390	5,554	164	3.0%
85.2%	5,340	5,510	170	3.2%
86.4%	5,302	5,414	111	2.1%
87.7%	5,246	5,354	108	2.1%
88.9%	5,243	5,275	32	0.6%
90.1%	5,101	5,213	112	2.2%
91.4%	5,014	5,060	46	0.9%
92.6%	5,011	5,035	24	0.5%
93.8%	4,836	4,886	50	1.0%
95.1%	4,826	4,878	53	1.1%
96.3%	4,809	4,862	53	1.1%
97.5%	4,782	4,795	12	0.3%
98.8%	4,648	4,751	102	2.2%
100.0%	4,639	4,656	17	0.4%

Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	29,858	29,797	-61	-0.2%
1.2%	17,335	17,182	-153	-0.9%
2.5%	12,624	11,920	-704	-5.6%
3.7%	10,662	11,194	532	5.0%
4.9%	10,272	10,877	605	5.9%
6.2%	10,073	10,695	622	6.2%
7.4%	9,744	10,602	858	8.8%
8.6%	9,487	10,279	793	8.4%
9.9%	9,215	10,222	1,006	10.9%
11.1%	9,159	10,033	874	9.5%
12.3%	9,130	10,012	881	9.7%
13.6%	8,867	9,842	975	11.0%
14.8%	8,860	9,593	733	8.3%
16.0%	8,491	9,453	962	11.3%
17.3%	8,453	9,452	999	11.8%
18.5%	8,328	9,384	1,056	12.7%
19.8%	8,229	9,153	923	11.2%
21.0%	8,112	9,074	962	11.9%
22.2%	7,776	9,028	1,252	16.1%
23.5%	7,770	8,919	1,150	14.8%
24.7%	7,733	8,895	1,162	15.0%
25.9%	7,698	8,791	1,093	14.2%
27.2%	7,691	8,750	1,059	13.8%
28.4%	7,615	8,619	1,004	13.2%
29.6%	7,572	8,444	872	11.5%
30.9%	7,520	8,163	643	8.5%
32.1%	7,462	8,141	679	9.1%
33.3%	7,454	8,128	675	9.0%
34.6%	7,432	8,103	672	9.0%
35.8%	7,422	8,044	622	8.4%
37.0%	7,415	7,978	563	7.6%
38.3%	7,401	7,928	527	7.1%
39.5%	7,401	7,917	516	7.0%
40.7%	7,357	7,739	382	5.2%
42.0%	7,323	7,733	410	5.6%
43.2%	7,315	7,654	339	4.6%
44.4%	7,293	7,625	332	4.6%
45.7%	7,291	7,549	257	3.5%
46.9%	7,265	7,521	257	3.5%
48.1%	7,263	7,488	225	3.1%
49.4%	7,251	7,487	236	3.3%
50.6%	7,226	7,477	252	3.5%
51.9%	7,218	7,418	200	2.8%
53.1%	7,217	7,414	197	2.7%
54.3%	7,215	7,412	197	2.7%
55.6%	7,208	7,409	201	2.8%
56.8%	7,177	7,404	227	3.2%
58.0%	7,141	7,403	262	3.7%
59.3%	7,137	7,372	235	3.3%
60.5%	7,136	7,314	178	2.5%
61.7%	7,127	7,311	183	2.6%
63.0%	7,078	7,305	227	3.2%
64.2%	7,060	7,290	230	3.3%
65.4%	7,042	7,235	193	2.7%
66.7%	7,042	7,210	168	2.4%
67.9%	7,041	7,208	167	2.4%
69.1%	6,970	7,202	232	3.3%
70.4%	6,948	7,198	250	3.6%
71.6%	6,827	7,156	329	4.8%
72.8%	6,815	7,154	339	5.0%
74.1%	6,805	7,146	340	5.0%
75.3%	6,708	7,132	424	6.3%
76.5%	6,704	7,125	421	6.3%
77.8%	6,672	7,046	374	5.6%
79.0%	6,663	7,036	373	5.6%
80.2%	6,624	6,981	357	5.4%
81.5%	6,619	6,971	352	5.3%
82.7%	6,508	6,923	415	6.4%
84.0%	6,489	6,921	432	6.7%
85.2%	6,209	6,873	664	10.7%
86.4%	6,199	6,868	670	10.8%
87.7%	6,183	6,814	632	10.2%
88.9%	6,179	6,731	551	8.9%
90.1%	6,175	6,713	538	8.7%
91.4%	6,085	6,642	558	9.2%
92.6%	5,940	6,614	673	11.3%
93.8%	5,619	6,233	614	10.9%
95.1%	5,610	6,200	591	10.5%
96.3%	5,574	6,006	432	7.7%
97.5%	5,562	5,946	385	6.9%
98.8%	5,559	5,945	386	6.9%
100.0%	5,241	5,715	473	9.0%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,943	13,279	336	2.6%
1.2%	12,639	12,935	296	2.3%
2.5%	11,547	12,853	1,306	11.3%
3.7%	11,063	12,780	1,717	15.5%
4.9%	10,978	12,572	1,594	14.5%
6.2%	10,904	12,539	1,635	15.0%
7.4%	10,569	12,467	1,898	18.0%
8.6%	10,549	12,290	1,741	16.5%
9.9%	10,531	12,267	1,736	16.5%
11.1%	10,529	12,183	1,654	15.7%
12.3%	10,522	12,174	1,652	15.7%
13.6%	10,448	12,077	1,629	15.6%
14.8%	10,448	11,994	1,546	14.8%
16.0%	10,403	11,990	1,586	15.2%
17.3%	10,365	11,917	1,552	15.0%
18.5%	10,327	11,904	1,577	15.3%
19.8%	10,193	11,889	1,697	16.6%
21.0%	10,179	11,757	1,578	15.5%
22.2%	10,097	11,752	1,655	16.4%
23.5%	10,007	11,621	1,614	16.1%
24.7%	9,876	11,214	1,338	13.6%
25.9%	9,838	11,136	1,297	13.2%
27.2%	9,797	11,054	1,257	12.8%
28.4%	9,734	11,003	1,269	13.0%
29.6%	9,710	10,840	1,130	11.6%
30.9%	9,671	10,801	1,130	11.7%
32.1%	9,617	10,776	1,158	12.0%
33.3%	9,591	10,697	1,106	11.5%
34.6%	9,517	10,690	1,173	12.3%
35.8%	9,437	10,593	1,156	12.2%
37.0%	9,376	10,589	1,213	12.9%
38.3%	9,303	10,586	1,283	13.8%
39.5%	9,288	10,570	1,282	13.8%
40.7%	9,254	10,534	1,280	13.8%
42.0%	9,127	10,517	1,390	15.2%
43.2%	9,090	10,182	1,092	12.0%
44.4%	9,022	10,170	1,148	12.7%
45.7%	8,990	10,157	1,166	13.0%
46.9%	8,900	10,142	1,242	14.0%
48.1%	8,767	10,091	1,324	15.1%
49.4%	8,753	9,971	1,219	13.9%
50.6%	8,714	9,953	1,239	14.2%
51.9%	8,679	9,911	1,232	14.2%
53.1%	8,642	9,891	1,248	14.4%
54.3%	8,596	9,828	1,233	14.3%
55.6%	8,313	9,592	1,279	15.4%
56.8%	8,170	9,578	1,407	17.2%
58.0%	8,122	9,562	1,440	17.7%
59.3%	8,060	9,250	1,190	14.8%
60.5%	7,972	9,130	1,157	14.5%
61.7%	7,869	9,079	1,210	15.4%
63.0%	7,826	9,055	1,229	15.7%
64.2%	7,757	9,016	1,260	16.2%
65.4%	7,680	8,991	1,311	17.1%
66.7%	7,665	8,972	1,307	17.0%
67.9%	7,652	8,940	1,289	16.8%
69.1%	7,625	8,927	1,302	17.1%
70.4%	7,615	8,908	1,293	17.0%
71.6%	7,583	8,828	1,245	16.4%
72.8%	7,322	8,732	1,409	19.2%
74.1%	7,262	8,683	1,421	19.6%
75.3%	7,222	8,659	1,437	19.9%
76.5%	7,179	8,644	1,464	20.4%
77.8%	7,175	8,439	1,265	17.6%
79.0%	7,159	8,326	1,168	16.3%
80.2%	7,104	8,256	1,152	16.2%
81.5%	7,090	8,255	1,165	16.4%
82.7%	7,076	8,174	1,099	15.5%
84.0%	7,072	7,805	733	10.4%
85.2%	7,070	7,673	603	8.5%
86.4%	7,056	7,600	543	7.7%
87.7%	7,056	7,557	501	7.1%
88.9%	7,008	7,278	270	3.9%
90.1%	6,960	7,250	290	4.2%
91.4%	6,947	7,199	252	3.6%
92.6%	6,917	7,159	242	3.5%
93.8%	6,696	7,155	458	6.8%
95.1%	6,642	7,103	461	6.9%
96.3%	6,590	7,097	507	7.7%
97.5%	5,570	7,083	1,514	27.2%
98.8%	5,551	6,791	1,239	22.3%
100.0%	5,337	6,560	1,223	22.9%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,002	11,839	-163	-1.4%
1.2%	10,558	10,546	-12	-0.1%
2.5%	10,221	10,376	155	1.5%
3.7%	9,837	10,108	271	2.8%
4.9%	9,689	9,932	243	2.5%
6.2%	9,407	9,903	496	5.3%
7.4%	9,163	9,511	348	3.8%
8.6%	9,111	9,421	310	3.4%
9.9%	9,065	9,205	140	1.5%
11.1%	9,054	9,192	138	1.5%
12.3%	8,683	9,169	486	5.6%
13.6%	8,485	9,122	638	7.5%
14.8%	8,420	9,059	639	7.6%
16.0%	8,284	8,990	706	8.5%
17.3%	8,085	8,919	834	10.3%
18.5%	7,968	8,758	790	9.9%
19.8%	7,959	8,639	680	8.5%
21.0%	7,893	8,604	711	9.0%
22.2%	7,760	8,598	838	10.8%
23.5%	7,517	8,587	1,070	14.2%
24.7%	7,416	8,585	1,168	15.8%
25.9%	7,355	8,382	1,027	14.0%
27.2%	7,256	8,150	894	12.3%
28.4%	7,165	8,115	950	13.3%
29.6%	7,159	8,110	950	13.3%
30.9%	7,141	8,106	966	13.5%
32.1%	6,967	8,039	1,073	15.4%
33.3%	6,910	8,030	1,120	16.2%
34.6%	6,902	7,990	1,088	15.8%
35.8%	6,881	7,990	1,108	16.1%
37.0%	6,854	7,929	1,076	15.7%
38.3%	6,834	7,916	1,082	15.8%
39.5%	6,817	7,819	1,002	14.7%
40.7%	6,691	7,719	1,028	15.4%
42.0%	6,671	7,704	1,033	15.5%
43.2%	6,668	7,500	832	12.5%
44.4%	6,662	7,371	709	10.6%
45.7%	6,638	7,369	732	11.0%
46.9%	6,624	7,366	742	11.2%
48.1%	6,609	7,358	749	11.3%
49.4%	6,601	7,189	588	8.9%
50.6%	6,597	7,175	578	8.8%
51.9%	6,591	7,068	477	7.2%
53.1%	6,591	7,011	420	6.4%
54.3%	6,572	7,002	431	6.6%
55.6%	6,562	6,984	422	6.4%
56.8%	6,555	6,972	417	6.4%
58.0%	6,555	6,917	362	5.5%
59.3%	6,553	6,799	246	3.8%
60.5%	6,525	6,785	260	4.0%
61.7%	6,514	6,738	224	3.4%
63.0%	6,511	6,708	197	3.0%
64.2%	6,499	6,689	190	2.9%
65.4%	6,468	6,689	221	3.4%
66.7%	6,458	6,677	220	3.4%
67.9%	6,386	6,676	290	4.5%
69.1%	6,385	6,645	259	4.1%
70.4%	6,371	6,637	266	4.2%
71.6%	6,208	6,626	418	6.7%
72.8%	6,202	6,621	419	6.8%
74.1%	6,189	6,621	432	7.0%
75.3%	6,146	6,617	471	7.7%
76.5%	6,136	6,617	481	7.8%
77.8%	6,108	6,606	498	8.2%
79.0%	6,069	6,598	528	8.7%
80.2%	6,063	6,596	533	8.8%
81.5%	6,050	6,565	514	8.5%
82.7%	6,040	6,561	521	8.6%
84.0%	5,915	6,560	645	10.9%
85.2%	5,912	6,546	633	10.7%
86.4%	5,775	6,532	757	13.1%
87.7%	5,743	6,515	772	13.4%
88.9%	5,728	6,497	769	13.4%
90.1%	5,634	6,472	838	14.9%
91.4%	5,562	6,467	905	16.3%
92.6%	5,552	6,458	906	16.3%
93.8%	5,550	6,426	876	15.8%
95.1%	5,375	6,409	1,035	19.3%
96.3%	5,271	6,333	1,061	20.1%
97.5%	5,129	6,101	973	19.0%
98.8%	5,055	6,094	1,039	20.6%
100.0%	4,992	5,056	64	1.3%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,344	15,511	168	1.1%
1.2%	15,308	15,320	12	0.1%
2.5%	15,298	15,316	18	0.1%
3.7%	15,296	15,309	13	0.1%
4.9%	15,270	15,293	23	0.2%
6.2%	15,262	15,281	20	0.1%
7.4%	15,227	15,278	51	0.3%
8.6%	14,854	15,266	412	2.8%
9.9%	14,441	15,266	825	5.7%
11.1%	13,702	15,218	1,516	11.1%
12.3%	13,672	15,125	1,453	10.6%
13.6%	13,488	14,319	831	6.2%
14.8%	13,451	14,142	691	5.1%
16.0%	13,325	14,047	722	5.4%
17.3%	13,274	13,729	455	3.4%
18.5%	12,904	13,699	796	6.2%
19.8%	12,868	13,548	680	5.3%
21.0%	12,683	13,490	807	6.4%
22.2%	12,615	13,232	617	4.9%
23.5%	12,601	13,227	626	5.0%
24.7%	12,283	13,140	857	7.0%
25.9%	12,232	12,980	748	6.1%
27.2%	12,144	12,710	566	4.7%
28.4%	12,030	12,075	45	0.4%
29.6%	11,181	10,923	-258	-2.3%
30.9%	11,144	10,854	-290	-2.6%
32.1%	10,675	10,646	-29	-0.3%
33.3%	10,620	10,564	-56	-0.5%
34.6%	10,611	9,754	-856	-8.1%
35.8%	8,755	9,375	619	7.1%
37.0%	8,560	9,154	594	6.9%
38.3%	8,530	9,072	542	6.4%
39.5%	8,523	8,877	354	4.2%
40.7%	8,378	8,772	394	4.7%
42.0%	7,731	8,712	982	12.7%
43.2%	7,682	8,671	989	12.9%
44.4%	6,996	8,382	1,386	19.8%
45.7%	6,839	8,094	1,255	18.3%
46.9%	6,611	7,907	1,296	19.6%
48.1%	6,430	7,892	1,462	22.7%
49.4%	6,375	7,795	1,420	22.3%
50.6%	6,136	7,742	1,606	26.2%
51.9%	6,113	7,547	1,433	23.4%
53.1%	5,828	7,449	1,620	27.8%
54.3%	5,790	7,446	1,657	28.6%
55.6%	5,684	7,403	1,719	30.2%
56.8%	5,666	7,307	1,641	29.0%
58.0%	5,618	7,288	1,670	29.7%
59.3%	5,563	7,259	1,696	30.5%
60.5%	5,529	7,097	1,569	28.4%
61.7%	5,516	7,023	1,507	27.3%
63.0%	5,435	6,988	1,553	28.6%
64.2%	5,382	6,973	1,591	29.6%
65.4%	5,379	6,951	1,572	29.2%
66.7%	5,332	6,857	1,525	28.6%
67.9%	5,089	6,738	1,649	32.4%
69.1%	5,074	6,679	1,605	31.6%
70.4%	5,052	6,671	1,620	32.1%
71.6%	4,978	6,633	1,655	33.3%
72.8%	4,905	6,591	1,687	34.4%
74.1%	4,897	6,436	1,538	31.4%
75.3%	4,858	6,397	1,539	31.7%
76.5%	4,848	6,380	1,532	31.6%
77.8%	4,825	6,361	1,535	31.8%
79.0%	4,804	6,339	1,536	32.0%
80.2%	4,743	6,043	1,299	27.4%
81.5%	4,621	6,031	1,409	30.5%
82.7%	4,543	6,023	1,479	32.6%
84.0%	4,374	5,953	1,579	36.1%
85.2%	4,365	5,773	1,408	32.3%
86.4%	4,341	5,604	1,263	29.1%
87.7%	4,323	5,599	1,276	29.5%
88.9%	4,322	5,508	1,186	27.4%
90.1%	4,301	5,352	1,051	24.4%
91.4%	4,295	5,335	1,040	24.2%
92.6%	4,265	5,178	913	21.4%
93.8%	4,177	5,130	953	22.8%
95.1%	3,915	4,807	892	22.8%
96.3%	3,863	4,717	854	22.1%
97.5%	3,822	4,506	684	17.9%
98.8%	3,794	4,000	206	5.4%
100.0%	3,660	3,943	283	7.7%

Figure SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

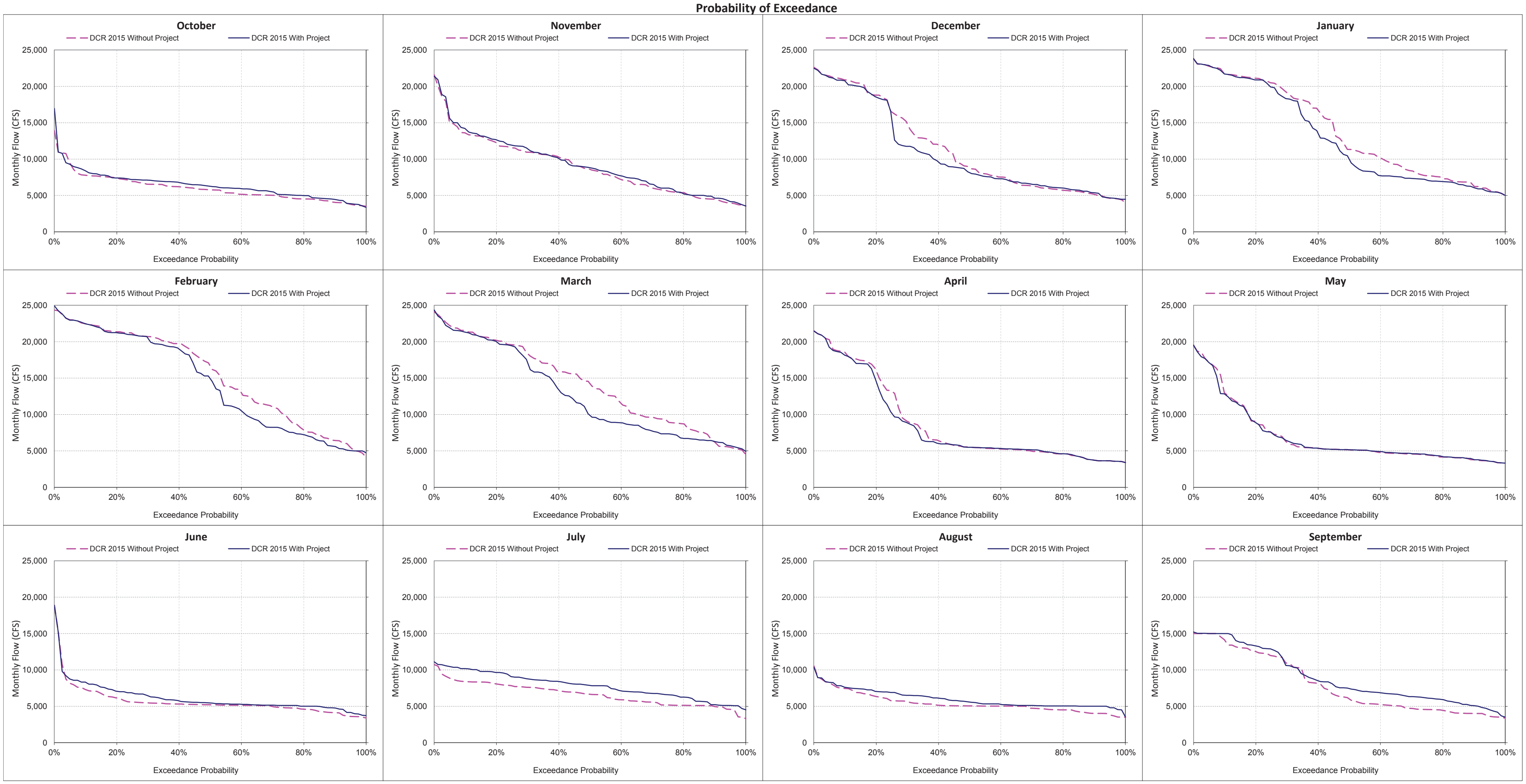


Table SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,932	16,968	3,036	21.8%
1.2%	10,953	10,980	27	0.2%
2.5%	10,852	10,800	-52	-0.5%
3.7%	10,762	9,496	-1,266	-11.8%
4.9%	9,483	9,304	-179	-1.9%
6.2%	8,583	8,975	392	4.6%
7.4%	8,049	8,816	767	9.5%
8.6%	7,845	8,653	808	10.3%
9.9%	7,789	8,401	612	7.9%
11.1%	7,713	8,099	386	5.0%
12.3%	7,684	8,018	334	4.4%
13.6%	7,676	7,991	315	4.1%
14.8%	7,598	7,786	188	2.5%
16.0%	7,589	7,779	191	2.5%
17.3%	7,527	7,687	161	2.1%
18.5%	7,496	7,423	-73	-1.0%
19.8%	7,417	7,418	1	0.0%
21.0%	7,286	7,389	103	1.4%
22.2%	7,222	7,369	148	2.0%
23.5%	7,132	7,309	176	2.5%
24.7%	6,911	7,195	284	4.1%
25.9%	6,905	7,180	274	4.0%
27.2%	6,771	7,160	389	5.7%
28.4%	6,723	7,126	403	6.0%
29.6%	6,557	7,115	558	8.5%
30.9%	6,541	7,088	547	8.4%
32.1%	6,534	7,001	467	7.2%
33.3%	6,517	6,988	471	7.2%
34.6%	6,516	6,925	409	6.3%
35.8%	6,319	6,905	585	9.3%
37.0%	6,249	6,895	646	10.3%
38.3%	6,221	6,869	649	10.4%
39.5%	6,207	6,818	611	9.8%
40.7%	6,174	6,708	534	8.7%
42.0%	6,121	6,613	492	8.0%
43.2%	6,070	6,535	465	7.7%
44.4%	6,024	6,479	455	7.6%
45.7%	5,903	6,467	564	9.6%
46.9%	5,844	6,450	606	10.4%
48.1%	5,837	6,371	535	9.2%
49.4%	5,785	6,309	524	9.1%
50.6%	5,766	6,230	464	8.0%
51.9%	5,749	6,188	440	7.6%
53.1%	5,739	6,089	350	6.1%
54.3%	5,371	6,055	683	12.7%
55.6%	5,363	6,031	668	12.5%
56.8%	5,344	6,019	675	12.6%
58.0%	5,331	5,978	647	12.1%
59.3%	5,163	5,969	807	15.6%
60.5%	5,152	5,912	760	14.8%
61.7%	5,113	5,895	782	15.3%
63.0%	5,108	5,867	758	14.8%
64.2%	5,103	5,752	649	12.7%
65.4%	5,083	5,652	569	11.2%
66.7%	5,081	5,650	569	11.2%
67.9%	5,050	5,645	596	11.8%
69.1%	5,037	5,545	509	10.1%
70.4%	5,022	5,477	455	9.1%
71.6%	5,012	5,163	150	3.0%
72.8%	4,822	5,108	287	5.9%
74.1%	4,751	5,107	356	7.5%
75.3%	4,733	5,083	350	7.4%
76.5%	4,599	5,037	438	9.5%
77.8%	4,544	5,022	478	10.5%
79.0%	4,533	5,000	467	10.3%
80.2%	4,520	4,975	455	10.1%
81.5%	4,519	4,974	454	10.1%
82.7%	4,507	4,684	177	3.9%
84.0%	4,430	4,661	231	5.2%
85.2%	4,375	4,617	241	5.5%
86.4%	4,286	4,600	315	7.3%
87.7%	4,258	4,544	286	6.7%
88.9%	4,112	4,520	408	9.9%
90.1%	4,048	4,460	412	10.2%
91.4%	4,022	4,342	320	8.0%
92.6%	4,021	4,297	275	6.8%
93.8%	3,919	3,902	-17	-0.4%
95.1%	3,769	3,880	111	2.9%
96.3%	3,689	3,800	112	3.0%
97.5%	3,642	3,769	127	3.5%
98.8%	3,602	3,544	-59	-1.6%
100.0%	3,504	3,378	-126	-3.6%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,592	21,377	-215	-1.0%
1.2%	20,034	20,932	898	4.5%
2.5%	18,598	18,872	274	1.5%
3.7%	17,962	18,559	597	3.3%
4.9%	14,997	15,607	610	4.1%
6.2%	14,857	15,000	143	1.0%
7.4%	14,449	15,000	551	3.8%
8.6%	13,653	14,374	720	5.3%
9.9%	13,614	14,225	612	4.5%
11.1%	13,342	13,718	376	2.8%
12.3%	13,307	13,569	262	2.0%
13.6%	13,192	13,510	318	2.4%
14.8%	13,162	13,170	9	0.1%
16.0%	12,959	13,141	182	1.4%
17.3%	12,688	12,962	274	2.2%
18.5%	12,513	12,746	233	1.9%
19.8%	12,319	12,667	348	2.8%
21.0%	11,798	12,476	678	5.7%
22.2%	11,762	12,385	623	5.3%
23.5%	11,710	12,045	334	2.9%
24.7%	11,546	11,926	380	3.3%
25.9%	11,526	11,829	304	2.6%
27.2%	11,243	11,787	544	4.8%
28.4%	11,174	11,744	570	5.1%
29.6%	10,958	11,549	592	5.4%
30.9%	10,946	11,153	207	1.9%
32.1%	10,892	10,918	26	0.2%
33.3%	10,752	10,902	150	1.4%
34.6%	10,647	10,700	53	0.5%
35.8%	10,620	10,685	65	0.6%
37.0%	10,522	10,514	-8	-0.1%
38.3%	10,513	10,329	-184	-1.7%
39.5%	10,369	10,227	-141	-1.4%
40.7%	10,133	9,852	-281	-2.8%
42.0%	9,987	9,846	-142	-1.4%
43.2%	9,891	9,243	-648	-6.6%
44.4%	9,308	9,066	-243	-2.6%
45.7%	9,077	9,048	-29	-0.3%
46.9%	8,980	9,021	41	0.5%
48.1%	8,730	8,952	222	2.5%
49.4%	8,696	8,874	178	2.0%
50.6%	8,486	8,755	270	3.2%
51.9%	8,397	8,650	253	3.0%
53.1%	8,253	8,427	174	2.1%
54.3%	7,911	8,374	463	5.9%
55.6%	7,901	8,285	384	4.9%
56.8%	7,651	8,098	448	5.8%
58.0%	7,578	7,911	333	4.4%
59.3%	7,316	7,753	438	6.0%
60.5%	7,121	7,643	522	7.3%
61.7%	7,072	7,481	409	5.8%
63.0%	6,928	7,404	476	6.9%
64.2%	6,524	7,355	831	12.7%
65.4%	6,513	7,267	754	11.6%
66.7%	6,512	7,034	521	8.0%
67.9%	6,470	6,986	516	8.0%
69.1%	6,145	6,591	447	7.3%
70.4%	5,976	6,502	526	8.8%
71.6%	5,877	6,143	266	4.5%
72.8%	5,772	6,025	254	4.4%
74.1%	5,743	6,015	272	4.7%
75.3%	5,559	6,003	443	8.0%
76.5%	5,496	5,877	382	6.9%
77.8%	5,440	5,462	22	0.4%
79.0%	5,381	5,435	55	1.0%
80.2%	5,380	5,181	-198	-3.7%
81.5%	5,102	5,131	28	0.6%
82.7%	5,010	5,005	-4	-0.1%
84.0%	4,752	5,000	248	5.2%
85.2%	4,619	5,000	381	8.3%
86.4%	4,586	5,000	414	9.0%
87.7%	4,529	4,919	390	8.6%
88.9%	4,510	4,914	404	9.0%
90.1%	4,495	4,625	130	2.9%
91.4%	4,331	4,619	288	6.6%
92.6%	4,145	4,534	389	9.4%
93.8%	4,020	4,372	352	8.8%
95.1%	3,959	4,164	205	5.2%
96.3%	3,889	4,133	244	6.3%
97.5%	3,729	3,937	208	5.6%
98.8%	3,695	3,721	26	0.7%
100.0%	3,534	3,533	-1	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	22,621	22,490	-130	-0.6%
1.2%	22,293	22,197	-96	-0.4%
2.5%	21,714	21,661	-52	-0.2%
3.7%	21,543	21,537	-6	0.0%
4.9%	21,429	21,241	-189	-0.9%
6.2%	21,215	21,133	-82	-0.4%
7.4%	21,166	20,867	-299	-1.4%
8.6%	21,059	20,846	-213	-1.0%
9.9%	20,890	20,776	-114	-0.5%
11.1%	20,856	20,192	-664	-3.2%
12.3%	20,647	20,166	-481	-2.3%
13.6%	20,473	20,058	-415	-2.0%
14.8%	20,448	19,991	-457	-2.2%
16.0%	20,218	19,815	-403	-2.0%
17.3%	19,056	19,277	221	1.2%
18.5%	18,859	18,924	66	0.3%
19.8%	18,795	18,563	-232	-1.2%
21.0%	18,792	18,350	-442	-2.4%
22.2%	18,426	18,175	-251	-1.4%
23.5%	18,160	18,111	-49	-0.3%
24.7%	16,562	16,582	20	0.1%
25.9%	16,204	12,621	-3,583	-22.1%
27.2%	15,858	12,035	-3,823	-24.1%
28.4%	15,648	11,846	-3,802	-24.3%
29.6%	15,190	11,753	-3,437	-22.6%
30.9%	14,097	11,750	-2,347	-16.6%
32.1%	13,419	11,570	-1,849	-13.8%
33.3%	12,930	11,112	-1,818	-14.1%
34.6%	12,912	10,914	-1,997	-15.5%
35.8%	12,822	10,764	-2,058	-16.0%
37.0%	12,663	10,603	-2,060	-16.3%
38.3%	12,053	10,040	-2,013	-16.7%
39.5%	12,034	9,778	-2,256	-18.7%
40.7%	11,878	9,328	-2,549	-21.5%
42.0%	11,731	9,311	-2,420	-20.6%
43.2%	11,065	8,963	-2,102	-19.0%
44.4%	10,914	8,941	-1,974	-18.1%
45.7%	9,419	8,873	-546	-5.8%
46.9%	9,409	8,801	-608	-6.5%
48.1%	9,075	8,732	-344	-3.8%
49.4%	8,994	8,242	-752	-8.4%
50.6%	8,666	7,992	-674	-7.8%
51.9%	8,614	7,942	-673	-7.8%
53.1%	8,101	7,785	-316	-3.9%
54.3%	8,015	7,642	-373	-4.6%
55.6%	7,949	7,590	-359	-4.5%
56.8%	7,752	7,557	-196	-2.5%
58.0%	7,724	7,322	-402	-5.2%
59.3%	7,547	7,302	-245	-3.2%
60.5%	7,533	7,296	-237	-3.1%
61.7%	7,475	7,183	-292	-3.9%
63.0%	7,105	6,960	-145	-2.0%
64.2%	6,785	6,880	96	1.4%
65.4%	6,616	6,867	250	3.8%
66.7%	6,399	6,689	290	4.5%
67.9%	6,393	6,674	281	4.4%
69.1%	6,356	6,632	276	4.3%
70.4%	6,281	6,498	217	3.5%
71.6%	6,231	6,495	263	4.2%
72.8%	6,049	6,341	293	4.8%
74.1%	5,995	6,327	333	5.5%
75.3%	5,980	6,173	194	3.2%
76.5%	5,889	6,124	236	4.0%
77.8%	5,850	6,100	250	4.3%
79.0%	5,758	6,031	274	4.8%
80.2%	5,716	6,011	295	5.2%
81.5%	5,676	5,887	212	3.7%
82.7%	5,597	5,793	196	3.5%
84.0%	5,586	5,761	175	3.1%
85.2%	5,542	5,718	176	3.2%
86.4%	5,438	5,586	148	2.7%
87.7%	5,314	5,582	268	5.0%
88.9%	5,269	5,406	137	2.6%
90.1%	5,137	5,361	223	4.3%
91.4%	4,994	5,293	299	6.0%
92.6%	4,920	4,788	-132	-2.7%
93.8%	4,712	4,736	24	0.5%
95.1%	4,616	4,657	41	0.9%
96.3%	4,598	4,616	17	0.4%
97.5%	4,538	4,538	0	0.0%
98.8%	4,404	4,476	72	1.6%
100.0%	3,977	4,471	494	12.4%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,803	23,828	25	0.1%
1.2%	23,076	23,102	26	0.1%
2.5%	23,044	23,059	15	0.1%
3.7%	22,984	22,939	-44	-0.2%
4.9%	22,759	22,879	120	0.5%
6.2%	22,645	22,603	-41	-0.2%
7.4%	22,578	22,494	-83	-0.4%
8.6%	22,429	22,195	-233	-1.0%
9.9%	21,734	21,704	-30	-0.1%
11.1%	21,620	21,635	15	0.1%
12.3%	21,607	21,514	-93	-0.4%
13.6%	21,518	21,323	-196	-0.9%
14.8%	21,425	21,225	-201	-0.9%
16.0%	21,333	21,207	-126	-0.6%
17.3%	21,250	21,139	-111	-0.5%
18.5%	21,202	21,025	-177	-0.8%
19.8%	21,124	20,901	-223	-1.1%
21.0%	21,077	20,880	-197	-0.9%
22.2%	20,849	20,878	29	0.1%
23.5%	20,738	20,462	-276	-1.3%
24.7%	20,501	19,926	-576	-2.8%
25.9%	20,435	19,832	-604	-3.0%
27.2%	20,136	19,014	-1,122	-5.6%
28.4%	19,695	18,640	-1,055	-5.4%
29.6%	19,258	18,324	-934	-4.8%
30.9%	18,848	18,260	-588	-3.1%
32.1%	18,374	18,025	-349	-1.9%
33.3%	18,245	17,967	-278	-1.5%
34.6%	18,205	16,178	-2,027	-11.1%
35.8%	18,005	15,308	-2,697	-15.0%
37.0%	17,839	15,164	-2,675	-15.0%
38.3%	17,012	14,236	-2,776	-16.3%
39.5%	17,006	13,927	-3,079	-18.1%
40.7%	16,314	12,893	-3,421	-21.0%
42.0%	15,664	12,855	-2,810	-17.9%
43.2%	15,460	12,593	-2,867	-18.5%
44.4%	15,454	12,283	-3,170	-20.5%
45.7%	13,142	12,195	-947	-7.2%
46.9%	12,861	11,133	-1,728	-13.4%
48.1%	12,208	10,658	-1,550	-12.7%
49.4%	11,337	10,460	-878	-7.7%
50.6%	11,323	9,461	-1,863	-16.4%
51.9%	11,203	9,005	-2,198	-19.6%
53.1%	11,057	8,625	-2,432	-22.0%
54.3%	10,805	8,352	-2,453	-22.7%
55.6%	10,769	8,314	-2,455	-22.8%
56.8%	10,730	8,305	-2,426	-22.6%
58.0%	10,660	8,238	-2,422	-22.7%
59.3%	10,261	7,765	-2,496	-24.3%
60.5%	10,044	7,703	-2,341	-23.3%
61.7%	9,769	7,701	-2,068	-21.2%
63.0%	9,535	7,676	-1,859	-19.5%
64.2%	9,301	7,631	-1,669	-17.9%
65.4%	9,260	7,581	-1,679	-18.1%
66.7%	8,987	7,561	-1,425	-15.9%
67.9%	8,596	7,362	-1,234	-14.4%
69.1%	8,430	7,357	-1,074	-12.7%
70.4%	8,357	7,319	-1,039	-12.4%
71.6%	8,059	7,292	-767	-9.5%
72.8%	7,876	7,265	-612	-7.8%
74.1%	7,741	7,231	-510	-6.6%
75.3%	7,698	7,038	-659	-8.6%
76.5%	7,671	6,991	-680	-8.9%
77.8%	7,601	6,980	-621	-8.2%
79.0%	7,553	6,952	-601	-8.0%
80.2%	7,298	6,900	-398	-5.4%
81.5%	7,289	6,851	-438	-6.0%
82.7%	7,034	6,826	-208	-3.0%
84.0%	6,894	6,724	-170	-2.5%
85.2%	6,882	6,513	-369	-5.4%
86.4%	6,852	6,488	-364	-5.3%
87.7%	6,845	6,304	-541	-7.9%
88.9%	6,790	6,253	-537	-7.9%
90.1%	6,230	6,059	-171	-2.7%
91.4%	6,228	5,893	-335	-5.4%
92.6%	6,020	5,889	-131	-2.2%
93.8%	6,010	5,651	-358	-6.0%
95.1%	5,697	5,496	-201	-3.5%
96.3%	5,545	5,469	-76	-1.4%
97.5%	5,479	5,455	-24	-0.4%
98.8%	5,295	5,306	10	0.2%
100.0%	5,029	5,029	0	0.0%

Table SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,349	24,911	562	2.3%
1.2%	24,275	24,252	-23	-0.1%
2.5%	23,750	23,819	68	0.3%
3.7%	23,248	23,250	2	0.0%
4.9%	23,028	22,972	-56	-0.2%
6.2%	22,984	22,957	-27	-0.1%
7.4%	22,882	22,877	-6	0.0%
8.6%	22,591	22,676	84	0.4%
9.9%	22,479	22,459	-20	-0.1%
11.1%	22,417	22,354	-63	-0.3%
12.3%	22,269	22,220	-49	-0.2%
13.6%	22,202	22,046	-156	-0.7%
14.8%	22,093	21,882	-210	-1.0%
16.0%	21,522	21,417	-104	-0.5%
17.3%	21,506	21,292	-214	-1.0%
18.5%	21,420	21,269	-151	-0.7%
19.8%	21,370	21,263	-108	-0.5%
21.0%	21,367	21,200	-168	-0.8%
22.2%	21,245	21,146	-99	-0.5%
23.5%	21,229	20,992	-238	-1.1%
24.7%	21,221	20,982	-239	-1.1%
25.9%	20,906	20,899	-8	0.0%
27.2%	20,816	20,805	-12	-0.1%
28.4%	20,770	20,765	-6	0.0%
29.6%	20,721	20,733	12	0.1%
30.9%	20,699	19,930	-770	-3.7%
32.1%	20,590	19,722	-868	-4.2%
33.3%	20,440	19,691	-749	-3.7%
34.6%	20,147	19,609	-537	-2.7%
35.8%	20,093	19,440	-653	-3.2%
37.0%	19,928	19,319	-610	-3.1%
38.3%	19,751	19,299	-452	-2.3%
39.5%	19,742	19,164	-578	-2.9%
40.7%	19,712	18,746	-966	-4.9%
42.0%	19,356	18,341	-1,014	-5.2%
43.2%	19,041	18,206	-834	-4.4%
44.4%	18,429	17,122	-1,307	-7.1%
45.7%	18,046	15,819	-2,227	-12.3%
46.9%	17,673	15,643	-2,030	-11.5%
48.1%	17,333	15,316	-2,017	-11.6%
49.4%	17,101	15,315	-1,786	-10.4%
50.6%	16,198	14,556	-1,643	-10.1%
51.9%	15,977	13,518	-2,460	-15.4%
53.1%	15,337	13,289	-2,048	-13.4%
54.3%	13,929	11,278	-2,651	-19.0%
55.6%	13,884	11,245	-2,639	-19.0%
56.8%	13,765	11,152	-2,614	-19.0%
58.0%	13,487	10,969	-2,518	-18.7%
59.3%	13,474	10,775	-2,699	-20.0%
60.5%	12,628	10,319	-2,309	-18.3%
61.7%	12,567	9,843	-2,723	-21.7%
63.0%	12,432	9,604	-2,828	-22.7%
64.2%	11,717	9,331	-2,387	-20.4%
65.4%	11,510	9,164	-2,346	-20.4%
66.7%	11,481	8,683	-2,798	-24.4%
67.9%	11,349	8,278	-3,071	-27.1%
69.1%	11,239	8,249	-2,990	-26.6%
70.4%	10,981	8,248	-2,733	-24.9%
71.6%	10,816	8,239	-2,577	-23.8%
72.8%	10,211	8,114	-2,096	-20.5%
74.1%	9,982	7,805	-2,177	-21.8%
75.3%	9,294	7,580	-1,714	-18.4%
76.5%	8,775	7,528	-1,247	-14.2%
77.8%	8,646	7,351	-1,295	-15.0%
79.0%	8,180	7,313	-867	-10.6%
80.2%	7,795	7,196	-598	-7.7%
81.5%	7,574	7,023	-552	-7.3%
82.7%	7,571	6,875	-696	-9.2%
84.0%	7,283	6,515	-768	-10.6%
85.2%	7,186	6,378	-808	-11.2%
86.4%	6,811	6,366	-445	-6.5%
87.7%	6,728	5,735	-992	-14.8%
88.9%	6,479	5,669	-810	-12.5%
90.1%	6,428	5,592	-836	-13.0%
91.4%	6,402	5,334	-1,068	-16.7%
92.6%	6,067	5,296	-771	-12.7%
93.8%	6,000	5,114	-886	-14.8%
95.1%	5,432	5,046	-387	-7.1%
96.3%	5,017	5,000	-17	-0.3%
97.5%	4,936	5,000	64	1.3%
98.8%	4,705	5,000	295	6.3%
100.0%	4,144	4,758	614	14.8%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,113	24,365	252	1.0%
1.2%	23,715	23,546	-169	-0.7%
2.5%	23,230	23,135	-96	-0.4%
3.7%	22,671	22,257	-414	-1.8%
4.9%	22,245	21,934	-311	-1.4%
6.2%	21,912	21,566	-347	-1.6%
7.4%	21,867	21,545	-323	-1.5%
8.6%	21,556	21,468	-88	-0.4%
9.9%	21,555	21,317	-238	-1.1%
11.1%	21,331	21,217	-114	-0.5%
12.3%	21,314	20,960	-353	-1.7%
13.6%	20,907	20,892	-14	-0.1%
14.8%	20,733	20,698	-34	-0.2%
16.0%	20,636	20,572	-64	-0.3%
17.3%	20,598	20,270	-328	-1.6%
18.5%	20,284	20,232	-52	-0.3%
19.8%	20,214	20,062	-152	-0.8%
21.0%	20,089	19,668	-422	-2.1%
22.2%	20,068	19,625	-443	-2.2%
23.5%	19,635	19,593	-41	-0.2%
24.7%	19,603	19,464	-139	-0.7%
25.9%	19,542	19,280	-262	-1.3%
27.2%	19,458	18,667	-791	-4.1%
28.4%	19,343	18,120	-1,223	-6.3%
29.6%	18,516	17,577	-938	-5.1%
30.9%	18,026	16,163	-1,863	-10.3%
32.1%	17,698	15,853	-1,846	-10.4%
33.3%	17,577	15,834	-1,743	-9.9%
34.6%	17,089	15,741	-1,348	-7.9%
35.8%	17,035	15,355	-1,680	-9.9%
37.0%	17,022	15,150	-1,873	-11.0%
38.3%	16,651	14,472	-2,179	-13.1%
39.5%	15,885	13,644	-2,241	-14.1%
40.7%	15,878	12,997	-2,881	-18.1%
42.0%	15,827	12,637	-3,190	-20.2%
43.2%	15,647	12,566	-3,081	-19.7%
44.4%	15,579	12,216	-3,363	-21.6%
45.7%	15,564	11,611	-3,954	-25.4%
46.9%	14,937	11,514	-3,423	-22.9%
48.1%	14,602	11,131	-3,471	-23.8%
49.4%	14,566	10,106	-4,460	-30.6%
50.6%	13,903	9,613	-4,290	-30.9%
51.9%	13,553	9,607	-3,945	-29.1%
53.1%	13,499	9,323	-4,176	-30.9%
54.3%	12,998	9,294	-3,704	-28.5%
55.6%	12,636	9,055	-3,581	-28.3%
56.8%	12,580	8,910	-3,670	-29.2%
58.0%	12,523	8,900	-3,623	-28.9%
59.3%	11,842	8,895	-2,948	-24.9%
60.5%	11,304	8,842	-2,462	-21.8%
61.7%	11,137	8,680	-2,456	-22.1%
63.0%	10,226	8,609	-1,616	-15.8%
64.2%	10,138	8,543	-1,595	-15.7%
65.4%	9,960	8,519	-1,441	-14.5%
66.7%	9,841	8,194	-1,647	-16.7%
67.9%	9,657	7,946	-1,711	-17.7%
69.1%	9,628	7,859	-1,770	-18.4%
70.4%	9,591	7,683	-1,908	-19.9%
71.6%	9,438	7,553	-1,885	-20.0%
72.8%	9,385	7,356	-2,028	-21.6%
74.1%	9,381	7,340	-2,041	-21.8%
75.3%	8,922	7,332	-1,590	-17.8%
76.5%	8,860	7,280	-1,580	-17.8%
77.8%	8,830	7,162	-1,668	-18.9%
79.0%	8,763	6,776	-1,987	-22.7%
80.2%	8,701	6,715	-1,986	-22.8%
81.5%	8,047	6,691	-1,357	-16.9%
82.7%	7,888	6,624	-1,264	-16.0%
84.0%	7,753	6,602	-1,150	-14.8%
85.2%	7,538	6,502	-1,036	-13.7%
86.4%	7,521	6,482	-1,039	-13.8%
87.7%	7,280	6,420	-861	-11.8%
88.9%	6,576	6,405	-172	-2.6%
90.1%	6,171	6,266	95	1.5%
91.4%	5,643	6,168	525	9.3%
92.6%	5,613	6,138	525	9.4%
93.8%	5,588	5,778	189	3.4%
95.1%	5,493	5,706	213	3.9%
96.3%	5,340	5,581	241	4.5%
97.5%	5,249	5,428	179	3.4%
98.8%	5,128	5,274	146	2.8%
100.0%	4,496	4,937	441	9.8%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,507	21,472	-36	-0.2%
1.2%	21,105	21,098	-7	0.0%
2.5%	20,913	20,914	1	0.0%
3.7%	20,459	20,496	37	0.2%
4.9%	20,290	19,263	-1,027	-5.1%
6.2%	18,944	18,788	-156	-0.8%
7.4%	18,789	18,668	-121	-0.6%
8.6%	18,682	18,561	-121	-0.6%
9.9%	18,594	18,170	-424	-2.3%
11.1%	17,947	17,966	20	0.1%
12.3%	17,717	17,617	-100	-0.6%
13.6%	17,636	17,017	-619	-3.5%
14.8%	17,460	16,998	-462	-2.6%
16.0%	17,400	16,959	-441	-2.5%
17.3%	17,207	16,956	-251	-1.5%
18.5%	16,918	16,309	-609	-3.6%
19.8%	16,309	14,861	-1,447	-8.9%
21.0%	15,000	13,343	-1,657	-11.0%
22.2%	14,081	12,071	-2,010	-14.3%
23.5%	13,340	11,368	-1,972	-14.8%
24.7%	13,300	10,393	-2,906	-21.9%
25.9%	12,909	9,655	-3,254	-25.2%
27.2%	10,970	9,613	-1,357	-12.4%
28.4%	9,544	9,102	-443	-4.6%
29.6%	9,152	8,926	-226	-2.5%
30.9%	8,860	8,674	-187	-2.1%
32.1%	8,760	8,455	-305	-3.5%
33.3%	8,576	7,788	-788	-9.2%
34.6%	7,848	6,478	-1,370	-17.5%
35.8%	7,742	6,314	-1,428	-18.4%
37.0%	6,549	6,271	-278	-4.2%
38.3%	6,539	6,264	-275	-4.2%
39.5%	6,491	6,054	-437	-6.7%
40.7%	6,271	5,973	-298	-4.7%
42.0%	6,128	5,967	-161	-2.6%
43.2%	5,941	5,943	2	0.0%
44.4%	5,830	5,863	33	0.6%
45.7%	5,666	5,823	157	2.8%
46.9%	5,648	5,753	105	1.9%
48.1%	5,547	5,545	-3	0.0%
49.4%	5,545	5,495	-50	-0.9%
50.6%	5,482	5,482	0	0.0%
51.9%	5,459	5,459	0	0.0%
53.1%	5,439	5,456	17	0.3%
54.3%	5,368	5,439	72	1.3%
55.6%	5,340	5,427	88	1.6%
56.8%	5,333	5,420	87	1.6%
58.0%	5,308	5,368	60	1.1%
59.3%	5,276	5,340	64	1.2%
60.5%	5,244	5,308	64	1.2%
61.7%	5,232	5,276	44	0.8%
63.0%	5,205	5,272	67	1.3%
64.2%	5,195	5,244	49	0.9%
65.4%	5,161	5,232	71	1.4%
66.7%	5,146	5,195	49	1.0%
67.9%	5,039	5,161	122	2.4%
69.1%	5,030	5,156	126	2.5%
70.4%	4,927	5,146	219	4.4%
71.6%	4,920	5,145	225	4.6%
72.8%	4,896	5,039	143	2.9%
74.1%	4,851	4,896	46	0.9%
75.3%	4,783	4,851	68	1.4%
76.5%	4,695	4,783	88	1.9%
77.8%	4,609	4,673	64	1.4%
79.0%	4,603	4,609	6	0.1%
80.2%	4,588	4,609	20	0.4%
81.5%	4,582	4,582	0	0.0%
82.7%	4,365	4,491	126	2.9%
84.0%	4,358	4,300	-58	-1.3%
85.2%	4,220	4,220	0	0.0%
86.4%	4,085	4,085	0	0.0%
87.7%	3,856	3,856	0	0.0%
88.9%	3,792	3,792	0	0.0%
90.1%	3,712	3,712	0	0.0%
91.4%	3,635	3,635	0	0.0%
92.6%	3,634	3,634	0	0.0%
93.8%	3,633	3,633	0	0.0%
95.1%	3,629	3,629	0	0.0%
96.3%	3,586	3,586	0	0.0%
97.5%	3,581	3,581	0	0.0%
98.8%	3,535	3,535	0	0.0%
100.0%	3,394	3,394	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,523	19,526	3	0.0%
1.2%	18,695	18,611	-84	-0.4%
2.5%	18,579	17,930	-649	-3.5%
3.7%	17,684	17,706	21	0.1%
4.9%	17,169	17,139	-30	-0.2%
6.2%	16,785	16,743	-43	-0.3%
7.4%	16,322	15,292	-1,030	-6.3%
8.6%	15,449	12,872	-2,577	-16.7%
9.9%	13,003	12,824	-179	-1.4%
11.1%	12,563	12,395	-168	-1.3%
12.3%	12,171	11,870	-301	-2.5%
13.6%	11,803	11,701	-102	-0.9%
14.8%	11,482	11,268	-214	-1.9%
16.0%	11,242	11,093	-150	-1.3%
17.3%	10,300	10,160	-140	-1.4%
18.5%	9,109	9,237	128	1.4%
19.8%	9,087	8,951	-136	-1.5%
21.0%	8,606	8,597	-10	-0.1%
22.2%	8,566	7,760	-806	-9.4%
23.5%	7,732	7,642	-90	-1.2%
24.7%	7,610	7,603	-7	-0.1%
25.9%	7,267	7,188	-79	-1.1%
27.2%	7,227	6,916	-311	-4.3%
28.4%	6,966	6,814	-152	-2.2%
29.6%	6,288	6,465	177	2.8%
30.9%	5,905	6,233	327	5.5%
32.1%	5,849	6,027	178	3.0%
33.3%	5,575	5,968	393	7.1%
34.6%	5,538	5,871	333	6.0%
35.8%	5,453	5,512	59	1.1%
37.0%	5,453	5,453	0	0.0%
38.3%	5,432	5,396	-36	-0.7%
39.5%	5,385	5,385	0	0.0%
40.7%	5,315	5,315	0	0.0%
42.0%	5,254	5,254	0	0.0%
43.2%	5,228	5,228	0	0.0%
44.4%	5,224	5,215	-9	-0.2%
45.7%	5,215	5,196	-19	-0.4%
46.9%	5,196	5,186	-10	-0.2%
48.1%	5,186	5,176	-10	-0.2%
49.4%	5,171	5,171	0	0.0%
50.6%	5,130	5,130	0	0.0%
51.9%	5,129	5,129	0	0.0%
53.1%	5,108	5,108	0	0.0%
54.3%	5,101	5,101	0	0.0%
55.6%	5,090	5,090	0	0.0%
56.8%	4,956	5,000	44	0.9%
58.0%	4,941	4,956	15	0.3%
59.3%	4,799	4,941	142	3.0%
60.5%	4,772	4,879	107	2.2%
61.7%	4,733	4,799	66	1.4%
63.0%	4,676	4,772	96	2.1%
64.2%	4,667	4,733	66	1.4%
65.4%	4,665	4,720	56	1.2%
66.7%	4,657	4,667	10	0.2%
67.9%	4,593	4,665	72	1.6%
69.1%	4,577	4,657	80	1.8%
70.4%	4,570	4,611	41	0.9%
71.6%	4,550	4,593	42	0.9%
72.8%	4,509	4,577	68	1.5%
74.1%	4,489	4,550	62	1.4%
75.3%	4,421	4,478	57	1.3%
76.5%	4,362	4,421	59	1.4%
77.8%	4,324	4,362	37	0.9%
79.0%	4,168	4,324	156	3.8%
80.2%	4,163	4,168	5	0.1%
81.5%	4,145	4,163	18	0.4%
82.7%	4,111	4,145	34	0.8%
84.0%	4,066	4,070	4	0.1%
85.2%	4,059	4,066	6	0.2%
86.4%	4,012	4,059	47	1.2%
87.7%	3,995	3,954	-41	-1.0%
88.9%	3,792	3,946	154	4.1%
90.1%	3,778	3,792	13	0.4%
91.4%	3,707	3,778	71	1.9%
92.6%	3,659	3,707	48	1.3%
93.8%	3,642	3,659	17	0.5%
95.1%	3,583	3,583	0	0.0%
96.3%	3,522	3,522	0	0.0%
97.5%	3,377	3,377	0	0.0%
98.8%	3,354	3,354	0	0.0%
100.0%	3,319	3,319	0	0.0%

Table SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,899	18,889	-11	-0.1%
1.2%	15,277	15,123	-154	-1.0%
2.5%	10,842	9,784	-1,058	-9.8%
3.7%	8,730	9,228	498	5.7%
4.9%	8,168	8,771	602	7.4%
6.2%	7,964	8,583	619	7.8%
7.4%	7,630	8,574	944	12.4%
8.6%	7,586	8,327	741	9.8%
9.9%	7,315	8,324	1,009	13.8%
11.1%	7,124	8,043	919	12.9%
12.3%	7,069	8,024	955	13.5%
13.6%	7,060	7,923	863	12.2%
14.8%	6,799	7,653	854	12.6%
16.0%	6,508	7,567	1,059	16.3%
17.3%	6,342	7,365	1,024	16.1%
18.5%	6,282	7,278	996	15.9%
19.8%	6,161	7,069	909	14.7%
21.0%	6,064	7,010	946	15.6%
22.2%	5,811	6,997	1,187	20.4%
23.5%	5,628	6,871	1,243	22.1%
24.7%	5,577	6,864	1,288	23.1%
25.9%	5,568	6,725	1,158	20.8%
27.2%	5,526	6,699	1,172	21.2%
28.4%	5,502	6,684	1,182	21.5%
29.6%	5,479	6,490	1,011	18.5%
30.9%	5,441	6,304	863	15.9%
32.1%	5,424	6,248	824	15.2%
33.3%	5,419	6,177	759	14.0%
34.6%	5,409	6,025	616	11.4%
35.8%	5,342	5,887	545	10.2%
37.0%	5,332	5,883	551	10.3%
38.3%	5,316	5,849	533	10.0%
39.5%	5,307	5,781	474	8.9%
40.7%	5,302	5,664	361	6.8%
42.0%	5,268	5,613	345	6.6%
43.2%	5,265	5,566	301	5.7%
44.4%	5,247	5,547	300	5.7%
45.7%	5,236	5,536	300	5.7%
46.9%	5,235	5,504	269	5.1%
48.1%	5,214	5,502	287	5.5%
49.4%	5,206	5,467	261	5.0%
50.6%	5,204	5,424	219	4.2%
51.9%	5,196	5,356	160	3.1%
53.1%	5,173	5,349	176	3.4%
54.3%	5,159	5,342	183	3.5%
55.6%	5,155	5,342	186	3.6%
56.8%	5,145	5,302	157	3.0%
58.0%	5,145	5,291	145	2.8%
59.3%	5,144	5,288	144	2.8%
60.5%	5,132	5,260	127	2.5%
61.7%	5,131	5,247	116	2.3%
63.0%	5,128	5,214	86	1.7%
64.2%	5,124	5,204	81	1.6%
65.4%	5,110	5,173	63	1.2%
66.7%	5,098	5,167	69	1.4%
67.9%	5,092	5,155	63	1.2%
69.1%	5,049	5,145	96	1.9%
70.4%	4,927	5,144	217	4.4%
71.6%	4,854	5,132	278	5.7%
72.8%	4,849	5,128	279	5.8%
74.1%	4,793	5,128	334	7.0%
75.3%	4,782	5,124	342	7.1%
76.5%	4,751	5,110	359	7.6%
77.8%	4,746	5,098	353	7.4%
79.0%	4,632	5,000	368	7.9%
80.2%	4,591	5,000	409	8.9%
81.5%	4,582	5,000	418	9.1%
82.7%	4,536	5,000	464	10.2%
84.0%	4,411	5,000	589	13.4%
85.2%	4,245	4,980	734	17.3%
86.4%	4,238	4,882	643	15.2%
87.7%	4,171	4,793	622	14.9%
88.9%	4,141	4,782	641	15.5%
90.1%	4,126	4,766	640	15.5%
91.4%	4,084	4,607	523	12.8%
92.6%	3,768	4,591	824	21.9%
93.8%	3,661	4,154	494	13.5%
95.1%	3,598	4,141	543	15.1%
96.3%	3,585	3,971	386	10.8%
97.5%	3,579	3,940	361	10.1%
98.8%	3,507	3,768	260	7.4%
100.0%	3,397	3,738	341	10.0%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,738	11,095	357	3.3%
1.2%	10,509	10,757	247	2.4%
2.5%	9,427	10,701	1,273	13.5%
3.7%	9,125	10,581	1,456	16.0%
4.9%	8,876	10,475	1,600	18.0%
6.2%	8,675	10,371	1,696	19.5%
7.4%	8,518	10,343	1,824	21.4%
8.6%	8,443	10,190	1,747	20.7%
9.9%	8,395	10,166	1,772	21.1%
11.1%	8,365	10,134	1,769	21.2%
12.3%	8,344	10,033	1,690	20.2%
13.6%	8,341	10,030	1,689	20.3%
14.8%	8,336	9,804	1,468	17.6%
16.0%	8,325	9,783	1,458	17.5%
17.3%	8,284	9,783	1,499	18.1%
18.5%	8,195	9,757	1,562	19.1%
19.8%	8,086	9,656	1,571	19.4%
21.0%	8,002	9,654	1,652	20.6%
22.2%	7,921	9,585	1,664	21.0%
23.5%	7,902	9,425	1,523	19.3%
24.7%	7,843	9,088	1,245	15.9%
25.9%	7,712	9,002	1,290	16.7%
27.2%	7,712	8,988	1,276	16.5%
28.4%	7,668	8,907	1,239	16.2%
29.6%	7,616	8,774	1,158	15.2%
30.9%	7,604	8,708	1,104	14.5%
32.1%	7,601	8,648	1,047	13.8%
33.3%	7,498	8,614	1,116	14.9%
34.6%	7,418	8,589	1,171	15.8%
35.8%	7,385	8,574	1,189	16.1%
37.0%	7,305	8,461	1,156	15.8%
38.3%	7,292	8,444	1,152	15.8%
39.5%	7,195	8,432	1,237	17.2%
40.7%	7,083	8,367	1,284	18.1%
42.0%	6,998	8,246	1,249	17.8%
43.2%	6,960	8,138	1,178	16.9%
44.4%	6,960	8,060	1,100	15.8%
45.7%	6,903	8,051	1,148	16.6%
46.9%	6,823	8,034	1,211	17.7%
48.1%	6,728	7,983	1,255	18.7%
49.4%	6,672	7,892	1,220	18.3%
50.6%	6,626	7,834	1,208	18.2%
51.9%	6,615	7,829	1,214	18.4%
53.1%	6,591	7,818	1,227	18.6%
54.3%	6,567	7,814	1,248	19.0%
55.6%	6,183	7,807	1,624	26.3%
56.8%	6,131	7,418	1,287	21.0%
58.0%	5,973	7,352	1,379	23.1%
59.3%	5,906	7,171	1,265	21.4%
60.5%	5,890	7,072	1,182	20.1%
61.7%	5,864	7,037	1,173	20.0%
63.0%	5,742	6,994	1,252	21.8%
64.2%	5,724	6,973	1,249	21.8%
65.4%	5,688	6,956	1,268	22.3%
66.7%	5,679	6,938	1,259	22.2%
67.9%	5,590	6,826	1,235	22.1%
69.1%	5,582	6,794	1,212	21.7%
70.4%	5,575	6,771	1,195	21.4%
71.6%	5,486	6,769	1,283	23.4%
72.8%	5,185	6,678	1,493	28.8%
74.1%	5,172	6,599	1,428	27.6%
75.3%	5,169	6,578	1,409	27.3%
76.5%	5,142	6,545	1,403	27.3%
77.8%	5,137	6,450	1,313	25.6%
79.0%	5,129	6,261	1,132	22.1%
80.2%	5,129	6,260	1,131	22.1%
81.5%	5,117	6,208	1,090	21.3%
82.7%	5,111	6,064	953	18.7%
84.0%	5,107	5,689	581	11.4%
85.2%	5,104	5,673	569	11.2%
86.4%	5,102	5,646	544	10.7%
87.7%	5,089	5,603	514	10.1%
88.9%	5,080	5,222	142	2.8%
90.1%	4,954	5,212	258	5.2%
91.4%	4,892	5,135	242	4.9%
92.6%	4,884	5,129	246	5.0%
93.8%	4,597	5,127	529	11.5%
95.1%	4,574	5,107	533	11.6%
96.3%	4,513	5,089	576	12.8%
97.5%	3,541	5,080	1,539	43.4%
98.8%	3,502	4,687	1,185	33.8%
100.0%	3,308	4,520	1,212	36.6%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,550	10,393	-157	-1.5%
1.2%	9,079	8,928	-151	-1.7%
2.5%	8,743	8,907	164	1.9%
3.7%	8,369	8,382	13	0.2%
4.9%	8,241	8,290	49	0.6%
6.2%	7,936	8,268	332	4.2%
7.4%	7,618	7,842	224	2.9%
8.6%	7,484	7,831	347	4.6%
9.9%	7,448	7,613	165	2.2%
11.1%	7,423	7,540	117	1.6%
12.3%	7,189	7,486	297	4.1%
13.6%	6,893	7,437	544	7.9%
14.8%	6,861	7,396	535	7.8%
16.0%	6,725	7,353	627	9.3%
17.3%	6,690	7,256	566	8.5%
18.5%	6,494	7,240	747	11.5%
19.8%	6,364	7,050	686	10.8%
21.0%	6,273	7,022	749	11.9%
22.2%	6,165	6,963	798	12.9%
23.5%	6,060	6,960	900	14.9%
24.7%	5,764	6,897	1,134	19.7%
25.9%	5,756	6,889	1,133	19.7%
27.2%	5,732	6,712	980	17.1%
28.4%	5,728	6,541	813	14.2%
29.6%	5,701	6,504	803	14.1%
30.9%	5,528	6,490	962	17.4%
32.1%	5,430	6,481	1,051	19.4%
33.3%	5,400	6,475	1,076	19.9%
34.6%	5,394	6,445	1,051	19.5%
35.8%	5,309	6,370	1,061	20.0%
37.0%	5,309	6,283	974	18.3%
38.3%	5,291	6,152	861	16.3%
39.5%	5,161	6,138	977	18.9%
40.7%	5,122	6,089	967	18.9%
42.0%	5,087	6,029	942	18.5%
43.2%	5,080	5,878	798	15.7%
44.4%	5,070	5,783	713	14.1%
45.7%	5,066	5,782	715	14.1%
46.9%	5,062	5,735	673	13.3%
48.1%	5,061	5,703	642	12.7%
49.4%	5,055	5,606	551	10.9%
50.6%	5,052	5,533	480	9.5%
51.9%	5,033	5,525	492	9.8%
53.1%	5,030	5,395	365	7.3%
54.3%	5,029	5,342	313	6.2%
55.6%	5,029	5,339	310	6.2%
56.8%	5,029	5,326	297	5.9%
58.0%	5,024	5,321	296	5.9%
59.3%	5,023	5,314	291	5.8%
60.5%	5,019	5,238	219	4.4%
61.7%	5,018	5,217	199	4.0%
63.0%	5,016	5,180	164	3.3%
64.2%	5,012	5,161	148	3.0%
65.4%	5,012	5,126	114	2.3%
66.7%	5,011	5,114	103	2.0%
67.9%	5,008	5,106	99	2.0%
69.1%	4,736	5,106	370	7.8%
70.4%	4,725	5,105	380	8.0%
71.6%	4,697	5,070	373	7.9%
72.8%	4,655	5,066	411	8.8%
74.1%	4,626	5,061	435	9.4%
75.3%	4,555	5,055	499	11.0%
76.5%	4,533	5,044	511	11.3%
77.8%	4,530	5,041	511	11.3%
79.0%	4,510	5,036	526	11.7%
80.2%	4,510	5,035	525	11.6%
81.5%	4,505	5,030	525	11.6%
82.7%	4,487	5,029	542	12.1%
84.0%	4,337	5,029	691	15.9%
85.2%	4,238	5,023	784	18.5%
86.4%	4,197	5,019	822	19.6%
87.7%	4,101	5,018	918	22.4%
88.9%	4,038	5,012	974	24.1%
90.1%	4,021	5,012	991	24.6%
91.4%	4,017	5,011	994	24.7%
92.6%	4,013	5,000	987	24.6%
93.8%	4,009	5,000	991	24.7%
95.1%	3,796	4,803	1,007	26.5%
96.3%	3,679	4,788	1,109	30.1%
97.5%	3,517	4,533	1,017	28.9%
98.8%	3,509	4,510	1,002	28.5%
100.0%	3,505	3,517	12	0.4%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,000	15,202	202	1.3%
1.2%	15,000	15,042	42	0.3%
2.5%	15,000	15,040	40	0.3%
3.7%	15,000	15,028	28	0.2%
4.9%	15,000	15,000	0	0.0%
6.2%	15,000	15,000	0	0.0%
7.4%	15,000	15,000	0	0.0%
8.6%	14,561	15,000	439	3.0%
9.9%	14,155	15,000	845	6.0%
11.1%	13,415	15,000	1,585	11.8%
12.3%	13,407	14,834	1,427	10.6%
13.6%	13,171	14,040	869	6.6%
14.8%	13,035	13,826	792	6.1%
16.0%	13,016	13,780	765	5.9%
17.3%	12,964	13,467	503	3.9%
18.5%	12,641	13,414	773	6.1%
19.8%	12,554	13,302	749	6.0%
21.0%	12,348	13,218	870	7.0%
22.2%	12,288	12,977	689	5.6%
23.5%	12,277	12,931	654	5.3%
24.7%	11,974	12,893	919	7.7%
25.9%	11,893	12,684	790	6.6%
27.2%	11,740	12,425	685	5.8%
28.4%	11,733	11,751	18	0.2%
29.6%	10,943	10,608	-334	-3.1%
30.9%	10,880	10,589	-290	-2.7%
32.1%	10,372	10,366	-7	-0.1%
33.3%	10,306	10,258	-48	-0.5%
34.6%	10,289	9,511	-778	-7.6%
35.8%	8,654	9,259	605	7.0%
37.0%	8,294	8,965	671	8.1%
38.3%	8,231	8,799	568	6.9%
39.5%	8,181	8,575	395	4.8%
40.7%	8,061	8,381	319	4.0%
42.0%	7,456	8,370	914	12.3%
43.2%	7,284	8,364	1,080	14.8%
44.4%	6,725	8,123	1,398	20.8%
45.7%	6,495	7,692	1,196	18.4%
46.9%	6,340	7,553	1,213	19.1%
48.1%	6,283	7,549	1,265	20.1%
49.4%	6,192	7,502	1,309	21.1%
50.6%	5,828	7,369	1,541	26.4%
51.9%	5,704	7,276	1,572	27.6%
53.1%	5,525	7,144	1,619	29.3%
54.3%	5,373	7,050	1,677	31.2%
55.6%	5,354	7,045	1,691	31.6%
56.8%	5,352	6,955	1,603	30.0%
58.0%	5,326	6,928	1,602	30.1%
59.3%	5,286	6,885	1,599	30.2%
60.5%	5,213	6,843	1,629	31.3%
61.7%	5,176	6,748	1,572	30.4%
63.0%	5,134	6,729	1,595	31.1%
64.2%	5,073	6,680	1,607	31.7%
65.4%	5,064	6,653	1,589	31.4%
66.7%	5,019	6,535	1,515	30.2%
67.9%	4,785	6,435	1,651	34.5%
69.1%	4,726	6,343	1,617	34.2%
70.4%	4,698	6,342	1,644	35.0%
71.6%	4,596	6,280	1,685	36.7%
72.8%	4,571	6,263	1,692	37.0%
74.1%	4,566	6,198	1,632	35.8%
75.3%	4,554	6,110	1,556	34.2%
76.5%	4,545	6,069	1,525	33.5%
77.8%	4,526	6,020	1,494	33.0%
79.0%	4,513	5,971	1,458	32.3%
80.2%	4,424	5,886	1,462	33.1%
81.5%	4,304	5,736	1,432	33.3%
82.7%	4,201	5,667	1,465	34.9%
84.0%	4,075	5,557	1,482	36.4%
85.2%	4,061	5,457	1,397	34.4%
86.4%	4,041	5,273	1,232	30.5%
87.7%	4,019	5,245	1,225	30.5%
88.9%	4,017	5,121	1,105	27.5%
90.1%	4,007	5,070	1,063	26.5%
91.4%	4,006	5,000	994	24.8%
92.6%	4,000	4,833	832	20.8%
93.8%	3,809	4,716	907	23.8%
95.1%	3,616	4,526	909	25.1%
96.3%	3,539	4,317	778	22.0%
97.5%	3,512	4,205	693	19.7%
98.8%	3,505	3,686	181	5.2%
100.0%	3,360	3,512	152	4.5%

Figure SW-16-b
Sacramento River at Verona, Monthly Flow
Probability of Exceedance

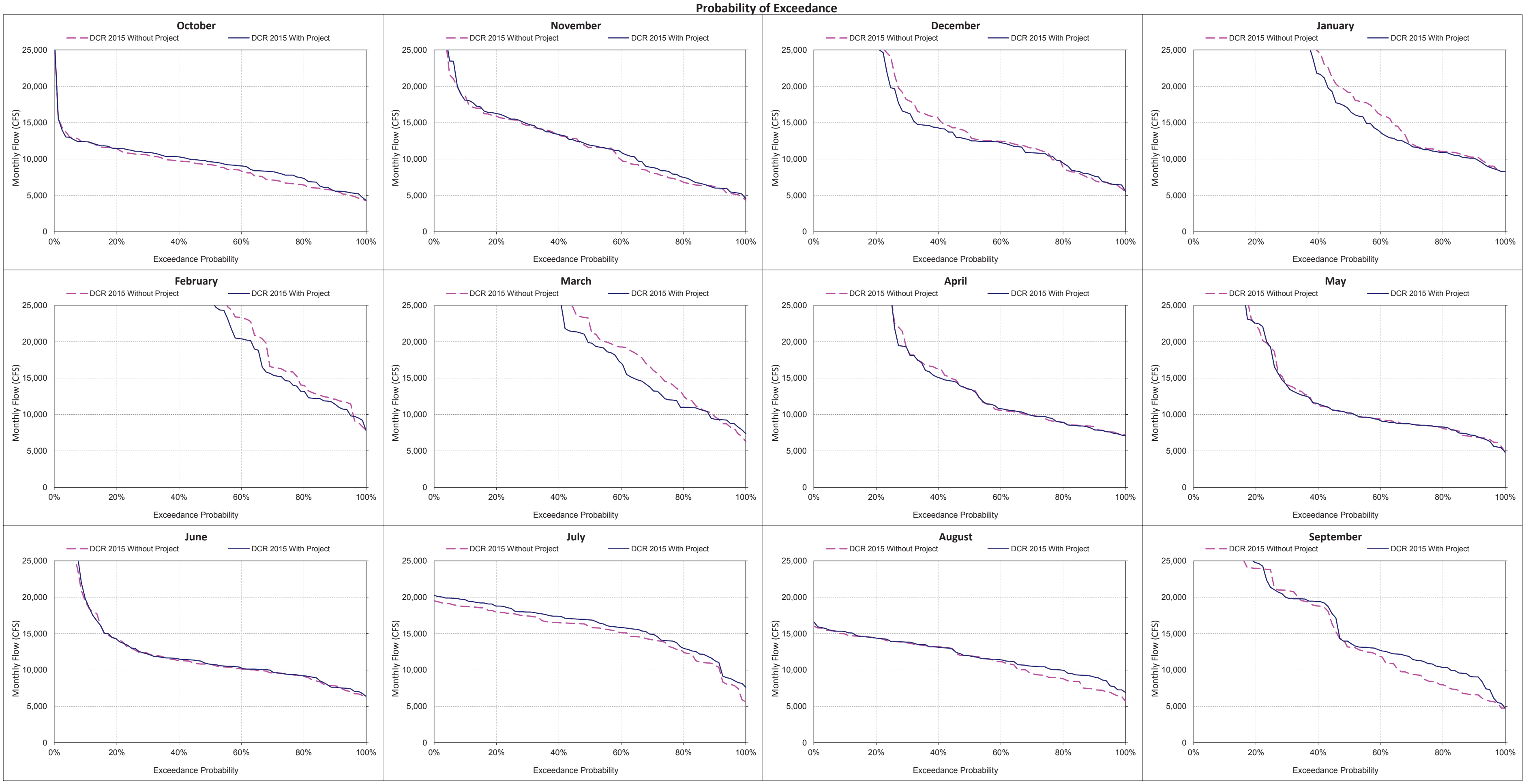


Table SW-16-b

Sacramento River at Verona, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,508	26,727	220	0.8%
1.2%	15,599	15,553	-47	-0.3%
2.5%	14,357	13,955	-402	-2.8%
3.7%	13,727	13,053	-674	-4.9%
4.9%	13,030	12,993	-38	-0.3%
6.2%	12,954	12,679	-275	-2.1%
7.4%	12,837	12,444	-393	-3.1%
8.6%	12,441	12,433	-8	-0.1%
9.9%	12,391	12,406	15	0.1%
11.1%	12,287	12,367	80	0.7%
12.3%	12,171	12,154	-18	-0.1%
13.6%	11,873	12,006	134	1.1%
14.8%	11,651	11,840	189	1.6%
16.0%	11,619	11,810	191	1.6%
17.3%	11,608	11,752	144	1.2%
18.5%	11,529	11,501	-27	-0.2%
19.8%	11,465	11,470	5	0.0%
21.0%	11,202	11,466	263	2.4%
22.2%	10,882	11,420	539	4.9%
23.5%	10,833	11,280	447	4.1%
24.7%	10,774	11,217	443	4.1%
25.9%	10,681	11,094	414	3.9%
27.2%	10,681	11,079	398	3.7%
28.4%	10,626	10,952	326	3.1%
29.6%	10,589	10,913	324	3.1%
30.9%	10,412	10,888	477	4.6%
32.1%	10,377	10,779	402	3.9%
33.3%	10,310	10,691	381	3.7%
34.6%	10,124	10,493	370	3.7%
35.8%	9,909	10,377	467	4.7%
37.0%	9,866	10,368	502	5.1%
38.3%	9,837	10,363	526	5.3%
39.5%	9,796	10,340	544	5.5%
40.7%	9,713	10,262	549	5.7%
42.0%	9,663	10,134	471	4.9%
43.2%	9,633	9,999	366	3.8%
44.4%	9,516	9,947	431	4.5%
45.7%	9,373	9,896	523	5.6%
46.9%	9,338	9,838	500	5.4%
48.1%	9,258	9,835	576	6.2%
49.4%	9,233	9,633	401	4.3%
50.6%	9,208	9,604	397	4.3%
51.9%	9,094	9,557	463	5.1%
53.1%	8,893	9,454	561	6.3%
54.3%	8,822	9,339	517	5.9%
55.6%	8,572	9,207	636	7.4%
56.8%	8,556	9,190	634	7.4%
58.0%	8,553	9,162	609	7.1%
59.3%	8,499	9,082	583	6.9%
60.5%	8,249	9,049	800	9.7%
61.7%	8,114	8,931	817	10.1%
63.0%	8,112	8,581	469	5.8%
64.2%	7,680	8,419	739	9.6%
65.4%	7,669	8,414	745	9.7%
66.7%	7,592	8,378	786	10.3%
67.9%	7,231	8,312	1,082	15.0%
69.1%	7,126	8,302	1,177	16.5%
70.4%	7,125	8,250	1,126	15.8%
71.6%	7,028	8,108	1,080	15.4%
72.8%	6,932	7,960	1,028	14.8%
74.1%	6,716	7,810	1,095	16.3%
75.3%	6,664	7,786	1,122	16.8%
76.5%	6,612	7,780	1,168	17.7%
77.8%	6,528	7,532	1,004	15.4%
79.0%	6,521	7,491	970	14.9%
80.2%	6,421	7,288	867	13.5%
81.5%	6,123	6,898	775	12.7%
82.7%	6,067	6,863	796	13.1%
84.0%	6,020	6,819	799	13.3%
85.2%	5,990	6,286	296	4.9%
86.4%	5,865	6,124	259	4.4%
87.7%	5,821	6,101	281	4.8%
88.9%	5,757	5,794	37	0.6%
90.1%	5,522	5,584	62	1.1%
91.4%	5,479	5,576	97	1.8%
92.6%	5,177	5,558	381	7.4%
93.8%	5,169	5,482	314	6.1%
95.1%	4,989	5,369	380	7.6%
96.3%	4,845	5,296	451	9.3%
97.5%	4,628	5,236	608	13.1%
98.8%	4,462	4,741	279	6.2%
100.0%	4,314	4,349	35	0.8%

November				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,745	42,044	299	0.7%
1.2%	40,642	40,727	85	0.2%
2.5%	27,544	27,803	259	0.9%
3.7%	26,334	27,022	688	2.6%
4.9%	21,617	23,489	1,872	8.7%
6.2%	21,045	23,452	2,408	11.4%
7.4%	19,977	19,983	7	0.0%
8.6%	18,939	18,901	-38	-0.2%
9.9%	18,799	18,115	-684	-3.6%
11.1%	17,481	18,064	583	3.3%
12.3%	17,155	17,777	622	3.6%
13.6%	16,996	17,300	304	1.8%
14.8%	16,985	17,161	176	1.0%
16.0%	16,224	16,602	378	2.3%
17.3%	16,215	16,415	199	1.2%
18.5%	16,031	16,408	377	2.4%
19.8%	15,977	16,298	321	2.0%
21.0%	15,681	16,169	488	3.1%
22.2%	15,625	16,005	380	2.4%
23.5%	15,478	15,756	278	1.8%
24.7%	15,414	15,502	89	0.6%
25.9%	15,381	15,492	111	0.7%
27.2%	15,357	15,347	-10	-0.1%
28.4%	14,832	15,111	279	1.9%
29.6%	14,648	14,894	246	1.7%
30.9%	14,619	14,699	80	0.5%
32.1%	14,364	14,625	262	1.8%
33.3%	14,198	14,163	-35	-0.2%
34.6%	14,082	14,138	55	0.4%
35.8%	14,029	13,770	-259	-1.8%
37.0%	13,879	13,746	-132	-1.0%
38.3%	13,667	13,532	-136	-1.0%
39.5%	13,295	13,441	146	1.1%
40.7%	13,190	13,299	109	0.8%
42.0%	13,069	13,183	114	0.9%
43.2%	13,043	12,711	-332	-2.5%
44.4%	12,856	12,692	-164	-1.3%
45.7%	12,821	12,468	-353	-2.8%
46.9%	12,205	12,383	179	1.5%
48.1%	11,950	12,167	217	1.8%
49.4%	11,626	11,960	334	2.9%
50.6%	11,625	11,860	235	2.0%
51.9%	11,624	11,799	174	1.5%
53.1%	11,594	11,635	41	0.4%
54.3%	11,552	11,577	25	0.2%
55.6%	11,543	11,443	-100	-0.9%
56.8%	11,517	11,378	-139	-1.2%
58.0%	10,924	11,193	270	2.5%
59.3%	10,153	11,191	1,038	10.2%
60.5%	9,721	10,799	1,078	11.1%
61.7%	9,623	10,561	938	9.7%
63.0%	9,351	10,398	1,047	11.2%
64.2%	9,276	10,315	1,039	11.2%
65.4%	9,234	9,724	490	5.3%
66.7%	8,561	9,641	1,080	12.6%
67.9%	8,513	9,000	487	5.7%
69.1%	8,199	8,907	709	8.6%
70.4%	8,022	8,832	810	10.1%
71.6%	7,969	8,697	728	9.1%
72.8%	7,759	8,407	648	8.4%
74.1%	7,742	8,387	644	8.3%
75.3%	7,413	8,296	883	11.9%
76.5%	7,370	7,945	575	7.8%
77.8%	7,206	7,891	684	9.5%
79.0%	7,023	7,572	549	7.8%
80.2%	6,780	7,480	700	10.3%
81.5%	6,674	7,339	665	10.0%
82.7%	6,534	7,056	522	8.0%
84.0%	6,446	6,771	325	5.0%
85.2%	6,391	6,680	289	4.5%
86.4%	6,377	6,536	160	2.5%
87.7%	6,347	6,409	62	1.0%
88.9%	6,321	6,202	-119	-1.9%
90.1%	6,210	6,029	-181	-2.9%
91.4%	5,932	6,018	86	1.5%
92.6%	5,910	5,963	54	0.9%
93.8%	5,361	5,962	601	11.2%
95.1%	5,279	5,466	187	3.5%
96.3%	5,197	5,415	217	4.2%
97.5%	5,106	5,317	211	4.1%
98.8%	4,786	5,187	401	8.4%
100.0%	4,350	4,537	187	4.3%

December				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	62,193	61,789	-404	-0.7%
1.2%	53,845	54,398	553	1.0%
2.5%	51,835	49,431	-2,405	-4.6%
3.7%	50,159	49,036	-1,123	-2.2%
4.9%	49,546	45,967	-3,579	-7.2%
6.2%	45,983	45,630	-353	-0.8%
7.4%	45,182	44,694	-488	-1.1%
8.6%	40,832	39,793	-1,040	-2.5%
9.9%	39,825	38,607	-1,219	-3.1%
11.1%	38,971	37,037	-1,934	-5.0%
12.3%	34,209	34,281	71	0.2%
13.6%	33,785	33,991	207	0.6%
14.8%	31,718	32,501	783	2.5%
16.0%	31,217	30,418	-798	-2.6%
17.3%	29,931	29,795	-136	-0.5%
18.5%	28,553	28,594	41	0.1%
19.8%	27,354	27,696	342	1.3%
21.0%	25,827	25,013	-814	-3.2%
22.2%	25,245	24,615	-630	-2.5%
23.5%	24,604	21,845	-2,759	-11.2%
24.7%	24,044	19,806	-4,238	-17.6%
25.9%	21,554	19,660	-1,894	-8.8%
27.2%	19,786	17,722	-2,065	-10.4%
28.4%	19,179	16,616	-2,563	-13.4%
29.6%	18,212	16,433	-1,779	-9.8%
30.9%	17,968	16,199	-1,770	-9.8%
32.1%	17,659	15,201	-2,458	-13.9%
33.3%	16,547	14,735	-1,812	-11.0%
34.6%	16,398	14,724	-1,675	-10.2%
35.8%	16,190	14,656	-1,534	-9.5%
37.0%	15,957	14,622	-1,335	-8.4%
38.3%	15,856	14,395	-1,461	-9.2%
39.5%	15,835	14,359	-1,476	-9.3%
40.7%	15,151	14,190	-961	-6.3%
42.0%	14,681	14,139	-542	-3.7%
43.2%	14,614	13,718	-896	-6.1%
44.4%	14,306	13,713	-593	-4.1%
45.7%	14,303	12,972	-1,331	-9.3%
46.9%	14,108	12,954	-1,153	-8.2%
48.1%	13,961	12,817	-1,144	-8.2%
49.4%	13,634	12,715	-919	-6.7%
50.6%	12,835	12,509	-325	-2.5%
51.9%	12,742	12,501	-241	-1.9%
53.1%	12,627	12,450	-177	-1.4%
54.3%	12,507	12,450	-57	-0.5%
55.6%	12,501	12,437	-64	-0.5%
56.8%	12,500	12,424	-76	-0.6%
58.0%	12,487	12,386	-101	-0.8%
59.3%	12,455	12,369	-87	-0.7%
60.5%	12,450	12,226	-224	-1.8%
61.7%	12,435	12,111	-324	-2.6%
63.0%	12,224	11,918	-306	-2.5%
64.2%	12,077	11,752	-326	-2.7%
65.4%	11,941	11,702	-239	-2.0%
66.7%	11,917	11,648	-269	-2.3%
67.9%	11,765	10,919	-847	-7.2%
69.1%	11,553	10,884	-670	-5.8%
70.4%	11,529	10,875	-654	-5.7%
71.6%	11,380	10,837	-543	-4.8%
72.8%	11,173	10,801	-372	-3.3%
74.1%	10,993	10,794	-200	-1.8%
75.3%	10,747	10,423	-324	-3.0%
76.5%	9,911	10,404	493	5.0%
77.8%	9,840	9,861	21	0.2%
79.0%	9,831	9,747	-84	-0.9%
80.2%	8,598	9,358	760	8.8%
81.5%	8,416	9,049	633	7.5%
82.7%	8,240	8,474	234	2.8%
84.0%	8,236	8,368	131	1.6%
85.2%	8,010	8,300	290	3.6%
86.4%	7,779	8,037	258	3.3%
87.7%	7,518	8,034	516	6.9%
88.9%	7,516	7,845	329	4.4%
90.1%	7,042	7,656	613	8.7%
91.4%	6,867	7,541	674	9.8%
92.6%	6,814	6,910	97	1.4%
93.8%	6,797	6,820	23	0.3%
95.1%	6,581	6,617	36	0.5%
96.3%	6,446	6,523	77	1.2%
97.5%	6,362	6,497	135	2.1%
98.8%	5,961	6,426	465	7.8%
100.0%	5,508	5,566	58	1.1%

January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	71,146	71,138	-8	0.0%
1.2%	70,133	70,158	25	0.0%
2.5%	62,567	62,591	25	0.0%
3.7%	61,795	61,196	-599	-1.0%
4.9%	58,308	57,872	-436	-0.7%
6.2%	58,038	57,807	-231	-0.4%
7.4%	56,688	55,644	-1,043	-1.8%
8.6%	52,559	53,434	875	1.7%
9.9%	52,485	52,619	134	0.3%
11.1%	51,666	49,488	-2,178	-4.2%
12.3%	50,875	49,165	-1,710	-3.4%
13.6%	50,090	48,162	-1,928	-3.8%
14.8%	49,095	47,940	-1,156	-2.4%
16.0%	47,937	47,730	-207	-0.4%
17.3%	47,506	46,033	-1,473	-3.1%
18.5%	47,075	45,808	-1,268	-2.7%
19.8%	45,925	44,935	-990	-2.2%
21.0%	44,246	42,923	-1,323	-3.0%
22.2%	43,915	42,613	-1,301	-3.0%
23.5%	42,286	40,771	-1,515	-3.6%
24.7%	41,259	40,669	-590	-1.4%
25.9%	40,715	40,403	-312	-0.8%
27.2%	40,323	40,358	35	0.1%
28.4%	39,572	35,171	-4,401	-11.1%
29.6%	36,779	33,910	-2,869	-7.8%
30.9%	33,988	32,684	-1,304	-3.8%
32.1%	33,262	31,784	-1,478	-4.4%
33.3%	31,785	31,025	-760	-2.4%
34.6%	29,976	27,326	-2,650	-8.8%
35.8%	29,562	26,424	-3,137	-10.6%
37.0%	27,126	25,638	-1,488	-5.5%
38.3%	25,467	23,887	-1,580	-6.2%
39.5%	24,967	21,813	-3,154	-12.6%
40.7%	24,530	21,622	-2,908	-11.9%
42.0%	22,997	21,188	-1,809	-7.9%
43.2%	22,553	19,769	-2,784	-12.3%
44.4%	21,219	19,295	-1,923	-9.1%
45.7%	20,355	17,734	-2,621	-12.9%
46.9%	19,837	17,603	-2,234	-11.3%
48.1%	19,675	17,380	-2,295	-11.7%
49.4%	19,228	17,074	-2,154	-11.2%
50.6%	19,115	16,422	-2,694	-14.1%
51.9%	18,099	16,073	-2,026	-11.2%
53.1%	17,962	15,893	-2,069	-11.5%
54.3%	17,830	15,809	-2,021	-11.3%
55.6%	17,729	14,895	-2,834	-16.0%
56.8%	17,421	14,877	-2,545	-14.6%
58.0%	16,894	14,299	-2,595	-15.4%
59.3%	16,264	13,968	-2,296	-14.1%
60.5%	15,967	13,490	-2,478	-15.5%
61.7%	15,870	13,183	-2,687	-16.9%
63.0%	15,576	12,935	-2,642	-17.0%
64.2%	14,591	12,849	-1,742	-11.9%
65.4%	14,533	12,570	-1,963	-13.5%
66.7%	13,868	12,566	-1,302	-9.4%
67.9%	13,316	12,293	-1,023	-7.7%
69.1%	12,155	12,034	-122	-1.0%
70.4%	12,034	11,687	-347	-2.9%
71.6%	11,701	11,618	-83	-0.7%
72.8%	11,598	11,453	-145	-1.2%
74.1%	11,569	11,301	-268	-2.3%
75.3%	11,412	11,295	-117	-1.0%
76.5%	11,399	11,110	-289	-2.5%
77.8%	11,306	11,045	-261	-2.3%
79.0%	11,084	10,947	-138	-1.2%
80.2%	11,062	10,943	-119	-1.1%
81.5%	11,021	10,863	-158	-1.4%
82.7%	10,971	10,663	-307	-2.8%
84.0%	10,909	10,502	-406	-3.7%
85.2%	10,766	10,453	-313	-2.9%
86.4%	10,532	10,208	-324	-3.1%
87.7%	10,437	10,202	-235	-2.3%
88.9%	10,274	10,123	-150	-1.5%
90.1%	10,259	10,119	-141	-1.4%
91.4%	10,238	9,826	-412	-4.0%
92.6%	9,808	9,516	-291	-3.0%
93.8%	9,474	9,099	-375	-4.0%
95.1%	9,027	8,849	-178	-2.0%
96.3%	9,012	8,692	-320	-3.6%
97.5%	8,524	8,500	-24	-0.3%
98.8%	8,316	8,281	-36	-0.4%
100.0%	8,264	8,250	-14	-0.2%

Table SW-16-b

Sacramento River at Verona, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	72,374	72,621	248	0.3%
1.2%	65,798	68,008	2,210	3.4%
2.5%	63,829	66,379	2,550	4.0%
3.7%	63,225	63,216	-8	0.0%
4.9%	61,008	60,977	-31	-0.1%
6.2%	60,295	60,435	140	0.2%
7.4%	59,902	59,913	11	0.0%
8.6%	59,043	58,462	-581	-1.0%
9.9%	58,518	58,180	-338	-0.6%
11.1%	58,264	58,165	-99	-0.2%
12.3%	57,476	57,598	122	0.2%
13.6%	56,679	56,393	-286	-0.5%
14.8%	56,349	56,180	-170	-0.3%
16.0%	55,960	55,944	-15	0.0%
17.3%	55,612	54,568	-1,044	-1.9%
18.5%	54,870	54,302	-568	-1.0%
19.8%	53,000	51,512	-1,488	-2.8%
21.0%	49,607	47,435	-2,172	-4.4%
22.2%	47,634	45,869	-1,765	-3.7%
23.5%	46,146	45,517	-628	-1.4%
24.7%	45,130	45,121	-9	0.0%
25.9%	45,081	44,342	-739	-1.6%
27.2%	44,816	43,594	-1,222	-2.7%
28.4%	43,619	42,785	-834	-1.9%
29.6%	43,322	41,328	-1,994	-4.6%
30.9%	42,525	41,111	-1,413	-3.3%
32.1%	41,649	40,984	-665	-1.6%
33.3%	41,310	39,835	-1,475	-3.6%
34.6%	40,938	38,930	-2,008	-4.9%
35.8%	39,804	38,858	-946	-2.4%
37.0%	39,778	38,826	-952	-2.4%
38.3%	39,651	38,308	-1,343	-3.4%
39.5%	38,206	37,810	-396	-1.0%
40.7%	37,249	36,886	-363	-1.0%
42.0%	35,126	34,739	-387	-1.1%
43.2%	34,895	32,090	-2,805	-8.0%
44.4%	34,044	31,562	-2,481	-7.3%
45.7%	32,881	30,343	-2,538	-7.7%
46.9%	31,592	30,075	-1,517	-4.8%
48.1%	31,548	27,676	-3,872	-12.3%
49.4%	29,075	25,698	-3,377	-11.6%
50.6%	28,759	25,432	-3,327	-11.6%
51.9%	26,976	24,720	-2,257	-8.4%
53.1%	26,636	24,343	-2,293	-8.6%
54.3%	26,277	24,336	-1,941	-7.4%
55.6%	24,816	23,223	-1,592	-6.4%
56.8%	24,368	21,753	-2,615	-10.7%
58.0%	23,408	20,493	-2,914	-12.5%
59.3%	23,380	20,439	-2,941	-12.6%
60.5%	23,208	20,366	-2,842	-12.2%
61.7%	23,097	20,230	-2,868	-12.4%
63.0%	22,780	20,189	-2,591	-11.4%
64.2%	20,879	18,998	-1,881	-9.0%
65.4%	20,785	18,835	-1,950	-9.4%
66.7%	20,397	16,530	-3,867	-19.0%
67.9%	19,807	15,845	-3,962	-20.0%
69.1%	16,582	15,644	-938	-5.7%
70.4%	16,467	15,367	-1,100	-6.7%
71.6%	16,403	15,256	-1,147	-7.0%
72.8%	16,278	15,206	-1,073	-6.6%
74.1%	15,963	14,643	-1,320	-8.3%
75.3%	15,882	14,571	-1,312	-8.3%
76.5%	15,845	14,027	-1,818	-11.5%
77.8%	15,243	13,901	-1,342	-8.8%
79.0%	14,068	13,181	-887	-6.3%
80.2%	13,993	13,170	-824	-5.9%
81.5%	13,260	12,314	-946	-7.1%
82.7%	13,011	12,231	-780	-6.0%
84.0%	12,839	12,208	-631	-4.9%
85.2%	12,665	12,195	-469	-3.7%
86.4%	12,462	11,864	-598	-4.8%
87.7%	12,373	11,851	-522	-4.2%
88.9%	12,159	11,729	-430	-3.5%
90.1%	12,109	11,364	-745	-6.2%
91.4%	11,866	10,967	-899	-7.6%
92.6%	11,788	10,748	-1,040	-8.8%
93.8%	11,659	10,692	-967	-8.3%
95.1%	11,428	9,818	-1,610	-14.1%
96.3%	9,116	9,723	607	6.7%
97.5%	8,906	9,522	616	6.9%
98.8%	8,346	9,185	839	10.0%
100.0%	7,857	7,815	-42	-0.5%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	68,990	69,866	876	1.3%
1.2%	67,755	66,991	-763	-1.1%
2.5%	62,777	62,564	-213	-0.3%
3.7%	60,485	59,747	-738	-1.2%
4.9%	59,915	58,860	-1,056	-1.8%
6.2%	58,857	56,614	-2,243	-3.8%
7.4%	58,042	56,421	-1,620	-2.8%
8.6%	56,262	56,244	-17	0.0%
9.9%	55,178	55,211	32	0.1%
11.1%	52,614	52,631	17	0.0%
12.3%	52,179	52,156	-23	0.0%
13.6%	50,818	51,374	556	1.1%
14.8%	48,879	48,972	93	0.2%
16.0%	48,579	48,570	-9	0.0%
17.3%	47,733	47,677	-56	-0.1%
18.5%	47,651	47,640	-11	0.0%
19.8%	46,238	43,460	-2,778	-6.0%
21.0%	43,682	42,476	-1,206	-2.8%
22.2%	41,341	42,060	719	1.7%
23.5%	41,121	37,989	-3,132	-7.6%
24.7%	39,107	37,732	-1,374	-3.5%
25.9%	36,788	35,374	-1,413	-3.8%
27.2%	36,346	34,183	-2,163	-6.0%
28.4%	35,523	32,898	-2,625	-7.4%
29.6%	34,194	32,022	-2,173	-6.4%
30.9%	32,611	31,312	-1,299	-4.0%
32.1%	32,446	30,825	-1,621	-5.0%
33.3%	31,355	30,720	-635	-2.0%
34.6%	31,024	30,152	-872	-2.8%
35.8%	30,751	29,870	-882	-2.9%
37.0%	30,696	28,502	-2,193	-7.1%
38.3%	30,256	26,922	-3,334	-11.0%
39.5%	29,592	25,777	-3,815	-12.9%
40.7%	28,554	25,089	-3,464	-12.1%
42.0%	26,714	21,835	-4,879	-18.3%
43.2%	25,067	21,498	-3,568	-14.2%
44.4%	24,809	21,389	-3,420	-13.8%
45.7%	23,594	21,377	-2,217	-9.4%
46.9%	23,438	21,230	-2,208	-9.4%
48.1%	23,334	21,053	-2,280	-9.8%
49.4%	23,268	19,894	-3,374	-14.5%
50.6%	21,103	19,787	-1,315	-6.2%
51.9%	21,066	19,368	-1,698	-8.1%
53.1%	20,305	19,264	-1,041	-5.1%
54.3%	20,069	19,165	-904	-4.5%
55.6%	19,932	18,609	-1,323	-6.6%
56.8%	19,715	18,477	-1,238	-6.3%
58.0%	19,505	18,170	-1,335	-6.8%
59.3%	19,300	17,378	-1,922	-10.0%
60.5%	19,274	16,874	-2,400	-12.5%
61.7%	19,187	15,505	-3,682	-19.2%
63.0%	18,786	15,184	-3,601	-19.2%
64.2%	18,509	14,959	-3,550	-19.2%
65.4%	18,190	14,725	-3,465	-19.1%
66.7%	17,793	14,601	-3,192	-17.9%
67.9%	17,047	14,210	-2,837	-16.6%
69.1%	16,627	13,819	-2,808	-16.9%
70.4%	16,046	13,242	-2,804	-17.5%
71.6%	15,679	13,180	-2,499	-15.9%
72.8%	15,141	12,732	-2,409	-15.9%
74.1%	14,551	12,165	-2,386	-16.4%
75.3%	14,440	12,009	-2,431	-16.8%
76.5%	14,076	11,970	-2,106	-15.0%
77.8%	13,589	11,922	-1,667	-12.3%
79.0%	13,278	10,997	-2,282	-17.2%
80.2%	12,442	10,983	-1,459	-11.7%
81.5%	11,969	10,968	-1,001	-8.4%
82.7%	11,870	10,954	-915	-7.7%
84.0%	11,177	10,909	-268	-2.4%
85.2%	10,913	10,704	-210	-1.9%
86.4%	10,576	10,547	-28	-0.3%
87.7%	10,395	10,413	18	0.2%
88.9%	10,246	9,484	-762	-7.4%
90.1%	9,669	9,351	-318	-3.3%
91.4%	9,345	9,323	-22	-0.2%
92.6%	8,732	9,281	549	6.3%
93.8%	8,718	9,253	535	6.1%
95.1%	8,267	8,784	517	6.3%
96.3%	8,087	8,730	643	8.0%
97.5%	7,329	8,263	934	12.7%
98.8%	7,000	7,890	890	12.7%
100.0%	6,258	7,356	1,098	17.5%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,571	59,565	-6	0.0%
1.2%	56,909	56,549	-360	-0.6%
2.5%	53,928	54,043	114	0.2%
3.7%	49,183	48,868	-315	-0.6%
4.9%	48,884	48,358	-525	-1.1%
6.2%	48,861	47,499	-1,361	-2.8%
7.4%	48,371	46,218	-2,153	-4.5%
8.6%	46,299	45,544	-755	-1.6%
9.9%	45,611	44,225	-1,386	-3.0%
11.1%	42,553	39,818	-2,735	-6.4%
12.3%	38,212	38,212	0	0.0%
13.6%	35,471	35,467	-4	0.0%
14.8%	34,080	32,626	-1,454	-4.3%
16.0%	33,158	32,357	-801	-2.4%
17.3%	32,630	31,208	-1,423	-4.4%
18.5%	32,534	30,431	-2,103	-6.5%
19.8%	32,063	30,212	-1,850	-5.8%
21.0%	29,780	29,011	-769	-2.6%
22.2%	29,004	28,541	-464	-1.6%
23.5%	28,408	27,071	-1,337	-4.7%
24.7%	26,425	26,486	61	0.2%
25.9%	22,542	21,901	-642	-2.8%
27.2%	22,026	19,472	-2,554	-11.6%
28.4%	21,430	19,406	-2,025	-9.4%
29.6%	19,293	19,298	5	0.0%
30.9%	18,178	18,130	-48	-0.3%
32.1%	18,170	18,121	-50	-0.3%
33.3%	17,477	17,477	0	0.0%
34.6%	17,206	17,122	-84	-0.5%
35.8%	16,757	16,065	-692	-4.1%
37.0%	16,664	15,888	-776	-4.7%
38.3%	16,572	15,410	-1,162	-7.0%
39.5%	16,290	15,140	-1,150	-7.1%
40.7%	16,267	14,973	-1,295	-8.0%
42.0%	15,413	14,760	-653	-4.2%
43.2%	15,206	14,668	-538	-3.5%
44.4%	14,906	14,603	-302	-2.0%
45.7%	14,717	14,452	-264	-1.8%
46.9%	13,937	13,941	4	0.0%
48.1%	13,759	13,759	0	0.0%
49.4%	13,533	13,533	0	0.0%
50.6%	13,428	13,420	-7	-0.1%
51.9%	13,209	13,037	-172	-1.3%
53.1%	12,235	12,314	79	0.6%
54.3%	11,660	11,778	118	1.0%
55.6%	11,446	11,440	-7	-0.1%
56.8%	11,405	11,407	1	0.0%
58.0%	10,760	11,246	486	4.5%
59.3%	10,594	10,795	201	1.9%
60.5%	10,547	10,760	214	2.0%
61.7%	10,503	10,668	164	1.6%
63.0%	10,426	10,547	120	1.2%
64.2%	10,367	10,506	140	1.3%
65.4%	10,328	10,429	101	1.0%
66.7%	10,181	10,332	151	1.5%
67.9%	9,982	10,183	202	2.0%
69.1%	9,964	9,967	3	0.0%
70.4%	9,862	9,808	-54	-0.5%
71.6%	9,751	9,749	-2	0.0%
72.8%	9,736	9,741	4	0.0%
74.1%	9,465	9,741	276	2.9%
75.3%	9,213	9,576	363	3.9%
76.5%	9,092	9,465	372	4.1%
77.8%	9,073	9,047	-26	-0.3%
79.0%	8,995	8,969	-26	-0.3%
80.2%	8,897	8,895	-1	0.0%
81.5%	8,577	8,578	1	0.0%
82.7%	8,548	8,536	-12	-0.1%
84.0%	8,533	8,506	-27	-0.3%
85.2%	8,505	8,428	-77	-0.9%
86.4%	8,428	8,427	-1	0.0%
87.7%	8,427	8,328	-99	-1.2%
88.9%	8,408	8,144	-264	-3.1%
90.1%	8,312	7,868	-444	-5.3%
91.4%	7,867	7,833	-34	-0.4%
92.6%	7,833	7,811	-22	-0.3%
93.8%	7,625	7,625	0	0.0%
95.1%	7,605	7,606	1	0.0%
96.3%	7,571	7,367	-205	-2.7%
97.5%	7,367	7,339	-28	-0.4%
98.8%	7,339	7,166	-173	-2.4%
100.0%	7,165	7,055	-111	-1.5%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	49,440	48,273	-1,167	-2.4%
1.2%	46,974	46,823	-151	-0.3%
2.5%	44,074	44,068	-6	0.0%
3.7%	41,803	41,642	-161	-0.4%
4.9%	37,839	37,875	36	0.1%
6.2%	36,600	36,604	4	0.0%
7.4%	34,950	34,638	-312	-0.9%
8.6%	34,199	34,066	-133	-0.4%
9.9%	33,544	33,382	-163	-0.5%
11.1%	31,877	31,743	-135	-0.4%
12.3%	31,844	31,700	-144	-0.5%
13.6%	31,747	31,527	-221	-0.7%
14.8%	30,395	30,005	-390	-1.3%
16.0%	27,219	27,108	-110	-0.4%
17.3%	25,768	23,105	-2,663	-10.3%
18.5%	23,161	22,982	-179	-0.8%
19.8%	22,447	22,578	131	0.6%
21.0%	21,698	22,457	759	3.5%
22.2%	20,152	22,076	1,924	9.5%
23.5%	19,840	20,001	161	0.8%
24.7%	19,237	19,252	15	0.1%
25.9%	18,686	16,541	-2,145	-11.5%
27.2%	15,764	15,661	-103	-0.7%
28.4%	15,235	14,750	-486	-3.2%
29.6%	14,216	14,203	-13	-0.1%
30.9%	13,936	13,438	-498	-3.6%
32.1%	13,732	13,173	-559	-4.1%
33.3%	13,267	12,898	-369	-2.8%
34.6%	13,207	12,697	-510	-3.9%
35.8%	12,716	12,549	-167	-1.3%
37.0%	12,676	12,389	-287	-2.3%
38.3%	11,612	11,613	1	0.0%
39.5%	11,367	11,555	188	1.7%
40.7%	11,156	11,346	190	1.7%
42.0%	11,111	11,158	47	0.4%
43.2%	10,986	11,022	36	0.3%
44.4%	10,617	10,618	1	0.0%
45.7%	10,554	10,554	0	0.0%
46.9%	10,429	10,474	45	0.4%
48.1%	10,337	10,430	93	0.9%
49.4%	10,204	10,204	0	0.0%
50.6%	10,195	10,198	3	0.0%
51.9%	9,965	9,960	-5	0.0%
53.1%	9,663	9,710	47	0.5%
54.3%	9,628	9,629	1	0.0%
55.6%	9,619	9,623	4	0.0%
56.8%	9,566	9,551	-16	-0.2%
58.0%	9,446	9,422	-25	-0.3%
59.3%	9,424	9,320	-104	-1.1%
60.5%	9,317	9,052	-265	-2.8%
61.7%	9,175	9,027	-148	-1.6%
63.0%	9,161	8,921	-240	-2.6%
64.2%	9,051	8,915	-136	-1.5%
65.4%	9,026	8,787	-240	-2.7%
66.7%	8,763	8,758	-5	-0.1%
67.9%	8,758	8,750	-8	-0.1%
69.1%	8,747	8,730	-17	-0.2%
70.4%	8,639	8,640	1	0.0%
71.6%	8,563	8,563	0	0.0%
72.8%	8,521	8,522	2	0.0%
74.1%	8,512	8,511	-1	0.0%
75.3%	8,468	8,470	2	0.0%
76.5%	8,429	8,428	-1	0.0%
77.8%	8,287	8,336	50	0.6%
79.0%	8,284	8,306	23	0.3%
80.2%	8,043	8,288	245	3.0%
81.5%	7,995	8,208	214	2.7%
82.7%	7,898	7,895	-3	0.0%
84.0%	7,832	7,836	4	0.0%
85.2%	7,708	7,464	-244	-3.2%
86.4%	7,122	7,410	288	4.0%
87.7%	7,080	7,347	267	3.8%
88.9%	6,969	7,169	199	2.9%
90.1%	6,912	7,123	211	3.1%
91.4%	6,856	6,912	56	0.8%
92.6%	6,773	6,745	-28	-0.4%
93.8%	6,745	6,567	-178	-2.6%
95.1%	6,565	6,314	-250	-3.8%
96.3%	6,198	5,622	-576	-9.3%
97.5%	6,159	5,523	-636	-10.3%
98.8%	5,622	5,406	-216	-3.8%
100.0%	4,822	4,822	0	0.0%

Table SW-16-b
Sacramento River at Verona, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	49,538	49,503	-35	-0.1%
1.2%	37,122	36,955	-167	-0.4%
2.5%	27,095	27,936	841	3.1%
3.7%	26,960	27,687	727	2.7%
4.9%	25,773	26,384	612	2.4%
6.2%	25,659	25,993	334	1.3%
7.4%	23,985	25,758	1,773	7.4%
8.6%	20,935	21,936	1,000	4.8%
9.9%	19,461	19,771	310	1.6%
11.1%	18,468	18,617	149	0.8%
12.3%	17,962	17,479	-483	-2.7%
13.6%	17,766	16,769	-996	-5.6%
14.8%	16,086	16,118	32	0.2%
16.0%	14,957	15,017	60	0.4%
17.3%	14,766	14,943	177	1.2%
18.5%	14,466	14,454	-12	-0.1%
19.8%	14,307	14,296	-11	-0.1%
21.0%	14,107	13,840	-267	-1.9%
22.2%	13,712	13,658	-54	-0.4%
23.5%	13,119	13,397	278	2.1%
24.7%	12,975	12,999	24	0.2%
25.9%	12,719	12,962	242	1.9%
27.2%	12,396	12,536	140	1.1%
28.4%	12,373	12,353	-20	-0.2%
29.6%	12,345	12,197	-148	-1.2%
30.9%	12,072	12,053	-19	-0.2%
32.1%	12,009	11,837	-171	-1.4%
33.3%	11,946	11,816	-130	-1.1%
34.6%	11,845	11,706	-139	-1.2%
35.8%	11,640	11,655	15	0.1%
37.0%	11,492	11,640	148	1.3%
38.3%	11,453	11,590	137	1.2%
39.5%	11,318	11,543	225	2.0%
40.7%	11,257	11,444	187	1.7%
42.0%	11,255	11,439	184	1.6%
43.2%	11,207	11,387	180	1.6%
44.4%	10,980	11,372	392	3.6%
45.7%	10,861	11,279	418	3.8%
46.9%	10,817	11,228	411	3.8%
48.1%	10,814	10,956	142	1.3%
49.4%	10,794	10,825	31	0.3%
50.6%	10,709	10,756	47	0.4%
51.9%	10,537	10,710	173	1.6%
53.1%	10,468	10,580	112	1.1%
54.3%	10,413	10,525	112	1.1%
55.6%	10,390	10,511	121	1.2%
56.8%	10,380	10,506	126	1.2%
58.0%	10,206	10,461	255	2.5%
59.3%	10,174	10,387	214	2.1%
60.5%	10,100	10,186	86	0.9%
61.7%	10,037	10,125	87	0.9%
63.0%	10,018	10,124	106	1.1%
64.2%	10,004	10,114	110	1.1%
65.4%	9,892	10,077	185	1.9%
66.7%	9,888	10,066	178	1.8%
67.9%	9,850	10,021	171	1.7%
69.1%	9,611	9,975	364	3.8%
70.4%	9,571	9,622	51	0.5%
71.6%	9,558	9,601	42	0.4%
72.8%	9,510	9,537	27	0.3%
74.1%	9,487	9,420	-67	-0.7%
75.3%	9,381	9,376	-6	-0.1%
76.5%	9,315	9,358	42	0.5%
77.8%	9,234	9,337	104	1.1%
79.0%	9,195	9,226	31	0.3%
80.2%	9,069	9,187	117	1.3%
81.5%	8,942	9,101	159	1.8%
82.7%	8,620	9,007	387	4.5%
84.0%	8,493	8,929	437	5.1%
85.2%	8,360	8,495	135	1.6%
86.4%	8,010	8,265	255	3.2%
87.7%	7,897	7,930	33	0.4%
88.9%	7,830	7,615	-214	-2.7%
90.1%	7,805	7,602	-203	-2.6%
91.4%	7,687	7,550	-137	-1.8%
92.6%	7,320	7,500	180	2.5%
93.8%	7,128	7,471	343	4.8%
95.1%	7,025	7,411	386	5.5%
96.3%	6,719	7,048	329	4.9%
97.5%	6,708	7,042	335	5.0%
98.8%	6,503	6,767	264	4.1%
100.0%	6,245	6,347	102	1.6%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,495	20,226	731	3.8%
1.2%	19,383	20,110	727	3.8%
2.5%	19,221	20,029	809	4.2%
3.7%	19,193	19,895	703	3.7%
4.9%	19,101	19,872	771	4.0%
6.2%	18,956	19,853	897	4.7%
7.4%	18,852	19,801	949	5.0%
8.6%	18,762	19,721	960	5.1%
9.9%	18,719	19,655	937	5.0%
11.1%	18,681	19,409	728	3.9%
12.3%	18,657	19,368	710	3.8%
13.6%	18,623	19,291	667	3.6%
14.8%	18,538	19,218	680	3.7%
16.0%	18,531	19,188	657	3.5%
17.3%	18,194	19,061	868	4.8%
18.5%	18,189	19,050	862	4.7%
19.8%	17,961	18,765	804	4.5%
21.0%	17,946	18,762	816	4.5%
22.2%	17,889	18,734	845	4.7%
23.5%	17,787	18,552	765	4.3%
24.7%	17,771	18,460	689	3.9%
25.9%	17,695	18,069	374	2.1%
27.2%	17,567	18,004	437	2.5%
28.4%	17,451	17,982	531	3.0%
29.6%	17,422	17,973	550	3.2%
30.9%	17,378	17,942	564	3.2%
32.1%	17,285	17,888	602	3.5%
33.3%	17,267	17,765	499	2.9%
34.6%	16,759	17,720	961	5.7%
35.8%	16,658	17,610	952	5.7%
37.0%	16,558	17,446	889	5.4%
38.3%	16,523	17,397	875	5.3%
39.5%	16,518	17,388	869	5.3%
40.7%	16,468	17,356	888	5.4%
42.0%	16,464	17,108	645	3.9%
43.2%	16,421	17,050	629	3.8%
44.4%	16,412	17,024	612	3.7%
45.7%	16,403	17,004	601	3.7%
46.9%	16,340	16,975	635	3.9%
48.1%	16,326	16,947	621	3.8%
49.4%	16,053	16,896	843	5.3%
50.6%	15,804	16,844	1,041	6.6%
51.9%	15,787	16,686	898	5.7%
53.1%	15,756	16,410	655	4.2%
54.3%	15,600	16,305	705	4.5%
55.6%	15,583	16,054	472	3.0%
56.8%	15,462	15,942	480	3.1%
58.0%	15,363	15,935	572	3.7%
59.3%	15,185	15,868	682	4.5%
60.5%	15,100	15,804	704	4.7%
61.7%	15,099	15,755	655	4.3%
63.0%	14,610	15,657	1,047	7.2%
64.2%	14,590	15,611	1,021	7.0%
65.4%	14,553	15,559	1,006	6.9%
66.7%	14,515	15,354	838	5.8%
67.9%	14,309	15,292	983	6.9%
69.1%	14,219	14,908	689	4.8%
70.4%	14,105	14,897	792	5.6%
71.6%	14,013	14,554	541	3.9%
72.8%	13,962	14,096	134	1.0%
74.1%	13,796	14,043	248	1.8%
75.3%	13,223	14,013	790	6.0%
76.5%	13,063	13,961	898	6.9%
77.8%	12,825	13,758	933	7.3%
79.0%	12,822	13,175	352	2.7%
80.2%	12,354	12,917	563	4.6%
81.5%	12,265	12,810	545	4.4%
82.7%	12,151	12,598	447	3.7%
84.0%	11,260	12,540	1,279	11.4%
85.2%	11,100	12,195	1,095	9.9%
86.4%	10,995	12,151	1,156	10.5%
87.7%	10,954	11,891	938	8.6%
88.9%	10,917	11,639	722	6.6%
90.1%	10,652	11,233	581	5.5%
91.4%	10,332	11,002	670	6.5%
92.6%	8,341	9,130	789	9.5%
93.8%	8,049	8,944	894	11.1%
95.1%	8,001	8,821	820	10.2%
96.3%	7,857	8,543	686	8.7%
97.5%	7,417	8,243	826	11.1%
98.8%	5,915	8,144	2,229	37.7%
100.0%	5,564	7,598	2,034	36.5%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,000	16,608	608	3.8%
1.2%	15,765	15,941	176	1.1%
2.5%	15,754	15,817	64	0.4%
3.7%	15,463	15,707	244	1.6%
4.9%	15,409	15,485	76	0.5%
6.2%	15,369	15,397	28	0.2%
7.4%	15,088	15,334	245	1.6%
8.6%	14,994	15,319	325	2.2%
9.9%	14,959	15,279	320	2.1%
11.1%	14,717	15,101	384	2.6%
12.3%	14,690	15,078	388	2.6%
13.6%	14,653	14,752	99	0.7%
14.8%	14,650	14,576	-73	-0.5%
16.0%	14,592	14,555	-37	-0.3%
17.3%	14,533	14,533	0	0.0%
18.5%	14,483	14,465	-18	-0.1%
19.8%	14,427	14,394	-33	-0.2%
21.0%	14,332	14,331	-1	0.0%
22.2%	14,210	14,282	72	0.5%
23.5%	14,003	14,198	195	1.4%
24.7%	13,922	13,913	-8	-0.1%
25.9%	13,909	13,905	-5	0.0%
27.2%	13,862	13,902	40	0.3%
28.4%	13,844	13,837	-7	0.0%
29.6%	13,732	13,824	92	0.7%
30.9%	13,658	13,804	146	1.1%
32.1%	13,554	13,667	113	0.8%
33.3%	13,457	13,510	53	0.4%
34.6%	13,419	13,492	73	0.5%
35.8%	13,340	13,469	128	1.0%
37.0%	13,245	13,192	-53	-0.4%
38.3%	13,243	13,170	-73	-0.6%
39.5%	13,199	13,130	-68	-0.5%
40.7%	13,155	13,076	-78	-0.6%
42.0%	13,084	13,034	-49	-0.4%
43.2%	13,065	12,988	-77	-0.6%
44.4%	12,929	12,839	-91	-0.7%
45.7%	12,249	12,397	148	1.2%
46.9%	12,010	12,251	241	2.0%
48.1%	11,985	11,987	2	0.0%
49.4%	11,978	11,986	7	0.1%
50.6%	11,919	11,853	-66	-0.6%
51.9%	11,822	11,777	-44	-0.4%
53.1%	11,777	11,636	-141	-1.2%
54.3%	11,594	11,548	-47	-0.4%
55.6%	11,520	11,521	1	0.0%
56.8%	11,455	11,467	12	0.1%
58.0%	11,230	11,457	227	2.0%
59.3%	11,157	11,415	258	2.3%
60.5%	11,095	11,353	258	2.3%
61.7%	10,896	11,200	304	2.8%
63.0%	10,806	11,185	379	3.5%
64.2%	10,704	11,129	425	4.0%
65.4%	10,036	10,712	676	6.7%
66.7%	10,029	10,688	659	6.6%
67.9%	10,022	10,629	607	6.1%
69.1%	9,611	10,545	934	9.7%
70.4%	9,456	10,501	1,045	11.0%
71.6%	9,328	10,458	1,130	12.1%
72.8%	9,295	10,431	1,136	12.2%
74.1%	9,264	10,426	1,162	12.5%
75.3%	8,992	10,168	1,176	13.1%
76.5%	8,940	10,053	1,112	12.4%
77.8%	8,940	10,035	1,095	12.3%
79.0%	8,868	9,995	1,127	12.7%
80.2%	8,744	9,936	1,192	13.6%
81.5%	8,487	9,537	1,050	12.4%
82.7%	8,438	9,517	1,079	12.8%
84.0%	8,428	9,324	897	10.6%
85.2%	8,400	9,298	898	10.7%
86.4%	7,518	9,242	1,723	22.9%
87.7%	7,454	9,238	1,784	23.9%
88.9%	7,433	9,164	1,731	23.3%
90.1%	7,260	9,005	1,745	24.0%
91.4%	7,236	8,880	1,644	22.7%
92.6%	7,200	8,615	1,415	19.7%
93.8%	6,977	8,514	1,537	22.0%
95.1%	6,937	7,776	838	12.1%
96.3%	6,643	7,725	1,082	16.3%
97.5%	6,428	7,256	828	12.9%
98.8%	6,345	7,252	907	14.3%
100.0%	5,667	6,916	1,248	22.0%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	27,526	27,726	200	0.7%
1.2%	26,975	27,001	26	0.1%
2.5%	26,791	26,864	73	0.3%
3.7%	26,720	26,787	67	0.2%
4.9%	26,645	26,704	58	0.2%
6.2%	26,427	26,646	219	0.8%
7.4%	26,398	26,574	176	0.7%
8.6%	26,334	26,428	93	0.4%
9.9%	26,054	25,974	-80	-0.3%
11.1%	25,876	25,759	-116	-0.4%
12.3%	25,715	25,732	17	0.1%
13.6%	25,137	25,728	591	2.4%
14.8%	25,110	25,315	205	0.8%
16.0%	25,079	25,193	114	0.5%
17.3%	24,032	25,193	1,160	4.8%
18.5%	24,026	25,170	1,144	4.8%
19.8%	23,953	24,768	815	3.4%
21.0%	23,939	24,627	687	2.9%
22.2%	23,899	24,281	382	1.6%
23.5%	23,820	22,328	-1,493	-6.3%
24.7%	23,811	21,349	-2,462	-10.3%
25.9%	21,266	21,010	-256	-1.2%
27.2%	20,989	20,712	-277	-1.3%
28.4%	20,977	20,487	-490	-2.3%
29.6%	20,961	19,940	-1,021	-4.9%
30.9%	20,860	19,801	-1,059	-5.1%
32.1%	20,765	19,794	-971	-4.7%
33.3%	20,112	19,783	-329	-1.6%
34.6%	19,530	19,765	235	1.2%
35.8%	19,431	19,753	322	1.7%
37.0%	19,337	19,459	122	0.6%
38.3%	18,924	19,438	515	2.7%
39.5%	18,798	19,384	587	3.1%
40.7%	18,763	19,368	605	3.2%
42.0%	18,607	19,193	586	3.2%
43.2%	18,042	18,703	660	3.7%
44.4%	16,347	17,745	1,398	8.6%
45.7%	15,260	17,148	1,888	12.4%
46.9%	14,330	14,329	0	0.0%
48.1%	14,195	13,973	-222	-1.6%
49.4%	13,169	13,969	800	6.1%
50.6%	13,105	13,622	516	3.9%
51.9%	13,057	13,266	210	1.6%
53.1%	12,774	13,126	351	2.8%
54.3%	12,631	13,115	484	3.8%
55.6%	12,454	13,093	639	5.1%
56.8%	12,418	13,043	625	5.0%
58.0%	12,273	13,006	734	6.0%
59.3%	11,942	12,780	837	7.0%
60.5%	11,770	12,593	823	7.0%
61.7%	10,921	12,553	1,632	14.9%
63.0%	10,917	12,354	1,436	13.2%
64.2%	10,858	12,206	1,348	12.4%
65.4%	10,093	12,167	2,074	20.5%
66.7%	9,758	12,147	2,389	24.5%
67.9%	9,725	11,951	2,226	22.9%
69.1%	9,505	11,846	2,341	24.6%
70.4%	9,402	11,415	2,013	21.4%
71.6%	9,321	11,311	1,991	21.4%
72.8%	9,264	11,269	2,005	21.6%
74.1%	8,706	11,121	2,415	27.7%
75.3%	8,472	10,871	2,399	28.3%
76.5%	8,408	10,833	2,425	28.8%
77.8%	8,377	10,552	2,176	26.0%
79.0%	7,984	10,431	2,447	30.6%
80.2%	7,937	10,324	2,388	30.1%
81.5%	7,652	10,308	2,656	34.7%
82.7%	7,385	9,888	2,503	33.9%
84.0%	7,316	9,881	2,566	35.1%
85.2%	7,186	9,583	2,397	33.4%
86.4%	6,758	9,521	2,763	40.9%
87.7%	6,699	9,471	2,772	41.4%
88.9%	6,611	9,080	2,469	37.3%
90.1%	6,593	9,047	2,453	37.2%
91.4%	6,571	9,042	2,470	37.6%
92.6%	6,119	8,387	2,268	37.1%
93.8%	5,894	7,386	1,493	25.3%
95.1%	5,699	7,290	1,591	27.9%
96.3%	5,639	6,125	487	8.6%
97.5%	5,482	5,513	31	0.6%
98.8%	4,749	5,385	636	13.4%
100.0%	4,740	4,750	9	0.2%

Figure SW-17-b
Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

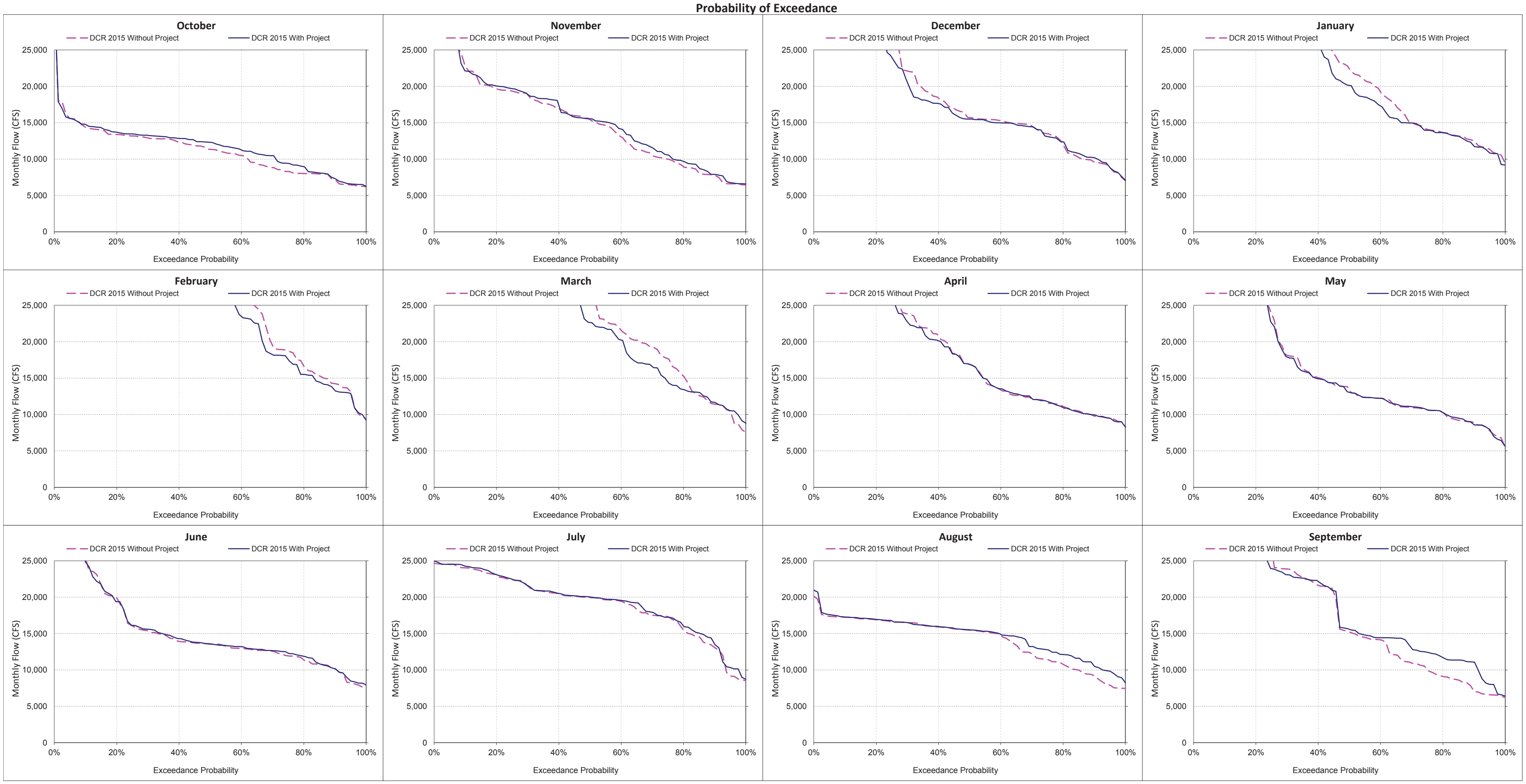


Table SW-17-b

Sacramento River at Freeport, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	32,118	33,002	884	2.8%
1.2%	18,018	17,881	-137	-0.8%
2.5%	17,927	16,924	-1,003	-5.6%
3.7%	16,199	15,772	-426	-2.6%
4.9%	15,591	15,613	23	0.1%
6.2%	15,548	15,482	-66	-0.4%
7.4%	15,337	15,162	-175	-1.1%
8.6%	14,775	14,828	53	0.4%
9.9%	14,408	14,777	368	2.6%
11.1%	14,204	14,500	296	2.1%
12.3%	14,142	14,479	337	2.4%
13.6%	14,077	14,387	309	2.2%
14.8%	14,014	14,353	339	2.4%
16.0%	13,889	14,066	177	1.3%
17.3%	13,428	13,961	534	4.0%
18.5%	13,416	13,739	323	2.4%
19.8%	13,385	13,712	327	2.4%
21.0%	13,374	13,622	248	1.9%
22.2%	13,299	13,491	192	1.4%
23.5%	13,234	13,479	245	1.8%
24.7%	13,177	13,458	280	2.1%
25.9%	13,174	13,434	260	2.0%
27.2%	13,084	13,331	247	1.9%
28.4%	13,048	13,278	230	1.8%
29.6%	12,949	13,274	325	2.5%
30.9%	12,829	13,224	394	3.1%
32.1%	12,815	13,189	374	2.9%
33.3%	12,793	13,144	350	2.7%
34.6%	12,791	13,106	315	2.5%
35.8%	12,790	13,078	287	2.2%
37.0%	12,743	12,939	196	1.5%
38.3%	12,623	12,931	308	2.4%
39.5%	12,375	12,871	496	4.0%
40.7%	12,335	12,821	487	3.9%
42.0%	12,098	12,807	709	5.9%
43.2%	12,007	12,672	666	5.5%
44.4%	11,962	12,672	709	5.9%
45.7%	11,804	12,407	603	5.1%
46.9%	11,803	12,401	597	5.1%
48.1%	11,643	12,347	704	6.0%
49.4%	11,360	12,335	974	8.6%
50.6%	11,318	12,275	957	8.5%
51.9%	11,267	12,067	799	7.1%
53.1%	11,055	11,918	863	7.8%
54.3%	10,952	11,767	815	7.4%
55.6%	10,810	11,710	900	8.3%
56.8%	10,794	11,597	804	7.4%
58.0%	10,730	11,501	771	7.2%
59.3%	10,518	11,390	872	8.3%
60.5%	10,478	11,151	673	6.4%
61.7%	10,203	11,071	867	8.5%
63.0%	9,571	11,070	1,499	15.7%
64.2%	9,513	10,818	1,305	13.7%
65.4%	9,251	10,678	1,427	15.4%
66.7%	9,185	10,604	1,419	15.4%
67.9%	9,017	10,511	1,494	16.6%
69.1%	8,830	10,471	1,641	18.6%
70.4%	8,828	10,463	1,635	18.5%
71.6%	8,570	9,677	1,107	12.9%
72.8%	8,532	9,479	947	11.1%
74.1%	8,303	9,428	1,126	13.6%
75.3%	8,297	9,417	1,120	13.5%
76.5%	8,109	9,179	1,070	13.2%
77.8%	8,049	9,170	1,122	13.9%
79.0%	8,042	9,058	1,016	12.6%
80.2%	8,015	8,938	924	11.5%
81.5%	8,012	8,262	250	3.1%
82.7%	8,009	8,237	228	2.8%
84.0%	7,985	8,142	157	2.0%
85.2%	7,963	8,097	134	1.7%
86.4%	7,958	8,053	95	1.2%
87.7%	7,928	7,928	0	0.0%
88.9%	7,301	7,523	222	3.0%
90.1%	7,129	7,297	168	2.4%
91.4%	6,596	6,953	357	5.4%
92.6%	6,528	6,825	297	4.5%
93.8%	6,524	6,639	115	1.8%
95.1%	6,445	6,578	134	2.1%
96.3%	6,409	6,533	123	1.9%
97.5%	6,282	6,524	242	3.9%
98.8%	6,264	6,511	247	4.0%
100.0%	6,215	6,276	61	1.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	53,220	54,548	1,328	2.5%
1.2%	46,877	46,747	-130	-0.3%
2.5%	45,057	46,575	1,518	3.4%
3.7%	32,120	33,666	1,546	4.8%
4.9%	31,831	32,854	1,023	3.2%
6.2%	26,124	28,680	2,556	9.8%
7.4%	25,259	26,131	872	3.5%
8.6%	24,633	23,178	-1,455	-5.9%
9.9%	22,862	22,120	-743	-3.2%
11.1%	22,099	22,069	-31	-0.1%
12.3%	22,069	21,665	-404	-1.8%
13.6%	21,418	21,544	126	0.6%
14.8%	20,207	21,167	960	4.8%
16.0%	20,201	20,559	358	1.8%
17.3%	20,164	20,220	57	0.3%
18.5%	19,963	20,209	246	1.2%
19.8%	19,677	20,066	390	2.0%
21.0%	19,541	19,984	443	2.3%
22.2%	19,470	19,968	498	2.6%
23.5%	19,463	19,815	351	1.8%
24.7%	19,390	19,716	326	1.7%
25.9%	19,252	19,640	388	2.0%
27.2%	19,105	19,408	303	1.6%
28.4%	19,102	19,237	135	0.7%
29.6%	19,070	19,015	-55	-0.3%
30.9%	18,398	18,652	254	1.4%
32.1%	18,147	18,588	441	2.4%
33.3%	17,944	18,364	420	2.3%
34.6%	17,664	18,310	647	3.7%
35.8%	17,634	18,309	675	3.8%
37.0%	17,521	18,226	704	4.0%
38.3%	17,314	18,133	819	4.7%
39.5%	16,920	18,056	1,135	6.7%
40.7%	16,801	16,377	-424	-2.5%
42.0%	16,542	16,363	-179	-1.1%
43.2%	16,326	16,129	-197	-1.2%
44.4%	15,999	15,855	-144	-0.9%
45.7%	15,946	15,729	-217	-1.4%
46.9%	15,888	15,691	-197	-1.2%
48.1%	15,634	15,602	-32	-0.2%
49.4%	15,621	15,542	-80	-0.5%
50.6%	15,245	15,540	296	1.9%
51.9%	15,065	15,247	182	1.2%
53.1%	14,797	15,220	423	2.9%
54.3%	14,718	15,154	436	3.0%
55.6%	14,580	15,062	482	3.3%
56.8%	14,295	14,923	628	4.4%
58.0%	13,766	14,746	980	7.1%
59.3%	13,247	14,199	952	7.2%
60.5%	12,915	14,082	1,167	9.0%
61.7%	12,258	13,387	1,129	9.2%
63.0%	11,982	13,303	1,320	11.0%
64.2%	11,397	12,513	1,116	9.8%
65.4%	11,209	12,357	1,148	10.2%
66.7%	11,207	12,101	894	8.0%
67.9%	10,987	12,012	1,025	9.3%
69.1%	10,857	11,763	907	8.4%
70.4%	10,407	11,480	1,073	10.3%
71.6%	10,263	11,035	772	7.5%
72.8%	10,182	11,024	842	8.3%
74.1%	10,045	10,647	602	6.0%
75.3%	9,963	10,547	585	5.9%
76.5%	9,782	9,992	210	2.1%
77.8%	9,418	9,849	431	4.6%
79.0%	9,283	9,841	559	6.0%
80.2%	8,877	9,664	787	8.9%
81.5%	8,805	9,388	583	6.6%
82.7%	8,769	9,314	545	6.2%
84.0%	8,629	9,298	670	7.8%
85.2%	7,955	8,692	736	9.3%
86.4%	7,915	8,529	614	7.8%
87.7%	7,877	8,320	444	5.6%
88.9%	7,857	7,915	58	0.7%
90.1%	7,756	7,890	133	1.7%
91.4%	7,479	7,806	327	4.4%
92.6%	6,772	7,693	922	13.6%
93.8%	6,622	6,918	295	4.5%
95.1%	6,612	6,767	156	2.4%
96.3%	6,609	6,702	93	1.4%
97.5%	6,597	6,612	15	0.2%
98.8%	6,469	6,609	140	2.2%
100.0%	6,462	6,566	104	1.6%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	76,916	76,586	-330	-0.4%
1.2%	70,987	68,481	-2,506	-3.5%
2.5%	65,974	66,500	526	0.8%
3.7%	59,042	57,505	-1,536	-2.6%
4.9%	57,845	55,658	-2,187	-3.8%
6.2%	56,392	55,509	-883	-1.6%
7.4%	50,299	50,257	-43	-0.1%
8.6%	49,955	49,744	-211	-0.4%
9.9%	47,909	47,343	-566	-1.2%
11.1%	47,733	44,540	-3,193	-6.7%
12.3%	44,438	44,001	-437	-1.0%
13.6%	37,610	39,544	1,934	5.1%
14.8%	36,991	36,508	-483	-1.3%
16.0%	35,617	35,789	173	0.5%
17.3%	35,228	34,685	-543	-1.5%
18.5%	34,282	34,323	41	0.1%
19.8%	33,051	32,665	-386	-1.2%
21.0%	31,155	31,755	600	1.9%
22.2%	28,924	28,427	-497	-1.7%
23.5%	28,617	24,658	-3,959	-13.8%
24.7%	27,417	24,230	-3,187	-11.6%
25.9%	25,800	23,381	-2,419	-9.4%
27.2%	25,494	22,561	-2,934	-11.5%
28.4%	22,276	22,397	121	0.5%
29.6%	22,148	20,908	-1,240	-5.6%
30.9%	22,021	19,644	-2,377	-10.8%
32.1%	21,945	18,519	-3,425	-15.6%
33.3%	20,278	18,408	-1,870	-9.2%
34.6%	19,884	18,149	-1,735	-8.7%
35.8%	19,341	18,106	-1,236	-6.4%
37.0%	19,192	17,921	-1,271	-6.6%
38.3%	18,665	17,688	-977	-5.2%
39.5%	18,554	17,675	-879	-4.7%
40.7%	18,149	17,559	-590	-3.3%
42.0%	17,880	17,148	-731	-4.1%
43.2%	17,260	17,077	-184	-1.1%
44.4%	17,096	16,315	-781	-4.6%
45.7%	16,755	16,001	-754	-4.5%
46.9%	16,573	15,717	-855	-5.2%
48.1%	16,442	15,544	-898	-5.5%
49.4%	15,717	15,504	-213	-1.4%
50.6%	15,685	15,489	-196	-1.2%
51.9%	15,561	15,424	-137	-0.9%
53.1%	15,505	15,412	-93	-0.6%
54.3%	15,489	15,412	-77	-0.5%
55.6%	15,456	15,262	-194	-1.3%
56.8%	15,425	15,059	-365	-2.4%
58.0%	15,412	14,996	-416	-2.7%
59.3%	15,333	14,986	-347	-2.3%
60.5%	15,262	14,964	-298	-2.0%
61.7%	15,078	14,963	-116	-0.8%
63.0%	14,991	14,956	-34	-0.2%
64.2%	14,888	14,845	-43	-0.3%
65.4%	14,885	14,635	-250	-1.7%
66.7%	14,845	14,603	-242	-1.6%
67.9%	14,801	14,533	-267	-1.8%
69.1%	14,799	14,451	-347	-2.3%
70.4%	14,408	14,434	26	0.2%
71.6%	14,057	14,077	20	0.1%
72.8%	13,803	14,013	210	1.5%
74.1%	13,534	13,185	-349	-2.6%
75.3%	13,478	13,063	-415	-3.1%
76.5%	13,210	12,968	-241	-1.8%
77.8%	13,096	12,914	-182	-1.4%
79.0%	12,629	12,465	-164	-1.3%
80.2%	11,783	12,335	552	4.7%
81.5%	10,853	11,191	338	3.1%
82.7%	10,747	11,011	265	2.5%
84.0%	10,483	10,883	401	3.8%
85.2%	10,174	10,772	598	5.9%
86.4%	9,955	10,512	557	5.6%
87.7%	9,936	10,256	320	3.2%
88.9%	9,883	10,253	370	3.7%
90.1%	9,536	10,171	635	6.7%
91.4%	9,517	9,928	411	4.3%
92.6%	9,380	9,582	202	2.2%
93.8%	9,287	9,477	190	2.0%
95.1%	8,820	8,802	-18	-0.2%
96.3%	8,240	8,367	127	1.5%
97.5%	8,124	8,179	54	0.7%
98.8%	7,468	7,602	134	1.8%
100.0%	7,012	7,081	70	1.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	77,754	77,755	1	0.0%
1.2%	77,088	77,090	1	0.0%
2.5%	75,238	74,724	-514	-0.7%
3.7%	72,719	72,740	21	0.0%
4.9%	70,284	69,909	-374	-0.5%
6.2%	65,277	64,383	-894	-1.4%
7.4%	64,119	64,324	205	0.3%
8.6%	63,190	63,204	14	0.0%
9.9%	62,981	62,974	-7	0.0%
11.1%	62,279	61,267	-1,012	-1.6%
12.3%	60,298	58,645	-1,653	-2.7%
13.6%	58,688	58,195	-494	-0.8%
14.8%	58,578	56,889	-1,689	-2.9%
16.0%	58,102	56,807	-1,294	-2.2%
17.3%	57,129	56,170	-960	-1.7%
18.5%	57,008	54,565	-2,443	-4.3%
19.8%	53,950	52,971	-978	-1.8%
21.0%	53,107	52,540	-567	-1.1%
22.2%	48,287	47,815	-472	-1.0%
23.5%	48,233	47,462	-770	-1.6%
24.7%	47,428	46,736	-692	-1.5%
25.9%	46,682	46,606	-75	-0.2%
27.2%	45,668	41,261	-4,407	-9.7%
28.4%	43,121	40,272	-2,848	-6.6%
29.6%	40,920	39,623	-1,296	-3.2%
30.9%	38,671	38,670	-1	0.0%
32.1%	38,441	34,860	-3,581	-9.3%
33.3%	37,100	34,844	-2,256	-6.1%
34.6%	37,012	34,107	-2,904	-7.8%
35.8%	31,667	31,102	-566	-1.8%
37.0%	29,813	27,240	-2,573	-8.6%
38.3%	27,416	25,969	-1,447	-5.3%
39.5%	27,027	25,946	-1,080	-4.0%
40.7%	26,450	25,290	-1,159	-4.4%
42.0%	25,886	24,037	-1,849	-7.1%
43.2%	25,484	23,708	-1,777	-7.0%
44.4%	24,926	21,813	-3,113	-12.5%
45.7%	24,088	21,014	-3,074	-12.8%
46.9%	23,162	20,818	-2,344	-10.1%
48.1%	23,116	20,472	-2,644	-11.4%
49.4%	22,822	20,175	-2,648	-11.6%
50.6%	22,023	20,088	-1,935	-8.8%
51.9%	21,649	19,109	-2,540	-11.7%
53.1%	21,529	18,665	-2,864	-13.3%
54.3%	21,045	18,583	-2,462	-11.7%
55.6%	20,664	18,496	-2,168	-10.5%
56.8%	20,537	18,205	-2,332	-11.4%
58.0%	20,035	17,985	-2,050	-10.2%
59.3%	19,747	17,500	-2,247	-11.4%
60.5%	18,885	17,183	-1,701	-9.0%
61.7%	18,539	16,378	-2,161	-11.7%
63.0%	18,122	15,765	-2,357	-13.0%
64.2%	17,783	15,635	-2,148	-12.1%
65.4%	17,043	15,541	-1,502	-8.8%
66.7%	16,609	15,016	-1,592	-9.6%
67.9%	16,013	14,997	-1,016	-6.3%
69.1%	15,100	14,969	-131	-0.9%
70.4%	14,931	14,968	37	0.2%
71.6%	14,712	14,850	137	0.9%
72.8%	14,620	14,517	-103	-0.7%
74.1%	14,203	13,967	-236	-1.7%
75.3%	14,052	13,967	-85	-0.6%
76.5%	13,947	13,879	-68	-0.5%
77.8%	13,892	13,658	-234	-1.7%
79.0%	13,778	13,647	-131	-1.0%
80.2%	13,606	13,634	28	0.2%
81.5%	13,596	13,488	-108	-0.8%
82.7%	13,304	13,275	-29	-0.2%
84.0%	13,259	13,193	-66	-0.5%
85.2%	13,141	13,163	23	0.2%
86.4%	13,138	12,833	-305	-2.3%
87.7%	12,785	12,518	-267	-2.1%
88.9%	12,658	12,321	-337	-2.7%
90.1%	12,500	11,704	-796	-6.4%
91.4%	11,846	11,651	-195	-1.6%
92.6%	11,667	11,646	-21	-0.2%
93.8%	11,604	11,317	-286	-2.5%
95.1%	11,341	10,826	-515	-4.5%
96.3%	10,862	10,764	-98	-0.9%
97.5%	10,835	10,742	-94	-0.9%
98.8%	10,517	9,261	-1,256	-11.9%
100.0%	9,424	9,189	-235	-2.5%

Table SW-17-b

Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	76,930	76,928	-3	0.0%
1.2%	75,747	75,740	-7	0.0%
2.5%	73,545	73,550	5	0.0%
3.7%	72,212	72,659	447	0.6%
4.9%	70,712	72,333	1,621	2.3%
6.2%	69,690	70,225	535	0.8%
7.4%	69,196	69,410	214	0.3%
8.6%	69,117	69,177	59	0.1%
9.9%	68,159	68,368	209	0.3%
11.1%	68,077	67,249	-828	-1.2%
12.3%	67,159	67,102	-58	-0.1%
13.6%	64,583	64,120	-464	-0.7%
14.8%	63,970	63,483	-488	-0.8%
16.0%	63,497	63,424	-73	-0.1%
17.3%	62,070	62,111	41	0.1%
18.5%	60,797	59,806	-991	-1.6%
19.8%	59,871	59,347	-525	-0.9%
21.0%	59,786	58,722	-1,064	-1.8%
22.2%	59,326	58,277	-1,049	-1.8%
23.5%	58,782	57,678	-1,104	-1.9%
24.7%	57,568	55,854	-1,714	-3.0%
25.9%	54,294	53,789	-505	-0.9%
27.2%	53,798	53,565	-233	-0.4%
28.4%	50,248	50,055	-193	-0.4%
29.6%	50,080	49,111	-969	-1.9%
30.9%	48,987	46,260	-2,727	-5.6%
32.1%	48,869	46,196	-2,672	-5.5%
33.3%	48,010	45,888	-2,121	-4.4%
34.6%	47,361	45,440	-1,921	-4.1%
35.8%	46,643	45,190	-1,453	-3.1%
37.0%	45,543	45,189	-354	-0.8%
38.3%	45,482	44,295	-1,187	-2.6%
39.5%	44,637	42,862	-1,775	-4.0%
40.7%	43,652	42,749	-903	-2.1%
42.0%	42,585	42,429	-156	-0.4%
43.2%	40,121	40,309	188	0.5%
44.4%	38,499	36,822	-1,677	-4.4%
45.7%	36,807	35,102	-1,706	-4.6%
46.9%	35,711	33,392	-2,319	-6.5%
48.1%	35,529	32,205	-3,323	-9.4%
49.4%	35,271	31,315	-3,956	-11.2%
50.6%	34,678	31,173	-3,504	-10.1%
51.9%	31,580	31,048	-532	-1.7%
53.1%	31,157	28,207	-2,950	-9.5%
54.3%	30,412	27,085	-3,327	-10.9%
55.6%	29,440	26,727	-2,713	-9.2%
56.8%	27,667	25,813	-1,854	-6.7%
58.0%	26,992	24,935	-2,057	-7.6%
59.3%	26,532	23,748	-2,783	-10.5%
60.5%	26,517	23,279	-3,238	-12.2%
61.7%	25,998	23,231	-2,767	-10.6%
63.0%	25,325	23,117	-2,208	-8.7%
64.2%	24,966	22,587	-2,379	-9.5%
65.4%	24,470	22,479	-1,992	-8.1%
66.7%	23,787	20,122	-3,665	-15.4%
67.9%	22,037	18,694	-3,343	-15.2%
69.1%	20,241	18,403	-1,838	-9.1%
70.4%	19,144	18,170	-973	-5.1%
71.6%	18,942	18,158	-784	-4.1%
72.8%	18,934	18,134	-800	-4.2%
74.1%	18,859	18,075	-784	-4.2%
75.3%	18,668	17,384	-1,284	-6.9%
76.5%	18,497	16,923	-1,574	-8.5%
77.8%	17,566	16,864	-702	-4.0%
79.0%	17,421	15,512	-1,909	-11.0%
80.2%	16,477	15,511	-966	-5.9%
81.5%	16,030	15,394	-636	-4.0%
82.7%	15,925	15,364	-561	-3.5%
84.0%	15,475	14,605	-870	-5.6%
85.2%	15,292	14,449	-842	-5.5%
86.4%	14,990	14,177	-813	-5.4%
87.7%	14,906	14,076	-829	-5.6%
88.9%	14,294	13,827	-467	-3.3%
90.1%	14,224	13,217	-1,008	-7.1%
91.4%	14,103	13,076	-1,027	-7.3%
92.6%	13,704	13,040	-663	-4.8%
93.8%	13,669	13,025	-644	-4.7%
95.1%	13,153	12,920	-233	-1.8%
96.3%	10,954	10,866	-88	-0.8%
97.5%	10,076	10,244	168	1.7%
98.8%	9,710	9,996	286	2.9%
100.0%	9,397	9,239	-158	-1.7%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	80,777	80,457	-320	-0.4%
1.2%	77,377	77,466	89	0.1%
2.5%	72,429	72,247	-182	-0.3%
3.7%	71,627	70,996	-631	-0.9%
4.9%	68,979	68,803	-176	-0.3%
6.2%	68,801	66,203	-2,597	-3.8%
7.4%	67,522	66,026	-1,496	-2.2%
8.6%	62,584	62,601	16	0.0%
9.9%	62,266	62,249	-17	0.0%
11.1%	61,862	61,974	112	0.2%
12.3%	61,090	61,122	32	0.1%
13.6%	58,702	58,681	-21	0.0%
14.8%	58,148	58,139	-9	0.0%
16.0%	57,480	57,470	-10	0.0%
17.3%	55,840	55,785	-55	-0.1%
18.5%	54,895	52,249	-2,646	-4.8%
19.8%	53,851	52,197	-1,654	-3.1%
21.0%	48,622	49,178	556	1.1%
22.2%	46,068	47,419	1,351	2.9%
23.5%	45,054	45,983	929	2.1%
24.7%	44,713	41,362	-3,351	-7.5%
25.9%	44,568	40,844	-3,724	-8.4%
27.2%	44,213	40,339	-3,874	-8.8%
28.4%	39,779	39,421	-358	-0.9%
29.6%	39,432	38,187	-1,245	-3.2%
30.9%	38,608	35,867	-2,741	-7.1%
32.1%	36,323	35,332	-991	-2.7%
33.3%	36,011	35,125	-885	-2.5%
34.6%	35,905	35,086	-819	-2.3%
35.8%	35,572	33,710	-1,862	-5.2%
37.0%	35,375	32,585	-2,790	-7.9%
38.3%	35,156	32,547	-2,610	-7.4%
39.5%	34,687	30,802	-3,886	-11.2%
40.7%	32,689	30,047	-2,642	-8.1%
42.0%	31,109	27,228	-3,881	-12.5%
43.2%	30,207	26,380	-3,827	-12.7%
44.4%	30,070	25,784	-4,286	-14.3%
45.7%	28,863	25,206	-3,658	-12.7%
46.9%	27,039	25,057	-1,982	-7.3%
48.1%	26,523	23,158	-3,364	-12.7%
49.4%	26,122	22,666	-3,456	-13.2%
50.6%	25,223	22,618	-2,606	-10.3%
51.9%	25,177	22,118	-3,058	-12.1%
53.1%	23,171	22,004	-1,167	-5.0%
54.3%	23,104	21,980	-1,124	-4.9%
55.6%	22,640	21,734	-906	-4.0%
56.8%	22,462	21,693	-769	-3.4%
58.0%	22,415	20,967	-1,447	-6.5%
59.3%	21,937	20,319	-1,618	-7.4%
60.5%	21,352	20,172	-1,180	-5.5%
61.7%	21,000	18,463	-2,537	-12.1%
63.0%	20,422	17,807	-2,616	-12.8%
64.2%	20,225	17,370	-2,854	-14.1%
65.4%	20,208	17,100	-3,108	-15.4%
66.7%	19,852	17,089	-2,763	-13.9%
67.9%	19,756	16,946	-2,810	-14.2%
69.1%	19,350	16,905	-2,445	-12.6%
70.4%	19,238	16,432	-2,807	-14.6%
71.6%	18,931	16,397	-2,533	-13.4%
72.8%	18,108	15,411	-2,697	-14.9%
74.1%	17,820	15,005	-2,815	-15.8%
75.3%	17,619	14,301	-3,318	-18.8%
76.5%	16,574	14,019	-2,555	-15.4%
77.8%	16,288	13,999	-2,290	-14.1%
79.0%	15,728	13,534	-2,194	-14.0%
80.2%	15,163	13,402	-1,761	-11.6%
81.5%	14,303	13,195	-1,108	-7.7%
82.7%	13,195	13,098	-96	-0.7%
84.0%	12,924	13,075	151	1.2%
85.2%	12,558	13,023	464	3.7%
86.4%	12,405	12,537	132	1.1%
87.7%	11,940	12,427	488	4.1%
88.9%	11,516	11,745	228	2.0%
90.1%	11,404	11,679	275	2.4%
91.4%	11,396	11,344	-52	-0.5%
92.6%	11,237	11,234	-3	0.0%
93.8%	10,663	10,751	88	0.8%
95.1%	10,448	10,514	66	0.6%
96.3%	8,782	10,480	1,697	19.3%
97.5%	8,705	9,969	1,264	14.5%
98.8%	7,919	9,124	1,205	15.2%
100.0%	7,537	8,809	1,272	16.9%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	73,218	73,213	-5	0.0%
1.2%	67,848	67,955	107	0.2%
2.5%	64,358	64,023	-335	-0.5%
3.7%	57,239	56,272	-967	-1.7%
4.9%	56,284	54,686	-1,598	-2.8%
6.2%	54,701	54,591	-110	-0.2%
7.4%	54,671	52,880	-1,791	-3.3%
8.6%	54,564	52,633	-1,930	-3.5%
9.9%	50,750	49,838	-912	-1.8%
11.1%	49,904	48,015	-1,889	-3.8%
12.3%	46,235	46,232	-4	0.0%
13.6%	42,635	41,945	-690	-1.6%
14.8%	41,945	40,925	-1,021	-2.4%
16.0%	41,604	40,237	-1,367	-3.3%
17.3%	40,847	38,737	-2,110	-5.2%
18.5%	40,242	38,722	-1,520	-3.8%
19.8%	37,392	36,157	-1,235	-3.3%
21.0%	36,522	35,667	-855	-2.3%
22.2%	35,627	35,633	6	0.0%
23.5%	34,851	33,514	-1,337	-3.8%
24.7%	33,172	33,233	61	0.2%
25.9%	25,510	25,245	-264	-1.0%
27.2%	25,371	23,877	-1,494	-5.9%
28.4%	24,021	23,815	-206	-0.9%
29.6%	23,863	22,927	-936	-3.9%
30.9%	23,764	22,274	-1,490	-6.3%
32.1%	23,546	22,200	-1,346	-5.7%
33.3%	22,274	21,939	-335	-1.5%
34.6%	21,935	21,924	-11	-0.1%
35.8%	21,919	20,823	-1,095	-5.0%
37.0%	21,850	20,377	-1,473	-6.7%
38.3%	21,125	20,302	-824	-3.9%
39.5%	21,073	20,225	-848	-4.0%
40.7%	20,309	20,016	-293	-1.4%
42.0%	20,118	19,311	-808	-4.0%
43.2%	19,684	19,302	-382	-1.9%
44.4%	18,408	18,343	-66	-0.4%
45.7%	18,360	18,248	-112	-0.6%
46.9%	18,069	17,832	-238	-1.3%
48.1%	17,012	17,012	0	0.0%
49.4%	16,984	16,976	-7	0.0%
50.6%	16,798	16,790	-8	0.0%
51.9%	16,504	16,508	4	0.0%
53.1%	15,844	15,672	-172	-1.1%
54.3%	15,010	15,010	0	0.0%
55.6%	14,198	14,849	652	4.6%
56.8%	14,012	14,088	77	0.5%
58.0%	13,811	13,813	2	0.0%
59.3%	13,563	13,564	1	0.0%
60.5%	13,239	13,517	278	2.1%
61.7%	13,233	13,233	0	0.0%
63.0%	12,789	13,070	280	2.2%
64.2%	12,637	12,886	249	2.0%
65.4%	12,630	12,791	161	1.3%
66.7%	12,571	12,633	62	0.5%
67.9%	12,395	12,558	163	1.3%
69.1%	12,386	12,547	161	1.3%
70.4%	12,046	12,048	2	0.0%
71.6%	12,045	12,040	-6	0.0%
72.8%	12,036	11,908	-128	-1.1%
74.1%	11,903	11,897	-7	-0.1%
75.3%	11,534	11,723	188	1.6%
76.5%	11,527	11,540	13	0.1%
77.8%	11,449	11,294	-154	-1.3%
79.0%	11,294	11,166	-128	-1.1%
80.2%	11,086	10,877	-209	-1.9%
81.5%	10,787	10,863	76	0.7%
82.7%	10,604	10,604	0	0.0%
84.0%	10,589	10,461	-128	-1.2%
85.2%	10,460	10,299	-161	-1.5%
86.4%	10,214	10,124	-90	-0.9%
87.7%	10,087	10,090	3	0.0%
88.9%	10,000	10,001	0	0.0%
90.1%	9,754	9,954	201	2.1%
91.4%	9,720	9,723	3	0.0%
92.6%	9,648	9,722	74	0.8%
93.8%	9,557	9,557	0	0.0%
95.1%	9,483	9,483	0	0.0%
96.3%	9,351	9,088	-263	-2.8%
97.5%	9,087	9,003	-84	-0.9%
98.8%	8,970	8,981	11	0.1%
100.0%	8,364	8,241	-123	-1.5%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	57,929	57,275	-654	-1.1%
1.2%	57,425	56,790	-635	-1.1%
2.5%	53,578	53,572	-6	0.0%
3.7%	51,870	51,709	-161	-0.3%
4.9%	47,518	47,554	36	0.1%
6.2%	43,891	43,895	4	0.0%
7.4%	43,715	43,403	-312	-0.7%
8.6%	42,412	42,250	-163	-0.4%
9.9%	40,727	40,629	-98	-0.2%
11.1%	40,511	40,291	-221	-0.5%
12.3%	39,022	38,889	-133	-0.3%
13.6%	38,206	38,029	-178	-0.5%
14.8%	36,821	36,435	-387	-1.0%
16.0%	31,508	32,915	1,407	4.5%
17.3%	31,010	30,899	-110	-0.4%
18.5%	29,282	28,626	-656	-2.2%
19.8%	28,805	28,275	-530	-1.8%
21.0%	26,894	26,904	10	0.0%
22.2%	26,039	26,092	53	0.2%
23.5%	25,553	25,568	15	0.1%
24.7%	24,185	22,781	-1,404	-5.8%
25.9%	22,931	22,041	-891	-3.9%
27.2%	20,129	20,026	-103	-0.5%
28.4%	19,429	18,935	-494	-2.5%
29.6%	18,199	17,965	-234	-1.3%
30.9%	18,034	17,744	-290	-1.6%
32.1%	17,982	17,715	-267	-1.5%
33.3%	17,871	16,500	-1,371	-7.7%
34.6%	16,519	16,049	-470	-2.8%
35.8%	16,070	15,857	-214	-1.3%
37.0%	15,827	15,733	-94	-0.6%
38.3%	15,166	15,140	-26	-0.2%
39.5%	15,139	14,956	-184	-1.2%
40.7%	14,957	14,856	-101	-0.7%
42.0%	14,765	14,765	0	0.0%
43.2%	14,402	14,404	2	0.0%
44.4%	14,327	14,344	16	0.1%
45.7%	13,940	14,328	387	2.8%
46.9%	13,918	13,913	-5	0.0%
48.1%	13,854	13,841	-13	-0.1%
49.4%	13,829	13,127	-702	-5.1%
50.6%	12,987	12,975	-12	-0.1%
51.9%	12,917	12,923	6	0.0%
53.1%	12,431	12,615	184	1.5%
54.3%	12,381	12,382	1	0.0%
55.6%	12,353	12,350	-3	0.0%
56.8%	12,324	12,327	3	0.0%
58.0%	12,261	12,261	0	0.0%
59.3%	12,236	12,237	2	0.0%
60.5%	12,211	12,216	6	0.0%
61.7%	12,121	11,952	-168	-1.4%
63.0%	11,952	11,611	-340	-2.8%
64.2%	11,384	11,487	103	0.9%
65.4%	11,163	11,385	222	2.0%
66.7%	11,056	11,166	110	1.0%
67.9%	11,034	11,142	107	1.0%
69.1%	11,017	11,126	109	1.0%
70.4%	10,922	11,040	118	1.1%
71.6%	10,905	11,018	113	1.0%
72.8%	10,825	10,936	110	1.0%
74.1%	10,784	10,820	36	0.3%
75.3%	10,579	10,580	1	0.0%
76.5%	10,577	10,543	-35	-0.3%
77.8%	10,563	10,540	-23	-0.2%
79.0%	10,510	10,513	3	0.0%
80.2%	10,215	10,205	-10	-0.1%
81.5%	9,655	9,925	271	2.8%
82.7%	9,467	9,659	192	2.0%
84.0%	9,321	9,603	282	3.0%
85.2%	9,183	9,471	287	3.1%
86.4%	9,096	9,390	295	3.2%
87.7%	9,042	9,043	1	0.0%
88.9%	9,016	8,990	-26	-0.3%
90.1%	8,905	8,575	-329	-3.7%
91.4%	8,551	8,549	-2	0.0%
92.6%	8,549	8,520	-29	-0.3%
93.8%	8,287	8,290	3	0.0%
95.1%	7,760	7,960	199	2.6%
96.3%	7,261	6,994	-268	-3.7%
97.5%	6,994	6,587	-407	-5.8%
98.8%	6,769	6,439	-330	-4.9%
100.0%	5,439	5,653	214	3.9%

Table SW-17-b

Sacramento River at Freeport, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,552	59,518	-34	-0.1%
1.2%	48,964	48,797	-167	-0.3%
2.5%	37,341	37,934	593	1.6%
3.7%	35,764	36,739	976	2.7%
4.9%	34,155	36,555	2,399	7.0%
6.2%	33,730	33,966	236	0.7%
7.4%	33,631	33,715	84	0.2%
8.6%	28,450	29,450	1,000	3.5%
9.9%	25,505	24,893	-613	-2.4%
11.1%	23,589	24,208	618	2.6%
12.3%	23,553	22,804	-749	-3.2%
13.6%	23,091	22,163	-928	-4.0%
14.8%	21,871	21,860	-11	-0.1%
16.0%	20,538	20,842	304	1.5%
17.3%	20,264	20,526	263	1.3%
18.5%	20,159	20,250	91	0.5%
19.8%	20,094	19,381	-712	-3.5%
21.0%	19,119	19,370	251	1.3%
22.2%	18,298	18,285	-13	-0.1%
23.5%	16,417	16,686	269	1.6%
24.7%	16,125	16,149	24	0.2%
25.9%	15,834	16,094	260	1.6%
27.2%	15,611	15,898	287	1.8%
28.4%	15,481	15,627	146	0.9%
29.6%	15,414	15,601	186	1.2%
30.9%	15,147	15,577	429	2.8%
32.1%	15,136	15,467	330	2.2%
33.3%	14,981	15,132	151	1.0%
34.6%	14,886	14,981	95	0.6%
35.8%	14,712	14,850	138	0.9%
37.0%	14,370	14,758	388	2.7%
38.3%	14,262	14,501	239	1.7%
39.5%	13,972	14,330	358	2.6%
40.7%	13,869	14,273	404	2.9%
42.0%	13,862	14,114	252	1.8%
43.2%	13,820	13,972	152	1.1%
44.4%	13,735	13,831	96	0.7%
45.7%	13,675	13,770	95	0.7%
46.9%	13,656	13,738	82	0.6%
48.1%	13,619	13,656	37	0.3%
49.4%	13,617	13,552	-64	-0.5%
50.6%	13,552	13,516	-36	-0.3%
51.9%	13,547	13,451	-95	-0.7%
53.1%	13,516	13,400	-116	-0.9%
54.3%	13,319	13,393	74	0.6%
55.6%	13,286	13,319	33	0.2%
56.8%	13,022	13,286	264	2.0%
58.0%	12,979	13,214	234	1.8%
59.3%	12,971	13,197	226	1.7%
60.5%	12,939	13,178	239	1.8%
61.7%	12,891	12,971	80	0.6%
63.0%	12,829	12,940	111	0.9%
64.2%	12,697	12,871	174	1.4%
65.4%	12,696	12,832	136	1.1%
66.7%	12,684	12,828	145	1.1%
67.9%	12,671	12,695	24	0.2%
69.1%	12,622	12,685	63	0.5%
70.4%	12,543	12,644	100	0.8%
71.6%	12,304	12,622	318	2.6%
72.8%	12,219	12,545	327	2.7%
74.1%	11,986	12,504	518	4.3%
75.3%	11,912	12,240	328	2.7%
76.5%	11,897	12,219	321	2.7%
77.8%	11,828	12,085	257	2.2%
79.0%	11,713	11,981	267	2.3%
80.2%	11,281	11,872	591	5.2%
81.5%	11,216	11,678	461	4.1%
82.7%	10,822	11,615	793	7.3%
84.0%	10,805	11,033	229	2.1%
85.2%	10,791	10,805	15	0.1%
86.4%	10,712	10,635	-77	-0.7%
87.7%	10,635	10,533	-102	-1.0%
88.9%	10,299	10,299	0	0.0%
90.1%	10,152	10,152	0	0.0%
91.4%	9,687	9,688	0	0.0%
92.6%	9,561	9,579	18	0.2%
93.8%	8,287	8,983	695	8.4%
95.1%	8,238	8,479	241	2.9%
96.3%	8,073	8,349	276	3.4%
97.5%	7,928	8,191	262	3.3%
98.8%	7,653	8,173	520	6.8%
100.0%	7,569	7,922	352	4.7%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,666	24,971	304	1.2%
1.2%	24,577	24,801	225	0.9%
2.5%	24,570	24,531	-40	-0.2%
3.7%	24,534	24,529	-5	0.0%
4.9%	24,531	24,527	-4	0.0%
6.2%	24,526	24,526	0	0.0%
7.4%	24,286	24,521	235	1.0%
8.6%	24,054	24,468	414	1.7%
9.9%	24,040	24,260	220	0.9%
11.1%	24,011	24,213	202	0.8%
12.3%	23,856	24,046	190	0.8%
13.6%	23,781	24,013	232	1.0%
14.8%	23,678	23,992	314	1.3%
16.0%	23,361	23,821	460	2.0%
17.3%	23,287	23,679	393	1.7%
18.5%	23,193	23,341	148	0.6%
19.8%	23,118	23,118	0	0.0%
21.0%	22,733	22,939	205	0.9%
22.2%	22,679	22,835	157	0.7%
23.5%	22,511	22,679	168	0.7%
24.7%	22,441	22,511	70	0.3%
25.9%	22,348	22,296	-52	-0.2%
27.2%	22,298	22,259	-39	-0.2%
28.4%	22,260	22,030	-230	-1.0%
29.6%	21,701	21,701	0	0.0%
30.9%	21,230	21,388	159	0.7%
32.1%	20,967	20,967	0	0.0%
33.3%	20,879	20,923	44	0.2%
34.6%	20,844	20,897	53	0.3%
35.8%	20,717	20,856	139	0.7%
37.0%	20,637	20,832	194	0.9%
38.3%	20,581	20,717	136	0.7%
39.5%	20,535	20,577	43	0.2%
40.7%	20,320	20,462	142	0.7%
42.0%	20,234	20,285	51	0.2%
43.2%	20,189	20,226	37	0.2%
44.4%	20,155	20,187	31	0.2%
45.7%	20,137	20,155	18	0.1%
46.9%	20,041	20,112	71	0.4%
48.1%	19,987	20,110	123	0.6%
49.4%	19,958	20,057	100	0.5%
50.6%	19,927	19,980	53	0.3%
51.9%	19,912	19,911	-1	0.0%
53.1%	19,883	19,879	-4	0.0%
54.3%	19,656	19,783	127	0.6%
55.6%	19,634	19,708	74	0.4%
56.8%	19,596	19,689	93	0.5%
58.0%	19,595	19,653	58	0.3%
59.3%	19,516	19,596	80	0.4%
60.5%	19,373	19,515	142	0.7%
61.7%	19,049	19,454	404	2.1%
63.0%	18,965	19,319	353	1.9%
64.2%	18,666	19,238	571	3.1%
65.4%	18,129	19,216	1,087	6.0%
66.7%	17,864	18,667	803	4.5%
67.9%	17,863	18,064	201	1.1%
69.1%	17,559	18,004	444	2.5%
70.4%	17,513	17,871	358	2.0%
71.6%	17,459	17,513	54	0.3%
72.8%	17,451	17,437	-13	-0.1%
74.1%	17,437	17,260	-177	-1.0%
75.3%	17,261	17,227	-34	-0.2%
76.5%	16,895	17,143	248	1.5%
77.8%	16,786	16,787	1	0.0%
79.0%	16,060	16,582	522	3.3%
80.2%	15,342	15,913	571	3.7%
81.5%	15,029	15,903	874	5.8%
82.7%	14,878	15,509	632	4.2%
84.0%	14,599	15,183	585	4.0%
85.2%	14,522	15,029	507	3.5%
86.4%	13,797	14,851	1,054	7.6%
87.7%	13,612	14,550	938	6.9%
88.9%	13,437	14,397	960	7.1%
90.1%	13,036	13,467	432	3.3%
91.4%	12,716	13,018	302	2.4%
92.6%	12,012	11,120	-892	-7.4%
93.8%	9,627	10,416	789	8.2%
95.1%	9,151	10,308	1,156	12.6%
96.3%	9,106	10,159	1,053	11.6%
97.5%	8,750	10,134	1,384	15.8%
98.8%	8,675	8,979	304	3.5%
100.0%	8,514	8,716	201	2.4%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,120	20,962	843	4.2%
1.2%	19,716	20,698	982	5.0%
2.5%	17,617	17,879	262	1.5%
3.7%	17,512	17,724	211	1.2%
4.9%	17,359	17,599	240	1.4%
6.2%	17,332	17,522	190	1.1%
7.4%	17,307	17,441	135	0.8%
8.6%	17,293	17,320	27	0.2%
9.9%	17,247	17,293	46	0.3%
11.1%	17,236	17,248	12	0.1%
12.3%	17,190	17,222	32	0.2%
13.6%	17,111	17,195	84	0.5%
14.8%	17,037	17,111	75	0.4%
16.0%	17,030	17,085	54	0.3%
17.3%	17,004	17,069	64	0.4%
18.5%	16,959	17,031	72	0.4%
19.8%	16,910	16,959	49	0.3%
21.0%	16,815	16,935	120	0.7%
22.2%	16,798	16,848	50	0.3%
23.5%	16,745	16,822	76	0.5%
24.7%	16,638	16,815	177	1.1%
25.9%	16,621	16,583	-38	-0.2%
27.2%	16,572	16,582	11	0.1%
28.4%	16,547	16,552	5	0.0%
29.6%	16,519	16,547	28	0.2%
30.9%	16,493	16,412	-81	-0.5%
32.1%	16,469	16,240	-229	-1.4%
33.3%	16,412	16,200	-212	-1.3%
34.6%	16,200	16,156	-44	-0.3%
35.8%	16,156	16,060	-96	-0.6%
37.0%	16,060	16,026	-34	-0.2%
38.3%	15,982	16,012	30	0.2%
39.5%	15,924	15,982	59	0.4%
40.7%	15,891	15,941	50	0.3%
42.0%	15,823	15,891	68	0.4%
43.2%	15,809	15,809	1	0.0%
44.4%	15,662	15,797	135	0.9%
45.7%	15,632	15,632	0	0.0%
46.9%	15,606	15,604	-2	0.0%
48.1%	15,533	15,576	43	0.3%
49.4%	15,483	15,525	42	0.3%
50.6%	15,464	15,491	27	0.2%
51.9%	15,398	15,464	67	0.4%
53.1%	15,336	15,398	62	0.4%
54.3%	15,260	15,332	73	0.5%
55.6%	15,243	15,307	65	0.4%
56.8%	15,091	15,260	169	1.1%
58.0%	15,038	15,153	115	0.8%
59.3%	14,960	15,022	62	0.4%
60.5%	14,553	14,787	234	1.6%
61.7%	14,353	14,748	395	2.8%
63.0%	13,988	14,689	701	5.0%
64.2%	13,612	14,678	1,067	7.8%
65.4%	13,210	14,545	1,336	10.1%
66.7%	12,453	14,424	1,971	15.8%
67.9%	12,447	14,223	1,776	14.3%
69.1%	12,412	13,226	814	6.6%
70.4%	12,124	13,198	1,074	8.9%
71.6%	11,615	12,971	1,356	11.7%
72.8%	11,531	12,893	1,362	11.8%
74.1%	11,490	12,804	1,314	11.4%
75.3%	11,379	12,751	1,372	12.1%
76.5%	11,138	12,426	1,287	11.6%
77.8%	11,113	12,424	1,311	11.8%
79.0%	11,010	12,137	1,126	10.2%
80.2%	10,703	12,091	1,387	13.0%
81.5%	10,438	12,061	1,623	15.5%
82.7%	10,132	11,941	1,809	17.9%
84.0%	10,051	11,612	1,561	15.5%
85.2%	9,951	11,604	1,653	16.6%
86.4%	9,538	11,151	1,613	16.9%
87.7%	9,434	11,118	1,684	17.9%
88.9%	9,405	11,097	1,692	18.0%
90.1%	9,176	10,449	1,273	13.9%
91.4%	8,712	10,334	1,622	18.6%
92.6%	8,357	10,009	1,652	19.8%
93.8%	8,003	9,911	1,908	23.8%
95.1%	7,895	9,837	1,942	24.6%
96.3%	7,548	9,475	1,927	25.5%
97.5%	7,507	9,086	1,579	21.0%
98.8%	7,477	8,936	1,458	19.5%
100.0%	7,455	8,217	762	10.2%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,478	31,475	-3	0.0%
1.2%	30,434	30,559	125	0.4%
2.5%	30,310	30,440	130	0.4%
3.7%	30,197	30,289	91	0.3%
4.9%	30,037	30,260	224	0.7%
6.2%	29,960	30,227	267	0.9%
7.4%	29,779	30,115	336	1.1%
8.6%	29,645	29,843	198	0.7%
9.9%	29,639	29,732	94	0.3%
11.1%	29,609	29,684	75	0.3%
12.3%	29,519	29,680	161	0.5%
13.6%	29,485	29,594	109	0.4%
14.8%	29,479	29,580	102	0.3%
16.0%	29,473	29,574	101	0.3%
17.3%	29,424	29,552	128	0.4%
18.5%	29,252	29,474	222	0.8%
19.8%	29,150	29,362	212	0.7%
21.0%	28,891	29,170	280	1.0%
22.2%	28,440	28,295	-145	-0.5%
23.5%	28,331	25,188	-3,143	-11.1%
24.7%	28,161	23,953	-4,209	-14.9%
25.9%	24,049	23,840	-209	-0.9%
27.2%	24,036	23,628	-408	-1.7%
28.4%	23,907	23,439	-469	-2.0%
29.6%	23,895	23,108	-787	-3.3%
30.9%	23,839	23,064	-775	-3.3%
32.1%	23,625	22,728	-897	-3.8%
33.3%	23,088	22,711	-377	-1.6%
34.6%	22,824	22,616	-208	-0.9%
35.8%	22,464	22,604	140	0.6%
37.0%	22,423	22,384	-39	-0.2%
38.3%	22,091	22,308	218	1.0%
39.5%	21,710	22,300	590	2.7%
40.7%	21,524	21,940	416	1.9%
42.0%	21,517	21,592	74	0.3%
43.2%	21,234	21,431	198	0.9%
44.4%	21,210	20,962	-248	-1.2%
45.7%	19,923	20,827	904	4.5%
46.9%	15,609	15,853	245	1.6%
48.1%	15,446	15,771	325	2.1%
49.4%	15,345	15,667	321	2.1%
50.6%	15,107	15,501	394	2.6%
51.9%	14,950	15,422	471	3.2%
53.1%	14,669	14,987	317	2.2%
54.3%	14,531	14,842	312	2.1%
55.6%	14,418	14,748	330	2.3%
56.8%	14,228	14,663	435	3.1%
58.0%	14,204	14,476	272	1.9%
59.3%	14,179	14,424	245	1.7%
60.5%	14,087	14,422	335	2.4%
61.7%	13,774	14,419	645	4.7%
63.0%	12,167	14,409	2,242	18.4%
64.2%	12,094	14,389	2,295	19.0%
65.4%	12,030	14,367	2,337	19.4%
66.7%	11,386	14,355	2,969	26.1%
67.9%	11,149	14,150	3,001	26.9%
69.1%	11,085	13,430	2,345	21.2%
70.4%	10,895	12,800	1,905	17.5%
71.6%	10,855	12,723	1,868	17.2%
72.8%	10,634	12,543	1,909	18.0%
74.1%	10,527	12,493	1,966	18.7%
75.3%	9,859	12,397	2,538	25.7%
76.5%	9,675	12,257	2,581	26.7%
77.8%	9,399	12,169	2,769	29.5%
79.0%	9,206	11,940	2,733	29.7%
80.2%	9,075	11,646	2,570	28.3%
81.5%	9,017	11,396	2,379	26.4%
82.7%	8,731	11,349	2,618	30.0%
84.0%	8,713	11,345	2,632	30.2%
85.2%	8,591	11,343	2,753	32.0%
86.4%	8,295	11,322	3,027	36.5%
87.7%	8,246	11,134	2,887	35.0%
88.9%	7,829	11,106	3,277	41.9%
90.1%	6,995	11,084	4,090	58.5%
91.4%	6,963	9,988	3,025	43.5%
92.6%	6,710	8,787	2,077	30.9%
93.8%	6,656	8,187	1,531	23.0%
95.1%	6,575	8,015	1,439	21.9%
96.3%	6,553	8,004	1,451	22.1%
97.5%	6,532	6,673	141	2.2%
98.8%	6,364	6,573	209	3.3%
100.0%	6,227	6,389	162	2.6%

Figure SW-18-b
Lake Oroville, End of Month Storage
Probability of Exceedance

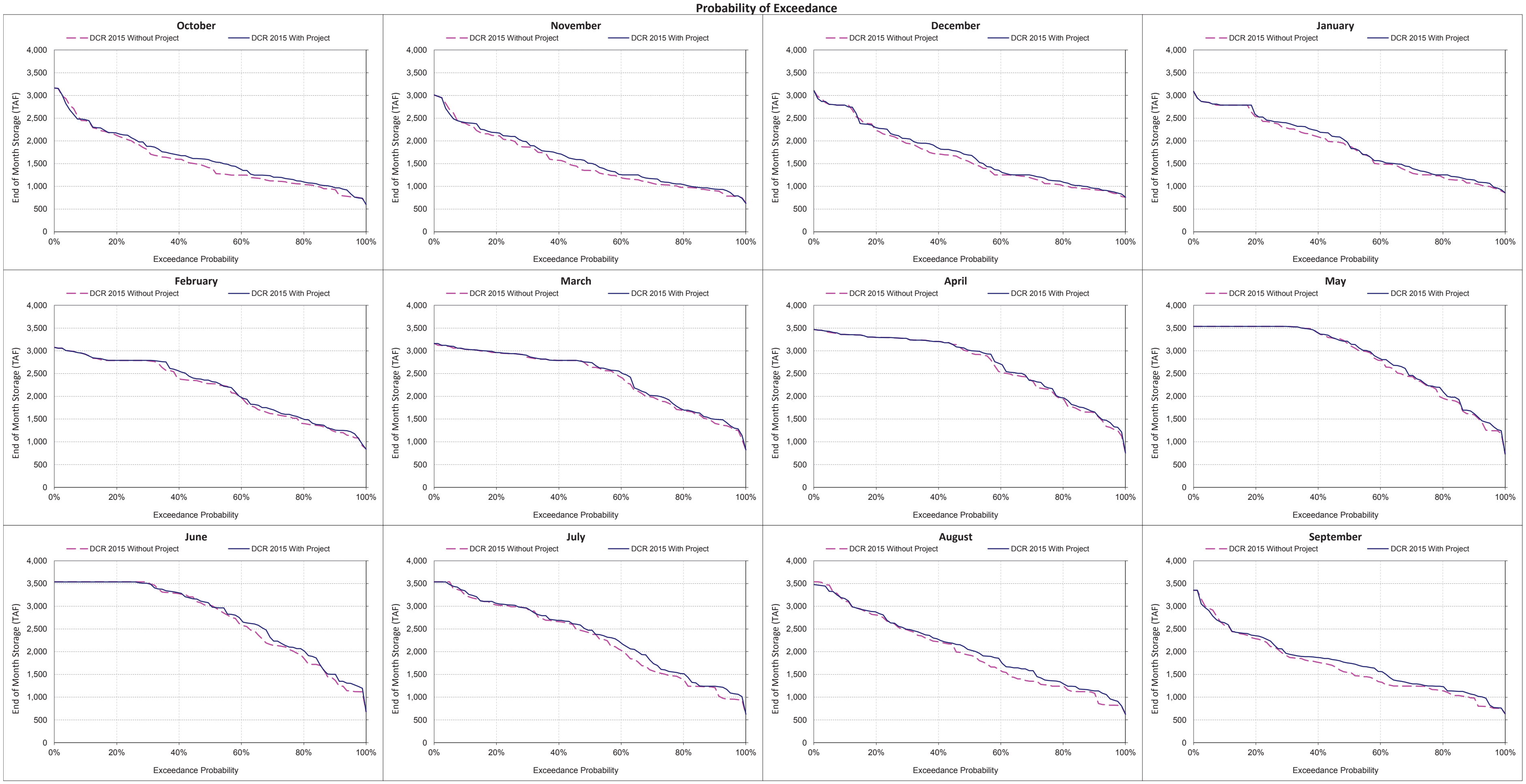


Table SW-18-b

Lake Oroville, End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,163	3,163	0	0.0%
1.2%	3,154	3,154	0	0.0%
2.5%	2,993	3,011	18	0.6%
3.7%	2,930	2,823	-108	-3.7%
4.9%	2,783	2,688	-95	-3.4%
6.2%	2,715	2,585	-130	-4.8%
7.4%	2,554	2,478	-76	-3.0%
8.6%	2,450	2,478	28	1.1%
9.9%	2,446	2,468	22	0.9%
11.1%	2,423	2,447	24	1.0%
12.3%	2,289	2,301	11	0.5%
13.6%	2,270	2,289	19	0.9%
14.8%	2,226	2,283	57	2.6%
16.0%	2,210	2,237	27	1.2%
17.3%	2,186	2,186	0	0.0%
18.5%	2,170	2,184	15	0.7%
19.8%	2,128	2,179	50	2.4%
21.0%	2,091	2,148	57	2.7%
22.2%	2,065	2,134	69	3.4%
23.5%	2,029	2,125	96	4.7%
24.7%	2,002	2,067	65	3.2%
25.9%	1,944	2,030	86	4.4%
27.2%	1,914	1,978	64	3.3%
28.4%	1,857	1,976	119	6.4%
29.6%	1,817	1,883	66	3.6%
30.9%	1,707	1,881	174	10.2%
32.1%	1,683	1,866	183	10.9%
33.3%	1,669	1,825	156	9.4%
34.6%	1,647	1,761	114	7.0%
35.8%	1,641	1,749	108	6.6%
37.0%	1,624	1,726	103	6.3%
38.3%	1,604	1,708	104	6.5%
39.5%	1,598	1,693	95	6.0%
40.7%	1,594	1,676	82	5.2%
42.0%	1,551	1,675	123	7.9%
43.2%	1,519	1,641	122	8.0%
44.4%	1,505	1,614	108	7.2%
45.7%	1,493	1,613	119	8.0%
46.9%	1,475	1,605	130	8.8%
48.1%	1,446	1,602	156	10.8%
49.4%	1,412	1,589	178	12.6%
50.6%	1,401	1,553	152	10.9%
51.9%	1,281	1,535	254	19.9%
53.1%	1,275	1,527	252	19.8%
54.3%	1,271	1,496	225	17.7%
55.6%	1,260	1,485	225	17.9%
56.8%	1,248	1,453	205	16.4%
58.0%	1,248	1,440	192	15.3%
59.3%	1,248	1,394	146	11.7%
60.5%	1,248	1,352	105	8.4%
61.7%	1,247	1,351	104	8.3%
63.0%	1,194	1,268	74	6.2%
64.2%	1,186	1,248	62	5.2%
65.4%	1,178	1,248	70	5.9%
66.7%	1,170	1,248	78	6.6%
67.9%	1,138	1,244	106	9.3%
69.1%	1,123	1,234	111	9.9%
70.4%	1,119	1,204	84	7.5%
71.6%	1,113	1,201	88	7.9%
72.8%	1,108	1,194	86	7.7%
74.1%	1,100	1,174	75	6.8%
75.3%	1,071	1,161	89	8.4%
76.5%	1,068	1,152	84	7.8%
77.8%	1,058	1,119	61	5.8%
79.0%	1,052	1,114	62	5.9%
80.2%	1,040	1,093	53	5.1%
81.5%	1,035	1,074	39	3.8%
82.7%	1,027	1,068	41	4.0%
84.0%	1,000	1,057	57	5.7%
85.2%	990	1,028	38	3.9%
86.4%	949	1,018	69	7.3%
87.7%	946	1,014	68	7.2%
88.9%	942	995	53	5.6%
90.1%	927	968	41	4.4%
91.4%	804	967	164	20.4%
92.6%	792	941	149	18.8%
93.8%	782	924	142	18.2%
95.1%	771	833	62	8.1%
96.3%	763	762	-1	-0.2%
97.5%	756	742	-14	-1.8%
98.8%	734	741	7	1.0%
100.0%	612	602	-10	-1.7%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,008	3,008	0	0.0%
1.2%	2,981	2,981	0	0.0%
2.5%	2,950	2,950	0	0.0%
3.7%	2,824	2,716	-108	-3.8%
4.9%	2,690	2,595	-95	-3.5%
6.2%	2,616	2,486	-130	-5.0%
7.4%	2,452	2,448	-5	-0.2%
8.6%	2,405	2,423	18	0.8%
9.9%	2,391	2,406	15	0.6%
11.1%	2,348	2,392	44	1.9%
12.3%	2,332	2,386	54	2.3%
13.6%	2,230	2,376	146	6.6%
14.8%	2,185	2,256	72	3.3%
16.0%	2,156	2,244	88	4.1%
17.3%	2,155	2,212	57	2.6%
18.5%	2,122	2,187	65	3.1%
19.8%	2,114	2,185	70	3.3%
21.0%	2,110	2,172	62	3.0%
22.2%	2,035	2,113	78	3.8%
23.5%	2,026	2,108	82	4.0%
24.7%	2,016	2,100	84	4.2%
25.9%	1,988	2,099	111	5.6%
27.2%	1,884	2,032	148	7.9%
28.4%	1,869	1,997	128	6.8%
29.6%	1,866	1,985	119	6.4%
30.9%	1,863	1,898	35	1.9%
32.1%	1,825	1,891	66	3.6%
33.3%	1,748	1,836	88	5.0%
34.6%	1,743	1,782	39	2.3%
35.8%	1,724	1,773	49	2.8%
37.0%	1,596	1,767	171	10.7%
38.3%	1,584	1,753	170	10.7%
39.5%	1,575	1,724	150	9.5%
40.7%	1,568	1,707	139	8.8%
42.0%	1,540	1,670	130	8.5%
43.2%	1,486	1,626	139	9.4%
44.4%	1,463	1,607	144	9.8%
45.7%	1,445	1,591	146	10.1%
46.9%	1,370	1,590	220	16.1%
48.1%	1,353	1,574	221	16.3%
49.4%	1,351	1,507	156	11.5%
50.6%	1,347	1,506	159	11.8%
51.9%	1,346	1,476	130	9.6%
53.1%	1,292	1,420	128	9.9%
54.3%	1,271	1,398	127	10.0%
55.6%	1,264	1,353	89	7.0%
56.8%	1,242	1,331	89	7.2%
58.0%	1,239	1,323	84	6.8%
59.3%	1,209	1,267	58	4.8%
60.5%	1,181	1,251	70	6.0%
61.7%	1,168	1,251	83	7.1%
63.0%	1,160	1,251	91	7.9%
64.2%	1,151	1,251	100	8.7%
65.4%	1,147	1,251	104	9.1%
66.7%	1,117	1,207	89	8.0%
67.9%	1,106	1,184	78	7.1%
69.1%	1,085	1,174	88	8.1%
70.4%	1,062	1,166	105	9.8%
71.6%	1,042	1,159	117	11.2%
72.8%	1,039	1,105	66	6.4%
74.1%	1,033	1,091	58	5.6%
75.3%	1,032	1,088	57	5.5%
76.5%	1,014	1,067	53	5.3%
77.8%	1,012	1,053	42	4.1%
79.0%	979	1,051	72	7.4%
80.2%	976	1,036	60	6.2%
81.5%	976	1,011	35	3.6%
82.7%	972	994	21	2.2%
84.0%	965	982	17	1.8%
85.2%	938	971	33	3.5%
86.4%	936	969	33	3.6%
87.7%	922	967	45	4.9%
88.9%	908	953	45	4.9%
90.1%	902	942	40	4.4%
91.4%	893	936	43	4.8%
92.6%	847	935	89	10.5%
93.8%	786	907	121	15.4%
95.1%	785	867	82	10.4%
96.3%	781	792	12	1.5%
97.5%	778	789	11	1.4%
98.8%	749	737	-12	-1.6%
100.0%	637	627	-11	-1.7%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,107	3,107	0	0.0%
1.2%	2,977	2,930	-47	-1.6%
2.5%	2,930	2,869	-61	-2.1%
3.7%	2,842	2,866	24	0.8%
4.9%	2,806	2,806	0	0.0%
6.2%	2,800	2,800	0	0.0%
7.4%	2,788	2,788	0	0.0%
8.6%	2,788	2,788	0	0.0%
9.9%	2,788	2,788	0	0.0%
11.1%	2,786	2,747	-39	-1.4%
12.3%	2,684	2,744	60	2.2%
13.6%	2,532	2,607	75	3.0%
14.8%	2,484	2,383	-101	-4.1%
16.0%	2,398	2,370	-28	-1.2%
17.3%	2,382	2,367	-15	-0.6%
18.5%	2,376	2,350	-27	-1.1%
19.8%	2,239	2,297	58	2.6%
21.0%	2,204	2,274	70	3.2%
22.2%	2,155	2,268	113	5.2%
23.5%	2,132	2,259	127	5.9%
24.7%	2,114	2,158	45	2.1%
25.9%	2,089	2,132	43	2.0%
27.2%	2,046	2,112	66	3.2%
28.4%	1,992	2,059	67	3.4%
29.6%	1,951	2,052	101	5.2%
30.9%	1,936	2,043	106	5.5%
32.1%	1,916	1,985	69	3.6%
33.3%	1,870	1,957	86	4.6%
34.6%	1,824	1,951	127	7.0%
35.8%	1,812	1,948	135	7.5%
37.0%	1,749	1,940	192	11.0%
38.3%	1,726	1,911	185	10.7%
39.5%	1,712	1,857	145	8.5%
40.7%	1,708	1,817	108	6.3%
42.0%	1,694	1,814	121	7.1%
43.2%	1,690	1,812	123	7.3%
44.4%	1,676	1,789	113	6.7%
45.7%	1,665	1,778	113	6.8%
46.9%	1,621	1,758	137	8.5%
48.1%	1,584	1,709	125	7.9%
49.4%	1,558	1,692	134	8.6%
50.6%	1,514	1,679	165	10.9%
51.9%	1,471	1,611	140	9.5%
53.1%	1,448	1,526	78	5.4%
54.3%	1,397	1,505	108	7.7%
55.6%	1,394	1,437	44	3.1%
56.8%	1,325	1,421	96	7.3%
58.0%	1,253	1,366	113	9.0%
59.3%	1,252	1,354	101	8.1%
60.5%	1,252	1,302	50	4.0%
61.7%	1,252	1,283	31	2.5%
63.0%	1,250	1,260	10	0.8%
64.2%	1,241	1,253	12	1.0%
65.4%	1,238	1,252	15	1.2%
66.7%	1,223	1,252	30	2.4%
67.9%	1,220	1,252	33	2.7%
69.1%	1,195	1,252	57	4.8%
70.4%	1,170	1,238	68	5.8%
71.6%	1,145	1,212	67	5.9%
72.8%	1,123	1,199	76	6.7%
74.1%	1,062	1,178	116	11.0%
75.3%	1,060	1,140	80	7.5%
76.5%	1,054	1,129	74	7.1%
77.8%	1,047	1,123	76	7.2%
79.0%	1,038	1,114	76	7.3%
80.2%	1,007	1,088	81	8.0%
81.5%	1,004	1,069	65	6.5%
82.7%	973	1,038	65	6.7%
84.0%	971	1,018	46	4.8%
85.2%	958	1,017	59	6.2%
86.4%	949	1,004	55	5.8%
87.7%	947	998	51	5.4%
88.9%	931	967	36	3.8%
90.1%	926	955	29	3.2%
91.4%	915	948	33	3.6%
92.6%	911	915	4	0.5%
93.8%	904	913	9	0.9%
95.1%	872	894	22	2.6%
96.3%	843	877	34	4.0%
97.5%	842	852	9	1.1%
98.8%	777	831	55	7.1%
100.0%	760	759	0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,091	3,091	0	0.0%
1.2%	2,943	2,943	0	0.0%
2.5%	2,870	2,870	0	0.0%
3.7%	2,854	2,854	0	0.0%
4.9%	2,846	2,846	0	0.0%
6.2%	2,809	2,813	4	0.1%
7.4%	2,788	2,809	21	0.8%
8.6%	2,788	2,788	0	0.0%
9.9%	2,788	2,788	0	0.0%
11.1%	2,788	2,788	0	0.0%
12.3%	2,788	2,788	0	0.0%
13.6%	2,788	2,788	0	0.0%
14.8%	2,788	2,788	0	0.0%
16.0%	2,788	2,788	0	0.0%
17.3%	2,787	2,788	1	0.0%
18.5%	2,638	2,787	149	5.6%
19.8%	2,539	2,589	50	2.0%
21.0%	2,530	2,526	-4	-0.1%
22.2%	2,431	2,524	93	3.8%
23.5%	2,428	2,458	29	1.2%
24.7%	2,412	2,446	34	1.4%
25.9%	2,391	2,425	34	1.4%
27.2%	2,376	2,419	43	1.8%
28.4%	2,304	2,408	104	4.5%
29.6%	2,290	2,403	112	4.9%
30.9%	2,265	2,378	113	5.0%
32.1%	2,263	2,346	83	3.7%
33.3%	2,232	2,319	88	3.9%
34.6%	2,190	2,318	128	5.8%
35.8%	2,164	2,312	148	6.9%
37.0%	2,159	2,271	112	5.2%
38.3%	2,125	2,246	121	5.7%
39.5%	2,100	2,231	131	6.3%
40.7%	2,074	2,188	114	5.5%
42.0%	2,070	2,182	112	5.4%
43.2%	1,989	2,179	189	9.5%
44.4%	1,981	2,106	125	6.3%
45.7%	1,981	2,090	109	5.5%
46.9%	1,969	2,084	115	5.8%
48.1%	1,951	2,037	86	4.4%
49.4%	1,874	1,970	96	5.1%
50.6%	1,873	1,830	-43	-2.3%
51.9%	1,811	1,827	16	0.9%
53.1%	1,762	1,788	26	1.5%
54.3%	1,710	1,699	-11	-0.6%
55.6%	1,681	1,697	16	1.0%
56.8%	1,652	1,643	-9	-0.6%
58.0%	1,503	1,568	64	4.3%
59.3%	1,494	1,564	70	4.7%
60.5%	1,491	1,550	59	4.0%
61.7%	1,489	1,517	28	1.9%
63.0%	1,489	1,508	19	1.3%
64.2%	1,478	1,507	29	1.9%
65.4%	1,447	1,495	48	3.3%
66.7%	1,397	1,486	89	6.4%
67.9%	1,361	1,447	86	6.3%
69.1%	1,324	1,438	114	8.6%
70.4%	1,285	1,390	106	8.2%
71.6%	1,269	1,370	101	8.0%
72.8%	1,253	1,340	86	6.9%
74.1%	1,253	1,327	73	5.9%
75.3%	1,253	1,303	50	4.0%
76.5%	1,253	1,268	15	1.2%
77.8%	1,234	1,253	20	1.6%
79.0%	1,231	1,253	22	1.8%
80.2%	1,190	1,253	64	5.3%
81.5%	1,151	1,253	102	8.9%
82.7%	1,148	1,218	70	6.1%
84.0%	1,140	1,213	73	6.4%
85.2%	1,139	1,201	62	5.4%
86.4%	1,137	1,176	39	3.4%
87.7%	1,076	1,155	79	7.4%
88.9%	1,075	1,151	76	7.1%
90.1%	1,061	1,141	80	7.5%
91.4%	1,048	1,091	43	4.1%
92.6%	1,019	1,089	70	6.8%
93.8%	1,002	1,083	82	8.2%
95.1%	997	1,062	65	6.5%
96.3%	962	984	22	2.3%
97.5%	944	962	17	1.8%
98.8%	899	926	26	2.9%
100.0%	860	858	-2	-0.3%

Table SW-18-b

Lake Oroville, End of Month Storage

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,078	3,078	0	0.0%
1.2%	3,058	3,058	0	0.0%
2.5%	3,057	3,057	0	0.0%
3.7%	3,009	3,009	0	0.0%
4.9%	2,997	2,997	0	0.0%
6.2%	2,987	2,987	0	0.0%
7.4%	2,962	2,962	0	0.0%
8.6%	2,952	2,952	0	0.0%
9.9%	2,925	2,925	0	0.0%
11.1%	2,890	2,890	0	0.0%
12.3%	2,837	2,849	12	0.4%
13.6%	2,832	2,835	3	0.1%
14.8%	2,806	2,832	26	0.9%
16.0%	2,788	2,806	18	0.6%
17.3%	2,788	2,788	0	0.0%
18.5%	2,788	2,788	0	0.0%
19.8%	2,788	2,788	0	0.0%
21.0%	2,788	2,788	0	0.0%
22.2%	2,788	2,788	0	0.0%
23.5%	2,788	2,788	0	0.0%
24.7%	2,788	2,788	0	0.0%
25.9%	2,788	2,788	0	0.0%
27.2%	2,788	2,788	0	0.0%
28.4%	2,788	2,788	0	0.0%
29.6%	2,787	2,788	1	0.0%
30.9%	2,773	2,788	15	0.5%
32.1%	2,766	2,787	21	0.8%
33.3%	2,726	2,771	45	1.6%
34.6%	2,632	2,764	132	5.0%
35.8%	2,570	2,756	185	7.2%
37.0%	2,568	2,613	46	1.8%
38.3%	2,541	2,599	58	2.3%
39.5%	2,393	2,567	174	7.3%
40.7%	2,372	2,536	164	6.9%
42.0%	2,364	2,509	145	6.1%
43.2%	2,354	2,440	86	3.7%
44.4%	2,350	2,400	50	2.1%
45.7%	2,346	2,382	37	1.6%
46.9%	2,323	2,378	54	2.3%
48.1%	2,288	2,358	70	3.1%
49.4%	2,279	2,355	76	3.3%
50.6%	2,276	2,323	47	2.1%
51.9%	2,274	2,311	38	1.6%
53.1%	2,240	2,269	29	1.3%
54.3%	2,236	2,219	-16	-0.7%
55.6%	2,217	2,206	-11	-0.5%
56.8%	2,076	2,193	117	5.6%
58.0%	2,063	2,103	39	1.9%
59.3%	1,999	2,005	6	0.3%
60.5%	1,937	1,957	19	1.0%
61.7%	1,841	1,937	96	5.2%
63.0%	1,790	1,824	35	1.9%
64.2%	1,763	1,818	55	3.1%
65.4%	1,705	1,806	101	5.9%
66.7%	1,684	1,754	69	4.1%
67.9%	1,652	1,751	99	6.0%
69.1%	1,623	1,725	102	6.3%
70.4%	1,610	1,701	91	5.6%
71.6%	1,592	1,660	68	4.3%
72.8%	1,576	1,622	46	2.9%
74.1%	1,561	1,604	42	2.7%
75.3%	1,559	1,602	42	2.7%
76.5%	1,518	1,575	57	3.7%
77.8%	1,517	1,557	39	2.6%
79.0%	1,408	1,522	114	8.1%
80.2%	1,399	1,489	90	6.4%
81.5%	1,383	1,483	99	7.2%
82.7%	1,367	1,410	43	3.1%
84.0%	1,362	1,382	21	1.5%
85.2%	1,353	1,373	20	1.5%
86.4%	1,329	1,362	33	2.5%
87.7%	1,324	1,302	-21	-1.6%
88.9%	1,252	1,281	30	2.4%
90.1%	1,218	1,254	36	2.9%
91.4%	1,203	1,252	49	4.0%
92.6%	1,201	1,252	51	4.3%
93.8%	1,144	1,245	100	8.8%
95.1%	1,133	1,221	87	7.7%
96.3%	1,089	1,175	86	7.9%
97.5%	1,084	1,072	-12	-1.1%
98.8%	914	940	26	2.9%
100.0%	844	841	-2	-0.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,163	3,163	0	0.0%
1.2%	3,123	3,162	39	1.2%
2.5%	3,120	3,123	3	0.1%
3.7%	3,105	3,120	15	0.5%
4.9%	3,096	3,105	9	0.3%
6.2%	3,059	3,096	37	1.2%
7.4%	3,058	3,059	1	0.0%
8.6%	3,054	3,058	4	0.1%
9.9%	3,036	3,036	0	0.0%
11.1%	3,028	3,028	0	0.0%
12.3%	3,027	3,027	0	0.0%
13.6%	3,018	3,018	0	0.0%
14.8%	2,999	3,005	6	0.2%
16.0%	2,995	2,999	4	0.1%
17.3%	2,988	2,995	7	0.2%
18.5%	2,964	2,988	24	0.8%
19.8%	2,964	2,964	0	0.0%
21.0%	2,951	2,964	13	0.4%
22.2%	2,944	2,951	7	0.2%
23.5%	2,942	2,944	2	0.1%
24.7%	2,937	2,937	0	0.0%
25.9%	2,936	2,936	0	0.0%
27.2%	2,927	2,927	0	0.0%
28.4%	2,918	2,918	0	0.0%
29.6%	2,865	2,903	38	1.3%
30.9%	2,847	2,865	18	0.6%
32.1%	2,833	2,847	14	0.5%
33.3%	2,817	2,833	16	0.6%
34.6%	2,817	2,817	0	0.0%
35.8%	2,817	2,817	0	0.0%
37.0%	2,797	2,797	0	0.0%
38.3%	2,797	2,788	-9	-0.3%
39.5%	2,788	2,788	0	0.0%
40.7%	2,788	2,788	0	0.0%
42.0%	2,788	2,788	0	0.0%
43.2%	2,788	2,788	0	0.0%
44.4%	2,788	2,788	0	0.0%
45.7%	2,788	2,788	0	0.0%
46.9%	2,788	2,774	-14	-0.5%
48.1%	2,743	2,757	15	0.5%
49.4%	2,676	2,751	75	2.8%
50.6%	2,637	2,742	105	4.0%
51.9%	2,636	2,674	38	1.4%
53.1%	2,615	2,626	12	0.4%
54.3%	2,565	2,620	54	2.1%
55.6%	2,563	2,595	32	1.2%
56.8%	2,557	2,572	15	0.6%
58.0%	2,504	2,568	64	2.6%
59.3%	2,443	2,559	116	4.7%
60.5%	2,398	2,499	101	4.2%
61.7%	2,296	2,470	173	7.5%
63.0%	2,267	2,421	154	6.8%
64.2%	2,132	2,185	53	2.5%
65.4%	2,113	2,151	38	1.8%
66.7%	2,062	2,109	47	2.3%
67.9%	1,998	2,081	84	4.2%
69.1%	1,992	2,019	27	1.4%
70.4%	1,976	2,013	38	1.9%
71.6%	1,934	2,009	74	3.8%
72.8%	1,890	1,992	102	5.4%
74.1%	1,882	1,965	83	4.4%
75.3%	1,846	1,921	75	4.1%
76.5%	1,803	1,844	41	2.2%
77.8%	1,711	1,782	71	4.2%
79.0%	1,700	1,728	28	1.6%
80.2%	1,676	1,697	21	1.2%
81.5%	1,671	1,697	26	1.6%
82.7%	1,660	1,673	13	0.8%
84.0%	1,604	1,643	39	2.4%
85.2%	1,591	1,631	40	2.5%
86.4%	1,519	1,558	38	2.5%
87.7%	1,499	1,540	40	2.7%
88.9%	1,464	1,508	44	3.0%
90.1%	1,403	1,495	92	6.6%
91.4%	1,384	1,488	105	7.6%
92.6%	1,363	1,484	121	8.9%
93.8%	1,354	1,421	67	5.0%
95.1%	1,320	1,353	33	2.5%
96.3%	1,259	1,302	43	3.4%
97.5%	1,251	1,285	35	2.8%
98.8%	1,052	1,144	91	8.7%
100.0%	826	824	-3	-0.3%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,470	3,470	0	0.0%
1.2%	3,456	3,456	0	0.0%
2.5%	3,452	3,452	0	0.0%
3.7%	3,427	3,433	6	0.2%
4.9%	3,407	3,427	20	0.6%
6.2%	3,396	3,406	10	0.3%
7.4%	3,381	3,396	15	0.4%
8.6%	3,362	3,361	-1	0.0%
9.9%	3,361	3,361	0	0.0%
11.1%	3,356	3,355	-1	0.0%
12.3%	3,354	3,354	0	0.0%
13.6%	3,352	3,352	0	0.0%
14.8%	3,350	3,350	0	0.0%
16.0%	3,334	3,334	0	0.0%
17.3%	3,305	3,304	-1	0.0%
18.5%	3,303	3,303	0	0.0%
19.8%	3,298	3,298	0	0.0%
21.0%	3,295	3,295	-1	0.0%
22.2%	3,293	3,292	-1	0.0%
23.5%	3,292	3,292	0	0.0%
24.7%	3,292	3,292	0	0.0%
25.9%	3,284	3,284	0	0.0%
27.2%	3,281	3,281	0	0.0%
28.4%	3,277	3,277	0	0.0%
29.6%	3,277	3,276	-1	0.0%
30.9%	3,240	3,240	-1	0.0%
32.1%	3,238	3,238	0	0.0%
33.3%	3,236	3,236	0	0.0%
34.6%	3,235	3,235	0	0.0%
35.8%	3,233	3,232	-1	0.0%
37.0%	3,218	3,218	0	0.0%
38.3%	3,208	3,208	0	0.0%
39.5%	3,208	3,208	0	0.0%
40.7%	3,202	3,202	-1	0.0%
42.0%	3,180	3,180	0	0.0%
43.2%	3,180	3,180	0	0.0%
44.4%	3,142	3,142	-1	0.0%
45.7%	3,138	3,088	-50	-1.6%
46.9%	3,076	3,078	2	0.1%
48.1%	3,011	3,063	52	1.7%
49.4%	2,993	3,019	26	0.9%
50.6%	2,942	3,000	58	2.0%
51.9%	2,921	2,998	77	2.6%
53.1%	2,921	2,992	71	2.4%
54.3%	2,903	2,957	54	1.8%
55.6%	2,890	2,934	44	1.5%
56.8%	2,801	2,926	125	4.5%
58.0%	2,669	2,759	91	3.4%
59.3%	2,547	2,728	181	7.1%
60.5%	2,514	2,695	181	7.2%
61.7%	2,507	2,546	39	1.6%
63.0%	2,492	2,527	35	1.4%
64.2%	2,455	2,522	66	2.7%
65.4%	2,455	2,508	53	2.2%
66.7%	2,438	2,506	69	2.8%
67.9%	2,432	2,467	35	1.5%
69.1%	2,376	2,352	-24	-1.0%
70.4%	2,322	2,343	22	0.9%
71.6%	2,188	2,316	128	5.9%
72.8%	2,178	2,306	128	5.9%
74.1%	2,165	2,217	52	2.4%
75.3%	2,152	2,183	31	1.4%
76.5%	2,095	2,168	73	3.5%
77.8%	2,002	2,014	13	0.6%
79.0%	1,947	1,972	25	1.3%
80.2%	1,932	1,962	30	1.5%
81.5%	1,782	1,904	122	6.8%
82.7%	1,772	1,818	46	2.6%
84.0%	1,743	1,799	56	3.2%
85.2%	1,698	1,763	64	3.8%
86.4%	1,658	1,753	95	5.7%
87.7%	1,653	1,717	64	3.9%
88.9%	1,653	1,678	25	1.5%
90.1%	1,640	1,658	18	1.1%
91.4%	1,544	1,561	17	1.1%
92.6%	1,459	1,484	26	1.8%
93.8%	1,338	1,471	133	10.0%
95.1%	1,317	1,421	104	7.9%
96.3%	1,273	1,332	59	4.7%
97.5%	1,246	1,321	74	6.0%
98.8%	1,123	1,213	90	8.1%
100.0%	756	756	0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,538	3,538	0	0.0%
1.2%	3,538	3,538	0	0.0%
2.5%	3,538	3,538	0	0.0%
3.7%	3,538	3,538	0	0.0%
4.9%	3,538	3,538	0	0.0%
6.2%	3,538	3,538	0	0.0%
7.4%	3,538	3,538	0	0.0%
8.6%	3,538	3,538	0	0.0%
9.9%	3,538	3,538	0	0.0%
11.1%	3,538	3,538	0	0.0%
12.3%	3,538	3,538	0	0.0%
13.6%	3,538	3,538	0	0.0%
14.8%	3,538	3,538	0	0.0%
16.0%	3,538	3,538	0	0.0%
17.3%	3,538	3,538	0	0.0%
18.5%	3,538	3,538	0	0.0%
19.8%	3,538	3,538	0	0.0%
21.0%	3,538	3,538	0	0.0%
22.2%	3,538	3,538	0	0.0%
23.5%	3,538	3,538	0	0.0%
24.7%	3,538	3,538	0	0.0%
25.9%	3,538	3,538	0	0.0%
27.2%	3,538	3,538	0	0.0%
28.4%	3,538	3,538	0	0.0%
29.6%	3,538	3,538	0	0.0%
30.9%	3,535	3,534	-1	0.0%
32.1%	3,529	3,528	-2	0.0%
33.3%	3,526	3,525	-1	0.0%
34.6%	3,505	3,503	-2	0.0%
35.8%	3,493	3,491	-1	0.0%
37.0%	3,493	3,481	-12	-0.3%
38.3%	3,480	3,466	-14	-0.4%
39.5%	3,412	3,411	-1	0.0%
40.7%	3,360	3,368	8	0.2%
42.0%	3,345	3,359	14	0.4%
43.2%	3,294	3,343	49	1.5%
44.4%	3,285	3,293	7	0.2%
45.7%	3,267	3,263	-5	-0.1%
46.9%	3,265	3,230	-34	-1.0%
48.1%	3,232	3,211	-21	-0.7%
49.4%	3,167	3,210	43	1.4%
50.6%	3,104	3,144	40	1.3%
51.9%	3,057	3,139	82	2.7%
53.1%	3,003	3,062	59	2.0%
54.3%	2,997	3,014	17	0.6%
55.6%	2,984	3,004	20	0.7%
56.8%	2,954	2,979	25	0.8%
58.0%	2,839	2,895	55	1.9%
59.3%	2,794	2,850	56	2.0%
60.5%	2,787	2,808	21	0.8%
61.7%	2,644	2,806	162	6.1%
63.0%	2,637	2,744	107	4.1%
64.2%	2,603	2,682	78	3.0%
65.4%	2,512	2,674	162	6.4%
66.7%	2,496	2,656	161	6.4%
67.9%	2,451	2,613	162	6.6%
69.1%	2,437	2,461	23	1.0%
70.4%	2,431	2,457	25	1.0%
71.6%	2,333	2,386	54	2.3%
72.8%	2,330	2,356	26	1.1%
74.1%	2,270	2,287	18	0.8%
75.3%	2,209	2,229	20	0.9%
76.5%	2,208	2,224	16	0.7%
77.8%	2,159	2,201	42	2.0%
79.0%	1,991	2,198	207	10.4%
80.2%	1,952	2,090	138	7.1%
81.5%	1,924	1,998	74	3.8%
82.7%	1,916	1,980	65	3.4%
84.0%	1,899	1,978	79	4.2%
85.2%	1,858	1,929	72	3.9%
86.4%	1,673	1,698	25	1.5%
87.7%	1,620	1,696	76	4.7%
88.9%	1,615	1,677	62	3.8%
90.1%	1,592	1,616	25	1.6%
91.4%	1,514	1,542	28	1.8%
92.6%	1,422	1,459	37	2.6%
93.8%	1,255	1,432	177	14.1%
95.1%	1,244	1,409	165	13.3%
96.3%	1,244	1,331	88	7.0%
97.5%	1,244	1,265	22	1.7%
98.8%	1,181	1,244	63	5.3%
100.0%	732	732	0	0.0%

Table SW-18-b

Lake Oroville, End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,538	3,538	0	0.0%
1.2%	3,538	3,538	0	0.0%
2.5%	3,538	3,538	0	0.0%
3.7%	3,538	3,538	0	0.0%
4.9%	3,538	3,538	0	0.0%
6.2%	3,538	3,538	0	0.0%
7.4%	3,538	3,538	0	0.0%
8.6%	3,538	3,538	0	0.0%
9.9%	3,538	3,538	0	0.0%
11.1%	3,538	3,538	0	0.0%
12.3%	3,538	3,538	0	0.0%
13.6%	3,538	3,538	0	0.0%
14.8%	3,538	3,538	0	0.0%
16.0%	3,538	3,538	0	0.0%
17.3%	3,538	3,538	0	0.0%
18.5%	3,538	3,538	0	0.0%
19.8%	3,538	3,538	0	0.0%
21.0%	3,538	3,538	0	0.0%
22.2%	3,538	3,538	0	0.0%
23.5%	3,538	3,538	0	0.0%
24.7%	3,538	3,538	0	0.0%
25.9%	3,538	3,534	-4	-0.1%
27.2%	3,538	3,517	-21	-0.6%
28.4%	3,538	3,509	-29	-0.8%
29.6%	3,538	3,504	-34	-0.9%
30.9%	3,489	3,483	-7	-0.2%
32.1%	3,466	3,404	-62	-1.8%
33.3%	3,381	3,383	3	0.1%
34.6%	3,312	3,377	65	2.0%
35.8%	3,303	3,342	39	1.2%
37.0%	3,302	3,331	29	0.9%
38.3%	3,290	3,321	31	0.9%
39.5%	3,282	3,299	17	0.5%
40.7%	3,265	3,283	17	0.5%
42.0%	3,258	3,209	-49	-1.5%
43.2%	3,210	3,188	-21	-0.7%
44.4%	3,207	3,166	-41	-1.3%
45.7%	3,103	3,156	53	1.7%
46.9%	3,077	3,112	35	1.1%
48.1%	3,029	3,098	69	2.3%
49.4%	3,022	3,076	54	1.8%
50.6%	3,012	2,981	-31	-1.0%
51.9%	2,960	2,968	8	0.3%
53.1%	2,904	2,966	62	2.1%
54.3%	2,850	2,964	114	4.0%
55.6%	2,806	2,827	20	0.7%
56.8%	2,750	2,821	70	2.6%
58.0%	2,733	2,802	69	2.5%
59.3%	2,621	2,753	132	5.0%
60.5%	2,575	2,650	74	2.9%
61.7%	2,551	2,631	79	3.1%
63.0%	2,477	2,620	143	5.8%
64.2%	2,458	2,613	156	6.3%
65.4%	2,365	2,580	215	9.1%
66.7%	2,282	2,527	245	10.7%
67.9%	2,194	2,479	285	13.0%
69.1%	2,161	2,319	158	7.3%
70.4%	2,138	2,234	97	4.5%
71.6%	2,133	2,232	99	4.6%
72.8%	2,120	2,183	64	3.0%
74.1%	2,104	2,136	32	1.5%
75.3%	2,050	2,100	50	2.5%
76.5%	2,016	2,097	81	4.0%
77.8%	1,968	2,069	101	5.1%
79.0%	1,934	2,067	133	6.9%
80.2%	1,840	2,010	170	9.2%
81.5%	1,730	1,912	182	10.5%
82.7%	1,722	1,896	174	10.1%
84.0%	1,721	1,863	142	8.3%
85.2%	1,699	1,720	21	1.2%
86.4%	1,598	1,593	-5	-0.3%
87.7%	1,447	1,507	60	4.1%
88.9%	1,436	1,506	69	4.8%
90.1%	1,368	1,501	133	9.7%
91.4%	1,241	1,351	110	8.8%
92.6%	1,241	1,348	107	8.6%
93.8%	1,142	1,311	168	14.7%
95.1%	1,141	1,306	165	14.5%
96.3%	1,122	1,270	147	13.1%
97.5%	1,120	1,234	115	10.2%
98.8%	1,118	1,195	77	6.9%
100.0%	682	682	0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,538	3,538	0	0.0%
1.2%	3,538	3,538	0	0.0%
2.5%	3,538	3,535	-3	-0.1%
3.7%	3,538	3,534	-4	-0.1%
4.9%	3,538	3,477	-61	-1.7%
6.2%	3,383	3,440	56	1.7%
7.4%	3,372	3,419	47	1.4%
8.6%	3,343	3,361	18	0.6%
9.9%	3,247	3,342	94	2.9%
11.1%	3,208	3,258	50	1.6%
12.3%	3,180	3,238	58	1.8%
13.6%	3,163	3,212	49	1.5%
14.8%	3,122	3,119	-3	-0.1%
16.0%	3,104	3,108	4	0.1%
17.3%	3,104	3,105	1	0.0%
18.5%	3,057	3,105	47	1.6%
19.8%	3,030	3,065	35	1.2%
21.0%	3,021	3,050	29	1.0%
22.2%	3,015	3,046	31	1.0%
23.5%	3,014	3,033	20	0.7%
24.7%	2,990	3,030	40	1.3%
25.9%	2,990	3,023	33	1.1%
27.2%	2,988	2,984	-4	-0.1%
28.4%	2,975	2,971	-4	-0.1%
29.6%	2,957	2,966	10	0.3%
30.9%	2,895	2,912	17	0.6%
32.1%	2,894	2,855	-39	-1.4%
33.3%	2,765	2,818	53	1.9%
34.6%	2,731	2,796	65	2.4%
35.8%	2,693	2,792	99	3.7%
37.0%	2,690	2,713	22	0.8%
38.3%	2,674	2,704	30	1.1%
39.5%	2,664	2,692	28	1.0%
40.7%	2,657	2,692	35	1.3%
42.0%	2,640	2,671	31	1.2%
43.2%	2,622	2,668	46	1.8%
44.4%	2,601	2,614	13	0.5%
45.7%	2,479	2,608	129	5.2%
46.9%	2,472	2,589	117	4.8%
48.1%	2,449	2,512	63	2.6%
49.4%	2,426	2,475	48	2.0%
50.6%	2,383	2,472	89	3.7%
51.9%	2,381	2,381	0	0.0%
53.1%	2,277	2,375	98	4.3%
54.3%	2,273	2,353	81	3.6%
55.6%	2,242	2,322	80	3.6%
56.8%	2,114	2,308	194	9.2%
58.0%	2,113	2,284	171	8.1%
59.3%	2,056	2,234	178	8.6%
60.5%	2,014	2,165	152	7.5%
61.7%	1,940	2,117	176	9.1%
63.0%	1,845	2,062	217	11.7%
64.2%	1,837	2,051	214	11.7%
65.4%	1,774	1,994	220	12.4%
66.7%	1,692	1,938	245	14.5%
67.9%	1,685	1,933	248	14.7%
69.1%	1,603	1,823	220	13.7%
70.4%	1,574	1,739	164	10.4%
71.6%	1,545	1,697	152	9.8%
72.8%	1,524	1,613	88	5.8%
74.1%	1,504	1,601	96	6.4%
75.3%	1,479	1,564	85	5.8%
76.5%	1,470	1,554	84	5.7%
77.8%	1,460	1,542	82	5.6%
79.0%	1,419	1,522	103	7.3%
80.2%	1,372	1,513	141	10.3%
81.5%	1,241	1,435	194	15.6%
82.7%	1,240	1,326	86	6.9%
84.0%	1,240	1,312	72	5.8%
85.2%	1,234	1,246	12	1.0%
86.4%	1,230	1,241	11	0.9%
87.7%	1,229	1,241	12	1.0%
88.9%	1,228	1,240	13	1.1%
90.1%	1,208	1,240	32	2.7%
91.4%	1,021	1,230	209	20.4%
92.6%	976	1,220	244	25.0%
93.8%	958	1,170	212	22.1%
95.1%	957	1,091	134	14.0%
96.3%	956	1,073	117	12.2%
97.5%	944	1,063	120	12.7%
98.8%	936	1,012	76	8.1%
100.0%	626	626	0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,538	3,476	-62	-1.8%
1.2%	3,538	3,467	-71	-2.0%
2.5%	3,525	3,453	-72	-2.0%
3.7%	3,474	3,446	-27	-0.8%
4.9%	3,468	3,328	-140	-4.0%
6.2%	3,312	3,322	10	0.3%
7.4%	3,286	3,248	-38	-1.2%
8.6%	3,185	3,195	9	0.3%
9.9%	3,113	3,168	55	1.8%
11.1%	3,098	3,116	19	0.6%
12.3%	2,982	2,989	8	0.3%
13.6%	2,961	2,964	3	0.1%
14.8%	2,947	2,936	-11	-0.4%
16.0%	2,901	2,920	19	0.7%
17.3%	2,876	2,903	27	0.9%
18.5%	2,822	2,887	65	2.3%
19.8%	2,809	2,881	72	2.6%
21.0%	2,801	2,839	39	1.4%
22.2%	2,752	2,813	61	2.2%
23.5%	2,674	2,691	18	0.7%
24.7%	2,659	2,636	-23	-0.9%
25.9%	2,608	2,626	18	0.7%
27.2%	2,534	2,560	26	1.0%
28.4%	2,493	2,535	43	1.7%
29.6%	2,489	2,495	7	0.3%
30.9%	2,458	2,485	27	1.1%
32.1%	2,430	2,462	31	1.3%
33.3%	2,360	2,440	80	3.4%
34.6%	2,347	2,406	59	2.5%
35.8%	2,303	2,370	68	2.9%
37.0%	2,271	2,358	87	3.8%
38.3%	2,232	2,302	70	3.2%
39.5%	2,224	2,286	62	2.8%
40.7%	2,208	2,247	39	1.7%
42.0%	2,186	2,214	28	1.3%
43.2%	2,172	2,202	29	1.4%
44.4%	2,163	2,186	23	1.1%
45.7%	1,995	2,158	163	8.2%
46.9%	1,985	2,156	171	8.6%
48.1%	1,950	2,114	164	8.4%
49.4%	1,932	2,052	120	6.2%
50.6%	1,914	2,026	111	5.8%
51.9%	1,885	2,005	120	6.3%
53.1%	1,803	1,967	164	9.1%
54.3%	1,772	1,909	137	7.7%
55.6%	1,732	1,902	170	9.8%
56.8%	1,665	1,898	233	14.0%
58.0%	1,662	1,871	208	12.5%
59.3%	1,615	1,856	242	15.0%
60.5%	1,560	1,745	185	11.9%
61.7%	1,543	1,670	127	8.2%
63.0%	1,451	1,661	210	14.5%
64.2%	1,436	1,647	211	14.7%
65.4%	1,402	1,645	243	17.3%
66.7%	1,401	1,625	224	16.0%
67.9%	1,367	1,623	256	18.7%
69.1%	1,352	1,583	232	17.1%
70.4%	1,349	1,582	233	17.2%
71.6%	1,347	1,450	103	7.6%
72.8%	1,280	1,426	146	11.4%
74.1%	1,272	1,375	103	8.1%
75.3%	1,268	1,367	99	7.8%
76.5%	1,242	1,361	119	9.6%
77.8%	1,241	1,353	112	9.0%
79.0%	1,241	1,338	97	7.8%
80.2%	1,239	1,285	47	3.8%
81.5%	1,160	1,242	83	7.1%
82.7%	1,128	1,242	113	10.0%
84.0%	1,124	1,236	112	9.9%
85.2%	1,123	1,180	57	5.1%
86.4%	1,122	1,171	49	4.4%
87.7%	1,121	1,166	45	4.0%
88.9%	1,116	1,148	32	2.9%
90.1%	1,085	1,140	55	5.1%
91.4%	860	1,140	279	32.5%
92.6%	838	1,087	250	29.8%
93.8%	835	1,059	224	26.9%
95.1%	824	962	138	16.7%
96.3%	823	934	110	13.4%
97.5%	820	907	87	10.6%
98.8%	798	809	11	1.4%
100.0%	626	626	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,351	3,351	0	0.0%
1.2%	3,351	3,351	0	0.0%
2.5%	3,160	3,052	-108	-3.4%
3.7%	3,003	2,971	-32	-1.1%
4.9%	2,953	2,908	-46	-1.5%
6.2%	2,916	2,786	-130	-4.4%
7.4%	2,778	2,702	-76	-2.7%
8.6%	2,657	2,659	1	0.0%
9.9%	2,584	2,638	54	2.1%
11.1%	2,576	2,595	18	0.7%
12.3%	2,442	2,452	10	0.4%
13.6%	2,437	2,426	-11	-0.5%
14.8%	2,398	2,418	20	0.8%
16.0%	2,384	2,404	20	0.8%
17.3%	2,362	2,399	38	1.6%
18.5%	2,311	2,362	52	2.2%
19.8%	2,289	2,356	67	2.9%
21.0%	2,271	2,340	69	3.0%
22.2%	2,246	2,317	70	3.1%
23.5%	2,205	2,275	69	3.1%
24.7%	2,113	2,236	124	5.8%
25.9%	2,109	2,141	32	1.5%
27.2%	2,045	2,070	24	1.2%
28.4%	1,975	2,065	90	4.6%
29.6%	1,923	1,965	42	2.2%
30.9%	1,873	1,942	69	3.7%
32.1%	1,863	1,926	63	3.4%
33.3%	1,852	1,908	56	3.0%
34.6%	1,850	1,897	47	2.5%
35.8%	1,816	1,893	77	4.2%
37.0%	1,796	1,891	95	5.3%
38.3%	1,793	1,884	91	5.1%
39.5%	1,773	1,877	104	5.9%
40.7%	1,756	1,868	112	6.4%
42.0%	1,742	1,854	112	6.4%
43.2%	1,722	1,850	128	7.4%
44.4%	1,702	1,827	125	7.3%
45.7%	1,660	1,818	158	9.5%
46.9%	1,599	1,801	202	12.6%
48.1%	1,562	1,771	210	13.4%
49.4%	1,544	1,755	210	13.6%
50.6%	1,536	1,744	208	13.5%
51.9%	1,473	1,725	252	17.1%
53.1%	1,467	1,700	233	15.9%
54.3%	1,450	1,672	222	15.3%
55.6%	1,449	1,671	222	15.3%
56.8%	1,434	1,655	221	15.4%
58.0%	1,400	1,639	239	17.1%
59.3%	1,343	1,564	222	16.5%
60.5%	1,326	1,559	234	17.6%
61.7%	1,271	1,501	230	18.1%
63.0%	1,266	1,435	169	13.3%
64.2%	1,246	1,378	132	10.6%
65.4%	1,245	1,361	116	9.3%
66.7%	1,244	1,349	104	8.4%
67.9%	1,244	1,331	87	7.0%
69.1%	1,244	1,310	66	5.3%
70.4%	1,244	1,291	47	3.8%
71.6%	1,243	1,291	48	3.8%
72.8%	1,240	1,279	39	3.1%
74.1%	1,239	1,258	19	1.5%
75.3%	1,208	1,244	36	3.0%
76.5%	1,168	1,244	76	6.5%
77.8%	1,163	1,244	80	6.9%
79.0%	1,152	1,243	92	8.0%
80.2%	1,138	1,231	93	8.1%
81.5%	1,106	1,140	33	3.0%
82.7%	1,061	1,138	78	7.3%
84.0%	1,036	1,131	95	9.2%
85.2%	1,035	1,128	93	9.0%
86.4%	1,021	1,125	104	10.2%
87.7%	1,018	1,096	78	7.6%
88.9%	987	1,068	81	8.2%
90.1%	982	1,053	70	7.2%
91.4%	802	1,019	216	26.9%
92.6%	799	1,005	206	25.8%
93.8%	794	979	185	23.3%
95.1%	787	824	37	4.7%
96.3%	757	774	17	2.3%
97.5%	756	766	11	1.4%
98.8%	755	761	6	0.8%
100.0%	634	634	0	0.0%

Figure SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

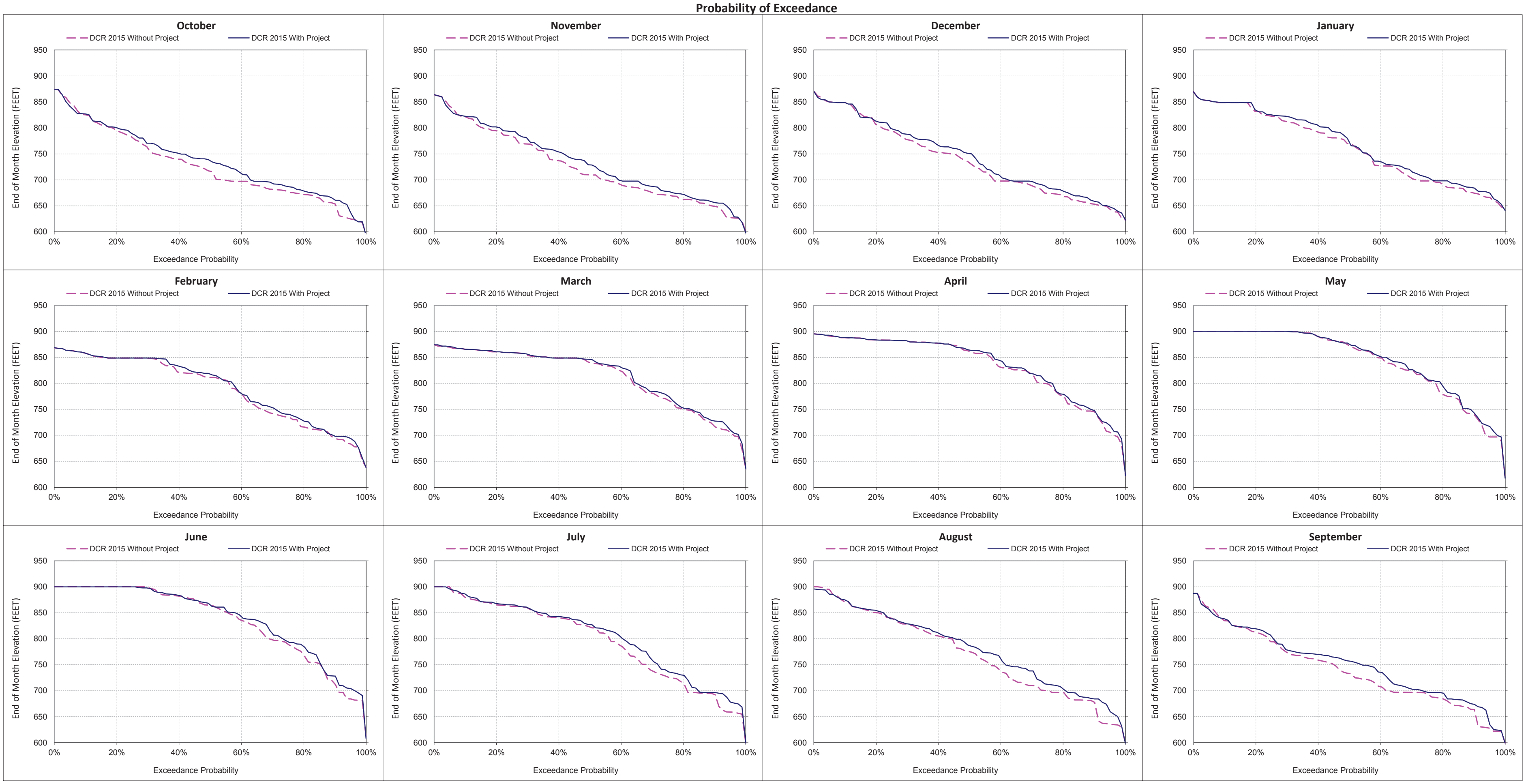


Table SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	874	874	0	0.0%
1.2%	874	874	0	0.0%
2.5%	863	864	1	0.1%
3.7%	858	851	-7	-0.9%
4.9%	848	842	-6	-0.8%
6.2%	844	835	-9	-1.0%
7.4%	833	828	-5	-0.6%
8.6%	826	828	2	0.2%
9.9%	825	827	1	0.2%
11.1%	824	825	2	0.2%
12.3%	813	814	1	0.1%
13.6%	811	813	2	0.2%
14.8%	806	812	6	0.7%
16.0%	804	807	3	0.3%
17.3%	802	802	0	0.0%
18.5%	800	802	1	0.2%
19.8%	796	801	5	0.6%
21.0%	792	798	6	0.7%
22.2%	789	797	7	0.9%
23.5%	786	796	10	1.3%
24.7%	783	790	7	0.9%
25.9%	777	786	9	1.1%
27.2%	774	781	7	0.8%
28.4%	768	780	12	1.6%
29.6%	764	771	7	0.9%
30.9%	753	771	18	2.4%
32.1%	750	769	19	2.5%
33.3%	749	765	16	2.2%
34.6%	746	758	12	1.7%
35.8%	745	757	12	1.6%
37.0%	743	755	12	1.6%
38.3%	741	753	12	1.6%
39.5%	740	751	11	1.5%
40.7%	740	750	10	1.4%
42.0%	734	749	15	2.0%
43.2%	730	745	15	2.0%
44.4%	729	742	13	1.8%
45.7%	727	742	15	2.0%
46.9%	725	741	16	2.2%
48.1%	722	740	19	2.6%
49.4%	717	739	22	3.0%
50.6%	716	735	19	2.6%
51.9%	701	732	31	4.4%
53.1%	701	731	31	4.4%
54.3%	700	727	27	3.9%
55.6%	699	726	28	3.9%
56.8%	697	722	25	3.6%
58.0%	697	721	23	3.4%
59.3%	697	715	18	2.6%
60.5%	697	710	13	1.8%
61.7%	697	710	13	1.8%
63.0%	691	700	9	1.3%
64.2%	690	697	8	1.1%
65.4%	689	697	8	1.2%
66.7%	688	697	9	1.4%
67.9%	684	697	13	1.9%
69.1%	682	696	14	2.0%
70.4%	682	692	10	1.5%
71.6%	681	692	11	1.6%
72.8%	680	691	10	1.5%
74.1%	679	688	9	1.3%
75.3%	676	687	11	1.6%
76.5%	675	686	10	1.5%
77.8%	674	682	8	1.1%
79.0%	673	681	8	1.1%
80.2%	672	678	6	1.0%
81.5%	671	676	5	0.7%
82.7%	670	675	5	0.8%
84.0%	667	674	7	1.1%
85.2%	665	670	6	0.9%
86.4%	657	669	12	1.8%
87.7%	657	669	12	1.8%
88.9%	656	666	10	1.5%
90.1%	653	661	7	1.1%
91.4%	631	661	30	4.7%
92.6%	629	656	27	4.3%
93.8%	627	653	26	4.2%
95.1%	625	637	12	1.9%
96.3%	623	623	0	0.0%
97.5%	622	619	-3	-0.4%
98.8%	618	619	1	0.2%
100.0%	595	593	-2	-0.3%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	864	864	0	0.0%
1.2%	862	862	0	0.0%
2.5%	860	860	0	0.0%
3.7%	851	844	-7	-0.9%
4.9%	842	836	-6	-0.8%
6.2%	837	828	-9	-1.1%
7.4%	826	826	0	0.0%
8.6%	823	824	1	0.1%
9.9%	822	823	1	0.1%
11.1%	819	822	3	0.4%
12.3%	817	821	4	0.5%
13.6%	806	821	14	1.8%
14.8%	802	809	7	0.9%
16.0%	799	808	9	1.1%
17.3%	799	805	6	0.7%
18.5%	795	802	7	0.8%
19.8%	795	802	7	0.9%
21.0%	794	801	6	0.8%
22.2%	786	794	8	1.0%
23.5%	786	794	8	1.1%
24.7%	784	793	9	1.1%
25.9%	782	793	11	1.5%
27.2%	771	786	15	2.0%
28.4%	769	783	13	1.7%
29.6%	769	781	12	1.6%
30.9%	769	772	4	0.5%
32.1%	765	772	7	0.9%
33.3%	757	766	9	1.2%
34.6%	756	760	4	0.5%
35.8%	755	760	5	0.7%
37.0%	740	759	19	2.6%
38.3%	738	758	19	2.6%
39.5%	737	755	17	2.4%
40.7%	736	753	16	2.2%
42.0%	733	749	16	2.2%
43.2%	726	743	17	2.3%
44.4%	724	741	18	2.4%
45.7%	721	739	18	2.5%
46.9%	712	739	27	3.8%
48.1%	710	737	27	3.8%
49.4%	710	729	19	2.7%
50.6%	709	729	19	2.7%
51.9%	709	725	16	2.2%
53.1%	703	718	16	2.2%
54.3%	700	716	15	2.2%
55.6%	699	710	11	1.6%
56.8%	697	707	11	1.6%
58.0%	696	706	10	1.5%
59.3%	693	700	7	1.0%
60.5%	689	698	9	1.2%
61.7%	688	698	10	1.5%
63.0%	687	698	11	1.6%
64.2%	685	698	12	1.8%
65.4%	685	698	13	1.9%
66.7%	681	692	11	1.6%
67.9%	680	689	10	1.4%
69.1%	677	688	11	1.6%
70.4%	675	687	13	1.9%
71.6%	672	686	14	2.1%
72.8%	672	680	8	1.2%
74.1%	671	678	7	1.0%
75.3%	671	678	7	1.0%
76.5%	669	675	7	1.0%
77.8%	668	674	5	0.8%
79.0%	663	673	11	1.6%
80.2%	662	671	9	1.4%
81.5%	662	668	6	0.9%
82.7%	662	665	4	0.6%
84.0%	660	663	3	0.5%
85.2%	655	661	6	0.9%
86.4%	655	661	6	0.9%
87.7%	653	661	8	1.2%
88.9%	650	658	8	1.2%
90.1%	649	656	7	1.1%
91.4%	647	655	8	1.2%
92.6%	639	655	16	2.5%
93.8%	628	650	22	3.5%
95.1%	627	643	15	2.4%
96.3%	627	629	2	0.3%
97.5%	626	628	2	0.3%
98.8%	621	618	-2	-0.4%
100.0%	600	598	-2	-0.3%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	871	871	0	0.0%
1.2%	862	858	-3	-0.4%
2.5%	858	854	-4	-0.5%
3.7%	852	854	2	0.2%
4.9%	850	850	0	0.0%
6.2%	850	850	0	0.0%
7.4%	849	849	0	0.0%
8.6%	849	849	0	0.0%
9.9%	849	849	0	0.0%
11.1%	849	846	-3	-0.3%
12.3%	842	846	4	0.5%
13.6%	831	836	5	0.6%
14.8%	828	821	-7	-0.8%
16.0%	822	820	-2	-0.2%
17.3%	821	820	-1	-0.1%
18.5%	821	819	-2	-0.2%
19.8%	807	813	6	0.7%
21.0%	804	811	7	0.9%
22.2%	799	810	12	1.5%
23.5%	796	809	13	1.6%
24.7%	795	799	5	0.6%
25.9%	792	796	4	0.6%
27.2%	788	794	7	0.9%
28.4%	782	789	7	0.9%
29.6%	778	788	10	1.3%
30.9%	776	787	11	1.4%
32.1%	774	781	7	0.9%
33.3%	770	778	9	1.2%
34.6%	765	778	13	1.7%
35.8%	764	777	14	1.8%
37.0%	757	777	20	2.6%
38.3%	755	774	19	2.5%
39.5%	753	768	15	2.0%
40.7%	753	764	11	1.5%
42.0%	751	764	12	1.6%
43.2%	751	764	13	1.7%
44.4%	750	761	12	1.6%
45.7%	748	760	12	1.6%
46.9%	743	758	15	2.0%
48.1%	738	753	15	2.0%
49.4%	735	751	16	2.2%
50.6%	730	750	20	2.8%
51.9%	724	742	17	2.4%
53.1%	722	731	9	1.3%
54.3%	715	729	13	1.8%
55.6%	715	720	5	0.7%
56.8%	707	718	12	1.7%
58.0%	698	712	14	2.0%
59.3%	698	710	12	1.8%
60.5%	698	704	6	0.9%
61.7%	698	702	4	0.5%
63.0%	698	699	1	0.2%
64.2%	696	698	1	0.2%
65.4%	696	698	2	0.3%
66.7%	694	698	4	0.5%
67.9%	694	698	4	0.6%
69.1%	691	698	7	1.0%
70.4%	688	696	8	1.2%
71.6%	685	693	8	1.2%
72.8%	682	691	9	1.4%
74.1%	675	689	14	2.1%
75.3%	674	684	10	1.4%
76.5%	674	683	9	1.3%
77.8%	673	682	9	1.4%
79.0%	672	681	9	1.4%
80.2%	668	678	10	1.5%
81.5%	667	675	8	1.2%
82.7%	662	672	10	1.5%
84.0%	661	669	8	1.2%
85.2%	659	669	10	1.5%
86.4%	657	667	10	1.5%
87.7%	657	666	9	1.4%
88.9%	654	661	6	1.0%
90.1%	653	658	5	0.8%
91.4%	651	657	6	0.9%
92.6%	651	651	1	0.1%
93.8%	649	651	2	0.2%
95.1%	644	648	4	0.6%
96.3%	638	644	6	1.0%
97.5%	638	640	2	0.3%
98.8%	626	636	10	1.6%
100.0%	623	623	0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	869	869	0	0.0%
1.2%	859	859	0	0.0%
2.5%	854	854	0	0.0%
3.7%	853	853	0	0.0%
4.9%	853	853	0	0.0%
6.2%	850	850	0	0.0%
7.4%	849	850	1	0.2%
8.6%	849	849	0	0.0%
9.9%	849	849	0	0.0%
11.1%	849	849	0	0.0%
12.3%	849	849	0	0.0%
13.6%	849	849	0	0.0%
14.8%	849	849	0	0.0%
16.0%	849	849	0	0.0%
17.3%	849	849	0	0.0%
18.5%	839	849	10	1.2%
19.8%	832	835	3	0.4%
21.0%	831	831	0	0.0%
22.2%	824	831	6	0.8%
23.5%	824	826	2	0.2%
24.7%	823	825	2	0.3%
25.9%	822	824	2	0.3%
27.2%	821	824	3	0.4%
28.4%	814	823	9	1.1%
29.6%	813	822	10	1.2%
30.9%	810	821	11	1.3%
32.1%	810	818	9	1.1%
33.3%	807	816	9	1.1%
34.6%	802	815	13	1.6%
35.8%	800	815	15	1.9%
37.0%	799	811	11	1.4%
38.3%	796	808	12	1.6%
39.5%	793	807	13	1.7%
40.7%	790	802	12	1.5%
42.0%	790	802	12	1.5%
43.2%	782	801	19	2.5%
44.4%	781	794	13	1.6%
45.7%	781	792	11	1.4%
46.9%	780	791	12	1.5%
48.1%	778	787	9	1.1%
49.4%	770	780	10	1.3%
50.6%	770	765	-4	-0.6%
51.9%	763	765	2	0.2%
53.1%	758	761	3	0.4%
54.3%	753	752	-1	-0.1%
55.6%	750	752	2	0.2%
56.8%	747	745	-1	-0.1%
58.0%	728	736	8	1.1%
59.3%	727	736	9	1.2%
60.5%	727	734	7	1.0%
61.7%	727	730	3	0.5%
63.0%	727	729	2	0.3%
64.2%	725	729	3	0.5%
65.4%	722	727	6	0.8%
66.7%	715	726	11	1.5%
67.9%	711	722	10	1.5%
69.1%	707	720	14	2.0%
70.4%	702	715	13	1.8%
71.6%	700	712	12	1.8%
72.8%	698	708	11	1.5%
74.1%	698	707	9	1.3%
75.3%	698	704	6	0.9%
76.5%	698	700	2	0.3%
77.8%	696	698	2	0.3%
79.0%	695	698	3	0.4%
80.2%	690	698	8	1.1%
81.5%	685	698	12	1.8%
82.7%	685	694	9	1.2%
84.0%	684	693	9	1.3%
85.2%	684	692	8	1.1%
86.4%	684	689	5	0.7%
87.7%	676	686	10	1.4%
88.9%	676	686	9	1.4%
90.1%	674	684	10	1.4%
91.4%	673	678	5	0.8%
92.6%	669	678	9	1.3%
93.8%	667	677	10	1.6%
95.1%	666	675	9	1.3%
96.3%	660	664	4	0.6%
97.5%	657	660	3	0.5%
98.8%	648	653	5	0.7%
100.0%	641	641	0	-0.1%

Table SW-19-b

Lake Oroville, End of Month Elevation

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	869	869	0	0.0%
1.2%	867	867	0	0.0%
2.5%	867	867	0	0.0%
3.7%	864	864	0	0.0%
4.9%	863	863	0	0.0%
6.2%	862	862	0	0.0%
7.4%	861	861	0	0.0%
8.6%	860	860	0	0.0%
9.9%	858	858	0	0.0%
11.1%	856	856	0	0.0%
12.3%	852	853	1	0.1%
13.6%	852	852	0	0.0%
14.8%	850	852	2	0.2%
16.0%	849	850	1	0.1%
17.3%	849	849	0	0.0%
18.5%	849	849	0	0.0%
19.8%	849	849	0	0.0%
21.0%	849	849	0	0.0%
22.2%	849	849	0	0.0%
23.5%	849	849	0	0.0%
24.7%	849	849	0	0.0%
25.9%	849	849	0	0.0%
27.2%	849	849	0	0.0%
28.4%	849	849	0	0.0%
29.6%	849	849	0	0.0%
30.9%	848	849	1	0.1%
32.1%	847	849	1	0.2%
33.3%	845	848	3	0.4%
34.6%	838	847	9	1.1%
35.8%	834	847	13	1.5%
37.0%	834	837	3	0.4%
38.3%	832	836	4	0.5%
39.5%	822	834	12	1.4%
40.7%	820	832	11	1.4%
42.0%	820	830	10	1.2%
43.2%	819	825	6	0.7%
44.4%	819	822	4	0.4%
45.7%	818	821	3	0.3%
46.9%	816	821	5	0.6%
48.1%	812	819	7	0.9%
49.4%	812	819	8	0.9%
50.6%	811	816	5	0.6%
51.9%	811	815	4	0.5%
53.1%	807	810	3	0.4%
54.3%	807	805	-2	-0.2%
55.6%	805	804	-1	-0.1%
56.8%	791	803	12	1.5%
58.0%	789	793	4	0.5%
59.3%	783	783	1	0.1%
60.5%	776	778	2	0.3%
61.7%	767	776	10	1.3%
63.0%	761	765	4	0.5%
64.2%	758	764	6	0.7%
65.4%	753	763	10	1.4%
66.7%	750	758	7	0.9%
67.9%	747	757	11	1.4%
69.1%	743	755	12	1.6%
70.4%	741	752	11	1.4%
71.6%	739	748	8	1.1%
72.8%	737	743	6	0.8%
74.1%	736	741	5	0.7%
75.3%	735	740	5	0.7%
76.5%	730	737	7	0.9%
77.8%	730	735	5	0.7%
79.0%	717	731	14	1.9%
80.2%	716	727	11	1.5%
81.5%	714	726	12	1.7%
82.7%	712	717	5	0.7%
84.0%	711	714	3	0.4%
85.2%	710	713	2	0.4%
86.4%	707	711	4	0.6%
87.7%	707	704	-3	-0.4%
88.9%	698	701	4	0.5%
90.1%	694	698	4	0.6%
91.4%	692	698	6	0.9%
92.6%	691	698	6	0.9%
93.8%	685	697	12	1.8%
95.1%	683	694	11	1.6%
96.3%	678	688	10	1.5%
97.5%	677	676	-1	-0.2%
98.8%	651	656	5	0.7%
100.0%	638	638	0	-0.1%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	874	874	0	0.0%
1.2%	872	874	3	0.3%
2.5%	871	872	0	0.0%
3.7%	870	871	1	0.1%
4.9%	870	870	1	0.1%
6.2%	867	870	3	0.3%
7.4%	867	867	0	0.0%
8.6%	867	867	0	0.0%
9.9%	866	866	0	0.0%
11.1%	865	865	0	0.0%
12.3%	865	865	0	0.0%
13.6%	864	864	0	0.0%
14.8%	863	864	0	0.0%
16.0%	863	863	0	0.0%
17.3%	862	863	0	0.1%
18.5%	861	862	2	0.2%
19.8%	861	861	0	0.0%
21.0%	860	861	1	0.1%
22.2%	859	860	0	0.1%
23.5%	859	859	0	0.0%
24.7%	859	859	0	0.0%
25.9%	859	859	0	0.0%
27.2%	858	858	0	0.0%
28.4%	858	858	0	0.0%
29.6%	854	857	3	0.3%
30.9%	853	854	1	0.1%
32.1%	852	853	1	0.1%
33.3%	851	852	1	0.1%
34.6%	851	851	0	0.0%
35.8%	851	851	0	0.0%
37.0%	849	849	0	0.0%
38.3%	849	849	-1	-0.1%
39.5%	849	849	0	0.0%
40.7%	849	849	0	0.0%
42.0%	849	849	0	0.0%
43.2%	849	849	0	0.0%
44.4%	849	849	0	0.0%
45.7%	849	849	0	0.0%
46.9%	849	848	-1	-0.1%
48.1%	846	847	1	0.1%
49.4%	841	846	5	0.6%
50.6%	838	846	7	0.9%
51.9%	838	841	3	0.3%
53.1%	837	838	1	0.1%
54.3%	834	837	4	0.4%
55.6%	833	836	2	0.3%
56.8%	833	834	1	0.1%
58.0%	829	834	4	0.5%
59.3%	825	833	8	1.0%
60.5%	822	829	7	0.8%
61.7%	813	827	14	1.7%
63.0%	810	824	13	1.7%
64.2%	796	802	5	0.7%
65.4%	794	798	4	0.5%
66.7%	789	794	5	0.6%
67.9%	783	791	9	1.1%
69.1%	782	785	3	0.4%
70.4%	780	784	4	0.5%
71.6%	776	784	8	1.0%
72.8%	772	782	10	1.4%
74.1%	771	779	9	1.1%
75.3%	767	775	8	1.0%
76.5%	763	767	4	0.5%
77.8%	753	760	7	1.0%
79.0%	752	755	3	0.4%
80.2%	750	752	2	0.3%
81.5%	749	752	3	0.4%
82.7%	748	749	2	0.2%
84.0%	741	745	5	0.6%
85.2%	739	744	5	0.7%
86.4%	730	735	5	0.6%
87.7%	728	733	5	0.7%
88.9%	724	729	5	0.7%
90.1%	716	727	11	1.6%
91.4%	714	727	13	1.8%
92.6%	711	726	15	2.1%
93.8%	710	718	8	1.2%
95.1%	706	710	4	0.6%
96.3%	699	704	5	0.7%
97.5%	698	702	4	0.6%
98.8%	673	685	11	1.7%
100.0%	635	635	0	-0.1%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	895	895	0	0.0%
1.2%	894	894	0	0.0%
2.5%	894	894	0	0.0%
3.7%	892	893	0	0.0%
4.9%	891	892	1	0.2%
6.2%	890	891	1	0.1%
7.4%	889	890	1	0.1%
8.6%	888	888	0	0.0%
9.9%	888	888	0	0.0%
11.1%	888	887	0	0.0%
12.3%	887	887	0	0.0%
13.6%	887	887	0	0.0%
14.8%	887	887	0	0.0%
16.0%	886	886	0	0.0%
17.3%	884	884	0	0.0%
18.5%	884	884	0	0.0%
19.8%	884	884	0	0.0%
21.0%	883	883	0	0.0%
22.2%	883	883	0	0.0%
23.5%	883	883	0	0.0%
24.7%	883	883	0	0.0%
25.9%	883	883	0	0.0%
27.2%	882	882	0	0.0%
28.4%	882	882	0	0.0%
29.6%	882	882	0	0.0%
30.9%	880	880	0	0.0%
32.1%	879	879	0	0.0%
33.3%	879	879	0	0.0%
34.6%	879	879	0	0.0%
35.8%	879	879	0	0.0%
37.0%	878	878	0	0.0%
38.3%	877	877	0	0.0%
39.5%	877	877	0	0.0%
40.7%	877	877	0	0.0%
42.0%	876	876	0	0.0%
43.2%	876	875	0	0.0%
44.4%	873	873	0	0.0%
45.7%	873	869	-3	-0.4%
46.9%	868	869	0	0.0%
48.1%	864	868	4	0.4%
49.4%	863	865	2	0.2%
50.6%	859	863	4	0.5%
51.9%	858	863	5	0.6%
53.1%	858	863	5	0.6%
54.3%	857	860	4	0.4%
55.6%	856	859	3	0.3%
56.8%	850	858	9	1.0%
58.0%	841	847	6	0.7%
59.3%	832	845	12	1.5%
60.5%	830	842	12	1.5%
61.7%	830	832	3	0.3%
63.0%	829	831	2	0.3%
64.2%	826	831	5	0.5%
65.4%	826	830	4	0.4%
66.7%	825	830	5	0.6%
67.9%	824	827	2	0.3%
69.1%	821	819	-2	-0.2%
70.4%	816	818	2	0.3%
71.6%	802	815	13	1.6%
72.8%	801	814	13	1.6%
74.1%	800	805	5	0.7%
75.3%	799	802	3	0.4%
76.5%	793	800	8	1.0%
77.8%	783	784	1	0.2%
79.0%	777	780	3	0.3%
80.2%	776	779	3	0.4%
81.5%	760	773	13	1.6%
82.7%	759	764	5	0.6%
84.0%	756	762	6	0.8%
85.2%	752	758	7	0.9%
86.4%	747	757	10	1.4%
87.7%	747	754	7	1.0%
88.9%	747	750	3	0.4%
90.1%	745	747	2	0.3%
91.4%	733	735	2	0.3%
92.6%	723	726	3	0.4%
93.8%	708	725	16	2.3%
95.1%	706	718	13	1.8%
96.3%	700	708	7	1.0%
97.5%	697	706	9	1.3%
98.8%	682	693	11	1.6%
100.0%	622	622	0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	900	900	0	0.0%
1.2%	900	900	0	0.0%
2.5%	900	900	0	0.0%
3.7%	900	900	0	0.0%
4.9%	900	900	0	0.0%
6.2%	900	900	0	0.0%
7.4%	900	900	0	0.0%
8.6%	900	900	0	0.0%
9.9%	900	900	0	0.0%
11.1%	900	900	0	0.0%
12.3%	900	900	0	0.0%
13.6%	900	900	0	0.0%
14.8%	900	900	0	0.0%
16.0%	900	900	0	0.0%
17.3%	900	900	0	0.0%
18.5%	900	900	0	0.0%
19.8%	900	900	0	0.0%
21.0%	900	900	0	0.0%
22.2%	900	900	0	0.0%
23.5%	900	900	0	0.0%
24.7%	900	900	0	0.0%
25.9%	900	900	0	0.0%
27.2%	900	900	0	0.0%
28.4%	900	900	0	0.0%
29.6%	900	900	0	0.0%
30.9%	900	900	0	0.0%
32.1%	899	899	0	0.0%
33.3%	899	899	0	0.0%
34.6%	898	898	0	0.0%
35.8%	897	897	0	0.0%
37.0%	897	896	-1	-0.1%
38.3%	896	895	-1	-0.1%
39.5%	891	891	0	0.0%
40.7%	888	888	1	0.1%
42.0%	887	888	1	0.1%
43.2%	883	887	3	0.4%
44.4%	883	883	1	0.1%
45.7%	881	881	0	0.0%
46.9%	881	879	-2	-0.3%
48.1%	879	878	-1	-0.2%
49.4%	875	878	3	0.3%
50.6%	870	873	3	0.3%
51.9%	867	873	6	0.6%
53.1%	863	867	4	0.5%
54.3%	863	864	1	0.1%
55.6%	862	864	1	0.2%
56.8%	860	862	2	0.2%
58.0%	852	856	4	0.4%
59.3%	849	853	4	0.4%
60.5%	849	850	1	0.2%
61.7%	839	850	11	1.3%
63.0%	838	846	7	0.9%
64.2%	836	842	5	0.6%
65.4%	830	841	11	1.3%
66.7%	829	840	11	1.3%
67.9%	826	837	11	1.3%
69.1%	825	826	2	0.2%
70.4%	824	826	2	0.2%
71.6%	817	821	4	0.5%
72.8%	817	819	3	0.3%
74.1%	811	812	2	0.2%
75.3%	804	806	2	0.3%
76.5%	804	806	2	0.2%
77.8%	799	804	4	0.5%
79.0%	782	803	21	2.7%
80.2%	778	792	14	1.8%
81.5%	775	783	8	1.0%
82.7%	774	781	7	0.9%
84.0%	772	781	8	1.1%
85.2%	768	776	7	1.0%
86.4%	749	752	3	0.4%
87.7%	743	752	9	1.2%
88.9%	742	750	8	1.0%
90.1%	739	742	3	0.4%
91.4%	730	733	3	0.5%
92.6%	718	723	5	0.6%
93.8%	698	720	22	3.1%
95.1%	697	717	20	2.9%
96.3%	697	707	11	1.5%
97.5%	697	699	3	0.4%
98.8%	689	697	8	1.1%
100.0%	617	617	0	0.0%

Table SW-19-b

Lake Oroville, End of Month Elevation
Probability of Exceedance

June				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	900	900	0	0.0%
1.2%	900	900	0	0.0%
2.5%	900	900	0	0.0%
3.7%	900	900	0	0.0%
4.9%	900	900	0	0.0%
6.2%	900	900	0	0.0%
7.4%	900	900	0	0.0%
8.6%	900	900	0	0.0%
9.9%	900	900	0	0.0%
11.1%	900	900	0	0.0%
12.3%	900	900	0	0.0%
13.6%	900	900	0	0.0%
14.8%	900	900	0	0.0%
16.0%	900	900	0	0.0%
17.3%	900	900	0	0.0%
18.5%	900	900	0	0.0%
19.8%	900	900	0	0.0%
21.0%	900	900	0	0.0%
22.2%	900	900	0	0.0%
23.5%	900	900	0	0.0%
24.7%	900	900	0	0.0%
25.9%	900	900	0	0.0%
27.2%	900	899	-1	-0.2%
28.4%	900	898	-2	-0.2%
29.6%	900	898	-2	-0.3%
30.9%	897	896	0	-0.1%
32.1%	895	891	-4	-0.5%
33.3%	889	889	0	0.0%
34.6%	885	889	4	0.5%
35.8%	884	887	3	0.3%
37.0%	884	886	2	0.2%
38.3%	883	885	2	0.2%
39.5%	882	884	1	0.1%
40.7%	881	883	1	0.1%
42.0%	881	877	-3	-0.4%
43.2%	878	876	-1	-0.2%
44.4%	877	875	-3	-0.3%
45.7%	870	874	4	0.4%
46.9%	868	871	2	0.3%
48.1%	865	870	5	0.5%
49.4%	865	868	4	0.4%
50.6%	864	862	-2	-0.2%
51.9%	860	861	1	0.1%
53.1%	857	861	4	0.5%
54.3%	853	861	8	0.9%
55.6%	850	851	1	0.2%
56.8%	846	851	5	0.6%
58.0%	845	850	5	0.6%
59.3%	837	846	9	1.1%
60.5%	834	839	5	0.6%
61.7%	833	838	5	0.7%
63.0%	828	837	10	1.2%
64.2%	826	837	11	1.3%
65.4%	820	835	15	1.8%
66.7%	812	831	19	2.4%
67.9%	803	828	25	3.1%
69.1%	799	816	16	2.0%
70.4%	797	807	10	1.2%
71.6%	796	807	10	1.3%
72.8%	795	802	7	0.8%
74.1%	794	797	3	0.4%
75.3%	788	793	5	0.7%
76.5%	785	793	8	1.1%
77.8%	780	790	10	1.3%
79.0%	776	790	14	1.8%
80.2%	766	784	17	2.3%
81.5%	755	774	19	2.5%
82.7%	754	772	18	2.4%
84.0%	754	769	15	1.9%
85.2%	752	754	2	0.3%
86.4%	740	739	-1	-0.1%
87.7%	722	729	7	1.0%
88.9%	720	729	8	1.2%
90.1%	712	728	16	2.3%
91.4%	696	710	13	1.9%
92.6%	696	709	13	1.9%
93.8%	684	705	21	3.0%
95.1%	684	704	20	2.9%
96.3%	682	700	18	2.6%
97.5%	682	696	14	2.1%
98.8%	681	691	9	1.4%
100.0%	608	608	0	0.0%

July				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	900	900	0	0.0%
1.2%	900	900	0	0.0%
2.5%	900	900	0	0.0%
3.7%	900	900	0	0.0%
4.9%	900	896	-4	-0.5%
6.2%	889	893	4	0.4%
7.4%	889	892	3	0.4%
8.6%	887	888	1	0.1%
9.9%	880	887	6	0.7%
11.1%	877	881	3	0.4%
12.3%	875	879	4	0.5%
13.6%	874	878	3	0.4%
14.8%	872	871	0	0.0%
16.0%	870	871	0	0.0%
17.3%	870	870	0	0.0%
18.5%	867	870	3	0.4%
19.8%	865	868	2	0.3%
21.0%	865	867	2	0.2%
22.2%	864	866	2	0.2%
23.5%	864	865	1	0.2%
24.7%	863	865	3	0.3%
25.9%	863	865	2	0.3%
27.2%	862	862	0	0.0%
28.4%	861	861	0	0.0%
29.6%	860	861	1	0.1%
30.9%	856	857	1	0.1%
32.1%	856	853	-3	-0.3%
33.3%	847	851	4	0.4%
34.6%	845	849	4	0.5%
35.8%	842	849	7	0.8%
37.0%	842	844	2	0.2%
38.3%	841	843	2	0.2%
39.5%	840	842	2	0.2%
40.7%	840	842	2	0.3%
42.0%	839	841	2	0.3%
43.2%	837	841	3	0.4%
44.4%	836	837	1	0.1%
45.7%	828	836	9	1.1%
46.9%	827	835	8	1.0%
48.1%	826	830	4	0.5%
49.4%	824	827	3	0.4%
50.6%	821	827	6	0.7%
51.9%	821	821	0	0.0%
53.1%	811	821	9	1.1%
54.3%	811	819	8	1.0%
55.6%	808	816	8	1.0%
56.8%	795	814	20	2.5%
58.0%	794	812	18	2.2%
59.3%	789	807	18	2.3%
60.5%	784	800	16	2.0%
61.7%	777	795	18	2.3%
63.0%	767	789	22	2.9%
64.2%	766	788	22	2.9%
65.4%	760	782	23	3.0%
66.7%	751	776	25	3.4%
67.9%	751	776	25	3.4%
69.1%	741	765	24	3.2%
70.4%	737	756	19	2.6%
71.6%	734	752	18	2.5%
72.8%	731	742	11	1.5%
74.1%	729	740	12	1.6%
75.3%	725	736	10	1.4%
76.5%	724	735	10	1.4%
77.8%	723	733	10	1.4%
79.0%	718	731	13	1.7%
80.2%	712	730	17	2.4%
81.5%	696	720	24	3.4%
82.7%	696	707	10	1.5%
84.0%	696	705	9	1.3%
85.2%	696	697	1	0.2%
86.4%	695	696	1	0.2%
87.7%	695	696	1	0.2%
88.9%	695	696	2	0.2%
90.1%	692	696	4	0.6%
91.4%	670	695	25	3.8%
92.6%	662	694	32	4.8%
93.8%	659	688	29	4.4%
95.1%	659	678	19	2.9%
96.3%	659	676	17	2.6%
97.5%	656	675	18	2.8%
98.8%	655	668	13	2.1%
100.0%	597	597	0	0.0%

August				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	900	896	-4	-0.5%
1.2%	900	895	-5	-0.5%
2.5%	899	894	-5	-0.5%
3.7%	896	894	-2	-0.2%
4.9%	895	886	-10	-1.1%
6.2%	885	885	1	0.1%
7.4%	883	880	-3	-0.3%
8.6%	876	877	1	0.1%
9.9%	871	875	4	0.4%
11.1%	870	871	1	0.1%
12.3%	862	863	1	0.1%
13.6%	861	861	0	0.0%
14.8%	860	859	-1	-0.1%
16.0%	856	858	1	0.2%
17.3%	855	857	2	0.2%
18.5%	851	856	4	0.5%
19.8%	850	855	5	0.6%
21.0%	850	852	3	0.3%
22.2%	846	850	4	0.5%
23.5%	841	842	1	0.1%
24.7%	840	838	-2	-0.2%
25.9%	836	838	1	0.1%
27.2%	831	833	2	0.2%
28.4%	829	832	3	0.4%
29.6%	828	829	0	0.1%
30.9%	826	828	2	0.2%
32.1%	824	826	2	0.3%
33.3%	820	825	5	0.7%
34.6%	819	823	4	0.5%
35.8%	814	820	6	0.8%
37.0%	811	819	9	1.1%
38.3%	807	814	7	0.9%
39.5%	806	812	6	0.8%
40.7%	804	808	4	0.5%
42.0%	802	805	3	0.4%
43.2%	801	804	3	0.4%
44.4%	800	802	2	0.3%
45.7%	782	799	17	2.1%
46.9%	781	799	18	2.2%
48.1%	778	795	17	2.2%
49.4%	776	788	12	1.6%
50.6%	774	785	11	1.5%
51.9%	771	783	12	1.6%
53.1%	763	780	17	2.2%
54.3%	759	773	14	1.8%
55.6%	755	773	17	2.3%
56.8%	748	772	24	3.2%
58.0%	748	770	22	2.9%
59.3%	742	768	26	3.5%
60.5%	735	757	21	2.9%
61.7%	733	749	15	2.1%
63.0%	722	748	26	3.5%
64.2%	720	746	26	3.6%
65.4%	716	746	30	4.1%
66.7%	716	743	27	3.8%
67.9%	712	743	31	4.4%
69.1%	710	738	28	4.0%
70.4%	710	738	28	4.0%
71.6%	709	722	13	1.8%
72.8%	701	719	18	2.5%
74.1%	700	713	13	1.8%
75.3%	700	712	12	1.7%
76.5%	697	711	15	2.1%
77.8%	696	710	14	2.0%
79.0%	696	708	12	1.7%
80.2%	696	702	6	0.8%
81.5%	687	697	10	1.5%
82.7%	683	697	14	2.0%
84.0%	682	696	14	2.0%
85.2%	682	689	7	1.0%
86.4%	682	688	6	0.9%
87.7%	682	687	5	0.8%
88.9%	681	685	4	0.6%
90.1%	677	684	7	1.0%
91.4%	641	684	43	6.6%
92.6%	637	678	40	6.3%
93.8%	637	674	37	5.9%
95.1%	635	660	25	3.9%
96.3%	635	655	20	3.2%
97.5%	634	650	16	2.5%
98.8%	630	632	2	0.3%
100.0%	597	597	0	0.0%

September				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	887	887	0	0.0%
1.2%	887	887	0	0.0%
2.5%	874	867	-7	-0.8%
3.7%	863	861	-2	-0.3%
4.9%	860	857	-3	-0.4%
6.2%	857	849	-9	-1.0%
7.4%	848	843	-5	-0.6%
8.6%	840	840	0	0.0%
9.9%	835	839	4	0.4%
11.1%	834	836	1	0.1%
12.3%	825	826	1	0.1%
13.6%	825	824	-1	-0.1%
14.8%	822	823	1	0.2%
16.0%	821	823	1	0.2%
17.3%	820	822	3	0.3%
18.5%	815	820	5	0.6%
19.8%	813	819	7	0.8%
21.0%	811	818	7	0.9%
22.2%	808	815	7	0.9%
23.5%	804	811	7	0.9%
24.7%	794	807	13	1.6%
25.9%	794	797	3	0.4%
27.2%	788	790	2	0.3%
28.4%	780	790	9	1.2%
29.6%	775	779	4	0.6%
30.9%	770	777	7	0.9%
32.1%	769	775	6	0.8%
33.3%	768	773	6	0.7%
34.6%	768	772	5	0.6%
35.8%	764	772	8	1.0%
37.0%	762	772	10	1.3%
38.3%	762	771	9	1.2%
39.5%	760	770	11	1.4%
40.7%	758	769	12	1.5%
42.0%	756	768	11	1.5%
43.2%	754	767	13	1.7%
44.4%	752	765	13	1.7%
45.7%	748	764	17	2.2%
46.9%	740	762	22	3.0%
48.1%	736	759	24	3.2%
49.4%	733	758	24	3.3%
50.6%	732	757	24	3.3%
51.9%	725	755	30	4.1%
53.1%	724	752	28	3.9%
54.3%	722	749	27	3.8%
55.6%	722	749	27	3.7%
56.8%	720	747	27	3.7%
58.0%	716	745	29	4.1%
59.3%	709	736	27	3.8%
60.5%	707	735	29	4.0%
61.7%	700	728	28	4.0%
63.0%	699	720	21	2.9%
64.2%	697	713	16	2.3%
65.4%	697	711	14	2.0%
66.7%	697	710	13	1.8%
67.9%	697	707	11	1.5%
69.1%	697	705	8	1.2%
70.4%	697	703	6	0.8%
71.6%	697	703	6	0.8%
72.8%	696	701	5	0.7%
74.1%	696	698	2	0.3%
75.3%	692	697	4	0.6%
76.5%	688	697	9	1.3%
77.8%	687	697	10	1.4%
79.0%	686	697	11	1.6%
80.2%	684	695	11	1.7%
81.5%	680	684	4	0.6%
82.7%	674	684	9	1.4%
84.0%	671	683	12	1.7%
85.2%	671	683	11	1.7%
86.4%	670	682	13	1.9%
87.7%	669	679	9	1.4%
88.9%	664	675	11	1.7%
90.1%	663	673	10	1.5%
91.4%	631	669	39	6.1%
92.6%	630	667	37	5.9%
93.8%	629	663	34	5.3%
95.1%	628	635	7	1.1%
96.3%	622	625	3	0.5%
97.5%	622	624	2	0.3%
98.8%	622	623	1	0.2%
100.0%	599	599	0	0.0%

Figure SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

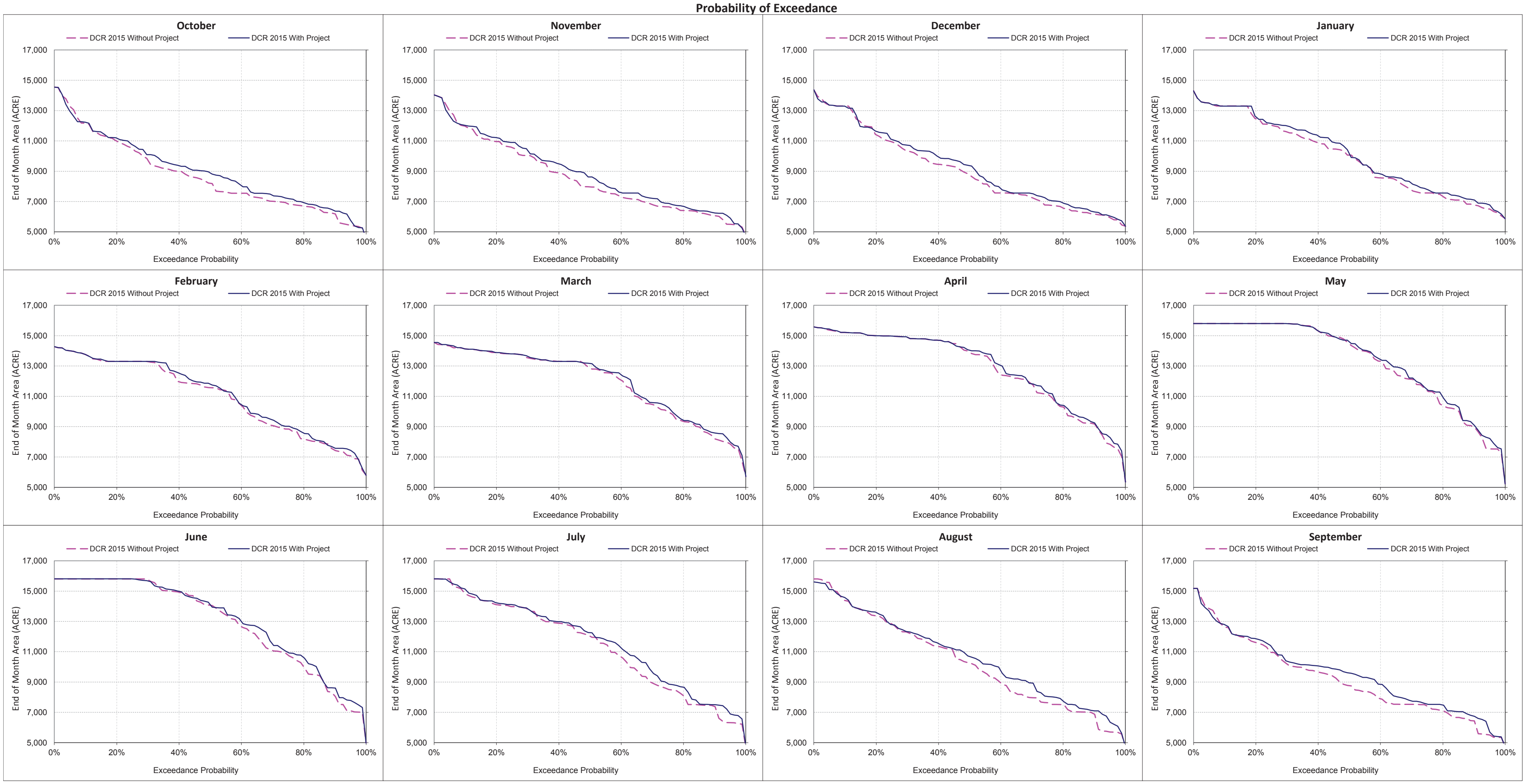


Table SW-20-b

Lake Oroville, End of Month Area

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,554	14,554	0	0.0%
1.2%	14,523	14,523	0	0.0%
2.5%	13,989	14,047	59	0.4%
3.7%	13,779	13,419	-359	-2.6%
4.9%	13,286	12,970	-317	-2.4%
6.2%	13,059	12,627	-432	-3.3%
7.4%	12,525	12,272	-253	-2.0%
8.6%	12,176	12,269	93	0.8%
9.9%	12,164	12,236	72	0.6%
11.1%	12,089	12,168	79	0.7%
12.3%	11,616	11,659	43	0.4%
13.6%	11,543	11,616	73	0.6%
14.8%	11,382	11,595	213	1.9%
16.0%	11,321	11,422	101	0.9%
17.3%	11,230	11,231	1	0.0%
18.5%	11,170	11,225	54	0.5%
19.8%	11,015	11,203	188	1.7%
21.0%	10,876	11,089	213	2.0%
22.2%	10,777	11,036	260	2.4%
23.5%	10,645	11,004	359	3.4%
24.7%	10,543	10,786	243	2.3%
25.9%	10,326	10,648	321	3.1%
27.2%	10,215	10,453	238	2.3%
28.4%	10,001	10,445	444	4.4%
29.6%	9,850	10,097	247	2.5%
30.9%	9,441	10,091	650	6.9%
32.1%	9,353	10,037	684	7.3%
33.3%	9,292	9,881	589	6.3%
34.6%	9,203	9,644	441	4.8%
35.8%	9,177	9,597	420	4.6%
37.0%	9,106	9,513	407	4.5%
38.3%	9,026	9,446	420	4.7%
39.5%	8,999	9,389	390	4.3%
40.7%	8,983	9,325	342	3.8%
42.0%	8,806	9,318	512	5.8%
43.2%	8,672	9,178	506	5.8%
44.4%	8,615	9,065	450	5.2%
45.7%	8,566	9,061	496	5.8%
46.9%	8,488	9,027	539	6.4%
48.1%	8,370	9,016	646	7.7%
49.4%	8,225	8,963	737	9.0%
50.6%	8,182	8,813	632	7.7%
51.9%	7,681	8,737	1,056	13.7%
53.1%	7,659	8,705	1,047	13.7%
54.3%	7,642	8,574	932	12.2%
55.6%	7,595	8,532	936	12.3%
56.8%	7,548	8,399	851	11.3%
58.0%	7,547	8,342	795	10.5%
59.3%	7,547	8,152	605	8.0%
60.5%	7,545	7,980	435	5.8%
61.7%	7,543	7,973	430	5.7%
63.0%	7,322	7,628	306	4.2%
64.2%	7,291	7,547	256	3.5%
65.4%	7,256	7,545	289	4.0%
66.7%	7,222	7,545	323	4.5%
67.9%	7,091	7,531	439	6.2%
69.1%	7,026	7,486	460	6.6%
70.4%	7,013	7,363	350	5.0%
71.6%	6,986	7,351	365	5.2%
72.8%	6,967	7,322	356	5.1%
74.1%	6,931	7,241	310	4.5%
75.3%	6,813	7,184	372	5.5%
76.5%	6,801	7,148	347	5.1%
77.8%	6,756	7,011	255	3.8%
79.0%	6,732	6,989	257	3.8%
80.2%	6,681	6,902	221	3.3%
81.5%	6,662	6,823	161	2.4%
82.7%	6,629	6,801	172	2.6%
84.0%	6,514	6,754	240	3.7%
85.2%	6,466	6,632	166	2.6%
86.4%	6,282	6,593	311	4.9%
87.7%	6,265	6,574	309	4.9%
88.9%	6,247	6,489	243	3.9%
90.1%	6,180	6,365	186	3.0%
91.4%	5,592	6,363	771	13.8%
92.6%	5,535	6,243	709	12.8%
93.8%	5,482	6,165	683	12.5%
95.1%	5,427	5,745	317	5.8%
96.3%	5,387	5,381	-6	-0.1%
97.5%	5,353	5,283	-70	-1.3%
98.8%	5,237	5,273	36	0.7%
100.0%	4,622	4,570	-53	-1.1%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,037	14,037	0	0.0%
1.2%	13,947	13,947	0	0.0%
2.5%	13,844	13,844	0	0.0%
3.7%	13,425	13,065	-360	-2.7%
4.9%	12,979	12,662	-317	-2.4%
6.2%	12,730	12,298	-432	-3.4%
7.4%	12,185	12,170	-15	-0.1%
8.6%	12,028	12,088	60	0.5%
9.9%	11,980	12,030	50	0.4%
11.1%	11,835	11,984	148	1.3%
12.3%	11,776	11,965	188	1.6%
13.6%	11,395	11,932	537	4.7%
14.8%	11,226	11,494	268	2.4%
16.0%	11,118	11,448	330	3.0%
17.3%	11,116	11,328	212	1.9%
18.5%	10,990	11,233	243	2.2%
19.8%	10,963	11,225	263	2.4%
21.0%	10,947	11,180	233	2.1%
22.2%	10,667	10,959	293	2.7%
23.5%	10,635	10,939	305	2.9%
24.7%	10,594	10,908	314	3.0%
25.9%	10,489	10,905	416	4.0%
27.2%	10,103	10,656	553	5.5%
28.4%	10,047	10,525	478	4.8%
29.6%	10,036	10,481	445	4.4%
30.9%	10,023	10,154	131	1.3%
32.1%	9,880	10,127	247	2.5%
33.3%	9,596	9,925	329	3.4%
34.6%	9,575	9,722	147	1.5%
35.8%	9,504	9,686	182	1.9%
37.0%	8,991	9,665	673	7.5%
38.3%	8,940	9,614	674	7.5%
39.5%	8,903	9,506	603	6.8%
40.7%	8,876	9,441	565	6.4%
42.0%	8,758	9,298	541	6.2%
43.2%	8,535	9,114	579	6.8%
44.4%	8,439	9,036	597	7.1%
45.7%	8,363	8,971	608	7.3%
46.9%	8,053	8,967	914	11.3%
48.1%	7,981	8,899	918	11.5%
49.4%	7,974	8,622	648	8.1%
50.6%	7,958	8,619	660	8.3%
51.9%	7,954	8,492	538	6.8%
53.1%	7,729	8,261	532	6.9%
54.3%	7,643	8,169	526	6.9%
55.6%	7,614	7,983	369	4.8%
56.8%	7,521	7,891	370	4.9%
58.0%	7,508	7,859	351	4.7%
59.3%	7,384	7,626	242	3.3%
60.5%	7,269	7,560	292	4.0%
61.7%	7,216	7,560	345	4.8%
63.0%	7,181	7,560	380	5.3%
64.2%	7,145	7,560	415	5.8%
65.4%	7,126	7,560	434	6.1%
66.7%	7,004	7,375	371	5.3%
67.9%	6,955	7,281	325	4.7%
69.1%	6,870	7,237	367	5.3%
70.4%	6,772	7,206	434	6.4%
71.6%	6,692	7,176	485	7.2%
72.8%	6,678	6,954	276	4.1%
74.1%	6,654	6,893	239	3.6%
75.3%	6,648	6,883	235	3.5%
76.5%	6,573	6,794	221	3.4%
77.8%	6,565	6,739	174	2.7%
79.0%	6,416	6,728	313	4.9%
80.2%	6,405	6,668	263	4.1%
81.5%	6,403	6,563	160	2.5%
82.7%	6,388	6,485	97	1.5%
84.0%	6,352	6,432	80	1.3%
85.2%	6,232	6,383	151	2.4%
86.4%	6,220	6,373	152	2.5%
87.7%	6,157	6,362	205	3.3%
88.9%	6,095	6,298	204	3.3%
90.1%	6,065	6,248	182	3.0%
91.4%	6,025	6,219	194	3.2%
92.6%	5,811	6,218	407	7.0%
93.8%	5,505	6,089	584	10.6%
95.1%	5,498	5,905	407	7.4%
96.3%	5,477	5,535	59	1.1%
97.5%	5,465	5,519	54	1.0%
98.8%	5,317	5,256	-61	-1.1%
100.0%	4,748	4,694	-54	-1.1%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,367	14,367	0	0.0%
1.2%	13,933	13,777	-156	-1.1%
2.5%	13,777	13,573	-204	-1.5%
3.7%	13,485	13,564	79	0.6%
4.9%	13,364	13,364	0	0.0%
6.2%	13,344	13,344	0	0.0%
7.4%	13,304	13,304	0	0.0%
8.6%	13,304	13,304	0	0.0%
9.9%	13,304	13,304	0	0.0%
11.1%	13,297	13,168	-129	-1.0%
12.3%	12,957	13,157	200	1.5%
13.6%	12,452	12,701	249	2.0%
14.8%	12,292	11,953	-338	-2.8%
16.0%	12,003	11,910	-93	-0.8%
17.3%	11,950	11,901	-49	-0.4%
18.5%	11,932	11,843	-90	-0.8%
19.8%	11,430	11,646	216	1.9%
21.0%	11,299	11,561	262	2.3%
22.2%	11,114	11,537	422	3.8%
23.5%	11,030	11,504	474	4.3%
24.7%	10,961	11,128	167	1.5%
25.9%	10,870	11,029	160	1.5%
27.2%	10,708	10,956	247	2.3%
28.4%	10,505	10,757	251	2.4%
29.6%	10,353	10,730	376	3.6%
30.9%	10,298	10,695	397	3.9%
32.1%	10,222	10,481	259	2.5%
33.3%	10,051	10,373	323	3.2%
34.6%	9,877	10,352	475	4.8%
35.8%	9,834	10,340	506	5.1%
37.0%	9,596	10,312	716	7.5%
38.3%	9,510	10,201	691	7.3%
39.5%	9,459	10,003	543	5.7%
40.7%	9,445	9,850	405	4.3%
42.0%	9,392	9,842	450	4.8%
43.2%	9,376	9,835	459	4.9%
44.4%	9,325	9,748	423	4.5%
45.7%	9,279	9,706	427	4.6%
46.9%	9,095	9,631	536	5.9%
48.1%	8,942	9,448	506	5.7%
49.4%	8,834	9,386	553	6.3%
50.6%	8,650	9,337	687	7.9%
51.9%	8,471	9,052	581	6.9%
53.1%	8,376	8,699	322	3.8%
54.3%	8,164	8,612	448	5.5%
55.6%	8,151	8,333	181	2.2%
56.8%	7,867	8,267	400	5.1%
58.0%	7,565	8,035	470	6.2%
59.3%	7,565	7,985	421	5.6%
60.5%	7,564	7,770	206	2.7%
61.7%	7,563	7,692	128	1.7%
63.0%	7,554	7,595	41	0.5%
64.2%	7,515	7,566	50	0.7%
65.4%	7,503	7,565	62	0.8%
66.7%	7,442	7,565	123	1.6%
67.9%	7,429	7,565	136	1.8%
69.1%	7,325	7,564	239	3.3%
70.4%	7,224	7,506	282	3.9%
71.6%	7,118	7,397	278	3.9%
72.8%	7,028	7,342	314	4.5%
74.1%	6,774	7,257	483	7.1%
75.3%	6,766	7,097	332	4.9%
76.5%	6,742	7,051	309	4.6%
77.8%	6,712	7,026	314	4.7%
79.0%	6,675	6,992	317	4.7%
80.2%	6,545	6,881	336	5.1%
81.5%	6,530	6,802	272	4.2%
82.7%	6,388	6,674	286	4.5%
84.0%	6,382	6,590	207	3.3%
85.2%	6,321	6,587	266	4.2%
86.4%	6,280	6,530	250	4.0%
87.7%	6,271	6,504	233	3.7%
88.9%	6,199	6,361	163	2.6%
90.1%	6,175	6,308	134	2.2%
91.4%	6,126	6,278	152	2.5%
92.6%	6,107	6,127	19	0.3%
93.8%	6,076	6,115	39	0.6%
95.1%	5,929	6,031	102	1.7%
96.3%	5,794	5,952	158	2.7%
97.5%	5,789	5,835	47	0.8%
98.8%	5,456	5,734	278	5.1%
100.0%	5,369	5,369	0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,314	14,314	0	0.0%
1.2%	13,821	13,821	0	0.0%
2.5%	13,577	13,577	0	0.0%
3.7%	13,524	13,524	0	0.0%
4.9%	13,497	13,497	0	0.0%
6.2%	13,374	13,387	13	0.1%
7.4%	13,304	13,374	70	0.5%
8.6%	13,304	13,304	0	0.0%
9.9%	13,304	13,304	0	0.0%
11.1%	13,304	13,304	0	0.0%
12.3%	13,304	13,304	0	0.0%
13.6%	13,304	13,304	0	0.0%
14.8%	13,304	13,304	0	0.0%
16.0%	13,304	13,304	0	0.0%
17.3%	13,301	13,304	3	0.0%
18.5%	12,806	13,301	495	3.9%
19.8%	12,473	12,641	168	1.3%
21.0%	12,443	12,432	-12	-0.1%
22.2%	12,113	12,424	311	2.6%
23.5%	12,105	12,203	98	0.8%
24.7%	12,051	12,165	114	0.9%
25.9%	11,982	12,096	114	0.9%
27.2%	11,930	12,074	144	1.2%
28.4%	11,671	12,037	367	3.1%
29.6%	11,620	12,019	400	3.4%
30.9%	11,527	11,937	410	3.6%
32.1%	11,518	11,829	311	2.7%
33.3%	11,401	11,729	327	2.9%
34.6%	11,245	11,723	478	4.3%
35.8%	11,149	11,703	554	5.0%
37.0%	11,131	11,548	417	3.7%
38.3%	11,003	11,454	451	4.1%
39.5%	10,910	11,401	491	4.5%
40.7%	10,812	11,239	427	3.9%
42.0%	10,797	11,217	420	3.9%
43.2%	10,496	11,203	706	6.7%
44.4%	10,464	10,931	467	4.5%
45.7%	10,463	10,870	407	3.9%
46.9%	10,418	10,849	430	4.1%
48.1%	10,353	10,676	322	3.1%
49.4%	10,066	10,424	359	3.6%
50.6%	10,061	9,900	-161	-1.6%
51.9%	9,828	9,888	60	0.6%
53.1%	9,647	9,745	98	1.0%
54.3%	9,451	9,411	-40	-0.4%
55.6%	9,344	9,404	60	0.6%
56.8%	9,224	9,186	-38	-0.4%
58.0%	8,607	8,873	266	3.1%
59.3%	8,569	8,859	290	3.4%
60.5%	8,554	8,799	245	2.9%
61.7%	8,549	8,664	116	1.4%
63.0%	8,547	8,625	78	0.9%
64.2%	8,502	8,620	119	1.4%
65.4%	8,372	8,573	201	2.4%
66.7%	8,166	8,535	369	4.5%
67.9%	8,017	8,373	356	4.4%
69.1%	7,862	8,335	473	6.0%
70.4%	7,699	8,138	439	5.7%
71.6%	7,632	8,052	420	5.5%
72.8%	7,568	7,927	359	4.7%
74.1%	7,568	7,873	305	4.0%
75.3%	7,568	7,774	206	2.7%
76.5%	7,567	7,629	62	0.8%
77.8%	7,487	7,568	82	1.1%
79.0%	7,478	7,568	90	1.2%
80.2%	7,304	7,568	264	3.6%
81.5%	7,145	7,568	423	5.9%
82.7%	7,130	7,420	290	4.1%
84.0%	7,097	7,402	305	4.3%
85.2%	7,096	7,351	255	3.6%
86.4%	7,087	7,249	161	2.3%
87.7%	6,831	7,161	330	4.8%
88.9%	6,828	7,146	317	4.6%
90.1%	6,769	7,102	332	4.9%
91.4%	6,717	6,896	179	2.7%
92.6%	6,595	6,885	289	4.4%
93.8%	6,521	6,863	343	5.3%
95.1%	6,502	6,775	274	4.2%
96.3%	6,341	6,442	101	1.6%
97.5%	6,259	6,338	79	1.3%
98.8%	6,054	6,175	121	2.0%
100.0%	5,874	5,863	-11	-0.2%

Table SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,271	14,271	0	0.0%
1.2%	14,204	14,204	0	0.0%
2.5%	14,201	14,201	0	0.0%
3.7%	14,041	14,041	0	0.0%
4.9%	14,001	14,001	0	0.0%
6.2%	13,967	13,967	0	0.0%
7.4%	13,884	13,884	0	0.0%
8.6%	13,851	13,851	0	0.0%
9.9%	13,761	13,761	0	0.0%
11.1%	13,644	13,644	0	0.0%
12.3%	13,467	13,508	41	0.3%
13.6%	13,451	13,460	9	0.1%
14.8%	13,364	13,451	87	0.6%
16.0%	13,304	13,364	60	0.5%
17.3%	13,304	13,304	0	0.0%
18.5%	13,304	13,304	0	0.0%
19.8%	13,304	13,304	0	0.0%
21.0%	13,304	13,304	0	0.0%
22.2%	13,304	13,304	0	0.0%
23.5%	13,304	13,304	0	0.0%
24.7%	13,304	13,304	0	0.0%
25.9%	13,304	13,304	0	0.0%
27.2%	13,304	13,304	0	0.0%
28.4%	13,304	13,304	0	0.0%
29.6%	13,301	13,304	3	0.0%
30.9%	13,255	13,304	49	0.4%
32.1%	13,230	13,301	71	0.5%
33.3%	13,097	13,247	149	1.1%
34.6%	12,783	13,223	440	3.4%
35.8%	12,579	13,197	618	4.9%
37.0%	12,570	12,722	152	1.2%
38.3%	12,482	12,674	193	1.5%
39.5%	11,988	12,569	581	4.8%
40.7%	11,918	12,463	545	4.6%
42.0%	11,891	12,373	483	4.1%
43.2%	11,856	12,144	288	2.4%
44.4%	11,843	12,013	169	1.4%
45.7%	11,827	11,953	126	1.1%
46.9%	11,744	11,937	193	1.6%
48.1%	11,613	11,872	259	2.2%
49.4%	11,579	11,862	282	2.4%
50.6%	11,567	11,742	175	1.5%
51.9%	11,559	11,699	140	1.2%
53.1%	11,431	11,540	109	1.0%
54.3%	11,416	11,356	-60	-0.5%
55.6%	11,345	11,305	-40	-0.4%
56.8%	10,821	11,258	436	4.0%
58.0%	10,773	10,919	147	1.4%
59.3%	10,530	10,553	23	0.2%
60.5%	10,302	10,374	72	0.7%
61.7%	9,940	10,299	359	3.6%
63.0%	9,750	9,879	129	1.3%
64.2%	9,649	9,856	206	2.1%
65.4%	9,432	9,809	377	4.0%
66.7%	9,356	9,615	259	2.8%
67.9%	9,223	9,606	383	4.2%
69.1%	9,103	9,507	403	4.4%
70.4%	9,050	9,419	369	4.1%
71.6%	8,974	9,257	283	3.2%
72.8%	8,907	9,100	193	2.2%
74.1%	8,847	9,023	175	2.0%
75.3%	8,840	9,016	176	2.0%
76.5%	8,669	8,904	235	2.7%
77.8%	8,664	8,828	164	1.9%
79.0%	8,209	8,683	474	5.8%
80.2%	8,172	8,546	375	4.6%
81.5%	8,107	8,520	413	5.1%
82.7%	8,041	8,219	178	2.2%
84.0%	8,018	8,105	87	1.1%
85.2%	7,982	8,067	85	1.1%
86.4%	7,884	8,020	136	1.7%
87.7%	7,860	7,772	-88	-1.1%
88.9%	7,562	7,685	123	1.6%
90.1%	7,421	7,570	149	2.0%
91.4%	7,360	7,562	202	2.7%
92.6%	7,349	7,562	213	2.9%
93.8%	7,116	7,532	416	5.8%
95.1%	7,071	7,432	362	5.1%
96.3%	6,888	7,244	357	5.2%
97.5%	6,866	6,816	-50	-0.7%
98.8%	6,120	6,241	121	2.0%
100.0%	5,796	5,783	-13	-0.2%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,554	14,554	0	0.0%
1.2%	14,421	14,551	130	0.9%
2.5%	14,411	14,421	10	0.1%
3.7%	14,361	14,411	50	0.3%
4.9%	14,331	14,361	30	0.2%
6.2%	14,207	14,331	123	0.9%
7.4%	14,204	14,207	3	0.0%
8.6%	14,191	14,204	13	0.1%
9.9%	14,131	14,131	0	0.0%
11.1%	14,104	14,104	0	0.0%
12.3%	14,101	14,101	0	0.0%
13.6%	14,071	14,071	0	0.0%
14.8%	14,007	14,027	19	0.1%
16.0%	13,994	14,007	13	0.1%
17.3%	13,971	13,994	23	0.2%
18.5%	13,891	13,971	80	0.6%
19.8%	13,891	13,891	0	0.0%
21.0%	13,847	13,891	43	0.3%
22.2%	13,824	13,847	23	0.2%
23.5%	13,816	13,824	8	0.1%
24.7%	13,801	13,801	0	0.0%
25.9%	13,797	13,797	0	0.0%
27.2%	13,767	13,767	0	0.0%
28.4%	13,737	13,737	0	0.0%
29.6%	13,560	13,687	126	0.9%
30.9%	13,501	13,560	59	0.4%
32.1%	13,454	13,501	47	0.3%
33.3%	13,401	13,454	53	0.4%
34.6%	13,401	13,401	0	0.0%
35.8%	13,401	13,401	0	0.0%
37.0%	13,334	13,334	0	0.0%
38.3%	13,334	13,304	-30	-0.2%
39.5%	13,304	13,304	0	0.0%
40.7%	13,304	13,304	0	0.0%
42.0%	13,304	13,304	0	0.0%
43.2%	13,304	13,304	0	0.0%
44.4%	13,304	13,304	0	0.0%
45.7%	13,304	13,304	0	0.0%
46.9%	13,304	13,259	-45	-0.3%
48.1%	13,153	13,202	49	0.4%
49.4%	12,931	13,180	249	1.9%
50.6%	12,801	13,150	350	2.7%
51.9%	12,798	12,925	127	1.0%
53.1%	12,727	12,765	39	0.3%
54.3%	12,562	12,743	181	1.4%
55.6%	12,554	12,660	107	0.8%
56.8%	12,536	12,585	49	0.4%
58.0%	12,359	12,572	213	1.7%
59.3%	12,156	12,541	385	3.2%
60.5%	12,005	12,341	336	2.8%
61.7%	11,643	12,243	600	5.2%
63.0%	11,535	12,081	546	4.7%
64.2%	11,029	11,229	200	1.8%
65.4%	10,958	11,100	143	1.3%
66.7%	10,769	10,943	174	1.6%
67.9%	10,528	10,840	312	3.0%
69.1%	10,505	10,607	101	1.0%
70.4%	10,445	10,586	141	1.3%
71.6%	10,291	10,568	277	2.7%
72.8%	10,125	10,505	380	3.7%
74.1%	10,093	10,404	311	3.1%
75.3%	9,959	10,240	281	2.8%
76.5%	9,800	9,951	151	1.5%
77.8%	9,456	9,722	266	2.8%
79.0%	9,414	9,518	104	1.1%
80.2%	9,325	9,403	79	0.8%
81.5%	9,301	9,403	101	1.1%
82.7%	9,255	9,310	55	0.6%
84.0%	9,023	9,185	162	1.8%
85.2%	8,972	9,136	165	1.8%
86.4%	8,673	8,833	160	1.8%
87.7%	8,590	8,757	167	1.9%
88.9%	8,442	8,625	183	2.2%
90.1%	8,190	8,573	383	4.7%
91.4%	8,110	8,544	434	5.4%
92.6%	8,023	8,526	504	6.3%
93.8%	7,985	8,264	279	3.5%
95.1%	7,844	7,981	137	1.7%
96.3%	7,591	7,769	178	2.3%
97.5%	7,557	7,701	144	1.9%
98.8%	6,735	7,114	379	5.6%
100.0%	5,709	5,696	-13	-0.2%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,577	15,577	0	0.0%
1.2%	15,530	15,530	0	0.0%
2.5%	15,517	15,517	0	0.0%
3.7%	15,434	15,454	20	0.1%
4.9%	15,366	15,434	68	0.4%
6.2%	15,330	15,363	32	0.2%
7.4%	15,282	15,330	49	0.3%
8.6%	15,216	15,213	-2	0.0%
9.9%	15,214	15,213	-1	0.0%
11.1%	15,197	15,195	-2	0.0%
12.3%	15,190	15,190	0	0.0%
13.6%	15,184	15,184	0	0.0%
14.8%	15,177	15,177	0	0.0%
16.0%	15,124	15,124	0	0.0%
17.3%	15,027	15,024	-3	0.0%
18.5%	15,020	15,020	0	0.0%
19.8%	15,004	15,004	0	0.0%
21.0%	14,995	14,992	-2	0.0%
22.2%	14,987	14,985	-2	0.0%
23.5%	14,984	14,984	0	0.0%
24.7%	14,984	14,984	0	0.0%
25.9%	14,957	14,957	0	0.0%
27.2%	14,947	14,947	0	0.0%
28.4%	14,934	14,934	0	0.0%
29.6%	14,932	14,931	-2	0.0%
30.9%	14,811	14,809	-2	0.0%
32.1%	14,804	14,804	0	0.0%
33.3%	14,797	14,797	0	0.0%
34.6%	14,794	14,794	0	0.0%
35.8%	14,787	14,785	-2	0.0%
37.0%	14,737	14,737	0	0.0%
38.3%	14,704	14,704	0	0.0%
39.5%	14,704	14,704	0	0.0%
40.7%	14,685	14,683	-2	0.0%
42.0%	14,612	14,611	-1	0.0%
43.2%	14,611	14,610	-1	0.0%
44.4%	14,484	14,483	-2	0.0%
45.7%	14,470	14,305	-166	-1.1%
46.9%	14,263	14,269	6	0.0%
48.1%	14,049	14,220	172	1.2%
49.4%	13,988	14,074	86	0.6%
50.6%	13,819	14,012	193	1.4%
51.9%	13,748	14,005	256	1.9%
53.1%	13,747	13,983	236	1.7%
54.3%	13,688	13,866	179	1.3%
55.6%	13,645	13,791	146	1.1%
56.8%	13,348	13,764	416	3.1%
58.0%	12,907	13,209	302	2.3%
59.3%	12,501	13,105	603	4.8%
60.5%	12,390	12,993	603	4.9%
61.7%	12,367	12,498	130	1.1%
63.0%	12,316	12,434	118	1.0%
64.2%	12,195	12,416	221	1.8%
65.4%	12,193	12,371	178	1.5%
66.7%	12,136	12,366	230	1.9%
67.9%	12,117	12,235	118	1.0%
69.1%	11,930	11,851	-79	-0.7%
70.4%	11,738	11,819	81	0.7%
71.6%	11,238	11,717	479	4.3%
72.8%	11,202	11,679	477	4.3%
74.1%	11,152	11,345	193	1.7%
75.3%	11,105	11,220	115	1.0%
76.5%	10,891	11,165	274	2.5%
77.8%	10,542	10,590	47	0.4%
79.0%	10,338	10,430	92	0.9%
80.2%	10,281	10,393	112	1.1%
81.5%	9,721	10,176	455	4.7%
82.7%	9,684	9,856	172	1.8%
84.0%	9,575	9,785	210	2.2%
85.2%	9,409	9,648	240	2.5%
86.4%	9,248	9,611	363	3.9%
87.7%	9,228	9,480	252	2.7%
88.9%	9,228	9,331	103	1.1%
90.1%	9,172	9,247	75	0.8%
91.4%	8,773	8,844	71	0.8%
92.6%	8,421	8,528	107	1.3%
93.8%	7,920	8,474	554	7.0%
95.1%	7,831	8,265	433	5.5%
96.3%	7,649	7,895	247	3.2%
97.5%	7,538	7,848	309	4.1%
98.8%	7,027	7,402	375	5.3%
100.0%	5,351	5,351	0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,804	15,804	0	0.0%
1.2%	15,804	15,804	0	0.0%
2.5%	15,804	15,804	0	0.0%
3.7%	15,804	15,804	0	0.0%
4.9%	15,804	15,804	0	0.0%
6.2%	15,804	15,804	0	0.0%
7.4%	15,804	15,804	0	0.0%
8.6%	15,804	15,804	0	0.0%
9.9%	15,804	15,804	0	0.0%
11.1%	15,804	15,804	0	0.0%
12.3%	15,804	15,804	0	0.0%
13.6%	15,804	15,804	0	0.0%
14.8%	15,804	15,804	0	0.0%
16.0%	15,804	15,804	0	0.0%
17.3%	15,804	15,804	0	0.0%
18.5%	15,804	15,804	0	0.0%
19.8%	15,804	15,804	0	0.0%
21.0%	15,804	15,804	0	0.0%
22.2%	15,804	15,804	0	0.0%
23.5%	15,804	15,804	0	0.0%
24.7%	15,804	15,804	0	0.0%
25.9%	15,804	15,804	0	0.0%
27.2%	15,804	15,804	0	0.0%
28.4%	15,804	15,804	0	0.0%
29.6%	15,804	15,804	0	0.0%
30.9%	15,794	15,791	-3	0.0%
32.1%	15,774	15,769	-5	0.0%
33.3%	15,764	15,762	-3	0.0%
34.6%	15,693	15,688	-5	0.0%
35.8%	15,653	15,649	-5	0.0%
37.0%	15,652	15,613	-39	-0.2%
38.3%	15,609	15,563	-46	-0.3%
39.5%	15,383	15,381	-2	0.0%
40.7%	15,212	15,238	26	0.2%
42.0%	15,160	15,207	47	0.3%
43.2%	14,991	15,155	164	1.1%
44.4%	14,961	14,986	25	0.2%
45.7%	14,902	14,886	-16	-0.1%
46.9%	14,892	14,778	-114	-0.8%
48.1%	14,783	14,712	-70	-0.5%
49.4%	14,566	14,711	145	1.0%
50.6%	14,356	14,489	133	0.9%
51.9%	14,201	14,475	273	1.9%
53.1%	14,020	14,216	196	1.4%
54.3%	14,001	14,057	56	0.4%
55.6%	13,958	14,025	68	0.5%
56.8%	13,856	13,940	83	0.6%
58.0%	13,476	13,660	185	1.4%
59.3%	13,324	13,510	186	1.4%
60.5%	13,300	13,371	71	0.5%
61.7%	12,824	13,366	541	4.2%
63.0%	12,801	13,158	357	2.8%
64.2%	12,689	12,950	261	2.1%
65.4%	12,383	12,923	540	4.4%
66.7%	12,330	12,865	535	4.3%
67.9%	12,180	12,719	539	4.4%
69.1%	12,135	12,213	78	0.6%
70.4%	12,116	12,200	84	0.7%
71.6%	11,779	11,965	187	1.6%
72.8%	11,768	11,864	96	0.8%
74.1%	11,543	11,609	66	0.6%
75.3%	11,317	11,390	74	0.7%
76.5%	11,313	11,374	61	0.5%
77.8%	11,131	11,289	158	1.4%
79.0%	10,503	11,275	772	7.4%
80.2%	10,356	10,872	516	5.0%
81.5%	10,251	10,527	277	2.7%
82.7%	10,220	10,462	242	2.4%
84.0%	10,157	10,452	296	2.9%
85.2%	10,004	10,272	268	2.7%
86.4%	9,311	9,406	95	1.0%
87.7%	9,092	9,401	308	3.4%
88.9%	9,071	9,327	256	2.8%
90.1%	8,973	9,076	103	1.2%
91.4%	8,652	8,767	115	1.3%
92.6%	8,268	8,422	155	1.9%
93.8%	7,576	8,310	734	9.7%
95.1%	7,530	8,215	685	9.1%
96.3%	7,528	7,892	364	4.8%
97.5%	7,528	7,617	89	1.2%
98.8%	7,269	7,531	262	3.6%
100.0%	5,228	5,228	0	0.0%

Table SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,804	15,804	0	0.0%
1.2%	15,804	15,804	0	0.0%
2.5%	15,804	15,804	0	0.0%
3.7%	15,804	15,804	0	0.0%
4.9%	15,804	15,804	0	0.0%
6.2%	15,804	15,804	0	0.0%
7.4%	15,804	15,804	0	0.0%
8.6%	15,804	15,804	0	0.0%
9.9%	15,804	15,804	0	0.0%
11.1%	15,804	15,804	0	0.0%
12.3%	15,804	15,804	0	0.0%
13.6%	15,804	15,804	0	0.0%
14.8%	15,804	15,804	0	0.0%
16.0%	15,804	15,804	0	0.0%
17.3%	15,804	15,804	0	0.0%
18.5%	15,804	15,804	0	0.0%
19.8%	15,804	15,804	0	0.0%
21.0%	15,804	15,804	0	0.0%
22.2%	15,804	15,804	0	0.0%
23.5%	15,804	15,804	0	0.0%
24.7%	15,804	15,804	0	0.0%
25.9%	15,804	15,791	-13	-0.1%
27.2%	15,804	15,735	-68	-0.4%
28.4%	15,804	15,706	-97	-0.6%
29.6%	15,804	15,692	-112	-0.7%
30.9%	15,641	15,619	-22	-0.1%
32.1%	15,562	15,357	-206	-1.3%
33.3%	15,279	15,289	9	0.1%
34.6%	15,052	15,267	216	1.4%
35.8%	15,021	15,150	129	0.9%
37.0%	15,017	15,114	96	0.6%
38.3%	14,976	15,080	104	0.7%
39.5%	14,950	15,007	57	0.4%
40.7%	14,895	14,953	57	0.4%
42.0%	14,870	14,707	-163	-1.1%
43.2%	14,709	14,638	-71	-0.5%
44.4%	14,700	14,565	-135	-0.9%
45.7%	14,353	14,531	178	1.2%
46.9%	14,267	14,383	115	0.8%
48.1%	14,109	14,339	230	1.6%
49.4%	14,085	14,265	180	1.3%
50.6%	14,050	13,946	-104	-0.7%
51.9%	13,876	13,903	27	0.2%
53.1%	13,691	13,897	207	1.5%
54.3%	13,511	13,891	380	2.8%
55.6%	13,365	13,433	68	0.5%
56.8%	13,178	13,413	235	1.8%
58.0%	13,121	13,351	230	1.8%
59.3%	12,747	13,187	440	3.4%
60.5%	12,595	12,843	248	2.0%
61.7%	12,515	12,779	265	2.1%
63.0%	12,266	12,743	476	3.9%
64.2%	12,203	12,722	519	4.3%
65.4%	11,895	12,612	717	6.0%
66.7%	11,591	12,435	844	7.3%
67.9%	11,261	12,276	1,015	9.0%
69.1%	11,137	11,727	589	5.3%
70.4%	11,050	11,411	361	3.3%
71.6%	11,032	11,402	370	3.4%
72.8%	10,983	11,221	238	2.2%
74.1%	10,924	11,044	120	1.1%
75.3%	10,721	10,909	188	1.8%
76.5%	10,597	10,899	302	2.9%
77.8%	10,416	10,793	377	3.6%
79.0%	10,288	10,785	496	4.8%
80.2%	9,938	10,574	636	6.4%
81.5%	9,525	10,206	681	7.1%
82.7%	9,497	10,149	652	6.9%
84.0%	9,493	10,025	532	5.6%
85.2%	9,410	9,489	79	0.8%
86.4%	8,999	8,980	-19	-0.2%
87.7%	8,372	8,620	248	3.0%
88.9%	8,328	8,616	288	3.5%
90.1%	8,045	8,598	553	6.9%
91.4%	7,519	7,975	455	6.1%
92.6%	7,517	7,961	444	5.9%
93.8%	7,108	7,808	699	9.8%
95.1%	7,100	7,786	685	9.7%
96.3%	7,024	7,636	612	8.7%
97.5%	7,014	7,490	476	6.8%
98.8%	7,007	7,326	319	4.6%
100.0%	4,978	4,978	0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,804	15,804	0	0.0%
1.2%	15,804	15,804	0	0.0%
2.5%	15,804	15,793	-10	-0.1%
3.7%	15,804	15,790	-14	-0.1%
4.9%	15,804	15,600	-204	-1.3%
6.2%	15,288	15,476	188	1.2%
7.4%	15,251	15,407	156	1.0%
8.6%	15,153	15,215	61	0.4%
9.9%	14,834	15,149	314	2.1%
11.1%	14,704	14,872	168	1.1%
12.3%	14,610	14,804	194	1.3%
13.6%	14,553	14,716	163	1.1%
14.8%	14,418	14,408	-10	-0.1%
16.0%	14,358	14,372	14	0.1%
17.3%	14,356	14,361	5	0.0%
18.5%	14,201	14,359	158	1.1%
19.8%	14,112	14,229	116	0.8%
21.0%	14,080	14,177	97	0.7%
22.2%	14,062	14,164	102	0.7%
23.5%	14,056	14,122	66	0.5%
24.7%	13,977	14,110	132	0.9%
25.9%	13,976	14,087	111	0.8%
27.2%	13,972	13,958	-14	-0.1%
28.4%	13,926	13,912	-13	-0.1%
29.6%	13,866	13,899	33	0.2%
30.9%	13,661	13,717	56	0.4%
32.1%	13,656	13,526	-131	-1.0%
33.3%	13,228	13,405	178	1.3%
34.6%	13,116	13,331	215	1.6%
35.8%	12,987	13,317	330	2.5%
37.0%	12,979	13,053	74	0.6%
38.3%	12,924	13,024	100	0.8%
39.5%	12,892	12,984	92	0.7%
40.7%	12,867	12,983	115	0.9%
42.0%	12,810	12,914	104	0.8%
43.2%	12,749	12,904	155	1.2%
44.4%	12,682	12,723	42	0.3%
45.7%	12,275	12,703	428	3.5%
46.9%	12,250	12,641	392	3.2%
48.1%	12,176	12,384	209	1.7%
49.4%	12,099	12,260	161	1.3%
50.6%	11,953	12,249	297	2.5%
51.9%	11,947	11,948	1	0.0%
53.1%	11,570	11,927	357	3.1%
54.3%	11,554	11,855	301	2.6%
55.6%	11,440	11,738	298	2.6%
56.8%	10,960	11,685	725	6.6%
58.0%	10,958	11,599	640	5.8%
59.3%	10,747	11,411	665	6.2%
60.5%	10,587	11,154	567	5.4%
61.7%	10,312	10,971	659	6.4%
63.0%	9,956	10,766	810	8.1%
64.2%	9,928	10,728	800	8.1%
65.4%	9,691	10,513	822	8.5%
66.7%	9,385	10,302	917	9.8%
67.9%	9,359	10,284	926	9.9%
69.1%	9,022	9,874	852	9.4%
70.4%	8,901	9,559	657	7.4%
71.6%	8,781	9,404	623	7.1%
72.8%	8,693	9,060	367	4.2%
74.1%	8,611	9,010	400	4.6%
75.3%	8,505	8,859	354	4.2%
76.5%	8,469	8,817	348	4.1%
77.8%	8,426	8,768	342	4.1%
79.0%	8,257	8,684	427	5.2%
80.2%	8,061	8,647	585	7.3%
81.5%	7,516	8,322	806	10.7%
82.7%	7,515	7,871	356	4.7%
84.0%	7,514	7,814	300	4.0%
85.2%	7,490	7,540	50	0.7%
86.4%	7,471	7,516	46	0.6%
87.7%	7,466	7,515	50	0.7%
88.9%	7,462	7,515	54	0.7%
90.1%	7,381	7,515	134	1.8%
91.4%	6,604	7,470	866	13.1%
92.6%	6,406	7,432	1,027	16.0%
93.8%	6,322	7,222	900	14.2%
95.1%	6,318	6,897	578	9.2%
96.3%	6,314	6,819	506	8.0%
97.5%	6,256	6,779	524	8.4%
98.8%	6,219	6,566	346	5.6%
100.0%	4,691	4,691	0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,804	15,597	-207	-1.3%
1.2%	15,804	15,566	-238	-1.5%
2.5%	15,760	15,519	-241	-1.5%
3.7%	15,589	15,499	-91	-0.6%
4.9%	15,570	15,103	-466	-3.0%
6.2%	15,052	15,085	33	0.2%
7.4%	14,962	14,836	-126	-0.8%
8.6%	14,628	14,659	31	0.2%
9.9%	14,389	14,571	182	1.3%
11.1%	14,337	14,399	62	0.4%
12.3%	13,949	13,975	26	0.2%
13.6%	13,882	13,891	10	0.1%
14.8%	13,834	13,796	-38	-0.3%
16.0%	13,680	13,743	63	0.5%
17.3%	13,598	13,688	89	0.7%
18.5%	13,418	13,635	217	1.6%
19.8%	13,375	13,616	240	1.8%
21.0%	13,346	13,475	129	1.0%
22.2%	13,183	13,387	203	1.5%
23.5%	12,923	12,982	60	0.5%
24.7%	12,874	12,797	-77	-0.6%
25.9%	12,705	12,765	60	0.5%
27.2%	12,457	12,545	88	0.7%
28.4%	12,320	12,462	142	1.2%
29.6%	12,307	12,329	22	0.2%
30.9%	12,204	12,293	88	0.7%
32.1%	12,112	12,217	104	0.9%
33.3%	11,878	12,144	267	2.2%
34.6%	11,833	12,032	199	1.7%
35.8%	11,666	11,912	246	2.1%
37.0%	11,548	11,871	323	2.8%
38.3%	11,403	11,666	263	2.3%
39.5%	11,373	11,605	232	2.0%
40.7%	11,314	11,458	144	1.3%
42.0%	11,232	11,336	104	0.9%
43.2%	11,179	11,289	110	1.0%
44.4%	11,145	11,231	86	0.8%
45.7%	10,515	11,124	609	5.8%
46.9%	10,481	11,119	638	6.1%
48.1%	10,349	10,963	614	5.9%
49.4%	10,282	10,731	448	4.4%
50.6%	10,215	10,632	416	4.1%
51.9%	10,108	10,554	447	4.4%
53.1%	9,801	10,414	613	6.3%
54.3%	9,684	10,194	510	5.3%
55.6%	9,534	10,170	636	6.7%
56.8%	9,276	10,154	878	9.5%
58.0%	9,266	10,053	786	8.5%
59.3%	9,068	9,998	930	10.3%
60.5%	8,841	9,583	742	8.4%
61.7%	8,773	9,299	526	6.0%
63.0%	8,387	9,259	872	10.4%
64.2%	8,329	9,205	876	10.5%
65.4%	8,188	9,196	1,008	12.3%
66.7%	8,183	9,111	928	11.3%
67.9%	8,040	9,102	1,062	13.2%
69.1%	7,976	8,938	962	12.1%
70.4%	7,966	8,932	966	12.1%
71.6%	7,959	8,386	427	5.4%
72.8%	7,679	8,286	607	7.9%
74.1%	7,646	8,075	429	5.6%
75.3%	7,631	8,041	410	5.4%
76.5%	7,520	8,015	495	6.6%
77.8%	7,519	7,983	464	6.2%
79.0%	7,518	7,921	403	5.4%
80.2%	7,507	7,701	194	2.6%
81.5%	7,180	7,522	343	4.8%
82.7%	7,050	7,520	471	6.7%
84.0%	7,032	7,496	464	6.6%
85.2%	7,029	7,265	236	3.4%
86.4%	7,022	7,225	203	2.9%
87.7%	7,018	7,205	187	2.7%
88.9%	6,998	7,132	135	1.9%
90.1%	6,871	7,099	228	3.3%
91.4%	5,875	7,096	1,221	20.8%
92.6%	5,766	6,879	1,113	19.3%
93.8%	5,750	6,761	1,011	17.6%
95.1%	5,697	6,339	642	11.3%
96.3%	5,693	6,210	518	9.1%
97.5%	5,677	6,089	413	7.3%
98.8%	5,564	5,622	57	1.0%
100.0%	4,691	4,691	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,180	15,180	0	0.0%
1.2%	15,180	15,180	0	0.0%
2.5%	14,542	14,183	-359	-2.5%
3.7%	14,019	13,914	-106	-0.8%
4.9%	13,855	13,703	-152	-1.1%
6.2%	13,730	13,298	-432	-3.1%
7.4%	13,272	13,019	-253	-1.9%
8.6%	12,869	12,873	4	0.0%
9.9%	12,623	12,803	180	1.4%
11.1%	12,599	12,659	60	0.5%
12.3%	12,151	12,184	34	0.3%
13.6%	12,135	12,097	-38	-0.3%
14.8%	12,004	12,070	65	0.5%
16.0%	11,958	12,024	65	0.5%
17.3%	11,883	12,009	126	1.1%
18.5%	11,697	11,886	189	1.6%
19.8%	11,617	11,864	247	2.1%
21.0%	11,548	11,806	257	2.2%
22.2%	11,457	11,718	262	2.3%
23.5%	11,304	11,561	258	2.3%
24.7%	10,957	11,419	462	4.2%
25.9%	10,945	11,064	119	1.1%
27.2%	10,705	10,796	91	0.8%
28.4%	10,441	10,779	338	3.2%
29.6%	10,247	10,404	157	1.5%
30.9%	10,062	10,320	259	2.6%
32.1%	10,025	10,260	235	2.3%
33.3%	9,984	10,192	208	2.1%
34.6%	9,977	10,151	174	1.7%
35.8%	9,849	10,135	286	2.9%
37.0%	9,774	10,130	356	3.6%
38.3%	9,761	10,101	340	3.5%
39.5%	9,686	10,075	389	4.0%
40.7%	9,625	10,044	419	4.4%
42.0%	9,571	9,989	418	4.4%
43.2%	9,499	9,976	477	5.0%
44.4%	9,422	9,888	467	5.0%
45.7%	9,256	9,856	600	6.5%
46.9%	9,004	9,793	789	8.8%
48.1%	8,848	9,680	832	9.4%
49.4%	8,776	9,618	842	9.6%
50.6%	8,744	9,580	836	9.6%
51.9%	8,479	9,507	1,028	12.1%
53.1%	8,455	9,415	960	11.4%
54.3%	8,383	9,307	923	11.0%
55.6%	8,382	9,301	920	11.0%
56.8%	8,317	9,234	917	11.0%
58.0%	8,179	9,172	992	12.1%
59.3%	7,939	8,860	920	11.6%
60.5%	7,869	8,839	970	12.3%
61.7%	7,643	8,597	954	12.5%
63.0%	7,622	8,321	700	9.2%
64.2%	7,536	8,085	549	7.3%
65.4%	7,534	8,016	482	6.4%
66.7%	7,531	7,965	434	5.8%
67.9%	7,531	7,893	362	4.8%
69.1%	7,529	7,803	273	3.6%
70.4%	7,528	7,725	197	2.6%
71.6%	7,527	7,725	198	2.6%
72.8%	7,511	7,673	162	2.2%
74.1%	7,508	7,587	79	1.1%
75.3%	7,381	7,531	150	2.0%
76.5%	7,214	7,528	314	4.4%
77.8%	7,196	7,528	332	4.6%
79.0%	7,146	7,527	381	5.3%
80.2%	7,092	7,476	384	5.4%
81.5%	6,958	7,096	138	2.0%
82.7%	6,769	7,092	323	4.8%
84.0%	6,665	7,061	396	5.9%
85.2%	6,662	7,047	386	5.8%
86.4%	6,604	7,037	433	6.6%
87.7%	6,593	6,915	322	4.9%
88.9%	6,453	6,799	346	5.4%
90.1%	6,433	6,736	303	4.7%
91.4%	5,586	6,594	1,007	18.0%
92.6%	5,568	6,535	966	17.4%
93.8%	5,544	6,416	872	15.7%
95.1%	5,508	5,695	187	3.4%
96.3%	5,355	5,443	87	1.6%
97.5%	5,350	5,404	54	1.0%
98.8%	5,348	5,377	29	0.5%
100.0%	4,732	4,732	0	0.0%

Figure SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

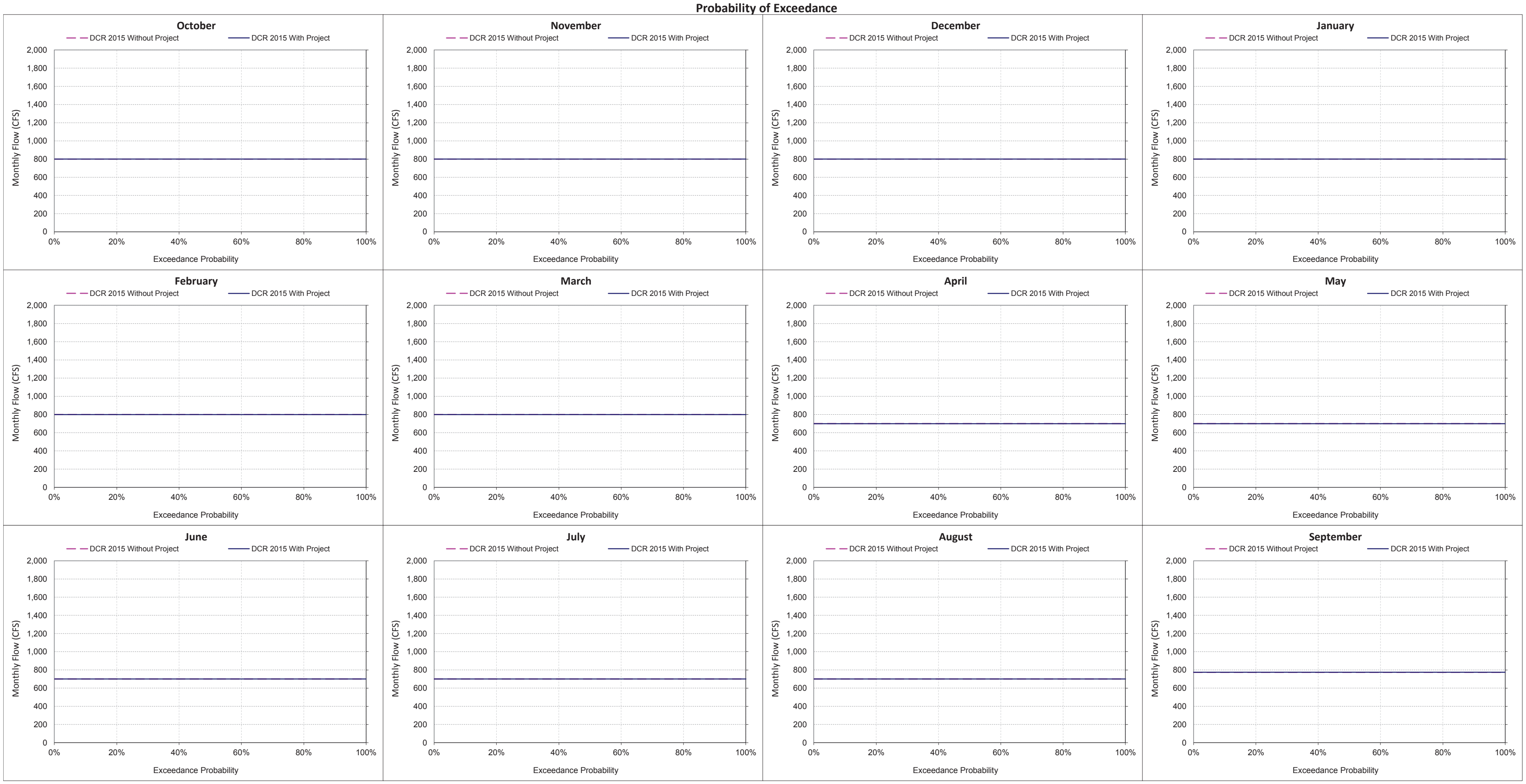


Table SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

October					November					December					January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%	0.0%	800	800	0	0.0%	0.0%	800	800	0	0.0%	0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%	1.2%	800	800	0	0.0%	1.2%	800	800	0	0.0%	1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%	2.5%	800	800	0	0.0%	2.5%	800	800	0	0.0%	2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%	3.7%	800	800	0	0.0%	3.7%	800	800	0	0.0%	3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%	4.9%	800	800	0	0.0%	4.9%	800	800	0	0.0%	4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%	6.2%	800	800	0	0.0%	6.2%	800	800	0	0.0%	6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%	7.4%	800	800	0	0.0%	7.4%	800	800	0	0.0%	7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%	8.6%	800	800	0	0.0%	8.6%	800	800	0	0.0%	8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%	9.9%	800	800	0	0.0%	9.9%	800	800	0	0.0%	9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%	11.1%	800	800	0	0.0%	11.1%	800	800	0	0.0%	11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%	12.3%	800	800	0	0.0%	12.3%	800	800	0	0.0%	12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%	13.6%	800	800	0	0.0%	13.6%	800	800	0	0.0%	13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%	14.8%	800	800	0	0.0%	14.8%	800	800	0	0.0%	14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%	16.0%	800	800	0	0.0%	16.0%	800	800	0	0.0%	16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%	17.3%	800	800	0	0.0%	17.3%	800	800	0	0.0%	17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%	18.5%	800	800	0	0.0%	18.5%	800	800	0	0.0%	18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%	19.8%	800	800	0	0.0%	19.8%	800	800	0	0.0%	19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%	21.0%	800	800	0	0.0%	21.0%	800	800	0	0.0%	21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%	22.2%	800	800	0	0.0%	22.2%	800	800	0	0.0%	22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%	23.5%	800	800	0	0.0%	23.5%	800	800	0	0.0%	23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%	24.7%	800	800	0	0.0%	24.7%	800	800	0	0.0%	24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%	25.9%	800	800	0	0.0%	25.9%	800	800	0	0.0%	25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%	27.2%	800	800	0	0.0%	27.2%	800	800	0	0.0%	27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%	28.4%	800	800	0	0.0%	28.4%	800	800	0	0.0%	28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%	29.6%	800	800	0	0.0%	29.6%	800	800	0	0.0%	29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%	30.9%	800	800	0	0.0%	30.9%	800	800	0	0.0%	30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%	32.1%	800	800	0	0.0%	32.1%	800	800	0	0.0%	32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%	33.3%	800	800	0	0.0%	33.3%	800	800	0	0.0%	33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%	34.6%	800	800	0	0.0%	34.6%	800	800	0	0.0%	34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%	35.8%	800	800	0	0.0%	35.8%	800	800	0	0.0%	35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%	37.0%	800	800	0	0.0%	37.0%	800	800	0	0.0%	37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%	38.3%	800	800	0	0.0%	38.3%	800	800	0	0.0%	38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%	39.5%	800	800	0	0.0%	39.5%	800	800	0	0.0%	39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%	40.7%	800	800	0	0.0%	40.7%	800	800	0	0.0%	40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%	42.0%	800	800	0	0.0%	42.0%	800	800	0	0.0%	42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%	43.2%	800	800	0	0.0%	43.2%	800	800	0	0.0%	43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%	44.4%	800	800	0	0.0%	44.4%	800	800	0	0.0%	44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%	45.7%	800	800	0	0.0%	45.7%	800	800	0	0.0%	45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%	46.9%	800	800	0	0.0%	46.9%	800	800	0	0.0%	46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%	48.1%	800	800	0	0.0%	48.1%	800	800	0	0.0%	48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%	49.4%	800	800	0	0.0%	49.4%	800	800	0	0.0%	49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%	50.6%	800	800	0	0.0%	50.6%	800	800	0	0.0%	50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%	51.9%	800	800	0	0.0%	51.9%	800	800	0	0.0%	51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%	53.1%	800	800	0	0.0%	53.1%	800	800	0	0.0%	53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%	54.3%	800	800	0	0.0%	54.3%	800	800	0	0.0%	54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%	55.6%	800	800	0	0.0%	55.6%	800	800	0	0.0%	55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%	56.8%	800	800	0	0.0%	56.8%	800	800	0	0.0%	56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%	58.0%	800	800	0	0.0%	58.0%	800	800	0	0.0%	58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%	59.3%	800	800	0	0.0%	59.3%	800	800	0	0.0%	59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%	60.5%	800	800	0	0.0%	60.5%	800	800	0	0.0%	60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%	61.7%	800	800	0	0.0%	61.7%	800	800	0	0.0%	61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%	63.0%	800	800	0	0.0%	63.0%	800	800	0	0.0%	63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%	64.2%	800	800	0	0.0%	64.2%	800	800	0	0.0%	64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%	65.4%	800	800	0	0.0%	65.4%	800	800	0	0.0%	65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%	66.7%	800	800	0	0.0%	66.7%	800	800	0	0.0%	66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%	67.9%	800	800	0	0.0%	67.9%	800	800	0	0.0%	67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%	69.1%	800	800	0	0.0%	69.1%	800	800	0	0.0%	69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%	70.4%	800	800	0	0.0%	70.4%	800	800	0	0.0%	70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%	71.6%	800	800	0	0.0%	71.6%	800	800	0	0.0%	71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%	72.8%	800	800	0	0.0%	72.8%	800	800	0	0.0%	72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%	74.1%	800	800	0	0.0%	74.1%	800	800	0	0.0%	74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%	75.3%	800	800	0	0.0%	75.3%	800	800	0	0.0%	75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%	76.5%	800	800	0	0.0%	76.5%	800	800	0	0.0%	76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%	77.8%	800	800	0	0.0%	77.8%	800	800	0	0.0%	77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%	79.0%	800	800	0	0.0%	79.0%	800	800	0	0.0%	79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%	80.2%	800	800	0	0.0%	80.2%	800	800	0	0.0%	80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%	81.5%	800	800	0	0.0%	81.5%	800	800	0	0.0%	81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%	82.7%	800	800	0	0.0%	82.7%	800	800	0	0.0%	82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%	84.0%	800	800	0	0.0%	84.0%	800	800	0	0.0%	84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%	85.2%	800	800	0	0.0%	85.2%	800	800	0	0.0%	85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%	86.4%	800	800	0	0.0%	86.4%	800	800	0	0.0%	86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%	87.7%	800	800	0	0.0%	87.7%	800	800	0	0.0%	87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%	88.9%	800	800	0	0.0%	88.9%	800	800	0	0.0%	88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%	90.1%	800	800	0	0.0%	90.1%	800	800	0	0.0%	90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%	91.4%	800	800	0	0.0%	91.4%	800	800	0	0.0%	91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%	92.6%	800	800	0	0.0%	92.6%	800	800	0	0.0%	92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%	93.8%	800	800	0	0.0%	93.8%	800	800	0	0.0%	93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%	95.1%	800	800	0	0.0%	95.1%	800	800	0	0.0%	95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%	96.3%	800	800	0	0.0%	96.3%	800	800	0	0.0%	96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%	97.5%	800	800	0	0.0%	97.5%	800	800	0	0.0%	97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%	98.8%	800	800	0	0.0%	98.8%	800	800	0	0.0%	98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%	100.0%	800	800	0	0.0%	100.0%	800	800	0	0.0%	100.0%	800	800	0	0.0%

Table SW-21-b

Feather River at Thermalito Low Flow Channel, Monthly Flow

Probability of Exceedance

February					March					April					May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%	0.0%	800	800	0	0.0%	0.0%	700	700	0	0.0%	0.0%	700	700	0	0.0%
1.2%	800	800	0	0.0%	1.2%	800	800	0	0.0%	1.2%	700	700	0	0.0%	1.2%	700	700	0	0.0%
2.5%	800	800	0	0.0%	2.5%	800	800	0	0.0%	2.5%	700	700	0	0.0%	2.5%	700	700	0	0.0%
3.7%	800	800	0	0.0%	3.7%	800	800	0	0.0%	3.7%	700	700	0	0.0%	3.7%	700	700	0	0.0%
4.9%	800	800	0	0.0%	4.9%	800	800	0	0.0%	4.9%	700	700	0	0.0%	4.9%	700	700	0	0.0%
6.2%	800	800	0	0.0%	6.2%	800	800	0	0.0%	6.2%	700	700	0	0.0%	6.2%	700	700	0	0.0%
7.4%	800	800	0	0.0%	7.4%	800	800	0	0.0%	7.4%	700	700	0	0.0%	7.4%	700	700	0	0.0%
8.6%	800	800	0	0.0%	8.6%	800	800	0	0.0%	8.6%	700	700	0	0.0%	8.6%	700	700	0	0.0%
9.9%	800	800	0	0.0%	9.9%	800	800	0	0.0%	9.9%	700	700	0	0.0%	9.9%	700	700	0	0.0%
11.1%	800	800	0	0.0%	11.1%	800	800	0	0.0%	11.1%	700	700	0	0.0%	11.1%	700	700	0	0.0%
12.3%	800	800	0	0.0%	12.3%	800	800	0	0.0%	12.3%	700	700	0	0.0%	12.3%	700	700	0	0.0%
13.6%	800	800	0	0.0%	13.6%	800	800	0	0.0%	13.6%	700	700	0	0.0%	13.6%	700	700	0	0.0%
14.8%	800	800	0	0.0%	14.8%	800	800	0	0.0%	14.8%	700	700	0	0.0%	14.8%	700	700	0	0.0%
16.0%	800	800	0	0.0%	16.0%	800	800	0	0.0%	16.0%	700	700	0	0.0%	16.0%	700	700	0	0.0%
17.3%	800	800	0	0.0%	17.3%	800	800	0	0.0%	17.3%	700	700	0	0.0%	17.3%	700	700	0	0.0%
18.5%	800	800	0	0.0%	18.5%	800	800	0	0.0%	18.5%	700	700	0	0.0%	18.5%	700	700	0	0.0%
19.8%	800	800	0	0.0%	19.8%	800	800	0	0.0%	19.8%	700	700	0	0.0%	19.8%	700	700	0	0.0%
21.0%	800	800	0	0.0%	21.0%	800	800	0	0.0%	21.0%	700	700	0	0.0%	21.0%	700	700	0	0.0%
22.2%	800	800	0	0.0%	22.2%	800	800	0	0.0%	22.2%	700	700	0	0.0%	22.2%	700	700	0	0.0%
23.5%	800	800	0	0.0%	23.5%	800	800	0	0.0%	23.5%	700	700	0	0.0%	23.5%	700	700	0	0.0%
24.7%	800	800	0	0.0%	24.7%	800	800	0	0.0%	24.7%	700	700	0	0.0%	24.7%	700	700	0	0.0%
25.9%	800	800	0	0.0%	25.9%	800	800	0	0.0%	25.9%	700	700	0	0.0%	25.9%	700	700	0	0.0%
27.2%	800	800	0	0.0%	27.2%	800	800	0	0.0%	27.2%	700	700	0	0.0%	27.2%	700	700	0	0.0%
28.4%	800	800	0	0.0%	28.4%	800	800	0	0.0%	28.4%	700	700	0	0.0%	28.4%	700	700	0	0.0%
29.6%	800	800	0	0.0%	29.6%	800	800	0	0.0%	29.6%	700	700	0	0.0%	29.6%	700	700	0	0.0%
30.9%	800	800	0	0.0%	30.9%	800	800	0	0.0%	30.9%	700	700	0	0.0%	30.9%	700	700	0	0.0%
32.1%	800	800	0	0.0%	32.1%	800	800	0	0.0%	32.1%	700	700	0	0.0%	32.1%	700	700	0	0.0%
33.3%	800	800	0	0.0%	33.3%	800	800	0	0.0%	33.3%	700	700	0	0.0%	33.3%	700	700	0	0.0%
34.6%	800	800	0	0.0%	34.6%	800	800	0	0.0%	34.6%	700	700	0	0.0%	34.6%	700	700	0	0.0%
35.8%	800	800	0	0.0%	35.8%	800	800	0	0.0%	35.8%	700	700	0	0.0%	35.8%	700	700	0	0.0%
37.0%	800	800	0	0.0%	37.0%	800	800	0	0.0%	37.0%	700	700	0	0.0%	37.0%	700	700	0	0.0%
38.3%	800	800	0	0.0%	38.3%	800	800	0	0.0%	38.3%	700	700	0	0.0%	38.3%	700	700	0	0.0%
39.5%	800	800	0	0.0%	39.5%	800	800	0	0.0%	39.5%	700	700	0	0.0%	39.5%	700	700	0	0.0%
40.7%	800	800	0	0.0%	40.7%	800	800	0	0.0%	40.7%	700	700	0	0.0%	40.7%	700	700	0	0.0%
42.0%	800	800	0	0.0%	42.0%	800	800	0	0.0%	42.0%	700	700	0	0.0%	42.0%	700	700	0	0.0%
43.2%	800	800	0	0.0%	43.2%	800	800	0	0.0%	43.2%	700	700	0	0.0%	43.2%	700	700	0	0.0%
44.4%	800	800	0	0.0%	44.4%	800	800	0	0.0%	44.4%	700	700	0	0.0%	44.4%	700	700	0	0.0%
45.7%	800	800	0	0.0%	45.7%	800	800	0	0.0%	45.7%	700	700	0	0.0%	45.7%	700	700	0	0.0%
46.9%	800	800	0	0.0%	46.9%	800	800	0	0.0%	46.9%	700	700	0	0.0%	46.9%	700	700	0	0.0%
48.1%	800	800	0	0.0%	48.1%	800	800	0	0.0%	48.1%	700	700	0	0.0%	48.1%	700	700	0	0.0%
49.4%	800	800	0	0.0%	49.4%	800	800	0	0.0%	49.4%	700	700	0	0.0%	49.4%	700	700	0	0.0%
50.6%	800	800	0	0.0%	50.6%	800	800	0	0.0%	50.6%	700	700	0	0.0%	50.6%	700	700	0	0.0%
51.9%	800	800	0	0.0%	51.9%	800	800	0	0.0%	51.9%	700	700	0	0.0%	51.9%	700	700	0	0.0%
53.1%	800	800	0	0.0%	53.1%	800	800	0	0.0%	53.1%	700	700	0	0.0%	53.1%	700	700	0	0.0%
54.3%	800	800	0	0.0%	54.3%	800	800	0	0.0%	54.3%	700	700	0	0.0%	54.3%	700	700	0	0.0%
55.6%	800	800	0	0.0%	55.6%	800	800	0	0.0%	55.6%	700	700	0	0.0%	55.6%	700	700	0	0.0%
56.8%	800	800	0	0.0%	56.8%	800	800	0	0.0%	56.8%	700	700	0	0.0%	56.8%	700	700	0	0.0%
58.0%	800	800	0	0.0%	58.0%	800	800	0	0.0%	58.0%	700	700	0	0.0%	58.0%	700	700	0	0.0%
59.3%	800	800	0	0.0%	59.3%	800	800	0	0.0%	59.3%	700	700	0	0.0%	59.3%	700	700	0	0.0%
60.5%	800	800	0	0.0%	60.5%	800	800	0	0.0%	60.5%	700	700	0	0.0%	60.5%	700	700	0	0.0%
61.7%	800	800	0	0.0%	61.7%	800	800	0	0.0%	61.7%	700	700	0	0.0%	61.7%	700	700	0	0.0%
63.0%	800	800	0	0.0%	63.0%	800	800	0	0.0%	63.0%	700	700	0	0.0%	63.0%	700	700	0	0.0%
64.2%	800	800	0	0.0%	64.2%	800	800	0	0.0%	64.2%	700	700	0	0.0%	64.2%	700	700	0	0.0%
65.4%	800	800	0	0.0%	65.4%	800	800	0	0.0%	65.4%	700	700	0	0.0%	65.4%	700	700	0	0.0%
66.7%	800	800	0	0.0%	66.7%	800	800	0	0.0%	66.7%	700	700	0	0.0%	66.7%	700	700	0	0.0%
67.9%	800	800	0	0.0%	67.9%	800	800	0	0.0%	67.9%	700	700	0	0.0%	67.9%	700	700	0	0.0%
69.1%	800	800	0	0.0%	69.1%	800	800	0	0.0%	69.1%	700	700	0	0.0%	69.1%	700	700	0	0.0%
70.4%	800	800	0	0.0%	70.4%	800	800	0	0.0%	70.4%	700	700	0	0.0%	70.4%	700	700	0	0.0%
71.6%	800	800	0	0.0%	71.6%	800	800	0	0.0%	71.6%	700	700	0	0.0%	71.6%	700	700	0	0.0%
72.8%	800	800	0	0.0%	72.8%	800	800	0	0.0%	72.8%	700	700	0	0.0%	72.8%	700	700	0	0.0%
74.1%	800	800	0	0.0%	74.1%	800	800	0	0.0%	74.1%	700	700	0	0.0%	74.1%	700	700	0	0.0%
75.3%	800	800	0	0.0%	75.3%	800	800	0	0.0%	75.3%	700	700	0	0.0%	75.3%	700	700	0	0.0%
76.5%	800	800	0	0.0%	76.5%	800	800	0	0.0%	76.5%	700	700	0	0.0%	76.5%	700	700	0	0.0%
77.8%	800	800	0	0.0%	77.8%	800	800	0	0.0%	77.8%	700	700	0	0.0%	77.8%	700	700	0	0.0%
79.0%	800	800	0	0.0%	79.0%	800	800	0	0.0%	79.0%	700	700	0	0.0%	79.0%	700	700	0	0.0%
80.2%	800	800	0	0.0%	80.2%	800	800	0	0.0%	80.2%	700	700	0	0.0%	80.2%	700	700	0	0.0%
81.5%	800	800	0	0.0%	81.5%	800	800	0	0.0%	81.5%	700	700	0	0.0%	81.5%	700	700	0	0.0%
82.7%	800	800	0	0.0%	82.7%	800	800	0	0.0%	82.7%	700	700	0	0.0%	82.7%	700	700	0	0.0%
84.0%	800	800	0	0.0%	84.0%	800	800	0	0.0%	84.0%	700	700	0	0.0%	84.0%	700	700	0	0.0%
85.2%	800	800	0	0.0%	85.2%	800	800	0	0.0%	85.2%	700	700	0	0.0%	85.2%	700	700	0	0.0%
86.4%	800	800	0	0.0%	86.4%	800	800	0	0.0%	86.4%	700	700	0	0.0%	86.4%	700	700	0	0.0%
87.7%	800	800	0	0.0%	87.7%	800	800	0	0.0%	87.7%	700	700	0	0.0%	87.7%	700	700	0	0.0%
88.9%	800	800	0	0.0%	88.9%	800	800	0	0.0%	88.9%	700	700	0	0.0%	88.9%	700	700	0	0.0%
90.1%	800	800	0	0.0%	90.1%	800	800	0	0.0%	90.1%	700	700	0	0.0%	90.1%	700	700	0	0.0%
91.4%	800	800	0	0.0%	91.4%	800	800	0	0.0%	91.4%	700	700	0	0.0%	91.4%	700	700	0	0.0%
92.6%	800	800	0	0.0%	92.6%	800	800	0	0.0%	92.6%	700	700	0	0.0%	92.6%	700	700	0	0.0%
93.8%	800	800	0	0.0%	93.8%	800	800	0	0.0%	93.8%	700	700	0	0.0%	93.8%	700	700	0	0.0%
95.1%	800	800	0	0.0%	95.1%	800	800	0	0.0%	95.1%	700	700	0	0.0%	95.1%	700	700	0	0.0%
96.3%	800	800	0	0.0%	96.3%	800	800	0	0.0%	96.3%	700	700	0	0.0%	96.3%	700	700	0	0.0%
97.5%	800	800	0	0.0%	97.5%	800	800	0	0.0%	97.5%	700	700	0	0.0%	97.5%	700	700	0	0.0%
98.8%	800	800	0	0.0%	98.8%	800	800	0	0.0%	98.8%	700	700	0	0.0%	98.8%	700	700	0	0.0%
100.0%	800	800	0	0.0%	100.0%	800	800	0	0.0%	100.0%	700	700	0	0.0%	100.0%	700	700	0	0.0%

Table SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	773	773	0	0.0%
1.2%	773	773	0	0.0%
2.5%	773	773	0	0.0%
3.7%	773	773	0	0.0%
4.9%	773	773	0	0.0%
6.2%	773	773	0	0.0%
7.4%	773	773	0	0.0%
8.6%	773	773	0	0.0%
9.9%	773	773	0	0.0%
11.1%	773	773	0	0.0%
12.3%	773	773	0	0.0%
13.6%	773	773	0	0.0%
14.8%	773	773	0	0.0%
16.0%	773	773	0	0.0%
17.3%	773	773	0	0.0%
18.5%	773	773	0	0.0%
19.8%	773	773	0	0.0%
21.0%	773	773	0	0.0%
22.2%	773	773	0	0.0%
23.5%	773	773	0	0.0%
24.7%	773	773	0	0.0%
25.9%	773	773	0	0.0%
27.2%	773	773	0	0.0%
28.4%	773	773	0	0.0%
29.6%	773	773	0	0.0%
30.9%	773	773	0	0.0%
32.1%	773	773	0	0.0%
33.3%	773	773	0	0.0%
34.6%	773	773	0	0.0%
35.8%	773	773	0	0.0%
37.0%	773	773	0	0.0%
38.3%	773	773	0	0.0%
39.5%	773	773	0	0.0%
40.7%	773	773	0	0.0%
42.0%	773	773	0	0.0%
43.2%	773	773	0	0.0%
44.4%	773	773	0	0.0%
45.7%	773	773	0	0.0%
46.9%	773	773	0	0.0%
48.1%	773	773	0	0.0%
49.4%	773	773	0	0.0%
50.6%	773	773	0	0.0%
51.9%	773	773	0	0.0%
53.1%	773	773	0	0.0%
54.3%	773	773	0	0.0%
55.6%	773	773	0	0.0%
56.8%	773	773	0	0.0%
58.0%	773	773	0	0.0%
59.3%	773	773	0	0.0%
60.5%	773	773	0	0.0%
61.7%	773	773	0	0.0%
63.0%	773	773	0	0.0%
64.2%	773	773	0	0.0%
65.4%	773	773	0	0.0%
66.7%	773	773	0	0.0%
67.9%	773	773	0	0.0%
69.1%	773	773	0	0.0%
70.4%	773	773	0	0.0%
71.6%	773	773	0	0.0%
72.8%	773	773	0	0.0%
74.1%	773	773	0	0.0%
75.3%	773	773	0	0.0%
76.5%	773	773	0	0.0%
77.8%	773	773	0	0.0%
79.0%	773	773	0	0.0%
80.2%	773	773	0	0.0%
81.5%	773	773	0	0.0%
82.7%	773	773	0	0.0%
84.0%	773	773	0	0.0%
85.2%	773	773	0	0.0%
86.4%	773	773	0	0.0%
87.7%	773	773	0	0.0%
88.9%	773	773	0	0.0%
90.1%	773	773	0	0.0%
91.4%	773	773	0	0.0%
92.6%	773	773	0	0.0%
93.8%	773	773	0	0.0%
95.1%	773	773	0	0.0%
96.3%	773	773	0	0.0%
97.5%	773	773	0	0.0%
98.8%	773	773	0	0.0%
100.0%	773	773	0	0.0%

Figure SW-22-b
Feather River below Thermalito, Monthly Flow
Probability of Exceedance

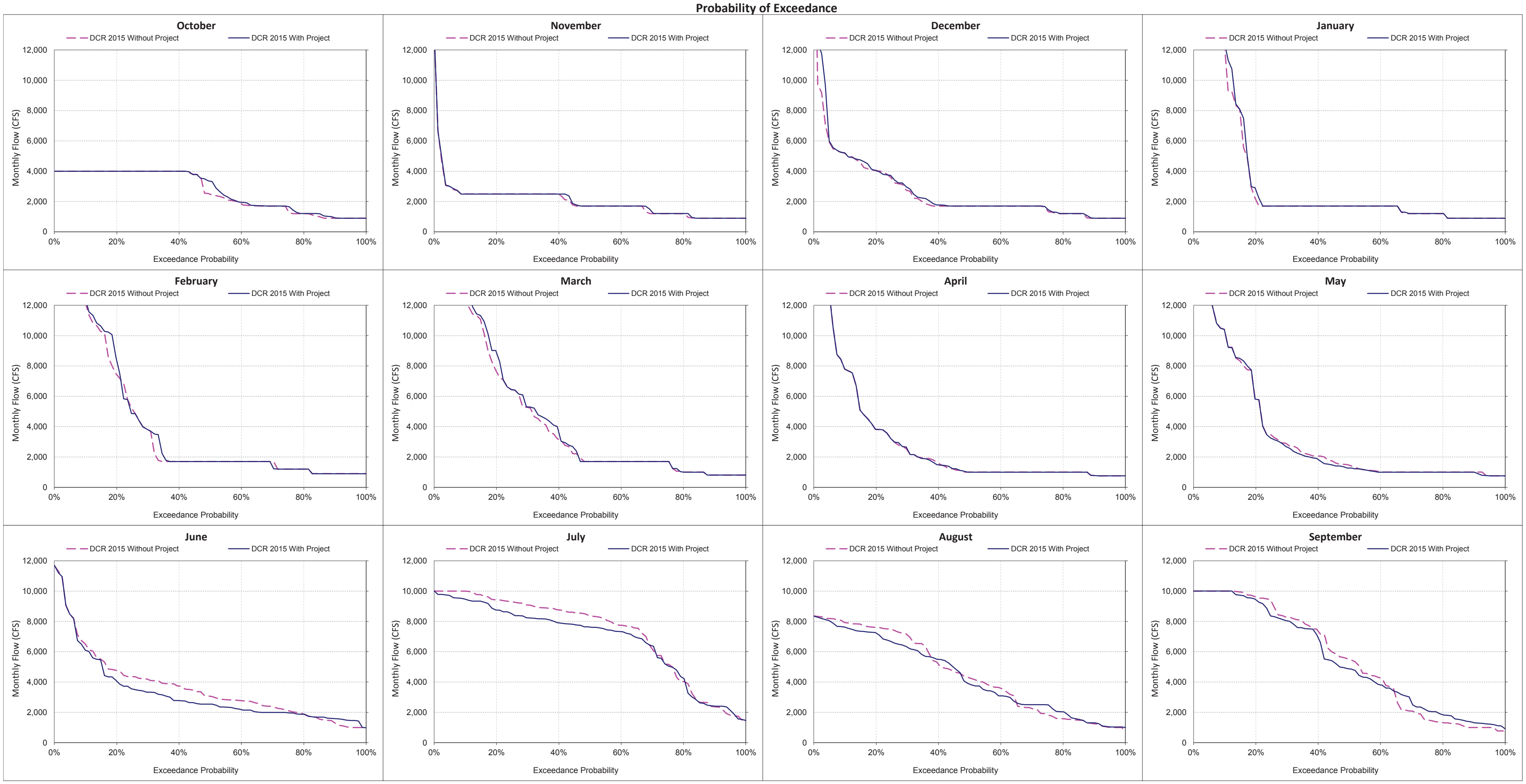


Table SW-22-b

Feather River below Thermalito, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,000	4,000	0	0.0%
1.2%	4,000	4,000	0	0.0%
2.5%	4,000	4,000	0	0.0%
3.7%	4,000	4,000	0	0.0%
4.9%	4,000	4,000	0	0.0%
6.2%	4,000	4,000	0	0.0%
7.4%	4,000	4,000	0	0.0%
8.6%	4,000	4,000	0	0.0%
9.9%	4,000	4,000	0	0.0%
11.1%	4,000	4,000	0	0.0%
12.3%	4,000	4,000	0	0.0%
13.6%	4,000	4,000	0	0.0%
14.8%	4,000	4,000	0	0.0%
16.0%	4,000	4,000	0	0.0%
17.3%	4,000	4,000	0	0.0%
18.5%	4,000	4,000	0	0.0%
19.8%	4,000	4,000	0	0.0%
21.0%	4,000	4,000	0	0.0%
22.2%	4,000	4,000	0	0.0%
23.5%	4,000	4,000	0	0.0%
24.7%	4,000	4,000	0	0.0%
25.9%	4,000	4,000	0	0.0%
27.2%	4,000	4,000	0	0.0%
28.4%	4,000	4,000	0	0.0%
29.6%	4,000	4,000	0	0.0%
30.9%	4,000	4,000	0	0.0%
32.1%	4,000	4,000	0	0.0%
33.3%	4,000	4,000	0	0.0%
34.6%	4,000	4,000	0	0.0%
35.8%	4,000	4,000	0	0.0%
37.0%	4,000	4,000	0	0.0%
38.3%	4,000	4,000	0	0.0%
39.5%	4,000	4,000	0	0.0%
40.7%	4,000	4,000	0	0.0%
42.0%	4,000	4,000	0	0.0%
43.2%	3,897	3,962	65	1.7%
44.4%	3,804	3,784	-20	-0.5%
45.7%	3,786	3,768	-17	-0.5%
46.9%	3,674	3,530	-144	-3.9%
48.1%	2,551	3,508	958	37.6%
49.4%	2,528	3,371	842	33.3%
50.6%	2,429	3,306	877	36.1%
51.9%	2,383	2,889	505	21.2%
53.1%	2,330	2,649	320	13.7%
54.3%	2,247	2,421	174	7.7%
55.6%	2,098	2,295	197	9.4%
56.8%	2,069	2,155	86	4.1%
58.0%	2,020	2,069	49	2.4%
59.3%	1,961	1,969	8	0.4%
60.5%	1,774	1,951	177	10.0%
61.7%	1,754	1,908	154	8.8%
63.0%	1,721	1,756	35	2.0%
64.2%	1,721	1,735	15	0.9%
65.4%	1,711	1,723	12	0.7%
66.7%	1,700	1,717	17	1.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,685	1,700	15	0.9%
75.3%	1,261	1,649	388	30.8%
76.5%	1,200	1,428	228	19.0%
77.8%	1,200	1,274	74	6.2%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	1,200	1,200	0	0.0%
82.7%	1,112	1,200	88	7.9%
84.0%	1,057	1,200	143	13.6%
85.2%	991	1,189	198	20.0%
86.4%	900	1,055	155	17.3%
87.7%	900	1,015	115	12.8%
88.9%	900	996	96	10.7%
90.1%	900	915	15	1.6%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,178	13,150	-29	-0.2%
1.2%	6,661	6,660	-1	0.0%
2.5%	4,566	4,862	296	6.5%
3.7%	3,054	3,089	35	1.1%
4.9%	3,007	3,004	-2	-0.1%
6.2%	2,796	2,852	56	2.0%
7.4%	2,722	2,727	5	0.2%
8.6%	2,500	2,500	0	0.0%
9.9%	2,500	2,500	0	0.0%
11.1%	2,500	2,500	0	0.0%
12.3%	2,500	2,500	0	0.0%
13.6%	2,500	2,500	0	0.0%
14.8%	2,500	2,500	0	0.0%
16.0%	2,500	2,500	0	0.0%
17.3%	2,500	2,500	0	0.0%
18.5%	2,500	2,500	0	0.0%
19.8%	2,500	2,500	0	0.0%
21.0%	2,500	2,500	0	0.0%
22.2%	2,500	2,500	0	0.0%
23.5%	2,500	2,500	0	0.0%
24.7%	2,500	2,500	0	0.0%
25.9%	2,500	2,500	0	0.0%
27.2%	2,500	2,500	0	0.0%
28.4%	2,500	2,500	0	0.0%
29.6%	2,500	2,500	0	0.0%
30.9%	2,500	2,500	0	0.0%
32.1%	2,500	2,500	0	0.0%
33.3%	2,500	2,500	0	0.0%
34.6%	2,500	2,500	0	0.0%
35.8%	2,500	2,500	0	0.0%
37.0%	2,500	2,500	0	0.0%
38.3%	2,500	2,500	0	0.0%
39.5%	2,500	2,500	0	0.0%
40.7%	2,376	2,500	124	5.2%
42.0%	2,118	2,500	382	18.0%
43.2%	2,096	2,375	279	13.3%
44.4%	1,772	1,872	100	5.6%
45.7%	1,700	1,772	72	4.2%
46.9%	1,700	1,710	10	0.6%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,324	1,684	361	27.3%
69.1%	1,210	1,502	292	24.1%
70.4%	1,200	1,209	9	0.7%
71.6%	1,200	1,200	0	0.0%
72.8%	1,200	1,200	0	0.0%
74.1%	1,200	1,200	0	0.0%
75.3%	1,200	1,200	0	0.0%
76.5%	1,200	1,200	0	0.0%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	957	1,200	243	25.4%
82.7%	921	958	36	3.9%
84.0%	915	900	-15	-1.6%
85.2%	900	900	0	0.0%
86.4%	900	900	0	0.0%
87.7%	900	900	0	0.0%
88.9%	900	900	0	0.0%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,709	23,709	0	0.0%
1.2%	9,719	12,500	2,781	28.6%
2.5%	9,202	11,756	2,554	27.8%
3.7%	7,076	9,719	2,643	37.3%
4.9%	5,924	5,993	70	1.2%
6.2%	5,481	5,557	75	1.4%
7.4%	5,338	5,393	54	1.0%
8.6%	5,261	5,240	-21	-0.4%
9.9%	5,193	5,217	25	0.5%
11.1%	4,972	4,948	-24	-0.5%
12.3%	4,939	4,912	-27	-0.5%
13.6%	4,750	4,795	45	0.9%
14.8%	4,615	4,750	135	2.9%
16.0%	4,244	4,637	393	9.3%
17.3%	4,162	4,496	333	8.0%
18.5%	4,073	4,138	66	1.6%
19.8%	4,063	4,052	-12	-0.3%
21.0%	4,012	3,967	-45	-1.1%
22.2%	3,969	3,801	-168	-4.2%
23.5%	3,801	3,760	-41	-1.1%
24.7%	3,584	3,718	134	3.7%
25.9%	3,228	3,421	193	6.0%
27.2%	3,180	3,232	52	1.6%
28.4%	3,127	3,228	101	3.2%
29.6%	2,745	2,964	219	8.0%
30.9%	2,680	2,820	140	5.2%
32.1%	2,222	2,477	255	11.5%
33.3%	2,200	2,287	87	4.0%
34.6%	2,024	2,227	203	10.0%
35.8%	1,868	2,199	331	17.7%
37.0%	1,770	2,039	270	15.2%
38.3%	1,700	1,865	165	9.7%
39.5%	1,700	1,770	70	4.1%
40.7%	1,700	1,770	70	4.1%
42.0%	1,700	1,752	52	3.1%
43.2%	1,700	1,705	5	0.3%
44.4%	1,700	1,700	0	0.0%
45.7%	1,700	1,700	0	0.0%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,627	1,678	51	3.1%
75.3%	1,318	1,439	121	9.2%
76.5%	1,296	1,312	16	1.2%
77.8%	1,200	1,294	94	7.8%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	1,200	1,200	0	0.0%
82.7%	1,200	1,200	0	0.0%
84.0%	1,200	1,200	0	0.0%
85.2%	1,200	1,200	0	0.0%
86.4%	1,200	1,200	0	0.0%
87.7%	919	1,063	144	15.7%
88.9%	900	919	19	2.2%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	40,890	40,890	0	0.0%
1.2%	35,835	35,835	0	0.0%
2.5%	20,187	20,187	0	0.0%
3.7%	19,287	17,739	-1,548	-8.0%
4.9%	14,659	15,872	1,213	8.3%
6.2%	14,316	14,310	-6	0.0%
7.4%	13,864	13,307	-557	-4.0%
8.6%	13,307	13,179	-128	-1.0%
9.9%	12,501	12,501	0	0.0%
11.1%	9,248	11,313	2,066	22.3%
12.3%	9,223	10,748	1,525	16.5%
13.6%	8,350	8,445	96	1.1%
14.8%	8,087	8,087	0	0.0%
16.0%	5,556	7,492	1,936	34.8%
17.3%	4,878	4,878	0	0.0%
18.5%	2,926	2,968	42	1.4%
19.8%	2,222	2,926	704	31.7%
21.0%	1,700	2,227	527	31.0%
22.2%	1,700	1,700	0	0.0%
23.5%	1,700	1,700	0	0.0%
24.7%	1,700	1,700	0	0.0%
25.9%	1,700	1,700	0	0.0%
27.2%	1,700	1,700	0	0.0%
28.4%	1,700	1,700	0	0.0%
29.6%	1,700	1,700	0	0.0%
30.9%	1,700	1,700	0	0.0%
32.1%	1,700	1,700	0	0.0%
33.3%	1,700	1,700	0	0.0%
34.6%	1,700	1,700	0	0.0%
35.8%	1,700	1,700	0	0.0%
37.0%	1,700	1,700	0	0.0%
38.3%	1,700	1,700	0	0.0%
39.5%	1,700	1,700	0	0.0%
40.7%	1,700	1,700	0	0.0%
42.0%	1,700	1,700	0	0.0%
43.2%	1,700	1,700	0	0.0%
44.4%	1,700	1,700	0	0.0%
45.7%	1,700	1,700	0	0.0%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,299	1,316	16	1.3%
67.9%	1,220	1,298	77	6.3%
69.1%	1,200	1,200	0	0.0%
70.4%	1,200	1,200	0	0.0%
71.6%	1,200	1,200	0	0.0%
72.8%	1,200	1,200	0	0.0%
74.1%	1,200	1,200	0	0.0%
75.3%	1,200	1,200	0	0.0%
76.5%	1,200	1,200	0	0.0%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	904	900	-4	-0.5%
82.7%	900	900	0	0.0%
84.0%	900	900	0	0.0%
85.2%	900	900	0	0.0%
86.4%	900	900	0	0.0%
87.7%	900	900	0	0.0%
88.9%	900	900	0	0.0%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

Table SW-22-b
Feather River below Thermalito, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,722	21,722	0	0.0%
1.2%	21,189	21,189	0	0.0%
2.5%	17,981	20,730	2,749	15.3%
3.7%	17,629	18,142	513	2.9%
4.9%	16,571	17,981	1,410	8.5%
6.2%	15,422	17,629	2,207	14.3%
7.4%	13,215	16,571	3,356	25.4%
8.6%	12,472	13,930	1,458	11.7%
9.9%	12,209	12,472	263	2.2%
11.1%	11,342	11,569	227	2.0%
12.3%	10,840	11,342	501	4.6%
13.6%	10,655	10,840	186	1.7%
14.8%	10,285	10,655	370	3.6%
16.0%	10,199	10,285	86	0.8%
17.3%	8,595	10,237	1,641	19.1%
18.5%	7,993	10,072	2,079	26.0%
19.8%	7,488	8,595	1,107	14.8%
21.0%	7,175	7,488	314	4.4%
22.2%	6,847	5,838	-1,009	-14.7%
23.5%	5,792	5,792	0	0.0%
24.7%	5,244	4,859	-386	-7.4%
25.9%	4,859	4,858	-1	0.0%
27.2%	4,399	4,399	0	0.0%
28.4%	3,987	3,982	-4	-0.1%
29.6%	3,832	3,830	-2	0.0%
30.9%	3,704	3,704	0	0.0%
32.1%	2,222	3,507	1,285	57.8%
33.3%	1,777	3,473	1,696	95.4%
34.6%	1,700	2,227	527	31.0%
35.8%	1,700	1,777	77	4.5%
37.0%	1,700	1,700	0	0.0%
38.3%	1,700	1,700	0	0.0%
39.5%	1,700	1,700	0	0.0%
40.7%	1,700	1,700	0	0.0%
42.0%	1,700	1,700	0	0.0%
43.2%	1,700	1,700	0	0.0%
44.4%	1,700	1,700	0	0.0%
45.7%	1,700	1,700	0	0.0%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,691	1,214	-477	-28.2%
71.6%	1,200	1,200	0	0.0%
72.8%	1,200	1,200	0	0.0%
74.1%	1,200	1,200	0	0.0%
75.3%	1,200	1,200	0	0.0%
76.5%	1,200	1,200	0	0.0%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	1,200	1,200	0	0.0%
82.7%	900	900	0	0.0%
84.0%	900	900	0	0.0%
85.2%	900	900	0	0.0%
86.4%	900	900	0	0.0%
87.7%	900	900	0	0.0%
88.9%	900	900	0	0.0%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	34,018	33,737	-281	-0.8%
1.2%	31,803	31,803	0	0.0%
2.5%	26,259	26,259	0	0.0%
3.7%	21,845	21,845	0	0.0%
4.9%	19,000	19,363	363	1.9%
6.2%	16,061	16,061	0	0.0%
7.4%	14,265	14,265	0	0.0%
8.6%	13,955	14,090	134	1.0%
9.9%	13,394	13,394	0	0.0%
11.1%	11,899	12,742	842	7.1%
12.3%	11,432	11,899	468	4.1%
13.6%	11,341	11,432	91	0.8%
14.8%	11,097	11,340	243	2.2%
16.0%	10,127	10,943	816	8.1%
17.3%	9,025	10,127	1,101	12.2%
18.5%	8,289	9,025	736	8.9%
19.8%	7,731	9,025	1,295	16.7%
21.0%	7,256	8,289	1,033	14.2%
22.2%	7,073	7,073	0	0.0%
23.5%	6,628	6,628	0	0.0%
24.7%	6,450	6,450	0	0.0%
25.9%	6,410	6,409	-1	0.0%
27.2%	6,141	6,140	0	0.0%
28.4%	5,310	6,100	790	14.9%
29.6%	5,286	5,310	24	0.5%
30.9%	5,228	5,285	58	1.1%
32.1%	4,657	5,227	570	12.2%
33.3%	4,522	4,774	253	5.6%
34.6%	4,248	4,657	409	9.6%
35.8%	4,109	4,521	412	10.0%
37.0%	3,556	4,347	791	22.2%
38.3%	3,532	4,109	576	16.3%
39.5%	3,204	3,998	795	24.8%
40.7%	3,088	3,030	-58	-1.9%
42.0%	2,767	2,940	173	6.3%
43.2%	2,683	2,767	83	3.1%
44.4%	2,222	2,683	461	20.7%
45.7%	2,216	2,377	161	7.3%
46.9%	1,934	1,700	-234	-12.1%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,700	0	0.0%
75.3%	1,700	1,700	0	0.0%
76.5%	1,230	1,229	-1	-0.1%
77.8%	1,061	1,226	165	15.5%
79.0%	1,043	1,034	-9	-0.9%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,991	18,985	-6	0.0%
1.2%	17,581	17,574	-8	0.0%
2.5%	13,116	13,110	-6	0.0%
3.7%	13,089	13,090	1	0.0%
4.9%	12,888	12,881	-7	-0.1%
6.2%	10,546	10,542	-4	0.0%
7.4%	8,758	8,754	-4	0.0%
8.6%	8,450	8,442	-8	-0.1%
9.9%	7,799	7,790	-9	-0.1%
11.1%	7,679	7,673	-6	-0.1%
12.3%	7,560	7,551	-9	-0.1%
13.6%	6,702	6,696	-6	-0.1%
14.8%	5,088	5,083	-5	-0.1%
16.0%	4,780	4,771	-9	-0.2%
17.3%	4,532	4,524	-8	-0.2%
18.5%	4,215	4,209	-6	-0.1%
19.8%	3,831	3,823	-8	-0.2%
21.0%	3,793	3,822	29	0.8%
22.2%	3,768	3,789	21	0.6%
23.5%	3,574	3,567	-7	-0.2%
24.7%	3,237	3,225	-12	-0.4%
25.9%	2,962	2,983	20	0.7%
27.2%	2,783	2,949	166	6.0%
28.4%	2,693	2,690	-3	-0.1%
29.6%	2,554	2,654	100	3.9%
30.9%	2,190	2,161	-29	-1.3%
32.1%	2,160	2,157	-3	-0.2%
33.3%	1,999	1,999	0	0.0%
34.6%	1,951	1,893	-58	-2.9%
35.8%	1,900	1,890	-10	-0.5%
37.0%	1,894	1,806	-88	-4.7%
38.3%	1,808	1,647	-161	-8.9%
39.5%	1,649	1,490	-159	-9.6%
40.7%	1,492	1,451	-41	-2.7%
42.0%	1,384	1,433	49	3.5%
43.2%	1,233	1,382	150	12.2%
44.4%	1,224	1,232	7	0.6%
45.7%	1,127	1,220	93	8.2%
46.9%	1,121	1,120	-1	-0.1%
48.1%	1,000	1,070	70	7.0%
49.4%	1,000	1,000	0	0.0%
50.6%	1,000	1,000	0	0.0%
51.9%	1,000	1,000	0	0.0%
53.1%	1,000	1,000	0	0.0%
54.3%	1,000	1,000	0	0.0%
55.6%	1,000	1,000	0	0.0%
56.8%	1,000	1,000	0	0.0%
58.0%	1,000	1,000	0	0.0%
59.3%	1,000	1,000	0	0.0%
60.5%	1,000	1,000	0	0.0%
61.7%	1,000	1,000	0	0.0%
63.0%	1,000	1,000	0	0.0%
64.2%	1,000	1,000	0	0.0%
65.4%	1,000	1,000	0	0.0%
66.7%	1,000	1,000	0	0.0%
67.9%	1,000	1,000	0	0.0%
69.1%	1,000	1,000	0	0.0%
70.4%	1,000	1,000	0	0.0%
71.6%	1,000	1,000	0	0.0%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	781	780	0	0.0%
90.1%	778	777	-1	-0.2%
91.4%	750	750	0	0.0%
92.6%	750	750	0	0.0%
93.8%	750	750	0	0.0%
95.1%	750	750	0	0.0%
96.3%	750	750	0	0.0%
97.5%	750	750	0	0.0%
98.8%	750	750	0	0.0%
100.0%	750	750	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,391	20,378	-13	-0.1%
1.2%	18,236	18,226	-9	0.0%
2.5%	17,333	17,321	-12	-0.1%
3.7%	16,132	16,105	-27	-0.2%
4.9%	12,825	12,811	-14	-0.1%
6.2%	11,871	11,877	6	0.1%
7.4%	10,828	10,817	-11	-0.1%
8.6%	10,507	10,497	-10	-0.1%
9.9%	10,424	10,417	-7	-0.1%
11.1%	9,250	9,224	-27	-0.3%
12.3%	9,236	9,215	-21	-0.2%
13.6%	8,512	8,554	41	0.5%
14.8%	8,360	8,507	147	1.8%
16.0%	8,006	8,338	332	4.1%
17.3%	7,749	7,993	245	3.2%
18.5%	7,726	7,740	14	0.2%
19.8%	5,825	5,816	-10	-0.2%
21.0%	5,778	5,765	-13	-0.2%
22.2%	4,033	4,021	-12	-0.3%
23.5%	3,497	3,472	-25	-0.7%
24.7%	3,485	3,261	-223	-6.4%
25.9%	3,273	3,128	-144	-4.4%
27.2%	3,139	3,045	-94	-3.0%
28.4%	2,928	2,900	-28	-0.9%
29.6%	2,900	2,694	-206	-7.1%
30.9%	2,710	2,569	-141	-5.2%
32.1%	2,709	2,362	-347	-12.8%
33.3%	2,592	2,249	-343	-13.2%
34.6%	2,313	2,152	-161	-7.0%
35.8%	2,229	2,057	-171	-7.7%
37.0%	2,162	1,995	-166	-7.7%
38.3%	2,069	1,932	-137	-6.6%
39.5%	2,058	1,897	-161	-7.8%
40.7%	2,057	1,725	-333	-16.2%
42.0%	1,998	1,551	-447	-22.4%
43.2%	1,775	1,517	-259	-14.6%
44.4%	1,747	1,475	-273	-15.6%
45.7%	1,594	1,406	-188	-11.8%
46.9%	1,519	1,400	-119	-7.8%
48.1%	1,518	1,348	-170	-11.2%
49.4%	1,492	1,273	-219	-14.7%
50.6%	1,415	1,272	-143	-10.1%
51.9%	1,308	1,215	-93	-7.1%
53.1%	1,217	1,214	-3	-0.2%
54.3%	1,169	1,167	-2	-0.1%
55.6%	1,132	1,129	-2	-0.2%
56.8%	1,111	1,087	-24	-2.2%
58.0%	1,089	1,050	-39	-3.6%
59.3%	1,051	1,000	-51	-4.8%
60.5%	1,000	1,000	0	0.0%
61.7%	1,000	1,000	0	0.0%
63.0%	1,000	1,000	0	0.0%
64.2%	1,000	1,000	0	0.0%
65.4%	1,000	1,000	0	0.0%
66.7%	1,000	1,000	0	0.0%
67.9%	1,000	1,000	0	0.0%
69.1%	1,000	1,000	0	0.0%
70.4%	1,000	1,000	0	0.0%
71.6%	1,000	1,000	0	0.0%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	1,000	1,000	0	0.0%
90.1%	1,000	1,000	0	0.0%
91.4%	1,000	886	-114	-11.4%
92.6%	1,000	783	-217	-21.7%
93.8%	786	773	-13	-1.6%
95.1%	750	750	0	0.0%
96.3%	750	750	0	0.0%
97.5%	750	750	0	0.0%
98.8%	750	750	0	0.0%
100.0%	750	750	0	0.0%

Table SW-22-b
Feather River below Thermalito, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,681	11,704	24	0.2%
1.2%	11,332	11,224	-108	-0.9%
2.5%	10,955	10,944	-12	-0.1%
3.7%	9,070	9,056	-14	-0.1%
4.9%	8,492	8,480	-12	-0.1%
6.2%	8,203	8,189	-15	-0.2%
7.4%	7,128	6,730	-398	-5.6%
8.6%	6,741	6,504	-238	-3.5%
9.9%	6,519	6,108	-410	-6.3%
11.1%	6,123	6,019	-104	-1.7%
12.3%	6,034	5,584	-450	-7.5%
13.6%	5,598	5,501	-98	-1.7%
14.8%	5,514	5,474	-40	-0.7%
16.0%	5,319	4,427	-893	-16.8%
17.3%	4,855	4,347	-508	-10.5%
18.5%	4,834	4,342	-492	-10.2%
19.8%	4,775	4,108	-666	-14.0%
21.0%	4,730	3,867	-862	-18.2%
22.2%	4,439	3,727	-712	-16.0%
23.5%	4,361	3,720	-641	-14.7%
24.7%	4,356	3,548	-808	-18.5%
25.9%	4,349	3,504	-846	-19.4%
27.2%	4,238	3,447	-791	-18.7%
28.4%	4,231	3,418	-813	-19.2%
29.6%	4,200	3,328	-871	-20.7%
30.9%	4,101	3,322	-779	-19.0%
32.1%	4,092	3,315	-777	-19.0%
33.3%	4,087	3,185	-902	-22.1%
34.6%	3,922	3,161	-760	-19.4%
35.8%	3,895	3,065	-830	-21.3%
37.0%	3,888	2,999	-889	-22.9%
38.3%	3,884	2,785	-1,099	-28.3%
39.5%	3,741	2,779	-962	-25.7%
40.7%	3,733	2,763	-970	-26.0%
42.0%	3,528	2,748	-779	-22.1%
43.2%	3,508	2,644	-864	-24.6%
44.4%	3,474	2,644	-830	-23.9%
45.7%	3,367	2,577	-790	-23.5%
46.9%	3,360	2,547	-813	-24.2%
48.1%	3,099	2,547	-552	-17.8%
49.4%	3,079	2,541	-538	-17.5%
50.6%	3,034	2,536	-498	-16.4%
51.9%	2,951	2,468	-482	-16.3%
53.1%	2,864	2,353	-511	-17.9%
54.3%	2,844	2,348	-496	-17.4%
55.6%	2,828	2,333	-495	-17.5%
56.8%	2,818	2,316	-502	-17.8%
58.0%	2,809	2,252	-557	-19.8%
59.3%	2,781	2,215	-566	-20.3%
60.5%	2,760	2,153	-607	-22.0%
61.7%	2,743	2,149	-594	-21.7%
63.0%	2,722	2,146	-576	-21.2%
64.2%	2,638	2,047	-591	-22.4%
65.4%	2,589	2,011	-579	-22.3%
66.7%	2,450	2,000	-450	-18.4%
67.9%	2,412	2,000	-412	-17.1%
69.1%	2,405	2,000	-405	-16.8%
70.4%	2,347	2,000	-347	-14.8%
71.6%	2,269	2,000	-269	-11.9%
72.8%	2,230	2,000	-230	-10.3%
74.1%	2,161	1,985	-176	-8.1%
75.3%	2,094	1,965	-128	-6.1%
76.5%	2,024	1,955	-69	-3.4%
77.8%	1,995	1,894	-101	-5.0%
79.0%	1,962	1,881	-81	-4.1%
80.2%	1,860	1,876	16	0.9%
81.5%	1,733	1,754	21	1.2%
82.7%	1,694	1,695	1	0.1%
84.0%	1,667	1,690	23	1.4%
85.2%	1,536	1,683	147	9.6%
86.4%	1,497	1,679	183	12.2%
87.7%	1,475	1,616	142	9.6%
88.9%	1,458	1,597	140	9.6%
90.1%	1,276	1,581	305	23.9%
91.4%	1,139	1,567	428	37.6%
92.6%	1,103	1,529	426	38.7%
93.8%	1,038	1,483	445	42.9%
95.1%	1,000	1,464	464	46.4%
96.3%	1,000	1,456	456	45.6%
97.5%	1,000	1,428	428	42.8%
98.8%	1,000	1,000	0	0.0%
100.0%	860	977	117	13.6%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,000	10,000	0	0.0%
1.2%	10,000	9,783	-217	-2.2%
2.5%	10,000	9,779	-221	-2.2%
3.7%	10,000	9,756	-244	-2.4%
4.9%	10,000	9,722	-278	-2.8%
6.2%	10,000	9,565	-435	-4.3%
7.4%	10,000	9,542	-458	-4.6%
8.6%	10,000	9,527	-473	-4.7%
9.9%	10,000	9,469	-531	-5.3%
11.1%	9,977	9,391	-587	-5.9%
12.3%	9,931	9,346	-585	-5.9%
13.6%	9,771	9,340	-431	-4.4%
14.8%	9,769	9,334	-435	-4.5%
16.0%	9,675	9,264	-411	-4.2%
17.3%	9,618	9,188	-430	-4.5%
18.5%	9,450	8,877	-573	-6.1%
19.8%	9,428	8,757	-671	-7.1%
21.0%	9,417	8,741	-676	-7.2%
22.2%	9,373	8,636	-737	-7.9%
23.5%	9,335	8,634	-702	-7.5%
24.7%	9,306	8,532	-774	-8.3%
25.9%	9,263	8,383	-880	-9.5%
27.2%	9,215	8,381	-834	-9.1%
28.4%	9,206	8,365	-841	-9.1%
29.6%	9,084	8,240	-844	-9.3%
30.9%	9,073	8,227	-845	-9.3%
32.1%	8,986	8,212	-774	-8.6%
33.3%	8,917	8,180	-737	-8.3%
34.6%	8,904	8,170	-735	-8.3%
35.8%	8,892	8,151	-741	-8.3%
37.0%	8,867	8,107	-760	-8.6%
38.3%	8,853	8,017	-835	-9.4%
39.5%	8,766	7,909	-857	-9.8%
40.7%	8,751	7,887	-863	-9.9%
42.0%	8,665	7,841	-824	-9.5%
43.2%	8,608	7,836	-772	-9.0%
44.4%	8,603	7,809	-794	-9.2%
45.7%	8,553	7,770	-783	-9.1%
46.9%	8,549	7,739	-811	-9.5%
48.1%	8,511	7,646	-865	-10.2%
49.4%	8,418	7,639	-779	-9.3%
50.6%	8,353	7,605	-749	-9.0%
51.9%	8,317	7,604	-713	-8.6%
53.1%	8,287	7,578	-709	-8.6%
54.3%	8,191	7,525	-666	-8.1%
55.6%	8,066	7,446	-620	-7.7%
56.8%	7,969	7,426	-543	-6.8%
58.0%	7,821	7,349	-472	-6.0%
59.3%	7,753	7,333	-420	-5.4%
60.5%	7,742	7,318	-424	-5.5%
61.7%	7,691	7,212	-479	-6.2%
63.0%	7,687	7,162	-525	-6.8%
64.2%	7,567	6,993	-574	-7.6%
65.4%	7,553	6,903	-650	-8.6%
66.7%	7,217	6,856	-361	-5.0%
67.9%	7,020	6,597	-424	-6.0%
69.1%	6,424	6,448	24	0.4%
70.4%	6,074	6,353	279	4.6%
71.6%	5,754	5,598	-156	-2.7%
72.8%	5,740	5,566	-174	-3.0%
74.1%	5,183	5,195	13	0.2%
75.3%	5,160	5,045	-115	-2.2%
76.5%	4,971	4,966	-5	-0.1%
77.8%	4,330	4,775	446	10.3%
79.0%	4,030	4,371	340	8.4%
80.2%	4,028	4,227	199	4.9%
81.5%	3,881	3,254	-627	-16.1%
82.7%	3,250	3,013	-237	-7.3%
84.0%	2,877	2,847	-30	-1.0%
85.2%	2,668	2,633	-35	-1.3%
86.4%	2,653	2,586	-68	-2.5%
87.7%	2,645	2,480	-165	-6.3%
88.9%	2,390	2,440	50	2.1%
90.1%	2,362	2,400	38	1.6%
91.4%	2,347	2,400	53	2.3%
92.6%	2,164	2,400	236	10.9%
93.8%	1,910	2,358	448	23.5%
95.1%	1,810	2,124	314	17.4%
96.3%	1,761	1,866	105	6.0%
97.5%	1,749	1,567	-182	-10.4%
98.8%	1,485	1,524	39	2.6%
100.0%	1,417	1,470	54	3.8%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,365	8,346	-19	-0.2%
1.2%	8,324	8,282	-42	-0.5%
2.5%	8,303	8,189	-114	-1.4%
3.7%	8,196	8,119	-76	-0.9%
4.9%	8,195	8,055	-140	-1.7%
6.2%	8,174	7,891	-284	-3.5%
7.4%	8,119	7,676	-443	-5.5%
8.6%	8,081	7,666	-416	-5.1%
9.9%	7,924	7,622	-302	-3.8%
11.1%	7,895	7,533	-362	-4.6%
12.3%	7,846	7,464	-382	-4.9%
13.6%	7,840	7,383	-457	-5.8%
14.8%	7,825	7,349	-476	-6.1%
16.0%	7,711	7,332	-379	-4.9%
17.3%	7,658	7,304	-354	-4.6%
18.5%	7,630	7,286	-344	-4.5%
19.8%	7,607	7,266	-341	-4.5%
21.0%	7,598	7,088	-510	-6.7%
22.2%	7,538	6,847	-691	-9.2%
23.5%	7,506	6,766	-740	-9.9%
24.7%	7,503	6,677	-826	-11.0%
25.9%	7,397	6,573	-824	-11.1%
27.2%	7,289	6,502	-787	-10.8%
28.4%	7,235	6,442	-793	-11.0%
29.6%	7,171	6,337	-834	-11.6%
30.9%	6,948	6,183	-765	-11.0%
32.1%	6,559	6,135	-424	-6.5%
33.3%	6,539	6,070	-469	-7.2%
34.6%	6,538	5,835	-703	-10.7%
35.8%	6,349	5,690	-659	-10.4%
37.0%	5,858	5,681	-177	-3.0%
38.3%	5,415	5,597	182	3.4%
39.5%	5,313	5,511	198	3.7%
40.7%	4,965	5,488	524	10.5%
42.0%	4,920	5,416	496	10.1%
43.2%	4,862	5,259	397	8.2%
44.4%	4,760	5,047	287	6.0%
45.7%	4,637	4,823	186	4.0%
46.9%	4,577	4,633	56	1.2%
48.1%	4,387	4,079	-308	-7.0%
49.4%	4,310	3,906	-404	-9.4%
50.6%	4,224	3,816	-407	-9.6%
51.9%	4,142	3,741	-401	-9.7%
53.1%	4,020	3,736	-284	-7.1%
54.3%	3,999	3,509	-490	-12.3%
55.6%	3,847	3,434	-413	-10.7%
56.8%	3,735	3,409	-326	-8.7%
58.0%	3,662	3,310	-352	-9.6%
59.3%	3,649	3,088	-561	-15.4%
60.5%	3,541	3,083	-459	-13.0%
61.7%	3,365	3,050	-315	-9.3%
63.0%	3,184	2,993	-190	-6.0%
64.2%	3,101	2,723	-378	-12.2%
65.4%	2,401	2,598	197	8.2%
66.7%	2,368	2,532	164	6.9%
67.9%	2,321	2,500	179	7.7%
69.1%	2,313	2,500	187	8.1%
70.4%	2,223	2,500	277	12.4%
71.6%	2,192	2,500	308	14.0%
72.8%	1,925	2,500	575	29.9%
74.1%	1,918	2,500	582	30.3%
75.3%	1,814	2,492	678	37.4%
76.5%	1,743	2,245	502	28.8%
77.8%	1,599	2,060	461	28.8%
79.0%	1,586	2,047	461	29.1%
80.2%	1,577	2,025	448	28.4%
81.5%	1,537	1,847	309	20.1%
82.7%	1,534	1,637	103	6.7%
84.0%	1,501	1,586	85	5.6%
85.2%	1,481	1,532	51	3.5%
86.4%	1,472	1,468	-3	-0.2%
87.7%	1,302	1,313	11	0.9%
88.9%	1,281	1,308	27	2.1%
90.1%	1,242	1,303	62	5.0%
91.4%	1,235	1,253	18	1.4%
92.6%	1,084	1,109	25	2.3%
93.8%	1,043	1,067	24	2.3%
95.1%	1,000	1,040	40	4.0%
96.3%	1,000	1,035	35	3.5%
97.5%	1,000	1,035	35	3.5%
98.8%	1,000	1,035	35	3.5%
100.0%	750	1,000	250	33.3%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,000	10,000	0	0.0%
1.2%	10,000	10,000	0	0.0%
2.5%	10,000	10,000	0	0.0%
3.7%	10,000	10,000	0	0.0%
4.9%	10,000	10,000	0	0.0%
6.2%	10,000	10,000	0	0.0%
7.4%	10,000	10,000	0	0.0%
8.6%	10,000	10,000	0	0.0%
9.9%	10,000	10,000	0	0.0%
11.1%	10,000	10,000	0	0.0%
12.3%	10,000	9,998	-2	0.0%
13.6%	9,975	9,764	-211	-2.1%
14.8%	9,947	9,732	-215	-2.2%
16.0%	9,910	9,699	-210	-2.1%
17.3%	9,750	9,568	-182	-1.9%
18.5%	9,727	9,540	-187	-1.9%
19.8%	9,633	9,474	-159	-1.6%
21.0%	9,534	9,266	-268	-2.8%
22.2%	9,534	9,160	-375	-3.9%
23.5%	9,492	8,880	-612	-6.5%
24.7%	9,440	8,367	-1,073	-11.4%
25.9%	8,927	8,312	-614	-6.9%
27.2%	8,427	8,233	-193	-2.3%
28.4%	8,387	8,137	-250	-3.0%
29.6%	8,285	8,058	-227	-2.7%
30.9%	8,284	8,010	-274	-3.3%
32.1%	8,175	7,813	-362	-4.4%
33.3%	8,111	7,596	-516	-6.4%
34.6%	8,090	7,593	-497	-6.1%
35.8%	7,833	7,528	-305	-3.9%
37.0%	7,720	7,499	-222	-2.9%
38.3%	7,510	7,495	-15	-0.2%
39.5%	7,489	7,126	-363	-4.8%
40.7%	7,152	6,608	-544	-7.6%
42.0%	7,141	5,521	-1,620	-22.7%
43.2%	6,219	5,477	-742	-11.9%
44.4%	5,982	5,402	-580	-9.7%
45.7%	5,862	5,212	-651	-11.1%
46.9%	5,673	4,985	-688	-12.1%
48.1%	5,621	4,961	-660	-11.7%
49.4%	5,541	4,895	-646	-11.7%
50.6%	5,459	4,853	-606	-11.1%
51.9%	5,338	4,772	-566	-10.6%
53.1%	5,082	4,447	-635	-12.5%
54.3%	4,581	4,325	-256	-5.6%
55.6%	4,570	4,309	-261	-5.7%
56.8%	4,432	4,195	-237	-5.4%
58.0%	4,408	4,006	-402	-9.1%
59.3%	4,308	3,839	-468	-10.9%
60.5%	4,241	3,792	-449	-10.6%
61.7%	3,763	3,610	-154	-4.1%
63.0%	3,706	3,604	-102	-2.7%
64.2%	3,540	3,413	-127	-3.6%
65.4%	2,634	3,326	692	26.3%
66.7%	2,173	3,181	1,008	46.4%
67.9%	2,151	3,092	941	43.7%
69.1%	2,092	3,025	933	44.6%
70.4%	2,077	2,482	406	19.5%
71.6%	1,920	2,358	438	22.8%
72.8%	1,892	2,349	457	24.2%
74.1%	1,523	2,212	689	45.2%
75.3%	1,489	2,079	590	39.6%
76.5%	1,440	2,037	598	41.5%
77.8%	1,374	2,036	662	48.2%
79.0%	1,362	1,904	542	39.8%
80.2%	1,313	1,818	505	38.5%
81.5%	1,305	1,805	500	38.3%
82.7%	1,268	1,778	510	40.2%
84.0%	1,262	1,567	305	24.2%
85.2%	1,220	1,528	308	25.2%
86.4%	1,114	1,484	370	33.2%
87.7%	1,000	1,417	417	41.7%
88.9%	1,000	1,374	374	37.4%
90.1%	1,000	1,313	313	31.3%
91.4%	1,000	1,298	298	29.8%
92.6%	1,000	1,272	272	27.2%
93.8%	1,000	1,236	236	23.6%
95.1%	1,000	1,224	224	22.4%
96.3%	1,000	1,195	195	19.5%
97.5%	773	1,114	340	44.0%
98.8%	773	1,107	334	43.1%
100.0%	773	906	133	17.1%

Figure SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

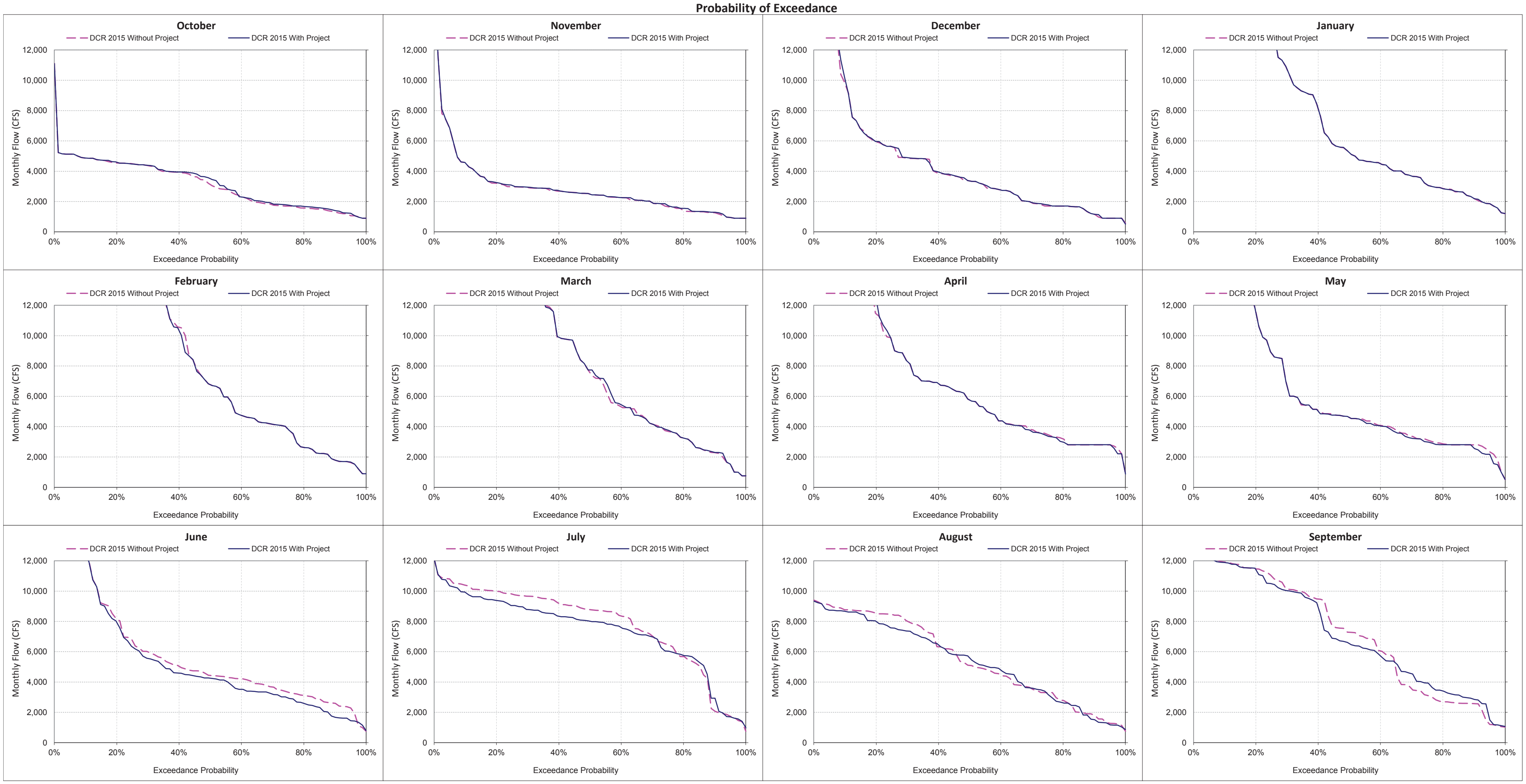


Table SW-23-b

Feather River at Mouth, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,113	11,102	-12	-0.1%
1.2%	5,226	5,228	2	0.0%
2.5%	5,149	5,151	1	0.0%
3.7%	5,131	5,134	3	0.1%
4.9%	5,129	5,131	1	0.0%
6.2%	5,129	5,130	0	0.0%
7.4%	5,003	5,005	3	0.1%
8.6%	4,907	4,907	0	0.0%
9.9%	4,862	4,871	9	0.2%
11.1%	4,857	4,862	5	0.1%
12.3%	4,856	4,850	-6	-0.1%
13.6%	4,761	4,761	1	0.0%
14.8%	4,726	4,727	0	0.0%
16.0%	4,714	4,716	2	0.0%
17.3%	4,632	4,714	81	1.8%
18.5%	4,581	4,633	53	1.1%
19.8%	4,544	4,610	66	1.5%
21.0%	4,536	4,537	1	0.0%
22.2%	4,528	4,529	1	0.0%
23.5%	4,516	4,508	-9	-0.2%
24.7%	4,503	4,482	-21	-0.5%
25.9%	4,462	4,463	1	0.0%
27.2%	4,427	4,434	6	0.1%
28.4%	4,425	4,425	0	0.0%
29.6%	4,389	4,385	-5	-0.1%
30.9%	4,338	4,371	33	0.8%
32.1%	4,320	4,324	4	0.1%
33.3%	4,109	4,111	2	0.1%
34.6%	3,998	4,110	111	2.8%
35.8%	3,987	3,999	12	0.3%
37.0%	3,961	3,988	26	0.7%
38.3%	3,948	3,962	14	0.4%
39.5%	3,945	3,949	4	0.1%
40.7%	3,898	3,945	47	1.2%
42.0%	3,882	3,943	61	1.6%
43.2%	3,807	3,907	100	2.6%
44.4%	3,643	3,885	242	6.6%
45.7%	3,627	3,807	180	5.0%
46.9%	3,452	3,652	200	5.8%
48.1%	3,423	3,646	223	6.5%
49.4%	3,202	3,564	361	11.3%
50.6%	3,039	3,450	412	13.6%
51.9%	2,939	3,376	437	14.9%
53.1%	2,836	3,052	216	7.6%
54.3%	2,811	3,046	235	8.4%
55.6%	2,785	2,813	28	1.0%
56.8%	2,602	2,744	142	5.4%
58.0%	2,471	2,712	241	9.7%
59.3%	2,406	2,326	-79	-3.3%
60.5%	2,297	2,287	-10	-0.4%
61.7%	2,206	2,238	31	1.4%
63.0%	2,070	2,209	139	6.7%
64.2%	1,953	2,064	111	5.7%
65.4%	1,947	2,040	93	4.8%
66.7%	1,896	2,014	118	6.2%
67.9%	1,850	1,947	98	5.3%
69.1%	1,846	1,926	80	4.3%
70.4%	1,751	1,830	79	4.5%
71.6%	1,737	1,823	86	4.9%
72.8%	1,716	1,805	89	5.2%
74.1%	1,700	1,787	87	5.1%
75.3%	1,700	1,752	52	3.1%
76.5%	1,700	1,712	12	0.7%
77.8%	1,634	1,700	66	4.0%
79.0%	1,575	1,700	125	7.9%
80.2%	1,568	1,663	95	6.1%
81.5%	1,547	1,654	107	6.9%
82.7%	1,535	1,633	98	6.4%
84.0%	1,506	1,595	89	5.9%
85.2%	1,500	1,578	78	5.2%
86.4%	1,473	1,542	69	4.7%
87.7%	1,402	1,521	119	8.5%
88.9%	1,354	1,465	111	8.2%
90.1%	1,303	1,397	93	7.2%
91.4%	1,236	1,356	120	9.7%
92.6%	1,200	1,251	51	4.3%
93.8%	1,200	1,237	37	3.1%
95.1%	1,065	1,225	159	15.0%
96.3%	1,062	1,066	4	0.3%
97.5%	989	974	-15	-1.5%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,697	21,669	-28	-0.1%
1.2%	11,684	11,680	-3	0.0%
2.5%	7,819	8,116	297	3.8%
3.7%	7,422	7,423	1	0.0%
4.9%	6,861	6,861	0	0.0%
6.2%	5,896	5,897	0	0.0%
7.4%	4,932	4,935	3	0.1%
8.6%	4,610	4,611	1	0.0%
9.9%	4,584	4,584	0	0.0%
11.1%	4,288	4,285	-2	-0.1%
12.3%	4,154	4,154	0	0.0%
13.6%	3,896	3,895	-1	0.0%
14.8%	3,667	3,667	0	0.0%
16.0%	3,613	3,613	0	0.0%
17.3%	3,338	3,338	0	0.0%
18.5%	3,214	3,321	107	3.3%
19.8%	3,207	3,270	63	2.0%
21.0%	3,150	3,210	61	1.9%
22.2%	3,112	3,151	39	1.2%
23.5%	2,985	3,113	128	4.3%
24.7%	2,972	3,094	121	4.1%
25.9%	2,969	2,987	18	0.6%
27.2%	2,960	2,974	14	0.5%
28.4%	2,949	2,970	21	0.7%
29.6%	2,945	2,962	17	0.6%
30.9%	2,895	2,944	49	1.7%
32.1%	2,886	2,896	10	0.3%
33.3%	2,885	2,886	1	0.0%
34.6%	2,877	2,885	8	0.3%
35.8%	2,869	2,877	7	0.3%
37.0%	2,753	2,866	113	4.1%
38.3%	2,749	2,756	7	0.3%
39.5%	2,690	2,750	60	2.2%
40.7%	2,683	2,684	0	0.0%
42.0%	2,642	2,641	-1	0.0%
43.2%	2,619	2,620	0	0.0%
44.4%	2,603	2,594	-8	-0.3%
45.7%	2,586	2,586	0	0.0%
46.9%	2,540	2,540	0	0.0%
48.1%	2,534	2,535	1	0.0%
49.4%	2,532	2,532	0	0.0%
50.6%	2,444	2,442	-2	-0.1%
51.9%	2,428	2,432	4	0.2%
53.1%	2,421	2,418	-3	-0.1%
54.3%	2,417	2,415	-2	-0.1%
55.6%	2,320	2,321	1	0.1%
56.8%	2,293	2,320	27	1.2%
58.0%	2,286	2,302	16	0.7%
59.3%	2,268	2,275	7	0.3%
60.5%	2,256	2,259	4	0.2%
61.7%	2,244	2,253	8	0.4%
63.0%	2,108	2,246	138	6.5%
64.2%	2,085	2,108	23	1.1%
65.4%	2,078	2,074	-3	-0.2%
66.7%	2,075	2,073	-2	-0.1%
67.9%	2,028	2,027	-1	0.0%
69.1%	2,022	2,024	1	0.1%
70.4%	1,876	1,875	-1	0.0%
71.6%	1,851	1,871	20	1.1%
72.8%	1,845	1,853	8	0.5%
74.1%	1,700	1,850	150	8.8%
75.3%	1,648	1,700	52	3.1%
76.5%	1,639	1,644	4	0.3%
77.8%	1,551	1,632	81	5.2%
79.0%	1,550	1,553	3	0.2%
80.2%	1,359	1,551	192	14.1%
81.5%	1,350	1,527	177	13.1%
82.7%	1,341	1,359	18	1.3%
84.0%	1,333	1,351	18	1.4%
85.2%	1,328	1,345	17	1.2%
86.4%	1,326	1,336	10	0.8%
87.7%	1,284	1,330	46	3.5%
88.9%	1,284	1,286	3	0.2%
90.1%	1,257	1,285	27	2.2%
91.4%	1,173	1,256	83	7.1%
92.6%	1,084	1,177	94	8.6%
93.8%	968	966	-2	-0.2%
95.1%	943	944	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	47,785	47,785	0	0.0%
1.2%	23,676	29,097	5,421	22.9%
2.5%	21,738	22,513	775	3.6%
3.7%	19,913	19,913	-1	0.0%
4.9%	15,475	18,029	2,554	16.5%
6.2%	13,076	13,075	-1	0.0%
7.4%	12,932	12,934	2	0.0%
8.6%	10,390	11,331	941	9.1%
9.9%	9,857	10,152	295	3.0%
11.1%	9,141	9,143	2	0.0%
12.3%	7,567	7,568	1	0.0%
13.6%	7,342	7,344	3	0.0%
14.8%	6,839	6,839	0	0.0%
16.0%	6,651	6,508	-143	-2.2%
17.3%	6,289	6,314	25	0.4%
18.5%	6,108	6,178	70	1.1%
19.8%	5,954	5,962	8	0.1%
21.0%	5,885	5,954	69	1.2%
22.2%	5,758	5,738	-20	-0.3%
23.5%	5,659	5,642	-17	-0.3%
24.7%	5,642	5,636	-6	-0.1%
25.9%	5,558	5,580	22	0.4%
27.2%	4,914	5,513	599	12.2%
28.4%	4,912	4,917	5	0.1%
29.6%	4,872	4,903	31	0.6%
30.9%	4,844	4,872	28	0.6%
32.1%	4,844	4,848	4	0.1%
33.3%	4,831	4,836	5	0.1%
34.6%	4,818	4,831	14	0.3%
35.8%	4,814	4,817	3	0.1%
37.0%	4,782	4,568	-214	-4.5%
38.3%	4,026	4,027	1	0.0%
39.5%	3,899	3,983	84	2.2%
40.7%	3,846	3,897	51	1.3%
42.0%	3,812	3,808	-4	-0.1%
43.2%	3,750	3,803	53	1.4%
44.4%	3,671	3,733	62	1.7%
45.7%	3,664	3,674	10	0.3%
46.9%	3,600	3,601	2	0.0%
48.1%	3,392	3,565	173	5.1%
49.4%	3,385	3,387	2	0.1%
50.6%	3,335	3,333	-1	0.0%
51.9%	3,322	3,325	3	0.1%
53.1%	3,224	3,219	-5	-0.2%
54.3%	3,140	3,140	0	0.0%
55.6%	2,887	3,037	150	5.2%
56.8%	2,871	2,889	18	0.6%
58.0%	2,856	2,857	1	0.0%
59.3%	2,796	2,796	0	0.0%
60.5%	2,738	2,740	1	0.1%
61.7%	2,725	2,727	2	0.1%
63.0%	2,662	2,663	1	0.0%
64.2%	2,500	2,500	0	0.0%
65.4%	2,381	2,388	7	0.3%
66.7%	2,054	2,056	1	0.1%
67.9%	2,018	2,022	4	0.2%
69.1%	1,998	1,999	1	0.0%
70.4%	1,876	1,902	25	1.3%
71.6%	1,859	1,875	16	0.9%
72.8%	1,802	1,860	58	3.2%
74.1%	1,710	1,803	93	5.4%
75.3%	1,700	1,773	73	4.3%
76.5%	1,700	1,712	12	0.7%
77.8%	1,700	1,700	0	0.0%
79.0%	1,700	1,700	0	0.0%
80.2%	1,700	1,700	0	0.0%
81.5%	1,676	1,700	24	1.5%
82.7%	1,666	1,677	12	0.7%
84.0%	1,654	1,658	4	0.3%
85.2%	1,647	1,648	0	0.0%
86.4%	1,529	1,533	4	0.2%
87.7%	1,335	1,338	2	0.2%
88.9%	1,200	1,200	0	0.0%
90.1%	1,156	1,159	3	0.3%
91.4%	980	1,141	161	16.4%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	567	510	-57	-10.1%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	98,400	98,388	-13	0.0%
1.2%	67,754	67,754	-1	0.0%
2.5%	38,499	38,495	-4	0.0%
3.7%	33,668	34,885	1,216	3.6%
4.9%	31,315	31,284	-31	-0.1%
6.2%	31,035	31,029	-6	0.0%
7.4%	24,818	30,009	5,192	20.9%
8.6%	23,259	24,526	1,267	5.4%
9.9%	21,276	21,672	396	1.9%
11.1%	20,108	21,277	1,169	5.8%
12.3%	19,287	20,109	822	4.3%
13.6%	18,714	17,740	-974	-5.2%
14.8%	18,316	17,631	-684	-3.7%
16.0%	17,612	17,615	3	0.0%
17.3%	17,288	17,289	0	0.0%
18.5%	16,247	16,248	1	0.0%
19.8%	16,177	16,178	1	0.0%
21.0%	16,018	16,018	0	0.0%
22.2%	15,769	14,991	-778	-4.9%
23.5%	14,971	13,217	-1,754	-11.7%
24.7%	13,217	13,216	0	0.0%
25.9%	13,022	13,025	3	0.0%
27.2%	11,514	11,514	0	0.0%
28.4%	11,321	11,321	0	0.0%
29.6%	10,910	10,910	0	0.0%
30.9%	10,311	10,311	0	0.0%
32.1%	9,705	9,693	-12	-0.1%
33.3%	9,486	9,487	1	0.0%
34.6%	9,299	9,301	2	0.0%
35.8%	9,208	9,210	3	0.0%
37.0%	9,088	9,087	0	0.0%
38.3%	9,042	9,042	0	0.0%
39.5%	8,445	8,445	0	0.0%
40.7%	7,636	7,640	4	0.0%
42.0%	6,538	6,538	1	0.0%
43.2%	6,261	6,261	0	0.0%
44.4%	5,828	5,835	8	0.1%
45.7%	5,654	5,655	1	0.0%
46.9%	5,585	5,586	1	0.0%
48.1%	5,553	5,568	15	0.3%
49.4%	5,351	5,352	1	0.0%
50.6%	5,112	5,112	0	0.0%
51.9%	4,997	4,999	2	0.0%
53.1%	4,734	4,734	1	0.0%
54.3%	4,722	4,722	0	0.0%
55.6%	4,646	4,647	1	0.0%
56.8%	4,628	4,628	1	0.0%
58.0%	4,576	4,578	2	0.0%
59.3%	4,573	4,572	-1	0.0%
60.5%	4,448	4,449	0	0.0%
61.7%	4,412	4,413	0	0.0%
63.0%	4,175	4,174	-1	0.0%
64.2%	4,021	4,022	1	0.0%
65.4%	4,012	4,013	1	0.0%
66.7%	4,006	4,009	3	0.1%
67.9%	3,795	3,796	1	0.0%
69.1%	3,746	3,746	0	0.0%
70.4%	3,662	3,664	2	0.1%
71.6%	3,644	3,644	0	0.0%
72.8%	3,579	3,576	-3	-0.1%
74.1%	3,228	3,225	-3	-0.1%
75.3%	3,051	3,052	0	0.0%
76.5%	2,996	2,996	1	0.0%
77.8%	2,935	2,937	1	0.1%
79.0%	2,922	2,924	2	0.1%
80.2%	2,843	2,839	-5	-0.2%
81.5%	2,841	2,802	-38	-1.3%
82.7%	2,801	2,759	-41	-1.5%
84.0%	2,647	2,678	32	1.2%
85.2%	2,646	2,648	3	0.1%
86.4%	2,627	2,627	0	0.0%
87.7%	2,408	2,408	0	0.0%
88.9%	2,331	2,331	1	0.0%
90.1%	2,186	2,187	1	0.0%
91.4%	2,056	2,154	98	4.8%
92.6%	1,963	1,970	7	0.3%
93.8%	1,876	1,877	0	0.0%
95.1%	1,857	1,858	1	0.0%
96.3%	1,700	1,700	0	0.0%
97.5%	1,557	1,559	1	0.1%
98.8%	1,256	1,257	1	0.1%
100.0%	1,200	1,200	0	0.0%

Table SW-23-b

Feather River at Mouth, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	71,426	73,148	1,722	2.4%
1.2%	41,897	47,215	5,318	12.7%
2.5%	36,327	36,840	513	1.4%
3.7%	35,641	36,328	686	1.9%
4.9%	35,400	35,654	254	0.7%
6.2%	35,055	35,403	348	1.0%
7.4%	33,783	35,059	1,276	3.8%
8.6%	31,923	33,784	1,861	5.8%
9.9%	31,079	31,050	-29	-0.1%
11.1%	30,135	30,139	4	0.0%
12.3%	25,878	25,880	2	0.0%
13.6%	23,307	23,310	3	0.0%
14.8%	21,354	22,005	650	3.0%
16.0%	20,612	21,354	742	3.6%
17.3%	20,121	20,595	473	2.4%
18.5%	19,106	20,160	1,053	5.5%
19.8%	18,712	18,713	1	0.0%
21.0%	18,049	18,049	0	0.0%
22.2%	16,450	17,385	935	5.7%
23.5%	16,416	16,455	39	0.2%
24.7%	15,762	16,416	654	4.1%
25.9%	15,612	15,765	152	1.0%
27.2%	15,036	15,620	584	3.9%
28.4%	14,532	15,126	594	4.1%
29.6%	13,606	14,548	942	6.9%
30.9%	12,829	14,216	1,387	10.8%
32.1%	12,512	13,607	1,095	8.8%
33.3%	12,410	12,826	416	3.4%
34.6%	12,139	12,514	375	3.1%
35.8%	12,042	12,139	97	0.8%
37.0%	11,108	11,107	-1	0.0%
38.3%	10,883	10,578	-305	-2.8%
39.5%	10,576	10,523	-53	-0.5%
40.7%	10,521	10,029	-492	-4.7%
42.0%	10,008	8,895	-1,113	-11.1%
43.2%	8,664	8,666	1	0.0%
44.4%	8,414	8,424	10	0.1%
45.7%	7,806	7,627	-178	-2.3%
46.9%	7,414	7,415	1	0.0%
48.1%	7,117	7,119	2	0.0%
49.4%	6,827	6,827	0	0.0%
50.6%	6,713	6,713	1	0.0%
51.9%	6,655	6,656	1	0.0%
53.1%	6,522	6,525	3	0.0%
54.3%	5,957	5,959	2	0.0%
55.6%	5,956	5,956	0	0.0%
56.8%	5,623	5,624	1	0.0%
58.0%	4,910	4,911	0	0.0%
59.3%	4,787	4,788	2	0.0%
60.5%	4,706	4,707	1	0.0%
61.7%	4,618	4,619	2	0.0%
63.0%	4,582	4,582	0	0.0%
64.2%	4,530	4,531	1	0.0%
65.4%	4,318	4,319	1	0.0%
66.7%	4,253	4,263	10	0.2%
67.9%	4,234	4,238	4	0.1%
69.1%	4,184	4,188	4	0.1%
70.4%	4,136	4,135	0	0.0%
71.6%	4,099	4,103	4	0.1%
72.8%	4,078	4,076	-3	-0.1%
74.1%	4,016	4,018	1	0.0%
75.3%	3,749	3,749	1	0.0%
76.5%	3,535	3,538	3	0.1%
77.8%	2,923	2,922	-1	0.0%
79.0%	2,665	2,666	1	0.0%
80.2%	2,615	2,616	0	0.0%
81.5%	2,607	2,608	1	0.0%
82.7%	2,491	2,496	5	0.2%
84.0%	2,262	2,262	0	0.0%
85.2%	2,234	2,235	1	0.0%
86.4%	2,223	2,223	1	0.0%
87.7%	2,181	2,183	1	0.1%
88.9%	1,880	1,882	2	0.1%
90.1%	1,782	1,784	2	0.1%
91.4%	1,700	1,707	7	0.4%
92.6%	1,700	1,700	0	0.0%
93.8%	1,692	1,700	8	0.5%
95.1%	1,627	1,661	33	2.1%
96.3%	1,522	1,524	2	0.1%
97.5%	1,204	1,205	1	0.1%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	58,613	58,613	1	0.0%
1.2%	58,312	58,036	-276	-0.5%
2.5%	47,764	47,749	-15	0.0%
3.7%	37,216	37,351	135	0.4%
4.9%	35,819	36,172	354	1.0%
6.2%	34,659	34,661	2	0.0%
7.4%	31,957	33,727	1,770	5.5%
8.6%	30,957	30,939	-18	-0.1%
9.9%	29,369	29,370	1	0.0%
11.1%	29,097	29,099	2	0.0%
12.3%	27,671	27,671	0	0.0%
13.6%	26,099	26,100	1	0.0%
14.8%	23,889	23,889	0	0.0%
16.0%	23,213	23,065	-148	-0.6%
17.3%	22,306	22,307	2	0.0%
18.5%	21,897	21,879	-18	-0.1%
19.8%	18,567	19,936	1,369	7.4%
21.0%	17,402	18,571	1,169	6.7%
22.2%	17,272	18,264	992	5.7%
23.5%	16,982	17,119	137	0.8%
24.7%	16,226	16,981	755	4.7%
25.9%	15,407	16,224	816	5.3%
27.2%	14,845	15,873	1,028	6.9%
28.4%	14,785	14,845	60	0.4%
29.6%	14,090	14,798	707	5.0%
30.9%	13,996	14,092	96	0.7%
32.1%	13,253	13,996	743	5.6%
33.3%	12,921	12,921	0	0.0%
34.6%	12,189	12,448	259	2.1%
35.8%	11,984	11,888	-97	-0.8%
37.0%	11,883	11,811	-72	-0.6%
38.3%	11,588	11,590	2	0.0%
39.5%	9,828	9,943	115	1.2%
40.7%	9,817	9,820	2	0.0%
42.0%	9,785	9,771	-14	-0.1%
43.2%	9,730	9,733	3	0.0%
44.4%	9,706	9,706	0	0.0%
45.7%	8,987	8,987	0	0.0%
46.9%	8,400	8,401	1	0.0%
48.1%	8,160	8,161	1	0.0%
49.4%	7,739	7,738	-1	0.0%
50.6%	7,371	7,734	363	4.9%
51.9%	7,192	7,373	180	2.5%
53.1%	7,178	7,192	14	0.2%
54.3%	6,763	7,179	416	6.1%
55.6%	6,146	6,756	610	9.9%
56.8%	5,579	6,146	567	10.2%
58.0%	5,528	5,576	47	0.9%
59.3%	5,395	5,532	137	2.5%
60.5%	5,253	5,398	145	2.8%
61.7%	5,248	5,254	6	0.1%
63.0%	5,177	5,250	73	1.4%
64.2%	5,175	4,761	-414	-8.0%
65.4%	4,760	4,742	-18	-0.4%
66.7%	4,739	4,661	-78	-1.7%
67.9%	4,527	4,528	1	0.0%
69.1%	4,231	4,234	3	0.1%
70.4%	4,139	4,140	0	0.0%
71.6%	4,069	3,979	-90	-2.2%
72.8%	3,959	3,959	0	0.0%
74.1%	3,744	3,842	98	2.6%
75.3%	3,674	3,744	71	1.9%
76.5%	3,636	3,634	-2	-0.1%
77.8%	3,556	3,556	1	0.0%
79.0%	3,297	3,297	0	0.0%
80.2%	3,237	3,237	0	0.0%
81.5%	3,174	3,175	1	0.0%
82.7%	2,951	2,955	5	0.2%
84.0%	2,621	2,622	1	0.0%
85.2%	2,577	2,578	2	0.1%
86.4%	2,465	2,467	3	0.1%
87.7%	2,365	2,440	75	3.2%
88.9%	2,300	2,366	66	2.9%
90.1%	2,286	2,302	15	0.7%
91.4%	2,231	2,287	56	2.5%
92.6%	1,994	2,236	241	12.1%
93.8%	1,652	1,654	2	0.1%
95.1%	1,516	1,517	1	0.0%
96.3%	1,000	1,000	0	0.0%
97.5%	1,000	1,000	0	0.0%
98.8%	750	750	0	0.0%
100.0%	750	750	0	0.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	49,210	49,206	-4	0.0%
1.2%	30,333	30,325	-9	0.0%
2.5%	28,596	28,590	-7	0.0%
3.7%	27,659	27,653	-6	0.0%
4.9%	27,272	27,267	-6	0.0%
6.2%	27,116	27,117	0	0.0%
7.4%	25,727	25,722	-5	0.0%
8.6%	25,464	25,463	-1	0.0%
9.9%	21,656	21,653	-4	0.0%
11.1%	18,835	18,831	-4	0.0%
12.3%	17,892	17,888	-4	0.0%
13.6%	14,914	14,908	-6	0.0%
14.8%	14,826	14,821	-5	0.0%
16.0%	14,507	14,495	-12	-0.1%
17.3%	13,761	13,766	6	0.0%
18.5%	13,299	13,292	-7	-0.1%
19.8%	11,489	12,732	1,243	10.8%
21.0%	11,265	11,259	-6	-0.1%
22.2%	10,317	10,706	388	3.8%
23.5%	9,925	10,317	393	4.0%
24.7%	9,861	9,857	-4	0.0%
25.9%	9,002	9,002	0	0.0%
27.2%	8,897	8,897	0	0.0%
28.4%	8,871	8,870	-1	0.0%
29.6%	8,403	8,373	-30	-0.4%
30.9%	8,124	8,124	0	0.0%
32.1%	7,391	7,392	1	0.0%
33.3%	7,283	7,285	2	0.0%
34.6%	7,016	7,020	4	0.1%
35.8%	7,007	7,000	-7	-0.1%
37.0%	6,998	6,996	-2	0.0%
38.3%	6,920	6,914	-5	-0.1%
39.5%	6,912	6,911	-1	0.0%
40.7%	6,729	6,729	0	0.0%
42.0%	6,709	6,704	-5	-0.1%
43.2%	6,628	6,624	-4	-0.1%
44.4%	6,476	6,478	2	0.0%
45.7%	6,336	6,336	0	0.0%
46.9%	6,306	6,306	1	0.0%
48.1%	6,214	6,216	2	0.0%
49.4%	5,823	5,826	3	0.0%
50.6%	5,684	5,686	2	0.0%
51.9%	5,644	5,648	3	0.1%
53.1%	5,342	5,342	1	0.0%
54.3%	5,324	5,313	-12	-0.2%
55.6%	4,999	4,998	0	0.0%
56.8%	4,881	4,882	0	0.0%
58.0%	4,790	4,790	0	0.0%
59.3%	4,380	4,382	2	0.0%
60.5%	4,378	4,378	0	0.0%
61.7%	4,198	4,171	-27	-0.6%
63.0%	4,169	4,144	-25	-0.6%
64.2%	4,109	4,093	-16	-0.4%
65.4%	4,091	4,082	-9	-0.2%
66.7%	4,060	4,048	-12	-0.3%
67.9%	4,044	3,821	-223	-5.5%
69.1%	3,828	3,780	-48	-1.2%
70.4%	3,781	3,625	-156	-4.1%
71.6%	3,623	3,614	-9	-0.3%
72.8%	3,609	3,560	-49	-1.4%
74.1%	3,557	3,455	-102	-2.9%
75.3%	3,454	3,350	-104	-3.0%
76.5%	3,347	3,320	-27	-0.8%
77.8%	3,317	3,269	-48	-1.4%
79.0%	3,266	3,039	-228	-7.0%
80.2%	3,167	2,960	-207	-6.5%
81.5%	2,800	2,800	0	0.0%
82.7%	2,800	2,800	0	0.0%
84.0%	2,800	2,800	0	0.0%
85.2%	2,800	2,800	0	0.0%
86.4%	2,800	2,800	0	0.0%
87.7%	2,800	2,800	0	0.0%
88.9%	2,800	2,800	0	0.0%
90.1%	2,800	2,800	0	0.0%
91.4%	2,800	2,800	0	0.0%
92.6%	2,800	2,800	0	0.0%
93.8%	2,800	2,800	0	0.0%
95.1%	2,800	2,800	0	0.0%
96.3%	2,723	2,571	-152	-5.6%
97.5%	2,571	2,207	-364	-14.2%
98.8%	2,195	2,202	6	0.3%
100.0%	874	876	2	0.2%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	34,937	34,925	-12	0.0%
1.2%	32,840	32,833	-7	0.0%
2.5%	29,876	29,849	-27	-0.1%
3.7%	25,941	25,930	-11	0.0%
4.9%	23,966	23,955	-11	0.0%
6.2%	21,984	21,973	-11	0.0%
7.4%	19,423	19,417	-6	0.0%
8.6%	19,193	19,186	-7	0.0%
9.9%	17,924	17,914	-10	-0.1%
11.1%	17,377	17,366	-11	-0.1%
12.3%	16,022	16,015	-7	0.0%
13.6%	15,929	15,919	-10	-0.1%
14.8%	14,126	14,117	-10	-0.1%
16.0%	13,505	13,484	-21	-0.2%
17.3%	12,768	13,386	618	4.8%
18.5%	12,570	12,760	190	1.5%
19.8%	11,816	11,818	2	0.0%
21.0%	10,599	10,588	-11	-0.1%
22.2%	9,913	9,901	-12	-0.1%
23.5%	9,705	9,702	-3	0.0%
24.7%	8,939	8,940	1	0.0%
25.9%	8,585	8,586	0	0.0%
27.2%	8,550	8,538	-12	-0.1%
28.4%	8,496	8,485	-11	-0.1%
29.6%	7,004	6,985	-19	-0.3%
30.9%	6,013	6,013	1	0.0%
32.1%	6,013	6,013	0	0.0%
33.3%	5,924	5,926	2	0.0%
34.6%	5,435	5,509	73	1.4%
35.8%	5,421	5,435	15	0.3%
37.0%	5,363	5,421	58	1.1%
38.3%	5,154	5,133	-21	-0.4%
39.5%	5,146	5,131	-15	-0.3%
40.7%	4,946	4,854	-93	-1.9%
42.0%	4,854	4,849	-4	-0.1%
43.2%	4,852	4,837	-15	-0.3%
44.4%	4,847	4,756	-91	-1.9%
45.7%	4,753	4,755	2	0.0%
46.9%	4,742	4,741	0	0.0%
48.1%	4,694	4,694	0	0.0%
49.4%	4,669	4,670	0	0.0%
50.6%	4,538	4,544	6	0.1%
51.9%	4,537	4,540	3	0.1%
53.1%	4,500	4,495	-5	-0.1%
54.3%	4,495	4,376	-119	-2.6%
55.6%	4,375	4,211	-164	-3.7%
56.8%	4,374	4,207	-167	-3.8%
58.0%	4,208	4,097	-111	-2.6%
59.3%	4,095	4,069	-26	-0.6%
60.5%	4,067	4,016	-50	-1.2%
61.7%	4,041	4,002	-39	-1.0%
63.0%	4,001	3,878	-123	-3.1%
64.2%	3,875	3,702	-174	-4.5%
65.4%	3,700	3,582	-118	-3.2%
66.7%	3,581	3,554	-28	-0.8%
67.9%	3,554	3,352	-202	-5.7%
69.1%	3,383	3,278	-105	-3.1%
70.4%	3,351	3,212	-138	-4.1%
71.6%	3,212	3,200	-12	-0.4%
72.8%	3,197	3,188	-10	-0.3%
74.1%	3,193	3,008	-186	-5.8%
75.3%	3,095	2,980	-115	-3.7%
76.5%	3,011	2,918	-93	-3.1%
77.8%	2,936	2,827	-109	-3.7%
79.0%	2,917	2,800	-117	-4.0%
80.2%	2,858	2,800	-58	-2.0%
81.5%	2,826	2,800	-26	-0.9%
82.7%	2,800	2,800	0	0.0%
84.0%	2,800	2,800	0	0.0%
85.2%	2,800	2,800	0	0.0%
86.4%	2,800	2,800	0	0.0%
87.7%	2,800	2,800	0	0.0%
88.9%	2,800	2,800	0	0.0%
90.1%	2,800	2,551	-249	-8.9%
91.4%	2,800	2,466	-334	-11.9%
92.6%	2,706	2,246	-460	-17.0%
93.8%	2,547	2,182	-364	-14.3%
95.1%	2,335	2,182	-153	-6.5%
96.3%	2,182	1,562	-620	-28.4%
97.5%	1,828	1,489	-339	-18.6%
98.8%	1,000	1,000	0	0.0%
100.0%	507	507	0	-0.1%

Table SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,593	24,581	-12	0.0%
1.2%	22,420	22,408	-13	-0.1%
2.5%	19,244	19,231	-13	-0.1%
3.7%	18,949	18,934	-15	-0.1%
4.9%	18,554	18,546	-8	0.0%
6.2%	18,115	18,102	-13	-0.1%
7.4%	17,573	17,564	-9	-0.1%
8.6%	12,425	12,411	-14	-0.1%
9.9%	12,420	12,410	-10	-0.1%
11.1%	11,954	11,941	-14	-0.1%
12.3%	10,748	10,735	-13	-0.1%
13.6%	10,291	10,276	-14	-0.1%
14.8%	9,222	9,113	-109	-1.2%
16.0%	9,125	9,019	-106	-1.2%
17.3%	9,032	8,511	-521	-5.8%
18.5%	8,524	8,183	-341	-4.0%
19.8%	8,195	8,032	-163	-2.0%
21.0%	8,034	7,568	-466	-5.8%
22.2%	6,960	6,947	-13	-0.2%
23.5%	6,953	6,719	-234	-3.4%
24.7%	6,853	6,367	-487	-7.1%
25.9%	6,381	6,187	-193	-3.0%
27.2%	6,240	6,051	-189	-3.0%
28.4%	6,025	5,710	-315	-5.2%
29.6%	6,022	5,577	-444	-7.4%
30.9%	5,917	5,513	-404	-6.8%
32.1%	5,808	5,441	-367	-6.3%
33.3%	5,659	5,358	-301	-5.3%
34.6%	5,590	5,131	-459	-8.2%
35.8%	5,361	4,889	-472	-8.8%
37.0%	5,246	4,869	-377	-7.2%
38.3%	5,137	4,613	-524	-10.2%
39.5%	5,101	4,600	-501	-9.8%
40.7%	4,946	4,585	-361	-7.3%
42.0%	4,870	4,499	-371	-7.6%
43.2%	4,787	4,482	-304	-6.4%
44.4%	4,743	4,421	-322	-6.8%
45.7%	4,737	4,376	-361	-7.6%
46.9%	4,725	4,346	-379	-8.0%
48.1%	4,597	4,276	-321	-7.0%
49.4%	4,446	4,270	-176	-4.0%
50.6%	4,419	4,241	-179	-4.0%
51.9%	4,406	4,202	-204	-4.6%
53.1%	4,385	4,135	-250	-5.7%
54.3%	4,365	4,128	-236	-5.4%
55.6%	4,292	4,008	-284	-6.6%
56.8%	4,281	3,806	-475	-11.1%
58.0%	4,231	3,584	-646	-15.3%
59.3%	4,223	3,523	-699	-16.6%
60.5%	4,204	3,515	-689	-16.4%
61.7%	4,148	3,403	-744	-17.9%
63.0%	4,067	3,392	-674	-16.6%
64.2%	3,903	3,377	-526	-13.5%
65.4%	3,887	3,354	-533	-13.7%
66.7%	3,858	3,346	-512	-13.3%
67.9%	3,782	3,338	-445	-11.8%
69.1%	3,695	3,267	-428	-11.6%
70.4%	3,658	3,172	-486	-13.3%
71.6%	3,481	3,152	-329	-9.4%
72.8%	3,456	3,025	-430	-12.5%
74.1%	3,389	3,024	-365	-10.8%
75.3%	3,308	2,916	-391	-11.8%
76.5%	3,248	2,877	-371	-11.4%
77.8%	3,208	2,686	-522	-16.3%
79.0%	3,140	2,668	-472	-15.0%
80.2%	3,115	2,583	-532	-17.1%
81.5%	3,067	2,488	-578	-18.9%
82.7%	3,031	2,458	-573	-18.9%
84.0%	2,887	2,368	-519	-18.0%
85.2%	2,873	2,321	-552	-19.2%
86.4%	2,692	2,066	-625	-23.2%
87.7%	2,650	2,027	-622	-23.5%
88.9%	2,627	1,748	-879	-33.4%
90.1%	2,590	1,676	-914	-35.3%
91.4%	2,414	1,639	-774	-32.1%
92.6%	2,398	1,620	-778	-32.4%
93.8%	2,374	1,618	-756	-31.8%
95.1%	2,286	1,440	-846	-37.0%
96.3%	1,921	1,431	-490	-25.5%
97.5%	1,118	1,348	229	20.5%
98.8%	1,000	1,156	156	15.6%
100.0%	750	800	50	6.7%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,160	12,105	-55	-0.5%
1.2%	11,063	11,115	52	0.5%
2.5%	10,884	10,781	-103	-0.9%
3.7%	10,829	10,749	-80	-0.7%
4.9%	10,806	10,352	-454	-4.2%
6.2%	10,515	10,285	-231	-2.2%
7.4%	10,502	10,218	-284	-2.7%
8.6%	10,468	9,951	-517	-4.9%
9.9%	10,393	9,943	-450	-4.3%
11.1%	10,333	9,756	-578	-5.6%
12.3%	10,120	9,637	-483	-4.8%
13.6%	10,117	9,635	-482	-4.8%
14.8%	10,091	9,625	-466	-4.6%
16.0%	10,074	9,490	-584	-5.8%
17.3%	10,043	9,449	-595	-5.9%
18.5%	10,033	9,447	-586	-5.8%
19.8%	9,984	9,395	-589	-5.9%
21.0%	9,980	9,347	-632	-6.3%
22.2%	9,872	9,322	-549	-5.6%
23.5%	9,838	9,194	-644	-6.5%
24.7%	9,819	9,050	-769	-7.8%
25.9%	9,750	9,049	-701	-7.2%
27.2%	9,709	8,984	-724	-7.5%
28.4%	9,705	8,958	-747	-7.7%
29.6%	9,664	8,792	-872	-9.0%
30.9%	9,660	8,774	-886	-9.2%
32.1%	9,643	8,742	-901	-9.3%
33.3%	9,584	8,738	-847	-8.8%
34.6%	9,519	8,602	-918	-9.6%
35.8%	9,502	8,551	-951	-10.0%
37.0%	9,466	8,526	-940	-9.9%
38.3%	9,428	8,520	-908	-9.6%
39.5%	9,250	8,356	-894	-9.7%
40.7%	9,107	8,319	-787	-8.6%
42.0%	9,103	8,304	-799	-8.8%
43.2%	9,052	8,281	-771	-8.5%
44.4%	9,050	8,260	-790	-8.7%
45.7%	9,012	8,137	-875	-9.7%
46.9%	8,898	8,090	-809	-9.1%
48.1%	8,829	8,066	-763	-8.6%
49.4%	8,796	8,038	-759	-8.6%
50.6%	8,760	7,990	-770	-8.8%
51.9%	8,737	7,986	-751	-8.6%
53.1%	8,723	7,956	-766	-8.8%
54.3%	8,694	7,938	-756	-8.7%
55.6%	8,652	7,820	-832	-9.6%
56.8%	8,643	7,819	-824	-9.5%
58.0%	8,629	7,721	-908	-10.5%
59.3%	8,403	7,689	-715	-8.5%
60.5%	8,331	7,544	-787	-9.4%
61.7%	8,317	7,497	-821	-9.9%
63.0%	8,154	7,391	-763	-9.4%
64.2%	7,531	7,239	-291	-3.9%
65.4%	7,503	7,154	-349	-4.7%
66.7%	7,353	7,115	-238	-3.2%
67.9%	7,300	7,113	-187	-2.6%
69.1%	7,182	7,022	-160	-2.2%
70.4%	6,976	6,963	-13	-0.2%
71.6%	6,677	6,815	138	2.1%
72.8%	6,625	6,282	-343	-5.2%
74.1%	6,522	6,043	-479	-7.3%
75.3%	6,464	6,041	-423	-6.5%
76.5%	6,324	5,959	-365	-5.8%
77.8%	5,913	5,879	-34	-0.6%
79.0%	5,684	5,824	140	2.5%
80.2%	5,678	5,750	72	1.3%
81.5%	5,475	5,721	246	4.5%
82.7%	5,373	5,672	300	5.6%
84.0%	5,233	5,484	251	4.8%
85.2%	5,054	5,287	233	4.6%
86.4%	4,476	5,088	612	13.7%
87.7%	4,233	4,516	283	6.7%
88.9%	2,256	2,942	687	30.4%
90.1%	2,068	2,930	862	41.7%
91.4%	1,974	2,063	89	4.5%
92.6%	1,915	1,951	36	1.9%
93.8%	1,867	1,716	-151	-8.1%
95.1%	1,732	1,702	-30	-1.7%
96.3%	1,670	1,621	-49	-2.9%
97.5%	1,462	1,561	99	6.8%
98.8%	1,387	1,419	32	2.3%
100.0%	750	983	233	31.0%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,406	9,346	-60	-0.6%
1.2%	9,298	9,234	-64	-0.7%
2.5%	9,167	9,170	3	0.0%
3.7%	9,156	8,831	-325	-3.6%
4.9%	9,092	8,740	-352	-3.9%
6.2%	8,946	8,731	-215	-2.4%
7.4%	8,925	8,711	-214	-2.4%
8.6%	8,882	8,701	-181	-2.0%
9.9%	8,770	8,666	-104	-1.2%
11.1%	8,765	8,627	-139	-1.6%
12.3%	8,747	8,621	-126	-1.4%
13.6%	8,718	8,614	-104	-1.2%
14.8%	8,705	8,498	-207	-2.4%
16.0%	8,695	8,443	-251	-2.9%
17.3%	8,684	8,051	-632	-7.3%
18.5%	8,632	8,050	-581	-6.7%
19.8%	8,559	8,041	-518	-6.1%
21.0%	8,503	7,843	-661	-7.8%
22.2%	8,502	7,837	-665	-7.8%
23.5%	8,485	7,721	-764	-9.0%
24.7%	8,480	7,582	-898	-10.6%
25.9%	8,412	7,560	-851	-10.1%
27.2%	8,408	7,462	-946	-11.2%
28.4%	8,295	7,421	-874	-10.5%
29.6%	8,049	7,365	-684	-8.5%
30.9%	7,926	7,356	-570	-7.2%
32.1%	7,816	7,177	-640	-8.2%
33.3%	7,771	7,097	-674	-8.7%
34.6%	7,620	6,961	-658	-8.6%
35.8%	7,361	6,905	-455	-6.2%
37.0%	7,248	6,770	-478	-6.6%
38.3%	7,177	6,590	-587	-8.2%
39.5%	6,334	6,543	208	3.3%
40.7%	6,320	6,320	1	0.0%
42.0%	6,191	6,197	7	0.1%
43.2%	6,188	5,917	-271	-4.4%
44.4%	6,140	5,828	-312	-5.1%
45.7%	5,828	5,793	-34	-0.6%
46.9%	5,363	5,784	421	7.8%
48.1%	5,291	5,781	490	9.3%
49.4%	5,113	5,723	610	11.9%
50.6%	5,083	5,450	367	7.2%
51.9%	4,965	5,275	309	6.2%
53.1%	4,941	5,141	200	4.0%
54.3%	4,891	5,107	217	4.4%
55.6%	4,814	5,027	213	4.4%
56.8%	4,724	4,957	233	4.9%
58.0%	4,582	4,956	375	8.2%
59.3%	4,549	4,904	355	7.8%
60.5%	4,411	4,711	300	6.8%
61.7%	4,392	4,570	178	4.1%
63.0%	4,234	4,534	300	7.1%
64.2%	3,830	4,498	668	17.5%
65.4%	3,803	4,029	226	5.9%
66.7%	3,776	3,925	149	3.9%
67.9%	3,708	3,645	-63	-1.7%
69.1%	3,652	3,628	-24	-0.7%
70.4%	3,507	3,579	72	2.0%
71.6%	3,447	3,521	75	2.2%
72.8%	3,309	3,489	179	5.4%
74.1%	3,300	3,404	104	3.2%
75.3%	3,300	3,150	-150	-4.5%
76.5%	3,300	2,947	-353	-10.7%
77.8%	2,959	2,722	-237	-8.0%
79.0%	2,818	2,684	-133	-4.7%
80.2%	2,767	2,613	-154	-5.6%
81.5%	2,625	2,604	-21	-0.8%
82.7%	2,484	2,459	-25	-1.0%
84.0%	2,026	2,448	422	20.8%
85.2%	2,003	2,346	343	17.1%
86.4%	1,971	1,828	-143	-7.3%
87.7%	1,905	1,826	-79	-4.1%
88.9%	1,901	1,548	-353	-18.6%
90.1%	1,802	1,512	-290	-16.1%
91.4%	1,567	1,337	-230	-14.7%
92.6%	1,559	1,332	-227	-14.5%
93.8%	1,335	1,301	-34	-2.5%
95.1%	1,274	1,176	-98	-7.7%
96.3%	1,266	1,157	-109	-8.6%
97.5%	1,234	1,146	-87	-7.1%
98.8%	1,138	1,035	-103	-9.0%
100.0%	750	863	113	15.0%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,839	12,845	6	0.0%
1.2%	12,676	12,647	-29	-0.2%
2.5%	12,433	12,445	12	0.1%
3.7%	12,332	12,275	-57	-0.5%
4.9%	12,273	12,121	-152	-1.2%
6.2%	12,095	12,073	-23	-0.2%
7.4%	12,071	11,944	-127	-1.1%
8.6%	11,964	11,914	-50	-0.4%
9.9%	11,918	11,885	-34	-0.3%
11.1%	11,888	11,864	-24	-0.2%
12.3%	11,818	11,773	-45	-0.4%
13.6%	11,767	11,767	1	0.0%
14.8%	11,764	11,594	-170	-1.4%
16.0%	11,547	11,548	1	0.0%
17.3%	11,542	11,538	-4	0.0%
18.5%	11,506	11,527	21	0.2%
19.8%	11,466	11,507	41	0.4%
21.0%	11,452	11,092	-360	-3.1%
22.2%	11,334	11,017	-317	-2.8%
23.5%	11,261	10,523	-738	-6.6%
24.7%	11,064	10,509	-555	-5.0%
25.9%	10,795	10,437	-358	-3.3%
27.2%	10,703	10,224	-479	-4.5%
28.4%	10,582	10,110	-472	-4.5%
29.6%	10,160	10,035	-125	-1.2%
30.9%	10,105	10,004	-101	-1.0%
32.1%	10,088	9,947	-141	-1.4%
33.3%	10,011	9,909	-102	-1.0%
34.6%	9,986	9,869	-117	-1.2%
35.8%	9,880	9,593	-287	-2.9%
37.0%	9,652	9,517	-135	-1.4%
38.3%	9,586	9,384	-202	-2.1%
39.5%	9,486	9,230	-256	-2.7%
40.7%	9,463	8,475	-988	-10.4%
42.0%	9,375	7,417	-1,958	-20.9%
43.2%	8,362	7,308	-1,054	-12.6%
44.4%	7,728	6,894	-834	-10.8%
45.7%	7,592	6,849	-743	-9.8%
46.9%	7,560	6,726	-834	-11.0%
48.1%	7,543	6,690	-853	-11.3%
49.4%	7,293	6,616	-677	-9.3%
50.6%	7,277	6,467	-810	-11.1%
51.9%	7,257	6,401	-856	-11.8%
53.1%	7,061	6,380	-680	-9.6%
54.3%	7,011	6,241	-770	-11.0%
55.6%	6,883	6,206	-677	-9.8%
56.8%	6,882	6,124	-758	-11.0%
58.0%	6,783	6,088	-695	-10.2%
59.3%	6,088	5,863	-224	-3.7%
60.5%	6,019	5,624	-395	-6.6%
61.7%	5,822	5,393	-429	-7.4%
63.0%	5,821	5,386	-435	-7.5%
64.2%	5,621	5,384	-237	-4.2%
65.4%	4,300	5,151	851	19.8%
66.7%	3,839	4,703	864	22.5%
67.9%	3,831	4,688	857	22.4%
69.1%	3,740	4,603	863	23.1%
70.4%	3,474	4,530	1,056	30.4%
71.6%	3,436	4,046	610	17.8%
72.8%	3,421	4,031	610	17.8%
74.1%	3,163	3,953	790	25.0%
75.3%	3,101	3,929	828	26.7%
76.5%	3,005	3,643	638	21.2%
77.8%	2,823	3,473	650	23.0%
79.0%	2,730	3,465	735	26.9%
80.2%	2,699	3,404	704	26.1%
81.5%	2,689	3,274	585	21.8%
82.7%	2,653	3,208	555	20.9%
84.0%	2,634	3,164	529	20.1%
85.2%	2,600	3,132	532	20.5%
86.4%	2,593	3,009	416	16.0%
87.7%	2,590	2,962	371	14.3%
88.9%	2,589	2,934	345	13.3%
90.1%	2,572	2,852	280	10.9%
91.4%	2,559	2,808	249	9.7%
92.6%	2,125	2,571	446	21.0%
93.8%	1,493	2,559	1,066	71.4%
95.1%	1,201	1,493	292	24.3%
96.3%	1,183	1,183	0	0.0%
97.5%	1,117	1,164	48	4.3%
98.8%	1,060	1,117	56	5.3%
100.0%	1,028	1,060	32	3.2%

Figure SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

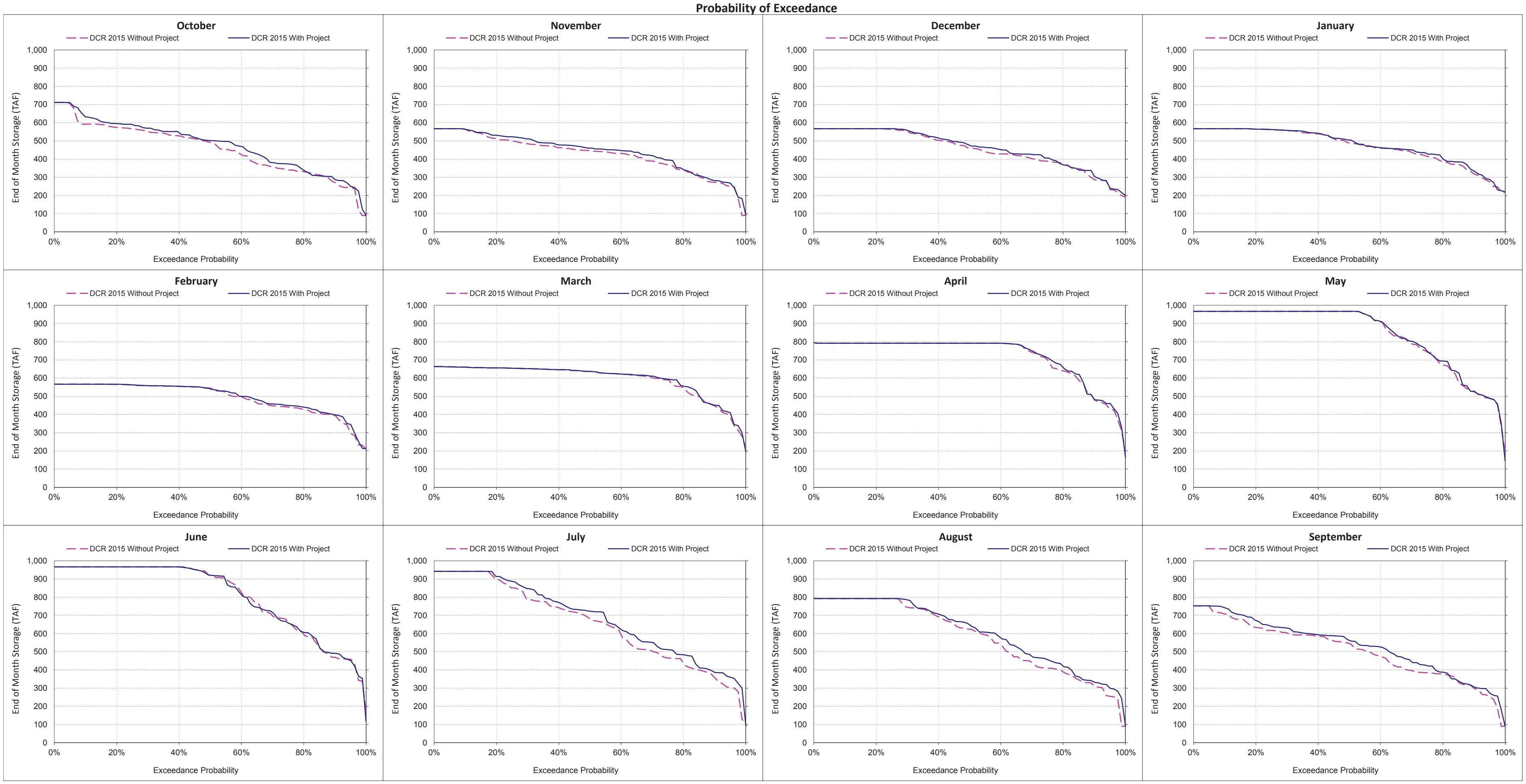


Table SW-24-b

Folsom Lake, End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	712	712	0	0.0%
1.2%	712	712	0	0.0%
2.5%	712	712	0	0.0%
3.7%	712	712	0	0.0%
4.9%	707	712	5	0.7%
6.2%	680	691	11	1.7%
7.4%	612	683	71	11.7%
8.6%	592	654	62	10.5%
9.9%	592	633	41	7.0%
11.1%	592	630	38	6.4%
12.3%	592	625	33	5.7%
13.6%	592	620	28	4.7%
14.8%	590	608	18	3.0%
16.0%	590	603	14	2.3%
17.3%	580	600	20	3.5%
18.5%	578	596	18	3.2%
19.8%	574	596	21	3.7%
21.0%	574	594	20	3.4%
22.2%	571	592	21	3.7%
23.5%	570	592	22	3.9%
24.7%	567	592	25	4.4%
25.9%	565	584	19	3.4%
27.2%	561	583	22	3.9%
28.4%	559	573	15	2.7%
29.6%	553	570	17	3.0%
30.9%	547	570	23	4.2%
32.1%	546	561	16	2.9%
33.3%	545	560	15	2.8%
34.6%	543	552	9	1.7%
35.8%	540	552	12	2.3%
37.0%	532	552	20	3.8%
38.3%	529	551	23	4.3%
39.5%	529	551	22	4.2%
40.7%	526	536	10	2.0%
42.0%	518	534	16	3.0%
43.2%	517	533	16	3.1%
44.4%	513	522	9	1.7%
45.7%	510	516	7	1.3%
46.9%	503	509	5	1.0%
48.1%	500	504	4	0.8%
49.4%	494	503	9	1.9%
50.6%	491	501	10	2.0%
51.9%	478	500	22	4.5%
53.1%	456	499	43	9.5%
54.3%	454	497	43	9.5%
55.6%	453	497	44	9.6%
56.8%	447	491	44	9.8%
58.0%	446	476	30	6.6%
59.3%	432	472	40	9.2%
60.5%	419	468	49	11.6%
61.7%	418	448	31	7.3%
63.0%	390	438	48	12.3%
64.2%	381	433	51	13.4%
65.4%	370	426	56	15.1%
66.7%	368	415	47	12.7%
67.9%	367	405	38	10.2%
69.1%	360	381	21	5.9%
70.4%	358	380	23	6.4%
71.6%	349	376	26	7.6%
72.8%	348	374	26	7.6%
74.1%	344	374	29	8.5%
75.3%	340	372	32	9.5%
76.5%	340	371	31	9.1%
77.8%	334	366	32	9.7%
79.0%	332	350	18	5.3%
80.2%	330	336	6	1.7%
81.5%	327	324	-2	-0.7%
82.7%	321	311	-10	-3.0%
84.0%	314	311	-3	-1.1%
85.2%	313	307	-6	-1.8%
86.4%	306	307	0	0.1%
87.7%	300	304	5	1.5%
88.9%	279	304	25	8.8%
90.1%	271	286	15	5.6%
91.4%	254	282	28	11.0%
92.6%	245	282	37	15.0%
93.8%	244	271	27	11.1%
95.1%	241	250	9	3.9%
96.3%	239	244	5	2.2%
97.5%	120	223	104	86.5%
98.8%	90	123	33	36.7%
100.0%	90	90	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	565	565	0	0.0%
11.1%	555	560	5	0.9%
12.3%	551	555	4	0.7%
13.6%	546	548	2	0.4%
14.8%	542	547	5	1.0%
16.0%	535	546	11	2.1%
17.3%	522	541	19	3.7%
18.5%	515	532	17	3.2%
19.8%	513	532	19	3.7%
21.0%	507	528	22	4.3%
22.2%	506	526	20	4.1%
23.5%	506	523	18	3.5%
24.7%	498	523	25	5.0%
25.9%	498	522	24	4.8%
27.2%	492	519	27	5.4%
28.4%	489	515	26	5.4%
29.6%	486	512	26	5.4%
30.9%	482	510	28	5.8%
32.1%	480	502	22	4.5%
33.3%	479	492	13	2.8%
34.6%	474	491	17	3.6%
35.8%	473	489	16	3.3%
37.0%	473	488	16	3.3%
38.3%	472	487	15	3.2%
39.5%	463	479	15	3.3%
40.7%	463	478	15	3.3%
42.0%	458	477	18	4.0%
43.2%	458	475	17	3.7%
44.4%	454	474	20	4.4%
45.7%	451	472	21	4.6%
46.9%	449	468	19	4.3%
48.1%	448	464	16	3.6%
49.4%	447	461	13	3.0%
50.6%	444	461	17	3.7%
51.9%	443	456	13	2.9%
53.1%	441	455	14	3.2%
54.3%	441	455	14	3.2%
55.6%	439	452	13	2.9%
56.8%	434	451	17	3.8%
58.0%	432	450	19	4.3%
59.3%	431	449	18	4.1%
60.5%	431	446	15	3.4%
61.7%	427	445	18	4.2%
63.0%	421	444	23	5.4%
64.2%	421	437	17	3.9%
65.4%	409	437	28	6.9%
66.7%	408	426	18	4.4%
67.9%	392	423	31	7.8%
69.1%	390	422	32	8.2%
70.4%	389	418	29	7.3%
71.6%	378	408	30	7.8%
72.8%	378	406	28	7.4%
74.1%	371	396	25	6.7%
75.3%	367	394	27	7.2%
76.5%	364	391	27	7.4%
77.8%	345	353	8	2.3%
79.0%	342	352	9	2.7%
80.2%	340	340	1	0.2%
81.5%	328	335	7	2.0%
82.7%	327	323	-5	-1.4%
84.0%	327	310	-17	-5.1%
85.2%	300	309	8	2.7%
86.4%	294	302	8	2.7%
87.7%	277	296	19	6.7%
88.9%	274	286	12	4.3%
90.1%	272	281	9	3.3%
91.4%	271	280	9	3.2%
92.6%	266	274	8	3.0%
93.8%	254	272	18	7.1%
95.1%	250	268	18	7.2%
96.3%	248	242	-6	-2.2%
97.5%	184	191	7	3.7%
98.8%	90	183	93	102.7%
100.0%	90	90	0	0.2%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	567	567	0	0.0%
19.8%	567	567	0	0.0%
21.0%	567	567	0	0.0%
22.2%	567	567	0	0.0%
23.5%	565	567	2	0.4%
24.7%	563	567	4	0.6%
25.9%	563	567	4	0.7%
27.2%	559	565	6	1.0%
28.4%	558	565	6	1.2%
29.6%	558	559	2	0.3%
30.9%	543	554	10	1.9%
32.1%	541	546	5	1.0%
33.3%	540	543	3	0.6%
34.6%	533	540	7	1.3%
35.8%	524	533	9	1.8%
37.0%	520	524	4	0.8%
38.3%	512	523	11	2.1%
39.5%	504	519	15	3.0%
40.7%	501	512	11	2.2%
42.0%	501	509	8	1.6%
43.2%	496	506	9	1.9%
44.4%	491	498	7	1.4%
45.7%	480	496	16	3.4%
46.9%	476	493	18	3.7%
48.1%	475	491	16	3.4%
49.4%	462	480	19	4.1%
50.6%	459	472	13	2.8%
51.9%	458	472	14	3.1%
53.1%	453	466	13	2.9%
54.3%	445	466	21	4.7%
55.6%	437	463	26	6.0%
56.8%	433	463	30	6.9%
58.0%	429	459	29	6.8%
59.3%	429	454	26	6.0%
60.5%	428	450	22	5.1%
61.7%	428	450	21	5.0%
63.0%	428	433	5	1.2%
64.2%	423	429	6	1.4%
65.4%	419	429	10	2.4%
66.7%	418	428	10	2.4%
67.9%	413	428	15	3.7%
69.1%	406	427	21	5.2%
70.4%	401	425	24	6.0%
71.6%	398	424	26	6.4%
72.8%	391	422	32	8.2%
74.1%	390	406	17	4.3%
75.3%	388	406	18	4.6%
76.5%	384	397	12	3.2%
77.8%	382	390	8	2.1%
79.0%	380	374	-6	-1.6%
80.2%	367	367	0	0.0%
81.5%	367	364	-3	-0.7%
82.7%	351	353	2	0.5%
84.0%	348	350	2	0.6%
85.2%	347	339	-8	-2.2%
86.4%	341	339	-2	-0.6%
87.7%	316	338	21	6.7%
88.9%	300	337	37	12.2%
90.1%	286	304	18	6.1%
91.4%	284	294	10	3.5%
92.6%	283	284	1	0.5%
93.8%	282	280	-2	-0.6%
95.1%	232	239	7	3.0%
96.3%	230	235	5	2.1%
97.5%	217	234	17	7.9%
98.8%	198	216	17	8.8%
100.0%	191	198	8	4.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	566	566	0	0.0%
19.8%	565	565	0	0.0%
21.0%	564	564	0	0.0%
22.2%	564	564	0	0.0%
23.5%	563	564	1	0.2%
24.7%	562	563	1	0.2%
25.9%	562	562	0	0.0%
27.2%	560	561	1	0.1%
28.4%	559	560	1	0.2%
29.6%	557	559	2	0.4%
30.9%	556	557	1	0.2%
32.1%	556	556	0	0.0%
33.3%	551	556	5	0.9%
34.6%	546	554	8	1.5%
35.8%	544	551	7	1.3%
37.0%	543	546	3	0.6%
38.3%	542	544	2	0.3%
39.5%	539	543	4	0.7%
40.7%	538	539	1	0.3%
42.0%	534	534	0	0.0%
43.2%	526	530	5	0.9%
44.4%	519	515	-3	-0.7%
45.7%	505	515	10	1.9%
46.9%	505	513	8	1.6%
48.1%	503	510	7	1.4%
49.4%	491	505	14	2.8%
50.6%	487	505	18	3.7%
51.9%	485	492	7	1.4%
53.1%	481	482	1	0.3%
54.3%	477	481	4	0.8%
55.6%	476	470	-5	-1.2%
56.8%	471	470	-1	-0.2%
58.0%	464	467	4	0.8%
59.3%	460	465	5	1.1%
60.5%	460	461	1	0.3%
61.7%	459	460	1	0.2%
63.0%	459	459	0	0.1%
64.2%	453	458	5	1.1%
65.4%	453	457	4	1.0%
66.7%	448	455	7	1.6%
67.9%	445	453	8	1.7%
69.1%	444	452	8	1.8%
70.4%	434	450	15	3.6%
71.6%	427	439	12	2.7%
72.8%	425	436	11	2.5%
74.1%	420	436	15	3.6%
75.3%	414	427	13	3.2%
76.5%	410	427	17	4.3%
77.8%	405	425	20	5.0%
79.0%	391	423	32	8.0%
80.2%	384	398	14	3.5%
81.5%	382	387	5	1.4%
82.7%	372	387	15	4.1%
84.0%	370	384	14	3.7%
85.2%	370	384	14	3.8%
86.4%	363	383	21	5.7%
87.7%	341	370	29	8.5%
88.9%	334	344	11	3.2%
90.1%	317	334	17	5.3%
91.4%	310	319	8	2.7%
92.6%	297	312	15	5.0%
93.8%	285	293	8	2.7%
95.1%	275	288	12	4.5%
96.3%	249	270	21	8.5%
97.5%	248	231	-17	-6.8%
98.8%	222	226	5	2.1%
100.0%	217	220	4	1.7%

Table SW-24-b

Folsom Lake, End of Month Storage

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	566	567	1	0.2%
18.5%	566	566	0	0.0%
19.8%	565	566	1	0.1%
21.0%	565	566	1	0.1%
22.2%	565	565	1	0.1%
23.5%	563	565	2	0.4%
24.7%	562	563	1	0.2%
25.9%	560	562	2	0.4%
27.2%	559	560	1	0.1%
28.4%	559	559	0	0.0%
29.6%	558	559	1	0.2%
30.9%	558	558	0	0.0%
32.1%	558	558	0	0.0%
33.3%	558	558	0	0.0%
34.6%	557	558	1	0.2%
35.8%	557	557	0	0.0%
37.0%	557	557	0	0.1%
38.3%	556	556	0	0.0%
39.5%	555	555	0	0.0%
40.7%	555	555	0	0.0%
42.0%	553	553	0	0.0%
43.2%	553	553	0	0.0%
44.4%	553	552	-1	-0.1%
45.7%	552	552	0	0.0%
46.9%	551	551	0	0.0%
48.1%	547	547	0	0.0%
49.4%	546	543	-3	-0.6%
50.6%	543	538	-5	-1.0%
51.9%	530	535	5	0.9%
53.1%	529	530	1	0.2%
54.3%	527	529	2	0.4%
55.6%	509	527	18	3.4%
56.8%	501	520	18	3.7%
58.0%	499	518	19	3.9%
59.3%	499	501	2	0.5%
60.5%	494	499	5	1.0%
61.7%	483	499	16	3.2%
63.0%	481	494	13	2.8%
64.2%	473	485	12	2.6%
65.4%	458	480	22	4.8%
66.7%	458	474	16	3.5%
67.9%	457	462	5	1.1%
69.1%	450	458	8	1.8%
70.4%	448	458	10	2.3%
71.6%	446	457	11	2.5%
72.8%	444	454	11	2.4%
74.1%	443	450	7	1.7%
75.3%	440	450	10	2.2%
76.5%	437	449	12	2.6%
77.8%	436	446	10	2.2%
79.0%	432	443	11	2.5%
80.2%	427	440	13	3.1%
81.5%	423	437	14	3.4%
82.7%	411	428	17	4.2%
84.0%	409	427	18	4.4%
85.2%	407	414	7	1.8%
86.4%	402	410	8	2.1%
87.7%	402	407	5	1.3%
88.9%	395	402	7	1.7%
90.1%	394	398	4	0.9%
91.4%	369	394	25	6.7%
92.6%	352	386	35	9.9%
93.8%	344	351	8	2.2%
95.1%	295	345	51	17.2%
96.3%	285	299	14	4.9%
97.5%	233	251	18	7.7%
98.8%	231	214	-18	-7.6%
100.0%	210	211	1	0.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	664	664	0	0.0%
1.2%	664	664	0	0.0%
2.5%	664	664	0	0.0%
3.7%	664	662	-2	-0.3%
4.9%	662	662	0	0.0%
6.2%	662	662	0	0.0%
7.4%	662	661	-1	-0.2%
8.6%	661	661	0	0.0%
9.9%	661	661	0	0.0%
11.1%	660	659	-1	-0.2%
12.3%	659	658	-1	-0.2%
13.6%	658	658	0	0.0%
14.8%	658	657	-1	-0.2%
16.0%	657	657	0	0.0%
17.3%	657	656	-1	-0.2%
18.5%	656	656	0	0.0%
19.8%	656	656	0	0.0%
21.0%	656	656	0	0.0%
22.2%	656	656	0	0.0%
23.5%	656	655	-1	-0.2%
24.7%	655	655	0	0.0%
25.9%	655	654	-1	-0.2%
27.2%	654	654	0	0.0%
28.4%	654	652	-2	-0.3%
29.6%	652	652	0	0.0%
30.9%	652	651	-1	-0.1%
32.1%	651	651	0	0.0%
33.3%	651	650	-1	-0.2%
34.6%	650	649	-1	-0.2%
35.8%	649	649	0	0.0%
37.0%	648	648	0	0.0%
38.3%	647	647	0	0.0%
39.5%	646	647	1	0.1%
40.7%	646	646	0	0.0%
42.0%	646	646	0	0.0%
43.2%	643	646	3	0.5%
44.4%	642	642	0	0.0%
45.7%	642	642	0	0.0%
46.9%	640	640	0	0.0%
48.1%	637	637	0	0.0%
49.4%	637	637	0	0.0%
50.6%	636	636	0	0.0%
51.9%	635	635	0	0.0%
53.1%	629	629	0	0.0%
54.3%	628	628	0	0.0%
55.6%	626	626	0	0.0%
56.8%	625	625	0	0.0%
58.0%	624	624	0	0.0%
59.3%	622	624	2	0.3%
60.5%	621	622	1	0.2%
61.7%	621	621	0	0.0%
63.0%	618	621	3	0.5%
64.2%	616	618	2	0.3%
65.4%	615	617	2	0.3%
66.7%	612	616	4	0.7%
67.9%	611	615	4	0.7%
69.1%	610	612	2	0.4%
70.4%	599	611	12	2.0%
71.6%	599	604	5	0.9%
72.8%	593	599	6	1.0%
74.1%	591	596	5	0.9%
75.3%	590	593	3	0.5%
76.5%	561	591	30	5.4%
77.8%	555	590	35	6.3%
79.0%	554	560	6	1.2%
80.2%	546	555	9	1.6%
81.5%	520	552	32	6.1%
82.7%	507	544	37	7.4%
84.0%	504	532	29	5.7%
85.2%	498	500	1	0.3%
86.4%	474	468	-6	-1.2%
87.7%	468	464	-4	-0.9%
88.9%	455	456	2	0.4%
90.1%	446	451	5	1.1%
91.4%	434	449	15	3.6%
92.6%	410	421	11	2.8%
93.8%	404	417	12	3.1%
95.1%	383	409	27	6.9%
96.3%	336	344	7	2.2%
97.5%	312	340	28	8.9%
98.8%	281	300	19	6.8%
100.0%	217	194	-23	-10.4%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	794	794	0	0.0%
1.2%	792	792	0	0.0%
2.5%	792	792	0	0.0%
3.7%	792	792	0	0.0%
4.9%	792	792	0	0.0%
6.2%	792	792	0	0.0%
7.4%	792	792	0	0.0%
8.6%	792	792	0	0.0%
9.9%	792	792	0	0.0%
11.1%	792	792	0	0.0%
12.3%	792	792	0	0.0%
13.6%	792	792	0	0.0%
14.8%	792	792	0	0.0%
16.0%	792	792	0	0.0%
17.3%	792	792	0	0.0%
18.5%	792	792	0	0.0%
19.8%	792	792	0	0.0%
21.0%	792	792	0	0.0%
22.2%	792	792	0	0.0%
23.5%	792	792	0	0.0%
24.7%	792	792	0	0.0%
25.9%	792	792	0	0.0%
27.2%	792	792	0	0.0%
28.4%	792	792	0	0.0%
29.6%	792	792	0	0.0%
30.9%	792	792	0	0.0%
32.1%	792	792	0	0.0%
33.3%	792	792	0	0.0%
34.6%	792	792	0	0.0%
35.8%	792	792	0	0.0%
37.0%	792	792	0	0.0%
38.3%	792	792	0	0.0%
39.5%	792	792	0	0.0%
40.7%	792	792	0	0.0%
42.0%	792	792	0	0.0%
43.2%	792	792	0	0.0%
44.4%	792	792	0	0.0%
45.7%	792	792	0	0.0%
46.9%	792	792	0	0.0%
48.1%	792	792	0	0.0%
49.4%	792	792	0	0.0%
50.6%	792	792	0	0.0%
51.9%	792	792	0	0.0%
53.1%	792	792	0	0.0%
54.3%	792	792	0	0.0%
55.6%	792	792	0	0.0%
56.8%	792	792	0	0.0%
58.0%	792	792	0	0.0%
59.3%	792	792	0	0.0%
60.5%	792	792	0	0.0%
61.7%	790	790	0	0.0%
63.0%	789	789	0	0.0%
64.2%	787	787	0	0.0%
65.4%	786	786	0	0.0%
66.7%	778	778	0	0.0%
67.9%	758	766	8	1.1%
69.1%	748	758	10	1.3%
70.4%	739	748	9	1.2%
71.6%	734	735	0	0.0%
72.8%	718	728	9	1.3%
74.1%	715	718	4	0.5%
75.3%	694	709	15	2.2%
76.5%	656	694	38	5.7%
77.8%	652	682	31	4.7%
79.0%	642	676	35	5.4%
80.2%	640	653	13	2.1%
81.5%	633	639	6	0.9%
82.7%	623	638	15	2.3%
84.0%	611	623	12	2.0%
85.2%	585	620	35	5.9%
86.4%	575	578	3	0.5%
87.7%	523	512	-11	-2.0%
88.9%	509	510	1	0.3%
90.1%	480	481	1	0.2%
91.4%	469	480	10	2.2%
92.6%	465	476	12	2.5%
93.8%	455	461	6	1.3%
95.1%	427	460	33	7.8%
96.3%	426	430	5	1.1%
97.5%	372	407	34	9.2%
98.8%	309	329	20	6.5%
100.0%	197	164	-32	-16.5%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	967	967	0	0.0%
1.2%	967	967	0	0.0%
2.5%	967	967	0	0.0%
3.7%	967	967	0	0.0%
4.9%	967	967	0	0.0%
6.2%	967	967	0	0.0%
7.4%	967	967	0	0.0%
8.6%	967	967	0	0.0%
9.9%	967	967	0	0.0%
11.1%	967	967	0	0.0%
12.3%	967	967	0	0.0%
13.6%	967	967	0	0.0%
14.8%	967	967	0	0.0%
16.0%	967	967	0	0.0%
17.3%	967	967	0	0.0%
18.5%	967	967	0	0.0%
19.8%	967	967	0	0.0%
21.0%	967	967	0	0.0%
22.2%	967	967	0	0.0%
23.5%	967	967	0	0.0%
24.7%	967	967	0	0.0%
25.9%	967	967	0	0.0%
27.2%	967	967	0	0.0%
28.4%	967	967	0	0.0%
29.6%	967	967	0	0.0%
30.9%	967	967	0	0.0%
32.1%	967	967	0	0.0%
33.3%	967	967	0	0.0%
34.6%	967	967	0	0.0%
35.8%	967	967	0	0.0%
37.0%	967	967	0	0.0%
38.3%	967	967	0	0.0%
39.5%	967	967	0	0.0%
40.7%	967	967	0	0.0%
42.0%	967	967	0	0.0%
43.2%	967	967	0	0.0%
44.4%	967	967	0	0.0%
45.7%	967	967	0	0.0%
46.9%	967	967	0	0.0%
48.1%	967	967	0	0.0%
49.4%	967	967	0	0.0%
50.6%	967	967	0	0.0%
51.9%	967	967	0	0.0%
53.1%	966	966	0	0.0%
54.3%	955	955	0	0.0%
55.6%	949	948	-1	-0.1%
56.8%	941	941	0	0.0%
58.0%	918	918	0	0.0%
59.3%	910	916	6	0.7%
60.5%	908	909	1	0.1%
61.7%	871	889	19	2.2%
63.0%	851	871	19	2.3%
64.2%	833	851	18	2.2%
65.4%	831	833	2	0.2%
66.7%	828	818	-10	-1.2%
67.9%	818	818	-1	-0.1%
69.1%	792	804	12	1.5%
70.4%	786	801	15	1.9%
71.6%	783	792	9	1.1%
72.8%	760	777	17	2.2%
74.1%	753	767	15	1.9%
75.3%	741	741	0	0.0%
76.5%	738	727	-11	-1.5%
77.8%	708	708	0	0.0%
79.0%	680	695	15	2.2%
80.2%	671	693	22	3.3%
81.5%	667	693	25	3.8%
82.7%	642	643	1	0.2%
84.0%	624	640	16	2.6%
85.2%	572	628	56	9.7%
86.4%	559	562	3	0.6%
87.7%	543	558	16	2.9%
88.9%	532	528	-3	-0.6%
90.1%	524	528	4	0.7%
91.4%	513	511	-2	-0.3%
92.6%	504	508	4	0.7%
93.8%	492	499	7	1.4%
95.1%	490	488	-1	-0.3%
96.3%	479	484	5	1.0%
97.5%	455	456	1	0.3%
98.8%	331	352	20	6.1%
100.0%	193	147	-46	-23.6%

Table SW-24-b

Folsom Lake, End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	967	967	0	0.0%
1.2%	967	967	0	0.0%
2.5%	967	967	0	0.0%
3.7%	967	967	0	0.0%
4.9%	967	967	0	0.0%
6.2%	967	967	0	0.0%
7.4%	967	967	0	0.0%
8.6%	967	967	0	0.0%
9.9%	967	967	0	0.0%
11.1%	967	967	0	0.0%
12.3%	967	967	0	0.0%
13.6%	967	967	0	0.0%
14.8%	967	967	0	0.0%
16.0%	967	967	0	0.0%
17.3%	967	967	0	0.0%
18.5%	967	967	0	0.0%
19.8%	967	967	0	0.0%
21.0%	967	967	0	0.0%
22.2%	967	967	0	0.0%
23.5%	967	967	0	0.0%
24.7%	967	967	0	0.0%
25.9%	967	967	0	0.0%
27.2%	967	967	0	0.0%
28.4%	967	967	0	0.0%
29.6%	967	967	0	0.0%
30.9%	967	967	0	0.0%
32.1%	967	967	0	0.0%
33.3%	967	967	0	0.0%
34.6%	967	967	0	0.0%
35.8%	967	967	0	0.0%
37.0%	967	967	0	0.0%
38.3%	967	967	0	0.0%
39.5%	967	967	0	0.0%
40.7%	967	965	-2	-0.2%
42.0%	965	962	-4	-0.4%
43.2%	962	959	-3	-0.3%
44.4%	954	954	0	0.0%
45.7%	950	950	0	0.0%
46.9%	946	945	-1	-0.1%
48.1%	944	937	-7	-0.8%
49.4%	923	923	0	0.0%
50.6%	917	919	2	0.2%
51.9%	908	917	9	1.0%
53.1%	908	917	9	1.0%
54.3%	905	916	11	1.2%
55.6%	893	867	-26	-2.9%
56.8%	879	857	-22	-2.5%
58.0%	868	855	-13	-1.5%
59.3%	845	828	-16	-1.9%
60.5%	812	804	-8	-1.0%
61.7%	804	798	-6	-0.8%
63.0%	798	763	-35	-4.4%
64.2%	773	748	-26	-3.4%
65.4%	767	744	-23	-3.0%
66.7%	721	733	12	1.7%
67.9%	717	727	9	1.3%
69.1%	713	725	12	1.7%
70.4%	691	711	20	2.9%
71.6%	690	685	-5	-0.8%
72.8%	684	669	-15	-2.1%
74.1%	681	667	-14	-2.0%
75.3%	659	655	-4	-0.6%
76.5%	640	647	7	1.1%
77.8%	619	637	19	3.0%
79.0%	619	611	-7	-1.2%
80.2%	590	606	16	2.7%
81.5%	580	605	24	4.2%
82.7%	578	586	8	1.4%
84.0%	549	571	21	3.9%
85.2%	519	520	1	0.2%
86.4%	502	498	-4	-0.9%
87.7%	487	498	11	2.3%
88.9%	470	492	21	4.6%
90.1%	469	491	22	4.8%
91.4%	461	488	27	5.9%
92.6%	461	469	9	1.9%
93.8%	460	459	-1	-0.3%
95.1%	458	452	-7	-1.5%
96.3%	433	422	-11	-2.5%
97.5%	343	366	23	6.8%
98.8%	338	353	15	4.5%
100.0%	163	118	-45	-27.7%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	942	942	0	0.0%
1.2%	942	942	0	0.0%
2.5%	942	942	0	0.0%
3.7%	942	942	0	0.0%
4.9%	942	942	0	0.0%
6.2%	942	942	0	0.0%
7.4%	942	942	0	0.0%
8.6%	942	942	0	0.0%
9.9%	942	942	0	0.0%
11.1%	942	942	0	0.0%
12.3%	942	942	0	0.0%
13.6%	942	942	0	0.0%
14.8%	942	942	0	0.0%
16.0%	942	942	0	0.0%
17.3%	942	942	0	0.0%
18.5%	922	940	18	2.0%
19.8%	897	913	16	1.8%
21.0%	895	913	19	2.1%
22.2%	878	902	24	2.7%
23.5%	870	893	22	2.6%
24.7%	852	888	36	4.2%
25.9%	850	884	34	4.0%
27.2%	843	868	25	2.9%
28.4%	831	859	28	3.3%
29.6%	790	848	59	7.4%
30.9%	787	845	58	7.4%
32.1%	781	840	59	7.6%
33.3%	778	813	36	4.6%
34.6%	776	812	36	4.6%
35.8%	775	793	18	2.3%
37.0%	753	791	38	5.1%
38.3%	746	778	32	4.3%
39.5%	745	774	29	3.9%
40.7%	736	766	29	4.0%
42.0%	730	753	23	3.2%
43.2%	723	742	19	2.7%
44.4%	720	734	15	2.0%
45.7%	715	733	18	2.5%
46.9%	708	730	22	3.1%
48.1%	702	728	26	3.6%
49.4%	688	724	36	5.2%
50.6%	671	722	50	7.5%
51.9%	670	720	50	7.4%
53.1%	665	720	54	8.2%
54.3%	663	717	54	8.2%
55.6%	648	663	14	2.2%
56.8%	637	654	17	2.7%
58.0%	632	648	17	2.7%
59.3%	619	631	12	2.0%
60.5%	576	617	41	7.0%
61.7%	565	610	45	8.0%
63.0%	540	595	55	10.3%
64.2%	527	592	65	12.4%
65.4%	516	569	54	10.4%
66.7%	513	555	43	8.3%
67.9%	512	554	42	8.1%
69.1%	509	552	44	8.6%
70.4%	500	550	50	9.9%
71.6%	495	528	33	6.7%
72.8%	477	515	38	8.0%
74.1%	468	513	45	9.6%
75.3%	465	512	47	10.1%
76.5%	463	508	45	9.7%
77.8%	462	485	23	4.9%
79.0%	462	484	22	4.7%
80.2%	429	483	54	12.6%
81.5%	415	479	64	15.3%
82.7%	409	475	66	16.2%
84.0%	401	431	30	7.5%
85.2%	399	410	11	2.8%
86.4%	393	410	17	4.3%
87.7%	387	405	18	4.8%
88.9%	377	397	20	5.4%
90.1%	355	386	31	8.7%
91.4%	333	385	52	15.5%
92.6%	324	384	60	18.6%
93.8%	306	366	59	19.3%
95.1%	302	360	58	19.2%
96.3%	300	353	53	17.7%
97.5%	281	326	45	16.1%
98.8%	127	300	173	136.4%
100.0%	114	90	-24	-21.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	795	792	-3	-0.3%
1.2%	792	792	0	0.0%
2.5%	792	792	0	0.0%
3.7%	792	792	0	0.0%
4.9%	792	792	0	0.0%
6.2%	792	792	0	0.0%
7.4%	792	792	0	0.0%
8.6%	792	792	0	0.0%
9.9%	792	792	0	0.0%
11.1%	792	792	0	0.0%
12.3%	792	792	0	0.0%
13.6%	792	792	0	0.0%
14.8%	792	792	0	0.0%
16.0%	792	792	0	0.0%
17.3%	792	792	0	0.0%
18.5%	792	792	0	0.0%
19.8%	792	792	0	0.0%
21.0%	792	792	0	0.0%
22.2%	792	792	0	0.0%
23.5%	792	792	0	0.0%
24.7%	792	792	0	0.0%
25.9%	792	792	0	0.0%
27.2%	791	792	1	0.1%
28.4%	766	790	24	3.2%
29.6%	746	787	41	5.5%
30.9%	742	782	40	5.4%
32.1%	740	757	17	2.3%
33.3%	739	740	1	0.1%
34.6%	735	739	5	0.6%
35.8%	731	736	5	0.7%
37.0%	717	725	8	1.1%
38.3%	708	716	8	1.2%
39.5%	695	710	15	2.2%
40.7%	689	703	13	1.9%
42.0%	673	695	22	3.3%
43.2%	666	677	11	1.7%
44.4%	662	675	13	2.0%
45.7%	640	666	26	4.0%
46.9%	631	665	34	5.4%
48.1%	630	663	33	5.2%
49.4%	625	655	30	4.9%
50.6%	623	639	17	2.7%
51.9%	611	630	19	3.1%
53.1%	603	609	6	0.9%
54.3%	595	608	13	2.2%
55.6%	591	607	16	2.6%
56.8%	574	605	30	5.3%
58.0%	548	603	54	9.9%
59.3%	548	586	38	6.9%
60.5%	530	570	40	7.6%
61.7%	503	566	64	12.7%
63.0%	497	539	42	8.5%
64.2%	472	536	63	13.4%
65.4%	472	523	51	10.9%
66.7%	452	509	58	12.8%
67.9%	451	490	39	8.6%
69.1%	450	486	36	8.0%
70.4%	436	470	34	7.7%
71.6%	417	468	51	12.2%
72.8%	412	465	53	12.9%
74.1%	411	463	51	12.5%
75.3%	409	455	45	11.1%
76.5%	408	446	38	9.3%
77.8%	404	439	35	8.5%
79.0%	402	435	34	8.4%
80.2%	386	417	31	7.9%
81.5%	376	414	38	10.0%
82.7%	370	399	29	7.8%
84.0%	355	366	10	2.9%
85.2%	344	361	18	5.2%
86.4%	332	347	14	4.2%
87.7%	329	343	14	4.2%
88.9%	329	342	12	3.8%
90.1%	308	332	24	7.9%
91.4%	305	328	23	7.5%
92.6%	302	322	20	6.6%
93.8%	259	320	62	23.9%
95.1%	254	299	45	17.6%
96.3%	252	294	43	17.0%
97.5%	242	284	42	17.2%
98.8%	90	244	154	171.3%
100.0%	90	90	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Storage (TAF)	DCR 2015 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	752	752	0	0.0%
1.2%	752	752	0	0.0%
2.5%	752	752	0	0.0%
3.7%	752	752	0	0.0%
4.9%	752	752	0	0.0%
6.2%	722	751	29	4.0%
7.4%	716	751	34	4.8%
8.6%	715	750	35	4.9%
9.9%	708	743	35	5.0%
11.1%	706	735	29	4.2%
12.3%	687	716	30	4.3%
13.6%	679	708	30	4.4%
14.8%	679	703	25	3.7%
16.0%	676	702	25	3.7%
17.3%	658	692	34	5.1%
18.5%	639	690	51	7.9%
19.8%	635	673	39	6.1%
21.0%	631	665	34	5.4%
22.2%	630	650	20	3.2%
23.5%	618	648	30	4.9%
24.7%	618	641	23	3.8%
25.9%	616	636	20	3.2%
27.2%	615	636	20	3.3%
28.4%	606	632	26	4.4%
29.6%	605	631	26	4.3%
30.9%	596	627	31	5.2%
32.1%	593	610	17	2.9%
33.3%	592	609	17	2.8%
34.6%	592	604	12	2.1%
35.8%	592	602	10	1.7%
37.0%	592	600	8	1.4%
38.3%	590	598	7	1.2%
39.5%	586	594	9	1.5%
40.7%	583	592	9	1.5%
42.0%	583	592	9	1.6%
43.2%	568	588	20	3.5%
44.4%	563	588	25	4.5%
45.7%	556	586	30	5.4%
46.9%	556	585	29	5.3%
48.1%	550	585	35	6.3%
49.4%	549	568	19	3.4%
50.6%	541	559	18	3.3%
51.9%	516	557	41	8.0%
53.1%	514	539	25	4.8%
54.3%	511	535	23	4.6%
55.6%	501	534	33	6.7%
56.8%	497	530	33	6.6%
58.0%	483	530	46	9.6%
59.3%	479	528	49	10.3%
60.5%	471	524	52	11.0%
61.7%	463	515	52	11.1%
63.0%	438	498	61	13.9%
64.2%	426	489	63	14.9%
65.4%	416	475	58	14.0%
66.7%	416	472	56	13.4%
67.9%	402	461	59	14.7%
69.1%	399	457	58	14.6%
70.4%	394	440	45	11.5%
71.6%	387	440	53	13.6%
72.8%	386	428	42	10.9%
74.1%	385	428	43	11.2%
75.3%	385	421	37	9.5%
76.5%	382	421	39	10.1%
77.8%	379	397	17	4.6%
79.0%	378	389	11	2.9%
80.2%	376	388	12	3.1%
81.5%	373	382	9	2.3%
82.7%	367	352	-15	-4.2%
84.0%	357	350	-7	-1.9%
85.2%	329	337	8	2.5%
86.4%	320	325	5	1.5%
87.7%	317	322	6	1.8%
88.9%	317	317	1	0.3%
90.1%	297	305	8	2.8%
91.4%	294	300	7	2.2%
92.6%	265	297	32	12.1%
93.8%	263	297	33	12.6%
95.1%	252	272	20	7.8%
96.3%	238	260	22	9.1%
97.5%	189	256	67	35.4%
98.8%	90	182	92	102.3%
100.0%	90	90	0	0.0%

Figure SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

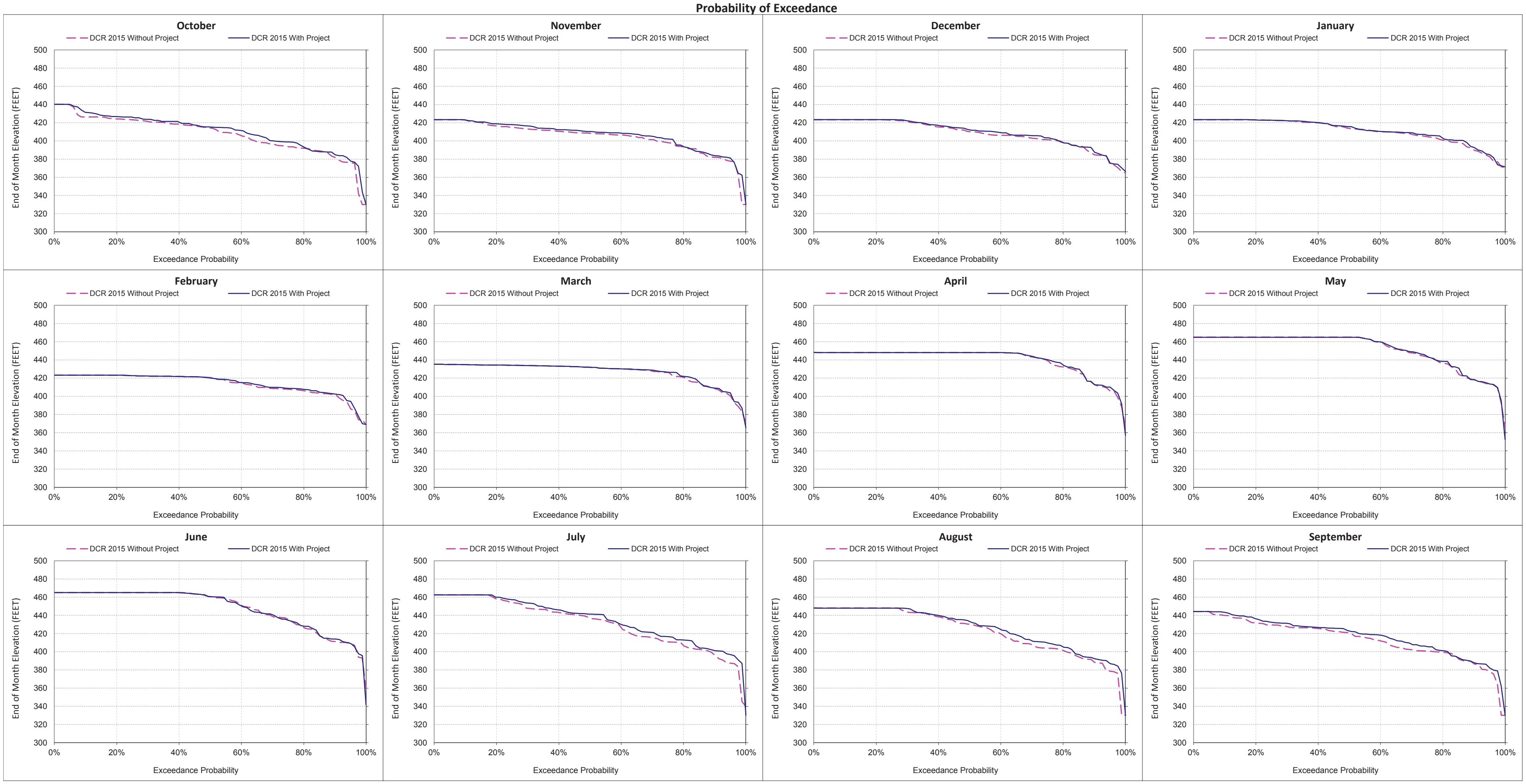


Table SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	440	440	0	0.0%
1.2%	440	440	0	0.0%
2.5%	440	440	0	0.0%
3.7%	440	440	0	0.0%
4.9%	440	440	1	0.1%
6.2%	437	438	1	0.3%
7.4%	429	438	9	2.0%
8.6%	426	434	8	1.8%
9.9%	426	432	5	1.2%
11.1%	426	431	5	1.1%
12.3%	426	431	4	1.0%
13.6%	426	430	3	0.8%
14.8%	426	428	2	0.5%
16.0%	426	428	2	0.4%
17.3%	425	427	3	0.6%
18.5%	425	427	2	0.5%
19.8%	424	427	3	0.6%
21.0%	424	427	2	0.6%
22.2%	424	426	3	0.6%
23.5%	424	426	3	0.6%
24.7%	423	426	3	0.7%
25.9%	423	425	2	0.6%
27.2%	423	425	3	0.6%
28.4%	422	424	2	0.4%
29.6%	422	424	2	0.5%
30.9%	421	424	3	0.7%
32.1%	421	423	2	0.5%
33.3%	421	422	2	0.5%
34.6%	420	422	1	0.3%
35.8%	420	421	2	0.4%
37.0%	419	421	2	0.6%
38.3%	419	421	3	0.7%
39.5%	419	421	3	0.7%
40.7%	418	419	1	0.3%
42.0%	417	419	2	0.5%
43.2%	417	419	2	0.5%
44.4%	417	418	1	0.3%
45.7%	416	417	1	0.2%
46.9%	415	416	1	0.1%
48.1%	415	416	1	0.1%
49.4%	414	415	1	0.3%
50.6%	414	415	1	0.3%
51.9%	412	415	3	0.6%
53.1%	410	415	5	1.3%
54.3%	409	415	5	1.3%
55.6%	409	415	5	1.3%
56.8%	409	414	5	1.3%
58.0%	408	412	4	0.9%
59.3%	407	412	5	1.2%
60.5%	405	411	6	1.5%
61.7%	405	409	4	0.9%
63.0%	402	407	6	1.5%
64.2%	400	407	7	1.6%
65.4%	398	406	8	1.9%
66.7%	398	405	6	1.6%
67.9%	398	403	5	1.4%
69.1%	397	400	3	0.9%
70.4%	396	400	4	0.9%
71.6%	395	399	4	1.1%
72.8%	395	399	4	1.1%
74.1%	394	399	5	1.2%
75.3%	394	399	5	1.3%
76.5%	393	399	5	1.3%
77.8%	392	398	5	1.3%
79.0%	392	395	3	0.7%
80.2%	392	393	1	0.2%
81.5%	391	391	0	-0.1%
82.7%	390	389	-2	-0.4%
84.0%	389	389	-1	-0.1%
85.2%	389	388	-1	-0.2%
86.4%	388	388	0	0.0%
87.7%	387	388	1	0.2%
88.9%	383	388	4	1.1%
90.1%	382	385	3	0.8%
91.4%	379	384	5	1.4%
92.6%	377	384	7	1.9%
93.8%	376	382	5	1.4%
95.1%	376	378	2	0.5%
96.3%	375	377	1	0.3%
97.5%	342	372	30	8.7%
98.8%	330	343	13	4.1%
100.0%	330	330	0	0.0%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	422	422	1	0.1%
12.3%	421	422	0	0.1%
13.6%	421	421	0	0.1%
14.8%	420	421	1	0.2%
16.0%	419	421	1	0.3%
17.3%	418	420	2	0.6%
18.5%	417	419	2	0.5%
19.8%	417	419	2	0.6%
21.0%	416	419	3	0.6%
22.2%	416	418	3	0.6%
23.5%	416	418	2	0.5%
24.7%	415	418	3	0.7%
25.9%	415	418	3	0.7%
27.2%	414	417	3	0.8%
28.4%	414	417	3	0.8%
29.6%	413	417	3	0.8%
30.9%	413	416	3	0.8%
32.1%	413	415	3	0.7%
33.3%	412	414	2	0.4%
34.6%	412	414	2	0.5%
35.8%	412	414	2	0.5%
37.0%	412	414	2	0.5%
38.3%	412	413	2	0.5%
39.5%	411	412	2	0.5%
40.7%	410	412	2	0.5%
42.0%	410	412	2	0.5%
43.2%	410	412	2	0.5%
44.4%	409	412	2	0.6%
45.7%	409	412	3	0.6%
46.9%	409	411	2	0.6%
48.1%	409	411	2	0.5%
49.4%	409	410	2	0.4%
50.6%	408	410	2	0.5%
51.9%	408	410	2	0.4%
53.1%	408	410	2	0.4%
54.3%	408	410	2	0.4%
55.6%	408	409	2	0.4%
56.8%	407	409	2	0.5%
58.0%	407	409	2	0.6%
59.3%	407	409	2	0.5%
60.5%	407	408	2	0.4%
61.7%	406	408	2	0.5%
63.0%	405	408	3	0.7%
64.2%	405	407	2	0.5%
65.4%	404	407	3	0.9%
66.7%	404	406	2	0.5%
67.9%	402	406	4	0.9%
69.1%	401	405	4	1.0%
70.4%	401	405	4	0.9%
71.6%	400	404	4	1.0%
72.8%	400	403	4	0.9%
74.1%	399	402	4	0.9%
75.3%	398	402	4	1.0%
76.5%	397	402	4	1.1%
77.8%	394	396	1	0.3%
79.0%	394	395	1	0.4%
80.2%	393	394	0	0.0%
81.5%	392	393	1	0.3%
82.7%	391	391	-1	-0.2%
84.0%	391	389	-3	-0.7%
85.2%	387	388	1	0.3%
86.4%	386	387	1	0.3%
87.7%	383	386	3	0.9%
88.9%	382	385	2	0.6%
90.1%	382	384	2	0.5%
91.4%	382	383	2	0.4%
92.6%	381	382	2	0.4%
93.8%	379	382	3	0.9%
95.1%	378	381	3	0.9%
96.3%	377	376	-1	-0.3%
97.5%	363	365	2	0.5%
98.8%	330	362	32	9.8%
100.0%	330	330	0	0.0%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	423	423	0	0.0%
21.0%	423	423	0	0.0%
22.2%	423	423	0	0.0%
23.5%	423	423	0	0.1%
24.7%	423	423	0	0.1%
25.9%	423	423	0	0.1%
27.2%	422	423	1	0.2%
28.4%	422	423	1	0.2%
29.6%	422	422	0	0.1%
30.9%	420	422	1	0.3%
32.1%	420	421	1	0.2%
33.3%	420	420	0	0.1%
34.6%	419	420	1	0.2%
35.8%	418	419	1	0.3%
37.0%	418	418	1	0.1%
38.3%	417	418	1	0.3%
39.5%	416	417	2	0.4%
40.7%	415	417	1	0.3%
42.0%	415	416	1	0.2%
43.2%	415	416	1	0.3%
44.4%	414	415	1	0.2%
45.7%	413	415	2	0.5%
46.9%	412	414	2	0.5%
48.1%	412	414	2	0.5%
49.4%	410	413	2	0.6%
50.6%	410	412	2	0.4%
51.9%	410	412	2	0.4%
53.1%	409	411	2	0.4%
54.3%	408	411	3	0.6%
55.6%	407	411	3	0.8%
56.8%	407	411	4	0.9%
58.0%	406	410	4	0.9%
59.3%	406	409	3	0.8%
60.5%	406	409	3	0.7%
61.7%	406	409	3	0.7%
63.0%	406	407	1	0.2%
64.2%	406	406	1	0.2%
65.4%	405	406	1	0.3%
66.7%	405	406	1	0.3%
67.9%	404	406	2	0.5%
69.1%	403	406	3	0.6%
70.4%	403	406	3	0.7%
71.6%	402	406	3	0.8%
72.8%	402	405	4	1.0%
74.1%	401	403	2	0.5%
75.3%	401	403	2	0.5%
76.5%	401	402	2	0.4%
77.8%	400	401	1	0.3%
79.0%	400	399	-1	-0.2%
80.2%	398	398	0	0.0%
81.5%	398	397	0	-0.1%
82.7%	395	396	0	0.1%
84.0%	395	395	0	0.1%
85.2%	395	393	-1	-0.3%
86.4%	394	393	0	-0.1%
87.7%	390	393	3	0.9%
88.9%	387	393	6	1.5%
90.1%	385	388	3	0.8%
91.4%	384	386	2	0.4%
92.6%	384	384	0	0.1%
93.8%	384	384	0	-0.1%
95.1%	374	376	2	0.4%
96.3%	374	375	1	0.3%
97.5%	371	374	4	1.0%
98.8%	366	370	4	1.1%
100.0%	365	366	2	0.5%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	423	423	0	0.0%
21.0%	423	423	0	0.0%
22.2%	423	423	0	0.0%
23.5%	423	423	0	0.0%
24.7%	423	423	0	0.0%
25.9%	423	423	0	0.0%
27.2%	422	423	0	0.0%
28.4%	422	422	0	0.0%
29.6%	422	422	0	0.1%
30.9%	422	422	0	0.0%
32.1%	422	422	0	0.0%
33.3%	421	422	1	0.1%
34.6%	421	422	1	0.2%
35.8%	420	421	1	0.2%
37.0%	420	421	0	0.1%
38.3%	420	420	0	0.0%
39.5%	420	420	0	0.1%
40.7%	420	420	0	0.0%
42.0%	419	419	0	0.0%
43.2%	418	419	1	0.1%
44.4%	417	417	0	-0.1%
45.7%	416	417	1	0.3%
46.9%	416	417	1	0.2%
48.1%	415	416	1	0.2%
49.4%	414	416	2	0.4%
50.6%	413	416	2	0.5%
51.9%	413	414	1	0.2%
53.1%	413	413	0	0.0%
54.3%	412	413	0	0.1%
55.6%	412	411	-1	-0.2%
56.8%	411	411	0	0.0%
58.0%	411	411	0	0.1%
59.3%	410	411	1	0.1%
60.5%	410	410	0	0.0%
61.7%	410	410	0	0.0%
63.0%	410	410	0	0.0%
64.2%	409	410	1	0.1%
65.4%	409	410	1	0.1%
66.7%	409	409	1	0.2%
67.9%	408	409	1	0.2%
69.1%	408	409	1	0.2%
70.4%	407	409	2	0.5%
71.6%	406	407	1	0.4%
72.8%	406	407	1	0.3%
74.1%	405	407	2	0.5%
75.3%	404	406	2	0.4%
76.5%	404	406	2	0.5%
77.8%	403	406	2	0.6%
79.0%	402	406	4	1.0%
80.2%	401	402	2	0.4%
81.5%	400	401	1	0.2%
82.7%	399	401	2	0.6%
84.0%	398	401	2	0.6%
85.2%	398	401	2	0.6%
86.4%	397	401	3	0.8%
87.7%	394	398	5	1.2%
88.9%	392	394	2	0.4%
90.1%	390	392	3	0.7%
91.4%	389	390	1	0.4%
92.6%	386	389	2	0.6%
93.8%	384	386	1	0.3%
95.1%	383	385	2	0.6%
96.3%	378	382	4	1.1%
97.5%	377	374	-4	-0.9%
98.8%	372	373	1	0.3%
100.0%	371	371	1	0.2%

Table SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

February					March					April					May				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)	Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)	Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)	Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%	0.0%	435	435	0	0.0%	0.0%	448	448	0	0.0%	0.0%	465	465	0	0.0%
1.2%	423	423	0	0.0%	1.2%	435	435	0	0.0%	1.2%	448	448	0	0.0%	1.2%	465	465	0	0.0%
2.5%	423	423	0	0.0%	2.5%	435	435	0	0.0%	2.5%	448	448	0	0.0%	2.5%	465	465	0	0.0%
3.7%	423	423	0	0.0%	3.7%	435	435	0	-0.1%	3.7%	448	448	0	0.0%	3.7%	465	465	0	0.0%
4.9%	423	423	0	0.0%	4.9%	435	435	0	0.0%	4.9%	448	448	0	0.0%	4.9%	465	465	0	0.0%
6.2%	423	423	0	0.0%	6.2%	435	435	0	0.0%	6.2%	448	448	0	0.0%	6.2%	465	465	0	0.0%
7.4%	423	423	0	0.0%	7.4%	435	435	0	0.0%	7.4%	448	448	0	0.0%	7.4%	465	465	0	0.0%
8.6%	423	423	0	0.0%	8.6%	435	435	0	0.0%	8.6%	448	448	0	0.0%	8.6%	465	465	0	0.0%
9.9%	423	423	0	0.0%	9.9%	435	435	0	0.0%	9.9%	448	448	0	0.0%	9.9%	465	465	0	0.0%
11.1%	423	423	0	0.0%	11.1%	435	435	0	0.0%	11.1%	448	448	0	0.0%	11.1%	465	465	0	0.0%
12.3%	423	423	0	0.0%	12.3%	435	435	0	0.0%	12.3%	448	448	0	0.0%	12.3%	465	465	0	0.0%
13.6%	423	423	0	0.0%	13.6%	435	435	0	0.0%	13.6%	448	448	0	0.0%	13.6%	465	465	0	0.0%
14.8%	423	423	0	0.0%	14.8%	435	434	0	0.0%	14.8%	448	448	0	0.0%	14.8%	465	465	0	0.0%
16.0%	423	423	0	0.0%	16.0%	434	434	0	0.0%	16.0%	448	448	0	0.0%	16.0%	465	465	0	0.0%
17.3%	423	423	0	0.0%	17.3%	434	434	0	0.0%	17.3%	448	448	0	0.0%	17.3%	465	465	0	0.0%
18.5%	423	423	0	0.0%	18.5%	434	434	0	0.0%	18.5%	448	448	0	0.0%	18.5%	465	465	0	0.0%
19.8%	423	423	0	0.0%	19.8%	434	434	0	0.0%	19.8%	448	448	0	0.0%	19.8%	465	465	0	0.0%
21.0%	423	423	0	0.0%	21.0%	434	434	0	0.0%	21.0%	448	448	0	0.0%	21.0%	465	465	0	0.0%
22.2%	423	423	0	0.0%	22.2%	434	434	0	0.0%	22.2%	448	448	0	0.0%	22.2%	465	465	0	0.0%
23.5%	423	423	0	0.1%	23.5%	434	434	0	0.0%	23.5%	448	448	0	0.0%	23.5%	465	465	0	0.0%
24.7%	423	423	0	0.0%	24.7%	434	434	0	0.0%	24.7%	448	448	0	0.0%	24.7%	465	465	0	0.0%
25.9%	422	423	0	0.1%	25.9%	434	434	0	0.0%	25.9%	448	448	0	0.0%	25.9%	465	465	0	0.0%
27.2%	422	422	0	0.0%	27.2%	434	434	0	0.0%	27.2%	448	448	0	0.0%	27.2%	465	465	0	0.0%
28.4%	422	422	0	0.0%	28.4%	434	434	0	-0.1%	28.4%	448	448	0	0.0%	28.4%	465	465	0	0.0%
29.6%	422	422	0	0.0%	29.6%	434	434	0	0.0%	29.6%	448	448	0	0.0%	29.6%	465	465	0	0.0%
30.9%	422	422	0	0.0%	30.9%	434	434	0	0.0%	30.9%	448	448	0	0.0%	30.9%	465	465	0	0.0%
32.1%	422	422	0	0.0%	32.1%	434	434	0	0.0%	32.1%	448	448	0	0.0%	32.1%	465	465	0	0.0%
33.3%	422	422	0	0.0%	33.3%	434	434	0	0.0%	33.3%	448	448	0	0.0%	33.3%	465	465	0	0.0%
34.6%	422	422	0	0.0%	34.6%	434	433	0	0.0%	34.6%	448	448	0	0.0%	34.6%	465	465	0	0.0%
35.8%	422	422	0	0.0%	35.8%	433	433	0	0.0%	35.8%	448	448	0	0.0%	35.8%	465	465	0	0.0%
37.0%	422	422	0	0.0%	37.0%	433	433	0	0.0%	37.0%	448	448	0	0.0%	37.0%	465	465	0	0.0%
38.3%	422	422	0	0.0%	38.3%	433	433	0	0.0%	38.3%	448	448	0	0.0%	38.3%	465	465	0	0.0%
39.5%	422	422	0	0.0%	39.5%	433	433	0	0.0%	39.5%	448	448	0	0.0%	39.5%	465	465	0	0.0%
40.7%	422	422	0	0.0%	40.7%	433	433	0	0.0%	40.7%	448	448	0	0.0%	40.7%	465	465	0	0.0%
42.0%	422	422	0	0.0%	42.0%	433	433	0	0.0%	42.0%	448	448	0	0.0%	42.0%	465	465	0	0.0%
43.2%	422	422	0	0.0%	43.2%	433	433	0	0.1%	43.2%	448	448	0	0.0%	43.2%	465	465	0	0.0%
44.4%	422	421	0	0.0%	44.4%	433	433	0	0.0%	44.4%	448	448	0	0.0%	44.4%	465	465	0	0.0%
45.7%	421	421	0	0.0%	45.7%	433	433	0	0.0%	45.7%	448	448	0	0.0%	45.7%	465	465	0	0.0%
46.9%	421	421	0	0.0%	46.9%	432	432	0	0.0%	46.9%	448	448	0	0.0%	46.9%	465	465	0	0.0%
48.1%	421	421	0	0.0%	48.1%	432	432	0	0.0%	48.1%	448	448	0	0.0%	48.1%	465	465	0	0.0%
49.4%	421	420	0	-0.1%	49.4%	432	432	0	0.0%	49.4%	448	448	0	0.0%	49.4%	465	465	0	0.0%
50.6%	420	420	-1	-0.2%	50.6%	432	432	0	0.0%	50.6%	448	448	0	0.0%	50.6%	465	465	0	0.0%
51.9%	419	419	1	0.1%	51.9%	432	432	0	0.0%	51.9%	448	448	0	0.0%	51.9%	465	465	0	0.0%
53.1%	419	419	0	0.0%	53.1%	431	431	0	0.0%	53.1%	448	448	0	0.0%	53.1%	465	465	0	0.0%
54.3%	418	419	0	0.1%	54.3%	431	431	0	0.0%	54.3%	448	448	0	0.0%	54.3%	464	464	0	0.0%
55.6%	416	418	2	0.5%	55.6%	431	431	0	0.0%	55.6%	448	448	0	0.0%	55.6%	463	463	0	0.0%
56.8%	415	417	2	0.5%	56.8%	430	430	0	0.0%	56.8%	448	448	0	0.0%	56.8%	462	462	0	0.0%
58.0%	415	417	2	0.6%	58.0%	430	430	0	0.0%	58.0%	448	448	0	0.0%	58.0%	460	460	0	0.0%
59.3%	415	415	0	0.1%	59.3%	430	430	0	0.1%	59.3%	448	448	0	0.0%	59.3%	459	460	1	0.1%
60.5%	414	415	1	0.1%	60.5%	430	430	0	0.0%	60.5%	448	448	0	0.0%	60.5%	459	459	0	0.0%
61.7%	413	415	2	0.5%	61.7%	430	430	0	0.0%	61.7%	448	448	0	0.0%	61.7%	456	458	2	0.4%
63.0%	413	414	2	0.4%	63.0%	430	430	0	0.1%	63.0%	448	448	0	0.0%	63.0%	454	456	2	0.4%
64.2%	412	413	2	0.4%	64.2%	429	430	0	0.1%	64.2%	448	448	0	0.0%	64.2%	452	454	2	0.4%
65.4%	410	413	3	0.7%	65.4%	429	429	0	0.0%	65.4%	447	447	0	0.0%	65.4%	452	452	0	0.0%
66.7%	410	412	2	0.5%	66.7%	429	429	0	0.1%	66.7%	447	447	0	0.0%	66.7%	452	451	-1	-0.2%
67.9%	410	410	1	0.1%	67.9%	429	429	0	0.1%	67.9%	445	446	1	0.2%	67.9%	451	451	0	0.0%
69.1%	409	410	1	0.2%	69.1%	429	429	0	0.1%	69.1%	444	445	1	0.2%	69.1%	448	449	1	0.3%
70.4%	409	410	1	0.3%	70.4%	427	429	1	0.3%	70.4%	443	444	1	0.2%	70.4%	448	449	1	0.3%
71.6%	408	410	1	0.3%	71.6%	427	428	1	0.1%	71.6%	442	442	0	0.0%	71.6%	447	448	1	0.2%
72.8%	408	409	1	0.3%	72.8%	427	427	1	0.2%	72.8%	441	442	1	0.2%	72.8%	445	447	2	0.4%
74.1%	408	409	1	0.2%	74.1%	426	427	1	0.2%	74.1%	441	441	0	0.1%	74.1%	444	446	1	0.3%
75.3%	408	409	1	0.3%	75.3%	426	427	0	0.1%	75.3%	439	440	1	0.3%	75.3%	443	443	0	0.0%
76.5%	407	409	1	0.3%	76.5%	423	426	4	0.9%	76.5%	434	439	4	1.0%	76.5%	443	442	-1	-0.2%
77.8%	407	408	1	0.3%	77.8%	422	426	4	1.0%	77.8%	434	437	4	0.8%	77.8%	440	440	0	0.0%
79.0%	407	408	1	0.3%	79.0%	422	422	1	0.2%	79.0%	433	437	4	1.0%	79.0%	437	439	1	0.3%
80.2%	406	408	2	0.4%	80.2%	421	422	1	0.3%	80.2%	432	434	2	0.4%	80.2%	436	439	2	0.5%
81.5%	406	407	2	0.4%	81.5%	418	421	4	0.9%	81.5%	431	432	1	0.2%	81.5%	436	438	3	0.6%
82.7%	404	406	2	0.5%	82.7%	416	421	5	1.1%	82.7%	430	432	2	0.4%	82.7%	433	433	0	0.0%
84.0%	404	406	2	0.5%	84.0%	416	419	4	0.8%	84.0%	429	430	1	0.3%	84.0%	430	432	2	0.5%
85.2%	404	404	1	0.2%	85.2%	415	415	0	0.0%	85.2%	426	430	4	1.0%	85.2%	424	431	7	1.6%
86.4%	403	404	1	0.3%	86.4%	412	411	-1	-0.2%	86.4%	424	425	0	0.1%	86.4%	422	423	0	0.1%
87.7%	403	404	1	0.2%	87.7%	411	411	-1	-0.1%	87.7%	418	417	-1	-0.3%	87.7%	420	422	2	0.5%
88.9%	402	403	1	0.2%	88.9%	409	410	0	0.1%	88.9%	416	416	0	0.0%	88.9%	419	419	0	-0.1%
90.1%	402	402	0	0.1%	90.1%	408	409	1	0.2%	90.1%	413	413	0	0.0%	90.1%	418	419	0	0.1%
91.4%	398	402	4	0.9%	91.4%	407	409	2	0.5%	91.4%	411	413	1	0.3%	91.4%	417	416	0	0.0%
92.6%	395	401	6	1.4%	92.6%	404	405	1	0.3%	92.6%	411	412	1	0.3%	92.6%	416	416	0	0.1%
93.8%	394	395	1	0.3%	93.8%	403	405	2	0.4%	93.8%	410	410	1	0.2%	93.8%	414	415	1	0.2%
95.1%	386	394	8	2.1%	95.1%	400	404	3	0.9%	95.1%	406	410	4	1.0%	95.1%	414	414	0	0.0%
96.3%	384	387	2	0.6%	96.3%	393	394	1	0.3%	96.3%	406	406	1	0.1%	96.3%	412	413	1	0.2%
97.5%	374	378	4	1.0%	97.5%	389	393	5	1.2%	97.5%	399	404	5	1.2%	97.5%	409	410	0	0.0%
98.8%	374	370	-4	-1.1%	98.8%	384	387	3	0.9%	98.8%	388	392	3	0.8%	98.8%	392	395	3	0.8%
100.0%	369	369	0	0.0%	100.0%	371	365	-5	-1.4%	100.0%	366	357	-9	-2.4%	100.0%	365	352	-13	-3.5%

Table SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	465	465	0	0.0%
1.2%	465	465	0	0.0%
2.5%	465	465	0	0.0%
3.7%	465	465	0	0.0%
4.9%	465	465	0	0.0%
6.2%	465	465	0	0.0%
7.4%	465	465	0	0.0%
8.6%	465	465	0	0.0%
9.9%	465	465	0	0.0%
11.1%	465	465	0	0.0%
12.3%	465	465	0	0.0%
13.6%	465	465	0	0.0%
14.8%	465	465	0	0.0%
16.0%	465	465	0	0.0%
17.3%	465	465	0	0.0%
18.5%	465	465	0	0.0%
19.8%	465	465	0	0.0%
21.0%	465	465	0	0.0%
22.2%	465	465	0	0.0%
23.5%	465	465	0	0.0%
24.7%	465	465	0	0.0%
25.9%	465	465	0	0.0%
27.2%	465	465	0	0.0%
28.4%	465	465	0	0.0%
29.6%	465	465	0	0.0%
30.9%	465	465	0	0.0%
32.1%	465	465	0	0.0%
33.3%	465	465	0	0.0%
34.6%	465	465	0	0.0%
35.8%	465	465	0	0.0%
37.0%	465	465	0	0.0%
38.3%	465	465	0	0.0%
39.5%	465	465	0	0.0%
40.7%	465	465	0	0.0%
42.0%	465	465	0	-0.1%
43.2%	465	464	0	-0.1%
44.4%	464	464	0	0.0%
45.7%	463	463	0	0.0%
46.9%	463	463	0	0.0%
48.1%	463	462	-1	-0.2%
49.4%	461	461	0	0.0%
50.6%	460	460	0	0.0%
51.9%	459	460	1	0.2%
53.1%	459	460	1	0.2%
54.3%	459	460	1	0.2%
55.6%	458	455	-3	-0.6%
56.8%	456	454	-2	-0.5%
58.0%	455	454	-1	-0.3%
59.3%	453	452	-2	-0.4%
60.5%	450	449	-1	-0.2%
61.7%	449	449	-1	-0.1%
63.0%	449	445	-3	-0.8%
64.2%	446	444	-3	-0.6%
65.4%	446	443	-2	-0.5%
66.7%	441	442	1	0.3%
67.9%	441	442	1	0.2%
69.1%	440	442	1	0.3%
70.4%	438	440	2	0.4%
71.6%	438	438	-1	-0.1%
72.8%	438	436	-2	-0.4%
74.1%	437	436	-2	-0.4%
75.3%	435	434	0	-0.1%
76.5%	432	433	1	0.2%
77.8%	430	432	2	0.5%
79.0%	430	429	-1	-0.2%
80.2%	426	428	2	0.5%
81.5%	425	428	3	0.7%
82.7%	425	426	1	0.2%
84.0%	421	424	3	0.6%
85.2%	417	418	0	0.0%
86.4%	415	415	-1	-0.1%
87.7%	413	415	1	0.3%
88.9%	411	414	3	0.6%
90.1%	411	414	3	0.7%
91.4%	410	414	3	0.8%
92.6%	410	411	1	0.3%
93.8%	410	410	0	0.0%
95.1%	410	409	-1	-0.2%
96.3%	407	405	-1	-0.3%
97.5%	394	398	4	1.0%
98.8%	393	396	2	0.6%
100.0%	357	341	-15	-4.3%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	463	463	0	0.0%
1.2%	463	463	0	0.0%
2.5%	463	463	0	0.0%
3.7%	463	463	0	0.0%
4.9%	463	463	0	0.0%
6.2%	463	463	0	0.0%
7.4%	463	463	0	0.0%
8.6%	463	463	0	0.0%
9.9%	463	463	0	0.0%
11.1%	463	463	0	0.0%
12.3%	463	463	0	0.0%
13.6%	463	463	0	0.0%
14.8%	463	463	0	0.0%
16.0%	463	463	0	0.0%
17.3%	463	463	0	0.0%
18.5%	461	462	2	0.4%
19.8%	458	460	2	0.3%
21.0%	458	460	2	0.4%
22.2%	456	459	2	0.5%
23.5%	456	458	2	0.5%
24.7%	454	457	3	0.8%
25.9%	454	457	3	0.7%
27.2%	453	455	2	0.5%
28.4%	452	455	3	0.6%
29.6%	448	454	6	1.3%
30.9%	448	453	6	1.3%
32.1%	447	453	6	1.3%
33.3%	447	450	3	0.8%
34.6%	447	450	3	0.8%
35.8%	446	448	2	0.4%
37.0%	444	448	4	0.8%
38.3%	444	447	3	0.7%
39.5%	444	446	3	0.6%
40.7%	443	446	3	0.6%
42.0%	442	444	2	0.5%
43.2%	441	443	2	0.4%
44.4%	441	442	1	0.3%
45.7%	441	442	2	0.4%
46.9%	440	442	2	0.5%
48.1%	439	442	2	0.6%
49.4%	438	442	3	0.8%
50.6%	436	441	5	1.2%
51.9%	436	441	5	1.2%
53.1%	435	441	6	1.3%
54.3%	435	441	6	1.3%
55.6%	433	435	2	0.4%
56.8%	432	434	2	0.5%
58.0%	431	433	2	0.5%
59.3%	430	431	2	0.4%
60.5%	424	429	5	1.2%
61.7%	423	429	6	1.3%
63.0%	420	427	7	1.6%
64.2%	418	426	8	1.9%
65.4%	417	424	7	1.6%
66.7%	417	422	5	1.3%
67.9%	417	422	5	1.2%
69.1%	416	422	5	1.3%
70.4%	415	421	6	1.5%
71.6%	415	419	4	1.0%
72.8%	412	417	5	1.1%
74.1%	411	417	6	1.4%
75.3%	411	417	6	1.4%
76.5%	411	416	6	1.4%
77.8%	410	413	3	0.7%
79.0%	410	413	3	0.7%
80.2%	406	413	7	1.6%
81.5%	405	412	8	1.9%
82.7%	404	412	8	2.0%
84.0%	403	407	4	0.9%
85.2%	403	404	1	0.3%
86.4%	402	404	2	0.5%
87.7%	401	403	2	0.6%
88.9%	399	402	3	0.7%
90.1%	396	401	5	1.3%
91.4%	392	401	8	2.2%
92.6%	391	401	10	2.5%
93.8%	388	398	10	2.5%
95.1%	387	397	9	2.4%
96.3%	387	396	9	2.2%
97.5%	384	391	8	2.0%
98.8%	345	387	42	12.2%
100.0%	340	330	-10	-2.9%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	448	448	0	-0.1%
1.2%	448	448	0	0.0%
2.5%	448	448	0	0.0%
3.7%	448	448	0	0.0%
4.9%	448	448	0	0.0%
6.2%	448	448	0	0.0%
7.4%	448	448	0	0.0%
8.6%	448	448	0	0.0%
9.9%	448	448	0	0.0%
11.1%	448	448	0	0.0%
12.3%	448	448	0	0.0%
13.6%	448	448	0	0.0%
14.8%	448	448	0	0.0%
16.0%	448	448	0	0.0%
17.3%	448	448	0	0.0%
18.5%	448	448	0	0.0%
19.8%	448	448	0	0.0%
21.0%	448	448	0	0.0%
22.2%	448	448	0	0.0%
23.5%	448	448	0	0.0%
24.7%	448	448	0	0.0%
25.9%	448	448	0	0.0%
27.2%	448	448	0	0.0%
28.4%	446	448	2	0.5%
29.6%	444	448	4	0.9%
30.9%	443	447	4	0.9%
32.1%	443	445	2	0.4%
33.3%	443	443	0	0.0%
34.6%	443	443	0	0.1%
35.8%	442	443	0	0.1%
37.0%	441	442	1	0.2%
38.3%	440	441	1	0.2%
39.5%	439	440	1	0.3%
40.7%	438	439	1	0.3%
42.0%	436	439	2	0.5%
43.2%	435	437	1	0.3%
44.4%	435	437	2	0.4%
45.7%	432	435	3	0.7%
46.9%	431	435	4	1.0%
48.1%	431	435	4	0.9%
49.4%	430	434	4	0.9%
50.6%	430	432	2	0.5%
51.9%	429	431	2	0.5%
53.1%	428	429	1	0.2%
54.3%	427	428	2	0.4%
55.6%	426	428	2	0.5%
56.8%	424	428	4	0.9%
58.0%	421	428	7	1.6%
59.3%	421	426	5	1.1%
60.5%	419	424	5	1.2%
61.7%	415	423	8	1.9%
63.0%	415	420	5	1.3%
64.2%	412	419	8	1.9%
65.4%	412	418	6	1.5%
66.7%	409	416	7	1.7%
67.9%	409	414	5	1.2%
69.1%	409	413	4	1.1%
70.4%	407	411	4	1.0%
71.6%	405	411	6	1.5%
72.8%	404	411	7	1.6%
74.1%	404	410	6	1.6%
75.3%	404	409	6	1.4%
76.5%	404	408	5	1.2%
77.8%	403	408	4	1.1%
79.0%	403	407	4	1.0%
80.2%	401	405	4	0.9%
81.5%	399	404	5	1.3%
82.7%	398	403	4	1.1%
84.0%	396	398	2	0.4%
85.2%	394	397	3	0.7%
86.4%	392	395	2	0.6%
87.7%	392	394	2	0.6%
88.9%	392	394	2	0.5%
90.1%	388	392	4	1.0%
91.4%	388	392	4	1.0%
92.6%	387	390	3	0.8%
93.8%	379	390	11	2.9%
95.1%	379	387	8	2.2%
96.3%	378	386	8	2.1%
97.5%	376	384	8	2.1%
98.8%	330	377	47	14.1%
100.0%	330	330	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Elevation (FEET)	DCR 2015 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	444	444	0	0.0%
1.2%	444	444	0	0.0%
2.5%	444	444	0	0.0%
3.7%	444	444	0	0.0%
4.9%	444	444	0	0.0%
6.2%	441	444	3	0.6%
7.4%	441	444	3	0.8%
8.6%	441	444	3	0.8%
9.9%	440	443	3	0.8%
11.1%	440	443	3	0.6%
12.3%	438	441	3	0.7%
13.6%	437	440	3	0.7%
14.8%	437	439	2	0.5%
16.0%	437	439	3	0.6%
17.3%	435	438	4	0.9%
18.5%	432	438	6	1.4%
19.8%	432	436	5	1.1%
21.0%	431	435	4	1.0%
22.2%	431	434	3	0.6%
23.5%	430	433	4	0.9%
24.7%	430	432	3	0.7%
25.9%	429	432	2	0.6%
27.2%	429	432	3	0.6%
28.4%	428	431	3	0.8%
29.6%	428	431	3	0.7%
30.9%	427	431	4	0.9%
32.1%	426	429	2	0.5%
33.3%	426	428	2	0.5%
34.6%	426	428	2	0.4%
35.8%	426	428	1	0.3%
37.0%	426	427	1	0.2%
38.3%	426	427	1	0.2%
39.5%	426	427	1	0.3%
40.7%	425	426	1	0.2%
42.0%	425	426	1	0.3%
43.2%	423	426	2	0.6%
44.4%	423	426	3	0.7%
45.7%	422	426	4	0.9%
46.9%	422	426	4	0.9%
48.1%	421	426	4	1.0%
49.4%	421	423	2	0.6%
50.6%	420	422	2	0.5%
51.9%	417	422	5	1.2%
53.1%	417	420	3	0.7%
54.3%	416	419	3	0.7%
55.6%	415	419	4	1.0%
56.8%	415	419	4	1.0%
58.0%	413	419	6	1.4%
59.3%	412	419	6	1.5%
60.5%	412	418	6	1.6%
61.7%	411	417	6	1.6%
63.0%	407	415	7	1.8%
64.2%	406	414	8	1.9%
65.4%	405	412	7	1.8%
66.7%	405	412	7	1.7%
67.9%	403	410	7	1.8%
69.1%	403	410	7	1.8%
70.4%	402	408	6	1.4%
71.6%	401	408	7	1.6%
72.8%	401	406	5	1.3%
74.1%	401	406	5	1.3%
75.3%	401	405	5	1.1%
76.5%	400	405	5	1.2%
77.8%	400	402	2	0.6%
79.0%	400	401	2	0.4%
80.2%	399	401	2	0.5%
81.5%	399	400	1	0.4%
82.7%	398	395	-3	-0.6%
84.0%	396	395	-1	-0.3%
85.2%	392	393	1	0.3%
86.4%	390	391	1	0.2%
87.7%	390	391	1	0.2%
88.9%	390	390	0	0.0%
90.1%	386	388	1	0.3%
91.4%	386	387	1	0.3%
92.6%	381	386	6	1.5%
93.8%	380	386	6	1.6%
95.1%	378	382	4	1.0%
96.3%	375	380	4	1.1%
97.5%	364	379	15	4.0%
98.8%	330	362	32	9.7%
100.0%	330	330	0	0.0%

Figure SW-26-b
Folsom Lake, End of Month Area
Probability of Exceedance

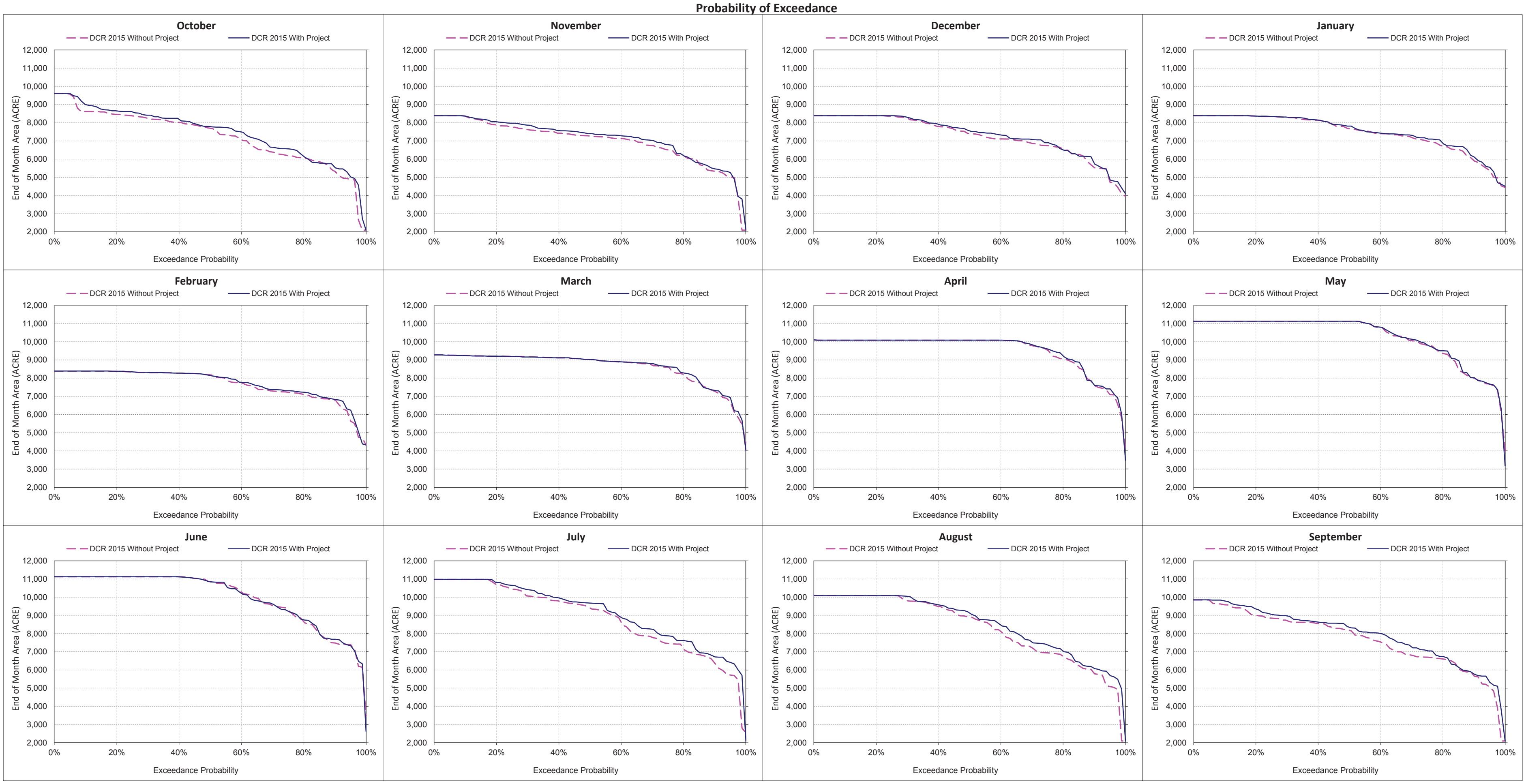


Table SW-26-b

Folsom Lake, End of Month Area

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,609	9,609	0	0.0%
1.2%	9,609	9,609	0	0.0%
2.5%	9,609	9,609	0	0.0%
3.7%	9,609	9,609	0	0.0%
4.9%	9,578	9,609	31	0.3%
6.2%	9,419	9,487	68	0.7%
7.4%	8,800	9,439	640	7.3%
8.6%	8,615	9,186	571	6.6%
9.9%	8,615	8,996	381	4.4%
11.1%	8,615	8,961	346	4.0%
12.3%	8,615	8,923	308	3.6%
13.6%	8,615	8,871	256	3.0%
14.8%	8,594	8,759	165	1.9%
16.0%	8,594	8,720	126	1.5%
17.3%	8,505	8,693	187	2.2%
18.5%	8,482	8,651	169	2.0%
19.8%	8,454	8,651	197	2.3%
21.0%	8,454	8,634	180	2.1%
22.2%	8,421	8,615	194	2.3%
23.5%	8,412	8,615	203	2.4%
24.7%	8,383	8,611	228	2.7%
25.9%	8,364	8,543	179	2.1%
27.2%	8,331	8,534	203	2.4%
28.4%	8,307	8,444	137	1.6%
29.6%	8,259	8,413	154	1.9%
30.9%	8,198	8,412	214	2.6%
32.1%	8,187	8,333	146	1.8%
33.3%	8,181	8,323	142	1.7%
34.6%	8,165	8,251	86	1.1%
35.8%	8,131	8,246	115	1.4%
37.0%	8,058	8,244	186	2.3%
38.3%	8,031	8,239	208	2.6%
39.5%	8,031	8,237	206	2.6%
40.7%	8,003	8,098	95	1.2%
42.0%	7,936	8,080	144	1.8%
43.2%	7,924	8,070	147	1.9%
44.4%	7,891	7,970	79	1.0%
45.7%	7,857	7,918	62	0.8%
46.9%	7,800	7,846	46	0.6%
48.1%	7,766	7,805	39	0.5%
49.4%	7,713	7,798	84	1.1%
50.6%	7,685	7,777	92	1.2%
51.9%	7,565	7,764	200	2.6%
53.1%	7,361	7,760	399	5.4%
54.3%	7,344	7,741	397	5.4%
55.6%	7,334	7,736	402	5.5%
56.8%	7,281	7,685	404	5.6%
58.0%	7,273	7,545	272	3.7%
59.3%	7,145	7,513	368	5.1%
60.5%	7,023	7,470	447	6.4%
61.7%	7,008	7,289	281	4.0%
63.0%	6,756	7,198	442	6.5%
64.2%	6,661	7,146	485	7.3%
65.4%	6,529	7,087	558	8.5%
66.7%	6,507	6,988	480	7.4%
67.9%	6,495	6,892	397	6.1%
69.1%	6,405	6,659	253	4.0%
70.4%	6,377	6,651	274	4.3%
71.6%	6,281	6,596	315	5.0%
72.8%	6,263	6,577	315	5.0%
74.1%	6,222	6,573	351	5.6%
75.3%	6,172	6,556	384	6.2%
76.5%	6,167	6,538	371	6.0%
77.8%	6,094	6,479	385	6.3%
79.0%	6,077	6,288	211	3.5%
80.2%	6,053	6,119	66	1.1%
81.5%	6,010	5,983	-27	-0.4%
82.7%	5,938	5,823	-115	-1.9%
84.0%	5,862	5,822	-40	-0.7%
85.2%	5,844	5,775	-69	-1.2%
86.4%	5,766	5,770	4	0.1%
87.7%	5,689	5,744	55	1.0%
88.9%	5,430	5,741	311	5.7%
90.1%	5,306	5,516	209	3.9%
91.4%	5,077	5,466	389	7.7%
92.6%	4,950	5,462	511	10.3%
93.8%	4,930	5,306	376	7.6%
95.1%	4,889	5,020	131	2.7%
96.3%	4,849	4,935	86	1.8%
97.5%	2,657	4,563	1,906	71.8%
98.8%	2,091	2,721	630	30.1%
100.0%	2,091	2,091	0	0.0%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,366	8,366	0	0.0%
11.1%	8,273	8,318	45	0.5%
12.3%	8,240	8,276	35	0.4%
13.6%	8,191	8,209	18	0.2%
14.8%	8,154	8,202	48	0.6%
16.0%	8,090	8,191	102	1.3%
17.3%	7,967	8,147	179	2.3%
18.5%	7,909	8,062	153	1.9%
19.8%	7,887	8,061	174	2.2%
21.0%	7,829	8,027	199	2.5%
22.2%	7,822	8,011	189	2.4%
23.5%	7,819	7,982	163	2.1%
24.7%	7,749	7,979	230	3.0%
25.9%	7,747	7,969	222	2.9%
27.2%	7,693	7,939	246	3.2%
28.4%	7,665	7,907	242	3.2%
29.6%	7,636	7,877	240	3.1%
30.9%	7,598	7,856	258	3.4%
32.1%	7,586	7,788	201	2.7%
33.3%	7,573	7,695	122	1.6%
34.6%	7,526	7,683	157	2.1%
35.8%	7,523	7,666	144	1.9%
37.0%	7,516	7,660	143	1.9%
38.3%	7,510	7,650	140	1.9%
39.5%	7,428	7,569	142	1.9%
40.7%	7,422	7,562	139	1.9%
42.0%	7,385	7,552	168	2.3%
43.2%	7,385	7,541	156	2.1%
44.4%	7,344	7,530	186	2.5%
45.7%	7,318	7,510	192	2.6%
46.9%	7,298	7,474	177	2.4%
48.1%	7,291	7,438	148	2.0%
49.4%	7,283	7,407	124	1.7%
50.6%	7,253	7,406	153	2.1%
51.9%	7,242	7,361	119	1.6%
53.1%	7,228	7,356	128	1.8%
54.3%	7,225	7,354	130	1.8%
55.6%	7,206	7,321	115	1.6%
56.8%	7,163	7,316	153	2.1%
58.0%	7,138	7,310	172	2.4%
59.3%	7,134	7,298	164	2.3%
60.5%	7,132	7,266	134	1.9%
61.7%	7,094	7,258	164	2.3%
63.0%	7,043	7,251	208	3.0%
64.2%	7,037	7,190	153	2.2%
65.4%	6,928	7,188	260	3.8%
66.7%	6,924	7,090	165	2.4%
67.9%	6,775	7,056	281	4.1%
69.1%	6,755	7,051	296	4.4%
70.4%	6,746	7,009	263	3.9%
71.6%	6,625	6,918	293	4.4%
72.8%	6,617	6,898	281	4.2%
74.1%	6,542	6,812	270	4.1%
75.3%	6,496	6,792	296	4.5%
76.5%	6,456	6,765	309	4.8%
77.8%	6,225	6,319	94	1.5%
79.0%	6,198	6,308	110	1.8%
80.2%	6,166	6,174	9	0.1%
81.5%	6,029	6,109	80	1.3%
82.7%	6,016	5,961	-55	-0.9%
84.0%	6,012	5,812	-200	-3.3%
85.2%	5,696	5,794	98	1.7%
86.4%	5,626	5,720	95	1.7%
87.7%	5,402	5,646	244	4.5%
88.9%	5,356	5,518	162	3.0%
90.1%	5,329	5,455	126	2.4%
91.4%	5,315	5,435	120	2.3%
92.6%	5,238	5,349	111	2.1%
93.8%	5,077	5,329	251	4.9%
95.1%	5,018	5,266	248	4.9%
96.3%	4,986	4,910	-77	-1.5%
97.5%	3,833	3,955	122	3.2%
98.8%	2,094	3,812	1,718	82.0%
100.0%	2,091	2,094	3	0.2%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,385	8,385	0	0.0%
19.8%	8,385	8,385	0	0.0%
21.0%	8,385	8,385	0	0.0%
22.2%	8,385	8,385	0	0.0%
23.5%	8,366	8,385	18	0.2%
24.7%	8,351	8,385	34	0.4%
25.9%	8,350	8,385	35	0.4%
27.2%	8,315	8,366	51	0.6%
28.4%	8,304	8,363	59	0.7%
29.6%	8,299	8,315	16	0.2%
30.9%	8,167	8,261	94	1.1%
32.1%	8,145	8,193	48	0.6%
33.3%	8,135	8,165	29	0.4%
34.6%	8,074	8,137	62	0.8%
35.8%	7,989	8,076	87	1.1%
37.0%	7,950	7,989	38	0.5%
38.3%	7,878	7,977	99	1.3%
39.5%	7,805	7,943	137	1.8%
40.7%	7,777	7,878	101	1.3%
42.0%	7,777	7,851	74	1.0%
43.2%	7,733	7,820	87	1.1%
44.4%	7,681	7,746	65	0.8%
45.7%	7,582	7,733	151	2.0%
46.9%	7,543	7,706	163	2.2%
48.1%	7,534	7,683	149	2.0%
49.4%	7,414	7,587	173	2.3%
50.6%	7,393	7,511	118	1.6%
51.9%	7,379	7,509	130	1.8%
53.1%	7,336	7,457	121	1.6%
54.3%	7,260	7,451	191	2.6%
55.6%	7,190	7,431	240	3.3%
56.8%	7,150	7,427	277	3.9%
58.0%	7,117	7,386	270	3.8%
59.3%	7,111	7,347	236	3.3%
60.5%	7,108	7,309	201	2.8%
61.7%	7,106	7,304	198	2.8%
63.0%	7,104	7,150	46	0.6%
64.2%	7,057	7,112	54	0.8%
65.4%	7,018	7,111	93	1.3%
66.7%	7,013	7,105	92	1.3%
67.9%	6,965	7,104	140	2.0%
69.1%	6,901	7,096	195	2.8%
70.4%	6,855	7,078	223	3.3%
71.6%	6,830	7,066	236	3.5%
72.8%	6,760	7,053	293	4.3%
74.1%	6,750	6,904	154	2.3%
75.3%	6,738	6,901	164	2.4%
76.5%	6,698	6,815	118	1.8%
77.8%	6,670	6,754	84	1.3%
79.0%	6,648	6,577	-71	-1.1%
80.2%	6,490	6,490	0	0.0%
81.5%	6,489	6,458	-31	-0.5%
82.7%	6,300	6,322	22	0.4%
84.0%	6,263	6,288	24	0.4%
85.2%	6,253	6,162	-91	-1.4%
86.4%	6,179	6,155	-24	-0.4%
87.7%	5,888	6,142	254	4.3%
88.9%	5,697	6,134	438	7.7%
90.1%	5,521	5,734	214	3.9%
91.4%	5,497	5,621	125	2.3%
92.6%	5,482	5,500	18	0.3%
93.8%	5,465	5,442	-23	-0.4%
95.1%	4,723	4,852	129	2.7%
96.3%	4,696	4,788	92	2.0%
97.5%	4,442	4,764	322	7.3%
98.8%	4,096	4,422	326	8.0%
100.0%	3,956	4,096	141	3.6%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,376	8,376	0	0.0%
19.8%	8,366	8,366	0	0.0%
21.0%	8,357	8,357	0	0.0%
22.2%	8,357	8,357	0	0.0%
23.5%	8,348	8,357	9	0.1%
24.7%	8,339	8,348	9	0.1%
25.9%	8,339	8,339	0	0.0%
27.2%	8,320	8,326	5	0.1%
28.4%	8,311	8,320	9	0.1%
29.6%	8,293	8,311	18	0.2%
30.9%	8,283	8,293	9	0.1%
32.1%	8,283	8,283	0	0.0%
33.3%	8,237	8,283	46	0.6%
34.6%	8,191	8,268	77	0.9%
35.8%	8,173	8,237	64	0.8%
37.0%	8,164	8,191	28	0.3%
38.3%	8,158	8,173	15	0.2%
39.5%	8,130	8,164	33	0.4%
40.7%	8,118	8,130	13	0.2%
42.0%	8,077	8,077	0	0.0%
43.2%	8,003	8,048	45	0.6%
44.4%	7,939	7,908	-31	-0.4%
45.7%	7,816	7,906	90	1.2%
46.9%	7,814	7,886	72	0.9%
48.1%	7,791	7,856	65	0.8%
49.4%	7,689	7,816	127	1.7%
50.6%	7,646	7,814	168	2.2%
51.9%	7,627	7,689	62	0.8%
53.1%	7,592	7,604	12	0.2%
54.3%	7,556	7,592	36	0.5%
55.6%	7,546	7,495	-50	-0.7%
56.8%	7,501	7,492	-9	-0.1%
58.0%	7,434	7,467	33	0.4%
59.3%	7,399	7,444	45	0.6%
60.5%	7,395	7,409	13	0.2%
61.7%	7,390	7,399	9	0.1%
63.0%	7,385	7,390	4	0.1%
64.2%	7,335	7,380	45	0.6%
65.4%	7,334	7,374	40	0.5%
66.7%	7,284	7,350	66	0.9%
67.9%	7,264	7,334	70	1.0%
69.1%	7,252	7,325	73	1.0%
70.4%	7,161	7,304	143	2.0%
71.6%	7,095	7,202	107	1.5%
72.8%	7,077	7,174	98	1.4%
74.1%	7,033	7,174	141	2.0%
75.3%	6,975	7,097	122	1.8%
76.5%	6,934	7,095	161	2.3%
77.8%	6,891	7,077	185	2.7%
79.0%	6,768	7,058	290	4.3%
80.2%	6,693	6,824	131	2.0%
81.5%	6,670	6,730	60	0.9%
82.7%	6,548	6,728	180	2.7%
84.0%	6,531	6,696	164	2.5%
85.2%	6,526	6,693	167	2.6%
86.4%	6,438	6,684	246	3.8%
87.7%	6,180	6,526	347	5.6%
88.9%	6,091	6,219	127	2.1%
90.1%	5,896	6,096	200	3.4%
91.4%	5,813	5,912	100	1.7%
92.6%	5,657	5,835	178	3.1%
93.8%	5,510	5,606	96	1.7%
95.1%	5,371	5,543	172	3.2%
96.3%	5,006	5,300	295	5.9%
97.5%	4,987	4,705	-282	-5.6%
98.8%	4,530	4,616	86	1.9%
100.0%	4,439	4,506	67	1.5%

Table SW-26-b

Folsom Lake, End of Month Area

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,376	8,385	9	0.1%
18.5%	8,376	8,376	0	0.0%
19.8%	8,371	8,376	5	0.1%
21.0%	8,366	8,373	7	0.1%
22.2%	8,366	8,371	5	0.1%
23.5%	8,348	8,366	18	0.2%
24.7%	8,339	8,348	9	0.1%
25.9%	8,320	8,339	18	0.2%
27.2%	8,315	8,320	5	0.1%
28.4%	8,314	8,315	1	0.0%
29.6%	8,302	8,314	12	0.1%
30.9%	8,302	8,302	0	0.0%
32.1%	8,302	8,302	0	0.0%
33.3%	8,302	8,302	0	0.0%
34.6%	8,293	8,302	9	0.1%
35.8%	8,293	8,293	0	0.0%
37.0%	8,289	8,293	4	0.0%
38.3%	8,283	8,283	0	0.0%
39.5%	8,274	8,274	0	0.0%
40.7%	8,274	8,274	0	0.0%
42.0%	8,256	8,256	-1	0.0%
43.2%	8,256	8,256	0	0.0%
44.4%	8,256	8,249	-7	-0.1%
45.7%	8,247	8,247	0	0.0%
46.9%	8,237	8,237	0	0.0%
48.1%	8,201	8,201	0	0.0%
49.4%	8,192	8,164	-28	-0.3%
50.6%	8,164	8,115	-48	-0.6%
51.9%	8,044	8,088	44	0.5%
53.1%	8,035	8,044	9	0.1%
54.3%	8,016	8,035	18	0.2%
55.6%	7,855	8,016	162	2.1%
56.8%	7,779	7,949	169	2.2%
58.0%	7,758	7,938	179	2.3%
59.3%	7,758	7,779	21	0.3%
60.5%	7,712	7,758	46	0.6%
61.7%	7,615	7,758	144	1.9%
63.0%	7,589	7,712	123	1.6%
64.2%	7,514	7,628	114	1.5%
65.4%	7,381	7,583	202	2.7%
66.7%	7,381	7,526	146	2.0%
67.9%	7,371	7,416	45	0.6%
69.1%	7,305	7,381	75	1.0%
70.4%	7,284	7,381	97	1.3%
71.6%	7,270	7,371	101	1.4%
72.8%	7,250	7,348	98	1.4%
74.1%	7,242	7,310	68	0.9%
75.3%	7,215	7,304	90	1.2%
76.5%	7,188	7,294	106	1.5%
77.8%	7,181	7,270	89	1.2%
79.0%	7,141	7,242	101	1.4%
80.2%	7,094	7,215	121	1.7%
81.5%	7,056	7,188	133	1.9%
82.7%	6,950	7,108	158	2.3%
84.0%	6,929	7,094	166	2.4%
85.2%	6,911	6,977	67	1.0%
86.4%	6,865	6,942	78	1.1%
87.7%	6,863	6,911	48	0.7%
88.9%	6,801	6,865	63	0.9%
90.1%	6,791	6,824	33	0.5%
91.4%	6,519	6,791	272	4.2%
92.6%	6,307	6,720	413	6.6%
93.8%	6,211	6,302	91	1.5%
95.1%	5,630	6,233	603	10.7%
96.3%	5,506	5,678	172	3.1%
97.5%	4,750	5,038	287	6.1%
98.8%	4,713	4,381	-332	-7.0%
100.0%	4,314	4,326	11	0.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,278	9,278	0	0.0%
1.2%	9,278	9,278	0	0.0%
2.5%	9,278	9,278	0	0.0%
3.7%	9,278	9,260	-18	-0.2%
4.9%	9,260	9,260	0	0.0%
6.2%	9,260	9,260	0	0.0%
7.4%	9,260	9,251	-9	-0.1%
8.6%	9,251	9,251	0	0.0%
9.9%	9,251	9,251	0	0.0%
11.1%	9,242	9,232	-9	-0.1%
12.3%	9,232	9,223	-9	-0.1%
13.6%	9,223	9,223	0	0.0%
14.8%	9,223	9,214	-9	-0.1%
16.0%	9,214	9,214	0	0.0%
17.3%	9,214	9,205	-9	-0.1%
18.5%	9,205	9,205	0	0.0%
19.8%	9,205	9,205	0	0.0%
21.0%	9,205	9,205	0	0.0%
22.2%	9,205	9,205	0	0.0%
23.5%	9,205	9,196	-9	-0.1%
24.7%	9,196	9,196	0	0.0%
25.9%	9,196	9,186	-9	-0.1%
27.2%	9,186	9,186	0	0.0%
28.4%	9,186	9,168	-18	-0.2%
29.6%	9,168	9,168	0	0.0%
30.9%	9,168	9,161	-7	-0.1%
32.1%	9,161	9,159	-2	0.0%
33.3%	9,159	9,149	-9	-0.1%
34.6%	9,149	9,140	-9	-0.1%
35.8%	9,140	9,138	-2	0.0%
37.0%	9,131	9,131	0	0.0%
38.3%	9,122	9,122	0	0.0%
39.5%	9,113	9,120	6	0.1%
40.7%	9,113	9,115	3	0.0%
42.0%	9,113	9,113	0	0.0%
43.2%	9,085	9,113	27	0.3%
44.4%	9,078	9,078	0	0.0%
45.7%	9,076	9,076	0	0.0%
46.9%	9,057	9,057	0	0.0%
48.1%	9,030	9,030	0	0.0%
49.4%	9,030	9,030	0	0.0%
50.6%	9,020	9,020	0	0.0%
51.9%	9,011	9,011	0	0.0%
53.1%	8,956	8,956	0	0.0%
54.3%	8,947	8,947	0	0.0%
55.6%	8,928	8,928	0	0.0%
56.8%	8,919	8,919	0	0.0%
58.0%	8,912	8,912	0	0.0%
59.3%	8,891	8,911	19	0.2%
60.5%	8,882	8,891	9	0.1%
61.7%	8,882	8,882	0	0.0%
63.0%	8,855	8,882	28	0.3%
64.2%	8,836	8,855	18	0.2%
65.4%	8,827	8,843	16	0.2%
66.7%	8,799	8,836	37	0.4%
67.9%	8,790	8,827	37	0.4%
69.1%	8,779	8,799	20	0.2%
70.4%	8,680	8,790	111	1.3%
71.6%	8,678	8,725	47	0.5%
72.8%	8,624	8,680	55	0.6%
74.1%	8,606	8,655	49	0.6%
75.3%	8,597	8,624	28	0.3%
76.5%	8,328	8,606	278	3.3%
77.8%	8,275	8,597	321	3.9%
79.0%	8,261	8,320	59	0.7%
80.2%	8,194	8,275	82	1.0%
81.5%	7,953	8,245	292	3.7%
82.7%	7,829	8,174	345	4.4%
84.0%	7,803	8,066	263	3.4%
85.2%	7,750	7,764	14	0.2%
86.4%	7,531	7,477	-54	-0.7%
87.7%	7,477	7,439	-37	-0.5%
88.9%	7,350	7,366	16	0.2%
90.1%	7,272	7,319	47	0.6%
91.4%	7,156	7,299	143	2.0%
92.6%	6,936	7,041	105	1.5%
93.8%	6,887	7,001	114	1.7%
95.1%	6,679	6,933	254	3.8%
96.3%	6,125	6,211	87	1.4%
97.5%	5,836	6,167	331	5.7%
98.8%	5,450	5,692	242	4.4%
100.0%	4,440	4,016	-424	-9.5%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,098	10,097	-1	0.0%
1.2%	10,084	10,084	0	0.0%
2.5%	10,084	10,084	0	0.0%
3.7%	10,084	10,084	0	0.0%
4.9%	10,084	10,084	0	0.0%
6.2%	10,084	10,084	0	0.0%
7.4%	10,084	10,084	0	0.0%
8.6%	10,084	10,084	0	0.0%
9.9%	10,084	10,084	0	0.0%
11.1%	10,084	10,084	0	0.0%
12.3%	10,084	10,084	0	0.0%
13.6%	10,084	10,084	0	0.0%
14.8%	10,084	10,084	0	0.0%
16.0%	10,084	10,084	0	0.0%
17.3%	10,084	10,084	0	0.0%
18.5%	10,084	10,084	0	0.0%
19.8%	10,084	10,084	0	0.0%
21.0%	10,084	10,084	0	0.0%
22.2%	10,084	10,084	0	0.0%
23.5%	10,084	10,084	0	0.0%
24.7%	10,084	10,084	0	0.0%
25.9%	10,084	10,084	0	0.0%
27.2%	10,084	10,084	0	0.0%
28.4%	10,084	10,084	0	0.0%
29.6%	10,084	10,084	0	0.0%
30.9%	10,084	10,084	0	0.0%
32.1%	10,084	10,084	0	0.0%
33.3%	10,084	10,084	0	0.0%
34.6%	10,084	10,084	0	0.0%
35.8%	10,084	10,084	0	0.0%
37.0%	10,084	10,084	0	0.0%
38.3%	10,084	10,084	0	0.0%
39.5%	10,084	10,084	0	0.0%
40.7%	10,084	10,084	0	0.0%
42.0%	10,084	10,084	0	0.0%
43.2%	10,084	10,084	0	0.0%
44.4%	10,084	10,084	0	0.0%
45.7%	10,084	10,084	0	0.0%
46.9%	10,084	10,084	0	0.0%
48.1%	10,084	10,084	0	0.0%
49.4%	10,084	10,084	0	0.0%
50.6%	10,084	10,084	0	0.0%
51.9%	10,084	10,084	0	0.0%
53.1%	10,084	10,084	0	0.0%
54.3%	10,084	10,084	0	0.0%
55.6%	10,084	10,084	0	0.0%
56.8%	10,084	10,084	0	0.0%
58.0%	10,084	10,084	0	0.0%
59.3%	10,084	10,084	0	0.0%
60.5%	10,084	10,084	0	0.0%
61.7%	10,074	10,074	0	0.0%
63.0%	10,069	10,069	0	0.0%
64.2%	10,054	10,055	1	0.0%
65.4%	10,046	10,046	0	0.0%
66.7%	10,002	10,002	0	0.0%
67.9%	9,882	9,931	49	0.5%
69.1%	9,823	9,882	59	0.6%
70.4%	9,772	9,823	51	0.5%
71.6%	9,743	9,743	0	0.0%
72.8%	9,646	9,702	56	0.6%
74.1%	9,625	9,647	22	0.2%
75.3%	9,503	9,593	91	1.0%
76.5%	9,208	9,502	294	3.2%
77.8%	9,168	9,434	266	2.9%
79.0%	9,075	9,393	319	3.5%
80.2%	9,056	9,177	122	1.3%
81.5%	8,992	9,046	54	0.6%
82.7%	8,903	9,038	134	1.5%
84.0%	8,792	8,903	111	1.3%
85.2%	8,551	8,871	320	3.7%
86.4%	8,458	8,485	26	0.3%
87.7%	7,979	7,882	-97	-1.2%
88.9%	7,849	7,862	13	0.2%
90.1%	7,584	7,591	7	0.1%
91.4%	7,486	7,581	94	1.3%
92.6%	7,442	7,549	107	1.4%
93.8%	7,354	7,407	53	0.7%
95.1%	7,093	7,400	308	4.3%
96.3%	7,084	7,126	42	0.6%
97.5%	6,552	6,906	354	5.4%
98.8%	5,802	6,043	241	4.2%
100.0%	4,066	3,483	-582	-14.3%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,124	11,124	0	0.0%
1.2%	11,124	11,124	0	0.0%
2.5%	11,124	11,124	0	0.0%
3.7%	11,124	11,124	0	0.0%
4.9%	11,124	11,124	0	0.0%
6.2%	11,124	11,124	0	0.0%
7.4%	11,124	11,124	0	0.0%
8.6%	11,124	11,124	0	0.0%
9.9%	11,124	11,124	0	0.0%
11.1%	11,124	11,124	0	0.0%
12.3%	11,124	11,124	0	0.0%
13.6%	11,124	11,124	0	0.0%
14.8%	11,124	11,124	0	0.0%
16.0%	11,124	11,124	0	0.0%
17.3%	11,124	11,124	0	0.0%
18.5%	11,124	11,124	0	0.0%
19.8%	11,124	11,124	0	0.0%
21.0%	11,124	11,124	0	0.0%
22.2%	11,124	11,124	0	0.0%
23.5%	11,124	11,124	0	0.0%
24.7%	11,124	11,124	0	0.0%
25.9%	11,124	11,124	0	0.0%
27.2%	11,124	11,124	0	0.0%
28.4%	11,124	11,124	0	0.0%
29.6%	11,124	11,124	0	0.0%
30.9%	11,124	11,124	0	0.0%
32.1%	11,124	11,124	0	0.0%
33.3%	11,124	11,124	0	0.0%
34.6%	11,124	11,124	0	0.0%
35.8%	11,124	11,124	0	0.0%
37.0%	11,124	11,124	0	0.0%
38.3%	11,124	11,124	0	0.0%
39.5%	11,124	11,124	0	0.0%
40.7%	11,124	11,124	0	0.0%
42.0%	11,124	11,124	0	0.0%
43.2%	11,124	11,124	0	0.0%
44.4%	11,124	11,124	0	0.0%
45.7%	11,124	11,124	0	0.0%
46.9%	11,124	11,124	0	0.0%
48.1%	11,124	11,124	0	0.0%
49.4%	11,124	11,124	0	0.0%
50.6%	11,124	11,124	0	0.0%
51.9%	11,124	11,124	0	0.0%
53.1%	11,118	11,118	0	0.0%
54.3%	11,055	11,055	0	0.0%
55.6%	11,019	11,014	-5	0.0%
56.8%	10,968	10,968	0	0.0%
58.0%	10,833	10,833	0	0.0%
59.3%	10,783	10,822	38	0.4%
60.5%	10,775	10,780	5	0.0%
61.7%	10,551	10,663	111	1.1%
63.0%	10,437	10,551	115	1.1%
64.2%	10,327	10,437	110	1.1%
65.4%	10,318	10,328	10	0.1%
66.7%	10,298	10,240	-58	-0.6%
67.9%	10,241	10,238	-4	0.0%
69.1%	10,084	10,155	71	0.7%
70.4%	10,051	10,138	87	0.9%
71.6%	10,032	10,083	51	0.5%
72.8%	9,895	9,994	99	1.0%
74.1%	9,850	9,937	86	0.9%
75.3%	9,783	9,783	0	0.0%
76.5%	9,764	9,701	-64	-0.7%
77.8%	9,583	9,583	0	0.0%
79.0%	9,417	9,508	90	1.0%
80.2%	9,345	9,498	153	1.6%
81.5%	9,309	9,493	184	2.0%
82.7%	9,075	9,086	11	0.1%
84.0%	8,914	9,061	147	1.7%
85.2%	8,434	8,946	512	6.1%
86.4%	8,311	8,341	30	0.4%
87.7%	8,160	8,306	145	1.8%
88.9%	8,059	8,028	-31	-0.4%
90.1%	7,993	8,026	34	0.4%
91.4%	7,883	7,868	-15	-0.2%
92.6%	7,807	7,841	34	0.4%
93.8%	7,690	7,754	65	0.8%
95.1%	7,674	7,661	-12	-0.2%
96.3%	7,576	7,622	46	0.6%
97.5%	7,350	7,361	11	0.1%
98.8%	6,067	6,308	242	4.0%
100.0%	3,995	3,181	-814	-20.4%

Table SW-26-b

Folsom Lake, End of Month Area

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,124	11,124	0	0.0%
1.2%	11,124	11,124	0	0.0%
2.5%	11,124	11,124	0	0.0%
3.7%	11,124	11,124	0	0.0%
4.9%	11,124	11,124	0	0.0%
6.2%	11,124	11,124	0	0.0%
7.4%	11,124	11,124	0	0.0%
8.6%	11,124	11,124	0	0.0%
9.9%	11,124	11,124	0	0.0%
11.1%	11,124	11,124	0	0.0%
12.3%	11,124	11,124	0	0.0%
13.6%	11,124	11,124	0	0.0%
14.8%	11,124	11,124	0	0.0%
16.0%	11,124	11,124	0	0.0%
17.3%	11,124	11,124	0	0.0%
18.5%	11,124	11,124	0	0.0%
19.8%	11,124	11,124	0	0.0%
21.0%	11,124	11,124	0	0.0%
22.2%	11,124	11,124	0	0.0%
23.5%	11,124	11,124	0	0.0%
24.7%	11,124	11,124	0	0.0%
25.9%	11,124	11,124	0	0.0%
27.2%	11,124	11,124	0	0.0%
28.4%	11,124	11,124	0	0.0%
29.6%	11,124	11,124	0	0.0%
30.9%	11,124	11,124	0	0.0%
32.1%	11,124	11,124	0	0.0%
33.3%	11,124	11,124	0	0.0%
34.6%	11,124	11,124	0	0.0%
35.8%	11,124	11,124	0	0.0%
37.0%	11,124	11,124	0	0.0%
38.3%	11,124	11,124	0	0.0%
39.5%	11,124	11,124	0	0.0%
40.7%	11,124	11,114	-10	-0.1%
42.0%	11,114	11,092	-22	-0.2%
43.2%	11,092	11,077	-15	-0.1%
44.4%	11,046	11,046	0	0.0%
45.7%	11,023	11,021	-2	0.0%
46.9%	11,001	10,995	-7	-0.1%
48.1%	10,987	10,943	-44	-0.4%
49.4%	10,860	10,860	0	0.0%
50.6%	10,828	10,838	10	0.1%
51.9%	10,774	10,829	55	0.5%
53.1%	10,772	10,828	56	0.5%
54.3%	10,755	10,818	64	0.6%
55.6%	10,684	10,529	-156	-1.5%
56.8%	10,599	10,471	-129	-1.2%
58.0%	10,535	10,460	-75	-0.7%
59.3%	10,396	10,299	-97	-0.9%
60.5%	10,206	10,157	-48	-0.5%
61.7%	10,157	10,119	-38	-0.4%
63.0%	10,119	9,911	-208	-2.1%
64.2%	9,974	9,820	-154	-1.5%
65.4%	9,936	9,798	-139	-1.4%
66.7%	9,663	9,736	73	0.8%
67.9%	9,641	9,696	55	0.6%
69.1%	9,615	9,687	72	0.7%
70.4%	9,483	9,603	120	1.3%
71.6%	9,479	9,447	-32	-0.3%
72.8%	9,442	9,327	-115	-1.2%
74.1%	9,422	9,305	-117	-1.2%
75.3%	9,236	9,199	-37	-0.4%
76.5%	9,060	9,125	65	0.7%
77.8%	8,862	9,034	172	1.9%
79.0%	8,861	8,795	-66	-0.7%
80.2%	8,593	8,740	147	1.7%
81.5%	8,508	8,731	223	2.6%
82.7%	8,489	8,562	73	0.9%
84.0%	8,222	8,417	195	2.4%
85.2%	7,943	7,950	7	0.1%
86.4%	7,788	7,748	-39	-0.5%
87.7%	7,645	7,747	102	1.3%
88.9%	7,494	7,691	197	2.6%
90.1%	7,480	7,685	205	2.7%
91.4%	7,406	7,655	249	3.4%
92.6%	7,404	7,484	81	1.1%
93.8%	7,400	7,387	-13	-0.2%
95.1%	7,384	7,322	-62	-0.8%
96.3%	7,146	7,048	-98	-1.4%
97.5%	6,200	6,477	277	4.5%
98.8%	6,143	6,326	183	3.0%
100.0%	3,461	2,623	-838	-24.2%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,975	10,975	0	0.0%
1.2%	10,975	10,975	0	0.0%
2.5%	10,975	10,975	0	0.0%
3.7%	10,975	10,975	0	0.0%
4.9%	10,975	10,975	0	0.0%
6.2%	10,975	10,975	0	0.0%
7.4%	10,975	10,975	0	0.0%
8.6%	10,975	10,975	0	0.0%
9.9%	10,975	10,975	0	0.0%
11.1%	10,975	10,975	0	0.0%
12.3%	10,975	10,975	0	0.0%
13.6%	10,975	10,975	0	0.0%
14.8%	10,975	10,975	0	0.0%
16.0%	10,975	10,975	0	0.0%
17.3%	10,975	10,975	0	0.0%
18.5%	10,857	10,965	108	1.0%
19.8%	10,708	10,806	97	0.9%
21.0%	10,693	10,805	112	1.0%
22.2%	10,597	10,740	143	1.3%
23.5%	10,550	10,682	132	1.3%
24.7%	10,439	10,652	212	2.0%
25.9%	10,431	10,633	201	1.9%
27.2%	10,390	10,537	147	1.4%
28.4%	10,316	10,481	164	1.6%
29.6%	10,070	10,418	348	3.5%
30.9%	10,055	10,401	347	3.4%
32.1%	10,020	10,370	350	3.5%
33.3%	9,999	10,211	212	2.1%
34.6%	9,991	10,202	212	2.1%
35.8%	9,982	10,087	105	1.1%
37.0%	9,851	10,077	227	2.3%
38.3%	9,810	9,999	189	1.9%
39.5%	9,806	9,977	171	1.7%
40.7%	9,754	9,928	174	1.8%
42.0%	9,714	9,853	139	1.4%
43.2%	9,672	9,786	114	1.2%
44.4%	9,654	9,741	87	0.9%
45.7%	9,628	9,733	104	1.1%
46.9%	9,584	9,715	131	1.4%
48.1%	9,550	9,702	152	1.6%
49.4%	9,469	9,683	214	2.3%
50.6%	9,347	9,667	320	3.4%
51.9%	9,331	9,654	323	3.5%
53.1%	9,289	9,654	365	3.9%
54.3%	9,265	9,637	372	4.0%
55.6%	9,136	9,265	129	1.4%
56.8%	9,033	9,189	157	1.7%
58.0%	8,979	9,136	156	1.7%
59.3%	8,861	8,976	115	1.3%
60.5%	8,468	8,842	374	4.4%
61.7%	8,366	8,783	417	5.0%
63.0%	8,135	8,646	511	6.3%
64.2%	8,013	8,615	602	7.5%
65.4%	7,911	8,406	495	6.3%
66.7%	7,886	8,277	392	5.0%
67.9%	7,879	8,263	384	4.9%
69.1%	7,847	8,249	401	5.1%
70.4%	7,769	8,227	458	5.9%
71.6%	7,726	8,030	304	3.9%
72.8%	7,554	7,907	353	4.7%
74.1%	7,476	7,891	415	5.6%
75.3%	7,444	7,876	431	5.8%
76.5%	7,430	7,845	415	5.6%
77.8%	7,420	7,630	210	2.8%
79.0%	7,419	7,618	199	2.7%
80.2%	7,111	7,609	498	7.0%
81.5%	6,987	7,573	586	8.4%
82.7%	6,932	7,542	610	8.8%
84.0%	6,853	7,131	278	4.1%
85.2%	6,834	6,937	103	1.5%
86.4%	6,778	6,934	156	2.3%
87.7%	6,727	6,897	170	2.5%
88.9%	6,606	6,820	214	3.2%
90.1%	6,353	6,720	367	5.8%
91.4%	6,086	6,703	617	10.1%
92.6%	5,974	6,693	719	12.0%
93.8%	5,767	6,474	707	12.3%
95.1%	5,717	6,410	692	12.1%
96.3%	5,692	6,326	634	11.1%
97.5%	5,446	5,999	553	10.2%
98.8%	2,798	5,697	2,899	103.6%
100.0%	2,546	2,091	-455	-17.9%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,099	10,084	-15	-0.1%
1.2%	10,084	10,084	0	0.0%
2.5%	10,084	10,084	0	0.0%
3.7%	10,084	10,084	0	0.0%
4.9%	10,084	10,084	0	0.0%
6.2%	10,084	10,084	0	0.0%
7.4%	10,084	10,084	0	0.0%
8.6%	10,084	10,084	0	0.0%
9.9%	10,084	10,084	0	0.0%
11.1%	10,084	10,084	0	0.0%
12.3%	10,084	10,084	0	0.0%
13.6%	10,084	10,084	0	0.0%
14.8%	10,084	10,084	0	0.0%
16.0%	10,084	10,084	0	0.0%
17.3%	10,084	10,084	0	0.0%
18.5%	10,084	10,084	0	0.0%
19.8%	10,084	10,084	0	0.0%
21.0%	10,084	10,084	0	0.0%
22.2%	10,084	10,084	0	0.0%
23.5%	10,084	10,084	0	0.0%
24.7%	10,084	10,084	0	0.0%
25.9%	10,084	10,084	0	0.0%
27.2%	10,079	10,084	6	0.1%
28.4%	9,927	10,071	144	1.4%
29.6%	9,809	10,055	246	2.5%
30.9%	9,786	10,022	236	2.4%
32.1%	9,777	9,879	102	1.0%
33.3%	9,768	9,774	6	0.1%
34.6%	9,745	9,772	27	0.3%
35.8%	9,723	9,752	29	0.3%
37.0%	9,640	9,685	45	0.5%
38.3%	9,583	9,633	50	0.5%
39.5%	9,507	9,598	92	1.0%
40.7%	9,474	9,553	79	0.8%
42.0%	9,361	9,507	147	1.6%
43.2%	9,292	9,395	103	1.1%
44.4%	9,260	9,382	122	1.3%
45.7%	9,058	9,293	235	2.6%
46.9%	8,976	9,289	313	3.5%
48.1%	8,969	9,269	301	3.4%
49.4%	8,915	9,195	281	3.1%
50.6%	8,898	9,051	153	1.7%
51.9%	8,792	8,967	175	2.0%
53.1%	8,721	8,772	51	0.6%
54.3%	8,643	8,766	122	1.4%
55.6%	8,606	8,750	144	1.7%
56.8%	8,452	8,732	280	3.3%
58.0%	8,211	8,713	502	6.1%
59.3%	8,209	8,559	350	4.3%
60.5%	8,043	8,413	371	4.6%
61.7%	7,792	8,379	588	7.5%
63.0%	7,737	8,126	389	5.0%
64.2%	7,512	8,096	584	7.8%
65.4%	7,509	7,981	472	6.3%
66.7%	7,321	7,854	533	7.3%
67.9%	7,314	7,673	359	4.9%
69.1%	7,305	7,637	332	4.5%
70.4%	7,181	7,491	311	4.3%
71.6%	7,003	7,471	468	6.7%
72.8%	6,959	7,450	490	7.0%
74.1%	6,948	7,422	474	6.8%
75.3%	6,933	7,351	418	6.0%
76.5%	6,924	7,273	349	5.0%
77.8%	6,886	7,204	318	4.6%
79.0%	6,861	7,173	311	4.5%
80.2%	6,718	7,000	282	4.2%
81.5%	6,603	6,976	372	5.6%
82.7%	6,525	6,834	309	4.7%
84.0%	6,348	6,473	125	2.0%
85.2%	6,214	6,425	211	3.4%
86.4%	6,078	6,246	168	2.8%
87.7%	6,040	6,203	163	2.7%
88.9%	6,039	6,187	148	2.5%
90.1%	5,784	6,074	290	5.0%
91.4%	5,752	6,026	274	4.8%
92.6%	5,713	5,950	237	4.1%
93.8%	5,141	5,934	794	15.4%
95.1%	5,080	5,681	600	11.8%
96.3%	5,042	5,622	581	11.5%
97.5%	4,909	5,488	579	11.8%
98.8%	2,091	4,939	2,848	136.2%
100.0%	2,091	2,091	0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project End of Month Area (ACRE)	DCR 2015 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,847	9,847	0	0.0%
1.2%	9,847	9,847	0	0.0%
2.5%	9,847	9,847	0	0.0%
3.7%	9,847	9,847	0	0.0%
4.9%	9,847	9,847	0	0.0%
6.2%	9,666	9,839	173	1.8%
7.4%	9,634	9,838	203	2.1%
8.6%	9,624	9,832	208	2.2%
9.9%	9,584	9,793	209	2.2%
11.1%	9,573	9,748	175	1.8%
12.3%	9,458	9,635	177	1.9%
13.6%	9,411	9,588	177	1.9%
14.8%	9,410	9,557	147	1.6%
16.0%	9,391	9,547	156	1.7%
17.3%	9,223	9,489	266	2.9%
18.5%	9,049	9,476	427	4.7%
19.8%	9,007	9,366	359	4.0%
21.0%	8,977	9,292	315	3.5%
22.2%	8,961	9,149	188	2.1%
23.5%	8,851	9,131	280	3.2%
24.7%	8,850	9,064	213	2.4%
25.9%	8,836	9,020	184	2.1%
27.2%	8,830	9,018	188	2.1%
28.4%	8,742	8,985	243	2.8%
29.6%	8,739	8,978	239	2.7%
30.9%	8,652	8,940	287	3.3%
32.1%	8,621	8,780	159	1.8%
33.3%	8,615	8,769	154	1.8%
34.6%	8,615	8,729	114	1.3%
35.8%	8,615	8,706	91	1.1%
37.0%	8,615	8,691	76	0.9%
38.3%	8,600	8,668	68	0.8%
39.5%	8,555	8,635	80	0.9%
40.7%	8,536	8,615	79	0.9%
42.0%	8,531	8,615	84	1.0%
43.2%	8,392	8,576	185	2.2%
44.4%	8,344	8,576	232	2.8%
45.7%	8,286	8,564	278	3.4%
46.9%	8,280	8,551	271	3.3%
48.1%	8,230	8,549	319	3.9%
49.4%	8,217	8,390	173	2.1%
50.6%	8,143	8,308	164	2.0%
51.9%	7,911	8,292	381	4.8%
53.1%	7,900	8,126	226	2.9%
54.3%	7,872	8,088	216	2.7%
55.6%	7,778	8,085	307	4.0%
56.8%	7,740	8,043	303	3.9%
58.0%	7,615	8,042	428	5.6%
59.3%	7,576	8,029	453	6.0%
60.5%	7,505	7,985	480	6.4%
61.7%	7,428	7,904	476	6.4%
63.0%	7,192	7,752	560	7.8%
64.2%	7,084	7,667	583	8.2%
65.4%	6,996	7,534	537	7.7%
66.7%	6,995	7,508	514	7.3%
67.9%	6,864	7,408	545	7.9%
69.1%	6,836	7,374	538	7.9%
70.4%	6,794	7,211	418	6.1%
71.6%	6,725	7,211	486	7.2%
72.8%	6,718	7,108	389	5.8%
74.1%	6,704	7,103	399	5.9%
75.3%	6,700	7,043	342	5.1%
76.5%	6,674	7,040	365	5.5%
77.8%	6,639	6,816	177	2.7%
79.0%	6,622	6,745	122	1.8%
80.2%	6,596	6,732	136	2.1%
81.5%	6,561	6,663	102	1.6%
82.7%	6,496	6,311	-184	-2.8%
84.0%	6,371	6,291	-80	-1.3%
85.2%	6,037	6,134	96	1.6%
86.4%	5,935	5,993	58	1.0%
87.7%	5,891	5,960	69	1.2%
88.9%	5,889	5,899	10	0.2%
90.1%	5,653	5,751	98	1.7%
91.4%	5,616	5,694	78	1.4%
92.6%	5,228	5,655	427	8.2%
93.8%	5,207	5,653	446	8.6%
95.1%	5,048	5,322	273	5.4%
96.3%	4,843	5,158	315	6.5%
97.5%	3,927	5,107	1,180	30.0%
98.8%	2,091	3,798	1,708	81.7%
100.0%	2,091	2,091	0	0.0%

Figure SW-27-b
American River below Nimbus Reservoir, Monthly Flow
Probability of Exceedance

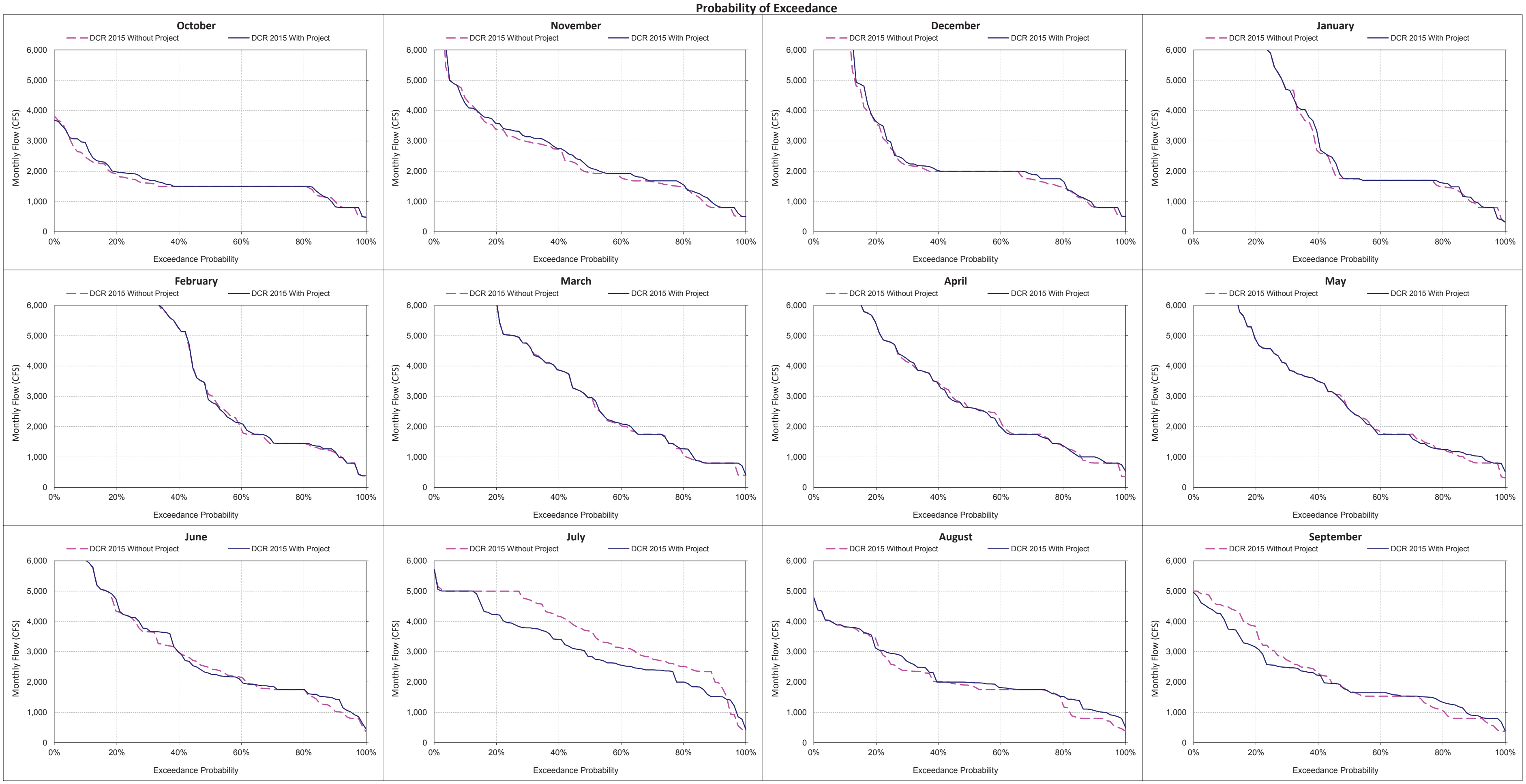


Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,815	3,686	-130	-3.4%
1.2%	3,679	3,639	-39	-1.1%
2.5%	3,613	3,495	-118	-3.3%
3.7%	3,355	3,362	7	0.2%
4.9%	3,069	3,104	35	1.1%
6.2%	2,802	3,069	267	9.5%
7.4%	2,645	3,065	420	15.9%
8.6%	2,626	2,964	338	12.9%
9.9%	2,477	2,948	471	19.0%
11.1%	2,380	2,656	276	11.6%
12.3%	2,302	2,449	146	6.4%
13.6%	2,291	2,354	63	2.8%
14.8%	2,248	2,313	65	2.9%
16.0%	2,245	2,302	57	2.6%
17.3%	2,027	2,186	159	7.9%
18.5%	1,948	2,012	64	3.3%
19.8%	1,925	1,979	54	2.8%
21.0%	1,815	1,952	138	7.6%
22.2%	1,804	1,948	144	8.0%
23.5%	1,771	1,929	158	8.9%
24.7%	1,742	1,926	184	10.5%
25.9%	1,725	1,911	186	10.8%
27.2%	1,651	1,860	210	12.7%
28.4%	1,617	1,760	144	8.9%
29.6%	1,612	1,734	121	7.5%
30.9%	1,597	1,691	94	5.9%
32.1%	1,583	1,688	105	6.6%
33.3%	1,505	1,647	142	9.4%
34.6%	1,500	1,621	121	8.0%
35.8%	1,500	1,574	74	4.9%
37.0%	1,500	1,567	67	4.5%
38.3%	1,500	1,500	0	0.0%
39.5%	1,500	1,500	0	0.0%
40.7%	1,500	1,500	0	0.0%
42.0%	1,500	1,500	0	0.0%
43.2%	1,500	1,500	0	0.0%
44.4%	1,500	1,500	0	0.0%
45.7%	1,500	1,500	0	0.0%
46.9%	1,500	1,500	0	0.0%
48.1%	1,500	1,500	0	0.0%
49.4%	1,500	1,500	0	0.0%
50.6%	1,500	1,500	0	0.0%
51.9%	1,500	1,500	0	0.0%
53.1%	1,500	1,500	0	0.0%
54.3%	1,500	1,500	0	0.0%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,500	1,500	0	0.0%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,500	1,500	0	0.0%
77.8%	1,500	1,500	0	0.0%
79.0%	1,500	1,500	0	0.0%
80.2%	1,489	1,500	11	0.7%
81.5%	1,460	1,500	40	2.7%
82.7%	1,392	1,478	86	6.2%
84.0%	1,203	1,348	145	12.0%
85.2%	1,177	1,256	79	6.7%
86.4%	1,153	1,168	14	1.2%
87.7%	1,123	1,128	4	0.4%
88.9%	1,122	993	-129	-11.5%
90.1%	994	830	-163	-16.4%
91.4%	861	800	-61	-7.1%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	500	800	300	60.0%
98.8%	500	500	0	0.0%
100.0%	479	482	3	0.7%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,982	16,555	1,573	10.5%
1.2%	13,902	13,902	0	0.0%
2.5%	7,727	7,727	0	0.0%
3.7%	5,457	6,181	724	13.3%
4.9%	5,000	5,000	0	0.0%
6.2%	4,905	4,905	0	0.0%
7.4%	4,831	4,828	-3	-0.1%
8.6%	4,753	4,508	-245	-5.2%
9.9%	4,424	4,252	-172	-3.9%
11.1%	4,264	4,091	-173	-4.0%
12.3%	4,162	4,079	-83	-2.0%
13.6%	4,016	4,012	-5	-0.1%
14.8%	3,819	3,887	69	1.8%
16.0%	3,651	3,788	136	3.7%
17.3%	3,554	3,771	217	6.1%
18.5%	3,547	3,726	179	5.0%
19.8%	3,386	3,578	191	5.7%
21.0%	3,378	3,570	191	5.7%
22.2%	3,361	3,414	53	1.6%
23.5%	3,153	3,377	224	7.1%
24.7%	3,152	3,359	207	6.6%
25.9%	3,119	3,326	207	6.6%
27.2%	3,043	3,319	275	9.0%
28.4%	3,021	3,177	157	5.2%
29.6%	2,982	3,139	157	5.3%
30.9%	2,958	3,136	178	6.0%
32.1%	2,915	3,087	172	5.9%
33.3%	2,908	3,086	178	6.1%
34.6%	2,887	3,066	179	6.2%
35.8%	2,846	2,997	151	5.3%
37.0%	2,838	2,934	96	3.4%
38.3%	2,741	2,830	90	3.3%
39.5%	2,730	2,749	20	0.7%
40.7%	2,694	2,743	48	1.8%
42.0%	2,352	2,664	312	13.3%
43.2%	2,340	2,563	223	9.5%
44.4%	2,303	2,528	225	9.8%
45.7%	2,253	2,412	159	7.1%
46.9%	2,078	2,373	296	14.2%
48.1%	1,989	2,265	276	13.9%
49.4%	1,968	2,147	179	9.1%
50.6%	1,947	2,087	140	7.2%
51.9%	1,925	2,063	138	7.2%
53.1%	1,925	2,003	78	4.1%
54.3%	1,925	1,957	32	1.7%
55.6%	1,925	1,925	0	0.0%
56.8%	1,925	1,925	0	0.0%
58.0%	1,925	1,925	0	0.0%
59.3%	1,841	1,925	84	4.6%
60.5%	1,759	1,925	166	9.5%
61.7%	1,727	1,925	198	11.4%
63.0%	1,689	1,925	236	14.0%
64.2%	1,683	1,847	164	9.7%
65.4%	1,683	1,813	130	7.7%
66.7%	1,683	1,804	121	7.2%
67.9%	1,683	1,737	54	3.2%
69.1%	1,664	1,683	19	1.2%
70.4%	1,649	1,683	34	2.1%
71.6%	1,616	1,683	67	4.2%
72.8%	1,599	1,683	85	5.3%
74.1%	1,555	1,683	128	8.2%
75.3%	1,554	1,683	129	8.3%
76.5%	1,521	1,683	162	10.6%
77.8%	1,511	1,683	172	11.4%
79.0%	1,489	1,610	121	8.1%
80.2%	1,460	1,538	78	5.3%
81.5%	1,392	1,353	-39	-2.8%
82.7%	1,266	1,348	83	6.5%
84.0%	1,203	1,295	91	7.6%
85.2%	1,123	1,256	133	11.8%
86.4%	994	1,168	174	17.5%
87.7%	861	1,128	266	30.9%
88.9%	800	993	193	24.2%
90.1%	800	895	95	11.8%
91.4%	800	830	30	3.8%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	530	800	270	51.0%
97.5%	500	612	112	22.3%
98.8%	500	500	0	0.0%
100.0%	500	500	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,250	20,444	1,193	6.2%
1.2%	16,514	16,514	0	0.0%
2.5%	16,064	16,330	266	1.7%
3.7%	15,873	15,873	0	0.0%
4.9%	13,816	13,811	-5	0.0%
6.2%	12,847	12,769	-78	-0.6%
7.4%	9,747	9,747	0	0.0%
8.6%	8,732	8,726	-6	-0.1%
9.9%	7,304	7,304	0	0.0%
11.1%	6,929	6,929	0	0.0%
12.3%	5,339	6,397	1,058	19.8%
13.6%	4,816	4,935	120	2.5%
14.8%	4,755	4,879	124	2.6%
16.0%	4,119	4,806	687	16.7%
17.3%	3,981	4,213	232	5.8%
18.5%	3,864	3,862	-2	-0.1%
19.8%	3,584	3,660	76	2.1%
21.0%	3,493	3,555	62	1.8%
22.2%	3,084	3,493	409	13.3%
23.5%	2,963	3,025	61	2.1%
24.7%	2,760	2,963	204	7.4%
25.9%	2,618	2,525	-93	-3.5%
27.2%	2,361	2,490	129	5.5%
28.4%	2,258	2,425	167	7.4%
29.6%	2,197	2,298	101	4.6%
30.9%	2,184	2,237	53	2.4%
32.1%	2,168	2,235	67	3.1%
33.3%	2,156	2,184	28	1.3%
34.6%	2,118	2,182	63	3.0%
35.8%	2,057	2,173	116	5.6%
37.0%	2,000	2,154	154	7.7%
38.3%	2,000	2,099	99	4.9%
39.5%	2,000	2,031	31	1.5%
40.7%	2,000	2,000	0	0.0%
42.0%	2,000	2,000	0	0.0%
43.2%	2,000	2,000	0	0.0%
44.4%	2,000	2,000	0	0.0%
45.7%	2,000	2,000	0	0.0%
46.9%	2,000	2,000	0	0.0%
48.1%	2,000	2,000	0	0.0%
49.4%	2,000	2,000	0	0.0%
50.6%	2,000	2,000	0	0.0%
51.9%	2,000	2,000	0	0.0%
53.1%	2,000	2,000	0	0.0%
54.3%	2,000	2,000	0	0.0%
55.6%	2,000	2,000	0	0.0%
56.8%	2,000	2,000	0	0.0%
58.0%	2,000	2,000	0	0.0%
59.3%	2,000	2,000	0	0.0%
60.5%	2,000	2,000	0	0.0%
61.7%	2,000	2,000	0	0.0%
63.0%	2,000	2,000	0	0.0%
64.2%	2,000	2,000	0	0.0%
65.4%	2,000	2,000	0	0.0%
66.7%	1,828	2,000	172	9.4%
67.9%	1,750	1,982	232	13.2%
69.1%	1,750	1,920	170	9.7%
70.4%	1,723	1,884	161	9.3%
71.6%	1,703	1,875	172	10.1%
72.8%	1,658	1,750	92	5.5%
74.1%	1,635	1,750	115	7.0%
75.3%	1,575	1,750	175	11.1%
76.5%	1,574	1,750	176	11.2%
77.8%	1,529	1,750	221	14.4%
79.0%	1,489	1,750	261	17.5%
80.2%	1,460	1,650	190	13.0%
81.5%	1,392	1,353	-39	-2.8%
82.7%	1,323	1,348	25	1.9%
84.0%	1,203	1,256	53	4.4%
85.2%	1,123	1,168	44	3.9%
86.4%	1,122	1,128	5	0.5%
87.7%	994	1,059	65	6.6%
88.9%	861	993	132	15.3%
90.1%	800	830	30	3.8%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	540	800	260	48.2%
98.8%	517	517	0	0.0%
100.0%	504	507	2	0.4%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,321	33,321	0	0.0%
1.2%	20,163	20,163	0	0.0%
2.5%	16,917	16,917	0	0.0%
3.7%	16,406	16,406	0	0.0%
4.9%	15,984	16,277	293	1.8%
6.2%	12,758	12,758	0	0.0%
7.4%	11,928	11,928	0	0.0%
8.6%	11,069	11,569	499	4.5%
9.9%	10,953	11,069	117	1.1%
11.1%	10,126	10,126	0	0.0%
12.3%	9,700	9,700	0	0.0%
13.6%	9,435	9,435	0	0.0%
14.8%	9,323	9,318	-5	-0.1%
16.0%	8,907	8,907	0	0.0%
17.3%	8,890	8,890	0	0.0%
18.5%	7,045	7,045	0	0.0%
19.8%	6,748	6,748	0	0.0%
21.0%	6,623	6,625	2	0.0%
22.2%	6,082	6,082	0	0.0%
23.5%	6,021	6,026	5	0.1%
24.7%	5,897	5,897	0	0.0%
25.9%	5,441	5,435	-6	-0.1%
27.2%	5,247	5,247	0	0.0%
28.4%	5,026	5,025	0	0.0%
29.6%	4,703	4,703	0	0.0%
30.9%	4,686	4,670	-17	-0.4%
32.1%	4,672	4,404	-268	-5.7%
33.3%	3,965	4,113	148	3.7%
34.6%	3,855	4,038	184	4.8%
35.8%	3,665	4,034	369	10.1%
37.0%	3,647	3,786	140	3.8%
38.3%	3,334	3,665	331	9.9%
39.5%	2,703	3,334	631	23.4%
40.7%	2,582	2,703	120	4.7%
42.0%	2,582	2,603	21	0.8%
43.2%	2,482	2,518	36	1.4%
44.4%	2,131	2,457	327	15.3%
45.7%	1,821	2,260	438	24.1%
46.9%	1,759	1,895	137	7.8%
48.1%	1,756	1,756	0	0.0%
49.4%	1,750	1,750	0	0.0%
50.6%	1,750	1,750	0	0.0%
51.9%	1,750	1,750	0	0.0%
53.1%	1,750	1,750	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,700	0	0.0%
75.3%	1,700	1,700	0	0.0%
76.5%	1,700	1,700	0	0.0%
77.8%	1,554	1,700	146	9.4%
79.0%	1,489	1,632	142	9.6%
80.2%	1,488	1,601	114	7.7%
81.5%	1,465	1,594	129	8.8%
82.7%	1,448	1,488	40	2.7%
84.0%	1,409	1,488	78	5.5%
85.2%	1,339	1,488	149	11.1%
86.4%	1,241	1,168	-73	-5.9%
87.7%	1,123	1,150	27	2.4%
88.9%	994	1,146	152	15.3%
90.1%	954	993	39	4.1%
91.4%	800	959	159	19.8%
92.6%	800	830	30	3.8%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	431	-369	-46.1%
98.8%	431	408	-23	-5.2%
100.0%	323	323	0	0.0%

Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	32,710	32,711	1	0.0%
1.2%	16,269	16,264	-6	0.0%
2.5%	13,793	13,793	0	0.0%
3.7%	13,657	13,657	0	0.0%
4.9%	13,472	13,472	0	0.0%
6.2%	13,181	13,184	2	0.0%
7.4%	13,085	13,082	-3	0.0%
8.6%	12,796	12,796	0	0.0%
9.9%	12,457	12,455	-3	0.0%
11.1%	11,621	11,621	0	0.0%
12.3%	10,738	10,738	0	0.0%
13.6%	10,590	10,590	0	0.0%
14.8%	10,235	10,235	0	0.0%
16.0%	10,175	10,209	35	0.3%
17.3%	10,098	10,098	0	0.0%
18.5%	9,996	9,996	0	0.0%
19.8%	9,569	9,569	0	0.0%
21.0%	8,372	8,555	183	2.2%
22.2%	7,702	7,702	0	0.0%
23.5%	7,610	7,610	0	0.0%
24.7%	7,555	7,555	0	0.0%
25.9%	7,549	7,549	0	0.0%
27.2%	7,192	7,192	0	0.0%
28.4%	7,112	7,113	1	0.0%
29.6%	6,880	6,846	-35	-0.5%
30.9%	6,846	6,798	-48	-0.7%
32.1%	6,798	6,288	-510	-7.5%
33.3%	6,036	6,033	-3	-0.1%
34.6%	5,838	5,924	86	1.5%
35.8%	5,760	5,760	0	0.0%
37.0%	5,593	5,593	0	0.0%
38.3%	5,503	5,501	-2	0.0%
39.5%	5,297	5,297	0	0.0%
40.7%	5,139	5,139	0	0.0%
42.0%	5,137	5,137	0	0.0%
43.2%	4,615	4,728	113	2.4%
44.4%	3,975	3,922	-54	-1.4%
45.7%	3,601	3,601	0	0.0%
46.9%	3,515	3,519	5	0.1%
48.1%	3,456	3,456	0	0.0%
49.4%	3,064	2,895	-168	-5.5%
50.6%	3,011	2,791	-220	-7.3%
51.9%	2,806	2,740	-66	-2.4%
53.1%	2,630	2,565	-65	-2.5%
54.3%	2,570	2,456	-114	-4.4%
55.6%	2,463	2,316	-147	-6.0%
56.8%	2,316	2,242	-73	-3.2%
58.0%	2,304	2,150	-154	-6.7%
59.3%	2,077	2,133	56	2.7%
60.5%	1,791	2,077	286	16.0%
61.7%	1,750	1,876	126	7.2%
63.0%	1,750	1,814	64	3.6%
64.2%	1,750	1,750	0	0.0%
65.4%	1,750	1,750	0	0.0%
66.7%	1,700	1,750	50	2.9%
67.9%	1,564	1,700	136	8.7%
69.1%	1,445	1,619	174	12.0%
70.4%	1,445	1,454	9	0.6%
71.6%	1,445	1,445	0	0.0%
72.8%	1,445	1,445	0	0.0%
74.1%	1,445	1,445	0	0.0%
75.3%	1,445	1,445	0	0.0%
76.5%	1,445	1,445	0	0.0%
77.8%	1,445	1,445	0	0.0%
79.0%	1,445	1,445	0	0.0%
80.2%	1,445	1,445	0	0.0%
81.5%	1,412	1,445	33	2.4%
82.7%	1,322	1,387	64	4.9%
84.0%	1,321	1,361	41	3.1%
85.2%	1,264	1,355	90	7.2%
86.4%	1,245	1,264	19	1.5%
87.7%	1,231	1,264	34	2.7%
88.9%	1,198	1,264	66	5.5%
90.1%	1,138	1,168	30	2.6%
91.4%	1,055	978	-77	-7.3%
92.6%	955	974	19	2.0%
93.8%	811	800	-11	-1.3%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	419	441	22	5.2%
98.8%	379	379	0	0.0%
100.0%	375	375	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,080	18,080	0	0.0%
1.2%	17,377	17,377	0	0.0%
2.5%	12,880	12,880	0	0.0%
3.7%	12,078	12,078	0	0.0%
4.9%	11,247	11,253	5	0.0%
6.2%	11,075	11,075	0	0.0%
7.4%	10,954	10,978	24	0.2%
8.6%	9,747	9,747	0	0.0%
9.9%	9,026	9,026	0	0.0%
11.1%	8,624	8,624	0	0.0%
12.3%	7,742	8,006	264	3.4%
13.6%	7,578	7,742	164	2.2%
14.8%	7,415	7,415	0	0.0%
16.0%	7,205	7,205	0	0.0%
17.3%	7,068	7,068	0	0.0%
18.5%	6,983	6,983	0	0.0%
19.8%	6,281	6,274	-7	-0.1%
21.0%	5,438	5,438	0	0.0%
22.2%	5,043	5,043	0	0.0%
23.5%	5,029	5,023	-6	-0.1%
24.7%	5,017	5,017	0	0.0%
25.9%	4,992	4,992	0	0.0%
27.2%	4,946	4,946	0	0.0%
28.4%	4,759	4,759	0	0.0%
29.6%	4,757	4,757	0	0.0%
30.9%	4,614	4,614	0	0.0%
32.1%	4,385	4,344	-41	-0.9%
33.3%	4,342	4,314	-28	-0.6%
34.6%	4,231	4,231	0	0.0%
35.8%	4,107	4,100	-7	-0.2%
37.0%	4,100	4,100	0	0.0%
38.3%	4,043	4,043	0	0.0%
39.5%	3,880	3,881	0	0.0%
40.7%	3,844	3,844	0	0.0%
42.0%	3,804	3,804	0	0.0%
43.2%	3,732	3,732	0	0.0%
44.4%	3,280	3,280	0	0.0%
45.7%	3,231	3,224	-6	-0.2%
46.9%	3,176	3,176	0	0.0%
48.1%	3,087	3,091	3	0.1%
49.4%	2,953	2,952	-1	0.0%
50.6%	2,952	2,952	0	0.0%
51.9%	2,562	2,844	282	11.0%
53.1%	2,518	2,518	0	0.0%
54.3%	2,374	2,374	0	0.0%
55.6%	2,197	2,233	36	1.6%
56.8%	2,159	2,197	38	1.8%
58.0%	2,122	2,152	30	1.4%
59.3%	2,083	2,122	39	1.9%
60.5%	2,011	2,083	72	3.6%
61.7%	2,006	2,075	68	3.4%
63.0%	1,863	2,011	148	7.9%
64.2%	1,847	1,863	16	0.8%
65.4%	1,750	1,750	0	0.0%
66.7%	1,750	1,750	0	0.0%
67.9%	1,750	1,750	0	0.0%
69.1%	1,750	1,750	0	0.0%
70.4%	1,750	1,750	0	0.0%
71.6%	1,750	1,750	0	0.0%
72.8%	1,750	1,750	0	0.0%
74.1%	1,695	1,660	-35	-2.1%
75.3%	1,445	1,445	0	0.0%
76.5%	1,445	1,445	0	0.0%
77.8%	1,275	1,355	80	6.3%
79.0%	1,264	1,275	10	0.8%
80.2%	1,024	1,264	240	23.4%
81.5%	980	1,256	276	28.2%
82.7%	921	1,072	151	16.4%
84.0%	886	886	0	0.0%
85.2%	866	866	0	0.0%
86.4%	809	809	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	401	800	399	99.4%
98.8%	400	711	311	77.9%
100.0%	396	402	6	1.5%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,628	15,628	0	0.0%
1.2%	10,411	10,411	0	0.0%
2.5%	9,208	9,208	0	0.0%
3.7%	7,562	7,562	0	0.0%
4.9%	7,503	7,503	0	0.0%
6.2%	7,366	7,366	0	0.0%
7.4%	6,881	6,881	0	0.0%
8.6%	6,745	6,745	0	0.0%
9.9%	6,334	6,334	0	0.0%
11.1%	6,281	6,281	0	0.0%
12.3%	6,234	6,234	0	0.0%
13.6%	6,100	6,110	10	0.2%
14.8%	6,079	6,089	11	0.2%
16.0%	5,797	5,797	0	0.0%
17.3%	5,754	5,744	-9	-0.2%
18.5%	5,675	5,675	0	0.0%
19.8%	5,450	5,450	0	0.0%
21.0%	5,090	5,090	0	0.0%
22.2%	4,864	4,864	0	0.0%
23.5%	4,823	4,823	0	0.0%
24.7%	4,781	4,781	0	0.0%
25.9%	4,707	4,707	0	0.0%
27.2%	4,338	4,412	73	1.7%
28.4%	4,250	4,338	88	2.1%
29.6%	4,147	4,250	103	2.5%
30.9%	4,104	4,147	44	1.1%
32.1%	3,988	4,104	116	2.9%
33.3%	3,860	3,861	1	0.0%
34.6%	3,841	3,841	0	0.0%
35.8%	3,799	3,799	0	0.0%
37.0%	3,765	3,760	-5	-0.1%
38.3%	3,512	3,512	0	0.0%
39.5%	3,477	3,477	0	0.0%
40.7%	3,375	3,273	-102	-3.0%
42.0%	3,273	3,210	-63	-1.9%
43.2%	3,210	2,971	-239	-7.4%
44.4%	2,971	2,867	-105	-3.5%
45.7%	2,867	2,813	-54	-1.9%
46.9%	2,811	2,811	0	0.0%
48.1%	2,811	2,644	-167	-5.9%
49.4%	2,645	2,636	-9	-0.3%
50.6%	2,615	2,615	0	0.0%
51.9%	2,594	2,594	0	0.0%
53.1%	2,563	2,522	-41	-1.6%
54.3%	2,522	2,521	-1	0.0%
55.6%	2,521	2,459	-62	-2.4%
56.8%	2,472	2,310	-162	-6.5%
58.0%	2,462	2,276	-186	-7.5%
59.3%	2,310	2,047	-263	-11.4%
60.5%	2,047	1,931	-116	-5.7%
61.7%	1,910	1,800	-111	-5.8%
63.0%	1,798	1,750	-48	-2.7%
64.2%	1,750	1,750	0	0.0%
65.4%	1,750	1,750	0	0.0%
66.7%	1,750	1,750	0	0.0%
67.9%	1,750	1,750	0	0.0%
69.1%	1,750	1,750	0	0.0%
70.4%	1,750	1,750	0	0.0%
71.6%	1,750	1,750	0	0.0%
72.8%	1,750	1,673	-77	-4.4%
74.1%	1,673	1,629	-45	-2.7%
75.3%	1,597	1,595	-2	-0.1%
76.5%	1,445	1,446	1	0.1%
77.8%	1,445	1,445	0	0.0%
79.0%	1,417	1,428	11	0.8%
80.2%	1,327	1,355	28	2.1%
81.5%	1,264	1,264	0	0.0%
82.7%	1,238	1,176	-63	-5.1%
84.0%	1,176	1,089	-87	-7.4%
85.2%	1,089	1,000	-89	-8.1%
86.4%	886	1,000	114	12.9%
87.7%	866	1,000	134	15.5%
88.9%	809	1,000	191	23.6%
90.1%	800	1,000	200	25.0%
91.4%	800	956	156	19.5%
92.6%	800	886	86	10.7%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	360	749	389	108.0%
100.0%	348	529	181	52.1%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,673	10,673	0	0.0%
1.2%	9,837	9,837	0	0.0%
2.5%	9,681	9,681	0	0.0%
3.7%	9,249	9,249	0	0.0%
4.9%	8,487	8,487	0	0.0%
6.2%	8,453	8,453	0	0.0%
7.4%	8,341	8,341	0	0.0%
8.6%	7,742	7,742	0	0.0%
9.9%	7,725	7,725	0	0.0%
11.1%	7,617	7,617	0	0.0%
12.3%	6,921	6,921	0	0.0%
13.6%	6,292	6,292	0	0.0%
14.8%	5,789	5,789	0	0.0%
16.0%	5,637	5,637	0	0.0%
17.3%	5,294	5,294	0	0.0%
18.5%	5,286	5,286	0	0.0%
19.8%	4,905	4,909	3	0.1%
21.0%	4,676	4,682	5	0.1%
22.2%	4,593	4,593	0	0.0%
23.5%	4,574	4,574	0	0.0%
24.7%	4,570	4,570	0	0.0%
25.9%	4,411	4,411	0	0.0%
27.2%	4,340	4,340	0	0.0%
28.4%	4,120	4,122	2	0.1%
29.6%	4,093	4,081	-12	-0.3%
30.9%	3,856	3,852	-5	-0.1%
32.1%	3,822	3,822	0	0.0%
33.3%	3,741	3,741	0	0.0%
34.6%	3,719	3,721	2	0.1%
35.8%	3,652	3,652	0	0.0%
37.0%	3,630	3,630	0	0.0%
38.3%	3,614	3,602	-12	-0.3%
39.5%	3,517	3,517	0	0.0%
40.7%	3,468	3,468	0	0.0%
42.0%	3,426	3,426	0	0.0%
43.2%	3,156	3,156	0	0.0%
44.4%	3,147	3,147	0	0.0%
45.7%	3,062	3,062	0	0.0%
46.9%	3,055	2,932	-123	-4.0%
48.1%	2,932	2,814	-118	-4.0%
49.4%	2,629	2,629	0	0.0%
50.6%	2,505	2,499	-6	-0.2%
51.9%	2,401	2,401	0	0.0%
53.1%	2,341	2,343	2	0.1%
54.3%	2,287	2,229	-58	-2.5%
55.6%	2,228	2,089	-138	-6.2%
56.8%	2,089	2,055	-34	-1.6%
58.0%	1,906	1,906	0	0.0%
59.3%	1,883	1,750	-133	-7.1%
60.5%	1,770	1,750	-20	-1.2%
61.7%	1,750	1,750	0	0.0%
63.0%	1,750	1,750	0	0.0%
64.2%	1,750	1,750	0	0.0%
65.4%	1,750	1,750	0	0.0%
66.7%	1,750	1,750	0	0.0%
67.9%	1,750	1,750	0	0.0%
69.1%	1,750	1,750	0	0.0%
70.4%	1,750	1,588	-162	-9.2%
71.6%	1,597	1,522	-75	-4.7%
72.8%	1,588	1,445	-143	-9.0%
74.1%	1,491	1,445	-46	-3.1%
75.3%	1,445	1,355	-90	-6.2%
76.5%	1,445	1,306	-139	-9.6%
77.8%	1,275	1,275	0	0.0%
79.0%	1,264	1,258	-7	-0.5%
80.2%	1,258	1,245	-12	-1.0%
81.5%	1,176	1,245	70	5.9%
82.7%	1,149	1,192	43	3.7%
84.0%	1,089	1,176	87	8.0%
85.2%	1,024	1,172	148	14.5%
86.4%	1,013	1,144	131	13.0%
87.7%	886	1,075	190	21.4%
88.9%	866	1,067	201	23.2%
90.1%	809	1,034	225	27.9%
91.4%	800	1,031	231	28.9%
92.6%	800	1,005	205	25.6%
93.8%	800	886	86	10.7%
95.1%	800	837	37	4.7%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	347	784	437	126.0%
100.0%	305	526	221	72.4%

Table SW-27-b
American River below Nimbus Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,833	11,833	0	0.0%
1.2%	9,841	9,841	0	0.0%
2.5%	9,106	9,106	0	0.0%
3.7%	8,467	8,467	0	0.0%
4.9%	8,107	8,107	0	0.0%
6.2%	7,640	7,640	0	0.0%
7.4%	7,600	7,600	0	0.0%
8.6%	6,319	6,319	0	0.0%
9.9%	6,028	6,028	0	0.0%
11.1%	5,935	5,935	0	0.0%
12.3%	5,778	5,778	0	0.0%
13.6%	5,210	5,210	0	0.0%
14.8%	5,061	5,061	0	0.0%
16.0%	5,027	5,027	0	0.0%
17.3%	4,974	4,974	0	0.0%
18.5%	4,746	4,899	153	3.2%
19.8%	4,338	4,746	409	9.4%
21.0%	4,299	4,324	25	0.6%
22.2%	4,218	4,221	3	0.1%
23.5%	4,187	4,187	0	0.0%
24.7%	4,127	4,128	0	0.0%
25.9%	3,998	4,127	129	3.2%
27.2%	3,779	4,004	225	6.0%
28.4%	3,658	3,779	121	3.3%
29.6%	3,658	3,761	103	2.8%
30.9%	3,655	3,658	3	0.1%
32.1%	3,645	3,658	13	0.3%
33.3%	3,266	3,655	390	11.9%
34.6%	3,257	3,645	388	11.9%
35.8%	3,213	3,629	416	13.0%
37.0%	3,190	3,602	412	12.9%
38.3%	3,167	3,167	0	0.0%
39.5%	3,015	3,015	0	0.0%
40.7%	2,913	2,913	-1	0.0%
42.0%	2,866	2,711	-155	-5.4%
43.2%	2,815	2,681	-134	-4.8%
44.4%	2,711	2,541	-170	-6.3%
45.7%	2,681	2,494	-187	-7.0%
46.9%	2,561	2,409	-153	-6.0%
48.1%	2,522	2,329	-193	-7.7%
49.4%	2,492	2,299	-193	-7.7%
50.6%	2,418	2,250	-168	-7.0%
51.9%	2,406	2,250	-156	-6.5%
53.1%	2,375	2,205	-170	-7.2%
54.3%	2,310	2,188	-122	-5.3%
55.6%	2,227	2,181	-46	-2.1%
56.8%	2,205	2,172	-32	-1.5%
58.0%	2,180	2,172	-8	-0.4%
59.3%	2,172	2,106	-66	-3.0%
60.5%	2,133	1,965	-167	-7.8%
61.7%	1,961	1,942	-19	-1.0%
63.0%	1,940	1,924	-16	-0.8%
64.2%	1,920	1,920	0	0.0%
65.4%	1,810	1,896	86	4.8%
66.7%	1,792	1,880	89	5.0%
67.9%	1,787	1,875	88	4.9%
69.1%	1,775	1,855	80	4.5%
70.4%	1,750	1,853	103	5.9%
71.6%	1,750	1,750	0	0.0%
72.8%	1,750	1,750	0	0.0%
74.1%	1,750	1,750	0	0.0%
75.3%	1,750	1,750	0	0.0%
76.5%	1,750	1,750	0	0.0%
77.8%	1,750	1,750	0	0.0%
79.0%	1,750	1,750	0	0.0%
80.2%	1,750	1,750	0	0.0%
81.5%	1,560	1,612	52	3.3%
82.7%	1,522	1,599	77	5.1%
84.0%	1,443	1,596	153	10.6%
85.2%	1,298	1,529	231	17.8%
86.4%	1,258	1,516	259	20.6%
87.7%	1,248	1,498	249	20.0%
88.9%	1,176	1,496	320	27.2%
90.1%	1,024	1,431	407	39.7%
91.4%	1,017	1,412	395	38.9%
92.6%	992	1,152	160	16.2%
93.8%	849	1,063	214	25.2%
95.1%	800	1,017	217	27.2%
96.3%	800	918	118	14.8%
97.5%	800	862	62	7.7%
98.8%	552	638	86	15.6%
100.0%	357	445	87	24.4%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,720	5,720	0	0.0%
1.2%	5,144	5,054	-89	-1.7%
2.5%	5,054	5,000	-54	-1.1%
3.7%	5,000	5,000	0	0.0%
4.9%	5,000	5,000	0	0.0%
6.2%	5,000	5,000	0	0.0%
7.4%	5,000	5,000	0	0.0%
8.6%	5,000	5,000	0	0.0%
9.9%	5,000	5,000	0	0.0%
11.1%	5,000	5,000	0	0.0%
12.3%	5,000	5,000	0	0.0%
13.6%	5,000	4,912	-88	-1.8%
14.8%	5,000	4,605	-395	-7.9%
16.0%	5,000	4,323	-677	-13.5%
17.3%	5,000	4,297	-703	-14.1%
18.5%	5,000	4,232	-768	-15.4%
19.8%	5,000	4,229	-771	-15.4%
21.0%	5,000	4,208	-792	-15.8%
22.2%	5,000	4,015	-985	-19.7%
23.5%	5,000	3,961	-1,039	-20.8%
24.7%	5,000	3,953	-1,047	-20.9%
25.9%	5,000	3,891	-1,109	-22.2%
27.2%	5,000	3,830	-1,170	-23.4%
28.4%	4,771	3,796	-975	-20.4%
29.6%	4,741	3,788	-953	-20.1%
30.9%	4,701	3,784	-917	-19.5%
32.1%	4,626	3,762	-863	-18.7%
33.3%	4,589	3,754	-835	-18.2%
34.6%	4,572	3,699	-873	-19.1%
35.8%	4,323	3,668	-655	-15.2%
37.0%	4,289	3,595	-695	-16.2%
38.3%	4,252	3,420	-832	-19.6%
39.5%	4,180	3,407	-773	-18.5%
40.7%	4,150	3,403	-748	-18.0%
42.0%	4,084	3,228	-856	-21.0%
43.2%	4,009	3,178	-831	-20.7%
44.4%	3,901	3,115	-787	-20.2%
45.7%	3,830	3,081	-748	-19.5%
46.9%	3,784	3,067	-717	-18.9%
48.1%	3,709	3,034	-675	-18.2%
49.4%	3,690	2,840	-851	-23.1%
50.6%	3,663	2,835	-828	-22.6%
51.9%	3,459	2,745	-714	-20.6%
53.1%	3,369	2,731	-639	-19.0%
54.3%	3,313	2,697	-616	-18.6%
55.6%	3,303	2,634	-669	-20.3%
56.8%	3,259	2,630	-630	-19.3%
58.0%	3,154	2,619	-534	-16.9%
59.3%	3,146	2,575	-571	-18.2%
60.5%	3,106	2,546	-560	-18.0%
61.7%	3,104	2,521	-583	-18.8%
63.0%	3,096	2,516	-579	-18.7%
64.2%	3,034	2,465	-569	-18.7%
65.4%	2,915	2,454	-462	-15.8%
66.7%	2,874	2,434	-440	-15.3%
67.9%	2,840	2,404	-436	-15.4%
69.1%	2,835	2,402	-433	-15.3%
70.4%	2,745	2,401	-345	-12.6%
71.6%	2,729	2,396	-333	-12.2%
72.8%	2,697	2,388	-309	-11.5%
74.1%	2,685	2,363	-322	-12.0%
75.3%	2,619	2,362	-257	-9.8%
76.5%	2,611	2,352	-259	-9.9%
77.8%	2,546	2,000	-546	-21.5%
79.0%	2,521	1,999	-522	-20.7%
80.2%	2,516	1,997	-520	-20.6%
81.5%	2,483	1,943	-540	-21.8%
82.7%	2,408	1,843	-565	-23.5%
84.0%	2,367	1,841	-526	-22.2%
85.2%	2,350	1,838	-512	-21.8%
86.4%	2,349	1,750	-599	-25.5%
87.7%	2,344	1,598	-746	-31.8%
88.9%	2,343	1,518	-825	-35.2%
90.1%	1,997	1,516	-480	-24.1%
91.4%	1,968	1,516	-452	-23.0%
92.6%	1,775	1,507	-268	-15.1%
93.8%	1,522	1,425	-97	-6.4%
95.1%	944	1,405	461	48.8%
96.3%	921	1,218	297	32.3%
97.5%	552	853	301	54.6%
98.8%	445	771	326	73.4%
100.0%	362	429	67	18.6%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,782	4,782	0	0.0%
1.2%	4,379	4,379	0	0.0%
2.5%	4,346	4,346	0	0.0%
3.7%	4,048	4,048	0	0.0%
4.9%	4,032	4,032	0	0.0%
6.2%	3,957	3,957	0	0.0%
7.4%	3,884	3,884	0	0.0%
8.6%	3,884	3,884	0	0.0%
9.9%	3,818	3,818	0	0.0%
11.1%	3,812	3,812	0	0.0%
12.3%	3,803	3,803	0	0.0%
13.6%	3,742	3,787	45	1.2%
14.8%	3,637	3,742	105	2.9%
16.0%	3,610	3,637	27	0.7%
17.3%	3,589	3,610	21	0.6%
18.5%	3,463	3,548	86	2.5%
19.8%	3,452	3,126	-326	-9.4%
21.0%	3,111	3,048	-63	-2.0%
22.2%	2,884	3,039	155	5.4%
23.5%	2,804	2,976	172	6.1%
24.7%	2,588	2,950	362	14.0%
25.9%	2,559	2,929	369	14.4%
27.2%	2,457	2,905	448	18.2%
28.4%	2,387	2,850	462	19.4%
29.6%	2,383	2,700	318	13.3%
30.9%	2,367	2,628	262	11.1%
32.1%	2,352	2,581	229	9.7%
33.3%	2,349	2,487	138	5.9%
34.6%	2,348	2,485	137	5.8%
35.8%	2,298	2,471	173	7.5%
37.0%	2,292	2,324	33	1.4%
38.3%	2,021	2,304	283	14.0%
39.5%	2,020	2,000	-20	-1.0%
40.7%	2,015	2,000	-15	-0.7%
42.0%	2,008	2,000	-8	-0.4%
43.2%	1,999	2,000	1	0.0%
44.4%	1,949	2,000	51	2.6%
45.7%	1,934	2,000	66	3.4%
46.9%	1,914	2,000	86	4.5%
48.1%	1,901	2,000	99	5.2%
49.4%	1,897	1,992	94	5.0%
50.6%	1,880	1,982	102	5.4%
51.9%	1,824	1,975	151	8.3%
53.1%	1,750	1,968	218	12.5%
54.3%	1,750	1,960	210	12.0%
55.6%	1,750	1,939	189	10.8%
56.8%	1,750	1,939	189	10.8%
58.0%	1,750	1,933	183	10.5%
59.3%	1,750	1,825	75	4.3%
60.5%	1,750	1,809	59	3.4%
61.7%	1,750	1,797	47	2.7%
63.0%	1,750	1,772	22	1.2%
64.2%	1,750	1,770	20	1.2%
65.4%	1,750	1,762	12	0.7%
66.7%	1,750	1,750	0	0.0%
67.9%	1,750	1,750	0	0.0%
69.1%	1,750	1,750	0	0.0%
70.4%	1,750	1,750	0	0.0%
71.6%	1,750	1,750	0	0.0%
72.8%	1,750	1,750	0	0.0%
74.1%	1,736	1,750	14	0.8%
75.3%	1,690	1,691	1	0.1%
76.5%	1,659	1,611	-49	-2.9%
77.8%	1,586	1,608	21	1.3%
79.0%	1,522	1,523	2	0.1%
80.2%	1,176	1,516	341	29.0%
81.5%	1,146	1,435	290	25.3%
82.7%	886	1,430	544	61.4%
84.0%	848	1,409	561	66.1%
85.2%	809	1,394	585	72.3%
86.4%	800	1,109	309	38.7%
87.7%	800	1,108	308	38.5%
88.9%	800	1,090	290	36.3%
90.1%	800	1,055	255	31.8%
91.4%	800	1,022	222	27.7%
92.6%	800	1,001	201	25.1%
93.8%	722	997	275	38.1%
95.1%	703	918	215	30.5%
96.3%	552	894	343	62.1%
97.5%	505	864	359	71.0%
98.8%	459	800	341	74.4%
100.0%	378	506	128	33.9%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,000	4,959	-41	-0.8%
1.2%	5,000	4,829	-171	-3.4%
2.5%	4,912	4,611	-302	-6.1%
3.7%	4,911	4,534	-377	-7.7%
4.9%	4,864	4,444	-420	-8.6%
6.2%	4,652	4,378	-274	-5.9%
7.4%	4,557	4,273	-284	-6.2%
8.6%	4,553	4,258	-295	-6.5%
9.9%	4,492	4,052	-440	-9.8%
11.1%	4,478	3,742	-736	-16.4%
12.3%	4,399	3,735	-664	-15.1%
13.6%	4,359	3,718	-641	-14.7%
14.8%	4,266	3,502	-765	-17.9%
16.0%	3,995	3,288	-707	-17.7%
17.3%	3,930	3,266	-663	-16.9%
18.5%	3,865	3,214	-650	-16.8%
19.8%	3,847	3,166	-680	-17.7%
21.0%	3,418	3,070	-348	-10.2%
22.2%	3,216	2,914	-303	-9.4%
23.5%	3,214	2,583	-632	-19.7%
24.7%	3,082	2,565	-517	-16.8%
25.9%	3,025	2,552	-473	-15.6%
27.2%	2,864	2,514	-350	-12.2%
28.4%	2,864	2,495	-370	-12.9%
29.6%	2,743	2,487	-256	-9.3%
30.9%	2,684	2,472	-212	-7.9%
32.1%	2,594	2,469	-125	-4.8%
33.3%	2,573	2,450	-123	-4.8%
34.6%	2,495	2,363	-132	-5.3%
35.8%	2,494	2,349	-144	-5.8%
37.0%	2,469	2,312	-157	-6.4%
38.3%	2,444	2,311	-132	-5.4%
39.5%	2,341	2,230	-111	-4.7%
40.7%	2,230	2,221	-9	-0.4%
42.0%	2,205	1,972	-233	-10.6%
43.2%	2,188	1,965	-224	-10.2%
44.4%	1,959	1,956	-3	-0.2%
45.7%	1,951	1,953	2	0.1%
46.9%	1,870	1,921	51	2.7%
48.1%	1,817	1,783	-34	-1.9%
49.4%	1,733	1,742	9	0.5%
50.6%	1,686	1,650	-36	-2.1%
51.9%	1,651	1,650	-1	-0.1%
53.1%	1,593	1,650	57	3.6%
54.3%	1,533	1,650	117	7.6%
55.6%	1,533	1,650	117	7.6%
56.8%	1,533	1,650	117	7.6%
58.0%	1,533	1,650	117	7.6%
59.3%	1,533	1,650	117	7.6%
60.5%	1,533	1,650	117	7.6%
61.7%	1,533	1,650	117	7.6%
63.0%	1,533	1,615	81	5.3%
64.2%	1,533	1,575	42	2.7%
65.4%	1,533	1,566	33	2.1%
66.7%	1,533	1,533	0	0.0%
67.9%	1,533	1,533	0	0.0%
69.1%	1,533	1,533	0	0.0%
70.4%	1,522	1,533	12	0.8%
71.6%	1,512	1,533	22	1.4%
72.8%	1,458	1,516	58	4.0%
74.1%	1,315	1,512	197	15.0%
75.3%	1,258	1,500	242	19.2%
76.5%	1,176	1,489	313	26.6%
77.8%	1,124	1,447	322	28.7%
79.0%	1,105	1,374	269	24.4%
80.2%	1,039	1,325	286	27.5%
81.5%	886	1,287	401	45.3%
82.7%	809	1,266	457	56.5%
84.0%	800	1,247	447	55.9%
85.2%	800	1,185	385	48.2%
86.4%	800	1,144	344	43.0%
87.7%	800	977	177	22.1%
88.9%	800	909	109	13.7%
90.1%	800	893	93	11.6%
91.4%	800	887	87	10.9%
92.6%	800	826	26	3.3%
93.8%	681	800	119	17.5%
95.1%	594	800	206	34.8%
96.3%	552	800	248	45.0%
97.5%	414	800	386	93.4%
98.8%	375	684	309	82.3%
100.0%	375	400	25	6.7%

Figure SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

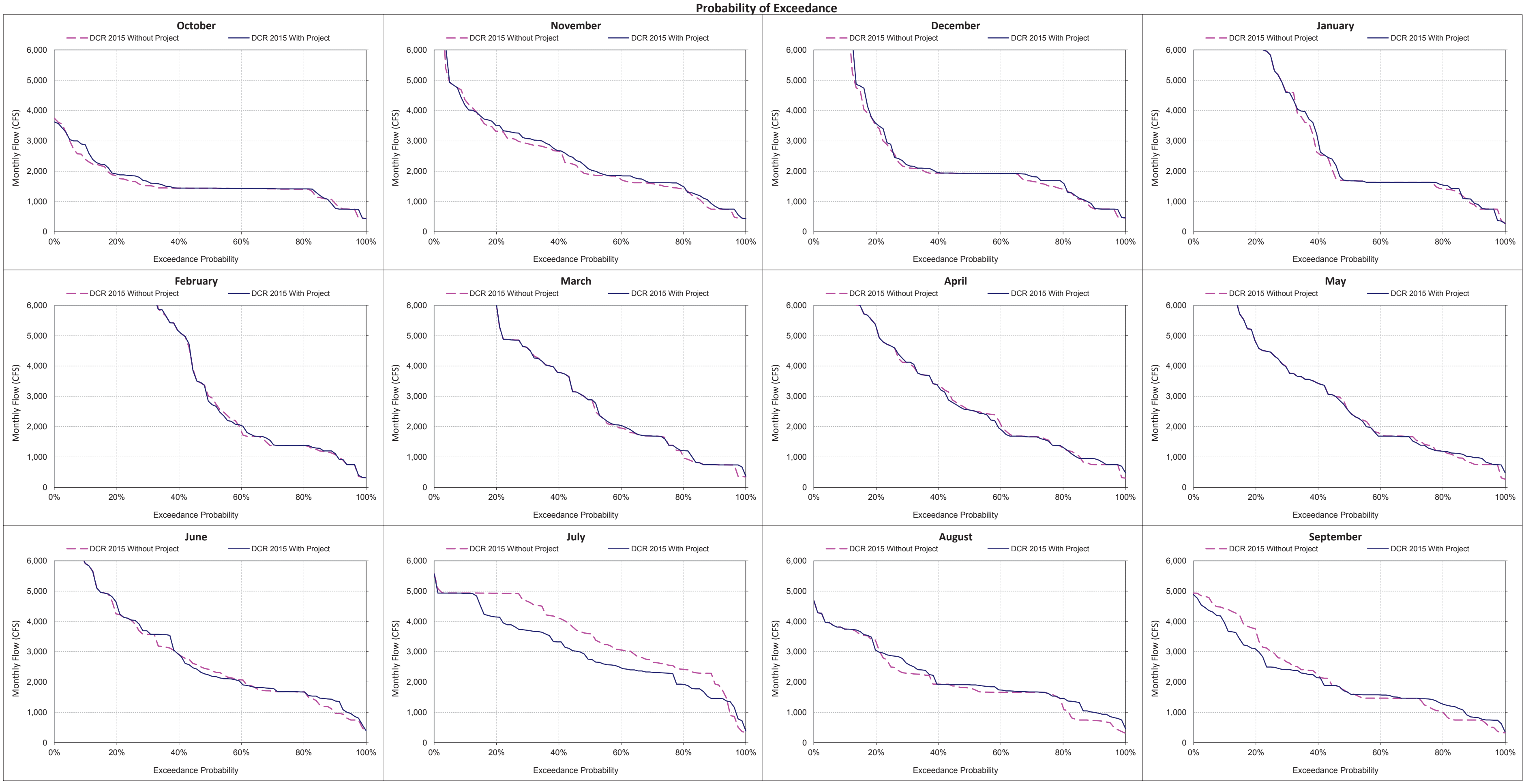


Table SW-28-b

American River at Watt Avenue, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,746	3,624	-122	-3.3%
1.2%	3,618	3,577	-41	-1.1%
2.5%	3,552	3,425	-127	-3.6%
3.7%	3,286	3,293	7	0.2%
4.9%	3,000	3,040	40	1.3%
6.2%	2,729	3,000	271	9.9%
7.4%	2,575	2,999	424	16.4%
8.6%	2,565	2,902	337	13.1%
9.9%	2,390	2,875	484	20.3%
11.1%	2,306	2,586	280	12.1%
12.3%	2,230	2,387	157	7.0%
13.6%	2,227	2,280	53	2.4%
14.8%	2,184	2,227	43	2.0%
16.0%	2,153	2,225	72	3.3%
17.3%	1,966	2,111	145	7.4%
18.5%	1,881	1,942	62	3.3%
19.8%	1,857	1,917	60	3.2%
21.0%	1,754	1,883	129	7.4%
22.2%	1,743	1,881	138	7.9%
23.5%	1,704	1,860	156	9.2%
24.7%	1,663	1,858	194	11.7%
25.9%	1,660	1,846	186	11.2%
27.2%	1,579	1,802	223	14.1%
28.4%	1,531	1,699	168	11.0%
29.6%	1,525	1,674	150	9.8%
30.9%	1,521	1,605	84	5.5%
32.1%	1,497	1,600	103	6.9%
33.3%	1,450	1,586	137	9.4%
34.6%	1,448	1,558	109	7.5%
35.8%	1,448	1,506	58	4.0%
37.0%	1,444	1,498	54	3.8%
38.3%	1,443	1,450	7	0.5%
39.5%	1,443	1,442	-1	0.0%
40.7%	1,441	1,442	0	0.0%
42.0%	1,441	1,441	0	0.0%
43.2%	1,439	1,440	1	0.1%
44.4%	1,439	1,440	1	0.0%
45.7%	1,439	1,439	0	0.0%
46.9%	1,439	1,439	0	0.0%
48.1%	1,439	1,439	0	0.0%
49.4%	1,439	1,439	0	0.0%
50.6%	1,439	1,439	0	0.0%
51.9%	1,438	1,439	0	0.0%
53.1%	1,438	1,438	0	0.0%
54.3%	1,438	1,438	0	0.0%
55.6%	1,437	1,438	1	0.1%
56.8%	1,437	1,438	1	0.1%
58.0%	1,436	1,438	2	0.1%
59.3%	1,435	1,438	3	0.2%
60.5%	1,431	1,438	7	0.5%
61.7%	1,429	1,435	6	0.4%
63.0%	1,428	1,432	4	0.3%
64.2%	1,427	1,432	5	0.3%
65.4%	1,425	1,431	6	0.4%
66.7%	1,423	1,430	8	0.6%
67.9%	1,419	1,430	11	0.8%
69.1%	1,419	1,424	5	0.4%
70.4%	1,418	1,422	4	0.3%
71.6%	1,415	1,420	5	0.4%
72.8%	1,413	1,420	6	0.5%
74.1%	1,413	1,420	7	0.5%
75.3%	1,412	1,415	3	0.2%
76.5%	1,410	1,415	5	0.4%
77.8%	1,410	1,414	5	0.3%
79.0%	1,409	1,414	4	0.3%
80.2%	1,409	1,413	4	0.3%
81.5%	1,408	1,413	5	0.3%
82.7%	1,334	1,410	76	5.7%
84.0%	1,152	1,294	143	12.4%
85.2%	1,131	1,202	72	6.4%
86.4%	1,101	1,116	15	1.3%
87.7%	1,073	1,076	3	0.3%
88.9%	1,072	933	-139	-13.0%
90.1%	933	779	-154	-16.5%
91.4%	810	751	-59	-7.3%
92.6%	753	748	-5	-0.6%
93.8%	748	747	-2	-0.2%
95.1%	748	745	-3	-0.5%
96.3%	747	742	-4	-0.6%
97.5%	459	739	280	61.1%
98.8%	456	448	-8	-1.8%
100.0%	439	439	0	0.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,909	16,492	1,583	10.6%
1.2%	13,833	13,833	0	0.0%
2.5%	7,651	7,651	0	0.0%
3.7%	5,395	6,119	724	13.4%
4.9%	4,935	4,934	-1	0.0%
6.2%	4,838	4,838	0	0.0%
7.4%	4,761	4,752	-9	-0.2%
8.6%	4,690	4,445	-244	-5.2%
9.9%	4,361	4,182	-179	-4.1%
11.1%	4,197	4,016	-181	-4.3%
12.3%	4,090	4,014	-76	-1.9%
13.6%	3,954	3,943	-11	-0.3%
14.8%	3,756	3,825	69	1.8%
16.0%	3,572	3,720	149	4.2%
17.3%	3,484	3,691	207	5.9%
18.5%	3,470	3,651	181	5.2%
19.8%	3,322	3,515	193	5.8%
21.0%	3,315	3,507	192	5.8%
22.2%	3,296	3,337	40	1.2%
23.5%	3,091	3,315	224	7.3%
24.7%	3,089	3,294	205	6.6%
25.9%	3,057	3,264	207	6.8%
27.2%	2,981	3,256	275	9.2%
28.4%	2,946	3,111	165	5.6%
29.6%	2,918	3,076	158	5.4%
30.9%	2,888	3,073	186	6.4%
32.1%	2,852	3,024	172	6.0%
33.3%	2,846	3,020	174	6.1%
34.6%	2,824	3,003	179	6.3%
35.8%	2,784	2,927	143	5.1%
37.0%	2,765	2,871	106	3.8%
38.3%	2,678	2,759	81	3.0%
39.5%	2,667	2,687	20	0.7%
40.7%	2,632	2,670	38	1.4%
42.0%	2,289	2,601	312	13.6%
43.2%	2,271	2,500	229	10.1%
44.4%	2,235	2,465	230	10.3%
45.7%	2,190	2,349	159	7.3%
46.9%	2,015	2,309	294	14.6%
48.1%	1,926	2,201	275	14.3%
49.4%	1,905	2,084	179	9.4%
50.6%	1,884	2,024	140	7.4%
51.9%	1,862	2,001	138	7.4%
53.1%	1,862	1,936	74	4.0%
54.3%	1,862	1,894	32	1.7%
55.6%	1,855	1,862	7	0.4%
56.8%	1,843	1,862	19	1.0%
58.0%	1,843	1,862	20	1.1%
59.3%	1,778	1,860	81	4.6%
60.5%	1,696	1,844	148	8.8%
61.7%	1,665	1,843	178	10.7%
63.0%	1,626	1,842	216	13.3%
64.2%	1,621	1,785	164	10.1%
65.4%	1,621	1,750	129	8.0%
66.7%	1,620	1,742	122	7.5%
67.9%	1,618	1,675	57	3.5%
69.1%	1,601	1,621	19	1.2%
70.4%	1,586	1,621	34	2.2%
71.6%	1,553	1,621	67	4.3%
72.8%	1,536	1,621	85	5.5%
74.1%	1,492	1,621	128	8.6%
75.3%	1,491	1,618	127	8.5%
76.5%	1,459	1,617	159	10.9%
77.8%	1,448	1,617	168	11.6%
79.0%	1,427	1,548	121	8.5%
80.2%	1,398	1,475	78	5.6%
81.5%	1,330	1,290	-40	-3.0%
82.7%	1,206	1,287	81	6.7%
84.0%	1,143	1,241	98	8.6%
85.2%	1,064	1,195	131	12.4%
86.4%	936	1,108	172	18.3%
87.7%	807	1,068	262	32.4%
88.9%	747	936	190	25.4%
90.1%	746	841	95	12.7%
91.4%	746	776	30	4.0%
92.6%	746	747	0	0.0%
93.8%	740	747	6	0.8%
95.1%	740	747	6	0.9%
96.3%	482	746	264	54.7%
97.5%	453	564	111	24.6%
98.8%	453	453	0	0.1%
100.0%	434	436	2	0.3%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,188	20,381	1,193	6.2%
1.2%	16,345	16,345	0	0.0%
2.5%	16,000	16,266	266	1.7%
3.7%	15,694	15,680	-14	-0.1%
4.9%	13,734	13,728	-6	0.0%
6.2%	12,763	12,684	-79	-0.6%
7.4%	9,632	9,632	0	0.0%
8.6%	8,659	8,645	-14	-0.2%
9.9%	7,208	7,202	-6	-0.1%
11.1%	6,865	6,850	-14	-0.2%
12.3%	5,265	6,322	1,057	20.1%
13.6%	4,755	4,864	109	2.3%
14.8%	4,683	4,818	135	2.9%
16.0%	4,046	4,735	689	17.0%
17.3%	3,909	4,136	227	5.8%
18.5%	3,774	3,772	-2	-0.1%
19.8%	3,522	3,596	74	2.1%
21.0%	3,403	3,492	90	2.6%
22.2%	2,997	3,403	405	13.5%
23.5%	2,882	2,938	55	1.9%
24.7%	2,697	2,889	192	7.1%
25.9%	2,554	2,457	-97	-3.8%
27.2%	2,296	2,420	124	5.4%
28.4%	2,173	2,351	179	8.2%
29.6%	2,132	2,218	85	4.0%
30.9%	2,104	2,168	64	3.0%
32.1%	2,094	2,162	67	3.2%
33.3%	2,089	2,104	15	0.7%
34.6%	2,047	2,101	54	2.6%
35.8%	1,978	2,090	112	5.7%
37.0%	1,936	2,089	154	7.9%
38.3%	1,936	2,034	98	5.1%
39.5%	1,936	1,965	29	1.5%
40.7%	1,936	1,936	0	0.0%
42.0%	1,935	1,936	0	0.0%
43.2%	1,934	1,936	1	0.1%
44.4%	1,934	1,935	1	0.1%
45.7%	1,932	1,935	3	0.1%
46.9%	1,932	1,935	3	0.1%
48.1%	1,932	1,934	3	0.1%
49.4%	1,928	1,932	4	0.2%
50.6%	1,927	1,930	3	0.1%
51.9%	1,927	1,928	2	0.1%
53.1%	1,927	1,928	1	0.0%
54.3%	1,927	1,926	0	0.0%
55.6%	1,926	1,926	-1	0.0%
56.8%	1,925	1,925	0	0.0%
58.0%	1,925	1,925	0	0.0%
59.3%	1,925	1,923	-1	-0.1%
60.5%	1,923	1,923	0	0.0%
61.7%	1,923	1,923	0	0.0%
63.0%	1,923	1,923	0	0.0%
64.2%	1,911	1,921	10	0.5%
65.4%	1,909	1,920	11	0.6%
66.7%	1,765	1,917	152	8.6%
67.9%	1,688	1,909	221	13.1%
69.1%	1,688	1,856	168	10.0%
70.4%	1,661	1,821	159	9.6%
71.6%	1,641	1,812	170	10.4%
72.8%	1,596	1,688	91	5.7%
74.1%	1,573	1,688	115	7.3%
75.3%	1,514	1,688	174	11.5%
76.5%	1,513	1,688	175	11.6%
77.8%	1,468	1,688	219	14.9%
79.0%	1,429	1,688	259	18.1%
80.2%	1,400	1,589	189	13.5%
81.5%	1,332	1,294	-39	-2.9%
82.7%	1,272	1,289	17	1.4%
84.0%	1,145	1,197	52	4.5%
85.2%	1,066	1,110	44	4.1%
86.4%	1,064	1,070	7	0.6%
87.7%	938	1,007	69	7.4%
88.9%	808	938	129	16.0%
90.1%	755	778	23	3.1%
91.4%	748	755	6	0.8%
92.6%	748	748	0	0.0%
93.8%	748	748	0	0.0%
95.1%	748	748	0	0.0%
96.3%	748	746	-2	-0.3%
97.5%	494	741	248	50.2%
98.8%	472	472	0	0.0%
100.0%	459	459	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,161	33,162	1	0.0%
1.2%	20,074	20,072	-2	0.0%
2.5%	16,846	16,851	5	0.0%
3.7%	16,218	16,215	-2	0.0%
4.9%	15,924	16,214	290	1.8%
6.2%	12,542	12,531	-10	-0.1%
7.4%	11,816	11,816	0	0.0%
8.6%	10,995	11,517	522	4.7%
9.9%	10,901	10,995	95	0.9%
11.1%	9,940	9,940	0	0.0%
12.3%	9,628	9,621	-8	-0.1%
13.6%	9,352	9,351	-1	0.0%
14.8%	9,154	9,150	-5	-0.1%
16.0%	8,808	8,800	-7	-0.1%
17.3%	8,774	8,774	0	0.0%
18.5%	6,966	6,966	0	0.0%
19.8%	6,558	6,560	2	0.0%
21.0%	6,557	6,557	0	0.0%
22.2%	6,004	6,004	0	0.0%
23.5%	5,956	5,961	5	0.1%
24.7%	5,832	5,829	-2	0.0%
25.9%	5,317	5,311	-6	-0.1%
27.2%	5,181	5,179	-2	0.0%
28.4%	4,936	4,935	-1	0.0%
29.6%	4,623	4,600	-24	-0.5%
30.9%	4,609	4,588	-20	-0.4%
32.1%	4,591	4,339	-252	-5.5%
33.3%	3,900	4,044	143	3.7%
34.6%	3,793	3,987	194	5.1%
35.8%	3,606	3,972	366	10.1%
37.0%	3,586	3,721	136	3.8%
38.3%	3,226	3,608	383	11.9%
39.5%	2,636	3,226	590	22.4%
40.7%	2,535	2,633	98	3.9%
42.0%	2,515	2,537	21	0.9%
43.2%	2,424	2,453	29	1.2%
44.4%	2,066	2,399	333	16.1%
45.7%	1,756	2,195	438	25.0%
46.9%	1,710	1,830	121	7.1%
48.1%	1,694	1,710	16	0.9%
49.4%	1,685	1,687	2	0.1%
50.6%	1,685	1,685	0	0.0%
51.9%	1,685	1,685	0	0.0%
53.1%	1,677	1,677	0	0.0%
54.3%	1,672	1,672	0	0.0%
55.6%	1,635	1,635	0	0.0%
56.8%	1,635	1,635	0	0.0%
58.0%	1,635	1,635	0	0.0%
59.3%	1,635	1,635	0	0.0%
60.5%	1,635	1,635	0	0.0%
61.7%	1,635	1,635	0	0.0%
63.0%	1,635	1,635	0	0.0%
64.2%	1,635	1,635	0	0.0%
65.4%	1,635	1,635	0	0.0%
66.7%	1,635	1,635	0	0.0%
67.9%	1,635	1,635	0	0.0%
69.1%	1,635	1,635	0	0.0%
70.4%	1,635	1,635	0	0.0%
71.6%	1,635	1,635	0	0.0%
72.8%	1,634	1,634	0	0.0%
74.1%	1,634	1,634	0	0.0%
75.3%	1,633	1,633	0	0.0%
76.5%	1,632	1,633	1	0.1%
77.8%	1,490	1,633	143	9.6%
79.0%	1,429	1,567	139	9.7%
80.2%	1,425	1,537	113	7.9%
81.5%	1,402	1,530	128	9.1%
82.7%	1,385	1,425	39	2.8%
84.0%	1,347	1,425	77	5.7%
85.2%	1,278	1,425	147	11.5%
86.4%	1,181	1,110	-71	-6.0%
87.7%	1,066	1,091	25	2.3%
88.9%	938	1,087	149	15.8%
90.1%	897	938	41	4.6%
91.4%	748	901	153	20.4%
92.6%	748	778	30	4.0%
93.8%	748	748	0	0.0%
95.1%	748	748	0	0.0%
96.3%	748	748	0	0.0%
97.5%	747	369	-378	-50.6%
98.8%	369	356	-13	-3.5%
100.0%	277	277	0	0.0%

Table SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	32,620	32,619	-1	0.0%
1.2%	16,127	16,122	-6	0.0%
2.5%	13,655	13,655	0	0.0%
3.7%	13,551	13,551	0	0.0%
4.9%	13,263	13,263	0	0.0%
6.2%	13,074	13,076	2	0.0%
7.4%	12,997	12,992	-5	0.0%
8.6%	12,698	12,700	3	0.0%
9.9%	12,360	12,357	-3	0.0%
11.1%	11,510	11,510	0	0.0%
12.3%	10,530	10,528	-3	0.0%
13.6%	10,511	10,512	0	0.0%
14.8%	10,161	10,161	0	0.0%
16.0%	10,104	10,137	33	0.3%
17.3%	9,954	9,954	0	0.0%
18.5%	9,911	9,911	0	0.0%
19.8%	9,435	9,435	0	0.0%
21.0%	8,305	8,485	181	2.2%
22.2%	7,556	7,556	0	0.0%
23.5%	7,506	7,506	0	0.0%
24.7%	7,405	7,405	0	0.0%
25.9%	7,389	7,389	0	0.0%
27.2%	7,034	7,021	-13	-0.2%
28.4%	6,875	6,875	0	0.0%
29.6%	6,842	6,642	-200	-2.9%
30.9%	6,642	6,550	-92	-1.4%
32.1%	6,550	6,250	-300	-4.6%
33.3%	5,877	5,868	-9	-0.2%
34.6%	5,771	5,857	86	1.5%
35.8%	5,647	5,647	0	0.0%
37.0%	5,433	5,424	-9	-0.2%
38.3%	5,418	5,418	0	0.0%
39.5%	5,176	5,176	0	0.0%
40.7%	5,067	5,067	0	0.0%
42.0%	4,971	4,971	0	0.0%
43.2%	4,614	4,726	113	2.4%
44.4%	3,913	3,852	-60	-1.5%
45.7%	3,500	3,499	0	0.0%
46.9%	3,446	3,456	10	0.3%
48.1%	3,368	3,368	0	0.0%
49.4%	3,009	2,840	-168	-5.6%
50.6%	2,943	2,724	-218	-7.4%
51.9%	2,737	2,670	-66	-2.4%
53.1%	2,561	2,473	-88	-3.4%
54.3%	2,478	2,351	-127	-5.1%
55.6%	2,358	2,199	-159	-6.7%
56.8%	2,234	2,173	-61	-2.7%
58.0%	2,199	2,081	-118	-5.4%
59.3%	2,015	2,064	48	2.4%
60.5%	1,722	2,016	294	17.1%
61.7%	1,683	1,806	124	7.3%
63.0%	1,680	1,743	62	3.7%
64.2%	1,680	1,683	2	0.1%
65.4%	1,680	1,680	0	0.0%
66.7%	1,625	1,680	55	3.4%
67.9%	1,495	1,625	130	8.7%
69.1%	1,378	1,549	171	12.4%
70.4%	1,378	1,393	15	1.1%
71.6%	1,376	1,378	2	0.2%
72.8%	1,376	1,378	2	0.2%
74.1%	1,376	1,376	0	0.0%
75.3%	1,376	1,376	0	0.0%
76.5%	1,376	1,376	0	0.0%
77.8%	1,376	1,376	0	0.0%
79.0%	1,376	1,376	0	0.0%
80.2%	1,376	1,376	0	0.0%
81.5%	1,354	1,376	22	1.6%
82.7%	1,267	1,318	51	4.1%
84.0%	1,253	1,293	40	3.2%
85.2%	1,197	1,287	89	7.5%
86.4%	1,178	1,200	21	1.8%
87.7%	1,164	1,197	33	2.9%
88.9%	1,132	1,197	66	5.8%
90.1%	1,075	1,106	31	2.9%
91.4%	992	914	-79	-7.9%
92.6%	891	912	21	2.4%
93.8%	750	745	-6	-0.8%
95.1%	745	743	-2	-0.3%
96.3%	743	742	-1	-0.1%
97.5%	362	393	30	8.4%
98.8%	326	326	0	0.0%
100.0%	312	312	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,912	17,912	0	0.0%
1.2%	17,277	17,278	0	0.0%
2.5%	12,596	12,596	0	0.0%
3.7%	11,965	11,965	0	0.0%
4.9%	11,110	11,115	5	0.0%
6.2%	10,940	10,940	0	0.0%
7.4%	10,892	10,915	24	0.2%
8.6%	9,655	9,655	0	0.0%
9.9%	8,837	8,837	0	0.0%
11.1%	8,514	8,514	0	0.0%
12.3%	7,582	7,954	372	4.9%
13.6%	7,523	7,582	59	0.8%
14.8%	7,274	7,274	0	0.0%
16.0%	7,038	7,038	0	0.0%
17.3%	6,975	6,975	0	0.0%
18.5%	6,852	6,852	0	0.0%
19.8%	6,188	6,181	-7	-0.1%
21.0%	5,289	5,289	0	0.0%
22.2%	4,879	4,879	0	0.0%
23.5%	4,874	4,875	1	0.0%
24.7%	4,866	4,860	-6	-0.1%
25.9%	4,855	4,855	0	0.0%
27.2%	4,852	4,852	0	0.0%
28.4%	4,644	4,644	0	0.0%
29.6%	4,622	4,622	0	0.0%
30.9%	4,501	4,501	0	0.0%
32.1%	4,325	4,265	-60	-1.4%
33.3%	4,263	4,254	-9	-0.2%
34.6%	4,164	4,164	0	0.0%
35.8%	4,037	4,034	-3	-0.1%
37.0%	4,003	4,003	0	0.0%
38.3%	3,969	3,971	2	0.0%
39.5%	3,795	3,794	-1	0.0%
40.7%	3,775	3,775	0	0.0%
42.0%	3,730	3,730	0	0.0%
43.2%	3,653	3,650	-4	-0.1%
44.4%	3,153	3,147	-6	-0.2%
45.7%	3,144	3,144	0	0.0%
46.9%	3,070	3,070	0	0.0%
48.1%	2,992	2,995	3	0.1%
49.4%	2,886	2,886	0	0.0%
50.6%	2,884	2,883	-1	0.0%
51.9%	2,487	2,771	283	11.4%
53.1%	2,362	2,362	0	0.0%
54.3%	2,266	2,271	5	0.2%
55.6%	2,098	2,171	73	3.5%
56.8%	2,063	2,098	35	1.7%
58.0%	2,062	2,062	0	0.0%
59.3%	1,962	2,056	94	4.8%
60.5%	1,946	2,020	73	3.8%
61.7%	1,903	1,961	58	3.0%
63.0%	1,803	1,903	100	5.5%
64.2%	1,790	1,802	12	0.7%
65.4%	1,735	1,738	3	0.2%
66.7%	1,709	1,709	0	0.0%
67.9%	1,698	1,698	0	0.0%
69.1%	1,692	1,691	-1	-0.1%
70.4%	1,688	1,688	0	0.0%
71.6%	1,683	1,683	0	0.0%
72.8%	1,680	1,680	0	0.0%
74.1%	1,644	1,594	-50	-3.0%
75.3%	1,385	1,385	0	0.0%
76.5%	1,385	1,385	0	0.0%
77.8%	1,212	1,295	83	6.9%
79.0%	1,206	1,212	6	0.5%
80.2%	962	1,206	244	25.4%
81.5%	919	1,201	282	30.7%
82.7%	862	1,009	147	17.1%
84.0%	826	826	0	0.0%
85.2%	808	807	-1	-0.1%
86.4%	749	749	0	0.0%
87.7%	748	748	0	0.0%
88.9%	742	742	1	0.1%
90.1%	741	741	0	0.1%
91.4%	740	740	1	0.1%
92.6%	740	740	0	0.0%
93.8%	740	740	0	0.0%
95.1%	737	740	3	0.4%
96.3%	737	737	0	0.0%
97.5%	357	736	379	106.0%
98.8%	357	672	315	88.2%
100.0%	342	357	16	4.6%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,498	15,498	0	0.0%
1.2%	10,296	10,296	0	0.0%
2.5%	9,096	9,096	0	0.0%
3.7%	7,413	7,413	0	0.0%
4.9%	7,296	7,296	0	0.0%
6.2%	7,273	7,273	0	0.0%
7.4%	6,669	6,669	0	0.0%
8.6%	6,651	6,651	0	0.0%
9.9%	6,210	6,210	0	0.0%
11.1%	6,197	6,197	0	0.0%
12.3%	6,116	6,116	0	0.0%
13.6%	6,014	6,045	32	0.5%
14.8%	6,007	5,996	-11	-0.2%
16.0%	5,719	5,719	0	0.0%
17.3%	5,685	5,676	-9	-0.2%
18.5%	5,524	5,524	0	0.0%
19.8%	5,373	5,373	0	0.0%
21.0%	4,931	4,931	0	0.0%
22.2%	4,793	4,793	0	0.0%
23.5%	4,717	4,717	0	0.0%
24.7%	4,668	4,668	0	0.0%
25.9%	4,593	4,593	0	0.0%
27.2%	4,252	4,391	138	3.3%
28.4%	4,123	4,252	129	3.1%
29.6%	4,122	4,123	1	0.0%
30.9%	4,060	4,122	62	1.5%
32.1%	3,969	4,060	91	2.3%
33.3%	3,765	3,765	0	0.0%
34.6%	3,711	3,712	1	0.0%
35.8%	3,699	3,694	-5	-0.1%
37.0%	3,681	3,677	-4	-0.1%
38.3%	3,414	3,414	0	0.0%
39.5%	3,386	3,386	0	0.0%
40.7%	3,318	3,208	-110	-3.3%
42.0%	3,208	3,142	-66	-2.1%
43.2%	3,142	2,877	-264	-8.4%
44.4%	2,877	2,802	-76	-2.6%
45.7%	2,802	2,720	-82	-2.9%
46.9%	2,720	2,649	-71	-2.6%
48.1%	2,647	2,580	-67	-2.5%
49.4%	2,566	2,557	-9	-0.3%
50.6%	2,538	2,538	0	0.0%
51.9%	2,505	2,505	0	0.0%
53.1%	2,491	2,438	-52	-2.1%
54.3%	2,438	2,431	-8	-0.3%
55.6%	2,431	2,392	-39	-1.6%
56.8%	2,404	2,216	-188	-7.8%
58.0%	2,396	2,201	-195	-8.1%
59.3%	2,216	1,964	-252	-11.4%
60.5%	1,964	1,871	-93	-4.8%
61.7%	1,846	1,739	-107	-5.8%
63.0%	1,737	1,685	-52	-3.0%
64.2%	1,685	1,685	0	0.0%
65.4%	1,685	1,685	0	0.0%
66.7%	1,685	1,683	-2	-0.1%
67.9%	1,683	1,666	-17	-1.0%
69.1%	1,666	1,664	-2	-0.1%
70.4%	1,664	1,664	0	0.0%
71.6%	1,664	1,662	-2	-0.1%
72.8%	1,661	1,597	-64	-3.8%
74.1%	1,597	1,570	-28	-1.7%
75.3%	1,553	1,527	-26	-1.7%
76.5%	1,383	1,384	1	0.1%
77.8%	1,383	1,383	0	0.0%
79.0%	1,364	1,374	11	0.8%
80.2%	1,269	1,293	25	1.9%
81.5%	1,204	1,204	0	0.0%
82.7%	1,185	1,107	-78	-6.6%
84.0%	1,107	1,019	-88	-7.9%
85.2%	1,021	947	-75	-7.3%
86.4%	831	947	116	13.9%
87.7%	811	946	135	16.7%
88.9%	755	946	191	25.3%
90.1%	747	945	199	26.6%
91.4%	747	903	156	20.9%
92.6%	747	831	84	11.3%
93.8%	747	747	0	0.0%
95.1%	747	747	0	0.0%
96.3%	747	747	0	0.0%
97.5%	744	747	2	0.3%
98.8%	315	697	382	121.5%
100.0%	303	484	181	59.9%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,561	10,561	0	0.0%
1.2%	9,709	9,709	0	0.0%
2.5%	9,574	9,574	0	0.0%
3.7%	9,065	9,065	0	0.0%
4.9%	8,349	8,349	0	0.0%
6.2%	8,340	8,340	0	0.0%
7.4%	8,314	8,315	0	0.0%
8.6%	7,653	7,653	0	0.0%
9.9%	7,636	7,636	0	0.0%
11.1%	7,511	7,511	0	0.0%
12.3%	6,820	6,820	0	0.0%
13.6%	6,189	6,189	0	0.0%
14.8%	5,718	5,718	0	0.0%
16.0%	5,539	5,539	0	0.0%
17.3%	5,226	5,226	0	0.0%
18.5%	5,209	5,209	0	0.0%
19.8%	4,829	4,833	3	0.1%
21.0%	4,576	4,581	5	0.1%
22.2%	4,509	4,509	0	0.0%
23.5%	4,488	4,488	0	0.0%
24.7%	4,458	4,458	0	0.0%
25.9%	4,333	4,333	0	0.0%
27.2%	4,237	4,237	0	0.0%
28.4%	4,079	4,077	-3	-0.1%
29.6%	3,992	3,980	-12	-0.3%
30.9%	3,758	3,754	-4	-0.1%
32.1%	3,753	3,753	0	0.0%
33.3%	3,651	3,654	2	0.1%
34.6%	3,649	3,651	2	0.1%
35.8%	3,565	3,565	0	0.0%
37.0%	3,557	3,557	0	0.0%
38.3%	3,524	3,512	-12	-0.3%
39.5%	3,448	3,448	0	0.0%
40.7%	3,398	3,398	0	0.0%
42.0%	3,363	3,363	0	0.0%
43.2%	3,066	3,066	0	0.0%
44.4%	3,059	3,059	0	0.0%
45.7%	2,989	2,989	0	0.0%
46.9%	2,975	2,863	-112	-3.8%
48.1%	2,863	2,749	-113	-4.0%
49.4%	2,566	2,566	0	0.0%
50.6%	2,429	2,424	-6	-0.2%
51.9%	2,328	2,328	0	0.0%
53.1%	2,270	2,272	2	0.1%
54.3%	2,223	2,166	-56	-2.5%
55.6%	2,165	1,998	-167	-7.7%
56.8%	1,998	1,975	-23	-1.2%
58.0%	1,834	1,834	0	0.0%
59.3%	1,803	1,687	-116	-6.4%
60.5%	1,712	1,687	-25	-1.4%
61.7%	1,687	1,687	0	0.0%
63.0%	1,687	1,687	0	0.0%
64.2%	1,687	1,687	0	0.0%
65.4%	1,687	1,679	-8	-0.5%
66.7%	1,687	1,670	-18	-1.0%
67.9%	1,679	1,669	-10	-0.6%
69.1%	1,669	1,666	-3	-0.2%
70.4%	1,666	1,526	-140	-8.4%
71.6%	1,535	1,466	-69	-4.5%
72.8%	1,526	1,385	-142	-9.3%
74.1%	1,414	1,385	-29	-2.1%
75.3%	1,385	1,295	-89	-6.5%
76.5%	1,385	1,247	-138	-10.0%
77.8%	1,211	1,211	0	0.0%
79.0%	1,206	1,196	-10	-0.8%
80.2%	1,189	1,183	-5	-0.4%
81.5%	1,118	1,175	57	5.1%
82.7%	1,089	1,135	46	4.2%
84.0%	1,032	1,118	86	8.4%
85.2%	965	1,112	147	15.2%
86.4%	961	1,088	127	13.2%
87.7%	833	1,020	187	22.5%
88.9%	813	1,011	198	24.4%
90.1%	757	979	222	29.4%
91.4%	748	978	230	30.8%
92.6%	748	950	202	27.0%
93.8%	748	833	84	11.3%
95.1%	748	786	37	5.0%
96.3%	748	748	0	0.0%
97.5%	748	748	0	0.0%
98.8%	309	733	424	137.2%
100.0%	266	480	214	80.4%

Table SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,697	11,697	0	0.0%
1.2%	9,696	9,696	0	0.0%
2.5%	8,994	8,994	0	0.0%
3.7%	8,329	8,329	0	0.0%
4.9%	7,988	7,988	0	0.0%
6.2%	7,514	7,514	0	0.0%
7.4%	7,499	7,499	0	0.0%
8.6%	6,193	6,193	0	0.0%
9.9%	5,911	5,911	0	0.0%
11.1%	5,835	5,835	0	0.0%
12.3%	5,647	5,647	0	0.0%
13.6%	5,109	5,109	0	0.0%
14.8%	4,964	4,964	0	0.0%
16.0%	4,937	4,937	0	0.0%
17.3%	4,903	4,903	0	0.0%
18.5%	4,656	4,817	161	3.5%
19.8%	4,252	4,656	404	9.5%
21.0%	4,222	4,238	16	0.4%
22.2%	4,136	4,138	3	0.1%
23.5%	4,107	4,107	0	0.0%
24.7%	4,038	4,046	8	0.2%
25.9%	3,907	4,038	131	3.4%
27.2%	3,691	3,913	222	6.0%
28.4%	3,577	3,693	116	3.2%
29.6%	3,576	3,691	115	3.2%
30.9%	3,572	3,577	5	0.1%
32.1%	3,561	3,576	15	0.4%
33.3%	3,184	3,572	389	12.2%
34.6%	3,176	3,566	390	12.3%
35.8%	3,149	3,561	412	13.1%
37.0%	3,120	3,541	421	13.5%
38.3%	3,048	3,048	0	0.0%
39.5%	2,938	2,938	0	0.0%
40.7%	2,851	2,841	-10	-0.3%
42.0%	2,782	2,614	-168	-6.1%
43.2%	2,755	2,576	-179	-6.5%
44.4%	2,614	2,468	-146	-5.6%
45.7%	2,576	2,424	-152	-5.9%
46.9%	2,502	2,323	-179	-7.2%
48.1%	2,449	2,269	-180	-7.4%
49.4%	2,422	2,237	-185	-7.6%
50.6%	2,356	2,188	-168	-7.1%
51.9%	2,320	2,175	-145	-6.2%
53.1%	2,312	2,137	-176	-7.6%
54.3%	2,239	2,111	-127	-5.7%
55.6%	2,162	2,109	-53	-2.4%
56.8%	2,137	2,104	-32	-1.5%
58.0%	2,110	2,078	-32	-1.5%
59.3%	2,078	2,044	-34	-1.6%
60.5%	2,067	1,901	-167	-8.1%
61.7%	1,895	1,883	-11	-0.6%
63.0%	1,885	1,859	-26	-1.4%
64.2%	1,830	1,830	0	0.0%
65.4%	1,745	1,815	70	4.0%
66.7%	1,722	1,815	93	5.4%
67.9%	1,714	1,797	83	4.9%
69.1%	1,711	1,795	84	4.9%
70.4%	1,685	1,788	103	6.1%
71.6%	1,685	1,685	0	0.0%
72.8%	1,685	1,685	0	0.0%
74.1%	1,685	1,685	0	0.0%
75.3%	1,685	1,685	0	0.0%
76.5%	1,684	1,685	1	0.1%
77.8%	1,674	1,684	9	0.6%
79.0%	1,673	1,674	2	0.1%
80.2%	1,673	1,673	0	0.0%
81.5%	1,502	1,551	50	3.3%
82.7%	1,458	1,538	80	5.5%
84.0%	1,390	1,536	146	10.5%
85.2%	1,238	1,469	231	18.7%
86.4%	1,197	1,455	258	21.6%
87.7%	1,193	1,439	246	20.6%
88.9%	1,116	1,436	320	28.7%
90.1%	966	1,376	410	42.4%
91.4%	963	1,353	390	40.4%
92.6%	938	1,094	156	16.6%
93.8%	809	1,009	200	24.7%
95.1%	746	959	213	28.5%
96.3%	746	865	118	15.9%
97.5%	746	809	62	8.3%
98.8%	498	584	86	17.2%
100.0%	323	397	74	22.8%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,570	5,570	0	0.0%
1.2%	5,077	4,937	-140	-2.8%
2.5%	4,948	4,937	-11	-0.2%
3.7%	4,937	4,937	0	0.0%
4.9%	4,937	4,937	0	0.0%
6.2%	4,937	4,936	-1	0.0%
7.4%	4,937	4,934	-3	-0.1%
8.6%	4,937	4,931	-6	-0.1%
9.9%	4,937	4,921	-16	-0.3%
11.1%	4,937	4,918	-19	-0.4%
12.3%	4,936	4,915	-21	-0.4%
13.6%	4,935	4,842	-94	-1.9%
14.8%	4,934	4,514	-420	-8.5%
16.0%	4,933	4,231	-703	-14.2%
17.3%	4,933	4,196	-737	-14.9%
18.5%	4,932	4,168	-763	-15.5%
19.8%	4,931	4,150	-781	-15.8%
21.0%	4,930	4,137	-793	-16.1%
22.2%	4,924	3,948	-976	-19.8%
23.5%	4,921	3,892	-1,029	-20.9%
24.7%	4,921	3,888	-1,032	-21.0%
25.9%	4,918	3,824	-1,093	-22.2%
27.2%	4,915	3,733	-1,182	-24.0%
28.4%	4,713	3,725	-988	-21.0%
29.6%	4,678	3,709	-969	-20.7%
30.9%	4,622	3,690	-931	-20.2%
32.1%	4,534	3,671	-863	-19.0%
33.3%	4,526	3,666	-861	-19.0%
34.6%	4,505	3,638	-867	-19.2%
35.8%	4,217	3,584	-633	-15.0%
37.0%	4,196	3,532	-664	-15.8%
38.3%	4,176	3,331	-845	-20.2%
39.5%	4,124	3,323	-800	-19.4%
40.7%	4,080	3,323	-757	-18.5%
42.0%	4,016	3,148	-869	-21.6%
43.2%	3,946	3,114	-832	-21.1%
44.4%	3,818	3,035	-783	-20.5%
45.7%	3,709	3,020	-688	-18.6%
46.9%	3,666	2,987	-678	-18.5%
48.1%	3,620	2,920	-700	-19.3%
49.4%	3,599	2,754	-845	-23.5%
50.6%	3,583	2,740	-843	-23.5%
51.9%	3,380	2,656	-724	-21.4%
53.1%	3,318	2,648	-670	-20.2%
54.3%	3,238	2,595	-644	-19.9%
55.6%	3,235	2,573	-662	-20.5%
56.8%	3,184	2,566	-618	-19.4%
58.0%	3,083	2,545	-538	-17.5%
59.3%	3,069	2,502	-567	-18.5%
60.5%	3,048	2,446	-603	-19.8%
61.7%	3,025	2,428	-597	-19.7%
63.0%	3,021	2,402	-619	-20.5%
64.2%	2,920	2,402	-518	-17.7%
65.4%	2,830	2,369	-461	-16.3%
66.7%	2,811	2,363	-448	-15.9%
67.9%	2,754	2,335	-420	-15.2%
69.1%	2,740	2,333	-408	-14.9%
70.4%	2,648	2,312	-336	-12.7%
71.6%	2,638	2,311	-326	-12.4%
72.8%	2,612	2,309	-304	-11.6%
74.1%	2,595	2,296	-299	-11.5%
75.3%	2,552	2,290	-262	-10.3%
76.5%	2,545	2,279	-267	-10.5%
77.8%	2,446	1,933	-513	-21.0%
79.0%	2,428	1,932	-496	-20.4%
80.2%	2,414	1,920	-494	-20.5%
81.5%	2,402	1,878	-524	-21.8%
82.7%	2,335	1,781	-554	-23.7%
84.0%	2,304	1,777	-526	-22.9%
85.2%	2,291	1,775	-516	-22.5%
86.4%	2,290	1,683	-608	-26.5%
87.7%	2,289	1,534	-755	-33.0%
88.9%	2,285	1,462	-823	-36.0%
90.1%	1,932	1,456	-476	-24.6%
91.4%	1,897	1,455	-442	-23.3%
92.6%	1,714	1,449	-265	-15.5%
93.8%	1,461	1,370	-90	-6.2%
95.1%	892	1,348	456	51.1%
96.3%	864	1,165	300	34.7%
97.5%	505	786	281	55.6%
98.8%	369	722	353	95.7%
100.0%	321	384	63	19.6%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,685	4,685	0	0.0%
1.2%	4,287	4,287	0	0.0%
2.5%	4,265	4,265	0	0.0%
3.7%	3,964	3,964	0	0.0%
4.9%	3,961	3,961	0	0.0%
6.2%	3,876	3,876	0	0.0%
7.4%	3,813	3,813	0	0.0%
8.6%	3,811	3,811	0	0.0%
9.9%	3,746	3,746	0	0.0%
11.1%	3,742	3,742	0	0.0%
12.3%	3,734	3,734	0	0.0%
13.6%	3,671	3,718	47	1.3%
14.8%	3,565	3,671	107	3.0%
16.0%	3,540	3,565	24	0.7%
17.3%	3,524	3,540	16	0.5%
18.5%	3,392	3,480	89	2.6%
19.8%	3,384	3,057	-327	-9.6%
21.0%	3,031	2,979	-52	-1.7%
22.2%	2,800	2,959	158	5.7%
23.5%	2,730	2,896	166	6.1%
24.7%	2,497	2,876	379	15.2%
25.9%	2,482	2,853	372	15.0%
27.2%	2,377	2,835	457	19.2%
28.4%	2,308	2,781	473	20.5%
29.6%	2,292	2,623	332	14.5%
30.9%	2,291	2,557	265	11.6%
32.1%	2,266	2,504	238	10.5%
33.3%	2,261	2,412	151	6.7%
34.6%	2,256	2,404	148	6.5%
35.8%	2,227	2,386	159	7.1%
37.0%	2,216	2,247	30	1.4%
38.3%	1,931	2,225	294	15.2%
39.5%	1,930	1,929	-1	-0.1%
40.7%	1,929	1,918	-11	-0.6%
42.0%	1,927	1,917	-10	-0.5%
43.2%	1,926	1,916	-11	-0.6%
44.4%	1,873	1,916	43	2.3%
45.7%	1,865	1,915	50	2.7%
46.9%	1,823	1,912	90	4.9%
48.1%	1,819	1,909	89	4.9%
49.4%	1,806	1,909	103	5.7%
50.6%	1,788	1,907	118	6.6%
51.9%	1,736	1,906	170	9.8%
53.1%	1,677	1,887	209	12.5%
54.3%	1,668	1,868	200	12.0%
55.6%	1,666	1,849	182	10.9%
56.8%	1,665	1,848	182	11.0%
58.0%	1,665	1,842	177	10.6%
59.3%	1,662	1,740	78	4.7%
60.5%	1,661	1,734	72	4.3%
61.7%	1,661	1,708	47	2.8%
63.0%	1,659	1,706	47	2.8%
64.2%	1,659	1,702	43	2.6%
65.4%	1,659	1,685	27	1.6%
66.7%	1,659	1,682	23	1.4%
67.9%	1,659	1,679	21	1.3%
69.1%	1,659	1,671	12	0.7%
70.4%	1,659	1,671	12	0.7%
71.6%	1,659	1,669	11	0.6%
72.8%	1,659	1,668	9	0.6%
74.1%	1,657	1,659	1	0.1%
75.3%	1,615	1,623	8	0.5%
76.5%	1,591	1,540	-51	-3.2%
77.8%	1,521	1,539	18	1.2%
79.0%	1,461	1,459	-2	-0.2%
80.2%	1,086	1,455	369	34.0%
81.5%	1,061	1,372	310	29.2%
82.7%	818	1,365	547	66.9%
84.0%	773	1,345	572	74.0%
85.2%	746	1,319	573	76.9%
86.4%	746	1,049	303	40.6%
87.7%	745	1,046	301	40.4%
88.9%	732	1,010	279	38.1%
90.1%	730	994	265	36.3%
91.4%	723	971	248	34.3%
92.6%	709	940	232	32.7%
93.8%	682	936	254	37.2%
95.1%	659	859	200	30.4%
96.3%	505	829	324	64.3%
97.5%	429	804	375	87.5%
98.8%	367	747	380	103.5%
100.0%	310	462	152	49.0%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,935	4,885	-50	-1.0%
1.2%	4,929	4,762	-167	-3.4%
2.5%	4,846	4,538	-308	-6.4%
3.7%	4,831	4,452	-379	-7.8%
4.9%	4,783	4,361	-422	-8.8%
6.2%	4,568	4,308	-260	-5.7%
7.4%	4,487	4,195	-292	-6.5%
8.6%	4,475	4,183	-292	-6.5%
9.9%	4,425	3,963	-461	-10.4%
11.1%	4,395	3,668	-727	-16.5%
12.3%	4,329	3,659	-670	-15.5%
13.6%	4,274	3,637	-638	-14.9%
14.8%	4,202	3,419	-783	-18.6%
16.0%	3,907	3,221	-685	-17.5%
17.3%	3,844	3,196	-648	-16.8%
18.5%	3,792	3,122	-670	-17.7%
19.8%	3,763	3,099	-664	-17.6%
21.0%	3,348	2,994	-354	-10.6%
22.2%	3,151	2,830	-321	-10.2%
23.5%	3,122	2,499	-624	-20.0%
24.7%	3,017	2,498	-519	-17.2%
25.9%	2,948	2,487	-461	-15.6%
27.2%	2,797	2,449	-348	-12.4%
28.4%	2,790	2,415	-375	-13.4%
29.6%	2,677	2,406	-271	-10.1%
30.9%	2,619	2,405	-214	-8.2%
32.1%	2,510	2,385	-125	-5.0%
33.3%	2,508	2,384	-124	-4.9%
34.6%	2,410	2,297	-114	-4.7%
35.8%	2,406	2,285	-121	-5.0%
37.0%	2,385	2,246	-139	-5.8%
38.3%	2,379	2,245	-133	-5.6%
39.5%	2,276	2,145	-132	-5.8%
40.7%	2,145	2,137	-8	-0.4%
42.0%	2,124	1,889	-235	-11.1%
43.2%	2,123	1,889	-235	-11.1%
44.4%	1,888	1,889	0	0.0%
45.7%	1,884	1,886	2	0.1%
46.9%	1,804	1,835	32	1.8%
48.1%	1,745	1,712	-33	-1.9%
49.4%	1,665	1,675	9	0.6%
50.6%	1,621	1,583	-38	-2.4%
51.9%	1,584	1,583	-1	0.0%
53.1%	1,523	1,583	60	3.9%
54.3%	1,469	1,579	110	7.5%
55.6%	1,469	1,578	109	7.4%
56.8%	1,469	1,575	106	7.3%
58.0%	1,469	1,575	106	7.2%
59.3%	1,469	1,574	106	7.2%
60.5%	1,469	1,573	105	7.1%
61.7%	1,468	1,569	100	6.8%
63.0%	1,467	1,550	83	5.6%
64.2%	1,467	1,510	44	3.0%
65.4%	1,464	1,501	38	2.6%
66.7%	1,463	1,469	5	0.4%
67.9%	1,463	1,468	5	0.4%
69.1%	1,459	1,468	10	0.7%
70.4%	1,458	1,468	10	0.7%
71.6%	1,445	1,466	21	1.5%
72.8%	1,407	1,453	47	3.3%
74.1%	1,245	1,446	201	16.2%
75.3%	1,193	1,445	252	21.1%
76.5%	1,116	1,425	308	27.6%
77.8%	1,061	1,384	324	30.5%
79.0%	1,041	1,311	270	25.9%
80.2%	980	1,261	281	28.7%
81.5%	831	1,224	393	47.3%
82.7%	755	1,201	445	59.0%
84.0%	747	1,186	438	58.6%
85.2%	747	1,123	376	50.4%
86.4%	747	1,082	335	44.8%
87.7%	747	918	171	22.9%
88.9%	747	850	104	13.9%
90.1%	747	834	87	11.7%
91.4%	746	828	82	11.0%
92.6%	736	770	35	4.7%
93.8%	634	745	111	17.5%
95.1%	513	745	232	45.1%
96.3%	503	743	239	47.6%
97.5%	374	742	369	98.7%
98.8%	329	626	296	89.9%
100.0%	323	352	30	9.2%

Figure SW-29-b
American River at H Street, Monthly Flow
Probability of Exceedance

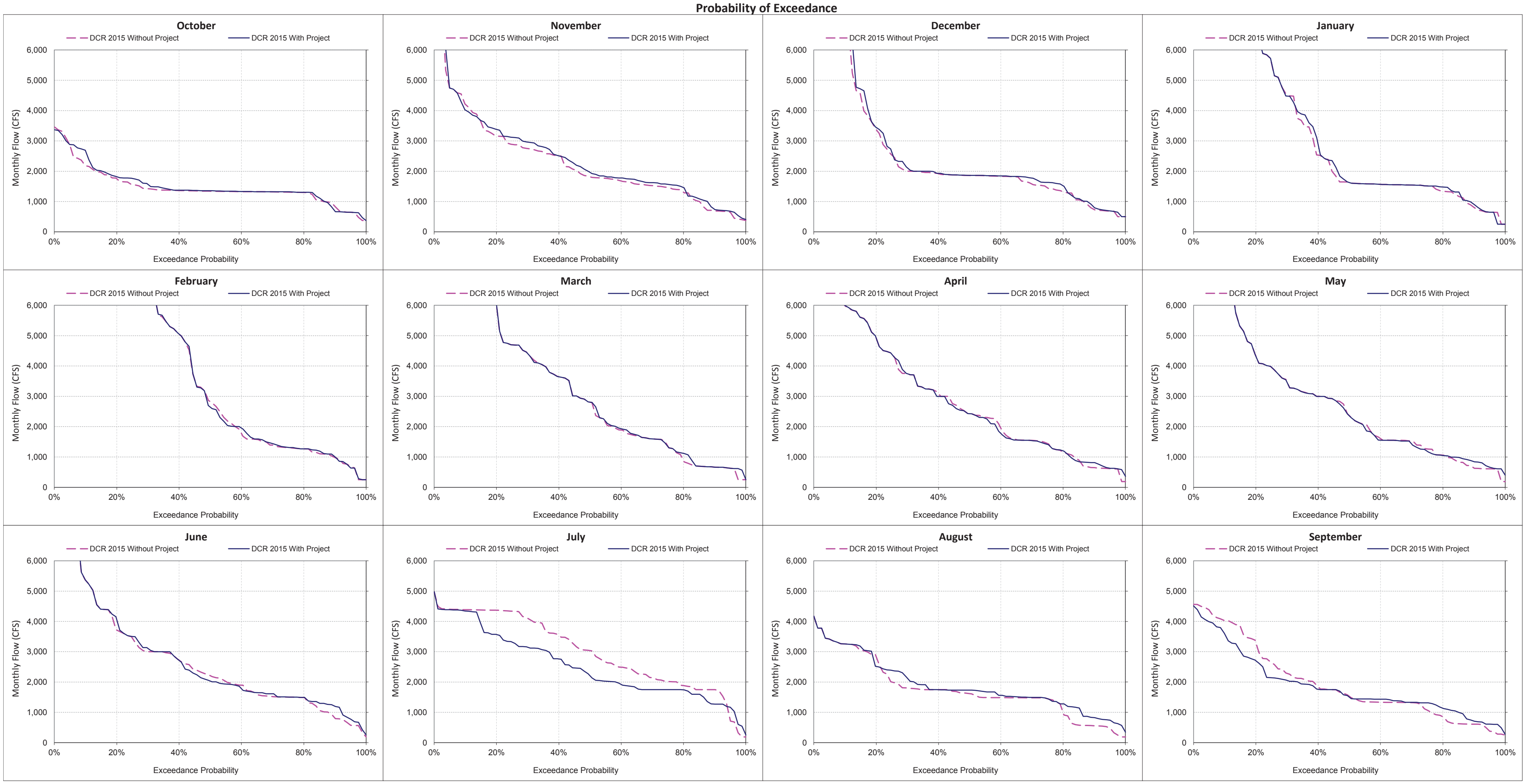


Table SW-29-b

American River at H Street, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,462	3,372	-90	-2.6%
1.2%	3,366	3,340	-26	-0.8%
2.5%	3,315	3,206	-109	-3.3%
3.7%	3,101	3,009	-91	-2.9%
4.9%	2,877	2,877	0	0.0%
6.2%	2,459	2,872	413	16.8%
7.4%	2,431	2,771	340	14.0%
8.6%	2,365	2,734	369	15.6%
9.9%	2,184	2,690	506	23.1%
11.1%	2,154	2,375	222	10.3%
12.3%	2,056	2,116	60	2.9%
13.6%	1,983	2,030	47	2.4%
14.8%	1,974	2,019	45	2.3%
16.0%	1,883	1,974	91	4.8%
17.3%	1,879	1,912	33	1.8%
18.5%	1,781	1,861	80	4.5%
19.8%	1,775	1,830	54	3.1%
21.0%	1,663	1,786	123	7.4%
22.2%	1,651	1,781	129	7.8%
23.5%	1,644	1,777	134	8.1%
24.7%	1,562	1,769	208	13.3%
25.9%	1,546	1,746	200	12.9%
27.2%	1,515	1,704	189	12.5%
28.4%	1,434	1,602	168	11.7%
29.6%	1,424	1,598	174	12.2%
30.9%	1,416	1,491	75	5.3%
32.1%	1,401	1,488	87	6.2%
33.3%	1,379	1,484	104	7.6%
34.6%	1,377	1,453	76	5.5%
35.8%	1,376	1,430	54	3.9%
37.0%	1,374	1,402	28	2.0%
38.3%	1,369	1,377	8	0.6%
39.5%	1,365	1,376	11	0.8%
40.7%	1,361	1,373	12	0.9%
42.0%	1,360	1,373	12	0.9%
43.2%	1,355	1,372	16	1.2%
44.4%	1,353	1,365	11	0.8%
45.7%	1,351	1,362	11	0.8%
46.9%	1,345	1,360	14	1.1%
48.1%	1,344	1,356	13	0.9%
49.4%	1,343	1,356	13	0.9%
50.6%	1,339	1,354	15	1.1%
51.9%	1,338	1,352	14	1.1%
53.1%	1,335	1,345	11	0.8%
54.3%	1,334	1,342	8	0.6%
55.6%	1,331	1,340	10	0.7%
56.8%	1,330	1,337	7	0.5%
58.0%	1,329	1,336	7	0.5%
59.3%	1,328	1,335	7	0.5%
60.5%	1,326	1,333	7	0.5%
61.7%	1,326	1,331	6	0.4%
63.0%	1,326	1,330	4	0.3%
64.2%	1,325	1,327	2	0.1%
65.4%	1,325	1,326	2	0.1%
66.7%	1,324	1,326	2	0.1%
67.9%	1,321	1,326	5	0.3%
69.1%	1,321	1,326	5	0.4%
70.4%	1,318	1,325	7	0.6%
71.6%	1,314	1,325	11	0.8%
72.8%	1,312	1,325	13	1.0%
74.1%	1,311	1,323	12	0.9%
75.3%	1,309	1,320	10	0.8%
76.5%	1,305	1,312	7	0.5%
77.8%	1,304	1,310	6	0.4%
79.0%	1,303	1,307	4	0.3%
80.2%	1,298	1,306	8	0.6%
81.5%	1,295	1,304	9	0.7%
82.7%	1,235	1,300	65	5.3%
84.0%	1,060	1,181	121	11.4%
85.2%	1,035	1,110	76	7.3%
86.4%	995	1,015	20	2.0%
87.7%	986	964	-22	-2.2%
88.9%	960	823	-137	-14.3%
90.1%	823	667	-156	-18.9%
91.4%	698	663	-35	-5.0%
92.6%	664	655	-10	-1.4%
93.8%	647	651	3	0.5%
95.1%	646	646	0	0.0%
96.3%	636	636	0	-0.1%
97.5%	478	633	156	32.6%
98.8%	375	470	95	25.3%
100.0%	375	375	0	0.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,816	16,399	1,583	10.7%
1.2%	13,782	13,782	0	0.0%
2.5%	7,576	7,576	0	0.0%
3.7%	5,330	6,054	724	13.6%
4.9%	4,748	4,747	-1	0.0%
6.2%	4,705	4,705	0	0.0%
7.4%	4,588	4,579	-9	-0.2%
8.6%	4,551	4,304	-248	-5.4%
9.9%	4,220	4,029	-191	-4.5%
11.1%	4,102	3,952	-151	-3.7%
12.3%	3,937	3,851	-86	-2.2%
13.6%	3,889	3,804	-85	-2.2%
14.8%	3,685	3,681	-3	-0.1%
16.0%	3,350	3,626	275	8.2%
17.3%	3,320	3,467	147	4.4%
18.5%	3,246	3,429	183	5.6%
19.8%	3,161	3,384	223	7.0%
21.0%	3,155	3,348	193	6.1%
22.2%	3,146	3,158	12	0.4%
23.5%	2,930	3,144	214	7.3%
24.7%	2,890	3,122	232	8.0%
25.9%	2,874	3,110	236	8.2%
27.2%	2,874	3,096	222	7.7%
28.4%	2,775	2,989	215	7.7%
29.6%	2,753	2,967	214	7.8%
30.9%	2,737	2,948	211	7.7%
32.1%	2,709	2,933	224	8.3%
33.3%	2,668	2,836	169	6.3%
34.6%	2,653	2,813	160	6.0%
35.8%	2,579	2,777	198	7.7%
37.0%	2,573	2,719	146	5.7%
38.3%	2,533	2,566	33	1.3%
39.5%	2,510	2,518	8	0.3%
40.7%	2,499	2,483	-15	-0.6%
42.0%	2,154	2,456	302	14.0%
43.2%	2,146	2,357	211	9.8%
44.4%	2,068	2,287	219	10.6%
45.7%	2,028	2,193	165	8.1%
46.9%	1,921	2,150	229	11.9%
48.1%	1,860	2,064	205	11.0%
49.4%	1,840	2,000	160	8.7%
50.6%	1,796	1,924	128	7.1%
51.9%	1,788	1,897	109	6.1%
53.1%	1,781	1,847	66	3.7%
54.3%	1,773	1,847	74	4.2%
55.6%	1,760	1,809	49	2.8%
56.8%	1,741	1,809	67	3.9%
58.0%	1,732	1,788	57	3.3%
59.3%	1,699	1,781	81	4.8%
60.5%	1,664	1,773	109	6.6%
61.7%	1,650	1,753	103	6.2%
63.0%	1,636	1,741	105	6.4%
64.2%	1,586	1,732	146	9.2%
65.4%	1,569	1,689	120	7.7%
66.7%	1,568	1,667	99	6.3%
67.9%	1,546	1,631	85	5.5%
69.1%	1,531	1,626	95	6.2%
70.4%	1,522	1,625	103	6.8%
71.6%	1,504	1,612	108	7.2%
72.8%	1,496	1,584	88	5.8%
74.1%	1,473	1,577	103	7.0%
75.3%	1,465	1,560	94	6.4%
76.5%	1,412	1,542	130	9.2%
77.8%	1,395	1,540	145	10.4%
79.0%	1,390	1,500	111	8.0%
80.2%	1,287	1,451	165	12.8%
81.5%	1,286	1,180	-107	-8.3%
82.7%	1,095	1,176	81	7.4%
84.0%	1,034	1,138	104	10.0%
85.2%	997	1,086	89	9.0%
86.4%	825	1,039	214	25.9%
87.7%	711	1,008	297	41.7%
88.9%	709	825	117	16.4%
90.1%	688	734	46	6.6%
91.4%	686	711	25	3.7%
92.6%	678	709	31	4.6%
93.8%	673	694	22	3.2%
95.1%	643	679	36	5.7%
96.3%	447	649	202	45.1%
97.5%	427	538	112	26.2%
98.8%	402	447	45	11.1%
100.0%	375	404	29	7.7%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,126	20,319	1,193	6.2%
1.2%	16,284	16,284	0	0.0%
2.5%	16,006	16,272	266	1.7%
3.7%	15,609	15,595	-14	-0.1%
4.9%	13,626	13,620	-6	0.0%
6.2%	12,724	12,645	-79	-0.6%
7.4%	9,519	9,519	0	0.0%
8.6%	8,580	8,566	-14	-0.2%
9.9%	7,108	7,102	-6	-0.1%
11.1%	6,749	6,734	-14	-0.2%
12.3%	5,241	6,299	1,057	20.2%
13.6%	4,660	4,775	116	2.5%
14.8%	4,595	4,723	128	2.8%
16.0%	3,990	4,653	663	16.6%
17.3%	3,828	4,080	253	6.6%
18.5%	3,636	3,633	-2	-0.1%
19.8%	3,407	3,463	56	1.6%
21.0%	3,246	3,378	132	4.1%
22.2%	2,881	3,246	365	12.7%
23.5%	2,729	2,822	93	3.4%
24.7%	2,565	2,735	171	6.7%
25.9%	2,448	2,376	-72	-2.9%
27.2%	2,149	2,328	179	8.3%
28.4%	2,069	2,327	257	12.4%
29.6%	2,003	2,143	139	6.9%
30.9%	2,000	2,032	32	1.6%
32.1%	2,000	2,000	0	0.0%
33.3%	2,000	2,000	0	0.0%
34.6%	1,975	2,000	25	1.3%
35.8%	1,959	2,000	41	2.1%
37.0%	1,958	2,000	42	2.2%
38.3%	1,933	1,994	61	3.2%
39.5%	1,932	1,933	1	0.0%
40.7%	1,899	1,933	34	1.8%
42.0%	1,885	1,900	14	0.8%
43.2%	1,884	1,884	0	0.0%
44.4%	1,877	1,884	7	0.4%
45.7%	1,874	1,876	2	0.1%
46.9%	1,872	1,873	1	0.0%
48.1%	1,863	1,871	8	0.4%
49.4%	1,862	1,864	2	0.1%
50.6%	1,859	1,864	4	0.2%
51.9%	1,857	1,860	3	0.2%
53.1%	1,857	1,860	3	0.2%
54.3%	1,856	1,858	3	0.1%
55.6%	1,848	1,857	10	0.5%
56.8%	1,841	1,855	14	0.8%
58.0%	1,840	1,855	15	0.8%
59.3%	1,838	1,847	9	0.5%
60.5%	1,830	1,844	14	0.7%
61.7%	1,829	1,842	13	0.7%
63.0%	1,826	1,832	6	0.3%
64.2%	1,817	1,829	12	0.6%
65.4%	1,813	1,828	16	0.9%
66.7%	1,674	1,818	144	8.6%
67.9%	1,663	1,813	149	9.0%
69.1%	1,623	1,787	165	10.2%
70.4%	1,557	1,765	208	13.3%
71.6%	1,536	1,712	175	11.4%
72.8%	1,532	1,641	108	7.1%
74.1%	1,515	1,629	115	7.6%
75.3%	1,428	1,628	199	14.0%
76.5%	1,421	1,619	198	13.9%
77.8%	1,381	1,595	214	15.5%
79.0%	1,360	1,584	223	16.4%
80.2%	1,313	1,504	191	14.5%
81.5%	1,285	1,287	2	0.2%
82.7%	1,278	1,203	-76	-5.9%
84.0%	1,057	1,106	49	4.6%
85.2%	1,054	1,089	34	3.3%
86.4%	1,011	1,013	3	0.3%
87.7%	914	1,005	92	10.0%
88.9%	794	913	120	15.1%
90.1%	727	794	67	9.2%
91.4%	711	753	42	5.9%
92.6%	704	723	18	2.6%
93.8%	689	704	15	2.2%
95.1%	683	689	6	0.9%
96.3%	680	673	-7	-1.1%
97.5%	500	651	151	30.1%
98.8%	500	500	0	0.0%
100.0%	500	500	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,148	33,148	1	0.0%
1.2%	20,017	20,015	-2	0.0%
2.5%	16,771	16,776	5	0.0%
3.7%	16,165	16,222	57	0.4%
4.9%	15,932	16,163	231	1.5%
6.2%	12,440	12,430	-10	-0.1%
7.4%	11,702	11,702	0	0.0%
8.6%	10,959	11,575	616	5.6%
9.9%	10,923	10,923	1	0.0%
11.1%	9,813	9,813	0	0.0%
12.3%	9,605	9,597	-8	-0.1%
13.6%	9,241	9,240	-1	0.0%
14.8%	9,071	9,066	-5	-0.1%
16.0%	8,796	8,788	-7	-0.1%
17.3%	8,699	8,699	0	0.0%
18.5%	6,929	6,930	0	0.0%
19.8%	6,440	6,442	2	0.0%
21.0%	6,382	6,382	0	0.0%
22.2%	5,888	5,888	0	0.0%
23.5%	5,842	5,846	5	0.1%
24.7%	5,724	5,722	-2	0.0%
25.9%	5,152	5,146	-6	-0.1%
27.2%	5,102	5,100	-2	0.0%
28.4%	4,774	4,773	-1	0.0%
29.6%	4,554	4,479	-76	-1.7%
30.9%	4,488	4,474	-14	-0.3%
32.1%	4,476	4,270	-206	-4.6%
33.3%	3,747	3,971	225	6.0%
34.6%	3,677	3,890	213	5.8%
35.8%	3,467	3,856	388	11.2%
37.0%	3,462	3,597	136	3.9%
38.3%	3,102	3,469	368	11.9%
39.5%	2,539	3,102	562	22.1%
40.7%	2,520	2,537	17	0.7%
42.0%	2,404	2,426	21	0.9%
43.2%	2,389	2,364	-25	-1.1%
44.4%	2,000	2,354	354	17.7%
45.7%	1,839	2,129	290	15.8%
46.9%	1,648	1,839	191	11.6%
48.1%	1,645	1,740	95	5.8%
49.4%	1,645	1,645	0	0.0%
50.6%	1,604	1,603	-1	-0.1%
51.9%	1,600	1,600	0	0.0%
53.1%	1,595	1,591	-4	-0.2%
54.3%	1,592	1,585	-6	-0.4%
55.6%	1,585	1,581	-5	-0.3%
56.8%	1,581	1,578	-3	-0.2%
58.0%	1,578	1,576	-2	-0.1%
59.3%	1,573	1,573	0	0.0%
60.5%	1,564	1,564	0	0.0%
61.7%	1,563	1,563	0	0.0%
63.0%	1,555	1,558	3	0.2%
64.2%	1,553	1,553	0	0.0%
65.4%	1,551	1,550	-1	-0.1%
66.7%	1,550	1,550	0	0.0%
67.9%	1,550	1,550	0	0.0%
69.1%	1,547	1,547	0	0.0%
70.4%	1,542	1,542	0	0.0%
71.6%	1,540	1,540	0	0.0%
72.8%	1,539	1,539	0	0.0%
74.1%	1,516	1,524	8	0.5%
75.3%	1,514	1,514	0	0.0%
76.5%	1,514	1,514	0	0.0%
77.8%	1,410	1,514	104	7.4%
79.0%	1,362	1,487	125	9.2%
80.2%	1,338	1,478	140	10.5%
81.5%	1,326	1,468	141	10.7%
82.7%	1,318	1,361	43	3.3%
84.0%	1,239	1,317	77	6.2%
85.2%	1,165	1,312	147	12.6%
86.4%	1,123	1,051	-73	-6.5%
87.7%	953	1,029	76	8.0%
88.9%	892	993	101	11.3%
90.1%	799	892	93	11.7%
91.4%	715	796	81	11.4%
92.6%	689	715	26	3.8%
93.8%	650	665	15	2.3%
95.1%	650	650	0	0.0%
96.3%	644	650	7	1.0%
97.5%	641	250	-391	-61.0%
98.8%	250	250	0	0.0%
100.0%	250	250	0	0.0%

Table SW-29-b

American River at H Street, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	32,621	32,620	-1	0.0%
1.2%	15,988	15,982	-6	0.0%
2.5%	13,581	13,581	0	0.0%
3.7%	13,481	13,481	0	0.0%
4.9%	13,208	13,208	0	0.0%
6.2%	13,049	13,051	2	0.0%
7.4%	12,917	12,912	-5	0.0%
8.6%	12,729	12,732	3	0.0%
9.9%	12,219	12,216	-3	0.0%
11.1%	11,405	11,405	0	0.0%
12.3%	10,459	10,457	-3	0.0%
13.6%	10,444	10,444	0	0.0%
14.8%	10,119	10,132	13	0.1%
16.0%	10,098	10,119	21	0.2%
17.3%	9,878	9,878	0	0.0%
18.5%	9,827	9,827	0	0.0%
19.8%	9,278	9,278	0	0.0%
21.0%	8,196	8,377	181	2.2%
22.2%	7,481	7,481	0	0.0%
23.5%	7,423	7,423	0	0.0%
24.7%	7,246	7,246	0	0.0%
25.9%	7,231	7,231	0	0.0%
27.2%	6,947	6,934	-13	-0.2%
28.4%	6,899	6,682	-217	-3.1%
29.6%	6,682	6,494	-188	-2.8%
30.9%	6,494	6,374	-119	-1.8%
32.1%	6,374	6,307	-68	-1.1%
33.3%	5,686	5,710	24	0.4%
34.6%	5,625	5,676	52	0.9%
35.8%	5,465	5,465	0	0.0%
37.0%	5,305	5,296	-9	-0.2%
38.3%	5,230	5,230	0	0.0%
39.5%	5,093	5,093	0	0.0%
40.7%	4,988	4,988	0	0.0%
42.0%	4,789	4,789	0	0.0%
43.2%	4,532	4,645	113	2.5%
44.4%	3,734	3,737	3	0.1%
45.7%	3,330	3,303	-27	-0.8%
46.9%	3,303	3,277	-26	-0.8%
48.1%	3,186	3,186	0	0.0%
49.4%	2,867	2,699	-168	-5.9%
50.6%	2,780	2,598	-183	-6.6%
51.9%	2,664	2,562	-102	-3.8%
53.1%	2,494	2,299	-194	-7.8%
54.3%	2,305	2,178	-127	-5.5%
55.6%	2,184	2,041	-143	-6.6%
56.8%	2,102	2,014	-89	-4.2%
58.0%	2,000	2,000	0	0.0%
59.3%	1,916	2,000	84	4.4%
60.5%	1,683	1,916	233	13.8%
61.7%	1,591	1,768	177	11.1%
63.0%	1,590	1,652	62	3.9%
64.2%	1,588	1,591	3	0.2%
65.4%	1,570	1,588	18	1.2%
66.7%	1,502	1,570	68	4.5%
67.9%	1,501	1,500	0	0.0%
69.1%	1,392	1,465	73	5.2%
70.4%	1,388	1,430	43	3.1%
71.6%	1,341	1,388	46	3.5%
72.8%	1,325	1,341	16	1.2%
74.1%	1,314	1,325	11	0.8%
75.3%	1,313	1,314	2	0.1%
76.5%	1,291	1,313	22	1.7%
77.8%	1,282	1,282	0	0.0%
79.0%	1,271	1,271	0	0.0%
80.2%	1,269	1,269	0	0.0%
81.5%	1,266	1,266	0	0.0%
82.7%	1,159	1,232	73	6.3%
84.0%	1,151	1,225	73	6.4%
85.2%	1,103	1,187	85	7.7%
86.4%	1,098	1,114	16	1.5%
87.7%	1,095	1,100	5	0.4%
88.9%	1,034	1,100	65	6.3%
90.1%	975	990	15	1.6%
91.4%	932	852	-80	-8.6%
92.6%	783	850	68	8.6%
93.8%	761	761	0	0.0%
95.1%	687	634	-53	-7.7%
96.3%	634	634	-1	-0.1%
97.5%	250	280	30	
98.8%	250	250	0	
100.0%	250	250	0	

March				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,900	17,900	0	0.0%
1.2%	17,249	17,249	0	0.0%
2.5%	12,500	12,500	0	0.0%
3.7%	11,847	11,847	0	0.0%
4.9%	11,004	11,009	5	0.0%
6.2%	10,843	10,843	0	0.0%
7.4%	10,784	10,807	24	0.2%
8.6%	9,559	9,559	0	0.0%
9.9%	8,781	8,781	0	0.0%
11.1%	8,378	8,378	0	0.0%
12.3%	7,459	7,890	430	5.8%
13.6%	7,443	7,443	0	0.0%
14.8%	7,178	7,178	0	0.0%
16.0%	6,893	6,893	0	0.0%
17.3%	6,869	6,869	0	0.0%
18.5%	6,742	6,742	0	0.0%
19.8%	6,240	6,232	-7	-0.1%
21.0%	5,142	5,142	0	0.0%
22.2%	4,776	4,777	1	0.0%
23.5%	4,750	4,750	0	0.0%
24.7%	4,699	4,699	0	0.0%
25.9%	4,695	4,689	-6	-0.1%
27.2%	4,687	4,687	0	0.0%
28.4%	4,523	4,523	0	0.0%
29.6%	4,460	4,460	0	0.0%
30.9%	4,311	4,311	0	0.0%
32.1%	4,188	4,117	-71	-1.7%
33.3%	4,098	4,100	2	0.0%
34.6%	4,048	4,048	0	0.0%
35.8%	3,978	3,975	-3	-0.1%
37.0%	3,791	3,791	0	0.0%
38.3%	3,734	3,736	2	0.1%
39.5%	3,658	3,657	-1	0.0%
40.7%	3,627	3,627	0	0.0%
42.0%	3,602	3,602	0	0.0%
43.2%	3,521	3,518	-4	-0.1%
44.4%	3,018	3,014	-4	-0.1%
45.7%	3,014	3,011	-2	-0.1%
46.9%	2,940	2,940	0	0.0%
48.1%	2,907	2,910	3	0.1%
49.4%	2,816	2,816	0	0.0%
50.6%	2,796	2,795	-1	0.0%
51.9%	2,366	2,650	283	12.0%
53.1%	2,298	2,298	0	0.0%
54.3%	2,252	2,258	5	0.2%
55.6%	2,037	2,107	70	3.5%
56.8%	2,015	2,037	22	1.1%
58.0%	1,956	2,014	58	3.0%
59.3%	1,892	1,949	57	3.0%
60.5%	1,882	1,921	39	2.1%
61.7%	1,778	1,890	113	6.3%
63.0%	1,745	1,778	33	1.9%
64.2%	1,712	1,745	33	1.9%
65.4%	1,692	1,711	19	1.1%
66.7%	1,644	1,644	0	0.0%
67.9%	1,632	1,631	-1	-0.1%
69.1%	1,602	1,605	3	0.2%
70.4%	1,593	1,594	0	0.0%
71.6%	1,584	1,584	0	0.0%
72.8%	1,577	1,577	0	0.0%
74.1%	1,517	1,467	-50	-3.3%
75.3%	1,303	1,303	0	0.0%
76.5%	1,276	1,276	0	0.0%
77.8%	1,140	1,169	29	2.5%
79.0%	1,079	1,140	61	5.6%
80.2%	837	1,114	277	33.2%
81.5%	792	1,074	283	35.7%
82.7%	735	884	149	20.2%
84.0%	701	701	0	0.0%
85.2%	694	692	-1	-0.2%
86.4%	684	684	0	0.0%
87.7%	680	680	0	0.0%
88.9%	675	675	0	0.0%
90.1%	663	663	0	0.0%
91.4%	657	657	0	-0.1%
92.6%	657	657	0	0.0%
93.8%	642	641	0	0.0%
95.1%	627	627	0	0.0%
96.3%	616	616	0	0.0%
97.5%	250	615	365	145.9%
98.8%	250	565	315	126.0%
100.0%	250	250	0	0.0%

April				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,357	15,357	0	0.0%
1.2%	10,135	10,135	0	0.0%
2.5%	8,724	8,724	0	0.0%
3.7%	7,058	7,058	0	0.0%
4.9%	6,976	6,976	0	0.0%
6.2%	6,931	6,931	0	0.0%
7.4%	6,492	6,492	0	0.0%
8.6%	6,273	6,273	0	0.0%
9.9%	5,999	5,999	0	0.0%
11.1%	5,896	5,928	32	0.5%
12.3%	5,843	5,843	0	0.0%
13.6%	5,807	5,807	0	0.0%
14.8%	5,616	5,605	-11	-0.2%
16.0%	5,567	5,567	0	0.0%
17.3%	5,427	5,417	-9	-0.2%
18.5%	5,118	5,118	0	0.0%
19.8%	4,997	4,996	0	0.0%
21.0%	4,640	4,640	0	0.0%
22.2%	4,508	4,508	0	0.0%
23.5%	4,478	4,478	0	0.0%
24.7%	4,433	4,432	0	0.0%
25.9%	4,284	4,284	0	0.0%
27.2%	3,886	4,174	288	7.4%
28.4%	3,755	3,886	131	3.5%
29.6%	3,753	3,755	3	0.1%
30.9%	3,711	3,711	0	0.0%
32.1%	3,706	3,706	0	0.0%
33.3%	3,334	3,335	1	0.0%
34.6%	3,310	3,310	0	0.0%
35.8%	3,252	3,247	-5	-0.2%
37.0%	3,244	3,240	-4	-0.1%
38.3%	3,214	3,214	0	0.0%
39.5%	3,153	3,000	-153	-4.9%
40.7%	3,000	3,000	0	0.0%
42.0%	3,000	3,000	0	0.0%
43.2%	3,000	2,760	-240	-8.0%
44.4%	2,760	2,708	-52	-1.9%
45.7%	2,708	2,598	-110	-4.1%
46.9%	2,598	2,540	-58	-2.2%
48.1%	2,526	2,528	2	0.1%
49.4%	2,433	2,433	0	0.0%
50.6%	2,428	2,419	-9	-0.4%
51.9%	2,375	2,372	-3	-0.1%
53.1%	2,372	2,302	-70	-2.9%
54.3%	2,302	2,302	-1	0.0%
55.6%	2,302	2,255	-47	-2.0%
56.8%	2,273	2,097	-176	-7.7%
58.0%	2,267	2,085	-182	-8.0%
59.3%	2,097	1,848	-249	-11.9%
60.5%	1,848	1,734	-115	-6.2%
61.7%	1,709	1,624	-84	-4.9%
63.0%	1,624	1,601	-24	-1.5%
64.2%	1,599	1,556	-43	-2.7%
65.4%	1,555	1,554	-1	-0.1%
66.7%	1,554	1,551	-3	-0.2%
67.9%	1,551	1,550	-2	-0.1%
69.1%	1,550	1,546	-4	-0.2%
70.4%	1,546	1,532	-13	-0.9%
71.6%	1,532	1,524	-9	-0.6%
72.8%	1,524	1,482	-42	-2.7%
74.1%	1,482	1,439	-43	-2.9%
75.3%	1,428	1,404	-25	-1.7%
76.5%	1,276	1,276	0	0.0%
77.8%	1,242	1,243	1	0.1%
79.0%	1,222	1,232	11	0.9%
80.2%	1,138	1,194	56	5.0%
81.5%	1,104	1,079	-25	-2.3%
82.7%	1,064	970	-93	-8.8%
84.0%	970	884	-86	-8.9%
85.2%	886	839	-47	-5.3%
86.4%	703	827	124	17.6%
87.7%	681	825	144	21.2%
88.9%	651	816	165	25.4%
90.1%	648	815	167	25.8%
91.4%	627	763	136	21.6%
92.6%	627	703	76	12.2%
93.8%	623	653	30	4.8%
95.1%	616	627	11	1.8%
96.3%	607	623	17	2.8%
97.5%	605	605	0	0.0%
98.8%	188	582	394	209.8%
100.0%	188	357	169	90.0%

May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,214	10,214	0	0.0%
1.2%	9,233	9,233	0	0.0%
2.5%	9,094	9,094	0	0.0%
3.7%	8,526	8,526	0	0.0%
4.9%	7,899	7,899	0	0.0%
6.2%	7,888	7,888	0	0.0%
7.4%	7,887	7,887	0	0.0%
8.6%	7,353	7,353	0	0.0%
9.9%	7,134	7,134	0	0.0%
11.1%	7,031	7,031	0	0.0%
12.3%	6,595	6,595	0	0.0%
13.6%	5,741	5,741	0	0.0%
14.8%	5,321	5,321	0	0.0%
16.0%	5,147	5,147	0	0.0%
17.3%	4,811	4,811	0	0.0%
18.5%	4,735	4,735	0	0.0%
19.8%	4,387	4,390	3	0.1%
21.0%	4,088	4,088	0	0.0%
22.2%	4,072	4,077	5	0.1%
23.5%	4,014	4,014	0	0.0%
24.7%	3,987	3,987	0	0.0%
25.9%	3,872	3,872	0	0.0%
27.2%	3,738	3,738	0	0.0%
28.4%	3,605	3,603	-3	-0.1%
29.6%	3,559	3,548	-12	-0.3%
30.9%	3,279	3,274	-4	-0.1%
32.1%	3,271	3,271	0	0.0%
33.3%	3,226	3,231	5	0.1%
34.6%	3,162	3,162	0	0.0%
35.8%	3,128	3,116	-12	-0.4%
37.0%	3,088	3,088	0	0.0%
38.3%	3,086	3,086	0	0.0%
39.5%	3,000	3,000	0	0.0%
40.7%	3,000	3,000	0	0.0%
42.0%	3,000	3,000	0	0.0%
43.2%	2,936	2,936	0	0.0%
44.4%	2,925	2,925	0	0.0%
45.7%	2,853	2,853	0	0.0%
46.9%	2,832	2,741	-90	-3.2%
48.1%	2,741	2,616	-126	-4.6%
49.4%	2,425	2,425	0	0.0%
50.6%	2,299	2,293	-6	-0.2%
51.9%	2,192	2,192	0	0.0%
53.1%	2,128	2,130	2	0.1%
54.3%	2,089	2,062	-27	-1.3%
55.6%	2,061	1,856	-205	-10.0%
56.8%	1,856	1,832	-24	-1.3%
58.0%	1,712	1,712	0	0.0%
59.3%	1,661	1,560	-101	-6.1%
60.5%	1,568	1,553	-15	-0.9%
61.7%	1,560	1,551	-9	-0.6%
63.0%	1,553	1,550	-3	-0.2%
64.2%	1,551	1,549	-2	-0.1%
65.4%	1,550	1,544	-6	-0.4%
66.7%	1,549	1,528	-21	-1.4%
67.9%	1,544	1,528	-16	-1.1%
69.1%	1,528	1,527	0	0.0%
70.4%	1,528	1,390	-138	-9.0%
71.6%	1,392	1,322	-69	-5.0%
72.8%	1,390	1,260	-130	-9.4%
74.1%	1,277	1,254	-23	-1.8%
75.3%	1,260	1,161	-99	-7.8%
76.5%	1,254	1,103	-150	-12.0%
77.8%	1,071	1,068	-4	-0.3%
79.0%	1,068	1,066	-2	-0.2%
80.2%	1,058	1,046	-12	-1.1%
81.5%	981	1,037	56	5.7%
82.7%	971	995	23	2.4%
84.0%	891	994	103	11.6%
85.2%	828	981	154	18.6%
86.4%	819	945	126	15.3%
87.7%	720	918	198	27.6%
88.9%	713	881	168	23.5%
90.1%	627	839	213	33.9%
91.4%	621	835	213	34.3%
92.6%	613	808	195	31.8%
93.8%	610	713	104	17.0%
95.1%	608	659	50	8.3%
96.3%	606	627	21	3.5%
97.5%	605	612	7	1.2%
98.8%	188	606	418	222.2%
100.0%	188	402	214	113.8%

Table SW-29-b
American River at H Street, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,103	11,103	0	0.0%
1.2%	9,175	9,175	0	0.0%
2.5%	8,378	8,378	0	0.0%
3.7%	7,803	7,803	0	0.0%
4.9%	7,453	7,453	0	0.0%
6.2%	6,945	6,945	0	0.0%
7.4%	6,933	6,933	0	0.0%
8.6%	5,620	5,620	0	0.0%
9.9%	5,368	5,368	0	0.0%
11.1%	5,225	5,225	0	0.0%
12.3%	5,025	5,025	0	0.0%
13.6%	4,552	4,552	0	0.0%
14.8%	4,406	4,406	0	0.0%
16.0%	4,396	4,396	0	0.0%
17.3%	4,386	4,386	0	0.0%
18.5%	4,159	4,242	83	2.0%
19.8%	3,727	4,159	433	11.6%
21.0%	3,664	3,713	49	1.3%
22.2%	3,604	3,607	3	0.1%
23.5%	3,527	3,527	0	0.0%
24.7%	3,498	3,501	3	0.1%
25.9%	3,303	3,498	195	5.9%
27.2%	3,137	3,309	172	5.5%
28.4%	3,041	3,137	96	3.2%
29.6%	3,000	3,135	135	4.5%
30.9%	3,000	3,041	41	1.4%
32.1%	3,000	3,000	0	0.0%
33.3%	3,000	3,000	0	0.0%
34.6%	3,000	3,000	0	0.0%
35.8%	2,966	3,000	34	1.1%
37.0%	2,948	3,000	52	1.8%
38.3%	2,865	2,865	0	0.0%
39.5%	2,756	2,756	0	0.0%
40.7%	2,666	2,659	-8	-0.3%
42.0%	2,600	2,428	-171	-6.6%
43.2%	2,576	2,391	-185	-7.2%
44.4%	2,428	2,298	-131	-5.4%
45.7%	2,391	2,241	-149	-6.2%
46.9%	2,332	2,144	-189	-8.1%
48.1%	2,278	2,099	-179	-7.9%
49.4%	2,239	2,060	-179	-8.0%
50.6%	2,179	2,006	-173	-7.9%
51.9%	2,141	2,003	-137	-6.4%
53.1%	2,130	1,958	-172	-8.1%
54.3%	2,056	1,940	-117	-5.7%
55.6%	1,982	1,926	-55	-2.8%
56.8%	1,958	1,922	-36	-1.8%
58.0%	1,926	1,894	-32	-1.7%
59.3%	1,898	1,862	-36	-1.9%
60.5%	1,894	1,720	-174	-9.2%
61.7%	1,715	1,701	-14	-0.8%
63.0%	1,703	1,684	-19	-1.1%
64.2%	1,653	1,653	0	0.0%
65.4%	1,573	1,645	72	4.6%
66.7%	1,547	1,643	96	6.2%
67.9%	1,541	1,615	75	4.8%
69.1%	1,532	1,614	82	5.4%
70.4%	1,513	1,613	99	6.6%
71.6%	1,511	1,513	2	0.1%
72.8%	1,506	1,506	0	0.0%
74.1%	1,506	1,506	0	0.0%
75.3%	1,503	1,504	1	0.1%
76.5%	1,501	1,503	2	0.1%
77.8%	1,492	1,502	11	0.7%
79.0%	1,490	1,492	1	0.1%
80.2%	1,490	1,490	0	0.0%
81.5%	1,320	1,372	52	4.0%
82.7%	1,297	1,356	59	4.6%
84.0%	1,209	1,352	143	11.8%
85.2%	1,056	1,294	238	22.6%
86.4%	1,015	1,293	278	27.3%
87.7%	1,011	1,259	247	24.5%
88.9%	939	1,255	315	33.6%
90.1%	793	1,194	402	50.7%
91.4%	787	1,170	383	48.7%
92.6%	755	912	157	20.8%
93.8%	669	838	169	25.3%
95.1%	569	777	207	36.4%
96.3%	565	688	123	21.8%
97.5%	564	669	105	18.5%
98.8%	339	425	86	25.4%
100.0%	188	262	74	39.2%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,974	4,974	0	0.0%
1.2%	4,491	4,413	-78	-1.7%
2.5%	4,417	4,399	-18	-0.4%
3.7%	4,413	4,388	-25	-0.6%
4.9%	4,399	4,386	-13	-0.3%
6.2%	4,397	4,382	-16	-0.4%
7.4%	4,396	4,375	-21	-0.5%
8.6%	4,388	4,372	-17	-0.4%
9.9%	4,388	4,347	-41	-0.9%
11.1%	4,386	4,339	-47	-1.1%
12.3%	4,384	4,321	-63	-1.4%
13.6%	4,382	4,308	-74	-1.7%
14.8%	4,378	3,949	-428	-9.8%
16.0%	4,375	3,637	-739	-16.9%
17.3%	4,375	3,628	-747	-17.1%
18.5%	4,372	3,576	-795	-18.2%
19.8%	4,370	3,576	-794	-18.2%
21.0%	4,367	3,537	-830	-19.0%
22.2%	4,356	3,387	-969	-22.2%
23.5%	4,347	3,344	-1,003	-23.1%
24.7%	4,339	3,332	-1,007	-23.2%
25.9%	4,339	3,271	-1,068	-24.6%
27.2%	4,321	3,173	-1,148	-26.6%
28.4%	4,164	3,170	-993	-23.9%
29.6%	4,126	3,159	-966	-23.4%
30.9%	4,051	3,121	-931	-23.0%
32.1%	3,974	3,119	-856	-21.5%
33.3%	3,970	3,107	-863	-21.7%
34.6%	3,944	3,072	-873	-22.1%
35.8%	3,664	3,046	-618	-16.9%
37.0%	3,615	2,980	-635	-17.6%
38.3%	3,608	2,769	-839	-23.3%
39.5%	3,576	2,766	-810	-22.7%
40.7%	3,480	2,755	-725	-20.8%
42.0%	3,476	2,568	-908	-26.1%
43.2%	3,408	2,562	-845	-24.8%
44.4%	3,280	2,471	-808	-24.6%
45.7%	3,159	2,465	-695	-22.0%
46.9%	3,072	2,454	-618	-20.1%
48.1%	3,055	2,357	-698	-22.8%
49.4%	3,047	2,269	-778	-25.5%
50.6%	3,029	2,135	-893	-29.5%
51.9%	2,846	2,057	-789	-27.7%
53.1%	2,772	2,051	-722	-26.0%
54.3%	2,693	2,036	-657	-24.4%
55.6%	2,633	2,027	-606	-23.0%
56.8%	2,625	2,016	-609	-23.2%
58.0%	2,553	2,008	-545	-21.4%
59.3%	2,493	1,962	-531	-21.3%
60.5%	2,486	1,897	-589	-23.7%
61.7%	2,462	1,879	-583	-23.7%
63.0%	2,450	1,864	-586	-23.9%
64.2%	2,357	1,843	-514	-21.8%
65.4%	2,269	1,769	-500	-22.1%
66.7%	2,264	1,751	-514	-22.7%
67.9%	2,251	1,750	-501	-22.2%
69.1%	2,153	1,750	-403	-18.7%
70.4%	2,135	1,750	-385	-18.0%
71.6%	2,076	1,750	-326	-15.7%
72.8%	2,064	1,750	-314	-15.2%
74.1%	2,027	1,750	-277	-13.7%
75.3%	2,016	1,750	-266	-13.2%
76.5%	2,008	1,750	-258	-12.8%
77.8%	2,007	1,750	-257	-12.8%
79.0%	1,897	1,750	-147	-7.7%
80.2%	1,879	1,738	-140	-7.5%
81.5%	1,857	1,696	-161	-8.7%
82.7%	1,843	1,598	-245	-13.3%
84.0%	1,750	1,595	-155	-8.9%
85.2%	1,750	1,592	-158	-9.0%
86.4%	1,750	1,501	-249	-14.2%
87.7%	1,750	1,352	-398	-22.7%
88.9%	1,750	1,280	-470	-26.9%
90.1%	1,750	1,275	-475	-27.2%
91.4%	1,712	1,274	-438	-25.6%
92.6%	1,532	1,268	-264	-17.3%
93.8%	1,279	1,190	-89	-7.0%
95.1%	712	1,166	454	63.8%
96.3%	682	1,027	344	50.4%
97.5%	323	605	282	87.5%
98.8%	188	540	352	187.2%
100.0%	188	251	63	33.4%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,171	4,171	0	0.0%
1.2%	3,780	3,780	0	0.0%
2.5%	3,776	3,776	0	0.0%
3.7%	3,446	3,446	0	0.0%
4.9%	3,422	3,422	0	0.0%
6.2%	3,356	3,356	0	0.0%
7.4%	3,316	3,316	0	0.0%
8.6%	3,261	3,261	0	0.0%
9.9%	3,258	3,258	0	0.0%
11.1%	3,250	3,250	0	0.0%
12.3%	3,240	3,240	0	0.0%
13.6%	3,186	3,233	47	1.5%
14.8%	3,048	3,186	138	4.5%
16.0%	3,035	3,048	13	0.4%
17.3%	2,988	3,035	47	1.6%
18.5%	2,909	3,013	105	3.6%
19.8%	2,906	2,521	-385	-13.3%
21.0%	2,570	2,498	-72	-2.8%
22.2%	2,326	2,437	112	4.8%
23.5%	2,263	2,404	142	6.3%
24.7%	2,010	2,395	385	19.1%
25.9%	1,976	2,368	392	19.8%
27.2%	1,927	2,360	433	22.5%
28.4%	1,811	2,306	495	27.3%
29.6%	1,806	2,173	367	20.3%
30.9%	1,791	2,027	235	13.1%
32.1%	1,784	2,006	222	12.5%
33.3%	1,771	1,924	153	8.6%
34.6%	1,750	1,911	161	9.2%
35.8%	1,750	1,909	159	9.1%
37.0%	1,750	1,750	0	0.0%
38.3%	1,750	1,750	0	0.0%
39.5%	1,750	1,750	0	0.0%
40.7%	1,750	1,738	-12	-0.7%
42.0%	1,750	1,738	-12	-0.7%
43.2%	1,750	1,736	-14	-0.8%
44.4%	1,697	1,735	37	2.2%
45.7%	1,686	1,734	48	2.9%
46.9%	1,643	1,733	90	5.5%
48.1%	1,641	1,731	90	5.5%
49.4%	1,626	1,730	104	6.4%
50.6%	1,609	1,730	120	7.5%
51.9%	1,557	1,728	171	11.0%
53.1%	1,498	1,708	209	14.0%
54.3%	1,489	1,689	200	13.4%
55.6%	1,488	1,674	186	12.5%
56.8%	1,486	1,673	187	12.5%
58.0%	1,486	1,669	183	12.3%
59.3%	1,486	1,561	76	5.1%
60.5%	1,485	1,561	75	5.1%
61.7%	1,484	1,529	45	3.0%
63.0%	1,483	1,527	44	2.9%
64.2%	1,482	1,522	41	2.7%
65.4%	1,482	1,510	28	1.9%
66.7%	1,481	1,503	22	1.5%
67.9%	1,480	1,501	21	1.4%
69.1%	1,480	1,492	12	0.8%
70.4%	1,480	1,492	12	0.8%
71.6%	1,479	1,491	12	0.8%
72.8%	1,479	1,489	10	0.7%
74.1%	1,478	1,480	2	0.2%
75.3%	1,435	1,444	9	0.6%
76.5%	1,410	1,362	-48	-3.4%
77.8%	1,342	1,359	16	1.2%
79.0%	1,282	1,281	-1	-0.1%
80.2%	911	1,277	366	40.1%
81.5%	884	1,192	309	35.0%
82.7%	639	1,186	546	85.4%
84.0%	593	1,165	572	96.3%
85.2%	573	1,144	571	99.6%
86.4%	567	870	303	53.4%
87.7%	567	868	301	53.1%
88.9%	564	832	268	47.4%
90.1%	553	822	269	48.6%
91.4%	551	792	241	43.7%
92.6%	544	762	218	40.0%
93.8%	530	758	227	42.9%
95.1%	481	738	257	53.4%
96.3%	326	650	324	99.5%
97.5%	250	625	375	150.0%
98.8%	188	569	381	202.9%
100.0%	188	344	156	82.8%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,563	4,516	-47	-1.0%
1.2%	4,559	4,389	-170	-3.7%
2.5%	4,493	4,143	-349	-7.8%
3.7%	4,459	4,062	-397	-8.9%
4.9%	4,385	3,995	-390	-8.9%
6.2%	4,203	3,947	-256	-6.1%
7.4%	4,126	3,825	-301	-7.3%
8.6%	4,085	3,798	-288	-7.0%
9.9%	4,030	3,610	-420	-10.4%
11.1%	4,027	3,358	-670	-16.6%
12.3%	3,962	3,279	-683	-17.2%
13.6%	3,891	3,265	-627	-16.1%
14.8%	3,888	3,051	-837	-21.5%
16.0%	3,554	2,854	-699	-19.7%
17.3%	3,465	2,822	-643	-18.6%
18.5%	3,434	2,768	-666	-19.4%
19.8%	3,383	2,725	-658	-19.5%
21.0%	2,973	2,625	-348	-11.7%
22.2%	2,776	2,500	-276	-9.9%
23.5%	2,768	2,152	-616	-22.3%
24.7%	2,665	2,142	-523	-19.6%
25.9%	2,579	2,133	-446	-17.3%
27.2%	2,433	2,119	-314	-12.9%
28.4%	2,431	2,088	-342	-14.1%
29.6%	2,300	2,063	-237	-10.3%
30.9%	2,258	2,024	-233	-10.3%
32.1%	2,153	2,023	-130	-6.0%
33.3%	2,122	2,009	-113	-5.3%
34.6%	2,119	1,942	-177	-8.3%
35.8%	2,080	1,927	-154	-7.4%
37.0%	2,032	1,920	-113	-5.5%
38.3%	2,023	1,880	-143	-7.1%
39.5%	1,896	1,769	-127	-6.7%
40.7%	1,769	1,750	-19	-1.1%
42.0%	1,769	1,750	-19	-1.1%
43.2%	1,750	1,750	0	0.0%
44.4%	1,750	1,750	0	0.0%
45.7%	1,746	1,750	4	0.2%
46.9%	1,666	1,698	33	2.0%
48.1%	1,628	1,579	-49	-3.0%
49.4%	1,575	1,553	-22	-1.4%
50.6%	1,483	1,452	-31	-2.1%
51.9%	1,449	1,445	-4	-0.3%
53.1%	1,385	1,444	59	4.2%
54.3%	1,351	1,443	92	6.8%
55.6%	1,346	1,440	95	7.0%
56.8%	1,343	1,438	95	7.1%
58.0%	1,337	1,437	100	7.5%
59.3%	1,336	1,436	101	7.5%
60.5%	1,331	1,435	105	7.9%
61.7%	1,331	1,431	100	7.5%
63.0%	1,330	1,417	87	6.5%
64.2%	1,329	1,385	56	4.2%
65.4%	1,328	1,383	55	4.1%
66.7%	1,326	1,376	50	3.8%
67.9%	1,325	1,331	6	0.4%
69.1%	1,322	1,330	8	0.6%
70.4%	1,321	1,330	9	0.7%
71.6%	1,311	1,330	19	1.5%
72.8%	1,271	1,315	45	3.5%
74.1%	1,118	1,310	192	17.2%
75.3%	1,055	1,310	255	24.2%
76.5%	978	1,287	309	31.6%
77.8%	923	1,246	324	35.1%
79.0%	902	1,173	271	30.0%
80.2%	843	1,122	280	33.2%
81.5%	695	1,097	402	57.9%
82.7%	649	1,062	414	63.8%
84.0%	624	1,047	423	67.7%
85.2%	622	992	371	59.6%
86.4%	615	951	336	54.6%
87.7%	613	783	170	27.8%
88.9%	611	752	141	23.0%
90.1%	609	709	100	16.4%
91.4%	608	692	83	13.7%
92.6%	597	678	81	13.6%
93.8%	498	608	110	22.1%
95.1%	375	607	232	61.9%
96.3%	365	606	241	66.1%
97.5%	281	605	324	115.1%
98.8%	281	487	206	73.4%
100.0%	248	278	30	11.9%

Figure SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

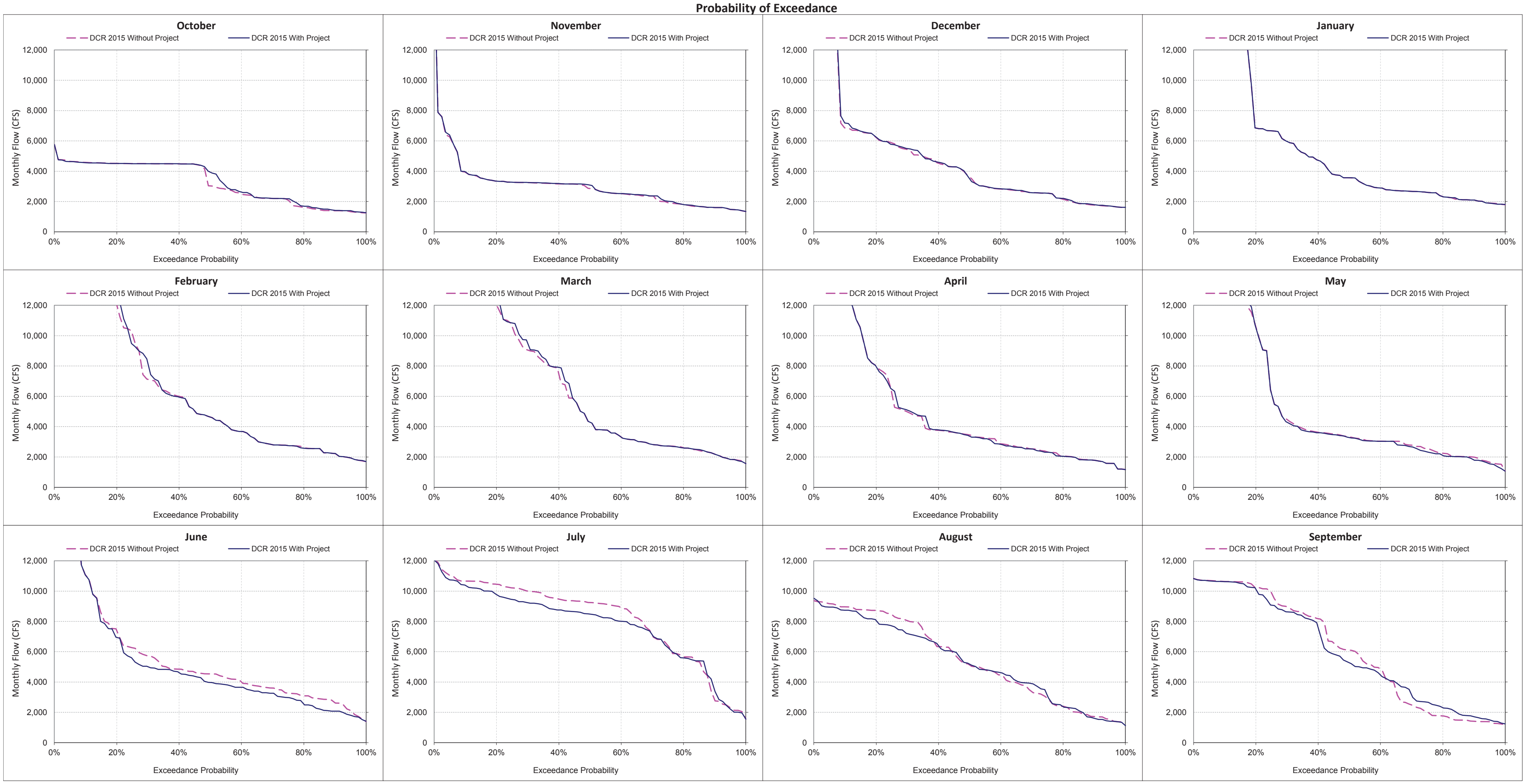


Table SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,763	5,763	0	0.0%
1.2%	4,772	4,753	-19	-0.4%
2.5%	4,753	4,731	-22	-0.5%
3.7%	4,731	4,651	-80	-1.7%
4.9%	4,651	4,636	-15	-0.3%
6.2%	4,636	4,631	-5	-0.1%
7.4%	4,631	4,590	-41	-0.9%
8.6%	4,590	4,581	-9	-0.2%
9.9%	4,583	4,568	-15	-0.3%
11.1%	4,568	4,554	-14	-0.3%
12.3%	4,554	4,554	0	0.0%
13.6%	4,554	4,546	-8	-0.2%
14.8%	4,546	4,542	-4	-0.1%
16.0%	4,542	4,523	-19	-0.4%
17.3%	4,523	4,520	-2	-0.1%
18.5%	4,520	4,515	-5	-0.1%
19.8%	4,515	4,511	-5	-0.1%
21.0%	4,511	4,508	-2	-0.1%
22.2%	4,508	4,507	-1	0.0%
23.5%	4,507	4,504	-3	-0.1%
24.7%	4,506	4,502	-3	-0.1%
25.9%	4,504	4,502	-2	0.0%
27.2%	4,502	4,500	-2	0.0%
28.4%	4,502	4,495	-7	-0.2%
29.6%	4,500	4,492	-9	-0.2%
30.9%	4,495	4,491	-4	-0.1%
32.1%	4,491	4,491	0	0.0%
33.3%	4,491	4,491	0	0.0%
34.6%	4,491	4,490	-2	0.0%
35.8%	4,490	4,489	0	0.0%
37.0%	4,489	4,487	-2	0.0%
38.3%	4,487	4,487	0	0.0%
39.5%	4,487	4,487	0	0.0%
40.7%	4,486	4,486	0	0.0%
42.0%	4,486	4,486	0	0.0%
43.2%	4,484	4,484	0	0.0%
44.4%	4,484	4,484	0	0.0%
45.7%	4,435	4,447	12	0.3%
46.9%	4,382	4,399	17	0.4%
48.1%	4,166	4,302	135	3.2%
49.4%	3,038	3,993	955	31.4%
50.6%	3,021	3,876	855	28.3%
51.9%	2,933	3,805	872	29.7%
53.1%	2,873	3,393	520	18.1%
54.3%	2,845	3,166	322	11.3%
55.6%	2,776	2,906	130	4.7%
56.8%	2,732	2,788	56	2.0%
58.0%	2,607	2,776	169	6.5%
59.3%	2,572	2,664	92	3.6%
60.5%	2,461	2,590	129	5.3%
61.7%	2,438	2,587	149	6.1%
63.0%	2,413	2,487	74	3.1%
64.2%	2,318	2,275	-43	-1.8%
65.4%	2,244	2,246	2	0.1%
66.7%	2,218	2,238	20	0.9%
67.9%	2,217	2,232	14	0.7%
69.1%	2,210	2,214	5	0.2%
70.4%	2,200	2,203	3	0.1%
71.6%	2,199	2,199	0	0.0%
72.8%	2,198	2,198	0	0.0%
74.1%	2,185	2,189	4	0.2%
75.3%	2,053	2,189	136	6.6%
76.5%	1,728	2,038	310	17.9%
77.8%	1,692	1,918	226	13.3%
79.0%	1,650	1,728	78	4.7%
80.2%	1,601	1,692	91	5.7%
81.5%	1,592	1,688	96	6.1%
82.7%	1,526	1,601	75	4.9%
84.0%	1,497	1,592	95	6.4%
85.2%	1,456	1,541	85	5.8%
86.4%	1,410	1,504	94	6.7%
87.7%	1,407	1,502	95	6.7%
88.9%	1,396	1,455	59	4.2%
90.1%	1,392	1,410	18	1.3%
91.4%	1,391	1,407	16	1.2%
92.6%	1,389	1,392	3	0.2%
93.8%	1,389	1,391	2	0.1%
95.1%	1,331	1,389	58	4.3%
96.3%	1,301	1,331	30	2.3%
97.5%	1,297	1,316	19	1.5%
98.8%	1,260	1,297	37	2.9%
100.0%	1,251	1,260	9	0.7%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,793	17,765	-29	-0.2%
1.2%	7,878	7,878	0	0.0%
2.5%	7,603	7,602	-1	0.0%
3.7%	6,402	6,571	169	2.6%
4.9%	6,275	6,402	127	2.0%
6.2%	5,780	5,780	0	0.0%
7.4%	5,265	5,265	0	0.0%
8.6%	3,992	4,004	13	0.3%
9.9%	3,949	3,989	41	1.0%
11.1%	3,790	3,795	5	0.1%
12.3%	3,741	3,741	0	0.0%
13.6%	3,690	3,725	35	0.9%
14.8%	3,553	3,553	0	0.0%
16.0%	3,508	3,508	0	0.0%
17.3%	3,436	3,436	0	0.0%
18.5%	3,398	3,398	0	0.0%
19.8%	3,347	3,347	0	0.0%
21.0%	3,336	3,336	0	0.0%
22.2%	3,332	3,332	0	0.0%
23.5%	3,285	3,285	0	0.0%
24.7%	3,280	3,280	0	0.0%
25.9%	3,266	3,266	0	0.0%
27.2%	3,257	3,257	0	0.0%
28.4%	3,254	3,254	0	0.0%
29.6%	3,254	3,254	0	0.0%
30.9%	3,250	3,253	3	0.1%
32.1%	3,229	3,250	21	0.6%
33.3%	3,223	3,248	25	0.8%
34.6%	3,213	3,229	16	0.5%
35.8%	3,201	3,223	22	0.7%
37.0%	3,196	3,213	18	0.6%
38.3%	3,183	3,201	18	0.6%
39.5%	3,165	3,196	30	1.0%
40.7%	3,163	3,183	20	0.6%
42.0%	3,160	3,165	5	0.1%
43.2%	3,159	3,163	4	0.1%
44.4%	3,157	3,160	4	0.1%
45.7%	3,143	3,159	16	0.5%
46.9%	3,111	3,157	46	1.5%
48.1%	3,060	3,143	83	2.7%
49.4%	2,871	3,111	240	8.3%
50.6%	2,844	3,058	215	7.6%
51.9%	2,791	2,791	0	0.0%
53.1%	2,687	2,687	0	0.0%
54.3%	2,628	2,628	0	0.0%
55.6%	2,599	2,599	0	0.0%
56.8%	2,560	2,560	0	0.0%
58.0%	2,530	2,547	17	0.7%
59.3%	2,522	2,530	8	0.3%
60.5%	2,515	2,522	7	0.3%
61.7%	2,486	2,515	29	1.2%
63.0%	2,451	2,486	35	1.4%
64.2%	2,444	2,451	7	0.3%
65.4%	2,430	2,451	21	0.8%
66.7%	2,376	2,444	68	2.8%
67.9%	2,375	2,430	55	2.3%
69.1%	2,371	2,376	5	0.2%
70.4%	2,367	2,376	10	0.4%
71.6%	2,050	2,371	321	15.7%
72.8%	2,006	2,158	152	7.6%
74.1%	2,002	2,049	47	2.3%
75.3%	1,902	2,006	104	5.5%
76.5%	1,884	2,002	118	6.2%
77.8%	1,856	1,884	28	1.5%
79.0%	1,837	1,837	0	0.0%
80.2%	1,788	1,788	0	0.0%
81.5%	1,753	1,778	25	1.4%
82.7%	1,698	1,753	55	3.2%
84.0%	1,674	1,699	26	1.5%
85.2%	1,667	1,674	7	0.4%
86.4%	1,656	1,656	0	0.0%
87.7%	1,617	1,617	0	0.0%
88.9%	1,611	1,611	0	0.0%
90.1%	1,605	1,605	0	0.0%
91.4%	1,602	1,602	0	0.0%
92.6%	1,601	1,601	0	0.0%
93.8%	1,549	1,549	0	0.0%
95.1%	1,472	1,474	2	0.1%
96.3%	1,463	1,463	0	0.0%
97.5%	1,455	1,455	0	0.0%
98.8%	1,389	1,389	0	0.0%
100.0%	1,340	1,340	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	34,743	34,743	0	0.0%
1.2%	19,255	21,809	2,554	13.3%
2.5%	16,411	21,721	5,310	32.4%
3.7%	16,297	16,411	114	0.7%
4.9%	14,296	14,296	0	0.0%
6.2%	13,127	13,551	425	3.2%
7.4%	12,775	13,127	352	2.8%
8.6%	7,176	7,641	465	6.5%
9.9%	6,857	7,176	319	4.7%
11.1%	6,838	7,151	313	4.6%
12.3%	6,702	6,838	136	2.0%
13.6%	6,701	6,770	70	1.0%
14.8%	6,648	6,648	0	0.0%
16.0%	6,550	6,592	43	0.7%
17.3%	6,517	6,529	12	0.2%
18.5%	6,503	6,503	0	0.0%
19.8%	6,270	6,295	25	0.4%
21.0%	6,041	6,095	54	0.9%
22.2%	5,966	5,960	-6	-0.1%
23.5%	5,960	5,945	-14	-0.2%
24.7%	5,895	5,779	-117	-2.0%
25.9%	5,803	5,751	-51	-0.9%
27.2%	5,598	5,663	66	1.2%
28.4%	5,498	5,598	99	1.8%
29.6%	5,453	5,498	45	0.8%
30.9%	5,379	5,475	96	1.8%
32.1%	5,076	5,409	333	6.6%
33.3%	5,076	5,377	301	5.9%
34.6%	4,995	5,076	81	1.6%
35.8%	4,920	4,827	-94	-1.9%
37.0%	4,823	4,811	-12	-0.2%
38.3%	4,821	4,668	-153	-3.2%
39.5%	4,564	4,613	49	1.1%
40.7%	4,479	4,564	85	1.9%
42.0%	4,421	4,495	74	1.7%
43.2%	4,315	4,315	0	0.0%
44.4%	4,292	4,292	0	0.0%
45.7%	4,283	4,283	0	0.0%
46.9%	4,184	4,184	0	0.0%
48.1%	3,983	4,035	52	1.3%
49.4%	3,710	3,665	-45	-1.2%
50.6%	3,500	3,318	-182	-5.2%
51.9%	3,190	3,190	0	0.0%
53.1%	3,035	3,033	-1	0.0%
54.3%	3,029	3,029	0	0.0%
55.6%	2,970	2,970	0	0.0%
56.8%	2,860	2,918	58	2.0%
58.0%	2,860	2,860	1	0.0%
59.3%	2,832	2,860	27	1.0%
60.5%	2,821	2,832	11	0.4%
61.7%	2,813	2,821	8	0.3%
63.0%	2,764	2,813	48	1.8%
64.2%	2,746	2,764	18	0.7%
65.4%	2,724	2,730	6	0.2%
66.7%	2,661	2,724	63	2.4%
67.9%	2,656	2,656	0	0.0%
69.1%	2,602	2,602	0	0.0%
70.4%	2,591	2,577	-15	-0.6%
71.6%	2,569	2,569	0	0.0%
72.8%	2,557	2,557	-1	0.0%
74.1%	2,554	2,554	0	0.0%
75.3%	2,552	2,537	-15	-0.6%
76.5%	2,506	2,506	0	0.0%
77.8%	2,241	2,241	0	0.0%
79.0%	2,207	2,213	6	0.2%
80.2%	2,138	2,201	63	3.0%
81.5%	2,065	2,133	68	3.3%
82.7%	1,974	2,065	92	4.6%
84.0%	1,925	1,925	0	0.0%
85.2%	1,859	1,870	11	0.6%
86.4%	1,858	1,859	1	0.0%
87.7%	1,817	1,858	42	2.3%
88.9%	1,784	1,817	32	1.8%
90.1%	1,763	1,784	22	1.2%
91.4%	1,755	1,764	9	0.5%
92.6%	1,721	1,755	34	2.0%
93.8%	1,708	1,721	13	0.8%
95.1%	1,707	1,708	1	0.0%
96.3%	1,668	1,668	0	0.0%
97.5%	1,633	1,633	0	0.0%
98.8%	1,613	1,613	0	0.0%
100.0%	1,611	1,611	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	62,612	62,612	0	0.0%
1.2%	51,642	51,642	0	0.0%
2.5%	29,568	29,568	0	0.0%
3.7%	25,549	26,197	648	2.5%
4.9%	24,983	25,543	559	2.2%
6.2%	23,979	22,431	-1,548	-6.5%
7.4%	18,619	20,916	2,297	12.3%
8.6%	17,954	17,954	0	0.0%
9.9%	17,841	17,934	93	0.5%
11.1%	15,724	17,841	2,117	13.5%
12.3%	14,767	17,323	2,556	17.3%
13.6%	14,359	13,989	-370	-2.6%
14.8%	13,947	13,703	-245	-1.8%
16.0%	13,703	13,458	-244	-1.8%
17.3%	12,190	12,191	1	0.0%
18.5%	9,739	9,739	0	0.0%
19.8%	6,865	6,865	0	0.0%
21.0%	6,808	6,808	0	0.0%
22.2%	6,801	6,801	0	0.0%
23.5%	6,675	6,681	5	0.1%
24.7%	6,670	6,670	0	0.0%
25.9%	6,650	6,650	0	0.0%
27.2%	6,614	6,614	0	0.0%
28.4%	6,156	6,156	0	0.0%
29.6%	6,003	6,003	0	0.0%
30.9%	5,886	5,886	0	0.0%
32.1%	5,830	5,830	0	0.0%
33.3%	5,459	5,459	0	0.0%
34.6%	5,260	5,259	-1	0.0%
35.8%	5,160	5,160	0	0.0%
37.0%	4,939	4,939	0	0.0%
38.3%	4,937	4,937	0	0.0%
39.5%	4,755	4,755	0	0.0%
40.7%	4,658	4,658	0	0.0%
42.0%	4,464	4,464	0	0.0%
43.2%	4,107	4,107	0	0.0%
44.4%	3,818	3,818	0	0.0%
45.7%	3,753	3,753	0	0.0%
46.9%	3,727	3,727	0	0.0%
48.1%	3,568	3,568	0	0.0%
49.4%	3,564	3,564	0	0.0%
50.6%	3,562	3,562	0	0.0%
51.9%	3,549	3,549	0	0.0%
53.1%	3,334	3,334	0	0.0%
54.3%	3,199	3,199	0	0.0%
55.6%	3,080	3,080	0	0.0%
56.8%	3,014	3,014	0	0.0%
58.0%	2,929	2,929	0	0.0%
59.3%	2,897	2,897	0	0.0%
60.5%	2,888	2,888	0	0.0%
61.7%	2,776	2,776	0	0.0%
63.0%	2,765	2,765	0	0.0%
64.2%	2,735	2,735	0	0.0%
65.4%	2,722	2,722	0	0.0%
66.7%	2,702	2,702	0	0.0%
67.9%	2,700	2,700	0	0.0%
69.1%	2,676	2,676	0	0.0%
70.4%	2,668	2,668	0	0.0%
71.6%	2,665	2,665	0	0.0%
72.8%	2,640	2,640	0	0.0%
74.1%	2,624	2,624	0	0.0%
75.3%	2,597	2,597	0	0.0%
76.5%	2,585	2,585	0	0.0%
77.8%	2,584	2,584	0	0.0%
79.0%	2,397	2,397	0	0.0%
80.2%	2,304	2,303	-1	-0.1%
81.5%	2,278	2,278	0	0.0%
82.7%	2,255	2,260	5	0.2%
84.0%	2,165	2,255	90	4.2%
85.2%	2,131	2,131	0	0.0%
86.4%	2,118	2,118	0	0.0%
87.7%	2,115	2,115	0	0.0%
88.9%	2,105	2,105	0	0.0%
90.1%	2,091	2,091	0	0.0%
91.4%	2,033	2,033	0	0.0%
92.6%	2,018	2,018	0	0.0%
93.8%	1,914	1,914	0	0.0%
95.1%	1,892	1,885	-7	-0.4%
96.3%	1,885	1,864	-21	-1.1%
97.5%	1,864	1,821	-43	-2.3%
98.8%	1,817	1,817	0	0.0%
100.0%	1,792	1,808	17	0.9%

Table SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	34,404	39,712	5,307	15.4%
1.2%	29,343	29,343	0	0.0%
2.5%	28,757	28,757	0	0.0%
3.7%	28,342	28,342	0	0.0%
4.9%	24,955	27,557	2,602	10.4%
6.2%	22,630	24,955	2,326	10.3%
7.4%	22,565	22,565	0	0.0%
8.6%	19,063	20,784	1,721	9.0%
9.9%	18,943	18,943	0	0.0%
11.1%	16,359	18,465	2,106	12.9%
12.3%	16,234	16,359	125	0.8%
13.6%	15,733	16,234	502	3.2%
14.8%	15,613	15,771	158	1.0%
16.0%	14,981	15,613	632	4.2%
17.3%	14,889	14,981	92	0.6%
18.5%	13,547	13,547	0	0.0%
19.8%	12,229	13,223	995	8.1%
21.0%	11,261	12,229	967	8.6%
22.2%	10,521	11,114	594	5.6%
23.5%	10,469	10,469	0	0.0%
24.7%	10,326	9,481	-845	-8.2%
25.9%	9,481	9,272	-209	-2.2%
27.2%	8,991	8,991	0	0.0%
28.4%	7,435	8,829	1,394	18.8%
29.6%	7,140	8,474	1,333	18.7%
30.9%	7,056	7,435	379	5.4%
32.1%	7,024	7,138	114	1.6%
33.3%	6,666	7,024	358	5.4%
34.6%	6,420	6,420	0	0.0%
35.8%	6,352	6,203	-149	-2.3%
37.0%	6,203	6,098	-106	-1.7%
38.3%	6,098	6,012	-86	-1.4%
39.5%	6,016	5,967	-49	-0.8%
40.7%	5,968	5,905	-62	-1.0%
42.0%	5,905	5,862	-43	-0.7%
43.2%	5,316	5,316	0	0.0%
44.4%	5,164	5,164	0	0.0%
45.7%	4,869	4,869	0	0.0%
46.9%	4,804	4,803	0	0.0%
48.1%	4,772	4,772	0	0.0%
49.4%	4,673	4,673	0	0.0%
50.6%	4,593	4,593	0	0.0%
51.9%	4,405	4,410	5	0.1%
53.1%	4,405	4,405	0	0.0%
54.3%	4,197	4,197	0	0.0%
55.6%	4,039	4,039	0	0.0%
56.8%	3,795	3,795	0	0.0%
58.0%	3,736	3,736	0	0.0%
59.3%	3,685	3,685	0	0.0%
60.5%	3,675	3,675	0	0.0%
61.7%	3,576	3,576	0	0.0%
63.0%	3,358	3,358	0	0.0%
64.2%	3,228	3,228	0	0.0%
65.4%	2,999	2,999	0	0.0%
66.7%	2,941	2,941	0	0.0%
67.9%	2,889	2,889	0	0.0%
69.1%	2,846	2,846	0	0.0%
70.4%	2,793	2,793	0	0.0%
71.6%	2,791	2,791	0	0.0%
72.8%	2,783	2,783	0	0.0%
74.1%	2,781	2,781	0	0.0%
75.3%	2,738	2,738	0	0.0%
76.5%	2,734	2,734	0	0.0%
77.8%	2,729	2,699	-30	-1.1%
79.0%	2,699	2,600	-99	-3.7%
80.2%	2,600	2,565	-34	-1.3%
81.5%	2,565	2,554	-12	-0.5%
82.7%	2,554	2,550	-4	-0.1%
84.0%	2,548	2,548	0	0.0%
85.2%	2,544	2,544	0	0.0%
86.4%	2,273	2,273	0	0.0%
87.7%	2,270	2,270	0	0.0%
88.9%	2,247	2,247	0	0.0%
90.1%	2,222	2,222	0	0.0%
91.4%	2,032	2,046	14	0.7%
92.6%	2,020	2,020	0	0.0%
93.8%	1,982	1,982	0	0.0%
95.1%	1,931	1,931	0	0.0%
96.3%	1,832	1,832	0	0.0%
97.5%	1,785	1,785	0	0.0%
98.8%	1,739	1,771	32	1.8%
100.0%	1,688	1,688	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	47,934	47,653	-281	-0.6%
1.2%	45,876	45,876	0	0.0%
2.5%	35,108	35,108	0	0.0%
3.7%	32,996	32,996	0	0.0%
4.9%	27,009	27,373	363	1.3%
6.2%	24,870	24,870	0	0.0%
7.4%	21,539	21,674	135	0.6%
8.6%	20,286	20,286	0	0.0%
9.9%	20,181	20,181	0	0.0%
11.1%	17,832	17,832	0	0.0%
12.3%	17,096	17,096	0	0.0%
13.6%	16,363	16,640	277	1.7%
14.8%	15,464	16,363	899	5.8%
16.0%	15,110	15,464	354	2.3%
17.3%	13,199	14,956	1,757	13.3%
18.5%	12,861	14,629	1,769	13.8%
19.8%	12,135	13,199	1,064	8.8%
21.0%	11,629	12,135	506	4.4%
22.2%	11,071	11,071	0	0.0%
23.5%	11,007	10,924	-84	-0.8%
24.7%	10,802	10,859	57	0.5%
25.9%	10,105	10,801	696	6.9%
27.2%	9,730	10,105	375	3.9%
28.4%	9,271	9,737	466	5.0%
29.6%	9,081	9,730	649	7.1%
30.9%	8,995	9,081	86	1.0%
32.1%	8,951	9,050	99	1.1%
33.3%	8,604	8,995	391	4.5%
34.6%	8,380	8,604	224	2.7%
35.8%	8,122	8,440	318	3.9%
37.0%	8,010	8,010	0	0.0%
38.3%	7,932	7,949	17	0.2%
39.5%	7,874	7,932	58	0.7%
40.7%	6,851	7,873	1,022	14.9%
42.0%	6,763	7,020	257	3.8%
43.2%	5,888	6,851	963	16.4%
44.4%	5,884	5,884	0	0.0%
45.7%	5,589	5,589	0	0.0%
46.9%	5,011	5,011	0	0.0%
48.1%	4,875	4,875	0	0.0%
49.4%	4,344	4,344	0	0.0%
50.6%	4,225	4,225	0	0.0%
51.9%	3,803	3,803	0	0.0%
53.1%	3,796	3,796	0	0.0%
54.3%	3,778	3,778	0	0.0%
55.6%	3,773	3,773	0	0.0%
56.8%	3,586	3,586	0	0.0%
58.0%	3,574	3,574	0	0.0%
59.3%	3,421	3,421	0	0.0%
60.5%	3,240	3,240	0	0.0%
61.7%	3,183	3,183	0	0.0%
63.0%	3,141	3,155	14	0.4%
64.2%	3,134	3,134	0	0.0%
65.4%	3,021	3,021	0	0.0%
66.7%	2,998	2,998	0	0.0%
67.9%	2,957	2,957	0	0.0%
69.1%	2,863	2,863	0	0.0%
70.4%	2,810	2,810	0	0.0%
71.6%	2,790	2,790	0	0.0%
72.8%	2,746	2,746	0	0.0%
74.1%	2,721	2,721	0	0.0%
75.3%	2,718	2,718	0	0.0%
76.5%	2,712	2,680	-32	-1.2%
77.8%	2,680	2,668	-12	-0.5%
79.0%	2,668	2,625	-43	-1.6%
80.2%	2,590	2,590	0	0.0%
81.5%	2,583	2,583	0	0.0%
82.7%	2,496	2,527	32	1.3%
84.0%	2,487	2,496	8	0.3%
85.2%	2,417	2,487	70	2.9%
86.4%	2,360	2,417	57	2.4%
87.7%	2,331	2,331	0	0.0%
88.9%	2,270	2,270	0	0.0%
90.1%	2,179	2,179	0	0.0%
91.4%	2,104	2,095	-9	-0.4%
92.6%	1,976	1,972	-4	-0.2%
93.8%	1,915	1,915	0	0.0%
95.1%	1,830	1,830	0	0.0%
96.3%	1,828	1,828	0	0.0%
97.5%	1,785	1,747	-38	-2.1%
98.8%	1,747	1,696	-51	-2.9%
100.0%	1,559	1,559	0	0.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,925	30,920	-6	0.0%
1.2%	24,253	24,246	-8	0.0%
2.5%	19,254	19,248	-6	0.0%
3.7%	18,434	18,427	-7	0.0%
4.9%	18,342	18,342	1	0.0%
6.2%	15,083	15,080	-4	0.0%
7.4%	14,571	14,566	-6	0.0%
8.6%	13,671	13,663	-8	-0.1%
9.9%	13,314	13,310	-4	0.0%
11.1%	12,211	12,202	-9	-0.1%
12.3%	11,986	11,977	-9	-0.1%
13.6%	11,083	11,076	-6	-0.1%
14.8%	10,575	10,566	-9	-0.1%
16.0%	9,539	9,534	-5	-0.1%
17.3%	8,533	8,528	-6	-0.1%
18.5%	8,224	8,220	-4	-0.1%
19.8%	8,047	8,038	-9	-0.1%
21.0%	7,779	7,612	-167	-2.2%
22.2%	7,620	7,387	-233	-3.1%
23.5%	7,401	6,995	-406	-5.5%
24.7%	6,537	6,530	-7	-0.1%
25.9%	5,279	6,332	1,053	19.9%
27.2%	5,193	5,279	86	1.7%
28.4%	5,119	5,181	62	1.2%
29.6%	5,012	5,119	106	2.1%
30.9%	4,894	5,012	118	2.4%
32.1%	4,756	4,894	138	2.9%
33.3%	4,703	4,753	50	1.1%
34.6%	4,684	4,703	19	0.4%
35.8%	3,894	4,684	790	20.3%
37.0%	3,802	3,894	92	2.4%
38.3%	3,796	3,802	5	0.1%
39.5%	3,762	3,796	35	0.9%
40.7%	3,751	3,762	11	0.3%
42.0%	3,721	3,751	30	0.8%
43.2%	3,651	3,721	71	1.9%
44.4%	3,643	3,651	7	0.2%
45.7%	3,590	3,590	0	0.0%
46.9%	3,561	3,561	0	0.0%
48.1%	3,509	3,474	-35	-1.0%
49.4%	3,477	3,426	-52	-1.5%
50.6%	3,426	3,311	-114	-3.3%
51.9%	3,313	3,302	-11	-0.3%
53.1%	3,302	3,273	-28	-0.9%
54.3%	3,273	3,205	-68	-2.1%
55.6%	3,235	3,204	-31	-1.0%
56.8%	3,205	3,106	-99	-3.1%
58.0%	3,204	2,883	-320	-10.0%
59.3%	2,885	2,856	-30	-1.0%
60.5%	2,856	2,815	-40	-1.4%
61.7%	2,815	2,731	-84	-3.0%
63.0%	2,760	2,719	-40	-1.5%
64.2%	2,726	2,646	-80	-2.9%
65.4%	2,646	2,634	-12	-0.5%
66.7%	2,638	2,623	-15	-0.6%
67.9%	2,625	2,542	-82	-3.1%
69.1%	2,544	2,541	-3	-0.1%
70.4%	2,525	2,516	-9	-0.3%
71.6%	2,517	2,423	-94	-3.7%
72.8%	2,423	2,387	-36	-1.5%
74.1%	2,389	2,312	-77	-3.2%
75.3%	2,312	2,306	-6	-0.3%
76.5%	2,306	2,274	-32	-1.4%
77.8%	2,274	2,067	-207	-9.1%
79.0%	2,067	2,062	-5	-0.2%
80.2%	2,062	2,039	-23	-1.1%
81.5%	2,040	2,019	-21	-1.0%
82.7%	2,019	2,007	-12	-0.6%
84.0%	1,968	1,964	-4	-0.2%
85.2%	1,861	1,822	-39	-2.1%
86.4%	1,822	1,822	0	0.0%
87.7%	1,822	1,804	-18	-1.0%
88.9%	1,804	1,804	0	0.0%
90.1%	1,779	1,779	0	0.0%
91.4%	1,735	1,735	0	0.0%
92.6%	1,689	1,688	0	0.0%
93.8%	1,580	1,580	0	0.0%
95.1%	1,575	1,575	0	0.0%
96.3%	1,571	1,571	0	0.0%
97.5%	1,205	1,205	0	0.0%
98.8%	1,205	1,205	0	0.0%
100.0%	1,170	1,170	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,476	31,463	-13	0.0%
1.2%	28,198	28,189	-9	0.0%
2.5%	26,842	26,830	-12	0.0%
3.7%	24,959	24,932	-27	-0.1%
4.9%	20,460	20,446	-14	-0.1%
6.2%	18,848	18,854	6	0.0%
7.4%	18,782	18,774	-7	0.0%
8.6%	18,650	18,640	-10	-0.1%
9.9%	15,492	15,481	-11	-0.1%
11.1%	15,064	15,052	-12	-0.1%
12.3%	14,595	14,583	-12	-0.1%
13.6%	13,816	13,811	-5	0.0%
14.8%	13,589	13,553	-36	-0.3%
16.0%	12,244	12,396	151	1.2%
17.3%	11,919	12,222	303	2.5%
18.5%	11,567	11,910	343	3.0%
19.8%	10,750	10,740	-10	-0.1%
21.0%	9,880	9,867	-13	-0.1%
22.2%	9,067	9,057	-11	-0.1%
23.5%	9,022	9,011	-12	-0.1%
24.7%	6,440	6,426	-13	-0.2%
25.9%	5,484	5,461	-23	-0.4%
27.2%	5,348	5,336	-11	-0.2%
28.4%	4,692	4,692	0	0.0%
29.6%	4,531	4,338	-193	-4.3%
30.9%	4,338	4,191	-147	-3.4%
32.1%	4,191	4,066	-125	-3.0%
33.3%	4,017	4,017	0	0.0%
34.6%	3,921	3,790	-131	-3.3%
35.8%	3,812	3,720	-93	-2.4%
37.0%	3,735	3,661	-75	-2.0%
38.3%	3,688	3,644	-44	-1.2%
39.5%	3,644	3,604	-40	-1.1%
40.7%	3,604	3,592	-12	-0.3%
42.0%	3,592	3,560	-32	-0.9%
43.2%	3,560	3,518	-43	-1.2%
44.4%	3,518	3,482	-35	-1.0%
45.7%	3,500	3,453	-47	-1.4%
46.9%	3,453	3,401	-52	-1.5%
48.1%	3,382	3,382	0	0.0%
49.4%	3,352	3,301	-51	-1.5%
50.6%	3,301	3,247	-54	-1.6%
51.9%	3,243	3,243	0	0.0%
53.1%	3,214	3,162	-53	-1.6%
54.3%	3,172	3,086	-86	-2.7%
55.6%	3,087	3,069	-17	-0.6%
56.8%	3,069	3,052	-17	-0.6%
58.0%	3,052	3,041	-11	-0.4%
59.3%	3,041	3,036	-5	-0.2%
60.5%	3,036	3,033	-3	-0.1%
61.7%	3,033	3,033	0	0.0%
63.0%	3,033	3,033	0	0.0%
64.2%	3,033	3,024	-9	-0.3%
65.4%	3,033	2,785	-248	-8.2%
66.7%	3,024	2,771	-253	-8.4%
67.9%	2,830	2,754	-76	-2.7%
69.1%	2,787	2,682	-105	-3.8%
70.4%	2,771	2,658	-113	-4.1%
71.6%	2,693	2,548	-146	-5.4%
72.8%	2,687	2,439	-248	-9.2%
74.1%	2,562	2,382	-180	-7.0%
75.3%	2,550	2,318	-232	-9.1%
76.5%	2,448	2,252	-196	-8.0%
77.8%	2,344	2,209	-135	-5.7%
79.0%	2,254	2,206	-48	-2.1%
80.2%	2,241	2,065	-176	-7.9%
81.5%	2,211	2,031	-180	-8.1%
82.7%	2,067	2,030	-37	-1.8%
84.0%	2,031	2,026	-5	-0.2%
85.2%	2,030	2,021	-9	-0.4%
86.4%	2,026	2,012	-14	-0.7%
87.7%	2,021	2,010	-11	-0.6%
88.9%	2,012	1,916	-96	-4.8%
90.1%	1,987	1,778	-209	-10.5%
91.4%	1,916	1,776	-140	-7.3%
92.6%	1,778	1,730	-48	-2.7%
93.8%	1,733	1,644	-89	-5.1%
95.1%	1,646	1,537	-109	-6.6%
96.3%	1,578	1,515	-63	-4.0%
97.5%	1,537	1,356	-181	-11.8%
98.8%	1,515	1,240	-275	-18.2%
100.0%	1,066	1,066	0	0.0%

Table SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,912	20,935	24	0.1%
1.2%	18,743	18,636	-108	-0.6%
2.5%	18,204	18,192	-12	-0.1%
3.7%	16,571	16,557	-14	-0.1%
4.9%	16,014	16,002	-12	-0.1%
6.2%	14,958	14,943	-15	-0.1%
7.4%	14,846	14,831	-15	-0.1%
8.6%	11,730	11,718	-12	-0.1%
9.9%	11,082	11,067	-15	-0.1%
11.1%	10,780	10,766	-14	-0.1%
12.3%	9,794	9,781	-14	-0.1%
13.6%	9,548	9,533	-14	-0.2%
14.8%	8,616	7,999	-617	-7.2%
16.0%	8,013	7,871	-142	-1.8%
17.3%	7,883	7,517	-366	-4.6%
18.5%	7,532	7,500	-32	-0.4%
19.8%	7,514	6,962	-552	-7.3%
21.0%	6,909	6,895	-13	-0.2%
22.2%	6,357	5,930	-426	-6.7%
23.5%	6,345	5,728	-617	-9.7%
24.7%	6,274	5,607	-666	-10.6%
25.9%	6,221	5,322	-899	-14.4%
27.2%	5,944	5,168	-776	-13.0%
28.4%	5,828	5,040	-788	-13.5%
29.6%	5,742	5,036	-706	-12.3%
30.9%	5,718	4,943	-776	-13.6%
32.1%	5,595	4,926	-670	-12.0%
33.3%	5,378	4,841	-538	-10.0%
34.6%	5,054	4,835	-220	-4.3%
35.8%	5,004	4,833	-171	-3.4%
37.0%	4,892	4,816	-76	-1.5%
38.3%	4,864	4,718	-146	-3.0%
39.5%	4,853	4,683	-170	-3.5%
40.7%	4,842	4,534	-307	-6.3%
42.0%	4,757	4,516	-241	-5.1%
43.2%	4,711	4,440	-271	-5.8%
44.4%	4,704	4,405	-299	-6.4%
45.7%	4,591	4,335	-257	-5.6%
46.9%	4,575	4,285	-290	-6.3%
48.1%	4,545	4,045	-500	-11.0%
49.4%	4,541	3,984	-557	-12.3%
50.6%	4,536	3,962	-574	-12.6%
51.9%	4,528	3,895	-633	-14.0%
53.1%	4,412	3,873	-540	-12.2%
54.3%	4,349	3,837	-512	-11.8%
55.6%	4,249	3,815	-434	-10.2%
56.8%	4,196	3,740	-456	-10.9%
58.0%	4,179	3,660	-519	-12.4%
59.3%	4,151	3,655	-496	-12.0%
60.5%	3,909	3,654	-255	-6.5%
61.7%	3,895	3,516	-379	-9.7%
63.0%	3,811	3,467	-344	-9.0%
64.2%	3,763	3,400	-363	-9.6%
65.4%	3,731	3,398	-333	-8.9%
66.7%	3,683	3,298	-385	-10.4%
67.9%	3,639	3,287	-352	-9.7%
69.1%	3,606	3,267	-339	-9.4%
70.4%	3,602	3,258	-344	-9.5%
71.6%	3,498	3,047	-451	-12.9%
72.8%	3,477	3,014	-463	-13.3%
74.1%	3,287	2,994	-293	-8.9%
75.3%	3,259	2,963	-295	-9.1%
76.5%	3,241	2,901	-341	-10.5%
77.8%	3,222	2,801	-421	-13.1%
79.0%	3,121	2,776	-345	-11.1%
80.2%	3,090	2,494	-596	-19.3%
81.5%	3,087	2,484	-603	-19.5%
82.7%	2,958	2,444	-515	-17.4%
84.0%	2,923	2,270	-653	-22.3%
85.2%	2,895	2,214	-681	-23.5%
86.4%	2,859	2,127	-732	-25.6%
87.7%	2,856	2,121	-735	-25.7%
88.9%	2,804	2,084	-721	-25.7%
90.1%	2,613	2,078	-535	-20.5%
91.4%	2,604	2,071	-533	-20.5%
92.6%	2,517	1,985	-532	-21.1%
93.8%	2,219	1,875	-344	-15.5%
95.1%	2,118	1,796	-322	-15.2%
96.3%	1,859	1,712	-147	-7.9%
97.5%	1,726	1,681	-45	-2.6%
98.8%	1,557	1,508	-49	-3.1%
100.0%	1,391	1,406	15	1.1%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,084	12,037	-48	-0.4%
1.2%	11,888	11,829	-59	-0.5%
2.5%	11,424	11,271	-153	-1.3%
3.7%	11,219	10,897	-323	-2.9%
4.9%	11,048	10,737	-311	-2.8%
6.2%	10,969	10,725	-244	-2.2%
7.4%	10,746	10,655	-91	-0.8%
8.6%	10,665	10,435	-230	-2.2%
9.9%	10,660	10,401	-259	-2.4%
11.1%	10,658	10,239	-419	-3.9%
12.3%	10,655	10,215	-440	-4.1%
13.6%	10,652	10,202	-450	-4.2%
14.8%	10,650	10,139	-511	-4.8%
16.0%	10,567	10,013	-554	-5.2%
17.3%	10,548	10,005	-543	-5.2%
18.5%	10,472	9,983	-489	-4.7%
19.8%	10,456	9,807	-650	-6.2%
21.0%	10,434	9,644	-789	-7.6%
22.2%	10,295	9,603	-692	-6.7%
23.5%	10,272	9,535	-737	-7.2%
24.7%	10,220	9,454	-766	-7.5%
25.9%	10,200	9,424	-776	-7.6%
27.2%	10,181	9,304	-877	-8.6%
28.4%	10,103	9,303	-801	-7.9%
29.6%	10,015	9,261	-754	-7.5%
30.9%	9,974	9,204	-770	-7.7%
32.1%	9,967	9,198	-769	-7.7%
33.3%	9,928	9,161	-767	-7.7%
34.6%	9,875	9,111	-764	-7.7%
35.8%	9,662	8,972	-690	-7.1%
37.0%	9,578	8,848	-730	-7.6%
38.3%	9,546	8,810	-736	-7.7%
39.5%	9,497	8,761	-736	-7.7%
40.7%	9,435	8,751	-684	-7.2%
42.0%	9,387	8,682	-705	-7.5%
43.2%	9,369	8,669	-701	-7.5%
44.4%	9,364	8,650	-714	-7.6%
45.7%	9,341	8,638	-704	-7.5%
46.9%	9,333	8,605	-728	-7.8%
48.1%	9,313	8,524	-789	-8.5%
49.4%	9,251	8,493	-757	-8.2%
50.6%	9,242	8,463	-779	-8.4%
51.9%	9,218	8,423	-795	-8.6%
53.1%	9,187	8,332	-854	-9.3%
54.3%	9,166	8,242	-924	-10.1%
55.6%	9,125	8,235	-890	-9.8%
56.8%	9,076	8,205	-871	-9.6%
58.0%	9,028	8,074	-954	-10.6%
59.3%	8,989	8,018	-971	-10.8%
60.5%	8,845	8,007	-838	-9.5%
61.7%	8,823	7,988	-836	-9.5%
63.0%	8,596	7,803	-793	-9.2%
64.2%	8,291	7,783	-508	-6.1%
65.4%	8,218	7,637	-581	-7.1%
66.7%	8,023	7,597	-426	-5.3%
67.9%	7,622	7,468	-154	-2.0%
69.1%	7,422	7,367	-55	-0.7%
70.4%	6,962	6,999	37	0.5%
71.6%	6,817	6,851	35	0.5%
72.8%	6,814	6,820	6	0.1%
74.1%	6,637	6,441	-196	-3.0%
75.3%	6,326	6,226	-100	-1.6%
76.5%	5,880	5,970	91	1.5%
77.8%	5,877	5,847	-30	-0.5%
79.0%	5,789	5,597	-192	-3.3%
80.2%	5,657	5,587	-70	-1.2%
81.5%	5,655	5,552	-103	-1.8%
82.7%	5,648	5,463	-184	-3.3%
84.0%	5,363	5,401	38	0.7%
85.2%	5,328	5,396	67	1.3%
86.4%	4,691	5,381	690	14.7%
87.7%	4,412	4,468	56	1.3%
88.9%	3,395	4,199	804	23.7%
90.1%	2,754	3,383	628	22.8%
91.4%	2,732	2,855	123	4.5%
92.6%	2,538	2,720	181	7.1%
93.8%	2,477	2,445	-32	-1.3%
95.1%	2,295	2,211	-84	-3.7%
96.3%	2,134	2,009	-125	-5.9%
97.5%	2,131	2,006	-125	-5.9%
98.8%	2,050	1,952	-97	-4.7%
100.0%	1,557	1,542	-15	-1.0%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,369	9,532	162	1.7%
1.2%	9,302	9,363	61	0.7%
2.5%	9,287	9,029	-258	-2.8%
3.7%	9,235	8,956	-279	-3.0%
4.9%	9,170	8,942	-228	-2.5%
6.2%	9,151	8,939	-212	-2.3%
7.4%	9,064	8,897	-167	-1.8%
8.6%	8,963	8,764	-200	-2.2%
9.9%	8,962	8,747	-215	-2.4%
11.1%	8,958	8,742	-216	-2.4%
12.3%	8,932	8,694	-238	-2.7%
13.6%	8,786	8,669	-117	-1.3%
14.8%	8,781	8,451	-330	-3.8%
16.0%	8,769	8,237	-532	-6.1%
17.3%	8,755	8,177	-578	-6.6%
18.5%	8,730	8,176	-554	-6.3%
19.8%	8,727	8,123	-605	-6.9%
21.0%	8,697	7,814	-883	-10.1%
22.2%	8,669	7,802	-867	-10.0%
23.5%	8,540	7,777	-763	-8.9%
24.7%	8,508	7,725	-783	-9.2%
25.9%	8,297	7,641	-656	-7.9%
27.2%	8,202	7,456	-745	-9.1%
28.4%	8,185	7,439	-746	-9.1%
29.6%	8,077	7,217	-860	-10.6%
30.9%	7,990	7,143	-847	-10.6%
32.1%	7,960	7,093	-867	-10.9%
33.3%	7,955	7,031	-924	-11.6%
34.6%	7,639	6,964	-675	-8.8%
35.8%	7,119	6,897	-222	-3.1%
37.0%	6,896	6,738	-158	-2.3%
38.3%	6,737	6,674	-63	-0.9%
39.5%	6,341	6,549	209	3.3%
40.7%	6,331	6,199	-133	-2.1%
42.0%	6,302	6,072	-229	-3.6%
43.2%	6,292	6,065	-227	-3.6%
44.4%	5,977	6,026	49	0.8%
45.7%	5,700	5,943	243	4.3%
46.9%	5,428	5,626	198	3.6%
48.1%	5,229	5,294	65	1.2%
49.4%	5,204	5,246	43	0.8%
50.6%	5,042	5,111	69	1.4%
51.9%	4,998	5,030	32	0.6%
53.1%	4,978	4,842	-136	-2.7%
54.3%	4,873	4,816	-57	-1.2%
55.6%	4,754	4,802	49	1.0%
56.8%	4,747	4,752	6	0.1%
58.0%	4,655	4,688	33	0.7%
59.3%	4,471	4,642	171	3.8%
60.5%	4,463	4,600	137	3.1%
61.7%	4,117	4,465	348	8.5%
63.0%	4,013	4,422	409	10.2%
64.2%	4,011	4,175	164	4.1%
65.4%	3,921	4,034	113	2.9%
66.7%	3,803	3,968	164	4.3%
67.9%	3,769	3,951	182	4.8%
69.1%	3,490	3,927	437	12.5%
70.4%	3,293	3,878	585	17.8%
71.6%	3,266	3,715	450	13.8%
72.8%	3,203	3,556	353	11.0%
74.1%	3,067	3,493	426	13.9%
75.3%	2,869	2,960	91	3.2%
76.5%	2,565	2,567	2	0.1%
77.8%	2,452	2,532	80	3.3%
79.0%	2,405	2,512	107	4.5%
80.2%	2,391	2,329	-62	-2.6%
81.5%	2,305	2,316	11	0.5%
82.7%	2,045	2,283	238	11.6%
84.0%	2,020	2,258	238	11.8%
85.2%	2,002	2,102	99	5.0%
86.4%	1,883	1,980	97	5.2%
87.7%	1,856	1,708	-148	-8.0%
88.9%	1,737	1,669	-68	-3.9%
90.1%	1,723	1,594	-129	-7.5%
91.4%	1,705	1,532	-173	-10.1%
92.6%	1,695	1,530	-165	-9.8%
93.8%	1,568	1,451	-117	-7.5%
95.1%	1,544	1,419	-126	-8.1%
96.3%	1,400	1,410	10	0.7%
97.5%	1,384	1,372	-12	-0.9%
98.8%	1,372	1,335	-37	-2.7%
100.0%	1,370	1,125	-245	-17.9%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,834	10,834	0	0.0%
1.2%	10,759	10,743	-17	-0.2%
2.5%	10,719	10,714	-5	0.0%
3.7%	10,714	10,700	-14	-0.1%
4.9%	10,700	10,670	-30	-0.3%
6.2%	10,688	10,655	-33	-0.3%
7.4%	10,670	10,648	-22	-0.2%
8.6%	10,648	10,636	-11	-0.1%
9.9%	10,636	10,630	-6	-0.1%
11.1%	10,630	10,616	-14	-0.1%
12.3%	10,620	10,609	-11	-0.1%
13.6%	10,616	10,582	-35	-0.3%
14.8%	10,609	10,512	-97	-0.9%
16.0%	10,609	10,479	-130	-1.2%
17.3%	10,556	10,275	-281	-2.7%
18.5%	10,479	10,251	-229	-2.2%
19.8%	10,241	10,233	-8	-0.1%
21.0%	10,229	9,777	-452	-4.4%
22.2%	10,151	9,753	-398	-3.9%
23.5%	10,147	9,455	-692	-6.8%
24.7%	10,021	9,076	-945	-9.4%
25.9%	9,503	9,052	-451	-4.7%
27.2%	9,136	8,821	-315	-3.5%
28.4%	9,025	8,782	-243	-2.7%
29.6%	8,996	8,628	-368	-4.1%
30.9%	8,872	8,611	-261	-2.9%
32.1%	8,709	8,604	-105	-1.2%
33.3%	8,658	8,453	-205	-2.4%
34.6%	8,649	8,422	-227	-2.6%
35.8%	8,464	8,218	-246	-2.9%
37.0%	8,341	8,158	-183	-2.2%
38.3%	8,310	8,073	-237	-2.8%
39.5%	8,200	7,917	-282	-3.4%
40.7%	8,152	7,087	-1,065	-13.1%
42.0%	7,932	6,238	-1,694	-21.4%
43.2%	6,704	6,006	-698	-10.4%
44.4%	6,672	5,887	-785	-11.8%
45.7%	6,450	5,799	-651	-10.1%
46.9%	6,245	5,702	-543	-8.7%
48.1%	6,150	5,446	-704	-11.5%
49.4%	6,114	5,330	-785	-12.8%
50.6%	6,092	5,220	-872	-14.3%
51.9%	6,022	5,018	-1,005	-16.7%
53.1%	5,815	5,004	-811	-13.9%
54.3%	5,397	4,946	-450	-8.3%
55.6%	5,199	4,934	-265	-5.1%
56.8%	5,169	4,850	-318	-6.2%
58.0%	4,978	4,791	-187	-3.8%
59.3%	4,957	4,607	-351	-7.1%
60.5%	4,784	4,358	-427	-8.9%
61.7%	4,189	4,240	50	1.2%
63.0%	4,035	4,098	63	1.6%
64.2%	3,998	4,089	91	2.3%
65.4%	3,120	3,898	778	24.9%
66.7%	2,686	3,680	994	37.0%
67.9%	2,655	3,658	1,003	37.8%
69.1%	2,549	3,511	962	37.7%
70.4%	2,457	2,983	526	21.4%
71.6%	2,324	2,754	430	18.5%
72.8%	2,261	2,713	453	20.0%
74.1%	2,097	2,699	602	28.7%
75.3%	1,991	2,666	674	33.9%
76.5%	1,794	2,521	727	40.5%
77.8%	1,788	2,477	690	38.6%
79.0%	1,773	2,399	626	35.3%
80.2%	1,763	2,289	526	29.8%
81.5%	1,704	2,263	559	32.8%
82.7%	1,564	2,202	638	40.8%
84.0%	1,492	2,059	567	38.0%
85.2%	1,485	1,898	413	27.8%
86.4%	1,485	1,810	325	21.9%
87.7%	1,482	1,795	313	21.2%
88.9%	1,425	1,772	347	24.4%
90.1%	1,406	1,709	304	21.6%
91.4%	1,389	1,653	264	19.0%
92.6%	1,388	1,584	196	14.1%
93.8%	1,388	1,559	171	12.3%
95.1%	1,384	1,495	111	8.0%
96.3%	1,275	1,418	143	11.2%
97.5%	1,267	1,392	125	9.9%
98.8%	1,235	1,299	64	5.1%
100.0%	1,166	1,234	68	5.9%

Figure SW-47-b
American River at Mouth, Monthly Flow
Probability of Exceedance

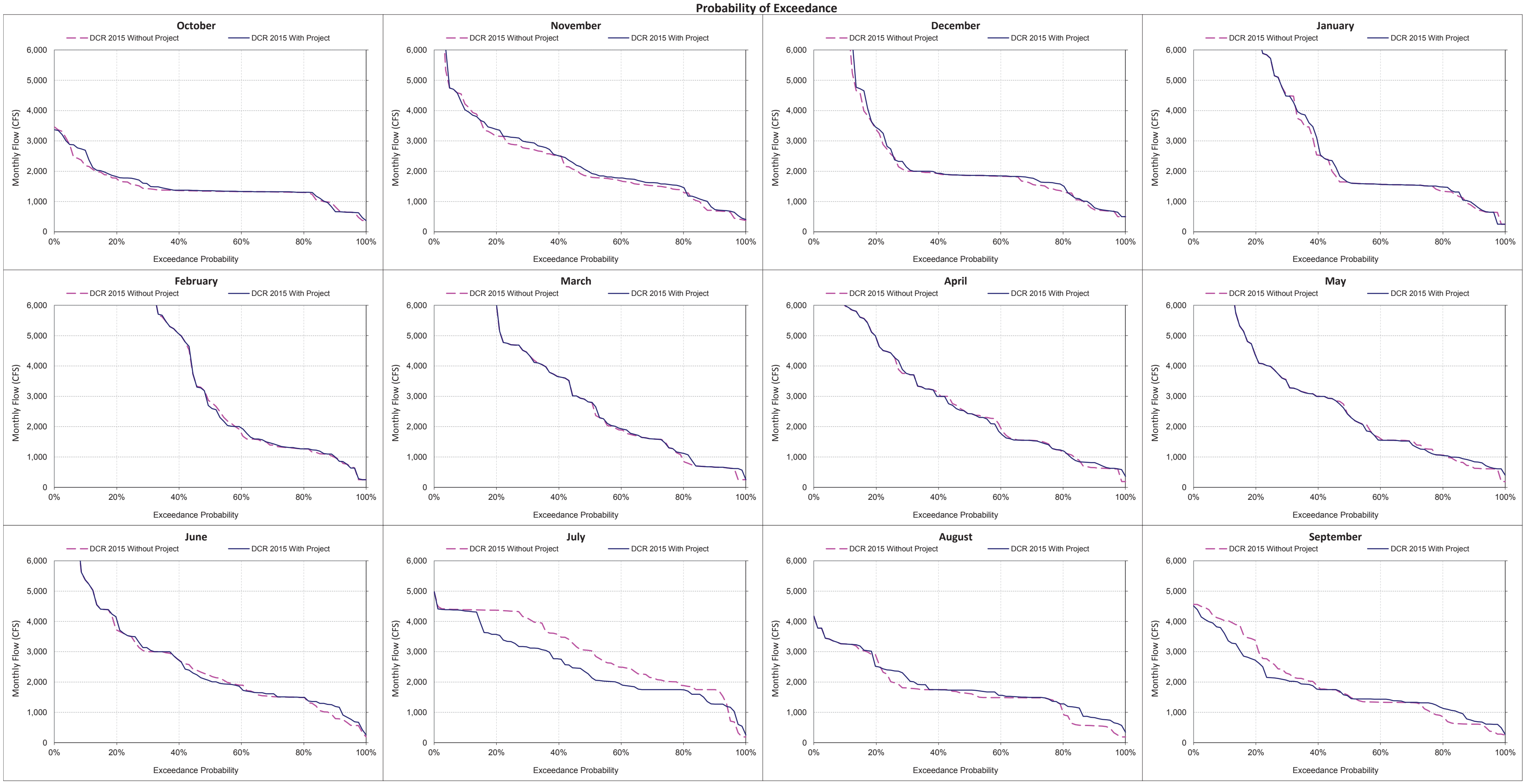


Table SW-47-b

American River at Mouth, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,462	3,372	-90	-2.6%
1.2%	3,366	3,340	-26	-0.8%
2.5%	3,315	3,206	-109	-3.3%
3.7%	3,101	3,009	-91	-2.9%
4.9%	2,877	2,877	0	0.0%
6.2%	2,459	2,872	413	16.8%
7.4%	2,431	2,771	340	14.0%
8.6%	2,365	2,734	369	15.6%
9.9%	2,184	2,690	506	23.1%
11.1%	2,154	2,375	222	10.3%
12.3%	2,056	2,116	60	2.9%
13.6%	1,983	2,030	47	2.4%
14.8%	1,974	2,019	45	2.3%
16.0%	1,883	1,974	91	4.8%
17.3%	1,879	1,912	33	1.8%
18.5%	1,781	1,861	80	4.5%
19.8%	1,775	1,830	54	3.1%
21.0%	1,663	1,786	123	7.4%
22.2%	1,651	1,781	129	7.8%
23.5%	1,644	1,777	134	8.1%
24.7%	1,562	1,769	208	13.3%
25.9%	1,546	1,746	200	12.9%
27.2%	1,515	1,704	189	12.5%
28.4%	1,434	1,602	168	11.7%
29.6%	1,424	1,598	174	12.2%
30.9%	1,416	1,491	75	5.3%
32.1%	1,401	1,488	87	6.2%
33.3%	1,379	1,484	104	7.6%
34.6%	1,377	1,453	76	5.5%
35.8%	1,376	1,430	54	3.9%
37.0%	1,374	1,402	28	2.0%
38.3%	1,369	1,377	8	0.6%
39.5%	1,365	1,376	11	0.8%
40.7%	1,361	1,373	12	0.9%
42.0%	1,360	1,373	12	0.9%
43.2%	1,355	1,372	16	1.2%
44.4%	1,353	1,365	11	0.8%
45.7%	1,351	1,362	11	0.8%
46.9%	1,345	1,360	14	1.1%
48.1%	1,344	1,356	13	0.9%
49.4%	1,343	1,356	13	0.9%
50.6%	1,339	1,354	15	1.1%
51.9%	1,338	1,352	14	1.1%
53.1%	1,335	1,345	11	0.8%
54.3%	1,334	1,342	8	0.6%
55.6%	1,331	1,340	10	0.7%
56.8%	1,330	1,337	7	0.5%
58.0%	1,329	1,336	7	0.5%
59.3%	1,328	1,335	7	0.5%
60.5%	1,326	1,333	7	0.5%
61.7%	1,326	1,331	6	0.4%
63.0%	1,326	1,330	4	0.3%
64.2%	1,325	1,327	2	0.1%
65.4%	1,325	1,326	2	0.1%
66.7%	1,324	1,326	2	0.1%
67.9%	1,321	1,326	5	0.3%
69.1%	1,321	1,326	5	0.4%
70.4%	1,318	1,325	7	0.6%
71.6%	1,314	1,325	11	0.8%
72.8%	1,312	1,325	13	1.0%
74.1%	1,311	1,323	12	0.9%
75.3%	1,309	1,320	10	0.8%
76.5%	1,305	1,312	7	0.5%
77.8%	1,304	1,310	6	0.4%
79.0%	1,303	1,307	4	0.3%
80.2%	1,298	1,306	8	0.6%
81.5%	1,295	1,304	9	0.7%
82.7%	1,235	1,300	65	5.3%
84.0%	1,060	1,181	121	11.4%
85.2%	1,035	1,110	76	7.3%
86.4%	995	1,015	20	2.0%
87.7%	986	964	-22	-2.2%
88.9%	960	823	-137	-14.3%
90.1%	823	667	-156	-18.9%
91.4%	698	663	-35	-5.0%
92.6%	664	655	-10	-1.4%
93.8%	647	651	3	0.5%
95.1%	646	646	0	0.0%
96.3%	636	636	0	-0.1%
97.5%	478	633	156	32.6%
98.8%	375	470	95	25.3%
100.0%	375	375	0	0.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,816	16,399	1,583	10.7%
1.2%	13,782	13,782	0	0.0%
2.5%	7,576	7,576	0	0.0%
3.7%	5,330	6,054	724	13.6%
4.9%	4,748	4,747	-1	0.0%
6.2%	4,705	4,705	0	0.0%
7.4%	4,588	4,579	-9	-0.2%
8.6%	4,551	4,304	-248	-5.4%
9.9%	4,220	4,029	-191	-4.5%
11.1%	4,102	3,952	-151	-3.7%
12.3%	3,937	3,851	-86	-2.2%
13.6%	3,889	3,804	-85	-2.2%
14.8%	3,685	3,681	-3	-0.1%
16.0%	3,350	3,626	275	8.2%
17.3%	3,320	3,467	147	4.4%
18.5%	3,246	3,429	183	5.6%
19.8%	3,161	3,384	223	7.0%
21.0%	3,155	3,348	193	6.1%
22.2%	3,146	3,158	12	0.4%
23.5%	2,930	3,144	214	7.3%
24.7%	2,890	3,122	232	8.0%
25.9%	2,874	3,110	236	8.2%
27.2%	2,874	3,096	222	7.7%
28.4%	2,775	2,989	215	7.7%
29.6%	2,753	2,967	214	7.8%
30.9%	2,737	2,948	211	7.7%
32.1%	2,709	2,933	224	8.3%
33.3%	2,668	2,836	169	6.3%
34.6%	2,653	2,813	160	6.0%
35.8%	2,579	2,777	198	7.7%
37.0%	2,573	2,719	146	5.7%
38.3%	2,533	2,566	33	1.3%
39.5%	2,510	2,518	8	0.3%
40.7%	2,499	2,483	-15	-0.6%
42.0%	2,154	2,456	302	14.0%
43.2%	2,146	2,357	211	9.8%
44.4%	2,068	2,287	219	10.6%
45.7%	2,028	2,193	165	8.1%
46.9%	1,921	2,150	229	11.9%
48.1%	1,860	2,064	205	11.0%
49.4%	1,840	2,000	160	8.7%
50.6%	1,796	1,924	128	7.1%
51.9%	1,788	1,897	109	6.1%
53.1%	1,781	1,847	66	3.7%
54.3%	1,773	1,847	74	4.2%
55.6%	1,760	1,809	49	2.8%
56.8%	1,741	1,809	67	3.9%
58.0%	1,732	1,788	57	3.3%
59.3%	1,699	1,781	81	4.8%
60.5%	1,664	1,773	109	6.6%
61.7%	1,650	1,753	103	6.2%
63.0%	1,636	1,741	105	6.4%
64.2%	1,586	1,732	146	9.2%
65.4%	1,569	1,689	120	7.7%
66.7%	1,568	1,667	99	6.3%
67.9%	1,546	1,631	85	5.5%
69.1%	1,531	1,626	95	6.2%
70.4%	1,522	1,625	103	6.8%
71.6%	1,504	1,612	108	7.2%
72.8%	1,496	1,584	88	5.8%
74.1%	1,473	1,577	103	7.0%
75.3%	1,465	1,560	94	6.4%
76.5%	1,412	1,542	130	9.2%
77.8%	1,395	1,540	145	10.4%
79.0%	1,390	1,500	111	8.0%
80.2%	1,287	1,451	165	12.8%
81.5%	1,286	1,180	-107	-8.3%
82.7%	1,095	1,176	81	7.4%
84.0%	1,034	1,138	104	10.0%
85.2%	997	1,086	89	9.0%
86.4%	825	1,039	214	25.9%
87.7%	711	1,008	297	41.7%
88.9%	709	825	117	16.4%
90.1%	688	734	46	6.6%
91.4%	686	711	25	3.7%
92.6%	678	709	31	4.6%
93.8%	673	694	22	3.2%
95.1%	643	679	36	5.7%
96.3%	447	649	202	45.1%
97.5%	427	538	112	26.2%
98.8%	402	447	45	11.1%
100.0%	375	404	29	7.7%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,126	20,319	1,193	6.2%
1.2%	16,284	16,284	0	0.0%
2.5%	16,006	16,272	266	1.7%
3.7%	15,609	15,595	-14	-0.1%
4.9%	13,626	13,620	-6	0.0%
6.2%	12,724	12,645	-79	-0.6%
7.4%	9,519	9,519	0	0.0%
8.6%	8,580	8,566	-14	-0.2%
9.9%	7,108	7,102	-6	-0.1%
11.1%	6,749	6,734	-14	-0.2%
12.3%	5,241	6,299	1,057	20.2%
13.6%	4,660	4,775	116	2.5%
14.8%	4,595	4,723	128	2.8%
16.0%	3,990	4,653	663	16.6%
17.3%	3,828	4,080	253	6.6%
18.5%	3,636	3,633	-2	-0.1%
19.8%	3,407	3,463	56	1.6%
21.0%	3,246	3,378	132	4.1%
22.2%	2,881	3,246	365	12.7%
23.5%	2,729	2,822	93	3.4%
24.7%	2,565	2,735	171	6.7%
25.9%	2,448	2,376	-72	-2.9%
27.2%	2,149	2,328	179	8.3%
28.4%	2,069	2,327	257	12.4%
29.6%	2,003	2,143	139	6.9%
30.9%	2,000	2,032	32	1.6%
32.1%	2,000	2,000	0	0.0%
33.3%	2,000	2,000	0	0.0%
34.6%	1,975	2,000	25	1.3%
35.8%	1,959	2,000	41	2.1%
37.0%	1,958	2,000	42	2.2%
38.3%	1,933	1,994	61	3.2%
39.5%	1,932	1,933	1	0.0%
40.7%	1,899	1,933	34	1.8%
42.0%	1,885	1,900	14	0.8%
43.2%	1,884	1,884	0	0.0%
44.4%	1,877	1,884	7	0.4%
45.7%	1,874	1,876	2	0.1%
46.9%	1,872	1,873	1	0.0%
48.1%	1,863	1,871	8	0.4%
49.4%	1,862	1,864	2	0.1%
50.6%	1,859	1,864	4	0.2%
51.9%	1,857	1,860	3	0.2%
53.1%	1,857	1,860	3	0.2%
54.3%	1,856	1,858	3	0.1%
55.6%	1,848	1,857	10	0.5%
56.8%	1,841	1,855	14	0.8%
58.0%	1,840	1,855	15	0.8%
59.3%	1,838	1,847	9	0.5%
60.5%	1,830	1,844	14	0.7%
61.7%	1,829	1,842	13	0.7%
63.0%	1,826	1,832	6	0.3%
64.2%	1,817	1,829	12	0.6%
65.4%	1,813	1,828	16	0.9%
66.7%	1,674	1,818	144	8.6%
67.9%	1,663	1,813	149	9.0%
69.1%	1,623	1,787	165	10.2%
70.4%	1,557	1,765	208	13.3%
71.6%	1,536	1,712	175	11.4%
72.8%	1,532	1,641	108	7.1%
74.1%	1,515	1,629	115	7.6%
75.3%	1,428	1,628	199	14.0%
76.5%	1,421	1,619	198	13.9%
77.8%	1,381	1,595	214	15.5%
79.0%	1,360	1,584	223	16.4%
80.2%	1,313	1,504	191	14.5%
81.5%	1,285	1,287	2	0.2%
82.7%	1,278	1,203	-76	-5.9%
84.0%	1,057	1,106	49	4.6%
85.2%	1,054	1,089	34	3.3%
86.4%	1,011	1,013	3	0.3%
87.7%	914	1,005	92	10.0%
88.9%	794	913	120	15.1%
90.1%	727	794	67	9.2%
91.4%	711	753	42	5.9%
92.6%	704	723	18	2.6%
93.8%	689	704	15	2.2%
95.1%	683	689	6	0.9%
96.3%	680	673	-7	-1.1%
97.5%	500	651	151	30.1%
98.8%	500	500	0	0.0%
100.0%	500	500	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,148	33,148	1	0.0%
1.2%	20,017	20,015	-2	0.0%
2.5%	16,771	16,776	5	0.0%
3.7%	16,165	16,222	57	0.4%
4.9%	15,932	16,163	231	1.5%
6.2%	12,440	12,430	-10	-0.1%
7.4%	11,702	11,702	0	0.0%
8.6%	10,959	11,575	616	5.6%
9.9%	10,923	10,923	1	0.0%
11.1%	9,813	9,813	0	0.0%
12.3%	9,605	9,597	-8	-0.1%
13.6%	9,241	9,240	-1	0.0%
14.8%	9,071	9,066	-5	-0.1%
16.0%	8,796	8,788	-7	-0.1%
17.3%	8,699	8,699	0	0.0%
18.5%	6,929	6,930	0	0.0%
19.8%	6,440	6,442	2	0.0%
21.0%	6,382	6,382	0	0.0%
22.2%	5,888	5,888	0	0.0%
23.5%	5,842	5,846	5	0.1%
24.7%	5,724	5,722	-2	0.0%
25.9%	5,152	5,146	-6	-0.1%
27.2%	5,102	5,100	-2	0.0%
28.4%	4,774	4,773	-1	0.0%
29.6%	4,554	4,479	-76	-1.7%
30.9%	4,488	4,474	-14	-0.3%
32.1%	4,476	4,270	-206	-4.6%
33.3%	3,747	3,971	225	6.0%
34.6%	3,677	3,890	213	5.8%
35.8%	3,467	3,856	388	11.2%
37.0%	3,462	3,597	136	3.9%
38.3%	3,102	3,469	368	11.9%
39.5%	2,539	3,102	562	22.1%
40.7%	2,520	2,537	17	0.7%
42.0%	2,404	2,426	21	0.9%
43.2%	2,389	2,364	-25	-1.1%
44.4%	2,000	2,354	354	17.7%
45.7%	1,839	2,129	290	15.8%
46.9%	1,648	1,839	191	11.6%
48.1%	1,645	1,740	95	5.8%
49.4%	1,645	1,645	0	0.0%
50.6%	1,604	1,603	-1	-0.1%
51.9%	1,600	1,600	0	0.0%
53.1%	1,595	1,591	-4	-0.2%
54.3%	1,592	1,585	-6	-0.4%
55.6%	1,585	1,581	-5	-0.3%
56.8%	1,581	1,578	-3	-0.2%
58.0%	1,578	1,576	-2	-0.1%
59.3%	1,573	1,573	0	0.0%
60.5%	1,564	1,564	0	0.0%
61.7%	1,563	1,563	0	0.0%
63.0%	1,555	1,558	3	0.2%
64.2%	1,553	1,553	0	0.0%
65.4%	1,551	1,550	-1	-0.1%
66.7%	1,550	1,550	0	0.0%
67.9%	1,550	1,550	0	0.0%
69.1%	1,547	1,547	0	0.0%
70.4%	1,542	1,542	0	0.0%
71.6%	1,540	1,540	0	0.0%
72.8%	1,539	1,539	0	0.0%
74.1%	1,516	1,524	8	0.5%
75.3%	1,514	1,514	0	0.0%
76.5%	1,514	1,514	0	0.0%
77.8%	1,410	1,514	104	7.4%
79.0%	1,362	1,487	125	9.2%
80.2%	1,338	1,478	140	10.5%
81.5%	1,326	1,468	141	10.7%
82.7%	1,318	1,361	43	3.3%
84.0%	1,239	1,317	77	6.2%
85.2%	1,165	1,312	147	12.6%
86.4%	1,123	1,051	-73	-6.5%
87.7%	953	1,029	76	8.0%
88.9%	892	993	101	11.3%
90.1%	799	892	93	11.7%
91.4%	715	796	81	11.4%
92.6%	689	715	26	3.8%
93.8%	650	665	15	2.3%
95.1%	650	650	0	0.0%
96.3%	644	650	7	1.0%
97.5%	641	250	-391	-61.0%
98.8%	250	250	0	0.0%
100.0%	250	250	0	0.0%

Table SW-47-b
American River at Mouth, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	32,621	32,620	-1	0.0%
1.2%	15,988	15,982	-6	0.0%
2.5%	13,581	13,581	0	0.0%
3.7%	13,481	13,481	0	0.0%
4.9%	13,208	13,208	0	0.0%
6.2%	13,049	13,051	2	0.0%
7.4%	12,917	12,912	-5	0.0%
8.6%	12,729	12,732	3	0.0%
9.9%	12,219	12,216	-3	0.0%
11.1%	11,405	11,405	0	0.0%
12.3%	10,459	10,457	-3	0.0%
13.6%	10,444	10,444	0	0.0%
14.8%	10,119	10,132	13	0.1%
16.0%	10,098	10,119	21	0.2%
17.3%	9,878	9,878	0	0.0%
18.5%	9,827	9,827	0	0.0%
19.8%	9,278	9,278	0	0.0%
21.0%	8,196	8,377	181	2.2%
22.2%	7,481	7,481	0	0.0%
23.5%	7,423	7,423	0	0.0%
24.7%	7,246	7,246	0	0.0%
25.9%	7,231	7,231	0	0.0%
27.2%	6,947	6,934	-13	-0.2%
28.4%	6,899	6,682	-217	-3.1%
29.6%	6,682	6,494	-188	-2.8%
30.9%	6,494	6,374	-119	-1.8%
32.1%	6,374	6,307	-68	-1.1%
33.3%	5,686	5,710	24	0.4%
34.6%	5,625	5,676	52	0.9%
35.8%	5,465	5,465	0	0.0%
37.0%	5,305	5,296	-9	-0.2%
38.3%	5,230	5,230	0	0.0%
39.5%	5,093	5,093	0	0.0%
40.7%	4,988	4,988	0	0.0%
42.0%	4,789	4,789	0	0.0%
43.2%	4,532	4,645	113	2.5%
44.4%	3,734	3,737	3	0.1%
45.7%	3,330	3,303	-27	-0.8%
46.9%	3,303	3,277	-26	-0.8%
48.1%	3,186	3,186	0	0.0%
49.4%	2,867	2,699	-168	-5.9%
50.6%	2,780	2,598	-183	-6.6%
51.9%	2,664	2,562	-102	-3.8%
53.1%	2,494	2,299	-194	-7.8%
54.3%	2,305	2,178	-127	-5.5%
55.6%	2,184	2,041	-143	-6.6%
56.8%	2,102	2,014	-89	-4.2%
58.0%	2,000	2,000	0	0.0%
59.3%	1,916	2,000	84	4.4%
60.5%	1,683	1,916	233	13.8%
61.7%	1,591	1,768	177	11.1%
63.0%	1,590	1,652	62	3.9%
64.2%	1,588	1,591	3	0.2%
65.4%	1,570	1,588	18	1.2%
66.7%	1,502	1,570	68	4.5%
67.9%	1,501	1,500	0	0.0%
69.1%	1,392	1,465	73	5.2%
70.4%	1,388	1,430	43	3.1%
71.6%	1,341	1,388	46	3.5%
72.8%	1,325	1,341	16	1.2%
74.1%	1,314	1,325	11	0.8%
75.3%	1,313	1,314	2	0.1%
76.5%	1,291	1,313	22	1.7%
77.8%	1,282	1,282	0	0.0%
79.0%	1,271	1,271	0	0.0%
80.2%	1,269	1,269	0	0.0%
81.5%	1,266	1,266	0	0.0%
82.7%	1,159	1,232	73	6.3%
84.0%	1,151	1,225	73	6.4%
85.2%	1,103	1,187	85	7.7%
86.4%	1,098	1,114	16	1.5%
87.7%	1,095	1,100	5	0.4%
88.9%	1,034	1,100	65	6.3%
90.1%	975	990	15	1.6%
91.4%	932	852	-80	-8.6%
92.6%	783	850	68	8.6%
93.8%	761	761	0	0.0%
95.1%	687	634	-53	-7.7%
96.3%	634	634	-1	-0.1%
97.5%	250	280	30	
98.8%	250	250	0	
100.0%	250	250	0	

March				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,900	17,900	0	0.0%
1.2%	17,249	17,249	0	0.0%
2.5%	12,500	12,500	0	0.0%
3.7%	11,847	11,847	0	0.0%
4.9%	11,004	11,009	5	0.0%
6.2%	10,843	10,843	0	0.0%
7.4%	10,784	10,807	24	0.2%
8.6%	9,559	9,559	0	0.0%
9.9%	8,781	8,781	0	0.0%
11.1%	8,378	8,378	0	0.0%
12.3%	7,459	7,890	430	5.8%
13.6%	7,443	7,443	0	0.0%
14.8%	7,178	7,178	0	0.0%
16.0%	6,893	6,893	0	0.0%
17.3%	6,869	6,869	0	0.0%
18.5%	6,742	6,742	0	0.0%
19.8%	6,240	6,232	-7	-0.1%
21.0%	5,142	5,142	0	0.0%
22.2%	4,776	4,777	1	0.0%
23.5%	4,750	4,750	0	0.0%
24.7%	4,699	4,699	0	0.0%
25.9%	4,695	4,689	-6	-0.1%
27.2%	4,687	4,687	0	0.0%
28.4%	4,523	4,523	0	0.0%
29.6%	4,460	4,460	0	0.0%
30.9%	4,311	4,311	0	0.0%
32.1%	4,188	4,117	-71	-1.7%
33.3%	4,098	4,100	2	0.0%
34.6%	4,048	4,048	0	0.0%
35.8%	3,978	3,975	-3	-0.1%
37.0%	3,791	3,791	0	0.0%
38.3%	3,734	3,736	2	0.1%
39.5%	3,658	3,657	-1	0.0%
40.7%	3,627	3,627	0	0.0%
42.0%	3,602	3,602	0	0.0%
43.2%	3,521	3,518	-4	-0.1%
44.4%	3,018	3,014	-4	-0.1%
45.7%	3,014	3,011	-2	-0.1%
46.9%	2,940	2,940	0	0.0%
48.1%	2,907	2,910	3	0.1%
49.4%	2,816	2,816	0	0.0%
50.6%	2,796	2,795	-1	0.0%
51.9%	2,366	2,650	283	12.0%
53.1%	2,298	2,298	0	0.0%
54.3%	2,252	2,258	5	0.2%
55.6%	2,037	2,107	70	3.5%
56.8%	2,015	2,037	22	1.1%
58.0%	1,956	2,014	58	3.0%
59.3%	1,892	1,949	57	3.0%
60.5%	1,882	1,921	39	2.1%
61.7%	1,778	1,890	113	6.3%
63.0%	1,745	1,778	33	1.9%
64.2%	1,712	1,745	33	1.9%
65.4%	1,692	1,711	19	1.1%
66.7%	1,644	1,644	0	0.0%
67.9%	1,632	1,631	-1	-0.1%
69.1%	1,602	1,605	3	0.2%
70.4%	1,593	1,594	0	0.0%
71.6%	1,584	1,584	0	0.0%
72.8%	1,577	1,577	0	0.0%
74.1%	1,517	1,467	-50	-3.3%
75.3%	1,303	1,303	0	0.0%
76.5%	1,276	1,276	0	0.0%
77.8%	1,140	1,169	29	2.5%
79.0%	1,079	1,140	61	5.6%
80.2%	837	1,114	277	33.2%
81.5%	792	1,074	283	35.7%
82.7%	735	884	149	20.2%
84.0%	701	701	0	0.0%
85.2%	694	692	-1	-0.2%
86.4%	684	684	0	0.0%
87.7%	680	680	0	0.0%
88.9%	675	675	0	0.0%
90.1%	663	663	0	0.0%
91.4%	657	657	0	-0.1%
92.6%	657	657	0	0.0%
93.8%	642	641	0	0.0%
95.1%	627	627	0	0.0%
96.3%	616	616	0	0.0%
97.5%	250	615	365	145.9%
98.8%	250	565	315	126.0%
100.0%	250	250	0	0.0%

April				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,357	15,357	0	0.0%
1.2%	10,135	10,135	0	0.0%
2.5%	8,724	8,724	0	0.0%
3.7%	7,058	7,058	0	0.0%
4.9%	6,976	6,976	0	0.0%
6.2%	6,931	6,931	0	0.0%
7.4%	6,492	6,492	0	0.0%
8.6%	6,273	6,273	0	0.0%
9.9%	5,999	5,999	0	0.0%
11.1%	5,896	5,928	32	0.5%
12.3%	5,843	5,843	0	0.0%
13.6%	5,807	5,807	0	0.0%
14.8%	5,616	5,605	-11	-0.2%
16.0%	5,567	5,567	0	0.0%
17.3%	5,427	5,417	-9	-0.2%
18.5%	5,118	5,118	0	0.0%
19.8%	4,997	4,996	0	0.0%
21.0%	4,640	4,640	0	0.0%
22.2%	4,508	4,508	0	0.0%
23.5%	4,478	4,478	0	0.0%
24.7%	4,433	4,432	0	0.0%
25.9%	4,284	4,284	0	0.0%
27.2%	3,886	4,174	288	7.4%
28.4%	3,755	3,886	131	3.5%
29.6%	3,753	3,755	3	0.1%
30.9%	3,711	3,711	0	0.0%
32.1%	3,706	3,706	0	0.0%
33.3%	3,334	3,335	1	0.0%
34.6%	3,310	3,310	0	0.0%
35.8%	3,252	3,247	-5	-0.2%
37.0%	3,244	3,240	-4	-0.1%
38.3%	3,214	3,214	0	0.0%
39.5%	3,153	3,000	-153	-4.9%
40.7%	3,000	3,000	0	0.0%
42.0%	3,000	3,000	0	0.0%
43.2%	3,000	2,760	-240	-8.0%
44.4%	2,760	2,708	-52	-1.9%
45.7%	2,708	2,598	-110	-4.1%
46.9%	2,598	2,540	-58	-2.2%
48.1%	2,526	2,528	2	0.1%
49.4%	2,433	2,433	0	0.0%
50.6%	2,428	2,419	-9	-0.4%
51.9%	2,375	2,372	-3	-0.1%
53.1%	2,372	2,302	-70	-2.9%
54.3%	2,302	2,302	-1	0.0%
55.6%	2,302	2,255	-47	-2.0%
56.8%	2,273	2,097	-176	-7.7%
58.0%	2,267	2,085	-182	-8.0%
59.3%	2,097	1,848	-249	-11.9%
60.5%	1,848	1,734	-115	-6.2%
61.7%	1,709	1,624	-84	-4.9%
63.0%	1,624	1,601	-24	-1.5%
64.2%	1,599	1,556	-43	-2.7%
65.4%	1,555	1,554	-1	-0.1%
66.7%	1,554	1,551	-3	-0.2%
67.9%	1,551	1,550	-2	-0.1%
69.1%	1,550	1,546	-4	-0.2%
70.4%	1,546	1,532	-13	-0.9%
71.6%	1,532	1,524	-9	-0.6%
72.8%	1,524	1,482	-42	-2.7%
74.1%	1,482	1,439	-43	-2.9%
75.3%	1,428	1,404	-25	-1.7%
76.5%	1,276	1,276	0	0.0%
77.8%	1,242	1,243	1	0.1%
79.0%	1,222	1,232	11	0.9%
80.2%	1,138	1,194	56	5.0%
81.5%	1,104	1,079	-25	-2.3%
82.7%	1,064	970	-93	-8.8%
84.0%	970	884	-86	-8.9%
85.2%	886	839	-47	-5.3%
86.4%	703	827	124	17.6%
87.7%	681	825	144	21.2%
88.9%	651	816	165	25.4%
90.1%	648	815	167	25.8%
91.4%	627	763	136	21.6%
92.6%	627	703	76	12.2%
93.8%	623	653	30	4.8%
95.1%	616	627	11	1.8%
96.3%	607	623	17	2.8%
97.5%	605	605	0	0.0%
98.8%	188	582	394	209.8%
100.0%	188	357	169	90.0%

May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,214	10,214	0	0.0%
1.2%	9,233	9,233	0	0.0%
2.5%	9,094	9,094	0	0.0%
3.7%	8,526	8,526	0	0.0%
4.9%	7,899	7,899	0	0.0%
6.2%	7,888	7,888	0	0.0%
7.4%	7,887	7,887	0	0.0%
8.6%	7,353	7,353	0	0.0%
9.9%	7,134	7,134	0	0.0%
11.1%	7,031	7,031	0	0.0%
12.3%	6,595	6,595	0	0.0%
13.6%	5,741	5,741	0	0.0%
14.8%	5,321	5,321	0	0.0%
16.0%	5,147	5,147	0	0.0%
17.3%	4,811	4,811	0	0.0%
18.5%	4,735	4,735	0	0.0%
19.8%	4,387	4,390	3	0.1%
21.0%	4,088	4,088	0	0.0%
22.2%	4,072	4,077	5	0.1%
23.5%	4,014	4,014	0	0.0%
24.7%	3,987	3,987	0	0.0%
25.9%	3,872	3,872	0	0.0%
27.2%	3,738	3,738	0	0.0%
28.4%	3,605	3,603	-3	-0.1%
29.6%	3,559	3,548	-12	-0.3%
30.9%	3,279	3,274	-4	-0.1%
32.1%	3,271	3,271	0	0.0%
33.3%	3,226	3,231	5	0.1%
34.6%	3,162	3,162	0	0.0%
35.8%	3,128	3,116	-12	-0.4%
37.0%	3,088	3,088	0	0.0%
38.3%	3,086	3,086	0	0.0%
39.5%	3,000	3,000	0	0.0%
40.7%	3,000	3,000	0	0.0%
42.0%	3,000	3,000	0	0.0%
43.2%	2,936	2,936	0	0.0%
44.4%	2,925	2,925	0	0.0%
45.7%	2,853	2,853	0	0.0%
46.9%	2,832	2,741	-90	-3.2%
48.1%	2,741	2,616	-126	-4.6%
49.4%	2,425	2,425	0	0.0%
50.6%	2,299	2,293	-6	-0.2%
51.9%	2,192	2,192	0	0.0%
53.1%	2,128	2,130	2	0.1%
54.3%	2,089	2,062	-27	-1.3%
55.6%	2,061	1,856	-205	-10.0%
56.8%	1,856	1,832	-24	-1.3%
58.0%	1,712	1,712	0	0.0%
59.3%	1,661	1,560	-101	-6.1%
60.5%	1,568	1,553	-15	-0.9%
61.7%	1,560	1,551	-9	-0.6%
63.0%	1,553	1,550	-3	-0.2%
64.2%	1,551	1,549	-2	-0.1%
65.4%	1,550	1,544	-6	-0.4%
66.7%	1,549	1,528	-21	-1.4%
67.9%	1,544	1,528	-16	-1.1%
69.1%	1,528	1,527	0	0.0%
70.4%	1,528	1,390	-138	-9.0%
71.6%	1,392	1,322	-69	-5.0%
72.8%	1,390	1,260	-130	-9.4%
74.1%	1,277	1,254	-23	-1.8%
75.3%	1,260	1,161	-99	-7.8%
76.5%	1,254	1,103	-150	-12.0%
77.8%	1,071	1,068	-4	-0.3%
79.0%	1,068	1,066	-2	-0.2%
80.2%	1,058	1,046	-12	-1.1%
81.5%	981	1,037	56	5.7%
82.7%	971	995	23	2.4%
84.0%	891	994	103	11.6%
85.2%	828	981	154	18.6%
86.4%	819	945	126	15.3%
87.7%	720	918	198	27.6%
88.9%	713	881	168	23.5%
90.1%	627	839	213	33.9%
91.4%	621	835	213	34.3%
92.6%	613	808	195	31.8%
93.8%	610	713	104	17.0%
95.1%	608	659	50	8.3%
96.3%	606	627	21	3.5%
97.5%	605	612	7	1.2%
98.8%	188	606	418	222.2%
100.0%	188	402	214	113.8%

Table SW-47-b

American River at Mouth, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,103	11,103	0	0.0%
1.2%	9,175	9,175	0	0.0%
2.5%	8,378	8,378	0	0.0%
3.7%	7,803	7,803	0	0.0%
4.9%	7,453	7,453	0	0.0%
6.2%	6,945	6,945	0	0.0%
7.4%	6,933	6,933	0	0.0%
8.6%	5,620	5,620	0	0.0%
9.9%	5,368	5,368	0	0.0%
11.1%	5,225	5,225	0	0.0%
12.3%	5,025	5,025	0	0.0%
13.6%	4,552	4,552	0	0.0%
14.8%	4,406	4,406	0	0.0%
16.0%	4,396	4,396	0	0.0%
17.3%	4,386	4,386	0	0.0%
18.5%	4,159	4,242	83	2.0%
19.8%	3,727	4,159	433	11.6%
21.0%	3,664	3,713	49	1.3%
22.2%	3,604	3,607	3	0.1%
23.5%	3,527	3,527	0	0.0%
24.7%	3,498	3,501	3	0.1%
25.9%	3,303	3,498	195	5.9%
27.2%	3,137	3,309	172	5.5%
28.4%	3,041	3,137	96	3.2%
29.6%	3,000	3,135	135	4.5%
30.9%	3,000	3,041	41	1.4%
32.1%	3,000	3,000	0	0.0%
33.3%	3,000	3,000	0	0.0%
34.6%	3,000	3,000	0	0.0%
35.8%	2,966	3,000	34	1.1%
37.0%	2,948	3,000	52	1.8%
38.3%	2,865	2,865	0	0.0%
39.5%	2,756	2,756	0	0.0%
40.7%	2,666	2,659	-8	-0.3%
42.0%	2,600	2,428	-171	-6.6%
43.2%	2,576	2,391	-185	-7.2%
44.4%	2,428	2,298	-131	-5.4%
45.7%	2,391	2,241	-149	-6.2%
46.9%	2,332	2,144	-189	-8.1%
48.1%	2,278	2,099	-179	-7.9%
49.4%	2,239	2,060	-179	-8.0%
50.6%	2,179	2,006	-173	-7.9%
51.9%	2,141	2,003	-137	-6.4%
53.1%	2,130	1,958	-172	-8.1%
54.3%	2,056	1,940	-117	-5.7%
55.6%	1,982	1,926	-55	-2.8%
56.8%	1,958	1,922	-36	-1.8%
58.0%	1,926	1,894	-32	-1.7%
59.3%	1,898	1,862	-36	-1.9%
60.5%	1,894	1,720	-174	-9.2%
61.7%	1,715	1,701	-14	-0.8%
63.0%	1,703	1,684	-19	-1.1%
64.2%	1,653	1,653	0	0.0%
65.4%	1,573	1,645	72	4.6%
66.7%	1,547	1,643	96	6.2%
67.9%	1,541	1,615	75	4.8%
69.1%	1,532	1,614	82	5.4%
70.4%	1,513	1,613	99	6.6%
71.6%	1,511	1,513	2	0.1%
72.8%	1,506	1,506	0	0.0%
74.1%	1,506	1,506	0	0.0%
75.3%	1,503	1,504	1	0.1%
76.5%	1,501	1,503	2	0.1%
77.8%	1,492	1,502	11	0.7%
79.0%	1,490	1,492	1	0.1%
80.2%	1,490	1,490	0	0.0%
81.5%	1,320	1,372	52	4.0%
82.7%	1,297	1,356	59	4.6%
84.0%	1,209	1,352	143	11.8%
85.2%	1,056	1,294	238	22.6%
86.4%	1,015	1,293	278	27.3%
87.7%	1,011	1,259	247	24.5%
88.9%	939	1,255	315	33.6%
90.1%	793	1,194	402	50.7%
91.4%	787	1,170	383	48.7%
92.6%	755	912	157	20.8%
93.8%	669	838	169	25.3%
95.1%	569	777	207	36.4%
96.3%	565	688	123	21.8%
97.5%	564	669	105	18.5%
98.8%	339	425	86	25.4%
100.0%	188	262	74	39.2%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,974	4,974	0	0.0%
1.2%	4,491	4,413	-78	-1.7%
2.5%	4,417	4,399	-18	-0.4%
3.7%	4,413	4,388	-25	-0.6%
4.9%	4,399	4,386	-13	-0.3%
6.2%	4,397	4,382	-16	-0.4%
7.4%	4,396	4,375	-21	-0.5%
8.6%	4,388	4,372	-17	-0.4%
9.9%	4,388	4,347	-41	-0.9%
11.1%	4,386	4,339	-47	-1.1%
12.3%	4,384	4,321	-63	-1.4%
13.6%	4,382	4,308	-74	-1.7%
14.8%	4,378	3,949	-428	-9.8%
16.0%	4,375	3,637	-739	-16.9%
17.3%	4,375	3,628	-747	-17.1%
18.5%	4,372	3,576	-795	-18.2%
19.8%	4,370	3,576	-794	-18.2%
21.0%	4,367	3,537	-830	-19.0%
22.2%	4,356	3,387	-969	-22.2%
23.5%	4,347	3,344	-1,003	-23.1%
24.7%	4,339	3,332	-1,007	-23.2%
25.9%	4,339	3,271	-1,068	-24.6%
27.2%	4,321	3,173	-1,148	-26.6%
28.4%	4,164	3,170	-993	-23.9%
29.6%	4,126	3,159	-966	-23.4%
30.9%	4,051	3,121	-931	-23.0%
32.1%	3,974	3,119	-856	-21.5%
33.3%	3,970	3,107	-863	-21.7%
34.6%	3,944	3,072	-873	-22.1%
35.8%	3,664	3,046	-618	-16.9%
37.0%	3,615	2,980	-635	-17.6%
38.3%	3,608	2,769	-839	-23.3%
39.5%	3,576	2,766	-810	-22.7%
40.7%	3,480	2,755	-725	-20.8%
42.0%	3,476	2,568	-908	-26.1%
43.2%	3,408	2,562	-845	-24.8%
44.4%	3,280	2,471	-808	-24.6%
45.7%	3,159	2,465	-695	-22.0%
46.9%	3,072	2,454	-618	-20.1%
48.1%	3,055	2,357	-698	-22.8%
49.4%	3,047	2,269	-778	-25.5%
50.6%	3,029	2,135	-893	-29.5%
51.9%	2,846	2,057	-789	-27.7%
53.1%	2,772	2,051	-722	-26.0%
54.3%	2,693	2,036	-657	-24.4%
55.6%	2,633	2,027	-606	-23.0%
56.8%	2,625	2,016	-609	-23.2%
58.0%	2,553	2,008	-545	-21.4%
59.3%	2,493	1,962	-531	-21.3%
60.5%	2,486	1,897	-589	-23.7%
61.7%	2,462	1,879	-583	-23.7%
63.0%	2,450	1,864	-586	-23.9%
64.2%	2,357	1,843	-514	-21.8%
65.4%	2,269	1,769	-500	-22.1%
66.7%	2,264	1,751	-514	-22.7%
67.9%	2,251	1,750	-501	-22.2%
69.1%	2,153	1,750	-403	-18.7%
70.4%	2,135	1,750	-385	-18.0%
71.6%	2,076	1,750	-326	-15.7%
72.8%	2,064	1,750	-314	-15.2%
74.1%	2,027	1,750	-277	-13.7%
75.3%	2,016	1,750	-266	-13.2%
76.5%	2,008	1,750	-258	-12.8%
77.8%	2,007	1,750	-257	-12.8%
79.0%	1,897	1,750	-147	-7.7%
80.2%	1,879	1,738	-140	-7.5%
81.5%	1,857	1,696	-161	-8.7%
82.7%	1,843	1,598	-245	-13.3%
84.0%	1,750	1,595	-155	-8.9%
85.2%	1,750	1,592	-158	-9.0%
86.4%	1,750	1,501	-249	-14.2%
87.7%	1,750	1,352	-398	-22.7%
88.9%	1,750	1,280	-470	-26.9%
90.1%	1,750	1,275	-475	-27.2%
91.4%	1,712	1,274	-438	-25.6%
92.6%	1,532	1,268	-264	-17.3%
93.8%	1,279	1,190	-89	-7.0%
95.1%	712	1,166	454	63.8%
96.3%	682	1,027	344	50.4%
97.5%	323	605	282	87.5%
98.8%	188	540	352	187.2%
100.0%	188	251	63	33.4%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,171	4,171	0	0.0%
1.2%	3,780	3,780	0	0.0%
2.5%	3,776	3,776	0	0.0%
3.7%	3,446	3,446	0	0.0%
4.9%	3,422	3,422	0	0.0%
6.2%	3,356	3,356	0	0.0%
7.4%	3,316	3,316	0	0.0%
8.6%	3,261	3,261	0	0.0%
9.9%	3,258	3,258	0	0.0%
11.1%	3,250	3,250	0	0.0%
12.3%	3,240	3,240	0	0.0%
13.6%	3,186	3,233	47	1.5%
14.8%	3,048	3,186	138	4.5%
16.0%	3,035	3,048	13	0.4%
17.3%	2,988	3,035	47	1.6%
18.5%	2,909	3,013	105	3.6%
19.8%	2,906	2,521	-385	-13.3%
21.0%	2,570	2,498	-72	-2.8%
22.2%	2,326	2,437	112	4.8%
23.5%	2,263	2,404	142	6.3%
24.7%	2,010	2,395	385	19.1%
25.9%	1,976	2,368	392	19.8%
27.2%	1,927	2,360	433	22.5%
28.4%	1,811	2,306	495	27.3%
29.6%	1,806	2,173	367	20.3%
30.9%	1,791	2,027	235	13.1%
32.1%	1,784	2,006	222	12.5%
33.3%	1,771	1,924	153	8.6%
34.6%	1,750	1,911	161	9.2%
35.8%	1,750	1,909	159	9.1%
37.0%	1,750	1,750	0	0.0%
38.3%	1,750	1,750	0	0.0%
39.5%	1,750	1,750	0	0.0%
40.7%	1,750	1,738	-12	-0.7%
42.0%	1,750	1,738	-12	-0.7%
43.2%	1,750	1,736	-14	-0.8%
44.4%	1,697	1,735	37	2.2%
45.7%	1,686	1,734	48	2.9%
46.9%	1,643	1,733	90	5.5%
48.1%	1,641	1,731	90	5.5%
49.4%	1,626	1,730	104	6.4%
50.6%	1,609	1,730	120	7.5%
51.9%	1,557	1,728	171	11.0%
53.1%	1,498	1,708	209	14.0%
54.3%	1,489	1,689	200	13.4%
55.6%	1,488	1,674	186	12.5%
56.8%	1,486	1,673	187	12.5%
58.0%	1,486	1,669	183	12.3%
59.3%	1,486	1,561	76	5.1%
60.5%	1,485	1,561	75	5.1%
61.7%	1,484	1,529	45	3.0%
63.0%	1,483	1,527	44	2.9%
64.2%	1,482	1,522	41	2.7%
65.4%	1,482	1,510	28	1.9%
66.7%	1,481	1,503	22	1.5%
67.9%	1,480	1,501	21	1.4%
69.1%	1,480	1,492	12	0.8%
70.4%	1,480	1,492	12	0.8%
71.6%	1,479	1,491	12	0.8%
72.8%	1,479	1,489	10	0.7%
74.1%	1,478	1,480	2	0.2%
75.3%	1,435	1,444	9	0.6%
76.5%	1,410	1,362	-48	-3.4%
77.8%	1,342	1,359	16	1.2%
79.0%	1,282	1,281	-1	-0.1%
80.2%	911	1,277	366	40.1%
81.5%	884	1,192	309	35.0%
82.7%	639	1,186	546	85.4%
84.0%	593	1,165	572	96.3%
85.2%	573	1,144	571	99.6%
86.4%	567	870	303	53.4%
87.7%	567	868	301	53.1%
88.9%	564	832	268	47.4%
90.1%	553	822	269	48.6%
91.4%	551	792	241	43.7%
92.6%	544	762	218	40.0%
93.8%	530	758	227	42.9%
95.1%	481	738	257	53.4%
96.3%	326	650	324	99.5%
97.5%	250	625	375	150.0%
98.8%	188	569	381	202.9%
100.0%	188	344	156	82.8%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Flow (CFS)	DCR 2015 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,563	4,516	-47	-1.0%
1.2%	4,559	4,389	-170	-3.7%
2.5%	4,493	4,143	-349	-7.8%
3.7%	4,459	4,062	-397	-8.9%
4.9%	4,385	3,995	-390	-8.9%
6.2%	4,203	3,947	-256	-6.1%
7.4%	4,126	3,825	-301	-7.3%
8.6%	4,085	3,798	-288	-7.0%
9.9%	4,030	3,610	-420	-10.4%
11.1%	4,027	3,358	-670	-16.6%
12.3%	3,962	3,279	-683	-17.2%
13.6%	3,891	3,265	-627	-16.1%
14.8%	3,888	3,051	-837	-21.5%
16.0%	3,554	2,854	-699	-19.7%
17.3%	3,465	2,822	-643	-18.6%
18.5%	3,434	2,768	-666	-19.4%
19.8%	3,383	2,725	-658	-19.5%
21.0%	2,973	2,625	-348	-11.7%
22.2%	2,776	2,500	-276	-9.9%
23.5%	2,768	2,152	-616	-22.3%
24.7%	2,665	2,142	-523	-19.6%
25.9%	2,579	2,133	-446	-17.3%
27.2%	2,433	2,119	-314	-12.9%
28.4%	2,431	2,088	-342	-14.1%
29.6%	2,300	2,063	-237	-10.3%
30.9%	2,258	2,024	-233	-10.3%
32.1%	2,153	2,023	-130	-6.0%
33.3%	2,122	2,009	-113	-5.3%
34.6%	2,119	1,942	-177	-8.3%
35.8%	2,080	1,927	-154	-7.4%
37.0%	2,032	1,920	-113	-5.5%
38.3%	2,023	1,880	-143	-7.1%
39.5%	1,896	1,769	-127	-6.7%
40.7%	1,769	1,750	-19	-1.1%
42.0%	1,769	1,750	-19	-1.1%
43.2%	1,750	1,750	0	0.0%
44.4%	1,750	1,750	0	0.0%
45.7%	1,746	1,750	4	0.2%
46.9%	1,666	1,698	33	2.0%
48.1%	1,628	1,579	-49	-3.0%
49.4%	1,575	1,553	-22	-1.4%
50.6%	1,483	1,452	-31	-2.1%
51.9%	1,449	1,445	-4	-0.3%
53.1%	1,385	1,444	59	4.2%
54.3%	1,351	1,443	92	6.8%
55.6%	1,346	1,440	95	7.0%
56.8%	1,343	1,438	95	7.1%
58.0%	1,337	1,437	100	7.5%
59.3%	1,336	1,436	101	7.5%
60.5%	1,331	1,435	105	7.9%
61.7%	1,331	1,431	100	7.5%
63.0%	1,330	1,417	87	6.5%
64.2%	1,329	1,385	56	4.2%
65.4%	1,328	1,383	55	4.1%
66.7%	1,326	1,376	50	3.8%
67.9%	1,325	1,331	6	0.4%
69.1%	1,322	1,330	8	0.6%
70.4%	1,321	1,330	9	0.7%
71.6%	1,311	1,330	19	1.5%
72.8%	1,271	1,315	45	3.5%
74.1%	1,118	1,310	192	17.2%
75.3%	1,055	1,310	255	24.2%
76.5%	978	1,287	309	31.6%
77.8%	923	1,246	324	35.1%
79.0%	902	1,173	271	30.0%
80.2%	843	1,122	280	33.2%
81.5%	695	1,097	402	57.9%
82.7%	649	1,062	414	63.8%
84.0%	624	1,047	423	67.7%
85.2%	622	992	371	59.6%
86.4%	615	951	336	54.6%
87.7%	613	783	170	27.8%
88.9%	611	752	141	23.0%
90.1%	609	709	100	16.4%
91.4%	608	692	83	13.7%
92.6%	597	678	81	13.6%
93.8%	498	608	110	22.1%
95.1%	375	607	232	61.9%
96.3%	365	606	241	66.1%
97.5%	281	605	324	115.1%
98.8%	281	487	206	73.4%
100.0%	248	278	30	11.9%

Figure SW-53-b
Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

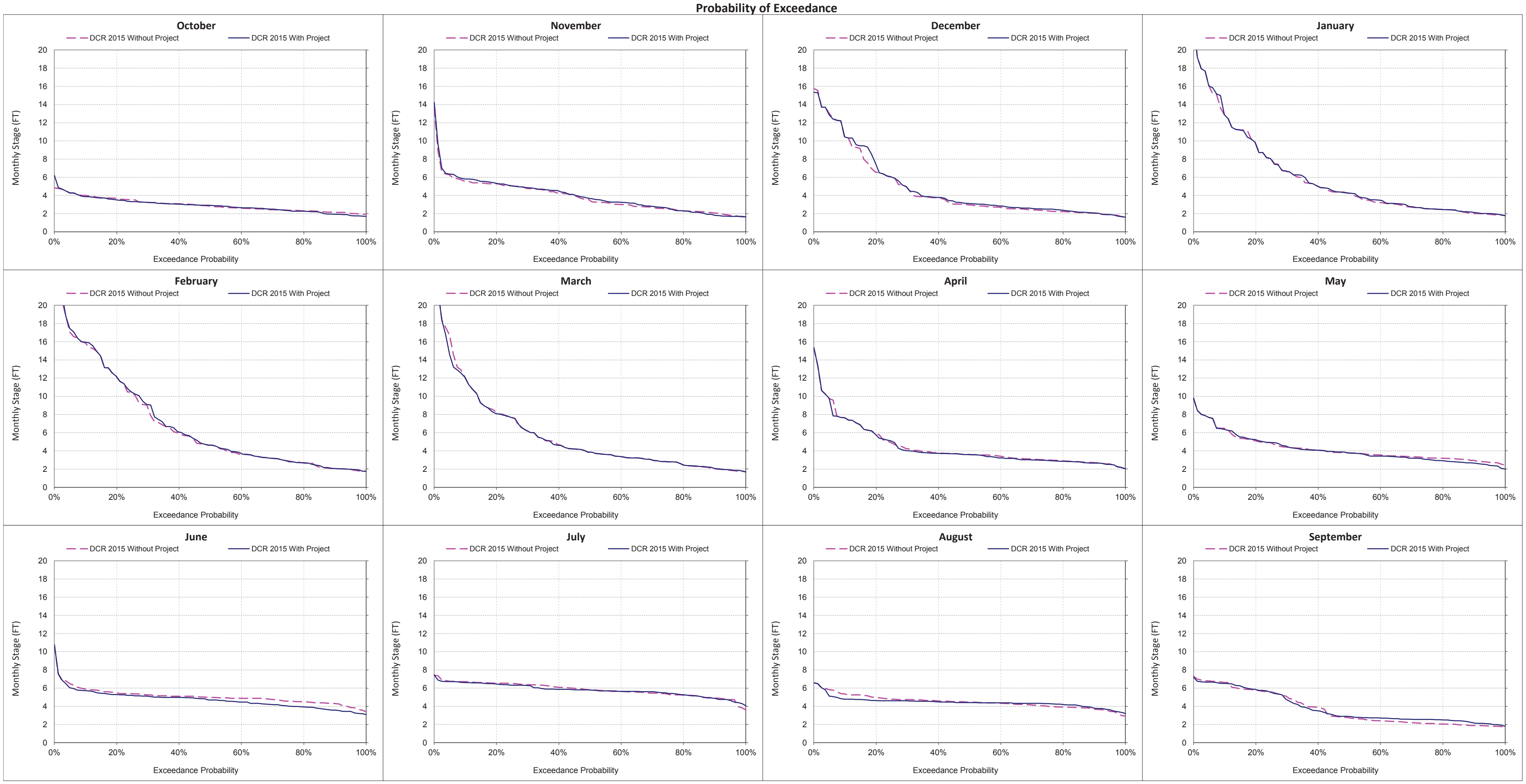


Table SW-53-b

Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	5	6	1	28.2%
1.2%	5	5	0	2.1%
2.5%	5	5	0	0.0%
3.7%	5	5	0	0.0%
4.9%	4	4	0	-0.3%
6.2%	4	4	0	-0.5%
7.4%	4	4	0	-1.3%
8.6%	4	4	0	-2.1%
9.9%	4	4	0	-3.2%
11.1%	4	4	0	-2.2%
12.3%	4	4	0	-2.6%
13.6%	4	4	0	-1.2%
14.8%	4	4	0	-1.3%
16.0%	4	4	0	-0.5%
17.3%	4	4	0	-3.1%
18.5%	4	4	0	-3.5%
19.8%	4	4	0	-4.8%
21.0%	4	3	0	-3.4%
22.2%	4	3	0	-2.6%
23.5%	4	3	0	-5.9%
24.7%	4	3	0	-5.4%
25.9%	4	3	0	-5.7%
27.2%	3	3	0	1.2%
28.4%	3	3	0	-0.3%
29.6%	3	3	0	0.1%
30.9%	3	3	0	0.0%
32.1%	3	3	0	-0.3%
33.3%	3	3	0	-0.9%
34.6%	3	3	0	-0.6%
35.8%	3	3	0	0.1%
37.0%	3	3	0	-0.6%
38.3%	3	3	0	-1.1%
39.5%	3	3	0	-1.6%
40.7%	3	3	0	-1.3%
42.0%	3	3	0	-2.3%
43.2%	3	3	0	-1.8%
44.4%	3	3	0	-0.6%
45.7%	3	3	0	1.2%
46.9%	3	3	0	0.7%
48.1%	3	3	0	0.9%
49.4%	3	3	0	1.9%
50.6%	3	3	0	4.0%
51.9%	3	3	0	4.3%
53.1%	3	3	0	3.6%
54.3%	3	3	0	4.8%
55.6%	3	3	0	5.0%
56.8%	3	3	0	2.9%
58.0%	3	3	0	2.5%
59.3%	3	3	0	2.1%
60.5%	3	3	0	2.1%
61.7%	3	3	0	2.8%
63.0%	3	3	0	2.7%
64.2%	3	3	0	3.2%
65.4%	3	3	0	2.3%
66.7%	3	3	0	2.1%
67.9%	2	3	0	1.9%
69.1%	2	2	0	2.6%
70.4%	2	2	0	2.4%
71.6%	2	2	0	0.8%
72.8%	2	2	0	-0.1%
74.1%	2	2	0	-2.0%
75.3%	2	2	0	-1.7%
76.5%	2	2	0	-3.5%
77.8%	2	2	0	-3.4%
79.0%	2	2	0	-2.5%
80.2%	2	2	0	-1.8%
81.5%	2	2	0	-2.0%
82.7%	2	2	0	-3.4%
84.0%	2	2	0	-3.0%
85.2%	2	2	0	-3.5%
86.4%	2	2	0	-7.9%
87.7%	2	2	0	-9.0%
88.9%	2	2	0	-9.7%
90.1%	2	2	0	-10.2%
91.4%	2	2	0	-10.2%
92.6%	2	2	0	-10.3%
93.8%	2	2	0	-10.1%
95.1%	2	2	0	-12.1%
96.3%	2	2	0	-12.2%
97.5%	2	2	0	-11.4%
98.8%	2	2	0	-11.3%
100.0%	2	2	0	-12.2%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	14	14	1	4.2%
1.2%	9	10	1	9.3%
2.5%	7	7	0	7.0%
3.7%	6	6	0	1.3%
4.9%	6	6	0	1.4%
6.2%	6	6	0	8.0%
7.4%	6	6	0	3.0%
8.6%	6	6	0	2.9%
9.9%	6	6	0	4.9%
11.1%	6	6	0	4.8%
12.3%	5	6	0	7.0%
13.6%	5	6	0	5.4%
14.8%	5	6	0	2.8%
16.0%	5	6	0	3.5%
17.3%	5	5	0	3.9%
18.5%	5	5	0	3.0%
19.8%	5	5	0	1.2%
21.0%	5	5	0	0.0%
22.2%	5	5	0	2.9%
23.5%	5	5	0	1.0%
24.7%	5	5	0	0.1%
25.9%	5	5	0	0.0%
27.2%	5	5	0	-0.9%
28.4%	5	5	0	-1.0%
29.6%	5	5	0	2.1%
30.9%	5	5	0	1.9%
32.1%	5	5	0	1.8%
33.3%	5	5	0	0.1%
34.6%	5	5	0	1.3%
35.8%	5	5	0	1.8%
37.0%	4	5	0	3.9%
38.3%	4	5	0	3.4%
39.5%	4	5	0	6.4%
40.7%	4	4	0	3.4%
42.0%	4	4	0	3.0%
43.2%	4	4	0	-0.9%
44.4%	4	4	0	1.6%
45.7%	4	4	0	2.4%
46.9%	4	4	0	4.6%
48.1%	4	4	0	5.8%
49.4%	4	4	0	3.1%
50.6%	3	4	0	10.4%
51.9%	3	4	0	8.6%
53.1%	3	4	0	8.0%
54.3%	3	3	0	6.2%
55.6%	3	3	0	4.3%
56.8%	3	3	0	4.3%
58.0%	3	3	0	8.4%
59.3%	3	3	0	8.0%
60.5%	3	3	0	7.9%
61.7%	3	3	0	7.9%
63.0%	3	3	0	6.8%
64.2%	3	3	0	12.6%
65.4%	3	3	0	7.4%
66.7%	3	3	0	6.1%
67.9%	3	3	0	3.6%
69.1%	3	3	0	3.8%
70.4%	3	3	0	3.8%
71.6%	3	3	0	5.7%
72.8%	3	3	0	4.5%
74.1%	3	3	0	4.4%
75.3%	2	3	0	3.5%
76.5%	2	2	0	-2.1%
77.8%	2	2	0	-3.3%
79.0%	2	2	0	-0.7%
80.2%	2	2	0	0.8%
81.5%	2	2	0	-0.8%
82.7%	2	2	0	-4.3%
84.0%	2	2	0	-3.5%
85.2%	2	2	0	-5.0%
86.4%	2	2	0	-7.2%
87.7%	2	2	0	-9.3%
88.9%	2	2	0	-9.0%
90.1%	2	2	0	-11.9%
91.4%	2	2	0	-13.3%
92.6%	2	2	0	-11.6%
93.8%	2	2	0	-9.5%
95.1%	2	2	0	-6.0%
96.3%	2	2	0	-5.1%
97.5%	2	2	0	-1.0%
98.8%	2	2	0	2.3%
100.0%	2	2	0	0.4%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	16	15	0	-2.7%
1.2%	16	15	0	-1.7%
2.5%	14	14	0	-0.2%
3.7%	14	14	0	0.0%
4.9%	13	13	0	-1.3%
6.2%	12	12	0	-0.7%
7.4%	12	12	0	0.0%
8.6%	12	12	0	-0.2%
9.9%	10	10	0	0.7%
11.1%	10	10	0	0.0%
12.3%	9	10	1	10.9%
13.6%	9	10	0	3.1%
14.8%	9	9	0	3.1%
16.0%	8	9	1	18.8%
17.3%	8	9	2	23.3%
18.5%	7	9	2	22.7%
19.8%	7	8	1	15.0%
21.0%	6	6	0	0.0%
22.2%	6	6	0	0.0%
23.5%	6	6	0	0.0%
24.7%	6	6	0	0.8%
25.9%	6	6	0	-1.0%
27.2%	5	6	0	7.5%
28.4%	5	5	0	0.0%
29.6%	5	5	0	0.0%
30.9%	4	4	0	0.1%
32.1%	4	4	0	12.2%
33.3%	4	4	0	11.5%
34.6%	4	4	0	2.4%
35.8%	4	4	0	0.0%
37.0%	4	4	0	1.8%
38.3%	4	4	0	0.8%
39.5%	4	4	0	0.5%
40.7%	4	4	0	2.1%
42.0%	4	4	0	3.8%
43.2%	3	3	0	6.8%
44.4%	3	3	0	11.6%
45.7%	3	3	0	6.1%
46.9%	3	3	0	6.3%
48.1%	3	3	0	4.0%
49.4%	3	3	0	4.6%
50.6%	3	3	0	5.3%
51.9%	3	3	0	5.9%
53.1%	3	3	0	6.5%
54.3%	3	3	0	6.5%
55.6%	3	3	0	7.3%
56.8%	3	3	0	5.4%
58.0%	3	3	0	7.0%
59.3%	3	3	0	5.0%
60.5%	3	3	0	6.0%
61.7%	3	3	0	7.9%
63.0%	3	3	0	5.8%
64.2%	3	3	0	5.7%
65.4%	3	3	0	4.9%
66.7%	3	3	0	3.8%
67.9%	2	3	0	5.3%
69.1%	2	3	0	7.4%
70.4%	2	3	0	5.7%
71.6%	2	3	0	5.5%
72.8%	2	3	0	7.1%
74.1%	2	3	0	6.5%
75.3%	2	2	0	9.1%
76.5%	2	2	0	11.2%
77.8%	2	2	0	9.7%
79.0%	2	2	0	7.8%
80.2%	2	2	0	6.0%
81.5%	2	2	0	3.9%
82.7%	2	2	0	4.6%
84.0%	2	2	0	3.2%
85.2%	2	2	0	1.8%
86.4%	2	2	0	1.5%
87.7%	2	2	0	2.0%
88.9%	2	2	0	1.5%
90.1%	2	2	0	0.2%
91.4%	2	2	0	4.1%
92.6%	2	2	0	-0.7%
93.8%	2	2	0	-0.2%
95.1%	2	2	0	0.1%
96.3%	2	2	0	0.1%
97.5%	2	2	0	-4.6%
98.8%	2	2	0	0.1%
100.0%	2	2	0	0.2%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	23	23	0	0.0%
1.2%	19	19	0	0.0%
2.5%	18	18	0	0.0%
3.7%	18	18	0	0.0%
4.9%	16	16	0	0.0%
6.2%	15	16	1	4.7%
7.4%	15	15	0	0.6%
8.6%	14	15	1	10.0%
9.9%	13	13	0	0.0%
11.1%	12	12	0	0.0%
12.3%	11	11	0	0.5%
13.6%	11	11	0	0.0%
14.8%	11	11	0	0.0%
16.0%	11	11	0	-0.8%
17.3%	11	10	-1	-6.5%
18.5%	10	10	0	0.0%
19.8%	10	10	0	0.0%
21.0%	9	9	0	-0.9%
22.2%	9	9	0	0.0%
23.5%	8	8	0	-0.1%
24.7%	8	8	0	-1.2%
25.9%	8	7	0	-1.0%
27.2%	7	7	0	-0.6%
28.4%	7	7	0	0.0%
29.6%	7	7	0	-0.5%
30.9%	7	7	0	0.0%
32.1%	6	6	0	0.0%
33.3%	6	6	0	4.2%
34.6%	6	6	0	4.1%
35.8%	5	6	1	10.8%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	4.8%
44.4%	4	5	0	3.3%
45.7%	4	4	0	0.8%
46.9%	4	4	0	0.0%
48.1%	4	4	0	-1.2%
49.4%	4	4	0	0.0%
50.6%	4	4	0	0.5%
51.9%	4	4	0	6.4%
53.1%	4	4	0	0.3%
54.3%	4	4	0	6.3%
55.6%	4	4	0	5.5%
56.8%	3	4	0	3.1%
58.0%	3	4	0	7.5%
59.3%	3	3	0	8.2%
60.5%	3	3	0	7.1%
61.7%	3	3	0	1.5%
63.0%	3	3	0	1.0%
64.2%	3	3	0	1.3%
65.4%	3	3	0	2.6%
66.7%	3	3	0	4.7%
67.9%	3	3	0	8.7%
69.1%	3	3	0	1.4%
70.4%	3	3	0	1.8%
71.6%	3	3	0	0.0%
72.8%	3	3	0	0.1%
74.1%	3	3	0	-0.1%
75.3%	3	3	0	-0.4%
76.5%	3	3	0	0.0%
77.8%	2	2	0	0.0%
79.0%	2	2	0	-0.6%
80.2%	2	2	0	-1.3%
81.5%	2	2	0	-0.1%
82.7%	2	2	0	-0.6%
84.0%	2	2	0	-1.6%
85.2%	2	2	0	-4.2%
86.4%	2	2	0	0.7%
87.7%	2	2	0	4.0%
88.9%	2	2	0	8.3%
90.1%	2	2	0	5.6%
91.4%	2	2	0	3.9%
92.6%	2	2	0	0.7%
93.8%	2	2	0	3.3%
95.1%	2	2	0	4.3%
96.3%	2	2	0	5.1%
97.5%	2	2	0	2.6%
98.8%	2	2	0	2.1%
100.0%	2	2	0	0.0%

Table SW-53-b

Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	23	25	2	10.6%
1.2%	21	23	2	9.3%
2.5%	20	21	1	3.2%
3.7%	19	19	0	0.0%
4.9%	17	17	0	2.3%
6.2%	17	17	1	3.2%
7.4%	16	16	0	0.0%
8.6%	16	16	0	0.0%
9.9%	16	16	0	0.3%
11.1%	15	16	1	3.3%
12.3%	15	16	0	2.0%
13.6%	15	15	0	0.0%
14.8%	14	14	0	0.0%
16.0%	13	13	0	0.0%
17.3%	13	13	0	0.0%
18.5%	13	13	0	0.0%
19.8%	12	12	0	0.0%
21.0%	12	12	0	0.0%
22.2%	11	11	0	0.0%
23.5%	10	11	0	3.4%
24.7%	10	10	0	0.0%
25.9%	10	10	0	1.5%
27.2%	9	10	1	8.4%
28.4%	9	9	0	3.9%
29.6%	9	9	0	0.4%
30.9%	8	9	1	14.8%
32.1%	7	8	1	7.0%
33.3%	7	7	0	4.8%
34.6%	7	7	0	4.9%
35.8%	7	7	0	0.0%
37.0%	7	7	0	2.0%
38.3%	6	7	0	7.1%
39.5%	6	6	0	2.0%
40.7%	6	6	0	4.4%
42.0%	6	6	0	1.6%
43.2%	6	6	0	0.9%
44.4%	5	5	0	0.0%
45.7%	5	5	0	6.5%
46.9%	5	5	0	1.3%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	4	4	0	2.0%
54.3%	4	4	0	1.7%
55.6%	4	4	0	5.8%
56.8%	4	4	0	3.3%
58.0%	4	4	0	2.5%
59.3%	4	4	0	5.0%
60.5%	4	4	0	0.2%
61.7%	4	4	0	1.0%
63.0%	4	4	0	0.0%
64.2%	3	3	0	0.0%
65.4%	3	3	0	0.1%
66.7%	3	3	0	0.0%
67.9%	3	3	0	0.0%
69.1%	3	3	0	0.0%
70.4%	3	3	0	0.0%
71.6%	3	3	0	0.0%
72.8%	3	3	0	0.0%
74.1%	3	3	0	0.0%
75.3%	3	3	0	-3.0%
76.5%	3	3	0	-0.1%
77.8%	3	3	0	-3.2%
79.0%	3	3	0	0.0%
80.2%	3	3	0	-1.3%
81.5%	3	3	0	-0.7%
82.7%	3	2	0	-5.5%
84.0%	2	2	0	2.6%
85.2%	2	2	0	8.9%
86.4%	2	2	0	0.4%
87.7%	2	2	0	2.8%
88.9%	2	2	0	0.3%
90.1%	2	2	0	0.4%
91.4%	2	2	0	0.0%
92.6%	2	2	0	0.0%
93.8%	2	2	0	0.0%
95.1%	2	2	0	0.1%
96.3%	2	2	0	3.5%
97.5%	2	2	0	6.2%
98.8%	2	2	0	0.1%
100.0%	2	2	0	1.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	22	23	1	3.7%
1.2%	22	22	0	0.1%
2.5%	18	18	0	0.0%
3.7%	18	17	-1	-4.7%
4.9%	17	15	-2	-12.7%
6.2%	15	13	-1	-9.5%
7.4%	13	13	0	-2.5%
8.6%	13	13	0	-2.5%
9.9%	12	12	0	0.0%
11.1%	11	11	0	0.0%
12.3%	11	11	0	0.0%
13.6%	10	10	0	0.0%
14.8%	9	9	0	0.0%
16.0%	9	9	0	0.0%
17.3%	9	9	0	0.0%
18.5%	9	8	0	-2.9%
19.8%	8	8	0	-2.8%
21.0%	8	8	0	0.0%
22.2%	8	8	0	-1.2%
23.5%	8	8	0	1.1%
24.7%	8	8	0	0.0%
25.9%	8	8	0	0.0%
27.2%	7	7	0	2.0%
28.4%	6	6	0	0.0%
29.6%	6	6	0	0.0%
30.9%	6	6	0	-0.8%
32.1%	6	6	0	0.0%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	1.1%
37.0%	5	5	0	0.0%
38.3%	5	5	0	-7.2%
39.5%	5	5	0	-2.0%
40.7%	5	5	0	0.0%
42.0%	4	4	0	0.0%
43.2%	4	4	0	0.0%
44.4%	4	4	0	0.1%
45.7%	4	4	0	0.0%
46.9%	4	4	0	-0.1%
48.1%	4	4	0	0.0%
49.4%	4	4	0	0.0%
50.6%	4	4	0	-0.1%
51.9%	4	4	0	0.0%
53.1%	4	4	0	0.0%
54.3%	4	4	0	0.0%
55.6%	4	4	0	0.0%
56.8%	4	4	0	0.0%
58.0%	3	3	0	0.0%
59.3%	3	3	0	0.1%
60.5%	3	3	0	0.1%
61.7%	3	3	0	0.0%
63.0%	3	3	0	0.0%
64.2%	3	3	0	0.0%
65.4%	3	3	0	0.0%
66.7%	3	3	0	0.0%
67.9%	3	3	0	0.0%
69.1%	3	3	0	0.1%
70.4%	3	3	0	-0.2%
71.6%	3	3	0	0.0%
72.8%	3	3	0	0.0%
74.1%	3	3	0	0.0%
75.3%	3	3	0	0.0%
76.5%	3	3	0	0.1%
77.8%	3	3	0	0.0%
79.0%	3	3	0	0.0%
80.2%	2	2	0	2.3%
81.5%	2	2	0	0.5%
82.7%	2	2	0	0.9%
84.0%	2	2	0	2.1%
85.2%	2	2	0	0.4%
86.4%	2	2	0	2.5%
87.7%	2	2	0	1.2%
88.9%	2	2	0	4.7%
90.1%	2	2	0	1.4%
91.4%	2	2	0	2.3%
92.6%	2	2	0	1.3%
93.8%	2	2	0	2.0%
95.1%	2	2	0	3.2%
96.3%	2	2	0	2.0%
97.5%	2	2	0	4.7%
98.8%	2	2	0	2.8%
100.0%	2	2	0	0.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	15	15	0	0.0%
1.2%	13	13	0	0.0%
2.5%	11	11	0	0.0%
3.7%	10	10	0	-0.1%
4.9%	10	10	0	0.4%
6.2%	10	8	-2	-18.2%
7.4%	8	8	0	0.0%
8.6%	8	8	0	0.0%
9.9%	8	8	0	0.0%
11.1%	7	7	0	0.0%
12.3%	7	7	0	0.0%
13.6%	7	7	0	0.0%
14.8%	7	7	0	0.0%
16.0%	6	6	0	0.0%
17.3%	6	6	0	0.0%
18.5%	6	6	0	0.0%
19.8%	6	6	0	-1.4%
21.0%	6	5	0	-6.6%
22.2%	5	5	0	1.7%
23.5%	5	5	0	2.1%
24.7%	5	5	0	3.7%
25.9%	5	5	0	4.7%
27.2%	5	4	0	-6.2%
28.4%	4	4	0	-7.9%
29.6%	4	4	0	-4.9%
30.9%	4	4	0	-5.0%
32.1%	4	4	0	-2.2%
33.3%	4	4	0	-4.0%
34.6%	4	4	0	-3.5%
35.8%	4	4	0	-3.3%
37.0%	4	4	0	-3.3%
38.3%	4	4	0	-1.3%
39.5%	4	4	0	-1.7%
40.7%	4	4	0	-1.1%
42.0%	4	4	0	-0.6%
43.2%	4	4	0	0.0%
44.4%	4	4	0	-0.6%
45.7%	4	4	0	-0.7%
46.9%	4	4	0	0.8%
48.1%	4	4	0	-0.2%
49.4%	4	4	0	-0.4%
50.6%	4	4	0	-0.3%
51.9%	4	4	0	-0.3%
53.1%	4	4	0	-0.2%
54.3%	4	3	0	-1.6%
55.6%	4	3	0	-4.7%
56.8%	4	3	0	-4.2%
58.0%	4	3	0	-5.8%
59.3%	3	3	0	-6.2%
60.5%	3	3	0	-4.9%
61.7%	3	3	0	-4.7%
63.0%	3	3	0	-2.5%
64.2%	3	3	0	-1.0%
65.4%	3	3	0	-3.2%
66.7%	3	3	0	-4.2%
67.9%	3	3	0	-3.1%
69.1%	3	3	0	-3.3%
70.4%	3	3	0	-2.2%
71.6%	3	3	0	-1.8%
72.8%	3	3	0	-2.9%
74.1%	3	3	0	-2.1%
75.3%	3	3	0	-2.1%
76.5%	3	3	0	-2.2%
77.8%	3	3	0	-3.0%
79.0%	3	3	0	-2.1%
80.2%	3	3	0	-1.2%
81.5%	3	3	0	-2.0%
82.7%	3	3	0	-1.0%
84.0%	3	3	0	-0.6%
85.2%	3	3	0	-0.6%
86.4%	3	3	0	-2.1%
87.7%	3	3	0	-2.4%
88.9%	3	3	0	-2.6%
90.1%	3	3	0	-2.1%
91.4%	3	3	0	-1.2%
92.6%	3	3	0	0.9%
93.8%	3	3	0	-1.9%
95.1%	3	3	0	-2.6%
96.3%	2	2	0	5.5%
97.5%	2	2	0	-2.6%
98.8%	2	2	0	0.1%
100.0%	2	2	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	10	10	0	0.0%
1.2%	8	8	0	0.0%
2.5%	8	8	0	0.0%
3.7%	8	8	0	0.0%
4.9%	8	8	0	0.0%
6.2%	8	8	0	0.0%
7.4%	7	6	0	-0.7%
8.6%	6	6	0	-0.7%
9.9%	6	6	0	-1.8%
11.1%	6	6	0	-0.6%
12.3%	6	6	0	6.5%
13.6%	5	6	0	5.8%
14.8%	5	6	0	2.9%
16.0%	5	5	0	2.5%
17.3%	5	5	0	1.2%
18.5%	5	5	0	0.7%
19.8%	5	5	0	2.9%
21.0%	5	5	0	1.9%
22.2%	5	5	0	1.7%
23.5%	5	5	0	0.1%
24.7%	5	5	0	0.0%
25.9%	5	5	0	4.8%
27.2%	5	5	0	6.2%
28.4%	4	5	0	3.1%
29.6%	4	5	0	3.1%
30.9%	4	4	0	0.0%
32.1%	4	4	0	-0.6%
33.3%	4	4	0	-1.3%
34.6%	4	4	0	-2.7%
35.8%	4	4	0	-2.9%
37.0%	4	4	0	-0.8%
38.3%	4	4	0	-0.5%
39.5%	4	4	0	-0.1%
40.7%	4	4	0	0.0%
42.0%	4	4	0	-0.1%
43.2%	4	4	0	0.6%
44.4%	4	4	0	2.4%
45.7%	4	4	0	1.5%
46.9%	4	4	0	1.6%
48.1%	4	4	0	1.5%
49.4%	4	4	0	0.2%
50.6%	4	4	0	-0.8%
51.9%	4	4	0	-1.0%
53.1%	4	4	0	-0.9%
54.3%	4	4	0	-1.1%
55.6%	4	4	0	-2.8%
56.8%	4	3	0	-5.2%
58.0%	4	3	0	-3.9%
59.3%	4	3	0	-3.9%
60.5%	4	3	0	-3.4%
61.7%	3	3	0	-1.5%
63.0%	3	3	0	-1.8%
64.2%	3	3	0	-2.4%
65.4%	3	3	0	-2.7%
66.7%	3	3	0	-2.9%
67.9%	3	3	0	-2.5%
69.1%	3	3	0	-4.9%
70.4%	3	3	0	-4.5%
71.6%	3	3	0	-4.6%
72.8%	3	3	0	-4.4%
74.1%	3	3	0	-5.0%
75.3%	3	3	0	-5.2%
76.5%	3	3	0	-6.4%
77.8%	3	3	0	-8.1%
79.0%	3	3	0	-8.4%
80.2%	3	3	0	-9.0%
81.5%	3	3	0	-10.1%
82.7%	3	3	0	-10.0%
84.0%	3	3	0	-9.9%
85.2%	3	3	0	-10.7%
86.4%	3	3	0	-10.7%
87.7%	3	3	0	-12.3%
88.9%	3	3	0	-9.4%
90.1%	3	3	0	-9.9%
91.4%	3	3	0	-8.5%
92.6%	3	3	0	-10.3%
93.8%	3	3	0	-9.3%
95.1%	3	2	0	-12.4%
96.3%	3	2	0	-12.9%
97.5%	3	2	0	-12.7%
98.8%	3	2	0	-17.6%
100.0%	2	2	0	-18.2%

Table SW-53-b

Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	11	11	0	0.0%
1.2%	8	8	0	0.0%
2.5%	7	7	0	1.2%
3.7%	7	6	0	-4.6%
4.9%	6	6	0	-7.2%
6.2%	6	6	0	-6.1%
7.4%	6	6	0	-5.4%
8.6%	6	6	0	-4.1%
9.9%	6	6	0	-2.8%
11.1%	6	6	0	-2.3%
12.3%	6	6	0	-3.1%
13.6%	6	5	0	-4.8%
14.8%	6	5	0	-4.2%
16.0%	6	5	0	-3.5%
17.3%	6	5	0	-4.3%
18.5%	6	5	0	-4.6%
19.8%	5	5	0	-3.7%
21.0%	5	5	0	-2.6%
22.2%	5	5	0	-2.6%
23.5%	5	5	0	-3.4%
24.7%	5	5	0	-3.5%
25.9%	5	5	0	-3.7%
27.2%	5	5	0	-3.7%
28.4%	5	5	0	-3.5%
29.6%	5	5	0	-2.8%
30.9%	5	5	0	-3.5%
32.1%	5	5	0	-2.8%
33.3%	5	5	0	-2.8%
34.6%	5	5	0	-3.7%
35.8%	5	5	0	-3.6%
37.0%	5	5	0	-2.7%
38.3%	5	5	0	-2.8%
39.5%	5	5	0	-2.8%
40.7%	5	5	0	-2.8%
42.0%	5	5	0	-2.8%
43.2%	5	5	0	-2.8%
44.4%	5	5	0	-3.5%
45.7%	5	5	0	-3.8%
46.9%	5	5	0	-3.5%
48.1%	5	5	0	-3.6%
49.4%	5	5	0	-5.5%
50.6%	5	5	0	-5.5%
51.9%	5	5	0	-5.5%
53.1%	5	5	0	-6.0%
54.3%	5	5	0	-6.0%
55.6%	5	5	0	-7.5%
56.8%	5	5	0	-6.7%
58.0%	5	5	0	-7.6%
59.3%	5	4	0	-8.7%
60.5%	5	4	0	-8.7%
61.7%	5	4	0	-8.7%
63.0%	5	4	-1	-11.2%
64.2%	5	4	-1	-11.2%
65.4%	5	4	-1	-11.2%
66.7%	5	4	-1	-12.2%
67.9%	5	4	-1	-12.3%
69.1%	5	4	-1	-12.1%
70.4%	5	4	-1	-11.6%
71.6%	5	4	-1	-11.1%
72.8%	5	4	-1	-11.7%
74.1%	5	4	-1	-11.1%
75.3%	5	4	-1	-12.1%
76.5%	5	4	-1	-12.4%
77.8%	5	4	-1	-12.0%
79.0%	5	4	-1	-12.5%
80.2%	5	4	-1	-12.6%
81.5%	4	4	-1	-12.9%
82.7%	4	4	-1	-12.1%
84.0%	4	4	-1	-12.8%
85.2%	4	4	-1	-14.2%
86.4%	4	4	-1	-15.3%
87.7%	4	4	-1	-16.2%
88.9%	4	4	-1	-17.4%
90.1%	4	4	-1	-17.1%
91.4%	4	4	-1	-17.0%
92.6%	4	3	-1	-14.7%
93.8%	4	3	-1	-14.3%
95.1%	4	3	0	-11.2%
96.3%	4	3	-1	-14.8%
97.5%	4	3	0	-11.7%
98.8%	4	3	0	-11.0%
100.0%	3	3	0	-9.1%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	0.0%
1.2%	7	7	0	-6.4%
2.5%	7	7	0	-2.0%
3.7%	7	7	0	-1.9%
4.9%	7	7	0	-0.6%
6.2%	7	7	0	-0.6%
7.4%	7	7	0	-0.1%
8.6%	7	7	0	-1.3%
9.9%	7	7	0	-1.3%
11.1%	7	7	0	-1.3%
12.3%	7	7	0	-1.3%
13.6%	7	7	0	-0.6%
14.8%	7	7	0	-0.7%
16.0%	7	7	0	-1.2%
17.3%	7	6	0	-1.3%
18.5%	7	6	0	-0.9%
19.8%	7	6	0	-1.4%
21.0%	7	6	0	-2.0%
22.2%	7	6	0	-2.6%
23.5%	7	6	0	-2.5%
24.7%	7	6	0	-3.1%
25.9%	6	6	0	-2.5%
27.2%	6	6	0	-1.8%
28.4%	6	6	0	-1.2%
29.6%	6	6	0	-1.4%
30.9%	6	6	0	-1.4%
32.1%	6	6	0	-5.2%
33.3%	6	6	0	-4.8%
34.6%	6	6	0	-6.0%
35.8%	6	6	0	-6.0%
37.0%	6	6	0	-5.5%
38.3%	6	6	0	-4.1%
39.5%	6	6	0	-4.0%
40.7%	6	6	0	-3.7%
42.0%	6	6	0	-3.6%
43.2%	6	6	0	-2.9%
44.4%	6	6	0	-2.9%
45.7%	6	6	0	-2.2%
46.9%	6	6	0	-2.2%
48.1%	6	6	0	-0.8%
49.4%	6	6	0	-0.2%
50.6%	6	6	0	-0.7%
51.9%	6	6	0	-0.7%
53.1%	6	6	0	-0.9%
54.3%	6	6	0	-0.9%
55.6%	6	6	0	-0.9%
56.8%	6	6	0	0.8%
58.0%	6	6	0	0.8%
59.3%	6	6	0	0.1%
60.5%	6	6	0	0.0%
61.7%	6	6	0	0.6%
63.0%	6	6	0	0.8%
64.2%	6	6	0	0.7%
65.4%	6	6	0	1.5%
66.7%	6	6	0	1.0%
67.9%	5	6	0	1.8%
69.1%	5	6	0	2.6%
70.4%	5	6	0	2.8%
71.6%	5	6	0	1.9%
72.8%	5	5	0	1.7%
74.1%	5	5	0	1.8%
75.3%	5	5	0	2.0%
76.5%	5	5	0	2.5%
77.8%	5	5	0	1.9%
79.0%	5	5	0	0.8%
80.2%	5	5	0	0.9%
81.5%	5	5	0	-0.1%
82.7%	5	5	0	-0.8%
84.0%	5	5	0	0.0%
85.2%	5	5	0	0.0%
86.4%	5	5	0	0.9%
87.7%	5	5	0	-0.7%
88.9%	5	5	0	-0.7%
90.1%	5	5	0	-1.0%
91.4%	5	5	0	-2.7%
92.6%	5	5	0	-2.0%
93.8%	5	5	0	-0.8%
95.1%	5	5	0	-2.3%
96.3%	5	4	0	-5.8%
97.5%	4	4	0	11.9%
98.8%	4	4	0	12.2%
100.0%	4	4	0	13.0%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	0.0%
1.2%	6	6	0	0.0%
2.5%	6	6	0	0.0%
3.7%	6	6	0	-2.3%
4.9%	6	5	-1	-12.2%
6.2%	6	5	-1	-12.3%
7.4%	6	5	-1	-11.1%
8.6%	5	5	-1	-10.5%
9.9%	5	5	-1	-10.7%
11.1%	5	5	0	-9.1%
12.3%	5	5	0	-9.2%
13.6%	5	5	-1	-9.8%
14.8%	5	5	-1	-9.8%
16.0%	5	5	0	-9.0%
17.3%	5	5	0	-8.9%
18.5%	5	5	0	-7.7%
19.8%	5	5	0	-6.7%
21.0%	5	5	0	-6.7%
22.2%	5	5	0	-5.6%
23.5%	5	5	0	-4.9%
24.7%	5	5	0	-3.8%
25.9%	5	5	0	-3.8%
27.2%	5	5	0	-3.0%
28.4%	5	5	0	-3.0%
29.6%	5	5	0	-3.0%
30.9%	5	5	0	-2.9%
32.1%	5	5	0	-3.0%
33.3%	5	5	0	-3.0%
34.6%	5	5	0	-3.0%
35.8%	5	5	0	-1.9%
37.0%	5	5	0	-1.9%
38.3%	5	5	0	-2.7%
39.5%	5	5	0	-1.9%
40.7%	5	4	0	-2.3%
42.0%	5	4	0	-2.3%
43.2%	5	4	0	-2.1%
44.4%	5	4	0	-1.2%
45.7%	5	4	0	-1.9%
46.9%	5	4	0	-1.9%
48.1%	5	4	0	-1.9%
49.4%	4	4	0	-1.0%
50.6%	4	4	0	-0.9%
51.9%	4	4	0	-0.9%
53.1%	4	4	0	-0.8%
54.3%	4	4	0	-0.7%
55.6%	4	4	0	0.1%
56.8%	4	4	0	0.0%
58.0%	4	4	0	0.0%
59.3%	4	4	0	1.0%
60.5%	4	4	0	1.2%
61.7%	4	4	0	1.6%
63.0%	4	4	0	2.1%
64.2%	4	4	0	2.2%
65.4%	4	4	0	2.6%
66.7%	4	4	0	2.7%
67.9%	4	4	0	3.3%
69.1%	4	4	0	3.7%
70.4%	4	4	0	4.7%
71.6%	4	4	0	5.3%
72.8%	4	4	0	6.3%
74.1%	4	4	0	6.1%
75.3%	4	4	0	7.3%
76.5%	4	4	0	8.0%
77.8%	4	4	0	7.9%
79.0%	4	4	0	7.9%
80.2%	4	4	0	7.1%
81.5%	4	4	0	6.8%
82.7%	4	4	0	6.8%
84.0%	4	4	0	6.8%
85.2%	4	4	0	5.0%
86.4%	4	4	0	4.1%
87.7%	4	4	0	3.3%
88.9%	4	4	0	3.5%
90.1%	4	4	0	3.4%
91.4%	4	4	0	3.0%
92.6%	4	4	0	3.6%
93.8%	4	4	0	2.5%
95.1%	3	4	0	5.2%
96.3%	3	3	0	1.9%
97.5%	3	3	0	5.4%
98.8%	3	3	0	10.9%
100.0%	3	3	0	9.1%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	-1.2%
1.2%	7	7	0	-3.5%
2.5%	7	7	0	-2.5%
3.7%	7	7	0	-1.8%
4.9%	7	7	0	-1.8%
6.2%	7	7	0	-1.2%
7.4%	7	7	0	-1.9%
8.6%	7	7	0	-2.1%
9.9%	7	7	0	-1.3%
11.1%	7	6	0	-2.0%
12.3%	6	6	0	6.1%
13.6%	6	6	0	4.2%
14.8%	6	6	0	5.6%
16.0%	6	6	0	3.1%
17.3%	6	6	0	2.1%
18.5%	6	6	0	0.7%
19.8%	6	6	0	2.0%
21.0%	6	6	0	0.0%
22.2%	6	6	0	1.7%
23.5%	6	6	0	0.8%
24.7%	6	6	0	-1.0%
25.9%	5	5	0	-1.9%
27.2%	5	5	0	0.0%
28.4%	5	5	0	0.0%
29.6%	5	5	0	-6.5%
30.9%	5	5	0	-5.8%
32.1%	5	4	0	-9.6%
33.3%	4	4	0	-5.5%
34.6%	4	4	0	-9.7%
35.8%	4	4	0	-4.6%
37.0%	4	4	0	-4.9%
38.3%	4	4	0	-9.6%
39.5%	4	4	0	-10.0%
40.7%	4	3	0	-9.6%
42.0%	4	3	0	-9.6%
43.2%	3	3	0	6.9%
44.4%	3	3	0	6.3%
45.7%	3	3	0	2.2%
46.9%	3	3	0	2.4%
48.1%	3	3	0	3.0%
49.4%	3	3	0	3.8%
50.6%	3	3	0	6.5%
51.9%	3	3	0	6.1%
53.1%	3	3	0	5.6%
54.3%	3	3	0	5.8%
55.6%	3	3	0	9.5%
56.8%	2	3	0	10.3%
58.0%	2	3	0	12.0%
59.3%	2	3	0	12.2%
60.5%	2	3	0	12.1%
61.7%	2	3	0	13.2%
63.0%	2	3	0	13.7%
64.2%	2	3	0	13.4%
65.4%	2	3	0	13.9%
66.7%	2	3	0	12.2%
67.9%	2	3	0	15.1%
69.1%	2	3	0	15.9%
70.4%	2	3	0	16.8%
71.6%	2	3	0	18.3%
72.8%	2	3	0	19.0%
74.1%	2	3	0	19.8%
75.3%	2	3	0	20.2%
76.5%	2	3	0	20.2%
77.8%	2	3	0	21.2%
79.0%	2	3	0	22.4%
80.2%	2	3	0	22.3%
81.5%	2	2	0	22.7%
82.7%	2	2	0	19.9%
84.0%	2	2	0	19.1%
85.2%	2	2	0	22.0%
86.4%	2	2	0	21.4%
87.7%	2	2	0	20.9%
88.9%	2	2	0	19.3%
90.1%	2	2	0	14.4%
91.4%	2	2	0	12.7%
92.6%	2	2	0	12.6%
93.8%	2	2	0	13.7%
95.1%	2	2	0	13.8%
96.3%	2	2	0	10.4%
97.5%	2	2	0	10.4%
98.8%	2	2	0	9.3%
100.0%	2	2	0	3.6%

Figure SW-54-b
Sacramento River below Hamilton City, Monthly Stage
Probability of Exceedance

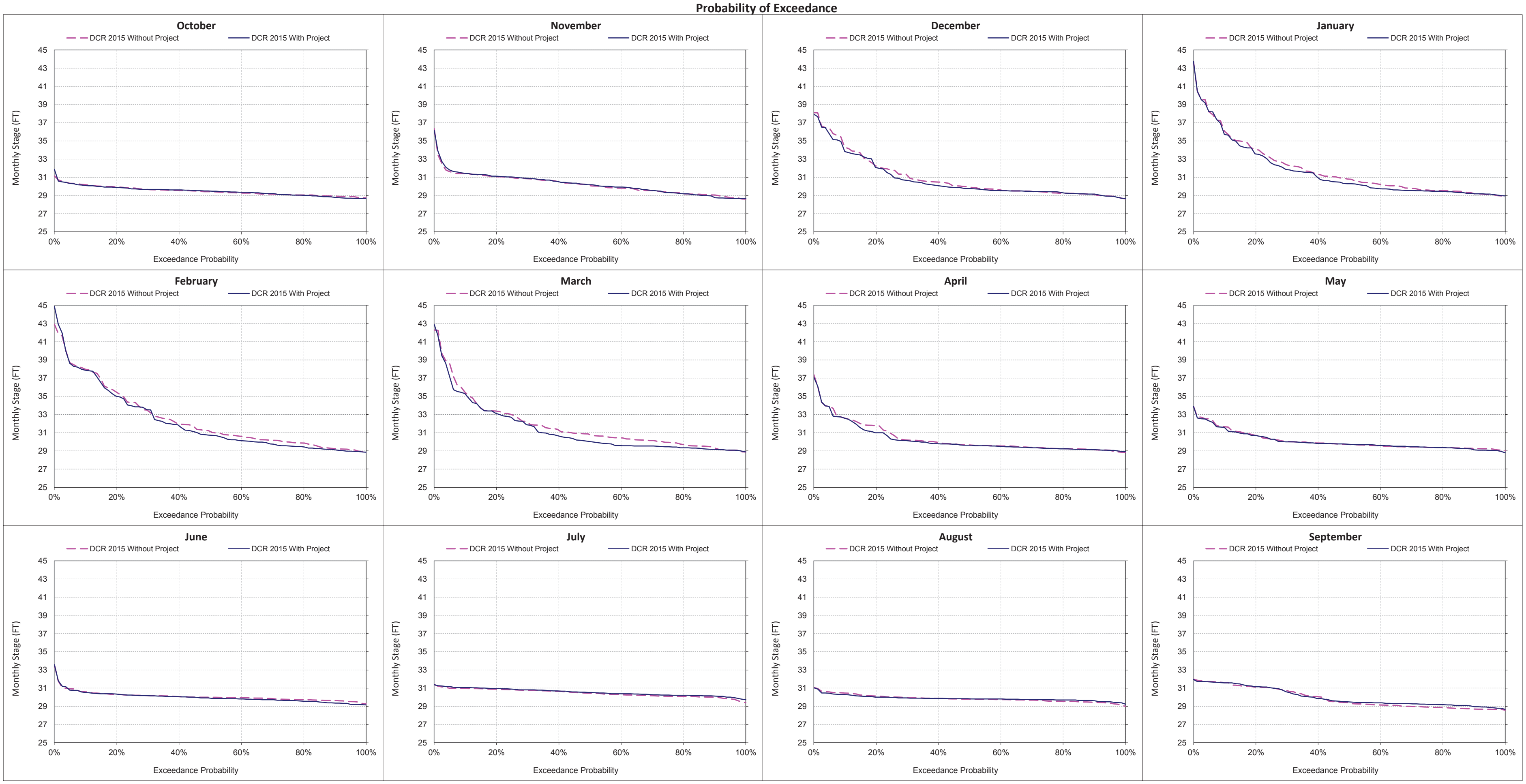


Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage

Probability of Exceedance

Percent Exceedance Probability	October: DCR 2015 Without Project Monthly Stage (FT)	October: DCR 2015 With Project Monthly Stage (FT)	October: Absolute Difference (FT)	October: Relative Difference (%)	November: DCR 2015 Without Project Monthly Stage (FT)	November: DCR 2015 With Project Monthly Stage (FT)	November: Absolute Difference (FT)	November: Relative Difference (%)	December: DCR 2015 Without Project Monthly Stage (FT)	December: DCR 2015 With Project Monthly Stage (FT)	December: Absolute Difference (FT)	December: Relative Difference (%)	January: DCR 2015 Without Project Monthly Stage (FT)	January: DCR 2015 With Project Monthly Stage (FT)	January: Absolute Difference (FT)	January: Relative Difference (%)
0.0%	31	32	1	2.3%	36	36	0	-0.6%	38	38	0	-0.4%	44	44	0	0.0%
1.2%	31	31	0	-0.5%	33	34	0	1.3%	38	38	0	-1.2%	40	40	0	0.0%
2.5%	31	30	0	-0.3%	33	33	0	0.7%	37	37	0	-0.3%	40	40	0	0.0%
3.7%	30	30	0	-0.1%	32	32	0	1.0%	36	36	0	0.0%	40	39	0	-0.9%
4.9%	30	30	0	0.0%	32	32	0	0.6%	36	36	-1	-1.7%	38	38	0	0.0%
6.2%	30	30	0	-0.1%	32	32	0	0.3%	36	35	-1	-1.9%	38	38	0	0.8%
7.4%	30	30	0	-0.4%	31	32	0	0.6%	36	35	0	-1.4%	37	37	0	0.3%
8.6%	30	30	0	-0.2%	31	31	0	0.3%	35	35	0	-1.4%	37	37	0	-0.7%
9.9%	30	30	0	-0.3%	31	31	0	0.1%	34	34	0	-1.4%	36	36	0	-1.0%
11.1%	30	30	0	-0.2%	31	31	0	0.1%	34	34	0	-1.3%	36	36	0	-0.2%
12.3%	30	30	0	-0.1%	31	31	0	0.0%	34	34	0	-0.8%	35	35	0	-0.5%
13.6%	30	30	0	-0.1%	31	31	0	0.0%	34	34	0	-1.1%	35	35	0	-0.1%
14.8%	30	30	0	-0.1%	31	31	0	0.3%	34	33	0	-0.7%	35	34	-1	-1.5%
16.0%	30	30	0	-0.2%	31	31	0	0.2%	33	33	0	0.3%	35	34	-1	-1.8%
17.3%	30	30	0	-0.2%	31	31	0	0.2%	33	33	0	0.7%	35	34	-1	-1.6%
18.5%	30	30	0	-0.2%	31	31	0	0.1%	33	33	0	1.3%	34	34	0	0.0%
19.8%	30	30	0	-0.3%	31	31	0	0.2%	32	32	0	-0.6%	34	34	0	-1.4%
21.0%	30	30	0	-0.2%	31	31	0	0.2%	32	32	0	-0.4%	34	34	0	-1.4%
22.2%	30	30	0	-0.2%	31	31	0	0.1%	32	32	0	-0.2%	34	33	0	-0.8%
23.5%	30	30	0	-0.1%	31	31	0	0.2%	32	32	0	-1.3%	33	33	0	-1.0%
24.7%	30	30	0	-0.3%	31	31	0	0.1%	32	31	0	-1.5%	33	33	-1	-1.6%
25.9%	30	30	0	-0.3%	31	31	0	0.3%	32	31	-1	-2.7%	33	32	0	-1.5%
27.2%	30	30	0	-0.1%	31	31	0	0.2%	31	31	0	-1.5%	33	32	0	-1.4%
28.4%	30	30	0	-0.1%	31	31	0	0.1%	31	31	-1	-2.0%	33	32	-1	-1.7%
29.6%	30	30	0	0.0%	31	31	0	0.1%	31	31	-1	-2.2%	32	32	-1	-1.7%
30.9%	30	30	0	0.1%	31	31	0	0.1%	31	31	0	-0.9%	32	32	0	-1.4%
32.1%	30	30	0	0.1%	31	31	0	0.1%	31	30	0	-0.9%	32	32	-1	-1.6%
33.3%	30	30	0	0.2%	31	31	0	0.1%	31	30	0	-0.8%	32	32	-1	-1.6%
34.6%	30	30	0	0.2%	31	31	0	0.3%	31	30	0	-0.7%	32	32	0	-1.4%
35.8%	30	30	0	0.1%	31	31	0	0.0%	31	30	0	-1.0%	32	32	0	-0.5%
37.0%	30	30	0	0.1%	31	31	0	0.1%	31	30	0	-1.0%	32	32	0	-0.5%
38.3%	30	30	0	0.1%	31	31	0	-0.2%	31	30	0	-1.2%	32	31	0	-0.1%
39.5%	30	30	0	0.1%	31	31	0	0.1%	30	30	0	-1.3%	31	31	0	-0.9%
40.7%	30	30	0	0.2%	31	30	0	-0.3%	30	30	0	-1.4%	31	31	-1	-1.7%
42.0%	30	30	0	0.2%	30	30	0	0.2%	30	30	0	-1.5%	31	31	0	-1.6%
43.2%	30	30	0	0.2%	30	30	0	0.0%	30	30	0	-1.4%	31	31	0	-1.6%
44.4%	30	30	0	0.1%	30	30	0	0.1%	30	30	0	-0.7%	31	31	-1	-1.8%
45.7%	29	30	0	0.1%	30	30	0	0.2%	30	30	0	-0.6%	31	30	-1	-1.8%
46.9%	29	30	0	0.3%	30	30	0	0.1%	30	30	0	-0.6%	31	30	0	-1.5%
48.1%	29	30	0	0.3%	30	30	0	-0.1%	30	30	0	-0.6%	31	30	-1	-1.9%
49.4%	29	29	0	0.3%	30	30	0	0.3%	30	30	0	-0.6%	31	30	-1	-1.7%
50.6%	29	29	0	0.2%	30	30	0	0.4%	30	30	0	-0.5%	31	30	0	-1.6%
51.9%	29	29	0	0.2%	30	30	0	0.3%	30	30	0	-0.5%	31	30	0	-1.1%
53.1%	29	29	0	0.3%	30	30	0	0.0%	30	30	0	-0.2%	31	30	0	-1.2%
54.3%	29	29	0	0.2%	30	30	0	0.1%	30	30	0	-0.3%	30	30	0	-1.0%
55.6%	29	29	0	0.3%	30	30	0	0.5%	30	30	0	-0.3%	30	30	0	-1.1%
56.8%	29	29	0	0.3%	30	30	0	0.5%	30	30	0	-0.5%	30	30	-1	-1.8%
58.0%	29	29	0	0.3%	30	30	0	0.4%	30	30	0	-0.5%	30	30	-1	-1.7%
59.3%	29	29	0	0.3%	30	30	0	0.4%	30	30	0	-0.3%	30	30	0	-1.6%
60.5%	29	29	0	0.3%	30	30	0	0.4%	30	30	0	-0.1%	30	30	0	-1.5%
61.7%	29	29	0	0.3%	30	30	0	0.3%	30	30	0	-0.1%	30	30	0	-1.3%
63.0%	29	29	0	0.2%	30	30	0	0.2%	30	30	0	0.0%	30	30	0	-1.2%
64.2%	29	29	0	0.2%	30	30	0	0.2%	30	29	0	0.0%	30	30	0	-1.5%
65.4%	29	29	0	0.3%	30	30	0	0.6%	30	29	0	0.0%	30	30	0	-1.5%
66.7%	29	29	0	0.2%	30	30	0	0.2%	29	29	0	0.0%	30	30	0	-1.3%
67.9%	29	29	0	0.2%	30	30	0	0.3%	29	29	0	0.0%	30	30	0	-0.8%
69.1%	29	29	0	0.2%	30	30	0	0.1%	29	29	0	0.0%	30	30	0	-0.8%
70.4%	29	29	0	0.2%	30	30	0	0.1%	29	29	0	0.1%	30	30	0	-0.8%
71.6%	29	29	0	0.0%	29	29	0	0.0%	29	29	0	0.0%	30	30	0	-0.6%
72.8%	29	29	0	0.0%	29	29	0	0.1%	29	29	0	0.1%	30	30	0	-0.3%
74.1%	29	29	0	0.0%	29	29	0	-0.2%	29	29	0	0.2%	30	29	0	-0.4%
75.3%	29	29	0	-0.1%	29	29	0	0.0%	29	29	0	0.3%	30	29	0	-0.3%
76.5%	29	29	0	-0.1%	29	29	0	0.0%	29	29	0	0.4%	30	29	0	-0.2%
77.8%	29	29	0	0.0%	29	29	0	-0.1%	29	29	0	0.5%	30	29	0	-0.2%
79.0%	29	29	0	-0.1%	29	29	0	-0.2%	29	29	0	0.4%	30	29	0	-0.2%
80.2%	29	29	0	-0.1%	29	29	0	0.1%	29	29	0	0.1%	30	29	0	-0.3%
81.5%	29	29	0	-0.1%	29	29	0	0.0%	29	29	0	0.0%	30	29	0	-0.3%
82.7%	29	29	0	-0.3%	29	29	0	-0.2%	29	29	0	0.0%	29	29	0	-0.3%
84.0%	29	29	0	-0.2%	29	29	0	-0.2%	29	29	0	-0.1%	29	29	0	-0.4%
85.2%	29	29	0	-0.3%	29	29	0	-0.3%	29	29	0	0.0%	29	29	0	-0.4%
86.4%	29	29	0	-0.3%	29	29	0	-0.5%	29	29	0	0.0%	29	29	0	-0.4%
87.7%	29	29	0	-0.3%	29	29	0	-0.4%	29	29	0	0.0%	29	29	0	-0.3%
88.9%	29	29	0	-0.3%	29	29	0	-0.4%	29	29	0	0.1%	29	29	0	-0.3%
90.1%	29	29	0	-0.5%	29	29	0	-1.0%	29	29	0	0.2%	29	29	0	0.0%
91.4%	29	29	0	-0.5%	29	29	0	-0.8%	29	29	0	0.3%	29	29	0	0.0%
92.6%	29	29	0	-0.6%	29	29	0	-0.6%	29	29	0	0.0%	29	29	0	0.1%
93.8%	29	29	0	-0.7%	29	29	0	-0.5%	29	29	0	0.0%	29	29	0	0.1%
95.1%	29	29	0	-0.7%	29	29	0	-0.3%	29	29	0	0.0%	29	29	0	0.2%
96.3%	29	29	0	-0.6%	29	29	0	-0.2%	29	29	0	0.0%	29	29	0	0.0%
97.5%	29	29	0	-0.4%	29	29	0	-0.2%	29	29	0	-0.3%	29	29	0	0.2%
98.8%	29	29	0	-0.3%	29	29	0	0.2%	29	29	0	0.0%	29	29	0	0.1%
100.0%	29	29	0	-0.3%	29	29	0	0.2%	29	29	0	0.1%	29	29	0	0.0%

Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage

Probability of Exceedance

February				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	43	45	2	4.6%
1.2%	42	43	1	2.4%
2.5%	42	42	0	0.7%
3.7%	40	40	0	0.0%
4.9%	39	39	0	-0.1%
6.2%	38	38	0	-0.4%
7.4%	38	38	0	-0.2%
8.6%	38	38	0	-0.5%
9.9%	38	38	0	-0.3%
11.1%	38	38	0	-0.2%
12.3%	38	38	0	0.3%
13.6%	38	37	0	-0.9%
14.8%	37	37	0	-1.2%
16.0%	36	36	0	-0.4%
17.3%	36	36	0	-0.8%
18.5%	36	35	0	-1.3%
19.8%	35	35	0	-1.3%
21.0%	35	35	0	-0.8%
22.2%	35	35	0	-0.6%
23.5%	34	34	0	-0.9%
24.7%	34	34	0	-1.1%
25.9%	34	34	0	-1.4%
27.2%	34	34	0	-0.1%
28.4%	34	34	0	0.8%
29.6%	33	34	0	0.1%
30.9%	33	33	0	0.9%
32.1%	33	32	0	-1.2%
33.3%	33	32	0	-1.2%
34.6%	33	32	0	-1.1%
35.8%	32	32	0	-1.5%
37.0%	32	32	0	-1.5%
38.3%	32	32	0	-1.0%
39.5%	32	32	0	-0.3%
40.7%	32	32	0	-1.2%
42.0%	32	31	-1	-1.9%
43.2%	32	31	-1	-1.9%
44.4%	32	31	-1	-2.0%
45.7%	31	31	0	-1.1%
46.9%	31	31	0	-1.6%
48.1%	31	31	0	-1.5%
49.4%	31	31	-1	-1.6%
50.6%	31	31	0	-1.0%
51.9%	31	31	0	-1.0%
53.1%	31	31	0	-1.2%
54.3%	31	30	0	-1.1%
55.6%	31	30	0	-1.5%
56.8%	31	30	-1	-1.7%
58.0%	31	30	0	-1.5%
59.3%	31	30	0	-1.6%
60.5%	31	30	0	-1.5%
61.7%	30	30	0	-1.3%
63.0%	30	30	0	-1.3%
64.2%	30	30	0	-1.1%
65.4%	30	30	0	-0.8%
66.7%	30	30	0	-0.8%
67.9%	30	30	0	-1.0%
69.1%	30	30	0	-1.4%
70.4%	30	30	0	-1.4%
71.6%	30	30	-1	-1.7%
72.8%	30	30	0	-1.6%
74.1%	30	30	0	-1.4%
75.3%	30	30	0	-1.5%
76.5%	30	30	0	-1.4%
77.8%	30	29	0	-1.3%
79.0%	30	29	0	-1.3%
80.2%	30	29	0	-1.5%
81.5%	30	29	0	-1.4%
82.7%	30	29	0	-1.4%
84.0%	30	29	0	-1.1%
85.2%	29	29	0	-0.7%
86.4%	29	29	0	-0.5%
87.7%	29	29	0	-0.6%
88.9%	29	29	0	-0.4%
90.1%	29	29	0	-0.4%
91.4%	29	29	0	-0.5%
92.6%	29	29	0	-0.6%
93.8%	29	29	0	-0.8%
95.1%	29	29	0	-0.6%
96.3%	29	29	0	-0.5%
97.5%	29	29	0	-0.1%
98.8%	29	29	0	-0.1%
100.0%	29	29	0	0.0%

March				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	42	43	1	1.4%
1.2%	42	42	-1	-1.3%
2.5%	40	39	0	-0.6%
3.7%	39	39	0	-0.7%
4.9%	39	37	-1	-3.8%
6.2%	37	36	-1	-4.0%
7.4%	36	36	-1	-1.9%
8.6%	36	35	-1	-1.6%
9.9%	35	35	0	-0.4%
11.1%	35	35	0	-0.7%
12.3%	35	34	0	-1.4%
13.6%	34	34	0	0.0%
14.8%	34	34	0	-0.1%
16.0%	33	33	0	-0.1%
17.3%	33	33	0	-0.1%
18.5%	33	33	0	-0.1%
19.8%	33	33	0	-0.7%
21.0%	33	33	0	-1.0%
22.2%	33	33	0	-0.8%
23.5%	33	33	0	-1.0%
24.7%	33	33	0	-0.9%
25.9%	33	32	-1	-1.6%
27.2%	33	32	0	-0.9%
28.4%	32	32	0	0.0%
29.6%	32	32	0	-1.2%
30.9%	32	32	0	-0.2%
32.1%	32	32	0	-0.6%
33.3%	32	31	-1	-2.3%
34.6%	32	31	-1	-2.5%
35.8%	32	31	-1	-1.9%
37.0%	31	31	-1	-2.0%
38.3%	31	31	-1	-2.1%
39.5%	31	31	-1	-2.3%
40.7%	31	31	-1	-1.7%
42.0%	31	30	-1	-1.9%
43.2%	31	30	-1	-2.0%
44.4%	31	30	-1	-1.9%
45.7%	31	30	-1	-2.4%
46.9%	31	30	-1	-2.4%
48.1%	31	30	-1	-2.4%
49.4%	31	30	-1	-2.7%
50.6%	31	30	-1	-2.2%
51.9%	31	30	-1	-2.4%
53.1%	31	30	-1	-2.5%
54.3%	31	30	-1	-2.6%
55.6%	31	30	-1	-2.4%
56.8%	30	30	-1	-2.3%
58.0%	30	30	-1	-2.8%
59.3%	30	30	-1	-2.8%
60.5%	30	30	-1	-2.8%
61.7%	30	30	-1	-2.5%
63.0%	30	30	-1	-2.5%
64.2%	30	30	-1	-2.2%
65.4%	30	30	-1	-2.2%
66.7%	30	30	-1	-2.1%
67.9%	30	30	-1	-2.1%
69.1%	30	30	-1	-2.0%
70.4%	30	30	-1	-2.0%
71.6%	30	30	-1	-1.8%
72.8%	30	29	-1	-1.8%
74.1%	30	29	0	-1.6%
75.3%	30	29	0	-1.6%
76.5%	30	29	0	-1.5%
77.8%	30	29	0	-1.5%
79.0%	30	29	0	-1.4%
80.2%	30	29	0	-1.1%
81.5%	30	29	0	-0.9%
82.7%	30	29	0	-0.8%
84.0%	30	29	0	-0.8%
85.2%	30	29	0	-0.8%
86.4%	30	29	0	-1.0%
87.7%	29	29	0	-0.9%
88.9%	29	29	0	-1.0%
90.1%	29	29	0	-0.4%
91.4%	29	29	0	-0.1%
92.6%	29	29	0	0.0%
93.8%	29	29	0	0.0%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.0%
97.5%	29	29	0	-0.1%
98.8%	29	29	0	0.2%
100.0%	29	29	0	0.0%

April				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	37	37	0	-0.8%
1.2%	36	36	0	0.0%
2.5%	34	34	0	0.0%
3.7%	34	34	0	0.1%
4.9%	34	34	0	-0.1%
6.2%	34	33	-1	-2.5%
7.4%	33	33	0	0.0%
8.6%	33	33	0	0.0%
9.9%	33	33	0	0.0%
11.1%	32	32	0	-0.1%
12.3%	32	32	0	-0.5%
13.6%	32	32	0	-0.9%
14.8%	32	32	0	-1.4%
16.0%	32	31	-1	-1.8%
17.3%	32	31	-1	-2.0%
18.5%	32	31	-1	-2.1%
19.8%	32	31	-1	-2.5%
21.0%	32	31	-1	-2.4%
22.2%	31	31	0	-1.0%
23.5%	31	31	-1	-1.6%
24.7%	31	30	-1	-2.0%
25.9%	31	30	0	-1.4%
27.2%	30	30	0	-0.5%
28.4%	30	30	0	-0.3%
29.6%	30	30	0	-0.2%
30.9%	30	30	0	-0.3%
32.1%	30	30	0	-0.4%
33.3%	30	30	0	-0.5%
34.6%	30	30	0	-0.4%
35.8%	30	30	0	-0.3%
37.0%	30	30	0	-0.6%
38.3%	30	30	0	-0.7%
39.5%	30	30	0	-0.6%
40.7%	30	30	0	-0.3%
42.0%	30	30	0	-0.1%
43.2%	30	30	0	0.0%
44.4%	30	30	0	-0.1%
45.7%	30	30	0	0.0%
46.9%	30	30	0	-0.1%
48.1%	30	30	0	-0.1%
49.4%	30	30	0	-0.2%
50.6%	30	30	0	-0.1%
51.9%	30	30	0	-0.1%
53.1%	30	30	0	-0.2%
54.3%	30	30	0	-0.2%
55.6%	30	30	0	-0.1%
56.8%	30	30	0	-0.1%
58.0%	30	30	0	-0.1%
59.3%	30	30	0	-0.1%
60.5%	30	29	0	-0.2%
61.7%	30	29	0	-0.2%
63.0%	30	29	0	-0.3%
64.2%	30	29	0	-0.3%
65.4%	29	29	0	-0.1%
66.7%	29	29	0	-0.1%
67.9%	29	29	0	-0.1%
69.1%	29	29	0	-0.1%
70.4%	29	29	0	-0.1%
71.6%	29	29	0	-0.1%
72.8%	29	29	0	-0.2%
74.1%	29	29	0	-0.1%
75.3%	29	29	0	0.0%
76.5%	29	29	0	-0.1%
77.8%	29	29	0	-0.1%
79.0%	29	29	0	-0.1%
80.2%	29	29	0	-0.1%
81.5%	29	29	0	-0.1%
82.7%	29	29	0	-0.1%
84.0%	29	29	0	-0.2%
85.2%	29	29	0	-0.2%
86.4%	29	29	0	-0.2%
87.7%	29	29	0	-0.2%
88.9%	29	29	0	-0.2%
90.1%	29	29	0	0.0%
91.4%	29	29	0	0.0%
92.6%	29	29	0	-0.1%
93.8%	29	29	0	-0.1%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.4%
97.5%	29	29	0	0.3%
98.8%	29	29	0	0.3%
100.0%	29	29	0	0.3%

May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	34	34	0	0.0%
1.2%	33	33	0	-0.4%
2.5%	33	33	0	-0.5%
3.7%	33	32	0	-0.1%
4.9%	33	32	0	-0.7%
6.2%	32	32	0	-0.6%
7.4%	32	32	0	-0.3%
8.6%	32	32	0	-0.3%
9.9%	32	32	0	-0.2%
11.1%	32	31	0	-1.4%
12.3%	31	31	0	-0.3%
13.6%	31	31	0	-0.2%
14.8%	31	31	0	-0.5%
16.0%	31	31	0	-0.3%
17.3%	31	31	0	-0.2%
18.5%	31	31	0	-0.3%
19.8%	31	31	0	0.0%
21.0%	31	31	0	-0.1%
22.2%	30	31	0	0.4%
23.5%	30	30	0	0.4%
24.7%	30	30	0	-0.1%
25.9%	30	30	0	0.1%
27.2%	30	30	0	-0.4%
28.4%	30	30	0	-0.3%
29.6%	30	30	0	-0.1%
30.9%	30	30	0	-0.1%
32.1%	30	30	0	-0.1%
33.3%	30	30	0	-0.1%
34.6%	30	30	0	-0.1%
35.8%	30	30	0	-0.2%
37.0%	30	30	0	-0.1%
38.3%	30	30	0	-0.1%
39.5%	30	30	0	-0.1%
40.7%	30	30	0	-0.1%
42.0%	30	30	0	-0.2%
43.2%	30	30	0	-0.1%
44.4%	30	30	0	0.0%
45.7%	30	30	0	0.0%
46.9%	30	30	0	0.1%
48.1%	30	30	0	0.1%
49.4%	30	30	0	0.1%
50.6%	30	30	0	0.1%
51.9%	30	30	0	0.0%
53.1%	30	30	0	0.1%
54.3%	30	30	0	0.1%
55.6%	30	30	0	0.2%
56.8%	30	30	0	0.2%
58.0%	30	30	0	0.3%
59.3%	30	30	0	0.1%
60.5%	30	30	0	0.2%
61.7%	30	30	0	0.1%
63.0%	29	30	0	0.2%
64.2%	29	30	0	0.1%
65.4%	29	30	0	0.2%
66.7%	29	30	0	0.2%
67.9%	29	29	0	0.2%
69.1%	29	29	0	0.1%
70.4%	29	29	0	0.1%
71.6%	29	29	0	0.1%
72.8%	29	29	0	0.0%
74.1%	29	29	0	0.1%
75.3%	29	29	0	0.0%
76.5%	29	29	0	0.1%
77.8%	29	29	0	0.0%
79.0%	29	29	0	0.0%
80.2%	29	29	0	0.0%
81.5%	29	29	0	-0.1%
82.7%	29	29	0	-0.1%
84.0%	29	29	0	-0.1%
85.2%	29	29	0	-0.1%
86.4%	29	29	0	-0.2%
87.7%	29	29	0	-0.1%
88.9%	29	29	0	-0.2%
90.1%	29	29	0	-0.5%
91.4%	29	29	0	-0.5%
92.6%	29	29	0	-0.5%
93.8%	29	29	0	-0.6%
95.1%	29	29	0	-0.6%
96.3%	29	29	0	-0.5%
97.5%	29	29	0	-0.3%
98.8%	29	29	0	-0.5%
100.0%	29	29	0	-0.8%

Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage

Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	34	34	0	0.0%
1.2%	32	32	0	0.0%
2.5%	31	31	0	0.5%
3.7%	31	31	0	0.5%
4.9%	31	31	0	-0.5%
6.2%	31	31	0	-0.5%
7.4%	31	31	0	0.0%
8.6%	31	31	0	-0.1%
9.9%	31	31	0	-0.2%
11.1%	31	30	0	-0.2%
12.3%	30	30	0	0.0%
13.6%	30	30	0	-0.2%
14.8%	30	30	0	-0.1%
16.0%	30	30	0	-0.1%
17.3%	30	30	0	0.0%
18.5%	30	30	0	0.2%
19.8%	30	30	0	0.1%
21.0%	30	30	0	-0.1%
22.2%	30	30	0	0.0%
23.5%	30	30	0	0.0%
24.7%	30	30	0	0.1%
25.9%	30	30	0	0.0%
27.2%	30	30	0	-0.1%
28.4%	30	30	0	0.0%
29.6%	30	30	0	0.0%
30.9%	30	30	0	0.0%
32.1%	30	30	0	0.0%
33.3%	30	30	0	-0.1%
34.6%	30	30	0	-0.1%
35.8%	30	30	0	-0.2%
37.0%	30	30	0	-0.2%
38.3%	30	30	0	-0.1%
39.5%	30	30	0	0.0%
40.7%	30	30	0	0.0%
42.0%	30	30	0	-0.1%
43.2%	30	30	0	0.0%
44.4%	30	30	0	0.0%
45.7%	30	30	0	0.0%
46.9%	30	30	0	-0.2%
48.1%	30	30	0	-0.2%
49.4%	30	30	0	-0.2%
50.6%	30	30	0	-0.4%
51.9%	30	30	0	-0.4%
53.1%	30	30	0	-0.4%
54.3%	30	30	0	-0.4%
55.6%	30	30	0	-0.4%
56.8%	30	30	0	-0.4%
58.0%	30	30	0	-0.4%
59.3%	30	30	0	-0.5%
60.5%	30	30	0	-0.5%
61.7%	30	30	0	-0.5%
63.0%	30	30	0	-0.6%
64.2%	30	30	0	-0.5%
65.4%	30	30	0	-0.5%
66.7%	30	30	0	-0.5%
67.9%	30	30	0	-0.5%
69.1%	30	30	0	-0.5%
70.4%	30	30	0	-0.4%
71.6%	30	30	0	-0.4%
72.8%	30	30	0	-0.4%
74.1%	30	30	0	-0.4%
75.3%	30	30	0	-0.4%
76.5%	30	30	0	-0.4%
77.8%	30	30	0	-0.5%
79.0%	30	30	0	-0.5%
80.2%	30	30	0	-0.5%
81.5%	30	30	0	-0.5%
82.7%	30	30	0	-0.6%
84.0%	30	30	0	-0.5%
85.2%	30	29	0	-0.7%
86.4%	30	29	0	-0.8%
87.7%	30	29	0	-0.9%
88.9%	30	29	0	-1.0%
90.1%	30	29	0	-1.0%
91.4%	30	29	0	-0.9%
92.6%	30	29	0	-0.9%
93.8%	30	29	0	-0.7%
95.1%	30	29	0	-1.0%
96.3%	30	29	0	-1.0%
97.5%	29	29	0	-0.9%
98.8%	29	29	0	-0.5%
100.0%	29	29	0	-0.4%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	31	0	-0.1%
1.2%	31	31	0	0.2%
2.5%	31	31	0	0.3%
3.7%	31	31	0	0.4%
4.9%	31	31	0	0.6%
6.2%	31	31	0	0.4%
7.4%	31	31	0	0.3%
8.6%	31	31	0	0.3%
9.9%	31	31	0	0.3%
11.1%	31	31	0	0.3%
12.3%	31	31	0	0.3%
13.6%	31	31	0	0.3%
14.8%	31	31	0	0.2%
16.0%	31	31	0	0.2%
17.3%	31	31	0	0.3%
18.5%	31	31	0	0.2%
19.8%	31	31	0	0.2%
21.0%	31	31	0	0.3%
22.2%	31	31	0	0.3%
23.5%	31	31	0	0.2%
24.7%	31	31	0	0.2%
25.9%	31	31	0	0.2%
27.2%	31	31	0	0.1%
28.4%	31	31	0	0.1%
29.6%	31	31	0	0.1%
30.9%	31	31	0	0.2%
32.1%	31	31	0	0.2%
33.3%	31	31	0	0.2%
34.6%	31	31	0	0.2%
35.8%	31	31	0	0.1%
37.0%	31	31	0	0.2%
38.3%	31	31	0	0.1%
39.5%	31	31	0	0.1%
40.7%	31	31	0	0.1%
42.0%	31	31	0	0.3%
43.2%	31	31	0	0.2%
44.4%	31	31	0	0.1%
45.7%	31	31	0	0.2%
46.9%	30	31	0	0.2%
48.1%	30	31	0	0.3%
49.4%	30	31	0	0.3%
50.6%	30	31	0	0.3%
51.9%	30	30	0	0.2%
53.1%	30	30	0	0.2%
54.3%	30	30	0	0.3%
55.6%	30	30	0	0.4%
56.8%	30	30	0	0.3%
58.0%	30	30	0	0.3%
59.3%	30	30	0	0.3%
60.5%	30	30	0	0.4%
61.7%	30	30	0	0.4%
63.0%	30	30	0	0.4%
64.2%	30	30	0	0.4%
65.4%	30	30	0	0.4%
66.7%	30	30	0	0.4%
67.9%	30	30	0	0.4%
69.1%	30	30	0	0.4%
70.4%	30	30	0	0.4%
71.6%	30	30	0	0.4%
72.8%	30	30	0	0.4%
74.1%	30	30	0	0.4%
75.3%	30	30	0	0.4%
76.5%	30	30	0	0.4%
77.8%	30	30	0	0.4%
79.0%	30	30	0	0.4%
80.2%	30	30	0	0.4%
81.5%	30	30	0	0.4%
82.7%	30	30	0	0.4%
84.0%	30	30	0	0.4%
85.2%	30	30	0	0.5%
86.4%	30	30	0	0.5%
87.7%	30	30	0	0.5%
88.9%	30	30	0	0.5%
90.1%	30	30	0	0.4%
91.4%	30	30	0	0.5%
92.6%	30	30	0	0.7%
93.8%	30	30	0	0.6%
95.1%	30	30	0	0.6%
96.3%	30	30	0	0.6%
97.5%	30	30	0	0.9%
98.8%	29	30	0	1.1%
100.0%	29	30	0	1.0%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	31	0	-0.1%
1.2%	31	31	0	-0.2%
2.5%	31	30	0	-0.6%
3.7%	31	30	0	-0.5%
4.9%	31	30	0	-0.5%
6.2%	31	30	0	-0.5%
7.4%	30	30	0	-0.5%
8.6%	30	30	0	-0.6%
9.9%	30	30	0	-0.5%
11.1%	30	30	0	-0.5%
12.3%	30	30	0	-0.6%
13.6%	30	30	0	-0.7%
14.8%	30	30	0	-0.4%
16.0%	30	30	0	-0.4%
17.3%	30	30	0	-0.2%
18.5%	30	30	0	-0.2%
19.8%	30	30	0	-0.4%
21.0%	30	30	0	-0.3%
22.2%	30	30	0	-0.2%
23.5%	30	30	0	-0.1%
24.7%	30	30	0	-0.1%
25.9%	30	30	0	-0.2%
27.2%	30	30	0	-0.3%
28.4%	30	30	0	-0.2%
29.6%	30	30	0	-0.2%
30.9%	30	30	0	-0.2%
32.1%	30	30	0	-0.2%
33.3%	30	30	0	-0.1%
34.6%	30	30	0	-0.1%
35.8%	30	30	0	-0.1%
37.0%	30	30	0	-0.1%
38.3%	30	30	0	-0.1%
39.5%	30	30	0	-0.1%
40.7%	30	30	0	-0.1%
42.0%	30	30	0	-0.1%
43.2%	30	30	0	0.1%
44.4%	30	30	0	0.1%
45.7%	30	30	0	0.1%
46.9%	30	30	0	0.1%
48.1%	30	30	0	0.1%
49.4%	30	30	0	0.2%
50.6%	30	30	0	0.1%
51.9%	30	30	0	0.2%
53.1%	30	30	0	0.2%
54.3%	30	30	0	0.1%
55.6%	30	30	0	0.1%
56.8%	30	30	0	0.2%
58.0%	30	30	0	0.2%
59.3%	30	30	0	0.2%
60.5%	30	30	0	0.2%
61.7%	30	30	0	0.2%
63.0%	30	30	0	0.2%
64.2%	30	30	0	0.3%
65.4%	30	30	0	0.2%
66.7%	30	30	0	0.2%
67.9%	30	30	0	0.2%
69.1%	30	30	0	0.2%
70.4%	30	30	0	0.2%
71.6%	30	30	0	0.2%
72.8%	30	30	0	0.3%
74.1%	30	30	0	0.4%
75.3%	30	30	0	0.5%
76.5%	30	30	0	0.5%
77.8%	30	30	0	0.5%
79.0%	30	30	0	0.5%
80.2%	30	30	0	0.5%
81.5%	30	30	0	0.5%
82.7%	30	30	0	0.5%
84.0%	30	30	0	0.5%
85.2%	29	30	0	0.5%
86.4%	29	30	0	0.5%
87.7%	29	30	0	0.6%
88.9%	29	30	0	0.6%
90.1%	29	30	0	0.5%
91.4%	29	30	0	0.4%
92.6%	29	30	0	0.4%
93.8%	29	29	0	0.4%
95.1%	29	29	0	0.5%
96.3%	29	29	0	0.6%
97.5%	29	29	0	0.6%
98.8%	29	29	0	1.0%
100.0%	29	29	0	0.9%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	32	32	0	-0.1%
1.2%	32	32	0	-0.4%
2.5%	32	32	0	-0.3%
3.7%	32	32	0	-0.1%
4.9%	32	32	0	-0.1%
6.2%	32	32	0	-0.1%
7.4%	32	32	0	-0.1%
8.6%	32	32	0	-0.2%
9.9%	32	32	0	-0.1%
11.1%	32	32	0	-0.1%
12.3%	31	32	0	0.8%
13.6%	31	31	0	0.6%
14.8%	31	31	0	0.6%
16.0%	31	31	0	0.4%
17.3%	31	31	0	0.2%
18.5%	31	31	0	0.2%
19.8%	31	31	0	0.2%
21.0%	31	31	0	0.2%
22.2%	31	31	0	0.1%
23.5%	31	31	0	0.1%
24.7%	31	31	0	0.1%
25.9%	31	31	0	0.0%
27.2%	31	31	0	0.2%
28.4%	31	31	0	-0.1%
29.6%	31	31	0	-0.6%
30.9%	31	31	0	-0.3%
32.1%	31	30	0	-0.8%
33.3%	30	30	0	-0.5%
34.6%	30	30	0	-0.8%
35.8%	30	30	0	-0.4%
37.0%	30	30	0	-0.3%
38.3%	30	30	0	-0.2%
39.5%	30	30	0	-0.6%
40.7%	30	30	0	-0.6%
42.0%	30	30	0	-0.6%
43.2%	30	30	0	0.4%
44.4%	30	30	0	0.3%
45.7%	30	30	0	0.2%
46.9%	29	30	0	0.3%
48.1%	29	29	0	0.2%
49.4%	29	29	0	0.3%
50.6%	29	29	0	0.6%
51.9%	29	29	0	0.6%
53.1%	29	29	0	0.5%
54.3%	29	29	0	0.5%
55.6%	29	29	0	0.6%
56.8%	29	29	0	0.6%
58.0%	29	29	0	0.8%
59.3%	29	29	0	0.8%
60.5%	29	29	0	0.8%
61.7%	29	29	0	0.7%
63.0%	29	29	0	0.7%
64.2%	29	29	0	0.7%
65.4%	29	29	0	0.7%
66.7%	29	29	0	0.9%
67.9%	29	29	0	1.0%
69.1%	29	29	0	1.0%
70.4%	29	29	0	0.9%
71.6%	29	29	0	1.0%
72.8%	29	29	0	1.0%
74.1%	29	29	0	1.1%
75.3%	29	29	0	1.1%
76.5%	29	29	0	1.1%
77.8%	29	29	0	1.2%
79.0%	29	29	0	1.1%
80.2%	29	29	0	1.1%
81.5%	29	29	0	1.1%
82.7%	29	29	0	1.2%
84.0%	29	29	0	1.1%
85.2%	29	29	0	1.2%
86.4%	29	29	0	1.2%
87.7%	29	29	0	1.3%
88.9%	29	29	0	1.1%
90.1%	29	29	0	0.9%
91.4%	29	29	0	0.9%
92.6%	29	29	0	0.9%
93.8%	29	29	0	0.9%
95.1%	29	29	0	0.6%
96.3%	29	29	0	0.6%
97.5%	29	29	0	0.5%
98.8%	29	29	0	0.4%
100.0%	29	29	0	0.3%

Figure SW-56-b
Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

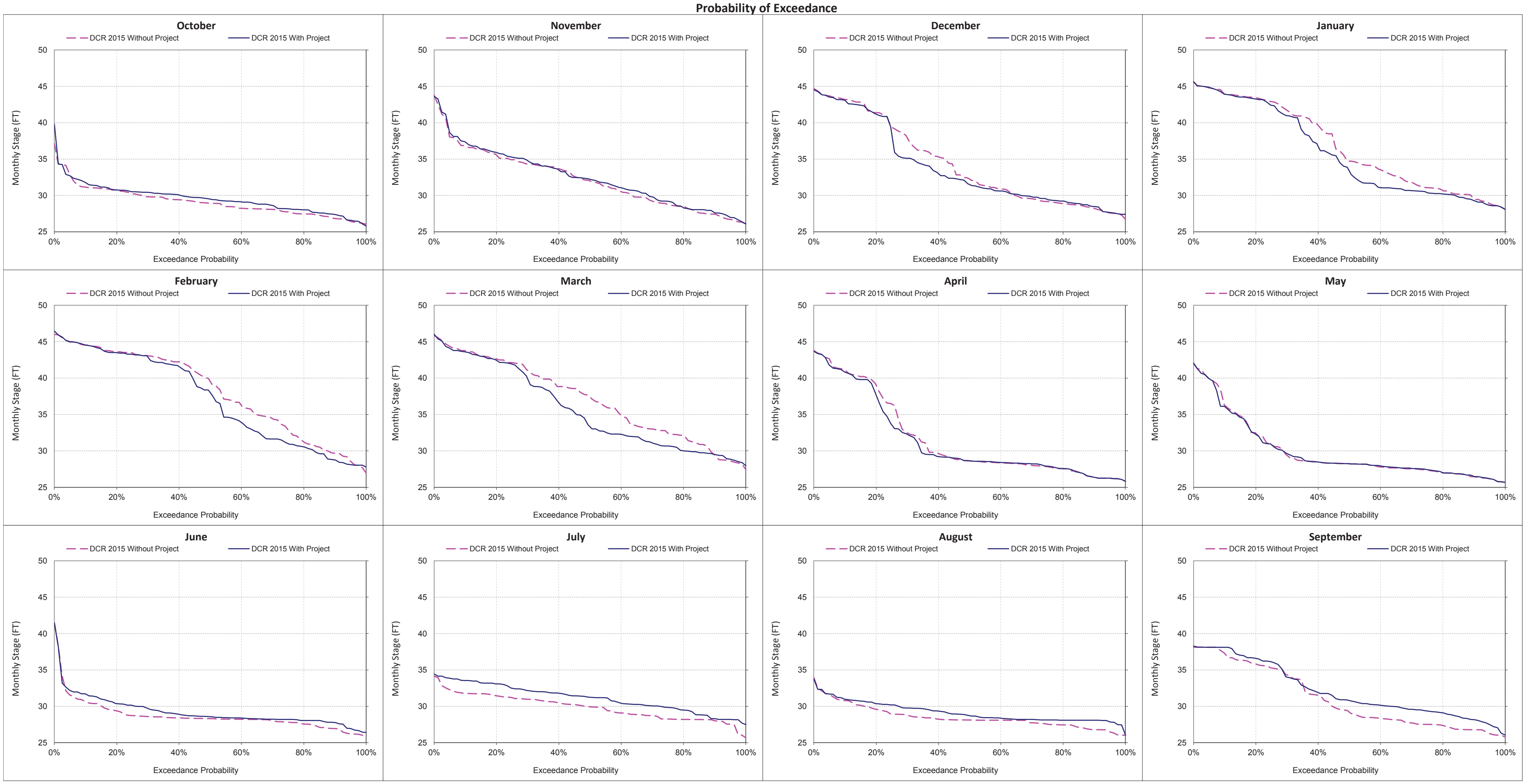


Table SW-56-b
Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

October				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	37	40	3	7.1%
1.2%	34	34	0	0.0%
2.5%	34	34	0	0.0%
3.7%	34	33	-1	-3.6%
4.9%	33	33	0	-0.5%
6.2%	32	32	0	1.3%
7.4%	31	32	1	2.5%
8.6%	31	32	1	2.7%
9.9%	31	32	1	2.1%
11.1%	31	31	0	1.3%
12.3%	31	31	0	1.1%
13.6%	31	31	0	1.1%
14.8%	31	31	0	0.6%
16.0%	31	31	0	0.6%
17.3%	31	31	0	0.6%
18.5%	31	31	0	-0.3%
19.8%	31	31	0	0.0%
21.0%	31	31	0	0.4%
22.2%	31	31	0	0.5%
23.5%	30	31	0	0.6%
24.7%	30	31	0	1.0%
25.9%	30	30	0	1.0%
27.2%	30	30	0	1.4%
28.4%	30	30	0	1.5%
29.6%	30	30	1	2.1%
30.9%	30	30	1	2.0%
32.1%	30	30	1	1.7%
33.3%	30	30	1	1.7%
34.6%	30	30	0	1.5%
35.8%	30	30	1	2.2%
37.0%	29	30	1	2.4%
38.3%	29	30	1	2.4%
39.5%	29	30	1	2.3%
40.7%	29	30	1	2.0%
42.0%	29	30	1	1.9%
43.2%	29	30	1	1.8%
44.4%	29	30	1	1.7%
45.7%	29	30	1	2.2%
46.9%	29	30	1	2.4%
48.1%	29	30	1	2.1%
49.4%	29	30	1	2.1%
50.6%	29	29	1	1.8%
51.9%	29	29	0	1.7%
53.1%	29	29	0	1.4%
54.3%	28	29	1	2.7%
55.6%	28	29	1	2.7%
56.8%	28	29	1	2.7%
58.0%	28	29	1	2.6%
59.3%	28	29	1	3.2%
60.5%	28	29	1	3.0%
61.7%	28	29	1	3.2%
63.0%	28	29	1	3.1%
64.2%	28	29	1	2.6%
65.4%	28	29	1	2.3%
66.7%	28	29	1	2.3%
67.9%	28	29	1	2.4%
69.1%	28	29	1	2.1%
70.4%	28	29	1	1.8%
71.6%	28	28	0	0.6%
72.8%	28	28	0	1.2%
74.1%	28	28	0	1.5%
75.3%	28	28	0	1.5%
76.5%	28	28	1	2.0%
77.8%	27	28	1	2.1%
79.0%	27	28	1	2.1%
80.2%	27	28	1	2.1%
81.5%	27	28	1	2.1%
82.7%	27	28	0	0.9%
84.0%	27	28	0	1.1%
85.2%	27	28	0	1.2%
86.4%	27	28	0	1.6%
87.7%	27	27	0	1.4%
88.9%	27	27	1	2.0%
90.1%	27	27	1	2.1%
91.4%	27	27	0	1.6%
92.6%	27	27	0	1.4%
93.8%	27	27	0	-0.1%
95.1%	26	27	0	0.6%
96.3%	26	26	0	0.6%
97.5%	26	26	0	0.6%
98.8%	26	26	0	-0.4%
100.0%	26	26	0	-0.9%

November				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	44	44	0	-0.4%
1.2%	42	43	1	1.8%
2.5%	41	41	0	0.6%
3.7%	41	41	1	1.3%
4.9%	38	39	1	1.6%
6.2%	38	38	0	0.5%
7.4%	38	38	1	1.4%
8.6%	37	37	1	1.7%
9.9%	37	37	1	1.5%
11.1%	37	37	0	1.0%
12.3%	37	37	0	0.5%
13.6%	36	37	0	1.0%
14.8%	36	36	0	0.0%
16.0%	36	36	0	0.5%
17.3%	36	36	0	0.8%
18.5%	36	36	0	0.5%
19.8%	36	36	0	0.8%
21.0%	35	36	1	1.8%
22.2%	35	36	1	1.6%
23.5%	35	35	0	0.8%
24.7%	35	35	0	1.1%
25.9%	35	35	0	0.8%
27.2%	35	35	0	1.4%
28.4%	35	35	1	1.7%
29.6%	34	35	1	1.7%
30.9%	34	35	0	0.6%
32.1%	34	34	0	0.2%
33.3%	34	34	0	0.5%
34.6%	34	34	0	0.0%
35.8%	34	34	0	0.0%
37.0%	34	34	0	0.0%
38.3%	34	34	0	-0.6%
39.5%	34	34	0	-0.3%
40.7%	34	33	0	-0.9%
42.0%	33	33	0	-0.4%
43.2%	33	33	-1	-1.9%
44.4%	33	32	0	-0.7%
45.7%	32	32	0	-0.1%
46.9%	32	32	0	0.1%
48.1%	32	32	0	0.7%
49.4%	32	32	0	0.6%
50.6%	32	32	0	0.8%
51.9%	32	32	0	0.8%
53.1%	32	32	0	0.6%
54.3%	31	32	0	1.5%
55.6%	31	32	0	1.3%
56.8%	31	31	0	1.5%
58.0%	31	31	0	1.1%
59.3%	31	31	0	1.5%
60.5%	30	31	1	1.8%
61.7%	30	31	0	1.4%
63.0%	30	31	1	1.7%
64.2%	30	31	1	3.1%
65.4%	30	31	1	2.8%
66.7%	30	30	1	1.9%
67.9%	30	30	1	1.9%
69.1%	29	30	1	1.7%
70.4%	29	30	1	2.0%
71.6%	29	29	0	1.0%
72.8%	29	29	0	1.0%
74.1%	29	29	0	1.1%
75.3%	29	29	0	1.7%
76.5%	29	29	0	1.5%
77.8%	29	29	0	0.1%
79.0%	28	29	0	0.2%
80.2%	28	28	0	-0.8%
81.5%	28	28	0	0.1%
82.7%	28	28	0	0.0%
84.0%	28	28	0	1.0%
85.2%	28	28	0	1.7%
86.4%	28	28	1	1.8%
87.7%	27	28	0	1.8%
88.9%	27	28	1	1.9%
90.1%	27	28	0	0.7%
91.4%	27	28	0	1.4%
92.6%	27	27	1	1.9%
93.8%	27	27	0	1.8%
95.1%	27	27	0	1.0%
96.3%	27	27	0	1.3%
97.5%	26	27	0	1.1%
98.8%	26	26	0	0.1%
100.0%	26	26	0	0.0%

December				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	45	45	0	-0.4%
1.2%	44	44	0	-0.2%
2.5%	44	44	0	-0.2%
3.7%	44	44	0	0.0%
4.9%	44	44	0	-0.4%
6.2%	44	43	0	-0.2%
7.4%	43	43	0	-0.6%
8.6%	43	43	0	-0.4%
9.9%	43	43	0	-0.2%
11.1%	43	43	-1	-1.4%
12.3%	43	43	0	-1.0%
13.6%	43	42	0	-0.8%
14.8%	43	42	0	-1.0%
16.0%	43	42	0	-0.8%
17.3%	42	42	0	0.4%
18.5%	41	42	0	0.2%
19.8%	41	41	0	-0.4%
21.0%	41	41	0	-0.9%
22.2%	41	41	0	-0.6%
23.5%	41	41	0	0.0%
24.7%	39	39	0	0.0%
25.9%	39	36	-3	-8.2%
27.2%	39	35	-3	-8.9%
28.4%	39	35	-3	-9.0%
29.6%	38	35	-3	-8.1%
30.9%	37	35	-2	-5.7%
32.1%	37	35	-2	-4.8%
33.3%	36	35	-2	-4.7%
34.6%	36	34	-2	-5.2%
35.8%	36	34	-2	-5.5%
37.0%	36	34	-2	-5.3%
38.3%	35	33	-2	-5.5%
39.5%	35	33	-2	-6.2%
40.7%	35	33	-2	-7.0%
42.0%	35	33	-2	-6.8%
43.2%	34	32	-2	-6.0%
44.4%	34	32	-2	-5.8%
45.7%	33	32	-1	-1.7%
46.9%	33	32	-1	-1.9%
48.1%	32	32	0	-1.1%
49.4%	32	32	-1	-2.4%
50.6%	32	31	-1	-2.2%
51.9%	32	31	-1	-2.2%
53.1%	31	31	0	-1.1%
54.3%	31	31	0	-1.3%
55.6%	31	31	0	-1.2%
56.8%	31	31	0	-0.7%
58.0%	31	31	0	-1.4%
59.3%	31	31	0	-0.9%
60.5%	31	31	0	-0.8%
61.7%	31	31	0	-1.0%
63.0%	30	30	0	-0.5%
64.2%	30	30	0	0.4%
65.4%	30	30	0	0.9%
66.7%	30	30	0	1.1%
67.9%	30	30	0	1.1%
69.1%	30	30	0	1.0%
70.4%	30	30	0	0.8%
71.6%	29	30	0	1.0%
72.8%	29	30	0	1.1%
74.1%	29	30	0	1.3%
75.3%	29	29	0	0.8%
76.5%	29	29	0	0.9%
77.8%	29	29	0	1.0%
79.0%	29	29	0	1.1%
80.2%	29	29	0	1.2%
81.5%	29	29	0	0.8%
82.7%	29	29	0	0.8%
84.0%	29	29	0	0.7%
85.2%	29	29	0	0.7%
86.4%	29	29	0	0.6%
87.7%	28	29	0	1.1%
88.9%	28	29	0	0.6%
90.1%	28	28	0	0.9%
91.4%	28	28	0	1.2%
92.6%	28	28	0	-0.5%
93.8%	28	28	0	0.1%
95.1%	28	28	0	0.2%
96.3%	28	28	0	0.1%
97.5%	27	27	0	0.0%
98.8%	27	27	0	0.3%
100.0%	27	27	1	2.5%

January				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	0.0%
1.2%	45	45	0	0.2%
2.5%	45	45	0	0.0%
3.7%	45	45	0	0.0%
4.9%	45	45	0	0.2%
6.2%	45	45	0	0.0%
7.4%	45	45	0	-0.2%
8.6%	45	44	0	-0.5%
9.9%	44	44	0	0.0%
11.1%	44	44	0	0.0%
12.3%	44	44	0	-0.2%
13.6%	44	44	0	-0.4%
14.8%	44	44	0	-0.4%
16.0%	44	44	0	-0.2%
17.3%	44	43	0	-0.2%
18.5%	44	43	0	-0.4%
19.8%	43	43	0	-0.4%
21.0%	43	43	0	-0.4%
22.2%	43	43	0	0.0%
23.5%	43	43	0	-0.6%
24.7%	43	42	-1	-1.2%
25.9%	43	42	-1	-1.2%
27.2%	43	42	-1	-2.2%
28.4%	42	41	-1	-2.1%
29.6%	42	41	-1	-1.9%
30.9%	41	41	-1	-1.3%
32.1%	41	41	0	-0.6%
33.3%	41	41	0	-0.7%
34.6%	41	39	-2	-4.5%
35.8%	41	38	-2	-5.8%
37.0%	41	38	-2	-5.8%
38.3%	40	37	-2	-6.2%
39.5%	40	37	-3	-6.9%
40.7%	39	36	-3	-8.0%
42.0%	39	36	-3	-6.5%
43.2%	38	36	-3	-6.8%
44.4%	38	36	-3	-7.5%
45.7%	36	35	-1	-2.5%
46.9%	36	35	-2	-4.5%
48.1%	36	34	-2	-4.3%
49.4%	35	34	-1	-2.5%
50.6%	35	33	-2	-5.3%
51.9%	35	32	-2	-6.4%
53.1%	34	32	-2	-7.0%
54.3%	34	32	-2	-7.3%
55.6%	34	32	-2	-7.2%
56.8%	34	32	-2	-7.2%
58.0%	34	32	-2	-7.1%
59.3%	34	31	-3	-7.5%
60.5%	33	31	-2	-7.1%
61.7%	33	31	-2	-6.4%
63.0%	33	31	-2	-5.8%
64.2%	33	31	-2	-5.3%
65.4%	33	31	-2	-5.3%
66.7%	32	31	-1	-4.6%
67.9%	32	31	-1	-4.0%
69.1%	32	31	-1	-3.5%
70.4%	32	31	-1	-3.5%
71.6%	31	31	-1	-2.6%
72.8%	31	31	-1	-2.1%
74.1%	31	31	-1	-1.7%
75.3%	31	30	-1	-2.3%
76.5%	31	30	-1	-2.4%
77.8%	31	30	-1	-2.2%
79.0%	31	30	-1	-2.1%
80.2%	31	30	0	-1.4%
81.5%	31	30	0	-1.6%
82.7%	30	30	0	-0.8%
84.0%	30	30	0	-0.6%
85.2%	30	30	0	-1.4%
86.4%	30	30	0	-1.3%
87.7%	30	30	-1	-2.0%
88.9%	30	29	-1	-2.0%
90.1%	29	29	0	-0.6%
91.4%	29	29	0	-1.3%
92.6%	29	29	0	-0.5%
93.8%	29	29	0	-1.4%
95.1%	29	29	0	-0.8%
96.3%	29	29	0	-0.3%
97.5%	29	29	0	-0.1%
98.8%	28	28	0	0.0%
100.0%	28	28	0	0.0%

Table SW-56-b

Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	1.0%
1.2%	46	46	0	0.0%
2.5%	46	46	0	0.2%
3.7%	45	45	0	0.0%
4.9%	45	45	0	-0.2%
6.2%	45	45	0	0.0%
7.4%	45	45	0	0.0%
8.6%	45	45	0	0.2%
9.9%	45	45	0	0.0%
11.1%	45	44	0	-0.2%
12.3%	44	44	0	0.0%
13.6%	44	44	0	-0.4%
14.8%	44	44	0	-0.4%
16.0%	44	44	0	-0.2%
17.3%	44	44	0	-0.6%
18.5%	44	44	0	-0.4%
19.8%	44	44	0	-0.2%
21.0%	44	43	0	-0.4%
22.2%	44	43	0	-0.2%
23.5%	44	43	0	-0.6%
24.7%	44	43	0	-0.6%
25.9%	43	43	0	-0.2%
27.2%	43	43	0	0.0%
28.4%	43	43	0	0.0%
29.6%	43	43	0	0.0%
30.9%	43	42	-1	-1.4%
32.1%	43	42	-1	-1.6%
33.3%	43	42	-1	-1.6%
34.6%	43	42	0	-1.0%
35.8%	42	42	-1	-1.2%
37.0%	42	42	-1	-1.2%
38.3%	42	42	0	-1.0%
39.5%	42	42	-1	-1.2%
40.7%	42	41	-1	-2.0%
42.0%	42	41	-1	-2.1%
43.2%	42	41	-1	-1.7%
44.4%	41	40	-1	-2.8%
45.7%	41	39	-2	-4.7%
46.9%	40	39	-2	-4.3%
48.1%	40	38	-2	-4.3%
49.4%	40	38	-2	-3.9%
50.6%	39	38	-1	-3.6%
51.9%	39	37	-2	-5.5%
53.1%	38	37	-2	-4.9%
54.3%	37	35	-3	-6.7%
55.6%	37	35	-2	-6.5%
56.8%	37	35	-2	-6.6%
58.0%	37	34	-2	-6.4%
59.3%	37	34	-3	-6.9%
60.5%	36	34	-2	-6.1%
61.7%	36	33	-3	-7.3%
63.0%	36	33	-3	-7.7%
64.2%	35	33	-2	-6.7%
65.4%	35	33	-2	-6.7%
66.7%	35	32	-3	-7.9%
67.9%	35	32	-3	-8.8%
69.1%	35	32	-3	-8.6%
70.4%	34	32	-3	-7.9%
71.6%	34	32	-3	-7.6%
72.8%	34	31	-2	-6.4%
74.1%	33	31	-2	-6.7%
75.3%	33	31	-2	-5.4%
76.5%	32	31	-1	-4.0%
77.8%	32	31	-1	-4.2%
79.0%	32	31	-1	-2.9%
80.2%	31	31	-1	-2.0%
81.5%	31	30	-1	-1.9%
82.7%	31	30	-1	-2.4%
84.0%	31	30	-1	-2.7%
85.2%	31	30	-1	-2.9%
86.4%	30	30	0	-1.6%
87.7%	30	29	-1	-3.7%
88.9%	30	29	-1	-3.1%
90.1%	30	29	-1	-3.2%
91.4%	30	28	-1	-4.1%
92.6%	29	28	-1	-3.0%
93.8%	29	28	-1	-3.4%
95.1%	29	28	0	-1.6%
96.3%	28	28	0	-0.1%
97.5%	28	28	0	0.3%
98.8%	28	28	0	1.2%
100.0%	27	28	1	3.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	0.3%
1.2%	46	45	0	-0.3%
2.5%	45	45	0	-0.2%
3.7%	45	44	0	-0.7%
4.9%	44	44	0	-0.6%
6.2%	44	44	0	-0.7%
7.4%	44	44	0	-0.6%
8.6%	44	44	0	-0.2%
9.9%	44	44	0	-0.4%
11.1%	44	44	0	-0.2%
12.3%	44	43	0	-0.8%
13.6%	43	43	0	-0.2%
14.8%	43	43	0	-0.2%
16.0%	43	43	0	-0.2%
17.3%	43	43	0	-0.6%
18.5%	43	43	0	0.0%
19.8%	43	42	0	-0.4%
21.0%	42	42	0	-0.8%
22.2%	42	42	0	-0.8%
23.5%	42	42	0	-0.2%
24.7%	42	42	0	-0.4%
25.9%	42	42	0	-0.6%
27.2%	42	41	-1	-1.7%
28.4%	42	41	-1	-2.5%
29.6%	41	40	-1	-2.1%
30.9%	41	39	-2	-4.1%
32.1%	40	39	-2	-3.9%
33.3%	40	39	-1	-3.7%
34.6%	40	39	-1	-2.8%
35.8%	40	38	-1	-3.7%
37.0%	40	38	-2	-4.2%
38.3%	40	38	-2	-4.9%
39.5%	39	37	-2	-5.1%
40.7%	39	36	-3	-6.7%
42.0%	39	36	-3	-7.4%
43.2%	39	36	-3	-7.2%
44.4%	39	36	-3	-7.8%
45.7%	39	35	-4	-9.2%
46.9%	38	35	-3	-8.2%
48.1%	38	35	-3	-8.6%
49.4%	38	34	-4	-11.0%
50.6%	37	33	-4	-11.1%
51.9%	37	33	-4	-10.2%
53.1%	37	33	-4	-10.8%
54.3%	36	33	-4	-9.7%
55.6%	36	32	-3	-9.7%
56.8%	36	32	-4	-9.9%
58.0%	36	32	-4	-9.9%
59.3%	35	32	-3	-8.2%
60.5%	35	32	-2	-7.1%
61.7%	35	32	-2	-7.1%
63.0%	34	32	-2	-4.9%
64.2%	34	32	-2	-4.8%
65.4%	33	32	-1	-4.3%
66.7%	33	32	-2	-5.0%
67.9%	33	31	-2	-5.3%
69.1%	33	31	-2	-5.5%
70.4%	33	31	-2	-5.9%
71.6%	33	31	-2	-5.9%
72.8%	33	31	-2	-6.4%
74.1%	33	31	-2	-6.5%
75.3%	32	31	-2	-5.2%
76.5%	32	31	-2	-5.1%
77.8%	32	30	-2	-5.5%
79.0%	32	30	-2	-6.5%
80.2%	32	30	-2	-6.6%
81.5%	31	30	-1	-4.6%
82.7%	31	30	-1	-4.4%
84.0%	31	30	-1	-4.0%
85.2%	31	30	-1	-3.6%
86.4%	31	30	-1	-3.7%
87.7%	31	30	-1	-3.1%
88.9%	30	30	0	-0.6%
90.1%	29	29	0	0.4%
91.4%	29	29	1	2.1%
92.6%	29	29	1	2.1%
93.8%	29	29	0	0.7%
95.1%	29	29	0	0.8%
96.3%	28	29	0	1.0%
97.5%	28	29	0	0.7%
98.8%	28	28	0	0.6%
100.0%	27	28	1	2.0%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	44	44	0	-0.2%
1.2%	43	43	0	-0.2%
2.5%	43	43	0	0.0%
3.7%	43	43	0	0.0%
4.9%	43	42	-1	-2.0%
6.2%	42	41	0	-0.4%
7.4%	41	41	0	-0.2%
8.6%	41	41	0	-0.2%
9.9%	41	41	0	-0.9%
11.1%	41	41	0	0.0%
12.3%	40	40	0	-0.2%
13.6%	40	40	-1	-1.3%
14.8%	40	40	0	-1.1%
16.0%	40	40	0	-1.1%
17.3%	40	40	0	-0.6%
18.5%	40	39	-1	-1.3%
19.8%	39	38	-1	-3.3%
21.0%	38	37	-2	-4.0%
22.2%	37	35	-2	-4.9%
23.5%	37	35	-2	-5.1%
24.7%	37	34	-3	-7.5%
25.9%	36	33	-3	-8.7%
27.2%	34	33	-1	-3.8%
28.4%	33	33	0	-1.3%
29.6%	33	32	0	-0.7%
30.9%	32	32	0	-0.6%
32.1%	32	32	0	-0.9%
33.3%	32	31	-1	-2.6%
34.6%	31	30	-1	-4.8%
35.8%	31	30	-2	-5.0%
37.0%	30	30	0	-1.0%
38.3%	30	29	0	-1.0%
39.5%	30	29	0	-1.7%
40.7%	30	29	0	-1.1%
42.0%	29	29	0	-0.6%
43.2%	29	29	0	0.0%
44.4%	29	29	0	0.1%
45.7%	29	29	0	0.6%
46.9%	29	29	0	0.4%
48.1%	29	29	0	0.0%
49.4%	29	29	0	-0.2%
50.6%	29	29	0	0.0%
51.9%	29	29	0	0.0%
53.1%	29	29	0	0.1%
54.3%	28	29	0	0.3%
55.6%	28	29	0	0.4%
56.8%	28	29	0	0.4%
58.0%	28	28	0	0.2%
59.3%	28	28	0	0.2%
60.5%	28	28	0	0.3%
61.7%	28	28	0	0.2%
63.0%	28	28	0	0.3%
64.2%	28	28	0	0.2%
65.4%	28	28	0	0.3%
66.7%	28	28	0	0.2%
67.9%	28	28	0	0.5%
69.1%	28	28	0	0.5%
70.4%	28	28	0	0.9%
71.6%	28	28	0	0.9%
72.8%	28	28	0	0.6%
74.1%	28	28	0	0.2%
75.3%	28	28	0	0.3%
76.5%	28	28	0	0.4%
77.8%	28	28	0	0.3%
79.0%	28	28	0	0.0%
80.2%	28	28	0	0.1%
81.5%	28	28	0	0.0%
82.7%	27	27	0	0.6%
84.0%	27	27	0	-0.3%
85.2%	27	27	0	0.0%
86.4%	27	27	0	0.0%
87.7%	27	27	0	0.0%
88.9%	26	26	0	0.0%
90.1%	26	26	0	0.0%
91.4%	26	26	0	0.0%
92.6%	26	26	0	0.0%
93.8%	26	26	0	0.0%
95.1%	26	26	0	0.0%
96.3%	26	26	0	0.0%
97.5%	26	26	0	0.0%
98.8%	26	26	0	0.0%
100.0%	26	26	0	0.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	42	42	0	0.0%
1.2%	41	41	0	0.0%
2.5%	41	41	-1	-1.3%
3.7%	40	40	0	0.2%
4.9%	40	40	0	0.0%
6.2%	40	40	0	0.0%
7.4%	39	38	-1	-2.4%
8.6%	38	36	-2	-6.1%
9.9%	36	36	0	-0.5%
11.1%	36	36	0	-0.5%
12.3%	35	35	0	-0.8%
13.6%	35	35	0	-0.3%
14.8%	35	35	0	-0.5%
16.0%	35	34	0	-0.5%
17.3%	34	34	0	-0.6%
18.5%	33	33	0	0.4%
19.8%	32	32	0	-0.4%
21.0%	32	32	0	0.0%
22.2%	32	31	-1	-2.6%
23.5%	31	31	0	-0.3%
24.7%	31	31	0	0.0%
25.9%	31	31	0	-0.3%
27.2%	31	30	0	-1.1%
28.4%	30	30	0	-0.5%
29.6%	30	30	0	0.7%
30.9%	29	29	0	1.3%
32.1%	29	29	0	0.7%
33.3%	29	29	0	1.5%
34.6%	29	29	0	1.3%
35.8%	29	29	0	0.2%
37.0%	29	29	0	0.0%
38.3%	29	29	0	-0.2%
39.5%	28	28	0	0.0%
40.7%	28	28	0	0.0%
42.0%	28	28	0	0.0%
43.2%	28	28	0	0.0%
44.4%	28	28	0	0.0%
45.7%	28	28	0	-0.1%
46.9%	28	28	0	0.0%
48.1%	28	28	0	0.0%
49.4%	28	28	0	0.0%
50.6%	28	28	0	0.0%
51.9%	28	28	0	0.0%
53.1%	28	28	0	0.0%
54.3%	28	28	0	0.0%
55.6%	28	28	0	0.0%
56.8%	28	28	0	0.2%
58.0%	28	28	0	0.1%
59.3%	28	28	0	0.6%
60.5%	28	28	0	0.5%
61.7%	28	28	0	0.3%
63.0%	28	28	0	0.4%
64.2%	28	28	0	0.3%
65.4%	28	28	0	0.2%
66.7%	28	28	0	0.0%
67.9%	28	28	0	0.4%
69.1%	28	28	0	0.4%
70.4%	28	28	0	0.2%
71.6%	28	28	0	0.2%
72.8%	27	28	0	0.4%
74.1%	27	28	0	0.3%
75.3%	27	27	0	0.2%
76.5%	27	27	0	0.3%
77.8%	27	27	0	0.2%
79.0%	27	27	0	0.8%
80.2%	27	27	0	0.0%
81.5%	27	27	0	0.1%
82.7%	27	27	0	0.2%
84.0%	27	27	0	0.0%
85.2%	27	27	0	0.1%
86.4%	27	27	0	0.2%
87.7%	27	27	0	-0.2%
88.9%	26	27	0	0.8%
90.1%	26	26	0	0.1%
91.4%	26	26	0	0.4%
92.6%	26	26	0	0.3%
93.8%	26	26	0	0.1%
95.1%	26	26	0	0.0%
96.3%	26	26	0	0.0%
97.5%	26	26	0	0.0%
98.8%	26	26	0	0.0%
100.0%	26	26	0	0.0%

Table SW-56-b

Sacramento River at Wilkins Slough, Monthly Stage

Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	41	41	0	0.0%
1.2%	38	38	0	-0.2%
2.5%	34	33	-1	-3.1%
3.7%	32	33	1	1.6%
4.9%	32	32	1	2.0%
6.2%	31	32	1	2.1%
7.4%	31	32	1	3.2%
8.6%	31	32	1	2.5%
9.9%	31	32	1	3.5%
11.1%	30	31	1	3.2%
12.3%	30	31	1	3.4%
13.6%	30	31	1	3.0%
14.8%	30	31	1	3.1%
16.0%	30	31	1	3.9%
17.3%	30	31	1	3.8%
18.5%	30	31	1	3.7%
19.8%	29	30	1	3.4%
21.0%	29	30	1	3.6%
22.2%	29	30	1	4.6%
23.5%	29	30	1	4.8%
24.7%	29	30	1	5.0%
25.9%	29	30	1	4.5%
27.2%	29	30	1	4.6%
28.4%	29	30	1	4.7%
29.6%	29	30	1	4.0%
30.9%	29	30	1	3.4%
32.1%	29	29	1	3.3%
33.3%	29	29	1	3.0%
34.6%	29	29	1	2.4%
35.8%	28	29	1	2.2%
37.0%	28	29	1	2.2%
38.3%	28	29	1	2.1%
39.5%	28	29	1	1.9%
40.7%	28	29	0	1.4%
42.0%	28	29	0	1.4%
43.2%	28	29	0	1.2%
44.4%	28	29	0	1.2%
45.7%	28	29	0	1.2%
46.9%	28	29	0	1.1%
48.1%	28	29	0	1.2%
49.4%	28	29	0	1.0%
50.6%	28	29	0	0.9%
51.9%	28	28	0	0.7%
53.1%	28	28	0	0.7%
54.3%	28	28	0	0.8%
55.6%	28	28	0	0.8%
56.8%	28	28	0	0.6%
58.0%	28	28	0	0.6%
59.3%	28	28	0	0.6%
60.5%	28	28	0	0.5%
61.7%	28	28	0	0.5%
63.0%	28	28	0	0.4%
64.2%	28	28	0	0.4%
65.4%	28	28	0	0.3%
66.7%	28	28	0	0.3%
67.9%	28	28	0	0.3%
69.1%	28	28	0	0.4%
70.4%	28	28	0	0.9%
71.6%	28	28	0	1.1%
72.8%	28	28	0	1.1%
74.1%	28	28	0	1.4%
75.3%	28	28	0	1.4%
76.5%	28	28	0	1.5%
77.8%	28	28	0	1.5%
79.0%	28	28	0	1.6%
80.2%	28	28	0	1.8%
81.5%	28	28	1	1.8%
82.7%	27	28	1	2.1%
84.0%	27	28	1	2.7%
85.2%	27	28	1	3.5%
86.4%	27	28	1	3.1%
87.7%	27	28	1	3.0%
88.9%	27	28	1	3.2%
90.1%	27	28	1	3.2%
91.4%	27	28	1	2.6%
92.6%	26	28	1	4.3%
93.8%	26	27	1	2.6%
95.1%	26	27	1	2.9%
96.3%	26	27	1	2.0%
97.5%	26	27	1	2.0%
98.8%	26	26	0	1.5%
100.0%	26	26	1	2.2%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	34	34	0	0.9%
1.2%	34	34	0	0.6%
2.5%	33	34	1	4.0%
3.7%	33	34	1	4.3%
4.9%	32	34	2	4.9%
6.2%	32	34	2	5.2%
7.4%	32	34	2	5.8%
8.6%	32	34	2	5.4%
9.9%	32	34	2	5.6%
11.1%	32	34	2	5.7%
12.3%	32	33	2	5.4%
13.6%	32	33	2	5.4%
14.8%	32	33	1	4.7%
16.0%	32	33	1	4.7%
17.3%	32	33	2	4.8%
18.5%	32	33	2	5.0%
19.8%	31	33	2	5.1%
21.0%	31	33	2	5.4%
22.2%	31	33	2	5.4%
23.5%	31	33	2	5.0%
24.7%	31	32	1	4.1%
25.9%	31	32	1	4.3%
27.2%	31	32	1	4.3%
28.4%	31	32	1	4.2%
29.6%	31	32	1	3.9%
30.9%	31	32	1	3.7%
32.1%	31	32	1	3.5%
33.3%	31	32	1	3.8%
34.6%	31	32	1	4.0%
35.8%	31	32	1	4.1%
37.0%	31	32	1	4.0%
38.3%	31	32	1	4.0%
39.5%	31	32	1	4.3%
40.7%	30	32	1	4.5%
42.0%	30	32	1	4.4%
43.2%	30	32	1	4.2%
44.4%	30	31	1	3.9%
45.7%	30	31	1	4.1%
46.9%	30	31	1	4.3%
48.1%	30	31	1	4.5%
49.4%	30	31	1	4.4%
50.6%	30	31	1	4.4%
51.9%	30	31	1	4.4%
53.1%	30	31	1	4.4%
54.3%	30	31	1	4.6%
55.6%	29	31	2	6.0%
56.8%	29	31	1	4.8%
58.0%	29	31	2	5.2%
59.3%	29	30	1	4.8%
60.5%	29	30	1	4.5%
61.7%	29	30	1	4.5%
63.0%	29	30	1	4.9%
64.2%	29	30	1	4.8%
65.4%	29	30	1	4.9%
66.7%	29	30	1	4.9%
67.9%	29	30	1	4.8%
69.1%	29	30	1	4.7%
70.4%	29	30	1	4.7%
71.6%	29	30	1	5.0%
72.8%	28	30	2	6.0%
74.1%	28	30	2	5.7%
75.3%	28	30	2	5.6%
76.5%	28	30	2	5.6%
77.8%	28	30	1	5.3%
79.0%	28	29	1	4.6%
80.2%	28	29	1	4.6%
81.5%	28	29	1	4.4%
82.7%	28	29	1	3.8%
84.0%	28	29	1	2.3%
85.2%	28	29	1	2.3%
86.4%	28	29	1	2.2%
87.7%	28	29	1	2.1%
88.9%	28	28	0	0.6%
90.1%	28	28	0	1.1%
91.4%	28	28	0	1.0%
92.6%	28	28	0	1.0%
93.8%	28	28	1	2.3%
95.1%	28	28	1	2.3%
96.3%	27	28	1	2.6%
97.5%	26	28	2	7.9%
98.8%	26	28	2	6.4%
100.0%	26	27	2	7.0%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	34	34	0	-0.5%
1.2%	32	32	0	-0.5%
2.5%	32	32	0	0.5%
3.7%	32	32	0	0.0%
4.9%	32	32	0	0.2%
6.2%	31	32	0	1.1%
7.4%	31	31	0	0.8%
8.6%	31	31	0	1.2%
9.9%	31	31	0	0.6%
11.1%	31	31	0	0.4%
12.3%	31	31	0	1.0%
13.6%	30	31	1	1.9%
14.8%	30	31	1	1.9%
16.0%	30	31	1	2.3%
17.3%	30	31	1	2.1%
18.5%	30	31	1	2.7%
19.8%	30	30	1	2.6%
21.0%	30	30	1	2.8%
22.2%	29	30	1	3.0%
23.5%	29	30	1	3.4%
24.7%	29	30	1	4.4%
25.9%	29	30	1	4.4%
27.2%	29	30	1	3.8%
28.4%	29	30	1	3.2%
29.6%	29	30	1	3.2%
30.9%	29	30	1	3.8%
32.1%	29	30	1	4.1%
33.3%	29	30	1	4.3%
34.6%	29	30	1	4.2%
35.8%	28	30	1	4.2%
37.0%	28	30	1	3.9%
38.3%	28	29	1	3.4%
39.5%	28	29	1	3.9%
40.7%	28	29	1	3.9%
42.0%	28	29	1	3.8%
43.2%	28	29	1	3.2%
44.4%	28	29	1	2.9%
45.7%	28	29	1	2.9%
46.9%	28	29	1	2.7%
48.1%	28	29	1	2.6%
49.4%	28	29	1	2.2%
50.6%	28	29	1	2.0%
51.9%	28	29	1	2.0%
53.1%	28	29	0	1.5%
54.3%	28	28	0	1.3%
55.6%	28	28	0	1.2%
56.8%	28	28	0	1.2%
58.0%	28	28	0	1.2%
59.3%	28	28	0	1.2%
60.5%	28	28	0	0.9%
61.7%	28	28	0	0.8%
63.0%	28	28	0	0.7%
64.2%	28	28	0	0.6%
65.4%	28	28	0	0.4%
66.7%	28	28	0	0.4%
67.9%	28	28	0	0.4%
69.1%	28	28	0	1.5%
70.4%	28	28	0	1.6%
71.6%	28	28	0	1.6%
72.8%	28	28	0	1.7%
74.1%	28	28	1	1.9%
75.3%	28	28	1	2.2%
76.5%	27	28	1	2.3%
77.8%	27	28	1	2.3%
79.0%	27	28	1	2.4%
80.2%	27	28	1	2.3%
81.5%	27	28	1	2.4%
82.7%	27	28	1	2.5%
84.0%	27	28	1	3.2%
85.2%	27	28	1	3.7%
86.4%	27	28	1	3.9%
87.7%	27	28	1	4.4%
88.9%	27	28	1	4.7%
90.1%	27	28	1	4.8%
91.4%	27	28	1	4.8%
92.6%	27	28	1	4.8%
93.8%	27	28	1	4.8%
95.1%	26	28	1	5.1%
96.3%	26	28	1	5.7%
97.5%	26	27	1	5.5%
98.8%	26	27	1	5.5%
100.0%	26	26	0	0.1%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	38	38	0	0.5%
1.2%	38	38	0	0.0%
2.5%	38	38	0	0.0%
3.7%	38	38	0	0.0%
4.9%	38	38	0	0.0%
6.2%	38	38	0	0.0%
7.4%	38	38	0	0.0%
8.6%	38	38	0	1.2%
9.9%	37	38	1	2.2%
11.1%	37	38	1	3.9%
12.3%	37	38	1	3.4%
13.6%	36	37	1	2.2%
14.8%	36	37	1	2.0%
16.0%	36	37	1	1.8%
17.3%	36	37	0	1.3%
18.5%	36	37	1	2.1%
19.8%	36	37	1	2.0%
21.0%	36	37	1	2.3%
22.2%	36	36	1	1.8%
23.5%	36	36	1	1.8%
24.7%	35	36	1	2.4%
25.9%	35	36	1	2.1%
27.2%	35	36	1	1.8%
28.4%	35	35	0	0.0%
29.6%	34	34	0	-0.9%
30.9%	34	34	0	-0.9%
32.1%	34	34	0	0.0%
33.3%	34	34	0	-0.3%
34.6%	34	33	-1	-2.2%
35.8%	32	33	1	1.9%
37.0%	32	32	1	2.2%
38.3%	32	32	1	1.8%
39.5%	32	32	0	1.3%
40.7%	31	32	0	1.0%
42.0%	31	32	1	3.1%
43.2%	31	32	1	3.7%
44.4%	30	32	1	5.0%
45.7%	30	31	1	4.4%
46.9%	30	31	1	4.5%
48.1%	30	31	1	4.7%
49.4%	29	31	1	4.9%
50.6%	29	31	2	5.9%
51.9%	29	31	2	6.1%
53.1%	29	30	2	6.3%
54.3%	28	30	2	6.6%
55.6%	28	30	2	6.6%
56.8%	28	30	2	6.3%
58.0%	28	30	2	6.3%
59.3%	28	30	2	6.3%
60.5%	28	30	2	6.5%
61.7%	28	30	2	6.3%
63.0%	28	30	2	6.4%
64.2%	28	30	2	6.5%
65.4%	28	30	2	6.4%
66.7%	28	30	2	6.1%
67.9%	28	30	2	6.8%
69.1%	28	30	2	6.7%
70.4%	28	30	2	6.8%
71.6%	28	30	2	7.1%
72.8%	28	29	2	7.1%
74.1%	28	29	2	6.9%
75.3%	28	29	2	6.6%
76.5%	27	29	2	6.5%
77.8%	27	29	2	6.4%
79.0%	27	29	2	6.2%
80.2%	27	29	2	6.3%
81.5%	27	29	2	6.4%
82.7%	27	29	2	6.6%
84.0%	27	29	2	6.9%
85.2%	27	29	2	6.5%
86.4%	27	28	2	5.8%
87.7%	27	28	2	5.8%
88.9%	27	28	1	5.3%
90.1%	27	28	1	5.1%
91.4%	27	28	1	4.8%
92.6%	27	28	1	4.1%
93.8%	26	28	1	4.6%
95.1%	26	27	1	4.7%
96.3%	26	27	1	4.2%
97.5%	26	27	1	3.8%
98.8%	26	26	0	1.1%
100.0%	26	26	0	1.1%

Figure SW-57-b
Feather River near Gridley, Monthly Stage
Probability of Exceedance

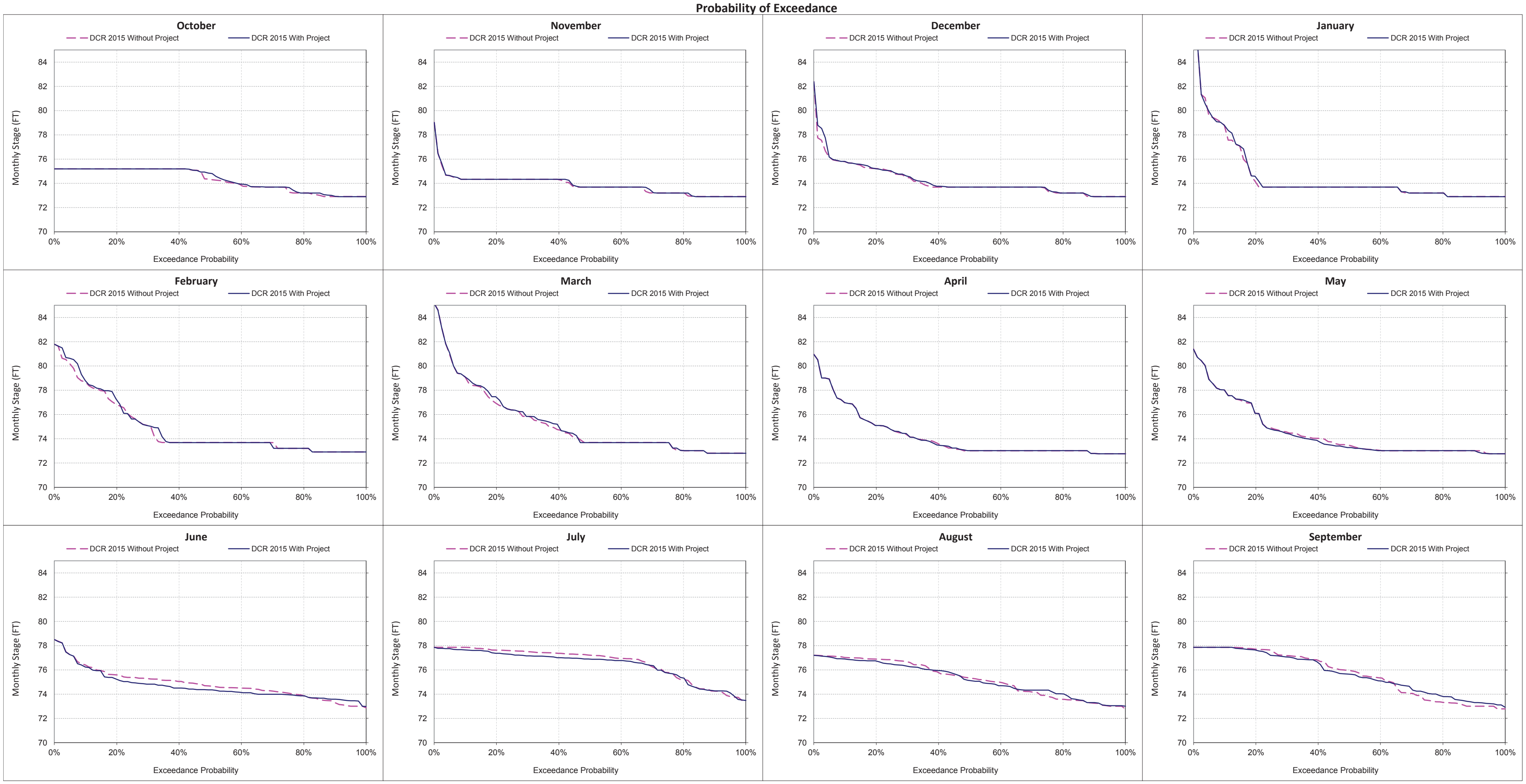


Table SW-57-b

Feather River near Gridley, Monthly Stage

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	75	75	0	0.0%
1.2%	75	75	0	0.0%
2.5%	75	75	0	0.0%
3.7%	75	75	0	0.0%
4.9%	75	75	0	0.0%
6.2%	75	75	0	0.0%
7.4%	75	75	0	0.0%
8.6%	75	75	0	0.0%
9.9%	75	75	0	0.0%
11.1%	75	75	0	0.0%
12.3%	75	75	0	0.0%
13.6%	75	75	0	0.0%
14.8%	75	75	0	0.0%
16.0%	75	75	0	0.0%
17.3%	75	75	0	0.0%
18.5%	75	75	0	0.0%
19.8%	75	75	0	0.0%
21.0%	75	75	0	0.0%
22.2%	75	75	0	0.0%
23.5%	75	75	0	0.0%
24.7%	75	75	0	0.0%
25.9%	75	75	0	0.0%
27.2%	75	75	0	0.0%
28.4%	75	75	0	0.0%
29.6%	75	75	0	0.0%
30.9%	75	75	0	0.0%
32.1%	75	75	0	0.0%
33.3%	75	75	0	0.0%
34.6%	75	75	0	0.0%
35.8%	75	75	0	0.0%
37.0%	75	75	0	0.0%
38.3%	75	75	0	0.0%
39.5%	75	75	0	0.0%
40.7%	75	75	0	0.0%
42.0%	75	75	0	0.0%
43.2%	75	75	0	0.0%
44.4%	75	75	0	0.0%
45.7%	75	75	0	0.0%
46.9%	75	75	0	-0.1%
48.1%	74	75	1	0.7%
49.4%	74	75	0	0.7%
50.6%	74	75	1	0.7%
51.9%	74	75	0	0.4%
53.1%	74	74	0	0.3%
54.3%	74	74	0	0.1%
55.6%	74	74	0	0.2%
56.8%	74	74	0	0.1%
58.0%	74	74	0	0.1%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.2%
61.7%	74	74	0	0.2%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	73	74	0	0.5%
76.5%	73	73	0	0.3%
77.8%	73	73	0	0.1%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.1%
84.0%	73	73	0	0.2%
85.2%	73	73	0	0.3%
86.4%	73	73	0	0.2%
87.7%	73	73	0	0.2%
88.9%	73	73	0	0.1%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	79	79	0	0.0%
1.2%	76	76	0	0.0%
2.5%	75	76	0	0.2%
3.7%	75	75	0	0.0%
4.9%	75	75	0	0.0%
6.2%	75	75	0	0.0%
7.4%	74	74	0	0.0%
8.6%	74	74	0	0.0%
9.9%	74	74	0	0.0%
11.1%	74	74	0	0.0%
12.3%	74	74	0	0.0%
13.6%	74	74	0	0.0%
14.8%	74	74	0	0.0%
16.0%	74	74	0	0.0%
17.3%	74	74	0	0.0%
18.5%	74	74	0	0.0%
19.8%	74	74	0	0.0%
21.0%	74	74	0	0.0%
22.2%	74	74	0	0.0%
23.5%	74	74	0	0.0%
24.7%	74	74	0	0.0%
25.9%	74	74	0	0.0%
27.2%	74	74	0	0.0%
28.4%	74	74	0	0.0%
29.6%	74	74	0	0.0%
30.9%	74	74	0	0.0%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.0%
34.6%	74	74	0	0.0%
35.8%	74	74	0	0.0%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.1%
42.0%	74	74	0	0.3%
43.2%	74	74	0	0.3%
44.4%	74	74	0	0.1%
45.7%	74	74	0	0.1%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	73	74	0	0.5%
69.1%	73	73	0	0.4%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.3%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	82	82	0	0.0%
1.2%	78	79	1	1.3%
2.5%	78	79	1	1.3%
3.7%	77	78	1	1.4%
4.9%	76	76	0	0.0%
6.2%	76	76	0	0.0%
7.4%	76	76	0	0.0%
8.6%	76	76	0	0.0%
9.9%	76	76	0	0.0%
11.1%	76	76	0	0.0%
12.3%	76	76	0	0.0%
13.6%	76	76	0	0.0%
14.8%	76	76	0	0.1%
16.0%	75	76	0	0.3%
17.3%	75	75	0	0.2%
18.5%	75	75	0	0.0%
19.8%	75	75	0	0.0%
21.0%	75	75	0	0.0%
22.2%	75	75	0	-0.1%
23.5%	75	75	0	0.0%
24.7%	75	75	0	0.1%
25.9%	75	75	0	0.1%
27.2%	75	75	0	0.0%
28.4%	75	75	0	0.1%
29.6%	74	75	0	0.2%
30.9%	74	75	0	0.1%
32.1%	74	74	0	0.2%
33.3%	74	74	0	0.1%
34.6%	74	74	0	0.2%
35.8%	74	74	0	0.4%
37.0%	74	74	0	0.4%
38.3%	74	74	0	0.2%
39.5%	74	74	0	0.1%
40.7%	74	74	0	0.1%
42.0%	74	74	0	0.1%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.1%
75.3%	73	73	0	0.2%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.1%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.2%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	87	87	0	0.0%
1.2%	86	86	0	0.0%
2.5%	81	81	0	0.0%
3.7%	81	81	0	-0.6%
4.9%	80	80	0	0.5%
6.2%	79	79	0	0.0%
7.4%	79	79	0	-0.2%
8.6%	79	79	0	-0.1%
9.9%	79	79	0	0.0%
11.1%	78	78	1	1.0%
12.3%	78	78	1	0.8%
13.6%	77	77	0	0.1%
14.8%	77	77	0	0.0%
16.0%	76	77	1	1.1%
17.3%	76	76	0	0.0%
18.5%	75	75	0	0.0%
19.8%	74	75	0	0.6%
21.0%	74	74	0	0.6%
22.2%	74	74	0	0.0%
23.5%	74	74	0	0.0%
24.7%	74	74	0	0.0%
25.9%	74	74	0	0.0%
27.2%	74	74	0	0.0%
28.4%	74	74	0	0.0%
29.6%	74	74	0	0.0%
30.9%	74	74	0	0.0%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.0%
34.6%	74	74	0	0.0%
35.8%	74	74	0	0.0%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	73	73	0	0.0%
67.9%	73	73	0	0.1%
69.1%	73	73	0	0.0%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

Table SW-57-b
Feather River near Gridley, Monthly Stage
Probability of Exceedance

February				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	82	82	0	0.0%
1.2%	82	82	0	0.0%
2.5%	81	81	1	1.1%
3.7%	81	81	0	0.2%
4.9%	80	81	0	0.6%
6.2%	80	81	1	0.9%
7.4%	79	80	1	1.4%
8.6%	79	79	1	0.7%
9.9%	79	79	0	0.1%
11.1%	78	78	0	0.1%
12.3%	78	78	0	0.2%
13.6%	78	78	0	0.1%
14.8%	78	78	0	0.2%
16.0%	78	78	0	0.0%
17.3%	77	78	1	0.8%
18.5%	77	78	1	1.1%
19.8%	77	77	0	0.6%
21.0%	77	77	0	0.2%
22.2%	77	76	0	-0.6%
23.5%	76	76	0	0.0%
24.7%	76	76	0	-0.2%
25.9%	76	76	0	0.0%
27.2%	75	75	0	0.0%
28.4%	75	75	0	0.0%
29.6%	75	75	0	0.0%
30.9%	75	75	0	0.0%
32.1%	74	75	1	1.0%
33.3%	74	75	1	1.6%
34.6%	74	74	0	0.6%
35.8%	74	74	0	0.1%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	73	0	-0.6%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

March				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	85	85	0	-0.1%
1.2%	85	85	0	0.0%
2.5%	83	83	0	0.0%
3.7%	82	82	0	0.0%
4.9%	81	81	0	0.1%
6.2%	80	80	0	0.0%
7.4%	79	79	0	0.0%
8.6%	79	79	0	0.1%
9.9%	79	79	0	0.0%
11.1%	79	79	0	0.4%
12.3%	78	79	0	0.2%
13.6%	78	78	0	0.0%
14.8%	78	78	0	0.1%
16.0%	78	78	0	0.4%
17.3%	77	78	0	0.6%
18.5%	77	77	0	0.4%
19.8%	77	77	1	0.7%
21.0%	77	77	0	0.6%
22.2%	77	77	0	0.0%
23.5%	76	76	0	0.0%
24.7%	76	76	0	0.0%
25.9%	76	76	0	0.0%
27.2%	76	76	0	0.0%
28.4%	76	76	0	0.5%
29.6%	76	76	0	0.0%
30.9%	76	76	0	0.0%
32.1%	76	76	0	0.4%
33.3%	75	76	0	0.2%
34.6%	75	76	0	0.3%
35.8%	75	75	0	0.3%
37.0%	75	75	0	0.6%
38.3%	75	75	0	0.4%
39.5%	75	75	0	0.6%
40.7%	75	75	0	0.0%
42.0%	75	75	0	0.1%
43.2%	74	75	0	0.1%
44.4%	74	74	0	0.4%
45.7%	74	74	0	0.1%
46.9%	74	74	0	-0.3%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.2%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

April				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	81	81	0	0.0%
1.2%	81	81	0	0.0%
2.5%	79	79	0	0.0%
3.7%	79	79	0	0.0%
4.9%	79	79	0	0.0%
6.2%	78	78	0	0.0%
7.4%	77	77	0	0.0%
8.6%	77	77	0	0.0%
9.9%	77	77	0	0.0%
11.1%	77	77	0	0.0%
12.3%	77	77	0	0.0%
13.6%	76	76	0	0.0%
14.8%	76	76	0	0.0%
16.0%	76	76	0	0.0%
17.3%	75	75	0	0.0%
18.5%	75	75	0	0.0%
19.8%	75	75	0	0.0%
21.0%	75	75	0	0.0%
22.2%	75	75	0	0.0%
23.5%	75	75	0	0.0%
24.7%	75	75	0	0.0%
25.9%	75	75	0	0.0%
27.2%	75	75	0	0.1%
28.4%	74	74	0	0.0%
29.6%	74	74	0	0.1%
30.9%	74	74	0	0.0%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.0%
34.6%	74	74	0	-0.1%
35.8%	74	74	0	0.0%
37.0%	74	74	0	-0.1%
38.3%	74	74	0	-0.2%
39.5%	74	73	0	-0.2%
40.7%	73	73	0	-0.1%
42.0%	73	73	0	0.1%
43.2%	73	73	0	0.2%
44.4%	73	73	0	0.0%
45.7%	73	73	0	0.1%
46.9%	73	73	0	0.0%
48.1%	73	73	0	0.1%
49.4%	73	73	0	0.0%
50.6%	73	73	0	0.0%
51.9%	73	73	0	0.0%
53.1%	73	73	0	0.0%
54.3%	73	73	0	0.0%
55.6%	73	73	0	0.0%
56.8%	73	73	0	0.0%
58.0%	73	73	0	0.0%
59.3%	73	73	0	0.0%
60.5%	73	73	0	0.0%
61.7%	73	73	0	0.0%
63.0%	73	73	0	0.0%
64.2%	73	73	0	0.0%
65.4%	73	73	0	0.0%
66.7%	73	73	0	0.0%
67.9%	73	73	0	0.0%
69.1%	73	73	0	0.0%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

May				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	81	81	0	0.0%
1.2%	81	81	0	0.0%
2.5%	80	80	0	0.0%
3.7%	80	80	0	0.0%
4.9%	79	79	0	0.0%
6.2%	79	79	0	0.0%
7.4%	78	78	0	0.0%
8.6%	78	78	0	0.0%
9.9%	78	78	0	0.0%
11.1%	78	78	0	0.0%
12.3%	78	78	0	0.0%
13.6%	77	77	0	0.0%
14.8%	77	77	0	0.1%
16.0%	77	77	0	0.2%
17.3%	77	77	0	0.1%
18.5%	77	77	0	0.0%
19.8%	76	76	0	0.0%
21.0%	76	76	0	0.0%
22.2%	75	75	0	0.0%
23.5%	75	75	0	0.0%
24.7%	75	75	0	-0.2%
25.9%	75	75	0	-0.1%
27.2%	75	75	0	-0.1%
28.4%	75	75	0	0.0%
29.6%	75	74	0	-0.2%
30.9%	74	74	0	-0.1%
32.1%	74	74	0	-0.3%
33.3%	74	74	0	-0.3%
34.6%	74	74	0	-0.1%
35.8%	74	74	0	-0.2%
37.0%	74	74	0	-0.2%
38.3%	74	74	0	-0.2%
39.5%	74	74	0	-0.2%
40.7%	74	74	0	-0.4%
42.0%	74	74	0	-0.6%
43.2%	74	74	0	-0.3%
44.4%	74	73	0	-0.4%
45.7%	74	73	0	-0.2%
46.9%	74	73	0	-0.2%
48.1%	74	73	0	-0.2%
49.4%	73	73	0	-0.3%
50.6%	73	73	0	-0.2%
51.9%	73	73	0	-0.1%
53.1%	73	73	0	0.0%
54.3%	73	73	0	0.0%
55.6%	73	73	0	0.0%
56.8%	73	73	0	0.0%
58.0%	73	73	0	-0.1%
59.3%	73	73	0	-0.1%
60.5%	73	73	0	0.0%
61.7%	73	73	0	0.0%
63.0%	73	73	0	0.0%
64.2%	73	73	0	0.0%
65.4%	73	73	0	0.0%
66.7%	73	73	0	0.0%
67.9%	73	73	0	0.0%
69.1%	73	73	0	0.0%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	-0.2%
92.6%	73	73	0	-0.3%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

Table SW-57-b
Feather River near Gridley, Monthly Stage
Probability of Exceedance

June

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	79	0	0.0%
1.2%	78	78	0	-0.1%
2.5%	78	78	0	0.0%
3.7%	77	77	0	0.0%
4.9%	77	77	0	0.0%
6.2%	77	77	0	0.0%
7.4%	77	77	0	-0.2%
8.6%	77	76	0	-0.1%
9.9%	76	76	0	-0.2%
11.1%	76	76	0	-0.1%
12.3%	76	76	0	-0.3%
13.6%	76	76	0	-0.1%
14.8%	76	76	0	0.0%
16.0%	76	75	0	-0.6%
17.3%	76	75	0	-0.3%
18.5%	76	75	0	-0.3%
19.8%	76	75	0	-0.5%
21.0%	76	75	0	-0.6%
22.2%	75	75	0	-0.5%
23.5%	75	75	0	-0.4%
24.7%	75	75	0	-0.6%
25.9%	75	75	0	-0.6%
27.2%	75	75	0	-0.6%
28.4%	75	75	0	-0.6%
29.6%	75	75	0	-0.6%
30.9%	75	75	0	-0.6%
32.1%	75	75	0	-0.6%
33.3%	75	75	0	-0.7%
34.6%	75	75	0	-0.6%
35.8%	75	75	0	-0.6%
37.0%	75	75	0	-0.7%
38.3%	75	75	-1	-0.8%
39.5%	75	75	-1	-0.7%
40.7%	75	74	-1	-0.7%
42.0%	75	74	0	-0.6%
43.2%	75	74	-1	-0.7%
44.4%	75	74	0	-0.6%
45.7%	75	74	0	-0.6%
46.9%	75	74	0	-0.6%
48.1%	75	74	0	-0.4%
49.4%	75	74	0	-0.4%
50.6%	75	74	0	-0.4%
51.9%	75	74	0	-0.4%
53.1%	75	74	0	-0.4%
54.3%	75	74	0	-0.4%
55.6%	75	74	0	-0.4%
56.8%	75	74	0	-0.4%
58.0%	75	74	0	-0.5%
59.3%	75	74	0	-0.5%
60.5%	74	74	0	-0.5%
61.7%	74	74	0	-0.5%
63.0%	74	74	0	-0.5%
64.2%	74	74	0	-0.5%
65.4%	74	74	0	-0.5%
66.7%	74	74	0	-0.4%
67.9%	74	74	0	-0.4%
69.1%	74	74	0	-0.4%
70.4%	74	74	0	-0.4%
71.6%	74	74	0	-0.3%
72.8%	74	74	0	-0.3%
74.1%	74	74	0	-0.2%
75.3%	74	74	0	-0.2%
76.5%	74	74	0	-0.1%
77.8%	74	74	0	-0.1%
79.0%	74	74	0	-0.1%
80.2%	74	74	0	0.0%
81.5%	74	74	0	0.0%
82.7%	74	74	0	0.0%
84.0%	74	74	0	0.0%
85.2%	74	74	0	0.2%
86.4%	73	74	0	0.2%
87.7%	73	74	0	0.2%
88.9%	73	74	0	0.2%
90.1%	73	74	0	0.4%
91.4%	73	74	0	0.6%
92.6%	73	74	0	0.6%
93.8%	73	73	0	0.6%
95.1%	73	73	0	0.6%
96.3%	73	73	0	0.6%
97.5%	73	73	0	0.6%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.2%

July

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	78	0	0.0%
1.2%	78	78	0	-0.1%
2.5%	78	78	0	-0.1%
3.7%	78	78	0	-0.1%
4.9%	78	78	0	-0.1%
6.2%	78	78	0	-0.2%
7.4%	78	78	0	-0.2%
8.6%	78	78	0	-0.2%
9.9%	78	78	0	-0.3%
11.1%	78	78	0	-0.3%
12.3%	78	78	0	-0.3%
13.6%	78	78	0	-0.2%
14.8%	78	78	0	-0.2%
16.0%	78	78	0	-0.2%
17.3%	78	78	0	-0.2%
18.5%	78	77	0	-0.3%
19.8%	78	77	0	-0.3%
21.0%	78	77	0	-0.3%
22.2%	78	77	0	-0.4%
23.5%	78	77	0	-0.4%
24.7%	78	77	0	-0.4%
25.9%	78	77	0	-0.5%
27.2%	78	77	0	-0.4%
28.4%	78	77	0	-0.4%
29.6%	77	77	0	-0.4%
30.9%	77	77	0	-0.4%
32.1%	77	77	0	-0.4%
33.3%	77	77	0	-0.4%
34.6%	77	77	0	-0.4%
35.8%	77	77	0	-0.4%
37.0%	77	77	0	-0.4%
38.3%	77	77	0	-0.4%
39.5%	77	77	0	-0.5%
40.7%	77	77	0	-0.5%
42.0%	77	77	0	-0.4%
43.2%	77	77	0	-0.4%
44.4%	77	77	0	-0.4%
45.7%	77	77	0	-0.4%
46.9%	77	77	0	-0.4%
48.1%	77	77	0	-0.5%
49.4%	77	77	0	-0.4%
50.6%	77	77	0	-0.4%
51.9%	77	77	0	-0.4%
53.1%	77	77	0	-0.4%
54.3%	77	77	0	-0.4%
55.6%	77	77	0	-0.3%
56.8%	77	77	0	-0.3%
58.0%	77	77	0	-0.3%
59.3%	77	77	0	-0.2%
60.5%	77	77	0	-0.2%
61.7%	77	77	0	-0.3%
63.0%	77	77	0	-0.3%
64.2%	77	77	0	-0.3%
65.4%	77	77	0	-0.4%
66.7%	77	77	0	-0.2%
67.9%	77	76	0	-0.2%
69.1%	76	76	0	0.0%
70.4%	76	76	0	0.2%
71.6%	76	76	0	-0.1%
72.8%	76	76	0	-0.1%
74.1%	76	76	0	0.0%
75.3%	76	76	0	-0.1%
76.5%	76	76	0	0.0%
77.8%	75	76	0	0.3%
79.0%	75	75	0	0.2%
80.2%	75	75	0	0.1%
81.5%	75	75	0	-0.5%
82.7%	75	75	0	-0.2%
84.0%	75	75	0	0.0%
85.2%	74	74	0	0.0%
86.4%	74	74	0	-0.1%
87.7%	74	74	0	-0.1%
88.9%	74	74	0	0.0%
90.1%	74	74	0	0.0%
91.4%	74	74	0	0.0%
92.6%	74	74	0	0.2%
93.8%	74	74	0	0.5%
95.1%	74	74	0	0.4%
96.3%	74	74	0	0.1%
97.5%	74	74	0	-0.2%
98.8%	73	74	0	0.1%
100.0%	73	73	0	0.1%

August

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	77	77	0	0.0%
1.2%	77	77	0	0.0%
2.5%	77	77	0	-0.1%
3.7%	77	77	0	0.0%
4.9%	77	77	0	-0.1%
6.2%	77	77	0	-0.2%
7.4%	77	77	0	-0.2%
8.6%	77	77	0	-0.2%
9.9%	77	77	0	-0.2%
11.1%	77	77	0	-0.2%
12.3%	77	77	0	-0.2%
13.6%	77	77	0	-0.3%
14.8%	77	77	0	-0.3%
16.0%	77	77	0	-0.2%
17.3%	77	77	0	-0.2%
18.5%	77	77	0	-0.2%
19.8%	77	77	0	-0.2%
21.0%	77	77	0	-0.3%
22.2%	77	77	0	-0.4%
23.5%	77	77	0	-0.4%
24.7%	77	76	0	-0.5%
25.9%	77	76	0	-0.5%
27.2%	77	76	0	-0.5%
28.4%	77	76	0	-0.5%
29.6%	77	76	0	-0.5%
30.9%	77	76	0	-0.4%
32.1%	76	76	0	-0.3%
33.3%	76	76	0	-0.3%
34.6%	76	76	0	-0.4%
35.8%	76	76	0	-0.4%
37.0%	76	76	0	-0.1%
38.3%	76	76	0	0.1%
39.5%	76	76	0	0.1%
40.7%	76	76	0	0.3%
42.0%	76	76	0	0.3%
43.2%	76	76	0	0.3%
44.4%	76	76	0	0.2%
45.7%	76	76	0	0.1%
46.9%	75	76	0	0.0%
48.1%	75	75	0	-0.2%
49.4%	75	75	0	-0.3%
50.6%	75	75	0	-0.3%
51.9%	75	75	0	-0.3%
53.1%	75	75	0	-0.2%
54.3%	75	75	0	-0.4%
55.6%	75	75	0	-0.3%
56.8%	75	75	0	-0.2%
58.0%	75	75	0	-0.3%
59.3%	75	75	0	-0.4%
60.5%	75	75	0	-0.3%
61.7%	75	75	0	-0.2%
63.0%	75	75	0	-0.1%
64.2%	75	74	0	-0.3%
65.4%	74	74	0	0.2%
66.7%	74	74	0	0.1%
67.9%	74	74	0	0.2%
69.1%	74	74	0	0.2%
70.4%	74	74	0	0.2%
71.6%	74	74	0	0.3%
72.8%	74	74	0	0.6%
74.1%	74	74	0	0.6%
75.3%	74	74	1	0.7%
76.5%	74	74	0	0.6%
77.8%	74	74	0	0.6%
79.0%	74	74	0	0.6%
80.2%	74	74	0	0.6%
81.5%	74	74	0	0.4%
82.7%	74	74	0	0.1%
84.0%	73	74	0	0.1%
85.2%	73	74	0	0.1%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.1%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.1%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.3%

September

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	78	0	0.0%
1.2%	78	78	0	0.0%
2.5%	78	78	0	0.0%
3.7%	78	78	0	0.0%
4.9%	78	78	0	0.0%
6.2%	78	78	0	0.0%
7.4%	78	78	0	0.0%
8.6%	78	78	0	0.0%
9.9%	78	78	0	0.0%
11.1%	78	78	0	0.0%
12.3%	78	78	0	0.0%
13.6%	78	78	0	-0.1%
14.8%	78	78	0	-0.1%
16.0%	78	78	0	-0.1%
17.3%	78	78	0	-0.1%
18.5%	78	78	0	-0.1%
19.8%	78	78	0	-0.1%
21.0%	78	78	0	-0.1%
22.2%	78	78	0	-0.2%
23.5%	78	77	0	-0.3%
24.7%	78	77	0	-0.6%
25.9%	77	77	0	-0.3%
27.2%	77	77	0	-0.1%
28.4%	77	77	0	-0.1%
29.6%	77	77	0	-0.1%
30.9%	77	77	0	-0.1%
32.1%	77	77	0	-0.2%
33.3%	77	77	0	-0.3%
34.6%	77	77	0	-0.3%
35.8%	77	77	0	-0.2%
37.0%	77	77	0	-0.1%
38.3%	77	77	0	0.0%
39.5%	77	77	0	-0.2%
40.7%	77	76	0	-0.3%
42.0%	77	76	-1	-1.0%
43.2%	76	76	0	-0.5%
44.4%	76	76	0	-0.4%
45.7%	76	76	0	-0.4%
46.9%	76	76	0	-0.4%
48.1%	76	76	0	-0.4%
49.4%	76	76	0	-0.4%
50.6%	76	76	0	-0.4%
51.9%	76	76	0	-0.4%
53.1%	76	75	0	-0.4%
54.3%	75	75	0	-0.2%
55.6%	75	75	0	-0.2%
56.8%	75	75	0	-0.2%
58.0%	75	75	0	-0.3%
59.3%	75	75	0	-0.3%
60.5%	75	75	0	-0.3%
61.7%	75	75	0	-0.1%
63.0%	75	75	0	-0.1%
64.2%	75	75	0	-0.1%
65.4%	74	75	0	0.5%
66.7%	74	75	1	0.8%
67.9%	74	75	1	0.8%
69.1%	74	75	1	0.8%
70.4%	74	74	0	0.4%
71.6%	74	74	0	0.5%
72.8%	74	74	0	0.5%
74.1%	74	74	1	0.9%
75.3%	73	74	1	0.8%
76.5%	73	74	1	0.8%
77.8%	73	74	1	0.9%
79.0%	73	74	1	0.7%
80.2%	73	74	0	0.7%
81.5%	73	74	0	0.7%
82.7%	73	74	0	0.7%
84.0%	73	74	0	0.4%
85.2%	73	74	0	0.4%
86.4%	73	73	0	0.5%
87.7%	73	73	0	0.6%
88.9%	73	73	0	0.5%
90.1%	73	73	0	0.4%
91.4%	73	73	0	0.4%
92.6%	73	73	0	0.4%
93.8%	73	73	0	0.3%
95.1%	73	73	0	0.3%
96.3%	73	73	0	0.3%
97.5%	73	73	0	0.5%
98.8%	73	73	0	0.5%
100.0%	73	73	0	0.2%

Figure SW-58-b
American River at Fair Oaks, Monthly Stage
Probability of Exceedance

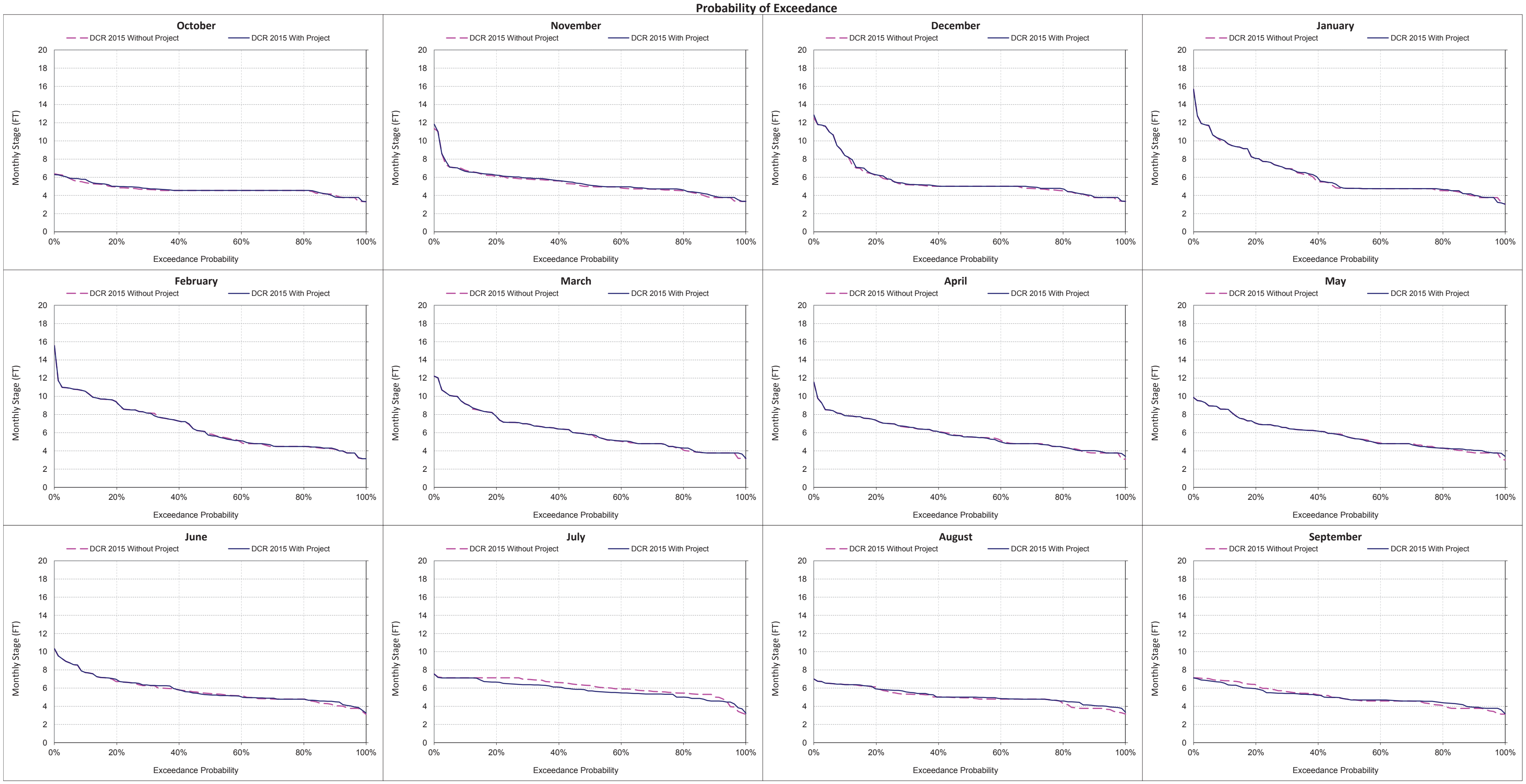


Table SW-58-b

American River at Fair Oaks, Monthly Stage

Probability of Exceedance

October

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	6	6	0	-1.4%
1.2%	6	6	0	-0.4%
2.5%	6	6	0	-1.3%
3.7%	6	6	0	0.1%
4.9%	6	6	0	0.5%
6.2%	6	6	0	3.6%
7.4%	6	6	0	5.7%
8.6%	6	6	0	4.7%
9.9%	5	6	0	6.7%
11.1%	5	6	0	4.1%
12.3%	5	5	0	2.2%
13.6%	5	5	0	1.0%
14.8%	5	5	0	1.0%
16.0%	5	5	0	0.9%
17.3%	5	5	0	2.8%
18.5%	5	5	0	1.1%
19.8%	5	5	0	1.1%
21.0%	5	5	0	2.6%
22.2%	5	5	0	2.7%
23.5%	5	5	0	2.9%
24.7%	5	5	0	3.4%
25.9%	5	5	0	3.6%
27.2%	5	5	0	4.0%
28.4%	5	5	0	2.9%
29.6%	5	5	0	2.4%
30.9%	5	5	0	1.8%
32.1%	5	5	0	2.0%
33.3%	5	5	0	3.1%
34.6%	5	5	0	2.7%
35.8%	5	5	0	1.6%
37.0%	5	5	0	1.5%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.0%
56.8%	5	5	0	0.0%
58.0%	5	5	0	0.0%
59.3%	5	5	0	0.0%
60.5%	5	5	0	0.0%
61.7%	5	5	0	0.0%
63.0%	5	5	0	0.0%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.0%
71.6%	5	5	0	0.0%
72.8%	5	5	0	0.0%
74.1%	5	5	0	0.0%
75.3%	5	5	0	0.0%
76.5%	5	5	0	0.0%
77.8%	5	5	0	0.0%
79.0%	5	5	0	0.0%
80.2%	5	5	0	0.2%
81.5%	5	5	0	0.9%
82.7%	4	5	0	1.9%
84.0%	4	4	0	3.6%
85.2%	4	4	0	2.1%
86.4%	4	4	0	0.3%
87.7%	4	4	0	0.1%
88.9%	4	4	0	-3.5%
90.1%	4	4	0	-4.9%
91.4%	4	4	0	-2.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	4	0	12.7%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.2%

November

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	11	12	0	4.0%
1.2%	11	11	0	0.0%
2.5%	9	9	0	0.0%
3.7%	7	8	0	5.4%
4.9%	7	7	0	0.0%
6.2%	7	7	0	0.0%
7.4%	7	7	0	0.0%
8.6%	7	7	0	-2.2%
9.9%	7	7	0	-1.6%
11.1%	7	7	0	-1.7%
12.3%	7	7	0	-0.8%
13.6%	7	7	0	-0.1%
14.8%	6	6	0	0.7%
16.0%	6	6	0	1.5%
17.3%	6	6	0	2.4%
18.5%	6	6	0	2.0%
19.8%	6	6	0	2.2%
21.0%	6	6	0	2.2%
22.2%	6	6	0	0.7%
23.5%	6	6	0	2.7%
24.7%	6	6	0	2.5%
25.9%	6	6	0	2.5%
27.2%	6	6	0	3.4%
28.4%	6	6	0	1.9%
29.6%	6	6	0	2.0%
30.9%	6	6	0	2.2%
32.1%	6	6	0	2.2%
33.3%	6	6	0	2.2%
34.6%	6	6	0	2.3%
35.8%	6	6	0	1.9%
37.0%	6	6	0	1.2%
38.3%	6	6	0	1.2%
39.5%	6	6	0	0.3%
40.7%	6	6	0	0.7%
42.0%	5	6	0	4.7%
43.2%	5	5	0	3.4%
44.4%	5	5	0	3.4%
45.7%	5	5	0	2.5%
46.9%	5	5	0	5.0%
48.1%	5	5	0	4.7%
49.4%	5	5	0	3.0%
50.6%	5	5	0	2.4%
51.9%	5	5	0	2.6%
53.1%	5	5	0	1.4%
54.3%	5	5	0	0.7%
55.6%	5	5	0	0.0%
56.8%	5	5	0	0.0%
58.0%	5	5	0	0.0%
59.3%	5	5	0	1.5%
60.5%	5	5	0	3.1%
61.7%	5	5	0	3.7%
63.0%	5	5	0	4.6%
64.2%	5	5	0	3.3%
65.4%	5	5	0	2.5%
66.7%	5	5	0	2.4%
67.9%	5	5	0	1.1%
69.1%	5	5	0	0.2%
70.4%	5	5	0	0.5%
71.6%	5	5	0	1.2%
72.8%	5	5	0	1.6%
74.1%	5	5	0	2.6%
75.3%	5	5	0	2.6%
76.5%	5	5	0	3.3%
77.8%	5	5	0	3.6%
79.0%	5	5	0	2.7%
80.2%	5	5	0	1.7%
81.5%	4	4	0	-0.9%
82.7%	4	4	0	1.9%
84.0%	4	4	0	2.4%
85.2%	4	4	0	3.7%
86.4%	4	4	0	5.0%
87.7%	4	4	0	8.0%
88.9%	4	4	0	6.3%
90.1%	4	4	0	3.1%
91.4%	4	4	0	1.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	3	4	0	11.1%
97.5%	3	4	0	5.1%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.0%

December

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	13	13	0	2.5%
1.2%	12	12	0	0.0%
2.5%	12	12	0	0.7%
3.7%	12	12	0	0.0%
4.9%	11	11	0	0.0%
6.2%	11	11	0	-0.4%
7.4%	10	10	0	0.0%
8.6%	9	9	0	0.0%
9.9%	8	8	0	0.0%
11.1%	8	8	0	0.0%
12.3%	7	8	1	8.0%
13.6%	7	7	0	1.0%
14.8%	7	7	0	1.0%
16.0%	7	7	0	6.5%
17.3%	6	7	0	2.3%
18.5%	6	6	0	0.0%
19.8%	6	6	0	0.9%
21.0%	6	6	0	0.7%
22.2%	6	6	0	4.9%
23.5%	6	6	0	0.8%
24.7%	6	6	0	2.8%
25.9%	6	5	0	-1.3%
27.2%	5	5	0	1.9%
28.4%	5	5	0	2.6%
29.6%	5	5	0	1.6%
30.9%	5	5	0	0.8%
32.1%	5	5	0	1.1%
33.3%	5	5	0	0.5%
34.6%	5	5	0	1.0%
35.8%	5	5	0	1.9%
37.0%	5	5	0	2.7%
38.3%	5	5	0	1.8%
39.5%	5	5	0	0.6%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.0%
56.8%	5	5	0	0.0%
58.0%	5	5	0	0.0%
59.3%	5	5	0	0.0%
60.5%	5	5	0	0.0%
61.7%	5	5	0	0.0%
63.0%	5	5	0	0.0%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	3.1%
67.9%	5	5	0	4.4%
69.1%	5	5	0	3.1%
70.4%	5	5	0	3.2%
71.6%	5	5	0	3.4%
72.8%	5	5	0	1.7%
74.1%	5	5	0	2.2%
75.3%	5	5	0	3.6%
76.5%	5	5	0	3.6%
77.8%	5	5	0	4.6%
79.0%	5	5	0	5.5%
80.2%	5	5	0	4.2%
81.5%	4	4	0	-0.9%
82.7%	4	4	0	0.6%
84.0%	4	4	0	1.5%
85.2%	4	4	0	1.3%
86.4%	4	4	0	0.1%
87.7%	4	4	0	1.8%
88.9%	4	4	0	4.1%
90.1%	4	4	0	1.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	4	0	10.6%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.1%

January

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	16	16	0	0.0%
1.2%	13	13	0	0.0%
2.5%	12	12	0	0.0%
3.7%	12	12	0	0.0%
4.9%	12	12	0	0.7%
6.2%	11	11	0	0.0%
7.4%	10	10	0	0.0%
8.6%	10	10	0	1.9%
9.9%	10	10	0	0.4%
11.1%	10	10	0	0.0%
12.3%	9	9	0	0.0%
13.6%	9	9	0	0.0%
14.8%	9	9	0	0.0%
16.0%	9	9	0	0.0%
17.3%	9	9	0	0.0%
18.5%	8	8	0	0.0%
19.8%	8	8	0	0.0%
21.0%	8	8	0	0.0%
22.2%	8	8	0	0.0%
23.5%	8	8	0	0.0%
24.7%	8	8	0	0.0%
25.9%	7	7	0	0.0%
27.2%	7	7	0	0.0%
28.4%	7	7	0	0.0%
29.6%	7	7	0	0.0%
30.9%	7	7	0	-0.1%
32.1%	7	7	0	-2.4%
33.3%	6	7	0	1.5%
34.6%	6	7	0	1.8%
35.8%	6	7	0	3.9%
37.0%	6	6	0	1.6%
38.3%	6	6	0	3.8%
39.5%	6	6	0	8.3%
40.7%	5	6	0	1.8%
42.0%	5	6	0	0.4%
43.2%	5	5	0	0.6%
44.4%	5	5	0	5.2%
45.7%	5	5	0	7.9%
46.9%	5	5	0	2.6%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.0%
56.8%	5	5	0	0.0%
58.0%	5	5	0	0.0%
59.3%	5	5	0	0.0%
60.5%	5	5	0	0.0%
61.7%	5	5	0	0.0%
63.0%	5	5	0	0.0%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.0%
71.6%	5	5	0	0.0%
72.8%	5	5	0	0.0%
74.1%	5	5	0	0.0%
75.3%	5	5	0	0.0%
76.5%	5	5	0	0.0%
77.8%	5	5	0	3.0%
79.0%	5	5	0	3.1%
80.2%	5	5	0	2.5%
81.5%	5	5	0	2.9%
82.7%	4	5	0	0.9%
84.0%	4	5	0	1.8%
85.2%	4	5	0	3.4%
86.4%	4	4	0	-1.7%
87.7%	4	4	0	0.9%
88.9%	4	4	0	4.4%
90.1%	4	4	0	1.2%
91.4%	4	4	0	5.2%
92.6%	4	4	0	1.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	4	3	-1	-14.3%
98.8%	3	3	0	-1.2%
100.0%	3	3	0	0.0%

Table SW-58-b
American River at Fair Oaks, Monthly Stage
Probability of Exceedance

February

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	16	16	0	0.0%
1.2%	12	12	0	0.0%
2.5%	11	11	0	0.0%
3.7%	11	11	0	0.0%
4.9%	11	11	0	0.0%
6.2%	11	11	0	0.0%
7.4%	11	11	0	0.0%
8.6%	11	11	0	0.0%
9.9%	11	11	0	0.0%
11.1%	10	10	0	0.0%
12.3%	10	10	0	0.0%
13.6%	10	10	0	0.0%
14.8%	10	10	0	0.0%
16.0%	10	10	0	0.3%
17.3%	10	10	0	0.0%
18.5%	10	10	0	0.0%
19.8%	9	9	0	0.0%
21.0%	9	9	0	0.9%
22.2%	9	9	0	0.0%
23.5%	9	9	0	0.0%
24.7%	9	9	0	0.0%
25.9%	9	9	0	0.0%
27.2%	8	8	0	0.0%
28.4%	8	8	0	0.0%
29.6%	8	8	0	-0.2%
30.9%	8	8	0	-0.3%
32.1%	8	8	0	-3.3%
33.3%	8	8	0	0.0%
34.6%	8	8	0	0.6%
35.8%	8	8	0	0.0%
37.0%	7	7	0	0.0%
38.3%	7	7	0	0.0%
39.5%	7	7	0	0.0%
40.7%	7	7	0	0.0%
42.0%	7	7	0	0.0%
43.2%	7	7	0	1.0%
44.4%	6	6	0	-0.5%
45.7%	6	6	0	0.0%
46.9%	6	6	0	0.0%
48.1%	6	6	0	0.0%
49.4%	6	6	0	-2.2%
50.6%	6	6	0	-2.8%
51.9%	6	6	0	-0.8%
53.1%	6	5	0	-0.9%
54.3%	5	5	0	-1.6%
55.6%	5	5	0	-2.2%
56.8%	5	5	0	-1.1%
58.0%	5	5	0	-2.5%
59.3%	5	5	0	1.0%
60.5%	5	5	0	5.1%
61.7%	5	5	0	2.4%
63.0%	5	5	0	1.1%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	1.1%
67.9%	5	5	0	2.7%
69.1%	4	5	0	3.9%
70.4%	4	5	0	0.2%
71.6%	4	4	0	0.0%
72.8%	4	4	0	0.0%
74.1%	4	4	0	0.0%
75.3%	4	4	0	0.0%
76.5%	4	4	0	0.0%
77.8%	4	4	0	0.0%
79.0%	4	4	0	0.0%
80.2%	4	4	0	0.0%
81.5%	4	4	0	0.7%
82.7%	4	4	0	1.5%
84.0%	4	4	0	0.9%
85.2%	4	4	0	2.1%
86.4%	4	4	0	0.7%
87.7%	4	4	0	1.0%
88.9%	4	4	0	1.8%
90.1%	4	4	0	0.9%
91.4%	4	4	0	-2.1%
92.6%	4	4	0	0.6%
93.8%	4	4	0	-0.4%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	3	0	1.1%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.0%

March

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	12	12	0	0.0%
1.2%	12	12	0	0.0%
2.5%	11	11	0	0.0%
3.7%	10	10	0	0.0%
4.9%	10	10	0	0.0%
6.2%	10	10	0	0.0%
7.4%	10	10	0	0.0%
8.6%	10	10	0	0.0%
9.9%	9	9	0	0.0%
11.1%	9	9	0	0.0%
12.3%	9	9	0	1.5%
13.6%	9	9	0	0.8%
14.8%	8	8	0	0.0%
16.0%	8	8	0	0.0%
17.3%	8	8	0	0.0%
18.5%	8	8	0	0.0%
19.8%	8	8	0	0.0%
21.0%	7	7	0	0.0%
22.2%	7	7	0	0.0%
23.5%	7	7	0	0.0%
24.7%	7	7	0	0.0%
25.9%	7	7	0	0.0%
27.2%	7	7	0	0.0%
28.4%	7	7	0	0.0%
29.6%	7	7	0	0.0%
30.9%	7	7	0	0.0%
32.1%	7	7	0	-0.4%
33.3%	7	7	0	-0.3%
34.6%	7	7	0	0.0%
35.8%	7	7	0	-0.1%
37.0%	7	7	0	0.0%
38.3%	7	7	0	0.0%
39.5%	6	6	0	0.0%
40.7%	6	6	0	0.0%
42.0%	6	6	0	0.0%
43.2%	6	6	0	0.0%
44.4%	6	6	0	0.0%
45.7%	6	6	0	-0.1%
46.9%	6	6	0	0.0%
48.1%	6	6	0	0.1%
49.4%	6	6	0	0.0%
50.6%	6	6	0	0.0%
51.9%	5	6	0	3.9%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.6%
56.8%	5	5	0	0.7%
58.0%	5	5	0	0.4%
59.3%	5	5	0	0.8%
60.5%	5	5	0	1.2%
61.7%	5	5	0	1.2%
63.0%	5	5	0	2.6%
64.2%	5	5	0	0.3%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.0%
71.6%	5	5	0	0.0%
72.8%	5	5	0	0.0%
74.1%	5	5	0	-0.5%
75.3%	4	4	0	0.0%
76.5%	4	4	0	0.0%
77.8%	4	4	0	1.9%
79.0%	4	4	0	0.2%
80.2%	4	4	0	6.7%
81.5%	4	4	0	7.8%
82.7%	4	4	0	4.6%
84.0%	4	4	0	0.0%
85.2%	4	4	0	0.0%
86.4%	4	4	0	0.0%
87.7%	4	4	0	0.0%
88.9%	4	4	0	0.0%
90.1%	4	4	0	0.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	4	1	18.5%
98.8%	3	4	0	14.9%
100.0%	3	3	0	0.3%

April

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	12	12	0	0.0%
1.2%	10	10	0	0.0%
2.5%	9	9	0	0.0%
3.7%	9	9	0	0.0%
4.9%	8	8	0	0.0%
6.2%	8	8	0	0.0%
7.4%	8	8	0	0.0%
8.6%	8	8	0	0.0%
9.9%	8	8	0	0.0%
11.1%	8	8	0	0.0%
12.3%	8	8	0	0.0%
13.6%	8	8	0	0.1%
14.8%	8	8	0	0.1%
16.0%	8	8	0	0.0%
17.3%	8	8	0	-0.1%
18.5%	8	8	0	0.0%
19.8%	7	7	0	0.0%
21.0%	7	7	0	0.0%
22.2%	7	7	0	0.0%
23.5%	7	7	0	0.0%
24.7%	7	7	0	0.0%
25.9%	7	7	0	0.0%
27.2%	7	7	0	0.7%
28.4%	7	7	0	0.8%
29.6%	7	7	0	1.1%
30.9%	7	7	0	0.4%
32.1%	6	7	0	1.2%
33.3%	6	6	0	0.0%
34.6%	6	6	0	0.0%
35.8%	6	6	0	0.0%
37.0%	6	6	0	0.0%
38.3%	6	6	0	0.0%
39.5%	6	6	0	0.0%
40.7%	6	6	0	-1.2%
42.0%	6	6	0	-0.8%
43.2%	6	6	0	-2.9%
44.4%	6	6	0	-1.3%
45.7%	6	6	0	-0.8%
46.9%	6	6	0	0.0%
48.1%	6	6	0	-2.2%
49.4%	6	6	0	-0.2%
50.6%	6	6	0	0.0%
51.9%	6	6	0	0.0%
53.1%	5	5	0	-0.6%
54.3%	5	5	0	0.0%
55.6%	5	5	0	-0.9%
56.8%	5	5	0	-2.4%
58.0%	5	5	0	-2.9%
59.3%	5	5	0	-4.2%
60.5%	5	5	0	-2.1%
61.7%	5	5	0	-2.0%
63.0%	5	5	0	-0.9%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.0%
71.6%	5	5	0	0.0%
72.8%	5	5	0	-1.5%
74.1%	5	5	0	-0.8%
75.3%	5	5	0	0.0%
76.5%	4	4	0	0.0%
77.8%	4	4	0	0.0%
79.0%	4	4	0	0.2%
80.2%	4	4	0	0.6%
81.5%	4	4	0	0.0%
82.7%	4	4	0	-1.5%
84.0%	4	4	0	-2.3%
85.2%	4	4	0	-2.4%
86.4%	4	4	0	3.6%
87.7%	4	4	0	4.3%
88.9%	4	4	0	6.3%
90.1%	4	4	0	6.6%
91.4%	4	4	0	5.1%
92.6%	4	4	0	2.9%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	4	4	0	0.0%
98.8%	3	4	1	19.2%
100.0%	3	3	0	10.0%

May

Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	10	10	0	0.0%
1.2%	10	10	0	0.0%
2.5%	9	9	0	0.0%
3.7%	9	9	0	0.0%
4.9%	9	9	0	0.0%
6.2%	9	9	0	0.0%
7.4%	9	9	0	0.0%
8.6%	9	9	0	0.0%
9.9%	9	9	0	0.0%
11.1%	9	9	0	0.0%
12.3%	8	8	0	0.0%
13.6%	8	8	0	0.0%
14.8%	8	8	0	0.0%
16.0%	7	7	0	0.0%
17.3%	7	7	0	0.0%
18.5%	7	7	0	0.0%
19.8%	7	7	0	0.0%
21.0%	7	7	0	0.0%
22.2%	7	7	0	0.0%
23.5%	7	7	0	0.0%
24.7%	7	7	0	0.0%
25.9%	7	7	0	0.0%
27.2%	7	7	0	0.0%
28.4%	7	7	0	0.0%
29.6%	7	7	0	-0.1%
30.9%	6	6	0	0.0%
32.1%	6	6	0	0.0%
33.3%	6	6	0	0.0%
34.6%	6	6	0	0.0%
35.8%	6	6	0	0.0%
37.0%	6	6	0	0.0%
38.3%	6	6	0	-0.1%
39.5%	6	6	0	0.0%
40.7%	6	6	0	0.0%
42.0%	6	6	0	0.0%
43.2%	6	6	0	0.0%
44.4%	6	6	0	0.0%
45.7%	6	6	0	0.0%
46.9%	6	6	0	-1.6%
48.1%	6	6	0	-1.5%
49.4%	6	6	0	0.0%
50.6%	5	5	0	-0.1%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	-0.9%
55.6%	5	5	0	-2.3%
56.8%	5	5	0	-0.5%
58.0%	5	5	0	0.0%
59.3%	5	5	0	-2.5%
60.5%	5	5	0	-0.4%
61.7%	5	5	0	0.0%
63.0%	5	5	0	0.0%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	-3.2%
71.6%	5	5	0	-1.6%
72.8%	5	4	0	-3.1%
74.1%	5	4	0	-1.0%
75.3%	4	4	0	-2.0%
76.5%	4	4	0	-3.1%
77.8%	4	4	0	0.0%
79.0%	4	4	0	-0.2%
80.2%	4	4	0	-0.5%
81.5%	4	4	0	1.6%
82.7%	4	4	0	1.0%
84.0%	4	4	0	2.4%
85.2%	4	4	0	4.2%
86.4%	4	4	0	3.7%
87.7%	4	4	0	5.8%
88.9%	4	4	0	6.3%
90.1%	4	4	0	7.2%
91.4%	4	4	0	7.4%
92.6%	4	4	0	6.7%
93.8%	4	4	0	2.9%
95.1%	4	4	0	1.3%
96.3%	4	4	0	0.0%
97.5%	4	4	0	0.0%
98.8%	3	4	1	21.6%
100.0%	3	3	0	12.9%

Table SW-58-b

American River at Fair Oaks, Monthly Stage

Probability of Exceedance

June				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	10	10	0	0.0%
1.2%	10	10	0	0.0%
2.5%	9	9	0	0.0%
3.7%	9	9	0	0.0%
4.9%	9	9	0	0.0%
6.2%	9	9	0	0.0%
7.4%	9	9	0	0.0%
8.6%	8	8	0	0.0%
9.9%	8	8	0	0.0%
11.1%	8	8	0	0.0%
12.3%	8	8	0	0.0%
13.6%	7	7	0	0.0%
14.8%	7	7	0	0.0%
16.0%	7	7	0	0.0%
17.3%	7	7	0	0.0%
18.5%	7	7	0	1.3%
19.8%	7	7	0	3.8%
21.0%	7	7	0	0.2%
22.2%	7	7	0	0.0%
23.5%	7	7	0	0.0%
24.7%	7	7	0	0.0%
25.9%	7	7	0	1.3%
27.2%	6	7	0	2.3%
28.4%	6	6	0	1.3%
29.6%	6	6	0	1.2%
30.9%	6	6	0	0.0%
32.1%	6	6	0	0.2%
33.3%	6	6	0	4.5%
34.6%	6	6	0	4.5%
35.8%	6	6	0	4.9%
37.0%	6	6	0	4.9%
38.3%	6	6	0	0.0%
39.5%	6	6	0	0.0%
40.7%	6	6	0	0.0%
42.0%	6	6	0	-2.1%
43.2%	6	6	0	-1.8%
44.4%	6	5	0	-2.4%
45.7%	6	5	0	-2.6%
46.9%	5	5	0	-2.2%
48.1%	5	5	0	-3.0%
49.4%	5	5	0	-2.8%
50.6%	5	5	0	-2.6%
51.9%	5	5	0	-2.3%
53.1%	5	5	0	-2.7%
54.3%	5	5	0	-1.9%
55.6%	5	5	0	-0.7%
56.8%	5	5	0	-0.5%
58.0%	5	5	0	-0.2%
59.3%	5	5	0	-1.1%
60.5%	5	5	0	-2.8%
61.7%	5	5	0	-0.4%
63.0%	5	5	0	-0.3%
64.2%	5	5	0	0.0%
65.4%	5	5	0	1.8%
66.7%	5	5	0	1.6%
67.9%	5	5	0	1.6%
69.1%	5	5	0	1.5%
70.4%	5	5	0	1.9%
71.6%	5	5	0	0.0%
72.8%	5	5	0	0.0%
74.1%	5	5	0	0.0%
75.3%	5	5	0	0.0%
76.5%	5	5	0	0.0%
77.8%	5	5	0	0.0%
79.0%	5	5	0	0.0%
80.2%	5	5	0	0.0%
81.5%	5	5	0	1.1%
82.7%	5	5	0	1.7%
84.0%	4	5	0	3.4%
85.2%	4	5	0	5.3%
86.4%	4	5	0	6.0%
87.7%	4	5	0	6.0%
88.9%	4	5	0	7.8%
90.1%	4	4	0	10.8%
91.4%	4	4	0	10.5%
92.6%	4	4	0	4.6%
93.8%	4	4	0	6.8%
95.1%	4	4	0	7.1%
96.3%	4	4	0	3.9%
97.5%	4	4	0	2.1%
98.8%	3	4	0	3.6%
100.0%	3	3	0	4.9%

July				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	8	8	0	0.0%
1.2%	7	7	0	-0.7%
2.5%	7	7	0	-0.4%
3.7%	7	7	0	0.0%
4.9%	7	7	0	0.0%
6.2%	7	7	0	0.0%
7.4%	7	7	0	0.0%
8.6%	7	7	0	0.0%
9.9%	7	7	0	0.0%
11.1%	7	7	0	0.0%
12.3%	7	7	0	0.0%
13.6%	7	7	0	-0.8%
14.8%	7	7	0	-3.4%
16.0%	7	7	0	-5.8%
17.3%	7	7	0	-6.1%
18.5%	7	7	0	-6.6%
19.8%	7	7	0	-6.7%
21.0%	7	7	0	-6.9%
22.2%	7	7	-1	-8.6%
23.5%	7	6	-1	-9.1%
24.7%	7	6	-1	-9.2%
25.9%	7	6	-1	-9.7%
27.2%	7	6	-1	-10.3%
28.4%	7	6	-1	-8.8%
29.6%	7	6	-1	-8.6%
30.9%	7	6	-1	-8.4%
32.1%	7	6	-1	-8.0%
33.3%	7	6	-1	-7.8%
34.6%	7	6	-1	-8.2%
35.8%	7	6	0	-6.4%
37.0%	7	6	0	-6.8%
38.3%	7	6	-1	-8.3%
39.5%	7	6	-1	-7.8%
40.7%	7	6	0	-7.5%
42.0%	7	6	-1	-8.9%
43.2%	7	6	-1	-8.7%
44.4%	6	6	-1	-8.4%
45.7%	6	6	-1	-8.2%
46.9%	6	6	-1	-7.9%
48.1%	6	6	0	-7.6%
49.4%	6	6	-1	-9.6%
50.6%	6	6	-1	-9.4%
51.9%	6	6	-1	-8.4%
53.1%	6	6	0	-7.7%
54.3%	6	6	0	-7.5%
55.6%	6	6	0	-8.3%
56.8%	6	6	0	-7.8%
58.0%	6	6	0	-6.7%
59.3%	6	5	0	-7.3%
60.5%	6	5	0	-7.2%
61.7%	6	5	0	-7.5%
63.0%	6	5	0	-7.5%
64.2%	6	5	0	-7.4%
65.4%	6	5	0	-6.2%
66.7%	6	5	0	-6.0%
67.9%	6	5	0	-6.0%
69.1%	6	5	0	-6.0%
70.4%	6	5	0	-4.8%
71.6%	6	5	0	-4.7%
72.8%	6	5	0	-4.4%
74.1%	6	5	0	-4.5%
75.3%	6	5	0	-3.7%
76.5%	6	5	0	-3.8%
77.8%	5	5	0	-8.3%
79.0%	5	5	0	-8.1%
80.2%	5	5	0	-8.0%
81.5%	5	5	0	-8.4%
82.7%	5	5	0	-9.1%
84.0%	5	5	0	-8.6%
85.2%	5	5	0	-8.3%
86.4%	5	5	-1	-9.8%
87.7%	5	5	-1	-12.4%
88.9%	5	5	-1	-13.9%
90.1%	5	5	0	-8.8%
91.4%	5	5	0	-8.5%
92.6%	5	5	0	-5.4%
93.8%	5	4	0	-2.1%
95.1%	4	4	1	12.8%
96.3%	4	4	0	8.6%
97.5%	3	4	0	12.0%
98.8%	3	4	0	14.7%
100.0%	3	3	0	3.8%

August				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	0.0%
1.2%	7	7	0	0.0%
2.5%	7	7	0	0.0%
3.7%	7	7	0	0.0%
4.9%	7	7	0	0.0%
6.2%	6	6	0	0.0%
7.4%	6	6	0	0.0%
8.6%	6	6	0	0.0%
9.9%	6	6	0	0.0%
11.1%	6	6	0	0.0%
12.3%	6	6	0	0.0%
13.6%	6	6	0	0.5%
14.8%	6	6	0	1.2%
16.0%	6	6	0	0.3%
17.3%	6	6	0	0.2%
18.5%	6	6	0	1.0%
19.8%	6	6	0	-3.7%
21.0%	6	6	0	-0.8%
22.2%	6	6	0	2.0%
23.5%	6	6	0	2.3%
24.7%	5	6	0	5.1%
25.9%	5	6	0	5.1%
27.2%	5	6	0	6.4%
28.4%	5	6	0	6.8%
29.6%	5	6	0	4.8%
30.9%	5	6	0	3.8%
32.1%	5	5	0	3.4%
33.3%	5	5	0	2.1%
34.6%	5	5	0	2.1%
35.8%	5	5	0	2.7%
37.0%	5	5	0	0.5%
38.3%	5	5	0	4.8%
39.5%	5	5	0	-0.4%
40.7%	5	5	0	-0.3%
42.0%	5	5	0	-0.2%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.8%
45.7%	5	5	0	1.1%
46.9%	5	5	0	1.5%
48.1%	5	5	0	1.6%
49.4%	5	5	0	1.6%
50.6%	5	5	0	1.9%
51.9%	5	5	0	2.9%
53.1%	5	5	0	4.1%
54.3%	5	5	0	4.0%
55.6%	5	5	0	3.5%
56.8%	5	5	0	3.5%
58.0%	5	5	0	3.4%
59.3%	5	5	0	1.4%
60.5%	5	5	0	1.0%
61.7%	5	5	0	0.9%
63.0%	5	5	0	0.5%
64.2%	5	5	0	0.4%
65.4%	5	5	0	0.3%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.0%
71.6%	5	5	0	0.0%
72.8%	5	5	0	0.0%
74.1%	5	5	0	0.3%
75.3%	5	5	0	0.0%
76.5%	5	5	0	-1.0%
77.8%	5	5	0	0.5%
79.0%	5	5	0	0.0%
80.2%	4	5	0	8.3%
81.5%	4	4	0	7.2%
82.7%	4	4	1	15.5%
84.0%	4	4	1	16.3%
85.2%	4	4	1	17.5%
86.4%	4	4	0	9.8%
87.7%	4	4	0	9.7%
88.9%	4	4	0	9.3%
90.1%	4	4	0	8.0%
91.4%	4	4	0	7.2%
92.6%	4	4	0	6.6%
93.8%	4	4	0	9.4%
95.1%	4	4	0	7.5%
96.3%	3	4	0	13.4%
97.5%	3	4	0	14.8%
98.8%	3	4	0	15.0%
100.0%	3	3	0	6.8%

September				
Percent Exceedance Probability	DCR 2015 Without Project Monthly Stage (FT)	DCR 2015 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	-0.4%
1.2%	7	7	0	-1.5%
2.5%	7	7	0	-2.6%
3.7%	7	7	0	-3.2%
4.9%	7	7	0	-3.6%
6.2%	7	7	0	-2.5%
7.4%	7	7	0	-2.6%
8.6%	7	7	0	-2.7%
9.9%	7	7	0	-4.1%
11.1%	7	6	0	-6.9%
12.3%	7	6	0	-6.3%
13.6%	7	6	0	-6.2%
14.8%	7	6	-1	-7.6%
16.0%	7	6	0	-7.4%
17.3%	6	6	0	-7.0%
18.5%	6	6	0	-7.0%
19.8%	6	6	0	-7.3%
21.0%	6	6	0	-4.1%
22.2%	6	6	0	-3.6%
23.5%	6	5	0	-8.0%
24.7%	6	5	0	-6.6%
25.9%	6	5	0	-6.2%
27.2%	6	5	0	-4.7%
28.4%	6	5	0	-5.1%
29.6%	6	5	0	-3.6%
30.9%	6	5	0	-2.9%
32.1%	6	5	0	-1.7%
33.3%	5	5	0	-1.8%
34.6%	5	5	0	-1.9%
35.8%	5	5	0	-2.1%
37.0%	5	5	0	-2.4%
38.3%	5	5	0	-1.9%
39.5%	5	5	0	-1.7%
40.7%	5	5	0	-0.2%
42.0%	5	5	0	-3.8%
43.2%	5	5	0	-3.7%
44.4%	5	5	0	-0.1%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.8%
48.1%	5	5	0	-0.5%
49.4%	5	5	0	0.2%
50.6%	5	5	0	-0.6%
51.9%	5	5	0	0.0%
53.1%	5	5	0	1.2%
54.3%	5	5	0	2.5%
55.6%	5	5	0	2.5%
56.8%	5	5	0	2.5%
58.0%	5	5	0	2.5%
59.3%	5	5	0	2.5%
60.5%	5	5	0	2.5%
61.7%	5	5	0	2.5%
63.0%	5	5	0	1.8%
64.2%	5	5	0	0.9%
65.4%	5	5	0	0.7%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.3%
71.6%	5	5	0	0.5%
72.8%	5	5	0	1.3%
74.1%	4	5	0	4.5%
75.3%	4	5	0	5.6%
76.5%	4	5	0	7.7%
77.8%	4	4	0	8.2%
79.0%	4	4	0	7.0%
80.2%	4	4	0	7.8%
81.5%	4	4	0	11.8%
82.7%	4	4	1	14.1%
84.0%	4	4	1	13.7%
85.2%	4	4	0	12.0%
86.4%	4	4	0	10.9%
87.7%	4	4	0	5.8%
88.9%	4	4	0	3.6%
90.1%	4	4	0	3.1%
91.4%	4	4	0	2.9%
92.6%	4	4	0	0.9%
93.8%	4	4	0	4.4%
95.1%	3	4	0	8.1%
96.3%	3	4	0	10.0%
97.5%	3	4	1	17.7%
98.8%	3	4	0	15.3%
100.0%	3	3	0	1.4%

Trinity and Sacramento River Basin Operations

Summary Tables and Bar Charts

Table SW-01-a
Trinity Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1,268	1,277	1,362	1,494	1,635	1,763	1,897	1,826	1,737	1,590	1,439	1,320
WSIP 2030 With Project	1,259	1,271	1,358	1,494	1,637	1,764	1,898	1,827	1,743	1,598	1,436	1,312
Difference	-10	-6	-4	0	3	1	1	1	6	8	-3	-8
Percent Difference[3]	-0.8%	-0.5%	-0.3%	0.0%	0.2%	0.1%	0.1%	0.1%	0.4%	0.5%	-0.2%	-0.6%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1,537	1,526	1,600	1,772	1,940	2,062	2,230	2,167	2,043	1,904	1,769	1,626
WSIP 2030 With Project	1,517	1,510	1,585	1,775	1,950	2,070	2,235	2,172	2,057	1,913	1,753	1,608
Difference	-20	-16	-15	3	10	8	5	5	13	9	-16	-18
Percent Difference	-1.3%	-1.1%	-0.9%	0.2%	0.5%	0.4%	0.2%	0.2%	0.6%	0.5%	-0.9%	-1.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	1,457	1,458	1,512	1,637	1,817	1,994	2,149	2,057	1,970	1,810	1,655	1,511
WSIP 2030 With Project	1,469	1,481	1,537	1,632	1,819	2,002	2,158	2,067	1,988	1,838	1,679	1,527
Difference	12	23	25	-4	2	8	9	9	17	28	24	16
Percent Difference	0.8%	1.6%	1.7%	-0.3%	0.1%	0.4%	0.4%	0.5%	0.9%	1.6%	1.4%	1.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	1,260	1,269	1,361	1,400	1,552	1,699	1,848	1,781	1,705	1,572	1,406	1,306
WSIP 2030 With Project	1,238	1,249	1,343	1,390	1,542	1,686	1,837	1,770	1,698	1,563	1,391	1,289
Difference	-22	-19	-18	-10	-10	-13	-11	-11	-7	-9	-14	-17
Percent Difference	-1.7%	-1.5%	-1.3%	-0.7%	-0.6%	-0.7%	-0.6%	-0.6%	-0.4%	-0.6%	-1.0%	-1.3%
Dry (19.5%)												
WSIP 2030 Without Project	1,085	1,127	1,274	1,368	1,478	1,615	1,720	1,636	1,549	1,376	1,211	1,104
WSIP 2030 With Project	1,078	1,123	1,269	1,369	1,480	1,603	1,710	1,626	1,543	1,387	1,210	1,093
Difference	-7	-4	-5	1	2	-12	-11	-11	-6	11	-1	-11
Percent Difference	-0.6%	-0.4%	-0.4%	0.1%	0.1%	-0.8%	-0.6%	-0.6%	-0.4%	0.8%	-0.1%	-1.0%
Critical (14.6%)												
WSIP 2030 Without Project	776	788	837	1,075	1,142	1,200	1,254	1,201	1,162	1,027	889	800
WSIP 2030 With Project	781	791	847	1,084	1,150	1,217	1,272	1,217	1,178	1,035	897	807
Difference	4	3	10	8	8	18	18	16	16	8	8	7
Percent Difference	0.5%	0.4%	1.2%	0.8%	0.7%	1.5%	1.4%	1.3%	1.4%	0.8%	0.9%	0.9%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

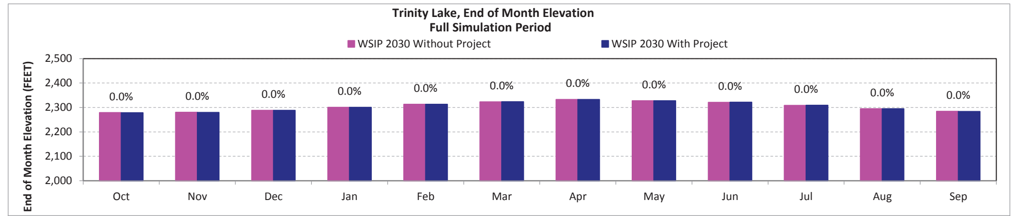
Table SW-02-a
Trinity Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

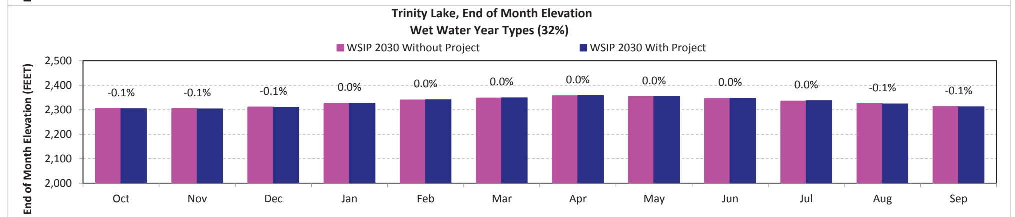
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	2,279	2,280	2,288	2,301	2,313	2,323	2,333	2,327	2,321	2,309	2,295	2,284
WSIP 2030 With Project	2,278	2,280	2,288	2,301	2,313	2,323	2,333	2,328	2,321	2,309	2,295	2,284
Difference	-1	0	0	0	0	0	0	0	1	1	0	-1
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	2,305	2,305	2,311	2,325	2,340	2,348	2,357	2,353	2,346	2,336	2,325	2,313
WSIP 2030 With Project	2,304	2,303	2,310	2,326	2,341	2,348	2,358	2,354	2,347	2,336	2,324	2,312
Difference	-2	-1	-1	0	1	1	0	0	1	1	-1	-2
Percent Difference	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	2,299	2,299	2,304	2,313	2,329	2,342	2,352	2,346	2,340	2,329	2,316	2,303
WSIP 2030 With Project	2,300	2,301	2,306	2,313	2,329	2,343	2,353	2,347	2,342	2,331	2,318	2,305
Difference	1	2	2	0	0	1	1	1	1	2	2	1
Percent Difference	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Below Normal (20.7%)												
WSIP 2030 Without Project	2,281	2,282	2,290	2,293	2,307	2,319	2,331	2,326	2,320	2,309	2,294	2,285
WSIP 2030 With Project	2,279	2,280	2,288	2,292	2,306	2,318	2,330	2,325	2,319	2,308	2,293	2,284
Difference	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-2
Percent Difference	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Dry (19.5%)												
WSIP 2030 Without Project	2,262	2,266	2,280	2,290	2,300	2,312	2,321	2,314	2,307	2,291	2,276	2,265
WSIP 2030 With Project	2,262	2,266	2,280	2,291	2,300	2,311	2,320	2,313	2,306	2,292	2,276	2,264
Difference	-1	0	0	0	0	-1	-1	-1	0	1	0	-1
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
Critical (14.6%)												
WSIP 2030 Without Project	2,225	2,227	2,234	2,261	2,268	2,274	2,279	2,274	2,271	2,256	2,238	2,228
WSIP 2030 With Project	2,226	2,228	2,236	2,262	2,269	2,276	2,281	2,276	2,272	2,257	2,240	2,230
Difference	1	1	2	1	1	2	2	2	2	1	2	2
Percent Difference	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%

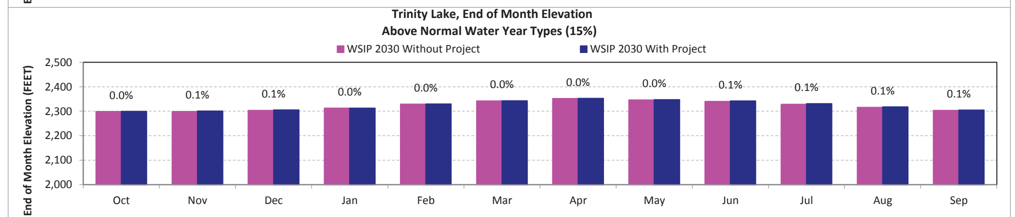
1 Based on the 82-year simulation period

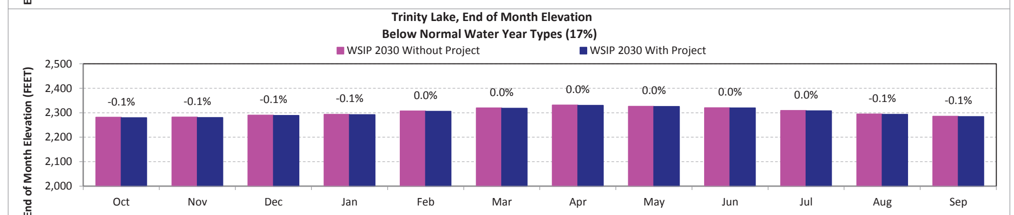
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

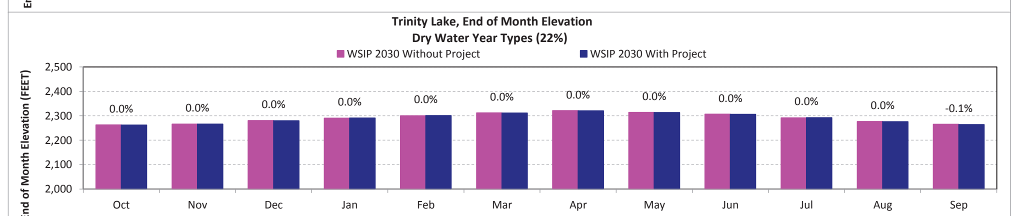
3 Relative difference of the monthly average











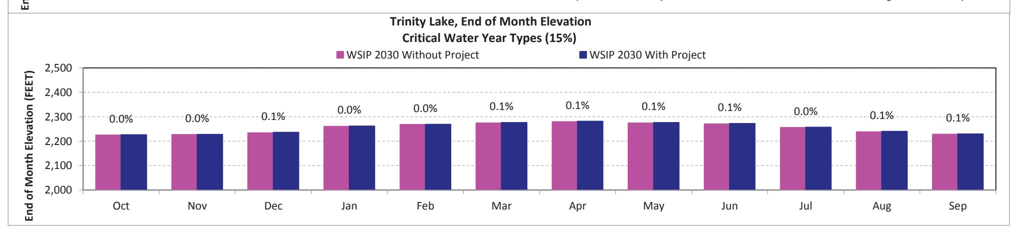


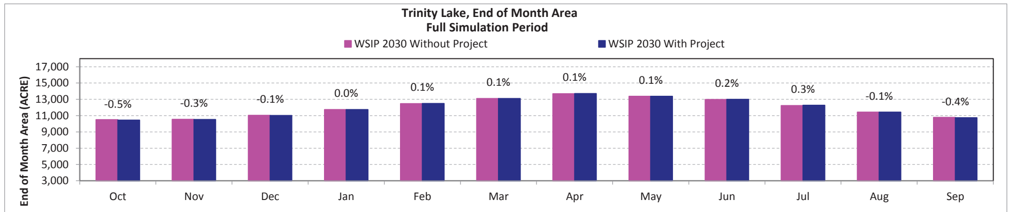
Table SW-03-a
Trinity Lake, End of Month Area
Long-term Average and Average by Water Year Type

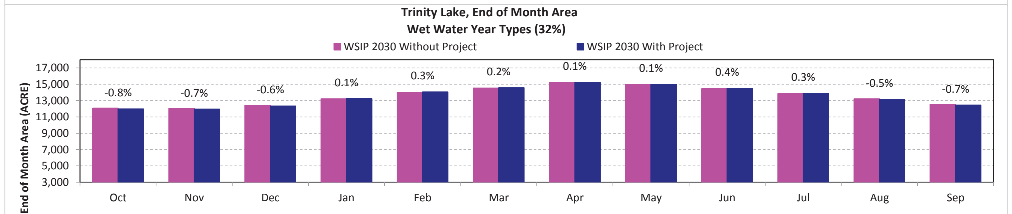
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	10,500	10,556	11,038	11,744	12,473	13,098	13,700	13,379	12,979	12,246	11,440	10,792
WSIP 2030 With Project	10,449	10,526	11,022	11,745	12,489	13,105	13,709	13,387	13,007	12,288	11,425	10,751
Difference	-51	-31	-16	1	15	7	9	8	29	42	-15	-42
Percent Difference[3]	-0.5%	-0.3%	-0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%	0.3%	-0.1%	-0.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	12,076	12,029	12,405	13,225	14,022	14,537	15,219	14,958	14,445	13,838	13,221	12,536
WSIP 2030 With Project	11,977	11,948	12,334	13,244	14,068	14,573	15,242	14,980	14,503	13,885	13,149	12,449
Difference	-99	-81	-71	19	46	35	22	22	58	47	-72	-87
Percent Difference	-0.8%	-0.7%	-0.6%	0.1%	0.3%	0.2%	0.1%	0.1%	0.4%	0.3%	-0.5%	-0.7%
Above Normal (14.6%)												
WSIP 2030 Without Project	11,661	11,655	11,952	12,490	13,389	14,218	14,875	14,497	14,134	13,428	12,693	11,965
WSIP 2030 With Project	11,731	11,788	12,095	12,489	13,418	14,264	14,920	14,545	14,212	13,559	12,813	12,053
Difference	70	133	143	0	28	46	45	48	78	131	120	88
Percent Difference	0.6%	1.1%	1.2%	0.0%	0.2%	0.3%	0.3%	0.3%	0.5%	1.0%	0.9%	0.7%
Below Normal (20.7%)												
WSIP 2030 Without Project	10,549	10,600	11,125	11,307	12,121	12,869	13,596	13,305	12,939	12,291	11,389	10,818
WSIP 2030 With Project	10,417	10,481	11,020	11,237	12,058	12,800	13,541	13,247	12,899	12,241	11,311	10,718
Difference	-132	-118	-105	-70	-63	-69	-55	-58	-40	-50	-77	-100
Percent Difference	-1.3%	-1.1%	-0.9%	-0.6%	-0.5%	-0.5%	-0.4%	-0.4%	-0.3%	-0.4%	-0.7%	-0.9%
Dry (19.5%)												
WSIP 2030 Without Project	9,435	9,688	10,526	11,126	11,766	12,480	12,993	12,588	12,155	11,205	10,240	9,581
WSIP 2030 With Project	9,392	9,662	10,504	11,142	11,782	12,422	12,954	12,547	12,120	11,262	10,223	9,504
Difference	-43	-26	-22	15	16	-58	-40	-42	-35	56	-17	-77
Percent Difference	-0.5%	-0.3%	-0.2%	0.1%	0.1%	-0.5%	-0.3%	-0.3%	-0.3%	0.5%	-0.2%	-0.8%
Critical (14.6%)												
WSIP 2030 Without Project	7,405	7,486	7,837	9,354	9,774	10,126	10,447	10,134	9,921	9,071	8,151	7,565
WSIP 2030 With Project	7,440	7,514	7,908	9,400	9,821	10,229	10,549	10,229	10,023	9,123	8,211	7,618
Difference	35	28	71	46	48	103	103	95	102	52	61	53
Percent Difference	0.5%	0.4%	0.9%	0.5%	0.5%	1.0%	1.0%	0.9%	1.0%	0.6%	0.7%	0.7%

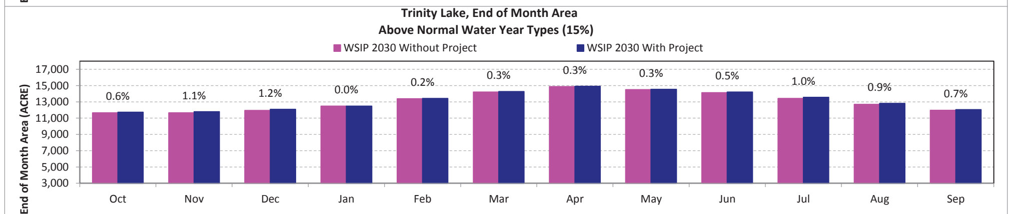
1 Based on the 82-year simulation period

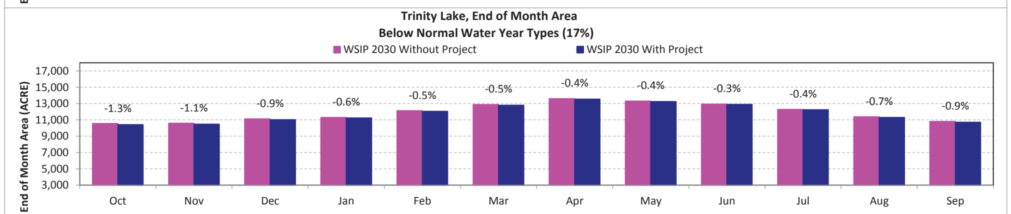
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

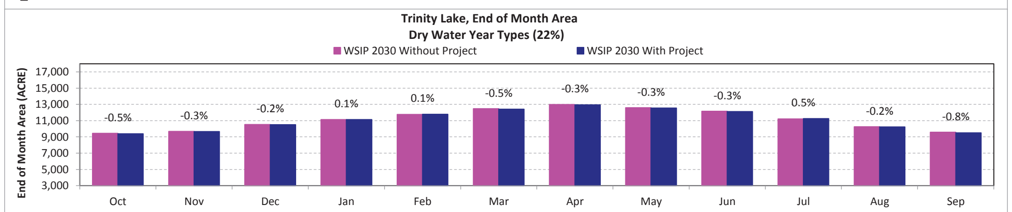
3 Relative difference of the monthly average











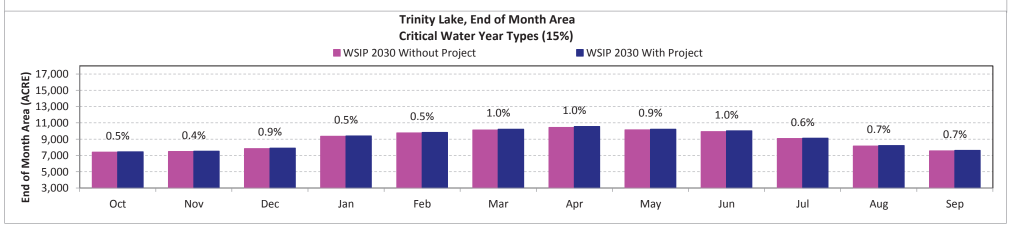


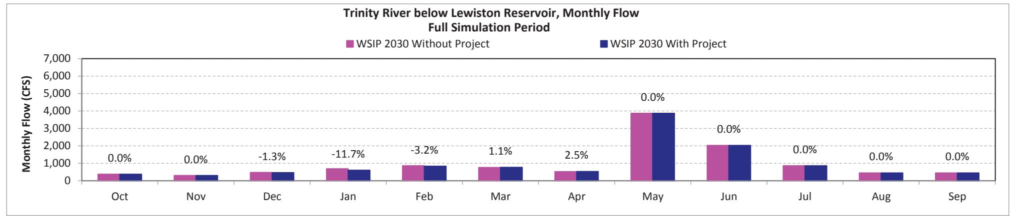
Table SW-04-a
Trinity River below Lewiston Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

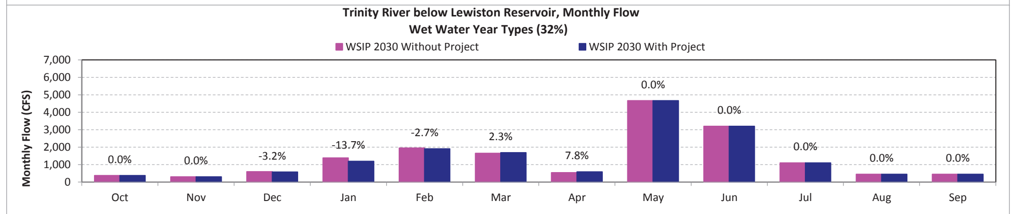
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	373	300	479	688	867	767	523	3,867	2,024	863	450	450
WSIP 2030 With Project	373	300	473	608	839	775	536	3,867	2,024	863	450	450
Difference	0	0	-6	-80	-27	8	13	0	0	0	0	0
Percent Difference[3]	0.0%	0.0%	-1.3%	-11.7%	-3.2%	1.1%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	373	300	598	1,385	1,957	1,647	540	4,665	3,198	1,102	450	450
WSIP 2030 With Project	373	300	579	1,196	1,904	1,685	582	4,665	3,198	1,102	450	450
Difference	0	0	-19	-189	-53	38	42	0	0	0	0	0
Percent Difference	0.0%	0.0%	-3.2%	-13.7%	-2.7%	2.3%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	373	300	775	694	721	686	466	4,622	2,458	1,102	450	450
WSIP 2030 With Project	373	300	775	538	645	662	466	4,622	2,458	1,102	450	450
Difference	0	0	0	-155	-76	-24	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	-22.4%	-10.6%	-3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	373	300	300	300	300	300	504	3,834	1,720	872	450	450
WSIP 2030 With Project	373	300	300	300	300	300	504	3,834	1,720	872	450	450
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (19.5%)												
WSIP 2030 Without Project	373	300	398	300	300	300	528	3,240	1,117	613	450	450
WSIP 2030 With Project	373	300	395	300	300	300	528	3,240	1,117	613	450	450
Difference	0	0	-3	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
WSIP 2030 Without Project	373	300	300	300	300	300	565	2,330	783	450	450	450
WSIP 2030 With Project	373	300	300	300	300	300	565	2,330	783	450	450	450
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

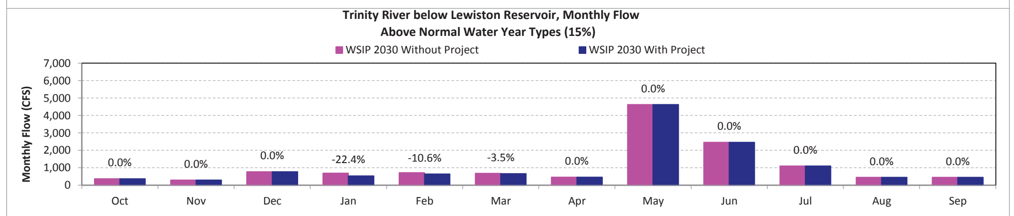
1 Based on the 82-year simulation period

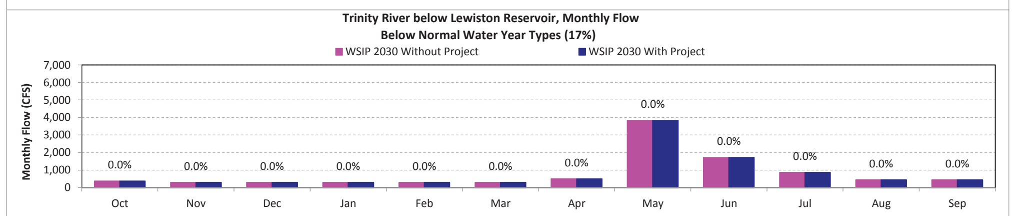
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

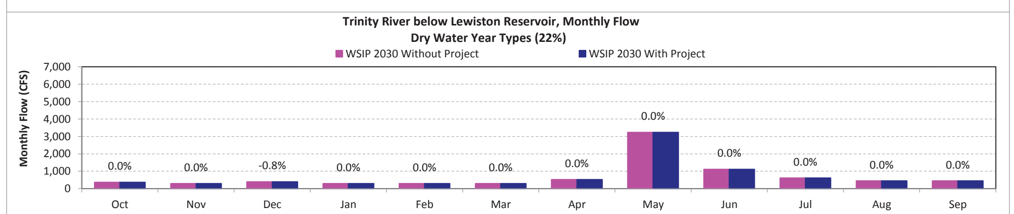
3 Relative difference of the monthly average











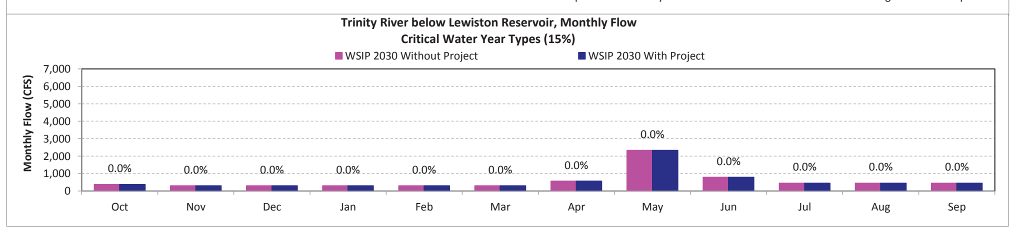


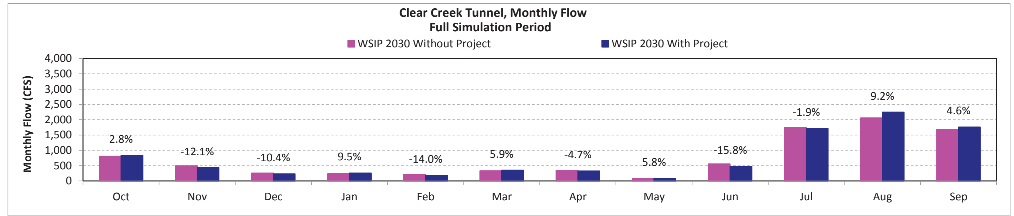
Table SW-05-a
Clear Creek Tunnel, Monthly Flow
Long-term Average and Average by Water Year Type

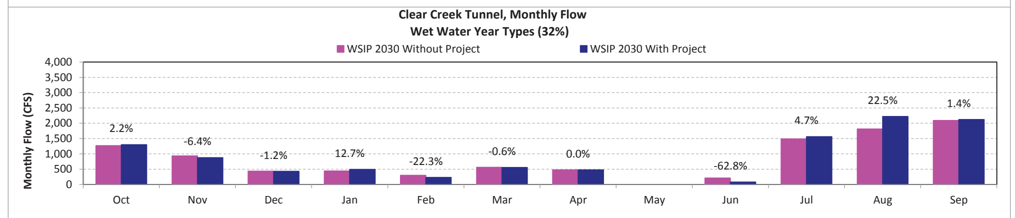
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	809	495	258	236	209	331	343	79	558	1,748	2,059	1,684
WSIP 2030 With Project	832	435	231	258	179	351	327	83	470	1,715	2,249	1,762
Difference	23	-60	-27	22	-29	20	-16	5	-88	-33	190	77
Percent Difference[3]	2.8%	-12.1%	-10.4%	9.5%	-14.0%	5.9%	-4.7%	5.8%	-15.8%	-1.9%	9.2%	4.6%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1,270	935	434	438	298	559	477	0	212	1,489	1,812	2,090
WSIP 2030 With Project	1,298	875	429	493	232	555	477	0	79	1,559	2,220	2,120
Difference	28	-60	-5	56	-66	-3	0	0	-133	71	408	29
Percent Difference	2.2%	-6.4%	-1.2%	12.7%	-22.3%	-0.6%	0.0%		-62.8%	4.7%	22.5%	1.4%
Above Normal (14.6%)												
WSIP 2030 Without Project	1,072	758	407	131	111	353	281	0	337	1,688	2,124	2,030
WSIP 2030 With Project	1,127	573	367	111	67	285	257	0	201	1,508	2,201	2,163
Difference	55	-185	-39	-20	-45	-69	-25	0	-136	-181	76	133
Percent Difference	5.1%	-24.5%	-9.6%	-15.3%	-40.1%	-19.4%	-8.8%		-40.4%	-10.7%	3.6%	6.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	618	294	120	144	106	111	216	71	531	1,445	2,292	1,410
WSIP 2030 With Project	691	250	94	156	97	156	184	71	466	1,476	2,382	1,462
Difference	74	-44	-25	12	-9	45	-32	0	-65	31	91	53
Percent Difference	11.9%	-15.0%	-21.3%	8.5%	-8.3%	40.5%	-14.8%	0.0%	-12.2%	2.2%	4.0%	3.7%
Dry (19.5%)												
WSIP 2030 Without Project	580	146	59	179	333	206	320	197	1,194	2,395	2,298	1,423
WSIP 2030 With Project	502	106	69	198	324	436	293	195	1,122	2,122	2,482	1,605
Difference	-77	-40	9	19	-9	230	-27	-2	-72	-273	184	181
Percent Difference	-13.3%	-27.5%		10.7%	-2.8%	111.4%	-8.4%	-1.2%	-6.0%	-11.4%	8.0%	12.7%
Critical (14.6%)												
WSIP 2030 Without Project	167	67	204	124	99	315	339	176	694	1,917	1,858	1,231
WSIP 2030 With Project	208	83	94	139	107	154	335	210	692	2,046	1,856	1,248
Difference	42	17	-110	15	8	-161	-5	34	-1	129	-2	17
Percent Difference	25.0%	25.0%	-53.8%	11.7%	8.4%	-51.1%	-1.3%	19.6%	-0.2%	6.7%	-0.1%	1.4%

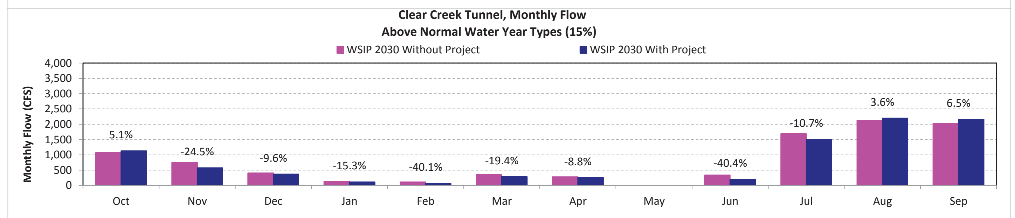
1 Based on the 82-year simulation period

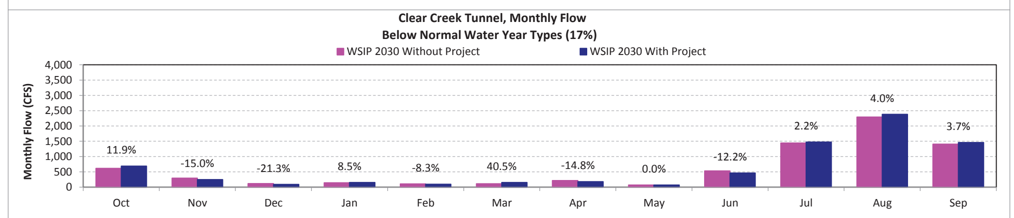
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

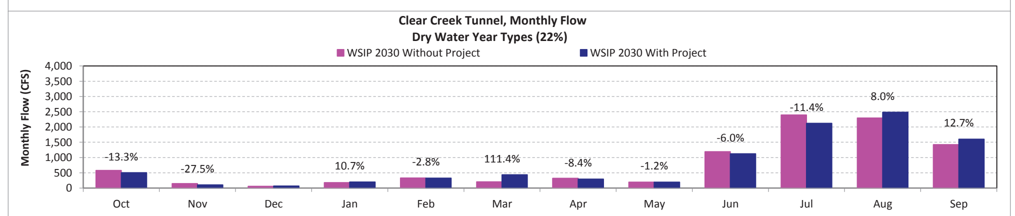
3 Relative difference of the monthly average











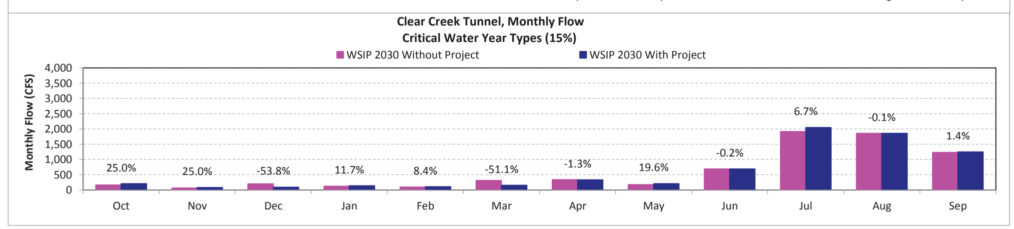
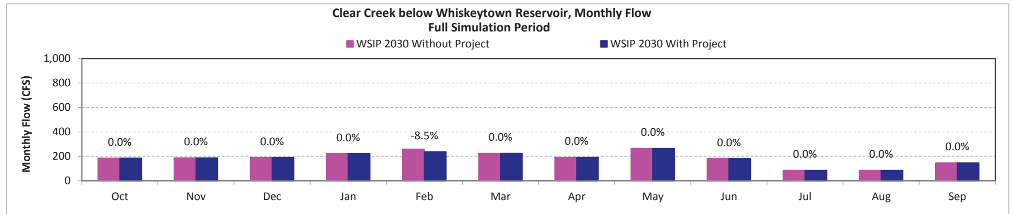
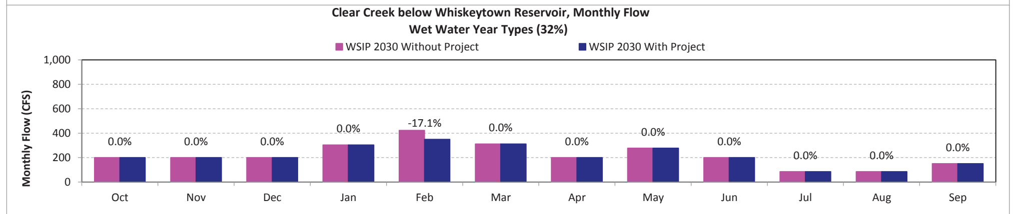


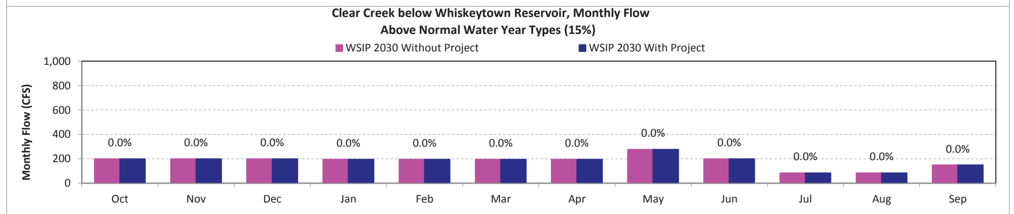
Table SW-06-a
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

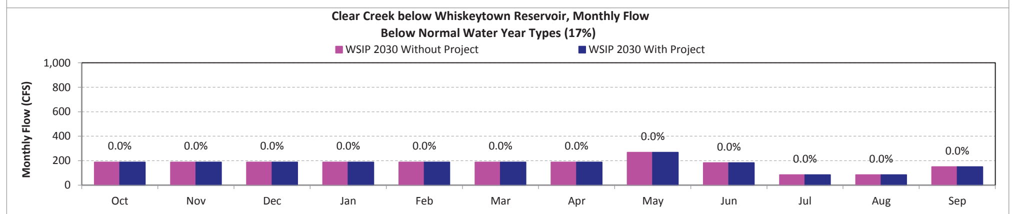
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	187	188	190	223	259	226	191	265	181	85	85	148
WSIP 2030 With Project	187	188	190	223	237	226	191	265	181	85	85	148
Difference	0	0	0	0	-22	0	0	0	0	0	0	0
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	-8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	200	200	200	303	423	312	200	277	200	85	85	150
WSIP 2030 With Project	200	200	200	303	350	312	200	277	200	85	85	150
Difference	0	0	0	0	-72	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	-17.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	200	200	200	196	196	196	196	277	200	85	85	150
WSIP 2030 With Project	200	200	200	196	196	196	196	277	200	85	85	150
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	188	188	188	188	188	188	188	268	182	85	85	150
WSIP 2030 With Project	188	188	188	188	188	188	188	268	182	85	85	150
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (19.5%)												
WSIP 2030 Without Project	184	188	188	194	194	194	194	265	183	85	85	150
WSIP 2030 With Project	184	188	188	194	194	194	194	265	183	85	85	150
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
WSIP 2030 Without Project	146	149	163	171	171	171	171	224	120	85	85	133
WSIP 2030 With Project	146	149	163	171	171	171	171	224	120	85	85	133
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

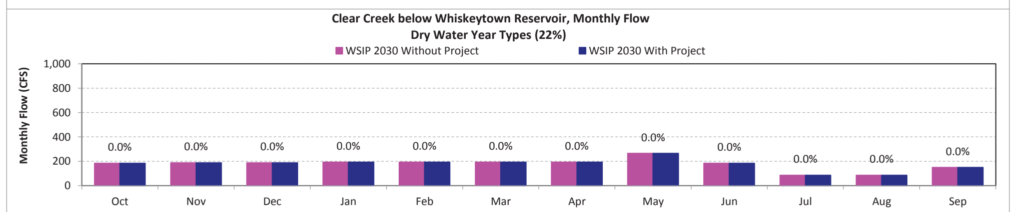
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











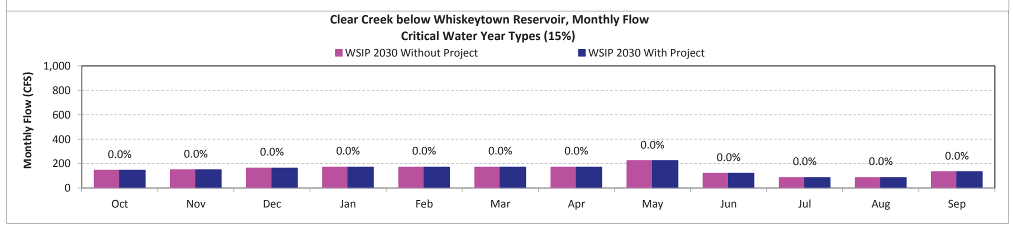


Table SW-07-a
Shasta Lake, End of Month Storage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	2,475	2,490	2,743	3,066	3,365	3,750	3,989	3,950	3,560	3,013	2,716	2,544
WSIP 2030 With Project	2,560	2,562	2,794	3,109	3,396	3,777	4,021	4,009	3,648	3,105	2,808	2,627
Difference	85	73	52	44	31	27	31	59	88	92	92	83
Percent Difference[3]	3.4%	2.9%	1.9%	1.4%	0.9%	0.7%	0.8%	1.5%	2.5%	3.1%	3.4%	3.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	2,698	2,625	2,901	3,436	3,579	3,865	4,280	4,387	4,082	3,557	3,251	2,837
WSIP 2030 With Project	2,718	2,634	2,897	3,439	3,579	3,865	4,285	4,405	4,086	3,561	3,263	2,855
Difference	20	9	-4	4	0	0	6	18	4	4	12	18
Percent Difference	0.7%	0.3%	-0.1%	0.1%	0.0%	0.0%	0.1%	0.4%	0.1%	0.1%	0.4%	0.6%
Above Normal (14.6%)												
WSIP 2030 Without Project	2,652	2,580	2,818	3,205	3,562	4,014	4,364	4,322	3,908	3,319	2,999	2,758
WSIP 2030 With Project	2,821	2,708	2,875	3,258	3,591	4,015	4,372	4,359	4,031	3,432	3,146	2,940
Difference	169	129	57	53	29	1	8	37	123	113	147	182
Percent Difference	6.4%	5.0%	2.0%	1.7%	0.8%	0.0%	0.2%	0.9%	3.1%	3.4%	4.9%	6.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	2,744	2,803	2,983	2,976	3,418	3,925	4,214	4,133	3,700	3,078	2,774	2,771
WSIP 2030 With Project	2,797	2,838	2,996	3,014	3,437	3,942	4,209	4,155	3,779	3,160	2,873	2,836
Difference	53	35	14	38	19	17	-5	22	80	83	98	65
Percent Difference	1.9%	1.3%	0.5%	1.3%	0.6%	0.4%	-0.1%	0.5%	2.2%	2.7%	3.5%	2.3%
Dry (19.5%)												
WSIP 2030 Without Project	2,465	2,593	2,899	2,857	3,275	3,717	3,786	3,663	3,252	2,766	2,486	2,457
WSIP 2030 With Project	2,527	2,652	2,951	2,924	3,325	3,778	3,854	3,765	3,379	2,884	2,572	2,514
Difference	62	59	52	67	50	61	67	101	126	118	86	57
Percent Difference	2.5%	2.3%	1.8%	2.3%	1.5%	1.6%	1.8%	2.8%	3.9%	4.3%	3.5%	2.3%
Critical (14.6%)												
WSIP 2030 Without Project	1,465	1,535	1,791	2,560	2,768	3,043	2,961	2,787	2,337	1,810	1,540	1,515
WSIP 2030 With Project	1,678	1,756	2,005	2,656	2,858	3,120	3,073	2,953	2,524	2,042	1,746	1,696
Difference	213	221	214	95	89	77	112	166	187	232	206	181
Percent Difference	14.5%	14.4%	12.0%	3.7%	3.2%	2.5%	3.8%	6.0%	8.0%	12.8%	13.3%	12.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

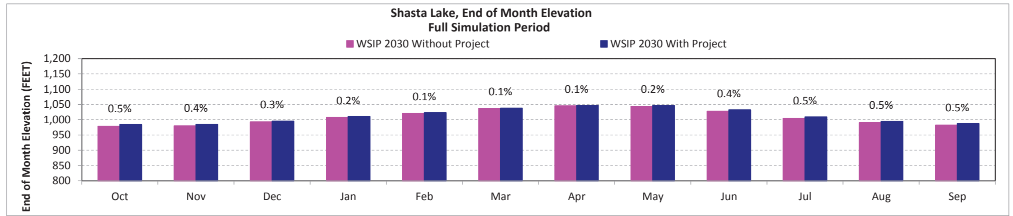
Table SW-08-a
Shasta Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

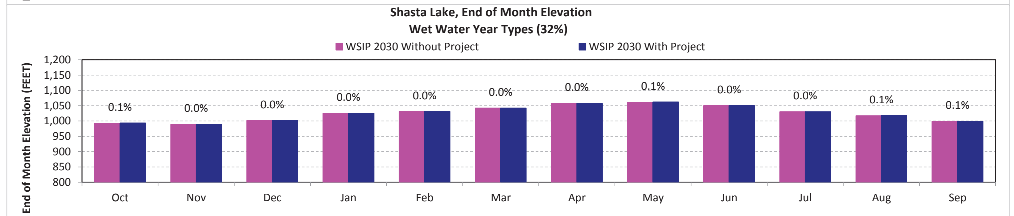
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	979	980	993	1,008	1,021	1,037	1,046	1,044	1,028	1,004	990	983
WSIP 2030 With Project	984	984	996	1,010	1,023	1,038	1,047	1,046	1,032	1,009	995	987
Difference	5	4	3	2	1	1	1	2	4	5	5	5
Percent Difference[3]	0.5%	0.4%	0.3%	0.2%	0.1%	0.1%	0.1%	0.2%	0.4%	0.5%	0.5%	0.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	992	989	1,001	1,025	1,031	1,042	1,057	1,061	1,050	1,030	1,017	998
WSIP 2030 With Project	993	989	1,001	1,025	1,031	1,042	1,057	1,062	1,050	1,030	1,017	999
Difference	1	0	0	0	0	0	0	1	0	0	1	1
Percent Difference	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	990	987	998	1,015	1,030	1,048	1,060	1,059	1,044	1,020	1,006	995
WSIP 2030 With Project	998	993	1,000	1,017	1,031	1,048	1,061	1,060	1,048	1,025	1,012	1,003
Difference	8	6	3	3	1	0	0	1	5	5	6	8
Percent Difference	0.8%	0.6%	0.3%	0.3%	0.1%	0.0%	0.0%	0.1%	0.4%	0.5%	0.6%	0.8%
Below Normal (20.7%)												
WSIP 2030 Without Project	994	997	1,005	1,004	1,024	1,044	1,055	1,052	1,035	1,009	996	995
WSIP 2030 With Project	997	999	1,006	1,006	1,024	1,045	1,055	1,053	1,038	1,013	1,000	999
Difference	3	2	1	2	1	1	0	1	3	4	5	3
Percent Difference	0.3%	0.2%	0.1%	0.2%	0.1%	0.1%	0.0%	0.1%	0.3%	0.4%	0.5%	0.3%
Dry (19.5%)												
WSIP 2030 Without Project	980	986	1,001	999	1,018	1,036	1,038	1,033	1,017	995	982	980
WSIP 2030 With Project	983	989	1,004	1,002	1,020	1,038	1,041	1,037	1,022	1,000	986	983
Difference	3	3	3	3	2	2	3	4	5	5	4	3
Percent Difference	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.3%	0.4%	0.5%	0.5%	0.4%	0.3%
Critical (14.6%)												
WSIP 2030 Without Project	918	923	942	984	994	1,007	1,003	995	972	941	923	921
WSIP 2030 With Project	934	939	955	989	998	1,011	1,008	1,003	982	956	937	935
Difference	16	16	13	5	4	3	5	8	11	15	14	14
Percent Difference	1.7%	1.7%	1.4%	0.5%	0.4%	0.3%	0.5%	0.8%	1.1%	1.6%	1.6%	1.5%

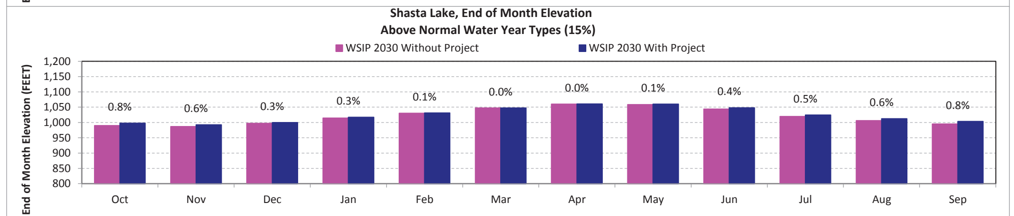
1 Based on the 82-year simulation period

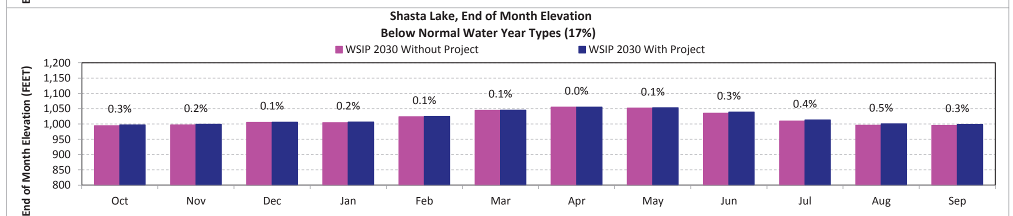
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

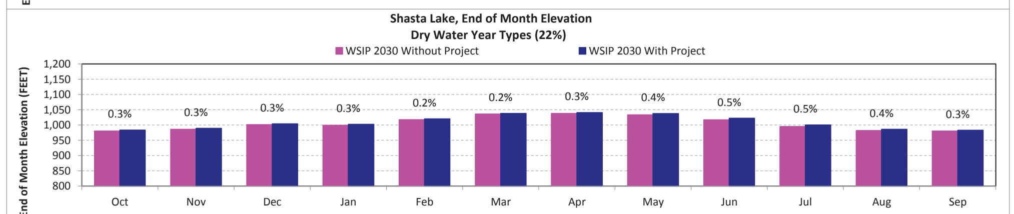
3 Relative difference of the monthly average











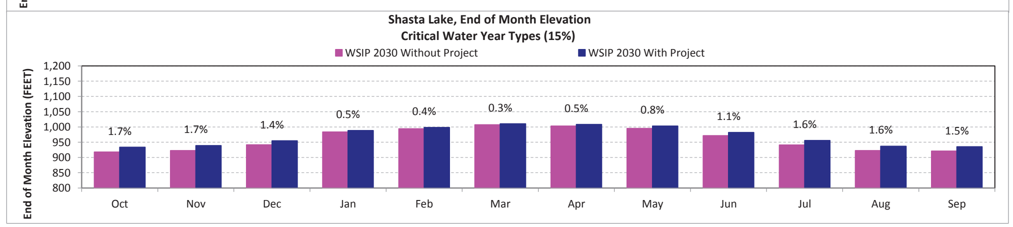


Table SW-09-a
Shasta Lake, End of Month Area
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	19,643	19,731	21,149	22,914	24,494	26,379	27,423	27,208	25,355	22,560	20,956	20,029
WSIP 2030 With Project	20,141	20,163	21,446	23,157	24,660	26,515	27,584	27,504	25,805	23,080	21,481	20,510
Difference	499	432	297	242	166	137	160	296	450	520	524	481
Percent Difference[3]	2.5%	2.2%	1.4%	1.1%	0.7%	0.5%	0.6%	1.1%	1.8%	2.3%	2.5%	2.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	20,952	20,554	22,047	24,918	25,639	26,973	28,831	29,293	27,947	25,498	23,932	21,703
WSIP 2030 With Project	21,059	20,601	22,024	24,938	25,639	26,974	28,854	29,370	27,966	25,534	23,996	21,799
Difference	107	47	-22	20	0	1	24	77	19	36	64	95
Percent Difference	0.5%	0.2%	-0.1%	0.1%	0.0%	0.0%	0.1%	0.3%	0.1%	0.1%	0.3%	0.4%
Above Normal (14.6%)												
WSIP 2030 Without Project	20,694	20,306	21,599	23,676	25,554	27,666	29,193	29,013	27,202	24,283	22,586	21,278
WSIP 2030 With Project	21,626	21,013	21,908	23,971	25,707	27,670	29,229	29,173	27,750	24,879	23,373	22,266
Difference	931	707	309	295	154	4	35	160	548	596	787	988
Percent Difference	4.5%	3.5%	1.4%	1.2%	0.6%	0.0%	0.1%	0.6%	2.0%	2.5%	3.5%	4.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	21,198	21,521	22,492	22,435	24,769	27,276	28,551	28,186	26,165	22,993	21,362	21,344
WSIP 2030 With Project	21,499	21,724	22,571	22,647	24,870	27,353	28,528	28,289	26,563	23,430	21,904	21,703
Difference	301	203	79	211	101	78	-23	103	398	437	542	359
Percent Difference	1.4%	0.9%	0.4%	0.9%	0.4%	0.3%	-0.1%	0.4%	1.5%	1.9%	2.5%	1.7%
Dry (19.5%)												
WSIP 2030 Without Project	19,642	20,344	22,031	21,804	24,021	26,217	26,508	25,909	23,936	21,311	19,784	19,617
WSIP 2030 With Project	19,991	20,680	22,322	22,171	24,285	26,522	26,837	26,399	24,559	21,946	20,249	19,929
Difference	348	336	291	367	264	305	329	490	622	635	465	312
Percent Difference	1.8%	1.7%	1.3%	1.7%	1.1%	1.2%	1.2%	1.9%	2.6%	3.0%	2.4%	1.6%
Critical (14.6%)												
WSIP 2030 Without Project	13,660	14,091	15,748	20,138	21,288	22,797	22,344	21,404	18,850	15,766	14,115	13,978
WSIP 2030 With Project	15,024	15,504	17,018	20,667	21,776	23,208	22,950	22,307	19,948	17,180	15,388	15,153
Difference	1,363	1,413	1,269	529	488	411	605	903	1,097	1,415	1,273	1,175
Percent Difference	10.0%	10.0%	8.1%	2.6%	2.3%	1.8%	2.7%	4.2%	5.8%	9.0%	9.0%	8.4%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-10-a
Sacramento River below Keswick Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,401	6,731	6,528	8,983	11,573	8,809	6,949	7,602	11,338	14,006	10,032	8,215
WSIP 2030 With Project	6,377	6,883	6,846	9,130	11,792	8,895	6,859	7,148	10,770	13,882	10,207	8,451
Difference	-24	153	317	147	219	85	-91	-455	-568	-124	176	236
Percent Difference[3]	-0.4%	2.3%	4.9%	1.6%	1.9%	1.0%	-1.3%	-6.0%	-5.0%	-0.9%	1.8%	2.9%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	7,508	8,857	6,744	17,694	23,395	16,416	8,912	7,496	10,336	13,814	10,215	12,700
WSIP 2030 With Project	7,497	8,985	6,947	18,071	23,470	16,410	8,821	7,295	10,438	13,880	10,496	12,634
Difference	-11	128	203	378	75	-6	-91	-201	101	66	281	-66
Percent Difference	-0.1%	1.4%	3.0%	2.1%	0.3%	0.0%	-1.0%	-2.7%	1.0%	0.5%	2.7%	-0.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	6,634	9,171	6,246	9,823	12,932	10,150	5,854	7,817	11,874	14,752	10,728	9,615
WSIP 2030 With Project	6,802	9,668	7,370	9,522	13,319	10,532	5,708	7,343	10,297	14,719	10,240	9,153
Difference	168	497	1,124	-301	387	382	-147	-474	-1,577	-32	-488	-462
Percent Difference	2.5%	5.4%	18.0%	-3.1%	3.0%	3.8%	-2.5%	-6.1%	-13.3%	-0.2%	-4.5%	-4.8%
Below Normal (20.7%)												
WSIP 2030 Without Project	5,286	5,014	7,102	4,556	5,693	4,243	5,943	8,021	11,893	14,866	10,370	5,845
WSIP 2030 With Project	5,546	5,273	7,429	4,549	6,021	4,313	6,292	7,584	10,848	14,843	10,201	6,451
Difference	260	259	326	-7	327	70	349	-437	-1,046	-23	-168	606
Percent Difference	4.9%	5.2%	4.6%	-0.2%	5.8%	1.6%	5.9%	-5.5%	-8.8%	-0.2%	-1.6%	10.4%
Dry (19.5%)												
WSIP 2030 Without Project	6,847	5,656	8,163	3,585	4,368	4,621	6,039	7,405	11,844	13,341	9,691	5,092
WSIP 2030 With Project	6,686	5,667	8,284	3,941	4,652	4,681	5,900	6,846	11,347	13,188	10,393	5,751
Difference	-161	11	120	356	284	60	-140	-560	-497	-153	702	658
Percent Difference	-2.4%	0.2%	1.5%	9.9%	6.5%	1.3%	-2.3%	-7.6%	-4.2%	-1.1%	7.2%	12.9%
Critical (14.6%)												
WSIP 2030 Without Project	4,842	3,725	3,368	3,464	3,522	3,676	6,595	7,279	11,427	13,330	8,931	4,994
WSIP 2030 With Project	4,381	3,623	3,366	3,518	3,635	3,709	6,003	6,429	11,054	12,612	9,337	5,472
Difference	-461	-102	-2	54	112	33	-592	-850	-372	-718	406	478
Percent Difference	-9.5%	-2.7%	-0.1%	1.6%	3.2%	0.9%	-9.0%	-11.7%	-3.3%	-5.4%	4.5%	9.6%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

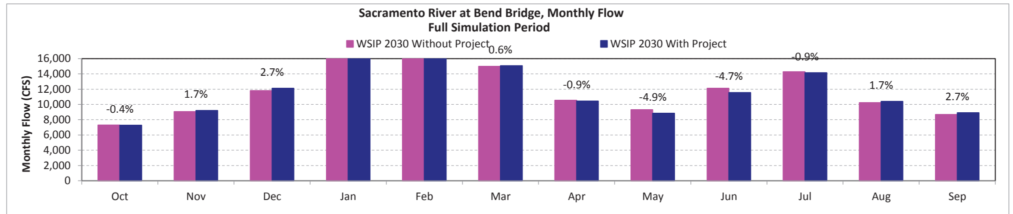
Table SW-11-a
Sacramento River at Bend Bridge, Monthly Flow
Long-term Average and Average by Water Year Type

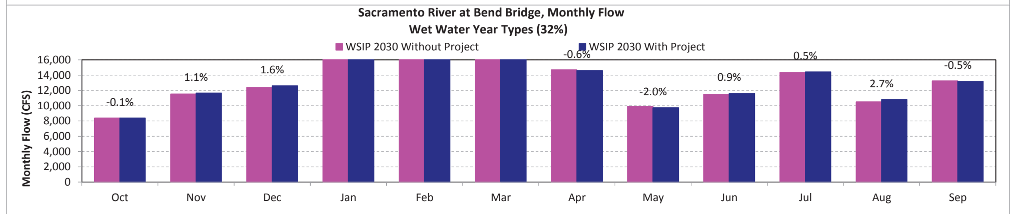
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	7,298	9,055	11,795	16,301	19,680	14,981	10,540	9,305	12,118	14,270	10,237	8,689
WSIP 2030 With Project	7,272	9,208	12,112	16,447	19,878	15,067	10,450	8,852	11,554	14,148	10,406	8,922
Difference	-26	154	317	145	198	85	-90	-453	-564	-122	169	233
Percent Difference[3]	-0.4%	1.7%	2.7%	0.9%	1.0%	0.6%	-0.9%	-4.9%	-4.7%	-0.9%	1.7%	2.7%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	8,383	11,515	12,390	30,290	36,187	25,621	14,696	9,920	11,490	14,349	10,507	13,249
WSIP 2030 With Project	8,374	11,644	12,593	30,667	36,188	25,617	14,607	9,721	11,594	14,415	10,787	13,181
Difference	-10	129	203	377	2	-5	-90	-199	104	65	280	-69
Percent Difference	-0.1%	1.1%	1.6%	1.2%	0.0%	0.0%	-0.6%	-2.0%	0.9%	0.5%	2.7%	-0.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	7,485	11,316	10,617	19,229	21,644	17,271	9,691	9,707	12,724	14,892	10,890	9,984
WSIP 2030 With Project	7,653	11,810	11,738	18,929	22,033	17,651	9,543	9,236	11,152	14,867	10,399	9,523
Difference	168	494	1,120	-300	389	381	-148	-471	-1,572	-25	-491	-462
Percent Difference	2.2%	4.4%	10.6%	-1.6%	1.8%	2.2%	-1.5%	-4.9%	-12.4%	-0.2%	-4.5%	-4.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	6,327	7,276	12,313	9,346	12,207	9,156	9,404	9,494	12,546	15,016	10,542	6,435
WSIP 2030 With Project	6,581	7,533	12,639	9,338	12,535	9,225	9,754	9,055	11,506	14,999	10,372	7,039
Difference	254	258	326	-8	328	69	350	-439	-1,040	-17	-170	604
Percent Difference	4.0%	3.5%	2.6%	-0.1%	2.7%	0.8%	3.7%	-4.6%	-8.3%	-0.1%	-1.6%	9.4%
Dry (19.5%)												
WSIP 2030 Without Project	7,889	8,237	14,959	7,023	10,054	9,274	7,877	8,608	12,378	13,462	9,861	5,481
WSIP 2030 With Project	7,723	8,252	15,080	7,374	10,338	9,335	7,738	8,051	11,886	13,310	10,561	6,131
Difference	-165	15	121	351	284	61	-138	-557	-492	-152	700	650
Percent Difference	-2.1%	0.2%	0.8%	5.0%	2.8%	0.7%	-1.8%	-6.5%	-4.0%	-1.1%	7.1%	11.9%
Critical (14.6%)												
WSIP 2030 Without Project	5,436	5,279	6,780	6,455	6,751	6,387	7,891	8,283	11,863	13,505	9,093	5,365
WSIP 2030 With Project	4,970	5,181	6,778	6,506	6,864	6,421	7,300	7,439	11,498	12,787	9,463	5,835
Difference	-465	-97	-2	52	113	33	-591	-844	-365	-718	370	471
Percent Difference	-8.6%	-1.8%	0.0%	0.8%	1.7%	0.5%	-7.5%	-10.2%	-3.1%	-5.3%	4.1%	8.8%

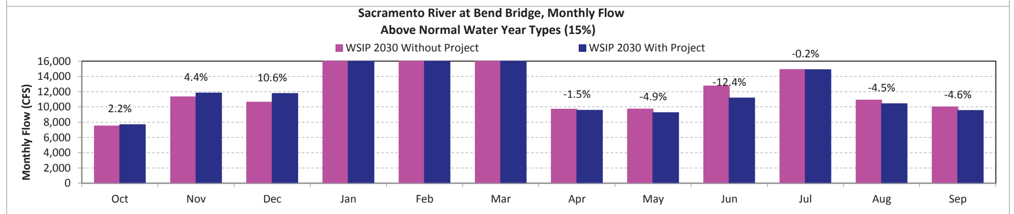
1 Based on the 82-year simulation period

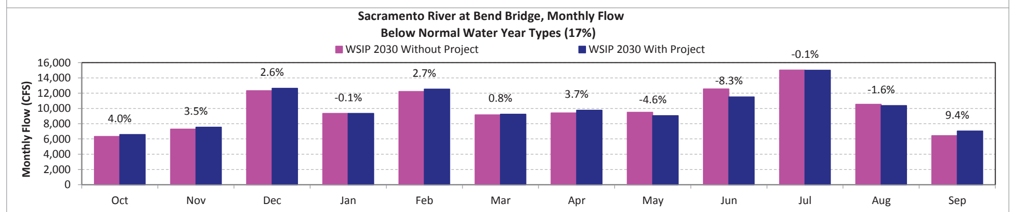
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

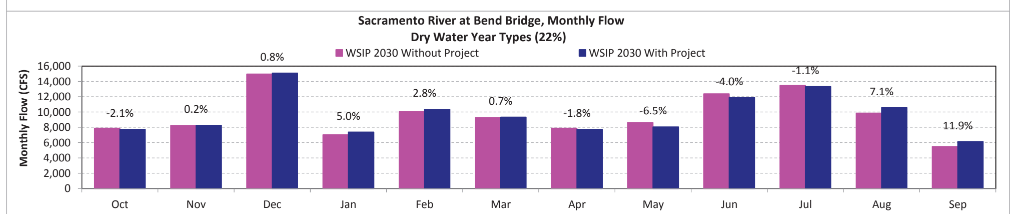
3 Relative difference of the monthly average











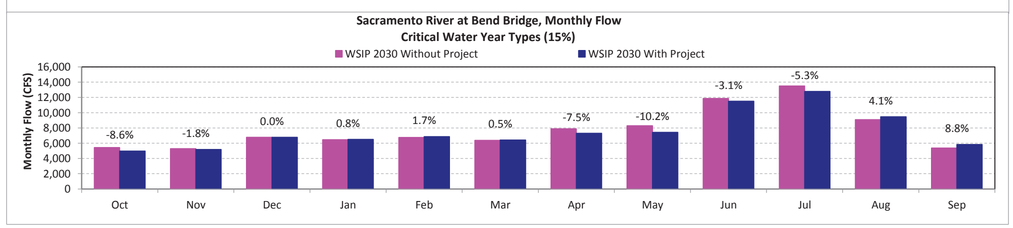


Table SW-12-a
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	7,198	9,074	11,860	16,487	19,820	15,065	10,477	9,012	11,504	13,624	9,718	8,588
WSIP 2030 With Project	7,101	9,061	11,404	15,398	18,673	14,107	10,144	8,580	11,015	13,643	9,953	8,860
Difference	-98	-14	-456	-1,089	-1,147	-959	-333	-432	-489	19	236	271
Percent Difference[3]	-1.4%	-0.1%	-3.8%	-6.6%	-5.8%	-6.4%	-3.2%	-4.8%	-4.3%	0.1%	2.4%	3.2%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	8,254	11,542	12,462	30,619	36,423	25,766	14,678	9,484	10,591	13,352	9,715	13,096
WSIP 2030 With Project	8,235	11,509	11,719	29,637	35,247	24,959	14,222	9,369	10,709	13,530	10,024	13,093
Difference	-19	-33	-743	-982	-1,176	-807	-456	-115	117	178	310	-3
Percent Difference	-0.2%	-0.3%	-6.0%	-3.2%	-3.2%	-3.1%	-3.1%	-1.2%	1.1%	1.3%	3.2%	0.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	7,378	11,332	10,661	19,476	21,824	17,392	9,574	9,295	11,882	14,003	10,203	9,841
WSIP 2030 With Project	7,377	11,346	10,374	17,639	20,476	16,650	9,203	8,837	10,510	14,407	9,892	9,468
Difference	-1	14	-288	-1,837	-1,347	-742	-371	-458	-1,372	404	-311	-373
Percent Difference	0.0%	0.1%	-2.7%	-9.4%	-6.2%	-4.3%	-3.9%	-4.9%	-11.5%	2.9%	-3.0%	-3.8%
Below Normal (20.7%)												
WSIP 2030 Without Project	6,229	7,299	12,388	9,482	12,303	9,193	9,311	9,229	11,997	14,447	10,093	6,368
WSIP 2030 With Project	6,501	7,552	12,589	8,125	11,506	7,993	9,243	8,759	11,101	14,637	10,045	6,984
Difference	272	253	201	-1,357	-797	-1,200	-68	-470	-896	190	-48	616
Percent Difference	4.4%	3.5%	1.6%	-14.3%	-6.5%	-13.1%	-0.7%	-5.1%	-7.5%	1.3%	-0.5%	9.7%
Dry (19.5%)												
WSIP 2030 Without Project	7,815	8,259	15,040	7,089	10,132	9,341	7,814	8,467	12,023	13,158	9,619	5,433
WSIP 2030 With Project	7,398	8,094	14,498	6,292	8,624	8,089	7,625	7,930	11,591	13,018	10,344	6,086
Difference	-417	-165	-542	-796	-1,508	-1,252	-188	-537	-432	-140	725	652
Percent Difference	-5.3%	-2.0%	-3.6%	-11.2%	-14.9%	-13.4%	-2.4%	-6.3%	-3.6%	-1.1%	7.5%	12.0%
Critical (14.6%)												
WSIP 2030 Without Project	5,370	5,278	6,815	6,510	6,789	6,396	7,830	8,161	11,635	13,267	8,837	5,298
WSIP 2030 With Project	4,913	5,101	5,975	5,934	5,892	5,640	7,225	7,291	11,266	12,540	9,216	5,788
Difference	-457	-177	-839	-575	-897	-757	-605	-870	-369	-727	379	490
Percent Difference	-8.5%	-3.4%	-12.3%	-8.8%	-13.2%	-11.8%	-7.7%	-10.7%	-3.2%	-5.5%	4.3%	9.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

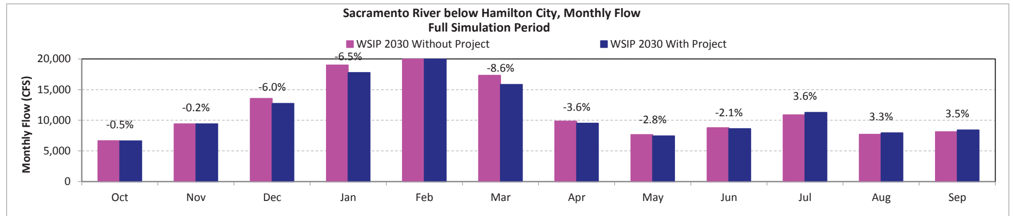
Table SW-13-a
Sacramento River below Hamilton City, Monthly Flow
Long-term Average and Average by Water Year Type

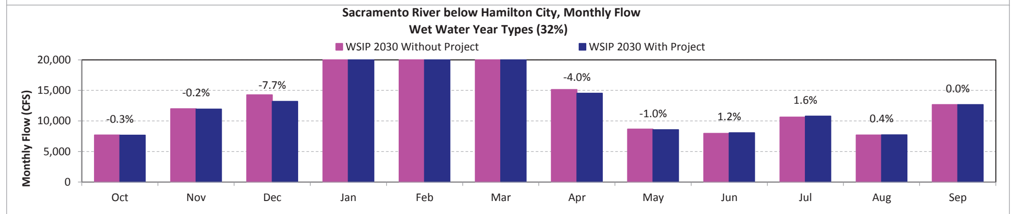
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,663	9,423	13,553	19,005	22,651	17,320	9,858	7,648	8,794	10,882	7,695	8,128
WSIP 2030 With Project	6,632	9,404	12,733	17,769	21,272	15,823	9,503	7,437	8,613	11,276	7,945	8,417
Difference	-31	-19	-820	-1,236	-1,379	-1,496	-356	-211	-181	394	250	289
Percent Difference[3]	-0.5%	-0.2%	-6.0%	-6.5%	-6.1%	-8.6%	-3.6%	-2.8%	-2.1%	3.6%	3.3%	3.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	7,701	11,985	14,285	35,138	40,923	29,043	15,127	8,662	7,975	10,633	7,688	12,676
WSIP 2030 With Project	7,677	11,956	13,192	33,989	39,537	27,744	14,528	8,571	8,070	10,798	7,720	12,674
Difference	-24	-28	-1,094	-1,149	-1,386	-1,299	-599	-91	96	165	32	-2
Percent Difference	-0.3%	-0.2%	-7.7%	-3.3%	-3.4%	-4.5%	-4.0%	-1.0%	1.2%	1.6%	0.4%	0.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	6,819	11,736	12,164	22,753	25,159	20,103	9,227	8,055	9,205	11,213	8,125	9,349
WSIP 2030 With Project	6,880	11,649	11,288	20,703	23,545	18,803	8,670	7,750	8,341	12,309	8,044	8,984
Difference	61	-87	-876	-2,051	-1,614	-1,300	-557	-305	-864	1,096	-81	-365
Percent Difference	0.9%	-0.7%	-7.2%	-9.0%	-6.4%	-6.5%	-6.0%	-3.8%	-9.4%	9.8%	-1.0%	-3.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	5,695	7,562	13,985	11,155	14,475	11,044	8,510	7,608	9,201	11,626	7,965	5,928
WSIP 2030 With Project	6,145	7,859	14,101	9,645	13,453	9,203	8,083	7,294	8,751	12,525	7,939	6,577
Difference	450	297	117	-1,509	-1,022	-1,841	-427	-314	-451	899	-26	650
Percent Difference	7.9%	3.9%	0.8%	-13.5%	-7.1%	-16.7%	-5.0%	-4.1%	-4.9%	7.7%	-0.3%	11.0%
Dry (19.5%)												
WSIP 2030 Without Project	7,349	8,777	17,290	8,094	12,034	11,042	6,442	6,633	9,119	10,312	7,484	4,910
WSIP 2030 With Project	6,937	8,585	16,300	7,178	10,213	9,109	6,452	6,421	9,127	10,598	8,401	5,584
Difference	-412	-192	-990	-916	-1,821	-1,934	9	-212	8	286	918	674
Percent Difference	-5.6%	-2.2%	-5.7%	-11.3%	-15.1%	-17.5%	0.1%	-3.2%	0.1%	2.8%	12.3%	13.7%
Critical (14.6%)												
WSIP 2030 Without Project	4,801	5,268	7,822	7,314	7,814	7,375	5,978	6,543	9,078	10,773	7,178	4,843
WSIP 2030 With Project	4,489	5,119	6,531	6,670	6,767	6,341	5,946	6,322	9,132	10,371	7,716	5,364
Difference	-312	-149	-1,291	-644	-1,047	-1,034	-32	-221	54	-401	538	521
Percent Difference	-6.5%	-2.8%	-16.5%	-8.8%	-13.4%	-14.0%	-0.5%	-3.4%	0.6%	-3.7%	7.5%	10.8%

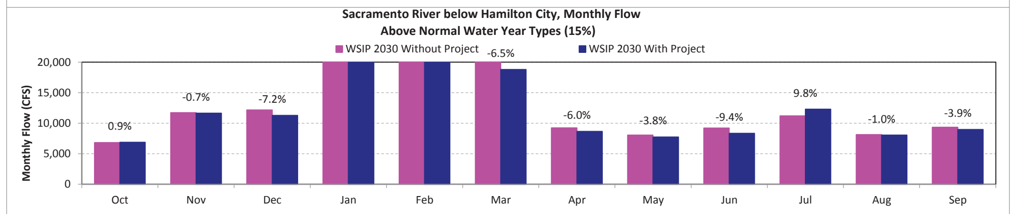
1 Based on the 82-year simulation period

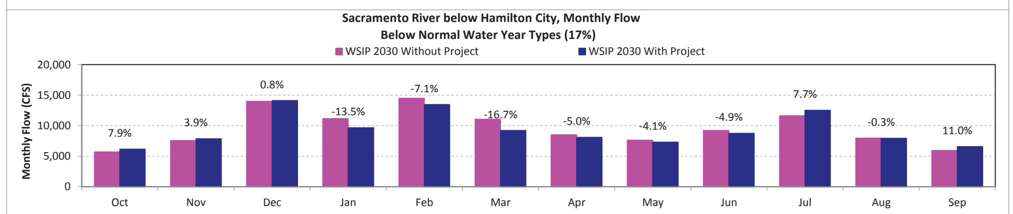
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

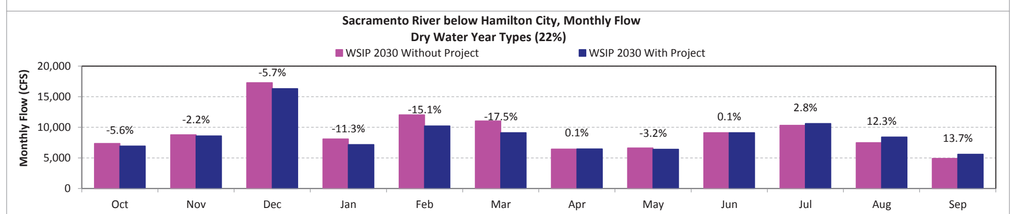
3 Relative difference of the monthly average











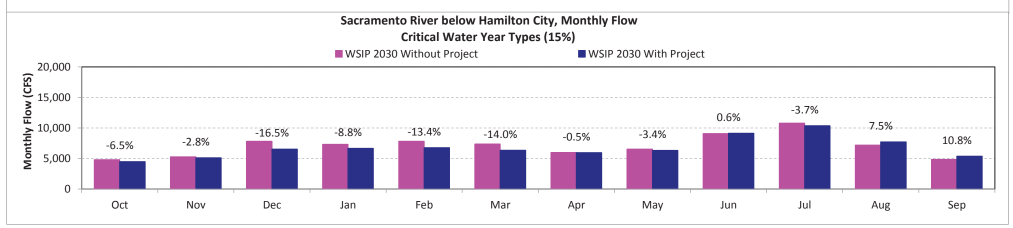
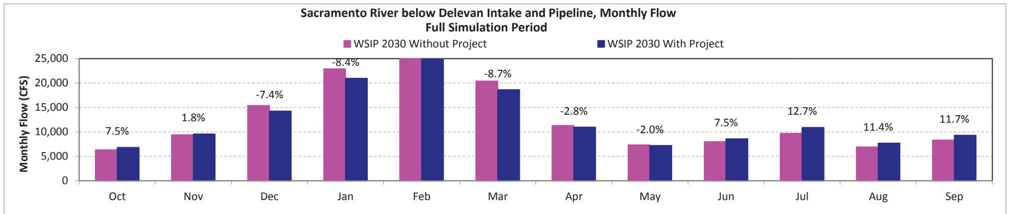
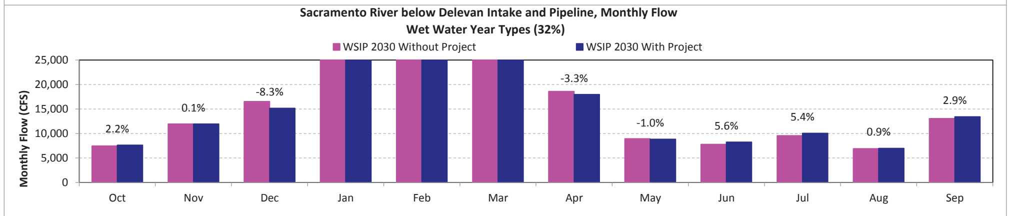


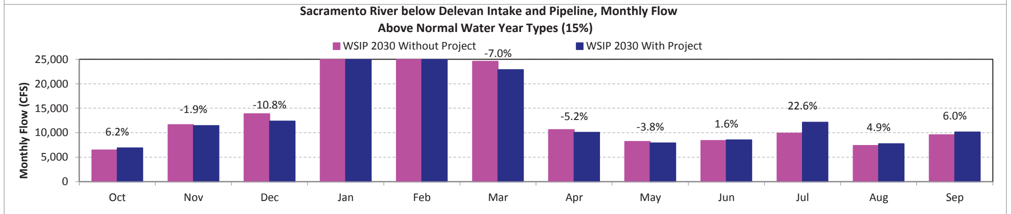
Table SW-14-a
Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Long-term Average and Average by Water Year Type

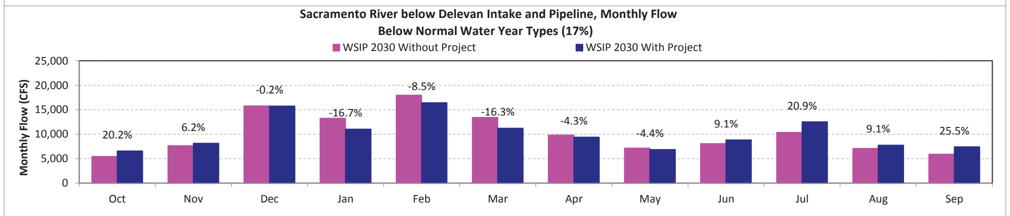
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,342	9,413	15,403	22,885	27,392	20,418	11,312	7,348	7,982	9,688	6,910	8,324
WSIP 2030 With Project	6,818	9,581	14,263	20,966	25,424	18,632	10,993	7,202	8,577	10,922	7,694	9,295
Difference	476	168	-1,139	-1,919	-1,969	-1,786	-319	-145	595	1,234	785	971
Percent Difference[3]	7.5%	1.8%	-7.4%	-8.4%	-7.2%	-8.7%	-2.8%	-2.0%	7.5%	12.7%	11.4%	11.7%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	7,465	11,944	16,538	42,186	48,509	33,318	18,595	8,925	7,802	9,554	6,912	13,056
WSIP 2030 With Project	7,632	11,955	15,160	40,350	46,679	31,830	17,976	8,834	8,238	10,067	6,974	13,435
Difference	168	11	-1,378	-1,836	-1,830	-1,488	-619	-91	437	513	62	379
Percent Difference	2.2%	0.1%	-8.3%	-4.4%	-3.8%	-4.5%	-3.3%	-1.0%	5.6%	5.4%	0.9%	2.9%
Above Normal (14.6%)												
WSIP 2030 Without Project	6,477	11,655	13,880	29,047	31,425	24,591	10,630	8,213	8,398	9,899	7,387	9,573
WSIP 2030 With Project	6,881	11,433	12,377	25,962	28,981	22,861	10,072	7,903	8,536	12,135	7,746	10,145
Difference	404	-222	-1,503	-3,085	-2,444	-1,730	-558	-310	138	2,236	359	573
Percent Difference	6.2%	-1.9%	-10.8%	-10.6%	-7.8%	-7.0%	-5.2%	-3.8%	1.6%	22.6%	4.9%	6.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	5,464	7,658	15,773	13,258	17,960	13,416	9,813	7,173	8,092	10,380	7,097	5,916
WSIP 2030 With Project	6,569	8,131	15,747	11,037	16,440	11,224	9,388	6,857	8,827	12,545	7,746	7,422
Difference	1,105	473	-26	-2,221	-1,520	-2,192	-425	-316	734	2,165	649	1,506
Percent Difference	20.2%	6.2%	-0.2%	-16.7%	-8.5%	-16.3%	-4.3%	-4.4%	9.1%	20.9%	9.1%	25.5%
Dry (19.5%)												
WSIP 2030 Without Project	6,942	8,957	19,465	9,146	15,195	13,302	6,200	5,720	7,909	9,095	6,561	5,083
WSIP 2030 With Project	7,291	9,243	18,083	7,576	12,366	11,003	6,218	5,496	8,692	10,563	8,500	6,634
Difference	349	286	-1,382	-1,570	-2,829	-2,299	17	-224	783	1,468	1,939	1,551
Percent Difference	5.0%	3.2%	-7.1%	-17.2%	-18.6%	-17.3%	0.3%	-3.9%	9.9%	16.1%	29.6%	30.5%
Critical (14.6%)												
WSIP 2030 Without Project	4,308	4,991	8,619	8,471	8,990	8,777	5,759	5,613	7,883	9,566	6,627	4,949
WSIP 2030 With Project	4,779	5,287	7,088	7,506	7,720	7,573	6,003	5,865	8,819	9,672	7,996	6,018
Difference	471	296	-1,531	-965	-1,271	-1,203	244	253	936	106	1,369	1,069
Percent Difference	10.9%	5.9%	-17.8%	-11.4%	-14.1%	-13.7%	4.2%	4.5%	11.9%	1.1%	20.7%	21.6%

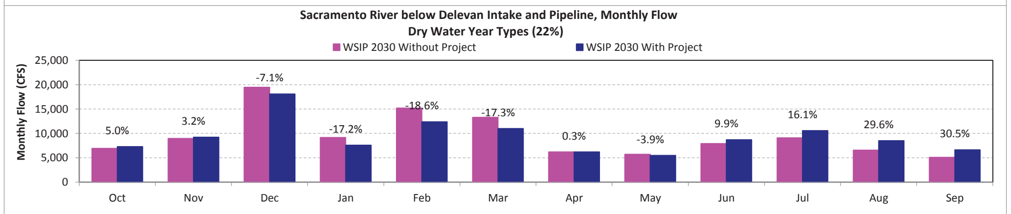
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











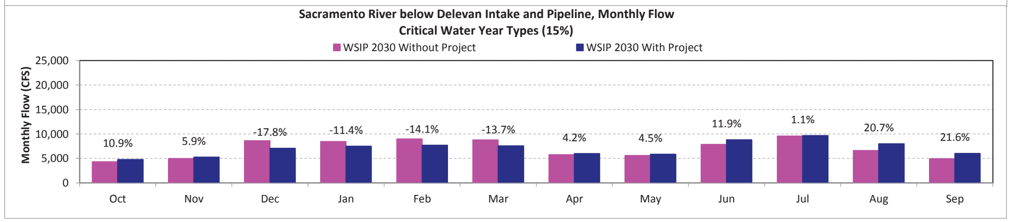
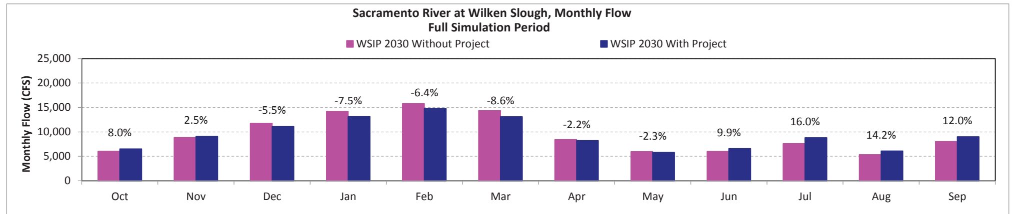
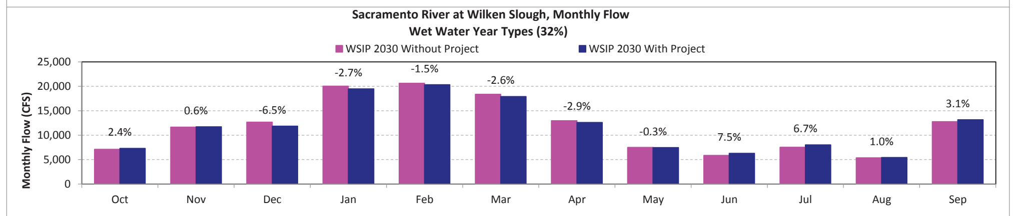


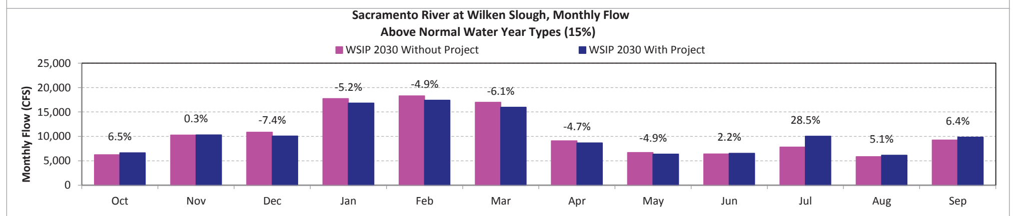
Table SW-15-a
Sacramento River at Wilken Slough, Monthly Flow
Long-term Average and Average by Water Year Type

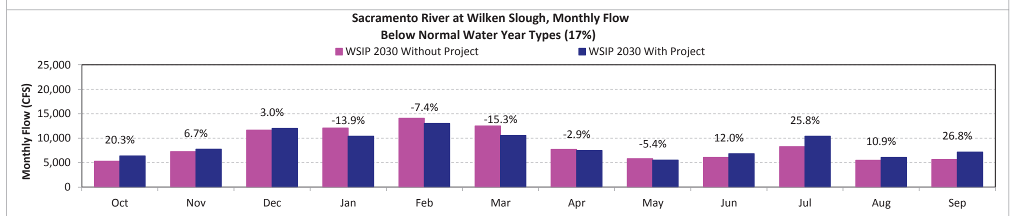
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,027	8,861	11,770	14,192	15,784	14,348	8,420	5,955	5,986	7,594	5,327	8,033
WSIP 2030 With Project	6,510	9,085	11,122	13,130	14,773	13,116	8,233	5,816	6,579	8,807	6,085	9,000
Difference	483	224	-648	-1,062	-1,012	-1,232	-187	-139	593	1,213	758	967
Percent Difference[3]	8.0%	2.5%	-5.5%	-7.5%	-6.4%	-8.6%	-2.2%	-2.3%	9.9%	16.0%	14.2%	12.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	7,119	11,648	12,686	20,038	20,640	18,373	12,980	7,498	5,864	7,534	5,364	12,779
WSIP 2030 With Project	7,290	11,718	11,866	19,487	20,330	17,903	12,605	7,473	6,301	8,036	5,419	13,171
Difference	171	69	-821	-551	-310	-470	-375	-25	437	502	55	392
Percent Difference	2.4%	0.6%	-6.5%	-2.7%	-1.5%	-2.6%	-2.9%	-0.3%	7.5%	6.7%	1.0%	3.1%
Above Normal (14.6%)												
WSIP 2030 Without Project	6,230	10,270	10,865	17,743	18,306	16,990	9,098	6,682	6,395	7,813	5,834	9,258
WSIP 2030 With Project	6,636	10,300	10,057	16,817	17,417	15,952	8,669	6,357	6,536	10,040	6,134	9,850
Difference	406	30	-808	-926	-889	-1,037	-429	-325	142	2,227	300	592
Percent Difference	6.5%	0.3%	-7.4%	-5.2%	-4.9%	-6.1%	-4.7%	-4.9%	2.2%	28.5%	5.1%	6.4%
Below Normal (20.7%)												
WSIP 2030 Without Project	5,308	7,258	11,648	12,060	14,066	12,494	7,701	5,823	6,084	8,259	5,479	5,659
WSIP 2030 With Project	6,388	7,744	11,995	10,387	13,029	10,580	7,479	5,506	6,816	10,393	6,079	7,174
Difference	1,080	486	347	-1,673	-1,037	-1,913	-222	-316	732	2,134	599	1,516
Percent Difference	20.3%	6.7%	3.0%	-13.9%	-7.4%	-15.3%	-2.9%	-5.4%	12.0%	25.8%	10.9%	26.8%
Dry (19.5%)												
WSIP 2030 Without Project	6,346	8,107	13,549	9,110	13,392	12,380	4,760	4,408	5,864	6,951	4,964	4,783
WSIP 2030 With Project	6,756	8,372	12,883	7,580	11,294	10,490	4,798	4,158	6,645	8,387	6,866	6,295
Difference	410	265	-666	-1,530	-2,098	-1,890	37	-250	781	1,436	1,902	1,512
Percent Difference	6.5%	3.3%	-4.9%	-16.8%	-15.7%	-15.3%	0.8%	-5.7%	13.3%	20.7%	38.3%	31.6%
Critical (14.6%)												
WSIP 2030 Without Project	4,142	4,921	8,571	8,259	8,770	8,573	4,138	4,263	5,855	7,417	5,012	4,617
WSIP 2030 With Project	4,607	5,233	7,054	7,487	7,658	7,399	4,337	4,470	6,779	7,494	6,394	5,654
Difference	465	311	-1,517	-771	-1,112	-1,174	198	207	924	77	1,382	1,037
Percent Difference	11.2%	6.3%	-17.7%	-9.3%	-12.7%	-13.7%	4.8%	4.9%	15.8%	1.0%	27.6%	22.5%

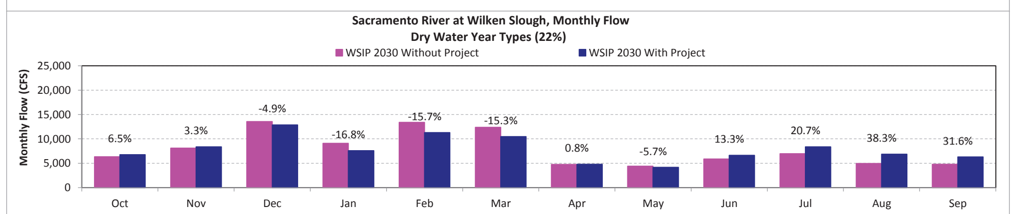
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











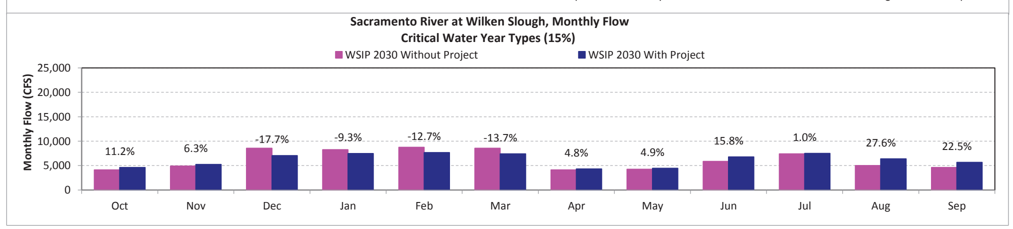


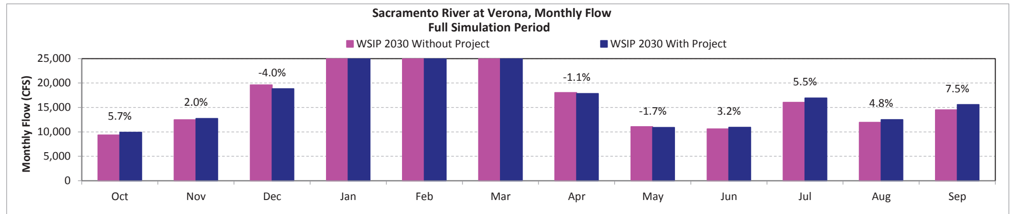
Table SW-16-a
Sacramento River at Verona, Monthly Flow
Long-term Average and Average by Water Year Type

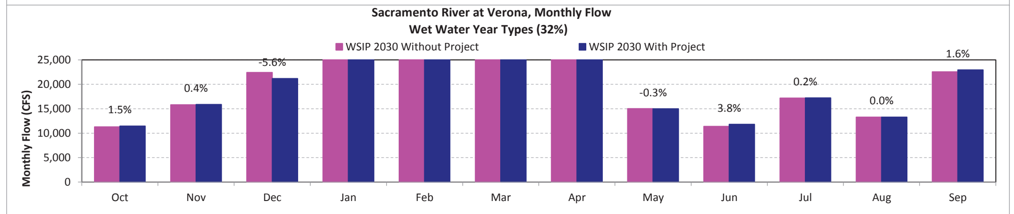
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	9,383	12,497	19,612	28,453	34,769	29,869	18,065	11,090	10,606	16,048	11,953	14,508
WSIP 2030 With Project	9,919	12,747	18,826	27,095	33,595	28,536	17,865	10,905	10,944	16,930	12,526	15,590
Difference	536	251	-787	-1,358	-1,174	-1,334	-200	-185	338	882	573	1,082
Percent Difference[3]	5.7%	2.0%	-4.0%	-4.8%	-3.4%	-4.5%	-1.1%	-1.7%	3.2%	5.5%	4.8%	7.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	11,300	15,803	22,421	47,449	54,273	44,584	29,750	15,027	11,400	17,200	13,306	22,571
WSIP 2030 With Project	11,471	15,866	21,172	46,531	53,765	43,794	29,307	14,985	11,832	17,226	13,300	22,941
Difference	171	63	-1,250	-918	-509	-790	-443	-42	432	26	-6	370
Percent Difference	1.5%	0.4%	-5.6%	-1.9%	-0.9%	-1.8%	-1.5%	-0.3%	3.8%	0.2%	0.0%	1.6%
Above Normal (14.6%)												
WSIP 2030 Without Project	10,683	15,053	18,268	35,751	42,412	39,417	18,767	12,401	11,250	17,972	14,419	17,199
WSIP 2030 With Project	11,020	15,100	17,406	34,134	41,165	38,428	18,432	12,086	11,176	19,320	14,403	17,750
Difference	337	46	-862	-1,617	-1,247	-990	-334	-315	-74	1,348	-17	550
Percent Difference	3.2%	0.3%	-4.7%	-4.5%	-2.9%	-2.5%	-1.8%	-2.5%	-0.7%	7.5%	-0.1%	3.2%
Below Normal (20.7%)												
WSIP 2030 Without Project	8,549	10,516	18,991	19,683	25,886	23,612	14,921	10,066	10,892	18,147	13,619	10,509
WSIP 2030 With Project	9,751	11,053	19,374	17,691	25,017	21,699	14,681	9,715	10,912	19,269	14,234	12,171
Difference	1,203	538	383	-1,992	-869	-1,914	-240	-351	19	1,122	615	1,662
Percent Difference	14.1%	5.1%	2.0%	-10.1%	-3.4%	-8.1%	-1.6%	-3.5%	0.2%	6.2%	4.5%	15.8%
Dry (19.5%)												
WSIP 2030 Without Project	9,343	12,062	23,156	14,382	22,774	19,252	9,591	8,252	10,075	14,213	9,619	9,748
WSIP 2030 With Project	9,935	12,397	22,383	12,903	20,401	17,227	9,622	8,019	10,635	15,900	11,042	11,501
Difference	592	335	-773	-1,479	-2,372	-2,025	31	-233	560	1,687	1,423	1,753
Percent Difference	6.3%	2.8%	-3.3%	-10.3%	-10.4%	-10.5%	0.3%	-2.8%	5.6%	11.9%	14.8%	18.0%
Critical (14.6%)												
WSIP 2030 Without Project	5,323	6,438	11,260	12,768	15,070	12,686	8,769	6,813	8,612	11,198	7,420	7,031
WSIP 2030 With Project	5,800	6,764	9,838	11,812	13,746	11,619	8,961	6,760	9,319	11,984	8,596	8,412
Difference	477	326	-1,422	-956	-1,324	-1,067	192	-53	707	786	1,176	1,381
Percent Difference	9.0%	5.1%	-12.6%	-7.5%	-8.8%	-8.4%	2.2%	-0.8%	8.2%	7.0%	15.8%	19.6%

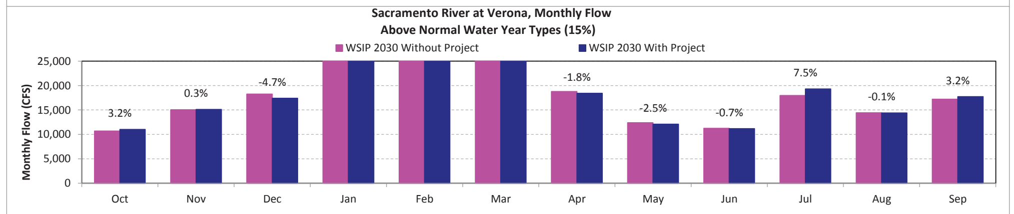
1 Based on the 82-year simulation period

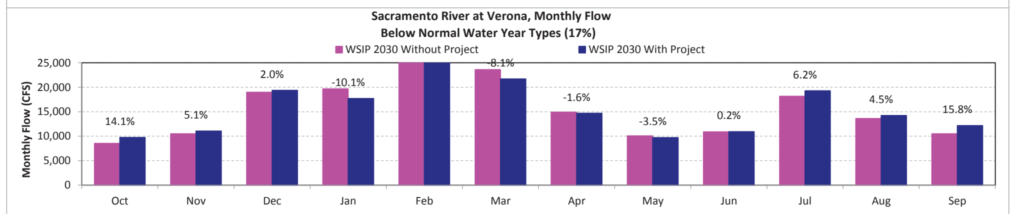
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

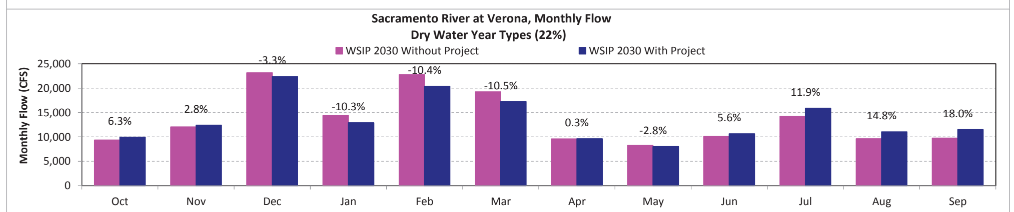
3 Relative difference of the monthly average











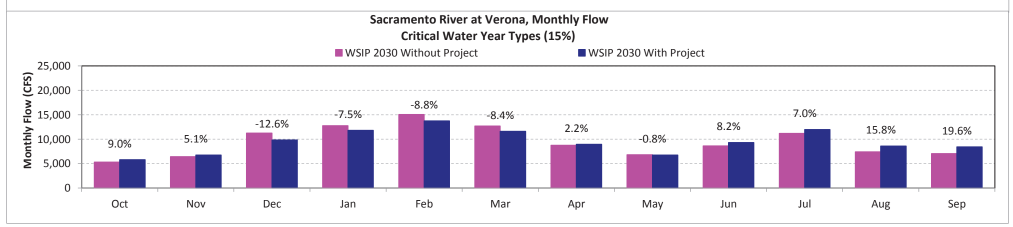


Table SW-17-a
Sacramento River at Freeport, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	11,381	15,801	24,220	33,907	41,521	35,166	22,047	13,469	12,840	19,825	13,884	16,590
WSIP 2030 With Project	12,052	16,175	23,446	32,650	40,359	33,876	21,877	13,347	13,186	20,243	14,514	17,721
Difference	672	374	-774	-1,257	-1,161	-1,290	-170	-123	345	418	629	1,132
Percent Difference[3]	5.9%	2.4%	-3.2%	-3.7%	-2.8%	-3.7%	-0.8%	-0.9%	2.7%	2.1%	4.5%	6.8%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	13,580	20,172	27,667	55,944	63,741	51,966	36,623	18,448	13,867	21,398	15,700	26,164
WSIP 2030 With Project	14,014	20,214	26,379	55,128	63,310	51,219	36,182	18,437	14,354	21,321	15,736	26,378
Difference	434	42	-1,287	-817	-431	-746	-441	-12	487	-77	37	213
Percent Difference	3.2%	0.2%	-4.7%	-1.5%	-0.7%	-1.4%	-1.2%	-0.1%	3.5%	-0.4%	0.2%	0.8%
Above Normal (14.6%)												
WSIP 2030 Without Project	12,753	18,016	22,793	43,085	50,731	45,715	22,296	14,774	13,299	22,694	16,258	19,132
WSIP 2030 With Project	13,079	18,348	21,899	41,569	49,515	44,749	21,963	14,513	13,317	23,279	16,342	19,765
Difference	326	332	-895	-1,516	-1,216	-966	-333	-261	18	585	84	632
Percent Difference	2.6%	1.8%	-3.9%	-3.5%	-2.4%	-2.1%	-1.5%	-1.8%	0.1%	2.6%	0.5%	3.3%
Below Normal (20.7%)												
WSIP 2030 Without Project	10,424	13,040	23,085	23,704	32,376	29,058	18,111	11,973	13,025	22,804	15,384	12,098
WSIP 2030 With Project	11,726	13,709	23,579	21,742	31,472	27,187	17,934	11,672	13,243	22,919	16,171	13,914
Difference	1,301	669	494	-1,962	-904	-1,871	-178	-301	218	115	787	1,816
Percent Difference	12.5%	5.1%	2.1%	-8.3%	-2.8%	-6.4%	-1.0%	-2.5%	1.7%	0.5%	5.1%	15.0%
Dry (19.5%)												
WSIP 2030 Without Project	11,566	16,255	29,074	17,683	27,683	23,024	11,994	10,355	12,726	17,409	11,644	11,033
WSIP 2030 With Project	12,327	16,892	28,354	16,399	25,224	20,992	12,065	10,261	13,028	18,475	13,028	12,993
Difference	761	637	-720	-1,284	-2,459	-2,033	71	-94	302	1,066	1,385	1,959
Percent Difference	6.6%	3.9%	-2.5%	-7.3%	-8.9%	-8.8%	0.6%	-0.9%	2.4%	6.1%	11.9%	17.8%
Critical (14.6%)												
WSIP 2030 Without Project	6,533	7,788	13,600	14,905	17,422	14,459	10,411	8,064	10,134	12,677	8,593	7,871
WSIP 2030 With Project	7,035	8,126	12,149	14,021	16,160	13,525	10,660	8,064	10,750	13,528	9,771	9,343
Difference	501	338	-1,451	-884	-1,262	-934	249	0	616	851	1,178	1,472
Percent Difference	7.7%	4.3%	-10.7%	-5.9%	-7.2%	-6.5%	2.4%	0.0%	6.1%	6.7%	13.7%	18.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-18-a

Lake Oroville, End of Month Storage

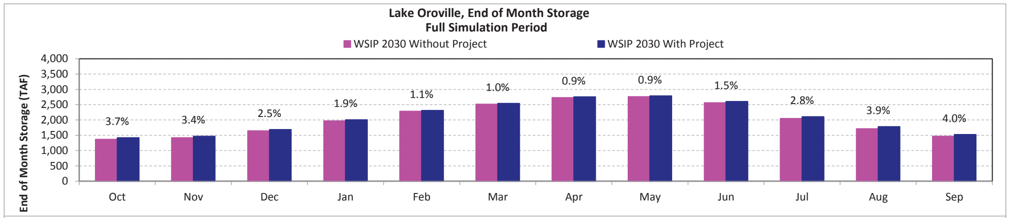
Long-term Average and Average by Water Year Type

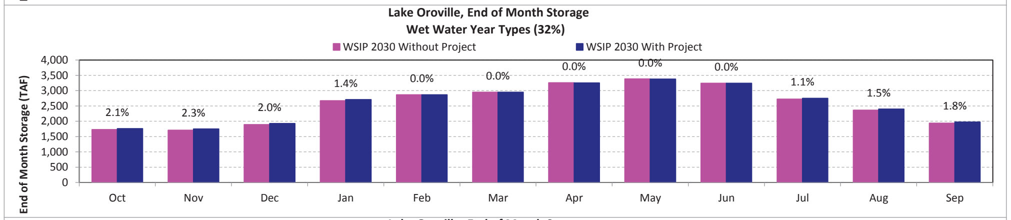
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1,369	1,420	1,647	1,973	2,285	2,518	2,730	2,760	2,565	2,049	1,713	1,469
WSIP 2030 With Project	1,419	1,468	1,688	2,010	2,311	2,544	2,755	2,786	2,604	2,106	1,780	1,528
Difference	50	48	41	37	26	25	25	26	39	57	67	59
Percent Difference[3]	3.7%	3.4%	2.5%	1.9%	1.1%	1.0%	0.9%	0.9%	1.5%	2.8%	3.9%	4.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1,727	1,709	1,892	2,672	2,865	2,952	3,256	3,383	3,243	2,724	2,362	1,938
WSIP 2030 With Project	1,762	1,749	1,929	2,710	2,866	2,952	3,256	3,381	3,242	2,753	2,397	1,974
Difference	35	39	37	38	1	0	0	-1	0	29	35	36
Percent Difference	2.1%	2.3%	2.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	1.5%	1.8%
Above Normal (14.6%)												
WSIP 2030 Without Project	1,548	1,566	1,651	2,283	2,760	2,945	3,250	3,313	3,129	2,501	2,045	1,697
WSIP 2030 With Project	1,629	1,634	1,718	2,306	2,784	2,951	3,257	3,318	3,146	2,559	2,124	1,778
Difference	81	68	68	23	23	7	6	6	17	59	78	81
Percent Difference	5.2%	4.4%	4.1%	1.0%	0.8%	0.2%	0.2%	0.2%	0.6%	2.3%	3.8%	4.8%
Below Normal (20.7%)												
WSIP 2030 Without Project	1,215	1,230	1,505	1,729	2,123	2,512	2,757	2,764	2,510	1,878	1,441	1,323
WSIP 2030 With Project	1,306	1,313	1,573	1,761	2,152	2,543	2,785	2,792	2,580	2,001	1,562	1,435
Difference	91	83	68	32	29	31	28	28	69	122	121	112
Percent Difference	7.5%	6.7%	4.5%	1.8%	1.4%	1.2%	1.0%	1.0%	2.8%	6.5%	8.4%	8.4%
Dry (19.5%)												
WSIP 2030 Without Project	1,201	1,395	1,762	1,454	1,851	2,213	2,339	2,294	2,048	1,563	1,309	1,146
WSIP 2030 With Project	1,225	1,422	1,769	1,487	1,884	2,254	2,380	2,332	2,097	1,603	1,374	1,195
Difference	25	27	7	33	33	41	41	38	50	40	65	49
Percent Difference	2.1%	1.9%	0.4%	2.3%	1.8%	1.8%	1.7%	1.7%	2.4%	2.6%	5.0%	4.3%
Critical (14.6%)												
WSIP 2030 Without Project	890	973	1,181	1,246	1,412	1,605	1,598	1,527	1,355	1,079	952	901
WSIP 2030 With Project	916	999	1,209	1,305	1,477	1,673	1,666	1,611	1,443	1,123	1,000	924
Difference	26	26	29	59	65	69	68	83	88	44	48	23
Percent Difference	2.9%	2.6%	2.4%	4.8%	4.6%	4.3%	4.3%	5.5%	6.5%	4.0%	5.0%	2.6%

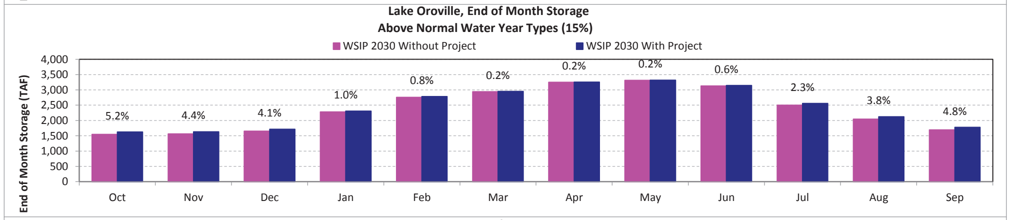
1 Based on the 82-year simulation period

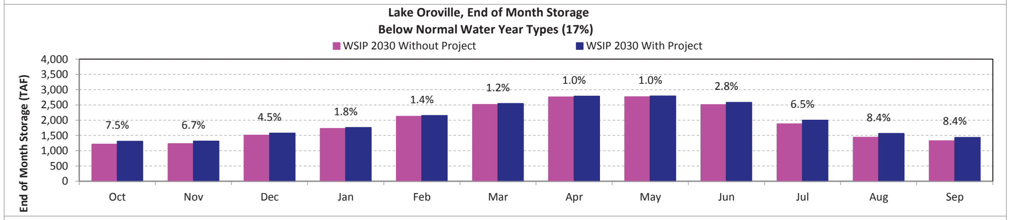
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

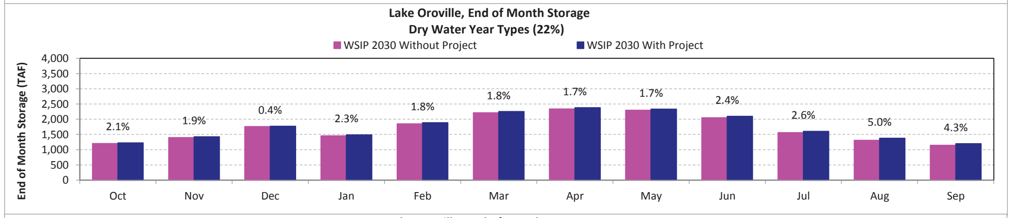
3 Relative difference of the monthly average











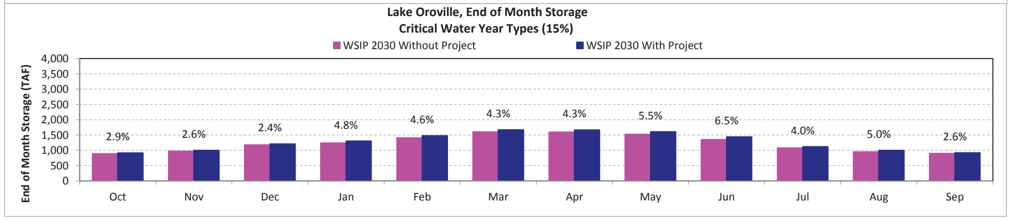


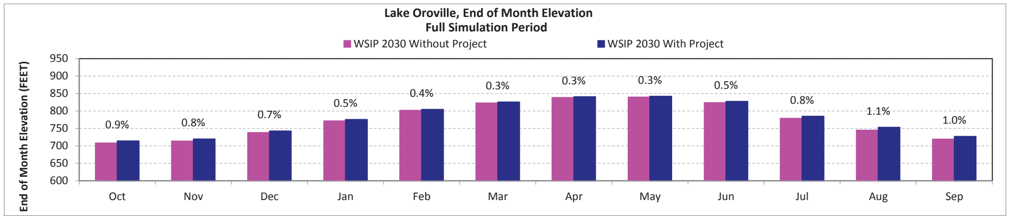
Table SW-19-a
Lake Oroville, End of Month Elevation
Long-term Average and Average by Water Year Type

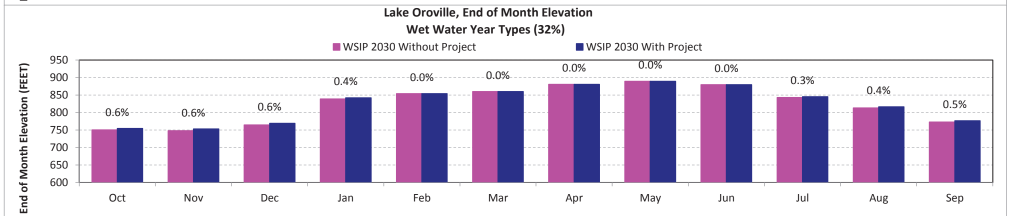
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	708	714	738	772	802	823	838	840	824	779	745	719
WSIP 2030 With Project	714	720	743	776	805	826	841	842	827	785	753	727
Difference	6	6	5	4	3	3	3	3	4	6	8	7
Percent Difference[3]	0.9%	0.8%	0.7%	0.5%	0.4%	0.3%	0.3%	0.3%	0.5%	0.8%	1.1%	1.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	750	748	765	839	854	860	881	889	880	843	813	773
WSIP 2030 With Project	755	753	769	842	854	860	881	889	880	845	817	777
Difference	4	5	5	3	0	0	0	0	0	2	4	4
Percent Difference	0.6%	0.6%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.4%	0.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	732	732	741	804	846	859	880	885	872	827	787	750
WSIP 2030 With Project	742	741	749	807	848	860	881	885	873	832	795	759
Difference	10	8	8	3	2	0	0	0	1	5	8	9
Percent Difference	1.3%	1.2%	1.1%	0.3%	0.2%	0.1%	0.0%	0.0%	0.1%	0.6%	1.0%	1.3%
Below Normal (20.7%)												
WSIP 2030 Without Project	693	695	723	753	792	827	846	847	828	769	720	706
WSIP 2030 With Project	704	705	731	756	794	830	848	849	833	782	735	720
Difference	11	10	8	4	3	3	2	2	5	13	15	14
Percent Difference	1.6%	1.4%	1.1%	0.5%	0.4%	0.3%	0.2%	0.2%	0.6%	1.6%	2.1%	1.9%
Dry (19.5%)												
WSIP 2030 Without Project	687	709	747	720	764	800	810	806	783	733	703	683
WSIP 2030 With Project	689	711	748	725	768	804	814	810	788	737	710	688
Difference	2	2	1	4	4	5	4	4	4	4	7	5
Percent Difference	0.3%	0.3%	0.1%	0.6%	0.5%	0.6%	0.5%	0.5%	0.5%	0.5%	1.0%	0.8%
Critical (14.6%)												
WSIP 2030 Without Project	645	659	687	694	714	736	735	726	706	671	652	646
WSIP 2030 With Project	651	663	691	702	722	744	743	737	718	679	662	652
Difference	6	5	4	8	8	8	9	10	12	8	9	6
Percent Difference	0.9%	0.7%	0.6%	1.1%	1.1%	1.1%	1.2%	1.4%	1.6%	1.2%	1.5%	0.9%

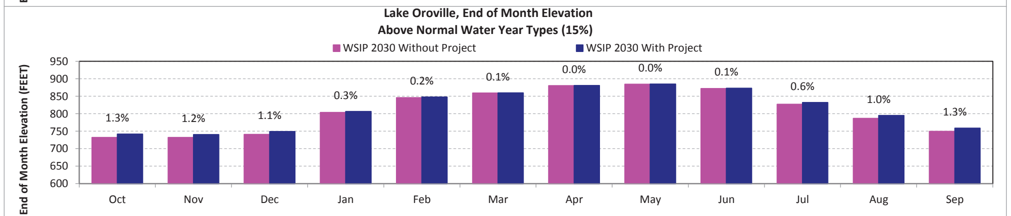
1 Based on the 82-year simulation period

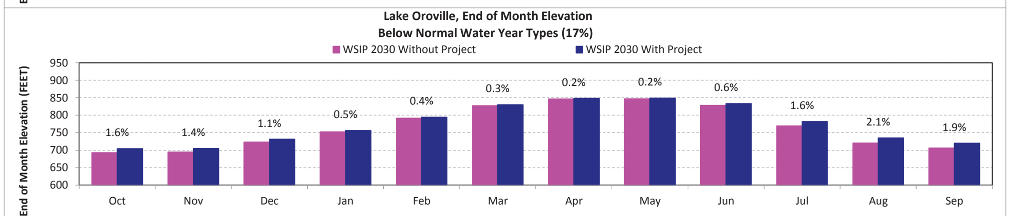
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

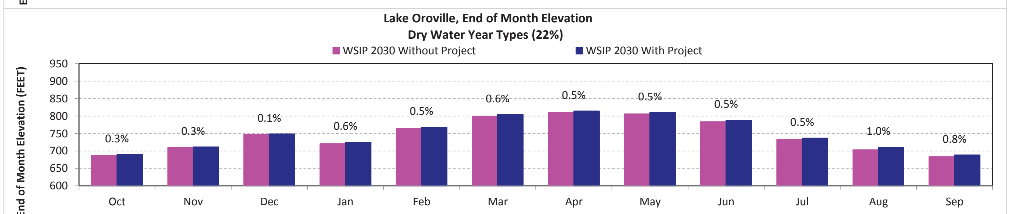
3 Relative difference of the monthly average











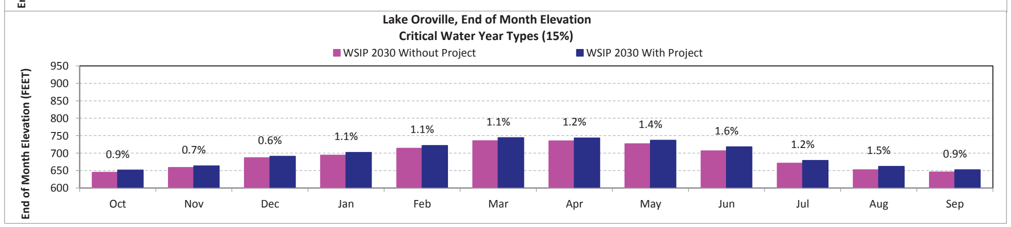


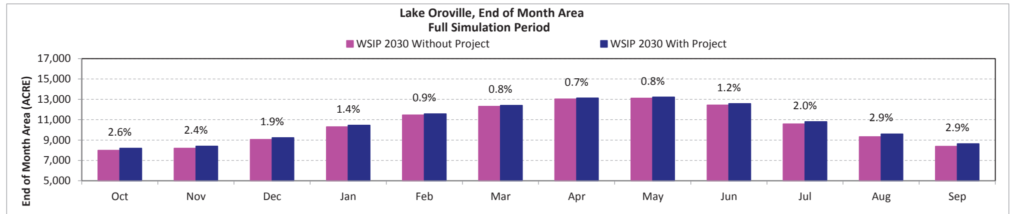
Table SW-20-a
Lake Oroville, End of Month Area
Long-term Average and Average by Water Year Type

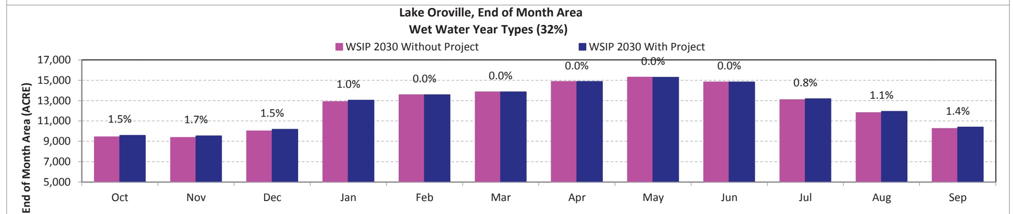
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	7,990	8,192	9,063	10,306	11,465	12,313	13,029	13,118	12,432	10,586	9,322	8,389
WSIP 2030 With Project	8,201	8,391	9,232	10,451	11,567	12,411	13,122	13,217	12,577	10,802	9,594	8,633
Difference	210	198	168	145	101	98	93	99	145	216	272	245
Percent Difference[3]	2.6%	2.4%	1.9%	1.4%	0.9%	0.8%	0.7%	0.8%	1.2%	2.0%	2.9%	2.9%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	9,433	9,364	10,019	12,895	13,560	13,849	14,864	15,286	14,820	13,073	11,805	10,245
WSIP 2030 With Project	9,579	9,524	10,171	13,027	13,563	13,849	14,863	15,282	14,818	13,175	11,935	10,386
Difference	146	160	152	132	3	0	-1	-5	-2	102	130	140
Percent Difference	1.5%	1.7%	1.5%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	1.1%	1.4%
Above Normal (14.6%)												
WSIP 2030 Without Project	8,758	8,793	9,116	11,489	13,203	13,827	14,845	15,053	14,439	12,323	10,696	9,358
WSIP 2030 With Project	9,088	9,078	9,395	11,584	13,284	13,848	14,866	15,071	14,497	12,533	10,990	9,684
Difference	331	286	279	94	82	22	21	19	57	209	293	326
Percent Difference	3.8%	3.2%	3.1%	0.8%	0.6%	0.2%	0.1%	0.1%	0.4%	1.7%	2.7%	3.5%
Below Normal (20.7%)												
WSIP 2030 Without Project	7,407	7,467	8,527	9,472	10,943	12,354	13,198	13,219	12,358	10,063	8,335	7,856
WSIP 2030 With Project	7,786	7,808	8,800	9,597	11,051	12,465	13,293	13,311	12,593	10,522	8,837	8,318
Difference	379	341	273	125	108	111	95	92	235	459	502	461
Percent Difference	5.1%	4.6%	3.2%	1.3%	1.0%	0.9%	0.7%	0.7%	1.9%	4.6%	6.0%	5.9%
Dry (19.5%)												
WSIP 2030 Without Project	7,292	8,063	9,466	8,365	9,911	11,266	11,709	11,544	10,649	8,801	7,782	7,106
WSIP 2030 With Project	7,387	8,156	9,495	8,504	10,048	11,425	11,862	11,688	10,822	8,946	8,040	7,305
Difference	94	93	29	139	136	159	153	144	174	145	258	198
Percent Difference	1.3%	1.2%	0.3%	1.7%	1.4%	1.4%	1.3%	1.2%	1.6%	1.6%	3.3%	2.8%
Critical (14.6%)												
WSIP 2030 Without Project	5,974	6,351	7,242	7,501	8,175	8,937	8,909	8,624	7,931	6,789	6,228	6,014
WSIP 2030 With Project	6,114	6,480	7,371	7,757	8,446	9,215	9,191	8,968	8,306	6,997	6,467	6,148
Difference	140	129	129	256	270	278	281	344	375	208	238	135
Percent Difference	2.3%	2.0%	1.8%	3.4%	3.3%	3.1%	3.2%	4.0%	4.7%	3.1%	3.8%	2.2%

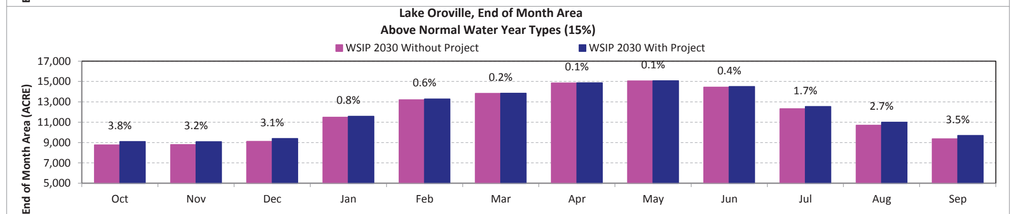
1 Based on the 82-year simulation period

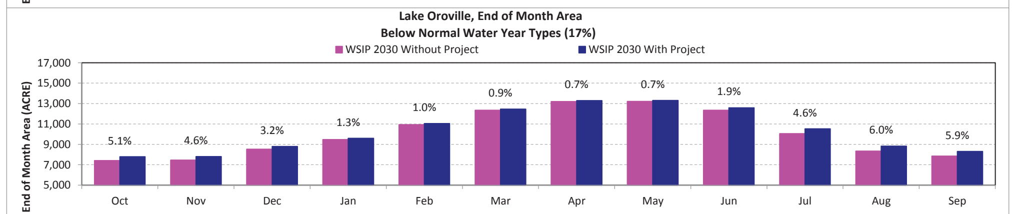
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

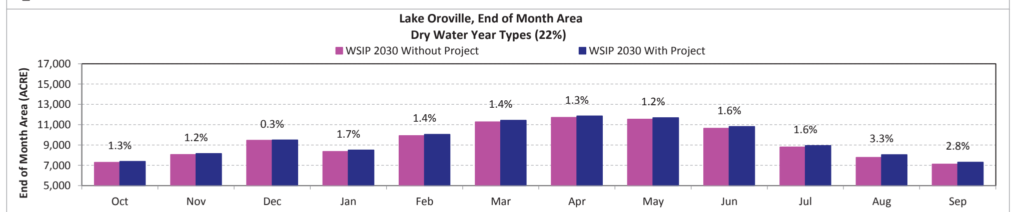
3 Relative difference of the monthly average











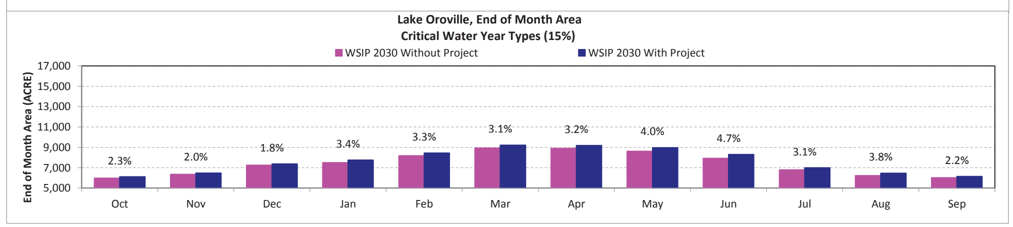


Table SW-21-a

Feather River at Thermalito Low Flow Channel, Monthly Flow

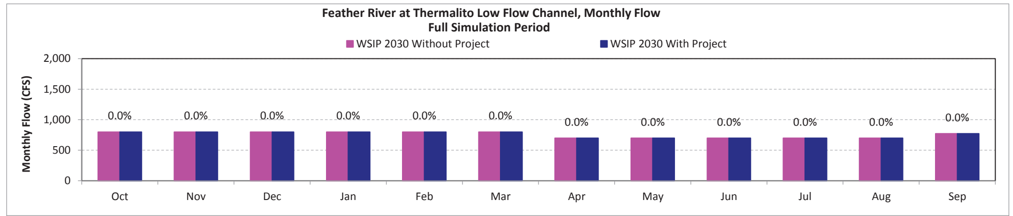
Long-term Average and Average by Water Year Type

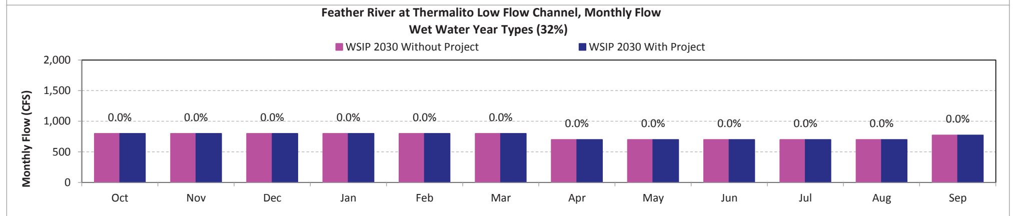
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2030 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2030 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2030 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2030 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (19.5%)												
WSIP 2030 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2030 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
WSIP 2030 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2030 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

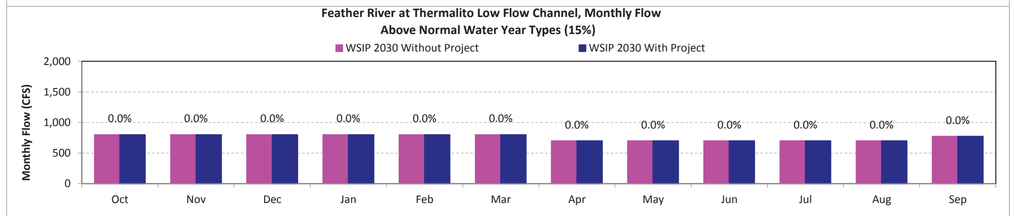
1 Based on the 82-year simulation period

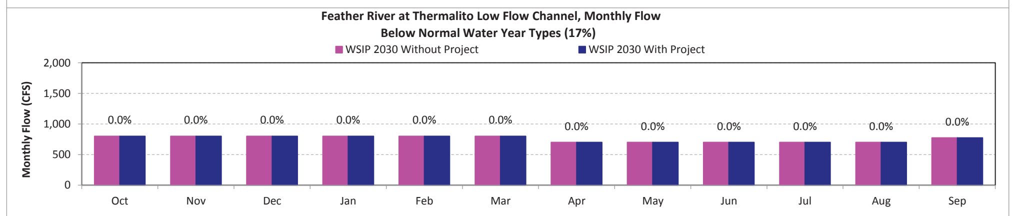
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

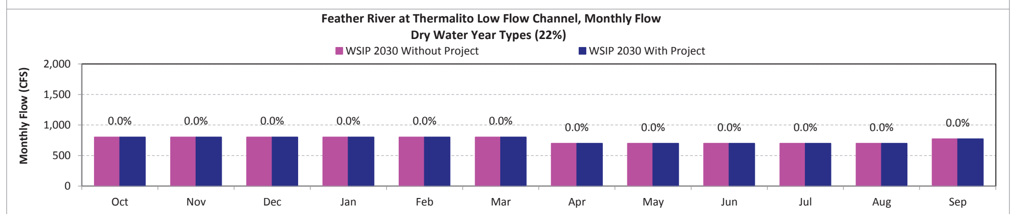
3 Relative difference of the monthly average











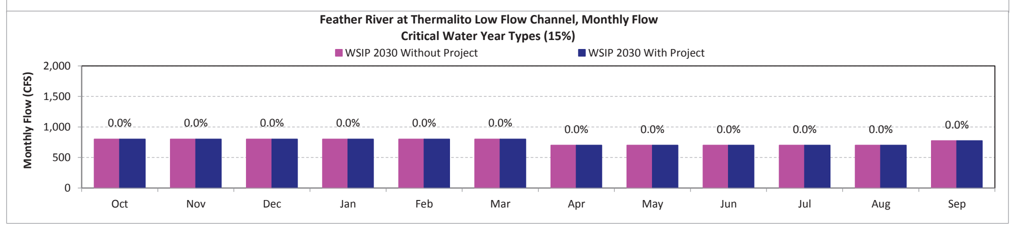


Table SW-22-a
Feather River below Thermalito, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	2,945	1,986	3,101	4,598	7,321	7,112	2,613	1,865	2,779	7,452	5,138	4,407
WSIP 2030 With Project	3,035	2,015	3,206	4,663	7,518	7,109	2,617	1,828	2,514	7,165	4,947	4,507
Difference	90	28	105	65	197	-3	3	-38	-265	-287	-190	100
Percent Difference[3]	3.0%	1.4%	3.4%	1.4%	2.7%	0.0%	0.1%	-2.0%	-9.5%	-3.8%	-3.7%	2.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	3,908	2,681	3,765	11,561	17,554	14,599	5,472	2,719	2,745	8,076	5,914	7,511
WSIP 2030 With Project	3,908	2,614	3,808	11,589	18,213	14,614	5,466	2,728	2,716	7,580	5,804	7,476
Difference	0	-67	42	29	659	15	-6	9	-29	-496	-110	-35
Percent Difference	0.0%	-2.5%	1.1%	0.2%	3.8%	0.1%	-0.1%	0.3%	-1.1%	-6.1%	-1.9%	-0.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	3,991	2,542	3,874	2,215	6,709	10,363	1,421	1,628	2,798	9,274	7,158	5,631
WSIP 2030 With Project	3,922	2,749	3,945	2,601	6,707	10,634	1,419	1,626	2,587	8,589	6,827	5,574
Difference	-69	207	72	386	-2	271	-2	-1	-211	-684	-331	-57
Percent Difference	-1.7%	8.1%	1.9%	17.4%	0.0%	2.6%	-0.2%	-0.1%	-7.5%	-7.4%	-4.6%	-1.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	2,712	1,853	1,928	1,477	2,316	2,489	1,378	1,311	3,160	8,795	6,558	2,542
WSIP 2030 With Project	2,839	1,883	2,100	1,477	2,365	2,452	1,424	1,293	2,444	7,918	6,542	2,688
Difference	127	30	172	0	49	-37	46	-18	-717	-877	-16	146
Percent Difference	4.7%	1.6%	8.9%	0.0%	2.1%	-1.5%	3.3%	-1.4%	-22.7%	-10.0%	-0.2%	5.7%
Dry (19.5%)												
WSIP 2030 Without Project	2,152	1,343	3,888	1,388	1,547	2,123	1,539	1,669	2,951	6,661	3,529	2,787
WSIP 2030 With Project	2,523	1,415	4,147	1,388	1,536	2,003	1,527	1,685	2,727	6,869	3,063	2,985
Difference	371	72	260	0	-11	-121	-12	17	-224	208	-466	199
Percent Difference	17.3%	5.4%	6.7%	0.0%	-0.7%	-5.7%	-0.8%	1.0%	-7.6%	3.1%	-13.2%	7.1%
Critical (14.6%)												
WSIP 2030 Without Project	1,280	1,031	1,560	1,175	1,405	1,465	1,033	1,373	2,061	3,481	1,631	1,517
WSIP 2030 With Project	1,288	1,019	1,527	1,175	1,325	1,358	1,023	1,102	1,838	4,205	1,537	1,859
Difference	8	-12	-32	0	-80	-107	-10	-271	-223	724	-95	342
Percent Difference	0.6%	-1.1%	-2.1%	0.0%	-5.7%	-7.3%	-1.0%	-19.7%	-10.8%	20.8%	-5.8%	22.6%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

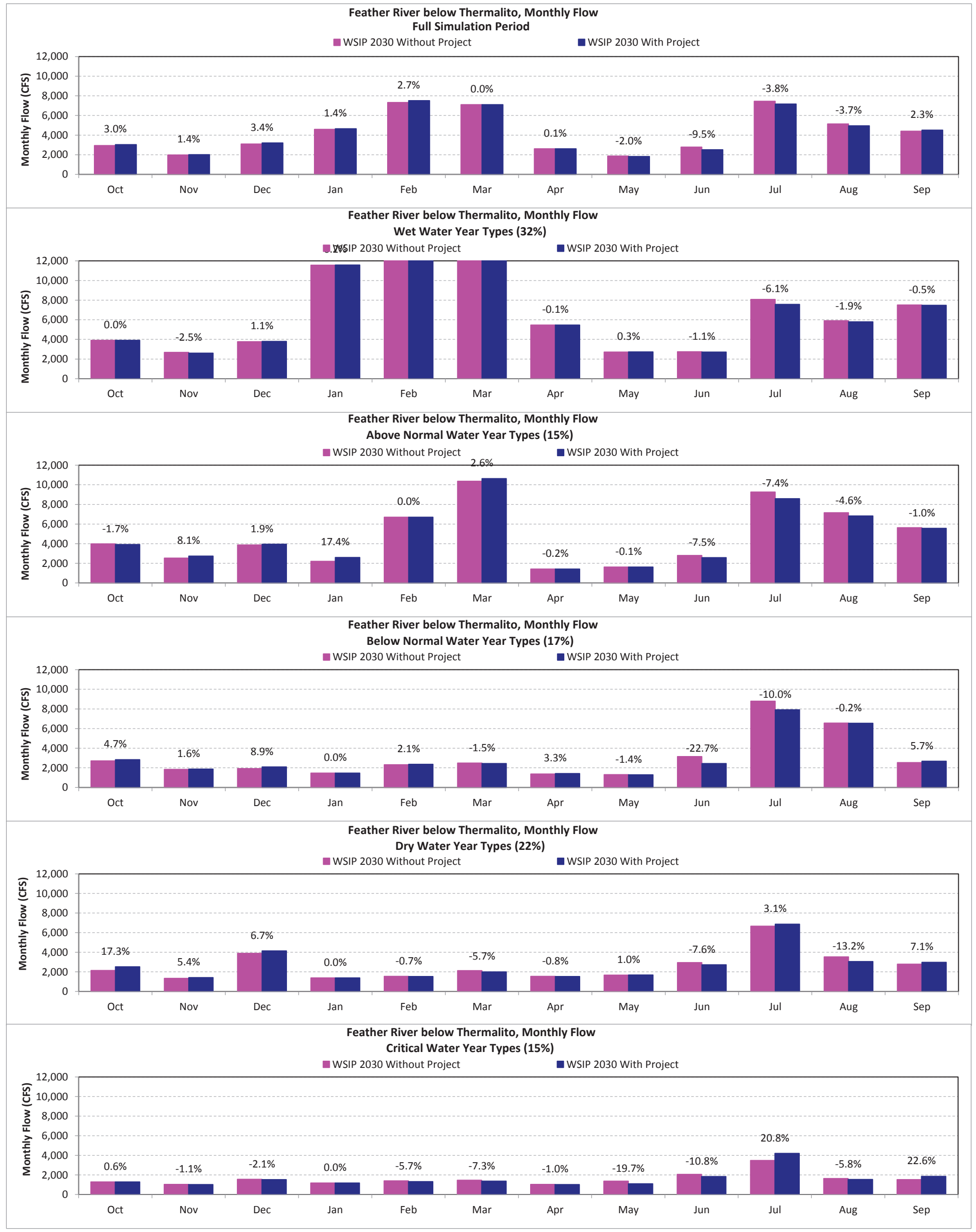


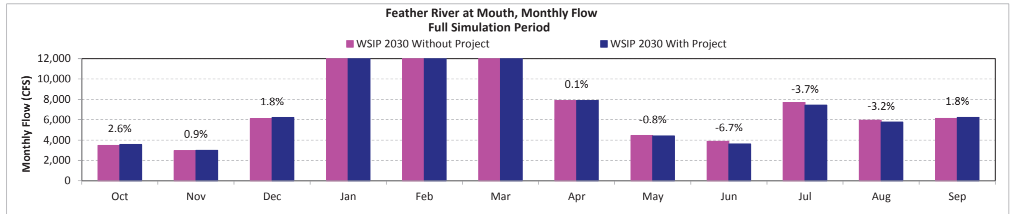
Table SW-23-a
Feather River at Mouth, Monthly Flow
Long-term Average and Average by Water Year Type

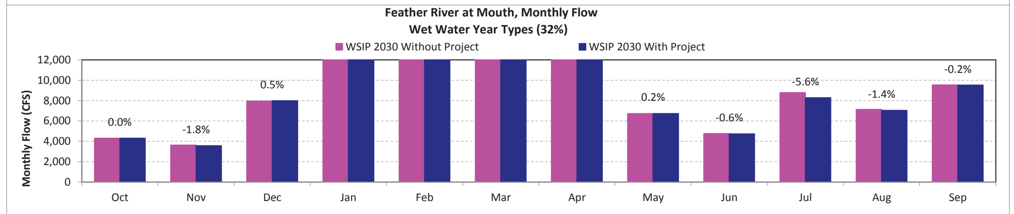
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	3,463	2,962	6,097	12,539	16,361	15,102	7,890	4,438	3,887	7,713	5,959	6,127
WSIP 2030 With Project	3,554	2,990	6,204	12,600	16,553	15,101	7,897	4,402	3,625	7,431	5,768	6,239
Difference	91	28	108	61	192	-1	6	-35	-262	-282	-192	112
Percent Difference[3]	2.6%	0.9%	1.8%	0.5%	1.2%	0.0%	0.1%	-0.8%	-6.7%	-3.7%	-3.2%	1.8%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	4,312	3,627	7,948	27,310	34,435	27,089	14,539	6,720	4,762	8,784	7,139	9,542
WSIP 2030 With Project	4,312	3,561	7,991	27,339	35,094	27,103	14,537	6,730	4,735	8,288	7,039	9,520
Difference	1	-67	43	29	659	14	-3	10	-28	-496	-99	-22
Percent Difference	0.0%	-1.8%	0.5%	0.1%	1.9%	0.1%	0.0%	0.2%	-0.6%	-5.6%	-1.4%	-0.2%
Above Normal (14.6%)												
WSIP 2030 Without Project	4,472	3,806	5,764	10,743	18,451	22,081	8,045	4,701	4,079	9,503	8,010	7,565
WSIP 2030 With Project	4,403	4,013	5,834	11,130	18,448	22,352	8,043	4,701	3,870	8,819	7,678	7,511
Difference	-69	207	71	387	-3	271	-2	0	-209	-685	-332	-54
Percent Difference	-1.5%	5.4%	1.2%	3.6%	0.0%	1.2%	0.0%	0.0%	-5.1%	-7.2%	-4.1%	-0.7%
Below Normal (20.7%)												
WSIP 2030 Without Project	3,212	2,437	4,565	5,960	7,819	9,831	5,298	3,602	4,070	9,060	7,476	4,396
WSIP 2030 With Project	3,336	2,468	4,738	5,962	7,871	9,795	5,347	3,586	3,353	8,186	7,457	4,543
Difference	124	31	173	3	53	-36	49	-15	-717	-874	-19	147
Percent Difference	3.9%	1.3%	3.8%	0.0%	0.7%	-0.4%	0.9%	-0.4%	-17.6%	-9.7%	-0.2%	3.3%
Dry (19.5%)												
WSIP 2030 Without Project	3,203	3,012	8,318	4,400	5,231	5,665	3,780	3,283	3,455	6,552	4,023	4,559
WSIP 2030 With Project	3,577	3,077	8,581	4,391	5,193	5,537	3,772	3,303	3,234	6,782	3,554	4,799
Difference	374	65	263	-10	-38	-129	-8	20	-221	230	-469	240
Percent Difference	11.7%	2.2%	3.2%	-0.2%	-0.7%	-2.3%	-0.2%	0.6%	-6.4%	3.5%	-11.6%	5.3%
Critical (14.6%)												
WSIP 2030 Without Project	1,389	1,412	1,783	3,735	3,556	3,198	3,035	2,145	2,189	3,331	1,885	2,114
WSIP 2030 With Project	1,402	1,404	1,761	3,712	3,474	3,113	3,029	1,878	1,976	4,052	1,765	2,452
Difference	13	-8	-22	-23	-82	-85	-6	-267	-214	721	-120	338
Percent Difference	0.9%	-0.5%	-1.2%	-0.6%	-2.3%	-2.7%	-0.2%	-12.4%	-9.8%	21.6%	-6.4%	16.0%

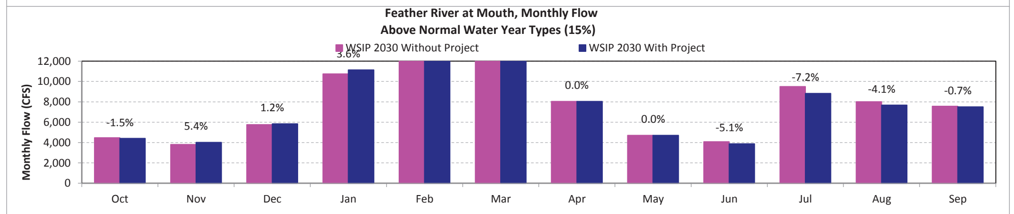
1 Based on the 82-year simulation period

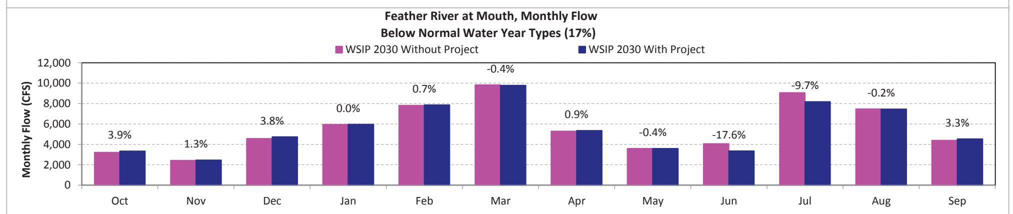
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

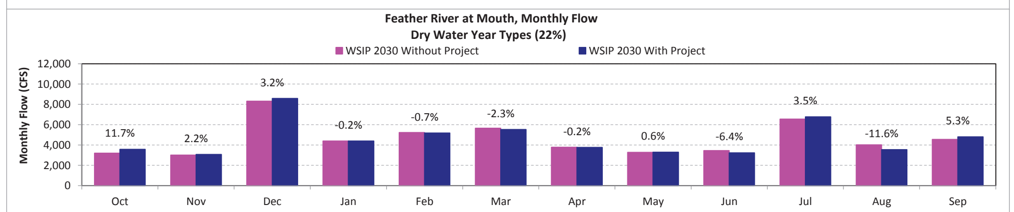
3 Relative difference of the monthly average











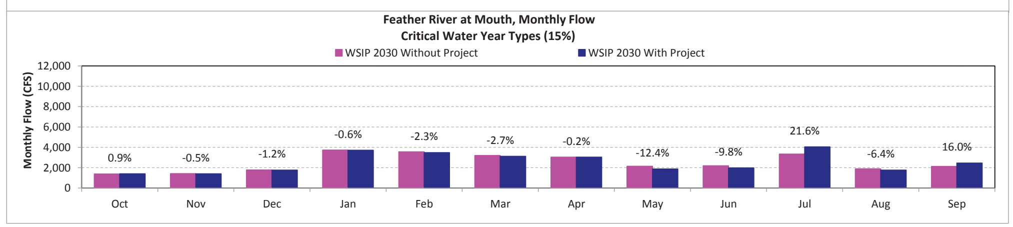


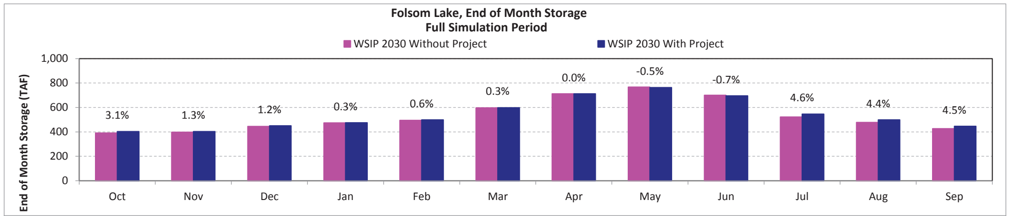
Table SW-24-a
Folsom Lake, End of Month Storage
Long-term Average and Average by Water Year Type

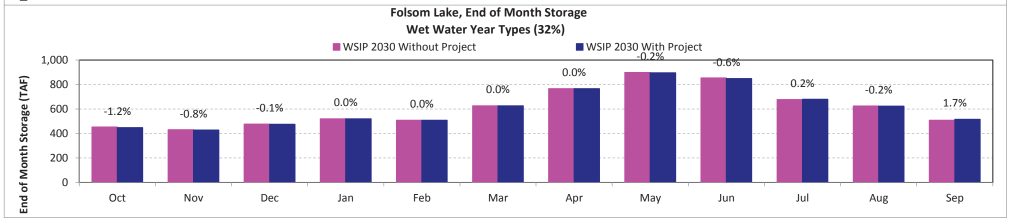
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	392	399	446	475	496	598	713	769	701	523	478	428
WSIP 2030 With Project	404	404	451	476	499	599	713	764	696	547	499	447
Difference	12	5	5	1	3	2	0	-4	-5	24	21	19
Percent Difference[3]	3.1%	1.3%	1.2%	0.3%	0.6%	0.3%	0.0%	-0.5%	-0.7%	4.6%	4.4%	4.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	454	431	476	520	508	626	767	898	853	678	625	508
WSIP 2030 With Project	448	428	475	520	508	626	767	896	848	679	624	516
Difference	-5	-4	-1	0	0	0	0	-2	-5	1	-1	9
Percent Difference	-1.2%	-0.8%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.6%	0.2%	-0.2%	1.7%
Above Normal (14.6%)												
WSIP 2030 Without Project	414	428	462	531	548	643	778	844	778	544	508	459
WSIP 2030 With Project	444	441	478	530	548	643	778	841	769	580	539	487
Difference	30	13	16	-1	0	0	0	-3	-9	37	31	28
Percent Difference	7.3%	3.0%	3.5%	-0.3%	0.0%	0.0%	0.0%	-0.4%	-1.2%	6.8%	6.1%	6.2%
Below Normal (20.7%)												
WSIP 2030 Without Project	398	404	461	500	536	627	775	796	718	482	448	437
WSIP 2030 With Project	420	419	471	500	540	629	772	790	700	526	482	464
Difference	22	15	9	-1	4	1	-2	-6	-17	44	35	27
Percent Difference	5.6%	3.8%	2.0%	-0.2%	0.7%	0.2%	-0.3%	-0.7%	-2.4%	9.1%	7.7%	6.1%
Dry (19.5%)												
WSIP 2030 Without Project	360	400	403	419	479	594	689	699	596	438	381	371
WSIP 2030 With Project	388	411	412	417	482	597	690	692	604	483	430	410
Difference	28	11	8	-2	3	4	1	-8	8	44	50	38
Percent Difference	7.7%	2.8%	2.1%	-0.6%	0.6%	0.6%	0.2%	-1.1%	1.3%	10.1%	13.1%	10.4%
Critical (14.6%)												
WSIP 2030 Without Project	275	293	402	361	384	457	484	476	422	353	316	293
WSIP 2030 With Project	269	286	398	375	395	461	484	473	425	355	316	289
Difference	-6	-7	-4	15	11	4	0	-3	3	2	0	-4
Percent Difference	-2.1%	-2.3%	-0.9%	4.0%	2.9%	0.9%	0.1%	-0.6%	0.7%	0.6%	0.0%	-1.4%

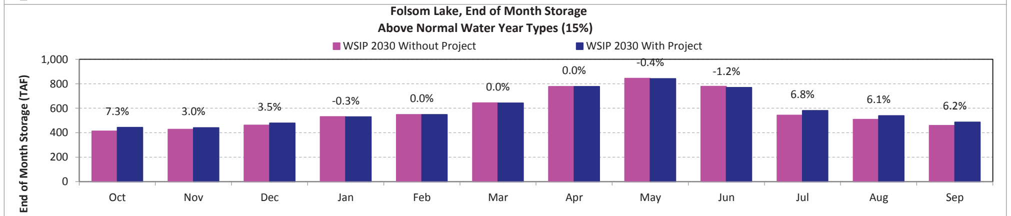
1 Based on the 82-year simulation period

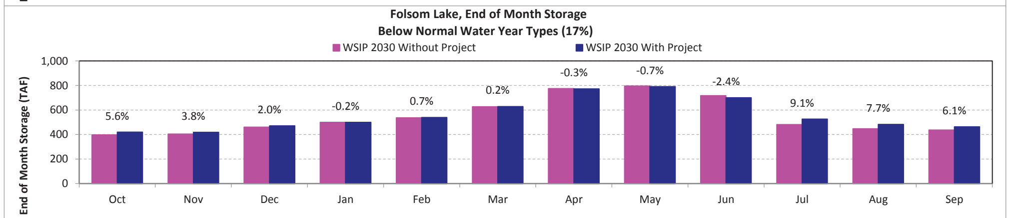
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

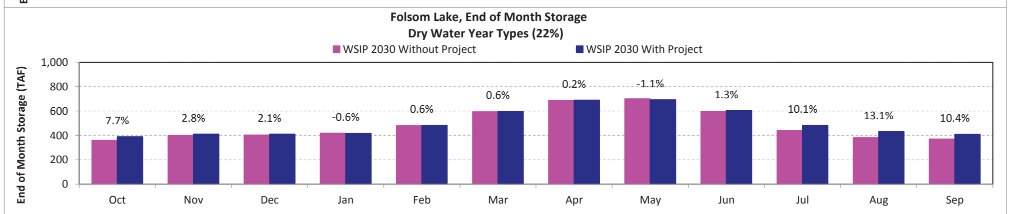
3 Relative difference of the monthly average











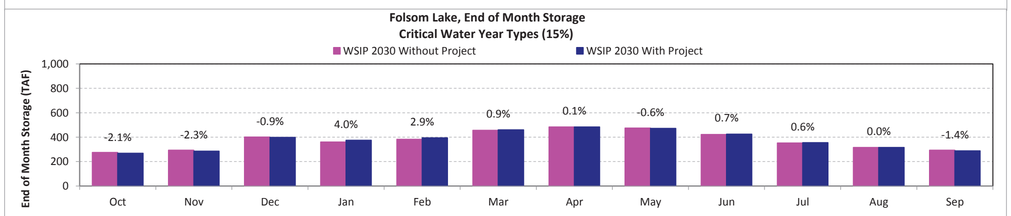
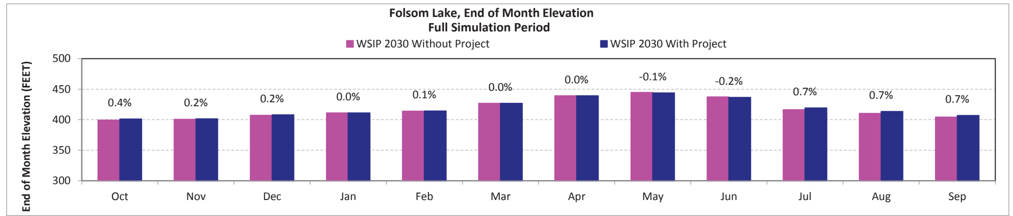
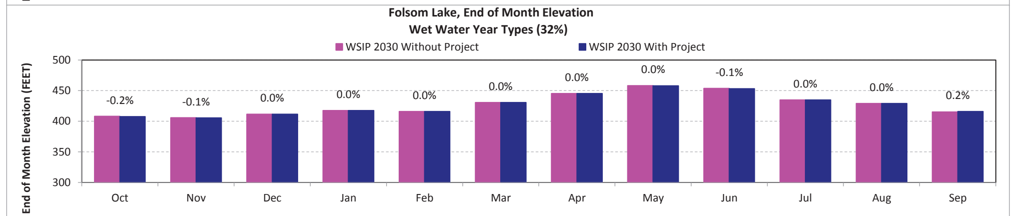


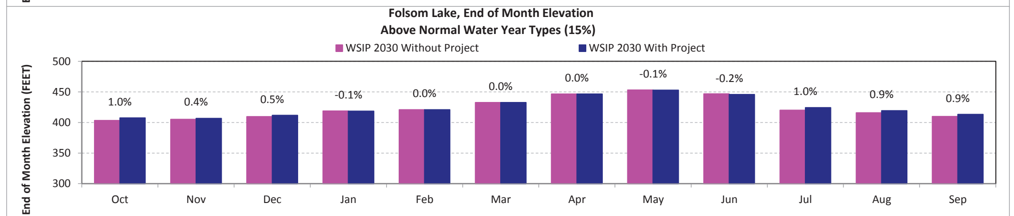
Table SW-25-a
Folsom Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

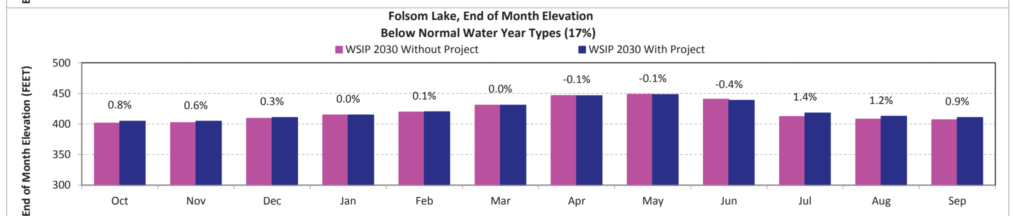
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	399	401	407	411	414	427	439	445	437	416	410	404
WSIP 2030 With Project	401	401	408	411	414	427	439	444	437	419	413	407
Difference	2	1	1	0	0	0	0	-1	-1	3	3	3
Percent Difference[3]	0.4%	0.2%	0.2%	0.0%	0.1%	0.0%	0.0%	-0.1%	-0.2%	0.7%	0.7%	0.7%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	408	406	412	417	416	431	445	458	454	435	429	415
WSIP 2030 With Project	408	405	412	417	416	431	445	458	453	435	429	416
Difference	-1	0	0	0	0	0	0	0	-1	0	0	1
Percent Difference	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.2%
Above Normal (14.6%)												
WSIP 2030 Without Project	403	405	410	419	421	433	447	453	447	420	416	410
WSIP 2030 With Project	408	407	412	419	421	433	447	453	446	424	419	413
Difference	4	2	2	0	0	0	0	0	-1	4	4	4
Percent Difference	1.0%	0.4%	0.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	1.0%	0.9%	0.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	401	402	409	415	419	431	446	448	440	412	408	407
WSIP 2030 With Project	404	404	410	415	420	431	446	448	438	418	413	410
Difference	3	2	1	0	0	0	0	-1	-2	6	5	4
Percent Difference	0.8%	0.6%	0.3%	0.0%	0.1%	0.0%	-0.1%	-0.1%	-0.4%	1.4%	1.2%	0.9%
Dry (19.5%)												
WSIP 2030 Without Project	395	400	401	403	412	427	437	438	427	406	397	396
WSIP 2030 With Project	399	402	402	403	412	427	437	437	427	412	405	402
Difference	4	2	1	-1	0	0	0	-1	1	6	8	6
Percent Difference	1.1%	0.5%	0.3%	-0.1%	0.1%	0.1%	0.0%	-0.2%	0.2%	1.5%	2.0%	1.5%
Critical (14.6%)												
WSIP 2030 Without Project	381	383	401	395	398	408	412	411	404	393	388	384
WSIP 2030 With Project	380	382	400	397	400	408	411	409	403	394	388	383
Difference	-1	-1	-1	2	1	0	-1	-1	-1	0	0	-1
Percent Difference	-0.3%	-0.3%	-0.1%	0.5%	0.4%	0.1%	-0.2%	-0.3%	-0.2%	0.0%	0.0%	-0.2%

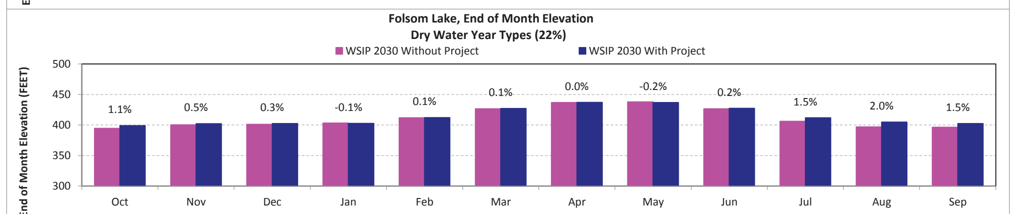
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











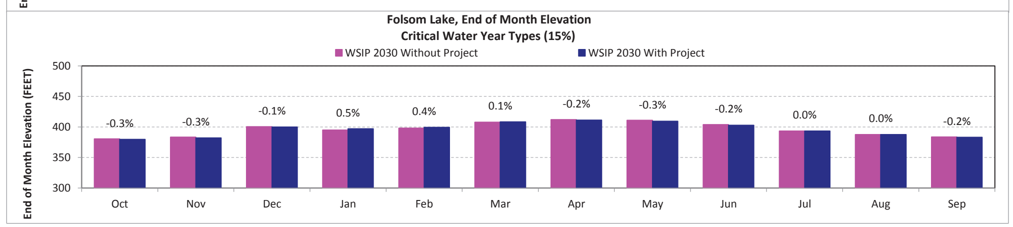


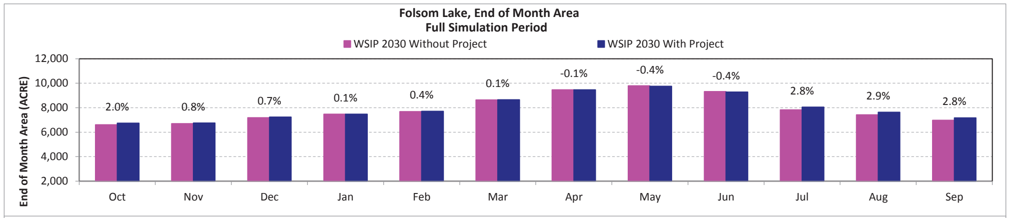
Table SW-26-a
Folsom Lake, End of Month Area
Long-term Average and Average by Water Year Type

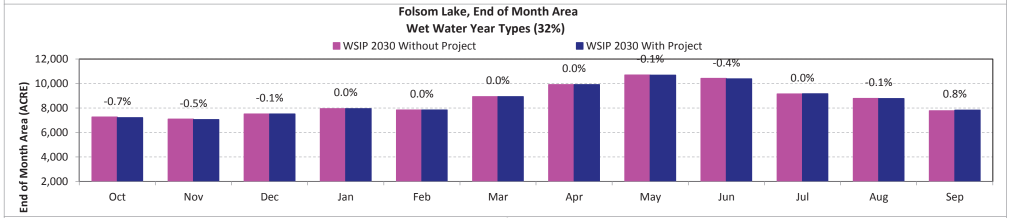
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	6,614	6,705	7,185	7,472	7,692	8,646	9,475	9,797	9,320	7,834	7,425	6,980
WSIP 2030 With Project	6,744	6,760	7,236	7,482	7,719	8,658	9,469	9,758	9,281	8,056	7,641	7,173
Difference	130	56	51	10	27	12	-6	-40	-39	222	216	193
Percent Difference[3]	2.0%	0.8%	0.7%	0.1%	0.4%	0.1%	-0.1%	-0.4%	-0.4%	2.8%	2.9%	2.8%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	7,262	7,090	7,518	7,950	7,840	8,930	9,911	10,695	10,415	9,156	8,779	7,772
WSIP 2030 With Project	7,213	7,055	7,510	7,950	7,840	8,930	9,911	10,680	10,378	9,160	8,769	7,833
Difference	-49	-36	-8	0	0	0	0	-15	-37	3	-10	62
Percent Difference	-0.7%	-0.5%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.4%	0.0%	-0.1%	0.8%
Above Normal (14.6%)												
WSIP 2030 Without Project	6,905	7,031	7,373	8,054	8,212	9,087	10,001	10,396	10,001	8,119	7,812	7,378
WSIP 2030 With Project	7,208	7,162	7,523	8,038	8,212	9,087	10,001	10,376	9,936	8,428	8,075	7,641
Difference	303	130	150	-16	0	0	0	-20	-65	310	263	263
Percent Difference	4.4%	1.9%	2.0%	-0.2%	0.0%	0.0%	0.0%	-0.2%	-0.7%	3.8%	3.4%	3.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	6,748	6,809	7,335	7,744	8,092	8,927	9,982	10,102	9,582	7,529	7,233	7,146
WSIP 2030 With Project	6,981	6,975	7,431	7,738	8,124	8,939	9,965	10,063	9,449	7,956	7,583	7,418
Difference	233	167	96	-5	32	13	-17	-40	-133	427	350	273
Percent Difference	3.5%	2.4%	1.3%	-0.1%	0.4%	0.1%	-0.2%	-0.4%	-1.4%	5.7%	4.8%	3.8%
Dry (19.5%)												
WSIP 2030 Without Project	6,243	6,667	6,730	6,888	7,537	8,628	9,324	9,378	8,606	7,093	6,450	6,382
WSIP 2030 With Project	6,567	6,801	6,827	6,847	7,564	8,659	9,333	9,314	8,670	7,538	7,006	6,819
Difference	324	133	98	-41	27	31	9	-63	65	444	555	437
Percent Difference	5.2%	2.0%	1.5%	-0.6%	0.4%	0.4%	0.1%	-0.7%	0.8%	6.3%	8.6%	6.8%
Critical (14.6%)												
WSIP 2030 Without Project	5,277	5,477	6,698	6,290	6,503	7,241	7,527	7,454	6,941	6,213	5,786	5,495
WSIP 2030 With Project	5,202	5,386	6,648	6,435	6,606	7,267	7,498	7,376	6,915	6,219	5,782	5,455
Difference	-75	-90	-50	145	103	25	-29	-78	-26	6	-4	-41
Percent Difference	-1.4%	-1.6%	-0.7%	2.3%	1.6%	0.3%	-0.4%	-1.0%	-0.4%	0.1%	-0.1%	-0.7%

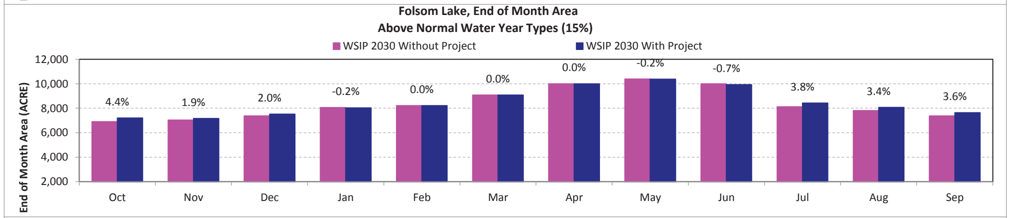
1 Based on the 82-year simulation period

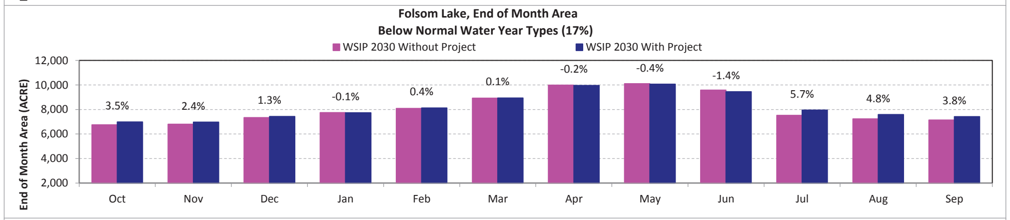
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

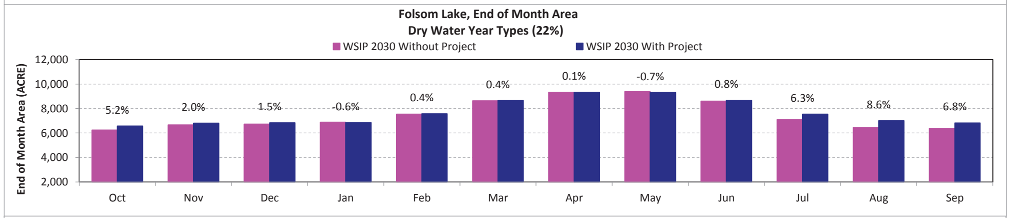
3 Relative difference of the monthly average











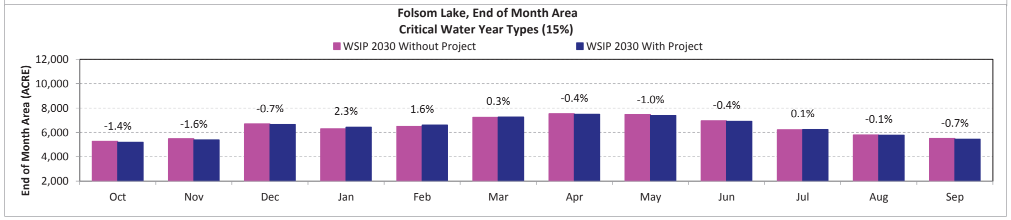


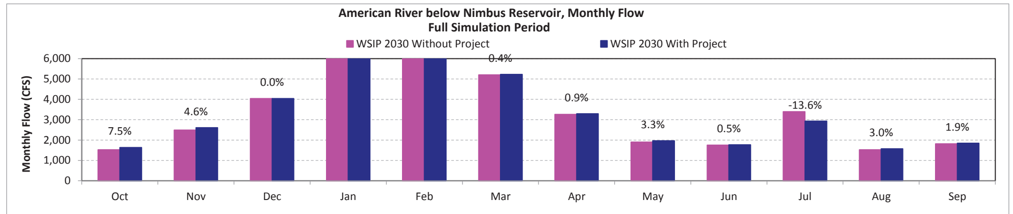
Table SW-27-a
American River below Nimbus Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

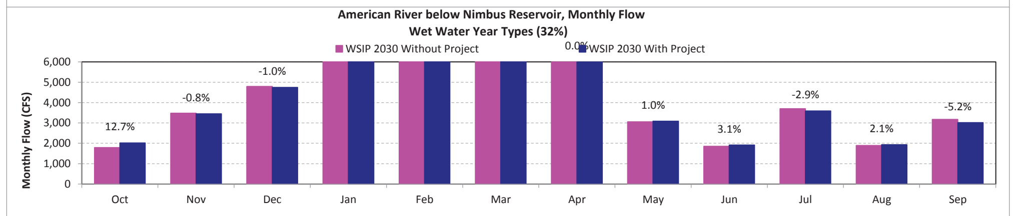
Analysis Period	Monthly Flow (CFS) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1,524	2,495	4,038	6,122	7,443	5,203	3,262	1,906	1,757	3,394	1,528	1,814
WSIP 2030 With Project	1,639	2,609	4,038	6,186	7,412	5,226	3,291	1,970	1,767	2,931	1,573	1,847
Difference	114	114	0	64	-31	23	30	64	9	-463	45	34
Percent Difference[3]	7.5%	4.6%	0.0%	1.0%	-0.4%	0.4%	0.9%	3.3%	0.5%	-13.6%	3.0%	1.9%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1,790	3,479	4,792	12,905	13,091	8,133	5,995	3,054	1,857	3,698	1,891	3,178
WSIP 2030 With Project	2,018	3,451	4,744	12,913	13,091	8,133	5,995	3,085	1,915	3,590	1,930	3,014
Difference	227	-28	-49	8	0	0	0	31	57	-108	39	-164
Percent Difference	12.7%	-0.8%	-1.0%	0.1%	0.0%	0.0%	0.0%	1.0%	3.1%	-2.9%	2.1%	-5.2%
Above Normal (14.6%)												
WSIP 2030 Without Project	1,638	2,294	3,458	6,988	9,155	7,059	3,045	1,770	1,627	4,429	1,534	1,789
WSIP 2030 With Project	1,591	2,584	3,410	7,051	9,132	7,058	3,044	1,824	1,719	3,682	1,629	1,835
Difference	-47	290	-49	64	-24	-1	-1	54	92	-747	95	47
Percent Difference	-2.9%	12.7%	-1.4%	0.9%	-0.3%	0.0%	0.0%	3.1%	5.7%	-16.9%	6.2%	2.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	1,431	1,697	2,949	2,793	5,986	4,792	2,531	1,510	1,758	4,297	1,394	1,206
WSIP 2030 With Project	1,506	1,816	3,048	2,814	5,904	4,827	2,596	1,561	1,957	3,291	1,539	1,337
Difference	74	119	99	21	-82	35	66	52	200	-1,006	145	131
Percent Difference	5.2%	7.0%	3.4%	0.7%	-1.4%	0.7%	2.6%	3.4%	11.4%	-23.4%	10.4%	10.8%
Dry (19.5%)												
WSIP 2030 Without Project	1,563	3,122	6,604	2,090	3,422	2,714	1,534	1,319	2,096	2,764	1,527	1,063
WSIP 2030 With Project	1,734	3,404	6,648	2,281	3,328	2,700	1,573	1,461	1,840	2,152	1,436	1,249
Difference	170	282	45	191	-95	-14	39	142	-256	-612	-91	186
Percent Difference	10.9%	9.0%	0.7%	9.1%	-2.8%	-0.5%	2.6%	10.8%	-12.2%	-22.1%	-6.0%	17.5%
Critical (14.6%)												
WSIP 2030 Without Project	936	943	1,169	1,216	1,390	1,143	1,124	996	1,227	1,286	958	858
WSIP 2030 With Project	957	947	1,117	1,290	1,442	1,270	1,182	1,050	1,137	1,338	1,009	950
Difference	21	4	-52	74	53	127	58	55	-90	52	51	93
Percent Difference	2.3%	0.4%	-4.5%	6.1%	3.8%	11.1%	5.1%	5.5%	-7.4%	4.1%	5.3%	10.8%

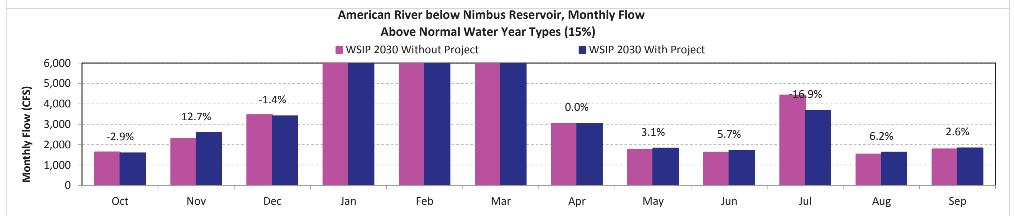
1 Based on the 82-year simulation period

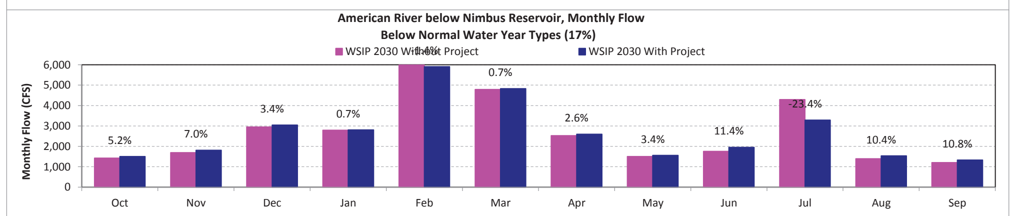
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

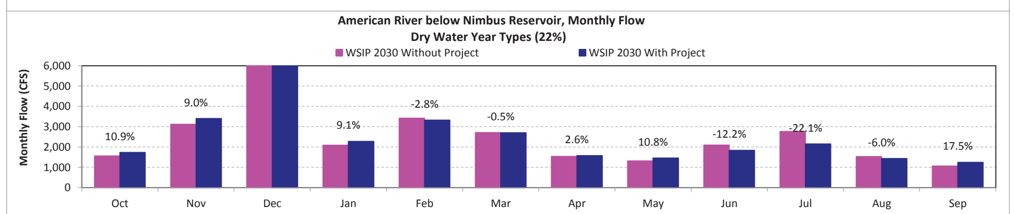
3 Relative difference of the monthly average











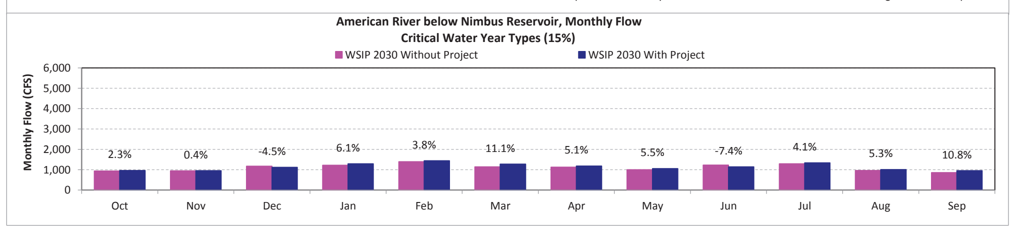
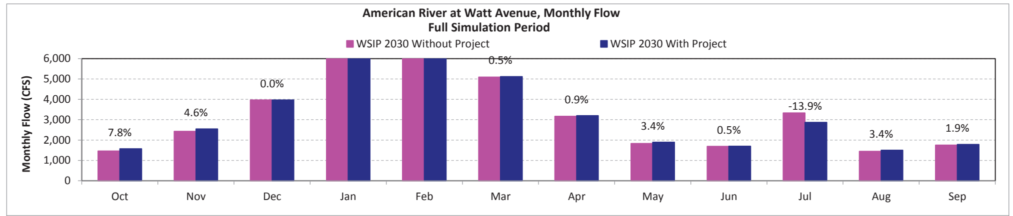
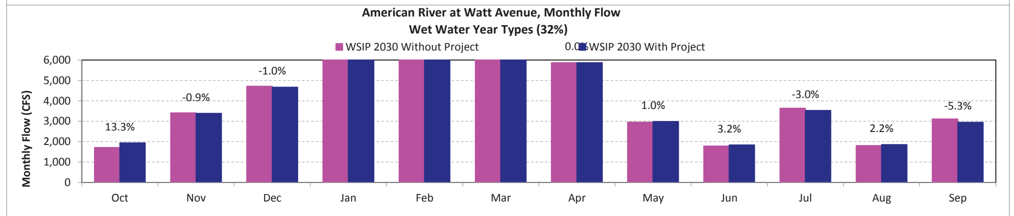


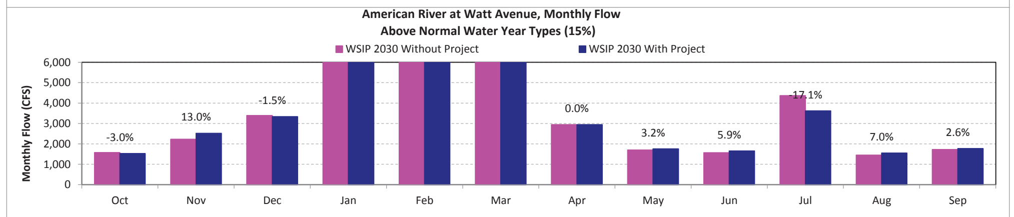
Table SW-28-a
American River at Watt Avenue, Monthly Flow
Long-term Average and Average by Water Year Type

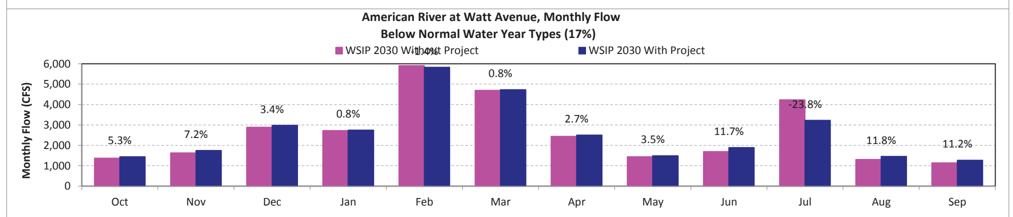
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1,462	2,433	3,969	6,040	7,335	5,093	3,169	1,833	1,692	3,331	1,451	1,752
WSIP 2030 With Project	1,575	2,546	3,968	6,104	7,303	5,117	3,198	1,896	1,700	2,869	1,500	1,784
Difference	113	113	-1	64	-32	23	29	63	8	-463	49	33
Percent Difference[3]	7.8%	4.6%	0.0%	1.1%	-0.4%	0.5%	0.9%	3.4%	0.5%	-13.9%	3.4%	1.9%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1,715	3,414	4,715	12,784	12,920	7,975	5,873	2,955	1,781	3,635	1,811	3,112
WSIP 2030 With Project	1,944	3,384	4,666	12,792	12,920	7,975	5,873	2,985	1,838	3,526	1,851	2,947
Difference	229	-30	-48	8	0	0	0	31	57	-109	40	-164
Percent Difference	13.3%	-0.9%	-1.0%	0.1%	0.0%	0.0%	0.0%	1.0%	3.2%	-3.0%	2.2%	-5.3%
Above Normal (14.6%)												
WSIP 2030 Without Project	1,576	2,230	3,391	6,918	9,042	6,938	2,942	1,703	1,565	4,367	1,447	1,726
WSIP 2030 With Project	1,528	2,521	3,340	6,982	9,018	6,937	2,941	1,757	1,657	3,619	1,549	1,772
Difference	-47	291	-51	64	-25	-1	-1	54	92	-748	101	46
Percent Difference	-3.0%	13.0%	-1.5%	0.9%	-0.3%	0.0%	0.0%	3.2%	5.9%	-17.1%	7.0%	2.6%
Below Normal (20.7%)												
WSIP 2030 Without Project	1,374	1,635	2,887	2,725	5,908	4,696	2,441	1,444	1,695	4,234	1,309	1,145
WSIP 2030 With Project	1,447	1,753	2,985	2,747	5,826	4,732	2,506	1,494	1,894	3,226	1,463	1,274
Difference	73	118	98	22	-82	36	65	50	199	-1,008	154	129
Percent Difference	5.3%	7.2%	3.4%	0.8%	-1.4%	0.8%	2.7%	3.5%	11.7%	-23.8%	11.8%	11.2%
Dry (19.5%)												
WSIP 2030 Without Project	1,508	3,060	6,530	2,028	3,350	2,636	1,462	1,259	2,035	2,699	1,455	1,001
WSIP 2030 With Project	1,676	3,339	6,571	2,219	3,254	2,623	1,501	1,400	1,778	2,089	1,369	1,188
Difference	168	280	42	191	-97	-13	40	141	-257	-610	-86	186
Percent Difference	11.1%	9.1%	0.6%	9.4%	-2.9%	-0.5%	2.7%	11.2%	-12.6%	-22.6%	-5.9%	18.6%
Critical (14.6%)												
WSIP 2030 Without Project	885	888	1,115	1,156	1,327	1,085	1,067	941	1,172	1,229	900	803
WSIP 2030 With Project	904	892	1,063	1,229	1,379	1,211	1,124	993	1,080	1,282	950	894
Difference	19	4	-52	73	52	127	56	53	-92	53	50	91
Percent Difference	2.2%	0.5%	-4.7%	6.3%	3.9%	11.7%	5.3%	5.6%	-7.8%	4.3%	5.5%	11.3%

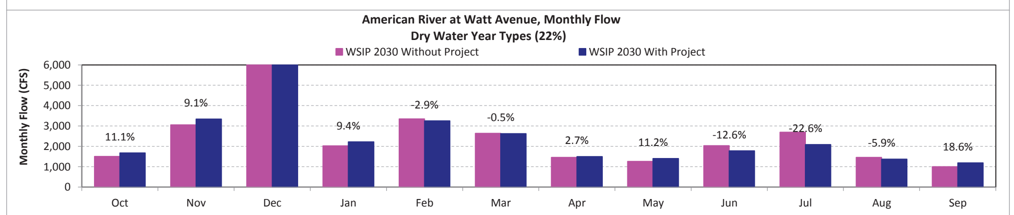
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











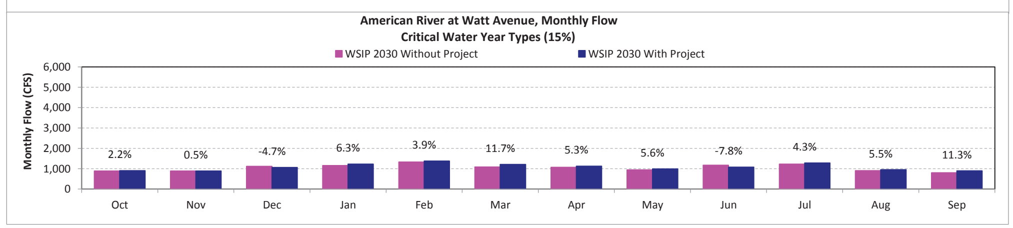


Table SW-29-a
American River at H Street, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1,358	2,343	3,897	5,957	7,231	4,982	2,998	1,668	1,492	2,866	1,239	1,551
WSIP 2030 With Project	1,467	2,455	3,896	6,020	7,199	5,006	3,027	1,731	1,518	2,405	1,292	1,587
Difference	110	112	-1	63	-32	23	29	63	26	-461	53	36
Percent Difference[3]	8.1%	4.8%	0.0%	1.1%	-0.4%	0.5%	1.0%	3.8%	1.8%	-16.1%	4.3%	2.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1,587	3,300	4,630	12,711	12,804	7,861	5,653	2,741	1,602	3,164	1,565	2,783
WSIP 2030 With Project	1,803	3,270	4,584	12,719	12,804	7,861	5,653	2,772	1,659	2,958	1,581	2,630
Difference	216	-30	-45	8	0	0	0	31	57	-206	16	-153
Percent Difference	13.6%	-0.9%	-1.0%	0.1%	0.0%	0.0%	0.0%	1.1%	3.6%	-6.5%	1.0%	-5.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	1,470	2,126	3,323	6,844	8,938	6,821	2,747	1,542	1,386	3,811	1,270	1,530
WSIP 2030 With Project	1,422	2,419	3,272	6,903	8,913	6,820	2,745	1,597	1,478	3,063	1,371	1,576
Difference	-47	293	-51	60	-25	-1	-1	54	92	-748	101	46
Percent Difference	-3.2%	13.8%	-1.5%	0.9%	-0.3%	0.0%	-0.1%	3.5%	6.6%	-19.6%	8.0%	3.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	1,279	1,563	2,816	2,633	5,801	4,583	2,296	1,291	1,494	3,674	1,112	1,017
WSIP 2030 With Project	1,352	1,682	2,910	2,655	5,719	4,619	2,361	1,342	1,692	2,708	1,266	1,145
Difference	73	118	93	22	-82	36	65	50	199	-966	154	129
Percent Difference	5.7%	7.6%	3.3%	0.8%	-1.4%	0.8%	2.8%	3.9%	13.3%	-26.3%	13.9%	12.7%
Dry (19.5%)												
WSIP 2030 Without Project	1,420	2,982	6,445	1,938	3,255	2,527	1,326	1,124	1,763	2,193	1,238	867
WSIP 2030 With Project	1,587	3,257	6,486	2,126	3,158	2,514	1,366	1,265	1,597	1,723	1,190	1,053
Difference	168	275	42	188	-97	-13	40	141	-166	-470	-48	186
Percent Difference	11.8%	9.2%	0.6%	9.7%	-3.0%	-0.5%	3.0%	12.6%	-9.4%	-21.4%	-3.9%	21.5%
Critical (14.6%)												
WSIP 2030 Without Project	798	816	1,082	1,067	1,238	986	942	817	1,005	1,055	707	675
WSIP 2030 With Project	817	820	1,030	1,140	1,290	1,113	998	869	913	1,077	782	765
Difference	19	4	-52	73	52	127	56	53	-92	22	75	91
Percent Difference	2.4%	0.5%	-4.8%	6.8%	4.2%	12.8%	6.0%	6.4%	-9.1%	2.1%	10.6%	13.4%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-46-a
Feather River at Shanghai Bend, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	3,534	3,095	5,911	9,135	12,324	11,310	4,718	3,192	3,487	8,064	5,915	4,946
WSIP 2030 With Project	3,624	3,121	6,017	9,194	12,515	11,309	4,721	3,154	3,222	7,778	5,727	5,055
Difference	90	26	106	60	190	-2	3	-38	-265	-286	-188	108
Percent Difference[3]	2.6%	0.9%	1.8%	0.7%	1.5%	0.0%	0.1%	-1.2%	-7.6%	-3.5%	-3.2%	2.2%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	4,470	3,833	7,029	20,480	25,722	21,242	9,332	5,198	3,762	8,894	6,981	8,177
WSIP 2030 With Project	4,470	3,766	7,072	20,509	26,380	21,257	9,326	5,206	3,733	8,398	6,871	8,141
Difference	0	-67	42	29	659	15	-6	9	-29	-496	-110	-35
Percent Difference	0.0%	-1.8%	0.6%	0.1%	2.6%	0.1%	-0.1%	0.2%	-0.8%	-5.6%	-1.6%	-0.4%
Above Normal (14.6%)												
WSIP 2030 Without Project	4,532	4,029	5,847	7,450	13,672	16,033	3,431	2,984	3,454	10,036	8,056	6,236
WSIP 2030 With Project	4,463	4,236	5,919	7,836	13,671	16,304	3,429	2,983	3,243	9,351	7,725	6,180
Difference	-69	207	72	386	-2	271	-2	-1	-211	-684	-331	-57
Percent Difference	-1.5%	5.1%	1.2%	5.2%	0.0%	1.7%	-0.1%	0.0%	-6.1%	-6.8%	-4.1%	-0.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	3,222	2,604	4,179	4,082	6,172	5,688	2,849	2,063	3,804	9,348	7,373	3,106
WSIP 2030 With Project	3,349	2,634	4,351	4,082	6,221	5,651	2,895	2,045	3,088	8,471	7,357	3,252
Difference	127	30	172	0	49	-37	46	-18	-717	-877	-16	146
Percent Difference	3.9%	1.2%	4.1%	0.0%	0.8%	-0.6%	1.6%	-0.9%	-18.8%	-9.4%	-0.2%	4.7%
Dry (19.5%)												
WSIP 2030 Without Project	3,034	2,742	8,549	2,999	4,018	4,583	2,703	2,358	3,529	7,139	4,092	3,227
WSIP 2030 With Project	3,405	2,804	8,809	2,987	3,976	4,453	2,690	2,375	3,305	7,368	3,651	3,462
Difference	371	62	260	-11	-41	-131	-12	17	-224	228	-441	235
Percent Difference	12.2%	2.3%	3.0%	-0.4%	-1.0%	-2.9%	-0.5%	0.7%	-6.3%	3.2%	-10.8%	7.3%
Critical (14.6%)												
WSIP 2030 Without Project	1,693	1,786	2,585	2,521	2,858	2,832	1,728	1,931	2,438	3,775	1,920	1,826
WSIP 2030 With Project	1,705	1,774	2,559	2,497	2,774	2,744	1,717	1,660	2,215	4,478	1,803	2,177
Difference	12	-12	-25	-24	-84	-88	-10	-271	-223	703	-116	351
Percent Difference	0.7%	-0.7%	-1.0%	-0.9%	-2.9%	-3.1%	-0.6%	-14.0%	-9.1%	18.6%	-6.1%	19.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-47-a
American River at Mouth, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	1,358	2,343	3,897	5,957	7,231	4,982	2,998	1,668	1,492	2,866	1,239	1,551
WSIP 2030 With Project	1,467	2,455	3,896	6,020	7,199	5,006	3,027	1,731	1,518	2,405	1,292	1,587
Difference	110	112	-1	63	-32	23	29	63	26	-461	53	36
Percent Difference[3]	8.1%	4.8%	0.0%	1.1%	-0.4%	0.5%	1.0%	3.8%	1.8%	-16.1%	4.3%	2.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	1,587	3,300	4,630	12,711	12,804	7,861	5,653	2,741	1,602	3,164	1,565	2,783
WSIP 2030 With Project	1,803	3,270	4,584	12,719	12,804	7,861	5,653	2,772	1,659	2,958	1,581	2,630
Difference	216	-30	-45	8	0	0	0	31	57	-206	16	-153
Percent Difference	13.6%	-0.9%	-1.0%	0.1%	0.0%	0.0%	0.0%	1.1%	3.6%	-6.5%	1.0%	-5.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	1,470	2,126	3,323	6,844	8,938	6,821	2,747	1,542	1,386	3,811	1,270	1,530
WSIP 2030 With Project	1,422	2,419	3,272	6,903	8,913	6,820	2,745	1,597	1,478	3,063	1,371	1,576
Difference	-47	293	-51	60	-25	-1	-1	54	92	-748	101	46
Percent Difference	-3.2%	13.8%	-1.5%	0.9%	-0.3%	0.0%	-0.1%	3.5%	6.6%	-19.6%	8.0%	3.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	1,279	1,563	2,816	2,633	5,801	4,583	2,296	1,291	1,494	3,674	1,112	1,017
WSIP 2030 With Project	1,352	1,682	2,910	2,655	5,719	4,619	2,361	1,342	1,692	2,708	1,266	1,145
Difference	73	118	93	22	-82	36	65	50	199	-966	154	129
Percent Difference	5.7%	7.6%	3.3%	0.8%	-1.4%	0.8%	2.8%	3.9%	13.3%	-26.3%	13.9%	12.7%
Dry (19.5%)												
WSIP 2030 Without Project	1,420	2,982	6,445	1,938	3,255	2,527	1,326	1,124	1,763	2,193	1,238	867
WSIP 2030 With Project	1,587	3,257	6,486	2,126	3,158	2,514	1,366	1,265	1,597	1,723	1,190	1,053
Difference	168	275	42	188	-97	-13	40	141	-166	-470	-48	186
Percent Difference	11.8%	9.2%	0.6%	9.7%	-3.0%	-0.5%	3.0%	12.6%	-9.4%	-21.4%	-3.9%	21.5%
Critical (14.6%)												
WSIP 2030 Without Project	798	816	1,082	1,067	1,238	986	942	817	1,005	1,055	707	675
WSIP 2030 With Project	817	820	1,030	1,140	1,290	1,113	998	869	913	1,077	782	765
Difference	19	4	-52	73	52	127	56	53	-92	22	75	91
Percent Difference	2.4%	0.5%	-4.8%	6.8%	4.2%	12.8%	6.0%	6.4%	-9.1%	2.1%	10.6%	13.4%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

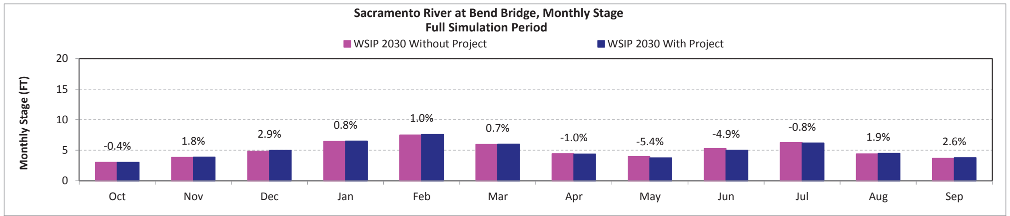
Table SW-53-a
Sacramento River at Bend Bridge, Monthly Stage
Long-term Average and Average by Water Year Type

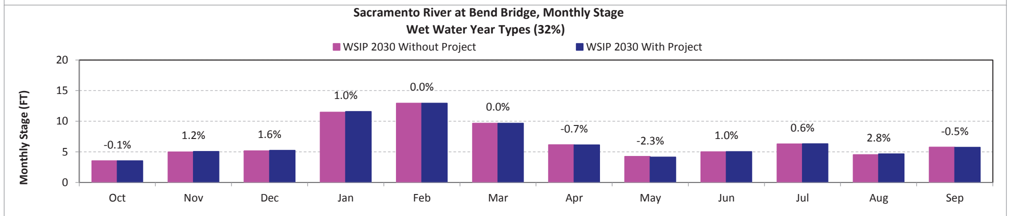
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	3	4	5	6	8	6	4	4	5	6	4	4
WSIP 2030 With Project	3	4	5	6	8	6	4	4	5	6	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	-0.4%	1.8%	2.9%	0.8%	1.0%	0.7%	-1.0%	-5.4%	-4.9%	-0.8%	1.9%	2.6%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	4	5	5	11	13	10	6	4	5	6	5	6
WSIP 2030 With Project	4	5	5	12	13	10	6	4	5	6	5	6
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.1%	1.2%	1.6%	1.0%	0.0%	0.0%	-0.7%	-2.3%	1.0%	0.6%	2.8%	-0.5%
Above Normal (14.6%)												
WSIP 2030 Without Project	3	5	4	8	9	7	4	4	6	7	5	4
WSIP 2030 With Project	3	5	5	8	9	7	4	4	5	6	4	4
Difference	0	0	1	0	0	0	0	0	-1	0	0	0
Percent Difference	2.4%	4.2%	11.7%	-1.2%	1.4%	2.5%	-1.7%	-5.5%	-13.1%	-0.1%	-4.9%	-5.2%
Below Normal (20.7%)												
WSIP 2030 Without Project	3	3	5	4	5	4	4	4	5	7	5	3
WSIP 2030 With Project	3	3	5	4	5	4	4	4	5	7	4	3
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	4.5%	3.9%	2.9%	-0.3%	2.0%	0.7%	4.0%	-5.2%	-8.7%	0.0%	-1.6%	10.1%
Dry (19.5%)												
WSIP 2030 Without Project	3	3	6	3	4	4	3	4	5	6	4	2
WSIP 2030 With Project	3	3	6	3	4	4	3	3	5	6	5	2
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-2.8%	0.5%	1.1%	5.5%	2.9%	0.8%	-2.0%	-7.2%	-4.2%	-1.1%	7.8%	12.3%
Critical (14.6%)												
WSIP 2030 Without Project	2	2	3	3	3	3	3	3	5	6	4	2
WSIP 2030 With Project	2	2	3	3	3	3	3	3	5	6	4	2
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-8.7%	-1.9%	0.0%	0.9%	1.7%	0.5%	-8.5%	-11.3%	-3.4%	-5.6%	4.8%	9.1%

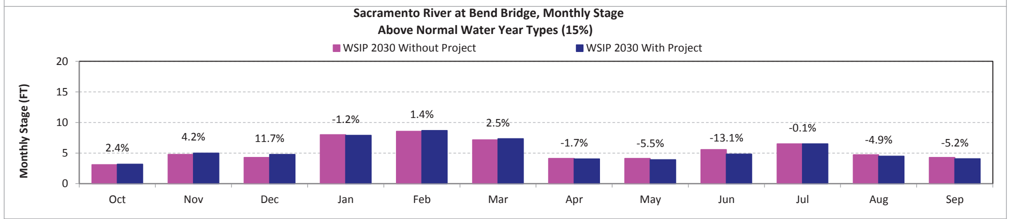
1 Based on the 82-year simulation period

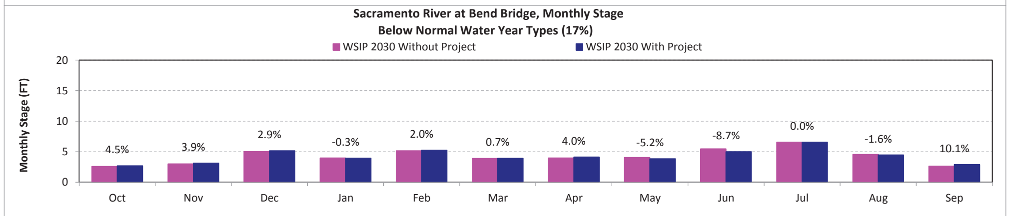
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

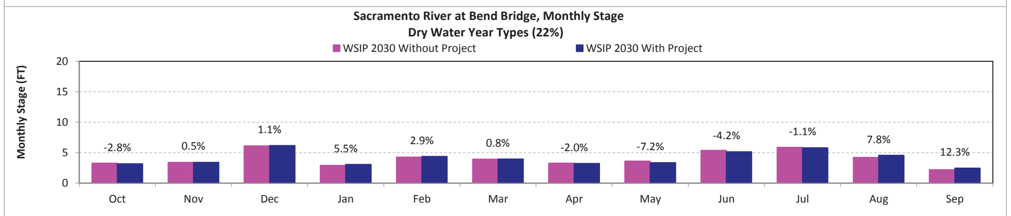
3 Relative difference of the monthly average











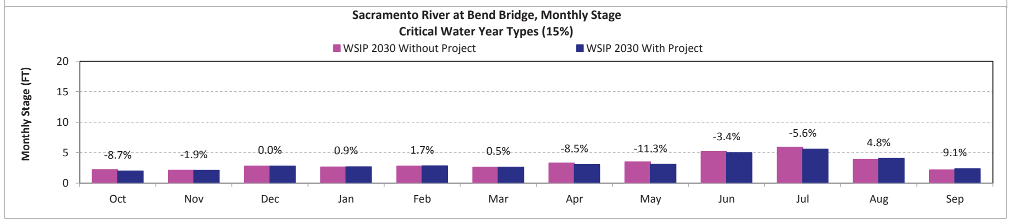


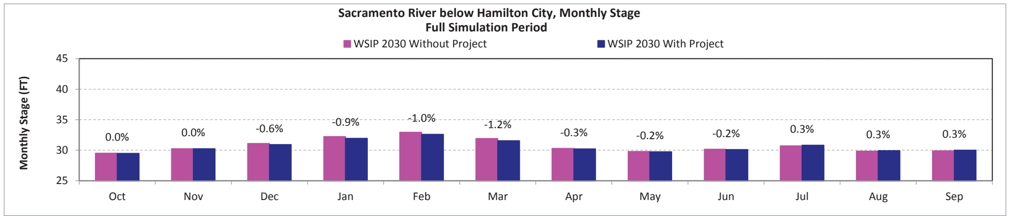
Table SW-54-a
Sacramento River below Hamilton City, Monthly Stage
Long-term Average and Average by Water Year Type

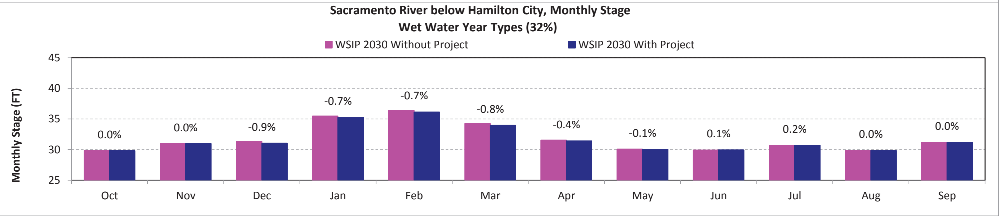
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	29	30	31	32	33	32	30	30	30	31	30	30
WSIP 2030 With Project	29	30	31	32	33	32	30	30	30	31	30	30
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	0.0%	0.0%	-0.6%	-0.9%	-1.0%	-1.2%	-0.3%	-0.2%	-0.2%	0.3%	0.3%	0.3%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	30	31	31	35	36	34	32	30	30	31	30	31
WSIP 2030 With Project	30	31	31	35	36	34	31	30	30	31	30	31
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	-0.9%	-0.7%	-0.7%	-0.8%	-0.4%	-0.1%	0.1%	0.2%	0.0%	0.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	30	31	31	33	34	33	30	30	30	31	30	30
WSIP 2030 With Project	30	31	31	33	33	32	30	30	30	31	30	30
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.1%	-0.1%	-0.6%	-1.3%	-1.1%	-1.0%	-0.5%	-0.3%	-0.8%	0.9%	-0.1%	-0.3%
Below Normal (20.7%)												
WSIP 2030 Without Project	29	30	31	31	31	31	30	30	30	31	30	29
WSIP 2030 With Project	29	30	31	30	31	30	30	30	30	31	30	30
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.5%	0.3%	0.2%	-1.2%	-0.8%	-1.6%	-0.3%	-0.3%	-0.4%	0.7%	0.0%	0.7%
Dry (19.5%)												
WSIP 2030 Without Project	30	30	32	30	31	31	29	30	30	31	30	29
WSIP 2030 With Project	30	30	32	30	30	30	29	29	30	31	30	29
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.4%	-0.2%	-0.7%	-0.8%	-1.6%	-1.6%	0.0%	-0.2%	0.0%	0.3%	0.9%	0.8%
Critical (14.6%)												
WSIP 2030 Without Project	29	29	30	30	30	30	29	29	30	31	30	29
WSIP 2030 With Project	29	29	29	30	30	29	29	29	30	31	30	29
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.4%	-0.2%	-1.2%	-0.6%	-1.0%	-1.0%	0.0%	-0.2%	0.0%	-0.3%	0.6%	0.6%

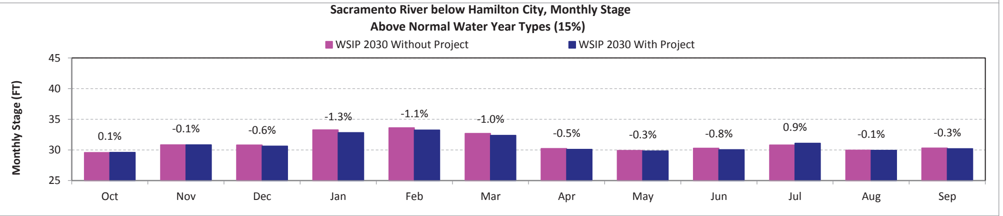
1 Based on the 82-year simulation period

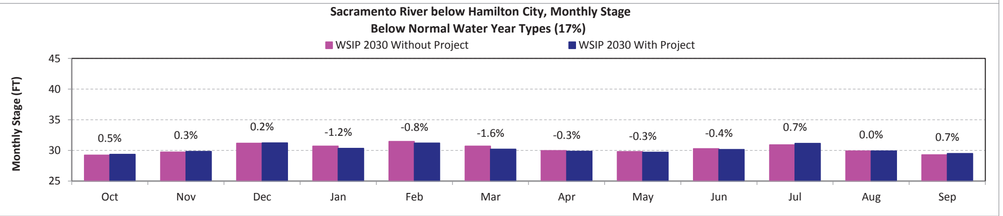
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

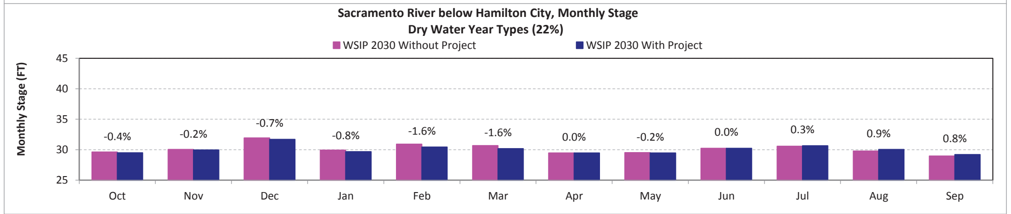
3 Relative difference of the monthly average











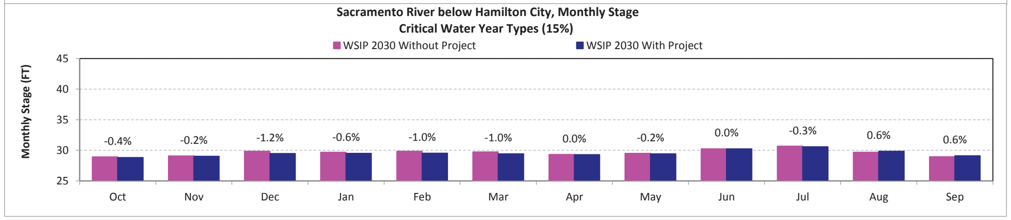


Table SW-56-a
Sacramento River at Wilkins Slough, Monthly Stage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	29	32	35	37	39	37	31	29	29	31	28	31
WSIP 2030 With Project	30	32	34	36	38	36	31	29	30	32	29	32
Difference	1	0	-1	-1	-1	-1	0	0	1	1	1	1
Percent Difference[3]	2.0%	0.8%	-1.7%	-2.8%	-2.5%	-3.2%	-0.5%	-0.5%	2.3%	4.0%	3.2%	3.5%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	30	35	36	42	43	41	36	31	29	31	28	36
WSIP 2030 With Project	31	35	35	42	43	41	36	31	29	31	29	36
Difference	0	0	-1	-1	0	0	0	0	0	1	0	0
Percent Difference	0.6%	0.2%	-2.2%	-1.2%	-0.7%	-1.1%	-0.9%	-0.1%	1.6%	1.7%	0.3%	1.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	29	34	34	40	41	40	32	30	30	31	29	33
WSIP 2030 With Project	30	34	33	39	40	39	32	29	30	33	29	33
Difference	0	0	-1	-1	-1	-1	0	0	0	2	0	1
Percent Difference	1.5%	0.0%	-2.2%	-2.2%	-2.1%	-2.6%	-1.3%	-1.2%	0.5%	7.2%	1.1%	1.9%
Below Normal (20.7%)												
WSIP 2030 Without Project	28	30	35	35	37	36	31	29	29	32	29	29
WSIP 2030 With Project	30	31	35	34	36	34	31	29	30	34	29	30
Difference	1	1	0	-2	-1	-2	0	0	1	2	1	2
Percent Difference	4.3%	1.8%	1.1%	-4.5%	-2.5%	-5.2%	-0.6%	-1.2%	2.8%	6.7%	2.5%	5.9%
Dry (19.5%)												
WSIP 2030 Without Project	29	31	36	32	36	35	28	27	29	30	28	28
WSIP 2030 With Project	30	32	36	31	34	34	28	27	30	32	30	30
Difference	1	0	-1	-2	-2	-2	0	0	1	2	2	2
Percent Difference	2.0%	1.1%	-1.7%	-4.7%	-5.6%	-4.9%	0.2%	-1.1%	3.4%	5.1%	8.1%	6.5%
Critical (14.6%)												
WSIP 2030 Without Project	27	28	32	31	32	32	27	27	29	31	28	28
WSIP 2030 With Project	28	28	30	31	31	31	27	27	30	31	30	29
Difference	1	0	-1	-1	-1	-1	0	0	1	0	2	1
Percent Difference	2.2%	1.5%	-4.6%	-2.5%	-3.4%	-3.5%	0.9%	1.0%	3.5%	0.2%	5.9%	4.6%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

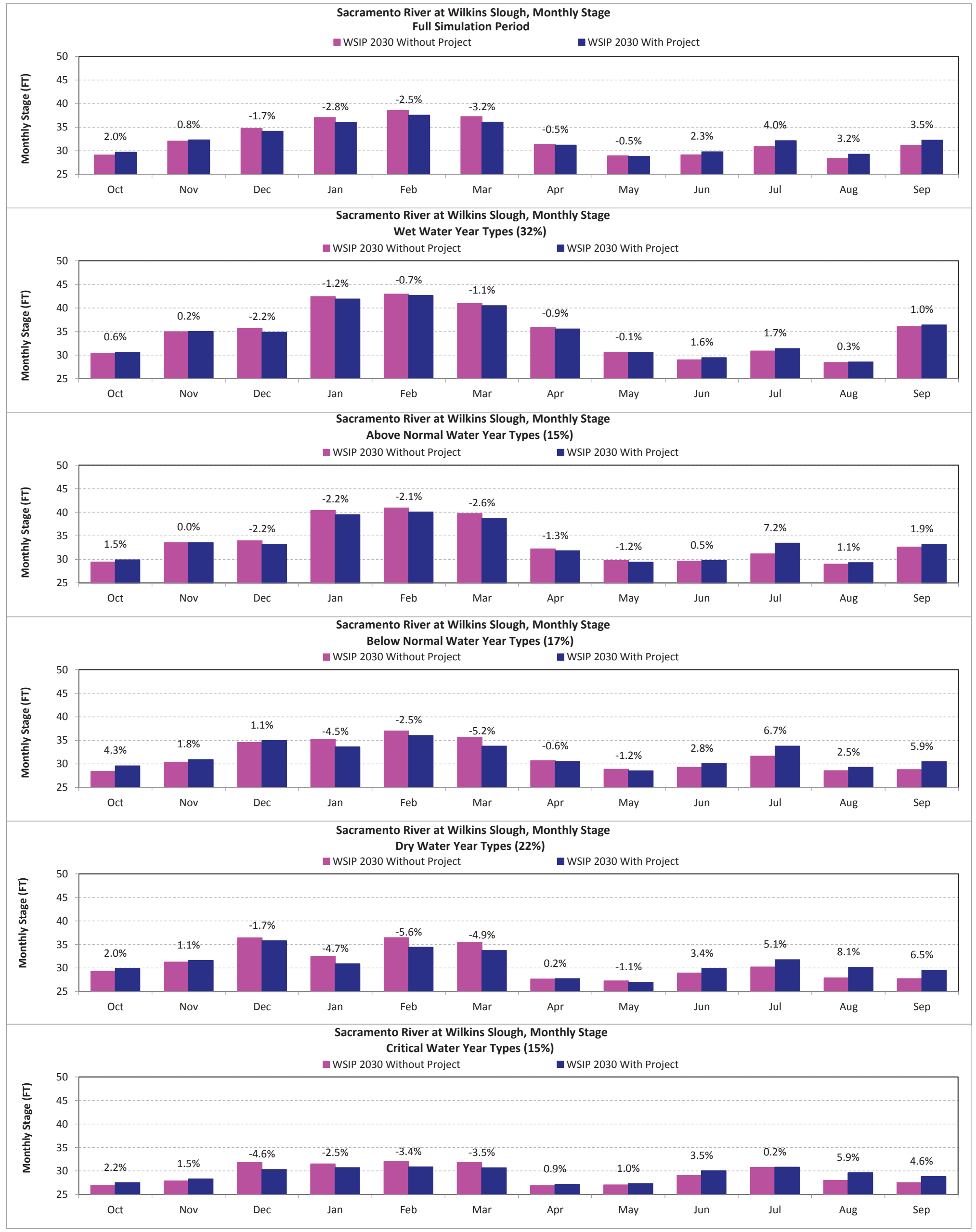


Table SW-57-a
Feather River near Gridley, Monthly Stage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	74	74	74	75	76	76	74	74	74	77	76	75
WSIP 2030 With Project	75	74	74	75	76	76	74	74	74	77	76	75
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.2%	-0.1%	-0.1%	0.1%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	75	74	75	78	80	79	76	74	74	77	76	77
WSIP 2030 With Project	75	74	75	78	80	79	76	74	74	77	76	77
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.1%	-0.3%	0.0%	0.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	75	74	75	74	76	78	73	73	74	78	77	76
WSIP 2030 With Project	75	74	75	74	76	78	73	73	74	77	77	76
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.1%	0.1%	0.1%	0.3%	0.0%	0.2%	0.0%	0.0%	-0.1%	-0.4%	-0.2%	0.0%
Below Normal (20.7%)												
WSIP 2030 Without Project	74	74	74	73	74	74	73	73	75	77	76	74
WSIP 2030 With Project	74	74	74	73	74	74	73	73	74	77	76	74
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.5%	0.0%	0.2%
Dry (19.5%)												
WSIP 2030 Without Project	74	73	75	73	74	74	73	74	75	76	75	74
WSIP 2030 With Project	74	73	75	73	74	74	73	74	74	77	74	74
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.2%	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.2%	0.2%	-0.4%	0.3%
Critical (14.6%)												
WSIP 2030 Without Project	73	73	73	73	73	73	73	73	74	75	74	74
WSIP 2030 With Project	73	73	73	73	73	73	73	73	74	75	73	74
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	-0.3%	-0.3%	0.5%	-0.2%	0.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

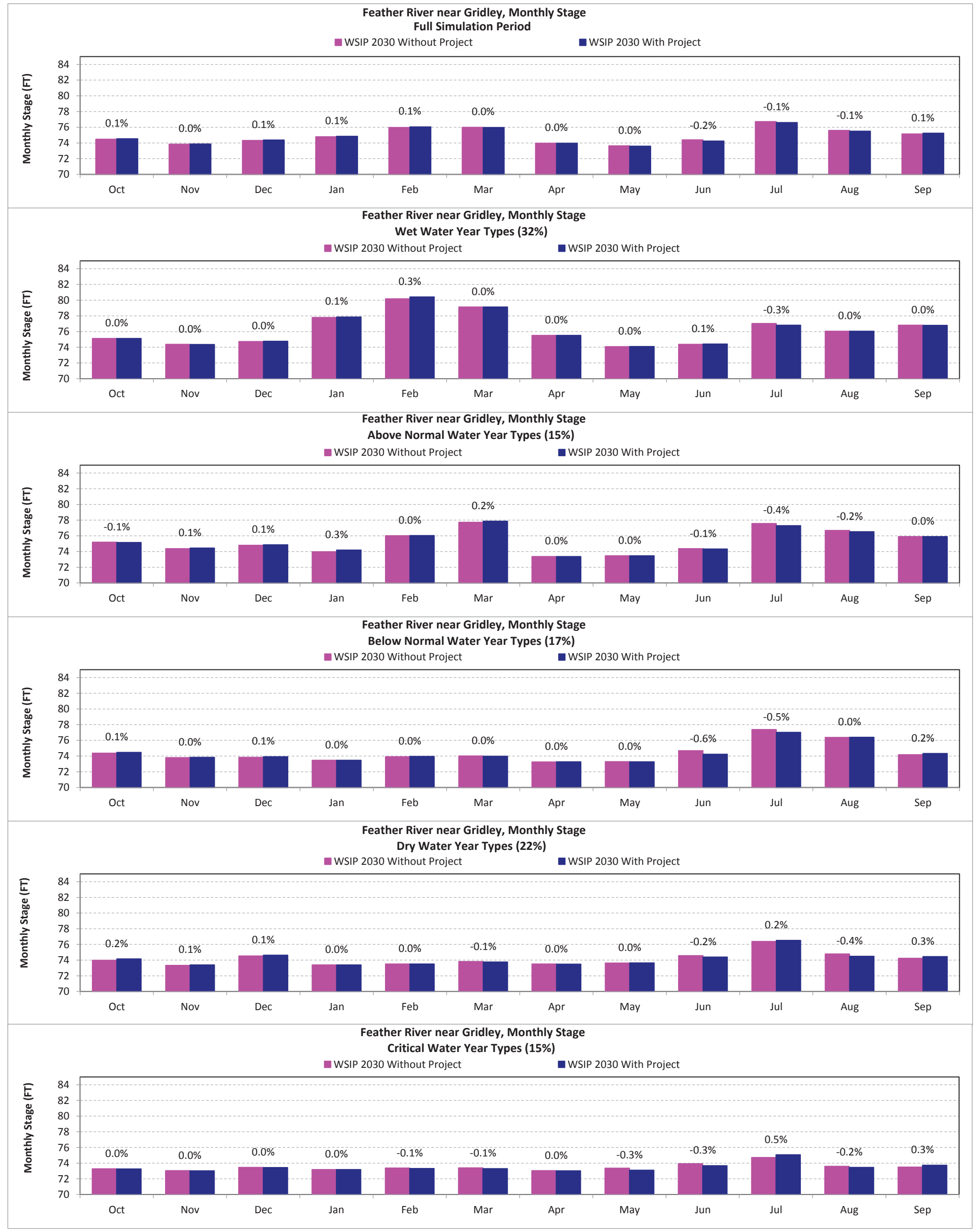


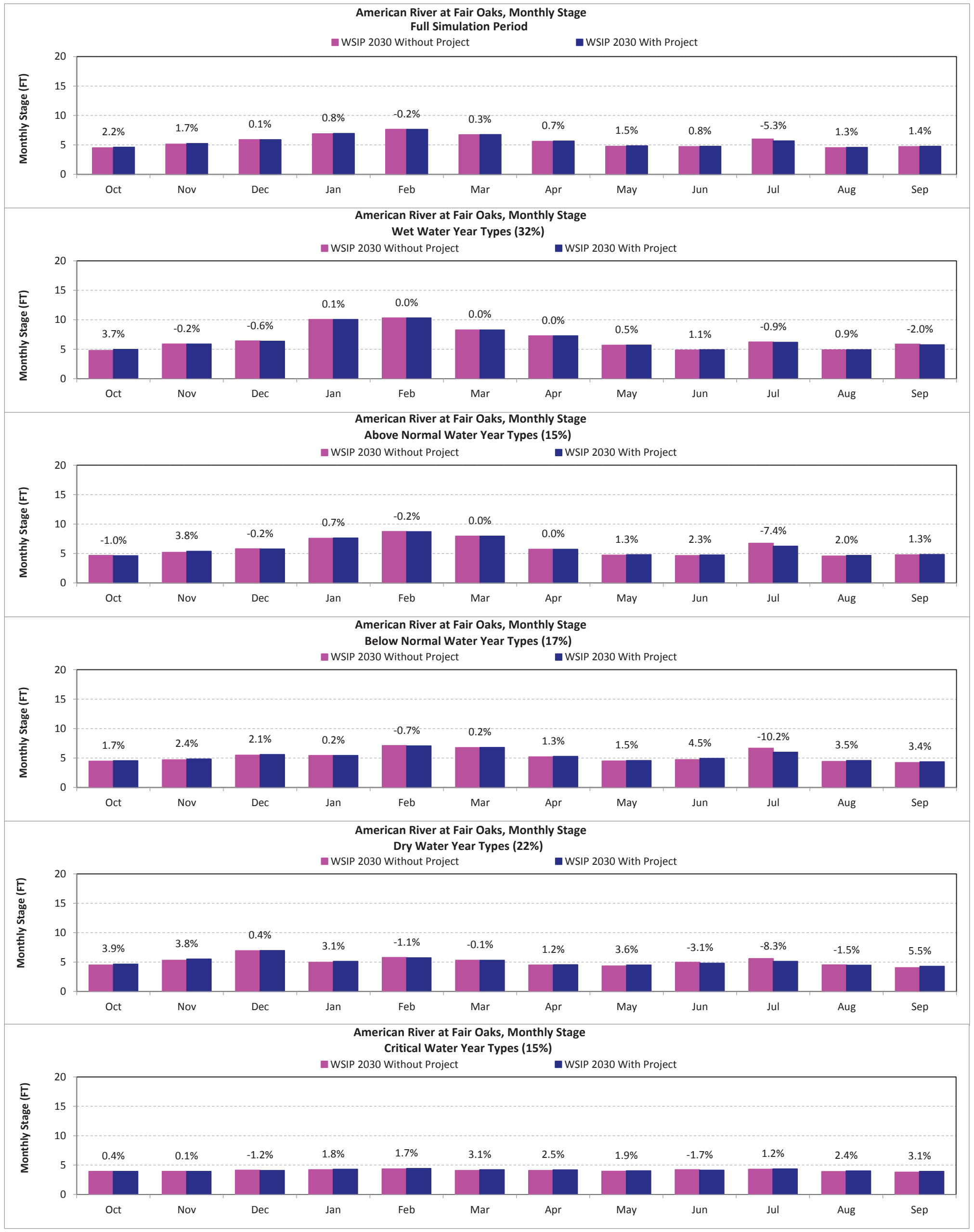
Table SW-58-a
American River at Fair Oaks, Monthly Stage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	5	5	6	7	8	7	6	5	5	6	5	5
WSIP 2030 With Project	5	5	6	7	8	7	6	5	5	6	5	5
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	2.2%	1.7%	0.1%	0.8%	-0.2%	0.3%	0.7%	1.5%	0.8%	-5.3%	1.3%	1.4%
Water Year Types[2]												
Wet (30.5%)												
WSIP 2030 Without Project	5	6	6	10	10	8	7	6	5	6	5	6
WSIP 2030 With Project	5	6	6	10	10	8	7	6	5	6	5	6
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	3.7%	-0.2%	-0.6%	0.1%	0.0%	0.0%	0.0%	0.5%	1.1%	-0.9%	0.9%	-2.0%
Above Normal (14.6%)												
WSIP 2030 Without Project	5	5	6	8	9	8	6	5	5	7	5	5
WSIP 2030 With Project	5	5	6	8	9	8	6	5	5	6	5	5
Difference	0	0	0	0	0	0	0	0	0	-1	0	0
Percent Difference	-1.0%	3.8%	-0.2%	0.7%	-0.2%	0.0%	0.0%	1.3%	2.3%	-7.4%	2.0%	1.3%
Below Normal (20.7%)												
WSIP 2030 Without Project	4	5	5	5	7	7	5	5	5	7	4	4
WSIP 2030 With Project	5	5	6	5	7	7	5	5	5	6	5	4
Difference	0	0	0	0	0	0	0	0	0	-1	0	0
Percent Difference	1.7%	2.4%	2.1%	0.2%	-0.7%	0.2%	1.3%	1.5%	4.5%	-10.2%	3.5%	3.4%
Dry (19.5%)												
WSIP 2030 Without Project	4	5	7	5	6	5	4	4	5	6	5	4
WSIP 2030 With Project	5	6	7	5	6	5	5	4	5	5	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	3.9%	3.8%	0.4%	3.1%	-1.1%	-0.1%	1.2%	3.6%	-3.1%	-8.3%	-1.5%	5.5%
Critical (14.6%)												
WSIP 2030 Without Project	4	4	4	4	4	4	4	4	4	4	4	4
WSIP 2030 With Project	4	4	4	4	4	4	4	4	4	4	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.4%	0.1%	-1.2%	1.8%	1.7%	3.1%	2.5%	1.9%	-1.7%	1.2%	2.4%	3.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



Trinity and Sacramento River Basin Operations
Exceedance Probability Charts and Tables

Figure SW-01-b
Trinity Lake, End of Month Storage
Probability of Exceedance

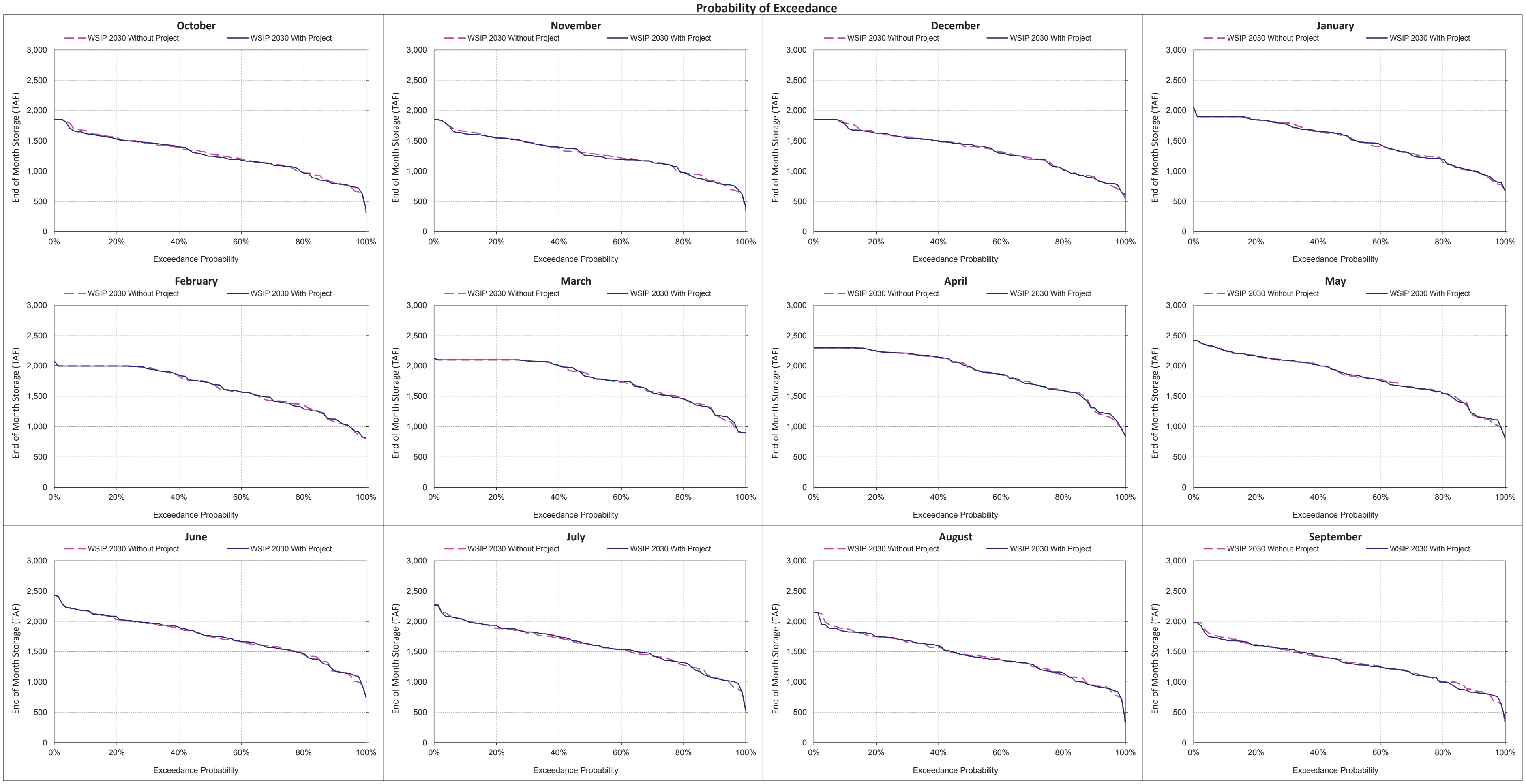


Table SW-01-b
Trinity Lake, End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,850	1,850	0	0.0%
1.2%	1,850	1,850	0	0.0%
2.5%	1,850	1,850	0	0.0%
3.7%	1,828	1,813	-15	-0.8%
4.9%	1,789	1,711	-79	-4.4%
6.2%	1,711	1,666	-45	-2.6%
7.4%	1,696	1,652	-44	-2.6%
8.6%	1,679	1,649	-30	-1.8%
9.9%	1,675	1,620	-55	-3.3%
11.1%	1,646	1,614	-32	-2.0%
12.3%	1,612	1,613	1	0.1%
13.6%	1,611	1,589	-23	-1.4%
14.8%	1,606	1,582	-23	-1.5%
16.0%	1,590	1,577	-12	-0.8%
17.3%	1,575	1,559	-16	-1.0%
18.5%	1,567	1,551	-16	-1.0%
19.8%	1,564	1,534	-30	-1.9%
21.0%	1,528	1,512	-16	-1.0%
22.2%	1,508	1,509	1	0.0%
23.5%	1,507	1,500	-8	-0.5%
24.7%	1,506	1,497	-9	-0.6%
25.9%	1,504	1,493	-11	-0.8%
27.2%	1,474	1,489	15	1.0%
28.4%	1,473	1,479	6	0.4%
29.6%	1,462	1,476	15	1.0%
30.9%	1,460	1,468	8	0.5%
32.1%	1,454	1,463	9	0.6%
33.3%	1,429	1,454	25	1.8%
34.6%	1,425	1,444	19	1.3%
35.8%	1,420	1,436	17	1.2%
37.0%	1,416	1,431	15	1.0%
38.3%	1,406	1,424	18	1.3%
39.5%	1,395	1,408	14	1.0%
40.7%	1,366	1,396	30	2.2%
42.0%	1,362	1,392	30	2.2%
43.2%	1,350	1,350	0	0.0%
44.4%	1,346	1,308	-37	-2.8%
45.7%	1,344	1,298	-46	-3.4%
46.9%	1,329	1,287	-42	-3.1%
48.1%	1,318	1,270	-49	-3.7%
49.4%	1,294	1,248	-46	-3.6%
50.6%	1,276	1,246	-30	-2.3%
51.9%	1,269	1,236	-34	-2.7%
53.1%	1,264	1,229	-35	-2.8%
54.3%	1,249	1,227	-22	-1.8%
55.6%	1,244	1,205	-39	-3.1%
56.8%	1,223	1,191	-31	-2.6%
58.0%	1,219	1,191	-28	-2.3%
59.3%	1,215	1,190	-25	-2.1%
60.5%	1,193	1,174	-19	-1.6%
61.7%	1,178	1,168	-10	-0.9%
63.0%	1,169	1,167	-2	-0.2%
64.2%	1,156	1,154	-1	-0.1%
65.4%	1,144	1,152	9	0.8%
66.7%	1,140	1,143	3	0.2%
67.9%	1,138	1,133	-5	-0.5%
69.1%	1,132	1,131	0	0.0%
70.4%	1,122	1,099	-23	-2.0%
71.6%	1,111	1,094	-17	-1.5%
72.8%	1,100	1,088	-12	-1.1%
74.1%	1,082	1,082	0	0.0%
75.3%	1,082	1,080	-2	-0.2%
76.5%	1,047	1,067	20	1.9%
77.8%	1,002	1,051	49	4.9%
79.0%	986	994	7	0.7%
80.2%	969	970	1	0.1%
81.5%	968	967	-1	-0.1%
82.7%	967	891	-76	-7.8%
84.0%	930	882	-48	-5.1%
85.2%	928	856	-72	-7.8%
86.4%	857	848	-9	-1.1%
87.7%	854	837	-17	-2.0%
88.9%	823	804	-19	-2.4%
90.1%	817	800	-18	-2.2%
91.4%	797	786	-11	-1.4%
92.6%	780	785	5	0.6%
93.8%	757	777	20	2.7%
95.1%	750	748	-2	-0.3%
96.3%	675	739	64	9.5%
97.5%	659	721	62	9.3%
98.8%	628	622	-6	-1.0%
100.0%	317	377	60	19.1%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,850	1,850	0	0.0%
1.2%	1,850	1,850	0	0.0%
2.5%	1,833	1,833	0	0.0%
3.7%	1,789	1,790	1	0.1%
4.9%	1,743	1,737	-6	-0.4%
6.2%	1,704	1,655	-50	-2.9%
7.4%	1,677	1,638	-39	-2.3%
8.6%	1,667	1,635	-32	-1.9%
9.9%	1,659	1,616	-43	-2.6%
11.1%	1,646	1,614	-32	-1.9%
12.3%	1,644	1,602	-42	-2.6%
13.6%	1,632	1,602	-30	-1.8%
14.8%	1,619	1,601	-18	-1.1%
16.0%	1,608	1,590	-18	-1.1%
17.3%	1,572	1,575	2	0.1%
18.5%	1,569	1,566	-3	-0.2%
19.8%	1,555	1,549	-6	-0.4%
21.0%	1,551	1,548	-3	-0.2%
22.2%	1,548	1,542	-6	-0.4%
23.5%	1,545	1,540	-5	-0.3%
24.7%	1,539	1,528	-11	-0.7%
25.9%	1,520	1,525	5	0.3%
27.2%	1,512	1,517	5	0.3%
28.4%	1,481	1,496	15	1.0%
29.6%	1,476	1,485	10	0.6%
30.9%	1,471	1,475	4	0.3%
32.1%	1,469	1,455	-13	-0.9%
33.3%	1,444	1,438	-6	-0.4%
34.6%	1,424	1,435	11	0.8%
35.8%	1,423	1,420	-3	-0.2%
37.0%	1,389	1,408	19	1.4%
38.3%	1,387	1,405	18	1.3%
39.5%	1,386	1,401	15	1.1%
40.7%	1,369	1,395	26	1.9%
42.0%	1,331	1,379	48	3.6%
43.2%	1,331	1,377	47	3.5%
44.4%	1,323	1,373	50	3.8%
45.7%	1,322	1,368	46	3.5%
46.9%	1,313	1,314	1	0.1%
48.1%	1,313	1,266	-47	-3.5%
49.4%	1,297	1,262	-36	-2.8%
50.6%	1,290	1,254	-36	-2.8%
51.9%	1,281	1,243	-37	-2.9%
53.1%	1,272	1,243	-29	-2.3%
54.3%	1,266	1,229	-37	-2.9%
55.6%	1,255	1,207	-48	-3.9%
56.8%	1,248	1,205	-43	-3.4%
58.0%	1,238	1,201	-37	-3.0%
59.3%	1,226	1,198	-28	-2.3%
60.5%	1,214	1,191	-23	-1.9%
61.7%	1,207	1,190	-18	-1.5%
63.0%	1,207	1,189	-18	-1.5%
64.2%	1,199	1,186	-12	-1.0%
65.4%	1,178	1,183	5	0.4%
66.7%	1,170	1,172	2	0.1%
67.9%	1,169	1,171	1	0.1%
69.1%	1,169	1,170	2	0.1%
70.4%	1,148	1,136	-12	-1.0%
71.6%	1,139	1,133	-6	-0.6%
72.8%	1,135	1,130	-5	-0.5%
74.1%	1,124	1,113	-11	-1.0%
75.3%	1,109	1,111	3	0.2%
76.5%	1,093	1,083	-10	-1.0%
77.8%	989	1,081	92	9.3%
79.0%	986	977	-8	-0.9%
80.2%	976	976	1	0.1%
81.5%	965	950	-15	-1.5%
82.7%	961	918	-44	-4.5%
84.0%	950	889	-61	-6.4%
85.2%	945	879	-67	-7.0%
86.4%	911	869	-43	-4.7%
87.7%	857	838	-19	-2.3%
88.9%	842	831	-10	-1.2%
90.1%	837	822	-16	-1.9%
91.4%	814	791	-23	-2.9%
92.6%	779	784	5	0.6%
93.8%	761	777	16	2.0%
95.1%	700	773	73	10.4%
96.3%	686	754	67	9.8%
97.5%	665	700	35	5.3%
98.8%	629	623	-6	-1.0%
100.0%	341	402	60	17.7%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,850	1,850	0	0.0%
1.2%	1,850	1,850	0	0.0%
2.5%	1,850	1,850	0	0.0%
3.7%	1,850	1,850	0	0.0%
4.9%	1,850	1,850	0	0.0%
6.2%	1,850	1,850	0	0.0%
7.4%	1,850	1,850	0	0.0%
8.6%	1,842	1,811	-31	-1.7%
9.9%	1,795	1,782	-13	-0.7%
11.1%	1,788	1,708	-80	-4.5%
12.3%	1,778	1,682	-96	-5.4%
13.6%	1,743	1,680	-63	-3.6%
14.8%	1,687	1,674	-13	-0.7%
16.0%	1,675	1,662	-12	-0.7%
17.3%	1,674	1,657	-17	-1.0%
18.5%	1,671	1,646	-25	-1.5%
19.8%	1,629	1,630	1	0.1%
21.0%	1,626	1,629	3	0.2%
22.2%	1,617	1,623	5	0.3%
23.5%	1,592	1,620	28	1.8%
24.7%	1,592	1,594	2	0.1%
25.9%	1,578	1,590	12	0.8%
27.2%	1,571	1,574	2	0.2%
28.4%	1,569	1,564	-5	-0.3%
29.6%	1,565	1,547	-18	-1.2%
30.9%	1,564	1,545	-19	-1.2%
32.1%	1,561	1,543	-18	-1.1%
33.3%	1,544	1,542	-2	-0.1%
34.6%	1,529	1,534	5	0.3%
35.8%	1,527	1,525	-2	-0.1%
37.0%	1,516	1,525	9	0.6%
38.3%	1,510	1,505	-5	-0.4%
39.5%	1,505	1,501	-5	-0.3%
40.7%	1,495	1,484	-11	-0.7%
42.0%	1,489	1,484	-5	-0.3%
43.2%	1,483	1,479	-4	-0.3%
44.4%	1,477	1,468	-9	-0.6%
45.7%	1,470	1,461	-9	-0.6%
46.9%	1,463	1,456	-7	-0.5%
48.1%	1,410	1,446	36	2.6%
49.4%	1,409	1,444	35	2.5%
50.6%	1,408	1,441	33	2.3%
51.9%	1,406	1,418	12	0.9%
53.1%	1,397	1,414	17	1.2%
54.3%	1,389	1,414	25	1.8%
55.6%	1,376	1,387	11	0.8%
56.8%	1,367	1,386	19	1.4%
58.0%	1,350	1,331	-20	-1.5%
59.3%	1,322	1,301	-21	-1.6%
60.5%	1,317	1,297	-20	-1.5%
61.7%	1,297	1,282	-15	-1.2%
63.0%	1,293	1,266	-27	-2.1%
64.2%	1,260	1,257	-2	-0.2%
65.4%	1,258	1,253	-5	-0.4%
66.7%	1,245	1,248	4	0.3%
67.9%	1,234	1,207	-27	-2.2%
69.1%	1,227	1,203	-24	-2.0%
70.4%	1,206	1,199	-6	-0.5%
71.6%	1,202	1,199	-4	-0.3%
72.8%	1,191	1,197	6	0.5%
74.1%	1,190	1,186	-4	-0.3%
75.3%	1,170	1,134	-36	-3.0%
76.5%	1,108	1,081	-28	-2.5%
77.8%	1,063	1,077	15	1.4%
79.0%	1,042	1,058	17	1.6%
80.2%	1,034	1,015	-19	-1.8%
81.5%	996	997	1	0.1%
82.7%	984	962	-22	-2.3%
84.0%	969	961	-8	-0.9%
85.2%	932	937	5	0.5%
86.4%	931	931	0	0.0%
87.7%	928	903	-25	-2.7%
88.9%	922	896	-27	-2.9%
90.1%	904	884	-20	-2.2%
91.4%	839	846	8	0.9%
92.6%	826	820	-6	-0.7%
93.8%	800	800	0	0.0%
95.1%	770	799	29	3.8%
96.3%	740	798	57	7.8%
97.5%	710	771	61	8.6%
98.8%	653	647	-6	-0.9%
100.0%	553	614	60	10.9%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,055	2,055	0	0.0%
1.2%	1,900	1,900	0	0.0%
2.5%	1,900	1,900	0	0.0%
3.7%	1,900	1,900	0	0.0%
4.9%	1,900	1,900	0	0.0%
6.2%	1,900	1,900	0	0.0%
7.4%	1,900	1,900	0	0.0%
8.6%	1,900	1,900	0	0.0%
9.9%	1,900	1,900	0	0.0%
11.1%	1,900	1,900	0	0.0%
12.3%	1,900	1,900	0	0.0%
13.6%	1,900	1,900	0	0.0%
14.8%	1,900	1,900	0	0.0%
16.0%	1,896	1,900	4	0.2%
17.3%	1,890	1,875	-15	-0.8%
18.5%	1,889	1,856	-34	-1.8%
19.8%	1,852	1,845	-7	-0.4%
21.0%	1,849	1,845	-5	-0.3%
22.2%	1,834	1,843	9	0.5%
23.5%	1,834	1,840	6	0.3%
24.7%	1,821	1,820	-1	0.0%
25.9%	1,820	1,799	-21	-1.2%
27.2%	1,799	1,795	-5	-0.3%
28.4%	1,798	1,790	-8	-0.5%
29.6%	1,797	1,776	-21	-1.2%
30.9%	1,794	1,754	-40	-2.3%
32.1%	1,778	1,717	-61	-3.4%
33.3%	1,749	1,713	-36	-2.1%
34.6%	1,730	1,694	-37	-2.1%
35.8%	1,707	1,693	-15	-0.9%
37.0%	1,676	1,683	7	0.4%
38.3%	1,665	1,679	15	0.9%
39.5%	1,645	1,658	12	0.7%
40.7%	1,645	1,655	11	0.6%
42.0%	1,633	1,649	16	1.0%
43.2%	1,629	1,648	19	1.2%
44.4%	1,627	1,639	12	0.8%
45.7%	1,625	1,629	4	0.2%
46.9%	1,602	1,623	21	1.3%
48.1%	1,575	1,597	21	1.4%
49.4%	1,574	1,592	18	1.1%
50.6%	1,548	1,517	-31	-2.0%
51.9%	1,494	1,510	17	1.1%
53.1%	1,486	1,484	-2	-0.2%
54.3%	1,483	1,471	-12	-0.8%
55.6%	1,465	1,470	5	0.3%
56.8%	1,436	1,468	32	2.2%
58.0%	1,413	1,467	55	3.9%
59.3%	1,412	1,459	47	3.3%
60.5%	1,407	1,423	17	1.2%
61.7%	1,391	1,392	1	0.0%
63.0%	1,367	1,376	10	0.7%
64.2%	1,359	1,359	0	0.0%
65.4%	1,338	1,342	4	0.3%
66.7%	1,319	1,321	2	0.2%
67.9%	1,307	1,319	12	0.9%
69.1%	1,292	1,300	8	0.6%
70.4%	1,292	1,254	-38	-2.9%
71.6%	1,267	1,237	-30	-2.4%
72.8%	1,259	1,231	-28	-2.2%
74.1%	1,252	1,227	-25	-2.0%
75.3%	1,247	1,213	-34	-2.8%
76.5%	1,238	1,211	-27	-2.2%
77.8%	1,234	1,210	-24	-1.9%
79.0%	1,228	1,207	-21	-1.7%
80.2%	1,137	1,197	60	5.3%
81.5%	1,130	1,115	-15	-1.3%
82.7%	1,099	1,110	12	1.1%
84.0%	1,085	1,066	-19	-1.8%
85.2%	1,041	1,058	17	1.6%
86.4%	1,032	1,046	14	1.4%
87.7%	1,017	1,023	6	0.6%
88.9%	1,017	1,017	0	0.0%
90.1%	1,012	993	-20	-2.0%
91.4%	980	986	6	0.6%
92.6%	956	948	-9	-0.9%
93.8%	934	934	0	0.0%
95.1%	880	915	36	4.0%
96.3%	827	848	21	2.5%
97.5%	787	821	34	4.3%
98.8%	783	812	29	3.7%
100.0%	683	677	-6	-0.9%

Table SW-01-b

Trinity Lake, End of Month Storage

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,012	2,078	66	3.3%
1.2%	2,000	2,000	0	0.0%
2.5%	2,000	2,000	0	0.0%
3.7%	2,000	2,000	0	0.0%
4.9%	2,000	2,000	0	0.0%
6.2%	2,000	2,000	0	0.0%
7.4%	2,000	2,000	0	0.0%
8.6%	2,000	2,000	0	0.0%
9.9%	2,000	2,000	0	0.0%
11.1%	2,000	2,000	0	0.0%
12.3%	2,000	2,000	0	0.0%
13.6%	2,000	2,000	0	0.0%
14.8%	2,000	2,000	0	0.0%
16.0%	2,000	2,000	0	0.0%
17.3%	2,000	2,000	0	0.0%
18.5%	2,000	2,000	0	0.0%
19.8%	2,000	2,000	0	0.0%
21.0%	2,000	2,000	0	0.0%
22.2%	2,000	2,000	0	0.0%
23.5%	2,000	1,999	-1	0.0%
24.7%	1,999	1,992	-7	-0.4%
25.9%	1,996	1,990	-6	-0.3%
27.2%	1,983	1,988	5	0.2%
28.4%	1,981	1,985	4	0.2%
29.6%	1,979	1,955	-25	-1.2%
30.9%	1,969	1,947	-23	-1.1%
32.1%	1,945	1,940	-5	-0.2%
33.3%	1,929	1,921	-7	-0.4%
34.6%	1,912	1,914	2	0.1%
35.8%	1,907	1,906	-1	0.0%
37.0%	1,884	1,905	21	1.1%
38.3%	1,884	1,884	1	0.0%
39.5%	1,851	1,858	7	0.4%
40.7%	1,806	1,835	30	1.6%
42.0%	1,777	1,832	55	3.1%
43.2%	1,768	1,768	0	0.0%
44.4%	1,763	1,762	-1	-0.1%
45.7%	1,761	1,761	0	0.0%
46.9%	1,758	1,745	-13	-0.7%
48.1%	1,748	1,736	-13	-0.7%
49.4%	1,727	1,723	-4	-0.2%
50.6%	1,715	1,699	-16	-0.9%
51.9%	1,667	1,689	22	1.3%
53.1%	1,616	1,687	71	4.4%
54.3%	1,616	1,612	-3	-0.2%
55.6%	1,613	1,601	-12	-0.8%
56.8%	1,581	1,599	18	1.2%
58.0%	1,578	1,596	18	1.2%
59.3%	1,575	1,579	5	0.3%
60.5%	1,568	1,565	-3	-0.2%
61.7%	1,562	1,562	0	0.0%
63.0%	1,548	1,555	7	0.5%
64.2%	1,523	1,526	3	0.2%
65.4%	1,501	1,514	14	0.9%
66.7%	1,470	1,497	28	1.9%
67.9%	1,441	1,490	48	3.3%
69.1%	1,433	1,487	54	3.8%
70.4%	1,429	1,419	-10	-0.7%
71.6%	1,425	1,413	-12	-0.8%
72.8%	1,421	1,405	-16	-1.2%
74.1%	1,413	1,389	-24	-1.7%
75.3%	1,401	1,386	-15	-1.1%
76.5%	1,378	1,343	-35	-2.5%
77.8%	1,374	1,337	-38	-2.7%
79.0%	1,370	1,329	-41	-3.0%
80.2%	1,348	1,288	-60	-4.4%
81.5%	1,308	1,288	-21	-1.6%
82.7%	1,287	1,259	-27	-2.1%
84.0%	1,266	1,259	-7	-0.6%
85.2%	1,243	1,239	-4	-0.3%
86.4%	1,225	1,206	-19	-1.6%
87.7%	1,123	1,133	11	0.9%
88.9%	1,104	1,128	24	2.2%
90.1%	1,067	1,124	58	5.4%
91.4%	1,050	1,084	34	3.2%
92.6%	1,046	1,041	-4	-0.4%
93.8%	1,013	1,034	22	2.1%
95.1%	990	984	-6	-0.6%
96.3%	916	929	12	1.4%
97.5%	868	916	49	5.6%
98.8%	827	829	2	0.2%
100.0%	800	821	21	2.6%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,126	2,126	0	0.0%
1.2%	2,100	2,100	0	0.0%
2.5%	2,100	2,100	0	0.0%
3.7%	2,100	2,100	0	0.0%
4.9%	2,100	2,100	0	0.0%
6.2%	2,100	2,100	0	0.0%
7.4%	2,100	2,100	0	0.0%
8.6%	2,100	2,100	0	0.0%
9.9%	2,100	2,100	0	0.0%
11.1%	2,100	2,100	0	0.0%
12.3%	2,100	2,100	0	0.0%
13.6%	2,100	2,100	0	0.0%
14.8%	2,100	2,100	0	0.0%
16.0%	2,100	2,100	0	0.0%
17.3%	2,100	2,100	0	0.0%
18.5%	2,100	2,100	0	0.0%
19.8%	2,100	2,100	0	0.0%
21.0%	2,100	2,100	0	0.0%
22.2%	2,100	2,100	0	0.0%
23.5%	2,100	2,100	0	0.0%
24.7%	2,100	2,100	0	0.0%
25.9%	2,100	2,100	0	0.0%
27.2%	2,100	2,100	0	0.0%
28.4%	2,093	2,093	0	0.0%
29.6%	2,092	2,085	-7	-0.3%
30.9%	2,081	2,079	-2	-0.1%
32.1%	2,078	2,074	-4	-0.2%
33.3%	2,076	2,073	-2	-0.1%
34.6%	2,074	2,070	-4	-0.2%
35.8%	2,068	2,070	2	0.1%
37.0%	2,056	2,067	11	0.5%
38.3%	2,031	2,030	-1	0.0%
39.5%	2,013	2,019	6	0.3%
40.7%	1,998	1,984	-14	-0.7%
42.0%	1,988	1,983	-5	-0.3%
43.2%	1,932	1,977	45	2.3%
44.4%	1,913	1,973	60	3.1%
45.7%	1,909	1,928	20	1.0%
46.9%	1,903	1,906	3	0.1%
48.1%	1,896	1,838	-58	-3.0%
49.4%	1,866	1,826	-40	-2.2%
50.6%	1,822	1,809	-13	-0.7%
51.9%	1,787	1,786	-1	0.0%
53.1%	1,785	1,784	0	0.0%
54.3%	1,784	1,775	-9	-0.5%
55.6%	1,758	1,769	11	0.6%
56.8%	1,753	1,765	11	0.6%
58.0%	1,747	1,764	17	1.0%
59.3%	1,739	1,752	13	0.7%
60.5%	1,732	1,750	18	1.0%
61.7%	1,716	1,744	28	1.6%
63.0%	1,716	1,742	26	1.5%
64.2%	1,692	1,668	-24	-1.4%
65.4%	1,666	1,656	-10	-0.6%
66.7%	1,643	1,651	8	0.5%
67.9%	1,594	1,630	36	2.2%
69.1%	1,582	1,585	3	0.2%
70.4%	1,575	1,550	-26	-1.6%
71.6%	1,574	1,542	-32	-2.0%
72.8%	1,553	1,525	-28	-1.8%
74.1%	1,519	1,514	-5	-0.3%
75.3%	1,519	1,513	-6	-0.4%
76.5%	1,518	1,485	-33	-2.2%
77.8%	1,502	1,484	-18	-1.2%
79.0%	1,489	1,468	-21	-1.4%
80.2%	1,461	1,452	-9	-0.6%
81.5%	1,417	1,429	12	0.9%
82.7%	1,397	1,398	1	0.1%
84.0%	1,383	1,355	-27	-2.0%
85.2%	1,376	1,350	-25	-1.9%
86.4%	1,360	1,332	-27	-2.0%
87.7%	1,357	1,330	-26	-1.9%
88.9%	1,309	1,289	-21	-1.6%
90.1%	1,193	1,191	-3	-0.2%
91.4%	1,163	1,185	22	1.9%
92.6%	1,127	1,173	46	4.1%
93.8%	1,094	1,168	74	6.8%
95.1%	1,082	1,119	37	3.4%
96.3%	1,005	1,066	61	6.1%
97.5%	909	925	17	1.8%
98.8%	904	904	0	0.0%
100.0%	896	903	6	0.7%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,300	2,300	0	0.0%
1.2%	2,300	2,300	0	0.0%
2.5%	2,300	2,300	0	0.0%
3.7%	2,300	2,300	0	0.0%
4.9%	2,300	2,300	0	0.0%
6.2%	2,300	2,300	0	0.0%
7.4%	2,300	2,300	0	0.0%
8.6%	2,300	2,300	0	0.0%
9.9%	2,300	2,300	0	0.0%
11.1%	2,297	2,300	3	0.1%
12.3%	2,295	2,300	5	0.2%
13.6%	2,295	2,297	2	0.1%
14.8%	2,294	2,295	1	0.1%
16.0%	2,293	2,295	2	0.1%
17.3%	2,282	2,278	-4	-0.2%
18.5%	2,258	2,258	0	0.0%
19.8%	2,250	2,250	0	0.0%
21.0%	2,235	2,235	0	0.0%
22.2%	2,228	2,228	0	0.0%
23.5%	2,227	2,224	-3	-0.1%
24.7%	2,223	2,223	0	0.0%
25.9%	2,216	2,222	6	0.3%
27.2%	2,214	2,214	0	0.0%
28.4%	2,213	2,213	0	0.0%
29.6%	2,209	2,213	4	0.2%
30.9%	2,191	2,209	18	0.8%
32.1%	2,191	2,195	4	0.2%
33.3%	2,181	2,181	0	0.0%
34.6%	2,169	2,177	9	0.4%
35.8%	2,165	2,175	10	0.5%
37.0%	2,161	2,169	7	0.3%
38.3%	2,160	2,161	1	0.0%
39.5%	2,139	2,153	14	0.7%
40.7%	2,133	2,139	6	0.3%
42.0%	2,128	2,130	2	0.1%
43.2%	2,111	2,129	18	0.8%
44.4%	2,077	2,062	-15	-0.7%
45.7%	2,069	2,061	-8	-0.4%
46.9%	2,051	2,051	0	0.0%
48.1%	2,051	2,006	-45	-2.2%
49.4%	1,979	1,995	17	0.8%
50.6%	1,970	1,979	9	0.4%
51.9%	1,935	1,927	-8	-0.4%
53.1%	1,917	1,920	3	0.2%
54.3%	1,897	1,901	4	0.2%
55.6%	1,885	1,899	13	0.7%
56.8%	1,877	1,897	20	1.0%
58.0%	1,876	1,875	0	0.0%
59.3%	1,874	1,867	-7	-0.4%
60.5%	1,849	1,861	12	0.6%
61.7%	1,846	1,848	1	0.1%
63.0%	1,822	1,799	-23	-1.3%
64.2%	1,795	1,792	-3	-0.2%
65.4%	1,762	1,785	23	1.3%
66.7%	1,757	1,737	-20	-1.1%
67.9%	1,749	1,714	-35	-2.0%
69.1%	1,741	1,706	-35	-2.0%
70.4%	1,695	1,697	3	0.1%
71.6%	1,683	1,684	1	0.1%
72.8%	1,673	1,666	-7	-0.4%
74.1%	1,646	1,659	13	0.8%
75.3%	1,644	1,624	-21	-1.3%
76.5%	1,628	1,619	-8	-0.5%
77.8%	1,626	1,603	-23	-1.4%
79.0%	1,598	1,602	4	0.3%
80.2%	1,592	1,593	1	0.0%
81.5%	1,573	1,580	6	0.4%
82.7%	1,562	1,565	2	0.2%
84.0%	1,561	1,562	0	0.0%
85.2%	1,558	1,526	-32	-2.1%
86.4%	1,510	1,471	-39	-2.6%
87.7%	1,470	1,424	-46	-3.1%
88.9%	1,331	1,310	-21	-1.6%
90.1%	1,247	1,308	62	4.9%
91.4%	1,211	1,238	27	2.2%
92.6%	1,200	1,227	27	2.3%
93.8%	1,177	1,216	39	3.3%
95.1%	1,155	1,206	51	4.5%
96.3%	1,115	1,147	31	2.8%
97.5%	1,039	1,071	32	3.1%
98.8%	967	961	-6	-0.6%
100.0%	841	841	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,419	2,419	0	0.0%
1.2%	2,418	2,418	0	0.0%
2.5%	2,377	2,377	0	0.0%
3.7%	2,353	2,353	0	0.0%
4.9%	2,329	2,335	5	0.2%
6.2%	2,328	2,329	1	0.0%
7.4%	2,302	2,302	0	0.0%
8.6%	2,290	2,275	-15	-0.6%
9.9%	2,256	2,256	0	0.0%
11.1%	2,249	2,234	-14	-0.6%
12.3%	2,214	2,232	18	0.8%
13.6%	2,206	2,206	0	0.0%
14.8%	2,205	2,205	0	0.0%
16.0%	2,203	2,203	0	0.0%
17.3%	2,184	2,181	-3	-0.1%
18.5%	2,181	2,179	-2	-0.1%
19.8%	2,179	2,168	-11	-0.5%
21.0%	2,147	2,157	10	0.5%
22.2%	2,134	2,147	13	0.6%
23.5%	2,127	2,134	7	0.3%
24.7%	2,115	2,127	12	0.6%
25.9%	2,114	2,115	1	0.1%
27.2%	2,099	2,114	15	0.7%
28.4%	2,093	2,099	6	0.3%
29.6%	2,093	2,097	4	0.2%
30.9%	2,089	2,090	1	0.0%
32.1%	2,083	2,089	6	0.3%
33.3%	2,065	2,066	1	0.0%
34.6%	2,060	2,065	5	0.2%
35.8%	2,057	2,056	-1	-0.1%
37.0%	2,057	2,049	-8	-0.4%
38.3%	2,049	2,024	-25	-1.2%
39.5%	2,022	2,020	-2	-0.1%
40.7%	1,995	1,999	4	0.2%
42.0%	1,995	1,999	4	0.2%
43.2%	1,982	1,992	10	0.5%
44.4%	1,948	1,941	-7	-0.4%
45.7%	1,931	1,933	2	0.1%
46.9%	1,888	1,903	15	0.8%
48.1%	1,854	1,888	34	1.8%
49.4%	1,843	1,860	17	0.9%
50.6%	1,837	1,854	18	1.0%
51.9%	1,825	1,850	25	1.4%
53.1%	1,813	1,840	27	1.5%
54.3%	1,812	1,813	1	0.1%
55.6%	1,804	1,802	-2	-0.1%
56.8%	1,792	1,797	5	0.3%
58.0%	1,791	1,789	-2	-0.1%
59.3%	1,777	1,775	-2	-0.1%
60.5%	1,768	1,742	-26	-1.4%
61.7%	1,755	1,741	-14	-0.8%
63.0%	1,734	1,694	-40	-2.3%
64.2%	1,727	1,687	-40	-2.3%
65.4%	1,722	1,678	-44	-2.6%
66.7%	1,672	1,669	-3	-0.2%
67.9%	1,661	1,661	0	0.0%
69.1%	1,651	1,656	5	0.3%
70.4%	1,648	1,650	3	0.2%
71.6%	1,630	1,632	3	0.2%
72.8%	1,623	1,622	-1	0.0%
74.1%	1,621	1,620	-1	-0.1%
75.3%	1,618	1,611	-7	-0.4%
76.5%	1,616	1,592	-24	-1.5%
77.8%	1,572	1,582	10	0.6%
79.0%	1,561	1,581	20	1.3%
80.2%	1,545	1,547	2	0.1%
81.5%	1,544	1,531	-13	-0.8%
82.7%	1,517	1,494	-22	-1.5%
84.0%	1,491	1,450	-41	-2.7%
85.2%	1,444	1,407	-37	-2.6%
86.4%	1,412	1,404	-8	-0.6%
87.7%	1,403	1,358	-45	-3.2%
88.9%	1,225	1,233	8	0.7%
90.1%	1,176	1,204	28	2.4%
91.4%	1,172	1,156	-16	-1.4%
92.6%	1,149	1,154	5	0.4%
93.8%	1,122	1,141	20	1.7%
95.1%	1,109	1,133	24	2.2%
96.3%	1,034	1,114	80	7.7%
97.5%	1,023	1,113	90	8.8%
98.8%	986	980	-6	-0.6%
100.0%	812	812	0	0.0%

Table SW-01-b

Trinity Lake, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,433	2,433	0	0.0%
1.2%	2,413	2,411	-2	-0.1%
2.5%	2,292	2,292	0	0.0%
3.7%	2,233	2,233	1	0.0%
4.9%	2,225	2,219	-6	-0.3%
6.2%	2,213	2,210	-3	-0.1%
7.4%	2,193	2,193	0	0.0%
8.6%	2,182	2,182	0	0.0%
9.9%	2,171	2,178	6	0.3%
11.1%	2,170	2,170	0	0.0%
12.3%	2,131	2,122	-9	-0.4%
13.6%	2,122	2,117	-6	-0.3%
14.8%	2,105	2,116	11	0.5%
16.0%	2,099	2,109	10	0.5%
17.3%	2,088	2,092	4	0.2%
18.5%	2,078	2,088	10	0.5%
19.8%	2,032	2,087	55	2.7%
21.0%	2,024	2,032	8	0.4%
22.2%	2,022	2,022	0	0.0%
23.5%	2,008	2,019	11	0.5%
24.7%	2,000	2,008	8	0.4%
25.9%	1,992	2,000	8	0.4%
27.2%	1,990	1,992	2	0.1%
28.4%	1,984	1,984	0	0.0%
29.6%	1,968	1,982	15	0.8%
30.9%	1,963	1,971	8	0.4%
32.1%	1,956	1,968	11	0.6%
33.3%	1,937	1,965	28	1.5%
34.6%	1,934	1,940	6	0.3%
35.8%	1,922	1,937	15	0.8%
37.0%	1,916	1,934	19	1.0%
38.3%	1,904	1,928	24	1.3%
39.5%	1,882	1,916	34	1.8%
40.7%	1,866	1,883	17	0.9%
42.0%	1,855	1,878	24	1.3%
43.2%	1,846	1,856	10	0.6%
44.4%	1,838	1,853	14	0.8%
45.7%	1,822	1,814	-8	-0.4%
46.9%	1,801	1,794	-7	-0.4%
48.1%	1,758	1,772	13	0.7%
49.4%	1,753	1,769	16	0.9%
50.6%	1,743	1,757	14	0.8%
51.9%	1,735	1,748	13	0.7%
53.1%	1,722	1,746	25	1.4%
54.3%	1,699	1,740	41	2.4%
55.6%	1,697	1,722	25	1.4%
56.8%	1,689	1,719	30	1.8%
58.0%	1,688	1,680	-8	-0.5%
59.3%	1,683	1,676	-8	-0.5%
60.5%	1,646	1,661	15	0.9%
61.7%	1,641	1,661	20	1.2%
63.0%	1,626	1,659	33	2.0%
64.2%	1,616	1,653	37	2.3%
65.4%	1,614	1,617	3	0.2%
66.7%	1,606	1,611	5	0.3%
67.9%	1,599	1,579	-20	-1.3%
69.1%	1,590	1,570	-20	-1.3%
70.4%	1,585	1,567	-18	-1.1%
71.6%	1,582	1,556	-25	-1.6%
72.8%	1,555	1,545	-10	-0.7%
74.1%	1,543	1,538	-5	-0.3%
75.3%	1,538	1,525	-12	-0.8%
76.5%	1,514	1,505	-9	-0.6%
77.8%	1,512	1,497	-15	-1.0%
79.0%	1,489	1,480	-9	-0.6%
80.2%	1,443	1,463	20	1.4%
81.5%	1,425	1,404	-22	-1.5%
82.7%	1,424	1,378	-45	-3.2%
84.0%	1,421	1,378	-43	-3.0%
85.2%	1,371	1,357	-14	-1.0%
86.4%	1,341	1,298	-43	-3.2%
87.7%	1,328	1,293	-35	-2.6%
88.9%	1,183	1,224	41	3.5%
90.1%	1,183	1,176	-6	-0.5%
91.4%	1,162	1,164	2	0.2%
92.6%	1,156	1,159	3	0.3%
93.8%	1,154	1,142	-13	-1.1%
95.1%	1,104	1,137	33	3.0%
96.3%	1,007	1,106	99	9.8%
97.5%	1,004	1,094	90	9.0%
98.8%	949	943	-6	-0.6%
100.0%	750	750	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,270	2,270	0	0.0%
1.2%	2,270	2,270	0	0.0%
2.5%	2,145	2,143	-2	-0.1%
3.7%	2,143	2,084	-58	-2.7%
4.9%	2,096	2,082	-15	-0.7%
6.2%	2,083	2,064	-20	-0.9%
7.4%	2,058	2,053	-5	-0.2%
8.6%	2,043	2,043	0	0.0%
9.9%	2,020	2,020	0	0.0%
11.1%	1,991	1,991	0	0.0%
12.3%	1,989	1,974	-15	-0.8%
13.6%	1,964	1,970	6	0.3%
14.8%	1,952	1,968	16	0.8%
16.0%	1,942	1,948	6	0.3%
17.3%	1,940	1,940	0	0.0%
18.5%	1,900	1,936	36	1.9%
19.8%	1,887	1,936	48	2.6%
21.0%	1,881	1,900	19	1.0%
22.2%	1,878	1,887	9	0.5%
23.5%	1,873	1,887	14	0.7%
24.7%	1,872	1,881	9	0.5%
25.9%	1,852	1,878	25	1.4%
27.2%	1,850	1,850	0	0.0%
28.4%	1,845	1,834	-11	-0.6%
29.6%	1,809	1,825	16	0.9%
30.9%	1,808	1,825	16	0.9%
32.1%	1,806	1,821	15	0.8%
33.3%	1,770	1,808	38	2.2%
34.6%	1,764	1,797	33	1.9%
35.8%	1,761	1,797	36	2.0%
37.0%	1,755	1,778	23	1.3%
38.3%	1,739	1,773	34	2.0%
39.5%	1,725	1,746	21	1.2%
40.7%	1,717	1,739	22	1.3%
42.0%	1,705	1,731	26	1.5%
43.2%	1,691	1,714	22	1.3%
44.4%	1,669	1,679	10	0.6%
45.7%	1,645	1,674	29	1.8%
46.9%	1,643	1,663	20	1.2%
48.1%	1,616	1,639	22	1.4%
49.4%	1,614	1,633	19	1.2%
50.6%	1,613	1,610	-3	-0.2%
51.9%	1,603	1,602	-2	-0.1%
53.1%	1,588	1,598	10	0.6%
54.3%	1,565	1,573	8	0.5%
55.6%	1,563	1,567	3	0.2%
56.8%	1,556	1,552	-4	-0.3%
58.0%	1,545	1,542	-3	-0.2%
59.3%	1,539	1,539	0	0.0%
60.5%	1,528	1,533	5	0.3%
61.7%	1,522	1,529	7	0.5%
63.0%	1,496	1,528	32	2.2%
64.2%	1,475	1,509	34	2.3%
65.4%	1,463	1,497	34	2.3%
66.7%	1,456	1,488	32	2.2%
67.9%	1,453	1,484	31	2.2%
69.1%	1,448	1,474	27	1.8%
70.4%	1,427	1,422	-5	-0.3%
71.6%	1,413	1,414	1	0.1%
72.8%	1,412	1,391	-22	-1.5%
74.1%	1,404	1,356	-48	-3.4%
75.3%	1,379	1,353	-26	-1.9%
76.5%	1,363	1,345	-18	-1.3%
77.8%	1,320	1,337	17	1.3%
79.0%	1,294	1,326	32	2.5%
80.2%	1,276	1,320	44	3.4%
81.5%	1,262	1,297	35	2.8%
82.7%	1,245	1,242	-4	-0.3%
84.0%	1,232	1,191	-42	-3.4%
85.2%	1,213	1,175	-38	-3.2%
86.4%	1,199	1,121	-78	-6.5%
87.7%	1,121	1,102	-19	-1.7%
88.9%	1,085	1,076	-10	-0.9%
90.1%	1,082	1,065	-17	-1.5%
91.4%	1,049	1,052	3	0.3%
92.6%	1,047	1,030	-18	-1.7%
93.8%	1,041	1,021	-20	-2.0%
95.1%	972	1,017	45	4.6%
96.3%	906	1,004	98	10.8%
97.5%	886	976	90	10.1%
98.8%	842	836	-6	-0.7%
100.0%	520	520	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,150	2,150	0	0.0%
1.2%	2,150	2,150	0	0.0%
2.5%	2,129	1,949	-180	-8.5%
3.7%	1,982	1,945	-37	-1.9%
4.9%	1,949	1,891	-58	-3.0%
6.2%	1,922	1,885	-37	-1.9%
7.4%	1,913	1,881	-32	-1.7%
8.6%	1,885	1,845	-39	-2.1%
9.9%	1,879	1,836	-42	-2.3%
11.1%	1,875	1,825	-50	-2.7%
12.3%	1,852	1,824	-27	-1.5%
13.6%	1,819	1,821	1	0.1%
14.8%	1,803	1,819	16	0.9%
16.0%	1,794	1,815	21	1.2%
17.3%	1,766	1,802	36	2.0%
18.5%	1,752	1,796	44	2.5%
19.8%	1,750	1,753	4	0.2%
21.0%	1,743	1,750	6	0.4%
22.2%	1,741	1,743	2	0.1%
23.5%	1,730	1,741	11	0.6%
24.7%	1,727	1,737	10	0.6%
25.9%	1,714	1,727	14	0.8%
27.2%	1,701	1,699	-2	-0.1%
28.4%	1,696	1,699	3	0.2%
29.6%	1,660	1,683	23	1.4%
30.9%	1,659	1,681	22	1.3%
32.1%	1,651	1,658	7	0.4%
33.3%	1,637	1,644	7	0.4%
34.6%	1,636	1,639	3	0.2%
35.8%	1,630	1,628	-2	-0.1%
37.0%	1,574	1,621	48	3.0%
38.3%	1,572	1,620	48	3.0%
39.5%	1,571	1,602	31	2.0%
40.7%	1,567	1,590	23	1.5%
42.0%	1,519	1,526	7	0.4%
43.2%	1,492	1,519	27	1.8%
44.4%	1,484	1,499	15	1.0%
45.7%	1,476	1,483	7	0.5%
46.9%	1,467	1,457	-10	-0.7%
48.1%	1,462	1,447	-15	-1.0%
49.4%	1,446	1,430	-16	-1.1%
50.6%	1,438	1,421	-17	-1.2%
51.9%	1,434	1,410	-25	-1.7%
53.1%	1,432	1,408	-23	-1.6%
54.3%	1,420	1,395	-25	-1.8%
55.6%	1,413	1,387	-26	-1.9%
56.8%	1,405	1,374	-31	-2.2%
58.0%	1,394	1,371	-23	-1.7%
59.3%	1,388	1,368	-20	-1.5%
60.5%	1,362	1,363	1	0.1%
61.7%	1,342	1,347	5	0.4%
63.0%	1,334	1,347	13	1.0%
64.2%	1,329	1,340	11	0.8%
65.4%	1,324	1,324	0	0.0%
66.7%	1,317	1,321	4	0.3%
67.9%	1,306	1,320	15	1.1%
69.1%	1,282	1,298	16	1.2%
70.4%	1,252	1,289	37	3.0%
71.6%	1,252	1,236	-16	-1.3%
72.8%	1,223	1,203	-21	-1.7%
74.1%	1,221	1,189	-32	-2.6%
75.3%	1,209	1,178	-31	-2.6%
76.5%	1,158	1,166	8	0.7%
77.8%	1,143	1,165	21	1.8%
79.0%	1,133	1,165	31	2.8%
80.2%	1,115	1,145	30	2.7%
81.5%	1,082	1,092	10	0.9%
82.7%	1,081	1,073	-8	-0.7%
84.0%	1,081	1,013	-68	-6.3%
85.2%	1,080	1,004	-77	-7.1%
86.4%	1,063	999	-64	-6.0%
87.7%	970	963	-6	-0.6%
88.9%	967	947	-20	-2.1%
90.1%	932	935	3	0.3%
91.4%	930	918	-12	-1.3%
92.6%	929	913	-16	-1.7%
93.8%	925	900	-25	-2.7%
95.1%	871	886	15	1.7%
96.3%	788	856	68	8.6%
97.5%	767	839	72	9.3%
98.8%	725	719	-6	-0.8%
100.0%	294	355	61	20.7%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,975	1,975	0	0.0%
1.2%	1,975	1,975	0	0.0%
2.5%	1,975	1,924	-51	-2.6%
3.7%	1,867	1,805	-62	-3.3%
4.9%	1,805	1,746	-59	-3.2%
6.2%	1,786	1,741	-45	-2.5%
7.4%	1,763	1,737	-26	-1.5%
8.6%	1,741	1,709	-31	-1.8%
9.9%	1,736	1,702	-34	-1.9%
11.1%	1,731	1,681	-50	-2.9%
12.3%	1,708	1,681	-27	-1.6%
13.6%	1,706	1,679	-27	-1.6%
14.8%	1,661	1,676	15	0.9%
16.0%	1,650	1,671	21	1.2%
17.3%	1,637	1,659	22	1.3%
18.5%	1,626	1,621	-5	-0.3%
19.8%	1,621	1,600	-21	-1.3%
21.0%	1,606	1,597	-9	-0.6%
22.2%	1,600	1,597	-3	-0.2%
23.5%	1,597	1,583	-14	-0.9%
24.7%	1,587	1,577	-11	-0.7%
25.9%	1,570	1,573	3	0.2%
27.2%	1,550	1,560	10	0.6%
28.4%	1,539	1,557	18	1.1%
29.6%	1,531	1,556	25	1.6%
30.9%	1,517	1,540	23	1.5%
32.1%	1,493	1,539	46	3.1%
33.3%	1,488	1,500	12	0.8%
34.6%	1,468	1,487	19	1.3%
35.8%	1,465	1,487	22	1.5%
37.0%	1,440	1,467	27	1.9%
38.3%	1,429	1,461	32	2.2%
39.5%	1,428	1,427	-1	-0.1%
40.7%	1,425	1,422	-3	-0.2%
42.0%	1,409	1,400	-9	-0.6%
43.2%	1,408	1,397	-10	-0.7%
44.4%	1,405	1,391	-14	-1.0%
45.7%	1,380	1,387	7	0.5%
46.9%	1,372	1,350	-21	-1.5%
48.1%	1,362	1,319	-43	-3.2%
49.4%	1,326	1,313	-13	-1.0%
50.6%	1,325	1,305	-20	-1.5%
51.9%	1,321	1,295	-26	-1.9%
53.1%	1,306	1,282	-24	-1.8%
54.3%	1,297	1,282	-15	-1.2%
55.6%	1,293	1,276	-17	-1.3%
56.8%	1,283	1,262	-21	-1.7%
58.0%	1,276	1,256	-20	-1.6%
59.3%	1,270	1,251	-19	-1.5%
60.5%	1,238	1,245	7	0.5%
61.7%	1,230	1,221	-9	-0.8%
63.0%	1,217	1,219	3	0.2%
64.2%	1,213	1,218	5	0.4%
65.4%	1,208	1,209	1	0.1%
66.7%	1,206	1,195	-11	-0.9%
67.9%	1,195	1,183	-12	-1.0%
69.1%	1,169	1,170	1	0.1%
70.4%	1,141	1,128	-13	-1.1%
71.6%	1,139	1,111	-28	-2.5%
72.8%	1,111	1,110	-1	-0.1%
74.1%	1,110	1,098	-12	-1.1%
75.3%	1,078	1,084	5	0.5%
76.5%	1,076	1,083	6	0.6%
77.8%	1,023	1,082	59	5.8%
79.0%	1,018	1,000	-18	-1.7%
80.2%	1,005	1,000	-5	-0.5%
81.5%	1,000	996	-4	-0.4%
82.7%	999	962	-37	-3.7%
84.0%	999	922	-77	-7.7%
85.2%	969	886	-83	-8.6%
86.4%	958	881	-77	-8.1%
87.7%	887	864	-23	-2.5%
88.9%	884	831	-53	-6.0%
90.1%	850	831	-20	-2.3%
91.4%	848	818	-30	-3.5%
92.6%	842	816	-26	-3.1%
93.8%	799	806	7	0.9%
95.1%	789	796	7	0.9%
96.3%	686	775	89	12.9%
97.5%	672	758	85	12.7%
98.8%	642	636	-6	-0.9%
100.0%	331	391	61	18.3%

Figure SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

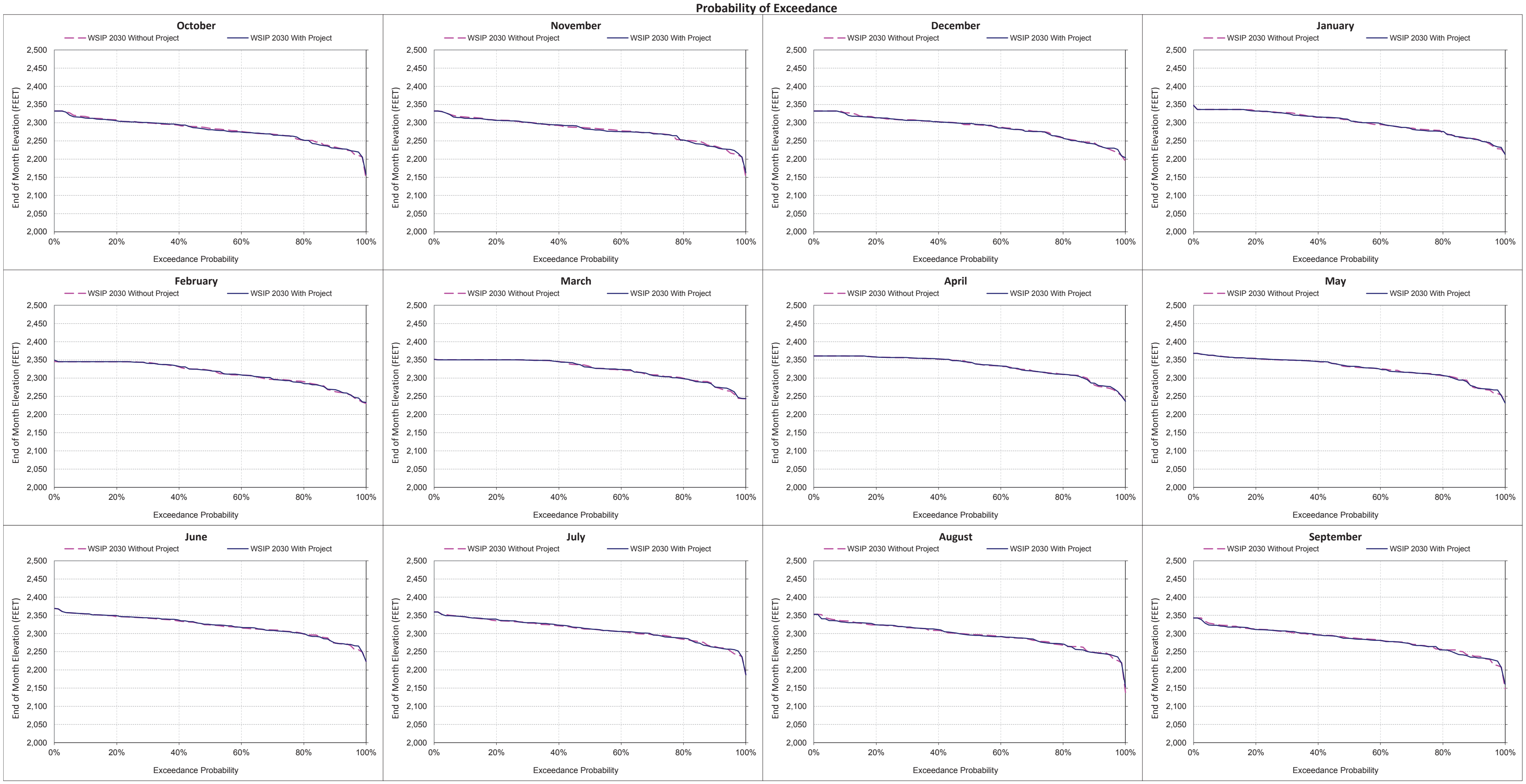


Table SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,332	2,332	0	0.0%
2.5%	2,332	2,332	0	0.0%
3.7%	2,330	2,329	-1	-0.1%
4.9%	2,327	2,320	-7	-0.3%
6.2%	2,320	2,317	-4	-0.2%
7.4%	2,319	2,315	-4	-0.2%
8.6%	2,318	2,315	-3	-0.1%
9.9%	2,317	2,313	-5	-0.2%
11.1%	2,315	2,312	-3	-0.1%
12.3%	2,312	2,312	0	0.0%
13.6%	2,312	2,310	-2	-0.1%
14.8%	2,311	2,310	-2	-0.1%
16.0%	2,310	2,309	-1	0.0%
17.3%	2,309	2,308	-1	-0.1%
18.5%	2,308	2,307	-1	-0.1%
19.8%	2,308	2,305	-3	-0.1%
21.0%	2,305	2,304	-1	-0.1%
22.2%	2,303	2,303	0	0.0%
23.5%	2,303	2,303	-1	0.0%
24.7%	2,303	2,302	-1	0.0%
25.9%	2,303	2,302	-1	0.0%
27.2%	2,300	2,302	1	0.1%
28.4%	2,300	2,301	1	0.0%
29.6%	2,299	2,301	1	0.1%
30.9%	2,299	2,300	1	0.0%
32.1%	2,299	2,299	1	0.0%
33.3%	2,297	2,299	2	0.1%
34.6%	2,296	2,298	2	0.1%
35.8%	2,296	2,297	1	0.1%
37.0%	2,296	2,297	1	0.1%
38.3%	2,295	2,296	1	0.1%
39.5%	2,294	2,295	1	0.1%
40.7%	2,291	2,294	3	0.1%
42.0%	2,291	2,293	3	0.1%
43.2%	2,290	2,290	0	0.0%
44.4%	2,290	2,286	-3	-0.1%
45.7%	2,289	2,286	-4	-0.2%
46.9%	2,288	2,285	-4	-0.2%
48.1%	2,287	2,283	-4	-0.2%
49.4%	2,285	2,281	-4	-0.2%
50.6%	2,284	2,281	-3	-0.1%
51.9%	2,283	2,280	-3	-0.1%
53.1%	2,282	2,279	-3	-0.2%
54.3%	2,281	2,279	-2	-0.1%
55.6%	2,280	2,276	-4	-0.2%
56.8%	2,278	2,275	-3	-0.1%
58.0%	2,278	2,275	-3	-0.1%
59.3%	2,278	2,275	-2	-0.1%
60.5%	2,275	2,273	-2	-0.1%
61.7%	2,274	2,273	-1	0.0%
63.0%	2,273	2,273	0	0.0%
64.2%	2,272	2,271	0	0.0%
65.4%	2,270	2,271	1	0.0%
66.7%	2,270	2,270	0	0.0%
67.9%	2,270	2,269	-1	0.0%
69.1%	2,269	2,269	0	0.0%
70.4%	2,268	2,266	-2	-0.1%
71.6%	2,267	2,265	-2	-0.1%
72.8%	2,266	2,265	-1	-0.1%
74.1%	2,264	2,264	0	0.0%
75.3%	2,264	2,264	0	0.0%
76.5%	2,260	2,263	2	0.1%
77.8%	2,255	2,261	6	0.2%
79.0%	2,253	2,254	1	0.0%
80.2%	2,251	2,252	0	0.0%
81.5%	2,251	2,251	0	0.0%
82.7%	2,251	2,243	-9	-0.4%
84.0%	2,247	2,242	-5	-0.2%
85.2%	2,247	2,238	-8	-0.4%
86.4%	2,239	2,237	-1	-0.1%
87.7%	2,238	2,236	-2	-0.1%
88.9%	2,234	2,231	-3	-0.1%
90.1%	2,233	2,230	-3	-0.1%
91.4%	2,230	2,228	-2	-0.1%
92.6%	2,228	2,228	1	0.0%
93.8%	2,224	2,227	3	0.1%
95.1%	2,223	2,223	0	0.0%
96.3%	2,213	2,222	9	0.4%
97.5%	2,210	2,219	9	0.4%
98.8%	2,206	2,205	-1	0.0%
100.0%	2,145	2,158	12	0.6%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,332	2,332	0	0.0%
2.5%	2,331	2,331	0	0.0%
3.7%	2,327	2,327	0	0.0%
4.9%	2,323	2,323	-1	0.0%
6.2%	2,320	2,316	-4	-0.2%
7.4%	2,318	2,314	-3	-0.1%
8.6%	2,317	2,314	-3	-0.1%
9.9%	2,316	2,312	-4	-0.2%
11.1%	2,315	2,312	-3	-0.1%
12.3%	2,315	2,311	-4	-0.2%
13.6%	2,314	2,311	-3	-0.1%
14.8%	2,313	2,311	-2	-0.1%
16.0%	2,312	2,310	-2	-0.1%
17.3%	2,309	2,309	0	0.0%
18.5%	2,308	2,308	0	0.0%
19.8%	2,307	2,307	0	0.0%
21.0%	2,307	2,307	0	0.0%
22.2%	2,307	2,306	-1	0.0%
23.5%	2,306	2,306	0	0.0%
24.7%	2,306	2,305	-1	0.0%
25.9%	2,304	2,305	0	0.0%
27.2%	2,304	2,304	0	0.0%
28.4%	2,301	2,302	1	0.1%
29.6%	2,300	2,301	1	0.0%
30.9%	2,300	2,300	0	0.0%
32.1%	2,300	2,299	-1	0.0%
33.3%	2,298	2,297	0	0.0%
34.6%	2,296	2,297	1	0.0%
35.8%	2,296	2,296	0	0.0%
37.0%	2,293	2,295	2	0.1%
38.3%	2,293	2,295	2	0.1%
39.5%	2,293	2,294	1	0.1%
40.7%	2,292	2,294	2	0.1%
42.0%	2,288	2,292	4	0.2%
43.2%	2,288	2,292	4	0.2%
44.4%	2,288	2,292	4	0.2%
45.7%	2,288	2,291	4	0.2%
46.9%	2,287	2,287	0	0.0%
48.1%	2,287	2,283	-4	-0.2%
49.4%	2,285	2,282	-3	-0.1%
50.6%	2,285	2,281	-3	-0.1%
51.9%	2,284	2,280	-4	-0.2%
53.1%	2,283	2,280	-3	-0.1%
54.3%	2,283	2,279	-4	-0.2%
55.6%	2,282	2,277	-5	-0.2%
56.8%	2,281	2,277	-4	-0.2%
58.0%	2,280	2,276	-4	-0.2%
59.3%	2,279	2,276	-3	-0.1%
60.5%	2,277	2,275	-2	-0.1%
61.7%	2,277	2,275	-2	-0.1%
63.0%	2,277	2,275	-2	-0.1%
64.2%	2,276	2,275	-1	-0.1%
65.4%	2,274	2,274	0	0.0%
66.7%	2,273	2,273	0	0.0%
67.9%	2,273	2,273	0	0.0%
69.1%	2,273	2,273	0	0.0%
70.4%	2,271	2,270	-1	-0.1%
71.6%	2,270	2,269	-1	0.0%
72.8%	2,270	2,269	-1	0.0%
74.1%	2,268	2,267	-1	0.0%
75.3%	2,267	2,267	0	0.0%
76.5%	2,265	2,264	-1	0.0%
77.8%	2,254	2,264	10	0.5%
79.0%	2,253	2,252	-1	0.0%
80.2%	2,252	2,252	0	0.0%
81.5%	2,251	2,249	-2	-0.1%
82.7%	2,251	2,246	-5	-0.2%
84.0%	2,249	2,242	-7	-0.3%
85.2%	2,249	2,241	-8	-0.3%
86.4%	2,245	2,240	-5	-0.2%
87.7%	2,239	2,236	-3	-0.1%
88.9%	2,236	2,235	-1	-0.1%
90.1%	2,236	2,234	-2	-0.1%
91.4%	2,232	2,229	-3	-0.1%
92.6%	2,227	2,228	1	0.0%
93.8%	2,225	2,227	2	0.1%
95.1%	2,216	2,227	10	0.5%
96.3%	2,214	2,224	10	0.4%
97.5%	2,211	2,216	5	0.2%
98.8%	2,206	2,205	-1	0.0%
100.0%	2,150	2,163	12	0.6%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,332	2,332	0	0.0%
2.5%	2,332	2,332	0	0.0%
3.7%	2,332	2,332	0	0.0%
4.9%	2,332	2,332	0	0.0%
6.2%	2,332	2,332	0	0.0%
7.4%	2,332	2,332	0	0.0%
8.6%	2,332	2,329	-3	-0.1%
9.9%	2,328	2,326	-1	0.0%
11.1%	2,327	2,320	-7	-0.3%
12.3%	2,326	2,318	-8	-0.4%
13.6%	2,323	2,318	-5	-0.2%
14.8%	2,318	2,317	-1	0.0%
16.0%	2,317	2,316	-1	0.0%
17.3%	2,317	2,316	-1	-0.1%
18.5%	2,317	2,315	-2	-0.1%
19.8%	2,313	2,314	0	0.0%
21.0%	2,313	2,314	0	0.0%
22.2%	2,312	2,313	0	0.0%
23.5%	2,310	2,313	2	0.1%
24.7%	2,310	2,310	0	0.0%
25.9%	2,309	2,310	1	0.0%
27.2%	2,309	2,309	0	0.0%
28.4%	2,308	2,308	0	0.0%
29.6%	2,308	2,306	-2	-0.1%
30.9%	2,308	2,306	-2	-0.1%
32.1%	2,308	2,306	-1	-0.1%
33.3%	2,306	2,306	0	0.0%
34.6%	2,305	2,305	0	0.0%
35.8%	2,305	2,305	0	0.0%
37.0%	2,304	2,305	1	0.0%
38.3%	2,303	2,303	0	0.0%
39.5%	2,303	2,303	0	0.0%
40.7%	2,302	2,301	-1	0.0%
42.0%	2,302	2,301	0	0.0%
43.2%	2,301	2,301	0	0.0%
44.4%	2,301	2,300	-1	0.0%
45.7%	2,300	2,299	-1	0.0%
46.9%	2,299	2,299	-1	0.0%
48.1%	2,295	2,298	3	0.1%
49.4%	2,295	2,298	3	0.1%
50.6%	2,295	2,298	3	0.1%
51.9%	2,295	2,296	1	0.0%
53.1%	2,294	2,295	1	0.1%
54.3%	2,293	2,295	2	0.1%
55.6%	2,292	2,293	1	0.0%
56.8%	2,291	2,293	2	0.1%
58.0%	2,290	2,288	-2	-0.1%
59.3%	2,288	2,286	-2	-0.1%
60.5%	2,287	2,285	-2	-0.1%
61.7%	2,285	2,284	-1	-0.1%
63.0%	2,285	2,283	-2	-0.1%
64.2%	2,282	2,282	0	0.0%
65.4%	2,282	2,281	-1	0.0%
66.7%	2,280	2,281	0	0.0%
67.9%	2,279	2,277	-3	-0.1%
69.1%	2,279	2,276	-2	-0.1%
70.4%	2,277	2,276	-1	0.0%
71.6%	2,276	2,276	0	0.0%
72.8%	2,275	2,276	1	0.0%
74.1%	2,275	2,275	0	0.0%
75.3%	2,273	2,269	-4	-0.2%
76.5%	2,267	2,264	-3	-0.1%
77.8%	2,262	2,264	2	0.1%
79.0%	2,260	2,262	2	0.1%
80.2%	2,259	2,257	-2	-0.1%
81.5%	2,255	2,255	0	0.0%
82.7%	2,253	2,251	-3	-0.1%
84.0%	2,251	2,250	-1	0.0%
85.2%	2,247	2,248	1	0.0%
86.4%	2,247	2,247	0	0.0%
87.7%	2,247	2,244	-3	-0.1%
88.9%	2,246	2,243	-3	-0.1%
90.1%	2,244	2,242	-2	-0.1%
91.4%	2,236	2,237	1	0.0%
92.6%	2,234	2,233	-1	0.0%
93.8%	2,230	2,230	0	0.0%
95.1%	2,226	2,230	4	0.2%
96.3%	2,222	2,230	8	0.4%
97.5%	2,218	2,226	9	0.4%
98.8%	2,209	2,209	-1	0.0%
100.0%	2,194	2,204	10	0.5%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,348	2,348	0	0.0%
1.2%	2,337	2,337	0	0.0%
2.5%	2,337	2,337	0	0.0%
3.7%	2,337	2,337	0	0.0%
4.9%	2,337	2,337	0	0.0%
6.2%	2,337	2,337	0	0.0%
7.4%	2,337	2,337	0	0.0%
8.6%	2,337	2,337	0	0.0%
9.9%	2,337	2,337	0	0.0%
11.1%	2,337	2,337	0	0.0%
12.3%	2,337	2,337	0	0.0%
13.6%	2,337	2,337	0	0.0%
14.8%	2,337	2,337	0	0.0%
16.0%	2,336	2,337	0	0.0%
17.3%	2,336	2,334	-1	-0.1%
18.5%	2,336	2,333	-3	-0.1%
19.8%	2,332	2,332	-1	0.0%
21.0%	2,332	2,332	0	0.0%
22.2%	2,331	2,332	1	0.0%
23.5%	2,331	2,331	0	0.0%
24.7%	2,330	2,330	0	0.0%
25.9%	2,330	2,328	-2	-0.1%
27.2%	2,328	2,328	0	0.0%
28.4%	2,328	2,327	-1	0.0%
29.6%	2,328	2,326	-2	-0.1%
30.9%	2,327	2,324	-3	-0.1%
32.1%	2,326	2,321	-5	-0.2%
33.3%	2,324	2,321	-3	-0.1%
34.6%	2,322	2,319	-3	-0.1%
35.8%	2,320	2,319	-1	-0.1%
37.0%	2,317	2,318	1	0.0%
38.3%	2,316	2,318	1	0.1%
39.5%	2,315	2,316	1	0.0%
40.7%	2,315	2,316	1	0.0%
42.0%	2,314	2,315	1	0.1%
43.2%	2,313	2,315	2	0.1%
44.4%	2,313	2,314	1	0.0%
45.7%	2,313	2,313	0	0.0%
46.9%	2,311	2,313	2	0.1%
48.1%	2,309	2,311	2	0.1%
49.4%	2,309	2,310	1	0.1%
50.6%	2,307	2,304	-3	-0.1%
51.9%	2,302	2,303	1	0.1%
53.1%	2,301	2,301	0	0.0%
54.3%	2,301	2,300	-1	0.0%
55.6%	2,300	2,300	0	0.0%
56.8%	2,297	2,300	3	0.1%
58.0%	2,295	2,300	5	0.2%
59.3%	2,295	2,299	4	0.2%
60.5%	2,295	2,296	1	0.1%
61.7%	2,293	2,293	0	0.0%
63.0%	2,291	2,292	1	0.0%
64.2%	2,291	2,291	0	0.0%
65.4%	2,289	2,289	0	0.0%
66.7%	2,287	2,287	0	0.0%
67.9%	2,286	2,287	1	0.0%
69.1%	2,285	2,286	1	0.0%
70.4%	2,285	2,281	-4	-0.2%
71.6%	2,283	2,280	-3	-0.1%
72.8%	2,282	2,279	-3	-0.1%
74.1%	2,281	2,279	-2	-0.1%
75.3%	2,281	2,277	-3	-0.2%
76.5%	2,280	2,277	-3	-0.1%
77.8%	2,279	2,277	-2	-0.1%
79.0%	2,279	2,277	-2	-0.1%
80.2%	2,270	2,276	6	0.3%
81.5%	2,269	2,268	-1	-0.1%
82.7%	2,266	2,267	1	0.1%
84.0%	2,264	2,262	-2	-0.1%
85.2%	2,260	2,262	2	0.1%
86.4%	2,259	2,260	2	0.1%
87.7%	2,257	2,258	1	0.0%
88.9%	2,257	2,257	0	0.0%
90.1%	2,256	2,254	-2	-0.1%
91.4%	2,253	2,253	1	0.0%
92.6%	2,250	2,249	-1	0.0%
93.8%	2,247	2,247	0	0.0%
95.1%	2,241	2,245	4	0.2%
96.3%	2,234	2,237	3	0.1%
97.5%	2,229	2,233	5	0.2%
98.8%	2,228	2,232	4	0.2%
100.0%	2,214	2,213	-1	0.0%

Table SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,346	2,349	4	0.1%
1.2%	2,345	2,345	0	0.0%
2.5%	2,345	2,345	0	0.0%
3.7%	2,345	2,345	0	0.0%
4.9%	2,345	2,345	0	0.0%
6.2%	2,345	2,345	0	0.0%
7.4%	2,345	2,345	0	0.0%
8.6%	2,345	2,345	0	0.0%
9.9%	2,345	2,345	0	0.0%
11.1%	2,345	2,345	0	0.0%
12.3%	2,345	2,345	0	0.0%
13.6%	2,345	2,345	0	0.0%
14.8%	2,345	2,345	0	0.0%
16.0%	2,345	2,345	0	0.0%
17.3%	2,345	2,345	0	0.0%
18.5%	2,345	2,345	0	0.0%
19.8%	2,345	2,345	0	0.0%
21.0%	2,345	2,345	0	0.0%
22.2%	2,345	2,345	0	0.0%
23.5%	2,345	2,345	0	0.0%
24.7%	2,345	2,344	-1	0.0%
25.9%	2,345	2,344	-1	0.0%
27.2%	2,344	2,344	0	0.0%
28.4%	2,343	2,344	0	0.0%
29.6%	2,343	2,341	-2	-0.1%
30.9%	2,342	2,340	-2	-0.1%
32.1%	2,340	2,340	0	0.0%
33.3%	2,339	2,338	-1	0.0%
34.6%	2,338	2,338	0	0.0%
35.8%	2,337	2,337	0	0.0%
37.0%	2,335	2,337	2	0.1%
38.3%	2,335	2,335	0	0.0%
39.5%	2,332	2,333	1	0.0%
40.7%	2,328	2,331	3	0.1%
42.0%	2,326	2,331	5	0.2%
43.2%	2,325	2,325	0	0.0%
44.4%	2,325	2,325	0	0.0%
45.7%	2,325	2,325	0	0.0%
46.9%	2,324	2,323	-1	0.0%
48.1%	2,324	2,323	-1	0.0%
49.4%	2,322	2,321	0	0.0%
50.6%	2,321	2,319	-1	-0.1%
51.9%	2,317	2,319	2	0.1%
53.1%	2,312	2,318	6	0.3%
54.3%	2,312	2,312	0	0.0%
55.6%	2,312	2,311	-1	0.0%
56.8%	2,309	2,311	2	0.1%
58.0%	2,309	2,311	2	0.1%
59.3%	2,309	2,309	0	0.0%
60.5%	2,308	2,308	0	0.0%
61.7%	2,308	2,308	0	0.0%
63.0%	2,307	2,307	1	0.0%
64.2%	2,305	2,305	0	0.0%
65.4%	2,303	2,304	1	0.1%
66.7%	2,300	2,302	2	0.1%
67.9%	2,298	2,302	4	0.2%
69.1%	2,297	2,301	5	0.2%
70.4%	2,297	2,296	-1	0.0%
71.6%	2,296	2,295	-1	0.0%
72.8%	2,296	2,295	-1	-0.1%
74.1%	2,295	2,293	-2	-0.1%
75.3%	2,294	2,293	-1	-0.1%
76.5%	2,292	2,289	-3	-0.1%
77.8%	2,292	2,289	-3	-0.1%
79.0%	2,292	2,288	-3	-0.2%
80.2%	2,290	2,285	-5	-0.2%
81.5%	2,286	2,285	-2	-0.1%
82.7%	2,285	2,282	-3	-0.1%
84.0%	2,283	2,282	-1	0.0%
85.2%	2,280	2,280	0	0.0%
86.4%	2,278	2,277	-2	-0.1%
87.7%	2,268	2,269	1	0.0%
88.9%	2,266	2,269	2	0.1%
90.1%	2,263	2,268	6	0.3%
91.4%	2,261	2,264	4	0.2%
92.6%	2,260	2,260	0	0.0%
93.8%	2,256	2,259	2	0.1%
95.1%	2,254	2,253	-1	0.0%
96.3%	2,245	2,247	1	0.1%
97.5%	2,240	2,245	6	0.2%
98.8%	2,234	2,235	0	0.0%
100.0%	2,230	2,233	3	0.1%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,352	2,352	0	0.0%
1.2%	2,350	2,350	0	0.0%
2.5%	2,350	2,350	0	0.0%
3.7%	2,350	2,350	0	0.0%
4.9%	2,350	2,350	0	0.0%
6.2%	2,350	2,350	0	0.0%
7.4%	2,350	2,350	0	0.0%
8.6%	2,350	2,350	0	0.0%
9.9%	2,350	2,350	0	0.0%
11.1%	2,350	2,350	0	0.0%
12.3%	2,350	2,350	0	0.0%
13.6%	2,350	2,350	0	0.0%
14.8%	2,350	2,350	0	0.0%
16.0%	2,350	2,350	0	0.0%
17.3%	2,350	2,350	0	0.0%
18.5%	2,350	2,350	0	0.0%
19.8%	2,350	2,350	0	0.0%
21.0%	2,350	2,350	0	0.0%
22.2%	2,350	2,350	0	0.0%
23.5%	2,350	2,350	0	0.0%
24.7%	2,350	2,350	0	0.0%
25.9%	2,350	2,350	0	0.0%
27.2%	2,350	2,350	0	0.0%
28.4%	2,350	2,350	0	0.0%
29.6%	2,350	2,350	0	0.0%
30.9%	2,349	2,349	0	0.0%
32.1%	2,349	2,349	0	0.0%
33.3%	2,349	2,349	0	0.0%
34.6%	2,349	2,349	0	0.0%
35.8%	2,349	2,349	0	0.0%
37.0%	2,348	2,349	1	0.0%
38.3%	2,347	2,347	0	0.0%
39.5%	2,346	2,346	0	0.0%
40.7%	2,345	2,344	-1	-0.1%
42.0%	2,344	2,344	0	0.0%
43.2%	2,339	2,343	4	0.2%
44.4%	2,338	2,343	5	0.2%
45.7%	2,337	2,339	2	0.1%
46.9%	2,337	2,337	0	0.0%
48.1%	2,336	2,331	-5	-0.2%
49.4%	2,334	2,330	-3	-0.1%
50.6%	2,330	2,329	-1	0.0%
51.9%	2,327	2,327	0	0.0%
53.1%	2,327	2,327	0	0.0%
54.3%	2,327	2,326	-1	0.0%
55.6%	2,324	2,325	1	0.0%
56.8%	2,324	2,325	1	0.0%
58.0%	2,324	2,325	1	0.1%
59.3%	2,323	2,324	1	0.0%
60.5%	2,322	2,324	2	0.1%
61.7%	2,321	2,323	2	0.1%
63.0%	2,321	2,323	2	0.1%
64.2%	2,319	2,317	-2	-0.1%
65.4%	2,317	2,316	-1	0.0%
66.7%	2,315	2,315	1	0.0%
67.9%	2,311	2,314	3	0.1%
69.1%	2,309	2,310	0	0.0%
70.4%	2,309	2,307	-2	-0.1%
71.6%	2,309	2,306	-3	-0.1%
72.8%	2,307	2,305	-2	-0.1%
74.1%	2,304	2,304	0	0.0%
75.3%	2,304	2,304	0	0.0%
76.5%	2,304	2,301	-3	-0.1%
77.8%	2,303	2,301	-2	-0.1%
79.0%	2,302	2,300	-2	-0.1%
80.2%	2,299	2,299	-1	0.0%
81.5%	2,296	2,297	1	0.0%
82.7%	2,294	2,294	0	0.0%
84.0%	2,293	2,290	-2	-0.1%
85.2%	2,292	2,290	-2	-0.1%
86.4%	2,291	2,288	-2	-0.1%
87.7%	2,290	2,288	-2	-0.1%
88.9%	2,286	2,285	-2	-0.1%
90.1%	2,275	2,275	0	0.0%
91.4%	2,272	2,275	2	0.1%
92.6%	2,269	2,273	5	0.2%
93.8%	2,265	2,273	7	0.3%
95.1%	2,264	2,268	4	0.2%
96.3%	2,256	2,262	7	0.3%
97.5%	2,245	2,246	2	0.1%
98.8%	2,244	2,244	0	0.0%
100.0%	2,243	2,244	1	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,361	2,361	0	0.0%
1.2%	2,361	2,361	0	0.0%
2.5%	2,361	2,361	0	0.0%
3.7%	2,361	2,361	0	0.0%
4.9%	2,361	2,361	0	0.0%
6.2%	2,361	2,361	0	0.0%
7.4%	2,361	2,361	0	0.0%
8.6%	2,361	2,361	0	0.0%
9.9%	2,361	2,361	0	0.0%
11.1%	2,361	2,361	0	0.0%
12.3%	2,361	2,361	0	0.0%
13.6%	2,361	2,361	0	0.0%
14.8%	2,361	2,361	0	0.0%
16.0%	2,361	2,361	0	0.0%
17.3%	2,360	2,360	0	0.0%
18.5%	2,359	2,359	0	0.0%
19.8%	2,358	2,358	0	0.0%
21.0%	2,358	2,358	0	0.0%
22.2%	2,357	2,357	0	0.0%
23.5%	2,357	2,357	0	0.0%
24.7%	2,357	2,357	0	0.0%
25.9%	2,357	2,357	0	0.0%
27.2%	2,356	2,356	0	0.0%
28.4%	2,356	2,356	0	0.0%
29.6%	2,356	2,356	0	0.0%
30.9%	2,355	2,356	1	0.0%
32.1%	2,355	2,355	0	0.0%
33.3%	2,355	2,355	0	0.0%
34.6%	2,354	2,354	0	0.0%
35.8%	2,354	2,354	1	0.0%
37.0%	2,354	2,354	0	0.0%
38.3%	2,354	2,354	0	0.0%
39.5%	2,352	2,353	1	0.0%
40.7%	2,352	2,352	0	0.0%
42.0%	2,352	2,352	0	0.0%
43.2%	2,351	2,352	1	0.0%
44.4%	2,349	2,348	-1	0.0%
45.7%	2,349	2,348	0	0.0%
46.9%	2,348	2,348	0	0.0%
48.1%	2,348	2,345	-2	-0.1%
49.4%	2,343	2,345	1	0.1%
50.6%	2,342	2,343	1	0.0%
51.9%	2,339	2,339	-1	0.0%
53.1%	2,338	2,338	0	0.0%
54.3%	2,336	2,337	0	0.0%
55.6%	2,335	2,336	1	0.0%
56.8%	2,335	2,336	2	0.1%
58.0%	2,334	2,334	0	0.0%
59.3%	2,334	2,334	-1	0.0%
60.5%	2,332	2,333	1	0.0%
61.7%	2,332	2,332	0	0.0%
63.0%	2,330	2,328	-2	-0.1%
64.2%	2,328	2,327	0	0.0%
65.4%	2,325	2,327	2	0.1%
66.7%	2,324	2,323	-2	-0.1%
67.9%	2,324	2,321	-3	-0.1%
69.1%	2,323	2,320	-3	-0.1%
70.4%	2,319	2,319	0	0.0%
71.6%	2,318	2,318	0	0.0%
72.8%	2,317	2,317	-1	0.0%
74.1%	2,315	2,316	1	0.0%
75.3%	2,315	2,313	-2	-0.1%
76.5%	2,313	2,313	-1	0.0%
77.8%	2,313	2,311	-2	-0.1%
79.0%	2,311	2,311	0	0.0%
80.2%	2,310	2,310	0	0.0%
81.5%	2,309	2,309	1	0.0%
82.7%	2,308	2,308	0	0.0%
84.0%	2,308	2,308	0	0.0%
85.2%	2,307	2,305	-3	-0.1%
86.4%	2,303	2,300	-3	-0.1%
87.7%	2,300	2,296	-4	-0.2%
88.9%	2,288	2,287	-2	-0.1%
90.1%	2,281	2,286	6	0.3%
91.4%	2,277	2,280	3	0.1%
92.6%	2,276	2,279	3	0.1%
93.8%	2,274	2,278	4	0.2%
95.1%	2,271	2,277	5	0.2%
96.3%	2,268	2,271	3	0.1%
97.5%	2,259	2,263	4	0.2%
98.8%	2,251	2,251	-1	0.0%
100.0%	2,236	2,236	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,368	2,368	0	0.0%
1.2%	2,368	2,368	0	0.0%
2.5%	2,366	2,366	0	0.0%
3.7%	2,364	2,364	0	0.0%
4.9%	2,363	2,363	0	0.0%
6.2%	2,363	2,363	0	0.0%
7.4%	2,361	2,361	0	0.0%
8.6%	2,360	2,360	-1	0.0%
9.9%	2,359	2,359	0	0.0%
11.1%	2,358	2,357	-1	0.0%
12.3%	2,356	2,357	1	0.0%
13.6%	2,356	2,356	0	0.0%
14.8%	2,356	2,356	0	0.0%
16.0%	2,356	2,356	0	0.0%
17.3%	2,355	2,355	0	0.0%
18.5%	2,355	2,355	0	0.0%
19.8%	2,355	2,354	-1	0.0%
21.0%	2,353	2,353	1	0.0%
22.2%	2,352	2,353	1	0.0%
23.5%	2,352	2,352	0	0.0%
24.7%	2,351	2,352	1	0.0%
25.9%	2,351	2,351	0	0.0%
27.2%	2,350	2,351	1	0.0%
28.4%	2,350	2,350	0	0.0%
29.6%	2,350	2,350	0	0.0%
30.9%	2,350	2,350	0	0.0%
32.1%	2,349	2,350	0	0.0%
33.3%	2,348	2,349	0	0.0%
34.6%	2,348	2,348	0	0.0%
35.8%	2,348	2,348	0	0.0%
37.0%	2,348	2,348	0	0.0%
38.3%	2,348	2,346	-1	-0.1%
39.5%	2,346	2,346	0	0.0%
40.7%	2,345	2,345	0	0.0%
42.0%	2,345	2,345	0	0.0%
43.2%	2,343	2,344	1	0.0%
44.4%	2,341	2,340	-1	0.0%
45.7%	2,339	2,339	0	0.0%
46.9%	2,335	2,337	1	0.1%
48.1%	2,333	2,335	3	0.1%
49.4%	2,332	2,333	1	0.1%
50.6%	2,331	2,333	1	0.1%
51.9%	2,330	2,332	2	0.1%
53.1%	2,329	2,331	2	0.1%
54.3%	2,329	2,329	0	0.0%
55.6%	2,328	2,328	0	0.0%
56.8%	2,327	2,328	0	0.0%
58.0%	2,327	2,327	0	0.0%
59.3%	2,326	2,326	0	0.0%
60.5%	2,325	2,323	-2	-0.1%
61.7%	2,324	2,323	-1	-0.1%
63.0%	2,322	2,319	-3	-0.1%
64.2%	2,322	2,318	-3	-0.1%
65.4%	2,321	2,318	-4	-0.2%
66.7%	2,317	2,317	0	0.0%
67.9%	2,316	2,316	0	0.0%
69.1%	2,315	2,316	0	0.0%
70.4%	2,315	2,315	0	0.0%
71.6%	2,314	2,314	0	0.0%
72.8%	2,313	2,313	0	0.0%
74.1%	2,313	2,313	0	0.0%
75.3%	2,313	2,312	-1	0.0%
76.5%	2,312	2,310	-2	-0.1%
77.8%	2,309	2,309	1	0.0%
79.0%	2,308	2,309	2	0.1%
80.2%	2,306	2,307	0	0.0%
81.5%	2,306	2,305	-1	0.0%
82.7%	2,304	2,302	-2	-0.1%
84.0%	2,302	2,298	-3	-0.1%
85.2%	2,298	2,295	-3	-0.1%
86.4%	2,295	2,294	-1	0.0%
87.7%	2,294	2,291	-4	-0.2%
88.9%	2,278	2,279	1	0.0%
90.1%	2,274	2,276	3	0.1%
91.4%	2,273	2,272	-2	-0.1%
92.6%	2,271	2,271	1	0.0%
93.8%	2,268	2,270	2	0.1%
95.1%	2,267	2,269	2	0.1%
96.3%	2,259	2,267	9	0.4%
97.5%	2,258	2,267	10	0.4%
98.8%	2,253	2,253	-1	0.0%
100.0%	2,232	2,232	0	0.0%

Table SW-02-b

Trinity Lake, End of Month Elevation

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,369	2,369	0	0.0%
1.2%	2,368	2,368	0	0.0%
2.5%	2,361	2,361	0	0.0%
3.7%	2,357	2,357	0	0.0%
4.9%	2,357	2,357	0	0.0%
6.2%	2,356	2,356	0	0.0%
7.4%	2,355	2,355	0	0.0%
8.6%	2,355	2,355	0	0.0%
9.9%	2,354	2,354	0	0.0%
11.1%	2,354	2,354	0	0.0%
12.3%	2,352	2,352	0	0.0%
13.6%	2,352	2,351	0	0.0%
14.8%	2,351	2,351	1	0.0%
16.0%	2,350	2,351	1	0.0%
17.3%	2,350	2,350	0	0.0%
18.5%	2,349	2,350	1	0.0%
19.8%	2,347	2,350	3	0.1%
21.0%	2,346	2,347	0	0.0%
22.2%	2,346	2,346	0	0.0%
23.5%	2,345	2,346	1	0.0%
24.7%	2,345	2,345	0	0.0%
25.9%	2,344	2,345	1	0.0%
27.2%	2,344	2,344	0	0.0%
28.4%	2,344	2,344	0	0.0%
29.6%	2,342	2,344	1	0.1%
30.9%	2,342	2,343	1	0.0%
32.1%	2,341	2,342	1	0.0%
33.3%	2,340	2,342	2	0.1%
34.6%	2,339	2,340	1	0.0%
35.8%	2,338	2,340	1	0.1%
37.0%	2,338	2,339	2	0.1%
38.3%	2,337	2,339	2	0.1%
39.5%	2,335	2,338	3	0.1%
40.7%	2,334	2,335	1	0.1%
42.0%	2,333	2,335	2	0.1%
43.2%	2,332	2,333	1	0.0%
44.4%	2,331	2,332	1	0.1%
45.7%	2,330	2,329	-1	0.0%
46.9%	2,328	2,327	-1	0.0%
48.1%	2,324	2,326	1	0.0%
49.4%	2,324	2,325	1	0.1%
50.6%	2,323	2,324	1	0.0%
51.9%	2,323	2,324	1	0.0%
53.1%	2,321	2,323	2	0.1%
54.3%	2,319	2,323	3	0.1%
55.6%	2,319	2,321	2	0.1%
56.8%	2,319	2,321	3	0.1%
58.0%	2,319	2,318	-1	0.0%
59.3%	2,318	2,317	-1	0.0%
60.5%	2,315	2,316	1	0.1%
61.7%	2,314	2,316	2	0.1%
63.0%	2,313	2,316	3	0.1%
64.2%	2,312	2,316	3	0.1%
65.4%	2,312	2,312	0	0.0%
66.7%	2,311	2,312	0	0.0%
67.9%	2,311	2,309	-2	-0.1%
69.1%	2,310	2,308	-2	-0.1%
70.4%	2,310	2,308	-2	-0.1%
71.6%	2,309	2,307	-2	-0.1%
72.8%	2,307	2,306	-1	0.0%
74.1%	2,306	2,306	0	0.0%
75.3%	2,306	2,305	-1	0.0%
76.5%	2,304	2,303	-1	0.0%
77.8%	2,304	2,302	-1	-0.1%
79.0%	2,302	2,301	-1	0.0%
80.2%	2,298	2,299	2	0.1%
81.5%	2,296	2,294	-2	-0.1%
82.7%	2,296	2,292	-4	-0.2%
84.0%	2,296	2,292	-4	-0.2%
85.2%	2,292	2,291	-1	-0.1%
86.4%	2,289	2,286	-4	-0.2%
87.7%	2,288	2,285	-3	-0.1%
88.9%	2,274	2,278	4	0.2%
90.1%	2,274	2,274	-1	0.0%
91.4%	2,272	2,272	0	0.0%
92.6%	2,272	2,272	0	0.0%
93.8%	2,271	2,270	-1	-0.1%
95.1%	2,266	2,270	3	0.1%
96.3%	2,256	2,267	11	0.5%
97.5%	2,255	2,265	10	0.4%
98.8%	2,249	2,248	-1	0.0%
100.0%	2,223	2,223	0	0.0%

July				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,359	2,359	0	0.0%
1.2%	2,359	2,359	0	0.0%
2.5%	2,353	2,353	0	0.0%
3.7%	2,353	2,349	-3	-0.1%
4.9%	2,350	2,349	-1	0.0%
6.2%	2,349	2,348	-1	0.0%
7.4%	2,348	2,348	0	0.0%
8.6%	2,347	2,347	0	0.0%
9.9%	2,346	2,346	0	0.0%
11.1%	2,344	2,344	0	0.0%
12.3%	2,344	2,343	-1	-0.1%
13.6%	2,342	2,342	0	0.0%
14.8%	2,341	2,342	1	0.1%
16.0%	2,340	2,341	1	0.0%
17.3%	2,340	2,340	0	0.0%
18.5%	2,337	2,340	3	0.1%
19.8%	2,335	2,340	4	0.2%
21.0%	2,335	2,337	2	0.1%
22.2%	2,335	2,335	1	0.0%
23.5%	2,334	2,335	1	0.1%
24.7%	2,334	2,335	1	0.0%
25.9%	2,332	2,335	2	0.1%
27.2%	2,332	2,332	0	0.0%
28.4%	2,332	2,331	-1	0.0%
29.6%	2,329	2,330	1	0.1%
30.9%	2,329	2,330	1	0.1%
32.1%	2,329	2,330	1	0.1%
33.3%	2,325	2,329	3	0.1%
34.6%	2,325	2,328	3	0.1%
35.8%	2,325	2,328	3	0.1%
37.0%	2,324	2,326	2	0.1%
38.3%	2,323	2,326	3	0.1%
39.5%	2,322	2,323	2	0.1%
40.7%	2,321	2,323	2	0.1%
42.0%	2,320	2,322	2	0.1%
43.2%	2,319	2,321	2	0.1%
44.4%	2,317	2,318	1	0.0%
45.7%	2,315	2,317	2	0.1%
46.9%	2,315	2,316	2	0.1%
48.1%	2,312	2,314	2	0.1%
49.4%	2,312	2,314	2	0.1%
50.6%	2,312	2,312	0	0.0%
51.9%	2,311	2,311	0	0.0%
53.1%	2,310	2,311	1	0.0%
54.3%	2,308	2,309	1	0.0%
55.6%	2,308	2,308	0	0.0%
56.8%	2,307	2,307	0	0.0%
58.0%	2,306	2,306	0	0.0%
59.3%	2,306	2,306	0	0.0%
60.5%	2,305	2,305	0	0.0%
61.7%	2,304	2,305	1	0.0%
63.0%	2,302	2,305	3	0.1%
64.2%	2,300	2,303	3	0.1%
65.4%	2,299	2,302	3	0.1%
66.7%	2,299	2,302	3	0.1%
67.9%	2,299	2,301	3	0.1%
69.1%	2,298	2,300	2	0.1%
70.4%	2,296	2,296	0	0.0%
71.6%	2,295	2,295	0	0.0%
72.8%	2,295	2,293	-2	-0.1%
74.1%	2,294	2,290	-4	-0.2%
75.3%	2,292	2,290	-2	-0.1%
76.5%	2,291	2,289	-2	-0.1%
77.8%	2,287	2,289	1	0.1%
79.0%	2,285	2,288	3	0.1%
80.2%	2,284	2,287	4	0.2%
81.5%	2,282	2,285	3	0.1%
82.7%	2,281	2,280	0	0.0%
84.0%	2,279	2,275	-4	-0.2%
85.2%	2,277	2,273	-4	-0.2%
86.4%	2,276	2,268	-8	-0.3%
87.7%	2,268	2,266	-2	-0.1%
88.9%	2,265	2,264	-1	0.0%
90.1%	2,264	2,262	-2	-0.1%
91.4%	2,261	2,261	0	0.0%
92.6%	2,260	2,258	-2	-0.1%
93.8%	2,260	2,257	-2	-0.1%
95.1%	2,252	2,257	5	0.2%
96.3%	2,244	2,255	11	0.5%
97.5%	2,242	2,252	10	0.5%
98.8%	2,236	2,236	-1	0.0%
100.0%	2,187	2,187	0	0.0%

August				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,353	2,353	0	0.0%
1.2%	2,353	2,353	0	0.0%
2.5%	2,352	2,341	-11	-0.5%
3.7%	2,343	2,340	-3	-0.1%
4.9%	2,341	2,336	-5	-0.2%
6.2%	2,338	2,335	-3	-0.1%
7.4%	2,338	2,335	-3	-0.1%
8.6%	2,335	2,332	-3	-0.1%
9.9%	2,335	2,331	-4	-0.2%
11.1%	2,334	2,330	-4	-0.2%
12.3%	2,332	2,330	-2	-0.1%
13.6%	2,330	2,330	0	0.0%
14.8%	2,328	2,330	1	0.1%
16.0%	2,327	2,329	2	0.1%
17.3%	2,325	2,328	3	0.1%
18.5%	2,324	2,328	4	0.2%
19.8%	2,324	2,324	0	0.0%
21.0%	2,323	2,324	1	0.0%
22.2%	2,323	2,323	0	0.0%
23.5%	2,322	2,323	1	0.0%
24.7%	2,322	2,323	1	0.0%
25.9%	2,321	2,322	1	0.1%
27.2%	2,320	2,319	0	0.0%
28.4%	2,319	2,319	0	0.0%
29.6%	2,316	2,318	2	0.1%
30.9%	2,316	2,318	2	0.1%
32.1%	2,315	2,316	1	0.0%
33.3%	2,314	2,315	1	0.0%
34.6%	2,314	2,314	0	0.0%
35.8%	2,314	2,313	0	0.0%
37.0%	2,309	2,313	4	0.2%
38.3%	2,309	2,313	4	0.2%
39.5%	2,309	2,311	3	0.1%
40.7%	2,308	2,310	2	0.1%
42.0%	2,304	2,305	1	0.0%
43.2%	2,302	2,304	2	0.1%
44.4%	2,301	2,302	1	0.1%
45.7%	2,301	2,301	1	0.0%
46.9%	2,300	2,299	-1	0.0%
48.1%	2,299	2,298	-1	-0.1%
49.4%	2,298	2,297	-1	-0.1%
50.6%	2,297	2,296	-1	-0.1%
51.9%	2,297	2,295	-2	-0.1%
53.1%	2,297	2,295	-2	-0.1%
54.3%	2,296	2,294	-2	-0.1%
55.6%	2,295	2,293	-2	-0.1%
56.8%	2,295	2,292	-3	-0.1%
58.0%	2,294	2,292	-2	-0.1%
59.3%	2,293	2,291	-2	-0.1%
60.5%	2,291	2,291	0	0.0%
61.7%	2,289	2,290	0	0.0%
63.0%	2,289	2,290	1	0.0%
64.2%	2,288	2,289	1	0.0%
65.4%	2,288	2,288	0	0.0%
66.7%	2,287	2,287	0	0.0%
67.9%	2,286	2,287	1	0.1%
69.1%	2,284	2,285	1	0.1%
70.4%	2,281	2,285	4	0.2%
71.6%	2,281	2,280	-2	-0.1%
72.8%	2,278	2,276	-2	-0.1%
74.1%	2,278	2,275	-3	-0.1%
75.3%	2,277	2,274	-3	-0.1%
76.5%	2,272	2,273	1	0.0%
77.8%	2,270	2,272	2	0.1%
79.0%	2,269	2,272	3	0.1%
80.2%	2,268	2,270	3	0.1%
81.5%	2,264	2,265	1	0.0%
82.7%	2,264	2,263	-1	0.0%
84.0%	2,264	2,256	-8	-0.3%
85.2%	2,264	2,255	-9	-0.4%
86.4%	2,262	2,255	-7	-0.3%
87.7%	2,252	2,251	-1	0.0%
88.9%	2,251	2,249	-2	-0.1%
90.1%	2,247	2,248	0	0.0%
91.4%	2,247	2,246	-1	-0.1%
92.6%	2,247	2,245	-2	-0.1%
93.8%	2,246	2,244	-3	-0.1%
95.1%	2,240	2,242	2	0.1%
96.3%	2,229	2,238	10	0.4%
97.5%	2,226	2,236	10	0.5%
98.8%	2,220	2,219	-1	0.0%
100.0%	2,138	2,153	15	0.7%

September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,343	2,343	0	0.0%
1.2%	2,343	2,343	0	0.0%
2.5%	2,343	2,339	-4	-0.2%
3.7%	2,334	2,328	-5	-0.2%
4.9%	2,328	2,323	-5	-0.2%
6.2%	2,327	2,323	-4	-0.2%
7.4%	2,325	2,323	-2	-0.1%
8.6%	2,323	2,320	-3	-0.1%
9.9%	2,323	2,320	-3	-0.1%
11.1%	2,322	2,318	-4	-0.2%
12.3%	2,320	2,318	-2	-0.1%
13.6%	2,320	2,318	-2	-0.1%
14.8%	2,316	2,317	1	0.1%
16.0%	2,315	2,317	2	0.1%
17.3%	2,314	2,316	2	0.1%
18.5%	2,313	2,313	0	0.0%
19.8%	2,313	2,311	-2	-0.1%
21.0%	2,312	2,311	-1	0.0%
22.2%	2,311	2,311	0	0.0%
23.5%	2,311	2,310	-1	-0.1%
24.7%	2,310	2,309	-1	0.0%
25.9%	2,308	2,309	0	0.0%
27.2%	2,307	2,308	1	0.0%
28.4%	2,306	2,307	1	0.1%
29.6%	2,305	2,307	2	0.1%
30.9%	2,304	2,306	2	0.1%
32.1%	2,302	2,306	4	0.2%
33.3%	2,302	2,303	1	0.0%
34.6%	2,300	2,301	2	0.1%
35.8%	2,300	2,301	2	0.1%
37.0%	2,297	2,300	2	0.1%
38.3%	2,297	2,299	3	0.1%
39.5%	2,297	2,296	0	0.0%
40.7%	2,296	2,296	0	0.0%
42.0%	2,295	2,294	-1	0.0%
43.2%	2,295	2,294	-1	0.0%
44.4%	2,295	2,293	-1	0.0%
45.7%	2,292	2,293	1	0.0%
46.9%	2,292	2,290	-2	-0.1%
48.1%	2,291	2,287	-4	-0.2%
49.4%	2,288	2,287	-1	0.0%
50.6%	2,288	2,286	-2	-0.1%
51.9%	2,287	2,285	-2	-0.1%
53.1%	2,286	2,284	-2	-0.1%
54.3%	2,285	2,284	-1	-0.1%
55.6%	2,285	2,284	-2	-0.1%
56.8%	2,284	2,282	-2	-0.1%
58.0%	2,284	2,282	-2	-0.1%
59.3%	2,283	2,281	-2	-0.1%
60.5%	2,280	2,280	1	0.0%
61.7%	2,279	2,278	-1	0.0%
63.0%	2,278	2,278	0	0.0%
64.2%	2,277	2,278	0	0.0%
65.4%	2,277	2,277	0	0.0%
66.7%	2,277	2,275	-1	0.0%
67.9%	2,275	2,274	-1	-0.1%
69.1%	2,273	2,273	0	0.0%
70.4%	2,270	2,269	-1	-0.1%
71.6%	2,270	2,267	-3	-0.1%
72.8%	2,267	2,267	0	0.0%
74.1%	2,267	2,266	-1	-0.1%
75.3%	2,264	2,264	1	0.0%
76.5%	2,264	2,264	1	0.0%
77.8%	2,258	2,264	7	0.3%
79.0%	2,257	2,255	-2	-0.1%
80.2%	2,256	2,255	-1	0.0%
81.5%	2,255	2,255	0	0.0%
82.7%	2,255	2,251	-4	-0.2%
84.0%	2,255	2,246	-9	-0.4%
85.2%	2,251	2,242	-9	-0.4%
86.4%	2,250	2,241	-9	-0.4%
87.7%	2,242	2,239	-3	-0.1%
88.9%	2,242	2,235	-7	-0.3%
90.1%	2,238	2,235	-3	-0.1%
91.4%	2,237	2,233	-4	-0.2%
92.6%	2,236	2,233	-4	-0.2%
93.8%	2,230	2,231	1	0.0%
95.1%	2,229	2,230	1	0.0%
96.3%	2,214	2,227	13	0.6%
97.5%	2,212	2,224	12	0.6%
98.8%	2,208	2,207	-1	0.0%
100.0%	2,148	2,161	12	0.6%

Figure SW-03-b
Trinity Lake, End of Month Area
Probability of Exceedance

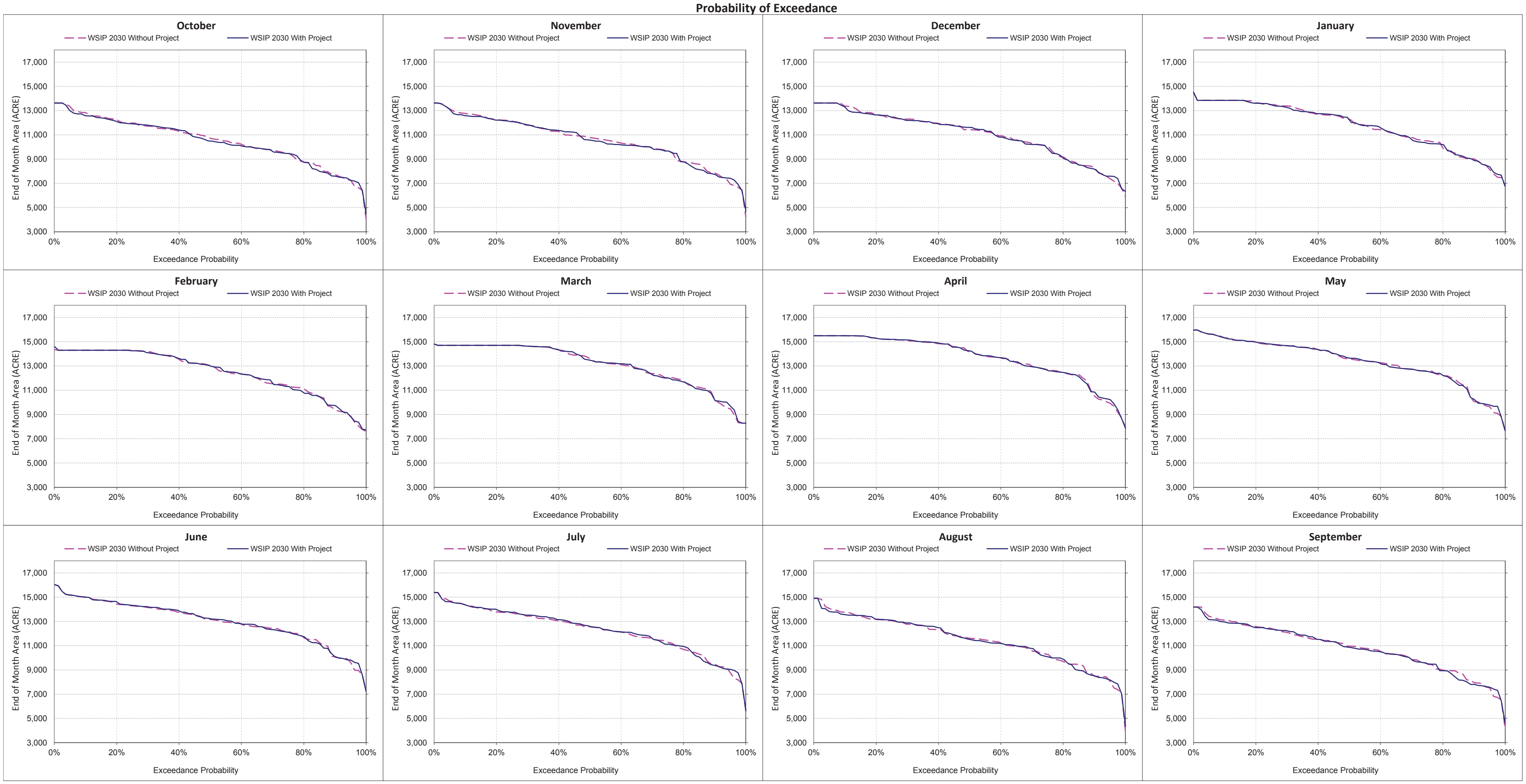


Table SW-03-b

Trinity Lake, End of Month Area

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,625	13,625	0	0.0%
1.2%	13,625	13,625	0	0.0%
2.5%	13,625	13,625	0	0.0%
3.7%	13,526	13,457	-69	-0.5%
4.9%	13,353	12,998	-354	-2.7%
6.2%	12,998	12,795	-203	-1.6%
7.4%	12,932	12,736	-196	-1.5%
8.6%	12,854	12,720	-135	-1.0%
9.9%	12,837	12,588	-249	-1.9%
11.1%	12,707	12,561	-145	-1.1%
12.3%	12,554	12,560	6	0.1%
13.6%	12,550	12,436	-114	-0.9%
14.8%	12,525	12,400	-125	-1.0%
16.0%	12,442	12,372	-69	-0.6%
17.3%	12,359	12,270	-89	-0.7%
18.5%	12,313	12,222	-91	-0.7%
19.8%	12,298	12,130	-167	-1.4%
21.0%	12,093	12,005	-88	-0.7%
22.2%	11,983	11,987	3	0.0%
23.5%	11,979	11,936	-43	-0.4%
24.7%	11,971	11,922	-49	-0.4%
25.9%	11,962	11,897	-64	-0.5%
27.2%	11,792	11,875	83	0.7%
28.4%	11,788	11,822	34	0.3%
29.6%	11,721	11,804	83	0.7%
30.9%	11,712	11,755	43	0.4%
32.1%	11,680	11,728	48	0.4%
33.3%	11,538	11,679	141	1.2%
34.6%	11,517	11,625	108	0.9%
35.8%	11,486	11,579	93	0.8%
37.0%	11,467	11,549	82	0.7%
38.3%	11,409	11,508	99	0.9%
39.5%	11,344	11,422	78	0.7%
40.7%	11,185	11,352	167	1.5%
42.0%	11,163	11,332	168	1.5%
43.2%	11,095	11,093	-2	0.0%
44.4%	11,071	10,860	-211	-1.9%
45.7%	11,061	10,801	-260	-2.3%
46.9%	10,976	10,742	-234	-2.1%
48.1%	10,916	10,636	-281	-2.6%
49.4%	10,778	10,499	-279	-2.6%
50.6%	10,672	10,489	-183	-1.7%
51.9%	10,634	10,425	-209	-2.0%
53.1%	10,600	10,383	-216	-2.0%
54.3%	10,508	10,370	-138	-1.3%
55.6%	10,475	10,235	-240	-2.3%
56.8%	10,345	10,151	-193	-1.9%
58.0%	10,323	10,147	-176	-1.7%
59.3%	10,300	10,145	-154	-1.5%
60.5%	10,162	10,045	-116	-1.1%
61.7%	10,071	10,008	-64	-0.6%
63.0%	10,015	10,001	-14	-0.1%
64.2%	9,930	9,922	-9	-0.1%
65.4%	9,855	9,910	55	0.6%
66.7%	9,835	9,850	16	0.2%
67.9%	9,821	9,788	-32	-0.3%
69.1%	9,782	9,780	-3	0.0%
70.4%	9,721	9,581	-141	-1.4%
71.6%	9,654	9,551	-103	-1.1%
72.8%	9,586	9,510	-76	-0.8%
74.1%	9,476	9,476	0	0.0%
75.3%	9,472	9,459	-13	-0.1%
76.5%	9,248	9,380	133	1.4%
77.8%	8,946	9,272	326	3.6%
79.0%	8,843	8,890	48	0.5%
80.2%	8,728	8,732	4	0.0%
81.5%	8,722	8,715	-7	-0.1%
82.7%	8,715	8,210	-505	-5.8%
84.0%	8,465	8,147	-318	-3.8%
85.2%	8,452	7,970	-482	-5.7%
86.4%	7,979	7,918	-61	-0.8%
87.7%	7,960	7,844	-116	-1.5%
88.9%	7,750	7,619	-131	-1.7%
90.1%	7,710	7,590	-121	-1.6%
91.4%	7,574	7,498	-76	-1.0%
92.6%	7,456	7,490	33	0.4%
93.8%	7,301	7,440	139	1.9%
95.1%	7,256	7,243	-13	-0.2%
96.3%	6,745	7,178	433	6.4%
97.5%	6,637	7,055	418	6.3%
98.8%	6,429	6,388	-41	-0.6%
100.0%	4,033	4,508	475	11.8%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,625	13,625	0	0.0%
1.2%	13,625	13,625	0	0.0%
2.5%	13,549	13,549	0	0.0%
3.7%	13,348	13,355	6	0.0%
4.9%	13,143	13,115	-28	-0.2%
6.2%	12,970	12,746	-224	-1.7%
7.4%	12,848	12,672	-176	-1.4%
8.6%	12,802	12,660	-143	-1.1%
9.9%	12,767	12,572	-195	-1.5%
11.1%	12,706	12,562	-144	-1.1%
12.3%	12,697	12,508	-189	-1.5%
13.6%	12,642	12,508	-135	-1.1%
14.8%	12,586	12,505	-81	-0.6%
16.0%	12,536	12,442	-94	-0.8%
17.3%	12,344	12,357	13	0.1%
18.5%	12,327	12,310	-17	-0.1%
19.8%	12,245	12,213	-32	-0.3%
21.0%	12,223	12,207	-16	-0.1%
22.2%	12,207	12,171	-36	-0.3%
23.5%	12,189	12,160	-29	-0.2%
24.7%	12,157	12,093	-64	-0.5%
25.9%	12,051	12,078	27	0.2%
27.2%	12,002	12,031	28	0.2%
28.4%	11,831	11,914	83	0.7%
29.6%	11,800	11,853	54	0.5%
30.9%	11,773	11,797	24	0.2%
32.1%	11,762	11,687	-75	-0.6%
33.3%	11,623	11,591	-32	-0.3%
34.6%	11,507	11,571	64	0.6%
35.8%	11,504	11,488	-16	-0.1%
37.0%	11,312	11,420	107	1.0%
38.3%	11,301	11,403	102	0.9%
39.5%	11,295	11,378	83	0.7%
40.7%	11,202	11,346	144	1.3%
42.0%	10,988	11,256	269	2.4%
43.2%	10,985	11,248	262	2.4%
44.4%	10,943	11,223	280	2.6%
45.7%	10,934	11,195	261	2.4%
46.9%	10,888	10,893	5	0.0%
48.1%	10,884	10,614	-270	-2.5%
49.4%	10,798	10,586	-212	-2.0%
50.6%	10,756	10,541	-214	-2.0%
51.9%	10,705	10,473	-232	-2.2%
53.1%	10,650	10,471	-179	-1.7%
54.3%	10,613	10,386	-227	-2.1%
55.6%	10,546	10,246	-300	-2.8%
56.8%	10,503	10,237	-266	-2.5%
58.0%	10,437	10,210	-227	-2.2%
59.3%	10,368	10,195	-172	-1.7%
60.5%	10,292	10,152	-140	-1.4%
61.7%	10,251	10,141	-110	-1.1%
63.0%	10,247	10,137	-110	-1.1%
64.2%	10,196	10,119	-77	-0.8%
65.4%	10,067	10,097	30	0.3%
66.7%	10,020	10,031	10	0.1%
67.9%	10,014	10,023	9	0.1%
69.1%	10,010	10,020	10	0.1%
70.4%	9,883	9,809	-74	-0.8%
71.6%	9,828	9,789	-39	-0.4%
72.8%	9,805	9,773	-32	-0.3%
74.1%	9,734	9,666	-68	-0.7%
75.3%	9,640	9,657	17	0.2%
76.5%	9,543	9,478	-65	-0.7%
77.8%	8,863	9,470	607	6.9%
79.0%	8,838	8,781	-56	-0.6%
80.2%	8,771	8,775	4	0.0%
81.5%	8,702	8,602	-99	-1.1%
82.7%	8,676	8,384	-291	-3.4%
84.0%	8,602	8,194	-408	-4.7%
85.2%	8,570	8,126	-444	-5.2%
86.4%	8,343	8,058	-285	-3.4%
87.7%	7,979	7,847	-131	-1.6%
88.9%	7,875	7,805	-70	-0.9%
90.1%	7,847	7,740	-107	-1.4%
91.4%	7,688	7,529	-159	-2.1%
92.6%	7,453	7,487	34	0.5%
93.8%	7,332	7,437	106	1.4%
95.1%	6,914	7,410	496	7.2%
96.3%	6,822	7,279	457	6.7%
97.5%	6,676	6,914	238	3.6%
98.8%	6,431	6,390	-41	-0.6%
100.0%	4,226	4,700	475	11.2%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,625	13,625	0	0.0%
1.2%	13,625	13,625	0	0.0%
2.5%	13,625	13,625	0	0.0%
3.7%	13,625	13,625	0	0.0%
4.9%	13,625	13,625	0	0.0%
6.2%	13,625	13,625	0	0.0%
7.4%	13,625	13,625	0	0.0%
8.6%	13,589	13,452	-138	-1.0%
9.9%	13,377	13,317	-60	-0.4%
11.1%	13,345	12,986	-359	-2.7%
12.3%	13,299	12,868	-431	-3.2%
13.6%	13,143	12,860	-283	-2.2%
14.8%	12,891	12,834	-56	-0.4%
16.0%	12,837	12,781	-55	-0.4%
17.3%	12,834	12,756	-78	-0.6%
18.5%	12,820	12,706	-115	-0.9%
19.8%	12,632	12,636	4	0.0%
21.0%	12,617	12,633	16	0.1%
22.2%	12,579	12,603	25	0.2%
23.5%	12,454	12,590	136	1.1%
24.7%	12,454	12,465	11	0.1%
25.9%	12,377	12,445	68	0.5%
27.2%	12,338	12,352	14	0.1%
28.4%	12,326	12,298	-28	-0.2%
29.6%	12,302	12,200	-103	-0.8%
30.9%	12,300	12,191	-109	-0.9%
32.1%	12,279	12,180	-99	-0.8%
33.3%	12,187	12,175	-12	-0.1%
34.6%	12,099	12,128	30	0.2%
35.8%	12,087	12,078	-10	-0.1%
37.0%	12,027	12,078	51	0.4%
38.3%	11,993	11,963	-30	-0.3%
39.5%	11,968	11,941	-27	-0.2%
40.7%	11,910	11,849	-60	-0.5%
42.0%	11,875	11,848	-27	-0.2%
43.2%	11,844	11,821	-23	-0.2%
44.4%	11,807	11,758	-49	-0.4%
45.7%	11,768	11,719	-49	-0.4%
46.9%	11,730	11,688	-42	-0.4%
48.1%	11,430	11,634	204	1.8%
49.4%	11,427	11,625	198	1.7%
50.6%	11,421	11,605	185	1.6%
51.9%	11,410	11,479	68	0.6%
53.1%	11,360	11,455	95	0.8%
54.3%	11,311	11,454	143	1.3%
55.6%	11,242	11,304	62	0.5%
56.8%	11,190	11,299	109	1.0%
58.0%	11,095	10,984	-110	-1.0%
59.3%	10,935	10,818	-118	-1.1%
60.5%	10,910	10,797	-113	-1.0%
61.7%	10,797	10,710	-87	-0.8%
63.0%	10,774	10,615	-160	-1.5%
64.2%	10,573	10,560	-13	-0.1%
65.4%	10,562	10,531	-31	-0.3%
66.7%	10,482	10,504	22	0.2%
67.9%	10,415	10,248	-166	-1.6%
69.1%	10,371	10,222	-149	-1.4%
70.4%	10,241	10,201	-40	-0.4%
71.6%	10,219	10,195	-23	-0.2%
72.8%	10,147	10,186	38	0.4%
74.1%	10,141	10,118	-24	-0.2%
75.3%	10,020	9,799	-221	-2.2%
76.5%	9,636	9,466	-170	-1.8%
77.8%	9,351	9,445	94	1.0%
79.0%	9,211	9,321	110	1.2%
80.2%	9,159	9,034	-125	-1.4%
81.5%	8,906	8,910	4	0.0%
82.7%	8,827	8,677	-150	-1.7%
84.0%	8,727	8,671	-56	-0.6%
85.2%	8,482	8,515	34	0.4%
86.4%	8,475	8,475	0	0.0%
87.7%	8,455	8,287	-168	-2.0%
88.9%	8,416	8,239	-177	-2.1%
90.1%	8,295	8,162	-133	-1.6%
91.4%	7,855	7,908	52	0.7%
92.6%	7,769	7,728	-42	-0.5%
93.8%	7,591	7,591	0	0.0%
95.1%	7,387	7,584	197	2.7%
96.3%	7,188	7,578	389	5.4%
97.5%	6,983	7,399	415	5.9%
98.8%	6,597	6,557	-41	-0.6%
100.0%	5,891	6,329	438	7.4%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,521	14,521	0	0.0%
1.2%	13,850	13,850	0	0.0%
2.5%	13,850	13,850	0	0.0%
3.7%	13,850	13,850	0	0.0%
4.9%	13,850	13,850	0	0.0%
6.2%	13,850	13,850	0	0.0%
7.4%	13,850	13,850	0	0.0%
8.6%	13,850	13,850	0	0.0%
9.9%	13,850	13,850	0	0.0%
11.1%	13,850	13,850	0	0.0%
12.3%	13,850	13,850	0	0.0%
13.6%	13,850	13,850	0	0.0%
14.8%	13,850	13,850	0	0.0%
16.0%	13,833	13,850	17	0.1%
17.3%	13,803	13,737	-66	-0.5%
18.5%	13,802	13,651	-151	-1.1%
19.8%	13,635	13,604	-30	-0.2%
21.0%	13,622	13,601	-21	-0.2%
22.2%	13,554	13,594	41	0.3%
23.5%	13,553	13,578	25	0.2%
24.7%	13,495	13,491	-4	0.0%
25.9%	13,492	13,398	-94	-0.7%
27.2%	13,397	13,377	-20	-0.2%
28.4%	13,391	13,353	-38	-0.3%
29.6%	13,387	13,293	-93	-0.7%
30.9%	13,373	13,192	-182	-1.4%
32.1%	13,301	13,025	-276	-2.1%
33.3%	13,170	13,008	-162	-1.2%
34.6%	13,086	12,921	-165	-1.3%
35.8%	12,983	12,918	-66	-0.5%
37.0%	12,842	12,873	31	0.2%
38.3%	12,791	12,857	67	0.5%
39.5%	12,704	12,759	55	0.4%
40.7%	12,702	12,749	47	0.4%
42.0%	12,649	12,722	73	0.6%
43.2%	12,630	12,715	85	0.7%
44.4%	12,620	12,675	55	0.4%
45.7%	12,613	12,631	18	0.1%
46.9%	12,509	12,603	94	0.8%
48.1%	12,360	12,481	120	1.0%
49.4%	12,355	12,454	100	0.8%
50.6%	12,208	12,032	-177	-1.4%
51.9%	11,902	11,996	94	0.8%
53.1%	11,858	11,846	-13	-0.1%
54.3%	11,841	11,773	-69	-0.6%
55.6%	11,742	11,769	27	0.2%
56.8%	11,578	11,755	177	1.5%
58.0%	11,447	11,754	307	2.7%
59.3%	11,442	11,707	264	2.3%
60.5%	11,412	11,507	95	0.8%
61.7%	11,326	11,329	3	0.0%
63.0%	11,188	11,241	54	0.5%
64.2%	11,145	11,144	0	0.0%
65.4%	11,025	11,047	22	0.2%
66.7%	10,919	10,933	14	0.1%
67.9%	10,852	10,920	68	0.6%
69.1%	10,769	10,812	44	0.4%
70.4%	10,766	10,540	-226	-2.1%
71.6%	10,621	10,433	-188	-1.8%
72.8%	10,572	10,399	-172	-1.6%
74.1%	10,527	10,374	-153	-1.5%
75.3%	10,495	10,282	-212	-2.0%
76.5%	10,439	10,274	-165	-1.6%
77.8%	10,418	10,269	-149	-1.4%
79.0%	10,379	10,251	-128	-1.2%
80.2%	9,815	10,189	374	3.8%
81.5%	9,771	9,679	-92	-0.9%
82.7%	9,577	9,649	73	0.8%
84.0%	9,492	9,370	-122	-1.3%
85.2%	9,205	9,318	113	1.2%
86.4%	9,146	9,238	93	1.0%
87.7%	9,048	9,089	42	0.5%
88.9%	9,044	9,044	0	0.0%
90.1%	9,016	8,883	-133	-1.5%
91.4%	8,800	8,839	39	0.4%
92.6%	8,642	8,584	-59	-0.7%
93.8%	8,496	8,496	0	0.0%
95.1%	8,132	8,369	237	2.9%
96.3%	7,779	7,922	143	1.8%
97.5%	7,507	7,737	230	3.1%
98.8%	7,474	7,672	197	2.6%
100.0%	6,801	6,761	-41	-0.6%

Table SW-03-b
Trinity Lake, End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,350	14,613	264	1.8%
1.2%	14,300	14,300	0	0.0%
2.5%	14,300	14,300	0	0.0%
3.7%	14,300	14,300	0	0.0%
4.9%	14,300	14,300	0	0.0%
6.2%	14,300	14,300	0	0.0%
7.4%	14,300	14,300	0	0.0%
8.6%	14,300	14,300	0	0.0%
9.9%	14,300	14,300	0	0.0%
11.1%	14,300	14,300	0	0.0%
12.3%	14,300	14,300	0	0.0%
13.6%	14,300	14,300	0	0.0%
14.8%	14,300	14,300	0	0.0%
16.0%	14,300	14,300	0	0.0%
17.3%	14,300	14,300	0	0.0%
18.5%	14,300	14,300	0	0.0%
19.8%	14,300	14,300	0	0.0%
21.0%	14,300	14,300	0	0.0%
22.2%	14,300	14,300	0	0.0%
23.5%	14,300	14,298	-2	0.0%
24.7%	14,298	14,264	-34	-0.2%
25.9%	14,283	14,254	-28	-0.2%
27.2%	14,225	14,246	20	0.1%
28.4%	14,215	14,233	17	0.1%
29.6%	14,208	14,097	-110	-0.8%
30.9%	14,163	14,061	-102	-0.7%
32.1%	14,051	14,029	-21	-0.2%
33.3%	13,980	13,946	-33	-0.2%
34.6%	13,903	13,914	11	0.1%
35.8%	13,882	13,878	-4	0.0%
37.0%	13,779	13,874	95	0.7%
38.3%	13,777	13,780	3	0.0%
39.5%	13,629	13,660	32	0.2%
40.7%	13,426	13,559	133	1.0%
42.0%	13,297	13,543	246	1.9%
43.2%	13,255	13,256	1	0.0%
44.4%	13,234	13,228	-7	0.0%
45.7%	13,225	13,225	-1	0.0%
46.9%	13,209	13,150	-59	-0.4%
48.1%	13,168	13,112	-56	-0.4%
49.4%	13,072	13,056	-17	-0.1%
50.6%	13,017	12,947	-70	-0.5%
51.9%	12,804	12,901	97	0.8%
53.1%	12,573	12,891	318	2.5%
54.3%	12,572	12,556	-16	-0.1%
55.6%	12,557	12,503	-55	-0.4%
56.8%	12,393	12,495	102	0.8%
58.0%	12,375	12,478	103	0.8%
59.3%	12,358	12,384	26	0.2%
60.5%	12,318	12,302	-16	-0.1%
61.7%	12,286	12,286	-1	0.0%
63.0%	12,209	12,249	40	0.3%
64.2%	12,068	12,083	14	0.1%
65.4%	11,942	12,019	77	0.6%
66.7%	11,767	11,923	156	1.3%
67.9%	11,608	11,879	271	2.3%
69.1%	11,561	11,865	304	2.6%
70.4%	11,539	11,484	-55	-0.5%
71.6%	11,516	11,449	-68	-0.6%
72.8%	11,495	11,402	-92	-0.8%
74.1%	11,449	11,316	-133	-1.2%
75.3%	11,380	11,294	-86	-0.8%
76.5%	11,250	11,055	-195	-1.7%
77.8%	11,231	11,020	-211	-1.9%
79.0%	11,206	10,974	-233	-2.1%
80.2%	11,083	10,746	-337	-3.0%
81.5%	10,860	10,743	-116	-1.1%
82.7%	10,737	10,570	-166	-1.5%
84.0%	10,616	10,570	-46	-0.4%
85.2%	10,468	10,446	-22	-0.2%
86.4%	10,359	10,239	-120	-1.2%
87.7%	9,727	9,792	65	0.7%
88.9%	9,608	9,758	150	1.6%
90.1%	9,379	9,736	357	3.8%
91.4%	9,266	9,485	219	2.4%
92.6%	9,239	9,210	-29	-0.3%
93.8%	9,018	9,162	144	1.6%
95.1%	8,867	8,827	-40	-0.4%
96.3%	8,376	8,459	83	1.0%
97.5%	8,051	8,376	325	4.0%
98.8%	7,775	7,788	13	0.2%
100.0%	7,590	7,733	143	1.9%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,806	14,806	0	0.0%
1.2%	14,700	14,700	0	0.0%
2.5%	14,700	14,700	0	0.0%
3.7%	14,700	14,700	0	0.0%
4.9%	14,700	14,700	0	0.0%
6.2%	14,700	14,700	0	0.0%
7.4%	14,700	14,700	0	0.0%
8.6%	14,700	14,700	0	0.0%
9.9%	14,700	14,700	0	0.0%
11.1%	14,700	14,700	0	0.0%
12.3%	14,700	14,700	0	0.0%
13.6%	14,700	14,700	0	0.0%
14.8%	14,700	14,700	0	0.0%
16.0%	14,700	14,700	0	0.0%
17.3%	14,700	14,700	0	0.0%
18.5%	14,700	14,700	0	0.0%
19.8%	14,700	14,700	0	0.0%
21.0%	14,700	14,700	0	0.0%
22.2%	14,700	14,700	0	0.0%
23.5%	14,700	14,700	0	0.0%
24.7%	14,700	14,700	0	0.0%
25.9%	14,700	14,700	0	0.0%
27.2%	14,700	14,700	0	0.0%
28.4%	14,672	14,672	0	0.0%
29.6%	14,668	14,640	-28	-0.2%
30.9%	14,624	14,618	-7	0.0%
32.1%	14,611	14,597	-14	-0.1%
33.3%	14,602	14,593	-10	-0.1%
34.6%	14,597	14,582	-16	-0.1%
35.8%	14,570	14,580	10	0.1%
37.0%	14,522	14,566	44	0.3%
38.3%	14,424	14,421	-3	0.0%
39.5%	14,351	14,375	24	0.2%
40.7%	14,293	14,228	-65	-0.5%
42.0%	14,247	14,223	-24	-0.2%
43.2%	13,994	14,197	203	1.4%
44.4%	13,909	14,178	269	1.9%
45.7%	13,889	13,977	89	0.6%
46.9%	13,865	13,877	12	0.1%
48.1%	13,831	13,571	-259	-1.9%
49.4%	13,697	13,515	-182	-1.3%
50.6%	13,499	13,439	-60	-0.4%
51.9%	13,340	13,337	-3	0.0%
53.1%	13,331	13,329	-2	0.0%
54.3%	13,329	13,288	-42	-0.3%
55.6%	13,210	13,259	49	0.4%
56.8%	13,191	13,242	51	0.4%
58.0%	13,162	13,237	75	0.6%
59.3%	13,127	13,184	57	0.4%
60.5%	13,095	13,175	80	0.6%
61.7%	13,022	13,146	124	1.0%
63.0%	13,020	13,140	119	0.9%
64.2%	12,913	12,807	-106	-0.8%
65.4%	12,795	12,750	-45	-0.4%
66.7%	12,695	12,729	34	0.3%
67.9%	12,469	12,635	166	1.3%
69.1%	12,399	12,413	14	0.1%
70.4%	12,360	12,216	-144	-1.2%
71.6%	12,354	12,175	-178	-1.4%
72.8%	12,233	12,075	-158	-1.3%
74.1%	12,046	12,016	-30	-0.2%
75.3%	12,044	12,012	-31	-0.3%
76.5%	12,038	11,850	-188	-1.6%
77.8%	11,950	11,848	-102	-0.9%
79.0%	11,877	11,759	-117	-1.0%
80.2%	11,718	11,668	-51	-0.4%
81.5%	11,468	11,536	68	0.6%
82.7%	11,356	11,363	6	0.1%
84.0%	11,279	11,125	-154	-1.4%
85.2%	11,237	11,094	-143	-1.3%
86.4%	11,148	10,993	-155	-1.4%
87.7%	11,133	10,984	-149	-1.3%
88.9%	10,866	10,749	-116	-1.1%
90.1%	10,164	10,148	-16	-0.2%
91.4%	9,978	10,114	136	1.4%
92.6%	9,754	10,041	286	2.9%
93.8%	9,550	10,009	459	4.8%
95.1%	9,473	9,702	229	2.4%
96.3%	8,964	9,371	407	4.5%
97.5%	8,324	8,436	112	1.3%
98.8%	8,293	8,293	0	0.0%
100.0%	8,242	8,283	41	0.5%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,500	15,500	0	0.0%
1.2%	15,500	15,500	0	0.0%
2.5%	15,500	15,500	0	0.0%
3.7%	15,500	15,500	0	0.0%
4.9%	15,500	15,500	0	0.0%
6.2%	15,500	15,500	0	0.0%
7.4%	15,500	15,500	0	0.0%
8.6%	15,500	15,500	0	0.0%
9.9%	15,500	15,500	0	0.0%
11.1%	15,488	15,500	12	0.1%
12.3%	15,480	15,500	20	0.1%
13.6%	15,478	15,488	9	0.1%
14.8%	15,475	15,480	5	0.0%
16.0%	15,472	15,478	6	0.0%
17.3%	15,428	15,413	-16	-0.1%
18.5%	15,334	15,334	0	0.0%
19.8%	15,300	15,300	0	0.0%
21.0%	15,240	15,240	0	0.0%
22.2%	15,211	15,211	0	0.0%
23.5%	15,209	15,196	-13	-0.1%
24.7%	15,192	15,192	0	0.0%
25.9%	15,164	15,188	24	0.2%
27.2%	15,157	15,157	0	0.0%
28.4%	15,151	15,151	0	0.0%
29.6%	15,134	15,151	16	0.1%
30.9%	15,064	15,134	70	0.5%
32.1%	15,064	15,080	16	0.1%
33.3%	15,025	15,025	0	0.0%
34.6%	14,975	15,010	35	0.2%
35.8%	14,959	15,000	41	0.3%
37.0%	14,946	14,975	29	0.2%
38.3%	14,940	14,942	3	0.0%
39.5%	14,856	14,913	57	0.4%
40.7%	14,831	14,856	25	0.2%
42.0%	14,811	14,821	10	0.1%
43.2%	14,745	14,817	72	0.5%
44.4%	14,608	14,547	-61	-0.4%
45.7%	14,578	14,546	-32	-0.2%
46.9%	14,505	14,503	-2	0.0%
48.1%	14,503	14,324	-179	-1.2%
49.4%	14,204	14,279	75	0.5%
50.6%	14,165	14,204	39	0.3%
51.9%	14,008	13,973	-35	-0.3%
53.1%	13,925	13,941	16	0.1%
54.3%	13,838	13,855	17	0.1%
55.6%	13,784	13,844	61	0.4%
56.8%	13,748	13,836	88	0.6%
58.0%	13,741	13,739	-2	0.0%
59.3%	13,732	13,703	-30	-0.2%
60.5%	13,621	13,674	53	0.4%
61.7%	13,608	13,614	6	0.0%
63.0%	13,497	13,394	-103	-0.8%
64.2%	13,379	13,366	-14	-0.1%
65.4%	13,229	13,333	104	0.8%
66.7%	13,205	13,114	-90	-0.7%
67.9%	13,170	13,013	-156	-1.2%
69.1%	13,135	12,979	-156	-1.2%
70.4%	12,925	12,937	11	0.1%
71.6%	12,875	12,880	5	0.0%
72.8%	12,828	12,798	-30	-0.2%
74.1%	12,709	12,767	58	0.5%
75.3%	12,699	12,606	-93	-0.7%
76.5%	12,625	12,587	-38	-0.3%
77.8%	12,618	12,513	-105	-0.8%
79.0%	12,490	12,510	20	0.2%
80.2%	12,457	12,461	4	0.0%
81.5%	12,349	12,386	36	0.3%
82.7%	12,289	12,303	14	0.1%
84.0%	12,282	12,284	2	0.0%
85.2%	12,265	12,085	-181	-1.5%
86.4%	11,992	11,776	-217	-1.8%
87.7%	11,769	11,509	-260	-2.2%
88.9%	10,986	10,869	-116	-1.1%
90.1%	10,494	10,860	366	3.5%
91.4%	10,271	10,437	167	1.6%
92.6%	10,203	10,371	169	1.7%
93.8%	10,060	10,302	241	2.4%
95.1%	9,926	10,244	318	3.2%
96.3%	9,681	9,874	192	2.0%
97.5%	9,192	9,407	214	2.3%
98.8%	8,712	8,672	-41	-0.5%
100.0%	7,872	7,872	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,974	15,974	0	0.0%
1.2%	15,971	15,971	0	0.0%
2.5%	15,809	15,809	0	0.0%
3.7%	15,711	15,711	0	0.0%
4.9%	15,617	15,638	21	0.1%
6.2%	15,613	15,617	4	0.0%
7.4%	15,508	15,508	0	0.0%
8.6%	15,461	15,401	-60	-0.4%
9.9%	15,323	15,323	0	0.0%
11.1%	15,294	15,236	-58	-0.4%
12.3%	15,156	15,228	72	0.5%
13.6%	15,125	15,125	0	0.0%
14.8%	15,119	15,119	0	0.0%
16.0%	15,110	15,110	0	0.0%
17.3%	15,035	15,025	-11	-0.1%
18.5%	15,025	15,017	-7	0.0%
19.8%	15,017	14,973	-44	-0.3%
21.0%	14,887	14,928	41	0.3%
22.2%	14,834	14,887	52	0.4%
23.5%	14,807	14,834	27	0.2%
24.7%	14,760	14,807	47	0.3%
25.9%	14,755	14,760	5	0.0%
27.2%	14,696	14,755	59	0.4%
28.4%	14,673	14,696	23	0.2%
29.6%	14,673	14,689	16	0.1%
30.9%	14,656	14,659	4	0.0%
32.1%	14,632	14,656	24	0.2%
33.3%	14,560	14,564	4	0.0%
34.6%	14,540	14,560	20	0.1%
35.8%	14,528	14,523	-5	0.0%
37.0%	14,526	14,496	-30	-0.2%
38.3%	14,496	14,398	-98	-0.7%
39.5%	14,388	14,378	-10	-0.1%
40.7%	14,279	14,296	17	0.1%
42.0%	14,276	14,293	17	0.1%
43.2%	14,217	14,262	45	0.3%
44.4%	14,067	14,035	-31	-0.2%
45.7%	13,989	13,998	9	0.1%
46.9%	13,797	13,864	67	0.5%
48.1%	13,644	13,797	153	1.1%
49.4%	13,594	13,671	78	0.6%
50.6%	13,565	13,644	79	0.6%
51.9%	13,511	13,625	114	0.8%
53.1%	13,458	13,581	123	0.9%
54.3%	13,453	13,458	5	0.0%
55.6%	13,418	13,409	-9	-0.1%
56.8%	13,366	13,388	23	0.2%
58.0%	13,359	13,352	-8	-0.1%
59.3%	13,296	13,287	-9	-0.1%
60.5%	13,254	13,140	-115	-0.9%
61.7%	13,197	13,132	-65	-0.5%
63.0%	13,105	12,924	-181	-1.4%
64.2%	13,072	12,892	-180	-1.4%
65.4%	13,047	12,849	-198	-1.5%
66.7%	12,824	12,810	-14	-0.1%
67.9%	12,773	12,775	2	0.0%
69.1%	12,732	12,753	21	0.2%
70.4%	12,715	12,727	12	0.1%
71.6%	12,634	12,645	11	0.1%
72.8%	12,604	12,601	-3	0.0%
74.1%	12,595	12,591	-5	0.0%
75.3%	12,582	12,551	-30	-0.2%
76.5%	12,572	12,454	-118	-0.9%
77.8%	12,341	12,398	57	0.5%
79.0%	12,281	12,396	114	0.9%
80.2%	12,192	12,202	9	0.1%
81.5%	12,186	12,113	-73	-0.6%
82.7%	12,031	11,905	-125	-1.0%
84.0%	11,887	11,657	-230	-1.9%
85.2%	11,621	11,412	-209	-1.8%
86.4%	11,441	11,396	-44	-0.4%
87.7%	11,390	11,139	-251	-2.2%
88.9%	10,358	10,410	52	0.5%
90.1%	10,057	10,231	174	1.7%
91.4%	10,034	9,935	-99	-1.0%
92.6%	9,889	9,920	31	0.3%
93.8%	9,719	9,841	121	1.2%
95.1%	9,642	9,790	149	1.5%
96.3%	9,160	9,672	512	5.6%
97.5%	9,089	9,668	579	6.4%
98.8%	8,843	8,803	-41	-0.5%
100.0%	7,672	7,672	0	0.0%

Table SW-03-b

Trinity Lake, End of Month Area

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	16,033	16,033	0	0.0%
1.2%	15,954	15,946	-8	0.0%
2.5%	15,469	15,469	0	0.0%
3.7%	15,230	15,233	3	0.0%
4.9%	15,199	15,175	-24	-0.2%
6.2%	15,150	15,139	-11	-0.1%
7.4%	15,072	15,072	0	0.0%
8.6%	15,029	15,029	0	0.0%
9.9%	14,986	15,011	26	0.2%
11.1%	14,979	14,979	0	0.0%
12.3%	14,824	14,790	-34	-0.2%
13.6%	14,790	14,766	-23	-0.2%
14.8%	14,719	14,762	44	0.3%
16.0%	14,695	14,734	39	0.3%
17.3%	14,653	14,670	17	0.1%
18.5%	14,614	14,653	39	0.3%
19.8%	14,428	14,649	221	1.5%
21.0%	14,395	14,428	33	0.2%
22.2%	14,389	14,389	0	0.0%
23.5%	14,334	14,378	44	0.3%
24.7%	14,301	14,334	32	0.2%
25.9%	14,264	14,301	37	0.3%
27.2%	14,254	14,264	10	0.1%
28.4%	14,226	14,226	0	0.0%
29.6%	14,154	14,221	67	0.5%
30.9%	14,132	14,170	37	0.3%
32.1%	14,104	14,154	51	0.4%
33.3%	14,016	14,143	127	0.9%
34.6%	14,005	14,032	27	0.2%
35.8%	13,950	14,016	67	0.5%
37.0%	13,921	14,005	83	0.6%
38.3%	13,866	13,976	110	0.8%
39.5%	13,769	13,921	152	1.1%
40.7%	13,696	13,774	79	0.6%
42.0%	13,646	13,753	107	0.8%
43.2%	13,607	13,653	46	0.3%
44.4%	13,573	13,637	65	0.5%
45.7%	13,498	13,463	-35	-0.3%
46.9%	13,404	13,373	-32	-0.2%
48.1%	13,213	13,272	59	0.4%
49.4%	13,189	13,259	71	0.5%
50.6%	13,143	13,205	61	0.5%
51.9%	13,109	13,167	58	0.4%
53.1%	13,047	13,159	112	0.9%
54.3%	12,945	13,128	183	1.4%
55.6%	12,937	13,047	110	0.9%
56.8%	12,900	13,035	135	1.0%
58.0%	12,898	12,861	-36	-0.3%
59.3%	12,874	12,840	-34	-0.3%
60.5%	12,707	12,776	68	0.5%
61.7%	12,683	12,774	92	0.7%
63.0%	12,617	12,766	149	1.2%
64.2%	12,571	12,738	168	1.3%
65.4%	12,562	12,576	14	0.1%
66.7%	12,526	12,549	23	0.2%
67.9%	12,496	12,381	-115	-0.9%
69.1%	12,447	12,332	-114	-0.9%
70.4%	12,413	12,312	-101	-0.8%
71.6%	12,397	12,255	-142	-1.1%
72.8%	12,248	12,190	-59	-0.5%
74.1%	12,179	12,152	-27	-0.2%
75.3%	12,149	12,081	-68	-0.6%
76.5%	12,017	11,966	-52	-0.4%
77.8%	12,005	11,918	-87	-0.7%
79.0%	11,876	11,824	-52	-0.4%
80.2%	11,618	11,729	111	1.0%
81.5%	11,518	11,395	-123	-1.1%
82.7%	11,508	11,254	-255	-2.2%
84.0%	11,493	11,251	-242	-2.1%
85.2%	11,212	11,136	-76	-0.7%
86.4%	11,043	10,802	-241	-2.2%
87.7%	10,970	10,774	-196	-1.8%
88.9%	10,098	10,353	255	2.5%
90.1%	10,097	10,059	-38	-0.4%
91.4%	9,969	9,982	13	0.1%
92.6%	9,935	9,953	18	0.2%
93.8%	9,922	9,843	-79	-0.8%
95.1%	9,608	9,813	205	2.1%
96.3%	8,980	9,620	640	7.1%
97.5%	8,957	9,547	590	6.6%
98.8%	8,591	8,551	-41	-0.5%
100.0%	7,252	7,252	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,380	15,380	0	0.0%
1.2%	15,380	15,380	0	0.0%
2.5%	14,880	14,870	-10	-0.1%
3.7%	14,870	14,637	-233	-1.6%
4.9%	14,686	14,627	-59	-0.4%
6.2%	14,634	14,555	-79	-0.5%
7.4%	14,530	14,511	-19	-0.1%
8.6%	14,471	14,471	0	0.0%
9.9%	14,379	14,379	0	0.0%
11.1%	14,258	14,258	0	0.0%
12.3%	14,252	14,182	-69	-0.5%
13.6%	14,140	14,166	26	0.2%
14.8%	14,086	14,158	72	0.5%
16.0%	14,037	14,066	29	0.2%
17.3%	14,028	14,028	0	0.0%
18.5%	13,850	14,014	164	1.2%
19.8%	13,793	14,011	218	1.6%
21.0%	13,763	13,850	88	0.6%
22.2%	13,750	13,793	43	0.3%
23.5%	13,729	13,791	63	0.5%
24.7%	13,722	13,762	40	0.3%
25.9%	13,635	13,750	115	0.8%
27.2%	13,624	13,624	0	0.0%
28.4%	13,602	13,551	-51	-0.4%
29.6%	13,442	13,513	71	0.5%
30.9%	13,437	13,511	74	0.5%
32.1%	13,429	13,495	67	0.5%
33.3%	13,264	13,436	172	1.3%
34.6%	13,237	13,387	149	1.1%
35.8%	13,223	13,385	162	1.2%
37.0%	13,198	13,299	101	0.8%
38.3%	13,124	13,279	155	1.2%
39.5%	13,064	13,159	95	0.7%
40.7%	13,024	13,124	99	0.8%
42.0%	12,970	13,088	118	0.9%
43.2%	12,911	13,011	100	0.8%
44.4%	12,810	12,855	46	0.4%
45.7%	12,702	12,834	132	1.0%
46.9%	12,695	12,784	89	0.7%
48.1%	12,574	12,673	99	0.8%
49.4%	12,565	12,650	85	0.7%
50.6%	12,557	12,543	-14	-0.1%
51.9%	12,516	12,509	-7	-0.1%
53.1%	12,434	12,491	57	0.5%
54.3%	12,304	12,349	46	0.4%
55.6%	12,293	12,313	19	0.2%
56.8%	12,254	12,230	-24	-0.2%
58.0%	12,190	12,173	-17	-0.1%
59.3%	12,156	12,157	1	0.0%
60.5%	12,097	12,125	28	0.2%
61.7%	12,061	12,102	41	0.3%
63.0%	11,915	12,097	183	1.5%
64.2%	11,796	11,990	194	1.6%
65.4%	11,727	11,919	192	1.6%
66.7%	11,690	11,868	178	1.5%
67.9%	11,672	11,849	177	1.5%
69.1%	11,642	11,792	150	1.3%
70.4%	11,525	11,498	-27	-0.2%
71.6%	11,447	11,455	8	0.1%
72.8%	11,445	11,322	-123	-1.1%
74.1%	11,396	11,125	-271	-2.4%
75.3%	11,259	11,112	-148	-1.3%
76.5%	11,166	11,066	-100	-0.9%
77.8%	10,925	11,021	96	0.9%
79.0%	10,781	10,961	180	1.7%
80.2%	10,677	10,927	250	2.3%
81.5%	10,591	10,798	207	2.0%
82.7%	10,485	10,463	-22	-0.2%
84.0%	10,403	10,146	-257	-2.5%
85.2%	10,287	10,050	-237	-2.3%
86.4%	10,198	9,718	-480	-4.7%
87.7%	9,718	9,597	-120	-1.2%
88.9%	9,496	9,435	-60	-0.6%
90.1%	9,474	9,369	-105	-1.1%
91.4%	9,261	9,281	20	0.2%
92.6%	9,248	9,131	-117	-1.3%
93.8%	9,207	9,072	-136	-1.5%
95.1%	8,749	9,048	299	3.4%
96.3%	8,304	8,958	654	7.9%
97.5%	8,173	8,771	597	7.3%
98.8%	7,877	7,835	-41	-0.5%
100.0%	5,628	5,628	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,900	14,900	0	0.0%
1.2%	14,900	14,900	0	0.0%
2.5%	14,816	14,070	-747	-5.0%
3.7%	14,220	14,054	-167	-1.2%
4.9%	14,070	13,809	-261	-1.9%
6.2%	13,949	13,784	-165	-1.2%
7.4%	13,909	13,766	-143	-1.0%
8.6%	13,781	13,603	-177	-1.3%
9.9%	13,754	13,564	-191	-1.4%
11.1%	13,738	13,512	-226	-1.6%
12.3%	13,633	13,509	-124	-0.9%
13.6%	13,487	13,493	7	0.0%
14.8%	13,413	13,487	73	0.5%
16.0%	13,371	13,466	95	0.7%
17.3%	13,247	13,409	162	1.2%
18.5%	13,182	13,380	198	1.5%
19.8%	13,174	13,190	16	0.1%
21.0%	13,145	13,174	29	0.2%
22.2%	13,135	13,145	11	0.1%
23.5%	13,084	13,134	50	0.4%
24.7%	13,074	13,119	45	0.3%
25.9%	13,011	13,074	63	0.5%
27.2%	12,954	12,946	-8	-0.1%
28.4%	12,930	12,944	14	0.1%
29.6%	12,770	12,875	104	0.8%
30.9%	12,765	12,865	100	0.8%
32.1%	12,730	12,763	32	0.3%
33.3%	12,668	12,699	30	0.2%
34.6%	12,661	12,676	15	0.1%
35.8%	12,635	12,628	-7	-0.1%
37.0%	12,351	12,596	245	2.0%
38.3%	12,344	12,589	245	2.0%
39.5%	12,336	12,509	174	1.4%
40.7%	12,314	12,446	132	1.1%
42.0%	12,047	12,085	38	0.3%
43.2%	11,895	12,044	149	1.3%
44.4%	11,848	11,931	83	0.7%
45.7%	11,804	11,842	38	0.3%
46.9%	11,754	11,697	-57	-0.5%
48.1%	11,724	11,639	-86	-0.7%
49.4%	11,633	11,542	-91	-0.8%
50.6%	11,589	11,495	-94	-0.8%
51.9%	11,569	11,430	-139	-1.2%
53.1%	11,554	11,423	-131	-1.1%
54.3%	11,486	11,346	-140	-1.2%
55.6%	11,450	11,302	-148	-1.3%
56.8%	11,403	11,226	-177	-1.5%
58.0%	11,341	11,211	-130	-1.1%
59.3%	11,309	11,195	-114	-1.0%
60.5%	11,163	11,168	5	0.0%
61.7%	11,048	11,076	29	0.3%
63.0%	11,002	11,074	72	0.7%
64.2%	10,978	11,039	60	0.5%
65.4%	10,945	10,947	2	0.0%
66.7%	10,908	10,931	23	0.2%
67.9%	10,845	10,927	83	0.8%
69.1%	10,711	10,799	88	0.8%
70.4%	10,528	10,753	225	2.1%
71.6%	10,526	10,428	-98	-0.9%
72.8%	10,349	10,222	-128	-1.2%
74.1%	10,336	10,137	-199	-1.9%
75.3%	10,263	10,069	-193	-1.9%
76.5%	9,946	9,994	48	0.5%
77.8%	9,855	9,986	131	1.3%
79.0%	9,791	9,985	194	2.0%
80.2%	9,679	9,864	185	1.9%
81.5%	9,473	9,535	62	0.7%
82.7%	9,470	9,421	-50	-0.5%
84.0%	9,468	9,017	-451	-4.8%
85.2%	9,465	8,959	-506	-5.3%
86.4%	9,351	8,925	-426	-4.6%
87.7%	8,731	8,689	-41	-0.5%
88.9%	8,711	8,578	-134	-1.5%
90.1%	8,480	8,500	20	0.2%
91.4%	8,467	8,387	-80	-0.9%
92.6%	8,458	8,350	-108	-1.3%
93.8%	8,432	8,267	-165	-2.0%
95.1%	8,072	8,173	101	1.3%
96.3%	7,515	7,975	461	6.1%
97.5%	7,371	7,856	485	6.6%
98.8%	7,082	7,041	-41	-0.6%
100.0%	3,818	4,328	510	13.4%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,188	14,188	0	0.0%
1.2%	14,188	14,188	0	0.0%
2.5%	14,188	13,960	-228	-1.6%
3.7%	13,703	13,422	-281	-2.1%
4.9%	13,422	13,159	-263	-2.0%
6.2%	13,336	13,136	-201	-1.5%
7.4%	13,235	13,119	-117	-0.9%
8.6%	13,132	12,992	-140	-1.1%
9.9%	13,111	12,959	-152	-1.2%
11.1%	13,091	12,865	-226	-1.7%
12.3%	12,985	12,863	-122	-0.9%
13.6%	12,976	12,854	-122	-0.9%
14.8%	12,774	12,842	68	0.5%
16.0%	12,725	12,818	93	0.7%
17.3%	12,668	12,766	98	0.8%
18.5%	12,619	12,594	-24	-0.2%
19.8%	12,595	12,500	-95	-0.8%
21.0%	12,528	12,485	-43	-0.3%
22.2%	12,500	12,481	-20	-0.2%
23.5%	12,485	12,406	-79	-0.6%
24.7%	12,428	12,368	-60	-0.5%
25.9%	12,330	12,347	17	0.1%
27.2%	12,220	12,274	54	0.4%
28.4%	12,156	12,256	100	0.8%
29.6%	12,112	12,253	141	1.2%
30.9%	12,034	12,164	131	1.1%
32.1%	11,898	12,156	258	2.2%
33.3%	11,868	11,938	69	0.6%
34.6%	11,757	11,862	105	0.9%
35.8%	11,740	11,862	122	1.0%
37.0%	11,599	11,749	150	1.3%
38.3%	11,539	11,718	179	1.6%
39.5%	11,534	11,527	-6	-0.1%
40.7%	11,514	11,498	-16	-0.1%
42.0%	11,423	11,373	-50	-0.4%
43.2%	11,418	11,360	-58	-0.5%
44.4%	11,403	11,327	-76	-0.7%
45.7%	11,265	11,303	38	0.3%
46.9%	11,215	11,095	-120	-1.1%
48.1%	11,163	10,920	-243	-2.2%
49.4%	10,959	10,884	-74	-0.7%
50.6%	10,950	10,840	-110	-1.0%
51.9%	10,930	10,786	-144	-1.3%
53.1%	10,849	10,714	-134	-1.2%
54.3%	10,796	10,709	-87	-0.8%
55.6%	10,772	10,673	-99	-0.9%
56.8%	10,717	10,586	-131	-1.2%
58.0%	10,676	10,552	-123	-1.2%
59.3%	10,638	10,521	-117	-1.1%
60.5%	10,440	10,482	42	0.4%
61.7%	10,393	10,335	-58	-0.6%
63.0%	10,308	10,323	16	0.2%
64.2%	10,283	10,314	30	0.3%
65.4%	10,255	10,261	6	0.1%
66.7%	10,240	10,173	-67	-0.7%
67.9%	10,172	10,097	-75	-0.7%
69.1%	10,014	10,020	6	0.1%
70.4%	9,841	9,761	-80	-0.8%
71.6%	9,830	9,654	-176	-1.8%
72.8%	9,656	9,649	-7	-0.1%
74.1%	9,650	9,575	-75	-0.8%
75.3%	9,451	9,485	34	0.4%
76.5%	9,440	9,478	38	0.4%
77.8%	9,084	9,474	389	4.3%
79.0%	9,052	8,933	-118	-1.3%
80.2%	8,964	8,933	-30	-0.3%
81.5%	8,933	8,907	-26	-0.3%
82.7%	8,930	8,682	-248	-2.8%
84.0%	8,928	8,415	-513	-5.7%
85.2%	8,724	8,171	-553	-6.3%
86.4%	8,653	8,137	-517	-6.0%
87.7%	8,178	8,027	-151	-1.8%
88.9%	8,161	7,803	-357	-4.4%
90.1%	7,935	7,802	-132	-1.7%
91.4%	7,920	7,717	-204	-2.6%
92.6%	7,875	7,700	-175	-2.2%
93.8%	7,585	7,635	50	0.7%
95.1%	7,519	7,567	48	0.6%
96.3%	6,821	7,424	603	8.8%
97.5%	6,727	7,307	580	8.6%
98.8%	6,523	6,482	-41	-0.6%
100.0%	4,140	4,616	476	11.5%

Figure SW-04-b
Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

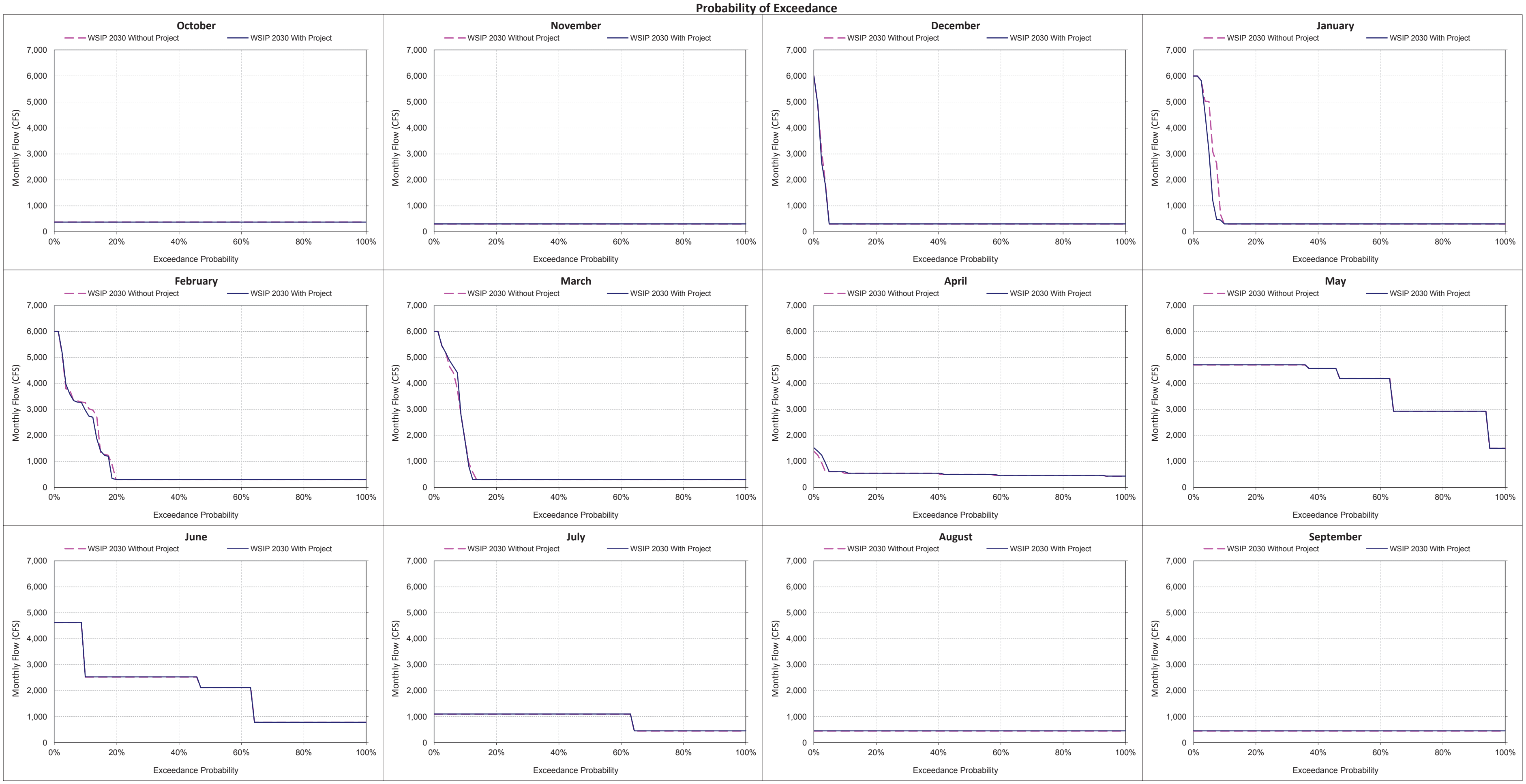


Table SW-04-b

Trinity River below Lewiston Reservoir, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	373	373	0	0.0%
1.2%	373	373	0	0.0%
2.5%	373	373	0	0.0%
3.7%	373	373	0	0.0%
4.9%	373	373	0	0.0%
6.2%	373	373	0	0.0%
7.4%	373	373	0	0.0%
8.6%	373	373	0	0.0%
9.9%	373	373	0	0.0%
11.1%	373	373	0	0.0%
12.3%	373	373	0	0.0%
13.6%	373	373	0	0.0%
14.8%	373	373	0	0.0%
16.0%	373	373	0	0.0%
17.3%	373	373	0	0.0%
18.5%	373	373	0	0.0%
19.8%	373	373	0	0.0%
21.0%	373	373	0	0.0%
22.2%	373	373	0	0.0%
23.5%	373	373	0	0.0%
24.7%	373	373	0	0.0%
25.9%	373	373	0	0.0%
27.2%	373	373	0	0.0%
28.4%	373	373	0	0.0%
29.6%	373	373	0	0.0%
30.9%	373	373	0	0.0%
32.1%	373	373	0	0.0%
33.3%	373	373	0	0.0%
34.6%	373	373	0	0.0%
35.8%	373	373	0	0.0%
37.0%	373	373	0	0.0%
38.3%	373	373	0	0.0%
39.5%	373	373	0	0.0%
40.7%	373	373	0	0.0%
42.0%	373	373	0	0.0%
43.2%	373	373	0	0.0%
44.4%	373	373	0	0.0%
45.7%	373	373	0	0.0%
46.9%	373	373	0	0.0%
48.1%	373	373	0	0.0%
49.4%	373	373	0	0.0%
50.6%	373	373	0	0.0%
51.9%	373	373	0	0.0%
53.1%	373	373	0	0.0%
54.3%	373	373	0	0.0%
55.6%	373	373	0	0.0%
56.8%	373	373	0	0.0%
58.0%	373	373	0	0.0%
59.3%	373	373	0	0.0%
60.5%	373	373	0	0.0%
61.7%	373	373	0	0.0%
63.0%	373	373	0	0.0%
64.2%	373	373	0	0.0%
65.4%	373	373	0	0.0%
66.7%	373	373	0	0.0%
67.9%	373	373	0	0.0%
69.1%	373	373	0	0.0%
70.4%	373	373	0	0.0%
71.6%	373	373	0	0.0%
72.8%	373	373	0	0.0%
74.1%	373	373	0	0.0%
75.3%	373	373	0	0.0%
76.5%	373	373	0	0.0%
77.8%	373	373	0	0.0%
79.0%	373	373	0	0.0%
80.2%	373	373	0	0.0%
81.5%	373	373	0	0.0%
82.7%	373	373	0	0.0%
84.0%	373	373	0	0.0%
85.2%	373	373	0	0.0%
86.4%	373	373	0	0.0%
87.7%	373	373	0	0.0%
88.9%	373	373	0	0.0%
90.1%	373	373	0	0.0%
91.4%	373	373	0	0.0%
92.6%	373	373	0	0.0%
93.8%	373	373	0	0.0%
95.1%	373	373	0	0.0%
96.3%	373	373	0	0.0%
97.5%	373	373	0	0.0%
98.8%	373	373	0	0.0%
100.0%	373	373	0	0.0%

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	300	300	0	0.0%
1.2%	300	300	0	0.0%
2.5%	300	300	0	0.0%
3.7%	300	300	0	0.0%
4.9%	300	300	0	0.0%
6.2%	300	300	0	0.0%
7.4%	300	300	0	0.0%
8.6%	300	300	0	0.0%
9.9%	300	300	0	0.0%
11.1%	300	300	0	0.0%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	4,906	4,906	0	0.0%
2.5%	3,136	2,664	-472	-15.1%
3.7%	1,871	1,822	-49	-2.6%
4.9%	300	300	0	0.0%
6.2%	300	300	0	0.0%
7.4%	300	300	0	0.0%
8.6%	300	300	0	0.0%
9.9%	300	300	0	0.0%
11.1%	300	300	0	0.0%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	6,000	6,000	0	0.0%
2.5%	5,823	5,823	0	0.0%
3.7%	5,027	4,516	-511	-10.2%
4.9%	5,013	3,161	-1,852	-36.9%
6.2%	3,080	1,220	-1,860	-60.4%
7.4%	2,637	482	-2,155	-81.7%
8.6%	672	455	-218	-32.4%
9.9%	300	300	0	0.0%
11.1%	300	300	0	0.0%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-04-b

Trinity River below Lewiston Reservoir, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	6,000	6,000	0	0.0%
2.5%	5,158	5,158	0	0.0%
3.7%	3,790	3,972	182	4.8%
4.9%	3,744	3,593	-151	-4.0%
6.2%	3,338	3,338	0	0.0%
7.4%	3,324	3,280	-44	-1.3%
8.6%	3,280	3,264	-16	-0.5%
9.9%	3,264	2,967	-297	-9.1%
11.1%	3,016	2,732	-285	-9.4%
12.3%	2,967	2,696	-271	-9.1%
13.6%	2,732	1,875	-857	-31.4%
14.8%	1,305	1,401	96	7.4%
16.0%	1,269	1,230	-39	-3.1%
17.3%	1,230	1,187	-42	-3.4%
18.5%	862	336	-526	-61.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	6,000	6,000	0	0.0%
2.5%	5,445	5,454	9	0.2%
3.7%	5,179	5,179	0	0.0%
4.9%	4,642	4,872	230	5.0%
6.2%	4,410	4,642	232	5.3%
7.4%	3,800	4,410	611	16.1%
8.6%	2,767	2,772	5	0.2%
9.9%	1,823	1,823	0	0.0%
11.1%	941	806	-135	-14.4%
12.3%	589	300	-289	-49.1%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,388	1,514	126	9.1%
1.2%	1,243	1,388	145	11.7%
2.5%	953	1,243	290	30.4%
3.7%	600	953	353	58.8%
4.9%	600	600	0	0.0%
6.2%	600	600	0	0.0%
7.4%	600	600	0	0.0%
8.6%	600	600	0	0.0%
9.9%	540	600	60	11.1%
11.1%	540	540	0	0.0%
12.3%	540	540	0	0.0%
13.6%	540	540	0	0.0%
14.8%	540	540	0	0.0%
16.0%	540	540	0	0.0%
17.3%	540	540	0	0.0%
18.5%	540	540	0	0.0%
19.8%	540	540	0	0.0%
21.0%	540	540	0	0.0%
22.2%	540	540	0	0.0%
23.5%	540	540	0	0.0%
24.7%	540	540	0	0.0%
25.9%	540	540	0	0.0%
27.2%	540	540	0	0.0%
28.4%	540	540	0	0.0%
29.6%	540	540	0	0.0%
30.9%	540	540	0	0.0%
32.1%	540	540	0	0.0%
33.3%	540	540	0	0.0%
34.6%	540	540	0	0.0%
35.8%	540	540	0	0.0%
37.0%	540	540	0	0.0%
38.3%	540	540	0	0.0%
39.5%	540	540	0	0.0%
40.7%	493	540	47	9.5%
42.0%	493	493	0	0.0%
43.2%	493	493	0	0.0%
44.4%	493	493	0	0.0%
45.7%	493	493	0	0.0%
46.9%	493	493	0	0.0%
48.1%	493	493	0	0.0%
49.4%	493	493	0	0.0%
50.6%	493	493	0	0.0%
51.9%	493	493	0	0.0%
53.1%	493	493	0	0.0%
54.3%	493	493	0	0.0%
55.6%	493	493	0	0.0%
56.8%	493	493	0	0.0%
58.0%	460	493	33	7.2%
59.3%	460	460	0	0.0%
60.5%	460	460	0	0.0%
61.7%	460	460	0	0.0%
63.0%	460	460	0	0.0%
64.2%	460	460	0	0.0%
65.4%	460	460	0	0.0%
66.7%	460	460	0	0.0%
67.9%	460	460	0	0.0%
69.1%	460	460	0	0.0%
70.4%	460	460	0	0.0%
71.6%	460	460	0	0.0%
72.8%	460	460	0	0.0%
74.1%	460	460	0	0.0%
75.3%	460	460	0	0.0%
76.5%	460	460	0	0.0%
77.8%	460	460	0	0.0%
79.0%	460	460	0	0.0%
80.2%	460	460	0	0.0%
81.5%	460	460	0	0.0%
82.7%	460	460	0	0.0%
84.0%	460	460	0	0.0%
85.2%	460	460	0	0.0%
86.4%	460	460	0	0.0%
87.7%	460	460	0	0.0%
88.9%	460	460	0	0.0%
90.1%	460	460	0	0.0%
91.4%	460	460	0	0.0%
92.6%	460	460	0	0.0%
93.8%	427	427	0	0.0%
95.1%	427	427	0	0.0%
96.3%	427	427	0	0.0%
97.5%	427	427	0	0.0%
98.8%	427	427	0	0.0%
100.0%	427	427	0	0.0%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,709	4,709	0	0.0%
1.2%	4,709	4,709	0	0.0%
2.5%	4,709	4,709	0	0.0%
3.7%	4,709	4,709	0	0.0%
4.9%	4,709	4,709	0	0.0%
6.2%	4,709	4,709	0	0.0%
7.4%	4,709	4,709	0	0.0%
8.6%	4,709	4,709	0	0.0%
9.9%	4,709	4,709	0	0.0%
11.1%	4,709	4,709	0	0.0%
12.3%	4,709	4,709	0	0.0%
13.6%	4,709	4,709	0	0.0%
14.8%	4,709	4,709	0	0.0%
16.0%	4,709	4,709	0	0.0%
17.3%	4,709	4,709	0	0.0%
18.5%	4,709	4,709	0	0.0%
19.8%	4,709	4,709	0	0.0%
21.0%	4,709	4,709	0	0.0%
22.2%	4,709	4,709	0	0.0%
23.5%	4,709	4,709	0	0.0%
24.7%	4,709	4,709	0	0.0%
25.9%	4,709	4,709	0	0.0%
27.2%	4,709	4,709	0	0.0%
28.4%	4,709	4,709	0	0.0%
29.6%	4,709	4,709	0	0.0%
30.9%	4,709	4,709	0	0.0%
32.1%	4,709	4,709	0	0.0%
33.3%	4,709	4,709	0	0.0%
34.6%	4,709	4,709	0	0.0%
35.8%	4,709	4,709	0	0.0%
37.0%	4,570	4,570	0	0.0%
38.3%	4,570	4,570	0	0.0%
39.5%	4,570	4,570	0	0.0%
40.7%	4,570	4,570	0	0.0%
42.0%	4,570	4,570	0	0.0%
43.2%	4,570	4,570	0	0.0%
44.4%	4,570	4,570	0	0.0%
45.7%	4,570	4,570	0	0.0%
46.9%	4,189	4,189	0	0.0%
48.1%	4,189	4,189	0	0.0%
49.4%	4,189	4,189	0	0.0%
50.6%	4,189	4,189	0	0.0%
51.9%	4,189	4,189	0	0.0%
53.1%	4,189	4,189	0	0.0%
54.3%	4,189	4,189	0	0.0%
55.6%	4,189	4,189	0	0.0%
56.8%	4,189	4,189	0	0.0%
58.0%	4,189	4,189	0	0.0%
59.3%	4,189	4,189	0	0.0%
60.5%	4,189	4,189	0	0.0%
61.7%	4,189	4,189	0	0.0%
63.0%	4,189	4,189	0	0.0%
64.2%	2,924	2,924	0	0.0%
65.4%	2,924	2,924	0	0.0%
66.7%	2,924	2,924	0	0.0%
67.9%	2,924	2,924	0	0.0%
69.1%	2,924	2,924	0	0.0%
70.4%	2,924	2,924	0	0.0%
71.6%	2,924	2,924	0	0.0%
72.8%	2,924	2,924	0	0.0%
74.1%	2,924	2,924	0	0.0%
75.3%	2,924	2,924	0	0.0%
76.5%	2,924	2,924	0	0.0%
77.8%	2,924	2,924	0	0.0%
79.0%	2,924	2,924	0	0.0%
80.2%	2,924	2,924	0	0.0%
81.5%	2,924	2,924	0	0.0%
82.7%	2,924	2,924	0	0.0%
84.0%	2,924	2,924	0	0.0%
85.2%	2,924	2,924	0	0.0%
86.4%	2,924	2,924	0	0.0%
87.7%	2,924	2,924	0	0.0%
88.9%	2,924	2,924	0	0.0%
90.1%	2,924	2,924	0	0.0%
91.4%	2,924	2,924	0	0.0%
92.6%	2,924	2,924	0	0.0%
93.8%	2,924	2,924	0	0.0%
95.1%	1,498	1,498	0	0.0%
96.3%	1,498	1,498	0	0.0%
97.5%	1,498	1,498	0	0.0%
98.8%	1,498	1,498	0	0.0%
100.0%	1,498	1,498	0	0.0%

Table SW-04-b

Trinity River below Lewiston Reservoir, Monthly Flow

Probability of Exceedance

June					July					August					September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,626	4,626	0	0.0%	0.0%	1,102	1,102	0	0.0%	0.0%	450	450	0	0.0%	0.0%	450	450	0	0.0%
1.2%	4,626	4,626	0	0.0%	1.2%	1,102	1,102	0	0.0%	1.2%	450	450	0	0.0%	1.2%	450	450	0	0.0%
2.5%	4,626	4,626	0	0.0%	2.5%	1,102	1,102	0	0.0%	2.5%	450	450	0	0.0%	2.5%	450	450	0	0.0%
3.7%	4,626	4,626	0	0.0%	3.7%	1,102	1,102	0	0.0%	3.7%	450	450	0	0.0%	3.7%	450	450	0	0.0%
4.9%	4,626	4,626	0	0.0%	4.9%	1,102	1,102	0	0.0%	4.9%	450	450	0	0.0%	4.9%	450	450	0	0.0%
6.2%	4,626	4,626	0	0.0%	6.2%	1,102	1,102	0	0.0%	6.2%	450	450	0	0.0%	6.2%	450	450	0	0.0%
7.4%	4,626	4,626	0	0.0%	7.4%	1,102	1,102	0	0.0%	7.4%	450	450	0	0.0%	7.4%	450	450	0	0.0%
8.6%	4,626	4,626	0	0.0%	8.6%	1,102	1,102	0	0.0%	8.6%	450	450	0	0.0%	8.6%	450	450	0	0.0%
9.9%	2,526	2,526	0	0.0%	9.9%	1,102	1,102	0	0.0%	9.9%	450	450	0	0.0%	9.9%	450	450	0	0.0%
11.1%	2,526	2,526	0	0.0%	11.1%	1,102	1,102	0	0.0%	11.1%	450	450	0	0.0%	11.1%	450	450	0	0.0%
12.3%	2,526	2,526	0	0.0%	12.3%	1,102	1,102	0	0.0%	12.3%	450	450	0	0.0%	12.3%	450	450	0	0.0%
13.6%	2,526	2,526	0	0.0%	13.6%	1,102	1,102	0	0.0%	13.6%	450	450	0	0.0%	13.6%	450	450	0	0.0%
14.8%	2,526	2,526	0	0.0%	14.8%	1,102	1,102	0	0.0%	14.8%	450	450	0	0.0%	14.8%	450	450	0	0.0%
16.0%	2,526	2,526	0	0.0%	16.0%	1,102	1,102	0	0.0%	16.0%	450	450	0	0.0%	16.0%	450	450	0	0.0%
17.3%	2,526	2,526	0	0.0%	17.3%	1,102	1,102	0	0.0%	17.3%	450	450	0	0.0%	17.3%	450	450	0	0.0%
18.5%	2,526	2,526	0	0.0%	18.5%	1,102	1,102	0	0.0%	18.5%	450	450	0	0.0%	18.5%	450	450	0	0.0%
19.8%	2,526	2,526	0	0.0%	19.8%	1,102	1,102	0	0.0%	19.8%	450	450	0	0.0%	19.8%	450	450	0	0.0%
21.0%	2,526	2,526	0	0.0%	21.0%	1,102	1,102	0	0.0%	21.0%	450	450	0	0.0%	21.0%	450	450	0	0.0%
22.2%	2,526	2,526	0	0.0%	22.2%	1,102	1,102	0	0.0%	22.2%	450	450	0	0.0%	22.2%	450	450	0	0.0%
23.5%	2,526	2,526	0	0.0%	23.5%	1,102	1,102	0	0.0%	23.5%	450	450	0	0.0%	23.5%	450	450	0	0.0%
24.7%	2,526	2,526	0	0.0%	24.7%	1,102	1,102	0	0.0%	24.7%	450	450	0	0.0%	24.7%	450	450	0	0.0%
25.9%	2,526	2,526	0	0.0%	25.9%	1,102	1,102	0	0.0%	25.9%	450	450	0	0.0%	25.9%	450	450	0	0.0%
27.2%	2,526	2,526	0	0.0%	27.2%	1,102	1,102	0	0.0%	27.2%	450	450	0	0.0%	27.2%	450	450	0	0.0%
28.4%	2,526	2,526	0	0.0%	28.4%	1,102	1,102	0	0.0%	28.4%	450	450	0	0.0%	28.4%	450	450	0	0.0%
29.6%	2,526	2,526	0	0.0%	29.6%	1,102	1,102	0	0.0%	29.6%	450	450	0	0.0%	29.6%	450	450	0	0.0%
30.9%	2,526	2,526	0	0.0%	30.9%	1,102	1,102	0	0.0%	30.9%	450	450	0	0.0%	30.9%	450	450	0	0.0%
32.1%	2,526	2,526	0	0.0%	32.1%	1,102	1,102	0	0.0%	32.1%	450	450	0	0.0%	32.1%	450	450	0	0.0%
33.3%	2,526	2,526	0	0.0%	33.3%	1,102	1,102	0	0.0%	33.3%	450	450	0	0.0%	33.3%	450	450	0	0.0%
34.6%	2,526	2,526	0	0.0%	34.6%	1,102	1,102	0	0.0%	34.6%	450	450	0	0.0%	34.6%	450	450	0	0.0%
35.8%	2,526	2,526	0	0.0%	35.8%	1,102	1,102	0	0.0%	35.8%	450	450	0	0.0%	35.8%	450	450	0	0.0%
37.0%	2,526	2,526	0	0.0%	37.0%	1,102	1,102	0	0.0%	37.0%	450	450	0	0.0%	37.0%	450	450	0	0.0%
38.3%	2,526	2,526	0	0.0%	38.3%	1,102	1,102	0	0.0%	38.3%	450	450	0	0.0%	38.3%	450	450	0	0.0%
39.5%	2,526	2,526	0	0.0%	39.5%	1,102	1,102	0	0.0%	39.5%	450	450	0	0.0%	39.5%	450	450	0	0.0%
40.7%	2,526	2,526	0	0.0%	40.7%	1,102	1,102	0	0.0%	40.7%	450	450	0	0.0%	40.7%	450	450	0	0.0%
42.0%	2,526	2,526	0	0.0%	42.0%	1,102	1,102	0	0.0%	42.0%	450	450	0	0.0%	42.0%	450	450	0	0.0%
43.2%	2,526	2,526	0	0.0%	43.2%	1,102	1,102	0	0.0%	43.2%	450	450	0	0.0%	43.2%	450	450	0	0.0%
44.4%	2,526	2,526	0	0.0%	44.4%	1,102	1,102	0	0.0%	44.4%	450	450	0	0.0%	44.4%	450	450	0	0.0%
45.7%	2,526	2,526	0	0.0%	45.7%	1,102	1,102	0	0.0%	45.7%	450	450	0	0.0%	45.7%	450	450	0	0.0%
46.9%	2,120	2,120	0	0.0%	46.9%	1,102	1,102	0	0.0%	46.9%	450	450	0	0.0%	46.9%	450	450	0	0.0%
48.1%	2,120	2,120	0	0.0%	48.1%	1,102	1,102	0	0.0%	48.1%	450	450	0	0.0%	48.1%	450	450	0	0.0%
49.4%	2,120	2,120	0	0.0%	49.4%	1,102	1,102	0	0.0%	49.4%	450	450	0	0.0%	49.4%	450	450	0	0.0%
50.6%	2,120	2,120	0	0.0%	50.6%	1,102	1,102	0	0.0%	50.6%	450	450	0	0.0%	50.6%	450	450	0	0.0%
51.9%	2,120	2,120	0	0.0%	51.9%	1,102	1,102	0	0.0%	51.9%	450	450	0	0.0%	51.9%	450	450	0	0.0%
53.1%	2,120	2,120	0	0.0%	53.1%	1,102	1,102	0	0.0%	53.1%	450	450	0	0.0%	53.1%	450	450	0	0.0%
54.3%	2,120	2,120	0	0.0%	54.3%	1,102	1,102	0	0.0%	54.3%	450	450	0	0.0%	54.3%	450	450	0	0.0%
55.6%	2,120	2,120	0	0.0%	55.6%	1,102	1,102	0	0.0%	55.6%	450	450	0	0.0%	55.6%	450	450	0	0.0%
56.8%	2,120	2,120	0	0.0%	56.8%	1,102	1,102	0	0.0%	56.8%	450	450	0	0.0%	56.8%	450	450	0	0.0%
58.0%	2,120	2,120	0	0.0%	58.0%	1,102	1,102	0	0.0%	58.0%	450	450	0	0.0%	58.0%	450	450	0	0.0%
59.3%	2,120	2,120	0	0.0%	59.3%	1,102	1,102	0	0.0%	59.3%	450	450	0	0.0%	59.3%	450	450	0	0.0%
60.5%	2,120	2,120	0	0.0%	60.5%	1,102	1,102	0	0.0%	60.5%	450	450	0	0.0%	60.5%	450	450	0	0.0%
61.7%	2,120	2,120	0	0.0%	61.7%	1,102	1,102	0	0.0%	61.7%	450	450	0	0.0%	61.7%	450	450	0	0.0%
63.0%	2,120	2,120	0	0.0%	63.0%	1,102	1,102	0	0.0%	63.0%	450	450	0	0.0%	63.0%	450	450	0	0.0%
64.2%	783	783	0	0.0%	64.2%	450	450	0	0.0%	64.2%	450	450	0	0.0%	64.2%	450	450	0	0.0%
65.4%	783	783	0	0.0%	65.4%	450	450	0	0.0%	65.4%	450	450	0	0.0%	65.4%	450	450	0	0.0%
66.7%	783	783	0	0.0%	66.7%	450	450	0	0.0%	66.7%	450	450	0	0.0%	66.7%	450	450	0	0.0%
67.9%	783	783	0	0.0%	67.9%	450	450	0	0.0%	67.9%	450	450	0	0.0%	67.9%	450	450	0	0.0%
69.1%	783	783	0	0.0%	69.1%	450	450	0	0.0%	69.1%	450	450	0	0.0%	69.1%	450	450	0	0.0%
70.4%	783	783	0	0.0%	70.4%	450	450	0	0.0%	70.4%	450	450	0	0.0%	70.4%	450	450	0	0.0%
71.6%	783	783	0	0.0%	71.6%	450	450	0	0.0%	71.6%	450	450	0	0.0%	71.6%	450	450	0	0.0%
72.8%	783	783	0	0.0%	72.8%	450	450	0	0.0%	72.8%	450	450	0	0.0%	72.8%	450	450	0	0.0%
74.1%	783	783	0	0.0%	74.1%	450	450	0	0.0%	74.1%	450	450	0	0.0%	74.1%	450	450	0	0.0%
75.3%	783	783	0	0.0%	75.3%	450	450	0	0.0%	75.3%	450	450	0	0.0%	75.3%	450	450	0	0.0%
76.5%	783	783	0	0.0%	76.5%	450	450	0	0.0%	76.5%	450	450	0	0.0%	76.5%	450	450	0	0.0%
77.8%	783	783	0	0.0%	77.8%	450	450	0	0.0%	77.8%	450	450	0	0.0%	77.8%	450	450	0	0.0%
79.0%	783	783	0	0.0%	79.0%	450	450	0	0.0%	79.0%	450	450	0	0.0%	79.0%	450	450	0	0.0%
80.2%	783	783	0	0.0%	80.2%	450	450	0	0.0%	80.2%	450	450	0	0.0%	80.2%	450	450	0	0.0%
81.5%	783	783	0	0.0%	81.5%	450	450	0	0.0%	81.5%	450	450	0	0.0%	81.5%	450	450	0	0.0%
82.7%	783	783	0	0.0%	82.7%	450	450	0	0.0%	82.7%	450	450	0	0.0%	82.7%	450	450	0	0.0%
84.0%	783	783	0	0.0%	84.0%	450	450	0	0.0%	84.0%	450	450	0	0.0%	84.0%	450	450	0	0.0%
85.2%	783	783	0	0.0%	85.2%	450	450	0	0.0%	85.2%	450	450	0	0.0%	85.2%	450	450	0	0.0%
86.4%	783	783	0	0.0%	86.4%	450	450	0	0.0%	86.4%	450	450	0	0.0%	86.4%	450	450	0	0.0%
87.7%	783	783	0	0.0%	87.7%	450	450	0	0.0%	87.7%	450	450	0	0.0%	87.7%	450	450	0	0.0%
88.9%	783	783	0	0.0%	88.9%	450	450	0	0.0%	88.9%	450	450	0	0.0%	88.9%	450	450	0	0.0%
90.1%	783	783	0	0.0%	90.1%	450	450	0	0.0%	90.1%	450	450	0	0.0%	90.1%	450	450	0	0.0%
91.4%	783	783	0	0.0%	91.4%	450	450	0	0.0%	91.4%	450	450	0	0.0%	91.4%	450	450	0	0.0%
92.6%	783	783	0	0.0%	92.6%	450	450	0	0.0%	92.6%	450	450	0	0.0%	92.6%	450	450	0	0.0%
93.8%	783	783	0	0.0%	93.8%	450	450	0	0.0%	93.8%	450	450	0	0.0%	93.8%	450	450	0	0.0%
95.1%	783	783	0	0.0%	95.1%	450	450	0	0.0%	95.1%	450	450	0	0.0%	95.1%	450	450	0	0.0%
96.3%	783	783	0	0.0%	96.3%	450	450	0	0.0%	96.3%	450	450	0	0.0%	96.3%	450	450	0	0.0%
97.5%	783	783	0	0.0%	97.5%	450	450	0	0.0%	97.5%	450	450	0	0.0%	97.5%	450	450	0	0.0%
98.8%	783	783	0	0.0%	98.8%	450	450	0	0.0%	98.8%	450	450	0	0.0%	98.8%	450	450	0	0.0%
100.0%	783	783	0	0.0%	100.0%	450	450	0	0.0%	100.0%	450	450	0	0.0%	100.0%	450	450	0	0.0%

Figure SW-05-b
Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

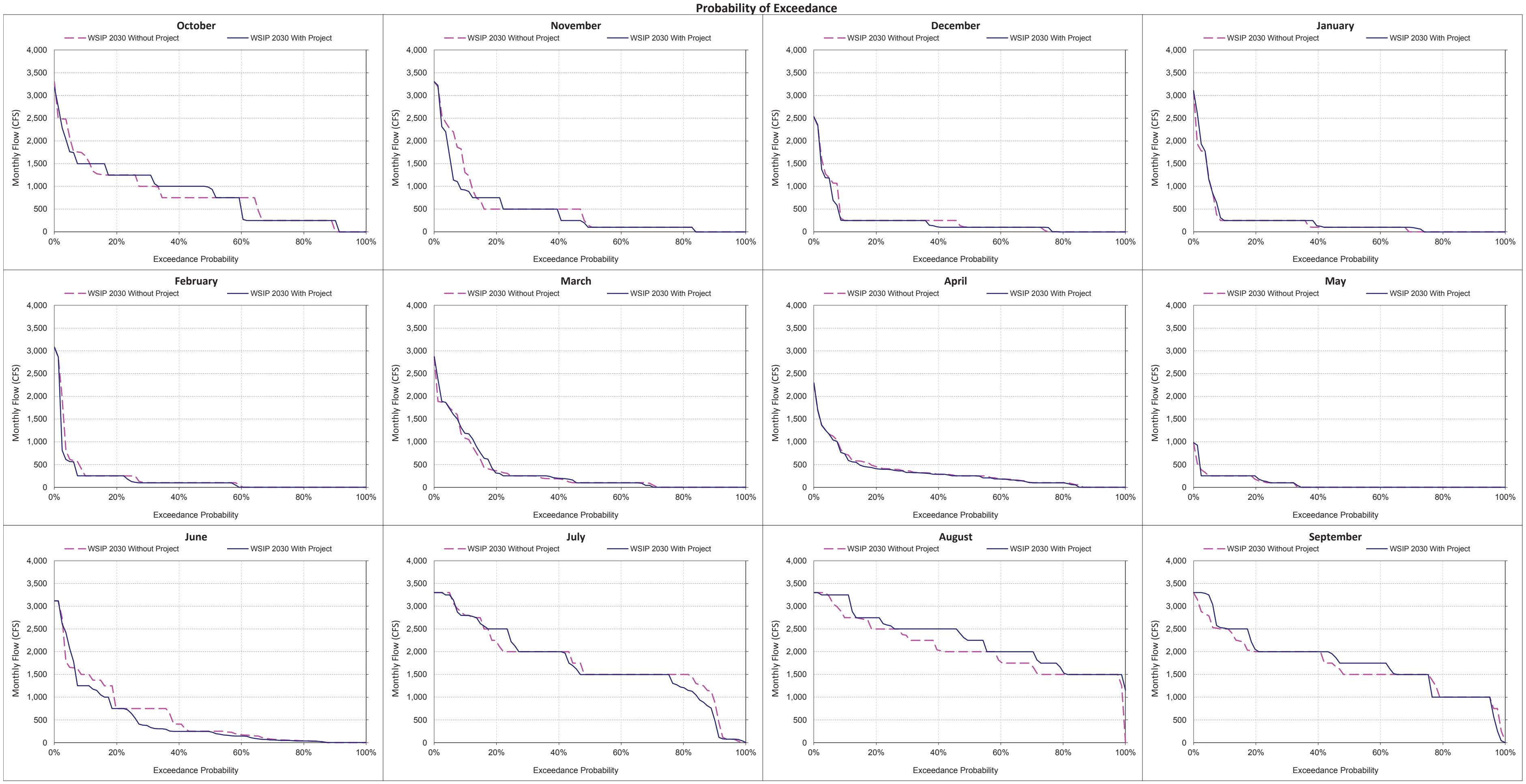


Table SW-05-b

Clear Creek Tunnel, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,175	-125	-3.8%
1.2%	2,500	2,750	250	10.0%
2.5%	2,485	2,288	-197	-7.9%
3.7%	2,480	2,042	-438	-17.7%
4.9%	2,070	1,761	-309	-14.9%
6.2%	1,761	1,746	-15	-0.8%
7.4%	1,758	1,500	-258	-14.7%
8.6%	1,746	1,500	-246	-14.1%
9.9%	1,674	1,500	-174	-10.4%
11.1%	1,533	1,500	-33	-2.2%
12.3%	1,335	1,500	165	12.4%
13.6%	1,279	1,500	221	17.3%
14.8%	1,262	1,500	238	18.8%
16.0%	1,250	1,500	250	20.0%
17.3%	1,250	1,250	0	0.0%
18.5%	1,250	1,250	0	0.0%
19.8%	1,250	1,250	0	0.0%
21.0%	1,250	1,250	0	0.0%
22.2%	1,250	1,250	0	0.0%
23.5%	1,250	1,250	0	0.0%
24.7%	1,250	1,250	0	0.0%
25.9%	1,250	1,250	0	0.0%
27.2%	1,000	1,250	250	25.0%
28.4%	1,000	1,250	250	25.0%
29.6%	1,000	1,250	250	25.0%
30.9%	1,000	1,250	250	25.0%
32.1%	1,000	1,057	57	5.7%
33.3%	985	1,000	15	1.5%
34.6%	750	1,000	250	33.3%
35.8%	750	1,000	250	33.3%
37.0%	750	1,000	250	33.3%
38.3%	750	1,000	250	33.3%
39.5%	750	1,000	250	33.3%
40.7%	750	1,000	250	33.3%
42.0%	750	1,000	250	33.3%
43.2%	750	1,000	250	33.3%
44.4%	750	1,000	250	33.3%
45.7%	750	1,000	250	33.3%
46.9%	750	1,000	250	33.3%
48.1%	750	1,000	250	33.3%
49.4%	750	983	233	31.1%
50.6%	750	934	184	24.6%
51.9%	750	750	0	0.0%
53.1%	750	750	0	0.0%
54.3%	750	750	0	0.0%
55.6%	750	750	0	0.0%
56.8%	750	750	0	0.0%
58.0%	750	750	0	0.0%
59.3%	750	750	0	0.0%
60.5%	750	272	-478	-63.7%
61.7%	750	250	-500	-66.7%
63.0%	750	250	-500	-66.7%
64.2%	750	250	-500	-66.7%
65.4%	460	250	-210	-45.7%
66.7%	250	250	0	0.0%
67.9%	250	250	0	0.0%
69.1%	250	250	0	0.0%
70.4%	250	250	0	0.0%
71.6%	250	250	0	0.0%
72.8%	250	250	0	0.0%
74.1%	250	250	0	0.0%
75.3%	250	250	0	0.0%
76.5%	250	250	0	0.0%
77.8%	250	250	0	0.0%
79.0%	250	250	0	0.0%
80.2%	250	250	0	0.0%
81.5%	250	250	0	0.0%
82.7%	250	250	0	0.0%
84.0%	250	250	0	0.0%
85.2%	250	250	0	0.0%
86.4%	250	250	0	0.0%
87.7%	250	250	0	0.0%
88.9%	250	250	0	0.0%
90.1%	0	250	250	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,192	3,219	27	0.8%
2.5%	2,554	2,313	-241	-9.4%
3.7%	2,404	2,200	-204	-8.5%
4.9%	2,273	1,671	-602	-26.5%
6.2%	2,200	1,140	-1,061	-48.2%
7.4%	1,861	1,105	-757	-40.7%
8.6%	1,825	933	-893	-48.9%
9.9%	1,307	923	-384	-29.4%
11.1%	1,235	887	-348	-28.2%
12.3%	923	750	-173	-18.8%
13.6%	742	750	8	1.1%
14.8%	696	750	54	7.8%
16.0%	500	750	250	50.0%
17.3%	500	750	250	50.0%
18.5%	500	750	250	50.0%
19.8%	500	750	250	50.0%
21.0%	500	750	250	50.0%
22.2%	500	500	0	0.0%
23.5%	500	500	0	0.0%
24.7%	500	500	0	0.0%
25.9%	500	500	0	0.0%
27.2%	500	500	0	0.0%
28.4%	500	500	0	0.0%
29.6%	500	500	0	0.0%
30.9%	500	500	0	0.0%
32.1%	500	500	0	0.0%
33.3%	500	500	0	0.0%
34.6%	500	500	0	0.0%
35.8%	500	500	0	0.0%
37.0%	500	500	0	0.0%
38.3%	500	500	0	0.0%
39.5%	500	500	0	0.0%
40.7%	500	250	-250	-50.0%
42.0%	500	250	-250	-50.0%
43.2%	500	250	-250	-50.0%
44.4%	500	250	-250	-50.0%
45.7%	500	250	-250	-50.0%
46.9%	500	250	-250	-50.0%
48.1%	250	198	-52	-21.0%
49.4%	147	100	-47	-32.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	100	0	0.0%
67.9%	100	100	0	0.0%
69.1%	100	100	0	0.0%
70.4%	100	100	0	0.0%
71.6%	100	100	0	0.0%
72.8%	100	100	0	0.0%
74.1%	100	100	0	0.0%
75.3%	100	100	0	0.0%
76.5%	100	100	0	0.0%
77.8%	100	100	0	0.0%
79.0%	100	100	0	0.0%
80.2%	100	100	0	0.0%
81.5%	100	100	0	0.0%
82.7%	100	100	0	0.0%
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,530	2,530	0	0.0%
1.2%	2,329	2,353	23	1.0%
2.5%	1,617	1,372	-245	-15.2%
3.7%	1,278	1,188	-90	-7.1%
4.9%	1,187	1,187	0	0.0%
6.2%	1,072	696	-376	-35.1%
7.4%	1,067	585	-482	-45.2%
8.6%	299	256	-42	-14.2%
9.9%	250	250	0	0.0%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	250	250	0	0.0%
28.4%	250	250	0	0.0%
29.6%	250	250	0	0.0%
30.9%	250	250	0	0.0%
32.1%	250	250	0	0.0%
33.3%	250	250	0	0.0%
34.6%	250	250	0	0.0%
35.8%	250	250	0	0.0%
37.0%	250	144	-106	-42.5%
38.3%	250	134	-116	-46.3%
39.5%	250	109	-141	-56.3%
40.7%	250	102	-148	-59.3%
42.0%	250	100	-150	-60.0%
43.2%	250	100	-150	-60.0%
44.4%	250	100	-150	-60.0%
45.7%	250	100	-150	-60.0%
46.9%	134	100	-34	-25.5%
48.1%	109	100	-9	-8.4%
49.4%	102	100	-2	-1.7%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	100	0	0.0%
67.9%	100	100	0	0.0%
69.1%	100	100	0	0.0%
70.4%	100	100	0	0.0%
71.6%	100	100	0	0.0%
72.8%	95	100	5	5.3%
74.1%	32	100	68	213.9%
75.3%	0	95	95	
76.5%	0	3	3	
77.8%	0	2	2	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,109	3,109	0	0.0%
1.2%	1,933	2,598	666	34.4%
2.5%	1,779	1,933	154	8.7%
3.7%	1,771	1,771	0	0.0%
4.9%	1,158	1,158	0	0.0%
6.2%	845	845	0	0.0%
7.4%	375	646	271	72.4%
8.6%	250	314	64	25.5%
9.9%	250	250	0	0.0%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	250	250	0	0.0%
28.4%	250	250	0	0.0%
29.6%	250	250	0	0.0%
30.9%	250	250	0	0.0%
32.1%	250	250	0	0.0%
33.3%	250	250	0	0.0%
34.6%	250	250	0	0.0%
35.8%	250	250	0	0.0%
37.0%	109	250	141	128.8%
38.3%	100	250	150	150.0%
39.5%	100	134	34	33.8%
40.7%	100	125	25	25.0%
42.0%	100	100	0	0.0%
43.2%	100	100	0	0.0%
44.4%	100	100	0	0.0%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	100	0	0.0%
67.9%	93	100	7	7.2%
69.1%	0	100	100	
70.4%	0	93	93	
71.6%	0	76	76	
72.8%	0	58	58	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-05-b

Clear Creek Tunnel, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,081	3,081	0	0.0%
1.2%	2,862	2,862	0	0.0%
2.5%	1,988	811	-1,177	-59.2%
3.7%	811	613	-197	-24.3%
4.9%	613	566	-48	-7.8%
6.2%	585	560	-25	-4.2%
7.4%	566	250	-316	-55.8%
8.6%	409	250	-159	-38.9%
9.9%	250	250	0	0.0%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	178	-72	-28.7%
24.7%	250	128	-122	-48.9%
25.9%	250	109	-141	-56.2%
27.2%	128	100	-28	-21.7%
28.4%	109	100	-9	-8.7%
29.6%	100	100	0	0.0%
30.9%	100	100	0	0.0%
32.1%	100	100	0	0.0%
33.3%	100	100	0	0.0%
34.6%	100	100	0	0.0%
35.8%	100	100	0	0.0%
37.0%	100	100	0	0.0%
38.3%	100	100	0	0.0%
39.5%	100	100	0	0.0%
40.7%	100	100	0	0.0%
42.0%	100	100	0	0.0%
43.2%	100	100	0	0.0%
44.4%	100	100	0	0.0%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	53	-47	-46.6%
59.3%	53	0	-53	-100.0%
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,871	2,871	0	0.0%
1.2%	1,888	2,381	493	26.1%
2.5%	1,871	1,888	16	0.9%
3.7%	1,867	1,867	0	0.0%
4.9%	1,748	1,732	-16	-0.9%
6.2%	1,669	1,599	-70	-4.2%
7.4%	1,599	1,503	-95	-6.0%
8.6%	1,176	1,317	141	12.0%
9.9%	1,082	1,185	103	9.5%
11.1%	1,050	1,176	127	12.1%
12.3%	891	1,059	168	18.9%
13.6%	751	891	140	18.6%
14.8%	618	751	133	21.5%
16.0%	427	640	213	49.8%
17.3%	407	618	211	51.8%
18.5%	383	427	44	11.6%
19.8%	363	317	-46	-12.6%
21.0%	352	305	-47	-13.2%
22.2%	318	250	-68	-21.5%
23.5%	305	250	-55	-18.1%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	250	250	0	0.0%
28.4%	250	250	0	0.0%
29.6%	250	250	0	0.0%
30.9%	250	250	0	0.0%
32.1%	250	250	0	0.0%
33.3%	243	250	7	3.0%
34.6%	202	250	48	23.8%
35.8%	192	250	58	30.0%
37.0%	189	243	54	28.4%
38.3%	188	211	23	12.5%
39.5%	186	202	16	8.3%
40.7%	177	192	15	8.5%
42.0%	159	188	29	18.0%
43.2%	117	177	60	51.5%
44.4%	100	159	59	59.3%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	87	-13	-13.4%
67.9%	100	43	-57	-57.0%
69.1%	87	39	-47	-54.4%
70.4%	43	0	-43	-100.0%
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,294	2,294	0	0.0%
1.2%	1,697	1,697	0	0.0%
2.5%	1,367	1,367	0	0.0%
3.7%	1,263	1,263	0	0.0%
4.9%	1,167	1,167	0	0.0%
6.2%	1,123	1,042	-81	-7.2%
7.4%	1,042	1,011	-31	-3.0%
8.6%	829	762	-66	-8.0%
9.9%	736	736	0	0.0%
11.1%	707	587	-120	-17.0%
12.3%	587	558	-29	-4.9%
13.6%	579	546	-33	-5.7%
14.8%	576	487	-90	-15.5%
16.0%	558	458	-100	-17.9%
17.3%	546	445	-101	-18.4%
18.5%	487	436	-51	-10.5%
19.8%	458	410	-48	-10.5%
21.0%	436	401	-35	-8.1%
22.2%	410	395	-16	-3.8%
23.5%	408	394	-14	-3.3%
24.7%	401	390	-10	-2.6%
25.9%	394	369	-25	-6.4%
27.2%	390	361	-30	-7.6%
28.4%	369	358	-11	-3.0%
29.6%	361	328	-33	-9.2%
30.9%	358	325	-33	-9.2%
32.1%	328	319	-8	-2.5%
33.3%	325	318	-7	-2.2%
34.6%	319	312	-7	-2.2%
35.8%	318	311	-7	-2.3%
37.0%	312	302	-10	-3.3%
38.3%	311	288	-23	-7.3%
39.5%	286	286	0	0.0%
40.7%	285	285	0	0.0%
42.0%	284	284	0	0.0%
43.2%	281	271	-10	-3.5%
44.4%	271	250	-21	-7.9%
45.7%	250	250	0	0.0%
46.9%	250	250	0	0.0%
48.1%	250	250	0	0.0%
49.4%	250	250	0	0.0%
50.6%	250	250	0	0.0%
51.9%	250	250	0	0.0%
53.1%	250	248	-2	-0.9%
54.3%	250	209	-41	-16.6%
55.6%	248	208	-40	-16.1%
56.8%	209	205	-3	-1.6%
58.0%	208	185	-22	-10.8%
59.3%	185	183	-2	-1.1%
60.5%	183	178	-6	-3.1%
61.7%	178	176	-2	-1.1%
63.0%	176	161	-14	-8.2%
64.2%	161	160	-2	-0.9%
65.4%	160	144	-15	-9.6%
66.7%	144	143	-1	-0.8%
67.9%	143	125	-18	-12.6%
69.1%	106	106	0	0.0%
70.4%	100	100	0	0.0%
71.6%	100	100	0	0.0%
72.8%	100	100	0	0.0%
74.1%	100	100	0	0.0%
75.3%	100	100	0	0.0%
76.5%	100	100	0	0.0%
77.8%	100	100	0	0.0%
79.0%	100	100	0	0.0%
80.2%	100	100	0	0.0%
81.5%	100	81	-19	-19.0%
82.7%	81	58	-23	-28.9%
84.0%	58	51	-6	-10.6%
85.2%	55	0	-55	-100.0%
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	983	983	0	0.0%
1.2%	522	922	401	76.7%
2.5%	387	250	-137	-35.4%
3.7%	327	250	-77	-23.4%
4.9%	250	250	0	0.0%
6.2%	250	250	0	0.0%
7.4%	250	250	0	0.0%
8.6%	250	250	0	0.0%
9.9%	250	250	0	0.0%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	177	250	73	41.5%
21.0%	142	177	35	24.7%
22.2%	126	142	16	12.7%
23.5%	100	126	26	25.7%
24.7%	100	100	0	0.0%
25.9%	100	100	0	0.0%
27.2%	100	100	0	0.0%
28.4%	100	100	0	0.0%
29.6%	100	100	0	0.0%
30.9%	100	100	0	0.0%
32.1%	100	100	0	0.0%
33.3%	0	39	39	
34.6%	0	0	0	
35.8%	0	0	0	
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-05-b
Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,121	3,121	0	0.0%
1.2%	3,120	3,120	0	0.0%
2.5%	2,752	2,613	-138	-5.0%
3.7%	1,784	2,427	643	36.0%
4.9%	1,654	2,067	413	25.0%
6.2%	1,647	1,784	137	8.3%
7.4%	1,627	1,250	-377	-23.2%
8.6%	1,500	1,250	-250	-16.7%
9.9%	1,500	1,250	-250	-16.7%
11.1%	1,500	1,250	-250	-16.7%
12.3%	1,374	1,179	-196	-14.2%
13.6%	1,374	1,150	-224	-16.3%
14.8%	1,374	1,055	-319	-23.2%
16.0%	1,250	1,000	-250	-20.0%
17.3%	1,250	999	-251	-20.1%
18.5%	1,250	750	-500	-40.0%
19.8%	750	750	0	0.0%
21.0%	750	750	0	0.0%
22.2%	750	750	0	0.0%
23.5%	750	720	-30	-4.0%
24.7%	750	641	-109	-14.5%
25.9%	750	538	-212	-28.3%
27.2%	750	407	-343	-45.7%
28.4%	750	383	-367	-48.9%
29.6%	750	378	-372	-49.7%
30.9%	750	334	-416	-55.4%
32.1%	750	313	-437	-58.3%
33.3%	750	303	-447	-59.6%
34.6%	750	303	-447	-59.7%
35.8%	750	292	-458	-61.0%
37.0%	631	252	-379	-60.1%
38.3%	412	250	-162	-39.3%
39.5%	408	250	-158	-38.8%
40.7%	407	250	-157	-38.6%
42.0%	303	250	-53	-17.5%
43.2%	252	250	-2	-0.6%
44.4%	250	250	0	0.0%
45.7%	250	250	0	0.0%
46.9%	250	250	0	0.0%
48.1%	250	250	0	0.0%
49.4%	250	250	0	-0.2%
50.6%	250	229	-21	-8.5%
51.9%	250	196	-54	-21.4%
53.1%	250	183	-67	-26.9%
54.3%	250	167	-83	-33.2%
55.6%	234	160	-74	-31.5%
56.8%	229	152	-77	-33.7%
58.0%	196	148	-49	-24.8%
59.3%	183	145	-38	-20.8%
60.5%	168	143	-24	-14.5%
61.7%	167	137	-30	-17.8%
63.0%	158	110	-48	-30.5%
64.2%	148	93	-55	-36.9%
65.4%	143	82	-61	-42.6%
66.7%	110	70	-40	-36.0%
67.9%	93	69	-24	-25.7%
69.1%	82	60	-22	-26.9%
70.4%	70	58	-12	-17.6%
71.6%	69	54	-16	-22.6%
72.8%	60	50	-10	-16.4%
74.1%	58	49	-9	-14.8%
75.3%	54	48	-5	-10.0%
76.5%	50	40	-11	-20.9%
77.8%	48	37	-11	-22.7%
79.0%	40	36	-3	-8.7%
80.2%	37	36	-1	-3.4%
81.5%	36	36	-1	-2.2%
82.7%	36	34	-2	-5.5%
84.0%	35	33	-1	-4.3%
85.2%	34	23	-11	-32.6%
86.4%	12	12	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,300	3,300	0	0.0%
3.7%	3,300	3,250	-50	-1.5%
4.9%	3,300	3,250	-50	-1.5%
6.2%	3,066	3,133	68	2.2%
7.4%	2,952	2,876	-76	-2.6%
8.6%	2,876	2,800	-75	-2.6%
9.9%	2,800	2,800	-1	0.0%
11.1%	2,800	2,800	0	0.0%
12.3%	2,753	2,776	22	0.8%
13.6%	2,750	2,750	0	0.0%
14.8%	2,750	2,616	-134	-4.9%
16.0%	2,500	2,563	63	2.5%
17.3%	2,500	2,500	0	0.0%
18.5%	2,250	2,500	250	11.1%
19.8%	2,250	2,500	250	11.1%
21.0%	2,110	2,500	390	18.5%
22.2%	2,004	2,500	496	24.8%
23.5%	2,000	2,500	500	25.0%
24.7%	2,000	2,222	222	11.1%
25.9%	2,000	2,123	123	6.1%
27.2%	2,000	2,000	0	0.0%
28.4%	2,000	2,000	0	0.0%
29.6%	2,000	2,000	0	0.0%
30.9%	2,000	2,000	0	0.0%
32.1%	2,000	2,000	0	0.0%
33.3%	2,000	2,000	0	0.0%
34.6%	2,000	2,000	0	0.0%
35.8%	2,000	2,000	0	0.0%
37.0%	2,000	2,000	0	0.0%
38.3%	2,000	2,000	0	0.0%
39.5%	2,000	2,000	0	0.0%
40.7%	2,000	2,000	0	0.0%
42.0%	2,000	1,972	-28	-1.4%
43.2%	2,000	1,750	-250	-12.5%
44.4%	1,750	1,700	-50	-2.9%
45.7%	1,750	1,617	-133	-7.6%
46.9%	1,750	1,500	-250	-14.3%
48.1%	1,500	1,500	0	0.0%
49.4%	1,500	1,500	0	0.0%
50.6%	1,500	1,500	0	0.0%
51.9%	1,500	1,500	0	0.0%
53.1%	1,500	1,500	0	0.0%
54.3%	1,500	1,500	0	0.0%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,500	1,500	0	0.0%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,500	1,303	-197	-13.1%
77.8%	1,500	1,275	-225	-15.0%
79.0%	1,500	1,223	-277	-18.5%
80.2%	1,500	1,206	-294	-19.6%
81.5%	1,500	1,149	-351	-23.4%
82.7%	1,456	1,131	-325	-22.3%
84.0%	1,303	1,051	-252	-19.3%
85.2%	1,275	941	-334	-26.2%
86.4%	1,250	887	-363	-29.0%
87.7%	1,149	814	-335	-29.1%
88.9%	1,131	759	-372	-32.9%
90.1%	868	477	-391	-45.0%
91.4%	440	116	-324	-73.6%
92.6%	116	80	-36	-30.8%
93.8%	78	79	1	
95.1%	78	78	0	
96.3%	72	78	5	
97.5%	33	72	40	
98.8%	0	43	43	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,300	3,250	-50	-1.5%
3.7%	3,300	3,250	-50	-1.5%
4.9%	3,217	3,250	33	1.0%
6.2%	3,052	3,250	198	6.5%
7.4%	2,993	3,250	257	8.6%
8.6%	2,894	3,250	356	12.3%
9.9%	2,750	3,250	500	18.2%
11.1%	2,750	3,250	500	18.2%
12.3%	2,750	2,886	136	4.9%
13.6%	2,750	2,750	0	0.0%
14.8%	2,730	2,750	20	0.7%
16.0%	2,711	2,750	39	1.4%
17.3%	2,702	2,750	48	1.8%
18.5%	2,500	2,750	250	10.0%
19.8%	2,500	2,750	250	10.0%
21.0%	2,500	2,750	250	10.0%
22.2%	2,500	2,615	115	4.6%
23.5%	2,500	2,590	90	3.6%
24.7%	2,500	2,572	72	2.9%
25.9%	2,500	2,500	0	0.0%
27.2%	2,500	2,500	0	0.0%
28.4%	2,378	2,500	122	5.1%
29.6%	2,363	2,500	137	5.8%
30.9%	2,250	2,500	250	11.1%
32.1%	2,250	2,500	250	11.1%
33.3%	2,250	2,500	250	11.1%
34.6%	2,250	2,500	250	11.1%
35.8%	2,250	2,500	250	11.1%
37.0%	2,250	2,500	250	11.1%
38.3%	2,250	2,500	250	11.1%
39.5%	2,043	2,500	457	22.4%
40.7%	2,019	2,500	481	23.8%
42.0%	2,000	2,500	500	25.0%
43.2%	2,000	2,500	500	25.0%
44.4%	2,000	2,500	500	25.0%
45.7%	2,000	2,500	500	25.0%
46.9%	2,000	2,406	406	20.3%
48.1%	2,000	2,309	309	15.4%
49.4%	2,000	2,250	250	12.5%
50.6%	2,000	2,250	250	12.5%
51.9%	2,000	2,250	250	12.5%
53.1%	2,000	2,250	250	12.5%
54.3%	2,000	2,250	250	12.5%
55.6%	2,000	2,000	0	0.0%
56.8%	2,000	2,000	0	0.0%
58.0%	2,000	2,000	0	0.0%
59.3%	1,817	2,000	183	10.1%
60.5%	1,750	2,000	250	14.3%
61.7%	1,750	2,000	250	14.3%
63.0%	1,750	2,000	250	14.3%
64.2%	1,750	2,000	250	14.3%
65.4%	1,750	2,000	250	14.3%
66.7%	1,750	2,000	250	14.3%
67.9%	1,750	2,000	250	14.3%
69.1%	1,750	2,000	250	14.3%
70.4%	1,662	2,000	338	20.3%
71.6%	1,526	1,817	290	19.0%
72.8%	1,500	1,750	250	16.7%
74.1%	1,500	1,750	250	16.7%
75.3%	1,500	1,750	250	16.7%
76.5%	1,500	1,750	250	16.7%
77.8%	1,500	1,750	250	16.7%
79.0%	1,500	1,662	162	10.8%
80.2%	1,500	1,526	26	1.8%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,500	1,500	0	0.0%
90.1%	1,500	1,500	0	0.0%
91.4%	1,500	1,500	0	0.0%
92.6%	1,500	1,500	0	0.0%
93.8%	1,500	1,500	0	0.0%
95.1%	1,500	1,500	0	0.0%
96.3%	1,500	1,500	0	0.0%
97.5%	1,500	1,500	0	0.0%
98.8%	1,250	1,500	250	20.0%
100.0%	0	1,157	1,157	

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,150	3,300	150	4.8%
2.5%	2,883	3,300	417	14.5%
3.7%	2,832	3,285	453	16.0%
4.9%	2,787	3,250	463	16.6%
6.2%	2,529	3,039	510	20.2%
7.4%	2,518	2,574	56	2.2%
8.6%	2,500	2,529	29	1.2%
9.9%	2,500	2,518	18	0.7%
11.1%	2,500	2,500	0	0.0%
12.3%	2,406	2,500	94	3.9%
13.6%	2,255	2,500	245	10.9%
14.8%	2,234	2,500	266	11.9%
16.0%	2,216	2,500	284	12.8%
17.3%	2,033	2,500	467	23.0%
18.5%	2,029	2,218	188	9.3%
19.8%	2,000	2,059	59	2.9%
21.0%	2,000	2,000	0	0.0%
22.2%	2,000	2,000	0	0.0%
23.5%	2,000	2,000	0	0.0%
24.7%	2,000	2,000	0	0.0%
25.9%	2,000	2,000	0	0.0%
27.2%	2,000	2,000	0	0.0%
28.4%	2,000	2,000	0	0.0%
29.6%	2,000	2,000	0	0.0%
30.9%	2,000	2,000	0	0.0%
32.1%	2,000	2,000	0	0.0%
33.3%	2,000	2,000	0	0.0%
34.6%	2,000	2,000	0	0.0%
35.8%	2,000	2,000	0	0.0%
37.0%	2,000	2,000	0	0.0%
38.3%	2,000	2,000	0	0.0%
39.5%	2,000	2,000	0	0.0%
40.7%	2,000	2,000	0	0.0%
42.0%	1,753	2,000	247	14.1%
43.2%	1,750	2,000	250	14.3%
44.4%	1,750	1,956	206	11.8%
45.7%	1,674	1,867	193	11.5%
46.9%	1,617	1,750	133	8.2%
48.1%	1,500	1,750	250	16.7%
49.4%	1,500	1,750	250	16.7%
50.6%	1,500	1,750	250	16.7%
51.9%	1,500	1,750	250	16.7%
53.1%	1,500	1,750	250	16.7%
54.3%	1,500	1,750	250	16.7%
55.6%	1,500	1,750	250	16.7%
56.8%	1,500	1,750	250	16.7%
58.0%	1,500	1,750	250	16.7%
59.3%	1,500	1,750	250	16.7%
60.5%	1,500	1,750	250	16.7%
61.7%	1,500	1,750	250	16.7%
63.0%	1,500	1,630	130	8.7%
64.2%	1,500	1,522	22	1.5%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,500	0	0.0%
72.8%	1,500	1,500	0	0.0%
74.1%	1,500	1,500	0	0.0%
75.3%	1,500	1,500	0	0.0%
76.5%	1,375	1,000	-375	-27.3%
77.8%	1,241	1,000	-241	-19.4%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	1,000	1,000	0	0.0%
90.1%	1,000	1,000	0	0.0%
91.4%	1,000	1,000	0	0.0%
92.6%	1,000	1,000	0	0.0%
93.8%	1,000	1,000	0	0.0%
95.1%	1,000	1,000	0	0.0%
96.3%	750	571	-179	-23.9%
97.5%	750	250	-500	-66.7%
98.8%	250	39	-211	-84.2%
100.0%	39	0	-39	

Figure SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

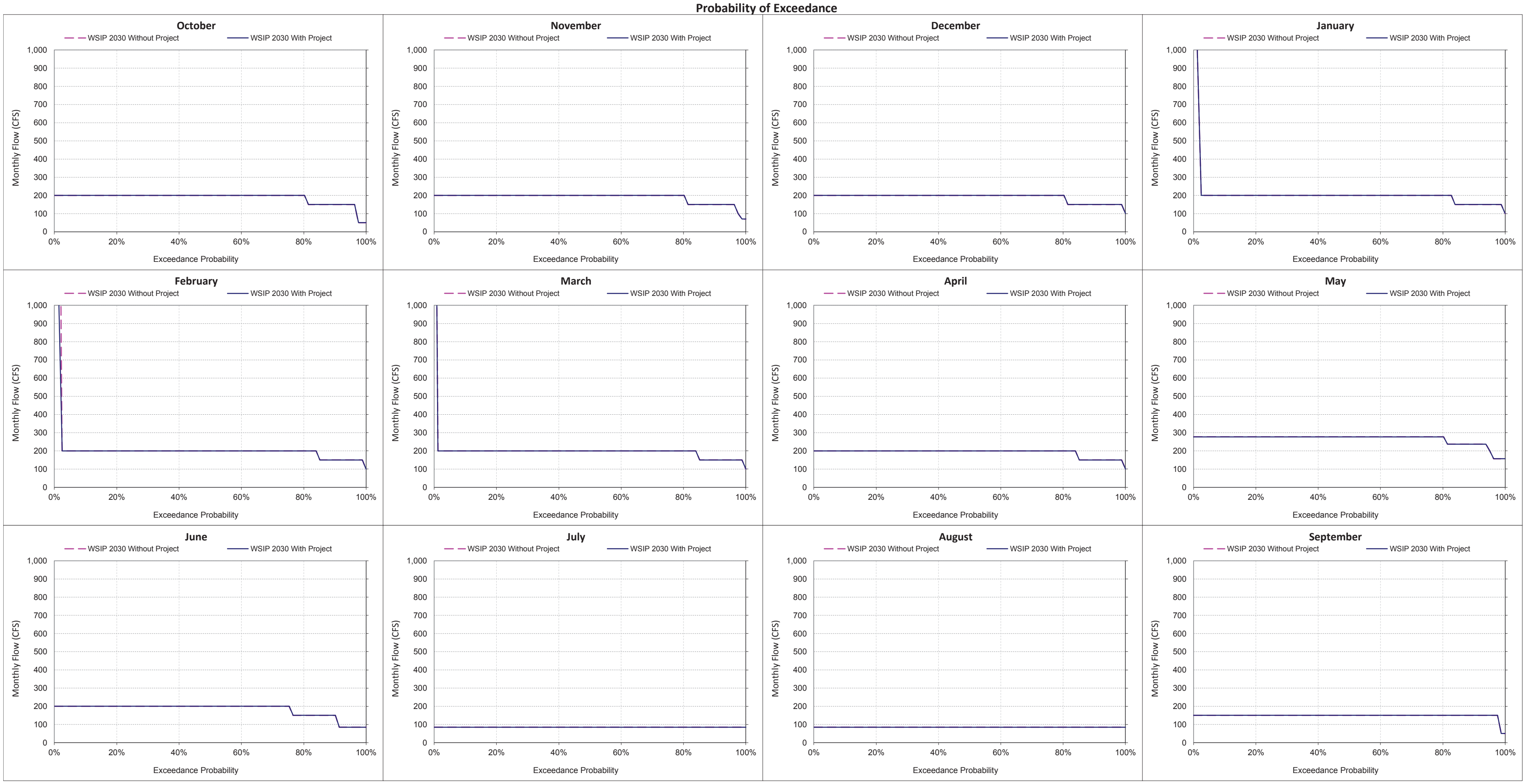


Table SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	50	50	0	0.0%
98.8%	50	50	0	0.0%
100.0%	50	50	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	100	100	0	0.0%
98.8%	70	70	0	0.0%
100.0%	70	70	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	100	100	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,049	2,049	0	0.0%
1.2%	987	987	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	100	100	0	0.0%

Table SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	2,963	1,154	-1,810	-61.1%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	200	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	100	100	0	0.0%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	200	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	100	100	0	0.0%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	200	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	100	100	0	0.0%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	277	277	0	0.0%
1.2%	277	277	0	0.0%
2.5%	277	277	0	0.0%
3.7%	277	277	0	0.0%
4.9%	277	277	0	0.0%
6.2%	277	277	0	0.0%
7.4%	277	277	0	0.0%
8.6%	277	277	0	0.0%
9.9%	277	277	0	0.0%
11.1%	277	277	0	0.0%
12.3%	277	277	0	0.0%
13.6%	277	277	0	0.0%
14.8%	277	277	0	0.0%
16.0%	277	277	0	0.0%
17.3%	277	277	0	0.0%
18.5%	277	277	0	0.0%
19.8%	277	277	0	0.0%
21.0%	277	277	0	0.0%
22.2%	277	277	0	0.0%
23.5%	277	277	0	0.0%
24.7%	277	277	0	0.0%
25.9%	277	277	0	0.0%
27.2%	277	277	0	0.0%
28.4%	277	277	0	0.0%
29.6%	277	277	0	0.0%
30.9%	277	277	0	0.0%
32.1%	277	277	0	0.0%
33.3%	277	277	0	0.0%
34.6%	277	277	0	0.0%
35.8%	277	277	0	0.0%
37.0%	277	277	0	0.0%
38.3%	277	277	0	0.0%
39.5%	277	277	0	0.0%
40.7%	277	277	0	0.0%
42.0%	277	277	0	0.0%
43.2%	277	277	0	0.0%
44.4%	277	277	0	0.0%
45.7%	277	277	0	0.0%
46.9%	277	277	0	0.0%
48.1%	277	277	0	0.0%
49.4%	277	277	0	0.0%
50.6%	277	277	0	0.0%
51.9%	277	277	0	0.0%
53.1%	277	277	0	0.0%
54.3%	277	277	0	0.0%
55.6%	277	277	0	0.0%
56.8%	277	277	0	0.0%
58.0%	277	277	0	0.0%
59.3%	277	277	0	0.0%
60.5%	277	277	0	0.0%
61.7%	277	277	0	0.0%
63.0%	277	277	0	0.0%
64.2%	277	277	0	0.0%
65.4%	277	277	0	0.0%
66.7%	277	277	0	0.0%
67.9%	277	277	0	0.0%
69.1%	277	277	0	0.0%
70.4%	277	277	0	0.0%
71.6%	277	277	0	0.0%
72.8%	277	277	0	0.0%
74.1%	277	277	0	0.0%
75.3%	277	277	0	0.0%
76.5%	277	277	0	0.0%
77.8%	277	277	0	0.0%
79.0%	277	277	0	0.0%
80.2%	277	277	0	0.0%
81.5%	237	237	0	0.0%
82.7%	237	237	0	0.0%
84.0%	237	237	0	0.0%
85.2%	237	237	0	0.0%
86.4%	237	237	0	0.0%
87.7%	237	237	0	0.0%
88.9%	237	237	0	0.0%
90.1%	237	237	0	0.0%
91.4%	237	237	0	0.0%
92.6%	237	237	0	0.0%
93.8%	237	237	0	0.0%
95.1%	200	200	0	0.0%
96.3%	156	156	0	0.0%
97.5%	156	156	0	0.0%
98.8%	156	156	0	0.0%
100.0%	156	156	0	0.0%

Table SW-06-b

Clear Creek below Whiskeytown Reservoir, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	150	150	0	0.0%
77.8%	150	150	0	0.0%
79.0%	150	150	0	0.0%
80.2%	150	150	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85	85	0	0.0%
1.2%	85	85	0	0.0%
2.5%	85	85	0	0.0%
3.7%	85	85	0	0.0%
4.9%	85	85	0	0.0%
6.2%	85	85	0	0.0%
7.4%	85	85	0	0.0%
8.6%	85	85	0	0.0%
9.9%	85	85	0	0.0%
11.1%	85	85	0	0.0%
12.3%	85	85	0	0.0%
13.6%	85	85	0	0.0%
14.8%	85	85	0	0.0%
16.0%	85	85	0	0.0%
17.3%	85	85	0	0.0%
18.5%	85	85	0	0.0%
19.8%	85	85	0	0.0%
21.0%	85	85	0	0.0%
22.2%	85	85	0	0.0%
23.5%	85	85	0	0.0%
24.7%	85	85	0	0.0%
25.9%	85	85	0	0.0%
27.2%	85	85	0	0.0%
28.4%	85	85	0	0.0%
29.6%	85	85	0	0.0%
30.9%	85	85	0	0.0%
32.1%	85	85	0	0.0%
33.3%	85	85	0	0.0%
34.6%	85	85	0	0.0%
35.8%	85	85	0	0.0%
37.0%	85	85	0	0.0%
38.3%	85	85	0	0.0%
39.5%	85	85	0	0.0%
40.7%	85	85	0	0.0%
42.0%	85	85	0	0.0%
43.2%	85	85	0	0.0%
44.4%	85	85	0	0.0%
45.7%	85	85	0	0.0%
46.9%	85	85	0	0.0%
48.1%	85	85	0	0.0%
49.4%	85	85	0	0.0%
50.6%	85	85	0	0.0%
51.9%	85	85	0	0.0%
53.1%	85	85	0	0.0%
54.3%	85	85	0	0.0%
55.6%	85	85	0	0.0%
56.8%	85	85	0	0.0%
58.0%	85	85	0	0.0%
59.3%	85	85	0	0.0%
60.5%	85	85	0	0.0%
61.7%	85	85	0	0.0%
63.0%	85	85	0	0.0%
64.2%	85	85	0	0.0%
65.4%	85	85	0	0.0%
66.7%	85	85	0	0.0%
67.9%	85	85	0	0.0%
69.1%	85	85	0	0.0%
70.4%	85	85	0	0.0%
71.6%	85	85	0	0.0%
72.8%	85	85	0	0.0%
74.1%	85	85	0	0.0%
75.3%	85	85	0	0.0%
76.5%	85	85	0	0.0%
77.8%	85	85	0	0.0%
79.0%	85	85	0	0.0%
80.2%	85	85	0	0.0%
81.5%	85	85	0	0.0%
82.7%	85	85	0	0.0%
84.0%	85	85	0	0.0%
85.2%	85	85	0	0.0%
86.4%	85	85	0	0.0%
87.7%	85	85	0	0.0%
88.9%	85	85	0	0.0%
90.1%	85	85	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85	85	0	0.0%
1.2%	85	85	0	0.0%
2.5%	85	85	0	0.0%
3.7%	85	85	0	0.0%
4.9%	85	85	0	0.0%
6.2%	85	85	0	0.0%
7.4%	85	85	0	0.0%
8.6%	85	85	0	0.0%
9.9%	85	85	0	0.0%
11.1%	85	85	0	0.0%
12.3%	85	85	0	0.0%
13.6%	85	85	0	0.0%
14.8%	85	85	0	0.0%
16.0%	85	85	0	0.0%
17.3%	85	85	0	0.0%
18.5%	85	85	0	0.0%
19.8%	85	85	0	0.0%
21.0%	85	85	0	0.0%
22.2%	85	85	0	0.0%
23.5%	85	85	0	0.0%
24.7%	85	85	0	0.0%
25.9%	85	85	0	0.0%
27.2%	85	85	0	0.0%
28.4%	85	85	0	0.0%
29.6%	85	85	0	0.0%
30.9%	85	85	0	0.0%
32.1%	85	85	0	0.0%
33.3%	85	85	0	0.0%
34.6%	85	85	0	0.0%
35.8%	85	85	0	0.0%
37.0%	85	85	0	0.0%
38.3%	85	85	0	0.0%
39.5%	85	85	0	0.0%
40.7%	85	85	0	0.0%
42.0%	85	85	0	0.0%
43.2%	85	85	0	0.0%
44.4%	85	85	0	0.0%
45.7%	85	85	0	0.0%
46.9%	85	85	0	0.0%
48.1%	85	85	0	0.0%
49.4%	85	85	0	0.0%
50.6%	85	85	0	0.0%
51.9%	85	85	0	0.0%
53.1%	85	85	0	0.0%
54.3%	85	85	0	0.0%
55.6%	85	85	0	0.0%
56.8%	85	85	0	0.0%
58.0%	85	85	0	0.0%
59.3%	85	85	0	0.0%
60.5%	85	85	0	0.0%
61.7%	85	85	0	0.0%
63.0%	85	85	0	0.0%
64.2%	85	85	0	0.0%
65.4%	85	85	0	0.0%
66.7%	85	85	0	0.0%
67.9%	85	85	0	0.0%
69.1%	85	85	0	0.0%
70.4%	85	85	0	0.0%
71.6%	85	85	0	0.0%
72.8%	85	85	0	0.0%
74.1%	85	85	0	0.0%
75.3%	85	85	0	0.0%
76.5%	85	85	0	0.0%
77.8%	85	85	0	0.0%
79.0%	85	85	0	0.0%
80.2%	85	85	0	0.0%
81.5%	85	85	0	0.0%
82.7%	85	85	0	0.0%
84.0%	85	85	0	0.0%
85.2%	85	85	0	0.0%
86.4%	85	85	0	0.0%
87.7%	85	85	0	0.0%
88.9%	85	85	0	0.0%
90.1%	85	85	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	150	150	0	0.0%
1.2%	150	150	0	0.0%
2.5%	150	150	0	0.0%
3.7%	150	150	0	0.0%
4.9%	150	150	0	0.0%
6.2%	150	150	0	0.0%
7.4%	150	150	0	0.0%
8.6%	150	150	0	0.0%
9.9%	150	150	0	0.0%
11.1%	150	150	0	0.0%
12.3%	150	150	0	0.0%
13.6%	150	150	0	0.0%
14.8%	150	150	0	0.0%
16.0%	150	150	0	0.0%
17.3%	150	150	0	0.0%
18.5%	150	150	0	0.0%
19.8%	150	150	0	0.0%
21.0%	150	150	0	0.0%
22.2%	150	150	0	0.0%
23.5%	150	150	0	0.0%
24.7%	150	150	0	0.0%
25.9%	150	150	0	0.0%
27.2%	150	150	0	0.0%
28.4%	150	150	0	0.0%
29.6%	150	150	0	0.0%
30.9%	150	150	0	0.0%
32.1%	150	150	0	0.0%
33.3%	150	150	0	0.0%
34.6%	150	150	0	0.0%
35.8%	150	150	0	0.0%
37.0%	150	150	0	0.0%
38.3%	150	150	0	0.0%
39.5%	150	150	0	0.0%
40.7%	150	150	0	0.0%
42.0%	150	150	0	0.0%
43.2%	150	150	0	0.0%
44.4%	150	150	0	0.0%
45.7%	150	150	0	0.0%
46.9%	150	150	0	0.0%
48.1%	150	150	0	0.0%
49.4%	150	150	0	0.0%
50.6%	150	150	0	0.0%
51.9%	150	150	0	0.0%
53.1%	150	150	0	0.0%
54.3%	150	150	0	0.0%
55.6%	150	150	0	0.0%
56.8%	150	150	0	0.0%
58.0%	150	150	0	0.0%
59.3%	150	150	0	0.0%
60.5%	150	150	0	0.0%
61.7%	150	150	0	0.0%
63.0%	150	150	0	0.0%
64.2%	150	150	0	0.0%
65.4%	150	150	0	0.0%
66.7%	150	150	0	0.0%
67.9%	150	150	0	0.0%
69.1%	150	150	0	0.0%
70.4%	150	150	0	0.0%
71.6%	150	150	0	0.0%
72.8%	150	150	0	0.0%
74.1%	150	150	0	0.0%
75.3%	150	150	0	0.0%
76.5%	150	150	0	0.0%
77.8%	150	150	0	0.0%
79.0%	150	150	0	0.0%
80.2%	150	150	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	50	50	0	0.0%
100.0%	50	50	0	0.0%

Figure SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

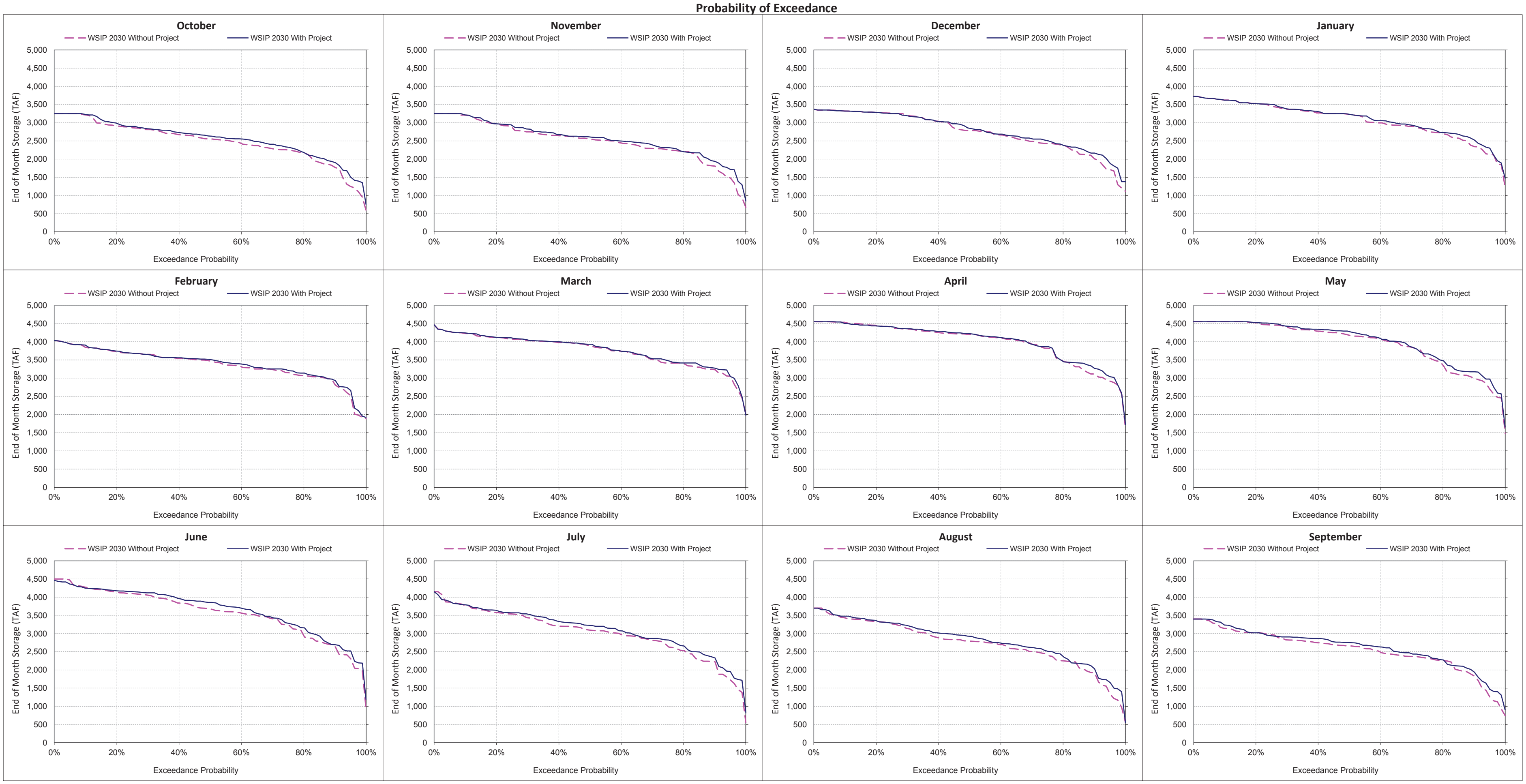


Table SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,250	3,250	0	0.0%
1.2%	3,250	3,250	0	0.0%
2.5%	3,250	3,250	0	0.0%
3.7%	3,250	3,250	0	0.0%
4.9%	3,250	3,250	0	0.0%
6.2%	3,250	3,250	0	0.0%
7.4%	3,250	3,249	-1	0.0%
8.6%	3,232	3,248	16	0.5%
9.9%	3,215	3,231	15	0.5%
11.1%	3,200	3,215	15	0.5%
12.3%	3,133	3,214	81	2.6%
13.6%	2,994	3,175	181	6.0%
14.8%	2,992	3,095	103	3.4%
16.0%	2,962	3,046	84	2.8%
17.3%	2,940	3,031	91	3.1%
18.5%	2,934	3,010	76	2.6%
19.8%	2,910	2,994	84	2.9%
21.0%	2,904	2,952	48	1.7%
22.2%	2,889	2,912	23	0.8%
23.5%	2,884	2,903	19	0.7%
24.7%	2,863	2,899	36	1.3%
25.9%	2,857	2,899	42	1.5%
27.2%	2,849	2,868	19	0.7%
28.4%	2,814	2,855	41	1.5%
29.6%	2,813	2,836	24	0.8%
30.9%	2,811	2,828	16	0.6%
32.1%	2,799	2,817	18	0.6%
33.3%	2,780	2,809	29	1.0%
34.6%	2,745	2,793	48	1.8%
35.8%	2,709	2,792	83	3.1%
37.0%	2,708	2,784	76	2.8%
38.3%	2,701	2,751	50	1.9%
39.5%	2,679	2,735	56	2.1%
40.7%	2,663	2,722	59	2.2%
42.0%	2,660	2,705	44	1.7%
43.2%	2,649	2,700	51	1.9%
44.4%	2,641	2,689	48	1.8%
45.7%	2,597	2,684	86	3.3%
46.9%	2,585	2,664	78	3.0%
48.1%	2,564	2,658	95	3.7%
49.4%	2,554	2,637	83	3.2%
50.6%	2,553	2,629	77	3.0%
51.9%	2,539	2,609	70	2.8%
53.1%	2,529	2,608	79	3.1%
54.3%	2,519	2,583	64	2.5%
55.6%	2,515	2,567	53	2.1%
56.8%	2,493	2,567	74	3.0%
58.0%	2,467	2,561	95	3.8%
59.3%	2,456	2,560	103	4.2%
60.5%	2,407	2,553	145	6.0%
61.7%	2,398	2,538	141	5.9%
63.0%	2,389	2,525	136	5.7%
64.2%	2,374	2,485	111	4.7%
65.4%	2,371	2,476	105	4.4%
66.7%	2,320	2,461	142	6.1%
67.9%	2,320	2,429	110	4.7%
69.1%	2,299	2,407	108	4.7%
70.4%	2,278	2,405	127	5.6%
71.6%	2,268	2,370	102	4.5%
72.8%	2,260	2,365	104	4.6%
74.1%	2,260	2,338	78	3.5%
75.3%	2,249	2,323	73	3.3%
76.5%	2,229	2,297	68	3.1%
77.8%	2,210	2,267	57	2.6%
79.0%	2,176	2,218	42	2.0%
80.2%	2,166	2,173	7	0.3%
81.5%	2,124	2,108	-16	-0.7%
82.7%	2,006	2,093	87	4.3%
84.0%	1,938	2,057	118	6.1%
85.2%	1,908	2,031	123	6.5%
86.4%	1,869	2,012	144	7.7%
87.7%	1,864	1,956	92	4.9%
88.9%	1,830	1,939	110	6.0%
90.1%	1,766	1,901	135	7.7%
91.4%	1,735	1,824	89	5.1%
92.6%	1,473	1,693	220	15.0%
93.8%	1,308	1,677	370	28.3%
95.1%	1,246	1,503	257	20.6%
96.3%	1,209	1,419	210	17.3%
97.5%	1,100	1,394	294	26.7%
98.8%	957	1,352	395	41.3%
100.0%	585	750	165	28.1%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,252	3,252	0	0.0%
1.2%	3,252	3,252	0	0.0%
2.5%	3,252	3,252	0	0.0%
3.7%	3,252	3,252	0	0.0%
4.9%	3,252	3,252	0	0.0%
6.2%	3,252	3,252	0	0.0%
7.4%	3,252	3,252	0	0.0%
8.6%	3,211	3,252	41	1.3%
9.9%	3,210	3,214	5	0.1%
11.1%	3,200	3,209	9	0.3%
12.3%	3,174	3,160	-13	-0.4%
13.6%	3,098	3,144	46	1.5%
14.8%	3,068	3,132	64	2.1%
16.0%	3,015	3,063	48	1.6%
17.3%	3,002	3,044	42	1.4%
18.5%	2,986	2,981	-5	-0.2%
19.8%	2,970	2,975	5	0.2%
21.0%	2,949	2,961	13	0.4%
22.2%	2,920	2,960	40	1.4%
23.5%	2,916	2,951	35	1.2%
24.7%	2,905	2,940	35	1.2%
25.9%	2,788	2,869	82	2.9%
27.2%	2,779	2,863	84	3.0%
28.4%	2,775	2,862	86	3.1%
29.6%	2,750	2,828	78	2.8%
30.9%	2,749	2,824	75	2.7%
32.1%	2,739	2,757	17	0.6%
33.3%	2,701	2,755	54	2.0%
34.6%	2,682	2,745	63	2.3%
35.8%	2,672	2,745	73	2.7%
37.0%	2,653	2,728	74	2.8%
38.3%	2,653	2,722	69	2.6%
39.5%	2,649	2,670	22	0.8%
40.7%	2,638	2,670	32	1.2%
42.0%	2,627	2,652	25	0.9%
43.2%	2,624	2,630	6	0.2%
44.4%	2,623	2,628	5	0.2%
45.7%	2,587	2,628	41	1.6%
46.9%	2,574	2,621	47	1.8%
48.1%	2,573	2,615	42	1.6%
49.4%	2,563	2,614	51	2.0%
50.6%	2,544	2,603	59	2.3%
51.9%	2,528	2,596	67	2.7%
53.1%	2,523	2,594	71	2.8%
54.3%	2,516	2,590	75	3.0%
55.6%	2,514	2,545	31	1.2%
56.8%	2,500	2,517	17	0.7%
58.0%	2,500	2,517	17	0.7%
59.3%	2,454	2,500	46	1.9%
60.5%	2,434	2,492	58	2.4%
61.7%	2,425	2,482	56	2.3%
63.0%	2,405	2,478	73	3.1%
64.2%	2,398	2,465	67	2.8%
65.4%	2,372	2,461	89	3.7%
66.7%	2,330	2,442	112	4.8%
67.9%	2,297	2,440	143	6.2%
69.1%	2,294	2,417	123	5.4%
70.4%	2,289	2,376	88	3.8%
71.6%	2,286	2,344	58	2.5%
72.8%	2,285	2,323	38	1.7%
74.1%	2,269	2,315	46	2.0%
75.3%	2,251	2,314	63	2.8%
76.5%	2,239	2,302	63	2.8%
77.8%	2,231	2,282	51	2.3%
79.0%	2,218	2,224	6	0.3%
80.2%	2,213	2,203	-9	-0.4%
81.5%	2,204	2,188	-16	-0.7%
82.7%	2,166	2,179	13	0.6%
84.0%	2,138	2,172	34	1.6%
85.2%	1,980	2,172	192	9.7%
86.4%	1,861	2,061	199	10.7%
87.7%	1,833	2,020	187	10.2%
88.9%	1,816	1,955	139	7.7%
90.1%	1,806	1,938	132	7.3%
91.4%	1,662	1,890	228	13.7%
92.6%	1,606	1,795	188	11.7%
93.8%	1,509	1,774	264	17.5%
95.1%	1,480	1,717	237	16.0%
96.3%	1,342	1,709	367	27.4%
97.5%	1,026	1,391	366	35.6%
98.8%	940	1,292	352	37.4%
100.0%	670	846	176	26.3%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,368	3,368	0	0.0%
1.2%	3,350	3,350	0	0.0%
2.5%	3,349	3,349	0	0.0%
3.7%	3,349	3,349	0	0.0%
4.9%	3,347	3,347	0	0.0%
6.2%	3,346	3,338	-8	-0.2%
7.4%	3,338	3,328	-10	-0.3%
8.6%	3,328	3,328	0	0.0%
9.9%	3,322	3,322	0	0.0%
11.1%	3,319	3,319	0	0.0%
12.3%	3,317	3,317	0	0.0%
13.6%	3,310	3,310	0	0.0%
14.8%	3,306	3,306	0	0.0%
16.0%	3,294	3,294	0	0.0%
17.3%	3,293	3,293	0	0.0%
18.5%	3,291	3,291	0	0.0%
19.8%	3,285	3,285	0	0.0%
21.0%	3,276	3,276	0	0.0%
22.2%	3,271	3,267	-4	-0.1%
23.5%	3,267	3,265	-2	-0.1%
24.7%	3,265	3,252	-13	-0.4%
25.9%	3,252	3,252	0	0.0%
27.2%	3,252	3,252	0	0.0%
28.4%	3,252	3,204	-48	-1.5%
29.6%	3,215	3,197	-18	-0.5%
30.9%	3,190	3,172	-18	-0.6%
32.1%	3,182	3,168	-14	-0.4%
33.3%	3,167	3,158	-8	-0.3%
34.6%	3,150	3,143	-7	-0.2%
35.8%	3,095	3,086	-9	-0.3%
37.0%	3,083	3,084	1	0.0%
38.3%	3,052	3,073	20	0.7%
39.5%	3,046	3,035	-11	-0.4%
40.7%	3,027	3,033	6	0.2%
42.0%	3,019	3,021	2	0.1%
43.2%	2,992	3,020	29	1.0%
44.4%	2,876	2,975	99	3.4%
45.7%	2,826	2,968	143	5.0%
46.9%	2,812	2,954	142	5.1%
48.1%	2,793	2,918	125	4.5%
49.4%	2,787	2,855	68	2.4%
50.6%	2,786	2,838	52	1.9%
51.9%	2,785	2,817	32	1.1%
53.1%	2,769	2,811	42	1.5%
54.3%	2,769	2,786	17	0.6%
55.6%	2,758	2,736	-22	-0.8%
56.8%	2,742	2,724	-18	-0.7%
58.0%	2,665	2,696	31	1.2%
59.3%	2,665	2,689	24	0.9%
60.5%	2,664	2,686	22	0.8%
61.7%	2,637	2,657	20	0.8%
63.0%	2,614	2,644	30	1.1%
64.2%	2,587	2,638	51	2.0%
65.4%	2,551	2,626	75	2.9%
66.7%	2,542	2,586	45	1.8%
67.9%	2,522	2,580	58	2.3%
69.1%	2,493	2,579	86	3.4%
70.4%	2,488	2,554	66	2.7%
71.6%	2,457	2,552	95	3.9%
72.8%	2,441	2,550	109	4.5%
74.1%	2,431	2,524	93	3.8%
75.3%	2,429	2,500	71	2.9%
76.5%	2,425	2,463	38	1.6%
77.8%	2,411	2,420	9	0.4%
79.0%	2,395	2,415	20	0.8%
80.2%	2,386	2,373	-13	-0.6%
81.5%	2,326	2,350	24	1.0%
82.7%	2,250	2,332	82	3.6%
84.0%	2,246	2,329	83	3.7%
85.2%	2,137	2,296	159	7.4%
86.4%	2,129	2,263	134	6.3%
87.7%	2,119	2,210	90	4.3%
88.9%	2,104	2,169	65	3.1%
90.1%	2,005	2,167	162	8.1%
91.4%	1,967	2,131	164	8.3%
92.6%	1,850	2,109	260	14.0%
93.8%	1,725	2,018	293	17.0%
95.1%	1,712	1,878	166	9.7%
96.3%	1,673	1,812	139	8.3%
97.5%	1,297	1,754	457	35.2%
98.8%	1,201	1,380	180	15.0%
100.0%	1,113	1,379	266	23.9%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,725	3,725	0	0.0%
1.2%	3,723	3,723	0	0.0%
2.5%	3,698	3,698	0	0.0%
3.7%	3,678	3,678	0	0.0%
4.9%	3,668	3,668	0	0.0%
6.2%	3,668	3,668	0	0.0%
7.4%	3,650	3,650	0	0.0%
8.6%	3,640	3,640	0	0.0%
9.9%	3,624	3,624	0	0.0%
11.1%	3,622	3,622	0	0.0%
12.3%	3,616	3,616	0	0.0%
13.6%	3,604	3,604	0	0.0%
14.8%	3,552	3,552	0	0.0%
16.0%	3,552	3,552	0	0.0%
17.3%	3,551	3,551	0	0.0%
18.5%	3,531	3,531	0	0.0%
19.8%	3,528	3,528	0	0.0%
21.0%	3,515	3,523	8	0.2%
22.2%	3,515	3,515	0	0.0%
23.5%	3,500	3,515	15	0.4%
24.7%	3,465	3,507	42	1.2%
25.9%	3,438	3,500	62	1.8%
27.2%	3,419	3,440	22	0.6%
28.4%	3,389	3,419	30	0.9%
29.6%	3,371	3,389	18	0.5%
30.9%	3,368	3,371	3	0.1%
32.1%	3,366	3,368	2	0.1%
33.3%	3,358	3,366	8	0.2%
34.6%	3,339	3,358	20	0.6%
35.8%	3,321	3,339	18	0.5%
37.0%	3,317	3,332	15	0.5%
38.3%	3,310	3,321	11	0.3%
39.5%	3,271	3,317	46	1.4%
40.7%	3,270	3,292	22	0.7%
42.0%	3,252	3,252	0	0.0%
43.2%	3,252	3,252	0	0.0%
44.4%	3,252	3,252	0	0.0%
45.7%	3,252	3,252	0	0.0%
46.9%	3,252	3,252	0	0.0%
48.1%	3,249	3,250	1	0.0%
49.4%	3,237	3,243	6	0.2%
50.6%	3,210	3,224	14	0.4%
51.9%	3,205	3,204	-2	0.0%
53.1%	3,199	3,196	-3	-0.1%
54.3%	3,156	3,188	32	1.0%
55.6%	3,022	3,188	166	5.5%
56.8%	3,011	3,113	101	3.4%
58.0%	3,007	3,066	59	2.0%
59.3%	2,997	3,058	61	2.0%
60.5%	2,995	3,056	61	2.0%
61.7%	2,960	3,048	88	3.0%
63.0%	2,942	3,022	80	2.7%
64.2%	2,934	3,007	73	2.5%
65.4%	2,930	2,981	50	1.7%
66.7%	2,920	2,967	47	1.6%
67.9%	2,917	2,966	49	1.7%
69.1%	2,899	2,945	46	1.6%
70.4%	2,898	2,926	29	1.0%
71.6%	2,866	2,899	33	1.1%
72.8%	2,849	2,867	19	0.7%
74.1%	2,806	2,834	28	1.0%
75.3%	2,749	2,834	85	3.1%
76.5%	2,741	2,823	82	3.0%
77.8%	2,732	2,783	50	1.8%
79.0%	2,727	2,738	12	0.4%
80.2%	2,693	2,731	37	1.4%
81.5%	2,671	2,722	51	1.9%
82.7%	2,607	2,710	104	4.0%
84.0%	2,585	2,697	112	4.4%
85.2%	2,572	2,677	104	4.0%
86.4%	2,518	2,637	119	4.7%
87.7%	2,509	2,625	116	4.6%
88.9%	2,383	2,577	194	8.2%
90.1%	2,342	2,524	182	7.8%
91.4%	2,335	2,437	102	4.4%
92.6%	2,265	2,385	120	5.3%
93.8%	2,145	2,333	188	8.8%
95.1%	2,129	2,299	170	8.0%
96.3%	2,118	2,109	-9	-0.4%
97.5%	1,860	1,952	92	5.0%
98.8%	1,853	1,897	44	2.4%
100.0%	1,216	1,473	257	21.2%

Table SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,037	4,037	0	0.0%
1.2%	4,022	4,022	0	0.0%
2.5%	4,005	4,005	0	0.0%
3.7%	3,982	3,982	0	0.0%
4.9%	3,944	3,944	0	0.0%
6.2%	3,926	3,926	0	0.0%
7.4%	3,920	3,920	0	0.0%
8.6%	3,914	3,914	0	0.0%
9.9%	3,848	3,912	64	1.7%
11.1%	3,831	3,848	17	0.5%
12.3%	3,827	3,831	3	0.1%
13.6%	3,826	3,826	0	0.0%
14.8%	3,794	3,794	0	0.0%
16.0%	3,789	3,789	0	0.0%
17.3%	3,777	3,777	0	0.0%
18.5%	3,743	3,757	14	0.4%
19.8%	3,739	3,743	4	0.1%
21.0%	3,705	3,739	34	0.9%
22.2%	3,698	3,705	7	0.2%
23.5%	3,694	3,694	0	0.0%
24.7%	3,685	3,685	0	0.0%
25.9%	3,675	3,675	0	0.0%
27.2%	3,675	3,675	0	0.0%
28.4%	3,661	3,661	0	0.0%
29.6%	3,654	3,654	0	0.0%
30.9%	3,652	3,636	-16	-0.4%
32.1%	3,636	3,603	-33	-0.9%
33.3%	3,588	3,588	0	0.0%
34.6%	3,570	3,570	0	0.0%
35.8%	3,567	3,569	2	0.1%
37.0%	3,565	3,567	2	0.0%
38.3%	3,560	3,567	7	0.2%
39.5%	3,544	3,561	17	0.5%
40.7%	3,539	3,560	21	0.6%
42.0%	3,539	3,547	8	0.2%
43.2%	3,530	3,540	10	0.3%
44.4%	3,516	3,539	23	0.6%
45.7%	3,503	3,530	27	0.8%
46.9%	3,498	3,522	24	0.7%
48.1%	3,496	3,521	25	0.7%
49.4%	3,480	3,516	36	1.0%
50.6%	3,462	3,503	41	1.2%
51.9%	3,431	3,480	49	1.4%
53.1%	3,423	3,462	39	1.1%
54.3%	3,371	3,431	60	1.8%
55.6%	3,358	3,423	65	1.9%
56.8%	3,356	3,412	55	1.6%
58.0%	3,348	3,395	47	1.4%
59.3%	3,333	3,392	59	1.8%
60.5%	3,292	3,381	89	2.7%
61.7%	3,288	3,367	79	2.4%
63.0%	3,282	3,328	46	1.4%
64.2%	3,252	3,292	40	1.2%
65.4%	3,252	3,288	36	1.1%
66.7%	3,252	3,282	30	0.9%
67.9%	3,252	3,252	0	0.0%
69.1%	3,252	3,252	0	0.0%
70.4%	3,229	3,252	23	0.7%
71.6%	3,208	3,252	44	1.4%
72.8%	3,206	3,252	46	1.4%
74.1%	3,158	3,236	78	2.5%
75.3%	3,147	3,203	56	1.8%
76.5%	3,104	3,192	88	2.8%
77.8%	3,091	3,149	58	1.9%
79.0%	3,072	3,142	70	2.3%
80.2%	3,067	3,138	70	2.3%
81.5%	3,056	3,096	40	1.3%
82.7%	3,043	3,080	37	1.2%
84.0%	3,037	3,062	25	0.8%
85.2%	3,028	3,047	19	0.6%
86.4%	3,008	3,033	24	0.8%
87.7%	2,993	2,979	-14	-0.5%
88.9%	2,972	2,974	2	0.1%
90.1%	2,808	2,933	125	4.5%
91.4%	2,740	2,766	26	1.0%
92.6%	2,699	2,757	58	2.1%
93.8%	2,599	2,749	150	5.8%
95.1%	2,521	2,659	138	5.5%
96.3%	2,012	2,178	166	8.3%
97.5%	1,982	2,103	121	6.1%
98.8%	1,921	1,951	30	1.6%
100.0%	1,887	1,921	34	1.8%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,462	4,462	0	0.0%
1.2%	4,347	4,347	0	0.0%
2.5%	4,339	4,339	0	0.0%
3.7%	4,292	4,292	0	0.0%
4.9%	4,280	4,280	0	0.0%
6.2%	4,256	4,256	0	0.0%
7.4%	4,248	4,252	4	0.1%
8.6%	4,246	4,248	2	0.0%
9.9%	4,229	4,246	17	0.4%
11.1%	4,226	4,229	3	0.1%
12.3%	4,224	4,226	2	0.0%
13.6%	4,162	4,218	56	1.3%
14.8%	4,147	4,174	27	0.6%
16.0%	4,142	4,162	20	0.5%
17.3%	4,136	4,142	6	0.1%
18.5%	4,121	4,136	15	0.4%
19.8%	4,118	4,121	3	0.1%
21.0%	4,116	4,118	2	0.1%
22.2%	4,106	4,116	10	0.2%
23.5%	4,083	4,111	29	0.7%
24.7%	4,076	4,106	30	0.7%
25.9%	4,071	4,086	15	0.4%
27.2%	4,064	4,080	16	0.4%
28.4%	4,062	4,071	9	0.2%
29.6%	4,033	4,062	29	0.7%
30.9%	4,030	4,033	3	0.1%
32.1%	4,022	4,030	8	0.2%
33.3%	4,022	4,022	0	0.0%
34.6%	4,014	4,022	8	0.2%
35.8%	4,010	4,014	4	0.1%
37.0%	4,000	4,010	10	0.2%
38.3%	4,000	4,000	0	0.0%
39.5%	3,985	4,000	15	0.4%
40.7%	3,980	3,993	13	0.3%
42.0%	3,976	3,980	4	0.1%
43.2%	3,976	3,976	0	0.0%
44.4%	3,965	3,965	0	0.0%
45.7%	3,953	3,963	10	0.3%
46.9%	3,940	3,953	13	0.3%
48.1%	3,937	3,940	3	0.1%
49.4%	3,901	3,931	30	0.8%
50.6%	3,873	3,927	54	1.4%
51.9%	3,846	3,873	27	0.7%
53.1%	3,834	3,856	22	0.6%
54.3%	3,831	3,842	12	0.3%
55.6%	3,823	3,835	12	0.3%
56.8%	3,756	3,773	17	0.5%
58.0%	3,748	3,763	15	0.4%
59.3%	3,743	3,756	13	0.3%
60.5%	3,738	3,732	-5	-0.1%
61.7%	3,729	3,729	0	0.0%
63.0%	3,679	3,718	39	1.1%
64.2%	3,661	3,688	27	0.7%
65.4%	3,657	3,652	-5	-0.1%
66.7%	3,653	3,640	-13	-0.4%
67.9%	3,600	3,621	21	0.6%
69.1%	3,534	3,553	19	0.5%
70.4%	3,504	3,534	30	0.9%
71.6%	3,503	3,532	29	0.8%
72.8%	3,435	3,527	92	2.7%
74.1%	3,417	3,504	87	2.5%
75.3%	3,417	3,474	58	1.7%
76.5%	3,416	3,435	19	0.6%
77.8%	3,416	3,428	12	0.4%
79.0%	3,416	3,417	1	0.0%
80.2%	3,393	3,417	24	0.7%
81.5%	3,337	3,416	79	2.4%
82.7%	3,331	3,416	85	2.5%
84.0%	3,305	3,416	111	3.3%
85.2%	3,302	3,361	59	1.8%
86.4%	3,262	3,310	48	1.5%
87.7%	3,248	3,300	52	1.6%
88.9%	3,246	3,290	45	1.4%
90.1%	3,231	3,271	40	1.2%
91.4%	3,137	3,237	100	3.2%
92.6%	3,133	3,232	100	3.2%
93.8%	3,059	3,222	163	5.3%
95.1%	3,049	3,047	-2	-0.1%
96.3%	2,826	2,997	171	6.1%
97.5%	2,653	2,794	142	5.3%
98.8%	2,458	2,492	34	1.4%
100.0%	2,008	1,975	-33	-1.6%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,552	4,552	0	0.0%
1.2%	4,552	4,552	0	0.0%
2.5%	4,552	4,552	0	0.0%
3.7%	4,552	4,552	0	0.0%
4.9%	4,552	4,552	0	0.0%
6.2%	4,546	4,552	6	0.1%
7.4%	4,543	4,546	3	0.1%
8.6%	4,536	4,543	8	0.2%
9.9%	4,534	4,498	-35	-0.8%
11.1%	4,507	4,491	-16	-0.4%
12.3%	4,506	4,482	-24	-0.5%
13.6%	4,505	4,479	-26	-0.6%
14.8%	4,491	4,459	-32	-0.7%
16.0%	4,479	4,456	-23	-0.5%
17.3%	4,462	4,456	-6	-0.1%
18.5%	4,456	4,438	-18	-0.4%
19.8%	4,454	4,434	-20	-0.5%
21.0%	4,434	4,429	-5	-0.1%
22.2%	4,422	4,425	3	0.1%
23.5%	4,420	4,422	2	0.0%
24.7%	4,412	4,412	0	0.0%
25.9%	4,367	4,402	35	0.8%
27.2%	4,366	4,367	1	0.0%
28.4%	4,356	4,366	10	0.2%
29.6%	4,355	4,358	3	0.1%
30.9%	4,344	4,355	11	0.3%
32.1%	4,335	4,347	11	0.3%
33.3%	4,305	4,342	37	0.8%
34.6%	4,301	4,334	33	0.8%
35.8%	4,290	4,310	20	0.5%
37.0%	4,289	4,303	14	0.3%
38.3%	4,271	4,301	30	0.7%
39.5%	4,259	4,290	31	0.7%
40.7%	4,243	4,289	46	1.1%
42.0%	4,232	4,277	45	1.1%
43.2%	4,230	4,259	30	0.7%
44.4%	4,227	4,255	28	0.7%
45.7%	4,217	4,247	30	0.7%
46.9%	4,217	4,244	27	0.6%
48.1%	4,215	4,231	16	0.4%
49.4%	4,204	4,227	23	0.6%
50.6%	4,203	4,217	14	0.3%
51.9%	4,196	4,204	8	0.2%
53.1%	4,173	4,173	0	0.0%
54.3%	4,143	4,156	13	0.3%
55.6%	4,137	4,151	14	0.3%
56.8%	4,126	4,137	11	0.3%
58.0%	4,117	4,137	20	0.5%
59.3%	4,109	4,120	12	0.3%
60.5%	4,094	4,109	15	0.4%
61.7%	4,074	4,096	22	0.5%
63.0%	4,067	4,094	27	0.7%
64.2%	4,058	4,074	16	0.4%
65.4%	4,033	4,058	25	0.6%
66.7%	4,024	4,033	9	0.2%
67.9%	3,973	4,026	53	1.3%
69.1%	3,972	3,949	-23	-0.6%
70.4%	3,922	3,926	4	0.1%
71.6%	3,918	3,889	-29	-0.7%
72.8%	3,861	3,867	7	0.2%
74.1%	3,821	3,867	45	1.2%
75.3%	3,819	3,863	43	1.1%
76.5%	3,808	3,821	14	0.4%
77.8%	3,554	3,580	25	0.7%
79.0%	3,517	3,510	-6	-0.2%
80.2%	3,454	3,442	-12	-0.4%
81.5%	3,437	3,437	0	0.0%
82.7%	3,378	3,429	51	1.5%
84.0%	3,313	3,427	114	3.4%
85.2%	3,313	3,416	103	3.1%
86.4%	3,227	3,407	180	5.6%
87.7%	3,165	3,364	199	6.3%
88.9%	3,116	3,337	222	7.1%
90.1%	3,116	3,263	148	4.7%
91.4%	3,030	3,244	214	7.1%
92.6%	3,021	3,192	172	5.7%
93.8%	2,958	3,089	131	4.4%
95.1%	2,917	3,037	120	4.1%
96.3%	2,879	3,019	141	4.9%
97.5%	2,804	2,815	11	0.4%
98.8%	2,559	2,592	34	1.3%
100.0%	1,619	1,724	105	6.5%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,552	4,552	0	0.0%
1.2%	4,552	4,552	0	0.0%
2.5%	4,552	4,552	0	0.0%
3.7%	4,552	4,552	0	0.0%
4.9%	4,552	4,552	0	0.0%
6.2%	4,552	4,552	0	0.0%
7.4%	4,552	4,552	0	0.0%
8.6%	4,552	4,552	0	0.0%
9.9%	4,552	4,552	0	0.0%
11.1%	4,552	4,552	0	0.0%
12.3%	4,552	4,552	0	0.0%
13.6%	4,552	4,552	0	0.0%
14.8%	4,552	4,552	0	0.0%
16.0%	4,552	4,552	0	0.0%
17.3%	4,537	4,551	14	0.3%
18.5%	4,532	4,538	6	0.1%
19.8%	4,524	4,529	5	0.1%
21.0%	4,500	4,523	23	0.5%
22.2%	4,471	4,515	44	1.0%
23.5%	4,470	4,511	42	0.9%
24.7%	4,460	4,511	51	1.1%
25.9%	4,458	4,494	36	0.8%
27.2%	4,456	4,484	27	0.6%
28.4%	4,443	4,448	6	0.1%
29.6%	4,401	4,430	29	0.7%
30.9%	4,377	4,422	45	1.0%
32.1%	4,348	4,410	61	1.4%
33.3%	4,338	4,408	70	1.6%
34.6%	4,332	4,369	37	0.8%
35.8%	4,332	4,354	22	0.5%
37.0%	4,327	4,353	26	0.6%
38.3%	4,319	4,347	28	0.7%
39.5%	4,294	4,341	48	1.1%
40.7%	4,287	4,337	50	1.2%
42.0%	4,275	4,332	57	1.3%
43.2%	4,261	4,327	66	1.5%
44.4%	4,251	4,316	65	1.5%
45.7%	4,249	4,303	55	1.3%
46.9%	4,240	4,302	62	1.5%
48.1%	4,217	4,291	75	1.8%
49.4%	4,194	4,291	97	2.3%
50.6%	4,163	4,264	101	2.4%
51.9%	4,154	4,247	93	2.2%
53.1%	4,151	4,222	70	1.7%
54.3%	4,135	4,196	60	1.5%
55.6%	4,130	4,189	59	1.4%
56.8%	4,111	4,137	26	0.6%
58.0%	4,108	4,134	27	0.6%
59.3%	4,089	4,115	26	0.6%
60.5%	4,058	4,067	10	0.2%
61.7%	4,025	4,063	38	0.9%
63.0%	4,009	4,019	10	0.2%
64.2%	3,999	4,016	17	0.4%
65.4%	3,982	4,011	28	0.7%
66.7%	3,896	3,992	95	2.4%
67.9%	3,867	3,968	102	2.6%
69.1%	3,866	3,880	14	0.4%
70.4%	3,840	3,847	7	0.2%
71.6%	3,804	3,803	0	0.0%
72.8%	3,767	3,715	-53	-1.4%
74.1%	3,598	3,667	69	1.9%
75.3%	3,569	3,666	98	2.7%
76.5%	3,519	3,621	102	2.9%
77.8%	3,477	3,570	93	2.7%
79.0%	3,455	3,502	47	1.3%
80.2%	3,336	3,472	137	4.1%
81.5%	3,154	3,354	200	6.3%
82.7%	3,142	3,332	190	6.1%
84.0%	3,122	3,238	116	3.7%
85.2%	3,093	3,201	108	3.5%
86.4%	3,084	3,191	106	3.5%
87.7%	3,077	3,179	102	3.3%
88.9%	3,040	3,177	138	4.5%
90.1%	2,998	3,175	176	5.9%
91.4%	2,958	3,168	210	7.1%
92.6%	2,930	3,064	134	4.6%
93.8%	2,859	2,977	118	4.1%
95.1%	2,694	2,974	280	10.4%
96.3%	2,568	2,751	183	7.1%
97.5%	2,471	2,587	117	4.7%
98.8%	2,459	2,567	108	4.4%
100.0%	1,485	1,657	171	11.5%

Table SW-07-b

Shasta Lake, End of Month Storage

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,500	4,460	-40	-0.9%
1.2%	4,500	4,431	-69	-1.5%
2.5%	4,500	4,422	-78	-1.7%
3.7%	4,500	4,417	-83	-1.8%
4.9%	4,471	4,365	-107	-2.4%
6.2%	4,324	4,339	14	0.3%
7.4%	4,318	4,288	-30	-0.7%
8.6%	4,300	4,286	-14	-0.3%
9.9%	4,274	4,244	-29	-0.7%
11.1%	4,257	4,244	-13	-0.3%
12.3%	4,231	4,235	4	0.1%
13.6%	4,210	4,230	20	0.5%
14.8%	4,205	4,229	23	0.5%
16.0%	4,199	4,214	15	0.3%
17.3%	4,172	4,194	22	0.5%
18.5%	4,152	4,190	38	0.9%
19.8%	4,148	4,174	26	0.6%
21.0%	4,119	4,173	53	1.3%
22.2%	4,117	4,167	50	1.2%
23.5%	4,104	4,154	50	1.2%
24.7%	4,097	4,153	55	1.4%
25.9%	4,093	4,151	58	1.4%
27.2%	4,081	4,140	60	1.5%
28.4%	4,072	4,128	56	1.4%
29.6%	4,059	4,119	60	1.5%
30.9%	4,047	4,117	70	1.7%
32.1%	4,000	4,116	116	2.9%
33.3%	3,978	4,080	102	2.6%
34.6%	3,966	4,079	112	2.8%
35.8%	3,955	4,063	109	2.7%
37.0%	3,914	4,037	123	3.1%
38.3%	3,886	4,015	129	3.3%
39.5%	3,841	3,973	132	3.4%
40.7%	3,834	3,947	113	3.0%
42.0%	3,833	3,916	83	2.2%
43.2%	3,807	3,913	106	2.8%
44.4%	3,768	3,909	141	3.7%
45.7%	3,724	3,891	167	4.5%
46.9%	3,702	3,889	187	5.1%
48.1%	3,696	3,870	174	4.7%
49.4%	3,686	3,858	172	4.7%
50.6%	3,665	3,855	190	5.2%
51.9%	3,632	3,841	209	5.7%
53.1%	3,627	3,780	153	4.2%
54.3%	3,606	3,772	167	4.6%
55.6%	3,602	3,742	139	3.9%
56.8%	3,599	3,731	132	3.7%
58.0%	3,595	3,724	130	3.6%
59.3%	3,578	3,714	136	3.8%
60.5%	3,553	3,685	132	3.7%
61.7%	3,531	3,663	132	3.7%
63.0%	3,525	3,657	132	3.7%
64.2%	3,517	3,575	58	1.6%
65.4%	3,486	3,540	54	1.6%
66.7%	3,467	3,527	60	1.7%
67.9%	3,467	3,465	-3	-0.1%
69.1%	3,423	3,463	40	1.2%
70.4%	3,401	3,427	26	0.8%
71.6%	3,384	3,421	38	1.1%
72.8%	3,257	3,385	128	3.9%
74.1%	3,241	3,301	60	1.8%
75.3%	3,229	3,280	51	1.6%
76.5%	3,128	3,246	118	3.8%
77.8%	3,115	3,227	112	3.6%
79.0%	3,102	3,166	65	2.1%
80.2%	2,906	3,158	253	8.7%
81.5%	2,873	3,031	158	5.5%
82.7%	2,872	2,997	125	4.3%
84.0%	2,795	2,971	176	6.3%
85.2%	2,788	2,929	141	5.1%
86.4%	2,739	2,810	71	2.6%
87.7%	2,711	2,751	40	1.5%
88.9%	2,695	2,702	7	0.3%
90.1%	2,631	2,691	60	2.3%
91.4%	2,422	2,675	252	10.4%
92.6%	2,420	2,555	135	5.6%
93.8%	2,413	2,521	108	4.5%
95.1%	2,305	2,518	213	9.2%
96.3%	2,049	2,233	184	9.0%
97.5%	2,032	2,194	163	8.0%
98.8%	1,991	2,184	193	9.7%
100.0%	906	1,188	282	31.2%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,150	4,147	-3	-0.1%
1.2%	4,150	4,070	-80	-1.9%
2.5%	4,069	3,934	-135	-3.3%
3.7%	3,870	3,918	48	1.2%
4.9%	3,865	3,885	20	0.5%
6.2%	3,863	3,827	-36	-0.9%
7.4%	3,823	3,821	-2	-0.1%
8.6%	3,814	3,795	-19	-0.5%
9.9%	3,772	3,788	17	0.4%
11.1%	3,761	3,774	13	0.4%
12.3%	3,685	3,717	32	0.9%
13.6%	3,682	3,710	28	0.8%
14.8%	3,652	3,693	40	1.1%
16.0%	3,647	3,653	5	0.1%
17.3%	3,619	3,647	28	0.8%
18.5%	3,590	3,647	57	1.6%
19.8%	3,582	3,639	56	1.6%
21.0%	3,568	3,605	37	1.0%
22.2%	3,561	3,583	22	0.6%
23.5%	3,543	3,578	35	1.0%
24.7%	3,539	3,572	33	0.9%
25.9%	3,532	3,569	38	1.1%
27.2%	3,520	3,567	47	1.3%
28.4%	3,499	3,543	44	1.3%
29.6%	3,438	3,542	104	3.0%
30.9%	3,424	3,522	97	2.8%
32.1%	3,423	3,481	58	1.7%
33.3%	3,372	3,473	101	3.0%
34.6%	3,360	3,457	97	2.9%
35.8%	3,301	3,441	139	4.2%
37.0%	3,250	3,384	135	4.2%
38.3%	3,223	3,375	152	4.7%
39.5%	3,206	3,338	133	4.1%
40.7%	3,200	3,320	120	3.8%
42.0%	3,199	3,304	105	3.3%
43.2%	3,197	3,297	100	3.1%
44.4%	3,186	3,295	108	3.4%
45.7%	3,180	3,285	105	3.3%
46.9%	3,165	3,273	108	3.4%
48.1%	3,117	3,233	116	3.7%
49.4%	3,099	3,225	126	4.1%
50.6%	3,087	3,220	133	4.3%
51.9%	3,078	3,200	122	4.0%
53.1%	3,076	3,200	124	4.0%
54.3%	3,075	3,200	125	4.1%
55.6%	3,047	3,152	105	3.4%
56.8%	3,022	3,141	120	4.0%
58.0%	3,017	3,139	121	4.0%
59.3%	3,006	3,079	73	2.4%
60.5%	2,954	3,069	115	3.9%
61.7%	2,937	3,022	85	2.9%
63.0%	2,936	3,010	75	2.5%
64.2%	2,927	2,965	39	1.3%
65.4%	2,922	2,937	16	0.5%
66.7%	2,863	2,902	39	1.3%
67.9%	2,855	2,871	16	0.6%
69.1%	2,830	2,866	36	1.3%
70.4%	2,812	2,865	53	1.9%
71.6%	2,800	2,861	61	2.2%
72.8%	2,784	2,852	67	2.4%
74.1%	2,724	2,830	106	3.9%
75.3%	2,628	2,823	194	7.4%
76.5%	2,616	2,785	169	6.5%
77.8%	2,585	2,718	133	5.1%
79.0%	2,539	2,669	130	5.1%
80.2%	2,532	2,657	124	4.9%
81.5%	2,446	2,547	100	4.1%
82.7%	2,440	2,500	61	2.5%
84.0%	2,309	2,499	190	8.2%
85.2%	2,278	2,490	211	9.3%
86.4%	2,238	2,422	184	8.2%
87.7%	2,238	2,390	152	6.8%
88.9%	2,234	2,363	129	5.8%
90.1%	2,222	2,325	104	4.7%
91.4%	1,880	2,096	215	11.4%
92.6%	1,880	2,055	176	9.3%
93.8%	1,807	1,962	155	8.6%
95.1%	1,720	1,956	236	13.7%
96.3%	1,625	1,769	143	8.8%
97.5%	1,461	1,735	274	18.8%
98.8%	1,381	1,713	332	24.0%
100.0%	550	819	269	48.9%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,700	3,700	0	0.0%
1.2%	3,700	3,700	0	0.0%
2.5%	3,700	3,655	-45	-1.2%
3.7%	3,614	3,654	40	1.1%
4.9%	3,541	3,626	85	2.4%
6.2%	3,512	3,517	5	0.1%
7.4%	3,498	3,506	8	0.2%
8.6%	3,450	3,480	30	0.9%
9.9%	3,434	3,477	43	1.2%
11.1%	3,400	3,474	74	2.2%
12.3%	3,400	3,446	46	1.4%
13.6%	3,392	3,428	36	1.1%
14.8%	3,385	3,417	32	0.9%
16.0%	3,378	3,414	36	1.1%
17.3%	3,349	3,375	26	0.8%
18.5%	3,341	3,371	30	0.9%
19.8%	3,329	3,364	35	1.0%
21.0%	3,326	3,323	-3	-0.1%
22.2%	3,315	3,316	0	0.0%
23.5%	3,305	3,307	2	0.1%
24.7%	3,265	3,291	26	0.8%
25.9%	3,260	3,288	28	0.9%
27.2%	3,224	3,282	58	1.8%
28.4%	3,202	3,242	39	1.2%
29.6%	3,145	3,226	81	2.6%
30.9%	3,124	3,200	76	2.4%
32.1%	3,063	3,170	107	3.5%
33.3%	3,040	3,128	88	2.9%
34.6%	3,024	3,121	96	3.2%
35.8%	3,019	3,081	63	2.1%
37.0%	2,965	3,077	112	3.8%
38.3%	2,920	3,024	105	3.6%
39.5%	2,893	3,023	129	4.5%
40.7%	2,870	3,010	140	4.9%
42.0%	2,843	3,007	164	5.8%
43.2%	2,838	2,990	151	5.3%
44.4%	2,834	2,985	151	5.3%
45.7%	2,833	2,967	134	4.7%
46.9%	2,831	2,959	128	4.5%
48.1%	2,798	2,952	154	5.5%
49.4%	2,797	2,931	134	4.8%
50.6%	2,789	2,921	132	4.7%
51.9%	2,781	2,882	100	3.6%
53.1%	2,777	2,864	87	3.1%
54.3%	2,771	2,853	82	3.0%
55.6%	2,748	2,816	68	2.5%
56.8%	2,742	2,769	27	1.0%
58.0%	2,741	2,753	12	0.4%
59.3%	2,700	2,751	51	1.9%
60.5%	2,698	2,730	33	1.2%
61.7%	2,658	2,719	61	2.3%
63.0%	2,589	2,714	124	4.8%
64.2%	2,583	2,691	109	4.2%
65.4%	2,568	2,684	116	4.5%
66.7%	2,560	2,660	101	3.9%
67.9%	2,558	2,636	79	3.1%
69.1%	2,506	2,622	116	4.6%
70.4%	2,504	2,611	107	4.3%
71.6%	2,492	2,591	99	4.0%
72.8%	2,470	2,582	113	4.6%
74.1%	2,448	2,538	90	3.7%
75.3%	2,391	2,506	116	4.8%
76.5%	2,372	2,497	126	5.3%
77.8%	2,271	2,449	178	7.8%
79.0%	2,254	2,443	189	8.4%
80.2%	2,249	2,349	100	4.5%
81.5%	2,236	2,291	55	2.5%
82.7%	2,231	2,196	-36	-1.6%
84.0%	2,220	2,184	-37	-1.7%
85.2%	2,052	2,182	130	6.4%
86.4%	2,034	2,161	128	6.3%
87.7%	1,968	2,159	191	9.7%
88.9%	1,929	2,114	185	9.6%
90.1%	1,915	2,030	115	6.0%
91.4%	1,668	1,773	105	6.3%
92.6%	1,577	1,738	161	10.2%
93.8%	1,554	1,729	175	11.3%
95.1%	1,335	1,649	314	23.5%
96.3%	1,215	1,496	281	23.2%
97.5%	1,169	1,481	312	26.7%
98.8%	966	1,403	436	45.2%
100.0%	550	550	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,400	3,400	0	0.0%
1.2%	3,400	3,400	0	0.0%
2.5%	3,400	3,400	0	0.0%
3.7%	3,364	3,400	36	1.1%
4.9%	3,357	3,393	35	1.1%
6.2%	3,288	3,378	90	2.7%
7.4%	3,277	3,331	53	1.6%
8.6%	3,168	3,311	142	4.5%
9.9%	3,141	3,234	93	3.0%
11.1%	3,138	3,229	92	2.9%
12.3%	3,117	3,200	83	2.7%
13.6%	3,067	3,146	79	2.6%
14.8%	3,056	3,128	72	2.4%
16.0%	3,031	3,111	80	2.7%
17.3%	3,028	3,042	14	0.5%
18.5%	3,025	3,024	-1	0.0%
19.8%	3,025	3,020	-5	-0.2%
21.0%	3,023	3,020	-3	-0.1%
22.2%	3,007	2,999	-8	-0.3%
23.5%	2,985	2,954	-31	-1.0%
24.7%	2,970	2,941	-29	-1.0%
25.9%	2,959	2,928	-31	-1.1%
27.2%	2,885	2,919	34	1.2%
28.4%	2,871	2,910	38	1.3%
29.6%	2,826	2,909	83	2.9%
30.9%	2,820	2,907	87	3.1%
32.1%	2,820	2,902	82	2.9%
33.3%	2,815	2,899	85	3.0%
34.6%	2,805	2,885	80	2.9%
35.8%	2,792	2,875	83	3.0%
37.0%	2,783	2,870	87	3.1%
38.3%	2,768	2,865	97	3.5%
39.5%	2,746	2,864	118	4.3%
40.7%	2,742	2,862	120	4.4%
42.0%	2,725	2,849	124	4.6%
43.2%	2,721	2,831	110	4.0%
44.4%	2,697	2,781	84	3.1%
45.7%	2,688	2,762	74	2.7%
46.9%	2,675	2,760	86	3.2%
48.1%	2,671	2,757	86	3.2%
49.4%	2,659	2,756	97	3.7%
50.6%	2,658	2,746	88	3.3%
51.9%	2,644	2,743	100	3.8%
53.1%	2,641	2,725	83	3.2%
54.3%	2,598	2,681	83	3.2%
55.6%	2,582	2,678	96	3.7%
56.8%	2,581	2,663	82	3.2%
58.0%	2,532	2,650	119	4.7%
59.3%	2,520	2,637	118	4.7%
60.5%	2,470	2,628	158	6.4%
61.7%	2,450	2,606	156	6.4%
63.0%	2,439	2,606	167	6.9%
64.2%	2,426	2,516	91	3.7%
65.4%	2,408	2,498	90	3.7%
66.7%	2,404	2,478	75	3.1%
67.9%	2,376	2,471	94	4.0%
69.1%	2,370	2,468	98	4.1%
70.4%	2,368	2,437	69	2.9%
71.6%	2,365	2,436	71	3.0%
72.8%	2,350	2,415	64	2.7%
74.1%	2,333	2,401	68	2.9%
75.3%	2,321	2,386	65	2.8%
76.5%	2,299	2,321	22	0.9%
77.8%	2,274	2,313	39	1.7%
79.0%	2,264	2,288	24	1.1%
80.2%	2,253	2,269	16	0.7%
81.5%	2,243	2,148	-96	-4.3%
82.7%	2,213	2,129	-84	-3.8%
84.0%	2,016	2,115	99	4.9%
85.2%	1,991	2,111	120	6.0%
86.4%	1,961	2,100	139	7.1%
87.7%	1,950	2,052	101	5.2%
88.9%	1,892	2,012	120	6.3%
90.1%	1,831	1,933	102	5.6%
91.4%	1,708	1,797	89	5.2%
92.6%	1,499	1,696	197	13.2%
93.8%	1,441	1,634	193	13.4%
95.1%	1,258	1,464	206	16.4%
96.3%	1,152	1,410	259	22.5%
97.5%	1,124	1,403	279	24.8%
98.8%	925	1,308	383	41.4%
100.0%	742	902	160	21.5%

Figure SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

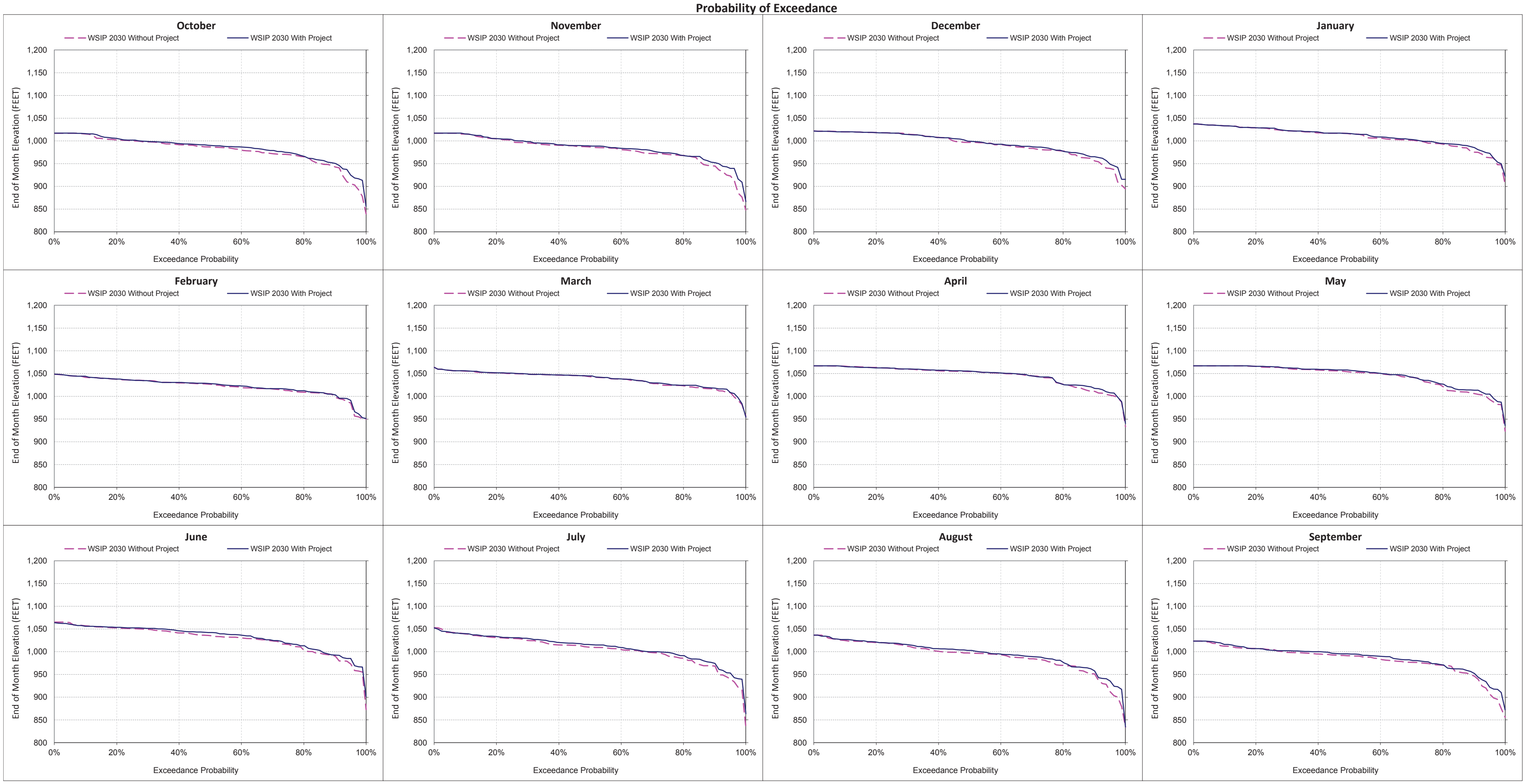


Table SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,017	1,017	0	0.0%
1.2%	1,017	1,017	0	0.0%
2.5%	1,017	1,017	0	0.0%
3.7%	1,017	1,017	0	0.0%
4.9%	1,017	1,017	0	0.0%
6.2%	1,017	1,017	0	0.0%
7.4%	1,017	1,017	0	0.0%
8.6%	1,016	1,017	1	0.1%
9.9%	1,015	1,016	1	0.1%
11.1%	1,015	1,015	1	0.1%
12.3%	1,012	1,015	4	0.3%
13.6%	1,006	1,014	8	0.8%
14.8%	1,006	1,010	4	0.4%
16.0%	1,004	1,008	4	0.4%
17.3%	1,003	1,007	4	0.4%
18.5%	1,003	1,007	3	0.3%
19.8%	1,002	1,006	4	0.4%
21.0%	1,002	1,004	2	0.2%
22.2%	1,001	1,002	1	0.1%
23.5%	1,001	1,002	1	0.1%
24.7%	1,000	1,002	2	0.2%
25.9%	1,000	1,002	2	0.2%
27.2%	999	1,000	1	0.1%
28.4%	998	1,000	2	0.2%
29.6%	998	999	1	0.1%
30.9%	998	999	1	0.1%
32.1%	997	998	1	0.1%
33.3%	997	998	1	0.1%
34.6%	995	997	2	0.2%
35.8%	993	997	4	0.4%
37.0%	993	997	3	0.3%
38.3%	993	995	2	0.2%
39.5%	992	995	2	0.2%
40.7%	991	994	3	0.3%
42.0%	991	993	2	0.2%
43.2%	991	993	2	0.2%
44.4%	990	993	2	0.2%
45.7%	989	992	4	0.4%
46.9%	988	991	3	0.3%
48.1%	987	991	4	0.4%
49.4%	987	990	4	0.4%
50.6%	987	990	3	0.3%
51.9%	986	989	3	0.3%
53.1%	986	989	3	0.3%
54.3%	985	988	3	0.3%
55.6%	985	987	2	0.2%
56.8%	984	987	3	0.4%
58.0%	982	987	5	0.5%
59.3%	982	987	5	0.5%
60.5%	979	987	8	0.8%
61.7%	978	986	8	0.8%
63.0%	978	985	8	0.8%
64.2%	977	983	6	0.6%
65.4%	977	983	6	0.6%
66.7%	974	982	8	0.8%
67.9%	974	980	6	0.6%
69.1%	973	979	6	0.6%
70.4%	972	979	7	0.7%
71.6%	971	977	6	0.6%
72.8%	971	976	6	0.6%
74.1%	971	975	4	0.5%
75.3%	970	974	4	0.4%
76.5%	969	973	4	0.4%
77.8%	968	971	3	0.3%
79.0%	966	968	2	0.2%
80.2%	965	966	0	0.0%
81.5%	963	962	-1	-0.1%
82.7%	956	961	5	0.5%
84.0%	952	959	7	0.7%
85.2%	951	958	7	0.7%
86.4%	948	957	8	0.9%
87.7%	948	953	5	0.6%
88.9%	946	952	6	0.7%
90.1%	943	950	8	0.8%
91.4%	941	946	5	0.5%
92.6%	922	938	16	1.7%
93.8%	910	937	27	3.0%
95.1%	906	925	19	2.1%
96.3%	903	918	15	1.7%
97.5%	893	917	24	2.6%
98.8%	878	914	35	4.0%
100.0%	839	857	17	2.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,017	1,017	0	0.0%
1.2%	1,017	1,017	0	0.0%
2.5%	1,017	1,017	0	0.0%
3.7%	1,017	1,017	0	0.0%
4.9%	1,017	1,017	0	0.0%
6.2%	1,017	1,017	0	0.0%
7.4%	1,017	1,017	0	0.0%
8.6%	1,015	1,017	2	0.2%
9.9%	1,015	1,015	0	0.0%
11.1%	1,015	1,015	0	0.0%
12.3%	1,014	1,013	-1	-0.1%
13.6%	1,010	1,012	2	0.2%
14.8%	1,009	1,012	3	0.3%
16.0%	1,007	1,009	2	0.2%
17.3%	1,006	1,008	2	0.2%
18.5%	1,005	1,005	0	0.0%
19.8%	1,005	1,005	0	0.0%
21.0%	1,004	1,004	1	0.1%
22.2%	1,003	1,004	2	0.2%
23.5%	1,002	1,004	2	0.2%
24.7%	1,002	1,003	2	0.2%
25.9%	997	1,000	4	0.4%
27.2%	996	1,000	4	0.4%
28.4%	996	1,000	4	0.4%
29.6%	995	999	3	0.3%
30.9%	995	998	3	0.3%
32.1%	995	995	1	0.1%
33.3%	993	995	2	0.2%
34.6%	992	995	3	0.3%
35.8%	992	995	3	0.3%
37.0%	991	994	3	0.3%
38.3%	991	994	3	0.3%
39.5%	991	992	1	0.1%
40.7%	990	992	1	0.1%
42.0%	990	991	1	0.1%
43.2%	990	990	0	0.0%
44.4%	990	990	0	0.0%
45.7%	988	990	2	0.2%
46.9%	988	990	2	0.2%
48.1%	988	989	2	0.2%
49.4%	987	989	2	0.2%
50.6%	986	989	3	0.3%
51.9%	986	989	3	0.3%
53.1%	985	988	3	0.3%
54.3%	985	988	3	0.3%
55.6%	985	986	1	0.1%
56.8%	984	985	1	0.1%
58.0%	984	985	1	0.1%
59.3%	982	984	3	0.3%
60.5%	980	984	3	0.3%
61.7%	980	983	3	0.3%
63.0%	979	983	4	0.4%
64.2%	978	982	4	0.4%
65.4%	977	982	5	0.5%
66.7%	974	981	6	0.7%
67.9%	973	981	8	0.8%
69.1%	972	979	7	0.7%
70.4%	972	977	5	0.5%
71.6%	972	975	3	0.3%
72.8%	972	974	2	0.2%
74.1%	971	974	3	0.3%
75.3%	970	974	4	0.4%
76.5%	969	973	4	0.4%
77.8%	969	972	3	0.3%
79.0%	968	969	0	0.0%
80.2%	968	967	-1	-0.1%
81.5%	967	966	-1	-0.1%
82.7%	965	966	1	0.1%
84.0%	964	966	2	0.2%
85.2%	955	966	11	1.1%
86.4%	948	959	11	1.2%
87.7%	946	957	11	1.1%
88.9%	945	953	8	0.8%
90.1%	945	952	7	0.8%
91.4%	936	950	13	1.4%
92.6%	932	944	12	1.3%
93.8%	925	943	18	1.9%
95.1%	923	940	17	1.8%
96.3%	913	939	27	2.9%
97.5%	885	916	31	3.5%
98.8%	876	909	33	3.7%
100.0%	848	866	18	2.2%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,022	1,022	0	0.0%
1.2%	1,021	1,021	0	0.0%
2.5%	1,021	1,021	0	0.0%
3.7%	1,021	1,021	0	0.0%
4.9%	1,021	1,021	0	0.0%
6.2%	1,021	1,021	0	0.0%
7.4%	1,021	1,020	0	0.0%
8.6%	1,020	1,020	0	0.0%
9.9%	1,020	1,020	0	0.0%
11.1%	1,020	1,020	0	0.0%
12.3%	1,020	1,020	0	0.0%
13.6%	1,020	1,020	0	0.0%
14.8%	1,019	1,019	0	0.0%
16.0%	1,019	1,019	0	0.0%
17.3%	1,019	1,019	0	0.0%
18.5%	1,019	1,019	0	0.0%
19.8%	1,018	1,018	0	0.0%
21.0%	1,018	1,018	0	0.0%
22.2%	1,018	1,018	0	0.0%
23.5%	1,018	1,018	0	0.0%
24.7%	1,018	1,017	-1	-0.1%
25.9%	1,017	1,017	0	0.0%
27.2%	1,017	1,017	0	0.0%
28.4%	1,017	1,015	-2	-0.2%
29.6%	1,015	1,015	-1	-0.1%
30.9%	1,014	1,014	-1	-0.1%
32.1%	1,014	1,013	-1	-0.1%
33.3%	1,013	1,013	0	0.0%
34.6%	1,013	1,012	0	0.0%
35.8%	1,010	1,010	0	0.0%
37.0%	1,010	1,010	0	0.0%
38.3%	1,008	1,009	1	0.1%
39.5%	1,008	1,008	0	0.0%
40.7%	1,007	1,007	0	0.0%
42.0%	1,007	1,007	0	0.0%
43.2%	1,006	1,007	1	0.1%
44.4%	1,001	1,005	4	0.4%
45.7%	998	1,005	6	0.6%
46.9%	998	1,004	6	0.6%
48.1%	997	1,002	5	0.5%
49.4%	997	1,000	3	0.3%
50.6%	997	999	2	0.2%
51.9%	997	998	1	0.1%
53.1%	996	998	2	0.2%
54.3%	996	997	1	0.1%
55.6%	996	995	-1	-0.1%
56.8%	995	994	-1	-0.1%
58.0%	992	993	1	0.1%
59.3%	992	993	1	0.1%
60.5%	991	992	1	0.1%
61.7%	990	991	1	0.1%
63.0%	989	991	1	0.1%
64.2%	988	990	2	0.2%
65.4%	987	990	3	0.3%
66.7%	986	988	2	0.2%
67.9%	985	988	3	0.3%
69.1%	984	988	4	0.4%
70.4%	983	987	3	0.3%
71.6%	982	987	5	0.5%
72.8%	981	987	6	0.6%
74.1%	980	985	5	0.5%
75.3%	980	984	4	0.4%
76.5%	980	982	2	0.2%
77.8%	979	980	1	0.1%
79.0%	978	979	1	0.1%
80.2%	978	977	-1	-0.1%
81.5%	974	976	1	0.1%
82.7%	970	975	5	0.5%
84.0%	970	974	5	0.5%
85.2%	964	973	9	0.9%
86.4%	963	971	8	0.8%
87.7%	963	968	5	0.5%
88.9%	962	965	4	0.4%
90.1%	956	965	9	1.0%
91.4%	954	963	9	1.0%
92.6%	947	962	15	1.6%
93.8%	940	957	17	1.8%
95.1%	939	949	9	1.0%
96.3%	937	945	8	0.9%
97.5%	909	942	32	3.6%
98.8%	902	916	13	1.5%
100.0%	894	915	21	2.4%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,037	1,037	0	0.0%
1.2%	1,037	1,037	0	0.0%
2.5%	1,036	1,036	0	0.0%
3.7%	1,035	1,035	0	0.0%
4.9%	1,035	1,035	0	0.0%
6.2%	1,035	1,035	0	0.0%
7.4%	1,034	1,034	0	0.0%
8.6%	1,034	1,034	0	0.0%
9.9%	1,033	1,033	0	0.0%
11.1%	1,033	1,033	0	0.0%
12.3%	1,033	1,033	0	0.0%
13.6%	1,032	1,032	0	0.0%
14.8%	1,030	1,030	0	0.0%
16.0%	1,030	1,030	0	0.0%
17.3%	1,030	1,030	0	0.0%
18.5%	1,029	1,029	0	0.0%
19.8%	1,029	1,029	0	0.0%
21.0%	1,028	1,029	0	0.0%
22.2%	1,028	1,028	0	0.0%
23.5%	1,028	1,028	1	0.1%
24.7%	1,026	1,028	2	0.2%
25.9%	1,025	1,028	3	0.3%
27.2%	1,024	1,025	1	0.1%
28.4%	1,023	1,024	1	0.1%
29.6%	1,022	1,023	1	0.1%
30.9%	1,022	1,022	0	0.0%
32.1%	1,022	1,022	0	0.0%
33.3%	1,022	1,022	0	0.0%
34.6%	1,021	1,022	1	0.1%
35.8%	1,020	1,021	1	0.1%
37.0%	1,020	1,020	1	0.1%
38.3%	1,020	1,020	0	0.0%
39.5%	1,018	1,020	2	0.2%
40.7%	1,018	1,019	1	0.1%
42.0%	1,017	1,017	0	0.0%
43.2%	1,017	1,017	0	0.0%
44.4%	1,017	1,017	0	0.0%
45.7%	1,017	1,017	0	0.0%
46.9%	1,017	1,017	0	0.0%
48.1%	1,017	1,017	0	0.0%
49.4%	1,016	1,017	0	0.0%
50.6%	1,015	1,016	1	0.1%
51.9%	1,015	1,015	0	0.0%
53.1%	1,015	1,015	0	0.0%
54.3%	1,013	1,014	1	0.1%
55.6%	1,007	1,014	7	0.7%
56.8%	1,007	1,011	4	0.4%
58.0%	1,006	1,009	3	0.3%
59.3%	1,006	1,009	3	0.3%
60.5%	1,006	1,008	3	0.3%
61.7%	1,004	1,008	4	0.4%
63.0%	1,004	1,007	3	0.3%
64.2%	1,003	1,006	3	0.3%
65.4%	1,003	1,005	2	0.2%
66.7%	1,003	1,005	2	0.2%
67.9%	1,002	1,005	2	0.2%
69.1%	1,002	1,004	2	0.2%
70.4%	1,002	1,003	1	0.1%
71.6%	1,000	1,002	1	0.1%
72.8%	999	1,000	1	0.1%
74.1%	998	999	1	0.1%
75.3%	995	999	4	0.4%
76.5%	995	998	4	0.4%
77.8%	994	997	2	0.2%
79.0%	994	995	0	0.1%
80.2%	993	994	2	0.2%
81.5%	992	994	2	0.2%
82.7%	989	993	5	0.5%
84.0%	988	993	5	0.5%
85.2%	987	992	5	0.5%
86.4%	985	990	5	0.5%
87.7%	985	990	5	0.5%
88.9%	977	988	10	1.0%
90.1%	975	985	10	1.0%
91.4%	975	981	6	0.6%
92.6%	971	978	7	0.7%
93.8%	964	975	11	1.1%
95.1%	963	973	10	1.0%
96.3%	963	962	-1	-0.1%
97.5%	948	953	5	0.6%
98.8%	947	950	3	0.3%
100.0%	903	922	19	2.1%

Table SW-08-b

Shasta Lake, End of Month Elevation

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,049	1,049	0	0.0%
1.2%	1,048	1,048	0	0.0%
2.5%	1,047	1,047	0	0.0%
3.7%	1,047	1,047	0	0.0%
4.9%	1,045	1,045	0	0.0%
6.2%	1,045	1,045	0	0.0%
7.4%	1,044	1,044	0	0.0%
8.6%	1,044	1,044	0	0.0%
9.9%	1,042	1,044	2	0.2%
11.1%	1,041	1,042	1	0.1%
12.3%	1,041	1,041	0	0.0%
13.6%	1,041	1,041	0	0.0%
14.8%	1,040	1,040	0	0.0%
16.0%	1,040	1,040	0	0.0%
17.3%	1,039	1,039	0	0.0%
18.5%	1,038	1,039	1	0.0%
19.8%	1,038	1,038	0	0.0%
21.0%	1,037	1,038	1	0.1%
22.2%	1,036	1,037	0	0.0%
23.5%	1,036	1,036	0	0.0%
24.7%	1,036	1,036	0	0.0%
25.9%	1,035	1,035	0	0.0%
27.2%	1,035	1,035	0	0.0%
28.4%	1,035	1,035	0	0.0%
29.6%	1,034	1,034	0	0.0%
30.9%	1,034	1,034	-1	-0.1%
32.1%	1,034	1,032	-1	-0.1%
33.3%	1,032	1,032	0	0.0%
34.6%	1,031	1,031	0	0.0%
35.8%	1,031	1,031	0	0.0%
37.0%	1,031	1,031	0	0.0%
38.3%	1,030	1,031	0	0.0%
39.5%	1,030	1,030	1	0.1%
40.7%	1,029	1,030	1	0.1%
42.0%	1,029	1,030	0	0.0%
43.2%	1,029	1,029	0	0.0%
44.4%	1,028	1,029	1	0.1%
45.7%	1,028	1,029	1	0.1%
46.9%	1,028	1,029	1	0.1%
48.1%	1,028	1,029	1	0.1%
49.4%	1,027	1,028	2	0.2%
50.6%	1,026	1,028	2	0.2%
51.9%	1,025	1,027	2	0.2%
53.1%	1,024	1,026	2	0.2%
54.3%	1,022	1,025	3	0.3%
55.6%	1,022	1,024	3	0.3%
56.8%	1,022	1,024	2	0.2%
58.0%	1,021	1,023	2	0.2%
59.3%	1,021	1,023	3	0.3%
60.5%	1,019	1,023	4	0.4%
61.7%	1,019	1,022	3	0.3%
63.0%	1,018	1,020	2	0.2%
64.2%	1,017	1,019	2	0.2%
65.4%	1,017	1,019	2	0.2%
66.7%	1,017	1,018	1	0.1%
67.9%	1,017	1,017	0	0.0%
69.1%	1,017	1,017	0	0.0%
70.4%	1,016	1,017	1	0.1%
71.6%	1,015	1,017	2	0.2%
72.8%	1,015	1,017	2	0.2%
74.1%	1,013	1,016	3	0.3%
75.3%	1,012	1,015	2	0.2%
76.5%	1,011	1,014	4	0.4%
77.8%	1,010	1,013	3	0.2%
79.0%	1,009	1,012	3	0.3%
80.2%	1,009	1,012	3	0.3%
81.5%	1,008	1,010	2	0.2%
82.7%	1,008	1,010	2	0.2%
84.0%	1,008	1,009	1	0.1%
85.2%	1,007	1,008	1	0.1%
86.4%	1,006	1,007	1	0.1%
87.7%	1,006	1,005	-1	-0.1%
88.9%	1,005	1,005	0	0.0%
90.1%	998	1,003	5	0.5%
91.4%	995	996	1	0.1%
92.6%	993	996	3	0.3%
93.8%	989	995	7	0.7%
95.1%	985	991	6	0.6%
96.3%	956	966	9	1.0%
97.5%	955	962	7	0.7%
98.8%	951	953	2	0.2%
100.0%	949	951	2	0.2%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,064	1,064	0	0.0%
1.2%	1,060	1,060	0	0.0%
2.5%	1,059	1,059	0	0.0%
3.7%	1,058	1,058	0	0.0%
4.9%	1,057	1,057	0	0.0%
6.2%	1,056	1,056	0	0.0%
7.4%	1,056	1,056	0	0.0%
8.6%	1,056	1,056	0	0.0%
9.9%	1,055	1,056	1	0.1%
11.1%	1,055	1,055	0	0.0%
12.3%	1,055	1,055	0	0.0%
13.6%	1,053	1,055	2	0.2%
14.8%	1,053	1,053	1	0.1%
16.0%	1,052	1,053	1	0.1%
17.3%	1,052	1,052	0	0.0%
18.5%	1,052	1,052	1	0.1%
19.8%	1,051	1,052	0	0.0%
21.0%	1,051	1,051	0	0.0%
22.2%	1,051	1,051	0	0.0%
23.5%	1,050	1,051	1	0.1%
24.7%	1,050	1,051	1	0.1%
25.9%	1,050	1,050	1	0.1%
27.2%	1,050	1,050	1	0.1%
28.4%	1,049	1,050	0	0.0%
29.6%	1,048	1,049	1	0.1%
30.9%	1,048	1,048	0	0.0%
32.1%	1,048	1,048	0	0.0%
33.3%	1,048	1,048	0	0.0%
34.6%	1,048	1,048	0	0.0%
35.8%	1,048	1,048	0	0.0%
37.0%	1,047	1,048	0	0.0%
38.3%	1,047	1,047	0	0.0%
39.5%	1,047	1,047	1	0.1%
40.7%	1,047	1,047	0	0.0%
42.0%	1,046	1,047	0	0.0%
43.2%	1,046	1,046	0	0.0%
44.4%	1,046	1,046	0	0.0%
45.7%	1,046	1,046	0	0.0%
46.9%	1,045	1,046	0	0.0%
48.1%	1,045	1,045	0	0.0%
49.4%	1,044	1,045	1	0.1%
50.6%	1,043	1,045	2	0.2%
51.9%	1,042	1,043	1	0.1%
53.1%	1,041	1,042	1	0.1%
54.3%	1,041	1,042	0	0.0%
55.6%	1,041	1,041	0	0.0%
56.8%	1,039	1,039	1	0.1%
58.0%	1,038	1,039	1	0.1%
59.3%	1,038	1,039	0	0.0%
60.5%	1,038	1,038	0	0.0%
61.7%	1,038	1,038	0	0.0%
63.0%	1,036	1,037	2	0.2%
64.2%	1,035	1,036	1	0.1%
65.4%	1,035	1,034	0	0.0%
66.7%	1,034	1,034	-1	-0.1%
67.9%	1,032	1,033	1	0.1%
69.1%	1,029	1,030	1	0.1%
70.4%	1,028	1,029	1	0.1%
71.6%	1,028	1,029	1	0.1%
72.8%	1,025	1,029	4	0.4%
74.1%	1,024	1,028	4	0.4%
75.3%	1,024	1,027	2	0.2%
76.5%	1,024	1,025	1	0.1%
77.8%	1,024	1,025	1	0.1%
79.0%	1,024	1,024	0	0.0%
80.2%	1,023	1,024	1	0.1%
81.5%	1,021	1,024	3	0.3%
82.7%	1,020	1,024	4	0.4%
84.0%	1,019	1,024	5	0.5%
85.2%	1,019	1,022	3	0.3%
86.4%	1,017	1,020	2	0.2%
87.7%	1,017	1,019	2	0.2%
88.9%	1,017	1,019	2	0.2%
90.1%	1,016	1,018	2	0.2%
91.4%	1,012	1,016	4	0.4%
92.6%	1,012	1,016	4	0.4%
93.8%	1,009	1,016	7	0.7%
95.1%	1,008	1,008	0	0.0%
96.3%	999	1,006	7	0.7%
97.5%	991	997	6	0.6%
98.8%	982	984	2	0.2%
100.0%	956	954	-2	-0.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,066	1,067	0	0.0%
9.9%	1,066	1,065	-1	-0.1%
11.1%	1,065	1,065	-1	-0.1%
12.3%	1,065	1,064	-1	-0.1%
13.6%	1,065	1,064	-1	-0.1%
14.8%	1,065	1,064	-1	-0.1%
16.0%	1,064	1,064	-1	-0.1%
17.3%	1,064	1,064	0	0.0%
18.5%	1,064	1,063	-1	-0.1%
19.8%	1,064	1,063	-1	-0.1%
21.0%	1,063	1,063	0	0.0%
22.2%	1,062	1,062	0	0.0%
23.5%	1,062	1,062	0	0.0%
24.7%	1,062	1,062	0	0.0%
25.9%	1,060	1,062	1	0.1%
27.2%	1,060	1,060	0	0.0%
28.4%	1,060	1,060	0	0.0%
29.6%	1,060	1,060	0	0.0%
30.9%	1,060	1,060	0	0.0%
32.1%	1,059	1,060	0	0.0%
33.3%	1,058	1,059	1	0.1%
34.6%	1,058	1,059	1	0.1%
35.8%	1,058	1,058	1	0.1%
37.0%	1,058	1,058	1	0.0%
38.3%	1,057	1,058	1	0.1%
39.5%	1,057	1,058	1	0.1%
40.7%	1,056	1,058	2	0.2%
42.0%	1,056	1,057	2	0.2%
43.2%	1,055	1,057	1	0.1%
44.4%	1,055	1,056	1	0.1%
45.7%	1,055	1,056	1	0.1%
46.9%	1,055	1,056	1	0.1%
48.1%	1,055	1,056	1	0.1%
49.4%	1,055	1,055	1	0.1%
50.6%	1,055	1,055	0	0.0%
51.9%	1,054	1,055	0	0.0%
53.1%	1,053	1,053	0	0.0%
54.3%	1,052	1,053	0	0.0%
55.6%	1,052	1,053	0	0.0%
56.8%	1,052	1,052	0	0.0%
58.0%	1,051	1,052	1	0.1%
59.3%	1,051	1,052	0	0.0%
60.5%	1,051	1,051	1	0.0%
61.7%	1,050	1,051	1	0.1%
63.0%	1,050	1,051	1	0.1%
64.2%	1,049	1,050	1	0.1%
65.4%	1,048	1,049	1	0.1%
66.7%	1,048	1,048	0	0.0%
67.9%	1,046	1,048	2	0.2%
69.1%	1,046	1,045	-1	-0.1%
70.4%	1,044	1,045	0	0.0%
71.6%	1,044	1,043	-1	-0.1%
72.8%	1,042	1,043	0	0.0%
74.1%	1,041	1,042	2	0.2%
75.3%	1,041	1,042	2	0.1%
76.5%	1,040	1,041	0	0.0%
77.8%	1,030	1,031	1	0.1%
79.0%	1,028	1,028	0	0.0%
80.2%	1,026	1,025	-1	-0.1%
81.5%	1,025	1,025	0	0.0%
82.7%	1,022	1,025	2	0.2%
84.0%	1,020	1,025	5	0.5%
85.2%	1,020	1,024	4	0.4%
86.4%	1,016	1,024	8	0.8%
87.7%	1,013	1,022	9	0.9%
88.9%	1,011	1,021	10	1.0%
90.1%	1,011	1,017	6	0.6%
91.4%	1,007	1,017	9	0.9%
92.6%	1,007	1,014	7	0.7%
93.8%	1,004	1,010	6	0.6%
95.1%	1,002	1,008	5	0.5%
96.3%	1,001	1,007	6	0.6%
97.5%	998	998	0	0.0%
98.8%	987	988	1	0.1%
100.0%	933	940	7	0.8%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,067	0	0.0%
11.1%	1,067	1,067	0	0.0%
12.3%	1,067	1,067	0	0.0%
13.6%	1,067	1,067	0	0.0%
14.8%	1,067	1,067	0	0.0%
16.0%	1,067	1,067	0	0.0%
17.3%	1,066	1,067	0	0.0%
18.5%	1,066	1,066	0	0.0%
19.8%	1,066	1,066	0	0.0%
21.0%	1,065	1,066	1	0.1%
22.2%	1,064	1,066	2	0.1%
23.5%	1,064	1,066	1	0.1%
24.7%	1,064	1,066	2	0.2%
25.9%	1,064	1,065	1	0.1%
27.2%	1,064	1,065	1	0.1%
28.4%	1,063	1,063	0	0.0%
29.6%	1,062	1,063	1	0.1%
30.9%	1,061	1,062	2	0.2%
32.1%	1,060	1,062	2	0.2%
33.3%	1,059	1,062	3	0.2%
34.6%	1,059	1,060	1	0.1%
35.8%	1,059	1,060	1	0.1%
37.0%	1,059	1,060	1	0.1%
38.3%	1,059	1,060	1	0.1%
39.5%	1,058	1,059	2	0.2%
40.7%	1,058	1,059	2	0.2%
42.0%	1,057	1,059	2	0.2%
43.2%	1,057	1,059	2	0.2%
44.4%	1,056	1,059	2	0.2%
45.7%	1,056	1,058	2	0.2%
46.9%	1,056	1,058	2	0.2%
48.1%	1,055	1,058	3	0.3%
49.4%	1,054	1,058	3	0.3%
50.6%	1,053	1,057	4	0.3%
51.9%	1,053	1,056	3	0.3%
53.1%	1,053	1,055	3	0.2%
54.3%	1,052	1,054	2	0.2%
55.6%	1,052	1,054	2	0.2%
56.8%	1,051	1,052	1	0.1%
58.0%	1,051	1,052	1	0.1%
59.3%	1,050	1,051	1	0.1%
60.5%	1,049	1,050	0	0.0%
61.7%	1,048	1,049	1	0.1%
63.0%	1,048	1,048	0	0.0%
64.2%	1,047	1,048	1	0.1%
65.4%	1,047	1,048	1	0.1%
66.7%	1,044	1,047	3	0.3%
67.9%	1,042	1,046	4	0.3%
69.1%	1,042	1,043	1	0.0%
70.4%	1,042	1,042	0	0.0%
71.6%	1,040	1,040	0	0.0%
72.8%	1,039	1,037	-2	-0.2%
74.1%	1,032	1,035	3	0.3%
75.3%	1,031	1,035	4	0.4%
76.5%	1,029	1,033	4	0.4%
77.8%	1,027	1,031	4	0.4%
79.0%	1,026	1,028	2	0.2%
80.2%	1,021	1,027	6	0.6%
81.5%	1,013	1,021	9	0.9%
82.7%	1,012	1,020	8	0.8%
84.0%	1,011	1,016	5	0.5%
85.2%	1,010	1,015	5	0.5%
86.4%	1,010	1,014	5	0.5%
87.7%	1,009	1,014	4	0.4%
88.9%	1,008	1,014	6	0.6%
90.1%	1,006	1,014	8	0.8%
91.4%	1,004	1,013	9	0.9%
92.6%	1,003	1,009	6	0.6%
93.8%	1,000	1,005	5	0.5%
95.1%	993	1,005	12	1.2%
96.3%	987	995	8	0.8%
97.5%	982	988	6	0.6%
98.8%	982	987	5	0.6%
100.0%	923	936	13	1.4%

Table SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,065	1,064	-1	-0.1%
1.2%	1,065	1,063	-2	-0.2%
2.5%	1,065	1,062	-3	-0.3%
3.7%	1,065	1,062	-3	-0.3%
4.9%	1,064	1,060	-4	-0.4%
6.2%	1,059	1,059	1	0.0%
7.4%	1,059	1,058	-1	-0.1%
8.6%	1,058	1,057	-1	0.0%
9.9%	1,057	1,056	-1	-0.1%
11.1%	1,056	1,056	0	0.0%
12.3%	1,056	1,056	0	0.0%
13.6%	1,055	1,055	1	0.1%
14.8%	1,055	1,055	1	0.1%
16.0%	1,054	1,055	1	0.0%
17.3%	1,053	1,054	1	0.1%
18.5%	1,053	1,054	1	0.1%
19.8%	1,053	1,053	1	0.1%
21.0%	1,052	1,053	2	0.2%
22.2%	1,051	1,053	2	0.2%
23.5%	1,051	1,053	2	0.2%
24.7%	1,051	1,053	2	0.2%
25.9%	1,051	1,053	2	0.2%
27.2%	1,050	1,052	2	0.2%
28.4%	1,050	1,052	2	0.2%
29.6%	1,049	1,052	2	0.2%
30.9%	1,049	1,051	2	0.2%
32.1%	1,047	1,051	4	0.4%
33.3%	1,046	1,050	4	0.3%
34.6%	1,046	1,050	4	0.4%
35.8%	1,046	1,050	4	0.4%
37.0%	1,044	1,049	4	0.4%
38.3%	1,043	1,048	5	0.4%
39.5%	1,042	1,046	5	0.5%
40.7%	1,041	1,045	4	0.4%
42.0%	1,041	1,044	3	0.3%
43.2%	1,040	1,044	4	0.4%
44.4%	1,039	1,044	5	0.5%
45.7%	1,037	1,043	6	0.6%
46.9%	1,037	1,043	7	0.7%
48.1%	1,036	1,043	6	0.6%
49.4%	1,036	1,042	6	0.6%
50.6%	1,035	1,042	7	0.7%
51.9%	1,033	1,042	8	0.8%
53.1%	1,033	1,039	6	0.6%
54.3%	1,032	1,039	7	0.7%
55.6%	1,032	1,038	6	0.6%
56.8%	1,032	1,038	6	0.5%
58.0%	1,032	1,037	6	0.5%
59.3%	1,031	1,037	6	0.6%
60.5%	1,030	1,036	6	0.6%
61.7%	1,029	1,035	6	0.6%
63.0%	1,029	1,035	6	0.6%
64.2%	1,029	1,031	3	0.2%
65.4%	1,027	1,029	2	0.2%
66.7%	1,026	1,029	3	0.3%
67.9%	1,026	1,026	0	0.0%
69.1%	1,024	1,026	2	0.2%
70.4%	1,023	1,025	1	0.1%
71.6%	1,023	1,024	2	0.2%
72.8%	1,017	1,023	6	0.5%
74.1%	1,016	1,019	3	0.3%
75.3%	1,016	1,018	2	0.2%
76.5%	1,012	1,017	5	0.5%
77.8%	1,011	1,016	5	0.5%
79.0%	1,010	1,013	3	0.3%
80.2%	1,002	1,013	11	1.1%
81.5%	1,001	1,007	7	0.7%
82.7%	1,001	1,006	5	0.5%
84.0%	997	1,005	8	0.8%
85.2%	997	1,003	6	0.6%
86.4%	995	998	3	0.3%
87.7%	994	995	2	0.2%
88.9%	993	993	0	0.0%
90.1%	990	993	3	0.3%
91.4%	980	992	12	1.2%
92.6%	980	987	7	0.7%
93.8%	979	985	6	0.6%
95.1%	973	985	12	1.2%
96.3%	959	969	10	1.1%
97.5%	958	967	9	1.0%
98.8%	955	966	11	1.1%
100.0%	873	901	29	3.3%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,053	1,053	0	0.0%
1.2%	1,053	1,050	-3	-0.3%
2.5%	1,050	1,045	-5	-0.5%
3.7%	1,043	1,044	2	0.2%
4.9%	1,042	1,043	1	0.1%
6.2%	1,042	1,041	-1	-0.1%
7.4%	1,041	1,041	0	0.0%
8.6%	1,041	1,040	-1	-0.1%
9.9%	1,039	1,040	1	0.1%
11.1%	1,039	1,039	0	0.0%
12.3%	1,036	1,037	1	0.1%
13.6%	1,036	1,037	1	0.1%
14.8%	1,034	1,036	2	0.2%
16.0%	1,034	1,034	0	0.0%
17.3%	1,033	1,034	1	0.1%
18.5%	1,032	1,034	2	0.2%
19.8%	1,031	1,034	2	0.2%
21.0%	1,031	1,032	2	0.2%
22.2%	1,030	1,031	1	0.1%
23.5%	1,030	1,031	2	0.1%
24.7%	1,029	1,031	1	0.1%
25.9%	1,029	1,031	2	0.2%
27.2%	1,029	1,031	2	0.2%
28.4%	1,028	1,030	2	0.2%
29.6%	1,025	1,030	5	0.4%
30.9%	1,024	1,029	4	0.4%
32.1%	1,024	1,027	3	0.2%
33.3%	1,022	1,027	4	0.4%
34.6%	1,022	1,026	4	0.4%
35.8%	1,019	1,025	6	0.6%
37.0%	1,017	1,023	6	0.6%
38.3%	1,016	1,022	7	0.7%
39.5%	1,015	1,021	6	0.6%
40.7%	1,015	1,020	5	0.5%
42.0%	1,015	1,019	5	0.4%
43.2%	1,015	1,019	4	0.4%
44.4%	1,014	1,019	5	0.5%
45.7%	1,014	1,018	5	0.5%
46.9%	1,013	1,018	5	0.5%
48.1%	1,011	1,016	5	0.5%
49.4%	1,010	1,016	5	0.5%
50.6%	1,010	1,016	6	0.6%
51.9%	1,009	1,015	5	0.5%
53.1%	1,009	1,015	5	0.5%
54.3%	1,009	1,015	5	0.5%
55.6%	1,008	1,013	5	0.5%
56.8%	1,007	1,012	5	0.5%
58.0%	1,007	1,012	5	0.5%
59.3%	1,006	1,009	3	0.3%
60.5%	1,004	1,009	5	0.5%
61.7%	1,003	1,007	4	0.4%
63.0%	1,003	1,007	3	0.3%
64.2%	1,003	1,005	2	0.2%
65.4%	1,003	1,003	1	0.1%
66.7%	1,000	1,002	2	0.2%
67.9%	1,000	1,000	1	0.1%
69.1%	999	1,000	2	0.2%
70.4%	998	1,000	2	0.2%
71.6%	997	1,000	3	0.3%
72.8%	997	1,000	3	0.3%
74.1%	994	999	5	0.5%
75.3%	990	998	8	0.9%
76.5%	989	997	7	0.7%
77.8%	988	994	6	0.6%
79.0%	986	992	6	0.6%
80.2%	986	991	5	0.5%
81.5%	981	986	5	0.5%
82.7%	981	984	3	0.4%
84.0%	973	984	11	1.1%
85.2%	972	984	12	1.2%
86.4%	969	980	10	1.1%
87.7%	969	978	9	0.9%
88.9%	969	976	7	0.8%
90.1%	968	974	6	0.6%
91.4%	949	961	12	1.3%
92.6%	949	959	10	1.0%
93.8%	945	954	9	0.9%
95.1%	940	953	13	1.4%
96.3%	934	943	9	1.0%
97.5%	921	941	19	2.1%
98.8%	916	940	24	2.6%
100.0%	834	864	29	3.5%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,036	1,036	0	0.0%
1.2%	1,036	1,036	0	0.0%
2.5%	1,036	1,034	-2	-0.2%
3.7%	1,033	1,034	2	0.2%
4.9%	1,030	1,033	4	0.4%
6.2%	1,028	1,028	0	0.0%
7.4%	1,028	1,028	0	0.0%
8.6%	1,026	1,027	1	0.1%
9.9%	1,025	1,027	2	0.2%
11.1%	1,023	1,027	3	0.3%
12.3%	1,023	1,025	2	0.2%
13.6%	1,023	1,025	2	0.2%
14.8%	1,023	1,024	1	0.1%
16.0%	1,022	1,024	2	0.2%
17.3%	1,021	1,022	1	0.1%
18.5%	1,021	1,022	1	0.1%
19.8%	1,020	1,022	2	0.1%
21.0%	1,020	1,020	0	0.0%
22.2%	1,020	1,020	0	0.0%
23.5%	1,019	1,019	0	0.0%
24.7%	1,018	1,019	1	0.1%
25.9%	1,017	1,019	1	0.1%
27.2%	1,016	1,018	3	0.2%
28.4%	1,015	1,017	2	0.2%
29.6%	1,012	1,016	4	0.3%
30.9%	1,011	1,015	3	0.3%
32.1%	1,009	1,013	5	0.5%
33.3%	1,008	1,012	4	0.4%
34.6%	1,007	1,011	4	0.4%
35.8%	1,007	1,010	3	0.3%
37.0%	1,005	1,009	5	0.5%
38.3%	1,003	1,007	5	0.5%
39.5%	1,001	1,007	6	0.6%
40.7%	1,000	1,006	6	0.6%
42.0%	999	1,006	7	0.7%
43.2%	999	1,006	7	0.7%
44.4%	999	1,005	7	0.7%
45.7%	999	1,005	6	0.6%
46.9%	999	1,004	6	0.6%
48.1%	997	1,004	7	0.7%
49.4%	997	1,003	6	0.6%
50.6%	997	1,003	6	0.6%
51.9%	997	1,001	4	0.4%
53.1%	996	1,000	4	0.4%
54.3%	996	1,000	4	0.4%
55.6%	995	998	3	0.3%
56.8%	995	996	1	0.1%
58.0%	995	995	1	0.1%
59.3%	993	995	2	0.2%
60.5%	993	994	1	0.1%
61.7%	991	994	3	0.3%
63.0%	988	994	5	0.5%
64.2%	988	993	5	0.5%
65.4%	987	992	5	0.5%
66.7%	987	991	4	0.4%
67.9%	987	990	3	0.3%
69.1%	984	990	5	0.5%
70.4%	984	989	5	0.5%
71.6%	984	988	5	0.5%
72.8%	982	988	5	0.6%
74.1%	981	986	5	0.5%
75.3%	978	984	7	0.7%
76.5%	977	984	7	0.7%
77.8%	971	981	10	1.0%
79.0%	970	981	11	1.1%
80.2%	970	976	6	0.6%
81.5%	969	972	3	0.3%
82.7%	969	967	-2	-0.2%
84.0%	968	966	-2	-0.2%
85.2%	959	966	7	0.8%
86.4%	958	965	7	0.8%
87.7%	954	965	11	1.1%
88.9%	952	962	10	1.1%
90.1%	951	958	7	0.7%
91.4%	937	943	6	0.7%
92.6%	930	941	11	1.2%
93.8%	928	940	12	1.3%
95.1%	912	935	23	2.5%
96.3%	903	924	21	2.3%
97.5%	900	923	23	2.5%
98.8%	879	917	38	4.3%
100.0%	834	834	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,023	1,023	0	0.0%
1.2%	1,023	1,023	0	0.0%
2.5%	1,023	1,023	0	0.0%
3.7%	1,022	1,023	2	0.2%
4.9%	1,022	1,023	2	0.2%
6.2%	1,019	1,022	4	0.4%
7.4%	1,018	1,020	2	0.2%
8.6%	1,013	1,020	6	0.6%
9.9%	1,012	1,016	4	0.4%
11.1%	1,012	1,016	4	0.4%
12.3%	1,011	1,015	4	0.4%
13.6%	1,009	1,012	3	0.3%
14.8%	1,008	1,012	3	0.3%
16.0%	1,007	1,011	3	0.3%
17.3%	1,007	1,008	1	0.1%
18.5%	1,007	1,007	0	0.0%
19.8%	1,007	1,007	0	0.0%
21.0%	1,007	1,007	0	0.0%
22.2%	1,006	1,006	0	0.0%
23.5%	1,005	1,004	-1	-0.1%
24.7%	1,005	1,004	-1	-0.1%
25.9%	1,004	1,003	-1	-0.1%
27.2%	1,001	1,003	1	0.1%
28.4%	1,000	1,002	2	0.2%
29.6%	999	1,002	4	0.4%
30.9%	998	1,002	4	0.4%
32.1%	998	1,002	4	0.4%
33.3%	998	1,002	4	0.4%
34.6%	998	1,001	3	0.3%
35.8%	997	1,001	4	0.4%
37.0%	997	1,000	4	0.4%
38.3%	996	1,000	4	0.4%
39.5%	995	1,000	5	0.5%
40.7%	995	1,000	5	0.5%
42.0%	994	999	5	0.5%
43.2%	994	999	5	0.5%
44.4%	993	997	4	0.4%
45.7%	993	996	3	0.3%
46.9%	992	996	4	0.4%
48.1%	992	995	4	0.4%
49.4%	991	995	4	0.4%
50.6%	991	995	4	0.4%
51.9%	991	995	4	0.4%
53.1%	990	994	4	0.4%
54.3%	989	992	4	0.4%
55.6%	988	992	4	0.4%
56.8%	988	991	4	0.4%
58.0%	986	991	5	0.5%
59.3%	985	990	5	0.5%
60.5%	982	990	7	0.8%
61.7%	981	989	8	0.8%
63.0%	981	989	8	0.8%
64.2%	980	985	5	0.5%
65.4%	979	984	5	0.5%
66.7%	979	983	4	0.4%
67.9%	977	982	5	0.5%
69.1%	977	982	6	0.6%
70.4%	977	981	4	0.4%
71.6%	977	981	4	0.4%
72.8%	976	979	4	0.4%
74.1%	975	979	4	0.4%
75.3%	974	978	4	0.4%
76.5%	973	974	1	0.1%
77.8%	971	974	2	0.2%
79.0%	971	972	1	0.1%
80.2%	970	971	1	0.1%
81.5%	970	964	-5	-0.6%
82.7%	968	963	-5	-0.5%
84.0%	957	962	6	0.6%
85.2%	955	962	7	0.7%
86.4%	954	961	8	0.8%
87.7%	953	959	6	0.6%
88.9%	950	956	7	0.7%
90.1%	946	952	6	0.6%
91.4%	939	944	5	0.5%
92.6%	924	939	14	1.5%
93.8%	920	934	14	1.5%
95.1%	907	922	15	1.7%
96.3%	898	918	19	2.2%
97.5%	895	917	22	2.4%
98.8%	875	910	36	4.1%
100.0%	856	872	17	1.9%

Figure SW-09-b
Shasta Lake, End of Month Area
Probability of Exceedance

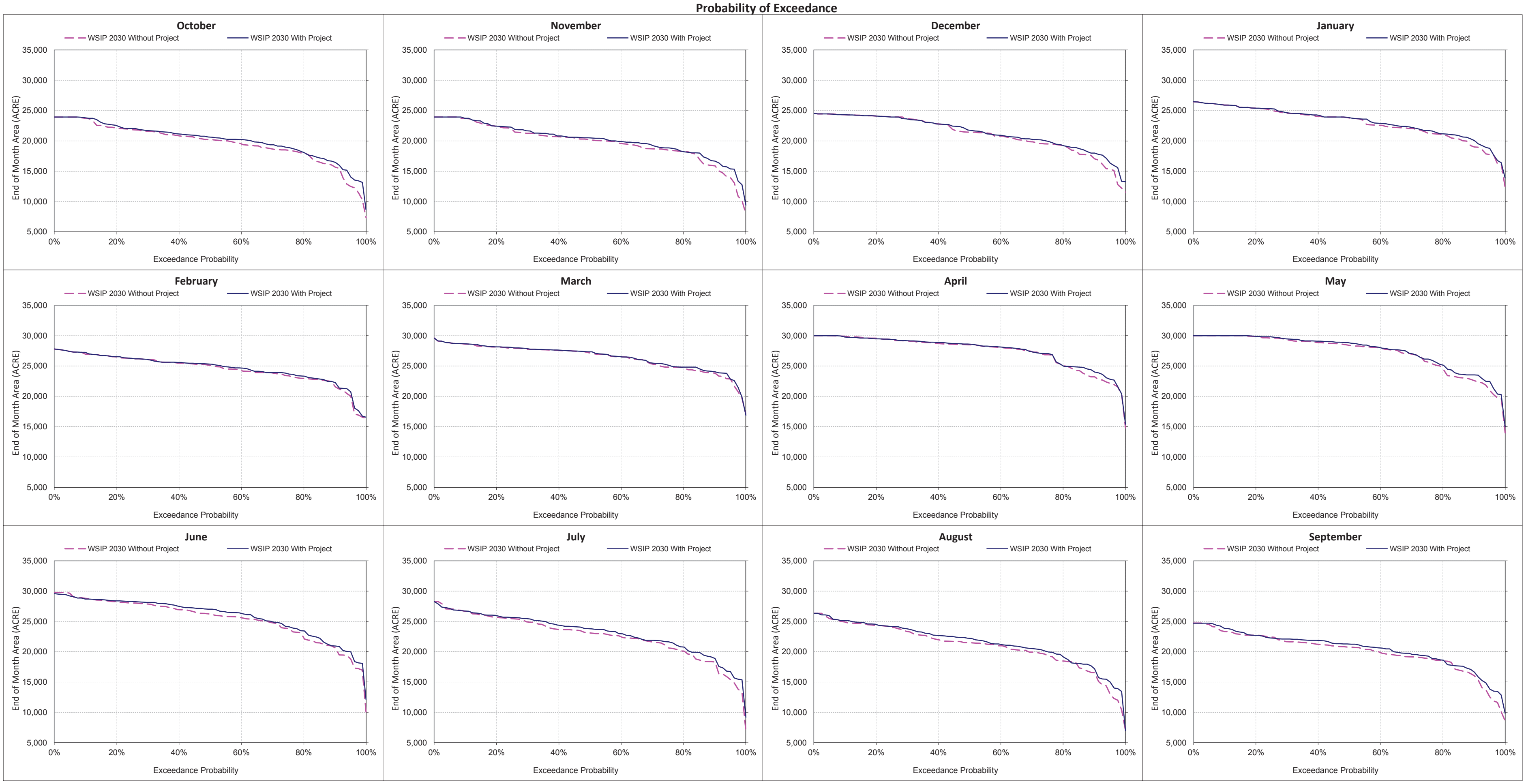


Table SW-09-b
Shasta Lake, End of Month Area
Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	23,927	23,927	0	0.0%
1.2%	23,927	23,927	0	0.0%
2.5%	23,927	23,927	0	0.0%
3.7%	23,927	23,927	0	0.0%
4.9%	23,927	23,927	0	0.0%
6.2%	23,927	23,927	0	0.0%
7.4%	23,927	23,923	-4	0.0%
8.6%	23,830	23,918	88	0.4%
9.9%	23,742	23,824	82	0.3%
11.1%	23,659	23,740	80	0.3%
12.3%	23,303	23,735	432	1.9%
13.6%	22,559	23,525	966	4.3%
14.8%	22,550	23,101	551	2.4%
16.0%	22,389	22,838	448	2.0%
17.3%	22,270	22,758	488	2.2%
18.5%	22,241	22,647	406	1.8%
19.8%	22,110	22,557	446	2.0%
21.0%	22,077	22,335	258	1.2%
22.2%	21,998	22,120	121	0.6%
23.5%	21,974	22,075	101	0.5%
24.7%	21,860	22,053	193	0.9%
25.9%	21,826	22,053	227	1.0%
27.2%	21,783	21,885	101	0.5%
28.4%	21,597	21,816	219	1.0%
29.6%	21,590	21,717	127	0.6%
30.9%	21,583	21,670	87	0.4%
32.1%	21,519	21,615	96	0.4%
33.3%	21,418	21,573	155	0.7%
34.6%	21,227	21,484	257	1.2%
35.8%	21,037	21,480	443	2.1%
37.0%	21,031	21,437	406	1.9%
38.3%	20,992	21,261	268	1.3%
39.5%	20,875	21,175	300	1.4%
40.7%	20,791	21,105	315	1.5%
42.0%	20,777	21,014	237	1.1%
43.2%	20,714	20,988	274	1.3%
44.4%	20,674	20,931	257	1.2%
45.7%	20,440	20,900	460	2.3%
46.9%	20,374	20,794	419	2.1%
48.1%	20,260	20,765	505	2.5%
49.4%	20,208	20,650	442	2.2%
50.6%	20,202	20,611	409	2.0%
51.9%	20,126	20,501	375	1.9%
53.1%	20,075	20,495	420	2.1%
54.3%	20,022	20,366	343	1.7%
55.6%	19,998	20,280	283	1.4%
56.8%	19,872	20,276	403	2.0%
58.0%	19,721	20,248	527	2.7%
59.3%	19,661	20,240	579	2.9%
60.5%	19,377	20,201	824	4.3%
61.7%	19,320	20,124	803	4.2%
63.0%	19,270	20,053	783	4.1%
64.2%	19,185	19,826	642	3.3%
65.4%	19,167	19,774	607	3.2%
66.7%	18,869	19,688	819	4.3%
67.9%	18,868	19,503	634	3.4%
69.1%	18,750	19,373	624	3.3%
70.4%	18,625	19,363	738	4.0%
71.6%	18,570	19,162	591	3.2%
72.8%	18,526	19,130	604	3.3%
74.1%	18,522	18,974	452	2.4%
75.3%	18,461	18,887	425	2.3%
76.5%	18,345	18,740	395	2.2%
77.8%	18,234	18,562	328	1.8%
79.0%	18,035	18,281	246	1.4%
80.2%	17,976	18,017	41	0.2%
81.5%	17,735	17,644	-90	-0.5%
82.7%	17,055	17,559	505	3.0%
84.0%	16,661	17,347	685	4.1%
85.2%	16,484	17,197	713	4.3%
86.4%	16,259	17,090	831	5.1%
87.7%	16,230	16,764	534	3.3%
88.9%	16,032	16,667	635	4.0%
90.1%	15,661	16,445	783	5.0%
91.4%	15,483	16,000	517	3.3%
92.6%	13,883	15,242	1,359	9.8%
93.8%	12,863	15,147	2,284	17.8%
95.1%	12,481	14,068	1,587	12.7%
96.3%	12,253	13,549	1,296	10.6%
97.5%	11,454	13,397	1,942	17.0%
98.8%	10,301	13,138	2,837	27.5%
100.0%	7,306	8,632	1,326	18.2%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	23,937	23,937	0	0.0%
1.2%	23,937	23,937	0	0.0%
2.5%	23,937	23,937	0	0.0%
3.7%	23,937	23,937	0	0.0%
4.9%	23,937	23,937	0	0.0%
6.2%	23,937	23,937	0	0.0%
7.4%	23,937	23,937	0	0.0%
8.6%	23,717	23,937	220	0.9%
9.9%	23,711	23,736	25	0.1%
11.1%	23,659	23,708	49	0.2%
12.3%	23,518	23,446	-72	-0.3%
13.6%	23,116	23,362	245	1.1%
14.8%	22,954	23,298	344	1.5%
16.0%	22,669	22,928	259	1.1%
17.3%	22,601	22,827	225	1.0%
18.5%	22,518	22,492	-27	-0.1%
19.8%	22,431	22,455	24	0.1%
21.0%	22,317	22,384	67	0.3%
22.2%	22,163	22,378	215	1.0%
23.5%	22,142	22,331	189	0.9%
24.7%	22,082	22,270	188	0.8%
25.9%	21,456	21,892	436	2.0%
27.2%	21,409	21,859	450	2.1%
28.4%	21,390	21,852	461	2.2%
29.6%	21,254	21,672	418	2.0%
30.9%	21,251	21,650	399	1.9%
32.1%	21,198	21,290	92	0.4%
33.3%	20,993	21,284	291	1.4%
34.6%	20,895	21,230	335	1.6%
35.8%	20,838	21,229	391	1.9%
37.0%	20,739	21,136	397	1.9%
38.3%	20,736	21,103	368	1.8%
39.5%	20,714	20,830	116	0.6%
40.7%	20,656	20,826	170	0.8%
42.0%	20,600	20,732	133	0.6%
43.2%	20,583	20,613	29	0.1%
44.4%	20,578	20,602	25	0.1%
45.7%	20,383	20,601	218	1.1%
46.9%	20,315	20,568	253	1.2%
48.1%	20,309	20,532	223	1.1%
49.4%	20,258	20,531	273	1.3%
50.6%	20,156	20,469	313	1.6%
51.9%	20,072	20,431	360	1.8%
53.1%	20,044	20,423	379	1.9%
54.3%	20,004	20,402	398	2.0%
55.6%	19,992	20,159	166	0.8%
56.8%	19,913	20,012	99	0.5%
58.0%	19,913	20,010	97	0.5%
59.3%	19,648	19,913	265	1.3%
60.5%	19,532	19,865	333	1.7%
61.7%	19,481	19,808	327	1.7%
63.0%	19,362	19,787	425	2.2%
64.2%	19,320	19,709	390	2.0%
65.4%	19,175	19,688	514	2.7%
66.7%	18,927	19,575	648	3.4%
67.9%	18,737	19,565	828	4.4%
69.1%	18,719	19,431	713	3.8%
70.4%	18,691	19,198	507	2.7%
71.6%	18,673	19,010	336	1.8%
72.8%	18,670	18,889	219	1.2%
74.1%	18,577	18,843	266	1.4%
75.3%	18,472	18,839	366	2.0%
76.5%	18,403	18,768	365	2.0%
77.8%	18,357	18,652	295	1.6%
79.0%	18,281	18,316	35	0.2%
80.2%	18,249	18,196	-53	-0.3%
81.5%	18,199	18,107	-92	-0.5%
82.7%	17,979	18,053	75	0.4%
84.0%	17,819	18,016	197	1.1%
85.2%	16,904	18,013	1,109	6.6%
86.4%	16,216	17,370	1,154	7.1%
87.7%	16,051	17,136	1,084	6.8%
88.9%	15,952	16,758	806	5.1%
90.1%	15,894	16,659	765	4.8%
91.4%	15,052	16,380	1,328	8.8%
92.6%	14,708	15,829	1,122	7.6%
93.8%	14,108	15,708	1,600	11.3%
95.1%	13,928	15,380	1,452	10.4%
96.3%	13,073	15,334	2,261	17.3%
97.5%	10,854	13,379	2,525	23.3%
98.8%	10,166	12,768	2,602	25.6%
100.0%	7,986	9,405	1,420	17.8%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	24,555	24,555	0	0.0%
1.2%	24,461	24,461	0	0.0%
2.5%	24,455	24,455	0	0.0%
3.7%	24,455	24,455	0	0.0%
4.9%	24,445	24,445	0	0.0%
6.2%	24,439	24,397	-43	-0.2%
7.4%	24,397	24,346	-51	-0.2%
8.6%	24,343	24,343	0	0.0%
9.9%	24,311	24,311	0	0.0%
11.1%	24,295	24,295	0	0.0%
12.3%	24,284	24,284	0	0.0%
13.6%	24,247	24,247	0	0.0%
14.8%	24,226	24,226	0	0.0%
16.0%	24,161	24,162	2	0.0%
17.3%	24,156	24,156	0	0.0%
18.5%	24,147	24,147	0	0.0%
19.8%	24,114	24,114	0	0.0%
21.0%	24,065	24,065	0	0.0%
22.2%	24,038	24,017	-20	-0.1%
23.5%	24,017	24,007	-11	0.0%
24.7%	24,007	23,938	-69	-0.3%
25.9%	23,938	23,937	-1	0.0%
27.2%	23,937	23,937	0	0.0%
28.4%	23,937	23,683	-255	-1.1%
29.6%	23,738	23,644	-94	-0.4%
30.9%	23,606	23,511	-95	-0.4%
32.1%	23,564	23,487	-76	-0.3%
33.3%	23,481	23,437	-44	-0.2%
34.6%	23,395	23,357	-38	-0.2%
35.8%	23,097	23,051	-47	-0.2%
37.0%	23,033	23,038	5	0.0%
38.3%	22,869	22,978	109	0.5%
39.5%	22,835	22,777	-59	-0.3%
40.7%	22,735	22,768	33	0.1%
42.0%	22,691	22,702	12	0.1%
43.2%	22,547	22,700	153	0.7%
44.4%	21,928	22,457	529	2.4%
45.7%	21,659	22,421	762	3.5%
46.9%	21,587	22,347	760	3.5%
48.1%	21,485	22,154	668	3.1%
49.4%	21,453	21,814	361	1.7%
50.6%	21,448	21,728	280	1.3%
51.9%	21,441	21,611	170	0.8%
53.1%	21,358	21,583	225	1.1%
54.3%	21,356	21,448	92	0.4%
55.6%	21,297	21,178	-119	-0.6%
56.8%	21,214	21,116	-98	-0.5%
58.0%	20,802	20,969	166	0.8%
59.3%	20,802	20,929	128	0.6%
60.5%	20,796	20,915	119	0.6%
61.7%	20,650	20,759	109	0.5%
63.0%	20,527	20,688	160	0.8%
64.2%	20,385	20,657	273	1.3%
65.4%	20,193	20,595	402	2.0%
66.7%	20,142	20,380	238	1.2%
67.9%	20,040	20,349	309	1.5%
69.1%	19,875	20,344	469	2.4%
70.4%	19,844	20,208	364	1.8%
71.6%	19,664	20,198	533	2.7%
72.8%	19,570	20,187	617	3.2%
74.1%	19,515	20,048	533	2.7%
75.3%	19,501	19,915	413	2.1%
76.5%	19,477	19,700	222	1.1%
77.8%	19,401	19,453	52	0.3%
79.0%	19,305	19,420	115	0.6%
80.2%	19,255	19,177	-78	-0.4%
81.5%	18,903	19,044	141	0.7%
82.7%	18,467	18,940	474	2.6%
84.0%	18,444	18,923	479	2.6%
85.2%	17,812	18,730	918	5.2%
86.4%	17,762	18,538	776	4.4%
87.7%	17,709	18,231	523	3.0%
88.9%	17,623	17,997	374	2.1%
90.1%	17,049	17,985	937	5.5%
91.4%	16,828	17,779	950	5.6%
92.6%	16,147	17,650	1,503	9.3%
93.8%	15,426	17,125	1,699	11.0%
95.1%	15,351	16,311	960	6.3%
96.3%	15,118	15,929	812	5.4%
97.5%	12,796	15,591	2,796	21.8%
98.8%	12,201	13,311	1,110	9.1%
100.0%	11,554	13,303	1,749	15.1%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	26,451	26,451	0	0.0%
1.2%	26,441	26,441	0	0.0%
2.5%	26,320	26,320	0	0.0%
3.7%	26,215	26,215	0	0.0%
4.9%	26,160	26,160	0	0.0%
6.2%	26,160	26,160	0	0.0%
7.4%	26,063	26,063	0	0.0%
8.6%	26,011	26,011	0	0.0%
9.9%	25,925	25,925	0	0.0%
11.1%	25,914	25,914	0	0.0%
12.3%	25,882	25,882	0	0.0%
13.6%	25,818	25,818	0	0.0%
14.8%	25,540	25,540	0	0.0%
16.0%	25,540	25,540	0	0.0%
17.3%	25,535	25,535	0	0.0%
18.5%	25,428	25,428	0	0.0%
19.8%	25,412	25,412	0	0.0%
21.0%	25,343	25,384	41	0.2%
22.2%	25,342	25,343	1	0.0%
23.5%	25,261	25,342	81	0.3%
24.7%	25,075	25,300	226	0.9%
25.9%	24,932	25,261	329	1.3%
27.2%	24,828	24,944	115	0.5%
28.4%	24,669	24,828	159	0.6%
29.6%	24,573	24,669	96	0.4%
30.9%	24,557	24,573	16	0.1%
32.1%	24,546	24,557	11	0.0%
33.3%	24,504	24,546	43	0.2%
34.6%	24,399	24,504	104	0.4%
35.8%	24,306	24,399	93	0.4%
37.0%	24,284	24,366	82	0.3%
38.3%	24,246	24,306	59	0.2%
39.5%	24,039	24,284	245	1.0%
40.7%	24,034	24,153	119	0.5%
42.0%	23,938	23,938	0	0.0%
43.2%	23,938	23,938	0	0.0%
44.4%	23,937	23,937	0	0.0%
45.7%	23,937	23,937	0	0.0%
46.9%	23,937	23,937	0	0.0%
48.1%	23,921	23,925	4	0.0%
49.4%	23,856	23,890	35	0.1%
50.6%	23,714	23,788	74	0.3%
51.9%	23,688	23,680	-8	0.0%
53.1%	23,653	23,635	-18	-0.1%
54.3%	23,427	23,597	170	0.7%
55.6%	22,707	23,595	888	3.9%
56.8%	22,652	23,193	541	2.4%
58.0%	22,628	22,944	316	1.4%
59.3%	22,575	22,900	325	1.4%
60.5%	22,565	22,889	323	1.4%
61.7%	22,378	22,849	472	2.1%
63.0%	22,281	22,706	425	1.9%
64.2%	22,236	22,628	392	1.8%
65.4%	22,219	22,488	269	1.2%
66.7%	22,164	22,417	253	1.1%
67.9%	22,148	22,409	261	1.2%
69.1%	22,053	22,297	244	1.1%
70.4%	22,044	22,198	154	0.7%
71.6%	21,875	22,049	175	0.8%
72.8%	21,782	21,883	101	0.5%
74.1%	21,554	21,705	151	0.7%
75.3%	21,248	21,704	456	2.1%
76.5%	21,207	21,644	437	2.1%
77.8%	21,161	21,431	270	1.3%
79.0%	21,131	21,193	61	0.3%
80.2%	20,953	21,152	199	1.0%
81.5%	20,834	21,105	271	1.3%
82.7%	20,489	21,043	554	2.7%
84.0%	20,374	20,975	601	2.9%
85.2%	20,307	20,863	556	2.7%
86.4%	20,015	20,651	637	3.2%
87.7%	19,965	20,589	625	3.1%
88.9%	19,233	20,330	1,097	5.7%
90.1%	19,001	20,048	1,048	5.5%
91.4%	18,960	19,550	589	3.1%
92.6%	18,555	19,248	693	3.7%
93.8%	17,856	18,943	1,088	6.1%
95.1%	17,763	18,750	987	5.6%
96.3%	17,704	17,650	-54	-0.3%
97.5%	16,207	16,743	535	3.3%
98.8%	16,165	16,421	256	1.6%
100.0%	12,295	13,884	1,590	12.9%

Table SW-09-b

Shasta Lake, End of Month Area
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	27,790	27,790	0	0.0%
1.2%	27,726	27,726	0	0.0%
2.5%	27,653	27,653	0	0.0%
3.7%	27,554	27,554	0	0.0%
4.9%	27,391	27,391	0	0.0%
6.2%	27,315	27,315	0	0.0%
7.4%	27,288	27,288	0	0.0%
8.6%	27,262	27,262	0	0.0%
9.9%	26,979	27,253	274	1.0%
11.1%	26,905	26,979	75	0.3%
12.3%	26,890	26,905	14	0.1%
13.6%	26,883	26,883	0	0.0%
14.8%	26,748	26,748	0	0.0%
16.0%	26,725	26,725	0	0.0%
17.3%	26,675	26,675	0	0.0%
18.5%	26,527	26,588	61	0.2%
19.8%	26,512	26,527	15	0.1%
21.0%	26,357	26,512	154	0.6%
22.2%	26,322	26,357	36	0.1%
23.5%	26,298	26,298	0	0.0%
24.7%	26,252	26,252	0	0.0%
25.9%	26,197	26,197	0	0.0%
27.2%	26,195	26,195	0	0.0%
28.4%	26,122	26,122	0	0.0%
29.6%	26,085	26,085	0	0.0%
30.9%	26,073	25,989	-85	-0.3%
32.1%	25,989	25,811	-177	-0.7%
33.3%	25,732	25,732	0	0.0%
34.6%	25,634	25,634	0	0.0%
35.8%	25,620	25,631	11	0.0%
37.0%	25,612	25,620	8	0.0%
38.3%	25,583	25,620	37	0.1%
39.5%	25,497	25,589	92	0.4%
40.7%	25,471	25,583	112	0.4%
42.0%	25,470	25,515	44	0.2%
43.2%	25,422	25,475	52	0.2%
44.4%	25,348	25,468	120	0.5%
45.7%	25,279	25,422	144	0.6%
46.9%	25,251	25,379	127	0.5%
48.1%	25,240	25,376	135	0.5%
49.4%	25,155	25,348	192	0.8%
50.6%	25,059	25,279	220	0.9%
51.9%	24,893	25,155	262	1.1%
53.1%	24,851	25,059	208	0.8%
54.3%	24,572	24,893	321	1.3%
55.6%	24,503	24,851	348	1.4%
56.8%	24,495	24,790	295	1.2%
58.0%	24,452	24,703	250	1.0%
59.3%	24,371	24,685	314	1.3%
60.5%	24,151	24,625	474	2.0%
61.7%	24,130	24,551	421	1.7%
63.0%	24,095	24,343	248	1.0%
64.2%	23,938	24,151	213	0.9%
65.4%	23,937	24,130	192	0.8%
66.7%	23,937	24,095	158	0.7%
67.9%	23,937	23,938	1	0.0%
69.1%	23,937	23,937	0	0.0%
70.4%	23,815	23,937	123	0.5%
71.6%	23,700	23,937	237	1.0%
72.8%	23,690	23,937	247	1.0%
74.1%	23,434	23,849	415	1.8%
75.3%	23,378	23,677	299	1.3%
76.5%	23,149	23,617	468	2.0%
77.8%	23,077	23,387	310	1.3%
79.0%	22,973	23,348	375	1.6%
80.2%	22,951	23,327	376	1.6%
81.5%	22,890	23,101	212	0.9%
82.7%	22,818	23,017	199	0.9%
84.0%	22,788	22,924	136	0.6%
85.2%	22,740	22,842	101	0.4%
86.4%	22,636	22,765	129	0.6%
87.7%	22,554	22,480	-75	-0.3%
88.9%	22,442	22,450	8	0.0%
90.1%	21,563	22,233	670	3.1%
91.4%	21,201	21,342	141	0.7%
92.6%	20,985	21,295	310	1.5%
93.8%	20,447	21,250	804	3.9%
95.1%	20,033	20,769	736	3.7%
96.3%	17,089	18,051	963	5.6%
97.5%	16,914	17,614	700	4.1%
98.8%	16,563	16,736	173	1.0%
100.0%	16,361	16,559	198	1.2%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	29,614	29,614	0	0.0%
1.2%	29,120	29,120	0	0.0%
2.5%	29,087	29,087	0	0.0%
3.7%	28,884	28,884	0	0.0%
4.9%	28,833	28,833	0	0.0%
6.2%	28,730	28,730	0	0.0%
7.4%	28,695	28,712	16	0.1%
8.6%	28,687	28,695	9	0.0%
9.9%	28,614	28,687	73	0.3%
11.1%	28,601	28,614	13	0.0%
12.3%	28,593	28,601	8	0.0%
13.6%	28,326	28,566	240	0.8%
14.8%	28,263	28,377	114	0.4%
16.0%	28,241	28,326	86	0.3%
17.3%	28,215	28,241	26	0.1%
18.5%	28,149	28,215	66	0.2%
19.8%	28,138	28,149	11	0.0%
21.0%	28,129	28,138	9	0.0%
22.2%	28,086	28,129	42	0.2%
23.5%	27,986	28,109	123	0.4%
24.7%	27,959	28,086	127	0.5%
25.9%	27,936	28,002	66	0.2%
27.2%	27,905	27,974	68	0.2%
28.4%	27,896	27,936	40	0.1%
29.6%	27,773	27,896	123	0.4%
30.9%	27,760	27,773	13	0.0%
32.1%	27,728	27,760	32	0.1%
33.3%	27,726	27,728	2	0.0%
34.6%	27,691	27,726	34	0.1%
35.8%	27,674	27,691	18	0.1%
37.0%	27,631	27,674	42	0.2%
38.3%	27,631	27,631	0	0.0%
39.5%	27,565	27,631	66	0.2%
40.7%	27,546	27,601	55	0.2%
42.0%	27,530	27,546	15	0.1%
43.2%	27,527	27,527	0	0.0%
44.4%	27,481	27,481	0	0.0%
45.7%	27,430	27,473	43	0.2%
46.9%	27,374	27,430	56	0.2%
48.1%	27,359	27,374	15	0.1%
49.4%	27,208	27,336	128	0.5%
50.6%	27,086	27,320	234	0.9%
51.9%	26,972	27,086	114	0.4%
53.1%	26,919	27,014	95	0.4%
54.3%	26,904	26,955	51	0.2%
55.6%	26,872	26,923	51	0.2%
56.8%	26,584	26,659	74	0.3%
58.0%	26,550	26,614	64	0.2%
59.3%	26,531	26,584	54	0.2%
60.5%	26,506	26,482	-23	-0.1%
61.7%	26,470	26,470	0	0.0%
63.0%	26,220	26,424	203	0.8%
64.2%	26,122	26,264	143	0.5%
65.4%	26,101	26,072	-28	-0.1%
66.7%	26,082	26,013	-69	-0.3%
67.9%	25,796	25,907	111	0.4%
69.1%	25,444	25,543	99	0.4%
70.4%	25,283	25,444	161	0.6%
71.6%	25,278	25,433	155	0.6%
72.8%	24,915	25,408	493	2.0%
74.1%	24,819	25,283	464	1.9%
75.3%	24,816	25,123	307	1.2%
76.5%	24,813	24,915	102	0.4%
77.8%	24,813	24,877	64	0.3%
79.0%	24,813	24,819	5	0.0%
80.2%	24,690	24,816	126	0.5%
81.5%	24,394	24,813	420	1.7%
82.7%	24,362	24,813	452	1.9%
84.0%	24,222	24,813	591	2.4%
85.2%	24,205	24,521	316	1.3%
86.4%	23,989	24,247	258	1.1%
87.7%	23,917	24,194	277	1.2%
88.9%	23,903	24,141	238	1.0%
90.1%	23,824	24,036	212	0.9%
91.4%	23,322	23,858	536	2.3%
92.6%	23,300	23,832	533	2.3%
93.8%	22,906	23,777	872	3.8%
95.1%	22,854	22,843	-11	-0.1%
96.3%	21,663	22,577	914	4.2%
97.5%	20,735	21,491	757	3.6%
98.8%	19,669	19,867	198	1.0%
100.0%	17,062	16,872	-190	-1.1%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	30,000	30,000	0	0.0%
1.2%	30,000	30,000	0	0.0%
2.5%	30,000	30,000	0	0.0%
3.7%	30,000	30,000	0	0.0%
4.9%	30,000	30,000	0	0.0%
6.2%	29,974	30,000	26	0.1%
7.4%	29,961	29,974	13	0.0%
8.6%	29,929	29,961	32	0.1%
9.9%	29,921	29,770	-151	-0.5%
11.1%	29,806	29,738	-68	-0.2%
12.3%	29,802	29,699	-102	-0.3%
13.6%	29,796	29,686	-110	-0.4%
14.8%	29,738	29,600	-138	-0.5%
16.0%	29,686	29,588	-99	-0.3%
17.3%	29,613	29,587	-26	-0.1%
18.5%	29,588	29,512	-76	-0.3%
19.8%	29,581	29,493	-88	-0.3%
21.0%	29,493	29,472	-21	-0.1%
22.2%	29,442	29,454	12	0.0%
23.5%	29,433	29,442	9	0.0%
24.7%	29,399	29,399	1	0.0%
25.9%	29,206	29,358	151	0.5%
27.2%	29,202	29,206	4	0.0%
28.4%	29,159	29,202	43	0.1%
29.6%	29,156	29,168	12	0.0%
30.9%	29,107	29,156	49	0.2%
32.1%	29,071	29,119	49	0.2%
33.3%	28,941	29,098	157	0.5%
34.6%	28,922	29,065	142	0.5%
35.8%	28,876	28,961	86	0.3%
37.0%	28,871	28,933	62	0.2%
38.3%	28,792	28,922	130	0.5%
39.5%	28,744	28,876	131	0.5%
40.7%	28,675	28,871	196	0.7%
42.0%	28,628	28,821	193	0.7%
43.2%	28,617	28,744	127	0.4%
44.4%	28,604	28,723	119	0.4%
45.7%	28,562	28,691	129	0.5%
46.9%	28,561	28,678	116	0.4%
48.1%	28,553	28,623	70	0.2%
49.4%	28,506	28,606	100	0.4%
50.6%	28,502	28,561	59	0.2%
51.9%	28,471	28,506	35	0.1%
53.1%	28,374	28,374	0	0.0%
54.3%	28,243	28,301	58	0.2%
55.6%	28,219	28,277	58	0.2%
56.8%	28,171	28,219	49	0.2%
58.0%	28,133	28,219	86	0.3%
59.3%	28,098	28,148	50	0.2%
60.5%	28,035	28,098	63	0.2%
61.7%	27,949	28,044	95	0.3%
63.0%	27,917	28,035	118	0.4%
64.2%	27,880	27,949	69	0.2%
65.4%	27,771	27,880	109	0.4%
66.7%	27,734	27,774	40	0.1%
67.9%	27,516	27,744	228	0.8%
69.1%	27,512	27,413	-99	-0.4%
70.4%	27,298	27,315	17	0.1%
71.6%	27,278	27,156	-122	-0.4%
72.8%	27,035	27,063	28	0.1%
74.1%	26,865	27,059	194	0.7%
75.3%	26,856	27,042	186	0.7%
76.5%	26,807	26,865	58	0.2%
77.8%	25,553	25,688	136	0.5%
79.0%	25,351	25,317	-33	-0.1%
80.2%	25,019	24,954	-65	-0.3%
81.5%	24,925	24,925	0	0.0%
82.7%	24,612	24,885	274	1.1%
84.0%	24,262	24,872	610	2.5%
85.2%	24,261	24,812	552	2.3%
86.4%	23,802	24,765	964	4.0%
87.7%	23,473	24,534	1,061	4.5%
88.9%	23,209	24,392	1,183	5.1%
90.1%	23,209	23,998	789	3.4%
91.4%	22,751	23,895	1,144	5.0%
92.6%	22,701	23,618	917	4.0%
93.8%	22,368	23,067	699	3.1%
95.1%	22,146	22,788	641	2.9%
96.3%	21,942	22,694	752	3.4%
97.5%	21,546	21,604	58	0.3%
98.8%	20,233	20,414	181	0.9%
100.0%	14,784	15,419	634	4.3%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	30,000	30,000	0	0.0%
1.2%	30,000	30,000	0	0.0%
2.5%	30,000	30,000	0	0.0%
3.7%	30,000	30,000	0	0.0%
4.9%	30,000	30,000	0	0.0%
6.2%	30,000	30,000	0	0.0%
7.4%	30,000	30,000	0	0.0%
8.6%	30,000	30,000	0	0.0%
9.9%	30,000	30,000	0	0.0%
11.1%	30,000	30,000	0	0.0%
12.3%	30,000	30,000	0	0.0%
13.6%	30,000	30,000	0	0.0%
14.8%	30,000	30,000	0	0.0%
16.0%	30,000	30,000	0	0.0%
17.3%	29,936	29,995	59	0.2%
18.5%	29,913	29,938	25	0.1%
19.8%	29,879	29,903	24	0.1%
21.0%	29,775	29,875	99	0.3%
22.2%	29,652	29,841	189	0.6%
23.5%	29,647	29,826	178	0.6%
24.7%	29,605	29,824	218	0.7%
25.9%	29,597	29,750	153	0.5%
27.2%	29,590	29,707	117	0.4%
28.4%	29,531	29,555	24	0.1%
29.6%	29,353	29,477	125	0.4%
30.9%	29,248	29,440	192	0.7%
32.1%	29,126	29,389	263	0.9%
33.3%	29,080	29,381	301	1.0%
34.6%	29,055	29,213	158	0.5%
35.8%	29,054	29,150	95	0.3%
37.0%	29,036	29,146	110	0.4%
38.3%	29,000	29,121	121	0.4%
39.5%	28,891	29,095	204	0.7%
40.7%	28,861	29,075	214	0.7%
42.0%	28,811	29,054	243	0.8%
43.2%	28,752	29,035	283	1.0%
44.4%	28,709	28,989	280	1.0%
45.7%	28,698	28,933	235	0.8%
46.9%	28,660	28,927	266	0.9%
48.1%	28,562	28,881	320	1.1%
49.4%	28,465	28,879	414	1.5%
50.6%	28,332	28,765	433	1.5%
51.9%	28,292	28,692	400	1.4%
53.1%	28,281	28,582	301	1.1%
54.3%	28,212	28,470	259	0.9%
55.6%	28,191	28,442	251	0.9%
56.8%	28,106	28,219	113	0.4%
58.0%	28,094	28,208	114	0.4%
59.3%	28,012	28,123	111	0.4%
60.5%	27,879	27,921	42	0.1%
61.7%	27,738	27,900	161	0.6%
63.0%	27,670	27,713	43	0.2%
64.2%	27,628	27,701	73	0.3%
65.4%	27,555	27,677	122	0.4%
66.7%	27,187	27,596	409	1.5%
67.9%	27,060	27,496	436	1.6%
69.1%	27,055	27,115	60	0.2%
70.4%	26,946	26,976	30	0.1%
71.6%	26,789	26,787	-2	0.0%
72.8%	26,632	26,406	-226	-0.8%
74.1%	25,786	26,153	367	1.4%
75.3%	25,630	26,151	521	2.0%
76.5%	25,366	25,910	544	2.1%
77.8%	25,139	25,638	499	2.0%
79.0%	25,023	25,272	249	1.0%
80.2%	24,383	25,114	730	3.0%
81.5%	23,412	24,481	1,069	4.6%
82.7%	23,349	24,365	1,016	4.4%
84.0%	23,245	23,862	617	2.7%
85.2%	23,088	23,667	578	2.5%
86.4%	23,041	23,610	568	2.5%
87.7%	23,004	23,547	543	2.4%
88.9%	22,803	23,539	736	3.2%
90.1%	22,583	23,524	942	4.2%
91.4%	22,367	23,491	1,124	5.0%
92.6%	22,217	22,932	715	3.2%
93.8%	21,838	22,468	631	2.9%
95.1%	20,958	22,454	1,496	7.1%
96.3%	20,284	21,262	977	4.8%
97.5%	19,743	20,385	643	3.3%
98.8%	19,676	20,277	601	3.1%
100.0%	13,961	15,018	1,057	7.6%

Table SW-09-b

Shasta Lake, End of Month Area

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	29,776	29,606	-171	-0.6%
1.2%	29,776	29,481	-295	-1.0%
2.5%	29,776	29,443	-334	-1.1%
3.7%	29,776	29,422	-354	-1.2%
4.9%	29,653	29,196	-457	-1.5%
6.2%	29,023	29,086	62	0.2%
7.4%	28,996	28,868	-128	-0.4%
8.6%	28,920	28,859	-61	-0.2%
9.9%	28,806	28,680	-126	-0.4%
11.1%	28,736	28,678	-58	-0.2%
12.3%	28,624	28,639	15	0.1%
13.6%	28,532	28,618	86	0.3%
14.8%	28,513	28,612	99	0.3%
16.0%	28,485	28,548	63	0.2%
17.3%	28,371	28,465	94	0.3%
18.5%	28,284	28,447	162	0.6%
19.8%	28,266	28,380	113	0.4%
21.0%	28,143	28,372	229	0.8%
22.2%	28,133	28,346	213	0.8%
23.5%	28,079	28,293	214	0.8%
24.7%	28,048	28,286	238	0.8%
25.9%	28,031	28,279	248	0.9%
27.2%	27,978	28,233	255	0.9%
28.4%	27,941	28,180	240	0.9%
29.6%	27,884	28,142	258	0.9%
30.9%	27,833	28,132	299	1.1%
32.1%	27,633	28,129	497	1.8%
33.3%	27,538	27,975	436	1.6%
34.6%	27,487	27,969	482	1.8%
35.8%	27,436	27,903	466	1.7%
37.0%	27,261	27,788	527	1.9%
38.3%	27,144	27,695	552	2.0%
39.5%	26,949	27,516	567	2.1%
40.7%	26,918	27,405	487	1.8%
42.0%	26,915	27,270	355	1.3%
43.2%	26,804	27,260	456	1.7%
44.4%	26,636	27,240	604	2.3%
45.7%	26,449	27,164	715	2.7%
46.9%	26,340	27,154	814	3.1%
48.1%	26,310	27,074	763	2.9%
49.4%	26,255	27,021	766	2.9%
50.6%	26,145	27,010	865	3.3%
51.9%	25,968	26,948	980	3.8%
53.1%	25,941	26,689	749	2.9%
54.3%	25,827	26,655	829	3.2%
55.6%	25,809	26,523	714	2.8%
56.8%	25,792	26,479	686	2.7%
58.0%	25,767	26,449	682	2.6%
59.3%	25,679	26,405	726	2.8%
60.5%	25,546	26,252	706	2.8%
61.7%	25,427	26,135	707	2.8%
63.0%	25,394	26,099	706	2.8%
64.2%	25,354	25,663	308	1.2%
65.4%	25,185	25,476	291	1.2%
66.7%	25,088	25,406	318	1.3%
67.9%	25,087	25,073	-14	-0.1%
69.1%	24,850	25,065	215	0.9%
70.4%	24,733	24,874	141	0.6%
71.6%	24,641	24,842	202	0.8%
72.8%	23,962	24,646	683	2.9%
74.1%	23,877	24,196	320	1.3%
75.3%	23,813	24,087	275	1.2%
76.5%	23,274	23,905	631	2.7%
77.8%	23,206	23,804	598	2.6%
79.0%	23,133	23,480	346	1.5%
80.2%	22,086	23,437	1,350	6.1%
81.5%	21,913	22,756	843	3.8%
82.7%	21,909	22,576	667	3.0%
84.0%	21,493	22,434	941	4.4%
85.2%	21,459	22,214	755	3.5%
86.4%	21,195	21,576	381	1.8%
87.7%	21,047	21,260	213	1.0%
88.9%	20,961	20,998	37	0.2%
90.1%	20,622	20,943	321	1.6%
91.4%	19,462	20,852	1,390	7.1%
92.6%	19,451	20,215	764	3.9%
93.8%	19,410	20,030	620	3.2%
95.1%	18,782	20,015	1,233	6.6%
96.3%	17,304	18,368	1,065	6.2%
97.5%	17,201	18,143	941	5.5%
98.8%	16,968	18,084	1,116	6.6%
100.0%	9,886	12,123	2,237	22.6%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	28,275	28,261	-13	0.0%
1.2%	28,275	27,930	-345	-1.2%
2.5%	27,929	27,349	-580	-2.1%
3.7%	27,072	27,278	206	0.8%
4.9%	27,053	27,139	86	0.3%
6.2%	27,043	26,889	-153	-0.6%
7.4%	26,873	26,863	-9	0.0%
8.6%	26,832	26,751	-81	-0.3%
9.9%	26,652	26,724	71	0.3%
11.1%	26,605	26,661	57	0.2%
12.3%	26,252	26,417	165	0.6%
13.6%	26,232	26,383	151	0.6%
14.8%	26,076	26,291	216	0.8%
16.0%	26,050	26,078	28	0.1%
17.3%	25,896	26,048	152	0.6%
18.5%	25,743	26,045	302	1.2%
19.8%	25,703	26,002	299	1.2%
21.0%	25,625	25,821	195	0.8%
22.2%	25,590	25,707	117	0.5%
23.5%	25,492	25,681	189	0.7%
24.7%	25,470	25,646	176	0.7%
25.9%	25,430	25,632	202	0.8%
27.2%	25,367	25,620	253	1.0%
28.4%	25,258	25,493	236	0.9%
29.6%	24,930	25,484	555	2.2%
30.9%	24,858	25,378	520	2.1%
32.1%	24,850	25,162	312	1.3%
33.3%	24,577	25,115	539	2.2%
34.6%	24,516	25,033	517	2.1%
35.8%	24,201	24,945	744	3.1%
37.0%	23,924	24,645	720	3.0%
38.3%	23,782	24,596	814	3.4%
39.5%	23,690	24,399	708	3.0%
40.7%	23,659	24,301	642	2.7%
42.0%	23,654	24,213	560	2.4%
43.2%	23,643	24,179	536	2.3%
44.4%	23,586	24,165	579	2.5%
45.7%	23,553	24,116	562	2.4%
46.9%	23,473	24,051	578	2.5%
48.1%	23,217	23,838	621	2.7%
49.4%	23,122	23,794	672	2.9%
50.6%	23,056	23,765	709	3.1%
51.9%	23,005	23,659	654	2.8%
53.1%	22,995	23,659	664	2.9%
54.3%	22,990	23,659	669	2.9%
55.6%	22,845	23,403	559	2.4%
56.8%	22,707	23,347	640	2.8%
58.0%	22,683	23,331	648	2.9%
59.3%	22,624	23,014	390	1.7%
60.5%	22,344	22,960	616	2.8%
61.7%	22,256	22,708	451	2.0%
63.0%	22,247	22,647	399	1.8%
64.2%	22,200	22,407	207	0.9%
65.4%	22,172	22,255	83	0.4%
66.7%	21,860	22,066	206	0.9%
67.9%	21,816	21,903	86	0.4%
69.1%	21,680	21,875	195	0.9%
70.4%	21,585	21,868	283	1.3%
71.6%	21,524	21,849	325	1.5%
72.8%	21,438	21,799	361	1.7%
74.1%	21,119	21,683	565	2.7%
75.3%	20,606	21,645	1,039	5.0%
76.5%	20,541	21,444	904	4.4%
77.8%	20,374	21,085	711	3.5%
79.0%	20,128	20,823	695	3.5%
80.2%	20,091	20,756	665	3.3%
81.5%	19,601	20,168	567	2.9%
82.7%	19,564	19,914	351	1.8%
84.0%	18,808	19,908	1,101	5.9%
85.2%	18,630	19,854	1,224	6.6%
86.4%	18,398	19,462	1,064	5.8%
87.7%	18,395	19,277	882	4.8%
88.9%	18,375	19,122	747	4.1%
90.1%	18,302	18,902	600	3.3%
91.4%	16,325	17,572	1,246	7.6%
92.6%	16,321	17,338	1,017	6.2%
93.8%	15,901	16,800	899	5.7%
95.1%	15,399	16,766	1,367	8.9%
96.3%	14,826	15,679	853	5.8%
97.5%	13,810	15,483	1,673	12.1%
98.8%	13,318	15,356	2,039	15.3%
100.0%	7,002	9,188	2,186	31.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	26,331	26,331	0	0.0%
1.2%	26,331	26,331	0	0.0%
2.5%	26,331	26,088	-242	-0.9%
3.7%	25,873	26,086	213	0.8%
4.9%	25,482	25,935	452	1.8%
6.2%	25,327	25,353	26	0.1%
7.4%	25,250	25,294	44	0.2%
8.6%	24,993	25,153	160	0.6%
9.9%	24,912	25,140	229	0.9%
11.1%	24,727	25,125	398	1.6%
12.3%	24,726	24,973	248	1.0%
13.6%	24,685	24,875	190	0.8%
14.8%	24,648	24,817	169	0.7%
16.0%	24,609	24,802	193	0.8%
17.3%	24,456	24,597	140	0.6%
18.5%	24,411	24,572	161	0.7%
19.8%	24,351	24,537	186	0.8%
21.0%	24,333	24,317	-16	-0.1%
22.2%	24,275	24,278	2	0.0%
23.5%	24,218	24,231	13	0.1%
24.7%	24,007	24,148	141	0.6%
25.9%	23,980	24,130	151	0.6%
27.2%	23,786	24,098	312	1.3%
28.4%	23,673	23,882	210	0.9%
29.6%	23,366	23,798	432	1.8%
30.9%	23,254	23,659	406	1.7%
32.1%	22,928	23,498	570	2.5%
33.3%	22,805	23,276	471	2.1%
34.6%	22,720	23,235	515	2.3%
35.8%	22,691	23,026	336	1.5%
37.0%	22,403	23,001	598	2.7%
38.3%	22,163	22,721	559	2.5%
39.5%	22,021	22,712	691	3.1%
40.7%	21,895	22,643	748	3.4%
42.0%	21,753	22,628	875	4.0%
43.2%	21,727	22,536	809	3.7%
44.4%	21,705	22,513	808	3.7%
45.7%	21,698	22,412	714	3.3%
46.9%	21,689	22,371	682	3.1%
48.1%	21,513	22,335	822	3.8%
49.4%	21,505	22,220	716	3.3%
50.6%	21,463	22,168	705	3.3%
51.9%	21,423	21,958	535	2.5%
53.1%	21,401	21,863	463	2.2%
54.3%	21,368	21,805	437	2.0%
55.6%	21,244	21,609	364	1.7%
56.8%	21,213	21,357	144	0.7%
58.0%	21,207	21,270	63	0.3%
59.3%	20,989	21,263	274	1.3%
60.5%	20,975	21,149	174	0.8%
61.7%	20,766	21,090	325	1.6%
63.0%	20,398	21,061	664	3.3%
64.2%	20,361	20,943	582	2.9%
65.4%	20,283	20,902	620	3.1%
66.7%	20,238	20,776	538	2.7%
67.9%	20,229	20,649	420	2.1%
69.1%	19,947	20,573	626	3.1%
70.4%	19,937	20,513	576	2.9%
71.6%	19,866	20,406	540	2.7%
72.8%	19,737	20,360	623	3.2%
74.1%	19,611	20,120	509	2.6%
75.3%	19,280	19,949	669	3.5%
76.5%	19,170	19,899	728	3.8%
77.8%	18,588	19,617	1,029	5.5%
79.0%	18,486	19,583	1,097	5.9%
80.2%	18,459	19,040	581	3.1%
81.5%	18,383	18,703	319	1.7%
82.7%	18,357	18,150	-207	-1.1%
84.0%	18,294	18,082	-213	-1.2%
85.2%	17,319	18,074	755	4.4%
86.4%	17,212	17,952	740	4.3%
87.7%	16,834	17,940	1,105	6.6%
88.9%	16,608	17,677	1,069	6.4%
90.1%	16,524	17,192	668	4.0%
91.4%	15,086	15,701	615	4.1%
92.6%	14,527	15,499	972	6.7%
93.8%	14,384	15,447	1,064	7.4%
95.1%	13,032	14,972	1,940	14.9%
96.3%	12,288	14,025	1,737	14.1%
97.5%	12,008	13,937	1,929	16.1%
98.8%	10,375	13,450	3,074	29.6%
100.0%	7,002	7,002	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	24,728	24,728	0	0.0%
1.2%	24,728	24,728	0	0.0%
2.5%	24,728	24,728	0	0.0%
3.7%	24,537	24,728	191	0.8%
4.9%	24,499	24,688	189	0.8%
6.2%	24,129	24,612	483	2.0%
7.4%	24,073	24,358	285	1.2%
8.6%	23,491	24,251	760	3.2%
9.9%	23,346	23,842	495	2.1%
11.1%	23,326	23,817	491	2.1%
12.3%	23,218	23,659	442	1.9%
13.6%	22,948	23,371	422	1.8%
14.8%	22,888	23,272	385	1.7%
16.0%	22,754	23,184	430	1.9%
17.3%	22,742	22,818	76	0.3%
18.5%	22,724	22,720	-5	0.0%
19.8%	22,722	22,697	-25	-0.1%
21.0%	22,713	22,696	-17	-0.1%
22.2%	22,628	22,586	-42	-0.2%
23.5%	22,508	22,345	-164	-0.7%
24.7%	22,429	22,277	-152	-0.7%
25.9%	22,373	22,206	-167	-0.7%
27.2%	21,978	22,157	180	0.8%
28.4%	21,902	22,108	206	0.9%
29.6%	21,663	22,105	443	2.0%
30.9%	21,632	22,095	463	2.1%
32.1%	21,629	22,069	440	2.0%
33.3%	21,600	22,052	452	2.1%
34.6%	21,549	21,979	430	2.0%
35.8%	21,481	21,923	441	2.1%
37.0%	21,434	21,897	463	2.2%
38.3%	21,352	21,871	520	2.4%
39.5%	21,236	21,865	629	3.0%
40.7%	21,215	21,853	639	3.0%
42.0%	21,121	21,784	663	3.1%
43.2%	21,099	21,687	588	2.8%
44.4%	20,972	21,422	450	2.1%
45.7%	20,926	21,321	395	1.9%
46.9%	20,852	21,311	459	2.2%
48.1%	20,832	21,291	459	2.2%
49.4%	20,768	21,288	519	2.5%
50.6%	20,762	21,234	472	2.3%
51.9%	20,688	21,221	533	2.6%
53.1%	20,675	21,119	445	2.2%
54.3%	20,444	20,887	443	2.2%
55.6%	20,357	20,871	513	2.5%
56.8%	20,350	20,788	438	2.2%
58.0%	20,089	20,723	633	3.2%
59.3%	20,025	20,654	628	3.1%
60.5%	19,738	20,604	866	4.4%
61.7%	19,625	20,489	864	4.4%
63.0%	19,559	20,488	928	4.7%
64.2%	19,483	20,006	524	2.7%
65.4%	19,382	19,902	520	2.7%
66.7%	19,355	19,787	432	2.2%
67.9%	19,196	19,743	546	2.8%
69.1%	19,161	19,727	566	3.0%
70.4%	19,149	19,548	399	2.1%
71.6%	19,133	19,542	409	2.1%
72.8%	19,046	19,419	373	2.0%
74.1%	18,949	19,340	391	2.1%
75.3%	18,878	19,254	376	2.0%
76.5%	18,752	18,878	126	0.7%
77.8%	18,603	18,828	225	1.2%
79.0%	18,548	18,688	140	0.8%
80.2%	18,483	18,578	94	0.5%
81.5%	18,428	17,873	-555	-3.0%
82.7%	18,251	17,766	-485	-2.7%
84.0%	17,110	17,682	572	3.3%
85.2%	16,964	17,659	695	4.1%
86.4%	16,794	17,598	803	4.8%
87.7%	16,731	17,317	586	3.5%
88.9%	16,393	17,089	695	4.2%
90.1%	16,040	16,630	590	3.7%
91.4%	15,327	15,845	518	3.4%
92.6%	14,045	15,260	1,214	8.6%
93.8%	13,688	14,878	1,190	8.7%
95.1%	12,559	13,830	1,272	10.1%
96.3%	11,870	13,498	1,628	13.7%
97.5%	11,645	13,452	1,807	15.5%
98.8%	10,047	12,868	2,821	28.1%
100.0%	8,572	9,859	1,287	15.0%

Figure SW-10-b
Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

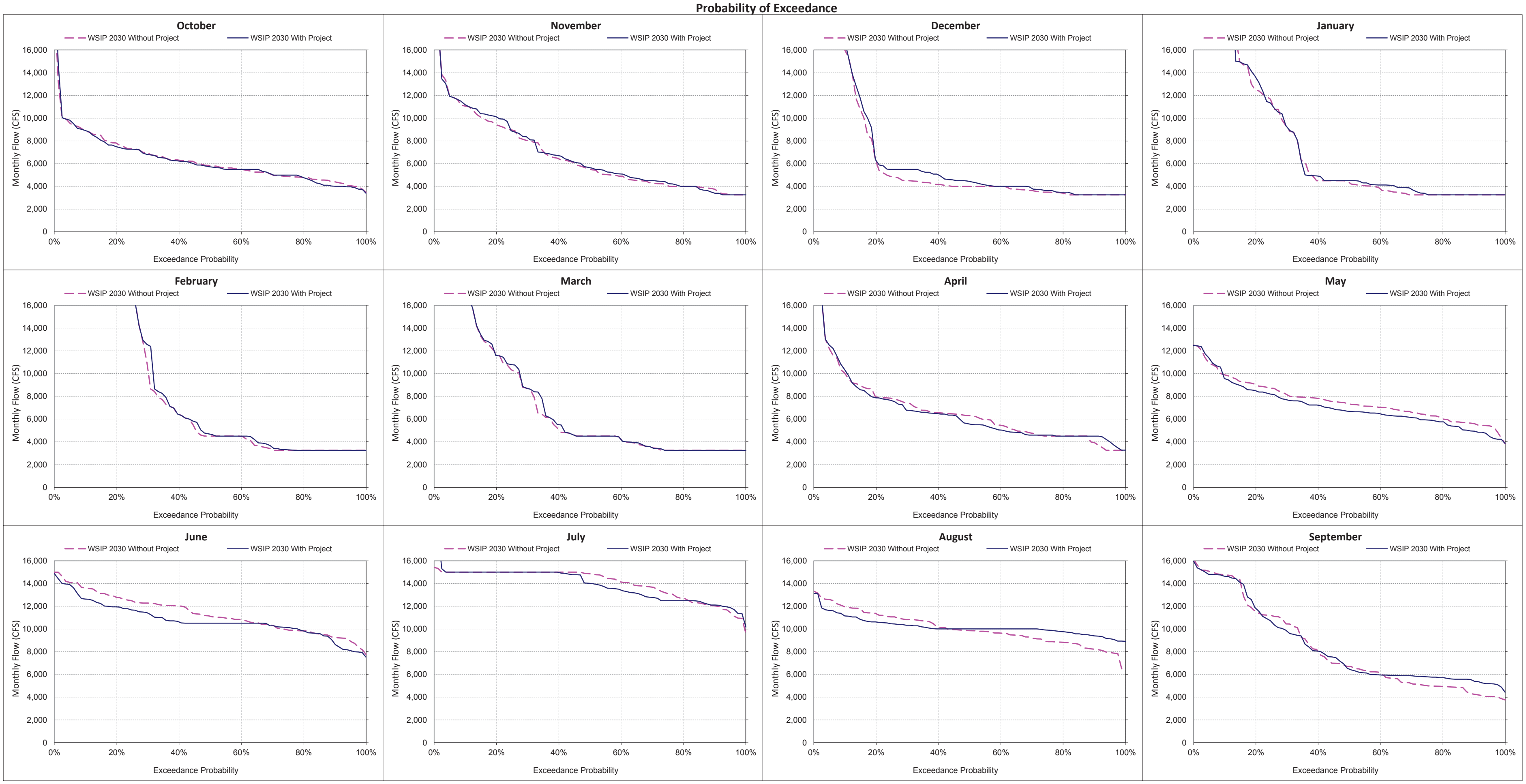


Table SW-10-b

Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,482	23,314	2,832	13.8%
1.2%	13,269	14,718	1,448	10.9%
2.5%	10,011	10,032	21	0.2%
3.7%	9,944	9,929	-15	-0.1%
4.9%	9,583	9,836	252	2.6%
6.2%	9,329	9,519	190	2.0%
7.4%	9,298	9,097	-201	-2.2%
8.6%	9,112	9,036	-76	-0.8%
9.9%	8,862	8,926	64	0.7%
11.1%	8,782	8,795	13	0.1%
12.3%	8,589	8,511	-78	-0.9%
13.6%	8,536	8,331	-204	-2.4%
14.8%	8,502	8,060	-442	-5.2%
16.0%	8,033	7,913	-120	-1.5%
17.3%	7,987	7,637	-350	-4.4%
18.5%	7,832	7,634	-199	-2.5%
19.8%	7,819	7,492	-327	-4.2%
21.0%	7,613	7,414	-199	-2.6%
22.2%	7,490	7,320	-170	-2.3%
23.5%	7,321	7,280	-40	-0.6%
24.7%	7,305	7,265	-40	-0.5%
25.9%	7,302	7,253	-49	-0.7%
27.2%	7,219	7,217	-2	0.0%
28.4%	6,996	6,926	-71	-1.0%
29.6%	6,989	6,821	-168	-2.4%
30.9%	6,797	6,778	-19	-0.3%
32.1%	6,713	6,713	0	0.0%
33.3%	6,656	6,550	-106	-1.6%
34.6%	6,622	6,528	-93	-1.4%
35.8%	6,470	6,462	-7	-0.1%
37.0%	6,349	6,322	-27	-0.4%
38.3%	6,327	6,264	-63	-1.0%
39.5%	6,324	6,244	-80	-1.3%
40.7%	6,266	6,204	-62	-1.0%
42.0%	6,262	6,193	-68	-1.1%
43.2%	6,225	6,131	-94	-1.5%
44.4%	6,206	6,016	-190	-3.1%
45.7%	6,026	5,885	-141	-2.3%
46.9%	5,990	5,878	-112	-1.9%
48.1%	5,865	5,812	-52	-0.9%
49.4%	5,842	5,737	-104	-1.8%
50.6%	5,785	5,691	-94	-1.6%
51.9%	5,778	5,645	-132	-2.3%
53.1%	5,682	5,639	-42	-0.7%
54.3%	5,635	5,512	-123	-2.2%
55.6%	5,627	5,500	-127	-2.3%
56.8%	5,623	5,500	-123	-2.2%
58.0%	5,541	5,500	-41	-0.7%
59.3%	5,537	5,500	-37	-0.7%
60.5%	5,467	5,500	33	0.6%
61.7%	5,415	5,500	85	1.6%
63.0%	5,343	5,500	157	2.9%
64.2%	5,262	5,500	238	4.5%
65.4%	5,260	5,484	224	4.3%
66.7%	5,244	5,326	82	1.6%
67.9%	5,200	5,272	72	1.4%
69.1%	5,101	5,118	17	0.3%
70.4%	4,967	5,000	33	0.7%
71.6%	4,966	5,000	34	0.7%
72.8%	4,923	5,000	77	1.6%
74.1%	4,883	5,000	117	2.4%
75.3%	4,863	5,000	137	2.8%
76.5%	4,832	5,000	168	3.5%
77.8%	4,824	4,979	155	3.2%
79.0%	4,797	4,879	81	1.7%
80.2%	4,771	4,737	-34	-0.7%
81.5%	4,766	4,625	-141	-3.0%
82.7%	4,625	4,496	-129	-2.8%
84.0%	4,619	4,306	-313	-6.8%
85.2%	4,554	4,226	-328	-7.2%
86.4%	4,553	4,108	-445	-9.8%
87.7%	4,540	4,104	-436	-9.6%
88.9%	4,414	4,028	-386	-8.7%
90.1%	4,388	4,010	-379	-8.6%
91.4%	4,313	4,000	-313	-7.3%
92.6%	4,251	4,000	-251	-5.9%
93.8%	4,077	3,964	-113	-2.8%
95.1%	4,055	3,951	-104	-2.6%
96.3%	4,000	3,899	-101	-2.5%
97.5%	4,000	3,762	-238	-6.0%
98.8%	3,746	3,740	-7	-0.2%
100.0%	3,468	3,390	-78	-2.2%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,009	22,765	1,756	8.4%
1.2%	17,899	18,693	795	4.4%
2.5%	13,829	13,451	-378	-2.7%
3.7%	13,358	13,037	-321	-2.4%
4.9%	11,945	11,922	-23	-0.2%
6.2%	11,815	11,815	0	0.0%
7.4%	11,658	11,658	0	0.0%
8.6%	11,147	11,496	349	3.1%
9.9%	11,072	11,200	128	1.2%
11.1%	11,009	11,022	13	0.1%
12.3%	10,751	10,873	123	1.1%
13.6%	10,352	10,800	449	4.3%
14.8%	10,108	10,394	287	2.8%
16.0%	9,953	10,374	422	4.2%
17.3%	9,742	10,295	553	5.7%
18.5%	9,683	10,218	535	5.5%
19.8%	9,437	10,158	721	7.6%
21.0%	9,321	9,940	619	6.6%
22.2%	9,202	9,912	710	7.7%
23.5%	9,022	9,715	693	7.7%
24.7%	8,974	8,893	-81	-0.9%
25.9%	8,893	8,778	-115	-1.3%
27.2%	8,270	8,658	388	4.7%
28.4%	8,145	8,389	245	3.0%
29.6%	8,048	8,372	325	4.0%
30.9%	7,986	8,104	118	1.5%
32.1%	7,882	8,068	186	2.4%
33.3%	7,830	7,030	-799	-10.2%
34.6%	7,210	7,009	-201	-2.8%
35.8%	6,848	6,899	51	0.7%
37.0%	6,646	6,869	223	3.4%
38.3%	6,545	6,767	222	3.4%
39.5%	6,487	6,716	229	3.5%
40.7%	6,326	6,646	320	5.1%
42.0%	6,306	6,418	111	1.8%
43.2%	6,225	6,317	93	1.5%
44.4%	6,138	6,181	43	0.7%
45.7%	5,880	6,079	199	3.4%
46.9%	5,789	6,029	241	4.2%
48.1%	5,672	5,731	59	1.0%
49.4%	5,551	5,672	121	2.2%
50.6%	5,460	5,607	147	2.7%
51.9%	5,429	5,500	71	1.3%
53.1%	5,087	5,500	413	8.1%
54.3%	5,061	5,415	354	7.0%
55.6%	5,036	5,255	219	4.4%
56.8%	5,002	5,231	229	4.6%
58.0%	4,980	5,122	142	2.8%
59.3%	4,906	5,108	203	4.1%
60.5%	4,892	5,081	188	3.8%
61.7%	4,644	4,950	306	6.6%
63.0%	4,579	4,794	215	4.7%
64.2%	4,544	4,726	182	4.0%
65.4%	4,489	4,686	197	4.4%
66.7%	4,485	4,594	109	2.4%
67.9%	4,473	4,516	43	1.0%
69.1%	4,326	4,500	174	4.0%
70.4%	4,279	4,500	221	5.2%
71.6%	4,242	4,457	215	5.1%
72.8%	4,236	4,434	198	4.7%
74.1%	4,204	4,412	208	5.0%
75.3%	4,006	4,242	236	5.9%
76.5%	4,000	4,204	204	5.1%
77.8%	4,000	4,126	126	3.1%
79.0%	4,000	4,000	0	0.0%
80.2%	4,000	4,000	0	0.0%
81.5%	4,000	4,000	0	0.0%
82.7%	4,000	4,000	0	0.0%
84.0%	3,971	4,000	29	0.7%
85.2%	3,931	3,767	-164	-4.2%
86.4%	3,885	3,670	-215	-5.5%
87.7%	3,854	3,644	-209	-5.4%
88.9%	3,823	3,498	-325	-8.5%
90.1%	3,739	3,387	-352	-9.4%
91.4%	3,481	3,380	-101	-2.9%
92.6%	3,334	3,261	-73	-2.2%
93.8%	3,321	3,250	-71	-2.1%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,077	30,100	23	0.1%
1.2%	26,650	27,397	747	2.8%
2.5%	24,364	24,364	0	0.0%
3.7%	24,085	23,634	-451	-1.9%
4.9%	23,634	21,894	-1,740	-7.4%
6.2%	18,545	18,545	0	0.0%
7.4%	18,097	17,296	-802	-4.4%
8.6%	17,123	17,222	99	0.6%
9.9%	16,028	16,783	755	4.7%
11.1%	15,388	15,388	0	0.0%
12.3%	13,886	13,886	0	0.0%
13.6%	11,696	12,809	1,113	9.5%
14.8%	10,819	11,813	994	9.2%
16.0%	10,043	10,576	533	5.3%
17.3%	8,478	10,016	1,538	18.1%
18.5%	8,210	9,167	957	11.7%
19.8%	6,353	6,353	0	0.0%
21.0%	5,365	5,888	523	9.7%
22.2%	5,190	5,800	610	11.8%
23.5%	4,992	5,518	525	10.5%
24.7%	4,857	5,500	643	13.2%
25.9%	4,846	5,500	654	13.5%
27.2%	4,738	5,500	762	16.1%
28.4%	4,534	5,500	965	21.3%
29.6%	4,498	5,500	1,002	22.3%
30.9%	4,492	5,500	1,008	22.4%
32.1%	4,461	5,500	1,039	23.3%
33.3%	4,447	5,500	1,053	23.7%
34.6%	4,376	5,338	962	22.0%
35.8%	4,334	5,247	913	21.1%
37.0%	4,327	5,242	915	21.1%
38.3%	4,222	5,084	862	20.4%
39.5%	4,169	5,082	913	21.9%
40.7%	4,160	4,902	742	17.8%
42.0%	4,087	4,640	553	13.5%
43.2%	4,048	4,609	561	13.9%
44.4%	4,000	4,572	572	14.3%
45.7%	4,000	4,500	500	12.5%
46.9%	4,000	4,500	500	12.5%
48.1%	4,000	4,500	500	12.5%
49.4%	4,000	4,466	466	11.7%
50.6%	4,000	4,395	395	9.9%
51.9%	4,000	4,323	323	8.1%
53.1%	4,000	4,242	242	6.1%
54.3%	4,000	4,160	160	4.0%
55.6%	4,000	4,097	97	2.4%
56.8%	4,000	4,055	55	1.4%
58.0%	4,000	4,004	4	0.1%
59.3%	4,000	4,000	0	0.0%
60.5%	4,000	4,000	0	0.0%
61.7%	3,959	4,000	41	1.0%
63.0%	3,781	4,000	219	5.8%
64.2%	3,764	4,000	236	6.3%
65.4%	3,744	4,000	256	6.8%
66.7%	3,707	4,000	293	7.9%
67.9%	3,690	4,000	310	8.4%
69.1%	3,650	3,959	309	8.5%
70.4%	3,609	3,764	155	4.3%
71.6%	3,551	3,744	193	5.4%
72.8%	3,494	3,707	213	6.1%
74.1%	3,493	3,650	157	4.5%
75.3%	3,490	3,648	159	4.5%
76.5%	3,472	3,609	137	4.0%
77.8%	3,471	3,494	24	0.7%
79.0%	3,439	3,493	54	1.6%
80.2%	3,392	3,490	98	2.9%
81.5%	3,251	3,472	221	6.8%
82.7%	3,250	3,392	142	4.4%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	50,381	50,381	0	0.0%
1.2%	38,601	38,601	0	0.0%
2.5%	37,180	37,180	0	0.0%
3.7%	33,556	33,556	0	0.0%
4.9%	29,077	29,077	0	0.0%
6.2%	28,527	28,392	-134	-0.5%
7.4%	24,826	26,118	1,292	5.2%
8.6%	22,825	24,687	1,862	8.2%
9.9%	22,150	22,825	675	3.0%
11.1%	21,937	22,150	213	1.0%
12.3%	21,569	21,937	368	1.7%
13.6%	17,052	15,000	-2,052	-12.0%
14.8%	14,963	14,963	0	0.0%
16.0%	14,689	14,791	101	0.7%
17.3%	14,657	14,689	33	0.2%
18.5%	13,036	14,155	1,118	8.6%
19.8%	12,472	13,699	1,227	9.8%
21.0%	12,402	13,136	734	5.9%
22.2%	12,093	12,386	293	2.4%
23.5%	11,922	11,471	-451	-3.8%
24.7%	11,664	11,329	-335	-2.9%
25.9%	10,781	10,858	76	0.7%
27.2%	10,777	10,532	-245	-2.3%
28.4%	9,846	10,408	563	5.7%
29.6%	9,348	9,348	0	0.0%
30.9%	8,856	8,904	49	0.5%
32.1%	8,766	8,766	0	0.0%
33.3%	8,031	8,031	0	0.0%
34.6%	6,268	6,268	0	0.0%
35.8%	6,170	5,003	-1,167	-18.9%
37.0%	5,145	4,950	-195	-3.8%
38.3%	4,915	4,950	35	0.7%
39.5%	4,500	4,915	415	9.2%
40.7%	4,500	4,868	368	8.2%
42.0%	4,500	4,500	0	0.0%
43.2%	4,500	4,500	0	0.0%
44.4%	4,500	4,500	0	0.0%
45.7%	4,500	4,500	0	0.0%
46.9%	4,500	4,500	0	0.0%
48.1%	4,500	4,500	0	0.0%
49.4%	4,465	4,500	35	0.8%
50.6%	4,202	4,500	298	7.1%
51.9%	4,165	4,500	335	8.0%
53.1%	4,087	4,465	378	9.2%
54.3%	4,082	4,298	216	5.3%
55.6%	4,040	4,298	258	6.4%
56.8%	4,025	4,165	140	3.5%
58.0%	3,979	4,149	170	4.3%
59.3%	3,926	4,125	199	5.1%
60.5%	3,638	4,125	487	13.4%
61.7%	3,629	4,125	496	13.7%
63.0%	3,584	4,087	503	14.0%
64.2%	3,502	4,082	580	16.6%
65.4%	3,488	3,926	438	12.6%
66.7%	3,417	3,919	501	14.7%
67.9%	3,389	3,883	493	14.6%
69.1%	3,255	3,874	619	19.0%
70.4%	3,250	3,698	448	13.8%
71.6%	3,250	3,532	282	8.7%
72.8%	3,250	3,417	167	5.2%
74.1%	3,250	3,393	143	4.4%
75.3%	3,250	3,262	12	0.4%
76.5%	3,250	3,260	10	0.3%
77.8%	3,250	3,255	5	0.1%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

Table SW-10-b

Sacramento River below Keswick Reservoir, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	53,417	53,417	0	0.0%
1.2%	50,275	50,275	0	0.0%
2.5%	39,207	39,773	566	1.4%
3.7%	38,056	39,207	1,151	3.0%
4.9%	38,051	38,056	5	0.0%
6.2%	36,392	36,392	0	0.0%
7.4%	34,350	34,350	0	0.0%
8.6%	32,084	32,084	0	0.0%
9.9%	30,245	30,245	0	0.0%
11.1%	29,446	30,113	667	2.3%
12.3%	27,865	29,446	1,581	5.7%
13.6%	26,990	27,865	875	3.2%
14.8%	26,644	26,990	346	1.3%
16.0%	26,311	26,311	0	0.0%
17.3%	25,626	26,068	442	1.7%
18.5%	24,390	24,390	0	0.0%
19.8%	23,076	23,076	0	0.0%
21.0%	21,643	21,643	0	0.0%
22.2%	20,242	20,242	0	0.0%
23.5%	20,206	20,206	0	0.0%
24.7%	19,346	19,346	0	0.0%
25.9%	16,279	16,279	0	0.0%
27.2%	14,250	14,250	0	0.0%
28.4%	12,789	12,941	151	1.2%
29.6%	11,089	12,583	1,494	13.5%
30.9%	8,650	12,384	3,734	43.2%
32.1%	8,432	8,650	218	2.6%
33.3%	7,909	8,432	523	6.6%
34.6%	7,717	8,271	554	7.2%
35.8%	7,294	7,909	615	8.4%
37.0%	7,118	7,117	-1	0.0%
38.3%	6,961	6,961	0	0.0%
39.5%	6,435	6,435	0	0.0%
40.7%	6,324	6,324	0	0.0%
42.0%	6,092	6,092	0	0.0%
43.2%	6,001	6,001	0	0.0%
44.4%	5,527	5,826	299	5.4%
45.7%	4,852	5,703	851	17.5%
46.9%	4,595	5,055	460	10.0%
48.1%	4,500	4,772	272	6.0%
49.4%	4,500	4,714	214	4.8%
50.6%	4,500	4,625	125	2.8%
51.9%	4,500	4,500	0	0.0%
53.1%	4,500	4,500	0	0.0%
54.3%	4,500	4,500	0	0.0%
55.6%	4,500	4,500	0	0.0%
56.8%	4,500	4,500	0	0.0%
58.0%	4,500	4,500	0	0.0%
59.3%	4,491	4,500	9	0.2%
60.5%	4,451	4,500	49	1.1%
61.7%	4,207	4,491	285	6.8%
63.0%	4,107	4,451	344	8.4%
64.2%	3,679	4,207	528	14.3%
65.4%	3,675	3,901	226	6.1%
66.7%	3,560	3,875	315	8.9%
67.9%	3,488	3,807	319	9.1%
69.1%	3,414	3,679	265	7.8%
70.4%	3,250	3,414	164	5.0%
71.6%	3,250	3,413	163	5.0%
72.8%	3,250	3,313	63	1.9%
74.1%	3,250	3,306	56	1.7%
75.3%	3,250	3,297	47	1.5%
76.5%	3,250	3,258	8	0.2%
77.8%	3,250	3,250	0	0.0%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	55,765	55,765	0	0.0%
1.2%	49,855	49,855	0	0.0%
2.5%	37,105	37,105	0	0.0%
3.7%	36,029	36,029	0	0.0%
4.9%	26,743	25,396	-1,347	-5.0%
6.2%	23,420	23,420	0	0.0%
7.4%	22,946	22,946	0	0.0%
8.6%	21,803	21,803	0	0.0%
9.9%	20,393	20,393	0	0.0%
11.1%	16,622	16,622	0	0.0%
12.3%	15,749	15,749	0	0.0%
13.6%	14,212	14,212	0	0.0%
14.8%	13,341	13,476	135	1.0%
16.0%	12,837	12,951	115	0.9%
17.3%	12,606	12,837	231	1.8%
18.5%	12,239	12,606	366	3.0%
19.8%	11,794	11,591	-203	-1.7%
21.0%	11,591	11,550	-41	-0.4%
22.2%	10,858	11,442	584	5.4%
23.5%	10,757	10,858	100	0.9%
24.7%	10,358	10,791	434	4.2%
25.9%	10,151	10,757	606	6.0%
27.2%	10,103	10,358	254	2.5%
28.4%	8,803	8,866	63	0.7%
29.6%	8,721	8,721	0	0.0%
30.9%	8,622	8,622	0	0.0%
32.1%	7,882	8,408	526	6.7%
33.3%	6,480	8,380	1,899	29.3%
34.6%	6,440	7,815	1,375	21.4%
35.8%	6,142	6,285	143	2.3%
37.0%	6,131	6,142	11	0.2%
38.3%	5,524	5,924	400	7.2%
39.5%	5,203	5,524	321	6.2%
40.7%	4,830	5,481	651	13.5%
42.0%	4,827	4,830	3	0.1%
43.2%	4,762	4,768	6	0.1%
44.4%	4,644	4,644	0	0.0%
45.7%	4,500	4,500	0	0.0%
46.9%	4,500	4,500	0	0.0%
48.1%	4,500	4,500	0	0.0%
49.4%	4,500	4,500	0	0.0%
50.6%	4,500	4,500	0	0.0%
51.9%	4,500	4,500	0	0.0%
53.1%	4,500	4,500	0	0.0%
54.3%	4,500	4,500	0	0.0%
55.6%	4,500	4,500	0	0.0%
56.8%	4,500	4,500	0	0.0%
58.0%	4,500	4,500	0	0.0%
59.3%	4,431	4,431	0	0.0%
60.5%	4,048	4,048	0	0.0%
61.7%	3,979	3,994	16	0.4%
63.0%	3,958	3,979	20	0.5%
64.2%	3,898	3,916	18	0.5%
65.4%	3,768	3,898	130	3.4%
66.7%	3,704	3,768	65	1.7%
67.9%	3,602	3,602	0	0.0%
69.1%	3,575	3,595	20	0.6%
70.4%	3,455	3,422	-32	-0.9%
71.6%	3,422	3,404	-18	-0.5%
72.8%	3,250	3,378	128	3.9%
74.1%	3,250	3,250	0	0.0%
75.3%	3,250	3,250	0	0.0%
76.5%	3,250	3,250	0	0.0%
77.8%	3,250	3,250	0	0.0%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,315	31,315	0	0.0%
1.2%	23,960	23,960	0	0.0%
2.5%	16,657	16,657	0	0.0%
3.7%	13,026	13,026	0	0.0%
4.9%	12,204	12,502	297	2.4%
6.2%	11,590	12,204	614	5.3%
7.4%	11,360	11,524	164	1.4%
8.6%	10,336	10,822	486	4.7%
9.9%	10,045	10,336	291	2.9%
11.1%	9,548	9,840	291	3.1%
12.3%	9,186	9,186	0	0.0%
13.6%	9,115	8,855	-259	-2.8%
14.8%	8,977	8,572	-406	-4.5%
16.0%	8,782	8,516	-266	-3.0%
17.3%	8,675	8,247	-428	-4.9%
18.5%	8,672	7,961	-711	-8.2%
19.8%	7,961	7,871	-90	-1.1%
21.0%	7,872	7,861	-12	-0.1%
22.2%	7,868	7,757	-110	-1.4%
23.5%	7,861	7,725	-136	-1.7%
24.7%	7,830	7,651	-179	-2.3%
25.9%	7,757	7,526	-232	-3.0%
27.2%	7,663	7,295	-368	-4.8%
28.4%	7,529	7,254	-275	-3.6%
29.6%	7,394	6,777	-617	-8.4%
30.9%	7,373	6,765	-608	-8.2%
32.1%	7,104	6,716	-389	-5.5%
33.3%	6,977	6,671	-306	-4.4%
34.6%	6,774	6,608	-166	-2.5%
35.8%	6,765	6,595	-169	-2.5%
37.0%	6,670	6,538	-132	-2.0%
38.3%	6,558	6,508	-51	-0.8%
39.5%	6,552	6,483	-69	-1.1%
40.7%	6,538	6,448	-90	-1.4%
42.0%	6,508	6,426	-81	-1.3%
43.2%	6,483	6,339	-144	-2.2%
44.4%	6,466	6,336	-130	-2.0%
45.7%	6,426	6,268	-158	-2.5%
46.9%	6,404	5,972	-432	-6.7%
48.1%	6,342	5,671	-671	-10.6%
49.4%	6,307	5,601	-706	-11.2%
50.6%	6,279	5,531	-747	-11.9%
51.9%	6,228	5,504	-724	-11.6%
53.1%	6,078	5,500	-579	-9.5%
54.3%	5,957	5,477	-480	-8.1%
55.6%	5,951	5,370	-581	-9.8%
56.8%	5,920	5,250	-669	-11.3%
58.0%	5,511	5,155	-356	-6.5%
59.3%	5,477	5,053	-423	-7.7%
60.5%	5,433	5,017	-416	-7.7%
61.7%	5,339	4,938	-402	-7.5%
63.0%	5,149	4,867	-282	-5.5%
64.2%	5,074	4,839	-235	-4.6%
65.4%	4,940	4,816	-124	-2.5%
66.7%	4,925	4,792	-132	-2.7%
67.9%	4,894	4,634	-260	-5.3%
69.1%	4,801	4,600	-201	-4.2%
70.4%	4,733	4,600	-133	-2.8%
71.6%	4,585	4,600	15	0.3%
72.8%	4,564	4,600	36	0.8%
74.1%	4,500	4,600	100	2.2%
75.3%	4,500	4,600	100	2.2%
76.5%	4,500	4,600	100	2.2%
77.8%	4,500	4,500	0	0.0%
79.0%	4,500	4,500	0	0.0%
80.2%	4,500	4,500	0	0.0%
81.5%	4,500	4,500	0	0.0%
82.7%	4,500	4,500	0	0.0%
84.0%	4,500	4,500	0	0.0%
85.2%	4,500	4,500	0	0.0%
86.4%	4,500	4,500	0	0.0%
87.7%	4,500	4,500	0	0.0%
88.9%	3,990	4,500	510	12.8%
90.1%	3,910	4,500	590	15.1%
91.4%	3,700	4,500	800	21.6%
92.6%	3,485	4,430	945	27.1%
93.8%	3,250	4,197	947	29.1%
95.1%	3,250	3,977	727	22.4%
96.3%	3,250	3,700	450	13.8%
97.5%	3,250	3,467	217	6.7%
98.8%	3,250	3,258	8	0.3%
100.0%	3,250	3,255	5	0.1%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,495	12,495	0	0.0%
1.2%	12,433	12,433	0	0.0%
2.5%	12,079	12,376	298	2.5%
3.7%	11,387	11,742	355	3.1%
4.9%	10,920	11,387	467	4.3%
6.2%	10,768	10,920	152	1.4%
7.4%	10,577	10,671	95	0.9%
8.6%	10,007	10,577	570	5.7%
9.9%	9,898	9,572	-326	-3.3%
11.1%	9,803	9,452	-350	-3.6%
12.3%	9,660	9,211	-449	-4.7%
13.6%	9,532	9,079	-452	-4.7%
14.8%	9,309	8,981	-329	-3.5%
16.0%	9,285	8,839	-446	-4.8%
17.3%	9,202	8,591	-611	-6.6%
18.5%	9,162	8,560	-602	-6.6%
19.8%	9,061	8,515	-546	-6.0%
21.0%	8,894	8,377	-517	-5.8%
22.2%	8,864	8,367	-497	-5.6%
23.5%	8,799	8,295	-504	-5.7%
24.7%	8,714	8,204	-509	-5.8%
25.9%	8,688	8,160	-528	-6.1%
27.2%	8,487	7,940	-547	-6.4%
28.4%	8,377	7,788	-589	-7.0%
29.6%	8,197	7,724	-473	-5.8%
30.9%	8,005	7,629	-376	-4.7%
32.1%	7,957	7,611	-346	-4.3%
33.3%	7,943	7,595	-348	-4.4%
34.6%	7,940	7,545	-396	-5.0%
35.8%	7,914	7,398	-516	-6.5%
37.0%	7,906	7,243	-663	-8.4%
38.3%	7,865	7,235	-630	-8.0%
39.5%	7,831	7,234	-597	-7.6%
40.7%	7,775	7,195	-580	-7.5%
42.0%	7,701	7,053	-648	-8.4%
43.2%	7,616	7,008	-608	-8.0%
44.4%	7,534	6,945	-588	-7.8%
45.7%	7,521	6,819	-702	-9.3%
46.9%	7,481	6,792	-689	-9.2%
48.1%	7,463	6,765	-699	-9.4%
49.4%	7,365	6,682	-683	-9.3%
50.6%	7,294	6,673	-621	-8.5%
51.9%	7,279	6,637	-642	-8.8%
53.1%	7,235	6,636	-600	-8.3%
54.3%	7,151	6,610	-542	-7.6%
55.6%	7,134	6,567	-568	-8.0%
56.8%	7,118	6,524	-594	-8.3%
58.0%	7,105	6,519	-586	-8.2%
59.3%	7,043	6,513	-530	-7.5%
60.5%	7,019	6,411	-608	-8.7%
61.7%	7,012	6,353	-658	-9.4%
63.0%	6,975	6,320	-655	-9.4%
64.2%	6,858	6,283	-576	-8.4%
65.4%	6,810	6,265	-545	-8.0%
66.7%	6,755	6,263	-492	-7.3%
67.9%	6,682	6,218	-464	-6.9%
69.1%	6,680	6,158	-522	-7.8%
70.4%	6,549	6,112	-437	-6.7%
71.6%	6,544	6,100	-444	-6.8%
72.8%	6,445	5,944	-500	-7.8%
74.1%	6,413	5,934	-479	-7.5%
75.3%	6,289	5,918	-370	-5.9%
76.5%	6,283	5,886	-397	-6.3%
77.8%	6,273	5,821	-452	-7.2%
79.0%	6,166	5,755	-411	-6.7%
80.2%	5,988	5,743	-245	-4.1%
81.5%	5,964	5,483	-481	-8.1%
82.7%	5,756	5,384	-371	-6.5%
84.0%	5,751	5,365	-387	-6.7%
85.2%	5,741	5,313	-428	-7.5%
86.4%	5,692	5,045	-648	-11.4%
87.7%	5,687	5,012	-675	-11.9%
88.9%	5,637	4,943	-693	-12.3%
90.1%	5,598	4,929	-669	-11.9%
91.4%	5,465	4,851	-614	-11.2%
92.6%	5,450	4,830	-619	-11.4%
93.8%	5,429	4,751	-679	-12.5%
95.1%	5,395	4,455	-940	-17.4%
96.3%	5,305	4,289	-1,016	-19.2%
97.5%	4,869	4,223	-645	-13.3%
98.8%	4,329	4,219	-109	-2.5%
100.0%	3,824	3,850	26	0.7%

Table SW-10-b

Sacramento River below Keswick Reservoir, Monthly Flow

Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,000	14,879	-121	-0.8%
1.2%	15,000	14,426	-574	-3.8%
2.5%	14,650	14,010	-640	-4.4%
3.7%	14,185	13,966	-219	-1.5%
4.9%	14,103	13,909	-194	-1.4%
6.2%	14,101	13,618	-482	-3.4%
7.4%	14,076	13,111	-965	-6.9%
8.6%	13,680	12,690	-990	-7.2%
9.9%	13,598	12,639	-959	-7.1%
11.1%	13,577	12,617	-960	-7.1%
12.3%	13,520	12,517	-1,004	-7.4%
13.6%	13,298	12,343	-955	-7.2%
14.8%	13,125	12,242	-883	-6.7%
16.0%	13,113	12,020	-1,094	-8.3%
17.3%	12,986	11,989	-996	-7.7%
18.5%	12,955	11,960	-995	-7.7%
19.8%	12,803	11,942	-861	-6.7%
21.0%	12,746	11,918	-827	-6.5%
22.2%	12,622	11,796	-826	-6.5%
23.5%	12,547	11,786	-762	-6.1%
24.7%	12,497	11,672	-826	-6.6%
25.9%	12,348	11,657	-690	-5.6%
27.2%	12,315	11,514	-802	-6.5%
28.4%	12,279	11,483	-796	-6.5%
29.6%	12,279	11,440	-839	-6.8%
30.9%	12,277	11,270	-1,007	-8.2%
32.1%	12,246	11,026	-1,220	-10.0%
33.3%	12,147	11,022	-1,125	-9.3%
34.6%	12,096	11,019	-1,078	-8.9%
35.8%	12,075	10,751	-1,323	-11.0%
37.0%	12,068	10,711	-1,358	-11.3%
38.3%	12,056	10,708	-1,347	-11.2%
39.5%	12,019	10,677	-1,342	-11.2%
40.7%	12,013	10,527	-1,486	-12.4%
42.0%	11,924	10,518	-1,407	-11.8%
43.2%	11,639	10,512	-1,127	-9.7%
44.4%	11,369	10,500	-869	-7.6%
45.7%	11,328	10,500	-828	-7.3%
46.9%	11,296	10,500	-796	-7.0%
48.1%	11,185	10,500	-685	-6.1%
49.4%	11,158	10,500	-658	-5.9%
50.6%	11,071	10,500	-571	-5.2%
51.9%	11,036	10,500	-536	-4.9%
53.1%	11,035	10,500	-535	-4.8%
54.3%	10,994	10,500	-494	-4.5%
55.6%	10,923	10,500	-423	-3.9%
56.8%	10,920	10,500	-420	-3.8%
58.0%	10,841	10,500	-341	-3.1%
59.3%	10,837	10,500	-337	-3.1%
60.5%	10,801	10,500	-301	-2.8%
61.7%	10,702	10,500	-202	-1.9%
63.0%	10,589	10,500	-89	-0.8%
64.2%	10,553	10,500	-53	-0.5%
65.4%	10,532	10,500	-32	-0.3%
66.7%	10,408	10,500	92	0.9%
67.9%	10,399	10,499	99	1.0%
69.1%	10,362	10,282	-80	-0.8%
70.4%	10,281	10,272	-9	-0.1%
71.6%	10,051	10,189	138	1.4%
72.8%	10,039	10,174	135	1.3%
74.1%	9,965	10,139	174	1.7%
75.3%	9,898	10,125	227	2.3%
76.5%	9,889	10,062	173	1.7%
77.8%	9,858	10,040	182	1.8%
79.0%	9,846	9,887	40	0.4%
80.2%	9,831	9,800	-31	-0.3%
81.5%	9,830	9,665	-165	-1.7%
82.7%	9,679	9,650	-29	-0.3%
84.0%	9,596	9,627	31	0.3%
85.2%	9,559	9,588	29	0.3%
86.4%	9,508	9,396	-111	-1.2%
87.7%	9,471	9,375	-96	-1.0%
88.9%	9,305	9,064	-241	-2.6%
90.1%	9,255	8,623	-632	-6.8%
91.4%	9,220	8,418	-801	-8.7%
92.6%	9,191	8,200	-991	-10.8%
93.8%	9,184	8,181	-1,004	-10.9%
95.1%	8,903	8,100	-803	-9.0%
96.3%	8,728	7,989	-740	-8.5%
97.5%	8,392	7,983	-410	-4.9%
98.8%	8,166	7,900	-266	-3.3%
100.0%	7,758	7,516	-242	-3.1%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,415	18,786	3,370	21.9%
1.2%	15,332	18,590	3,258	21.2%
2.5%	15,000	15,298	298	2.0%
3.7%	15,000	15,000	0	0.0%
4.9%	15,000	15,000	0	0.0%
6.2%	15,000	15,000	0	0.0%
7.4%	15,000	15,000	0	0.0%
8.6%	15,000	15,000	0	0.0%
9.9%	15,000	15,000	0	0.0%
11.1%	15,000	15,000	0	0.0%
12.3%	15,000	15,000	0	0.0%
13.6%	15,000	15,000	0	0.0%
14.8%	15,000	15,000	0	0.0%
16.0%	15,000	15,000	0	0.0%
17.3%	15,000	15,000	0	0.0%
18.5%	15,000	15,000	0	0.0%
19.8%	15,000	15,000	0	0.0%
21.0%	15,000	15,000	0	0.0%
22.2%	15,000	15,000	0	0.0%
23.5%	15,000	15,000	0	0.0%
24.7%	15,000	15,000	0	0.0%
25.9%	15,000	15,000	0	0.0%
27.2%	15,000	15,000	0	0.0%
28.4%	15,000	15,000	0	0.0%
29.6%	15,000	15,000	0	0.0%
30.9%	15,000	15,000	0	0.0%
32.1%	15,000	15,000	0	0.0%
33.3%	15,000	15,000	0	0.0%
34.6%	15,000	15,000	0	0.0%
35.8%	15,000	15,000	0	0.0%
37.0%	15,000	15,000	0	0.0%
38.3%	15,000	15,000	0	0.0%
39.5%	15,000	15,000	0	0.0%
40.7%	15,000	14,913	-87	-0.6%
42.0%	15,000	14,901	-99	-0.7%
43.2%	15,000	14,833	-167	-1.1%
44.4%	15,000	14,783	-217	-1.4%
45.7%	15,000	14,778	-222	-1.5%
46.9%	15,000	14,766	-234	-1.6%
48.1%	14,901	14,044	-857	-5.8%
49.4%	14,881	14,029	-852	-5.7%
50.6%	14,833	14,001	-831	-5.6%
51.9%	14,778	13,942	-836	-5.7%
53.1%	14,759	13,865	-894	-6.1%
54.3%	14,625	13,754	-870	-5.9%
55.6%	14,449	13,589	-860	-6.0%
56.8%	14,424	13,562	-862	-6.0%
58.0%	14,387	13,536	-851	-5.9%
59.3%	14,167	13,504	-663	-4.7%
60.5%	14,109	13,370	-739	-5.2%
61.7%	14,095	13,304	-790	-5.6%
63.0%	14,050	13,202	-848	-6.0%
64.2%	13,848	13,174	-674	-4.9%
65.4%	13,811	13,112	-699	-5.1%
66.7%	13,790	13,003	-787	-5.7%
67.9%	13,752	12,837	-915	-6.7%
69.1%	13,710	12,788	-922	-6.7%
70.4%	13,664	12,765	-899	-6.6%
71.6%	13,495	12,698	-797	-5.9%
72.8%	13,320	12,500	-820	-6.2%
74.1%	13,192	12,500	-692	-5.2%
75.3%	13,093	12,500	-593	-4.5%
76.5%	13,059	12,500	-559	-4.3%
77.8%	12,816	12,500	-316	-2.5%
79.0%	12,714	12,500	-214	-1.7%
80.2%	12,705	12,500	-205	-1.6%
81.5%	12,525	12,500	-25	-0.2%
82.7%	12,341	12,492	151	1.2%
84.0%	12,331	12,484	153	1.2%
85.2%	12,279	12,437	158	1.3%
86.4%	12,214	12,300	86	0.7%
87.7%	12,096	12,191	96	0.8%
88.9%	12,056	12,110	54	0.4%
90.1%	12,032	12,102	71	0.6%
91.4%	11,982	12,078	95	0.8%
92.6%	11,715	11,988	273	2.3%
93.8%	11,695	11,948	253	2.2%
95.1%	11,441	11,870	429	3.8%
96.3%	11,119	11,706	587	5.3%
97.5%	10,950	11,362	413	3.8%
98.8%	10,938	11,352	414	3.8%
100.0%	9,607	10,176	569	5.9%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,327	13,115	-213	-1.6%
1.2%	13,157	13,106	-51	-0.4%
2.5%	12,726	11,860	-866	-6.8%
3.7%	12,618	11,704	-914	-7.2%
4.9%	12,605	11,631	-974	-7.7%
6.2%	12,493	11,610	-883	-7.1%
7.4%	12,223	11,419	-804	-6.6%
8.6%	12,095	11,368	-727	-6.0%
9.9%	11,959	11,141	-818	-6.8%
11.1%	11,900	11,138	-763	-6.4%
12.3%	11,839	11,064	-775	-6.5%
13.6%	11,833	11,053	-780	-6.6%
14.8%	11,823	10,859	-964	-8.2%
16.0%	11,466	10,737	-729	-6.4%
17.3%	11,420	10,664	-756	-6.6%
18.5%	11,414	10,619	-794	-7.0%
19.8%	11,375	10,618	-757	-6.7%
21.0%	11,205	10,573	-632	-5.6%
22.2%	11,198	10,555	-642	-5.7%
23.5%	11,094	10,541	-553	-5.0%
24.7%	11,069	10,468	-601	-5.4%
25.9%	11,062	10,446	-615	-5.6%
27.2%	10,936	10,394	-542	-5.0%
28.4%	10,883	10,392	-491	-4.5%
29.6%	10,825	10,337	-488	-4.5%
30.9%	10,820	10,335	-484	-4.5%
32.1%	10,819	10,289	-529	-4.9%
33.3%	10,781	10,272	-508	-4.7%
34.6%	10,725	10,191	-534	-5.0%
35.8%	10,689	10,139	-550	-5.1%
37.0%	10,647	10,088	-559	-5.3%
38.3%	10,480	10,022	-458	-4.4%
39.5%	10,211	10,000	-211	-2.1%
40.7%	10,140	10,000	-140	-1.4%
42.0%	10,137	10,000	-137	-1.4%
43.2%	9,949	10,000	51	0.5%
44.4%	9,945	10,000	55	0.6%
45.7%	9,938	10,000	62	0.6%
46.9%	9,913	10,000	87	0.9%
48.1%	9,887	10,000	113	1.1%
49.4%	9,864	10,000	136	1.4%
50.6%	9,850	10,000	150	1.5%
51.9%	9,841	10,000	159	1.6%
53.1%	9,802	10,000	198	2.0%
54.3%	9,802	10,000	198	2.0%
55.6%	9,785	10,000	215	2.2%
56.8%	9,715	10,000	285	2.9%
58.0%	9,651	10,000	349	3.6%
59.3%	9,650	10,000	350	3.6%
60.5%	9,626	10,000	374	3.9%
61.7%	9,620	10,000	380	3.9%
63.0%	9,489	10,000	511	5.4%
64.2%	9,472	10,000	528	5.6%
65.4%	9,447	10,000	553	5.9%
66.7%	9,427	10,000	573	6.1%
67.9%	9,305	10,000	695	7.5%
69.1%	9,292	10,000	708	7.6%
70.4%	9,180	10,000	820	8.9%
71.6%	9,134	10,000	866	9.5%
72.8%	9,120	9,955	835	9.2%
74.1%	8,917	9,915	998	11.2%
75.3%	8,888	9,904	1,016	11.4%
76.5%	8,885	9,871	986	11.1%
77.8%	8,856	9,823	966	10.9%
79.0%	8,845	9,783	938	10.6%
80.2%	8,831	9,750	920	10.4%
81.5%	8,799	9,722	923	10.5%
82.7%	8,721	9,697	976	11.2%
84.0%	8,721	9,565	845	9.7%
85.2%	8,649	9,564	916	10.6%
86.4%	8,333	9,514	1,182	14.2%
87.7%	8,305	9,504	1,199	14.4%
88.9%	8,254	9,431	1,177	14.3%
90.1%	8,222	9,397	1,176	14.3%
91.4%	8,178	9,368	1,190	14.6%
92.6%	8,109	9,327	1,218	15.0%
93.8%	7,967	9,164	1,197	15.0%
95.1%	7,935	9,137	1,202	15.1%
96.3%	7,876	9,075	1,199	15.2%
97.5%	7,850	8,946	1,095	14.0%
98.8%	6,504	8,942	2,438	37.5%
100.0%	6,272	8,909	2,636	42.0%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,164	15,987	-177	-1.1%
1.2%	15,623	15,370	-253	-1.6%
2.5%	15,174	15,214	39	0.3%
3.7%	15,166	15,000	-166	-1.1%
4.9%	15,078	14,807	-271	-1.8%
6.2%	15,000	14,803	-197	-1.3%
7.4%	14,854	14,778	-76	-0.5%
8.6%	14,807	14,761	-46	-0.3%
9.9%	14,778	14,643	-136	-0.9%
11.1%	14,734	14,618	-116	-0.8%
12.3%	14,685	14,492	-193	-1.3%
13.6%	14,396	14,442	46	0.3%
14.8%	14,390	14,125	-265	-1.8%
16.0%	12,891	13,929	1,038	8.1%
17.3%	12,115	12,808	694	5.7%
18.5%	11,886	12,578	692	5.8%
19.8%	11,562	11,878	315	2.7%
21.0%	11,388	11,559	171	1.5%
22.2%	11,248	11,109	-138	-1.2%
23.5%	11,221	10,920	-301	-2.7%
24.7%	11,205	10,714	-492	-4.4%
25.9%	11,109	10,353	-757	-6.8%
27.2%	11,086	10,122	-964	-8.7%
28.4%	10,933	10,044	-889	-8.1%
29.6%	10,450	9,905	-545	-5.2%
30.9%	10,444	9,601	-843	-8.1%
32.1%	10,217	9,536	-681	-6.7%
33.3%	10,127	9,441	-687	-6.8%
34.6%	9,244	9,396	152	1.6%
35.8%	9,120	8,655	-464	-5.1%
37.0%	8,630	8,405	-225	-2.6%
38.3%	8,257	8,085	-171	-2.1%
39.5%	8,204	8,060	-144	-1.8%
40.7%	7,706	8,030	324	4.2%
42.0%	7,549	7,824	275	3.6%
43.2%	7,186	7,566	380	5.3%
44.4%	6,986	7,549	562	8.1%
45.7%	6,978	7,481	503	7.2%
46.9%	6,960	7,177	217	3.1%
48.1%	6,825	6,958	132	1.9%
49.4%	6,705	6,537	-168	-2.5%
50.6%	6,690	6,392	-298	-4.5%
51.9%	6,503	6,310	-193	-3.0%
53.1%	6,490	6,199	-291	-4.5%
54.3%	6,379	6,157	-222	-3.5%
55.6%	6,340	6,122	-217	-3.4%
56.8%	6,230	6,000	-230	-3.7%
58.0%	6,229	6,000	-229	-3.7%
59.3%	6,209	5,961	-248	-4.0%
60.5%	6,042	5,945	-97	-1.6%
61.7%	5,732	5,943	210	3.7%
63.0%	5,683	5,933	250	4.4%
64.2%	5,641	5,929	288	5.1%
65.4%	5,632	5,925	293	5.2%
66.7%	5,306	5,910	605	11.4%
67.9%	5,294	5,907	613	11.6%
69.1%	5,282	5,906	624	11.8%
70.4%	5,158	5,876	719	13.9%
71.6%	5,147	5,835	687	13.4%
72.8%	5,098	5,826	728	14.3%
74.1%	5,045	5,815	770	15.3%
75.3%	4,996	5,783	788	15.8%
76.5%	4,983	5,767	785	15.7%
77.8%	4,967	5,754	787	15.9%
79.0%	4,960	5,724	765	15.4%
80.2%	4,931	5,718	787	16.0%
81.5%	4,927	5,652	726	14.7%
82.7%	4,899	5,600	701	14.3%
84.0%	4,878	5,583	705	14.4%
85.2%	4,855	5,582	727	15.0%
86.4%	4,841	5,573	733	15.1%
87.7%	4,476	5,572	1,096	24.5%
88.9%	4,316	5,553	1,237	28.7%
90.1%	4,255	5,389	1,135	26.7%
91.4%	4,206	5,382	1,176	27.9%
92.6%	4,131	5,250	1,119	27.1%
93.8%	4,059	5,200	1,141	28.1%
95.1%	4,055	5,182	1,128	27.8%
96.3%	4,045	5,170	1,124	27.8%
97.5%	4,025	5,102	1,078	26.8%
98.8%	3,877	4,900	1,023	26.4%
100.0%	3,764	4,434	671	17.8%

Figure SW-11-b
Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

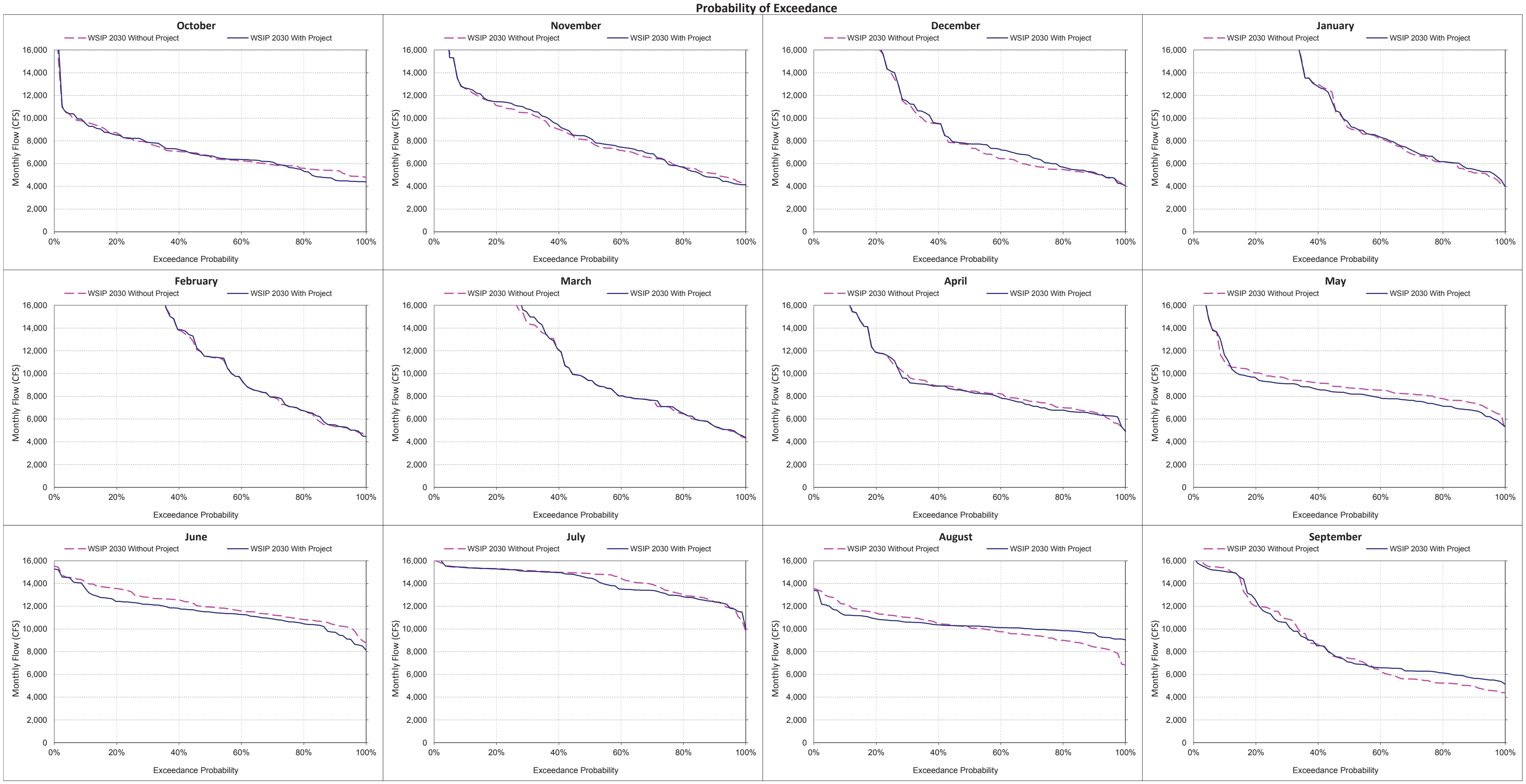


Table SW-11-b

Sacramento River at Bend Bridge, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,805	27,628	2,823	11.4%
1.2%	15,348	16,781	1,434	9.3%
2.5%	11,083	10,978	-105	-0.9%
3.7%	10,573	10,512	-62	-0.6%
4.9%	10,347	10,403	56	0.5%
6.2%	9,937	10,368	431	4.3%
7.4%	9,809	9,944	136	1.4%
8.6%	9,769	9,909	140	1.4%
9.9%	9,689	9,561	-128	-1.3%
11.1%	9,577	9,279	-297	-3.1%
12.3%	9,477	9,275	-202	-2.1%
13.6%	9,367	9,109	-258	-2.8%
14.8%	9,252	9,058	-194	-2.1%
16.0%	9,089	8,763	-326	-3.6%
17.3%	8,791	8,722	-69	-0.8%
18.5%	8,741	8,628	-113	-1.3%
19.8%	8,726	8,532	-194	-2.2%
21.0%	8,548	8,471	-77	-0.9%
22.2%	8,317	8,271	-46	-0.6%
23.5%	8,204	8,267	63	0.8%
24.7%	8,197	8,237	40	0.5%
25.9%	7,978	8,230	252	3.2%
27.2%	7,970	8,225	255	3.2%
28.4%	7,951	8,101	150	1.9%
29.6%	7,868	7,896	28	0.4%
30.9%	7,698	7,841	142	1.9%
32.1%	7,610	7,827	217	2.9%
33.3%	7,490	7,797	306	4.1%
34.6%	7,454	7,558	105	1.4%
35.8%	7,168	7,351	183	2.5%
37.0%	7,128	7,310	183	2.6%
38.3%	7,104	7,309	205	2.9%
39.5%	7,087	7,263	176	2.5%
40.7%	7,048	7,187	139	2.0%
42.0%	7,034	7,133	98	1.4%
43.2%	6,986	6,969	-16	-0.2%
44.4%	6,952	6,891	-60	-0.9%
45.7%	6,936	6,845	-91	-1.3%
46.9%	6,798	6,754	-43	-0.6%
48.1%	6,761	6,717	-44	-0.7%
49.4%	6,716	6,681	-35	-0.5%
50.6%	6,500	6,679	180	2.8%
51.9%	6,417	6,573	156	2.4%
53.1%	6,375	6,472	98	1.5%
54.3%	6,349	6,458	109	1.7%
55.6%	6,331	6,402	70	1.1%
56.8%	6,327	6,393	66	1.0%
58.0%	6,313	6,393	80	1.3%
59.3%	6,245	6,392	147	2.3%
60.5%	6,239	6,355	116	1.9%
61.7%	6,222	6,350	127	2.0%
63.0%	6,178	6,319	141	2.3%
64.2%	6,079	6,315	237	3.9%
65.4%	6,065	6,295	230	3.8%
66.7%	6,033	6,200	167	2.8%
67.9%	5,999	6,193	194	3.2%
69.1%	5,927	6,186	259	4.4%
70.4%	5,893	6,112	218	3.7%
71.6%	5,842	5,936	94	1.6%
72.8%	5,827	5,880	53	0.9%
74.1%	5,818	5,840	22	0.4%
75.3%	5,815	5,643	-172	-3.0%
76.5%	5,815	5,639	-176	-3.0%
77.8%	5,778	5,556	-222	-3.8%
79.0%	5,605	5,482	-123	-2.2%
80.2%	5,589	5,305	-283	-5.1%
81.5%	5,512	5,264	-248	-4.5%
82.7%	5,506	4,957	-549	-10.0%
84.0%	5,480	4,862	-618	-11.3%
85.2%	5,437	4,838	-599	-11.0%
86.4%	5,425	4,784	-641	-11.8%
87.7%	5,416	4,763	-653	-12.1%
88.9%	5,405	4,736	-668	-12.4%
90.1%	5,387	4,537	-851	-15.8%
91.4%	5,363	4,495	-868	-16.2%
92.6%	5,146	4,485	-661	-12.8%
93.8%	5,058	4,478	-580	-11.5%
95.1%	4,895	4,442	-453	-9.2%
96.3%	4,890	4,432	-459	-9.4%
97.5%	4,882	4,428	-454	-9.3%
98.8%	4,876	4,422	-453	-9.3%
100.0%	4,772	4,395	-377	-7.9%

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,510	32,253	1,743	5.7%
1.2%	27,006	27,799	793	2.9%
2.5%	20,269	19,968	-301	-1.5%
3.7%	19,973	19,950	-22	-0.1%
4.9%	15,676	15,332	-344	-2.2%
6.2%	15,333	15,299	-34	-0.2%
7.4%	13,545	13,520	-25	-0.2%
8.6%	12,853	12,786	-67	-0.5%
9.9%	12,616	12,664	48	0.4%
11.1%	12,466	12,583	117	0.9%
12.3%	12,209	12,478	269	2.2%
13.6%	12,036	12,206	170	1.4%
14.8%	11,848	12,128	280	2.4%
16.0%	11,658	11,781	123	1.1%
17.3%	11,558	11,575	18	0.2%
18.5%	11,553	11,493	-61	-0.5%
19.8%	11,141	11,460	320	2.9%
21.0%	11,045	11,442	397	3.6%
22.2%	11,039	11,420	382	3.5%
23.5%	10,848	11,390	542	5.0%
24.7%	10,831	11,305	474	4.4%
25.9%	10,755	11,129	374	3.5%
27.2%	10,518	11,061	543	5.2%
28.4%	10,497	11,015	518	4.9%
29.6%	10,486	10,840	354	3.4%
30.9%	10,437	10,757	320	3.1%
32.1%	10,219	10,588	369	3.6%
33.3%	10,102	10,536	434	4.3%
34.6%	9,888	10,193	306	3.1%
35.8%	9,736	10,114	378	3.9%
37.0%	9,275	9,929	654	7.1%
38.3%	9,195	9,623	428	4.7%
39.5%	9,059	9,498	439	4.8%
40.7%	8,950	9,170	220	2.5%
42.0%	8,836	9,032	196	2.2%
43.2%	8,617	8,891	274	3.2%
44.4%	8,485	8,535	50	0.6%
45.7%	8,160	8,484	324	4.0%
46.9%	8,155	8,450	294	3.6%
48.1%	8,112	8,448	336	4.1%
49.4%	8,097	8,323	225	2.8%
50.6%	7,815	8,148	334	4.3%
51.9%	7,601	7,818	217	2.9%
53.1%	7,476	7,800	325	4.3%
54.3%	7,403	7,725	322	4.4%
55.6%	7,368	7,675	307	4.2%
56.8%	7,360	7,647	287	3.9%
58.0%	7,336	7,596	261	3.6%
59.3%	7,189	7,484	295	4.1%
60.5%	7,147	7,439	293	4.1%
61.7%	7,056	7,393	336	4.8%
63.0%	7,050	7,346	296	4.2%
64.2%	6,942	7,268	326	4.7%
65.4%	6,791	7,133	342	5.0%
66.7%	6,697	7,126	429	6.4%
67.9%	6,578	6,962	383	5.8%
69.1%	6,543	6,878	335	5.1%
70.4%	6,451	6,852	401	6.2%
71.6%	6,419	6,505	86	1.3%
72.8%	6,413	6,469	56	0.9%
74.1%	6,343	6,283	-59	-0.9%
75.3%	6,214	5,898	-316	-5.1%
76.5%	5,964	5,827	-137	-2.3%
77.8%	5,836	5,824	-12	-0.2%
79.0%	5,779	5,710	-69	-1.2%
80.2%	5,605	5,692	87	1.6%
81.5%	5,595	5,443	-152	-2.7%
82.7%	5,587	5,321	-266	-4.8%
84.0%	5,533	5,280	-252	-4.6%
85.2%	5,325	5,137	-188	-3.5%
86.4%	5,213	4,914	-299	-5.7%
87.7%	5,211	4,823	-388	-7.5%
88.9%	5,152	4,801	-350	-6.8%
90.1%	5,131	4,794	-337	-6.6%
91.4%	4,918	4,710	-208	-4.2%
92.6%	4,863	4,442	-422	-8.7%
93.8%	4,809	4,434	-375	-7.8%
95.1%	4,725	4,340	-385	-8.2%
96.3%	4,613	4,236	-377	-8.2%
97.5%	4,410	4,187	-223	-5.1%
98.8%	4,344	4,150	-194	-4.5%
100.0%	4,091	4,140	49	1.2%

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	43,991	43,990	-1	0.0%
1.2%	40,606	41,235	630	1.6%
2.5%	40,494	40,622	128	0.3%
3.7%	40,330	38,144	-2,186	-5.4%
4.9%	37,225	37,223	-2	0.0%
6.2%	31,401	31,910	508	1.6%
7.4%	31,278	31,280	2	0.0%
8.6%	30,717	30,085	-632	-2.1%
9.9%	26,011	26,187	175	0.7%
11.1%	25,033	25,034	2	0.0%
12.3%	23,636	23,640	5	0.0%
13.6%	21,684	22,798	1,114	5.1%
14.8%	17,849	18,643	794	4.5%
16.0%	17,706	18,332	625	3.5%
17.3%	17,317	18,315	998	5.8%
18.5%	16,333	17,941	1,608	9.8%
19.8%	16,288	17,048	760	4.7%
21.0%	16,043	16,331	288	1.8%
22.2%	15,634	15,636	2	0.0%
23.5%	14,357	14,352	-5	0.0%
24.7%	14,023	14,148	126	0.9%
25.9%	13,451	13,996	545	4.1%
27.2%	12,911	12,906	-5	0.0%
28.4%	11,545	11,665	119	1.0%
29.6%	11,239	11,550	311	2.8%
30.9%	11,161	11,237	76	0.7%
32.1%	10,671	11,218	547	5.1%
33.3%	10,245	10,662	417	4.1%
34.6%	10,061	10,628	567	5.6%
35.8%	9,715	10,460	745	7.7%
37.0%	9,616	10,270	655	6.8%
38.3%	9,548	9,615	66	0.7%
39.5%	9,527	9,549	22	0.2%
40.7%	9,474	9,504	30	0.3%
42.0%	8,475	8,474	-1	0.0%
43.2%	7,883	8,331	449	5.7%
44.4%	7,845	7,941	96	1.2%
45.7%	7,810	7,881	71	0.9%
46.9%	7,737	7,847	109	1.4%
48.1%	7,725	7,809	84	1.1%
49.4%	7,692	7,748	56	0.7%
50.6%	7,346	7,734	388	5.3%
51.9%	7,337	7,728	390	5.3%
53.1%	7,146	7,723	577	8.1%
54.3%	6,922	7,694	771	11.1%
55.6%	6,833	7,652	819	12.0%
56.8%	6,831	7,347	517	7.6%
58.0%	6,657	7,342	685	10.3%
59.3%	6,461	7,297	836	12.9%
60.5%	6,431	7,188	757	11.8%
61.7%	6,429	7,147	718	11.2%
63.0%	6,393	7,043	651	10.2%
64.2%	6,343	6,943	600	9.5%
65.4%	6,153	6,862	709	11.5%
66.7%	6,005	6,815	810	13.5%
67.9%	5,971	6,786	815	13.7%
69.1%	5,863	6,732	868	14.8%
70.4%	5,862	6,495	633	10.8%
71.6%	5,737	6,432	695	12.1%
72.8%	5,697	6,346	649	11.4%
74.1%	5,696	6,083	387	6.8%
75.3%	5,524	6,073	549	9.9%
76.5%	5,510	6,001	492	8.9%
77.8%	5,507	5,986	480	8.7%
79.0%	5,500	5,748	249	4.5%
80.2%	5,473	5,663	189	3.5%
81.5%	5,428	5,573	145	2.7%
82.7%	5,372	5,489	117	2.2%
84.0%	5,312	5,476	164	3.1%
85.2%	5,296	5,433	137	2.6%
86.4%	5,253	5,430	177	3.4%
87.7%	5,241	5,315	75	1.4%
88.9%	5,228	5,295	67	1.3%
90.1%	5,114	5,225	111	2.2%
91.4%	5,040	5,039	-1	0.0%
92.6%	5,004	5,002	-1	0.0%
93.8%	4,773	4,779	6	0.1%
95.1%	4,725	4,775	50	1.1%
96.3%	4,716	4,740	25	0.5%
97.5%	4,467	4,278	-189	-4.2%
98.8%	4,274	4,215	-59	-1.4%
100.0%	4,052	4,057	5	0.1%

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	78,446	78,441	-5	0.0%
1.2%	56,765	56,769	3	0.0%
2.5%	55,578	55,590	12	0.0%
3.7%	53,568	54,753	1,185	2.2%
4.9%	51,633	53,568	1,934	3.7%
6.2%	44,390	44,817	427	1.0%
7.4%	44,288	44,387	99	0.2%
8.6%	43,522	44,154	632	1.5%
9.9%	34,621	34,614	-6	0.0%
11.1%	33,764	33,765	1	0.0%
12.3%	31,630	31,630	0	0.0%
13.6%	30,160	31,027	867	2.9%
14.8%	29,557	29,162	-395	-1.3%
16.0%	28,105	26,670	-1,435	-5.1%
17.3%	26,660	26,657	-3	0.0%
18.5%	26,410	26,419	10	0.0%
19.8%	22,035	23,873	1,838	8.3%
21.0%	21,779	22,135	356	1.6%
22.2%	21,741	21,910	169	0.8%
23.5%	21,272	21,389	117	0.5%
24.7%	20,925	20,982	57	0.3%
25.9%	20,415	20,356	-59	-0.3%
27.2%	20,284	20,088	-196	-1.0%
28.4%	20,263	19,133	-1,129	-5.6%
29.6%	17,621	18,556	935	5.3%
30.9%	17,133	17,131	-2	0.0%
32.1%	17,035	17,025	-10	-0.1%
33.3%	16,628	16,628	0	0.0%
34.6%	15,329	15,188	-142	-0.9%
35.8%	13,537	13,528	-9	-0.1%
37.0%	13,526	13,520	-6	0.0%
38.3%	13,131	13,072	-59	-0.5%
39.5%	13,071	12,857	-214	-1.6%
40.7%	12,858	12,648	-209	-1.6%
42.0%	12,651	12,535	-116	-0.9%
43.2%	12,537	12,293	-244	-1.9%
44.4%	12,292	11,459	-833	-6.8%
45.7%	10,506	10,644	138	1.3%
46.9%	10,400	10,504	104	1.0%
48.1%	9,920	9,920	0	0.0%
49.4%	9,203	9,738	535	5.8%
50.6%	9,035	9,225	190	2.1%
51.9%	8,964	9,135	170	1.9%
53.1%	8,935	8,965	30	0.3%
54.3%	8,596	8,924	328	3.8%
55.6%	8,571	8,646	75	0.9%
56.8%	8,556	8,573	17	0.2%
58.0%	8,480	8,556	76	0.9%
59.3%	8,280	8,419	139	1.7%
60.5%	8,181	8,278	98	1.2%
61.7%	8,025	8,185	160	2.0%
63.0%	7,908	8,026	118	1.5%
64.2%	7,713	7,906	193	2.5%
65.4%	7,540	7,714	174	2.3%
66.7%	7,467	7,542	75	1.0%
67.9%	7,122	7,470	348	4.9%
69.1%	6,971	7,294	323	4.6%
70.4%	6,812	7,137	325	4.8%
71.6%	6,738	6,971	234	3.5%
72.8%	6,658	6,789	131	2.0%
74.1%	6,647	6,739	92	1.4%
75.3%	6,364	6,658	294	4.6%
76.5%	6,336	6,651	314	5.0%
77.8%	6,173	6,366	193	3.1%
79.0%	6,164	6,175	12	0.2%
80.2%	6,133	6,165	32	0.5%
81.5%	6,126	6,130	4	0.1%
82.7%	6,091	6,093	2	0.0%
84.0%	6,049	6,067	18	0.3%
85.2%	5,584	6,049	465	8.3%
86.4%	5,578	5,784	206	3.7%
87.7%	5,313	5,588	276	5.2%
88.9%	5,307	5,570	263	5.0%
90.1%	5,179	5,494	315	6.1%
91.4%	5,175	5,403	227	4.4%
92.6%	5,163	5,318	155	3.0%
93.8%	5,115	5,314	199	3.9%
95.1%	4,837	5,294	457	9.5%
96.3%	4,777	5,114	336	7.0%
97.5%	4,547	4,828	281	6.2%
98.8%	4,180	4,550	370	8.8%
100.0%	4,133	3,995	-138	-3.3%

Table SW-11-b

Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	87,769	87,769	0	0.0%
1.2%	84,648	82,846	-1,802	-2.1%
2.5%	59,216	60,935	1,720	2.9%
3.7%	59,111	59,116	5	0.0%
4.9%	58,443	58,444	1	0.0%
6.2%	56,500	56,501	1	0.0%
7.4%	50,719	50,717	-2	0.0%
8.6%	45,997	46,019	22	0.0%
9.9%	43,771	43,774	3	0.0%
11.1%	43,711	43,706	-5	0.0%
12.3%	40,782	43,356	2,574	6.3%
13.6%	40,495	41,224	728	1.8%
14.8%	39,906	40,493	587	1.5%
16.0%	39,893	39,906	13	0.0%
17.3%	38,279	38,280	1	0.0%
18.5%	34,277	34,278	1	0.0%
19.8%	33,086	33,070	-16	0.0%
21.0%	31,794	32,673	879	2.8%
22.2%	31,298	31,813	515	1.6%
23.5%	29,971	31,299	1,328	4.4%
24.7%	28,319	29,960	1,640	5.8%
25.9%	27,409	28,307	898	3.3%
27.2%	25,229	25,238	9	0.0%
28.4%	23,378	23,363	-15	-0.1%
29.6%	21,750	23,248	1,498	6.9%
30.9%	20,257	20,411	154	0.8%
32.1%	18,565	19,116	551	3.0%
33.3%	17,469	18,315	846	4.8%
34.6%	16,596	17,474	879	5.3%
35.8%	15,783	15,784	1	0.0%
37.0%	15,224	15,048	-176	-1.2%
38.3%	14,810	14,813	2	0.0%
39.5%	13,842	13,866	24	0.2%
40.7%	13,742	13,853	111	0.8%
42.0%	13,486	13,738	252	1.9%
43.2%	13,300	13,421	121	0.9%
44.4%	12,865	13,300	435	3.4%
45.7%	12,111	12,235	124	1.0%
46.9%	11,938	11,940	2	0.0%
48.1%	11,523	11,524	1	0.0%
49.4%	11,503	11,503	0	0.0%
50.6%	11,432	11,433	1	0.0%
51.9%	11,381	11,431	50	0.4%
53.1%	11,375	11,384	9	0.1%
54.3%	11,172	11,348	176	1.6%
55.6%	10,475	10,475	0	0.0%
56.8%	10,014	10,013	-1	0.0%
58.0%	9,778	9,778	1	0.0%
59.3%	9,738	9,726	-11	-0.1%
60.5%	9,244	9,247	3	0.0%
61.7%	8,858	8,862	3	0.0%
63.0%	8,676	8,675	-1	0.0%
64.2%	8,537	8,540	3	0.0%
65.4%	8,458	8,461	3	0.0%
66.7%	8,358	8,358	1	0.0%
67.9%	8,306	8,303	-3	0.0%
69.1%	7,943	7,947	3	0.0%
70.4%	7,893	7,939	46	0.6%
71.6%	7,772	7,894	122	1.6%
72.8%	7,293	7,774	481	6.6%
74.1%	7,263	7,264	0	0.0%
75.3%	7,097	7,097	1	0.0%
76.5%	7,065	7,064	-1	0.0%
77.8%	6,997	6,997	0	0.0%
79.0%	6,779	6,781	2	0.0%
80.2%	6,720	6,721	1	0.0%
81.5%	6,535	6,591	55	0.8%
82.7%	6,470	6,537	67	1.0%
84.0%	6,000	6,312	312	5.2%
85.2%	5,769	6,205	436	7.6%
86.4%	5,520	5,770	250	4.5%
87.7%	5,491	5,524	33	0.6%
88.9%	5,427	5,492	65	1.2%
90.1%	5,333	5,481	149	2.8%
91.4%	5,332	5,333	1	0.0%
92.6%	5,269	5,329	60	1.1%
93.8%	5,216	5,268	52	1.0%
95.1%	5,019	5,021	2	0.0%
96.3%	5,014	5,018	4	0.1%
97.5%	4,825	4,926	101	2.1%
98.8%	4,761	4,526	-235	-4.9%
100.0%	4,404	4,454	49	1.1%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,396	81,397	1	0.0%
1.2%	78,412	78,418	6	0.0%
2.5%	56,138	56,139	1	0.0%
3.7%	49,042	49,044	2	0.0%
4.9%	40,170	38,824	-1,346	-3.4%
6.2%	35,288	35,283	-5	0.0%
7.4%	34,503	34,482	-21	-0.1%
8.6%	33,664	33,665	1	0.0%
9.9%	31,145	31,150	5	0.0%
11.1%	29,253	29,257	4	0.0%
12.3%	22,829	22,827	-2	0.0%
13.6%	22,596	21,877	-719	-3.2%
14.8%	21,875	21,525	-350	-1.6%
16.0%	21,519	21,477	-42	-0.2%
17.3%	21,477	20,878	-599	-2.8%
18.5%	20,694	20,842	148	0.7%
19.8%	20,333	20,697	364	1.8%
21.0%	20,126	20,469	343	1.7%
22.2%	19,363	19,434	71	0.4%
23.5%	19,075	19,079	4	0.0%
24.7%	17,602	19,012	1,410	8.0%
25.9%	16,263	17,603	1,340	8.2%
27.2%	15,608	16,789	1,181	7.6%
28.4%	15,397	15,612	215	1.4%
29.6%	14,548	15,463	915	6.3%
30.9%	14,326	14,976	649	4.5%
32.1%	14,284	14,965	681	4.8%
33.3%	14,025	14,547	522	3.7%
34.6%	13,597	14,284	687	5.1%
35.8%	13,475	13,479	3	0.0%
37.0%	13,104	13,108	5	0.0%
38.3%	13,091	12,895	-196	-1.5%
39.5%	12,198	12,194	-4	0.0%
40.7%	11,897	11,896	-1	0.0%
42.0%	10,686	10,688	2	0.0%
43.2%	10,501	10,503	2	0.0%
44.4%	9,940	9,940	1	0.0%
45.7%	9,894	9,893	-1	0.0%
46.9%	9,836	9,837	1	0.0%
48.1%	9,657	9,658	0	0.0%
49.4%	9,401	9,402	2	0.0%
50.6%	9,378	9,385	7	0.1%
51.9%	9,040	9,042	2	0.0%
53.1%	8,886	8,884	-2	0.0%
54.3%	8,849	8,849	0	0.0%
55.6%	8,706	8,702	-5	-0.1%
56.8%	8,682	8,681	-1	0.0%
58.0%	8,327	8,330	4	0.0%
59.3%	8,042	8,042	0	0.0%
60.5%	8,029	8,030	1	0.0%
61.7%	7,917	7,917	0	0.0%
63.0%	7,905	7,906	1	0.0%
64.2%	7,802	7,802	0	0.0%
65.4%	7,791	7,792	1	0.0%
66.7%	7,769	7,770	0	0.0%
67.9%	7,725	7,729	5	0.1%
69.1%	7,663	7,664	1	0.0%
70.4%	7,647	7,647	0	0.0%
71.6%	7,104	7,597	493	6.9%
72.8%	7,097	7,105	8	0.1%
74.1%	7,087	7,097	10	0.1%
75.3%	7,086	7,088	2	0.0%
76.5%	6,831	7,087	256	3.8%
77.8%	6,613	6,833	219	3.3%
79.0%	6,508	6,614	107	1.6%
80.2%	6,452	6,451	-1	0.0%
81.5%	6,283	6,288	6	0.1%
82.7%	6,008	6,256	248	4.1%
84.0%	5,960	5,955	-4	-0.1%
85.2%	5,871	5,873	2	0.0%
86.4%	5,833	5,834	1	0.0%
87.7%	5,798	5,799	2	0.0%
88.9%	5,558	5,559	1	0.0%
90.1%	5,334	5,335	2	0.0%
91.4%	5,209	5,244	35	0.7%
92.6%	5,112	5,101	-11	-0.2%
93.8%	5,058	5,065	7	0.1%
95.1%	4,948	5,058	110	2.2%
96.3%	4,889	4,951	62	1.3%
97.5%	4,680	4,686	5	0.1%
98.8%	4,421	4,548	127	2.9%
100.0%	4,338	4,357	19	0.4%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,458	42,460	1	0.0%
1.2%	33,162	33,164	3	0.0%
2.5%	27,535	27,535	0	0.0%
3.7%	23,041	23,043	1	0.0%
4.9%	20,865	22,056	1,191	5.7%
6.2%	20,590	20,867	277	1.3%
7.4%	18,663	20,525	1,862	10.0%
8.6%	18,531	18,664	132	0.7%
9.9%	16,972	16,973	1	0.0%
11.1%	16,816	16,278	-537	-3.2%
12.3%	15,439	15,444	4	0.0%
13.6%	15,354	15,358	3	0.0%
14.8%	14,666	14,668	2	0.0%
16.0%	14,234	14,140	-95	-0.7%
17.3%	14,122	14,123	1	0.0%
18.5%	12,381	12,347	-34	-0.3%
19.8%	11,882	11,884	3	0.0%
21.0%	11,796	11,795	-1	0.0%
22.2%	11,741	11,745	4	0.0%
23.5%	11,586	11,586	0	0.0%
24.7%	11,110	11,407	297	2.7%
25.9%	10,682	11,111	428	4.0%
27.2%	10,521	10,336	-185	-1.8%
28.4%	10,202	9,613	-589	-5.8%
29.6%	10,009	9,580	-430	-4.3%
30.9%	9,611	9,168	-443	-4.6%
32.1%	9,506	9,160	-346	-3.6%
33.3%	9,486	9,102	-384	-4.0%
34.6%	9,438	9,091	-347	-3.7%
35.8%	9,389	9,062	-327	-3.5%
37.0%	9,100	8,994	-106	-1.2%
38.3%	8,996	8,898	-98	-1.1%
39.5%	8,920	8,897	-23	-0.3%
40.7%	8,902	8,894	-8	-0.1%
42.0%	8,900	8,892	-9	-0.1%
43.2%	8,890	8,705	-185	-2.1%
44.4%	8,857	8,624	-232	-2.6%
45.7%	8,636	8,565	-71	-0.8%
46.9%	8,627	8,554	-73	-0.9%
48.1%	8,499	8,482	-17	-0.2%
49.4%	8,488	8,421	-67	-0.8%
50.6%	8,458	8,324	-134	-1.6%
51.9%	8,453	8,254	-198	-2.3%
53.1%	8,351	8,252	-99	-1.2%
54.3%	8,351	8,220	-131	-1.6%
55.6%	8,295	8,202	-93	-1.1%
56.8%	8,253	8,172	-81	-1.0%
58.0%	8,251	8,091	-160	-1.9%
59.3%	8,247	7,945	-302	-3.7%
60.5%	8,185	7,814	-371	-4.5%
61.7%	7,914	7,773	-141	-1.8%
63.0%	7,871	7,686	-186	-2.4%
64.2%	7,870	7,593	-277	-3.5%
65.4%	7,812	7,509	-302	-3.9%
66.7%	7,708	7,486	-222	-2.9%
67.9%	7,675	7,298	-376	-4.9%
69.1%	7,569	7,268	-301	-4.0%
70.4%	7,534	7,125	-409	-5.4%
71.6%	7,509	7,122	-387	-5.2%
72.8%	7,441	6,979	-462	-6.2%
74.1%	7,426	6,977	-449	-6.1%
75.3%	7,330	6,858	-472	-6.4%
76.5%	7,247	6,789	-458	-6.3%
77.8%	7,050	6,787	-263	-3.7%
79.0%	7,031	6,784	-247	-3.5%
80.2%	6,988	6,772	-216	-3.1%
81.5%	6,979	6,697	-281	-4.0%
82.7%	6,963	6,654	-310	-4.4%
84.0%	6,878	6,629	-250	-3.6%
85.2%	6,789	6,607	-181	-2.7%
86.4%	6,742	6,595	-147	-2.2%
87.7%	6,697	6,585	-112	-1.7%
88.9%	6,666	6,477	-189	-2.8%
90.1%	6,595	6,428	-166	-2.5%
91.4%	6,488	6,372	-116	-1.8%
92.6%	6,471	6,330	-141	-2.2%
93.8%	6,140	6,308	168	2.7%
95.1%	5,966	6,280	314	5.3%
96.3%	5,676	6,245	569	10.0%
97.5%	5,601	6,185	583	10.4%
98.8%	5,302	5,311	9	0.2%
100.0%	4,920	4,925	5	0.1%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,135	18,139	4	0.0%
1.2%	17,656	17,955	299	1.7%
2.5%	16,455	16,456	1	0.0%
3.7%	16,370	16,369	0	0.0%
4.9%	14,749	14,751	1	0.0%
6.2%	13,873	13,776	-97	-0.7%
7.4%	13,656	13,667	10	0.1%
8.6%	11,658	13,005	1,347	11.6%
9.9%	11,091	11,659	568	5.1%
11.1%	10,728	11,092	364	3.4%
12.3%	10,552	10,380	-172	-1.6%
13.6%	10,538	10,099	-439	-4.2%
14.8%	10,470	9,899	-571	-5.5%
16.0%	10,449	9,858	-591	-5.7%
17.3%	10,397	9,772	-625	-6.0%
18.5%	10,178	9,698	-480	-4.7%
19.8%	10,056	9,669	-387	-3.8%
21.0%	10,053	9,402	-651	-6.5%
22.2%	9,946	9,346	-600	-6.0%
23.5%	9,797	9,281	-515	-5.3%
24.7%	9,785	9,257	-528	-5.4%
25.9%	9,717	9,203	-514	-5.3%
27.2%	9,709	9,163	-546	-5.6%
28.4%	9,691	9,125	-567	-5.8%
29.6%	9,583	9,110	-473	-4.9%
30.9%	9,435	9,109	-326	-3.5%
32.1%	9,419	9,109	-310	-3.3%
33.3%	9,402	9,034	-368	-3.9%
34.6%	9,389	8,846	-543	-5.8%
35.8%	9,329	8,834	-495	-5.3%
37.0%	9,281	8,830	-451	-4.9%
38.3%	9,230	8,719	-510	-5.5%
39.5%	9,204	8,631	-573	-6.2%
40.7%	9,155	8,561	-594	-6.5%
42.0%	9,144	8,554	-590	-6.5%
43.2%	9,122	8,485	-637	-7.0%
44.4%	8,903	8,389	-513	-5.8%
45.7%	8,863	8,384	-479	-5.4%
46.9%	8,861	8,365	-495	-5.6%
48.1%	8,779	8,361	-418	-4.8%
49.4%	8,758	8,264	-494	-5.6%
50.6%	8,725	8,204	-520	-6.0%
51.9%	8,699	8,194	-504	-5.8%
53.1%	8,685	8,185	-500	-5.8%
54.3%	8,659	8,171	-488	-5.6%
55.6%	8,600	8,108	-492	-5.7%
56.8%	8,592	8,035	-558	-6.5%
58.0%	8,571	7,962	-609	-7.1%
59.3%	8,545	7,926	-619	-7.2%
60.5%	8,542	7,811	-731	-8.6%
61.7%	8,527	7,803	-724	-8.5%
63.0%	8,422	7,792	-630	-7.5%
64.2%	8,309	7,790	-520	-6.3%
65.4%	8,269	7,781	-489	-5.9%
66.7%	8,250	7,715	-536	-6.5%
67.9%	8,224	7,683	-541	-6.6%
69.1%	8,218	7,656	-562	-6.8%
70.4%	8,209	7,642	-568	-6.9%
71.6%	8,139	7,563	-576	-7.1%
72.8%	8,137	7,555	-582	-7.2%
74.1%	8,117	7,496	-621	-7.6%
75.3%	8,040	7,368	-672	-8.4%
76.5%	8,029	7,367	-662	-8.2%
77.8%	7,885	7,289	-596	-7.6%
79.0%	7,830	7,211	-620	-7.9%
80.2%	7,784	7,128	-657	-8.4%
81.5%	7,679	7,120	-559	-7.3%
82.7%	7,660	7,098	-562	-7.3%
84.0%	7,644	6,953	-691	-9.0%
85.2%	7,637	6,891	-746	-9.8%
86.4%	7,618	6,870	-748	-9.8%
87.7%	7,524	6,837	-687	-9.1%
88.9%	7,454	6,803	-651	-8.7%
90.1%	7,400	6,744	-656	-8.9%
91.4%	7,280	6,694	-586	-8.0%
92.6%	7,200	6,534	-666	-9.2%
93.8%	7,003	6,239	-763	-10.9%
95.1%	6,854	6,221	-633	-9.2%
96.3%	6,645	6,013	-632	-9.5%
97.5%	6,480	5,864	-616	-9.5%
98.8%	6,387	5,583	-804	-12.6%
100.0%	4,958	5,352	394	8.0%

Table SW-11-b

Sacramento River at Bend Bridge, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,526	15,285	-241	-1.6%
1.2%	15,440	15,215	-225	-1.5%
2.5%	14,781	14,584	-197	-1.3%
3.7%	14,549	14,541	-8	-0.1%
4.9%	14,532	14,516	-16	-0.1%
6.2%	14,493	14,108	-385	-2.7%
7.4%	14,388	14,076	-312	-2.2%
8.6%	14,351	14,057	-294	-2.0%
9.9%	14,150	13,561	-589	-4.2%
11.1%	13,964	13,184	-779	-5.6%
12.3%	13,964	12,999	-964	-6.9%
13.6%	13,775	12,908	-867	-6.3%
14.8%	13,736	12,780	-956	-7.0%
16.0%	13,682	12,759	-924	-6.8%
17.3%	13,663	12,705	-958	-7.0%
18.5%	13,576	12,653	-923	-6.8%
19.8%	13,564	12,435	-1,128	-8.3%
21.0%	13,524	12,429	-1,095	-8.1%
22.2%	13,463	12,391	-1,073	-8.0%
23.5%	13,380	12,380	-1,000	-7.5%
24.7%	13,272	12,327	-945	-7.1%
25.9%	12,948	12,324	-624	-4.8%
27.2%	12,923	12,275	-648	-5.0%
28.4%	12,828	12,188	-640	-5.0%
29.6%	12,799	12,176	-623	-4.9%
30.9%	12,757	12,157	-600	-4.7%
32.1%	12,681	12,106	-575	-4.5%
33.3%	12,667	12,102	-566	-4.5%
34.6%	12,660	12,039	-621	-4.9%
35.8%	12,637	11,961	-676	-5.4%
37.0%	12,625	11,860	-765	-6.1%
38.3%	12,596	11,860	-737	-5.8%
39.5%	12,588	11,832	-756	-6.0%
40.7%	12,507	11,754	-752	-6.0%
42.0%	12,404	11,749	-654	-5.3%
43.2%	12,386	11,706	-680	-5.5%
44.4%	12,278	11,690	-588	-4.8%
45.7%	12,054	11,607	-448	-3.7%
46.9%	12,006	11,562	-444	-3.7%
48.1%	11,962	11,523	-439	-3.7%
49.4%	11,943	11,505	-438	-3.7%
50.6%	11,928	11,476	-452	-3.8%
51.9%	11,869	11,426	-443	-3.7%
53.1%	11,845	11,412	-433	-3.7%
54.3%	11,841	11,387	-454	-3.8%
55.6%	11,786	11,362	-425	-3.6%
56.8%	11,745	11,354	-391	-3.3%
58.0%	11,661	11,337	-324	-2.8%
59.3%	11,612	11,287	-325	-2.8%
60.5%	11,570	11,270	-299	-2.6%
61.7%	11,525	11,244	-281	-2.4%
63.0%	11,516	11,127	-389	-3.4%
64.2%	11,506	11,094	-412	-3.6%
65.4%	11,367	11,068	-299	-2.6%
66.7%	11,360	10,992	-368	-3.2%
67.9%	11,328	10,977	-351	-3.1%
69.1%	11,317	10,912	-405	-3.6%
70.4%	11,216	10,870	-346	-3.1%
71.6%	11,185	10,800	-385	-3.4%
72.8%	11,167	10,777	-390	-3.5%
74.1%	11,049	10,683	-366	-3.3%
75.3%	11,023	10,632	-391	-3.5%
76.5%	10,961	10,630	-331	-3.0%
77.8%	10,933	10,581	-352	-3.2%
79.0%	10,863	10,523	-340	-3.1%
80.2%	10,832	10,447	-384	-3.5%
81.5%	10,800	10,401	-398	-3.7%
82.7%	10,790	10,394	-396	-3.7%
84.0%	10,698	10,361	-337	-3.1%
85.2%	10,687	10,318	-369	-3.5%
86.4%	10,615	10,209	-407	-3.8%
87.7%	10,573	9,794	-779	-7.4%
88.9%	10,436	9,729	-707	-6.8%
90.1%	10,361	9,717	-644	-6.2%
91.4%	10,266	9,460	-807	-7.9%
92.6%	10,230	9,418	-812	-7.9%
93.8%	10,182	9,116	-1,066	-10.5%
95.1%	10,091	9,101	-990	-9.8%
96.3%	9,838	8,654	-1,184	-12.0%
97.5%	9,303	8,589	-715	-7.7%
98.8%	8,964	8,500	-464	-5.2%
100.0%	8,781	8,134	-647	-7.4%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,042	19,127	3,085	19.2%
1.2%	15,933	18,740	2,808	17.6%
2.5%	15,787	15,932	146	0.9%
3.7%	15,545	15,544	0	0.0%
4.9%	15,480	15,528	48	0.3%
6.2%	15,459	15,481	22	0.1%
7.4%	15,441	15,465	24	0.2%
8.6%	15,429	15,438	9	0.1%
9.9%	15,405	15,434	28	0.2%
11.1%	15,379	15,380	1	0.0%
12.3%	15,363	15,378	15	0.1%
13.6%	15,341	15,363	22	0.1%
14.8%	15,338	15,339	1	0.0%
16.0%	15,330	15,338	8	0.1%
17.3%	15,320	15,332	11	0.1%
18.5%	15,297	15,303	6	0.0%
19.8%	15,296	15,296	0	0.0%
21.0%	15,295	15,257	-38	-0.2%
22.2%	15,294	15,233	-61	-0.4%
23.5%	15,236	15,231	-5	0.0%
24.7%	15,229	15,220	-9	-0.1%
25.9%	15,218	15,213	-5	0.0%
27.2%	15,209	15,111	-98	-0.6%
28.4%	15,168	15,092	-76	-0.5%
29.6%	15,153	15,073	-80	-0.5%
30.9%	15,139	15,073	-66	-0.4%
32.1%	15,109	15,066	-43	-0.3%
33.3%	15,097	15,056	-40	-0.3%
34.6%	15,066	15,025	-41	-0.3%
35.8%	15,058	15,002	-56	-0.4%
37.0%	15,045	14,997	-48	-0.3%
38.3%	15,018	14,996	-23	-0.2%
39.5%	14,985	14,969	-16	-0.1%
40.7%	14,977	14,960	-17	-0.1%
42.0%	14,970	14,858	-112	-0.7%
43.2%	14,962	14,832	-130	-0.9%
44.4%	14,948	14,829	-119	-0.8%
45.7%	14,931	14,745	-186	-1.2%
46.9%	14,914	14,674	-239	-1.6%
48.1%	14,909	14,569	-340	-2.3%
49.4%	14,889	14,486	-403	-2.7%
50.6%	14,861	14,459	-401	-2.7%
51.9%	14,812	14,328	-485	-3.3%
53.1%	14,809	14,104	-705	-4.8%
54.3%	14,804	13,976	-828	-5.6%
55.6%	14,780	13,891	-889	-6.0%
56.8%	14,765	13,823	-942	-6.4%
58.0%	14,627	13,791	-836	-5.7%
59.3%	14,620	13,523	-1,097	-7.5%
60.5%	14,367	13,502	-865	-6.0%
61.7%	14,260	13,482	-778	-5.5%
63.0%	14,202	13,475	-727	-5.1%
64.2%	14,107	13,441	-665	-4.7%
65.4%	14,080	13,425	-654	-4.6%
66.7%	14,052	13,421	-631	-4.5%
67.9%	14,031	13,413	-618	-4.4%
69.1%	13,980	13,402	-578	-4.1%
70.4%	13,888	13,389	-499	-3.6%
71.6%	13,761	13,323	-438	-3.2%
72.8%	13,613	13,204	-408	-3.0%
74.1%	13,427	13,134	-293	-2.2%
75.3%	13,375	12,983	-392	-2.9%
76.5%	13,256	12,969	-288	-2.2%
77.8%	13,175	12,963	-211	-1.6%
79.0%	13,102	12,898	-203	-1.6%
80.2%	12,972	12,817	-155	-1.2%
81.5%	12,909	12,769	-140	-1.1%
82.7%	12,884	12,765	-119	-0.9%
84.0%	12,821	12,691	-131	-1.0%
85.2%	12,802	12,591	-211	-1.6%
86.4%	12,759	12,553	-207	-1.6%
87.7%	12,646	12,477	-169	-1.3%
88.9%	12,517	12,448	-68	-0.5%
90.1%	12,378	12,378	0	0.0%
91.4%	12,339	12,353	15	0.1%
92.6%	12,138	12,259	121	1.0%
93.8%	11,913	12,173	260	2.2%
95.1%	11,859	11,816	-43	-0.4%
96.3%	11,833	11,769	-64	-0.5%
97.5%	11,093	11,528	435	3.9%
98.8%	10,741	11,496	754	7.0%
100.0%	9,801	9,968	168	1.7%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,571	13,401	-170	-1.3%
1.2%	13,442	13,348	-94	-0.7%
2.5%	13,314	12,179	-1,135	-8.5%
3.7%	12,955	12,131	-824	-6.4%
4.9%	12,836	12,008	-827	-6.4%
6.2%	12,773	11,728	-1,045	-8.2%
7.4%	12,568	11,644	-925	-7.4%
8.6%	12,231	11,383	-848	-6.9%
9.9%	12,192	11,217	-975	-8.0%
11.1%	12,109	11,212	-897	-7.4%
12.3%	11,833	11,188	-644	-5.4%
13.6%	11,780	11,172	-608	-5.2%
14.8%	11,607	11,165	-442	-3.8%
16.0%	11,584	11,132	-452	-3.9%
17.3%	11,555	11,079	-476	-4.1%
18.5%	11,496	10,978	-518	-4.5%
19.8%	11,429	10,903	-526	-4.6%
21.0%	11,312	10,841	-471	-4.2%
22.2%	11,303	10,803	-500	-4.4%
23.5%	11,231	10,780	-451	-4.0%
24.7%	11,201	10,742	-459	-4.1%
25.9%	11,169	10,738	-431	-3.9%
27.2%	11,106	10,718	-389	-3.5%
28.4%	11,058	10,652	-406	-3.7%
29.6%	11,030	10,608	-421	-3.8%
30.9%	11,005	10,608	-397	-3.6%
32.1%	10,960	10,577	-383	-3.5%
33.3%	10,946	10,577	-369	-3.4%
34.6%	10,844	10,561	-284	-2.6%
35.8%	10,790	10,511	-279	-2.6%
37.0%	10,729	10,470	-259	-2.4%
38.3%	10,674	10,386	-288	-2.7%
39.5%	10,507	10,366	-140	-1.3%
40.7%	10,453	10,345	-109	-1.0%
42.0%	10,411	10,337	-74	-0.7%
43.2%	10,405	10,316	-88	-0.8%
44.4%	10,307	10,309	2	0.0%
45.7%	10,295	10,285	-11	-0.1%
46.9%	10,257	10,284	28	0.3%
48.1%	10,230	10,283	54	0.5%
49.4%	10,211	10,263	52	0.5%
50.6%	10,062	10,258	196	1.9%
51.9%	10,057	10,257	200	2.0%
53.1%	10,034	10,254	220	2.2%
54.3%	10,012	10,210	198	2.0%
55.6%	9,945	10,204	260	2.6%
56.8%	9,904	10,158	254	2.6%
58.0%	9,871	10,151	281	2.8%
59.3%	9,772	10,129	357	3.7%
60.5%	9,755	10,127	372	3.8%
61.7%	9,725	10,116	391	4.0%
63.0%	9,595	10,107	512	5.3%
64.2%	9,579	10,104	525	5.5%
65.4%	9,565	10,101	536	5.6%
66.7%	9,554	10,068	514	5.4%
67.9%	9,491	10,041	550	5.8%
69.1%	9,466	10,022	556	5.9%
70.4%	9,440	9,992	553	5.9%
71.6%	9,400	9,967	567	6.0%
72.8%	9,377	9,960	582	6.2%
74.1%	9,301	9,953	652	7.0%
75.3%	9,212	9,923	711	7.7%
76.5%	9,202	9,913	711	7.7%
77.8%	9,041	9,899	858	9.5%
79.0%	9,004	9,863	859	9.5%
80.2%	8,994	9,860	865	9.6%
81.5%	8,952	9,849	897	10.0%
82.7%	8,912	9,817	905	10.2%
84.0%	8,816	9,804	988	11.2%
85.2%	8,802	9,787	985	11.2%
86.4%	8,705	9,713	1,008	11.6%
87.7%	8,628	9,671	1,043	12.1%
88.9%	8,491	9,669	1,179	13.9%
90.1%	8,415	9,625	1,210	14.4%
91.4%	8,390	9,337	947	11.3%
92.6%	8,300	9,282	982	11.8%
93.8%	8,246	9,256	1,009	12.2%
95.1%	8,149	9,240	1,091	13.4%
96.3%	8,006	9,124	1,118	14.0%
97.5%	7,859	9,116	1,257	16.0%
98.8%	6,898	9,115	2,217	32.1%
100.0%	6,831	9,060	2,229	32.6%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,583	16,406	-177	-1.1%
1.2%	16,055	15,802	-254	-1.6%
2.5%	15,970	15,599	-370	-2.3%
3.7%	15,636	15,450	-186	-1.2%
4.9%	15,485	15,293	-193	-1.2%
6.2%	15,464	15,195	-269	-1.7%
7.4%	15,461	15,165	-295	-1.9%
8.6%	15,405	15,123	-281	-1.8%
9.9%	15,404	15,073	-331	-2.1%
11.1%	15,220	15,003	-217	-1.4%
12.3%	15,003	14,978	-25	-0.2%
13.6%	14,911	14,910	-1	0.0%
14.8%	14,530	14,574	44	0.3%
16.0%	13,307	14,385	1,078	8.1%
17.3%	12,862	13,148	287	2.2%
18.5%	12,241	12,992	751	6.1%
19.8%	12,016	12,626	610	5.1%
21.0%	11,971	12,025	53	0.4%
22.2%	11,947	11,623	-325	-2.7%
23.5%	11,905	11,436	-468	-3.9%
24.7%	11,761	11,335	-426	-3.6%
25.9%	11,557	10,881	-676	-5.8%
27.2%	11,549	10,663	-886	-7.7%
28.4%	10,981	10,592	-388	-3.5%
29.6%	10,912	10,580	-332	-3.0%
30.9%	10,843	10,100	-743	-6.9%
32.1%	10,713	9,800	-913	-8.5%
33.3%	10,102	9,797	-305	-3.0%
34.6%	9,616	9,374	-242	-2.5%
35.8%	9,598	9,240	-359	-3.7%
37.0%	8,759	9,016	257	2.9%
38.3%	8,732	8,977	245	2.8%
39.5%	8,702	8,533	-168	-1.9%
40.7%	8,505	8,532	27	0.3%
42.0%	8,419	8,481	62	0.7%
43.2%	8,012	8,038	26	0.3%
44.4%	7,624	7,806	182	2.4%
45.7%	7,560	7,566	6	0.1%
46.9%	7,538	7,460	-77	-1.0%
48.1%	7,479	7,357	-123	-1.6%
49.4%	7,469	7,119	-350	-4.7%
50.6%	7,375	7,066	-309	-4.2%
51.9%	7,373	6,918	-456	-6.2%
53.1%	7,187	6,914	-273	-3.8%
54.3%	7,110	6,890	-220	-3.1%
55.6%	6,884	6,818	-66	-1.0%
56.8%	6,873	6,675	-198	-2.9%
58.0%	6,503	6,641	138	2.1%
59.3%	6,455	6,599	144	2.2%
60.5%	6,193	6,588	395	6.4%
61.7%	6,048	6,578	530	8.8%
63.0%	5,981	6,560	579	9.7%
64.2%	5,915	6,541	626	10.6%
65.4%	5,777	6,537	760	13.2%
66.7%	5,630	6,509	879	15.6%
67.9%	5,618	6,317	699	12.4%
69.1%	5,604	6,307	703	12.5%
70.4%	5,597	6,306	709	12.7%
71.6%	5,568	6,297	729	13.1%
72.8%	5,530	6,296	765	13.8%
74.1%	5,474	6,291	817	14.9%
75.3%	5,455	6,280	825	15.1%
76.5%	5,327	6,262	935	17.6%
77.8%	5,259	6,223	964	18.3%
79.0%	5,248	6,149	901	17.2%
80.2%	5,236	6,136	900	17.2%
81.5%	5,219	6,092	873	16.7%
82.7%	5,216	6,017	802	15.4%
84.0%	5,178	5,935	756	14.6%
85.2%	5,173	5,916	743	14.4%
86.4%	5,038	5,897	860	17.1%
87.7%	5,033	5,794	761	15.1%
88.9%	5,005	5,717	712	14.2%
90.1%	4,979	5,648	669	13.4%
91.4%	4,798	5,645	848	17.7%
92.6%	4,732	5,605	874	18.5%
93.8%	4,622	5,561	939	20.3%
95.1%	4,592	5,515	923	20.1%
96.3%	4,567	5,513	946	20.7%
97.5%	4,530	5,451	921	20.3%
98.8%	4,409	5,369	960	21.8%
100.0%	4,387	5,146	759	17.3%

Figure SW-12-b
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

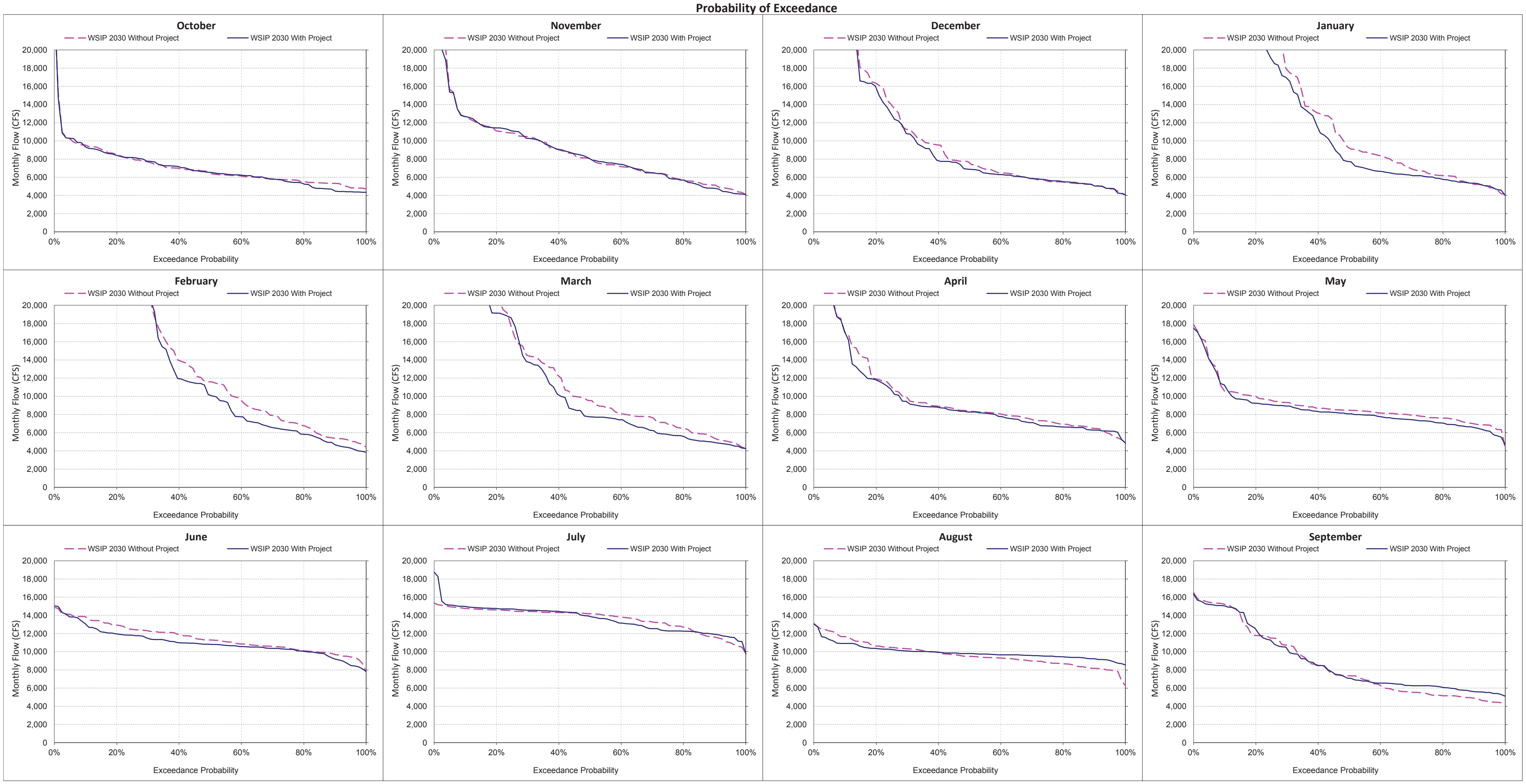


Table SW-12-b

Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,760	25,516	756	3.1%
1.2%	15,293	14,660	-633	-4.1%
2.5%	10,996	10,892	-104	-0.9%
3.7%	10,407	10,348	-60	-0.6%
4.9%	10,242	10,280	37	0.4%
6.2%	9,874	10,264	390	3.9%
7.4%	9,723	9,823	101	1.0%
8.6%	9,565	9,803	237	2.5%
9.9%	9,544	9,357	-187	-2.0%
11.1%	9,373	9,189	-183	-2.0%
12.3%	9,370	9,144	-226	-2.4%
13.6%	9,310	9,053	-258	-2.8%
14.8%	9,117	8,910	-206	-2.3%
16.0%	8,941	8,708	-233	-2.6%
17.3%	8,686	8,594	-92	-1.1%
18.5%	8,664	8,579	-86	-1.0%
19.8%	8,540	8,442	-99	-1.2%
21.0%	8,388	8,310	-77	-0.9%
22.2%	8,222	8,194	-28	-0.3%
23.5%	8,115	8,172	57	0.7%
24.7%	8,106	8,166	59	0.7%
25.9%	7,895	8,140	245	3.1%
27.2%	7,892	8,051	159	2.0%
28.4%	7,749	8,018	268	3.5%
29.6%	7,721	7,771	50	0.6%
30.9%	7,621	7,762	142	1.9%
32.1%	7,433	7,681	248	3.3%
33.3%	7,376	7,447	70	1.0%
34.6%	7,355	7,290	-65	-0.9%
35.8%	7,078	7,259	182	2.6%
37.0%	7,037	7,254	217	3.1%
38.3%	7,034	7,221	187	2.7%
39.5%	7,009	7,208	200	2.9%
40.7%	6,890	7,075	185	2.7%
42.0%	6,862	7,038	176	2.6%
43.2%	6,846	6,903	57	0.8%
44.4%	6,823	6,717	-105	-1.5%
45.7%	6,810	6,708	-101	-1.5%
46.9%	6,731	6,626	-105	-1.6%
48.1%	6,699	6,609	-91	-1.4%
49.4%	6,580	6,538	-42	-0.6%
50.6%	6,372	6,519	147	2.3%
51.9%	6,320	6,435	115	1.8%
53.1%	6,275	6,400	125	2.0%
54.3%	6,266	6,365	100	1.6%
55.6%	6,239	6,317	78	1.3%
56.8%	6,206	6,287	81	1.3%
58.0%	6,191	6,258	68	1.1%
59.3%	6,187	6,251	65	1.0%
60.5%	6,098	6,221	123	2.0%
61.7%	6,070	6,185	115	1.9%
63.0%	6,036	6,183	147	2.4%
64.2%	6,020	6,044	23	0.4%
65.4%	5,967	6,031	64	1.1%
66.7%	5,952	6,026	74	1.2%
67.9%	5,933	5,862	-71	-1.2%
69.1%	5,793	5,822	29	0.5%
70.4%	5,788	5,803	15	0.3%
71.6%	5,785	5,746	-39	-0.7%
72.8%	5,749	5,728	-21	-0.4%
74.1%	5,732	5,549	-183	-3.2%
75.3%	5,714	5,501	-213	-3.7%
76.5%	5,712	5,426	-286	-5.0%
77.8%	5,686	5,423	-262	-4.6%
79.0%	5,544	5,404	-140	-2.5%
80.2%	5,530	5,251	-279	-5.0%
81.5%	5,427	5,218	-209	-3.9%
82.7%	5,426	4,900	-526	-9.7%
84.0%	5,419	4,784	-635	-11.7%
85.2%	5,382	4,781	-601	-11.2%
86.4%	5,372	4,746	-626	-11.7%
87.7%	5,339	4,710	-628	-11.8%
88.9%	5,328	4,682	-646	-12.1%
90.1%	5,327	4,462	-865	-16.2%
91.4%	5,308	4,446	-862	-16.2%
92.6%	5,088	4,434	-654	-12.9%
93.8%	4,987	4,421	-566	-11.3%
95.1%	4,842	4,406	-435	-9.0%
96.3%	4,828	4,392	-436	-9.0%
97.5%	4,816	4,386	-430	-8.9%
98.8%	4,812	4,361	-452	-9.4%
100.0%	4,718	4,359	-359	-7.6%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,605	30,227	-378	-1.2%
1.2%	27,114	27,898	784	2.9%
2.5%	20,414	20,108	-305	-1.5%
3.7%	20,122	18,867	-1,255	-6.2%
4.9%	15,672	15,364	-309	-2.0%
6.2%	15,356	15,295	-61	-0.4%
7.4%	13,544	13,510	-34	-0.2%
8.6%	12,859	12,786	-73	-0.6%
9.9%	12,658	12,698	40	0.3%
11.1%	12,465	12,597	132	1.1%
12.3%	12,250	12,468	218	1.8%
13.6%	12,044	12,118	74	0.6%
14.8%	11,842	11,796	-46	-0.4%
16.0%	11,694	11,560	-134	-1.1%
17.3%	11,577	11,521	-56	-0.5%
18.5%	11,570	11,458	-112	-1.0%
19.8%	11,129	11,428	298	2.7%
21.0%	11,041	11,425	383	3.5%
22.2%	11,037	11,386	349	3.2%
23.5%	10,905	11,298	393	3.6%
24.7%	10,885	11,117	232	2.1%
25.9%	10,846	11,068	222	2.0%
27.2%	10,546	11,003	457	4.3%
28.4%	10,501	10,629	128	1.2%
29.6%	10,492	10,285	-206	-2.0%
30.9%	10,424	10,274	-150	-1.4%
32.1%	10,319	10,206	-114	-1.1%
33.3%	10,079	10,125	46	0.5%
34.6%	9,888	9,915	26	0.3%
35.8%	9,836	9,614	-222	-2.3%
37.0%	9,272	9,481	209	2.3%
38.3%	9,172	9,262	90	1.0%
39.5%	9,083	9,085	1	0.0%
40.7%	8,953	9,026	73	0.8%
42.0%	8,836	8,882	46	0.5%
43.2%	8,653	8,776	123	1.4%
44.4%	8,647	8,637	-9	-0.1%
45.7%	8,261	8,550	289	3.5%
46.9%	8,132	8,454	322	4.0%
48.1%	8,131	8,339	207	2.5%
49.4%	8,126	8,137	11	0.1%
50.6%	7,887	7,882	-5	-0.1%
51.9%	7,637	7,828	191	2.5%
53.1%	7,513	7,717	204	2.7%
54.3%	7,427	7,705	278	3.7%
55.6%	7,379	7,588	209	2.8%
56.8%	7,375	7,570	194	2.6%
58.0%	7,369	7,513	144	2.0%
59.3%	7,203	7,445	241	3.3%
60.5%	7,148	7,416	269	3.8%
61.7%	7,114	7,267	153	2.1%
63.0%	7,050	7,111	61	0.9%
64.2%	6,956	6,976	20	0.3%
65.4%	6,782	6,885	104	1.5%
66.7%	6,697	6,833	136	2.0%
67.9%	6,588	6,496	-92	-1.4%
69.1%	6,524	6,493	-31	-0.5%
70.4%	6,467	6,492	26	0.4%
71.6%	6,429	6,410	-19	-0.3%
72.8%	6,402	6,408	6	0.1%
74.1%	6,343	6,285	-59	-0.9%
75.3%	6,190	5,891	-299	-4.8%
76.5%	5,949	5,821	-128	-2.2%
77.8%	5,836	5,808	-28	-0.5%
79.0%	5,781	5,701	-80	-1.4%
80.2%	5,593	5,696	103	1.8%
81.5%	5,587	5,428	-159	-2.9%
82.7%	5,572	5,366	-206	-3.7%
84.0%	5,516	5,265	-252	-4.6%
85.2%	5,378	5,130	-248	-4.6%
86.4%	5,220	4,906	-314	-6.0%
87.7%	5,213	4,812	-402	-7.7%
88.9%	5,153	4,799	-354	-6.9%
90.1%	5,140	4,792	-348	-6.8%
91.4%	4,910	4,701	-209	-4.3%
92.6%	4,871	4,435	-435	-8.9%
93.8%	4,790	4,418	-372	-7.8%
95.1%	4,710	4,330	-379	-8.1%
96.3%	4,596	4,223	-373	-8.1%
97.5%	4,395	4,179	-216	-4.9%
98.8%	4,334	4,149	-185	-4.3%
100.0%	4,081	4,133	51	1.3%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,323	44,322	-1	0.0%
1.2%	40,732	41,426	694	1.7%
2.5%	40,685	38,627	-2,058	-5.1%
3.7%	40,604	38,418	-2,186	-5.4%
4.9%	37,377	35,254	-2,123	-5.7%
6.2%	31,674	32,137	462	1.5%
7.4%	31,408	30,358	-1,050	-3.3%
8.6%	30,944	29,289	-1,655	-5.3%
9.9%	26,188	26,363	175	0.7%
11.1%	25,176	25,177	2	0.0%
12.3%	23,711	21,594	-2,117	-8.9%
13.6%	21,766	20,759	-1,007	-4.6%
14.8%	18,054	16,605	-1,450	-8.0%
16.0%	17,841	16,522	-1,319	-7.4%
17.3%	17,453	16,346	-1,106	-6.3%
18.5%	16,523	16,329	-195	-1.2%
19.8%	16,371	16,025	-345	-2.1%
21.0%	16,092	14,975	-1,117	-6.9%
22.2%	15,835	14,221	-1,614	-10.2%
23.5%	14,491	13,716	-776	-5.4%
24.7%	14,052	13,068	-984	-7.0%
25.9%	13,524	12,365	-1,159	-8.6%
27.2%	13,073	12,188	-885	-6.8%
28.4%	11,563	11,712	149	1.3%
29.6%	11,268	10,811	-456	-4.1%
30.9%	11,250	10,752	-498	-4.4%
32.1%	10,820	10,359	-460	-4.3%
33.3%	10,291	9,649	-642	-6.2%
34.6%	10,185	9,446	-739	-7.3%
35.8%	9,808	9,189	-619	-6.3%
37.0%	9,756	9,144	-612	-6.3%
38.3%	9,649	8,394	-1,255	-13.0%
39.5%	9,571	7,855	-1,716	-17.9%
40.7%	9,529	7,763	-1,766	-18.5%
42.0%	8,553	7,759	-794	-9.3%
43.2%	7,965	7,735	-230	-2.9%
44.4%	7,890	7,662	-229	-2.9%
45.7%	7,856	7,634	-222	-2.8%
46.9%	7,769	7,427	-342	-4.4%
48.1%	7,766	6,946	-820	-10.6%
49.4%	7,733	6,905	-828	-10.7%
50.6%	7,385	6,864	-521	-7.1%
51.9%	7,373	6,835	-538	-7.3%
53.1%	7,151	6,752	-400	-5.6%
54.3%	6,953	6,500	-453	-6.5%
55.6%	6,857	6,431	-426	-6.2%
56.8%	6,843	6,381	-461	-6.7%
58.0%	6,662	6,359	-303	-4.6%
59.3%	6,486	6,293	-193	-3.0%
60.5%	6,455	6,281	-175	-2.7%
61.7%	6,451	6,237	-215	-3.3%
63.0%	6,398	6,222	-176	-2.8%
64.2%	6,356	6,122	-234	-3.7%
65.4%	6,163	6,087	-76	-1.2%
66.7%	6,052	6,074	22	0.4%
67.9%	5,996	6,011	16	0.3%
69.1%	5,868	5,881	13	0.2%
70.4%	5,866	5,842	-25	-0.4%
71.6%	5,742	5,841	100	1.7%
72.8%	5,719	5,771	51	0.9%
74.1%	5,699	5,753	54	0.9%
75.3%	5,530	5,663	132	2.4%
76.5%	5,526	5,622	95	1.7%
77.8%	5,507	5,601	94	1.7%
79.0%	5,500	5,573	73	1.3%
80.2%	5,481	5,491	11	0.2%
81.5%	5,433	5,483	51	0.9%
82.7%	5,375	5,440	65	1.2%
84.0%	5,326	5,435	108	2.0%
85.2%	5,313	5,330	17	0.3%
86.4%	5,261	5,312	51	1.0%
87.7%	5,241	5,269	28	0.5%
88.9%	5,231	5,228	-3	-0.1%
90.1%	5,114	5,039	-75	-1.5%
91.4%	5,043	5,031	-12	-0.2%
92.6%	5,007	5,006	-1	0.0%
93.8%	4,780	4,785	4	0.1%
95.1%	4,727	4,782	55	1.2%
96.3%	4,717	4,743	26	0.5%
97.5%	4,472	4,280	-192	-4.3%
98.8%	4,277	4,217	-60	-1.4%
100.0%	4,053	4,059	5	0.1%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	79,033	79,029	-5	0.0%
1.2%	57,100	56,882	-217	-0.4%
2.5%	56,011	53,902	-2,109	-3.8%
3.7%	54,057	53,710	-347	-0.6%
4.9%	52,712	52,200	-512	-1.0%
6.2%	44,749	44,464	-285	-0.6%
7.4%	44,597	43,183	-1,414	-3.2%
8.6%	44,010	42,625	-1,385	-3.1%
9.9%	34,985	34,201	-784	-2.2%
11.1%	34,200	32,858	-1,342	-3.9%
12.3%	31,743	31,743	0	0.0%
13.6%	30,506	29,640	-865	-2.8%
14.8%	29,901	29,118	-783	-2.6%
16.0%	28,840	24,893	-3,947	-13.7%
17.3%	26,895	24,771	-2,124	-7.9%
18.5%	26,705	24,593	-2,112	-7.9%
19.8%	22,392	21,929	-463	-2.1%
21.0%	22,004	21,751	-254	-1.2%
22.2%	21,876	20,370	-1,506	-6.9%
23.5%	21,449	20,015	-1,434	-6.7%
24.7%	21,286	19,173	-2,113	-9.9%
25.9%	20,728	18,496	-2,231	-10.8%
27.2%	20,545	18,325	-2,220	-10.8%
28.4%	20,448	17,198	-3,251	-15.9%
29.6%	17,980	16,998	-981	-5.5%
30.9%	17,496	16,569	-927	-5.3%
32.1%	17,245	15,373	-1,872	-10.9%
33.3%	16,998	15,114	-1,884	-11.1%
34.6%	15,706	13,762	-1,944	-12.4%
35.8%	13,831	13,443	-389	-2.8%
37.0%	13,768	13,110	-658	-4.8%
38.3%	13,398	12,774	-624	-4.7%
39.5%	13,109	11,701	-1,408	-10.7%
40.7%	12,968	10,847	-2,122	-16.4%
42.0%	12,776	10,629	-2,148	-16.8%
43.2%	12,752	10,267	-2,485	-19.5%
44.4%	12,387	9,605	-2,782	-22.5%
45.7%	10,761	8,884	-1,877	-17.4%
46.9%	10,628	8,505	-2,123	-20.0%
48.1%	9,997	7,876	-2,121	-21.2%
49.4%	9,336	7,749	-1,586	-17.0%
50.6%	9,094	7,705	-1,388	-15.3%
51.9%	9,077	7,234	-1,843	-20.3%
53.1%	8,966	7,160	-1,805	-20.1%
54.3%	8,779	7,073	-1,706	-19.4%
55.6%	8,767	6,957	-1,810	-20.6%
56.8%	8,604	6,833	-1,770	-20.6%
58.0%	8,537	6,707	-1,829	-21.4%
59.3%	8,409	6,670	-1,739	-20.7%
60.5%	8,372	6,647	-1,725	-20.6%
61.7%	8,147	6,547	-1,600	-19.6%
63.0%	8,017	6,483	-1,535	-19.1%
64.2%	7,720	6,415	-1,305	-16.9%
65.4%	7,583	6,360	-1,224	-16.1%
66.7%	7,562	6,351	-1,211	-16.0%
67.9%	7,219	6,286	-933	-12.9%
69.1%	7,048	6,271	-777	-11.0%
70.4%	6,865	6,189	-676	-9.8%
71.6%	6,759	6,188	-571	-8.5%
72.8%	6,703	6,179	-525	-7.8%
74.1%	6,666	6,097	-570	-8.5%
75.3%	6,414	6,041	-373	-5.8%
76.5%	6,370	6,027	-343	-5.4%
77.8%	6,236	5,895	-341	-5.5%
79.0%	6,194	5,858	-337	-5.4%
80.2%	6,191	5,747	-444	-7.2%
81.5%	6,178	5,716	-462	-7.5%
82.7%	6,129	5,601	-528	-8.6%
84.0%	6,095	5,588	-507	-8.3%
85.2%	5,609	5,465	-144	-2.6%
86.4%	5,584	5,454	-130	-2.3%
87.7%	5,447	5,398	-49	-0.9%
88.9%	5,313	5,365	52	1.0%
90.1%	5,221	5,363	142	2.7%
91.4%	5,220	5,294	74	1.4%
92.6%	5,189	5,146	-43	-0.8%
93.8%	5,148	5,026	-122	-2.4%
95.1%	4,848	5,025	176	3.6%
96.3%	4,834	4,767	-67	-1.4%
97.5%	4,573	4,642	69	1.5%
98.8%	4,194	4,576	382	9.1%
100.0%	4,137	3,999	-138	-3.3%

Table SW-12-b

Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	88,545	86,424	-2,121	-2.4%
1.2%	85,350	83,548	-1,802	-2.1%
2.5%	59,759	59,357	-402	-0.7%
3.7%	59,446	57,330	-2,116	-3.6%
4.9%	58,589	56,879	-1,710	-2.9%
6.2%	56,878	56,469	-410	-0.7%
7.4%	50,901	50,834	-67	-0.1%
8.6%	46,353	44,253	-2,099	-4.5%
9.9%	44,263	42,291	-1,972	-4.5%
11.1%	44,022	42,137	-1,886	-4.3%
12.3%	41,078	41,505	427	1.0%
13.6%	40,758	40,109	-649	-1.6%
14.8%	40,164	39,399	-765	-1.9%
16.0%	40,108	38,634	-1,474	-3.7%
17.3%	38,421	38,421	1	0.0%
18.5%	34,442	34,442	1	0.0%
19.8%	33,379	31,242	-2,137	-6.4%
21.0%	32,185	30,808	-1,377	-4.3%
22.2%	31,456	30,269	-1,187	-3.8%
23.5%	30,088	29,336	-753	-2.5%
24.7%	28,456	27,955	-501	-1.8%
25.9%	27,665	26,323	-1,342	-4.9%
27.2%	25,349	23,236	-2,113	-8.3%
28.4%	23,534	21,397	-2,136	-9.1%
29.6%	21,968	21,345	-623	-2.8%
30.9%	20,376	20,530	154	0.8%
32.1%	18,736	19,287	551	2.9%
33.3%	17,586	16,380	-1,206	-6.9%
34.6%	16,782	15,471	-1,312	-7.8%
35.8%	16,027	15,189	-838	-5.2%
37.0%	15,365	13,907	-1,458	-9.5%
38.3%	15,018	12,899	-2,119	-14.1%
39.5%	14,003	11,955	-2,048	-14.6%
40.7%	13,844	11,893	-1,951	-14.1%
42.0%	13,697	11,718	-1,978	-14.4%
43.2%	13,369	11,585	-1,784	-13.3%
44.4%	13,071	11,505	-1,566	-12.0%
45.7%	12,186	11,422	-764	-6.3%
46.9%	12,086	11,417	-669	-5.5%
48.1%	11,657	11,248	-409	-3.5%
49.4%	11,610	10,189	-1,421	-12.2%
50.6%	11,582	10,048	-1,534	-13.2%
51.9%	11,424	9,967	-1,457	-12.8%
53.1%	11,398	9,534	-1,864	-16.4%
54.3%	11,246	9,461	-1,785	-15.9%
55.6%	10,514	9,335	-1,179	-11.2%
56.8%	10,049	8,393	-1,656	-16.5%
58.0%	9,910	7,790	-2,120	-21.4%
59.3%	9,858	7,767	-2,092	-21.2%
60.5%	9,325	7,726	-1,599	-17.1%
61.7%	8,985	7,270	-1,714	-19.1%
63.0%	8,756	7,206	-1,550	-17.7%
64.2%	8,590	7,128	-1,462	-17.0%
65.4%	8,515	7,078	-1,438	-16.9%
66.7%	8,394	6,867	-1,527	-18.2%
67.9%	8,337	6,760	-1,577	-18.9%
69.1%	7,931	6,633	-1,298	-16.4%
70.4%	7,888	6,531	-1,357	-17.2%
71.6%	7,797	6,472	-1,325	-17.0%
72.8%	7,325	6,397	-928	-12.7%
74.1%	7,270	6,345	-925	-12.7%
75.3%	7,128	6,274	-854	-12.0%
76.5%	7,113	6,213	-900	-12.6%
77.8%	7,027	6,193	-834	-11.9%
79.0%	6,836	5,850	-986	-14.4%
80.2%	6,759	5,811	-948	-14.0%
81.5%	6,569	5,793	-776	-11.8%
82.7%	6,411	5,677	-734	-11.4%
84.0%	5,989	5,511	-478	-8.0%
85.2%	5,810	5,357	-453	-7.8%
86.4%	5,583	5,109	-474	-8.5%
87.7%	5,509	4,941	-568	-10.3%
88.9%	5,445	4,932	-513	-9.4%
90.1%	5,375	4,638	-737	-13.7%
91.4%	5,364	4,537	-826	-15.4%
92.6%	5,309	4,458	-851	-16.0%
93.8%	5,250	4,395	-855	-16.3%
95.1%	5,036	4,307	-729	-14.5%
96.3%	5,017	4,149	-869	-17.3%
97.5%	4,836	4,010	-826	-17.1%
98.8%	4,776	3,930	-846	-17.7%
100.0%	4,409	3,867	-541	-12.3%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,912	81,873	-39	0.0%
1.2%	78,728	76,613	-2,115	-2.7%
2.5%	56,404	55,935	-469	-0.8%
3.7%	49,359	49,353	-6	0.0%
4.9%	40,657	39,098	-1,558	-3.8%
6.2%	35,455	33,330	-2,126	-6.0%
7.4%	34,657	32,515	-2,142	-6.2%
8.6%	33,932	31,811	-2,121	-6.2%
9.9%	31,335	31,288	-47	-0.1%
11.1%	29,484	27,367	-2,117	-7.2%
12.3%	22,960	22,934	-26	-0.1%
13.6%	22,849	21,843	-1,006	-4.4%
14.8%	22,039	21,557	-482	-2.2%
16.0%	21,714	21,462	-252	-1.2%
17.3%	21,496	20,595	-900	-4.2%
18.5%	20,739	19,177	-1,562	-7.5%
19.8%	20,468	19,152	-1,316	-6.4%
21.0%	20,350	19,131	-1,219	-6.0%
22.2%	19,491	19,010	-481	-2.5%
23.5%	19,156	18,835	-320	-1.7%
24.7%	17,719	18,620	902	5.1%
25.9%	16,434	17,703	1,269	7.7%
27.2%	15,760	16,110	350	2.2%
28.4%	15,513	14,477	-1,036	-6.7%
29.6%	14,543	13,834	-710	-4.9%
30.9%	14,391	13,702	-689	-4.8%
32.1%	14,339	13,457	-881	-6.1%
33.3%	14,140	13,419	-721	-5.1%
34.6%	13,701	12,943	-758	-5.5%
35.8%	13,505	12,271	-1,234	-9.1%
37.0%	13,167	11,387	-1,780	-13.5%
38.3%	13,148	11,051	-2,097	-16.0%
39.5%	12,362	10,236	-2,125	-17.2%
40.7%	11,990	9,979	-2,011	-16.8%
42.0%	10,710	9,868	-842	-7.9%
43.2%	10,559	8,708	-1,851	-17.5%
44.4%	10,022	8,603	-1,420	-14.2%
45.7%	9,961	8,444	-1,518	-15.2%
46.9%	9,896	8,440	-1,456	-14.7%
48.1%	9,773	7,839	-1,933	-19.8%
49.4%	9,539	7,776	-1,764	-18.5%
50.6%	9,525	7,728	-1,797	-18.9%
51.9%	9,067	7,714	-1,353	-14.9%
53.1%	8,928	7,702	-1,225	-13.7%
54.3%	8,896	7,696	-1,200	-13.5%
55.6%	8,721	7,652	-1,069	-12.3%
56.8%	8,708	7,600	-1,108	-12.7%
58.0%	8,329	7,536	-794	-9.5%
59.3%	8,073	7,425	-648	-8.0%
60.5%	8,062	7,406	-656	-8.1%
61.7%	8,000	7,123	-877	-11.0%
63.0%	7,928	6,948	-981	-12.4%
64.2%	7,833	6,775	-1,058	-13.5%
65.4%	7,786	6,592	-1,195	-15.3%
66.7%	7,786	6,588	-1,198	-15.4%
67.9%	7,784	6,485	-1,299	-16.7%
69.1%	7,757	6,270	-1,487	-19.2%
70.4%	7,603	6,214	-1,389	-18.3%
71.6%	7,146	5,945	-1,201	-16.8%
72.8%	7,135	5,871	-1,264	-17.7%
74.1%	7,126	5,859	-1,267	-17.8%
75.3%	6,885	5,805	-1,079	-15.7%
76.5%	6,858	5,712	-1,146	-16.7%
77.8%	6,595	5,667	-928	-14.1%
79.0%	6,519	5,666	-853	-13.1%
80.2%	6,492	5,569	-923	-14.2%
81.5%	6,338	5,337	-1,001	-15.8%
82.7%	5,980	5,228	-753	-12.6%
84.0%	5,974	5,165	-810	-13.6%
85.2%	5,879	5,072	-807	-13.7%
86.4%	5,866	5,067	-798	-13.6%
87.7%	5,814	5,014	-800	-13.8%
88.9%	5,576	5,005	-571	-10.2%
90.1%	5,352	4,922	-431	-8.0%
91.4%	5,201	4,851	-350	-6.7%
92.6%	5,127	4,782	-345	-6.7%
93.8%	5,077	4,724	-352	-6.9%
95.1%	4,961	4,678	-283	-5.7%
96.3%	4,927	4,524	-403	-8.2%
97.5%	4,679	4,509	-170	-3.6%
98.8%	4,401	4,320	-81	-1.8%
100.0%	4,305	4,254	-51	-1.2%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,595	40,718	-1,877	-4.4%
1.2%	33,232	33,232	0	0.0%
2.5%	27,679	27,679	0	0.0%
3.7%	23,083	23,085	1	0.0%
4.9%	20,982	20,983	1	0.0%
6.2%	20,590	20,248	-342	-1.7%
7.4%	18,736	18,737	1	0.0%
8.6%	18,566	18,407	-159	-0.9%
9.9%	17,054	17,052	-2	0.0%
11.1%	16,749	16,203	-546	-3.3%
12.3%	15,443	13,566	-1,877	-12.2%
13.6%	15,303	13,253	-2,051	-13.4%
14.8%	14,418	12,751	-1,666	-11.6%
16.0%	14,293	12,370	-1,923	-13.5%
17.3%	14,168	11,968	-2,200	-15.5%
18.5%	12,094	11,918	-176	-1.5%
19.8%	11,918	11,838	-80	-0.7%
21.0%	11,839	11,628	-211	-1.8%
22.2%	11,629	11,401	-228	-2.0%
23.5%	11,617	11,121	-496	-4.3%
24.7%	11,122	10,797	-326	-2.9%
25.9%	10,593	10,202	-391	-3.7%
27.2%	10,486	10,130	-356	-3.4%
28.4%	10,030	9,468	-562	-5.6%
29.6%	9,987	9,433	-554	-5.5%
30.9%	9,466	9,124	-342	-3.6%
32.1%	9,379	9,067	-312	-3.3%
33.3%	9,319	8,993	-326	-3.5%
34.6%	9,303	8,908	-394	-4.2%
35.8%	9,301	8,863	-438	-4.7%
37.0%	9,064	8,855	-210	-2.3%
38.3%	8,948	8,845	-102	-1.1%
39.5%	8,935	8,819	-116	-1.3%
40.7%	8,880	8,719	-161	-1.8%
42.0%	8,823	8,700	-123	-1.4%
43.2%	8,768	8,531	-237	-2.7%
44.4%	8,692	8,471	-221	-2.5%
45.7%	8,550	8,452	-98	-1.1%
46.9%	8,455	8,373	-82	-1.0%
48.1%	8,452	8,365	-87	-1.0%
49.4%	8,409	8,275	-134	-1.6%
50.6%	8,339	8,273	-66	-0.8%
51.9%	8,316	8,273	-43	-0.5%
53.1%	8,278	8,175	-102	-1.2%
54.3%	8,276	8,159	-117	-1.4%
55.6%	8,226	8,122	-105	-1.3%
56.8%	8,204	8,076	-128	-1.6%
58.0%	8,169	8,028	-141	-1.7%
59.3%	8,082	7,780	-302	-3.7%
60.5%	8,028	7,774	-254	-3.2%
61.7%	7,916	7,613	-303	-3.8%
63.0%	7,845	7,556	-290	-3.7%
64.2%	7,844	7,502	-342	-4.4%
65.4%	7,817	7,464	-353	-4.5%
66.7%	7,729	7,246	-483	-6.2%
67.9%	7,622	7,178	-444	-5.8%
69.1%	7,545	7,117	-428	-5.7%
70.4%	7,409	7,107	-302	-4.1%
71.6%	7,345	6,948	-397	-5.4%
72.8%	7,322	6,765	-557	-7.6%
74.1%	7,304	6,759	-545	-7.5%
75.3%	7,231	6,747	-485	-6.7%
76.5%	7,154	6,733	-421	-5.9%
77.8%	7,033	6,670	-363	-5.2%
79.0%	6,964	6,660	-304	-4.4%
80.2%	6,941	6,627	-314	-4.5%
81.5%	6,913	6,623	-290	-4.2%
82.7%	6,754	6,579	-174	-2.6%
84.0%	6,753	6,561	-192	-2.8%
85.2%	6,742	6,557	-185	-2.7%
86.4%	6,710	6,551	-159	-2.4%
87.7%	6,649	6,346	-304	-4.6%
88.9%	6,521	6,299	-222	-3.4%
90.1%	6,459	6,280	-178	-2.8%
91.4%	6,445	6,268	-177	-2.7%
92.6%	6,334	6,190	-144	-2.3%
93.8%	6,013	6,187	174	2.9%
95.1%	5,866	6,158	291	5.0%
96.3%	5,520	6,150	630	11.4%
97.5%	5,431	6,059	628	11.6%
98.8%	5,232	5,251	19	0.4%
100.0%	4,869	4,866	-3	-0.1%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,891	17,493	-398	-2.2%
1.2%	17,195	17,098	-97	-0.6%
2.5%	16,295	16,294	0	0.0%
3.7%	16,136	15,202	-933	-5.8%
4.9%	14,130	14,132	1	0.0%
6.2%	13,496	13,399	-97	-0.7%
7.4%	13,208	12,603	-605	-4.6%
8.6%	11,246	11,420	174	1.5%
9.9%	10,591	11,247	655	6.2%
11.1%	10,530	10,530	1	0.0%
12.3%	10,509	10,026	-483	-4.6%
13.6%	10,436	9,728	-708	-6.8%
14.8%	10,325	9,710	-615	-6.0%
16.0%	10,156	9,639	-517	-5.1%
17.3%	10,141	9,592	-549	-5.4%
18.5%	10,058	9,278	-780	-7.8%
19.8%	10,053	9,248	-805	-8.0%
21.0%	9,768	9,222	-546	-5.6%
22.2%	9,711	9,139	-571	-5.9%
23.5%	9,647	9,132	-515	-5.3%
24.7%	9,580	9,062	-518	-5.4%
25.9%	9,439	9,007	-432	-4.6%
27.2%	9,426	8,984	-442	-4.7%
28.4%	9,337	8,979	-358	-3.8%
29.6%	9,323	8,943	-380	-4.1%
30.9%	9,295	8,937	-358	-3.8%
32.1%	9,061	8,768	-293	-3.2%
33.3%	9,012	8,688	-324	-3.6%
34.6%	8,983	8,535	-448	-5.0%
35.8%	8,948	8,503	-445	-5.0%
37.0%	8,836	8,494	-341	-3.9%
38.3%	8,835	8,382	-453	-5.1%
39.5%	8,694	8,358	-336	-3.9%
40.7%	8,689	8,287	-402	-4.6%
42.0%	8,670	8,283	-387	-4.5%
43.2%	8,607	8,264	-343	-4.0%
44.4%	8,572	8,237	-335	-3.9%
45.7%	8,521	8,226	-295	-3.5%
46.9%	8,497	8,175	-323	-3.8%
48.1%	8,481	8,153	-328	-3.9%
49.4%	8,464	8,086	-379	-4.5%
50.6%	8,453	8,064	-389	-4.6%
51.9%	8,445	7,986	-458	-5.4%
53.1%	8,419	7,980	-438	-5.2%
54.3%	8,379	7,961	-418	-5.0%
55.6%	8,369	7,933	-436	-5.2%
56.8%	8,307	7,925	-382	-4.6%
58.0%	8,256	7,910	-346	-4.2%
59.3%	8,180	7,794	-386	-4.7%
60.5%	8,139	7,741	-399	-4.9%
61.7%	8,138	7,645	-493	-6.1%
63.0%	8,134	7,644	-490	-6.0%
64.2%	8,106	7,560	-546	-6.7%
65.4%	8,059	7,534	-525	-6.5%
66.7%	8,031	7,516	-516	-6.4%
67.9%	8,028	7,464	-564	-7.0%
69.1%	7,967	7,435	-532	-6.7%
70.4%	7,903	7,413	-490	-6.2%
71.6%	7,888	7,368	-520	-6.6%
72.8%	7,816	7,308	-508	-6.5%
74.1%	7,772	7,294	-478	-6.1%
75.3%	7,663	7,281	-382	-5.0%
76.5%	7,648	7,219	-428	-5.6%
77.8%	7,640	7,101	-539	-7.1%
79.0%	7,607	7,078	-529	-7.0%
80.2%	7,605	7,050	-555	-7.3%
81.5%	7,598	6,899	-698	-9.2%
82.7%	7,520	6,892	-628	-8.4%
84.0%	7,439	6,877	-562	-7.6%
85.2%	7,339	6,764	-575	-7.8%
86.4%	7,188	6,733	-455	-6.3%
87.7%	7,094	6,653	-442	-6.2%
88.9%	7,047	6,651	-396	-5.6%
90.1%	6,972	6,551	-421	-6.0%
91.4%	6,884	6,478	-406	-5.9%
92.6%	6,878	6,353	-525	-7.6%
93.8%	6,856	6,234	-621	-9.1%
95.1%	6,828	6,170	-658	-9.6%
96.3%	6,564	5,768	-795	-12.1%
97.5%	6,347	5,653	-694	-10.9%
98.8%	6,338	5,502	-836	-13.2%
100.0%	4,313	4,695	382	8.9%

Table SW-12-b

Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,880	15,045	165	1.1%
1.2%	14,755	14,975	220	1.5%
2.5%	14,171	14,304	133	0.9%
3.7%	14,147	14,136	-12	-0.1%
4.9%	14,117	13,837	-279	-2.0%
6.2%	13,928	13,810	-118	-0.8%
7.4%	13,880	13,741	-140	-1.0%
8.6%	13,877	13,395	-482	-3.5%
9.9%	13,864	13,082	-782	-5.6%
11.1%	13,485	12,696	-789	-5.9%
12.3%	13,427	12,668	-760	-5.7%
13.6%	13,418	12,509	-909	-6.8%
14.8%	13,413	12,204	-1,209	-9.0%
16.0%	13,155	12,136	-1,020	-7.8%
17.3%	13,151	12,068	-1,082	-8.2%
18.5%	12,973	12,061	-912	-7.0%
19.8%	12,930	11,982	-948	-7.3%
21.0%	12,892	11,912	-980	-7.6%
22.2%	12,774	11,850	-924	-7.2%
23.5%	12,517	11,840	-678	-5.4%
24.7%	12,471	11,822	-650	-5.2%
25.9%	12,416	11,773	-643	-5.2%
27.2%	12,401	11,772	-629	-5.1%
28.4%	12,367	11,719	-649	-5.2%
29.6%	12,328	11,515	-812	-6.6%
30.9%	12,236	11,381	-855	-7.0%
32.1%	12,234	11,350	-884	-7.2%
33.3%	12,147	11,343	-804	-6.6%
34.6%	12,130	11,327	-803	-6.6%
35.8%	12,126	11,257	-868	-7.2%
37.0%	12,122	11,141	-981	-8.1%
38.3%	12,096	11,114	-982	-8.1%
39.5%	11,918	11,003	-915	-7.7%
40.7%	11,795	10,981	-814	-6.9%
42.0%	11,751	10,961	-790	-6.7%
43.2%	11,737	10,937	-800	-6.8%
44.4%	11,644	10,936	-707	-6.1%
45.7%	11,414	10,916	-498	-4.4%
46.9%	11,367	10,868	-499	-4.4%
48.1%	11,302	10,831	-471	-4.2%
49.4%	11,295	10,827	-468	-4.1%
50.6%	11,287	10,811	-476	-4.2%
51.9%	11,250	10,794	-457	-4.1%
53.1%	11,246	10,777	-469	-4.2%
54.3%	11,132	10,711	-422	-3.8%
55.6%	11,076	10,672	-404	-3.6%
56.8%	11,051	10,656	-395	-3.6%
58.0%	10,941	10,656	-285	-2.6%
59.3%	10,861	10,578	-283	-2.6%
60.5%	10,846	10,572	-274	-2.5%
61.7%	10,843	10,534	-310	-2.9%
63.0%	10,756	10,524	-232	-2.2%
64.2%	10,704	10,514	-190	-1.8%
65.4%	10,692	10,505	-187	-1.8%
66.7%	10,632	10,478	-154	-1.5%
67.9%	10,625	10,412	-213	-2.0%
69.1%	10,612	10,377	-234	-2.2%
70.4%	10,583	10,374	-209	-2.0%
71.6%	10,555	10,363	-192	-1.8%
72.8%	10,511	10,301	-210	-2.0%
74.1%	10,493	10,276	-217	-2.1%
75.3%	10,373	10,260	-113	-1.1%
76.5%	10,285	10,246	-40	-0.4%
77.8%	10,207	10,125	-81	-0.8%
79.0%	10,172	10,088	-84	-0.8%
80.2%	10,087	10,025	-62	-0.6%
81.5%	10,053	9,982	-71	-0.7%
82.7%	10,024	9,982	-43	-0.4%
84.0%	10,003	9,897	-106	-1.1%
85.2%	9,932	9,837	-95	-1.0%
86.4%	9,927	9,800	-127	-1.3%
87.7%	9,865	9,537	-329	-3.3%
88.9%	9,821	9,340	-481	-4.9%
90.1%	9,678	9,170	-508	-5.3%
91.4%	9,636	9,084	-553	-5.7%
92.6%	9,516	8,976	-540	-5.7%
93.8%	9,509	8,748	-761	-8.0%
95.1%	9,416	8,483	-933	-9.9%
96.3%	9,382	8,426	-956	-10.2%
97.5%	9,161	8,337	-824	-9.0%
98.8%	8,733	8,127	-606	-6.9%
100.0%	7,767	7,823	56	0.7%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,352	18,739	3,387	22.1%
1.2%	15,162	18,271	3,110	20.5%
2.5%	15,111	15,577	467	3.1%
3.7%	15,097	15,185	88	0.6%
4.9%	14,953	15,137	184	1.2%
6.2%	14,921	15,097	176	1.2%
7.4%	14,847	15,026	179	1.2%
8.6%	14,815	15,004	188	1.3%
9.9%	14,768	14,983	215	1.5%
11.1%	14,744	14,894	150	1.0%
12.3%	14,708	14,891	184	1.2%
13.6%	14,688	14,837	149	1.0%
14.8%	14,667	14,827	160	1.1%
16.0%	14,667	14,793	126	0.9%
17.3%	14,623	14,784	160	1.1%
18.5%	14,617	14,765	148	1.0%
19.8%	14,597	14,759	162	1.1%
21.0%	14,596	14,717	121	0.8%
22.2%	14,578	14,716	138	0.9%
23.5%	14,548	14,708	160	1.1%
24.7%	14,520	14,696	176	1.2%
25.9%	14,455	14,672	217	1.5%
27.2%	14,440	14,613	173	1.2%
28.4%	14,434	14,605	171	1.2%
29.6%	14,427	14,580	152	1.1%
30.9%	14,426	14,576	150	1.0%
32.1%	14,419	14,553	134	0.9%
33.3%	14,415	14,526	110	0.8%
34.6%	14,338	14,509	171	1.2%
35.8%	14,328	14,497	169	1.2%
37.0%	14,324	14,477	153	1.1%
38.3%	14,316	14,462	146	1.0%
39.5%	14,314	14,447	133	0.9%
40.7%	14,305	14,398	93	0.7%
42.0%	14,303	14,380	77	0.5%
43.2%	14,285	14,343	58	0.4%
44.4%	14,282	14,321	39	0.3%
45.7%	14,251	14,315	65	0.5%
46.9%	14,250	14,062	-188	-1.3%
48.1%	14,227	13,972	-255	-1.8%
49.4%	14,181	13,937	-244	-1.7%
50.6%	14,181	13,823	-358	-2.5%
51.9%	14,142	13,752	-390	-2.8%
53.1%	14,117	13,654	-463	-3.3%
54.3%	14,036	13,638	-397	-2.8%
55.6%	13,961	13,609	-352	-2.5%
56.8%	13,957	13,446	-511	-3.7%
58.0%	13,883	13,348	-535	-3.9%
59.3%	13,849	13,164	-685	-4.9%
60.5%	13,793	13,144	-649	-4.7%
61.7%	13,747	13,078	-669	-4.9%
63.0%	13,694	13,043	-651	-4.8%
64.2%	13,669	13,037	-632	-4.6%
65.4%	13,529	12,899	-630	-4.7%
66.7%	13,341	12,880	-461	-3.5%
67.9%	13,337	12,668	-669	-5.0%
69.1%	13,334	12,549	-785	-5.9%
70.4%	13,247	12,540	-707	-5.3%
71.6%	13,212	12,531	-681	-5.2%
72.8%	13,175	12,377	-798	-6.1%
74.1%	13,168	12,305	-863	-6.6%
75.3%	12,890	12,291	-599	-4.6%
76.5%	12,848	12,290	-558	-4.3%
77.8%	12,832	12,289	-543	-4.2%
79.0%	12,802	12,275	-527	-4.1%
80.2%	12,681	12,259	-422	-3.3%
81.5%	12,627	12,249	-378	-3.0%
82.7%	12,346	12,233	-113	-0.9%
84.0%	12,138	12,186	48	0.4%
85.2%	11,949	12,105	156	1.3%
86.4%	11,846	12,038	192	1.6%
87.7%	11,705	12,025	320	2.7%
88.9%	11,608	11,972	364	3.1%
90.1%	11,605	11,898	293	2.5%
91.4%	11,492	11,861	369	3.2%
92.6%	11,397	11,743	347	3.0%
93.8%	11,066	11,670	604	5.5%
95.1%	10,996	11,596	601	5.5%
96.3%	10,760	11,568	808	7.5%
97.5%	10,615	11,169	554	5.2%
98.8%	10,498	11,119	621	5.9%
100.0%	9,801	9,752	-48	-0.5%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,107	13,055	-52	-0.4%
1.2%	12,739	12,703	-36	-0.3%
2.5%	12,457	11,646	-811	-6.5%
3.7%	12,426	11,559	-867	-7.0%
4.9%	12,288	11,349	-939	-7.6%
6.2%	12,201	11,206	-994	-8.1%
7.4%	11,934	10,943	-991	-8.3%
8.6%	11,663	10,921	-743	-6.4%
9.9%	11,660	10,911	-748	-6.4%
11.1%	11,609	10,906	-704	-6.1%
12.3%	11,328	10,898	-430	-3.8%
13.6%	11,157	10,831	-326	-2.9%
14.8%	11,150	10,604	-547	-4.9%
16.0%	11,063	10,485	-578	-5.2%
17.3%	11,018	10,424	-594	-5.4%
18.5%	10,731	10,376	-355	-3.3%
19.8%	10,626	10,375	-252	-2.4%
21.0%	10,623	10,321	-302	-2.8%
22.2%	10,520	10,282	-238	-2.3%
23.5%	10,500	10,272	-227	-2.2%
24.7%	10,471	10,252	-220	-2.1%
25.9%	10,450	10,195	-256	-2.4%
27.2%	10,372	10,146	-226	-2.2%
28.4%	10,371	10,123	-248	-2.4%
29.6%	10,327	10,079	-249	-2.4%
30.9%	10,313	10,069	-243	-2.4%
32.1%	10,279	10,035	-244	-2.4%
33.3%	10,229	10,032	-197	-1.9%
34.6%	10,153	10,022	-131	-1.3%
35.8%	10,029	10,018	-12	-0.1%
37.0%	9,996	10,000	4	0.0%
38.3%	9,983	9,997	14	0.1%
39.5%	9,949	9,962	13	0.1%
40.7%	9,802	9,900	97	1.0%
42.0%	9,768	9,858	91	0.9%
43.2%	9,749	9,851	102	1.0%
44.4%	9,667	9,850	183	1.9%
45.7%	9,654	9,843	189	2.0%
46.9%	9,579	9,801	222	2.3%
48.1%	9,510	9,800	290	3.1%
49.4%	9,502	9,797	295	3.1%
50.6%	9,478	9,787	308	3.3%
51.9%	9,461	9,759	298	3.1%
53.1%	9,422	9,733	311	3.3%
54.3%	9,370	9,733	363	3.9%
55.6%	9,364	9,730	366	3.9%
56.8%	9,357	9,725	368	3.9%
58.0%	9,326	9,691	364	3.9%
59.3%	9,323	9,669	346	3.7%
60.5%	9,296	9,668	372	4.0%
61.7%	9,260	9,665	404	4.4%
63.0%	9,242	9,663	421	4.6%
64.2%	9,204	9,663	459	5.0%
65.4%	9,140	9,655	515	5.6%
66.7%	9,106	9,635	529	5.8%
67.9%	9,075	9,609	534	5.9%
69.1%	9,023	9,608	585	6.5%
70.4%	8,963	9,583	620	6.9%
71.6%	8,952	9,572	620	6.9%
72.8%	8,951	9,549	598	6.7%
74.1%	8,845	9,528	683	7.7%
75.3%	8,836	9,509	673	7.6%
76.5%	8,736	9,502	766	8.8%
77.8%	8,726	9,453	727	8.3%
79.0%	8,718	9,450	732	8.4%
80.2%	8,674	9,440	766	8.8%
81.5%	8,651	9,412	761	8.8%
82.7%	8,591	9,383	792	9.2%
84.0%	8,421	9,376	955	11.3%
85.2%	8,356	9,368	1,012	12.1%
86.4%	8,347	9,337	990	11.9%
87.7%	8,236	9,252	1,016	12.3%
88.9%	8,186	9,240	1,053	12.9%
90.1%	8,168	9,239	1,071	13.1%
91.4%	8,149	9,152	1,003	12.3%
92.6%	8,146	9,152	1,006	12.3%
93.8%	8,006	9,116	1,111	13.9%
95.1%	7,984	9,026	1,043	13.1%
96.3%	7,904	8,885	981	12.4%
97.5%	7,859	8,736	877	11.2%
98.8%	6,769	8,679	1,910	28.2%
100.0%	6,261	8,549	2,288	36.5%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,515	16,355	-160	-1.0%
1.2%	15,850	15,666	-184	-1.2%
2.5%	15,685	15,549	-137	-0.9%
3.7%	15,572	15,277	-295	-1.9%
4.9%	15,437	15,203	-233	-1.5%
6.2%	15,382	15,166	-216	-1.4%
7.4%	15,338	15,091	-247	-1.6%
8.6%	15,327	15,065	-263	-1.7%
9.9%	15,225	15,047	-178	-1.2%
11.1%	15,194	14,920	-273	-1.8%
12.3%	14,867	14,866	-1	0.0%
13.6%	14,694	14,739	45	0.3%
14.8%	14,244	14,349	105	0.7%
16.0%	13,028	14,314	1,287	9.9%
17.3%	12,734	13,111	377	3.0%
18.5%	11,930	12,833	903	7.6%
19.8%	11,792	12,583	791	6.7%
21.0%	11,776	11,957	181	1.5%
22.2%	11,750	11,543	-207	-1.8%
23.5%	11,721	11,375	-346	-3.0%
24.7%	11,501	11,289	-212	-1.8%
25.9%	11,486	10,837	-649	-5.7%
27.2%	11,382	10,622	-760	-6.7%
28.4%	10,772	10,548	-225	-2.1%
29.6%	10,732	10,514	-218	-2.0%
30.9%	10,682	9,897	-785	-7.3%
32.1%	10,552	9,767	-785	-7.4%
33.3%	9,891	9,749	-141	-1.4%
34.6%	9,567	9,239	-328	-3.4%
35.8%	9,356	9,228	-128	-1.4%
37.0%	8,748	8,894	146	1.7%
38.3%	8,654	8,822	168	1.9%
39.5%	8,568	8,500	-67	-0.8%
40.7%	8,392	8,493	100	1.2%
42.0%	8,381	8,449	68	0.8%
43.2%	7,929	7,991	61	0.8%
44.4%	7,571	7,779	208	2.8%
45.7%	7,507	7,460	-47	-0.6%
46.9%	7,463	7,432	-31	-0.4%
48.1%	7,366	7,325	-41	-0.6%
49.4%	7,352	7,084	-269	-3.7%
50.6%	7,349	7,055	-294	-4.0%
51.9%	7,343	6,883	-459	-6.3%
53.1%	7,169	6,868	-301	-4.2%
54.3%	6,979	6,787	-192	-2.8%
55.6%	6,859	6,776	-82	-1.2%
56.8%	6,823	6,648	-175	-2.6%
58.0%	6,466	6,570	104	1.6%
59.3%	6,432	6,559	127	2.0%
60.5%	6,168	6,554	387	6.3%
61.7%	5,969	6,539	570	9.6%
63.0%	5,940	6,506	566	9.5%
64.2%	5,798	6,487	689	11.9%
65.4%	5,711	6,441	730	12.8%
66.7%	5,630	6,426	796	14.1%
67.9%	5,597	6,299	702	12.5%
69.1%	5,596	6,283	687	12.3%
70.4%	5,530	6,263	732	13.2%
71.6%	5,522	6,263	740	13.4%
72.8%	5,491	6,252	761	13.9%
74.1%	5,449	6,249	800	14.7%
75.3%	5,355	6,248	893	16.7%
76.5%	5,225	6,245	1,020	19.5%
77.8%	5,206	6,202	997	19.1%
79.0%	5,201	6,149	948	18.2%
80.2%	5,160	6,058	898	17.4%
81.5%	5,159	6,034	875	17.0%
82.7%	5,155	5,980	825	16.0%
84.0%	5,145	5,935	789	15.3%
85.2%	5,072	5,818	746	14.7%
86.4%	5,013	5,762	749	15.0%
87.7%	4,966	5,754	789	15.9%
88.9%	4,946	5,649	703	14.2%
90.1%	4,889	5,605	716	14.6%
91.4%	4,798	5,580	782	16.3%
92.6%	4,623	5,564	941	20.4%
93.8%	4,581	5,524	943	20.6%
95.1%	4,513	5,513	1,000	22.2%
96.3%	4,454	5,417	963	21.6%
97.5%	4,446	5,414	969	21.8%
98.8%	4,387	5,288	901	20.5%
100.0%	4,210	5,113	903	21.5%

Figure SW-13-b
Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

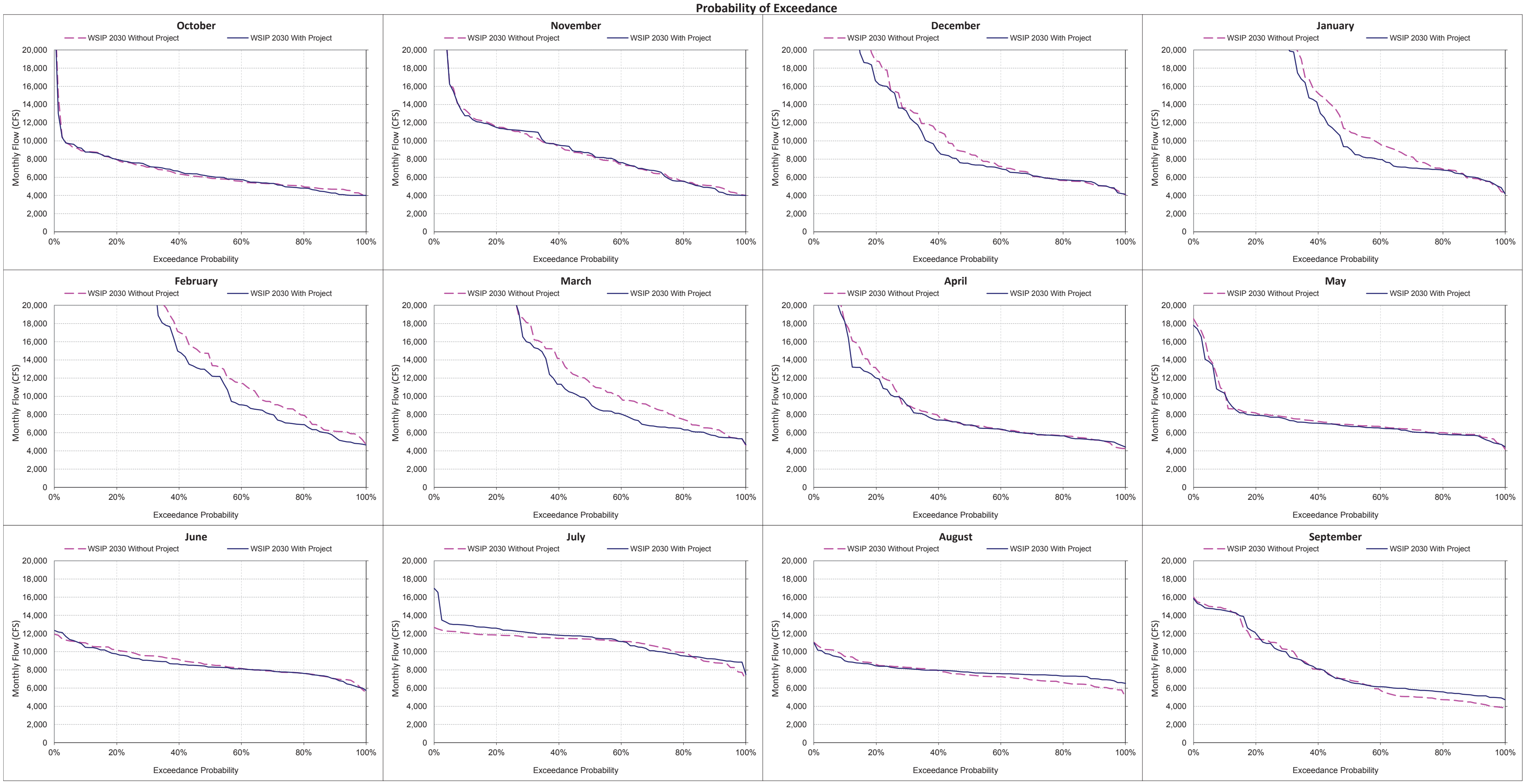


Table SW-13-b

Sacramento River below Hamilton City, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,159	25,407	-752	-2.9%
1.2%	15,151	13,010	-2,141	-14.1%
2.5%	10,445	10,382	-63	-0.6%
3.7%	9,807	9,779	-28	-0.3%
4.9%	9,575	9,677	102	1.1%
6.2%	9,218	9,637	419	4.5%
7.4%	9,192	9,293	101	1.1%
8.6%	8,921	9,195	275	3.1%
9.9%	8,881	8,769	-112	-1.3%
11.1%	8,813	8,766	-47	-0.5%
12.3%	8,791	8,733	-59	-0.7%
13.6%	8,749	8,702	-47	-0.5%
14.8%	8,647	8,555	-92	-1.1%
16.0%	8,316	8,324	9	0.1%
17.3%	8,244	8,307	63	0.8%
18.5%	8,091	8,077	-13	-0.2%
19.8%	8,007	7,984	-23	-0.3%
21.0%	7,753	7,899	147	1.9%
22.2%	7,641	7,774	133	1.7%
23.5%	7,634	7,714	80	1.0%
24.7%	7,577	7,596	19	0.3%
25.9%	7,397	7,591	193	2.6%
27.2%	7,323	7,579	256	3.5%
28.4%	7,268	7,517	250	3.4%
29.6%	7,117	7,313	196	2.8%
30.9%	7,105	7,163	58	0.8%
32.1%	7,081	7,115	34	0.5%
33.3%	6,859	7,088	229	3.3%
34.6%	6,820	7,047	227	3.3%
35.8%	6,733	6,914	181	2.7%
37.0%	6,669	6,895	226	3.4%
38.3%	6,518	6,721	203	3.1%
39.5%	6,342	6,697	355	5.6%
40.7%	6,334	6,537	203	3.2%
42.0%	6,262	6,410	148	2.4%
43.2%	6,210	6,397	186	3.0%
44.4%	6,117	6,384	268	4.4%
45.7%	6,108	6,378	270	4.4%
46.9%	6,053	6,259	206	3.4%
48.1%	6,053	6,211	158	2.6%
49.4%	5,946	6,123	177	3.0%
50.6%	5,872	6,066	194	3.3%
51.9%	5,857	6,016	159	2.7%
53.1%	5,818	6,015	197	3.4%
54.3%	5,803	5,971	168	2.9%
55.6%	5,787	5,820	33	0.6%
56.8%	5,687	5,813	127	2.2%
58.0%	5,607	5,788	181	3.2%
59.3%	5,580	5,749	169	3.0%
60.5%	5,519	5,725	207	3.7%
61.7%	5,410	5,577	167	3.1%
63.0%	5,402	5,480	78	1.4%
64.2%	5,384	5,470	85	1.6%
65.4%	5,352	5,424	72	1.3%
66.7%	5,337	5,390	53	1.0%
67.9%	5,302	5,372	70	1.3%
69.1%	5,302	5,317	15	0.3%
70.4%	5,285	5,310	25	0.5%
71.6%	5,270	5,145	-125	-2.4%
72.8%	5,143	5,115	-28	-0.5%
74.1%	5,142	4,960	-182	-3.5%
75.3%	5,108	4,937	-171	-3.3%
76.5%	5,101	4,907	-194	-3.8%
77.8%	5,082	4,855	-227	-4.5%
79.0%	5,073	4,821	-252	-5.0%
80.2%	4,935	4,810	-125	-2.5%
81.5%	4,919	4,780	-139	-2.8%
82.7%	4,851	4,628	-223	-4.6%
84.0%	4,831	4,584	-247	-5.1%
85.2%	4,759	4,461	-298	-6.3%
86.4%	4,725	4,449	-277	-5.9%
87.7%	4,721	4,338	-382	-8.1%
88.9%	4,689	4,268	-421	-9.0%
90.1%	4,683	4,258	-425	-9.1%
91.4%	4,681	4,097	-584	-12.5%
92.6%	4,680	4,083	-596	-12.7%
93.8%	4,565	4,039	-526	-11.5%
95.1%	4,538	4,024	-514	-11.3%
96.3%	4,294	4,016	-278	-6.5%
97.5%	4,286	4,013	-273	-6.4%
98.8%	4,078	4,012	-66	-1.6%
100.0%	3,988	4,004	16	0.4%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,160	33,491	-1,669	-4.7%
1.2%	30,990	31,782	792	2.6%
2.5%	23,318	22,067	-1,251	-5.4%
3.7%	22,072	21,779	-293	-1.3%
4.9%	16,263	16,262	0	0.0%
6.2%	15,815	15,438	-377	-2.4%
7.4%	14,181	14,229	48	0.3%
8.6%	13,583	13,427	-156	-1.1%
9.9%	13,452	12,784	-668	-5.0%
11.1%	13,054	12,784	-270	-2.1%
12.3%	12,549	12,340	-209	-1.7%
13.6%	12,328	12,102	-226	-1.8%
14.8%	12,267	12,060	-207	-1.7%
16.0%	12,152	11,946	-206	-1.7%
17.3%	12,035	11,875	-160	-1.3%
18.5%	11,832	11,684	-148	-1.3%
19.8%	11,593	11,524	-69	-0.6%
21.0%	11,501	11,382	-119	-1.0%
22.2%	11,471	11,334	-137	-1.2%
23.5%	11,294	11,252	-42	-0.4%
24.7%	11,175	11,229	54	0.5%
25.9%	11,046	11,201	155	1.4%
27.2%	11,044	11,164	120	1.1%
28.4%	10,794	11,122	328	3.0%
29.6%	10,785	11,069	284	2.6%
30.9%	10,425	11,034	609	5.8%
32.1%	10,408	11,014	606	5.8%
33.3%	10,248	10,955	707	6.9%
34.6%	9,945	10,167	222	2.2%
35.8%	9,725	9,779	54	0.6%
37.0%	9,712	9,711	-1	0.0%
38.3%	9,704	9,696	-8	-0.1%
39.5%	9,456	9,570	114	1.2%
40.7%	9,298	9,480	181	2.0%
42.0%	9,012	9,452	440	4.9%
43.2%	8,962	9,405	443	4.9%
44.4%	8,740	8,921	181	2.1%
45.7%	8,729	8,834	105	1.2%
46.9%	8,693	8,821	129	1.5%
48.1%	8,497	8,732	235	2.8%
49.4%	8,439	8,719	281	3.3%
50.6%	8,379	8,561	181	2.2%
51.9%	8,086	8,203	117	1.4%
53.1%	7,981	8,180	199	2.5%
54.3%	7,878	8,172	294	3.7%
55.6%	7,855	8,097	242	3.1%
56.8%	7,821	8,094	273	3.5%
58.0%	7,797	7,911	114	1.5%
59.3%	7,477	7,640	163	2.2%
60.5%	7,415	7,614	198	2.7%
61.7%	7,285	7,438	152	2.1%
63.0%	7,275	7,302	27	0.4%
64.2%	7,174	7,231	57	0.8%
65.4%	6,956	6,978	22	0.3%
66.7%	6,887	6,974	87	1.3%
67.9%	6,782	6,869	87	1.3%
69.1%	6,671	6,774	103	1.5%
70.4%	6,449	6,757	309	4.8%
71.6%	6,398	6,670	271	4.2%
72.8%	6,386	6,556	170	2.7%
74.1%	6,361	6,103	-258	-4.1%
75.3%	6,000	5,836	-164	-2.7%
76.5%	5,844	5,625	-219	-3.7%
77.8%	5,839	5,590	-249	-4.3%
79.0%	5,629	5,585	-44	-0.8%
80.2%	5,541	5,544	2	0.0%
81.5%	5,449	5,388	-60	-1.1%
82.7%	5,418	5,274	-144	-2.7%
84.0%	5,160	5,098	-62	-1.2%
85.2%	5,154	5,045	-109	-2.1%
86.4%	5,146	4,905	-242	-4.7%
87.7%	5,102	4,885	-217	-4.2%
88.9%	5,074	4,846	-228	-4.5%
90.1%	4,955	4,744	-211	-4.3%
91.4%	4,921	4,370	-551	-11.2%
92.6%	4,797	4,312	-485	-10.1%
93.8%	4,607	4,131	-476	-10.3%
95.1%	4,374	4,080	-295	-6.7%
96.3%	4,316	4,032	-284	-6.6%
97.5%	4,197	4,031	-166	-3.9%
98.8%	4,071	4,019	-53	-1.3%
100.0%	4,000	4,013	13	0.3%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	51,598	51,597	-1	0.0%
1.2%	48,170	46,681	-1,489	-3.1%
2.5%	45,939	45,984	44	0.1%
3.7%	45,087	41,543	-3,544	-7.9%
4.9%	41,585	39,982	-1,603	-3.9%
6.2%	38,789	38,022	-766	-2.0%
7.4%	36,027	34,589	-1,438	-4.0%
8.6%	35,905	32,468	-3,437	-9.6%
9.9%	31,089	31,273	184	0.6%
11.1%	28,479	28,481	2	0.0%
12.3%	26,495	22,983	-3,512	-13.3%
13.6%	25,429	22,939	-2,491	-9.8%
14.8%	21,826	19,679	-2,147	-9.8%
16.0%	21,513	18,633	-2,880	-13.4%
17.3%	21,179	18,561	-2,617	-12.4%
18.5%	19,680	18,358	-1,322	-6.7%
19.8%	18,827	16,635	-2,192	-11.6%
21.0%	18,723	16,195	-2,528	-13.5%
22.2%	17,840	16,063	-1,776	-10.0%
23.5%	17,801	15,993	-1,807	-10.2%
24.7%	15,554	15,549	-5	0.0%
25.9%	15,457	15,245	-212	-1.4%
27.2%	15,296	13,634	-1,662	-10.9%
28.4%	13,642	13,592	-50	-0.4%
29.6%	13,604	13,324	-280	-2.1%
30.9%	13,427	12,473	-954	-7.1%
32.1%	13,090	12,125	-965	-7.4%
33.3%	13,015	11,787	-1,229	-9.4%
34.6%	11,906	11,032	-875	-7.3%
35.8%	11,904	10,048	-1,856	-15.6%
37.0%	11,786	9,865	-1,921	-16.3%
38.3%	11,619	9,700	-1,919	-16.5%
39.5%	11,014	9,013	-2,001	-18.2%
40.7%	10,948	8,556	-2,391	-21.8%
42.0%	10,742	8,462	-2,280	-21.2%
43.2%	9,768	8,373	-1,394	-14.3%
44.4%	9,701	8,132	-1,569	-16.2%
45.7%	9,011	8,057	-954	-10.6%
46.9%	8,891	7,615	-1,276	-14.4%
48.1%	8,831	7,552	-1,279	-14.5%
49.4%	8,687	7,545	-1,143	-13.2%
50.6%	8,465	7,397	-1,068	-12.6%
51.9%	8,423	7,343	-1,080	-12.8%
53.1%	8,068	7,338	-729	-9.0%
54.3%	7,752	7,317	-434	-5.6%
55.6%	7,751	7,158	-593	-7.6%
56.8%	7,594	7,153	-441	-5.8%
58.0%	7,550	7,122	-428	-5.7%
59.3%	7,227	7,016	-210	-2.9%
60.5%	7,164	6,904	-259	-3.6%
61.7%	6,995	6,832	-163	-2.3%
63.0%	6,977	6,547	-431	-6.2%
64.2%	6,852	6,514	-338	-4.9%
65.4%	6,687	6,501	-186	-2.8%
66.7%	6,662	6,447	-215	-3.2%
67.9%	6,633	6,445	-188	-2.8%
69.1%	6,498	6,340	-158	-2.4%
70.4%	6,092	6,155	63	1.0%
71.6%	6,092	6,108	16	0.3%
72.8%	5,980	6,050	70	1.2%
74.1%	5,934	5,912	-22	-0.4%
75.3%	5,901	5,904	3	0.1%
76.5%	5,829	5,828	-1	0.0%
77.8%	5,748	5,807	59	1.0%
79.0%	5,667	5,726	58	1.0%
80.2%	5,641	5,716	75	1.3%
81.5%	5,627	5,691	64	1.1%
82.7%	5,564	5,670	106	1.9%
84.0%	5,560	5,643	83	1.5%
85.2%	5,546	5,631	85	1.5%
86.4%	5,544	5,608	63	1.1%
87.7%	5,386	5,529	143	2.7%
88.9%	5,280	5,523	243	4.6%
90.1%	5,148	5,383	234	4.6%
91.4%	5,070	5,088	18	0.4%
92.6%	5,044	5,078	34	0.7%
93.8%	5,027	5,030	2	0.0%
95.1%	4,862	4,877	16	0.3%
96.3%	4,751	4,848	97	2.0%
97.5%	4,529	4,289	-239	-5.3%
98.8%	4,286	4,218	-68	-1.6%
100.0%	4,077	4,111	34	0.8%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	90,217	90,213	-5	0.0%
1.2%	64,369	64,385	16	0.0%
2.5%	63,695	64,202	507	0.8%
3.7%	62,353	59,935	-2,418	-3.9%
4.9%	61,585	59,728	-1,857	-3.0%
6.2%	51,634	50,498	-1,136	-2.2%
7.4%	50,230	50,097	-134	-0.3%
8.6%	48,585	46,152	-2,433	-5.0%
9.9%	40,624	38,745	-1,879	-4.6%
11.1%	38,744	38,188	-556	-1.4%
12.3%	35,605	35,876	271	0.8%
13.6%	35,384	35,605	221	0.6%
14.8%	35,173	33,785	-1,388	-3.9%
16.0%	33,682	28,365	-5,317	-15.8%
17.3%	29,945	27,525	-2,421	-8.1%
18.5%	29,839	27,406	-2,433	-8.2%
19.8%	27,547	26,028	-1,520	-5.5%
21.0%	25,594	24,403	-1,191	-4.7%
22.2%	25,564	23,263	-2,300	-9.0%
23.5%	24,181	22,294	-1,886	-7.8%
24.7%	24,158	21,932	-2,226	-9.2%
25.9%	24,018	21,719	-2,299	-9.6%
27.2%	23,480	21,195	-2,285	-9.7%
28.4%	23,449	21,122	-2,326	-9.9%
29.6%	22,220	20,638	-1,582	-7.1%
30.9%	21,195	19,889	-1,305	-6.2%
32.1%	20,601	19,788	-813	-3.9%
33.3%	19,910	17,469	-2,440	-12.3%
34.6%	19,005	16,818	-2,187	-11.5%
35.8%	17,006	16,433	-573	-3.4%
37.0%	16,824	14,750	-2,074	-12.3%
38.3%	15,879	14,567	-1,312	-8.3%
39.5%	15,398	14,288	-1,110	-7.2%
40.7%	14,997	13,019	-1,978	-13.2%
42.0%	14,752	12,564	-2,188	-14.8%
43.2%	14,287	11,777	-2,510	-17.6%
44.4%	13,891	11,462	-2,429	-17.5%
45.7%	13,461	11,029	-2,432	-18.1%
46.9%	12,794	10,607	-2,186	-17.1%
48.1%	11,388	9,369	-2,018	-17.7%
49.4%	11,244	9,349	-1,895	-16.9%
50.6%	10,913	9,009	-1,904	-17.4%
51.9%	10,803	8,484	-2,319	-21.5%
53.1%	10,529	8,464	-2,065	-19.6%
54.3%	10,433	8,239	-2,195	-21.0%
55.6%	10,355	8,155	-2,200	-21.2%
56.8%	10,320	8,139	-2,181	-21.1%
58.0%	10,036	8,104	-1,932	-19.3%
59.3%	9,789	7,974	-1,815	-18.5%
60.5%	9,501	7,943	-1,558	-16.4%
61.7%	9,410	7,653	-1,757	-18.7%
63.0%	9,246	7,604	-1,642	-17.8%
64.2%	9,104	7,241	-1,863	-20.5%
65.4%	8,906	7,142	-1,764	-19.8%
66.7%	8,719	7,128	-1,591	-18.2%
67.9%	8,461	7,122	-1,338	-15.8%
69.1%	8,284	7,032	-1,252	-15.1%
70.4%	8,224	7,020	-1,203	-14.6%
71.6%	7,760	7,004	-756	-9.7%
72.8%	7,650	6,958	-692	-9.0%
74.1%	7,605	6,917	-689	-9.1%
75.3%	7,396	6,908	-489	-6.6%
76.5%	7,127	6,874	-253	-3.6%
77.8%	7,023	6,852	-171	-2.4%
79.0%	7,007	6,848	-159	-2.3%
80.2%	6,879	6,782	-97	-1.4%
81.5%	6,867	6,748	-119	-1.7%
82.7%	6,776	6,678	-98	-1.4%
84.0%	6,746	6,468	-278	-4.1%
85.2%	6,461	6,416	-45	-0.7%
86.4%	6,424	6,343	-81	-1.3%
87.7%	5,942	6,085	143	2.4%
88.9%	5,914	6,030	117	2.0%
90.1%	5,854	6,012	159	2.7%
91.4%	5,837	5,918	81	1.4%
92.6%	5,604	5,741	138	2.5%
93.8%	5,551	5,602	51	0.9%
95.1%	5,539	5,520	-19	-0.3%
96.3%	5,126	5,303	177	3.5%
97.5%	5,038	5,040	3	0.1%
98.8%	4,418	4,867	449	10.2%
100.0%	4,311	4,173	-138	-3.2%

Table SW-13-b
Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	98,053	95,487	-2,566	-2.6%
1.2%	94,425	92,623	-1,802	-1.9%
2.5%	70,308	69,461	-846	-1.2%
3.7%	65,329	62,921	-2,408	-3.7%
4.9%	64,363	62,768	-1,595	-2.5%
6.2%	62,920	61,798	-1,122	-1.8%
7.4%	56,282	56,215	-67	-0.1%
8.6%	51,732	49,204	-2,529	-4.9%
9.9%	50,026	48,295	-1,731	-3.5%
11.1%	48,606	47,320	-1,286	-2.6%
12.3%	46,409	46,035	-373	-0.8%
13.6%	45,894	45,681	-213	-0.5%
14.8%	45,680	44,121	-1,559	-3.4%
16.0%	45,491	42,938	-2,553	-5.6%
17.3%	42,279	42,280	1	0.0%
18.5%	39,202	39,203	1	0.0%
19.8%	37,192	34,610	-2,582	-6.9%
21.0%	36,105	34,410	-1,695	-4.7%
22.2%	35,235	34,189	-1,046	-3.0%
23.5%	34,426	32,686	-1,740	-5.1%
24.7%	31,774	31,848	74	0.2%
25.9%	31,712	29,196	-2,516	-7.9%
27.2%	28,850	26,756	-2,094	-7.3%
28.4%	26,971	24,390	-2,581	-9.6%
29.6%	25,222	24,154	-1,068	-4.2%
30.9%	23,594	24,145	551	2.3%
32.1%	22,619	22,773	154	0.7%
33.3%	20,374	18,897	-1,478	-7.3%
34.6%	20,221	18,096	-2,124	-10.5%
35.8%	19,743	17,814	-1,930	-9.8%
37.0%	18,935	17,656	-1,278	-6.8%
38.3%	18,273	16,371	-1,902	-10.4%
39.5%	17,148	14,977	-2,171	-12.7%
40.7%	16,928	14,753	-2,175	-12.9%
42.0%	16,763	14,358	-2,405	-14.3%
43.2%	15,682	13,527	-2,156	-13.7%
44.4%	15,420	13,352	-2,069	-13.4%
45.7%	15,166	13,127	-2,039	-13.4%
46.9%	14,777	12,979	-1,798	-12.2%
48.1%	14,749	12,968	-1,782	-12.1%
49.4%	14,723	12,601	-2,122	-14.4%
50.6%	13,377	12,211	-1,165	-8.7%
51.9%	13,351	12,185	-1,165	-8.7%
53.1%	13,219	12,171	-1,048	-7.9%
54.3%	12,975	11,390	-1,584	-12.2%
55.6%	11,999	10,711	-1,287	-10.7%
56.8%	11,891	9,449	-2,442	-20.5%
58.0%	11,578	9,314	-2,265	-19.6%
59.3%	11,496	9,072	-2,424	-21.1%
60.5%	11,392	9,058	-2,333	-20.5%
61.7%	11,044	8,972	-2,072	-18.8%
63.0%	10,744	8,681	-2,063	-19.2%
64.2%	10,600	8,594	-2,006	-18.9%
65.4%	9,964	8,537	-1,427	-14.3%
66.7%	9,585	8,481	-1,104	-11.5%
67.9%	9,448	8,181	-1,267	-13.4%
69.1%	9,428	8,033	-1,395	-14.8%
70.4%	9,080	7,973	-1,107	-12.2%
71.6%	9,072	7,402	-1,670	-18.4%
72.8%	8,908	7,280	-1,628	-18.3%
74.1%	8,638	7,063	-1,575	-18.2%
75.3%	8,629	7,049	-1,580	-18.3%
76.5%	8,610	7,003	-1,607	-18.7%
77.8%	8,276	6,922	-1,354	-16.4%
79.0%	7,971	6,906	-1,066	-13.4%
80.2%	7,894	6,879	-1,015	-12.9%
81.5%	7,478	6,557	-921	-12.3%
82.7%	6,923	6,334	-589	-8.5%
84.0%	6,896	6,323	-573	-8.3%
85.2%	6,690	6,101	-589	-8.8%
86.4%	6,321	6,018	-303	-4.8%
87.7%	6,251	5,971	-280	-4.5%
88.9%	6,222	5,800	-422	-6.8%
90.1%	6,144	5,480	-663	-10.8%
91.4%	6,130	5,153	-977	-15.9%
92.6%	6,119	5,084	-1,035	-16.9%
93.8%	6,079	5,002	-1,076	-17.7%
95.1%	5,891	4,961	-929	-15.8%
96.3%	5,880	4,815	-1,064	-18.1%
97.5%	5,636	4,785	-851	-15.1%
98.8%	5,243	4,742	-501	-9.5%
100.0%	4,693	4,639	-54	-1.2%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	90,364	90,333	-31	0.0%
1.2%	85,993	82,090	-3,902	-4.5%
2.5%	62,721	62,271	-449	-0.7%
3.7%	54,902	54,903	2	0.0%
4.9%	45,960	44,410	-1,550	-3.4%
6.2%	39,386	35,473	-3,913	-9.9%
7.4%	38,903	34,974	-3,929	-10.1%
8.6%	38,083	34,919	-3,164	-8.3%
9.9%	34,958	34,176	-782	-2.2%
11.1%	33,438	29,533	-3,904	-11.7%
12.3%	26,348	25,797	-551	-2.1%
13.6%	25,973	25,538	-435	-1.7%
14.8%	25,557	24,595	-962	-3.8%
16.0%	24,732	24,577	-156	-0.6%
17.3%	24,596	23,491	-1,105	-4.5%
18.5%	23,355	22,303	-1,052	-4.5%
19.8%	23,113	21,849	-1,265	-5.5%
21.0%	22,878	21,724	-1,154	-5.0%
22.2%	22,654	21,029	-1,625	-7.2%
23.5%	21,844	20,775	-1,070	-4.9%
24.7%	20,853	20,721	-132	-0.6%
25.9%	20,782	20,538	-244	-1.2%
27.2%	18,826	19,208	382	2.0%
28.4%	18,611	16,561	-2,050	-11.0%
29.6%	18,121	16,011	-2,110	-11.6%
30.9%	18,000	15,857	-2,143	-11.9%
32.1%	16,207	15,351	-857	-5.3%
33.3%	16,135	15,226	-909	-5.6%
34.6%	15,912	14,919	-993	-6.2%
35.8%	15,244	14,158	-1,086	-7.1%
37.0%	15,231	12,409	-2,822	-18.5%
38.3%	15,210	11,979	-3,231	-21.2%
39.5%	14,186	11,340	-2,846	-20.1%
40.7%	14,102	11,326	-2,776	-19.7%
42.0%	13,271	10,800	-2,472	-18.6%
43.2%	12,848	10,506	-2,343	-18.2%
44.4%	12,443	10,400	-2,043	-16.4%
45.7%	12,279	10,190	-2,090	-17.0%
46.9%	12,046	9,934	-2,112	-17.5%
48.1%	12,031	9,870	-2,161	-18.0%
49.4%	11,716	9,543	-2,173	-18.5%
50.6%	11,239	8,960	-2,279	-20.3%
51.9%	10,975	8,717	-2,258	-20.6%
53.1%	10,919	8,509	-2,410	-22.1%
54.3%	10,825	8,398	-2,427	-22.4%
55.6%	10,437	8,378	-2,059	-19.7%
56.8%	10,405	8,372	-2,033	-19.5%
58.0%	10,166	8,137	-2,029	-20.0%
59.3%	10,041	8,130	-1,911	-19.0%
60.5%	9,576	7,999	-1,576	-16.5%
61.7%	9,574	7,808	-1,766	-18.4%
63.0%	9,520	7,629	-1,891	-19.9%
64.2%	9,459	7,433	-2,025	-21.4%
65.4%	9,237	7,332	-1,905	-20.6%
66.7%	9,195	6,931	-2,264	-24.6%
67.9%	9,149	6,848	-2,301	-25.2%
69.1%	8,919	6,772	-2,147	-24.1%
70.4%	8,755	6,747	-2,008	-22.9%
71.6%	8,554	6,641	-1,913	-22.4%
72.8%	8,437	6,611	-1,826	-21.6%
74.1%	8,413	6,607	-1,806	-21.5%
75.3%	8,073	6,544	-1,529	-18.9%
76.5%	7,961	6,529	-1,431	-18.0%
77.8%	7,653	6,512	-1,141	-14.9%
79.0%	7,568	6,472	-1,096	-14.5%
80.2%	7,423	6,315	-1,108	-14.9%
81.5%	7,282	6,310	-972	-13.3%
82.7%	6,859	6,122	-738	-10.8%
84.0%	6,844	6,080	-764	-11.2%
85.2%	6,767	6,065	-702	-10.4%
86.4%	6,534	6,044	-490	-7.5%
87.7%	6,533	5,889	-643	-9.8%
88.9%	6,483	5,743	-740	-11.4%
90.1%	6,325	5,682	-643	-10.2%
91.4%	6,309	5,514	-795	-12.6%
92.6%	6,027	5,484	-543	-9.0%
93.8%	5,770	5,451	-319	-5.5%
95.1%	5,473	5,444	-29	-0.5%
96.3%	5,424	5,419	-5	-0.1%
97.5%	5,374	5,325	-49	-0.9%
98.8%	5,323	5,323	0	0.0%
100.0%	4,623	4,691	68	1.5%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	45,589	42,190	-3,399	-7.5%
1.2%	36,311	36,317	7	0.0%
2.5%	30,576	30,706	130	0.4%
3.7%	25,399	25,400	1	0.0%
4.9%	22,903	22,632	-271	-1.2%
6.2%	22,624	20,449	-2,175	-9.6%
7.4%	20,441	20,382	-59	-0.3%
8.6%	20,131	19,099	-1,032	-5.1%
9.9%	18,208	18,217	9	0.0%
11.1%	17,465	16,393	-1,072	-6.1%
12.3%	16,098	13,220	-2,878	-17.9%
13.6%	15,892	13,183	-2,709	-17.0%
14.8%	15,275	13,170	-2,105	-13.8%
16.0%	14,178	12,791	-1,387	-9.8%
17.3%	14,084	12,667	-1,417	-10.1%
18.5%	13,211	12,429	-782	-5.9%
19.8%	13,171	12,042	-1,129	-8.6%
21.0%	12,668	11,902	-766	-6.0%
22.2%	12,024	10,873	-1,151	-9.6%
23.5%	11,820	10,770	-1,049	-8.9%
24.7%	11,686	10,145	-1,541	-13.2%
25.9%	10,842	9,957	-886	-8.2%
27.2%	10,228	9,945	-283	-2.8%
28.4%	9,119	9,691	571	6.3%
29.6%	8,972	9,122	150	1.7%
30.9%	8,931	8,804	-127	-1.4%
32.1%	8,684	8,180	-504	-5.8%
33.3%	8,607	8,136	-470	-5.5%
34.6%	8,382	8,099	-283	-3.4%
35.8%	8,319	7,922	-397	-4.8%
37.0%	8,135	7,688	-447	-5.5%
38.3%	8,051	7,501	-551	-6.8%
39.5%	7,984	7,391	-593	-7.4%
40.7%	7,574	7,388	-186	-2.5%
42.0%	7,511	7,351	-160	-2.1%
43.2%	7,335	7,309	-25	-0.3%
44.4%	7,223	7,191	-32	-0.4%
45.7%	7,122	7,181	59	0.8%
46.9%	7,015	7,114	100	1.4%
48.1%	6,909	6,850	-59	-0.9%
49.4%	6,811	6,846	34	0.5%
50.6%	6,776	6,842	66	1.0%
51.9%	6,744	6,740	-4	-0.1%
53.1%	6,728	6,509	-218	-3.2%
54.3%	6,721	6,485	-236	-3.5%
55.6%	6,588	6,474	-114	-1.7%
56.8%	6,540	6,462	-78	-1.2%
58.0%	6,461	6,432	-29	-0.4%
59.3%	6,413	6,425	12	0.2%
60.5%	6,313	6,371	57	0.9%
61.7%	6,285	6,260	-25	-0.4%
63.0%	6,262	6,149	-113	-1.8%
64.2%	6,227	6,127	-100	-1.6%
65.4%	6,128	6,030	-97	-1.6%
66.7%	6,112	5,991	-121	-2.0%
67.9%	5,989	5,946	-43	-0.7%
69.1%	5,914	5,945	31	0.5%
70.4%	5,814	5,924	110	1.9%
71.6%	5,764	5,791	28	0.5%
72.8%	5,759	5,784	24	0.4%
74.1%	5,753	5,744	-9	-0.2%
75.3%	5,751	5,735	-16	-0.3%
76.5%	5,743	5,716	-27	-0.5%
77.8%	5,713	5,687	-26	-0.5%
79.0%	5,689	5,656	-32	-0.6%
80.2%	5,687	5,644	-43	-0.8%
81.5%	5,619	5,495	-124	-2.2%
82.7%	5,610	5,381	-229	-4.1%
84.0%	5,527	5,335	-193	-3.5%
85.2%	5,457	5,332	-125	-2.3%
86.4%	5,439	5,315	-124	-2.3%
87.7%	5,381	5,287	-94	-1.7%
88.9%	5,304	5,237	-67	-1.3%
90.1%	5,194	5,217	24	0.5%
91.4%	5,186	5,189	3	0.1%
92.6%	5,103	5,103	0	0.0%
93.8%	5,007	5,040	33	0.7%
95.1%	4,865	5,012	148	3.0%
96.3%	4,440	4,963	523	11.8%
97.5%	4,348	4,773	425	9.8%
98.8%	4,275	4,599	324	7.6%
100.0%	4,251	4,437	186	4.4%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,521	17,802	-718	-3.9%
1.2%	17,803	17,411	-392	-2.2%
2.5%	17,185	16,553	-632	-3.7%
3.7%	16,156	14,067	-2,089	-12.9%
4.9%	14,204	13,827	-377	-2.7%
6.2%	13,619	13,449	-170	-1.2%
7.4%	12,351	10,811	-1,540	-12.5%
8.6%	10,918	10,564	-354	-3.2%
9.9%	10,687	10,358	-329	-3.1%
11.1%	8,642	9,403	761	8.8%
12.3%	8,618	8,909	291	3.4%
13.6%	8,611	8,514	-98	-1.1%
14.8%	8,498	8,203	-295	-3.5%
16.0%	8,319	8,198	-120	-1.4%
17.3%	8,240	7,995	-245	-3.0%
18.5%	8,238	7,962	-277	-3.4%
19.8%	8,185	7,894	-291	-3.6%
21.0%	8,037	7,893	-144	-1.8%
22.2%	8,011	7,883	-128	-1.6%
23.5%	8,009	7,822	-188	-2.3%
24.7%	7,902	7,709	-193	-2.4%
25.9%	7,892	7,701	-191	-2.4%
27.2%	7,850	7,700	-150	-1.9%
28.4%	7,770	7,623	-147	-1.9%
29.6%	7,725	7,496	-229	-3.0%
30.9%	7,661	7,328	-333	-4.4%
32.1%	7,537	7,318	-220	-2.9%
33.3%	7,502	7,169	-333	-4.4%
34.6%	7,501	7,156	-345	-4.6%
35.8%	7,398	7,124	-275	-3.7%
37.0%	7,358	7,085	-273	-3.7%
38.3%	7,318	7,044	-273	-3.7%
39.5%	7,240	7,040	-200	-2.8%
40.7%	7,215	7,017	-198	-2.7%
42.0%	7,143	7,006	-137	-1.9%
43.2%	7,141	6,955	-186	-2.6%
44.4%	6,952	6,953	1	0.0%
45.7%	6,943	6,911	-32	-0.5%
46.9%	6,928	6,808	-121	-1.7%
48.1%	6,920	6,774	-147	-2.1%
49.4%	6,906	6,748	-157	-2.3%
50.6%	6,874	6,684	-190	-2.8%
51.9%	6,852	6,684	-168	-2.4%
53.1%	6,779	6,682	-96	-1.4%
54.3%	6,751	6,617	-135	-2.0%
55.6%	6,751	6,564	-187	-2.8%
56.8%	6,739	6,554	-184	-2.7%
58.0%	6,700	6,543	-157	-2.3%
59.3%	6,697	6,521	-176	-2.6%
60.5%	6,646	6,470	-176	-2.7%
61.7%	6,596	6,451	-145	-2.2%
63.0%	6,530	6,441	-89	-1.4%
64.2%	6,520	6,432	-88	-1.4%
65.4%	6,488	6,429	-59	-0.9%
66.7%	6,445	6,289	-157	-2.4%
67.9%	6,433	6,271	-162	-2.5%
69.1%	6,415	6,177	-237	-3.7%
70.4%	6,344	6,086	-258	-4.1%
71.6%	6,306	6,042	-264	-4.2%
72.8%	6,302	6,013	-290	-4.6%
74.1%	6,157	6,011	-147	-2.4%
75.3%	6,024	5,979	-45	-0.7%
76.5%	6,023	5,967	-57	-0.9%
77.8%	6,023	5,954	-69	-1.1%
79.0%	6,008	5,820	-188	-3.1%
80.2%	6,004	5,809	-195	-3.2%
81.5%	5,952	5,801	-150	-2.5%
82.7%	5,900	5,777	-123	-2.1%
84.0%	5,891	5,764	-128	-2.2%
85.2%	5,847	5,758	-89	-1.5%
86.4%	5,834	5,739	-95	-1.6%
87.7%	5,813	5,717	-96	-1.6%
88.9%	5,798	5,712	-86	-1.5%
90.1%	5,798	5,710	-88	-1.5%
91.4%	5,797	5,639	-158	-2.7%
92.6%	5,503	5,433	-70	-1.3%
93.8%	5,476	5,233	-243	-4.4%
95.1%	5,365	5,073	-292	-5.4%
96.3%	5,318	4,873	-445	-8.4%
97.5%	4,843	4,797	-46	-1.0%
98.8%	4,809	4,722	-87	-1.8%
100.0%	4,171	4,454	282	6.8%

Table SW-13-b
Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,928	12,341	413	3.5%
1.2%	11,810	12,154	345	2.9%
2.5%	11,428	12,099	671	5.9%
3.7%	11,283	11,675	392	3.5%
4.9%	11,190	11,347	157	1.4%
6.2%	11,139	11,224	85	0.8%
7.4%	11,106	11,053	-54	-0.5%
8.6%	11,005	10,891	-114	-1.0%
9.9%	10,976	10,489	-487	-4.4%
11.1%	10,807	10,467	-340	-3.1%
12.3%	10,568	10,454	-114	-1.1%
13.6%	10,549	10,361	-188	-1.8%
14.8%	10,539	10,189	-350	-3.3%
16.0%	10,527	10,186	-341	-3.2%
17.3%	10,526	9,996	-530	-5.0%
18.5%	10,259	9,823	-436	-4.2%
19.8%	10,221	9,765	-456	-4.5%
21.0%	10,104	9,632	-472	-4.7%
22.2%	10,043	9,593	-450	-4.5%
23.5%	9,995	9,520	-475	-4.8%
24.7%	9,927	9,309	-618	-6.2%
25.9%	9,823	9,249	-574	-5.8%
27.2%	9,655	9,230	-425	-4.4%
28.4%	9,572	9,054	-518	-5.4%
29.6%	9,558	9,054	-504	-5.3%
30.9%	9,546	9,033	-513	-5.4%
32.1%	9,541	8,968	-572	-6.0%
33.3%	9,484	8,936	-548	-5.8%
34.6%	9,427	8,910	-517	-5.5%
35.8%	9,324	8,902	-422	-4.5%
37.0%	9,294	8,699	-595	-6.4%
38.3%	9,239	8,668	-571	-6.2%
39.5%	9,194	8,647	-548	-6.0%
40.7%	9,023	8,583	-440	-4.9%
42.0%	8,948	8,581	-366	-4.1%
43.2%	8,894	8,514	-380	-4.3%
44.4%	8,839	8,503	-336	-3.8%
45.7%	8,825	8,486	-339	-3.8%
46.9%	8,769	8,450	-318	-3.6%
48.1%	8,620	8,425	-195	-2.3%
49.4%	8,620	8,325	-294	-3.4%
50.6%	8,538	8,313	-225	-2.6%
51.9%	8,488	8,300	-188	-2.2%
53.1%	8,485	8,279	-206	-2.4%
54.3%	8,429	8,253	-176	-2.1%
55.6%	8,326	8,248	-78	-0.9%
56.8%	8,284	8,150	-134	-1.6%
58.0%	8,272	8,122	-149	-1.8%
59.3%	8,180	8,111	-69	-0.8%
60.5%	8,123	8,104	-19	-0.2%
61.7%	8,077	8,067	-10	-0.1%
63.0%	8,075	8,031	-43	-0.5%
64.2%	7,990	8,011	21	0.3%
65.4%	7,985	7,995	9	0.1%
66.7%	7,947	7,977	29	0.4%
67.9%	7,904	7,972	68	0.9%
69.1%	7,890	7,958	67	0.9%
70.4%	7,871	7,837	-34	-0.4%
71.6%	7,871	7,799	-72	-0.9%
72.8%	7,738	7,774	36	0.5%
74.1%	7,727	7,768	41	0.5%
75.3%	7,721	7,748	26	0.3%
76.5%	7,713	7,716	4	0.0%
77.8%	7,697	7,688	-8	-0.1%
79.0%	7,644	7,651	8	0.1%
80.2%	7,618	7,615	-3	0.0%
81.5%	7,556	7,578	22	0.3%
82.7%	7,526	7,462	-64	-0.8%
84.0%	7,441	7,443	2	0.0%
85.2%	7,358	7,367	10	0.1%
86.4%	7,291	7,352	61	0.8%
87.7%	7,236	7,252	16	0.2%
88.9%	7,073	7,080	7	0.1%
90.1%	7,022	6,995	-27	-0.4%
91.4%	6,954	6,789	-164	-2.4%
92.6%	6,923	6,744	-179	-2.6%
93.8%	6,922	6,451	-471	-6.8%
95.1%	6,862	6,374	-487	-7.1%
96.3%	6,596	6,235	-361	-5.5%
97.5%	6,260	6,082	-178	-2.8%
98.8%	5,851	6,010	160	2.7%
100.0%	5,511	5,756	245	4.4%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,668	16,962	4,294	33.9%
1.2%	12,500	16,526	4,026	32.2%
2.5%	12,367	13,493	1,126	9.1%
3.7%	12,269	13,291	1,022	8.3%
4.9%	12,248	13,060	812	6.6%
6.2%	12,228	12,992	764	6.2%
7.4%	12,210	12,985	775	6.3%
8.6%	12,129	12,964	835	6.9%
9.9%	12,065	12,932	867	7.2%
11.1%	12,018	12,878	860	7.2%
12.3%	12,017	12,849	832	6.9%
13.6%	11,928	12,725	797	6.7%
14.8%	11,891	12,716	825	6.9%
16.0%	11,887	12,705	818	6.9%
17.3%	11,858	12,656	797	6.7%
18.5%	11,855	12,606	751	6.3%
19.8%	11,849	12,588	739	6.2%
21.0%	11,825	12,503	678	5.7%
22.2%	11,799	12,374	575	4.9%
23.5%	11,786	12,365	579	4.9%
24.7%	11,778	12,343	565	4.8%
25.9%	11,776	12,290	514	4.4%
27.2%	11,731	12,216	485	4.1%
28.4%	11,643	12,203	560	4.8%
29.6%	11,630	12,141	511	4.4%
30.9%	11,586	12,079	493	4.3%
32.1%	11,583	12,065	482	4.2%
33.3%	11,560	11,940	380	3.3%
34.6%	11,560	11,931	371	3.2%
35.8%	11,546	11,926	380	3.3%
37.0%	11,534	11,881	347	3.0%
38.3%	11,528	11,840	312	2.7%
39.5%	11,470	11,836	366	3.2%
40.7%	11,468	11,795	327	2.9%
42.0%	11,452	11,778	325	2.8%
43.2%	11,450	11,771	321	2.8%
44.4%	11,447	11,745	298	2.6%
45.7%	11,440	11,744	304	2.7%
46.9%	11,433	11,741	308	2.7%
48.1%	11,403	11,688	285	2.5%
49.4%	11,395	11,655	260	2.3%
50.6%	11,363	11,629	266	2.3%
51.9%	11,344	11,487	143	1.3%
53.1%	11,294	11,443	149	1.3%
54.3%	11,283	11,435	152	1.3%
55.6%	11,263	11,432	169	1.5%
56.8%	11,210	11,424	213	1.9%
58.0%	11,197	11,333	136	1.2%
59.3%	11,158	11,151	-7	-0.1%
60.5%	11,138	11,105	-32	-0.3%
61.7%	11,117	11,030	-86	-0.8%
63.0%	11,115	10,661	-453	-4.1%
64.2%	10,998	10,649	-350	-3.2%
65.4%	10,998	10,505	-492	-4.5%
66.7%	10,901	10,476	-425	-3.9%
67.9%	10,853	10,376	-477	-4.4%
69.1%	10,720	10,114	-606	-5.7%
70.4%	10,640	10,105	-536	-5.0%
71.6%	10,558	10,034	-524	-5.0%
72.8%	10,463	10,012	-451	-4.3%
74.1%	10,355	9,950	-405	-3.9%
75.3%	10,288	9,826	-462	-4.5%
76.5%	10,015	9,796	-219	-2.2%
77.8%	9,969	9,747	-221	-2.2%
79.0%	9,940	9,561	-379	-3.8%
80.2%	9,910	9,530	-379	-3.8%
81.5%	9,735	9,482	-253	-2.6%
82.7%	9,467	9,470	3	0.0%
84.0%	9,272	9,464	192	2.1%
85.2%	9,234	9,393	158	1.7%
86.4%	8,973	9,324	351	3.9%
87.7%	8,924	9,224	300	3.4%
88.9%	8,883	9,224	340	3.8%
90.1%	8,777	9,203	426	4.8%
91.4%	8,755	9,129	374	4.3%
92.6%	8,727	9,066	339	3.9%
93.8%	8,698	8,978	280	3.2%
95.1%	8,271	8,976	705	8.5%
96.3%	8,258	8,874	617	7.5%
97.5%	7,781	8,867	1,087	14.0%
98.8%	7,726	8,859	1,133	14.7%
100.0%	6,915	7,495	580	8.4%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,044	10,992	-52	-0.5%
1.2%	10,667	10,176	-491	-4.6%
2.5%	10,390	10,117	-274	-2.6%
3.7%	10,239	9,806	-433	-4.2%
4.9%	10,221	9,750	-471	-4.6%
6.2%	10,191	9,552	-640	-6.3%
7.4%	9,998	9,461	-537	-5.4%
8.6%	9,811	9,361	-451	-4.6%
9.9%	9,484	9,010	-474	-5.0%
11.1%	9,461	8,900	-561	-5.9%
12.3%	9,414	8,845	-570	-6.1%
13.6%	9,124	8,760	-365	-4.0%
14.8%	8,966	8,746	-220	-2.5%
16.0%	8,866	8,693	-174	-2.0%
17.3%	8,847	8,689	-157	-1.8%
18.5%	8,787	8,601	-186	-2.1%
19.8%	8,637	8,460	-177	-2.0%
21.0%	8,471	8,405	-66	-0.8%
22.2%	8,462	8,392	-70	-0.8%
23.5%	8,439	8,389	-50	-0.6%
24.7%	8,411	8,282	-129	-1.5%
25.9%	8,365	8,244	-120	-1.4%
27.2%	8,361	8,180	-182	-2.2%
28.4%	8,327	8,163	-164	-2.0%
29.6%	8,278	8,139	-139	-1.7%
30.9%	8,267	8,123	-144	-1.7%
32.1%	8,217	8,080	-137	-1.7%
33.3%	8,174	8,066	-108	-1.3%
34.6%	8,141	8,009	-132	-1.6%
35.8%	8,140	7,982	-158	-1.9%
37.0%	7,990	7,982	-8	-0.1%
38.3%	7,984	7,971	-13	-0.2%
39.5%	7,973	7,965	-8	-0.1%
40.7%	7,790	7,948	158	2.0%
42.0%	7,778	7,941	164	2.1%
43.2%	7,687	7,917	231	3.0%
44.4%	7,569	7,877	308	4.1%
45.7%	7,565	7,854	289	3.8%
46.9%	7,557	7,812	254	3.4%
48.1%	7,480	7,784	304	4.1%
49.4%	7,463	7,769	306	4.1%
50.6%	7,408	7,730	322	4.3%
51.9%	7,375	7,667	292	4.0%
53.1%	7,328	7,659	331	4.5%
54.3%	7,297	7,648	351	4.8%
55.6%	7,279	7,637	358	4.9%
56.8%	7,270	7,601	331	4.5%
58.0%	7,263	7,593	330	4.5%
59.3%	7,242	7,591	349	4.8%
60.5%	7,235	7,587	352	4.9%
61.7%	7,170	7,582	412	5.7%
63.0%	7,170	7,581	411	5.7%
64.2%	7,107	7,558	451	6.3%
65.4%	7,069	7,553	485	6.9%
66.7%	7,065	7,515	450	6.4%
67.9%	7,056	7,500	444	6.3%
69.1%	6,928	7,490	561	8.1%
70.4%	6,881	7,465	584	8.5%
71.6%	6,871	7,464	593	8.6%
72.8%	6,803	7,458	655	9.6%
74.1%	6,788	7,454	665	9.8%
75.3%	6,759	7,440	681	10.1%
76.5%	6,747	7,411	664	9.8%
77.8%	6,747	7,395	649	9.6%
79.0%	6,626	7,331	706	10.6%
80.2%	6,593	7,330	737	11.2%
81.5%	6,522	7,328	806	12.4%
82.7%	6,459	7,323	864	13.4%
84.0%	6,447	7,307	860	13.3%
85.2%	6,437	7,300	863	13.4%
86.4%	6,428	7,292	864	13.4%
87.7%	6,392	7,250	858	13.4%
88.9%	6,330	7,035	706	11.1%
90.1%	6,142	7,019	877	14.3%
91.4%	6,092	7,008	916	15.0%
92.6%	6,068	6,912	844	13.9%
93.8%	6,059	6,907	847	14.0%
95.1%	5,945	6,893	949	16.0%
96.3%	5,942	6,795	854	14.4%
97.5%	5,811	6,608	798	13.7%
98.8%	5,801	6,596	795	13.7%
100.0%	4,994	6,512	1,518	30.4%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,986	15,845	-141	-0.9%
1.2%	15,483	15,307	-175	-1.1%
2.5%	15,346	15,135	-211	-1.4%
3.7%	15,202	14,836	-366	-2.4%
4.9%	14,996	14,751	-245	-1.6%
6.2%	14,954	14,739	-215	-1.4%
7.4%	14,887	14,652	-235	-1.6%
8.6%	14,886	14,634	-252	-1.7%
9.9%	14,720	14,547	-173	-1.2%
11.1%	14,707	14,439	-268	-1.8%
12.3%	14,370	14,370	-1	0.0%
13.6%	14,238	14,283	45	0.3%
14.8%	13,797	13,965	168	1.2%
16.0%	12,544	13,867	1,323	10.5%
17.3%	12,283	12,635	351	2.9%
18.5%	11,474	12,349	875	7.6%
19.8%	11,416	12,132	716	6.3%
21.0%	11,383	11,590	207	1.8%
22.2%	11,326	11,069	-257	-2.3%
23.5%	11,318	10,922	-396	-3.5%
24.7%	11,033	10,915	-118	-1.1%
25.9%	11,024	10,387	-637	-5.8%
27.2%	10,934	10,206	-728	-6.7%
28.4%	10,316	10,054	-262	-2.5%
29.6%	10,279	10,001	-278	-2.7%
30.9%	10,201	9,429	-771	-7.6%
32.1%	10,015	9,294	-721	-7.2%
33.3%	9,379	9,213	-166	-1.8%
34.6%	9,073	9,092	19	0.2%
35.8%	8,888	8,728	-160	-1.8%
37.0%	8,566	8,540	-26	-0.3%
38.3%	8,105	8,411	306	3.8%
39.5%	8,095	8,123	28	0.3%
40.7%	7,988	8,100	112	1.4%
42.0%	7,842	7,953	111	1.4%
43.2%	7,629	7,528	-100	-1.3%
44.4%	7,299	7,303	4	0.1%
45.7%	7,236	7,069	-167	-2.3%
46.9%	7,025	7,062	37	0.5%
48.1%	7,021	6,896	-125	-1.8%
49.4%	6,985	6,770	-215	-3.1%
50.6%	6,828	6,597	-231	-3.4%
51.9%	6,756	6,512	-243	-3.6%
53.1%	6,700	6,486	-214	-3.2%
54.3%	6,495	6,391	-104	-1.6%
55.6%	6,308	6,353	45	0.7%
56.8%	6,291	6,227	-63	-1.0%
58.0%	5,939	6,186	246	4.2%
59.3%	5,922	6,156	234	3.9%
60.5%	5,644	6,145	502	8.9%
61.7%	5,477	6,123	645	11.8%
63.0%	5,355	6,068	713	13.3%
64.2%	5,249	5,998	749	14.3%
65.4%	5,149	5,971	821	15.9%
66.7%	5,079	5,964	885	17.4%
67.9%	5,069	5,962	892	17.6%
69.1%	5,065	5,853	787	15.5%
70.4%	5,058	5,830	772	15.3%
71.6%	5,004	5,794	790	15.8%
72.8%	4,989	5,743	754	15.1%
74.1%	4,981	5,734	753	15.1%
75.3%	4,921	5,719	798	16.2%
76.5%	4,904	5,681	777	15.8%
77.8%	4,814	5,627	813	16.9%
79.0%	4,745	5,600	855	18.0%
80.2%	4,723	5,590	867	18.3%
81.5%	4,707	5,460	753	16.0%
82.7%	4,668	5,453	785	16.8%
84.0%	4,644	5,408	764	16.4%
85.2%	4,587	5,404	818	17.8%
86.4%	4,574	5,318	744	16.3%
87.7%	4,475	5,298	823	18.4%
88.9%	4,470	5,263	793	17.8%
90.1%	4,368	5,185	817	18.7%
91.4%	4,322	5,142	820	19.0%
92.6%	4,231	5,141	910	21.5%
93.8%	4,159	5,139	980	23.6%
95.1%	4,022	4,979	957	23.8%
96.3%	3,964	4,978	1,013	25.6%
97.5%	3,929	4,946	1,017	25.9%
98.8%	3,877	4,914	1,037	26.8%
100.0%	3,813	4,709	896	23.5%

Figure SW-14-b
Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Probability of Exceedance

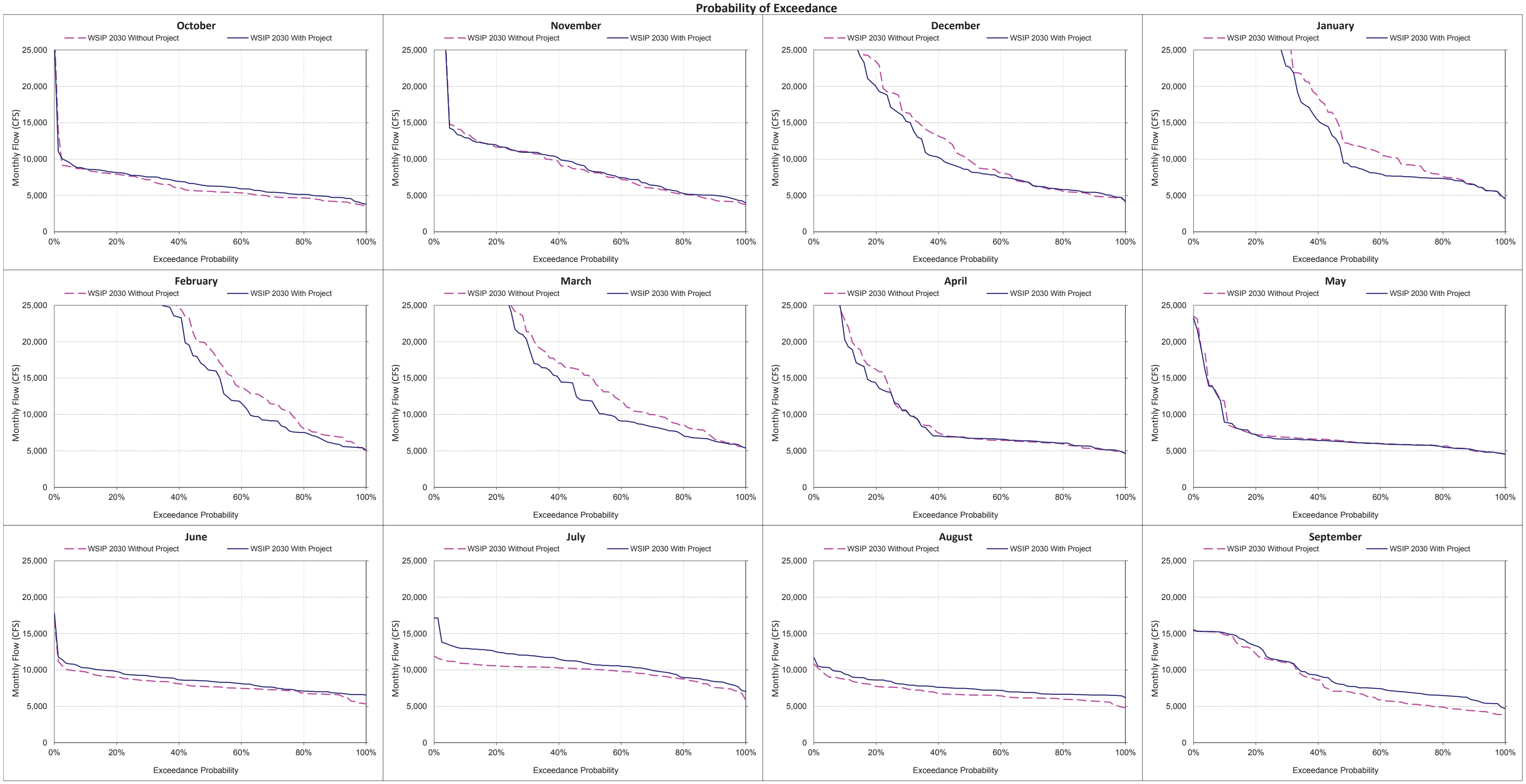


Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	27,728	26,182	-1,546	-5.6%
1.2%	13,993	11,051	-2,942	-21.0%
2.5%	9,163	10,058	895	9.8%
3.7%	9,083	9,782	699	7.7%
4.9%	8,984	9,510	526	5.9%
6.2%	8,858	9,091	233	2.6%
7.4%	8,697	8,846	148	1.7%
8.6%	8,683	8,812	129	1.5%
9.9%	8,631	8,656	25	0.3%
11.1%	8,415	8,591	176	2.1%
12.3%	8,297	8,583	286	3.4%
13.6%	8,247	8,562	315	3.8%
14.8%	8,111	8,476	366	4.5%
16.0%	8,103	8,391	288	3.6%
17.3%	8,033	8,265	232	2.9%
18.5%	7,983	8,230	247	3.1%
19.8%	7,926	8,160	235	3.0%
21.0%	7,862	8,109	248	3.1%
22.2%	7,780	8,075	295	3.8%
23.5%	7,691	7,950	259	3.4%
24.7%	7,656	7,768	112	1.5%
25.9%	7,611	7,763	151	2.0%
27.2%	7,322	7,725	402	5.5%
28.4%	7,304	7,653	350	4.8%
29.6%	7,165	7,557	392	5.5%
30.9%	7,155	7,556	401	5.6%
32.1%	6,805	7,552	747	11.0%
33.3%	6,641	7,518	877	13.2%
34.6%	6,541	7,309	768	11.7%
35.8%	6,507	7,261	754	11.6%
37.0%	6,498	7,192	694	10.7%
38.3%	6,139	7,053	915	14.9%
39.5%	6,066	6,932	866	14.3%
40.7%	6,007	6,902	895	14.9%
42.0%	5,776	6,858	1,082	18.7%
43.2%	5,679	6,664	985	17.3%
44.4%	5,678	6,642	964	17.0%
45.7%	5,629	6,548	919	16.3%
46.9%	5,609	6,439	831	14.8%
48.1%	5,583	6,382	799	14.3%
49.4%	5,577	6,287	709	12.7%
50.6%	5,561	6,283	723	13.0%
51.9%	5,481	6,252	771	14.1%
53.1%	5,454	6,250	795	14.6%
54.3%	5,454	6,227	773	14.2%
55.6%	5,435	6,155	720	13.3%
56.8%	5,428	6,119	691	12.7%
58.0%	5,410	6,069	660	12.2%
59.3%	5,354	5,941	587	11.0%
60.5%	5,341	5,900	559	10.5%
61.7%	5,267	5,899	632	12.0%
63.0%	5,213	5,881	668	12.8%
64.2%	5,109	5,697	588	11.5%
65.4%	5,054	5,685	632	12.5%
66.7%	5,014	5,621	607	12.1%
67.9%	4,998	5,484	487	9.7%
69.1%	4,827	5,451	624	12.9%
70.4%	4,812	5,436	623	12.9%
71.6%	4,758	5,407	649	13.6%
72.8%	4,723	5,380	657	13.9%
74.1%	4,710	5,332	622	13.2%
75.3%	4,708	5,214	506	10.7%
76.5%	4,705	5,193	488	10.4%
77.8%	4,693	5,168	475	10.1%
79.0%	4,650	5,156	506	10.9%
80.2%	4,641	5,154	513	11.1%
81.5%	4,621	5,117	496	10.7%
82.7%	4,573	5,011	438	9.6%
84.0%	4,497	4,944	447	9.9%
85.2%	4,428	4,936	507	11.5%
86.4%	4,236	4,911	675	15.9%
87.7%	4,222	4,857	635	15.0%
88.9%	4,212	4,723	511	12.1%
90.1%	4,183	4,715	532	12.7%
91.4%	4,130	4,712	582	14.1%
92.6%	4,108	4,685	577	14.1%
93.8%	4,094	4,596	502	12.3%
95.1%	3,936	4,594	658	16.7%
96.3%	3,879	4,207	328	8.4%
97.5%	3,773	4,068	296	7.8%
98.8%	3,672	3,896	224	6.1%
100.0%	3,427	3,799	372	10.9%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	37,473	34,340	-3,132	-8.4%
1.2%	33,424	34,219	795	2.4%
2.5%	26,783	25,572	-1,212	-4.5%
3.7%	25,900	25,049	-851	-3.3%
4.9%	14,790	14,264	-526	-3.6%
6.2%	14,631	14,027	-604	-4.1%
7.4%	14,144	13,347	-797	-5.6%
8.6%	14,030	13,241	-789	-5.6%
9.9%	13,451	12,946	-505	-3.8%
11.1%	13,384	12,893	-491	-3.7%
12.3%	12,919	12,517	-402	-3.1%
13.6%	12,510	12,327	-183	-1.5%
14.8%	12,260	12,326	66	0.5%
16.0%	12,172	12,184	12	0.1%
17.3%	12,094	12,036	-58	-0.5%
18.5%	11,959	12,034	75	0.6%
19.8%	11,644	11,959	316	2.7%
21.0%	11,643	11,690	48	0.4%
22.2%	11,568	11,645	77	0.7%
23.5%	11,434	11,563	128	1.1%
24.7%	11,223	11,275	52	0.5%
25.9%	11,182	11,193	12	0.1%
27.2%	11,112	11,018	-93	-0.8%
28.4%	11,077	10,947	-130	-1.2%
29.6%	11,037	10,946	-92	-0.8%
30.9%	10,942	10,937	-5	0.0%
32.1%	10,731	10,924	194	1.8%
33.3%	10,703	10,901	198	1.8%
34.6%	10,699	10,661	-38	-0.4%
35.8%	9,975	10,575	600	6.0%
37.0%	9,969	10,469	500	5.0%
38.3%	9,839	10,426	587	6.0%
39.5%	9,790	10,248	457	4.7%
40.7%	9,072	9,854	782	8.6%
42.0%	9,021	9,802	781	8.7%
43.2%	9,009	9,736	727	8.1%
44.4%	8,687	9,602	916	10.5%
45.7%	8,632	9,330	697	8.1%
46.9%	8,605	9,200	595	6.9%
48.1%	8,531	9,081	549	6.4%
49.4%	8,207	8,519	312	3.8%
50.6%	8,188	8,333	145	1.8%
51.9%	8,110	8,268	158	2.0%
53.1%	8,107	8,239	131	1.6%
54.3%	7,892	8,144	253	3.2%
55.6%	7,541	7,913	372	4.9%
56.8%	7,496	7,809	313	4.2%
58.0%	7,435	7,697	262	3.5%
59.3%	7,373	7,481	108	1.5%
60.5%	7,160	7,454	294	4.1%
61.7%	7,152	7,350	198	2.8%
63.0%	6,863	7,205	342	5.0%
64.2%	6,684	7,201	517	7.7%
65.4%	6,431	7,180	749	11.6%
66.7%	6,307	6,762	455	7.2%
67.9%	6,071	6,731	660	10.9%
69.1%	6,064	6,430	366	6.0%
70.4%	5,965	6,399	434	7.3%
71.6%	5,949	6,315	366	6.2%
72.8%	5,794	6,240	446	7.7%
74.1%	5,748	5,921	173	3.0%
75.3%	5,528	5,803	275	5.0%
76.5%	5,392	5,677	286	5.3%
77.8%	5,306	5,612	305	5.8%
79.0%	5,196	5,369	174	3.3%
80.2%	5,160	5,250	90	1.8%
81.5%	5,087	5,150	63	1.2%
82.7%	5,057	5,150	93	1.8%
84.0%	4,982	5,135	153	3.1%
85.2%	4,840	5,068	229	4.7%
86.4%	4,679	5,063	384	8.2%
87.7%	4,579	5,048	469	10.2%
88.9%	4,540	5,038	497	11.0%
90.1%	4,325	5,021	696	16.1%
91.4%	4,226	4,959	733	17.3%
92.6%	4,213	4,866	653	15.5%
93.8%	4,197	4,810	613	14.6%
95.1%	4,164	4,664	499	12.0%
96.3%	4,110	4,521	412	10.0%
97.5%	4,093	4,321	228	5.6%
98.8%	3,874	4,275	401	10.4%
100.0%	3,715	3,925	210	5.6%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	64,123	64,274	151	0.2%
1.2%	53,497	52,381	-1,116	-2.1%
2.5%	52,160	51,265	-895	-1.7%
3.7%	51,625	46,889	-4,736	-9.2%
4.9%	46,820	43,038	-3,782	-8.1%
6.2%	41,839	42,349	510	1.2%
7.4%	41,517	38,195	-3,323	-8.0%
8.6%	39,510	35,792	-3,718	-9.4%
9.9%	35,636	35,698	63	0.2%
11.1%	32,203	30,000	-2,203	-6.8%
12.3%	30,000	26,679	-3,321	-11.1%
13.6%	29,681	25,577	-4,104	-13.8%
14.8%	26,284	24,186	-2,098	-8.0%
16.0%	24,308	23,328	-980	-4.0%
17.3%	24,284	21,110	-3,173	-13.1%
18.5%	23,813	20,550	-3,264	-13.7%
19.8%	23,516	20,118	-3,399	-14.5%
21.0%	22,885	19,275	-3,611	-15.8%
22.2%	19,742	19,078	-664	-3.4%
23.5%	19,282	18,821	-461	-2.4%
24.7%	19,114	17,124	-1,990	-10.4%
25.9%	19,040	16,738	-2,302	-12.1%
27.2%	18,788	16,360	-2,428	-12.9%
28.4%	16,458	16,041	-416	-2.5%
29.6%	16,405	15,173	-1,232	-7.5%
30.9%	16,244	15,045	-1,199	-7.4%
32.1%	15,407	13,836	-1,572	-10.2%
33.3%	15,097	13,014	-2,082	-13.8%
34.6%	14,631	12,785	-1,846	-12.6%
35.8%	14,124	10,886	-3,238	-22.9%
37.0%	13,801	10,558	-3,243	-23.5%
38.3%	13,524	10,387	-3,137	-23.2%
39.5%	13,281	10,337	-2,943	-22.2%
40.7%	13,012	10,083	-2,929	-22.5%
42.0%	12,826	9,603	-3,223	-25.1%
43.2%	12,340	9,398	-2,942	-23.8%
44.4%	12,020	9,214	-2,806	-23.3%
45.7%	10,887	9,048	-1,839	-16.9%
46.9%	10,588	8,860	-1,728	-16.3%
48.1%	10,380	8,618	-1,762	-17.0%
49.4%	9,975	8,581	-1,394	-14.0%
50.6%	9,614	8,186	-1,428	-14.9%
51.9%	9,219	8,167	-1,052	-11.4%
53.1%	8,752	8,119	-633	-7.2%
54.3%	8,675	7,966	-710	-8.2%
55.6%	8,635	7,938	-697	-8.1%
56.8%	8,601	7,846	-754	-8.8%
58.0%	8,592	7,824	-768	-8.9%
59.3%	8,170	7,529	-640	-7.8%
60.5%	8,106	7,436	-670	-8.3%
61.7%	7,991	7,433	-558	-7.0%
63.0%	7,843	7,363	-480	-6.1%
64.2%	7,198	7,253	55	0.8%
65.4%	6,971	7,142	170	2.4%
66.7%	6,908	7,052	144	2.1%
67.9%	6,842	6,906	65	0.9%
69.1%	6,686	6,788	102	1.5%
70.4%	6,333	6,346	13	0.2%
71.6%	6,194	6,246	52	0.8%
72.8%	6,165	6,228	63	1.0%
74.1%	6,050	6,202	153	2.5%
75.3%	5,892	6,022	130	2.2%
76.5%	5,872	5,973	101	1.7%
77.8%	5,822	5,936	113	1.9%
79.0%	5,754	5,827	73	1.3%
80.2%	5,490	5,794	304	5.5%
81.5%	5,488	5,785	297	5.4%
82.7%	5,467	5,718	251	4.6%
84.0%	5,445	5,685	240	4.4%
85.2%	5,430	5,624	194	3.6%
86.4%	5,379	5,462	83	1.5%
87.7%	5,286	5,458	173	3.3%
88.9%	5,123	5,458	335	6.5%
90.1%	4,902	5,435	532	10.9%
91.4%	4,850	5,355	504	10.4%
92.6%	4,818	5,259	441	9.1%
93.8%	4,782	5,070	288	6.0%
95.1%	4,761	5,051	291	6.1%
96.3%	4,701	4,833	132	2.8%
97.5%	4,667	4,765	98	2.1%
98.8%	4,564	4,721	157	3.4%
100.0%	4,300	4,107	-193	-4.5%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	84,265	84,414	149	0.2%
1.2%	78,272	77,384	-888	-1.1%
2.5%	73,974	71,475	-2,498	-3.4%
3.7%	72,842	71,054	-1,788	-2.5%
4.9%	69,729	69,819	90	0.1%
6.2%	66,519	63,924	-2,595	-3.9%
7.4%	62,928	61,768	-1,160	-1.8%
8.6%	61,714	60,919	-795	-1.3%
9.9%	52,796	49,427	-3,370	-6.4%
11.1%	50,218	49,031	-1,187	-2.4%
12.3%	49,116	48,357	-759	-1.5%
13.6%	47,653	46,112	-1,541	-3.2%
14.8%	45,367	42,566	-2,800	-6.2%
16.0%	44,629	40,370	-4,259	-9.5%
17.3%	41,142	37,151	-3,991	-9.7%
18.5%	40,324	36,990	-3,334	-8.3%
19.8%	38,247	34,661	-3,585	-9.4%
21.0%	37,998	33,344	-4,654	-12.2%
22.2%	36,340	32,041	-4,299	-11.8%
23.5%	33,760	30,798	-2,961	-8.8%
24.7%	32,711	30,000	-2,711	-8.3%
25.9%	31,604	29,458	-2,146	-6.8%
27.2%	28,193	26,694	-1,499	-5.3%
28.4%	27,899	24,579	-3,320	-11.9%
29.6%	26,495	22,827	-3,668	-13.8%
30.9%	26,462	22,633	-3,830	-14.5%
32.1%	21,890	21,848	-42	-0.2%
33.3%	21,881	19,204	-2,677	-12.2%
34.6%	21,720	17,833	-3,887	-17.9%
35.8%	20,716	17,427	-3,289	-15.9%
37.0%	20,575	17,100	-3,475	-16.9%
38.3%	19,305	16,246	-3,058	-15.8%
39.5%	18,866	15,505	-3,361	-17.8%
40.7%	17,991	14,997	-2,995	-16.6%
42.0%	17,621	14,722	-2,899	-16.4%
43.2%	16,448	14,482	-1,966	-12.0%
44.4%	16,442	13,266	-3,177	-19.3%
45.7%	15,559	12,779	-2,780	-17.9%
46.9%	14,460	11,808	-2,652	-18.3%
48.1%	12,245	9,455	-2,790	-22.8%
49.4%	12,197	9,425	-2,773	-22.7%
50.6%	11,988	8,951	-3,036	-25.3%
51.9%	11,807	8,934	-2,873	-24.3%
53.1%	11,766	8,715	-3,050	-25.9%
54.3%	11,624	8,583	-3,040	-26.2%
55.6%	11,429	8,380	-3,048	-26.7%
56.8%	11,355	8,120	-3,235	-28.5%
58.0%	11,183	8,119	-3,063	-27.4%
59.3%	10,972	8,023	-2,949	-26.9%
60.5%	10,507	7,894	-2,613	-24.9%
61.7%	10,407	7,688	-2,719	-26.1%
63.0%	10,269	7,681	-2,588	-25.2%
64.2%	10,237	7,664	-2,574	-25.1%
65.4%	10,129	7,660	-2,469	-24.4%
66.7%	9,298	7,635	-1,663	-17.9%
67.9%	9,226	7,591	-1,634	-17.7%
69.1%	9,220	7,572	-1,648	-17.9%
70.4%	9,171	7,562	-1,609	-17.5%
71.6%	9,074	7,496	-1,578	-17.4%
72.8%	9,060	7,447	-1,612	-17.8%
74.1%	8,362	7,439	-922	-11.0%
75.3%	8,270	7,414	-856	-10.4%
76.5%	8,010	7,367	-643	-8.0%
77.8%	7,980	7,356	-624	-7.8%
79.0%	7,875	7,350	-525	-6.7%
80.2%	7,579	7,316	-263	-3.5%
81.5%	7,464	7,256	-208	-2.8%
82.7%	7,450	7,224	-225	-3.0%
84.0%	7,437	7,031	-406	-5.5%
85.2%	7,251	6,997	-254	-3.5%
86.4%	7,104	6,992	-112	-1.6%
87.7%	6,649	6,611	-39	-0.6%
88.9%	6,647	6,517	-130	-2.0%
90.1%	6,500	6,502	1	0.0%
91.4%	6,178	6,143	-34	-0.6%
92.6%	6,123	6,089	-33	-0.5%
93.8%	5,696	5,660	-36	-0.6%
95.1%	5,645	5,642	-2	0.0%
96.3%	5,614	5,632	18	0.3%
97.5%	5,530	5,541	11	0.2%
98.8%	4,699	4,963	264	5.6%
100.0%	4,690	4,567	-123	-2.6%

Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	101,616	99,822	-1,794	-1.8%
1.2%	94,345	94,151	-194	-0.2%
2.5%	77,996	76,536	-1,460	-1.9%
3.7%	76,733	74,017	-2,716	-3.5%
4.9%	73,853	73,848	-4	0.0%
6.2%	73,687	71,189	-2,498	-3.4%
7.4%	71,243	70,983	-260	-0.4%
8.6%	63,388	62,096	-1,292	-2.0%
9.9%	60,666	58,631	-2,036	-3.4%
11.1%	60,424	57,883	-2,541	-4.2%
12.3%	58,765	56,447	-2,319	-3.9%
13.6%	57,719	56,166	-1,553	-2.7%
14.8%	55,414	53,548	-1,866	-3.4%
16.0%	51,495	46,957	-4,538	-8.8%
17.3%	47,213	45,252	-1,961	-4.2%
18.5%	45,414	45,077	-337	-0.7%
19.8%	45,066	43,515	-1,551	-3.4%
21.0%	44,647	42,610	-2,037	-4.6%
22.2%	44,298	40,051	-4,247	-9.6%
23.5%	41,724	38,220	-3,505	-8.4%
24.7%	38,695	37,916	-778	-2.0%
25.9%	37,626	34,089	-3,537	-9.4%
27.2%	36,860	32,315	-4,545	-12.3%
28.4%	32,301	30,000	-2,301	-7.1%
29.6%	31,184	30,000	-1,184	-3.8%
30.9%	31,109	29,582	-1,527	-4.9%
32.1%	30,000	28,537	-1,463	-4.9%
33.3%	28,933	28,234	-699	-2.4%
34.6%	28,767	25,007	-3,760	-13.1%
35.8%	27,370	24,846	-2,524	-9.2%
37.0%	27,263	24,747	-2,516	-9.2%
38.3%	26,319	23,577	-2,742	-10.4%
39.5%	24,736	23,426	-1,309	-5.3%
40.7%	24,402	23,285	-1,118	-4.6%
42.0%	23,461	19,862	-3,598	-15.3%
43.2%	23,261	19,526	-3,735	-16.1%
44.4%	21,339	18,095	-3,245	-15.2%
45.7%	20,048	17,982	-2,067	-10.3%
46.9%	19,960	17,090	-2,870	-14.4%
48.1%	19,889	16,735	-3,154	-15.9%
49.4%	19,313	16,114	-3,200	-16.6%
50.6%	18,687	16,063	-2,623	-14.0%
51.9%	17,982	15,963	-2,019	-11.2%
53.1%	17,107	14,968	-2,139	-12.5%
54.3%	16,500	12,825	-3,675	-22.3%
55.6%	15,558	12,445	-3,114	-20.0%
56.8%	15,310	11,959	-3,352	-21.9%
58.0%	14,111	11,883	-2,228	-15.8%
59.3%	13,768	11,829	-1,939	-14.1%
60.5%	13,651	11,334	-2,317	-17.0%
61.7%	13,313	10,720	-2,593	-19.5%
63.0%	12,880	9,878	-3,002	-23.3%
64.2%	12,825	9,738	-3,087	-24.1%
65.4%	12,761	9,696	-3,065	-24.0%
66.7%	12,410	9,246	-3,164	-25.5%
67.9%	12,241	9,235	-3,006	-24.6%
69.1%	11,513	9,131	-2,383	-20.7%
70.4%	11,425	9,117	-2,309	-20.2%
71.6%	11,421	9,103	-2,317	-20.3%
72.8%	10,763	8,426	-2,337	-21.7%
74.1%	10,583	8,262	-2,321	-21.9%
75.3%	10,432	7,754	-2,678	-25.7%
76.5%	9,748	7,594	-2,155	-22.1%
77.8%	9,235	7,551	-1,684	-18.2%
79.0%	8,404	7,540	-864	-10.3%
80.2%	7,978	7,509	-469	-5.9%
81.5%	7,953	7,351	-602	-7.6%
82.7%	7,624	7,083	-542	-7.1%
84.0%	7,578	7,004	-574	-7.6%
85.2%	7,358	6,726	-632	-8.6%
86.4%	7,198	6,467	-731	-10.2%
87.7%	7,116	6,222	-894	-12.6%
88.9%	7,079	6,097	-982	-13.9%
90.1%	6,995	5,947	-1,049	-15.0%
91.4%	6,894	5,880	-1,014	-14.7%
92.6%	6,869	5,608	-1,261	-18.4%
93.8%	6,295	5,549	-746	-11.9%
95.1%	6,292	5,541	-750	-11.9%
96.3%	6,018	5,505	-514	-8.5%
97.5%	5,468	5,471	3	0.1%
98.8%	5,455	5,407	-48	-0.9%
100.0%	4,811	5,139	328	6.8%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	92,868	92,863	-5	0.0%
1.2%	86,098	84,343	-1,755	-2.0%
2.5%	74,842	75,009	167	0.2%
3.7%	54,125	54,124	-1	0.0%
4.9%	52,872	51,152	-1,720	-3.3%
6.2%	52,605	46,779	-5,826	-11.1%
7.4%	46,530	41,232	-5,298	-11.4%
8.6%	45,204	40,580	-4,623	-10.2%
9.9%	41,476	40,070	-1,407	-3.4%
11.1%	41,275	38,553	-2,722	-6.6%
12.3%	38,542	36,003	-2,539	-6.6%
13.6%	35,894	35,589	-305	-0.9%
14.8%	32,796	30,000	-2,796	-8.5%
16.0%	30,000	29,308	-692	-2.3%
17.3%	30,000	28,870	-1,130	-3.8%
18.5%	29,377	28,060	-1,317	-4.5%
19.8%	28,372	28,010	-362	-1.3%
21.0%	28,003	26,537	-1,466	-5.2%
22.2%	25,768	25,797	29	0.1%
23.5%	25,733	25,728	-5	0.0%
24.7%	24,950	24,141	-809	-3.2%
25.9%	24,160	21,711	-2,449	-10.1%
27.2%	23,932	21,181	-2,751	-11.5%
28.4%	23,574	20,959	-2,616	-11.1%
29.6%	21,388	20,381	-1,007	-4.7%
30.9%	21,343	18,615	-2,728	-12.8%
32.1%	20,044	17,023	-3,021	-15.1%
33.3%	19,297	16,906	-2,391	-12.4%
34.6%	18,901	16,451	-2,450	-13.0%
35.8%	18,580	16,395	-2,186	-11.8%
37.0%	17,792	16,073	-1,719	-9.7%
38.3%	17,731	15,403	-2,329	-13.1%
39.5%	17,065	15,282	-1,783	-10.4%
40.7%	17,031	14,462	-2,568	-15.1%
42.0%	16,496	14,456	-2,040	-12.4%
43.2%	16,445	14,401	-2,044	-12.4%
44.4%	16,387	14,344	-2,043	-12.5%
45.7%	16,244	12,455	-3,789	-23.3%
46.9%	16,107	12,026	-4,082	-25.3%
48.1%	15,414	11,962	-3,452	-22.4%
49.4%	15,397	11,903	-3,494	-22.7%
50.6%	15,115	11,829	-3,286	-21.7%
51.9%	14,204	10,936	-3,268	-23.0%
53.1%	13,720	10,096	-3,624	-26.4%
54.3%	13,123	10,079	-3,043	-23.2%
55.6%	13,120	9,950	-3,170	-24.2%
56.8%	13,019	9,878	-3,141	-24.1%
58.0%	12,381	9,672	-2,709	-21.9%
59.3%	12,043	9,170	-2,873	-23.9%
60.5%	11,753	9,102	-2,651	-22.6%
61.7%	11,041	9,078	-1,962	-17.8%
63.0%	10,867	8,971	-1,896	-17.4%
64.2%	10,446	8,917	-1,529	-14.6%
65.4%	10,408	8,709	-1,699	-16.3%
66.7%	10,339	8,665	-1,675	-16.2%
67.9%	10,326	8,531	-1,795	-17.4%
69.1%	9,989	8,387	-1,602	-16.0%
70.4%	9,987	8,290	-1,696	-17.0%
71.6%	9,876	8,208	-1,668	-16.9%
72.8%	9,687	8,057	-1,630	-16.8%
74.1%	9,610	7,943	-1,668	-17.4%
75.3%	9,206	7,787	-1,419	-15.4%
76.5%	8,865	7,727	-1,139	-12.8%
77.8%	8,752	7,686	-1,066	-12.2%
79.0%	8,543	7,390	-1,153	-13.5%
80.2%	8,538	7,028	-1,510	-17.7%
81.5%	8,183	6,960	-1,223	-14.9%
82.7%	8,019	6,811	-1,208	-15.1%
84.0%	7,975	6,789	-1,186	-14.9%
85.2%	7,911	6,758	-1,153	-14.6%
86.4%	7,865	6,723	-1,142	-14.5%
87.7%	7,389	6,675	-715	-9.7%
88.9%	7,027	6,475	-552	-7.9%
90.1%	6,552	6,305	-247	-3.8%
91.4%	6,441	6,202	-239	-3.7%
92.6%	6,309	6,137	-172	-2.7%
93.8%	6,119	6,041	-78	-1.3%
95.1%	6,103	5,937	-166	-2.7%
96.3%	6,012	5,921	-91	-1.5%
97.5%	5,613	5,899	286	5.1%
98.8%	5,582	5,580	-2	0.0%
100.0%	5,528	5,376	-151	-2.7%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	51,060	47,460	-3,600	-7.1%
1.2%	42,964	42,920	-44	-0.1%
2.5%	42,600	42,591	-8	0.0%
3.7%	40,199	40,196	-4	0.0%
4.9%	30,248	30,254	6	0.0%
6.2%	27,165	27,179	13	0.0%
7.4%	27,132	27,134	3	0.0%
8.6%	24,272	24,299	28	0.1%
9.9%	23,042	20,251	-2,791	-12.1%
11.1%	21,965	19,286	-2,680	-12.2%
12.3%	19,936	18,925	-1,011	-5.1%
13.6%	19,273	17,117	-2,156	-11.2%
14.8%	18,938	16,830	-2,108	-11.1%
16.0%	17,530	16,604	-926	-5.3%
17.3%	16,833	14,846	-1,988	-11.8%
18.5%	16,604	14,513	-2,091	-12.6%
19.8%	16,236	14,413	-1,823	-11.2%
21.0%	15,897	13,571	-2,326	-14.6%
22.2%	15,837	13,334	-2,503	-15.8%
23.5%	14,513	13,110	-1,403	-9.7%
24.7%	13,047	13,044	-3	0.0%
25.9%	11,470	11,625	154	1.3%
27.2%	10,921	11,409	488	4.5%
28.4%	10,636	10,534	-102	-1.0%
29.6%	10,618	10,517	-102	-1.0%
30.9%	9,811	9,837	25	0.3%
32.1%	9,786	9,677	-109	-1.1%
33.3%	9,288	9,346	58	0.6%
34.6%	8,672	8,370	-301	-3.5%
35.8%	8,505	8,191	-314	-3.7%
37.0%	8,492	7,613	-879	-10.4%
38.3%	8,124	7,073	-1,051	-12.9%
39.5%	7,581	7,065	-516	-6.8%
40.7%	7,321	7,043	-278	-3.8%
42.0%	7,141	6,971	-170	-2.4%
43.2%	7,019	6,936	-83	-1.2%
44.4%	6,963	6,923	-40	-0.6%
45.7%	6,939	6,906	-33	-0.5%
46.9%	6,907	6,874	-34	-0.5%
48.1%	6,902	6,829	-73	-1.1%
49.4%	6,730	6,759	29	0.4%
50.6%	6,718	6,731	13	0.2%
51.9%	6,654	6,718	64	1.0%
53.1%	6,611	6,706	95	1.4%
54.3%	6,608	6,703	95	1.4%
55.6%	6,494	6,686	192	3.0%
56.8%	6,472	6,660	188	2.9%
58.0%	6,466	6,658	192	3.0%
59.3%	6,455	6,616	161	2.5%
60.5%	6,445	6,603	158	2.4%
61.7%	6,442	6,581	139	2.2%
63.0%	6,407	6,451	44	0.7%
64.2%	6,315	6,441	126	2.0%
65.4%	6,312	6,424	112	1.8%
66.7%	6,295	6,385	90	1.4%
67.9%	6,275	6,372	98	1.6%
69.1%	6,252	6,372	120	1.9%
70.4%	6,222	6,351	129	2.1%
71.6%	6,191	6,304	113	1.8%
72.8%	6,137	6,226	88	1.4%
74.1%	6,133	6,214	81	1.3%
75.3%	6,101	6,165	63	1.0%
76.5%	6,083	6,161	78	1.3%
77.8%	6,080	6,096	16	0.3%
79.0%	6,021	6,081	60	1.0%
80.2%	5,926	6,067	140	2.4%
81.5%	5,767	6,056	289	5.0%
82.7%	5,705	5,843	138	2.4%
84.0%	5,675	5,726	51	0.9%
85.2%	5,636	5,697	61	1.1%
86.4%	5,378	5,672	294	5.5%
87.7%	5,355	5,664	309	5.8%
88.9%	5,336	5,644	309	5.8%
90.1%	5,319	5,400	81	1.5%
91.4%	5,200	5,356	156	3.0%
92.6%	5,192	5,206	14	0.3%
93.8%	5,187	5,151	-36	-0.7%
95.1%	5,153	5,143	-9	-0.2%
96.3%	4,973	5,131	157	3.2%
97.5%	4,934	5,014	80	1.6%
98.8%	4,853	4,898	45	0.9%
100.0%	4,679	4,642	-37	-0.8%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,531	23,304	-227	-1.0%
1.2%	23,087	21,584	-1,504	-6.5%
2.5%	18,973	18,977	4	0.0%
3.7%	18,375	16,051	-2,324	-12.6%
4.9%	13,998	13,897	-101	-0.7%
6.2%	13,963	13,811	-152	-1.1%
7.4%	12,971	12,807	-164	-1.3%
8.6%	12,057	11,929	-128	-1.1%
9.9%	11,854	8,937	-2,917	-24.6%
11.1%	8,559	8,833	274	3.2%
12.3%	8,339	8,777	439	5.3%
13.6%	8,114	8,151	37	0.5%
14.8%	8,088	7,999	-89	-1.1%
16.0%	7,723	7,884	161	2.1%
17.3%	7,577	7,868	291	3.8%
18.5%	7,301	7,354	53	0.7%
19.8%	7,279	7,279	0	0.0%
21.0%	7,188	6,997	-191	-2.7%
22.2%	7,157	6,852	-304	-4.3%
23.5%	7,122	6,837	-285	-4.0%
24.7%	7,010	6,801	-208	-3.0%
25.9%	6,997	6,677	-320	-4.6%
27.2%	6,962	6,645	-317	-4.6%
28.4%	6,896	6,643	-253	-3.7%
29.6%	6,892	6,614	-278	-4.0%
30.9%	6,864	6,612	-251	-3.7%
32.1%	6,828	6,604	-224	-3.3%
33.3%	6,738	6,589	-149	-2.2%
34.6%	6,736	6,537	-199	-2.9%
35.8%	6,685	6,527	-158	-2.4%
37.0%	6,667	6,514	-154	-2.3%
38.3%	6,613	6,500	-113	-1.7%
39.5%	6,609	6,438	-171	-2.6%
40.7%	6,603	6,427	-177	-2.7%
42.0%	6,587	6,419	-168	-2.6%
43.2%	6,564	6,383	-182	-2.8%
44.4%	6,490	6,334	-156	-2.4%
45.7%	6,483	6,307	-176	-2.7%
46.9%	6,414	6,267	-147	-2.3%
48.1%	6,382	6,262	-120	-1.9%
49.4%	6,269	6,225	-43	-0.7%
50.6%	6,263	6,180	-83	-1.3%
51.9%	6,162	6,127	-35	-0.6%
53.1%	6,135	6,116	-19	-0.3%
54.3%	6,106	6,113	7	0.1%
55.6%	6,102	6,038	-64	-1.1%
56.8%	6,076	6,026	-50	-0.8%
58.0%	6,074	6,014	-59	-1.0%
59.3%	6,037	5,996	-41	-0.7%
60.5%	5,998	5,965	-33	-0.6%
61.7%	5,992	5,934	-58	-1.0%
63.0%	5,970	5,903	-67	-1.1%
64.2%	5,948	5,900	-48	-0.8%
65.4%	5,877	5,869	-8	-0.1%
66.7%	5,873	5,860	-13	-0.2%
67.9%	5,864	5,858	-7	-0.1%
69.1%	5,862	5,853	-9	-0.2%
70.4%	5,852	5,815	-37	-0.6%
71.6%	5,848	5,790	-57	-1.0%
72.8%	5,811	5,782	-30	-0.5%
74.1%	5,808	5,773	-35	-0.6%
75.3%	5,805	5,768	-37	-0.6%
76.5%	5,803	5,740	-63	-1.1%
77.8%	5,673	5,738	65	1.1%
79.0%	5,667	5,626	-41	-0.7%
80.2%	5,666	5,482	-184	-3.3%
81.5%	5,654	5,456	-198	-3.5%
82.7%	5,417	5,410	-7	-0.1%
84.0%	5,378	5,338	-40	-0.7%
85.2%	5,368	5,330	-38	-0.7%
86.4%	5,347	5,314	-34	-0.6%
87.7%	5,336	5,289	-47	-0.9%
88.9%	5,078	5,260	182	3.6%
90.1%	4,972	5,109	137	2.8%
91.4%	4,911	4,983	72	1.5%
92.6%	4,862	4,973	111	2.3%
93.8%	4,818	4,852	34	0.7%
95.1%	4,814	4,851	37	0.8%
96.3%	4,792	4,833	41	0.9%
97.5%	4,720	4,712	-8	-0.2%
98.8%	4,664	4,636	-28	-0.6%
100.0%	4,553	4,522	-31	-0.7%

Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow

Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,013	17,820	807	4.7%
1.2%	11,191	11,753	562	5.0%
2.5%	10,600	11,416	817	7.7%
3.7%	10,069	10,936	867	8.6%
4.9%	9,986	10,831	845	8.5%
6.2%	9,897	10,770	873	8.8%
7.4%	9,870	10,595	725	7.3%
8.6%	9,797	10,309	511	5.2%
9.9%	9,746	10,302	557	5.7%
11.1%	9,575	10,252	677	7.1%
12.3%	9,407	10,148	742	7.9%
13.6%	9,246	10,054	808	8.7%
14.8%	9,187	10,019	832	9.1%
16.0%	9,084	9,983	898	9.9%
17.3%	9,064	9,910	845	9.3%
18.5%	9,009	9,895	886	9.8%
19.8%	8,999	9,784	784	8.7%
21.0%	8,988	9,664	677	7.5%
22.2%	8,805	9,435	630	7.2%
23.5%	8,781	9,359	579	6.6%
24.7%	8,745	9,323	578	6.6%
25.9%	8,666	9,292	626	7.2%
27.2%	8,614	9,251	637	7.4%
28.4%	8,525	9,248	723	8.5%
29.6%	8,514	9,216	702	8.2%
30.9%	8,494	9,108	614	7.2%
32.1%	8,442	9,081	639	7.6%
33.3%	8,400	9,005	605	7.2%
34.6%	8,395	8,947	552	6.6%
35.8%	8,393	8,927	534	6.4%
37.0%	8,341	8,906	564	6.8%
38.3%	8,191	8,877	686	8.4%
39.5%	8,108	8,664	556	6.9%
40.7%	8,064	8,628	563	7.0%
42.0%	8,037	8,581	544	6.8%
43.2%	7,823	8,565	742	9.5%
44.4%	7,782	8,559	777	10.0%
45.7%	7,761	8,551	790	10.2%
46.9%	7,751	8,520	769	9.9%
48.1%	7,726	8,497	771	10.0%
49.4%	7,698	8,467	768	10.0%
50.6%	7,674	8,395	721	9.4%
51.9%	7,669	8,365	695	9.1%
53.1%	7,646	8,306	660	8.6%
54.3%	7,566	8,283	717	9.5%
55.6%	7,527	8,280	753	10.0%
56.8%	7,523	8,249	726	9.7%
58.0%	7,498	8,193	695	9.3%
59.3%	7,480	8,142	662	8.9%
60.5%	7,445	8,091	645	8.7%
61.7%	7,441	8,044	603	8.1%
63.0%	7,428	8,041	613	8.2%
64.2%	7,410	7,849	439	5.9%
65.4%	7,377	7,806	429	5.8%
66.7%	7,343	7,676	333	4.5%
67.9%	7,296	7,652	357	4.9%
69.1%	7,282	7,648	366	5.0%
70.4%	7,276	7,614	338	4.6%
71.6%	7,274	7,472	197	2.7%
72.8%	7,219	7,438	218	3.0%
74.1%	7,160	7,321	161	2.3%
75.3%	7,151	7,314	162	2.3%
76.5%	7,139	7,278	139	1.9%
77.8%	7,139	7,161	22	0.3%
79.0%	6,834	7,110	276	4.0%
80.2%	6,829	7,093	263	3.9%
81.5%	6,737	7,072	335	5.0%
82.7%	6,705	7,026	320	4.8%
84.0%	6,699	7,012	313	4.7%
85.2%	6,697	7,010	313	4.7%
86.4%	6,679	7,003	323	4.8%
87.7%	6,642	6,988	346	5.2%
88.9%	6,619	6,866	247	3.7%
90.1%	6,608	6,812	204	3.1%
91.4%	6,573	6,803	230	3.5%
92.6%	6,327	6,770	443	7.0%
93.8%	6,280	6,696	416	6.6%
95.1%	5,711	6,630	919	16.1%
96.3%	5,665	6,625	959	16.9%
97.5%	5,428	6,616	1,188	21.9%
98.8%	5,426	6,600	1,174	21.6%
100.0%	5,313	6,545	1,232	23.2%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,903	17,139	5,236	44.0%
1.2%	11,577	17,120	5,543	47.9%
2.5%	11,419	13,822	2,404	21.0%
3.7%	11,261	13,634	2,373	21.1%
4.9%	11,174	13,427	2,253	20.2%
6.2%	11,174	13,259	2,085	18.7%
7.4%	11,070	13,063	1,993	18.0%
8.6%	10,907	12,965	2,058	18.9%
9.9%	10,876	12,950	2,074	19.1%
11.1%	10,862	12,928	2,066	19.0%
12.3%	10,810	12,867	2,057	19.0%
13.6%	10,730	12,860	2,131	19.9%
14.8%	10,686	12,800	2,114	19.8%
16.0%	10,663	12,769	2,106	19.8%
17.3%	10,601	12,715	2,114	19.9%
18.5%	10,583	12,679	2,095	19.8%
19.8%	10,565	12,482	1,917	18.1%
21.0%	10,532	12,398	1,866	17.7%
22.2%	10,493	12,373	1,881	17.9%
23.5%	10,478	12,216	1,739	16.6%
24.7%	10,459	12,199	1,740	16.6%
25.9%	10,445	12,183	1,738	16.6%
27.2%	10,444	12,048	1,604	15.4%
28.4%	10,425	12,042	1,616	15.5%
29.6%	10,408	12,023	1,614	15.5%
30.9%	10,404	11,964	1,560	15.0%
32.1%	10,404	11,939	1,535	14.8%
33.3%	10,395	11,848	1,453	14.0%
34.6%	10,392	11,801	1,409	13.6%
35.8%	10,369	11,725	1,356	13.1%
37.0%	10,344	11,703	1,359	13.1%
38.3%	10,337	11,700	1,362	13.2%
39.5%	10,306	11,522	1,216	11.8%
40.7%	10,260	11,384	1,124	11.0%
42.0%	10,251	11,293	1,043	10.2%
43.2%	10,222	11,258	1,036	10.1%
44.4%	10,211	11,243	1,032	10.1%
45.7%	10,169	11,207	1,039	10.2%
46.9%	10,153	11,105	952	9.4%
48.1%	10,135	10,956	822	8.1%
49.4%	10,123	10,863	740	7.3%
50.6%	10,085	10,759	674	6.7%
51.9%	10,042	10,688	646	6.4%
53.1%	10,032	10,668	636	6.3%
54.3%	9,998	10,605	607	6.1%
55.6%	9,949	10,593	644	6.5%
56.8%	9,911	10,586	675	6.8%
58.0%	9,871	10,586	714	7.2%
59.3%	9,808	10,569	761	7.8%
60.5%	9,782	10,482	701	7.2%
61.7%	9,754	10,470	716	7.3%
63.0%	9,742	10,434	691	7.1%
64.2%	9,675	10,332	657	6.8%
65.4%	9,535	10,274	739	7.7%
66.7%	9,516	10,259	743	7.8%
67.9%	9,479	10,129	651	6.9%
69.1%	9,356	10,046	690	7.4%
70.4%	9,236	9,898	662	7.2%
71.6%	9,218	9,832	614	6.7%
72.8%	9,138	9,739	601	6.6%
74.1%	9,118	9,668	550	6.0%
75.3%	9,019	9,592	573	6.4%
76.5%	8,871	9,461	590	6.7%
77.8%	8,867	9,367	500	5.6%
79.0%	8,772	9,017	245	2.8%
80.2%	8,746	8,945	199	2.3%
81.5%	8,601	8,931	330	3.8%
82.7%	8,488	8,863	375	4.4%
84.0%	8,416	8,815	399	4.7%
85.2%	8,292	8,795	503	6.1%
86.4%	8,098	8,657	559	6.9%
87.7%	8,080	8,612	532	6.6%
88.9%	7,668	8,453	785	10.2%
90.1%	7,574	8,398	824	10.9%
91.4%	7,546	8,377	831	11.0%
92.6%	7,496	8,324	828	11.0%
93.8%	7,415	8,159	744	10.0%
95.1%	7,396	8,002	606	8.2%
96.3%	7,164	7,914	750	10.5%
97.5%	7,049	7,685	636	9.0%
98.8%	6,760	7,144	384	5.7%
100.0%	5,834	7,031	1,197	20.5%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,843	11,726	883	8.1%
1.2%	10,294	10,553	259	2.5%
2.5%	9,847	10,399	551	5.6%
3.7%	9,363	10,343	980	10.5%
4.9%	9,010	10,317	1,307	14.5%
6.2%	9,001	9,884	882	9.8%
7.4%	8,943	9,833	890	10.0%
8.6%	8,799	9,767	969	11.0%
9.9%	8,720	9,437	718	8.2%
11.1%	8,717	9,316	599	6.9%
12.3%	8,431	8,999	568	6.7%
13.6%	8,299	8,971	672	8.1%
14.8%	8,224	8,938	714	8.7%
16.0%	8,107	8,937	830	10.2%
17.3%	8,068	8,689	621	7.7%
18.5%	7,970	8,648	678	8.5%
19.8%	7,755	8,610	855	11.0%
21.0%	7,683	8,604	921	12.0%
22.2%	7,658	8,600	942	12.3%
23.5%	7,642	8,454	811	10.6%
24.7%	7,623	8,433	810	10.6%
25.9%	7,611	8,184	573	7.5%
27.2%	7,560	8,089	529	7.0%
28.4%	7,549	8,088	539	7.1%
29.6%	7,427	7,973	546	7.4%
30.9%	7,303	7,894	591	8.1%
32.1%	7,231	7,893	662	9.2%
33.3%	7,225	7,799	573	7.9%
34.6%	7,193	7,783	590	8.2%
35.8%	7,000	7,779	779	11.1%
37.0%	6,992	7,757	765	10.9%
38.3%	6,985	7,708	723	10.4%
39.5%	6,814	7,603	790	11.6%
40.7%	6,716	7,597	881	13.1%
42.0%	6,672	7,591	919	13.8%
43.2%	6,659	7,547	888	13.3%
44.4%	6,642	7,515	874	13.2%
45.7%	6,634	7,482	848	12.8%
46.9%	6,612	7,464	852	12.9%
48.1%	6,579	7,456	878	13.3%
49.4%	6,565	7,426	861	13.1%
50.6%	6,547	7,413	866	13.2%
51.9%	6,547	7,349	803	12.3%
53.1%	6,542	7,275	733	11.2%
54.3%	6,538	7,235	697	10.7%
55.6%	6,531	7,230	699	10.7%
56.8%	6,509	7,221	712	10.9%
58.0%	6,485	7,206	720	11.1%
59.3%	6,453	7,185	732	11.3%
60.5%	6,409	7,179	770	12.0%
61.7%	6,270	7,058	787	12.6%
63.0%	6,246	6,987	741	11.9%
64.2%	6,196	6,966	770	12.4%
65.4%	6,176	6,954	778	12.6%
66.7%	6,146	6,924	777	12.6%
67.9%	6,144	6,890	747	12.2%
69.1%	6,142	6,886	745	12.1%
70.4%	6,140	6,886	746	12.1%
71.6%	6,136	6,835	699	11.4%
72.8%	6,124	6,716	593	9.7%
74.1%	6,107	6,692	584	9.6%
75.3%	6,105	6,672	567	9.3%
76.5%	6,099	6,658	558	9.2%
77.8%	6,083	6,655	572	9.4%
79.0%	5,994	6,643	648	10.8%
80.2%	5,974	6,639	665	11.1%
81.5%	5,937	6,635	699	11.8%
82.7%	5,925	6,634	709	12.0%
84.0%	5,903	6,616	713	12.1%
85.2%	5,878	6,616	737	12.5%
86.4%	5,829	6,591	762	13.1%
87.7%	5,751	6,562	811	14.1%
88.9%	5,732	6,551	819	14.3%
90.1%	5,718	6,550	831	14.5%
91.4%	5,669	6,549	881	15.5%
92.6%	5,616	6,540	924	16.4%
93.8%	5,595	6,526	931	16.6%
95.1%	5,563	6,523	960	17.3%
96.3%	5,142	6,521	1,379	26.8%
97.5%	5,058	6,458	1,399	27.7%
98.8%	4,871	6,442	1,572	32.3%
100.0%	4,796	6,187	1,390	29.0%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,382	15,541	159	1.0%
1.2%	15,311	15,318	7	0.0%
2.5%	15,305	15,299	-6	0.0%
3.7%	15,278	15,288	9	0.1%
4.9%	15,250	15,269	20	0.1%
6.2%	15,228	15,268	40	0.3%
7.4%	15,224	15,257	32	0.2%
8.6%	15,133	15,211	79	0.5%
9.9%	14,825	15,121	296	2.0%
11.1%	14,741	14,934	193	1.3%
12.3%	14,713	14,845	132	0.9%
13.6%	13,832	14,739	907	6.6%
14.8%	13,353	14,310	957	7.2%
16.0%	13,144	14,166	1,022	7.8%
17.3%	13,142	13,800	658	5.0%
18.5%	12,945	13,550	605	4.7%
19.8%	12,321	13,367	1,046	8.5%
21.0%	11,779	13,190	1,411	12.0%
22.2%	11,737	12,765	1,028	8.8%
23.5%	11,513	11,834	322	2.8%
24.7%	11,392	11,572	180	1.6%
25.9%	11,266	11,478	212	1.9%
27.2%	11,246	11,369	123	1.1%
28.4%	11,054	11,259	205	1.9%
29.6%	11,017	11,183	165	1.5%
30.9%	10,969	11,076	107	1.0%
32.1%	10,808	10,875	67	0.6%
33.3%	9,812	10,262	450	4.6%
34.6%	9,390	9,778	388	4.1%
35.8%	9,056	9,762	706	7.8%
37.0%	8,989	9,380	391	4.3%
38.3%	8,846	9,349	503	5.7%
39.5%	8,619	9,299	680	7.9%
40.7%	8,617	9,122	505	5.9%
42.0%	7,597	8,966	1,369	18.0%
43.2%	7,416	8,949	1,533	20.7%
44.4%	7,092	8,448	1,356	19.1%
45.7%	7,071	8,147	1,077	15.2%
46.9%	7,068	8,050	983	13.9%
48.1%	7,032	8,001	969	13.8%
49.4%	7,019	7,757	738	10.5%
50.6%	6,946	7,722	776	11.2%
51.9%	6,746	7,711	965	14.3%
53.1%	6,720	7,534	814	12.1%
54.3%	6,662	7,533	871	13.1%
55.6%	6,375	7,530	1,155	18.1%
56.8%	6,315	7,496	1,181	18.7%
58.0%	6,219	7,467	1,248	20.1%
59.3%	5,884	7,441	1,557	26.5%
60.5%	5,872	7,407	1,535	26.2%
61.7%	5,730	7,223	1,493	26.1%
63.0%	5,712	7,166	1,453	25.4%
64.2%	5,673	7,108	1,435	25.3%
65.4%	5,630	7,032	1,402	24.9%
66.7%	5,574	7,005	1,431	25.7%
67.9%	5,409	6,973	1,564	28.9%
69.1%	5,314	6,891	1,577	29.7%
70.4%	5,272	6,853	1,581	30.0%
71.6%	5,267	6,791	1,524	28.9%
72.8%	5,175	6,742	1,567	30.3%
74.1%	5,115	6,633	1,518	29.7%
75.3%	5,114	6,576	1,462	28.6%
76.5%	4,982	6,541	1,559	31.3%
77.8%	4,910	6,540	1,630	33.2%
79.0%	4,908	6,492	1,585	32.3%
80.2%	4,876	6,467	1,591	32.6%
81.5%	4,727	6,431	1,704	36.0%
82.7%	4,688	6,383	1,695	36.2%
84.0%	4,620	6,374	1,754	38.0%
85.2%	4,614	6,321	1,707	37.0%
86.4%	4,495	6,253	1,758	39.1%
87.7%	4,449	6,243	1,794	40.3%
88.9%	4,399	5,935	1,536	34.9%
90.1%	4,386	5,843	1,457	33.2%
91.4%	4,321	5,714	1,393	32.2%
92.6%	4,276	5,518	1,241	29.0%
93.8%	4,261	5,404	1,142	26.8%
95.1%	4,081	5,400	1,319	32.3%
96.3%	3,999	5,359	1,361	34.0%
97.5%	3,870	5,358	1,488	38.5%
98.8%	3,867	4,907	1,040	26.9%
100.0%	3,580	4,694	1,113	31.1%

Figure SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

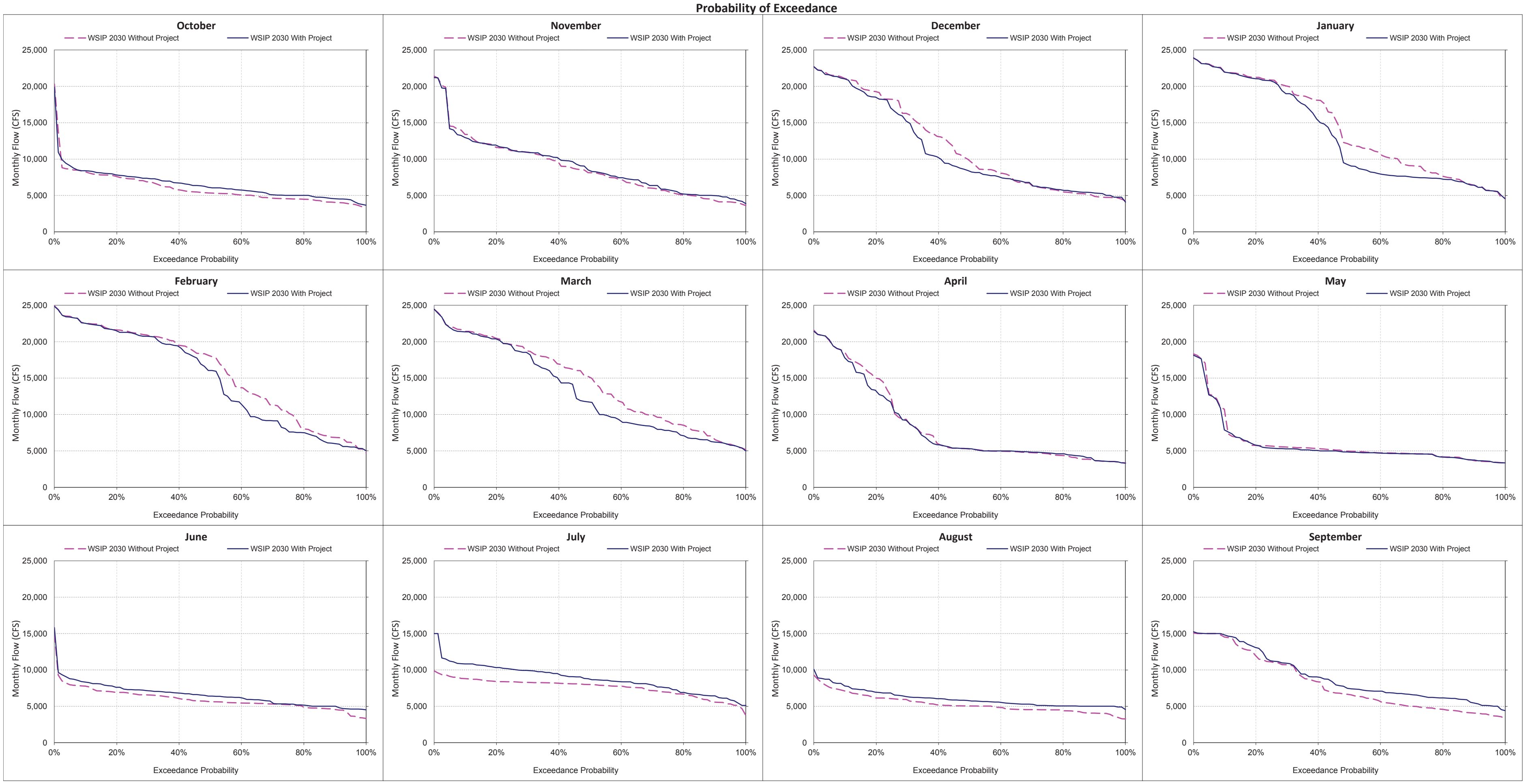


Table SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,327	19,905	-421	-2.1%
1.2%	13,897	10,940	-2,957	-21.3%
2.5%	8,816	9,908	1,092	12.4%
3.7%	8,680	9,436	756	8.7%
4.9%	8,631	9,116	485	5.6%
6.2%	8,502	8,752	250	2.9%
7.4%	8,491	8,518	26	0.3%
8.6%	8,381	8,416	35	0.4%
9.9%	8,264	8,396	132	1.6%
11.1%	8,079	8,383	305	3.8%
12.3%	7,950	8,291	341	4.3%
13.6%	7,892	8,169	277	3.5%
14.8%	7,821	8,130	309	4.0%
16.0%	7,811	8,051	240	3.1%
17.3%	7,803	8,003	200	2.6%
18.5%	7,759	7,966	207	2.7%
19.8%	7,637	7,835	197	2.6%
21.0%	7,477	7,767	290	3.9%
22.2%	7,431	7,710	280	3.8%
23.5%	7,309	7,622	313	4.3%
24.7%	7,278	7,573	296	4.1%
25.9%	7,260	7,560	300	4.1%
27.2%	7,050	7,480	430	6.1%
28.4%	7,038	7,379	341	4.8%
29.6%	6,870	7,358	488	7.1%
30.9%	6,870	7,292	422	6.1%
32.1%	6,680	7,280	600	9.0%
33.3%	6,502	7,181	678	10.4%
34.6%	6,281	7,016	734	11.7%
35.8%	6,178	6,991	813	13.2%
37.0%	6,172	6,970	798	12.9%
38.3%	5,901	6,776	875	14.8%
39.5%	5,794	6,713	919	15.9%
40.7%	5,724	6,683	958	16.7%
42.0%	5,609	6,577	968	17.3%
43.2%	5,532	6,527	995	18.0%
44.4%	5,507	6,386	879	16.0%
45.7%	5,483	6,351	868	15.8%
46.9%	5,420	6,325	905	16.7%
48.1%	5,381	6,267	886	16.5%
49.4%	5,347	6,122	775	14.5%
50.6%	5,328	6,048	720	13.5%
51.9%	5,284	6,047	763	14.4%
53.1%	5,270	6,037	767	14.5%
54.3%	5,267	5,961	694	13.2%
55.6%	5,255	5,906	651	12.4%
56.8%	5,241	5,906	664	12.7%
58.0%	5,135	5,789	653	12.7%
59.3%	5,083	5,750	667	13.1%
60.5%	5,050	5,740	690	13.7%
61.7%	5,033	5,666	633	12.6%
63.0%	5,030	5,604	574	11.4%
64.2%	4,957	5,553	597	12.0%
65.4%	4,865	5,480	614	12.6%
66.7%	4,718	5,441	723	15.3%
67.9%	4,715	5,326	611	13.0%
69.1%	4,649	5,136	487	10.5%
70.4%	4,613	5,072	459	9.9%
71.6%	4,588	5,040	452	9.8%
72.8%	4,574	5,036	461	10.1%
74.1%	4,562	5,000	438	9.6%
75.3%	4,544	5,000	456	10.0%
76.5%	4,513	5,000	487	10.8%
77.8%	4,512	5,000	488	10.8%
79.0%	4,507	5,000	493	10.9%
80.2%	4,471	5,000	529	11.8%
81.5%	4,461	4,997	536	12.0%
82.7%	4,423	4,871	448	10.1%
84.0%	4,315	4,774	459	10.6%
85.2%	4,294	4,757	464	10.8%
86.4%	4,111	4,712	601	14.6%
87.7%	4,091	4,672	581	14.2%
88.9%	4,078	4,577	500	12.3%
90.1%	4,050	4,537	487	12.0%
91.4%	4,017	4,516	499	12.4%
92.6%	3,988	4,507	519	13.0%
93.8%	3,909	4,464	555	14.2%
95.1%	3,795	4,409	614	16.2%
96.3%	3,769	4,109	339	9.0%
97.5%	3,625	3,883	258	7.1%
98.8%	3,437	3,760	322	9.4%
100.0%	3,254	3,658	404	12.4%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,401	21,213	-189	-0.9%
1.2%	21,119	21,157	38	0.2%
2.5%	20,126	19,796	-329	-1.6%
3.7%	19,877	19,715	-162	-0.8%
4.9%	14,552	14,198	-355	-2.4%
6.2%	14,478	13,996	-482	-3.3%
7.4%	14,145	13,347	-798	-5.6%
8.6%	13,998	13,263	-736	-5.3%
9.9%	13,392	12,982	-410	-3.1%
11.1%	13,382	12,800	-582	-4.3%
12.3%	12,833	12,437	-396	-3.1%
13.6%	12,432	12,326	-106	-0.9%
14.8%	12,160	12,220	60	0.5%
16.0%	12,120	12,196	77	0.6%
17.3%	12,111	12,012	-99	-0.8%
18.5%	12,010	11,944	-66	-0.6%
19.8%	11,633	11,932	299	2.6%
21.0%	11,554	11,686	132	1.1%
22.2%	11,549	11,601	51	0.4%
23.5%	11,369	11,533	164	1.4%
24.7%	11,166	11,263	97	0.9%
25.9%	11,160	11,129	-31	-0.3%
27.2%	11,142	11,008	-134	-1.2%
28.4%	11,009	11,008	-1	0.0%
29.6%	10,949	10,974	24	0.2%
30.9%	10,890	10,900	10	0.1%
32.1%	10,758	10,872	115	1.1%
33.3%	10,618	10,865	247	2.3%
34.6%	10,560	10,519	-41	-0.4%
35.8%	10,024	10,464	440	4.4%
37.0%	10,015	10,446	431	4.3%
38.3%	9,802	10,263	461	4.7%
39.5%	9,765	10,234	470	4.8%
40.7%	9,013	9,820	807	9.0%
42.0%	8,991	9,779	788	8.8%
43.2%	8,963	9,764	801	8.9%
44.4%	8,740	9,664	924	10.6%
45.7%	8,631	9,292	661	7.7%
46.9%	8,561	9,082	521	6.1%
48.1%	8,498	9,061	563	6.6%
49.4%	8,133	8,502	368	4.5%
50.6%	8,119	8,312	193	2.4%
51.9%	8,111	8,263	152	1.9%
53.1%	7,968	8,162	193	2.4%
54.3%	7,865	8,040	175	2.2%
55.6%	7,527	7,901	374	5.0%
56.8%	7,463	7,697	235	3.1%
58.0%	7,430	7,663	234	3.1%
59.3%	7,216	7,429	213	3.0%
60.5%	7,126	7,425	299	4.2%
61.7%	6,796	7,286	490	7.2%
63.0%	6,728	7,213	485	7.2%
64.2%	6,653	7,150	497	7.5%
65.4%	6,404	7,147	743	11.6%
66.7%	6,316	6,754	438	6.9%
67.9%	6,064	6,693	629	10.4%
69.1%	6,015	6,378	363	6.0%
70.4%	5,996	6,361	365	6.1%
71.6%	5,914	6,360	446	7.5%
72.8%	5,698	5,880	182	3.2%
74.1%	5,691	5,876	185	3.2%
75.3%	5,510	5,774	264	4.8%
76.5%	5,377	5,661	284	5.3%
77.8%	5,221	5,558	337	6.5%
79.0%	5,119	5,254	135	2.6%
80.2%	5,064	5,183	118	2.3%
81.5%	5,047	5,144	96	1.9%
82.7%	4,985	5,115	130	2.6%
84.0%	4,934	5,106	171	3.5%
85.2%	4,772	5,000	228	4.8%
86.4%	4,570	5,000	430	9.4%
87.7%	4,529	5,000	471	10.4%
88.9%	4,520	4,997	478	10.6%
90.1%	4,286	4,985	700	16.3%
91.4%	4,131	4,929	798	19.3%
92.6%	4,122	4,784	662	16.1%
93.8%	4,119	4,781	662	16.1%
95.1%	4,113	4,551	438	10.6%
96.3%	4,050	4,518	468	11.6%
97.5%	4,010	4,298	288	7.2%
98.8%	3,794	4,182	389	10.2%
100.0%	3,613	3,878	265	7.3%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	22,689	22,704	15	0.1%
1.2%	22,252	22,238	-13	-0.1%
2.5%	22,188	22,135	-53	-0.2%
3.7%	21,903	21,634	-269	-1.2%
4.9%	21,572	21,600	28	0.1%
6.2%	21,503	21,394	-109	-0.5%
7.4%	21,495	21,357	-138	-0.6%
8.6%	21,326	21,151	-175	-0.8%
9.9%	21,097	21,022	-75	-0.4%
11.1%	20,946	20,865	-81	-0.4%
12.3%	20,849	20,072	-777	-3.7%
13.6%	20,763	19,756	-1,007	-4.8%
14.8%	19,917	19,489	-427	-2.1%
16.0%	19,578	19,201	-376	-1.9%
17.3%	19,499	18,696	-803	-4.1%
18.5%	19,349	18,558	-791	-4.1%
19.8%	19,297	18,546	-750	-3.9%
21.0%	19,139	18,256	-884	-4.6%
22.2%	18,259	18,216	-43	-0.2%
23.5%	18,251	18,129	-122	-0.7%
24.7%	18,228	17,050	-1,177	-6.5%
25.9%	18,210	16,570	-1,640	-9.0%
27.2%	18,018	16,144	-1,874	-10.4%
28.4%	16,303	15,945	-358	-2.2%
29.6%	16,291	15,203	-1,088	-6.7%
30.9%	16,049	14,909	-1,141	-7.1%
32.1%	15,410	13,723	-1,686	-10.9%
33.3%	15,000	13,021	-1,979	-13.2%
34.6%	14,712	12,694	-2,018	-13.7%
35.8%	14,024	10,765	-3,258	-23.2%
37.0%	13,660	10,573	-3,087	-22.6%
38.3%	13,516	10,472	-3,044	-22.5%
39.5%	13,143	10,322	-2,821	-21.5%
40.7%	13,042	9,996	-3,046	-23.4%
42.0%	12,845	9,449	-3,396	-26.4%
43.2%	12,298	9,395	-2,902	-23.6%
44.4%	11,838	9,097	-2,740	-23.1%
45.7%	10,766	8,988	-1,778	-16.5%
46.9%	10,623	8,759	-1,865	-17.6%
48.1%	10,280	8,601	-1,679	-16.3%
49.4%	9,980	8,450	-1,531	-15.3%
50.6%	9,553	8,215	-1,338	-14.0%
51.9%	9,122	8,140	-982	-10.8%
53.1%	8,608	8,137	-471	-5.5%
54.3%	8,582	7,894	-689	-8.0%
55.6%	8,563	7,848	-715	-8.4%
56.8%	8,554	7,715	-839	-9.8%
58.0%	8,411	7,714	-697	-8.3%
59.3%	8,066	7,565	-501	-6.2%
60.5%	8,040	7,407	-634	-7.9%
61.7%	7,932	7,314	-619	-7.8%
63.0%	7,700	7,301	-399	-5.2%
64.2%	7,061	7,124	63	0.9%
65.4%	6,831	7,031	200	2.9%
66.7%	6,782	6,921	139	2.1%
67.9%	6,726	6,805	79	1.2%
69.1%	6,712	6,792	80	1.2%
70.4%	6,204	6,285	81	1.3%
71.6%	6,172	6,246	74	1.2%
72.8%	6,087	6,131	43	0.7%
74.1%	6,010	6,121	111	1.9%
75.3%	5,833	6,031	198	3.4%
76.5%	5,801	5,938	136	2.3%
77.8%	5,751	5,848	97	1.7%
79.0%	5,606	5,800	194	3.5%
80.2%	5,470	5,707	237	4.3%
81.5%	5,442	5,689	247	4.5%
82.7%	5,384	5,591	207	3.9%
84.0%	5,269	5,543	274	5.2%
85.2%	5,264	5,485	220	4.2%
86.4%	5,254	5,443	189	3.6%
87.7%	5,182	5,426	244	4.7%
88.9%	5,106	5,421	315	6.2%
90.1%	4,864	5,331	466	9.6%
91.4%	4,796	5,291	494	10.3%
92.6%	4,763	5,257	494	10.4%
93.8%	4,730	5,000	270	5.7%
95.1%	4,728	5,000	272	5.7%
96.3%	4,684	4,767	83	1.8%
97.5%	4,671	4,750	79	1.7%
98.8%	4,496	4,748	252	5.6%
100.0%	4,267	4,092	-174	-4.1%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,870	23,905	35	0.1%
1.2%	23,606	23,601	-5	0.0%
2.5%	23,200	23,130	-70	-0.3%
3.7%	23,162	23,089	-73	-0.3%
4.9%	23,060	23,027	-32	-0.1%
6.2%	22,809	22,693	-116	-0.5%
7.4%	22,617	22,644	27	0.1%
8.6%	22,611	22,536	-74	-0.3%
9.9%	21,987	21,963	-23	-0.1%
11.1%	21,895	21,891	-4	0.0%
12.3%	21,867	21,794	-73	-0.3%
13.6%	21,815	21,751	-65	-0.3%
14.8%	21,678	21,542	-136	-0.6%
16.0%	21,626	21,388	-238	-1.1%
17.3%	21,359	21,250	-108	-0.5%
18.5%	21,269	21,126	-143	-0.7%
19.8%	21,237	21,053	-184	-0.9%
21.0%	21,234	21,023	-211	-1.0%
22.2%	21,045	20,854	-192	-0.9%
23.5%	20,965	20,816	-148	-0.7%
24.7%	20,877	20,770	-107	-0.5%
25.9%	20,832	20,563	-269	-1.3%
27.2%	20,323	20,210	-113	-0.6%
28.4%	20,209	19,426	-783	-3.9%
29.6%	20,061	18,996	-1,065	-5.3%
30.9%	19,942	18,983	-960	-4.8%
32.1%	18,954	18,754	-200	-1.1%
33.3%	18,749	18,081	-668	-3.6%
34.6%	18,708	17,666	-1,042	-5.6%
35.8%	18,647	17,423	-1,223	-6.6%
37.0%	18,436	16,894	-1,542	-8.4%
38.3%	18,211	16,317	-1,894	-10.4%
39.5%	18,106	15,495	-2,611	-14.4%
40.7%	18,069	15,000	-3,069	-17.0%
42.0%	17,623	14,813	-2,810	-15.9%
43.2%	16,484	14,347	-2,137	-13.0%
44.4%	16,379	13,296	-3,083	-18.8%
45.7%	15,357	12,791	-2,565	-16.7%
46.9%	14,288	11,628	-2,660	-18.6%
48.1%	12,280	9,490	-2,789	-22.7%
49.4%	12,141	9,256	-2,884	-23.8%
50.6%	11,900	9,041	-2,859	-24.0%
51.9%	11,780	9,016	-2,764	-23.5%
53.1%	11,741	8,691	-3,050	-26.0%
54.3%	11,519	8,568	-2,950	-25.6%
55.6%	11,439	8,465	-2,973	-26.0%
56.8%	11,365	8,237	-3,128	-27.5%
58.0%	11,105	8,145	-2,960	-26.7%
59.3%	10,973	8,017	-2,956	-26.9%
60.5%	10,497	7,886	-2,611	-24.9%
61.7%	10,293	7,819	-2,474	-24.0%
63.0%	10,157	7,773	-2,384	-23.5%
64.2%	10,141	7,729	-2,411	-23.8%
65.4%	10,048	7,665	-2,383	-23.7%
66.7%	9,379	7,662	-1,717	-18.3%
67.9%	9,221	7,643	-1,578	-17.1%
69.1%	9,095	7,598	-1,497	-16.5%
70.4%	9,091	7,504	-1,587	-17.5%
71.6%	9,018	7,458	-1,560	-17.3%
72.8%	9,003	7,452	-1,551	-17.2%
74.1%	8,423	7,429	-994	-11.8%
75.3%	8,267	7,392	-875	-10.6%
76.5%	8,100	7,377	-723	-8.9%
77.8%	8,095	7,365	-731	-9.0%
79.0%	7,809	7,329	-480	-6.1%
80.2%	7,606	7,230	-377	-5.0%
81.5%	7,486	7,201	-285	-3.8%
82.7%	7,419	7,176	-243	-3.3%
84.0%	7,275	7,016	-259	-3.6%
85.2%	7,216	6,917	-299	-4.1%
86.4%	6,897	6,855	-42	-0.6%
87.7%	6,676	6,605	-71	-1.1%
88.9%	6,519	6,430	-89	-1.4%
90.1%	6,407	6,413	6	0.1%
91.4%	6,190	6,133	-58	-0.9%
92.6%	6,172	6,120	-52	-0.8%
93.8%	5,705	5,701	-5	-0.1%
95.1%	5,704	5,645	-59	-1.0%
96.3%	5,590	5,634	43	0.8%
97.5%	5,524	5,550	27	0.5%
98.8%	4,677	5,000	323	6.9%
100.0%	4,647	4,534	-112	-2.4%

Table SW-15-b

Sacramento River at Wilken Slough, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,933	24,869	-64	-0.3%
1.2%	24,423	24,383	-40	-0.2%
2.5%	23,600	23,652	52	0.2%
3.7%	23,523	23,422	-101	-0.4%
4.9%	23,500	23,379	-121	-0.5%
6.2%	23,296	23,301	5	0.0%
7.4%	23,223	23,219	-4	0.0%
8.6%	22,671	22,601	-70	-0.3%
9.9%	22,534	22,541	7	0.0%
11.1%	22,490	22,424	-66	-0.3%
12.3%	22,442	22,357	-85	-0.4%
13.6%	22,430	22,276	-153	-0.7%
14.8%	22,341	22,225	-115	-0.5%
16.0%	21,989	21,830	-160	-0.7%
17.3%	21,797	21,750	-47	-0.2%
18.5%	21,685	21,686	1	0.0%
19.8%	21,628	21,541	-87	-0.4%
21.0%	21,598	21,298	-301	-1.4%
22.2%	21,491	21,286	-205	-1.0%
23.5%	21,438	21,283	-156	-0.7%
24.7%	21,257	21,209	-48	-0.2%
25.9%	21,193	21,073	-120	-0.6%
27.2%	21,112	20,868	-243	-1.2%
28.4%	20,992	20,761	-231	-1.1%
29.6%	20,936	20,753	-184	-0.9%
30.9%	20,748	20,707	-41	-0.2%
32.1%	20,722	20,662	-60	-0.3%
33.3%	20,662	20,150	-512	-2.5%
34.6%	20,535	19,795	-741	-3.6%
35.8%	20,419	19,643	-777	-3.8%
37.0%	20,174	19,634	-540	-2.7%
38.3%	20,115	19,519	-597	-3.0%
39.5%	19,547	19,440	-107	-0.5%
40.7%	19,460	19,075	-385	-2.0%
42.0%	19,391	18,497	-893	-4.6%
43.2%	19,104	18,308	-796	-4.2%
44.4%	18,787	17,999	-787	-4.2%
45.7%	18,413	17,768	-644	-3.5%
46.9%	18,358	16,939	-1,419	-7.7%
48.1%	18,347	16,634	-1,713	-9.3%
49.4%	18,133	16,056	-2,076	-11.5%
50.6%	17,937	16,052	-1,885	-10.5%
51.9%	17,757	15,936	-1,822	-10.3%
53.1%	16,944	14,823	-2,121	-12.5%
54.3%	16,461	12,780	-3,680	-22.4%
55.6%	15,526	12,524	-3,002	-19.3%
56.8%	15,218	11,881	-3,337	-21.9%
58.0%	13,871	11,823	-2,049	-14.8%
59.3%	13,693	11,740	-1,952	-14.3%
60.5%	13,662	11,154	-2,508	-18.4%
61.7%	13,241	10,571	-2,669	-20.2%
63.0%	12,891	9,713	-3,177	-24.6%
64.2%	12,775	9,700	-3,075	-24.1%
65.4%	12,555	9,537	-3,018	-24.0%
66.7%	12,230	9,241	-2,989	-24.4%
67.9%	12,161	9,180	-2,980	-24.5%
69.1%	11,329	9,168	-2,161	-19.1%
70.4%	11,317	9,129	-2,187	-19.3%
71.6%	11,196	9,120	-2,076	-18.5%
72.8%	10,622	8,242	-2,381	-22.4%
74.1%	10,615	8,052	-2,563	-24.1%
75.3%	10,154	7,611	-2,542	-25.0%
76.5%	9,894	7,608	-2,285	-23.1%
77.8%	9,189	7,544	-1,644	-17.9%
79.0%	8,248	7,536	-712	-8.6%
80.2%	8,014	7,482	-532	-6.6%
81.5%	7,941	7,298	-643	-8.1%
82.7%	7,656	7,135	-521	-6.8%
84.0%	7,553	6,991	-562	-7.4%
85.2%	7,282	6,594	-688	-9.4%
86.4%	7,118	6,323	-796	-11.2%
87.7%	7,069	6,097	-972	-13.8%
88.9%	6,876	6,052	-824	-12.0%
90.1%	6,847	5,976	-871	-12.7%
91.4%	6,825	5,933	-892	-13.1%
92.6%	6,665	5,606	-1,058	-15.9%
93.8%	6,191	5,600	-591	-9.5%
95.1%	6,181	5,546	-635	-10.3%
96.3%	5,895	5,523	-372	-6.3%
97.5%	5,270	5,366	96	1.8%
98.8%	5,264	5,314	50	1.0%
100.0%	4,732	5,033	300	6.3%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,451	24,452	1	0.0%
1.2%	24,014	23,936	-77	-0.3%
2.5%	23,409	23,400	-9	0.0%
3.7%	22,389	22,399	10	0.0%
4.9%	22,053	21,979	-74	-0.3%
6.2%	21,981	21,629	-353	-1.6%
7.4%	21,729	21,418	-311	-1.4%
8.6%	21,672	21,383	-289	-1.3%
9.9%	21,429	21,371	-58	-0.3%
11.1%	21,428	21,359	-69	-0.3%
12.3%	21,355	21,083	-273	-1.3%
13.6%	21,122	21,029	-93	-0.4%
14.8%	21,052	20,798	-255	-1.2%
16.0%	20,850	20,687	-163	-0.8%
17.3%	20,794	20,624	-170	-0.8%
18.5%	20,720	20,397	-323	-1.6%
19.8%	20,486	20,396	-90	-0.4%
21.0%	20,367	20,185	-182	-0.9%
22.2%	19,758	19,765	6	0.0%
23.5%	19,726	19,726	0	0.0%
24.7%	19,632	19,554	-78	-0.4%
25.9%	19,555	18,808	-747	-3.8%
27.2%	19,424	18,704	-720	-3.7%
28.4%	19,339	18,533	-805	-4.2%
29.6%	18,767	18,529	-238	-1.3%
30.9%	18,661	18,200	-462	-2.5%
32.1%	18,300	16,991	-1,309	-7.2%
33.3%	18,117	16,722	-1,395	-7.7%
34.6%	17,987	16,393	-1,594	-8.9%
35.8%	17,935	16,273	-1,662	-9.3%
37.0%	17,712	16,012	-1,699	-9.6%
38.3%	17,540	15,300	-2,240	-12.8%
39.5%	16,973	15,089	-1,884	-11.1%
40.7%	16,877	14,348	-2,529	-15.0%
42.0%	16,438	14,330	-2,108	-12.8%
43.2%	16,357	14,325	-2,032	-12.4%
44.4%	16,224	14,146	-2,078	-12.8%
45.7%	16,040	12,208	-3,832	-23.9%
46.9%	16,029	11,925	-4,104	-25.6%
48.1%	15,338	11,807	-3,531	-23.0%
49.4%	15,227	11,736	-3,491	-22.9%
50.6%	14,962	11,678	-3,285	-22.0%
51.9%	14,204	10,807	-3,397	-23.9%
53.1%	13,747	9,986	-3,761	-27.4%
54.3%	12,868	9,983	-2,885	-22.4%
55.6%	12,832	9,829	-3,003	-23.4%
56.8%	12,809	9,642	-3,167	-24.7%
58.0%	12,150	9,570	-2,580	-21.2%
59.3%	11,828	9,321	-2,508	-21.2%
60.5%	11,657	8,934	-2,723	-23.4%
61.7%	10,795	8,926	-1,869	-17.3%
63.0%	10,692	8,807	-1,885	-17.6%
64.2%	10,415	8,709	-1,706	-16.4%
65.4%	10,354	8,592	-1,761	-17.0%
66.7%	10,298	8,526	-1,772	-17.2%
67.9%	10,015	8,458	-1,557	-15.5%
69.1%	9,921	8,422	-1,499	-15.1%
70.4%	9,891	8,275	-1,616	-16.3%
71.6%	9,622	7,958	-1,664	-17.3%
72.8%	9,582	7,953	-1,630	-17.0%
74.1%	9,166	7,829	-1,337	-14.6%
75.3%	8,996	7,799	-1,198	-13.3%
76.5%	8,692	7,663	-1,029	-11.8%
77.8%	8,645	7,600	-1,046	-12.1%
79.0%	8,627	7,167	-1,459	-16.9%
80.2%	8,495	7,074	-1,420	-16.7%
81.5%	8,248	6,773	-1,475	-17.9%
82.7%	7,867	6,723	-1,144	-14.5%
84.0%	7,789	6,693	-1,096	-14.1%
85.2%	7,692	6,574	-1,119	-14.5%
86.4%	7,674	6,536	-1,138	-14.8%
87.7%	7,075	6,534	-541	-7.6%
88.9%	7,064	6,263	-801	-11.3%
90.1%	6,532	6,213	-319	-4.9%
91.4%	6,327	6,167	-160	-2.5%
92.6%	6,141	6,106	-35	-0.6%
93.8%	5,924	5,975	50	0.9%
95.1%	5,909	5,768	-141	-2.4%
96.3%	5,726	5,752	26	0.5%
97.5%	5,492	5,571	79	1.4%
98.8%	5,398	5,403	5	0.1%
100.0%	5,167	5,000	-167	-3.2%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,579	21,450	-129	-0.6%
1.2%	21,006	21,008	2	0.0%
2.5%	20,880	20,885	6	0.0%
3.7%	20,794	20,804	10	0.1%
4.9%	20,178	20,301	123	0.6%
6.2%	19,430	19,438	8	0.0%
7.4%	19,067	19,077	9	0.0%
8.6%	18,889	18,919	30	0.2%
9.9%	18,588	17,795	-793	-4.3%
11.1%	17,738	17,314	-424	-2.4%
12.3%	17,439	17,157	-282	-1.6%
13.6%	17,170	15,790	-1,380	-8.0%
14.8%	16,880	15,720	-1,160	-6.9%
16.0%	16,480	15,563	-918	-5.6%
17.3%	15,910	14,019	-1,891	-11.9%
18.5%	15,565	13,431	-2,133	-13.7%
19.8%	15,000	13,343	-1,657	-11.0%
21.0%	14,912	12,717	-2,195	-14.7%
22.2%	14,474	12,564	-1,910	-13.2%
23.5%	13,444	12,024	-1,420	-10.6%
24.7%	12,564	11,742	-822	-6.5%
25.9%	10,118	10,292	174	1.7%
27.2%	9,639	10,077	439	4.6%
28.4%	9,356	9,275	-80	-0.9%
29.6%	9,333	9,216	-116	-1.2%
30.9%	8,629	8,684	55	0.6%
32.1%	8,490	8,362	-128	-1.5%
33.3%	7,957	7,949	-8	-0.1%
34.6%	7,428	7,184	-244	-3.3%
35.8%	7,310	6,866	-444	-6.1%
37.0%	7,264	6,334	-930	-12.8%
38.3%	7,082	5,992	-1,090	-15.4%
39.5%	6,066	5,841	-226	-3.7%
40.7%	5,771	5,807	36	0.6%
42.0%	5,641	5,683	42	0.7%
43.2%	5,450	5,554	104	1.9%
44.4%	5,387	5,403	16	0.3%
45.7%	5,368	5,391	24	0.4%
46.9%	5,340	5,367	27	0.5%
48.1%	5,340	5,332	-8	-0.1%
49.4%	5,284	5,304	20	0.4%
50.6%	5,249	5,271	21	0.4%
51.9%	5,183	5,187	4	0.1%
53.1%	5,123	5,050	-72	-1.4%
54.3%	5,045	5,010	-35	-0.7%
55.6%	5,039	5,001	-38	-0.8%
56.8%	4,982	5,000	18	0.4%
58.0%	4,969	5,000	31	0.6%
59.3%	4,959	5,000	41	0.8%
60.5%	4,952	5,000	48	1.0%
61.7%	4,939	5,000	61	1.2%
63.0%	4,920	5,000	80	1.6%
64.2%	4,909	4,963	54	1.1%
65.4%	4,879	4,931	52	1.1%
66.7%	4,833	4,903	70	1.4%
67.9%	4,799	4,881	82	1.7%
69.1%	4,776	4,870	94	2.0%
70.4%	4,744	4,830	86	1.8%
71.6%	4,732	4,806	74	1.6%
72.8%	4,695	4,795	100	2.1%
74.1%	4,646	4,729	83	1.8%
75.3%	4,609	4,700	91	2.0%
76.5%	4,427	4,675	248	5.6%
77.8%	4,410	4,607	197	4.5%
79.0%	4,379	4,605	226	5.2%
80.2%	4,351	4,596	245	5.6%
81.5%	4,283	4,453	169	4.0%
82.7%	4,120	4,421	301	7.3%
84.0%	4,082	4,365	283	6.9%
85.2%	3,896	4,310	414	10.6%
86.4%	3,858	4,239	381	9.9%
87.7%	3,856	4,084	228	5.9%
88.9%	3,830	4,069	239	6.3%
90.1%	3,635	3,693	57	1.6%
91.4%	3,633	3,651	17	0.5%
92.6%	3,585	3,615	30	0.8%
93.8%	3,581	3,571	-9	-0.3%
95.1%	3,542	3,542	0	0.0%
96.3%	3,535	3,538	3	0.1%
97.5%	3,470	3,487	17	0.5%
98.8%	3,394	3,361	-33	-1.0%
100.0%	3,336	3,329	-7	-0.2%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,327	18,148	-179	-1.0%
1.2%	18,119	17,909	-210	-1.2%
2.5%	17,656	17,660	4	0.0%
3.7%	17,056	15,000	-2,056	-12.1%
4.9%	12,777	12,682	-95	-0.7%
6.2%	12,628	12,472	-156	-1.2%
7.4%	12,167	12,008	-159	-1.3%
8.6%	10,993	10,868	-125	-1.1%
9.9%	10,728	7,867	-2,861	-26.7%
11.1%	7,335	7,606	271	3.7%
12.3%	7,005	7,344	338	4.8%
13.6%	6,904	6,894	-10	-0.1%
14.8%	6,757	6,805	48	0.7%
16.0%	6,359	6,508	149	2.3%
17.3%	6,353	6,322	-30	-0.5%
18.5%	5,765	6,019	255	4.4%
19.8%	5,756	5,803	47	0.8%
21.0%	5,727	5,709	-17	-0.3%
22.2%	5,710	5,479	-231	-4.0%
23.5%	5,703	5,432	-271	-4.8%
24.7%	5,672	5,394	-278	-4.9%
25.9%	5,623	5,362	-261	-4.6%
27.2%	5,575	5,321	-254	-4.6%
28.4%	5,565	5,313	-252	-4.5%
29.6%	5,538	5,290	-248	-4.5%
30.9%	5,498	5,285	-213	-3.9%
32.1%	5,478	5,280	-198	-3.6%
33.3%	5,432	5,254	-178	-3.3%
34.6%	5,431	5,138	-293	-5.4%
35.8%	5,419	5,135	-283	-5.2%
37.0%	5,409	5,133	-276	-5.1%
38.3%	5,359	5,069	-290	-5.4%
39.5%	5,347	5,057	-289	-5.4%
40.7%	5,293	5,005	-289	-5.5%
42.0%	5,250	5,000	-250	-4.8%
43.2%	5,198	5,000	-198	-3.8%
44.4%	5,186	5,000	-186	-3.6%
45.7%	5,115	5,000	-115	-2.2%
46.9%	5,108	4,930	-178	-3.5%
48.1%	4,969	4,868	-101	-2.0%
49.4%	4,956	4,842	-114	-2.3%
50.6%	4,953	4,827	-126	-2.5%
51.9%	4,941	4,822	-119	-2.4%
53.1%	4,915	4,779	-136	-2.8%
54.3%	4,885	4,761	-124	-2.5%
55.6%	4,815	4,760	-55	-1.1%
56.8%	4,799	4,740	-58	-1.2%
58.0%	4,754	4,736	-18	-0.4%
59.3%	4,733	4,727	-6	-0.1%
60.5%	4,728	4,667	-62	-1.3%
61.7%	4,725	4,663	-62	-1.3%
63.0%	4,715	4,639	-76	-1.6%
64.2%	4,696	4,630	-66	-1.4%
65.4%	4,686	4,622	-64	-1.4%
66.7%	4,676	4,620	-55	-1.2%
67.9%	4,657	4,613	-44	-1.0%
69.1%	4,630	4,612	-18	-0.4%
70.4%	4,622	4,602	-20	-0.4%
71.6%	4,601	4,583	-19	-0.4%
72.8%	4,590	4,565	-25	-0.5%
74.1%	4,590	4,565	-24	-0.5%
75.3%	4,555	4,550	-6	-0.1%
76.5%	4,550	4,537	-13	-0.3%
77.8%	4,324	4,286	-38	-0.9%
79.0%	4,212	4,163	-49	-1.2%
80.2%	4,167	4,135	-32	-0.8%
81.5%	4,165	4,101	-64	-1.5%
82.7%	4,155	4,098	-56	-1.4%
84.0%	4,131	4,081	-51	-1.2%
85.2%	4,129	4,008	-121	-2.9%
86.4%	3,921	3,936	15	0.4%
87.7%	3,782	3,822	40	1.1%
88.9%	3,778	3,735	-44	-1.2%
90.1%	3,663	3,731	68	1.9%
91.4%	3,583	3,642	59	1.7%
92.6%	3,569	3,626	57	1.6%
93.8%	3,542	3,590	48	1.4%
95.1%	3,522	3,564	42	1.2%
96.3%	3,457	3,442	-15	-0.4%
97.5%	3,418	3,393	-25	-0.7%
98.8%	3,377	3,350	-27	-0.8%
100.0%	3,354	3,349	-4	-0.1%

Table SW-15-b

Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,000	15,813	813	5.4%
1.2%	9,298	9,660	363	3.9%
2.5%	8,473	9,325	852	10.1%
3.7%	8,201	9,070	869	10.6%
4.9%	7,966	8,785	819	10.3%
6.2%	7,884	8,708	824	10.5%
7.4%	7,861	8,586	725	9.2%
8.6%	7,798	8,401	603	7.7%
9.9%	7,779	8,333	554	7.1%
11.1%	7,664	8,245	582	7.6%
12.3%	7,350	8,103	753	10.2%
13.6%	7,126	8,102	977	13.7%
14.8%	7,116	8,082	966	13.6%
16.0%	7,072	7,909	837	11.8%
17.3%	7,037	7,820	783	11.1%
18.5%	6,993	7,791	799	11.4%
19.8%	6,905	7,624	719	10.4%
21.0%	6,904	7,599	695	10.1%
22.2%	6,901	7,371	469	6.8%
23.5%	6,854	7,292	438	6.4%
24.7%	6,731	7,283	552	8.2%
25.9%	6,682	7,264	581	8.7%
27.2%	6,584	7,253	670	10.2%
28.4%	6,579	7,223	644	9.8%
29.6%	6,566	7,161	595	9.1%
30.9%	6,540	7,120	580	8.9%
32.1%	6,507	7,056	548	8.4%
33.3%	6,465	7,049	584	9.0%
34.6%	6,406	7,013	607	9.5%
35.8%	6,322	6,943	622	9.8%
37.0%	6,275	6,922	647	10.3%
38.3%	6,236	6,850	614	9.9%
39.5%	6,105	6,813	709	11.6%
40.7%	6,001	6,807	806	13.4%
42.0%	5,932	6,725	792	13.4%
43.2%	5,918	6,706	788	13.3%
44.4%	5,787	6,628	842	14.5%
45.7%	5,753	6,611	858	14.9%
46.9%	5,725	6,554	830	14.5%
48.1%	5,720	6,497	777	13.6%
49.4%	5,643	6,415	772	13.7%
50.6%	5,622	6,393	771	13.7%
51.9%	5,619	6,366	747	13.3%
53.1%	5,612	6,363	752	13.4%
54.3%	5,577	6,275	699	12.5%
55.6%	5,506	6,257	751	13.6%
56.8%	5,502	6,252	750	13.6%
58.0%	5,487	6,219	731	13.3%
59.3%	5,445	6,207	762	14.0%
60.5%	5,441	6,102	661	12.2%
61.7%	5,433	5,944	510	9.4%
63.0%	5,424	5,926	503	9.3%
64.2%	5,409	5,900	491	9.1%
65.4%	5,394	5,888	494	9.2%
66.7%	5,391	5,815	424	7.9%
67.9%	5,342	5,764	422	7.9%
69.1%	5,316	5,722	406	7.6%
70.4%	5,307	5,376	69	1.3%
71.6%	5,302	5,341	39	0.7%
72.8%	5,268	5,325	58	1.1%
74.1%	5,236	5,322	86	1.6%
75.3%	5,223	5,277	54	1.0%
76.5%	5,182	5,276	95	1.8%
77.8%	5,124	5,191	67	1.3%
79.0%	5,092	5,176	84	1.7%
80.2%	4,832	5,154	321	6.6%
81.5%	4,793	5,073	280	5.8%
82.7%	4,747	5,000	253	5.3%
84.0%	4,745	5,000	255	5.4%
85.2%	4,704	5,000	296	6.3%
86.4%	4,696	5,000	304	6.5%
87.7%	4,655	5,000	345	7.4%
88.9%	4,645	5,000	355	7.6%
90.1%	4,554	5,000	446	9.8%
91.4%	4,486	4,780	294	6.6%
92.6%	4,464	4,673	209	4.7%
93.8%	4,179	4,660	481	11.5%
95.1%	3,641	4,632	990	27.2%
96.3%	3,626	4,627	1,001	27.6%
97.5%	3,437	4,609	1,172	34.1%
98.8%	3,411	4,598	1,187	34.8%
100.0%	3,323	4,502	1,180	35.5%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,868	15,000	5,132	52.0%
1.2%	9,576	15,000	5,424	56.6%
2.5%	9,347	11,630	2,283	24.4%
3.7%	9,330	11,493	2,163	23.2%
4.9%	9,113	11,208	2,095	23.0%
6.2%	9,000	11,105	2,104	23.4%
7.4%	8,997	10,884	1,886	21.0%
8.6%	8,837	10,845	2,008	22.7%
9.9%	8,799	10,821	2,022	23.0%
11.1%	8,770	10,810	2,040	23.3%
12.3%	8,716	10,805	2,089	24.0%
13.6%	8,704	10,690	1,987	22.8%
14.8%	8,648	10,661	2,013	23.3%
16.0%	8,558	10,626	2,068	24.2%
17.3%	8,496	10,494	1,999	23.5%
18.5%	8,465	10,434	1,968	23.3%
19.8%	8,414	10,331	1,917	22.8%
21.0%	8,383	10,316	1,933	23.1%
22.2%	8,380	10,202	1,822	21.7%
23.5%	8,377	10,180	1,803	21.5%
24.7%	8,372	10,104	1,732	20.7%
25.9%	8,352	10,020	1,669	20.0%
27.2%	8,318	9,951	1,633	19.6%
28.4%	8,295	9,933	1,638	19.7%
29.6%	8,284	9,931	1,647	19.9%
30.9%	8,273	9,897	1,624	19.6%
32.1%	8,252	9,874	1,621	19.6%
33.3%	8,248	9,769	1,520	18.4%
34.6%	8,244	9,751	1,506	18.3%
35.8%	8,235	9,649	1,414	17.2%
37.0%	8,227	9,639	1,412	17.2%
38.3%	8,210	9,503	1,293	15.7%
39.5%	8,178	9,488	1,309	16.0%
40.7%	8,144	9,239	1,094	13.4%
42.0%	8,126	9,189	1,063	13.1%
43.2%	8,098	9,081	982	12.1%
44.4%	8,089	9,061	972	12.0%
45.7%	8,088	9,043	955	11.8%
46.9%	8,062	9,022	960	11.9%
48.1%	8,009	8,817	807	10.1%
49.4%	7,996	8,804	808	10.1%
50.6%	7,994	8,657	662	8.3%
51.9%	7,946	8,634	688	8.7%
53.1%	7,879	8,609	731	9.3%
54.3%	7,865	8,593	728	9.3%
55.6%	7,838	8,590	752	9.6%
56.8%	7,784	8,466	682	8.8%
58.0%	7,766	8,422	656	8.5%
59.3%	7,760	8,413	653	8.4%
60.5%	7,746	8,376	631	8.1%
61.7%	7,644	8,369	725	9.5%
63.0%	7,608	8,358	750	9.9%
64.2%	7,586	8,132	546	7.2%
65.4%	7,559	8,125	565	7.5%
66.7%	7,538	8,101	563	7.5%
67.9%	7,332	8,100	768	10.5%
69.1%	7,180	8,012	832	11.6%
70.4%	7,153	7,906	753	10.5%
71.6%	7,113	7,661	549	7.7%
72.8%	6,996	7,656	660	9.4%
74.1%	6,964	7,576	612	8.8%
75.3%	6,935	7,541	606	8.7%
76.5%	6,835	7,280	445	6.5%
77.8%	6,699	7,245	546	8.1%
79.0%	6,698	6,914	217	3.2%
80.2%	6,662	6,904	242	3.6%
81.5%	6,498	6,767	270	4.1%
82.7%	6,464	6,684	221	3.4%
84.0%	6,268	6,655	387	6.2%
85.2%	6,121	6,600	478	7.8%
86.4%	5,948	6,501	553	9.3%
87.7%	5,899	6,470	572	9.7%
88.9%	5,614	6,449	835	14.9%
90.1%	5,567	6,420	853	15.3%
91.4%	5,535	6,178	643	11.6%
92.6%	5,526	6,123	597	10.8%
93.8%	5,336	6,120	784	14.7%
95.1%	5,319	5,858	539	10.1%
96.3%	5,129	5,760	631	12.3%
97.5%	5,129	5,438	310	6.0%
98.8%	4,670	5,118	448	9.6%
100.0%	3,738	5,101	1,362	36.4%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,282	10,085	803	8.7%
1.2%	8,718	8,914	195	2.2%
2.5%	8,261	8,829	568	6.9%
3.7%	7,918	8,723	805	10.2%
4.9%	7,630	8,712	1,081	14.2%
6.2%	7,429	8,250	821	11.1%
7.4%	7,374	8,152	779	10.6%
8.6%	7,243	8,143	899	12.4%
9.9%	7,113	7,788	676	9.5%
11.1%	7,029	7,708	679	9.7%
12.3%	6,788	7,381	592	8.7%
13.6%	6,737	7,373	636	9.4%
14.8%	6,618	7,289	671	10.1%
16.0%	6,529	7,289	760	11.6%
17.3%	6,491	7,106	615	9.5%
18.5%	6,309	7,086	777	12.3%
19.8%	6,138	6,926	788	12.8%
21.0%	6,130	6,887	757	12.4%
22.2%	6,129	6,845	716	11.7%
23.5%	6,102	6,845	743	12.2%
24.7%	6,047	6,820	774	12.8%
25.9%	6,005	6,524	519	8.6%
27.2%	5,962	6,498	536	9.0%
28.4%	5,947	6,445	498	8.4%
29.6%	5,943	6,332	389	6.5%
30.9%	5,697	6,262	565	9.9%
32.1%	5,662	6,236	574	10.1%
33.3%	5,601	6,212	611	10.9%
34.6%	5,577	6,184	607	10.9%
35.8%	5,473	6,154	681	12.4%
37.0%	5,330	6,141	811	15.2%
38.3%	5,316	6,101	784	14.8%
39.5%	5,203	6,053	850	16.3%
40.7%	5,185	6,052	868	16.7%
42.0%	5,122	6,013	891	17.4%
43.2%	5,116	5,885	770	15.0%
44.4%	5,070	5,880	810	16.0%
45.7%	5,066	5,879	812	16.0%
46.9%	5,065	5,821	756	14.9%
48.1%	5,044	5,817	772	15.3%
49.4%	5,043	5,802	760	15.1%
50.6%	5,035	5,728	693	13.8%
51.9%	5,035	5,710	675	13.4%
53.1%	5,029	5,688	659	13.1%
54.3%	5,025	5,661	636	12.7%
55.6%	5,024	5,644	619	12.3%
56.8%	5,018	5,631	613	12.2%
58.0%	4,857	5,584	727	15.0%
59.3%	4,852	5,573	721	14.9%
60.5%	4,817	5,515	698	14.5%
61.7%	4,623	5,454	831	18.0%
63.0%	4,621	5,398	776	16.8%
64.2%	4,587	5,382	795	17.3%
65.4%	4,562	5,327	764	16.8%
66.7%	4,555	5,303	748	16.4%
67.9%	4,533	5,296	762	16.8%
69.1%	4,530	5,285	755	16.7%
70.4%	4,529	5,272	743	16.4%
71.6%	4,529	5,119	590	13.0%
72.8%	4,517	5,114	597	13.2%
74.1%	4,517	5,103	586	13.0%
75.3%	4,513	5,069	556	12.3%
76.5%	4,511	5,067	556	12.3%
77.8%	4,510	5,059	549	12.2%
79.0%	4,501	5,043	542	12.0%
80.2%	4,379	5,035	656	15.0%
81.5%	4,366	5,034	668	15.3%
82.7%	4,359	5,034	675	15.5%
84.0%	4,297	5,030	733	17.1%
85.2%	4,263	5,025	762	17.9%
86.4%	4,122	5,024	902	21.9%
87.7%	4,073	5,018	944	23.2%
88.9%	4,061	5,000	939	23.1%
90.1%	4,054	5,000	946	23.3%
91.4%	4,029	5,000	971	24.1%
92.6%	4,023	5,000	977	24.3%
93.8%	4,016	5,000	984	24.5%
95.1%	3,878	5,000	1,122	28.9%
96.3%	3,600	5,000	1,400	38.9%
97.5%	3,480	4,914	1,434	41.2%
98.8%	3,288	4,887	1,598	48.6%
100.0%	3,255	4,534	1,279	39.3%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,070	15,238	168	1.1%
1.2%	15,000	15,056	56	0.4%
2.5%	15,000	15,021	21	0.1%
3.7%	15,000	15,000	0	0.0%
4.9%	15,000	15,000	0	0.0%
6.2%	15,000	15,000	0	0.0%
7.4%	15,000	15,000	0	0.0%
8.6%	14,827	15,000	173	1.2%
9.9%	14,524	14,827	303	2.1%
11.1%	14,443	14,656	212	1.5%
12.3%	14,402	14,567	165	1.1%
13.6%	13,554	14,419	864	6.4%
14.8%	13,123	13,907	784	6.0%
16.0%	12,886	13,900	1,014	7.9%
17.3%	12,735	13,543	808	6.3%
18.5%	12,687	13,328	640	5.0%
19.8%	12,038	13,116	1,078	9.0%
21.0%	11,475	12,972	1,497	13.0%
22.2%	11,400	12,439	1,039	9.1%
23.5%	11,164	11,548	383	3.4%
24.7%	11,117	11,249	132	1.2%
25.9%	11,004	11,195	191	1.7%
27.2%	10,980	11,135	155	1.4%
28.4%	10,729	10,965	236	2.2%
29.6%	10,714	10,947	234	2.2%
30.9%	10,676	10,857	180	1.7%
32.1%	10,531	10,599	69	0.7%
33.3%	9,522	10,003	482	5.1%
34.6%	9,147	9,449	303	3.3%
35.8%	8,782	9,449	667	7.6%
37.0%	8,738	9,081	344	3.9%
38.3%	8,549	9,045	497	5.8%
39.5%	8,383	9,041	658	7.9%
40.7%	8,325	8,961	635	7.6%
42.0%	7,264	8,746	1,482	20.4%
43.2%	7,084	8,727	1,643	23.2%
44.4%	6,925	8,404	1,478	21.3%
45.7%	6,821	7,936	1,115	16.3%
46.9%	6,803	7,814	1,011	14.9%
48.1%	6,684	7,762	1,077	16.1%
49.4%	6,648	7,459	811	12.2%
50.6%	6,571	7,416	845	12.9%
51.9%	6,421	7,347	926	14.4%
53.1%	6,355	7,311	956	15.0%
54.3%	6,298	7,208	910	14.5%
55.6%	6,106	7,148	1,041	17.1%
56.8%	6,070	7,100	1,030	17.0%
58.0%	5,952	7,092	1,140	19.2%
59.3%	5,791	7,072	1,281	22.1%
60.5%	5,544	7,069	1,524	27.5%
61.7%	5,477	6,877	1,400	25.6%
63.0%	5,434	6,854	1,420	26.1%
64.2%	5,342	6,830	1,488	27.9%
65.4%	5,250	6,766	1,516	28.9%
66.7%	5,199	6,756	1,557	29.9%
67.9%	5,085	6,690	1,605	31.6%
69.1%	4,996	6,657	1,661	33.2%
70.4%	4,990	6,572	1,581	31.7%
71.6%	4,965	6,539	1,575	31.7%
72.8%	4,865	6,440	1,575	32.4%
74.1%	4,826	6,312	1,487	30.8%
75.3%	4,782	6,212	1,431	29.9%
76.5%	4,763	6,209	1,446	30.4%
77.8%	4,650	6,188	1,539	33.1%
79.0%	4,618	6,153	1,536	33.3%
80.2%	4,566	6,139	1,574	34.5%
81.5%	4,465	6,126	1,662	37.2%
82.7%	4,434	6,068	1,634	36.9%
84.0%	4,405	6,064	1,660	37.7%
85.2%	4,337	5,958	1,621	37.4%
86.4%	4,194	5,919	1,724	41.1%
87.7%	4,142	5,907	1,765	42.6%
88.9%	4,096	5,552	1,456	35.5%
90.1%	4,063	5,439	1,375	33.8%
91.4%	4,048	5,338	1,291	31.9%
92.6%	3,956	5,131	1,175	29.7%
93.8%	3,943	5,112	1,168	29.6%
95.1%	3,795	5,088	1,293	34.1%
96.3%	3,678	5,000	1,322	35.9%
97.5%	3,643	5,000	1,357	37.2%
98.8%	3,561	4,551	990	27.8%
100.0%	3,255	4,420	1,165	35.8%

Figure SW-16-b
Sacramento River at Verona, Monthly Flow
Probability of Exceedance

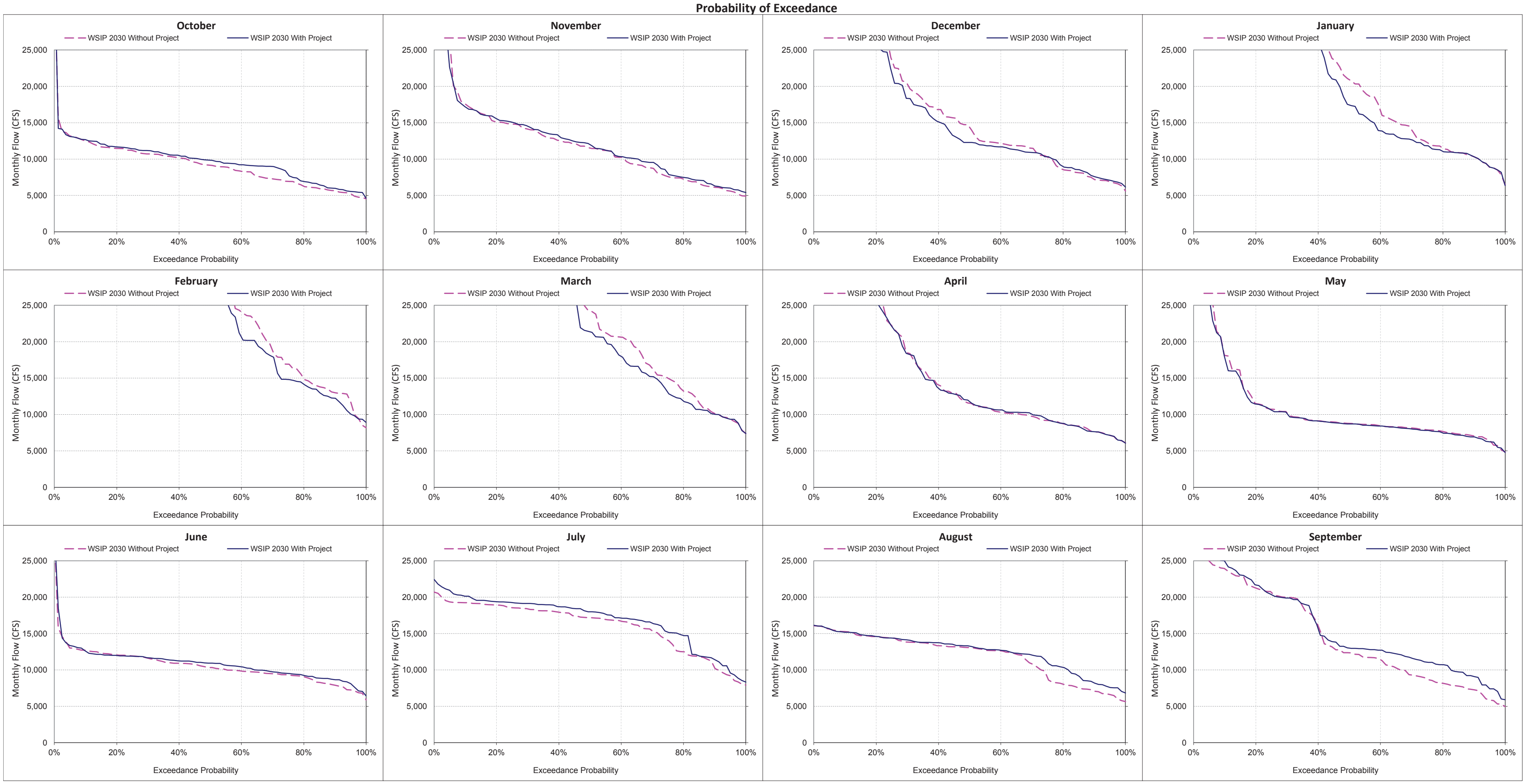


Table SW-16-b
Sacramento River at Verona, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,821	37,322	1,501	4.2%
1.2%	15,686	14,215	-1,470	-9.4%
2.5%	13,779	14,112	333	2.4%
3.7%	13,653	13,372	-280	-2.1%
4.9%	13,179	13,125	-54	-0.4%
6.2%	13,125	13,030	-95	-0.7%
7.4%	12,915	12,905	-10	-0.1%
8.6%	12,705	12,729	23	0.2%
9.9%	12,502	12,684	182	1.5%
11.1%	12,366	12,503	137	1.1%
12.3%	12,095	12,463	367	3.0%
13.6%	11,877	12,432	555	4.7%
14.8%	11,690	12,090	400	3.4%
16.0%	11,631	12,046	415	3.6%
17.3%	11,606	11,755	149	1.3%
18.5%	11,515	11,747	232	2.0%
19.8%	11,471	11,672	201	1.8%
21.0%	11,458	11,663	206	1.8%
22.2%	11,451	11,598	147	1.3%
23.5%	11,233	11,538	305	2.7%
24.7%	11,215	11,424	209	1.9%
25.9%	11,063	11,382	319	2.9%
27.2%	10,847	11,214	367	3.4%
28.4%	10,772	11,173	401	3.7%
29.6%	10,710	11,166	456	4.3%
30.9%	10,708	11,161	453	4.2%
32.1%	10,678	11,010	332	3.1%
33.3%	10,656	11,002	346	3.2%
34.6%	10,503	10,831	327	3.1%
35.8%	10,419	10,708	288	2.8%
37.0%	10,379	10,564	184	1.8%
38.3%	10,289	10,530	241	2.3%
39.5%	10,211	10,528	317	3.1%
40.7%	10,129	10,403	274	2.7%
42.0%	10,069	10,395	326	3.2%
43.2%	9,847	10,165	318	3.2%
44.4%	9,614	10,105	491	5.1%
45.7%	9,516	10,072	556	5.8%
46.9%	9,336	9,979	644	6.9%
48.1%	9,220	9,896	676	7.3%
49.4%	9,181	9,862	681	7.4%
50.6%	9,120	9,845	725	7.9%
51.9%	9,010	9,679	669	7.4%
53.1%	8,953	9,647	694	7.8%
54.3%	8,931	9,439	508	5.7%
55.6%	8,876	9,435	560	6.3%
56.8%	8,689	9,394	704	8.1%
58.0%	8,453	9,370	918	10.9%
59.3%	8,382	9,210	828	9.9%
60.5%	8,287	9,205	918	11.1%
61.7%	8,262	9,147	885	10.7%
63.0%	8,248	9,121	873	10.6%
64.2%	7,798	9,074	1,276	16.4%
65.4%	7,609	9,036	1,427	18.8%
66.7%	7,504	9,032	1,529	20.4%
67.9%	7,373	9,025	1,651	22.4%
69.1%	7,348	9,019	1,671	22.7%
70.4%	7,261	8,978	1,717	23.6%
71.6%	7,191	8,810	1,618	22.5%
72.8%	7,133	8,625	1,493	20.9%
74.1%	6,955	8,387	1,432	20.6%
75.3%	6,935	7,704	769	11.1%
76.5%	6,917	7,483	566	8.2%
77.8%	6,664	7,404	740	11.1%
79.0%	6,490	7,018	528	8.1%
80.2%	6,210	6,902	692	11.1%
81.5%	6,155	6,840	685	11.1%
82.7%	6,107	6,686	579	9.5%
84.0%	6,063	6,658	594	9.8%
85.2%	5,925	6,448	523	8.8%
86.4%	5,915	6,323	409	6.9%
87.7%	5,764	6,046	282	4.9%
88.9%	5,684	5,995	311	5.5%
90.1%	5,658	5,979	321	5.7%
91.4%	5,464	5,849	385	7.0%
92.6%	5,407	5,804	397	7.3%
93.8%	5,367	5,607	240	4.5%
95.1%	5,232	5,546	315	6.0%
96.3%	4,902	5,522	619	12.6%
97.5%	4,761	5,455	694	14.6%
98.8%	4,724	5,407	683	14.5%
100.0%	4,536	4,627	91	2.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,849	42,779	-70	-0.2%
1.2%	40,083	38,654	-1,429	-3.6%
2.5%	32,425	33,897	1,471	4.5%
3.7%	28,898	28,575	-323	-1.1%
4.9%	26,622	22,633	-3,988	-15.0%
6.2%	20,077	20,340	263	1.3%
7.4%	19,332	18,079	-1,254	-6.5%
8.6%	17,954	17,634	-321	-1.8%
9.9%	17,615	17,202	-413	-2.3%
11.1%	17,199	16,851	-348	-2.0%
12.3%	16,900	16,830	-70	-0.4%
13.6%	16,632	16,649	17	0.1%
14.8%	16,312	16,169	-143	-0.9%
16.0%	16,141	16,036	-105	-0.7%
17.3%	16,129	15,959	-169	-1.1%
18.5%	15,300	15,926	626	4.1%
19.8%	15,113	15,600	487	3.2%
21.0%	15,095	15,338	243	1.6%
22.2%	15,026	15,289	264	1.8%
23.5%	14,890	15,216	326	2.2%
24.7%	14,809	15,090	282	1.9%
25.9%	14,807	14,968	162	1.1%
27.2%	14,730	14,763	33	0.2%
28.4%	14,259	14,760	501	3.5%
29.6%	14,170	14,595	425	3.0%
30.9%	14,039	14,354	316	2.2%
32.1%	14,003	14,070	67	0.5%
33.3%	13,686	14,026	340	2.5%
34.6%	13,309	13,746	438	3.3%
35.8%	13,053	13,615	562	4.3%
37.0%	12,895	13,466	571	4.4%
38.3%	12,849	13,410	561	4.4%
39.5%	12,592	13,376	784	6.2%
40.7%	12,493	12,943	450	3.6%
42.0%	12,332	12,806	474	3.8%
43.2%	12,308	12,696	388	3.2%
44.4%	12,122	12,508	386	3.2%
45.7%	12,050	12,378	327	2.7%
46.9%	11,790	12,295	505	4.3%
48.1%	11,780	12,251	472	4.0%
49.4%	11,581	12,150	569	4.9%
50.6%	11,457	11,825	368	3.2%
51.9%	11,456	11,478	22	0.2%
53.1%	11,297	11,417	119	1.1%
54.3%	11,196	11,323	127	1.1%
55.6%	11,193	11,144	-50	-0.4%
56.8%	11,048	11,116	69	0.6%
58.0%	10,289	10,489	201	2.0%
59.3%	10,255	10,371	116	1.1%
60.5%	10,254	10,335	80	0.8%
61.7%	9,649	10,170	521	5.4%
63.0%	9,389	10,166	777	8.3%
64.2%	9,320	10,078	759	8.1%
65.4%	9,207	10,019	812	8.8%
66.7%	9,133	9,689	556	6.1%
67.9%	8,849	9,611	762	8.6%
69.1%	8,818	9,554	736	8.3%
70.4%	8,719	9,533	814	9.3%
71.6%	8,108	9,183	1,074	13.2%
72.8%	7,948	8,678	730	9.2%
74.1%	7,731	8,585	854	11.0%
75.3%	7,550	7,850	300	4.0%
76.5%	7,428	7,745	317	4.3%
77.8%	7,425	7,642	218	2.9%
79.0%	7,411	7,534	123	1.7%
80.2%	7,214	7,481	267	3.7%
81.5%	7,023	7,407	384	5.5%
82.7%	6,893	7,235	342	5.0%
84.0%	6,885	7,113	228	3.3%
85.2%	6,584	7,099	515	7.8%
86.4%	6,373	7,047	674	10.6%
87.7%	6,267	6,647	381	6.1%
88.9%	6,206	6,584	378	6.1%
90.1%	6,118	6,311	193	3.2%
91.4%	6,085	6,232	147	2.4%
92.6%	5,936	6,079	143	2.4%
93.8%	5,664	6,042	378	6.7%
95.1%	5,602	6,013	411	7.3%
96.3%	5,463	5,803	340	6.2%
97.5%	5,175	5,773	598	11.6%
98.8%	4,952	5,548	597	12.0%
100.0%	4,915	5,405	490	10.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	63,175	63,198	24	0.0%
1.2%	59,208	58,954	-253	-0.4%
2.5%	58,367	57,641	-726	-1.2%
3.7%	55,912	55,594	-318	-0.6%
4.9%	53,415	52,335	-1,080	-2.0%
6.2%	47,631	48,067	437	0.9%
7.4%	46,678	44,453	-2,226	-4.8%
8.6%	45,070	43,337	-1,733	-3.8%
9.9%	44,597	42,766	-1,831	-4.1%
11.1%	42,532	42,588	56	0.1%
12.3%	38,081	37,554	-527	-1.4%
13.6%	33,524	33,982	458	1.4%
14.8%	32,942	31,542	-1,400	-4.3%
16.0%	31,617	31,289	-328	-1.0%
17.3%	30,594	30,060	-534	-1.7%
18.5%	30,562	26,635	-3,928	-12.9%
19.8%	30,059	26,494	-3,564	-11.9%
21.0%	27,686	25,244	-2,442	-8.8%
22.2%	27,449	24,765	-2,684	-9.8%
23.5%	26,757	24,719	-2,038	-7.6%
24.7%	23,978	22,418	-1,560	-6.5%
25.9%	22,544	20,425	-2,119	-9.4%
27.2%	22,438	20,375	-2,063	-9.2%
28.4%	20,740	20,143	-597	-2.9%
29.6%	20,609	18,346	-2,264	-11.0%
30.9%	19,661	18,329	-1,332	-6.8%
32.1%	19,212	17,486	-1,726	-9.0%
33.3%	18,908	17,346	-1,562	-8.3%
34.6%	18,414	17,242	-1,173	-6.4%
35.8%	17,745	17,023	-721	-4.1%
37.0%	17,236	16,058	-1,178	-6.8%
38.3%	17,160	15,587	-1,573	-9.2%
39.5%	16,811	15,206	-1,605	-9.5%
40.7%	16,807	14,985	-1,822	-10.8%
42.0%	15,819	14,792	-1,026	-6.5%
43.2%	15,780	13,998	-1,782	-11.3%
44.4%	15,685	13,294	-2,391	-15.2%
45.7%	15,614	13,018	-2,596	-16.6%
46.9%	14,912	12,706	-2,206	-14.8%
48.1%	14,743	12,286	-2,457	-16.7%
49.4%	14,720	12,279	-2,441	-16.6%
50.6%	13,981	12,272	-1,709	-12.2%
51.9%	13,110	12,223	-887	-6.8%
53.1%	12,564	11,967	-597	-4.8%
54.3%	12,432	11,950	-482	-3.9%
55.6%	12,395	11,827	-567	-4.6%
56.8%	12,344	11,823	-521	-4.2%
58.0%	12,285	11,728	-558	-4.5%
59.3%	12,198	11,678	-521	-4.3%
60.5%	12,126	11,675	-451	-3.7%
61.7%	12,015	11,581	-434	-3.6%
63.0%	11,894	11,399	-496	-4.2%
64.2%	11,891	11,328	-563	-4.7%
65.4%	11,841	11,239	-601	-5.1%
66.7%	11,823	11,116	-707	-6.0%
67.9%	11,745	10,960	-785	-6.7%
69.1%	11,524	10,918	-607	-5.3%
70.4%	11,475	10,910	-565	-4.9%
71.6%	10,775	10,848	73	0.7%
72.8%	10,509	10,703	194	1.8%
74.1%	10,476	10,344	-132	-1.3%
75.3%	10,203	10,343	140	1.4%
76.5%	9,942	10,058	116	1.2%
77.8%	9,082	9,872	790	8.7%
79.0%	8,718	9,237	519	5.9%
80.2%	8,515	8,902	387	4.5%
81.5%	8,442	8,841	398	4.7%
82.7%	8,408	8,831	423	5.0%
84.0%	8,183	8,586	404	4.9%
85.2%	8,120	8,545	425	5.2%
86.4%	8,075	8,318	243	3.0%
87.7%	7,639	8,155	516	6.7%
88.9%	7,514	7,750	236	3.1%
90.1%	7,179	7,593	415	5.8%
91.4%	7,136	7,453	317	4.4%
92.6%	7,059	7,304	245	3.5%
93.8%	7,047	7,173	127	1.8%
95.1%	6,882	7,096	214	3.1%
96.3%	6,744	6,955	211	3.1%
97.5%	6,608	6,833	224	3.4%
98.8%	6,316	6,662	346	5.5%
100.0%	5,611	6,148	536	9.6%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	71,981	71,700	-281	-0.4%
1.2%	70,801	70,023	-778	-1.1%
2.5%	65,069	64,474	-596	-0.9%
3.7%	62,945	62,954	9	0.0%
4.9%	60,638	60,569	-69	-0.1%
6.2%	60,379	59,766	-613	-1.0%
7.4%	59,711	59,498	-213	-0.4%
8.6%	58,242	58,039	-203	-0.3%
9.9%	56,426	56,731	306	0.5%
11.1%	56,377	55,995	-382	-0.7%
12.3%	55,267	54,719	-548	-1.0%
13.6%	52,521	52,436	-85	-0.2%
14.8%	52,474	50,816	-1,658	-3.2%
16.0%	51,413	50,724	-689	-1.3%
17.3%	50,461	49,031	-1,430	-2.8%
18.5%	48,786	47,559	-1,227	-2.5%
19.8%	48,748	47,511	-1,237	-2.5%
21.0%	48,744	47,133	-1,611	-3.3%
22.2%	47,966	46,519	-1,447	-3.0%
23.5%	47,090	45,928	-1,162	-2.5%
24.7%	44,673	44,717	44	0.1%
25.9%	44,222	42,372	-1,849	-4.2%
27.2%	41,733	41,532	-201	-0.5%
28.4%	41,609	39,412	-2,197	-5.3%
29.6%	37,802	38,087	285	0.8%
30.9%	35,445	35,147	-298	-0.8%
32.1%	34,611	32,510	-2,101	-6.1%
33.3%	32,786	30,606	-2,180	-6.6%
34.6%	32,398	29,371	-3,027	-9.3%
35.8%	31,253	29,080	-2,173	-7.0%
37.0%	30,699	28,651	-2,047	-6.7%
38.3%	30,661	28,079	-2,582	-8.4%
39.5%	30,335	26,805	-3,530	-11.6%
40.7%	30,223	25,400	-4,823	-16.0%
42.0%	27,896	23,907	-3,989	-14.3%
43.2%	25,120	21,755	-3,366	-13.4%
44.4%	23,854	21,013	-2,841	-11.9%
45.7%	23,487	20,884	-2,604	-11.1%
46.9%	22,677	19,945	-2,732	-12.0%
48.1%	21,563	18,578	-2,985	-13.8%
49.4%	21,088	17,546	-3,541	-16.8%
50.6%	20,761	17,350	-3,411	-16.4%
51.9%	20,330	17,252	-3,078	-15.1%
53.1%	20,317	16,215	-4,102	-20.2%
54.3%	19,428	16,116	-3,312	-17.0%
55.6%	18,903	15,719	-3,184	-16.8%
56.8%	18,570	15,267	-3,303	-17.8%
58.0%	18,569	14,960	-3,608	-19.4%
59.3%	17,552	13,945	-3,607	-20.5%
60.5%	16,000	13,859	-2,141	-13.4%
61.7%	15,831	13,519	-2,312	-14.6%
63.0%	15,538	13,441	-2,096	-13.5%
64.2%	15,285	13,423	-1,862	-12.2%
65.4%	15,030	13,046	-1,984	-13.2%
66.7%	14,720	12,817	-1,904	-12.9%
67.9%	14,674	12,772	-1,902	-13.0%
69.1%	14,548	12,751	-1,797	-12.4%
70.4%	13,769	12,594	-1,175	-8.5%
71.6%	12,953	12,307	-647	-5.0%
72.8%	12,700	12,244	-456	-3.6%
74.1%	12,509	11,854	-654	-5.2%
75.3%	12,189	11,817	-373	-3.1%
76.5%	11,874	11,402	-472	-4.0%
77.8%	11,829	11,342	-487	-4.1%
79.0%	11,794	11,299	-495	-4.2%
80.2%	11,419	10,993	-426	-3.7%
81.5%	11,317	10,985	-332	-2.9%
82.7%	10,985	10,965	-21	-0.2%
84.0%	10,965	10,907	-58	-0.5%
85.2%	10,871	10,868	-4	0.0%
86.4%	10,852	10,845	-8	-0.1%
87.7%	10,619	10,779	160	1.5%
88.9%	10,503	10,537	34	0.3%
90.1%	10,307	10,274	-33	-0.3%
91.4%	10,050	10,084	33	0.3%
92.6%	9,578	9,664	85	0.9%
93.8%	9,426	9,393	-33	-0.4%
95.1%	8,839	8,903	65	0.7%
96.3%	8,797	8,741	-55	-0.6%
97.5%	8,499	8,507	8	0.1%
98.8%	7,842	8,171	329	4.2%
100.0%	6,454	6,365	-88	-1.4%

Table SW-16-b

Sacramento River at Verona, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	75,622	75,618	-4	0.0%
1.2%	69,422	69,543	121	0.2%
2.5%	67,603	67,022	-581	-0.9%
3.7%	66,455	66,174	-281	-0.4%
4.9%	65,722	65,711	-11	0.0%
6.2%	65,087	65,109	22	0.0%
7.4%	64,759	64,271	-488	-0.8%
8.6%	61,203	60,965	-237	-0.4%
9.9%	61,150	60,628	-522	-0.9%
11.1%	60,985	60,524	-460	-0.8%
12.3%	60,858	60,507	-351	-0.6%
13.6%	59,096	58,973	-123	-0.2%
14.8%	58,939	58,473	-466	-0.8%
16.0%	58,336	57,943	-393	-0.7%
17.3%	57,954	57,295	-658	-1.1%
18.5%	57,574	57,228	-345	-0.6%
19.8%	56,757	57,060	302	0.5%
21.0%	56,531	56,759	227	0.4%
22.2%	54,520	53,364	-1,156	-2.1%
23.5%	53,320	52,122	-1,198	-2.2%
24.7%	52,643	51,784	-858	-1.6%
25.9%	52,567	51,486	-1,081	-2.1%
27.2%	50,853	50,546	-307	-0.6%
28.4%	48,664	47,006	-1,658	-3.4%
29.6%	44,962	44,968	6	0.0%
30.9%	44,171	44,257	86	0.2%
32.1%	43,948	43,156	-792	-1.8%
33.3%	43,139	42,776	-363	-0.8%
34.6%	42,756	41,691	-1,065	-2.5%
35.8%	42,685	41,654	-1,031	-2.4%
37.0%	42,365	40,851	-1,513	-3.6%
38.3%	40,271	39,434	-836	-2.1%
39.5%	40,089	37,919	-2,169	-5.4%
40.7%	37,482	37,392	-89	-0.2%
42.0%	37,379	37,337	-42	-0.1%
43.2%	37,282	37,287	5	0.0%
44.4%	37,200	35,863	-1,337	-3.6%
45.7%	36,438	34,940	-1,497	-4.1%
46.9%	35,866	33,293	-2,574	-7.2%
48.1%	33,727	31,192	-2,534	-7.5%
49.4%	29,638	28,699	-939	-3.2%
50.6%	29,499	26,748	-2,751	-9.3%
51.9%	29,444	26,678	-2,766	-9.4%
53.1%	28,949	26,581	-2,368	-8.2%
54.3%	28,496	26,085	-2,411	-8.5%
55.6%	28,326	25,293	-3,033	-10.7%
56.8%	26,918	23,940	-2,979	-11.1%
58.0%	24,564	23,411	-1,153	-4.7%
59.3%	24,341	21,220	-3,122	-12.8%
60.5%	23,917	20,219	-3,698	-15.5%
61.7%	23,588	20,202	-3,386	-14.4%
63.0%	23,531	20,191	-3,341	-14.2%
64.2%	23,024	20,190	-2,835	-12.3%
65.4%	22,162	19,373	-2,789	-12.6%
66.7%	21,087	18,998	-2,088	-9.9%
67.9%	20,224	18,454	-1,770	-8.8%
69.1%	19,691	18,109	-1,581	-8.0%
70.4%	18,392	17,855	-538	-2.9%
71.6%	17,890	15,645	-2,244	-12.5%
72.8%	17,844	14,850	-2,995	-16.8%
74.1%	16,927	14,829	-2,098	-12.4%
75.3%	16,909	14,814	-2,095	-12.4%
76.5%	16,305	14,694	-1,611	-9.9%
77.8%	16,245	14,568	-1,678	-10.3%
79.0%	15,594	14,491	-1,104	-7.1%
80.2%	14,805	14,073	-732	-4.9%
81.5%	14,609	13,764	-845	-5.8%
82.7%	14,237	13,503	-734	-5.2%
84.0%	13,986	13,500	-487	-3.5%
85.2%	13,803	12,984	-819	-5.9%
86.4%	13,693	12,620	-1,073	-7.8%
87.7%	13,502	12,527	-975	-7.2%
88.9%	13,107	12,260	-847	-6.5%
90.1%	12,982	12,225	-756	-5.8%
91.4%	12,907	11,732	-1,175	-9.1%
92.6%	12,892	11,251	-1,641	-12.7%
93.8%	12,801	10,541	-2,261	-17.7%
95.1%	11,719	10,052	-1,668	-14.2%
96.3%	9,944	9,824	-120	-1.2%
97.5%	9,481	9,396	-85	-0.9%
98.8%	8,530	9,331	801	9.4%
100.0%	8,178	8,917	739	9.0%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	72,274	72,271	-4	0.0%
1.2%	69,838	69,160	-677	-1.0%
2.5%	64,683	64,684	0	0.0%
3.7%	61,913	61,165	-748	-1.2%
4.9%	60,665	60,196	-470	-0.8%
6.2%	60,194	59,842	-352	-0.6%
7.4%	59,081	58,369	-712	-1.2%
8.6%	56,439	56,430	-9	0.0%
9.9%	55,161	55,165	4	0.0%
11.1%	54,689	55,136	447	0.8%
12.3%	54,323	54,341	18	0.0%
13.6%	53,837	51,942	-1,896	-3.5%
14.8%	51,145	50,880	-265	-0.5%
16.0%	49,967	49,966	-1	0.0%
17.3%	49,605	49,608	2	0.0%
18.5%	49,028	48,780	-248	-0.5%
19.8%	48,063	47,763	-299	-0.6%
21.0%	46,539	46,243	-296	-0.6%
22.2%	45,456	44,088	-1,368	-3.0%
23.5%	44,990	43,583	-1,407	-3.1%
24.7%	43,724	41,835	-1,889	-4.3%
25.9%	42,910	41,486	-1,424	-3.3%
27.2%	41,580	41,176	-404	-1.0%
28.4%	41,558	39,733	-1,825	-4.4%
29.6%	40,985	38,473	-2,512	-6.1%
30.9%	40,968	37,649	-3,319	-8.1%
32.1%	38,739	36,678	-2,061	-5.3%
33.3%	35,113	34,476	-637	-1.8%
34.6%	34,325	34,279	-46	-0.1%
35.8%	33,379	33,744	365	1.1%
37.0%	33,134	32,979	-154	-0.5%
38.3%	33,024	31,434	-1,590	-4.8%
39.5%	32,182	30,384	-1,798	-5.6%
40.7%	32,092	28,543	-3,549	-11.1%
42.0%	31,483	26,561	-4,922	-15.6%
43.2%	30,378	26,228	-4,150	-13.7%
44.4%	30,367	25,928	-4,439	-14.6%
45.7%	27,895	25,375	-2,520	-9.0%
46.9%	25,983	21,948	-4,035	-15.5%
48.1%	24,995	21,563	-3,432	-13.7%
49.4%	24,310	21,419	-2,890	-11.9%
50.6%	24,153	21,295	-2,858	-11.8%
51.9%	23,797	20,698	-3,100	-13.0%
53.1%	21,726	20,647	-1,079	-5.0%
54.3%	21,400	20,604	-796	-3.7%
55.6%	21,119	19,725	-1,393	-6.6%
56.8%	20,757	19,609	-1,149	-5.5%
58.0%	20,727	18,933	-1,795	-8.7%
59.3%	20,666	18,184	-2,482	-12.0%
60.5%	20,614	17,865	-2,749	-13.3%
61.7%	20,283	17,045	-3,237	-16.0%
63.0%	20,161	16,650	-3,511	-17.4%
64.2%	19,330	16,620	-2,710	-14.0%
65.4%	19,077	16,607	-2,470	-12.9%
66.7%	18,143	15,839	-2,304	-12.7%
67.9%	17,073	15,663	-1,410	-8.3%
69.1%	16,796	15,223	-1,573	-9.4%
70.4%	16,152	15,203	-949	-5.9%
71.6%	15,441	14,839	-603	-3.9%
72.8%	15,373	14,329	-1,044	-6.8%
74.1%	15,234	13,617	-1,617	-10.6%
75.3%	14,926	12,851	-2,075	-13.9%
76.5%	14,641	12,560	-2,082	-14.2%
77.8%	14,364	12,297	-2,067	-14.4%
79.0%	13,602	12,194	-1,408	-10.4%
80.2%	13,139	11,761	-1,377	-10.5%
81.5%	13,127	11,632	-1,495	-11.4%
82.7%	12,848	11,368	-1,479	-11.5%
84.0%	12,349	10,714	-1,635	-13.2%
85.2%	11,492	10,698	-794	-6.9%
86.4%	10,864	10,594	-270	-2.5%
87.7%	10,838	10,561	-277	-2.6%
88.9%	10,389	10,136	-253	-2.4%
90.1%	10,107	10,028	-78	-0.8%
91.4%	9,967	9,996	30	0.3%
92.6%	9,645	9,673	29	0.3%
93.8%	9,578	9,483	-95	-1.0%
95.1%	9,337	9,361	25	0.3%
96.3%	9,048	9,344	295	3.3%
97.5%	8,778	8,833	54	0.6%
98.8%	7,834	7,763	-71	-0.9%
100.0%	7,374	7,385	11	0.1%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,468	59,463	-6	0.0%
1.2%	57,771	57,317	-454	-0.8%
2.5%	57,316	57,161	-155	-0.3%
3.7%	47,484	47,486	3	0.0%
4.9%	47,008	45,585	-1,423	-3.0%
6.2%	45,377	45,372	-4	0.0%
7.4%	41,269	41,898	628	1.5%
8.6%	41,207	41,284	77	0.2%
9.9%	39,892	37,827	-2,065	-5.2%
11.1%	37,776	36,983	-794	-2.1%
12.3%	36,532	36,526	-6	0.0%
13.6%	33,693	33,691	-2	0.0%
14.8%	32,997	32,970	-27	-0.1%
16.0%	31,333	30,452	-882	-2.8%
17.3%	30,937	28,224	-2,713	-8.8%
18.5%	30,533	28,182	-2,351	-7.7%
19.8%	28,499	25,812	-2,686	-9.4%
21.0%	27,937	24,883	-3,053	-10.9%
22.2%	25,013	24,073	-940	-3.8%
23.5%	22,885	23,209	323	1.4%
24.7%	22,363	22,315	-48	-0.2%
25.9%	21,696	21,584	-112	-0.5%
27.2%	21,054	21,106	51	0.2%
28.4%	20,656	19,415	-1,241	-6.0%
29.6%	18,529	18,410	-120	-0.6%
30.9%	18,358	18,233	-125	-0.7%
32.1%	17,425	18,081	655	3.8%
33.3%	16,673	16,626	-46	-0.3%
34.6%	16,160	15,863	-296	-1.8%
35.8%	15,864	14,825	-1,039	-6.5%
37.0%	15,013	14,727	-287	-1.9%
38.3%	14,980	14,710	-269	-1.8%
39.5%	14,168	13,795	-373	-2.6%
40.7%	13,918	13,342	-577	-4.1%
42.0%	13,204	13,257	52	0.4%
43.2%	13,204	12,942	-262	-2.0%
44.4%	12,926	12,882	-45	-0.3%
45.7%	12,894	12,725	-169	-1.3%
46.9%	12,213	12,614	401	3.3%
48.1%	11,829	12,067	238	2.0%
49.4%	11,588	11,978	390	3.4%
50.6%	11,513	11,574	61	0.5%
51.9%	11,112	11,284	171	1.5%
53.1%	11,075	11,167	92	0.8%
54.3%	11,048	10,981	-67	-0.6%
55.6%	10,959	10,925	-34	-0.3%
56.8%	10,756	10,800	43	0.4%
58.0%	10,460	10,665	205	2.0%
59.3%	10,362	10,646	283	2.7%
60.5%	10,269	10,630	360	3.5%
61.7%	10,194	10,338	144	1.4%
63.0%	10,151	10,326	175	1.7%
64.2%	10,130	10,312	182	1.8%
65.4%	10,115	10,299	183	1.8%
66.7%	9,993	10,290	298	3.0%
67.9%	9,942	10,274	332	3.3%
69.1%	9,833	10,225	392	4.0%
70.4%	9,713	9,934	221	2.3%
71.6%	9,559	9,867	308	3.2%
72.8%	9,259	9,806	548	5.9%
74.1%	9,197	9,528	330	3.6%
75.3%	9,171	9,232	61	0.7%
76.5%	9,128	9,063	-65	-0.7%
77.8%	9,082	8,950	-132	-1.5%
79.0%	8,835	8,828	-6	-0.1%
80.2%	8,717	8,783	66	0.8%
81.5%	8,553	8,543	-11	-0.1%
82.7%	8,544	8,537	-7	-0.1%
84.0%	8,432	8,468	36	0.4%
85.2%	8,411	8,322	-89	-1.1%
86.4%	8,329	8,042	-286	-3.4%
87.7%	8,086	7,723	-362	-4.5%
88.9%	7,725	7,672	-53	-0.7%
90.1%	7,609	7,630	20	0.3%
91.4%	7,592	7,607	15	0.2%
92.6%	7,478	7,438	-40	-0.5%
93.8%	7,284	7,229	-56	-0.8%
95.1%	7,125	7,117	-7	-0.1%
96.3%	6,983	6,976	-7	-0.1%
97.5%	6,428	6,486	58	0.9%
98.8%	6,402	6,434	32	0.5%
100.0%	6,091	6,079	-12	-0.2%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,159	43,032	-1,127	-2.6%
1.2%	31,165	31,343	178	0.6%
2.5%	30,152	30,047	-105	-0.3%
3.7%	27,574	27,350	-224	-0.8%
4.9%	26,475	26,479	4	0.0%
6.2%	25,221	22,886	-2,336	-9.3%
7.4%	21,429	21,264	-165	-0.8%
8.6%	20,876	20,712	-164	-0.8%
9.9%	18,139	18,020	-119	-0.7%
11.1%	18,035	16,011	-2,024	-11.2%
12.3%	16,253	15,988	-266	-1.6%
13.6%	16,227	15,963	-264	-1.6%
14.8%	16,110	15,132	-979	-6.1%
16.0%	13,451	13,556	105	0.8%
17.3%	13,331	12,369	-962	-7.2%
18.5%	12,522	11,647	-875	-7.0%
19.8%	11,524	11,443	-81	-0.7%
21.0%	11,425	11,394	-32	-0.3%
22.2%	11,299	11,214	-85	-0.8%
23.5%	10,870	10,983	113	1.0%
24.7%	10,737	10,657	-80	-0.7%
25.9%	10,706	10,376	-331	-3.1%
27.2%	10,461	10,366	-95	-0.9%
28.4%	10,413	10,365	-49	-0.5%
29.6%	10,404	10,339	-65	-0.6%
30.9%	9,832	9,672	-160	-1.6%
32.1%	9,677	9,580	-97	-1.0%
33.3%	9,635	9,551	-84	-0.9%
34.6%	9,540	9,506	-33	-0.4%
35.8%	9,280	9,435	155	1.7%
37.0%	9,211	9,209	-2	0.0%
38.3%	9,203	9,149	-54	-0.6%
39.5%	9,126	9,129	3	0.0%
40.7%	9,121	9,077	-44	-0.5%
42.0%	9,019	9,025	7	0.1%
43.2%	9,008	8,953	-55	-0.6%
44.4%	8,984	8,897	-87	-1.0%
45.7%	8,940	8,835	-104	-1.2%
46.9%	8,843	8,801	-43	-0.5%
48.1%	8,823	8,747	-75	-0.9%
49.4%	8,784	8,721	-62	-0.7%
50.6%	8,765	8,718	-47	-0.5%
51.9%	8,718	8,712	-6	-0.1%
53.1%	8,666	8,665	-1	0.0%
54.3%	8,643	8,533	-109	-1.3%
55.6%	8,637	8,512	-125	-1.4%
56.8%	8,611	8,499	-112	-1.3%
58.0%	8,599	8,439	-160	-1.9%
59.3%	8,505	8,413	-92	-1.1%
60.5%	8,401	8,412	11	0.1%
61.7%	8,334	8,334	0	0.0%
63.0%	8,332	8,291	-42	-0.5%
64.2%	8,304	8,287	-17	-0.2%
65.4%	8,294	8,193	-101	-1.2%
66.7%	8,286	8,147	-139	-1.7%
67.9%	8,206	8,093	-113	-1.4%
69.1%	8,166	8,077	-89	-1.1%
70.4%	8,138	7,998	-140	-1.7%
71.6%	8,085	7,941	-144	-1.8%
72.8%	7,973	7,848	-124	-1.6%
74.1%	7,944	7,804	-140	-1.8%
75.3%	7,868	7,799	-69	-0.9%
76.5%	7,867	7,701	-166	-2.1%
77.8%	7,840	7,661	-179	-2.3%
79.0%	7,756	7,643	-113	-1.5%
80.2%	7,652	7,430	-222	-2.9%
81.5%	7,507	7,409	-98	-1.3%
82.7%	7,473	7,345	-128	-1.7%
84.0%	7,371	7,190	-182	-2.5%
85.2%	7,311	7,163	-148	-2.0%
86.4%	7,240	7,129	-112	-1.5%
87.7%	7,238	6,998	-240	-3.3%
88.9%	7,140	6,929	-211	-3.0%
90.1%	7,032	6,916	-116	-1.6%
91.4%	6,946	6,742	-205	-2.9%
92.6%	6,937	6,627	-310	-4.5%
93.8%	6,655	6,299	-356	-5.3%
95.1%	6,465	6,254	-212	-3.3%
96.3%	5,795	6,221	426	7.4%
97.5%	5,740	5,496	-244	-4.3%
98.8%	5,142	5,372	230	4.5%
100.0%	4,841	4,789	-52	-1.1%

Table SW-16-b
Sacramento River at Verona, Monthly Flow
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	28,387	29,188	801	2.8%
1.2%	15,835	18,441	2,606	16.5%
2.5%	14,586	14,392	-194	-1.3%
3.7%	13,898	13,755	-143	-1.0%
4.9%	13,013	13,363	350	2.7%
6.2%	12,991	13,240	249	1.9%
7.4%	12,846	13,054	208	1.6%
8.6%	12,725	13,014	289	2.3%
9.9%	12,713	12,617	-96	-0.8%
11.1%	12,589	12,280	-309	-2.5%
12.3%	12,524	12,209	-315	-2.5%
13.6%	12,493	12,149	-344	-2.8%
14.8%	12,319	12,136	-183	-1.5%
16.0%	12,245	12,020	-225	-1.8%
17.3%	12,222	12,019	-204	-1.7%
18.5%	12,124	12,017	-107	-0.9%
19.8%	12,052	12,006	-46	-0.4%
21.0%	12,019	11,934	-85	-0.7%
22.2%	12,018	11,915	-104	-0.9%
23.5%	11,985	11,882	-104	-0.9%
24.7%	11,922	11,878	-44	-0.4%
25.9%	11,898	11,859	-40	-0.3%
27.2%	11,828	11,839	11	0.1%
28.4%	11,786	11,810	24	0.2%
29.6%	11,655	11,675	20	0.2%
30.9%	11,517	11,642	125	1.1%
32.1%	11,469	11,586	117	1.0%
33.3%	11,297	11,585	289	2.6%
34.6%	11,170	11,520	351	3.1%
35.8%	11,010	11,416	406	3.7%
37.0%	10,989	11,354	364	3.3%
38.3%	10,922	11,326	404	3.7%
39.5%	10,913	11,243	330	3.0%
40.7%	10,896	11,220	323	3.0%
42.0%	10,890	11,211	321	3.0%
43.2%	10,855	11,200	345	3.2%
44.4%	10,791	11,148	358	3.3%
45.7%	10,704	11,046	343	3.2%
46.9%	10,553	11,042	489	4.6%
48.1%	10,447	10,963	517	4.9%
49.4%	10,328	10,926	597	5.8%
50.6%	10,326	10,913	587	5.7%
51.9%	10,196	10,899	703	6.9%
53.1%	10,146	10,894	748	7.4%
54.3%	10,115	10,689	575	5.7%
55.6%	9,975	10,598	623	6.3%
56.8%	9,964	10,580	616	6.2%
58.0%	9,932	10,553	621	6.3%
59.3%	9,883	10,472	590	6.0%
60.5%	9,814	10,390	576	5.9%
61.7%	9,782	10,268	486	5.0%
63.0%	9,734	10,200	466	4.8%
64.2%	9,709	10,008	299	3.1%
65.4%	9,691	9,981	290	3.0%
66.7%	9,604	9,969	365	3.8%
67.9%	9,518	9,882	365	3.8%
69.1%	9,495	9,771	276	2.9%
70.4%	9,465	9,717	252	2.7%
71.6%	9,461	9,673	212	2.2%
72.8%	9,352	9,584	232	2.5%
74.1%	9,348	9,555	206	2.2%
75.3%	9,294	9,499	205	2.2%
76.5%	9,220	9,437	217	2.4%
77.8%	9,193	9,410	217	2.4%
79.0%	9,163	9,362	199	2.2%
80.2%	9,029	9,234	205	2.3%
81.5%	8,870	9,119	250	2.8%
82.7%	8,687	9,093	405	4.7%
84.0%	8,314	8,894	580	7.0%
85.2%	8,269	8,867	598	7.2%
86.4%	8,164	8,832	668	8.2%
87.7%	8,119	8,822	703	8.7%
88.9%	7,989	8,707	719	9.0%
90.1%	7,886	8,658	771	9.8%
91.4%	7,757	8,646	890	11.5%
92.6%	7,668	8,425	757	9.9%
93.8%	7,271	8,345	1,074	14.8%
95.1%	7,241	8,106	866	12.0%
96.3%	7,107	7,618	511	7.2%
97.5%	6,868	7,118	250	3.6%
98.8%	6,798	7,040	242	3.6%
100.0%	5,868	6,435	567	9.7%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,697	22,405	1,709	8.3%
1.2%	20,536	21,799	1,263	6.2%
2.5%	19,982	21,409	1,428	7.1%
3.7%	19,524	21,144	1,621	8.3%
4.9%	19,346	20,941	1,595	8.2%
6.2%	19,289	20,458	1,169	6.1%
7.4%	19,275	20,313	1,037	5.4%
8.6%	19,254	20,274	1,020	5.3%
9.9%	19,247	20,135	888	4.6%
11.1%	19,238	20,131	893	4.6%
12.3%	19,142	19,817	676	3.5%
13.6%	19,140	19,574	434	2.3%
14.8%	19,115	19,549	434	2.3%
16.0%	19,014	19,547	532	2.8%
17.3%	18,966	19,508	543	2.9%
18.5%	18,959	19,412	453	2.4%
19.8%	18,918	19,392	474	2.5%
21.0%	18,908	19,361	452	2.4%
22.2%	18,838	19,346	509	2.7%
23.5%	18,649	19,312	664	3.6%
24.7%	18,565	19,268	703	3.8%
25.9%	18,519	19,205	687	3.7%
27.2%	18,506	19,176	671	3.6%
28.4%	18,438	19,141	702	3.8%
29.6%	18,429	19,131	702	3.8%
30.9%	18,310	19,129	819	4.5%
32.1%	18,288	19,102	814	4.5%
33.3%	18,143	18,987	844	4.7%
34.6%	18,135	18,981	846	4.7%
35.8%	18,127	18,968	841	4.6%
37.0%	18,117	18,942	825	4.6%
38.3%	18,045	18,916	871	4.8%
39.5%	17,965	18,712	747	4.2%
40.7%	17,893	18,686	793	4.4%
42.0%	17,850	18,672	822	4.6%
43.2%	17,824	18,557	733	4.1%
44.4%	17,450	18,460	1,010	5.8%
45.7%	17,407	18,407	1,000	5.7%
46.9%	17,257	18,404	1,147	6.6%
48.1%	17,224	18,147	923	5.4%
49.4%	17,184	17,997	814	4.7%
50.6%	17,163	17,984	821	4.8%
51.9%	17,124	17,946	822	4.8%
53.1%	17,099	17,897	799	4.7%
54.3%	16,976	17,766	790	4.7%
55.6%	16,898	17,581	683	4.0%
56.8%	16,860	17,524	665	3.9%
58.0%	16,797	17,187	390	2.3%
59.3%	16,787	17,176	389	2.3%
60.5%	16,648	17,112	465	2.8%
61.7%	16,595	17,103	509	3.1%
63.0%	16,391	16,989	598	3.6%
64.2%	16,211	16,966	756	4.7%
65.4%	16,143	16,852	709	4.4%
66.7%	15,719	16,776	1,057	6.7%
67.9%	15,657	16,610	952	6.1%
69.1%	15,637	16,594	957	6.1%
70.4%	15,257	16,339	1,082	7.1%
71.6%	15,112	16,250	1,138	7.5%
72.8%	14,588	16,061	1,473	10.1%
74.1%	14,278	15,358	1,080	7.6%
75.3%	13,989	15,135	1,145	8.2%
76.5%	13,486	15,108	1,622	12.0%
77.8%	12,631	15,082	2,450	19.4%
79.0%	12,523	14,862	2,339	18.7%
80.2%	12,494	14,722	2,228	17.8%
81.5%	12,055	14,710	2,655	22.0%
82.7%	11,927	12,138	210	1.8%
84.0%	11,894	12,101	207	1.7%
85.2%	11,807	11,910	103	0.9%
86.4%	11,701	11,838	138	1.2%
87.7%	11,462	11,751	289	2.5%
88.9%	11,229	11,669	440	3.9%
90.1%	10,173	11,385	1,212	11.9%
91.4%	9,944	11,118	1,174	11.8%
92.6%	9,611	10,586	975	10.1%
93.8%	9,340	10,584	1,244	13.3%
95.1%	9,200	9,590	391	4.2%
96.3%	8,527	9,336	809	9.5%
97.5%	8,347	8,865	518	6.2%
98.8%	8,031	8,552	522	6.5%
100.0%	7,919	8,331	412	5.2%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,067	16,150	83	0.5%
1.2%	16,047	16,048	1	0.0%
2.5%	15,995	16,026	31	0.2%
3.7%	15,730	15,827	97	0.6%
4.9%	15,617	15,665	48	0.3%
6.2%	15,479	15,426	-53	-0.3%
7.4%	15,391	15,270	-121	-0.8%
8.6%	15,289	15,233	-56	-0.4%
9.9%	15,275	15,183	-92	-0.6%
11.1%	15,228	15,167	-61	-0.4%
12.3%	15,183	15,156	-26	-0.2%
13.6%	14,830	15,101	270	1.8%
14.8%	14,709	14,870	162	1.1%
16.0%	14,704	14,793	90	0.6%
17.3%	14,688	14,709	21	0.1%
18.5%	14,595	14,706	111	0.8%
19.8%	14,589	14,620	31	0.2%
21.0%	14,499	14,565	65	0.4%
22.2%	14,466	14,427	-39	-0.3%
23.5%	14,429	14,386	-43	-0.3%
24.7%	14,389	14,375	-14	-0.1%
25.9%	14,359	14,356	-3	0.0%
27.2%	14,063	14,278	215	1.5%
28.4%	13,969	14,185	216	1.5%
29.6%	13,839	14,137	298	2.2%
30.9%	13,806	14,052	246	1.8%
32.1%	13,787	13,919	132	1.0%
33.3%	13,768	13,810	42	0.3%
34.6%	13,732	13,791	58	0.4%
35.8%	13,705	13,787	82	0.6%
37.0%	13,622	13,776	154	1.1%
38.3%	13,498	13,740	242	1.8%
39.5%	13,328	13,731	403	3.0%
40.7%	13,323	13,703	379	2.8%
42.0%	13,288	13,568	280	2.1%
43.2%	13,202	13,556	355	2.7%
44.4%	13,183	13,517	334	2.5%
45.7%	13,179	13,367	188	1.4%
46.9%	13,164	13,338	174	1.3%
48.1%	13,100	13,330	229	1.8%
49.4%	13,075	13,311	237	1.8%
50.6%	13,070	13,222	152	1.2%
51.9%	12,964	13,081	117	0.9%
53.1%	12,889	12,963	74	0.6%
54.3%	12,828	12,915	87	0.7%
55.6%	12,685	12,785	100	0.8%
56.8%	12,662	12,783	120	1.0%
58.0%	12,659	12,775	116	0.9%
59.3%	12,656	12,757	101	0.8%
60.5%	12,600	12,676	76	0.6%
61.7%	12,431	12,636	205	1.6%
63.0%	12,405	12,466	62	0.5%
64.2%	12,271	12,309	38	0.3%
65.4%	12,098	12,276	179	1.5%
66.7%	12,015	12,198	183	1.5%
67.9%	11,448	12,167	719	6.3%
69.1%	10,988	12,156	1,168	10.6%
70.4%	10,751	12,005	1,254	11.7%
71.6%	10,407	11,897	1,489	14.3%
72.8%	10,015	11,854	1,839	18.4%
74.1%	9,848	11,419	1,571	16.0%
75.3%	8,604	10,859	2,255	26.2%
76.5%	8,298	10,590	2,292	27.6%
77.8%	8,229	10,582	2,352	28.6%
79.0%	8,161	10,436	2,275	27.9%
80.2%	7,999	10,335	2,336	29.2%
81.5%	7,889	10,029	2,140	27.1%
82.7%	7,846	9,540	1,694	21.6%
84.0%	7,687	9,421	1,734	22.6%
85.2%	7,479	9,117	1,638	21.9%
86.4%	7,381	8,557	1,176	15.9%
87.7%	7,361	8,505	1,144	15.5%
88.9%	7,286	8,443	1,157	15.9%
90.1%	7,072	8,194	1,122	15.9%
91.4%	7,008	8,000	992	14.2%
92.6%	6,741	7,963	1,223	18.1%
93.8%	6,725	7,740	1,015	15.1%
95.1%	6,604	7,592	988	15.0%
96.3%	6,474	7,557	1,083	16.7%
97.5%	6,004	7,526	1,521	25.3%
98.8%	5,768	7,024	1,256	21.8%
100.0%	5,648	6,838	1,190	21.1%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	27,827	27,821	-6	0.0%
1.2%	26,197	26,501	304	1.2%
2.5%	26,184	26,182	-2	0.0%
3.7%	25,437	26,142	705	2.8%
4.9%	25,008	25,767	759	3.0%
6.2%	24,444	25,512	1,068	4.4%
7.4%	24,296	25,300	1,004	4.1%
8.6%	24,022	25,067	1,045	4.4%
9.9%	23,940	25,018	1,078	4.5%
11.1%	23,566	24,181	616	2.6%
12.3%	23,230	23,981	751	3.2%
13.6%	22,942	23,656	714	3.1%
14.8%	22,880	23,057	177	0.8%
16.0%	22,837	23,003	166	0.7%
17.3%	21,617	22,679	1,062	4.9%
18.5%	21,507	22,367	860	4.0%
19.8%	21,285	21,692	407	1.9%
21.0%	21,100	21,581	482	2.3%
22.2%	20,916	21,094	178	0.8%
23.5%	20,792	20,673	-119	-0.6%
24.7%	20,773	20,430	-342	-1.6%
25.9%	20,273	20,149	-125	-0.6%
27.2%	20,162	20,020	-142	-0.7%
28.4%	20,031	19,954	-77	-0.4%
29.6%	19,990	19,886	-104	-0.5%
30.9%	19,975	19,879	-96	-0.5%
32.1%	19,903	19,685	-218	-1.1%
33.3%	19,764	19,654	-110	-0.6%
34.6%	19,092	19,182	91	0.5%
35.8%	18,149	18,995	845	4.7%
37.0%	17,882	18,858	977	5.5%
38.3%	17,445	17,363	-81	-0.5%
39.5%	16,593	16,250	-342	-2.1%
40.7%	15,258	14,748	-510	-3.3%
42.0%	13,590	14,656	1,066	7.8%
43.2%	13,403	14,101	698	5.2%
44.4%	13,172	13,892	719	5.5%
45.7%	12,759	13,836	1,077	8.4%
46.9%	12,758	13,263	505	4.0%
48.1%	12,373	13,250	876	7.1%
49.4%	12,372	13,048	676	5.5%
50.6%	12,346	12,972	627	5.1%
51.9%	12,159	12,950	791	6.5%
53.1%	12,120	12,927	807	6.7%
54.3%	11,792	12,924	1,132	9.6%
55.6%	11,724	12,839	1,115	9.5%
56.8%	11,701	12,802	1,101	9.4%
58.0%	11,675	12,774	1,099	9.4%
59.3%	11,586	12,709	1,123	9.7%
60.5%	11,271	12,703	1,432	12.7%
61.7%	10,683	12,424	1,742	16.3%
63.0%	10,570	12,387	1,817	17.2%
64.2%	10,444	12,270	1,826	17.5%
65.4%	10,177	12,172	1,995	19.6%
66.7%	9,934	12,086	2,151	21.7%
67.9%	9,924	11,858	1,934	19.5%
69.1%	9,344	11,743	2,399	25.7%
70.4%	9,282	11,560	2,279	24.6%
71.6%	9,172	11,440	2,268	24.7%
72.8%	9,059	11,323	2,265	25.0%
74.1%	8,943	11,100	2,157	24.1%
75.3%	8,662	11,021	2,360	27.2%
76.5%	8,547	11,020	2,474	28.9%
77.8%	8,290	10,792	2,502	30.2%
79.0%	8,221	10,714	2,492	30.3%
80.2%	8,143	10,705	2,562	31.5%
81.5%	8,031	10,626	2,595	32.3%
82.7%	7,870	9,914	2,044	26.0%
84.0%	7,825	9,789	1,964	25.1%
85.2%	7,762	9,727	1,966	25.3%
86.4%	7,662	9,665	2,002	26.1%
87.7%	7,394	9,232	1,838	24.9%
88.9%	7,336	9,215	1,880	25.6%
90.1%	7,254	9,082	1,828	25.2%
91.4%	7,145	8,958	1,813	25.4%
92.6%	6,651	7,949	1,298	19.5%
93.8%	6,019	7,927	1,907	31.7%
95.1%	5,850	7,403	1,554	26.6%
96.3%	5,786	7,386	1,600	27.7%
97.5%	5,321	7,049	1,728	32.5%
98.8%	5,301	5,993	691	13.0%
100.0%	4,946	5,884	938	19.0%

Figure SW-17-b
Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

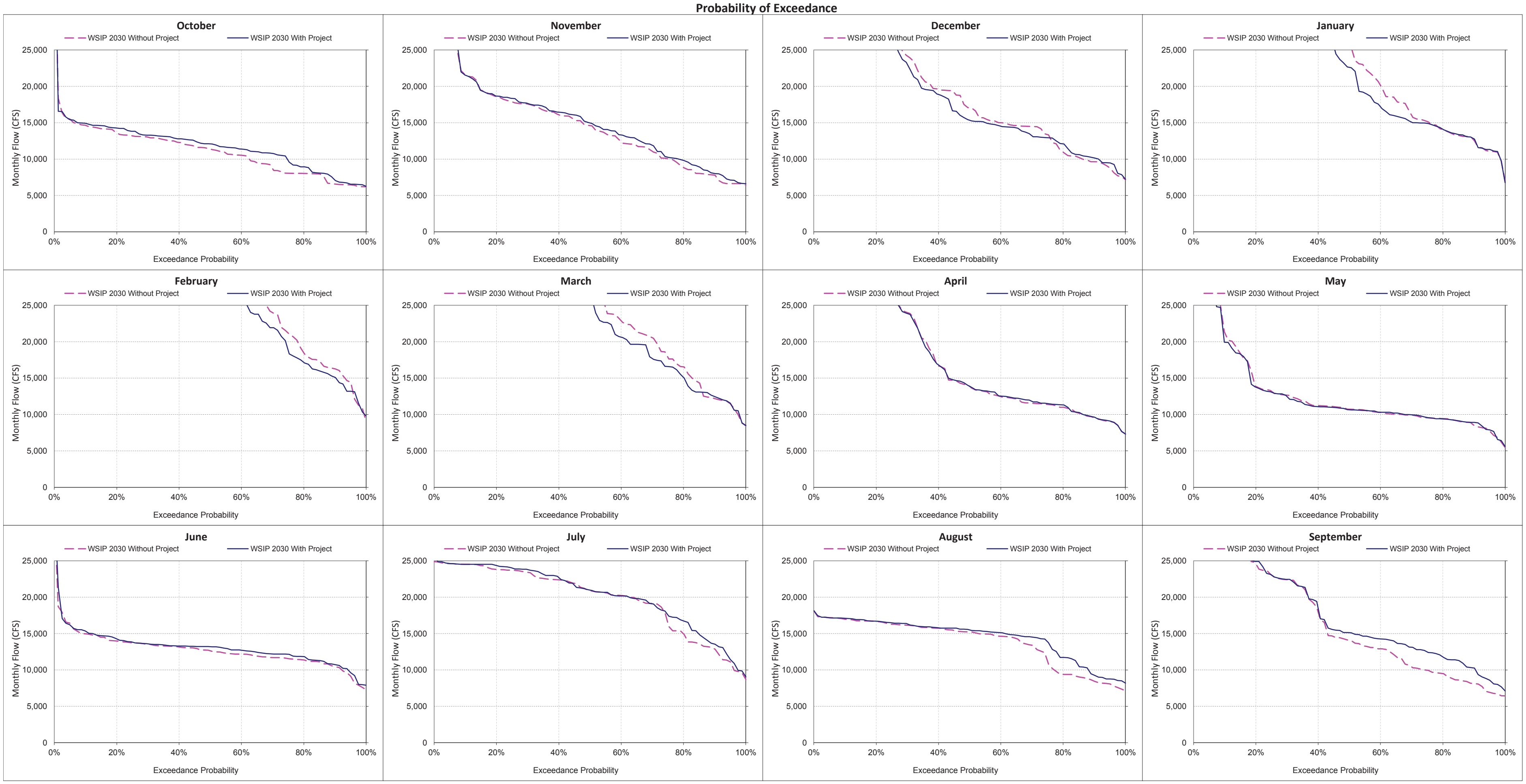


Table SW-17-b
Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,867	46,523	1,656	3.7%
1.2%	18,378	16,579	-1,799	-9.8%
2.5%	16,395	16,524	130	0.8%
3.7%	15,575	15,794	219	1.4%
4.9%	15,528	15,421	-108	-0.7%
6.2%	15,015	15,353	338	2.2%
7.4%	14,905	15,011	106	0.7%
8.6%	14,710	14,948	238	1.6%
9.9%	14,661	14,945	285	1.9%
11.1%	14,448	14,770	323	2.2%
12.3%	14,403	14,655	252	1.7%
13.6%	14,312	14,649	337	2.4%
14.8%	14,199	14,591	392	2.8%
16.0%	14,158	14,584	427	3.0%
17.3%	14,135	14,412	277	2.0%
18.5%	14,074	14,319	245	1.7%
19.8%	13,639	14,292	653	4.8%
21.0%	13,378	14,229	852	6.4%
22.2%	13,317	14,228	911	6.8%
23.5%	13,297	13,917	620	4.7%
24.7%	13,221	13,831	610	4.6%
25.9%	13,125	13,815	690	5.3%
27.2%	13,110	13,474	364	2.8%
28.4%	13,109	13,335	226	1.7%
29.6%	13,054	13,301	247	1.9%
30.9%	12,921	13,298	377	2.9%
32.1%	12,920	13,249	329	2.5%
33.3%	12,857	13,169	312	2.4%
34.6%	12,728	13,134	406	3.2%
35.8%	12,617	13,098	480	3.8%
37.0%	12,507	13,082	575	4.6%
38.3%	12,502	12,910	408	3.3%
39.5%	12,312	12,799	487	4.0%
40.7%	12,277	12,783	506	4.1%
42.0%	12,019	12,701	683	5.7%
43.2%	11,930	12,659	729	6.1%
44.4%	11,847	12,595	748	6.3%
45.7%	11,610	12,350	741	6.4%
46.9%	11,608	12,194	586	5.0%
48.1%	11,563	12,120	557	4.8%
49.4%	11,459	12,110	651	5.7%
50.6%	11,302	12,077	775	6.9%
51.9%	11,211	11,950	739	6.6%
53.1%	11,071	11,731	660	6.0%
54.3%	11,024	11,695	671	6.1%
55.6%	10,667	11,605	937	8.8%
56.8%	10,639	11,584	945	8.9%
58.0%	10,562	11,553	991	9.4%
59.3%	10,553	11,382	829	7.9%
60.5%	10,511	11,348	836	8.0%
61.7%	10,423	11,298	876	8.4%
63.0%	9,761	11,094	1,333	13.7%
64.2%	9,664	11,028	1,365	14.1%
65.4%	9,396	11,022	1,627	17.3%
66.7%	9,390	10,857	1,467	15.6%
67.9%	9,343	10,855	1,512	16.2%
69.1%	9,245	10,840	1,595	17.2%
70.4%	8,437	10,764	2,327	27.6%
71.6%	8,420	10,564	2,145	25.5%
72.8%	8,262	10,519	2,257	27.3%
74.1%	8,071	10,419	2,348	29.1%
75.3%	8,062	9,588	1,526	18.9%
76.5%	8,048	9,189	1,141	14.2%
77.8%	8,044	9,153	1,109	13.8%
79.0%	8,041	8,938	897	11.2%
80.2%	8,031	8,931	899	11.2%
81.5%	8,011	8,831	820	10.2%
82.7%	7,992	8,171	179	2.2%
84.0%	7,975	8,126	151	1.9%
85.2%	7,965	8,082	117	1.5%
86.4%	7,584	8,041	457	6.0%
87.7%	6,692	7,955	1,264	18.9%
88.9%	6,621	7,572	951	14.4%
90.1%	6,560	7,038	478	7.3%
91.4%	6,510	6,843	333	5.1%
92.6%	6,491	6,790	298	4.6%
93.8%	6,471	6,711	240	3.7%
95.1%	6,452	6,560	108	1.7%
96.3%	6,401	6,553	153	2.4%
97.5%	6,218	6,521	303	4.9%
98.8%	6,212	6,491	280	4.5%
100.0%	6,190	6,271	82	1.3%

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	54,082	52,040	-2,041	-3.8%
1.2%	49,144	48,915	-229	-0.5%
2.5%	47,919	46,839	-1,080	-2.3%
3.7%	40,471	42,778	2,306	5.7%
4.9%	33,636	33,615	-21	-0.1%
6.2%	30,763	29,054	-1,709	-5.6%
7.4%	24,990	25,741	751	3.0%
8.6%	22,156	22,006	-150	-0.7%
9.9%	21,619	21,578	-41	-0.2%
11.1%	21,367	21,367	0	0.0%
12.3%	21,290	21,037	-253	-1.2%
13.6%	20,821	20,607	-213	-1.0%
14.8%	19,512	19,460	-52	-0.3%
16.0%	19,306	19,242	-63	-0.3%
17.3%	19,047	18,997	-50	-0.3%
18.5%	18,837	18,981	144	0.8%
19.8%	18,603	18,687	84	0.5%
21.0%	18,508	18,649	142	0.8%
22.2%	18,227	18,506	279	1.5%
23.5%	18,056	18,496	440	2.4%
24.7%	17,928	18,356	427	2.4%
25.9%	17,735	18,335	600	3.4%
27.2%	17,648	17,858	211	1.2%
28.4%	17,613	17,761	148	0.8%
29.6%	17,609	17,721	112	0.6%
30.9%	17,489	17,541	52	0.3%
32.1%	17,323	17,434	111	0.6%
33.3%	17,120	17,419	300	1.7%
34.6%	16,816	17,311	494	2.9%
35.8%	16,622	17,091	469	2.8%
37.0%	16,489	16,625	136	0.8%
38.3%	16,476	16,615	140	0.8%
39.5%	16,168	16,454	286	1.8%
40.7%	15,962	16,422	460	2.9%
42.0%	15,935	16,350	415	2.6%
43.2%	15,911	16,169	258	1.6%
44.4%	15,580	16,117	537	3.4%
45.7%	15,297	16,023	726	4.7%
46.9%	15,281	15,874	593	3.9%
48.1%	14,740	15,207	467	3.2%
49.4%	14,643	15,038	395	2.7%
50.6%	14,574	14,888	314	2.2%
51.9%	13,950	14,574	624	4.5%
53.1%	13,838	14,441	602	4.4%
54.3%	13,688	14,078	390	2.8%
55.6%	13,374	14,065	692	5.2%
56.8%	13,216	13,885	669	5.1%
58.0%	13,206	13,848	642	4.9%
59.3%	12,698	13,371	673	5.3%
60.5%	12,197	13,290	1,093	9.0%
61.7%	12,119	13,069	950	7.8%
63.0%	12,075	12,952	878	7.3%
64.2%	12,073	12,949	877	7.3%
65.4%	11,736	12,601	865	7.4%
66.7%	11,706	12,351	645	5.5%
67.9%	11,663	12,101	438	3.8%
69.1%	11,327	12,087	761	6.7%
70.4%	10,970	11,832	862	7.9%
71.6%	10,810	11,051	241	2.2%
72.8%	10,138	11,024	886	8.7%
74.1%	10,125	10,359	234	2.3%
75.3%	10,028	10,212	184	1.8%
76.5%	9,932	10,133	201	2.0%
77.8%	9,572	10,090	517	5.4%
79.0%	9,134	9,939	805	8.8%
80.2%	8,793	9,789	996	11.3%
81.5%	8,551	9,587	1,036	12.1%
82.7%	8,548	9,224	676	7.9%
84.0%	8,035	9,102	1,067	13.3%
85.2%	8,027	8,891	864	10.8%
86.4%	7,978	8,494	516	6.5%
87.7%	7,883	8,448	565	7.2%
88.9%	7,857	8,099	243	3.1%
90.1%	7,780	8,027	247	3.2%
91.4%	7,044	7,978	934	13.3%
92.6%	6,743	7,707	964	14.3%
93.8%	6,639	7,274	635	9.6%
95.1%	6,635	7,129	494	7.4%
96.3%	6,635	7,064	429	6.5%
97.5%	6,631	6,769	137	2.1%
98.8%	6,624	6,639	15	0.2%
100.0%	6,425	6,635	210	3.3%

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	79,291	79,307	16	0.0%
1.2%	78,178	77,970	-208	-0.3%
2.5%	73,215	73,072	-143	-0.2%
3.7%	69,937	69,313	-624	-0.9%
4.9%	66,005	66,385	380	0.6%
6.2%	62,254	61,209	-1,044	-1.7%
7.4%	58,072	55,992	-2,080	-3.6%
8.6%	56,023	54,200	-1,823	-3.3%
9.9%	55,267	54,029	-1,237	-2.2%
11.1%	53,773	53,833	61	0.1%
12.3%	44,204	44,592	388	0.9%
13.6%	43,990	43,576	-415	-0.9%
14.8%	39,129	38,312	-817	-2.1%
16.0%	39,003	36,887	-2,116	-5.4%
17.3%	37,062	35,099	-1,963	-5.3%
18.5%	35,116	33,957	-1,159	-3.3%
19.8%	34,721	30,986	-3,735	-10.8%
21.0%	33,032	30,841	-2,191	-6.6%
22.2%	32,288	30,010	-2,279	-7.1%
23.5%	30,778	27,580	-3,198	-10.4%
24.7%	30,265	26,696	-3,569	-11.8%
25.9%	29,586	26,049	-3,537	-12.0%
27.2%	26,528	24,752	-1,776	-6.7%
28.4%	24,876	23,716	-1,160	-4.7%
29.6%	24,302	23,307	-995	-4.1%
30.9%	23,913	22,313	-1,600	-6.7%
32.1%	23,415	21,325	-2,091	-8.9%
33.3%	22,185	20,910	-1,275	-5.7%
34.6%	21,231	19,742	-1,489	-7.0%
35.8%	20,609	19,555	-1,054	-5.1%
37.0%	20,477	19,513	-964	-4.7%
38.3%	19,710	19,417	-293	-1.5%
39.5%	19,662	18,972	-689	-3.5%
40.7%	19,491	18,777	-714	-3.7%
42.0%	19,470	18,517	-953	-4.9%
43.2%	19,424	18,264	-1,160	-6.0%
44.4%	19,417	16,651	-2,766	-14.2%
45.7%	18,800	16,586	-2,214	-11.8%
46.9%	18,760	16,022	-2,738	-14.6%
48.1%	17,511	15,704	-1,808	-10.3%
49.4%	17,077	15,441	-1,636	-9.6%
50.6%	17,031	15,245	-1,786	-10.5%
51.9%	16,625	15,190	-1,435	-8.6%
53.1%	15,694	15,185	-509	-3.2%
54.3%	15,681	15,158	-523	-3.3%
55.6%	15,440	14,938	-502	-3.3%
56.8%	15,251	14,824	-427	-2.8%
58.0%	15,239	14,755	-483	-3.2%
59.3%	15,007	14,602	-405	-2.7%
60.5%	14,997	14,480	-516	-3.4%
61.7%	14,894	14,441	-453	-3.0%
63.0%	14,718	14,387	-330	-2.2%
64.2%	14,617	14,346	-271	-1.9%
65.4%	14,616	14,251	-364	-2.5%
66.7%	14,530	13,850	-680	-4.7%
67.9%	14,524	13,701	-824	-5.7%
69.1%	14,499	13,506	-993	-6.8%
70.4%	14,476	13,065	-1,410	-9.7%
71.6%	14,459	13,063	-1,396	-9.7%
72.8%	14,179	13,006	-1,172	-8.3%
74.1%	13,484	12,968	-516	-3.8%
75.3%	13,323	12,942	-381	-2.9%
76.5%	12,281	12,914	634	5.2%
77.8%	12,092	12,497	405	3.3%
79.0%	11,255	12,144	889	7.9%
80.2%	10,870	12,087	1,217	11.2%
81.5%	10,497	11,433	936	8.9%
82.7%	10,418	10,863	445	4.3%
84.0%	10,414	10,649	235	2.3%
85.2%	10,192	10,619	426	4.2%
86.4%	9,966	10,449	483	4.8%
87.7%	9,880	10,356	476	4.8%
88.9%	9,645	10,239	594	6.2%
90.1%	9,638	10,145	507	5.3%
91.4%	9,626	9,993	367	3.8%
92.6%	9,418	9,516	98	1.0%
93.8%	9,122	9,504	382	4.2%
95.1%	8,775	9,469	694	7.9%
96.3%	8,124	9,267	1,143	14.1%
97.5%	7,702	8,048	346	4.5%
98.8%	7,582	7,860	278	3.7%
100.0%	7,174	7,225	51	0.7%

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	80,927	80,799	-128	-0.2%
1.2%	78,431	78,075	-356	-0.5%
2.5%	77,344	77,381	37	0.0%
3.7%	77,300	77,302	2	0.0%
4.9%	75,237	75,243	6	0.0%
6.2%	72,602	72,333	-269	-0.4%
7.4%	70,790	70,785	-4	0.0%
8.6%	70,523	70,022	-501	-0.7%
9.9%	69,052	68,937	-115	-0.2%
11.1%	68,905	68,718	-187	-0.3%
12.3%	67,336	65,490	-1,846	-2.7%
13.6%	64,542	64,756	214	0.3%
14.8%	64,436	63,593	-843	-1.3%
16.0%	63,319	63,235	-84	-0.1%
17.3%	63,268	62,159	-1,109	-1.8%
18.5%	61,396	58,952	-2,444	-4.0%
19.8%	60,624	58,635	-1,989	-3.3%
21.0%	56,853	55,624	-1,229	-2.2%
22.2%	56,011	54,977	-1,033	-1.8%
23.5%	54,936	54,621	-315	-0.6%
24.7%	54,579	53,954	-625	-1.1%
25.9%	51,205	48,939	-2,266	-4.4%
27.2%	48,753	48,676	-77	-0.2%
28.4%	46,864	47,149	285	0.6%
29.6%	44,646	44,355	-291	-0.7%
30.9%	41,733	37,765	-3,968	-9.5%
32.1%	39,190	37,728	-1,462	-3.7%
33.3%	38,064	37,654	-410	-1.1%
34.6%	38,032	34,399	-3,633	-9.6%
35.8%	37,097	33,685	-3,412	-9.2%
37.0%	35,003	33,638	-1,365	-3.9%
38.3%	34,537	31,530	-3,007	-8.7%
39.5%	33,996	31,311	-2,685	-7.9%
40.7%	33,960	29,814	-4,146	-12.2%
42.0%	30,538	29,461	-1,077	-3.5%
43.2%	30,514	27,487	-3,027	-9.9%
44.4%	29,845	26,458	-3,387	-11.3%
45.7%	27,892	24,451	-3,441	-12.3%
46.9%	27,293	23,709	-3,583	-13.1%
48.1%	25,965	23,225	-2,741	-10.6%
49.4%	25,956	22,671	-3,285	-12.7%
50.6%	25,368	22,559	-2,809	-11.1%
51.9%	23,551	22,058	-1,493	-6.3%
53.1%	23,115	19,332	-3,784	-16.4%
54.3%	23,003	19,196	-3,808	-16.6%
55.6%	22,219	18,955	-3,263	-14.7%
56.8%	21,785	18,652	-3,133	-14.4%
58.0%	21,279	17,819	-3,460	-16.3%
59.3%	20,656	17,587	-3,069	-14.9%
60.5%	19,771	16,930	-2,841	-14.4%
61.7%	18,603	16,543	-2,060	-11.1%
63.0%	18,547	16,090	-2,457	-13.2%
64.2%	18,540	15,999	-2,541	-13.7%
65.4%	17,843	15,869	-1,974	-11.1%
66.7%	17,770	15,700	-2,070	-11.6%
67.9%	17,654	15,566	-2,088	-11.8%
69.1%	16,667	15,263	-1,403	-8.4%
70.4%	15,733	15,016	-717	-4.6%
71.6%	15,509	15,011	-498	-3.2%
72.8%	15,474	14,969	-505	-3.3%
74.1%	15,309	14,968	-341	-2.2%
75.3%	15,112	14,890	-221	-1.5%
76.5%	14,733	14,732	-1	0.0%
77.8%	14,681	14,522	-158	-1.1%
79.0%	14,201	14,346	145	1.0%
80.2%	13,990	14,050	61	0.4%
81.5%	13,787	13,806	19	0.1%
82.7%	13,539	13,594	55	0.4%
84.0%	13,304	13,509	205	1.5%
85.2%	13,250	13,365	115	0.9%
86.4%	13,126	13,338	212	1.6%
87.7%	13,120	13,087	-33	-0.2%
88.9%	13,106	13,049	-57	-0.4%
90.1%	12,533	12,746	213	1.7%
91.4%	11,614	11,559	-55	-0.5%
92.6%	11,556	11,522	-33	-0.3%
93.8%	11,181	11,341	160	1.4%
95.1%	11,068	11,339	271	2.5%
96.3%	11,045	11,120	75	0.7%
97.5%	10,957	11,053	96	0.9%
98.8%	9,727	9,744	17	0.2%
100.0%	6,866	6,778	-88	-1.3%

Table SW-17-b
Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	80,735	80,747	12	0.0%
1.2%	79,983	80,192	208	0.3%
2.5%	79,509	79,407	-103	-0.1%
3.7%	78,879	78,959	80	0.1%
4.9%	77,875	77,807	-68	-0.1%
6.2%	77,055	77,058	3	0.0%
7.4%	75,604	75,507	-98	-0.1%
8.6%	75,511	75,288	-223	-0.3%
9.9%	75,304	75,066	-238	-0.3%
11.1%	72,667	72,664	-3	0.0%
12.3%	70,861	70,602	-258	-0.4%
13.6%	70,710	70,436	-274	-0.4%
14.8%	70,567	69,950	-617	-0.9%
16.0%	69,920	69,921	1	0.0%
17.3%	68,241	68,272	31	0.0%
18.5%	66,989	66,448	-541	-0.8%
19.8%	66,468	66,332	-136	-0.2%
21.0%	66,336	65,230	-1,106	-1.7%
22.2%	64,551	65,106	555	0.9%
23.5%	64,392	63,961	-431	-0.7%
24.7%	63,236	61,714	-1,522	-2.4%
25.9%	62,664	61,633	-1,031	-1.6%
27.2%	62,415	61,591	-823	-1.3%
28.4%	57,626	57,459	-167	-0.3%
29.6%	57,273	56,083	-1,190	-2.1%
30.9%	54,948	53,913	-1,035	-1.9%
32.1%	53,907	53,483	-424	-0.8%
33.3%	53,135	50,818	-2,317	-4.4%
34.6%	51,562	50,429	-1,133	-2.2%
35.8%	51,175	50,303	-872	-1.7%
37.0%	50,833	48,878	-1,955	-3.8%
38.3%	50,032	48,252	-1,780	-3.6%
39.5%	49,819	48,055	-1,764	-3.5%
40.7%	48,923	47,990	-933	-1.9%
42.0%	45,243	45,831	587	1.3%
43.2%	44,442	44,436	-6	0.0%
44.4%	42,984	42,998	14	0.0%
45.7%	41,519	39,098	-2,421	-5.8%
46.9%	40,608	38,907	-1,701	-4.2%
48.1%	38,851	38,743	-109	-0.3%
49.4%	35,468	34,170	-1,297	-3.7%
50.6%	35,375	32,933	-2,442	-6.9%
51.9%	34,489	31,588	-2,901	-8.4%
53.1%	33,921	31,186	-2,735	-8.1%
54.3%	32,360	30,122	-2,238	-6.9%
55.6%	31,301	29,371	-1,930	-6.2%
56.8%	31,288	28,323	-2,965	-9.5%
58.0%	29,998	26,439	-3,560	-11.9%
59.3%	28,176	26,001	-2,175	-7.7%
60.5%	27,419	25,654	-1,765	-6.4%
61.7%	27,123	25,052	-2,071	-7.6%
63.0%	26,965	24,041	-2,924	-10.8%
64.2%	26,178	23,779	-2,399	-9.2%
65.4%	25,961	23,774	-2,186	-8.4%
66.7%	25,597	22,815	-2,782	-10.9%
67.9%	25,086	22,590	-2,496	-10.0%
69.1%	24,213	21,940	-2,273	-9.4%
70.4%	23,904	21,926	-1,978	-8.3%
71.6%	23,718	21,580	-2,137	-9.0%
72.8%	21,961	20,717	-1,244	-5.7%
74.1%	21,559	20,160	-1,399	-6.5%
75.3%	21,068	18,346	-2,722	-12.9%
76.5%	20,701	18,031	-2,670	-12.9%
77.8%	20,230	17,806	-2,424	-12.0%
79.0%	19,145	17,528	-1,616	-8.4%
80.2%	18,326	17,081	-1,244	-6.8%
81.5%	17,870	16,915	-955	-5.3%
82.7%	17,577	16,275	-1,302	-7.4%
84.0%	17,549	16,154	-1,394	-7.9%
85.2%	17,284	15,978	-1,306	-7.6%
86.4%	16,634	15,803	-831	-5.0%
87.7%	16,474	15,628	-846	-5.1%
88.9%	16,390	15,312	-1,078	-6.6%
90.1%	16,267	15,075	-1,192	-7.3%
91.4%	16,041	14,382	-1,659	-10.3%
92.6%	15,309	14,196	-1,113	-7.3%
93.8%	14,670	13,189	-1,481	-10.1%
95.1%	14,423	13,183	-1,240	-8.6%
96.3%	12,111	13,133	1,022	8.4%
97.5%	11,286	11,563	278	2.5%
98.8%	10,904	10,340	-564	-5.2%
100.0%	9,024	9,826	801	8.9%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	79,384	79,384	0	0.0%
1.2%	78,925	78,926	1	0.0%
2.5%	76,857	76,880	23	0.0%
3.7%	76,121	75,526	-595	-0.8%
4.9%	73,785	73,787	2	0.0%
6.2%	72,342	71,739	-604	-0.8%
7.4%	70,349	69,787	-562	-0.8%
8.6%	65,143	65,157	13	0.0%
9.9%	63,912	62,481	-1,431	-2.2%
11.1%	62,490	62,093	-397	-0.6%
12.3%	61,625	61,629	4	0.0%
13.6%	61,326	61,078	-248	-0.4%
14.8%	60,994	60,993	-1	0.0%
16.0%	59,649	59,406	-243	-0.4%
17.3%	57,985	58,190	205	0.4%
18.5%	57,851	57,855	4	0.0%
19.8%	56,921	55,737	-1,184	-2.1%
21.0%	55,289	54,201	-1,087	-2.0%
22.2%	54,496	54,184	-312	-0.6%
23.5%	54,314	53,890	-424	-0.8%
24.7%	50,546	50,738	192	0.4%
25.9%	50,272	48,905	-1,368	-2.7%
27.2%	50,177	48,304	-1,873	-3.7%
28.4%	49,721	46,195	-3,526	-7.1%
29.6%	47,816	45,697	-2,118	-4.4%
30.9%	46,969	45,338	-1,631	-3.5%
32.1%	44,705	42,068	-2,637	-5.9%
33.3%	42,514	40,816	-1,698	-4.0%
34.6%	41,810	39,463	-2,347	-5.6%
35.8%	39,509	38,821	-687	-1.7%
37.0%	39,466	38,169	-1,297	-3.3%
38.3%	38,564	37,925	-638	-1.7%
39.5%	38,459	36,711	-1,748	-4.5%
40.7%	37,962	36,355	-1,607	-4.2%
42.0%	36,755	35,028	-1,728	-4.7%
43.2%	36,404	32,016	-4,388	-12.1%
44.4%	36,364	31,390	-4,974	-13.7%
45.7%	33,683	31,150	-2,533	-7.5%
46.9%	30,480	28,906	-1,574	-5.2%
48.1%	29,961	26,261	-3,700	-12.4%
49.4%	29,373	25,927	-3,446	-11.7%
50.6%	28,641	25,895	-2,747	-9.6%
51.9%	27,108	23,950	-3,158	-11.7%
53.1%	25,799	22,945	-2,854	-11.1%
54.3%	25,659	22,682	-2,978	-11.6%
55.6%	23,878	22,643	-1,235	-5.2%
56.8%	23,825	22,370	-1,455	-6.1%
58.0%	23,761	21,005	-2,756	-11.6%
59.3%	23,232	20,719	-2,513	-10.8%
60.5%	22,652	20,590	-2,063	-9.1%
61.7%	22,415	20,286	-2,129	-9.5%
63.0%	22,351	19,666	-2,685	-12.0%
64.2%	21,775	19,639	-2,136	-9.8%
65.4%	21,284	19,639	-1,645	-7.7%
66.7%	21,121	19,609	-1,512	-7.2%
67.9%	20,935	19,589	-1,345	-6.4%
69.1%	20,736	17,944	-2,792	-13.5%
70.4%	20,478	17,598	-2,880	-14.1%
71.6%	19,693	17,438	-2,255	-11.4%
72.8%	18,666	17,374	-1,292	-6.9%
74.1%	18,604	16,613	-1,991	-10.7%
75.3%	17,637	16,568	-1,069	-6.1%
76.5%	17,629	16,527	-1,102	-6.2%
77.8%	16,985	16,144	-841	-5.0%
79.0%	16,604	15,527	-1,077	-6.5%
80.2%	16,541	15,023	-1,518	-9.2%
81.5%	15,596	13,911	-1,685	-10.8%
82.7%	15,019	13,329	-1,691	-11.3%
84.0%	14,633	13,087	-1,546	-10.6%
85.2%	14,313	13,075	-1,238	-8.7%
86.4%	12,524	13,057	533	4.3%
87.7%	12,401	13,035	634	5.1%
88.9%	12,347	12,664	317	2.6%
90.1%	12,177	12,432	255	2.1%
91.4%	12,042	12,247	205	1.7%
92.6%	11,939	12,013	74	0.6%
93.8%	11,837	11,867	29	0.2%
95.1%	11,473	11,556	83	0.7%
96.3%	10,773	10,593	-180	-1.7%
97.5%	9,968	10,519	551	5.5%
98.8%	8,824	8,836	12	0.1%
100.0%	8,454	8,500	46	0.5%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	76,337	76,339	2	0.0%
1.2%	76,183	76,179	-5	0.0%
2.5%	69,972	69,420	-552	-0.8%
3.7%	57,194	57,197	3	0.0%
4.9%	53,647	54,325	678	1.3%
6.2%	50,170	50,165	-4	0.0%
7.4%	49,801	49,636	-165	-0.3%
8.6%	49,621	48,996	-625	-1.3%
9.9%	48,946	48,378	-567	-1.2%
11.1%	48,593	47,808	-785	-1.6%
12.3%	47,814	45,684	-2,130	-4.5%
13.6%	39,998	37,585	-2,413	-6.0%
14.8%	39,310	37,272	-2,038	-5.2%
16.0%	37,611	37,030	-582	-1.5%
17.3%	37,111	36,200	-911	-2.5%
18.5%	35,629	35,173	-456	-1.3%
19.8%	35,177	33,505	-1,673	-4.8%
21.0%	31,949	30,145	-1,805	-5.6%
22.2%	29,720	29,330	-391	-1.3%
23.5%	29,377	29,241	-136	-0.5%
24.7%	28,063	26,087	-1,976	-7.0%
25.9%	25,606	25,657	51	0.2%
27.2%	25,103	24,991	-112	-0.4%
28.4%	24,279	24,158	-121	-0.5%
29.6%	24,068	23,918	-150	-0.6%
30.9%	23,876	23,757	-120	-0.5%
32.1%	23,266	22,827	-440	-1.9%
33.3%	21,862	21,861	-1	0.0%
34.6%	20,519	20,473	-46	-0.2%
35.8%	20,223	19,272	-951	-4.7%
37.0%	19,074	18,585	-489	-2.6%
38.3%	18,306	17,618	-688	-3.8%
39.5%	16,756	16,986	230	1.4%
40.7%	16,584	16,568	-17	-0.1%
42.0%	16,321	16,151	-169	-1.0%
43.2%	14,744	14,981	237	1.6%
44.4%	14,711	14,798	87	0.6%
45.7%	14,628	14,666	38	0.3%
46.9%	14,315	14,596	281	2.0%
48.1%	14,147	14,365	218	1.5%
49.4%	14,101	14,001	-101	-0.7%
50.6%	13,630	13,749	119	0.9%
51.9%	13,376	13,409	32	0.2%
53.1%	13,316	13,376	59	0.4%
54.3%	13,208	13,252	44	0.3%
55.6%	13,120	13,223	103	0.8%
56.8%	12,710	13,141	430	3.4%
58.0%	12,682	13,083	401	3.2%
59.3%	12,562	12,567	5	0.0%
60.5%	12,387	12,533	146	1.2%
61.7%	12,358	12,488	130	1.1%
63.0%	12,293	12,387	94	0.8%
64.2%	12,198	12,272	75	0.6%
65.4%	12,164	12,238	74	0.6%
66.7%	11,692	12,129	437	3.7%
67.9%	11,607	12,023	416	3.6%
69.1%	11,582	11,976	394	3.4%
70.4%	11,537	11,752	214	1.9%
71.6%	11,504	11,745	241	2.1%
72.8%	11,491	11,568	78	0.7%
74.1%	11,430	11,547	118	1.0%
75.3%	11,377	11,477	100	0.9%
76.5%	11,329	11,413	84	0.7%
77.8%	11,214	11,386	171	1.5%
79.0%	10,990	11,357	367	3.3%
80.2%	10,988	11,306	318	2.9%
81.5%	10,841	10,985	145	1.3%
82.7%	10,718	10,426	-291	-2.7%
84.0%	10,326	10,350	24	0.2%
85.2%	10,166	10,286	120	1.2%
86.4%	10,061	9,972	-89	-0.9%
87.7%	9,791	9,866	75	0.8%
88.9%	9,720	9,755	35	0.4%
90.1%	9,537	9,625	88	0.9%
91.4%	9,410	9,356	-55	-0.6%
92.6%	9,217	9,259	42	0.5%
93.8%	9,107	9,210	102	1.1%
95.1%	9,060	9,109	49	0.5%
96.3%	8,925	8,906	-19	-0.2%
97.5%	8,517	8,534	17	0.2%
98.8%	7,673	7,679	6	0.1%
100.0%	7,315	7,303	-12	-0.2%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	50,687	49,564	-1,123	-2.2%
1.2%	37,909	37,804	-105	-0.3%
2.5%	36,612	36,791	178	0.5%
3.7%	32,337	32,322	-15	0.0%
4.9%	32,318	32,113	-205	-0.6%
6.2%	28,457	28,291	-165	-0.6%
7.4%	27,056	24,810	-2,246	-8.3%
8.6%	24,975	24,720	-254	-1.0%
9.9%	21,378	19,947	-1,431	-6.7%
11.1%	20,203	19,912	-290	-1.4%
12.3%	20,066	19,109	-957	-4.8%
13.6%	19,326	18,475	-851	-4.4%
14.8%	18,515	18,361	-154	-0.8%
16.0%	17,754	17,979	225	1.3%
17.3%	17,392	17,270	-123	-0.7%
18.5%	15,980	14,176	-1,804	-11.3%
19.8%	13,915	13,793	-122	-0.9%
21.0%	13,663	13,581	-81	-0.6%
22.2%	13,449	13,342	-107	-0.8%
23.5%	13,433	13,182	-251	-1.9%
24.7%	13,291	13,126	-165	-1.2%
25.9%	12,898	12,925	27	0.2%
27.2%	12,840	12,849	9	0.1%
28.4%	12,723	12,834	111	0.9%
29.6%	12,671	12,627	-43	-0.3%
30.9%	12,623	12,102	-521	-4.1%
32.1%	12,329	12,059	-269	-2.2%
33.3%	12,169	11,823	-346	-2.8%
34.6%	11,917	11,748	-169	-1.4%
35.8%	11,844	11,390	-454	-3.8%
37.0%	11,467	11,258	-209	-1.8%
38.3%	11,254	11,138	-116	-1.0%
39.5%	11,237	11,085	-153	-1.4%
40.7%	11,209	11,072	-137	-1.2%
42.0%	11,188	11,045	-143	-1.3%
43.2%	11,145	11,017	-129	-1.2%
44.4%	11,115	10,997	-118	-1.1%
45.7%	11,045	10,947	-98	-0.9%
46.9%	10,989	10,893	-96	-0.9%
48.1%	10,938	10,860	-78	-0.7%
49.4%	10,739	10,671	-68	-0.6%
50.6%	10,719	10,631	-88	-0.8%
51.9%	10,697	10,626	-71	-0.7%
53.1%	10,680	10,594	-86	-0.8%
54.3%	10,653	10,568	-85	-0.8%
55.6%	10,514	10,548	35	0.3%
56.8%	10,484	10,483	-1	0.0%
58.0%	10,360	10,481	122	1.2%
59.3%	10,310	10,320	10	0.1%
60.5%	10,293	10,315	23	0.2%
61.7%	10,135	10,302	167	1.7%
63.0%	10,098	10,296	199	2.0%
64.2%	10,041	10,207	166	1.7%
65.4%	10,029	10,204	175	1.7%
66.7%	10,011	10,102	91	0.9%
67.9%	9,950	9,986	37	0.4%
69.1%	9,921	9,976	54	0.5%
70.4%	9,908	9,962	54	0.5%
71.6%	9,816	9,926	110	1.1%
72.8%	9,639	9,823	184	1.9%
74.1%	9,565	9,663	98	1.0%
75.3%	9,543	9,570	27	0.3%
76.5%	9,488	9,526	38	0.4%
77.8%	9,473	9,428	-46	-0.5%
79.0%	9,458	9,413	-46	-0.5%
80.2%	9,428	9,369	-58	-0.6%
81.5%	9,412	9,341	-71	-0.8%
82.7%	9,313	9,266	-47	-0.5%
84.0%	9,206	9,188	-19	-0.2%
85.2%	9,064	9,134	70	0.8%
86.4%	8,982	9,039	57	0.6%
87.7%	8,932	8,965	33	0.4%
88.9%	8,907	8,935	28	0.3%
90.1%	8,459	8,907	448	5.3%
91.4%	8,290	8,860	570	6.9%
92.6%	8,181	8,410	229	2.8%
93.8%	8,115	7,969	-146	-1.8%
95.1%	7,715	7,872	156	2.0%
96.3%	7,150	7,666	516	7.2%
97.5%	6,844	6,547	-297	-4.3%
98.8%	6,194	6,422	228	3.7%
100.0%	5,463	5,594	132	2.4%

Table SW-17-b
Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,828	32,630	801	2.5%
1.2%	18,710	21,315	2,606	13.9%
2.5%	17,931	17,069	-863	-4.8%
3.7%	16,575	16,437	-138	-0.8%
4.9%	16,437	16,226	-210	-1.3%
6.2%	15,636	15,717	82	0.5%
7.4%	15,316	15,546	230	1.5%
8.6%	14,998	15,542	544	3.6%
9.9%	14,970	15,355	385	2.6%
11.1%	14,909	15,034	125	0.8%
12.3%	14,777	14,998	222	1.5%
13.6%	14,772	14,777	5	0.0%
14.8%	14,498	14,695	197	1.4%
16.0%	14,490	14,662	172	1.2%
17.3%	14,057	14,629	572	4.1%
18.5%	14,018	14,543	525	3.7%
19.8%	13,976	14,333	357	2.6%
21.0%	13,946	14,057	111	0.8%
22.2%	13,851	14,018	167	1.2%
23.5%	13,808	13,874	66	0.5%
24.7%	13,734	13,851	117	0.9%
25.9%	13,716	13,717	1	0.0%
27.2%	13,691	13,691	0	0.0%
28.4%	13,612	13,631	19	0.1%
29.6%	13,515	13,603	88	0.6%
30.9%	13,493	13,544	51	0.4%
32.1%	13,374	13,516	142	1.1%
33.3%	13,320	13,512	192	1.4%
34.6%	13,316	13,462	146	1.1%
35.8%	13,275	13,374	99	0.7%
37.0%	13,265	13,322	56	0.4%
38.3%	13,246	13,320	74	0.6%
39.5%	13,187	13,292	105	0.8%
40.7%	13,098	13,286	188	1.4%
42.0%	13,060	13,279	219	1.7%
43.2%	13,054	13,246	192	1.5%
44.4%	13,028	13,234	206	1.6%
45.7%	12,943	13,216	272	2.1%
46.9%	12,743	13,214	470	3.7%
48.1%	12,738	13,213	476	3.7%
49.4%	12,708	13,211	503	4.0%
50.6%	12,546	13,194	647	5.2%
51.9%	12,471	13,191	720	5.8%
53.1%	12,459	13,093	634	5.1%
54.3%	12,345	12,992	647	5.2%
55.6%	12,278	12,943	665	5.4%
56.8%	12,227	12,749	522	4.3%
58.0%	12,181	12,738	557	4.6%
59.3%	12,177	12,735	559	4.6%
60.5%	12,163	12,689	526	4.3%
61.7%	12,157	12,611	454	3.7%
63.0%	12,069	12,564	496	4.1%
64.2%	11,942	12,487	545	4.6%
65.4%	11,881	12,392	511	4.3%
66.7%	11,805	12,327	522	4.4%
67.9%	11,782	12,242	460	3.9%
69.1%	11,703	12,198	495	4.2%
70.4%	11,694	12,195	500	4.3%
71.6%	11,690	12,181	491	4.2%
72.8%	11,688	12,176	488	4.2%
74.1%	11,630	12,162	532	4.6%
75.3%	11,524	12,131	608	5.3%
76.5%	11,486	11,906	420	3.7%
77.8%	11,439	11,863	424	3.7%
79.0%	11,415	11,858	443	3.9%
80.2%	11,351	11,807	456	4.0%
81.5%	11,176	11,414	238	2.1%
82.7%	11,173	11,350	177	1.6%
84.0%	11,172	11,308	136	1.2%
85.2%	11,114	11,270	156	1.4%
86.4%	10,832	11,171	339	3.1%
87.7%	10,827	10,867	39	0.4%
88.9%	10,586	10,827	242	2.3%
90.1%	10,431	10,732	301	2.9%
91.4%	10,322	10,592	270	2.6%
92.6%	9,832	10,205	373	3.8%
93.8%	9,612	10,163	551	5.7%
95.1%	9,132	9,612	479	5.2%
96.3%	8,173	9,200	1,026	12.6%
97.5%	7,910	8,022	112	1.4%
98.8%	7,602	7,970	368	4.8%
100.0%	7,288	7,910	623	8.5%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,894	25,661	767	3.1%
1.2%	24,834	24,881	47	0.2%
2.5%	24,714	24,868	154	0.6%
3.7%	24,634	24,683	49	0.2%
4.9%	24,615	24,634	19	0.1%
6.2%	24,606	24,601	-6	0.0%
7.4%	24,543	24,566	23	0.1%
8.6%	24,524	24,534	10	0.0%
9.9%	24,515	24,528	13	0.1%
11.1%	24,512	24,527	15	0.1%
12.3%	24,511	24,527	16	0.1%
13.6%	24,487	24,524	37	0.2%
14.8%	24,357	24,524	167	0.7%
16.0%	24,319	24,523	204	0.8%
17.3%	24,058	24,515	457	1.9%
18.5%	23,883	24,511	628	2.6%
19.8%	23,830	24,376	547	2.3%
21.0%	23,785	24,220	435	1.8%
22.2%	23,783	24,194	410	1.7%
23.5%	23,719	24,148	430	1.8%
24.7%	23,714	24,051	338	1.4%
25.9%	23,684	23,891	207	0.9%
27.2%	23,633	23,872	239	1.0%
28.4%	23,522	23,853	330	1.4%
29.6%	23,448	23,836	388	1.7%
30.9%	23,356	23,709	353	1.5%
32.1%	22,917	23,617	700	3.1%
33.3%	22,643	23,525	882	3.9%
34.6%	22,604	23,222	618	2.7%
35.8%	22,524	23,004	480	2.1%
37.0%	22,454	23,002	549	2.4%
38.3%	22,428	22,973	545	2.4%
39.5%	22,398	22,888	490	2.2%
40.7%	22,363	22,425	61	0.3%
42.0%	22,322	22,266	-56	-0.3%
43.2%	22,134	21,963	-171	-0.8%
44.4%	21,941	21,915	-26	-0.1%
45.7%	21,857	21,339	-517	-2.4%
46.9%	21,350	21,286	-64	-0.3%
48.1%	21,225	21,176	-49	-0.2%
49.4%	20,931	21,039	108	0.5%
50.6%	20,837	20,932	95	0.5%
51.9%	20,748	20,727	-20	-0.1%
53.1%	20,713	20,708	-5	0.0%
54.3%	20,659	20,683	25	0.1%
55.6%	20,563	20,659	96	0.5%
56.8%	20,320	20,316	-4	0.0%
58.0%	20,285	20,216	-69	-0.3%
59.3%	20,258	20,178	-80	-0.4%
60.5%	20,215	20,172	-44	-0.2%
61.7%	20,128	20,153	25	0.1%
63.0%	19,978	19,904	-74	-0.4%
64.2%	19,964	19,821	-143	-0.7%
65.4%	19,590	19,798	209	1.1%
66.7%	19,395	19,695	300	1.5%
67.9%	19,175	19,594	419	2.2%
69.1%	19,149	19,147	-2	0.0%
70.4%	19,129	19,060	-69	-0.4%
71.6%	19,046	18,526	-520	-2.7%
72.8%	18,654	18,256	-398	-2.1%
74.1%	17,893	18,114	221	1.2%
75.3%	15,966	17,380	1,414	8.9%
76.5%	15,381	17,250	1,868	12.1%
77.8%	15,377	17,209	1,832	11.9%
79.0%	15,375	16,881	1,506	9.8%
80.2%	14,868	16,704	1,836	12.3%
81.5%	13,850	16,541	2,691	19.4%
82.7%	13,838	15,410	1,572	11.4%
84.0%	13,746	15,381	1,635	11.9%
85.2%	13,572	14,811	1,240	9.1%
86.4%	13,254	14,411	1,157	8.7%
87.7%	13,202	14,078	876	6.6%
88.9%	13,120	13,687	567	4.3%
90.1%	12,838	13,528	690	5.4%
91.4%	12,108	13,187	1,080	8.9%
92.6%	11,403	13,056	1,653	14.5%
93.8%	11,351	12,191	841	7.4%
95.1%	11,095	11,425	330	3.0%
96.3%	9,922	10,907	985	9.9%
97.5%	9,776	9,946	170	1.7%
98.8%	9,608	9,850	242	2.5%
100.0%	8,698	9,036	338	3.9%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,144	18,126	-18	-0.1%
1.2%	17,330	17,441	112	0.6%
2.5%	17,285	17,258	-27	-0.2%
3.7%	17,232	17,232	1	0.0%
4.9%	17,163	17,160	-3	0.0%
6.2%	17,162	17,150	-12	-0.1%
7.4%	17,139	17,139	0	0.0%
8.6%	17,078	17,133	55	0.3%
9.9%	16,982	17,098	116	0.7%
11.1%	16,919	17,078	159	0.9%
12.3%	16,903	17,039	136	0.8%
13.6%	16,762	16,919	157	0.9%
14.8%	16,745	16,905	160	1.0%
16.0%	16,740	16,879	138	0.8%
17.3%	16,732	16,745	13	0.1%
18.5%	16,720	16,710	-10	-0.1%
19.8%	16,707	16,709	2	0.0%
21.0%	16,632	16,676	43	0.3%
22.2%	16,542	16,619	76	0.5%
23.5%	16,390	16,543	152	0.9%
24.7%	16,271	16,477	206	1.3%
25.9%	16,269	16,422	153	0.9%
27.2%	16,222	16,410	187	1.2%
28.4%	16,188	16,375	187	1.2%
29.6%	16,158	16,371	213	1.3%
30.9%	16,125	16,188	63	0.4%
32.1%	16,083	16,085	2	0.0%
33.3%	16,001	15,987	-13	-0.1%
34.6%	15,841	15,974	133	0.8%
35.8%	15,837	15,928	91	0.6%
37.0%	15,822	15,911	89	0.6%
38.3%	15,761	15,837	76	0.5%
39.5%	15,745	15,804	59	0.4%
40.7%	15,736	15,761	25	0.2%
42.0%	15,588	15,751	163	1.0%
43.2%	15,510	15,751	241	1.6%
44.4%	15,494	15,740	247	1.6%
45.7%	15,305	15,735	430	2.8%
46.9%	15,287	15,610	323	2.1%
48.1%	15,248	15,599	351	2.3%
49.4%	15,229	15,583	354	2.3%
50.6%	15,222	15,420	199	1.3%
51.9%	15,101	15,395	295	2.0%
53.1%	14,974	15,380	406	2.7%
54.3%	14,944	15,304	360	2.4%
55.6%	14,932	15,287	354	2.4%
56.8%	14,916	15,222	306	2.0%
58.0%	14,711	15,182	472	3.2%
59.3%	14,642	15,151	509	3.5%
60.5%	14,625	15,092	467	3.2%
61.7%	14,576	14,974	399	2.7%
63.0%	14,549	14,841	292	2.0%
64.2%	14,410	14,806	396	2.8%
65.4%	14,242	14,741	499	3.5%
66.7%	13,720	14,625	905	6.6%
67.9%	13,585	14,576	990	7.3%
69.1%	13,457	14,551	1,094	8.1%
70.4%	13,373	14,502	1,129	8.4%
71.6%	12,788	14,410	1,622	12.7%
72.8%	12,580	14,279	1,699	13.5%
74.1%	12,365	14,231	1,866	15.1%
75.3%	10,782	13,739	2,957	27.4%
76.5%	10,191	12,816	2,625	25.8%
77.8%	9,793	12,532	2,740	28.0%
79.0%	9,407	11,723	2,315	24.6%
80.2%	9,380	11,717	2,337	24.9%
81.5%	9,376	11,669	2,293	24.5%
82.7%	9,370	11,530	2,160	23.1%
84.0%	9,163	11,298	2,135	23.3%
85.2%	9,022	10,439	1,417	15.7%
86.4%	8,934	10,378	1,443	16.2%
87.7%	8,837	10,280	1,443	16.3%
88.9%	8,650	9,474	824	9.5%
90.1%	8,424	9,257	833	9.9%
91.4%	8,243	8,988	745	9.0%
92.6%	8,176	8,984	808	9.9%
93.8%	8,139	8,768	629	7.7%
95.1%	8,077	8,759	682	8.4%
96.3%	7,779	8,731	952	12.2%
97.5%	7,574	8,540	965	12.7%
98.8%	7,347	8,504	1,157	15.8%
100.0%	7,128	8,181	1,053	14.8%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,263	30,252	-11	0.0%
1.2%	30,137	30,222	85	0.3%
2.5%	29,508	29,592	83	0.3%
3.7%	29,461	29,529	68	0.2%
4.9%	28,870	29,352	482	1.7%
6.2%	28,864	29,351	487	1.7%
7.4%	28,399	28,937	539	1.9%
8.6%	28,311	28,660	349	1.2%
9.9%	27,912	28,579	668	2.4%
11.1%	27,780	28,557	777	2.8%
12.3%	27,725	28,471	745	2.7%
13.6%	27,463	28,337	874	3.2%
14.8%	27,216	27,291	75	0.3%
16.0%	26,390	26,179	-210	-0.8%
17.3%	25,646	25,977	331	1.3%
18.5%	24,914	25,056	142	0.6%
19.8%	24,763	24,914	152	0.6%
21.0%	23,847	24,904	1,057	4.4%
22.2%	23,703	24,187	484	2.0%
23.5%	23,699	23,272	-426	-1.8%
24.7%	23,163	23,120	-43	-0.2%
25.9%	22,758	22,758	-1	0.0%
27.2%	22,582	22,639	58	0.3%
28.4%	22,463	22,526	62	0.3%
29.6%	22,429	22,463	34	0.2%
30.9%	22,371	22,439	67	0.3%
32.1%	22,320	22,061	-258	-1.2%
33.3%	21,643	21,546	-97	-0.4%
34.6%	21,547	21,483	-64	-0.3%
35.8%	21,027	21,346	319	1.5%
37.0%	19,727	19,792	65	0.3%
38.3%	19,297	19,676	379	2.0%
39.5%	18,643	19,436	793	4.3%
40.7%	16,893	17,020	128	0.8%
42.0%	16,534	16,929	395	2.4%
43.2%	14,727	15,753	1,026	7.0%
44.4%	14,679	15,550	871	5.9%
45.7%	14,448	15,458	1,010	7.0%
46.9%	14,425	15,436	1,011	7.0%
48.1%	14,284	15,134	850	6.0%
49.4%	14,124	15,122	998	7.1%
50.6%	14,019	15,090	1,071	7.6%
51.9%	13,671	14,875	1,204	8.8%
53.1%	13,610	14,847	1,237	9.1%
54.3%	13,306	14,643	1,337	10.0%
55.6%	13,236	14,637	1,401	10.6%
56.8%	13,093	14,489	1,395	10.7%
58.0%	13,081	14,351	1,270	9.7%
59.3%	12,894	14,285	1,392	10.8%
60.5%	12,892	14,245	1,353	10.5%
61.7%	12,819	14,211	1,391	10.9%
63.0%	12,503	14,090	1,587	12.7%
64.2%	12,120	14,004	1,884	15.5%
65.4%	11,686	13,644	1,958	16.8%
66.7%	11,609	13,588	1,979	17.1%
67.9%	10,795	13,496	2,702	25.0%
69.1%	10,646	13,150	2,505	23.5%
70.4%	10,295	13,096	2,801	27.2%
71.6%	10,244	12,781	2,537	24.8%
72.8%	10,117	12,773	2,656	26.3%
74.1%	9,999	12,693	2,694	26.9%
75.3%	9,938	12,389	2,451	24.7%
76.5%	9,684	12,345	2,661	27.5%
77.8%	9,622	12,264	2,642	27.5%
79.0%	9,545	12,055	2,510	26.3%
80.2%	9,477	11,727	2,249	23.7%
81.5%	9,089	11,432	2,343	25.8%
82.7%	8,865	11,388	2,522	28.4%
84.0%	8,638	11,376	2,737	31.7%
85.2%	8,609	11,288	2,679	31.1%
86.4%	8,490	10,917	2,428	28.6%
87.7%	8,417	10,402	1,985	23.6%
88.9%	8,166	10,322	2,156	26.4%
90.1%	8,130	10,252	2,122	26.1%
91.4%	8,064	9,370	1,305	16.2%
92.6%	7,719	9,043	1,324	17.1%
93.8%	7,057	8,811	1,755	24.9%
95.1%	6,903	8,575	1,672	24.2%
96.3%	6,767	8,075	1,308	19.3%
97.5%	6,708	8,022	1,314	19.6%
98.8%	6,444	7,695	1,251	19.4%
100.0%	6,426	7,115	690	10.7%

Figure SW-18-b
Lake Oroville, End of Month Storage
Probability of Exceedance

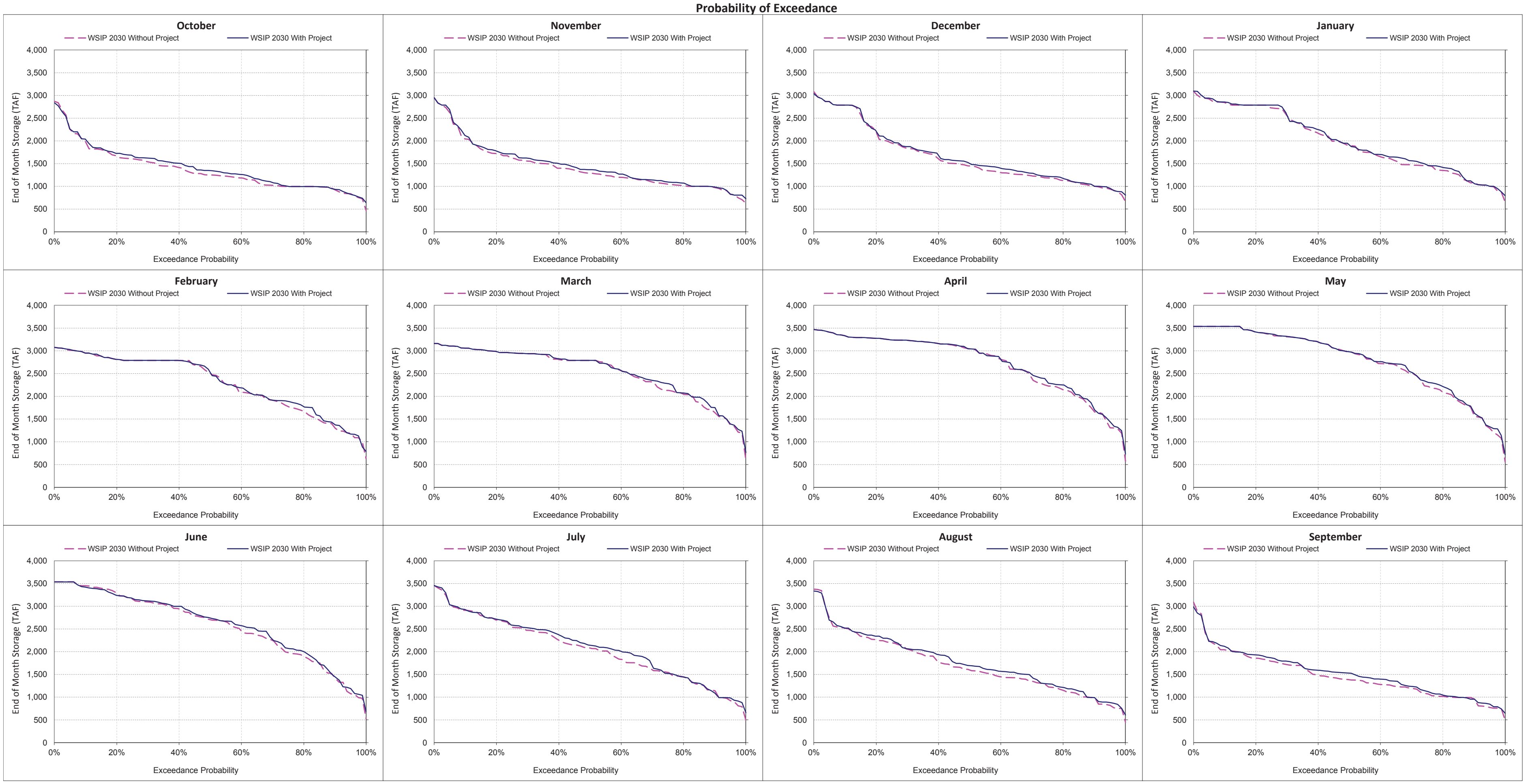


Table SW-18-b

Lake Oroville, End of Month Storage

Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,872	2,839	-33	-1.2%
1.2%	2,839	2,772	-67	-2.4%
2.5%	2,682	2,638	-44	-1.6%
3.7%	2,573	2,541	-33	-1.3%
4.9%	2,264	2,264	0	0.0%
6.2%	2,164	2,203	39	1.8%
7.4%	2,157	2,199	42	1.9%
8.6%	2,061	2,047	-14	-0.7%
9.9%	1,995	2,039	44	2.2%
11.1%	1,826	1,943	118	6.4%
12.3%	1,822	1,859	37	2.0%
13.6%	1,822	1,847	25	1.4%
14.8%	1,811	1,844	33	1.8%
16.0%	1,789	1,800	10	0.6%
17.3%	1,751	1,771	20	1.1%
18.5%	1,696	1,761	66	3.9%
19.8%	1,675	1,725	50	3.0%
21.0%	1,633	1,725	92	5.7%
22.2%	1,620	1,704	85	5.2%
23.5%	1,615	1,692	77	4.8%
24.7%	1,608	1,685	77	4.8%
25.9%	1,599	1,643	44	2.7%
27.2%	1,584	1,630	46	2.9%
28.4%	1,577	1,628	51	3.2%
29.6%	1,545	1,624	79	5.1%
30.9%	1,527	1,616	89	5.8%
32.1%	1,517	1,614	97	6.4%
33.3%	1,460	1,565	105	7.2%
34.6%	1,451	1,564	113	7.8%
35.8%	1,447	1,544	97	6.7%
37.0%	1,446	1,531	85	5.9%
38.3%	1,445	1,515	69	4.8%
39.5%	1,420	1,512	92	6.5%
40.7%	1,403	1,503	100	7.2%
42.0%	1,351	1,461	110	8.1%
43.2%	1,318	1,434	116	8.8%
44.4%	1,290	1,433	143	11.0%
45.7%	1,283	1,360	77	6.0%
46.9%	1,282	1,360	78	6.1%
48.1%	1,257	1,352	96	7.6%
49.4%	1,250	1,349	100	8.0%
50.6%	1,249	1,342	93	7.5%
51.9%	1,245	1,335	91	7.3%
53.1%	1,234	1,319	85	6.9%
54.3%	1,230	1,298	69	5.6%
55.6%	1,222	1,291	69	5.7%
56.8%	1,211	1,275	64	5.3%
58.0%	1,198	1,274	75	6.3%
59.3%	1,187	1,265	78	6.6%
60.5%	1,183	1,259	76	6.4%
61.7%	1,152	1,242	90	7.8%
63.0%	1,148	1,210	62	5.4%
64.2%	1,138	1,175	37	3.2%
65.4%	1,074	1,162	88	8.2%
66.7%	1,039	1,135	96	9.2%
67.9%	1,029	1,117	88	8.6%
69.1%	1,026	1,105	79	7.7%
70.4%	1,022	1,076	54	5.3%
71.6%	1,015	1,062	47	4.6%
72.8%	1,001	1,022	21	2.1%
74.1%	998	1,012	14	1.4%
75.3%	998	998	0	0.0%
76.5%	998	998	0	0.0%
77.8%	998	998	0	0.0%
79.0%	998	998	0	0.0%
80.2%	998	998	0	0.0%
81.5%	998	998	0	0.0%
82.7%	998	998	0	0.0%
84.0%	998	998	0	0.0%
85.2%	990	991	2	0.2%
86.4%	983	988	6	0.6%
87.7%	980	983	3	0.3%
88.9%	964	951	-13	-1.4%
90.1%	920	932	12	1.3%
91.4%	879	930	51	5.8%
92.6%	850	890	40	4.7%
93.8%	843	852	10	1.2%
95.1%	837	827	-10	-1.2%
96.3%	786	803	18	2.2%
97.5%	753	771	18	2.3%
98.8%	727	738	12	1.6%
100.0%	469	643	174	37.0%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,950	2,950	0	0.0%
1.2%	2,834	2,834	0	0.0%
2.5%	2,788	2,788	0	0.0%
3.7%	2,735	2,788	53	1.9%
4.9%	2,627	2,691	64	2.4%
6.2%	2,369	2,405	36	1.5%
7.4%	2,358	2,336	-22	-1.0%
8.6%	2,120	2,245	125	5.9%
9.9%	2,045	2,120	75	3.7%
11.1%	2,035	2,079	45	2.2%
12.3%	1,955	1,934	-22	-1.1%
13.6%	1,901	1,901	0	0.0%
14.8%	1,829	1,880	51	2.8%
16.0%	1,788	1,849	62	3.5%
17.3%	1,755	1,814	60	3.4%
18.5%	1,729	1,807	78	4.5%
19.8%	1,723	1,785	62	3.6%
21.0%	1,713	1,751	38	2.2%
22.2%	1,675	1,723	48	2.9%
23.5%	1,675	1,718	43	2.5%
24.7%	1,624	1,717	93	5.7%
25.9%	1,609	1,708	99	6.2%
27.2%	1,576	1,629	52	3.3%
28.4%	1,575	1,625	50	3.2%
29.6%	1,558	1,621	63	4.1%
30.9%	1,553	1,612	59	3.8%
32.1%	1,524	1,585	61	4.0%
33.3%	1,511	1,573	62	4.1%
34.6%	1,503	1,568	65	4.3%
35.8%	1,500	1,553	53	3.5%
37.0%	1,494	1,542	48	3.2%
38.3%	1,455	1,518	63	4.3%
39.5%	1,400	1,512	112	8.0%
40.7%	1,399	1,490	91	6.5%
42.0%	1,395	1,487	92	6.6%
43.2%	1,386	1,466	80	5.8%
44.4%	1,367	1,435	67	4.9%
45.7%	1,347	1,411	64	4.7%
46.9%	1,319	1,371	52	4.0%
48.1%	1,301	1,371	70	5.4%
49.4%	1,292	1,368	77	6.0%
50.6%	1,289	1,368	79	6.2%
51.9%	1,275	1,359	84	6.6%
53.1%	1,270	1,330	60	4.7%
54.3%	1,247	1,328	82	6.5%
55.6%	1,236	1,316	81	6.5%
56.8%	1,229	1,315	86	7.0%
58.0%	1,203	1,310	107	8.9%
59.3%	1,201	1,273	72	6.0%
60.5%	1,199	1,267	69	5.7%
61.7%	1,187	1,242	55	4.7%
63.0%	1,177	1,196	19	1.6%
64.2%	1,174	1,171	-2	-0.2%
65.4%	1,147	1,163	16	1.4%
66.7%	1,142	1,150	8	0.7%
67.9%	1,142	1,149	7	0.6%
69.1%	1,114	1,142	28	2.5%
70.4%	1,090	1,139	49	4.5%
71.6%	1,078	1,130	52	4.8%
72.8%	1,070	1,128	58	5.4%
74.1%	1,058	1,104	45	4.3%
75.3%	1,044	1,091	48	4.6%
76.5%	1,038	1,089	51	4.9%
77.8%	1,028	1,086	58	5.7%
79.0%	1,022	1,074	53	5.2%
80.2%	1,016	1,073	56	5.5%
81.5%	1,001	1,031	30	3.0%
82.7%	1,001	1,001	0	0.0%
84.0%	1,001	1,001	0	0.0%
85.2%	1,001	1,001	0	0.0%
86.4%	1,001	1,001	0	0.0%
87.7%	1,001	1,001	0	0.0%
88.9%	991	994	3	0.3%
90.1%	972	983	11	1.1%
91.4%	954	969	14	1.5%
92.6%	912	956	44	4.8%
93.8%	907	912	5	0.5%
95.1%	823	833	10	1.2%
96.3%	818	808	-10	-1.3%
97.5%	748	806	58	7.7%
98.8%	707	805	98	13.9%
100.0%	632	731	99	15.7%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,082	3,038	-44	-1.4%
1.2%	2,968	2,968	0	0.0%
2.5%	2,930	2,930	0	0.0%
3.7%	2,867	2,867	0	0.0%
4.9%	2,866	2,866	0	0.0%
6.2%	2,800	2,800	0	0.0%
7.4%	2,788	2,788	0	0.0%
8.6%	2,788	2,788	0	0.0%
9.9%	2,788	2,788	0	0.0%
11.1%	2,788	2,788	0	0.0%
12.3%	2,782	2,781	-1	0.0%
13.6%	2,740	2,747	7	0.3%
14.8%	2,604	2,707	103	4.0%
16.0%	2,432	2,426	-6	-0.2%
17.3%	2,335	2,380	45	1.9%
18.5%	2,314	2,279	-35	-1.5%
19.8%	2,241	2,241	0	0.0%
21.0%	2,032	2,107	75	3.7%
22.2%	2,018	2,103	86	4.2%
23.5%	1,997	2,033	36	1.8%
24.7%	1,961	2,013	52	2.6%
25.9%	1,930	1,960	30	1.6%
27.2%	1,920	1,953	33	1.7%
28.4%	1,869	1,888	19	1.0%
29.6%	1,841	1,874	33	1.8%
30.9%	1,829	1,873	45	2.4%
32.1%	1,826	1,838	12	0.7%
33.3%	1,774	1,803	29	1.6%
34.6%	1,750	1,788	38	2.2%
35.8%	1,739	1,773	34	2.0%
37.0%	1,715	1,756	41	2.4%
38.3%	1,704	1,744	40	2.3%
39.5%	1,634	1,733	100	6.1%
40.7%	1,564	1,613	49	3.1%
42.0%	1,546	1,590	44	2.9%
43.2%	1,508	1,587	79	5.2%
44.4%	1,506	1,572	65	4.3%
45.7%	1,502	1,565	63	4.2%
46.9%	1,484	1,563	79	5.3%
48.1%	1,476	1,557	80	5.4%
49.4%	1,451	1,524	74	5.1%
50.6%	1,447	1,483	36	2.5%
51.9%	1,433	1,476	42	2.9%
53.1%	1,402	1,460	58	4.2%
54.3%	1,350	1,453	103	7.7%
55.6%	1,347	1,446	99	7.3%
56.8%	1,338	1,437	99	7.4%
58.0%	1,332	1,432	100	7.5%
59.3%	1,308	1,411	103	7.9%
60.5%	1,297	1,389	92	7.1%
61.7%	1,296	1,378	82	6.3%
63.0%	1,285	1,371	86	6.7%
64.2%	1,270	1,354	83	6.5%
65.4%	1,263	1,333	70	5.5%
66.7%	1,260	1,325	64	5.1%
67.9%	1,253	1,309	57	4.5%
69.1%	1,241	1,295	54	4.4%
70.4%	1,226	1,289	62	5.1%
71.6%	1,221	1,255	34	2.8%
72.8%	1,210	1,238	29	2.4%
74.1%	1,189	1,225	36	3.0%
75.3%	1,185	1,218	34	2.8%
76.5%	1,181	1,212	31	2.6%
77.8%	1,172	1,212	40	3.4%
79.0%	1,138	1,202	64	5.6%
80.2%	1,125	1,168	43	3.8%
81.5%	1,124	1,147	23	2.0%
82.7%	1,106	1,108	2	0.2%
84.0%	1,087	1,093	6	0.6%
85.2%	1,059	1,081	22	2.1%
86.4%	1,047	1,073	26	2.5%
87.7%	1,034	1,056	22	2.1%
88.9%	1,006	1,047	42	4.1%
90.1%	1,002	1,002	0	0.0%
91.4%	990	1,001	12	1.2%
92.6%	965	998	33	3.5%
93.8%	964	993	29	3.1%
95.1%	940	954	15	1.6%
96.3%	911	907	-4	-0.4%
97.5%	881	889	8	0.9%
98.8%	813	880	68	8.3%
100.0%	665	809	144	21.6%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,091	3,094	3	0.1%
1.2%	3,007	3,091	84	2.8%
2.5%	2,943	3,007	64	2.2%
3.7%	2,940	2,943	3	0.1%
4.9%	2,924	2,940	16	0.5%
6.2%	2,870	2,924	54	1.9%
7.4%	2,854	2,870	16	0.6%
8.6%	2,854	2,854	0	0.0%
9.9%	2,846	2,854	8	0.3%
11.1%	2,809	2,846	37	1.3%
12.3%	2,788	2,813	25	0.9%
13.6%	2,788	2,809	21	0.8%
14.8%	2,788	2,794	6	0.2%
16.0%	2,788	2,788	0	0.0%
17.3%	2,788	2,788	0	0.0%
18.5%	2,788	2,788	0	0.0%
19.8%	2,788	2,788	0	0.0%
21.0%	2,788	2,788	0	0.0%
22.2%	2,788	2,788	0	0.0%
23.5%	2,787	2,788	1	0.0%
24.7%	2,730	2,788	58	2.1%
25.9%	2,719	2,788	69	2.6%
27.2%	2,711	2,788	77	2.8%
28.4%	2,707	2,749	41	1.5%
29.6%	2,588	2,624	36	1.4%
30.9%	2,477	2,431	-46	-1.9%
32.1%	2,431	2,426	-5	-0.2%
33.3%	2,395	2,400	5	0.2%
34.6%	2,373	2,392	19	0.8%
35.8%	2,276	2,308	33	1.4%
37.0%	2,253	2,304	51	2.3%
38.3%	2,213	2,289	76	3.4%
39.5%	2,186	2,255	68	3.1%
40.7%	2,144	2,237	93	4.3%
42.0%	2,117	2,195	78	3.7%
43.2%	2,106	2,076	-30	-1.4%
44.4%	1,993	2,032	39	1.9%
45.7%	1,993	2,028	36	1.8%
46.9%	1,981	1,984	3	0.2%
48.1%	1,946	1,951	5	0.3%
49.4%	1,905	1,951	45	2.4%
50.6%	1,894	1,875	-19	-1.0%
51.9%	1,886	1,864	-22	-1.2%
53.1%	1,780	1,809	29	1.6%
54.3%	1,758	1,797	39	2.2%
55.6%	1,750	1,796	46	2.6%
56.8%	1,749	1,757	8	0.4%
58.0%	1,703	1,702	-1	-0.1%
59.3%	1,668	1,702	34	2.0%
60.5%	1,641	1,698	57	3.4%
61.7%	1,620	1,668	48	3.0%
63.0%	1,614	1,648	34	2.1%
64.2%	1,577	1,647	70	4.5%
65.4%	1,544	1,641	97	6.3%
66.7%	1,479	1,622	143	9.6%
67.9%	1,477	1,606	128	8.7%
69.1%	1,477	1,566	89	6.1%
70.4%	1,465	1,563	98	6.7%
71.6%	1,464	1,549	85	5.8%
72.8%	1,461	1,521	60	4.1%
74.1%	1,456	1,499	44	3.0%
75.3%	1,455	1,460	5	0.3%
76.5%	1,440	1,455	15	1.1%
77.8%	1,359	1,455	96	7.1%
79.0%	1,355	1,434	79	5.8%
80.2%	1,350	1,410	59	4.4%
81.5%	1,344	1,404	60	4.4%
82.7%	1,296	1,390	94	7.3%
84.0%	1,279	1,353	73	5.7%
85.2%	1,255	1,326	71	5.7%
86.4%	1,159	1,208	49	4.2%
87.7%	1,124	1,123	-1	-0.1%
88.9%	1,079	1,122	43	4.0%
90.1%	1,078	1,057	-21	-1.9%
91.4%	1,037	1,034	-3	-0.3%
92.6%	1,031	1,031	0	0.0%
93.8%	1,021	1,029	8	0.8%
95.1%	1,003	1,003	0	0.0%
96.3%	992	1,003	11	1.1%
97.5%	900	951	50	5.6%
98.8%	874	880	6	0.7%
100.0%	654	798	144	22.0%

Table SW-18-b
Lake Oroville, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,078	3,078	0	0.0%
1.2%	3,064	3,064	0	0.0%
2.5%	3,057	3,057	0	0.0%
3.7%	3,028	3,041	13	0.4%
4.9%	3,014	3,028	13	0.4%
6.2%	3,009	3,009	0	0.0%
7.4%	2,997	2,997	0	0.0%
8.6%	2,987	2,987	0	0.0%
9.9%	2,952	2,952	0	0.0%
11.1%	2,951	2,951	0	0.0%
12.3%	2,925	2,928	3	0.1%
13.6%	2,891	2,925	34	1.2%
14.8%	2,890	2,890	0	0.0%
16.0%	2,856	2,856	0	0.0%
17.3%	2,853	2,853	0	0.0%
18.5%	2,832	2,832	0	0.0%
19.8%	2,813	2,813	0	0.0%
21.0%	2,806	2,806	0	0.0%
22.2%	2,788	2,788	0	0.0%
23.5%	2,788	2,788	0	0.0%
24.7%	2,788	2,788	0	0.0%
25.9%	2,788	2,788	0	0.0%
27.2%	2,788	2,788	0	0.0%
28.4%	2,788	2,788	0	0.0%
29.6%	2,788	2,788	0	0.0%
30.9%	2,788	2,788	0	0.0%
32.1%	2,788	2,788	0	0.0%
33.3%	2,788	2,788	0	0.0%
34.6%	2,788	2,788	0	0.0%
35.8%	2,788	2,788	0	0.0%
37.0%	2,788	2,788	0	0.0%
38.3%	2,788	2,788	0	0.0%
39.5%	2,788	2,788	0	0.0%
40.7%	2,788	2,787	-1	0.0%
42.0%	2,787	2,775	-12	-0.4%
43.2%	2,786	2,756	-30	-1.1%
44.4%	2,700	2,714	14	0.5%
45.7%	2,675	2,697	21	0.8%
46.9%	2,660	2,686	26	1.0%
48.1%	2,587	2,666	79	3.1%
49.4%	2,526	2,596	70	2.8%
50.6%	2,474	2,455	-19	-0.8%
51.9%	2,461	2,443	-18	-0.7%
53.1%	2,409	2,335	-74	-3.1%
54.3%	2,295	2,289	-5	-0.2%
55.6%	2,255	2,255	0	0.0%
56.8%	2,253	2,252	-1	-0.1%
58.0%	2,251	2,214	-37	-1.6%
59.3%	2,093	2,192	99	4.7%
60.5%	2,088	2,179	91	4.4%
61.7%	2,078	2,117	39	1.9%
63.0%	2,063	2,066	3	0.2%
64.2%	2,059	2,034	-26	-1.2%
65.4%	2,029	2,033	4	0.2%
66.7%	2,014	2,024	10	0.5%
67.9%	1,936	1,983	46	2.4%
69.1%	1,926	1,923	-3	-0.2%
70.4%	1,908	1,914	5	0.3%
71.6%	1,884	1,908	24	1.3%
72.8%	1,855	1,903	49	2.6%
74.1%	1,805	1,903	97	5.4%
75.3%	1,765	1,883	117	6.7%
76.5%	1,747	1,858	112	6.4%
77.8%	1,725	1,841	116	6.7%
79.0%	1,697	1,814	118	6.9%
80.2%	1,665	1,762	97	5.8%
81.5%	1,593	1,759	166	10.4%
82.7%	1,549	1,754	205	13.2%
84.0%	1,522	1,591	69	4.5%
85.2%	1,467	1,568	101	6.9%
86.4%	1,417	1,461	44	3.1%
87.7%	1,404	1,442	38	2.7%
88.9%	1,402	1,431	29	2.1%
90.1%	1,296	1,367	72	5.5%
91.4%	1,238	1,357	119	9.6%
92.6%	1,234	1,287	53	4.3%
93.8%	1,198	1,201	2	0.2%
95.1%	1,188	1,172	-16	-1.4%
96.3%	1,091	1,164	73	6.7%
97.5%	1,088	1,127	39	3.6%
98.8%	1,002	886	-115	-11.5%
100.0%	628	787	160	25.4%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,163	3,163	0	0.0%
1.2%	3,162	3,162	0	0.0%
2.5%	3,123	3,123	0	0.0%
3.7%	3,120	3,120	0	0.0%
4.9%	3,105	3,105	0	0.0%
6.2%	3,105	3,105	0	0.0%
7.4%	3,096	3,096	0	0.0%
8.6%	3,063	3,063	0	0.0%
9.9%	3,059	3,059	0	0.0%
11.1%	3,058	3,058	0	0.0%
12.3%	3,036	3,036	0	0.0%
13.6%	3,028	3,028	0	0.0%
14.8%	3,027	3,027	0	0.0%
16.0%	3,018	3,018	0	0.0%
17.3%	2,999	2,999	0	0.0%
18.5%	2,995	2,995	0	0.0%
19.8%	2,988	2,988	0	0.0%
21.0%	2,964	2,964	0	0.0%
22.2%	2,964	2,964	0	0.0%
23.5%	2,964	2,964	0	0.0%
24.7%	2,954	2,954	0	0.0%
25.9%	2,951	2,951	0	0.0%
27.2%	2,944	2,944	0	0.0%
28.4%	2,943	2,943	0	0.0%
29.6%	2,937	2,937	0	0.0%
30.9%	2,936	2,936	0	0.0%
32.1%	2,936	2,936	0	0.0%
33.3%	2,927	2,927	0	0.0%
34.6%	2,922	2,924	2	0.1%
35.8%	2,918	2,922	4	0.1%
37.0%	2,847	2,918	71	2.5%
38.3%	2,817	2,847	30	1.1%
39.5%	2,817	2,833	16	0.6%
40.7%	2,799	2,817	18	0.6%
42.0%	2,788	2,817	29	1.0%
43.2%	2,788	2,788	0	0.0%
44.4%	2,788	2,788	0	0.0%
45.7%	2,788	2,788	0	0.0%
46.9%	2,788	2,788	0	0.0%
48.1%	2,788	2,788	0	0.0%
49.4%	2,788	2,788	0	0.0%
50.6%	2,788	2,788	0	0.0%
51.9%	2,788	2,788	0	0.0%
53.1%	2,757	2,728	-29	-1.1%
54.3%	2,754	2,727	-27	-1.0%
55.6%	2,703	2,709	7	0.2%
56.8%	2,684	2,629	-55	-2.1%
58.0%	2,599	2,607	7	0.3%
59.3%	2,584	2,596	12	0.4%
60.5%	2,550	2,544	-6	-0.2%
61.7%	2,530	2,531	1	0.0%
63.0%	2,483	2,483	0	0.0%
64.2%	2,434	2,478	44	1.8%
65.4%	2,406	2,438	32	1.3%
66.7%	2,377	2,414	37	1.5%
67.9%	2,323	2,381	57	2.5%
69.1%	2,322	2,363	42	1.8%
70.4%	2,314	2,343	29	1.3%
71.6%	2,205	2,336	131	6.0%
72.8%	2,156	2,304	148	6.9%
74.1%	2,132	2,288	156	7.3%
75.3%	2,130	2,277	147	6.9%
76.5%	2,112	2,244	132	6.3%
77.8%	2,081	2,082	1	0.1%
79.0%	2,077	2,080	3	0.1%
80.2%	2,041	2,069	29	1.4%
81.5%	2,039	2,058	19	0.9%
82.7%	2,024	1,985	-39	-1.9%
84.0%	1,885	1,983	98	5.2%
85.2%	1,864	1,979	115	6.2%
86.4%	1,770	1,933	162	9.2%
87.7%	1,713	1,862	149	8.7%
88.9%	1,711	1,757	46	2.7%
90.1%	1,638	1,751	113	6.9%
91.4%	1,554	1,574	19	1.2%
92.6%	1,545	1,567	22	1.4%
93.8%	1,498	1,498	0	0.0%
95.1%	1,363	1,391	28	2.0%
96.3%	1,337	1,367	30	2.2%
97.5%	1,212	1,274	63	5.2%
98.8%	1,196	1,232	36	3.0%
100.0%	607	767	159	26.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,470	3,470	0	0.0%
1.2%	3,456	3,456	0	0.0%
2.5%	3,452	3,452	0	0.0%
3.7%	3,433	3,433	0	0.0%
4.9%	3,410	3,410	0	0.0%
6.2%	3,396	3,396	0	0.0%
7.4%	3,354	3,354	0	0.0%
8.6%	3,352	3,352	0	0.0%
9.9%	3,334	3,334	0	0.0%
11.1%	3,303	3,303	0	0.0%
12.3%	3,298	3,298	0	0.0%
13.6%	3,292	3,292	0	0.0%
14.8%	3,292	3,292	0	0.0%
16.0%	3,291	3,291	0	0.0%
17.3%	3,284	3,284	0	0.0%
18.5%	3,281	3,281	0	0.0%
19.8%	3,277	3,277	0	0.0%
21.0%	3,276	3,276	-1	0.0%
22.2%	3,263	3,262	-1	0.0%
23.5%	3,254	3,253	-1	0.0%
24.7%	3,243	3,242	0	0.0%
25.9%	3,238	3,238	0	0.0%
27.2%	3,236	3,236	0	0.0%
28.4%	3,235	3,235	0	0.0%
29.6%	3,234	3,234	0	0.0%
30.9%	3,227	3,226	-1	0.0%
32.1%	3,218	3,218	0	0.0%
33.3%	3,208	3,208	0	0.0%
34.6%	3,208	3,208	0	0.0%
35.8%	3,196	3,195	-1	0.0%
37.0%	3,190	3,190	-1	0.0%
38.3%	3,180	3,180	0	0.0%
39.5%	3,165	3,165	-1	0.0%
40.7%	3,150	3,150	-1	0.0%
42.0%	3,150	3,149	-1	0.0%
43.2%	3,139	3,147	8	0.3%
44.4%	3,128	3,139	11	0.3%
45.7%	3,108	3,128	20	0.6%
46.9%	3,102	3,107	5	0.2%
48.1%	3,069	3,101	32	1.0%
49.4%	3,051	3,050	-1	0.0%
50.6%	3,035	3,041	6	0.2%
51.9%	3,023	3,035	12	0.4%
53.1%	2,946	2,949	3	0.1%
54.3%	2,943	2,949	6	0.2%
55.6%	2,932	2,893	-38	-1.3%
56.8%	2,899	2,890	-9	-0.3%
58.0%	2,890	2,883	-7	-0.2%
59.3%	2,832	2,875	43	1.5%
60.5%	2,803	2,770	-32	-1.1%
61.7%	2,780	2,755	-25	-0.9%
63.0%	2,601	2,739	138	5.3%
64.2%	2,597	2,603	7	0.3%
65.4%	2,587	2,591	3	0.1%
66.7%	2,583	2,589	6	0.2%
67.9%	2,564	2,550	-14	-0.5%
69.1%	2,486	2,529	43	1.7%
70.4%	2,350	2,460	109	4.6%
71.6%	2,307	2,430	123	5.3%
72.8%	2,285	2,404	119	5.2%
74.1%	2,252	2,388	136	6.1%
75.3%	2,224	2,286	62	2.8%
76.5%	2,224	2,280	56	2.5%
77.8%	2,209	2,261	52	2.4%
79.0%	2,175	2,256	81	3.7%
80.2%	2,137	2,247	110	5.2%
81.5%	2,126	2,192	66	3.1%
82.7%	2,087	2,167	80	3.8%
84.0%	1,993	2,042	49	2.4%
85.2%	1,981	2,029	48	2.4%
86.4%	1,942	1,957	15	0.8%
87.7%	1,846	1,940	93	5.1%
88.9%	1,758	1,863	105	6.0%
90.1%	1,654	1,700	46	2.8%
91.4%	1,651	1,629	-21	-1.3%
92.6%	1,618	1,603	-15	-0.9%
93.8%	1,462	1,529	67	4.6%
95.1%	1,307	1,438	130	10.0%
96.3%	1,304	1,340	36	2.8%
97.5%	1,285	1,320	35	2.7%
98.8%	1,186	1,244	57	4.8%
100.0%	573	732	159	27.8%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,538	3,538	0	0.0%
1.2%	3,538	3,538	0	0.0%
2.5%	3,538	3,538	0	0.0%
3.7%	3,538	3,538	0	0.0%
4.9%	3,538	3,538	0	0.0%
6.2%	3,538	3,538	0	0.0%
7.4%	3,538	3,538	0	0.0%
8.6%	3,538	3,538	0	0.0%
9.9%	3,538	3,538	0	0.0%
11.1%	3,538	3,538	0	0.0%
12.3%	3,538	3,538	0	0.0%
13.6%	3,538	3,538	0	0.0%
14.8%	3,538	3,538	0	0.0%
16.0%	3,467	3,466	-1	0.0%
17.3%	3,464	3,463	-1	0.0%
18.5%	3,448	3,447	-1	0.0%
19.8%	3,416	3,415	-1	0.0%
21.0%	3,399	3,399	-1	0.0%
22.2%	3,396	3,395	-1	0.0%
23.5%	3,374	3,383	9	0.3%
24.7%	3,364	3,373	9	0.3%
25.9%	3,330	3,363	32	1.0%
27.2%	3,328	3,330	1	0.0%
28.4%	3,324	3,327	3	0.1%
29.6%	3,309	3,323	13	0.4%
30.9%	3,306	3,309	3	0.1%
32.1%	3,298	3,297	-1	0.0%
33.3%	3,290	3,288	-1	0.0%
34.6%	3,277	3,275	-1	0.0%
35.8%	3,263	3,262	-1	0.0%
37.0%	3,231	3,230	-1	0.0%
38.3%	3,217	3,217	0	0.0%
39.5%	3,209	3,208	-1	0.0%
40.7%	3,175	3,174	-1	0.0%
42.0%	3,160	3,157	-3	-0.1%
43.2%	3,140	3,139	-1	0.0%
44.4%	3,073	3,072	-1	0.0%
45.7%	3,046	3,045	-2	0.0%
46.9%	3,030	3,008	-22	-0.7%
48.1%	3,001	3,001	0	0.0%
49.4%	2,978	2,985	7	0.2%
50.6%	2,974	2,972	-2	-0.1%
51.9%	2,937	2,943	6	0.2%
53.1%	2,917	2,936	19	0.7%
54.3%	2,910	2,909	-1	0.0%
55.6%	2,819	2,845	26	0.9%
56.8%	2,818	2,828	11	0.4%
58.0%	2,787	2,770	-17	-0.6%
59.3%	2,721	2,762	41	1.5%
60.5%	2,720	2,760	40	1.5%
61.7%	2,716	2,734	18	0.7%
63.0%	2,716	2,725	9	0.3%
64.2%	2,706	2,717	11	0.4%
65.4%	2,666	2,710	43	1.6%
66.7%	2,604	2,704	100	3.8%
67.9%	2,569	2,679	110	4.3%
69.1%	2,506	2,554	48	1.9%
70.4%	2,503	2,514	11	0.4%
71.6%	2,449	2,453	4	0.1%
72.8%	2,369	2,361	-8	-0.4%
74.1%	2,232	2,341	109	4.9%
75.3%	2,216	2,304	88	4.0%
76.5%	2,179	2,292	113	5.2%
77.8%	2,170	2,278	108	5.0%
79.0%	2,145	2,249	104	4.9%
80.2%	2,075	2,206	131	6.3%
81.5%	2,063	2,176	113	5.5%
82.7%	2,035	2,130	95	4.6%
84.0%	1,948	1,986	39	2.0%
85.2%	1,886	1,923	37	2.0%
86.4%	1,837	1,892	55	3.0%
87.7%	1,793	1,813	20	1.1%
88.9%	1,769	1,786	17	0.9%
90.1%	1,563	1,626	63	4.1%
91.4%	1,543	1,572	29	1.9%
92.6%	1,525	1,527	2	0.1%
93.8%	1,355	1,373	18	1.3%
95.1%	1,296	1,331	34	2.7%
96.3%	1,206	1,288	82	6.8%
97.5%	1,152	1,285	133	11.5%
98.8%	1,077	1,143	66	6.2%
100.0%	559	718	159	28.4%

Table SW-18-b

Lake Oroville, End of Month Storage

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,538	3,538	0	0.0%
1.2%	3,538	3,538	0	0.0%
2.5%	3,538	3,538	0	0.0%
3.7%	3,538	3,538	0	0.0%
4.9%	3,538	3,538	0	0.0%
6.2%	3,538	3,538	0	0.0%
7.4%	3,481	3,475	-6	-0.2%
8.6%	3,452	3,431	-21	-0.6%
9.9%	3,451	3,421	-30	-0.9%
11.1%	3,446	3,402	-44	-1.3%
12.3%	3,418	3,391	-27	-0.8%
13.6%	3,416	3,389	-27	-0.8%
14.8%	3,397	3,371	-26	-0.8%
16.0%	3,382	3,364	-18	-0.5%
17.3%	3,375	3,313	-62	-1.8%
18.5%	3,345	3,284	-61	-1.8%
19.8%	3,302	3,241	-61	-1.8%
21.0%	3,232	3,229	-3	-0.1%
22.2%	3,224	3,228	5	0.1%
23.5%	3,190	3,190	0	0.0%
24.7%	3,174	3,183	9	0.3%
25.9%	3,117	3,147	30	0.9%
27.2%	3,107	3,142	35	1.1%
28.4%	3,106	3,125	19	0.6%
29.6%	3,097	3,119	22	0.7%
30.9%	3,090	3,111	21	0.7%
32.1%	3,067	3,104	38	1.2%
33.3%	3,055	3,089	34	1.1%
34.6%	3,052	3,066	15	0.5%
35.8%	3,026	3,056	30	1.0%
37.0%	3,022	3,032	10	0.3%
38.3%	2,955	3,001	46	1.5%
39.5%	2,950	2,999	49	1.6%
40.7%	2,925	2,998	74	2.5%
42.0%	2,870	2,935	65	2.3%
43.2%	2,865	2,906	41	1.4%
44.4%	2,789	2,859	70	2.5%
45.7%	2,786	2,816	29	1.1%
46.9%	2,764	2,791	27	1.0%
48.1%	2,754	2,764	10	0.4%
49.4%	2,715	2,755	40	1.5%
50.6%	2,694	2,728	33	1.2%
51.9%	2,692	2,712	20	0.7%
53.1%	2,684	2,685	0	0.0%
54.3%	2,676	2,675	-1	0.0%
55.6%	2,642	2,672	30	1.1%
56.8%	2,568	2,666	98	3.8%
58.0%	2,534	2,600	65	2.6%
59.3%	2,513	2,581	68	2.7%
60.5%	2,418	2,567	149	6.2%
61.7%	2,403	2,538	134	5.6%
63.0%	2,403	2,532	129	5.4%
64.2%	2,394	2,516	123	5.1%
65.4%	2,360	2,457	97	4.1%
66.7%	2,341	2,452	111	4.7%
67.9%	2,296	2,448	152	6.6%
69.1%	2,276	2,326	51	2.2%
70.4%	2,236	2,244	8	0.4%
71.6%	2,134	2,225	91	4.3%
72.8%	2,077	2,184	107	5.1%
74.1%	1,995	2,087	91	4.6%
75.3%	1,974	2,066	92	4.6%
76.5%	1,956	2,061	105	5.4%
77.8%	1,951	2,032	81	4.2%
79.0%	1,937	2,027	90	4.7%
80.2%	1,890	1,992	102	5.4%
81.5%	1,848	1,939	91	5.0%
82.7%	1,787	1,882	95	5.3%
84.0%	1,773	1,816	43	2.4%
85.2%	1,749	1,722	-27	-1.6%
86.4%	1,597	1,703	106	6.6%
87.7%	1,532	1,612	80	5.2%
88.9%	1,524	1,510	-14	-0.9%
90.1%	1,412	1,440	29	2.0%
91.4%	1,328	1,370	42	3.1%
92.6%	1,326	1,229	-97	-7.3%
93.8%	1,129	1,219	90	8.0%
95.1%	1,075	1,192	118	10.9%
96.3%	1,062	1,083	21	1.9%
97.5%	991	1,065	74	7.5%
98.8%	974	1,041	67	6.9%
100.0%	524	683	158	30.2%

July				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,456	3,456	0	0.0%
1.2%	3,402	3,426	24	0.7%
2.5%	3,357	3,405	48	1.4%
3.7%	3,246	3,294	47	1.5%
4.9%	3,059	3,035	-24	-0.8%
6.2%	2,985	3,009	24	0.8%
7.4%	2,966	2,989	23	0.8%
8.6%	2,917	2,942	25	0.9%
9.9%	2,913	2,932	19	0.7%
11.1%	2,906	2,890	-15	-0.5%
12.3%	2,889	2,866	-24	-0.8%
13.6%	2,879	2,860	-19	-0.6%
14.8%	2,798	2,856	58	2.1%
16.0%	2,778	2,765	-14	-0.5%
17.3%	2,751	2,741	-10	-0.4%
18.5%	2,745	2,739	-6	-0.2%
19.8%	2,700	2,719	19	0.7%
21.0%	2,696	2,703	8	0.3%
22.2%	2,667	2,689	22	0.8%
23.5%	2,651	2,667	16	0.6%
24.7%	2,538	2,588	50	2.0%
25.9%	2,533	2,575	42	1.7%
27.2%	2,527	2,570	43	1.7%
28.4%	2,521	2,534	13	0.5%
29.6%	2,471	2,532	61	2.5%
30.9%	2,468	2,518	50	2.0%
32.1%	2,452	2,507	55	2.2%
33.3%	2,428	2,487	58	2.4%
34.6%	2,424	2,486	61	2.5%
35.8%	2,419	2,477	58	2.4%
37.0%	2,385	2,457	71	3.0%
38.3%	2,328	2,421	92	4.0%
39.5%	2,271	2,386	115	5.1%
40.7%	2,221	2,346	125	5.6%
42.0%	2,188	2,303	114	5.2%
43.2%	2,168	2,289	121	5.6%
44.4%	2,149	2,249	100	4.6%
45.7%	2,149	2,245	97	4.5%
46.9%	2,126	2,199	73	3.5%
48.1%	2,095	2,181	86	4.1%
49.4%	2,091	2,150	59	2.8%
50.6%	2,070	2,136	66	3.2%
51.9%	2,067	2,124	57	2.8%
53.1%	2,021	2,096	74	3.7%
54.3%	2,017	2,094	77	3.8%
55.6%	2,015	2,083	68	3.4%
56.8%	1,934	2,062	128	6.6%
58.0%	1,886	2,034	148	7.8%
59.3%	1,839	2,031	192	10.4%
60.5%	1,827	1,992	165	9.0%
61.7%	1,760	1,990	229	13.0%
63.0%	1,759	1,969	210	11.9%
64.2%	1,757	1,917	160	9.1%
65.4%	1,726	1,906	180	10.4%
66.7%	1,687	1,899	213	12.6%
67.9%	1,680	1,866	185	11.0%
69.1%	1,640	1,808	168	10.2%
70.4%	1,585	1,637	52	3.3%
71.6%	1,582	1,618	35	2.2%
72.8%	1,570	1,595	25	1.6%
74.1%	1,556	1,524	-32	-2.1%
75.3%	1,541	1,519	-22	-1.4%
76.5%	1,474	1,508	34	2.3%
77.8%	1,464	1,483	19	1.3%
79.0%	1,461	1,454	-8	-0.5%
80.2%	1,442	1,443	1	0.0%
81.5%	1,399	1,425	26	1.9%
82.7%	1,334	1,321	-13	-1.0%
84.0%	1,291	1,317	26	2.0%
85.2%	1,283	1,302	19	1.5%
86.4%	1,258	1,263	5	0.4%
87.7%	1,161	1,185	24	2.1%
88.9%	1,158	1,143	-15	-1.3%
90.1%	1,140	1,086	-54	-4.7%
91.4%	991	991	0	0.0%
92.6%	991	991	0	0.0%
93.8%	976	991	15	1.5%
95.1%	924	984	61	6.6%
96.3%	899	931	32	3.6%
97.5%	811	916	105	12.9%
98.8%	791	881	90	11.4%
100.0%	498	656	158	31.7%

August				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,376	3,337	-39	-1.2%
1.2%	3,370	3,326	-45	-1.3%
2.5%	3,342	3,290	-53	-1.6%
3.7%	2,981	3,006	25	0.8%
4.9%	2,750	2,698	-52	-1.9%
6.2%	2,565	2,658	93	3.6%
7.4%	2,544	2,575	31	1.2%
8.6%	2,537	2,556	18	0.7%
9.9%	2,520	2,521	0	0.0%
11.1%	2,501	2,520	19	0.8%
12.3%	2,445	2,450	5	0.2%
13.6%	2,421	2,428	7	0.3%
14.8%	2,345	2,423	78	3.3%
16.0%	2,323	2,386	63	2.7%
17.3%	2,316	2,366	49	2.1%
18.5%	2,273	2,365	92	4.0%
19.8%	2,267	2,344	77	3.4%
21.0%	2,245	2,342	97	4.3%
22.2%	2,242	2,297	56	2.5%
23.5%	2,214	2,295	81	3.7%
24.7%	2,201	2,275	74	3.4%
25.9%	2,187	2,215	28	1.3%
27.2%	2,155	2,183	28	1.3%
28.4%	2,152	2,092	-61	-2.8%
29.6%	2,063	2,071	8	0.4%
30.9%	2,039	2,059	19	0.9%
32.1%	2,012	2,046	34	1.7%
33.3%	1,968	2,044	76	3.9%
34.6%	1,948	2,041	93	4.8%
35.8%	1,910	2,018	108	5.7%
37.0%	1,906	2,000	94	5.0%
38.3%	1,904	1,984	79	4.2%
39.5%	1,804	1,943	139	7.7%
40.7%	1,753	1,928	174	9.9%
42.0%	1,731	1,922	191	11.0%
43.2%	1,726	1,888	162	9.4%
44.4%	1,667	1,780	113	6.8%
45.7%	1,662	1,744	82	5.0%
46.9%	1,655	1,740	85	5.2%
48.1%	1,617	1,722	105	6.5%
49.4%	1,613	1,698	86	5.3%
50.6%	1,583	1,691	108	6.8%
51.9%	1,578	1,682	105	6.7%
53.1%	1,567	1,672	105	6.7%
54.3%	1,546	1,633	87	5.6%
55.6%	1,526	1,611	85	5.6%
56.8%	1,524	1,608	84	5.5%
58.0%	1,480	1,596	116	7.8%
59.3%	1,457	1,572	115	7.9%
60.5%	1,441	1,567	126	8.8%
61.7%	1,433	1,558	125	8.7%
63.0%	1,430	1,548	118	8.3%
64.2%	1,428	1,548	120	8.4%
65.4%	1,426	1,522	95	6.7%
66.7%	1,402	1,508	107	7.6%
67.9%	1,396	1,502	106	7.6%
69.1%	1,357	1,499	142	10.5%
70.4%	1,345	1,417	72	5.4%
71.6%	1,318	1,383	65	4.9%
72.8%	1,307	1,306	0	0.0%
74.1%	1,291	1,296	4	0.3%
75.3%	1,224	1,290	66	5.4%
76.5%	1,216	1,287	71	5.9%
77.8%	1,208	1,239	32	2.6%
79.0%	1,173	1,226	53	4.5%
80.2%	1,146	1,213	68	5.9%
81.5%	1,106	1,185	79	7.1%
82.7%	1,105	1,184	79	7.2%
84.0%	1,093	1,163	70	6.4%
85.2%	1,048	1,133	84	8.0%
86.4%	1,005	1,122	117	11.7%
87.7%	1,004	993	-11	-1.1%
88.9%	992	993	0	0.0%
90.1%	992	992	0	0.0%
91.4%	848	902	54	6.4%
92.6%	847	894	46	5.5%
93.8%	838	893	55	6.6%
95.1%	820	883	63	7.6%
96.3%	767	866	99	12.9%
97.5%	753	840	87	11.6%
98.8%	751	756	5	0.6%
100.0%	449	606	157	35.0%

September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,090	2,989	-100	-3.2%
1.2%	2,893	2,849	-44	-1.5%
2.5%	2,833	2,800	-32	-1.1%
3.7%	2,419	2,455	35	1.5%
4.9%	2,242	2,231	-11	-0.5%
6.2%	2,190	2,220	30	1.4%
7.4%	2,140	2,186	46	2.2%
8.6%	2,045	2,139	94	4.6%
9.9%	2,044	2,119	75	3.7%
11.1%	2,025	2,078	53	2.6%
12.3%	2,015	2,003	-12	-0.6%
13.6%	2,004	1,993	-12	-0.6%
14.8%	1,993	1,993	-1	0.0%
16.0%	1,946	1,976	30	1.5%
17.3%	1,898	1,945	47	2.5%
18.5%	1,864	1,938	74	4.0%
19.8%	1,860	1,929	69	3.7%
21.0%	1,853	1,925	73	3.9%
22.2%	1,837	1,907	70	3.8%
23.5%	1,824	1,878	54	3.0%
24.7%	1,794	1,868	74	4.1%
25.9%	1,781	1,849	69	3.8%
27.2%	1,758	1,809	51	2.9%
28.4%	1,739	1,797	58	3.3%
29.6%	1,722	1,794	72	4.2%
30.9%	1,705	1,783	78	4.6%
32.1%	1,700	1,759	59	3.5%
33.3%	1,699	1,758	59	3.4%
34.6%	1,699	1,704	5	0.3%
35.8%	1,619	1,629	10	0.6%
37.0%	1,567	1,610	43	2.7%
38.3%	1,504	1,603	99	6.6%
39.5%	1,493	1,595	102	6.9%
40.7%	1,469	1,588	119	8.1%
42.0%	1,464	1,576	112	7.6%
43.2%	1,446	1,571	124	8.6%
44.4%	1,433	1,557	124	8.7%
45.7%	1,424	1,547	122	8.6%
46.9%	1,403	1,545	142	10.1%
48.1%	1,393	1,538	145	10.4%
49.4%	1,388	1,531	143	10.3%
50.6%	1,379	1,529	150	10.9%
51.9%	1,376	1,491	116	8.4%
53.1%	1,372	1,456	84	6.1%
54.3%	1,358	1,441	83	6.1%
55.6%	1,315	1,434	119	9.1%
56.8%	1,313	1,421	108	8.2%
58.0%	1,305	1,402	98	7.5%
59.3%	1,284	1,399	115	8.9%
60.5%	1,275	1,395	120	9.4%
61.7%	1,275	1,387	113	8.9%
63.0%	1,267	1,360	93	7.3%
64.2%	1,244	1,356	112	9.0%
65.4%	1,233	1,351	118	9.6%
66.7%	1,225	1,279	54	4.4%
67.9%	1,224	1,260	36	2.9%
69.1%	1,203	1,238	35	2.9%
70.4%	1,191	1,233	41	3.5%
71.6%	1,176	1,222	46	3.9%
72.8%	1,112	1,168	57	5.1%
74.1%	1,085	1,143	58	5.4%
75.3%	1,070	1,124	53	5.0%
76.5%	1,031	1,085	55	5.3%
77.8%	1,028	1,071	43	4.2%
79.0%	1,018	1,071	52	5.1%
80.2%	1,018	1,042	25	2.4%
81.5%	1,003	1,025	21	2.1%
82.7%	1,002	1,018	17	1.7%
84.0%	995	1,013	18	1.9%
85.2%	994	995	0	0.0%
86.4%	994	994	0	0.0%
87.7%	994	987	-7	-0.8%
88.9%	994	957	-37	-3.7%
90.1%	960	953	-7	-0.8%
91.4%	810	884	74	9.1%
92.6%	803	867	65	8.0%
93.8%	797	863	67	8.4%
95.1%	773	848	75	9.7%
96.3%	757	789	32	4.3%
97.5%	757	788	31	4.1%
98.8%	753	742	-11	-1.4%
100.0%	491	648	157	31.9%

Figure SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

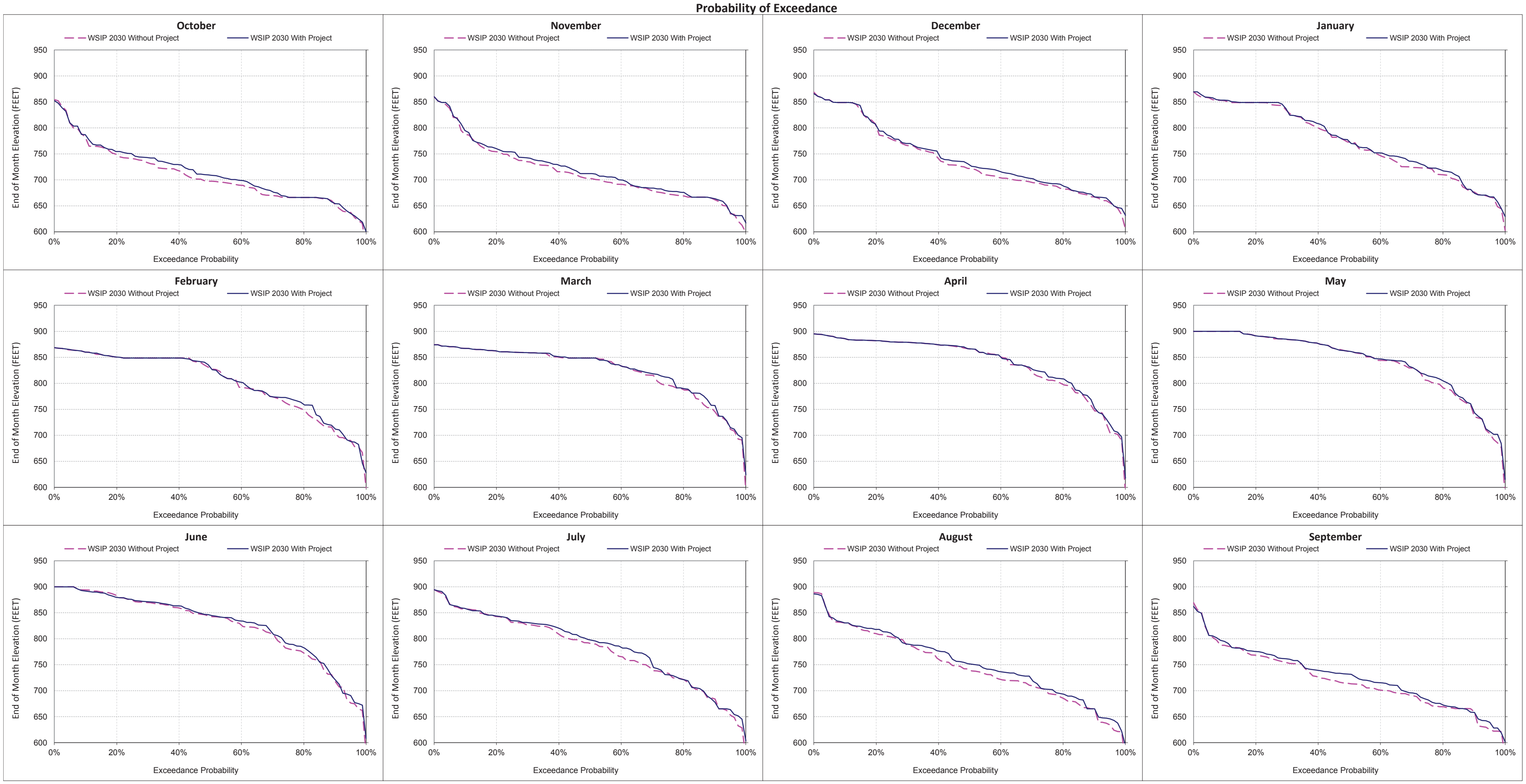


Table SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	855	852	-2	-0.3%
1.2%	852	848	-5	-0.5%
2.5%	842	839	-3	-0.4%
3.7%	834	832	-2	-0.3%
4.9%	810	810	0	0.0%
6.2%	800	804	4	0.5%
7.4%	799	803	4	0.5%
8.6%	789	788	-1	-0.2%
9.9%	782	787	5	0.6%
11.1%	765	777	12	1.6%
12.3%	765	768	4	0.5%
13.6%	765	767	3	0.3%
14.8%	763	767	3	0.4%
16.0%	761	762	1	0.1%
17.3%	757	759	2	0.3%
18.5%	752	758	7	0.9%
19.8%	749	755	5	0.7%
21.0%	744	755	10	1.4%
22.2%	743	752	10	1.3%
23.5%	742	751	9	1.2%
24.7%	741	751	9	1.2%
25.9%	740	745	5	0.7%
27.2%	738	744	6	0.8%
28.4%	737	744	6	0.8%
29.6%	734	743	10	1.3%
30.9%	731	742	11	1.5%
32.1%	730	742	12	1.6%
33.3%	723	736	13	1.8%
34.6%	722	736	14	1.9%
35.8%	722	733	12	1.6%
37.0%	721	732	10	1.4%
38.3%	721	730	8	1.2%
39.5%	718	729	11	1.6%
40.7%	716	728	12	1.7%
42.0%	710	723	13	1.9%
43.2%	706	720	14	2.0%
44.4%	702	720	17	2.5%
45.7%	702	711	9	1.3%
46.9%	701	711	9	1.3%
48.1%	698	710	12	1.7%
49.4%	697	710	12	1.7%
50.6%	697	709	11	1.6%
51.9%	697	708	11	1.6%
53.1%	696	706	10	1.5%
54.3%	695	703	8	1.2%
55.6%	694	703	8	1.2%
56.8%	693	701	8	1.1%
58.0%	691	700	9	1.3%
59.3%	690	699	9	1.4%
60.5%	689	699	9	1.3%
61.7%	686	697	11	1.6%
63.0%	685	693	8	1.1%
64.2%	684	688	4	0.7%
65.4%	676	687	11	1.6%
66.7%	672	684	12	1.7%
67.9%	671	681	11	1.6%
69.1%	670	680	10	1.4%
70.4%	670	676	7	1.0%
71.6%	669	675	6	0.9%
72.8%	667	670	3	0.5%
74.1%	666	669	2	0.3%
75.3%	666	666	0	0.0%
76.5%	666	666	0	0.0%
77.8%	666	666	0	0.0%
79.0%	666	666	0	0.0%
80.2%	666	666	0	0.0%
81.5%	666	666	0	0.0%
82.7%	666	666	0	0.0%
84.0%	666	666	0	0.0%
85.2%	665	665	0	0.0%
86.4%	663	664	1	0.2%
87.7%	663	664	0	0.1%
88.9%	660	658	-2	-0.4%
90.1%	652	654	2	0.3%
91.4%	645	654	9	1.4%
92.6%	640	647	7	1.1%
93.8%	638	640	2	0.3%
95.1%	637	635	-2	-0.3%
96.3%	628	631	3	0.5%
97.5%	621	625	3	0.5%
98.8%	616	619	2	0.4%
100.0%	566	601	35	6.1%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	860	860	0	0.0%
1.2%	852	852	0	0.0%
2.5%	849	849	0	0.0%
3.7%	845	849	4	0.4%
4.9%	838	842	4	0.5%
6.2%	820	823	2	0.3%
7.4%	819	817	-2	-0.3%
8.6%	795	808	13	1.6%
9.9%	787	795	8	1.0%
11.1%	786	791	5	0.6%
12.3%	778	776	-2	-0.3%
13.6%	773	773	0	0.0%
14.8%	765	771	5	0.7%
16.0%	761	767	6	0.8%
17.3%	758	764	6	0.8%
18.5%	755	763	8	1.1%
19.8%	754	761	6	0.8%
21.0%	753	757	4	0.5%
22.2%	749	754	5	0.7%
23.5%	749	754	4	0.6%
24.7%	743	754	11	1.4%
25.9%	741	753	12	1.6%
27.2%	737	744	6	0.9%
28.4%	737	743	6	0.8%
29.6%	735	743	8	1.0%
30.9%	734	742	7	1.0%
32.1%	731	738	7	1.0%
33.3%	729	737	8	1.0%
34.6%	728	736	8	1.1%
35.8%	728	734	6	0.9%
37.0%	727	733	6	0.8%
38.3%	723	730	8	1.1%
39.5%	716	730	14	1.9%
40.7%	716	727	11	1.5%
42.0%	715	726	11	1.6%
43.2%	714	724	10	1.4%
44.4%	712	720	8	1.2%
45.7%	709	717	8	1.1%
46.9%	706	712	6	0.9%
48.1%	704	712	9	1.2%
49.4%	703	712	9	1.3%
50.6%	702	712	10	1.4%
51.9%	701	711	10	1.5%
53.1%	700	707	7	1.0%
54.3%	697	707	10	1.4%
55.6%	696	706	10	1.4%
56.8%	695	705	11	1.5%
58.0%	692	705	13	1.9%
59.3%	692	700	9	1.3%
60.5%	691	700	8	1.2%
61.7%	690	697	7	1.0%
63.0%	689	691	2	0.3%
64.2%	688	688	0	0.0%
65.4%	685	687	2	0.3%
66.7%	684	685	1	0.1%
67.9%	684	685	1	0.1%
69.1%	681	684	3	0.5%
70.4%	678	684	6	0.9%
71.6%	677	683	6	0.9%
72.8%	676	683	7	1.1%
74.1%	674	680	6	0.8%
75.3%	672	678	6	0.9%
76.5%	672	678	6	0.9%
77.8%	670	677	7	1.1%
79.0%	670	676	6	1.0%
80.2%	669	676	7	1.0%
81.5%	667	671	4	0.6%
82.7%	667	667	0	0.0%
84.0%	667	667	0	0.0%
85.2%	667	667	0	0.0%
86.4%	667	667	0	0.0%
87.7%	667	667	0	0.0%
88.9%	665	665	1	0.1%
90.1%	662	663	2	0.3%
91.4%	658	661	3	0.4%
92.6%	651	659	8	1.2%
93.8%	650	651	1	0.1%
95.1%	635	636	2	0.3%
96.3%	634	632	-2	-0.3%
97.5%	620	631	11	1.8%
98.8%	613	631	18	3.0%
100.0%	599	617	19	3.1%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	869	866	-3	-0.3%
1.2%	861	861	0	0.0%
2.5%	858	858	0	0.0%
3.7%	854	854	0	0.0%
4.9%	854	854	0	0.0%
6.2%	850	850	0	0.0%
7.4%	849	849	0	0.0%
8.6%	849	849	0	0.0%
9.9%	849	849	0	0.0%
11.1%	849	849	0	0.0%
12.3%	848	848	0	0.0%
13.6%	845	846	1	0.1%
14.8%	836	843	7	0.8%
16.0%	824	824	0	0.0%
17.3%	817	821	4	0.4%
18.5%	815	812	-4	-0.4%
19.8%	808	808	0	0.0%
21.0%	786	794	8	1.0%
22.2%	785	793	9	1.1%
23.5%	783	786	4	0.5%
24.7%	779	784	5	0.7%
25.9%	776	779	3	0.4%
27.2%	775	778	3	0.4%
28.4%	769	771	2	0.3%
29.6%	767	770	3	0.4%
30.9%	765	770	5	0.6%
32.1%	765	766	1	0.2%
33.3%	760	763	3	0.4%
34.6%	757	761	4	0.5%
35.8%	756	760	3	0.5%
37.0%	754	758	4	0.6%
38.3%	752	757	4	0.5%
39.5%	744	755	11	1.5%
40.7%	736	742	6	0.8%
42.0%	734	739	5	0.7%
43.2%	729	739	10	1.3%
44.4%	729	737	8	1.1%
45.7%	728	736	8	1.0%
46.9%	726	736	10	1.3%
48.1%	725	735	10	1.4%
49.4%	722	731	9	1.2%
50.6%	722	726	4	0.6%
51.9%	720	725	5	0.7%
53.1%	716	723	7	1.0%
54.3%	710	722	13	1.8%
55.6%	709	721	12	1.7%
56.8%	708	720	12	1.7%
58.0%	708	720	12	1.7%
59.3%	705	717	13	1.8%
60.5%	703	715	11	1.6%
61.7%	703	713	10	1.4%
63.0%	702	712	10	1.5%
64.2%	700	710	10	1.4%
65.4%	699	708	9	1.2%
66.7%	699	707	8	1.1%
67.9%	698	705	7	1.0%
69.1%	696	703	7	0.9%
70.4%	695	702	8	1.1%
71.6%	694	698	4	0.6%
72.8%	693	696	3	0.5%
74.1%	690	694	4	0.6%
75.3%	690	694	4	0.6%
76.5%	689	693	4	0.6%
77.8%	688	693	5	0.7%
79.0%	684	692	8	1.1%
80.2%	682	688	5	0.8%
81.5%	682	685	3	0.4%
82.7%	680	680	0	0.0%
84.0%	678	678	1	0.1%
85.2%	674	677	3	0.4%
86.4%	673	676	3	0.5%
87.7%	671	674	3	0.4%
88.9%	668	673	5	0.8%
90.1%	667	667	0	0.0%
91.4%	665	667	2	0.3%
92.6%	660	666	6	0.9%
93.8%	660	665	5	0.8%
95.1%	656	658	3	0.4%
96.3%	651	650	-1	-0.1%
97.5%	645	647	1	0.2%
98.8%	633	645	12	2.0%
100.0%	605	632	27	4.5%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	869	870	0	0.0%
1.2%	864	869	6	0.7%
2.5%	859	864	4	0.5%
3.7%	859	859	0	0.0%
4.9%	858	859	1	0.1%
6.2%	854	858	4	0.4%
7.4%	853	854	1	0.1%
8.6%	853	853	0	0.0%
9.9%	853	853	1	0.1%
11.1%	850	853	3	0.3%
12.3%	849	850	2	0.2%
13.6%	849	850	1	0.2%
14.8%	849	849	0	0.0%
16.0%	849	849	0	0.0%
17.3%	849	849	0	0.0%
18.5%	849	849	0	0.0%
19.8%	849	849	0	0.0%
21.0%	849	849	0	0.0%
22.2%	849	849	0	0.0%
23.5%	849	849	0	0.0%
24.7%	845	849	4	0.5%
25.9%	844	849	5	0.6%
27.2%	843	849	5	0.6%
28.4%	843	846	3	0.3%
29.6%	835	838	2	0.3%
30.9%	828	824	-3	-0.4%
32.1%	824	824	0	0.0%
33.3%	822	822	0	0.0%
34.6%	820	822	1	0.2%
35.8%	811	815	3	0.4%
37.0%	809	814	5	0.7%
38.3%	805	813	8	1.0%
39.5%	802	809	7	0.9%
40.7%	798	807	10	1.2%
42.0%	795	803	8	1.0%
43.2%	794	791	-3	-0.4%
44.4%	782	786	4	0.5%
45.7%	782	786	4	0.5%
46.9%	781	781	0	0.0%
48.1%	777	778	1	0.1%
49.4%	773	778	5	0.6%
50.6%	772	770	-2	-0.3%
51.9%	771	769	-2	-0.3%
53.1%	760	763	3	0.4%
54.3%	758	762	4	0.5%
55.6%	757	762	5	0.6%
56.8%	757	758	1	0.1%
58.0%	752	752	0	0.0%
59.3%	749	752	4	0.5%
60.5%	745	752	7	0.9%
61.7%	743	749	6	0.8%
63.0%	742	746	4	0.6%
64.2%	737	746	9	1.2%
65.4%	733	745	12	1.6%
66.7%	725	743	17	2.4%
67.9%	725	741	16	2.2%
69.1%	725	736	11	1.5%
70.4%	724	736	12	1.7%
71.6%	724	734	10	1.4%
72.8%	723	731	7	1.0%
74.1%	723	728	5	0.7%
75.3%	723	723	1	0.1%
76.5%	721	723	2	0.3%
77.8%	711	723	12	1.7%
79.0%	710	720	10	1.4%
80.2%	710	717	7	1.0%
81.5%	709	716	7	1.0%
82.7%	703	715	11	1.6%
84.0%	701	710	9	1.3%
85.2%	698	707	9	1.2%
86.4%	686	692	6	0.9%
87.7%	682	682	0	0.0%
88.9%	677	682	5	0.8%
90.1%	677	674	-3	-0.4%
91.4%	672	671	0	-0.1%
92.6%	671	671	0	0.0%
93.8%	670	671	1	0.1%
95.1%	667	667	0	0.0%
96.3%	665	667	2	0.3%
97.5%	649	658	9	1.4%
98.8%	644	645	1	0.2%
100.0%	603	630	27	4.5%

Table SW-19-b

Lake Oroville, End of Month Elevation

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	869	869	0	0.0%
1.2%	868	868	0	0.0%
2.5%	867	867	0	0.0%
3.7%	865	866	1	0.1%
4.9%	864	865	1	0.1%
6.2%	864	864	0	0.0%
7.4%	863	863	0	0.0%
8.6%	862	862	0	0.0%
9.9%	860	860	0	0.0%
11.1%	860	860	0	0.0%
12.3%	858	858	0	0.0%
13.6%	856	858	2	0.3%
14.8%	856	856	0	0.0%
16.0%	853	853	0	0.0%
17.3%	853	853	0	0.0%
18.5%	852	852	0	0.0%
19.8%	850	850	0	0.0%
21.0%	850	850	0	0.0%
22.2%	849	849	0	0.0%
23.5%	849	849	0	0.0%
24.7%	849	849	0	0.0%
25.9%	849	849	0	0.0%
27.2%	849	849	0	0.0%
28.4%	849	849	0	0.0%
29.6%	849	849	0	0.0%
30.9%	849	849	0	0.0%
32.1%	849	849	0	0.0%
33.3%	849	849	0	0.0%
34.6%	849	849	0	0.0%
35.8%	849	849	0	0.0%
37.0%	849	849	0	0.0%
38.3%	849	849	0	0.0%
39.5%	849	849	0	0.0%
40.7%	849	849	0	0.0%
42.0%	849	848	-1	-0.1%
43.2%	849	847	-2	-0.2%
44.4%	843	844	1	0.1%
45.7%	841	843	1	0.2%
46.9%	840	842	2	0.2%
48.1%	835	840	5	0.6%
49.4%	831	836	5	0.6%
50.6%	827	826	-1	-0.2%
51.9%	826	825	-1	-0.2%
53.1%	823	817	-6	-0.7%
54.3%	813	813	-1	-0.1%
55.6%	809	809	0	0.0%
56.8%	809	809	0	0.0%
58.0%	809	805	-4	-0.5%
59.3%	792	803	10	1.3%
60.5%	792	801	9	1.2%
61.7%	791	795	4	0.5%
63.0%	789	790	0	0.0%
64.2%	789	786	-3	-0.3%
65.4%	786	786	0	0.1%
66.7%	784	785	1	0.1%
67.9%	776	781	5	0.6%
69.1%	775	775	0	0.0%
70.4%	773	774	1	0.1%
71.6%	771	773	2	0.3%
72.8%	768	773	5	0.7%
74.1%	763	773	10	1.3%
75.3%	759	771	12	1.6%
76.5%	757	768	11	1.5%
77.8%	755	766	12	1.6%
79.0%	752	764	12	1.6%
80.2%	748	758	10	1.4%
81.5%	739	758	19	2.5%
82.7%	734	758	24	3.2%
84.0%	731	739	8	1.1%
85.2%	724	736	12	1.7%
86.4%	718	723	5	0.7%
87.7%	716	721	5	0.6%
88.9%	716	720	4	0.5%
90.1%	703	712	9	1.2%
91.4%	696	711	15	2.1%
92.6%	696	702	6	0.9%
93.8%	691	691	0	0.0%
95.1%	690	688	-2	-0.3%
96.3%	678	687	9	1.3%
97.5%	678	683	5	0.7%
98.8%	667	646	-21	-3.1%
100.0%	598	628	30	5.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	874	874	0	0.0%
1.2%	874	874	0	0.0%
2.5%	872	872	0	0.0%
3.7%	871	871	0	0.0%
4.9%	870	870	0	0.0%
6.2%	870	870	0	0.0%
7.4%	870	870	0	0.0%
8.6%	868	868	0	0.0%
9.9%	867	867	0	0.0%
11.1%	867	867	0	0.0%
12.3%	866	866	0	0.0%
13.6%	865	865	0	0.0%
14.8%	865	865	0	0.0%
16.0%	864	864	0	0.0%
17.3%	863	863	0	0.0%
18.5%	863	863	0	0.0%
19.8%	862	862	0	0.0%
21.0%	861	861	0	0.0%
22.2%	861	861	0	0.0%
23.5%	861	861	0	0.0%
24.7%	860	860	0	0.0%
25.9%	860	860	0	0.0%
27.2%	859	859	0	0.0%
28.4%	859	859	0	0.0%
29.6%	859	859	0	0.0%
30.9%	859	859	0	0.0%
32.1%	859	859	0	0.0%
33.3%	858	858	0	0.0%
34.6%	858	858	0	0.0%
35.8%	858	858	0	0.0%
37.0%	853	858	5	0.6%
38.3%	851	853	2	0.2%
39.5%	851	852	1	0.1%
40.7%	850	851	1	0.1%
42.0%	849	851	2	0.2%
43.2%	849	849	0	0.0%
44.4%	849	849	0	0.0%
45.7%	849	849	0	0.0%
46.9%	849	849	0	0.0%
48.1%	849	849	0	0.0%
49.4%	849	849	0	0.0%
50.6%	849	849	0	0.0%
51.9%	849	849	0	0.0%
53.1%	847	845	-2	-0.2%
54.3%	846	845	-2	-0.2%
55.6%	843	843	0	0.1%
56.8%	842	838	-4	-0.4%
58.0%	836	836	0	0.1%
59.3%	835	836	1	0.1%
60.5%	832	832	0	0.0%
61.7%	831	831	0	0.0%
63.0%	828	828	0	0.0%
64.2%	825	828	3	0.4%
65.4%	823	825	2	0.3%
66.7%	821	823	3	0.3%
67.9%	816	821	5	0.6%
69.1%	816	820	4	0.5%
70.4%	815	818	3	0.4%
71.6%	804	817	13	1.7%
72.8%	799	814	15	1.9%
74.1%	796	812	16	2.0%
75.3%	796	811	15	1.9%
76.5%	794	808	14	1.7%
77.8%	791	791	0	0.0%
79.0%	791	791	0	0.0%
80.2%	787	790	3	0.4%
81.5%	787	789	2	0.2%
82.7%	785	781	-4	-0.5%
84.0%	771	781	10	1.3%
85.2%	769	781	12	1.5%
86.4%	759	776	17	2.2%
87.7%	753	769	15	2.0%
88.9%	753	758	5	0.6%
90.1%	745	757	12	1.7%
91.4%	735	737	2	0.3%
92.6%	734	736	3	0.4%
93.8%	728	728	0	0.0%
95.1%	711	715	3	0.5%
96.3%	708	712	4	0.5%
97.5%	693	701	8	1.1%
98.8%	691	695	4	0.6%
100.0%	594	624	30	5.1%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	895	895	0	0.0%
1.2%	894	894	0	0.0%
2.5%	894	894	0	0.0%
3.7%	893	893	0	0.0%
4.9%	891	891	0	0.0%
6.2%	890	890	0	0.0%
7.4%	887	887	0	0.0%
8.6%	887	887	0	0.0%
9.9%	886	886	0	0.0%
11.1%	884	884	0	0.0%
12.3%	884	884	0	0.0%
13.6%	883	883	0	0.0%
14.8%	883	883	0	0.0%
16.0%	883	883	0	0.0%
17.3%	883	883	0	0.0%
18.5%	882	882	0	0.0%
19.8%	882	882	0	0.0%
21.0%	882	882	0	0.0%
22.2%	881	881	0	0.0%
23.5%	881	880	0	0.0%
24.7%	880	880	0	0.0%
25.9%	879	879	0	0.0%
27.2%	879	879	0	0.0%
28.4%	879	879	0	0.0%
29.6%	879	879	0	0.0%
30.9%	879	879	0	0.0%
32.1%	878	878	0	0.0%
33.3%	877	877	0	0.0%
34.6%	877	877	0	0.0%
35.8%	877	877	0	0.0%
37.0%	876	876	0	0.0%
38.3%	876	876	0	0.0%
39.5%	875	874	0	0.0%
40.7%	873	873	0	0.0%
42.0%	873	873	0	0.0%
43.2%	873	873	1	0.1%
44.4%	872	873	1	0.1%
45.7%	871	872	1	0.2%
46.9%	870	871	0	0.0%
48.1%	868	870	2	0.3%
49.4%	867	867	0	0.0%
50.6%	866	866	0	0.1%
51.9%	865	866	1	0.1%
53.1%	860	860	0	0.0%
54.3%	859	860	0	0.1%
55.6%	859	856	-3	-0.3%
56.8%	856	856	-1	-0.1%
58.0%	856	855	0	-0.1%
59.3%	852	855	3	0.3%
60.5%	850	848	-2	-0.3%
61.7%	848	847	-2	-0.2%
63.0%	836	845	9	1.1%
64.2%	836	836	0	0.1%
65.4%	835	835	0	0.0%
66.7%	835	835	0	0.1%
67.9%	833	832	-1	-0.1%
69.1%	828	831	3	0.4%
70.4%	819	826	8	0.9%
71.6%	814	824	10	1.2%
72.8%	812	823	10	1.3%
74.1%	809	821	13	1.6%
75.3%	806	812	6	0.8%
76.5%	806	812	6	0.7%
77.8%	804	810	5	0.7%
79.0%	801	809	8	1.0%
80.2%	797	808	11	1.4%
81.5%	796	803	7	0.9%
82.7%	792	800	8	1.0%
84.0%	782	787	5	0.6%
85.2%	781	786	5	0.6%
86.4%	777	778	2	0.2%
87.7%	767	777	10	1.3%
88.9%	758	769	11	1.4%
90.1%	747	752	5	0.7%
91.4%	746	744	-3	-0.3%
92.6%	742	741	-2	-0.2%
93.8%	723	732	8	1.1%
95.1%	705	720	16	2.3%
96.3%	704	709	4	0.6%
97.5%	702	706	4	0.6%
98.8%	690	697	7	1.0%
100.0%	588	617	30	5.1%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	900	900	0	0.0%
1.2%	900	900	0	0.0%
2.5%	900	900	0	0.0%
3.7%	900	900	0	0.0%
4.9%	900	900	0	0.0%
6.2%	900	900	0	0.0%
7.4%	900	900	0	0.0%
8.6%	900	900	0	0.0%
9.9%	900	900	0	0.0%
11.1%	900	900	0	0.0%
12.3%	900	900	0	0.0%
13.6%	900	900	0	0.0%
14.8%	900	900	0	0.0%
16.0%	895	895	0	0.0%
17.3%	895	895	0	0.0%
18.5%	894	894	0	0.0%
19.8%	892	892	0	0.0%
21.0%	890	890	0	0.0%
22.2%	890	890	0	0.0%
23.5%	889	889	1	0.1%
24.7%	888	889	1	0.1%
25.9%	886	888	2	0.3%
27.2%	886	886	0	0.0%
28.4%	885	886	0	0.0%
29.6%	884	885	1	0.1%
30.9%	884	884	0	0.0%
32.1%	884	884	0	0.0%
33.3%	883	883	0	0.0%
34.6%	882	882	0	0.0%
35.8%	881	881	0	0.0%
37.0%	879	879	0	0.0%
38.3%	878	878	0	0.0%
39.5%	877	877	0	0.0%
40.7%	875	875	0	0.0%
42.0%	874	874	0	0.0%
43.2%	873	873	0	0.0%
44.4%	868	868	0	0.0%
45.7%	866	866	0	0.0%
46.9%	865	864	-2	-0.2%
48.1%	863	863	0	0.0%
49.4%	862	862	0	0.1%
50.6%	861	861	0	0.0%
51.9%	859	859	0	0.0%
53.1%	858	859	1	0.2%
54.3%	857	857	0	0.0%
55.6%	851	853	2	0.2%
56.8%	851	852	1	0.1%
58.0%	849	848	-1	-0.1%
59.3%	844	847	3	0.3%
60.5%	844	847	3	0.3%
61.7%	844	845	1	0.1%
63.0%	844	844	1	0.1%
64.2%	843	844	1	0.1%
65.4%	840	843	3	0.4%
66.7%	836	843	7	0.8%
67.9%	834	841	8	0.9%
69.1%	830	833	3	0.4%
70.4%	829	830	1	0.1%
71.6%	826	826	0	0.0%
72.8%	820	820	-1	-0.1%
74.1%	807	818	11	1.4%
75.3%	805	814	9	1.1%
76.5%	801	813	12	1.4%
77.8%	800	811	11	1.4%
79.0%	798	808	11	1.3%
80.2%	791	804	13	1.7%
81.5%	789	801	12	1.5%
82.7%	786	796	10	1.2%
84.0%	777	781	4	0.5%
85.2%	771	775	4	0.5%
86.4%	766	772	6	0.7%
87.7%	762	764	2	0.3%
88.9%	759	761	2	0.2%
90.1%	736	743	8	1.1%
91.4%	733	737	4	0.5%
92.6%	731	731	0	0.0%
93.8%	710	712	2	0.3%
95.1%	703	707	4	0.6%
96.3%	692	702	10	1.4%
97.5%	686	702	16	2.4%
98.8%	676	685	8	1.2%
100.0%	585	615	30	5.1%

Table SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	900	900	0	0.0%
1.2%	900	900	0	0.0%
2.5%	900	900	0	0.0%
3.7%	900	900	0	0.0%
4.9%	900	900	0	0.0%
6.2%	900	900	0	0.0%
7.4%	896	896	0	0.0%
8.6%	894	893	-1	-0.2%
9.9%	894	892	-2	-0.2%
11.1%	894	891	-3	-0.3%
12.3%	892	890	-2	-0.2%
13.6%	892	890	-2	-0.2%
14.8%	890	889	-2	-0.2%
16.0%	889	888	-1	-0.1%
17.3%	889	885	-4	-0.5%
18.5%	887	883	-4	-0.5%
19.8%	884	880	-4	-0.5%
21.0%	879	879	0	0.0%
22.2%	878	879	0	0.0%
23.5%	876	876	0	0.0%
24.7%	875	876	1	0.1%
25.9%	871	873	2	0.2%
27.2%	871	873	2	0.3%
28.4%	870	872	1	0.1%
29.6%	870	871	2	0.2%
30.9%	869	871	1	0.2%
32.1%	868	870	3	0.3%
33.3%	867	869	2	0.3%
34.6%	867	868	1	0.1%
35.8%	865	867	2	0.2%
37.0%	865	865	1	0.1%
38.3%	860	863	3	0.4%
39.5%	860	863	3	0.4%
40.7%	858	863	5	0.6%
42.0%	854	859	4	0.5%
43.2%	854	857	3	0.3%
44.4%	849	854	5	0.6%
45.7%	849	851	2	0.2%
46.9%	847	849	2	0.2%
48.1%	846	847	1	0.1%
49.4%	844	847	3	0.3%
50.6%	842	845	2	0.3%
51.9%	842	844	1	0.2%
53.1%	842	842	0	0.0%
54.3%	841	841	0	0.0%
55.6%	839	841	2	0.2%
56.8%	834	840	7	0.8%
58.0%	831	836	4	0.5%
59.3%	830	835	5	0.6%
60.5%	824	834	10	1.2%
61.7%	823	832	9	1.1%
63.0%	822	831	9	1.1%
64.2%	822	830	8	1.0%
65.4%	820	826	7	0.8%
66.7%	818	826	8	1.0%
67.9%	813	826	12	1.5%
69.1%	811	816	5	0.6%
70.4%	807	808	1	0.1%
71.6%	797	806	9	1.2%
72.8%	791	802	11	1.4%
74.1%	782	792	9	1.2%
75.3%	780	790	9	1.2%
76.5%	778	789	11	1.4%
77.8%	778	786	8	1.1%
79.0%	776	786	9	1.2%
80.2%	772	782	10	1.4%
81.5%	767	777	9	1.2%
82.7%	761	771	10	1.3%
84.0%	760	764	4	0.6%
85.2%	757	754	-3	-0.4%
86.4%	740	752	13	1.7%
87.7%	732	742	10	1.3%
88.9%	731	729	-2	-0.2%
90.1%	717	721	3	0.5%
91.4%	707	712	5	0.7%
92.6%	707	695	-12	-1.7%
93.8%	683	694	11	1.6%
95.1%	676	690	14	2.1%
96.3%	675	677	3	0.4%
97.5%	665	675	10	1.5%
98.8%	662	672	10	1.5%
100.0%	578	608	30	5.2%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	894	894	0	0.0%
1.2%	891	892	2	0.2%
2.5%	888	891	3	0.4%
3.7%	880	883	3	0.4%
4.9%	867	866	-2	-0.2%
6.2%	862	864	2	0.2%
7.4%	861	862	2	0.2%
8.6%	858	859	2	0.2%
9.9%	857	859	1	0.2%
11.1%	857	856	-1	-0.1%
12.3%	856	854	-2	-0.2%
13.6%	855	854	-1	-0.1%
14.8%	849	853	4	0.5%
16.0%	848	847	-1	-0.1%
17.3%	846	846	-1	-0.1%
18.5%	846	845	0	0.0%
19.8%	843	844	1	0.2%
21.0%	842	843	1	0.1%
22.2%	840	842	2	0.2%
23.5%	839	841	1	0.1%
24.7%	832	835	3	0.4%
25.9%	831	834	3	0.3%
27.2%	831	834	3	0.4%
28.4%	831	831	1	0.1%
29.6%	827	831	4	0.5%
30.9%	827	830	3	0.4%
32.1%	826	830	4	0.5%
33.3%	824	828	4	0.5%
34.6%	824	828	4	0.5%
35.8%	824	828	4	0.5%
37.0%	821	826	5	0.6%
38.3%	817	824	7	0.9%
39.5%	811	821	11	1.3%
40.7%	806	818	13	1.6%
42.0%	802	814	12	1.5%
43.2%	800	812	12	1.6%
44.4%	798	808	10	1.3%
45.7%	798	808	10	1.2%
46.9%	796	803	8	0.9%
48.1%	793	801	9	1.1%
49.4%	792	798	6	0.8%
50.6%	790	797	7	0.9%
51.9%	790	796	6	0.7%
53.1%	785	793	8	1.0%
54.3%	785	793	8	1.0%
55.6%	784	791	7	0.9%
56.8%	776	789	13	1.7%
58.0%	771	786	15	2.0%
59.3%	766	786	20	2.6%
60.5%	765	782	17	2.2%
61.7%	758	782	24	3.1%
63.0%	758	780	22	2.8%
64.2%	758	774	16	2.2%
65.4%	755	773	18	2.4%
66.7%	751	772	22	2.9%
67.9%	750	769	19	2.5%
69.1%	745	763	18	2.4%
70.4%	738	745	6	0.9%
71.6%	738	742	4	0.6%
72.8%	737	740	3	0.4%
74.1%	735	731	-4	-0.5%
75.3%	733	730	-3	-0.4%
76.5%	725	729	4	0.6%
77.8%	724	726	2	0.3%
79.0%	723	722	-1	-0.1%
80.2%	721	721	0	0.0%
81.5%	716	719	3	0.4%
82.7%	708	706	-2	-0.2%
84.0%	703	706	3	0.4%
85.2%	702	704	2	0.3%
86.4%	698	699	1	0.1%
87.7%	687	690	3	0.4%
88.9%	686	684	-2	-0.3%
90.1%	684	678	-7	-1.0%
91.4%	665	665	0	0.0%
92.6%	665	665	0	0.0%
93.8%	662	665	3	0.4%
95.1%	653	664	11	1.7%
96.3%	648	654	6	0.9%
97.5%	632	651	19	3.0%
98.8%	629	645	17	2.6%
100.0%	573	603	30	5.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	889	886	-3	-0.3%
1.2%	889	885	-3	-0.3%
2.5%	887	883	-4	-0.4%
3.7%	862	864	2	0.2%
4.9%	846	843	-4	-0.4%
6.2%	834	840	6	0.8%
7.4%	832	834	2	0.3%
8.6%	832	833	1	0.2%
9.9%	830	831	0	0.0%
11.1%	829	830	1	0.2%
12.3%	825	826	0	0.0%
13.6%	824	824	1	0.1%
14.8%	818	824	6	0.7%
16.0%	816	821	5	0.6%
17.3%	815	820	5	0.6%
18.5%	811	820	9	1.1%
19.8%	810	818	8	1.0%
21.0%	808	818	10	1.2%
22.2%	808	813	6	0.7%
23.5%	805	813	8	1.0%
24.7%	803	811	8	0.9%
25.9%	802	805	3	0.4%
27.2%	799	802	3	0.4%
28.4%	799	792	-6	-0.8%
29.6%	789	790	1	0.1%
30.9%	787	789	2	0.3%
32.1%	784	788	4	0.4%
33.3%	780	787	8	1.0%
34.6%	778	787	10	1.2%
35.8%	774	785	11	1.4%
37.0%	773	783	10	1.3%
38.3%	773	781	8	1.1%
39.5%	763	777	14	1.9%
40.7%	758	775	18	2.4%
42.0%	755	775	20	2.6%
43.2%	755	771	17	2.2%
44.4%	748	760	12	1.6%
45.7%	748	757	9	1.2%
46.9%	747	756	9	1.2%
48.1%	742	754	12	1.6%
49.4%	742	752	10	1.4%
50.6%	738	751	13	1.8%
51.9%	737	750	13	1.7%
53.1%	736	749	13	1.7%
54.3%	734	744	11	1.5%
55.6%	731	742	10	1.4%
56.8%	731	741	10	1.4%
58.0%	726	740	14	1.9%
59.3%	723	737	14	1.9%
60.5%	721	736	15	2.1%
61.7%	720	735	15	2.1%
63.0%	719	734	14	2.0%
64.2%	719	734	15	2.0%
65.4%	719	731	12	1.6%
66.7%	716	729	13	1.8%
67.9%	715	728	13	1.8%
69.1%	711	728	17	2.4%
70.4%	709	718	9	1.2%
71.6%	706	714	8	1.1%
72.8%	704	704	0	0.0%
74.1%	703	703	1	0.1%
75.3%	694	702	8	1.2%
76.5%	693	702	9	1.3%
77.8%	692	696	4	0.6%
79.0%	688	695	6	0.9%
80.2%	685	693	8	1.2%
81.5%	680	690	10	1.4%
82.7%	680	689	10	1.4%
84.0%	678	687	9	1.3%
85.2%	673	683	10	1.5%
86.4%	667	682	14	2.2%
87.7%	667	665	-2	-0.3%
88.9%	665	665	0	0.0%
90.1%	665	665	0	0.0%
91.4%	639	649	10	1.5%
92.6%	639	647	8	1.3%
93.8%	637	647	10	1.6%
95.1%	634	646	11	1.8%
96.3%	624	643	18	3.0%
97.5%	621	638	16	2.6%
98.8%	621	622	1	0.1%
100.0%	559	594	35	6.2%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	869	862	-7	-0.8%
1.2%	856	853	-3	-0.3%
2.5%	852	850	-2	-0.3%
3.7%	824	826	2	0.3%
4.9%	808	807	-1	-0.1%
6.2%	802	805	3	0.4%
7.4%	797	802	5	0.6%
8.6%	787	797	10	1.2%
9.9%	787	795	8	1.0%
11.1%	785	791	5	0.7%
12.3%	784	783	-1	-0.2%
13.6%	783	782	-1	-0.2%
14.8%	782	782	0	0.0%
16.0%	777	780	3	0.4%
17.3%	772	777	5	0.6%
18.5%	769	777	8	1.0%
19.8%	769	776	7	0.9%
21.0%	768	775	7	1.0%
22.2%	766	773	7	0.9%
23.5%	765	770	6	0.7%
24.7%	762	769	8	1.0%
25.9%	760	767	7	0.9%
27.2%	758	763	5	0.7%
28.4%	756	762	6	0.8%
29.6%	754	762	7	1.0%
30.9%	753	761	8	1.1%
32.1%	752	758	6	0.8%
33.3%	752	758	6	0.8%
34.6%	752	752	1	0.1%
35.8%	743	744	1	0.2%
37.0%	736	741	5	0.7%
38.3%	728	741	12	1.7%
39.5%	727	740	12	1.7%
40.7%	724	739	15	2.0%
42.0%	724	737	14	1.9%
43.2%	721	737	15	2.1%
44.4%	720	735	15	2.1%
45.7%	719	734	15	2.1%
46.9%	716	734	17	2.4%
48.1%	715	733	18	2.5%
49.4%	714	732	17	2.4%
50.6%	713	732	18	2.6%
51.9%	713	727	14	2.0%
53.1%	712	723	10	1.4%
54.3%	711	721	10	1.4%
55.6%	705	720	15	2.1%
56.8%	705	718	13	1.9%
58.0%	704	716	12	1.7%
59.3%	702	716	14	2.0%
60.5%	701	715	15	2.1%
61.7%	701	714	14	2.0%
63.0%	700	711	11	1.6%
64.2%	697	710	14	2.0%
65.4%	695	710	14	2.1%
66.7%	694	701	7	1.0%
67.9%	694	699	4	0.6%
69.1%	692	696	4	0.6%
70.4%	690	695	5	0.7%
71.6%	688	694	6	0.8%
72.8%	681	688	7	1.0%
74.1%	677	685	7	1.0%
75.3%	676	682	6	1.0%
76.5%	671	677	7	1.0%
77.8%	670	676	5	0.8%
79.0%	669	676	6	1.0%
80.2%	669	672	3	0.4%
81.5%	667	670	3	0.4%
82.7%	667	669	2	0.4%
84.0%	666	669	3	0.5%
85.2%	666	666	0	0.0%
86.4%	666	666	0	0.0%
87.7%	665	664	-1	-0.2%
88.9%	665	659	-7	-1.0%
90.1%	659	658	-1	-0.2%
91.4%	632	646	14	2.1%
92.6%	631	643	12	1.9%
93.8%	630	642	12	2.0%
95.1%	625	639	14	2.2%
96.3%	622	628	6	1.0%
97.5%	622	628	6	0.9%
98.8%	621	619	-2	-0.3%
100.0%	572	602	30	5.2%

Figure SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

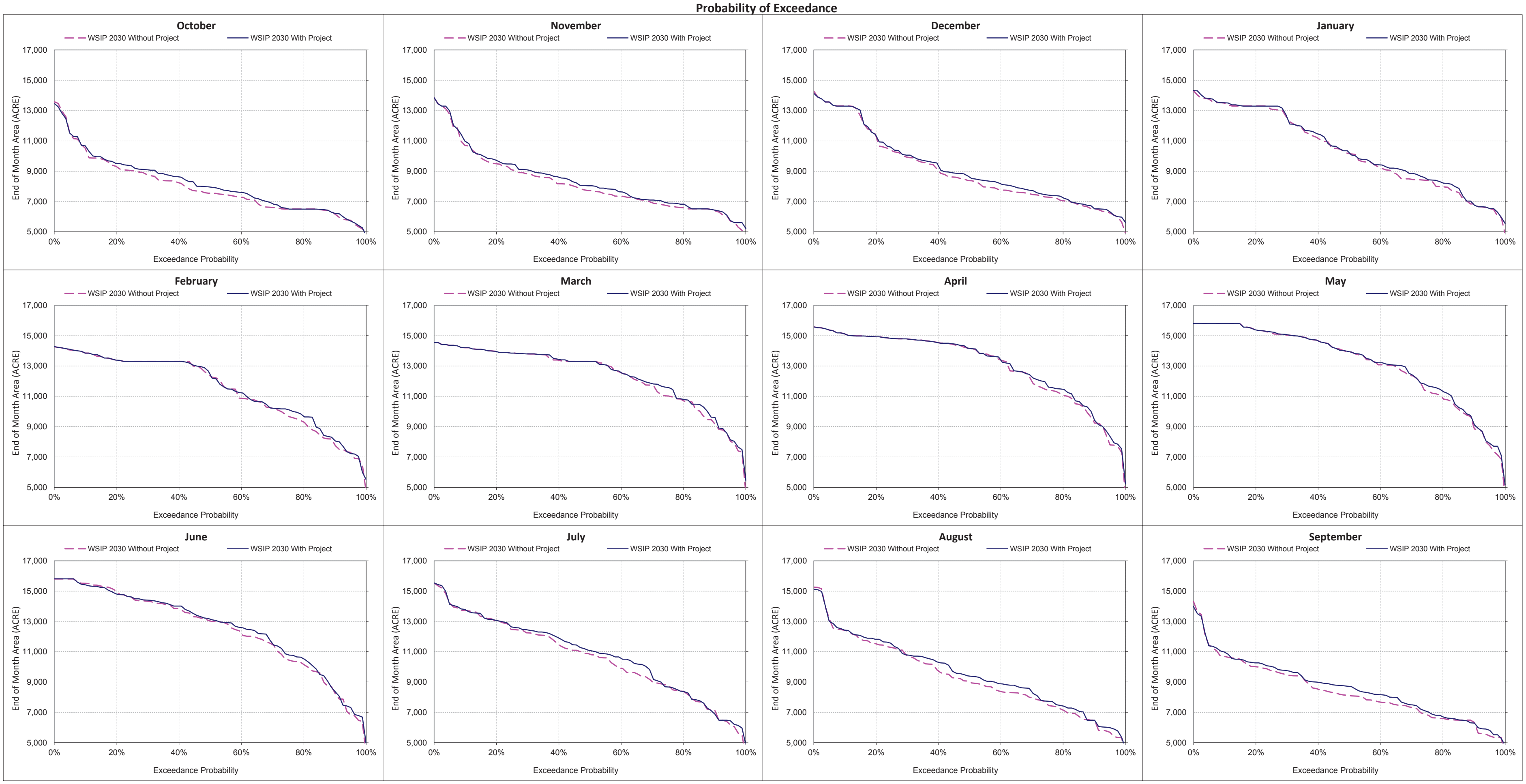


Table SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,584	13,474	-110	-0.8%
1.2%	13,474	13,250	-224	-1.7%
2.5%	12,951	12,806	-145	-1.1%
3.7%	12,588	12,480	-108	-0.9%
4.9%	11,524	11,524	0	0.0%
6.2%	11,148	11,295	147	1.3%
7.4%	11,122	11,279	157	1.4%
8.6%	10,764	10,712	-51	-0.5%
9.9%	10,517	10,682	166	1.6%
11.1%	9,885	10,325	440	4.4%
12.3%	9,870	10,008	138	1.4%
13.6%	9,869	9,964	95	1.0%
14.8%	9,830	9,953	123	1.2%
16.0%	9,749	9,788	39	0.4%
17.3%	9,605	9,678	73	0.8%
18.5%	9,398	9,643	245	2.6%
19.8%	9,320	9,510	189	2.0%
21.0%	9,143	9,508	365	4.0%
22.2%	9,089	9,431	341	3.8%
23.5%	9,070	9,385	315	3.5%
24.7%	9,043	9,359	316	3.5%
25.9%	9,005	9,186	181	2.0%
27.2%	8,942	9,134	192	2.1%
28.4%	8,912	9,125	213	2.4%
29.6%	8,781	9,108	327	3.7%
30.9%	8,703	9,073	370	4.3%
32.1%	8,663	9,066	403	4.7%
33.3%	8,425	8,861	436	5.2%
34.6%	8,388	8,858	470	5.6%
35.8%	8,373	8,775	402	4.8%
37.0%	8,367	8,722	355	4.2%
38.3%	8,366	8,654	288	3.4%
39.5%	8,261	8,642	380	4.6%
40.7%	8,190	8,607	417	5.1%
42.0%	7,975	8,431	456	5.7%
43.2%	7,837	8,320	484	6.2%
44.4%	7,722	8,314	592	7.7%
45.7%	7,692	8,012	320	4.2%
46.9%	7,688	8,010	322	4.2%
48.1%	7,582	7,980	398	5.2%
49.4%	7,553	7,967	414	5.5%
50.6%	7,550	7,937	387	5.1%
51.9%	7,533	7,908	376	5.0%
53.1%	7,489	7,842	354	4.7%
54.3%	7,471	7,755	284	3.8%
55.6%	7,437	7,725	288	3.9%
56.8%	7,393	7,657	265	3.6%
58.0%	7,340	7,653	313	4.3%
59.3%	7,295	7,618	323	4.4%
60.5%	7,278	7,592	314	4.3%
61.7%	7,148	7,522	375	5.2%
63.0%	7,133	7,390	257	3.6%
64.2%	7,090	7,242	152	2.1%
65.4%	6,825	7,190	365	5.3%
66.7%	6,680	7,078	398	6.0%
67.9%	6,637	7,004	367	5.5%
69.1%	6,625	6,951	326	4.9%
70.4%	6,607	6,831	224	3.4%
71.6%	6,581	6,775	195	3.0%
72.8%	6,517	6,608	91	1.4%
74.1%	6,506	6,568	62	1.0%
75.3%	6,506	6,506	0	0.0%
76.5%	6,506	6,506	0	0.0%
77.8%	6,504	6,506	1	0.0%
79.0%	6,504	6,504	0	0.0%
80.2%	6,504	6,504	0	0.0%
81.5%	6,503	6,504	1	0.0%
82.7%	6,502	6,504	1	0.0%
84.0%	6,502	6,502	0	0.0%
85.2%	6,466	6,474	7	0.1%
86.4%	6,435	6,461	26	0.4%
87.7%	6,424	6,436	12	0.2%
88.9%	6,351	6,289	-61	-1.0%
90.1%	6,146	6,201	55	0.9%
91.4%	5,959	6,192	233	3.9%
92.6%	5,826	6,009	184	3.2%
93.8%	5,791	5,839	48	0.8%
95.1%	5,762	5,713	-50	-0.9%
96.3%	5,502	5,591	89	1.6%
97.5%	5,336	5,425	89	1.7%
98.8%	5,202	5,261	60	1.1%
100.0%	3,879	4,778	899	23.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,844	13,844	0	0.0%
1.2%	13,456	13,456	0	0.0%
2.5%	13,304	13,304	0	0.0%
3.7%	13,127	13,304	177	1.3%
4.9%	12,769	12,982	213	1.7%
6.2%	11,906	12,027	121	1.0%
7.4%	11,872	11,791	-81	-0.7%
8.6%	10,983	11,451	468	4.3%
9.9%	10,702	10,983	281	2.6%
11.1%	10,666	10,833	167	1.6%
12.3%	10,369	10,287	-81	-0.8%
13.6%	10,165	10,166	1	0.0%
14.8%	9,898	10,087	189	1.9%
16.0%	9,742	9,973	231	2.4%
17.3%	9,620	9,842	223	2.3%
18.5%	9,523	9,816	293	3.1%
19.8%	9,500	9,731	231	2.4%
21.0%	9,464	9,607	143	1.5%
22.2%	9,320	9,501	181	1.9%
23.5%	9,320	9,481	161	1.7%
24.7%	9,109	9,480	371	4.1%
25.9%	9,045	9,445	400	4.4%
27.2%	8,910	9,127	217	2.4%
28.4%	8,904	9,113	209	2.3%
29.6%	8,833	9,095	262	3.0%
30.9%	8,813	9,056	244	2.8%
32.1%	8,693	8,945	252	2.9%
33.3%	8,638	8,894	256	3.0%
34.6%	8,605	8,876	271	3.2%
35.8%	8,593	8,812	219	2.5%
37.0%	8,566	8,768	201	2.3%
38.3%	8,407	8,668	261	3.1%
39.5%	8,176	8,643	467	5.7%
40.7%	8,173	8,549	376	4.6%
42.0%	8,156	8,538	382	4.7%
43.2%	8,117	8,450	333	4.1%
44.4%	8,042	8,322	280	3.5%
45.7%	7,959	8,224	265	3.3%
46.9%	7,840	8,058	218	2.8%
48.1%	7,767	8,056	289	3.7%
49.4%	7,727	8,046	319	4.1%
50.6%	7,715	8,045	329	4.3%
51.9%	7,660	8,009	349	4.6%
53.1%	7,639	7,888	249	3.3%
54.3%	7,541	7,880	339	4.5%
55.6%	7,495	7,830	335	4.5%
56.8%	7,467	7,825	358	4.8%
58.0%	7,359	7,804	445	6.0%
59.3%	7,351	7,649	298	4.1%
60.5%	7,342	7,627	285	3.9%
61.7%	7,291	7,521	230	3.2%
63.0%	7,251	7,331	79	1.1%
64.2%	7,237	7,228	-9	-0.1%
65.4%	7,128	7,195	67	0.9%
66.7%	7,106	7,139	33	0.5%
67.9%	7,105	7,134	29	0.4%
69.1%	6,989	7,106	116	1.7%
70.4%	6,889	7,092	203	2.9%
71.6%	6,841	7,057	217	3.2%
72.8%	6,807	7,048	242	3.6%
74.1%	6,758	6,947	189	2.8%
75.3%	6,698	6,897	199	3.0%
76.5%	6,673	6,886	213	3.2%
77.8%	6,631	6,872	241	3.6%
79.0%	6,606	6,825	218	3.3%
80.2%	6,585	6,818	233	3.5%
81.5%	6,520	6,647	127	1.9%
82.7%	6,520	6,519	-1	0.0%
84.0%	6,519	6,518	-1	0.0%
85.2%	6,519	6,518	-1	0.0%
86.4%	6,518	6,518	0	0.0%
87.7%	6,518	6,518	0	0.0%
88.9%	6,472	6,485	13	0.2%
90.1%	6,386	6,435	49	0.8%
91.4%	6,305	6,371	66	1.0%
92.6%	6,112	6,314	202	3.3%
93.8%	6,089	6,111	23	0.4%
95.1%	5,693	5,742	49	0.9%
96.3%	5,666	5,613	-53	-0.9%
97.5%	5,310	5,603	293	5.5%
98.8%	5,102	5,600	497	9.8%
100.0%	4,720	5,223	503	10.6%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,283	14,138	-146	-1.0%
1.2%	13,903	13,904	1	0.0%
2.5%	13,777	13,777	0	0.0%
3.7%	13,567	13,567	0	0.0%
4.9%	13,564	13,564	0	0.0%
6.2%	13,344	13,344	0	0.0%
7.4%	13,304	13,304	0	0.0%
8.6%	13,304	13,304	0	0.0%
9.9%	13,304	13,304	0	0.0%
11.1%	13,304	13,304	0	0.0%
12.3%	13,285	13,281	-4	0.0%
13.6%	13,143	13,167	25	0.2%
14.8%	12,690	13,034	345	2.7%
16.0%	12,116	12,097	-19	-0.2%
17.3%	11,789	11,944	155	1.3%
18.5%	11,709	11,580	-130	-1.1%
19.8%	11,436	11,435	0	0.0%
21.0%	10,655	10,936	281	2.6%
22.2%	10,602	10,921	320	3.0%
23.5%	10,525	10,661	136	1.3%
24.7%	10,392	10,585	194	1.9%
25.9%	10,274	10,386	112	1.1%
27.2%	10,237	10,361	124	1.2%
28.4%	10,048	10,118	71	0.7%
29.6%	9,941	10,065	123	1.2%
30.9%	9,895	10,063	167	1.7%
32.1%	9,884	9,930	46	0.5%
33.3%	9,692	9,801	109	1.1%
34.6%	9,602	9,743	141	1.5%
35.8%	9,561	9,688	127	1.3%
37.0%	9,473	9,625	152	1.6%
38.3%	9,431	9,580	149	1.6%
39.5%	9,147	9,540	392	4.3%
40.7%	8,860	9,063	203	2.3%
42.0%	8,784	8,968	184	2.1%
43.2%	8,625	8,953	328	3.8%
44.4%	8,619	8,890	271	3.1%
45.7%	8,602	8,862	260	3.0%
46.9%	8,528	8,854	326	3.8%
48.1%	8,494	8,828	333	3.9%
49.4%	8,388	8,694	305	3.6%
50.6%	8,374	8,524	150	1.8%
51.9%	8,316	8,491	175	2.1%
53.1%	8,185	8,426	242	3.0%
54.3%	7,968	8,397	429	5.4%
55.6%	7,958	8,368	410	5.1%
56.8%	7,922	8,332	411	5.2%
58.0%	7,895	8,312	417	5.3%
59.3%	7,795	8,222	427	5.5%
60.5%	7,752	8,132	381	4.9%
61.7%	7,745	8,084	339	4.4%
63.0%	7,699	8,056	357	4.6%
64.2%	7,639	7,985	345	4.5%
65.4%	7,608	7,897	289	3.8%
66.7%	7,598	7,864	266	3.5%
67.9%	7,566	7,801	235	3.1%
69.1%	7,516	7,741	225	3.0%
70.4%	7,457	7,716	259	3.5%
71.6%	7,436	7,576	140	1.9%
72.8%	7,387	7,505	119	1.6%
74.1%	7,302	7,452	149	2.0%
75.3%	7,283	7,423	140	1.9%
76.5%	7,268	7,397	129	1.8%
77.8%	7,230	7,395	166	2.3%
79.0%	7,091	7,357	266	3.8%
80.2%	7,036	7,215	179	2.5%
81.5%	7,034	7,127	94	1.3%
82.7%	6,957	6,964	7	0.1%
84.0%	6,879	6,905	25	0.4%
85.2%	6,760	6,853	92	1.4%
86.4%	6,712	6,821	109	1.6%
87.7%	6,659	6,751	92	1.4%
88.9%	6,539	6,713	174	2.7%
90.1%	6,523	6,523	0	0.0%
91.4%	6,466	6,519	53	0.8%
92.6%	6,354	6,506	152	2.4%
93.8%	6,348	6,482	134	2.1%
95.1%	6,238	6,305	67	1.1%
96.3%	6,107	6,089	-17	-0.3%
97.5%	5,969	6,005	37	0.6%
98.8%	5,640	5,967	327	5.8%
100.0%	4,891	5,620	729	14.9%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,314	14,323	9	0.1%
1.2%	14,034	14,314	280	2.0%
2.5%	13,821	14,034	213	1.5%
3.7%	13,811	13,821	10	0.1%
4.9%	13,757	13,811	53	0.4%
6.2%	13,577	13,757	180	1.3%
7.4%	13,524	13,577	53	0.4%
8.6%	13,524	13,524	0	0.0%
9.9%	13,497	13,524	27	0.2%
11.1%	13,374	13,497	123	0.9%
12.3%	13,304	13,387	83	0.6%
13.6%	13,304	13,374	70	0.5%
14.8%	13,304	13,324	20	0.2%
16.0%	13,304	13,304	0	0.0%
17.3%	13,304	13,304	0	0.0%
18.5%	13,304	13,304	0	0.0%
19.8%	13,304	13,304	0	0.0%
21.0%	13,304	13,304	0	0.0%
22.2%	13,304	13,304	0	0.0%
23.5%	13,301	13,304	3	0.0%
24.7%	13,110	13,304	194	1.5%
25.9%	13,073	13,304	232	1.8%
27.2%	13,047	13,304	257	2.0%
28.4%	13,035	13,172	137	1.1%
29.6%	12,636	12,756	120	0.9%
30.9%	12,268	12,115	-153	-1.2%
32.1%	12,115	12,099	-16	-0.1%
33.3%	11,995	12,012	16	0.1%
34.6%	11,920	11,985	65	0.5%
35.8%	11,565	11,687	122	1.1%
37.0%	11,481	11,673	192	1.7%
38.3%	11,333	11,617	284	2.5%
39.5%	11,232	11,487	255	2.3%
40.7%	11,073	11,420	347	3.1%
42.0%	10,972	11,265	293	2.7%
43.2%	10,930	10,820	-110	-1.0%
44.4%	10,509	10,654	145	1.4%
45.7%	10,509	10,642	133	1.3%
46.9%	10,465	10,477	13	0.1%
48.1%	10,334	10,352	19	0.2%
49.4%	10,181	10,351	170	1.7%
50.6%	10,140	10,069	-71	-0.7%
51.9%	10,111	10,028	-83	-0.8%
53.1%	9,713	9,822	109	1.1%
54.3%	9,632	9,777	145	1.5%
55.6%	9,600	9,773	173	1.8%
56.8%	9,599	9,627	28	0.3%
58.0%	9,428	9,424	-4	0.0%
59.3%	9,291	9,423	132	1.4%
60.5%	9,178	9,406	228	2.5%
61.7%	9,089	9,290	201	2.2%
63.0%	9,065	9,208	143	1.6%
64.2%	8,911	9,204	292	3.3%
65.4%	8,776	9,177	401	4.6%
66.7%	8,505	9,098	592	7.0%
67.9%	8,498	9,031	533	6.3%
69.1%	8,496	8,867	371	4.4%
70.4%	8,449	8,856	408	4.8%
71.6%	8,442	8,796	354	4.2%
72.8%	8,430	8,679	249	3.0%
74.1%	8,409	8,590	181	2.2%
75.3%	8,405	8,425	20	0.2%
76.5%	8,345	8,408	63	0.8%
77.8%	8,008	8,408	399	5.0%
79.0%	7,991	8,319	328	4.1%
80.2%	7,972	8,219	247	3.1%
81.5%	7,946	8,194	248	3.1%
82.7%	7,746	8,136	390	5.0%
84.0%	7,677	7,981	304	4.0%
85.2%	7,576	7,870	295	3.9%
86.4%	7,177	7,380	203	2.8%
87.7%	7,032	7,028	-4	-0.1%
88.9%	6,846	7,023	177	2.6%
90.1%	6,841	6,755	-86	-1.3%
91.4%	6,670	6,656	-14	-0.2%
92.6%	6,646	6,645	-1	0.0%
93.8%	6,604	6,636	32	0.5%
95.1%	6,527	6,526	0	0.0%
96.3%	6,475	6,526	51	0.8%
97.5%	6,057	6,287	231	3.8%
98.8%	5,940	5,966	26	0.4%
100.0%	4,832	5,563	731	15.1%

Table SW-20-b

Lake Oroville, End of Month Area
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,271	14,271	0	0.0%
1.2%	14,224	14,224	0	0.0%
2.5%	14,201	14,201	0	0.0%
3.7%	14,103	14,146	43	0.3%
4.9%	14,058	14,103	45	0.3%
6.2%	14,041	14,041	0	0.0%
7.4%	14,001	14,001	0	0.0%
8.6%	13,967	13,967	0	0.0%
9.9%	13,851	13,851	0	0.0%
11.1%	13,847	13,847	0	0.0%
12.3%	13,761	13,770	9	0.1%
13.6%	13,649	13,761	112	0.8%
14.8%	13,644	13,644	0	0.0%
16.0%	13,531	13,531	0	0.0%
17.3%	13,521	13,521	0	0.0%
18.5%	13,451	13,451	0	0.0%
19.8%	13,387	13,387	0	0.0%
21.0%	13,364	13,364	0	0.0%
22.2%	13,304	13,304	0	0.0%
23.5%	13,304	13,304	0	0.0%
24.7%	13,304	13,304	0	0.0%
25.9%	13,304	13,304	0	0.0%
27.2%	13,304	13,304	0	0.0%
28.4%	13,304	13,304	0	0.0%
29.6%	13,304	13,304	0	0.0%
30.9%	13,304	13,304	0	0.0%
32.1%	13,304	13,304	0	0.0%
33.3%	13,304	13,304	0	0.0%
34.6%	13,304	13,304	0	0.0%
35.8%	13,304	13,304	0	0.0%
37.0%	13,304	13,304	0	0.0%
38.3%	13,304	13,304	0	0.0%
39.5%	13,304	13,304	0	0.0%
40.7%	13,304	13,301	-3	0.0%
42.0%	13,301	13,261	-40	-0.3%
43.2%	13,297	13,196	-100	-0.8%
44.4%	13,010	13,058	48	0.4%
45.7%	12,928	12,999	71	0.6%
46.9%	12,878	12,964	86	0.7%
48.1%	12,634	12,898	264	2.1%
49.4%	12,430	12,663	233	1.9%
50.6%	12,259	12,194	-65	-0.5%
51.9%	12,215	12,155	-61	-0.5%
53.1%	12,042	11,789	-254	-2.1%
54.3%	11,637	11,617	-20	-0.2%
55.6%	11,488	11,489	1	0.0%
56.8%	11,480	11,476	-5	0.0%
58.0%	11,472	11,336	-137	-1.2%
59.3%	10,883	11,253	371	3.4%
60.5%	10,865	11,206	342	3.1%
61.7%	10,829	10,974	145	1.3%
63.0%	10,772	10,784	12	0.1%
64.2%	10,757	10,661	-96	-0.9%
65.4%	10,646	10,661	15	0.1%
66.7%	10,587	10,624	37	0.4%
67.9%	10,297	10,471	174	1.7%
69.1%	10,258	10,247	-11	-0.1%
70.4%	10,193	10,213	20	0.2%
71.6%	10,102	10,192	90	0.9%
72.8%	9,992	10,175	183	1.8%
74.1%	9,808	10,172	364	3.7%
75.3%	9,659	10,098	439	4.5%
76.5%	9,589	10,006	418	4.4%
77.8%	9,506	9,940	434	4.6%
79.0%	9,402	9,842	440	4.7%
80.2%	9,276	9,645	369	4.0%
81.5%	8,979	9,634	655	7.3%
82.7%	8,796	9,616	820	9.3%
84.0%	8,685	8,969	285	3.3%
85.2%	8,456	8,874	418	4.9%
86.4%	8,250	8,432	182	2.2%
87.7%	8,195	8,353	158	1.9%
88.9%	8,184	8,305	121	1.5%
90.1%	7,744	8,041	297	3.8%
91.4%	7,505	7,999	494	6.6%
92.6%	7,487	7,708	221	2.9%
93.8%	7,340	7,349	9	0.1%
95.1%	7,297	7,229	-68	-0.9%
96.3%	6,896	7,198	302	4.4%
97.5%	6,882	7,046	163	2.4%
98.8%	6,520	5,994	-527	-8.1%
100.0%	4,700	5,511	810	17.2%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,554	14,554	0	0.0%
1.2%	14,551	14,551	0	0.0%
2.5%	14,421	14,421	0	0.0%
3.7%	14,411	14,411	0	0.0%
4.9%	14,361	14,361	0	0.0%
6.2%	14,361	14,361	0	0.0%
7.4%	14,331	14,331	0	0.0%
8.6%	14,221	14,221	0	0.0%
9.9%	14,207	14,207	0	0.0%
11.1%	14,204	14,204	0	0.0%
12.3%	14,131	14,131	0	0.0%
13.6%	14,104	14,104	0	0.0%
14.8%	14,101	14,101	0	0.0%
16.0%	14,071	14,071	0	0.0%
17.3%	14,007	14,007	0	0.0%
18.5%	13,994	13,994	0	0.0%
19.8%	13,971	13,971	0	0.0%
21.0%	13,891	13,891	0	0.0%
22.2%	13,891	13,891	0	0.0%
23.5%	13,891	13,891	0	0.0%
24.7%	13,857	13,857	0	0.0%
25.9%	13,847	13,847	0	0.0%
27.2%	13,824	13,824	0	0.0%
28.4%	13,821	13,821	0	0.0%
29.6%	13,801	13,801	0	0.0%
30.9%	13,797	13,797	0	0.0%
32.1%	13,797	13,797	0	0.0%
33.3%	13,767	13,767	0	0.0%
34.6%	13,751	13,758	7	0.1%
35.8%	13,737	13,751	13	0.1%
37.0%	13,501	13,737	237	1.8%
38.3%	13,401	13,501	100	0.7%
39.5%	13,401	13,454	53	0.4%
40.7%	13,341	13,401	60	0.5%
42.0%	13,304	13,401	97	0.7%
43.2%	13,304	13,304	0	0.0%
44.4%	13,304	13,304	0	0.0%
45.7%	13,304	13,304	0	0.0%
46.9%	13,304	13,304	0	0.0%
48.1%	13,304	13,304	0	0.0%
49.4%	13,304	13,304	0	0.0%
50.6%	13,304	13,304	0	0.0%
51.9%	13,304	13,304	0	0.0%
53.1%	13,202	13,105	-98	-0.7%
54.3%	13,191	13,101	-90	-0.7%
55.6%	13,020	13,042	22	0.2%
56.8%	12,958	12,774	-184	-1.4%
58.0%	12,676	12,700	24	0.2%
59.3%	12,626	12,664	38	0.3%
60.5%	12,510	12,490	-20	-0.2%
61.7%	12,446	12,448	2	0.0%
63.0%	12,288	12,287	-1	0.0%
64.2%	12,123	12,270	147	1.2%
65.4%	12,032	12,138	106	0.9%
66.7%	11,934	12,056	122	1.0%
67.9%	11,743	11,946	203	1.7%
69.1%	11,738	11,889	151	1.3%
70.4%	11,710	11,818	109	0.9%
71.6%	11,302	11,793	491	4.3%
72.8%	11,118	11,671	553	5.0%
74.1%	11,030	11,612	582	5.3%
75.3%	11,021	11,570	549	5.0%
76.5%	10,955	11,448	493	4.5%
77.8%	10,838	10,843	6	0.1%
79.0%	10,822	10,833	11	0.1%
80.2%	10,689	10,795	107	1.0%
81.5%	10,680	10,752	71	0.7%
82.7%	10,625	10,481	-144	-1.4%
84.0%	10,105	10,471	365	3.6%
85.2%	10,027	10,459	431	4.3%
86.4%	9,677	10,284	607	6.3%
87.7%	9,464	10,022	558	5.9%
88.9%	9,457	9,627	170	1.8%
90.1%	9,167	9,607	440	4.8%
91.4%	8,819	8,898	79	0.9%
92.6%	8,780	8,871	91	1.0%
93.8%	8,582	8,584	2	0.0%
95.1%	8,024	8,139	115	1.4%
96.3%	7,915	8,039	124	1.6%
97.5%	7,396	7,656	260	3.5%
98.8%	7,330	7,480	150	2.0%
100.0%	4,597	5,406	809	17.6%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,577	15,577	0	0.0%
1.2%	15,530	15,530	0	0.0%
2.5%	15,517	15,517	0	0.0%
3.7%	15,454	15,454	0	0.0%
4.9%	15,377	15,376	-1	0.0%
6.2%	15,330	15,330	0	0.0%
7.4%	15,190	15,190	0	0.0%
8.6%	15,184	15,184	0	0.0%
9.9%	15,124	15,124	0	0.0%
11.1%	15,020	15,020	0	0.0%
12.3%	15,004	15,004	0	0.0%
13.6%	14,984	14,984	0	0.0%
14.8%	14,984	14,984	0	0.0%
16.0%	14,980	14,979	-1	0.0%
17.3%	14,957	14,957	0	0.0%
18.5%	14,947	14,947	0	0.0%
19.8%	14,934	14,934	0	0.0%
21.0%	14,932	14,929	-2	0.0%
22.2%	14,886	14,885	-2	0.0%
23.5%	14,856	14,853	-2	0.0%
24.7%	14,820	14,819	-2	0.0%
25.9%	14,804	14,804	0	0.0%
27.2%	14,797	14,797	0	0.0%
28.4%	14,794	14,794	0	0.0%
29.6%	14,790	14,790	0	0.0%
30.9%	14,767	14,764	-3	0.0%
32.1%	14,737	14,737	0	0.0%
33.3%	14,704	14,704	0	0.0%
34.6%	14,704	14,704	0	0.0%
35.8%	14,663	14,661	-2	0.0%
37.0%	14,645	14,643	-2	0.0%
38.3%	14,611	14,611	0	0.0%
39.5%	14,561	14,559	-2	0.0%
40.7%	14,512	14,509	-2	0.0%
42.0%	14,511	14,509	-2	0.0%
43.2%	14,475	14,502	27	0.2%
44.4%	14,438	14,474	36	0.2%
45.7%	14,369	14,436	67	0.5%
46.9%	14,349	14,366	17	0.1%
48.1%	14,241	14,347	106	0.7%
49.4%	14,179	14,177	-2	0.0%
50.6%	14,127	14,149	21	0.2%
51.9%	14,088	14,128	39	0.3%
53.1%	13,831	13,842	10	0.1%
54.3%	13,819	13,841	21	0.2%
55.6%	13,783	13,655	-128	-0.9%
56.8%	13,674	13,642	-31	-0.2%
58.0%	13,644	13,622	-23	-0.2%
59.3%	13,452	13,594	142	1.1%
60.5%	13,353	13,245	-107	-0.8%
61.7%	13,278	13,194	-84	-0.6%
63.0%	12,679	13,141	461	3.6%
64.2%	12,666	12,689	23	0.2%
65.4%	12,635	12,646	11	0.1%
66.7%	12,621	12,642	21	0.2%
67.9%	12,556	12,510	-46	-0.4%
69.1%	12,298	12,442	143	1.2%
70.4%	11,845	12,210	365	3.1%
71.6%	11,683	12,111	428	3.7%
72.8%	11,600	12,026	425	3.7%
74.1%	11,477	11,972	495	4.3%
75.3%	11,374	11,606	232	2.0%
76.5%	11,372	11,581	209	1.8%
77.8%	11,316	11,512	196	1.7%
79.0%	11,190	11,492	302	2.7%
80.2%	11,047	11,459	413	3.7%
81.5%	11,005	11,253	248	2.2%
82.7%	10,862	11,160	299	2.7%
84.0%	10,510	10,693	182	1.7%
85.2%	10,464	10,645	181	1.7%
86.4%	10,318	10,373	56	0.5%
87.7%	9,961	10,310	349	3.5%
88.9%	9,632	10,025	393	4.1%
90.1%	9,233	9,416	183	2.0%
91.4%	9,219	9,130	-89	-1.0%
92.6%	9,084	9,022	-62	-0.7%
93.8%	8,436	8,712	276	3.3%
95.1%	7,793	8,335	542	7.0%
96.3%	7,780	7,929	149	1.9%
97.5%	7,699	7,846	146	1.9%
98.8%	7,290	7,528	238	3.3%
100.0%	4,422	5,230	808	18.3%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,804	15,804	0	0.0%
1.2%	15,804	15,804	0	0.0%
2.5%	15,804	15,804	0	0.0%
3.7%	15,804	15,804	0	0.0%
4.9%	15,804	15,804	0	0.0%
6.2%	15,804	15,804	0	0.0%
7.4%	15,804	15,804	0	0.0%
8.6%	15,804	15,804	0	0.0%
9.9%	15,804	15,804	0	0.0%
11.1%	15,804	15,804	0	0.0%
12.3%	15,804	15,804	0	0.0%
13.6%	15,804	15,804	0	0.0%
14.8%	15,804	15,804	0	0.0%
16.0%	15,568	15,563	-5	0.0%
17.3%	15,556	15,554	-2	0.0%
18.5%	15,503	15,501	-2	0.0%
19.8%	15,398	15,395	-2	0.0%
21.0%	15,342	15,339	-3	0.0%
22.2%	15,331	15,328	-2	0.0%
23.5%	15,257	15,288	30	0.2%
24.7%	15,222	15,253	31	0.2%
25.9%	15,111	15,220	108	0.7%
27.2%	15,105	15,109	4	0.0%
28.4%	15,091	15,102	11	0.1%
29.6%	15,042	15,086	44	0.3%
30.9%	15,030	15,040	10	0.1%
32.1%	15,003	15,001	-2	0.0%
33.3%	14,976	14,972	-4	0.0%
34.6%	14,933	14,928	-5	0.0%
35.8%	14,887	14,883	-5	0.0%
37.0%	14,781	14,777	-4	0.0%
38.3%	14,733	14,734	1	0.0%
39.5%	14,707	14,705	-2	0.0%
40.7%	14,595	14,591	-5	0.0%
42.0%	14,544	14,534	-10	-0.1%
43.2%	14,478	14,474	-5	0.0%
44.4%	14,255	14,251	-4	0.0%
45.7%	14,164	14,159	-5	0.0%
46.9%	14,111	14,037	-74	-0.5%
48.1%	14,014	14,014	0	0.0%
49.4%	13,938	13,962	24	0.2%
50.6%	13,925	13,919	-6	0.0%
51.9%	13,800	13,820	20	0.1%
53.1%	13,733	13,797	64	0.5%
54.3%	13,711	13,707	-4	0.0%
55.6%	13,408	13,494	86	0.6%
56.8%	13,403	13,438	35	0.3%
58.0%	13,302	13,244	-57	-0.4%
59.3%	13,080	13,217	137	1.0%
60.5%	13,077	13,212	135	1.0%
61.7%	13,064	13,124	61	0.5%
63.0%	13,063	13,094	31	0.2%
64.2%	13,031	13,068	37	0.3%
65.4%	12,899	13,043	144	1.1%
66.7%	12,690	13,023	334	2.6%
67.9%	12,573	12,941	368	2.9%
69.1%	12,364	12,523	159	1.3%
70.4%	12,355	12,390	35	0.3%
71.6%	12,175	12,187	12	0.1%
72.8%	11,907	11,880	-28	-0.2%
74.1%	11,402	11,809	407	3.6%
75.3%	11,344	11,673	330	2.9%
76.5%	11,205	11,626	422	3.8%
77.8%	11,170	11,573	404	3.6%
79.0%	11,076	11,466	390	3.5%
80.2%	10,815	11,304	489	4.5%
81.5%	10,770	11,192	422	3.9%
82.7%	10,668	11,021	353	3.3%
84.0%	10,340	10,485	144	1.4%
85.2%	10,111	10,249	138	1.4%
86.4%	9,928	10,133	204	2.1%
87.7%	9,762	9,838	76	0.8%
88.9%	9,673	9,736	62	0.6%
90.1%	8,853	9,116	263	3.0%
91.4%	8,772	8,893	121	1.4%
92.6%	8,696	8,703	7	0.1%
93.8%	7,990	8,063	74	0.9%
95.1%	7,747	7,890	143	1.8%
96.3%	7,370	7,710	340	4.6%
97.5%	7,146	7,698	552	7.7%
98.8%	6,837	7,112	275	4.0%
100.0%	4,353	5,159	807	18.5%

Table SW-20-b

Lake Oroville, End of Month Area

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,804	15,804	0	0.0%
1.2%	15,804	15,804	0	0.0%
2.5%	15,804	15,804	0	0.0%
3.7%	15,804	15,804	0	0.0%
4.9%	15,804	15,804	0	0.0%
6.2%	15,804	15,804	0	0.0%
7.4%	15,613	15,593	-21	-0.1%
8.6%	15,515	15,446	-69	-0.4%
9.9%	15,514	15,412	-101	-0.7%
11.1%	15,498	15,351	-147	-0.9%
12.3%	15,403	15,313	-90	-0.6%
13.6%	15,397	15,308	-89	-0.6%
14.8%	15,333	15,248	-86	-0.6%
16.0%	15,284	15,224	-60	-0.4%
17.3%	15,259	15,053	-206	-1.3%
18.5%	15,159	14,956	-203	-1.3%
19.8%	15,017	14,815	-203	-1.3%
21.0%	14,783	14,772	-10	-0.1%
22.2%	14,756	14,771	15	0.1%
23.5%	14,644	14,644	0	0.0%
24.7%	14,590	14,620	31	0.2%
25.9%	14,401	14,500	99	0.7%
27.2%	14,367	14,484	118	0.8%
28.4%	14,363	14,427	63	0.4%
29.6%	14,334	14,408	75	0.5%
30.9%	14,312	14,381	69	0.5%
32.1%	14,233	14,358	126	0.9%
33.3%	14,193	14,307	114	0.8%
34.6%	14,183	14,231	48	0.3%
35.8%	14,096	14,197	101	0.7%
37.0%	14,085	14,119	34	0.2%
38.3%	13,862	14,014	152	1.1%
39.5%	13,846	14,008	162	1.2%
40.7%	13,760	14,005	246	1.8%
42.0%	13,576	13,794	217	1.6%
43.2%	13,560	13,696	136	1.0%
44.4%	13,307	13,540	233	1.7%
45.7%	13,299	13,397	98	0.7%
46.9%	13,223	13,313	90	0.7%
48.1%	13,190	13,223	33	0.2%
49.4%	13,062	13,195	133	1.0%
50.6%	12,992	13,103	111	0.9%
51.9%	12,985	13,051	66	0.5%
53.1%	12,959	12,960	2	0.0%
54.3%	12,930	12,927	-3	0.0%
55.6%	12,818	12,916	98	0.8%
56.8%	12,571	12,899	328	2.6%
58.0%	12,459	12,677	218	1.7%
59.3%	12,388	12,614	226	1.8%
60.5%	12,071	12,569	498	4.1%
61.7%	12,022	12,469	447	3.7%
63.0%	12,022	12,451	429	3.6%
64.2%	11,991	12,399	408	3.4%
65.4%	11,878	12,203	325	2.7%
66.7%	11,810	12,185	375	3.2%
67.9%	11,641	12,171	530	4.6%
69.1%	11,565	11,755	189	1.6%
70.4%	11,417	11,448	31	0.3%
71.6%	11,036	11,376	340	3.1%
72.8%	10,825	11,223	398	3.7%
74.1%	10,519	10,859	340	3.2%
75.3%	10,440	10,782	342	3.3%
76.5%	10,373	10,764	391	3.8%
77.8%	10,351	10,654	303	2.9%
79.0%	10,299	10,636	337	3.3%
80.2%	10,127	10,507	381	3.8%
81.5%	9,966	10,308	342	3.4%
82.7%	9,739	10,093	354	3.6%
84.0%	9,688	9,849	161	1.7%
85.2%	9,599	9,497	-102	-1.1%
86.4%	8,994	9,425	431	4.8%
87.7%	8,725	9,057	332	3.8%
88.9%	8,693	8,634	-59	-0.7%
90.1%	8,227	8,345	118	1.4%
91.4%	7,879	8,053	174	2.2%
92.6%	7,872	7,470	-402	-5.1%
93.8%	7,054	7,427	373	5.3%
95.1%	6,826	7,314	488	7.1%
96.3%	6,775	6,860	86	1.3%
97.5%	6,472	6,788	315	4.9%
98.8%	6,394	6,687	293	4.6%
100.0%	4,175	4,979	804	19.3%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,532	15,530	-1	0.0%
1.2%	15,351	15,431	80	0.5%
2.5%	15,199	15,359	161	1.1%
3.7%	14,832	14,989	157	1.1%
4.9%	14,207	14,128	-79	-0.6%
6.2%	13,959	14,041	81	0.6%
7.4%	13,899	13,974	76	0.5%
8.6%	13,734	13,818	84	0.6%
9.9%	13,720	13,784	64	0.5%
11.1%	13,696	13,645	-51	-0.4%
12.3%	13,642	13,563	-79	-0.6%
13.6%	13,606	13,544	-62	-0.5%
14.8%	13,338	13,530	192	1.4%
16.0%	13,272	13,227	-45	-0.3%
17.3%	13,180	13,147	-33	-0.3%
18.5%	13,160	13,141	-19	-0.1%
19.8%	13,011	13,074	63	0.5%
21.0%	12,997	13,022	25	0.2%
22.2%	12,901	12,975	75	0.6%
23.5%	12,847	12,902	55	0.4%
24.7%	12,472	12,638	166	1.3%
25.9%	12,453	12,593	140	1.1%
27.2%	12,435	12,578	143	1.2%
28.4%	12,413	12,456	43	0.3%
29.6%	12,249	12,451	202	1.6%
30.9%	12,239	12,406	167	1.4%
32.1%	12,183	12,367	184	1.5%
33.3%	12,106	12,301	195	1.6%
34.6%	12,092	12,297	205	1.7%
35.8%	12,073	12,268	194	1.6%
37.0%	11,962	12,199	238	2.0%
38.3%	11,762	12,080	317	2.7%
39.5%	11,550	11,965	415	3.6%
40.7%	11,361	11,828	466	4.1%
42.0%	11,240	11,667	427	3.8%
43.2%	11,162	11,614	452	4.0%
44.4%	11,094	11,466	373	3.4%
45.7%	11,092	11,453	361	3.3%
46.9%	11,006	11,281	274	2.5%
48.1%	10,891	11,210	320	2.9%
49.4%	10,877	11,096	219	2.0%
50.6%	10,797	11,044	247	2.3%
51.9%	10,786	11,001	214	2.0%
53.1%	10,615	10,893	278	2.6%
54.3%	10,599	10,888	289	2.7%
55.6%	10,593	10,847	254	2.4%
56.8%	10,290	10,769	479	4.7%
58.0%	10,109	10,662	553	5.5%
59.3%	9,934	10,650	717	7.2%
60.5%	9,889	10,504	616	6.2%
61.7%	9,640	10,497	857	8.9%
63.0%	9,634	10,418	785	8.1%
64.2%	9,628	10,226	598	6.2%
65.4%	9,513	10,185	672	7.1%
66.7%	9,364	10,159	794	8.5%
67.9%	9,341	10,034	692	7.4%
69.1%	9,174	9,817	643	7.0%
70.4%	8,946	9,161	215	2.4%
71.6%	8,935	9,081	146	1.6%
72.8%	8,883	8,988	105	1.2%
74.1%	8,824	8,691	-132	-1.5%
75.3%	8,764	8,672	-92	-1.1%
76.5%	8,486	8,628	141	1.7%
77.8%	8,444	8,521	78	0.9%
79.0%	8,431	8,400	-31	-0.4%
80.2%	8,354	8,356	3	0.0%
81.5%	8,173	8,282	109	1.3%
82.7%	7,904	7,851	-53	-0.7%
84.0%	7,726	7,832	106	1.4%
85.2%	7,691	7,771	80	1.0%
86.4%	7,587	7,607	20	0.3%
87.7%	7,184	7,286	102	1.4%
88.9%	7,174	7,111	-63	-0.9%
90.1%	7,096	6,873	-223	-3.1%
91.4%	6,473	6,474	1	0.0%
92.6%	6,472	6,473	1	0.0%
93.8%	6,403	6,472	69	1.1%
95.1%	6,165	6,441	277	4.5%
96.3%	6,052	6,198	146	2.4%
97.5%	5,631	6,130	499	8.9%
98.8%	5,531	5,971	440	8.0%
100.0%	4,042	4,843	801	19.8%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,264	15,134	-130	-0.9%
1.2%	15,245	15,096	-149	-1.0%
2.5%	15,152	14,977	-175	-1.2%
3.7%	13,946	14,030	84	0.6%
4.9%	13,177	13,005	-172	-1.3%
6.2%	12,560	12,870	311	2.5%
7.4%	12,491	12,593	102	0.8%
8.6%	12,469	12,530	62	0.5%
9.9%	12,412	12,413	1	0.0%
11.1%	12,347	12,411	64	0.5%
12.3%	12,161	12,179	17	0.1%
13.6%	12,081	12,106	25	0.2%
14.8%	11,824	12,087	262	2.2%
16.0%	11,743	11,963	220	1.9%
17.3%	11,717	11,897	179	1.5%
18.5%	11,557	11,894	338	2.9%
19.8%	11,533	11,821	287	2.5%
21.0%	11,452	11,814	361	3.2%
22.2%	11,439	11,646	208	1.8%
23.5%	11,333	11,638	304	2.7%
24.7%	11,287	11,563	277	2.4%
25.9%	11,234	11,340	106	0.9%
27.2%	11,113	11,218	105	0.9%
28.4%	11,105	10,878	-227	-2.0%
29.6%	10,772	10,801	30	0.3%
30.9%	10,682	10,754	72	0.7%
32.1%	10,581	10,709	128	1.2%
33.3%	10,417	10,701	284	2.7%
34.6%	10,343	10,690	347	3.4%
35.8%	10,199	10,604	405	4.0%
37.0%	10,184	10,537	353	3.5%
38.3%	10,178	10,474	297	2.9%
39.5%	9,805	10,324	519	5.3%
40.7%	9,614	10,266	652	6.8%
42.0%	9,531	10,245	713	7.5%
43.2%	9,510	10,117	606	6.4%
44.4%	9,287	9,716	428	4.6%
45.7%	9,266	9,581	315	3.4%
46.9%	9,236	9,565	329	3.6%
48.1%	9,077	9,496	419	4.6%
49.4%	9,061	9,409	348	3.8%
50.6%	8,937	9,380	443	5.0%
51.9%	8,915	9,349	435	4.9%
53.1%	8,872	9,307	435	4.9%
54.3%	8,783	9,145	362	4.1%
55.6%	8,699	9,052	353	4.1%
56.8%	8,691	9,042	351	4.0%
58.0%	8,511	8,991	480	5.6%
59.3%	8,414	8,893	479	5.7%
60.5%	8,346	8,870	524	6.3%
61.7%	8,315	8,834	519	6.2%
63.0%	8,301	8,793	492	5.9%
64.2%	8,293	8,793	499	6.0%
65.4%	8,286	8,682	396	4.8%
66.7%	8,184	8,627	443	5.4%
67.9%	8,160	8,600	440	5.4%
69.1%	7,999	8,590	591	7.4%
70.4%	7,949	8,248	299	3.8%
71.6%	7,838	8,108	270	3.4%
72.8%	7,790	7,789	0	0.0%
74.1%	7,725	7,744	19	0.2%
75.3%	7,449	7,722	273	3.7%
76.5%	7,413	7,709	296	4.0%
77.8%	7,379	7,510	131	1.8%
79.0%	7,234	7,455	220	3.0%
80.2%	7,123	7,403	280	3.9%
81.5%	6,956	7,284	327	4.7%
82.7%	6,951	7,280	329	4.7%
84.0%	6,903	7,193	289	4.2%
85.2%	6,717	7,067	350	5.2%
86.4%	6,536	7,024	488	7.5%
87.7%	6,534	6,483	-51	-0.8%
88.9%	6,478	6,480	2	0.0%
90.1%	6,477	6,477	0	0.0%
91.4%	5,816	6,066	250	4.3%
92.6%	5,815	6,029	214	3.7%
93.8%	5,768	6,025	257	4.5%
95.1%	5,679	5,980	301	5.3%
96.3%	5,407	5,902	495	9.2%
97.5%	5,336	5,779	443	8.3%
98.8%	5,327	5,352	24	0.5%
100.0%	3,745	4,592	847	22.6%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,309	13,975	-334	-2.3%
1.2%	13,654	13,508	-145	-1.1%
2.5%	13,453	13,345	-108	-0.8%
3.7%	12,076	12,193	117	1.0%
4.9%	11,439	11,397	-42	-0.4%
6.2%	11,246	11,358	111	1.0%
7.4%	11,058	11,231	173	1.6%
8.6%	10,703	11,054	352	3.3%
9.9%	10,699	10,979	280	2.6%
11.1%	10,630	10,826	196	1.8%
12.3%	10,591	10,548	-44	-0.4%
13.6%	10,553	10,509	-43	-0.4%
14.8%	10,511	10,508	-3	0.0%
16.0%	10,333	10,445	112	1.1%
17.3%	10,153	10,331	177	1.7%
18.5%	10,028	10,305	278	2.8%
19.8%	10,014	10,271	257	2.6%
21.0%	9,985	10,256	271	2.7%
22.2%	9,925	10,188	263	2.6%
23.5%	9,880	10,082	202	2.0%
24.7%	9,765	10,042	277	2.8%
25.9%	9,716	9,973	256	2.6%
27.2%	9,632	9,822	190	2.0%
28.4%	9,559	9,776	216	2.3%
29.6%	9,496	9,767	271	2.9%
30.9%	9,433	9,724	290	3.1%
32.1%	9,414	9,635	222	2.4%
33.3%	9,411	9,630	219	2.3%
34.6%	9,410	9,428	18	0.2%
35.8%	9,087	9,127	39	0.4%
37.0%	8,872	9,049	177	2.0%
38.3%	8,608	9,021	412	4.8%
39.5%	8,563	8,988	425	5.0%
40.7%	8,463	8,957	494	5.8%
42.0%	8,444	8,907	463	5.5%
43.2%	8,370	8,886	516	6.2%
44.4%	8,314	8,829	515	6.2%
45.7%	8,279	8,787	508	6.1%
46.9%	8,192	8,780	588	7.2%
48.1%	8,147	8,749	602	7.4%
49.4%	8,130	8,722	592	7.3%
50.6%	8,089	8,711	623	7.7%
51.9%	8,077	8,557	480	5.9%
53.1%	8,060	8,410	349	4.3%
54.3%	8,003	8,346	343	4.3%
55.6%	7,823	8,318	495	6.3%
56.8%	7,817	8,265	448	5.7%
58.0%	7,782	8,188	406	5.2%
59.3%	7,696	8,173	476	6.2%
60.5%	7,661	8,157	497	6.5%
61.7%	7,656	8,125	469	6.1%
63.0%	7,626	8,012	386	5.1%
64.2%	7,528	7,994	466	6.2%
65.4%	7,483	7,975	492	6.6%
66.7%	7,449	7,674	225	3.0%
67.9%	7,448	7,596	148	2.0%
69.1%	7,358	7,505	147	2.0%
70.4%	7,311	7,483	171	2.3%
71.6%	7,247	7,437	190	2.6%
72.8%	6,980	7,216	236	3.4%
74.1%	6,870	7,111	241	3.5%
75.3%	6,809	7,030	221	3.2%
76.5%	6,645	6,871	226	3.4%
77.8%	6,632	6,811	180	2.7%
79.0%	6,593	6,811	217	3.3%
80.2%	6,591	6,693	102	1.5%
81.5%	6,528	6,619	91	1.4%
82.7%	6,521	6,592	71	1.1%
84.0%	6,490	6,572	82	1.3%
85.2%	6,488	6,489	1	0.0%
86.4%	6,488	6,487	-1	0.0%
87.7%	6,486	6,452	-34	-0.5%
88.9%	6,486	6,316	-170	-2.6%
90.1%	6,331	6,298	-33	-0.5%
91.4%	5,624	5,983	358	6.4%
92.6%	5,589	5,907	318	5.7%
93.8%	5,557	5,890	332	6.0%
95.1%	5,437	5,816	379	7.0%
96.3%	5,357	5,521	164	3.1%
97.5%	5,356	5,512	156	2.9%
98.8%	5,334	5,279	-55	-1.0%
100.0%	4,008	4,804	796	19.9%

Figure SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

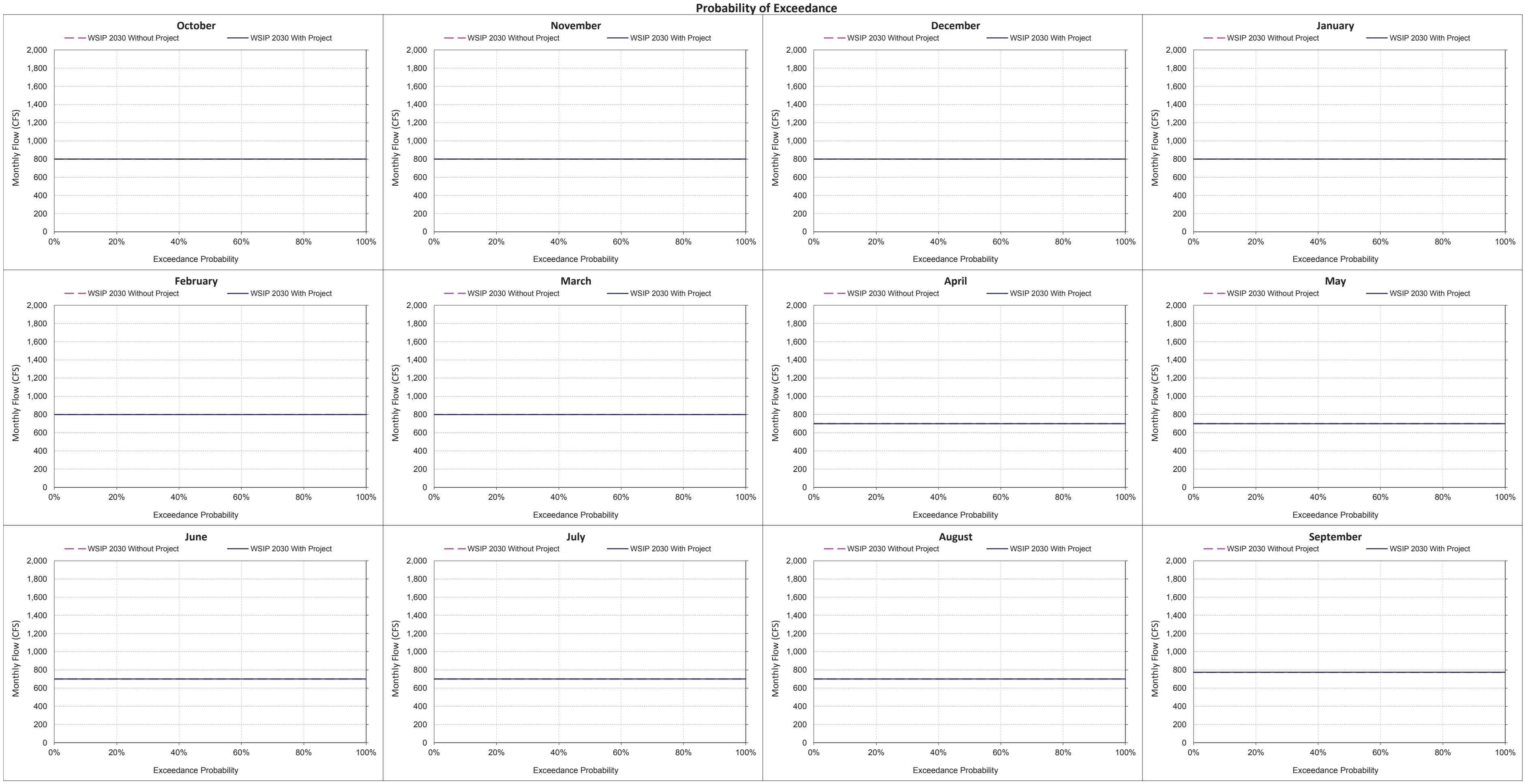


Table SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

Table SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

Table SW-21-b

Feather River at Thermalito Low Flow Channel, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%
1.2%	700	700	0	0.0%
2.5%	700	700	0	0.0%
3.7%	700	700	0	0.0%
4.9%	700	700	0	0.0%
6.2%	700	700	0	0.0%
7.4%	700	700	0	0.0%
8.6%	700	700	0	0.0%
9.9%	700	700	0	0.0%
11.1%	700	700	0	0.0%
12.3%	700	700	0	0.0%
13.6%	700	700	0	0.0%
14.8%	700	700	0	0.0%
16.0%	700	700	0	0.0%
17.3%	700	700	0	0.0%
18.5%	700	700	0	0.0%
19.8%	700	700	0	0.0%
21.0%	700	700	0	0.0%
22.2%	700	700	0	0.0%
23.5%	700	700	0	0.0%
24.7%	700	700	0	0.0%
25.9%	700	700	0	0.0%
27.2%	700	700	0	0.0%
28.4%	700	700	0	0.0%
29.6%	700	700	0	0.0%
30.9%	700	700	0	0.0%
32.1%	700	700	0	0.0%
33.3%	700	700	0	0.0%
34.6%	700	700	0	0.0%
35.8%	700	700	0	0.0%
37.0%	700	700	0	0.0%
38.3%	700	700	0	0.0%
39.5%	700	700	0	0.0%
40.7%	700	700	0	0.0%
42.0%	700	700	0	0.0%
43.2%	700	700	0	0.0%
44.4%	700	700	0	0.0%
45.7%	700	700	0	0.0%
46.9%	700	700	0	0.0%
48.1%	700	700	0	0.0%
49.4%	700	700	0	0.0%
50.6%	700	700	0	0.0%
51.9%	700	700	0	0.0%
53.1%	700	700	0	0.0%
54.3%	700	700	0	0.0%
55.6%	700	700	0	0.0%
56.8%	700	700	0	0.0%
58.0%	700	700	0	0.0%
59.3%	700	700	0	0.0%
60.5%	700	700	0	0.0%
61.7%	700	700	0	0.0%
63.0%	700	700	0	0.0%
64.2%	700	700	0	0.0%
65.4%	700	700	0	0.0%
66.7%	700	700	0	0.0%
67.9%	700	700	0	0.0%
69.1%	700	700	0	0.0%
70.4%	700	700	0	0.0%
71.6%	700	700	0	0.0%
72.8%	700	700	0	0.0%
74.1%	700	700	0	0.0%
75.3%	700	700	0	0.0%
76.5%	700	700	0	0.0%
77.8%	700	700	0	0.0%
79.0%	700	700	0	0.0%
80.2%	700	700	0	0.0%
81.5%	700	700	0	0.0%
82.7%	700	700	0	0.0%
84.0%	700	700	0	0.0%
85.2%	700	700	0	0.0%
86.4%	700	700	0	0.0%
87.7%	700	700	0	0.0%
88.9%	700	700	0	0.0%
90.1%	700	700	0	0.0%
91.4%	700	700	0	0.0%
92.6%	700	700	0	0.0%
93.8%	700	700	0	0.0%
95.1%	700	700	0	0.0%
96.3%	700	700	0	0.0%
97.5%	700	700	0	0.0%
98.8%	700	700	0	0.0%
100.0%	700	700	0	0.0%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	773	773	0	0.0%
1.2%	773	773	0	0.0%
2.5%	773	773	0	0.0%
3.7%	773	773	0	0.0%
4.9%	773	773	0	0.0%
6.2%	773	773	0	0.0%
7.4%	773	773	0	0.0%
8.6%	773	773	0	0.0%
9.9%	773	773	0	0.0%
11.1%	773	773	0	0.0%
12.3%	773	773	0	0.0%
13.6%	773	773	0	0.0%
14.8%	773	773	0	0.0%
16.0%	773	773	0	0.0%
17.3%	773	773	0	0.0%
18.5%	773	773	0	0.0%
19.8%	773	773	0	0.0%
21.0%	773	773	0	0.0%
22.2%	773	773	0	0.0%
23.5%	773	773	0	0.0%
24.7%	773	773	0	0.0%
25.9%	773	773	0	0.0%
27.2%	773	773	0	0.0%
28.4%	773	773	0	0.0%
29.6%	773	773	0	0.0%
30.9%	773	773	0	0.0%
32.1%	773	773	0	0.0%
33.3%	773	773	0	0.0%
34.6%	773	773	0	0.0%
35.8%	773	773	0	0.0%
37.0%	773	773	0	0.0%
38.3%	773	773	0	0.0%
39.5%	773	773	0	0.0%
40.7%	773	773	0	0.0%
42.0%	773	773	0	0.0%
43.2%	773	773	0	0.0%
44.4%	773	773	0	0.0%
45.7%	773	773	0	0.0%
46.9%	773	773	0	0.0%
48.1%	773	773	0	0.0%
49.4%	773	773	0	0.0%
50.6%	773	773	0	0.0%
51.9%	773	773	0	0.0%
53.1%	773	773	0	0.0%
54.3%	773	773	0	0.0%
55.6%	773	773	0	0.0%
56.8%	773	773	0	0.0%
58.0%	773	773	0	0.0%
59.3%	773	773	0	0.0%
60.5%	773	773	0	0.0%
61.7%	773	773	0	0.0%
63.0%	773	773	0	0.0%
64.2%	773	773	0	0.0%
65.4%	773	773	0	0.0%
66.7%	773	773	0	0.0%
67.9%	773	773	0	0.0%
69.1%	773	773	0	0.0%
70.4%	773	773	0	0.0%
71.6%	773	773	0	0.0%
72.8%	773	773	0	0.0%
74.1%	773	773	0	0.0%
75.3%	773	773	0	0.0%
76.5%	773	773	0	0.0%
77.8%	773	773	0	0.0%
79.0%	773	773	0	0.0%
80.2%	773	773	0	0.0%
81.5%	773	773	0	0.0%
82.7%	773	773	0	0.0%
84.0%	773	773	0	0.0%
85.2%	773	773	0	0.0%
86.4%	773	773	0	0.0%
87.7%	773	773	0	0.0%
88.9%	773	773	0	0.0%
90.1%	773	773	0	0.0%
91.4%	773	773	0	0.0%
92.6%	773	773	0	0.0%
93.8%	773	773	0	0.0%
95.1%	773	773	0	0.0%
96.3%	773	773	0	0.0%
97.5%	773	773	0	0.0%
98.8%	773	773	0	0.0%
100.0%	773	773	0	0.0%

Figure SW-22-b
Feather River below Thermalito, Monthly Flow
Probability of Exceedance

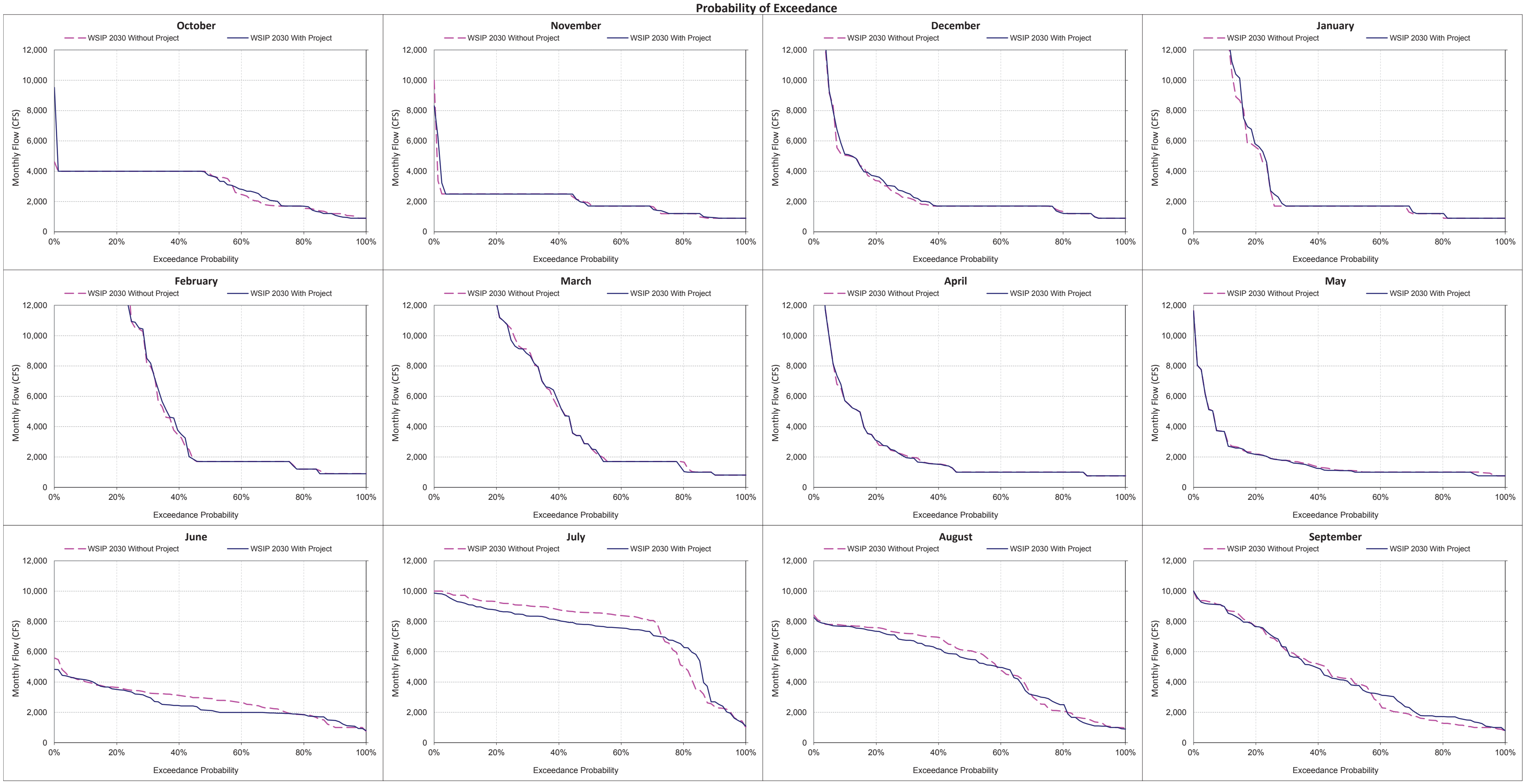


Table SW-22-b
Feather River below Thermalito, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,620	9,522	4,902	106.1%
1.2%	4,000	4,000	0	0.0%
2.5%	4,000	4,000	0	0.0%
3.7%	4,000	4,000	0	0.0%
4.9%	4,000	4,000	0	0.0%
6.2%	4,000	4,000	0	0.0%
7.4%	4,000	4,000	0	0.0%
8.6%	4,000	4,000	0	0.0%
9.9%	4,000	4,000	0	0.0%
11.1%	4,000	4,000	0	0.0%
12.3%	4,000	4,000	0	0.0%
13.6%	4,000	4,000	0	0.0%
14.8%	4,000	4,000	0	0.0%
16.0%	4,000	4,000	0	0.0%
17.3%	4,000	4,000	0	0.0%
18.5%	4,000	4,000	0	0.0%
19.8%	4,000	4,000	0	0.0%
21.0%	4,000	4,000	0	0.0%
22.2%	4,000	4,000	0	0.0%
23.5%	4,000	4,000	0	0.0%
24.7%	4,000	4,000	0	0.0%
25.9%	4,000	4,000	0	0.0%
27.2%	4,000	4,000	0	0.0%
28.4%	4,000	4,000	0	0.0%
29.6%	4,000	4,000	0	0.0%
30.9%	4,000	4,000	0	0.0%
32.1%	4,000	4,000	0	0.0%
33.3%	4,000	4,000	0	0.0%
34.6%	4,000	4,000	0	0.0%
35.8%	4,000	4,000	0	0.0%
37.0%	4,000	4,000	0	0.0%
38.3%	4,000	4,000	0	0.0%
39.5%	4,000	4,000	0	0.0%
40.7%	4,000	4,000	0	0.0%
42.0%	4,000	4,000	0	0.0%
43.2%	4,000	4,000	0	0.0%
44.4%	4,000	4,000	0	0.0%
45.7%	4,000	4,000	0	0.0%
46.9%	4,000	4,000	0	0.0%
48.1%	4,000	3,962	-38	-1.0%
49.4%	3,897	3,735	-162	-4.2%
50.6%	3,699	3,670	-29	-0.8%
51.9%	3,586	3,617	32	0.9%
53.1%	3,585	3,328	-257	-7.2%
54.3%	3,580	3,328	-252	-7.0%
55.6%	3,509	3,114	-394	-11.2%
56.8%	3,185	3,067	-118	-3.7%
58.0%	2,603	2,971	367	14.1%
59.3%	2,502	2,826	324	13.0%
60.5%	2,439	2,790	351	14.4%
61.7%	2,354	2,679	324	13.8%
63.0%	2,132	2,676	544	25.5%
64.2%	2,056	2,605	549	26.7%
65.4%	2,025	2,520	495	24.5%
66.7%	1,848	2,280	431	23.3%
67.9%	1,781	2,219	438	24.6%
69.1%	1,747	2,083	336	19.2%
70.4%	1,723	2,054	331	19.2%
71.6%	1,700	2,012	312	18.3%
72.8%	1,700	1,717	17	1.0%
74.1%	1,700	1,712	12	0.7%
75.3%	1,700	1,700	0	0.0%
76.5%	1,700	1,700	0	0.0%
77.8%	1,700	1,700	0	0.0%
79.0%	1,700	1,700	0	0.0%
80.2%	1,541	1,688	147	9.5%
81.5%	1,539	1,649	110	7.1%
82.7%	1,511	1,425	-86	-5.7%
84.0%	1,454	1,346	-108	-7.4%
85.2%	1,381	1,318	-63	-4.6%
86.4%	1,357	1,210	-146	-10.8%
87.7%	1,264	1,200	-64	-5.1%
88.9%	1,200	1,200	0	0.0%
90.1%	1,200	1,081	-119	-9.9%
91.4%	1,200	1,013	-187	-15.6%
92.6%	1,190	972	-218	-18.3%
93.8%	1,074	957	-116	-10.8%
95.1%	1,064	901	-163	-15.3%
96.3%	1,038	901	-137	-13.2%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,999	8,312	-1,686	-16.9%
1.2%	3,375	6,290	2,915	86.4%
2.5%	2,500	3,222	722	28.9%
3.7%	2,500	2,500	0	0.0%
4.9%	2,500	2,500	0	0.0%
6.2%	2,500	2,500	0	0.0%
7.4%	2,500	2,500	0	0.0%
8.6%	2,500	2,500	0	0.0%
9.9%	2,500	2,500	0	0.0%
11.1%	2,500	2,500	0	0.0%
12.3%	2,500	2,500	0	0.0%
13.6%	2,500	2,500	0	0.0%
14.8%	2,500	2,500	0	0.0%
16.0%	2,500	2,500	0	0.0%
17.3%	2,500	2,500	0	0.0%
18.5%	2,500	2,500	0	0.0%
19.8%	2,500	2,500	0	0.0%
21.0%	2,500	2,500	0	0.0%
22.2%	2,500	2,500	0	0.0%
23.5%	2,500	2,500	0	0.0%
24.7%	2,500	2,500	0	0.0%
25.9%	2,500	2,500	0	0.0%
27.2%	2,500	2,500	0	0.0%
28.4%	2,500	2,500	0	0.0%
29.6%	2,500	2,500	0	0.0%
30.9%	2,500	2,500	0	0.0%
32.1%	2,500	2,500	0	0.0%
33.3%	2,500	2,500	0	0.0%
34.6%	2,500	2,500	0	0.0%
35.8%	2,500	2,500	0	0.0%
37.0%	2,500	2,500	0	0.0%
38.3%	2,500	2,500	0	0.0%
39.5%	2,500	2,500	0	0.0%
40.7%	2,500	2,500	0	0.0%
42.0%	2,500	2,500	0	0.0%
43.2%	2,500	2,500	0	0.0%
44.4%	2,308	2,500	192	8.3%
45.7%	2,133	2,152	19	0.9%
46.9%	2,100	1,971	-129	-6.1%
48.1%	1,975	1,930	-45	-2.3%
49.4%	1,925	1,700	-225	-11.7%
50.6%	1,721	1,700	-21	-1.2%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,648	1,467	-181	-11.0%
71.6%	1,380	1,413	33	2.4%
72.8%	1,200	1,389	189	15.8%
74.1%	1,200	1,310	110	9.2%
75.3%	1,200	1,200	0	0.0%
76.5%	1,200	1,200	0	0.0%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	1,200	1,200	0	0.0%
82.7%	1,200	1,200	0	0.0%
84.0%	1,195	1,200	5	0.4%
85.2%	983	1,200	217	22.1%
86.4%	943	1,006	62	6.6%
87.7%	900	973	73	8.1%
88.9%	900	956	56	6.2%
90.1%	900	931	31	3.4%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,181	26,181	0	0.0%
1.2%	21,505	24,117	2,612	12.1%
2.5%	18,513	18,513	0	0.0%
3.7%	12,047	12,579	533	4.4%
4.9%	9,158	9,329	172	1.9%
6.2%	8,337	7,980	-357	-4.3%
7.4%	5,553	6,734	1,181	21.3%
8.6%	5,161	5,865	704	13.6%
9.9%	5,060	5,128	68	1.3%
11.1%	5,024	5,098	74	1.5%
12.3%	4,958	4,985	27	0.5%
13.6%	4,899	4,839	-59	-1.2%
14.8%	4,365	4,363	-2	-0.1%
16.0%	4,277	3,961	-317	-7.4%
17.3%	3,717	3,936	219	5.9%
18.5%	3,579	3,724	145	4.0%
19.8%	3,386	3,672	286	8.4%
21.0%	3,348	3,600	253	7.5%
22.2%	3,059	3,378	319	10.4%
23.5%	3,012	3,049	38	1.2%
24.7%	2,748	3,041	292	10.6%
25.9%	2,604	3,011	407	15.6%
27.2%	2,485	2,747	262	10.5%
28.4%	2,287	2,705	418	18.3%
29.6%	2,270	2,581	311	13.7%
30.9%	2,204	2,494	290	13.1%
32.1%	2,113	2,270	157	7.4%
33.3%	1,944	2,203	259	13.3%
34.6%	1,817	2,006	189	10.4%
35.8%	1,812	2,006	194	10.7%
37.0%	1,749	1,954	205	11.7%
38.3%	1,700	1,752	52	3.0%
39.5%	1,700	1,700	0	0.0%
40.7%	1,700	1,700	0	0.0%
42.0%	1,700	1,700	0	0.0%
43.2%	1,700	1,700	0	0.0%
44.4%	1,700	1,700	0	0.0%
45.7%	1,700	1,700	0	0.0%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,700	0	0.0%
75.3%	1,692	1,700	8	0.5%
76.5%	1,649	1,690	42	2.5%
77.8%	1,479	1,377	-102	-6.9%
79.0%	1,377	1,270	-107	-7.8%
80.2%	1,345	1,200	-145	-10.8%
81.5%	1,200	1,200	0	0.0%
82.7%	1,200	1,200	0	0.0%
84.0%	1,200	1,200	0	0.0%
85.2%	1,200	1,200	0	0.0%
86.4%	1,200	1,200	0	0.0%
87.7%	1,200	1,200	0	0.0%
88.9%	1,200	1,200	0	0.0%
90.1%	998	982	-16	-1.6%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,640	41,640	0	0.0%
1.2%	33,370	30,223	-3,148	-9.4%
2.5%	30,223	27,548	-2,675	-8.8%
3.7%	23,502	23,482	-20	-0.1%
4.9%	21,811	21,811	0	0.0%
6.2%	15,437	17,577	2,140	13.9%
7.4%	15,292	14,581	-711	-4.6%
8.6%	14,014	14,014	0	0.0%
9.9%	12,837	13,573	737	5.7%
11.1%	12,692	12,837	144	1.1%
12.3%	10,406	11,216	810	7.8%
13.6%	8,912	10,406	1,494	16.8%
14.8%	8,682	10,154	1,472	17.0%
16.0%	8,067	7,503	-564	-7.0%
17.3%	5,828	6,944	1,116	19.1%
18.5%	5,809	6,771	962	16.6%
19.8%	5,621	5,809	188	3.3%
21.0%	5,428	5,621	193	3.6%
22.2%	4,573	5,299	725	15.9%
23.5%	4,437	4,576	138	3.1%
24.7%	2,717	2,715	-1	0.0%
25.9%	1,700	2,468	768	45.2%
27.2%	1,700	2,304	604	35.5%
28.4%	1,700	1,877	177	10.4%
29.6%	1,700	1,700	0	0.0%
30.9%	1,700	1,700	0	0.0%
32.1%	1,700	1,700	0	0.0%
33.3%	1,700	1,700	0	0.0%
34.6%	1,700	1,700	0	0.0%
35.8%	1,700	1,700	0	0.0%
37.0%	1,700	1,700	0	0.0%
38.3%	1,700	1,700	0	0.0%
39.5%	1,700	1,700	0	0.0%
40.7%	1,700	1,700	0	0.0%
42.0%	1,700	1,700	0	0.0%
43.2%	1,700	1,700	0	0.0%
44.4%	1,700	1,700	0	0.0%
45.7%	1,700	1,700	0	0.0%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,305	1,700	395	30.2%
70.4%	1,200	1,304	104	8.7%
71.6%	1,200	1,200	0	0.0%
72.8%	1,200	1,200	0	0.0%
74.1%	1,200	1,200	0	0.0%
75.3%	1,200	1,200	0	0.0%
76.5%	1,200	1,200	0	0.0%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	900	1,200	300	33.3%
81.5%	900	900	0	0.0%
82.7%	900	900	0	0.0%
84.0%	900	900	0	0.0%
85.2%	900	900	0	0.0%
86.4%	900	900	0	0.0%
87.7%	900	900	0	0.0%
88.9%	900	900	0	0.0%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

Table SW-22-b

Feather River below Thermalito, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,651	42,651	0	0.0%
1.2%	33,365	33,365	0	0.0%
2.5%	31,854	31,854	0	0.0%
3.7%	24,672	24,672	0	0.0%
4.9%	24,401	24,401	0	0.0%
6.2%	24,211	24,211	0	0.0%
7.4%	24,113	24,113	0	0.0%
8.6%	21,861	23,699	1,839	8.4%
9.9%	21,175	21,186	11	0.1%
11.1%	19,910	20,107	197	1.0%
12.3%	18,344	19,980	1,636	8.9%
13.6%	18,213	19,912	1,699	9.3%
14.8%	18,071	19,102	1,031	5.7%
16.0%	17,431	18,861	1,429	8.2%
17.3%	16,757	18,213	1,457	8.7%
18.5%	15,774	18,148	2,374	15.1%
19.8%	15,586	18,071	2,484	15.9%
21.0%	15,566	15,774	208	1.3%
22.2%	15,391	15,586	196	1.3%
23.5%	14,456	12,191	-2,265	-15.7%
24.7%	10,940	10,937	-3	0.0%
25.9%	10,511	10,893	382	3.6%
27.2%	10,443	10,511	68	0.7%
28.4%	10,275	10,443	168	1.6%
29.6%	8,179	8,503	324	4.0%
30.9%	7,963	8,179	216	2.7%
32.1%	7,397	7,217	-180	-2.4%
33.3%	5,663	6,467	804	14.2%
34.6%	5,307	5,663	356	6.7%
35.8%	4,616	5,124	508	11.0%
37.0%	4,574	4,615	40	0.9%
38.3%	3,772	4,573	800	21.2%
39.5%	3,488	3,772	284	8.1%
40.7%	3,259	3,488	229	7.0%
42.0%	2,701	3,258	557	20.6%
43.2%	2,487	2,025	-463	-18.6%
44.4%	1,853	1,870	17	0.9%
45.7%	1,700	1,712	12	0.7%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,700	0	0.0%
75.3%	1,700	1,700	0	0.0%
76.5%	1,480	1,422	-59	-4.0%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	1,200	1,200	0	0.0%
82.7%	1,200	1,200	0	0.0%
84.0%	1,200	1,200	0	0.0%
85.2%	1,094	900	-194	-17.7%
86.4%	923	900	-23	-2.5%
87.7%	900	900	0	0.0%
88.9%	900	900	0	0.0%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	37,561	37,561	0	0.0%
1.2%	35,917	35,917	0	0.0%
2.5%	30,656	30,656	0	0.0%
3.7%	28,394	28,824	430	1.5%
4.9%	27,076	27,076	0	0.0%
6.2%	25,889	25,892	3	0.0%
7.4%	20,664	20,664	0	0.0%
8.6%	19,871	19,871	0	0.0%
9.9%	18,176	17,686	-490	-2.7%
11.1%	17,163	17,163	0	0.0%
12.3%	14,595	14,677	82	0.6%
13.6%	14,036	14,595	560	4.0%
14.8%	13,954	14,036	82	0.6%
16.0%	13,883	13,954	71	0.5%
17.3%	13,482	13,883	401	3.0%
18.5%	13,053	13,482	429	3.3%
19.8%	12,371	12,371	0	0.0%
21.0%	11,194	11,194	0	0.0%
22.2%	10,993	10,993	0	0.0%
23.5%	10,726	10,726	0	0.0%
24.7%	10,466	9,707	-759	-7.3%
25.9%	9,831	9,316	-515	-5.2%
27.2%	9,317	9,134	-183	-2.0%
28.4%	9,135	9,124	-10	-0.1%
29.6%	9,124	8,843	-281	-3.1%
30.9%	8,843	8,666	-177	-2.0%
32.1%	8,074	8,176	102	1.3%
33.3%	7,940	7,940	0	0.0%
34.6%	7,018	7,018	0	0.0%
35.8%	6,569	6,618	49	0.7%
37.0%	6,421	6,569	148	2.3%
38.3%	5,809	6,421	612	10.5%
39.5%	5,326	5,808	482	9.0%
40.7%	5,189	5,189	0	0.0%
42.0%	4,756	4,706	-50	-1.1%
43.2%	4,684	4,694	10	0.2%
44.4%	3,557	3,582	25	0.7%
45.7%	3,416	3,414	-1	0.0%
46.9%	3,414	3,413	-1	0.0%
48.1%	2,875	2,870	-5	-0.2%
49.4%	2,870	2,860	-10	-0.3%
50.6%	2,508	2,513	5	0.2%
51.9%	2,261	2,488	227	10.0%
53.1%	2,102	2,102	-1	0.0%
54.3%	1,951	1,700	-251	-12.9%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,700	0	0.0%
75.3%	1,700	1,700	0	0.0%
76.5%	1,700	1,700	0	0.0%
77.8%	1,700	1,700	0	0.0%
79.0%	1,700	1,354	-346	-20.4%
80.2%	1,654	1,031	-623	-37.7%
81.5%	1,208	1,000	-208	-17.2%
82.7%	1,034	1,000	-34	-3.2%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	1,000	1,000	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,908	17,902	-6	0.0%
1.2%	16,155	16,150	-4	0.0%
2.5%	15,076	15,073	-3	0.0%
3.7%	11,719	11,711	-8	-0.1%
4.9%	9,896	9,889	-7	-0.1%
6.2%	8,160	8,156	-4	0.0%
7.4%	6,794	7,353	559	8.2%
8.6%	6,579	6,789	210	3.2%
9.9%	5,722	5,719	-3	-0.1%
11.1%	5,498	5,494	-4	-0.1%
12.3%	5,245	5,238	-8	-0.1%
13.6%	5,126	5,117	-9	-0.2%
14.8%	4,964	4,960	-4	-0.1%
16.0%	3,981	3,949	-32	-0.8%
17.3%	3,543	3,536	-7	-0.2%
18.5%	3,483	3,474	-9	-0.3%
19.8%	3,116	3,110	-6	-0.2%
21.0%	2,765	2,998	233	8.4%
22.2%	2,762	2,753	-9	-0.3%
23.5%	2,732	2,721	-11	-0.4%
24.7%	2,440	2,507	67	2.8%
25.9%	2,379	2,431	52	2.2%
27.2%	2,256	2,250	-6	-0.3%
28.4%	2,178	2,086	-92	-4.2%
29.6%	2,084	1,958	-126	-6.0%
30.9%	1,984	1,923	-61	-3.1%
32.1%	1,960	1,911	-49	-2.5%
33.3%	1,925	1,661	-264	-13.7%
34.6%	1,688	1,648	-40	-2.3%
35.8%	1,624	1,614	-10	-0.6%
37.0%	1,569	1,567	-2	-0.1%
38.3%	1,553	1,549	-4	-0.3%
39.5%	1,521	1,518	-3	-0.2%
40.7%	1,520	1,514	-6	-0.4%
42.0%	1,479	1,444	-35	-2.4%
43.2%	1,401	1,400	-1	-0.1%
44.4%	1,263	1,261	-2	-0.1%
45.7%	1,000	1,000	0	0.0%
46.9%	1,000	1,000	0	0.0%
48.1%	1,000	1,000	0	0.0%
49.4%	1,000	1,000	0	0.0%
50.6%	1,000	1,000	0	0.0%
51.9%	1,000	1,000	0	0.0%
53.1%	1,000	1,000	0	0.0%
54.3%	1,000	1,000	0	0.0%
55.6%	1,000	1,000	0	0.0%
56.8%	1,000	1,000	0	0.0%
58.0%	1,000	1,000	0	0.0%
59.3%	1,000	1,000	0	0.0%
60.5%	1,000	1,000	0	0.0%
61.7%	1,000	1,000	0	0.0%
63.0%	1,000	1,000	0	0.0%
64.2%	1,000	1,000	0	0.0%
65.4%	1,000	1,000	0	0.0%
66.7%	1,000	1,000	0	0.0%
67.9%	1,000	1,000	0	0.0%
69.1%	1,000	1,000	0	0.0%
70.4%	1,000	1,000	0	0.0%
71.6%	1,000	1,000	0	0.0%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	750	750	0	0.0%
88.9%	750	750	0	0.0%
90.1%	750	750	0	0.0%
91.4%	750	750	0	0.0%
92.6%	750	750	0	0.0%
93.8%	750	750	0	0.0%
95.1%	750	750	0	0.0%
96.3%	750	750	0	0.0%
97.5%	750	750	0	0.0%
98.8%	750	750	0	0.0%
100.0%	750	750	0	0.0%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,656	11,643	-13	-0.1%
1.2%	8,047	8,038	-9	-0.1%
2.5%	7,764	7,762	-1	0.0%
3.7%	6,183	6,171	-12	-0.2%
4.9%	5,131	5,113	-18	-0.4%
6.2%	5,072	5,059	-14	-0.3%
7.4%	3,739	3,727	-12	-0.3%
8.6%	3,707	3,698	-9	-0.2%
9.9%	3,695	3,687	-7	-0.2%
11.1%	2,910	2,698	-212	-7.3%
12.3%	2,707	2,653	-54	-2.0%
13.6%	2,674	2,592	-82	-3.1%
14.8%	2,607	2,583	-23	-0.9%
16.0%	2,416	2,508	92	3.8%
17.3%	2,336	2,280	-55	-2.4%
18.5%	2,322	2,225	-97	-4.2%
19.8%	2,182	2,167	-15	-0.7%
21.0%	2,181	2,141	-40	-1.9%
22.2%	2,116	2,101	-16	-0.7%
23.5%	2,043	2,041	-2	-0.1%
24.7%	1,905	1,903	-2	-0.1%
25.9%	1,851	1,850	-1	-0.1%
27.2%	1,840	1,812	-27	-1.5%
28.4%	1,778	1,775	-3	-0.2%
29.6%	1,771	1,773	2	0.1%
30.9%	1,758	1,700	-58	-3.3%
32.1%	1,692	1,597	-95	-5.6%
33.3%	1,688	1,580	-108	-6.4%
34.6%	1,619	1,535	-84	-5.2%
35.8%	1,573	1,509	-64	-4.1%
37.0%	1,520	1,427	-93	-6.1%
38.3%	1,439	1,334	-105	-7.3%
39.5%	1,364	1,246	-119	-8.7%
40.7%	1,305	1,233	-73	-5.6%
42.0%	1,282	1,137	-145	-11.3%
43.2%	1,248	1,114	-134	-10.7%
44.4%	1,186	1,109	-77	-6.5%
45.7%	1,138	1,107	-31	-2.7%
46.9%	1,123	1,100	-23	-2.1%
48.1%	1,117	1,098	-18	-1.7%
49.4%	1,111	1,097	-13	-1.2%
50.6%	1,108	1,086	-22	-2.0%
51.9%	1,088	1,000	-88	-8.1%
53.1%	1,079	1,000	-79	-7.3%
54.3%	1,000	1,000	0	0.0%
55.6%	1,000	1,000	0	0.0%
56.8%	1,000	1,000	0	0.0%
58.0%	1,000	1,000	0	0.0%
59.3%	1,000	1,000	0	0.0%
60.5%	1,000	1,000	0	0.0%
61.7%	1,000	1,000	0	0.0%
63.0%	1,000	1,000	0	0.0%
64.2%	1,000	1,000	0	0.0%
65.4%	1,000	1,000	0	0.0%
66.7%	1,000	1,000	0	0.0%
67.9%	1,000	1,000	0	0.0%
69.1%	1,000	1,000	0	0.0%
70.4%	1,000	1,000	0	0.0%
71.6%	1,000	1,000	0	0.0%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	1,000	1,000	0	0.0%
90.1%	1,000	862	-138	-13.8%
91.4%	1,000	750	-250	-25.0%
92.6%	962	750	-212	-22.1%
93.8%	945	750	-195	-20.6%
95.1%	932	750	-182	-19.5%
96.3%	801	750	-51	-6.3%
97.5%	750	750	0	0.0%
98.8%	750	750	0	0.0%
100.0%	750	750	0	0.0%

Table SW-22-b

Feather River below Thermalito, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,585	4,832	-754	-13.5%
1.2%	5,481	4,820	-661	-12.1%
2.5%	4,824	4,435	-389	-8.1%
3.7%	4,592	4,415	-177	-3.9%
4.9%	4,294	4,335	41	1.0%
6.2%	4,289	4,276	-13	-0.3%
7.4%	4,165	4,222	57	1.4%
8.6%	4,163	4,185	22	0.5%
9.9%	4,025	4,153	128	3.2%
11.1%	3,964	4,103	139	3.5%
12.3%	3,914	4,012	98	2.5%
13.6%	3,787	3,853	66	1.7%
14.8%	3,775	3,725	-50	-1.3%
16.0%	3,709	3,667	-42	-1.1%
17.3%	3,678	3,663	-16	-0.4%
18.5%	3,674	3,559	-115	-3.1%
19.8%	3,647	3,514	-133	-3.6%
21.0%	3,633	3,482	-151	-4.2%
22.2%	3,548	3,465	-83	-2.3%
23.5%	3,493	3,396	-97	-2.8%
24.7%	3,456	3,341	-115	-3.3%
25.9%	3,441	3,217	-224	-6.5%
27.2%	3,426	3,192	-234	-6.8%
28.4%	3,381	3,152	-230	-6.8%
29.6%	3,312	3,034	-277	-8.4%
30.9%	3,255	2,958	-296	-9.1%
32.1%	3,243	2,713	-529	-16.3%
33.3%	3,233	2,701	-532	-16.4%
34.6%	3,232	2,516	-716	-22.2%
35.8%	3,205	2,501	-704	-22.0%
37.0%	3,201	2,490	-712	-22.2%
38.3%	3,148	2,456	-692	-22.0%
39.5%	3,132	2,447	-685	-21.9%
40.7%	3,096	2,428	-668	-21.6%
42.0%	3,057	2,421	-636	-20.8%
43.2%	3,055	2,417	-638	-20.9%
44.4%	2,973	2,415	-557	-18.8%
45.7%	2,970	2,368	-602	-20.3%
46.9%	2,969	2,160	-809	-27.2%
48.1%	2,945	2,139	-806	-27.4%
49.4%	2,919	2,136	-784	-26.8%
50.6%	2,904	2,113	-790	-27.2%
51.9%	2,792	2,043	-749	-26.8%
53.1%	2,787	2,000	-787	-28.2%
54.3%	2,786	2,000	-786	-28.2%
55.6%	2,776	2,000	-776	-28.0%
56.8%	2,736	2,000	-736	-26.9%
58.0%	2,699	2,000	-699	-25.9%
59.3%	2,659	2,000	-659	-24.8%
60.5%	2,638	2,000	-638	-24.2%
61.7%	2,530	2,000	-530	-21.0%
63.0%	2,514	2,000	-514	-20.4%
64.2%	2,449	2,000	-449	-18.3%
65.4%	2,439	2,000	-439	-18.0%
66.7%	2,337	1,999	-338	-14.5%
67.9%	2,282	1,981	-301	-13.2%
69.1%	2,281	1,958	-323	-14.1%
70.4%	2,242	1,954	-288	-12.8%
71.6%	2,220	1,937	-283	-12.8%
72.8%	2,120	1,936	-184	-8.7%
74.1%	2,023	1,927	-96	-4.8%
75.3%	1,932	1,919	-13	-0.6%
76.5%	1,891	1,889	-3	-0.1%
77.8%	1,865	1,885	21	1.1%
79.0%	1,864	1,854	-10	-0.5%
80.2%	1,836	1,836	0	0.0%
81.5%	1,833	1,754	-79	-4.3%
82.7%	1,759	1,735	-24	-1.4%
84.0%	1,665	1,724	59	3.6%
85.2%	1,540	1,705	164	10.7%
86.4%	1,499	1,702	203	13.6%
87.7%	1,213	1,495	282	23.3%
88.9%	1,121	1,483	361	32.2%
90.1%	1,000	1,459	459	45.9%
91.4%	1,000	1,374	374	37.4%
92.6%	1,000	1,223	223	22.3%
93.8%	1,000	1,121	121	12.1%
95.1%	1,000	1,104	104	10.4%
96.3%	1,000	1,086	86	8.6%
97.5%	1,000	939	-61	-6.1%
98.8%	1,000	926	-74	-7.4%
100.0%	750	800	50	6.7%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,000	9,877	-123	-1.2%
1.2%	10,000	9,843	-157	-1.6%
2.5%	10,000	9,817	-183	-1.8%
3.7%	9,886	9,736	-150	-1.5%
4.9%	9,838	9,569	-269	-2.7%
6.2%	9,736	9,423	-313	-3.2%
7.4%	9,728	9,304	-424	-4.4%
8.6%	9,725	9,276	-449	-4.6%
9.9%	9,724	9,209	-515	-5.3%
11.1%	9,528	9,101	-427	-4.5%
12.3%	9,497	9,083	-413	-4.4%
13.6%	9,446	8,961	-485	-5.1%
14.8%	9,376	8,958	-418	-4.5%
16.0%	9,349	8,879	-470	-5.0%
17.3%	9,335	8,805	-530	-5.7%
18.5%	9,333	8,796	-537	-5.8%
19.8%	9,312	8,748	-564	-6.1%
21.0%	9,237	8,679	-558	-6.0%
22.2%	9,188	8,643	-545	-5.9%
23.5%	9,182	8,636	-546	-5.9%
24.7%	9,180	8,606	-574	-6.3%
25.9%	9,092	8,479	-613	-6.7%
27.2%	9,079	8,475	-605	-6.7%
28.4%	9,078	8,471	-607	-6.7%
29.6%	9,055	8,357	-698	-7.7%
30.9%	9,007	8,352	-655	-7.3%
32.1%	8,988	8,344	-643	-7.2%
33.3%	8,987	8,340	-647	-7.2%
34.6%	8,967	8,329	-638	-7.1%
35.8%	8,962	8,255	-707	-7.9%
37.0%	8,907	8,156	-751	-8.4%
38.3%	8,851	8,143	-708	-8.0%
39.5%	8,792	8,088	-704	-8.0%
40.7%	8,738	8,023	-715	-8.2%
42.0%	8,707	7,988	-718	-8.3%
43.2%	8,669	7,931	-738	-8.5%
44.4%	8,658	7,928	-730	-8.4%
45.7%	8,606	7,838	-768	-8.9%
46.9%	8,604	7,816	-788	-9.2%
48.1%	8,593	7,805	-789	-9.2%
49.4%	8,585	7,804	-781	-9.1%
50.6%	8,585	7,768	-817	-9.5%
51.9%	8,563	7,695	-867	-10.1%
53.1%	8,559	7,677	-883	-10.3%
54.3%	8,533	7,656	-877	-10.3%
55.6%	8,502	7,615	-887	-10.4%
56.8%	8,472	7,604	-868	-10.2%
58.0%	8,430	7,594	-836	-9.9%
59.3%	8,403	7,577	-827	-9.8%
60.5%	8,379	7,554	-825	-9.8%
61.7%	8,354	7,539	-814	-9.7%
63.0%	8,322	7,469	-853	-10.2%
64.2%	8,317	7,460	-856	-10.3%
65.4%	8,262	7,459	-803	-9.7%
66.7%	8,180	7,415	-765	-9.4%
67.9%	8,160	7,359	-801	-9.8%
69.1%	8,067	7,336	-731	-9.1%
70.4%	8,060	7,056	-1,003	-12.4%
71.6%	7,843	7,026	-818	-10.4%
72.8%	7,133	6,996	-136	-1.9%
74.1%	6,667	6,964	297	4.5%
75.3%	6,567	6,774	207	3.2%
76.5%	6,126	6,745	619	10.1%
77.8%	5,957	6,638	681	11.4%
79.0%	5,132	6,522	1,390	27.1%
80.2%	5,010	6,273	1,263	25.2%
81.5%	4,739	6,252	1,514	31.9%
82.7%	4,131	5,961	1,830	44.3%
84.0%	3,514	5,822	2,308	65.7%
85.2%	3,468	5,406	1,938	55.9%
86.4%	3,198	3,956	758	23.7%
87.7%	2,623	3,731	1,108	42.2%
88.9%	2,569	2,697	128	5.0%
90.1%	2,352	2,687	335	14.2%
91.4%	2,289	2,516	227	9.9%
92.6%	2,269	2,400	131	5.8%
93.8%	2,210	2,026	-184	-8.3%
95.1%	2,017	1,943	-74	-3.7%
96.3%	1,644	1,612	-32	-2.0%
97.5%	1,488	1,470	-18	-1.2%
98.8%	1,431	1,322	-109	-7.6%
100.0%	1,000	1,090	90	9.0%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,418	8,254	-164	-1.9%
1.2%	8,104	8,003	-101	-1.2%
2.5%	8,002	7,906	-96	-1.2%
3.7%	7,814	7,852	38	0.5%
4.9%	7,800	7,786	-14	-0.2%
6.2%	7,795	7,706	-89	-1.1%
7.4%	7,795	7,692	-103	-1.3%
8.6%	7,763	7,681	-81	-1.0%
9.9%	7,731	7,681	-50	-0.6%
11.1%	7,721	7,676	-45	-0.6%
12.3%	7,716	7,635	-81	-1.0%
13.6%	7,690	7,564	-126	-1.6%
14.8%	7,686	7,535	-151	-2.0%
16.0%	7,639	7,501	-139	-1.8%
17.3%	7,600	7,444	-156	-2.0%
18.5%	7,594	7,400	-194	-2.6%
19.8%	7,592	7,353	-239	-3.1%
21.0%	7,579	7,337	-242	-3.2%
22.2%	7,527	7,241	-287	-3.8%
23.5%	7,452	7,151	-301	-4.0%
24.7%	7,346	7,112	-234	-3.2%
25.9%	7,301	7,105	-196	-2.7%
27.2%	7,259	6,840	-419	-5.8%
28.4%	7,235	6,792	-443	-6.1%
29.6%	7,205	6,745	-459	-6.4%
30.9%	7,193	6,745	-448	-6.2%
32.1%	7,192	6,715	-477	-6.6%
33.3%	7,107	6,569	-538	-7.6%
34.6%	7,058	6,545	-514	-7.3%
35.8%	7,013	6,397	-616	-8.8%
37.0%	7,000	6,385	-616	-8.8%
38.3%	6,986	6,328	-658	-9.4%
39.5%	6,963	6,212	-751	-10.8%
40.7%	6,914	6,159	-754	-10.9%
42.0%	6,679	5,941	-739	-11.1%
43.2%	6,497	5,877	-620	-9.5%
44.4%	6,466	5,856	-610	-9.4%
45.7%	6,243	5,840	-403	-6.5%
46.9%	6,139	5,662	-477	-7.8%
48.1%	6,099	5,597	-502	-8.2%
49.4%	6,071	5,526	-545	-9.0%
50.6%	6,055	5,491	-564	-9.3%
51.9%	5,971	5,466	-505	-8.5%
53.1%	5,932	5,252	-680	-11.5%
54.3%	5,794	5,231	-563	-9.7%
55.6%	5,586	5,122	-464	-8.3%
56.8%	5,394	5,115	-279	-5.2%
58.0%	5,206	5,057	-149	-2.9%
59.3%	4,841	4,974	133	2.8%
60.5%	4,726	4,955	229	4.8%
61.7%	4,509	4,867	358	7.9%
63.0%	4,462	4,796	335	7.5%
64.2%	4,449	4,283	-167	-3.7%
65.4%	4,397	4,200	-198	-4.5%
66.7%	4,213	3,852	-362	-8.6%
67.9%	3,826	3,431	-395	-10.3%
69.1%	3,350	3,205	-146	-4.3%
70.4%	2,992	3,136	144	4.8%
71.6%	2,796	3,092	296	10.6%
72.8%	2,542	2,995	452	17.8%
74.1%	2,538	2,968	430	16.9%
75.3%	2,248	2,898	651	28.9%
76.5%	2,122	2,735	612	28.9%
77.8%	2,120	2,607	487	23.0%
79.0%	2,093	2,500	407	19.4%
80.2%	2,092	2,500	408	19.5%
81.5%	1,992	1,893	-99	-5.0%
82.7%	1,940	1,662	-278	-14.3%
84.0%	1,684	1,661	-23	-1.4%
85.2%	1,652	1,469	-184	-11.1%
86.4%	1,606	1,328	-278	-17.3%
87.7%	1,582	1,232	-350	-22.1%
88.9%	1,484	1,177	-307	-20.7%
90.1%	1,369	1,104	-265	-19.3%
91.4%	1,335	1,100	-235	-17.6%
92.6%	1,276	1,090	-186	-14.6%
93.8%	1,092	1,088	-4	-0.4%
95.1%	1,069	1,000	-69	-6.5%
96.3%	1,000	1,000	0	0.0%
97.5%	1,000	1,000	0	0.0%
98.8%	990	912	-77	-7.8%
100.0%	973	905	-69	-7.0%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,000	10,000	0	0.0%
1.2%	9,433	9,573	140	1.5%
2.5%	9,375	9,277	-98	-1.0%
3.7%	9,364	9,184	-180	-1.9%
4.9%	9,302	9,152	-150	-1.6%
6.2%	9,267	9,125	-142	-1.5%
7.4%	9,138	9,124	-15	-0.2%
8.6%	9,106	9,093	-13	-0.1%
9.9%	8,900	8,984	84	0.9%
11.1%	8,708	8,535	-174	-2.0%
12.3%	8,668	8,469	-199	-2.3%
13.6%	8,653	8,320	-333	-3.8%
14.8%	8,404	8,168	-235	-2.8%
16.0%	8,147	7,957	-190	-2.3%
17.3%	8,019	7,947	-72	-0.9%
18.5%	7,889	7,858	-31	-0.4%
19.8%	7,686	7,654	-32	-0.4%
21.0%	7,607	7,638	31	0.4%
22.2%	7,504	7,570	66	0.9%
23.5%	7,080	7,324	244	3.4%
24.7%	6,941	7,105	164	2.4%
25.9%	6,863	6,938	75	1.1%
27.2%	6,634	6,830	196	3.0%
28.4%	6,334	6,338	4	0.1%
29.6%	6,101	6,315	214	3.5%
30.9%	5,957	5,725	-232	-3.9%
32.1%	5,900	5,646	-254	-4.3%
33.3%	5,695	5,643	-53	-0.9%
34.6%	5,628	5,478	-150	-2.7%
35.8%	5,506	5,156	-350	-6.4%
37.0%	5,333	5,136	-196	-3.7%
38.3%	5,252	5,065	-187	-3.6%
39.5%	5,218	4,963	-255	-4.9%
40.7%	5,140	4,845	-295	-5.7%
42.0%	5,052	4,465	-588	-11.6%
43.2%	4,778	4,391	-387	-8.1%
44.4%	4,363	4,246	-117	-2.7%
45.7%	4,362	4,221	-141	-3.2%
46.9%	4,294	4,145	-149	-3.5%
48.1%	4,250	4,125	-125	-2.9%
49.4%	4,233	4,071	-162	-3.8%
50.6%	4,223	3,812	-411	-9.7%
51.9%	3,878	3,782	-96	-2.5%
53.1%	3,860	3,779	-82	-2.1%
54.3%	3,797	3,461	-336	-8.8%
55.6%	3,697	3,338	-359	-9.7%
56.8%	3,331	3,283	-47	-1.4%
58.0%	2,876	3,268	392	13.6%
59.3%	2,708	3,205	497	18.3%
60.5%	2,294	3,124	831	36.2%
61.7%	2,268	3,109	842	37.1%
63.0%	2,130	3,080	950	44.6%
64.2%	2,049	3,038	989	48.3%
65.4%	2,022	2,772	749	37.1%
66.7%	1,958	2,587	629	32.1%
67.9%	1,945	2,374	429	22.0%
69.1%	1,883	2,315	432	22.9%
70.4%	1,728	2,107	379	21.9%
71.6%	1,720	1,934	214	12.5%
72.8%	1,609	1,785	176	10.9%
74.1%	1,587	1,778	191	12.0%
75.3%	1,492	1,774	282	18.9%
76.5%	1,476	1,765	289	19.6%
77.8%	1,458	1,725	267	18.3%
79.0%	1,303	1,721	418	32.1%
80.2%	1,270	1,719	448	35.3%
81.5%	1,270	1,709	439	34.6%
82.7%	1,230	1,699	469	38.1%
84.0%	1,205	1,698	493	41.0%
85.2%	1,156	1,604	448	38.7%
86.4%	1,149	1,556	407	35.5%
87.7%	1,066	1,490	424	39.7%
88.9%	1,056	1,487	431	40.8%
90.1%	1,000	1,352	352	35.2%
91.4%	1,000	1,323	323	32.3%
92.6%	1,000	1,258	258	25.8%
93.8%	1,000	1,077	77	7.7%
95.1%	1,000	1,056	56	5.6%
96.3%	1,000	1,000	0	0.0%
97.5%	907	1,000	93	10.3%
98.8%	881	1,000	119	13.5%
100.0%	773	800	27	3.4%

Figure SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

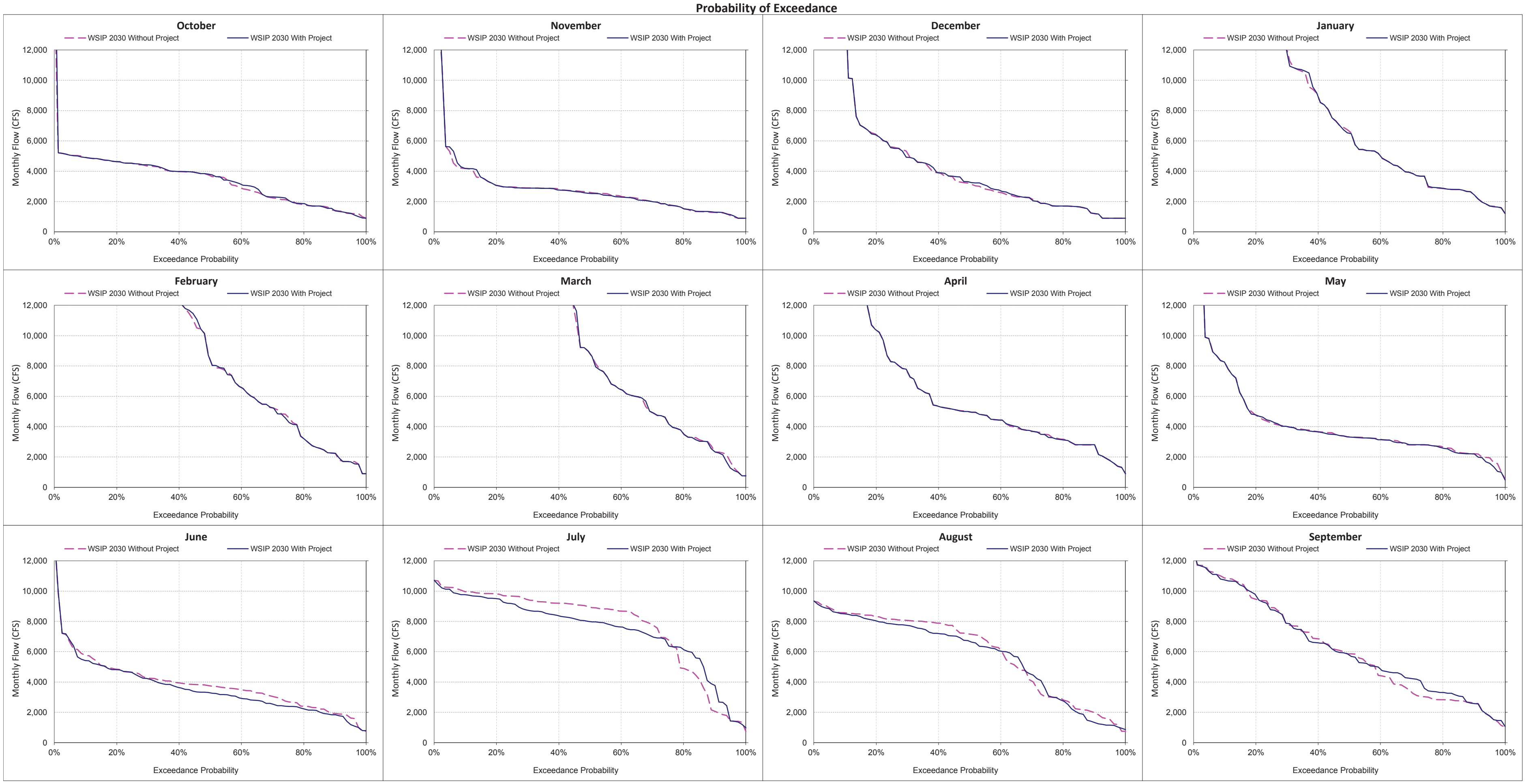


Table SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,797	21,708	4,911	29.2%
1.2%	5,213	5,214	1	0.0%
2.5%	5,182	5,178	-3	-0.1%
3.7%	5,127	5,127	0	0.0%
4.9%	5,063	5,059	-4	-0.1%
6.2%	5,033	5,032	-2	0.0%
7.4%	5,031	5,007	-24	-0.5%
8.6%	5,003	4,941	-62	-1.2%
9.9%	4,912	4,914	2	0.0%
11.1%	4,870	4,868	-2	0.0%
12.3%	4,845	4,844	-1	0.0%
13.6%	4,831	4,835	4	0.1%
14.8%	4,789	4,783	-6	-0.1%
16.0%	4,734	4,733	0	0.0%
17.3%	4,721	4,723	2	0.1%
18.5%	4,657	4,663	5	0.1%
19.8%	4,637	4,634	-3	-0.1%
21.0%	4,634	4,622	-12	-0.3%
22.2%	4,537	4,538	1	0.0%
23.5%	4,534	4,535	1	0.0%
24.7%	4,532	4,533	1	0.0%
25.9%	4,481	4,498	17	0.4%
27.2%	4,428	4,482	53	1.2%
28.4%	4,418	4,431	12	0.3%
29.6%	4,351	4,421	70	1.6%
30.9%	4,345	4,405	60	1.4%
32.1%	4,310	4,352	42	1.0%
33.3%	4,297	4,299	1	0.0%
34.6%	4,121	4,220	99	2.4%
35.8%	4,071	4,126	55	1.4%
37.0%	4,008	4,008	0	0.0%
38.3%	3,981	3,991	10	0.3%
39.5%	3,977	3,983	6	0.1%
40.7%	3,977	3,979	3	0.1%
42.0%	3,959	3,978	19	0.5%
43.2%	3,959	3,961	2	0.1%
44.4%	3,952	3,950	-1	0.0%
45.7%	3,899	3,891	-7	-0.2%
46.9%	3,844	3,847	2	0.1%
48.1%	3,842	3,846	5	0.1%
49.4%	3,759	3,804	45	1.2%
50.6%	3,645	3,758	113	3.1%
51.9%	3,641	3,646	5	0.1%
53.1%	3,622	3,637	15	0.4%
54.3%	3,584	3,418	-165	-4.6%
55.6%	3,417	3,417	0	0.0%
56.8%	3,099	3,341	242	7.8%
58.0%	3,054	3,286	232	7.6%
59.3%	2,956	3,196	240	8.1%
60.5%	2,838	3,080	242	8.5%
61.7%	2,796	3,054	258	9.2%
63.0%	2,727	3,030	303	11.1%
64.2%	2,648	2,949	301	11.4%
65.4%	2,587	2,798	211	8.1%
66.7%	2,475	2,478	3	0.1%
67.9%	2,311	2,336	25	1.1%
69.1%	2,270	2,310	39	1.7%
70.4%	2,225	2,306	81	3.7%
71.6%	2,205	2,278	74	3.3%
72.8%	2,131	2,267	137	6.4%
74.1%	2,120	2,227	107	5.0%
75.3%	2,063	2,052	-11	-0.5%
76.5%	2,001	1,924	-77	-3.8%
77.8%	1,854	1,897	43	2.3%
79.0%	1,831	1,870	38	2.1%
80.2%	1,765	1,856	91	5.1%
81.5%	1,733	1,743	11	0.6%
82.7%	1,705	1,708	2	0.1%
84.0%	1,700	1,700	0	0.0%
85.2%	1,700	1,700	0	0.0%
86.4%	1,678	1,629	-49	-2.9%
87.7%	1,627	1,552	-75	-4.6%
88.9%	1,441	1,542	101	7.0%
90.1%	1,410	1,372	-38	-2.7%
91.4%	1,367	1,349	-18	-1.3%
92.6%	1,348	1,311	-37	-2.7%
93.8%	1,226	1,265	39	3.2%
95.1%	1,204	1,231	27	2.3%
96.3%	1,200	1,111	-89	-7.4%
97.5%	1,200	1,000	-200	-16.7%
98.8%	999	913	-86	-8.6%
100.0%	900	900	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,883	18,200	-1,684	-8.5%
1.2%	14,252	17,171	2,919	20.5%
2.5%	11,220	11,218	-2	0.0%
3.7%	5,633	5,633	0	0.0%
4.9%	5,317	5,608	291	5.5%
6.2%	4,545	5,317	773	17.0%
7.4%	4,277	4,545	268	6.3%
8.6%	4,206	4,281	75	1.8%
9.9%	4,182	4,181	-2	0.0%
11.1%	4,162	4,176	14	0.3%
12.3%	4,095	4,161	66	1.6%
13.6%	3,616	4,095	479	13.3%
14.8%	3,583	3,616	33	0.9%
16.0%	3,496	3,496	0	0.0%
17.3%	3,322	3,329	6	0.2%
18.5%	3,209	3,214	5	0.2%
19.8%	3,077	3,078	1	0.0%
21.0%	3,027	3,027	0	0.0%
22.2%	2,965	2,968	3	0.1%
23.5%	2,963	2,962	0	0.0%
24.7%	2,958	2,956	-3	-0.1%
25.9%	2,955	2,910	-45	-1.5%
27.2%	2,912	2,908	-4	-0.1%
28.4%	2,906	2,890	-16	-0.6%
29.6%	2,889	2,889	0	0.0%
30.9%	2,888	2,884	-4	-0.2%
32.1%	2,883	2,880	-3	-0.1%
33.3%	2,881	2,877	-4	-0.1%
34.6%	2,876	2,875	-1	0.0%
35.8%	2,875	2,874	0	0.0%
37.0%	2,874	2,867	-7	-0.2%
38.3%	2,868	2,853	-15	-0.5%
39.5%	2,852	2,764	-88	-3.1%
40.7%	2,762	2,754	-7	-0.3%
42.0%	2,745	2,746	1	0.1%
43.2%	2,729	2,719	-10	-0.4%
44.4%	2,715	2,672	-43	-1.6%
45.7%	2,702	2,652	-50	-1.8%
46.9%	2,671	2,627	-44	-1.6%
48.1%	2,648	2,579	-69	-2.6%
49.4%	2,626	2,537	-89	-3.4%
50.6%	2,578	2,531	-47	-1.8%
51.9%	2,551	2,519	-32	-1.3%
53.1%	2,535	2,511	-24	-0.9%
54.3%	2,530	2,417	-113	-4.5%
55.6%	2,511	2,411	-100	-4.0%
56.8%	2,414	2,395	-19	-0.8%
58.0%	2,409	2,313	-97	-4.0%
59.3%	2,393	2,306	-87	-3.6%
60.5%	2,313	2,294	-19	-0.8%
61.7%	2,300	2,268	-32	-1.4%
63.0%	2,274	2,248	-26	-1.1%
64.2%	2,247	2,202	-45	-2.0%
65.4%	2,202	2,103	-99	-4.5%
66.7%	2,103	2,081	-22	-1.0%
67.9%	2,086	2,065	-21	-1.0%
69.1%	2,023	2,022	-1	-0.1%
70.4%	1,978	1,984	6	0.3%
71.6%	1,956	1,957	1	0.0%
72.8%	1,851	1,857	6	0.3%
74.1%	1,849	1,856	7	0.4%
75.3%	1,800	1,743	-56	-3.1%
76.5%	1,729	1,730	1	0.0%
77.8%	1,700	1,700	0	0.0%
79.0%	1,631	1,636	5	0.3%
80.2%	1,514	1,516	3	0.2%
81.5%	1,475	1,477	2	0.1%
82.7%	1,361	1,450	88	6.5%
84.0%	1,342	1,367	25	1.9%
85.2%	1,337	1,351	14	1.0%
86.4%	1,332	1,339	8	0.6%
87.7%	1,324	1,337	13	1.0%
88.9%	1,286	1,326	40	3.1%
90.1%	1,281	1,287	6	0.5%
91.4%	1,260	1,287	28	2.2%
92.6%	1,251	1,282	30	2.4%
93.8%	1,199	1,172	-28	-2.3%
95.1%	1,066	1,134	68	6.4%
96.3%	968	1,043	76	7.8%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	51,398	51,408	11	0.0%
1.2%	42,304	44,903	2,599	6.1%
2.5%	33,181	36,602	3,421	10.3%
3.7%	31,106	31,090	-16	-0.1%
4.9%	20,562	22,676	2,114	10.3%
6.2%	20,219	19,135	-1,083	-5.4%
7.4%	18,382	17,852	-530	-2.9%
8.6%	17,653	17,297	-356	-2.0%
9.9%	16,394	16,396	1	0.0%
11.1%	10,147	10,148	1	0.0%
12.3%	10,108	10,109	1	0.0%
13.6%	7,621	7,623	2	0.0%
14.8%	7,045	7,044	-1	0.0%
16.0%	6,895	6,895	0	0.0%
17.3%	6,716	6,723	7	0.1%
18.5%	6,533	6,459	-74	-1.1%
19.8%	6,457	6,415	-42	-0.6%
21.0%	6,252	6,258	6	0.1%
22.2%	6,005	6,035	30	0.5%
23.5%	5,948	5,922	-27	-0.5%
24.7%	5,611	5,564	-48	-0.8%
25.9%	5,563	5,512	-51	-0.9%
27.2%	5,512	5,509	-3	0.0%
28.4%	5,434	5,328	-106	-1.9%
29.6%	5,328	4,919	-410	-7.7%
30.9%	4,911	4,906	-5	-0.1%
32.1%	4,839	4,843	4	0.1%
33.3%	4,606	4,577	-29	-0.6%
34.6%	4,569	4,573	5	0.1%
35.8%	4,528	4,530	2	0.0%
37.0%	4,231	4,428	198	4.7%
38.3%	3,943	4,234	291	7.4%
39.5%	3,903	3,921	18	0.5%
40.7%	3,862	3,904	42	1.1%
42.0%	3,682	3,861	179	4.9%
43.2%	3,676	3,682	6	0.2%
44.4%	3,642	3,677	35	0.9%
45.7%	3,304	3,643	339	10.3%
46.9%	3,290	3,614	324	9.8%
48.1%	3,243	3,314	71	2.2%
49.4%	3,222	3,309	87	2.7%
50.6%	3,132	3,243	111	3.5%
51.9%	3,032	3,231	199	6.6%
53.1%	3,011	3,222	212	7.0%
54.3%	2,862	3,131	269	9.4%
55.6%	2,799	3,034	235	8.4%
56.8%	2,755	2,863	108	3.9%
58.0%	2,664	2,800	136	5.1%
59.3%	2,617	2,759	142	5.4%
60.5%	2,566	2,666	100	3.9%
61.7%	2,465	2,630	164	6.7%
63.0%	2,436	2,511	75	3.1%
64.2%	2,345	2,437	92	3.9%
65.4%	2,305	2,352	47	2.0%
66.7%	2,304	2,304	0	0.0%
67.9%	2,290	2,270	-20	-0.9%
69.1%	2,269	2,260	-9	-0.4%
70.4%	2,122	2,054	-69	-3.2%
71.6%	2,052	2,013	-39	-1.9%
72.8%	1,882	1,883	1	0.0%
74.1%	1,882	1,882	0	0.0%
75.3%	1,820	1,824	4	0.2%
76.5%	1,700	1,722	22	1.3%
77.8%	1,700	1,700	0	0.0%
79.0%	1,700	1,700	0	0.0%
80.2%	1,700	1,700	0	0.0%
81.5%	1,700	1,700	0	0.0%
82.7%	1,683	1,682	-1	-0.1%
84.0%	1,661	1,663	1	0.1%
85.2%	1,644	1,649	5	0.3%
86.4%	1,588	1,593	5	0.3%
87.7%	1,528	1,530	2	0.2%
88.9%	1,242	1,246	4	0.3%
90.1%	1,200	1,200	0	0.0%
91.4%	1,163	1,169	6	0.5%
92.6%	900	907	7	0.8%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	100,678	100,681	3	0.0%
1.2%	67,683	61,862	-5,821	-8.6%
2.5%	50,129	50,147	18	0.0%
3.7%	44,419	44,401	-18	0.0%
4.9%	41,123	43,264	2,141	5.2%
6.2%	40,986	40,988	2	0.0%
7.4%	35,760	35,762	2	0.0%
8.6%	34,879	35,752	873	2.5%
9.9%	29,619	31,091	1,473	5.0%
11.1%	26,866	27,472	605	2.3%
12.3%	25,153	25,262	109	0.4%
13.6%	25,123	25,141	18	0.1%
14.8%	22,956	24,414	1,458	6.3%
16.0%	22,305	22,305	0	0.0%
17.3%	20,062	20,058	-4	0.0%
18.5%	18,503	19,194	691	3.7%
19.8%	17,745	18,788	1,043	5.9%
21.0%	17,220	18,506	1,286	7.5%
22.2%	16,861	17,747	886	5.3%
23.5%	16,226	16,409	183	1.1%
24.7%	15,487	14,923	-563	-3.6%
25.9%	14,410	14,397	-12	-0.1%
27.2%	12,546	12,548	2	0.0%
28.4%	12,386	12,388	3	0.0%
29.6%	12,333	12,203	-129	-1.0%
30.9%	11,279	10,929	-349	-3.1%
32.1%	10,835	10,835	0	0.0%
33.3%	10,716	10,751	34	0.3%
34.6%	10,615	10,717	102	1.0%
35.8%	10,492	10,615	123	1.2%
37.0%	9,565	10,490	925	9.7%
38.3%	9,412	9,566	154	1.6%
39.5%	9,164	9,165	1	0.0%
40.7%	8,528	8,528	0	0.0%
42.0%	8,389	8,389	0	0.0%
43.2%	8,075	8,077	1	0.0%
44.4%	7,529	7,531	2	0.0%
45.7%	7,314	7,298	-16	-0.2%
46.9%	7,006	7,008	2	0.0%
48.1%	6,889	6,737	-152	-2.2%
49.4%	6,734	6,532	-202	-3.0%
50.6%	6,532	6,483	-49	-0.7%
51.9%	5,740	5,741	1	0.0%
53.1%	5,434	5,433	-1	0.0%
54.3%	5,431	5,433	2	0.0%
55.6%	5,363	5,369	6	0.1%
56.8%	5,343	5,344	0	0.0%
58.0%	5,335	5,336	1	0.0%
59.3%	5,181	5,184	3	0.1%
60.5%	4,840	4,877	38	0.8%
61.7%	4,723	4,712	-10	-0.2%
63.0%	4,580	4,579	-1	0.0%
64.2%	4,406	4,408	2	0.1%
65.4%	4,352	4,353	1	0.0%
66.7%	4,178	4,175	-2	-0.1%
67.9%	3,961	3,961	0	0.0%
69.1%	3,932	3,932	1	0.0%
70.4%	3,846	3,850	4	0.1%
71.6%	3,706	3,707	1	0.0%
72.8%	3,674	3,680	6	0.2%
74.1%	3,673	3,675	2	0.1%
75.3%	2,941	3,001	60	2.0%
76.5%	2,913	2,943	30	1.0%
77.8%	2,906	2,914	8	0.3%
79.0%	2,872	2,908	36	1.3%
80.2%	2,861	2,873	12	0.4%
81.5%	2,814	2,816	2	0.1%
82.7%	2,798	2,800	1	0.1%
84.0%	2,794	2,798	4	0.2%
85.2%	2,792	2,798	5	0.2%
86.4%	2,745	2,747	2	0.1%
87.7%	2,669	2,670	1	0.0%
88.9%	2,645	2,646	1	0.0%
90.1%	2,419	2,419	0	0.0%
91.4%	2,169	2,170	1	0.1%
92.6%	1,966	1,968	1	0.1%
93.8%	1,835	1,836	1	0.1%
95.1%	1,700	1,700	0	0.0%
96.3%	1,686	1,660	-26	-1.5%
97.5%	1,654	1,641	-13	-0.8%
98.8%	1,592	1,586	-5	-0.3%
100.0%	1,200	1,200	0	0.0%

Table SW-23-b

Feather River at Mouth, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	80,642	82,314	1,672	2.1%
1.2%	65,630	65,634	3	0.0%
2.5%	56,317	56,321	4	0.0%
3.7%	51,494	51,507	13	0.0%
4.9%	47,865	47,867	1	0.0%
6.2%	44,257	46,091	1,835	4.1%
7.4%	42,023	43,212	1,190	2.8%
8.6%	40,389	42,542	2,152	5.3%
9.9%	39,172	40,394	1,222	3.1%
11.1%	37,686	39,165	1,478	3.9%
12.3%	36,280	36,266	-13	0.0%
13.6%	36,018	36,013	-5	0.0%
14.8%	34,173	34,175	2	0.0%
16.0%	34,123	34,123	1	0.0%
17.3%	31,953	31,202	-751	-2.3%
18.5%	31,195	31,043	-151	-0.5%
19.8%	30,424	29,872	-552	-1.8%
21.0%	29,873	29,107	-766	-2.6%
22.2%	27,637	28,581	944	3.4%
23.5%	27,340	27,639	299	1.1%
24.7%	26,290	27,341	1,051	4.0%
25.9%	24,391	26,292	1,901	7.8%
27.2%	24,256	25,638	1,382	5.7%
28.4%	22,985	22,987	2	0.0%
29.6%	20,646	22,786	2,139	10.4%
30.9%	20,148	20,647	499	2.5%
32.1%	19,083	18,901	-182	-1.0%
33.3%	17,994	18,486	492	2.7%
34.6%	17,945	17,991	46	0.3%
35.8%	15,773	15,775	2	0.0%
37.0%	14,880	14,882	1	0.0%
38.3%	14,523	14,555	32	0.2%
39.5%	13,771	13,270	-501	-3.6%
40.7%	12,088	12,088	0	0.0%
42.0%	11,799	11,801	2	0.0%
43.2%	11,474	11,674	200	1.7%
44.4%	11,079	11,476	397	3.6%
45.7%	10,510	11,080	570	5.4%
46.9%	10,438	10,439	1	0.0%
48.1%	10,148	10,150	2	0.0%
49.4%	8,721	8,712	-9	-0.1%
50.6%	8,047	8,048	1	0.0%
51.9%	7,887	8,034	146	1.9%
53.1%	7,856	7,884	28	0.4%
54.3%	7,754	7,858	105	1.4%
55.6%	7,593	7,427	-166	-2.2%
56.8%	7,383	7,388	6	0.1%
58.0%	6,896	6,899	3	0.0%
59.3%	6,658	6,659	1	0.0%
60.5%	6,515	6,515	0	0.0%
61.7%	6,236	6,237	1	0.0%
63.0%	6,027	6,029	1	0.0%
64.2%	5,909	5,895	-14	-0.2%
65.4%	5,642	5,643	1	0.0%
66.7%	5,482	5,483	2	0.0%
67.9%	5,471	5,471	0	0.0%
69.1%	5,266	5,283	17	0.3%
70.4%	5,220	5,221	1	0.0%
71.6%	5,109	4,847	-262	-5.1%
72.8%	4,843	4,828	-15	-0.3%
74.1%	4,823	4,566	-257	-5.3%
75.3%	4,565	4,263	-302	-6.6%
76.5%	4,257	4,141	-116	-2.7%
77.8%	4,141	4,132	-9	-0.2%
79.0%	3,367	3,367	0	0.0%
80.2%	3,168	3,175	6	0.2%
81.5%	2,951	2,949	-2	-0.1%
82.7%	2,739	2,740	1	0.1%
84.0%	2,630	2,631	1	0.0%
85.2%	2,571	2,574	3	0.1%
86.4%	2,457	2,459	1	0.1%
87.7%	2,280	2,284	4	0.2%
88.9%	2,254	2,265	11	0.5%
90.1%	2,231	2,244	14	0.6%
91.4%	1,797	1,913	116	6.5%
92.6%	1,703	1,700	-3	-0.2%
93.8%	1,700	1,700	0	0.0%
95.1%	1,700	1,685	-15	-0.9%
96.3%	1,692	1,534	-158	-9.4%
97.5%	1,531	1,519	-13	-0.8%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	66,440	66,441	1	0.0%
1.2%	63,069	63,072	2	0.0%
2.5%	56,004	56,435	431	0.8%
3.7%	52,855	52,859	4	0.0%
4.9%	45,837	45,839	2	0.0%
6.2%	42,863	42,839	-24	-0.1%
7.4%	41,190	41,192	2	0.0%
8.6%	39,513	41,138	1,625	4.1%
9.9%	34,567	34,568	1	0.0%
11.1%	30,641	30,634	-7	0.0%
12.3%	29,476	29,477	1	0.0%
13.6%	28,650	28,651	1	0.0%
14.8%	27,496	27,491	-5	0.0%
16.0%	27,452	27,455	2	0.0%
17.3%	27,131	27,129	-2	0.0%
18.5%	26,215	26,230	14	0.1%
19.8%	25,781	25,768	-13	-0.1%
21.0%	25,767	25,291	-475	-1.8%
22.2%	24,952	24,200	-752	-3.0%
23.5%	21,473	21,475	1	0.0%
24.7%	20,819	20,821	2	0.0%
25.9%	20,244	20,244	0	0.0%
27.2%	20,082	20,083	2	0.0%
28.4%	20,064	20,051	-13	-0.1%
29.6%	19,777	19,777	0	0.0%
30.9%	19,272	19,272	0	0.0%
32.1%	18,139	18,733	593	3.3%
33.3%	17,451	17,434	-18	-0.1%
34.6%	15,839	15,840	0	0.0%
35.8%	15,232	15,233	1	0.0%
37.0%	15,048	14,386	-661	-4.4%
38.3%	14,261	13,963	-298	-2.1%
39.5%	13,854	13,853	-1	0.0%
40.7%	13,610	13,612	2	0.0%
42.0%	13,095	13,266	171	1.3%
43.2%	12,990	12,993	3	0.0%
44.4%	12,150	12,157	7	0.1%
45.7%	10,811	11,624	813	7.5%
46.9%	9,221	9,221	0	0.0%
48.1%	9,212	9,212	0	0.0%
49.4%	8,983	8,986	2	0.0%
50.6%	8,623	8,622	-2	0.0%
51.9%	8,148	7,936	-212	-2.6%
53.1%	7,802	7,753	-49	-0.6%
54.3%	7,624	7,621	-2	0.0%
55.6%	7,281	7,283	1	0.0%
56.8%	6,814	6,816	2	0.0%
58.0%	6,699	6,700	1	0.0%
59.3%	6,503	6,507	4	0.1%
60.5%	6,396	6,400	3	0.1%
61.7%	6,159	6,160	1	0.0%
63.0%	6,074	6,075	1	0.0%
64.2%	6,015	6,015	1	0.0%
65.4%	5,950	5,969	19	0.3%
66.7%	5,889	5,891	2	0.0%
67.9%	5,314	5,682	368	6.9%
69.1%	5,018	5,019	1	0.0%
70.4%	4,888	4,891	3	0.1%
71.6%	4,738	4,739	2	0.0%
72.8%	4,731	4,732	1	0.0%
74.1%	4,625	4,627	2	0.0%
75.3%	4,165	4,167	2	0.0%
76.5%	3,952	3,953	1	0.0%
77.8%	3,883	3,884	1	0.0%
79.0%	3,781	3,781	0	0.0%
80.2%	3,479	3,483	3	0.1%
81.5%	3,302	3,304	2	0.1%
82.7%	3,280	3,284	3	0.1%
84.0%	3,275	3,127	-148	-4.5%
85.2%	3,123	3,039	-83	-2.7%
86.4%	3,042	3,035	-7	-0.2%
87.7%	3,034	3,006	-28	-0.9%
88.9%	2,737	2,544	-193	-7.1%
90.1%	2,325	2,327	1	0.1%
91.4%	2,318	2,266	-52	-2.2%
92.6%	2,266	2,149	-117	-5.2%
93.8%	2,151	1,670	-481	-22.4%
95.1%	1,666	1,261	-405	-24.3%
96.3%	1,257	1,099	-158	-12.5%
97.5%	1,000	1,000	0	0.0%
98.8%	750	750	0	
100.0%	750	750	0	

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	48,986	48,981	-4	0.0%
1.2%	36,503	36,504	1	0.0%
2.5%	30,952	30,950	-2	0.0%
3.7%	26,796	26,788	-8	0.0%
4.9%	24,749	24,743	-6	0.0%
6.2%	22,235	22,230	-5	0.0%
7.4%	20,646	20,642	-4	0.0%
8.6%	19,739	19,733	-7	0.0%
9.9%	17,936	17,933	-3	0.0%
11.1%	14,563	14,559	-4	0.0%
12.3%	14,198	14,195	-3	0.0%
13.6%	13,715	13,927	212	1.5%
14.8%	13,393	13,711	317	2.4%
16.0%	13,151	13,394	242	1.8%
17.3%	11,871	11,867	-5	0.0%
18.5%	10,715	10,707	-8	-0.1%
19.8%	10,416	10,404	-13	-0.1%
21.0%	10,226	10,219	-7	-0.1%
22.2%	9,707	9,702	-5	-0.1%
23.5%	8,702	8,702	0	0.0%
24.7%	8,297	8,290	-7	-0.1%
25.9%	8,257	8,255	-2	0.0%
27.2%	8,031	8,027	-4	0.0%
28.4%	7,838	7,839	1	0.0%
29.6%	7,770	7,781	11	0.1%
30.9%	7,269	7,275	6	0.1%
32.1%	7,143	7,144	1	0.0%
33.3%	6,526	6,536	10	0.2%
34.6%	6,395	6,399	4	0.1%
35.8%	6,243	6,232	-11	-0.2%
37.0%	6,169	6,170	1	0.0%
38.3%	5,428	5,429	2	0.0%
39.5%	5,375	5,376	2	0.0%
40.7%	5,296	5,297	1	0.0%
42.0%	5,249	5,245	-4	-0.1%
43.2%	5,196	5,197	1	0.0%
44.4%	5,148	5,150	3	0.0%
45.7%	5,092	5,094	2	0.0%
46.9%	5,057	5,035	-22	-0.4%
48.1%	5,035	4,998	-37	-0.7%
49.4%	4,998	4,998	0	0.0%
50.6%	4,948	4,950	2	0.0%
51.9%	4,943	4,944	1	0.0%
53.1%	4,810	4,809	0	0.0%
54.3%	4,779	4,781	2	0.0%
55.6%	4,714	4,735	21	0.4%
56.8%	4,485	4,486	1	0.0%
58.0%	4,450	4,461	11	0.2%
59.3%	4,438	4,440	1	0.0%
60.5%	4,432	4,433	1	0.0%
61.7%	4,185	4,188	4	0.1%
63.0%	4,033	4,112	79	2.0%
64.2%	3,991	4,036	44	1.1%
65.4%	3,876	3,995	118	3.1%
66.7%	3,821	3,822	0	0.0%
67.9%	3,790	3,765	-24	-0.6%
69.1%	3,684	3,757	73	2.0%
70.4%	3,681	3,685	4	0.1%
71.6%	3,636	3,641	4	0.1%
72.8%	3,621	3,492	-128	-3.5%
74.1%	3,491	3,468	-23	-0.7%
75.3%	3,467	3,286	-181	-5.2%
76.5%	3,281	3,276	-5	-0.2%
77.8%	3,248	3,186	-62	-1.9%
79.0%	3,184	3,154	-30	-0.9%
80.2%	3,160	3,120	-40	-1.3%
81.5%	3,060	3,075	15	0.5%
82.7%	2,936	2,938	2	0.1%
84.0%	2,800	2,800	0	0.0%
85.2%	2,800	2,800	0	0.0%
86.4%	2,800	2,800	0	0.0%
87.7%	2,800	2,800	0	0.0%
88.9%	2,800	2,800	0	0.0%
90.1%	2,800	2,800	0	0.0%
91.4%	2,162	2,163	1	0.1%
92.6%	2,054	2,056	2	0.1%
93.8%	1,905	1,909	5	0.2%
95.1%	1,769	1,740	-29	-1.6%
96.3%	1,580	1,578	-2	-0.1%
97.5%	1,381	1,382	2	0.1%
98.8%	1,303	1,311	8	0.6%
100.0%	894	896	3	0.3%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	22,682	22,675	-7	0.0%
1.2%	21,179	21,167	-12	-0.1%
2.5%	17,211	17,201	-11	-0.1%
3.7%	9,905	9,896	-9	-0.1%
4.9%	9,815	9,803	-12	-0.1%
6.2%	8,947	8,934	-14	-0.2%
7.4%	8,687	8,687	0	0.0%
8.6%	8,363	8,357	-6	-0.1%
9.9%	8,282	8,270	-11	-0.1%
11.1%	7,791	7,782	-9	-0.1%
12.3%	7,438	7,439	1	0.0%
13.6%	7,208	7,205	-3	0.0%
14.8%	6,266	6,261	-6	-0.1%
16.0%	5,810	5,807	-3	0.0%
17.3%	5,196	5,197	1	0.0%
18.5%	5,009	4,823	-185	-3.7%
19.8%	4,790	4,791	1	0.0%
21.0%	4,623	4,694	71	1.5%
22.2%	4,468	4,624	156	3.5%
23.5%	4,373	4,452	79	1.8%
24.7%	4,267	4,377	111	2.6%
25.9%	4,180	4,256	77	1.8%
27.2%	4,113	4,180	67	1.6%
28.4%	4,065	4,030	-35	-0.9%
29.6%	4,020	4,021	1	0.0%
30.9%	3,964	3,964	0	0.0%
32.1%	3,930	3,930	1	0.0%
33.3%	3,869	3,798	-70	-1.8%
34.6%	3,836	3,786	-50	-1.3%
35.8%	3,785	3,777	-8	-0.2%
37.0%	3,776	3,720	-56	-1.5%
38.3%	3,718	3,675	-43	-1.2%
39.5%	3,674	3,657	-17	-0.5%
40.7%	3,653	3,635	-18	-0.5%
42.0%	3,634	3,574	-60	-1.7%
43.2%	3,601	3,516	-86	-2.4%
44.4%	3,598	3,491	-107	-3.0%
45.7%	3,469	3,469	0	0.0%
46.9%	3,411	3,413	1	0.0%
48.1%	3,382	3,386	4	0.1%
49.4%	3,334	3,315	-19	-0.6%
50.6%	3,315	3,303	-13	-0.4%
51.9%	3,304	3,291	-12	-0.4%
53.1%	3,298	3,278	-20	-0.6%
54.3%	3,284	3,253	-31	-0.9%
55.6%	3,251	3,251	0	0.0%
56.8%	3,249	3,230	-19	-0.6%
58.0%	3,228	3,218	-10	-0.3%
59.3%	3,217	3,140	-77	-2.4%
60.5%	3,135	3,136	1	0.0%
61.7%	3,124	3,125	1	0.0%
63.0%	3,096	3,111	14	0.5%
64.2%	3,094	2,990	-104	-3.4%
65.4%	3,062	2,952	-111	-3.6%
66.7%	2,944	2,945	1	0.0%
67.9%	2,809	2,904	95	3.4%
69.1%	2,802	2,812	11	0.4%
70.4%	2,800	2,800	0	0.0%
71.6%	2,800	2,800	0	0.0%
72.8%	2,800	2,800	0	0.0%
74.1%	2,800	2,800	0	0.0%
75.3%	2,793	2,795	1	0.1%
76.5%	2,729	2,734	4	0.2%
77.8%	2,714	2,731	17	0.6%
79.0%	2,713	2,636	-77	-2.8%
80.2%	2,650	2,571	-79	-3.0%
81.5%	2,599	2,534	-65	-2.5%
82.7%	2,567	2,400	-168	-6.5%
84.0%	2,374	2,293	-81	-3.4%
85.2%	2,293	2,240	-53	-2.3%
86.4%	2,257	2,222	-34	-1.5%
87.7%	2,236	2,218	-19	-0.8%
88.9%	2,216	2,216	0	0.0%
90.1%	2,205	2,190	-14	-0.6%
91.4%	2,190	1,984	-207	-9.4%
92.6%	1,982	1,947	-35	-1.8%
93.8%	1,970	1,671	-299	-15.2%
95.1%	1,943	1,574	-370	-19.0%
96.3%	1,635	1,354	-282	-17.2%
97.5%	1,559	1,042	-518	-33.2%
98.8%	1,000	1,000	0	0.0%
100.0%	524	475	-49	-9.3%

Table SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,714	13,702	-12	-0.1%
1.2%	9,912	9,900	-12	-0.1%
2.5%	7,217	7,208	-9	-0.1%
3.7%	7,136	7,180	45	0.6%
4.9%	6,633	6,763	130	2.0%
6.2%	6,179	6,383	205	3.3%
7.4%	6,149	5,655	-494	-8.0%
8.6%	5,889	5,499	-390	-6.6%
9.9%	5,763	5,425	-338	-5.9%
11.1%	5,733	5,401	-332	-5.8%
12.3%	5,540	5,225	-315	-5.7%
13.6%	5,382	5,181	-201	-3.7%
14.8%	5,096	5,117	21	0.4%
16.0%	5,064	5,036	-28	-0.6%
17.3%	4,952	4,880	-71	-1.4%
18.5%	4,904	4,823	-81	-1.7%
19.8%	4,845	4,815	-30	-0.6%
21.0%	4,831	4,796	-35	-0.7%
22.2%	4,692	4,706	14	0.3%
23.5%	4,661	4,683	22	0.5%
24.7%	4,646	4,647	1	0.0%
25.9%	4,633	4,506	-127	-2.7%
27.2%	4,539	4,372	-167	-3.7%
28.4%	4,354	4,252	-102	-2.3%
29.6%	4,258	4,233	-25	-0.6%
30.9%	4,246	4,165	-80	-1.9%
32.1%	4,231	4,069	-162	-3.8%
33.3%	4,138	3,963	-175	-4.2%
34.6%	4,135	3,886	-249	-6.0%
35.8%	4,068	3,845	-224	-5.5%
37.0%	4,068	3,842	-225	-5.5%
38.3%	3,994	3,732	-262	-6.5%
39.5%	3,952	3,658	-294	-7.5%
40.7%	3,923	3,602	-321	-8.2%
42.0%	3,884	3,520	-364	-9.4%
43.2%	3,853	3,508	-345	-9.0%
44.4%	3,841	3,399	-442	-11.5%
45.7%	3,832	3,349	-484	-12.6%
46.9%	3,827	3,328	-499	-13.0%
48.1%	3,809	3,323	-486	-12.8%
49.4%	3,765	3,316	-449	-11.9%
50.6%	3,728	3,261	-467	-12.5%
51.9%	3,710	3,236	-474	-12.8%
53.1%	3,668	3,173	-496	-13.5%
54.3%	3,635	3,172	-464	-12.8%
55.6%	3,586	3,153	-433	-12.1%
56.8%	3,581	3,093	-488	-13.6%
58.0%	3,557	3,070	-487	-13.7%
59.3%	3,518	2,957	-562	-16.0%
60.5%	3,472	2,908	-563	-16.2%
61.7%	3,431	2,878	-553	-16.1%
63.0%	3,428	2,817	-611	-17.8%
64.2%	3,297	2,796	-501	-15.2%
65.4%	3,283	2,788	-495	-15.1%
66.7%	3,265	2,725	-540	-16.6%
67.9%	3,142	2,600	-542	-17.2%
69.1%	3,091	2,589	-502	-16.2%
70.4%	3,026	2,530	-496	-16.4%
71.6%	2,973	2,434	-539	-18.1%
72.8%	2,876	2,430	-446	-15.5%
74.1%	2,745	2,397	-348	-12.7%
75.3%	2,681	2,390	-291	-10.9%
76.5%	2,672	2,382	-290	-10.9%
77.8%	2,629	2,365	-264	-10.0%
79.0%	2,410	2,291	-118	-4.9%
80.2%	2,395	2,214	-182	-7.6%
81.5%	2,386	2,144	-242	-10.2%
82.7%	2,321	2,140	-181	-7.8%
84.0%	2,304	2,134	-169	-7.3%
85.2%	2,217	2,007	-210	-9.5%
86.4%	2,215	1,925	-290	-13.1%
87.7%	2,061	1,886	-175	-8.5%
88.9%	1,931	1,840	-91	-4.7%
90.1%	1,924	1,839	-85	-4.4%
91.4%	1,889	1,768	-121	-6.4%
92.6%	1,877	1,730	-147	-7.8%
93.8%	1,810	1,418	-392	-21.7%
95.1%	1,623	1,193	-430	-26.5%
96.3%	1,594	1,091	-503	-31.5%
97.5%	1,000	1,000	0	0.0%
98.8%	759	800	41	5.4%
100.0%	750	800	50	6.7%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,710	10,702	-8	-0.1%
1.2%	10,675	10,457	-218	-2.0%
2.5%	10,288	10,215	-73	-0.7%
3.7%	10,259	10,133	-126	-1.2%
4.9%	10,244	10,131	-114	-1.1%
6.2%	10,237	9,881	-355	-3.5%
7.4%	10,144	9,843	-300	-3.0%
8.6%	10,062	9,774	-288	-2.9%
9.9%	9,967	9,766	-201	-2.0%
11.1%	9,945	9,737	-207	-2.1%
12.3%	9,938	9,682	-256	-2.6%
13.6%	9,881	9,658	-224	-2.3%
14.8%	9,870	9,652	-218	-2.2%
16.0%	9,843	9,599	-244	-2.5%
17.3%	9,838	9,531	-307	-3.1%
18.5%	9,837	9,523	-314	-3.2%
19.8%	9,822	9,516	-306	-3.1%
21.0%	9,788	9,476	-311	-3.2%
22.2%	9,698	9,263	-435	-4.5%
23.5%	9,683	9,195	-488	-5.0%
24.7%	9,672	9,189	-483	-5.0%
25.9%	9,657	9,139	-518	-5.4%
27.2%	9,645	8,944	-701	-7.3%
28.4%	9,558	8,829	-729	-7.6%
29.6%	9,457	8,758	-699	-7.4%
30.9%	9,395	8,702	-693	-7.4%
32.1%	9,383	8,673	-711	-7.6%
33.3%	9,306	8,670	-636	-6.8%
34.6%	9,296	8,633	-663	-7.1%
35.8%	9,283	8,527	-757	-8.2%
37.0%	9,228	8,487	-741	-8.0%
38.3%	9,212	8,449	-762	-8.3%
39.5%	9,206	8,405	-801	-8.7%
40.7%	9,199	8,327	-872	-9.5%
42.0%	9,195	8,302	-893	-9.7%
43.2%	9,163	8,259	-904	-9.9%
44.4%	9,144	8,203	-941	-10.3%
45.7%	9,084	8,146	-937	-10.3%
46.9%	9,073	8,078	-995	-11.0%
48.1%	9,046	8,060	-986	-10.9%
49.4%	8,983	8,004	-979	-10.9%
50.6%	8,909	7,973	-936	-10.5%
51.9%	8,896	7,966	-930	-10.5%
53.1%	8,846	7,936	-909	-10.3%
54.3%	8,828	7,909	-919	-10.4%
55.6%	8,827	7,838	-990	-11.2%
56.8%	8,787	7,766	-1,021	-11.6%
58.0%	8,771	7,672	-1,099	-12.5%
59.3%	8,687	7,644	-1,043	-12.0%
60.5%	8,675	7,625	-1,051	-12.1%
61.7%	8,667	7,510	-1,157	-13.4%
63.0%	8,641	7,458	-1,183	-13.7%
64.2%	8,446	7,451	-995	-11.8%
65.4%	8,332	7,397	-935	-11.2%
66.7%	8,057	7,293	-764	-9.5%
67.9%	7,975	7,200	-775	-9.7%
69.1%	7,875	7,078	-797	-10.1%
70.4%	7,730	6,959	-771	-10.0%
71.6%	7,556	6,915	-641	-8.5%
72.8%	6,940	6,911	-29	-0.4%
74.1%	6,932	6,833	-98	-1.4%
75.3%	6,765	6,383	-382	-5.6%
76.5%	6,329	6,333	4	0.1%
77.8%	6,251	6,330	79	1.3%
79.0%	4,927	6,292	1,365	27.7%
80.2%	4,893	6,121	1,228	25.1%
81.5%	4,776	6,017	1,240	26.0%
82.7%	4,702	5,967	1,265	26.9%
84.0%	4,445	5,597	1,152	25.9%
85.2%	4,145	5,548	1,403	33.9%
86.4%	3,610	4,987	1,377	38.1%
87.7%	3,154	4,096	942	29.9%
88.9%	2,161	3,887	1,727	79.9%
90.1%	2,059	3,773	1,713	83.2%
91.4%	1,958	2,674	715	36.5%
92.6%	1,851	2,655	804	43.4%
93.8%	1,792	2,438	645	36.0%
95.1%	1,447	1,423	-24	-1.7%
96.3%	1,407	1,411	4	0.3%
97.5%	1,407	1,351	-56	-3.9%
98.8%	1,345	1,202	-144	-10.7%
100.0%	750	983	233	31.0%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,329	9,360	31	0.3%
1.2%	9,278	9,125	-152	-1.6%
2.5%	9,098	8,987	-112	-1.2%
3.7%	9,058	8,890	-169	-1.9%
4.9%	8,906	8,849	-56	-0.6%
6.2%	8,790	8,638	-152	-1.7%
7.4%	8,599	8,589	-10	-0.1%
8.6%	8,580	8,516	-64	-0.7%
9.9%	8,575	8,495	-80	-0.9%
11.1%	8,538	8,472	-66	-0.8%
12.3%	8,521	8,400	-121	-1.4%
13.6%	8,491	8,389	-102	-1.2%
14.8%	8,487	8,330	-158	-1.9%
16.0%	8,418	8,215	-203	-2.4%
17.3%	8,414	8,158	-255	-3.0%
18.5%	8,406	8,109	-297	-3.5%
19.8%	8,309	8,055	-254	-3.1%
21.0%	8,301	7,973	-328	-4.0%
22.2%	8,211	7,959	-252	-3.1%
23.5%	8,151	7,870	-281	-3.4%
24.7%	8,150	7,846	-304	-3.7%
25.9%	8,138	7,811	-327	-4.0%
27.2%	8,100	7,777	-323	-4.0%
28.4%	8,094	7,777	-317	-3.9%
29.6%	8,072	7,745	-327	-4.1%
30.9%	8,052	7,709	-343	-4.3%
32.1%	8,028	7,639	-389	-4.8%
33.3%	8,019	7,559	-460	-5.7%
34.6%	8,014	7,524	-490	-6.1%
35.8%	7,977	7,452	-525	-6.6%
37.0%	7,963	7,278	-685	-8.6%
38.3%	7,935	7,222	-712	-9.0%
39.5%	7,886	7,215	-671	-8.5%
40.7%	7,886	7,177	-709	-9.0%
42.0%	7,808	7,168	-640	-8.2%
43.2%	7,741	7,064	-677	-8.7%
44.4%	7,738	7,048	-690	-8.9%
45.7%	7,453	7,034	-419	-5.6%
46.9%	7,235	6,929	-306	-4.2%
48.1%	7,225	6,746	-480	-6.6%
49.4%	7,182	6,735	-447	-6.2%
50.6%	7,145	6,636	-508	-7.1%
51.9%	7,107	6,577	-529	-7.4%
53.1%	7,073	6,352	-721	-10.2%
54.3%	6,877	6,335	-541	-7.9%
55.6%	6,709	6,305	-404	-6.0%
56.8%	6,387	6,241	-146	-2.3%
58.0%	6,315	6,205	-110	-1.7%
59.3%	6,272	6,064	-207	-3.3%
60.5%	5,952	6,014	62	1.0%
61.7%	5,469	5,993	525	9.6%
63.0%	5,251	5,920	669	12.7%
64.2%	5,149	5,694	546	10.6%
65.4%	4,928	5,662	734	14.9%
66.7%	4,777	5,216	439	9.2%
67.9%	4,765	4,710	-55	-1.2%
69.1%	4,157	4,558	400	9.6%
70.4%	4,013	4,461	448	11.2%
71.6%	3,582	4,226	644	18.0%
72.8%	3,198	4,101	903	28.2%
74.1%	3,051	3,626	575	18.8%
75.3%	3,015	3,088	73	2.4%
76.5%	2,997	3,003	6	0.2%
77.8%	2,981	2,970	-11	-0.4%
79.0%	2,960	2,835	-124	-4.2%
80.2%	2,798	2,725	-73	-2.6%
81.5%	2,733	2,527	-205	-7.5%
82.7%	2,552	2,233	-320	-12.5%
84.0%	2,232	2,054	-178	-8.0%
85.2%	2,202	1,931	-271	-12.3%
86.4%	2,166	1,877	-289	-13.4%
87.7%	2,146	1,485	-661	-30.8%
88.9%	2,056	1,416	-641	-31.2%
90.1%	1,979	1,331	-649	-32.8%
91.4%	1,837	1,234	-603	-32.8%
92.6%	1,649	1,212	-438	-26.5%
93.8%	1,588	1,152	-436	-27.5%
95.1%	1,520	1,148	-372	-24.5%
96.3%	1,232	1,144	-88	-7.1%
97.5%	1,192	1,036	-155	-13.0%
98.8%	750	943	193	25.7%
100.0%	750	866	116	15.4%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,788	12,781	-7	-0.1%
1.2%	11,703	11,759	56	0.5%
2.5%	11,697	11,652	-45	-0.4%
3.7%	11,682	11,567	-115	-1.0%
4.9%	11,316	11,302	-14	-0.1%
6.2%	11,252	11,096	-156	-1.4%
7.4%	11,109	11,095	-14	-0.1%
8.6%	11,006	10,790	-217	-2.0%
9.9%	10,866	10,741	-125	-1.2%
11.1%	10,821	10,677	-144	-1.3%
12.3%	10,800	10,658	-142	-1.3%
13.6%	10,653	10,643	-10	-0.1%
14.8%	10,558	10,417	-141	-1.3%
16.0%	10,422	10,307	-115	-1.1%
17.3%	9,973	10,068	95	0.9%
18.5%	9,563	9,946	383	4.0%
19.8%	9,474	9,807	333	3.5%
21.0%	9,407	9,406	0	0.0%
22.2%	9,381	9,292	-88	-0.9%
23.5%	9,353	9,201	-152	-1.6%
24.7%	8,913	8,765	-148	-1.7%
25.9%	8,907	8,737	-169	-1.9%
27.2%	8,705	8,625	-80	-0.9%
28.4%	8,524	8,463	-61	-0.7%
29.6%	7,885	7,890	5	0.1%
30.9%	7,748	7,853	105	1.4%
32.1%	7,703	7,539	-164	-2.1%
33.3%	7,692	7,476	-215	-2.8%
34.6%	7,373	7,474	101	1.4%
35.8%	7,296	7,147	-150	-2.1%
37.0%	7,284	6,704	-581	-8.0%
38.3%	6,890	6,624	-266	-3.9%
39.5%	6,861	6,593	-268	-3.9%
40.7%	6,838	6,572	-266	-3.9%
42.0%	6,555	6,568	13	0.2%
43.2%	6,490	6,422	-68	-1.0%
44.4%	6,209	6,190	-19	-0.3%
45.7%	6,138	6,015	-123	-2.0%
46.9%	6,087	5,941	-146	-2.4%
48.1%	6,008	5,927	-81	-1.3%
49.4%	5,861	5,867	7	0.1%
50.6%	5,858	5,697	-161	-2.7%
51.9%	5,846	5,641	-205	-3.5%
53.1%	5,592	5,277	-315	-5.6%
54.3%	5,518	5,269	-249	-4.5%
55.6%	5,283	5,237	-46	-0.9%
56.8%	5,142	5,066	-77	-1.5%
58.0%	5,092	5,038	-54	-1.1%
59.3%	4,440	4,995	555	12.5%
60.5%	4,403	4,756	353	8.0%
61.7%	4,346	4,707	360	8.3%
63.0%	4,277	4,642	365	8.5%
64.2%	3,876	4,621	746	19.2%
65.4%	3,831	4,619	787	20.5%
66.7%	3,812	4,502	690	18.1%
67.9%	3,655	4,282	627	17.2%
69.1%	3,489	4,258	768	22.0%
70.4%	3,247	4,217	970	29.9%
71.6%	3,114	4,184	1,070	34.4%
72.8%	3,035	4,076	1,041	34.3%
74.1%	3,026	3,579	553	18.3%
75.3%	3,000	3,410	410	13.7%
76.5%	2,898	3,377	479	16.5%
77.8%	2,839	3,371	532	18.7%
79.0%	2,833	3,320	487	17.2%
80.2%	2,833	3,308	475	16.8%
81.5%	2,828	3,262	434	15.3%
82.7%	2,823	3,256	433	15.3%
84.0%	2,770	3,165	394	14.2%
85.2%	2,765	3,079	315	11.4%
86.4%	2,762	3,042	280	10.1%
87.7%	2,679	2,685	5	0.2%
88.9%	2,650	2,614	-36	-1.4%
90.1%	2,609	2,567	-42	-1.6%
91.4%	2,572	2,566	-6	-0.2%
92.6%	2,115	2,117	2	0.1%
93.8%	1,901	1,929	27	1.4%
95.1%	1,751	1,751	0	0.0%
96.3%	1,519	1,512	-8	-0.5%
97.5%	1,394	1,461	67	4.8%
98.8%	1,131	1,458	327	28.9%
100.0%	1,035	1,071	37	3.6%

Figure SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

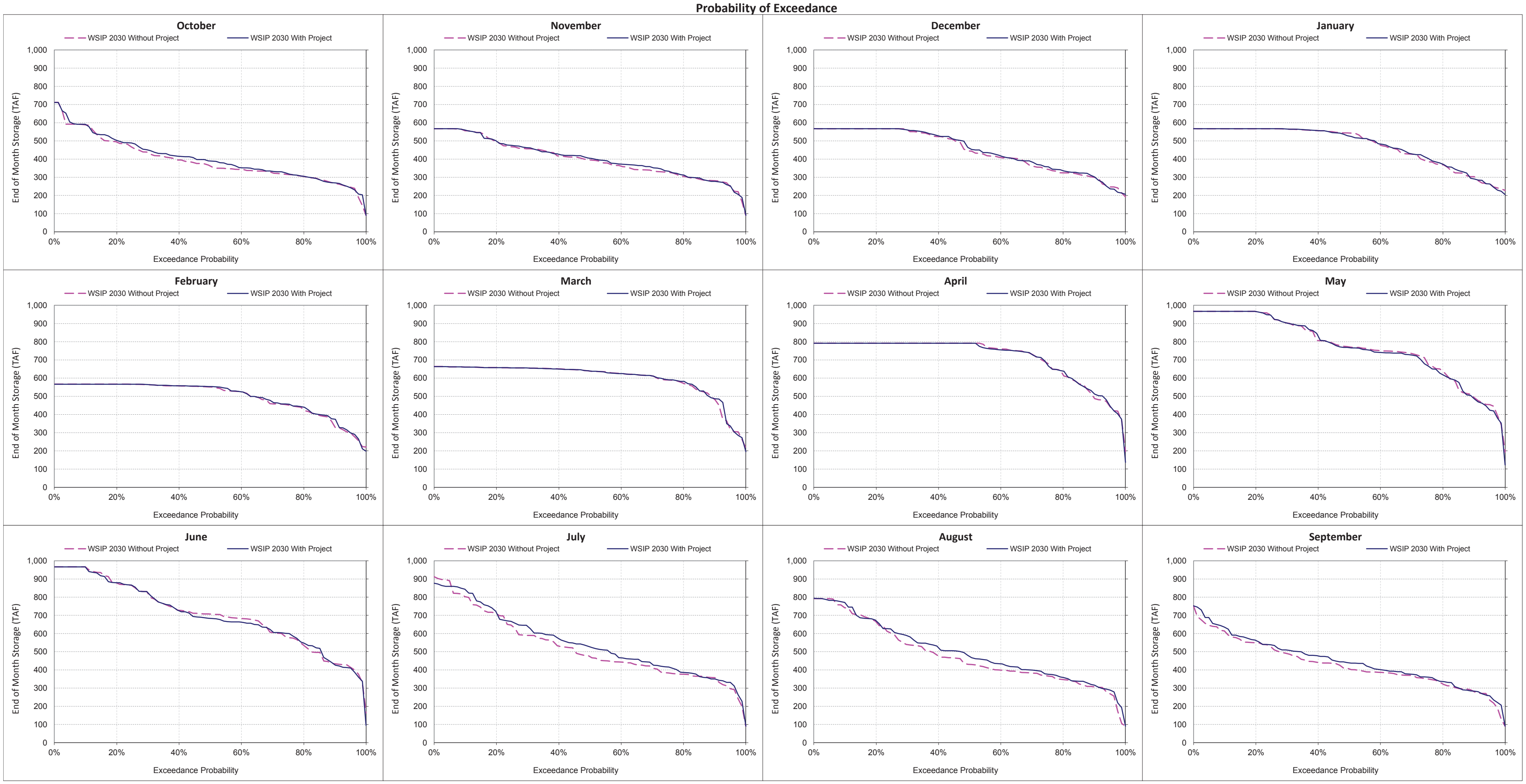


Table SW-24-b

Folsom Lake, End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	712	712	0	0.0%
1.2%	712	712	0	0.0%
2.5%	668	666	-2	-0.3%
3.7%	592	653	61	10.3%
4.9%	592	604	12	2.1%
6.2%	592	594	2	0.3%
7.4%	592	592	0	0.0%
8.6%	591	592	1	0.2%
9.9%	588	591	3	0.6%
11.1%	586	579	-8	-1.3%
12.3%	559	546	-12	-2.2%
13.6%	536	537	1	0.2%
14.8%	517	534	17	3.3%
16.0%	502	534	32	6.4%
17.3%	500	528	27	5.5%
18.5%	498	514	16	3.2%
19.8%	496	504	9	1.7%
21.0%	486	498	12	2.4%
22.2%	485	491	5	1.1%
23.5%	482	490	8	1.7%
24.7%	467	489	22	4.7%
25.9%	455	484	28	6.3%
27.2%	449	467	18	4.0%
28.4%	439	454	14	3.3%
29.6%	439	451	13	2.9%
30.9%	427	446	19	4.5%
32.1%	419	437	18	4.4%
33.3%	418	431	13	3.0%
34.6%	417	430	13	3.0%
35.8%	411	430	19	4.6%
37.0%	408	422	14	3.4%
38.3%	404	418	15	3.6%
39.5%	395	416	21	5.3%
40.7%	395	414	20	5.0%
42.0%	388	414	26	6.7%
43.2%	386	412	27	6.9%
44.4%	382	409	27	7.0%
45.7%	376	398	22	5.9%
46.9%	376	398	22	5.8%
48.1%	373	397	24	6.4%
49.4%	367	391	24	6.4%
50.6%	356	389	33	9.2%
51.9%	350	388	38	10.9%
53.1%	350	381	31	8.8%
54.3%	349	378	29	8.3%
55.6%	347	372	25	7.2%
56.8%	347	370	23	6.7%
58.0%	344	363	19	5.6%
59.3%	343	354	10	3.0%
60.5%	343	352	9	2.6%
61.7%	337	352	15	4.3%
63.0%	337	350	13	3.8%
64.2%	335	345	10	2.9%
65.4%	334	344	10	3.0%
66.7%	334	342	8	2.3%
67.9%	333	334	1	0.2%
69.1%	330	334	4	1.2%
70.4%	322	331	9	2.8%
71.6%	321	330	9	3.0%
72.8%	319	330	11	3.4%
74.1%	317	324	8	2.4%
75.3%	314	318	3	1.0%
76.5%	314	313	-1	-0.4%
77.8%	310	312	2	0.8%
79.0%	307	307	0	0.0%
80.2%	304	305	1	0.2%
81.5%	297	300	3	0.9%
82.7%	297	297	0	0.2%
84.0%	295	293	-2	-0.6%
85.2%	287	286	-1	-0.3%
86.4%	284	277	-6	-2.2%
87.7%	277	273	-4	-1.5%
88.9%	271	271	0	-0.1%
90.1%	266	269	3	1.0%
91.4%	262	266	4	1.6%
92.6%	256	257	1	0.5%
93.8%	249	250	1	0.2%
95.1%	245	242	-3	-1.2%
96.3%	239	230	-9	-3.6%
97.5%	189	207	18	9.6%
98.8%	145	204	59	40.3%
100.0%	90	90	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	566	567	1	0.2%
8.6%	565	565	0	0.0%
9.9%	556	560	4	0.8%
11.1%	555	555	0	-0.1%
12.3%	553	551	-2	-0.4%
13.6%	547	546	-1	-0.1%
14.8%	546	546	0	0.0%
16.0%	535	515	-21	-3.9%
17.3%	516	513	-3	-0.6%
18.5%	509	510	1	0.2%
19.8%	495	502	7	1.4%
21.0%	488	486	-2	-0.4%
22.2%	474	484	10	2.2%
23.5%	472	477	5	1.1%
24.7%	468	476	8	1.8%
25.9%	467	473	7	1.5%
27.2%	460	472	12	2.6%
28.4%	460	466	6	1.4%
29.6%	457	463	6	1.2%
30.9%	457	461	5	1.0%
32.1%	455	454	-1	-0.2%
33.3%	454	449	-5	-1.0%
34.6%	449	441	-8	-1.9%
35.8%	444	440	-3	-0.7%
37.0%	436	438	2	0.4%
38.3%	435	430	-6	-1.3%
39.5%	418	429	11	2.7%
40.7%	417	422	5	1.2%
42.0%	414	420	6	1.5%
43.2%	412	420	8	2.0%
44.4%	411	420	9	2.1%
45.7%	411	419	8	2.0%
46.9%	406	418	13	3.1%
48.1%	400	411	11	2.7%
49.4%	397	406	9	2.3%
50.6%	394	403	8	2.1%
51.9%	393	399	6	1.6%
53.1%	388	395	7	1.8%
54.3%	379	393	14	3.6%
55.6%	379	390	11	2.9%
56.8%	370	378	8	2.1%
58.0%	365	376	11	3.0%
59.3%	365	374	9	2.4%
60.5%	359	371	13	3.5%
61.7%	357	371	14	3.9%
63.0%	350	369	19	5.5%
64.2%	343	367	24	7.0%
65.4%	342	364	23	6.6%
66.7%	341	364	23	6.7%
67.9%	341	359	19	5.5%
69.1%	340	359	19	5.6%
70.4%	334	351	17	5.2%
71.6%	331	350	19	5.6%
72.8%	331	346	16	4.8%
74.1%	329	336	7	2.0%
75.3%	327	334	7	2.0%
76.5%	324	325	1	0.4%
77.8%	316	322	6	1.8%
79.0%	306	315	10	3.2%
80.2%	305	311	7	2.2%
81.5%	300	300	0	0.0%
82.7%	295	298	3	1.0%
84.0%	295	297	2	0.7%
85.2%	289	296	6	2.2%
86.4%	285	287	2	0.5%
87.7%	283	282	-1	-0.3%
88.9%	282	278	-4	-1.6%
90.1%	281	278	-4	-1.3%
91.4%	279	275	-4	-1.4%
92.6%	274	272	-2	-0.7%
93.8%	270	259	-11	-4.0%
95.1%	246	253	7	2.8%
96.3%	223	218	-5	-2.4%
97.5%	221	206	-15	-6.9%
98.8%	165	189	24	14.5%
100.0%	91	91	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	-0.1%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	567	567	0	0.0%
19.8%	567	567	0	0.0%
21.0%	567	567	0	0.0%
22.2%	567	567	0	0.0%
23.5%	567	567	0	0.0%
24.7%	567	567	0	0.0%
25.9%	567	567	0	0.0%
27.2%	567	567	0	0.0%
28.4%	567	565	-2	-0.3%
29.6%	565	562	-3	-0.6%
30.9%	551	558	6	1.2%
32.1%	551	557	6	1.1%
33.3%	549	554	5	0.9%
34.6%	545	551	7	1.2%
35.8%	543	547	4	0.7%
37.0%	536	541	5	0.9%
38.3%	526	535	9	1.7%
39.5%	524	531	7	1.3%
40.7%	524	525	1	0.2%
42.0%	520	524	4	0.8%
43.2%	512	524	12	2.3%
44.4%	509	512	3	0.5%
45.7%	496	506	10	2.0%
46.9%	493	503	11	2.2%
48.1%	455	498	44	9.6%
49.4%	445	465	20	4.4%
50.6%	444	453	9	2.1%
51.9%	433	451	18	4.1%
53.1%	432	450	19	4.3%
54.3%	428	436	8	1.9%
55.6%	418	436	17	4.1%
56.8%	417	433	16	3.9%
58.0%	417	428	11	2.7%
59.3%	411	421	11	2.6%
60.5%	407	414	7	1.8%
61.7%	407	409	2	0.4%
63.0%	406	406	0	0.0%
64.2%	404	401	-2	-0.6%
65.4%	402	394	-8	-2.1%
66.7%	397	392	-5	-1.2%
67.9%	383	391	8	2.1%
69.1%	367	391	24	6.4%
70.4%	361	382	21	5.9%
71.6%	356	370	14	3.9%
72.8%	355	367	12	3.4%
74.1%	346	359	13	3.8%
75.3%	343	358	15	4.4%
76.5%	336	345	9	2.6%
77.8%	333	343	9	2.7%
79.0%	325	341	16	5.0%
80.2%	324	335	10	3.2%
81.5%	324	331	7	2.0%
82.7%	324	328	4	1.4%
84.0%	321	327	6	1.9%
85.2%	315	323	8	2.4%
86.4%	310	323	12	3.9%
87.7%	308	322	14	4.5%
88.9%	303	311	8	2.6%
90.1%	299	302	3	0.9%
91.4%	293	283	-10	-3.5%
92.6%	264	273	9	3.4%
93.8%	256	252	-3	-1.3%
95.1%	247	236	-11	-4.4%
96.3%	247	234	-12	-4.9%
97.5%	241	218	-23	-9.7%
98.8%	214	214	0	0.0%
100.0%	192	206	14	7.2%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	567	567	0	0.0%
19.8%	567	567	0	0.0%
21.0%	567	567	0	0.0%
22.2%	567	567	0	0.0%
23.5%	567	567	0	0.0%
24.7%	567	567	0	0.0%
25.9%	567	567	0	0.0%
27.2%	567	567	0	0.0%
28.4%	566	567	1	0.2%
29.6%	565	566	1	0.2%
30.9%	564	565	1	0.2%
32.1%	564	564	0	0.0%
33.3%	563	564	1	0.2%
34.6%	562	563	1	0.2%
35.8%	560	562	2	0.4%
37.0%	559	560	1	0.2%
38.3%	557	559	2	0.4%
39.5%	557	557	0	0.0%
40.7%	556	556	0	0.0%
42.0%	556	556	0	0.0%
43.2%	552	551	-1	-0.1%
44.4%	551	546	-5	-0.9%
45.7%	547	544	-3	-0.5%
46.9%	546	543	-3	-0.5%
48.1%	544	537	-7	-1.3%
49.4%	544	529	-15	-2.7%
50.6%	543	524	-19	-3.5%
51.9%	542	517	-25	-4.5%
53.1%	532	516	-17	-3.1%
54.3%	514	513	-1	-0.2%
55.6%	508	512	4	0.9%
56.8%	505	505	0	0.0%
58.0%	494	502	8	1.5%
59.3%	481	485	4	0.8%
60.5%	473	481	8	1.6%
61.7%	470	477	7	1.5%
63.0%	460	467	7	1.5%
64.2%	459	460	1	0.2%
65.4%	453	459	6	1.3%
66.7%	432	453	21	4.8%
67.9%	430	443	13	3.0%
69.1%	428	432	4	1.0%
70.4%	427	427	0	0.0%
71.6%	425	425	0	0.0%
72.8%	401	425	24	5.9%
74.1%	393	413	20	5.0%
75.3%	385	403	18	4.7%
76.5%	384	391	7	1.8%
77.8%	373	384	11	2.9%
79.0%	370	379	9	2.4%
80.2%	368	370	2	0.5%
81.5%	356	358	2	0.6%
82.7%	336	356	19	5.7%
84.0%	324	345	20	6.3%
85.2%	324	335	11	3.5%
86.4%	323	330	8	2.4%
87.7%	309	323	14	4.6%
88.9%	303	295	-8	-2.8%
90.1%	303	290	-13	-4.1%
91.4%	281	285	3	1.2%
92.6%	268	283	15	5.5%
93.8%	267	265	-2	-0.7%
95.1%	264	263	-1	-0.4%
96.3%	247	245	-2	-0.8%
97.5%	241	229	-13	-5.2%
98.8%	236	224	-13	-5.3%
100.0%	228	204	-23	-10.2%

Table SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	567	567	0	0.0%
19.8%	567	567	0	0.0%
21.0%	567	567	0	0.0%
22.2%	567	567	0	0.0%
23.5%	567	567	0	0.0%
24.7%	566	567	1	0.2%
25.9%	566	566	0	0.0%
27.2%	566	566	0	0.0%
28.4%	565	566	1	0.2%
29.6%	564	565	1	0.2%
30.9%	563	563	0	0.0%
32.1%	562	562	0	0.0%
33.3%	560	561	1	0.2%
34.6%	560	561	1	0.2%
35.8%	558	560	2	0.4%
37.0%	558	560	2	0.3%
38.3%	558	558	0	0.0%
39.5%	558	558	0	0.0%
40.7%	557	558	1	0.2%
42.0%	557	558	1	0.2%
43.2%	556	557	1	0.2%
44.4%	555	557	2	0.4%
45.7%	555	556	1	0.2%
46.9%	553	555	2	0.4%
48.1%	553	555	2	0.4%
49.4%	552	553	1	0.2%
50.6%	551	553	2	0.4%
51.9%	547	552	5	0.9%
53.1%	543	551	8	1.5%
54.3%	532	547	15	2.7%
55.6%	530	543	13	2.5%
56.8%	529	530	1	0.2%
58.0%	527	529	2	0.3%
59.3%	527	527	0	0.0%
60.5%	523	523	0	0.1%
61.7%	516	514	-2	-0.4%
63.0%	499	499	0	0.0%
64.2%	499	499	0	0.0%
65.4%	494	494	0	0.0%
66.7%	482	494	12	2.5%
67.9%	481	484	3	0.5%
69.1%	460	479	19	4.1%
70.4%	458	465	7	1.5%
71.6%	458	463	5	1.1%
72.8%	457	458	1	0.2%
74.1%	455	458	3	0.7%
75.3%	451	457	6	1.2%
76.5%	446	447	1	0.2%
77.8%	443	446	3	0.7%
79.0%	440	443	3	0.7%
80.2%	421	440	19	4.4%
81.5%	416	425	8	2.0%
82.7%	407	407	0	0.0%
84.0%	402	402	0	0.0%
85.2%	394	400	6	1.5%
86.4%	390	397	7	1.7%
87.7%	387	394	7	1.7%
88.9%	363	377	14	3.9%
90.1%	328	374	46	14.1%
91.4%	326	328	2	0.7%
92.6%	316	326	10	3.3%
93.8%	304	316	11	3.7%
95.1%	297	298	0	0.1%
96.3%	278	291	14	4.9%
97.5%	256	265	9	3.3%
98.8%	223	211	-13	-5.6%
100.0%	221	198	-23	-10.5%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	664	664	0	0.0%
1.2%	664	664	0	0.0%
2.5%	664	664	0	0.0%
3.7%	664	664	0	0.1%
4.9%	662	662	0	0.0%
6.2%	662	662	0	0.0%
7.4%	662	662	0	0.0%
8.6%	662	662	0	0.0%
9.9%	661	661	0	0.0%
11.1%	661	661	0	0.0%
12.3%	661	661	0	0.0%
13.6%	660	660	0	0.0%
14.8%	659	659	0	0.0%
16.0%	658	658	0	0.0%
17.3%	658	658	0	0.0%
18.5%	658	658	0	0.0%
19.8%	658	658	0	0.0%
21.0%	657	657	0	0.0%
22.2%	657	657	0	0.0%
23.5%	657	657	0	0.0%
24.7%	656	656	0	0.0%
25.9%	656	656	0	0.0%
27.2%	656	656	0	0.0%
28.4%	656	656	0	0.0%
29.6%	656	656	0	0.0%
30.9%	655	655	0	0.0%
32.1%	655	654	-1	-0.1%
33.3%	655	654	-1	-0.1%
34.6%	654	654	0	0.0%
35.8%	654	652	-2	-0.3%
37.0%	652	652	0	0.0%
38.3%	652	651	-1	-0.2%
39.5%	651	650	-1	-0.1%
40.7%	651	649	-2	-0.2%
42.0%	649	648	-1	-0.2%
43.2%	648	648	0	0.0%
44.4%	647	647	0	0.0%
45.7%	646	646	0	0.0%
46.9%	646	646	0	0.0%
48.1%	642	642	0	0.0%
49.4%	640	640	0	0.0%
50.6%	637	637	0	0.0%
51.9%	637	637	0	0.0%
53.1%	636	636	0	0.0%
54.3%	635	635	0	0.0%
55.6%	635	629	-6	-0.9%
56.8%	629	628	-1	-0.2%
58.0%	628	626	-2	-0.3%
59.3%	626	625	-1	-0.1%
60.5%	625	625	0	0.0%
61.7%	622	622	0	0.0%
63.0%	621	621	0	0.0%
64.2%	621	621	0	0.0%
65.4%	618	618	0	0.0%
66.7%	616	616	0	0.0%
67.9%	615	615	0	-0.1%
69.1%	615	615	0	0.0%
70.4%	611	611	0	0.0%
71.6%	599	603	4	0.6%
72.8%	593	599	6	1.0%
74.1%	591	593	2	0.4%
75.3%	590	591	1	0.2%
76.5%	588	590	2	0.3%
77.8%	586	587	1	0.2%
79.0%	578	583	4	0.7%
80.2%	570	582	12	2.1%
81.5%	564	570	6	1.0%
82.7%	557	566	9	1.5%
84.0%	539	552	12	2.3%
85.2%	529	529	0	0.0%
86.4%	525	529	4	0.8%
87.7%	518	505	-13	-2.6%
88.9%	499	492	-7	-1.5%
90.1%	481	486	6	1.2%
91.4%	452	485	34	7.5%
92.6%	375	467	92	24.6%
93.8%	365	350	-15	-4.2%
95.1%	317	336	20	6.3%
96.3%	306	304	-2	-0.7%
97.5%	305	285	-20	-6.5%
98.8%	264	272	9	3.2%
100.0%	216	196	-20	-9.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	792	792	0	0.0%
1.2%	792	792	0	0.0%
2.5%	792	792	0	0.0%
3.7%	792	792	0	0.0%
4.9%	792	792	0	0.0%
6.2%	792	792	0	0.0%
7.4%	792	792	0	0.0%
8.6%	792	792	0	0.0%
9.9%	792	792	0	0.0%
11.1%	792	792	0	0.0%
12.3%	792	792	0	0.0%
13.6%	792	792	0	0.0%
14.8%	792	792	0	0.0%
16.0%	792	792	0	0.0%
17.3%	792	792	0	0.0%
18.5%	792	792	0	0.0%
19.8%	792	792	0	0.0%
21.0%	792	792	0	0.0%
22.2%	792	792	0	0.0%
23.5%	792	792	0	0.0%
24.7%	792	792	0	0.0%
25.9%	792	792	0	0.0%
27.2%	792	792	0	0.0%
28.4%	792	792	0	0.0%
29.6%	792	792	0	0.0%
30.9%	792	792	0	0.0%
32.1%	792	792	0	0.0%
33.3%	792	792	0	0.0%
34.6%	792	792	0	0.0%
35.8%	792	792	0	0.0%
37.0%	792	792	0	0.0%
38.3%	792	792	0	0.0%
39.5%	792	792	0	0.0%
40.7%	792	792	0	0.0%
42.0%	792	792	0	0.0%
43.2%	792	792	0	0.0%
44.4%	792	792	0	0.0%
45.7%	792	792	0	0.0%
46.9%	792	792	0	0.0%
48.1%	792	792	0	0.0%
49.4%	792	792	0	0.0%
50.6%	792	792	0	0.0%
51.9%	792	792	0	0.0%
53.1%	792	774	-18	-2.2%
54.3%	786	768	-18	-2.3%
55.6%	768	764	-4	-0.6%
56.8%	766	761	-5	-0.6%
58.0%	764	759	-4	-0.6%
59.3%	761	756	-5	-0.7%
60.5%	760	754	-6	-0.8%
61.7%	759	754	-6	-0.8%
63.0%	754	754	0	0.0%
64.2%	752	750	-3	-0.4%
65.4%	750	750	0	0.0%
66.7%	749	746	-4	-0.5%
67.9%	741	743	2	0.3%
69.1%	738	741	2	0.3%
70.4%	728	726	-2	-0.2%
71.6%	713	716	3	0.4%
72.8%	703	713	10	1.5%
74.1%	691	695	4	0.6%
75.3%	678	666	-12	-1.7%
76.5%	649	649	0	0.0%
77.8%	648	648	0	0.0%
79.0%	644	642	-2	-0.4%
80.2%	612	638	26	4.3%
81.5%	607	606	-1	-0.1%
82.7%	593	599	6	1.0%
84.0%	583	584	1	0.1%
85.2%	568	566	-1	-0.3%
86.4%	566	555	-11	-2.0%
87.7%	539	543	4	0.7%
88.9%	518	532	15	2.8%
90.1%	488	512	24	5.0%
91.4%	482	504	22	4.6%
92.6%	480	501	22	4.6%
93.8%	473	480	8	1.6%
95.1%	443	444	2	0.4%
96.3%	421	420	-1	-0.3%
97.5%	419	403	-15	-3.6%
98.8%	366	374	9	2.3%
100.0%	196	138	-59	-29.9%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	967	967	0	0.0%
1.2%	967	967	0	0.0%
2.5%	967	967	0	0.0%
3.7%	967	967	0	0.0%
4.9%	967	967	0	0.0%
6.2%	967	967	0	0.0%
7.4%	967	967	0	0.0%
8.6%	967	967	0	0.0%
9.9%	967	967	0	0.0%
11.1%	967	967	0	0.0%
12.3%	967	967	0	0.0%
13.6%	967	967	0	0.0%
14.8%	967	967	0	0.0%
16.0%	967	967	0	0.0%
17.3%	967	967	0	0.0%
18.5%	967	967	0	0.0%
19.8%	967	967	0	0.0%
21.0%	962	962	0	0.0%
22.2%	959	959	0	0.0%
23.5%	959	948	-11	-1.1%
24.7%	948	947	-2	-0.2%
25.9%	923	923	0	0.0%
27.2%	919	919	0	0.0%
28.4%	910	910	0	0.0%
29.6%	904	904	0	0.0%
30.9%	901	898	-3	-0.3%
32.1%	890	896	6	0.7%
33.3%	888	890	2	0.2%
34.6%	887	888	1	0.1%
35.8%	867	887	20	2.3%
37.0%	861	867	6	0.7%
38.3%	857	861	4	0.5%
39.5%	807	846	38	4.7%
40.7%	806	807	1	0.1%
42.0%	806	805	0	-0.1%
43.2%	803	799	-4	-0.5%
44.4%	793	791	-3	-0.4%
45.7%	785	779	-6	-0.8%
46.9%	780	771	-9	-1.1%
48.1%	775	769	-6	-0.8%
49.4%	773	769	-4	-0.6%
50.6%	770	766	-3	-0.4%
51.9%	769	766	-3	-0.4%
53.1%	769	764	-4	-0.6%
54.3%	764	757	-7	-0.9%
55.6%	763	756	-7	-0.9%
56.8%	758	753	-5	-0.7%
58.0%	754	743	-11	-1.5%
59.3%	752	742	-10	-1.4%
60.5%	749	740	-9	-1.2%
61.7%	749	739	-10	-1.4%
63.0%	748	739	-10	-1.3%
64.2%	748	738	-10	-1.3%
65.4%	746	738	-8	-1.1%
66.7%	743	737	-6	-0.8%
67.9%	741	730	-11	-1.4%
69.1%	739	729	-10	-1.4%
70.4%	734	726	-7	-1.0%
71.6%	727	721	-6	-0.8%
72.8%	721	703	-18	-2.5%
74.1%	712	680	-33	-4.6%
75.3%	675	666	-9	-1.3%
76.5%	666	650	-15	-2.3%
77.8%	652	649	-3	-0.4%
79.0%	650	628	-22	-3.4%
80.2%	635	616	-19	-3.0%
81.5%	611	604	-7	-1.2%
82.7%	587	595	8	1.4%
84.0%	584	589	5	0.9%
85.2%	532	576	44	8.2%
86.4%	521	529	8	1.6%
87.7%	515	509	-7	-1.3%
88.9%	511	505	-6	-1.2%
90.1%	493	485	-8	-1.5%
91.4%	476	470	-6	-1.3%
92.6%	466	462	-4	-0.9%
93.8%	455	448	-7	-1.5%
95.1%	454	423	-31	-6.9%
96.3%	446	419	-27	-6.0%
97.5%	395	380	-15	-3.8%
98.8%	343	352	9	2.5%
100.0%	193	123	-70	-36.4%

Table SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	967	967	0	0.0%
1.2%	967	967	0	0.0%
2.5%	967	967	0	0.0%
3.7%	967	967	0	0.0%
4.9%	967	967	0	0.0%
6.2%	967	967	0	0.0%
7.4%	967	967	0	0.0%
8.6%	967	967	0	0.0%
9.9%	967	967	0	0.0%
11.1%	950	941	-8	-0.9%
12.3%	941	937	-4	-0.5%
13.6%	937	933	-3	-0.4%
14.8%	935	918	-17	-1.8%
16.0%	918	914	-5	-0.5%
17.3%	913	885	-28	-3.1%
18.5%	882	882	0	0.0%
19.8%	880	879	0	0.0%
21.0%	871	879	8	0.9%
22.2%	869	871	1	0.1%
23.5%	868	869	1	0.1%
24.7%	866	866	1	0.1%
25.9%	851	855	5	0.6%
27.2%	832	832	0	0.0%
28.4%	831	832	0	0.0%
29.6%	831	831	0	0.0%
30.9%	798	808	10	1.2%
32.1%	790	791	1	0.2%
33.3%	774	774	0	0.0%
34.6%	767	767	0	0.0%
35.8%	758	759	1	0.1%
37.0%	749	757	8	1.1%
38.3%	743	742	-1	-0.1%
39.5%	729	728	-1	-0.1%
40.7%	727	720	-7	-0.9%
42.0%	723	719	-4	-0.6%
43.2%	720	712	-8	-1.2%
44.4%	712	695	-17	-2.4%
45.7%	711	692	-20	-2.8%
46.9%	709	690	-19	-2.7%
48.1%	708	686	-22	-3.1%
49.4%	708	684	-24	-3.4%
50.6%	706	683	-24	-3.4%
51.9%	705	681	-24	-3.5%
53.1%	705	677	-28	-4.0%
54.3%	694	668	-26	-3.7%
55.6%	691	666	-26	-3.7%
56.8%	687	665	-23	-3.3%
58.0%	685	664	-21	-3.1%
59.3%	684	663	-20	-2.9%
60.5%	682	661	-21	-3.0%
61.7%	681	658	-23	-3.4%
63.0%	678	657	-21	-3.1%
64.2%	674	650	-24	-3.6%
65.4%	669	649	-21	-3.1%
66.7%	650	635	-15	-2.3%
67.9%	639	634	-5	-0.8%
69.1%	608	622	14	2.3%
70.4%	604	606	2	0.3%
71.6%	601	605	4	0.7%
72.8%	600	605	5	0.8%
74.1%	583	601	18	3.1%
75.3%	577	600	22	3.9%
76.5%	575	586	11	2.0%
77.8%	567	574	7	1.2%
79.0%	548	555	6	1.1%
80.2%	532	546	14	2.6%
81.5%	515	534	19	3.6%
82.7%	498	533	35	7.0%
84.0%	496	521	25	5.0%
85.2%	496	519	23	4.6%
86.4%	448	469	20	4.5%
87.7%	447	455	9	1.9%
88.9%	436	441	6	1.3%
90.1%	433	426	-7	-1.6%
91.4%	431	421	-10	-2.3%
92.6%	429	414	-14	-3.3%
93.8%	427	412	-15	-3.5%
95.1%	413	410	-4	-0.9%
96.3%	400	387	-13	-3.3%
97.5%	377	360	-16	-4.4%
98.8%	331	337	6	1.8%
100.0%	164	95	-69	-42.1%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	912	877	-36	-3.9%
1.2%	902	873	-30	-3.3%
2.5%	897	864	-33	-3.7%
3.7%	896	860	-36	-4.0%
4.9%	890	860	-31	-3.4%
6.2%	822	859	37	4.5%
7.4%	821	856	36	4.4%
8.6%	818	850	32	3.9%
9.9%	803	844	42	5.2%
11.1%	799	822	23	2.9%
12.3%	759	821	62	8.2%
13.6%	757	780	23	3.0%
14.8%	746	774	28	3.7%
16.0%	725	758	33	4.5%
17.3%	717	753	36	5.0%
18.5%	717	741	24	3.4%
19.8%	712	722	10	1.4%
21.0%	698	678	-20	-2.9%
22.2%	696	674	-22	-3.2%
23.5%	651	670	19	3.0%
24.7%	646	667	21	3.2%
25.9%	629	657	27	4.3%
27.2%	594	647	53	8.9%
28.4%	592	646	54	9.1%
29.6%	590	645	56	9.4%
30.9%	590	627	38	6.4%
32.1%	589	603	14	2.3%
33.3%	574	603	29	5.0%
34.6%	573	601	29	5.0%
35.8%	565	594	28	5.0%
37.0%	564	592	28	5.0%
38.3%	555	591	37	6.6%
39.5%	533	577	44	8.3%
40.7%	528	564	36	6.9%
42.0%	526	558	32	6.1%
43.2%	523	550	27	5.1%
44.4%	522	549	27	5.3%
45.7%	491	543	52	10.6%
46.9%	485	542	57	11.8%
48.1%	480	537	57	11.9%
49.4%	479	529	50	10.5%
50.6%	467	522	56	11.9%
51.9%	464	517	53	11.5%
53.1%	452	512	60	13.2%
54.3%	451	510	59	13.1%
55.6%	450	508	58	13.0%
56.8%	447	492	45	10.1%
58.0%	445	488	43	9.7%
59.3%	444	467	23	5.2%
60.5%	443	466	23	5.2%
61.7%	439	461	22	5.0%
63.0%	439	460	21	4.8%
64.2%	431	459	27	6.4%
65.4%	427	458	32	7.4%
66.7%	426	446	19	4.5%
67.9%	422	444	22	5.3%
69.1%	422	443	21	5.0%
70.4%	409	426	18	4.3%
71.6%	404	424	20	5.0%
72.8%	388	421	33	8.5%
74.1%	385	417	32	8.3%
75.3%	383	415	32	8.4%
76.5%	380	409	29	7.6%
77.8%	378	402	24	6.4%
79.0%	376	388	11	3.0%
80.2%	376	385	9	2.5%
81.5%	375	385	10	2.7%
82.7%	367	382	15	4.2%
84.0%	365	377	11	3.1%
85.2%	365	362	-3	-0.7%
86.4%	365	359	-6	-1.6%
87.7%	360	357	-2	-0.7%
88.9%	358	351	-8	-2.1%
90.1%	357	350	-7	-1.9%
91.4%	332	343	10	3.1%
92.6%	319	341	22	6.8%
93.8%	313	332	20	6.3%
95.1%	297	332	35	11.9%
96.3%	291	312	21	7.1%
97.5%	241	263	22	8.9%
98.8%	199	228	29	14.5%
100.0%	90	90	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	792	795	3	0.3%
1.2%	792	792	0	0.0%
2.5%	792	792	0	0.0%
3.7%	792	788	-4	-0.5%
4.9%	792	782	-10	-1.3%
6.2%	790	782	-8	-1.0%
7.4%	758	779	21	2.7%
8.6%	758	776	18	2.4%
9.9%	742	771	29	3.9%
11.1%	739	746	7	0.9%
12.3%	709	745	37	5.2%
13.6%	705	702	-3	-0.4%
14.8%	704	687	-17	-2.4%
16.0%	694	683	-10	-1.5%
17.3%	686	683	-3	-0.5%
18.5%	678	681	3	0.5%
19.8%	668	673	5	0.7%
21.0%	643	654	10	1.6%
22.2%	642	627	-15	-2.4%
23.5%	613	627	14	2.3%
24.7%	603	625	22	3.7%
25.9%	592	606	14	2.4%
27.2%	564	599	35	6.2%
28.4%	552	595	43	7.8%
29.6%	540	589	49	9.0%
30.9%	537	581	44	8.2%
32.1%	535	565	30	5.6%
33.3%	533	549	16	3.1%
34.6%	528	548	19	3.6%
35.8%	507	548	41	8.1%
37.0%	504	542	38	7.6%
38.3%	497	537	40	8.1%
39.5%	482	531	49	10.2%
40.7%	470	508	38	8.1%
42.0%	470	506	37	7.8%
43.2%	467	506	38	8.2%
44.4%	467	505	39	8.3%
45.7%	464	504	40	8.5%
46.9%	462	502	39	8.5%
48.1%	437	495	59	13.5%
49.4%	431	480	49	11.5%
50.6%	430	467	37	8.6%
51.9%	428	462	34	8.0%
53.1%	422	460	37	8.9%
54.3%	419	457	38	9.1%
55.6%	412	455	43	10.4%
56.8%	407	443	36	8.9%
58.0%	401	436	34	8.6%
59.3%	400	434	34	8.5%
60.5%	398	433	35	8.8%
61.7%	398	425	27	6.8%
63.0%	393	419	25	6.4%
64.2%	393	418	24	6.2%
65.4%	391	416	25	6.3%
66.7%	386	402	16	4.3%
67.9%	385	401	16	4.1%
69.1%	384	400	16	4.1%
70.4%	382	398	16	4.2%
71.6%	382	396	15	3.9%
72.8%	372	394	22	6.0%
74.1%	370	379	9	2.4%
75.3%	366	375	10	2.6%
76.5%	363	375	12	3.2%
77.8%	350	371	21	6.0%
79.0%	349	361	13	3.6%
80.2%	346	357	11	3.2%
81.5%	345	351	7	1.9%
82.7%	339	340	1	0.3%
84.0%	336	339	3	0.9%
85.2%	322	337	15	4.6%
86.4%	317	337	19	6.1%
87.7%	310	329	19	6.2%
88.9%	309	320	11	3.5%
90.1%	307	315	9	2.8%
91.4%	304	304	0	0.0%
92.6%	303	298	-5	-1.8%
93.8%	281	295	14	5.1%
95.1%	269	289	20	7.5%
96.3%	256	278	22	8.6%
97.5%	172	218	46	26.8%
98.8%	105	193	87	82.6%
100.0%	90	90	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Storage (TAF)	WSIP 2030 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	752	752	0	0.0%
1.2%	694	745	51	7.4%
2.5%	675	729	54	7.9%
3.7%	656	688	32	4.9%
4.9%	645	688	43	6.6%
6.2%	640	656	16	2.5%
7.4%	638	650	12	1.9%
8.6%	618	644	26	4.2%
9.9%	614	635	21	3.3%
11.1%	592	624	32	5.4%
12.3%	581	592	11	1.9%
13.6%	578	592	14	2.5%
14.8%	569	584	15	2.6%
16.0%	553	581	29	5.2%
17.3%	552	575	22	4.0%
18.5%	551	567	16	3.0%
19.8%	550	565	15	2.8%
21.0%	549	554	5	0.9%
22.2%	540	540	0	0.0%
23.5%	539	539	1	0.1%
24.7%	529	539	10	1.8%
25.9%	510	534	24	4.6%
27.2%	502	518	17	3.3%
28.4%	496	510	14	2.8%
29.6%	492	510	18	3.7%
30.9%	486	508	21	4.4%
32.1%	477	502	25	5.3%
33.3%	474	502	28	5.9%
34.6%	459	500	41	9.0%
35.8%	454	487	33	7.3%
37.0%	447	481	34	7.5%
38.3%	446	480	34	7.7%
39.5%	442	478	36	8.0%
40.7%	438	475	37	8.4%
42.0%	438	475	37	8.4%
43.2%	438	471	34	7.7%
44.4%	437	455	18	4.1%
45.7%	434	448	14	3.1%
46.9%	426	445	19	4.4%
48.1%	410	444	34	8.4%
49.4%	409	440	31	7.6%
50.6%	401	438	37	9.1%
51.9%	401	437	36	8.9%
53.1%	397	436	39	9.8%
54.3%	394	435	41	10.4%
55.6%	389	421	32	8.3%
56.8%	389	415	26	6.7%
58.0%	388	406	18	4.5%
59.3%	387	404	17	4.4%
60.5%	387	400	14	3.6%
61.7%	384	397	14	3.5%
63.0%	383	393	10	2.7%
64.2%	381	393	13	3.4%
65.4%	374	391	17	4.5%
66.7%	372	390	18	4.8%
67.9%	371	379	8	2.2%
69.1%	370	377	7	1.8%
70.4%	370	376	6	1.5%
71.6%	358	372	15	4.1%
72.8%	356	362	6	1.6%
74.1%	353	361	8	2.3%
75.3%	350	361	11	3.0%
76.5%	346	358	11	3.3%
77.8%	342	346	4	1.1%
79.0%	332	338	6	1.8%
80.2%	320	336	16	5.0%
81.5%	312	332	20	6.4%
82.7%	312	330	17	5.5%
84.0%	302	308	5	1.8%
85.2%	297	300	3	0.9%
86.4%	296	290	-5	-1.9%
87.7%	294	288	-6	-2.1%
88.9%	291	284	-7	-2.4%
90.1%	280	283	4	1.4%
91.4%	272	281	9	3.1%
92.6%	271	269	-2	-0.6%
93.8%	270	261	-9	-3.4%
95.1%	234	257	24	10.2%
96.3%	217	234	17	7.7%
97.5%	191	221	30	15.6%
98.8%	128	205	77	60.3%
100.0%	90	90	0	0.0%

Figure SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

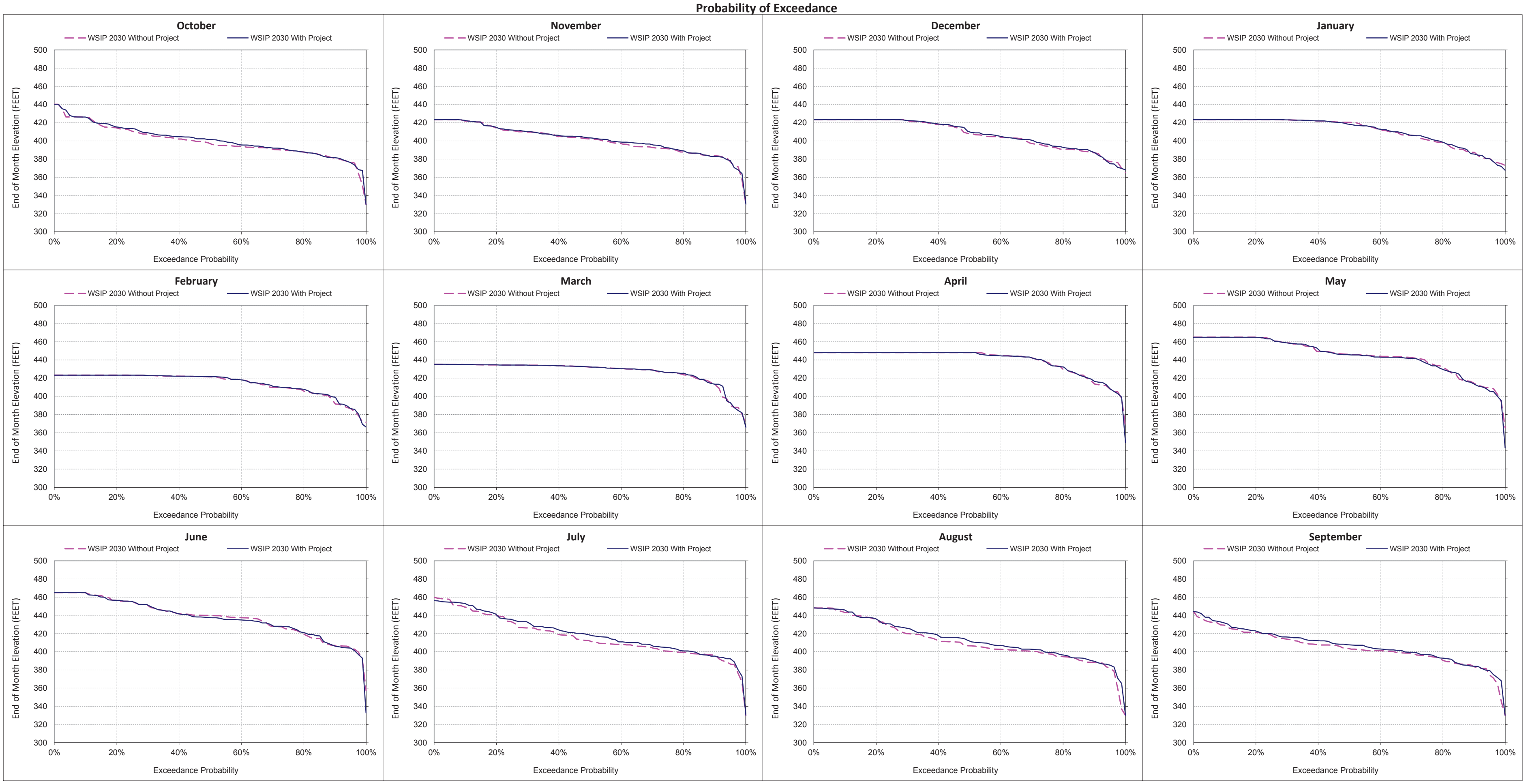


Table SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	440	440	0	0.0%
1.2%	440	440	0	0.0%
2.5%	436	436	0	-0.1%
3.7%	426	434	8	1.8%
4.9%	426	428	2	0.4%
6.2%	426	427	0	0.1%
7.4%	426	426	0	0.0%
8.6%	426	426	0	0.0%
9.9%	426	426	0	0.1%
11.1%	426	425	-1	-0.2%
12.3%	422	421	-2	-0.4%
13.6%	419	420	0	0.0%
14.8%	417	419	2	0.5%
16.0%	415	419	4	1.0%
17.3%	415	418	3	0.8%
18.5%	415	417	2	0.5%
19.8%	415	416	1	0.3%
21.0%	413	415	1	0.4%
22.2%	413	414	1	0.2%
23.5%	413	414	1	0.2%
24.7%	411	414	3	0.7%
25.9%	410	413	4	0.9%
27.2%	409	411	2	0.5%
28.4%	408	409	2	0.4%
29.6%	407	409	2	0.4%
30.9%	406	408	2	0.6%
32.1%	405	407	2	0.6%
33.3%	405	407	2	0.4%
34.6%	405	406	2	0.4%
35.8%	404	406	2	0.6%
37.0%	404	405	2	0.4%
38.3%	403	405	2	0.4%
39.5%	402	405	3	0.6%
40.7%	402	404	2	0.6%
42.0%	401	404	3	0.8%
43.2%	401	404	3	0.8%
44.4%	400	404	3	0.9%
45.7%	399	402	3	0.8%
46.9%	399	402	3	0.8%
48.1%	399	402	3	0.9%
49.4%	398	402	4	0.9%
50.6%	396	401	5	1.3%
51.9%	395	401	6	1.5%
53.1%	395	400	5	1.3%
54.3%	395	400	5	1.2%
55.6%	395	399	4	1.0%
56.8%	395	398	4	1.0%
58.0%	394	397	3	0.8%
59.3%	394	396	2	0.4%
60.5%	394	395	1	0.4%
61.7%	393	395	2	0.6%
63.0%	393	395	2	0.5%
64.2%	393	394	2	0.4%
65.4%	393	394	2	0.4%
66.7%	392	394	1	0.3%
67.9%	392	393	0	0.0%
69.1%	392	393	1	0.2%
70.4%	391	392	1	0.4%
71.6%	390	392	2	0.4%
72.8%	390	392	2	0.4%
74.1%	390	391	1	0.3%
75.3%	389	390	1	0.1%
76.5%	389	389	0	-0.1%
77.8%	389	389	0	0.1%
79.0%	388	388	0	0.0%
80.2%	388	388	0	0.0%
81.5%	387	387	0	0.1%
82.7%	386	387	0	0.0%
84.0%	386	386	0	-0.1%
85.2%	385	385	0	0.0%
86.4%	384	383	-1	-0.3%
87.7%	383	382	-1	-0.2%
88.9%	382	382	0	0.0%
90.1%	381	381	1	0.1%
91.4%	380	381	1	0.2%
92.6%	379	379	0	0.1%
93.8%	378	378	0	0.0%
95.1%	377	376	-1	-0.2%
96.3%	376	374	-2	-0.5%
97.5%	364	368	4	1.2%
98.8%	352	368	16	4.5%
100.0%	330	330	0	0.0%

November				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	422	422	1	0.1%
11.1%	422	422	0	0.0%
12.3%	422	421	0	-0.1%
13.6%	421	421	0	0.0%
14.8%	421	421	0	0.0%
16.0%	419	417	-3	-0.6%
17.3%	417	417	0	-0.1%
18.5%	416	416	0	0.0%
19.8%	414	415	1	0.2%
21.0%	414	413	0	-0.1%
22.2%	412	413	1	0.3%
23.5%	412	412	1	0.1%
24.7%	411	412	1	0.3%
25.9%	411	412	1	0.2%
27.2%	410	412	1	0.4%
28.4%	410	411	1	0.2%
29.6%	410	410	1	0.2%
30.9%	410	410	1	0.1%
32.1%	410	409	0	0.0%
33.3%	409	409	-1	-0.1%
34.6%	409	408	-1	-0.3%
35.8%	408	408	0	-0.1%
37.0%	407	407	0	0.0%
38.3%	407	406	-1	-0.2%
39.5%	405	406	1	0.3%
40.7%	405	405	1	0.2%
42.0%	404	405	1	0.2%
43.2%	404	405	1	0.2%
44.4%	404	405	1	0.3%
45.7%	404	405	1	0.2%
46.9%	403	405	2	0.4%
48.1%	403	404	1	0.3%
49.4%	402	403	1	0.3%
50.6%	402	403	1	0.3%
51.9%	402	403	1	0.2%
53.1%	401	402	1	0.2%
54.3%	400	402	2	0.5%
55.6%	400	401	2	0.4%
56.8%	398	400	1	0.3%
58.0%	398	399	2	0.4%
59.3%	398	399	1	0.4%
60.5%	397	399	2	0.5%
61.7%	396	399	2	0.6%
63.0%	395	398	3	0.8%
64.2%	394	398	4	1.0%
65.4%	394	397	4	0.9%
66.7%	394	397	4	1.0%
67.9%	394	397	3	0.8%
69.1%	393	397	3	0.8%
70.4%	393	395	3	0.7%
71.6%	392	395	3	0.8%
72.8%	392	395	3	0.7%
74.1%	392	393	1	0.3%
75.3%	391	392	1	0.3%
76.5%	391	391	0	0.0%
77.8%	390	391	1	0.2%
79.0%	388	389	2	0.4%
80.2%	388	389	1	0.3%
81.5%	387	387	0	0.0%
82.7%	386	387	0	0.1%
84.0%	386	386	0	0.1%
85.2%	385	386	1	0.3%
86.4%	384	385	0	0.1%
87.7%	384	384	0	0.0%
88.9%	384	383	-1	-0.2%
90.1%	384	383	-1	-0.2%
91.4%	383	383	-1	-0.2%
92.6%	382	382	0	-0.1%
93.8%	382	379	-2	-0.5%
95.1%	377	378	1	0.4%
96.3%	372	371	-1	-0.3%
97.5%	372	368	-3	-0.9%
98.8%	357	364	7	1.9%
100.0%	330	330	0	0.0%

December				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	423	423	0	0.0%
21.0%	423	423	0	0.0%
22.2%	423	423	0	0.0%
23.5%	423	423	0	0.0%
24.7%	423	423	0	0.0%
25.9%	423	423	0	0.0%
27.2%	423	423	0	0.0%
28.4%	423	423	0	-0.1%
29.6%	423	423	0	-0.1%
30.9%	421	422	1	0.2%
32.1%	421	422	1	0.2%
33.3%	421	422	1	0.1%
34.6%	421	421	1	0.2%
35.8%	420	421	0	0.1%
37.0%	419	420	1	0.1%
38.3%	418	419	1	0.3%
39.5%	418	419	1	0.2%
40.7%	418	418	0	0.0%
42.0%	418	418	1	0.1%
43.2%	417	418	1	0.4%
44.4%	416	417	0	0.1%
45.7%	415	416	1	0.3%
46.9%	414	415	1	0.3%
48.1%	409	415	5	1.3%
49.4%	408	411	2	0.6%
50.6%	408	409	1	0.3%
51.9%	407	409	2	0.5%
53.1%	407	409	2	0.6%
54.3%	406	407	1	0.2%
55.6%	405	407	2	0.5%
56.8%	405	407	2	0.5%
58.0%	405	406	1	0.3%
59.3%	404	405	1	0.3%
60.5%	404	404	1	0.2%
61.7%	404	404	0	0.1%
63.0%	403	403	0	0.0%
64.2%	403	403	0	-0.1%
65.4%	403	402	-1	-0.3%
66.7%	402	402	-1	-0.2%
67.9%	400	402	1	0.3%
69.1%	398	402	4	0.9%
70.4%	397	400	3	0.9%
71.6%	396	398	2	0.6%
72.8%	396	398	2	0.5%
74.1%	394	397	2	0.5%
75.3%	394	396	2	0.6%
76.5%	393	394	1	0.4%
77.8%	392	394	1	0.4%
79.0%	391	394	3	0.7%
80.2%	391	393	2	0.4%
81.5%	391	392	1	0.3%
82.7%	391	392	1	0.2%
84.0%	390	391	1	0.3%
85.2%	389	391	1	0.3%
86.4%	389	391	2	0.5%
87.7%	388	391	2	0.6%
88.9%	387	389	1	0.3%
90.1%	387	387	0	0.1%
91.4%	386	384	-2	-0.5%
92.6%	380	382	2	0.5%
93.8%	379	378	-1	-0.2%
95.1%	377	375	-2	-0.6%
96.3%	377	375	-3	-0.7%
97.5%	376	371	-5	-1.4%
98.8%	370	370	0	0.0%
100.0%	365	368	3	0.9%

January				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	423	423	0	0.0%
21.0%	423	423	0	0.0%
22.2%	423	423	0	0.0%
23.5%	423	423	0	0.0%
24.7%	423	423	0	0.0%
25.9%	423	423	0	0.0%
27.2%	423	423	0	0.0%
28.4%	423	423	0	0.0%
29.6%	423	423	0	0.0%
30.9%	423	423	0	0.0%
32.1%	423	423	0	0.0%
33.3%	423	423	0	0.0%
34.6%	423	423	0	0.0%
35.8%	422	423	0	0.1%
37.0%	422	422	0	0.0%
38.3%	422	422	0	0.1%
39.5%	422	422	0	0.0%
40.7%	422	422	0	0.0%
42.0%	422	422	0	0.0%
43.2%	421	421	0	0.0%
44.4%	421	421	-1	-0.1%
45.7%	421	420	0	-0.1%
46.9%	421	420	0	-0.1%
48.1%	420	420	-1	-0.2%
49.4%	420	419	-2	-0.4%
50.6%	420	418	-2	-0.6%
51.9%	420	417	-3	-0.7%
53.1%	419	417	-2	-0.5%
54.3%	417	417	0	0.0%
55.6%	416	417	1	0.1%
56.8%	416	416	0	0.0%
58.0%	414	415	1	0.2%
59.3%	413	413	0	0.1%
60.5%	412	413	1	0.2%
61.7%	411	412	1	0.2%
63.0%	410	411	1	0.2%
64.2%	410	410	0	0.0%
65.4%	409	410	1	0.2%
66.7%	407	409	3	0.6%
67.9%	406	408	2	0.4%
69.1%	406	407	1	0.1%
70.4%	406	406	0	0.0%
71.6%	406	406	0	0.0%
72.8%	403	406	3	0.7%
74.1%	402	404	2	0.6%
75.3%	401	403	2	0.6%
76.5%	401	402	1	0.2%
77.8%	399	401	2	0.4%
79.0%	398	400	1	0.4%
80.2%	398	398	0	0.1%
81.5%	396	396	0	0.1%
82.7%	393	396	3	0.8%
84.0%	391	394	3	0.9%
85.2%	391	393	2	0.5%
86.4%	391	392	1	0.3%
87.7%	388	391	2	0.6%
88.9%	388	386	-1	-0.4%
90.1%	387	385	-2	-0.5%
91.4%	384	384	1	0.2%
92.6%	381	384	3	0.7%
93.8%	381	381	0	-0.1%
95.1%	380	380	0	-0.1%
96.3%	377	377	0	-0.1%
97.5%	376	373	-3	-0.7%
98.8%	375	372	-3	-0.8%
100.0%	373	368	-5	-1.4%

Table SW-25-b

Folsom Lake, End of Month Elevation
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	423	423	0	0.0%
21.0%	423	423	0	0.0%
22.2%	423	423	0	0.0%
23.5%	423	423	0	0.0%
24.7%	423	423	0	0.0%
25.9%	423	423	0	0.0%
27.2%	423	423	0	0.0%
28.4%	423	423	0	0.0%
29.6%	423	423	0	0.0%
30.9%	423	423	0	0.0%
32.1%	423	423	0	0.0%
33.3%	422	423	0	0.0%
34.6%	422	423	0	0.0%
35.8%	422	422	0	0.1%
37.0%	422	422	0	0.0%
38.3%	422	422	0	0.0%
39.5%	422	422	0	0.0%
40.7%	422	422	0	0.0%
42.0%	422	422	0	0.0%
43.2%	422	422	0	0.0%
44.4%	422	422	0	0.1%
45.7%	422	422	0	0.0%
46.9%	422	422	0	0.1%
48.1%	422	422	0	0.1%
49.4%	421	422	0	0.0%
50.6%	421	422	0	0.1%
51.9%	421	421	1	0.1%
53.1%	420	421	1	0.2%
54.3%	419	421	2	0.4%
55.6%	419	420	2	0.4%
56.8%	419	419	0	0.0%
58.0%	418	419	0	0.0%
59.3%	418	418	0	0.0%
60.5%	418	418	0	0.0%
61.7%	417	417	0	-0.1%
63.0%	415	415	0	0.0%
64.2%	415	415	0	0.0%
65.4%	414	414	0	0.0%
66.7%	413	414	2	0.4%
67.9%	413	413	0	0.1%
69.1%	410	412	2	0.6%
70.4%	410	411	1	0.2%
71.6%	410	411	1	0.2%
72.8%	410	410	0	0.0%
74.1%	409	410	0	0.1%
75.3%	409	410	1	0.2%
76.5%	408	408	0	0.0%
77.8%	408	408	0	0.1%
79.0%	408	408	0	0.1%
80.2%	405	408	2	0.6%
81.5%	405	406	1	0.3%
82.7%	404	404	0	0.0%
84.0%	403	403	0	0.0%
85.2%	402	403	1	0.2%
86.4%	401	402	1	0.2%
87.7%	401	402	1	0.2%
88.9%	397	400	2	0.6%
90.1%	391	399	8	1.9%
91.4%	391	392	0	0.1%
92.6%	390	391	2	0.4%
93.8%	388	390	2	0.5%
95.1%	387	387	0	0.0%
96.3%	383	386	3	0.7%
97.5%	379	381	2	0.4%
98.8%	372	369	-3	-0.8%
100.0%	372	366	-5	-1.4%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	435	435	0	0.0%
1.2%	435	435	0	0.0%
2.5%	435	435	0	0.0%
3.7%	435	435	0	0.0%
4.9%	435	435	0	0.0%
6.2%	435	435	0	0.0%
7.4%	435	435	0	0.0%
8.6%	435	435	0	0.0%
9.9%	435	435	0	0.0%
11.1%	435	435	0	0.0%
12.3%	435	435	0	0.0%
13.6%	435	435	0	0.0%
14.8%	435	435	0	0.0%
16.0%	435	435	0	0.0%
17.3%	435	435	0	0.0%
18.5%	435	435	0	0.0%
19.8%	435	435	0	0.0%
21.0%	434	434	0	0.0%
22.2%	434	434	0	0.0%
23.5%	434	434	0	0.0%
24.7%	434	434	0	0.0%
25.9%	434	434	0	0.0%
27.2%	434	434	0	0.0%
28.4%	434	434	0	0.0%
29.6%	434	434	0	0.0%
30.9%	434	434	0	0.0%
32.1%	434	434	0	0.0%
33.3%	434	434	0	0.0%
34.6%	434	434	0	0.0%
35.8%	434	434	0	-0.1%
37.0%	434	434	0	0.0%
38.3%	434	434	0	0.0%
39.5%	434	434	0	0.0%
40.7%	434	433	0	0.0%
42.0%	433	433	0	0.0%
43.2%	433	433	0	0.0%
44.4%	433	433	0	0.0%
45.7%	433	433	0	0.0%
46.9%	433	433	0	0.0%
48.1%	433	433	0	0.0%
49.4%	432	432	0	0.0%
50.6%	432	432	0	0.0%
51.9%	432	432	0	0.0%
53.1%	432	432	0	0.0%
54.3%	432	432	0	0.0%
55.6%	432	431	-1	-0.2%
56.8%	431	431	0	0.0%
58.0%	431	431	0	-0.1%
59.3%	431	431	0	0.0%
60.5%	430	430	0	0.0%
61.7%	430	430	0	0.0%
63.0%	430	430	0	0.0%
64.2%	430	430	0	0.0%
65.4%	430	430	0	0.0%
66.7%	429	429	0	0.0%
67.9%	429	429	0	0.0%
69.1%	429	429	0	0.0%
70.4%	429	429	0	0.0%
71.6%	427	428	0	0.1%
72.8%	427	427	1	0.2%
74.1%	426	427	0	0.1%
75.3%	426	426	0	0.0%
76.5%	426	426	0	0.1%
77.8%	426	426	0	0.0%
79.0%	425	425	1	0.1%
80.2%	424	425	1	0.3%
81.5%	423	424	1	0.2%
82.7%	422	423	1	0.3%
84.0%	420	421	2	0.4%
85.2%	419	419	0	0.0%
86.4%	418	419	1	0.1%
87.7%	417	416	-2	-0.4%
88.9%	415	414	-1	-0.2%
90.1%	413	413	1	0.2%
91.4%	409	413	4	1.0%
92.6%	399	411	12	3.0%
93.8%	398	395	-2	-0.6%
95.1%	390	393	3	0.8%
96.3%	388	388	0	-0.1%
97.5%	388	384	-3	-0.9%
98.8%	380	382	2	0.4%
100.0%	370	366	-4	-1.2%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	448	448	0	0.0%
1.2%	448	448	0	0.0%
2.5%	448	448	0	0.0%
3.7%	448	448	0	0.0%
4.9%	448	448	0	0.0%
6.2%	448	448	0	0.0%
7.4%	448	448	0	0.0%
8.6%	448	448	0	0.0%
9.9%	448	448	0	0.0%
11.1%	448	448	0	0.0%
12.3%	448	448	0	0.0%
13.6%	448	448	0	0.0%
14.8%	448	448	0	0.0%
16.0%	448	448	0	0.0%
17.3%	448	448	0	0.0%
18.5%	448	448	0	0.0%
19.8%	448	448	0	0.0%
21.0%	448	448	0	0.0%
22.2%	448	448	0	0.0%
23.5%	448	448	0	0.0%
24.7%	448	448	0	0.0%
25.9%	448	448	0	0.0%
27.2%	448	448	0	0.0%
28.4%	448	448	0	0.0%
29.6%	448	448	0	0.0%
30.9%	448	448	0	0.0%
32.1%	448	448	0	0.0%
33.3%	448	448	0	0.0%
34.6%	448	448	0	0.0%
35.8%	448	448	0	0.0%
37.0%	448	448	0	0.0%
38.3%	448	448	0	0.0%
39.5%	448	448	0	0.0%
40.7%	448	448	0	0.0%
42.0%	448	448	0	0.0%
43.2%	448	448	0	0.0%
44.4%	448	448	0	0.0%
45.7%	448	448	0	0.0%
46.9%	448	448	0	0.0%
48.1%	448	448	0	0.0%
49.4%	448	448	0	0.0%
50.6%	448	448	0	0.0%
51.9%	448	448	0	0.0%
53.1%	448	446	-2	-0.4%
54.3%	447	446	-2	-0.4%
55.6%	446	445	0	-0.1%
56.8%	446	445	0	-0.1%
58.0%	445	445	0	-0.1%
59.3%	445	445	0	-0.1%
60.5%	445	444	-1	-0.1%
61.7%	445	444	-1	-0.1%
63.0%	444	444	0	0.0%
64.2%	444	444	0	-0.1%
65.4%	444	444	0	0.0%
66.7%	444	444	0	-0.1%
67.9%	443	443	0	0.0%
69.1%	443	443	0	0.1%
70.4%	442	442	0	0.0%
71.6%	440	441	0	0.1%
72.8%	439	440	1	0.2%
74.1%	438	439	0	0.1%
75.3%	437	436	-1	-0.3%
76.5%	433	433	0	0.0%
77.8%	433	433	0	0.0%
79.0%	433	433	0	-0.1%
80.2%	429	432	3	0.7%
81.5%	428	428	0	0.0%
82.7%	427	427	1	0.2%
84.0%	425	425	0	0.0%
85.2%	423	423	0	0.0%
86.4%	423	422	-1	-0.3%
87.7%	420	420	0	0.1%
88.9%	417	419	2	0.4%
90.1%	414	417	3	0.7%
91.4%	413	416	3	0.7%
92.6%	413	415	3	0.7%
93.8%	412	413	1	0.2%
95.1%	408	408	0	0.1%
96.3%	405	405	0	0.0%
97.5%	405	403	-2	-0.5%
98.8%	398	399	1	0.4%
100.0%	366	349	-17	-4.6%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	465	465	0	0.0%
1.2%	465	465	0	0.0%
2.5%	465	465	0	0.0%
3.7%	465	465	0	0.0%
4.9%	465	465	0	0.0%
6.2%	465	465	0	0.0%
7.4%	465	465	0	0.0%
8.6%	465	465	0	0.0%
9.9%	465	465	0	0.0%
11.1%	465	465	0	0.0%
12.3%	465	465	0	0.0%
13.6%	465	465	0	0.0%
14.8%	465	465	0	0.0%
16.0%	465	465	0	0.0%
17.3%	465	465	0	0.0%
18.5%	465	465	0	0.0%
19.8%	465	465	0	0.0%
21.0%	465	465	0	0.0%
22.2%	464	464	0	0.0%
23.5%	464	463	-1	-0.2%
24.7%	463	463	0	0.0%
25.9%	461	461	0	0.0%
27.2%	460	460	0	0.0%
28.4%	460	460	0	0.0%
29.6%	459	459	0	0.0%
30.9%	459	458	0	-0.1%
32.1%	458	458	1	0.1%
33.3%	457	458	0	0.0%
34.6%	457	457	0	0.0%
35.8%	455	457	2	0.4%
37.0%	455	455	1	0.1%
38.3%	454	455	0	0.1%
39.5%	450	453	4	0.8%
40.7%	449	450	0	0.0%
42.0%	449	449	0	0.0%
43.2%	449	449	0	-0.1%
44.4%	448	448	0	-0.1%
45.7%	447	447	-1	-0.1%
46.9%	447	446	-1	-0.2%
48.1%	446	446	-1	-0.1%
49.4%	446	446	0	-0.1%
50.6%	446	446	0	-0.1%
51.9%	446	446	0	-0.1%
53.1%	446	445	0	-0.1%
54.3%	445	445	-1	-0.2%
55.6%	445	445	-1	-0.1%
56.8%	445	444	0	-0.1%
58.0%	444	443	-1	-0.2%
59.3%	444	443	-1	-0.2%
60.5%	444	443	-1	-0.2%
61.7%	444	443	-1	-0.2%
63.0%	444	443	-1	-0.2%
64.2%	444	443	-1	-0.2%
65.4%	444	443	-1	-0.2%
66.7%	443	443	-1	-0.1%
67.9%	443	442	-1	-0.2%
69.1%	443	442	-1	-0.2%
70.4%	442	442	-1	-0.2%
71.6%	442	441	-1	-0.1%
72.8%	441	439	-2	-0.4%
74.1%	440	437	-3	-0.7%
75.3%	437	435	-1	-0.3%
76.5%	435	434	-2	-0.4%
77.8%	434	433	0	-0.1%
79.0%	434	431	-3	-0.6%
80.2%	432	429	-2	-0.5%
81.5%	429	428	-1	-0.2%
82.7%	426	427	1	0.2%
84.0%	425	426	1	0.1%
85.2%	419	424	5	1.3%
86.4%	418	419	1	0.2%
87.7%	417	416	-1	-0.2%
88.9%	416	416	-1	-0.2%
90.1%	414	413	-1	-0.2%
91.4%	412	411	-1	-0.2%
92.6%	411	410	0	-0.1%
93.8%	410	409	-1	-0.2%
95.1%	409	406	-4	-0.9%
96.3%	408	405	-3	-0.8%
97.5%	402	400	-2	-0.5%
98.8%	394	395	1	0.4%
100.0%	365	343	-22	-6.0%

Table SW-25-b

Folsom Lake, End of Month Elevation

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	465	465	0	0.0%
1.2%	465	465	0	0.0%
2.5%	465	465	0	0.0%
3.7%	465	465	0	0.0%
4.9%	465	465	0	0.0%
6.2%	465	465	0	0.0%
7.4%	465	465	0	0.0%
8.6%	465	465	0	0.0%
9.9%	465	465	0	0.0%
11.1%	463	463	-1	-0.2%
12.3%	463	462	0	-0.1%
13.6%	462	462	0	-0.1%
14.8%	462	460	-2	-0.4%
16.0%	460	460	0	-0.1%
17.3%	460	457	-3	-0.6%
18.5%	457	457	0	0.0%
19.8%	457	457	0	0.0%
21.0%	456	456	1	0.2%
22.2%	456	456	0	0.0%
23.5%	455	456	0	0.0%
24.7%	455	455	0	0.0%
25.9%	454	454	0	0.1%
27.2%	452	452	0	0.0%
28.4%	452	452	0	0.0%
29.6%	452	452	0	0.0%
30.9%	449	450	1	0.2%
32.1%	448	448	0	0.0%
33.3%	446	446	0	0.0%
34.6%	446	446	0	0.0%
35.8%	445	445	0	0.0%
37.0%	444	445	1	0.2%
38.3%	443	443	0	0.0%
39.5%	442	442	0	0.0%
40.7%	442	441	-1	-0.1%
42.0%	441	441	0	-0.1%
43.2%	441	440	-1	-0.2%
44.4%	440	439	-2	-0.4%
45.7%	440	438	-2	-0.4%
46.9%	440	438	-2	-0.4%
48.1%	440	438	-2	-0.5%
49.4%	440	438	-2	-0.5%
50.6%	440	437	-2	-0.5%
51.9%	440	437	-2	-0.5%
53.1%	440	437	-3	-0.6%
54.3%	439	436	-3	-0.6%
55.6%	438	435	-3	-0.6%
56.8%	438	435	-3	-0.6%
58.0%	438	435	-2	-0.6%
59.3%	438	435	-2	-0.5%
60.5%	437	435	-2	-0.6%
61.7%	437	434	-3	-0.6%
63.0%	437	434	-3	-0.6%
64.2%	437	434	-3	-0.7%
65.4%	436	433	-3	-0.6%
66.7%	434	432	-2	-0.4%
67.9%	432	432	-1	-0.1%
69.1%	428	430	2	0.4%
70.4%	428	428	0	0.1%
71.6%	428	428	0	0.1%
72.8%	427	428	1	0.1%
74.1%	425	428	2	0.5%
75.3%	425	427	3	0.6%
76.5%	424	426	1	0.3%
77.8%	423	424	1	0.2%
79.0%	421	422	1	0.2%
80.2%	419	421	2	0.4%
81.5%	417	419	2	0.6%
82.7%	415	419	4	1.0%
84.0%	415	418	3	0.7%
85.2%	415	417	3	0.7%
86.4%	409	411	2	0.6%
87.7%	408	410	1	0.3%
88.9%	407	408	1	0.2%
90.1%	407	406	-1	-0.2%
91.4%	407	405	-1	-0.3%
92.6%	406	404	-2	-0.4%
93.8%	406	404	-2	-0.5%
95.1%	404	404	0	-0.1%
96.3%	403	401	-2	-0.4%
97.5%	399	397	-3	-0.7%
98.8%	392	393	1	0.2%
100.0%	357	333	-24	-6.9%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	460	456	-3	-0.8%
1.2%	459	456	-3	-0.6%
2.5%	458	455	-3	-0.7%
3.7%	458	455	-3	-0.8%
4.9%	458	455	-3	-0.6%
6.2%	451	455	4	0.8%
7.4%	451	454	3	0.8%
8.6%	451	454	3	0.7%
9.9%	449	453	4	0.9%
11.1%	449	451	2	0.5%
12.3%	445	451	6	1.4%
13.6%	445	447	2	0.5%
14.8%	444	446	3	0.6%
16.0%	442	445	3	0.7%
17.3%	441	444	3	0.8%
18.5%	441	443	2	0.5%
19.8%	440	441	1	0.2%
21.0%	439	437	-2	-0.5%
22.2%	439	437	-2	-0.5%
23.5%	434	436	2	0.6%
24.7%	433	436	3	0.6%
25.9%	431	434	3	0.8%
27.2%	427	433	7	1.5%
28.4%	426	433	7	1.6%
29.6%	426	433	7	1.6%
30.9%	426	431	5	1.1%
32.1%	426	428	2	0.4%
33.3%	424	428	4	0.8%
34.6%	424	428	4	0.8%
35.8%	423	427	3	0.8%
37.0%	423	426	3	0.8%
38.3%	422	426	5	1.1%
39.5%	419	425	5	1.3%
40.7%	419	423	4	1.1%
42.0%	418	422	4	0.9%
43.2%	418	421	3	0.8%
44.4%	418	421	3	0.8%
45.7%	414	420	6	1.6%
46.9%	413	420	7	1.7%
48.1%	413	420	7	1.7%
49.4%	412	419	6	1.5%
50.6%	411	418	7	1.7%
51.9%	411	417	7	1.6%
53.1%	409	417	7	1.8%
54.3%	409	416	7	1.8%
55.6%	409	416	7	1.8%
56.8%	409	414	6	1.4%
58.0%	408	414	5	1.3%
59.3%	408	411	3	0.7%
60.5%	408	411	3	0.7%
61.7%	408	410	3	0.7%
63.0%	407	410	3	0.6%
64.2%	407	410	3	0.8%
65.4%	406	410	4	1.0%
66.7%	406	408	2	0.6%
67.9%	405	408	3	0.7%
69.1%	405	408	3	0.6%
70.4%	404	406	2	0.5%
71.6%	403	406	3	0.6%
72.8%	401	405	4	1.0%
74.1%	401	405	4	1.0%
75.3%	401	405	4	1.0%
76.5%	400	404	4	0.9%
77.8%	400	403	3	0.8%
79.0%	399	401	2	0.4%
80.2%	399	401	2	0.4%
81.5%	399	401	2	0.4%
82.7%	398	400	3	0.6%
84.0%	398	399	2	0.5%
85.2%	398	397	0	-0.1%
86.4%	397	397	-1	-0.2%
87.7%	397	396	0	-0.1%
88.9%	396	395	-1	-0.3%
90.1%	396	395	-1	-0.3%
91.4%	392	394	2	0.4%
92.6%	390	394	4	0.9%
93.8%	389	392	3	0.8%
95.1%	386	392	6	1.5%
96.3%	386	389	3	0.9%
97.5%	376	380	4	1.1%
98.8%	367	373	6	1.8%
100.0%	330	330	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	448	448	0	0.1%
1.2%	448	448	0	0.0%
2.5%	448	448	0	0.0%
3.7%	448	448	0	-0.1%
4.9%	448	447	-1	-0.2%
6.2%	448	447	-1	-0.2%
7.4%	445	447	2	0.5%
8.6%	445	447	2	0.4%
9.9%	443	446	3	0.6%
11.1%	443	444	1	0.1%
12.3%	440	444	4	0.8%
13.6%	440	439	0	-0.1%
14.8%	440	438	-2	-0.4%
16.0%	439	438	-1	-0.2%
17.3%	438	438	0	-0.1%
18.5%	437	437	0	0.1%
19.8%	436	436	1	0.1%
21.0%	433	434	1	0.3%
22.2%	433	431	-2	-0.4%
23.5%	429	431	2	0.4%
24.7%	428	430	3	0.6%
25.9%	426	428	2	0.4%
27.2%	423	427	4	1.0%
28.4%	422	427	5	1.3%
29.6%	420	426	6	1.4%
30.9%	420	425	5	1.3%
32.1%	419	423	4	0.9%
33.3%	419	421	2	0.5%
34.6%	419	421	2	0.6%
35.8%	416	421	5	1.2%
37.0%	416	420	5	1.1%
38.3%	415	420	5	1.2%
39.5%	413	419	6	1.5%
40.7%	411	416	5	1.1%
42.0%	411	416	5	1.1%
43.2%	411	416	5	1.2%
44.4%	411	416	5	1.2%
45.7%	411	416	5	1.2%
46.9%	410	415	5	1.2%
48.1%	407	414	7	1.8%
49.4%	407	413	6	1.5%
50.6%	406	411	5	1.1%
51.9%	406	410	4	1.0%
53.1%	405	410	5	1.1%
54.3%	405	410	5	1.2%
55.6%	404	409	5	1.3%
56.8%	404	408	4	1.1%
58.0%	403	407	4	1.1%
59.3%	403	407	4	1.0%
60.5%	403	407	4	1.1%
61.7%	402	406	3	0.8%
63.0%	402	405	3	0.8%
64.2%	402	405	3	0.8%
65.4%	402	405	3	0.8%
66.7%	401	403	2	0.5%
67.9%	401	403	2	0.5%
69.1%	401	403	2	0.5%
70.4%	400	402	2	0.5%
71.6%	400	402	2	0.5%
72.8%	399	402	3	0.8%
74.1%	398	400	1	0.4%
75.3%	398	399	2	0.4%
76.5%	397	399	2	0.5%
77.8%	395	398	3	0.9%
79.0%	395	397	2	0.5%
80.2%	394	396	2	0.5%
81.5%	394	395	1	0.3%
82.7%	393	393	0	0.0%
84.0%	393	393	1	0.1%
85.2%	391	393	2	0.6%
86.4%	390	393	3	0.8%
87.7%	389	392	3	0.8%
88.9%	388	390	2	0.5%
90.1%	388	389	1	0.4%
91.4%	388	388	0	0.0%
92.6%	388	387	-1	-0.2%
93.8%	384	386	3	0.7%
95.1%	381	385	4	1.0%
96.3%	379	383	4	1.1%
97.5%	359	371	12	3.2%
98.8%	337	365	28	8.4%
100.0%	330	330	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Elevation (FEET)	WSIP 2030 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	444	444	0	0.0%
1.2%	439	444	5	1.1%
2.5%	437	442	5	1.2%
3.7%	434	438	4	0.9%
4.9%	433	438	5	1.2%
6.2%	432	434	2	0.5%
7.4%	432	434	2	0.4%
8.6%	430	433	3	0.8%
9.9%	429	432	3	0.6%
11.1%	426	430	4	0.9%
12.3%	425	426	1	0.3%
13.6%	425	426	2	0.4%
14.8%	424	425	2	0.4%
16.0%	422	425	4	0.8%
17.3%	422	424	3	0.7%
18.5%	421	423	2	0.5%
19.8%	421	423	2	0.4%
21.0%	421	422	1	0.1%
22.2%	420	420	0	0.0%
23.5%	420	420	0	0.0%
24.7%	419	420	1	0.3%
25.9%	416	419	3	0.7%
27.2%	415	417	2	0.5%
28.4%	415	416	2	0.4%
29.6%	414	416	2	0.5%
30.9%	413	416	3	0.6%
32.1%	412	415	3	0.8%
33.3%	412	415	3	0.8%
34.6%	410	415	5	1.2%
35.8%	409	414	4	1.0%
37.0%	408	413	4	1.0%
38.3%	408	413	4	1.0%
39.5%	408	412	4	1.1%
40.7%	407	412	5	1.1%
42.0%	407	412	5	1.1%
43.2%	407	412	4	1.0%
44.4%	407	409	2	0.5%
45.7%	407	409	2	0.4%
46.9%	406	408	2	0.6%
48.1%	404	408	4	1.0%
49.4%	404	408	4	0.9%
50.6%	403	407	5	1.1%
51.9%	403	407	4	1.1%
53.1%	402	407	5	1.2%
54.3%	402	407	5	1.3%
55.6%	401	405	4	1.0%
56.8%	401	405	3	0.8%
58.0%	401	403	2	0.5%
59.3%	401	403	2	0.5%
60.5%	401	403	2	0.4%
61.7%	401	402	2	0.4%
63.0%	400	402	1	0.4%
64.2%	400	402	2	0.4%
65.4%	399	402	3	0.6%
66.7%	399	402	3	0.7%
67.9%	398	400	1	0.3%
69.1%	398	399	1	0.3%
70.4%	398	399	1	0.2%
71.6%	396	399	2	0.6%
72.8%	396	397	1	0.2%
74.1%	396	397	1	0.3%
75.3%	395	397	2	0.4%
76.5%	395	396	2	0.5%
77.8%	394	394	1	0.1%
79.0%	392	393	1	0.2%
80.2%	390	393	3	0.7%
81.5%	389	392	3	0.8%
82.7%	389	392	3	0.7%
84.0%	387	388	1	0.2%
85.2%	387	387	0	0.1%
86.4%	386	385	-1	-0.2%
87.7%	386	385	-1	-0.3%
88.9%	386	384	-1	-0.3%
90.1%	383	384	1	0.2%
91.4%	382	384	2	0.4%
92.6%	382	381	0	-0.1%
93.8%	382	380	-2	-0.5%
95.1%	374	379	5	1.3%
96.3%	371	374	4	1.0%
97.5%	365	371	7	1.9%
98.8%	345	368	23	6.5%
100.0%	330	330	0	0.0%

Figure SW-26-b
Folsom Lake, End of Month Area
Probability of Exceedance

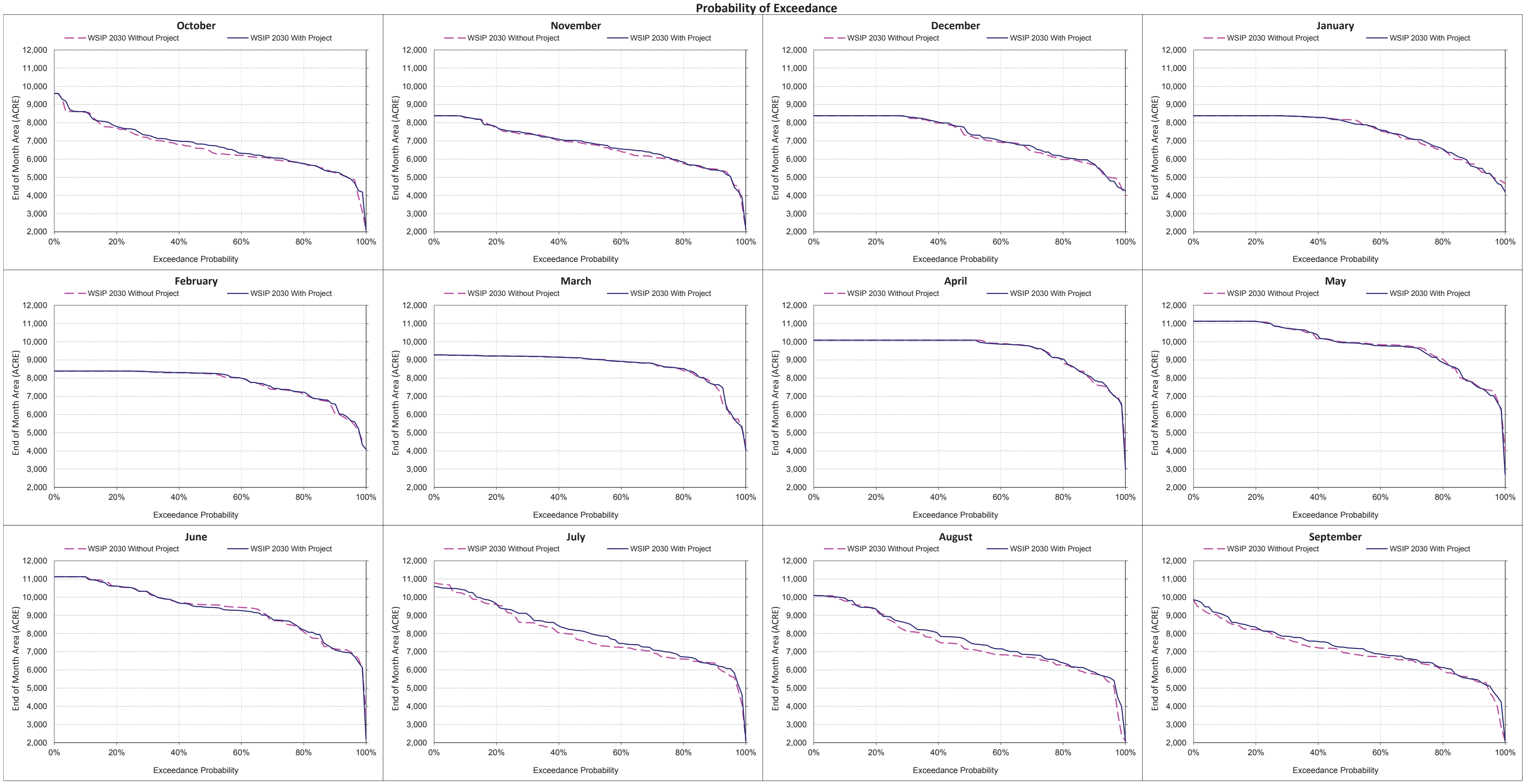


Table SW-26-b

Folsom Lake, End of Month Area

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,609	9,609	0	0.0%
1.2%	9,609	9,609	0	0.0%
2.5%	9,316	9,298	-17	-0.2%
3.7%	8,615	9,179	564	6.5%
4.9%	8,615	8,729	113	1.3%
6.2%	8,615	8,633	18	0.2%
7.4%	8,615	8,615	0	0.0%
8.6%	8,605	8,615	10	0.1%
9.9%	8,580	8,610	30	0.3%
11.1%	8,563	8,491	-72	-0.8%
12.3%	8,308	8,196	-113	-1.4%
13.6%	8,099	8,107	8	0.1%
14.8%	7,923	8,079	156	2.0%
16.0%	7,783	8,078	295	3.8%
17.3%	7,769	8,022	253	3.3%
18.5%	7,748	7,896	149	1.9%
19.8%	7,727	7,806	79	1.0%
21.0%	7,636	7,745	109	1.4%
22.2%	7,633	7,683	50	0.7%
23.5%	7,599	7,674	75	1.0%
24.7%	7,461	7,664	203	2.7%
25.9%	7,354	7,616	262	3.6%
27.2%	7,301	7,467	166	2.3%
28.4%	7,209	7,343	134	1.9%
29.6%	7,202	7,319	116	1.6%
30.9%	7,092	7,268	176	2.5%
32.1%	7,021	7,192	170	2.4%
33.3%	7,016	7,132	116	1.6%
34.6%	7,007	7,124	117	1.7%
35.8%	6,944	7,118	175	2.5%
37.0%	6,920	7,047	128	1.8%
38.3%	6,880	7,014	134	1.9%
39.5%	6,801	6,995	194	2.8%
40.7%	6,798	6,979	182	2.7%
42.0%	6,734	6,973	240	3.6%
43.2%	6,716	6,961	245	3.6%
44.4%	6,667	6,925	258	3.9%
45.7%	6,596	6,827	230	3.5%
46.9%	6,595	6,825	230	3.5%
48.1%	6,568	6,821	254	3.9%
49.4%	6,491	6,760	269	4.1%
50.6%	6,362	6,745	383	6.0%
51.9%	6,288	6,736	448	7.1%
53.1%	6,288	6,654	366	5.8%
54.3%	6,280	6,626	346	5.5%
55.6%	6,250	6,547	297	4.8%
56.8%	6,246	6,524	277	4.4%
58.0%	6,216	6,445	229	3.7%
59.3%	6,208	6,332	124	2.0%
60.5%	6,207	6,312	105	1.7%
61.7%	6,135	6,309	173	2.8%
63.0%	6,135	6,288	153	2.5%
64.2%	6,108	6,223	115	1.9%
65.4%	6,101	6,222	121	2.0%
66.7%	6,096	6,187	91	1.5%
67.9%	6,091	6,100	9	0.2%
69.1%	6,049	6,098	49	0.8%
70.4%	5,955	6,062	108	1.8%
71.6%	5,941	6,053	113	1.9%
72.8%	5,918	6,046	128	2.2%
74.1%	5,890	5,982	92	1.6%
75.3%	5,864	5,901	37	0.6%
76.5%	5,862	5,847	-15	-0.3%
77.8%	5,807	5,836	29	0.5%
79.0%	5,775	5,776	0	0.0%
80.2%	5,744	5,752	7	0.1%
81.5%	5,658	5,692	34	0.6%
82.7%	5,655	5,660	5	0.1%
84.0%	5,635	5,613	-21	-0.4%
85.2%	5,529	5,517	-12	-0.2%
86.4%	5,487	5,402	-85	-1.6%
87.7%	5,398	5,338	-60	-1.1%
88.9%	5,309	5,306	-3	-0.1%
90.1%	5,244	5,282	39	0.7%
91.4%	5,189	5,247	59	1.1%
92.6%	5,103	5,122	20	0.4%
93.8%	5,010	5,017	8	0.2%
95.1%	4,950	4,908	-42	-0.8%
96.3%	4,858	4,696	-162	-3.3%
97.5%	3,928	4,265	337	8.6%
98.8%	3,141	4,196	1,055	33.6%
100.0%	2,091	2,091	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,373	8,385	12	0.1%
8.6%	8,366	8,366	0	0.0%
9.9%	8,280	8,321	40	0.5%
11.1%	8,275	8,271	-4	-0.1%
12.3%	8,258	8,236	-22	-0.3%
13.6%	8,199	8,193	-6	-0.1%
14.8%	8,191	8,191	0	0.0%
16.0%	8,094	7,904	-190	-2.3%
17.3%	7,915	7,889	-26	-0.3%
18.5%	7,850	7,859	9	0.1%
19.8%	7,720	7,783	63	0.8%
21.0%	7,659	7,641	-18	-0.2%
22.2%	7,524	7,619	95	1.3%
23.5%	7,510	7,555	46	0.6%
24.7%	7,473	7,550	77	1.0%
25.9%	7,459	7,521	62	0.8%
27.2%	7,399	7,510	111	1.5%
28.4%	7,395	7,453	58	0.8%
29.6%	7,370	7,423	53	0.7%
30.9%	7,367	7,410	43	0.6%
32.1%	7,354	7,347	-7	-0.1%
33.3%	7,339	7,298	-42	-0.6%
34.6%	7,298	7,221	-77	-1.1%
35.8%	7,247	7,218	-29	-0.4%
37.0%	7,182	7,196	15	0.2%
38.3%	7,173	7,121	-52	-0.7%
39.5%	7,009	7,113	103	1.5%
40.7%	7,006	7,053	47	0.7%
42.0%	6,974	7,033	59	0.8%
43.2%	6,955	7,029	75	1.1%
44.4%	6,948	7,029	81	1.2%
45.7%	6,943	7,018	75	1.1%
46.9%	6,897	7,014	116	1.7%
48.1%	6,846	6,947	101	1.5%
49.4%	6,814	6,898	84	1.2%
50.6%	6,795	6,871	76	1.1%
51.9%	6,777	6,837	59	0.9%
53.1%	6,737	6,801	64	1.0%
54.3%	6,632	6,779	147	2.2%
55.6%	6,631	6,750	119	1.8%
56.8%	6,528	6,620	92	1.4%
58.0%	6,470	6,599	129	2.0%
59.3%	6,468	6,571	104	1.6%
60.5%	6,390	6,539	149	2.3%
61.7%	6,370	6,537	167	2.6%
63.0%	6,286	6,514	228	3.6%
64.2%	6,202	6,488	285	4.6%
65.4%	6,189	6,458	269	4.3%
66.7%	6,182	6,456	274	4.4%
67.9%	6,176	6,401	225	3.6%
69.1%	6,164	6,392	228	3.7%
70.4%	6,099	6,304	205	3.4%
71.6%	6,067	6,288	221	3.6%
72.8%	6,057	6,245	188	3.1%
74.1%	6,035	6,115	80	1.3%
75.3%	6,015	6,093	78	1.3%
76.5%	5,978	5,991	14	0.2%
77.8%	5,888	5,955	67	1.1%
79.0%	5,757	5,872	115	2.0%
80.2%	5,750	5,828	78	1.4%
81.5%	5,692	5,692	0	0.0%
82.7%	5,636	5,672	36	0.6%
84.0%	5,632	5,657	25	0.4%
85.2%	5,562	5,638	77	1.4%
86.4%	5,506	5,528	22	0.4%
87.7%	5,483	5,471	-12	-0.2%
88.9%	5,466	5,405	-61	-1.1%
90.1%	5,454	5,404	-51	-0.9%
91.4%	5,425	5,373	-52	-1.0%
92.6%	5,357	5,330	-27	-0.5%
93.8%	5,296	5,146	-150	-2.8%
95.1%	4,971	5,068	96	1.9%
96.3%	4,557	4,456	-101	-2.2%
97.5%	4,521	4,236	-285	-6.3%
98.8%	3,496	3,923	427	12.2%
100.0%	2,101	2,101	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,389	8,385	-5	-0.1%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,385	8,385	0	0.0%
19.8%	8,385	8,385	0	0.0%
21.0%	8,385	8,385	0	0.0%
22.2%	8,385	8,385	0	0.0%
23.5%	8,385	8,385	0	0.0%
24.7%	8,385	8,385	0	0.0%
25.9%	8,385	8,385	0	0.0%
27.2%	8,385	8,385	0	0.0%
28.4%	8,383	8,366	-17	-0.2%
29.6%	8,366	8,336	-30	-0.4%
30.9%	8,240	8,299	58	0.7%
32.1%	8,237	8,295	57	0.7%
33.3%	8,219	8,263	44	0.5%
34.6%	8,179	8,240	61	0.7%
35.8%	8,164	8,201	37	0.5%
37.0%	8,099	8,142	43	0.5%
38.3%	8,008	8,093	85	1.1%
39.5%	7,989	8,051	62	0.8%
40.7%	7,989	7,999	10	0.1%
42.0%	7,951	7,990	39	0.5%
43.2%	7,878	7,989	111	1.4%
44.4%	7,853	7,878	25	0.3%
45.7%	7,731	7,820	89	1.2%
46.9%	7,701	7,799	98	1.3%
48.1%	7,350	7,753	404	5.5%
49.4%	7,259	7,441	182	2.5%
50.6%	7,249	7,334	84	1.2%
51.9%	7,150	7,312	162	2.3%
53.1%	7,138	7,311	172	2.4%
54.3%	7,104	7,179	75	1.1%
55.6%	7,017	7,174	157	2.2%
56.8%	7,000	7,150	150	2.1%
58.0%	7,000	7,104	104	1.5%
59.3%	6,943	7,043	99	1.4%
60.5%	6,910	6,977	66	1.0%
61.7%	6,910	6,926	17	0.2%
63.0%	6,901	6,901	0	0.0%
64.2%	6,881	6,859	-22	-0.3%
65.4%	6,867	6,789	-78	-1.1%
66.7%	6,814	6,769	-45	-0.7%
67.9%	6,681	6,761	81	1.2%
69.1%	6,490	6,759	269	4.1%
70.4%	6,419	6,673	254	4.0%
71.6%	6,359	6,527	167	2.6%
72.8%	6,348	6,490	143	2.2%
74.1%	6,238	6,394	156	2.5%
75.3%	6,206	6,384	178	2.9%
76.5%	6,124	6,228	104	1.7%
77.8%	6,090	6,199	109	1.8%
79.0%	5,989	6,182	193	3.2%
80.2%	5,984	6,107	123	2.1%
81.5%	5,982	6,059	78	1.3%
82.7%	5,974	6,028	54	0.9%
84.0%	5,940	6,014	74	1.2%
85.2%	5,873	5,964	91	1.6%
86.4%	5,814	5,960	146	2.5%
87.7%	5,791	5,955	164	2.8%
88.9%	5,722	5,817	95	1.7%
90.1%	5,685	5,716	31	0.5%
91.4%	5,613	5,480	-133	-2.4%
92.6%	5,211	5,335	124	2.4%
93.8%	5,097	5,049	-48	-0.9%
95.1%	4,980	4,805	-175	-3.5%
96.3%	4,973	4,773	-200	-4.0%
97.5%	4,902	4,465	-436	-8.9%
98.8%	4,380	4,380	0	0.0%
100.0%	3,982	4,243	261	6.5%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,389	8,388	-1	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,385	8,385	0	0.0%
19.8%	8,385	8,385	0	0.0%
21.0%	8,385	8,385	0	0.0%
22.2%	8,385	8,385	0	0.0%
23.5%	8,385	8,385	0	0.0%
24.7%	8,385	8,385	0	0.0%
25.9%	8,385	8,385	0	0.0%
27.2%	8,385	8,385	0	0.0%
28.4%	8,376	8,385	9	0.1%
29.6%	8,366	8,376	9	0.1%
30.9%	8,357	8,366	9	0.1%
32.1%	8,357	8,357	0	0.0%
33.3%	8,348	8,357	9	0.1%
34.6%	8,339	8,348	9	0.1%
35.8%	8,320	8,339	18	0.2%
37.0%	8,311	8,320	9	0.1%
38.3%	8,293	8,311	18	0.2%
39.5%	8,291	8,293	2	0.0%
40.7%	8,283	8,283	0	0.0%
42.0%	8,283	8,283	0	0.0%
43.2%	8,244	8,237	-7	-0.1%
44.4%	8,237	8,191	-46	-0.6%
45.7%	8,200	8,173	-27	-0.3%
46.9%	8,191	8,164	-28	-0.3%
48.1%	8,173	8,107	-66	-0.8%
49.4%	8,173	8,036	-137	-1.7%
50.6%	8,164	7,990	-174	-2.1%
51.9%	8,155	7,928	-227	-2.8%
53.1%	8,066	7,913	-153	-1.9%
54.3%	7,898	7,891	-8	-0.1%
55.6%	7,841	7,882	41	0.5%
56.8%	7,814	7,814	0	0.0%
58.0%	7,713	7,784	70	0.9%
59.3%	7,592	7,628	36	0.5%
60.5%	7,521	7,592	71	0.9%
61.7%	7,490	7,557	66	0.9%
63.0%	7,399	7,463	64	0.9%
64.2%	7,390	7,399	9	0.1%
65.4%	7,334	7,390	55	0.8%
66.7%	7,142	7,334	192	2.7%
67.9%	7,121	7,238	118	1.7%
69.1%	7,101	7,142	40	0.6%
70.4%	7,095	7,095	0	0.0%
71.6%	7,077	7,077	0	0.0%
72.8%	6,857	7,075	218	3.2%
74.1%	6,785	6,966	181	2.7%
75.3%	6,708	6,876	168	2.5%
76.5%	6,693	6,762	69	1.0%
77.8%	6,563	6,693	130	2.0%
79.0%	6,526	6,632	106	1.6%
80.2%	6,503	6,526	23	0.4%
81.5%	6,354	6,380	27	0.4%
82.7%	6,126	6,354	228	3.7%
84.0%	5,983	6,227	244	4.1%
85.2%	5,979	6,115	136	2.3%
86.4%	5,963	6,054	91	1.5%
87.7%	5,795	5,964	169	2.9%
88.9%	5,731	5,630	-101	-1.8%
90.1%	5,727	5,578	-149	-2.6%
91.4%	5,453	5,501	48	0.9%
92.6%	5,277	5,484	207	3.9%
93.8%	5,250	5,223	-27	-0.5%
95.1%	5,218	5,202	-16	-0.3%
96.3%	4,980	4,951	-28	-0.6%
97.5%	4,899	4,666	-233	-4.8%
98.8%	4,807	4,570	-237	-4.9%
100.0%	4,647	4,210	-438	-9.4%

Table SW-26-b
Folsom Lake, End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,385	8,385	0	0.0%
19.8%	8,385	8,385	0	0.0%
21.0%	8,385	8,385	0	0.0%
22.2%	8,385	8,385	0	0.0%
23.5%	8,385	8,385	0	0.0%
24.7%	8,376	8,385	9	0.1%
25.9%	8,376	8,376	0	0.0%
27.2%	8,376	8,376	0	0.0%
28.4%	8,366	8,376	9	0.1%
29.6%	8,358	8,366	8	0.1%
30.9%	8,348	8,348	0	0.0%
32.1%	8,339	8,339	0	0.0%
33.3%	8,320	8,332	12	0.1%
34.6%	8,317	8,329	13	0.2%
35.8%	8,302	8,320	18	0.2%
37.0%	8,302	8,317	15	0.2%
38.3%	8,302	8,302	0	0.0%
39.5%	8,302	8,302	0	0.0%
40.7%	8,293	8,302	9	0.1%
42.0%	8,293	8,302	9	0.1%
43.2%	8,283	8,293	9	0.1%
44.4%	8,274	8,293	18	0.2%
45.7%	8,274	8,283	9	0.1%
46.9%	8,256	8,274	18	0.2%
48.1%	8,256	8,274	18	0.2%
49.4%	8,247	8,256	9	0.1%
50.6%	8,237	8,256	18	0.2%
51.9%	8,201	8,247	46	0.6%
53.1%	8,164	8,237	74	0.9%
54.3%	8,067	8,201	134	1.7%
55.6%	8,044	8,164	120	1.5%
56.8%	8,035	8,044	9	0.1%
58.0%	8,020	8,035	15	0.2%
59.3%	8,016	8,016	0	0.0%
60.5%	7,979	7,983	4	0.0%
61.7%	7,917	7,899	-18	-0.2%
63.0%	7,758	7,758	0	0.0%
64.2%	7,758	7,758	0	0.0%
65.4%	7,712	7,712	0	0.0%
66.7%	7,599	7,712	113	1.5%
67.9%	7,596	7,620	24	0.3%
69.1%	7,397	7,570	174	2.3%
70.4%	7,381	7,442	62	0.8%
71.6%	7,381	7,429	49	0.7%
72.8%	7,371	7,381	9	0.1%
74.1%	7,351	7,381	29	0.4%
75.3%	7,320	7,371	51	0.7%
76.5%	7,270	7,277	7	0.1%
77.8%	7,242	7,270	28	0.4%
79.0%	7,215	7,242	28	0.4%
80.2%	7,043	7,215	171	2.4%
81.5%	6,997	7,074	78	1.1%
82.7%	6,911	6,911	0	0.0%
84.0%	6,865	6,865	0	0.0%
85.2%	6,791	6,847	56	0.8%
86.4%	6,755	6,815	60	0.9%
87.7%	6,729	6,791	62	0.9%
88.9%	6,444	6,611	167	2.6%
90.1%	6,021	6,572	551	9.1%
91.4%	6,004	6,030	26	0.4%
92.6%	5,883	6,007	123	2.1%
93.8%	5,744	5,878	135	2.3%
95.1%	5,660	5,664	4	0.1%
96.3%	5,406	5,589	183	3.4%
97.5%	5,108	5,227	119	2.3%
98.8%	4,563	4,327	-237	-5.2%
100.0%	4,522	4,085	-437	-9.7%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,278	9,278	0	0.0%
1.2%	9,278	9,278	0	0.0%
2.5%	9,278	9,278	0	0.0%
3.7%	9,275	9,278	3	0.0%
4.9%	9,260	9,260	0	0.0%
6.2%	9,260	9,260	0	0.0%
7.4%	9,260	9,260	0	0.0%
8.6%	9,260	9,260	0	0.0%
9.9%	9,251	9,251	0	0.0%
11.1%	9,251	9,251	0	0.0%
12.3%	9,251	9,251	0	0.0%
13.6%	9,242	9,242	0	0.0%
14.8%	9,232	9,232	0	0.0%
16.0%	9,223	9,223	0	0.0%
17.3%	9,223	9,223	0	0.0%
18.5%	9,223	9,223	0	0.0%
19.8%	9,223	9,223	0	0.0%
21.0%	9,214	9,214	0	0.0%
22.2%	9,214	9,214	0	0.0%
23.5%	9,214	9,214	0	0.0%
24.7%	9,205	9,205	0	0.0%
25.9%	9,205	9,205	0	0.0%
27.2%	9,205	9,205	0	0.0%
28.4%	9,205	9,205	0	0.0%
29.6%	9,205	9,205	0	0.0%
30.9%	9,196	9,196	0	0.0%
32.1%	9,196	9,190	-6	-0.1%
33.3%	9,195	9,186	-9	-0.1%
34.6%	9,186	9,186	0	0.0%
35.8%	9,186	9,168	-18	-0.2%
37.0%	9,168	9,168	0	0.0%
38.3%	9,168	9,159	-9	-0.1%
39.5%	9,159	9,154	-5	-0.1%
40.7%	9,154	9,140	-14	-0.2%
42.0%	9,140	9,131	-9	-0.1%
43.2%	9,131	9,129	-2	0.0%
44.4%	9,122	9,122	0	0.0%
45.7%	9,113	9,113	0	0.0%
46.9%	9,113	9,113	0	0.0%
48.1%	9,076	9,076	0	0.0%
49.4%	9,057	9,057	0	0.0%
50.6%	9,030	9,030	0	0.0%
51.9%	9,030	9,030	0	0.0%
53.1%	9,020	9,020	0	0.0%
54.3%	9,013	9,011	-1	0.0%
55.6%	9,011	8,956	-55	-0.6%
56.8%	8,956	8,947	-9	-0.1%
58.0%	8,947	8,928	-18	-0.2%
59.3%	8,928	8,922	-6	-0.1%
60.5%	8,919	8,919	0	0.0%
61.7%	8,891	8,891	0	0.0%
63.0%	8,882	8,882	0	0.0%
64.2%	8,882	8,882	0	0.0%
65.4%	8,855	8,855	0	0.0%
66.7%	8,836	8,836	0	0.0%
67.9%	8,830	8,827	-3	0.0%
69.1%	8,827	8,827	0	0.0%
70.4%	8,790	8,790	0	0.0%
71.6%	8,680	8,714	34	0.4%
72.8%	8,624	8,680	55	0.6%
74.1%	8,603	8,624	22	0.3%
75.3%	8,597	8,606	9	0.1%
76.5%	8,578	8,597	18	0.2%
77.8%	8,557	8,567	10	0.1%
79.0%	8,490	8,529	39	0.5%
80.2%	8,409	8,519	110	1.3%
81.5%	8,355	8,409	53	0.6%
82.7%	8,297	8,376	79	1.0%
84.0%	8,131	8,244	114	1.4%
85.2%	8,039	8,039	0	0.0%
86.4%	7,994	8,034	39	0.5%
87.7%	7,935	7,813	-122	-1.5%
88.9%	7,757	7,690	-67	-0.9%
90.1%	7,590	7,642	52	0.7%
91.4%	7,323	7,634	311	4.2%
92.6%	6,580	7,460	880	13.4%
93.8%	6,469	6,287	-182	-2.8%
95.1%	5,889	6,126	237	4.0%
96.3%	5,760	5,734	-26	-0.5%
97.5%	5,747	5,505	-241	-4.2%
98.8%	5,211	5,330	118	2.3%
100.0%	4,418	4,047	-370	-8.4%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,084	10,084	0	0.0%
1.2%	10,084	10,084	0	0.0%
2.5%	10,084	10,084	0	0.0%
3.7%	10,084	10,084	0	0.0%
4.9%	10,084	10,084	0	0.0%
6.2%	10,084	10,084	0	0.0%
7.4%	10,084	10,084	0	0.0%
8.6%	10,084	10,084	0	0.0%
9.9%	10,084	10,084	0	0.0%
11.1%	10,084	10,084	0	0.0%
12.3%	10,084	10,084	0	0.0%
13.6%	10,084	10,084	0	0.0%
14.8%	10,084	10,084	0	0.0%
16.0%	10,084	10,084	0	0.0%
17.3%	10,084	10,084	0	0.0%
18.5%	10,084	10,084	0	0.0%
19.8%	10,084	10,084	0	0.0%
21.0%	10,084	10,084	0	0.0%
22.2%	10,084	10,084	0	0.0%
23.5%	10,084	10,084	0	0.0%
24.7%	10,084	10,084	0	0.0%
25.9%	10,084	10,084	0	0.0%
27.2%	10,084	10,084	0	0.0%
28.4%	10,084	10,084	0	0.0%
29.6%	10,084	10,084	0	0.0%
30.9%	10,084	10,084	0	0.0%
32.1%	10,084	10,084	0	0.0%
33.3%	10,084	10,084	0	0.0%
34.6%	10,084	10,084	0	0.0%
35.8%	10,084	10,084	0	0.0%
37.0%	10,084	10,084	0	0.0%
38.3%	10,084	10,084	0	0.0%
39.5%	10,084	10,084	0	0.0%
40.7%	10,084	10,084	0	0.0%
42.0%	10,084	10,084	0	0.0%
43.2%	10,084	10,084	0	0.0%
44.4%	10,084	10,084	0	0.0%
45.7%	10,084	10,084	0	0.0%
46.9%	10,084	10,084	0	0.0%
48.1%	10,084	10,084	0	0.0%
49.4%	10,084	10,084	0	0.0%
50.6%	10,084	10,084	0	0.0%
51.9%	10,084	10,083	-1	0.0%
53.1%	10,083	9,977	-106	-1.0%
54.3%	10,048	9,941	-106	-1.1%
55.6%	9,943	9,917	-26	-0.3%
56.8%	9,929	9,900	-28	-0.3%
58.0%	9,917	9,891	-26	-0.3%
59.3%	9,902	9,872	-29	-0.3%
60.5%	9,893	9,859	-35	-0.4%
61.7%	9,891	9,857	-34	-0.3%
63.0%	9,856	9,856	0	0.0%
64.2%	9,849	9,834	-16	-0.2%
65.4%	9,833	9,832	-2	0.0%
66.7%	9,831	9,808	-23	-0.2%
67.9%	9,780	9,791	11	0.1%
69.1%	9,765	9,779	14	0.1%
70.4%	9,705	9,695	-10	-0.1%
71.6%	9,617	9,635	18	0.2%
72.8%	9,555	9,617	62	0.6%
74.1%	9,485	9,508	23	0.2%
75.3%	9,407	9,299	-108	-1.1%
76.5%	9,138	9,138	0	0.0%
77.8%	9,132	9,132	0	0.0%
79.0%	9,098	9,076	-22	-0.2%
80.2%	8,796	9,036	240	2.7%
81.5%	8,751	8,744	-8	-0.1%
82.7%	8,622	8,678	56	0.6%
84.0%	8,536	8,542	6	0.1%
85.2%	8,392	8,378	-14	-0.2%
86.4%	8,378	8,273	-106	-1.3%
87.7%	8,125	8,160	35	0.4%
88.9%	7,930	8,064	135	1.7%
90.1%	7,653	7,876	223	2.9%
91.4%	7,599	7,803	204	2.7%
92.6%	7,580	7,781	201	2.7%
93.8%	7,514	7,585	70	0.9%
95.1%	7,240	7,256	16	0.2%
96.3%	7,039	7,028	-11	-0.2%
97.5%	7,017	6,877	-140	-2.0%
98.8%	6,477	6,579	102	1.6%
100.0%	4,058	3,001	-1,057	-26.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,124	11,124	0	0.0%
1.2%	11,124	11,124	0	0.0%
2.5%	11,124	11,124	0	0.0%
3.7%	11,124	11,124	0	0.0%
4.9%	11,124	11,124	0	0.0%
6.2%	11,124	11,124	0	0.0%
7.4%	11,124	11,124	0	0.0%
8.6%	11,124	11,124	0	0.0%
9.9%	11,124	11,124	0	0.0%
11.1%	11,124	11,124	0	0.0%
12.3%	11,124	11,124	0	0.0%
13.6%	11,124	11,124	0	0.0%
14.8%	11,124	11,124	0	0.0%
16.0%	11,124	11,124	0	0.0%
17.3%	11,124	11,124	0	0.0%
18.5%	11,124	11,124	0	0.0%
19.8%	11,124	11,124	0	0.0%
21.0%	11,096	11,097	1	0.0%
22.2%	11,077	11,077	0	0.0%
23.5%	11,076	11,011	-65	-0.6%
24.7%	11,012	11,003	-10	-0.1%
25.9%	10,860	10,860	0	0.0%
27.2%	10,841	10,841	0	0.0%
28.4%	10,787	10,786	0	0.0%
29.6%	10,749	10,750	1	0.0%
30.9%	10,733	10,716	-17	-0.2%
32.1%	10,666	10,702	36	0.3%
33.3%	10,657	10,666	10	0.1%
34.6%	10,650	10,657	7	0.1%
35.8%	10,529	10,650	120	1.1%
37.0%	10,494	10,529	36	0.3%
38.3%	10,471	10,494	23	0.2%
39.5%	10,176	10,403	227	2.2%
40.7%	10,166	10,172	6	0.1%
42.0%	10,166	10,163	-3	0.0%
43.2%	10,148	10,123	-25	-0.2%
44.4%	10,093	10,076	-17	-0.2%
45.7%	10,040	10,005	-35	-0.3%
46.9%	10,011	9,960	-51	-0.5%
48.1%	9,984	9,949	-35	-0.3%
49.4%	9,972	9,946	-26	-0.3%
50.6%	9,952	9,932	-20	-0.2%
51.9%	9,946	9,928	-18	-0.2%
53.1%	9,946	9,919	-27	-0.3%
54.3%	9,920	9,877	-43	-0.4%
55.6%	9,913	9,872	-41	-0.4%
56.8%	9,881	9,850	-30	-0.3%
58.0%	9,856	9,791	-65	-0.7%
59.3%	9,849	9,788	-61	-0.6%
60.5%	9,830	9,777	-53	-0.5%
61.7%	9,829	9,768	-61	-0.6%
63.0%	9,825	9,767	-58	-0.6%
64.2%	9,821	9,764	-57	-0.6%
65.4%	9,811	9,764	-47	-0.5%
66.7%	9,793	9,759	-34	-0.3%
67.9%	9,781	9,718	-64	-0.6%
69.1%	9,768	9,709	-59	-0.6%
70.4%	9,737	9,694	-44	-0.4%
71.6%	9,700	9,665	-36	-0.4%
72.8%	9,663	9,554	-108	-1.1%
74.1%	9,611	9,417	-194	-2.0%
75.3%	9,376	9,293	-82	-0.9%
76.5%	9,293	9,151	-142	-1.5%
77.8%	9,169	9,143	-26	-0.3%
79.0%	9,153	8,949	-205	-2.2%
80.2%	9,009	8,836	-173	-1.9%
81.5%	8,793	8,728	-65	-0.7%
82.7%	8,568	8,646	78	0.9%
84.0%	8,539	8,585	46	0.5%
85.2%	8,064	8,467	403	5.0%
86.4%	7,958	8,033	75	0.9%
87.7%	7,909	7,846	-63	-0.8%
88.9%	7,869	7,814	-56	-0.7%
90.1%	7,699	7,629	-70	-0.9%
91.4%	7,545	7,487	-57	-0.8%
92.6%	7,453	7,416	-37	-0.5%
93.8%	7,356	7,293	-63	-0.9%
95.1%	7,346	7,058	-287	-3.9%
96.3%	7,267	7,021	-246	-3.4%
97.5%	6,801	6,645	-156	-2.3%
98.8%	6,208	6,310	102	1.6%
100.0%	4,000	2,718	-1,282	-32.0%

Table SW-26-b
Folsom Lake, End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,124	11,124	0	0.0%
1.2%	11,124	11,124	0	0.0%
2.5%	11,124	11,124	0	0.0%
3.7%	11,124	11,124	0	0.0%
4.9%	11,124	11,124	0	0.0%
6.2%	11,124	11,124	0	0.0%
7.4%	11,124	11,124	0	0.0%
8.6%	11,124	11,124	0	0.0%
9.9%	11,124	11,124	0	0.0%
11.1%	11,021	10,971	-49	-0.4%
12.3%	10,971	10,945	-26	-0.2%
13.6%	10,945	10,925	-21	-0.2%
14.8%	10,936	10,836	-100	-0.9%
16.0%	10,836	10,807	-28	-0.3%
17.3%	10,805	10,637	-169	-1.6%
18.5%	10,616	10,616	0	0.0%
19.8%	10,604	10,603	-1	0.0%
21.0%	10,551	10,600	49	0.5%
22.2%	10,545	10,551	7	0.1%
23.5%	10,535	10,540	4	0.0%
24.7%	10,522	10,525	3	0.0%
25.9%	10,433	10,461	28	0.3%
27.2%	10,324	10,324	0	0.0%
28.4%	10,318	10,319	1	0.0%
29.6%	10,316	10,318	2	0.0%
30.9%	10,119	10,176	57	0.6%
32.1%	10,072	10,080	8	0.1%
33.3%	9,976	9,976	0	0.0%
34.6%	9,935	9,937	1	0.0%
35.8%	9,884	9,891	7	0.1%
37.0%	9,829	9,877	48	0.5%
38.3%	9,795	9,789	-5	-0.1%
39.5%	9,708	9,703	-5	-0.1%
40.7%	9,696	9,657	-39	-0.4%
42.0%	9,677	9,653	-24	-0.2%
43.2%	9,659	9,608	-50	-0.5%
44.4%	9,608	9,506	-103	-1.1%
45.7%	9,604	9,487	-117	-1.2%
46.9%	9,591	9,479	-112	-1.2%
48.1%	9,586	9,456	-129	-1.3%
49.4%	9,585	9,441	-144	-1.5%
50.6%	9,576	9,435	-142	-1.5%
51.9%	9,567	9,422	-145	-1.5%
53.1%	9,566	9,395	-171	-1.8%
54.3%	9,501	9,315	-186	-2.0%
55.6%	9,485	9,293	-192	-2.0%
56.8%	9,463	9,284	-179	-1.9%
58.0%	9,451	9,278	-173	-1.8%
59.3%	9,440	9,273	-167	-1.8%
60.5%	9,429	9,251	-177	-1.9%
61.7%	9,422	9,219	-203	-2.2%
63.0%	9,408	9,217	-191	-2.0%
64.2%	9,374	9,149	-225	-2.4%
65.4%	9,326	9,136	-189	-2.0%
66.7%	9,149	9,012	-137	-1.5%
67.9%	9,053	9,006	-47	-0.5%
69.1%	8,766	8,895	129	1.5%
70.4%	8,723	8,741	17	0.2%
71.6%	8,701	8,737	36	0.4%
72.8%	8,691	8,733	42	0.5%
74.1%	8,536	8,701	165	1.9%
75.3%	8,481	8,687	206	2.4%
76.5%	8,457	8,562	104	1.2%
77.8%	8,384	8,447	62	0.7%
79.0%	8,213	8,271	58	0.7%
80.2%	8,059	8,188	129	1.6%
81.5%	7,904	8,076	172	2.2%
82.7%	7,749	8,068	320	4.1%
84.0%	7,735	7,962	226	2.9%
85.2%	7,732	7,944	212	2.7%
86.4%	7,292	7,478	186	2.5%
87.7%	7,277	7,356	79	1.1%
88.9%	7,174	7,227	53	0.7%
90.1%	7,153	7,088	-65	-0.9%
91.4%	7,132	7,041	-91	-1.3%
92.6%	7,110	6,979	-131	-1.8%
93.8%	7,099	6,961	-138	-1.9%
95.1%	6,970	6,935	-34	-0.5%
96.3%	6,847	6,725	-122	-1.8%
97.5%	6,608	6,412	-196	-3.0%
98.8%	6,063	6,132	69	1.1%
100.0%	3,480	2,185	-1,295	-37.2%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,799	10,587	-212	-2.0%
1.2%	10,739	10,563	-176	-1.6%
2.5%	10,710	10,514	-196	-1.8%
3.7%	10,702	10,489	-214	-2.0%
4.9%	10,669	10,487	-182	-1.7%
6.2%	10,260	10,482	222	2.2%
7.4%	10,254	10,467	213	2.1%
8.6%	10,239	10,429	190	1.9%
9.9%	10,148	10,396	248	2.4%
11.1%	10,123	10,263	139	1.4%
12.3%	9,886	10,255	369	3.7%
13.6%	9,875	10,012	136	1.4%
14.8%	9,810	9,974	164	1.7%
16.0%	9,687	9,880	194	2.0%
17.3%	9,639	9,853	214	2.2%
18.5%	9,638	9,782	144	1.5%
19.8%	9,609	9,669	60	0.6%
21.0%	9,528	9,407	-121	-1.3%
22.2%	9,516	9,370	-146	-1.5%
23.5%	9,155	9,334	179	2.0%
24.7%	9,116	9,307	191	2.1%
25.9%	8,959	9,210	251	2.8%
27.2%	8,630	9,118	488	5.7%
28.4%	8,615	9,112	497	5.8%
29.6%	8,594	9,106	512	6.0%
30.9%	8,594	8,941	347	4.0%
32.1%	8,590	8,715	125	1.5%
33.3%	8,448	8,714	267	3.2%
34.6%	8,436	8,700	264	3.1%
35.8%	8,371	8,630	259	3.1%
37.0%	8,357	8,615	258	3.1%
38.3%	8,272	8,609	337	4.1%
39.5%	8,067	8,476	409	5.1%
40.7%	8,026	8,360	334	4.2%
42.0%	8,003	8,299	296	3.7%
43.2%	7,977	8,224	247	3.1%
44.4%	7,966	8,218	253	3.2%
45.7%	7,684	8,165	481	6.3%
46.9%	7,630	8,157	527	6.9%
48.1%	7,584	8,111	527	6.9%
49.4%	7,576	8,039	463	6.1%
50.6%	7,461	7,973	513	6.9%
51.9%	7,437	7,929	491	6.6%
53.1%	7,330	7,879	549	7.5%
54.3%	7,317	7,862	545	7.5%
55.6%	7,304	7,840	537	7.3%
56.8%	7,278	7,693	415	5.7%
58.0%	7,256	7,654	398	5.5%
59.3%	7,251	7,462	211	2.9%
60.5%	7,240	7,453	213	2.9%
61.7%	7,207	7,408	202	2.8%
63.0%	7,203	7,397	195	2.7%
64.2%	7,133	7,385	253	3.5%
65.4%	7,092	7,384	292	4.1%
66.7%	7,089	7,266	178	2.5%
67.9%	7,051	7,256	204	2.9%
69.1%	7,047	7,241	194	2.8%
70.4%	6,926	7,089	163	2.3%
71.6%	6,884	7,071	187	2.7%
72.8%	6,732	7,036	304	4.5%
74.1%	6,701	6,999	299	4.5%
75.3%	6,684	6,988	304	4.6%
76.5%	6,646	6,927	281	4.2%
77.8%	6,621	6,865	244	3.7%
79.0%	6,602	6,732	130	2.0%
80.2%	6,598	6,710	112	1.7%
81.5%	6,584	6,706	121	1.8%
82.7%	6,487	6,671	184	2.8%
84.0%	6,469	6,606	136	2.1%
85.2%	6,466	6,435	-31	-0.5%
86.4%	6,461	6,390	-71	-1.1%
87.7%	6,403	6,375	-29	-0.4%
88.9%	6,387	6,296	-92	-1.4%
90.1%	6,375	6,292	-82	-1.3%
91.4%	6,074	6,199	124	2.0%
92.6%	5,918	6,178	260	4.4%
93.8%	5,841	6,074	234	4.0%
95.1%	5,650	6,072	422	7.5%
96.3%	5,589	5,837	248	4.4%
97.5%	4,897	5,196	299	6.1%
98.8%	4,111	4,652	541	13.2%
100.0%	2,091	2,091	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,084	10,100	15	0.2%
1.2%	10,084	10,084	0	0.0%
2.5%	10,084	10,084	0	0.0%
3.7%	10,084	10,061	-23	-0.2%
4.9%	10,084	10,025	-59	-0.6%
6.2%	10,072	10,025	-47	-0.5%
7.4%	9,883	10,007	124	1.3%
8.6%	9,881	9,989	108	1.1%
9.9%	9,787	9,958	171	1.7%
11.1%	9,770	9,808	39	0.4%
12.3%	9,589	9,807	217	2.3%
13.6%	9,566	9,548	-18	-0.2%
14.8%	9,562	9,461	-101	-1.1%
16.0%	9,500	9,439	-61	-0.6%
17.3%	9,457	9,438	-19	-0.2%
18.5%	9,405	9,425	20	0.2%
19.8%	9,319	9,365	46	0.5%
21.0%	9,086	9,183	97	1.1%
22.2%	9,075	8,934	-141	-1.6%
23.5%	8,806	8,934	128	1.4%
24.7%	8,712	8,918	206	2.4%
25.9%	8,612	8,741	130	1.5%
27.2%	8,362	8,682	320	3.8%
28.4%	8,249	8,647	398	4.8%
29.6%	8,139	8,590	450	5.5%
30.9%	8,108	8,514	406	5.0%
32.1%	8,089	8,364	275	3.4%
33.3%	8,067	8,219	152	1.9%
34.6%	8,028	8,205	178	2.2%
35.8%	7,829	8,205	376	4.8%
37.0%	7,801	8,154	353	4.5%
38.3%	7,737	8,108	372	4.8%
39.5%	7,600	8,054	454	6.0%
40.7%	7,489	7,841	352	4.7%
42.0%	7,488	7,825	337	4.5%
43.2%	7,467	7,821	354	4.7%
44.4%	7,462	7,817	355	4.8%
45.7%	7,440	7,804	364	4.9%
46.9%	7,420	7,783	363	4.9%
48.1%	7,183	7,726	543	7.6%
49.4%	7,132	7,587	456	6.4%
50.6%	7,121	7,462	341	4.8%
51.9%	7,102	7,416	314	4.4%
53.1%	7,051	7,396	344	4.9%
54.3%	7,017	7,369	352	5.0%
55.6%	6,956	7,350	393	5.7%
56.8%	6,909	7,241	332	4.8%
58.0%	6,857	7,174	317	4.6%
59.3%	6,847	7,159	313	4.6%
60.5%	6,831	7,154	323	4.7%
61.7%	6,826	7,075	248	3.6%
63.0%	6,784	7,017	233	3.4%
64.2%	6,783	7,008	225	3.3%
65.4%	6,766	6,994	227	3.4%
66.7%	6,712	6,864	153	2.3%
67.9%	6,710	6,859	149	2.2%
69.1%	6,695	6,846	152	2.3%
70.4%	6,672	6,829	157	2.4%
71.6%	6,666	6,814	148	2.2%
72.8%	6,544	6,788	243	3.7%
74.1%	6,521	6,629	108	1.7%
75.3%	6,475	6,590	115	1.8%
76.5%	6,447	6,585	138	2.1%
77.8%	6,282	6,533	251	4.0%
79.0%	6,273	6,422	150	2.4%
80.2%	6,241	6,374	132	2.1%
81.5%	6,225	6,303	78	1.3%
82.7%	6,154	6,165	11	0.2%
84.0%	6,117	6,154	37	0.6%
85.2%	5,958	6,135	177	3.0%
86.4%	5,898	6,128	230	3.9%
87.7%	5,805	6,035	230	4.0%
88.9%	5,803	5,932	129	2.2%
90.1%	5,772	5,874	102	1.8%
91.4%	5,743	5,743	0	0.0%
92.6%	5,732	5,666	-65	-1.1%
93.8%	5,447	5,633	187	3.4%
95.1%	5,282	5,561	278	5.3%
96.3%	5,108	5,416	308	6.0%
97.5%	3,622	4,470	848	23.4%
98.8%	2,384	3,986	1,602	67.2%
100.0%	2,091	2,091	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project End of Month Area (ACRE)	WSIP 2030 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,847	9,847	0	0.0%
1.2%	9,502	9,806	304	3.2%
2.5%	9,383	9,710	327	3.5%
3.7%	9,206	9,469	263	2.9%
4.9%	9,102	9,465	362	4.0%
6.2%	9,054	9,201	147	1.6%
7.4%	9,035	9,149	115	1.3%
8.6%	8,850	9,092	242	2.7%
9.9%	8,822	9,011	190	2.1%
11.1%	8,615	8,911	296	3.4%
12.3%	8,516	8,615	99	1.2%
13.6%	8,482	8,615	133	1.6%
14.8%	8,406	8,543	138	1.6%
16.0%	8,253	8,518	264	3.2%
17.3%	8,251	8,456	205	2.5%
18.5%	8,236	8,387	151	1.8%
19.8%	8,225	8,365	140	1.7%
21.0%	8,215	8,260	46	0.6%
22.2%	8,137	8,136	-1	0.0%
23.5%	8,125	8,131	6	0.1%
24.7%	8,036	8,125	89	1.1%
25.9%	7,860	8,077	217	2.8%
27.2%	7,783	7,937	154	2.0%
28.4%	7,728	7,858	130	1.7%
29.6%	7,690	7,857	168	2.2%
30.9%	7,641	7,837	196	2.6%
32.1%	7,553	7,787	234	3.1%
33.3%	7,524	7,783	259	3.4%
34.6%	7,387	7,766	379	5.1%
35.8%	7,347	7,652	305	4.2%
37.0%	7,278	7,588	310	4.3%
38.3%	7,269	7,585	316	4.4%
39.5%	7,237	7,565	328	4.5%
40.7%	7,199	7,537	338	4.7%
42.0%	7,197	7,535	338	4.7%
43.2%	7,195	7,504	309	4.3%
44.4%	7,186	7,351	165	2.3%
45.7%	7,164	7,289	125	1.7%
46.9%	7,086	7,260	174	2.5%
48.1%	6,940	7,256	316	4.6%
49.4%	6,931	7,217	286	4.1%
50.6%	6,858	7,195	337	4.9%
51.9%	6,856	7,185	329	4.8%
53.1%	6,818	7,176	358	5.3%
54.3%	6,792	7,170	378	5.6%
55.6%	6,746	7,042	296	4.4%
56.8%	6,741	6,982	241	3.6%
58.0%	6,739	6,901	163	2.4%
59.3%	6,723	6,879	155	2.3%
60.5%	6,723	6,850	127	1.9%
61.7%	6,688	6,819	132	2.0%
63.0%	6,681	6,786	104	1.6%
64.2%	6,652	6,785	133	2.0%
65.4%	6,571	6,759	189	2.9%
66.7%	6,555	6,757	202	3.1%
67.9%	6,534	6,630	97	1.5%
69.1%	6,529	6,608	78	1.2%
70.4%	6,525	6,593	68	1.0%
71.6%	6,379	6,553	174	2.7%
72.8%	6,359	6,426	67	1.1%
74.1%	6,320	6,418	98	1.6%
75.3%	6,288	6,413	125	2.0%
76.5%	6,244	6,380	136	2.2%
77.8%	6,197	6,240	43	0.7%
79.0%	6,075	6,144	69	1.1%
80.2%	5,930	6,123	193	3.2%
81.5%	5,839	6,075	237	4.1%
82.7%	5,837	6,043	206	3.5%
84.0%	5,719	5,782	63	1.1%
85.2%	5,661	5,692	31	0.5%
86.4%	5,639	5,573	-65	-1.2%
87.7%	5,625	5,550	-75	-1.3%
88.9%	5,586	5,497	-89	-1.6%
90.1%	5,432	5,485	53	1.0%
91.4%	5,327	5,446	119	2.2%
92.6%	5,311	5,288	-23	-0.4%
93.8%	5,300	5,174	-126	-2.4%
95.1%	4,757	5,123	365	7.7%
96.3%	4,453	4,768	314	7.1%
97.5%	3,953	4,511	558	14.1%
98.8%	2,818	4,227	1,409	50.0%
100.0%	2,091	2,091	0	0.0%

Figure SW-27-b
American River below Nimbus Reservoir, Monthly Flow
Probability of Exceedance

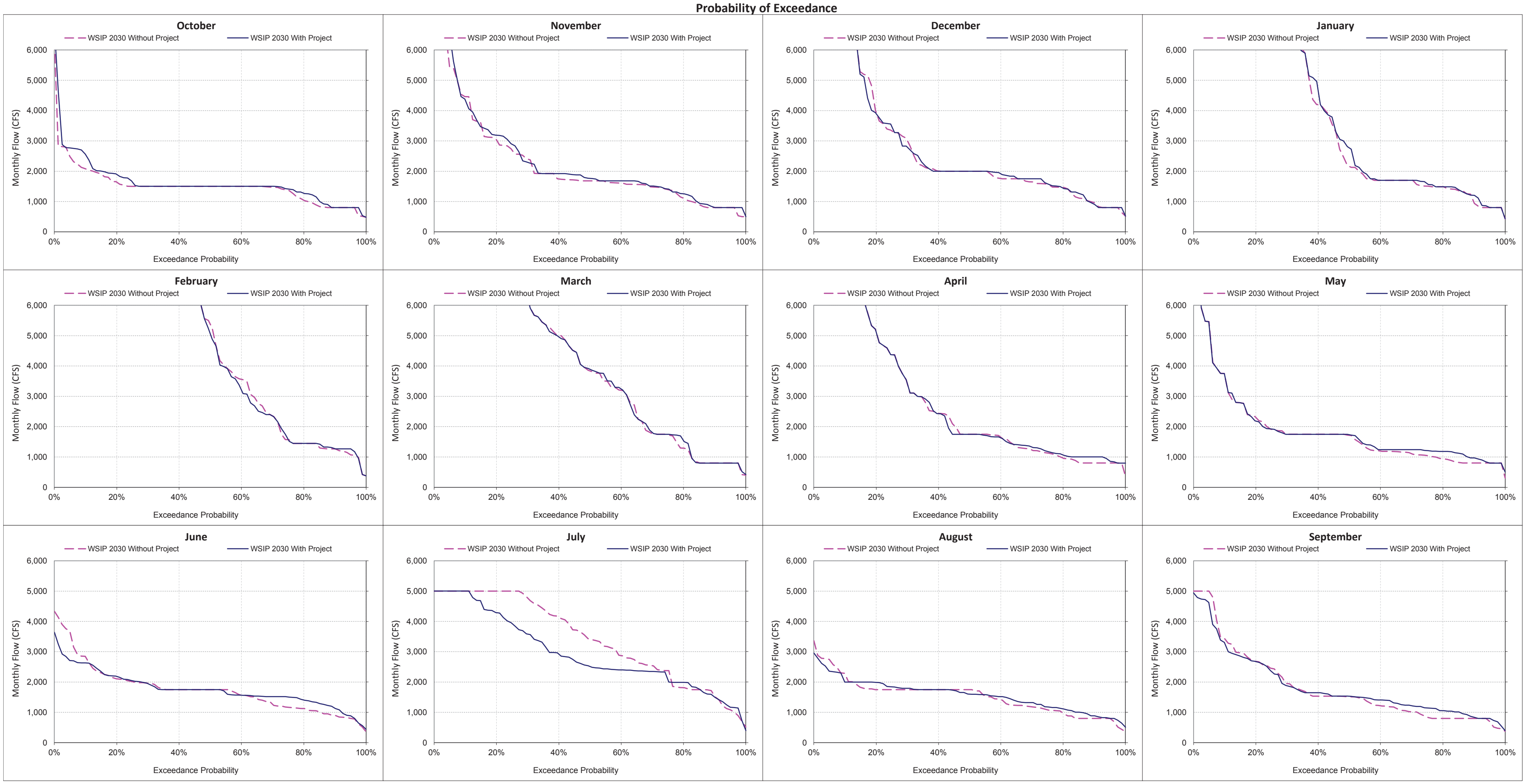


Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,302	6,758	456	7.2%
1.2%	2,836	4,630	1,795	63.3%
2.5%	2,811	2,885	74	2.6%
3.7%	2,799	2,777	-22	-0.8%
4.9%	2,494	2,773	279	11.2%
6.2%	2,315	2,748	433	18.7%
7.4%	2,235	2,733	497	22.2%
8.6%	2,129	2,703	574	26.9%
9.9%	2,084	2,566	482	23.1%
11.1%	2,034	2,368	334	16.4%
12.3%	2,002	2,084	82	4.1%
13.6%	1,957	2,020	63	3.2%
14.8%	1,918	2,007	88	4.6%
16.0%	1,819	1,985	166	9.1%
17.3%	1,800	1,936	136	7.6%
18.5%	1,658	1,927	269	16.2%
19.8%	1,657	1,910	253	15.3%
21.0%	1,568	1,827	259	16.5%
22.2%	1,542	1,786	244	15.8%
23.5%	1,503	1,776	273	18.2%
24.7%	1,500	1,685	185	12.3%
25.9%	1,500	1,528	28	1.8%
27.2%	1,500	1,500	0	0.0%
28.4%	1,500	1,500	0	0.0%
29.6%	1,500	1,500	0	0.0%
30.9%	1,500	1,500	0	0.0%
32.1%	1,500	1,500	0	0.0%
33.3%	1,500	1,500	0	0.0%
34.6%	1,500	1,500	0	0.0%
35.8%	1,500	1,500	0	0.0%
37.0%	1,500	1,500	0	0.0%
38.3%	1,500	1,500	0	0.0%
39.5%	1,500	1,500	0	0.0%
40.7%	1,500	1,500	0	0.0%
42.0%	1,500	1,500	0	0.0%
43.2%	1,500	1,500	0	0.0%
44.4%	1,500	1,500	0	0.0%
45.7%	1,500	1,500	0	0.0%
46.9%	1,500	1,500	0	0.0%
48.1%	1,500	1,500	0	0.0%
49.4%	1,500	1,500	0	0.0%
50.6%	1,500	1,500	0	0.0%
51.9%	1,500	1,500	0	0.0%
53.1%	1,500	1,500	0	0.0%
54.3%	1,500	1,500	0	0.0%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,500	1,500	0	0.0%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,486	1,500	14	0.9%
69.1%	1,478	1,500	22	1.5%
70.4%	1,472	1,500	28	1.9%
71.6%	1,464	1,491	28	1.9%
72.8%	1,416	1,480	64	4.5%
74.1%	1,386	1,422	37	2.6%
75.3%	1,362	1,411	49	3.6%
76.5%	1,265	1,391	125	9.9%
77.8%	1,151	1,318	167	14.5%
79.0%	1,101	1,311	210	19.1%
80.2%	1,029	1,262	232	22.6%
81.5%	998	1,256	259	25.9%
82.7%	957	1,217	260	27.1%
84.0%	889	1,155	266	30.0%
85.2%	832	994	162	19.5%
86.4%	820	919	99	12.0%
87.7%	800	907	107	13.4%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	532	800	268	50.4%
98.8%	512	534	22	4.2%
100.0%	481	482	2	0.4%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,486	21,825	1,339	6.5%
1.2%	15,475	14,705	-770	-5.0%
2.5%	8,186	8,924	738	9.0%
3.7%	6,576	7,565	990	15.0%
4.9%	5,452	6,547	1,095	20.1%
6.2%	5,414	5,633	219	4.0%
7.4%	5,000	5,000	0	0.0%
8.6%	4,536	4,461	-75	-1.6%
9.9%	4,461	4,378	-83	-1.9%
11.1%	4,459	4,064	-395	-8.9%
12.3%	3,703	3,955	252	6.8%
13.6%	3,651	3,697	46	1.3%
14.8%	3,648	3,470	-178	-4.9%
16.0%	3,146	3,419	273	8.7%
17.3%	3,124	3,372	249	8.0%
18.5%	3,117	3,219	101	3.2%
19.8%	3,077	3,186	109	3.5%
21.0%	2,865	3,184	318	11.1%
22.2%	2,854	3,157	303	10.6%
23.5%	2,838	3,053	216	7.6%
24.7%	2,742	2,908	167	6.1%
25.9%	2,563	2,837	274	10.7%
27.2%	2,561	2,641	80	3.1%
28.4%	2,526	2,342	-183	-7.3%
29.6%	2,415	2,304	-111	-4.6%
30.9%	2,373	2,265	-107	-4.5%
32.1%	1,929	2,228	299	15.5%
33.3%	1,925	1,943	18	0.9%
34.6%	1,925	1,925	0	0.0%
35.8%	1,925	1,925	0	0.0%
37.0%	1,925	1,925	0	0.0%
38.3%	1,925	1,925	0	0.0%
39.5%	1,752	1,925	173	9.9%
40.7%	1,734	1,925	191	11.0%
42.0%	1,725	1,925	200	11.6%
43.2%	1,717	1,909	192	11.2%
44.4%	1,715	1,890	175	10.2%
45.7%	1,704	1,882	177	10.4%
46.9%	1,683	1,881	197	11.7%
48.1%	1,683	1,795	112	6.6%
49.4%	1,683	1,771	87	5.2%
50.6%	1,683	1,763	80	4.8%
51.9%	1,683	1,739	55	3.3%
53.1%	1,683	1,683	0	0.0%
54.3%	1,683	1,683	0	0.0%
55.6%	1,626	1,683	57	3.5%
56.8%	1,624	1,683	59	3.7%
58.0%	1,619	1,683	64	4.0%
59.3%	1,610	1,683	73	4.5%
60.5%	1,607	1,683	76	4.8%
61.7%	1,570	1,683	113	7.2%
63.0%	1,569	1,683	114	7.3%
64.2%	1,567	1,683	117	7.5%
65.4%	1,562	1,666	104	6.6%
66.7%	1,558	1,607	50	3.2%
67.9%	1,547	1,590	43	2.8%
69.1%	1,486	1,515	29	2.0%
70.4%	1,478	1,510	31	2.1%
71.6%	1,472	1,491	20	1.3%
72.8%	1,464	1,480	16	1.1%
74.1%	1,416	1,422	6	0.4%
75.3%	1,386	1,411	26	1.9%
76.5%	1,362	1,318	-44	-3.2%
77.8%	1,265	1,311	46	3.6%
79.0%	1,151	1,262	110	9.6%
80.2%	1,101	1,256	155	14.1%
81.5%	1,029	1,217	187	18.2%
82.7%	998	1,172	174	17.5%
84.0%	957	1,021	64	6.7%
85.2%	889	933	45	5.0%
86.4%	832	919	87	10.5%
87.7%	800	907	107	13.4%
88.9%	800	843	43	5.3%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	532	800	268	50.4%
98.8%	500	800	300	60.0%
100.0%	500	500	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,259	21,704	445	2.1%
1.2%	20,729	20,730	1	0.0%
2.5%	20,431	20,699	268	1.3%
3.7%	19,569	19,789	219	1.1%
4.9%	19,398	19,398	0	0.0%
6.2%	17,702	17,702	0	0.0%
7.4%	17,634	17,632	-2	0.0%
8.6%	13,586	13,584	-2	0.0%
9.9%	13,234	12,779	-455	-3.4%
11.1%	9,336	9,351	16	0.2%
12.3%	8,417	7,432	-985	-11.7%
13.6%	6,349	6,349	0	0.0%
14.8%	5,288	5,205	-83	-1.6%
16.0%	5,197	5,110	-86	-1.7%
17.3%	5,157	4,414	-742	-14.4%
18.5%	4,823	4,012	-811	-16.8%
19.8%	4,020	3,938	-82	-2.0%
21.0%	3,656	3,760	104	2.8%
22.2%	3,571	3,588	16	0.5%
23.5%	3,394	3,571	177	5.2%
24.7%	3,354	3,555	200	6.0%
25.9%	3,272	3,273	1	0.0%
27.2%	3,254	3,272	18	0.6%
28.4%	3,158	2,833	-325	-10.3%
29.6%	3,092	2,826	-266	-8.6%
30.9%	2,833	2,702	-131	-4.6%
32.1%	2,515	2,586	70	2.8%
33.3%	2,243	2,519	276	12.3%
34.6%	2,197	2,303	106	4.8%
35.8%	2,123	2,166	43	2.0%
37.0%	2,080	2,076	-4	-0.2%
38.3%	2,076	2,000	-76	-3.6%
39.5%	2,011	2,000	-11	-0.6%
40.7%	2,000	2,000	0	0.0%
42.0%	2,000	2,000	0	0.0%
43.2%	2,000	2,000	0	0.0%
44.4%	2,000	2,000	0	0.0%
45.7%	2,000	2,000	0	0.0%
46.9%	2,000	2,000	0	0.0%
48.1%	2,000	2,000	0	0.0%
49.4%	2,000	2,000	0	0.0%
50.6%	2,000	2,000	0	0.0%
51.9%	2,000	2,000	0	0.0%
53.1%	2,000	2,000	0	0.0%
54.3%	2,000	2,000	0	0.0%
55.6%	2,000	2,000	0	0.0%
56.8%	1,902	1,983	81	4.3%
58.0%	1,793	1,964	171	9.5%
59.3%	1,772	1,954	182	10.3%
60.5%	1,750	1,884	134	7.6%
61.7%	1,750	1,865	115	6.6%
63.0%	1,750	1,840	90	5.2%
64.2%	1,750	1,833	83	4.7%
65.4%	1,750	1,750	0	0.0%
66.7%	1,750	1,750	0	0.0%
67.9%	1,672	1,750	78	4.7%
69.1%	1,651	1,750	99	6.0%
70.4%	1,646	1,750	104	6.3%
71.6%	1,596	1,750	154	9.6%
72.8%	1,591	1,750	159	10.0%
74.1%	1,585	1,623	38	2.4%
75.3%	1,564	1,572	8	0.5%
76.5%	1,478	1,521	43	2.9%
77.8%	1,473	1,513	40	2.7%
79.0%	1,472	1,491	20	1.3%
80.2%	1,464	1,422	-42	-2.8%
81.5%	1,416	1,411	-5	-0.3%
82.7%	1,265	1,318	53	4.2%
84.0%	1,151	1,311	160	13.9%
85.2%	1,109	1,262	152	13.7%
86.4%	1,101	1,217	115	10.5%
87.7%	1,029	1,021	-8	-0.8%
88.9%	998	964	-34	-3.4%
90.1%	957	907	-50	-5.3%
91.4%	832	800	-32	-3.8%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	638	800	162	25.5%
100.0%	517	517	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,803	35,803	0	0.0%
1.2%	30,114	30,047	-68	-0.2%
2.5%	25,484	25,484	0	0.0%
3.7%	22,871	22,871	0	0.0%
4.9%	22,836	22,838	2	0.0%
6.2%	21,271	21,271	0	0.0%
7.4%	19,873	20,225	352	1.8%
8.6%	17,319	17,319	0	0.0%
9.9%	15,253	15,251	-2	0.0%
11.1%	15,163	14,939	-224	-1.5%
12.3%	14,540	14,538	-2	0.0%
13.6%	13,512	13,512	0	0.0%
14.8%	11,272	11,273	1	0.0%
16.0%	10,710	10,710	0	0.0%
17.3%	10,630	10,630	0	0.0%
18.5%	10,040	10,040	0	0.0%
19.8%	9,708	9,708	0	0.0%
21.0%	9,472	9,472	0	0.0%
22.2%	8,879	8,739	-139	-1.6%
23.5%	8,739	8,600	-139	-1.6%
24.7%	8,405	8,388	-17	-0.2%
25.9%	8,286	8,287	0	0.0%
27.2%	7,523	7,523	0	0.0%
28.4%	7,180	7,178	-2	0.0%
29.6%	6,818	6,818	0	0.0%
30.9%	6,628	6,628	0	0.0%
32.1%	6,568	6,529	-39	-0.6%
33.3%	6,238	6,238	0	0.0%
34.6%	6,068	5,982	-86	-1.4%
35.8%	5,893	5,893	0	0.0%
37.0%	5,070	5,150	81	1.6%
38.3%	4,367	5,093	726	16.6%
39.5%	4,200	4,962	762	18.1%
40.7%	4,198	4,201	3	0.1%
42.0%	4,045	3,997	-48	-1.2%
43.2%	3,896	3,854	-41	-1.1%
44.4%	3,561	3,790	229	6.4%
45.7%	3,296	3,296	0	0.0%
46.9%	2,725	3,054	329	12.1%
48.1%	2,467	2,998	532	21.6%
49.4%	2,187	2,810	622	28.5%
50.6%	2,129	2,727	598	28.1%
51.9%	2,126	2,187	61	2.9%
53.1%	2,006	2,129	122	6.1%
54.3%	1,908	1,975	67	3.5%
55.6%	1,750	1,908	158	9.0%
56.8%	1,750	1,750	0	0.0%
58.0%	1,700	1,750	50	2.9%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,564	1,700	136	8.7%
72.8%	1,524	1,669	145	9.5%
74.1%	1,511	1,661	150	9.9%
75.3%	1,506	1,564	58	3.9%
76.5%	1,488	1,558	70	4.7%
77.8%	1,488	1,488	0	0.0%
79.0%	1,488	1,488	0	0.0%
80.2%	1,488	1,488	0	0.0%
81.5%	1,421	1,488	66	4.7%
82.7%	1,413	1,488	75	5.3%
84.0%	1,403	1,467	64	4.6%
85.2%	1,353	1,379	26	1.9%
86.4%	1,352	1,311	-41	-3.0%
87.7%	1,257	1,258	1	0.1%
88.9%	1,244	1,209	-35	-2.8%
90.1%	936	1,200	263	28.1%
91.4%	848	1,120	272	32.1%
92.6%	800	868	68	8.5%
93.8%	800	859	59	7.4%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	431	430	-1	-0.1%

Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	37,373	37,373	0	0.0%
1.2%	25,591	25,591	0	0.0%
2.5%	25,407	25,407	0	0.0%
3.7%	19,180	19,180	0	0.0%
4.9%	18,460	18,460	0	0.0%
6.2%	18,150	18,150	0	0.0%
7.4%	18,129	18,129	0	0.0%
8.6%	17,758	17,935	177	1.0%
9.9%	17,245	17,245	0	0.0%
11.1%	16,718	16,718	0	0.0%
12.3%	16,581	16,582	1	0.0%
13.6%	16,008	16,008	0	0.0%
14.8%	15,500	15,498	-3	0.0%
16.0%	15,213	14,956	-257	-1.7%
17.3%	14,325	14,326	1	0.0%
18.5%	14,291	14,291	0	0.0%
19.8%	14,168	14,168	0	0.0%
21.0%	12,945	12,941	-4	0.0%
22.2%	12,924	12,393	-531	-4.1%
23.5%	12,166	12,165	0	0.0%
24.7%	11,481	11,550	69	0.6%
25.9%	11,171	11,171	0	0.0%
27.2%	10,830	10,830	0	0.0%
28.4%	10,712	10,712	0	0.0%
29.6%	8,708	8,708	0	0.0%
30.9%	8,697	8,697	1	0.0%
32.1%	8,364	8,364	0	0.0%
33.3%	7,499	7,499	0	0.0%
34.6%	7,472	7,474	3	0.0%
35.8%	7,239	7,240	1	0.0%
37.0%	7,193	7,193	0	0.0%
38.3%	7,079	7,080	1	0.0%
39.5%	6,932	6,933	0	0.0%
40.7%	6,796	6,932	137	2.0%
42.0%	6,761	6,734	-27	-0.4%
43.2%	6,134	6,132	-3	0.0%
44.4%	6,130	6,130	0	0.0%
45.7%	6,106	6,106	0	0.0%
46.9%	6,049	6,047	-2	0.0%
48.1%	5,566	5,566	1	0.0%
49.4%	5,503	5,247	-256	-4.6%
50.6%	5,247	4,886	-361	-6.9%
51.9%	4,656	4,657	0	0.0%
53.1%	4,175	4,032	-143	-3.4%
54.3%	4,032	3,983	-50	-1.2%
55.6%	3,910	3,910	0	0.0%
56.8%	3,808	3,645	-162	-4.3%
58.0%	3,645	3,579	-67	-1.8%
59.3%	3,578	3,374	-204	-5.7%
60.5%	3,550	3,093	-457	-12.9%
61.7%	3,500	3,076	-424	-12.1%
63.0%	3,060	2,784	-276	-9.0%
64.2%	2,963	2,684	-279	-9.4%
65.4%	2,767	2,509	-257	-9.3%
66.7%	2,684	2,463	-220	-8.2%
67.9%	2,466	2,400	-65	-2.7%
69.1%	2,400	2,393	-7	-0.3%
70.4%	2,333	2,333	0	0.0%
71.6%	2,163	2,163	0	0.0%
72.8%	1,750	1,938	188	10.7%
74.1%	1,574	1,750	176	11.2%
75.3%	1,564	1,516	-48	-3.1%
76.5%	1,445	1,445	0	0.0%
77.8%	1,445	1,445	0	0.0%
79.0%	1,445	1,445	0	0.0%
80.2%	1,445	1,445	0	0.0%
81.5%	1,445	1,445	0	0.0%
82.7%	1,445	1,445	0	0.0%
84.0%	1,445	1,445	0	0.0%
85.2%	1,296	1,419	123	9.5%
86.4%	1,280	1,330	50	3.9%
87.7%	1,264	1,324	60	4.7%
88.9%	1,264	1,311	47	3.7%
90.1%	1,264	1,264	0	0.0%
91.4%	1,208	1,264	56	4.7%
92.6%	1,193	1,264	72	6.0%
93.8%	1,149	1,264	115	10.0%
95.1%	1,068	1,264	196	18.4%
96.3%	1,058	1,172	115	10.9%
97.5%	991	952	-39	-3.9%
98.8%	419	419	0	0.0%
100.0%	375	375	0	0.0%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,972	20,972	0	0.0%
1.2%	20,170	20,170	0	0.0%
2.5%	18,987	18,987	0	0.0%
3.7%	16,797	16,797	0	0.0%
4.9%	14,188	14,188	0	0.0%
6.2%	12,985	12,985	0	0.0%
7.4%	12,778	12,779	1	0.0%
8.6%	12,180	12,181	0	0.0%
9.9%	12,169	12,169	0	0.0%
11.1%	11,200	11,187	-13	-0.1%
12.3%	10,110	10,105	-5	0.0%
13.6%	9,344	9,725	380	4.1%
14.8%	9,198	9,344	146	1.6%
16.0%	8,964	8,966	2	0.0%
17.3%	8,949	8,949	0	0.0%
18.5%	8,386	8,386	0	0.0%
19.8%	8,260	8,259	-1	0.0%
21.0%	7,840	7,840	0	0.0%
22.2%	7,670	7,671	1	0.0%
23.5%	7,601	7,601	1	0.0%
24.7%	7,580	7,580	0	0.0%
25.9%	6,717	6,695	-21	-0.3%
27.2%	6,695	6,569	-127	-1.9%
28.4%	6,533	6,531	-2	0.0%
29.6%	6,396	6,396	0	0.0%
30.9%	5,914	5,909	-5	-0.1%
32.1%	5,673	5,675	2	0.0%
33.3%	5,627	5,626	-1	0.0%
34.6%	5,454	5,452	-2	0.0%
35.8%	5,357	5,357	0	0.0%
37.0%	5,275	5,132	-143	-2.7%
38.3%	5,132	5,065	-67	-1.3%
39.5%	5,001	5,001	0	0.0%
40.7%	5,000	4,901	-99	-2.0%
42.0%	4,861	4,861	0	0.0%
43.2%	4,663	4,663	0	0.0%
44.4%	4,517	4,517	0	0.0%
45.7%	4,448	4,448	0	0.0%
46.9%	4,054	4,054	0	0.0%
48.1%	3,958	3,958	0	0.0%
49.4%	3,862	3,918	56	1.5%
50.6%	3,815	3,864	49	1.3%
51.9%	3,766	3,815	49	1.3%
53.1%	3,762	3,763	1	0.0%
54.3%	3,508	3,762	254	7.2%
55.6%	3,498	3,507	8	0.2%
56.8%	3,300	3,498	198	6.0%
58.0%	3,294	3,300	6	0.2%
59.3%	3,212	3,294	82	2.6%
60.5%	3,190	3,212	21	0.7%
61.7%	3,051	3,051	0	0.0%
63.0%	2,778	2,714	-64	-2.3%
64.2%	2,716	2,385	-331	-12.2%
65.4%	2,247	2,247	0	0.0%
66.7%	2,173	2,173	0	0.0%
67.9%	1,881	2,100	220	11.7%
69.1%	1,817	1,881	64	3.5%
70.4%	1,750	1,772	22	1.3%
71.6%	1,750	1,750	0	0.0%
72.8%	1,750	1,750	0	0.0%
74.1%	1,750	1,750	0	0.0%
75.3%	1,721	1,750	29	1.7%
76.5%	1,695	1,729	34	2.0%
77.8%	1,488	1,721	233	15.7%
79.0%	1,296	1,696	400	30.9%
80.2%	1,288	1,508	220	17.1%
81.5%	1,243	1,445	202	16.3%
82.7%	951	951	0	0.0%
84.0%	849	810	-40	-4.7%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	416	518	103	24.7%
100.0%	401	417	16	3.9%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,267	19,267	0	0.0%
1.2%	16,960	16,961	1	0.0%
2.5%	11,843	11,840	-3	0.0%
3.7%	10,315	10,323	8	0.1%
4.9%	9,315	9,315	0	0.0%
6.2%	8,270	8,270	1	0.0%
7.4%	8,048	8,049	1	0.0%
8.6%	7,221	7,221	0	0.0%
9.9%	6,839	6,839	0	0.0%
11.1%	6,753	6,753	0	0.0%
12.3%	6,471	6,471	0	0.0%
13.6%	6,422	6,422	0	0.0%
14.8%	6,380	6,380	0	0.0%
16.0%	6,160	6,160	0	0.0%
17.3%	5,755	5,750	-4	-0.1%
18.5%	5,331	5,331	0	0.0%
19.8%	5,215	5,216	2	0.0%
21.0%	4,771	4,771	0	0.0%
22.2%	4,677	4,679	2	0.0%
23.5%	4,592	4,592	0	0.0%
24.7%	4,373	4,373	0	0.0%
25.9%	4,373	4,362	-10	-0.2%
27.2%	3,993	3,993	0	0.0%
28.4%	3,750	3,753	3	0.1%
29.6%	3,548	3,545	-3	-0.1%
30.9%	3,108	3,108	0	0.0%
32.1%	3,106	3,105	0	0.0%
33.3%	2,994	2,994	0	0.0%
34.6%	2,989	2,989	0	0.0%
35.8%	2,802	2,911	110	3.9%
37.0%	2,527	2,799	273	10.8%
38.3%	2,506	2,527	20	0.8%
39.5%	2,436	2,432	-4	-0.2%
40.7%	2,432	2,421	-11	-0.4%
42.0%	2,421	2,357	-65	-2.7%
43.2%	2,355	1,950	-405	-17.2%
44.4%	2,095	1,750	-345	-16.5%
45.7%	1,968	1,750	-218	-11.1%
46.9%	1,750	1,750	0	0.0%
48.1%	1,750	1,750	0	0.0%
49.4%	1,750	1,750	0	0.0%
50.6%	1,750	1,750	0	0.0%
51.9%	1,750	1,750	0	0.0%
53.1%	1,750	1,750	0	0.0%
54.3%	1,750	1,721	-29	-1.7%
55.6%	1,750	1,707	-43	-2.5%
56.8%	1,724	1,669	-55	-3.2%
58.0%	1,721	1,663	-58	-3.4%
59.3%	1,707	1,657	-50	-2.9%
60.5%	1,608	1,607	-1	0.0%
61.7%	1,600	1,508	-92	-5.8%
63.0%	1,488	1,445	-43	-2.9%
64.2%	1,401	1,413	12	0.8%
65.4%	1,311	1,401	90	6.9%
66.7%	1,296	1,384	88	6.8%
67.9%	1,279	1,375	95	7.5%
69.1%	1,269	1,358	89	7.0%
70.4%	1,210	1,311	102	8.4%
71.6%	1,206	1,301	95	7.9%
72.8%	1,176	1,270	94	8.0%
74.1%	1,141	1,210	69	6.0%
75.3%	1,127	1,176	49	4.4%
76.5%	1,101	1,141	40	3.6%
77.8%	1,057	1,114	57	5.4%
79.0%	1,007	1,101	94	9.4%
80.2%	951	1,057	106	11.1%
81.5%	939	1,020	81	8.6%
82.7%	927	1,000	73	7.9%
84.0%	882	1,000	118	13.4%
85.2%	800	1,000	200	25.0%
86.4%	800	1,000	200	25.0%
87.7%	800	1,000	200	25.0%
88.9%	800	1,000	200	25.0%
90.1%	800	1,000	200	25.0%
91.4%	800	1,000	200	25.0%
92.6%	800	1,000	200	25.0%
93.8%	800	951	151	18.9%
95.1%	800	854	54	6.7%
96.3%	800	841	41	5.1%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	360	800	440	122.1%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,589	8,590	1	0.0%
1.2%	7,932	7,932	0	0.0%
2.5%	5,924	5,924	0	0.0%
3.7%	5,478	5,478	0	0.0%
4.9%	5,464	5,464	0	0.0%
6.2%	4,112	4,112	0	0.0%
7.4%	3,937	3,937	0	0.0%
8.6%	3,756	3,756	0	0.0%
9.9%	3,753	3,753	0	0.0%
11.1%	3,123	3,123	0	0.0%
12.3%	2,898	3,104	206	7.1%
13.6%	2,796	2,796	0	0.0%
14.8%	2,792	2,792	0	0.0%
16.0%	2,768	2,768	0	0.0%
17.3%	2,394	2,425	31	1.3%
18.5%	2,382	2,329	-52	-2.2%
19.8%	2,329	2,194	-135	-5.8%
21.0%	2,197	2,154	-43	-2.0%
22.2%	2,159	2,002	-157	-7.3%
23.5%	2,006	1,934	-72	-3.6%
24.7%	1,919	1,925	6	0.3%
25.9%	1,886	1,911	25	1.3%
27.2%	1,868	1,842	-27	-1.4%
28.4%	1,859	1,800	-59	-3.2%
29.6%	1,750	1,750	0	0.0%
30.9%	1,750	1,750	0	0.0%
32.1%	1,750	1,750	0	0.0%
33.3%	1,750	1,750	0	0.0%
34.6%	1,750	1,750	0	0.0%
35.8%	1,750	1,750	0	0.0%
37.0%	1,750	1,750	0	0.0%
38.3%	1,750	1,750	0	0.0%
39.5%	1,750	1,750	0	0.0%
40.7%	1,750	1,750	0	0.0%
42.0%	1,750	1,750	0	0.0%
43.2%	1,750	1,750	0	0.0%
44.4%	1,750	1,750	0	0.0%
45.7%	1,750	1,750	0	0.0%
46.9%	1,750	1,750	0	0.0%
48.1%	1,750	1,750	0	0.0%
49.4%	1,721	1,750	29	1.7%
50.6%	1,707	1,721	14	0.8%
51.9%	1,575	1,707	132	8.4%
53.1%	1,493	1,575	82	5.5%
54.3%	1,401	1,445	44	3.1%
55.6%	1,296	1,401	105	8.1%
56.8%	1,229	1,394	165	13.5%
58.0%	1,210	1,340	130	10.8%
59.3%	1,206	1,245	39	3.2%
60.5%	1,185	1,245	60	5.1%
61.7%	1,184	1,245	61	5.2%
63.0%	1,183	1,245	62	5.2%
64.2%	1,182	1,245	64	5.4%
65.4%	1,176	1,245	69	5.9%
66.7%	1,163	1,245	82	7.1%
67.9%	1,159	1,245	86	7.5%
69.1%	1,141	1,245	104	9.2%
70.4%	1,091	1,245	155	14.2%
71.6%	1,068	1,245	177	16.6%
72.8%	1,067	1,245	178	16.7%
74.1%	1,057	1,217	160	15.1%
75.3%	1,043	1,210	167	16.0%
76.5%	1,011	1,190	179	17.8%
77.8%	997	1,189	192	19.3%
79.0%	951	1,185	233	24.5%
80.2%	939	1,185	245	26.1%
81.5%	917	1,179	262	28.6%
82.7%	882	1,172	290	32.9%
84.0%	838	1,142	304	36.2%
85.2%	817	1,126	309	37.9%
86.4%	800	1,093	293	36.6%
87.7%	800	1,013	213	26.6%
88.9%	800	971	171	21.3%
90.1%	800	968	168	21.0%
91.4%	800	938	138	17.2%
92.6%	800	897	97	12.1%
93.8%	800	836	36	4.6%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	305	506	200	65.6%

Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,335	3,640	-695	-16.0%
1.2%	4,140	3,247	-893	-21.6%
2.5%	3,902	2,921	-981	-25.2%
3.7%	3,758	2,850	-908	-24.2%
4.9%	3,687	2,713	-975	-26.4%
6.2%	3,154	2,703	-452	-14.3%
7.4%	2,909	2,641	-268	-9.2%
8.6%	2,856	2,630	-226	-7.9%
9.9%	2,850	2,630	-220	-7.7%
11.1%	2,630	2,625	-5	-0.2%
12.3%	2,451	2,558	107	4.4%
13.6%	2,357	2,451	94	4.0%
14.8%	2,312	2,357	45	1.9%
16.0%	2,250	2,250	0	0.0%
17.3%	2,216	2,209	-8	-0.3%
18.5%	2,151	2,200	49	2.3%
19.8%	2,109	2,192	83	3.9%
21.0%	2,093	2,149	56	2.7%
22.2%	2,083	2,093	10	0.5%
23.5%	2,046	2,083	37	1.8%
24.7%	2,021	2,048	26	1.3%
25.9%	1,985	2,020	35	1.8%
27.2%	1,979	2,011	32	1.6%
28.4%	1,978	1,992	14	0.7%
29.6%	1,964	1,963	-1	-0.1%
30.9%	1,963	1,908	-55	-2.8%
32.1%	1,922	1,843	-79	-4.1%
33.3%	1,819	1,760	-59	-3.2%
34.6%	1,777	1,750	-27	-1.5%
35.8%	1,750	1,750	0	0.0%
37.0%	1,750	1,750	0	0.0%
38.3%	1,750	1,750	0	0.0%
39.5%	1,750	1,750	0	0.0%
40.7%	1,750	1,750	0	0.0%
42.0%	1,750	1,750	0	0.0%
43.2%	1,750	1,750	0	0.0%
44.4%	1,750	1,750	0	0.0%
45.7%	1,750	1,750	0	0.0%
46.9%	1,750	1,750	0	0.0%
48.1%	1,750	1,750	0	0.0%
49.4%	1,750	1,750	0	0.0%
50.6%	1,750	1,750	0	0.0%
51.9%	1,750	1,750	0	0.0%
53.1%	1,750	1,750	0	0.0%
54.3%	1,750	1,707	-43	-2.5%
55.6%	1,750	1,594	-156	-8.9%
56.8%	1,707	1,575	-132	-7.7%
58.0%	1,651	1,569	-81	-4.9%
59.3%	1,583	1,567	-15	-1.0%
60.5%	1,575	1,565	-10	-0.7%
61.7%	1,550	1,563	13	0.8%
63.0%	1,516	1,552	36	2.4%
64.2%	1,512	1,535	23	1.6%
65.4%	1,422	1,532	110	7.8%
66.7%	1,401	1,527	125	9.0%
67.9%	1,358	1,523	164	12.1%
69.1%	1,353	1,521	168	12.4%
70.4%	1,229	1,521	292	23.8%
71.6%	1,210	1,520	311	25.7%
72.8%	1,209	1,519	310	25.7%
74.1%	1,176	1,515	339	28.9%
75.3%	1,163	1,503	340	29.2%
76.5%	1,154	1,493	339	29.4%
77.8%	1,141	1,481	341	29.9%
79.0%	1,128	1,437	309	27.4%
80.2%	1,124	1,401	277	24.6%
81.5%	1,067	1,381	314	29.5%
82.7%	1,057	1,345	288	27.2%
84.0%	1,053	1,334	281	26.7%
85.2%	1,011	1,289	279	27.6%
86.4%	951	1,258	306	32.2%
87.7%	951	1,228	277	29.1%
88.9%	909	1,200	291	32.1%
90.1%	896	1,124	227	25.4%
91.4%	844	1,083	238	28.2%
92.6%	838	962	124	14.8%
93.8%	828	904	76	9.2%
95.1%	800	889	89	11.2%
96.3%	779	800	21	2.7%
97.5%	621	646	25	4.0%
98.8%	517	564	47	9.2%
100.0%	357	437	80	22.4%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,000	5,000	0	0.0%
1.2%	5,000	5,000	0	0.0%
2.5%	5,000	5,000	0	0.0%
3.7%	5,000	5,000	0	0.0%
4.9%	5,000	5,000	0	0.0%
6.2%	5,000	5,000	0	0.0%
7.4%	5,000	5,000	0	0.0%
8.6%	5,000	5,000	0	0.0%
9.9%	5,000	5,000	0	0.0%
11.1%	5,000	5,000	0	0.0%
12.3%	5,000	4,788	-212	-4.2%
13.6%	5,000	4,695	-305	-6.1%
14.8%	5,000	4,690	-310	-6.2%
16.0%	5,000	4,395	-605	-12.1%
17.3%	5,000	4,367	-633	-12.7%
18.5%	5,000	4,365	-635	-12.7%
19.8%	5,000	4,288	-712	-14.2%
21.0%	5,000	4,278	-722	-14.4%
22.2%	5,000	4,127	-873	-17.5%
23.5%	5,000	4,020	-980	-19.6%
24.7%	5,000	3,961	-1,039	-20.8%
25.9%	5,000	3,847	-1,153	-23.1%
27.2%	5,000	3,725	-1,275	-25.5%
28.4%	4,929	3,696	-1,233	-25.0%
29.6%	4,814	3,591	-1,223	-25.4%
30.9%	4,683	3,562	-1,121	-23.9%
32.1%	4,588	3,409	-1,179	-25.7%
33.3%	4,537	3,366	-1,171	-25.8%
34.6%	4,444	3,316	-1,128	-25.4%
35.8%	4,348	3,148	-1,200	-27.6%
37.0%	4,230	2,975	-1,255	-29.7%
38.3%	4,189	2,973	-1,217	-29.0%
39.5%	4,175	2,967	-1,208	-28.9%
40.7%	4,095	2,855	-1,240	-30.3%
42.0%	4,052	2,839	-1,213	-29.9%
43.2%	3,918	2,824	-1,094	-27.9%
44.4%	3,725	2,756	-969	-26.0%
45.7%	3,712	2,660	-1,052	-28.4%
46.9%	3,654	2,612	-1,042	-28.5%
48.1%	3,558	2,564	-994	-27.9%
49.4%	3,432	2,533	-898	-26.2%
50.6%	3,397	2,488	-909	-26.7%
51.9%	3,370	2,466	-903	-26.8%
53.1%	3,332	2,464	-867	-26.0%
54.3%	3,188	2,438	-750	-23.5%
55.6%	3,171	2,432	-739	-23.3%
56.8%	3,123	2,417	-706	-22.6%
58.0%	3,097	2,408	-688	-22.2%
59.3%	2,883	2,400	-483	-16.8%
60.5%	2,866	2,397	-469	-16.4%
61.7%	2,795	2,395	-400	-14.3%
63.0%	2,787	2,394	-393	-14.1%
64.2%	2,740	2,373	-367	-13.4%
65.4%	2,631	2,367	-264	-10.0%
66.7%	2,610	2,363	-247	-9.5%
67.9%	2,566	2,362	-205	-8.0%
69.1%	2,556	2,351	-205	-8.0%
70.4%	2,533	2,350	-183	-7.2%
71.6%	2,408	2,345	-64	-2.6%
72.8%	2,388	2,331	-56	-2.4%
74.1%	2,378	2,329	-49	-2.1%
75.3%	2,375	1,999	-376	-15.8%
76.5%	1,856	1,993	137	7.4%
77.8%	1,835	1,990	155	8.5%
79.0%	1,818	1,989	171	9.4%
80.2%	1,815	1,987	173	9.5%
81.5%	1,776	1,981	205	11.6%
82.7%	1,750	1,841	91	5.2%
84.0%	1,750	1,826	76	4.3%
85.2%	1,750	1,760	10	0.6%
86.4%	1,750	1,659	-91	-5.2%
87.7%	1,743	1,601	-142	-8.1%
88.9%	1,717	1,596	-121	-7.1%
90.1%	1,512	1,496	-15	-1.0%
91.4%	1,415	1,415	0	0.0%
92.6%	1,215	1,344	129	10.6%
93.8%	1,124	1,246	122	10.8%
95.1%	1,082	1,169	87	8.0%
96.3%	1,008	1,156	148	14.7%
97.5%	891	1,138	246	27.6%
98.8%	699	723	24	3.4%
100.0%	517	395	-121	-23.5%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,363	2,956	-407	-12.1%
1.2%	2,882	2,783	-99	-3.4%
2.5%	2,782	2,614	-168	-6.0%
3.7%	2,772	2,533	-239	-8.6%
4.9%	2,749	2,361	-388	-14.1%
6.2%	2,576	2,339	-237	-9.2%
7.4%	2,483	2,321	-162	-6.5%
8.6%	2,301	2,302	1	0.1%
9.9%	2,288	2,002	-287	-12.5%
11.1%	2,014	2,000	-14	-0.7%
12.3%	2,009	2,000	-9	-0.4%
13.6%	1,927	2,000	73	3.8%
14.8%	1,829	1,999	170	9.3%
16.0%	1,789	1,999	210	11.7%
17.3%	1,776	1,998	222	12.5%
18.5%	1,775	1,997	222	12.5%
19.8%	1,750	1,992	242	13.8%
21.0%	1,750	1,982	232	13.3%
22.2%	1,750	1,944	194	11.1%
23.5%	1,750	1,856	106	6.1%
24.7%	1,750	1,840	90	5.1%
25.9%	1,750	1,834	84	4.8%
27.2%	1,750	1,813	63	3.6%
28.4%	1,750	1,793	43	2.5%
29.6%	1,750	1,792	42	2.4%
30.9%	1,750	1,791	41	2.3%
32.1%	1,750	1,755	5	0.3%
33.3%	1,750	1,750	0	0.0%
34.6%	1,750	1,750	0	0.0%
35.8%	1,750	1,750	0	0.0%
37.0%	1,750	1,750	0	0.0%
38.3%	1,750	1,750	0	0.0%
39.5%	1,750	1,750	0	0.0%
40.7%	1,750	1,750	0	0.0%
42.0%	1,750	1,750	0	0.0%
43.2%	1,750	1,750	0	0.0%
44.4%	1,750	1,737	-13	-0.8%
45.7%	1,750	1,707	-43	-2.5%
46.9%	1,750	1,659	-91	-5.2%
48.1%	1,750	1,654	-96	-5.5%
49.4%	1,750	1,605	-145	-8.3%
50.6%	1,750	1,599	-151	-8.6%
51.9%	1,707	1,598	-109	-6.4%
53.1%	1,706	1,586	-119	-7.0%
54.3%	1,575	1,585	9	0.6%
55.6%	1,518	1,575	57	3.7%
56.8%	1,512	1,545	33	2.2%
58.0%	1,446	1,535	88	6.1%
59.3%	1,440	1,516	76	5.3%
60.5%	1,401	1,515	114	8.1%
61.7%	1,285	1,496	212	16.5%
63.0%	1,240	1,447	207	16.7%
64.2%	1,235	1,401	166	13.5%
65.4%	1,229	1,352	123	10.0%
66.7%	1,228	1,331	103	8.4%
67.9%	1,210	1,326	116	9.6%
69.1%	1,192	1,320	128	10.7%
70.4%	1,176	1,320	144	12.2%
71.6%	1,163	1,264	101	8.7%
72.8%	1,141	1,259	119	10.4%
74.1%	1,107	1,181	74	6.6%
75.3%	1,071	1,172	101	9.4%
76.5%	1,067	1,163	96	9.0%
77.8%	1,057	1,156	99	9.3%
79.0%	1,046	1,133	88	8.4%
80.2%	951	1,105	153	16.1%
81.5%	882	1,075	194	22.0%
82.7%	882	1,057	176	19.9%
84.0%	800	1,003	203	25.4%
85.2%	800	1,002	202	25.2%
86.4%	800	989	189	23.7%
87.7%	800	951	151	18.9%
88.9%	800	887	87	10.9%
90.1%	800	882	82	10.2%
91.4%	800	852	52	6.5%
92.6%	800	828	28	3.4%
93.8%	800	822	22	2.8%
95.1%	800	800	0	0.0%
96.3%	699	796	97	13.8%
97.5%	517	737	220	42.6%
98.8%	439	647	208	47.3%
100.0%	363	509	146	40.2%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,000	4,944	-56	-1.1%
1.2%	5,000	4,793	-207	-4.1%
2.5%	5,000	4,736	-264	-5.3%
3.7%	5,000	4,717	-283	-5.7%
4.9%	5,000	4,629	-371	-7.4%
6.2%	4,798	3,901	-896	-18.7%
7.4%	4,035	3,757	-278	-6.9%
8.6%	3,489	3,385	-105	-3.0%
9.9%	3,445	3,304	-141	-4.1%
11.1%	3,281	2,999	-282	-8.6%
12.3%	3,245	2,952	-293	-9.0%
13.6%	2,983	2,905	-78	-2.6%
14.8%	2,966	2,860	-106	-3.6%
16.0%	2,954	2,811	-142	-4.8%
17.3%	2,821	2,779	-42	-1.5%
18.5%	2,727	2,702	-25	-0.9%
19.8%	2,685	2,685	0	0.0%
21.0%	2,665	2,647	-18	-0.7%
22.2%	2,572	2,595	23	0.9%
23.5%	2,551	2,522	-29	-1.1%
24.7%	2,458	2,377	-81	-3.3%
25.9%	2,432	2,264	-168	-6.9%
27.2%	2,278	2,250	-28	-1.2%
28.4%	2,159	1,959	-200	-9.3%
29.6%	1,953	1,888	-65	-3.3%
30.9%	1,940	1,857	-83	-4.3%
32.1%	1,819	1,815	-5	-0.3%
33.3%	1,785	1,750	-35	-2.0%
34.6%	1,733	1,688	-45	-2.6%
35.8%	1,687	1,650	-37	-2.2%
37.0%	1,588	1,650	62	3.9%
38.3%	1,533	1,650	117	7.6%
39.5%	1,533	1,650	117	7.6%
40.7%	1,533	1,650	117	7.6%
42.0%	1,533	1,623	90	5.9%
43.2%	1,533	1,603	69	4.5%
44.4%	1,533	1,533	0	0.0%
45.7%	1,533	1,533	0	0.0%
46.9%	1,533	1,533	0	0.0%
48.1%	1,528	1,533	6	0.4%
49.4%	1,514	1,533	19	1.3%
50.6%	1,512	1,528	16	1.1%
51.9%	1,510	1,514	4	0.3%
53.1%	1,480	1,502	22	1.5%
54.3%	1,470	1,496	26	1.8%
55.6%	1,371	1,478	107	7.8%
56.8%	1,303	1,462	159	12.2%
58.0%	1,235	1,415	180	14.5%
59.3%	1,229	1,410	181	14.7%
60.5%	1,210	1,404	194	16.1%
61.7%	1,206	1,401	195	16.2%
63.0%	1,184	1,389	205	17.3%
64.2%	1,176	1,317	141	12.0%
65.4%	1,115	1,299	184	16.5%
66.7%	1,067	1,257	190	17.8%
67.9%	1,057	1,235	178	16.8%
69.1%	1,022	1,234	211	20.7%
70.4%	1,018	1,210	192	18.8%
71.6%	1,011	1,196	186	18.4%
72.8%	939	1,190	250	26.7%
74.1%	882	1,155	273	31.0%
75.3%	828	1,141	313	37.8%
76.5%	800	1,134	334	41.8%
77.8%	800	1,121	321	40.2%
79.0%	800	1,057	257	32.2%
80.2%	800	1,054	254	31.7%
81.5%	800	1,039	239	29.9%
82.7%	800	1,037	237	29.6%
84.0%	800	1,018	218	27.2%
85.2%	800	1,012	212	26.5%
86.4%	800	957	157	19.7%
87.7%	800	931	131	16.3%
88.9%	800	867	67	8.4%
90.1%	800	830	30	3.7%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	699	800	101	14.4%
96.3%	517	729	213	41.2%
97.5%	476	689	213	44.7%
98.8%	461	554	93	20.2%
100.0%	375	400	25	6.7%

Figure SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

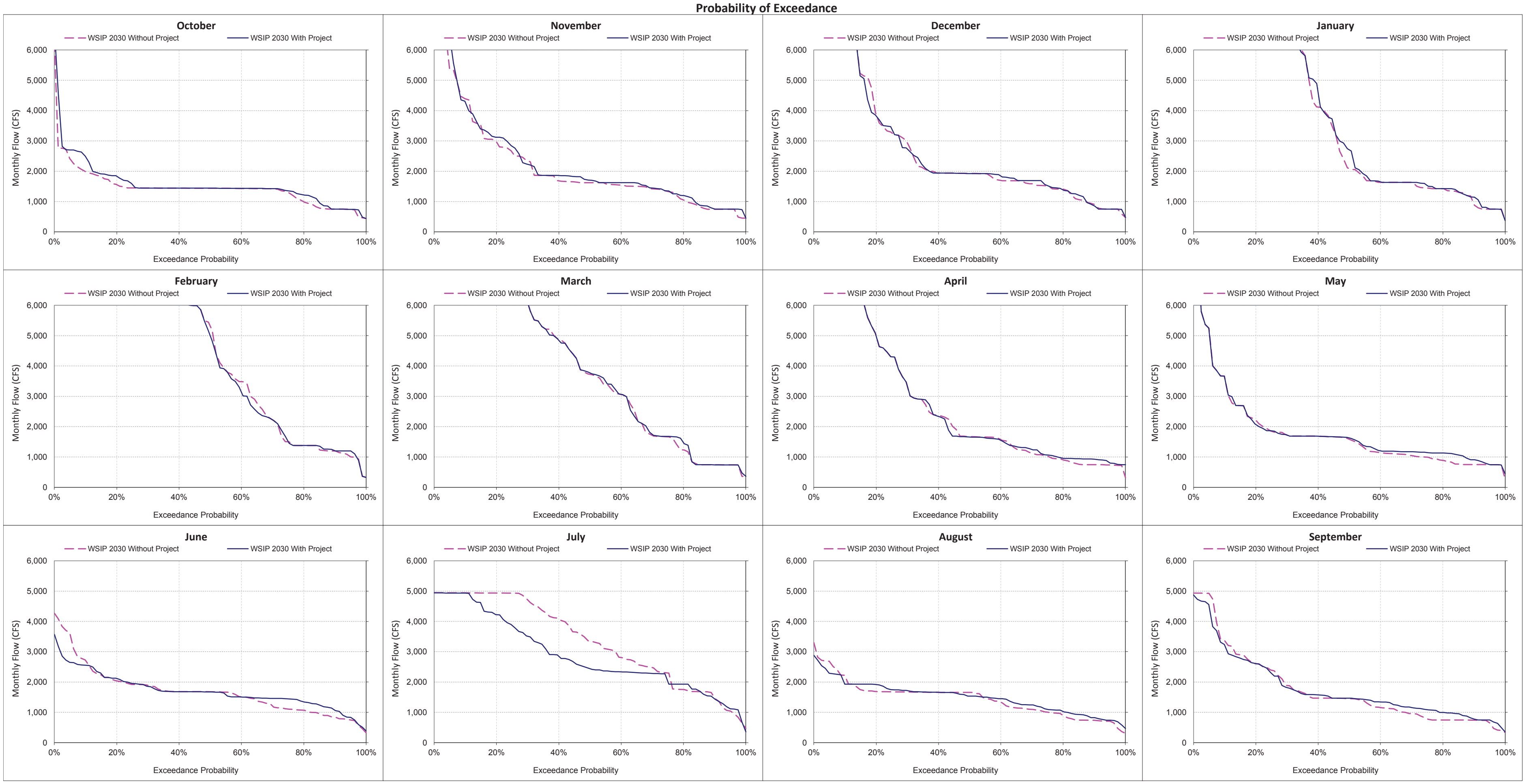


Table SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,243	6,698	455	7.3%
1.2%	2,762	4,566	1,804	65.3%
2.5%	2,761	2,822	60	2.2%
3.7%	2,732	2,710	-22	-0.8%
4.9%	2,417	2,699	281	11.6%
6.2%	2,252	2,698	446	19.8%
7.4%	2,144	2,662	518	24.2%
8.6%	2,064	2,630	565	27.4%
9.9%	1,993	2,495	502	25.2%
11.1%	1,942	2,296	353	18.2%
12.3%	1,911	1,993	82	4.3%
13.6%	1,865	1,957	92	4.9%
14.8%	1,836	1,918	82	4.5%
16.0%	1,749	1,904	155	8.9%
17.3%	1,726	1,867	141	8.1%
18.5%	1,588	1,856	267	16.8%
19.8%	1,568	1,852	284	18.1%
21.0%	1,504	1,770	266	17.7%
22.2%	1,488	1,697	209	14.0%
23.5%	1,448	1,687	238	16.4%
24.7%	1,448	1,597	148	10.2%
25.9%	1,448	1,463	15	1.0%
27.2%	1,448	1,444	-4	-0.3%
28.4%	1,447	1,442	-4	-0.3%
29.6%	1,444	1,442	-2	-0.1%
30.9%	1,444	1,442	-2	-0.1%
32.1%	1,444	1,442	-2	-0.1%
33.3%	1,443	1,442	-1	-0.1%
34.6%	1,443	1,442	-1	-0.1%
35.8%	1,442	1,442	-1	0.0%
37.0%	1,442	1,441	-1	0.0%
38.3%	1,442	1,441	-1	-0.1%
39.5%	1,442	1,441	-1	-0.1%
40.7%	1,442	1,440	-1	-0.1%
42.0%	1,441	1,440	-1	0.0%
43.2%	1,440	1,440	-1	-0.1%
44.4%	1,440	1,440	0	0.0%
45.7%	1,439	1,439	0	0.0%
46.9%	1,439	1,439	0	0.0%
48.1%	1,439	1,439	0	0.0%
49.4%	1,439	1,439	0	0.0%
50.6%	1,439	1,439	0	0.0%
51.9%	1,439	1,439	0	0.0%
53.1%	1,439	1,438	-1	0.0%
54.3%	1,439	1,438	-1	-0.1%
55.6%	1,437	1,438	1	0.1%
56.8%	1,437	1,438	1	0.1%
58.0%	1,431	1,438	7	0.5%
59.3%	1,430	1,438	8	0.6%
60.5%	1,430	1,438	8	0.6%
61.7%	1,429	1,437	8	0.6%
63.0%	1,429	1,436	8	0.5%
64.2%	1,427	1,435	8	0.6%
65.4%	1,425	1,432	6	0.4%
66.7%	1,424	1,430	6	0.4%
67.9%	1,422	1,429	7	0.5%
69.1%	1,421	1,427	6	0.4%
70.4%	1,420	1,427	7	0.5%
71.6%	1,405	1,423	18	1.2%
72.8%	1,355	1,404	48	3.6%
74.1%	1,334	1,367	33	2.5%
75.3%	1,284	1,351	67	5.2%
76.5%	1,199	1,335	136	11.3%
77.8%	1,100	1,261	161	14.7%
79.0%	1,050	1,241	191	18.2%
80.2%	978	1,209	231	23.6%
81.5%	937	1,204	267	28.5%
82.7%	907	1,149	242	26.7%
84.0%	828	1,103	275	33.2%
85.2%	780	942	162	20.8%
86.4%	769	859	91	11.8%
87.7%	754	855	101	13.4%
88.9%	748	750	2	0.3%
90.1%	748	750	1	0.2%
91.4%	748	748	0	0.0%
92.6%	748	746	-3	-0.3%
93.8%	748	744	-4	-0.6%
95.1%	739	743	5	0.6%
96.3%	728	739	12	1.6%
97.5%	487	728	241	49.5%
98.8%	467	487	20	4.2%
100.0%	439	439	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,423	21,762	1,339	6.6%
1.2%	15,410	14,633	-777	-5.0%
2.5%	8,123	8,858	734	9.0%
3.7%	6,522	7,504	982	15.1%
4.9%	5,386	6,484	1,099	20.4%
6.2%	5,352	5,568	217	4.1%
7.4%	4,925	4,926	1	0.0%
8.6%	4,467	4,351	-117	-2.6%
9.9%	4,392	4,313	-79	-1.8%
11.1%	4,355	3,997	-358	-8.2%
12.3%	3,640	3,892	252	6.9%
13.6%	3,581	3,633	52	1.5%
14.8%	3,581	3,394	-186	-5.2%
16.0%	3,080	3,356	276	9.0%
17.3%	3,055	3,281	227	7.4%
18.5%	3,055	3,151	96	3.2%
19.8%	3,009	3,121	111	3.7%
21.0%	2,803	3,118	316	11.3%
22.2%	2,792	3,095	303	10.9%
23.5%	2,766	2,980	214	7.7%
24.7%	2,676	2,846	170	6.3%
25.9%	2,500	2,763	263	10.5%
27.2%	2,498	2,578	80	3.2%
28.4%	2,462	2,280	-182	-7.4%
29.6%	2,352	2,242	-111	-4.7%
30.9%	2,310	2,203	-107	-4.6%
32.1%	1,866	2,153	288	15.4%
33.3%	1,862	1,880	18	1.0%
34.6%	1,862	1,862	0	0.0%
35.8%	1,862	1,862	0	0.0%
37.0%	1,851	1,862	12	0.6%
38.3%	1,850	1,862	12	0.6%
39.5%	1,689	1,862	173	10.3%
40.7%	1,671	1,854	183	11.0%
42.0%	1,663	1,851	188	11.3%
43.2%	1,655	1,846	192	11.6%
44.4%	1,653	1,827	175	10.6%
45.7%	1,641	1,819	177	10.8%
46.9%	1,621	1,818	197	12.2%
48.1%	1,621	1,732	112	6.9%
49.4%	1,621	1,708	87	5.4%
50.6%	1,621	1,697	76	4.7%
51.9%	1,621	1,672	51	3.2%
53.1%	1,621	1,621	0	0.0%
54.3%	1,619	1,621	1	0.1%
55.6%	1,563	1,621	57	3.7%
56.8%	1,561	1,621	59	3.8%
58.0%	1,556	1,621	64	4.1%
59.3%	1,548	1,621	73	4.7%
60.5%	1,544	1,621	76	5.0%
61.7%	1,508	1,621	113	7.5%
63.0%	1,506	1,621	114	7.6%
64.2%	1,504	1,620	117	7.8%
65.4%	1,499	1,603	104	6.9%
66.7%	1,495	1,545	50	3.3%
67.9%	1,484	1,527	43	2.9%
69.1%	1,423	1,453	29	2.1%
70.4%	1,416	1,444	28	2.0%
71.6%	1,409	1,429	20	1.4%
72.8%	1,401	1,418	16	1.2%
74.1%	1,354	1,360	6	0.4%
75.3%	1,324	1,349	26	1.9%
76.5%	1,301	1,257	-44	-3.4%
77.8%	1,205	1,250	46	3.8%
79.0%	1,092	1,201	109	10.0%
80.2%	1,042	1,196	154	14.7%
81.5%	971	1,157	186	19.1%
82.7%	940	1,115	174	18.5%
84.0%	900	962	61	6.8%
85.2%	834	880	47	5.6%
86.4%	778	863	86	11.0%
87.7%	747	851	104	13.9%
88.9%	747	789	43	5.7%
90.1%	746	752	5	0.7%
91.4%	746	747	0	0.1%
92.6%	746	747	0	0.0%
93.8%	746	747	0	0.0%
95.1%	746	746	0	0.0%
96.3%	746	746	0	0.0%
97.5%	484	746	262	54.2%
98.8%	453	734	281	61.9%
100.0%	452	453	1	0.2%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,198	21,642	444	2.1%
1.2%	20,502	20,638	136	0.7%
2.5%	20,370	20,491	121	0.6%
3.7%	19,478	19,697	219	1.1%
4.9%	19,214	19,221	7	0.0%
6.2%	17,583	17,576	-6	0.0%
7.4%	17,529	17,518	-11	-0.1%
8.6%	13,491	13,479	-12	-0.1%
9.9%	13,171	12,717	-454	-3.4%
11.1%	9,282	9,297	15	0.2%
12.3%	8,354	7,349	-1,005	-12.0%
13.6%	6,275	6,272	-3	0.0%
14.8%	5,228	5,154	-75	-1.4%
16.0%	5,145	5,052	-93	-1.8%
17.3%	5,105	4,363	-742	-14.5%
18.5%	4,748	3,940	-809	-17.0%
19.8%	3,947	3,855	-93	-2.3%
21.0%	3,592	3,695	104	2.9%
22.2%	3,476	3,508	32	0.9%
23.5%	3,332	3,492	160	4.8%
24.7%	3,292	3,474	182	5.5%
25.9%	3,193	3,205	12	0.4%
27.2%	3,186	3,186	0	0.0%
28.4%	3,106	2,774	-332	-10.7%
29.6%	3,012	2,766	-246	-8.2%
30.9%	2,763	2,640	-124	-4.5%
32.1%	2,453	2,521	68	2.8%
33.3%	2,168	2,454	286	13.2%
34.6%	2,136	2,241	106	5.0%
35.8%	2,060	2,089	29	1.4%
37.0%	2,007	2,001	-6	-0.3%
38.3%	1,994	1,940	-54	-2.7%
39.5%	1,940	1,936	-4	-0.2%
40.7%	1,939	1,936	-3	-0.2%
42.0%	1,936	1,936	0	0.0%
43.2%	1,936	1,936	0	0.0%
44.4%	1,936	1,935	0	0.0%
45.7%	1,936	1,933	-3	-0.1%
46.9%	1,932	1,933	1	0.0%
48.1%	1,930	1,927	-3	-0.2%
49.4%	1,928	1,926	-3	-0.1%
50.6%	1,927	1,925	-3	-0.1%
51.9%	1,926	1,925	-1	-0.1%
53.1%	1,920	1,924	4	0.2%
54.3%	1,920	1,922	2	0.1%
55.6%	1,913	1,919	6	0.3%
56.8%	1,833	1,914	82	4.4%
58.0%	1,731	1,900	169	9.8%
59.3%	1,709	1,890	181	10.6%
60.5%	1,688	1,813	125	7.4%
61.7%	1,688	1,802	114	6.8%
63.0%	1,688	1,777	89	5.3%
64.2%	1,688	1,770	82	4.9%
65.4%	1,688	1,688	0	0.0%
66.7%	1,688	1,688	0	0.0%
67.9%	1,610	1,688	77	4.8%
69.1%	1,589	1,688	99	6.2%
70.4%	1,584	1,688	104	6.5%
71.6%	1,535	1,688	153	10.0%
72.8%	1,530	1,688	158	10.3%
74.1%	1,523	1,561	38	2.5%
75.3%	1,502	1,511	9	0.6%
76.5%	1,418	1,460	43	3.0%
77.8%	1,414	1,452	39	2.7%
79.0%	1,411	1,431	20	1.4%
80.2%	1,403	1,362	-41	-2.9%
81.5%	1,356	1,351	-5	-0.3%
82.7%	1,207	1,259	52	4.3%
84.0%	1,094	1,252	159	14.5%
85.2%	1,058	1,203	145	13.8%
86.4%	1,044	1,159	114	10.9%
87.7%	973	965	-8	-0.8%
88.9%	942	912	-30	-3.2%
90.1%	902	853	-49	-5.5%
91.4%	779	748	-31	-4.0%
92.6%	754	748	-6	-0.8%
93.8%	748	748	0	0.0%
95.1%	748	748	0	0.0%
96.3%	748	747	-1	-0.1%
97.5%	748	746	-3	-0.4%
98.8%	591	742	151	25.6%
100.0%	472	472	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,584	35,582	-2	0.0%
1.2%	30,053	29,986	-67	-0.2%
2.5%	25,409	25,405	-4	0.0%
3.7%	22,796	22,799	3	0.0%
4.9%	22,602	22,600	-1	0.0%
6.2%	21,044	21,042	-2	0.0%
7.4%	19,810	20,161	351	1.8%
8.6%	17,226	17,226	0	0.0%
9.9%	15,096	15,049	-47	-0.3%
11.1%	15,051	14,876	-175	-1.2%
12.3%	14,373	14,371	-2	0.0%
13.6%	13,465	13,465	0	0.0%
14.8%	11,044	11,045	1	0.0%
16.0%	10,553	10,551	-1	0.0%
17.3%	10,507	10,507	0	0.0%
18.5%	9,962	9,962	0	0.0%
19.8%	9,587	9,595	9	0.1%
21.0%	9,403	9,401	-2	0.0%
22.2%	8,827	8,657	-170	-1.9%
23.5%	8,657	8,549	-108	-1.2%
24.7%	8,340	8,323	-17	-0.2%
25.9%	8,192	8,194	2	0.0%
27.2%	7,360	7,364	4	0.1%
28.4%	7,087	7,091	4	0.1%
29.6%	6,602	6,602	0	0.0%
30.9%	6,510	6,498	-12	-0.2%
32.1%	6,498	6,468	-30	-0.5%
33.3%	6,166	6,166	0	0.0%
34.6%	6,011	5,930	-81	-1.3%
35.8%	5,814	5,813	-1	0.0%
37.0%	5,011	5,085	74	1.5%
38.3%	4,302	5,035	732	17.0%
39.5%	4,121	4,892	771	18.7%
40.7%	4,111	4,119	8	0.2%
42.0%	3,980	3,938	-41	-1.0%
43.2%	3,835	3,785	-51	-1.3%
44.4%	3,498	3,726	227	6.5%
45.7%	3,193	3,193	0	0.0%
46.9%	2,661	2,991	331	12.4%
48.1%	2,405	2,933	529	22.0%
49.4%	2,111	2,745	634	30.0%
50.6%	2,061	2,663	602	29.2%
51.9%	2,053	2,111	58	2.8%
53.1%	1,950	2,053	103	5.3%
54.3%	1,848	1,921	73	4.0%
55.6%	1,685	1,847	162	9.6%
56.8%	1,685	1,685	0	0.0%
58.0%	1,673	1,685	12	0.7%
59.3%	1,635	1,673	38	2.3%
60.5%	1,635	1,635	0	0.0%
61.7%	1,635	1,635	0	0.0%
63.0%	1,635	1,635	0	0.0%
64.2%	1,635	1,635	0	0.0%
65.4%	1,635	1,635	0	0.0%
66.7%	1,635	1,635	0	0.0%
67.9%	1,635	1,635	0	0.0%
69.1%	1,634	1,635	1	0.0%
70.4%	1,633	1,634	1	0.1%
71.6%	1,502	1,634	131	8.7%
72.8%	1,461	1,605	143	9.8%
74.1%	1,451	1,596	145	10.0%
75.3%	1,443	1,500	58	4.0%
76.5%	1,425	1,494	70	4.9%
77.8%	1,425	1,425	0	0.0%
79.0%	1,425	1,425	0	0.0%
80.2%	1,425	1,425	0	0.0%
81.5%	1,359	1,425	66	4.8%
82.7%	1,346	1,425	78	5.8%
84.0%	1,341	1,399	58	4.4%
85.2%	1,298	1,317	19	1.5%
86.4%	1,291	1,252	-38	-3.0%
87.7%	1,196	1,206	10	0.8%
88.9%	1,184	1,149	-35	-3.0%
90.1%	879	1,140	261	29.7%
91.4%	793	1,061	269	33.9%
92.6%	751	812	60	8.1%
93.8%	748	807	59	7.9%
95.1%	748	748	0	0.0%
96.3%	748	748	0	0.0%
97.5%	748	748	0	0.0%
98.8%	748	745	-3	-0.4%
100.0%	369	369	0	0.0%

Table SW-28-b

American River at Watt Avenue, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	37,256	37,256	0	0.0%
1.2%	25,507	25,507	0	0.0%
2.5%	25,315	25,308	-7	0.0%
3.7%	19,024	19,024	0	0.0%
4.9%	18,304	18,304	0	0.0%
6.2%	18,048	18,048	0	0.0%
7.4%	17,892	17,889	-3	0.0%
8.6%	17,702	17,878	176	1.0%
9.9%	17,132	17,132	0	0.0%
11.1%	16,631	16,628	-3	0.0%
12.3%	16,491	16,492	0	0.0%
13.6%	15,870	15,870	0	0.0%
14.8%	15,301	15,298	-2	0.0%
16.0%	15,146	14,889	-257	-1.7%
17.3%	14,095	14,095	0	0.0%
18.5%	14,078	14,078	0	0.0%
19.8%	14,023	14,024	1	0.0%
21.0%	12,871	12,867	-4	0.0%
22.2%	12,866	12,335	-531	-4.1%
23.5%	11,966	11,968	2	0.0%
24.7%	11,481	11,550	69	0.6%
25.9%	11,063	11,064	0	0.0%
27.2%	10,685	10,685	0	0.0%
28.4%	10,573	10,575	2	0.0%
29.6%	8,629	8,618	-12	-0.1%
30.9%	8,524	8,524	0	0.0%
32.1%	8,214	8,214	0	0.0%
33.3%	7,213	7,215	3	0.0%
34.6%	7,171	7,171	0	0.0%
35.8%	7,078	7,080	1	0.0%
37.0%	6,946	6,947	0	0.0%
38.3%	6,912	6,912	0	0.0%
39.5%	6,738	6,866	128	1.9%
40.7%	6,694	6,676	-18	-0.3%
42.0%	6,663	6,663	0	0.0%
43.2%	6,012	6,010	-3	0.0%
44.4%	5,993	5,993	0	0.0%
45.7%	5,993	5,990	-3	0.0%
46.9%	5,856	5,854	-2	0.0%
48.1%	5,492	5,485	-8	-0.1%
49.4%	5,447	5,171	-277	-5.1%
50.6%	5,171	4,824	-347	-6.7%
51.9%	4,399	4,399	0	0.0%
53.1%	4,103	3,941	-162	-4.0%
54.3%	3,942	3,914	-28	-0.7%
55.6%	3,793	3,793	0	0.0%
56.8%	3,731	3,574	-157	-4.2%
58.0%	3,574	3,489	-85	-2.4%
59.3%	3,486	3,302	-184	-5.3%
60.5%	3,481	3,011	-470	-13.5%
61.7%	3,433	3,007	-426	-12.4%
63.0%	2,991	2,715	-276	-9.2%
64.2%	2,904	2,574	-330	-11.4%
65.4%	2,708	2,452	-256	-9.4%
66.7%	2,574	2,366	-208	-8.1%
67.9%	2,376	2,329	-47	-2.0%
69.1%	2,276	2,276	0	0.0%
70.4%	2,199	2,199	0	0.0%
71.6%	2,097	2,098	1	0.0%
72.8%	1,680	1,882	202	12.0%
74.1%	1,508	1,680	172	11.4%
75.3%	1,498	1,449	-49	-3.3%
76.5%	1,378	1,378	0	0.0%
77.8%	1,376	1,376	0	0.0%
79.0%	1,376	1,376	0	0.0%
80.2%	1,376	1,376	0	0.0%
81.5%	1,376	1,376	0	0.0%
82.7%	1,376	1,376	0	0.0%
84.0%	1,376	1,376	0	0.0%
85.2%	1,228	1,353	124	10.1%
86.4%	1,213	1,262	49	4.0%
87.7%	1,200	1,256	57	4.7%
88.9%	1,197	1,248	51	4.3%
90.1%	1,197	1,200	2	0.2%
91.4%	1,142	1,197	56	4.9%
92.6%	1,129	1,197	69	6.1%
93.8%	1,086	1,197	111	10.3%
95.1%	1,003	1,197	194	19.3%
96.3%	993	1,109	116	11.7%
97.5%	936	889	-47	-5.0%
98.8%	362	362	0	
100.0%	326	326	0	

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,866	20,866	0	0.0%
1.2%	19,961	19,961	0	0.0%
2.5%	18,733	18,733	0	0.0%
3.7%	16,494	16,494	0	0.0%
4.9%	14,088	14,088	0	0.0%
6.2%	12,782	12,780	-2	0.0%
7.4%	12,658	12,659	1	0.0%
8.6%	12,103	12,103	0	0.0%
9.9%	11,986	11,987	0	0.0%
11.1%	11,059	11,046	-13	-0.1%
12.3%	9,928	9,923	-5	0.0%
13.6%	9,266	9,666	400	4.3%
14.8%	9,137	9,262	125	1.4%
16.0%	8,890	8,895	5	0.1%
17.3%	8,756	8,756	0	0.0%
18.5%	8,317	8,316	-1	0.0%
19.8%	8,137	8,136	-1	0.0%
21.0%	7,634	7,634	0	0.0%
22.2%	7,587	7,588	1	0.0%
23.5%	7,420	7,423	3	0.0%
24.7%	7,409	7,409	0	0.0%
25.9%	6,656	6,621	-36	-0.5%
27.2%	6,617	6,508	-108	-1.6%
28.4%	6,328	6,326	-2	0.0%
29.6%	6,225	6,225	0	0.0%
30.9%	5,813	5,808	-5	-0.1%
32.1%	5,518	5,517	-1	0.0%
33.3%	5,486	5,488	2	0.0%
34.6%	5,301	5,299	-2	0.0%
35.8%	5,215	5,215	0	0.0%
37.0%	5,215	5,022	-193	-3.7%
38.3%	5,022	5,005	-17	-0.3%
39.5%	4,905	4,905	0	0.0%
40.7%	4,855	4,756	-99	-2.0%
42.0%	4,754	4,752	-2	0.0%
43.2%	4,554	4,554	0	0.0%
44.4%	4,409	4,410	1	0.0%
45.7%	4,250	4,249	0	0.0%
46.9%	3,877	3,877	0	0.0%
48.1%	3,800	3,841	40	1.1%
49.4%	3,738	3,800	63	1.7%
50.6%	3,714	3,740	26	0.7%
51.9%	3,670	3,714	44	1.2%
53.1%	3,601	3,672	71	2.0%
54.3%	3,405	3,601	196	5.8%
55.6%	3,396	3,405	8	0.2%
56.8%	3,245	3,395	150	4.6%
58.0%	3,106	3,235	129	4.1%
59.3%	3,079	3,079	0	0.0%
60.5%	3,051	3,055	5	0.2%
61.7%	2,990	2,991	1	0.0%
63.0%	2,739	2,542	-197	-7.2%
64.2%	2,544	2,344	-200	-7.9%
65.4%	2,167	2,167	0	0.0%
66.7%	2,105	2,105	0	0.0%
67.9%	1,813	2,032	218	12.0%
69.1%	1,757	1,813	57	3.2%
70.4%	1,692	1,712	20	1.2%
71.6%	1,680	1,692	12	0.7%
72.8%	1,679	1,680	1	0.0%
74.1%	1,669	1,679	10	0.6%
75.3%	1,663	1,675	12	0.7%
76.5%	1,617	1,671	54	3.3%
77.8%	1,419	1,663	245	17.3%
79.0%	1,237	1,617	380	30.8%
80.2%	1,231	1,439	208	16.9%
81.5%	1,169	1,385	216	18.5%
82.7%	840	840	0	0.0%
84.0%	777	745	-32	-4.1%
85.2%	743	741	-2	-0.2%
86.4%	742	741	-1	-0.1%
87.7%	742	741	0	-0.1%
88.9%	741	741	0	0.0%
90.1%	741	741	-1	-0.1%
91.4%	741	741	0	-0.1%
92.6%	740	740	0	0.0%
93.8%	740	740	0	0.0%
95.1%	740	740	0	0.0%
96.3%	740	740	0	0.0%
97.5%	737	737	0	0.0%
98.8%	357	474	117	32.8%
100.0%	357	357	0	0.0%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,128	19,128	0	0.0%
1.2%	16,801	16,802	1	0.0%
2.5%	11,770	11,767	-3	0.0%
3.7%	10,237	10,239	1	0.0%
4.9%	9,215	9,215	0	0.0%
6.2%	8,092	8,093	1	0.0%
7.4%	7,809	7,810	1	0.0%
8.6%	7,104	7,104	0	0.0%
9.9%	6,634	6,634	0	0.0%
11.1%	6,608	6,608	0	0.0%
12.3%	6,383	6,382	0	0.0%
13.6%	6,256	6,256	0	0.0%
14.8%	6,202	6,202	0	0.0%
16.0%	6,054	6,054	0	0.0%
17.3%	5,605	5,600	-4	-0.1%
18.5%	5,324	5,324	0	0.0%
19.8%	5,082	5,079	-3	-0.1%
21.0%	4,637	4,638	0	0.0%
22.2%	4,594	4,596	2	0.0%
23.5%	4,462	4,462	0	0.0%
24.7%	4,308	4,308	0	0.0%
25.9%	4,308	4,297	-10	-0.2%
27.2%	3,896	3,896	0	0.0%
28.4%	3,650	3,654	3	0.1%
29.6%	3,470	3,468	-3	-0.1%
30.9%	3,012	3,011	0	0.0%
32.1%	2,943	2,943	0	0.0%
33.3%	2,910	2,910	0	0.0%
34.6%	2,904	2,904	0	0.0%
35.8%	2,733	2,886	153	5.6%
37.0%	2,479	2,731	252	10.2%
38.3%	2,398	2,398	0	0.0%
39.5%	2,376	2,355	-21	-0.9%
40.7%	2,355	2,311	-43	-1.8%
42.0%	2,312	2,248	-64	-2.7%
43.2%	2,245	1,885	-360	-16.0%
44.4%	2,012	1,685	-327	-16.3%
45.7%	1,903	1,684	-219	-11.5%
46.9%	1,685	1,670	-16	-0.9%
48.1%	1,684	1,667	-17	-1.0%
49.4%	1,671	1,657	-13	-0.8%
50.6%	1,670	1,656	-14	-0.8%
51.9%	1,667	1,655	-12	-0.7%
53.1%	1,656	1,655	-2	-0.1%
54.3%	1,656	1,643	-13	-0.8%
55.6%	1,655	1,615	-40	-2.4%
56.8%	1,653	1,609	-44	-2.6%
58.0%	1,643	1,603	-39	-2.4%
59.3%	1,609	1,580	-30	-1.8%
60.5%	1,547	1,527	-20	-1.3%
61.7%	1,527	1,445	-82	-5.4%
63.0%	1,425	1,383	-42	-3.0%
64.2%	1,310	1,360	49	3.8%
65.4%	1,235	1,330	96	7.7%
66.7%	1,229	1,310	81	6.6%
67.9%	1,219	1,310	91	7.5%
69.1%	1,152	1,279	127	11.0%
70.4%	1,110	1,233	123	11.1%
71.6%	1,073	1,229	156	14.5%
72.8%	1,073	1,111	38	3.5%
74.1%	1,045	1,073	28	2.7%
75.3%	1,011	1,061	50	4.9%
76.5%	953	1,045	92	9.7%
77.8%	942	1,011	70	7.4%
79.0%	940	973	32	3.4%
80.2%	896	947	51	5.7%
81.5%	873	947	74	8.4%
82.7%	821	947	126	15.3%
84.0%	789	942	153	19.3%
85.2%	755	940	186	24.6%
86.4%	747	936	189	25.3%
87.7%	747	935	188	25.2%
88.9%	747	931	184	24.6%
90.1%	747	923	177	23.6%
91.4%	747	907	161	21.5%
92.6%	746	896	150	20.1%
93.8%	736	882	146	19.8%
95.1%	734	801	66	9.0%
96.3%	731	788	57	7.8%
97.5%	723	755	31	4.3%
98.8%	721	747	26	3.6%
100.0%	315	747	432	137.2%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,473	8,474	1	0.0%
1.2%	7,826	7,826	0	0.0%
2.5%	5,796	5,796	0	0.0%
3.7%	5,371	5,371	0	0.0%
4.9%	5,248	5,248	0	0.0%
6.2%	4,002	4,002	0	0.0%
7.4%	3,851	3,851	0	0.0%
8.6%	3,674	3,674	0	0.0%
9.9%	3,668	3,668	0	0.0%
11.1%	3,036	3,036	0	0.0%
12.3%	2,779	2,985	206	7.4%
13.6%	2,699	2,699	0	0.0%
14.8%	2,695	2,695	0	0.0%
16.0%	2,690	2,690	0	0.0%
17.3%	2,336	2,370	34	1.4%
18.5%	2,293	2,244	-50	-2.2%
19.8%	2,243	2,091	-152	-6.8%
21.0%	2,094	2,003	-91	-4.4%
22.2%	2,008	1,940	-68	-3.4%
23.5%	1,943	1,867	-76	-3.9%
24.7%	1,858	1,866	8	0.4%
25.9%	1,819	1,850	32	1.7%
27.2%	1,817	1,779	-38	-2.1%
28.4%	1,808	1,748	-60	-3.3%
29.6%	1,734	1,734	0	0.0%
30.9%	1,687	1,687	0	0.0%
32.1%	1,687	1,687	0	0.0%
33.3%	1,687	1,687	0	0.0%
34.6%	1,687	1,687	0	0.0%
35.8%	1,687	1,687	0	0.0%
37.0%	1,687	1,687	0	0.0%
38.3%	1,687	1,687	0	0.0%
39.5%	1,685	1,685	0	0.0%
40.7%	1,682	1,682	0	0.0%
42.0%	1,676	1,676	0	0.0%
43.2%	1,670	1,670	0	0.0%
44.4%	1,668	1,668	0	0.0%
45.7%	1,658	1,662	4	0.2%
46.9%	1,653	1,658	5	0.3%
48.1%	1,645	1,653	8	0.5%
49.4%	1,612	1,645	33	2.0%
50.6%	1,555	1,612	58	3.7%
51.9%	1,502	1,555	53	3.5%
53.1%	1,431	1,502	70	4.9%
54.3%	1,342	1,385	43	3.2%
55.6%	1,237	1,342	105	8.5%
56.8%	1,181	1,340	159	13.4%
58.0%	1,170	1,279	108	9.3%
59.3%	1,152	1,215	62	5.4%
60.5%	1,131	1,188	57	5.1%
61.7%	1,118	1,188	70	6.2%
63.0%	1,112	1,187	75	6.8%
64.2%	1,109	1,186	77	7.0%
65.4%	1,096	1,185	89	8.1%
66.7%	1,089	1,177	88	8.0%
67.9%	1,085	1,173	88	8.1%
69.1%	1,059	1,171	113	10.6%
70.4%	1,039	1,171	132	12.7%
71.6%	1,011	1,161	151	14.9%
72.8%	1,002	1,153	151	15.1%
74.1%	998	1,152	154	15.5%
75.3%	991	1,141	150	15.2%
76.5%	945	1,135	190	20.1%
77.8%	941	1,134	193	20.5%
79.0%	897	1,129	232	25.9%
80.2%	886	1,129	243	27.4%
81.5%	848	1,123	275	32.5%
82.7%	829	1,117	288	34.7%
84.0%	765	1,086	321	42.0%
85.2%	764	1,064	300	39.3%
86.4%	748	1,034	285	38.1%
87.7%	748	957	209	27.9%
88.9%	748	911	163	21.7%
90.1%	748	909	161	21.5%
91.4%	748	882	134	17.9%
92.6%	748	838	90	12.0%
93.8%	748	784	36	4.8%
95.1%	742	748	6	0.8%
96.3%	742	748	6	0.8%
97.5%	741	747	6	0.8%
98.8%	738	738	-1	-0.1%
100.0%	266	450	184	69.0%

Table SW-28-b

American River at Watt Avenue, Monthly Flow

Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,270	3,575	-695	-16.3%
1.2%	4,087	3,182	-904	-22.1%
2.5%	3,837	2,854	-983	-25.6%
3.7%	3,704	2,729	-975	-26.3%
4.9%	3,623	2,652	-970	-26.8%
6.2%	3,095	2,638	-458	-14.8%
7.4%	2,843	2,580	-263	-9.2%
8.6%	2,785	2,563	-222	-8.0%
9.9%	2,729	2,555	-174	-6.4%
11.1%	2,544	2,544	0	0.0%
12.3%	2,352	2,493	141	6.0%
13.6%	2,280	2,352	73	3.2%
14.8%	2,247	2,297	50	2.2%
16.0%	2,153	2,153	0	0.0%
17.3%	2,151	2,148	-3	-0.1%
18.5%	2,083	2,127	44	2.1%
19.8%	2,042	2,123	80	3.9%
21.0%	2,019	2,084	65	3.2%
22.2%	2,000	2,019	19	0.9%
23.5%	1,956	2,000	44	2.2%
24.7%	1,920	1,952	33	1.7%
25.9%	1,919	1,947	27	1.4%
27.2%	1,918	1,931	13	0.7%
28.4%	1,913	1,921	8	0.4%
29.6%	1,902	1,861	-41	-2.1%
30.9%	1,861	1,842	-19	-1.0%
32.1%	1,851	1,775	-76	-4.1%
33.3%	1,766	1,725	-41	-2.3%
34.6%	1,725	1,695	-30	-1.7%
35.8%	1,707	1,686	-21	-1.2%
37.0%	1,686	1,686	-1	0.0%
38.3%	1,686	1,685	-1	0.0%
39.5%	1,685	1,685	0	0.0%
40.7%	1,685	1,685	0	0.0%
42.0%	1,685	1,685	0	0.0%
43.2%	1,685	1,685	0	0.0%
44.4%	1,685	1,685	0	0.0%
45.7%	1,685	1,685	0	0.0%
46.9%	1,685	1,681	-4	-0.2%
48.1%	1,683	1,676	-7	-0.4%
49.4%	1,681	1,676	-5	-0.3%
50.6%	1,676	1,673	-3	-0.2%
51.9%	1,676	1,667	-9	-0.5%
53.1%	1,675	1,665	-10	-0.6%
54.3%	1,667	1,642	-25	-1.5%
55.6%	1,665	1,534	-132	-7.9%
56.8%	1,642	1,512	-130	-7.9%
58.0%	1,590	1,509	-81	-5.1%
59.3%	1,517	1,507	-10	-0.6%
60.5%	1,512	1,504	-8	-0.5%
61.7%	1,496	1,503	6	0.4%
63.0%	1,462	1,492	30	2.0%
64.2%	1,451	1,478	28	1.9%
65.4%	1,362	1,472	110	8.1%
66.7%	1,339	1,467	127	9.5%
67.9%	1,299	1,463	165	12.7%
69.1%	1,294	1,461	168	13.0%
70.4%	1,169	1,461	292	25.0%
71.6%	1,152	1,461	310	26.9%
72.8%	1,150	1,459	310	26.9%
74.1%	1,116	1,453	337	30.2%
75.3%	1,104	1,443	339	30.7%
76.5%	1,098	1,433	335	30.5%
77.8%	1,081	1,422	340	31.5%
79.0%	1,074	1,377	303	28.2%
80.2%	1,069	1,339	270	25.3%
81.5%	1,008	1,322	314	31.1%
82.7%	998	1,289	291	29.1%
84.0%	994	1,277	283	28.5%
85.2%	953	1,234	281	29.5%
86.4%	895	1,187	292	32.6%
87.7%	895	1,168	273	30.6%
88.9%	850	1,142	292	34.4%
90.1%	842	1,058	215	25.6%
91.4%	791	1,028	238	30.1%
92.6%	784	900	116	14.8%
93.8%	769	839	70	9.1%
95.1%	746	836	89	12.0%
96.3%	726	747	21	2.9%
97.5%	567	592	25	4.4%
98.8%	463	510	47	10.2%
100.0%	323	390	67	20.7%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,948	4,940	-8	-0.2%
1.2%	4,947	4,939	-8	-0.2%
2.5%	4,947	4,939	-8	-0.2%
3.7%	4,946	4,939	-8	-0.2%
4.9%	4,943	4,937	-6	-0.1%
6.2%	4,943	4,937	-6	-0.1%
7.4%	4,942	4,937	-5	-0.1%
8.6%	4,942	4,936	-6	-0.1%
9.9%	4,942	4,934	-8	-0.2%
11.1%	4,941	4,929	-11	-0.2%
12.3%	4,940	4,726	-215	-4.3%
13.6%	4,939	4,633	-306	-6.2%
14.8%	4,938	4,628	-310	-6.3%
16.0%	4,937	4,334	-603	-12.2%
17.3%	4,937	4,307	-630	-12.8%
18.5%	4,937	4,304	-633	-12.8%
19.8%	4,937	4,228	-709	-14.4%
21.0%	4,937	4,217	-720	-14.6%
22.2%	4,937	4,064	-872	-17.7%
23.5%	4,935	3,958	-977	-19.8%
24.7%	4,933	3,898	-1,035	-21.0%
25.9%	4,932	3,785	-1,148	-23.3%
27.2%	4,927	3,664	-1,263	-25.6%
28.4%	4,863	3,629	-1,233	-25.4%
29.6%	4,751	3,526	-1,225	-25.8%
30.9%	4,620	3,491	-1,129	-24.4%
32.1%	4,530	3,344	-1,186	-26.2%
33.3%	4,480	3,303	-1,176	-26.3%
34.6%	4,369	3,248	-1,121	-25.7%
35.8%	4,286	3,087	-1,199	-28.0%
37.0%	4,167	2,910	-1,257	-30.2%
38.3%	4,122	2,908	-1,215	-29.5%
39.5%	4,109	2,901	-1,208	-29.4%
40.7%	4,032	2,779	-1,253	-31.1%
42.0%	3,990	2,776	-1,214	-30.4%
43.2%	3,860	2,745	-1,116	-28.9%
44.4%	3,659	2,685	-974	-26.6%
45.7%	3,649	2,593	-1,056	-28.9%
46.9%	3,582	2,549	-1,033	-28.8%
48.1%	3,493	2,502	-991	-28.4%
49.4%	3,364	2,460	-903	-26.9%
50.6%	3,339	2,418	-921	-27.6%
51.9%	3,304	2,402	-903	-27.3%
53.1%	3,271	2,399	-871	-26.6%
54.3%	3,108	2,370	-739	-23.8%
55.6%	3,085	2,369	-716	-23.2%
56.8%	3,061	2,345	-715	-23.4%
58.0%	3,026	2,344	-682	-22.5%
59.3%	2,821	2,337	-483	-17.1%
60.5%	2,801	2,335	-466	-16.7%
61.7%	2,747	2,332	-415	-15.1%
63.0%	2,734	2,324	-410	-15.0%
64.2%	2,686	2,312	-373	-13.9%
65.4%	2,568	2,306	-262	-10.2%
66.7%	2,547	2,302	-245	-9.6%
67.9%	2,512	2,299	-213	-8.5%
69.1%	2,497	2,290	-207	-8.3%
70.4%	2,468	2,280	-188	-7.6%
71.6%	2,352	2,279	-74	-3.1%
72.8%	2,314	2,274	-40	-1.7%
74.1%	2,307	2,269	-39	-1.7%
75.3%	2,296	1,932	-364	-15.8%
76.5%	1,772	1,932	160	9.0%
77.8%	1,763	1,932	169	9.6%
79.0%	1,754	1,932	178	10.2%
80.2%	1,753	1,931	178	10.2%
81.5%	1,713	1,927	214	12.5%
82.7%	1,687	1,770	83	4.9%
84.0%	1,686	1,767	81	4.8%
85.2%	1,685	1,702	17	1.0%
86.4%	1,681	1,598	-83	-4.9%
87.7%	1,677	1,541	-137	-8.2%
88.9%	1,654	1,537	-117	-7.1%
90.1%	1,451	1,433	-17	-1.2%
91.4%	1,363	1,356	-7	-0.5%
92.6%	1,157	1,287	129	11.2%
93.8%	1,064	1,186	122	11.5%
95.1%	1,041	1,115	74	7.1%
96.3%	951	1,104	153	16.1%
97.5%	834	1,084	250	30.0%
98.8%	648	676	28	4.4%
100.0%	471	351	-120	-25.5%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	2,878	-421	-12.8%
1.2%	2,819	2,714	-104	-3.7%
2.5%	2,720	2,541	-179	-6.6%
3.7%	2,692	2,454	-238	-8.9%
4.9%	2,686	2,292	-394	-14.7%
6.2%	2,513	2,271	-243	-9.7%
7.4%	2,411	2,252	-159	-6.6%
8.6%	2,231	2,234	3	0.1%
9.9%	2,225	1,932	-293	-13.1%
11.1%	1,930	1,931	1	0.1%
12.3%	1,930	1,930	1	0.0%
13.6%	1,852	1,930	78	4.2%
14.8%	1,752	1,930	177	10.1%
16.0%	1,721	1,928	207	12.0%
17.3%	1,707	1,926	220	12.9%
18.5%	1,706	1,926	220	12.9%
19.8%	1,687	1,920	233	13.8%
21.0%	1,682	1,905	223	13.3%
22.2%	1,680	1,862	182	10.9%
23.5%	1,679	1,788	108	6.5%
24.7%	1,677	1,751	74	4.4%
25.9%	1,675	1,743	68	4.0%
27.2%	1,675	1,743	68	4.0%
28.4%	1,675	1,725	50	3.0%
29.6%	1,672	1,722	50	3.0%
30.9%	1,670	1,700	31	1.8%
32.1%	1,667	1,678	12	0.7%
33.3%	1,666	1,678	12	0.7%
34.6%	1,665	1,671	6	0.3%
35.8%	1,664	1,670	6	0.3%
37.0%	1,661	1,663	2	0.1%
38.3%	1,660	1,661	1	0.1%
39.5%	1,659	1,660	1	0.1%
40.7%	1,659	1,659	0	0.0%
42.0%	1,659	1,659	0	0.0%
43.2%	1,659	1,659	0	0.0%
44.4%	1,659	1,659	0	0.0%
45.7%	1,659	1,626	-33	-2.0%
46.9%	1,659	1,595	-64	-3.8%
48.1%	1,659	1,584	-75	-4.5%
49.4%	1,659	1,537	-122	-7.4%
50.6%	1,659	1,534	-124	-7.5%
51.9%	1,623	1,533	-90	-5.5%
53.1%	1,616	1,518	-98	-6.0%
54.3%	1,484	1,504	20	1.4%
55.6%	1,451	1,499	49	3.4%
56.8%	1,426	1,476	50	3.5%
58.0%	1,372	1,467	95	6.9%
59.3%	1,369	1,453	84	6.2%
60.5%	1,310	1,451	141	10.8%
61.7%	1,212	1,436	224	18.4%
63.0%	1,177	1,364	187	15.9%
64.2%	1,155	1,310	154	13.4%
65.4%	1,141	1,283	142	12.5%
66.7%	1,137	1,257	120	10.6%
67.9%	1,118	1,250	132	11.8%
69.1%	1,101	1,247	146	13.3%
70.4%	1,094	1,245	151	13.8%
71.6%	1,071	1,198	126	11.8%
72.8%	1,053	1,179	126	11.9%
74.1%	1,016	1,119	103	10.1%
75.3%	1,001	1,091	90	9.0%
76.5%	982	1,086	104	10.6%
77.8%	975	1,071	96	9.8%
79.0%	966	1,070	104	10.8%
80.2%	880	1,013	133	15.2%
81.5%	818	999	181	22.1%
82.7%	790	966	176	22.2%
84.0%	746	935	189	25.3%
85.2%	744	930	186	25.0%
86.4%	743	917	174	23.4%
87.7%	742	883	142	19.1%
88.9%	740	829	89	12.1%
90.1%	737	822	84	11.4%
91.4%	723	794	71	9.8%
92.6%	714	769	55	7.8%
93.8%	709	738	29	4.2%
95.1%	709	736	28	3.9%
96.3%	649	735	86	13.2%
97.5%	470	686	216	45.9%
98.8%	367	582	215	58.6%
100.0%	306	465	160	52.2%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,935	4,874	-62	-1.3%
1.2%	4,935	4,726	-209	-4.2%
2.5%	4,935	4,670	-265	-5.4%
3.7%	4,926	4,650	-276	-5.6%
4.9%	4,926	4,559	-366	-7.4%
6.2%	4,733	3,834	-899	-19.0%
7.4%	3,962	3,689	-273	-6.9%
8.6%	3,425	3,318	-107	-3.1%
9.9%	3,380	3,239	-141	-4.2%
11.1%	3,206	2,932	-273	-8.5%
12.3%	3,180	2,885	-294	-9.3%
13.6%	2,918	2,835	-84	-2.9%
14.8%	2,901	2,793	-108	-3.7%
16.0%	2,889	2,747	-142	-4.9%
17.3%	2,756	2,714	-42	-1.5%
18.5%	2,662	2,637	-25	-0.9%
19.8%	2,606	2,611	5	0.2%
21.0%	2,600	2,587	-13	-0.5%
22.2%	2,507	2,523	16	0.6%
23.5%	2,487	2,458	-29	-1.2%
24.7%	2,398	2,311	-87	-3.6%
25.9%	2,367	2,199	-168	-7.1%
27.2%	2,213	2,194	-19	-0.9%
28.4%	2,103	1,889	-214	-10.2%
29.6%	1,888	1,826	-62	-3.3%
30.9%	1,875	1,796	-80	-4.2%
32.1%	1,745	1,742	-3	-0.2%
33.3%	1,718	1,687	-31	-1.8%
34.6%	1,668	1,621	-47	-2.8%
35.8%	1,622	1,585	-37	-2.3%
37.0%	1,518	1,584	66	4.4%
38.3%	1,469	1,584	115	7.9%
39.5%	1,469	1,583	114	7.8%
40.7%	1,469	1,574	106	7.2%
42.0%	1,469	1,558	89	6.1%
43.2%	1,468	1,538	69	4.7%
44.4%	1,468	1,469	0	0.0%
45.7%	1,467	1,469	2	0.1%
46.9%	1,466	1,468	2	0.2%
48.1%	1,463	1,468	5	0.4%
49.4%	1,449	1,466	17	1.2%
50.6%	1,449	1,463	14	1.0%
51.9%	1,447	1,450	3	0.2%
53.1%	1,418	1,439	21	1.5%
54.3%	1,411	1,434	22	1.6%
55.6%	1,308	1,414	106	8.1%
56.8%	1,231	1,399	168	13.6%
58.0%	1,175	1,351	176	15.0%
59.3%	1,169	1,346	177	15.2%
60.5%	1,150	1,341	191	16.6%
61.7%	1,142	1,340	198	17.3%
63.0%	1,124	1,325	201	17.9%
64.2%	1,116	1,254	138	12.4%
65.4%	1,056	1,235	179	16.9%
66.7%	1,009	1,192	184	18.2%
67.9%	999	1,174	175	17.5%
69.1%	960	1,173	213	22.1%
70.4%	957	1,149	192	20.0%
71.6%	945	1,134	188	19.9%
72.8%	881	1,129	248	28.2%
74.1%	827	1,095	268	32.4%
75.3%	769	1,080	312	40.5%
76.5%	747	1,075	328	43.9%
77.8%	747	1,062	314	42.1%
79.0%	747	999	252	33.7%
80.2%	747	993	246	32.9%
81.5%	747	982	235	31.5%
82.7%	747	978	232	31.0%
84.0%	747	958	212	28.4%
85.2%	747	955	208	27.8%
86.4%	747	898	151	20.3%
87.7%	747	873	127	17.0%
88.9%	745	813	68	9.1%
90.1%	742	776	35	4.7%
91.4%	740	747	7	1.0%
92.6%	738	746	8	1.1%
93.8%	735	745	10	1.4%
95.1%	648	745	97	15.0%
96.3%	469	676	207	44.2%
97.5%	415	637	221	53.3%
98.8%	406	504	98	24.1%
100.0%	336	352	17	5.0%

Figure SW-29-b
American River at H Street, Monthly Flow
Probability of Exceedance

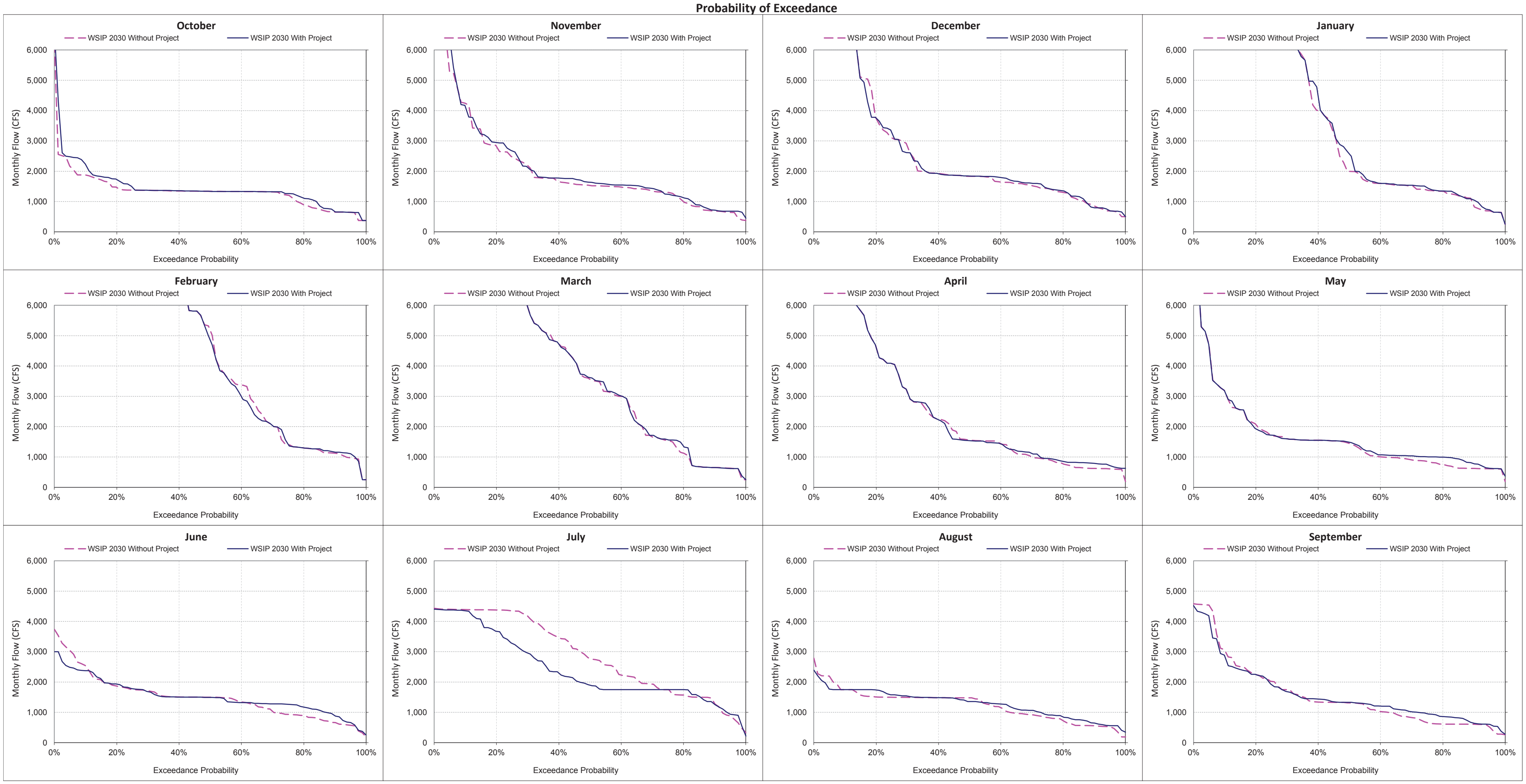


Table SW-29-b
American River at H Street, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,213	6,668	455	7.3%
1.2%	2,556	4,300	1,745	68.3%
2.5%	2,511	2,611	100	4.0%
3.7%	2,474	2,492	19	0.8%
4.9%	2,169	2,477	308	14.2%
6.2%	2,042	2,452	410	20.1%
7.4%	1,879	2,448	569	30.3%
8.6%	1,879	2,381	502	26.7%
9.9%	1,879	2,242	363	19.3%
11.1%	1,849	2,015	166	9.0%
12.3%	1,799	1,879	80	4.5%
13.6%	1,756	1,849	92	5.2%
14.8%	1,721	1,829	108	6.3%
16.0%	1,666	1,805	139	8.4%
17.3%	1,645	1,790	144	8.8%
18.5%	1,480	1,755	275	18.5%
19.8%	1,479	1,746	267	18.0%
21.0%	1,399	1,662	263	18.8%
22.2%	1,383	1,585	202	14.6%
23.5%	1,378	1,578	200	14.5%
24.7%	1,377	1,503	125	9.1%
25.9%	1,376	1,378	2	0.2%
27.2%	1,375	1,376	1	0.1%
28.4%	1,372	1,373	1	0.1%
29.6%	1,370	1,370	0	0.0%
30.9%	1,370	1,370	0	0.0%
32.1%	1,364	1,368	4	0.3%
33.3%	1,363	1,367	4	0.3%
34.6%	1,361	1,366	5	0.4%
35.8%	1,360	1,366	6	0.4%
37.0%	1,352	1,363	11	0.8%
38.3%	1,348	1,361	14	1.0%
39.5%	1,347	1,360	12	0.9%
40.7%	1,347	1,356	9	0.7%
42.0%	1,346	1,351	6	0.4%
43.2%	1,345	1,348	4	0.3%
44.4%	1,344	1,347	3	0.2%
45.7%	1,343	1,346	4	0.3%
46.9%	1,340	1,341	1	0.1%
48.1%	1,338	1,338	0	0.0%
49.4%	1,338	1,336	-1	-0.1%
50.6%	1,337	1,336	-2	-0.1%
51.9%	1,336	1,335	-1	0.0%
53.1%	1,335	1,334	-1	0.0%
54.3%	1,333	1,333	0	0.0%
55.6%	1,333	1,333	1	0.1%
56.8%	1,332	1,332	0	0.0%
58.0%	1,332	1,332	0	0.0%
59.3%	1,331	1,332	1	0.1%
60.5%	1,329	1,331	1	0.1%
61.7%	1,329	1,329	0	0.0%
63.0%	1,329	1,328	-1	-0.1%
64.2%	1,329	1,327	-1	-0.1%
65.4%	1,327	1,326	-1	-0.1%
66.7%	1,327	1,326	-1	-0.1%
67.9%	1,323	1,326	3	0.2%
69.1%	1,321	1,325	4	0.3%
70.4%	1,315	1,325	10	0.8%
71.6%	1,310	1,322	12	0.9%
72.8%	1,242	1,321	79	6.4%
74.1%	1,220	1,266	45	3.7%
75.3%	1,201	1,264	63	5.3%
76.5%	1,103	1,254	151	13.6%
77.8%	1,002	1,199	197	19.7%
79.0%	949	1,154	205	21.6%
80.2%	875	1,099	224	25.5%
81.5%	850	1,091	240	28.3%
82.7%	796	1,054	259	32.5%
84.0%	776	1,002	227	29.2%
85.2%	738	850	112	15.2%
86.4%	700	772	73	10.4%
87.7%	667	769	102	15.4%
88.9%	663	752	89	13.4%
90.1%	653	659	7	1.0%
91.4%	652	653	1	0.1%
92.6%	650	652	2	0.3%
93.8%	647	651	4	0.5%
95.1%	642	642	0	0.1%
96.3%	637	638	1	0.2%
97.5%	375	634	259	69.1%
98.8%	375	375	0	0.0%
100.0%	375	375	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,330	21,669	1,339	6.6%
1.2%	15,359	14,582	-777	-5.1%
2.5%	8,049	8,783	734	9.1%
3.7%	6,457	7,439	982	15.2%
4.9%	5,287	6,420	1,133	21.4%
6.2%	5,244	5,427	183	3.5%
7.4%	4,772	4,772	1	0.0%
8.6%	4,276	4,196	-79	-1.9%
9.9%	4,246	4,177	-69	-1.6%
11.1%	4,181	3,786	-396	-9.5%
12.3%	3,425	3,773	348	10.2%
13.6%	3,412	3,465	53	1.5%
14.8%	3,395	3,233	-162	-4.8%
16.0%	2,932	3,208	277	9.4%
17.3%	2,891	3,118	227	7.8%
18.5%	2,859	2,968	109	3.8%
19.8%	2,856	2,951	95	3.3%
21.0%	2,648	2,936	288	10.9%
22.2%	2,642	2,934	292	11.1%
23.5%	2,633	2,758	126	4.8%
24.7%	2,490	2,686	196	7.9%
25.9%	2,427	2,630	203	8.4%
27.2%	2,350	2,411	62	2.6%
28.4%	2,295	2,171	-124	-5.4%
29.6%	2,231	2,165	-66	-3.0%
30.9%	2,099	2,053	-46	-2.2%
32.1%	1,797	2,000	203	11.3%
33.3%	1,787	1,811	24	1.3%
34.6%	1,775	1,802	27	1.5%
35.8%	1,773	1,797	24	1.3%
37.0%	1,773	1,773	0	0.0%
38.3%	1,766	1,773	7	0.4%
39.5%	1,674	1,773	99	5.9%
40.7%	1,638	1,767	129	7.9%
42.0%	1,624	1,762	138	8.5%
43.2%	1,605	1,760	155	9.7%
44.4%	1,589	1,757	169	10.6%
45.7%	1,563	1,726	163	10.4%
46.9%	1,556	1,707	151	9.7%
48.1%	1,547	1,658	112	7.2%
49.4%	1,540	1,640	99	6.4%
50.6%	1,519	1,629	110	7.2%
51.9%	1,519	1,605	87	5.7%
53.1%	1,517	1,593	76	5.0%
54.3%	1,510	1,589	79	5.2%
55.6%	1,506	1,568	62	4.1%
56.8%	1,497	1,555	58	3.8%
58.0%	1,492	1,546	54	3.6%
59.3%	1,487	1,544	57	3.8%
60.5%	1,469	1,542	72	4.9%
61.7%	1,464	1,538	74	5.1%
63.0%	1,453	1,535	82	5.6%
64.2%	1,423	1,526	103	7.2%
65.4%	1,423	1,517	94	6.6%
66.7%	1,416	1,496	80	5.6%
67.9%	1,403	1,448	45	3.2%
69.1%	1,375	1,446	72	5.2%
70.4%	1,334	1,424	91	6.8%
71.6%	1,319	1,385	66	5.0%
72.8%	1,316	1,348	32	2.4%
74.1%	1,307	1,249	-58	-4.5%
75.3%	1,298	1,239	-60	-4.6%
76.5%	1,265	1,206	-59	-4.7%
77.8%	1,169	1,190	21	1.8%
79.0%	1,087	1,157	70	6.5%
80.2%	973	1,121	148	15.2%
81.5%	939	1,090	151	16.1%
82.7%	859	1,005	147	17.1%
84.0%	833	893	60	7.2%
85.2%	830	888	59	7.1%
86.4%	720	819	99	13.7%
87.7%	711	776	65	9.2%
88.9%	694	720	26	3.7%
90.1%	680	711	32	4.7%
91.4%	679	691	12	1.8%
92.6%	667	682	15	2.3%
93.8%	648	681	33	5.1%
95.1%	643	680	37	5.7%
96.3%	639	679	40	6.3%
97.5%	447	679	232	51.9%
98.8%	391	649	257	65.7%
100.0%	375	447	72	19.2%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,204	21,648	444	2.1%
1.2%	20,416	20,575	159	0.8%
2.5%	20,308	20,406	98	0.5%
3.7%	19,439	19,658	219	1.1%
4.9%	19,154	19,160	7	0.0%
6.2%	17,470	17,464	-6	0.0%
7.4%	17,421	17,410	-11	-0.1%
8.6%	13,391	13,379	-12	-0.1%
9.9%	13,093	12,638	-454	-3.5%
11.1%	9,187	9,202	15	0.2%
12.3%	8,331	7,326	-1,005	-12.1%
13.6%	6,159	6,156	-3	0.0%
14.8%	5,114	5,072	-42	-0.8%
16.0%	5,063	4,937	-126	-2.5%
17.3%	5,039	4,297	-742	-14.7%
18.5%	4,673	3,783	-890	-19.0%
19.8%	3,791	3,779	-11	-0.3%
21.0%	3,547	3,651	104	2.9%
22.2%	3,360	3,436	76	2.3%
23.5%	3,276	3,419	143	4.4%
24.7%	3,119	3,358	239	7.7%
25.9%	3,052	3,064	12	0.4%
27.2%	3,047	3,047	0	0.0%
28.4%	2,990	2,658	-332	-11.1%
29.6%	2,924	2,615	-309	-10.6%
30.9%	2,603	2,606	2	0.1%
32.1%	2,428	2,349	-80	-3.3%
33.3%	2,007	2,325	319	15.9%
34.6%	2,000	2,106	106	5.3%
35.8%	2,000	2,000	0	0.0%
37.0%	1,938	1,938	0	0.0%
38.3%	1,938	1,934	-4	-0.2%
39.5%	1,935	1,931	-4	-0.2%
40.7%	1,917	1,898	-19	-1.0%
42.0%	1,898	1,877	-22	-1.1%
43.2%	1,877	1,872	-5	-0.3%
44.4%	1,869	1,870	1	0.1%
45.7%	1,867	1,859	-7	-0.4%
46.9%	1,859	1,859	0	0.0%
48.1%	1,834	1,846	12	0.6%
49.4%	1,832	1,841	9	0.5%
50.6%	1,832	1,838	5	0.3%
51.9%	1,831	1,836	4	0.2%
53.1%	1,830	1,835	5	0.3%
54.3%	1,826	1,830	4	0.2%
55.6%	1,809	1,829	20	1.1%
56.8%	1,807	1,827	21	1.2%
58.0%	1,667	1,822	154	9.3%
59.3%	1,654	1,804	150	9.1%
60.5%	1,636	1,787	151	9.3%
61.7%	1,634	1,768	134	8.2%
63.0%	1,631	1,710	79	4.8%
64.2%	1,600	1,673	73	4.6%
65.4%	1,597	1,663	67	4.2%
66.7%	1,592	1,628	36	2.2%
67.9%	1,560	1,613	53	3.4%
69.1%	1,550	1,613	63	4.0%
70.4%	1,514	1,600	86	5.7%
71.6%	1,488	1,597	109	7.3%
72.8%	1,439	1,579	140	9.7%
74.1%	1,437	1,468	32	2.2%
75.3%	1,429	1,430	0	0.0%
76.5%	1,387	1,402	15	1.1%
77.8%	1,332	1,384	51	3.8%
79.0%	1,317	1,368	51	3.9%
80.2%	1,294	1,345	51	3.9%
81.5%	1,278	1,276	-2	-0.2%
82.7%	1,142	1,179	38	3.3%
84.0%	1,103	1,179	76	6.8%
85.2%	1,035	1,158	123	11.9%
86.4%	1,023	1,094	70	6.9%
87.7%	936	944	8	0.9%
88.9%	908	814	-94	-10.3%
90.1%	847	794	-53	-6.3%
91.4%	790	790	0	0.0%
92.6%	755	788	33	4.4%
93.8%	693	754	61	8.8%
95.1%	689	693	4	0.6%
96.3%	680	683	3	0.5%
97.5%	651	677	27	4.1%
98.8%	500	651	151	30.2%
100.0%	500	500	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,570	35,568	-2	0.0%
1.2%	30,060	29,994	-67	-0.2%
2.5%	25,352	25,348	-4	0.0%
3.7%	22,854	22,857	3	0.0%
4.9%	22,549	22,548	-1	0.0%
6.2%	20,943	20,941	-2	0.0%
7.4%	19,735	20,086	351	1.8%
8.6%	17,214	17,214	0	0.0%
9.9%	15,073	14,966	-108	-0.7%
11.1%	14,968	14,853	-115	-0.8%
12.3%	14,259	14,257	-2	0.0%
13.6%	13,595	13,595	0	0.0%
14.8%	10,917	10,918	1	0.0%
16.0%	10,441	10,440	-1	0.0%
17.3%	10,432	10,432	0	0.0%
18.5%	9,889	9,890	0	0.0%
19.8%	9,466	9,474	9	0.1%
21.0%	9,324	9,322	-2	0.0%
22.2%	8,812	8,541	-271	-3.1%
23.5%	8,541	8,533	-7	-0.1%
24.7%	8,222	8,206	-17	-0.2%
25.9%	8,156	8,158	2	0.0%
27.2%	7,195	7,199	4	0.1%
28.4%	6,948	6,952	4	0.1%
29.6%	6,427	6,427	0	0.0%
30.9%	6,394	6,353	-42	-0.7%
32.1%	6,337	6,337	0	0.0%
33.3%	6,041	6,041	0	0.0%
34.6%	5,861	5,780	-81	-1.4%
35.8%	5,660	5,659	-1	0.0%
37.0%	4,942	4,971	29	0.6%
38.3%	4,188	4,966	778	18.6%
39.5%	4,010	4,781	771	19.2%
40.7%	4,003	4,011	8	0.2%
42.0%	3,838	3,840	3	0.1%
43.2%	3,737	3,688	-49	-1.3%
44.4%	3,402	3,584	182	5.3%
45.7%	3,069	3,069	0	0.0%
46.9%	2,498	2,877	379	15.2%
48.1%	2,290	2,809	519	22.7%
49.4%	2,000	2,646	646	32.3%
50.6%	1,990	2,500	510	25.6%
51.9%	1,989	2,000	11	0.6%
53.1%	1,917	1,990	73	3.8%
54.3%	1,735	1,888	153	8.8%
55.6%	1,671	1,734	63	3.8%
56.8%	1,645	1,671	26	1.6%
58.0%	1,605	1,645	41	2.5%
59.3%	1,600	1,605	5	0.3%
60.5%	1,593	1,600	7	0.5%
61.7%	1,577	1,593	16	1.0%
63.0%	1,571	1,581	10	0.6%
64.2%	1,548	1,578	29	1.9%
65.4%	1,542	1,548	6	0.4%
66.7%	1,540	1,542	2	0.1%
67.9%	1,538	1,540	1	0.1%
69.1%	1,514	1,538	24	1.6%
70.4%	1,514	1,534	20	1.3%
71.6%	1,407	1,521	114	8.1%
72.8%	1,405	1,514	109	7.8%
74.1%	1,403	1,514	112	8.0%
75.3%	1,366	1,437	71	5.2%
76.5%	1,362	1,386	24	1.8%
77.8%	1,344	1,366	21	1.6%
79.0%	1,341	1,348	7	0.5%
80.2%	1,340	1,344	5	0.4%
81.5%	1,259	1,343	84	6.6%
82.7%	1,251	1,340	88	7.1%
84.0%	1,227	1,280	53	4.3%
85.2%	1,185	1,205	19	1.6%
86.4%	1,178	1,153	-25	-2.2%
87.7%	1,125	1,093	-31	-2.8%
88.9%	1,111	1,091	-20	-1.8%
90.1%	820	1,042	222	27.0%
91.4%	769	976	207	27.0%
92.6%	721	825	103	14.3%
93.8%	694	753	58	8.4%
95.1%	690	721	31	4.5%
96.3%	650	650	0	0.0%
97.5%	644	644	0	0.0%
98.8%	642	639	-3	-0.5%
100.0%	250	250	0	

Table SW-29-b

American River at H Street, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	37,257	37,258	0	0.0%
1.2%	25,474	25,474	0	0.0%
2.5%	25,290	25,283	-7	0.0%
3.7%	18,898	18,898	0	0.0%
4.9%	18,230	18,230	0	0.0%
6.2%	18,080	18,080	0	0.0%
7.4%	17,837	17,836	-2	0.0%
8.6%	17,660	17,834	174	1.0%
9.9%	17,052	17,052	0	0.0%
11.1%	16,564	16,561	-3	0.0%
12.3%	16,421	16,422	0	0.0%
13.6%	15,765	15,765	0	0.0%
14.8%	15,162	15,159	-2	0.0%
16.0%	15,140	14,883	-257	-1.7%
17.3%	13,954	13,954	0	0.0%
18.5%	13,952	13,953	1	0.0%
19.8%	13,921	13,921	0	0.0%
21.0%	12,923	12,759	-164	-1.3%
22.2%	12,762	12,392	-370	-2.9%
23.5%	11,892	11,893	2	0.0%
24.7%	11,399	11,468	69	0.6%
25.9%	10,922	10,922	0	0.0%
27.2%	10,602	10,602	0	0.0%
28.4%	10,486	10,488	2	0.0%
29.6%	8,550	8,550	0	0.0%
30.9%	8,501	8,489	-12	-0.1%
32.1%	8,057	8,057	0	0.0%
33.3%	7,065	7,067	3	0.0%
34.6%	6,978	6,978	0	0.0%
35.8%	6,919	6,921	1	0.0%
37.0%	6,759	6,759	0	0.0%
38.3%	6,737	6,737	0	0.0%
39.5%	6,705	6,720	14	0.2%
40.7%	6,548	6,643	96	1.5%
42.0%	6,472	6,472	0	0.0%
43.2%	5,830	5,827	-3	0.0%
44.4%	5,814	5,812	-2	0.0%
45.7%	5,812	5,811	0	0.0%
46.9%	5,674	5,671	-2	0.0%
48.1%	5,360	5,353	-8	-0.1%
49.4%	5,323	5,008	-315	-5.9%
50.6%	5,008	4,700	-308	-6.2%
51.9%	4,211	4,211	0	0.0%
53.1%	3,924	3,847	-78	-2.0%
54.3%	3,772	3,771	-1	0.0%
55.6%	3,597	3,597	0	0.0%
56.8%	3,561	3,412	-149	-4.2%
58.0%	3,412	3,328	-83	-2.4%
59.3%	3,365	3,123	-242	-7.2%
60.5%	3,365	2,891	-474	-14.1%
61.7%	3,326	2,841	-485	-14.6%
63.0%	2,918	2,643	-276	-9.5%
64.2%	2,771	2,401	-370	-13.4%
65.4%	2,529	2,273	-256	-10.1%
66.7%	2,401	2,195	-205	-8.6%
67.9%	2,187	2,178	-10	-0.4%
69.1%	2,102	2,102	0	0.0%
70.4%	2,000	2,000	0	0.0%
71.6%	1,989	1,990	1	0.0%
72.8%	1,570	1,899	328	20.9%
74.1%	1,423	1,570	147	10.3%
75.3%	1,407	1,364	-43	-3.0%
76.5%	1,338	1,338	0	0.0%
77.8%	1,325	1,325	0	0.0%
79.0%	1,314	1,314	0	0.0%
80.2%	1,293	1,291	-2	-0.2%
81.5%	1,282	1,282	0	0.0%
82.7%	1,269	1,271	2	0.1%
84.0%	1,266	1,269	3	0.3%
85.2%	1,220	1,266	46	3.8%
86.4%	1,138	1,209	71	6.2%
87.7%	1,138	1,204	66	5.8%
88.9%	1,134	1,179	45	3.9%
90.1%	1,124	1,159	35	3.1%
91.4%	1,103	1,157	54	4.8%
92.6%	1,044	1,136	92	8.8%
93.8%	986	1,134	148	15.0%
95.1%	969	1,103	135	13.9%
96.3%	952	1,008	57	5.9%
97.5%	931	854	-77	-8.3%
98.8%	250	250	0	
100.0%	250	250	0	

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,837	20,837	0	0.0%
1.2%	19,949	19,949	0	0.0%
2.5%	18,636	18,636	0	0.0%
3.7%	16,398	16,398	0	0.0%
4.9%	13,992	13,992	0	0.0%
6.2%	12,675	12,674	-2	0.0%
7.4%	12,540	12,541	1	0.0%
8.6%	12,039	12,039	0	0.0%
9.9%	11,890	11,890	0	0.0%
11.1%	10,924	10,910	-13	-0.1%
12.3%	9,872	9,867	-5	0.0%
13.6%	9,207	9,558	351	3.8%
14.8%	9,029	9,203	174	1.9%
16.0%	8,792	8,796	5	0.1%
17.3%	8,611	8,611	0	0.0%
18.5%	8,188	8,187	-1	0.0%
19.8%	8,180	8,179	-1	0.0%
21.0%	7,495	7,495	0	0.0%
22.2%	7,465	7,465	1	0.0%
23.5%	7,299	7,299	0	0.0%
24.7%	7,258	7,261	3	0.0%
25.9%	6,579	6,489	-91	-1.4%
27.2%	6,484	6,432	-53	-0.8%
28.4%	6,199	6,197	-2	0.0%
29.6%	6,073	6,073	0	0.0%
30.9%	5,678	5,673	-5	-0.1%
32.1%	5,412	5,411	-1	0.0%
33.3%	5,339	5,341	2	0.0%
34.6%	5,174	5,172	-2	0.0%
35.8%	5,094	5,094	0	0.0%
37.0%	5,078	4,867	-211	-4.1%
38.3%	4,832	4,832	0	0.0%
39.5%	4,789	4,789	0	0.0%
40.7%	4,644	4,617	-27	-0.6%
42.0%	4,618	4,545	-73	-1.6%
43.2%	4,406	4,406	0	0.0%
44.4%	4,266	4,266	1	0.0%
45.7%	4,082	4,082	0	0.0%
46.9%	3,711	3,735	23	0.6%
48.1%	3,629	3,711	82	2.3%
49.4%	3,601	3,629	28	0.8%
50.6%	3,519	3,603	84	2.4%
51.9%	3,502	3,521	19	0.5%
53.1%	3,478	3,502	24	0.7%
54.3%	3,170	3,478	309	9.7%
55.6%	3,156	3,169	13	0.4%
56.8%	3,119	3,155	36	1.1%
58.0%	3,037	3,109	72	2.4%
59.3%	3,000	3,041	41	1.4%
60.5%	3,000	3,000	0	0.0%
61.7%	2,926	2,927	1	0.0%
63.0%	2,606	2,478	-127	-4.9%
64.2%	2,480	2,211	-269	-10.9%
65.4%	2,095	2,095	0	0.0%
66.7%	2,017	2,017	0	0.0%
67.9%	1,715	1,905	190	11.1%
69.1%	1,714	1,715	1	0.1%
70.4%	1,636	1,714	79	4.8%
71.6%	1,632	1,631	0	0.0%
72.8%	1,593	1,593	0	0.0%
74.1%	1,556	1,591	35	2.2%
75.3%	1,542	1,556	14	0.9%
76.5%	1,492	1,556	64	4.3%
77.8%	1,308	1,549	241	18.4%
79.0%	1,155	1,493	337	29.2%
80.2%	1,117	1,328	211	18.9%
81.5%	1,043	1,303	260	25.0%
82.7%	715	715	0	0.0%
84.0%	686	686	0	0.0%
85.2%	680	680	0	0.0%
86.4%	663	663	0	0.0%
87.7%	658	658	0	0.0%
88.9%	652	654	2	0.3%
90.1%	651	649	-2	-0.2%
91.4%	650	641	-9	-1.5%
92.6%	640	633	-7	-1.1%
93.8%	633	627	-6	-0.9%
95.1%	627	615	-12	-2.0%
96.3%	615	614	-1	-0.1%
97.5%	614	613	-1	-0.1%
98.8%	250	367	117	46.8%
100.0%	250	250	0	0.0%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,987	18,987	0	0.0%
1.2%	16,641	16,642	1	0.0%
2.5%	11,559	11,556	-3	0.0%
3.7%	10,120	10,121	1	0.0%
4.9%	9,054	9,055	0	0.0%
6.2%	7,738	7,739	1	0.0%
7.4%	7,489	7,490	1	0.0%
8.6%	6,732	6,732	0	0.0%
9.9%	6,431	6,431	0	0.0%
11.1%	6,325	6,325	0	0.0%
12.3%	6,041	6,040	0	0.0%
13.6%	6,017	6,017	0	0.0%
14.8%	5,847	5,847	0	0.0%
16.0%	5,676	5,676	0	0.0%
17.3%	5,187	5,183	-4	-0.1%
18.5%	4,912	4,912	0	0.0%
19.8%	4,705	4,702	-3	-0.1%
21.0%	4,272	4,272	0	0.0%
22.2%	4,217	4,219	2	0.0%
23.5%	4,100	4,089	-11	-0.3%
24.7%	4,088	4,088	0	0.0%
25.9%	4,049	4,049	0	0.0%
27.2%	3,724	3,724	0	0.0%
28.4%	3,318	3,316	-3	-0.1%
29.6%	3,236	3,240	3	0.1%
30.9%	2,912	2,911	0	0.0%
32.1%	2,812	2,829	16	0.6%
33.3%	2,796	2,812	16	0.6%
34.6%	2,771	2,796	25	0.9%
35.8%	2,595	2,771	176	6.8%
37.0%	2,421	2,593	171	7.1%
38.3%	2,310	2,310	0	0.0%
39.5%	2,250	2,250	0	0.0%
40.7%	2,239	2,196	-43	-1.9%
42.0%	2,196	2,106	-90	-4.1%
43.2%	2,103	1,824	-279	-13.2%
44.4%	1,889	1,590	-299	-15.8%
45.7%	1,843	1,586	-257	-13.9%
46.9%	1,590	1,564	-26	-1.6%
48.1%	1,586	1,549	-37	-2.3%
49.4%	1,564	1,541	-23	-1.5%
50.6%	1,547	1,535	-12	-0.8%
51.9%	1,540	1,527	-14	-0.9%
53.1%	1,535	1,526	-9	-0.6%
54.3%	1,529	1,525	-3	-0.2%
55.6%	1,527	1,474	-53	-3.5%
56.8%	1,526	1,473	-53	-3.5%
58.0%	1,525	1,462	-64	-4.2%
59.3%	1,473	1,457	-16	-1.1%
60.5%	1,414	1,414	-1	0.0%
61.7%	1,406	1,306	-100	-7.1%
63.0%	1,286	1,252	-33	-2.6%
64.2%	1,168	1,242	74	6.3%
65.4%	1,094	1,191	97	8.9%
66.7%	1,092	1,180	88	8.1%
67.9%	1,088	1,168	79	7.3%
69.1%	1,045	1,158	113	10.8%
70.4%	975	1,096	122	12.5%
71.6%	966	1,092	126	13.0%
72.8%	949	975	26	2.8%
74.1%	935	954	19	2.0%
75.3%	913	949	36	4.0%
76.5%	877	935	58	6.6%
77.8%	821	906	86	10.4%
79.0%	818	877	59	7.2%
80.2%	763	846	83	10.9%
81.5%	733	821	87	11.9%
82.7%	706	819	113	16.0%
84.0%	652	818	166	25.4%
85.2%	652	816	163	25.1%
86.4%	640	815	175	27.4%
87.7%	627	805	177	28.3%
88.9%	623	792	169	27.1%
90.1%	622	788	166	26.7%
91.4%	619	771	152	24.5%
92.6%	616	766	150	24.4%
93.8%	615	763	148	24.1%
95.1%	605	707	102	16.9%
96.3%	600	668	68	11.4%
97.5%	592	640	47	8.0%
98.8%	588	623	35	6.0%
100.0%	188	622	434	231.0%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,126	8,127	1	0.0%
1.2%	7,345	7,345	0	0.0%
2.5%	5,294	5,294	0	0.0%
3.7%	5,146	5,146	0	0.0%
4.9%	4,709	4,709	0	0.0%
6.2%	3,526	3,526	0	0.0%
7.4%	3,408	3,409	0	0.0%
8.6%	3,283	3,283	0	0.0%
9.9%	3,193	3,193	0	0.0%
11.1%	2,892	2,892	0	0.0%
12.3%	2,634	2,840	206	7.8%
13.6%	2,612	2,612	0	0.0%
14.8%	2,557	2,557	0	0.0%
16.0%	2,551	2,551	0	0.0%
17.3%	2,193	2,229	36	1.7%
18.5%	2,156	2,100	-57	-2.6%
19.8%	2,099	1,946	-153	-7.3%
21.0%	1,950	1,874	-75	-3.9%
22.2%	1,879	1,820	-59	-3.2%
23.5%	1,823	1,736	-88	-4.8%
24.7%	1,724	1,724	-1	0.0%
25.9%	1,688	1,717	28	1.7%
27.2%	1,673	1,662	-11	-0.7%
28.4%	1,668	1,607	-61	-3.7%
29.6%	1,606	1,605	-2	-0.1%
30.9%	1,583	1,583	0	0.0%
32.1%	1,583	1,583	0	0.0%
33.3%	1,566	1,566	0	0.0%
34.6%	1,557	1,557	0	0.0%
35.8%	1,556	1,556	0	0.0%
37.0%	1,554	1,554	0	0.0%
38.3%	1,553	1,553	0	0.0%
39.5%	1,551	1,551	0	0.0%
40.7%	1,551	1,551	0	0.0%
42.0%	1,546	1,546	0	0.0%
43.2%	1,541	1,541	0	0.0%
44.4%	1,530	1,530	0	0.0%
45.7%	1,529	1,529	0	0.0%
46.9%	1,520	1,525	5	0.3%
48.1%	1,501	1,520	19	1.3%
49.4%	1,469	1,501	32	2.2%
50.6%	1,425	1,469	44	3.1%
51.9%	1,370	1,425	55	4.0%
53.1%	1,295	1,370	75	5.8%
54.3%	1,198	1,260	62	5.1%
55.6%	1,112	1,202	90	8.1%
56.8%	1,041	1,198	158	15.2%
58.0%	1,039	1,142	103	9.9%
59.3%	1,010	1,074	64	6.3%
60.5%	999	1,068	69	6.9%
61.7%	989	1,060	71	7.2%
63.0%	982	1,057	75	7.7%
64.2%	978	1,055	77	7.8%
65.4%	975	1,046	71	7.3%
66.7%	947	1,043	96	10.1%
67.9%	943	1,041	98	10.4%
69.1%	920	1,037	117	12.7%
70.4%	896	1,032	137	15.3%
71.6%	882	1,018	136	15.4%
72.8%	880	1,011	131	14.9%
74.1%	869	1,010	142	16.3%
75.3%	847	1,002	155	18.3%
76.5%	814	1,001	187	22.9%
77.8%	804	998	194	24.2%
79.0%	759	992	232	30.6%
80.2%	750	991	242	32.2%
81.5%	714	987	273	38.3%
82.7%	693	980	288	41.5%
84.0%	648	949	301	46.5%
85.2%	629	933	304	48.4%
86.4%	627	890	263	41.9%
87.7%	625	818	193	30.9%
88.9%	622	815	193	31.1%
90.1%	621	769	148	23.8%
91.4%	617	763	146	23.6%
92.6%	612	704	93	15.1%
93.8%	611	641	30	4.9%
95.1%	610	627	17	2.8%
96.3%	608	620	12	1.9%
97.5%	606	616	10	1.7%
98.8%	598	608	11	1.8%
100.0%	188	372	184	97.6%

Table SW-29-b

American River at H Street, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,738	3,000	-738	-19.7%
1.2%	3,535	3,000	-535	-15.1%
2.5%	3,284	2,678	-606	-18.5%
3.7%	3,159	2,546	-612	-19.4%
4.9%	3,048	2,482	-566	-18.6%
6.2%	2,917	2,458	-459	-15.7%
7.4%	2,661	2,403	-258	-9.7%
8.6%	2,609	2,381	-227	-8.7%
9.9%	2,546	2,373	-174	-6.8%
11.1%	2,371	2,371	0	0.0%
12.3%	2,169	2,311	143	6.6%
13.6%	2,098	2,169	70	3.3%
14.8%	2,077	2,118	42	2.0%
16.0%	1,970	1,970	0	0.0%
17.3%	1,967	1,967	1	0.0%
18.5%	1,898	1,942	44	2.3%
19.8%	1,873	1,941	68	3.7%
21.0%	1,836	1,914	78	4.3%
22.2%	1,823	1,836	12	0.7%
23.5%	1,794	1,823	29	1.6%
24.7%	1,753	1,785	31	1.8%
25.9%	1,744	1,770	26	1.5%
27.2%	1,738	1,755	16	0.9%
28.4%	1,737	1,752	15	0.9%
29.6%	1,723	1,694	-29	-1.7%
30.9%	1,694	1,668	-26	-1.5%
32.1%	1,669	1,590	-79	-4.8%
33.3%	1,583	1,542	-41	-2.6%
34.6%	1,542	1,520	-22	-1.4%
35.8%	1,524	1,514	-10	-0.7%
37.0%	1,514	1,511	-3	-0.2%
38.3%	1,511	1,508	-3	-0.2%
39.5%	1,508	1,505	-2	-0.2%
40.7%	1,505	1,505	0	0.0%
42.0%	1,505	1,502	-3	-0.2%
43.2%	1,502	1,502	0	0.0%
44.4%	1,502	1,501	-2	-0.1%
45.7%	1,501	1,500	-1	-0.1%
46.9%	1,500	1,500	-1	0.0%
48.1%	1,500	1,497	-2	-0.2%
49.4%	1,500	1,497	-2	-0.2%
50.6%	1,499	1,493	-6	-0.4%
51.9%	1,497	1,482	-15	-1.0%
53.1%	1,493	1,481	-12	-0.8%
54.3%	1,482	1,460	-22	-1.5%
55.6%	1,481	1,352	-129	-8.7%
56.8%	1,460	1,336	-124	-8.5%
58.0%	1,411	1,327	-84	-6.0%
59.3%	1,347	1,325	-22	-1.6%
60.5%	1,336	1,325	-11	-0.8%
61.7%	1,314	1,324	9	0.7%
63.0%	1,279	1,321	41	3.2%
64.2%	1,268	1,296	28	2.2%
65.4%	1,180	1,296	116	9.8%
66.7%	1,167	1,292	125	10.7%
67.9%	1,116	1,284	168	15.0%
69.1%	1,111	1,282	171	15.4%
70.4%	999	1,281	283	28.3%
71.6%	970	1,279	308	31.8%
72.8%	967	1,278	311	32.2%
74.1%	934	1,271	337	36.0%
75.3%	932	1,260	328	35.2%
76.5%	922	1,254	332	36.0%
77.8%	915	1,245	330	36.1%
79.0%	899	1,192	294	32.7%
80.2%	897	1,167	270	30.1%
81.5%	833	1,142	309	37.1%
82.7%	833	1,107	275	33.0%
84.0%	819	1,095	276	33.7%
85.2%	771	1,062	291	37.8%
86.4%	723	1,017	294	40.6%
87.7%	712	987	275	38.6%
88.9%	667	959	292	43.7%
90.1%	661	875	215	32.5%
91.4%	611	851	240	39.3%
92.6%	605	728	123	20.4%
93.8%	588	678	90	15.3%
95.1%	569	665	96	16.8%
96.3%	555	587	32	5.8%
97.5%	385	410	25	6.5%
98.8%	323	371	47	14.6%
100.0%	188	255	67	35.6%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,432	4,403	-29	-0.7%
1.2%	4,415	4,400	-16	-0.4%
2.5%	4,403	4,388	-15	-0.3%
3.7%	4,403	4,375	-28	-0.6%
4.9%	4,399	4,374	-25	-0.6%
6.2%	4,398	4,374	-24	-0.5%
7.4%	4,395	4,371	-24	-0.6%
8.6%	4,393	4,367	-27	-0.6%
9.9%	4,390	4,351	-39	-0.9%
11.1%	4,388	4,337	-52	-1.2%
12.3%	4,387	4,192	-195	-4.4%
13.6%	4,385	4,094	-291	-6.6%
14.8%	4,385	4,075	-310	-7.1%
16.0%	4,385	3,794	-591	-13.5%
17.3%	4,383	3,792	-591	-13.5%
18.5%	4,381	3,755	-626	-14.3%
19.8%	4,378	3,679	-699	-16.0%
21.0%	4,378	3,656	-722	-16.5%
22.2%	4,375	3,468	-907	-20.7%
23.5%	4,367	3,407	-960	-22.0%
24.7%	4,351	3,293	-1,058	-24.3%
25.9%	4,340	3,232	-1,109	-25.5%
27.2%	4,339	3,124	-1,214	-28.0%
28.4%	4,263	3,035	-1,228	-28.8%
29.6%	4,217	2,976	-1,241	-29.4%
30.9%	4,082	2,921	-1,161	-28.4%
32.1%	3,960	2,792	-1,168	-29.5%
33.3%	3,931	2,700	-1,230	-31.3%
34.6%	3,821	2,691	-1,130	-29.6%
35.8%	3,680	2,527	-1,153	-31.3%
37.0%	3,617	2,356	-1,262	-34.9%
38.3%	3,547	2,345	-1,202	-33.9%
39.5%	3,490	2,338	-1,152	-33.0%
40.7%	3,430	2,233	-1,197	-34.9%
42.0%	3,419	2,183	-1,236	-36.2%
43.2%	3,322	2,171	-1,151	-34.6%
44.4%	3,108	2,145	-963	-31.0%
45.7%	3,089	2,032	-1,058	-34.2%
46.9%	3,002	1,989	-1,013	-33.7%
48.1%	2,920	1,964	-956	-32.7%
49.4%	2,802	1,916	-886	-31.6%
50.6%	2,754	1,881	-874	-31.7%
51.9%	2,739	1,869	-871	-31.8%
53.1%	2,708	1,767	-941	-34.7%
54.3%	2,575	1,750	-825	-32.1%
55.6%	2,557	1,750	-807	-31.6%
56.8%	2,547	1,750	-797	-31.3%
58.0%	2,477	1,750	-727	-29.4%
59.3%	2,249	1,750	-499	-22.2%
60.5%	2,216	1,750	-466	-21.0%
61.7%	2,202	1,750	-452	-20.5%
63.0%	2,182	1,750	-432	-19.8%
64.2%	2,162	1,750	-412	-19.1%
65.4%	2,049	1,750	-299	-14.6%
66.7%	1,953	1,750	-203	-10.4%
67.9%	1,952	1,750	-202	-10.3%
69.1%	1,938	1,750	-188	-9.7%
70.4%	1,928	1,750	-178	-9.2%
71.6%	1,812	1,750	-62	-3.4%
72.8%	1,750	1,750	0	0.0%
74.1%	1,750	1,750	0	0.0%
75.3%	1,750	1,750	0	0.0%
76.5%	1,590	1,750	160	10.1%
77.8%	1,578	1,750	172	10.9%
79.0%	1,572	1,750	178	11.3%
80.2%	1,571	1,750	179	11.4%
81.5%	1,529	1,744	215	14.1%
82.7%	1,505	1,588	83	5.5%
84.0%	1,501	1,584	83	5.5%
85.2%	1,501	1,519	18	1.2%
86.4%	1,496	1,416	-79	-5.3%
87.7%	1,495	1,359	-136	-9.1%
88.9%	1,472	1,355	-116	-7.9%
90.1%	1,269	1,251	-18	-1.4%
91.4%	1,183	1,175	-8	-0.6%
92.6%	975	1,106	131	13.4%
93.8%	908	1,005	97	10.6%
95.1%	882	933	51	5.8%
96.3%	769	922	153	19.9%
97.5%	653	902	250	38.2%
98.8%	466	538	72	15.5%
100.0%	333	217	-115	-34.6%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,786	2,392	-393	-14.1%
1.2%	2,277	2,201	-77	-3.4%
2.5%	2,206	2,046	-160	-7.3%
3.7%	2,202	1,970	-232	-10.6%
4.9%	2,199	1,766	-432	-19.7%
6.2%	2,002	1,750	-252	-12.6%
7.4%	1,931	1,750	-181	-9.4%
8.6%	1,750	1,750	0	0.0%
9.9%	1,750	1,750	0	0.0%
11.1%	1,750	1,750	0	0.0%
12.3%	1,750	1,750	0	0.0%
13.6%	1,672	1,750	78	4.7%
14.8%	1,573	1,749	177	11.2%
16.0%	1,542	1,749	207	13.4%
17.3%	1,528	1,747	219	14.3%
18.5%	1,527	1,746	219	14.3%
19.8%	1,506	1,741	235	15.6%
21.0%	1,503	1,724	221	14.7%
22.2%	1,500	1,681	180	12.0%
23.5%	1,498	1,610	112	7.5%
24.7%	1,497	1,580	83	5.6%
25.9%	1,496	1,575	78	5.2%
27.2%	1,496	1,563	67	4.5%
28.4%	1,496	1,546	50	3.4%
29.6%	1,495	1,542	47	3.1%
30.9%	1,491	1,521	30	2.0%
32.1%	1,490	1,500	9	0.6%
33.3%	1,489	1,498	9	0.6%
34.6%	1,487	1,490	3	0.2%
35.8%	1,486	1,489	3	0.2%
37.0%	1,485	1,489	4	0.3%
38.3%	1,484	1,484	0	0.0%
39.5%	1,483	1,484	1	0.0%
40.7%	1,483	1,483	0	0.0%
42.0%	1,483	1,482	-1	-0.1%
43.2%	1,482	1,480	-2	-0.2%
44.4%	1,480	1,478	-3	-0.2%
45.7%	1,480	1,447	-33	-2.2%
46.9%	1,479	1,416	-63	-4.3%
48.1%	1,478	1,405	-73	-4.9%
49.4%	1,478	1,359	-119	-8.1%
50.6%	1,478	1,358	-119	-8.1%
51.9%	1,443	1,354	-89	-6.2%
53.1%	1,437	1,341	-96	-6.7%
54.3%	1,305	1,326	20	1.6%
55.6%	1,272	1,320	48	3.8%
56.8%	1,247	1,299	51	4.1%
58.0%	1,192	1,288	96	8.1%
59.3%	1,189	1,275	86	7.2%
60.5%	1,131	1,272	140	12.4%
61.7%	1,033	1,260	227	22.0%
63.0%	998	1,185	187	18.7%
64.2%	979	1,131	152	15.5%
65.4%	961	1,103	142	14.7%
66.7%	958	1,077	119	12.4%
67.9%	939	1,074	135	14.4%
69.1%	922	1,067	145	15.8%
70.4%	915	1,066	151	16.5%
71.6%	892	1,019	128	14.3%
72.8%	874	1,000	125	14.3%
74.1%	838	940	102	12.1%
75.3%	825	913	87	10.6%
76.5%	803	907	104	13.0%
77.8%	796	892	96	12.1%
79.0%	786	891	105	13.3%
80.2%	707	834	126	17.8%
81.5%	640	822	182	28.5%
82.7%	615	786	171	27.8%
84.0%	568	758	189	33.3%
85.2%	568	756	188	33.1%
86.4%	566	742	176	31.1%
87.7%	564	711	147	26.1%
88.9%	563	650	88	15.6%
90.1%	558	644	86	15.3%
91.4%	544	615	72	13.2%
92.6%	536	590	54	10.1%
93.8%	531	564	34	6.4%
95.1%	530	559	29	5.5%
96.3%	471	559	88	18.7%
97.5%	349	556	207	59.5%
98.8%	188	403	215	114.3%
100.0%	188	348	160	84.9%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,582	4,521	-62	-1.3%
1.2%	4,566	4,336	-230	-5.0%
2.5%	4,560	4,301	-260	-5.7%
3.7%	4,545	4,252	-293	-6.4%
4.9%	4,539	4,194	-345	-7.6%
6.2%	4,335	3,451	-884	-20.4%
7.4%	3,579	3,424	-156	-4.3%
8.6%	3,114	2,937	-177	-5.7%
9.9%	3,070	2,885	-185	-6.0%
11.1%	2,830	2,538	-292	-10.3%
12.3%	2,805	2,511	-294	-10.5%
13.6%	2,544	2,459	-85	-3.4%
14.8%	2,509	2,418	-91	-3.6%
16.0%	2,507	2,380	-127	-5.1%
17.3%	2,390	2,362	-28	-1.2%
18.5%	2,309	2,257	-53	-2.3%
19.8%	2,251	2,256	5	0.2%
21.0%	2,220	2,213	-7	-0.3%
22.2%	2,128	2,193	65	3.1%
23.5%	2,115	2,100	-15	-0.7%
24.7%	2,024	1,939	-85	-4.2%
25.9%	2,009	1,840	-169	-8.4%
27.2%	1,852	1,838	-14	-0.7%
28.4%	1,750	1,750	0	0.0%
29.6%	1,750	1,688	-62	-3.6%
30.9%	1,750	1,663	-87	-5.0%
32.1%	1,607	1,609	2	0.1%
33.3%	1,585	1,549	-36	-2.3%
34.6%	1,530	1,483	-46	-3.0%
35.8%	1,484	1,446	-38	-2.6%
37.0%	1,380	1,446	67	4.8%
38.3%	1,352	1,446	94	7.0%
39.5%	1,343	1,445	102	7.6%
40.7%	1,335	1,436	101	7.6%
42.0%	1,332	1,427	94	7.1%
43.2%	1,332	1,399	66	5.0%
44.4%	1,331	1,352	21	1.6%
45.7%	1,329	1,341	12	0.9%
46.9%	1,329	1,332	3	0.2%
48.1%	1,328	1,332	4	0.3%
49.4%	1,313	1,330	17	1.3%
50.6%	1,311	1,329	18	1.4%
51.9%	1,309	1,313	4	0.3%
53.1%	1,292	1,303	11	0.9%
54.3%	1,280	1,295	15	1.2%
55.6%	1,170	1,276	106	9.1%
56.8%	1,093	1,260	167	15.3%
58.0%	1,085	1,213	128	11.8%
59.3%	1,030	1,212	182	17.6%
60.5%	1,020	1,204	184	18.0%
61.7%	1,011	1,203	191	18.9%
63.0%	992	1,202	210	21.2%
64.2%	978	1,116	138	14.1%
65.4%	918	1,097	179	19.5%
66.7%	874	1,084	210	24.1%
67.9%	866	1,075	208	24.1%
69.1%	840	1,034	194	23.1%
70.4%	821	1,011	189	23.1%
71.6%	807	1,003	195	24.2%
72.8%	746	990	244	32.7%
74.1%	689	976	287	41.6%
75.3%	649	941	292	45.1%
76.5%	630	940	310	49.1%
77.8%	620	924	303	48.9%
79.0%	616	866	250	40.6%
80.2%	611	857	246	40.2%
81.5%	611	851	241	39.4%
82.7%	611	844	233	38.2%
84.0%	610	827	217	35.6%
85.2%	609	816	207	34.0%
86.4%	609	799	190	31.3%
87.7%	609	738	129	21.3%
88.9%	608	675	66	10.9%
90.1%	608	639	31	5.0%
91.4%	602	622	20	3.3%
92.6%	599	609	10	1.7%
93.8%	596	608	12	2.0%
95.1%	510	607	97	19.0%
96.3%	376	544	168	44.6%
97.5%	281	538	257	91.5%
98.8%	281	370	89	31.6%
100.0%	261	278	17	6.5%

Figure SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

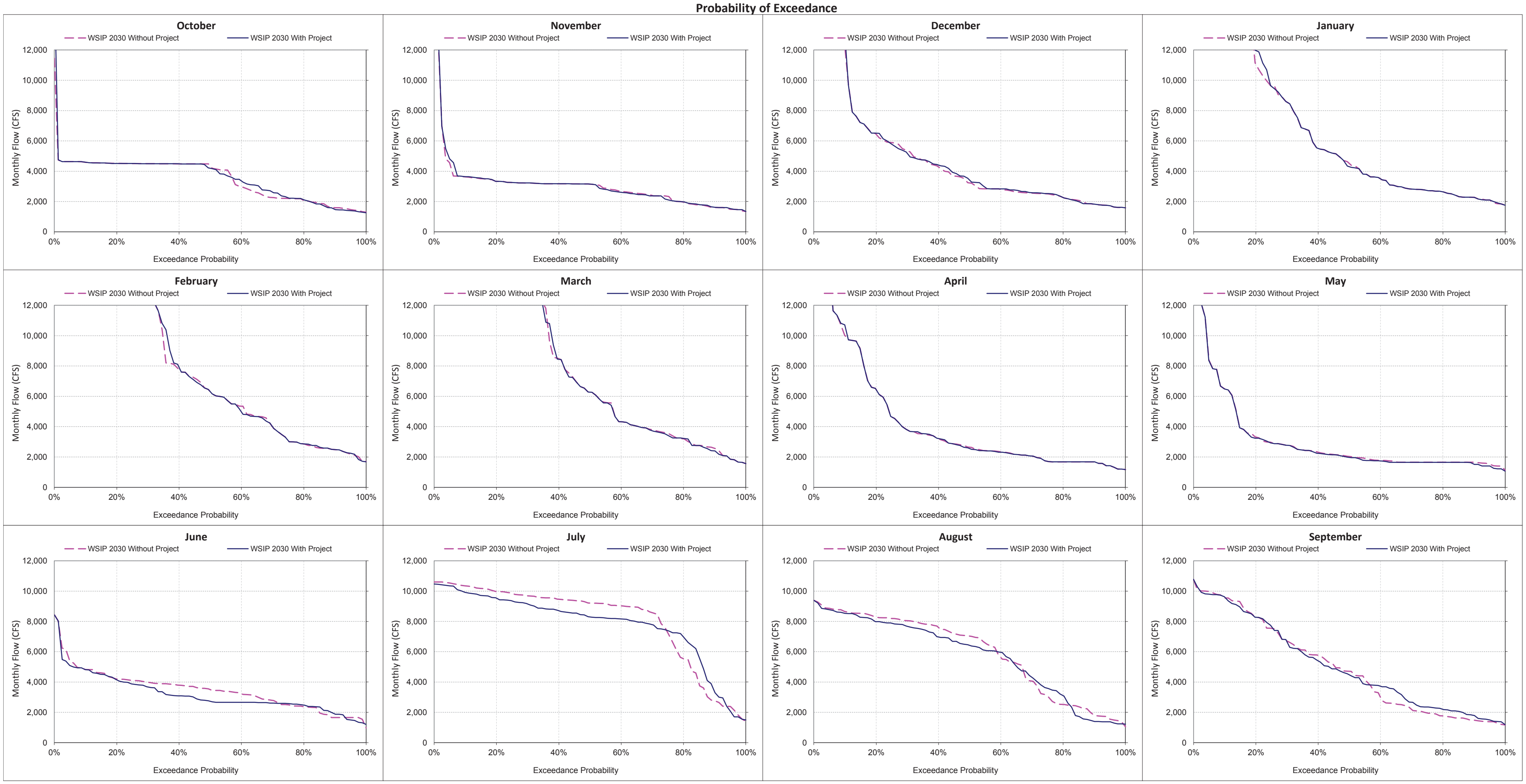


Table SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,454	16,356	4,902	42.8%
1.2%	4,746	4,746	0	0.0%
2.5%	4,635	4,635	0	0.0%
3.7%	4,635	4,635	0	0.0%
4.9%	4,635	4,635	0	0.0%
6.2%	4,635	4,635	0	0.0%
7.4%	4,635	4,635	0	0.0%
8.6%	4,631	4,631	0	0.0%
9.9%	4,590	4,590	0	0.0%
11.1%	4,568	4,568	0	0.0%
12.3%	4,554	4,554	0	0.0%
13.6%	4,554	4,554	0	0.0%
14.8%	4,546	4,546	0	0.0%
16.0%	4,542	4,542	0	0.0%
17.3%	4,528	4,523	-5	-0.1%
18.5%	4,523	4,520	-2	-0.1%
19.8%	4,520	4,515	-5	-0.1%
21.0%	4,515	4,511	-5	-0.1%
22.2%	4,511	4,508	-2	-0.1%
23.5%	4,508	4,507	-1	0.0%
24.7%	4,507	4,507	0	0.0%
25.9%	4,504	4,504	0	0.0%
27.2%	4,502	4,502	0	0.0%
28.4%	4,502	4,502	0	0.0%
29.6%	4,500	4,500	0	0.0%
30.9%	4,500	4,495	-4	-0.1%
32.1%	4,495	4,491	-4	-0.1%
33.3%	4,491	4,491	0	0.0%
34.6%	4,491	4,491	0	0.0%
35.8%	4,491	4,490	-2	0.0%
37.0%	4,490	4,489	0	0.0%
38.3%	4,489	4,487	-2	0.0%
39.5%	4,487	4,487	0	0.0%
40.7%	4,487	4,486	-1	0.0%
42.0%	4,486	4,486	0	0.0%
43.2%	4,486	4,486	0	0.0%
44.4%	4,486	4,484	-2	0.0%
45.7%	4,485	4,484	0	0.0%
46.9%	4,484	4,484	0	0.0%
48.1%	4,484	4,447	-38	-0.8%
49.4%	4,484	4,222	-262	-5.8%
50.6%	4,190	4,162	-28	-0.7%
51.9%	4,143	4,109	-34	-0.8%
53.1%	4,093	3,828	-265	-6.5%
54.3%	4,083	3,817	-266	-6.5%
55.6%	4,072	3,698	-374	-9.2%
56.8%	3,678	3,605	-72	-2.0%
58.0%	3,118	3,468	350	11.2%
59.3%	3,005	3,461	456	15.2%
60.5%	2,944	3,283	339	11.5%
61.7%	2,846	3,163	317	11.1%
63.0%	2,744	3,109	365	13.3%
64.2%	2,624	3,095	471	18.0%
65.4%	2,569	3,033	464	18.1%
66.7%	2,443	2,772	328	13.4%
67.9%	2,318	2,744	426	18.4%
69.1%	2,270	2,708	438	19.3%
70.4%	2,260	2,572	312	13.8%
71.6%	2,220	2,567	347	15.6%
72.8%	2,216	2,379	163	7.4%
74.1%	2,206	2,318	112	5.1%
75.3%	2,200	2,215	15	0.7%
76.5%	2,189	2,214	25	1.1%
77.8%	2,188	2,206	18	0.8%
79.0%	2,185	2,200	15	0.7%
80.2%	2,039	2,089	51	2.5%
81.5%	2,028	2,038	10	0.5%
82.7%	1,960	1,940	-20	-1.0%
84.0%	1,943	1,846	-97	-5.0%
85.2%	1,873	1,836	-37	-2.0%
86.4%	1,846	1,716	-131	-7.1%
87.7%	1,679	1,601	-77	-4.6%
88.9%	1,601	1,592	-9	-0.6%
90.1%	1,592	1,466	-126	-7.9%
91.4%	1,589	1,449	-140	-8.8%
92.6%	1,550	1,441	-108	-7.0%
93.8%	1,527	1,410	-116	-7.6%
95.1%	1,464	1,390	-74	-5.0%
96.3%	1,425	1,386	-39	-2.7%
97.5%	1,410	1,331	-79	-5.6%
98.8%	1,331	1,297	-34	-2.6%
100.0%	1,297	1,253	-45	-3.4%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,385	15,947	561	3.6%
1.2%	13,032	13,699	667	5.1%
2.5%	6,984	6,984	0	0.0%
3.7%	4,826	5,491	666	13.8%
4.9%	4,561	4,826	264	5.8%
6.2%	3,687	4,561	875	23.7%
7.4%	3,676	3,687	10	0.3%
8.6%	3,647	3,676	30	0.8%
9.9%	3,633	3,647	14	0.4%
11.1%	3,603	3,633	30	0.8%
12.3%	3,568	3,603	35	1.0%
13.6%	3,553	3,568	15	0.4%
14.8%	3,508	3,553	45	1.3%
16.0%	3,502	3,508	6	0.2%
17.3%	3,470	3,502	32	0.9%
18.5%	3,446	3,446	0	0.0%
19.8%	3,336	3,336	0	0.0%
21.0%	3,334	3,334	0	0.0%
22.2%	3,322	3,322	0	0.0%
23.5%	3,267	3,267	0	0.0%
24.7%	3,257	3,257	0	0.0%
25.9%	3,250	3,250	0	0.0%
27.2%	3,229	3,229	0	0.0%
28.4%	3,227	3,227	0	0.0%
29.6%	3,223	3,223	0	0.0%
30.9%	3,222	3,222	0	0.0%
32.1%	3,206	3,206	0	0.0%
33.3%	3,196	3,196	0	0.0%
34.6%	3,175	3,175	0	0.0%
35.8%	3,172	3,172	0	0.0%
37.0%	3,172	3,172	0	0.0%
38.3%	3,172	3,172	0	0.0%
39.5%	3,172	3,172	0	0.0%
40.7%	3,172	3,172	0	0.0%
42.0%	3,172	3,172	0	0.0%
43.2%	3,171	3,171	0	0.0%
44.4%	3,165	3,165	0	0.0%
45.7%	3,163	3,163	0	0.0%
46.9%	3,160	3,160	0	0.0%
48.1%	3,159	3,159	0	0.0%
49.4%	3,157	3,157	0	0.0%
50.6%	3,137	3,137	0	0.0%
51.9%	3,111	3,111	0	0.0%
53.1%	3,064	2,876	-188	-6.1%
54.3%	2,881	2,819	-62	-2.2%
55.6%	2,876	2,791	-85	-3.0%
56.8%	2,791	2,697	-95	-3.4%
58.0%	2,767	2,655	-111	-4.0%
59.3%	2,697	2,628	-69	-2.5%
60.5%	2,659	2,599	-60	-2.3%
61.7%	2,628	2,573	-55	-2.1%
63.0%	2,599	2,530	-69	-2.7%
64.2%	2,568	2,515	-53	-2.1%
65.4%	2,530	2,453	-77	-3.0%
66.7%	2,515	2,451	-64	-2.5%
67.9%	2,474	2,448	-26	-1.0%
69.1%	2,451	2,378	-73	-3.0%
70.4%	2,378	2,376	-2	-0.1%
71.6%	2,376	2,372	-4	-0.2%
72.8%	2,372	2,372	0	0.0%
74.1%	2,372	2,169	-204	-8.6%
75.3%	2,332	2,094	-238	-10.2%
76.5%	2,035	2,039	4	0.2%
77.8%	2,006	2,006	0	0.0%
79.0%	2,002	2,002	0	0.0%
80.2%	1,952	1,984	31	1.6%
81.5%	1,856	1,884	28	1.5%
82.7%	1,837	1,856	19	1.0%
84.0%	1,788	1,837	49	2.7%
85.2%	1,778	1,788	10	0.6%
86.4%	1,753	1,778	25	1.4%
87.7%	1,694	1,753	59	3.5%
88.9%	1,615	1,655	39	2.4%
90.1%	1,605	1,611	6	0.4%
91.4%	1,602	1,603	1	0.1%
92.6%	1,601	1,602	1	0.1%
93.8%	1,549	1,601	52	3.3%
95.1%	1,488	1,538	50	3.3%
96.3%	1,482	1,480	-2	-0.2%
97.5%	1,463	1,463	0	0.0%
98.8%	1,389	1,462	73	5.2%
100.0%	1,340	1,340	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	37,877	37,877	0	0.0%
1.2%	34,517	37,129	2,612	7.6%
2.5%	29,962	27,245	-2,718	-9.1%
3.7%	27,083	27,083	0	0.0%
4.9%	23,648	27,069	3,422	14.5%
6.2%	20,995	20,637	-357	-1.7%
7.4%	14,691	16,168	1,478	10.1%
8.6%	13,711	14,691	979	7.1%
9.9%	12,380	13,133	753	6.1%
11.1%	9,708	9,708	0	0.0%
12.3%	7,895	7,895	0	0.0%
13.6%	7,621	7,621	0	0.0%
14.8%	7,223	7,223	0	0.0%
16.0%	7,108	7,108	0	0.0%
17.3%	6,832	6,832	0	0.0%
18.5%	6,526	6,523	-2	0.0%
19.8%	6,497	6,515	19	0.3%
21.0%	6,204	6,496	293	4.7%
22.2%	6,060	6,134	74	1.2%
23.5%	5,921	6,008	86	1.5%
24.7%	5,898	5,830	-68	-1.2%
25.9%	5,863	5,659	-204	-3.5%
27.2%	5,778	5,491	-287	-5.0%
28.4%	5,491	5,378	-114	-2.1%
29.6%	5,385	5,266	-118	-2.2%
30.9%	5,276	4,944	-332	-6.3%
32.1%	4,944	4,882	-61	-1.2%
33.3%	4,882	4,799	-84	-1.7%
34.6%	4,758	4,758	0	0.0%
35.8%	4,730	4,730	0	0.0%
37.0%	4,476	4,641	165	3.7%
38.3%	4,423	4,483	60	1.4%
39.5%	4,351	4,444	93	2.1%
40.7%	4,181	4,351	171	4.1%
42.0%	3,998	4,322	324	8.1%
43.2%	3,959	4,181	221	5.6%
44.4%	3,692	3,937	244	6.6%
45.7%	3,673	3,843	171	4.7%
46.9%	3,624	3,691	67	1.9%
48.1%	3,530	3,673	143	4.1%
49.4%	3,240	3,530	290	8.9%
50.6%	3,211	3,273	62	1.9%
51.9%	3,039	3,262	223	7.3%
53.1%	2,849	3,240	391	13.7%
54.3%	2,838	3,038	199	7.0%
55.6%	2,838	2,849	11	0.4%
56.8%	2,838	2,838	0	0.0%
58.0%	2,838	2,838	0	0.0%
59.3%	2,838	2,838	0	0.0%
60.5%	2,764	2,838	74	2.7%
61.7%	2,764	2,838	75	2.7%
63.0%	2,724	2,764	40	1.5%
64.2%	2,656	2,760	104	3.9%
65.4%	2,623	2,724	101	3.8%
66.7%	2,596	2,657	61	2.3%
67.9%	2,579	2,656	78	3.0%
69.1%	2,573	2,596	22	0.9%
70.4%	2,552	2,579	26	1.0%
71.6%	2,535	2,576	41	1.6%
72.8%	2,526	2,552	26	1.0%
74.1%	2,517	2,534	16	0.7%
75.3%	2,503	2,526	24	0.9%
76.5%	2,451	2,503	51	2.1%
77.8%	2,417	2,451	34	1.4%
79.0%	2,351	2,351	0	0.0%
80.2%	2,241	2,241	0	0.0%
81.5%	2,180	2,179	0	0.0%
82.7%	2,137	2,122	-15	-0.7%
84.0%	2,110	2,065	-45	-2.1%
85.2%	2,065	1,974	-92	-4.4%
86.4%	1,974	1,859	-115	-5.8%
87.7%	1,859	1,858	-1	0.0%
88.9%	1,851	1,851	0	0.0%
90.1%	1,817	1,817	0	0.0%
91.4%	1,784	1,784	0	0.0%
92.6%	1,771	1,755	-16	-0.9%
93.8%	1,755	1,755	0	0.0%
95.1%	1,721	1,721	0	0.0%
96.3%	1,633	1,633	0	0.0%
97.5%	1,611	1,611	0	0.0%
98.8%	1,611	1,611	0	0.0%
100.0%	1,587	1,587	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	64,676	64,676	0	0.0%
1.2%	51,372	45,550	-5,822	-11.3%
2.5%	44,597	44,597	0	0.0%
3.7%	35,561	35,541	-20	-0.1%
4.9%	31,885	33,980	2,095	6.6%
6.2%	31,840	31,885	45	0.1%
7.4%	23,793	24,673	881	3.7%
8.6%	22,814	22,103	-711	-3.1%
9.9%	21,607	21,607	0	0.0%
11.1%	20,644	20,792	148	0.7%
12.3%	18,823	20,644	1,821	9.7%
13.6%	18,488	20,296	1,808	9.8%
14.8%	17,902	17,902	0	0.0%
16.0%	15,705	16,310	604	3.8%
17.3%	15,564	15,301	-262	-1.7%
18.5%	13,785	14,999	1,214	8.8%
19.8%	11,147	11,988	841	7.5%
21.0%	10,692	11,870	1,178	11.0%
22.2%	10,302	11,147	844	8.2%
23.5%	9,972	10,692	720	7.2%
24.7%	9,654	9,651	-4	0.0%
25.9%	9,651	9,443	-208	-2.2%
27.2%	9,060	9,237	177	1.9%
28.4%	8,902	8,902	0	0.0%
29.6%	8,604	8,604	0	0.0%
30.9%	8,455	8,455	0	0.0%
32.1%	7,943	7,946	2	0.0%
33.3%	7,520	7,520	0	0.0%
34.6%	6,879	6,879	0	0.0%
35.8%	6,785	6,785	0	0.0%
37.0%	6,692	6,692	0	0.0%
38.3%	5,922	5,922	0	0.0%
39.5%	5,542	5,542	0	0.0%
40.7%	5,462	5,462	0	0.0%
42.0%	5,418	5,418	0	0.0%
43.2%	5,285	5,285	0	0.0%
44.4%	5,192	5,192	0	0.0%
45.7%	5,153	5,152	-1	0.0%
46.9%	4,936	4,936	0	0.0%
48.1%	4,712	4,712	0	0.0%
49.4%	4,628	4,348	-280	-6.1%
50.6%	4,396	4,264	-133	-3.0%
51.9%	4,348	4,222	-125	-2.9%
53.1%	4,162	4,162	0	0.0%
54.3%	3,814	3,814	0	0.0%
55.6%	3,798	3,798	0	0.0%
56.8%	3,633	3,627	-6	-0.2%
58.0%	3,627	3,616	-11	-0.3%
59.3%	3,595	3,595	0	0.0%
60.5%	3,430	3,430	0	0.0%
61.7%	3,388	3,388	0	0.0%
63.0%	3,097	3,097	0	0.0%
64.2%	3,066	3,066	0	0.0%
65.4%	2,992	2,992	0	0.0%
66.7%	2,963	2,963	0	0.0%
67.9%	2,886	2,886	0	0.0%
69.1%	2,841	2,841	0	0.0%
70.4%	2,811	2,811	0	0.0%
71.6%	2,807	2,807	0	0.0%
72.8%	2,793	2,793	0	0.0%
74.1%	2,764	2,764	0	0.0%
75.3%	2,712	2,712	0	0.0%
76.5%	2,710	2,710	0	0.0%
77.8%	2,683	2,683	0	0.0%
79.0%	2,679	2,679	0	0.0%
80.2%	2,628	2,628	0	0.0%
81.5%	2,549	2,549	0	0.0%
82.7%	2,509	2,509	0	0.0%
84.0%	2,430	2,430	0	0.0%
85.2%	2,318	2,318	0	0.0%
86.4%	2,295	2,293	-2	-0.1%
87.7%	2,280	2,280	0	0.0%
88.9%	2,278	2,278	0	0.0%
90.1%	2,277	2,277	0	0.0%
91.4%	2,168	2,168	0	0.0%
92.6%	2,157	2,110	-47	-2.2%
93.8%	2,105	2,105	0	0.0%
95.1%	2,102	2,102	0	0.0%
96.3%	1,914	1,999	85	4.4%
97.5%	1,859	1,914	54	2.9%
98.8%	1,845	1,845	0	0.0%
100.0%	1,759	1,759	0	0.0%

Table SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,842	59,842	0	0.0%
1.2%	45,979	45,979	0	0.0%
2.5%	43,990	44,001	11	0.0%
3.7%	40,844	40,844	0	0.0%
4.9%	34,850	36,689	1,839	5.3%
6.2%	33,488	33,488	0	0.0%
7.4%	31,771	31,771	0	0.0%
8.6%	31,743	31,743	0	0.0%
9.9%	31,558	31,696	138	0.4%
11.1%	29,465	31,558	2,093	7.1%
12.3%	28,169	29,982	1,813	6.4%
13.6%	27,820	29,840	2,020	7.3%
14.8%	26,979	27,822	843	3.1%
16.0%	26,978	26,978	0	0.0%
17.3%	26,790	26,790	0	0.0%
18.5%	23,882	25,056	1,174	4.9%
19.8%	23,358	24,501	1,143	4.9%
21.0%	21,923	22,417	493	2.3%
22.2%	21,240	21,923	683	3.2%
23.5%	21,025	21,240	215	1.0%
24.7%	20,687	20,507	-180	-0.9%
25.9%	19,532	19,983	451	2.3%
27.2%	19,281	19,278	-3	0.0%
28.4%	17,629	17,629	0	0.0%
29.6%	14,059	14,195	136	1.0%
30.9%	13,655	14,059	404	3.0%
32.1%	12,151	12,151	0	0.0%
33.3%	11,639	11,639	0	0.0%
34.6%	10,390	10,816	426	4.1%
35.8%	8,202	10,390	2,188	26.7%
37.0%	8,179	9,027	848	10.4%
38.3%	8,120	8,202	81	1.0%
39.5%	7,868	8,119	251	3.2%
40.7%	7,595	7,595	0	0.0%
42.0%	7,589	7,589	0	0.0%
43.2%	7,317	7,317	0	0.0%
44.4%	7,264	7,119	-144	-2.0%
45.7%	7,121	6,919	-202	-2.8%
46.9%	6,919	6,760	-159	-2.3%
48.1%	6,555	6,555	0	0.0%
49.4%	6,449	6,449	0	0.0%
50.6%	6,156	6,156	0	0.0%
51.9%	6,024	6,023	-1	0.0%
53.1%	5,989	5,987	-2	0.0%
54.3%	5,946	5,946	0	0.0%
55.6%	5,720	5,720	0	0.0%
56.8%	5,503	5,503	0	0.0%
58.0%	5,492	5,492	0	0.0%
59.3%	5,354	5,181	-173	-3.2%
60.5%	5,351	4,816	-534	-10.0%
61.7%	4,816	4,799	-17	-0.4%
63.0%	4,801	4,690	-111	-2.3%
64.2%	4,690	4,669	-21	-0.5%
65.4%	4,669	4,650	-19	-0.4%
66.7%	4,650	4,575	-74	-1.6%
67.9%	4,575	4,373	-202	-4.4%
69.1%	4,223	4,223	0	0.0%
70.4%	3,880	3,880	0	0.0%
71.6%	3,684	3,684	0	0.0%
72.8%	3,489	3,489	0	0.0%
74.1%	3,310	3,310	0	0.0%
75.3%	3,005	3,005	0	0.0%
76.5%	2,990	2,990	0	0.0%
77.8%	2,982	2,982	0	0.0%
79.0%	2,884	2,884	0	0.0%
80.2%	2,848	2,852	4	0.1%
81.5%	2,760	2,848	89	3.2%
82.7%	2,754	2,760	5	0.2%
84.0%	2,629	2,754	126	4.8%
85.2%	2,581	2,629	47	1.8%
86.4%	2,572	2,583	11	0.4%
87.7%	2,571	2,581	10	0.4%
88.9%	2,508	2,508	0	0.0%
90.1%	2,478	2,478	0	0.0%
91.4%	2,465	2,465	0	0.0%
92.6%	2,364	2,364	0	0.0%
93.8%	2,273	2,273	0	0.0%
95.1%	2,179	2,243	63	2.9%
96.3%	2,112	2,179	67	3.2%
97.5%	2,021	1,832	-189	-9.4%
98.8%	1,711	1,711	0	0.0%
100.0%	1,700	1,678	-23	-1.3%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	53,653	53,653	0	0.0%
1.2%	52,428	52,429	0	0.0%
2.5%	41,481	41,518	37	0.1%
3.7%	41,088	41,481	393	1.0%
4.9%	37,093	37,096	3	0.0%
6.2%	37,092	37,092	0	0.0%
7.4%	29,584	29,584	0	0.0%
8.6%	26,754	26,754	0	0.0%
9.9%	25,520	25,520	0	0.0%
11.1%	24,973	24,483	-490	-2.0%
12.3%	24,125	24,125	0	0.0%
13.6%	20,551	21,941	1,390	6.8%
14.8%	20,317	20,551	234	1.2%
16.0%	19,782	19,782	0	0.0%
17.3%	19,457	19,457	0	0.0%
18.5%	19,398	18,824	-575	-3.0%
19.8%	18,824	18,639	-185	-1.0%
21.0%	18,202	18,202	0	0.0%
22.2%	17,236	17,236	0	0.0%
23.5%	17,213	17,213	0	0.0%
24.7%	15,606	15,606	0	0.0%
25.9%	15,017	15,017	0	0.0%
27.2%	14,049	14,049	0	0.0%
28.4%	13,613	13,613	0	0.0%
29.6%	13,238	13,238	0	0.0%
30.9%	13,038	13,037	-1	0.0%
32.1%	12,589	12,559	-30	-0.2%
33.3%	12,560	12,398	-162	-1.3%
34.6%	12,268	12,268	0	0.0%
35.8%	11,805	10,881	-924	-7.8%
37.0%	9,589	10,804	1,214	12.7%
38.3%	8,576	9,389	813	9.5%
39.5%	8,513	8,463	-50	-0.6%
40.7%	8,416	8,416	0	0.0%
42.0%	7,769	7,769	0	0.0%
43.2%	7,542	7,275	-267	-3.5%
44.4%	7,275	7,242	-33	-0.5%
45.7%	6,934	6,934	-1	0.0%
46.9%	6,640	6,650	10	0.2%
48.1%	6,547	6,547	0	0.0%
49.4%	6,291	6,291	0	0.0%
50.6%	6,267	6,267	0	0.0%
51.9%	6,078	6,078	0	0.0%
53.1%	5,809	5,809	0	0.0%
54.3%	5,622	5,570	-52	-0.9%
55.6%	5,573	5,563	-10	-0.2%
56.8%	5,563	5,414	-149	-2.7%
58.0%	4,665	4,650	-15	-0.3%
59.3%	4,326	4,326	0	0.0%
60.5%	4,316	4,314	-3	-0.1%
61.7%	4,273	4,273	0	0.0%
63.0%	4,127	4,127	0	0.0%
64.2%	4,072	4,072	0	0.0%
65.4%	4,013	4,013	0	0.0%
66.7%	3,936	3,935	-1	0.0%
67.9%	3,920	3,920	0	0.0%
69.1%	3,827	3,787	-40	-1.0%
70.4%	3,787	3,703	-84	-2.2%
71.6%	3,703	3,647	-56	-1.5%
72.8%	3,647	3,600	-47	-1.3%
74.1%	3,600	3,532	-69	-1.9%
75.3%	3,532	3,391	-140	-4.0%
76.5%	3,391	3,251	-141	-4.1%
77.8%	3,251	3,247	-3	-0.1%
79.0%	3,222	3,247	25	0.8%
80.2%	3,185	3,222	36	1.1%
81.5%	3,020	3,185	165	5.5%
82.7%	2,876	2,754	-122	-4.2%
84.0%	2,754	2,751	-3	-0.1%
85.2%	2,751	2,749	-3	-0.1%
86.4%	2,749	2,644	-106	-3.8%
87.7%	2,663	2,556	-107	-4.0%
88.9%	2,644	2,412	-232	-8.8%
90.1%	2,556	2,405	-150	-5.9%
91.4%	2,405	2,181	-224	-9.3%
92.6%	2,094	2,092	-2	-0.1%
93.8%	2,066	2,066	0	0.0%
95.1%	1,849	1,849	0	0.0%
96.3%	1,814	1,814	0	0.0%
97.5%	1,657	1,657	0	0.0%
98.8%	1,649	1,645	-4	-0.3%
100.0%	1,559	1,559	0	0.0%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,813	30,807	-6	0.0%
1.2%	25,542	25,538	-4	0.0%
2.5%	22,345	22,342	-3	0.0%
3.7%	15,712	15,704	-8	-0.1%
4.9%	14,944	14,937	-7	0.0%
6.2%	11,642	11,637	-5	0.0%
7.4%	11,360	11,357	-4	0.0%
8.6%	10,729	10,814	86	0.8%
9.9%	10,040	10,721	681	6.8%
11.1%	9,729	9,725	-4	0.0%
12.3%	9,684	9,681	-3	0.0%
13.6%	9,646	9,642	-4	0.0%
14.8%	9,176	9,144	-32	-0.3%
16.0%	8,005	7,995	-9	-0.1%
17.3%	7,044	7,035	-9	-0.1%
18.5%	6,605	6,598	-7	-0.1%
19.8%	6,528	6,522	-6	-0.1%
21.0%	6,122	6,113	-9	-0.2%
22.2%	5,945	5,939	-6	-0.1%
23.5%	5,450	5,450	0	0.0%
24.7%	4,666	4,666	0	0.0%
25.9%	4,538	4,529	-9	-0.2%
27.2%	4,282	4,282	0	0.0%
28.4%	4,009	3,995	-14	-0.3%
29.6%	3,823	3,816	-6	-0.2%
30.9%	3,685	3,685	0	0.0%
32.1%	3,673	3,673	0	0.0%
33.3%	3,539	3,670	132	3.7%
34.6%	3,528	3,539	11	0.3%
35.8%	3,497	3,528	31	0.9%
37.0%	3,437	3,497	60	1.8%
38.3%	3,404	3,394	-11	-0.3%
39.5%	3,239	3,239	0	0.0%
40.7%	3,138	3,180	41	1.3%
42.0%	3,051	3,138	87	2.8%
43.2%	2,907	2,904	-3	-0.1%
44.4%	2,870	2,870	0	0.0%
45.7%	2,850	2,803	-47	-1.6%
46.9%	2,803	2,758	-45	-1.6%
48.1%	2,756	2,630	-126	-4.6%
49.4%	2,656	2,595	-61	-2.3%
50.6%	2,632	2,501	-130	-5.0%
51.9%	2,501	2,479	-23	-0.9%
53.1%	2,483	2,418	-64	-2.6%
54.3%	2,418	2,410	-9	-0.4%
55.6%	2,412	2,392	-19	-0.8%
56.8%	2,392	2,391	-2	-0.1%
58.0%	2,391	2,361	-29	-1.2%
59.3%	2,361	2,320	-41	-1.7%
60.5%	2,320	2,320	0	0.0%
61.7%	2,297	2,286	-10	-0.4%
63.0%	2,258	2,231	-27	-1.2%
64.2%	2,176	2,176	0	0.0%
65.4%	2,164	2,164	0	0.0%
66.7%	2,119	2,119	0	0.0%
67.9%	2,116	2,116	0	0.0%
69.1%	2,073	2,072	-1	0.0%
70.4%	2,047	2,047	0	0.0%
71.6%	1,960	1,958	-2	-0.1%
72.8%	1,931	1,896	-35	-1.8%
74.1%	1,750	1,750	0	0.0%
75.3%	1,696	1,696	0	0.0%
76.5%	1,672	1,672	0	0.0%
77.8%	1,672	1,672	0	0.0%
79.0%	1,672	1,672	0	0.0%
80.2%	1,672	1,672	0	0.0%
81.5%	1,672	1,672	0	0.0%
82.7%	1,672	1,672	0	0.0%
84.0%	1,672	1,672	0	0.0%
85.2%	1,672	1,672	0	0.0%
86.4%	1,672	1,672	0	0.0%
87.7%	1,672	1,672	0	0.0%
88.9%	1,672	1,672	0	0.0%
90.1%	1,672	1,672	0	0.0%
91.4%	1,580	1,580	0	0.0%
92.6%	1,571	1,571	0	0.0%
93.8%	1,422	1,422	0	0.0%
95.1%	1,422	1,422	0	0.0%
96.3%	1,324	1,324	0	0.0%
97.5%	1,205	1,205	0	0.0%
98.8%	1,205	1,205	0	0.0%
100.0%	1,170	1,170	0	0.0%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,060	18,051	-9	-0.1%
1.2%	17,872	17,859	-13	-0.1%
2.5%	12,132	12,120	-12	-0.1%
3.7%	11,231	11,230	-1	0.0%
4.9%	8,391	8,378	-14	-0.2%
6.2%	7,826	7,819	-7	-0.1%
7.4%	7,797	7,779	-18	-0.2%
8.6%	6,678	6,668	-10	-0.1%
9.9%	6,508	6,496	-12	-0.2%
11.1%	6,430	6,421	-9	-0.1%
12.3%	6,071	6,059	-12	-0.2%
13.6%	5,129	5,117	-12	-0.2%
14.8%	3,925	3,925	0	0.0%
16.0%	3,816	3,816	0	0.0%
17.3%	3,565	3,565	0	0.0%
18.5%	3,561	3,304	-257	-7.2%
19.8%	3,325	3,242	-82	-2.5%
21.0%	3,257	3,234	-23	-0.7%
22.2%	3,044	3,159	115	3.8%
23.5%	2,986	3,042	56	1.9%
24.7%	2,972	2,931	-42	-1.4%
25.9%	2,882	2,878	-4	-0.1%
27.2%	2,878	2,876	-2	-0.1%
28.4%	2,832	2,818	-14	-0.5%
29.6%	2,779	2,777	-2	-0.1%
30.9%	2,767	2,751	-16	-0.6%
32.1%	2,687	2,646	-42	-1.5%
33.3%	2,502	2,500	-1	-0.1%
34.6%	2,490	2,463	-27	-1.1%
35.8%	2,429	2,426	-3	-0.1%
37.0%	2,422	2,424	2	0.1%
38.3%	2,408	2,350	-58	-2.4%
39.5%	2,343	2,248	-95	-4.1%
40.7%	2,270	2,231	-39	-1.7%
42.0%	2,223	2,185	-38	-1.7%
43.2%	2,192	2,160	-33	-1.5%
44.4%	2,171	2,138	-32	-1.5%
45.7%	2,138	2,138	0	0.0%
46.9%	2,138	2,092	-46	-2.1%
48.1%	2,092	2,039	-54	-2.6%
49.4%	2,041	1,985	-56	-2.7%
50.6%	2,015	1,954	-61	-3.0%
51.9%	1,954	1,951	-3	-0.2%
53.1%	1,951	1,888	-62	-3.2%
54.3%	1,932	1,787	-145	-7.5%
55.6%	1,888	1,764	-124	-6.6%
56.8%	1,837	1,760	-77	-4.2%
58.0%	1,788	1,750	-38	-2.1%
59.3%	1,775	1,748	-27	-1.5%
60.5%	1,774	1,736	-38	-2.1%
61.7%	1,767	1,702	-65	-3.7%
63.0%	1,739	1,651	-88	-5.1%
64.2%	1,730	1,651	-79	-4.6%
65.4%	1,651	1,651	0	0.0%
66.7%	1,651	1,651	0	0.0%
67.9%	1,651	1,651	0	0.0%
69.1%	1,651	1,651	0	0.0%
70.4%	1,651	1,651	0	0.0%
71.6%	1,651	1,651	0	0.0%
72.8%	1,651	1,651	0	0.0%
74.1%	1,651	1,651	0	0.0%
75.3%	1,651	1,651	0	0.0%
76.5%	1,651	1,651	0	0.0%
77.8%	1,651	1,651	0	0.0%
79.0%	1,651	1,651	0	0.0%
80.2%	1,651	1,651	0	0.0%
81.5%	1,651	1,651	0	0.0%
82.7%	1,651	1,651	0	0.0%
84.0%	1,651	1,651	0	0.0%
85.2%	1,651	1,651	0	0.0%
86.4%	1,651	1,651	0	0.0%
87.7%	1,651	1,651	0	0.0%
88.9%	1,651	1,622	-29	-1.7%
90.1%	1,651	1,515	-136	-8.2%
91.4%	1,622	1,512	-110	-6.8%
92.6%	1,595	1,401	-195	-12.2%
93.8%	1,583	1,401	-182	-11.5%
95.1%	1,515	1,401	-114	-7.5%
96.3%	1,421	1,254	-167	-11.7%
97.5%	1,401	1,216	-184	-13.1%
98.8%	1,401	1,208	-192	-13.7%
100.0%	1,117	1,066	-51	-4.5%

Table SW-46-b

Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,440	8,427	-13	-0.2%
1.2%	8,029	8,025	-4	0.0%
2.5%	6,242	5,488	-754	-12.1%
3.7%	6,138	5,383	-755	-12.3%
4.9%	5,395	5,091	-304	-5.6%
6.2%	5,249	4,996	-253	-4.8%
7.4%	4,954	4,946	-8	-0.2%
8.6%	4,945	4,932	-13	-0.3%
9.9%	4,823	4,811	-12	-0.2%
11.1%	4,821	4,809	-12	-0.2%
12.3%	4,819	4,619	-200	-4.2%
13.6%	4,620	4,583	-37	-0.8%
14.8%	4,609	4,509	-99	-2.2%
16.0%	4,570	4,497	-73	-1.6%
17.3%	4,362	4,379	16	0.4%
18.5%	4,290	4,319	30	0.7%
19.8%	4,204	4,170	-34	-0.8%
21.0%	4,186	4,053	-133	-3.2%
22.2%	4,178	3,997	-180	-4.3%
23.5%	4,145	3,976	-170	-4.1%
24.7%	4,112	3,873	-239	-5.8%
25.9%	4,097	3,848	-249	-6.1%
27.2%	4,082	3,803	-279	-6.8%
28.4%	4,038	3,795	-243	-6.0%
29.6%	4,000	3,691	-309	-7.7%
30.9%	3,959	3,639	-319	-8.1%
32.1%	3,911	3,614	-296	-7.6%
33.3%	3,899	3,370	-529	-13.6%
34.6%	3,889	3,358	-531	-13.7%
35.8%	3,889	3,172	-717	-18.4%
37.0%	3,859	3,149	-710	-18.4%
38.3%	3,849	3,112	-737	-19.1%
39.5%	3,797	3,096	-701	-18.5%
40.7%	3,784	3,084	-699	-18.5%
42.0%	3,752	3,071	-682	-18.2%
43.2%	3,713	3,069	-644	-17.4%
44.4%	3,711	3,024	-687	-18.5%
45.7%	3,629	2,887	-742	-20.5%
46.9%	3,588	2,821	-767	-21.4%
48.1%	3,580	2,796	-784	-21.9%
49.4%	3,549	2,770	-780	-22.0%
50.6%	3,448	2,699	-749	-21.7%
51.9%	3,443	2,656	-787	-22.9%
53.1%	3,442	2,656	-786	-22.8%
54.3%	3,393	2,656	-737	-21.7%
55.6%	3,392	2,656	-736	-21.7%
56.8%	3,356	2,656	-700	-20.8%
58.0%	3,315	2,656	-659	-19.9%
59.3%	3,295	2,656	-639	-19.4%
60.5%	3,186	2,656	-530	-16.6%
61.7%	3,170	2,656	-514	-16.2%
63.0%	3,153	2,656	-496	-15.7%
64.2%	3,100	2,655	-445	-14.4%
65.4%	2,993	2,639	-354	-11.8%
66.7%	2,876	2,639	-237	-8.2%
67.9%	2,846	2,637	-209	-7.3%
69.1%	2,813	2,615	-199	-7.1%
70.4%	2,777	2,610	-166	-6.0%
71.6%	2,643	2,593	-50	-1.9%
72.8%	2,517	2,593	76	3.0%
74.1%	2,513	2,587	74	2.9%
75.3%	2,489	2,576	86	3.5%
76.5%	2,420	2,545	125	5.2%
77.8%	2,416	2,534	118	4.9%
79.0%	2,410	2,510	100	4.1%
80.2%	2,363	2,479	116	4.9%
81.5%	2,347	2,393	46	2.0%
82.7%	2,328	2,392	63	2.7%
84.0%	2,321	2,361	40	1.7%
85.2%	1,947	2,358	412	21.2%
86.4%	1,869	2,125	257	13.7%
87.7%	1,847	2,104	258	14.0%
88.9%	1,657	1,993	337	20.3%
90.1%	1,656	1,880	224	13.5%
91.4%	1,656	1,874	218	13.1%
92.6%	1,656	1,831	175	10.5%
93.8%	1,656	1,539	-117	-7.1%
95.1%	1,656	1,500	-156	-9.4%
96.3%	1,656	1,458	-198	-12.0%
97.5%	1,656	1,349	-307	-18.5%
98.8%	1,540	1,308	-232	-15.0%
100.0%	972	1,206	234	24.1%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,600	10,477	-123	-1.2%
1.2%	10,600	10,444	-157	-1.5%
2.5%	10,600	10,417	-183	-1.7%
3.7%	10,573	10,388	-185	-1.8%
4.9%	10,535	10,351	-184	-1.7%
6.2%	10,486	10,336	-150	-1.4%
7.4%	10,438	10,091	-347	-3.3%
8.6%	10,382	10,023	-359	-3.5%
9.9%	10,350	9,921	-429	-4.1%
11.1%	10,324	9,876	-448	-4.3%
12.3%	10,292	9,837	-455	-4.4%
13.6%	10,209	9,807	-402	-3.9%
14.8%	10,178	9,724	-454	-4.5%
16.0%	10,167	9,694	-473	-4.7%
17.3%	10,130	9,684	-446	-4.4%
18.5%	10,046	9,584	-462	-4.6%
19.8%	9,976	9,562	-414	-4.1%
21.0%	9,964	9,432	-532	-5.3%
22.2%	9,959	9,422	-537	-5.4%
23.5%	9,912	9,405	-507	-5.1%
24.7%	9,880	9,373	-506	-5.1%
25.9%	9,784	9,289	-494	-5.1%
27.2%	9,757	9,245	-512	-5.2%
28.4%	9,747	9,236	-510	-5.2%
29.6%	9,693	9,176	-517	-5.3%
30.9%	9,681	9,075	-606	-6.3%
32.1%	9,657	9,017	-641	-6.6%
33.3%	9,589	8,871	-719	-7.5%
34.6%	9,567	8,869	-698	-7.3%
35.8%	9,556	8,822	-734	-7.7%
37.0%	9,555	8,805	-750	-7.8%
38.3%	9,550	8,801	-749	-7.8%
39.5%	9,471	8,745	-726	-7.7%
40.7%	9,453	8,651	-802	-8.5%
42.0%	9,424	8,621	-803	-8.5%
43.2%	9,411	8,589	-822	-8.7%
44.4%	9,390	8,554	-836	-8.9%
45.7%	9,364	8,544	-819	-8.8%
46.9%	9,360	8,442	-918	-9.8%
48.1%	9,309	8,438	-871	-9.4%
49.4%	9,214	8,314	-900	-9.8%
50.6%	9,206	8,279	-927	-10.1%
51.9%	9,204	8,260	-944	-10.3%
53.1%	9,188	8,256	-931	-10.1%
54.3%	9,186	8,235	-951	-10.4%
55.6%	9,148	8,206	-942	-10.3%
56.8%	9,063	8,195	-868	-9.6%
58.0%	9,060	8,194	-865	-9.6%
59.3%	9,030	8,177	-853	-9.4%
60.5%	9,018	8,165	-853	-9.5%
61.7%	8,986	8,141	-845	-9.4%
63.0%	8,966	8,061	-906	-10.1%
64.2%	8,955	8,025	-930	-10.4%
65.4%	8,938	7,951	-987	-11.0%
66.7%	8,789	7,950	-839	-9.5%
67.9%	8,783	7,876	-907	-10.3%
69.1%	8,630	7,829	-801	-9.3%
70.4%	8,552	7,761	-791	-9.2%
71.6%	8,469	7,526	-942	-11.1%
72.8%	7,849	7,501	-348	-4.4%
74.1%	7,597	7,461	-136	-1.8%
75.3%	7,123	7,375	251	3.5%
76.5%	6,623	7,253	630	9.5%
77.8%	6,102	7,243	1,141	18.7%
79.0%	5,629	7,202	1,572	27.9%
80.2%	5,516	6,924	1,408	25.5%
81.5%	5,480	6,624	1,144	20.9%
82.7%	4,715	6,413	1,698	36.0%
84.0%	4,598	6,206	1,608	35.0%
85.2%	3,745	5,540	1,795	47.9%
86.4%	3,608	4,847	1,238	34.3%
87.7%	3,025	4,101	1,076	35.6%
88.9%	2,810	3,899	1,089	38.7%
90.1%	2,754	3,288	534	19.4%
91.4%	2,650	3,001	351	13.2%
92.6%	2,403	2,947	544	22.6%
93.8%	2,402	2,401	-1	0.0%
95.1%	2,387	2,087	-300	-12.6%
96.3%	2,129	1,707	-422	-19.8%
97.5%	1,816	1,695	-121	-6.6%
98.8%	1,560	1,542	-18	-1.1%
100.0%	1,405	1,495	90	6.4%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,390	9,390	0	0.0%
1.2%	9,280	9,226	-54	-0.6%
2.5%	9,080	8,865	-216	-2.4%
3.7%	8,883	8,828	-55	-0.6%
4.9%	8,866	8,771	-95	-1.1%
6.2%	8,810	8,723	-86	-1.0%
7.4%	8,776	8,623	-153	-1.7%
8.6%	8,771	8,603	-167	-1.9%
9.9%	8,660	8,526	-134	-1.5%
11.1%	8,602	8,525	-77	-0.9%
12.3%	8,549	8,512	-37	-0.4%
13.6%	8,542	8,439	-104	-1.2%
14.8%	8,534	8,277	-257	-3.0%
16.0%	8,533	8,260	-272	-3.2%
17.3%	8,465	8,239	-226	-2.7%
18.5%	8,393	8,155	-238	-2.8%
19.8%	8,293	7,990	-303	-3.7%
21.0%	8,244	7,989	-255	-3.1%
22.2%	8,242	7,928	-314	-3.8%
23.5%	8,240	7,897	-343	-4.2%
24.7%	8,195	7,895	-300	-3.7%
25.9%	8,189	7,834	-356	-4.3%
27.2%	8,147	7,812	-335	-4.1%
28.4%	8,074	7,801	-274	-3.4%
29.6%	8,052	7,702	-349	-4.3%
30.9%	8,037	7,630	-408	-5.1%
32.1%	7,994	7,571	-423	-5.3%
33.3%	7,936	7,539	-397	-5.0%
34.6%	7,860	7,487	-373	-4.7%
35.8%	7,819	7,416	-403	-5.2%
37.0%	7,816	7,308	-508	-6.5%
38.3%	7,743	7,248	-495	-6.4%
39.5%	7,694	6,993	-701	-9.1%
40.7%	7,468	6,945	-524	-7.0%
42.0%	7,467	6,935	-533	-7.1%
43.2%	7,348	6,915	-433	-5.9%
44.4%	7,228	6,682	-547	-7.6%
45.7%	7,159	6,680	-479	-6.7%
46.9%	7,094	6,554	-540	-7.6%
48.1%	7,075	6,496	-580	-8.2%
49.4%	7,050	6,470	-581	-8.2%
50.6%	7,009	6,379	-630	-9.0%
51.9%	6,948	6,342	-606	-8.7%
53.1%	6,922	6,279	-643	-9.3%
54.3%	6,675	6,123	-552	-8.3%
55.6%	6,495	6,065	-430	-6.6%
56.8%	6,372	6,062	-310	-4.9%
58.0%	6,294	6,052	-243	-3.9%
59.3%	5,776	5,982	206	3.6%
60.5%	5,510	5,956	445	8.1%
61.7%	5,487	5,678	190	3.5%
63.0%	5,309	5,555	247	4.6%
64.2%	5,302	5,223	-78	-1.5%
65.4%	5,191	4,940	-251	-4.8%
66.7%	5,110	4,739	-371	-7.3%
67.9%	4,298	4,734	436	10.1%
69.1%	4,080	4,436	356	8.7%
70.4%	4,049	4,262	213	5.3%
71.6%	3,745	4,024	280	7.5%
72.8%	3,239	3,815	576	17.8%
74.1%	3,180	3,631	451	14.2%
75.3%	3,005	3,564	559	18.6%
76.5%	2,716	3,460	744	27.4%
77.8%	2,589	3,432	843	32.6%
79.0%	2,527	3,203	676	26.7%
80.2%	2,524	3,075	551	21.8%
81.5%	2,477	2,606	129	5.2%
82.7%	2,457	2,358	-99	-4.0%
84.0%	2,435	1,796	-639	-26.2%
85.2%	2,358	1,712	-647	-27.4%
86.4%	2,257	1,571	-686	-30.4%
87.7%	2,232	1,532	-700	-31.4%
88.9%	1,973	1,457	-516	-26.2%
90.1%	1,786	1,400	-386	-21.6%
91.4%	1,761	1,397	-364	-20.7%
92.6%	1,739	1,372	-367	-21.1%
93.8%	1,731	1,370	-361	-20.9%
95.1%	1,548	1,369	-179	-11.5%
96.3%	1,491	1,289	-203	-13.6%
97.5%	1,453	1,240	-213	-14.7%
98.8%	1,368	1,234	-134	-9.8%
100.0%	1,046	1,225	178	17.0%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,775	10,775	0	0.0%
1.2%	10,085	10,284	198	2.0%
2.5%	10,010	9,923	-87	-0.9%
3.7%	10,005	9,814	-191	-1.9%
4.9%	9,977	9,800	-177	-1.8%
6.2%	9,884	9,770	-114	-1.2%
7.4%	9,785	9,769	-15	-0.2%
8.6%	9,752	9,739	-13	-0.1%
9.9%	9,550	9,630	80	0.8%
11.1%	9,546	9,360	-186	-1.9%
12.3%	9,363	9,181	-182	-1.9%
13.6%	9,355	9,121	-234	-2.5%
14.8%	9,314	8,966	-348	-3.7%
16.0%	8,883	8,647	-235	-2.7%
17.3%	8,665	8,594	-72	-0.8%
18.5%	8,535	8,504	-31	-0.4%
19.8%	8,295	8,284	-11	-0.1%
21.0%	8,253	8,263	10	0.1%
22.2%	8,120	8,179	59	0.7%
23.5%	7,554	7,940	386	5.1%
24.7%	7,549	7,751	202	2.7%
25.9%	7,509	7,412	-97	-1.3%
27.2%	7,221	7,396	175	2.4%
28.4%	6,813	6,817	4	0.1%
29.6%	6,748	6,802	55	0.8%
30.9%	6,613	6,292	-321	-4.8%
32.1%	6,466	6,230	-236	-3.7%
33.3%	6,241	6,210	-31	-0.5%
34.6%	6,122	6,024	-98	-1.6%
35.8%	6,113	5,802	-311	-5.1%
37.0%	5,818	5,643	-174	-3.0%
38.3%	5,797	5,621	-176	-3.0%
39.5%	5,786	5,447	-339	-5.9%
40.7%	5,734	5,321	-412	-7.2%
42.0%	5,539	5,079	-460	-8.3%
43.2%	5,317	5,040	-277	-5.2%
44.4%	5,262	4,876	-386	-7.3%
45.7%	4,940	4,873	-67	-1.4%
46.9%	4,938	4,728	-210	-4.3%
48.1%	4,733	4,624	-109	-2.3%
49.4%	4,711	4,549	-162	-3.4%
50.6%	4,702	4,415	-287	-6.1%
51.9%	4,433	4,296	-137	-3.1%
53.1%	4,411	4,283	-128	-2.9%
54.3%	4,407	3,900	-507	-11.5%
55.6%	4,040	3,823	-217	-5.4%
56.8%	3,780	3,809	29	0.8%
58.0%	3,352	3,797	444	13.2%
59.3%	3,296	3,771	475	14.4%
60.5%	2,771	3,693	923	33.3%
61.7%	2,619	3,685	1,065	40.7%
63.0%	2,608	3,591	983	37.7%
64.2%	2,591	3,557	965	37.2%
65.4%	2,528	3,322	794	31.4%
66.7%	2,510	3,174	664	26.4%
67.9%	2,443	2,876	433	17.7%
69.1%	2,337	2,684	347	14.8%
70.4%	2,119	2,655	537	25.3%
71.6%	2,095	2,475	380	18.2%
72.8%	2,075	2,373	298	14.4%
74.1%	2,002	2,350	348	17.4%
75.3%	1,940	2,348	409	21.1%
76.5%	1,937	2,318	381	19.7%
77.8%	1,891	2,283	393	20.8%
79.0%	1,771	2,266	495	27.9%
80.2%	1,767	2,188	421	23.8%
81.5%	1,722	2,163	441	25.6%
82.7%	1,689	2,096	406	24.0%
84.0%	1,631	2,090	459	28.2%
85.2%	1,629	2,063	434	26.6%
86.4%	1,625	1,996	372	22.9%
87.7%	1,567	1,851	285	18.2%
88.9%	1,482	1,833	352	23.7%
90.1%	1,481	1,792	312	21.1%
91.4%	1,444	1,601	157	10.9%
92.6%	1,406	1,561	156	11.1%
93.8%	1,388	1,541	153	11.1%
95.1%	1,384	1,504	120	8.7%
96.3%	1,383	1,406	23	1.7%
97.5%	1,283	1,388	104	8.1%
98.8%	1,209	1,384	175	14.5%
100.0%	1,166	1,193	27	2.3%

Figure SW-47-b
American River at Mouth, Monthly Flow
Probability of Exceedance

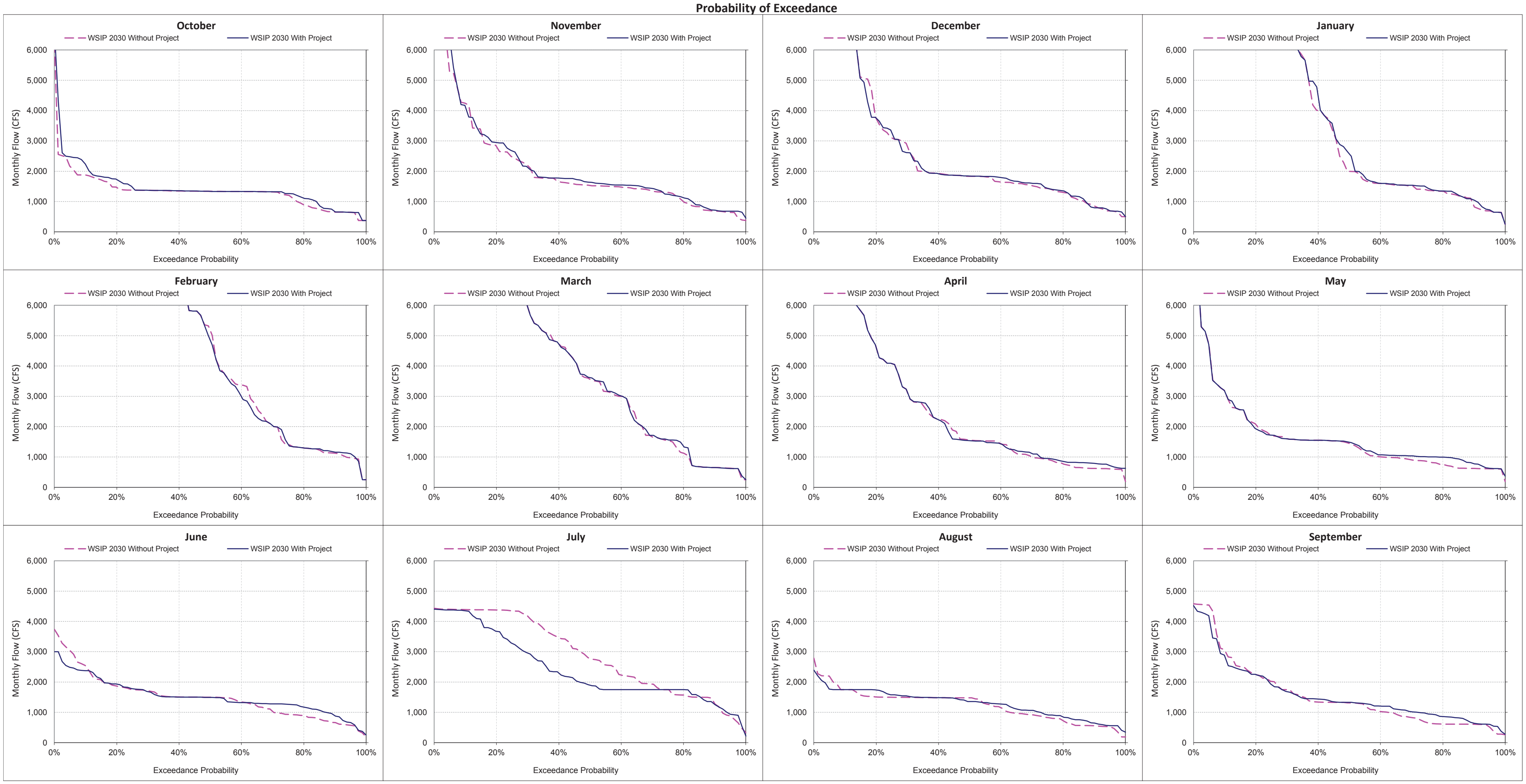


Table SW-47-b

American River at Mouth, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,213	6,668	455	7.3%
1.2%	2,556	4,300	1,745	68.3%
2.5%	2,511	2,611	100	4.0%
3.7%	2,474	2,492	19	0.8%
4.9%	2,169	2,477	308	14.2%
6.2%	2,042	2,452	410	20.1%
7.4%	1,879	2,448	569	30.3%
8.6%	1,879	2,381	502	26.7%
9.9%	1,879	2,242	363	19.3%
11.1%	1,849	2,015	166	9.0%
12.3%	1,799	1,879	80	4.5%
13.6%	1,756	1,849	92	5.2%
14.8%	1,721	1,829	108	6.3%
16.0%	1,666	1,805	139	8.4%
17.3%	1,645	1,790	144	8.8%
18.5%	1,480	1,755	275	18.5%
19.8%	1,479	1,746	267	18.0%
21.0%	1,399	1,662	263	18.8%
22.2%	1,383	1,585	202	14.6%
23.5%	1,378	1,578	200	14.5%
24.7%	1,377	1,503	125	9.1%
25.9%	1,376	1,378	2	0.2%
27.2%	1,375	1,376	1	0.1%
28.4%	1,372	1,373	1	0.1%
29.6%	1,370	1,370	0	0.0%
30.9%	1,370	1,370	0	0.0%
32.1%	1,364	1,368	4	0.3%
33.3%	1,363	1,367	4	0.3%
34.6%	1,361	1,366	5	0.4%
35.8%	1,360	1,366	6	0.4%
37.0%	1,352	1,363	11	0.8%
38.3%	1,348	1,361	14	1.0%
39.5%	1,347	1,360	12	0.9%
40.7%	1,347	1,356	9	0.7%
42.0%	1,346	1,351	6	0.4%
43.2%	1,345	1,348	4	0.3%
44.4%	1,344	1,347	3	0.2%
45.7%	1,343	1,346	4	0.3%
46.9%	1,340	1,341	1	0.1%
48.1%	1,338	1,338	0	0.0%
49.4%	1,338	1,336	-1	-0.1%
50.6%	1,337	1,336	-2	-0.1%
51.9%	1,336	1,335	-1	0.0%
53.1%	1,335	1,334	-1	0.0%
54.3%	1,333	1,333	0	0.0%
55.6%	1,333	1,333	1	0.1%
56.8%	1,332	1,332	0	0.0%
58.0%	1,332	1,332	0	0.0%
59.3%	1,331	1,332	1	0.1%
60.5%	1,329	1,331	1	0.1%
61.7%	1,329	1,329	0	0.0%
63.0%	1,329	1,328	-1	-0.1%
64.2%	1,329	1,327	-1	-0.1%
65.4%	1,327	1,326	-1	-0.1%
66.7%	1,327	1,326	-1	-0.1%
67.9%	1,323	1,326	3	0.2%
69.1%	1,321	1,325	4	0.3%
70.4%	1,315	1,325	10	0.8%
71.6%	1,310	1,322	12	0.9%
72.8%	1,242	1,321	79	6.4%
74.1%	1,220	1,266	45	3.7%
75.3%	1,201	1,264	63	5.3%
76.5%	1,103	1,254	151	13.6%
77.8%	1,002	1,199	197	19.7%
79.0%	949	1,154	205	21.6%
80.2%	875	1,099	224	25.5%
81.5%	850	1,091	240	28.3%
82.7%	796	1,054	259	32.5%
84.0%	776	1,002	227	29.2%
85.2%	738	850	112	15.2%
86.4%	700	772	73	10.4%
87.7%	667	769	102	15.4%
88.9%	663	752	89	13.4%
90.1%	653	659	7	1.0%
91.4%	652	653	1	0.1%
92.6%	650	652	2	0.3%
93.8%	647	651	4	0.5%
95.1%	642	642	0	0.1%
96.3%	637	638	1	0.2%
97.5%	375	634	259	69.1%
98.8%	375	375	0	0.0%
100.0%	375	375	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,330	21,669	1,339	6.6%
1.2%	15,359	14,582	-777	-5.1%
2.5%	8,049	8,783	734	9.1%
3.7%	6,457	7,439	982	15.2%
4.9%	5,287	6,420	1,133	21.4%
6.2%	5,244	5,427	183	3.5%
7.4%	4,772	4,772	1	0.0%
8.6%	4,276	4,196	-79	-1.9%
9.9%	4,246	4,177	-69	-1.6%
11.1%	4,181	3,786	-396	-9.5%
12.3%	3,425	3,773	348	10.2%
13.6%	3,412	3,465	53	1.5%
14.8%	3,395	3,233	-162	-4.8%
16.0%	2,932	3,208	277	9.4%
17.3%	2,891	3,118	227	7.8%
18.5%	2,859	2,968	109	3.8%
19.8%	2,856	2,951	95	3.3%
21.0%	2,648	2,936	288	10.9%
22.2%	2,642	2,934	292	11.1%
23.5%	2,633	2,758	126	4.8%
24.7%	2,490	2,686	196	7.9%
25.9%	2,427	2,630	203	8.4%
27.2%	2,350	2,411	62	2.6%
28.4%	2,295	2,171	-124	-5.4%
29.6%	2,231	2,165	-66	-3.0%
30.9%	2,099	2,053	-46	-2.2%
32.1%	1,797	2,000	203	11.3%
33.3%	1,787	1,811	24	1.3%
34.6%	1,775	1,802	27	1.5%
35.8%	1,773	1,797	24	1.3%
37.0%	1,773	1,773	0	0.0%
38.3%	1,766	1,773	7	0.4%
39.5%	1,674	1,773	99	5.9%
40.7%	1,638	1,767	129	7.9%
42.0%	1,624	1,762	138	8.5%
43.2%	1,605	1,760	155	9.7%
44.4%	1,589	1,757	169	10.6%
45.7%	1,563	1,726	163	10.4%
46.9%	1,556	1,707	151	9.7%
48.1%	1,547	1,658	112	7.2%
49.4%	1,540	1,640	99	6.4%
50.6%	1,519	1,629	110	7.2%
51.9%	1,519	1,605	87	5.7%
53.1%	1,517	1,593	76	5.0%
54.3%	1,510	1,589	79	5.2%
55.6%	1,506	1,568	62	4.1%
56.8%	1,497	1,555	58	3.8%
58.0%	1,492	1,546	54	3.6%
59.3%	1,487	1,544	57	3.8%
60.5%	1,469	1,542	72	4.9%
61.7%	1,464	1,538	74	5.1%
63.0%	1,453	1,535	82	5.6%
64.2%	1,423	1,526	103	7.2%
65.4%	1,423	1,517	94	6.6%
66.7%	1,416	1,496	80	5.6%
67.9%	1,403	1,448	45	3.2%
69.1%	1,375	1,446	72	5.2%
70.4%	1,334	1,424	91	6.8%
71.6%	1,319	1,385	66	5.0%
72.8%	1,316	1,348	32	2.4%
74.1%	1,307	1,249	-58	-4.5%
75.3%	1,298	1,239	-60	-4.6%
76.5%	1,265	1,206	-59	-4.7%
77.8%	1,169	1,190	21	1.8%
79.0%	1,087	1,157	70	6.5%
80.2%	973	1,121	148	15.2%
81.5%	939	1,090	151	16.1%
82.7%	859	1,005	147	17.1%
84.0%	833	893	60	7.2%
85.2%	830	888	59	7.1%
86.4%	720	819	99	13.7%
87.7%	711	776	65	9.2%
88.9%	694	720	26	3.7%
90.1%	680	711	32	4.7%
91.4%	679	691	12	1.8%
92.6%	667	682	15	2.3%
93.8%	648	681	33	5.1%
95.1%	643	680	37	5.7%
96.3%	639	679	40	6.3%
97.5%	447	679	232	51.9%
98.8%	391	649	257	65.7%
100.0%	375	447	72	19.2%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,204	21,648	444	2.1%
1.2%	20,416	20,575	159	0.8%
2.5%	20,308	20,406	98	0.5%
3.7%	19,439	19,658	219	1.1%
4.9%	19,154	19,160	7	0.0%
6.2%	17,470	17,464	-6	0.0%
7.4%	17,421	17,410	-11	-0.1%
8.6%	13,391	13,379	-12	-0.1%
9.9%	13,093	12,638	-454	-3.5%
11.1%	9,187	9,202	15	0.2%
12.3%	8,331	7,326	-1,005	-12.1%
13.6%	6,159	6,156	-3	0.0%
14.8%	5,114	5,072	-42	-0.8%
16.0%	5,063	4,937	-126	-2.5%
17.3%	5,039	4,297	-742	-14.7%
18.5%	4,673	3,783	-890	-19.0%
19.8%	3,791	3,779	-11	-0.3%
21.0%	3,547	3,651	104	2.9%
22.2%	3,360	3,436	76	2.3%
23.5%	3,276	3,419	143	4.4%
24.7%	3,119	3,358	239	7.7%
25.9%	3,052	3,064	12	0.4%
27.2%	3,047	3,047	0	0.0%
28.4%	2,990	2,658	-332	-11.1%
29.6%	2,924	2,615	-309	-10.6%
30.9%	2,603	2,606	2	0.1%
32.1%	2,428	2,349	-80	-3.3%
33.3%	2,007	2,325	319	15.9%
34.6%	2,000	2,106	106	5.3%
35.8%	2,000	2,000	0	0.0%
37.0%	1,938	1,938	0	0.0%
38.3%	1,938	1,934	-4	-0.2%
39.5%	1,935	1,931	-4	-0.2%
40.7%	1,917	1,898	-19	-1.0%
42.0%	1,898	1,877	-22	-1.1%
43.2%	1,877	1,872	-5	-0.3%
44.4%	1,869	1,870	1	0.1%
45.7%	1,867	1,859	-7	-0.4%
46.9%	1,859	1,859	0	0.0%
48.1%	1,834	1,846	12	0.6%
49.4%	1,832	1,841	9	0.5%
50.6%	1,832	1,838	5	0.3%
51.9%	1,831	1,836	4	0.2%
53.1%	1,830	1,835	5	0.3%
54.3%	1,826	1,830	4	0.2%
55.6%	1,809	1,829	20	1.1%
56.8%	1,807	1,827	21	1.2%
58.0%	1,667	1,822	154	9.3%
59.3%	1,654	1,804	150	9.1%
60.5%	1,636	1,787	151	9.3%
61.7%	1,634	1,768	134	8.2%
63.0%	1,631	1,710	79	4.8%
64.2%	1,600	1,673	73	4.6%
65.4%	1,597	1,663	67	4.2%
66.7%	1,592	1,628	36	2.2%
67.9%	1,560	1,613	53	3.4%
69.1%	1,550	1,613	63	4.0%
70.4%	1,514	1,600	86	5.7%
71.6%	1,488	1,597	109	7.3%
72.8%	1,439	1,579	140	9.7%
74.1%	1,437	1,468	32	2.2%
75.3%	1,429	1,430	0	0.0%
76.5%	1,387	1,402	15	1.1%
77.8%	1,332	1,384	51	3.8%
79.0%	1,317	1,368	51	3.9%
80.2%	1,294	1,345	51	3.9%
81.5%	1,278	1,276	-2	-0.2%
82.7%	1,142	1,179	38	3.3%
84.0%	1,103	1,179	76	6.8%
85.2%	1,035	1,158	123	11.9%
86.4%	1,023	1,094	70	6.9%
87.7%	936	944	8	0.9%
88.9%	908	814	-94	-10.3%
90.1%	847	794	-53	-6.3%
91.4%	790	790	0	0.0%
92.6%	755	788	33	4.4%
93.8%	693	754	61	8.8%
95.1%	689	693	4	0.6%
96.3%	680	683	3	0.5%
97.5%	651	677	27	4.1%
98.8%	500	651	151	30.2%
100.0%	500	500	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,570	35,568	-2	0.0%
1.2%	30,060	29,994	-67	-0.2%
2.5%	25,352	25,348	-4	0.0%
3.7%	22,854	22,857	3	0.0%
4.9%	22,549	22,548	-1	0.0%
6.2%	20,943	20,941	-2	0.0%
7.4%	19,735	20,086	351	1.8%
8.6%	17,214	17,214	0	0.0%
9.9%	15,073	14,966	-108	-0.7%
11.1%	14,968	14,853	-115	-0.8%
12.3%	14,259	14,257	-2	0.0%
13.6%	13,595	13,595	0	0.0%
14.8%	10,917	10,918	1	0.0%
16.0%	10,441	10,440	-1	0.0%
17.3%	10,432	10,432	0	0.0%
18.5%	9,889	9,890	0	0.0%
19.8%	9,466	9,474	9	0.1%
21.0%	9,324	9,322	-2	0.0%
22.2%	8,812	8,541	-271	-3.1%
23.5%	8,541	8,533	-7	-0.1%
24.7%	8,222	8,206	-17	-0.2%
25.9%	8,156	8,158	2	0.0%
27.2%	7,195	7,199	4	0.1%
28.4%	6,948	6,952	4	0.1%
29.6%	6,427	6,427	0	0.0%
30.9%	6,394	6,353	-42	-0.7%
32.1%	6,337	6,337	0	0.0%
33.3%	6,041	6,041	0	0.0%
34.6%	5,861	5,780	-81	-1.4%
35.8%	5,660	5,659	-1	0.0%
37.0%	4,942	4,971	29	0.6%
38.3%	4,188	4,966	778	18.6%
39.5%	4,010	4,781	771	19.2%
40.7%	4,003	4,011	8	0.2%
42.0%	3,838	3,840	3	0.1%
43.2%	3,737	3,688	-49	-1.3%
44.4%	3,402	3,584	182	5.3%
45.7%	3,069	3,069	0	0.0%
46.9%	2,498	2,877	379	15.2%
48.1%	2,290	2,809	519	22.7%
49.4%	2,000	2,646	646	32.3%
50.6%	1,990	2,500	510	25.6%
51.9%	1,989	2,000	11	0.6%
53.1%	1,917	1,990	73	3.8%
54.3%	1,735	1,888	153	8.8%
55.6%	1,671	1,734	63	3.8%
56.8%	1,645	1,671	26	1.6%
58.0%	1,605	1,645	41	2.5%
59.3%	1,600	1,605	5	0.3%
60.5%	1,593	1,600	7	0.5%
61.7%	1,577	1,593	16	1.0%
63.0%	1,571	1,581	10	0.6%
64.2%	1,548	1,578	29	1.9%
65.4%	1,542	1,548	6	0.4%
66.7%	1,540	1,542	2	0.1%
67.9%	1,538	1,540	1	0.1%
69.1%	1,514	1,538	24	1.6%
70.4%	1,514	1,534	20	1.3%
71.6%	1,407	1,521	114	8.1%
72.8%	1,405	1,514	109	7.8%
74.1%	1,403	1,514	112	8.0%
75.3%	1,366	1,437	71	5.2%
76.5%	1,362	1,386	24	1.8%
77.8%	1,344	1,366	21	1.6%
79.0%	1,341	1,348	7	0.5%
80.2%	1,340	1,344	5	0.4%
81.5%	1,259	1,343	84	6.6%
82.7%	1,251	1,340	88	7.1%
84.0%	1,227	1,280	53	4.3%
85.2%	1,185	1,205	19	1.6%
86.4%	1,178	1,153	-25	-2.2%
87.7%	1,125	1,093	-31	-2.8%
88.9%	1,111	1,091	-20	-1.8%
90.1%	820	1,042	222	27.0%
91.4%	769	976	207	27.0%
92.6%	721	825	103	14.3%
93.8%	694	753	58	8.4%
95.1%	690	721	31	4.5%
96.3%	650	650	0	0.0%
97.5%	644	644	0	0.0%
98.8%	642	639	-3	-0.5%
100.0%	250	250	0	

Table SW-47-b

American River at Mouth, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	37,257	37,258	0	0.0%
1.2%	25,474	25,474	0	0.0%
2.5%	25,290	25,283	-7	0.0%
3.7%	18,898	18,898	0	0.0%
4.9%	18,230	18,230	0	0.0%
6.2%	18,080	18,080	0	0.0%
7.4%	17,837	17,836	-2	0.0%
8.6%	17,660	17,834	174	1.0%
9.9%	17,052	17,052	0	0.0%
11.1%	16,564	16,561	-3	0.0%
12.3%	16,421	16,422	0	0.0%
13.6%	15,765	15,765	0	0.0%
14.8%	15,162	15,159	-2	0.0%
16.0%	15,140	14,883	-257	-1.7%
17.3%	13,954	13,954	0	0.0%
18.5%	13,952	13,953	1	0.0%
19.8%	13,921	13,921	0	0.0%
21.0%	12,923	12,759	-164	-1.3%
22.2%	12,762	12,392	-370	-2.9%
23.5%	11,892	11,893	2	0.0%
24.7%	11,399	11,468	69	0.6%
25.9%	10,922	10,922	0	0.0%
27.2%	10,602	10,602	0	0.0%
28.4%	10,486	10,488	2	0.0%
29.6%	8,550	8,550	0	0.0%
30.9%	8,501	8,489	-12	-0.1%
32.1%	8,057	8,057	0	0.0%
33.3%	7,065	7,067	3	0.0%
34.6%	6,978	6,978	0	0.0%
35.8%	6,919	6,921	1	0.0%
37.0%	6,759	6,759	0	0.0%
38.3%	6,737	6,737	0	0.0%
39.5%	6,705	6,720	14	0.2%
40.7%	6,548	6,643	96	1.5%
42.0%	6,472	6,472	0	0.0%
43.2%	5,830	5,827	-3	0.0%
44.4%	5,814	5,812	-2	0.0%
45.7%	5,812	5,811	0	0.0%
46.9%	5,674	5,671	-2	0.0%
48.1%	5,360	5,353	-8	-0.1%
49.4%	5,323	5,008	-315	-5.9%
50.6%	5,008	4,700	-308	-6.2%
51.9%	4,211	4,211	0	0.0%
53.1%	3,924	3,847	-78	-2.0%
54.3%	3,772	3,771	-1	0.0%
55.6%	3,597	3,597	0	0.0%
56.8%	3,561	3,412	-149	-4.2%
58.0%	3,412	3,328	-83	-2.4%
59.3%	3,365	3,123	-242	-7.2%
60.5%	3,365	2,891	-474	-14.1%
61.7%	3,326	2,841	-485	-14.6%
63.0%	2,918	2,643	-276	-9.5%
64.2%	2,771	2,401	-370	-13.4%
65.4%	2,529	2,273	-256	-10.1%
66.7%	2,401	2,195	-205	-8.6%
67.9%	2,187	2,178	-10	-0.4%
69.1%	2,102	2,102	0	0.0%
70.4%	2,000	2,000	0	0.0%
71.6%	1,989	1,990	1	0.0%
72.8%	1,570	1,899	328	20.9%
74.1%	1,423	1,570	147	10.3%
75.3%	1,407	1,364	-43	-3.0%
76.5%	1,338	1,338	0	0.0%
77.8%	1,325	1,325	0	0.0%
79.0%	1,314	1,314	0	0.0%
80.2%	1,293	1,291	-2	-0.2%
81.5%	1,282	1,282	0	0.0%
82.7%	1,269	1,271	2	0.1%
84.0%	1,266	1,269	3	0.3%
85.2%	1,220	1,266	46	3.8%
86.4%	1,138	1,209	71	6.2%
87.7%	1,138	1,204	66	5.8%
88.9%	1,134	1,179	45	3.9%
90.1%	1,124	1,159	35	3.1%
91.4%	1,103	1,157	54	4.8%
92.6%	1,044	1,136	92	8.8%
93.8%	986	1,134	148	15.0%
95.1%	969	1,103	135	13.9%
96.3%	952	1,008	57	5.9%
97.5%	931	854	-77	-8.3%
98.8%	250	250	0	
100.0%	250	250	0	

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,837	20,837	0	0.0%
1.2%	19,949	19,949	0	0.0%
2.5%	18,636	18,636	0	0.0%
3.7%	16,398	16,398	0	0.0%
4.9%	13,992	13,992	0	0.0%
6.2%	12,675	12,674	-2	0.0%
7.4%	12,540	12,541	1	0.0%
8.6%	12,039	12,039	0	0.0%
9.9%	11,890	11,890	0	0.0%
11.1%	10,924	10,910	-13	-0.1%
12.3%	9,872	9,867	-5	0.0%
13.6%	9,207	9,558	351	3.8%
14.8%	9,029	9,203	174	1.9%
16.0%	8,792	8,796	5	0.1%
17.3%	8,611	8,611	0	0.0%
18.5%	8,188	8,187	-1	0.0%
19.8%	8,180	8,179	-1	0.0%
21.0%	7,495	7,495	0	0.0%
22.2%	7,465	7,465	1	0.0%
23.5%	7,299	7,299	0	0.0%
24.7%	7,258	7,261	3	0.0%
25.9%	6,579	6,489	-91	-1.4%
27.2%	6,484	6,432	-53	-0.8%
28.4%	6,199	6,197	-2	0.0%
29.6%	6,073	6,073	0	0.0%
30.9%	5,678	5,673	-5	-0.1%
32.1%	5,412	5,411	-1	0.0%
33.3%	5,339	5,341	2	0.0%
34.6%	5,174	5,172	-2	0.0%
35.8%	5,094	5,094	0	0.0%
37.0%	5,078	4,867	-211	-4.1%
38.3%	4,832	4,832	0	0.0%
39.5%	4,789	4,789	0	0.0%
40.7%	4,644	4,617	-27	-0.6%
42.0%	4,618	4,545	-73	-1.6%
43.2%	4,406	4,406	0	0.0%
44.4%	4,266	4,266	1	0.0%
45.7%	4,082	4,082	0	0.0%
46.9%	3,711	3,735	23	0.6%
48.1%	3,629	3,711	82	2.3%
49.4%	3,601	3,629	28	0.8%
50.6%	3,519	3,603	84	2.4%
51.9%	3,502	3,521	19	0.5%
53.1%	3,478	3,502	24	0.7%
54.3%	3,170	3,478	309	9.7%
55.6%	3,156	3,169	13	0.4%
56.8%	3,119	3,155	36	1.1%
58.0%	3,037	3,109	72	2.4%
59.3%	3,000	3,041	41	1.4%
60.5%	3,000	3,000	0	0.0%
61.7%	2,926	2,927	1	0.0%
63.0%	2,606	2,478	-127	-4.9%
64.2%	2,480	2,211	-269	-10.9%
65.4%	2,095	2,095	0	0.0%
66.7%	2,017	2,017	0	0.0%
67.9%	1,715	1,905	190	11.1%
69.1%	1,714	1,715	1	0.1%
70.4%	1,636	1,714	79	4.8%
71.6%	1,632	1,631	0	0.0%
72.8%	1,593	1,593	0	0.0%
74.1%	1,556	1,591	35	2.2%
75.3%	1,542	1,556	14	0.9%
76.5%	1,492	1,556	64	4.3%
77.8%	1,308	1,549	241	18.4%
79.0%	1,155	1,493	337	29.2%
80.2%	1,117	1,328	211	18.9%
81.5%	1,043	1,303	260	25.0%
82.7%	715	715	0	0.0%
84.0%	686	686	0	0.0%
85.2%	680	680	0	0.0%
86.4%	663	663	0	0.0%
87.7%	658	658	0	0.0%
88.9%	652	654	2	0.3%
90.1%	651	649	-2	-0.2%
91.4%	650	641	-9	-1.5%
92.6%	640	633	-7	-1.1%
93.8%	633	627	-6	-0.9%
95.1%	627	615	-12	-2.0%
96.3%	615	614	-1	-0.1%
97.5%	614	613	-1	-0.1%
98.8%	250	367	117	46.8%
100.0%	250	250	0	0.0%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,987	18,987	0	0.0%
1.2%	16,641	16,642	1	0.0%
2.5%	11,559	11,556	-3	0.0%
3.7%	10,120	10,121	1	0.0%
4.9%	9,054	9,055	0	0.0%
6.2%	7,738	7,739	1	0.0%
7.4%	7,489	7,490	1	0.0%
8.6%	6,732	6,732	0	0.0%
9.9%	6,431	6,431	0	0.0%
11.1%	6,325	6,325	0	0.0%
12.3%	6,041	6,040	0	0.0%
13.6%	6,017	6,017	0	0.0%
14.8%	5,847	5,847	0	0.0%
16.0%	5,676	5,676	0	0.0%
17.3%	5,187	5,183	-4	-0.1%
18.5%	4,912	4,912	0	0.0%
19.8%	4,705	4,702	-3	-0.1%
21.0%	4,272	4,272	0	0.0%
22.2%	4,217	4,219	2	0.0%
23.5%	4,100	4,089	-11	-0.3%
24.7%	4,088	4,088	0	0.0%
25.9%	4,049	4,049	0	0.0%
27.2%	3,724	3,724	0	0.0%
28.4%	3,318	3,316	-3	-0.1%
29.6%	3,236	3,240	3	0.1%
30.9%	2,912	2,911	0	0.0%
32.1%	2,812	2,829	16	0.6%
33.3%	2,796	2,812	16	0.6%
34.6%	2,771	2,796	25	0.9%
35.8%	2,595	2,771	176	6.8%
37.0%	2,421	2,593	171	7.1%
38.3%	2,310	2,310	0	0.0%
39.5%	2,250	2,250	0	0.0%
40.7%	2,239	2,196	-43	-1.9%
42.0%	2,196	2,106	-90	-4.1%
43.2%	2,103	1,824	-279	-13.2%
44.4%	1,889	1,590	-299	-15.8%
45.7%	1,843	1,586	-257	-13.9%
46.9%	1,590	1,564	-26	-1.6%
48.1%	1,586	1,549	-37	-2.3%
49.4%	1,564	1,541	-23	-1.5%
50.6%	1,547	1,535	-12	-0.8%
51.9%	1,540	1,527	-14	-0.9%
53.1%	1,535	1,526	-9	-0.6%
54.3%	1,529	1,525	-3	-0.2%
55.6%	1,527	1,474	-53	-3.5%
56.8%	1,526	1,473	-53	-3.5%
58.0%	1,525	1,462	-64	-4.2%
59.3%	1,473	1,457	-16	-1.1%
60.5%	1,414	1,414	-1	0.0%
61.7%	1,406	1,306	-100	-7.1%
63.0%	1,286	1,252	-33	-2.6%
64.2%	1,168	1,242	74	6.3%
65.4%	1,094	1,191	97	8.9%
66.7%	1,092	1,180	88	8.1%
67.9%	1,088	1,168	79	7.3%
69.1%	1,045	1,158	113	10.8%
70.4%	975	1,096	122	12.5%
71.6%	966	1,092	126	13.0%
72.8%	949	975	26	2.8%
74.1%	935	954	19	2.0%
75.3%	913	949	36	4.0%
76.5%	877	935	58	6.6%
77.8%	821	906	86	10.4%
79.0%	818	877	59	7.2%
80.2%	763	846	83	10.9%
81.5%	733	821	87	11.9%
82.7%	706	819	113	16.0%
84.0%	652	818	166	25.4%
85.2%	652	816	163	25.1%
86.4%	640	815	175	27.4%
87.7%	627	805	177	28.3%
88.9%	623	792	169	27.1%
90.1%	622	788	166	26.7%
91.4%	619	771	152	24.5%
92.6%	616	766	150	24.4%
93.8%	615	763	148	24.1%
95.1%	605	707	102	16.9%
96.3%	600	668	68	11.4%
97.5%	592	640	47	8.0%
98.8%	588	623	35	6.0%
100.0%	188	622	434	231.0%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,126	8,127	1	0.0%
1.2%	7,345	7,345	0	0.0%
2.5%	5,294	5,294	0	0.0%
3.7%	5,146	5,146	0	0.0%
4.9%	4,709	4,709	0	0.0%
6.2%	3,526	3,526	0	0.0%
7.4%	3,408	3,409	0	0.0%
8.6%	3,283	3,283	0	0.0%
9.9%	3,193	3,193	0	0.0%
11.1%	2,892	2,892	0	0.0%
12.3%	2,634	2,840	206	7.8%
13.6%	2,612	2,612	0	0.0%
14.8%	2,557	2,557	0	0.0%
16.0%	2,551	2,551	0	0.0%
17.3%	2,193	2,229	36	1.7%
18.5%	2,156	2,100	-57	-2.6%
19.8%	2,099	1,946	-153	-7.3%
21.0%	1,950	1,874	-75	-3.9%
22.2%	1,879	1,820	-59	-3.2%
23.5%	1,823	1,736	-88	-4.8%
24.7%	1,724	1,724	-1	0.0%
25.9%	1,688	1,717	28	1.7%
27.2%	1,673	1,662	-11	-0.7%
28.4%	1,668	1,607	-61	-3.7%
29.6%	1,606	1,605	-2	-0.1%
30.9%	1,583	1,583	0	0.0%
32.1%	1,583	1,583	0	0.0%
33.3%	1,566	1,566	0	0.0%
34.6%	1,557	1,557	0	0.0%
35.8%	1,556	1,556	0	0.0%
37.0%	1,554	1,554	0	0.0%
38.3%	1,553	1,553	0	0.0%
39.5%	1,551	1,551	0	0.0%
40.7%	1,551	1,551	0	0.0%
42.0%	1,546	1,546	0	0.0%
43.2%	1,541	1,541	0	0.0%
44.4%	1,530	1,530	0	0.0%
45.7%	1,529	1,529	0	0.0%
46.9%	1,520	1,525	5	0.3%
48.1%	1,501	1,520	19	1.3%
49.4%	1,469	1,501	32	2.2%
50.6%	1,425	1,469	44	3.1%
51.9%	1,370	1,425	55	4.0%
53.1%	1,295	1,370	75	5.8%
54.3%	1,198	1,260	62	5.1%
55.6%	1,112	1,202	90	8.1%
56.8%	1,041	1,198	158	15.2%
58.0%	1,039	1,142	103	9.9%
59.3%	1,010	1,074	64	6.3%
60.5%	999	1,068	69	6.9%
61.7%	989	1,060	71	7.2%
63.0%	982	1,057	75	7.7%
64.2%	978	1,055	77	7.8%
65.4%	975	1,046	71	7.3%
66.7%	947	1,043	96	10.1%
67.9%	943	1,041	98	10.4%
69.1%	920	1,037	117	12.7%
70.4%	896	1,032	137	15.3%
71.6%	882	1,018	136	15.4%
72.8%	880	1,011	131	14.9%
74.1%	869	1,010	142	16.3%
75.3%	847	1,002	155	18.3%
76.5%	814	1,001	187	22.9%
77.8%	804	998	194	24.2%
79.0%	759	992	232	30.6%
80.2%	750	991	242	32.2%
81.5%	714	987	273	38.3%
82.7%	693	980	288	41.5%
84.0%	648	949	301	46.5%
85.2%	629	933	304	48.4%
86.4%	627	890	263	41.9%
87.7%	625	818	193	30.9%
88.9%	622	815	193	31.1%
90.1%	621	769	148	23.8%
91.4%	617	763	146	23.6%
92.6%	612	704	93	15.1%
93.8%	611	641	30	4.9%
95.1%	610	627	17	2.8%
96.3%	608	620	12	1.9%
97.5%	606	616	10	1.7%
98.8%	598	608	11	1.8%
100.0%	188	372	184	97.6%

Table SW-47-b

American River at Mouth, Monthly Flow
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,738	3,000	-738	-19.7%
1.2%	3,535	3,000	-535	-15.1%
2.5%	3,284	2,678	-606	-18.5%
3.7%	3,159	2,546	-612	-19.4%
4.9%	3,048	2,482	-566	-18.6%
6.2%	2,917	2,458	-459	-15.7%
7.4%	2,661	2,403	-258	-9.7%
8.6%	2,609	2,381	-227	-8.7%
9.9%	2,546	2,373	-174	-6.8%
11.1%	2,371	2,371	0	0.0%
12.3%	2,169	2,311	143	6.6%
13.6%	2,098	2,169	70	3.3%
14.8%	2,077	2,118	42	2.0%
16.0%	1,970	1,970	0	0.0%
17.3%	1,967	1,967	1	0.0%
18.5%	1,898	1,942	44	2.3%
19.8%	1,873	1,941	68	3.7%
21.0%	1,836	1,914	78	4.3%
22.2%	1,823	1,836	12	0.7%
23.5%	1,794	1,823	29	1.6%
24.7%	1,753	1,785	31	1.8%
25.9%	1,744	1,770	26	1.5%
27.2%	1,738	1,755	16	0.9%
28.4%	1,737	1,752	15	0.9%
29.6%	1,723	1,694	-29	-1.7%
30.9%	1,694	1,668	-26	-1.5%
32.1%	1,669	1,590	-79	-4.8%
33.3%	1,583	1,542	-41	-2.6%
34.6%	1,542	1,520	-22	-1.4%
35.8%	1,524	1,514	-10	-0.7%
37.0%	1,514	1,511	-3	-0.2%
38.3%	1,511	1,508	-3	-0.2%
39.5%	1,508	1,505	-2	-0.2%
40.7%	1,505	1,505	0	0.0%
42.0%	1,505	1,502	-3	-0.2%
43.2%	1,502	1,502	0	0.0%
44.4%	1,502	1,501	-2	-0.1%
45.7%	1,501	1,500	-1	-0.1%
46.9%	1,500	1,500	-1	0.0%
48.1%	1,500	1,497	-2	-0.2%
49.4%	1,500	1,497	-2	-0.2%
50.6%	1,499	1,493	-6	-0.4%
51.9%	1,497	1,482	-15	-1.0%
53.1%	1,493	1,481	-12	-0.8%
54.3%	1,482	1,460	-22	-1.5%
55.6%	1,481	1,352	-129	-8.7%
56.8%	1,460	1,336	-124	-8.5%
58.0%	1,411	1,327	-84	-6.0%
59.3%	1,347	1,325	-22	-1.6%
60.5%	1,336	1,325	-11	-0.8%
61.7%	1,314	1,324	9	0.7%
63.0%	1,279	1,321	41	3.2%
64.2%	1,268	1,296	28	2.2%
65.4%	1,180	1,296	116	9.8%
66.7%	1,167	1,292	125	10.7%
67.9%	1,116	1,284	168	15.0%
69.1%	1,111	1,282	171	15.4%
70.4%	999	1,281	283	28.3%
71.6%	970	1,279	308	31.8%
72.8%	967	1,278	311	32.2%
74.1%	934	1,271	337	36.0%
75.3%	932	1,260	328	35.2%
76.5%	922	1,254	332	36.0%
77.8%	915	1,245	330	36.1%
79.0%	899	1,192	294	32.7%
80.2%	897	1,167	270	30.1%
81.5%	833	1,142	309	37.1%
82.7%	833	1,107	275	33.0%
84.0%	819	1,095	276	33.7%
85.2%	771	1,062	291	37.8%
86.4%	723	1,017	294	40.6%
87.7%	712	987	275	38.6%
88.9%	667	959	292	43.7%
90.1%	661	875	215	32.5%
91.4%	611	851	240	39.3%
92.6%	605	728	123	20.4%
93.8%	588	678	90	15.3%
95.1%	569	665	96	16.8%
96.3%	555	587	32	5.8%
97.5%	385	410	25	6.5%
98.8%	323	371	47	14.6%
100.0%	188	255	67	35.6%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,432	4,403	-29	-0.7%
1.2%	4,415	4,400	-16	-0.4%
2.5%	4,403	4,388	-15	-0.3%
3.7%	4,403	4,375	-28	-0.6%
4.9%	4,399	4,374	-25	-0.6%
6.2%	4,398	4,374	-24	-0.5%
7.4%	4,395	4,371	-24	-0.6%
8.6%	4,393	4,367	-27	-0.6%
9.9%	4,390	4,351	-39	-0.9%
11.1%	4,388	4,337	-52	-1.2%
12.3%	4,387	4,192	-195	-4.4%
13.6%	4,385	4,094	-291	-6.6%
14.8%	4,385	4,075	-310	-7.1%
16.0%	4,385	3,794	-591	-13.5%
17.3%	4,383	3,792	-591	-13.5%
18.5%	4,381	3,755	-626	-14.3%
19.8%	4,378	3,679	-699	-16.0%
21.0%	4,378	3,656	-722	-16.5%
22.2%	4,375	3,468	-907	-20.7%
23.5%	4,367	3,407	-960	-22.0%
24.7%	4,351	3,293	-1,058	-24.3%
25.9%	4,340	3,232	-1,109	-25.5%
27.2%	4,339	3,124	-1,214	-28.0%
28.4%	4,263	3,035	-1,228	-28.8%
29.6%	4,217	2,976	-1,241	-29.4%
30.9%	4,082	2,921	-1,161	-28.4%
32.1%	3,960	2,792	-1,168	-29.5%
33.3%	3,931	2,700	-1,230	-31.3%
34.6%	3,821	2,691	-1,130	-29.6%
35.8%	3,680	2,527	-1,153	-31.3%
37.0%	3,617	2,356	-1,262	-34.9%
38.3%	3,547	2,345	-1,202	-33.9%
39.5%	3,490	2,338	-1,152	-33.0%
40.7%	3,430	2,233	-1,197	-34.9%
42.0%	3,419	2,183	-1,236	-36.2%
43.2%	3,322	2,171	-1,151	-34.6%
44.4%	3,108	2,145	-963	-31.0%
45.7%	3,089	2,032	-1,058	-34.2%
46.9%	3,002	1,989	-1,013	-33.7%
48.1%	2,920	1,964	-956	-32.7%
49.4%	2,802	1,916	-886	-31.6%
50.6%	2,754	1,881	-874	-31.7%
51.9%	2,739	1,869	-871	-31.8%
53.1%	2,708	1,767	-941	-34.7%
54.3%	2,575	1,750	-825	-32.1%
55.6%	2,557	1,750	-807	-31.6%
56.8%	2,547	1,750	-797	-31.3%
58.0%	2,477	1,750	-727	-29.4%
59.3%	2,249	1,750	-499	-22.2%
60.5%	2,216	1,750	-466	-21.0%
61.7%	2,202	1,750	-452	-20.5%
63.0%	2,182	1,750	-432	-19.8%
64.2%	2,162	1,750	-412	-19.1%
65.4%	2,049	1,750	-299	-14.6%
66.7%	1,953	1,750	-203	-10.4%
67.9%	1,952	1,750	-202	-10.3%
69.1%	1,938	1,750	-188	-9.7%
70.4%	1,928	1,750	-178	-9.2%
71.6%	1,812	1,750	-62	-3.4%
72.8%	1,750	1,750	0	0.0%
74.1%	1,750	1,750	0	0.0%
75.3%	1,750	1,750	0	0.0%
76.5%	1,590	1,750	160	10.1%
77.8%	1,578	1,750	172	10.9%
79.0%	1,572	1,750	178	11.3%
80.2%	1,571	1,750	179	11.4%
81.5%	1,529	1,744	215	14.1%
82.7%	1,505	1,588	83	5.5%
84.0%	1,501	1,584	83	5.5%
85.2%	1,501	1,519	18	1.2%
86.4%	1,496	1,416	-79	-5.3%
87.7%	1,495	1,359	-136	-9.1%
88.9%	1,472	1,355	-116	-7.9%
90.1%	1,269	1,251	-18	-1.4%
91.4%	1,183	1,175	-8	-0.6%
92.6%	975	1,106	131	13.4%
93.8%	908	1,005	97	10.6%
95.1%	882	933	51	5.8%
96.3%	769	922	153	19.9%
97.5%	653	902	250	38.2%
98.8%	466	538	72	15.5%
100.0%	333	217	-115	-34.6%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,786	2,392	-393	-14.1%
1.2%	2,277	2,201	-77	-3.4%
2.5%	2,206	2,046	-160	-7.3%
3.7%	2,202	1,970	-232	-10.6%
4.9%	2,199	1,766	-432	-19.7%
6.2%	2,002	1,750	-252	-12.6%
7.4%	1,931	1,750	-181	-9.4%
8.6%	1,750	1,750	0	0.0%
9.9%	1,750	1,750	0	0.0%
11.1%	1,750	1,750	0	0.0%
12.3%	1,750	1,750	0	0.0%
13.6%	1,672	1,750	78	4.7%
14.8%	1,573	1,749	177	11.2%
16.0%	1,542	1,749	207	13.4%
17.3%	1,528	1,747	219	14.3%
18.5%	1,527	1,746	219	14.3%
19.8%	1,506	1,741	235	15.6%
21.0%	1,503	1,724	221	14.7%
22.2%	1,500	1,681	180	12.0%
23.5%	1,498	1,610	112	7.5%
24.7%	1,497	1,580	83	5.6%
25.9%	1,496	1,575	78	5.2%
27.2%	1,496	1,563	67	4.5%
28.4%	1,496	1,546	50	3.4%
29.6%	1,495	1,542	47	3.1%
30.9%	1,491	1,521	30	2.0%
32.1%	1,490	1,500	9	0.6%
33.3%	1,489	1,498	9	0.6%
34.6%	1,487	1,490	3	0.2%
35.8%	1,486	1,489	3	0.2%
37.0%	1,485	1,489	4	0.3%
38.3%	1,484	1,484	0	0.0%
39.5%	1,483	1,484	1	0.0%
40.7%	1,483	1,483	0	0.0%
42.0%	1,483	1,482	-1	-0.1%
43.2%	1,482	1,480	-2	-0.2%
44.4%	1,480	1,478	-3	-0.2%
45.7%	1,480	1,447	-33	-2.2%
46.9%	1,479	1,416	-63	-4.3%
48.1%	1,478	1,405	-73	-4.9%
49.4%	1,478	1,359	-119	-8.1%
50.6%	1,478	1,358	-119	-8.1%
51.9%	1,443	1,354	-89	-6.2%
53.1%	1,437	1,341	-96	-6.7%
54.3%	1,305	1,326	20	1.6%
55.6%	1,272	1,320	48	3.8%
56.8%	1,247	1,299	51	4.1%
58.0%	1,192	1,288	96	8.1%
59.3%	1,189	1,275	86	7.2%
60.5%	1,131	1,272	140	12.4%
61.7%	1,033	1,260	227	22.0%
63.0%	998	1,185	187	18.7%
64.2%	979	1,131	152	15.5%
65.4%	961	1,103	142	14.7%
66.7%	958	1,077	119	12.4%
67.9%	939	1,074	135	14.4%
69.1%	922	1,067	145	15.8%
70.4%	915	1,066	151	16.5%
71.6%	892	1,019	128	14.3%
72.8%	874	1,000	125	14.3%
74.1%	838	940	102	12.1%
75.3%	825	913	87	10.6%
76.5%	803	907	104	13.0%
77.8%	796	892	96	12.1%
79.0%	786	891	105	13.3%
80.2%	707	834	126	17.8%
81.5%	640	822	182	28.5%
82.7%	615	786	171	27.8%
84.0%	568	758	189	33.3%
85.2%	568	756	188	33.1%
86.4%	566	742	176	31.1%
87.7%	564	711	147	26.1%
88.9%	563	650	88	15.6%
90.1%	558	644	86	15.3%
91.4%	544	615	72	13.2%
92.6%	536	590	54	10.1%
93.8%	531	564	34	6.4%
95.1%	530	559	29	5.5%
96.3%	471	559	88	18.7%
97.5%	349	556	207	59.5%
98.8%	188	403	215	114.3%
100.0%	188	348	160	84.9%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Flow (CFS)	WSIP 2030 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,582	4,521	-62	-1.3%
1.2%	4,566	4,336	-230	-5.0%
2.5%	4,560	4,301	-260	-5.7%
3.7%	4,545	4,252	-293	-6.4%
4.9%	4,539	4,194	-345	-7.6%
6.2%	4,335	3,451	-884	-20.4%
7.4%	3,579	3,424	-156	-4.3%
8.6%	3,114	2,937	-177	-5.7%
9.9%	3,070	2,885	-185	-6.0%
11.1%	2,830	2,538	-292	-10.3%
12.3%	2,805	2,511	-294	-10.5%
13.6%	2,544	2,459	-85	-3.4%
14.8%	2,509	2,418	-91	-3.6%
16.0%	2,507	2,380	-127	-5.1%
17.3%	2,390	2,362	-28	-1.2%
18.5%	2,309	2,257	-53	-2.3%
19.8%	2,251	2,256	5	0.2%
21.0%	2,220	2,213	-7	-0.3%
22.2%	2,128	2,193	65	3.1%
23.5%	2,115	2,100	-15	-0.7%
24.7%	2,024	1,939	-85	-4.2%
25.9%	2,009	1,840	-169	-8.4%
27.2%	1,852	1,838	-14	-0.7%
28.4%	1,750	1,750	0	0.0%
29.6%	1,750	1,688	-62	-3.6%
30.9%	1,750	1,663	-87	-5.0%
32.1%	1,607	1,609	2	0.1%
33.3%	1,585	1,549	-36	-2.3%
34.6%	1,530	1,483	-46	-3.0%
35.8%	1,484	1,446	-38	-2.6%
37.0%	1,380	1,446	67	4.8%
38.3%	1,352	1,446	94	7.0%
39.5%	1,343	1,445	102	7.6%
40.7%	1,335	1,436	101	7.6%
42.0%	1,332	1,427	94	7.1%
43.2%	1,332	1,399	66	5.0%
44.4%	1,331	1,352	21	1.6%
45.7%	1,329	1,341	12	0.9%
46.9%	1,329	1,332	3	0.2%
48.1%	1,328	1,332	4	0.3%
49.4%	1,313	1,330	17	1.3%
50.6%	1,311	1,329	18	1.4%
51.9%	1,309	1,313	4	0.3%
53.1%	1,292	1,303	11	0.9%
54.3%	1,280	1,295	15	1.2%
55.6%	1,170	1,276	106	9.1%
56.8%	1,093	1,260	167	15.3%
58.0%	1,085	1,213	128	11.8%
59.3%	1,030	1,212	182	17.6%
60.5%	1,020	1,204	184	18.0%
61.7%	1,011	1,203	191	18.9%
63.0%	992	1,202	210	21.2%
64.2%	978	1,116	138	14.1%
65.4%	918	1,097	179	19.5%
66.7%	874	1,084	210	24.1%
67.9%	866	1,075	208	24.1%
69.1%	840	1,034	194	23.1%
70.4%	821	1,011	189	23.1%
71.6%	807	1,003	195	24.2%
72.8%	746	990	244	32.7%
74.1%	689	976	287	41.6%
75.3%	649	941	292	45.1%
76.5%	630	940	310	49.1%
77.8%	620	924	303	48.9%
79.0%	616	866	250	40.6%
80.2%	611	857	246	40.2%
81.5%	611	851	241	39.4%
82.7%	611	844	233	38.2%
84.0%	610	827	217	35.6%
85.2%	609	816	207	34.0%
86.4%	609	799	190	31.3%
87.7%	609	738	129	21.3%
88.9%	608	675	66	10.9%
90.1%	608	639	31	5.0%
91.4%	602	622	20	3.3%
92.6%	599	609	10	1.7%
93.8%	596	608	12	2.0%
95.1%	510	607	97	19.0%
96.3%	376	544	168	44.6%
97.5%	281	538	257	91.5%
98.8%	281	370	89	31.6%
100.0%	261	278	17	6.5%

Figure SW-53-b
Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

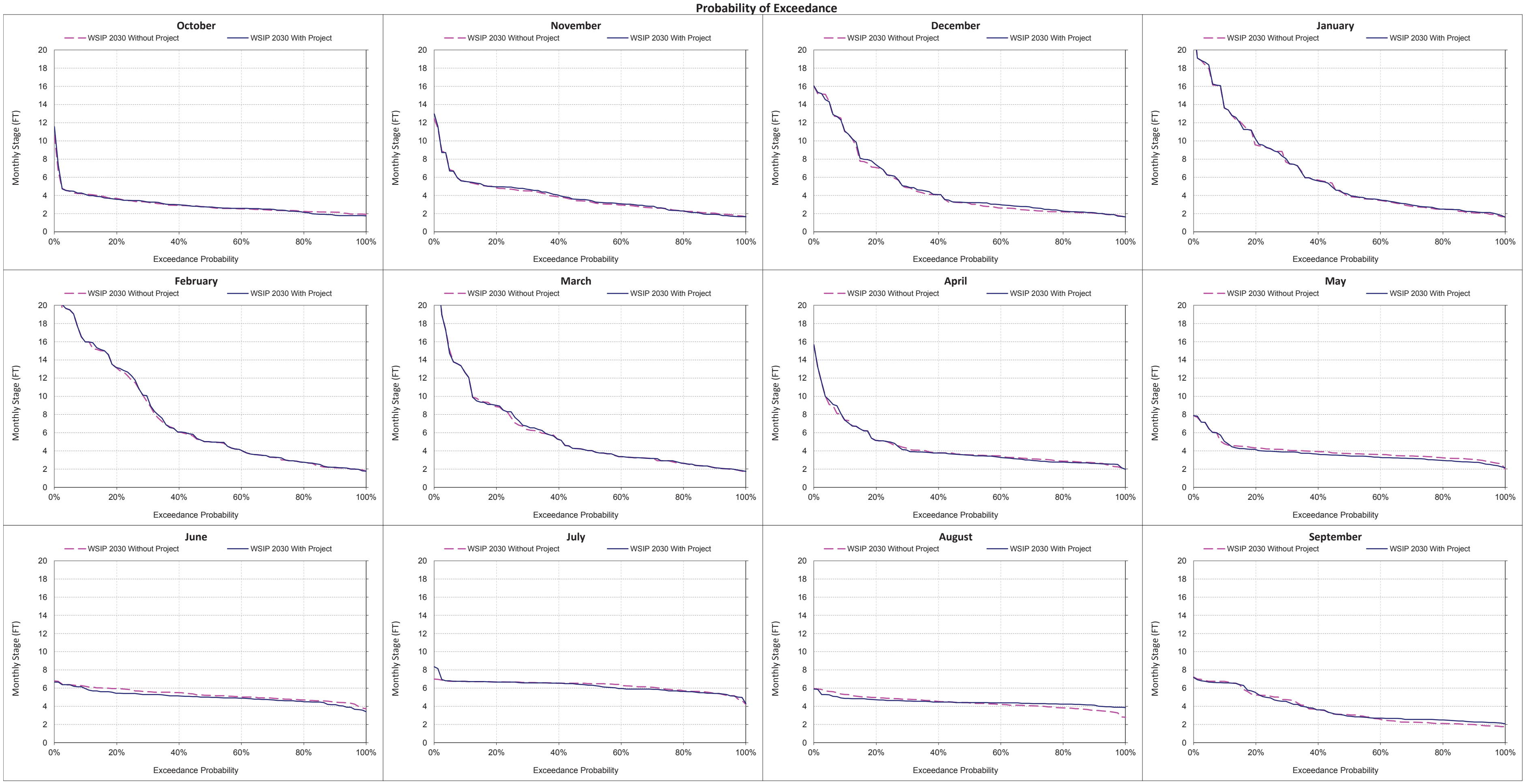


Table SW-53-b
Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	11	12	1	8.4%
1.2%	7	7	1	9.0%
2.5%	5	5	0	-0.8%
3.7%	5	5	0	-0.1%
4.9%	4	5	0	1.0%
6.2%	4	4	0	4.3%
7.4%	4	4	0	1.4%
8.6%	4	4	0	1.4%
9.9%	4	4	0	-1.3%
11.1%	4	4	0	-3.5%
12.3%	4	4	0	-2.5%
13.6%	4	4	0	-3.2%
14.8%	4	4	0	-2.5%
16.0%	4	4	0	-4.2%
17.3%	4	4	0	-0.9%
18.5%	4	4	0	-1.5%
19.8%	4	4	0	-2.6%
21.0%	4	4	0	-1.1%
22.2%	3	3	0	-0.7%
23.5%	3	3	0	0.9%
24.7%	3	3	0	0.6%
25.9%	3	3	0	3.6%
27.2%	3	3	0	3.7%
28.4%	3	3	0	2.1%
29.6%	3	3	0	0.4%
30.9%	3	3	0	2.2%
32.1%	3	3	0	3.3%
33.3%	3	3	0	4.7%
34.6%	3	3	0	1.5%
35.8%	3	3	0	2.8%
37.0%	3	3	0	2.9%
38.3%	3	3	0	3.3%
39.5%	3	3	0	2.8%
40.7%	3	3	0	2.1%
42.0%	3	3	0	1.5%
43.2%	3	3	0	-0.3%
44.4%	3	3	0	-0.9%
45.7%	3	3	0	-1.5%
46.9%	3	3	0	-0.8%
48.1%	3	3	0	-0.7%
49.4%	3	3	0	-0.6%
50.6%	3	3	0	3.0%
51.9%	3	3	0	2.6%
53.1%	3	3	0	1.7%
54.3%	3	3	0	1.8%
55.6%	3	3	0	1.2%
56.8%	3	3	0	1.1%
58.0%	3	3	0	1.4%
59.3%	3	3	0	2.5%
60.5%	3	3	0	1.9%
61.7%	3	3	0	2.2%
63.0%	3	3	0	2.5%
64.2%	2	3	0	4.2%
65.4%	2	3	0	4.1%
66.7%	2	3	0	3.0%
67.9%	2	3	0	3.4%
69.1%	2	3	0	4.7%
70.4%	2	2	0	4.0%
71.6%	2	2	0	1.7%
72.8%	2	2	0	0.9%
74.1%	2	2	0	0.5%
75.3%	2	2	0	-3.1%
76.5%	2	2	0	-3.1%
77.8%	2	2	0	-4.1%
79.0%	2	2	0	-2.3%
80.2%	2	2	0	-5.3%
81.5%	2	2	0	-4.7%
82.7%	2	2	0	-10.4%
84.0%	2	2	0	-11.5%
85.2%	2	2	0	-11.3%
86.4%	2	2	0	-12.1%
87.7%	2	2	0	-12.3%
88.9%	2	2	0	-12.6%
90.1%	2	2	0	-16.0%
91.4%	2	2	0	-16.4%
92.6%	2	2	0	-12.9%
93.8%	2	2	0	-11.5%
95.1%	2	2	0	-9.2%
96.3%	2	2	0	-9.3%
97.5%	2	2	0	-9.3%
98.8%	2	2	0	-9.3%
100.0%	2	2	0	-7.8%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	12	13	1	4.1%
1.2%	11	12	0	2.0%
2.5%	9	9	0	-1.4%
3.7%	9	9	0	0.0%
4.9%	7	7	0	-2.0%
6.2%	7	7	0	-0.5%
7.4%	6	6	0	0.0%
8.6%	6	6	0	-0.7%
9.9%	6	6	0	0.1%
11.1%	5	5	0	0.9%
12.3%	5	5	0	1.8%
13.6%	5	5	0	1.8%
14.8%	5	5	0	2.7%
16.0%	5	5	0	0.8%
17.3%	5	5	0	0.0%
18.5%	5	5	0	-0.9%
19.8%	5	5	0	2.7%
21.0%	5	5	0	4.0%
22.2%	5	5	0	3.9%
23.5%	5	5	0	5.0%
24.7%	5	5	0	4.8%
25.9%	5	5	0	4.3%
27.2%	5	5	0	4.9%
28.4%	5	5	0	5.8%
29.6%	5	5	0	4.1%
30.9%	5	5	0	2.9%
32.1%	4	5	0	3.3%
33.3%	4	5	0	4.2%
34.6%	4	4	0	3.1%
35.8%	4	4	0	4.5%
37.0%	4	4	0	7.6%
38.3%	4	4	0	5.2%
39.5%	4	4	0	5.7%
40.7%	4	4	0	2.9%
42.0%	4	4	0	2.6%
43.2%	4	4	0	3.8%
44.4%	4	4	0	0.7%
45.7%	3	4	0	4.6%
46.9%	3	4	0	4.2%
48.1%	3	4	0	4.8%
49.4%	3	3	0	3.3%
50.6%	3	3	0	4.8%
51.9%	3	3	0	3.3%
53.1%	3	3	0	5.0%
54.3%	3	3	0	4.9%
55.6%	3	3	0	4.7%
56.8%	3	3	0	4.5%
58.0%	3	3	0	4.1%
59.3%	3	3	0	4.7%
60.5%	3	3	0	4.6%
61.7%	3	3	0	5.3%
63.0%	3	3	0	4.6%
64.2%	3	3	0	5.3%
65.4%	3	3	0	5.6%
66.7%	3	3	0	7.1%
67.9%	3	3	0	6.4%
69.1%	3	3	0	5.7%
70.4%	3	3	0	6.9%
71.6%	3	3	0	1.5%
72.8%	3	3	0	0.9%
74.1%	3	3	0	-1.1%
75.3%	3	2	0	-5.5%
76.5%	2	2	0	-2.4%
77.8%	2	2	0	-0.3%
79.0%	2	2	0	-1.3%
80.2%	2	2	0	1.7%
81.5%	2	2	0	-2.7%
82.7%	2	2	0	-4.9%
84.0%	2	2	0	-4.8%
85.2%	2	2	0	-3.7%
86.4%	2	2	0	-5.9%
87.7%	2	2	0	-7.6%
88.9%	2	2	0	-6.9%
90.1%	2	2	0	-6.7%
91.4%	2	2	0	-4.3%
92.6%	2	2	0	-8.7%
93.8%	2	2	0	-7.8%
95.1%	2	2	0	-8.0%
96.3%	2	2	0	-8.0%
97.5%	2	2	0	-5.0%
98.8%	2	2	0	-4.4%
100.0%	2	2	0	1.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	16	16	0	0.0%
1.2%	15	15	0	1.0%
2.5%	15	15	0	0.3%
3.7%	15	15	-1	-3.8%
4.9%	14	14	0	0.0%
6.2%	13	13	0	1.2%
7.4%	13	13	0	0.0%
8.6%	13	12	0	-1.7%
9.9%	11	11	0	0.3%
11.1%	11	11	0	0.0%
12.3%	10	10	0	0.0%
13.6%	9	10	0	4.8%
14.8%	8	8	0	4.4%
16.0%	8	8	0	3.1%
17.3%	8	8	0	5.3%
18.5%	7	8	1	9.6%
19.8%	7	7	0	4.9%
21.0%	7	7	0	1.8%
22.2%	7	7	0	0.0%
23.5%	6	6	0	0.0%
24.7%	6	6	0	0.9%
25.9%	6	6	0	3.6%
27.2%	6	6	0	0.0%
28.4%	5	5	0	1.0%
29.6%	5	5	0	2.9%
30.9%	5	5	0	0.8%
32.1%	5	5	0	6.0%
33.3%	4	5	0	4.1%
34.6%	4	5	0	6.2%
35.8%	4	5	0	7.9%
37.0%	4	4	0	7.0%
38.3%	4	4	0	0.6%
39.5%	4	4	0	0.3%
40.7%	4	4	0	0.4%
42.0%	4	4	0	0.0%
43.2%	3	4	0	6.7%
44.4%	3	3	0	1.4%
45.7%	3	3	0	0.9%
46.9%	3	3	0	1.6%
48.1%	3	3	0	1.3%
49.4%	3	3	0	0.9%
50.6%	3	3	0	6.1%
51.9%	3	3	0	6.1%
53.1%	3	3	0	9.1%
54.3%	3	3	0	12.5%
55.6%	3	3	0	13.6%
56.8%	3	3	0	8.4%
58.0%	3	3	0	11.6%
59.3%	3	3	0	14.6%
60.5%	3	3	0	13.1%
61.7%	3	3	0	12.5%
63.0%	3	3	0	11.4%
64.2%	3	3	0	10.5%
65.4%	2	3	0	12.6%
66.7%	2	3	0	14.8%
67.9%	2	3	0	15.0%
69.1%	2	3	0	16.2%
70.4%	2	3	0	11.8%
71.6%	2	3	0	13.2%
72.8%	2	3	0	12.3%
74.1%	2	2	0	7.3%
75.3%	2	2	0	10.6%
76.5%	2	2	0	9.5%
77.8%	2	2	0	9.3%
79.0%	2	2	0	4.7%
80.2%	2	2	0	3.6%
81.5%	2	2	0	2.8%
82.7%	2	2	0	2.3%
84.0%	2	2	0	3.2%
85.2%	2	2	0	2.8%
86.4%	2	2	0	3.5%
87.7%	2	2	0	1.5%
88.9%	2	2	0	1.3%
90.1%	2	2	0	2.3%
91.4%	2	2	0	0.0%
92.6%	2	2	0	0.0%
93.8%	2	2	0	0.1%
95.1%	2	2	0	1.1%
96.3%	2	2	0	0.5%
97.5%	2	2	0	-4.2%
98.8%	2	2	0	-1.2%
100.0%	2	2	0	0.1%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	23	23	0	0.0%
1.2%	19	19	0	0.0%
2.5%	19	19	0	0.0%
3.7%	18	19	0	1.6%
4.9%	18	18	0	2.5%
6.2%	16	16	0	0.8%
7.4%	16	16	0	0.1%
8.6%	16	16	0	1.0%
9.9%	14	14	0	0.0%
11.1%	13	13	0	0.0%
12.3%	13	13	0	0.0%
13.6%	12	13	0	2.2%
14.8%	12	12	0	-1.1%
16.0%	12	11	0	-4.0%
17.3%	11	11	0	0.0%
18.5%	11	11	0	0.0%
19.8%	10	10	1	7.7%
21.0%	9	10	0	1.8%
22.2%	9	10	0	0.9%
23.5%	9	9	0	0.5%
24.7%	9	9	0	0.1%
25.9%	9	9	0	-0.4%
27.2%	9	9	0	-0.9%
28.4%	9	8	-1	-5.7%
29.6%	8	8	0	4.9%
30.9%	7	7	0	0.0%
32.1%	7	7	0	0.0%
33.3%	7	7	0	0.0%
34.6%	7	7	0	-1.3%
35.8%	6	6	0	0.0%
37.0%	6	6	0	0.0%
38.3%	6	6	0	-0.6%
39.5%	6	6	0	-1.8%
40.7%	6	6	0	-1.6%
42.0%	6	5	0	-0.9%
43.2%	5	5	0	-2.4%
44.4%	5	5	0	-7.3%
45.7%	5	5	0	1.0%
46.9%	4	5	0	2.0%
48.1%	4	4	0	0.0%
49.4%	4	4	0	6.4%
50.6%	4	4	0	2.5%
51.9%	4	4	0	2.2%
53.1%	4	4	0	0.4%
54.3%	4	4	0	4.5%
55.6%	4	4	0	1.0%
56.8%	4	4	0	0.2%
58.0%	4	4	0	1.1%
59.3%	3	4	0	1.9%
60.5%	3	3	0	1.4%
61.7%	3	3	0	2.2%
63.0%	3	3	0	1.8%
64.2%	3	3	0	2.9%
65.4%	3	3	0	2.6%
66.7%	3	3	0	1.1%
67.9%	3	3	0	5.6%
69.1%	3	3	0	5.3%
70.4%	3	3	0	5.3%
71.6%	3	3	0	3.9%
72.8%	3	3	0	2.2%
74.1%	3	3	0	1.5%
75.3%	3	3	0	5.1%
76.5%	3	3	0	5.4%
77.8%	3	3	0	3.3%
79.0%	2	3	0	0.2%
80.2%	2	2	0	0.6%
81.5%	2	2	0	0.1%
82.7%	2	2	0	0.0%
84.0%	2	2	0	0.4%
85.2%	2	2	0	8.9%
86.4%	2	2	0	4.0%
87.7%	2	2	0	5.4%
88.9%	2	2	0	5.2%
90.1%	2	2	0	6.4%
91.4%	2	2	0	4.6%
92.6%	2	2	0	3.2%
93.8%	2	2	0	4.1%
95.1%	2	2	0	9.6%
96.3%	2	2	0	7.1%
97.5%	2	2	0	6.2%
98.8%	2	2	0	8.5%
100.0%	2	2	0	-3.0%

Table SW-53-b

Sacramento River at Bend Bridge, Monthly Stage

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	25	25	0	0.0%
1.2%	25	24	0	-1.3%
2.5%	20	20	0	2.0%
3.7%	20	20	0	0.0%
4.9%	20	20	0	0.0%
6.2%	19	19	0	0.0%
7.4%	18	18	0	0.0%
8.6%	17	17	0	0.1%
9.9%	16	16	0	0.0%
11.1%	16	16	0	0.0%
12.3%	15	16	1	4.3%
13.6%	15	15	0	1.3%
14.8%	15	15	0	0.9%
16.0%	15	15	0	0.1%
17.3%	15	15	0	0.0%
18.5%	14	14	0	0.0%
19.8%	13	13	0	0.0%
21.0%	13	13	0	1.9%
22.2%	13	13	0	1.4%
23.5%	12	13	0	3.3%
24.7%	12	12	0	4.2%
25.9%	11	12	0	2.5%
27.2%	11	11	0	0.0%
28.4%	10	10	0	0.0%
29.6%	9	10	1	6.6%
30.9%	9	9	0	0.9%
32.1%	8	8	0	3.5%
33.3%	8	8	0	4.8%
34.6%	7	8	0	5.2%
35.8%	7	7	0	0.0%
37.0%	7	7	0	-1.3%
38.3%	6	6	0	0.0%
39.5%	6	6	0	0.0%
40.7%	6	6	0	0.8%
42.0%	6	6	0	2.1%
43.2%	6	6	0	1.2%
44.4%	6	6	0	3.3%
45.7%	5	5	0	1.2%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.7%
53.1%	5	5	0	0.0%
54.3%	5	5	0	1.8%
55.6%	5	5	0	0.0%
56.8%	4	4	0	0.0%
58.0%	4	4	0	0.0%
59.3%	4	4	0	-0.1%
60.5%	4	4	0	0.0%
61.7%	4	4	0	0.0%
63.0%	4	4	0	0.0%
64.2%	4	4	0	0.0%
65.4%	4	4	0	0.0%
66.7%	4	4	0	0.0%
67.9%	3	3	0	0.0%
69.1%	3	3	0	0.1%
70.4%	3	3	0	0.7%
71.6%	3	3	0	1.7%
72.8%	3	3	0	7.5%
74.1%	3	3	0	0.0%
75.3%	3	3	0	0.0%
76.5%	3	3	0	0.0%
77.8%	3	3	0	0.0%
79.0%	3	3	0	0.0%
80.2%	3	3	0	0.0%
81.5%	3	3	0	1.0%
82.7%	3	3	0	1.1%
84.0%	2	3	0	5.6%
85.2%	2	3	0	8.1%
86.4%	2	2	0	4.7%
87.7%	2	2	0	0.7%
88.9%	2	2	0	1.3%
90.1%	2	2	0	2.8%
91.4%	2	2	0	0.0%
92.6%	2	2	0	1.3%
93.8%	2	2	0	1.0%
95.1%	2	2	0	0.1%
96.3%	2	2	0	0.1%
97.5%	2	2	0	2.1%
98.8%	2	2	0	-4.9%
100.0%	2	2	0	1.0%

March

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	24	24	0	0.0%
1.2%	23	23	0	0.0%
2.5%	19	19	0	0.0%
3.7%	17	17	0	0.0%
4.9%	15	15	0	-2.3%
6.2%	14	14	0	0.0%
7.4%	14	14	0	-0.1%
8.6%	13	13	0	0.0%
9.9%	13	13	0	0.0%
11.1%	12	12	0	0.0%
12.3%	10	10	0	0.0%
13.6%	10	10	0	-2.9%
14.8%	10	9	0	-1.4%
16.0%	9	9	0	-0.4%
17.3%	9	9	0	-2.6%
18.5%	9	9	0	0.9%
19.8%	9	9	0	1.4%
21.0%	9	9	0	1.4%
22.2%	8	8	0	0.6%
23.5%	8	8	0	0.0%
24.7%	8	8	1	8.0%
25.9%	7	8	1	8.4%
27.2%	7	7	0	7.0%
28.4%	7	7	0	1.8%
29.6%	6	7	0	6.0%
30.9%	6	7	0	4.2%
32.1%	6	7	0	4.8%
33.3%	6	6	0	3.6%
34.6%	6	6	0	4.9%
35.8%	6	6	0	0.0%
37.0%	6	6	0	0.0%
38.3%	6	6	0	-1.7%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	4	4	0	0.0%
45.7%	4	4	0	0.0%
46.9%	4	4	0	0.0%
48.1%	4	4	0	0.0%
49.4%	4	4	0	0.0%
50.6%	4	4	0	0.1%
51.9%	4	4	0	0.0%
53.1%	4	4	0	0.0%
54.3%	4	4	0	0.0%
55.6%	4	4	0	-0.1%
56.8%	4	4	0	0.0%
58.0%	3	4	0	0.1%
59.3%	3	3	0	0.0%
60.5%	3	3	0	0.0%
61.7%	3	3	0	0.0%
63.0%	3	3	0	0.0%
64.2%	3	3	0	0.0%
65.4%	3	3	0	0.0%
66.7%	3	3	0	0.0%
67.9%	3	3	0	0.1%
69.1%	3	3	0	0.0%
70.4%	3	3	0	0.0%
71.6%	3	3	0	7.9%
72.8%	3	3	0	0.1%
74.1%	3	3	0	0.2%
75.3%	3	3	0	0.0%
76.5%	3	3	0	4.1%
77.8%	3	3	0	3.7%
79.0%	3	3	0	1.7%
80.2%	3	3	0	0.0%
81.5%	3	3	0	0.1%
82.7%	2	3	0	4.4%
84.0%	2	2	0	-0.1%
85.2%	2	2	0	0.0%
86.4%	2	2	0	0.0%
87.7%	2	2	0	0.0%
88.9%	2	2	0	0.0%
90.1%	2	2	0	0.0%
91.4%	2	2	0	0.6%
92.6%	2	2	0	-0.2%
93.8%	2	2	0	0.1%
95.1%	2	2	0	2.3%
96.3%	2	2	0	1.2%
97.5%	2	2	0	0.1%
98.8%	2	2	0	2.8%
100.0%	2	2	0	0.4%

April

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	16	16	0	0.0%
1.2%	13	13	0	0.0%
2.5%	12	12	0	0.0%
3.7%	10	10	0	0.0%
4.9%	9	10	0	5.4%
6.2%	9	9	0	1.4%
7.4%	8	9	1	10.6%
8.6%	8	8	0	0.7%
9.9%	7	7	0	0.0%
11.1%	7	7	0	-3.5%
12.3%	7	7	0	0.0%
13.6%	7	7	0	0.0%
14.8%	6	6	0	0.0%
16.0%	6	6	0	-0.6%
17.3%	6	6	0	0.0%
18.5%	5	5	0	-0.1%
19.8%	5	5	0	0.0%
21.0%	5	5	0	0.0%
22.2%	5	5	0	0.0%
23.5%	5	5	0	0.0%
24.7%	5	5	0	2.7%
25.9%	5	5	0	5.1%
27.2%	5	4	0	-2.2%
28.4%	4	4	0	-6.4%
29.6%	4	4	0	-4.8%
30.9%	4	4	0	-5.1%
32.1%	4	4	0	-4.2%
33.3%	4	4	0	-4.7%
34.6%	4	4	0	-4.3%
35.8%	4	4	0	-4.1%
37.0%	4	4	0	-1.4%
38.3%	4	4	0	-1.3%
39.5%	4	4	0	-0.3%
40.7%	4	4	0	-0.1%
42.0%	4	4	0	-0.1%
43.2%	4	4	0	-2.5%
44.4%	4	4	0	-3.1%
45.7%	4	4	0	-1.0%
46.9%	4	4	0	-1.0%
48.1%	4	4	0	-0.2%
49.4%	4	4	0	-0.9%
50.6%	4	3	0	-1.7%
51.9%	4	3	0	-2.6%
53.1%	4	3	0	-1.4%
54.3%	4	3	0	-1.9%
55.6%	3	3	0	-1.3%
56.8%	3	3	0	-1.2%
58.0%	3	3	0	-2.3%
59.3%	3	3	0	-4.2%
60.5%	3	3	0	-5.1%
61.7%	3	3	0	-2.0%
63.0%	3	3	0	-2.7%
64.2%	3	3	0	-3.9%
65.4%	3	3	0	-4.5%
66.7%	3	3	0	-3.2%
67.9%	3	3	0	-5.4%
69.1%	3	3	0	-4.5%
70.4%	3	3	0	-6.1%
71.6%	3	3	0	-5.7%
72.8%	3	3	0	-7.0%
74.1%	3	3	0	-6.8%
75.3%	3	3	0	-7.3%
76.5%	3	3	0	-7.0%
77.8%	3	3	0	-4.2%
79.0%	3	3	0	-3.9%
80.2%	3	3	0	-3.4%
81.5%	3	3	0	-4.4%
82.7%	3	3	0	-4.9%
84.0%	3	3	0	-4.1%
85.2%	3	3	0	-2.9%
86.4%	3	3	0	-2.3%
87.7%	3	3	0	-1.9%
88.9%	3	3	0	-3.1%
90.1%	3	3	0	-2.8%
91.4%	3	3	0	-2.0%
92.6%	3	3	0	-2.3%
93.8%	2	3	0	3.0%
95.1%	2	3	0	5.7%
96.3%	2	3	0	10.9%
97.5%	2	3	0	11.3%
98.8%	2	2	0	0.2%
100.0%	2	2	0	0.1%

May

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	8	8	0	0.0%
1.2%	8	8	0	1.6%
2.5%	7	7	0	0.0%
3.7%	7	7	0	0.0%
4.9%	6	6	0	0.0%
6.2%	6	6	0	-0.8%
7.4%	6	6	0	0.0%
8.6%	5	6	1	13.1%
9.9%	5	5	0	6.0%
11.1%	5	5	0	3.2%
12.3%	5	4	0	-2.1%
13.6%	5	4	0	-4.9%
14.8%	5	4	0	-5.6%
16.0%	5	4	0	-5.8%
17.3%	4	4	0	-5.8%
18.5%	4	4	0	-4.8%
19.8%	4	4	0	-4.0%
21.0%	4	4	0	-6.8%
22.2%	4	4	0	-6.4%
23.5%	4	4	0	-5.8%
24.7%	4	4	0	-5.9%
25.9%	4	4	0	-5.8%
27.2%	4	4	0	-6.3%
28.4%	4	4	0	-6.6%
29.6%	4	4	0	-5.6%
30.9%	4	4	0	-4.0%
32.1%	4	4	0	-3.8%
33.3%	4	4	0	-4.6%
34.6%	4	4	0	-6.7%
35.8%	4	4	0	-6.2%
37.0%	4	4	0	-5.7%
38.3%	4	4	0	-6.5%
39.5%	4	4	0	-7.3%
40.7%	4	4	0	-7.6%
42.0%	4	4	0	-7.6%
43.2%	4	4	0	-8.2%
44.4%	4	4	0	-6.7%
45.7%	4	4	0	-6.2%
46.9%	4	4	0	-6.5%
48.1%	4	4	0	-5.5%
49.4%	4	3	0	-6.5%
50.6%	4	3	0	-6.9%
51.9%	4	3	0	-6.7%
53.1%	4	3	0	-6.7%
54.3%	4	3	0	-6.5%
55.6%	4	3	0	-6.6%
56.8%	4	3	0	-7.4%
58.0%	4	3	0	-8.1%
59.3%	4	3	0	-8.3%
60.5%	4	3	0	-9.7%
61.7%	4	3	0	-9.7%
63.0%	4	3	0	-8.5%
64.2%	3	3	0	-7.2%
65.4%	3	3	0	-6.8%
66.7%	3	3	0	-7.5%
67.9%	3	3	0	-7.6%
69.1%	3	3	0	-7.8%
70.4%	3	3	0	-7.8%
71.6%	3	3	0	-8.0%
72.8%	3	3	0	-8.1%
74.1%	3	3	0	-8.7%
75.3%	3	3	0	-9.6%
76.5%	3	3	0	-9.4%
77.8%	3	3	0	-8.5%
79.0%	3	3	0	-9.0%
80.2%	3	3	0	-9.5%
81.5%	3	3	0	-8.2%
82.7%	3	3	0	-8.3%
84.0%	3	3	0	-10.2%
85.2%	3	3	0	-11.0%
86.4%	3	3	0	-11.1%
87.7%	3	3	0	-10.2%
88.9%	3	3	0	-9.8%
90.1%	3	3	0	-9.9%
91.4%	3	3	0	-8.9%
92.6%	3	3	0	-10.2%
93.8%	3	3	0	-11.9%
95.1%	3	3	0	-10.1%
96.3%	3	2	0	-10.2%
97.5%	3	2	0	-10.3%
98.8%	3	2	0	-13.5%
100.0%	2	2	0	8.2%

Table SW-53-b
Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	-1.8%
1.2%	7	7	0	-1.2%
2.5%	6	6	0	-1.2%
3.7%	6	6	0	0.0%
4.9%	6	6	0	0.0%
6.2%	6	6	0	-2.2%
7.4%	6	6	0	-2.1%
8.6%	6	6	0	-2.1%
9.9%	6	6	0	-4.0%
11.1%	6	6	0	-5.4%
12.3%	6	6	0	-6.8%
13.6%	6	6	0	-5.8%
14.8%	6	6	0	-7.1%
16.0%	6	6	0	-6.6%
17.3%	6	6	0	-6.6%
18.5%	6	6	0	-6.8%
19.8%	6	5	-1	-8.5%
21.0%	6	5	0	-8.4%
22.2%	6	5	0	-8.4%
23.5%	6	5	0	-7.9%
24.7%	6	5	0	-7.3%
25.9%	6	5	0	-5.1%
27.2%	6	5	0	-5.7%
28.4%	6	5	0	-5.9%
29.6%	6	5	0	-5.4%
30.9%	6	5	0	-5.4%
32.1%	6	5	0	-4.6%
33.3%	6	5	0	-4.6%
34.6%	6	5	0	-5.3%
35.8%	6	5	0	-6.1%
37.0%	6	5	0	-7.0%
38.3%	5	5	0	-6.2%
39.5%	5	5	0	-6.3%
40.7%	5	5	0	-7.0%
42.0%	5	5	0	-6.2%
43.2%	5	5	0	-5.5%
44.4%	5	5	0	-5.4%
45.7%	5	5	0	-3.7%
46.9%	5	5	0	-4.5%
48.1%	5	5	0	-3.7%
49.4%	5	5	0	-3.7%
50.6%	5	5	0	-4.5%
51.9%	5	5	0	-3.8%
53.1%	5	5	0	-3.8%
54.3%	5	5	0	-4.4%
55.6%	5	5	0	-3.6%
56.8%	5	5	0	-3.5%
58.0%	5	5	0	-2.8%
59.3%	5	5	0	-3.6%
60.5%	5	5	0	-2.8%
61.7%	5	5	0	-2.8%
63.0%	5	5	0	-3.6%
64.2%	5	5	0	-4.6%
65.4%	5	5	0	-3.0%
66.7%	5	5	0	-3.8%
67.9%	5	5	0	-3.8%
69.1%	5	5	0	-3.9%
70.4%	5	5	0	-3.6%
71.6%	5	5	0	-4.1%
72.8%	5	5	0	-4.1%
74.1%	5	5	0	-3.7%
75.3%	5	5	0	-3.8%
76.5%	5	5	0	-3.0%
77.8%	5	5	0	-3.7%
79.0%	5	5	0	-3.1%
80.2%	5	5	0	-4.0%
81.5%	5	5	0	-3.0%
82.7%	5	4	0	-3.9%
84.0%	5	4	0	-3.1%
85.2%	5	4	0	-3.2%
86.4%	5	4	0	-3.9%
87.7%	5	4	0	-7.6%
88.9%	5	4	0	-7.2%
90.1%	4	4	0	-6.3%
91.4%	4	4	0	-8.1%
92.6%	4	4	0	-8.5%
93.8%	4	4	0	-11.2%
95.1%	4	4	0	-10.4%
96.3%	4	4	-1	-13.6%
97.5%	4	4	0	-9.0%
98.8%	4	4	0	-6.1%
100.0%	4	3	0	-8.6%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	8	1	19.3%
1.2%	7	8	1	17.3%
2.5%	7	7	0	1.1%
3.7%	7	7	0	0.0%
4.9%	7	7	0	0.7%
6.2%	7	7	0	0.0%
7.4%	7	7	0	0.0%
8.6%	7	7	0	0.0%
9.9%	7	7	0	0.0%
11.1%	7	7	0	0.0%
12.3%	7	7	0	0.0%
13.6%	7	7	0	0.0%
14.8%	7	7	0	0.0%
16.0%	7	7	0	0.0%
17.3%	7	7	0	0.0%
18.5%	7	7	0	0.5%
19.8%	7	7	0	0.0%
21.0%	7	7	0	-0.1%
22.2%	7	7	0	-0.1%
23.5%	7	7	0	0.0%
24.7%	7	7	0	0.0%
25.9%	7	7	0	0.0%
27.2%	7	7	0	-0.7%
28.4%	7	7	0	-0.6%
29.6%	7	7	0	-0.6%
30.9%	7	7	0	-0.6%
32.1%	7	7	0	-0.5%
33.3%	7	7	0	-0.1%
34.6%	7	7	0	-0.1%
35.8%	7	7	0	-0.1%
37.0%	7	7	0	-0.5%
38.3%	7	7	0	-0.5%
39.5%	7	7	0	0.0%
40.7%	7	7	0	0.0%
42.0%	7	6	0	-0.8%
43.2%	7	6	0	-0.8%
44.4%	7	6	0	-0.8%
45.7%	7	6	0	-1.4%
46.9%	7	6	0	-1.9%
48.1%	7	6	0	-2.5%
49.4%	6	6	0	-2.5%
50.6%	6	6	0	-2.5%
51.9%	6	6	0	-3.2%
53.1%	6	6	0	-4.5%
54.3%	6	6	0	-5.8%
55.6%	6	6	0	-5.7%
56.8%	6	6	0	-5.8%
58.0%	6	6	0	-5.8%
59.3%	6	6	0	-7.2%
60.5%	6	6	0	-5.4%
61.7%	6	6	0	-5.4%
63.0%	6	6	0	-5.3%
64.2%	6	6	0	-4.8%
65.4%	6	6	0	-4.2%
66.7%	6	6	0	-4.1%
67.9%	6	6	0	-4.1%
69.1%	6	6	0	-3.6%
70.4%	6	6	0	-3.6%
71.6%	6	6	0	-2.9%
72.8%	6	6	0	-2.9%
74.1%	6	6	0	-2.0%
75.3%	6	6	0	-2.9%
76.5%	6	6	0	-2.2%
77.8%	6	6	0	-1.6%
79.0%	6	6	0	-2.3%
80.2%	6	6	0	-1.0%
81.5%	6	6	0	-1.5%
82.7%	6	6	0	-0.7%
84.0%	6	6	0	-1.5%
85.2%	6	5	0	-2.3%
86.4%	6	5	0	-1.8%
87.7%	6	5	0	-1.7%
88.9%	5	5	0	-0.9%
90.1%	5	5	0	0.0%
91.4%	5	5	0	0.0%
92.6%	5	5	0	1.2%
93.8%	5	5	0	1.8%
95.1%	5	5	0	-0.1%
96.3%	5	5	0	-0.9%
97.5%	5	5	0	4.9%
98.8%	5	5	0	7.2%
100.0%	4	4	0	1.8%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	6	6	0	-1.0%
1.2%	6	6	0	-0.7%
2.5%	6	5	-1	-9.5%
3.7%	6	5	0	-6.9%
4.9%	6	5	0	-6.8%
6.2%	6	5	0	-8.8%
7.4%	5	5	0	-7.9%
8.6%	5	5	0	-7.9%
9.9%	5	5	0	-8.1%
11.1%	5	5	0	-7.9%
12.3%	5	5	0	-6.1%
13.6%	5	5	0	-5.3%
14.8%	5	5	0	-4.4%
16.0%	5	5	0	-3.7%
17.3%	5	5	0	-4.7%
18.5%	5	5	0	-4.7%
19.8%	5	5	0	-4.7%
21.0%	5	5	0	-4.6%
22.2%	5	5	0	-4.7%
23.5%	5	5	0	-4.8%
24.7%	5	5	0	-4.8%
25.9%	5	5	0	-4.2%
27.2%	5	5	0	-4.1%
28.4%	5	5	0	-3.8%
29.6%	5	5	0	-3.8%
30.9%	5	5	0	-3.8%
32.1%	5	5	0	-3.8%
33.3%	5	5	0	-3.7%
34.6%	5	5	0	-2.9%
35.8%	5	5	0	-1.9%
37.0%	5	5	0	-2.7%
38.3%	5	4	0	-3.0%
39.5%	5	4	0	-2.1%
40.7%	5	4	0	-1.1%
42.0%	5	4	0	-1.1%
43.2%	5	4	0	-1.1%
44.4%	4	4	0	0.0%
45.7%	4	4	0	0.0%
46.9%	4	4	0	0.1%
48.1%	4	4	0	0.1%
49.4%	4	4	0	0.1%
50.6%	4	4	0	2.1%
51.9%	4	4	0	2.1%
53.1%	4	4	0	2.1%
54.3%	4	4	0	2.1%
55.6%	4	4	0	3.1%
56.8%	4	4	0	2.8%
58.0%	4	4	0	3.1%
59.3%	4	4	0	4.1%
60.5%	4	4	0	4.3%
61.7%	4	4	0	4.6%
63.0%	4	4	0	6.1%
64.2%	4	4	0	6.2%
65.4%	4	4	0	6.3%
66.7%	4	4	0	5.3%
67.9%	4	4	0	6.1%
69.1%	4	4	0	6.4%
70.4%	4	4	0	6.2%
71.6%	4	4	0	6.4%
72.8%	4	4	0	6.6%
74.1%	4	4	0	7.6%
75.3%	4	4	0	8.4%
76.5%	4	4	0	8.4%
77.8%	4	4	0	10.5%
79.0%	4	4	0	10.7%
80.2%	4	4	0	10.8%
81.5%	4	4	0	11.4%
82.7%	4	4	0	11.6%
84.0%	4	4	0	12.8%
85.2%	4	4	0	12.8%
86.4%	4	4	0	13.4%
87.7%	4	4	1	14.0%
88.9%	4	4	1	16.2%
90.1%	4	4	1	16.8%
91.4%	4	4	0	13.3%
92.6%	3	4	0	14.0%
93.8%	3	4	0	14.4%
95.1%	3	4	1	15.8%
96.3%	3	4	1	16.4%
97.5%	3	4	1	18.9%
98.8%	3	4	1	37.7%
100.0%	3	4	1	38.2%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	-0.7%
1.2%	7	7	0	-1.1%
2.5%	7	7	0	-2.3%
3.7%	7	7	0	-1.3%
4.9%	7	7	0	-1.2%
6.2%	7	7	0	-1.9%
7.4%	7	7	0	-1.9%
8.6%	7	7	0	-1.9%
9.9%	7	7	0	-2.4%
11.1%	7	7	0	-1.4%
12.3%	7	7	0	-0.5%
13.6%	7	7	0	0.0%
14.8%	6	6	0	0.1%
16.0%	6	6	0	7.3%
17.3%	6	6	0	2.5%
18.5%	5	6	0	6.3%
19.8%	5	6	0	5.5%
21.0%	5	5	0	0.9%
22.2%	5	5	0	-2.7%
23.5%	5	5	0	-4.6%
24.7%	5	5	0	-3.6%
25.9%	5	5	0	-6.3%
27.2%	5	5	0	-8.3%
28.4%	5	5	0	-3.8%
29.6%	5	5	0	-3.7%
30.9%	5	4	0	-6.9%
32.1%	5	4	0	-9.0%
33.3%	4	4	0	-3.6%
34.6%	4	4	0	-2.7%
35.8%	4	4	0	-4.1%
37.0%	4	4	0	3.5%
38.3%	4	4	0	3.3%
39.5%	4	4	0	-2.3%
40.7%	4	4	0	0.4%
42.0%	4	4	0	0.9%
43.2%	3	3	0	0.4%
44.4%	3	3	0	2.7%
45.7%	3	3	0	0.1%
46.9%	3	3	0	-1.1%
48.1%	3	3	0	-1.9%
49.4%	3	3	0	-5.3%
50.6%	3	3	0	-4.6%
51.9%	3	3	0	-6.8%
53.1%	3	3	0	-4.2%
54.3%	3	3	0	-3.4%
55.6%	3	3	0	-1.0%
56.8%	3	3	0	-3.2%
58.0%	3	3	0	2.2%
59.3%	3	3	0	2.5%
60.5%	3	3	0	7.0%
61.7%	2	3	0	9.6%
63.0%	2	3	0	10.5%
64.2%	2	3	0	11.4%
65.4%	2	3	0	14.2%
66.7%	2	3	0	17.0%
67.9%	2	3	0	13.5%
69.1%	2	3	0	13.6%
70.4%	2	3	0	13.7%
71.6%	2	3	0	14.0%
72.8%	2	3	0	14.8%
74.1%	2	3	0	16.0%
75.3%	2	3	0	16.1%
76.5%	2	3	0	18.7%
77.8%	2	3	0	19.5%
79.0%	2	2	0	18.3%
80.2%	2	2	0	18.3%
81.5%	2	2	0	17.7%
82.7%	2	2	0	16.3%
84.0%	2	2	0	15.5%
85.2%	2	2	0	15.3%
86.4%	2	2	0	17.8%
87.7%	2	2	0	15.8%
88.9%	2	2	0	15.0%
90.1%	2	2	0	14.0%
91.4%	2	2	0	18.4%
92.6%	2	2	0	18.9%
93.8%	2	2	0	20.8%
95.1%	2	2	0	20.7%
96.3%	2	2	0	21.2%
97.5%	2	2	0	20.8%
98.8%	2	2	0	22.0%
100.0%	2	2	0	17.2%

Figure SW-54-b
Sacramento River below Hamilton City, Monthly Stage
Probability of Exceedance

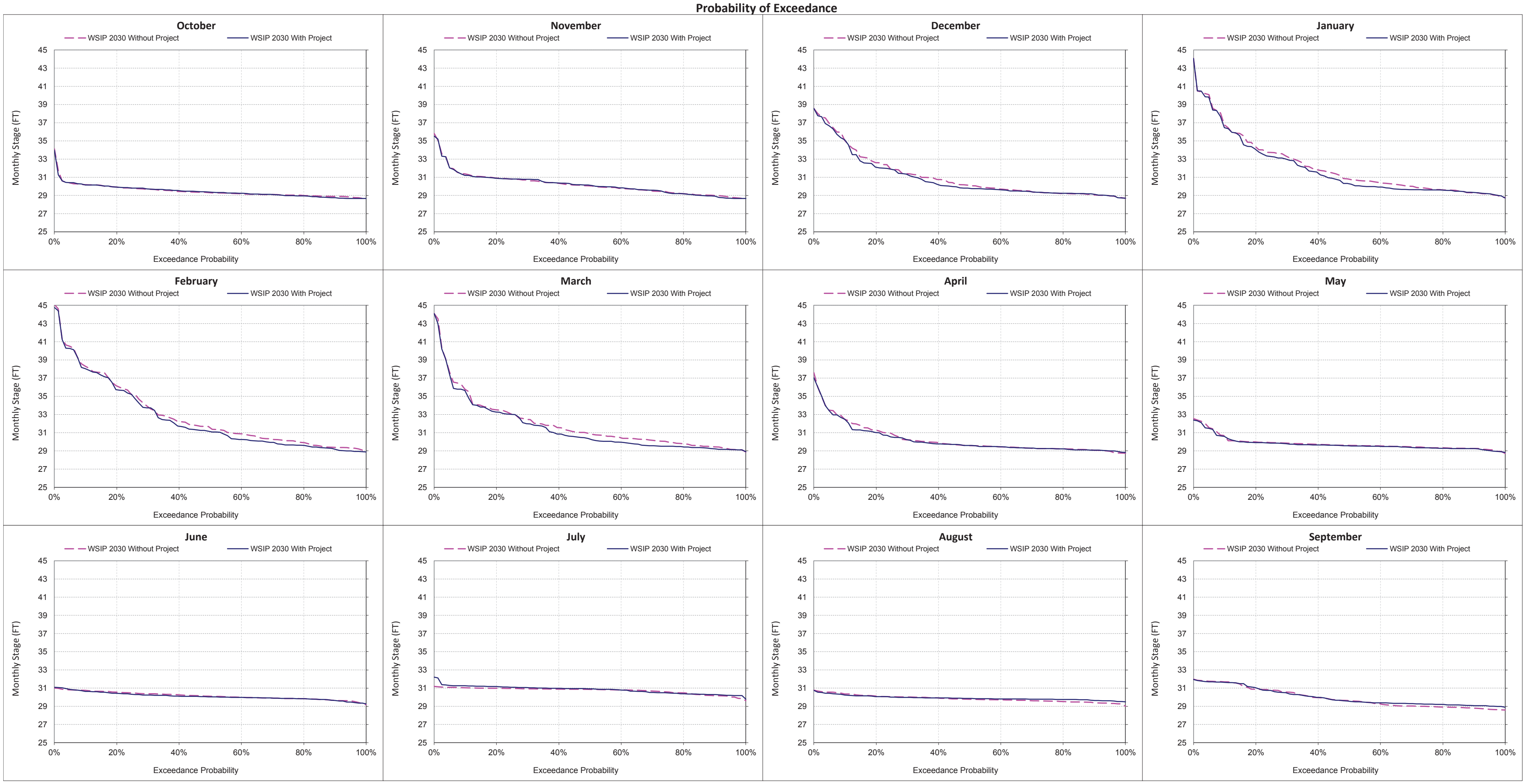


Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	34	34	0	-0.4%
1.2%	32	31	-1	-1.6%
2.5%	31	31	0	-0.1%
3.7%	30	30	0	0.0%
4.9%	30	30	0	0.1%
6.2%	30	30	0	0.4%
7.4%	30	30	0	0.1%
8.6%	30	30	0	0.3%
9.9%	30	30	0	-0.1%
11.1%	30	30	0	0.0%
12.3%	30	30	0	-0.1%
13.6%	30	30	0	0.0%
14.8%	30	30	0	-0.1%
16.0%	30	30	0	0.0%
17.3%	30	30	0	0.1%
18.5%	30	30	0	0.0%
19.8%	30	30	0	0.0%
21.0%	30	30	0	0.1%
22.2%	30	30	0	0.1%
23.5%	30	30	0	0.1%
24.7%	30	30	0	0.0%
25.9%	30	30	0	0.2%
27.2%	30	30	0	0.3%
28.4%	30	30	0	0.2%
29.6%	30	30	0	0.2%
30.9%	30	30	0	0.1%
32.1%	30	30	0	0.0%
33.3%	30	30	0	0.2%
34.6%	30	30	0	0.2%
35.8%	30	30	0	0.2%
37.0%	30	30	0	0.2%
38.3%	29	30	0	0.2%
39.5%	29	30	0	0.4%
40.7%	29	30	0	0.2%
42.0%	29	29	0	0.2%
43.2%	29	29	0	0.2%
44.4%	29	29	0	0.3%
45.7%	29	29	0	0.3%
46.9%	29	29	0	0.2%
48.1%	29	29	0	0.2%
49.4%	29	29	0	0.2%
50.6%	29	29	0	0.2%
51.9%	29	29	0	0.2%
53.1%	29	29	0	0.2%
54.3%	29	29	0	0.2%
55.6%	29	29	0	0.0%
56.8%	29	29	0	0.1%
58.0%	29	29	0	0.2%
59.3%	29	29	0	0.2%
60.5%	29	29	0	0.2%
61.7%	29	29	0	0.2%
63.0%	29	29	0	0.1%
64.2%	29	29	0	0.1%
65.4%	29	29	0	0.1%
66.7%	29	29	0	0.1%
67.9%	29	29	0	0.1%
69.1%	29	29	0	0.0%
70.4%	29	29	0	0.0%
71.6%	29	29	0	-0.1%
72.8%	29	29	0	0.0%
74.1%	29	29	0	-0.2%
75.3%	29	29	0	-0.2%
76.5%	29	29	0	-0.2%
77.8%	29	29	0	-0.3%
79.0%	29	29	0	-0.3%
80.2%	29	29	0	-0.1%
81.5%	29	29	0	-0.2%
82.7%	29	29	0	-0.3%
84.0%	29	29	0	-0.3%
85.2%	29	29	0	-0.4%
86.4%	29	29	0	-0.3%
87.7%	29	29	0	-0.5%
88.9%	29	29	0	-0.5%
90.1%	29	29	0	-0.5%
91.4%	29	29	0	-0.7%
92.6%	29	29	0	-0.7%
93.8%	29	29	0	-0.6%
95.1%	29	29	0	-0.6%
96.3%	29	29	0	-0.3%
97.5%	29	29	0	-0.3%
98.8%	29	29	0	-0.1%
100.0%	29	29	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	36	36	0	-0.8%
1.2%	35	35	0	0.4%
2.5%	34	33	0	-0.8%
3.7%	33	33	0	-0.2%
4.9%	32	32	0	0.0%
6.2%	32	32	0	-0.3%
7.4%	32	32	0	0.0%
8.6%	31	31	0	-0.1%
9.9%	31	31	0	-0.5%
11.1%	31	31	0	-0.2%
12.3%	31	31	0	-0.2%
13.6%	31	31	0	-0.2%
14.8%	31	31	0	-0.2%
16.0%	31	31	0	-0.2%
17.3%	31	31	0	-0.1%
18.5%	31	31	0	-0.1%
19.8%	31	31	0	-0.1%
21.0%	31	31	0	-0.1%
22.2%	31	31	0	-0.1%
23.5%	31	31	0	0.0%
24.7%	31	31	0	0.0%
25.9%	31	31	0	0.1%
27.2%	31	31	0	0.1%
28.4%	31	31	0	0.3%
29.6%	31	31	0	0.2%
30.9%	31	31	0	0.5%
32.1%	31	31	0	0.5%
33.3%	31	31	0	0.6%
34.6%	30	31	0	0.2%
35.8%	30	30	0	0.0%
37.0%	30	30	0	0.0%
38.3%	30	30	0	0.0%
39.5%	30	30	0	0.1%
40.7%	30	30	0	0.2%
42.0%	30	30	0	0.4%
43.2%	30	30	0	0.4%
44.4%	30	30	0	0.2%
45.7%	30	30	0	0.1%
46.9%	30	30	0	0.1%
48.1%	30	30	0	0.2%
49.4%	30	30	0	0.3%
50.6%	30	30	0	0.2%
51.9%	30	30	0	0.1%
53.1%	30	30	0	0.2%
54.3%	30	30	0	0.3%
55.6%	30	30	0	0.2%
56.8%	30	30	0	0.3%
58.0%	30	30	0	0.1%
59.3%	30	30	0	0.2%
60.5%	30	30	0	0.2%
61.7%	30	30	0	0.2%
63.0%	30	30	0	0.0%
64.2%	30	30	0	0.1%
65.4%	30	30	0	0.0%
66.7%	30	30	0	0.1%
67.9%	30	30	0	0.1%
69.1%	30	30	0	0.1%
70.4%	29	30	0	0.3%
71.6%	29	30	0	0.3%
72.8%	29	30	0	0.2%
74.1%	29	29	0	-0.3%
75.3%	29	29	0	-0.2%
76.5%	29	29	0	-0.2%
77.8%	29	29	0	-0.3%
79.0%	29	29	0	0.0%
80.2%	29	29	0	0.0%
81.5%	29	29	0	-0.1%
82.7%	29	29	0	-0.2%
84.0%	29	29	0	-0.1%
85.2%	29	29	0	-0.1%
86.4%	29	29	0	-0.3%
87.7%	29	29	0	-0.3%
88.9%	29	29	0	-0.3%
90.1%	29	29	0	-0.2%
91.4%	29	29	0	-0.7%
92.6%	29	29	0	-0.6%
93.8%	29	29	0	-0.6%
95.1%	29	29	0	-0.4%
96.3%	29	29	0	-0.4%
97.5%	29	29	0	-0.2%
98.8%	29	29	0	-0.1%
100.0%	29	29	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	39	39	0	0.0%
1.2%	38	38	0	-0.6%
2.5%	38	38	0	0.0%
3.7%	38	37	-1	-1.6%
4.9%	37	37	0	-0.7%
6.2%	36	36	0	-0.4%
7.4%	36	36	0	-0.7%
8.6%	36	35	-1	-1.7%
9.9%	35	35	0	0.1%
11.1%	35	35	0	0.0%
12.3%	34	33	-1	-2.1%
13.6%	34	33	-1	-1.5%
14.8%	33	33	0	-1.4%
16.0%	33	33	-1	-1.9%
17.3%	33	33	-1	-1.7%
18.5%	33	33	0	-0.9%
19.8%	33	32	0	-1.5%
21.0%	33	32	-1	-1.7%
22.2%	32	32	0	-1.2%
23.5%	32	32	0	-1.3%
24.7%	32	32	0	0.0%
25.9%	32	32	0	-0.2%
27.2%	32	31	0	-1.2%
28.4%	31	31	0	0.0%
29.6%	31	31	0	-0.2%
30.9%	31	31	0	-0.8%
32.1%	31	31	0	-0.8%
33.3%	31	31	0	-1.0%
34.6%	31	31	0	-0.7%
35.8%	31	31	0	-1.6%
37.0%	31	30	-1	-1.6%
38.3%	31	30	-1	-1.6%
39.5%	31	30	-1	-1.8%
40.7%	31	30	-1	-2.1%
42.0%	31	30	-1	-2.0%
43.2%	30	30	0	-1.3%
44.4%	30	30	0	-1.4%
45.7%	30	30	0	-0.9%
46.9%	30	30	0	-1.2%
48.1%	30	30	0	-1.2%
49.4%	30	30	0	-1.1%
50.6%	30	30	0	-1.0%
51.9%	30	30	0	-1.0%
53.1%	30	30	0	-0.7%
54.3%	30	30	0	-0.4%
55.6%	30	30	0	-0.6%
56.8%	30	30	0	-0.4%
58.0%	30	30	0	-0.4%
59.3%	30	30	0	-0.2%
60.5%	30	30	0	-0.3%
61.7%	30	30	0	-0.2%
63.0%	30	30	0	-0.4%
64.2%	30	29	0	-0.4%
65.4%	30	29	0	-0.2%
66.7%	30	29	0	-0.2%
67.9%	30	29	0	-0.2%
69.1%	29	29	0	-0.2%
70.4%	29	29	0	0.1%
71.6%	29	29	0	0.0%
72.8%	29	29	0	0.1%
74.1%	29	29	0	0.0%
75.3%	29	29	0	0.0%
76.5%	29	29	0	0.0%
77.8%	29	29	0	0.1%
79.0%	29	29	0	0.1%
80.2%	29	29	0	0.1%
81.5%	29	29	0	0.1%
82.7%	29	29	0	0.1%
84.0%	29	29	0	0.1%
85.2%	29	29	0	0.1%
86.4%	29	29	0	0.1%
87.7%	29	29	0	0.2%
88.9%	29	29	0	0.3%
90.1%	29	29	0	0.3%
91.4%	29	29	0	0.0%
92.6%	29	29	0	0.0%
93.8%	29	29	0	0.0%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.1%
97.5%	29	29	0	-0.3%
98.8%	29	29	0	-0.1%
100.0%	29	29	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	44	44	0	0.0%
1.2%	41	41	0	0.0%
2.5%	40	40	0	0.2%
3.7%	40	40	0	-0.9%
4.9%	40	40	0	-0.7%
6.2%	39	38	0	-0.5%
7.4%	38	38	0	-0.1%
8.6%	38	38	0	-1.0%
9.9%	37	36	0	-0.9%
11.1%	36	36	0	-0.3%
12.3%	36	36	0	0.1%
13.6%	36	36	0	0.1%
14.8%	36	36	0	-0.7%
16.0%	36	35	-1	-2.8%
17.3%	35	34	0	-1.3%
18.5%	35	34	0	-1.3%
19.8%	34	34	0	-0.9%
21.0%	34	34	0	-0.7%
22.2%	34	34	0	-1.4%
23.5%	34	33	0	-1.1%
24.7%	34	33	0	-1.4%
25.9%	34	33	0	-1.4%
27.2%	34	33	0	-1.4%
28.4%	34	33	0	-1.4%
29.6%	33	33	0	-1.0%
30.9%	33	33	0	-0.8%
32.1%	33	33	0	-0.5%
33.3%	33	32	-1	-1.6%
34.6%	33	32	0	-1.5%
35.8%	32	32	0	-0.4%
37.0%	32	32	0	-1.5%
38.3%	32	32	0	-1.0%
39.5%	32	32	0	-0.8%
40.7%	32	31	0	-1.5%
42.0%	32	31	-1	-1.7%
43.2%	32	31	-1	-2.0%
44.4%	31	31	-1	-1.9%
45.7%	31	31	-1	-2.0%
46.9%	31	31	-1	-1.8%
48.1%	31	30	-1	-1.7%
49.4%	31	30	-1	-1.6%
50.6%	31	30	-1	-1.7%
51.9%	31	30	-1	-2.1%
53.1%	31	30	-1	-1.8%
54.3%	31	30	-1	-2.0%
55.6%	31	30	-1	-2.0%
56.8%	31	30	-1	-2.0%
58.0%	31	30	-1	-1.8%
59.3%	30	30	-1	-1.7%
60.5%	30	30	0	-1.4%
61.7%	30	30	0	-1.6%
63.0%	30	30	0	-1.5%
64.2%	30	30	-1	-1.8%
65.4%	30	30	-1	-1.7%
66.7%	30	30	0	-1.5%
67.9%	30	30	0	-1.3%
69.1%	30	30	0	-1.2%
70.4%	30	30	0	-1.2%
71.6%	30	30	0	-0.8%
72.8%	30	30	0	-0.7%
74.1%	30	30	0	-0.7%
75.3%	30	30	0	-0.5%
76.5%	30	30	0	-0.3%
77.8%	30	30	0	-0.2%
79.0%	30	30	0	-0.2%
80.2%	30	30	0	-0.1%
81.5%	30	30	0	-0.1%
82.7%	30	30	0	-0.1%
84.0%	30	29	0	-0.3%
85.2%	29	29	0	0.0%
86.4%	29	29	0	-0.1%
87.7%	29	29	0	0.2%
88.9%	29	29	0	0.1%
90.1%	29	29	0	0.2%
91.4%	29	29	0	0.1%
92.6%	29	29	0	0.2%
93.8%	29	29	0	0.1%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.2%
97.5%	29	29	0	0.0%
98.8%	29	29	0	0.5%
100.0%	29	29	0	-0.2%

Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	45	45	0	-0.7%
1.2%	45	44	0	-0.5%
2.5%	41	41	0	-0.3%
3.7%	41	40	0	-0.9%
4.9%	41	40	0	-0.6%
6.2%	40	40	0	-0.4%
7.4%	39	39	0	0.0%
8.6%	39	38	0	-1.0%
9.9%	38	38	0	-0.7%
11.1%	38	38	0	-0.5%
12.3%	38	38	0	-0.2%
13.6%	38	38	0	-0.1%
14.8%	38	37	0	-0.7%
16.0%	38	37	0	-1.1%
17.3%	37	37	0	0.0%
18.5%	37	37	0	0.0%
19.8%	36	36	0	-1.3%
21.0%	36	36	0	-0.8%
22.2%	36	36	0	-0.5%
23.5%	36	35	0	-0.9%
24.7%	35	35	0	0.0%
25.9%	35	35	0	-1.3%
27.2%	35	34	0	-1.2%
28.4%	34	34	-1	-1.5%
29.6%	34	34	0	-0.6%
30.9%	34	34	0	0.3%
32.1%	33	33	0	0.1%
33.3%	33	33	0	-1.0%
34.6%	33	32	0	-1.4%
35.8%	33	32	0	-1.3%
37.0%	33	32	0	-0.9%
38.3%	32	32	0	-1.3%
39.5%	32	32	-1	-1.6%
40.7%	32	32	-1	-1.6%
42.0%	32	32	-1	-1.7%
43.2%	32	31	-1	-1.6%
44.4%	32	31	0	-1.6%
45.7%	32	31	0	-1.5%
46.9%	32	31	0	-1.4%
48.1%	32	31	0	-1.4%
49.4%	32	31	-1	-1.6%
50.6%	31	31	0	-0.9%
51.9%	31	31	0	-0.9%
53.1%	31	31	0	-0.8%
54.3%	31	31	0	-1.3%
55.6%	31	31	0	-1.1%
56.8%	31	30	-1	-2.1%
58.0%	31	30	-1	-1.9%
59.3%	31	30	-1	-2.1%
60.5%	31	30	-1	-2.0%
61.7%	31	30	-1	-1.8%
63.0%	31	30	-1	-1.8%
64.2%	31	30	-1	-1.8%
65.4%	30	30	0	-1.3%
66.7%	30	30	0	-1.0%
67.9%	30	30	0	-1.2%
69.1%	30	30	0	-1.3%
70.4%	30	30	0	-1.0%
71.6%	30	30	0	-1.6%
72.8%	30	30	0	-1.6%
74.1%	30	30	0	-1.5%
75.3%	30	30	0	-1.5%
76.5%	30	30	0	-1.6%
77.8%	30	30	0	-1.3%
79.0%	30	30	0	-1.1%
80.2%	30	30	0	-1.0%
81.5%	30	30	0	-0.9%
82.7%	30	29	0	-0.6%
84.0%	30	29	0	-0.6%
85.2%	30	29	0	-0.6%
86.4%	29	29	0	-0.3%
87.7%	29	29	0	-0.3%
88.9%	29	29	0	-0.5%
90.1%	29	29	0	-0.7%
91.4%	29	29	0	-1.1%
92.6%	29	29	0	-1.1%
93.8%	29	29	0	-1.2%
95.1%	29	29	0	-1.0%
96.3%	29	29	0	-1.2%
97.5%	29	29	0	-1.0%
98.8%	29	29	0	-0.6%
100.0%	29	29	0	-0.1%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	44	44	0	0.0%
1.2%	44	43	-1	-1.2%
2.5%	40	40	0	-0.2%
3.7%	39	39	0	0.0%
4.9%	38	37	0	-0.7%
6.2%	37	36	-1	-1.9%
7.4%	36	36	-1	-1.9%
8.6%	36	36	-1	-1.5%
9.9%	36	36	0	-0.4%
11.1%	36	35	-1	-2.0%
12.3%	34	34	0	-0.3%
13.6%	34	34	0	-0.3%
14.8%	34	34	0	-0.6%
16.0%	34	34	0	-0.1%
17.3%	34	34	0	-0.7%
18.5%	34	33	0	-0.6%
19.8%	34	33	0	-0.8%
21.0%	33	33	0	-0.7%
22.2%	33	33	0	-1.0%
23.5%	33	33	0	-0.7%
24.7%	33	33	0	-0.1%
25.9%	33	33	0	-0.2%
27.2%	33	33	0	0.3%
28.4%	33	32	0	-1.4%
29.6%	32	32	0	-1.5%
30.9%	32	32	0	-1.5%
32.1%	32	32	0	-0.6%
33.3%	32	32	0	-0.7%
34.6%	32	32	0	-0.7%
35.8%	32	32	0	-0.8%
37.0%	32	31	-1	-2.1%
38.3%	32	31	-1	-2.5%
39.5%	32	31	-1	-2.2%
40.7%	32	31	-1	-2.2%
42.0%	31	31	-1	-2.0%
43.2%	31	31	-1	-1.9%
44.4%	31	31	-1	-1.7%
45.7%	31	31	-1	-1.7%
46.9%	31	30	-1	-1.8%
48.1%	31	30	-1	-1.8%
49.4%	31	30	-1	-1.9%
50.6%	31	30	-1	-2.0%
51.9%	31	30	-1	-2.0%
53.1%	31	30	-1	-2.1%
54.3%	31	30	-1	-2.2%
55.6%	31	30	-1	-1.8%
56.8%	31	30	-1	-1.8%
58.0%	31	30	-1	-1.8%
59.3%	31	30	-1	-1.7%
60.5%	30	30	0	-1.5%
61.7%	30	30	0	-1.6%
63.0%	30	30	-1	-1.8%
64.2%	30	30	-1	-1.9%
65.4%	30	30	-1	-1.8%
66.7%	30	30	-1	-2.2%
67.9%	30	30	-1	-2.2%
69.1%	30	30	-1	-2.1%
70.4%	30	30	-1	-1.9%
71.6%	30	30	-1	-1.9%
72.8%	30	30	-1	-1.8%
74.1%	30	30	-1	-1.8%
75.3%	30	30	0	-1.5%
76.5%	30	29	0	-1.4%
77.8%	30	29	0	-1.2%
79.0%	30	29	0	-1.1%
80.2%	30	29	0	-1.1%
81.5%	30	29	0	-1.0%
82.7%	30	29	0	-0.8%
84.0%	30	29	0	-0.8%
85.2%	30	29	0	-0.7%
86.4%	29	29	0	-0.5%
87.7%	29	29	0	-0.7%
88.9%	29	29	0	-0.8%
90.1%	29	29	0	-0.7%
91.4%	29	29	0	-0.9%
92.6%	29	29	0	-0.6%
93.8%	29	29	0	-0.4%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.0%
97.5%	29	29	0	-0.1%
98.8%	29	29	0	0.0%
100.0%	29	29	0	0.1%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	38	37	-1	-1.5%
1.2%	36	36	0	0.0%
2.5%	35	35	0	0.1%
3.7%	34	34	0	0.0%
4.9%	33	33	0	-0.2%
6.2%	33	33	0	-1.4%
7.4%	33	33	0	0.0%
8.6%	33	33	0	-0.7%
9.9%	32	32	0	0.0%
11.1%	32	32	0	-0.8%
12.3%	32	31	-1	-2.1%
13.6%	32	31	-1	-2.0%
14.8%	32	31	-1	-1.6%
16.0%	32	31	0	-1.1%
17.3%	32	31	0	-1.1%
18.5%	31	31	0	-0.6%
19.8%	31	31	0	-0.9%
21.0%	31	31	0	-0.6%
22.2%	31	31	0	-1.0%
23.5%	31	31	0	-0.9%
24.7%	31	31	0	-1.3%
25.9%	31	30	0	-0.8%
27.2%	31	30	0	-0.2%
28.4%	30	30	0	0.5%
29.6%	30	30	0	0.1%
30.9%	30	30	0	-0.1%
32.1%	30	30	0	-0.5%
33.3%	30	30	0	-0.4%
34.6%	30	30	0	-0.3%
35.8%	30	30	0	-0.4%
37.0%	30	30	0	-0.4%
38.3%	30	30	0	-0.5%
39.5%	30	30	0	-0.6%
40.7%	30	30	0	-0.2%
42.0%	30	30	0	-0.2%
43.2%	30	30	0	0.0%
44.4%	30	30	0	0.0%
45.7%	30	30	0	0.1%
46.9%	30	30	0	0.1%
48.1%	30	30	0	-0.1%
49.4%	30	30	0	0.0%
50.6%	30	30	0	0.1%
51.9%	30	30	0	0.0%
53.1%	30	29	0	-0.2%
54.3%	30	29	0	-0.2%
55.6%	30	29	0	-0.1%
56.8%	30	29	0	-0.1%
58.0%	29	29	0	0.0%
59.3%	29	29	0	0.0%
60.5%	29	29	0	0.1%
61.7%	29	29	0	0.0%
63.0%	29	29	0	-0.1%
64.2%	29	29	0	-0.1%
65.4%	29	29	0	-0.1%
66.7%	29	29	0	-0.1%
67.9%	29	29	0	0.0%
69.1%	29	29	0	0.0%
70.4%	29	29	0	0.1%
71.6%	29	29	0	0.0%
72.8%	29	29	0	0.0%
74.1%	29	29	0	0.0%
75.3%	29	29	0	0.0%
76.5%	29	29	0	0.0%
77.8%	29	29	0	0.0%
79.0%	29	29	0	0.0%
80.2%	29	29	0	0.0%
81.5%	29	29	0	-0.1%
82.7%	29	29	0	-0.3%
84.0%	29	29	0	-0.2%
85.2%	29	29	0	-0.1%
86.4%	29	29	0	-0.1%
87.7%	29	29	0	-0.1%
88.9%	29	29	0	-0.1%
90.1%	29	29	0	0.0%
91.4%	29	29	0	0.0%
92.6%	29	29	0	0.0%
93.8%	29	29	0	0.0%
95.1%	29	29	0	0.2%
96.3%	29	29	0	0.6%
97.5%	29	29	0	0.5%
98.8%	29	29	0	0.4%
100.0%	29	29	0	0.2%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	33	32	0	-0.5%
1.2%	32	32	0	-0.3%
2.5%	32	32	0	-0.4%
3.7%	32	32	0	-1.5%
4.9%	32	31	0	-0.3%
6.2%	31	31	0	-0.1%
7.4%	31	31	0	-1.3%
8.6%	31	31	0	-0.3%
9.9%	31	31	0	-0.3%
11.1%	30	30	0	0.7%
12.3%	30	30	0	0.3%
13.6%	30	30	0	-0.1%
14.8%	30	30	0	-0.3%
16.0%	30	30	0	-0.1%
17.3%	30	30	0	-0.2%
18.5%	30	30	0	-0.3%
19.8%	30	30	0	-0.3%
21.0%	30	30	0	-0.1%
22.2%	30	30	0	-0.1%
23.5%	30	30	0	-0.2%
24.7%	30	30	0	-0.2%
25.9%	30	30	0	-0.2%
27.2%	30	30	0	-0.1%
28.4%	30	30	0	-0.1%
29.6%	30	30	0	-0.2%
30.9%	30	30	0	-0.3%
32.1%	30	30	0	-0.2%
33.3%	30	30	0	-0.3%
34.6%	30	30	0	-0.3%
35.8%	30	30	0	-0.3%
37.0%	30	30	0	-0.3%
38.3%	30	30	0	-0.3%
39.5%	30	30	0	-0.2%
40.7%	30	30	0	-0.2%
42.0%	30	30	0	-0.1%
43.2%	30	30	0	-0.2%
44.4%	30	30	0	0.0%
45.7%	30	30	0	0.0%
46.9%	30	30	0	-0.1%
48.1%	30	30	0	-0.2%
49.4%	30	30	0	-0.2%
50.6%	30	30	0	-0.2%
51.9%	30	30	0	-0.2%
53.1%	30	30	0	-0.1%
54.3%	30	30	0	-0.1%
55.6%	30	30	0	-0.2%
56.8%	30	30	0	-0.2%
58.0%	30	30	0	-0.2%
59.3%	30	29	0	-0.2%
60.5%	30	29	0	-0.2%
61.7%	30	29	0	-0.2%
63.0%	29	29	0	-0.1%
64.2%	29	29	0	-0.1%
65.4%	29	29	0	-0.1%
66.7%	29	29	0	-0.2%
67.9%	29	29	0	-0.2%
69.1%	29	29	0	-0.3%
70.4%	29	29	0	-0.3%
71.6%	29	29	0	-0.3%
72.8%	29	29	0	-0.3%
74.1%	29	29	0	-0.2%
75.3%	29	29	0	0.0%
76.5%	29	29	0	-0.1%
77.8%	29	29	0	-0.1%
79.0%	29	29	0	-0.2%
80.2%	29	29	0	-0.2%
81.5%	29	29	0	-0.2%
82.7%	29	29	0	-0.1%
84.0%	29	29	0	-0.1%
85.2%	29	29	0	-0.1%
86.4%	29	29	0	-0.1%
87.7%	29	29	0	-0.1%
88.9%	29	29	0	-0.1%
90.1%	29	29	0	-0.1%
91.4%	29	29	0	-0.2%
92.6%	29	29	0	-0.1%
93.8%	29	29	0	-0.3%
95.1%	29	29	0	-0.3%
96.3%	29	29	0	-0.5%
97.5%	29	29	0	-0.1%
98.8%	29	29	0	-0.1%
100.0%	29	29	0	0.3%

Table SW-54-b
Sacramento River below Hamilton City, Monthly Stage
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	31	0	0.3%
1.2%	31	31	0	0.3%
2.5%	31	31	0	0.6%
3.7%	31	31	0	0.3%
4.9%	31	31	0	0.1%
6.2%	31	31	0	0.1%
7.4%	31	31	0	0.0%
8.6%	31	31	0	-0.1%
9.9%	31	31	0	-0.4%
11.1%	31	31	0	-0.3%
12.3%	31	31	0	-0.1%
13.6%	31	31	0	-0.2%
14.8%	31	31	0	-0.3%
16.0%	31	31	0	-0.3%
17.3%	31	30	0	-0.5%
18.5%	31	30	0	-0.4%
19.8%	31	30	0	-0.4%
21.0%	31	30	0	-0.4%
22.2%	31	30	0	-0.4%
23.5%	30	30	0	-0.4%
24.7%	30	30	0	-0.6%
25.9%	30	30	0	-0.5%
27.2%	30	30	0	-0.4%
28.4%	30	30	0	-0.5%
29.6%	30	30	0	-0.5%
30.9%	30	30	0	-0.5%
32.1%	30	30	0	-0.5%
33.3%	30	30	0	-0.5%
34.6%	30	30	0	-0.5%
35.8%	30	30	0	-0.4%
37.0%	30	30	0	-0.5%
38.3%	30	30	0	-0.5%
39.5%	30	30	0	-0.5%
40.7%	30	30	0	-0.4%
42.0%	30	30	0	-0.3%
43.2%	30	30	0	-0.4%
44.4%	30	30	0	-0.3%
45.7%	30	30	0	-0.3%
46.9%	30	30	0	-0.3%
48.1%	30	30	0	-0.2%
49.4%	30	30	0	-0.3%
50.6%	30	30	0	-0.2%
51.9%	30	30	0	-0.2%
53.1%	30	30	0	-0.2%
54.3%	30	30	0	-0.2%
55.6%	30	30	0	-0.1%
56.8%	30	30	0	-0.1%
58.0%	30	30	0	-0.1%
59.3%	30	30	0	-0.1%
60.5%	30	30	0	0.0%
61.7%	30	30	0	0.0%
63.0%	30	30	0	0.0%
64.2%	30	30	0	0.0%
65.4%	30	30	0	0.0%
66.7%	30	30	0	0.0%
67.9%	30	30	0	0.1%
69.1%	30	30	0	0.1%
70.4%	30	30	0	0.0%
71.6%	30	30	0	-0.1%
72.8%	30	30	0	0.0%
74.1%	30	30	0	0.0%
75.3%	30	30	0	0.0%
76.5%	30	30	0	0.0%
77.8%	30	30	0	0.0%
79.0%	30	30	0	0.0%
80.2%	30	30	0	0.0%
81.5%	30	30	0	0.0%
82.7%	30	30	0	-0.1%
84.0%	30	30	0	0.0%
85.2%	30	30	0	0.0%
86.4%	30	30	0	0.1%
87.7%	30	30	0	0.0%
88.9%	30	30	0	0.0%
90.1%	30	30	0	0.0%
91.4%	30	30	0	-0.2%
92.6%	30	30	0	-0.2%
93.8%	30	29	0	-0.5%
95.1%	30	29	0	-0.5%
96.3%	30	29	0	-0.4%
97.5%	29	29	0	-0.2%
98.8%	29	29	0	0.2%
100.0%	29	29	0	0.3%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	32	1	3.3%
1.2%	31	32	1	3.1%
2.5%	31	31	0	0.9%
3.7%	31	31	0	0.8%
4.9%	31	31	0	0.7%
6.2%	31	31	0	0.6%
7.4%	31	31	0	0.6%
8.6%	31	31	0	0.7%
9.9%	31	31	0	0.7%
11.1%	31	31	0	0.7%
12.3%	31	31	0	0.7%
13.6%	31	31	0	0.6%
14.8%	31	31	0	0.7%
16.0%	31	31	0	0.7%
17.3%	31	31	0	0.6%
18.5%	31	31	0	0.6%
19.8%	31	31	0	0.6%
21.0%	31	31	0	0.6%
22.2%	31	31	0	0.5%
23.5%	31	31	0	0.5%
24.7%	31	31	0	0.5%
25.9%	31	31	0	0.4%
27.2%	31	31	0	0.4%
28.4%	31	31	0	0.5%
29.6%	31	31	0	0.4%
30.9%	31	31	0	0.4%
32.1%	31	31	0	0.4%
33.3%	31	31	0	0.3%
34.6%	31	31	0	0.3%
35.8%	31	31	0	0.3%
37.0%	31	31	0	0.3%
38.3%	31	31	0	0.3%
39.5%	31	31	0	0.3%
40.7%	31	31	0	0.3%
42.0%	31	31	0	0.3%
43.2%	31	31	0	0.3%
44.4%	31	31	0	0.2%
45.7%	31	31	0	0.3%
46.9%	31	31	0	0.3%
48.1%	31	31	0	0.2%
49.4%	31	31	0	0.2%
50.6%	31	31	0	0.2%
51.9%	31	31	0	0.1%
53.1%	31	31	0	0.1%
54.3%	31	31	0	0.1%
55.6%	31	31	0	0.1%
56.8%	31	31	0	0.2%
58.0%	31	31	0	0.1%
59.3%	31	31	0	0.0%
60.5%	31	31	0	0.0%
61.7%	31	31	0	-0.1%
63.0%	31	31	0	-0.4%
64.2%	31	31	0	-0.3%
65.4%	31	31	0	-0.4%
66.7%	31	31	0	-0.4%
67.9%	31	31	0	-0.4%
69.1%	31	31	0	-0.5%
70.4%	31	31	0	-0.5%
71.6%	31	31	0	-0.5%
72.8%	31	30	0	-0.4%
74.1%	31	30	0	-0.4%
75.3%	31	30	0	-0.4%
76.5%	30	30	0	-0.2%
77.8%	30	30	0	-0.2%
79.0%	30	30	0	-0.3%
80.2%	30	30	0	-0.3%
81.5%	30	30	0	-0.2%
82.7%	30	30	0	0.0%
84.0%	30	30	0	0.2%
85.2%	30	30	0	0.1%
86.4%	30	30	0	0.3%
87.7%	30	30	0	0.3%
88.9%	30	30	0	0.3%
90.1%	30	30	0	0.4%
91.4%	30	30	0	0.3%
92.6%	30	30	0	0.3%
93.8%	30	30	0	0.3%
95.1%	30	30	0	0.7%
96.3%	30	30	0	0.6%
97.5%	30	30	0	1.0%
98.8%	30	30	0	1.1%
100.0%	30	30	0	0.6%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	31	0	0.0%
1.2%	31	31	0	-0.4%
2.5%	31	31	0	-0.2%
3.7%	31	30	0	-0.4%
4.9%	31	30	0	-0.4%
6.2%	31	30	0	-0.6%
7.4%	30	30	0	-0.5%
8.6%	30	30	0	-0.4%
9.9%	30	30	0	-0.4%
11.1%	30	30	0	-0.5%
12.3%	30	30	0	-0.5%
13.6%	30	30	0	-0.3%
14.8%	30	30	0	-0.2%
16.0%	30	30	0	-0.2%
17.3%	30	30	0	-0.1%
18.5%	30	30	0	-0.2%
19.8%	30	30	0	-0.2%
21.0%	30	30	0	-0.1%
22.2%	30	30	0	-0.1%
23.5%	30	30	0	0.0%
24.7%	30	30	0	-0.1%
25.9%	30	30	0	-0.1%
27.2%	30	30	0	-0.2%
28.4%	30	30	0	-0.2%
29.6%	30	30	0	-0.1%
30.9%	30	30	0	-0.1%
32.1%	30	30	0	-0.1%
33.3%	30	30	0	-0.1%
34.6%	30	30	0	-0.1%
35.8%	30	30	0	-0.2%
37.0%	30	30	0	0.0%
38.3%	30	30	0	0.0%
39.5%	30	30	0	0.0%
40.7%	30	30	0	0.2%
42.0%	30	30	0	0.2%
43.2%	30	30	0	0.2%
44.4%	30	30	0	0.3%
45.7%	30	30	0	0.3%
46.9%	30	30	0	0.2%
48.1%	30	30	0	0.3%
49.4%	30	30	0	0.3%
50.6%	30	30	0	0.3%
51.9%	30	30	0	0.3%
53.1%	30	30	0	0.3%
54.3%	30	30	0	0.4%
55.6%	30	30	0	0.4%
56.8%	30	30	0	0.3%
58.0%	30	30	0	0.3%
59.3%	30	30	0	0.3%
60.5%	30	30	0	0.4%
61.7%	30	30	0	0.4%
63.0%	30	30	0	0.4%
64.2%	30	30	0	0.5%
65.4%	30	30	0	0.5%
66.7%	30	30	0	0.5%
67.9%	30	30	0	0.4%
69.1%	30	30	0	0.6%
70.4%	30	30	0	0.6%
71.6%	30	30	0	0.6%
72.8%	30	30	0	0.7%
74.1%	30	30	0	0.7%
75.3%	30	30	0	0.7%
76.5%	30	30	0	0.7%
77.8%	30	30	0	0.7%
79.0%	30	30	0	0.7%
80.2%	30	30	0	0.8%
81.5%	29	30	0	0.8%
82.7%	29	30	0	0.9%
84.0%	29	30	0	0.9%
85.2%	29	30	0	0.9%
86.4%	29	30	0	0.9%
87.7%	29	30	0	0.9%
88.9%	29	30	0	0.7%
90.1%	29	30	0	0.9%
91.4%	29	30	0	1.0%
92.6%	29	30	0	0.9%
93.8%	29	30	0	0.9%
95.1%	29	30	0	1.0%
96.3%	29	30	0	0.9%
97.5%	29	30	0	0.9%
98.8%	29	30	0	0.9%
100.0%	29	29	0	1.7%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	32	32	0	-0.1%
1.2%	32	32	0	-0.1%
2.5%	32	32	0	-0.2%
3.7%	32	32	0	-0.3%
4.9%	32	32	0	-0.2%
6.2%	32	32	0	-0.2%
7.4%	32	32	0	-0.2%
8.6%	32	32	0	-0.2%
9.9%	32	32	0	-0.1%
11.1%	32	32	0	-0.2%
12.3%	32	32	0	0.0%
13.6%	32	32	0	0.0%
14.8%	31	32	0	0.1%
16.0%	31	31	0	1.0%
17.3%	31	31	0	0.3%
18.5%	31	31	0	0.7%
19.8%	31	31	0	0.6%
21.0%	31	31	0	0.2%
22.2%	31	31	0	-0.2%
23.5%	31	31	0	-0.3%
24.7%	31	31	0	-0.1%
25.9%	31	31	0	-0.5%
27.2%	31	31	0	-0.6%
28.4%	31	31	0	-0.2%
29.6%	31	30	0	-0.2%
30.9%	31	30	0	-0.7%
32.1%	30	30	0	-0.6%
33.3%	30	30	0	-0.2%
34.6%	30	30	0	0.0%
35.8%	30	30	0	-0.1%
37.0%	30	30	0	0.0%
38.3%	30	30	0	0.3%
39.5%	30	30	0	0.0%
40.7%	30	30	0	0.1%
42.0%	30	30	0	0.1%
43.2%	30	30	0	-0.1%
44.4%	30	30	0	0.0%
45.7%	30	30	0	-0.2%
46.9%	30	30	0	0.0%
48.1%	30	30	0	-0.1%
49.4%	30	30	0	-0.2%
50.6%	30	30	0	-0.2%
51.9%	30	29	0	-0.3%
53.1%	30	29	0	-0.2%
54.3%	29	29	0	-0.1%
55.6%	29	29	0	0.0%
56.8%	29	29	0	-0.1%
58.0%	29	29	0	0.3%
59.3%	29	29	0	0.3%
60.5%	29	29	0	0.5%
61.7%	29	29	0	0.7%
63.0%	29	29	0	0.8%
64.2%	29	29	0	0.8%
65.4%	29	29	0	0.9%
66.7%	29	29	0	1.0%
67.9%	29	29	0	1.0%
69.1%	29	29	0	0.9%
70.4%	29	29	0	0.9%
71.6%	29	29	0	0.9%
72.8%	29	29	0	0.9%
74.1%	29	29	0	0.9%
75.3%	29	29	0	0.9%
76.5%	29	29	0	0.9%
77.8%	29	29	0	0.9%
79.0%	29	29	0	1.0%
80.2%	29	29	0	1.0%
81.5%	29	29	0	0.9%
82.7%	29	29	0	0.9%
84.0%	29	29	0	0.9%
85.2%	29	29	0	1.0%
86.4%	29	29	0	0.9%
87.7%	29	29	0	1.0%
88.9%	29	29	0	0.9%
90.1%	29	29	0	1.0%
91.4%	29	29	0	1.0%
92.6%	29	29	0	1.1%
93.8%	29	29	0	1.2%
95.1%	29	29	0	1.2%
96.3%	29	29	0	1.2%
97.5%	29	29	0	1.2%
98.8%	29	29	0	1.3%
100.0%	29	29	0	1.1%

Figure SW-56-b
Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

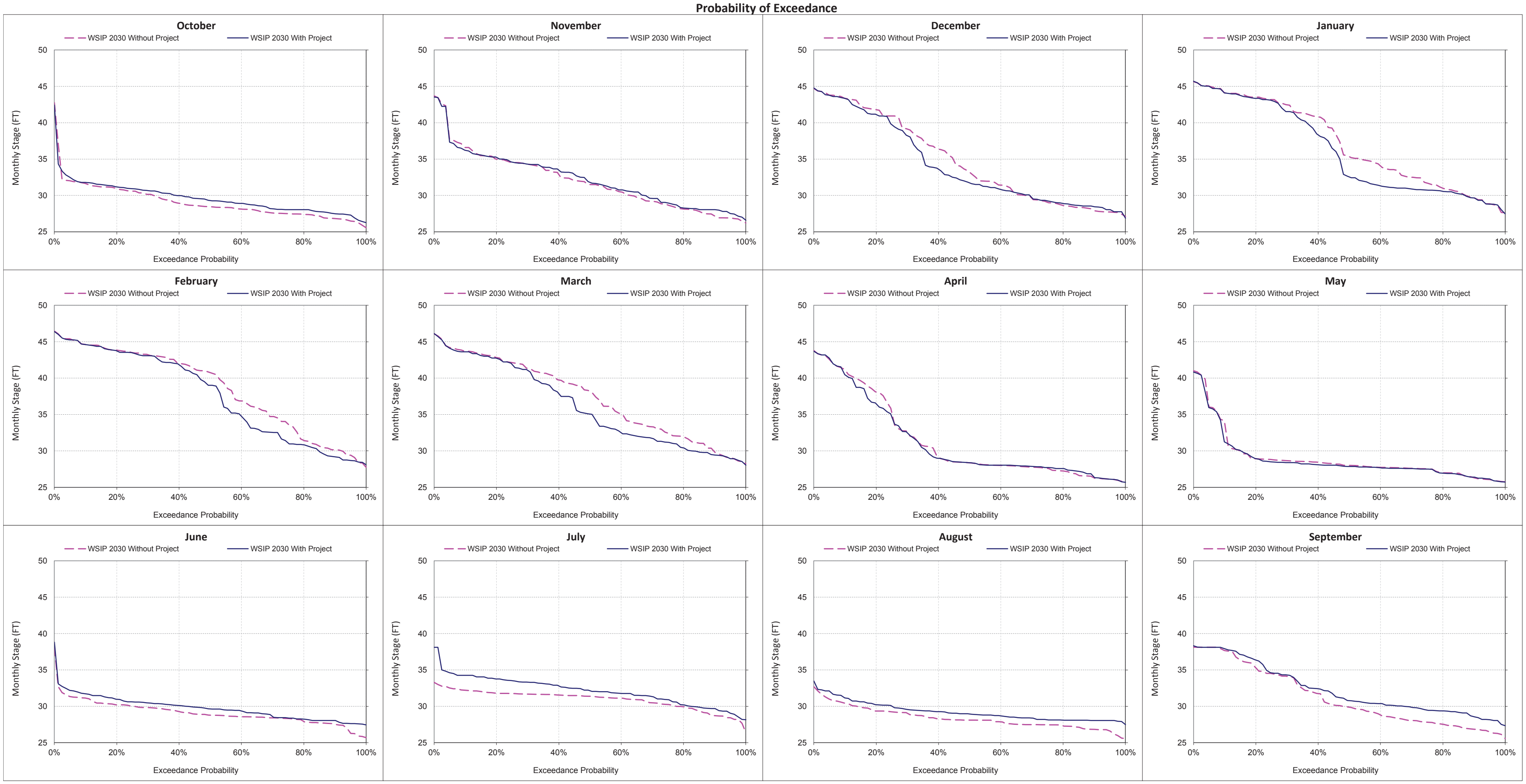


Table SW-56-b
Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	43	42	0	-0.8%
1.2%	37	34	-3	-7.3%
2.5%	32	33	1	3.4%
3.7%	32	33	1	2.4%
4.9%	32	33	0	1.5%
6.2%	32	32	0	0.8%
7.4%	32	32	0	0.1%
8.6%	32	32	0	0.1%
9.9%	32	32	0	0.4%
11.1%	31	32	0	1.0%
12.3%	31	32	0	1.2%
13.6%	31	32	0	0.9%
14.8%	31	32	0	1.0%
16.0%	31	31	0	0.8%
17.3%	31	31	0	0.7%
18.5%	31	31	0	0.7%
19.8%	31	31	0	0.7%
21.0%	31	31	0	1.0%
22.2%	31	31	0	1.0%
23.5%	31	31	0	1.1%
24.7%	31	31	0	1.0%
25.9%	31	31	0	1.0%
27.2%	30	31	0	1.5%
28.4%	30	31	0	1.2%
29.6%	30	31	1	1.8%
30.9%	30	31	0	1.5%
32.1%	30	31	1	2.2%
33.3%	30	31	1	2.5%
34.6%	30	30	1	2.8%
35.8%	29	30	1	3.1%
37.0%	29	30	1	3.0%
38.3%	29	30	1	3.4%
39.5%	29	30	1	3.6%
40.7%	29	30	1	3.7%
42.0%	29	30	1	3.8%
43.2%	29	30	1	3.9%
44.4%	29	30	1	3.5%
45.7%	29	30	1	3.4%
46.9%	29	30	1	3.6%
48.1%	28	29	1	3.5%
49.4%	28	29	1	3.1%
50.6%	28	29	1	2.9%
51.9%	28	29	1	3.0%
53.1%	28	29	1	3.1%
54.3%	28	29	1	2.8%
55.6%	28	29	1	2.6%
56.8%	28	29	1	2.7%
58.0%	28	29	1	2.6%
59.3%	28	29	1	2.7%
60.5%	28	29	1	2.8%
61.7%	28	29	1	2.6%
63.0%	28	29	1	2.3%
64.2%	28	29	1	2.5%
65.4%	28	29	1	2.5%
66.7%	28	29	1	3.0%
67.9%	28	28	1	2.6%
69.1%	28	28	1	2.1%
70.4%	28	28	1	2.0%
71.6%	28	28	1	2.0%
72.8%	28	28	1	2.0%
74.1%	28	28	1	2.0%
75.3%	27	28	1	2.0%
76.5%	27	28	1	2.2%
77.8%	27	28	1	2.2%
79.0%	27	28	1	2.2%
80.2%	27	28	1	2.4%
81.5%	27	28	1	2.4%
82.7%	27	28	1	2.1%
84.0%	27	28	1	2.2%
85.2%	27	28	1	2.3%
86.4%	27	28	1	3.0%
87.7%	27	28	1	2.9%
88.9%	27	28	1	2.5%
90.1%	27	27	1	2.4%
91.4%	27	27	1	2.5%
92.6%	27	27	1	2.6%
93.8%	27	27	1	2.8%
95.1%	26	27	1	3.1%
96.3%	26	27	0	1.8%
97.5%	26	27	0	1.4%
98.8%	26	26	1	2.0%
100.0%	26	26	1	2.8%

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	44	44	0	-0.4%
1.2%	43	43	0	0.0%
2.5%	43	42	0	-0.8%
3.7%	42	42	0	-0.2%
4.9%	38	37	0	-0.9%
6.2%	38	37	0	-1.2%
7.4%	37	37	-1	-1.9%
8.6%	37	37	-1	-1.7%
9.9%	37	36	0	-1.0%
11.1%	37	36	0	-1.3%
12.3%	36	36	0	-1.1%
13.6%	36	36	0	-0.3%
14.8%	35	36	0	0.3%
16.0%	35	35	0	0.0%
17.3%	35	35	0	-0.3%
18.5%	35	35	0	-0.2%
19.8%	35	35	0	0.8%
21.0%	35	35	0	0.3%
22.2%	35	35	0	0.2%
23.5%	35	35	0	0.5%
24.7%	35	35	0	0.3%
25.9%	35	35	0	0.0%
27.2%	35	34	0	-0.3%
28.4%	34	34	0	0.0%
29.6%	34	34	0	0.0%
30.9%	34	34	0	0.0%
32.1%	34	34	0	0.3%
33.3%	34	34	0	0.6%
34.6%	34	34	0	0.0%
35.8%	33	34	0	1.2%
37.0%	33	34	0	1.2%
38.3%	33	34	0	1.3%
39.5%	33	34	0	1.4%
40.7%	32	33	1	2.5%
42.0%	32	33	1	2.4%
43.2%	32	33	1	2.5%
44.4%	32	33	1	2.9%
45.7%	32	33	1	2.1%
46.9%	32	32	1	1.7%
48.1%	32	32	1	1.8%
49.4%	32	32	0	1.2%
50.6%	31	32	0	0.6%
51.9%	31	32	0	0.5%
53.1%	31	32	0	0.6%
54.3%	31	31	0	0.6%
55.6%	31	31	0	1.3%
56.8%	31	31	0	0.8%
58.0%	31	31	0	0.8%
59.3%	31	31	0	0.8%
60.5%	30	31	0	1.0%
61.7%	30	31	1	1.8%
63.0%	30	31	1	1.7%
64.2%	30	30	1	1.8%
65.4%	30	30	1	2.7%
66.7%	30	30	0	1.7%
67.9%	29	30	1	2.4%
69.1%	29	30	0	1.4%
70.4%	29	30	0	1.4%
71.6%	29	30	1	1.7%
72.8%	29	29	0	0.7%
74.1%	29	29	0	0.7%
75.3%	29	29	0	1.0%
76.5%	28	29	0	1.1%
77.8%	28	29	0	1.4%
79.0%	28	28	0	0.5%
80.2%	28	28	0	0.5%
81.5%	28	28	0	0.4%
82.7%	28	28	0	0.5%
84.0%	28	28	0	0.7%
85.2%	28	28	0	1.0%
86.4%	28	28	1	1.9%
87.7%	27	28	1	2.1%
88.9%	27	28	1	2.1%
90.1%	27	28	1	3.3%
91.4%	27	28	1	3.9%
92.6%	27	28	1	3.3%
93.8%	27	28	1	3.3%
95.1%	27	28	1	2.2%
96.3%	27	27	1	2.4%
97.5%	27	27	0	1.5%
98.8%	26	27	1	2.0%
100.0%	26	27	0	1.4%

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	45	45	0	0.2%
1.2%	44	44	0	0.0%
2.5%	44	44	0	0.0%
3.7%	44	44	0	-0.6%
4.9%	44	44	0	0.0%
6.2%	44	44	0	-0.4%
7.4%	44	44	0	-0.2%
8.6%	44	43	0	-0.4%
9.9%	43	43	0	0.0%
11.1%	43	43	0	-0.2%
12.3%	43	42	-1	-1.6%
13.6%	43	42	-1	-2.0%
14.8%	42	42	0	-1.0%
16.0%	42	42	0	-0.6%
17.3%	42	41	-1	-1.7%
18.5%	42	41	-1	-1.7%
19.8%	42	41	-1	-1.5%
21.0%	42	41	-1	-1.9%
22.2%	41	41	0	0.0%
23.5%	41	41	0	-0.2%
24.7%	41	40	-1	-2.6%
25.9%	41	39	-1	-3.6%
27.2%	41	39	-2	-4.1%
28.4%	39	39	0	-0.9%
29.6%	39	38	-1	-2.2%
30.9%	39	38	-1	-2.5%
32.1%	38	37	-2	-3.9%
33.3%	38	36	-2	-4.7%
34.6%	38	36	-2	-5.0%
35.8%	37	34	-3	-8.3%
37.0%	37	34	-3	-7.9%
38.3%	37	34	-3	-7.9%
39.5%	36	34	-3	-7.3%
40.7%	36	33	-3	-8.0%
42.0%	36	33	-3	-9.1%
43.2%	36	33	-3	-7.8%
44.4%	35	33	-3	-7.6%
45.7%	34	32	-2	-5.1%
46.9%	34	32	-2	-5.5%
48.1%	34	32	-2	-4.9%
49.4%	33	32	-2	-4.6%
50.6%	33	32	-1	-4.1%
51.9%	33	32	-1	-3.1%
53.1%	32	32	0	-1.5%
54.3%	32	31	-1	-2.2%
55.6%	32	31	-1	-2.3%
56.8%	32	31	-1	-2.8%
58.0%	32	31	-1	-2.3%
59.3%	31	31	-1	-1.7%
60.5%	31	31	-1	-2.1%
61.7%	31	31	-1	-2.1%
63.0%	31	31	0	-1.4%
64.2%	30	30	0	0.2%
65.4%	30	30	0	0.7%
66.7%	30	30	0	0.5%
67.9%	30	30	0	0.3%
69.1%	30	30	0	0.3%
70.4%	29	30	0	0.3%
71.6%	29	29	0	0.3%
72.8%	29	29	0	0.1%
74.1%	29	29	0	0.4%
75.3%	29	29	0	0.8%
76.5%	29	29	0	0.5%
77.8%	29	29	0	0.4%
79.0%	29	29	0	0.8%
80.2%	29	29	0	0.9%
81.5%	29	29	0	1.0%
82.7%	28	29	0	0.8%
84.0%	28	29	0	1.1%
85.2%	28	29	0	0.9%
86.4%	28	29	0	0.8%
87.7%	28	29	0	1.0%
88.9%	28	29	0	1.3%
90.1%	28	28	1	1.9%
91.4%	28	28	1	2.1%
92.6%	28	28	1	2.1%
93.8%	28	28	0	1.2%
95.1%	28	28	0	1.2%
96.3%	28	28	0	0.3%
97.5%	28	28	0	0.4%
98.8%	27	28	0	1.2%
100.0%	27	27	0	-0.9%

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	0.1%
1.2%	45	45	0	0.0%
2.5%	45	45	0	0.0%
3.7%	45	45	0	-0.2%
4.9%	45	45	0	0.0%
6.2%	45	45	0	-0.4%
7.4%	45	45	0	0.0%
8.6%	45	45	0	-0.2%
9.9%	44	44	0	0.0%
11.1%	44	44	0	0.0%
12.3%	44	44	0	-0.2%
13.6%	44	44	0	-0.2%
14.8%	44	44	0	-0.2%
16.0%	44	44	0	-0.6%
17.3%	44	44	0	-0.2%
18.5%	44	43	0	-0.2%
19.8%	44	43	0	-0.4%
21.0%	44	43	0	-0.4%
22.2%	43	43	0	-0.4%
23.5%	43	43	0	-0.2%
24.7%	43	43	0	-0.2%
25.9%	43	43	0	-0.6%
27.2%	43	43	0	-0.2%
28.4%	43	42	-1	-1.6%
29.6%	42	42	-1	-2.2%
30.9%	42	42	-1	-2.0%
32.1%	42	41	0	-0.4%
33.3%	41	41	-1	-1.5%
34.6%	41	40	-1	-2.3%
35.8%	41	40	-1	-2.6%
37.0%	41	40	-1	-3.4%
38.3%	41	39	-2	-4.1%
39.5%	41	38	-2	-5.8%
40.7%	41	38	-3	-6.5%
42.0%	40	38	-2	-6.1%
43.2%	39	37	-2	-4.7%
44.4%	39	37	-3	-7.0%
45.7%	38	36	-2	-6.1%
46.9%	37	35	-2	-6.4%
48.1%	36	33	-3	-7.5%
49.4%	35	33	-3	-7.9%
50.6%	35	32	-3	-7.8%
51.9%	35	32	-3	-7.6%
53.1%	35	32	-3	-8.6%
54.3%	35	32	-3	-8.4%
55.6%	35	32	-3	-8.5%
56.8%	35	32	-3	-8.9%
58.0%	35	32	-3	-8.7%
59.3%	34	31	-3	-8.6%
60.5%	34	31	-3	-7.7%
61.7%	34	31	-2	-7.3%
63.0%	34	31	-2	-7.2%
64.2%	34	31	-2	-7.3%
65.4%	33	31	-2	-7.3%
66.7%	33	31	-2	-5.4%
67.9%	33	31	-2	-5.0%
69.1%	33	31	-2	-4.8%
70.4%	33	31	-2	-5.1%
71.6%	32	31	-2	-5.0%
72.8%	32	31	-2	-5.0%
74.1%	32	31	-1	-3.3%
75.3%	32	31	-1	-2.9%
76.5%	31	31	-1	-2.4%
77.8%	31	31	-1	-2.4%
79.0%	31	31	-1	-1.6%
80.2%	31	31	0	-1.3%
81.5%	31	31	0	-1.0%
82.7%	31	30	0	-0.9%
84.0%	31	30	0	-0.9%
85.2%	31	30	0	-1.0%
86.4%	30	30	0	-0.2%
87.7%	30	30	0	-0.3%
88.9%	30	30	0	-0.3%
90.1%	30	30	0	0.0%
91.4%	29	29	0	-0.2%
92.6%	29	29	0	-0.2%
93.8%	29	29	0	0.0%
95.1%	29	29	0	-0.2%
96.3%	29	29	0	0.2%
97.5%	29	29	0	0.1%
98.8%	28	28	0	1.4%
100.0%	28	27	0	-0.6%

Table SW-56-b

Sacramento River at Wilkins Slough, Monthly Stage

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	-0.2%
1.2%	46	46	0	-0.2%
2.5%	45	45	0	0.0%
3.7%	45	45	0	-0.2%
4.9%	45	45	0	-0.3%
6.2%	45	45	0	0.2%
7.4%	45	45	0	0.0%
8.6%	45	45	0	0.0%
9.9%	45	45	0	0.0%
11.1%	45	45	0	0.0%
12.3%	45	44	0	-0.2%
13.6%	45	44	0	-0.3%
14.8%	44	44	0	-0.2%
16.0%	44	44	0	-0.2%
17.3%	44	44	0	0.0%
18.5%	44	44	0	0.0%
19.8%	44	44	0	-0.2%
21.0%	44	44	0	-0.6%
22.2%	44	44	0	-0.4%
23.5%	44	44	0	-0.4%
24.7%	44	44	0	0.0%
25.9%	43	43	0	-0.2%
27.2%	43	43	0	-0.6%
28.4%	43	43	0	-0.4%
29.6%	43	43	0	-0.4%
30.9%	43	43	0	0.0%
32.1%	43	43	0	-0.2%
33.3%	43	43	0	-1.0%
34.6%	43	42	-1	-1.6%
35.8%	43	42	-1	-1.6%
37.0%	43	42	0	-1.0%
38.3%	43	42	-1	-1.2%
39.5%	42	42	0	-0.2%
40.7%	42	42	0	-0.8%
42.0%	42	41	-1	-1.9%
43.2%	42	41	-1	-1.7%
44.4%	41	41	-1	-1.7%
45.7%	41	40	-1	-1.5%
46.9%	41	40	-1	-3.0%
48.1%	41	40	-1	-3.6%
49.4%	41	39	-2	-4.5%
50.6%	41	39	-2	-4.1%
51.9%	40	39	-2	-3.9%
53.1%	40	38	-2	-4.6%
54.3%	39	36	-3	-8.4%
55.6%	39	36	-3	-7.0%
56.8%	38	35	-3	-8.1%
58.0%	37	35	-2	-5.0%
59.3%	37	35	-2	-4.8%
60.5%	37	35	-2	-6.3%
61.7%	37	34	-3	-7.0%
63.0%	36	33	-3	-8.3%
64.2%	36	33	-3	-8.1%
65.4%	36	33	-3	-8.1%
66.7%	36	33	-3	-8.2%
67.9%	35	33	-3	-8.1%
69.1%	35	33	-2	-6.2%
70.4%	35	33	-2	-6.3%
71.6%	35	33	-2	-5.8%
72.8%	34	32	-2	-7.1%
74.1%	34	31	-3	-7.7%
75.3%	34	31	-3	-7.7%
76.5%	33	31	-2	-7.0%
77.8%	33	31	-2	-5.2%
79.0%	32	31	-1	-2.4%
80.2%	31	31	-1	-1.8%
81.5%	31	31	-1	-2.2%
82.7%	31	30	-1	-1.8%
84.0%	31	30	-1	-1.9%
85.2%	31	30	-1	-2.4%
86.4%	30	30	-1	-2.9%
87.7%	30	29	-1	-3.5%
88.9%	30	29	-1	-3.0%
90.1%	30	29	-1	-3.2%
91.4%	30	29	-1	-3.3%
92.6%	30	29	-1	-4.0%
93.8%	29	29	-1	-2.3%
95.1%	29	29	-1	-2.5%
96.3%	29	29	0	-1.5%
97.5%	28	28	0	0.4%
98.8%	28	28	0	0.2%
100.0%	28	28	0	1.3%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	0.0%
1.2%	46	46	0	-0.2%
2.5%	45	45	0	-0.2%
3.7%	44	44	0	0.0%
4.9%	44	44	0	-0.2%
6.2%	44	44	0	-0.6%
7.4%	44	44	0	-0.6%
8.6%	44	44	0	-0.6%
9.9%	44	44	0	-0.2%
11.1%	44	44	0	-0.2%
12.3%	44	43	0	-0.6%
13.6%	43	43	0	-0.2%
14.8%	43	43	0	-0.6%
16.0%	43	43	0	-0.4%
17.3%	43	43	0	-0.2%
18.5%	43	43	0	-0.8%
19.8%	43	43	0	-0.2%
21.0%	43	43	0	-0.4%
22.2%	42	42	0	0.0%
23.5%	42	42	0	0.0%
24.7%	42	42	0	-0.2%
25.9%	42	41	-1	-1.5%
27.2%	42	41	-1	-1.5%
28.4%	42	41	-1	-1.7%
29.6%	41	41	0	-0.4%
30.9%	41	41	0	-1.1%
32.1%	41	40	-1	-2.8%
33.3%	41	40	-1	-3.0%
34.6%	41	39	-1	-3.4%
35.8%	41	39	-1	-3.7%
37.0%	40	39	-1	-3.7%
38.3%	40	38	-2	-4.8%
39.5%	40	38	-2	-4.2%
40.7%	40	37	-2	-5.5%
42.0%	39	37	-2	-4.7%
43.2%	39	37	-2	-4.5%
44.4%	39	37	-2	-4.7%
45.7%	39	36	-3	-8.8%
46.9%	39	35	-4	-9.5%
48.1%	38	35	-3	-8.3%
49.4%	38	35	-3	-8.4%
50.6%	38	35	-3	-8.0%
51.9%	37	34	-3	-8.4%
53.1%	37	33	-4	-9.6%
54.3%	36	33	-3	-7.6%
55.6%	36	33	-3	-8.0%
56.8%	36	33	-3	-8.5%
58.0%	35	33	-2	-7.0%
59.3%	35	33	-2	-7.0%
60.5%	35	32	-3	-7.6%
61.7%	34	32	-2	-5.3%
63.0%	34	32	-2	-5.4%
64.2%	34	32	-2	-5.1%
65.4%	34	32	-2	-5.2%
66.7%	34	32	-2	-5.1%
67.9%	33	32	-2	-4.8%
69.1%	33	32	-2	-4.6%
70.4%	33	32	-2	-4.9%
71.6%	33	31	-2	-5.2%
72.8%	33	31	-2	-5.1%
74.1%	33	31	-1	-4.2%
75.3%	32	31	-1	-3.8%
76.5%	32	31	-1	-3.3%
77.8%	32	31	-1	-3.4%
79.0%	32	30	-2	-4.8%
80.2%	32	30	-2	-4.7%
81.5%	32	30	-2	-5.0%
82.7%	31	30	-1	-4.0%
84.0%	31	30	-1	-3.8%
85.2%	31	30	-1	-3.9%
86.4%	31	30	-1	-4.0%
87.7%	30	30	-1	-1.9%
88.9%	30	29	-1	-2.9%
90.1%	30	29	0	-1.2%
91.4%	30	29	0	-0.6%
92.6%	29	29	0	-0.1%
93.8%	29	29	0	0.2%
95.1%	29	29	0	-0.6%
96.3%	29	29	0	0.1%
97.5%	29	29	0	0.3%
98.8%	29	29	0	0.1%
100.0%	28	28	0	-0.7%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	44	44	0	-0.2%
1.2%	43	43	0	0.0%
2.5%	43	43	0	0.0%
3.7%	43	43	0	0.2%
4.9%	43	43	0	0.4%
6.2%	42	42	0	0.0%
7.4%	42	42	0	0.0%
8.6%	41	42	0	0.2%
9.9%	41	40	-1	-1.7%
11.1%	40	40	0	-0.9%
12.3%	40	40	0	-0.7%
13.6%	40	39	-1	-3.0%
14.8%	40	39	-1	-2.4%
16.0%	39	39	-1	-2.0%
17.3%	39	37	-2	-4.3%
18.5%	39	37	-2	-4.9%
19.8%	38	37	-2	-4.0%
21.0%	38	36	-2	-5.3%
22.2%	38	36	-2	-4.6%
23.5%	37	35	-1	-3.5%
24.7%	36	35	-1	-2.1%
25.9%	34	34	0	0.3%
27.2%	33	33	0	1.2%
28.4%	33	33	0	-0.2%
29.6%	33	33	0	-0.4%
30.9%	32	32	0	0.2%
32.1%	32	32	0	-0.4%
33.3%	31	31	0	0.0%
34.6%	31	31	0	-0.9%
35.8%	31	30	0	-1.6%
37.0%	31	30	-1	-3.3%
38.3%	30	29	-1	-4.0%
39.5%	29	29	0	-0.9%
40.7%	29	29	0	0.2%
42.0%	29	29	0	0.1%
43.2%	29	29	0	0.4%
44.4%	28	29	0	0.1%
45.7%	28	29	0	0.1%
46.9%	28	28	0	0.1%
48.1%	28	28	0	0.0%
49.4%	28	28	0	0.1%
50.6%	28	28	0	0.1%
51.9%	28	28	0	0.0%
53.1%	28	28	0	-0.3%
54.3%	28	28	0	-0.2%
55.6%	28	28	0	-0.2%
56.8%	28	28	0	0.1%
58.0%	28	28	0	0.1%
59.3%	28	28	0	0.1%
60.5%	28	28	0	0.2%
61.7%	28	28	0	0.3%
63.0%	28	28	0	0.3%
64.2%	28	28	0	0.2%
65.4%	28	28	0	0.2%
66.7%	28	28	0	0.3%
67.9%	28	28	0	0.3%
69.1%	28	28	0	0.4%
70.4%	28	28	0	0.3%
71.6%	28	28	0	0.3%
72.8%	28	28	0	0.4%
74.1%	28	28	0	0.4%
75.3%	28	28	0	0.4%
76.5%	27	28	0	1.2%
77.8%	27	28	0	1.0%
79.0%	27	28	0	1.1%
80.2%	27	28	0	1.2%
81.5%	27	27	0	0.8%
82.7%	27	27	0	1.5%
84.0%	27	27	0	1.4%
85.2%	27	27	1	2.2%
86.4%	27	27	1	2.0%
87.7%	27	27	0	1.2%
88.9%	27	27	0	1.2%
90.1%	26	26	0	0.3%
91.4%	26	26	0	0.1%
92.6%	26	26	0	0.2%
93.8%	26	26	0	-0.1%
95.1%	26	26	0	0.0%
96.3%	26	26	0	0.0%
97.5%	26	26	0	0.1%
98.8%	26	26	0	-0.2%
100.0%	26	26	0	-0.1%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	41	41	0	-0.4%
1.2%	41	41	0	-0.4%
2.5%	40	40	0	0.0%
3.7%	40	38	-2	-4.4%
4.9%	36	36	0	-0.2%
6.2%	36	36	0	-0.5%
7.4%	35	35	0	-0.3%
8.6%	34	34	0	-0.3%
9.9%	34	31	-3	-8.5%
11.1%	31	31	0	0.9%
12.3%	30	31	0	1.2%
13.6%	30	30	0	0.0%
14.8%	30	30	0	0.2%
16.0%	30	30	0	0.6%
17.3%	30	30	0	-0.1%
18.5%	29	29	0	1.0%
19.8%	29	29	0	0.2%
21.0%	29	29	0	-0.1%
22.2%	29	29	0	-0.9%
23.5%	29	29	0	-1.0%
24.7%	29	29	0	-1.1%
25.9%	29	28	0	-1.0%
27.2%	29	28	0	-1.0%
28.4%	29	28	0	-1.0%
29.6%	29	28	0	-1.0%
30.9%	29	28	0	-0.8%
32.1%	29	28	0	-0.8%
33.3%	29	28	0	-0.7%
34.6%	29	28	0	-1.2%
35.8%	29	28	0	-1.2%
37.0%	29	28	0	-1.1%
38.3%	28	28	0	-1.2%
39.5%	28	28	0	-1.2%
40.7%	28	28	0	-1.2%
42.0%	28	28	0	-1.0%
43.2%	28	28	0	-0.8%
44.4%	28	28	0	-0.8%
45.7%	28	28	0	-0.5%
46.9%	28	28	0	-0.7%
48.1%	28	28	0	-0.4%
49.4%	28	28	0	-0.5%
50.6%	28	28	0	-0.6%
51.9%	28	28	0	-0.5%
53.1%	28	28	0	-0.6%
54.3%	28	28	0	-0.5%
55.6%	28	28	0	-0.2%
56.8%	28	28	0	-0.2%
58.0%	28	28	0	-0.1%
59.3%	28	28	0	-0.1%
60.5%	28	28	0	-0.3%
61.7%	28	28	0	-0.3%
63.0%	28	28	0	-0.3%
64.2%	28	28	0	-0.3%
65.4%	28	28	0	-0.3%
66.7%	28	28	0	-0.2%
67.9%	28	28	0	-0.2%
69.1%	28	28	0	-0.1%
70.4%	28	28	0	-0.1%
71.6%	28	28	0	-0.1%
72.8%	28	28	0	-0.1%
74.1%	28	28	0	-0.1%
75.3%	28	27	0	0.0%
76.5%	28	27	0	-0.1%
77.8%	27	27	0	-0.2%
79.0%	27	27	0	-0.3%
80.2%	27	27	0	-0.2%
81.5%	27	27	0	-0.3%
82.7%	27	27	0	-0.3%
84.0%	27	27	0	-0.2%
85.2%	27	27	0	-0.6%
86.4%	27	27	0	0.1%
87.7%	26	27	0	0.2%
88.9%	26	26	0	-0.2%
90.1%	26	26	0	0.3%
91.4%	26	26	0	0.3%
92.6%	26	26	0	0.4%
93.8%	26	26	0	0.3%
95.1%	26	26	0	0.3%
96.3%	26	26	0	-0.1%
97.5%	26	26	0	-0.2%
98.8%	26	26	0	-0.2%
100.0%	26	26	0	-0.1%

Table SW-56-b
Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	38	39	1	1.9%
1.2%	33	33	0	1.1%
2.5%	32	33	1	2.7%
3.7%	32	32	1	2.8%
4.9%	31	32	1	2.7%
6.2%	31	32	1	2.7%
7.4%	31	32	1	2.4%
8.6%	31	32	1	2.0%
9.9%	31	32	1	1.9%
11.1%	31	32	1	2.0%
12.3%	31	31	1	2.6%
13.6%	30	31	1	3.4%
14.8%	30	31	1	3.4%
16.0%	30	31	1	3.0%
17.3%	30	31	1	2.8%
18.5%	30	31	1	2.8%
19.8%	30	31	1	2.5%
21.0%	30	31	1	2.5%
22.2%	30	31	1	1.7%
23.5%	30	31	0	1.6%
24.7%	30	31	1	2.0%
25.9%	30	31	1	2.1%
27.2%	30	31	1	2.4%
28.4%	30	31	1	2.4%
29.6%	30	30	1	2.2%
30.9%	30	30	1	2.1%
32.1%	30	30	1	2.0%
33.3%	30	30	1	2.2%
34.6%	30	30	1	2.3%
35.8%	30	30	1	2.3%
37.0%	30	30	1	2.4%
38.3%	29	30	1	2.3%
39.5%	29	30	1	2.7%
40.7%	29	30	1	3.1%
42.0%	29	30	1	3.1%
43.2%	29	30	1	3.1%
44.4%	29	30	1	3.3%
45.7%	29	30	1	3.3%
46.9%	29	30	1	3.2%
48.1%	29	30	1	3.0%
49.4%	29	30	1	3.0%
50.6%	29	30	1	3.0%
51.9%	29	30	1	2.9%
53.1%	29	30	1	3.0%
54.3%	29	30	1	2.7%
55.6%	29	29	1	3.0%
56.8%	29	29	1	3.0%
58.0%	29	29	1	2.9%
59.3%	29	29	1	3.0%
60.5%	29	29	1	2.6%
61.7%	29	29	1	2.0%
63.0%	29	29	1	2.0%
64.2%	29	29	1	1.9%
65.4%	29	29	1	2.0%
66.7%	29	29	0	1.7%
67.9%	28	29	0	1.7%
69.1%	28	29	0	1.6%
70.4%	28	28	0	0.3%
71.6%	28	28	0	0.2%
72.8%	28	28	0	0.2%
74.1%	28	28	0	0.3%
75.3%	28	28	0	0.2%
76.5%	28	28	0	0.4%
77.8%	28	28	0	0.3%
79.0%	28	28	0	0.3%
80.2%	28	28	0	1.4%
81.5%	28	28	0	1.2%
82.7%	28	28	0	1.1%
84.0%	28	28	0	1.1%
85.2%	28	28	0	1.2%
86.4%	28	28	0	1.3%
87.7%	28	28	0	1.5%
88.9%	28	28	0	1.5%
90.1%	28	28	1	2.0%
91.4%	27	28	0	1.4%
92.6%	27	28	0	1.0%
93.8%	27	28	1	2.4%
95.1%	26	28	1	5.1%
96.3%	26	28	1	5.2%
97.5%	26	28	2	6.5%
98.8%	26	28	2	6.6%
100.0%	26	27	2	6.8%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	33	38	5	14.5%
1.2%	33	38	5	15.6%
2.5%	33	35	2	6.9%
3.7%	33	35	2	6.4%
4.9%	33	35	2	6.5%
6.2%	32	35	2	6.5%
7.4%	32	34	2	5.7%
8.6%	32	34	2	6.2%
9.9%	32	34	2	6.3%
11.1%	32	34	2	6.4%
12.3%	32	34	2	6.6%
13.6%	32	34	2	6.1%
14.8%	32	34	2	6.2%
16.0%	32	34	2	6.5%
17.3%	32	34	2	6.2%
18.5%	32	34	2	6.2%
19.8%	32	34	2	6.1%
21.0%	32	34	2	6.2%
22.2%	32	34	2	5.9%
23.5%	32	34	2	5.6%
24.7%	32	34	2	5.6%
25.9%	32	33	2	5.4%
27.2%	32	33	2	5.2%
28.4%	32	33	2	5.2%
29.6%	32	33	2	5.3%
30.9%	32	33	2	5.2%
32.1%	32	33	2	5.2%
33.3%	32	33	2	4.9%
34.6%	32	33	2	4.8%
35.8%	32	33	1	4.5%
37.0%	32	33	1	4.5%
38.3%	32	33	1	4.2%
39.5%	32	33	1	4.2%
40.7%	32	33	1	3.6%
42.0%	32	33	1	3.5%
43.2%	31	32	1	3.2%
44.4%	31	32	1	3.2%
45.7%	31	32	1	3.1%
46.9%	31	32	1	3.1%
48.1%	31	32	1	2.7%
49.4%	31	32	1	2.6%
50.6%	31	32	1	2.2%
51.9%	31	32	1	2.3%
53.1%	31	32	1	2.4%
54.3%	31	32	1	2.4%
55.6%	31	32	1	2.5%
56.8%	31	32	1	2.3%
58.0%	31	32	1	2.2%
59.3%	31	32	1	2.2%
60.5%	31	32	1	2.1%
61.7%	31	32	1	2.4%
63.0%	31	32	1	2.6%
64.2%	31	32	1	1.9%
65.4%	31	32	1	1.9%
66.7%	31	31	1	1.9%
67.9%	31	31	1	2.7%
69.1%	31	31	1	2.9%
70.4%	30	31	1	2.6%
71.6%	30	31	1	1.9%
72.8%	30	31	1	2.3%
74.1%	30	31	1	2.2%
75.3%	30	31	1	2.2%
76.5%	30	31	0	1.6%
77.8%	30	31	1	2.0%
79.0%	30	30	0	0.8%
80.2%	30	30	0	0.9%
81.5%	30	30	0	1.0%
82.7%	30	30	0	0.8%
84.0%	29	30	0	1.4%
85.2%	29	30	1	1.8%
86.4%	29	30	1	2.1%
87.7%	29	30	1	2.2%
88.9%	29	30	1	3.3%
90.1%	29	30	1	3.4%
91.4%	29	29	1	2.6%
92.6%	29	29	1	2.4%
93.8%	28	29	1	3.1%
95.1%	28	29	1	2.1%
96.3%	28	29	1	2.6%
97.5%	28	29	0	1.3%
98.8%	28	28	1	1.9%
100.0%	26	28	2	6.8%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	33	33	1	2.3%
1.2%	32	32	0	0.6%
2.5%	32	32	1	1.9%
3.7%	31	32	1	2.7%
4.9%	31	32	1	3.7%
6.2%	31	32	1	2.8%
7.4%	31	32	1	2.7%
8.6%	31	32	1	3.1%
9.9%	30	31	1	2.4%
11.1%	30	31	1	2.4%
12.3%	30	31	1	2.1%
13.6%	30	31	1	2.3%
14.8%	30	31	1	2.4%
16.0%	30	31	1	2.8%
17.3%	30	30	1	2.3%
18.5%	30	30	1	2.9%
19.8%	29	30	1	3.0%
21.0%	29	30	1	2.9%
22.2%	29	30	1	2.7%
23.5%	29	30	1	2.8%
24.7%	29	30	1	3.0%
25.9%	29	30	1	2.0%
27.2%	29	30	1	2.1%
28.4%	29	30	1	1.9%
29.6%	29	30	0	1.5%
30.9%	29	29	1	2.2%
32.1%	29	29	1	2.2%
33.3%	29	29	1	2.4%
34.6%	29	29	1	2.4%
35.8%	29	29	1	2.7%
37.0%	28	29	1	3.2%
38.3%	28	29	1	3.1%
39.5%	28	29	1	3.4%
40.7%	28	29	1	3.5%
42.0%	28	29	1	3.6%
43.2%	28	29	1	3.1%
44.4%	28	29	1	3.3%
45.7%	28	29	1	3.3%
46.9%	28	29	1	3.1%
48.1%	28	29	1	3.1%
49.4%	28	29	1	3.1%
50.6%	28	29	1	2.8%
51.9%	28	29	1	2.7%
53.1%	28	29	1	2.7%
54.3%	28	29	1	2.6%
55.6%	28	29	1	2.5%
56.8%	28	29	1	2.5%
58.0%	28	29	1	3.0%
59.3%	28	29	1	3.0%
60.5%	28	29	1	2.9%
61.7%	28	29	1	3.5%
63.0%	28	29	1	3.3%
64.2%	28	28	1	3.4%
65.4%	28	28	1	3.3%
66.7%	28	28	1	3.3%
67.9%	27	28	1	3.4%
69.1%	27	28	1	3.3%
70.4%	27	28	1	3.3%
71.6%	27	28	1	2.6%
72.8%	27	28	1	2.6%
74.1%	27	28	1	2.6%
75.3%	27	28	1	2.5%
76.5%	27	28	1	2.5%
77.8%	27	28	1	2.4%
79.0%	27	28	1	2.4%
80.2%	27	28	1	3.0%
81.5%	27	28	1	3.1%
82.7%	27	28	1	3.1%
84.0%	27	28	1	3.4%
85.2%	27	28	1	3.6%
86.4%	27	28	1	4.3%
87.7%	27	28	1	4.6%
88.9%	27	28	1	4.5%
90.1%	27	28	1	4.6%
91.4%	27	28	1	4.7%
92.6%	27	28	1	4.7%
93.8%	27	28	1	4.8%
95.1%	27	28	1	5.5%
96.3%	26	28	2	7.1%
97.5%	26	28	2	7.6%
98.8%	26	28	2	9.0%
100.0%	26	27	2	7.5%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	38	38	0	0.5%
1.2%	38	38	0	0.0%
2.5%	38	38	0	0.0%
3.7%	38	38	0	0.0%
4.9%	38	38	0	0.0%
6.2%	38	38	0	0.0%
7.4%	38	38	0	0.0%
8.6%	38	38	0	0.5%
9.9%	38	38	0	0.7%
11.1%	38	38	0	0.5%
12.3%	38	38	0	0.3%
13.6%	37	38	1	2.2%
14.8%	36	37	1	2.0%
16.0%	36	37	1	2.5%
17.3%	36	37	1	2.1%
18.5%	36	37	1	1.8%
19.8%	35	36	1	2.9%
21.0%	35	36	1	4.0%
22.2%	35	36	1	2.7%
23.5%	35	35	0	1.1%
24.7%	35	35	0	0.3%
25.9%	34	35	0	0.3%
27.2%	34	35	0	0.5%
28.4%	34	34	0	0.6%
29.6%	34	34	0	0.6%
30.9%	34	34	0	0.6%
32.1%	34	34	0	0.0%
33.3%	33	33	1	1.6%
34.6%	33	33	0	0.9%
35.8%	32	33	1	2.1%
37.0%	32	32	0	1.1%
38.3%	32	32	1	1.6%
39.5%	32	32	1	2.1%
40.7%	32	32	1	2.1%
42.0%	31	32	2	5.1%
43.2%	30	32	2	5.7%
44.4%	30	32	2	5.2%
45.7%	30	31	1	4.0%
46.9%	30	31	1	3.6%
48.1%	30	31	1	3.9%
49.4%	30	31	1	2.9%
50.6%	30	31	1	3.1%
51.9%	30	31	1	3.4%
53.1%	30	31	1	3.5%
54.3%	30	31	1	3.4%
55.6%	29	30	1	3.9%
56.8%	29	30	1	3.9%
58.0%	29	30	1	4.3%
59.3%	29	30	1	4.9%
60.5%	29	30	2	5.9%
61.7%	29	30	2	5.5%
63.0%	29	30	2	5.6%
64.2%	28	30	2	5.9%
65.4%	28	30	2	6.0%
66.7%	28	30	2	6.2%
67.9%	28	30	2	6.4%
69.1%	28	30	2	6.7%
70.4%	28	30	2	6.4%
71.6%	28	30	2	6.4%
72.8%	28	30	2	6.4%
74.1%	28	30	2	6.1%
75.3%	28	29	2	5.9%
76.5%	28	29	2	6.0%
77.8%	28	29	2	6.4%
79.0%	28	29	2	6.4%
80.2%	28	29	2	6.7%
81.5%	27	29	2	7.1%
82.7%	27	29	2	7.0%
84.0%	27	29	2	7.2%
85.2%	27	29	2	7.1%
86.4%	27	29	2	7.7%
87.7%	27	29	2	7.9%
88.9%	27	29	2	6.7%
90.1%	27	29	2	6.4%
91.4%	27	28	2	6.0%
92.6%	27	28	2	5.6%
93.8%	27	28	2	5.7%
95.1%	26	28	2	6.4%
96.3%	26	28	2	6.6%
97.5%	26	28	2	6.8%
98.8%	26	28	1	5.2%
100.0%	26	27	2	6.9%

Figure SW-57-b
Feather River near Gridley, Monthly Stage
Probability of Exceedance

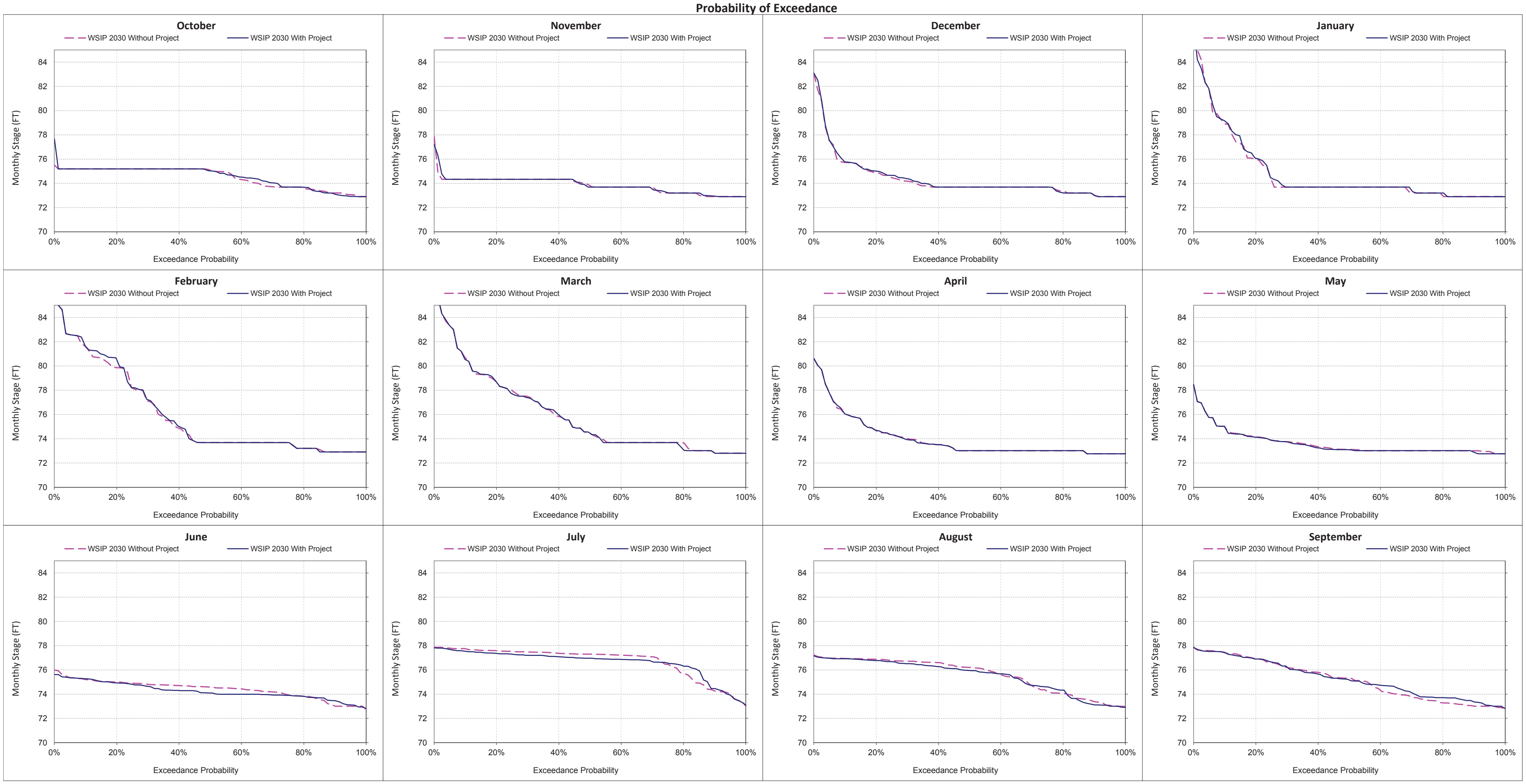


Table SW-57-b

Feather River near Gridley, Monthly Stage

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	76	78	2	2.9%
1.2%	75	75	0	0.0%
2.5%	75	75	0	0.0%
3.7%	75	75	0	0.0%
4.9%	75	75	0	0.0%
6.2%	75	75	0	0.0%
7.4%	75	75	0	0.0%
8.6%	75	75	0	0.0%
9.9%	75	75	0	0.0%
11.1%	75	75	0	0.0%
12.3%	75	75	0	0.0%
13.6%	75	75	0	0.0%
14.8%	75	75	0	0.0%
16.0%	75	75	0	0.0%
17.3%	75	75	0	0.0%
18.5%	75	75	0	0.0%
19.8%	75	75	0	0.0%
21.0%	75	75	0	0.0%
22.2%	75	75	0	0.0%
23.5%	75	75	0	0.0%
24.7%	75	75	0	0.0%
25.9%	75	75	0	0.0%
27.2%	75	75	0	0.0%
28.4%	75	75	0	0.0%
29.6%	75	75	0	0.0%
30.9%	75	75	0	0.0%
32.1%	75	75	0	0.0%
33.3%	75	75	0	0.0%
34.6%	75	75	0	0.0%
35.8%	75	75	0	0.0%
37.0%	75	75	0	0.0%
38.3%	75	75	0	0.0%
39.5%	75	75	0	0.0%
40.7%	75	75	0	0.0%
42.0%	75	75	0	0.0%
43.2%	75	75	0	0.0%
44.4%	75	75	0	0.0%
45.7%	75	75	0	0.0%
46.9%	75	75	0	0.0%
48.1%	75	75	0	0.0%
49.4%	75	75	0	-0.1%
50.6%	75	75	0	0.0%
51.9%	75	75	0	0.0%
53.1%	75	75	0	-0.2%
54.3%	75	75	0	-0.2%
55.6%	75	75	0	-0.3%
56.8%	75	75	0	-0.1%
58.0%	74	75	0	0.3%
59.3%	74	75	0	0.3%
60.5%	74	75	0	0.3%
61.7%	74	74	0	0.3%
63.0%	74	74	0	0.5%
64.2%	74	74	0	0.5%
65.4%	74	74	0	0.5%
66.7%	74	74	0	0.5%
67.9%	74	74	0	0.5%
69.1%	74	74	0	0.4%
70.4%	74	74	0	0.4%
71.6%	74	74	0	0.4%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	74	74	0	0.0%
77.8%	74	74	0	0.0%
79.0%	74	74	0	0.0%
80.2%	74	74	0	0.2%
81.5%	74	74	0	0.1%
82.7%	74	73	0	-0.1%
84.0%	73	73	0	-0.1%
85.2%	73	73	0	-0.1%
86.4%	73	73	0	-0.2%
87.7%	73	73	0	-0.1%
88.9%	73	73	0	0.0%
90.1%	73	73	0	-0.2%
91.4%	73	73	0	-0.2%
92.6%	73	73	0	-0.3%
93.8%	73	73	0	-0.2%
95.1%	73	73	0	-0.2%
96.3%	73	73	0	-0.2%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

November

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	77	-1	-0.9%
1.2%	75	76	1	1.9%
2.5%	74	75	0	0.6%
3.7%	74	74	0	0.0%
4.9%	74	74	0	0.0%
6.2%	74	74	0	0.0%
7.4%	74	74	0	0.0%
8.6%	74	74	0	0.0%
9.9%	74	74	0	0.0%
11.1%	74	74	0	0.0%
12.3%	74	74	0	0.0%
13.6%	74	74	0	0.0%
14.8%	74	74	0	0.0%
16.0%	74	74	0	0.0%
17.3%	74	74	0	0.0%
18.5%	74	74	0	0.0%
19.8%	74	74	0	0.0%
21.0%	74	74	0	0.0%
22.2%	74	74	0	0.0%
23.5%	74	74	0	0.0%
24.7%	74	74	0	0.0%
25.9%	74	74	0	0.0%
27.2%	74	74	0	0.0%
28.4%	74	74	0	0.0%
29.6%	74	74	0	0.0%
30.9%	74	74	0	0.0%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.0%
34.6%	74	74	0	0.0%
35.8%	74	74	0	0.0%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.2%
45.7%	74	74	0	0.0%
46.9%	74	74	0	-0.2%
48.1%	74	74	0	-0.1%
49.4%	74	74	0	-0.3%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	73	0	-0.2%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.3%
74.1%	73	73	0	0.1%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.3%
86.4%	73	73	0	0.1%
87.7%	73	73	0	0.1%
88.9%	73	73	0	0.1%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

December

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	83	83	0	0.0%
1.2%	82	83	1	0.9%
2.5%	81	81	0	0.0%
3.7%	79	79	0	0.2%
4.9%	78	78	0	0.1%
6.2%	77	77	0	-0.2%
7.4%	76	77	1	0.7%
8.6%	76	76	0	0.4%
9.9%	76	76	0	0.0%
11.1%	76	76	0	0.0%
12.3%	76	76	0	0.0%
13.6%	76	76	0	0.0%
14.8%	75	75	0	0.0%
16.0%	75	75	0	-0.2%
17.3%	75	75	0	0.2%
18.5%	75	75	0	0.1%
19.8%	75	75	0	0.2%
21.0%	75	75	0	0.2%
22.2%	75	75	0	0.2%
23.5%	75	75	0	0.0%
24.7%	74	75	0	0.2%
25.9%	74	75	0	0.3%
27.2%	74	74	0	0.2%
28.4%	74	74	0	0.3%
29.6%	74	74	0	0.3%
30.9%	74	74	0	0.2%
32.1%	74	74	0	0.1%
33.3%	74	74	0	0.3%
34.6%	74	74	0	0.2%
35.8%	74	74	0	0.3%
37.0%	74	74	0	0.3%
38.3%	74	74	0	0.1%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	74	74	0	0.1%
77.8%	73	73	0	-0.1%
79.0%	73	73	0	-0.1%
80.2%	73	73	0	-0.2%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

January

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	87	87	0	0.0%
1.2%	85	84	-1	-1.0%
2.5%	84	83	-1	-0.9%
3.7%	82	82	0	0.0%
4.9%	82	82	0	0.0%
6.2%	80	81	1	0.9%
7.4%	80	80	0	-0.3%
8.6%	79	79	0	0.0%
9.9%	79	79	0	0.3%
11.1%	79	79	0	0.1%
12.3%	78	78	0	0.4%
13.6%	77	78	1	0.8%
14.8%	77	78	1	0.8%
16.0%	77	77	0	-0.3%
17.3%	76	77	1	0.7%
18.5%	76	77	0	0.6%
19.8%	76	76	0	0.1%
21.0%	76	76	0	0.1%
22.2%	75	76	0	0.5%
23.5%	75	75	0	0.1%
24.7%	74	74	0	0.0%
25.9%	74	74	1	0.9%
27.2%	74	74	1	0.7%
28.4%	74	74	0	0.2%
29.6%	74	74	0	0.0%
30.9%	74	74	0	0.0%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.0%
34.6%	74	74	0	0.0%
35.8%	74	74	0	0.0%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	73	74	0	0.5%
70.4%	73	73	0	0.1%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.4%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

Table SW-57-b

Feather River near Gridley, Monthly Stage
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	87	87	0	0.0%
1.2%	85	85	0	0.0%
2.5%	85	85	0	0.0%
3.7%	83	83	0	0.0%
4.9%	83	83	0	0.0%
6.2%	83	83	0	0.0%
7.4%	83	83	0	0.0%
8.6%	82	82	1	0.7%
9.9%	82	82	0	0.0%
11.1%	81	81	0	0.1%
12.3%	81	81	1	0.6%
13.6%	81	81	1	0.7%
14.8%	81	81	0	0.4%
16.0%	80	81	0	0.6%
17.3%	80	81	0	0.6%
18.5%	80	81	1	1.0%
19.8%	80	81	1	1.0%
21.0%	80	80	0	0.1%
22.2%	80	80	0	0.1%
23.5%	79	79	-1	-1.0%
24.7%	78	78	0	0.0%
25.9%	78	78	0	0.2%
27.2%	78	78	0	0.0%
28.4%	78	78	0	0.1%
29.6%	77	77	0	0.2%
30.9%	77	77	0	0.1%
32.1%	77	77	0	-0.1%
33.3%	76	76	0	0.5%
34.6%	76	76	0	0.2%
35.8%	76	76	0	0.3%
37.0%	75	76	0	0.0%
38.3%	75	75	0	0.6%
39.5%	75	75	0	0.2%
40.7%	75	75	0	0.2%
42.0%	74	75	0	0.4%
43.2%	74	74	0	-0.4%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	73	73	0	-0.1%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	-0.3%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	86	86	0	0.0%
1.2%	86	86	0	0.0%
2.5%	84	84	0	0.0%
3.7%	84	84	0	0.1%
4.9%	83	83	0	0.0%
6.2%	83	83	0	0.0%
7.4%	81	81	0	0.0%
8.6%	81	81	0	0.0%
9.9%	81	81	0	-0.2%
11.1%	80	80	0	0.0%
12.3%	80	80	0	0.0%
13.6%	79	80	0	0.2%
14.8%	79	79	0	0.0%
16.0%	79	79	0	0.0%
17.3%	79	79	0	0.2%
18.5%	79	79	0	0.2%
19.8%	79	79	0	0.0%
21.0%	78	78	0	0.0%
22.2%	78	78	0	0.0%
23.5%	78	78	0	0.0%
24.7%	78	78	0	-0.4%
25.9%	78	78	0	-0.3%
27.2%	78	78	0	-0.1%
28.4%	78	78	0	0.0%
29.6%	78	77	0	-0.1%
30.9%	77	77	0	-0.1%
32.1%	77	77	0	0.1%
33.3%	77	77	0	0.0%
34.6%	77	77	0	0.0%
35.8%	76	76	0	0.0%
37.0%	76	76	0	0.1%
38.3%	76	76	0	0.4%
39.5%	76	76	0	0.3%
40.7%	76	76	0	0.0%
42.0%	76	76	0	0.0%
43.2%	76	76	0	0.0%
44.4%	75	75	0	0.0%
45.7%	75	75	0	0.0%
46.9%	75	75	0	0.0%
48.1%	75	75	0	0.0%
49.4%	75	75	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.2%
53.1%	74	74	0	0.0%
54.3%	74	74	0	-0.3%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	74	74	0	0.0%
77.8%	74	74	0	0.0%
79.0%	74	73	0	-0.5%
80.2%	74	73	-1	-0.8%
81.5%	73	73	0	-0.3%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	81	81	0	0.0%
1.2%	80	80	0	0.0%
2.5%	80	80	0	0.0%
3.7%	79	79	0	0.0%
4.9%	78	78	0	0.0%
6.2%	77	77	0	0.0%
7.4%	77	77	0	0.3%
8.6%	76	77	0	0.1%
9.9%	76	76	0	0.0%
11.1%	76	76	0	0.0%
12.3%	76	76	0	0.0%
13.6%	76	76	0	0.0%
14.8%	76	76	0	0.0%
16.0%	75	75	0	0.0%
17.3%	75	75	0	0.0%
18.5%	75	75	0	0.0%
19.8%	75	75	0	0.0%
21.0%	74	75	0	0.2%
22.2%	74	74	0	0.0%
23.5%	74	74	0	0.0%
24.7%	74	74	0	0.1%
25.9%	74	74	0	0.0%
27.2%	74	74	0	0.0%
28.4%	74	74	0	-0.1%
29.6%	74	74	0	-0.2%
30.9%	74	74	0	-0.1%
32.1%	74	74	0	-0.1%
33.3%	74	74	0	-0.3%
34.6%	74	74	0	-0.1%
35.8%	74	74	0	0.0%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	73	73	0	0.0%
43.2%	73	73	0	0.0%
44.4%	73	73	0	0.0%
45.7%	73	73	0	0.0%
46.9%	73	73	0	0.0%
48.1%	73	73	0	0.0%
49.4%	73	73	0	0.0%
50.6%	73	73	0	0.0%
51.9%	73	73	0	0.0%
53.1%	73	73	0	0.0%
54.3%	73	73	0	0.0%
55.6%	73	73	0	0.0%
56.8%	73	73	0	0.0%
58.0%	73	73	0	0.0%
59.3%	73	73	0	0.0%
60.5%	73	73	0	0.0%
61.7%	73	73	0	0.0%
63.0%	73	73	0	0.0%
64.2%	73	73	0	0.0%
65.4%	73	73	0	0.0%
66.7%	73	73	0	0.0%
67.9%	73	73	0	0.0%
69.1%	73	73	0	0.0%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	78	0	0.0%
1.2%	77	77	0	0.0%
2.5%	77	77	0	0.0%
3.7%	76	76	0	0.0%
4.9%	76	76	0	0.0%
6.2%	76	76	0	0.0%
7.4%	75	75	0	0.0%
8.6%	75	75	0	0.0%
9.9%	75	75	0	0.0%
11.1%	75	74	0	-0.2%
12.3%	74	74	0	0.0%
13.6%	74	74	0	-0.1%
14.8%	74	74	0	0.0%
16.0%	74	74	0	0.1%
17.3%	74	74	0	0.0%
18.5%	74	74	0	-0.1%
19.8%	74	74	0	0.0%
21.0%	74	74	0	0.0%
22.2%	74	74	0	0.0%
23.5%	74	74	0	0.0%
24.7%	74	74	0	0.0%
25.9%	74	74	0	0.0%
27.2%	74	74	0	0.0%
28.4%	74	74	0	0.0%
29.6%	74	74	0	0.0%
30.9%	74	74	0	-0.1%
32.1%	74	74	0	-0.1%
33.3%	74	74	0	-0.1%
34.6%	74	74	0	-0.1%
35.8%	74	74	0	-0.1%
37.0%	74	73	0	-0.1%
38.3%	73	73	0	-0.1%
39.5%	73	73	0	-0.2%
40.7%	73	73	0	-0.1%
42.0%	73	73	0	-0.2%
43.2%	73	73	0	-0.2%
44.4%	73	73	0	-0.1%
45.7%	73	73	0	0.0%
46.9%	73	73	0	0.0%
48.1%	73	73	0	0.0%
49.4%	73	73	0	0.0%
50.6%	73	73	0	0.0%
51.9%	73	73	0	-0.1%
53.1%	73	73	0	-0.1%
54.3%	73	73	0	0.0%
55.6%	73	73	0	0.0%
56.8%	73	73	0	0.0%
58.0%	73	73	0	0.0%
59.3%	73	73	0	0.0%
60.5%	73	73	0	0.0%
61.7%	73	73	0	0.0%
63.0%	73	73	0	0.0%
64.2%	73	73	0	0.0%
65.4%	73	73	0	0.0%
66.7%	73	73	0	0.0%
67.9%	73	73	0	0.0%
69.1%	73	73	0	0.0%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	-0.2%
91.4%	73	73	0	-0.3%
92.6%	73	73	0	-0.3%
93.8%	73	73	0	-0.3%
95.1%	73	73	0	-0.2%
96.3%	73	73	0	-0.1%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

Table SW-57-b

Feather River near Gridley, Monthly Stage
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	76	76	0	-0.5%
1.2%	76	76	0	-0.4%
2.5%	76	75	0	-0.3%
3.7%	75	75	0	-0.1%
4.9%	75	75	0	0.0%
6.2%	75	75	0	0.0%
7.4%	75	75	0	0.0%
8.6%	75	75	0	0.0%
9.9%	75	75	0	0.1%
11.1%	75	75	0	0.1%
12.3%	75	75	0	0.1%
13.6%	75	75	0	0.0%
14.8%	75	75	0	0.0%
16.0%	75	75	0	0.0%
17.3%	75	75	0	0.0%
18.5%	75	75	0	-0.1%
19.8%	75	75	0	-0.1%
21.0%	75	75	0	-0.1%
22.2%	75	75	0	-0.1%
23.5%	75	75	0	-0.1%
24.7%	75	75	0	-0.1%
25.9%	75	75	0	-0.2%
27.2%	75	75	0	-0.2%
28.4%	75	75	0	-0.2%
29.6%	75	75	0	-0.2%
30.9%	75	75	0	-0.2%
32.1%	75	74	0	-0.4%
33.3%	75	74	0	-0.4%
34.6%	75	74	0	-0.6%
35.8%	75	74	0	-0.6%
37.0%	75	74	0	-0.6%
38.3%	75	74	0	-0.6%
39.5%	75	74	0	-0.5%
40.7%	75	74	0	-0.5%
42.0%	75	74	0	-0.5%
43.2%	75	74	0	-0.5%
44.4%	75	74	0	-0.5%
45.7%	75	74	0	-0.5%
46.9%	75	74	0	-0.7%
48.1%	75	74	0	-0.7%
49.4%	75	74	0	-0.7%
50.6%	75	74	0	-0.7%
51.9%	75	74	0	-0.7%
53.1%	75	74	-1	-0.7%
54.3%	75	74	-1	-0.7%
55.6%	75	74	-1	-0.7%
56.8%	74	74	-1	-0.7%
58.0%	74	74	0	-0.6%
59.3%	74	74	0	-0.6%
60.5%	74	74	0	-0.6%
61.7%	74	74	0	-0.5%
63.0%	74	74	0	-0.5%
64.2%	74	74	0	-0.4%
65.4%	74	74	0	-0.4%
66.7%	74	74	0	-0.3%
67.9%	74	74	0	-0.3%
69.1%	74	74	0	-0.4%
70.4%	74	74	0	-0.3%
71.6%	74	74	0	-0.3%
72.8%	74	74	0	-0.2%
74.1%	74	74	0	-0.1%
75.3%	74	74	0	0.0%
76.5%	74	74	0	0.0%
77.8%	74	74	0	0.0%
79.0%	74	74	0	0.0%
80.2%	74	74	0	0.0%
81.5%	74	74	0	-0.1%
82.7%	74	74	0	0.0%
84.0%	74	74	0	0.1%
85.2%	74	74	0	0.2%
86.4%	73	74	0	0.3%
87.7%	73	73	0	0.4%
88.9%	73	73	0	0.5%
90.1%	73	73	0	0.6%
91.4%	73	73	0	0.5%
92.6%	73	73	0	0.3%
93.8%	73	73	0	0.2%
95.1%	73	73	0	0.1%
96.3%	73	73	0	0.1%
97.5%	73	73	0	-0.1%
98.8%	73	73	0	-0.1%
100.0%	73	73	0	0.1%

July				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	78	0	-0.1%
1.2%	78	78	0	-0.1%
2.5%	78	78	0	-0.1%
3.7%	78	78	0	-0.1%
4.9%	78	78	0	-0.1%
6.2%	78	78	0	-0.2%
7.4%	78	78	0	-0.2%
8.6%	78	78	0	-0.2%
9.9%	78	78	0	-0.3%
11.1%	78	78	0	-0.2%
12.3%	78	77	0	-0.2%
13.6%	78	77	0	-0.2%
14.8%	78	77	0	-0.2%
16.0%	78	77	0	-0.2%
17.3%	78	77	0	-0.3%
18.5%	78	77	0	-0.3%
19.8%	78	77	0	-0.3%
21.0%	78	77	0	-0.3%
22.2%	78	77	0	-0.3%
23.5%	78	77	0	-0.3%
24.7%	78	77	0	-0.3%
25.9%	78	77	0	-0.3%
27.2%	77	77	0	-0.3%
28.4%	77	77	0	-0.3%
29.6%	77	77	0	-0.4%
30.9%	77	77	0	-0.3%
32.1%	77	77	0	-0.3%
33.3%	77	77	0	-0.3%
34.6%	77	77	0	-0.3%
35.8%	77	77	0	-0.4%
37.0%	77	77	0	-0.4%
38.3%	77	77	0	-0.4%
39.5%	77	77	0	-0.4%
40.7%	77	77	0	-0.4%
42.0%	77	77	0	-0.4%
43.2%	77	77	0	-0.4%
44.4%	77	77	0	-0.4%
45.7%	77	77	0	-0.4%
46.9%	77	77	0	-0.4%
48.1%	77	77	0	-0.4%
49.4%	77	77	0	-0.4%
50.6%	77	77	0	-0.4%
51.9%	77	77	0	-0.5%
53.1%	77	77	0	-0.5%
54.3%	77	77	0	-0.5%
55.6%	77	77	0	-0.5%
56.8%	77	77	0	-0.5%
58.0%	77	77	0	-0.5%
59.3%	77	77	0	-0.4%
60.5%	77	77	0	-0.4%
61.7%	77	77	0	-0.4%
63.0%	77	77	0	-0.5%
64.2%	77	77	0	-0.5%
65.4%	77	77	0	-0.4%
66.7%	77	77	0	-0.4%
67.9%	77	77	0	-0.4%
69.1%	77	77	0	-0.4%
70.4%	77	77	0	-0.6%
71.6%	77	77	0	-0.5%
72.8%	77	77	0	-0.1%
74.1%	76	77	0	0.2%
75.3%	76	77	0	0.1%
76.5%	76	77	0	0.4%
77.8%	76	76	0	0.4%
79.0%	76	76	1	0.9%
80.2%	76	76	1	0.8%
81.5%	76	76	1	1.0%
82.7%	75	76	1	1.2%
84.0%	75	76	1	1.6%
85.2%	75	76	1	1.3%
86.4%	75	75	0	0.6%
87.7%	74	75	1	0.9%
88.9%	74	74	0	0.1%
90.1%	74	74	0	0.3%
91.4%	74	74	0	0.2%
92.6%	74	74	0	0.1%
93.8%	74	74	0	-0.2%
95.1%	74	74	0	-0.1%
96.3%	74	74	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	-0.1%
100.0%	73	73	0	0.1%

August				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	77	77	0	-0.1%
1.2%	77	77	0	-0.1%
2.5%	77	77	0	-0.1%
3.7%	77	77	0	0.0%
4.9%	77	77	0	0.0%
6.2%	77	77	0	0.0%
7.4%	77	77	0	-0.1%
8.6%	77	77	0	0.0%
9.9%	77	77	0	0.0%
11.1%	77	77	0	0.0%
12.3%	77	77	0	0.0%
13.6%	77	77	0	-0.1%
14.8%	77	77	0	-0.1%
16.0%	77	77	0	-0.1%
17.3%	77	77	0	-0.1%
18.5%	77	77	0	-0.1%
19.8%	77	77	0	-0.1%
21.0%	77	77	0	-0.1%
22.2%	77	77	0	-0.2%
23.5%	77	77	0	-0.2%
24.7%	77	77	0	-0.1%
25.9%	77	77	0	-0.1%
27.2%	77	77	0	-0.2%
28.4%	77	77	0	-0.3%
29.6%	77	77	0	-0.3%
30.9%	77	77	0	-0.3%
32.1%	77	77	0	-0.3%
33.3%	77	76	0	-0.3%
34.6%	77	76	0	-0.3%
35.8%	77	76	0	-0.4%
37.0%	77	76	0	-0.4%
38.3%	77	76	0	-0.4%
39.5%	77	76	0	-0.4%
40.7%	77	76	0	-0.4%
42.0%	76	76	0	-0.4%
43.2%	76	76	0	-0.4%
44.4%	76	76	0	-0.4%
45.7%	76	76	0	-0.2%
46.9%	76	76	0	-0.3%
48.1%	76	76	0	-0.3%
49.4%	76	76	0	-0.3%
50.6%	76	76	0	-0.3%
51.9%	76	76	0	-0.3%
53.1%	76	76	0	-0.4%
54.3%	76	76	0	-0.4%
55.6%	76	76	0	-0.3%
56.8%	76	76	0	-0.2%
58.0%	76	76	0	-0.1%
59.3%	76	76	0	0.1%
60.5%	76	76	0	0.2%
61.7%	75	76	0	0.2%
63.0%	75	76	0	0.2%
64.2%	75	75	0	-0.1%
65.4%	75	75	0	-0.1%
66.7%	75	75	0	-0.3%
67.9%	75	75	0	-0.3%
69.1%	75	75	0	-0.1%
70.4%	75	75	0	0.1%
71.6%	75	75	0	0.2%
72.8%	74	75	0	0.4%
74.1%	74	75	0	0.3%
75.3%	74	75	0	0.5%
76.5%	74	74	0	0.5%
77.8%	74	74	0	0.4%
79.0%	74	74	0	0.4%
80.2%	74	74	0	0.4%
81.5%	74	74	0	-0.1%
82.7%	74	74	0	-0.4%
84.0%	74	74	0	0.0%
85.2%	74	73	0	-0.2%
86.4%	74	73	0	-0.4%
87.7%	74	73	0	-0.5%
88.9%	73	73	0	-0.4%
90.1%	73	73	0	-0.4%
91.4%	73	73	0	-0.3%
92.6%	73	73	0	-0.2%
93.8%	73	73	0	0.0%
95.1%	73	73	0	-0.1%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	-0.1%
100.0%	73	73	0	-0.1%

September				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	78	0	0.0%
1.2%	78	78	0	0.1%
2.5%	78	78	0	-0.1%
3.7%	78	78	0	-0.1%
4.9%	78	78	0	-0.1%
6.2%	78	78	0	-0.1%
7.4%	78	78	0	0.0%
8.6%	78	78	0	0.0%
9.9%	77	77	0	0.0%
11.1%	77	77	0	-0.1%
12.3%	77	77	0	-0.1%
13.6%	77	77	0	-0.2%
14.8%	77	77	0	-0.1%
16.0%	77	77	0	-0.1%
17.3%	77	77	0	0.0%
18.5%	77	77	0	0.0%
19.8%	77	77	0	0.0%
21.0%	77	77	0	0.0%
22.2%	77	77	0	0.0%
23.5%	77	77	0	0.1%
24.7%	77	77	0	0.1%
25.9%	77	77	0	0.0%
27.2%	76	77	0	0.1%
28.4%	76	76	0	0.0%
29.6%	76	76	0	0.1%
30.9%	76	76	0	-0.1%
32.1%	76	76	0	-0.2%
33.3%	76	76	0	0.0%
34.6%	76	76	0	-0.1%
35.8%	76	76	0	-0.2%
37.0%	76	76	0	-0.1%
38.3%	76	76	0	-0.1%
39.5%	76	76	0	-0.2%
40.7%	76	76	0	-0.2%
42.0%	76	75	0	-0.4%
43.2%	76	75	0	-0.3%
44.4%	75	75	0	-0.1%
45.7%	75	75	0	-0.1%
46.9%	75	75	0	-0.1%
48.1%	75	75	0	-0.1%
49.4%	75	75	0	-0.1%
50.6%	75	75	0	-0.3%
51.9%	75	75	0	-0.1%
53.1%	75	75	0	-0.1%
54.3%	75	75	0	-0.2%
55.6%	75	75	0	-0.3%
56.8%	75	75	0	0.0%
58.0%	75	75	0	0.3%
59.3%	74	75	0	0.4%
60.5%	74	75	1	0.7%
61.7%	74	75	1	0.7%
63.0%	74	75	1	0.8%
64.2%	74	75	1	0.9%
65.4%	74	75	1	0.7%
66.7%	74	74	0	0.6%
67.9%	74	74	0	0.5%
69.1%	74	74	0	0.5%
70.4%	74	74	0	0.5%
71.6%	74	74	0	0.3%
72.8%	74	74	0	0.2%
74.1%	74	74	0	0.3%
75.3%	73	74	0	0.4%
76.5%	73	74	0	0.4%
77.8%	73	74	0	0.4%
79.0%	73	74	0	0.6%
80.2%	73	74	0	0.6%
81.5%	73	74	0	0.6%
82.7%	73	74	0	0.6%
84.0%	73	74	0	0.7%
85.2%	73	74	0	0.6%
86.4%	73	74	0	0.5%
87.7%	73	73	0	0.6%
88.9%	73	73	0	0.6%
90.1%	73	73	0	0.5%
91.4%	73	73	0	0.4%
92.6%	73	73	0	0.3%
93.8%	73	73	0	0.1%
95.1%	73	73	0	0.1%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.1%
98.8%	73	73	0	0.2%
100.0%	73	73	0	0.0%

Figure SW-58-b
American River at Fair Oaks, Monthly Stage
Probability of Exceedance

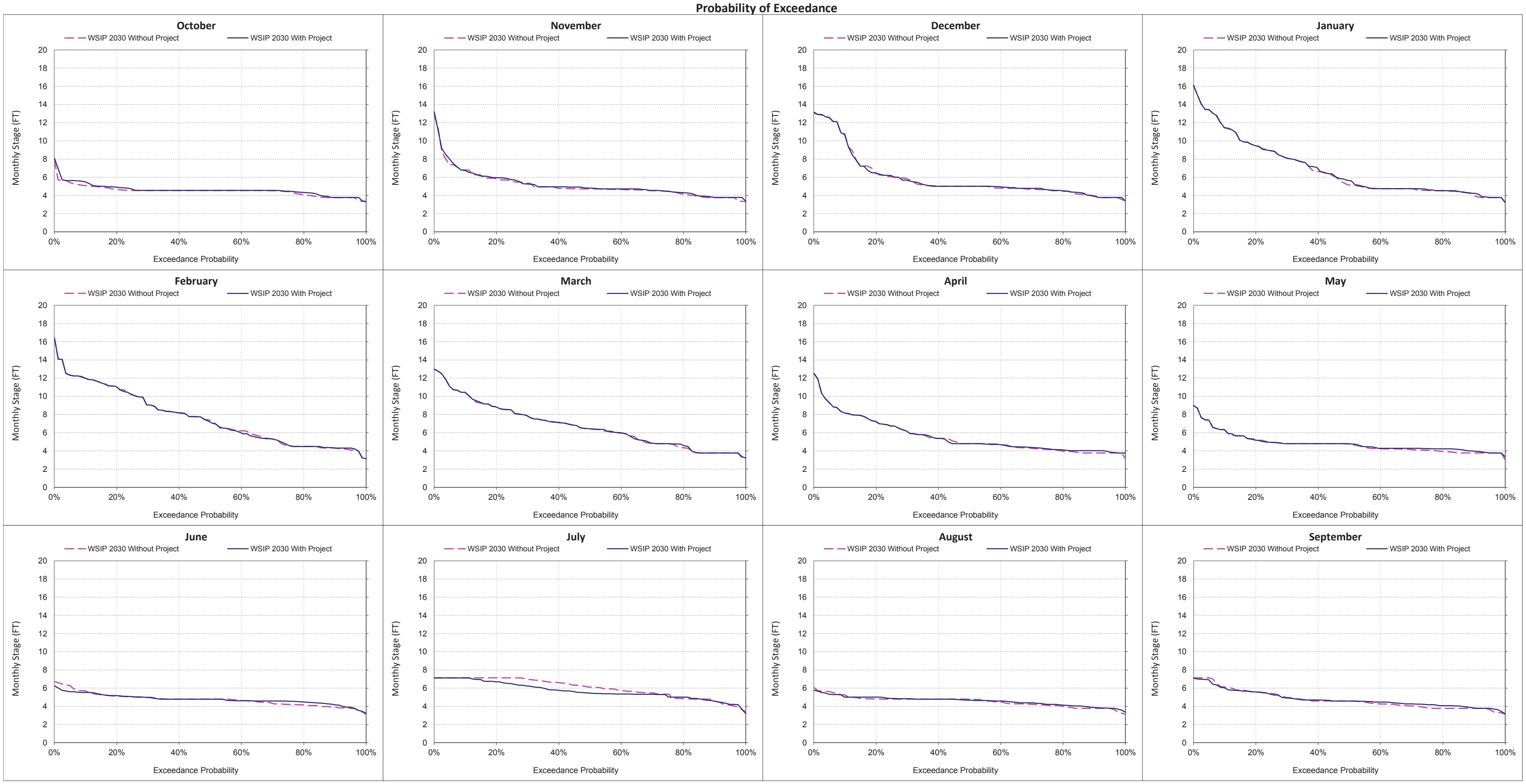


Table SW-58-b

American River at Fair Oaks, Monthly Stage

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	8	8	0	3.1%
1.2%	6	7	1	21.3%
2.5%	6	6	0	1.0%
3.7%	6	6	0	-0.2%
4.9%	5	6	0	4.0%
6.2%	5	6	0	6.5%
7.4%	5	6	0	7.6%
8.6%	5	6	0	9.0%
9.9%	5	5	0	7.8%
11.1%	5	5	0	5.6%
12.3%	5	5	0	1.4%
13.6%	5	5	0	1.1%
14.8%	5	5	0	1.6%
16.0%	5	5	0	3.2%
17.3%	5	5	0	2.5%
18.5%	5	5	0	5.1%
19.8%	5	5	0	4.8%
21.0%	5	5	0	5.2%
22.2%	5	5	0	5.1%
23.5%	5	5	0	5.8%
24.7%	5	5	0	3.8%
25.9%	5	5	0	0.6%
27.2%	5	5	0	0.0%
28.4%	5	5	0	0.0%
29.6%	5	5	0	0.0%
30.9%	5	5	0	0.0%
32.1%	5	5	0	0.0%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.0%
56.8%	5	5	0	0.0%
58.0%	5	5	0	0.0%
59.3%	5	5	0	0.0%
60.5%	5	5	0	0.0%
61.7%	5	5	0	0.0%
63.0%	5	5	0	0.0%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.3%
69.1%	5	5	0	0.5%
70.4%	5	5	0	0.6%
71.6%	5	5	0	0.6%
72.8%	4	5	0	1.4%
74.1%	4	4	0	0.8%
75.3%	4	4	0	1.1%
76.5%	4	4	0	2.9%
77.8%	4	4	0	4.2%
79.0%	4	4	0	5.6%
80.2%	4	4	0	6.5%
81.5%	4	4	0	7.2%
82.7%	4	4	0	7.3%
84.0%	4	4	0	8.0%
85.2%	4	4	0	5.2%
86.4%	4	4	0	3.2%
87.7%	4	4	0	3.5%
88.9%	4	4	0	0.0%
90.1%	4	4	0	0.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	4	0	11.0%
98.8%	3	3	0	1.0%
100.0%	3	3	0	0.1%

November				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	13	13	0	2.7%
1.2%	11	11	0	-1.9%
2.5%	9	9	0	3.8%
3.7%	8	9	1	6.4%
4.9%	7	8	1	8.2%
6.2%	7	7	0	1.7%
7.4%	7	7	0	0.0%
8.6%	7	7	0	-0.7%
9.9%	7	7	0	-0.8%
11.1%	7	7	0	-3.7%
12.3%	6	6	0	2.6%
13.6%	6	6	0	0.6%
14.8%	6	6	0	-1.9%
16.0%	6	6	0	3.3%
17.3%	6	6	0	3.0%
18.5%	6	6	0	1.2%
19.8%	6	6	0	1.4%
21.0%	6	6	0	4.1%
22.2%	6	6	0	3.9%
23.5%	6	6	0	2.8%
24.7%	6	6	0	2.3%
25.9%	5	6	0	3.9%
27.2%	5	6	0	1.1%
28.4%	5	5	0	-2.8%
29.6%	5	5	0	-1.7%
30.9%	5	5	0	-1.8%
32.1%	5	5	0	5.2%
33.3%	5	5	0	0.4%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	3.2%
40.7%	5	5	0	3.6%
42.0%	5	5	0	3.8%
43.2%	5	5	0	3.7%
44.4%	5	5	0	3.5%
45.7%	5	5	0	3.5%
46.9%	5	5	0	4.0%
48.1%	5	5	0	2.3%
49.4%	5	5	0	1.8%
50.6%	5	5	0	1.7%
51.9%	5	5	0	1.2%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	1.0%
56.8%	5	5	0	1.1%
58.0%	5	5	0	1.2%
59.3%	5	5	0	1.3%
60.5%	5	5	0	1.4%
61.7%	5	5	0	2.2%
63.0%	5	5	0	2.3%
64.2%	5	5	0	2.3%
65.4%	5	5	0	2.2%
66.7%	5	5	0	1.1%
67.9%	5	5	0	0.9%
69.1%	5	5	0	0.6%
70.4%	5	5	0	0.7%
71.6%	5	5	0	0.4%
72.8%	5	5	0	0.4%
74.1%	4	4	0	0.1%
75.3%	4	4	0	0.6%
76.5%	4	4	0	-1.0%
77.8%	4	4	0	1.1%
79.0%	4	4	0	2.9%
80.2%	4	4	0	4.2%
81.5%	4	4	0	5.1%
82.7%	4	4	0	4.9%
84.0%	4	4	0	1.9%
85.2%	4	4	0	1.4%
86.4%	4	4	0	2.8%
87.7%	4	4	0	3.5%
88.9%	4	4	0	1.5%
90.1%	4	4	0	0.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	4	0	11.0%
98.8%	3	4	0	12.7%
100.0%	3	3	0	0.0%

December				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	13	13	0	1.0%
1.2%	13	13	0	0.0%
2.5%	13	13	0	0.4%
3.7%	13	13	0	0.5%
4.9%	13	13	0	0.0%
6.2%	12	12	0	0.0%
7.4%	12	12	0	0.0%
8.6%	11	11	0	0.0%
9.9%	11	11	0	-1.4%
11.1%	9	9	0	0.1%
12.3%	9	8	0	-5.3%
13.6%	8	8	0	0.0%
14.8%	7	7	0	-0.7%
16.0%	7	7	0	-0.7%
17.3%	7	7	0	-6.2%
18.5%	7	7	-1	-7.3%
19.8%	7	6	0	-0.9%
21.0%	6	6	0	1.2%
22.2%	6	6	0	0.1%
23.5%	6	6	0	2.1%
24.7%	6	6	0	2.3%
25.9%	6	6	0	0.0%
27.2%	6	6	0	0.2%
28.4%	6	6	0	-4.0%
29.6%	6	6	0	-3.3%
30.9%	6	6	0	-1.8%
32.1%	5	5	0	0.9%
33.3%	5	5	0	4.3%
34.6%	5	5	0	1.7%
35.8%	5	5	0	0.6%
37.0%	5	5	0	0.0%
38.3%	5	5	0	-1.3%
39.5%	5	5	0	-0.2%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.0%
56.8%	5	5	0	1.4%
58.0%	5	5	0	3.2%
59.3%	5	5	0	3.4%
60.5%	5	5	0	2.6%
61.7%	5	5	0	2.2%
63.0%	5	5	0	1.7%
64.2%	5	5	0	1.5%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	1.6%
69.1%	5	5	0	1.9%
70.4%	5	5	0	2.0%
71.6%	5	5	0	3.1%
72.8%	5	5	0	3.2%
74.1%	5	5	0	0.8%
75.3%	5	5	0	0.2%
76.5%	5	5	0	0.9%
77.8%	5	5	0	0.9%
79.0%	5	5	0	0.4%
80.2%	5	4	0	-0.9%
81.5%	4	4	0	-0.1%
82.7%	4	4	0	1.2%
84.0%	4	4	0	4.1%
85.2%	4	4	0	4.2%
86.4%	4	4	0	3.0%
87.7%	4	4	0	-0.2%
88.9%	4	4	0	-1.1%
90.1%	4	4	0	-1.5%
91.4%	4	4	0	-1.1%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	4	4	0	0.0%
98.8%	4	4	0	6.2%
100.0%	3	3	0	0.0%

January				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	16	16	0	0.0%
1.2%	15	15	0	-0.1%
2.5%	14	14	0	0.0%
3.7%	13	13	0	0.0%
4.9%	13	13	0	0.0%
6.2%	13	13	0	0.0%
7.4%	13	13	0	0.8%
8.6%	12	12	0	0.0%
9.9%	11	11	0	0.0%
11.1%	11	11	0	-0.5%
12.3%	11	11	0	0.0%
13.6%	11	11	0	0.0%
14.8%	10	10	0	0.0%
16.0%	10	10	0	0.0%
17.3%	10	10	0	0.0%
18.5%	10	10	0	0.0%
19.8%	9	9	0	0.0%
21.0%	9	9	0	0.0%
22.2%	9	9	0	-0.7%
23.5%	9	9	0	-0.7%
24.7%	9	9	0	-0.1%
25.9%	9	9	0	0.0%
27.2%	9	9	0	0.0%
28.4%	8	8	0	0.0%
29.6%	8	8	0	0.0%
30.9%	8	8	0	0.0%
32.1%	8	8	0	-0.2%
33.3%	8	8	0	0.0%
34.6%	8	8	0	-0.6%
35.8%	8	8	0	0.0%
37.0%	7	7	0	0.7%
38.3%	7	7	0	6.6%
39.5%	7	7	0	7.1%
40.7%	7	7	0	0.0%
42.0%	7	7	0	-0.5%
43.2%	6	6	0	-0.4%
44.4%	6	6	0	2.6%
45.7%	6	6	0	0.0%
46.9%	6	6	0	4.4%
48.1%	5	6	0	7.4%
49.4%	5	6	0	9.5%
50.6%	5	6	0	9.3%
51.9%	5	5	0	1.0%
53.1%	5	5	0	2.2%
54.3%	5	5	0	1.2%
55.6%	5	5	0	3.0%
56.8%	5	5	0	0.0%
58.0%	5	5	0	1.1%
59.3%	5	5	0	0.0%
60.5%	5	5	0	0.0%
61.7%	5	5	0	0.0%
63.0%	5	5	0	0.0%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.0%
71.6%	5	5	0	2.7%
72.8%	5	5	0	3.1%
74.1%	5	5	0	3.3%
75.3%	5	5	0	1.3%
76.5%	5	5	0	1.5%
77.8%	5	5	0	0.0%
79.0%	5	5	0	0.0%
80.2%	5	5	0	0.0%
81.5%	4	5	0	1.5%
82.7%	4	5	0	1.7%
84.0%	4	5	0	1.4%
85.2%	4	4	0	0.6%
86.4%	4	4	0	-0.9%
87.7%	4	4	0	0.0%
88.9%	4	4	0	-0.8%
90.1%	4	4	0	7.6%
91.4%	4	4	0	8.3%
92.6%	4	4	0	2.3%
93.8%	4	4	0	2.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	4	4	0	0.0%
98.8%	4	4	0	0.0%
100.0%	3	3	0	0.0%

Table SW-58-b

American River at Fair Oaks, Monthly Stage

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	16	16	0	0.0%
1.2%	14	14	0	0.0%
2.5%	14	14	0	0.0%
3.7%	13	13	0	0.0%
4.9%	12	12	0	0.0%
6.2%	12	12	0	0.0%
7.4%	12	12	0	0.0%
8.6%	12	12	0	0.5%
9.9%	12	12	0	0.0%
11.1%	12	12	0	0.0%
12.3%	12	12	0	0.0%
13.6%	12	12	0	0.0%
14.8%	12	11	0	-0.2%
16.0%	11	11	0	-0.7%
17.3%	11	11	0	0.0%
18.5%	11	11	0	0.0%
19.8%	11	11	0	0.0%
21.0%	11	11	0	0.0%
22.2%	11	11	0	-1.8%
23.5%	10	10	0	0.0%
24.7%	10	10	0	0.4%
25.9%	10	10	0	0.0%
27.2%	10	10	0	0.0%
28.4%	10	10	0	0.0%
29.6%	9	9	0	0.0%
30.9%	9	9	0	0.0%
32.1%	9	9	0	0.0%
33.3%	8	8	0	0.0%
34.6%	8	8	0	0.0%
35.8%	8	8	0	0.0%
37.0%	8	8	0	0.0%
38.3%	8	8	0	0.0%
39.5%	8	8	0	0.0%
40.7%	8	8	0	0.9%
42.0%	8	8	0	-0.2%
43.2%	8	8	0	0.0%
44.4%	8	8	0	0.0%
45.7%	8	8	0	0.0%
46.9%	8	8	0	0.0%
48.1%	7	7	0	0.0%
49.4%	7	7	0	-2.0%
50.6%	7	7	0	-3.0%
51.9%	7	7	0	0.0%
53.1%	7	7	0	-1.4%
54.3%	7	6	0	-0.5%
55.6%	6	6	0	0.0%
56.8%	6	6	0	-1.7%
58.0%	6	6	0	-0.7%
59.3%	6	6	0	-2.3%
60.5%	6	6	0	-5.2%
61.7%	6	6	0	-4.9%
63.0%	6	6	0	-3.5%
64.2%	6	6	0	-3.7%
65.4%	6	5	0	-3.5%
66.7%	6	5	0	-3.1%
67.9%	5	5	0	-1.0%
69.1%	5	5	0	-0.1%
70.4%	5	5	0	0.0%
71.6%	5	5	0	0.0%
72.8%	5	5	0	3.5%
74.1%	5	5	0	3.6%
75.3%	5	5	0	-1.0%
76.5%	4	4	0	0.0%
77.8%	4	4	0	0.0%
79.0%	4	4	0	0.0%
80.2%	4	4	0	0.0%
81.5%	4	4	0	0.0%
82.7%	4	4	0	0.0%
84.0%	4	4	0	0.0%
85.2%	4	4	0	2.8%
86.4%	4	4	0	1.1%
87.7%	4	4	0	1.4%
88.9%	4	4	0	1.1%
90.1%	4	4	0	0.0%
91.4%	4	4	0	1.6%
92.6%	4	4	0	1.9%
93.8%	4	4	0	3.0%
95.1%	4	4	0	5.3%
96.3%	4	4	0	3.3%
97.5%	4	4	0	-1.1%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.0%

March				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	13	13	0	0.0%
1.2%	13	13	0	0.0%
2.5%	12	12	0	0.0%
3.7%	12	12	0	0.0%
4.9%	11	11	0	0.0%
6.2%	11	11	0	0.0%
7.4%	11	11	0	0.0%
8.6%	10	10	0	0.0%
9.9%	10	10	0	0.0%
11.1%	10	10	0	-0.3%
12.3%	10	10	0	0.0%
13.6%	9	9	0	1.8%
14.8%	9	9	0	0.6%
16.0%	9	9	0	0.0%
17.3%	9	9	0	0.0%
18.5%	9	9	0	0.0%
19.8%	9	9	0	0.0%
21.0%	9	9	0	0.0%
22.2%	9	9	0	0.0%
23.5%	9	9	0	0.0%
24.7%	9	9	0	0.0%
25.9%	8	8	0	-0.2%
27.2%	8	8	0	-0.8%
28.4%	8	8	0	0.0%
29.6%	8	8	0	0.0%
30.9%	8	8	0	0.0%
32.1%	8	8	0	0.0%
33.3%	7	7	0	0.0%
34.6%	7	7	0	0.0%
35.8%	7	7	0	0.0%
37.0%	7	7	0	-1.2%
38.3%	7	7	0	-0.5%
39.5%	7	7	0	0.0%
40.7%	7	7	0	-0.8%
42.0%	7	7	0	0.0%
43.2%	7	7	0	0.0%
44.4%	7	7	0	0.0%
45.7%	7	7	0	0.0%
46.9%	7	7	0	0.0%
48.1%	6	6	0	0.0%
49.4%	6	6	0	0.6%
50.6%	6	6	0	0.5%
51.9%	6	6	0	0.5%
53.1%	6	6	0	0.0%
54.3%	6	6	0	2.8%
55.6%	6	6	0	0.1%
56.8%	6	6	0	2.3%
58.0%	6	6	0	0.1%
59.3%	6	6	0	1.0%
60.5%	6	6	0	0.3%
61.7%	6	6	0	0.0%
63.0%	6	6	0	-0.9%
64.2%	6	5	0	-4.7%
65.4%	5	5	0	0.0%
66.7%	5	5	0	0.0%
67.9%	5	5	0	3.9%
69.1%	5	5	0	1.3%
70.4%	5	5	0	0.5%
71.6%	5	5	0	0.0%
72.8%	5	5	0	0.0%
74.1%	5	5	0	0.0%
75.3%	5	5	0	0.6%
76.5%	5	5	0	0.7%
77.8%	5	5	0	4.9%
79.0%	4	5	0	9.0%
80.2%	4	5	0	5.1%
81.5%	4	4	0	5.0%
82.7%	4	4	0	0.0%
84.0%	4	4	0	-1.3%
85.2%	4	4	0	0.0%
86.4%	4	4	0	0.0%
87.7%	4	4	0	0.0%
88.9%	4	4	0	0.0%
90.1%	4	4	0	0.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	4	4	0	0.0%
98.8%	3	3	0	5.2%
100.0%	3	3	0	0.9%

April				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	13	13	0	0.0%
1.2%	12	12	0	0.0%
2.5%	10	10	0	0.0%
3.7%	10	10	0	0.0%
4.9%	9	9	0	0.0%
6.2%	9	9	0	0.0%
7.4%	9	9	0	0.0%
8.6%	8	8	0	0.0%
9.9%	8	8	0	0.0%
11.1%	8	8	0	0.0%
12.3%	8	8	0	0.0%
13.6%	8	8	0	0.0%
14.8%	8	8	0	0.0%
16.0%	8	8	0	0.0%
17.3%	8	8	0	-0.1%
18.5%	7	7	0	0.0%
19.8%	7	7	0	0.0%
21.0%	7	7	0	0.0%
22.2%	7	7	0	0.0%
23.5%	7	7	0	0.0%
24.7%	7	7	0	0.0%
25.9%	7	7	0	-0.1%
27.2%	7	7	0	0.0%
28.4%	6	6	0	0.1%
29.6%	6	6	0	0.0%
30.9%	6	6	0	0.0%
32.1%	6	6	0	0.0%
33.3%	6	6	0	0.0%
34.6%	6	6	0	0.0%
35.8%	6	6	0	1.6%
37.0%	5	6	0	3.8%
38.3%	5	5	0	0.3%
39.5%	5	5	0	0.0%
40.7%	5	5	0	-0.1%
42.0%	5	5	0	-1.0%
43.2%	5	5	0	-6.5%
44.4%	5	5	0	-6.0%
45.7%	5	5	0	-4.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	-0.6%
55.6%	5	5	0	-0.9%
56.8%	5	5	0	-1.0%
58.0%	5	5	0	-1.0%
59.3%	5	5	0	-0.8%
60.5%	5	5	0	0.0%
61.7%	5	5	0	-2.0%
63.0%	5	4	0	-0.9%
64.2%	4	4	0	0.3%
65.4%	4	4	0	2.1%
66.7%	4	4	0	2.0%
67.9%	4	4	0	2.2%
69.1%	4	4	0	2.1%
70.4%	4	4	0	2.6%
71.6%	4	4	0	2.5%
72.8%	4	4	0	2.5%
74.1%	4	4	0	1.6%
75.3%	4	4	0	1.4%
76.5%	4	4	0	1.2%
77.8%	4	4	0	1.6%
79.0%	4	4	0	2.6%
80.2%	4	4	0	3.0%
81.5%	4	4	0	2.4%
82.7%	4	4	0	2.3%
84.0%	4	4	0	3.7%
85.2%	4	4	0	6.6%
86.4%	4	4	0	6.6%
87.7%	4	4	0	6.6%
88.9%	4	4	0	6.6%
90.1%	4	4	0	6.6%
91.4%	4	4	0	6.6%
92.6%	4	4	0	6.6%
93.8%	4	4	0	5.0%
95.1%	4	4	0	1.8%
96.3%	4	4	0	1.4%
97.5%	4	4	0	0.0%
98.8%	4	4	0	0.0%
100.0%	3	4	1	21.3%

May				
Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	9	9	0	0.0%
1.2%	9	9	0	0.0%
2.5%	8	8	0	0.0%
3.7%	7	7	0	0.0%
4.9%	7	7	0	0.0%
6.2%	7	7	0	0.0%
7.4%	6	6	0	0.0%
8.6%	6	6	0	0.0%
9.9%	6	6	0	0.0%
11.1%	6	6	0	0.0%
12.3%	6	6	0	2.7%
13.6%	6	6	0	0.0%
14.8%	6	6	0	0.0%
16.0%	6	6	0	0.0%
17.3%	5	5	0	0.5%
18.5%	5	5	0	-0.9%
19.8%	5	5	0	-2.0%
21.0%	5	5	0	-0.8%
22.2%	5	5	0	-2.7%
23.5%	5	5	0	-1.2%
24.7%	5	5	0	0.1%
25.9%	5	5	0	0.4%
27.2%	5	5	0	-0.5%
28.4%	5	5	0	-1.1%
29.6%	5	5	0	0.0%
30.9%	5	5	0	0.0%
32.1%	5	5	0	0.0%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.6%
50.6%	5	5	0	0.3%
51.9%	5	5	0	2.6%
53.1%	5	5	0	1.8%
54.3%	4	4	0	1.0%
55.6%	4	4	0	2.4%
56.8%	4	4	0	4.1%
58.0%	4	4	0	3.3%
59.3%	4	4	0	0.9%
60.5%	4	4	0	1.4%
61.7%	4	4	0	1.4%
63.0%	4	4	0	1.5%
64.2%	4	4	0	1.5%
65.4%	4	4	0	1.6%
66.7%	4	4	0	2.0%
67.9%	4	4	0	2.1%
69.1%	4	4	0	2.5%
70.4%	4	4	0	4.0%
71.6%	4	4	0	4.6%
72.8%	4	4	0	4.6%
74.1%	4	4	0	4.4%
75.3%	4	4	0	4.6%
76.5%	4	4	0	4.9%
77.8%	4	4	0	5.4%
79.0%	4	4	0	6.7%
80.2%	4	4	0	7.1%
81.5%	4	4	0	7.7%
82.7%	4	4	0	8.7%
84.0%	4	4	0	9.5%
85.2%	4	4	0	9.6%
86.4%	4	4	0	9.3%
87.7%	4	4	0	6.9%
88.9%	4	4	0	5.6%
90.1%	4	4	0	5.5%
91.4%	4	4	0	4.5%
92.6%	4	4	0	3.2%
93.8%	4	4	0	1.2%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	4	4	0	0.0%
98.8%	4	4	0	0.0%
100.0%	3	3	0	11.9%

Table SW-58-b

American River at Fair Oaks, Monthly Stage
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	6	0	-6.8%
1.2%	7	6	-1	-9.1%
2.5%	6	6	-1	-10.7%
3.7%	6	6	-1	-10.2%
4.9%	6	6	-1	-11.1%
6.2%	6	6	0	-5.6%
7.4%	6	6	0	-3.6%
8.6%	6	6	0	-3.1%
9.9%	6	6	0	-3.0%
11.1%	6	6	0	0.0%
12.3%	5	5	0	1.6%
13.6%	5	5	0	1.4%
14.8%	5	5	0	0.7%
16.0%	5	5	0	0.0%
17.3%	5	5	0	-0.1%
18.5%	5	5	0	0.9%
19.8%	5	5	0	1.4%
21.0%	5	5	0	0.9%
22.2%	5	5	0	0.2%
23.5%	5	5	0	0.5%
24.7%	5	5	0	0.5%
25.9%	5	5	0	0.5%
27.2%	5	5	0	0.4%
28.4%	5	5	0	0.2%
29.6%	5	5	0	0.0%
30.9%	5	5	0	-1.0%
32.1%	5	5	0	-1.4%
33.3%	5	5	0	-1.0%
34.6%	5	5	0	-0.6%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	-0.9%
55.6%	5	5	0	-3.0%
56.8%	5	5	0	-2.6%
58.0%	5	5	0	-1.7%
59.3%	5	5	0	-0.3%
60.5%	5	5	0	-0.2%
61.7%	5	5	0	0.3%
63.0%	5	5	0	0.8%
64.2%	5	5	0	0.5%
65.4%	4	5	0	2.5%
66.7%	4	5	0	2.8%
67.9%	4	5	0	3.7%
69.1%	4	5	0	3.8%
70.4%	4	5	0	7.1%
71.6%	4	5	0	7.5%
72.8%	4	5	0	7.5%
74.1%	4	5	0	8.3%
75.3%	4	5	0	8.3%
76.5%	4	5	0	8.3%
77.8%	4	5	0	8.4%
79.0%	4	4	0	7.9%
80.2%	4	4	0	7.1%
81.5%	4	4	0	8.2%
82.7%	4	4	0	7.8%
84.0%	4	4	0	7.6%
85.2%	4	4	0	7.7%
86.4%	4	4	0	8.8%
87.7%	4	4	0	7.8%
88.9%	4	4	0	8.5%
90.1%	4	4	0	6.7%
91.4%	4	4	0	7.4%
92.6%	4	4	0	4.0%
93.8%	4	4	0	2.5%
95.1%	4	4	0	3.0%
96.3%	4	4	0	0.7%
97.5%	4	4	0	1.0%
98.8%	3	3	0	2.2%
100.0%	3	3	0	4.5%

July

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	0.0%
1.2%	7	7	0	0.0%
2.5%	7	7	0	0.0%
3.7%	7	7	0	0.0%
4.9%	7	7	0	0.0%
6.2%	7	7	0	0.0%
7.4%	7	7	0	0.0%
8.6%	7	7	0	0.0%
9.9%	7	7	0	0.0%
11.1%	7	7	0	0.0%
12.3%	7	7	0	-1.8%
13.6%	7	7	0	-2.6%
14.8%	7	7	0	-2.7%
16.0%	7	7	0	-5.2%
17.3%	7	7	0	-5.5%
18.5%	7	7	0	-5.5%
19.8%	7	7	0	-6.2%
21.0%	7	7	0	-6.3%
22.2%	7	7	-1	-7.6%
23.5%	7	7	-1	-8.6%
24.7%	7	6	-1	-9.1%
25.9%	7	6	-1	-10.1%
27.2%	7	6	-1	-11.3%
28.4%	7	6	-1	-11.0%
29.6%	7	6	-1	-11.2%
30.9%	7	6	-1	-10.4%
32.1%	7	6	-1	-11.2%
33.3%	7	6	-1	-11.3%
34.6%	7	6	-1	-11.0%
35.8%	7	6	-1	-12.0%
37.0%	7	6	-1	-12.9%
38.3%	7	6	-1	-12.6%
39.5%	7	6	-1	-12.5%
40.7%	7	6	-1	-13.1%
42.0%	7	6	-1	-12.9%
43.2%	6	6	-1	-11.9%
44.4%	6	6	-1	-11.0%
45.7%	6	6	-1	-12.0%
46.9%	6	6	-1	-12.0%
48.1%	6	5	-1	-11.7%
49.4%	6	5	-1	-10.9%
50.6%	6	5	-1	-11.1%
51.9%	6	5	-1	-11.1%
53.1%	6	5	-1	-10.7%
54.3%	6	5	-1	-9.6%
55.6%	6	5	-1	-9.5%
56.8%	6	5	-1	-9.1%
58.0%	6	5	-1	-9.0%
59.3%	6	5	0	-6.6%
60.5%	6	5	0	-6.5%
61.7%	6	5	0	-5.5%
63.0%	6	5	0	-5.5%
64.2%	6	5	0	-5.1%
65.4%	6	5	0	-3.7%
66.7%	6	5	0	-3.6%
67.9%	5	5	0	-2.9%
69.1%	5	5	0	-3.0%
70.4%	5	5	0	-2.7%
71.6%	5	5	0	-1.0%
72.8%	5	5	0	-0.9%
74.1%	5	5	0	-0.8%
75.3%	5	5	0	-6.1%
76.5%	5	5	0	2.5%
77.8%	5	5	0	2.9%
79.0%	5	5	0	3.2%
80.2%	5	5	0	3.3%
81.5%	5	5	0	3.8%
82.7%	5	5	0	1.7%
84.0%	5	5	0	1.4%
85.2%	5	5	0	0.2%
86.4%	5	5	0	-1.7%
87.7%	5	5	0	-2.8%
88.9%	5	5	0	-2.3%
90.1%	5	5	0	-0.3%
91.4%	4	4	0	0.0%
92.6%	4	4	0	3.3%
93.8%	4	4	0	3.2%
95.1%	4	4	0	2.4%
96.3%	4	4	0	4.2%
97.5%	4	4	0	7.3%
98.8%	4	4	0	0.9%
100.0%	3	3	0	-6.0%

August

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	6	6	0	-4.8%
1.2%	6	6	0	-1.3%
2.5%	6	6	0	-2.3%
3.7%	6	5	0	-3.3%
4.9%	6	5	0	-5.4%
6.2%	5	5	0	-3.4%
7.4%	5	5	0	-2.4%
8.6%	5	5	0	0.0%
9.9%	5	5	0	-4.7%
11.1%	5	5	0	-0.3%
12.3%	5	5	0	-0.2%
13.6%	5	5	0	1.3%
14.8%	5	5	0	3.1%
16.0%	5	5	0	3.7%
17.3%	5	5	0	4.0%
18.5%	5	5	0	4.0%
19.8%	5	5	0	4.5%
21.0%	5	5	0	4.4%
22.2%	5	5	0	3.6%
23.5%	5	5	0	2.0%
24.7%	5	5	0	1.7%
25.9%	5	5	0	1.5%
27.2%	5	5	0	1.1%
28.4%	5	5	0	0.9%
29.6%	5	5	0	0.9%
30.9%	5	5	0	0.8%
32.1%	5	5	0	0.1%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	-0.3%
45.7%	5	5	0	-0.9%
46.9%	5	5	0	-1.7%
48.1%	5	5	0	-1.8%
49.4%	5	5	0	-2.8%
50.6%	5	5	0	-2.9%
51.9%	5	5	0	-2.1%
53.1%	5	5	0	-2.3%
54.3%	5	5	0	0.2%
55.6%	5	5	0	1.2%
56.8%	5	5	0	0.7%
58.0%	4	5	0	2.0%
59.3%	4	5	0	1.7%
60.5%	4	5	0	2.6%
61.7%	4	5	0	4.9%
63.0%	4	4	0	5.1%
64.2%	4	4	0	4.1%
65.4%	4	4	0	3.1%
66.7%	4	4	0	2.7%
67.9%	4	4	0	3.0%
69.1%	4	4	0	3.3%
70.4%	4	4	0	3.6%
71.6%	4	4	0	2.7%
72.8%	4	4	0	3.1%
74.1%	4	4	0	2.0%
75.3%	4	4	0	2.7%
76.5%	4	4	0	2.6%
77.8%	4	4	0	2.9%
79.0%	4	4	0	2.4%
80.2%	4	4	0	4.4%
81.5%	4	4	0	6.0%
82.7%	4	4	0	5.2%
84.0%	4	4	0	6.7%
85.2%	4	4	0	6.6%
86.4%	4	4	0	6.2%
87.7%	4	4	0	5.0%
88.9%	4	4	0	2.9%
90.1%	4	4	0	2.7%
91.4%	4	4	0	1.7%
92.6%	4	4	0	0.9%
93.8%	4	4	0	0.8%
95.1%	4	4	0	0.0%
96.3%	4	4	0	3.5%
97.5%	3	4	0	9.3%
98.8%	3	4	0	9.8%
100.0%	3	3	0	8.0%

September

Percent Exceedance Probability	WSIP 2030 Without Project Monthly Stage (FT)	WSIP 2030 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	-0.5%
1.2%	7	7	0	-1.8%
2.5%	7	7	0	-2.3%
3.7%	7	7	0	-2.4%
4.9%	7	7	0	-3.2%
6.2%	7	6	-1	-8.1%
7.4%	7	6	0	-2.8%
8.6%	6	6	0	-1.2%
9.9%	6	6	0	-1.6%
11.1%	6	6	0	-3.4%
12.3%	6	6	0	-3.5%
13.6%	6	6	0	-1.0%
14.8%	6	6	0	-1.3%
16.0%	6	6	0	-1.9%
17.3%	6	6	0	-0.6%
18.5%	6	6	0	-0.3%
19.8%	6	6	0	0.0%
21.0%	6	6	0	-0.3%
22.2%	5	6	0	0.3%
23.5%	5	5	0	-0.4%
24.7%	5	5	0	-1.2%
25.9%	5	5	0	-2.6%
27.2%	5	5	0	-0.3%
28.4%	5	5	0	-3.3%
29.6%	5	5	0	-1.1%
30.9%	5	5	0	-1.5%
32.1%	5	5	0	-0.1%
33.3%	5	5	0	-0.7%
34.6%	5	5	0	-0.9%
35.8%	5	5	0	-0.6%
37.0%	5	5	0	1.3%
38.3%	5	5	0	2.5%
39.5%	5	5	0	2.5%
40.7%	5	5	0	2.5%
42.0%	5	5	0	2.0%
43.2%	5	5	0	1.5%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.1%
49.4%	5	5	0	0.4%
50.6%	5	5	0	0.4%
51.9%	5	5	0	0.1%
53.1%	5	5	0	0.5%
54.3%	5	5	0	0.6%
55.6%	4	5	0	2.4%
56.8%	4	5	0	3.7%
58.0%	4	4	0	4.4%
59.3%	4	4	0	4.5%
60.5%	4	4	0	4.8%
61.7%	4	4	0	4.8%
63.0%	4	4	0	5.1%
64.2%	4	4	0	3.6%
65.4%	4	4	0	4.9%
66.7%	4	4	0	5.1%
67.9%	4	4	0	4.8%
69.1%	4	4	0	5.7%
70.4%	4	4	0	5.2%
71.6%	4	4	0	5.1%
72.8%	4	4	0	7.2%
74.1%	4	4	0	8.3%
75.3%	4	4	0	9.8%
76.5%	4	4	0	10.4%
77.8%	4	4	0	10.1%
79.0%	4	4	0	8.1%
80.2%	4	4	0	8.0%
81.5%	4	4	0	7.6%
82.7%	4	4	0	7.6%
84.0%	4	4	0	7.1%
85.2%	4	4	0	6.9%
86.4%	4	4	0	5.2%
87.7%	4	4	0	4.3%
88.9%	4	4	0	2.3%
90.1%	4	4	0	1.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	3.6%
96.3%	3	4	0	9.1%
97.5%	3	4	0	9.5%
98.8%	3	3	0	4.5%
100.0%	3	3	0	1.4%

Trinity and Sacramento River Basin Operations

Summary Tables and Bar Charts

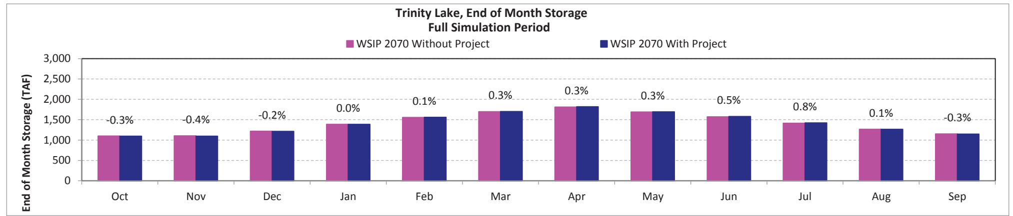
Table SW-01-a
Trinity Lake, End of Month Storage
Long-term Average and Average by Water Year Type

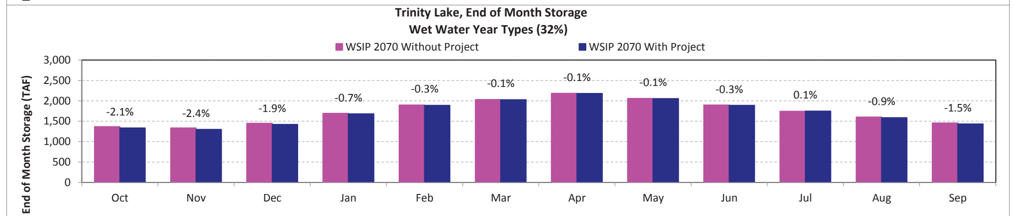
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1,101	1,103	1,217	1,387	1,558	1,697	1,814	1,689	1,572	1,414	1,264	1,152
WSIP 2070 With Project	1,097	1,099	1,214	1,387	1,560	1,701	1,819	1,693	1,579	1,425	1,265	1,149
Difference	-4	-5	-2	0	1	4	5	5	8	11	1	-3
Percent Difference[3]	-0.3%	-0.4%	-0.2%	0.0%	0.1%	0.3%	0.3%	0.3%	0.5%	0.8%	0.1%	-0.3%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1,365	1,334	1,450	1,694	1,898	2,030	2,184	2,058	1,896	1,745	1,602	1,456
WSIP 2070 With Project	1,337	1,302	1,423	1,681	1,892	2,027	2,181	2,056	1,890	1,747	1,589	1,434
Difference	-29	-33	-27	-13	-6	-3	-3	-3	-6	2	-14	-22
Percent Difference	-2.1%	-2.4%	-1.9%	-0.7%	-0.3%	-0.1%	-0.1%	-0.1%	-0.3%	0.1%	-0.9%	-1.5%
Above Normal (13.4%)												
WSIP 2070 Without Project	1,368	1,356	1,425	1,537	1,798	1,975	2,127	1,968	1,857	1,700	1,555	1,420
WSIP 2070 With Project	1,340	1,333	1,406	1,529	1,792	1,983	2,135	1,975	1,874	1,716	1,541	1,395
Difference	-28	-24	-19	-8	-6	8	8	8	17	16	-14	-25
Percent Difference	-2.0%	-1.7%	-1.4%	-0.5%	-0.3%	0.4%	0.4%	0.4%	0.9%	1.0%	-0.9%	-1.8%
Below Normal (15.9%)												
WSIP 2070 Without Project	1,154	1,181	1,303	1,376	1,523	1,680	1,817	1,697	1,600	1,443	1,279	1,181
WSIP 2070 With Project	1,147	1,176	1,300	1,369	1,516	1,672	1,810	1,691	1,597	1,443	1,272	1,170
Difference	-7	-4	-3	-7	-7	-9	-7	-7	-3	0	-7	-11
Percent Difference	-0.6%	-0.4%	-0.2%	-0.5%	-0.5%	-0.5%	-0.4%	-0.4%	-0.2%	0.0%	-0.5%	-0.9%
Dry (24.4%)												
WSIP 2070 Without Project	881	913	1,075	1,198	1,350	1,505	1,591	1,453	1,345	1,168	994	903
WSIP 2070 With Project	889	921	1,080	1,213	1,369	1,522	1,608	1,471	1,364	1,186	1,010	913
Difference	8	8	5	15	19	17	17	17	19	18	15	10
Percent Difference	0.9%	0.9%	0.5%	1.2%	1.4%	1.1%	1.1%	1.2%	1.4%	1.6%	1.5%	1.1%
Critical (14.6%)												
WSIP 2070 Without Project	593	604	664	914	988	1,057	1,095	1,016	954	815	701	627
WSIP 2070 With Project	650	657	719	931	993	1,068	1,105	1,024	977	840	731	673
Difference	56	52	54	17	6	11	9	9	23	25	31	47
Percent Difference	9.5%	8.7%	8.2%	1.8%	0.6%	1.0%	0.9%	0.9%	2.4%	3.1%	4.4%	7.5%

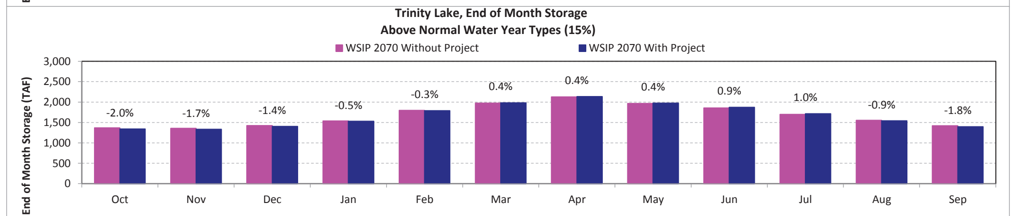
1 Based on the 82-year simulation period

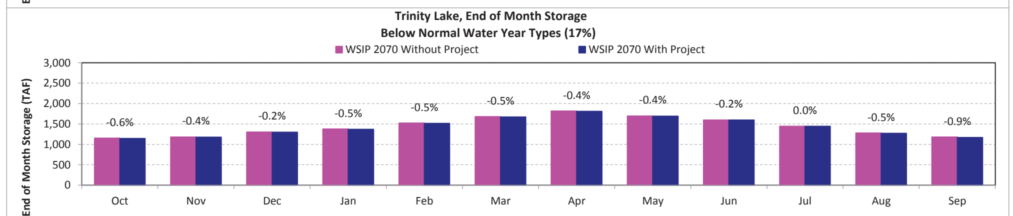
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

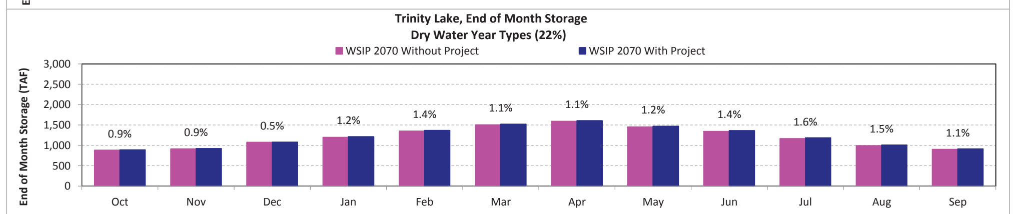
3 Relative difference of the monthly average











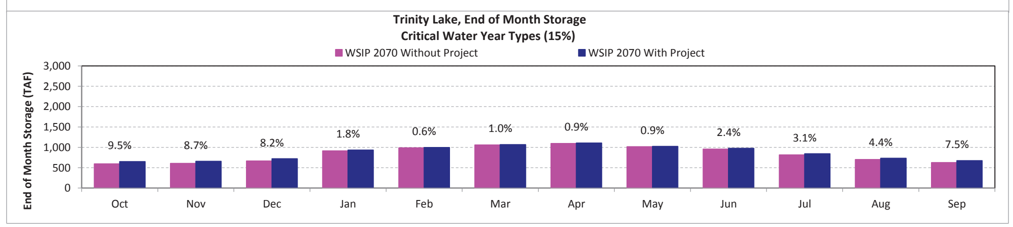


Table SW-02-a

Trinity Lake, End of Month Elevation

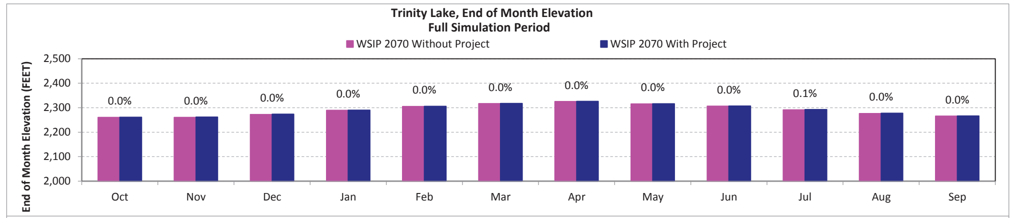
Long-term Average and Average by Water Year Type

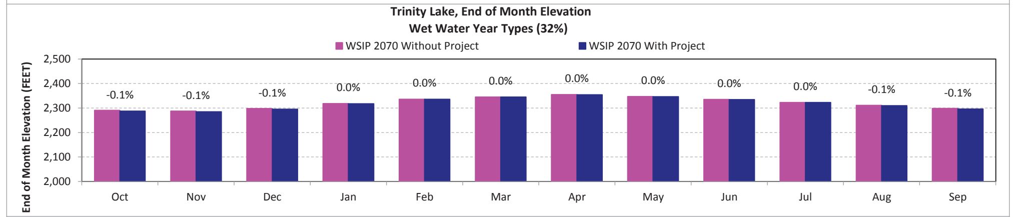
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	2,261	2,261	2,273	2,290	2,305	2,317	2,325	2,316	2,307	2,292	2,277	2,266
WSIP 2070 With Project	2,261	2,262	2,274	2,290	2,306	2,318	2,326	2,317	2,307	2,293	2,278	2,266
Difference	1	1	1	1	1	1	1	1	1	1	1	1
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	2,291	2,288	2,298	2,319	2,336	2,345	2,355	2,347	2,335	2,323	2,311	2,299
WSIP 2070 With Project	2,288	2,285	2,296	2,317	2,336	2,345	2,355	2,347	2,335	2,323	2,310	2,296
Difference	-3	-3	-2	-1	0	0	0	0	-1	0	-1	-2
Percent Difference	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Above Normal (13.4%)												
WSIP 2070 Without Project	2,291	2,290	2,296	2,304	2,327	2,341	2,350	2,340	2,332	2,319	2,307	2,296
WSIP 2070 With Project	2,289	2,288	2,294	2,303	2,327	2,342	2,351	2,341	2,334	2,321	2,306	2,293
Difference	-2	-2	-2	0	0	1	1	1	1	1	-1	-2
Percent Difference	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	-0.1%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,271	2,274	2,285	2,291	2,304	2,318	2,328	2,319	2,311	2,298	2,283	2,274
WSIP 2070 With Project	2,271	2,274	2,285	2,291	2,304	2,317	2,328	2,319	2,311	2,298	2,283	2,273
Difference	-1	0	0	0	0	-1	0	-1	0	0	0	-1
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (24.4%)												
WSIP 2070 Without Project	2,239	2,243	2,260	2,274	2,288	2,303	2,310	2,298	2,288	2,271	2,253	2,242
WSIP 2070 With Project	2,240	2,244	2,261	2,276	2,291	2,304	2,312	2,300	2,290	2,274	2,255	2,243
Difference	1	1	1	2	2	2	2	2	2	2	2	1
Percent Difference	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Critical (14.6%)												
WSIP 2070 Without Project	2,192	2,192	2,205	2,239	2,249	2,258	2,262	2,253	2,246	2,225	2,208	2,198
WSIP 2070 With Project	2,205	2,206	2,216	2,243	2,251	2,260	2,264	2,255	2,249	2,230	2,215	2,209
Difference	13	14	11	4	2	2	1	1	3	5	6	11
Percent Difference	0.6%	0.6%	0.5%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.3%	0.5%

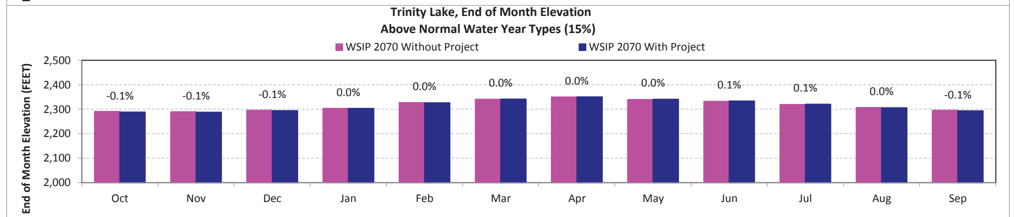
1 Based on the 82-year simulation period

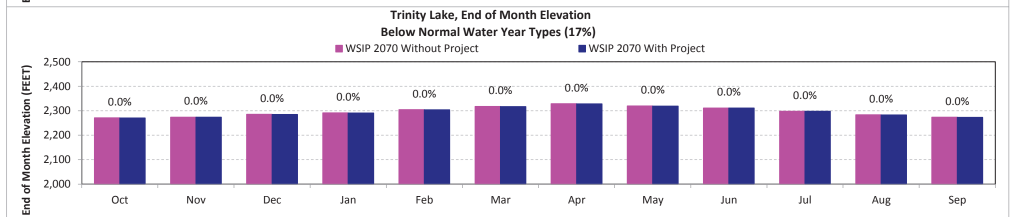
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

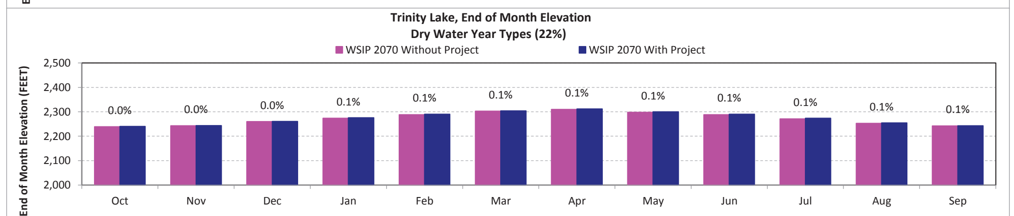
3 Relative difference of the monthly average











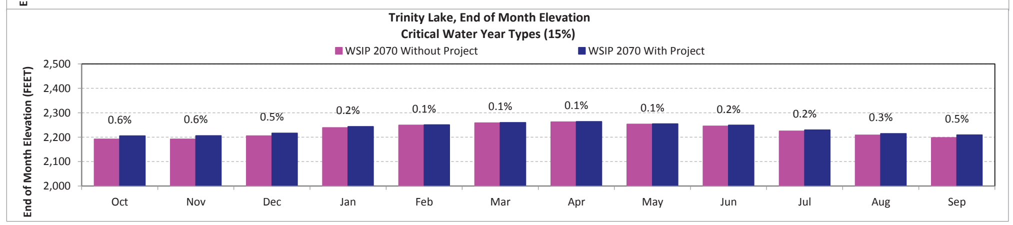


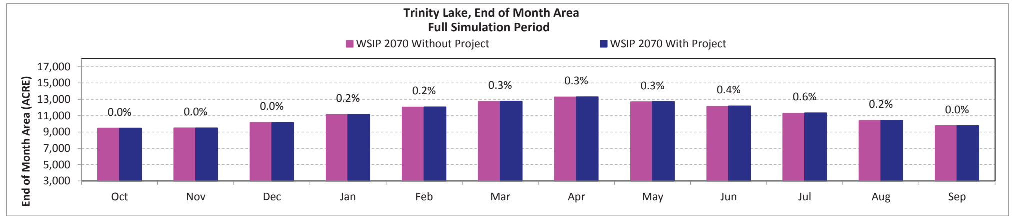
Table SW-03-a
Trinity Lake, End of Month Area
Long-term Average and Average by Water Year Type

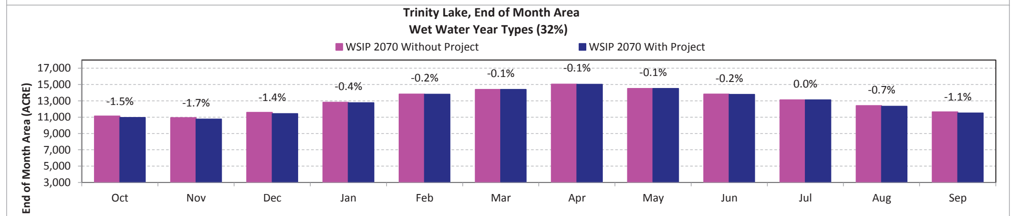
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	9,466	9,483	10,163	11,124	12,036	12,733	13,273	12,688	12,120	11,269	10,420	9,767
WSIP 2070 With Project	9,462	9,479	10,165	11,145	12,060	12,770	13,308	12,722	12,174	11,342	10,438	9,767
Difference	-4	-4	2	21	24	37	34	34	54	73	19	0
Percent Difference[3]	0.0%	0.0%	0.0%	0.2%	0.2%	0.3%	0.3%	0.3%	0.4%	0.6%	0.2%	0.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	11,131	10,946	11,587	12,815	13,830	14,398	15,033	14,515	13,819	13,115	12,414	11,640
WSIP 2070 With Project	10,959	10,756	11,426	12,764	13,804	14,386	15,022	14,502	13,791	13,118	12,329	11,511
Difference	-172	-190	-161	-52	-26	-12	-12	-13	-29	3	-85	-129
Percent Difference	-1.5%	-1.7%	-1.4%	-0.4%	-0.2%	-0.1%	-0.1%	-0.1%	-0.2%	0.0%	-0.7%	-1.1%
Above Normal (13.4%)												
WSIP 2070 Without Project	11,159	11,101	11,463	11,981	13,276	14,103	14,751	14,073	13,612	12,888	12,182	11,468
WSIP 2070 With Project	11,003	10,970	11,356	11,952	13,260	14,157	14,797	14,126	13,697	12,989	12,121	11,329
Difference	-156	-130	-107	-29	-16	54	46	53	85	100	-61	-139
Percent Difference	-1.4%	-1.2%	-0.9%	-0.2%	-0.1%	0.4%	0.3%	0.4%	0.6%	0.8%	-0.5%	-1.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	9,911	10,077	10,797	11,184	11,951	12,763	13,446	12,923	12,431	11,598	10,663	10,073
WSIP 2070 With Project	9,872	10,054	10,778	11,151	11,930	12,733	13,427	12,895	12,426	11,604	10,630	10,007
Difference	-39	-23	-19	-33	-20	-30	-19	-28	-5	6	-34	-66
Percent Difference	-0.4%	-0.2%	-0.2%	-0.3%	-0.2%	-0.2%	-0.1%	-0.2%	0.0%	0.1%	-0.3%	-0.7%
Dry (24.4%)												
WSIP 2070 Without Project	8,122	8,327	9,329	10,127	11,037	11,902	12,353	11,637	11,021	9,961	8,864	8,274
WSIP 2070 With Project	8,175	8,379	9,369	10,229	11,160	12,006	12,449	11,739	11,138	10,083	8,964	8,337
Difference	53	52	40	102	123	104	96	102	117	122	100	63
Percent Difference	0.7%	0.6%	0.4%	1.0%	1.1%	0.9%	0.8%	0.9%	1.1%	1.2%	1.1%	0.8%
Critical (14.6%)												
WSIP 2070 Without Project	6,065	6,117	6,589	8,271	8,771	9,225	9,452	8,958	8,563	7,607	6,812	6,308
WSIP 2070 With Project	6,510	6,556	7,004	8,418	8,824	9,311	9,530	9,029	8,728	7,798	7,049	6,682
Difference	445	439	415	148	53	86	78	71	166	191	237	374
Percent Difference	7.3%	7.2%	6.3%	1.8%	0.6%	0.9%	0.8%	0.8%	1.9%	2.5%	3.5%	5.9%

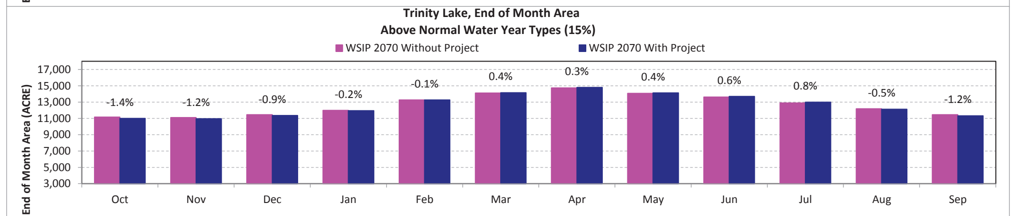
1 Based on the 82-year simulation period

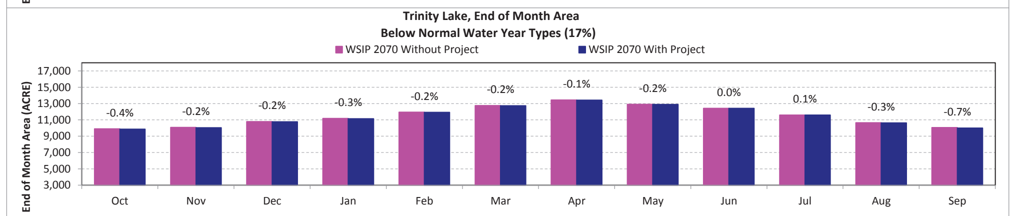
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

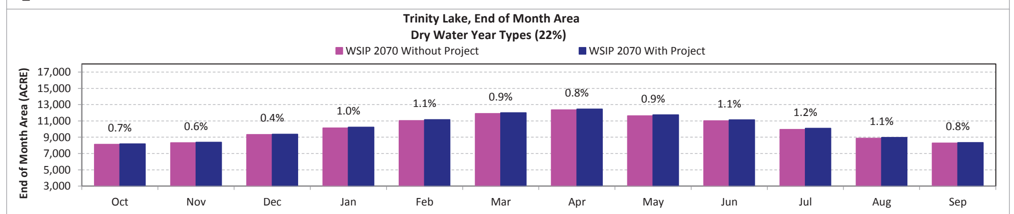
3 Relative difference of the monthly average











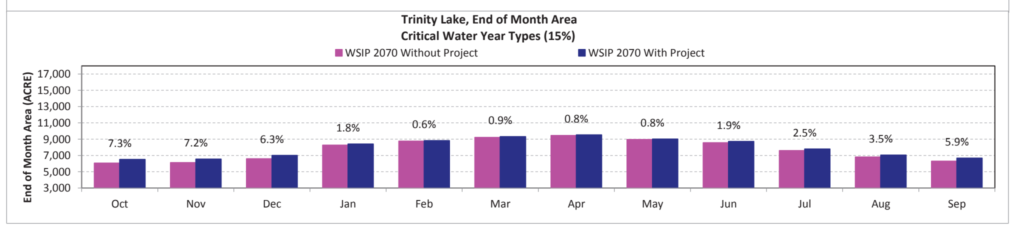
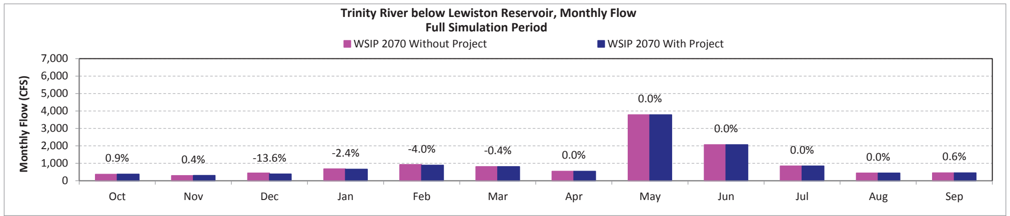
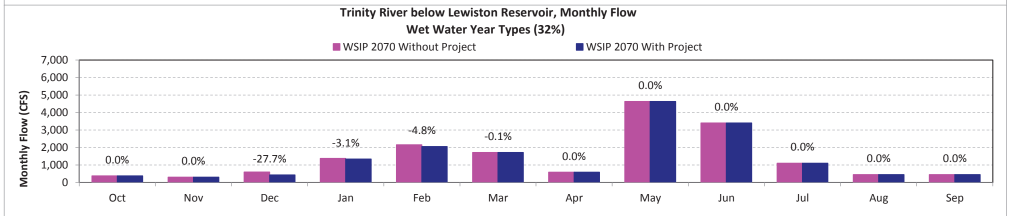


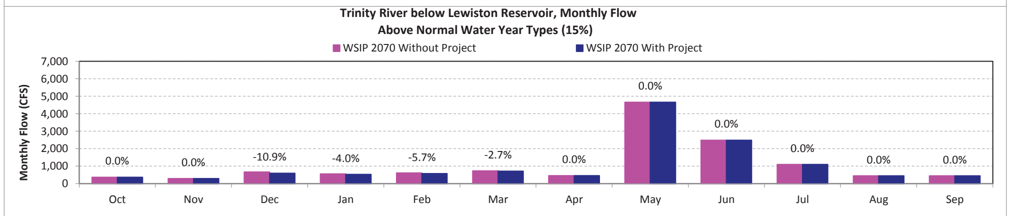
Table SW-04-a
Trinity River below Lewiston Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

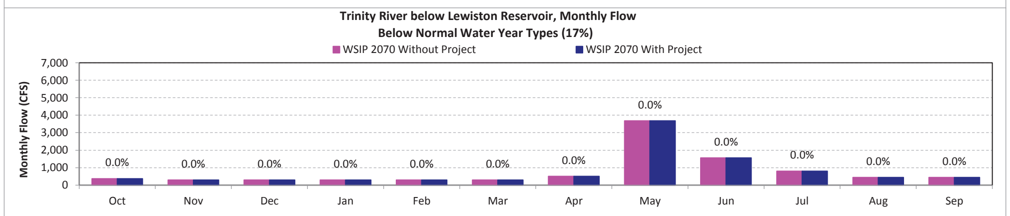
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	370	299	443	676	932	808	540	3,779	2,068	848	445	447
WSIP 2070 With Project	373	300	382	660	895	805	540	3,779	2,068	848	445	450
Difference	3	1	-60	-16	-37	-4	0	0	0	0	0	3
Percent Difference[3]	0.9%	0.4%	-13.6%	-2.4%	-4.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	373	300	592	1,376	2,159	1,716	582	4,630	3,399	1,102	450	450
WSIP 2070 With Project	373	300	428	1,334	2,055	1,714	582	4,630	3,399	1,102	450	450
Difference	0	0	-164	-42	-103	-2	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	-27.7%	-3.1%	-4.8%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	373	300	673	560	619	741	463	4,662	2,489	1,102	450	450
WSIP 2070 With Project	373	300	599	537	584	720	463	4,662	2,489	1,102	450	450
Difference	0	0	-73	-23	-35	-20	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	-10.9%	-4.0%	-5.7%	-2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	373	300	300	300	300	300	510	3,685	1,565	801	450	450
WSIP 2070 With Project	373	300	300	300	300	300	510	3,685	1,565	801	450	450
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (24.4%)												
WSIP 2070 Without Project	373	300	300	300	300	300	527	3,258	1,204	646	450	450
WSIP 2070 With Project	373	300	306	300	300	300	527	3,258	1,204	646	450	450
Difference	0	0	6	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
WSIP 2070 Without Project	351	291	300	300	300	300	575	2,092	783	450	413	433
WSIP 2070 With Project	373	300	300	300	300	300	575	2,092	783	450	413	450
Difference	22	9	0	0	0	0	0	0	0	0	0	17
Percent Difference	6.3%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%

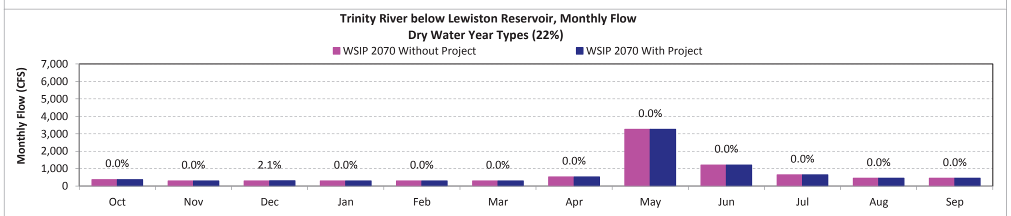
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











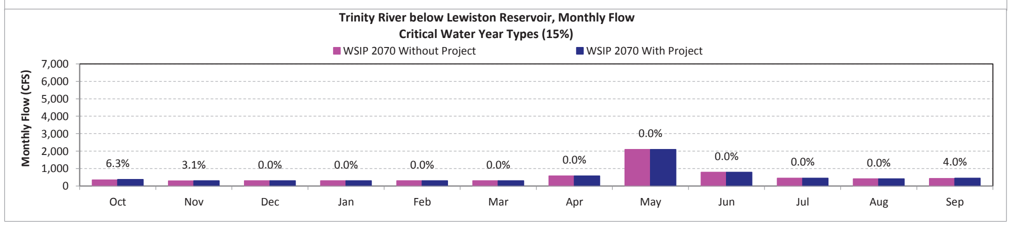


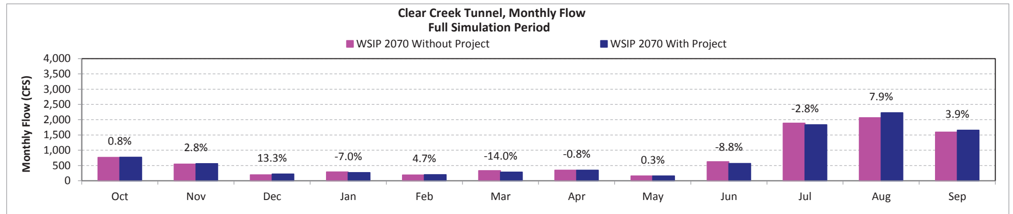
Table SW-05-a
Clear Creek Tunnel, Monthly Flow
Long-term Average and Average by Water Year Type

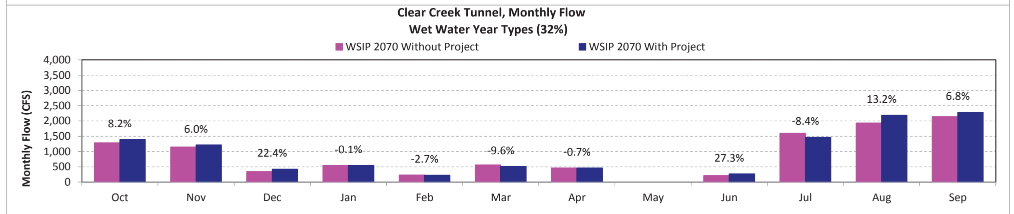
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	765	545	195	287	191	329	348	155	622	1,889	2,067	1,596
WSIP 2070 With Project	772	560	221	267	199	283	346	156	568	1,837	2,230	1,659
Difference	6	15	26	-20	9	-46	-3	0	-55	-53	163	63
Percent Difference[3]	0.8%	2.8%	13.3%	-7.0%	4.7%	-14.0%	-0.8%	0.3%	-8.8%	-2.8%	7.9%	3.9%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1,285	1,145	341	538	228	559	462	0	208	1,596	1,933	2,139
WSIP 2070 With Project	1,390	1,213	417	537	222	506	459	0	264	1,462	2,189	2,284
Difference	105	68	76	-1	-6	-54	-3	0	57	-133	256	144
Percent Difference	8.2%	6.0%	22.4%	-0.1%	-2.7%	-9.6%	-0.7%		27.3%	-8.4%	13.2%	6.8%
Above Normal (13.4%)												
WSIP 2070 Without Project	1,126	940	191	68	64	543	174	0	293	1,582	1,981	1,880
WSIP 2070 With Project	1,164	873	197	55	64	334	183	0	141	1,583	2,481	2,062
Difference	38	-67	7	-14	0	-210	9	0	-152	1	500	182
Percent Difference	3.3%	-7.2%	3.5%			-38.6%	5.2%		-51.9%	0.1%	25.2%	9.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	440	158	92	144	100	110	262	115	628	1,853	2,292	1,404
WSIP 2070 With Project	365	119	75	185	100	131	234	115	564	1,808	2,394	1,481
Difference	-74	-38	-17	41	0	21	-28	0	-64	-45	102	77
Percent Difference	-16.9%	-24.4%	-18.4%	28.5%	0.0%	19.1%	-10.9%	0.0%	-10.2%	-2.4%	4.5%	5.5%
Dry (24.4%)												
WSIP 2070 Without Project	355	64	66	260	323	118	302	340	1,218	2,416	2,451	1,186
WSIP 2070 With Project	377	66	100	175	248	150	295	335	1,187	2,426	2,501	1,281
Difference	23	3	34	-84	-75	31	-7	-4	-30	10	50	95
Percent Difference	6.4%			-32.5%	-23.2%	26.5%	-2.2%	-1.3%	-2.5%	0.4%	2.0%	8.0%
Critical (14.6%)												
WSIP 2070 Without Project	347	104	208	145	102	219	433	371	824	1,969	1,552	1,050
WSIP 2070 With Project	170	159	174	117	302	137	454	381	588	1,930	1,457	757
Difference	-178	55	-33	-28	200	-82	21	10	-236	-39	-96	-293
Percent Difference	-51.1%	53.6%	-16.1%	-19.3%		-37.2%	4.9%	2.7%	-28.7%	-2.0%	-6.2%	-27.9%

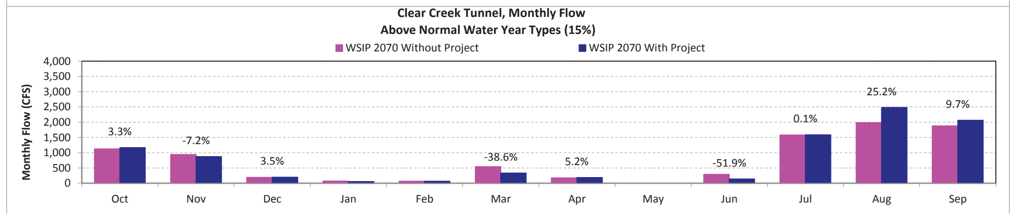
1 Based on the 82-year simulation period

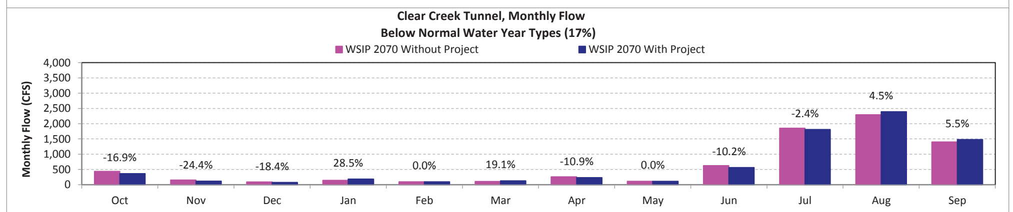
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

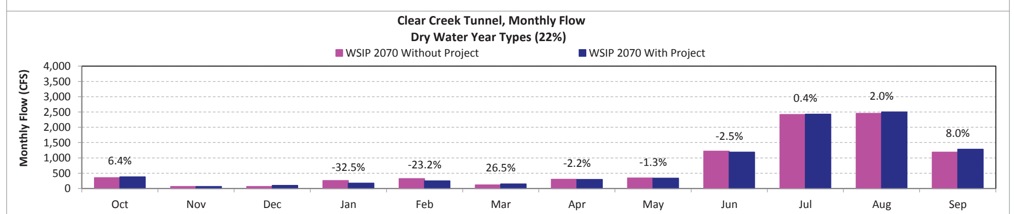
3 Relative difference of the monthly average











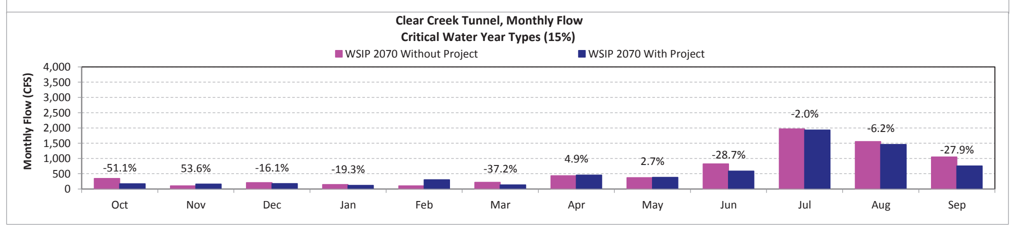
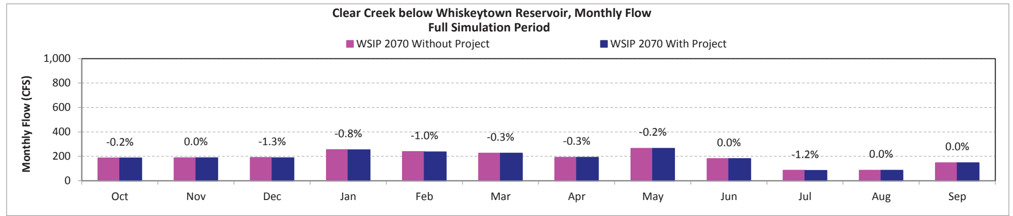
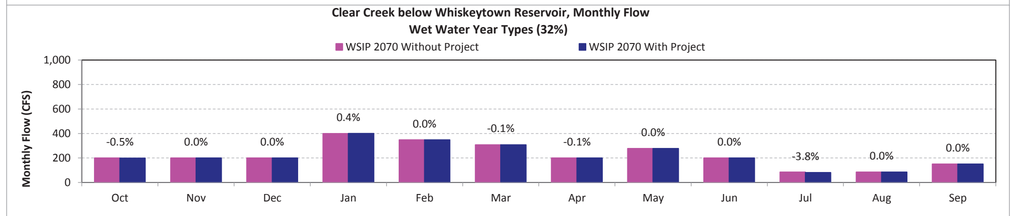


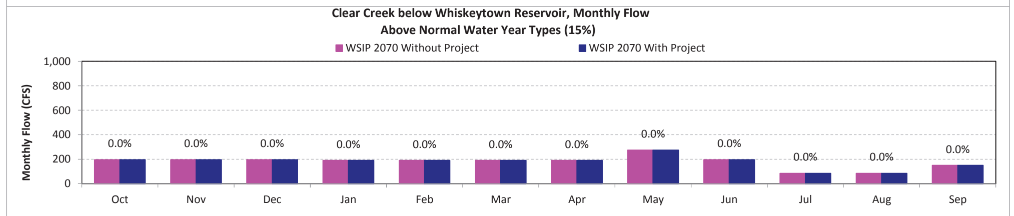
Table SW-06-a
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

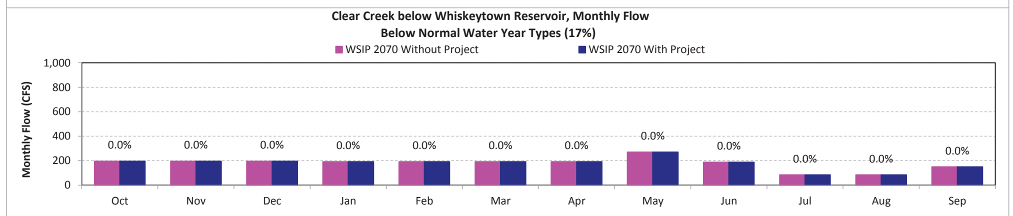
Analysis Period	Monthly Flow (CFS)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	187	188	190	255	238	226	192	265	181	85	85	148
WSIP 2070 With Project	186	188	187	253	236	225	191	265	181	84	85	148
Difference	0	0	-2	-2	-2	-1	-1	-1	0	-1	0	0
Percent Difference[3]	-0.2%	0.0%	-1.3%	-0.8%	-1.0%	-0.3%	-0.3%	-0.2%	0.0%	-1.2%	0.0%	0.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	200	200	200	399	348	308	200	277	200	85	85	150
WSIP 2070 With Project	199	200	200	401	348	308	200	277	200	82	85	150
Difference	-1	0	0	2	0	0	0	0	0	-3	0	0
Percent Difference	-0.5%	0.0%	0.0%	0.4%	0.0%	-0.1%	-0.1%	0.0%	0.0%	-3.8%	0.0%	0.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	195	195	195	191	191	191	191	274	195	85	85	150
WSIP 2070 With Project	195	195	195	191	191	191	191	274	195	85	85	150
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	196	196	196	192	192	192	192	271	188	85	85	150
WSIP 2070 With Project	196	196	196	192	192	192	192	271	188	85	85	150
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (24.4%)												
WSIP 2070 Without Project	183	185	185	193	193	193	193	265	182	85	85	150
WSIP 2070 With Project	183	185	175	193	193	193	193	265	182	85	85	150
Difference	0	0	-10	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	-5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
WSIP 2070 Without Project	146	149	163	171	171	171	171	224	120	85	85	133
WSIP 2070 With Project	146	149	163	154	154	167	167	220	120	85	85	133
Difference	0	0	0	-17	-17	-4	-4	-4	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	-9.8%	-9.8%	-2.4%	-2.4%	-1.6%	0.0%	0.0%	0.0%	0.0%

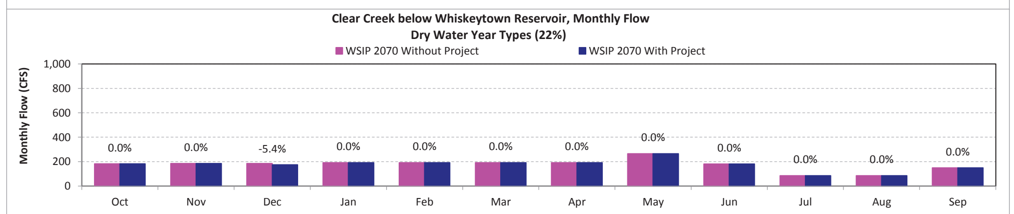
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











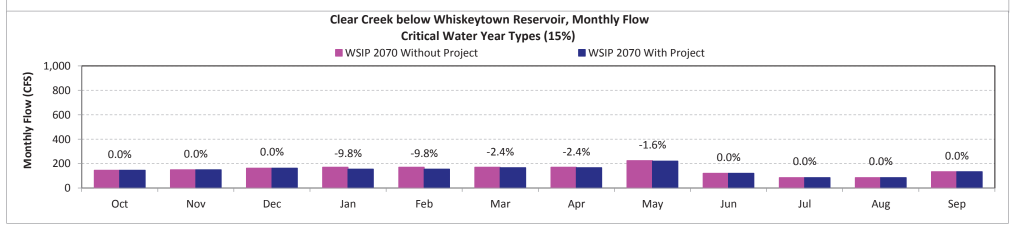


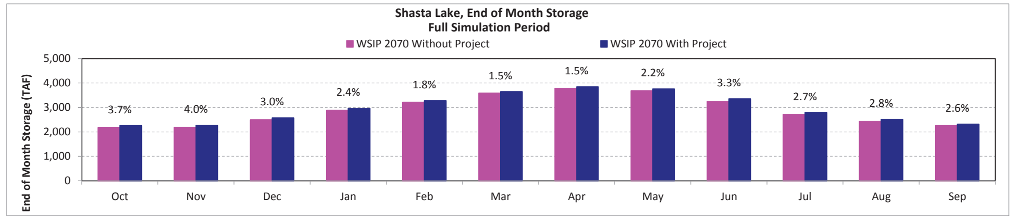
Table SW-07-a
Shasta Lake, End of Month Storage
Long-term Average and Average by Water Year Type

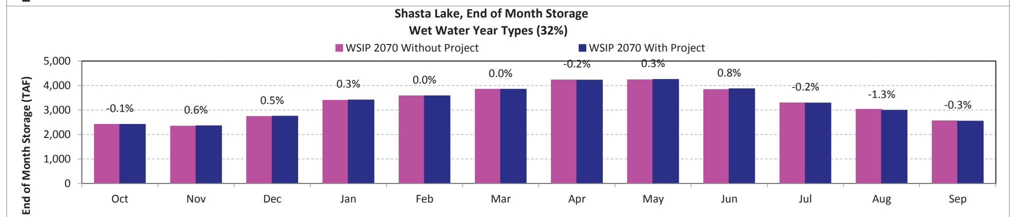
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	2,179	2,180	2,499	2,892	3,216	3,591	3,788	3,681	3,249	2,716	2,440	2,262
WSIP 2070 With Project	2,260	2,267	2,575	2,962	3,275	3,645	3,844	3,761	3,356	2,789	2,508	2,321
Difference	81	87	75	70	59	54	56	80	107	73	68	59
Percent Difference[3]	3.7%	4.0%	3.0%	2.4%	1.8%	1.5%	1.5%	2.2%	3.3%	2.7%	2.8%	2.6%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	2,412	2,339	2,728	3,392	3,574	3,841	4,226	4,228	3,831	3,285	3,023	2,552
WSIP 2070 With Project	2,409	2,354	2,741	3,402	3,575	3,842	4,219	4,242	3,860	3,278	2,985	2,544
Difference	-3	15	13	10	1	1	-7	14	30	-7	-38	-8
Percent Difference	-0.1%	0.6%	0.5%	0.3%	0.0%	0.0%	-0.2%	0.3%	0.8%	-0.2%	-1.3%	-0.3%
Above Normal (13.4%)												
WSIP 2070 Without Project	2,550	2,460	2,633	3,248	3,516	4,056	4,367	4,271	3,836	3,215	2,955	2,686
WSIP 2070 With Project	2,671	2,566	2,694	3,245	3,515	4,053	4,370	4,289	3,917	3,221	2,961	2,789
Difference	121	106	61	-2	-1	-3	3	18	81	6	6	104
Percent Difference	4.7%	4.3%	2.3%	-0.1%	0.0%	-0.1%	0.1%	0.4%	2.1%	0.2%	0.2%	3.9%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,681	2,725	2,986	2,924	3,336	3,793	4,055	3,949	3,478	2,875	2,602	2,658
WSIP 2070 With Project	2,660	2,713	2,960	3,008	3,407	3,860	4,097	4,018	3,580	2,938	2,655	2,646
Difference	-21	-12	-27	84	71	67	42	69	102	63	53	-13
Percent Difference	-0.8%	-0.5%	-0.9%	2.9%	2.1%	1.8%	1.0%	1.8%	2.9%	2.2%	2.0%	-0.5%
Dry (24.4%)												
WSIP 2070 Without Project	2,127	2,214	2,576	2,560	3,098	3,542	3,586	3,386	2,938	2,445	2,160	2,167
WSIP 2070 With Project	2,233	2,329	2,681	2,661	3,181	3,614	3,662	3,478	3,061	2,556	2,280	2,224
Difference	106	114	104	100	83	71	75	92	123	110	120	56
Percent Difference	5.0%	5.2%	4.0%	3.9%	2.7%	2.0%	2.1%	2.7%	4.2%	4.5%	5.5%	2.6%
Critical (14.6%)												
WSIP 2070 Without Project	875	932	1,226	2,002	2,230	2,486	2,357	2,157	1,719	1,305	997	971
WSIP 2070 With Project	1,172	1,219	1,511	2,204	2,419	2,665	2,579	2,428	1,995	1,563	1,282	1,219
Difference	297	287	285	203	189	179	222	271	276	257	286	247
Percent Difference	34.0%	30.8%	23.3%	10.1%	8.5%	7.2%	9.4%	12.6%	16.0%	19.7%	28.7%	25.5%

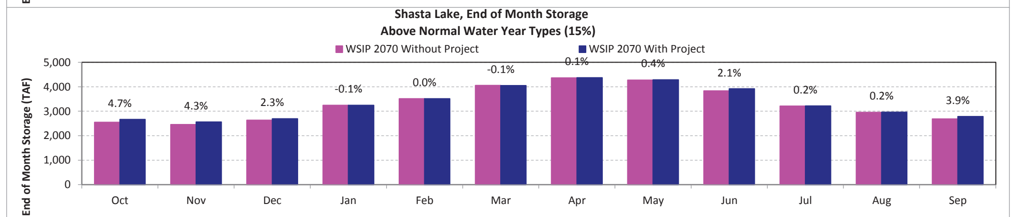
1 Based on the 82-year simulation period

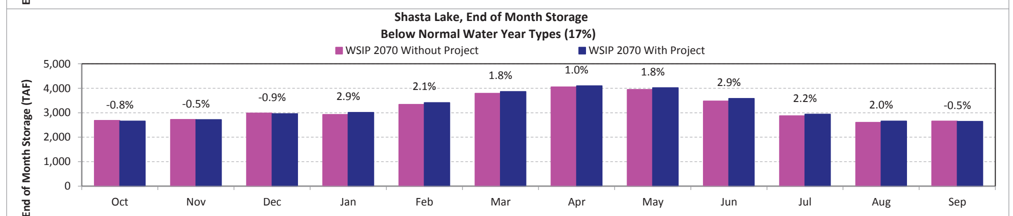
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

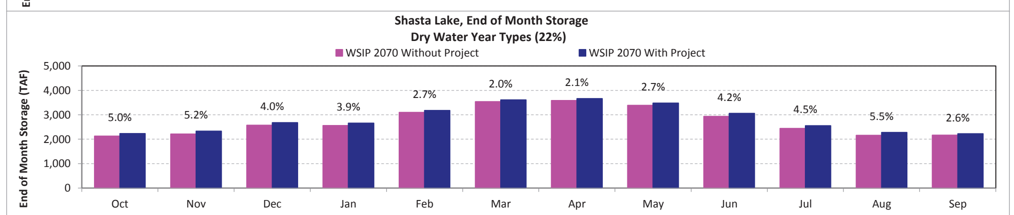
3 Relative difference of the monthly average











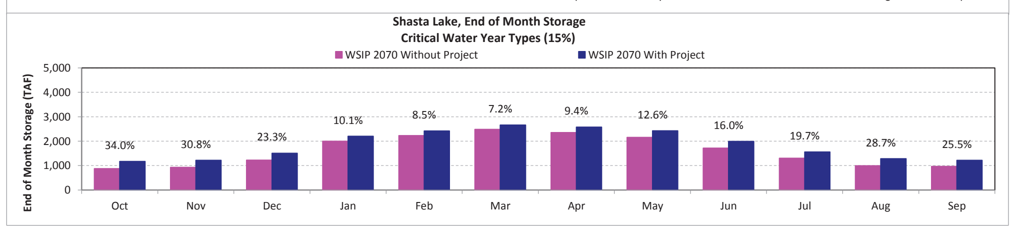


Table SW-08-a
Shasta Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	961	961	979	998	1,013	1,030	1,037	1,032	1,013	989	974	966
WSIP 2070 With Project	967	967	984	1,003	1,017	1,032	1,039	1,036	1,019	993	979	970
Difference	6	6	5	4	3	3	3	4	5	5	5	5
Percent Difference[3]	0.7%	0.7%	0.5%	0.4%	0.3%	0.2%	0.3%	0.4%	0.5%	0.5%	0.5%	0.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	977	974	993	1,023	1,031	1,041	1,055	1,055	1,040	1,018	1,007	985
WSIP 2070 With Project	977	974	993	1,023	1,031	1,041	1,055	1,056	1,042	1,018	1,005	985
Difference	0	1	1	0	0	0	0	1	1	0	-2	0
Percent Difference	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	0.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	985	981	989	1,017	1,028	1,049	1,060	1,057	1,041	1,015	1,004	992
WSIP 2070 With Project	991	986	992	1,017	1,028	1,049	1,061	1,058	1,044	1,016	1,004	997
Difference	6	5	3	0	0	0	0	1	3	0	0	5
Percent Difference	0.6%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	0.5%
Below Normal (15.9%)												
WSIP 2070 Without Project	991	993	1,005	1,002	1,020	1,039	1,049	1,045	1,026	1,000	988	990
WSIP 2070 With Project	990	993	1,004	1,006	1,023	1,042	1,051	1,048	1,030	1,003	990	989
Difference	-1	-1	-1	4	3	3	2	2	4	3	2	-1
Percent Difference	-0.1%	-0.1%	-0.1%	0.4%	0.3%	0.3%	0.1%	0.2%	0.4%	0.3%	0.2%	-0.1%
Dry (24.4%)												
WSIP 2070 Without Project	962	966	985	984	1,009	1,028	1,030	1,022	1,002	979	964	965
WSIP 2070 With Project	968	973	990	990	1,013	1,032	1,033	1,026	1,008	984	971	968
Difference	6	7	6	6	4	3	3	4	6	5	7	3
Percent Difference	0.6%	0.7%	0.6%	0.6%	0.4%	0.3%	0.3%	0.4%	0.6%	0.6%	0.7%	0.3%
Critical (14.6%)												
WSIP 2070 Without Project	866	872	900	949	963	979	972	961	933	904	878	875
WSIP 2070 With Project	895	899	922	962	974	988	984	977	951	925	904	899
Difference	29	27	22	13	11	9	12	16	18	20	26	24
Percent Difference	3.4%	3.1%	2.4%	1.4%	1.2%	0.9%	1.2%	1.7%	1.9%	2.3%	3.0%	2.8%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

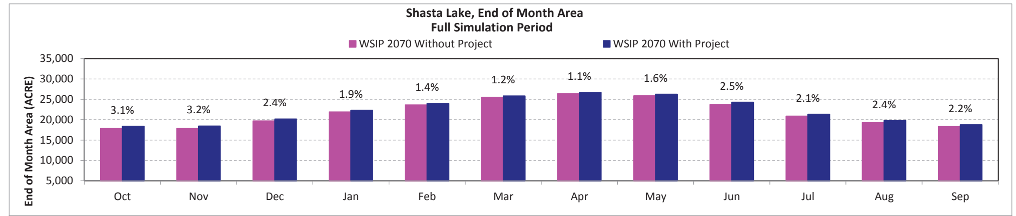
Table SW-09-a
Shasta Lake, End of Month Area
Long-term Average and Average by Water Year Type

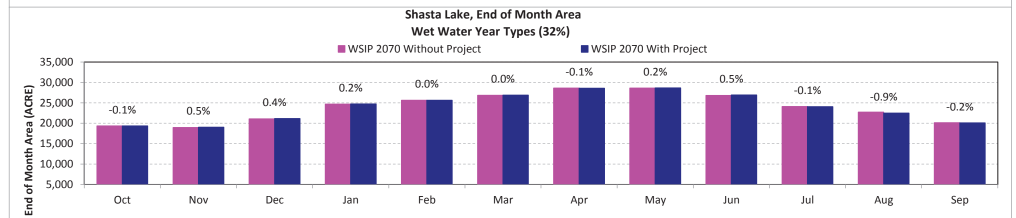
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	17,848	17,873	19,721	21,907	23,654	25,533	26,393	25,856	23,710	20,891	19,325	18,346
WSIP 2070 With Project	18,394	18,439	20,185	22,325	23,992	25,828	26,696	26,279	24,295	21,340	19,782	18,751
Difference	547	567	465	419	338	294	303	422	586	449	457	405
Percent Difference[3]	3.1%	3.2%	2.4%	1.9%	1.4%	1.2%	1.1%	1.6%	2.5%	2.1%	2.4%	2.2%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	19,348	18,932	21,085	24,683	25,616	26,861	28,600	28,604	26,794	24,078	22,706	20,132
WSIP 2070 With Project	19,335	19,019	21,160	24,737	25,623	26,867	28,570	28,666	26,930	24,049	22,500	20,096
Difference	-13	86	76	54	7	6	-30	62	136	-29	-206	-36
Percent Difference	-0.1%	0.5%	0.4%	0.2%	0.0%	0.0%	-0.1%	0.2%	0.5%	-0.1%	-0.9%	-0.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	20,140	19,639	20,592	23,912	25,333	27,873	29,208	28,795	26,860	23,729	22,350	20,894
WSIP 2070 With Project	20,802	20,224	20,928	23,901	25,331	27,859	29,220	28,871	27,256	23,770	22,382	21,457
Difference	662	585	336	-11	-3	-14	12	76	395	42	32	563
Percent Difference	3.3%	3.0%	1.6%	0.0%	0.0%	-0.1%	0.0%	0.3%	1.5%	0.2%	0.1%	2.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	20,850	21,099	22,504	22,152	24,317	26,597	27,844	27,365	25,076	21,915	20,424	20,738
WSIP 2070 With Project	20,726	21,029	22,357	22,628	24,702	26,944	28,026	27,655	25,566	22,247	20,702	20,653
Difference	-124	-71	-147	477	385	348	182	290	490	331	279	-85
Percent Difference	-0.6%	-0.3%	-0.7%	2.2%	1.6%	1.3%	0.7%	1.1%	2.0%	1.5%	1.4%	-0.4%
Dry (24.4%)												
WSIP 2070 Without Project	17,715	18,195	20,226	20,139	23,065	25,327	25,506	24,524	22,221	19,525	17,926	17,967
WSIP 2070 With Project	18,321	18,860	20,826	20,719	23,517	25,711	25,908	24,996	22,897	20,139	18,608	18,286
Difference	606	665	600	580	452	384	402	472	676	614	683	319
Percent Difference	3.4%	3.7%	3.0%	2.9%	2.0%	1.5%	1.6%	1.9%	3.0%	3.1%	3.8%	1.8%
Critical (14.6%)												
WSIP 2070 Without Project	9,464	9,924	12,109	16,735	18,126	19,704	18,940	17,794	15,140	12,550	10,368	10,180
WSIP 2070 With Project	11,745	12,040	13,972	18,005	19,253	20,697	20,198	19,377	16,827	14,259	12,468	12,071
Difference	2,281	2,115	1,863	1,270	1,127	993	1,258	1,583	1,687	1,709	2,101	1,890
Percent Difference	24.1%	21.3%	15.4%	7.6%	6.2%	5.0%	6.6%	8.9%	11.1%	13.6%	20.3%	18.6%

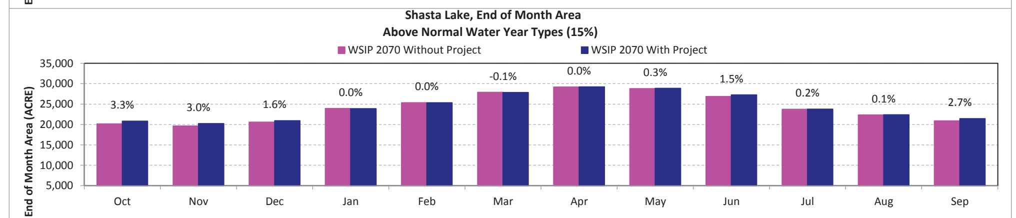
1 Based on the 82-year simulation period

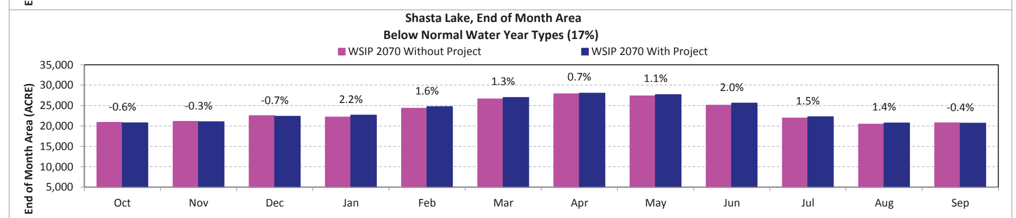
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

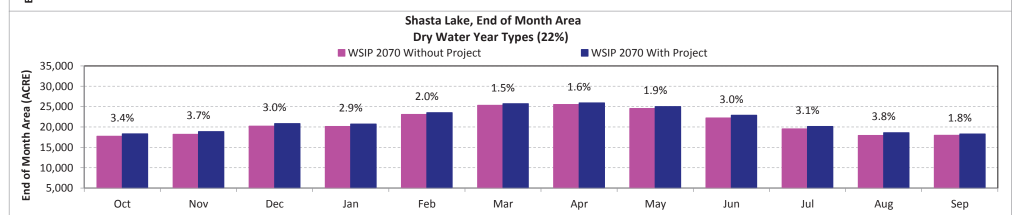
3 Relative difference of the monthly average











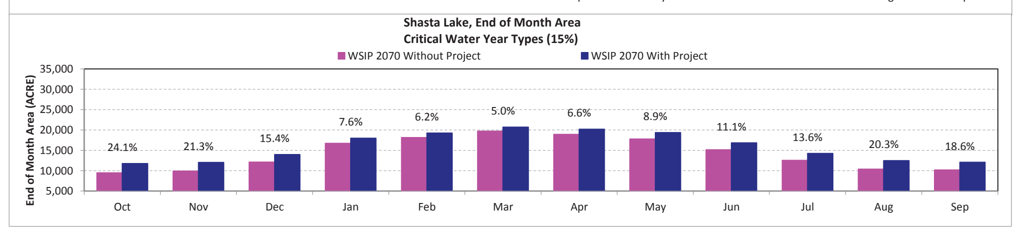


Table SW-10-a

Sacramento River below Keswick Reservoir, Monthly Flow

Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	6,303	6,441	6,167	9,854	12,357	9,185	6,863	7,780	11,743	13,731	9,657	8,219
WSIP 2070 With Project	5,957	6,339	6,370	9,921	12,559	9,226	6,835	7,385	11,229	14,221	9,865	8,451
Difference	-345	-101	203	67	202	41	-28	-395	-515	490	208	231
Percent Difference[3]	-5.5%	-1.6%	3.3%	0.7%	1.6%	0.5%	-0.4%	-5.1%	-4.4%	3.6%	2.2%	2.8%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	7,426	8,338	6,327	20,037	24,214	17,119	8,283	7,388	11,292	14,025	9,518	13,707
WSIP 2070 With Project	7,456	8,058	6,406	19,997	24,362	17,065	8,422	7,044	11,085	14,496	10,273	13,404
Difference	31	-280	80	-40	148	-54	139	-344	-207	471	755	-303
Percent Difference	0.4%	-3.4%	1.3%	-0.2%	0.6%	-0.3%	1.7%	-4.7%	-1.8%	3.4%	7.9%	-2.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	7,168	8,851	6,064	9,134	17,768	9,393	5,810	7,916	11,907	15,029	9,568	9,874
WSIP 2070 With Project	6,769	9,035	6,796	9,400	17,739	9,229	5,716	7,675	10,684	16,249	10,069	8,408
Difference	-398	184	732	266	-30	-164	-94	-242	-1,222	1,220	501	-1,466
Percent Difference	-5.6%	2.1%	12.1%	2.9%	-0.2%	-1.7%	-1.6%	-3.1%	-10.3%	8.1%	5.2%	-14.8%
Below Normal (15.9%)												
WSIP 2070 Without Project	4,868	5,482	7,186	5,534	5,254	4,726	5,346	7,714	12,103	14,726	9,746	4,532
WSIP 2070 With Project	4,934	5,294	7,398	5,623	5,491	4,803	5,734	7,277	11,475	15,309	10,019	5,707
Difference	66	-188	212	89	237	77	388	-437	-627	583	273	1,175
Percent Difference	1.4%	-3.4%	2.9%	1.6%	4.5%	1.6%	7.3%	-5.7%	-5.2%	4.0%	2.8%	25.9%
Dry (24.4%)												
WSIP 2070 Without Project	5,795	4,931	7,057	3,561	3,879	4,780	6,451	8,354	12,172	13,370	9,931	4,544
WSIP 2070 With Project	5,035	4,792	7,232	3,687	4,120	4,994	6,380	8,071	11,614	13,579	9,814	5,702
Difference	-760	-139	176	126	241	214	-71	-283	-558	209	-118	1,158
Percent Difference	-13.1%	-2.8%	2.5%	3.5%	6.2%	4.5%	-1.1%	-3.4%	-4.6%	1.6%	-1.2%	25.5%
Critical (14.6%)												
WSIP 2070 Without Project	5,477	3,675	3,331	3,615	3,532	3,973	7,080	7,620	11,468	11,425	9,489	4,931
WSIP 2070 With Project	4,611	3,854	3,349	3,612	3,960	4,084	6,373	6,833	11,129	11,654	8,713	5,309
Difference	-866	179	19	-4	429	111	-708	-788	-339	229	-775	378
Percent Difference	-15.8%	4.9%	0.6%	-0.1%	12.1%	2.8%	-10.0%	-10.3%	-3.0%	2.0%	-8.2%	7.7%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-11-a
Sacramento River at Bend Bridge, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	7,145	8,586	11,733	17,889	20,910	15,423	10,186	9,174	12,437	14,026	9,904	8,718
WSIP 2070 With Project	6,798	8,489	11,934	17,953	21,110	15,463	10,158	8,779	11,926	14,517	10,108	8,947
Difference	-347	-97	201	64	200	40	-28	-395	-511	490	204	229
Percent Difference[3]	-4.9%	-1.1%	1.7%	0.4%	1.0%	0.3%	-0.3%	-4.3%	-4.1%	3.5%	2.1%	2.6%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	8,248	10,682	12,600	34,139	37,157	26,612	13,685	9,296	12,303	14,559	9,842	14,278
WSIP 2070 With Project	8,282	10,403	12,682	34,101	37,306	26,558	13,824	8,951	12,099	15,027	10,593	13,969
Difference	34	-279	82	-38	149	-55	140	-345	-204	468	751	-310
Percent Difference	0.4%	-2.6%	0.7%	-0.1%	0.4%	-0.2%	1.0%	-3.7%	-1.7%	3.2%	7.6%	-2.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	7,986	10,969	9,898	19,403	28,778	16,238	9,414	9,552	12,712	15,284	9,854	10,355
WSIP 2070 With Project	7,600	11,154	10,625	19,671	28,749	16,076	9,321	9,311	11,491	16,509	10,346	8,884
Difference	-386	185	728	267	-29	-162	-92	-241	-1,221	1,225	492	-1,471
Percent Difference	-4.8%	1.7%	7.4%	1.4%	-0.1%	-1.0%	-1.0%	-2.5%	-9.6%	8.0%	5.0%	-14.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	5,962	7,965	13,471	11,234	11,466	9,773	8,577	8,992	12,679	14,932	9,980	5,096
WSIP 2070 With Project	6,019	7,780	13,687	11,320	11,702	9,848	8,964	8,553	12,056	15,516	10,248	6,267
Difference	58	-185	216	86	236	75	388	-440	-624	584	268	1,171
Percent Difference	1.0%	-2.3%	1.6%	0.8%	2.1%	0.8%	4.5%	-4.9%	-4.9%	3.9%	2.7%	23.0%
Dry (24.4%)												
WSIP 2070 Without Project	6,681	7,031	13,340	6,905	10,048	9,398	8,301	9,352	12,656	13,474	10,095	4,997
WSIP 2070 With Project	5,912	6,901	13,507	7,027	10,288	9,611	8,229	9,071	12,102	13,686	9,976	6,156
Difference	-769	-130	167	123	240	213	-72	-282	-554	212	-119	1,159
Percent Difference	-11.5%	-1.8%	1.3%	1.8%	2.4%	2.3%	-0.9%	-3.0%	-4.4%	1.6%	-1.2%	23.2%
Critical (14.6%)												
WSIP 2070 Without Project	6,040	5,124	6,974	6,811	6,831	6,594	8,198	8,461	11,850	11,658	9,683	5,299
WSIP 2070 With Project	5,170	5,310	6,989	6,787	7,244	6,698	7,486	7,678	11,517	11,887	8,904	5,681
Difference	-870	186	14	-24	413	104	-711	-784	-333	229	-779	381
Percent Difference	-14.4%	3.6%	0.2%	-0.4%	6.0%	1.6%	-8.7%	-9.3%	-2.8%	2.0%	-8.0%	7.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-12-a
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	7,062	8,601	11,801	18,092	21,057	15,508	10,132	9,022	12,016	13,609	9,564	8,660
WSIP 2070 With Project	6,666	8,368	11,203	16,880	19,838	14,571	9,815	8,597	11,535	14,105	9,778	8,908
Difference	-396	-233	-598	-1,213	-1,219	-937	-317	-425	-481	496	213	248
Percent Difference[3]	-5.6%	-2.7%	-5.1%	-6.7%	-5.8%	-6.0%	-3.1%	-4.7%	-4.0%	3.6%	2.2%	2.9%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	8,142	10,699	12,680	34,512	37,397	26,757	13,652	9,047	11,654	13,869	9,293	14,182
WSIP 2070 With Project	8,182	10,253	11,615	32,980	36,377	25,881	13,370	8,699	11,571	14,325	10,053	13,924
Difference	40	-446	-1,065	-1,532	-1,020	-876	-282	-348	-83	456	760	-258
Percent Difference	0.5%	-4.2%	-8.4%	-4.4%	-2.7%	-3.3%	-2.1%	-3.8%	-0.7%	3.3%	8.2%	-1.8%
Above Normal (13.4%)												
WSIP 2070 Without Project	7,900	10,986	9,937	19,672	29,001	16,353	9,321	9,352	12,172	14,717	9,421	10,312
WSIP 2070 With Project	7,276	10,854	9,700	18,257	27,084	14,811	8,704	9,044	10,945	16,131	9,951	8,853
Difference	-624	-133	-237	-1,415	-1,916	-1,541	-617	-308	-1,227	1,414	530	-1,459
Percent Difference	-7.9%	-1.2%	-2.4%	-7.2%	-6.6%	-9.4%	-6.6%	-3.3%	-10.1%	9.6%	5.6%	-14.1%
Below Normal (15.9%)												
WSIP 2070 Without Project	5,884	7,987	13,559	11,371	11,554	9,814	8,503	8,889	12,316	14,610	9,727	5,047
WSIP 2070 With Project	5,957	7,796	13,449	9,787	10,293	8,614	8,523	8,389	11,649	15,214	10,007	6,226
Difference	73	-191	-110	-1,584	-1,261	-1,200	21	-500	-667	605	280	1,180
Percent Difference	1.2%	-2.4%	-0.8%	-13.9%	-10.9%	-12.2%	0.2%	-5.6%	-5.4%	4.1%	2.9%	23.4%
Dry (24.4%)												
WSIP 2070 Without Project	6,612	7,046	13,416	6,982	10,135	9,458	8,239	9,275	12,394	13,260	9,926	4,959
WSIP 2070 With Project	5,751	6,757	13,053	6,182	8,680	8,487	8,063	8,968	11,840	13,411	9,812	6,118
Difference	-861	-289	-363	-800	-1,455	-971	-176	-306	-554	151	-114	1,159
Percent Difference	-13.0%	-4.1%	-2.7%	-11.5%	-14.4%	-10.3%	-2.1%	-3.3%	-4.5%	1.1%	-1.1%	23.4%
Critical (14.6%)												
WSIP 2070 Without Project	5,982	5,123	7,010	6,867	6,873	6,614	8,170	8,391	11,701	11,531	9,505	5,266
WSIP 2070 With Project	5,118	5,307	6,172	6,246	6,298	6,442	7,453	7,572	11,369	11,725	8,716	5,647
Difference	-864	185	-838	-622	-574	-172	-717	-819	-333	194	-789	382
Percent Difference	-14.4%	3.6%	-12.0%	-9.1%	-8.4%	-2.6%	-8.8%	-9.8%	-2.8%	1.7%	-8.3%	7.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-13-a
Sacramento River below Hamilton City, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	6,475	8,824	13,736	21,151	24,329	17,878	9,280	7,403	9,259	10,883	7,547	8,201
WSIP 2070 With Project	6,203	8,571	12,718	19,774	22,860	16,337	8,884	7,265	9,110	11,736	7,711	8,492
Difference	-272	-253	-1,018	-1,377	-1,470	-1,542	-396	-138	-150	853	164	290
Percent Difference[3]	-4.2%	-2.9%	-7.4%	-6.5%	-6.0%	-8.6%	-4.3%	-1.9%	-1.6%	7.8%	2.2%	3.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	7,537	10,948	14,900	40,045	42,492	30,311	13,816	7,768	8,963	11,123	7,265	13,765
WSIP 2070 With Project	7,641	10,420	13,273	38,326	41,237	28,879	13,217	7,598	8,869	11,547	7,704	13,566
Difference	104	-527	-1,627	-1,719	-1,255	-1,432	-599	-170	-94	424	440	-198
Percent Difference	1.4%	-4.8%	-10.9%	-4.3%	-3.0%	-4.7%	-4.3%	-2.2%	-1.0%	3.8%	6.0%	-1.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	7,279	11,314	11,381	23,701	33,362	19,000	8,775	7,837	9,444	11,905	7,371	9,804
WSIP 2070 With Project	6,799	11,110	10,754	22,043	31,129	16,737	7,927	7,644	8,780	14,129	7,802	8,443
Difference	-480	-204	-627	-1,658	-2,233	-2,263	-848	-193	-664	2,224	431	-1,362
Percent Difference	-6.6%	-1.8%	-5.5%	-7.0%	-6.7%	-11.9%	-9.7%	-2.5%	-7.0%	18.7%	5.8%	-13.9%
Below Normal (15.9%)												
WSIP 2070 Without Project	5,331	8,301	15,617	13,503	14,023	11,778	7,408	7,105	9,465	11,794	7,612	4,576
WSIP 2070 With Project	5,580	8,177	15,294	11,686	12,523	9,960	7,170	6,790	9,462	13,096	7,843	5,787
Difference	249	-124	-323	-1,818	-1,500	-1,818	-238	-315	-3	1,302	231	1,211
Percent Difference	4.7%	-1.5%	-2.1%	-13.5%	-10.7%	-15.4%	-3.2%	-4.4%	0.0%	11.0%	3.0%	26.5%
Dry (24.4%)												
WSIP 2070 Without Project	6,053	7,297	15,602	8,186	12,229	11,236	6,742	7,315	9,482	10,419	7,787	4,481
WSIP 2070 With Project	5,321	7,014	14,889	7,285	10,487	9,389	6,615	7,418	9,358	10,948	7,770	5,644
Difference	-732	-283	-713	-901	-1,741	-1,848	-127	103	-124	529	-17	1,163
Percent Difference	-12.1%	-3.9%	-4.6%	-11.0%	-14.2%	-16.4%	-1.9%	1.4%	-1.3%	5.1%	-0.2%	26.0%
Critical (14.6%)												
WSIP 2070 Without Project	5,380	5,052	8,223	7,767	8,028	7,591	6,175	6,683	9,139	9,214	7,849	4,807
WSIP 2070 With Project	4,685	5,260	6,908	7,072	7,279	7,281	6,013	6,458	9,138	9,792	7,402	5,219
Difference	-695	208	-1,315	-694	-750	-310	-162	-225	-1	578	-447	412
Percent Difference	-12.9%	4.1%	-16.0%	-8.9%	-9.3%	-4.1%	-2.6%	-3.4%	0.0%	6.3%	-5.7%	8.6%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

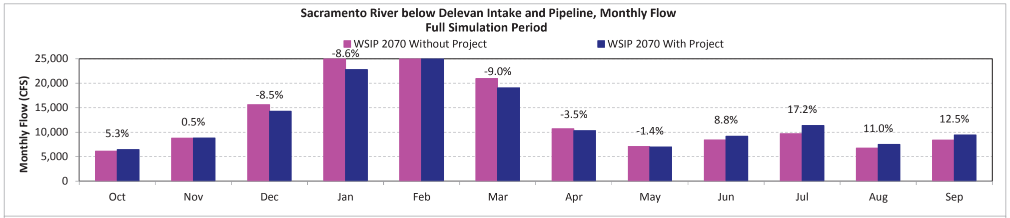
Table SW-14-a
Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Long-term Average and Average by Water Year Type

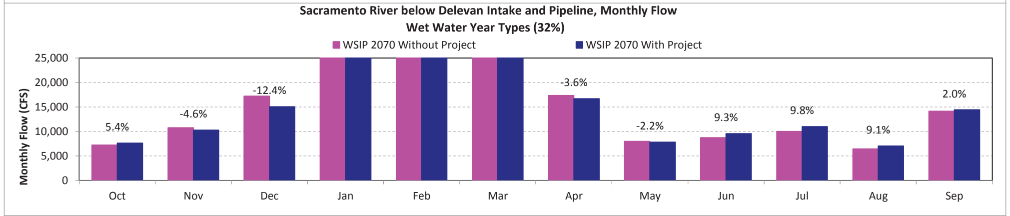
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	6,139	8,782	15,625	24,973	28,840	20,968	10,708	7,072	8,438	9,687	6,768	8,396
WSIP 2070 With Project	6,466	8,825	14,292	22,815	26,739	19,079	10,330	6,976	9,185	11,358	7,511	9,448
Difference	327	43	-1,333	-2,158	-2,101	-1,889	-378	-96	747	1,671	744	1,052
Percent Difference[3]	5.3%	0.5%	-8.5%	-8.6%	-7.3%	-9.0%	-3.5%	-1.4%	8.8%	17.2%	11.0%	12.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	7,239	10,786	17,207	46,509	48,447	34,679	17,342	7,987	8,751	10,011	6,462	14,142
WSIP 2070 With Project	7,626	10,295	15,066	44,014	46,607	32,899	16,710	7,815	9,564	10,996	7,051	14,430
Difference	387	-491	-2,140	-2,495	-1,840	-1,780	-632	-172	813	986	588	288
Percent Difference	5.4%	-4.6%	-12.4%	-5.4%	-3.8%	-5.1%	-3.6%	-2.2%	9.3%	9.8%	9.1%	2.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	6,947	11,357	12,918	29,843	41,836	23,096	9,738	7,904	8,611	10,572	6,656	10,002
WSIP 2070 With Project	7,285	11,241	11,802	26,947	38,762	20,374	8,893	7,707	9,220	14,303	7,413	9,984
Difference	338	-116	-1,115	-2,896	-3,074	-2,722	-845	-197	608	3,731	757	-18
Percent Difference	4.9%	-1.0%	-8.6%	-9.7%	-7.3%	-11.8%	-8.7%	-2.5%	7.1%	35.3%	11.4%	-0.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	5,095	8,709	18,047	16,675	16,937	14,264	8,603	6,921	8,373	10,512	6,813	4,626
WSIP 2070 With Project	5,894	8,968	17,506	13,700	14,771	12,086	8,357	6,597	9,484	13,037	7,740	6,625
Difference	800	259	-540	-2,975	-2,166	-2,178	-246	-324	1,112	2,525	927	2,000
Percent Difference	15.7%	3.0%	-3.0%	-17.8%	-12.8%	-15.3%	-2.9%	-4.7%	13.3%	24.0%	13.6%	43.2%
Dry (24.4%)												
WSIP 2070 Without Project	5,699	7,218	17,429	9,278	15,721	13,507	6,845	6,323	8,279	9,217	6,840	4,600
WSIP 2070 With Project	5,957	7,556	16,641	7,815	13,093	11,248	6,727	6,417	8,904	10,534	7,907	6,554
Difference	259	338	-788	-1,463	-2,628	-2,259	-119	94	625	1,317	1,067	1,954
Percent Difference	4.5%	4.7%	-4.5%	-15.8%	-16.7%	-16.7%	-1.7%	1.5%	7.5%	14.3%	15.6%	42.5%
Critical (14.6%)												
WSIP 2070 Without Project	4,882	4,763	9,049	8,998	9,203	9,009	5,943	5,743	7,937	8,066	7,363	4,884
WSIP 2070 With Project	4,667	5,384	7,501	7,974	8,378	8,573	5,966	5,830	8,476	8,997	7,693	6,042
Difference	-215	622	-1,548	-1,024	-824	-436	23	88	538	931	330	1,158
Percent Difference	-4.4%	13.1%	-17.1%	-11.4%	-9.0%	-4.8%	0.4%	1.5%	6.8%	11.5%	4.5%	23.7%

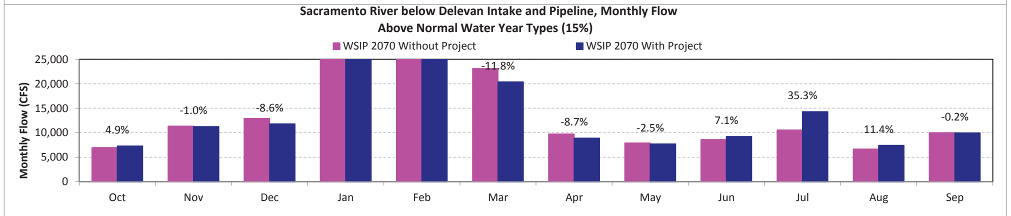
1 Based on the 82-year simulation period

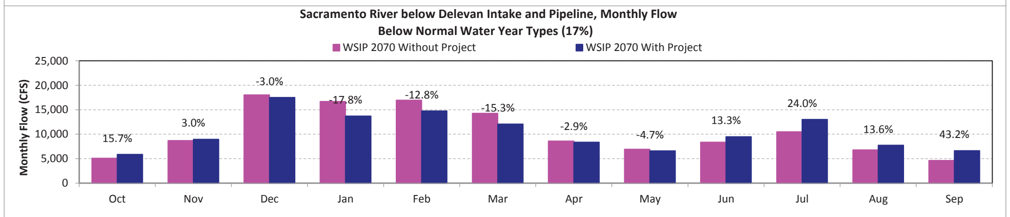
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

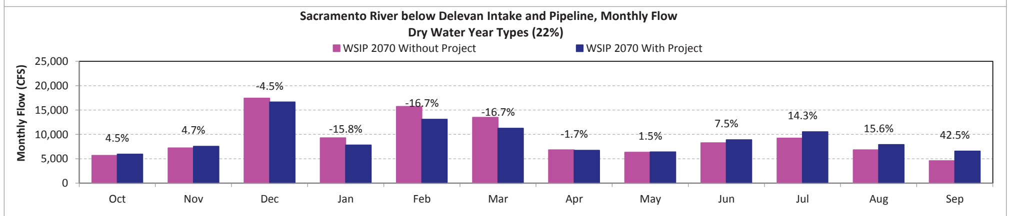
3 Relative difference of the monthly average











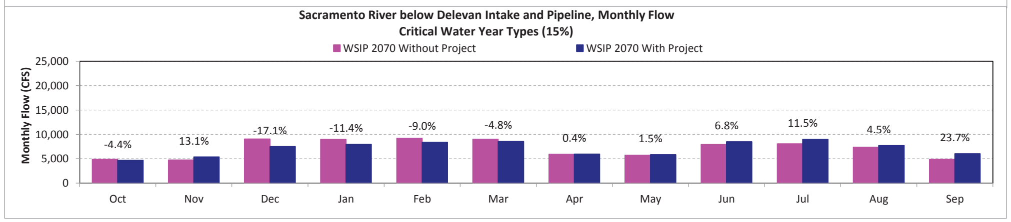


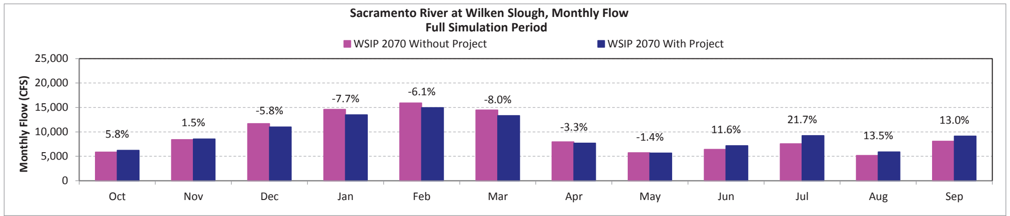
Table SW-15-a
Sacramento River at Wilken Slough, Monthly Flow
Long-term Average and Average by Water Year Type

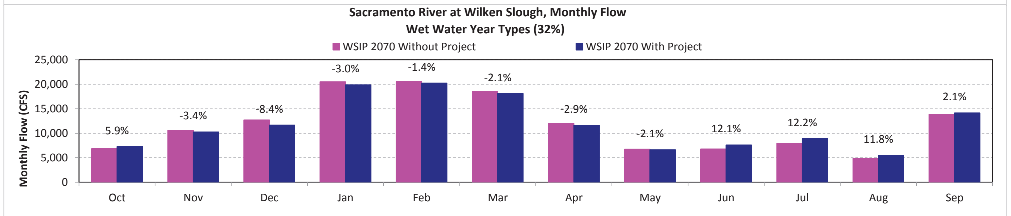
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	5,879	8,433	11,687	14,608	15,935	14,474	7,961	5,748	6,423	7,581	5,188	8,092
WSIP 2070 With Project	6,218	8,557	11,006	13,486	14,969	13,318	7,696	5,666	7,167	9,225	5,891	9,148
Difference	339	124	-681	-1,122	-967	-1,155	-266	-81	745	1,644	703	1,055
Percent Difference[3]	5.8%	1.5%	-5.8%	-7.7%	-6.1%	-8.0%	-3.3%	-1.4%	11.6%	21.7%	13.5%	13.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	6,846	10,620	12,708	20,489	20,534	18,484	11,967	6,746	6,790	7,925	4,884	13,865
WSIP 2070 With Project	7,251	10,262	11,642	19,882	20,240	18,096	11,620	6,603	7,610	8,890	5,461	14,157
Difference	406	-359	-1,067	-607	-294	-387	-347	-143	820	965	577	292
Percent Difference	5.9%	-3.4%	-8.4%	-3.0%	-1.4%	-2.1%	-2.9%	-2.1%	12.1%	12.2%	11.8%	2.1%
Above Normal (13.4%)												
WSIP 2070 Without Project	6,667	10,631	10,159	17,618	19,846	16,705	8,418	6,474	6,622	8,446	5,060	9,695
WSIP 2070 With Project	7,040	10,684	9,532	16,615	19,240	14,957	7,649	6,406	7,222	12,156	5,736	9,697
Difference	373	53	-627	-1,003	-606	-1,748	-769	-69	600	3,710	675	3
Percent Difference	5.6%	0.5%	-6.2%	-5.7%	-3.1%	-10.5%	-9.1%	-1.1%	9.1%	43.9%	13.3%	0.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	4,971	8,324	13,237	14,209	14,421	12,979	6,847	5,566	6,325	8,370	5,185	4,352
WSIP 2070 With Project	5,735	8,657	13,631	12,071	12,837	10,913	6,701	5,218	7,436	10,852	6,061	6,355
Difference	764	333	393	-2,138	-1,584	-2,066	-146	-348	1,111	2,482	876	2,003
Percent Difference	15.4%	4.0%	3.0%	-15.0%	-11.0%	-15.9%	-2.1%	-6.3%	17.6%	29.7%	16.9%	46.0%
Dry (24.4%)												
WSIP 2070 Without Project	5,484	6,723	11,810	9,185	12,997	12,450	5,422	4,993	6,218	7,054	5,233	4,299
WSIP 2070 With Project	5,784	7,058	11,425	7,771	11,155	10,737	5,322	5,069	6,830	8,350	6,267	6,240
Difference	300	335	-385	-1,415	-1,843	-1,713	-100	76	612	1,295	1,035	1,942
Percent Difference	5.5%	5.0%	-3.3%	-15.4%	-14.2%	-13.8%	-1.9%	1.5%	9.8%	18.4%	19.8%	45.2%
Critical (14.6%)												
WSIP 2070 Without Project	4,704	4,649	8,991	8,575	8,926	8,732	4,303	4,373	5,890	6,064	5,893	4,491
WSIP 2070 With Project	4,469	5,306	7,436	7,815	8,299	8,371	4,270	4,440	6,428	6,957	6,152	5,662
Difference	-235	657	-1,555	-760	-627	-361	-33	67	538	893	259	1,171
Percent Difference	-5.0%	14.1%	-17.3%	-8.9%	-7.0%	-4.1%	-0.8%	1.5%	9.1%	14.7%	4.4%	26.1%

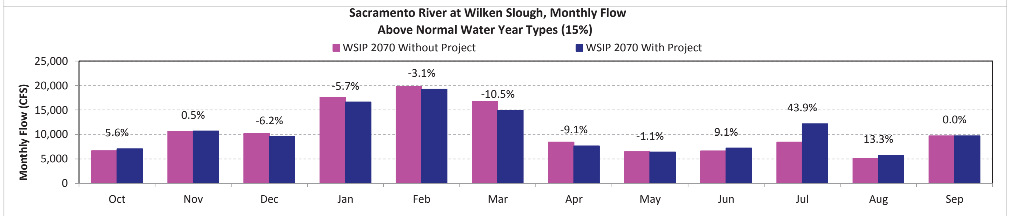
1 Based on the 82-year simulation period

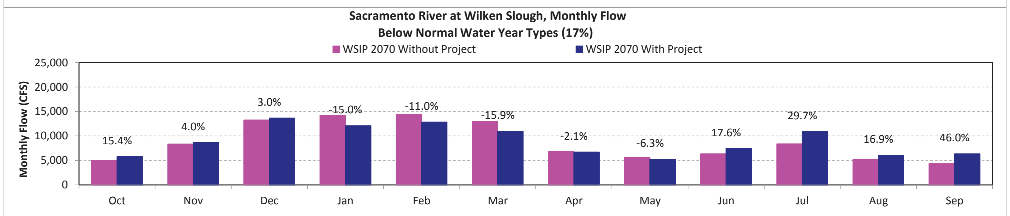
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

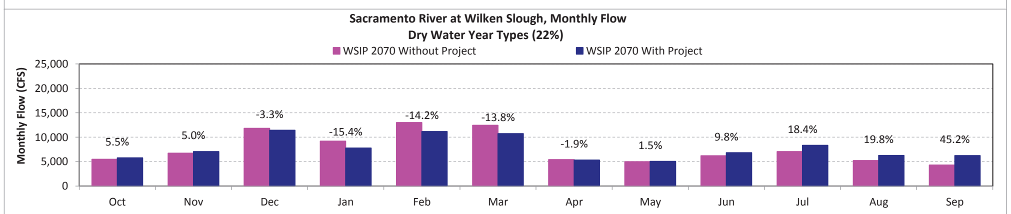
3 Relative difference of the monthly average











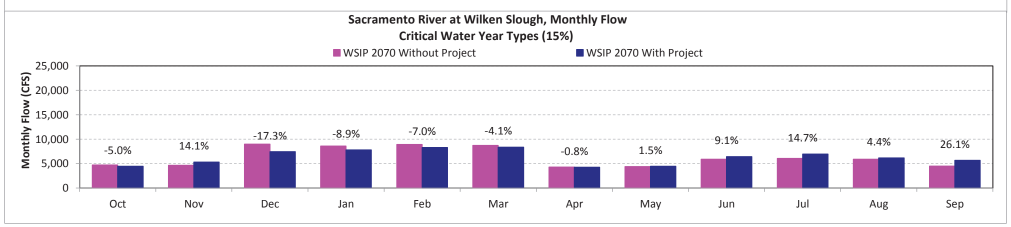


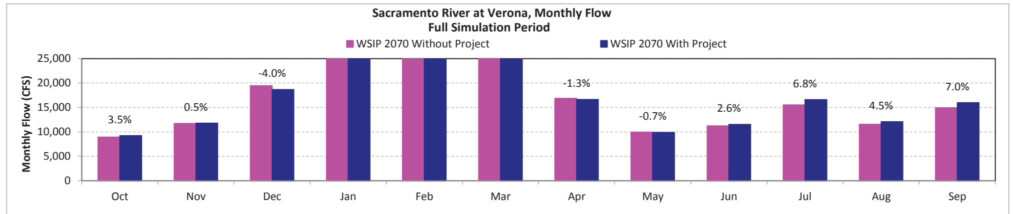
Table SW-16-a
Sacramento River at Verona, Monthly Flow
Long-term Average and Average by Water Year Type

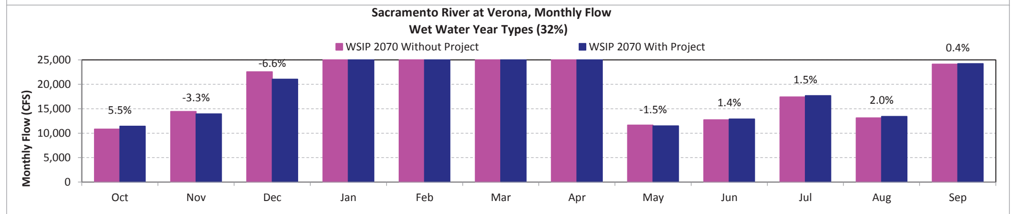
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	8,936	11,735	19,468	29,963	35,884	30,626	16,864	9,948	11,234	15,543	11,560	14,939
WSIP 2070 With Project	9,245	11,796	18,683	28,540	34,767	29,421	16,643	9,882	11,521	16,600	12,083	15,985
Difference	309	60	-785	-1,422	-1,117	-1,205	-220	-66	287	1,057	524	1,046
Percent Difference[3]	3.5%	0.5%	-4.0%	-4.7%	-3.1%	-3.9%	-1.3%	-0.7%	2.6%	6.8%	4.5%	7.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	10,840	14,429	22,543	49,795	54,978	46,227	27,438	11,665	12,729	17,422	13,144	24,130
WSIP 2070 With Project	11,440	13,951	21,045	48,803	54,434	45,540	27,205	11,491	12,907	17,681	13,410	24,218
Difference	600	-477	-1,499	-993	-544	-688	-233	-175	178	259	266	88
Percent Difference	5.5%	-3.3%	-6.6%	-2.0%	-1.0%	-1.5%	-0.8%	-1.5%	1.4%	1.5%	2.0%	0.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	10,923	14,685	16,804	36,450	49,872	38,788	16,129	11,281	12,426	17,748	13,924	19,234
WSIP 2070 With Project	11,395	14,675	16,281	34,834	48,785	37,276	15,518	11,095	12,296	19,824	14,160	18,938
Difference	472	-10	-522	-1,616	-1,088	-1,513	-611	-185	-130	2,075	236	-296
Percent Difference	4.3%	-0.1%	-3.1%	-4.4%	-2.2%	-3.9%	-3.8%	-1.6%	-1.0%	11.7%	1.7%	-1.5%
Below Normal (15.9%)												
WSIP 2070 Without Project	7,539	12,168	23,103	23,304	25,055	24,153	13,347	10,025	11,118	17,746	12,561	9,696
WSIP 2070 With Project	8,207	12,489	23,516	20,760	23,892	22,180	13,221	9,766	11,520	18,964	13,016	11,537
Difference	667	320	412	-2,545	-1,162	-1,973	-126	-258	401	1,218	455	1,841
Percent Difference	8.9%	2.6%	1.8%	-10.9%	-4.6%	-8.2%	-0.9%	-2.6%	3.6%	6.9%	3.6%	19.0%
Dry (24.4%)												
WSIP 2070 Without Project	8,000	9,728	19,213	14,948	22,869	20,795	10,505	8,742	10,281	13,719	9,228	8,872
WSIP 2070 With Project	8,012	10,050	18,816	13,584	20,731	19,047	10,357	9,047	10,698	15,130	10,554	11,218
Difference	12	323	-397	-1,365	-2,137	-1,748	-147	304	417	1,411	1,326	2,346
Percent Difference	0.2%	3.3%	-2.1%	-9.1%	-9.3%	-8.4%	-1.4%	3.5%	4.1%	10.3%	14.4%	26.4%
Critical (14.6%)												
WSIP 2070 Without Project	6,064	6,073	11,734	13,282	15,116	12,740	9,034	6,930	8,616	10,099	8,760	6,881
WSIP 2070 With Project	5,700	6,644	10,310	12,226	14,481	12,431	8,973	6,799	9,178	11,190	8,844	8,204
Difference	-364	571	-1,424	-1,056	-635	-309	-60	-131	561	1,090	83	1,322
Percent Difference	-6.0%	9.4%	-12.1%	-8.0%	-4.2%	-2.4%	-0.7%	-1.9%	6.5%	10.8%	1.0%	19.2%

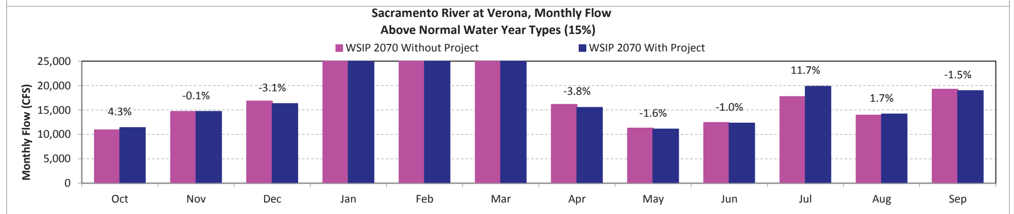
1 Based on the 82-year simulation period

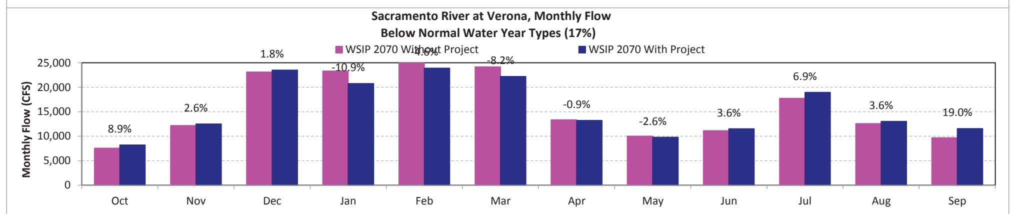
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

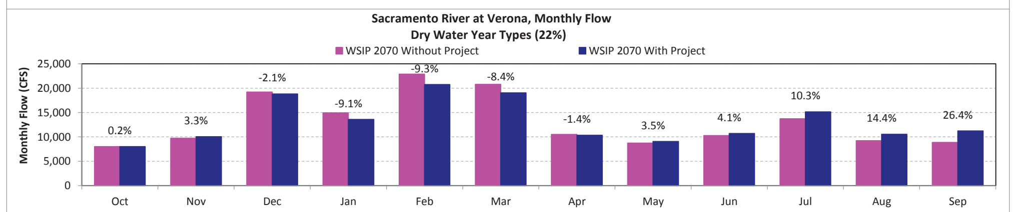
3 Relative difference of the monthly average











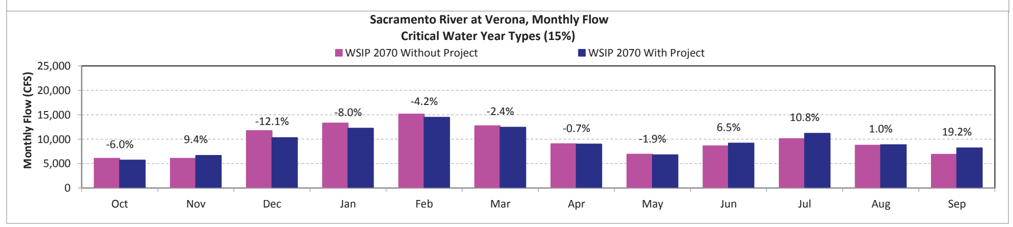


Table SW-17-a
Sacramento River at Freeport, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	10,851	14,509	23,754	35,618	43,165	36,153	20,823	11,953	13,242	18,903	13,306	16,798
WSIP 2070 With Project	11,271	14,663	23,051	34,304	42,108	34,977	20,591	11,971	13,621	19,414	13,909	17,866
Difference	420	154	-703	-1,314	-1,057	-1,176	-232	18	378	511	603	1,067
Percent Difference[3]	3.9%	1.1%	-3.0%	-3.7%	-2.4%	-3.3%	-1.1%	0.1%	2.9%	2.7%	4.5%	6.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	13,096	17,676	27,408	58,309	64,949	54,398	33,632	13,999	14,957	21,217	15,201	27,226
WSIP 2070 With Project	13,850	17,290	25,915	57,473	64,483	53,813	33,421	13,859	15,191	21,285	15,588	27,164
Difference	754	-386	-1,493	-836	-466	-585	-211	-140	234	68	387	-63
Percent Difference	5.8%	-2.2%	-5.4%	-1.4%	-0.7%	-1.1%	-0.6%	-1.0%	1.6%	0.3%	2.5%	-0.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	12,992	17,385	21,102	44,953	60,476	44,687	20,012	13,429	14,208	22,490	15,487	20,904
WSIP 2070 With Project	13,544	17,511	20,732	43,374	59,608	43,186	19,405	13,315	14,300	23,268	16,054	20,666
Difference	552	126	-370	-1,579	-868	-1,502	-606	-115	92	778	567	-238
Percent Difference	4.3%	0.7%	-1.8%	-3.5%	-1.4%	-3.4%	-3.0%	-0.9%	0.6%	3.5%	3.7%	-1.1%
Below Normal (15.9%)												
WSIP 2070 Without Project	9,419	15,895	28,000	27,999	31,304	29,983	17,160	11,956	13,252	21,520	14,477	11,303
WSIP 2070 With Project	10,208	16,383	28,571	25,552	30,235	28,023	17,047	11,795	13,671	21,891	15,036	13,288
Difference	788	489	571	-2,447	-1,069	-1,960	-113	-160	420	371	559	1,986
Percent Difference	8.4%	3.1%	2.0%	-8.7%	-3.4%	-6.5%	-0.7%	-1.3%	3.2%	1.7%	3.9%	17.6%
Dry (24.4%)												
WSIP 2070 Without Project	9,899	12,195	23,668	18,133	28,551	24,837	13,053	10,783	12,370	16,454	10,893	10,082
WSIP 2070 With Project	10,035	12,605	23,427	16,857	26,363	23,065	12,717	11,194	12,948	17,338	12,173	12,552
Difference	136	410	-241	-1,276	-2,188	-1,771	-336	411	578	884	1,281	2,470
Percent Difference	1.4%	3.4%	-1.0%	-7.0%	-7.7%	-7.1%	-2.6%	3.8%	4.7%	5.4%	11.8%	24.5%
Critical (14.6%)												
WSIP 2070 Without Project	7,163	7,369	13,812	15,294	17,307	14,344	10,734	8,114	10,084	11,845	9,954	7,586
WSIP 2070 With Project	6,812	7,929	12,367	14,351	16,694	14,027	10,843	8,131	10,660	12,603	9,979	8,967
Difference	-351	560	-1,445	-943	-613	-317	110	18	576	758	24	1,381
Percent Difference	-4.9%	7.6%	-10.5%	-6.2%	-3.5%	-2.2%	1.0%	0.2%	5.7%	6.4%	0.2%	18.2%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

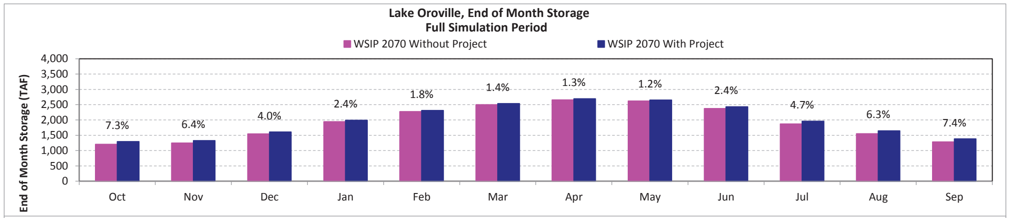
Table SW-18-a
Lake Oroville, End of Month Storage
Long-term Average and Average by Water Year Type

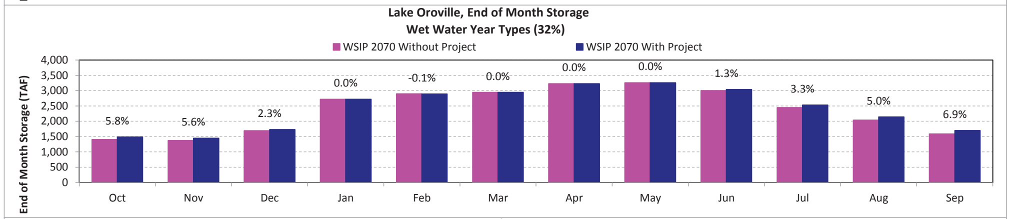
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1,205	1,248	1,548	1,946	2,273	2,499	2,660	2,620	2,374	1,871	1,549	1,287
WSIP 2070 With Project	1,293	1,329	1,610	1,992	2,314	2,534	2,694	2,651	2,431	1,959	1,647	1,383
Difference	88	80	62	46	41	35	34	31	57	88	98	96
Percent Difference[3]	7.3%	6.4%	4.0%	2.4%	1.8%	1.4%	1.3%	1.2%	2.4%	4.7%	6.3%	7.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1,404	1,372	1,691	2,719	2,895	2,942	3,226	3,258	3,001	2,448	2,039	1,585
WSIP 2070 With Project	1,485	1,448	1,730	2,719	2,891	2,942	3,226	3,258	3,039	2,529	2,142	1,695
Difference	81	76	39	1	-4	0	0	0	38	81	103	110
Percent Difference	5.8%	5.6%	2.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	1.3%	3.3%	5.0%	6.9%
Above Normal (13.4%)												
WSIP 2070 Without Project	1,276	1,294	1,388	2,185	2,736	2,962	3,196	3,166	2,898	2,298	1,832	1,392
WSIP 2070 With Project	1,418	1,425	1,511	2,262	2,780	2,962	3,196	3,165	2,939	2,414	1,975	1,549
Difference	142	131	123	77	44	0	0	-1	42	116	143	157
Percent Difference	11.1%	10.1%	8.9%	3.5%	1.6%	0.0%	0.0%	0.0%	1.4%	5.1%	7.8%	11.3%
Below Normal (15.9%)												
WSIP 2070 Without Project	1,113	1,192	1,607	1,636	2,046	2,482	2,656	2,609	2,334	1,732	1,347	1,184
WSIP 2070 With Project	1,268	1,322	1,702	1,693	2,102	2,530	2,698	2,644	2,410	1,872	1,508	1,353
Difference	155	130	95	57	56	47	42	35	76	139	161	170
Percent Difference	13.9%	10.9%	5.9%	3.5%	2.7%	1.9%	1.6%	1.3%	3.3%	8.0%	12.0%	14.3%
Dry (24.4%)												
WSIP 2070 Without Project	1,165	1,283	1,620	1,430	1,859	2,216	2,274	2,167	1,913	1,457	1,253	1,140
WSIP 2070 With Project	1,189	1,308	1,646	1,485	1,913	2,268	2,327	2,206	1,962	1,507	1,283	1,147
Difference	25	24	26	55	55	52	54	39	49	50	29	7
Percent Difference	2.1%	1.9%	1.6%	3.8%	2.9%	2.3%	2.4%	1.8%	2.5%	3.4%	2.3%	0.6%
Critical (14.6%)												
WSIP 2070 Without Project	875	941	1,203	1,247	1,435	1,607	1,588	1,507	1,346	1,073	942	903
WSIP 2070 With Project	963	1,022	1,283	1,339	1,533	1,708	1,689	1,618	1,451	1,158	1,031	979
Difference	87	82	80	92	98	101	101	111	106	86	89	76
Percent Difference	10.0%	8.7%	6.7%	7.4%	6.8%	6.3%	6.4%	7.4%	7.8%	8.0%	9.5%	8.4%

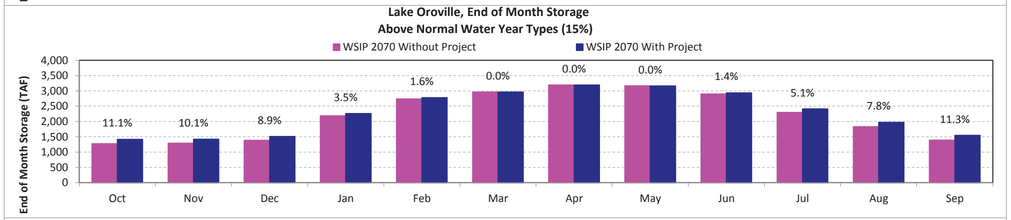
1 Based on the 82-year simulation period

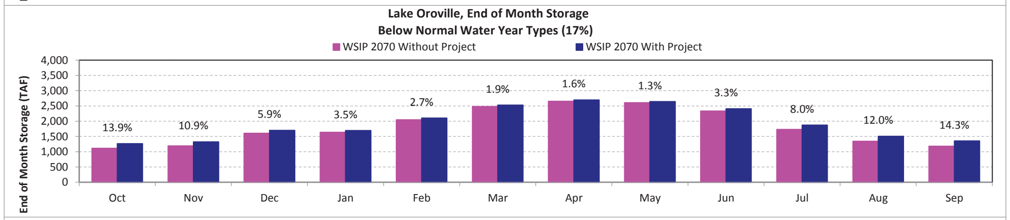
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

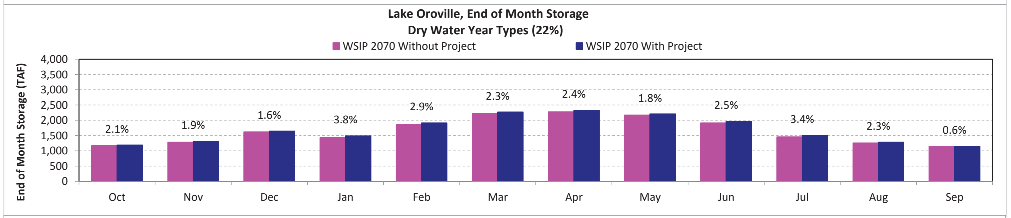
3 Relative difference of the monthly average











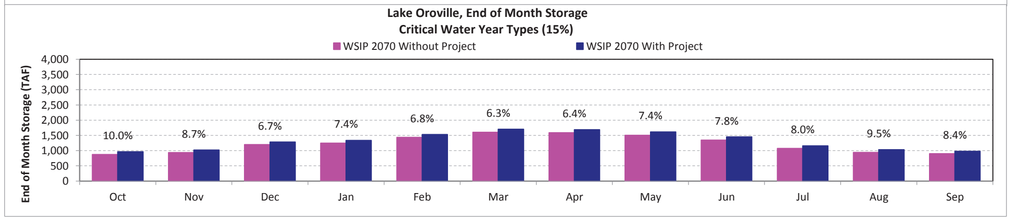


Table SW-19-a
Lake Oroville, End of Month Elevation
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	689	694	726	767	800	821	833	829	808	763	729	699
WSIP 2070 With Project	700	704	733	773	804	825	836	832	814	772	740	711
Difference	11	10	7	5	4	4	4	3	6	9	11	12
Percent Difference[3]	1.7%	1.5%	1.0%	0.7%	0.6%	0.4%	0.4%	0.4%	0.7%	1.2%	1.6%	1.7%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	714	709	741	842	856	859	879	881	863	821	784	735
WSIP 2070 With Project	724	718	745	842	856	859	879	881	866	829	794	747
Difference	9	9	4	0	0	0	0	0	3	7	10	12
Percent Difference	1.3%	1.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.9%	1.3%	1.7%
Above Normal (13.4%)												
WSIP 2070 Without Project	700	700	708	793	844	861	877	875	856	811	765	715
WSIP 2070 With Project	717	716	723	802	848	861	877	874	859	821	780	733
Difference	17	16	15	8	4	0	0	0	3	9	15	19
Percent Difference	2.5%	2.3%	2.2%	1.0%	0.4%	0.0%	0.0%	0.0%	0.3%	1.1%	2.0%	2.6%
Below Normal (15.9%)												
WSIP 2070 Without Project	679	689	733	738	783	824	838	835	812	753	709	689
WSIP 2070 With Project	700	706	744	745	788	827	841	838	819	769	728	710
Difference	20	17	11	6	5	3	3	3	7	16	19	21
Percent Difference	3.0%	2.4%	1.5%	0.8%	0.7%	0.4%	0.3%	0.3%	0.9%	2.1%	2.7%	3.1%
Dry (24.4%)												
WSIP 2070 Without Project	683	697	733	718	765	800	804	794	771	722	697	682
WSIP 2070 With Project	686	700	736	724	770	805	809	798	775	727	700	683
Difference	3	3	3	6	6	5	5	3	4	5	3	1
Percent Difference	0.4%	0.4%	0.4%	0.9%	0.7%	0.6%	0.6%	0.4%	0.5%	0.7%	0.5%	0.1%
Critical (14.6%)												
WSIP 2070 Without Project	642	653	689	694	716	735	733	724	704	669	650	645
WSIP 2070 With Project	658	667	700	706	728	748	746	738	719	683	666	659
Difference	16	14	11	13	13	13	13	14	15	14	15	14
Percent Difference	2.5%	2.1%	1.6%	1.8%	1.8%	1.7%	1.8%	1.9%	2.1%	2.1%	2.4%	2.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

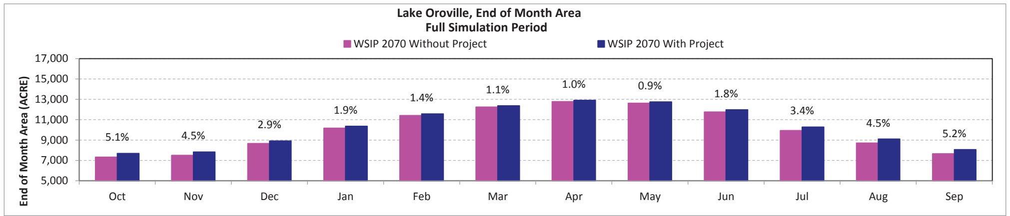
Table SW-20-a
Lake Oroville, End of Month Area
Long-term Average and Average by Water Year Type

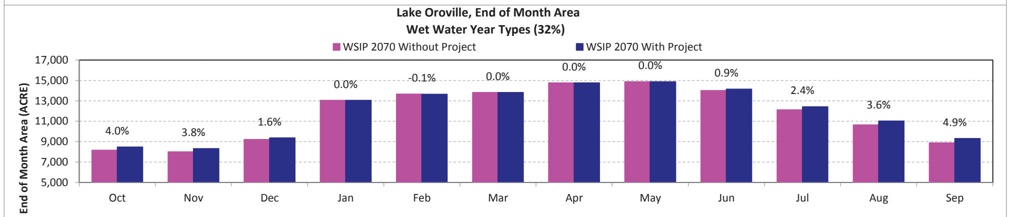
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	7,324	7,496	8,660	10,178	11,411	12,244	12,780	12,632	11,766	9,940	8,709	7,667
WSIP 2070 With Project	7,695	7,830	8,912	10,367	11,571	12,377	12,912	12,752	11,977	10,280	9,098	8,063
Difference	370	334	252	189	160	133	132	120	211	340	390	396
Percent Difference[3]	5.1%	4.5%	2.9%	1.9%	1.4%	1.1%	1.0%	0.9%	1.8%	3.4%	4.5%	5.2%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	8,156	8,006	9,213	13,049	13,661	13,817	14,763	14,871	14,012	12,123	10,639	8,876
WSIP 2070 With Project	8,480	8,309	9,361	13,050	13,649	13,819	14,763	14,871	14,141	12,416	11,023	9,312
Difference	324	303	148	1	-12	1	0	0	128	293	385	436
Percent Difference	4.0%	3.8%	1.6%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.9%	2.4%	3.6%	4.9%
Above Normal (13.4%)												
WSIP 2070 Without Project	7,639	7,696	8,028	11,109	13,119	13,884	14,665	14,564	13,670	11,624	9,895	8,140
WSIP 2070 With Project	8,227	8,236	8,540	11,405	13,271	13,884	14,664	14,559	13,808	12,028	10,440	8,781
Difference	589	540	512	295	151	0	-1	-5	138	403	546	641
Percent Difference	7.7%	7.0%	6.4%	2.7%	1.2%	0.0%	0.0%	0.0%	1.0%	3.5%	5.5%	7.9%
Below Normal (15.9%)												
WSIP 2070 Without Project	6,976	7,298	8,902	9,049	10,633	12,242	12,847	12,687	11,723	9,486	7,956	7,275
WSIP 2070 With Project	7,629	7,841	9,276	9,271	10,839	12,397	12,986	12,807	11,997	10,038	8,614	7,982
Difference	653	543	374	223	206	155	139	120	274	551	659	707
Percent Difference	9.4%	7.4%	4.2%	2.5%	1.9%	1.3%	1.1%	0.9%	2.3%	5.8%	8.3%	9.7%
Dry (24.4%)												
WSIP 2070 Without Project	7,150	7,631	8,929	8,275	9,944	11,284	11,477	11,083	10,153	8,389	7,558	7,083
WSIP 2070 With Project	7,250	7,728	9,035	8,500	10,151	11,473	11,671	11,219	10,322	8,582	7,676	7,108
Difference	99	97	107	224	208	190	194	137	168	193	118	25
Percent Difference	1.4%	1.3%	1.2%	2.7%	2.1%	1.7%	1.7%	1.2%	1.7%	2.3%	1.6%	0.4%
Critical (14.6%)												
WSIP 2070 Without Project	5,901	6,198	7,329	7,498	8,256	8,937	8,855	8,535	7,890	6,744	6,173	6,011
WSIP 2070 With Project	6,317	6,580	7,679	7,900	8,670	9,358	9,280	8,999	8,348	7,142	6,594	6,376
Difference	416	382	350	402	414	421	426	464	458	398	421	365
Percent Difference	7.0%	6.2%	4.8%	5.4%	5.0%	4.7%	4.8%	5.4%	5.8%	5.9%	6.8%	6.1%

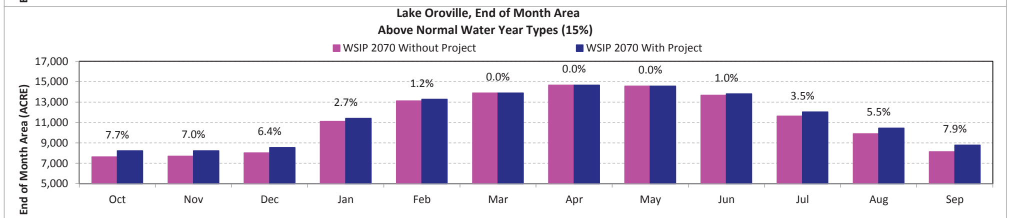
1 Based on the 82-year simulation period

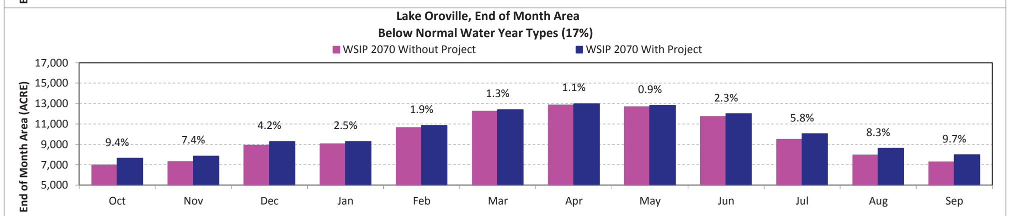
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

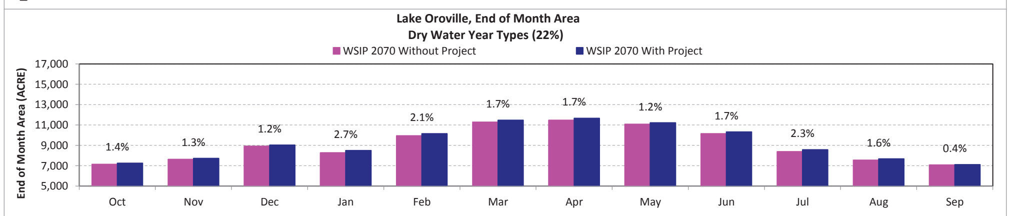
3 Relative difference of the monthly average











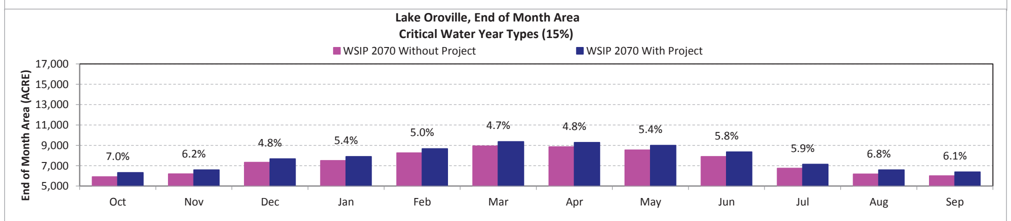


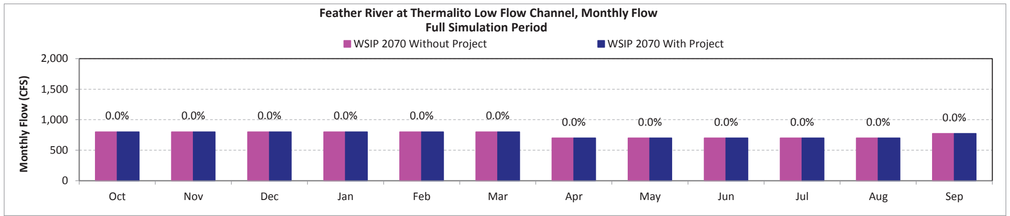
Table SW-21-a
Feather River at Thermalito Low Flow Channel, Monthly Flow
Long-term Average and Average by Water Year Type

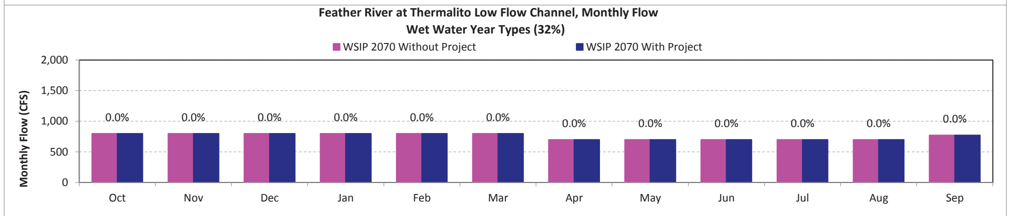
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2070 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2070 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2070 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2070 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dry (24.4%)												
WSIP 2070 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2070 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Critical (14.6%)												
WSIP 2070 Without Project	800	800	800	800	800	800	700	700	700	700	700	773
WSIP 2070 With Project	800	800	800	800	800	800	700	700	700	700	700	773
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

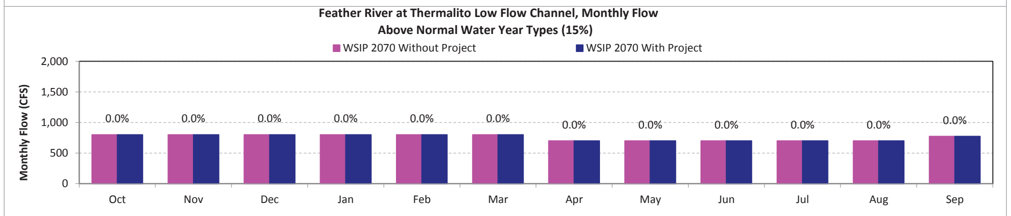
1 Based on the 82-year simulation period

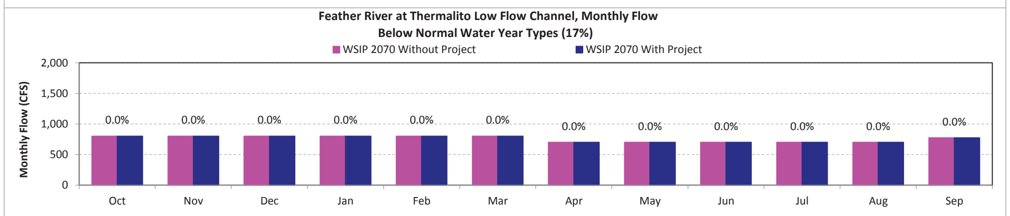
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

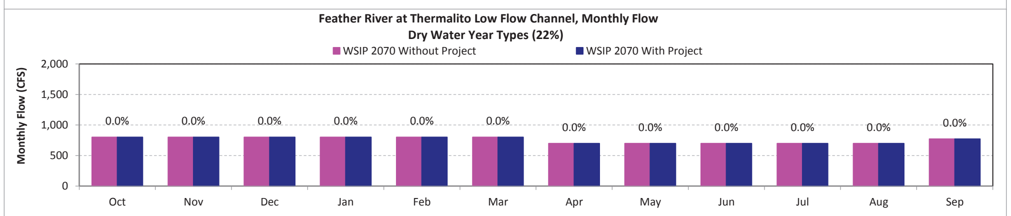
3 Relative difference of the monthly average











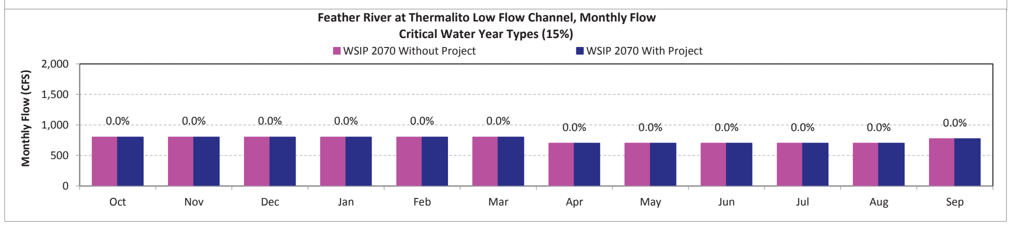


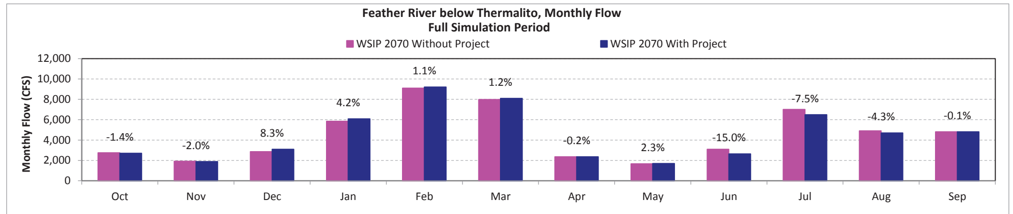
Table SW-22-a
Feather River below Thermalito, Monthly Flow
Long-term Average and Average by Water Year Type

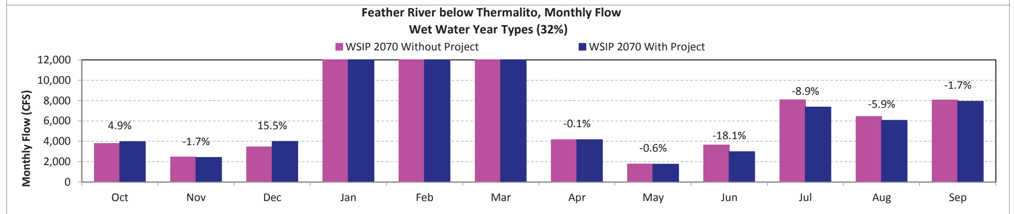
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	2,748	1,920	2,859	5,848	9,110	7,995	2,358	1,663	3,107	7,016	4,915	4,815
WSIP 2070 With Project	2,711	1,882	3,096	6,091	9,211	8,094	2,354	1,700	2,642	6,493	4,704	4,811
Difference	-38	-38	237	243	101	99	-4	37	-465	-523	-211	-4
Percent Difference[3]	-1.4%	-2.0%	8.3%	4.2%	1.1%	1.2%	-0.2%	2.3%	-15.0%	-7.5%	-4.3%	-0.1%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	3,778	2,446	3,438	14,244	20,879	17,306	4,153	1,759	3,627	8,066	6,421	8,049
WSIP 2070 With Project	3,964	2,405	3,970	14,701	20,961	17,243	4,149	1,749	2,972	7,352	6,044	7,913
Difference	186	-41	531	458	82	-63	-4	-10	-655	-714	-377	-136
Percent Difference	4.9%	-1.7%	15.5%	3.2%	0.4%	-0.4%	-0.1%	-0.6%	-18.1%	-8.9%	-5.9%	-1.7%
Above Normal (13.4%)												
WSIP 2070 Without Project	3,837	2,336	3,213	3,975	10,866	9,196	1,324	1,652	3,571	8,429	7,279	7,144
WSIP 2070 With Project	3,938	2,368	3,344	4,506	11,442	9,903	1,323	1,655	2,835	7,197	6,826	6,893
Difference	102	32	130	531	576	708	-1	3	-736	-1,232	-453	-251
Percent Difference	2.6%	1.4%	4.0%	13.4%	5.3%	7.7%	-0.1%	0.2%	-20.6%	-14.6%	-6.2%	-3.5%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,123	1,977	2,152	1,715	2,301	1,909	1,827	1,549	3,187	8,357	5,798	3,060
WSIP 2070 With Project	2,037	1,992	2,611	1,919	2,327	2,045	1,912	1,642	2,477	7,287	5,347	2,898
Difference	-86	15	459	204	26	136	85	93	-710	-1,070	-451	-162
Percent Difference	-4.1%	0.8%	21.3%	11.9%	1.1%	7.1%	4.7%	6.0%	-22.3%	-12.8%	-7.8%	-5.3%
Dry (24.4%)												
WSIP 2070 Without Project	1,978	1,452	3,156	1,410	1,848	2,954	1,627	1,748	2,779	6,050	2,841	2,395
WSIP 2070 With Project	1,664	1,385	3,076	1,410	1,853	2,995	1,579	1,969	2,580	6,057	3,061	2,732
Difference	-314	-66	-81	0	5	41	-49	222	-199	7	220	336
Percent Difference	-15.9%	-4.6%	-2.6%	0.0%	0.3%	1.4%	-3.0%	12.7%	-7.1%	0.1%	7.7%	14.0%
Critical (14.6%)												
WSIP 2070 Without Project	1,481	1,117	1,550	1,248	1,479	1,713	1,212	1,446	2,013	3,605	1,983	1,606
WSIP 2070 With Project	1,342	1,012	1,536	1,212	1,430	1,661	1,181	1,250	2,033	3,853	1,896	1,717
Difference	-139	-105	-13	-36	-49	-52	-31	-196	20	249	-87	111
Percent Difference	-9.4%	-9.4%	-0.8%	-2.9%	-3.3%	-3.0%	-2.5%	-13.6%	1.0%	6.9%	-4.4%	6.9%

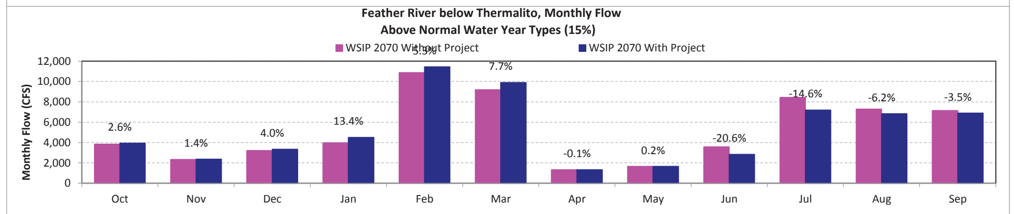
1 Based on the 82-year simulation period

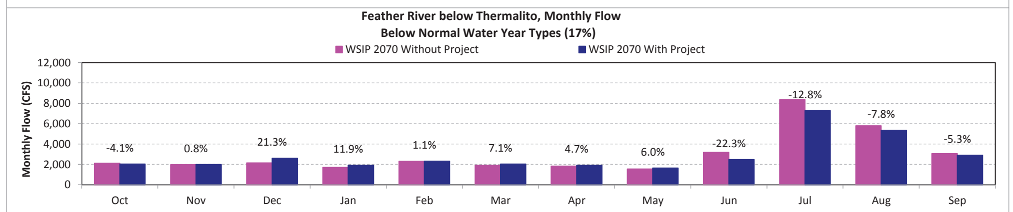
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

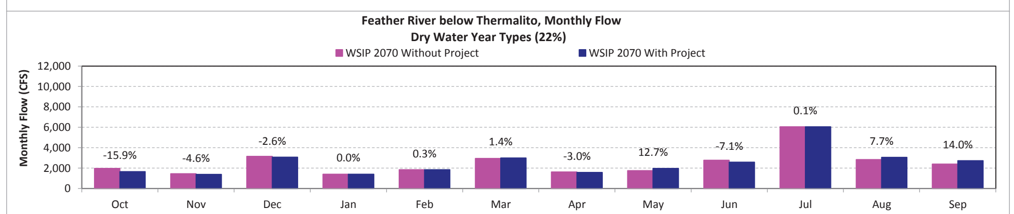
3 Relative difference of the monthly average











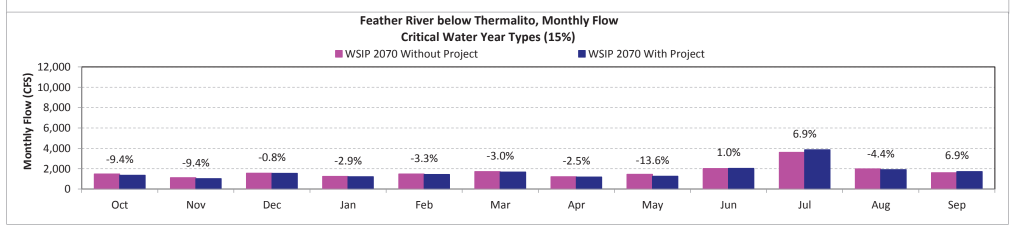


Table SW-23-a
Feather River at Mouth, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	3,181	2,644	5,749	14,807	19,074	16,553	7,233	3,577	4,072	7,230	5,696	6,512
WSIP 2070 With Project	3,147	2,606	5,989	15,034	19,154	16,638	7,231	3,617	3,610	6,732	5,499	6,536
Difference	-34	-38	239	226	80	85	-1	40	-462	-498	-197	24
Percent Difference[3]	-1.1%	-1.4%	4.2%	1.5%	0.4%	0.5%	0.0%	1.1%	-11.3%	-6.9%	-3.5%	0.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	4,134	3,206	7,830	32,171	39,076	31,578	13,230	4,256	5,159	8,644	7,485	10,064
WSIP 2070 With Project	4,322	3,165	8,363	32,593	39,139	31,507	13,229	4,249	4,506	7,936	7,120	9,947
Difference	188	-41	533	422	62	-72	-1	-8	-653	-708	-365	-118
Percent Difference	4.5%	-1.3%	6.8%	1.3%	0.2%	-0.2%	0.0%	-0.2%	-12.7%	-8.2%	-4.9%	-1.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	4,279	2,923	4,830	13,777	28,099	20,826	6,359	3,914	5,002	8,651	8,240	9,108
WSIP 2070 With Project	4,382	2,955	4,960	14,306	28,668	21,526	6,357	3,920	4,267	7,422	7,783	8,859
Difference	102	31	130	529	569	700	-2	6	-735	-1,228	-456	-249
Percent Difference	2.4%	1.1%	2.7%	3.8%	2.0%	3.4%	0.0%	0.1%	-14.7%	-14.2%	-5.5%	-2.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,606	3,033	6,449	6,577	6,827	9,561	4,952	3,771	4,088	8,688	6,684	4,896
WSIP 2070 With Project	2,522	3,049	6,908	6,766	6,782	9,656	5,039	3,865	3,379	7,640	6,231	4,739
Difference	-84	16	460	189	-46	95	87	94	-709	-1,048	-452	-157
Percent Difference	-3.2%	0.5%	7.1%	2.9%	-0.7%	1.0%	1.8%	2.5%	-17.3%	-12.1%	-6.8%	-3.2%
Dry (24.4%)												
WSIP 2070 Without Project	2,671	2,288	5,485	4,833	5,396	7,337	3,862	3,230	3,287	5,907	3,376	4,163
WSIP 2070 With Project	2,360	2,222	5,409	4,828	5,399	7,362	3,818	3,457	3,092	5,992	3,658	4,563
Difference	-311	-65	-76	-5	3	24	-44	227	-196	85	282	399
Percent Difference	-11.6%	-2.9%	-1.4%	-0.1%	0.1%	0.3%	-1.1%	7.0%	-6.0%	1.4%	8.4%	9.6%
Critical (14.6%)												
WSIP 2070 Without Project	1,578	1,343	1,765	3,670	3,529	3,018	3,128	2,162	2,152	3,491	2,283	2,100
WSIP 2070 With Project	1,456	1,237	1,756	3,622	3,463	2,966	3,101	1,968	2,179	3,737	2,170	2,250
Difference	-122	-106	-8	-48	-66	-52	-27	-194	27	247	-113	150
Percent Difference	-7.7%	-7.9%	-0.5%	-1.3%	-1.9%	-1.7%	-0.9%	-9.0%	1.2%	7.1%	-5.0%	7.1%

1 Based on the 82-year simulation period

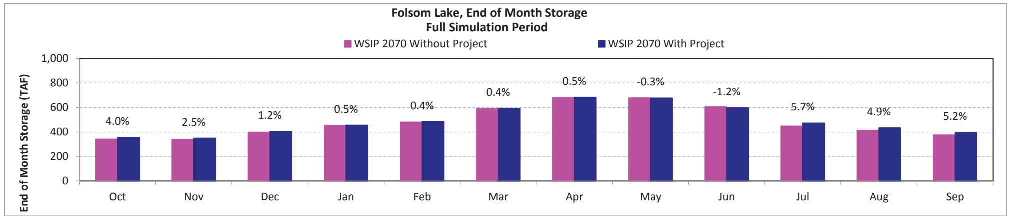
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

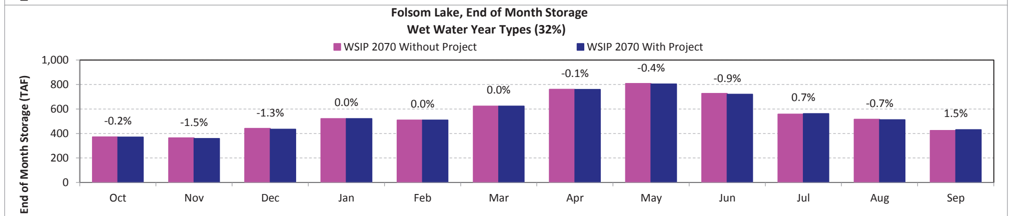
3 Relative difference of the monthly average

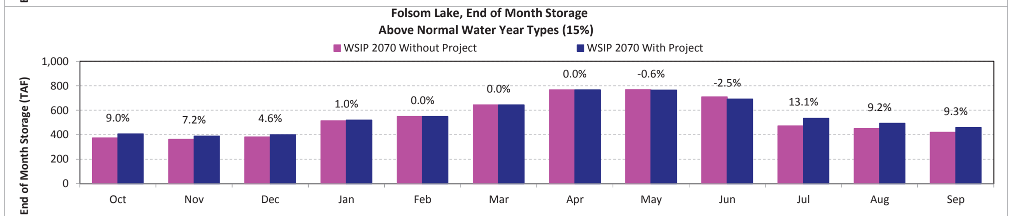
Table SW-24-a
Folsom Lake, End of Month Storage
Long-term Average and Average by Water Year Type

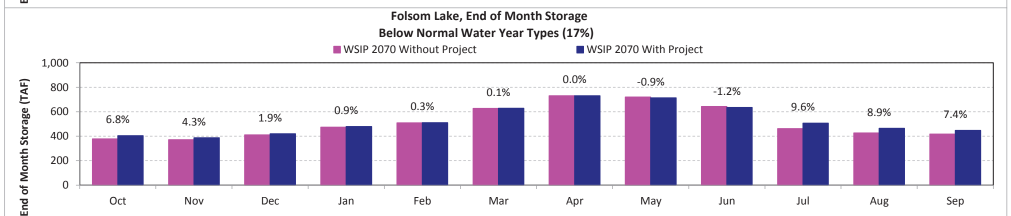
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Storage (TAF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	342	341	399	453	481	591	681	679	605	448	413	377
WSIP 2070 With Project	355	350	404	455	483	593	684	677	598	473	433	396
Difference	14	9	5	2	2	2	3	-2	-7	26	20	19
Percent Difference[3]	4.0%	2.5%	1.2%	0.5%	0.4%	0.4%	0.5%	-0.3%	-1.2%	5.7%	4.9%	5.2%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	371	365	441	522	509	624	760	808	727	557	516	425
WSIP 2070 With Project	371	359	435	522	509	624	759	805	720	562	513	431
Difference	-1	-5	-6	0	0	0	-1	-3	-7	4	-3	6
Percent Difference	-0.2%	-1.5%	-1.3%	0.0%	0.0%	0.0%	-0.1%	-0.4%	-0.9%	0.7%	-0.7%	1.5%
Above Normal (13.4%)												
WSIP 2070 Without Project	373	362	382	514	550	644	767	768	709	472	451	420
WSIP 2070 With Project	407	388	400	519	550	644	766	764	691	534	493	459
Difference	34	26	18	5	0	0	0	-4	-17	62	42	39
Percent Difference	9.0%	7.2%	4.6%	1.0%	0.0%	0.0%	0.0%	-0.6%	-2.5%	13.1%	9.2%	9.3%
Below Normal (15.9%)												
WSIP 2070 Without Project	378	371	411	474	509	627	731	719	643	462	427	417
WSIP 2070 With Project	404	387	419	479	510	628	731	713	635	507	465	448
Difference	26	16	8	4	1	1	0	-6	-8	44	38	31
Percent Difference	6.8%	4.3%	1.9%	0.9%	0.3%	0.1%	0.0%	-0.9%	-1.2%	9.6%	8.9%	7.4%
Dry (24.4%)												
WSIP 2070 Without Project	334	345	379	411	479	597	653	601	515	383	350	349
WSIP 2070 With Project	351	358	386	406	478	598	666	607	511	411	380	373
Difference	17	13	8	-5	-1	1	12	6	-4	28	29	24
Percent Difference	5.1%	3.8%	2.0%	-1.2%	-0.2%	0.2%	1.9%	1.0%	-0.7%	7.2%	8.4%	6.7%
Critical (14.6%)												
WSIP 2070 Without Project	221	233	342	296	333	419	421	407	354	279	246	235
WSIP 2070 With Project	229	240	351	311	346	433	425	401	350	295	263	246
Difference	9	7	9	14	14	14	4	-5	-4	16	17	11
Percent Difference	3.9%	3.1%	2.6%	4.9%	4.1%	3.2%	0.9%	-1.3%	-1.2%	5.7%	6.9%	4.8%

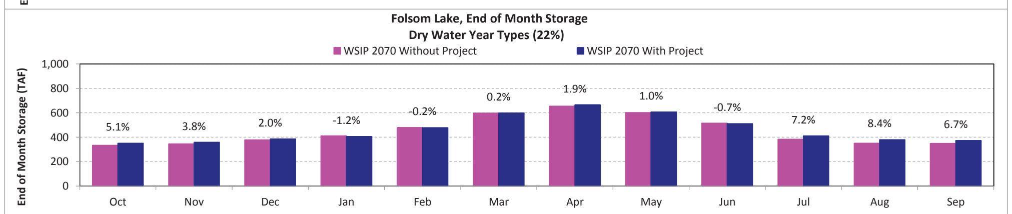
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











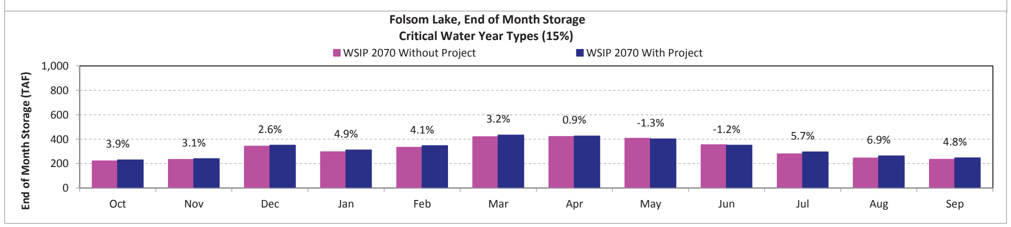
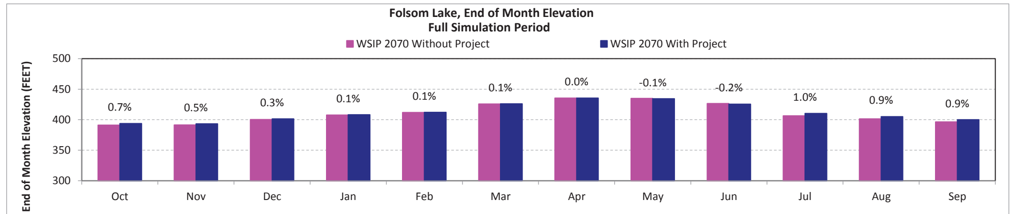
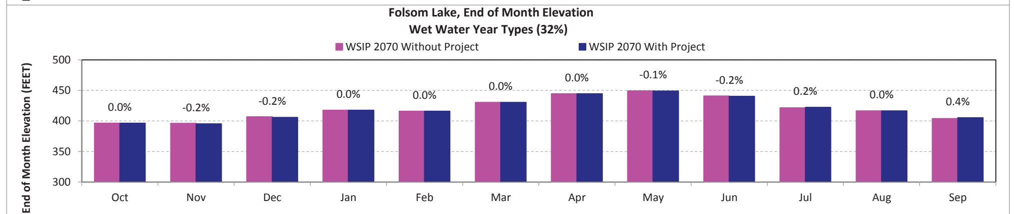


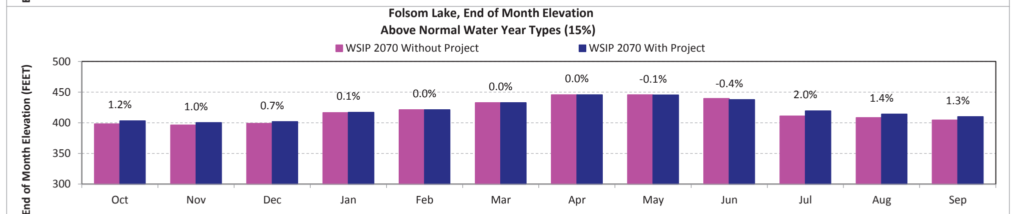
Table SW-25-a
Folsom Lake, End of Month Elevation
Long-term Average and Average by Water Year Type

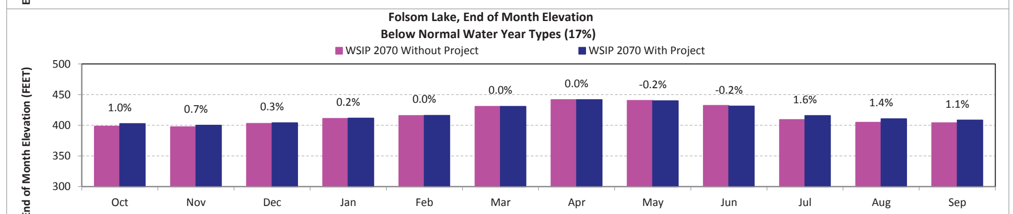
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Elevation (FEET)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	391	392	400	408	412	426	435	435	427	406	401	396
WSIP 2070 With Project	394	393	401	408	412	426	436	435	426	410	405	400
Difference	3	2	1	1	0	0	0	0	-1	4	4	4
Percent Difference[3]	0.7%	0.5%	0.3%	0.1%	0.1%	0.1%	0.0%	-0.1%	-0.2%	1.0%	0.9%	0.9%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	397	396	407	418	416	430	445	449	441	421	417	404
WSIP 2070 With Project	396	395	406	418	416	430	445	449	440	422	417	405
Difference	0	-1	-1	0	0	0	0	0	-1	1	0	1
Percent Difference	0.0%	-0.2%	-0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%	0.2%	0.0%	0.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	398	396	399	416	421	433	445	446	440	411	408	405
WSIP 2070 With Project	403	400	402	417	421	433	445	445	438	419	414	410
Difference	5	4	3	1	0	0	0	0	-2	8	6	5
Percent Difference	1.2%	1.0%	0.7%	0.1%	0.0%	0.0%	0.0%	-0.1%	-0.4%	2.0%	1.4%	1.3%
Below Normal (15.9%)												
WSIP 2070 Without Project	398	397	403	411	416	431	442	440	432	409	405	404
WSIP 2070 With Project	403	400	404	412	416	431	442	440	431	416	411	408
Difference	4	3	1	1	0	0	0	-1	-1	7	6	5
Percent Difference	1.0%	0.7%	0.3%	0.2%	0.0%	0.0%	0.0%	-0.2%	-0.2%	1.6%	1.4%	1.1%
Dry (24.4%)												
WSIP 2070 Without Project	390	393	397	402	412	427	433	427	417	398	393	393
WSIP 2070 With Project	394	395	399	401	412	427	435	428	416	403	398	398
Difference	4	3	1	-1	0	0	1	1	0	5	6	5
Percent Difference	1.0%	0.6%	0.4%	-0.1%	0.0%	0.0%	0.3%	0.2%	-0.1%	1.2%	1.4%	1.2%
Critical (14.6%)												
WSIP 2070 Without Project	367	369	391	383	390	403	403	401	393	380	373	370
WSIP 2070 With Project	371	373	393	387	392	404	402	399	392	384	378	374
Difference	3	3	3	4	2	1	-1	-2	-1	3	5	4
Percent Difference	0.9%	0.8%	0.7%	0.9%	0.5%	0.3%	-0.3%	-0.5%	-0.2%	0.9%	1.2%	1.0%

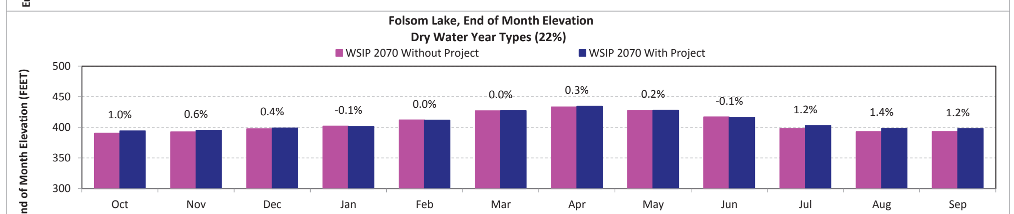
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











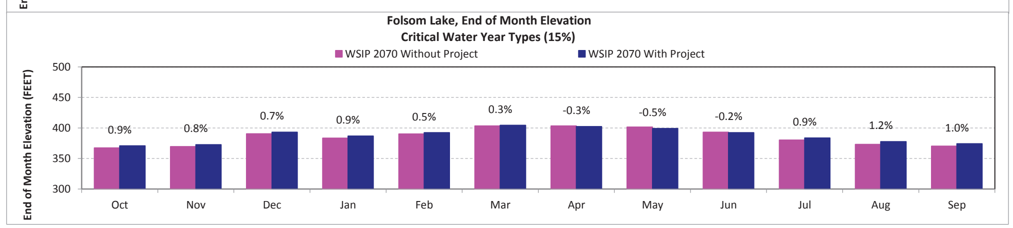


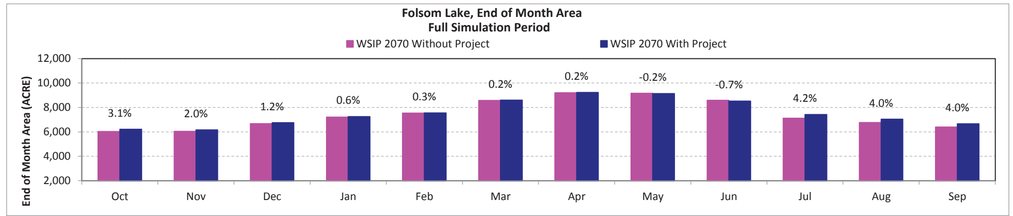
Table SW-26-a
Folsom Lake, End of Month Area
Long-term Average and Average by Water Year Type

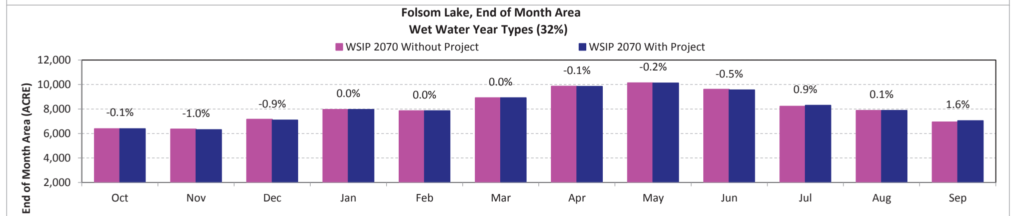
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	End of Month Area (ACRE)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	6,031	6,051	6,684	7,218	7,537	8,580	9,213	9,162	8,588	7,129	6,776	6,409
WSIP 2070 With Project	6,219	6,172	6,763	7,260	7,560	8,599	9,228	9,142	8,527	7,426	7,045	6,666
Difference	188	121	79	42	23	19	14	-20	-60	298	269	258
Percent Difference[3]	3.1%	2.0%	1.2%	0.6%	0.3%	0.2%	0.2%	-0.2%	-0.7%	4.2%	4.0%	4.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	6,390	6,367	7,154	7,964	7,849	8,910	9,858	10,136	9,609	8,223	7,874	6,937
WSIP 2070 With Project	6,384	6,304	7,092	7,964	7,849	8,910	9,850	10,115	9,561	8,295	7,880	7,044
Difference	-6	-63	-63	0	0	0	-7	-21	-48	72	6	108
Percent Difference	-0.1%	-1.0%	-0.9%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.5%	0.9%	0.1%	1.6%
Above Normal (13.4%)												
WSIP 2070 Without Project	6,514	6,377	6,576	7,874	8,228	9,092	9,918	9,921	9,538	7,469	7,269	6,985
WSIP 2070 With Project	6,879	6,666	6,784	7,919	8,228	9,092	9,916	9,894	9,411	8,083	7,699	7,385
Difference	365	289	208	46	0	0	-2	-27	-127	614	430	400
Percent Difference	5.6%	4.5%	3.2%	0.6%	0.0%	0.0%	0.0%	-0.3%	-1.3%	8.2%	5.9%	5.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	6,537	6,457	6,859	7,463	7,824	8,926	9,670	9,576	9,011	7,322	6,999	6,937
WSIP 2070 With Project	6,838	6,656	6,949	7,516	7,839	8,935	9,660	9,525	8,938	7,807	7,435	7,276
Difference	301	199	90	54	15	9	-11	-51	-73	485	435	339
Percent Difference	4.6%	3.1%	1.3%	0.7%	0.2%	0.1%	-0.1%	-0.5%	-0.8%	6.6%	6.2%	4.9%
Dry (24.4%)												
WSIP 2070 Without Project	5,945	6,105	6,458	6,802	7,530	8,658	9,082	8,650	7,895	6,526	6,136	6,150
WSIP 2070 With Project	6,207	6,285	6,571	6,760	7,521	8,668	9,180	8,708	7,863	6,850	6,526	6,477
Difference	262	180	113	-42	-8	10	98	58	-32	324	390	327
Percent Difference	4.4%	2.9%	1.8%	-0.6%	-0.1%	0.1%	1.1%	0.7%	-0.4%	5.0%	6.4%	5.3%
Critical (14.6%)												
WSIP 2070 Without Project	4,406	4,538	5,953	5,432	5,929	6,890	6,896	6,757	6,199	5,239	4,767	4,597
WSIP 2070 With Project	4,606	4,723	6,149	5,689	6,083	6,993	6,860	6,648	6,140	5,488	5,078	4,844
Difference	200	185	196	257	154	103	-36	-110	-59	250	311	248
Percent Difference	4.5%	4.1%	3.3%	4.7%	2.6%	1.5%	-0.5%	-1.6%	-1.0%	4.8%	6.5%	5.4%

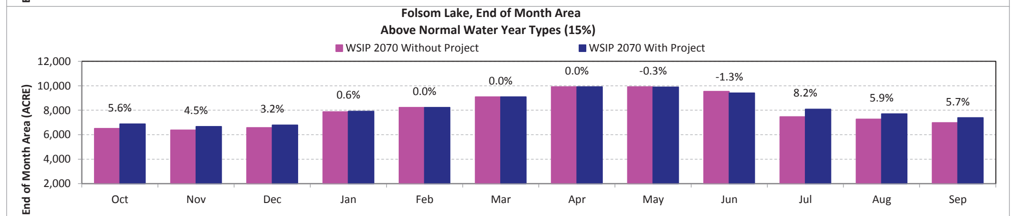
1 Based on the 82-year simulation period

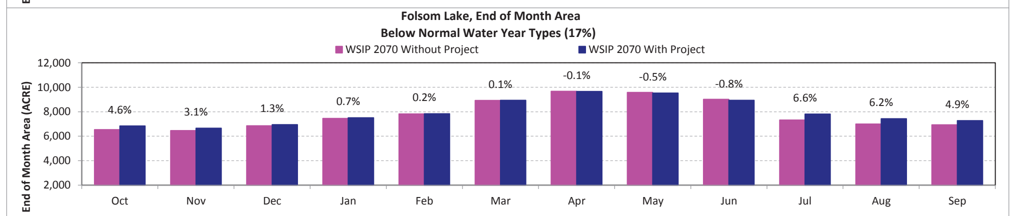
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

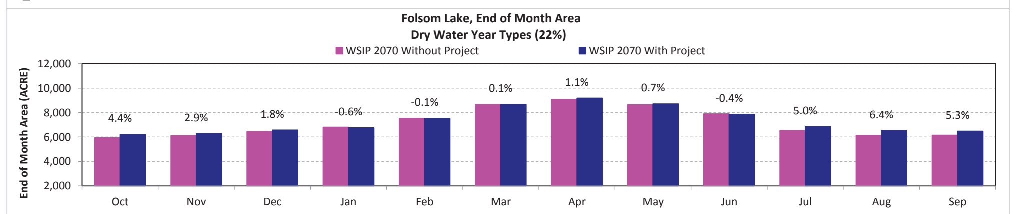
3 Relative difference of the monthly average











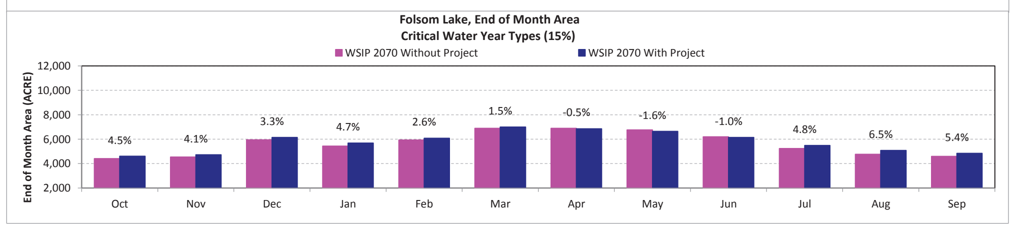


Table SW-27-a
American River below Nimbus Reservoir, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1,427	1,932	3,797	7,300	8,821	5,768	3,255	1,529	1,526	2,961	1,309	1,581
WSIP 2070 With Project	1,515	2,018	3,857	7,345	8,826	5,762	3,241	1,613	1,620	2,417	1,395	1,590
Difference	88	86	59	44	5	-7	-14	84	94	-545	86	9
Percent Difference[3]	6.2%	4.5%	1.6%	0.6%	0.1%	-0.1%	-0.4%	5.5%	6.2%	-18.4%	6.6%	0.6%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1,767	2,361	4,598	15,767	15,292	10,162	5,538	1,999	1,623	3,316	1,552	2,675
WSIP 2070 With Project	1,882	2,440	4,606	15,761	15,292	10,162	5,553	2,035	1,683	3,128	1,671	2,515
Difference	116	79	8	-6	0	0	15	36	60	-188	119	-160
Percent Difference	6.5%	3.4%	0.2%	0.0%	0.0%	0.0%	0.3%	1.8%	3.7%	-5.7%	7.7%	-6.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	1,633	2,006	3,254	8,121	13,644	6,186	3,053	1,442	1,322	4,433	1,253	1,546
WSIP 2070 With Project	1,693	2,142	3,393	8,100	13,733	6,186	3,057	1,507	1,545	3,133	1,573	1,588
Difference	60	135	139	-21	89	0	4	66	223	-1,301	320	42
Percent Difference	3.7%	6.7%	4.3%	-0.3%	0.7%	0.0%	0.1%	4.6%	16.8%	-29.3%	25.5%	2.7%
Below Normal (15.9%)												
WSIP 2070 Without Project	1,407	2,618	3,528	3,269	5,501	4,896	3,027	1,424	1,558	3,328	1,406	1,181
WSIP 2070 With Project	1,488	2,788	3,661	3,351	5,555	4,907	3,039	1,528	1,578	2,461	1,504	1,302
Difference	81	170	133	82	54	11	11	103	20	-867	98	120
Percent Difference	5.8%	6.5%	3.8%	2.5%	1.0%	0.2%	0.4%	7.3%	1.3%	-26.1%	7.0%	10.2%
Dry (24.4%)												
WSIP 2070 Without Project	1,255	1,519	4,970	2,197	4,472	3,279	1,793	1,396	1,707	2,361	1,198	977
WSIP 2070 With Project	1,367	1,589	5,058	2,280	4,399	3,247	1,604	1,500	1,869	1,842	1,160	1,068
Difference	112	70	88	83	-73	-32	-189	105	162	-519	-39	90
Percent Difference	8.9%	4.6%	1.8%	3.8%	-1.6%	-1.0%	-10.5%	7.5%	9.5%	-22.0%	-3.2%	9.3%
Critical (14.6%)												
WSIP 2070 Without Project	810	876	900	1,078	1,221	959	1,178	924	1,166	1,447	914	680
WSIP 2070 With Project	831	867	869	1,185	1,239	955	1,350	1,077	1,183	1,128	909	771
Difference	21	-9	-31	108	18	-4	173	153	17	-319	-5	90
Percent Difference	2.6%	-1.0%	-3.5%	10.0%	1.5%	-0.4%	14.7%	16.5%	1.5%	-22.0%	-0.6%	13.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

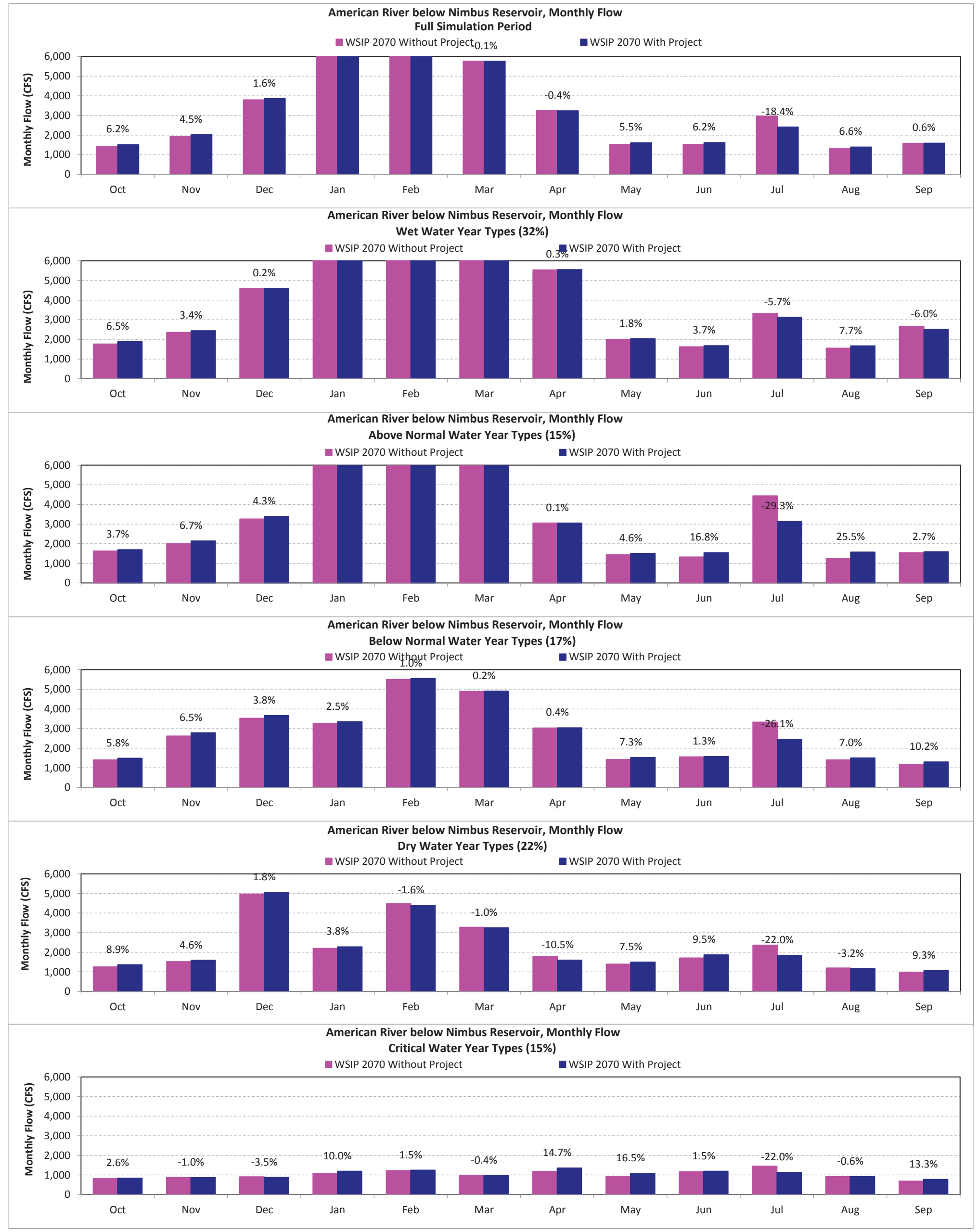


Table SW-28-a
American River at Watt Avenue, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1,367	1,870	3,734	7,221	8,703	5,648	3,157	1,455	1,464	2,901	1,236	1,521
WSIP 2070 With Project	1,454	1,955	3,792	7,264	8,708	5,641	3,143	1,539	1,557	2,355	1,327	1,529
Difference	87	85	59	44	5	-7	-14	84	93	-546	91	8
Percent Difference[3]	6.4%	4.5%	1.6%	0.6%	0.1%	-0.1%	-0.4%	5.8%	6.3%	-18.8%	7.3%	0.5%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1,696	2,296	4,530	15,650	15,099	9,988	5,399	1,904	1,556	3,254	1,476	2,612
WSIP 2070 With Project	1,813	2,374	4,537	15,643	15,099	9,988	5,414	1,939	1,615	3,066	1,596	2,451
Difference	117	78	8	-6	0	0	15	35	59	-188	121	-161
Percent Difference	6.9%	3.4%	0.2%	0.0%	0.0%	0.0%	0.3%	1.9%	3.8%	-5.8%	8.2%	-6.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	1,573	1,943	3,190	8,063	13,520	6,031	2,961	1,376	1,264	4,375	1,166	1,486
WSIP 2070 With Project	1,633	2,077	3,328	8,041	13,610	6,030	2,964	1,441	1,486	3,071	1,498	1,525
Difference	59	134	138	-22	89	-1	4	66	222	-1,303	332	39
Percent Difference	3.8%	6.9%	4.3%	-0.3%	0.7%	0.0%	0.1%	4.8%	17.6%	-29.8%	28.4%	2.6%
Below Normal (15.9%)												
WSIP 2070 Without Project	1,350	2,557	3,458	3,196	5,418	4,801	2,934	1,351	1,497	3,268	1,329	1,121
WSIP 2070 With Project	1,429	2,726	3,589	3,279	5,471	4,811	2,945	1,454	1,515	2,400	1,435	1,239
Difference	79	169	132	83	53	10	11	103	18	-868	106	118
Percent Difference	5.9%	6.6%	3.8%	2.6%	1.0%	0.2%	0.4%	7.6%	1.2%	-26.6%	8.0%	10.5%
Dry (24.4%)												
WSIP 2070 Without Project	1,201	1,459	4,910	2,137	4,400	3,193	1,716	1,334	1,646	2,300	1,130	919
WSIP 2070 With Project	1,311	1,528	4,997	2,219	4,326	3,162	1,527	1,440	1,806	1,778	1,096	1,009
Difference	110	69	87	82	-75	-31	-189	106	161	-521	-34	90
Percent Difference	9.2%	4.7%	1.8%	3.8%	-1.7%	-1.0%	-11.0%	7.9%	9.8%	-22.7%	-3.0%	9.8%
Critical (14.6%)												
WSIP 2070 Without Project	762	822	847	1,020	1,161	904	1,123	870	1,113	1,392	857	627
WSIP 2070 With Project	781	813	816	1,126	1,178	899	1,295	1,019	1,128	1,073	853	717
Difference	19	-9	-31	106	17	-5	173	149	14	-319	-4	89
Percent Difference	2.4%	-1.1%	-3.7%	10.4%	1.4%	-0.5%	15.4%	17.1%	1.3%	-22.9%	-0.4%	14.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-29-a
American River at H Street, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1,260	1,794	3,670	7,137	8,601	5,540	2,983	1,311	1,282	2,470	1,038	1,328
WSIP 2070 With Project	1,349	1,879	3,729	7,180	8,607	5,533	2,973	1,395	1,362	1,977	1,139	1,349
Difference	89	85	59	43	6	-7	-10	84	79	-493	101	21
Percent Difference[3]	7.1%	4.7%	1.6%	0.6%	0.1%	-0.1%	-0.3%	6.4%	6.2%	-20.0%	9.7%	1.6%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1,556	2,211	4,458	15,580	14,983	9,880	5,197	1,732	1,377	2,806	1,273	2,299
WSIP 2070 With Project	1,679	2,287	4,466	15,574	14,983	9,880	5,212	1,767	1,436	2,582	1,394	2,175
Difference	123	76	8	-6	0	0	15	35	59	-224	121	-124
Percent Difference	7.9%	3.4%	0.2%	0.0%	0.0%	0.0%	0.3%	2.0%	4.3%	-8.0%	9.5%	-5.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	1,468	1,858	3,126	7,980	13,450	5,901	2,765	1,242	1,086	3,817	989	1,307
WSIP 2070 With Project	1,528	2,000	3,264	7,958	13,539	5,900	2,769	1,308	1,308	2,549	1,321	1,366
Difference	59	142	138	-22	89	-1	4	66	222	-1,268	332	58
Percent Difference	4.0%	7.7%	4.4%	-0.3%	0.7%	0.0%	0.1%	5.3%	20.4%	-33.2%	33.5%	4.5%
Below Normal (15.9%)												
WSIP 2070 Without Project	1,256	2,493	3,395	3,098	5,290	4,687	2,748	1,220	1,316	2,742	1,099	990
WSIP 2070 With Project	1,335	2,650	3,533	3,177	5,343	4,698	2,759	1,322	1,334	1,977	1,233	1,108
Difference	79	157	137	79	53	10	11	103	18	-765	134	118
Percent Difference	6.3%	6.3%	4.0%	2.5%	1.0%	0.2%	0.4%	8.4%	1.4%	-27.9%	12.2%	11.9%
Dry (24.4%)												
WSIP 2070 Without Project	1,114	1,389	4,832	2,046	4,302	3,092	1,568	1,199	1,448	1,931	936	787
WSIP 2070 With Project	1,224	1,461	4,920	2,128	4,234	3,061	1,394	1,305	1,571	1,521	917	877
Difference	110	73	87	82	-68	-31	-174	106	124	-410	-19	90
Percent Difference	9.9%	5.2%	1.8%	4.0%	-1.6%	-1.0%	-11.1%	8.8%	8.6%	-21.2%	-2.0%	11.5%
Critical (14.6%)												
WSIP 2070 Without Project	675	751	821	931	1,078	810	997	746	946	1,108	674	508
WSIP 2070 With Project	694	743	789	1,037	1,095	805	1,170	895	931	899	685	588
Difference	19	-8	-31	106	17	-5	173	149	-15	-209	11	81
Percent Difference	2.8%	-1.0%	-3.8%	11.4%	1.6%	-0.6%	17.3%	19.9%	-1.6%	-18.9%	1.7%	15.9%

1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average

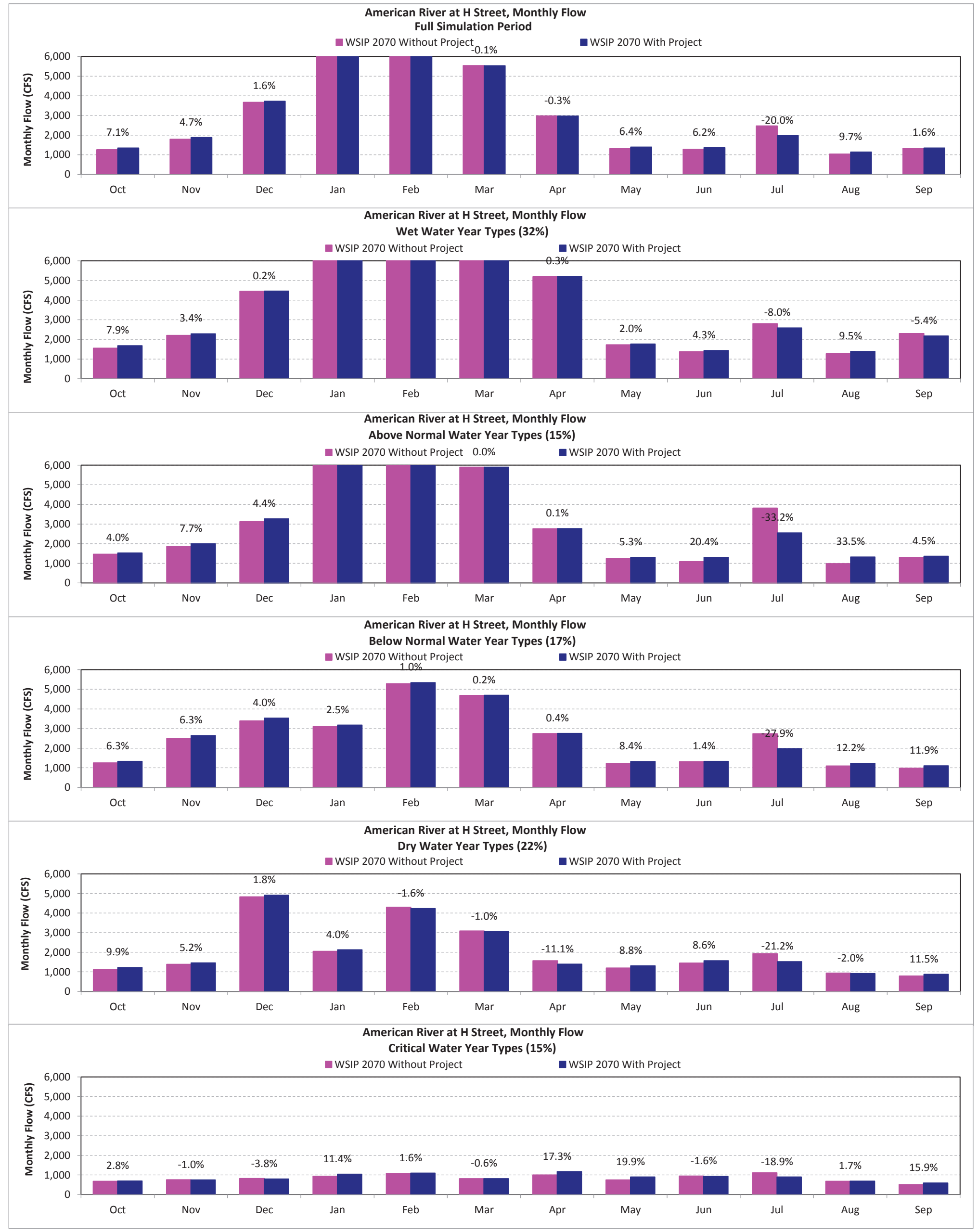


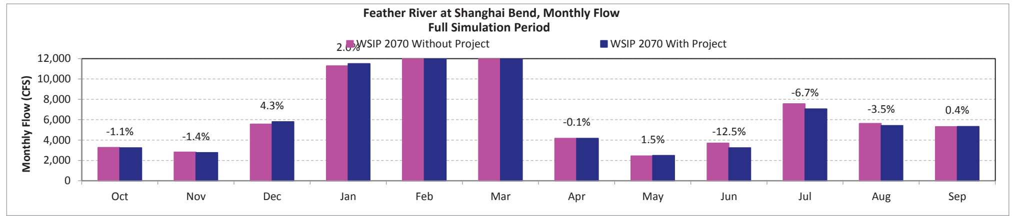
Table SW-46-a
Feather River at Shanghai Bend, Monthly Flow
Long-term Average and Average by Water Year Type

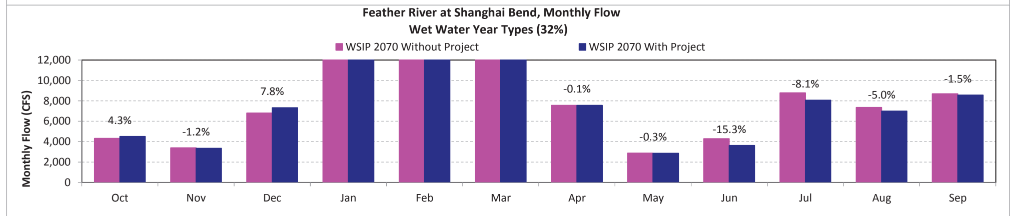
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	3,274	2,810	5,560	11,286	14,955	12,739	4,173	2,445	3,704	7,567	5,627	5,312
WSIP 2070 With Project	3,239	2,770	5,797	11,512	15,033	12,822	4,169	2,482	3,240	7,063	5,429	5,331
Difference	-36	-40	237	225	78	82	-4	37	-465	-504	-197	19
Percent Difference[3]	-1.1%	-1.4%	4.3%	2.0%	0.5%	0.6%	-0.1%	1.5%	-12.5%	-6.7%	-3.5%	0.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	4,321	3,392	6,799	25,426	30,914	25,399	7,566	2,874	4,283	8,780	7,358	8,695
WSIP 2070 With Project	4,507	3,351	7,331	25,847	30,976	25,325	7,562	2,864	3,628	8,068	6,986	8,567
Difference	186	-41	531	421	63	-74	-4	-10	-655	-711	-372	-128
Percent Difference	4.3%	-1.2%	7.8%	1.7%	0.2%	-0.3%	-0.1%	-0.3%	-15.3%	-8.1%	-5.0%	-1.5%
Above Normal (13.4%)												
WSIP 2070 Without Project	4,373	3,352	5,300	10,038	21,160	14,692	3,059	2,302	4,228	9,171	8,210	7,753
WSIP 2070 With Project	4,474	3,384	5,430	10,568	21,729	15,391	3,058	2,305	3,491	7,939	7,757	7,502
Difference	102	32	130	530	569	700	-1	3	-736	-1,232	-453	-251
Percent Difference	2.3%	1.0%	2.5%	5.3%	2.7%	4.8%	0.0%	0.1%	-17.4%	-13.4%	-5.5%	-3.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	2,627	2,883	5,045	4,374	5,813	5,561	3,103	2,200	3,828	8,916	6,581	3,583
WSIP 2070 With Project	2,541	2,898	5,505	4,562	5,766	5,654	3,188	2,293	3,118	7,847	6,119	3,421
Difference	-86	15	459	188	-47	93	85	93	-710	-1,070	-462	-162
Percent Difference	-3.3%	0.5%	9.1%	4.3%	-0.8%	1.7%	2.7%	4.2%	-18.5%	-12.0%	-7.0%	-4.5%
Dry (24.4%)												
WSIP 2070 Without Project	2,558	2,349	6,204	3,366	3,993	5,893	2,456	2,398	3,373	6,454	3,372	2,808
WSIP 2070 With Project	2,244	2,276	6,123	3,358	3,991	5,914	2,407	2,620	3,174	6,537	3,658	3,206
Difference	-314	-73	-81	-8	-3	21	-49	222	-199	83	285	397
Percent Difference	-12.3%	-3.1%	-1.3%	-0.2%	-0.1%	0.4%	-2.0%	9.3%	-5.9%	1.3%	8.5%	14.1%
Critical (14.6%)												
WSIP 2070 Without Project	1,894	1,743	2,595	2,483	2,860	2,708	1,867	1,987	2,390	3,862	2,231	1,791
WSIP 2070 With Project	1,771	1,632	2,582	2,434	2,791	2,653	1,836	1,790	2,410	4,110	2,127	1,941
Difference	-124	-111	-13	-49	-68	-55	-31	-196	20	249	-104	150
Percent Difference	-6.5%	-6.4%	-0.5%	-2.0%	-2.4%	-2.0%	-1.6%	-9.9%	0.8%	6.4%	-4.7%	8.4%

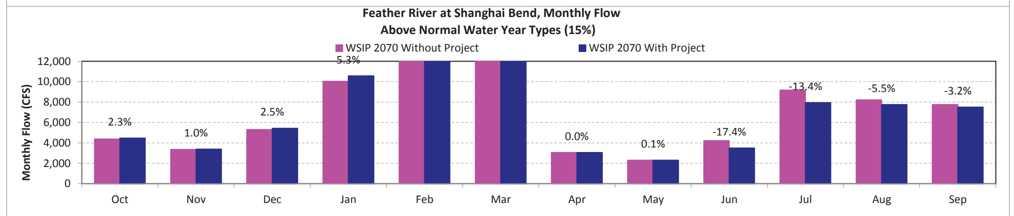
1 Based on the 82-year simulation period

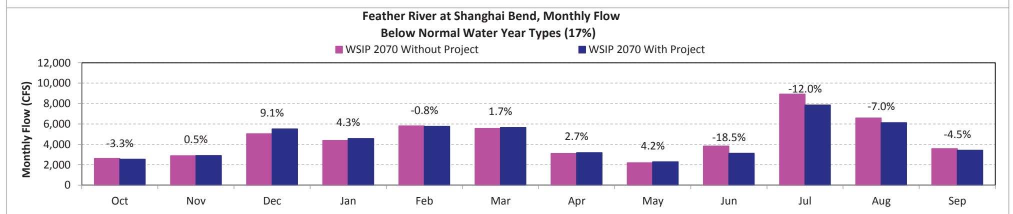
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

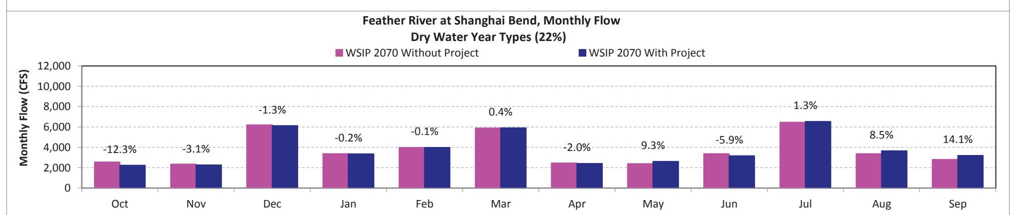
3 Relative difference of the monthly average











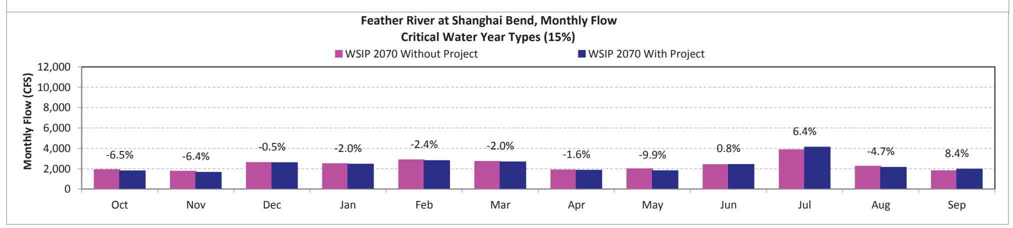


Table SW-47-a
American River at Mouth, Monthly Flow
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Flow (CFS)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	1,260	1,794	3,670	7,137	8,601	5,540	2,983	1,311	1,282	2,470	1,038	1,328
WSIP 2070 With Project	1,349	1,879	3,729	7,180	8,607	5,533	2,973	1,395	1,362	1,977	1,139	1,349
Difference	89	85	59	43	6	-7	-10	84	79	-493	101	21
Percent Difference[3]	7.1%	4.7%	1.6%	0.6%	0.1%	-0.1%	-0.3%	6.4%	6.2%	-20.0%	9.7%	1.6%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	1,556	2,211	4,458	15,580	14,983	9,880	5,197	1,732	1,377	2,806	1,273	2,299
WSIP 2070 With Project	1,679	2,287	4,466	15,574	14,983	9,880	5,212	1,767	1,436	2,582	1,394	2,175
Difference	123	76	8	-6	0	0	15	35	59	-224	121	-124
Percent Difference	7.9%	3.4%	0.2%	0.0%	0.0%	0.0%	0.3%	2.0%	4.3%	-8.0%	9.5%	-5.4%
Above Normal (13.4%)												
WSIP 2070 Without Project	1,468	1,858	3,126	7,980	13,450	5,901	2,765	1,242	1,086	3,817	989	1,307
WSIP 2070 With Project	1,528	2,000	3,264	7,958	13,539	5,900	2,769	1,308	1,308	2,549	1,321	1,366
Difference	59	142	138	-22	89	-1	4	66	222	-1,268	332	58
Percent Difference	4.0%	7.7%	4.4%	-0.3%	0.7%	0.0%	0.1%	5.3%	20.4%	-33.2%	33.5%	4.5%
Below Normal (15.9%)												
WSIP 2070 Without Project	1,256	2,493	3,395	3,098	5,290	4,687	2,748	1,220	1,316	2,742	1,099	990
WSIP 2070 With Project	1,335	2,650	3,533	3,177	5,343	4,698	2,759	1,322	1,334	1,977	1,233	1,108
Difference	79	157	137	79	53	10	11	103	18	-765	134	118
Percent Difference	6.3%	6.3%	4.0%	2.5%	1.0%	0.2%	0.4%	8.4%	1.4%	-27.9%	12.2%	11.9%
Dry (24.4%)												
WSIP 2070 Without Project	1,114	1,389	4,832	2,046	4,302	3,092	1,568	1,199	1,448	1,931	936	787
WSIP 2070 With Project	1,224	1,461	4,920	2,128	4,234	3,061	1,394	1,305	1,571	1,521	917	877
Difference	110	73	87	82	-68	-31	-174	106	124	-410	-19	90
Percent Difference	9.9%	5.2%	1.8%	4.0%	-1.6%	-1.0%	-11.1%	8.8%	8.6%	-21.2%	-2.0%	11.5%
Critical (14.6%)												
WSIP 2070 Without Project	675	751	821	931	1,078	810	997	746	946	1,108	674	508
WSIP 2070 With Project	694	743	789	1,037	1,095	805	1,170	895	931	899	685	588
Difference	19	-8	-31	106	17	-5	173	149	-15	-209	11	81
Percent Difference	2.8%	-1.0%	-3.8%	11.4%	1.6%	-0.6%	17.3%	19.9%	-1.6%	-18.9%	1.7%	15.9%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

Table SW-53-a
Sacramento River at Bend Bridge, Monthly Stage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	3	4	5	7	8	6	4	4	5	6	4	4
WSIP 2070 With Project	3	4	5	7	8	6	4	4	5	6	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	-5.2%	-1.2%	1.8%	0.4%	0.9%	0.3%	-0.3%	-4.8%	-4.2%	3.5%	2.3%	2.2%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	3	5	5	12	13	10	6	4	5	6	4	6
WSIP 2070 With Project	3	4	5	12	13	10	6	4	5	7	5	6
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.5%	-2.8%	0.5%	-0.1%	0.3%	-0.1%	1.2%	-4.2%	-1.8%	3.2%	8.4%	-2.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	3	5	4	8	11	7	4	4	6	7	4	4
WSIP 2070 With Project	3	5	4	8	11	7	4	4	5	7	4	4
Difference	0	0	0	0	0	0	0	0	-1	1	0	-1
Percent Difference	-5.6%	1.8%	8.3%	1.3%	-0.1%	-1.0%	-1.2%	-3.0%	-9.8%	7.9%	5.3%	-15.6%
Below Normal (15.9%)												
WSIP 2070 Without Project	2	3	6	5	5	4	4	4	6	7	4	2
WSIP 2070 With Project	2	3	6	5	5	4	4	4	5	7	4	3
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	1.2%	-2.6%	2.1%	0.7%	2.1%	0.6%	4.8%	-5.4%	-4.9%	4.0%	3.3%	24.0%
Dry (24.4%)												
WSIP 2070 Without Project	3	3	5	3	4	4	3	4	6	6	4	2
WSIP 2070 With Project	2	3	5	3	4	4	3	4	5	6	4	2
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-12.1%	-2.0%	1.1%	2.0%	1.8%	2.4%	-0.9%	-3.3%	-4.5%	1.5%	-1.1%	24.2%
Critical (14.6%)												
WSIP 2070 Without Project	2	2	3	3	3	3	3	4	5	5	4	2
WSIP 2070 With Project	2	2	3	3	3	3	3	3	5	5	4	2
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-15.7%	4.1%	0.2%	-0.4%	6.5%	1.8%	-9.6%	-10.0%	-2.9%	2.1%	-8.8%	7.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

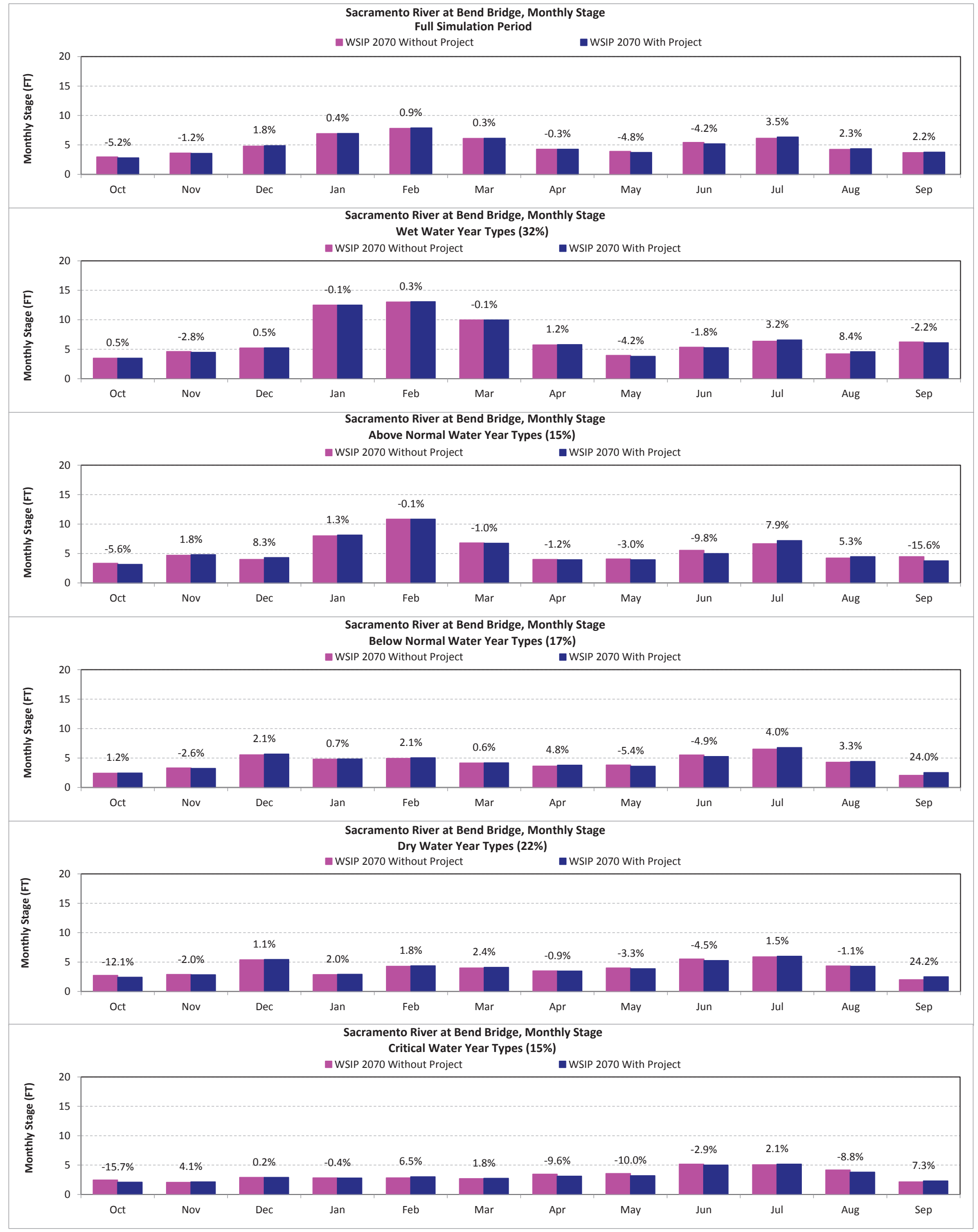


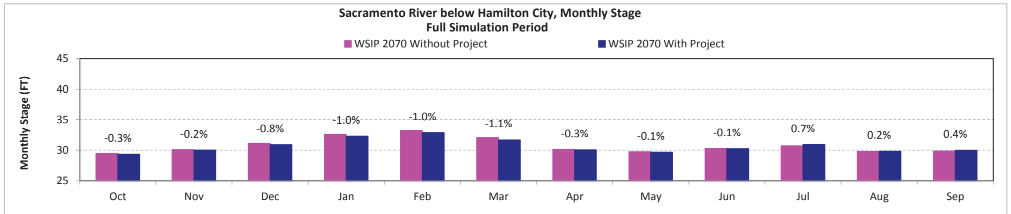
Table SW-54-a
Sacramento River below Hamilton City, Monthly Stage
Long-term Average and Average by Water Year Type

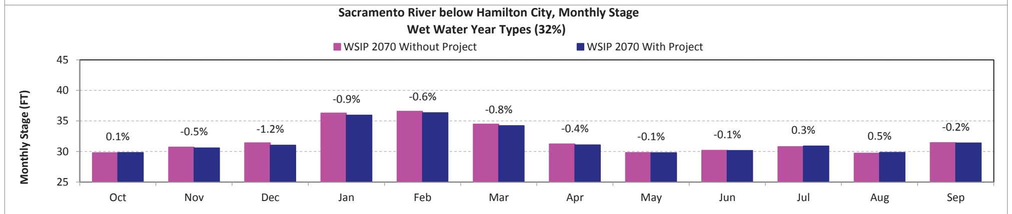
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	29	30	31	33	33	32	30	30	30	31	30	30
WSIP 2070 With Project	29	30	31	32	33	32	30	30	30	31	30	30
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	-0.3%	-0.2%	-0.8%	-1.0%	-1.0%	-1.1%	-0.3%	-0.1%	-0.1%	0.7%	0.2%	0.4%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	30	31	31	36	37	34	31	30	30	31	30	31
WSIP 2070 With Project	30	31	31	36	36	34	31	30	30	31	30	31
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.1%	-0.5%	-1.2%	-0.9%	-0.6%	-0.8%	-0.4%	-0.1%	-0.1%	0.3%	0.5%	-0.2%
Above Normal (13.4%)												
WSIP 2070 Without Project	30	31	31	33	35	32	30	30	30	31	30	30
WSIP 2070 With Project	30	31	30	33	35	32	30	30	30	32	30	30
Difference	0	0	0	0	0	-1	0	0	0	1	0	0
Percent Difference	-0.5%	-0.1%	-0.4%	-1.1%	-1.2%	-1.7%	-0.7%	-0.2%	-0.6%	1.7%	0.4%	-1.3%
Below Normal (15.9%)												
WSIP 2070 Without Project	29	30	32	31	31	31	30	30	30	31	30	29
WSIP 2070 With Project	29	30	32	31	31	30	30	30	30	31	30	29
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.3%	-0.1%	-0.1%	-1.5%	-1.2%	-1.6%	-0.2%	-0.3%	0.0%	1.0%	0.3%	1.4%
Dry (24.4%)												
WSIP 2070 Without Project	29	30	31	30	31	31	30	30	30	31	30	29
WSIP 2070 With Project	29	30	31	30	30	30	30	30	30	31	30	29
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.8%	-0.3%	-0.5%	-0.8%	-1.5%	-1.5%	-0.1%	0.1%	-0.1%	0.5%	0.0%	1.4%
Critical (14.6%)												
WSIP 2070 Without Project	29	29	30	30	30	30	29	30	30	30	30	29
WSIP 2070 With Project	29	29	30	30	30	30	29	29	30	30	30	29
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.8%	0.2%	-1.2%	-0.6%	-0.7%	-0.3%	-0.2%	-0.2%	0.0%	0.6%	-0.4%	0.5%

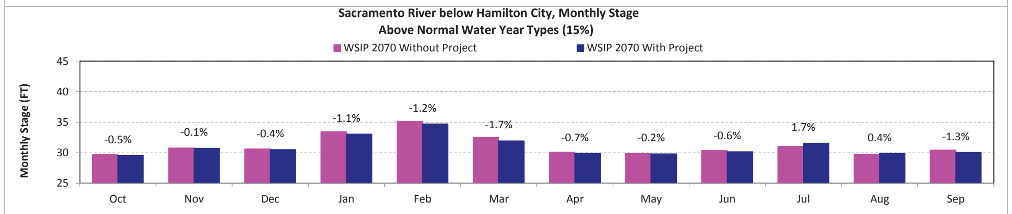
1 Based on the 82-year simulation period

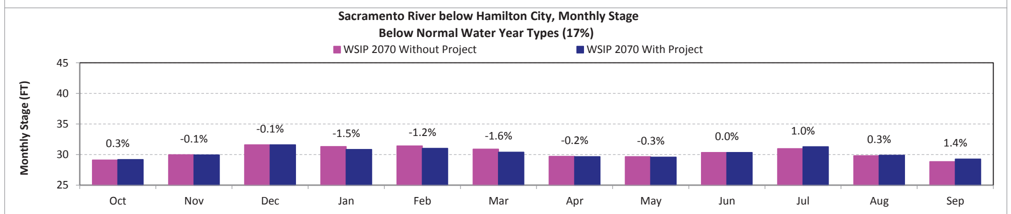
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

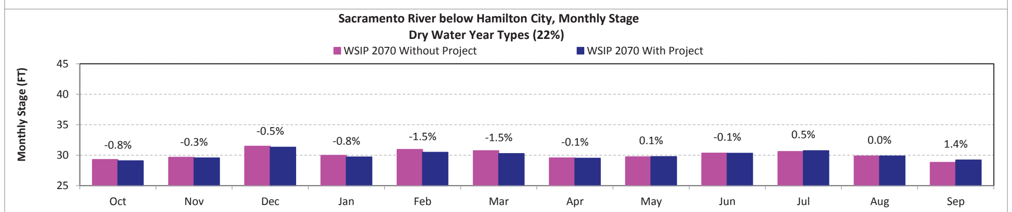
3 Relative difference of the monthly average











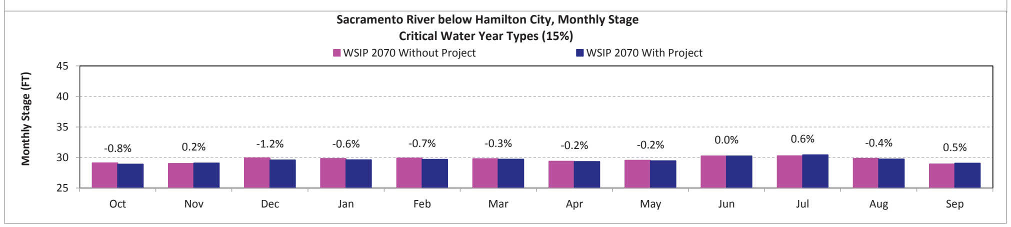


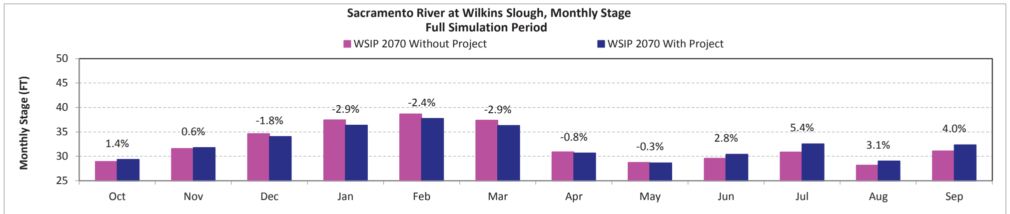
Table SW-56-a
Sacramento River at Wilkins Slough, Monthly Stage
Long-term Average and Average by Water Year Type

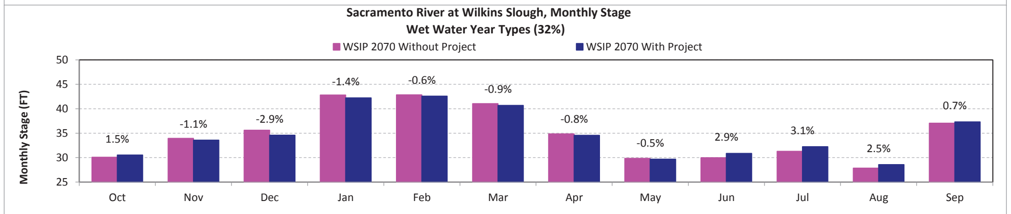
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	29	32	35	37	39	37	31	29	30	31	28	31
WSIP 2070 With Project	29	32	34	36	38	36	31	29	30	33	29	32
Difference	0	0	-1	-1	-1	-1	0	0	1	2	1	1
Percent Difference[3]	1.4%	0.6%	-1.8%	-2.9%	-2.4%	-2.9%	-0.8%	-0.3%	2.8%	5.4%	3.1%	4.0%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	30	34	36	43	43	41	35	30	30	31	28	37
WSIP 2070 With Project	31	34	35	42	43	41	35	30	31	32	29	37
Difference	0	0	-1	-1	0	0	0	0	1	1	1	0
Percent Difference	1.5%	-1.1%	-2.9%	-1.4%	-0.6%	-0.9%	-0.8%	-0.5%	2.9%	3.1%	2.5%	0.7%
Above Normal (13.4%)												
WSIP 2070 Without Project	30	34	33	40	42	39	32	30	30	32	28	33
WSIP 2070 With Project	30	34	33	39	42	38	31	29	30	35	29	33
Difference	0	0	-1	-1	-1	-2	-1	0	1	4	1	0
Percent Difference	1.4%	0.2%	-1.6%	-2.3%	-1.4%	-4.2%	-2.3%	-0.3%	2.1%	11.4%	3.0%	0.0%
Below Normal (15.9%)												
WSIP 2070 Without Project	28	32	36	37	37	36	30	29	30	32	28	27
WSIP 2070 With Project	29	32	37	35	36	34	30	28	31	34	29	30
Difference	1	0	0	-2	-2	-2	0	0	1	2	1	2
Percent Difference	3.2%	1.2%	1.2%	-5.5%	-4.0%	-5.6%	-0.4%	-1.3%	4.1%	7.6%	4.0%	8.9%
Dry (24.4%)												
WSIP 2070 Without Project	28	30	35	32	36	36	28	28	29	30	28	27
WSIP 2070 With Project	29	30	34	31	34	34	28	28	30	32	29	29
Difference	0	0	0	-1	-2	-2	0	0	1	1	1	2
Percent Difference	1.6%	1.5%	-0.9%	-4.3%	-5.0%	-4.5%	-0.4%	0.2%	2.4%	4.5%	4.4%	8.8%
Critical (14.6%)												
WSIP 2070 Without Project	28	28	32	32	32	32	27	27	29	29	29	27
WSIP 2070 With Project	27	28	31	31	32	32	27	27	30	30	29	29
Difference	0	1	-1	-1	-1	0	0	0	1	1	0	1
Percent Difference	-0.8%	2.8%	-4.6%	-2.4%	-1.8%	-0.9%	-0.2%	0.3%	2.1%	3.8%	1.3%	5.3%

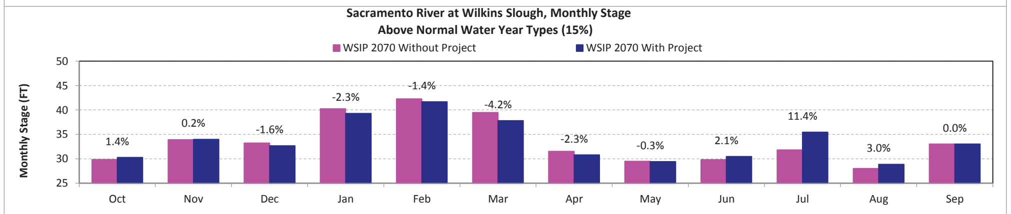
1 Based on the 82-year simulation period

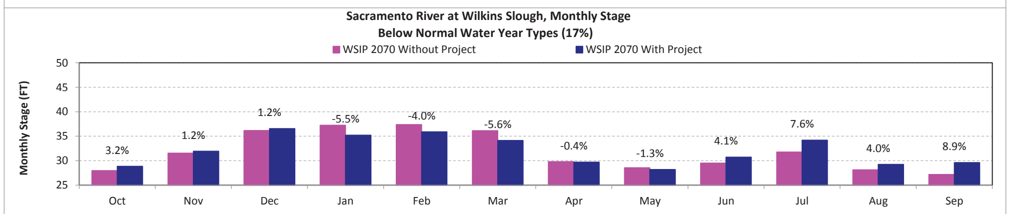
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

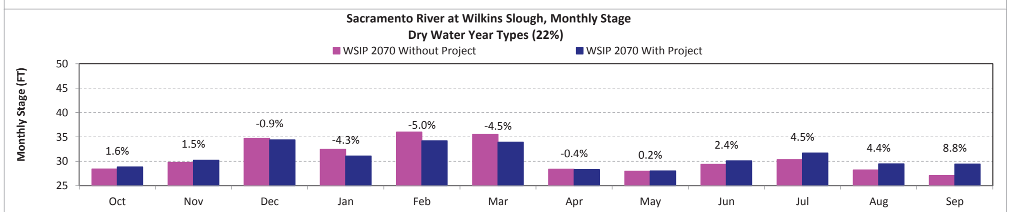
3 Relative difference of the monthly average











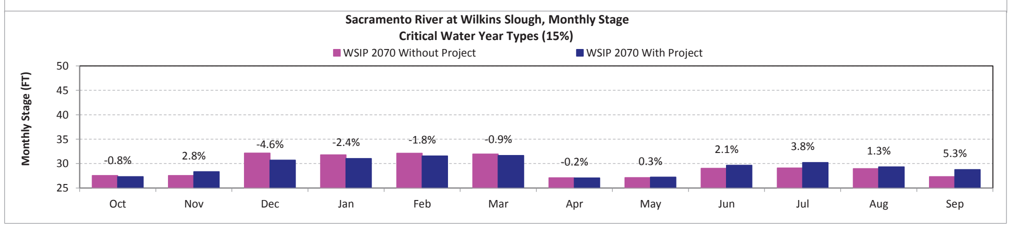


Table SW-57-a
Feather River near Gridley, Monthly Stage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
					Monthly Stage (FT)							
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	74	74	74	75	77	76	74	74	75	77	76	75
WSIP 2070 With Project	74	74	74	75	77	76	74	74	74	76	75	75
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	-0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	-0.3%	-0.3%	-0.1%	0.1%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	75	74	75	79	81	80	75	74	75	77	76	77
WSIP 2070 With Project	75	74	75	79	81	80	75	74	75	77	76	77
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.1%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	-0.4%	-0.4%	-0.2%	-0.1%
Above Normal (13.4%)												
WSIP 2070 Without Project	75	74	75	75	78	77	73	74	75	77	77	77
WSIP 2070 With Project	75	74	75	75	78	78	73	74	75	77	77	77
Difference	0	0	0	0	0	0	0	0	0	-1	0	0
Percent Difference	0.1%	0.0%	0.1%	0.2%	0.3%	0.4%	0.0%	0.0%	-0.5%	-0.7%	-0.3%	-0.1%
Below Normal (15.9%)												
WSIP 2070 Without Project	74	74	74	74	74	74	74	74	75	77	76	74
WSIP 2070 With Project	74	74	74	74	74	74	74	74	74	77	76	74
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.1%	0.0%	0.4%	0.1%	0.0%	0.1%	0.1%	0.1%	-0.6%	-0.6%	-0.3%	0.0%
Dry (24.4%)												
WSIP 2070 Without Project	74	73	74	73	74	74	74	74	74	76	74	74
WSIP 2070 With Project	74	73	74	73	74	74	74	74	74	76	75	74
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.2%	-0.2%	0.0%	0.1%	0.3%
Critical (14.6%)												
WSIP 2070 Without Project	73	73	73	73	73	74	73	73	74	75	74	74
WSIP 2070 With Project	73	73	73	73	73	74	73	73	74	75	74	74
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	-0.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.3%	-0.1%	0.2%	-0.1%	0.1%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

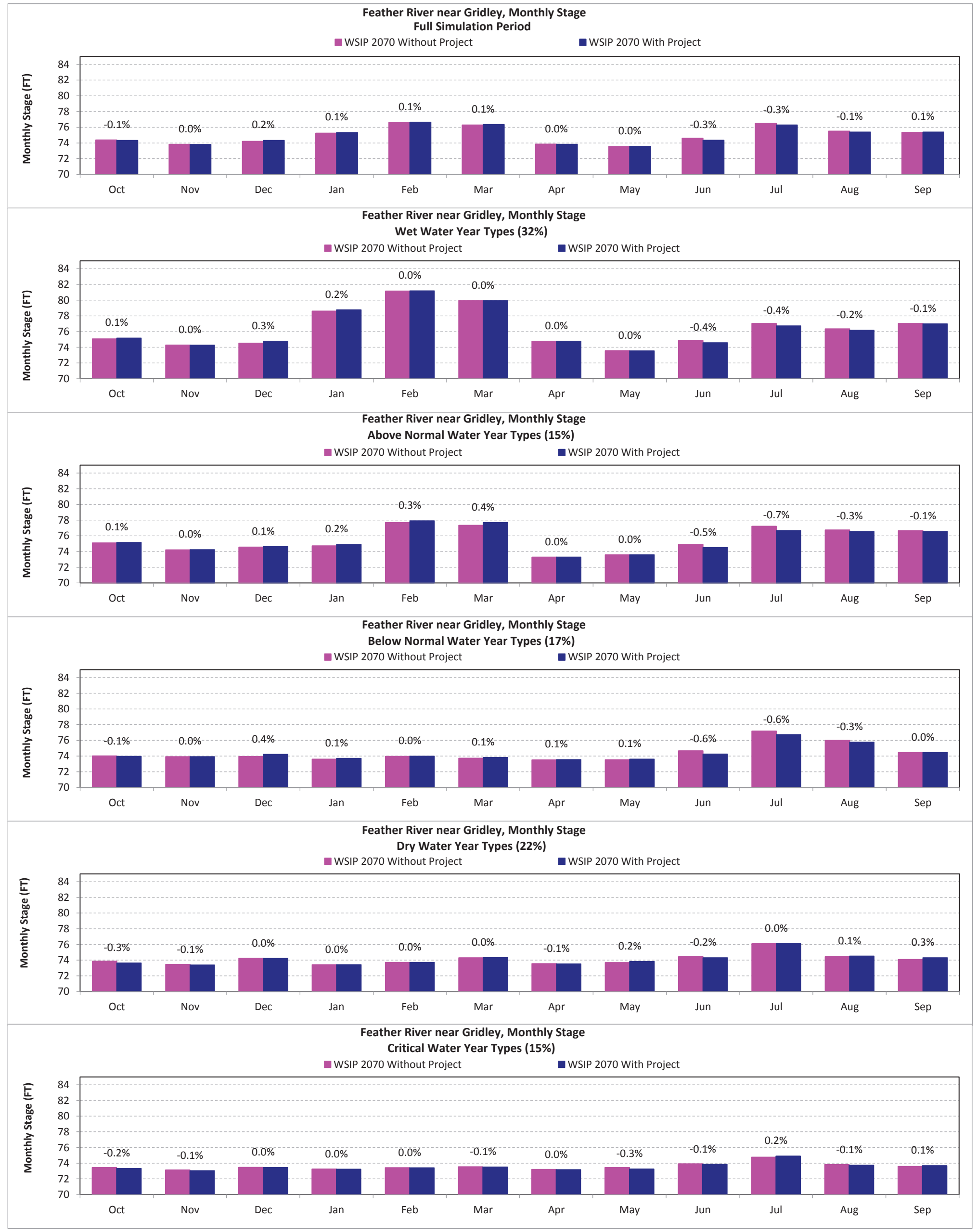


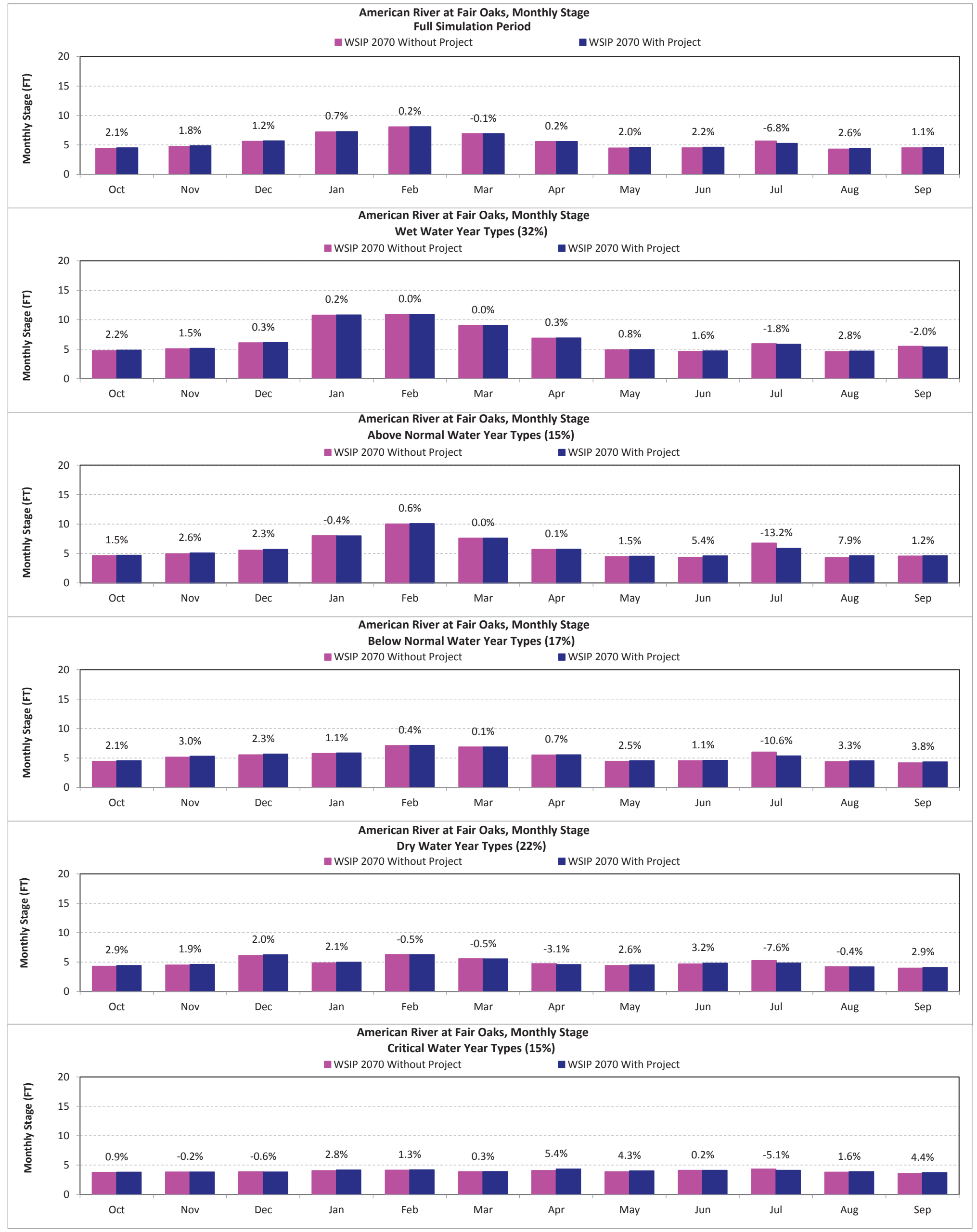
Table SW-58-a
American River at Fair Oaks, Monthly Stage
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Stage (FT)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	4	5	6	7	8	7	6	4	5	6	4	5
WSIP 2070 With Project	5	5	6	7	8	7	6	5	5	5	4	5
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference[3]	2.1%	1.8%	1.2%	0.7%	0.2%	-0.1%	0.2%	2.0%	2.2%	-6.8%	2.6%	1.1%
Water Year Types[2]												
Wet (31.7%)												
WSIP 2070 Without Project	5	5	6	11	11	9	7	5	5	6	5	6
WSIP 2070 With Project	5	5	6	11	11	9	7	5	5	6	5	5
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	2.2%	1.5%	0.3%	0.2%	0.0%	0.0%	0.3%	0.8%	1.6%	-1.8%	2.8%	-2.0%
Above Normal (13.4%)												
WSIP 2070 Without Project	5	5	6	8	10	8	6	4	4	7	4	5
WSIP 2070 With Project	5	5	6	8	10	8	6	5	5	6	5	5
Difference	0	0	0	0	0	0	0	0	0	-1	0	0
Percent Difference	1.5%	2.6%	2.3%	-0.4%	0.6%	0.0%	0.1%	1.5%	5.4%	-13.2%	7.9%	1.2%
Below Normal (15.9%)												
WSIP 2070 Without Project	4	5	6	6	7	7	6	4	5	6	4	4
WSIP 2070 With Project	5	5	6	6	7	7	6	5	5	5	5	4
Difference	0	0	0	0	0	0	0	0	0	-1	0	0
Percent Difference	2.1%	3.0%	2.3%	1.1%	0.4%	0.1%	0.7%	2.5%	1.1%	-10.6%	3.3%	3.8%
Dry (24.4%)												
WSIP 2070 Without Project	4	5	6	5	6	6	5	4	5	5	4	4
WSIP 2070 With Project	4	5	6	5	6	6	5	5	5	5	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	2.9%	1.9%	2.0%	2.1%	-0.5%	-0.5%	-3.1%	2.6%	3.2%	-7.6%	-0.4%	2.9%
Critical (14.6%)												
WSIP 2070 Without Project	4	4	4	4	4	4	4	4	4	4	4	4
WSIP 2070 With Project	4	4	4	4	4	4	4	4	4	4	4	4
Difference	0	0	0	0	0	0	0	0	0	0	0	0
Percent Difference	0.9%	-0.2%	-0.6%	2.8%	1.3%	0.3%	5.4%	4.3%	0.2%	-5.1%	1.6%	4.4%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average



Trinity and Sacramento River Basin Operations

Exceedance Probability Charts and Tables

Figure SW-01-b
Trinity Lake, End of Month Storage
Probability of Exceedance

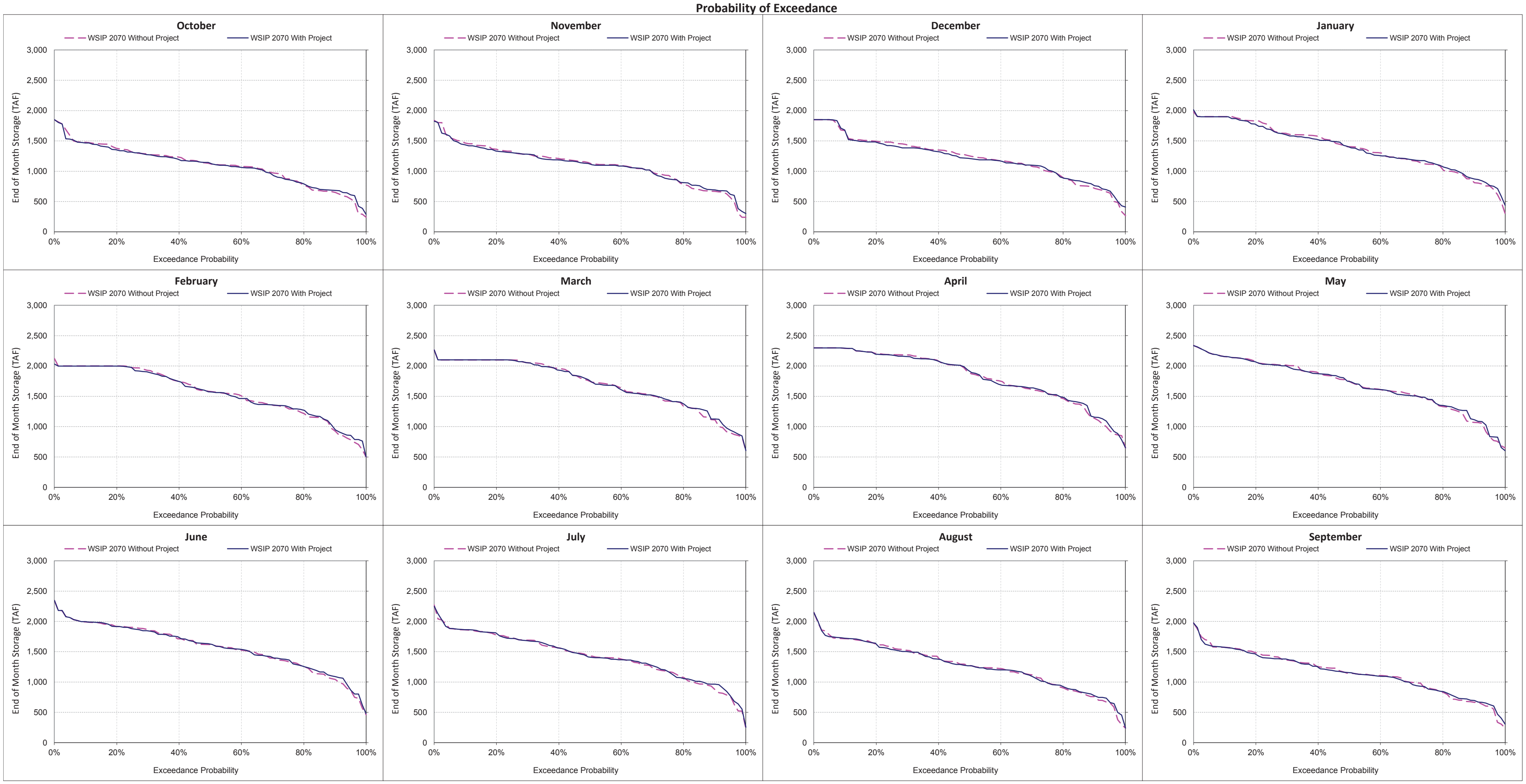


Table SW-01-b

Trinity Lake, End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,848	1,850	2	0.1%
1.2%	1,814	1,804	-10	-0.6%
2.5%	1,780	1,780	0	0.0%
3.7%	1,684	1,533	-151	-9.0%
4.9%	1,594	1,532	-62	-3.9%
6.2%	1,499	1,512	14	0.9%
7.4%	1,484	1,477	-7	-0.5%
8.6%	1,482	1,473	-9	-0.6%
9.9%	1,477	1,468	-9	-0.6%
11.1%	1,471	1,464	-7	-0.5%
12.3%	1,461	1,446	-14	-1.0%
13.6%	1,457	1,441	-17	-1.1%
14.8%	1,450	1,417	-34	-2.3%
16.0%	1,446	1,406	-40	-2.8%
17.3%	1,446	1,398	-48	-3.3%
18.5%	1,408	1,360	-47	-3.4%
19.8%	1,380	1,356	-25	-1.8%
21.0%	1,366	1,338	-28	-2.0%
22.2%	1,360	1,336	-25	-1.8%
23.5%	1,353	1,318	-35	-2.6%
24.7%	1,322	1,316	-5	-0.4%
25.9%	1,304	1,305	1	0.1%
27.2%	1,295	1,304	9	0.7%
28.4%	1,290	1,285	-5	-0.4%
29.6%	1,287	1,276	-11	-0.9%
30.9%	1,273	1,268	-4	-0.4%
32.1%	1,269	1,256	-13	-1.1%
33.3%	1,268	1,243	-25	-1.9%
34.6%	1,259	1,239	-19	-1.5%
35.8%	1,258	1,238	-20	-1.6%
37.0%	1,240	1,227	-13	-1.1%
38.3%	1,237	1,218	-19	-1.6%
39.5%	1,236	1,202	-35	-2.8%
40.7%	1,223	1,175	-48	-3.9%
42.0%	1,185	1,173	-12	-1.0%
43.2%	1,180	1,168	-12	-1.0%
44.4%	1,178	1,167	-11	-0.9%
45.7%	1,170	1,162	-8	-0.7%
46.9%	1,140	1,148	8	0.7%
48.1%	1,138	1,145	7	0.6%
49.4%	1,130	1,145	14	1.3%
50.6%	1,115	1,122	7	0.6%
51.9%	1,109	1,106	-3	-0.3%
53.1%	1,105	1,100	-5	-0.4%
54.3%	1,104	1,099	-4	-0.4%
55.6%	1,102	1,094	-8	-0.7%
56.8%	1,098	1,075	-23	-2.1%
58.0%	1,096	1,075	-21	-1.9%
59.3%	1,078	1,068	-10	-0.9%
60.5%	1,077	1,061	-16	-1.5%
61.7%	1,076	1,057	-18	-1.7%
63.0%	1,072	1,055	-17	-1.6%
64.2%	1,067	1,052	-14	-1.3%
65.4%	1,044	1,036	-8	-0.8%
66.7%	1,036	1,022	-14	-1.4%
67.9%	987	981	-6	-0.6%
69.1%	983	968	-15	-1.5%
70.4%	969	929	-41	-4.2%
71.6%	964	900	-64	-6.6%
72.8%	952	894	-58	-6.1%
74.1%	874	868	-7	-0.8%
75.3%	874	857	-17	-1.9%
76.5%	843	843	0	0.0%
77.8%	839	820	-19	-2.3%
79.0%	800	811	11	1.3%
80.2%	761	785	24	3.1%
81.5%	740	753	13	1.8%
82.7%	688	731	43	6.2%
84.0%	685	721	36	5.2%
85.2%	680	699	19	2.8%
86.4%	670	694	24	3.6%
87.7%	669	691	22	3.3%
88.9%	664	686	22	3.4%
90.1%	649	685	35	5.5%
91.4%	624	679	55	8.7%
92.6%	594	650	57	9.5%
93.8%	579	644	65	11.2%
95.1%	542	610	68	12.6%
96.3%	500	596	96	19.2%
97.5%	297	420	123	41.5%
98.8%	291	389	99	33.9%
100.0%	240	291	51	21.2%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,838	1,828	-10	-0.6%
1.2%	1,801	1,803	2	0.1%
2.5%	1,801	1,629	-172	-9.5%
3.7%	1,612	1,612	0	0.0%
4.9%	1,555	1,580	26	1.7%
6.2%	1,533	1,505	-28	-1.8%
7.4%	1,507	1,484	-23	-1.6%
8.6%	1,498	1,450	-48	-3.2%
9.9%	1,466	1,435	-31	-2.1%
11.1%	1,454	1,420	-34	-2.3%
12.3%	1,453	1,417	-35	-2.4%
13.6%	1,427	1,408	-19	-1.3%
14.8%	1,423	1,388	-35	-2.4%
16.0%	1,420	1,379	-41	-2.9%
17.3%	1,419	1,361	-57	-4.0%
18.5%	1,370	1,360	-9	-0.7%
19.8%	1,364	1,335	-29	-2.1%
21.0%	1,350	1,323	-27	-2.0%
22.2%	1,339	1,319	-20	-1.5%
23.5%	1,331	1,312	-19	-1.4%
24.7%	1,331	1,309	-22	-1.7%
25.9%	1,301	1,299	-2	-0.1%
27.2%	1,289	1,297	8	0.6%
28.4%	1,285	1,280	-4	-0.3%
29.6%	1,277	1,280	3	0.2%
30.9%	1,274	1,279	4	0.3%
32.1%	1,251	1,268	17	1.3%
33.3%	1,249	1,224	-25	-2.0%
34.6%	1,248	1,205	-44	-3.5%
35.8%	1,236	1,196	-40	-3.2%
37.0%	1,220	1,192	-28	-2.3%
38.3%	1,220	1,190	-30	-2.4%
39.5%	1,212	1,186	-26	-2.1%
40.7%	1,201	1,182	-20	-1.6%
42.0%	1,200	1,172	-27	-2.3%
43.2%	1,186	1,167	-19	-1.6%
44.4%	1,178	1,167	-11	-0.9%
45.7%	1,171	1,156	-14	-1.2%
46.9%	1,157	1,140	-17	-1.5%
48.1%	1,157	1,134	-23	-2.0%
49.4%	1,144	1,127	-17	-1.5%
50.6%	1,117	1,105	-12	-1.1%
51.9%	1,116	1,100	-16	-1.5%
53.1%	1,110	1,100	-10	-0.9%
54.3%	1,109	1,100	-9	-0.8%
55.6%	1,109	1,100	-9	-0.8%
56.8%	1,108	1,100	-8	-0.7%
58.0%	1,107	1,098	-10	-0.9%
59.3%	1,100	1,086	-14	-1.3%
60.5%	1,090	1,086	-4	-0.4%
61.7%	1,082	1,077	-5	-0.5%
63.0%	1,069	1,058	-11	-1.0%
64.2%	1,050	1,055	5	0.5%
65.4%	1,045	1,053	8	0.7%
66.7%	1,044	1,047	2	0.2%
67.9%	1,025	1,023	-3	-0.3%
69.1%	1,017	1,021	4	0.4%
70.4%	973	962	-11	-1.1%
71.6%	954	925	-29	-3.1%
72.8%	949	913	-37	-3.8%
74.1%	935	885	-49	-5.3%
75.3%	929	871	-58	-6.2%
76.5%	884	863	-21	-2.4%
77.8%	863	859	-3	-0.4%
79.0%	803	814	11	1.4%
80.2%	781	811	30	3.9%
81.5%	761	808	47	6.1%
82.7%	716	769	53	7.4%
84.0%	705	769	64	9.1%
85.2%	696	762	66	9.5%
86.4%	679	720	41	6.0%
87.7%	676	700	24	3.6%
88.9%	671	696	25	3.8%
90.1%	668	690	22	3.2%
91.4%	660	677	17	2.6%
92.6%	659	677	18	2.7%
93.8%	626	675	49	7.8%
95.1%	564	618	54	9.6%
96.3%	490	600	110	22.4%
97.5%	302	381	79	26.1%
98.8%	240	337	97	40.4%
100.0%	240	302	62	26.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,850	1,850	0	0.0%
1.2%	1,850	1,850	0	0.0%
2.5%	1,850	1,850	0	0.0%
3.7%	1,850	1,850	0	0.0%
4.9%	1,850	1,850	0	0.0%
6.2%	1,841	1,846	5	0.3%
7.4%	1,785	1,833	48	2.7%
8.6%	1,681	1,709	29	1.7%
9.9%	1,670	1,681	10	0.6%
11.1%	1,539	1,524	-15	-1.0%
12.3%	1,527	1,513	-13	-0.9%
13.6%	1,519	1,503	-16	-1.1%
14.8%	1,517	1,494	-24	-1.6%
16.0%	1,509	1,491	-17	-1.2%
17.3%	1,508	1,484	-24	-1.6%
18.5%	1,500	1,483	-17	-1.2%
19.8%	1,496	1,482	-14	-0.9%
21.0%	1,486	1,460	-26	-1.8%
22.2%	1,481	1,447	-34	-2.3%
23.5%	1,481	1,425	-56	-3.8%
24.7%	1,481	1,424	-57	-3.8%
25.9%	1,465	1,414	-51	-3.5%
27.2%	1,455	1,403	-52	-3.6%
28.4%	1,452	1,387	-65	-4.5%
29.6%	1,439	1,386	-53	-3.7%
30.9%	1,412	1,385	-26	-1.9%
32.1%	1,409	1,383	-26	-1.8%
33.3%	1,396	1,382	-15	-1.0%
34.6%	1,396	1,373	-23	-1.6%
35.8%	1,374	1,360	-13	-1.0%
37.0%	1,355	1,353	-2	-0.2%
38.3%	1,355	1,335	-20	-1.5%
39.5%	1,351	1,323	-27	-2.0%
40.7%	1,347	1,316	-32	-2.3%
42.0%	1,343	1,292	-50	-3.7%
43.2%	1,323	1,286	-37	-2.8%
44.4%	1,319	1,260	-59	-4.5%
45.7%	1,290	1,252	-39	-3.0%
46.9%	1,278	1,222	-56	-4.4%
48.1%	1,275	1,220	-55	-4.3%
49.4%	1,259	1,215	-44	-3.5%
50.6%	1,245	1,207	-38	-3.1%
51.9%	1,236	1,197	-39	-3.1%
53.1%	1,223	1,190	-33	-2.7%
54.3%	1,220	1,188	-32	-2.6%
55.6%	1,203	1,188	-15	-1.2%
56.8%	1,194	1,187	-7	-0.6%
58.0%	1,189	1,180	-9	-0.8%
59.3%	1,176	1,176	0	0.0%
60.5%	1,173	1,160	-13	-1.1%
61.7%	1,163	1,138	-25	-2.2%
63.0%	1,155	1,137	-18	-1.5%
64.2%	1,134	1,132	-3	-0.2%
65.4%	1,132	1,121	-11	-1.0%
66.7%	1,129	1,121	-8	-0.7%
67.9%	1,100	1,102	2	0.2%
69.1%	1,094	1,102	8	0.7%
70.4%	1,076	1,100	23	2.2%
71.6%	1,070	1,093	23	2.2%
72.8%	1,045	1,087	42	4.0%
74.1%	1,009	1,059	50	5.0%
75.3%	995	1,017	22	2.2%
76.5%	987	1,000	13	1.3%
77.8%	969	968	-1	-0.1%
79.0%	929	905	-25	-2.7%
80.2%	884	884	0	0.0%
81.5%	860	874	14	1.6%
82.7%	848	860	12	1.4%
84.0%	781	845	65	8.3%
85.2%	761	842	81	10.6%
86.4%	759	822	64	8.4%
87.7%	755	805	50	6.6%
88.9%	747	795	48	6.4%
90.1%	716	761	45	6.3%
91.4%	700	751	50	7.2%
92.6%	685	709	25	3.6%
93.8%	662	694	32	4.8%
95.1%	639	668	29	4.5%
96.3%	502	588	86	17.1%
97.5%	484	502	18	3.6%
98.8%	332	429	97	29.3%
100.0%	266	408	141	53.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,980	2,016	36	1.8%
1.2%	1,904	1,904	0	0.0%
2.5%	1,900	1,900	0	0.0%
3.7%	1,900	1,900	0	0.0%
4.9%	1,900	1,900	0	0.0%
6.2%	1,900	1,900	0	0.0%
7.4%	1,900	1,900	0	0.0%
8.6%	1,900	1,900	0	0.0%
9.9%	1,900	1,900	0	0.0%
11.1%	1,900	1,900	0	0.0%
12.3%	1,900	1,869	-31	-1.7%
13.6%	1,881	1,867	-14	-0.8%
14.8%	1,867	1,843	-24	-1.3%
16.0%	1,840	1,836	-3	-0.2%
17.3%	1,837	1,824	-13	-0.7%
18.5%	1,834	1,781	-53	-2.9%
19.8%	1,828	1,778	-50	-2.8%
21.0%	1,828	1,741	-87	-4.7%
22.2%	1,795	1,739	-56	-3.1%
23.5%	1,778	1,698	-80	-4.5%
24.7%	1,720	1,690	-30	-1.7%
25.9%	1,656	1,651	-5	-0.3%
27.2%	1,639	1,628	-11	-0.7%
28.4%	1,628	1,620	-8	-0.5%
29.6%	1,626	1,603	-23	-1.4%
30.9%	1,608	1,581	-27	-1.7%
32.1%	1,604	1,581	-23	-1.4%
33.3%	1,601	1,571	-31	-1.9%
34.6%	1,601	1,569	-32	-2.0%
35.8%	1,600	1,557	-43	-2.7%
37.0%	1,592	1,553	-39	-2.5%
38.3%	1,590	1,535	-55	-3.4%
39.5%	1,581	1,527	-54	-3.4%
40.7%	1,562	1,510	-52	-3.4%
42.0%	1,528	1,508	-20	-1.3%
43.2%	1,519	1,508	-11	-0.7%
44.4%	1,514	1,493	-21	-1.4%
45.7%	1,459	1,489	29	2.0%
46.9%	1,444	1,478	34	2.3%
48.1%	1,426	1,426	0	0.0%
49.4%	1,405	1,411	6	0.4%
50.6%	1,404	1,386	-18	-1.3%
51.9%	1,401	1,381	-20	-1.4%
53.1%	1,379	1,351	-28	-2.0%
54.3%	1,374	1,349	-25	-1.8%
55.6%	1,354	1,301	-52	-3.9%
56.8%	1,315	1,292	-24	-1.8%
58.0%	1,309	1,266	-43	-3.3%
59.3%	1,307	1,260	-46	-3.6%
60.5%	1,298	1,251	-47	-3.6%
61.7%	1,244	1,251	7	0.5%
63.0%	1,237	1,232	-4	-0.4%
64.2%	1,232	1,230	-2	-0.2%
65.4%	1,224	1,214	-10	-0.9%
66.7%	1,207	1,212	5	0.4%
67.9%	1,206	1,208	2	0.2%
69.1%	1,185	1,197	12	1.0%
70.4%	1,173	1,188	15	1.3%
71.6%	1,167	1,178	11	1.0%
72.8%	1,141	1,176	35	3.1%
74.1%	1,122	1,173	52	4.6%
75.3%	1,116	1,148	32	2.9%
76.5%	1,114	1,138	24	2.1%
77.8%	1,105	1,115	10	0.9%
79.0%	1,090	1,100	10	0.9%
80.2%	1,013	1,070	57	5.6%
81.5%	1,000	1,053	53	5.3%
82.7%	1,000	1,027	27	2.7%
84.0%	987	1,022	35	3.5%
85.2%	965	989	24	2.5%
86.4%	940	960	20	2.2%
87.7%	876	910	34	3.9%
88.9%	874	888	15	1.7%
90.1%	811	870	59	7.3%
91.4%	804	861	57	7.1%
92.6%	790	840	50	6.3%
93.8%	757	811	54	7.1%
95.1%	756	763	7	0.9%
96.3%	700	751	51	7.2%
97.5%	616	713	97	15.7%
98.8%	492	591	98	20.0%
100.0%	299	440	141	47.2%

Table SW-01-b

Trinity Lake, End of Month Storage

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,124	2,034	-90	-4.2%
1.2%	2,000	2,000	0	0.0%
2.5%	2,000	2,000	0	0.0%
3.7%	2,000	2,000	0	0.0%
4.9%	2,000	2,000	0	0.0%
6.2%	2,000	2,000	0	0.0%
7.4%	2,000	2,000	0	0.0%
8.6%	2,000	2,000	0	0.0%
9.9%	2,000	2,000	0	0.0%
11.1%	2,000	2,000	0	0.0%
12.3%	2,000	2,000	0	0.0%
13.6%	2,000	2,000	0	0.0%
14.8%	2,000	2,000	0	0.0%
16.0%	2,000	2,000	0	0.0%
17.3%	2,000	2,000	0	0.0%
18.5%	2,000	2,000	0	0.0%
19.8%	2,000	2,000	0	0.0%
21.0%	2,000	2,000	0	0.0%
22.2%	2,000	1,996	-4	-0.2%
23.5%	1,996	1,986	-9	-0.5%
24.7%	1,974	1,977	3	0.2%
25.9%	1,969	1,922	-47	-2.4%
27.2%	1,968	1,916	-52	-2.6%
28.4%	1,952	1,907	-45	-2.3%
29.6%	1,930	1,902	-28	-1.4%
30.9%	1,922	1,889	-33	-1.7%
32.1%	1,887	1,871	-16	-0.8%
33.3%	1,880	1,859	-21	-1.1%
34.6%	1,855	1,833	-22	-1.2%
35.8%	1,826	1,826	1	0.0%
37.0%	1,792	1,792	0	0.0%
38.3%	1,765	1,771	6	0.3%
39.5%	1,751	1,751	0	0.0%
40.7%	1,738	1,733	-5	-0.3%
42.0%	1,723	1,666	-57	-3.3%
43.2%	1,695	1,655	-41	-2.4%
44.4%	1,686	1,647	-40	-2.3%
45.7%	1,615	1,631	16	1.0%
46.9%	1,598	1,613	15	0.9%
48.1%	1,598	1,601	3	0.2%
49.4%	1,582	1,575	-7	-0.5%
50.6%	1,577	1,569	-7	-0.4%
51.9%	1,568	1,563	-6	-0.4%
53.1%	1,561	1,561	0	0.0%
54.3%	1,550	1,558	8	0.5%
55.6%	1,549	1,530	-19	-1.2%
56.8%	1,540	1,507	-32	-2.1%
58.0%	1,538	1,495	-43	-2.8%
59.3%	1,523	1,462	-61	-4.0%
60.5%	1,493	1,462	-30	-2.0%
61.7%	1,430	1,462	32	2.2%
63.0%	1,427	1,407	-20	-1.4%
64.2%	1,413	1,377	-36	-2.5%
65.4%	1,401	1,367	-34	-2.4%
66.7%	1,396	1,365	-31	-2.2%
67.9%	1,378	1,365	-13	-0.9%
69.1%	1,369	1,363	-6	-0.5%
70.4%	1,351	1,355	5	0.3%
71.6%	1,350	1,349	-1	0.0%
72.8%	1,334	1,348	14	1.1%
74.1%	1,326	1,344	18	1.3%
75.3%	1,292	1,321	29	2.2%
76.5%	1,291	1,293	2	0.1%
77.8%	1,269	1,293	23	1.8%
79.0%	1,238	1,285	47	3.8%
80.2%	1,212	1,267	54	4.5%
81.5%	1,160	1,206	46	3.9%
82.7%	1,157	1,191	34	3.0%
84.0%	1,153	1,171	18	1.6%
85.2%	1,152	1,167	15	1.3%
86.4%	1,118	1,125	7	0.6%
87.7%	1,087	1,101	14	1.3%
88.9%	971	1,026	54	5.6%
90.1%	924	946	22	2.4%
91.4%	859	913	54	6.3%
92.6%	849	888	39	4.6%
93.8%	811	861	50	6.1%
95.1%	782	854	72	9.2%
96.3%	741	788	48	6.4%
97.5%	706	786	80	11.3%
98.8%	620	761	141	22.8%
100.0%	499	500	1	0.1%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,264	2,264	0	0.0%
1.2%	2,100	2,100	0	0.0%
2.5%	2,100	2,100	0	0.0%
3.7%	2,100	2,100	0	0.0%
4.9%	2,100	2,100	0	0.0%
6.2%	2,100	2,100	0	0.0%
7.4%	2,100	2,100	0	0.0%
8.6%	2,100	2,100	0	0.0%
9.9%	2,100	2,100	0	0.0%
11.1%	2,100	2,100	0	0.0%
12.3%	2,100	2,100	0	0.0%
13.6%	2,100	2,100	0	0.0%
14.8%	2,100	2,100	0	0.0%
16.0%	2,100	2,100	0	0.0%
17.3%	2,100	2,100	0	0.0%
18.5%	2,100	2,100	0	0.0%
19.8%	2,100	2,100	0	0.0%
21.0%	2,100	2,100	0	0.0%
22.2%	2,100	2,100	0	0.0%
23.5%	2,100	2,100	0	0.0%
24.7%	2,100	2,096	-4	-0.2%
25.9%	2,098	2,089	-9	-0.4%
27.2%	2,096	2,073	-24	-1.1%
28.4%	2,067	2,071	4	0.2%
29.6%	2,056	2,056	0	0.0%
30.9%	2,050	2,050	0	0.0%
32.1%	2,050	2,020	-30	-1.5%
33.3%	2,044	2,017	-27	-1.3%
34.6%	2,034	1,991	-44	-2.1%
35.8%	2,014	1,990	-24	-1.2%
37.0%	1,988	1,980	-8	-0.4%
38.3%	1,966	1,972	6	0.3%
39.5%	1,963	1,933	-30	-1.5%
40.7%	1,955	1,927	-28	-1.4%
42.0%	1,943	1,911	-32	-1.7%
43.2%	1,907	1,907	0	0.0%
44.4%	1,849	1,844	-4	-0.2%
45.7%	1,837	1,840	3	0.1%
46.9%	1,800	1,828	28	1.6%
48.1%	1,781	1,800	18	1.0%
49.4%	1,761	1,777	15	0.9%
50.6%	1,733	1,731	-1	-0.1%
51.9%	1,727	1,701	-26	-1.5%
53.1%	1,720	1,697	-23	-1.3%
54.3%	1,713	1,687	-26	-1.5%
55.6%	1,703	1,684	-19	-1.1%
56.8%	1,698	1,683	-15	-0.9%
58.0%	1,676	1,679	3	0.2%
59.3%	1,653	1,631	-21	-1.3%
60.5%	1,628	1,596	-32	-2.0%
61.7%	1,574	1,563	-10	-0.7%
63.0%	1,571	1,559	-12	-0.8%
64.2%	1,559	1,550	-9	-0.6%
65.4%	1,556	1,544	-12	-0.8%
66.7%	1,543	1,531	-13	-0.8%
67.9%	1,539	1,522	-17	-1.1%
69.1%	1,532	1,522	-10	-0.7%
70.4%	1,503	1,514	11	0.7%
71.6%	1,495	1,496	1	0.1%
72.8%	1,451	1,479	28	1.9%
74.1%	1,423	1,454	31	2.2%
75.3%	1,422	1,436	14	1.0%
76.5%	1,413	1,413	0	0.0%
77.8%	1,411	1,411	0	0.0%
79.0%	1,396	1,402	6	0.4%
80.2%	1,323	1,371	48	3.6%
81.5%	1,318	1,320	2	0.2%
82.7%	1,305	1,302	-4	-0.3%
84.0%	1,296	1,300	3	0.2%
85.2%	1,228	1,291	63	5.1%
86.4%	1,161	1,276	115	9.9%
87.7%	1,156	1,258	102	8.8%
88.9%	1,115	1,125	10	0.9%
90.1%	1,111	1,124	13	1.1%
91.4%	1,001	1,122	120	12.0%
92.6%	983	1,037	54	5.5%
93.8%	915	974	59	6.4%
95.1%	898	944	45	5.0%
96.3%	871	910	39	4.5%
97.5%	854	877	23	2.7%
98.8%	833	846	13	1.5%
100.0%	605	605	1	0.1%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,300	2,300	0	0.0%
1.2%	2,300	2,300	0	0.0%
2.5%	2,300	2,300	0	0.0%
3.7%	2,300	2,300	0	0.0%
4.9%	2,300	2,300	0	0.0%
6.2%	2,300	2,300	0	0.0%
7.4%	2,300	2,300	0	0.0%
8.6%	2,297	2,300	3	0.1%
9.9%	2,292	2,292	0	0.0%
11.1%	2,290	2,289	0	0.0%
12.3%	2,289	2,288	-1	-0.1%
13.6%	2,248	2,250	3	0.1%
14.8%	2,245	2,246	1	0.0%
16.0%	2,237	2,237	0	0.0%
17.3%	2,235	2,231	-3	-0.1%
18.5%	2,230	2,230	0	0.0%
19.8%	2,208	2,194	-14	-0.6%
21.0%	2,205	2,190	-15	-0.7%
22.2%	2,194	2,189	-5	-0.2%
23.5%	2,190	2,186	-4	-0.2%
24.7%	2,189	2,183	-5	-0.2%
25.9%	2,186	2,175	-11	-0.5%
27.2%	2,186	2,163	-23	-1.1%
28.4%	2,185	2,161	-24	-1.1%
29.6%	2,183	2,159	-25	-1.1%
30.9%	2,180	2,153	-28	-1.3%
32.1%	2,165	2,126	-40	-1.8%
33.3%	2,161	2,124	-37	-1.7%
34.6%	2,128	2,119	-9	-0.4%
35.8%	2,126	2,118	-8	-0.4%
37.0%	2,119	2,112	-7	-0.3%
38.3%	2,111	2,107	-4	-0.2%
39.5%	2,097	2,088	-9	-0.4%
40.7%	2,059	2,062	3	0.2%
42.0%	2,039	2,043	4	0.2%
43.2%	2,021	2,027	6	0.3%
44.4%	2,019	2,022	3	0.1%
45.7%	2,013	2,017	3	0.2%
46.9%	2,013	2,013	1	0.0%
48.1%	1,971	1,988	17	0.9%
49.4%	1,899	1,933	35	1.8%
50.6%	1,870	1,890	20	1.1%
51.9%	1,857	1,879	22	1.2%
53.1%	1,836	1,851	16	0.9%
54.3%	1,827	1,779	-48	-2.6%
55.6%	1,792	1,773	-19	-1.1%
56.8%	1,788	1,761	-26	-1.5%
58.0%	1,764	1,729	-35	-2.0%
59.3%	1,758	1,699	-59	-3.4%
60.5%	1,741	1,680	-61	-3.5%
61.7%	1,688	1,677	-11	-0.7%
63.0%	1,681	1,674	-8	-0.4%
64.2%	1,670	1,673	3	0.2%
65.4%	1,657	1,664	7	0.4%
66.7%	1,654	1,662	8	0.5%
67.9%	1,630	1,651	21	1.3%
69.1%	1,624	1,641	18	1.1%
70.4%	1,603	1,640	37	2.3%
71.6%	1,598	1,621	24	1.5%
72.8%	1,580	1,607	27	1.7%
74.1%	1,572	1,581	9	0.5%
75.3%	1,542	1,534	-8	-0.5%
76.5%	1,527	1,527	1	0.1%
77.8%	1,512	1,526	14	0.9%
79.0%	1,479	1,493	14	1.0%
80.2%	1,459	1,481	23	1.6%
81.5%	1,419	1,436	17	1.2%
82.7%	1,397	1,419	22	1.6%
84.0%	1,374	1,411	37	2.7%
85.2%	1,371	1,400	29	2.1%
86.4%	1,339	1,383	43	3.2%
87.7%	1,236	1,349	114	9.2%
88.9%	1,157	1,171	14	1.2%
90.1%	1,136	1,155	19	1.7%
91.4%	1,101	1,150	49	4.4%
92.6%	1,046	1,128	82	7.8%
93.8%	1,000	1,091	91	9.1%
95.1%	929	1,000	71	7.7%
96.3%	878	920	42	4.8%
97.5%	865	884	20	2.3%
98.8%	850	781	-69	-8.1%
100.0%	648	649	1	0.1%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,339	2,339	0	0.0%
1.2%	2,311	2,314	3	0.1%
2.5%	2,282	2,282	1	0.0%
3.7%	2,252	2,252	0	0.0%
4.9%	2,216	2,216	0	0.0%
6.2%	2,195	2,194	-2	-0.1%
7.4%	2,185	2,185	0	0.0%
8.6%	2,169	2,166	-3	-0.2%
9.9%	2,155	2,155	0	0.0%
11.1%	2,152	2,152	0	0.0%
12.3%	2,139	2,139	0	0.0%
13.6%	2,136	2,136	0	0.0%
14.8%	2,128	2,131	3	0.1%
16.0%	2,120	2,120	0	0.0%
17.3%	2,117	2,102	-15	-0.7%
18.5%	2,102	2,079	-23	-1.1%
19.8%	2,079	2,070	-9	-0.4%
21.0%	2,046	2,046	0	0.0%
22.2%	2,039	2,029	-9	-0.5%
23.5%	2,029	2,027	-2	-0.1%
24.7%	2,027	2,026	-1	-0.1%
25.9%	2,026	2,018	-9	-0.4%
27.2%	2,018	2,015	-3	-0.2%
28.4%	2,017	2,005	-13	-0.6%
29.6%	2,015	2,002	-12	-0.6%
30.9%	2,005	1,974	-31	-1.5%
32.1%	2,005	1,945	-59	-3.0%
33.3%	2,003	1,940	-63	-3.1%
34.6%	1,925	1,935	11	0.6%
35.8%	1,911	1,911	0	0.0%
37.0%	1,911	1,900	-11	-0.6%
38.3%	1,909	1,877	-32	-1.7%
39.5%	1,899	1,876	-23	-1.2%
40.7%	1,869	1,869	0	0.0%
42.0%	1,849	1,866	16	0.9%
43.2%	1,841	1,864	22	1.2%
44.4%	1,838	1,844	6	0.3%
45.7%	1,804	1,838	34	1.9%
46.9%	1,780	1,813	33	1.9%
48.1%	1,776	1,805	29	1.6%
49.4%	1,769	1,750	-18	-1.0%
50.6%	1,729	1,736	8	0.4%
51.9%	1,702	1,709	7	0.4%
53.1%	1,687	1,698	11	0.6%
54.3%	1,649	1,637	-12	-0.7%
55.6%	1,635	1,628	-7	-0.4%
56.8%	1,632	1,624	-8	-0.5%
58.0%	1,626	1,618	-8	-0.5%
59.3%	1,618	1,613	-5	-0.3%
60.5%	1,605	1,609	4	0.2%
61.7%	1,589	1,601	11	0.7%
63.0%	1,589	1,586	-2	-0.2%
64.2%	1,581	1,558	-23	-1.5%
65.4%	1,574	1,534	-40	-2.5%
66.7%	1,572	1,530	-43	-2.7%
67.9%	1,555	1,520	-34	-2.2%
69.1%	1,541	1,514	-27	-1.8%
70.4%	1,535	1,508	-27	-1.8%
71.6%	1,502	1,506	5	0.3%
72.8%	1,490	1,485	-5	-0.3%
74.1%	1,459	1,484	25	1.7%
75.3%	1,447	1,453	6	0.4%
76.5%	1,442	1,447	5	0.4%
77.8%	1,367	1,381	14	1.0%
79.0%	1,340	1,354	14	1.0%
80.2%	1,329	1,348	19	1.4%
81.5%	1,323	1,337	14	1.1%
82.7%	1,287	1,329	42	3.3%
84.0%	1,271	1,302	32	2.5%
85.2%	1,247	1,274	27	2.2%
86.4%	1,206	1,267	61	5.0%
87.7%	1,092	1,265	173	15.8%
88.9%	1,074	1,128	54	5.0%
90.1%	1,070	1,112	42	3.9%
91.4%	1,067	1,087	20	1.9%
92.6%	1,055	1,084	29	2.8%
93.8%	917	1,029	111	12.2%
95.1%	829	835	6	0.8%
96.3%	771	829	58	7.5%
97.5%	758	826	69	9.0%
98.8%	684	657	-27	-3.9%
100.0%	650	603	-46	-7.1%

Table SW-01-b
Trinity Lake, End of Month Storage
Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,347	2,347	0	0.0%
1.2%	2,181	2,182	1	0.0%
2.5%	2,178	2,180	3	0.1%
3.7%	2,080	2,078	-2	-0.1%
4.9%	2,067	2,065	-2	-0.1%
6.2%	2,030	2,030	0	0.0%
7.4%	2,014	2,014	0	0.0%
8.6%	1,995	1,995	0	0.0%
9.9%	1,992	1,995	3	0.1%
11.1%	1,987	1,989	2	0.1%
12.3%	1,982	1,987	5	0.2%
13.6%	1,982	1,982	0	0.0%
14.8%	1,971	1,982	11	0.6%
16.0%	1,955	1,971	16	0.8%
17.3%	1,955	1,955	0	0.0%
18.5%	1,944	1,918	-26	-1.3%
19.8%	1,916	1,916	0	0.0%
21.0%	1,916	1,915	0	0.0%
22.2%	1,915	1,903	-11	-0.6%
23.5%	1,903	1,902	-1	-0.1%
24.7%	1,902	1,883	-19	-1.0%
25.9%	1,901	1,872	-29	-1.5%
27.2%	1,886	1,864	-22	-1.2%
28.4%	1,883	1,846	-36	-1.9%
29.6%	1,870	1,845	-25	-1.4%
30.9%	1,847	1,838	-10	-0.5%
32.1%	1,845	1,826	-19	-1.0%
33.3%	1,807	1,788	-19	-1.1%
34.6%	1,801	1,785	-15	-0.8%
35.8%	1,792	1,781	-11	-0.6%
37.0%	1,788	1,758	-30	-1.7%
38.3%	1,758	1,755	-2	-0.1%
39.5%	1,713	1,750	37	2.1%
40.7%	1,711	1,715	4	0.2%
42.0%	1,686	1,710	24	1.4%
43.2%	1,686	1,684	-2	-0.1%
44.4%	1,685	1,671	-14	-0.8%
45.7%	1,623	1,645	23	1.4%
46.9%	1,623	1,641	18	1.1%
48.1%	1,621	1,637	16	1.0%
49.4%	1,619	1,634	15	0.9%
50.6%	1,618	1,618	0	0.0%
51.9%	1,593	1,590	-4	-0.2%
53.1%	1,586	1,587	1	0.1%
54.3%	1,580	1,566	-13	-0.8%
55.6%	1,571	1,555	-15	-1.0%
56.8%	1,566	1,552	-14	-0.9%
58.0%	1,540	1,545	6	0.4%
59.3%	1,526	1,543	17	1.1%
60.5%	1,524	1,535	11	0.7%
61.7%	1,516	1,519	4	0.2%
63.0%	1,509	1,494	-15	-1.0%
64.2%	1,493	1,450	-43	-2.9%
65.4%	1,460	1,441	-18	-1.3%
66.7%	1,454	1,441	-13	-0.9%
67.9%	1,434	1,429	-5	-0.4%
69.1%	1,397	1,425	28	2.0%
70.4%	1,395	1,396	2	0.1%
71.6%	1,366	1,392	26	1.9%
72.8%	1,359	1,381	22	1.6%
74.1%	1,351	1,377	26	1.9%
75.3%	1,333	1,364	31	2.3%
76.5%	1,323	1,300	-23	-1.7%
77.8%	1,309	1,286	-23	-1.8%
79.0%	1,271	1,274	4	0.3%
80.2%	1,252	1,252	0	0.0%
81.5%	1,226	1,236	10	0.8%
82.7%	1,163	1,214	51	4.4%
84.0%	1,138	1,190	52	4.6%
85.2%	1,134	1,167	33	2.9%
86.4%	1,129	1,166	37	3.3%
87.7%	1,072	1,117	45	4.2%
88.9%	1,056	1,101	45	4.2%
90.1%	1,041	1,088	46	4.4%
91.4%	992	1,070	78	7.8%
92.6%	968	1,065	97	10.0%
93.8%	896	966	71	7.9%
95.1%	861	867	6	0.7%
96.3%	748	803	55	7.4%
97.5%	732	802	71	9.7%
98.8%	571	617	47	8.2%
100.0%	460	483	23	5.0%

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,270	2,247	-23	-1.0%
1.2%	2,041	2,131	90	4.4%
2.5%	2,023	2,026	3	0.1%
3.7%	1,963	1,919	-43	-2.2%
4.9%	1,884	1,884	0	0.0%
6.2%	1,878	1,881	3	0.2%
7.4%	1,867	1,873	7	0.4%
8.6%	1,863	1,867	3	0.2%
9.9%	1,862	1,863	1	0.1%
11.1%	1,858	1,862	4	0.2%
12.3%	1,852	1,858	6	0.3%
13.6%	1,837	1,850	13	0.7%
14.8%	1,833	1,829	-4	-0.2%
16.0%	1,832	1,827	-5	-0.3%
17.3%	1,817	1,820	2	0.1%
18.5%	1,804	1,817	13	0.7%
19.8%	1,779	1,814	34	1.9%
21.0%	1,766	1,759	-7	-0.4%
22.2%	1,765	1,741	-23	-1.3%
23.5%	1,741	1,723	-18	-1.1%
24.7%	1,737	1,718	-19	-1.1%
25.9%	1,717	1,718	1	0.1%
27.2%	1,697	1,697	0	0.0%
28.4%	1,692	1,689	-4	-0.2%
29.6%	1,691	1,685	-7	-0.4%
30.9%	1,691	1,677	-14	-0.8%
32.1%	1,687	1,673	-15	-0.9%
33.3%	1,654	1,668	14	0.8%
34.6%	1,609	1,648	40	2.5%
35.8%	1,595	1,628	33	2.1%
37.0%	1,580	1,602	22	1.4%
38.3%	1,576	1,595	20	1.2%
39.5%	1,567	1,563	-4	-0.3%
40.7%	1,555	1,555	0	0.0%
42.0%	1,521	1,538	17	1.1%
43.2%	1,508	1,508	-1	0.0%
44.4%	1,492	1,485	-7	-0.5%
45.7%	1,482	1,477	-5	-0.3%
46.9%	1,475	1,461	-14	-1.0%
48.1%	1,463	1,449	-14	-1.0%
49.4%	1,430	1,416	-14	-1.0%
50.6%	1,427	1,406	-22	-1.5%
51.9%	1,411	1,402	-9	-0.6%
53.1%	1,406	1,401	-5	-0.3%
54.3%	1,403	1,398	-5	-0.4%
55.6%	1,402	1,393	-9	-0.6%
56.8%	1,399	1,378	-21	-1.5%
58.0%	1,398	1,375	-23	-1.6%
59.3%	1,389	1,368	-22	-1.6%
60.5%	1,372	1,368	-5	-0.4%
61.7%	1,360	1,365	4	0.3%
63.0%	1,353	1,364	10	0.8%
64.2%	1,325	1,344	19	1.4%
65.4%	1,317	1,337	20	1.5%
66.7%	1,284	1,313	30	2.3%
67.9%	1,281	1,313	32	2.5%
69.1%	1,275	1,285	11	0.8%
70.4%	1,220	1,264	44	3.6%
71.6%	1,206	1,243	37	3.1%
72.8%	1,191	1,208	17	1.4%
74.1%	1,183	1,202	19	1.6%
75.3%	1,170	1,165	-5	-0.5%
76.5%	1,160	1,125	-35	-3.0%
77.8%	1,125	1,078	-47	-4.2%
79.0%	1,088	1,071	-17	-1.6%
80.2%	1,071	1,054	-17	-1.6%
81.5%	1,020	1,049	29	2.9%
82.7%	1,006	1,035	30	3.0%
84.0%	985	1,012	27	2.7%
85.2%	967	1,011	43	4.5%
86.4%	966	993	27	2.8%
87.7%	949	970	21	2.2%
88.9%	932	965	33	3.5%
90.1%	873	963	90	10.3%
91.4%	823	955	132	16.0%
92.6%	814	899	86	10.6%
93.8%	787	847	60	7.6%
95.1%	765	771	6	0.8%
96.3%	629	684	55	8.7%
97.5%	522	641	119	22.8%
98.8%	520	553	33	6.4%
100.0%	240	256	16	6.8%

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,150	2,147	-3	-0.2%
1.2%	1,991	2,011	20	1.0%
2.5%	1,858	1,845	-12	-0.7%
3.7%	1,843	1,770	-73	-3.9%
4.9%	1,779	1,748	-31	-1.7%
6.2%	1,729	1,746	17	1.0%
7.4%	1,721	1,734	12	0.7%
8.6%	1,718	1,730	12	0.7%
9.9%	1,716	1,721	5	0.3%
11.1%	1,713	1,718	5	0.3%
12.3%	1,708	1,716	8	0.4%
13.6%	1,697	1,709	12	0.7%
14.8%	1,688	1,697	9	0.5%
16.0%	1,681	1,676	-5	-0.3%
17.3%	1,681	1,661	-19	-1.2%
18.5%	1,654	1,648	-6	-0.4%
19.8%	1,628	1,640	11	0.7%
21.0%	1,613	1,573	-40	-2.5%
22.2%	1,613	1,569	-44	-2.7%
23.5%	1,592	1,561	-31	-1.9%
24.7%	1,586	1,539	-47	-3.0%
25.9%	1,552	1,531	-21	-1.3%
27.2%	1,541	1,517	-25	-1.6%
28.4%	1,537	1,505	-32	-2.1%
29.6%	1,524	1,505	-20	-1.3%
30.9%	1,517	1,496	-21	-1.4%
32.1%	1,478	1,492	14	1.0%
33.3%	1,469	1,490	20	1.4%
34.6%	1,460	1,457	-3	-0.2%
35.8%	1,442	1,422	-20	-1.4%
37.0%	1,430	1,413	-17	-1.2%
38.3%	1,428	1,384	-44	-3.1%
39.5%	1,426	1,381	-45	-3.2%
40.7%	1,355	1,371	16	1.2%
42.0%	1,344	1,336	-8	-0.6%
43.2%	1,339	1,326	-13	-1.0%
44.4%	1,339	1,303	-35	-2.6%
45.7%	1,326	1,291	-35	-2.6%
46.9%	1,296	1,290	-6	-0.5%
48.1%	1,296	1,279	-17	-1.3%
49.4%	1,280	1,270	-9	-0.7%
50.6%	1,267	1,269	2	0.2%
51.9%	1,251	1,247	-4	-0.3%
53.1%	1,240	1,235	-5	-0.4%
54.3%	1,239	1,234	-5	-0.4%
55.6%	1,236	1,215	-21	-1.7%
56.8%	1,235	1,212	-23	-1.8%
58.0%	1,232	1,205	-27	-2.2%
59.3%	1,225	1,202	-22	-1.8%
60.5%	1,219	1,201	-18	-1.5%
61.7%	1,198	1,200	1	0.1%
63.0%	1,171	1,198	27	2.3%
64.2%	1,168	1,186	18	1.6%
65.4%	1,149	1,175	25	2.2%
66.7%	1,142	1,166	24	2.1%
67.9%	1,136	1,133	-3	-0.2%
69.1%	1,123	1,113	-9	-0.8%
70.4%	1,117	1,085	-32	-2.8%
71.6%	1,074	1,050	-24	-2.3%
72.8%	1,065	1,015	-49	-4.6%
74.1%	986	1,006	20	2.1%
75.3%	982	978	-4	-0.4%
76.5%	963	956	-7	-0.8%
77.8%	953	953	0	0.0%
79.0%	919	948	29	3.2%
80.2%	899	919	20	2.3%
81.5%	869	894	25	2.8%
82.7%	863	879	16	1.9%
84.0%	850	877	27	3.2%
85.2%	832	839	6	0.8%
86.4%	816	828	13	1.5%
87.7%	780	817	37	4.7%
88.9%	759	804	45	5.9%
90.1%	758	774	16	2.1%
91.4%	700	748	48	6.9%
92.6%	697	745	47	6.8%
93.8%	671	732	61	9.1%
95.1%	656	663	6	0.9%
96.3%	588	642	55	9.3%
97.5%	377	500	123	32.6%
98.8%	297	454	157	52.7%
100.0%	240	240	0	0.0%

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	1,975	1,975	0	0.0%
1.2%	1,877	1,897	20	1.1%
2.5%	1,748	1,702	-46	-2.6%
3.7%	1,699	1,623	-76	-4.5%
4.9%	1,683	1,606	-77	-4.6%
6.2%	1,579	1,591	12	0.7%
7.4%	1,578	1,586	8	0.5%
8.6%	1,575	1,579	5	0.3%
9.9%	1,573	1,572	-1	-0.1%
11.1%	1,570	1,566	-4	-0.3%
12.3%	1,565	1,558	-6	-0.4%
13.6%	1,553	1,545	-8	-0.5%
14.8%	1,545	1,533	-12	-0.8%
16.0%	1,514	1,523	10	0.6%
17.3%	1,512	1,489	-23	-1.5%
18.5%	1,508	1,475	-33	-2.2%
19.8%	1,486	1,468	-18	-1.2%
21.0%	1,469	1,426	-44	-3.0%
22.2%	1,443	1,400	-43	-3.0%
23.5%	1,443	1,397	-45	-3.1%
24.7%	1,439	1,393	-46	-3.2%
25.9%	1,417	1,383	-34	-2.4%
27.2%	1,412	1,382	-30	-2.1%
28.4%	1,373	1,380	7	0.5%
29.6%	1,363	1,379	16	1.1%
30.9%	1,357	1,364	7	0.5%
32.1%	1,348	1,359	10	0.8%
33.3%	1,332	1,330	-1	-0.1%
34.6%	1,320	1,305	-15	-1.1%
35.8%	1,314	1,296	-17	-1.3%
37.0%	1,312	1,295	-17	-1.3%
38.3%	1,306	1,260	-46	-3.5%
39.5%	1,259	1,260	1	0.1%
40.7%	1,247	1,217	-29	-2.3%
42.0%	1,241	1,212	-29	-2.3%
43.2%	1,232	1,200	-33	-2.6%
44.4%	1,228	1,193	-36	-2.9%
45.7%	1,228	1,178	-51	-4.1%
46.9%	1,183	1,176	-8	-0.6%
48.1%	1,168	1,162	-6	-0.5%
49.4%	1,145	1,157	13	1.1%
50.6%	1,144	1,152	8	0.7%
51.9%	1,140	1,135	-4	-0.4%
53.1%	1,129	1,128	0	0.0%
54.3%	1,128	1,124	-4	-0.3%
55.6%	1,127	1,119	-7	-0.6%
56.8%	1,113	1,116	3	0.3%
58.0%	1,108	1,106	-2	-0.2%
59.3%	1,107	1,098	-10	-0.9%
60.5%	1,107	1,092	-15	-1.4%
61.7%	1,100	1,091	-9	-0.8%
63.0%	1,091	1,085	-6	-0.6%
64.2%	1,088	1,074	-14	-1.3%
65.4%	1,083	1,053	-31	-2.8%
66.7%	1,065	1,031	-34	-3.2%
67.9%	1,012	1,005	-7	-0.7%
69.1%	1,000	997	-3	-0.3%
70.4%	993	956	-38	-3.8%
71.6%	983	937	-45	-4.6%
72.8%	982	930	-52	-5.3%
74.1%	905	924	20	2.2%
75.3%	902	883	-19	-2.1%
76.5%	885	874	-12	-1.3%
77.8%	874	867	-6	-0.7%
79.0%	838	847	9	1.1%
80.2%	827	842	16	1.9%
81.5%	792	813	21	2.6%
82.7%	716	784	67	9.4%
84.0%	716	757	41	5.8%
85.2%	701	730	29	4.1%
86.4%	700	725	25	3.5%
87.7%	679	723	44	6.5%
88.9%	675	700	25	3.7%
90.1%	665	693	28	4.2%
91.4%	664	671	7	1.1%
92.6%	635	666	31	4.8%
93.8%	602	652	50	8.3%
95.1%	602	626	25	4.1%
96.3%	552	606	54	9.9%
97.5%	335	467	131	39.1%
98.8%	305	402	97	31.9%
100.0%	240	305	65	27.1%

Figure SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

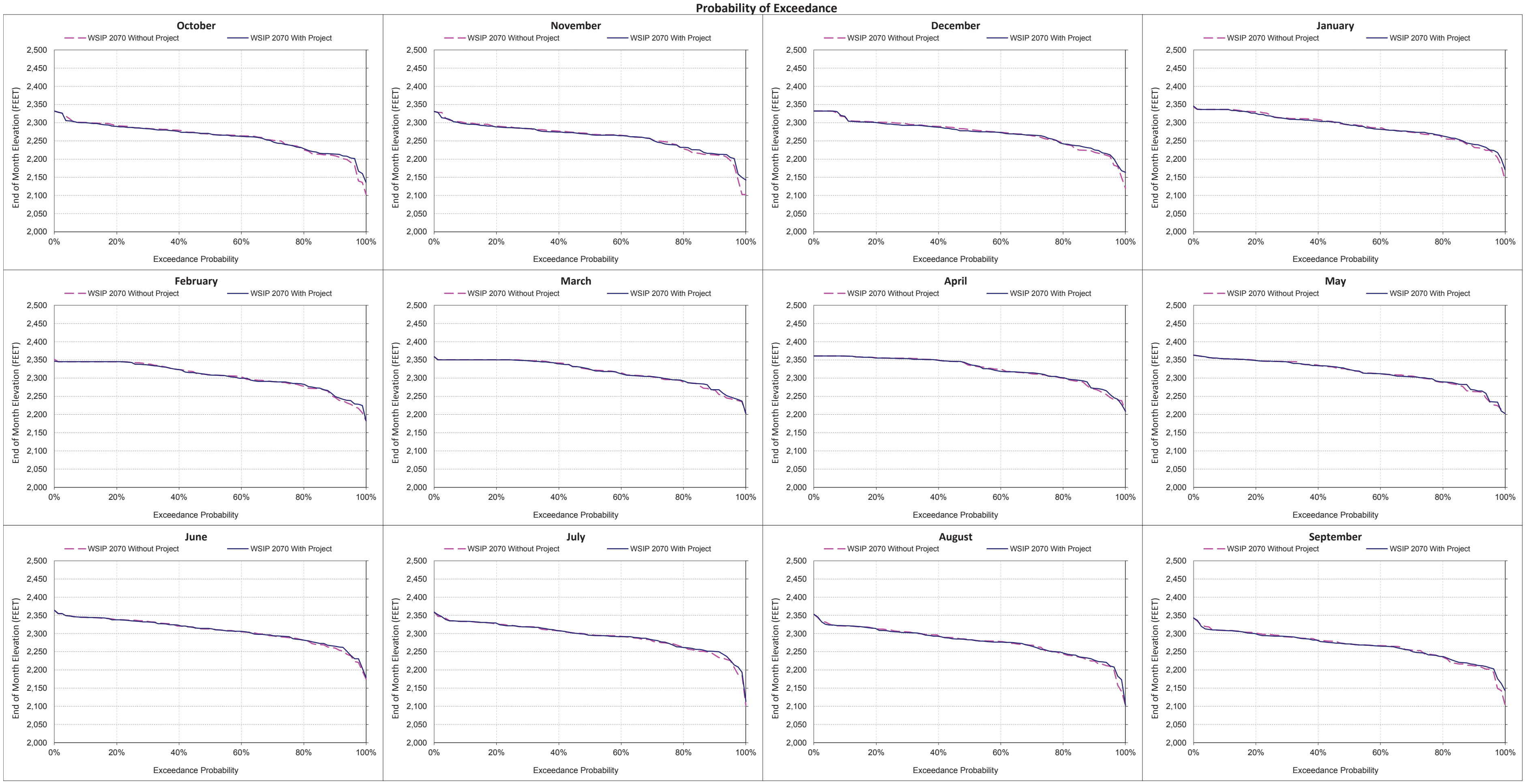


Table SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

October				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,329	2,328	-1	0.0%
2.5%	2,326	2,326	0	0.0%
3.7%	2,318	2,305	-13	-0.6%
4.9%	2,310	2,305	-5	-0.2%
6.2%	2,302	2,304	1	0.0%
7.4%	2,301	2,301	-1	0.0%
8.6%	2,301	2,300	-1	0.0%
9.9%	2,301	2,300	-1	0.0%
11.1%	2,300	2,300	-1	0.0%
12.3%	2,299	2,298	-1	-0.1%
13.6%	2,299	2,298	-1	-0.1%
14.8%	2,298	2,296	-3	-0.1%
16.0%	2,298	2,295	-3	-0.1%
17.3%	2,298	2,294	-4	-0.2%
18.5%	2,295	2,291	-4	-0.2%
19.8%	2,292	2,290	-2	-0.1%
21.0%	2,291	2,289	-2	-0.1%
22.2%	2,291	2,289	-2	-0.1%
23.5%	2,290	2,287	-3	-0.1%
24.7%	2,288	2,287	0	0.0%
25.9%	2,286	2,286	0	0.0%
27.2%	2,285	2,286	1	0.0%
28.4%	2,285	2,284	0	0.0%
29.6%	2,285	2,284	-1	0.0%
30.9%	2,283	2,283	0	0.0%
32.1%	2,283	2,282	-1	-0.1%
33.3%	2,283	2,280	-2	-0.1%
34.6%	2,282	2,280	-2	-0.1%
35.8%	2,282	2,280	-2	-0.1%
37.0%	2,280	2,279	-1	-0.1%
38.3%	2,280	2,278	-2	-0.1%
39.5%	2,280	2,276	-3	-0.2%
40.7%	2,278	2,274	-5	-0.2%
42.0%	2,275	2,273	-1	-0.1%
43.2%	2,274	2,273	-1	-0.1%
44.4%	2,274	2,273	-1	0.0%
45.7%	2,273	2,272	-1	0.0%
46.9%	2,270	2,271	1	0.0%
48.1%	2,270	2,270	1	0.0%
49.4%	2,269	2,270	1	0.1%
50.6%	2,268	2,268	1	0.0%
51.9%	2,267	2,267	0	0.0%
53.1%	2,266	2,266	0	0.0%
54.3%	2,266	2,266	0	0.0%
55.6%	2,266	2,265	-1	0.0%
56.8%	2,266	2,264	-2	-0.1%
58.0%	2,266	2,264	-2	-0.1%
59.3%	2,264	2,263	-1	0.0%
60.5%	2,264	2,262	-2	-0.1%
61.7%	2,264	2,262	-2	-0.1%
63.0%	2,263	2,261	-2	-0.1%
64.2%	2,263	2,261	-2	-0.1%
65.4%	2,260	2,259	-1	0.0%
66.7%	2,259	2,258	-2	-0.1%
67.9%	2,254	2,253	-1	0.0%
69.1%	2,253	2,251	-2	-0.1%
70.4%	2,251	2,247	-5	-0.2%
71.6%	2,251	2,244	-7	-0.3%
72.8%	2,250	2,243	-7	-0.3%
74.1%	2,241	2,240	-1	0.0%
75.3%	2,241	2,239	-2	-0.1%
76.5%	2,237	2,237	0	0.0%
77.8%	2,236	2,233	-3	-0.1%
79.0%	2,230	2,232	2	0.1%
80.2%	2,225	2,228	3	0.2%
81.5%	2,222	2,224	2	0.1%
82.7%	2,214	2,221	6	0.3%
84.0%	2,214	2,219	5	0.2%
85.2%	2,213	2,216	3	0.1%
86.4%	2,212	2,215	3	0.2%
87.7%	2,212	2,215	3	0.1%
88.9%	2,211	2,214	3	0.1%
90.1%	2,209	2,214	5	0.2%
91.4%	2,205	2,213	8	0.4%
92.6%	2,201	2,209	8	0.4%
93.8%	2,199	2,208	9	0.4%
95.1%	2,191	2,203	12	0.6%
96.3%	2,183	2,201	19	0.9%
97.5%	2,140	2,166	27	1.2%
98.8%	2,136	2,160	24	1.1%
100.0%	2,103	2,136	33	1.6%

November				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,331	2,330	-1	0.0%
1.2%	2,328	2,328	0	0.0%
2.5%	2,328	2,313	-15	-0.6%
3.7%	2,312	2,312	0	0.0%
4.9%	2,307	2,309	2	0.1%
6.2%	2,305	2,303	-2	-0.1%
7.4%	2,303	2,301	-2	-0.1%
8.6%	2,302	2,298	-4	-0.2%
9.9%	2,300	2,297	-3	-0.1%
11.1%	2,299	2,296	-3	-0.1%
12.3%	2,299	2,296	-3	-0.1%
13.6%	2,296	2,295	-2	-0.1%
14.8%	2,296	2,293	-3	-0.1%
16.0%	2,296	2,292	-3	-0.2%
17.3%	2,296	2,291	-5	-0.2%
18.5%	2,292	2,291	-1	0.0%
19.8%	2,291	2,289	-2	-0.1%
21.0%	2,290	2,288	-2	-0.1%
22.2%	2,289	2,287	-2	-0.1%
23.5%	2,288	2,287	-2	-0.1%
24.7%	2,288	2,286	-2	-0.1%
25.9%	2,286	2,286	0	0.0%
27.2%	2,285	2,285	1	0.0%
28.4%	2,284	2,284	0	0.0%
29.6%	2,284	2,284	0	0.0%
30.9%	2,283	2,284	0	0.0%
32.1%	2,281	2,283	2	0.1%
33.3%	2,281	2,278	-2	-0.1%
34.6%	2,281	2,276	-4	-0.2%
35.8%	2,280	2,276	-4	-0.2%
37.0%	2,278	2,275	-3	-0.1%
38.3%	2,278	2,275	-3	-0.1%
39.5%	2,277	2,275	-3	-0.1%
40.7%	2,276	2,274	-2	-0.1%
42.0%	2,276	2,273	-3	-0.1%
43.2%	2,275	2,273	-2	-0.1%
44.4%	2,274	2,273	-1	0.0%
45.7%	2,273	2,272	-1	-0.1%
46.9%	2,272	2,270	-2	-0.1%
48.1%	2,272	2,269	-2	-0.1%
49.4%	2,270	2,269	-2	-0.1%
50.6%	2,268	2,267	-1	-0.1%
51.9%	2,268	2,266	-2	-0.1%
53.1%	2,267	2,266	-1	0.0%
54.3%	2,267	2,266	-1	0.0%
55.6%	2,267	2,266	-1	0.0%
56.8%	2,267	2,266	-1	0.0%
58.0%	2,267	2,266	-1	0.0%
59.3%	2,266	2,265	-1	-0.1%
60.5%	2,265	2,265	0	0.0%
61.7%	2,264	2,264	-1	0.0%
63.0%	2,263	2,262	-1	-0.1%
64.2%	2,261	2,261	1	0.0%
65.4%	2,260	2,261	1	0.0%
66.7%	2,260	2,260	0	0.0%
67.9%	2,258	2,258	0	0.0%
69.1%	2,257	2,257	1	0.0%
70.4%	2,252	2,251	-1	-0.1%
71.6%	2,250	2,246	-3	-0.1%
72.8%	2,249	2,245	-4	-0.2%
74.1%	2,248	2,242	-6	-0.3%
75.3%	2,247	2,240	-7	-0.3%
76.5%	2,242	2,239	-2	-0.1%
77.8%	2,239	2,239	0	0.0%
79.0%	2,231	2,232	2	0.1%
80.2%	2,228	2,232	4	0.2%
81.5%	2,225	2,232	7	0.3%
82.7%	2,218	2,226	8	0.3%
84.0%	2,217	2,226	9	0.4%
85.2%	2,216	2,225	9	0.4%
86.4%	2,213	2,219	6	0.3%
87.7%	2,213	2,216	3	0.2%
88.9%	2,212	2,216	4	0.2%
90.1%	2,212	2,215	3	0.1%
91.4%	2,210	2,213	2	0.1%
92.6%	2,210	2,213	3	0.1%
93.8%	2,206	2,213	7	0.3%
95.1%	2,196	2,204	9	0.4%
96.3%	2,181	2,202	21	1.0%
97.5%	2,142	2,159	16	0.8%
98.8%	2,103	2,150	47	2.2%
100.0%	2,103	2,142	40	1.9%

December				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,332	2,332	0	0.0%
1.2%	2,332	2,332	0	0.0%
2.5%	2,332	2,332	0	0.0%
3.7%	2,332	2,332	0	0.0%
4.9%	2,332	2,332	0	0.0%
6.2%	2,332	2,332	0	0.0%
7.4%	2,327	2,331	4	0.2%
8.6%	2,318	2,320	2	0.1%
9.9%	2,317	2,318	1	0.0%
11.1%	2,306	2,305	-1	-0.1%
12.3%	2,305	2,304	-1	0.0%
13.6%	2,304	2,303	-1	-0.1%
14.8%	2,304	2,302	-2	-0.1%
16.0%	2,303	2,302	-1	-0.1%
17.3%	2,303	2,301	-2	-0.1%
18.5%	2,303	2,301	-1	-0.1%
19.8%	2,302	2,301	-1	0.0%
21.0%	2,301	2,299	-2	-0.1%
22.2%	2,301	2,298	-3	-0.1%
23.5%	2,301	2,296	-5	-0.2%
24.7%	2,301	2,296	-5	-0.2%
25.9%	2,300	2,295	-4	-0.2%
27.2%	2,299	2,294	-4	-0.2%
28.4%	2,299	2,293	-6	-0.2%
29.6%	2,297	2,293	-4	-0.2%
30.9%	2,295	2,293	-2	-0.1%
32.1%	2,295	2,293	-2	-0.1%
33.3%	2,294	2,293	-1	-0.1%
34.6%	2,294	2,292	-2	-0.1%
35.8%	2,292	2,291	-1	0.0%
37.0%	2,290	2,290	0	0.0%
38.3%	2,290	2,289	-2	-0.1%
39.5%	2,290	2,288	-2	-0.1%
40.7%	2,290	2,287	-3	-0.1%
42.0%	2,289	2,285	-4	-0.2%
43.2%	2,288	2,285	-3	-0.1%
44.4%	2,287	2,282	-5	-0.2%
45.7%	2,285	2,281	-4	-0.2%
46.9%	2,284	2,278	-6	-0.2%
48.1%	2,283	2,278	-6	-0.2%
49.4%	2,282	2,278	-4	-0.2%
50.6%	2,281	2,277	-4	-0.2%
51.9%	2,280	2,276	-4	-0.2%
53.1%	2,278	2,275	-3	-0.1%
54.3%	2,278	2,275	-3	-0.1%
55.6%	2,276	2,275	-1	-0.1%
56.8%	2,275	2,275	-1	0.0%
58.0%	2,275	2,274	-1	0.0%
59.3%	2,274	2,274	0	0.0%
60.5%	2,273	2,272	-1	-0.1%
61.7%	2,272	2,270	-3	-0.1%
63.0%	2,271	2,270	-2	-0.1%
64.2%	2,269	2,269	0	0.0%
65.4%	2,269	2,268	-1	0.0%
66.7%	2,269	2,268	-1	0.0%
67.9%	2,266	2,266	0	0.0%
69.1%	2,265	2,266	1	0.0%
70.4%	2,264	2,266	2	0.1%
71.6%	2,263	2,265	2	0.1%
72.8%	2,260	2,265	5	0.2%
74.1%	2,256	2,262	6	0.3%
75.3%	2,254	2,257	3	0.1%
76.5%	2,254	2,255	1	0.1%
77.8%	2,251	2,251	0	0.0%
79.0%	2,247	2,244	-3	-0.1%
80.2%	2,242	2,242	0	0.0%
81.5%	2,239	2,241	2	0.1%
82.7%	2,237	2,239	2	0.1%
84.0%	2,228	2,237	9	0.4%
85.2%	2,225	2,236	12	0.5%
86.4%	2,225	2,234	9	0.4%
87.7%	2,224	2,231	7	0.3%
88.9%	2,223	2,230	7	0.3%
90.1%	2,218	2,225	6	0.3%
91.4%	2,216	2,223	7	0.3%
92.6%	2,214	2,217	4	0.2%
93.8%	2,211	2,215	5	0.2%
95.1%	2,207	2,212	4	0.2%
96.3%	2,183	2,200	17	0.8%
97.5%	2,180	2,183	4	0.2%
98.8%	2,148	2,168	20	0.9%
100.0%	2,120	2,164	44	2.1%

January				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,343	2,346	3	0.1%
1.2%	2,337	2,337	0	0.0%
2.5%	2,337	2,337	0	0.0%
3.7%	2,337	2,337	0	0.0%
4.9%	2,337	2,337	0	0.0%
6.2%	2,337	2,337	0	0.0%
7.4%	2,337	2,337	0	0.0%
8.6%	2,337	2,337	0	0.0%
9.9%	2,337	2,337	0	0.0%
11.1%	2,337	2,337	0	0.0%
12.3%	2,337	2,334	-3	-0.1%
13.6%	2,335	2,334	-1	-0.1%
14.8%	2,334	2,332	-2	-0.1%
16.0%	2,331	2,331	0	0.0%
17.3%	2,331	2,330	-1	0.0%
18.5%	2,331	2,326	-4	-0.2%
19.8%	2,330	2,326	-4	-0.2%
21.0%	2,330	2,323	-7	-0.3%
22.2%	2,328	2,323	-5	-0.2%
23.5%	2,326	2,319	-7	-0.3%
24.7%	2,321	2,319	-3	-0.1%
25.9%	2,316	2,315	0	0.0%
27.2%	2,314	2,313	-1	0.0%
28.4%	2,313	2,313	-1	0.0%
29.6%	2,313	2,311	-2	-0.1%
30.9%	2,312	2,309	-2	-0.1%
32.1%	2,311	2,309	-2	-0.1%
33.3%	2,311	2,309	-3	-0.1%
34.6%	2,311	2,308	-3	-0.1%
35.8%	2,311	2,307	-4	-0.2%
37.0%	2,310	2,307	-3	-0.1%
38.3%	2,310	2,306	-5	-0.2%
39.5%	2,309	2,305	-5	-0.2%
40.7%	2,308	2,303	-4	-0.2%
42.0%	2,305	2,303	-2	-0.1%
43.2%	2,304	2,303	-1	0.0%
44.4%	2,304	2,302	-2	-0.1%
45.7%	2,299	2,302	2	0.1%
46.9%	2,298	2,301	3	0.1%
48.1%	2,296	2,296	0	0.0%
49.4%	2,295	2,295	0	0.0%
50.6%	2,294	2,293	-2	-0.1%
51.9%	2,294	2,293	-2	-0.1%
53.1%	2,292	2,290	-2	-0.1%
54.3%	2,292	2,290	-2	-0.1%
55.6%	2,290	2,286	-4	-0.2%
56.8%	2,287	2,285	-2	-0.1%
58.0%	2,286	2,283	-4	-0.2%
59.3%	2,286	2,282	-4	-0.2%
60.5%	2,286	2,281	-4	-0.2%
61.7%	2,280	2,281	1	0.0%
63.0%	2,280	2,279	0	0.0%
64.2%	2,279	2,279	0	0.0%
65.4%	2,278	2,277	-1	0.0%
66.7%	2,277	2,277	0	0.0%
67.9%	2,277	2,277	0	0.0%
69.1%	2,275	2,276	1	0.1%
70.4%	2,273	2,275	1	0.1%
71.6%	2,273	2,274	1	0.0%
72.8%	2,270	2,274	4	0.2%
74.1%	2,268	2,273	5	0.2%
75.3%	2,268	2,271	3	0.1%
76.5%	2,267	2,270	2	0.1%
77.8%	2,267	2,267	1	0.0%
79.0%	2,265	2,266	1	0.0%
80.2%	2,256	2,263	7	0.3%
81.5%	2,255	2,261	6	0.3%
82.7%	2,255	2,258	3	0.1%
84.0%	2,253	2,257	4	0.2%
85.2%	2,251	2,254	3	0.1%
86.4%	2,248	2,250	2	0.1%
87.7%	2,241	2,245	4	0.2%
88.9%	2,241	2,242	2	0.1%
90.1%	2,232	2,240	8	0.4%
91.4%	2,231	2,239	8	0.4%
92.6%	2,229	2,236	7	0.3%
93.8%	2,224	2,232	8	0.3%
95.1%	2,224	2,225	1	0.0%
96.3%	2,216	2,223	7	0.3%
97.5%	2,204	2,218	14	0.6%
98.8%	2,181	2,201	19	0.9%
100.0%	2,141	2,171	29	1.4%

Table SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,352	2,347	-5	-0.2%
1.2%	2,345	2,345	0	0.0%
2.5%	2,345	2,345	0	0.0%
3.7%	2,345	2,345	0	0.0%
4.9%	2,345	2,345	0	0.0%
6.2%	2,345	2,345	0	0.0%
7.4%	2,345	2,345	0	0.0%
8.6%	2,345	2,345	0	0.0%
9.9%	2,345	2,345	0	0.0%
11.1%	2,345	2,345	0	0.0%
12.3%	2,345	2,345	0	0.0%
13.6%	2,345	2,345	0	0.0%
14.8%	2,345	2,345	0	0.0%
16.0%	2,345	2,345	0	0.0%
17.3%	2,345	2,345	0	0.0%
18.5%	2,345	2,345	0	0.0%
19.8%	2,345	2,345	0	0.0%
21.0%	2,345	2,345	0	0.0%
22.2%	2,345	2,345	0	0.0%
23.5%	2,345	2,344	-1	0.0%
24.7%	2,343	2,343	0	0.0%
25.9%	2,342	2,338	-4	-0.2%
27.2%	2,342	2,338	-4	-0.2%
28.4%	2,341	2,337	-4	-0.2%
29.6%	2,339	2,337	-2	-0.1%
30.9%	2,338	2,336	-3	-0.1%
32.1%	2,335	2,334	-1	-0.1%
33.3%	2,335	2,333	-2	-0.1%
34.6%	2,333	2,331	-2	-0.1%
35.8%	2,330	2,330	0	0.0%
37.0%	2,327	2,327	0	0.0%
38.3%	2,325	2,326	1	0.0%
39.5%	2,324	2,324	0	0.0%
40.7%	2,323	2,322	0	0.0%
42.0%	2,321	2,317	-5	-0.2%
43.2%	2,319	2,316	-3	-0.1%
44.4%	2,318	2,315	-3	-0.1%
45.7%	2,312	2,314	1	0.1%
46.9%	2,311	2,312	1	0.1%
48.1%	2,311	2,311	0	0.0%
49.4%	2,309	2,309	-1	0.0%
50.6%	2,309	2,308	-1	0.0%
51.9%	2,308	2,308	0	0.0%
53.1%	2,308	2,308	0	0.0%
54.3%	2,307	2,307	1	0.0%
55.6%	2,307	2,305	-2	-0.1%
56.8%	2,306	2,303	-3	-0.1%
58.0%	2,306	2,302	-4	-0.2%
59.3%	2,305	2,299	-5	-0.2%
60.5%	2,302	2,299	-3	-0.1%
61.7%	2,297	2,299	3	0.1%
63.0%	2,296	2,295	-2	-0.1%
64.2%	2,295	2,292	-3	-0.1%
65.4%	2,294	2,291	-3	-0.1%
66.7%	2,294	2,291	-3	-0.1%
67.9%	2,292	2,291	-1	0.0%
69.1%	2,291	2,291	-1	0.0%
70.4%	2,290	2,290	0	0.0%
71.6%	2,290	2,290	0	0.0%
72.8%	2,289	2,290	1	0.1%
74.1%	2,288	2,289	2	0.1%
75.3%	2,285	2,287	2	0.1%
76.5%	2,285	2,285	0	0.0%
77.8%	2,283	2,285	2	0.1%
79.0%	2,280	2,284	5	0.2%
80.2%	2,277	2,283	5	0.2%
81.5%	2,272	2,277	5	0.2%
82.7%	2,272	2,275	3	0.2%
84.0%	2,271	2,273	2	0.1%
85.2%	2,271	2,273	2	0.1%
86.4%	2,268	2,269	1	0.0%
87.7%	2,265	2,266	1	0.1%
88.9%	2,252	2,258	6	0.3%
90.1%	2,246	2,249	3	0.1%
91.4%	2,239	2,245	6	0.3%
92.6%	2,237	2,242	5	0.2%
93.8%	2,232	2,239	7	0.3%
95.1%	2,228	2,238	10	0.5%
96.3%	2,222	2,229	7	0.3%
97.5%	2,217	2,228	11	0.5%
98.8%	2,205	2,225	20	0.9%
100.0%	2,183	2,183	0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,359	2,359	0	0.0%
1.2%	2,350	2,350	0	0.0%
2.5%	2,350	2,350	0	0.0%
3.7%	2,350	2,350	0	0.0%
4.9%	2,350	2,350	0	0.0%
6.2%	2,350	2,350	0	0.0%
7.4%	2,350	2,350	0	0.0%
8.6%	2,350	2,350	0	0.0%
9.9%	2,350	2,350	0	0.0%
11.1%	2,350	2,350	0	0.0%
12.3%	2,350	2,350	0	0.0%
13.6%	2,350	2,350	0	0.0%
14.8%	2,350	2,350	0	0.0%
16.0%	2,350	2,350	0	0.0%
17.3%	2,350	2,350	0	0.0%
18.5%	2,350	2,350	0	0.0%
19.8%	2,350	2,350	0	0.0%
21.0%	2,350	2,350	0	0.0%
22.2%	2,350	2,350	0	0.0%
23.5%	2,350	2,350	0	0.0%
24.7%	2,350	2,350	0	0.0%
25.9%	2,350	2,350	0	0.0%
27.2%	2,350	2,349	-1	-0.1%
28.4%	2,349	2,349	0	0.0%
29.6%	2,348	2,348	0	0.0%
30.9%	2,348	2,348	0	0.0%
32.1%	2,348	2,346	-2	-0.1%
33.3%	2,347	2,346	-1	-0.1%
34.6%	2,347	2,344	-3	-0.1%
35.8%	2,346	2,344	-2	-0.1%
37.0%	2,344	2,343	-1	0.0%
38.3%	2,342	2,343	1	0.0%
39.5%	2,342	2,339	-3	-0.1%
40.7%	2,341	2,339	-2	-0.1%
42.0%	2,340	2,337	-3	-0.1%
43.2%	2,337	2,337	0	0.0%
44.4%	2,332	2,332	0	0.0%
45.7%	2,331	2,331	0	0.0%
46.9%	2,328	2,330	2	0.1%
48.1%	2,326	2,328	2	0.1%
49.4%	2,325	2,326	1	0.1%
50.6%	2,322	2,322	0	0.0%
51.9%	2,322	2,320	-2	-0.1%
53.1%	2,321	2,319	-2	-0.1%
54.3%	2,321	2,318	-2	-0.1%
55.6%	2,320	2,318	-2	-0.1%
56.8%	2,319	2,318	-1	-0.1%
58.0%	2,317	2,318	0	0.0%
59.3%	2,315	2,314	-2	-0.1%
60.5%	2,313	2,311	-3	-0.1%
61.7%	2,309	2,308	-1	0.0%
63.0%	2,309	2,308	-1	0.0%
64.2%	2,308	2,307	-1	0.0%
65.4%	2,307	2,306	-1	0.0%
66.7%	2,306	2,305	-1	0.0%
67.9%	2,306	2,304	-1	-0.1%
69.1%	2,305	2,304	-1	0.0%
70.4%	2,303	2,304	1	0.0%
71.6%	2,302	2,302	0	0.0%
72.8%	2,298	2,301	2	0.1%
74.1%	2,296	2,299	3	0.1%
75.3%	2,296	2,297	1	0.1%
76.5%	2,295	2,295	0	0.0%
77.8%	2,295	2,295	0	0.0%
79.0%	2,294	2,294	0	0.0%
80.2%	2,288	2,292	4	0.2%
81.5%	2,287	2,287	0	0.0%
82.7%	2,286	2,286	0	0.0%
84.0%	2,285	2,286	0	0.0%
85.2%	2,279	2,285	6	0.3%
86.4%	2,272	2,284	12	0.5%
87.7%	2,272	2,282	10	0.4%
88.9%	2,268	2,269	1	0.0%
90.1%	2,267	2,268	1	0.1%
91.4%	2,255	2,268	13	0.6%
92.6%	2,253	2,259	6	0.3%
93.8%	2,245	2,252	7	0.3%
95.1%	2,243	2,249	5	0.2%
96.3%	2,240	2,245	5	0.2%
97.5%	2,238	2,241	3	0.1%
98.8%	2,235	2,237	2	0.1%
100.0%	2,203	2,203	0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,361	2,361	0	0.0%
1.2%	2,361	2,361	0	0.0%
2.5%	2,361	2,361	0	0.0%
3.7%	2,361	2,361	0	0.0%
4.9%	2,361	2,361	0	0.0%
6.2%	2,361	2,361	0	0.0%
7.4%	2,361	2,361	0	0.0%
8.6%	2,361	2,361	0	0.0%
9.9%	2,361	2,361	0	0.0%
11.1%	2,360	2,360	0	0.0%
12.3%	2,360	2,360	0	0.0%
13.6%	2,358	2,358	0	0.0%
14.8%	2,358	2,358	0	0.0%
16.0%	2,358	2,358	0	0.0%
17.3%	2,358	2,357	0	0.0%
18.5%	2,357	2,357	0	0.0%
19.8%	2,356	2,355	-1	0.0%
21.0%	2,356	2,355	-1	0.0%
22.2%	2,355	2,355	0	0.0%
23.5%	2,355	2,355	0	0.0%
24.7%	2,355	2,355	0	0.0%
25.9%	2,355	2,354	-1	0.0%
27.2%	2,355	2,354	-1	-0.1%
28.4%	2,355	2,354	-1	-0.1%
29.6%	2,355	2,353	-1	-0.1%
30.9%	2,355	2,353	-1	-0.1%
32.1%	2,354	2,352	-2	-0.1%
33.3%	2,354	2,352	-2	-0.1%
34.6%	2,352	2,351	0	0.0%
35.8%	2,352	2,351	0	0.0%
37.0%	2,351	2,351	0	0.0%
38.3%	2,351	2,351	0	0.0%
39.5%	2,350	2,350	0	0.0%
40.7%	2,348	2,348	0	0.0%
42.0%	2,347	2,347	0	0.0%
43.2%	2,346	2,346	0	0.0%
44.4%	2,346	2,346	0	0.0%
45.7%	2,346	2,346	0	0.0%
46.9%	2,346	2,346	0	0.0%
48.1%	2,343	2,344	1	0.1%
49.4%	2,336	2,339	3	0.1%
50.6%	2,334	2,336	2	0.1%
51.9%	2,333	2,335	2	0.1%
53.1%	2,331	2,332	1	0.1%
54.3%	2,330	2,326	-4	-0.2%
55.6%	2,327	2,326	-2	-0.1%
56.8%	2,327	2,325	-2	-0.1%
58.0%	2,325	2,322	-3	-0.1%
59.3%	2,324	2,319	-5	-0.2%
60.5%	2,323	2,318	-5	-0.2%
61.7%	2,318	2,318	-1	0.0%
63.0%	2,318	2,317	-1	0.0%
64.2%	2,317	2,317	0	0.0%
65.4%	2,316	2,316	1	0.0%
66.7%	2,316	2,316	1	0.0%
67.9%	2,314	2,315	2	0.1%
69.1%	2,313	2,315	2	0.1%
70.4%	2,311	2,314	3	0.1%
71.6%	2,311	2,313	2	0.1%
72.8%	2,309	2,312	2	0.1%
74.1%	2,309	2,309	1	0.0%
75.3%	2,306	2,305	-1	0.0%
76.5%	2,305	2,305	0	0.0%
77.8%	2,304	2,305	1	0.1%
79.0%	2,301	2,302	1	0.1%
80.2%	2,299	2,301	2	0.1%
81.5%	2,296	2,297	1	0.1%
82.7%	2,294	2,296	2	0.1%
84.0%	2,292	2,295	3	0.1%
85.2%	2,292	2,294	2	0.1%
86.4%	2,289	2,293	4	0.2%
87.7%	2,280	2,290	10	0.5%
88.9%	2,272	2,273	1	0.1%
90.1%	2,270	2,272	2	0.1%
91.4%	2,266	2,271	5	0.2%
92.6%	2,260	2,269	8	0.4%
93.8%	2,255	2,265	10	0.4%
95.1%	2,247	2,255	8	0.4%
96.3%	2,241	2,246	5	0.2%
97.5%	2,240	2,242	2	0.1%
98.8%	2,238	2,228	-10	-0.4%
100.0%	2,209	2,209	0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,363	2,363	0	0.0%
1.2%	2,362	2,362	0	0.0%
2.5%	2,360	2,360	0	0.0%
3.7%	2,358	2,358	0	0.0%
4.9%	2,357	2,357	0	0.0%
6.2%	2,355	2,355	0	0.0%
7.4%	2,355	2,355	0	0.0%
8.6%	2,354	2,354	0	0.0%
9.9%	2,353	2,353	0	0.0%
11.1%	2,353	2,353	0	0.0%
12.3%	2,352	2,352	0	0.0%
13.6%	2,352	2,352	0	0.0%
14.8%	2,352	2,352	0	0.0%
16.0%	2,351	2,351	0	0.0%
17.3%	2,351	2,350	-1	0.0%
18.5%	2,350	2,349	-1	-0.1%
19.8%	2,349	2,349	0	0.0%
21.0%	2,347	2,347	0	0.0%
22.2%	2,347	2,347	0	0.0%
23.5%	2,347	2,346	0	0.0%
24.7%	2,346	2,346	0	0.0%
25.9%	2,346	2,346	0	0.0%
27.2%	2,346	2,346	0	0.0%
28.4%	2,346	2,345	-1	0.0%
29.6%	2,346	2,345	-1	0.0%
30.9%	2,345	2,343	-2	-0.1%
32.1%	2,345	2,340	-5	-0.2%
33.3%	2,345	2,340	-5	-0.2%
34.6%	2,339	2,340	1	0.0%
35.8%	2,337	2,337	0	0.0%
37.0%	2,337	2,337	-1	0.0%
38.3%	2,337	2,335	-3	-0.1%
39.5%	2,336	2,334	-2	-0.1%
40.7%	2,334	2,334	0	0.0%
42.0%	2,332	2,334	1	0.1%
43.2%	2,332	2,333	2	0.1%
44.4%	2,331	2,332	0	0.0%
45.7%	2,328	2,331	3	0.1%
46.9%	2,326	2,329	3	0.1%
48.1%	2,326	2,328	2	0.1%
49.4%	2,325	2,324	-2	-0.1%
50.6%	2,322	2,323	1	0.0%
51.9%	2,320	2,320	1	0.0%
53.1%	2,318	2,319	1	0.0%
54.3%	2,315	2,314	-1	0.0%
55.6%	2,314	2,313	-1	0.0%
56.8%	2,314	2,313	-1	0.0%
58.0%	2,313	2,312	-1	0.0%
59.3%	2,313	2,312	0	0.0%
60.5%	2,311	2,312	0	0.0%
61.7%	2,310	2,311	1	0.0%
63.0%	2,310	2,310	0	0.0%
64.2%	2,309	2,307	-2	-0.1%
65.4%	2,309	2,305	-3	-0.1%
66.7%	2,309	2,305	-4	-0.2%
67.9%	2,307	2,304	-3	-0.1%
69.1%	2,306	2,304	-2	-0.1%
70.4%	2,306	2,303	-2	-0.1%
71.6%	2,303	2,303	0	0.0%
72.8%	2,302	2,301	0	0.0%
74.1%	2,299	2,301	2	0.1%
75.3%	2,298	2,299	1	0.0%
76.5%	2,298	2,298	0	0.0%
77.8%	2,291	2,293	1	0.1%
79.0%	2,289	2,290	1	0.1%
80.2%	2,288	2,290	2	0.1%
81.5%	2,288	2,289	1	0.1%
82.7%	2,285	2,288	4	0.2%
84.0%	2,283	2,286	3	0.1%
85.2%	2,281	2,283	3	0.1%
86.4%	2,277	2,283	6	0.3%
87.7%	2,265	2,283	17	0.8%
88.9%	2,263	2,269	5	0.2%
90.1%	2,263	2,267	4	0.2%
91.4%	2,263	2,265	2	0.1%
92.6%	2,261	2,264	3	0.1%
93.8%	2,246	2,258	13	0.6%
95.1%	2,235	2,235	1	0.0%
96.3%	2,226	2,235	8	0.4%
97.5%	2,224	2,234	10	0.4%
98.8%	2,214	2,210	-4	-0.2%
100.0%	2,209	2,202	-7	-0.3%

Table SW-02-b
Trinity Lake, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,364	2,364	0	0.0%
1.2%	2,355	2,355	0	0.0%
2.5%	2,354	2,355	0	0.0%
3.7%	2,349	2,349	0	0.0%
4.9%	2,349	2,348	0	0.0%
6.2%	2,347	2,347	0	0.0%
7.4%	2,346	2,346	0	0.0%
8.6%	2,345	2,345	0	0.0%
9.9%	2,344	2,345	0	0.0%
11.1%	2,344	2,344	0	0.0%
12.3%	2,344	2,344	0	0.0%
13.6%	2,344	2,344	0	0.0%
14.8%	2,343	2,344	1	0.0%
16.0%	2,341	2,343	1	0.1%
17.3%	2,341	2,341	0	0.0%
18.5%	2,340	2,338	-2	-0.1%
19.8%	2,338	2,338	0	0.0%
21.0%	2,338	2,338	0	0.0%
22.2%	2,338	2,337	-1	0.0%
23.5%	2,337	2,337	0	0.0%
24.7%	2,337	2,335	-2	-0.1%
25.9%	2,337	2,334	-2	-0.1%
27.2%	2,335	2,333	-2	-0.1%
28.4%	2,335	2,332	-3	-0.1%
29.6%	2,334	2,332	-2	-0.1%
30.9%	2,332	2,331	-1	0.0%
32.1%	2,332	2,330	-2	-0.1%
33.3%	2,329	2,327	-2	-0.1%
34.6%	2,328	2,327	-1	-0.1%
35.8%	2,327	2,326	-1	0.0%
37.0%	2,327	2,324	-3	-0.1%
38.3%	2,324	2,324	0	0.0%
39.5%	2,321	2,324	3	0.1%
40.7%	2,320	2,321	0	0.0%
42.0%	2,318	2,320	2	0.1%
43.2%	2,318	2,318	0	0.0%
44.4%	2,318	2,317	-1	-0.1%
45.7%	2,313	2,315	2	0.1%
46.9%	2,313	2,314	2	0.1%
48.1%	2,313	2,314	1	0.1%
49.4%	2,313	2,314	1	0.1%
50.6%	2,313	2,313	0	0.0%
51.9%	2,310	2,310	0	0.0%
53.1%	2,310	2,310	0	0.0%
54.3%	2,309	2,308	-1	0.0%
55.6%	2,309	2,307	-1	-0.1%
56.8%	2,308	2,307	-1	0.0%
58.0%	2,306	2,306	0	0.0%
59.3%	2,305	2,306	1	0.1%
60.5%	2,305	2,306	1	0.0%
61.7%	2,304	2,304	0	0.0%
63.0%	2,303	2,302	-1	-0.1%
64.2%	2,302	2,298	-4	-0.2%
65.4%	2,299	2,298	-2	-0.1%
66.7%	2,299	2,298	-1	0.0%
67.9%	2,297	2,297	0	0.0%
69.1%	2,294	2,296	2	0.1%
70.4%	2,294	2,294	0	0.0%
71.6%	2,291	2,293	2	0.1%
72.8%	2,291	2,292	2	0.1%
74.1%	2,290	2,292	2	0.1%
75.3%	2,289	2,291	3	0.1%
76.5%	2,288	2,286	-2	-0.1%
77.8%	2,286	2,285	-2	-0.1%
79.0%	2,283	2,283	0	0.0%
80.2%	2,281	2,281	0	0.0%
81.5%	2,279	2,280	1	0.0%
82.7%	2,272	2,277	5	0.2%
84.0%	2,270	2,275	5	0.2%
85.2%	2,269	2,273	3	0.1%
86.4%	2,269	2,273	4	0.2%
87.7%	2,263	2,268	4	0.2%
88.9%	2,261	2,266	5	0.2%
90.1%	2,260	2,265	5	0.2%
91.4%	2,254	2,263	9	0.4%
92.6%	2,251	2,262	11	0.5%
93.8%	2,243	2,251	8	0.4%
95.1%	2,239	2,240	1	0.0%
96.3%	2,223	2,231	8	0.4%
97.5%	2,221	2,231	10	0.5%
98.8%	2,197	2,204	7	0.3%
100.0%	2,175	2,179	5	0.2%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,359	2,358	-1	-0.1%
1.2%	2,347	2,352	5	0.2%
2.5%	2,346	2,346	0	0.0%
3.7%	2,342	2,338	-4	-0.2%
4.9%	2,335	2,335	0	0.0%
6.2%	2,335	2,335	0	0.0%
7.4%	2,334	2,334	1	0.0%
8.6%	2,333	2,334	0	0.0%
9.9%	2,333	2,333	0	0.0%
11.1%	2,333	2,333	0	0.0%
12.3%	2,332	2,333	1	0.0%
13.6%	2,331	2,332	1	0.0%
14.8%	2,331	2,330	0	0.0%
16.0%	2,331	2,330	0	0.0%
17.3%	2,329	2,330	0	0.0%
18.5%	2,328	2,329	1	0.0%
19.8%	2,326	2,329	3	0.1%
21.0%	2,325	2,325	-1	0.0%
22.2%	2,325	2,323	-2	-0.1%
23.5%	2,323	2,321	-2	-0.1%
24.7%	2,323	2,321	-2	-0.1%
25.9%	2,321	2,321	0	0.0%
27.2%	2,319	2,319	0	0.0%
28.4%	2,319	2,319	0	0.0%
29.6%	2,319	2,318	-1	0.0%
30.9%	2,319	2,318	-1	-0.1%
32.1%	2,318	2,317	-1	-0.1%
33.3%	2,316	2,317	1	0.1%
34.6%	2,312	2,315	3	0.1%
35.8%	2,311	2,313	3	0.1%
37.0%	2,309	2,311	2	0.1%
38.3%	2,309	2,311	2	0.1%
39.5%	2,308	2,308	0	0.0%
40.7%	2,307	2,307	0	0.0%
42.0%	2,304	2,306	1	0.1%
43.2%	2,303	2,303	0	0.0%
44.4%	2,302	2,301	-1	0.0%
45.7%	2,301	2,301	0	0.0%
46.9%	2,300	2,299	-1	-0.1%
48.1%	2,299	2,298	-1	-0.1%
49.4%	2,297	2,295	-1	-0.1%
50.6%	2,296	2,295	-2	-0.1%
51.9%	2,295	2,294	-1	0.0%
53.1%	2,295	2,294	0	0.0%
54.3%	2,294	2,294	0	0.0%
55.6%	2,294	2,294	-1	0.0%
56.8%	2,294	2,292	-2	-0.1%
58.0%	2,294	2,292	-2	-0.1%
59.3%	2,293	2,291	-2	-0.1%
60.5%	2,292	2,291	0	0.0%
61.7%	2,291	2,291	0	0.0%
63.0%	2,290	2,291	1	0.0%
64.2%	2,288	2,289	2	0.1%
65.4%	2,287	2,289	2	0.1%
66.7%	2,284	2,287	2	0.1%
67.9%	2,284	2,287	3	0.1%
69.1%	2,283	2,284	1	0.0%
70.4%	2,278	2,282	4	0.2%
71.6%	2,277	2,280	4	0.2%
72.8%	2,275	2,277	2	0.1%
74.1%	2,274	2,276	2	0.1%
75.3%	2,273	2,273	-1	0.0%
76.5%	2,272	2,268	-4	-0.2%
77.8%	2,268	2,264	-5	-0.2%
79.0%	2,265	2,263	-2	-0.1%
80.2%	2,263	2,261	-2	-0.1%
81.5%	2,257	2,261	3	0.1%
82.7%	2,256	2,259	3	0.2%
84.0%	2,253	2,256	3	0.1%
85.2%	2,251	2,256	5	0.2%
86.4%	2,251	2,254	3	0.1%
87.7%	2,249	2,252	2	0.1%
88.9%	2,247	2,251	4	0.2%
90.1%	2,240	2,251	10	0.5%
91.4%	2,234	2,250	16	0.7%
92.6%	2,232	2,244	11	0.5%
93.8%	2,229	2,237	9	0.4%
95.1%	2,225	2,226	1	0.0%
96.3%	2,206	2,214	8	0.4%
97.5%	2,187	2,208	20	0.9%
98.8%	2,187	2,194	7	0.3%
100.0%	2,103	2,113	11	0.5%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,353	2,353	0	0.0%
1.2%	2,344	2,346	1	0.1%
2.5%	2,333	2,332	-1	0.0%
3.7%	2,332	2,325	-6	-0.3%
4.9%	2,326	2,324	-3	-0.1%
6.2%	2,322	2,323	1	0.1%
7.4%	2,321	2,322	1	0.0%
8.6%	2,321	2,322	1	0.0%
9.9%	2,321	2,321	0	0.0%
11.1%	2,321	2,321	0	0.0%
12.3%	2,320	2,321	1	0.0%
13.6%	2,319	2,320	1	0.0%
14.8%	2,318	2,319	1	0.0%
16.0%	2,318	2,317	0	0.0%
17.3%	2,318	2,316	-2	-0.1%
18.5%	2,316	2,315	-1	0.0%
19.8%	2,313	2,314	1	0.0%
21.0%	2,312	2,309	-3	-0.1%
22.2%	2,312	2,308	-4	-0.2%
23.5%	2,310	2,308	-3	-0.1%
24.7%	2,310	2,306	-4	-0.2%
25.9%	2,307	2,305	-2	-0.1%
27.2%	2,306	2,304	-2	-0.1%
28.4%	2,306	2,303	-3	-0.1%
29.6%	2,305	2,303	-2	-0.1%
30.9%	2,304	2,302	-2	-0.1%
32.1%	2,301	2,302	1	0.1%
33.3%	2,300	2,302	2	0.1%
34.6%	2,299	2,299	0	0.0%
35.8%	2,298	2,296	-2	-0.1%
37.0%	2,297	2,295	-1	-0.1%
38.3%	2,296	2,293	-4	-0.2%
39.5%	2,296	2,292	-4	-0.2%
40.7%	2,290	2,292	1	0.1%
42.0%	2,289	2,289	-1	0.0%
43.2%	2,289	2,288	-1	0.0%
44.4%	2,289	2,286	-3	-0.1%
45.7%	2,288	2,285	-3	-0.1%
46.9%	2,285	2,285	-1	0.0%
48.1%	2,285	2,284	-1	-0.1%
49.4%	2,284	2,283	-1	0.0%
50.6%	2,283	2,283	0	0.0%
51.9%	2,281	2,281	0	0.0%
53.1%	2,280	2,280	-1	0.0%
54.3%	2,280	2,279	0	0.0%
55.6%	2,280	2,277	-2	-0.1%
56.8%	2,280	2,277	-2	-0.1%
58.0%	2,279	2,276	-3	-0.1%
59.3%	2,278	2,276	-2	-0.1%
60.5%	2,278	2,276	-2	-0.1%
61.7%	2,276	2,276	0	0.0%
63.0%	2,273	2,276	3	0.1%
64.2%	2,273	2,275	2	0.1%
65.4%	2,271	2,273	3	0.1%
66.7%	2,270	2,273	2	0.1%
67.9%	2,270	2,269	0	0.0%
69.1%	2,268	2,267	-1	0.0%
70.4%	2,268	2,265	-3	-0.1%
71.6%	2,263	2,261	-3	-0.1%
72.8%	2,262	2,257	-6	-0.2%
74.1%	2,253	2,256	2	0.1%
75.3%	2,253	2,252	0	0.0%
76.5%	2,251	2,250	-1	0.0%
77.8%	2,250	2,250	0	0.0%
79.0%	2,246	2,249	3	0.1%
80.2%	2,243	2,246	2	0.1%
81.5%	2,240	2,243	3	0.1%
82.7%	2,239	2,241	2	0.1%
84.0%	2,238	2,241	3	0.2%
85.2%	2,235	2,236	1	0.0%
86.4%	2,233	2,234	2	0.1%
87.7%	2,228	2,233	5	0.2%
88.9%	2,225	2,231	6	0.3%
90.1%	2,224	2,227	2	0.1%
91.4%	2,216	2,223	7	0.3%
92.6%	2,216	2,223	7	0.3%
93.8%	2,212	2,221	9	0.4%
95.1%	2,210	2,211	1	0.0%
96.3%	2,200	2,208	8	0.4%
97.5%	2,158	2,183	25	1.2%
98.8%	2,140	2,173	33	1.6%
100.0%	2,103	2,103	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	2,343	2,343	0	0.0%
1.2%	2,335	2,336	2	0.1%
2.5%	2,324	2,320	-4	-0.2%
3.7%	2,319	2,313	-6	-0.3%
4.9%	2,318	2,312	-7	-0.3%
6.2%	2,309	2,310	1	0.0%
7.4%	2,309	2,310	1	0.0%
8.6%	2,309	2,309	0	0.0%
9.9%	2,309	2,309	0	0.0%
11.1%	2,308	2,308	0	0.0%
12.3%	2,308	2,307	-1	0.0%
13.6%	2,307	2,306	-1	0.0%
14.8%	2,306	2,305	-1	0.0%
16.0%	2,304	2,305	1	0.0%
17.3%	2,304	2,302	-2	-0.1%
18.5%	2,303	2,300	-3	-0.1%
19.8%	2,301	2,300	-2	-0.1%
21.0%	2,300	2,296	-4	-0.2%
22.2%	2,298	2,294	-4	-0.2%
23.5%	2,298	2,294	-4	-0.2%
24.7%	2,297	2,294	-4	-0.2%
25.9%	2,296	2,293	-3	-0.1%
27.2%	2,295	2,293	-3	-0.1%
28.4%	2,292	2,292	1	0.0%
29.6%	2,291	2,292	1	0.1%
30.9%	2,291	2,291	1	0.0%
32.1%	2,290	2,291	1	0.0%
33.3%	2,288	2,288	0	0.0%
34.6%	2,287	2,286	-1	-0.1%
35.8%	2,287	2,285	-1	-0.1%
37.0%	2,287	2,285	-1	-0.1%
38.3%	2,286	2,282	-4	-0.2%
39.5%	2,282	2,282	0	0.0%
40.7%	2,281	2,278	-3	-0.1%
42.0%	2,280	2,277	-3	-0.1%
43.2%	2,279	2,276	-3	-0.1%
44.4%	2,279	2,275	-4	-0.2%
45.7%	2,279	2,274	-5	-0.2%
46.9%	2,274	2,274	-1	0.0%
48.1%	2,273	2,272	-1	0.0%
49.4%	2,270	2,272	1	0.1%
50.6%	2,270	2,271	1	0.0%
51.9%	2,270	2,270	0	0.0%
53.1%	2,269	2,269	0	0.0%
54.3%	2,269	2,268	0	0.0%
55.6%	2,269	2,268	-1	0.0%
56.8%	2,267	2,268	0	0.0%
58.0%	2,267	2,267	0	0.0%
59.3%	2,267	2,266	-1	0.0%
60.5%	2,267	2,265	-1	-0.1%
61.7%	2,266	2,265	-1	0.0%
63.0%	2,265	2,264	-1	0.0%
64.2%	2,265	2,263	-1	-0.1%
65.4%	2,264	2,261	-3	-0.1%
66.7%	2,262	2,259	-4	-0.2%
67.9%	2,256	2,256	-1	0.0%
69.1%	2,255	2,255	0	0.0%
70.4%	2,254	2,250	-4	-0.2%
71.6%	2,253	2,248	-5	-0.2%
72.8%	2,253	2,247	-6	-0.3%
74.1%	2,244	2,246	2	0.1%
75.3%	2,244	2,242	-2	-0.1%
76.5%	2,242	2,241	-1	-0.1%
77.8%	2,241	2,240	-1	0.0%
79.0%	2,236	2,237	1	0.1%
80.2%	2,234	2,236	2	0.1%
81.5%	2,229	2,232	3	0.1%
82.7%	2,218	2,228	10	0.4%
84.0%	2,218	2,224	6	0.3%
85.2%	2,216	2,220	4	0.2%
86.4%	2,216	2,220	4	0.2%
87.7%	2,213	2,219	6	0.3%
88.9%	2,213	2,216	4	0.2%
90.1%	2,211	2,215	4	0.2%
91.4%	2,211	2,212	1	0.0%
92.6%	2,207	2,211	4	0.2%
93.8%	2,202	2,209	7	0.3%
95.1%	2,202	2,206	4	0.2%
96.3%	2,193	2,203	9	0.4%
97.5%	2,149	2,176	27	1.2%
98.8%	2,143	2,163	20	0.9%
100.0%	2,103	2,143	40	1.9%

Figure SW-03-b
Trinity Lake, End of Month Area
Probability of Exceedance

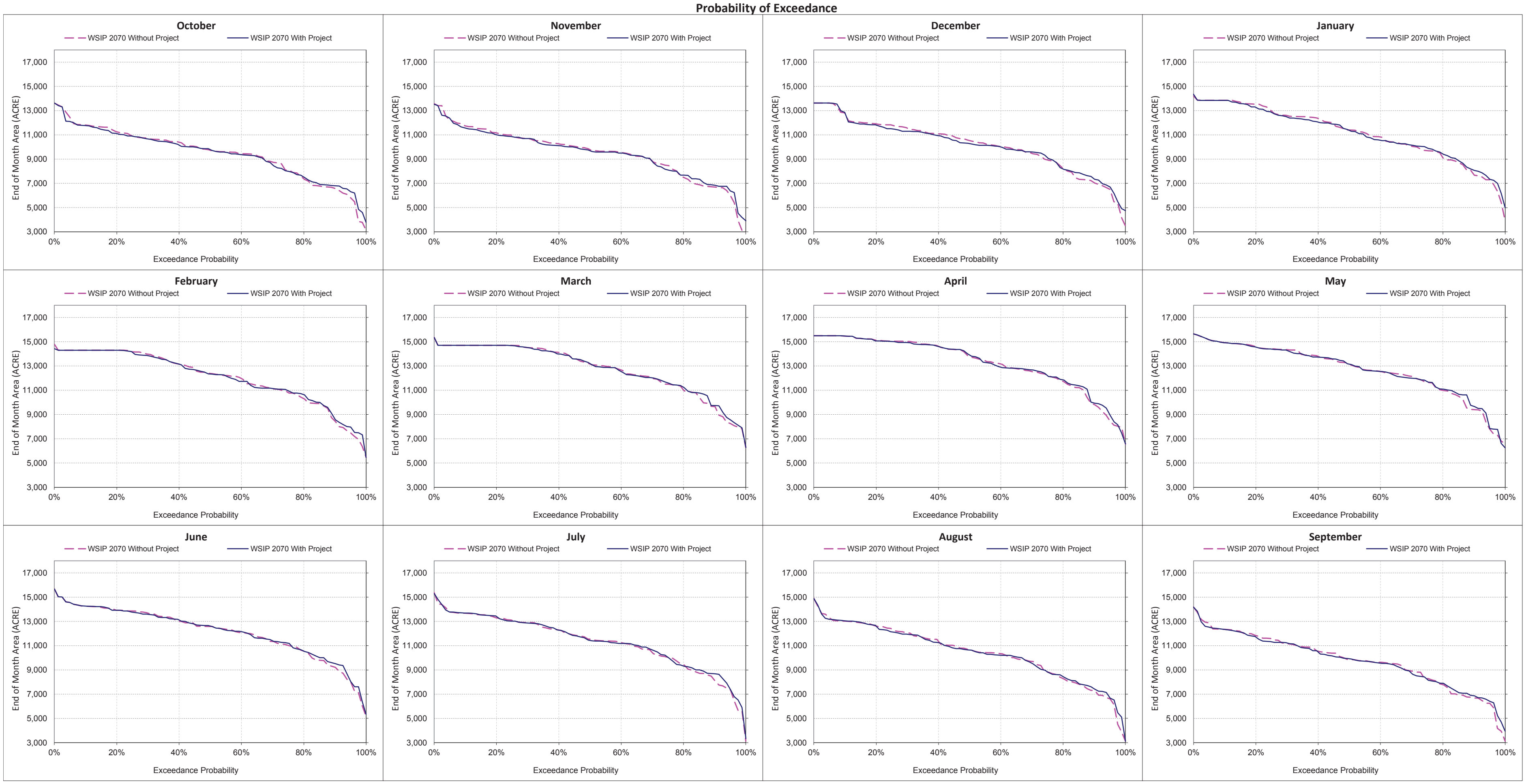


Table SW-03-b

Trinity Lake, End of Month Area

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,615	13,625	10	0.1%
1.2%	13,463	13,417	-46	-0.3%
2.5%	13,311	13,311	0	0.0%
3.7%	12,879	12,125	-754	-5.9%
4.9%	12,464	12,116	-348	-2.8%
6.2%	11,930	12,007	76	0.6%
7.4%	11,848	11,810	-38	-0.3%
8.6%	11,839	11,786	-53	-0.5%
9.9%	11,808	11,758	-50	-0.4%
11.1%	11,775	11,736	-39	-0.3%
12.3%	11,717	11,636	-81	-0.7%
13.6%	11,697	11,603	-93	-0.8%
14.8%	11,658	11,470	-189	-1.6%
16.0%	11,635	11,408	-227	-2.0%
17.3%	11,634	11,362	-272	-2.3%
18.5%	11,418	11,152	-266	-2.3%
19.8%	11,264	11,125	-139	-1.2%
21.0%	11,184	11,027	-157	-1.4%
22.2%	11,152	11,014	-138	-1.2%
23.5%	11,109	10,914	-195	-1.8%
24.7%	10,935	10,905	-30	-0.3%
25.9%	10,835	10,839	4	0.0%
27.2%	10,782	10,833	51	0.5%
28.4%	10,756	10,727	-28	-0.3%
29.6%	10,739	10,673	-65	-0.6%
30.9%	10,656	10,628	-28	-0.3%
32.1%	10,632	10,549	-83	-0.8%
33.3%	10,623	10,471	-152	-1.4%
34.6%	10,569	10,449	-120	-1.1%
35.8%	10,563	10,437	-126	-1.2%
37.0%	10,451	10,370	-82	-0.8%
38.3%	10,435	10,316	-119	-1.1%
39.5%	10,430	10,216	-214	-2.1%
40.7%	10,348	10,051	-297	-2.9%
42.0%	10,114	10,041	-73	-0.7%
43.2%	10,079	10,005	-74	-0.7%
44.4%	10,070	10,001	-69	-0.7%
45.7%	10,022	9,971	-50	-0.5%
46.9%	9,835	9,883	48	0.5%
48.1%	9,823	9,864	41	0.4%
49.4%	9,774	9,863	89	0.9%
50.6%	9,679	9,719	41	0.4%
51.9%	9,642	9,622	-20	-0.2%
53.1%	9,614	9,586	-28	-0.3%
54.3%	9,608	9,580	-28	-0.3%
55.6%	9,599	9,550	-49	-0.5%
56.8%	9,573	9,432	-141	-1.5%
58.0%	9,562	9,432	-130	-1.4%
59.3%	9,452	9,390	-62	-0.7%
60.5%	9,446	9,340	-105	-1.1%
61.7%	9,435	9,316	-119	-1.3%
63.0%	9,415	9,303	-112	-1.2%
64.2%	9,378	9,283	-95	-1.0%
65.4%	9,228	9,172	-56	-0.6%
66.7%	9,174	9,080	-94	-1.0%
67.9%	8,849	8,809	-39	-0.4%
69.1%	8,821	8,723	-98	-1.1%
70.4%	8,729	8,457	-271	-3.1%
71.6%	8,691	8,266	-425	-4.9%
72.8%	8,613	8,226	-386	-4.5%
74.1%	8,096	8,050	-46	-0.6%
75.3%	8,092	7,980	-112	-1.4%
76.5%	7,888	7,888	0	0.0%
77.8%	7,855	7,725	-129	-1.6%
79.0%	7,596	7,668	72	0.9%
80.2%	7,329	7,490	161	2.2%
81.5%	7,185	7,274	89	1.2%
82.7%	6,835	7,125	289	4.2%
84.0%	6,813	7,056	243	3.6%
85.2%	6,779	6,907	127	1.9%
86.4%	6,713	6,876	163	2.4%
87.7%	6,706	6,856	150	2.2%
88.9%	6,670	6,822	152	2.3%
90.1%	6,569	6,810	241	3.7%
91.4%	6,398	6,768	370	5.8%
92.6%	6,193	6,577	384	6.2%
93.8%	6,095	6,535	440	7.2%
95.1%	5,798	6,303	505	8.7%
96.3%	5,471	6,208	737	13.5%
97.5%	3,857	4,843	985	25.5%
98.8%	3,781	4,602	821	21.7%
100.0%	3,120	3,781	661	21.2%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,571	13,524	-46	-0.3%
1.2%	13,405	13,414	10	0.1%
2.5%	13,403	12,630	-774	-5.8%
3.7%	12,556	12,556	0	0.0%
4.9%	12,244	12,389	145	1.2%
6.2%	12,121	11,965	-156	-1.3%
7.4%	11,977	11,845	-132	-1.1%
8.6%	11,926	11,658	-268	-2.2%
9.9%	11,748	11,572	-176	-1.5%
11.1%	11,677	11,488	-189	-1.6%
12.3%	11,670	11,472	-198	-1.7%
13.6%	11,526	11,421	-106	-0.9%
14.8%	11,505	11,310	-195	-1.7%
16.0%	11,485	11,254	-230	-2.0%
17.3%	11,480	11,157	-323	-2.8%
18.5%	11,203	11,151	-52	-0.5%
19.8%	11,173	11,011	-163	-1.5%
21.0%	11,096	10,944	-153	-1.4%
22.2%	11,032	10,920	-112	-1.0%
23.5%	10,988	10,881	-107	-1.0%
24.7%	10,988	10,863	-125	-1.1%
25.9%	10,817	10,806	-10	-0.1%
27.2%	10,749	10,794	45	0.4%
28.4%	10,726	10,703	-23	-0.2%
29.6%	10,684	10,700	16	0.2%
30.9%	10,664	10,691	27	0.3%
32.1%	10,524	10,628	105	1.0%
33.3%	10,507	10,353	-154	-1.5%
34.6%	10,505	10,235	-270	-2.6%
35.8%	10,427	10,181	-246	-2.4%
37.0%	10,327	10,154	-173	-1.7%
38.3%	10,326	10,143	-184	-1.8%
39.5%	10,279	10,118	-160	-1.6%
40.7%	10,213	10,091	-122	-1.2%
42.0%	10,202	10,033	-169	-1.7%
43.2%	10,121	10,002	-119	-1.2%
44.4%	10,069	10,001	-68	-0.7%
45.7%	10,023	9,935	-87	-0.9%
46.9%	9,940	9,836	-104	-1.0%
48.1%	9,939	9,794	-145	-1.5%
49.4%	9,856	9,752	-103	-1.0%
50.6%	9,693	9,619	-74	-0.8%
51.9%	9,687	9,586	-102	-1.0%
53.1%	9,649	9,586	-63	-0.7%
54.3%	9,643	9,586	-57	-0.6%
55.6%	9,640	9,586	-54	-0.6%
56.8%	9,635	9,586	-50	-0.5%
58.0%	9,632	9,572	-60	-0.6%
59.3%	9,586	9,501	-85	-0.9%
60.5%	9,524	9,498	-26	-0.3%
61.7%	9,473	9,442	-31	-0.3%
63.0%	9,392	9,318	-74	-0.8%
64.2%	9,264	9,299	35	0.4%
65.4%	9,234	9,285	51	0.6%
66.7%	9,229	9,244	15	0.2%
67.9%	9,103	9,085	-18	-0.2%
69.1%	9,045	9,074	30	0.3%
70.4%	8,751	8,679	-72	-0.8%
71.6%	8,630	8,433	-197	-2.3%
72.8%	8,596	8,353	-243	-2.8%
74.1%	8,497	8,167	-330	-3.9%
75.3%	8,461	8,075	-386	-4.6%
76.5%	8,160	8,019	-140	-1.7%
77.8%	8,019	7,996	-23	-0.3%
79.0%	7,612	7,686	75	1.0%
80.2%	7,463	7,667	204	2.7%
81.5%	7,329	7,645	316	4.3%
82.7%	7,024	7,386	362	5.2%
84.0%	6,950	7,383	433	6.2%
85.2%	6,885	7,334	450	6.5%
86.4%	6,772	7,049	277	4.1%
87.7%	6,749	6,914	165	2.4%
88.9%	6,717	6,888	171	2.5%
90.1%	6,697	6,843	146	2.2%
91.4%	6,643	6,759	117	1.8%
92.6%	6,636	6,757	121	1.8%
93.8%	6,415	6,747	332	5.2%
95.1%	5,975	6,361	386	6.5%
96.3%	5,390	6,232	842	15.6%
97.5%	3,918	4,539	621	15.8%
98.8%	3,120	4,191	1,071	34.3%
100.0%	3,120	3,918	798	25.6%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,625	13,625	0	0.0%
1.2%	13,625	13,625	0	0.0%
2.5%	13,625	13,625	0	0.0%
3.7%	13,625	13,625	0	0.0%
4.9%	13,625	13,625	0	0.0%
6.2%	13,587	13,609	22	0.2%
7.4%	13,333	13,547	214	1.6%
8.6%	12,863	12,991	128	1.0%
9.9%	12,817	12,863	46	0.4%
11.1%	12,157	12,072	-86	-0.7%
12.3%	12,087	12,013	-74	-0.6%
13.6%	12,045	11,955	-91	-0.8%
14.8%	12,035	11,902	-133	-1.1%
16.0%	11,987	11,889	-98	-0.8%
17.3%	11,982	11,848	-134	-1.1%
18.5%	11,938	11,839	-98	-0.8%
19.8%	11,913	11,836	-77	-0.6%
21.0%	11,861	11,714	-147	-1.2%
22.2%	11,831	11,641	-191	-1.6%
23.5%	11,831	11,516	-314	-2.7%
24.7%	11,831	11,511	-320	-2.7%
25.9%	11,740	11,456	-285	-2.4%
27.2%	11,685	11,393	-293	-2.5%
28.4%	11,668	11,301	-367	-3.1%
29.6%	11,596	11,298	-298	-2.6%
30.9%	11,442	11,293	-149	-1.3%
32.1%	11,426	11,280	-146	-1.3%
33.3%	11,354	11,272	-82	-0.7%
34.6%	11,350	11,224	-127	-1.1%
35.8%	11,226	11,152	-75	-0.7%
37.0%	11,123	11,109	-14	-0.1%
38.3%	11,123	11,010	-112	-1.0%
39.5%	11,097	10,942	-154	-1.4%
40.7%	11,078	10,901	-178	-1.6%
42.0%	11,053	10,770	-283	-2.6%
43.2%	10,940	10,735	-206	-1.9%
44.4%	10,917	10,574	-343	-3.1%
45.7%	10,759	10,526	-233	-2.2%
46.9%	10,686	10,342	-344	-3.2%
48.1%	10,669	10,326	-343	-3.2%
49.4%	10,570	10,300	-270	-2.6%
50.6%	10,484	10,247	-237	-2.3%
51.9%	10,425	10,184	-240	-2.3%
53.1%	10,347	10,141	-206	-2.0%
54.3%	10,330	10,132	-198	-1.9%
55.6%	10,220	10,128	-92	-0.9%
56.8%	10,168	10,122	-46	-0.5%
58.0%	10,138	10,081	-57	-0.6%
59.3%	10,054	10,055	1	0.0%
60.5%	10,038	9,959	-78	-0.8%
61.7%	9,976	9,820	-157	-1.6%
63.0%	9,924	9,814	-110	-1.1%
64.2%	9,799	9,783	-16	-0.2%
65.4%	9,783	9,716	-67	-0.7%
66.7%	9,763	9,714	-49	-0.5%
67.9%	9,586	9,599	14	0.1%
69.1%	9,550	9,597	47	0.5%
70.4%	9,438	9,583	145	1.5%
71.6%	9,399	9,542	144	1.5%
72.8%	9,235	9,504	269	2.9%
74.1%	8,992	9,327	336	3.7%
75.3%	8,903	9,050	147	1.6%
76.5%	8,846	8,933	87	1.0%
77.8%	8,727	8,719	-8	-0.1%
79.0%	8,463	8,298	-166	-2.0%
80.2%	8,158	8,158	0	0.0%
81.5%	8,002	8,094	92	1.2%
82.7%	7,919	8,000	81	1.0%
84.0%	7,462	7,901	439	5.9%
85.2%	7,329	7,878	549	7.5%
86.4%	7,312	7,745	433	5.9%
87.7%	7,290	7,629	339	4.6%
88.9%	7,235	7,561	326	4.5%
90.1%	7,025	7,330	305	4.3%
91.4%	6,918	7,260	342	4.9%
92.6%	6,810	6,979	169	2.5%
93.8%	6,654	6,871	217	3.3%
95.1%	6,502	6,697	195	3.0%
96.3%	5,486	6,154	668	12.2%
97.5%	5,349	5,486	138	2.6%
98.8%	4,149	4,911	762	18.4%
100.0%	3,464	4,746	1,282	37.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,211	14,365	154	1.1%
1.2%	13,867	13,867	0	0.0%
2.5%	13,850	13,850	0	0.0%
3.7%	13,850	13,850	0	0.0%
4.9%	13,850	13,850	0	0.0%
6.2%	13,850	13,850	0	0.0%
7.4%	13,850	13,850	0	0.0%
8.6%	13,850	13,850	0	0.0%
9.9%	13,850	13,850	0	0.0%
11.1%	13,850	13,850	0	0.0%
12.3%	13,850	13,709	-141	-1.0%
13.6%	13,764	13,700	-64	-0.5%
14.8%	13,702	13,592	-110	-0.8%
16.0%	13,578	13,563	-14	-0.1%
17.3%	13,567	13,507	-60	-0.4%
18.5%	13,552	13,315	-237	-1.7%
19.8%	13,527	13,299	-227	-1.7%
21.0%	13,526	13,136	-390	-2.9%
22.2%	13,377	13,124	-253	-1.9%
23.5%	13,299	12,941	-359	-2.7%
24.7%	13,041	12,906	-135	-1.0%
25.9%	12,753	12,729	-24	-0.2%
27.2%	12,677	12,628	-49	-0.4%
28.4%	12,625	12,588	-37	-0.3%
29.6%	12,618	12,515	-103	-0.8%
30.9%	12,537	12,395	-142	-1.1%
32.1%	12,517	12,392	-125	-1.0%
33.3%	12,507	12,336	-170	-1.4%
34.6%	12,504	12,324	-180	-1.4%
35.8%	12,500	12,259	-241	-1.9%
37.0%	12,457	12,236	-221	-1.8%
38.3%	12,441	12,134	-308	-2.5%
39.5%	12,393	12,091	-302	-2.4%
40.7%	12,289	11,994	-294	-2.4%
42.0%	12,097	11,985	-112	-0.9%
43.2%	12,043	11,983	-61	-0.5%
44.4%	12,016	11,896	-120	-1.0%
45.7%	11,709	11,874	165	1.4%
46.9%	11,624	11,814	190	1.6%
48.1%	11,521	11,521	0	0.0%
49.4%	11,403	11,435	32	0.3%
50.6%	11,396	11,296	-100	-0.9%
51.9%	11,383	11,271	-112	-1.0%
53.1%	11,259	11,100	-159	-1.4%
54.3%	11,227	11,087	-140	-1.2%
55.6%	11,114	10,820	-294	-2.6%
56.8%	10,899	10,765	-134	-1.2%
58.0%	10,861	10,613	-248	-2.3%
59.3%	10,852	10,579	-272	-2.5%
60.5%	10,803	10,523	-279	-2.6%
61.7%	10,478	10,519	41	0.4%
63.0%	10,432	10,405	-27	-0.3%
64.2%	10,405	10,392	-14	-0.1%
65.4%	10,354	10,290	-64	-0.6%
66.7%	10,247	10,276	29	0.3%
67.9%	10,242	10,257	15	0.1%
69.1%	10,112	10,184	72	0.7%
70.4%	10,038	10,130	92	0.9%
71.6%	10,001	10,071	70	0.7%
72.8%	9,838	10,056	218	2.2%
74.1%	9,719	10,039	320	3.3%
75.3%	9,685	9,885	200	2.1%
76.5%	9,675	9,822	147	1.5%
77.8%	9,617	9,678	61	0.6%
79.0%	9,522	9,586	63	0.7%
80.2%	9,018	9,400	381	4.2%
81.5%	8,933	9,285	352	3.9%
82.7%	8,933	9,111	177	2.0%
84.0%	8,844	9,077	233	2.6%
85.2%	8,700	8,862	162	1.9%
86.4%	8,530	8,666	136	1.6%
87.7%	8,104	8,333	229	2.8%
88.9%	8,091	8,189	97	1.2%
90.1%	7,667	8,067	401	5.2%
91.4%	7,620	8,009	389	5.1%
92.6%	7,523	7,861	339	4.5%
93.8%	7,300	7,666	366	5.0%
95.1%	7,297	7,343	46	0.6%
96.3%	6,914	7,258	344	5.0%
97.5%	6,343	7,002	658	10.4%
98.8%	5,411	6,172	761	14.1%
100.0%	3,889	5,003	1,114	28.6%

Table SW-03-b

Trinity Lake, End of Month Area

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,795	14,437	-358	-2.4%
1.2%	14,300	14,300	0	0.0%
2.5%	14,300	14,300	0	0.0%
3.7%	14,300	14,300	0	0.0%
4.9%	14,300	14,300	0	0.0%
6.2%	14,300	14,300	0	0.0%
7.4%	14,300	14,300	0	0.0%
8.6%	14,300	14,300	0	0.0%
9.9%	14,300	14,300	0	0.0%
11.1%	14,300	14,300	0	0.0%
12.3%	14,300	14,300	0	0.0%
13.6%	14,300	14,300	0	0.0%
14.8%	14,300	14,300	0	0.0%
16.0%	14,300	14,300	0	0.0%
17.3%	14,300	14,300	0	0.0%
18.5%	14,300	14,300	0	0.0%
19.8%	14,300	14,300	0	0.0%
21.0%	14,300	14,300	0	0.0%
22.2%	14,300	14,281	-19	-0.1%
23.5%	14,281	14,238	-43	-0.3%
24.7%	14,183	14,197	15	0.1%
25.9%	14,160	13,949	-212	-1.5%
27.2%	14,154	13,922	-232	-1.6%
28.4%	14,085	13,883	-202	-1.4%
29.6%	13,987	13,861	-126	-0.9%
30.9%	13,949	13,799	-149	-1.1%
32.1%	13,792	13,721	-71	-0.5%
33.3%	13,761	13,667	-94	-0.7%
34.6%	13,649	13,549	-100	-0.7%
35.8%	13,517	13,519	2	0.0%
37.0%	13,364	13,364	0	0.0%
38.3%	13,243	13,270	27	0.2%
39.5%	13,180	13,178	-2	0.0%
40.7%	13,122	13,098	-24	-0.2%
42.0%	13,053	12,799	-255	-2.0%
43.2%	12,928	12,745	-183	-1.4%
44.4%	12,889	12,710	-178	-1.4%
45.7%	12,569	12,641	72	0.6%
46.9%	12,489	12,557	68	0.5%
48.1%	12,487	12,503	16	0.1%
49.4%	12,398	12,357	-41	-0.3%
50.6%	12,368	12,328	-40	-0.3%
51.9%	12,321	12,289	-32	-0.3%
53.1%	12,278	12,278	0	0.0%
54.3%	12,218	12,261	43	0.4%
55.6%	12,213	12,108	-105	-0.9%
56.8%	12,160	11,979	-181	-1.5%
58.0%	12,153	11,911	-242	-2.0%
59.3%	12,069	11,725	-344	-2.8%
60.5%	11,896	11,724	-171	-1.4%
61.7%	11,542	11,723	180	1.6%
63.0%	11,528	11,414	-114	-1.0%
64.2%	11,446	11,246	-200	-1.7%
65.4%	11,379	11,190	-189	-1.7%
66.7%	11,354	11,179	-175	-1.5%
67.9%	11,250	11,179	-71	-0.6%
69.1%	11,199	11,164	-35	-0.3%
70.4%	11,097	11,123	25	0.2%
71.6%	11,092	11,088	-4	0.0%
72.8%	11,001	11,081	80	0.7%
74.1%	10,957	11,057	101	0.9%
75.3%	10,767	10,928	162	1.5%
76.5%	10,763	10,772	9	0.1%
77.8%	10,633	10,770	137	1.3%
79.0%	10,440	10,729	289	2.8%
80.2%	10,282	10,617	335	3.3%
81.5%	9,958	10,240	282	2.8%
82.7%	9,936	10,148	213	2.1%
84.0%	9,913	10,026	112	1.1%
85.2%	9,906	10,000	94	0.9%
86.4%	9,700	9,741	41	0.4%
87.7%	9,505	9,590	86	0.9%
88.9%	8,743	9,105	362	4.1%
90.1%	8,424	8,574	150	1.8%
91.4%	7,992	8,354	362	4.5%
92.6%	7,926	8,185	259	3.3%
93.8%	7,668	8,006	338	4.4%
95.1%	7,471	7,961	490	6.6%
96.3%	7,190	7,513	323	4.5%
97.5%	6,955	7,496	542	7.8%
98.8%	6,372	7,329	958	15.0%
100.0%	5,467	5,471	4	0.1%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,356	15,356	0	0.0%
1.2%	14,700	14,700	0	0.0%
2.5%	14,700	14,700	0	0.0%
3.7%	14,700	14,700	0	0.0%
4.9%	14,700	14,700	0	0.0%
6.2%	14,700	14,700	0	0.0%
7.4%	14,700	14,700	0	0.0%
8.6%	14,700	14,700	0	0.0%
9.9%	14,700	14,700	0	0.0%
11.1%	14,700	14,700	0	0.0%
12.3%	14,700	14,700	0	0.0%
13.6%	14,700	14,700	0	0.0%
14.8%	14,700	14,700	0	0.0%
16.0%	14,700	14,700	0	0.0%
17.3%	14,700	14,700	0	0.0%
18.5%	14,700	14,700	0	0.0%
19.8%	14,700	14,700	0	0.0%
21.0%	14,700	14,700	0	0.0%
22.2%	14,700	14,700	0	0.0%
23.5%	14,700	14,700	0	0.0%
24.7%	14,700	14,685	-15	-0.1%
25.9%	14,690	14,655	-35	-0.2%
27.2%	14,685	14,591	-94	-0.6%
28.4%	14,570	14,585	15	0.1%
29.6%	14,524	14,524	0	0.0%
30.9%	14,501	14,501	0	0.0%
32.1%	14,500	14,378	-122	-0.8%
33.3%	14,477	14,368	-109	-0.8%
34.6%	14,438	14,259	-179	-1.2%
35.8%	14,356	14,257	-100	-0.7%
37.0%	14,246	14,208	-38	-0.3%
38.3%	14,145	14,174	28	0.2%
39.5%	14,134	13,997	-137	-1.0%
40.7%	14,097	13,970	-127	-0.9%
42.0%	14,043	13,898	-146	-1.0%
43.2%	13,883	13,881	-2	0.0%
44.4%	13,619	13,600	-19	-0.1%
45.7%	13,568	13,580	12	0.1%
46.9%	13,399	13,527	128	1.0%
48.1%	13,317	13,399	82	0.6%
49.4%	13,226	13,295	69	0.5%
50.6%	13,097	13,091	-6	0.0%
51.9%	13,074	12,955	-119	-0.9%
53.1%	13,041	12,938	-102	-0.8%
54.3%	13,008	12,891	-118	-0.9%
55.6%	12,963	12,876	-87	-0.7%
56.8%	12,940	12,873	-67	-0.5%
58.0%	12,842	12,856	14	0.1%
59.3%	12,736	12,641	-96	-0.8%
60.5%	12,627	12,477	-150	-1.2%
61.7%	12,351	12,292	-59	-0.5%
63.0%	12,335	12,267	-69	-0.6%
64.2%	12,270	12,221	-49	-0.4%
65.4%	12,253	12,187	-67	-0.5%
66.7%	12,182	12,111	-71	-0.6%
67.9%	12,156	12,062	-94	-0.8%
69.1%	12,118	12,061	-57	-0.5%
70.4%	11,952	12,014	63	0.5%
71.6%	11,910	11,915	4	0.0%
72.8%	11,662	11,819	158	1.4%
74.1%	11,505	11,678	173	1.5%
75.3%	11,499	11,579	81	0.7%
76.5%	11,447	11,447	0	0.0%
77.8%	11,434	11,436	2	0.0%
79.0%	11,355	11,387	32	0.3%
80.2%	10,943	11,212	269	2.5%
81.5%	10,915	10,927	11	0.1%
82.7%	10,843	10,821	-22	-0.2%
84.0%	10,793	10,810	17	0.2%
85.2%	10,376	10,759	383	3.7%
86.4%	9,963	10,676	713	7.2%
87.7%	9,932	10,562	630	6.3%
88.9%	9,679	9,741	62	0.6%
90.1%	9,656	9,734	78	0.8%
91.4%	8,942	9,720	779	8.7%
92.6%	8,820	9,181	362	4.1%
93.8%	8,367	8,760	393	4.7%
95.1%	8,256	8,557	300	3.6%
96.3%	8,072	8,335	263	3.3%
97.5%	7,961	8,114	153	1.9%
98.8%	7,818	7,904	86	1.1%
100.0%	6,269	6,273	4	0.1%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,500	15,500	0	0.0%
1.2%	15,500	15,500	0	0.0%
2.5%	15,500	15,500	0	0.0%
3.7%	15,500	15,500	0	0.0%
4.9%	15,500	15,500	0	0.0%
6.2%	15,500	15,500	0	0.0%
7.4%	15,500	15,500	0	0.0%
8.6%	15,489	15,500	11	0.1%
9.9%	15,468	15,468	0	0.0%
11.1%	15,458	15,458	-1	0.0%
12.3%	15,458	15,452	-5	0.0%
13.6%	15,290	15,301	10	0.1%
14.8%	15,281	15,283	2	0.0%
16.0%	15,248	15,248	0	0.0%
17.3%	15,239	15,225	-13	-0.1%
18.5%	15,218	15,218	0	0.0%
19.8%	15,130	15,074	-56	-0.4%
21.0%	15,120	15,059	-61	-0.4%
22.2%	15,074	15,054	-20	-0.1%
23.5%	15,059	15,044	-15	-0.1%
24.7%	15,054	15,034	-21	-0.1%
25.9%	15,044	14,999	-45	-0.3%
27.2%	15,044	14,950	-94	-0.6%
28.4%	15,039	14,944	-95	-0.6%
29.6%	15,034	14,935	-99	-0.7%
30.9%	15,022	14,911	-111	-0.7%
32.1%	14,961	14,803	-158	-1.1%
33.3%	14,944	14,795	-149	-1.0%
34.6%	14,810	14,776	-34	-0.2%
35.8%	14,803	14,770	-33	-0.2%
37.0%	14,778	14,750	-28	-0.2%
38.3%	14,743	14,729	-14	-0.1%
39.5%	14,687	14,651	-36	-0.2%
40.7%	14,535	14,548	13	0.1%
42.0%	14,455	14,473	18	0.1%
43.2%	14,383	14,408	25	0.2%
44.4%	14,376	14,387	11	0.1%
45.7%	14,353	14,367	14	0.1%
46.9%	14,350	14,353	3	0.0%
48.1%	14,169	14,248	79	0.6%
49.4%	13,843	13,999	156	1.1%
50.6%	13,716	13,806	90	0.7%
51.9%	13,656	13,753	98	0.7%
53.1%	13,560	13,631	71	0.5%
54.3%	13,522	13,305	-217	-1.6%
55.6%	13,362	13,277	-85	-0.6%
56.8%	13,345	13,226	-119	-0.9%
58.0%	13,239	13,081	-158	-1.2%
59.3%	13,212	12,945	-266	-2.0%
60.5%	13,135	12,862	-273	-2.1%
61.7%	12,895	12,845	-51	-0.4%
63.0%	12,866	12,832	-34	-0.3%
64.2%	12,816	12,829	13	0.1%
65.4%	12,757	12,790	33	0.3%
66.7%	12,742	12,779	36	0.3%
67.9%	12,637	12,730	93	0.7%
69.1%	12,606	12,686	80	0.6%
70.4%	12,512	12,679	166	1.3%
71.6%	12,488	12,596	109	0.9%
72.8%	12,390	12,532	142	1.1%
74.1%	12,344	12,392	48	0.4%
75.3%	12,174	12,129	-45	-0.4%
76.5%	12,087	12,091	5	0.0%
77.8%	12,003	12,084	81	0.7%
79.0%	11,820	11,900	81	0.7%
80.2%	11,704	11,833	129	1.1%
81.5%	11,483	11,576	93	0.8%
82.7%	11,357	11,483	126	1.1%
84.0%	11,228	11,436	207	1.8%
85.2%	11,212	11,374	163	1.5%
86.4%	11,033	11,277	244	2.2%
87.7%	10,426	11,091	664	6.4%
88.9%	9,938	10,025	87	0.9%
90.1%	9,808	9,927	119	1.2%
91.4%	9,591	9,893	302	3.1%
92.6%	9,243	9,759	516	5.6%
93.8%	8,933	9,533	599	6.7%
95.1%	8,457	8,933	476	5.6%
96.3%	8,120	8,402	282	3.5%
97.5%	8,030	8,162	131	1.6%
98.8%	7,935	7,466	-469	-5.9%
100.0%	6,563	6,566	4	0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,654	15,654	0	0.0%
1.2%	15,546	15,557	11	0.1%
2.5%	15,426	15,428	2	0.0%
3.7%	15,310	15,310	0	0.0%
4.9%	15,165	15,165	0	0.0%
6.2%	15,082	15,076	-6	0.0%
7.4%	15,041	15,041	0	0.0%
8.6%	14,977	14,964	-13	-0.1%
9.9%	14,920	14,920	0	0.0%
11.1%	14,907	14,907	0	0.0%
12.3%	14,858	14,858	0	0.0%
13.6%	14,845	14,845	0	0.0%
14.8%	14,813	14,823	10	0.1%
16.0%	14,780	14,780	0	0.0%
17.3%	14,767	14,707	-60	-0.4%
18.5%	14,707	14,614	-92	-0.6%
19.8%	14,614	14,579	-35	-0.2%
21.0%	14,484	14,484	0	0.0%
22.2%	14,455	14,418	-37	-0.3%
23.5%	14,415	14,408	-8	-0.1%
24.7%	14,408	14,404	-4	0.0%
25.9%	14,405	14,371	-34	-0.2%
27.2%	14,371	14,358	-13	-0.1%
28.4%	14,369	14,318	-51	-0.4%
29.6%	14,358	14,310	-48	-0.3%
30.9%	14,321	14,184	-137	-1.0%
32.1%	14,318	14,054	-264	-1.8%
33.3%	14,311	14,030	-281	-2.0%
34.6%	13,962	14,010	48	0.3%
35.8%	13,901	13,900	-1	0.0%
37.0%	13,900	13,851	-49	-0.4%
38.3%	13,888	13,747	-142	-1.0%
39.5%	13,846	13,743	-103	-0.7%
40.7%	13,712	13,712	0	0.0%
42.0%	13,623	13,697	74	0.5%
43.2%	13,586	13,687	100	0.7%
44.4%	13,573	13,598	26	0.2%
45.7%	13,419	13,573	154	1.1%
46.9%	13,310	13,461	150	1.1%
48.1%	13,294	13,423	130	1.0%
49.4%	13,259	13,177	-82	-0.6%
50.6%	13,079	13,114	35	0.3%
51.9%	12,960	12,989	29	0.2%
53.1%	12,891	12,940	49	0.4%
54.3%	12,719	12,666	-53	-0.4%
55.6%	12,658	12,626	-32	-0.2%
56.8%	12,646	12,608	-38	-0.3%
58.0%	12,615	12,579	-36	-0.3%
59.3%	12,580	12,558	-22	-0.2%
60.5%	12,523	12,540	17	0.1%
61.7%	12,440	12,503	62	0.5%
63.0%	12,436	12,423	-14	-0.1%
64.2%	12,392	12,261	-131	-1.1%
65.4%	12,353	12,130	-223	-1.8%
66.7%	12,344	12,105	-240	-1.9%
67.9%	12,245	12,051	-193	-1.6%
69.1%	12,169	12,017	-152	-1.3%
70.4%	12,136	11,983	-153	-1.3%
71.6%	11,946	11,972	26	0.2%
72.8%	11,883	11,855	-27	-0.2%
74.1%	11,706	11,848	142	1.2%
75.3%	11,637	11,673	36	0.3%
76.5%	11,612	11,641	30	0.3%
77.8%	11,191	11,270	78	0.7%
79.0%	11,039	11,115	77	0.7%
80.2%	10,975	11,081	106	1.0%
81.5%	10,942	11,022	80	0.7%
82.7%	10,739	10,975	236	2.2%
84.0%	10,643	10,826	183	1.7%
85.2%	10,493	10,662	169	1.6%
86.4%	10,243	10,619	376	3.7%
87.7%	9,539	10,610	1,071	11.2%
88.9%	9,427	9,761	334	3.5%
90.1%	9,402	9,661	259	2.8%
91.4%	9,382	9,508	126	1.3%
92.6%	9,298	9,487	188	2.0%
93.8%	8,381	9,124	743	8.9%
95.1%	7,789	7,831	42	0.5%
96.3%	7,394	7,789	394	5.3%
97.5%	7,306	7,771	465	6.4%
98.8%	6,804	6,622	-182	-2.7%
100.0%	6,574	6,259	-315	-4.8%

Table SW-03-b
Trinity Lake, End of Month Area
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,687	15,687	0	0.0%
1.2%	15,026	15,028	2	0.0%
2.5%	15,011	15,022	11	0.1%
3.7%	14,618	14,612	-6	0.0%
4.9%	14,569	14,559	-10	-0.1%
6.2%	14,419	14,419	0	0.0%
7.4%	14,358	14,358	0	0.0%
8.6%	14,278	14,278	0	0.0%
9.9%	14,264	14,276	13	0.1%
11.1%	14,243	14,253	10	0.1%
12.3%	14,221	14,243	22	0.2%
13.6%	14,221	14,221	0	0.0%
14.8%	14,172	14,221	49	0.3%
16.0%	14,098	14,172	73	0.5%
17.3%	14,096	14,096	0	0.0%
18.5%	14,047	13,930	-117	-0.8%
19.8%	13,924	13,924	0	0.0%
21.0%	13,920	13,918	-2	0.0%
22.2%	13,916	13,865	-51	-0.4%
23.5%	13,865	13,858	-7	0.0%
24.7%	13,858	13,771	-87	-0.6%
25.9%	13,853	13,724	-129	-0.9%
27.2%	13,788	13,689	-99	-0.7%
28.4%	13,771	13,608	-163	-1.2%
29.6%	13,716	13,602	-115	-0.8%
30.9%	13,614	13,569	-45	-0.3%
32.1%	13,603	13,519	-84	-0.6%
33.3%	13,433	13,346	-87	-0.6%
34.6%	13,403	13,334	-69	-0.5%
35.8%	13,366	13,316	-50	-0.4%
37.0%	13,346	13,210	-136	-1.0%
38.3%	13,210	13,199	-11	-0.1%
39.5%	13,009	13,174	165	1.3%
40.7%	13,001	13,017	16	0.1%
42.0%	12,887	12,996	109	0.8%
43.2%	12,886	12,878	-8	-0.1%
44.4%	12,881	12,818	-63	-0.5%
45.7%	12,601	12,704	102	0.8%
46.9%	12,601	12,683	82	0.6%
48.1%	12,594	12,665	72	0.6%
49.4%	12,587	12,653	66	0.5%
50.6%	12,583	12,583	0	0.0%
51.9%	12,462	12,442	-20	-0.2%
53.1%	12,422	12,428	6	0.1%
54.3%	12,385	12,310	-75	-0.6%
55.6%	12,334	12,249	-85	-0.7%
56.8%	12,309	12,232	-76	-0.6%
58.0%	12,160	12,193	33	0.3%
59.3%	12,086	12,180	94	0.8%
60.5%	12,071	12,134	62	0.5%
61.7%	12,026	12,046	20	0.2%
63.0%	11,990	11,906	-84	-0.7%
64.2%	11,897	11,656	-241	-2.0%
65.4%	11,712	11,608	-104	-0.9%
66.7%	11,678	11,606	-72	-0.6%
67.9%	11,569	11,539	-30	-0.3%
69.1%	11,360	11,515	156	1.4%
70.4%	11,344	11,354	10	0.1%
71.6%	11,182	11,329	147	1.3%
72.8%	11,146	11,267	121	1.1%
74.1%	11,099	11,246	147	1.3%
75.3%	11,000	11,175	175	1.6%
76.5%	10,943	10,815	-128	-1.2%
77.8%	10,865	10,736	-129	-1.2%
79.0%	10,643	10,666	23	0.2%
80.2%	10,526	10,526	0	0.0%
81.5%	10,368	10,428	61	0.6%
82.7%	9,973	10,290	317	3.2%
84.0%	9,820	10,145	325	3.3%
85.2%	9,797	10,003	206	2.1%
86.4%	9,767	9,997	230	2.4%
87.7%	9,415	9,691	276	2.9%
88.9%	9,309	9,593	284	3.1%
90.1%	9,209	9,509	300	3.3%
91.4%	8,882	9,400	519	5.8%
92.6%	8,720	9,368	648	7.4%
93.8%	8,238	8,708	471	5.7%
95.1%	8,004	8,045	41	0.5%
96.3%	7,240	7,616	375	5.2%
97.5%	7,129	7,609	480	6.7%
98.8%	6,028	6,354	326	5.4%
100.0%	5,158	5,339	182	3.5%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,380	15,290	-90	-0.6%
1.2%	14,465	14,824	359	2.5%
2.5%	14,391	14,402	11	0.1%
3.7%	14,133	13,938	-195	-1.4%
4.9%	13,776	13,776	0	0.0%
6.2%	13,751	13,765	14	0.1%
7.4%	13,700	13,730	30	0.2%
8.6%	13,685	13,700	15	0.1%
9.9%	13,679	13,685	5	0.0%
11.1%	13,659	13,679	20	0.1%
12.3%	13,632	13,659	27	0.2%
13.6%	13,568	13,626	59	0.4%
14.8%	13,549	13,532	-17	-0.1%
16.0%	13,543	13,522	-21	-0.2%
17.3%	13,479	13,490	11	0.1%
18.5%	13,419	13,477	59	0.4%
19.8%	13,306	13,461	155	1.2%
21.0%	13,247	13,216	-31	-0.2%
22.2%	13,241	13,136	-104	-0.8%
23.5%	13,136	13,053	-83	-0.6%
24.7%	13,116	13,032	-83	-0.6%
25.9%	13,025	13,030	5	0.0%
27.2%	12,936	12,936	0	0.0%
28.4%	12,916	12,899	-17	-0.1%
29.6%	12,912	12,882	-30	-0.2%
30.9%	12,909	12,848	-61	-0.5%
32.1%	12,893	12,827	-66	-0.5%
33.3%	12,743	12,804	61	0.5%
34.6%	12,539	12,718	178	1.4%
35.8%	12,473	12,627	155	1.2%
37.0%	12,390	12,510	120	1.0%
38.3%	12,363	12,473	110	0.9%
39.5%	12,315	12,291	-24	-0.2%
40.7%	12,247	12,247	0	0.0%
42.0%	12,055	12,149	95	0.8%
43.2%	11,984	11,980	-4	0.0%
44.4%	11,894	11,855	-40	-0.3%
45.7%	11,835	11,808	-27	-0.2%
46.9%	11,795	11,715	-80	-0.7%
48.1%	11,732	11,653	-78	-0.7%
49.4%	11,546	11,465	-80	-0.7%
50.6%	11,528	11,407	-121	-1.0%
51.9%	11,435	11,387	-48	-0.4%
53.1%	11,410	11,383	-27	-0.2%
54.3%	11,394	11,364	-30	-0.3%
55.6%	11,386	11,335	-51	-0.4%
56.8%	11,371	11,250	-120	-1.1%
58.0%	11,363	11,236	-127	-1.1%
59.3%	11,315	11,193	-122	-1.1%
60.5%	11,220	11,193	-27	-0.2%
61.7%	11,151	11,176	25	0.2%
63.0%	11,113	11,172	59	0.5%
64.2%	10,955	11,061	107	1.0%
65.4%	10,908	11,022	114	1.0%
66.7%	10,720	10,886	166	1.5%
67.9%	10,705	10,886	181	1.7%
69.1%	10,666	10,729	63	0.6%
70.4%	10,328	10,602	274	2.6%
71.6%	10,243	10,473	231	2.3%
72.8%	10,148	10,255	106	1.0%
74.1%	10,100	10,217	118	1.2%
75.3%	10,022	9,989	-33	-0.3%
76.5%	9,955	9,737	-218	-2.2%
77.8%	9,737	9,448	-290	-3.0%
79.0%	9,514	9,406	-108	-1.1%
80.2%	9,406	9,292	-114	-1.2%
81.5%	9,066	9,261	195	2.2%
82.7%	8,970	9,170	199	2.2%
84.0%	8,833	9,012	178	2.0%
85.2%	8,716	9,005	289	3.3%
86.4%	8,709	8,888	179	2.1%
87.7%	8,594	8,732	138	1.6%
88.9%	8,483	8,703	220	2.6%
90.1%	8,085	8,685	600	7.4%
91.4%	7,751	8,637	885	11.4%
92.6%	7,685	8,263	579	7.5%
93.8%	7,504	7,910	407	5.4%
95.1%	7,355	7,396	42	0.6%
96.3%	6,431	6,804	373	5.8%
97.5%	5,646	6,515	869	15.4%
98.8%	5,630	5,889	260	4.6%
100.0%	3,120	3,332	212	6.8%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,900	14,887	-13	-0.1%
1.2%	14,258	14,345	87	0.6%
2.5%	13,659	13,604	-55	-0.4%
3.7%	13,592	13,265	-327	-2.4%
4.9%	13,305	13,166	-138	-1.0%
6.2%	13,080	13,155	76	0.6%
7.4%	13,046	13,101	55	0.4%
8.6%	13,031	13,084	53	0.4%
9.9%	13,022	13,046	24	0.2%
11.1%	13,009	13,031	22	0.2%
12.3%	12,987	13,021	34	0.3%
13.6%	12,935	12,990	55	0.4%
14.8%	12,896	12,935	39	0.3%
16.0%	12,864	12,843	-21	-0.2%
17.3%	12,863	12,775	-87	-0.7%
18.5%	12,744	12,715	-28	-0.2%
19.8%	12,628	12,680	52	0.4%
21.0%	12,560	12,347	-212	-1.7%
22.2%	12,557	12,324	-233	-1.9%
23.5%	12,455	12,282	-173	-1.4%
24.7%	12,421	12,155	-266	-2.1%
25.9%	12,228	12,112	-116	-0.9%
27.2%	12,170	12,031	-139	-1.1%
28.4%	12,147	11,965	-182	-1.5%
29.6%	12,074	11,964	-111	-0.9%
30.9%	12,031	11,915	-116	-1.0%
32.1%	11,815	11,894	80	0.7%
33.3%	11,765	11,880	115	1.0%
34.6%	11,713	11,693	-20	-0.2%
35.8%	11,612	11,498	-114	-1.0%
37.0%	11,544	11,448	-96	-0.8%
38.3%	11,532	11,285	-246	-2.1%
39.5%	11,522	11,266	-256	-2.2%
40.7%	11,123	11,214	91	0.8%
42.0%	11,058	11,013	-45	-0.4%
43.2%	11,034	10,958	-76	-0.7%
44.4%	11,031	10,831	-199	-1.8%
45.7%	10,959	10,762	-197	-1.8%
46.9%	10,792	10,759	-33	-0.3%
48.1%	10,790	10,693	-97	-0.9%
49.4%	10,698	10,640	-59	-0.5%
50.6%	10,617	10,631	14	0.1%
51.9%	10,523	10,497	-26	-0.2%
53.1%	10,454	10,423	-32	-0.3%
54.3%	10,448	10,418	-30	-0.3%
55.6%	10,425	10,295	-130	-1.2%
56.8%	10,422	10,282	-140	-1.3%
58.0%	10,401	10,233	-167	-1.6%
59.3%	10,357	10,219	-138	-1.3%
60.5%	10,320	10,210	-111	-1.1%
61.7%	10,194	10,202	8	0.1%
63.0%	10,026	10,192	166	1.7%
64.2%	10,008	10,121	113	1.1%
65.4%	9,891	10,047	156	1.6%
66.7%	9,848	9,997	149	1.5%
67.9%	9,808	9,791	-17	-0.2%
69.1%	9,725	9,668	-57	-0.6%
70.4%	9,691	9,495	-196	-2.0%
71.6%	9,426	9,267	-159	-1.7%
72.8%	9,364	9,035	-329	-3.5%
74.1%	8,840	8,976	135	1.5%
75.3%	8,812	8,785	-27	-0.3%
76.5%	8,686	8,638	-48	-0.6%
77.8%	8,623	8,623	0	0.0%
79.0%	8,394	8,588	194	2.3%
80.2%	8,259	8,395	136	1.6%
81.5%	8,060	8,225	165	2.0%
82.7%	8,019	8,127	108	1.3%
84.0%	7,929	8,111	182	2.3%
85.2%	7,813	7,856	43	0.6%
86.4%	7,701	7,785	85	1.1%
87.7%	7,458	7,707	249	3.3%
88.9%	7,318	7,621	303	4.1%
90.1%	7,308	7,417	109	1.5%
91.4%	6,914	7,243	328	4.7%
92.6%	6,896	7,217	320	4.6%
93.8%	6,717	7,133	416	6.2%
95.1%	6,618	6,660	42	0.6%
96.3%	6,153	6,524	371	6.0%
97.5%	4,506	5,471	965	21.4%
98.8%	3,862	5,108	1,245	32.2%
100.0%	3,120	3,120	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,188	14,188	0	0.0%
1.2%	13,745	13,837	92	0.7%
2.5%	13,164	12,958	-206	-1.6%
3.7%	12,946	12,603	-343	-2.6%
4.9%	12,875	12,528	-347	-2.7%
6.2%	12,383	12,448	65	0.5%
7.4%	12,375	12,423	48	0.4%
8.6%	12,357	12,383	26	0.2%
9.9%	12,350	12,343	-7	-0.1%
11.1%	12,329	12,306	-23	-0.2%
12.3%	12,301	12,265	-36	-0.3%
13.6%	12,237	12,189	-48	-0.4%
14.8%	12,192	12,124	-67	-0.6%
16.0%	12,014	12,069	55	0.5%
17.3%	12,005	11,874	-132	-1.1%
18.5%	11,982	11,796	-186	-1.6%
19.8%	11,856	11,755	-101	-0.8%
21.0%	11,765	11,520	-245	-2.1%
22.2%	11,617	11,375	-243	-2.1%
23.5%	11,615	11,361	-254	-2.2%
24.7%	11,594	11,335	-259	-2.2%
25.9%	11,470	11,280	-190	-1.7%
27.2%	11,443	11,276	-168	-1.5%
28.4%	11,223	11,265	42	0.4%
29.6%	11,169	11,257	88	0.8%
30.9%	11,135	11,173	38	0.3%
32.1%	11,085	11,143	58	0.5%
33.3%	10,990	10,983	-7	-0.1%
34.6%	10,925	10,841	-84	-0.8%
35.8%	10,888	10,791	-98	-0.9%
37.0%	10,881	10,786	-96	-0.9%
38.3%	10,846	10,578	-268	-2.5%
39.5%	10,569	10,577	8	0.1%
40.7%	10,493	10,312	-181	-1.7%
42.0%	10,457	10,280	-177	-1.7%
43.2%	10,404	10,202	-202	-1.9%
44.4%	10,381	10,158	-223	-2.1%
45.7%	10,380	10,067	-313	-3.0%
46.9%	10,102	10,055	-47	-0.5%
48.1%	10,006	9,967	-39	-0.4%
49.4%	9,863	9,940	78	0.8%
50.6%	9,859	9,909	50	0.5%
51.9%	9,831	9,805	-26	-0.3%
53.1%	9,762	9,759	-3	0.0%
54.3%	9,758	9,736	-22	-0.2%
55.6%	9,750	9,706	-44	-0.5%
56.8%	9,665	9,684	19	0.2%
58.0%	9,637	9,624	-13	-0.1%
59.3%	9,632	9,571	-61	-0.6%
60.5%	9,627	9,534	-93	-1.0%
61.7%	9,586	9,532	-54	-0.6%
63.0%	9,529	9,491	-38	-0.4%
64.2%	9,512	9,426	-86	-0.9%
65.4%	9,483	9,285	-198	-2.1%
66.7%	9,368	9,143	-224	-2.4%
67.9%	9,015	8,970	-45	-0.5%
69.1%	8,933	8,916	-18	-0.2%
70.4%	8,890	8,639	-251	-2.8%
71.6%	8,819	8,516	-303	-3.4%
72.8%	8,815	8,469	-346	-3.9%
74.1%	8,297	8,428	131	1.6%
75.3%	8,282	8,155	-127	-1.5%
76.5%	8,169	8,091	-78	-1.0%
77.8%	8,091	8,048	-43	-0.5%
79.0%	7,852	7,914	62	0.8%
80.2%	7,773	7,880	107	1.4%
81.5%	7,540	7,681	141	1.9%
82.7%	7,025	7,481	456	6.5%
84.0%	7,023	7,304	281	4.0%
85.2%	6,922	7,118	196	2.8%
86.4%	6,914	7,082	168	2.4%
87.7%	6,769	7,070	301	4.4%
88.9%	6,746	6,914	168	2.5%
90.1%	6,676	6,868	191	2.9%
91.4%	6,670	6,719	49	0.7%
92.6%	6,472	6,681	209	3.2%
93.8%	6,250	6,591	341	5.5%
95.1%	6,248	6,415	167	2.7%
96.3%	5,879	6,278	400	6.8%
97.5%	4,178	5,209	1,031	24.7%
98.8%	3,940	4,704	764	19.4%
100.0%	3,120	3,940	820	26.3%

Figure SW-04-b
Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

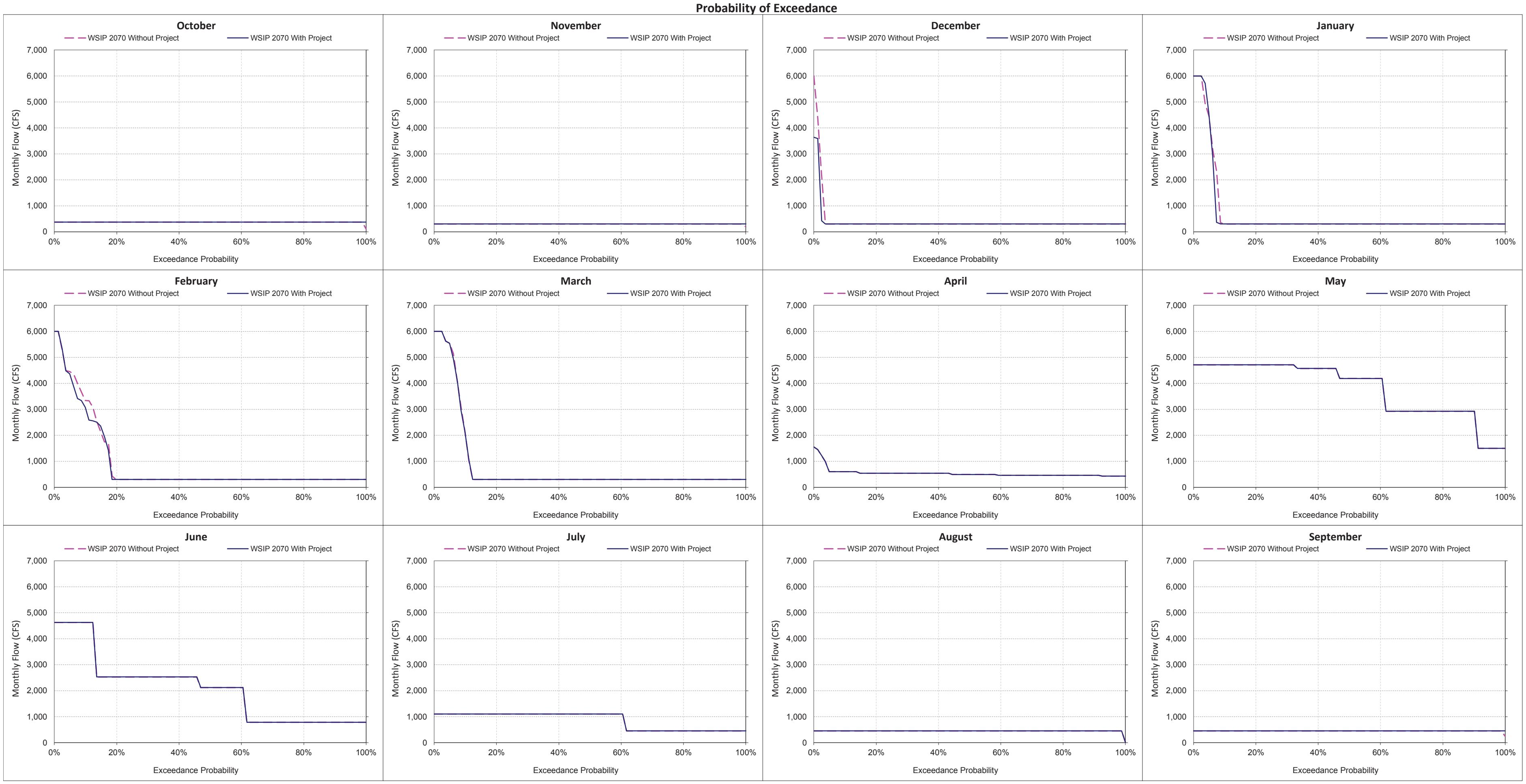


Table SW-04-b

Trinity River below Lewiston Reservoir, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	373	373	0	0.0%
1.2%	373	373	0	0.0%
2.5%	373	373	0	0.0%
3.7%	373	373	0	0.0%
4.9%	373	373	0	0.0%
6.2%	373	373	0	0.0%
7.4%	373	373	0	0.0%
8.6%	373	373	0	0.0%
9.9%	373	373	0	0.0%
11.1%	373	373	0	0.0%
12.3%	373	373	0	0.0%
13.6%	373	373	0	0.0%
14.8%	373	373	0	0.0%
16.0%	373	373	0	0.0%
17.3%	373	373	0	0.0%
18.5%	373	373	0	0.0%
19.8%	373	373	0	0.0%
21.0%	373	373	0	0.0%
22.2%	373	373	0	0.0%
23.5%	373	373	0	0.0%
24.7%	373	373	0	0.0%
25.9%	373	373	0	0.0%
27.2%	373	373	0	0.0%
28.4%	373	373	0	0.0%
29.6%	373	373	0	0.0%
30.9%	373	373	0	0.0%
32.1%	373	373	0	0.0%
33.3%	373	373	0	0.0%
34.6%	373	373	0	0.0%
35.8%	373	373	0	0.0%
37.0%	373	373	0	0.0%
38.3%	373	373	0	0.0%
39.5%	373	373	0	0.0%
40.7%	373	373	0	0.0%
42.0%	373	373	0	0.0%
43.2%	373	373	0	0.0%
44.4%	373	373	0	0.0%
45.7%	373	373	0	0.0%
46.9%	373	373	0	0.0%
48.1%	373	373	0	0.0%
49.4%	373	373	0	0.0%
50.6%	373	373	0	0.0%
51.9%	373	373	0	0.0%
53.1%	373	373	0	0.0%
54.3%	373	373	0	0.0%
55.6%	373	373	0	0.0%
56.8%	373	373	0	0.0%
58.0%	373	373	0	0.0%
59.3%	373	373	0	0.0%
60.5%	373	373	0	0.0%
61.7%	373	373	0	0.0%
63.0%	373	373	0	0.0%
64.2%	373	373	0	0.0%
65.4%	373	373	0	0.0%
66.7%	373	373	0	0.0%
67.9%	373	373	0	0.0%
69.1%	373	373	0	0.0%
70.4%	373	373	0	0.0%
71.6%	373	373	0	0.0%
72.8%	373	373	0	0.0%
74.1%	373	373	0	0.0%
75.3%	373	373	0	0.0%
76.5%	373	373	0	0.0%
77.8%	373	373	0	0.0%
79.0%	373	373	0	0.0%
80.2%	373	373	0	0.0%
81.5%	373	373	0	0.0%
82.7%	373	373	0	0.0%
84.0%	373	373	0	0.0%
85.2%	373	373	0	0.0%
86.4%	373	373	0	0.0%
87.7%	373	373	0	0.0%
88.9%	373	373	0	0.0%
90.1%	373	373	0	0.0%
91.4%	373	373	0	0.0%
92.6%	373	373	0	0.0%
93.8%	373	373	0	0.0%
95.1%	373	373	0	0.0%
96.3%	373	373	0	0.0%
97.5%	373	373	0	0.0%
98.8%	373	373	0	0.0%
100.0%	107	373	266	249.6%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	300	300	0	0.0%
1.2%	300	300	0	0.0%
2.5%	300	300	0	0.0%
3.7%	300	300	0	0.0%
4.9%	300	300	0	0.0%
6.2%	300	300	0	0.0%
7.4%	300	300	0	0.0%
8.6%	300	300	0	0.0%
9.9%	300	300	0	0.0%
11.1%	300	300	0	0.0%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	192	300	108	56.4%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	3,641	-2,359	-39.3%
1.2%	4,401	3,594	-807	-18.3%
2.5%	2,200	429	-1,771	-80.5%
3.7%	300	300	0	0.0%
4.9%	300	300	0	0.0%
6.2%	300	300	0	0.0%
7.4%	300	300	0	0.0%
8.6%	300	300	0	0.0%
9.9%	300	300	0	0.0%
11.1%	300	300	0	0.0%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	6,000	6,000	0	0.0%
2.5%	6,000	6,000	0	0.0%
3.7%	4,947	5,721	774	15.6%
4.9%	4,453	4,592	139	3.1%
6.2%	3,156	2,909	-248	-7.8%
7.4%	2,324	361	-1,963	-84.5%
8.6%	354	300	-54	-15.4%
9.9%	300	300	0	0.0%
11.1%	300	300	0	0.0%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

Table SW-04-b
Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	6,000	6,000	0	0.0%
2.5%	5,314	5,320	6	0.1%
3.7%	4,489	4,489	0	0.0%
4.9%	4,451	4,360	-91	-2.1%
6.2%	4,360	3,886	-474	-10.9%
7.4%	4,004	3,419	-585	-14.6%
8.6%	3,676	3,338	-338	-9.2%
9.9%	3,338	3,072	-266	-8.0%
11.1%	3,328	2,589	-739	-22.2%
12.3%	3,072	2,558	-513	-16.7%
13.6%	2,534	2,510	-24	-1.0%
14.8%	2,145	2,355	210	9.8%
16.0%	1,745	1,948	202	11.6%
17.3%	1,742	1,417	-325	-18.7%
18.5%	430	300	-130	-30.3%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,000	6,000	0	0.0%
1.2%	6,000	6,000	0	0.0%
2.5%	6,000	6,000	0	0.0%
3.7%	5,626	5,626	0	0.0%
4.9%	5,539	5,539	0	0.0%
6.2%	5,146	4,922	-224	-4.3%
7.4%	4,083	4,083	0	0.0%
8.6%	3,079	2,969	-109	-3.6%
9.9%	2,152	2,152	0	0.0%
11.1%	1,039	1,084	45	4.3%
12.3%	300	300	0	0.0%
13.6%	300	300	0	0.0%
14.8%	300	300	0	0.0%
16.0%	300	300	0	0.0%
17.3%	300	300	0	0.0%
18.5%	300	300	0	0.0%
19.8%	300	300	0	0.0%
21.0%	300	300	0	0.0%
22.2%	300	300	0	0.0%
23.5%	300	300	0	0.0%
24.7%	300	300	0	0.0%
25.9%	300	300	0	0.0%
27.2%	300	300	0	0.0%
28.4%	300	300	0	0.0%
29.6%	300	300	0	0.0%
30.9%	300	300	0	0.0%
32.1%	300	300	0	0.0%
33.3%	300	300	0	0.0%
34.6%	300	300	0	0.0%
35.8%	300	300	0	0.0%
37.0%	300	300	0	0.0%
38.3%	300	300	0	0.0%
39.5%	300	300	0	0.0%
40.7%	300	300	0	0.0%
42.0%	300	300	0	0.0%
43.2%	300	300	0	0.0%
44.4%	300	300	0	0.0%
45.7%	300	300	0	0.0%
46.9%	300	300	0	0.0%
48.1%	300	300	0	0.0%
49.4%	300	300	0	0.0%
50.6%	300	300	0	0.0%
51.9%	300	300	0	0.0%
53.1%	300	300	0	0.0%
54.3%	300	300	0	0.0%
55.6%	300	300	0	0.0%
56.8%	300	300	0	0.0%
58.0%	300	300	0	0.0%
59.3%	300	300	0	0.0%
60.5%	300	300	0	0.0%
61.7%	300	300	0	0.0%
63.0%	300	300	0	0.0%
64.2%	300	300	0	0.0%
65.4%	300	300	0	0.0%
66.7%	300	300	0	0.0%
67.9%	300	300	0	0.0%
69.1%	300	300	0	0.0%
70.4%	300	300	0	0.0%
71.6%	300	300	0	0.0%
72.8%	300	300	0	0.0%
74.1%	300	300	0	0.0%
75.3%	300	300	0	0.0%
76.5%	300	300	0	0.0%
77.8%	300	300	0	0.0%
79.0%	300	300	0	0.0%
80.2%	300	300	0	0.0%
81.5%	300	300	0	0.0%
82.7%	300	300	0	0.0%
84.0%	300	300	0	0.0%
85.2%	300	300	0	0.0%
86.4%	300	300	0	0.0%
87.7%	300	300	0	0.0%
88.9%	300	300	0	0.0%
90.1%	300	300	0	0.0%
91.4%	300	300	0	0.0%
92.6%	300	300	0	0.0%
93.8%	300	300	0	0.0%
95.1%	300	300	0	0.0%
96.3%	300	300	0	0.0%
97.5%	300	300	0	0.0%
98.8%	300	300	0	0.0%
100.0%	300	300	0	0.0%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,553	1,553	0	0.0%
1.2%	1,450	1,450	0	0.0%
2.5%	1,217	1,217	0	0.0%
3.7%	991	991	0	0.0%
4.9%	600	600	0	0.0%
6.2%	600	600	0	0.0%
7.4%	600	600	0	0.0%
8.6%	600	600	0	0.0%
9.9%	600	600	0	0.0%
11.1%	600	600	0	0.0%
12.3%	600	600	0	0.0%
13.6%	600	600	0	0.0%
14.8%	540	540	0	0.0%
16.0%	540	540	0	0.0%
17.3%	540	540	0	0.0%
18.5%	540	540	0	0.0%
19.8%	540	540	0	0.0%
21.0%	540	540	0	0.0%
22.2%	540	540	0	0.0%
23.5%	540	540	0	0.0%
24.7%	540	540	0	0.0%
25.9%	540	540	0	0.0%
27.2%	540	540	0	0.0%
28.4%	540	540	0	0.0%
29.6%	540	540	0	0.0%
30.9%	540	540	0	0.0%
32.1%	540	540	0	0.0%
33.3%	540	540	0	0.0%
34.6%	540	540	0	0.0%
35.8%	540	540	0	0.0%
37.0%	540	540	0	0.0%
38.3%	540	540	0	0.0%
39.5%	540	540	0	0.0%
40.7%	540	540	0	0.0%
42.0%	540	540	0	0.0%
43.2%	540	540	0	0.0%
44.4%	493	493	0	0.0%
45.7%	493	493	0	0.0%
46.9%	493	493	0	0.0%
48.1%	493	493	0	0.0%
49.4%	493	493	0	0.0%
50.6%	493	493	0	0.0%
51.9%	493	493	0	0.0%
53.1%	493	493	0	0.0%
54.3%	493	493	0	0.0%
55.6%	493	493	0	0.0%
56.8%	493	493	0	0.0%
58.0%	493	493	0	0.0%
59.3%	460	460	0	0.0%
60.5%	460	460	0	0.0%
61.7%	460	460	0	0.0%
63.0%	460	460	0	0.0%
64.2%	460	460	0	0.0%
65.4%	460	460	0	0.0%
66.7%	460	460	0	0.0%
67.9%	460	460	0	0.0%
69.1%	460	460	0	0.0%
70.4%	460	460	0	0.0%
71.6%	460	460	0	0.0%
72.8%	460	460	0	0.0%
74.1%	460	460	0	0.0%
75.3%	460	460	0	0.0%
76.5%	460	460	0	0.0%
77.8%	460	460	0	0.0%
79.0%	460	460	0	0.0%
80.2%	460	460	0	0.0%
81.5%	460	460	0	0.0%
82.7%	460	460	0	0.0%
84.0%	460	460	0	0.0%
85.2%	460	460	0	0.0%
86.4%	460	460	0	0.0%
87.7%	460	460	0	0.0%
88.9%	460	460	0	0.0%
90.1%	460	460	0	0.0%
91.4%	460	460	0	0.0%
92.6%	427	427	0	0.0%
93.8%	427	427	0	0.0%
95.1%	427	427	0	0.0%
96.3%	427	427	0	0.0%
97.5%	427	427	0	0.0%
98.8%	427	427	0	0.0%
100.0%	427	427	0	0.0%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,709	4,709	0	0.0%
1.2%	4,709	4,709	0	0.0%
2.5%	4,709	4,709	0	0.0%
3.7%	4,709	4,709	0	0.0%
4.9%	4,709	4,709	0	0.0%
6.2%	4,709	4,709	0	0.0%
7.4%	4,709	4,709	0	0.0%
8.6%	4,709	4,709	0	0.0%
9.9%	4,709	4,709	0	0.0%
11.1%	4,709	4,709	0	0.0%
12.3%	4,709	4,709	0	0.0%
13.6%	4,709	4,709	0	0.0%
14.8%	4,709	4,709	0	0.0%
16.0%	4,709	4,709	0	0.0%
17.3%	4,709	4,709	0	0.0%
18.5%	4,709	4,709	0	0.0%
19.8%	4,709	4,709	0	0.0%
21.0%	4,709	4,709	0	0.0%
22.2%	4,709	4,709	0	0.0%
23.5%	4,709	4,709	0	0.0%
24.7%	4,709	4,709	0	0.0%
25.9%	4,709	4,709	0	0.0%
27.2%	4,709	4,709	0	0.0%
28.4%	4,709	4,709	0	0.0%
29.6%	4,709	4,709	0	0.0%
30.9%	4,709	4,709	0	0.0%
32.1%	4,709	4,709	0	0.0%
33.3%	4,570	4,570	0	0.0%
34.6%	4,570	4,570	0	0.0%
35.8%	4,570	4,570	0	0.0%
37.0%	4,570	4,570	0	0.0%
38.3%	4,570	4,570	0	0.0%
39.5%	4,570	4,570	0	0.0%
40.7%	4,570	4,570	0	0.0%
42.0%	4,570	4,570	0	0.0%
43.2%	4,570	4,570	0	0.0%
44.4%	4,570	4,570	0	0.0%
45.7%	4,570	4,570	0	0.0%
46.9%	4,189	4,189	0	0.0%
48.1%	4,189	4,189	0	0.0%
49.4%	4,189	4,189	0	0.0%
50.6%	4,189	4,189	0	0.0%
51.9%	4,189	4,189	0	0.0%
53.1%	4,189	4,189	0	0.0%
54.3%	4,189	4,189	0	0.0%
55.6%	4,189	4,189	0	0.0%
56.8%	4,189	4,189	0	0.0%
58.0%	4,189	4,189	0	0.0%
59.3%	4,189	4,189	0	0.0%
60.5%	4,189	4,189	0	0.0%
61.7%	2,924	2,924	0	0.0%
63.0%	2,924	2,924	0	0.0%
64.2%	2,924	2,924	0	0.0%
65.4%	2,924	2,924	0	0.0%
66.7%	2,924	2,924	0	0.0%
67.9%	2,924	2,924	0	0.0%
69.1%	2,924	2,924	0	0.0%
70.4%	2,924	2,924	0	0.0%
71.6%	2,924	2,924	0	0.0%
72.8%	2,924	2,924	0	0.0%
74.1%	2,924	2,924	0	0.0%
75.3%	2,924	2,924	0	0.0%
76.5%	2,924	2,924	0	0.0%
77.8%	2,924	2,924	0	0.0%
79.0%	2,924	2,924	0	0.0%
80.2%	2,924	2,924	0	0.0%
81.5%	2,924	2,924	0	0.0%
82.7%	2,924	2,924	0	0.0%
84.0%	2,924	2,924	0	0.0%
85.2%	2,924	2,924	0	0.0%
86.4%	2,924	2,924	0	0.0%
87.7%	2,924	2,924	0	0.0%
88.9%	2,924	2,924	0	0.0%
90.1%	2,924	2,924	0	0.0%
91.4%	1,498	1,498	0	0.0%
92.6%	1,498	1,498	0	0.0%
93.8%	1,498	1,498	0	0.0%
95.1%	1,498	1,498	0	0.0%
96.3%	1,498	1,498	0	0.0%
97.5%	1,498	1,498	0	0.0%
98.8%	1,498	1,498	0	0.0%
100.0%	1,498	1,498	0	0.0%

Table SW-04-b
Trinity River below Lewiston Reservoir, Monthly Flow
Probability of Exceedance

	June			
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,626	4,626	0	0.0%
1.2%	4,626	4,626	0	0.0%
2.5%	4,626	4,626	0	0.0%
3.7%	4,626	4,626	0	0.0%
4.9%	4,626	4,626	0	0.0%
6.2%	4,626	4,626	0	0.0%
7.4%	4,626	4,626	0	0.0%
8.6%	4,626	4,626	0	0.0%
9.9%	4,626	4,626	0	0.0%
11.1%	4,626	4,626	0	0.0%
12.3%	4,626	4,626	0	0.0%
13.6%	2,526	2,526	0	0.0%
14.8%	2,526	2,526	0	0.0%
16.0%	2,526	2,526	0	0.0%
17.3%	2,526	2,526	0	0.0%
18.5%	2,526	2,526	0	0.0%
19.8%	2,526	2,526	0	0.0%
21.0%	2,526	2,526	0	0.0%
22.2%	2,526	2,526	0	0.0%
23.5%	2,526	2,526	0	0.0%
24.7%	2,526	2,526	0	0.0%
25.9%	2,526	2,526	0	0.0%
27.2%	2,526	2,526	0	0.0%
28.4%	2,526	2,526	0	0.0%
29.6%	2,526	2,526	0	0.0%
30.9%	2,526	2,526	0	0.0%
32.1%	2,526	2,526	0	0.0%
33.3%	2,526	2,526	0	0.0%
34.6%	2,526	2,526	0	0.0%
35.8%	2,526	2,526	0	0.0%
37.0%	2,526	2,526	0	0.0%
38.3%	2,526	2,526	0	0.0%
39.5%	2,526	2,526	0	0.0%
40.7%	2,526	2,526	0	0.0%
42.0%	2,526	2,526	0	0.0%
43.2%	2,526	2,526	0	0.0%
44.4%	2,526	2,526	0	0.0%
45.7%	2,526	2,526	0	0.0%
46.9%	2,120	2,120	0	0.0%
48.1%	2,120	2,120	0	0.0%
49.4%	2,120	2,120	0	0.0%
50.6%	2,120	2,120	0	0.0%
51.9%	2,120	2,120	0	0.0%
53.1%	2,120	2,120	0	0.0%
54.3%	2,120	2,120	0	0.0%
55.6%	2,120	2,120	0	0.0%
56.8%	2,120	2,120	0	0.0%
58.0%	2,120	2,120	0	0.0%
59.3%	2,120	2,120	0	0.0%
60.5%	2,120	2,120	0	0.0%
61.7%	783	783	0	0.0%
63.0%	783	783	0	0.0%
64.2%	783	783	0	0.0%
65.4%	783	783	0	0.0%
66.7%	783	783	0	0.0%
67.9%	783	783	0	0.0%
69.1%	783	783	0	0.0%
70.4%	783	783	0	0.0%
71.6%	783	783	0	0.0%
72.8%	783	783	0	0.0%
74.1%	783	783	0	0.0%
75.3%	783	783	0	0.0%
76.5%	783	783	0	0.0%
77.8%	783	783	0	0.0%
79.0%	783	783	0	0.0%
80.2%	783	783	0	0.0%
81.5%	783	783	0	0.0%
82.7%	783	783	0	0.0%
84.0%	783	783	0	0.0%
85.2%	783	783	0	0.0%
86.4%	783	783	0	0.0%
87.7%	783	783	0	0.0%
88.9%	783	783	0	0.0%
90.1%	783	783	0	0.0%
91.4%	783	783	0	0.0%
92.6%	783	783	0	0.0%
93.8%	783	783	0	0.0%
95.1%	783	783	0	0.0%
96.3%	783	783	0	0.0%
97.5%	783	783	0	0.0%
98.8%	783	783	0	0.0%
100.0%	783	783	0	0.0%

	July			
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	1,102	1,102	0	0.0%
1.2%	1,102	1,102	0	0.0%
2.5%	1,102	1,102	0	0.0%
3.7%	1,102	1,102	0	0.0%
4.9%	1,102	1,102	0	0.0%
6.2%	1,102	1,102	0	0.0%
7.4%	1,102	1,102	0	0.0%
8.6%	1,102	1,102	0	0.0%
9.9%	1,102	1,102	0	0.0%
11.1%	1,102	1,102	0	0.0%
12.3%	1,102	1,102	0	0.0%
13.6%	1,102	1,102	0	0.0%
14.8%	1,102	1,102	0	0.0%
16.0%	1,102	1,102	0	0.0%
17.3%	1,102	1,102	0	0.0%
18.5%	1,102	1,102	0	0.0%
19.8%	1,102	1,102	0	0.0%
21.0%	1,102	1,102	0	0.0%
22.2%	1,102	1,102	0	0.0%
23.5%	1,102	1,102	0	0.0%
24.7%	1,102	1,102	0	0.0%
25.9%	1,102	1,102	0	0.0%
27.2%	1,102	1,102	0	0.0%
28.4%	1,102	1,102	0	0.0%
29.6%	1,102	1,102	0	0.0%
30.9%	1,102	1,102	0	0.0%
32.1%	1,102	1,102	0	0.0%
33.3%	1,102	1,102	0	0.0%
34.6%	1,102	1,102	0	0.0%
35.8%	1,102	1,102	0	0.0%
37.0%	1,102	1,102	0	0.0%
38.3%	1,102	1,102	0	0.0%
39.5%	1,102	1,102	0	0.0%
40.7%	1,102	1,102	0	0.0%
42.0%	1,102	1,102	0	0.0%
43.2%	1,102	1,102	0	0.0%
44.4%	1,102	1,102	0	0.0%
45.7%	1,102	1,102	0	0.0%
46.9%	1,102	1,102	0	0.0%
48.1%	1,102	1,102	0	0.0%
49.4%	1,102	1,102	0	0.0%
50.6%	1,102	1,102	0	0.0%
51.9%	1,102	1,102	0	0.0%
53.1%	1,102	1,102	0	0.0%
54.3%	1,102	1,102	0	0.0%
55.6%	1,102	1,102	0	0.0%
56.8%	1,102	1,102	0	0.0%
58.0%	1,102	1,102	0	0.0%
59.3%	1,102	1,102	0	0.0%
60.5%	1,102	1,102	0	0.0%
61.7%	450	450	0	0.0%
63.0%	450	450	0	0.0%
64.2%	450	450	0	0.0%
65.4%	450	450	0	0.0%
66.7%	450	450	0	0.0%
67.9%	450	450	0	0.0%
69.1%	450	450	0	0.0%
70.4%	450	450	0	0.0%
71.6%	450	450	0	0.0%
72.8%	450	450	0	0.0%
74.1%	450	450	0	0.0%
75.3%	450	450	0	0.0%
76.5%	450	450	0	0.0%
77.8%	450	450	0	0.0%
79.0%	450	450	0	0.0%
80.2%	450	450	0	0.0%
81.5%	450	450	0	0.0%
82.7%	450	450	0	0.0%
84.0%	450	450	0	0.0%
85.2%	450	450	0	0.0%
86.4%	450	450	0	0.0%
87.7%	450	450	0	0.0%
88.9%	450	450	0	0.0%
90.1%	450	450	0	0.0%
91.4%	450	450	0	0.0%
92.6%	450	450	0	0.0%
93.8%	450	450	0	0.0%
95.1%	450	450	0	0.0%
96.3%	450	450	0	0.0%
97.5%	450	450	0	0.0%
98.8%	450	450	0	0.0%
100.0%	450	450	0	0.0%

	August			
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	450	450	0	0.0%
1.2%	450	450	0	0.0%
2.5%	450	450	0	0.0%
3.7%	450	450	0	0.0%
4.9%	450	450	0	0.0%
6.2%	450	450	0	0.0%
7.4%	450	450	0	0.0%
8.6%	450	450	0	0.0%
9.9%	450	450	0	0.0%
11.1%	450	450	0	0.0%
12.3%	450	450	0	0.0%
13.6%	450	450	0	0.0%
14.8%	450	450	0	0.0%
16.0%	450	450	0	0.0%
17.3%	450	450	0	0.0%
18.5%	450	450	0	0.0%
19.8%	450	450	0	0.0%
21.0%	450	450	0	0.0%
22.2%	450	450	0	0.0%
23.5%	450	450	0	0.0%
24.7%	450	450	0	0.0%
25.9%	450	450	0	0.0%
27.2%	450	450	0	0.0%
28.4%	450	450	0	0.0%
29.6%	450	450	0	0.0%
30.9%	450	450	0	0.0%
32.1%	450	450	0	0.0%
33.3%	450	450	0	0.0%
34.6%	450	450	0	0.0%
35.8%	450	450	0	0.0%
37.0%	450	450	0	0.0%
38.3%	450	450	0	0.0%
39.5%	450	450	0	0.0%
40.7%	450	450	0	0.0%
42.0%	450	450	0	0.0%
43.2%	450	450	0	0.0%
44.4%	450	450	0	0.0%
45.7%	450	450	0	0.0%
46.9%	450	450	0	0.0%
48.1%	450	450	0	0.0%
49.4%	450	450	0	0.0%
50.6%	450	450	0	0.0%
51.9%	450	450	0	0.0%
53.1%	450	450	0	0.0%
54.3%	450	450	0	0.0%
55.6%	450	450	0	0.0%
56.8%	450	450	0	0.0%
58.0%	450	450	0	0.0%
59.3%	450	450	0	0.0%
60.5%	450	450	0	0.0%
61.7%	450	450	0	0.0%
63.0%	450	450	0	0.0%
64.2%	450	450	0	0.0%
65.4%	450	450	0	0.0%
66.7%	450	450	0	0.0%
67.9%	450	450	0	0.0%
69.1%	450	450	0	0.0%
70.4%	450	450	0	0.0%
71.6%	450	450	0	0.0%
72.8%	450	450	0	0.0%
74.1%	450	450	0	0.0%
75.3%	450	450	0	0.0%
76.5%	450	450	0	0.0%
77.8%	450	450	0	0.0%
79.0%	450	450	0	0.0%
80.2%	450	450	0	0.0%
81.5%	450	450	0	0.0%
82.7%	450	450	0	0.0%
84.0%	450	450	0	0.0%
85.2%	450	450	0	0.0%
86.4%	450	450	0	0.0%
87.7%	450	450	0	0.0%
88.9%	450	450	0	0.0%
90.1%	450	450	0	0.0%
91.4%	450	450	0	0.0%
92.6%	450	450	0	0.0%
93.8%	450	450	0	0.0%
95.1%	450	450	0	0.0%
96.3%	450	450	0	0.0%
97.5%	450	450	0	0.0%
98.8%	450	450	0	0.0%
100.0%	0	0	0	

	September			
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	450	450	0	0.0%
1.2%	450	450	0	0.0%
2.5%	450	450	0	0.0%
3.7%	450	450	0	0.0%
4.9%	450	450	0	0.0%
6.2%	450	450	0	0.0%
7.4%	450	450	0	0.0%
8.6%	450	450	0	0.0%
9.9%	450	450	0	0.0%
11.1%	450	450	0	0.0%
12.3%	450	450	0	0.0%
13.6%	450	450	0	0.0%
14.8%	450	450	0	0.0%
16.0%	450	450	0	0.0%
17.3%	450	450	0	0.0%
18.5%	450	450	0	0.0%
19.8%	450	450	0	0.0%
21.0%	450	450	0	0.0%
22.2%	450	450	0	0.0%
23.5%	450	450	0	0.0%
24.7%	450	450	0	0.0%
25.9%	450	450	0	0.0%
27.2%	450	450	0	0.0%
28.4%	450	450	0	0.0%
29.6%	450	450	0	0.0%
30.9%	450	450	0	0.0%
32.1%	450	450	0	0.0%
33.3%	450	450	0	0.0%
34.6%	450	450	0	0.0%
35.8%	450	450	0	0.0%
37.0%	450	450	0	0.0%
38.3%	450	450	0	0.0%
39.5%	450	450	0	0.0%
40.7%	450	450	0	0.0%
42.0%	450	450	0	0.0%
43.2%	450	450	0	0.0%
44.4%	450	450	0	0.0%
45.7%	450	450	0	0.0%
46.9%	450	450	0	0.0%
48.1%	450	450	0	0.0%
49.4%	450	450	0	0.0%
50.6%	450	450	0	0.0%
51.9%	450	450	0	0.0%
53.1%	450	450	0	0.0%
54.3%	450	450	0	0.0%
55.6%	450	450	0	0.0%
56.8%	450	450	0	0.0%
58.0%	450	450	0	0.0%
59.3%	450	450	0	0.0%
60.5%	450	450	0	0.0%
61.7%	450	450	0	0.0%
63.0%	450	450	0	0.0%
64.2%	450	450	0	0.0%
65.4%	450	450	0	0.0%
66.7%	450	450	0	0.0%
67.9%	450	450	0	0.0%
69.1%	450	450	0	0.0%
70.4%	450	450	0	0.0%
71.6%	450	450	0	0.0%
72.8%	450	450	0	0.0%
74.1%	450	450	0	0.0%
75.3%	450	450	0	0.0%
76.5%	450	450	0	0.0%
77.8%	450	450	0	0.0%
79.0%	450	450	0	0.0%
80.2%	450	450	0	0.0%
81.5%	450	450	0	0.0%
82.7%	450	450	0	0.0%
84.0%	450	450	0	0.0%
85.2%	450	450	0	0.0%
86.4%	450	450	0	0.0%
87.7%	450	450	0	0.0%
88.9%	450	450	0	0.0%
90.1%	450	450	0	0.0%
91.4%	450	450	0	0.0%
92.6%	450	450	0	0.0%
93.8%	450	450	0	0.0%
95.1%	450	450	0	0.0%
96.3%	450	450	0	0.0%
97.5%	450	450	0	0.0%
98.8%	450	450	0	0.0%
100.0%	244	450	206	84.6%

Figure SW-05-b
Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

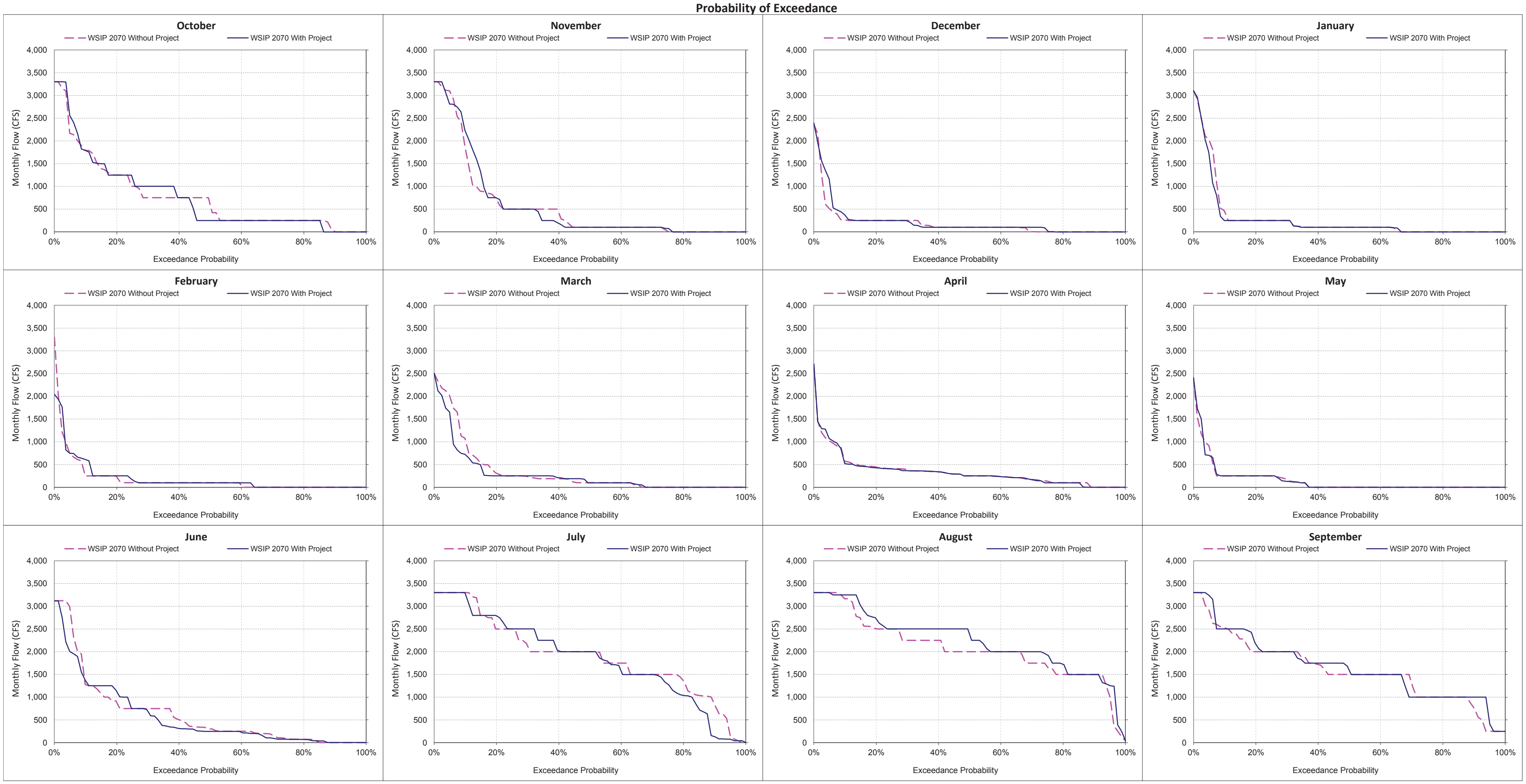


Table SW-05-b

Clear Creek Tunnel, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,163	3,300	137	4.3%
3.7%	3,096	3,294	197	6.4%
4.9%	2,168	2,557	390	18.0%
6.2%	2,138	2,408	270	12.6%
7.4%	2,010	2,168	159	7.9%
8.6%	1,899	1,824	-75	-3.9%
9.9%	1,791	1,789	-2	-0.1%
11.1%	1,788	1,754	-34	-1.9%
12.3%	1,717	1,525	-192	-11.2%
13.6%	1,518	1,507	-11	-0.7%
14.8%	1,393	1,500	107	7.7%
16.0%	1,368	1,500	132	9.7%
17.3%	1,301	1,250	-51	-3.9%
18.5%	1,250	1,250	0	0.0%
19.8%	1,250	1,250	0	0.0%
21.0%	1,250	1,250	0	0.0%
22.2%	1,250	1,250	0	0.0%
23.5%	1,250	1,250	0	0.0%
24.7%	1,000	1,250	250	25.0%
25.9%	1,000	1,000	0	0.0%
27.2%	955	1,000	45	4.7%
28.4%	750	1,000	250	33.3%
29.6%	750	1,000	250	33.3%
30.9%	750	1,000	250	33.3%
32.1%	750	1,000	250	33.3%
33.3%	750	1,000	250	33.3%
34.6%	750	1,000	250	33.3%
35.8%	750	1,000	250	33.3%
37.0%	750	1,000	250	33.3%
38.3%	750	1,000	250	33.3%
39.5%	750	750	0	0.0%
40.7%	750	750	0	0.0%
42.0%	750	750	0	0.0%
43.2%	750	750	0	0.0%
44.4%	750	536	-214	-28.5%
45.7%	750	250	-500	-66.7%
46.9%	750	250	-500	-66.7%
48.1%	750	250	-500	-66.7%
49.4%	750	250	-500	-66.7%
50.6%	421	250	-171	-40.6%
51.9%	420	250	-170	-40.5%
53.1%	250	250	0	0.0%
54.3%	250	250	0	0.0%
55.6%	250	250	0	0.0%
56.8%	250	250	0	0.0%
58.0%	250	250	0	0.0%
59.3%	250	250	0	0.0%
60.5%	250	250	0	0.0%
61.7%	250	250	0	0.0%
63.0%	250	250	0	0.0%
64.2%	250	250	0	0.0%
65.4%	250	250	0	0.0%
66.7%	250	250	0	0.0%
67.9%	250	250	0	0.0%
69.1%	250	250	0	0.0%
70.4%	250	250	0	0.0%
71.6%	250	250	0	0.0%
72.8%	250	250	0	0.0%
74.1%	250	250	0	0.0%
75.3%	250	250	0	0.0%
76.5%	250	250	0	0.0%
77.8%	250	250	0	0.0%
79.0%	250	250	0	0.0%
80.2%	250	250	0	0.0%
81.5%	250	250	0	0.0%
82.7%	250	250	0	0.0%
84.0%	250	250	0	0.0%
85.2%	250	250	0	0.0%
86.4%	250	0	-250	-100.0%
87.7%	215	0	-215	-100.0%
88.9%	54	0	-54	-100.0%
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,189	3,300	111	3.5%
3.7%	3,116	3,065	-51	-1.6%
4.9%	3,103	2,813	-290	-9.3%
6.2%	2,918	2,803	-115	-4.0%
7.4%	2,535	2,741	206	8.1%
8.6%	2,424	2,637	214	8.8%
9.9%	1,877	2,237	359	19.1%
11.1%	1,447	2,028	581	40.1%
12.3%	1,028	1,805	777	75.6%
13.6%	995	1,594	599	60.2%
14.8%	894	1,332	437	48.9%
16.0%	884	969	85	9.6%
17.3%	849	750	-99	-11.7%
18.5%	828	750	-78	-9.4%
19.8%	744	750	6	0.9%
21.0%	587	708	121	20.6%
22.2%	500	500	0	0.0%
23.5%	500	500	0	0.0%
24.7%	500	500	0	0.0%
25.9%	500	500	0	0.0%
27.2%	500	500	0	0.0%
28.4%	500	500	0	0.0%
29.6%	500	500	0	0.0%
30.9%	500	500	0	0.0%
32.1%	500	500	0	0.0%
33.3%	500	448	-52	-10.5%
34.6%	500	250	-250	-50.0%
35.8%	500	250	-250	-50.0%
37.0%	500	250	-250	-50.0%
38.3%	500	250	-250	-50.0%
39.5%	500	200	-300	-60.0%
40.7%	283	157	-126	-44.4%
42.0%	250	100	-150	-60.0%
43.2%	176	100	-76	-43.2%
44.4%	100	100	0	0.0%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	100	100	0	0.0%
67.9%	100	100	0	0.0%
69.1%	100	100	0	0.0%
70.4%	100	100	0	0.0%
71.6%	100	100	0	0.0%
72.8%	100	100	0	0.0%
74.1%	48	76	28	58.1%
75.3%	0	71	71	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,363	2,397	34	1.5%
1.2%	2,158	1,959	-199	-9.2%
2.5%	1,272	1,557	285	22.4%
3.7%	605	1,358	753	124.5%
4.9%	513	1,164	651	126.8%
6.2%	437	527	90	20.6%
7.4%	393	484	91	23.0%
8.6%	268	442	174	64.9%
9.9%	265	372	107	40.4%
11.1%	250	268	18	7.4%
12.3%	250	262	12	4.6%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	250	250	0	0.0%
28.4%	250	250	0	0.0%
29.6%	250	250	0	0.0%
30.9%	250	206	-44	-17.5%
32.1%	250	144	-106	-42.6%
33.3%	250	140	-110	-43.8%
34.6%	150	103	-47	-31.2%
35.8%	144	101	-42	-29.3%
37.0%	140	101	-39	-27.8%
38.3%	108	100	-8	-7.2%
39.5%	103	100	-3	-2.8%
40.7%	100	100	0	0.0%
42.0%	100	100	0	0.0%
43.2%	100	100	0	0.0%
44.4%	100	100	0	0.0%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	100	100	0	0.0%
65.4%	100	100	0	0.0%
66.7%	91	100	9	9.8%
67.9%	90	100	10	11.0%
69.1%	3	100	97	
70.4%	2	100	98	
71.6%	0	100	100	
72.8%	0	100	100	
74.1%	0	91	91	
75.3%	0	2	2	
76.5%	0	2	2	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,108	3,108	0	0.0%
1.2%	2,920	2,961	41	1.4%
2.5%	2,502	2,502	0	0.0%
3.7%	2,111	2,029	-81	-3.9%
4.9%	2,029	1,748	-281	-13.8%
6.2%	1,808	1,071	-736	-40.7%
7.4%	1,071	804	-267	-24.9%
8.6%	520	337	-183	-35.1%
9.9%	465	250	-215	-46.2%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	250	250	0	0.0%
28.4%	250	250	0	0.0%
29.6%	250	250	0	0.0%
30.9%	250	250	0	0.0%
32.1%	129	129	0	0.0%
33.3%	122	122	0	0.0%
34.6%	121	100	-21	-17.1%
35.8%	101	100	-1	-0.6%
37.0%	100	100	0	0.0%
38.3%	100	100	0	0.0%
39.5%	100	100	0	0.0%
40.7%	100	100	0	0.0%
42.0%	100	100	0	0.0%
43.2%	100	100	0	0.0%
44.4%	100	100	0	0.0%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	89	89	0	0.0%
65.4%	0	85	85	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-05-b

Clear Creek Tunnel, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	2,046	-1,254	-38.0%
1.2%	2,046	1,936	-110	-5.4%
2.5%	1,216	1,761	544	44.7%
3.7%	985	822	-163	-16.5%
4.9%	742	749	8	1.1%
6.2%	664	742	77	11.6%
7.4%	612	664	52	8.5%
8.6%	582	638	57	9.7%
9.9%	250	612	362	145.0%
11.1%	250	582	332	132.7%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	128	250	122	94.7%
22.2%	100	250	150	150.0%
23.5%	100	250	150	150.0%
24.7%	100	178	78	78.3%
25.9%	100	128	28	28.4%
27.2%	100	100	0	0.0%
28.4%	100	100	0	0.0%
29.6%	100	100	0	0.0%
30.9%	100	100	0	0.0%
32.1%	100	100	0	0.0%
33.3%	100	100	0	0.0%
34.6%	100	100	0	0.0%
35.8%	100	100	0	0.0%
37.0%	100	100	0	0.0%
38.3%	100	100	0	0.0%
39.5%	100	100	0	0.0%
40.7%	100	100	0	0.0%
42.0%	100	100	0	0.0%
43.2%	100	100	0	0.0%
44.4%	100	100	0	0.0%
45.7%	100	100	0	0.0%
46.9%	100	100	0	0.0%
48.1%	100	100	0	0.0%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	0	100	100	
61.7%	0	100	100	
63.0%	0	100	100	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,505	2,505	0	0.0%
1.2%	2,329	2,124	-205	-8.8%
2.5%	2,181	2,019	-161	-7.4%
3.7%	2,124	1,742	-382	-18.0%
4.9%	2,019	1,653	-367	-18.2%
6.2%	1,742	943	-799	-45.9%
7.4%	1,653	817	-836	-50.6%
8.6%	1,127	749	-379	-33.6%
9.9%	1,078	725	-353	-32.8%
11.1%	749	643	-105	-14.1%
12.3%	707	537	-170	-24.0%
13.6%	643	526	-118	-18.3%
14.8%	537	495	-43	-8.0%
16.0%	495	264	-230	-46.5%
17.3%	494	259	-234	-47.5%
18.5%	392	250	-142	-36.3%
19.8%	314	250	-64	-20.5%
21.0%	281	250	-31	-11.1%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	250	250	0	0.0%
28.4%	250	250	0	0.0%
29.6%	243	250	7	2.7%
30.9%	212	250	38	18.0%
32.1%	207	250	43	20.9%
33.3%	190	250	60	31.5%
34.6%	189	250	61	32.1%
35.8%	189	250	61	32.5%
37.0%	188	250	62	32.6%
38.3%	188	243	55	29.5%
39.5%	187	212	25	13.2%
40.7%	187	207	20	10.5%
42.0%	186	191	6	3.0%
43.2%	179	190	11	6.3%
44.4%	120	188	69	57.3%
45.7%	100	188	88	87.9%
46.9%	100	186	86	86.4%
48.1%	100	179	79	78.9%
49.4%	100	100	0	0.0%
50.6%	100	100	0	0.0%
51.9%	100	100	0	0.0%
53.1%	100	100	0	0.0%
54.3%	100	100	0	0.0%
55.6%	100	100	0	0.0%
56.8%	100	100	0	0.0%
58.0%	100	100	0	0.0%
59.3%	100	100	0	0.0%
60.5%	100	100	0	0.0%
61.7%	100	100	0	0.0%
63.0%	100	100	0	0.0%
64.2%	58	75	17	29.5%
65.4%	53	58	5	9.7%
66.7%	0	53	53	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,708	2,708	0	0.0%
1.2%	1,450	1,441	-9	-0.6%
2.5%	1,208	1,291	83	6.9%
3.7%	1,086	1,278	191	17.6%
4.9%	1,019	1,076	57	5.6%
6.2%	971	1,019	48	5.0%
7.4%	907	971	64	7.0%
8.6%	899	852	-46	-5.2%
9.9%	570	522	-48	-8.4%
11.1%	558	509	-49	-8.7%
12.3%	522	508	-14	-2.8%
13.6%	509	473	-37	-7.2%
14.8%	475	461	-14	-2.9%
16.0%	473	458	-15	-3.1%
17.3%	461	449	-12	-2.7%
18.5%	458	432	-26	-5.6%
19.8%	449	426	-22	-4.9%
21.0%	426	423	-3	-0.7%
22.2%	423	409	-14	-3.3%
23.5%	409	409	0	0.0%
24.7%	409	404	-5	-1.2%
25.9%	409	401	-8	-2.1%
27.2%	408	395	-13	-3.3%
28.4%	404	367	-37	-9.0%
29.6%	395	364	-31	-7.7%
30.9%	364	363	-1	-0.4%
32.1%	360	360	0	0.1%
33.3%	359	360	1	0.2%
34.6%	358	358	0	0.0%
35.8%	355	355	0	0.0%
37.0%	350	352	2	0.5%
38.3%	342	350	8	2.3%
39.5%	338	342	4	1.3%
40.7%	337	338	1	0.2%
42.0%	322	322	0	0.0%
43.2%	301	301	0	0.0%
44.4%	294	294	0	0.0%
45.7%	291	291	0	0.0%
46.9%	289	289	0	0.0%
48.1%	250	250	0	0.0%
49.4%	250	250	0	0.0%
50.6%	250	250	0	0.0%
51.9%	250	250	0	0.0%
53.1%	250	250	0	0.0%
54.3%	250	250	0	0.0%
55.6%	250	250	0	0.0%
56.8%	250	250	0	0.0%
58.0%	250	239	-11	-4.4%
59.3%	239	239	0	-0.1%
60.5%	228	228	0	0.0%
61.7%	227	227	0	0.0%
63.0%	221	219	-2	-1.0%
64.2%	214	214	0	0.0%
65.4%	213	213	0	0.0%
66.7%	203	212	9	4.5%
67.9%	182	203	20	11.2%
69.1%	177	177	0	0.0%
70.4%	169	162	-6	-3.8%
71.6%	162	146	-17	-10.4%
72.8%	146	144	-2	-1.1%
74.1%	144	100	-44	-30.5%
75.3%	128	100	-28	-22.0%
76.5%	100	100	0	-0.1%
77.8%	100	100	0	0.0%
79.0%	100	100	0	0.0%
80.2%	100	100	0	0.0%
81.5%	100	100	0	0.0%
82.7%	100	100	0	0.0%
84.0%	100	100	0	0.0%
85.2%	100	100	0	0.0%
86.4%	100	6	-94	-94.3%
87.7%	100	1	-99	-98.5%
88.9%	6	0	-6	
90.1%	1	0	-1	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,409	2,409	0	0.0%
1.2%	1,543	1,728	186	12.0%
2.5%	1,173	1,500	327	27.9%
3.7%	992	715	-277	-27.9%
4.9%	915	701	-214	-23.4%
6.2%	527	654	127	24.1%
7.4%	250	284	34	13.5%
8.6%	250	250	0	0.0%
9.9%	250	250	0	0.0%
11.1%	250	250	0	0.0%
12.3%	250	250	0	0.0%
13.6%	250	250	0	0.0%
14.8%	250	250	0	0.0%
16.0%	250	250	0	0.0%
17.3%	250	250	0	0.0%
18.5%	250	250	0	0.0%
19.8%	250	250	0	0.0%
21.0%	250	250	0	0.0%
22.2%	250	250	0	0.0%
23.5%	250	250	0	0.0%
24.7%	250	250	0	0.0%
25.9%	250	250	0	0.0%
27.2%	223	206	-17	-7.6%
28.4%	206	142	-64	-31.1%
29.6%	186	134	-52	-27.8%
30.9%	134	125	-9	-7.1%
32.1%	125	116	-8	-6.6%
33.3%	114	114	0	0.0%
34.6%	100	100	0	0.0%
35.8%	100	100	0	0.0%
37.0%	0	0	0	
38.3%	0	0	0	
39.5%	0	0	0	
40.7%	0	0	0	
42.0%	0	0	0	
43.2%	0	0	0	
44.4%	0	0	0	
45.7%	0	0	0	
46.9%	0	0	0	
48.1%	0	0	0	
49.4%	0	0	0	
50.6%	0	0	0	
51.9%	0	0	0	
53.1%	0	0	0	
54.3%	0	0	0	
55.6%	0	0	0	
56.8%	0	0	0	
58.0%	0	0	0	
59.3%	0	0	0	
60.5%	0	0	0	
61.7%	0	0	0	
63.0%	0	0	0	
64.2%	0	0	0	
65.4%	0	0	0	
66.7%	0	0	0	
67.9%	0	0	0	
69.1%	0	0	0	
70.4%	0	0	0	
71.6%	0	0	0	
72.8%	0	0	0	
74.1%	0	0	0	
75.3%	0	0	0	
76.5%	0	0	0	
77.8%	0	0	0	
79.0%	0	0	0	
80.2%	0	0	0	
81.5%	0	0	0	
82.7%	0	0	0	
84.0%	0	0	0	
85.2%	0	0	0	
86.4%	0	0	0	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

Table SW-05-b

Clear Creek Tunnel, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,122	3,121	-1	0.0%
1.2%	3,121	3,120	-2	-0.1%
2.5%	3,121	2,745	-376	-12.0%
3.7%	3,120	2,215	-905	-29.0%
4.9%	2,990	2,007	-983	-32.9%
6.2%	2,323	1,956	-368	-15.8%
7.4%	2,014	1,899	-115	-5.7%
8.6%	1,953	1,549	-404	-20.7%
9.9%	1,279	1,374	95	7.4%
11.1%	1,250	1,255	5	0.4%
12.3%	1,250	1,250	0	0.0%
13.6%	1,187	1,250	63	5.3%
14.8%	1,091	1,250	159	14.6%
16.0%	1,000	1,250	250	25.0%
17.3%	1,000	1,250	250	25.0%
18.5%	920	1,250	330	35.8%
19.8%	916	1,154	238	26.0%
21.0%	750	1,005	255	34.0%
22.2%	750	1,000	250	33.3%
23.5%	750	1,000	250	33.3%
24.7%	750	750	0	0.0%
25.9%	750	750	0	0.0%
27.2%	750	750	0	0.0%
28.4%	750	750	0	0.0%
29.6%	750	726	-24	-3.2%
30.9%	750	590	-160	-21.3%
32.1%	750	582	-168	-22.4%
33.3%	750	501	-249	-33.2%
34.6%	750	379	-371	-49.4%
35.8%	750	366	-384	-51.2%
37.0%	750	344	-406	-54.2%
38.3%	556	340	-216	-38.8%
39.5%	515	317	-198	-38.4%
40.7%	486	306	-180	-37.1%
42.0%	446	303	-143	-32.1%
43.2%	366	301	-65	-17.7%
44.4%	352	298	-54	-15.3%
45.7%	344	261	-83	-24.1%
46.9%	340	251	-89	-26.1%
48.1%	338	250	-88	-26.0%
49.4%	303	250	-53	-17.4%
50.6%	301	250	-51	-17.0%
51.9%	261	250	-11	-4.1%
53.1%	251	250	-1	-0.5%
54.3%	250	250	0	0.0%
55.6%	250	250	0	0.0%
56.8%	250	250	0	0.0%
58.0%	250	250	0	0.0%
59.3%	250	247	-3	-1.0%
60.5%	250	216	-34	-13.6%
61.7%	250	213	-37	-14.9%
63.0%	247	204	-44	-17.6%
64.2%	213	199	-13	-6.3%
65.4%	204	199	-5	-2.4%
66.7%	199	156	-44	-21.9%
67.9%	199	107	-91	-46.0%
69.1%	191	104	-87	-45.4%
70.4%	156	95	-60	-38.8%
71.6%	107	78	-29	-27.3%
72.8%	104	77	-27	-26.2%
74.1%	96	75	-21	-22.1%
75.3%	78	72	-6	-7.5%
76.5%	77	72	-5	-6.9%
77.8%	75	71	-4	-4.8%
79.0%	72	70	-3	-3.7%
80.2%	72	69	-3	-4.0%
81.5%	71	65	-6	-9.1%
82.7%	70	41	-29	-41.3%
84.0%	35	40	5	14.9%
85.2%	0	38	38	
86.4%	0	35	35	
87.7%	0	0	0	
88.9%	0	0	0	
90.1%	0	0	0	
91.4%	0	0	0	
92.6%	0	0	0	
93.8%	0	0	0	
95.1%	0	0	0	
96.3%	0	0	0	
97.5%	0	0	0	
98.8%	0	0	0	
100.0%	0	0	0	

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,300	3,300	0	0.0%
3.7%	3,300	3,300	0	0.0%
4.9%	3,300	3,300	0	0.0%
6.2%	3,300	3,300	0	0.0%
7.4%	3,300	3,300	0	0.0%
8.6%	3,300	3,300	0	0.0%
9.9%	3,300	3,300	0	0.0%
11.1%	3,300	3,056	-244	-7.4%
12.3%	3,207	2,802	-405	-12.6%
13.6%	3,191	2,801	-390	-12.2%
14.8%	2,800	2,800	0	0.0%
16.0%	2,800	2,800	0	0.0%
17.3%	2,750	2,800	50	1.8%
18.5%	2,750	2,800	50	1.8%
19.8%	2,500	2,800	300	12.0%
21.0%	2,500	2,750	250	10.0%
22.2%	2,500	2,636	136	5.5%
23.5%	2,500	2,508	8	0.3%
24.7%	2,500	2,500	0	0.0%
25.9%	2,500	2,500	0	0.0%
27.2%	2,250	2,500	250	11.1%
28.4%	2,250	2,500	250	11.1%
29.6%	2,181	2,500	319	14.6%
30.9%	2,000	2,500	500	25.0%
32.1%	2,000	2,500	500	25.0%
33.3%	2,000	2,250	250	12.5%
34.6%	2,000	2,250	250	12.5%
35.8%	2,000	2,250	250	12.5%
37.0%	2,000	2,250	250	12.5%
38.3%	2,000	2,250	250	12.5%
39.5%	2,000	2,036	36	1.8%
40.7%	2,000	2,000	0	0.0%
42.0%	2,000	2,000	0	0.0%
43.2%	2,000	2,000	0	0.0%
44.4%	2,000	2,000	0	0.0%
45.7%	2,000	2,000	0	0.0%
46.9%	2,000	2,000	0	0.0%
48.1%	2,000	2,000	0	0.0%
49.4%	2,000	2,000	0	0.0%
50.6%	2,000	2,000	0	0.0%
51.9%	2,000	2,000	0	0.0%
53.1%	1,988	1,864	-124	-6.2%
54.3%	1,750	1,817	67	3.8%
55.6%	1,750	1,794	44	2.5%
56.8%	1,750	1,717	-33	-1.9%
58.0%	1,750	1,713	-37	-2.1%
59.3%	1,750	1,696	-54	-3.1%
60.5%	1,750	1,500	-250	-14.3%
61.7%	1,750	1,500	-250	-14.3%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,500	0	0.0%
69.1%	1,500	1,500	0	0.0%
70.4%	1,500	1,500	0	0.0%
71.6%	1,500	1,482	-18	-1.2%
72.8%	1,500	1,442	-58	-3.9%
74.1%	1,500	1,330	-170	-11.3%
75.3%	1,500	1,268	-232	-15.5%
76.5%	1,500	1,147	-353	-23.5%
77.8%	1,500	1,092	-408	-27.2%
79.0%	1,442	1,050	-392	-27.2%
80.2%	1,340	1,037	-303	-22.6%
81.5%	1,133	1,027	-106	-9.3%
82.7%	1,092	1,000	-92	-8.4%
84.0%	1,050	852	-199	-18.9%
85.2%	1,037	718	-318	-30.7%
86.4%	1,027	676	-351	-34.2%
87.7%	1,022	635	-387	-37.8%
88.9%	1,000	158	-842	-84.2%
90.1%	815	129	-686	-84.1%
91.4%	638	83	-554	-86.9%
92.6%	637	80	-557	-87.5%
93.8%	535	79	-456	-85.3%
95.1%	129	75	-55	-42.4%
96.3%	80	44	-35	
97.5%	43	43	0	
98.8%	0	43	43	
100.0%	0	0	0	

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,300	3,300	0	0.0%
3.7%	3,300	3,300	0	0.0%
4.9%	3,300	3,300	0	0.0%
6.2%	3,300	3,250	-50	-1.5%
7.4%	3,299	3,250	-49	-1.5%
8.6%	3,256	3,250	-6	-0.2%
9.9%	3,166	3,250	84	2.7%
11.1%	3,165	3,250	85	2.7%
12.3%	3,089	3,250	161	5.2%
13.6%	2,780	3,250	470	16.9%
14.8%	2,750	3,033	283	10.3%
16.0%	2,562	2,896	334	13.1%
17.3%	2,561	2,802	241	9.4%
18.5%	2,552	2,770	218	8.5%
19.8%	2,506	2,750	244	9.7%
21.0%	2,500	2,626	126	5.0%
22.2%	2,500	2,573	73	2.9%
23.5%	2,500	2,500	0	0.0%
24.7%	2,500	2,500	0	0.0%
25.9%	2,500	2,500	0	0.0%
27.2%	2,500	2,500	0	0.0%
28.4%	2,250	2,500	250	11.1%
29.6%	2,250	2,500	250	11.1%
30.9%	2,250	2,500	250	11.1%
32.1%	2,250	2,500	250	11.1%
33.3%	2,250	2,500	250	11.1%
34.6%	2,250	2,500	250	11.1%
35.8%	2,250	2,500	250	11.1%
37.0%	2,250	2,500	250	11.1%
38.3%	2,250	2,500	250	11.1%
39.5%	2,250	2,500	250	11.1%
40.7%	2,250	2,500	250	11.1%
42.0%	2,000	2,500	500	25.0%
43.2%	2,000	2,500	500	25.0%
44.4%	2,000	2,500	500	25.0%
45.7%	2,000	2,500	500	25.0%
46.9%	2,000	2,500	500	25.0%
48.1%	2,000	2,500	500	25.0%
49.4%	2,000	2,500	500	25.0%
50.6%	2,000	2,250	250	12.5%
51.9%	2,000	2,250	250	12.5%
53.1%	2,000	2,250	250	12.5%
54.3%	2,000	2,182	182	9.1%
55.6%	2,000	2,063	63	3.2%
56.8%	2,000	2,000	0	0.0%
58.0%	2,000	2,000	0	0.0%
59.3%	2,000	2,000	0	0.0%
60.5%	2,000	2,000	0	0.0%
61.7%	2,000	2,000	0	0.0%
63.0%	2,000	2,000	0	0.0%
64.2%	2,000	2,000	0	0.0%
65.4%	2,000	2,000	0	0.0%
66.7%	1,953	2,000	47	2.4%
67.9%	1,757	2,000	243	13.9%
69.1%	1,750	2,000	250	14.3%
70.4%	1,750	2,000	250	14.3%
71.6%	1,750	2,000	250	14.3%
72.8%	1,750	2,000	250	14.3%
74.1%	1,750	1,958	208	11.9%
75.3%	1,632	1,916	284	17.4%
76.5%	1,625	1,750	125	7.7%
77.8%	1,500	1,750	250	16.7%
79.0%	1,500	1,750	250	16.7%
80.2%	1,500	1,714	214	14.3%
81.5%	1,500	1,500	0	0.0%
82.7%	1,500	1,500	0	0.0%
84.0%	1,500	1,500	0	0.0%
85.2%	1,500	1,500	0	0.0%
86.4%	1,500	1,500	0	0.0%
87.7%	1,500	1,500	0	0.0%
88.9%	1,500	1,500	0	0.0%
90.1%	1,500	1,500	0	0.0%
91.4%	1,500	1,500	0	0.0%
92.6%	1,500	1,320	-180	-12.0%
93.8%	1,250	1,295	45	3.6%
95.1%	1,000	1,250	250	25.0%
96.3%	375	1,240	865	231.0%
97.5%	250	391	141	56.5%
98.8%	128	250	122	95.7%
100.0%	41	41	0	

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,300	3,300	0	0.0%
1.2%	3,300	3,300	0	0.0%
2.5%	3,300	3,300	0	0.0%
3.7%	3,028	3,300	272	9.0%
4.9%	2,918	3,245	327	11.2%
6.2%	2,626	3,152	526	20.0%
7.4%	2,602	2,500	-102	-3.9%
8.6%	2,550	2,500	-50	-2.0%
9.9%	2,526	2,500	-26	-1.0%
11.1%	2,500	2,500	0	0.0%
12.3%	2,409	2,500	91	3.8%
13.6%	2,404	2,500	96	4.0%
14.8%	2,283	2,500	217	9.5%
16.0%	2,277	2,500	223	9.8%
17.3%	2,130	2,470	340	16.0%
18.5%	2,000	2,429	429	21.5%
19.8%	2,000	2,192	192	9.6%
21.0%	2,000	2,063	63	3.1%
22.2%	2,000	2,000	0	0.0%
23.5%	2,000	2,000	0	0.0%
24.7%	2,000	2,000	0	0.0%
25.9%	2,000	2,000	0	0.0%
27.2%	2,000	2,000	0	0.0%
28.4%	2,000	2,000	0	0.0%
29.6%	2,000	2,000	0	0.0%
30.9%	2,000	2,000	0	0.0%
32.1%	2,000	2,000	0	0.0%
33.3%	2,000	1,858	-142	-7.1%
34.6%	1,886	1,831	-56	-3.0%
35.8%	1,881	1,750	-131	-7.0%
37.0%	1,750	1,750	0	0.0%
38.3%	1,750	1,750	0	0.0%
39.5%	1,724	1,750	26	1.5%
40.7%	1,709	1,750	41	2.4%
42.0%	1,618	1,750	132	8.2%
43.2%	1,500	1,750	250	16.7%
44.4%	1,500	1,750	250	16.7%
45.7%	1,500	1,750	250	16.7%
46.9%	1,500	1,750	250	16.7%
48.1%	1,500	1,750	250	16.7%
49.4%	1,500	1,680	180	12.0%
50.6%	1,500	1,500	0	0.0%
51.9%	1,500	1,500	0	0.0%
53.1%	1,500	1,500	0	0.0%
54.3%	1,500	1,500	0	0.0%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,500	1,500	0	0.0%
60.5%	1,500	1,500	0	0.0%
61.7%	1,500	1,500	0	0.0%
63.0%	1,500	1,500	0	0.0%
64.2%	1,500	1,500	0	0.0%
65.4%	1,500	1,500	0	0.0%
66.7%	1,500	1,500	0	0.0%
67.9%	1,500	1,242	-258	-17.2%
69.1%	1,500	1,000	-500	-33.3%
70.4%	1,218	1,000	-218	-17.9%
71.6%	1,000	1,000	0	0.0%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	870	1,000	130	14.9%
90.1%	750	1,000	250	33.3%
91.4%	557	1,000	443	79.5%
92.6%	500	1,000	500	100.0%
93.8%	250	1,000	750	300.0%
95.1%	250	406	156	62.4%
96.3%	250	250	0	0.0%
97.5%	250	250	0	0.0%
98.8%	250	250	0	0.0%
100.0%	250	250	0	0.0%

Figure SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

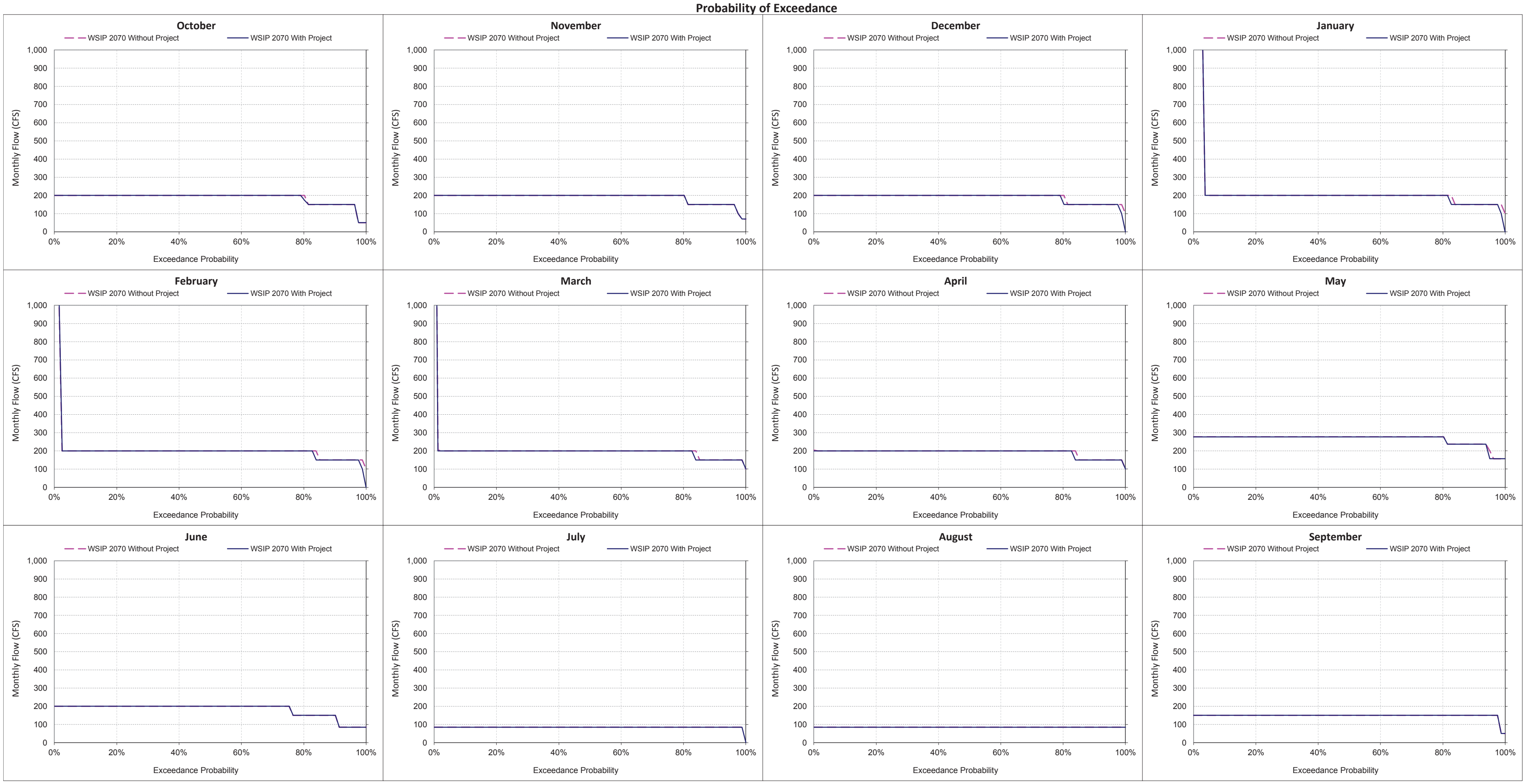


Table SW-06-b

Clear Creek below Whiskeytown Reservoir, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	174	-26	-13.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	50	50	0	0.0%
98.8%	50	50	0	0.0%
100.0%	50	50	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	100	100	0	0.0%
98.8%	70	70	0	0.0%
100.0%	70	70	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	150	-50	-25.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	100	-50	-33.3%
100.0%	100	0	-100	-100.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,411	2,452	41	1.7%
1.2%	1,899	1,899	0	0.0%
2.5%	1,522	1,522	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	150	-50	-25.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	100	-50	-33.3%
100.0%	100	0	-100	-100.0%

Table SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	1,247	1,247	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	150	-50	-25.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	100	-50	-33.3%
100.0%	100	0	-100	-100.0%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,000	3,000	0	0.0%
1.2%	204	200	-4	-2.1%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	150	-50	-25.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	100	100	0	0.0%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	204	200	-4	-2.1%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	200	200	0	0.0%
77.8%	200	200	0	0.0%
79.0%	200	200	0	0.0%
80.2%	200	200	0	0.0%
81.5%	200	200	0	0.0%
82.7%	200	200	0	0.0%
84.0%	200	150	-50	-25.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	150	150	0	0.0%
100.0%	100	100	0	0.0%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	277	277	0	0.0%
1.2%	277	277	0	0.0%
2.5%	277	277	0	0.0%
3.7%	277	277	0	0.0%
4.9%	277	277	0	0.0%
6.2%	277	277	0	0.0%
7.4%	277	277	0	0.0%
8.6%	277	277	0	0.0%
9.9%	277	277	0	0.0%
11.1%	277	277	0	0.0%
12.3%	277	277	0	0.0%
13.6%	277	277	0	0.0%
14.8%	277	277	0	0.0%
16.0%	277	277	0	0.0%
17.3%	277	277	0	0.0%
18.5%	277	277	0	0.0%
19.8%	277	277	0	0.0%
21.0%	277	277	0	0.0%
22.2%	277	277	0	0.0%
23.5%	277	277	0	0.0%
24.7%	277	277	0	0.0%
25.9%	277	277	0	0.0%
27.2%	277	277	0	0.0%
28.4%	277	277	0	0.0%
29.6%	277	277	0	0.0%
30.9%	277	277	0	0.0%
32.1%	277	277	0	0.0%
33.3%	277	277	0	0.0%
34.6%	277	277	0	0.0%
35.8%	277	277	0	0.0%
37.0%	277	277	0	0.0%
38.3%	277	277	0	0.0%
39.5%	277	277	0	0.0%
40.7%	277	277	0	0.0%
42.0%	277	277	0	0.0%
43.2%	277	277	0	0.0%
44.4%	277	277	0	0.0%
45.7%	277	277	0	0.0%
46.9%	277	277	0	0.0%
48.1%	277	277	0	0.0%
49.4%	277	277	0	0.0%
50.6%	277	277	0	0.0%
51.9%	277	277	0	0.0%
53.1%	277	277	0	0.0%
54.3%	277	277	0	0.0%
55.6%	277	277	0	0.0%
56.8%	277	277	0	0.0%
58.0%	277	277	0	0.0%
59.3%	277	277	0	0.0%
60.5%	277	277	0	0.0%
61.7%	277	277	0	0.0%
63.0%	277	277	0	0.0%
64.2%	277	277	0	0.0%
65.4%	277	277	0	0.0%
66.7%	277	277	0	0.0%
67.9%	277	277	0	0.0%
69.1%	277	277	0	0.0%
70.4%	277	277	0	0.0%
71.6%	277	277	0	0.0%
72.8%	277	277	0	0.0%
74.1%	277	277	0	0.0%
75.3%	277	277	0	0.0%
76.5%	277	277	0	0.0%
77.8%	277	277	0	0.0%
79.0%	277	277	0	0.0%
80.2%	277	277	0	0.0%
81.5%	237	237	0	0.0%
82.7%	237	237	0	0.0%
84.0%	237	237	0	0.0%
85.2%	237	237	0	0.0%
86.4%	237	237	0	0.0%
87.7%	237	237	0	0.0%
88.9%	237	237	0	0.0%
90.1%	237	237	0	0.0%
91.4%	237	237	0	0.0%
92.6%	237	237	0	0.0%
93.8%	237	237	0	0.0%
95.1%	200	156	-44	-21.8%
96.3%	156	156	0	0.0%
97.5%	156	156	0	0.0%
98.8%	156	156	0	0.0%
100.0%	156	156	0	0.0%

Table SW-06-b
Clear Creek below Whiskeytown Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	200	200	0	0.0%
1.2%	200	200	0	0.0%
2.5%	200	200	0	0.0%
3.7%	200	200	0	0.0%
4.9%	200	200	0	0.0%
6.2%	200	200	0	0.0%
7.4%	200	200	0	0.0%
8.6%	200	200	0	0.0%
9.9%	200	200	0	0.0%
11.1%	200	200	0	0.0%
12.3%	200	200	0	0.0%
13.6%	200	200	0	0.0%
14.8%	200	200	0	0.0%
16.0%	200	200	0	0.0%
17.3%	200	200	0	0.0%
18.5%	200	200	0	0.0%
19.8%	200	200	0	0.0%
21.0%	200	200	0	0.0%
22.2%	200	200	0	0.0%
23.5%	200	200	0	0.0%
24.7%	200	200	0	0.0%
25.9%	200	200	0	0.0%
27.2%	200	200	0	0.0%
28.4%	200	200	0	0.0%
29.6%	200	200	0	0.0%
30.9%	200	200	0	0.0%
32.1%	200	200	0	0.0%
33.3%	200	200	0	0.0%
34.6%	200	200	0	0.0%
35.8%	200	200	0	0.0%
37.0%	200	200	0	0.0%
38.3%	200	200	0	0.0%
39.5%	200	200	0	0.0%
40.7%	200	200	0	0.0%
42.0%	200	200	0	0.0%
43.2%	200	200	0	0.0%
44.4%	200	200	0	0.0%
45.7%	200	200	0	0.0%
46.9%	200	200	0	0.0%
48.1%	200	200	0	0.0%
49.4%	200	200	0	0.0%
50.6%	200	200	0	0.0%
51.9%	200	200	0	0.0%
53.1%	200	200	0	0.0%
54.3%	200	200	0	0.0%
55.6%	200	200	0	0.0%
56.8%	200	200	0	0.0%
58.0%	200	200	0	0.0%
59.3%	200	200	0	0.0%
60.5%	200	200	0	0.0%
61.7%	200	200	0	0.0%
63.0%	200	200	0	0.0%
64.2%	200	200	0	0.0%
65.4%	200	200	0	0.0%
66.7%	200	200	0	0.0%
67.9%	200	200	0	0.0%
69.1%	200	200	0	0.0%
70.4%	200	200	0	0.0%
71.6%	200	200	0	0.0%
72.8%	200	200	0	0.0%
74.1%	200	200	0	0.0%
75.3%	200	200	0	0.0%
76.5%	150	150	0	0.0%
77.8%	150	150	0	0.0%
79.0%	150	150	0	0.0%
80.2%	150	150	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85	85	0	0.0%
1.2%	85	85	0	0.0%
2.5%	85	85	0	0.0%
3.7%	85	85	0	0.0%
4.9%	85	85	0	0.0%
6.2%	85	85	0	0.0%
7.4%	85	85	0	0.0%
8.6%	85	85	0	0.0%
9.9%	85	85	0	0.0%
11.1%	85	85	0	0.0%
12.3%	85	85	0	0.0%
13.6%	85	85	0	0.0%
14.8%	85	85	0	0.0%
16.0%	85	85	0	0.0%
17.3%	85	85	0	0.0%
18.5%	85	85	0	0.0%
19.8%	85	85	0	0.0%
21.0%	85	85	0	0.0%
22.2%	85	85	0	0.0%
23.5%	85	85	0	0.0%
24.7%	85	85	0	0.0%
25.9%	85	85	0	0.0%
27.2%	85	85	0	0.0%
28.4%	85	85	0	0.0%
29.6%	85	85	0	0.0%
30.9%	85	85	0	0.0%
32.1%	85	85	0	0.0%
33.3%	85	85	0	0.0%
34.6%	85	85	0	0.0%
35.8%	85	85	0	0.0%
37.0%	85	85	0	0.0%
38.3%	85	85	0	0.0%
39.5%	85	85	0	0.0%
40.7%	85	85	0	0.0%
42.0%	85	85	0	0.0%
43.2%	85	85	0	0.0%
44.4%	85	85	0	0.0%
45.7%	85	85	0	0.0%
46.9%	85	85	0	0.0%
48.1%	85	85	0	0.0%
49.4%	85	85	0	0.0%
50.6%	85	85	0	0.0%
51.9%	85	85	0	0.0%
53.1%	85	85	0	0.0%
54.3%	85	85	0	0.0%
55.6%	85	85	0	0.0%
56.8%	85	85	0	0.0%
58.0%	85	85	0	0.0%
59.3%	85	85	0	0.0%
60.5%	85	85	0	0.0%
61.7%	85	85	0	0.0%
63.0%	85	85	0	0.0%
64.2%	85	85	0	0.0%
65.4%	85	85	0	0.0%
66.7%	85	85	0	0.0%
67.9%	85	85	0	0.0%
69.1%	85	85	0	0.0%
70.4%	85	85	0	0.0%
71.6%	85	85	0	0.0%
72.8%	85	85	0	0.0%
74.1%	85	85	0	0.0%
75.3%	85	85	0	0.0%
76.5%	85	85	0	0.0%
77.8%	85	85	0	0.0%
79.0%	85	85	0	0.0%
80.2%	85	85	0	0.0%
81.5%	85	85	0	0.0%
82.7%	85	85	0	0.0%
84.0%	85	85	0	0.0%
85.2%	85	85	0	0.0%
86.4%	85	85	0	0.0%
87.7%	85	85	0	0.0%
88.9%	85	85	0	0.0%
90.1%	85	85	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	0	-85	-100.0%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85	85	0	0.0%
1.2%	85	85	0	0.0%
2.5%	85	85	0	0.0%
3.7%	85	85	0	0.0%
4.9%	85	85	0	0.0%
6.2%	85	85	0	0.0%
7.4%	85	85	0	0.0%
8.6%	85	85	0	0.0%
9.9%	85	85	0	0.0%
11.1%	85	85	0	0.0%
12.3%	85	85	0	0.0%
13.6%	85	85	0	0.0%
14.8%	85	85	0	0.0%
16.0%	85	85	0	0.0%
17.3%	85	85	0	0.0%
18.5%	85	85	0	0.0%
19.8%	85	85	0	0.0%
21.0%	85	85	0	0.0%
22.2%	85	85	0	0.0%
23.5%	85	85	0	0.0%
24.7%	85	85	0	0.0%
25.9%	85	85	0	0.0%
27.2%	85	85	0	0.0%
28.4%	85	85	0	0.0%
29.6%	85	85	0	0.0%
30.9%	85	85	0	0.0%
32.1%	85	85	0	0.0%
33.3%	85	85	0	0.0%
34.6%	85	85	0	0.0%
35.8%	85	85	0	0.0%
37.0%	85	85	0	0.0%
38.3%	85	85	0	0.0%
39.5%	85	85	0	0.0%
40.7%	85	85	0	0.0%
42.0%	85	85	0	0.0%
43.2%	85	85	0	0.0%
44.4%	85	85	0	0.0%
45.7%	85	85	0	0.0%
46.9%	85	85	0	0.0%
48.1%	85	85	0	0.0%
49.4%	85	85	0	0.0%
50.6%	85	85	0	0.0%
51.9%	85	85	0	0.0%
53.1%	85	85	0	0.0%
54.3%	85	85	0	0.0%
55.6%	85	85	0	0.0%
56.8%	85	85	0	0.0%
58.0%	85	85	0	0.0%
59.3%	85	85	0	0.0%
60.5%	85	85	0	0.0%
61.7%	85	85	0	0.0%
63.0%	85	85	0	0.0%
64.2%	85	85	0	0.0%
65.4%	85	85	0	0.0%
66.7%	85	85	0	0.0%
67.9%	85	85	0	0.0%
69.1%	85	85	0	0.0%
70.4%	85	85	0	0.0%
71.6%	85	85	0	0.0%
72.8%	85	85	0	0.0%
74.1%	85	85	0	0.0%
75.3%	85	85	0	0.0%
76.5%	85	85	0	0.0%
77.8%	85	85	0	0.0%
79.0%	85	85	0	0.0%
80.2%	85	85	0	0.0%
81.5%	85	85	0	0.0%
82.7%	85	85	0	0.0%
84.0%	85	85	0	0.0%
85.2%	85	85	0	0.0%
86.4%	85	85	0	0.0%
87.7%	85	85	0	0.0%
88.9%	85	85	0	0.0%
90.1%	85	85	0	0.0%
91.4%	85	85	0	0.0%
92.6%	85	85	0	0.0%
93.8%	85	85	0	0.0%
95.1%	85	85	0	0.0%
96.3%	85	85	0	0.0%
97.5%	85	85	0	0.0%
98.8%	85	85	0	0.0%
100.0%	85	85	0	0.0%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	150	150	0	0.0%
1.2%	150	150	0	0.0%
2.5%	150	150	0	0.0%
3.7%	150	150	0	0.0%
4.9%	150	150	0	0.0%
6.2%	150	150	0	0.0%
7.4%	150	150	0	0.0%
8.6%	150	150	0	0.0%
9.9%	150	150	0	0.0%
11.1%	150	150	0	0.0%
12.3%	150	150	0	0.0%
13.6%	150	150	0	0.0%
14.8%	150	150	0	0.0%
16.0%	150	150	0	0.0%
17.3%	150	150	0	0.0%
18.5%	150	150	0	0.0%
19.8%	150	150	0	0.0%
21.0%	150	150	0	0.0%
22.2%	150	150	0	0.0%
23.5%	150	150	0	0.0%
24.7%	150	150	0	0.0%
25.9%	150	150	0	0.0%
27.2%	150	150	0	0.0%
28.4%	150	150	0	0.0%
29.6%	150	150	0	0.0%
30.9%	150	150	0	0.0%
32.1%	150	150	0	0.0%
33.3%	150	150	0	0.0%
34.6%	150	150	0	0.0%
35.8%	150	150	0	0.0%
37.0%	150	150	0	0.0%
38.3%	150	150	0	0.0%
39.5%	150	150	0	0.0%
40.7%	150	150	0	0.0%
42.0%	150	150	0	0.0%
43.2%	150	150	0	0.0%
44.4%	150	150	0	0.0%
45.7%	150	150	0	0.0%
46.9%	150	150	0	0.0%
48.1%	150	150	0	0.0%
49.4%	150	150	0	0.0%
50.6%	150	150	0	0.0%
51.9%	150	150	0	0.0%
53.1%	150	150	0	0.0%
54.3%	150	150	0	0.0%
55.6%	150	150	0	0.0%
56.8%	150	150	0	0.0%
58.0%	150	150	0	0.0%
59.3%	150	150	0	0.0%
60.5%	150	150	0	0.0%
61.7%	150	150	0	0.0%
63.0%	150	150	0	0.0%
64.2%	150	150	0	0.0%
65.4%	150	150	0	0.0%
66.7%	150	150	0	0.0%
67.9%	150	150	0	0.0%
69.1%	150	150	0	0.0%
70.4%	150	150	0	0.0%
71.6%	150	150	0	0.0%
72.8%	150	150	0	0.0%
74.1%	150	150	0	0.0%
75.3%	150	150	0	0.0%
76.5%	150	150	0	0.0%
77.8%	150	150	0	0.0%
79.0%	150	150	0	0.0%
80.2%	150	150	0	0.0%
81.5%	150	150	0	0.0%
82.7%	150	150	0	0.0%
84.0%	150	150	0	0.0%
85.2%	150	150	0	0.0%
86.4%	150	150	0	0.0%
87.7%	150	150	0	0.0%
88.9%	150	150	0	0.0%
90.1%	150	150	0	0.0%
91.4%	150	150	0	0.0%
92.6%	150	150	0	0.0%
93.8%	150	150	0	0.0%
95.1%	150	150	0	0.0%
96.3%	150	150	0	0.0%
97.5%	150	150	0	0.0%
98.8%	50	50	0	0.0%
100.0%	50	50	0	0.0%

Figure SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

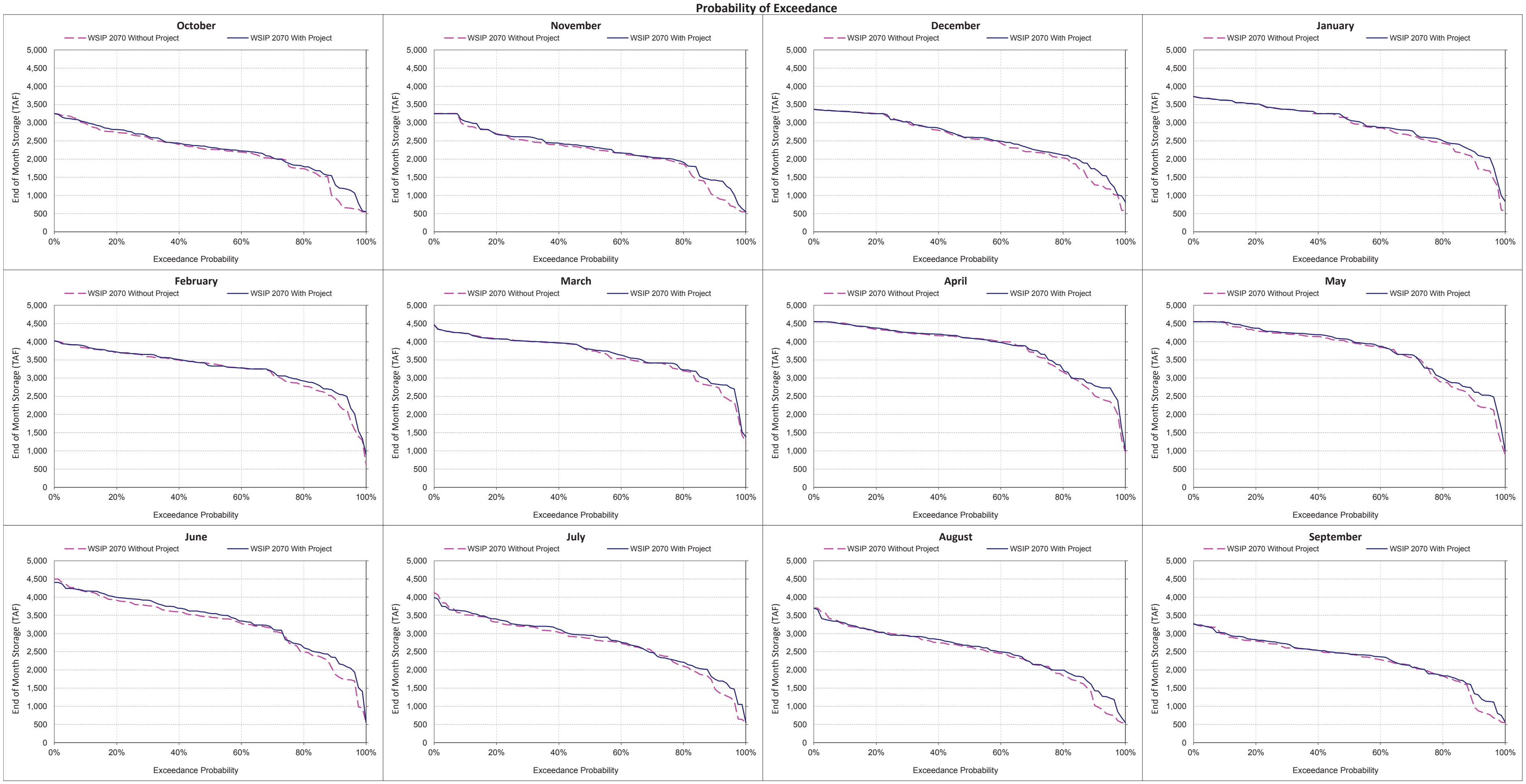


Table SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,250	3,250	0	0.0%
1.2%	3,239	3,230	-9	-0.3%
2.5%	3,200	3,150	-50	-1.6%
3.7%	3,190	3,118	-72	-2.3%
4.9%	3,184	3,113	-71	-2.2%
6.2%	3,137	3,094	-43	-1.4%
7.4%	3,104	3,089	-15	-0.5%
8.6%	3,012	3,041	29	0.9%
9.9%	2,982	3,022	40	1.3%
11.1%	2,925	2,987	62	2.1%
12.3%	2,877	2,964	86	3.0%
13.6%	2,857	2,926	70	2.4%
14.8%	2,789	2,909	120	4.3%
16.0%	2,768	2,854	86	3.1%
17.3%	2,761	2,840	79	2.8%
18.5%	2,755	2,815	60	2.2%
19.8%	2,737	2,814	77	2.8%
21.0%	2,722	2,806	84	3.1%
22.2%	2,716	2,800	83	3.1%
23.5%	2,709	2,763	54	2.0%
24.7%	2,670	2,747	77	2.9%
25.9%	2,647	2,696	49	1.8%
27.2%	2,637	2,692	55	2.1%
28.4%	2,628	2,687	59	2.2%
29.6%	2,613	2,640	27	1.0%
30.9%	2,553	2,594	41	1.6%
32.1%	2,530	2,589	59	2.3%
33.3%	2,498	2,579	81	3.2%
34.6%	2,486	2,526	39	1.6%
35.8%	2,459	2,463	4	0.2%
37.0%	2,453	2,458	5	0.2%
38.3%	2,446	2,445	-1	0.0%
39.5%	2,411	2,443	32	1.3%
40.7%	2,385	2,425	40	1.7%
42.0%	2,368	2,402	34	1.4%
43.2%	2,346	2,393	47	2.0%
44.4%	2,342	2,375	33	1.4%
45.7%	2,318	2,372	54	2.3%
46.9%	2,294	2,361	67	2.9%
48.1%	2,276	2,359	83	3.7%
49.4%	2,271	2,328	57	2.5%
50.6%	2,266	2,318	51	2.3%
51.9%	2,262	2,311	50	2.2%
53.1%	2,260	2,280	20	0.9%
54.3%	2,246	2,276	30	1.3%
55.6%	2,222	2,266	44	2.0%
56.8%	2,217	2,249	32	1.4%
58.0%	2,204	2,248	44	2.0%
59.3%	2,198	2,231	33	1.5%
60.5%	2,190	2,224	35	1.6%
61.7%	2,173	2,218	45	2.1%
63.0%	2,168	2,201	34	1.6%
64.2%	2,131	2,194	63	3.0%
65.4%	2,101	2,171	70	3.3%
66.7%	2,037	2,160	123	6.1%
67.9%	2,034	2,095	61	3.0%
69.1%	2,030	2,079	49	2.4%
70.4%	2,009	2,023	14	0.7%
71.6%	2,005	1,994	-11	-0.5%
72.8%	2,004	1,994	-10	-0.5%
74.1%	1,980	1,921	-59	-3.0%
75.3%	1,793	1,883	90	5.0%
76.5%	1,762	1,835	73	4.1%
77.8%	1,753	1,829	76	4.3%
79.0%	1,738	1,824	87	5.0%
80.2%	1,736	1,790	55	3.1%
81.5%	1,688	1,785	97	5.7%
82.7%	1,649	1,727	78	4.7%
84.0%	1,606	1,678	73	4.5%
85.2%	1,524	1,677	153	10.0%
86.4%	1,523	1,589	66	4.3%
87.7%	1,519	1,562	43	2.8%
88.9%	1,002	1,544	542	54.1%
90.1%	935	1,287	352	37.7%
91.4%	827	1,205	378	45.7%
92.6%	661	1,193	532	80.5%
93.8%	661	1,171	510	77.3%
95.1%	650	1,136	486	74.8%
96.3%	629	1,065	436	69.3%
97.5%	620	780	159	25.7%
98.8%	550	574	24	4.4%
100.0%	550	550	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,252	3,252	0	0.0%
1.2%	3,252	3,252	0	0.0%
2.5%	3,252	3,252	0	0.0%
3.7%	3,252	3,252	0	0.0%
4.9%	3,252	3,252	0	0.0%
6.2%	3,252	3,252	0	0.0%
7.4%	3,252	3,252	0	0.0%
8.6%	2,995	3,091	95	3.2%
9.9%	2,932	3,045	113	3.9%
11.1%	2,892	3,025	133	4.6%
12.3%	2,891	2,984	93	3.2%
13.6%	2,849	2,980	132	4.6%
14.8%	2,835	2,818	-17	-0.6%
16.0%	2,818	2,816	-2	-0.1%
17.3%	2,809	2,812	3	0.1%
18.5%	2,765	2,752	-13	-0.5%
19.8%	2,705	2,684	-21	-0.8%
21.0%	2,676	2,665	-11	-0.4%
22.2%	2,672	2,655	-18	-0.7%
23.5%	2,628	2,647	19	0.7%
24.7%	2,552	2,623	70	2.8%
25.9%	2,540	2,617	78	3.1%
27.2%	2,535	2,617	82	3.2%
28.4%	2,531	2,616	85	3.4%
29.6%	2,509	2,613	104	4.2%
30.9%	2,496	2,609	113	4.5%
32.1%	2,466	2,585	119	4.8%
33.3%	2,463	2,552	89	3.6%
34.6%	2,445	2,545	100	4.1%
35.8%	2,434	2,455	21	0.9%
37.0%	2,401	2,454	53	2.2%
38.3%	2,399	2,445	46	1.9%
39.5%	2,397	2,444	46	1.9%
40.7%	2,392	2,428	36	1.5%
42.0%	2,354	2,407	53	2.3%
43.2%	2,353	2,405	53	2.2%
44.4%	2,352	2,396	44	1.9%
45.7%	2,340	2,393	54	2.3%
46.9%	2,320	2,374	55	2.4%
48.1%	2,311	2,356	45	1.9%
49.4%	2,310	2,346	36	1.6%
50.6%	2,274	2,342	68	3.0%
51.9%	2,250	2,317	67	3.0%
53.1%	2,243	2,309	66	2.9%
54.3%	2,231	2,288	57	2.6%
55.6%	2,220	2,271	51	2.3%
56.8%	2,189	2,267	79	3.6%
58.0%	2,178	2,173	-4	-0.2%
59.3%	2,173	2,172	-1	0.0%
60.5%	2,166	2,163	-3	-0.1%
61.7%	2,120	2,155	36	1.7%
63.0%	2,112	2,155	43	2.0%
64.2%	2,104	2,111	6	0.3%
65.4%	2,100	2,093	-7	-0.3%
66.7%	2,078	2,085	7	0.3%
67.9%	2,057	2,079	21	1.0%
69.1%	2,017	2,060	43	2.1%
70.4%	2,011	2,042	31	1.5%
71.6%	2,009	2,037	27	1.4%
72.8%	2,009	2,031	23	1.1%
74.1%	1,997	2,015	18	0.9%
75.3%	1,966	2,013	47	2.4%
76.5%	1,942	1,999	58	3.0%
77.8%	1,908	1,963	56	2.9%
79.0%	1,876	1,943	67	3.6%
80.2%	1,856	1,899	43	2.3%
81.5%	1,722	1,809	87	5.0%
82.7%	1,538	1,800	262	17.0%
84.0%	1,451	1,795	344	23.7%
85.2%	1,416	1,529	113	8.0%
86.4%	1,406	1,474	67	4.8%
87.7%	1,249	1,449	200	16.0%
88.9%	1,039	1,422	383	36.8%
90.1%	980	1,421	441	45.1%
91.4%	912	1,405	492	54.0%
92.6%	882	1,387	505	57.2%
93.8%	862	1,251	389	45.1%
95.1%	713	1,187	475	66.6%
96.3%	687	1,017	331	48.2%
97.5%	600	761	162	27.0%
98.8%	550	640	90	16.5%
100.0%	550	550	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,368	3,368	0	0.0%
1.2%	3,354	3,354	0	0.0%
2.5%	3,349	3,349	0	0.0%
3.7%	3,349	3,338	-11	-0.3%
4.9%	3,338	3,337	-1	0.0%
6.2%	3,328	3,328	0	0.0%
7.4%	3,322	3,322	0	0.0%
8.6%	3,319	3,317	-2	-0.1%
9.9%	3,317	3,310	-7	-0.2%
11.1%	3,310	3,306	-4	-0.1%
12.3%	3,306	3,291	-15	-0.4%
13.6%	3,291	3,285	-6	-0.2%
14.8%	3,285	3,276	-9	-0.3%
16.0%	3,276	3,267	-9	-0.3%
17.3%	3,267	3,265	-2	-0.1%
18.5%	3,265	3,252	-13	-0.4%
19.8%	3,252	3,252	0	0.0%
21.0%	3,252	3,252	0	0.0%
22.2%	3,252	3,251	-1	0.0%
23.5%	3,173	3,218	46	1.4%
24.7%	3,169	3,089	-81	-2.6%
25.9%	3,099	3,084	-15	-0.5%
27.2%	3,055	3,069	14	0.5%
28.4%	3,051	3,027	-24	-0.8%
29.6%	3,048	3,023	-24	-0.8%
30.9%	2,957	3,022	66	2.2%
32.1%	2,921	2,947	25	0.9%
33.3%	2,921	2,936	15	0.5%
34.6%	2,903	2,924	20	0.7%
35.8%	2,893	2,886	-7	-0.3%
37.0%	2,853	2,870	17	0.6%
38.3%	2,810	2,870	59	2.1%
39.5%	2,801	2,862	61	2.2%
40.7%	2,776	2,834	58	2.1%
42.0%	2,761	2,791	31	1.1%
43.2%	2,714	2,748	34	1.3%
44.4%	2,669	2,719	50	1.9%
45.7%	2,649	2,679	30	1.1%
46.9%	2,635	2,651	16	0.6%
48.1%	2,594	2,603	8	0.3%
49.4%	2,566	2,601	35	1.4%
50.6%	2,559	2,600	41	1.6%
51.9%	2,550	2,595	45	1.7%
53.1%	2,546	2,591	45	1.8%
54.3%	2,540	2,586	46	1.8%
55.6%	2,530	2,571	42	1.6%
56.8%	2,500	2,536	36	1.4%
58.0%	2,491	2,511	20	0.8%
59.3%	2,482	2,504	21	0.8%
60.5%	2,414	2,488	74	3.1%
61.7%	2,369	2,458	89	3.7%
63.0%	2,312	2,455	143	6.2%
64.2%	2,307	2,413	106	4.6%
65.4%	2,303	2,405	102	4.4%
66.7%	2,243	2,365	122	5.4%
67.9%	2,206	2,338	132	6.0%
69.1%	2,204	2,302	98	4.4%
70.4%	2,202	2,266	65	2.9%
71.6%	2,179	2,241	61	2.8%
72.8%	2,177	2,226	48	2.2%
74.1%	2,154	2,201	47	2.2%
75.3%	2,151	2,195	44	2.1%
76.5%	2,073	2,171	98	4.7%
77.8%	2,055	2,148	93	4.5%
79.0%	2,035	2,132	97	4.8%
80.2%	2,034	2,101	67	3.3%
81.5%	1,999	2,101	103	5.1%
82.7%	1,877	2,038	161	8.6%
84.0%	1,868	2,026	158	8.5%
85.2%	1,729	1,972	243	14.1%
86.4%	1,716	1,891	175	10.2%
87.7%	1,505	1,887	383	25.4%
88.9%	1,411	1,741	329	23.3%
90.1%	1,292	1,737	444	34.4%
91.4%	1,280	1,657	378	29.5%
92.6%	1,267	1,552	285	22.5%
93.8%	1,181	1,537	356	30.1%
95.1%	1,177	1,347	170	14.4%
96.3%	1,022	1,233	212	20.7%
97.5%	1,004	1,020	16	1.6%
98.8%	592	985	393	66.3%
100.0%	580	815	235	40.5%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,723	3,723	0	0.0%
1.2%	3,698	3,698	0	0.0%
2.5%	3,678	3,678	0	0.0%
3.7%	3,668	3,668	0	0.0%
4.9%	3,667	3,668	1	0.0%
6.2%	3,650	3,650	0	0.0%
7.4%	3,640	3,640	0	0.0%
8.6%	3,624	3,624	0	0.0%
9.9%	3,622	3,622	0	0.0%
11.1%	3,616	3,616	0	0.0%
12.3%	3,604	3,604	0	0.0%
13.6%	3,552	3,552	0	0.0%
14.8%	3,552	3,552	0	0.0%
16.0%	3,551	3,551	0	0.0%
17.3%	3,531	3,531	0	0.0%
18.5%	3,528	3,528	0	0.0%
19.8%	3,515	3,515	0	0.0%
21.0%	3,515	3,515	0	0.0%
22.2%	3,467	3,481	15	0.4%
23.5%	3,419	3,426	7	0.2%
24.7%	3,416	3,419	3	0.1%
25.9%	3,408	3,398	-10	-0.3%
27.2%	3,389	3,389	0	0.0%
28.4%	3,371	3,371	0	0.0%
29.6%	3,368	3,368	0	0.0%
30.9%	3,366	3,366	0	0.0%
32.1%	3,358	3,358	0	0.0%
33.3%	3,339	3,339	0	0.0%
34.6%	3,328	3,321	-7	-0.2%
35.8%	3,321	3,321	0	0.0%
37.0%	3,317	3,317	0	0.0%
38.3%	3,252	3,311	59	1.8%
39.5%	3,252	3,252	0	0.0%
40.7%	3,252	3,252	0	0.0%
42.0%	3,252	3,252	0	0.0%
43.2%	3,252	3,252	0	0.0%
44.4%	3,252	3,252	0	0.0%
45.7%	3,215	3,251	36	1.1%
46.9%	3,153	3,246	93	3.0%
48.1%	3,149	3,166	17	0.5%
49.4%	3,144	3,090	-54	-1.7%
50.6%	2,996	3,059	63	2.1%
51.9%	2,963	3,041	78	2.6%
53.1%	2,962	3,027	65	2.2%
54.3%	2,918	2,988	69	2.4%
55.6%	2,888	2,904	16	0.6%
56.8%	2,876	2,903	27	1.0%
58.0%	2,869	2,899	29	1.0%
59.3%	2,857	2,875	18	0.6%
60.5%	2,855	2,872	17	0.6%
61.7%	2,817	2,865	48	1.7%
63.0%	2,804	2,856	52	1.9%
64.2%	2,742	2,839	96	3.5%
65.4%	2,706	2,811	106	3.9%
66.7%	2,687	2,804	116	4.3%
67.9%	2,685	2,799	114	4.3%
69.1%	2,660	2,795	135	5.1%
70.4%	2,622	2,770	148	5.7%
71.6%	2,612	2,656	44	1.7%
72.8%	2,555	2,600	45	1.8%
74.1%	2,535	2,597	62	2.4%
75.3%	2,520	2,587	67	2.7%
76.5%	2,478	2,581	103	4.2%
77.8%	2,469	2,576	107	4.3%
79.0%	2,451	2,541	90	3.7%
80.2%	2,431	2,494	63	2.6%
81.5%	2,414	2,450	36	1.5%
82.7%	2,375	2,431	56	2.3%
84.0%	2,203	2,422	218	9.9%
85.2%	2,183	2,409	225	10.3%
86.4%	2,164	2,349	185	8.5%
87.7%	2,117	2,298	181	8.5%
88.9%	2,096	2,250	154	7.3%
90.1%	1,979	2,201	222	11.2%
91.4%	1,727	2,098	371	21.5%
92.6%	1,724	2,079	355	20.6%
93.8%	1,689	2,045	356	21.1%
95.1%	1,674	2,033	360	21.5%
96.3%	1,441	1,773	332	23.1%
97.5%	1,258	1,377	118	9.4%
98.8%	600	1,000	400	66.6%
100.0%	571	837	266	46.6%

Table SW-07-b
Shasta Lake, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,022	4,022	0	0.0%
1.2%	4,005	4,005	0	0.0%
2.5%	3,979	3,944	-35	-0.9%
3.7%	3,944	3,938	-6	-0.1%
4.9%	3,920	3,920	0	0.0%
6.2%	3,917	3,917	0	0.0%
7.4%	3,914	3,914	0	0.0%
8.6%	3,840	3,900	61	1.6%
9.9%	3,835	3,884	49	1.3%
11.1%	3,813	3,840	27	0.7%
12.3%	3,794	3,813	19	0.5%
13.6%	3,789	3,794	5	0.1%
14.8%	3,777	3,789	12	0.3%
16.0%	3,775	3,777	2	0.1%
17.3%	3,743	3,743	0	0.0%
18.5%	3,739	3,739	0	0.0%
19.8%	3,695	3,724	29	0.8%
21.0%	3,694	3,705	11	0.3%
22.2%	3,688	3,695	7	0.2%
23.5%	3,675	3,694	19	0.5%
24.7%	3,671	3,675	4	0.1%
25.9%	3,661	3,671	10	0.3%
27.2%	3,654	3,661	7	0.2%
28.4%	3,636	3,655	19	0.5%
29.6%	3,593	3,654	61	1.7%
30.9%	3,588	3,652	64	1.8%
32.1%	3,570	3,636	66	1.9%
33.3%	3,567	3,588	21	0.6%
34.6%	3,560	3,570	10	0.3%
35.8%	3,553	3,567	14	0.4%
37.0%	3,530	3,560	30	0.8%
38.3%	3,516	3,530	14	0.4%
39.5%	3,503	3,516	13	0.4%
40.7%	3,480	3,503	23	0.7%
42.0%	3,480	3,480	0	0.0%
43.2%	3,462	3,462	0	0.0%
44.4%	3,454	3,457	2	0.1%
45.7%	3,431	3,431	0	0.0%
46.9%	3,423	3,423	0	0.0%
48.1%	3,421	3,421	0	0.0%
49.4%	3,405	3,345	-59	-1.7%
50.6%	3,397	3,335	-62	-1.8%
51.9%	3,381	3,333	-48	-1.4%
53.1%	3,357	3,333	-24	-0.7%
54.3%	3,340	3,332	-8	-0.2%
55.6%	3,300	3,302	2	0.0%
56.8%	3,298	3,292	-6	-0.2%
58.0%	3,292	3,288	-4	-0.1%
59.3%	3,288	3,282	-7	-0.2%
60.5%	3,282	3,273	-9	-0.3%
61.7%	3,252	3,266	14	0.4%
63.0%	3,252	3,252	0	0.0%
64.2%	3,252	3,252	0	0.0%
65.4%	3,252	3,252	0	0.0%
66.7%	3,252	3,252	0	0.0%
67.9%	3,218	3,252	34	1.1%
69.1%	3,202	3,212	11	0.3%
70.4%	3,067	3,159	92	3.0%
71.6%	3,040	3,067	27	0.9%
72.8%	2,992	3,059	67	2.2%
74.1%	2,917	3,057	140	4.8%
75.3%	2,888	3,014	126	4.3%
76.5%	2,872	2,987	114	4.0%
77.8%	2,867	2,972	105	3.7%
79.0%	2,824	2,938	114	4.0%
80.2%	2,775	2,920	145	5.2%
81.5%	2,768	2,887	119	4.3%
82.7%	2,733	2,885	153	5.6%
84.0%	2,670	2,842	172	6.4%
85.2%	2,640	2,789	149	5.6%
86.4%	2,619	2,702	83	3.2%
87.7%	2,531	2,702	170	6.7%
88.9%	2,516	2,679	163	6.5%
90.1%	2,424	2,613	190	7.8%
91.4%	2,243	2,556	314	14.0%
92.6%	2,140	2,541	401	18.8%
93.8%	2,137	2,499	362	16.9%
95.1%	1,809	2,175	365	20.2%
96.3%	1,584	2,019	435	27.4%
97.5%	1,396	1,551	155	11.1%
98.8%	1,293	1,332	39	3.0%
100.0%	624	907	283	45.4%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,462	4,462	0	0.0%
1.2%	4,347	4,347	0	0.0%
2.5%	4,323	4,323	0	0.0%
3.7%	4,292	4,292	0	0.0%
4.9%	4,280	4,280	0	0.0%
6.2%	4,256	4,256	0	0.0%
7.4%	4,248	4,248	0	0.0%
8.6%	4,246	4,246	0	0.0%
9.9%	4,229	4,229	0	0.0%
11.1%	4,226	4,226	0	0.0%
12.3%	4,178	4,162	-16	-0.4%
13.6%	4,162	4,142	-20	-0.5%
14.8%	4,142	4,114	-28	-0.7%
16.0%	4,114	4,106	-8	-0.2%
17.3%	4,106	4,096	-10	-0.2%
18.5%	4,100	4,081	-19	-0.5%
19.8%	4,081	4,077	-4	-0.1%
21.0%	4,077	4,076	0	0.0%
22.2%	4,076	4,072	-4	-0.1%
23.5%	4,071	4,071	0	0.0%
24.7%	4,060	4,039	-21	-0.5%
25.9%	4,033	4,033	0	0.0%
27.2%	4,030	4,030	0	0.0%
28.4%	4,022	4,022	0	0.0%
29.6%	4,019	4,016	-3	-0.1%
30.9%	4,010	4,010	1	0.0%
32.1%	4,000	4,010	10	0.2%
33.3%	4,000	4,000	0	0.0%
34.6%	3,991	4,000	9	0.2%
35.8%	3,980	3,991	11	0.3%
37.0%	3,979	3,980	1	0.0%
38.3%	3,976	3,979	3	0.1%
39.5%	3,965	3,976	11	0.3%
40.7%	3,962	3,965	3	0.1%
42.0%	3,953	3,960	7	0.2%
43.2%	3,940	3,953	13	0.3%
44.4%	3,937	3,940	3	0.1%
45.7%	3,927	3,931	4	0.1%
46.9%	3,873	3,873	0	0.0%
48.1%	3,819	3,819	0	0.0%
49.4%	3,756	3,799	43	1.1%
50.6%	3,745	3,787	42	1.1%
51.9%	3,742	3,768	26	0.7%
53.1%	3,700	3,756	56	1.5%
54.3%	3,700	3,745	45	1.2%
55.6%	3,647	3,743	96	2.6%
56.8%	3,544	3,706	163	4.6%
58.0%	3,538	3,671	133	3.8%
59.3%	3,535	3,647	113	3.2%
60.5%	3,534	3,627	93	2.6%
61.7%	3,520	3,589	68	1.9%
63.0%	3,504	3,552	48	1.4%
64.2%	3,477	3,546	69	2.0%
65.4%	3,466	3,534	68	2.0%
66.7%	3,435	3,504	69	2.0%
67.9%	3,417	3,435	18	0.5%
69.1%	3,417	3,417	1	0.0%
70.4%	3,416	3,417	1	0.0%
71.6%	3,416	3,416	0	0.0%
72.8%	3,416	3,416	0	0.0%
74.1%	3,385	3,416	31	0.9%
75.3%	3,369	3,411	42	1.2%
76.5%	3,272	3,407	135	4.1%
77.8%	3,256	3,374	118	3.6%
79.0%	3,211	3,247	36	1.1%
80.2%	3,194	3,227	33	1.0%
81.5%	3,181	3,226	45	1.4%
82.7%	3,163	3,195	32	1.0%
84.0%	2,930	3,186	256	8.7%
85.2%	2,887	3,049	161	5.6%
86.4%	2,828	3,003	174	6.2%
87.7%	2,811	2,977	166	5.9%
88.9%	2,788	2,855	67	2.4%
90.1%	2,774	2,842	69	2.5%
91.4%	2,729	2,828	99	3.6%
92.6%	2,502	2,812	310	12.4%
93.8%	2,446	2,811	365	14.9%
95.1%	2,374	2,737	363	15.3%
96.3%	2,355	2,704	349	14.8%
97.5%	1,932	2,189	258	13.3%
98.8%	1,437	1,528	91	6.3%
100.0%	1,224	1,386	161	13.2%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,552	4,552	0	0.0%
1.2%	4,552	4,552	0	0.0%
2.5%	4,546	4,552	6	0.1%
3.7%	4,546	4,552	6	0.1%
4.9%	4,544	4,546	2	0.0%
6.2%	4,530	4,540	10	0.2%
7.4%	4,522	4,517	-4	-0.1%
8.6%	4,513	4,491	-22	-0.5%
9.9%	4,512	4,479	-33	-0.7%
11.1%	4,479	4,476	-3	-0.1%
12.3%	4,456	4,456	0	0.0%
13.6%	4,436	4,431	-4	-0.1%
14.8%	4,417	4,430	13	0.3%
16.0%	4,412	4,425	12	0.3%
17.3%	4,384	4,408	24	0.6%
18.5%	4,360	4,384	23	0.5%
19.8%	4,343	4,379	35	0.8%
21.0%	4,336	4,371	35	0.8%
22.2%	4,319	4,351	31	0.7%
23.5%	4,317	4,343	26	0.6%
24.7%	4,295	4,311	16	0.4%
25.9%	4,289	4,308	19	0.4%
27.2%	4,254	4,289	35	0.8%
28.4%	4,252	4,265	13	0.3%
29.6%	4,247	4,260	13	0.3%
30.9%	4,235	4,254	19	0.5%
32.1%	4,218	4,248	30	0.7%
33.3%	4,217	4,232	15	0.4%
34.6%	4,214	4,229	15	0.4%
35.8%	4,206	4,224	18	0.4%
37.0%	4,190	4,218	28	0.7%
38.3%	4,173	4,217	44	1.0%
39.5%	4,169	4,210	41	1.0%
40.7%	4,167	4,207	41	1.0%
42.0%	4,159	4,184	25	0.6%
43.2%	4,158	4,178	19	0.5%
44.4%	4,158	4,174	16	0.4%
45.7%	4,137	4,173	36	0.9%
46.9%	4,121	4,137	16	0.4%
48.1%	4,114	4,109	-4	-0.1%
49.4%	4,112	4,098	-14	-0.3%
50.6%	4,094	4,094	0	0.0%
51.9%	4,091	4,077	-13	-0.3%
53.1%	4,085	4,074	-11	-0.3%
54.3%	4,074	4,058	-16	-0.4%
55.6%	4,058	4,050	-8	-0.2%
56.8%	4,050	4,007	-43	-1.1%
58.0%	4,028	4,003	-25	-0.6%
59.3%	4,023	3,990	-34	-0.8%
60.5%	3,999	3,971	-29	-0.7%
61.7%	3,999	3,944	-55	-1.4%
63.0%	3,998	3,925	-73	-1.8%
64.2%	3,948	3,898	-51	-1.3%
65.4%	3,882	3,896	13	0.3%
66.7%	3,882	3,895	13	0.3%
67.9%	3,865	3,887	22	0.6%
69.1%	3,722	3,797	75	2.0%
70.4%	3,710	3,759	49	1.3%
71.6%	3,603	3,752	148	4.1%
72.8%	3,558	3,658	100	2.8%
74.1%	3,554	3,653	99	2.8%
75.3%	3,405	3,502	97	2.9%
76.5%	3,357	3,474	117	3.5%
77.8%	3,302	3,384	82	2.5%
79.0%	3,212	3,360	148	4.6%
80.2%	3,156	3,196	40	1.3%
81.5%	3,094	3,161	67	2.2%
82.7%	3,016	2,999	-17	-0.6%
84.0%	2,965	2,995	30	1.0%
85.2%	2,911	2,980	69	2.4%
86.4%	2,811	2,971	160	5.7%
87.7%	2,738	2,875	137	5.0%
88.9%	2,657	2,863	206	7.8%
90.1%	2,509	2,789	280	11.1%
91.4%	2,470	2,759	289	11.7%
92.6%	2,416	2,734	318	13.2%
93.8%	2,381	2,730	349	14.7%
95.1%	2,355	2,730	374	15.9%
96.3%	2,224	2,542	318	14.3%
97.5%	2,001	2,387	386	19.3%
98.8%	1,310	1,613	303	23.1%
100.0%	955	1,010	54	5.7%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,552	4,552	0	0.0%
1.2%	4,552	4,552	0	0.0%
2.5%	4,552	4,552	0	0.0%
3.7%	4,552	4,552	0	0.0%
4.9%	4,552	4,552	0	0.0%
6.2%	4,552	4,552	0	0.0%
7.4%	4,552	4,544	-8	-0.2%
8.6%	4,552	4,543	-9	-0.2%
9.9%	4,552	4,530	-22	-0.5%
11.1%	4,450	4,528	78	1.8%
12.3%	4,417	4,493	76	1.7%
13.6%	4,406	4,472	66	1.5%
14.8%	4,402	4,470	68	1.5%
16.0%	4,401	4,436	35	0.8%
17.3%	4,340	4,418	77	1.8%
18.5%	4,340	4,389	50	1.1%
19.8%	4,299	4,374	75	1.8%
21.0%	4,287	4,369	82	1.9%
22.2%	4,283	4,312	29	0.7%
23.5%	4,271	4,289	18	0.4%
24.7%	4,246	4,288	42	1.0%
25.9%	4,240	4,282	42	1.0%
27.2%	4,240	4,275	35	0.8%
28.4%	4,229	4,251	22	0.5%
29.6%	4,221	4,249	28	0.7%
30.9%	4,203	4,245	42	1.0%
32.1%	4,203	4,233	31	0.7%
33.3%	4,189	4,230	41	1.0%
34.6%	4,185	4,227	42	1.0%
35.8%	4,160	4,219	59	1.4%
37.0%	4,150	4,211	61	1.5%
38.3%	4,144	4,201	57	1.4%
39.5%	4,142	4,197	55	1.3%
40.7%	4,140	4,194	54	1.3%
42.0%	4,103	4,181	78	1.9%
43.2%	4,098	4,156	57	1.4%
44.4%	4,056	4,140	84	2.1%
45.7%	4,046	4,097	51	1.3%
46.9%	4,039	4,090	50	1.2%
48.1%	4,036	4,077	41	1.0%
49.4%	3,994	4,075	81	2.0%
50.6%	3,993	4,036	43	1.1%
51.9%	3,953	3,981	28	0.7%
53.1%	3,946	3,976	30	0.7%
54.3%	3,911	3,962	51	1.3%
55.6%	3,898	3,944	46	1.2%
56.8%	3,882	3,944	62	1.6%
58.0%	3,879	3,928	48	1.2%
59.3%	3,850	3,880	31	0.8%
60.5%	3,842	3,875	34	0.9%
61.7%	3,837	3,820	-17	-0.4%
63.0%	3,791	3,798	8	0.2%
64.2%	3,785	3,719	-66	-1.8%
65.4%	3,658	3,654	-4	-0.1%
66.7%	3,655	3,652	-3	-0.1%
67.9%	3,620	3,648	29	0.8%
69.1%	3,573	3,648	74	2.1%
70.4%	3,566	3,638	72	2.0%
71.6%	3,547	3,574	27	0.8%
72.8%	3,505	3,432	-73	-2.1%
74.1%	3,383	3,278	-104	-3.1%
75.3%	3,260	3,269	8	0.3%
76.5%	3,046	3,243	197	6.5%
77.8%	2,999	3,092	93	3.1%
79.0%	2,900	3,040	140	4.8%
80.2%	2,880	2,992	112	3.9%
81.5%	2,879	2,925	46	1.6%
82.7%	2,762	2,874	112	4.0%
84.0%	2,739	2,873	134	4.9%
85.2%	2,683	2,861	178	6.6%
86.4%	2,659	2,778	118	4.5%
87.7%	2,613	2,753	140	5.4%
88.9%	2,477	2,742	265	10.7%
90.1%	2,370	2,613	243	10.3%
91.4%	2,234	2,611	377	16.9%
92.6%	2,195	2,536	340	15.5%
93.8%	2,193	2,534	341	15.6%
95.1%	2,171	2,523	352	16.2%
96.3%	2,121	2,486	365	17.2%
97.5%	1,571	2,051	480	30.6%
98.8%	1,202	1,624	422	35.1%
100.0%	900	1,004	104	11.6%

Table SW-07-b

Shasta Lake, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,500	4,407	-93	-2.1%
1.2%	4,500	4,402	-98	-2.2%
2.5%	4,404	4,365	-39	-0.9%
3.7%	4,355	4,242	-113	-2.6%
4.9%	4,269	4,240	-29	-0.7%
6.2%	4,262	4,232	-30	-0.7%
7.4%	4,235	4,214	-21	-0.5%
8.6%	4,180	4,201	20	0.5%
9.9%	4,158	4,168	11	0.3%
11.1%	4,132	4,168	36	0.9%
12.3%	4,129	4,161	32	0.8%
13.6%	4,095	4,160	64	1.6%
14.8%	4,013	4,121	108	2.7%
16.0%	4,003	4,094	91	2.3%
17.3%	3,942	4,041	99	2.5%
18.5%	3,934	4,023	89	2.3%
19.8%	3,918	3,996	78	2.0%
21.0%	3,890	3,982	92	2.4%
22.2%	3,882	3,973	91	2.4%
23.5%	3,881	3,961	80	2.1%
24.7%	3,846	3,955	110	2.8%
25.9%	3,796	3,948	152	4.0%
27.2%	3,791	3,944	153	4.0%
28.4%	3,786	3,922	136	3.6%
29.6%	3,769	3,920	151	4.0%
30.9%	3,760	3,905	145	3.9%
32.1%	3,747	3,858	111	3.0%
33.3%	3,714	3,814	99	2.7%
34.6%	3,657	3,782	125	3.4%
35.8%	3,637	3,751	115	3.2%
37.0%	3,619	3,750	131	3.6%
38.3%	3,605	3,740	135	3.7%
39.5%	3,600	3,697	98	2.7%
40.7%	3,598	3,691	93	2.6%
42.0%	3,553	3,669	116	3.3%
43.2%	3,521	3,619	99	2.8%
44.4%	3,517	3,619	102	2.9%
45.7%	3,507	3,619	111	3.2%
46.9%	3,480	3,602	122	3.5%
48.1%	3,466	3,591	125	3.6%
49.4%	3,463	3,565	102	2.9%
50.6%	3,442	3,548	106	3.1%
51.9%	3,436	3,548	112	3.3%
53.1%	3,414	3,514	101	2.9%
54.3%	3,403	3,497	94	2.8%
55.6%	3,400	3,496	96	2.8%
56.8%	3,391	3,443	52	1.5%
58.0%	3,338	3,414	75	2.3%
59.3%	3,306	3,348	42	1.3%
60.5%	3,260	3,344	85	2.6%
61.7%	3,255	3,323	69	2.1%
63.0%	3,248	3,312	64	2.0%
64.2%	3,206	3,238	32	1.0%
65.4%	3,200	3,236	36	1.1%
66.7%	3,200	3,236	36	1.1%
67.9%	3,174	3,226	53	1.7%
69.1%	3,161	3,200	39	1.2%
70.4%	3,050	3,104	53	1.8%
71.6%	3,047	3,092	45	1.5%
72.8%	3,013	3,089	76	2.5%
74.1%	2,917	2,830	-86	-3.0%
75.3%	2,734	2,797	63	2.3%
76.5%	2,702	2,732	30	1.1%
77.8%	2,657	2,720	63	2.4%
79.0%	2,494	2,694	200	8.0%
80.2%	2,493	2,600	107	4.3%
81.5%	2,474	2,570	96	3.9%
82.7%	2,398	2,515	117	4.9%
84.0%	2,394	2,491	97	4.0%
85.2%	2,366	2,481	115	4.9%
86.4%	2,316	2,440	124	5.3%
87.7%	2,267	2,433	166	7.3%
88.9%	2,068	2,349	281	13.6%
90.1%	1,875	2,346	471	25.1%
91.4%	1,796	2,167	371	20.7%
92.6%	1,748	2,143	396	22.7%
93.8%	1,732	2,084	352	20.3%
95.1%	1,726	2,044	318	18.4%
96.3%	1,695	1,938	243	14.4%
97.5%	986	1,505	519	52.6%
98.8%	950	1,411	460	48.4%
100.0%	550	550	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	4,123	3,987	-136	-3.3%
1.2%	4,060	3,949	-111	-2.7%
2.5%	3,849	3,746	-103	-2.7%
3.7%	3,839	3,741	-98	-2.6%
4.9%	3,698	3,652	-46	-1.2%
6.2%	3,682	3,644	-38	-1.0%
7.4%	3,578	3,641	63	1.8%
8.6%	3,570	3,624	54	1.5%
9.9%	3,511	3,620	108	3.1%
11.1%	3,508	3,592	84	2.4%
12.3%	3,501	3,547	46	1.3%
13.6%	3,473	3,532	59	1.7%
14.8%	3,468	3,487	19	0.5%
16.0%	3,459	3,485	26	0.8%
17.3%	3,458	3,437	-21	-0.6%
18.5%	3,331	3,409	78	2.3%
19.8%	3,317	3,404	87	2.6%
21.0%	3,313	3,370	57	1.7%
22.2%	3,259	3,355	96	3.0%
23.5%	3,242	3,335	93	2.9%
24.7%	3,239	3,269	30	0.9%
25.9%	3,224	3,255	31	1.0%
27.2%	3,200	3,244	44	1.4%
28.4%	3,200	3,229	29	0.9%
29.6%	3,200	3,227	27	0.8%
30.9%	3,187	3,221	34	1.1%
32.1%	3,176	3,200	24	0.7%
33.3%	3,145	3,200	55	1.7%
34.6%	3,089	3,200	111	3.6%
35.8%	3,088	3,200	112	3.6%
37.0%	3,079	3,190	111	3.6%
38.3%	3,069	3,180	112	3.6%
39.5%	3,047	3,124	77	2.5%
40.7%	3,014	3,096	82	2.7%
42.0%	3,008	3,033	25	0.8%
43.2%	2,922	2,997	75	2.6%
44.4%	2,917	2,978	60	2.1%
45.7%	2,906	2,974	68	2.3%
46.9%	2,905	2,964	60	2.1%
48.1%	2,886	2,963	78	2.7%
49.4%	2,870	2,952	82	2.8%
50.6%	2,868	2,946	78	2.7%
51.9%	2,813	2,920	108	3.8%
53.1%	2,807	2,901	95	3.4%
54.3%	2,791	2,897	106	3.8%
55.6%	2,789	2,896	107	3.8%
56.8%	2,783	2,814	31	1.1%
58.0%	2,769	2,810	42	1.5%
59.3%	2,767	2,785	18	0.7%
60.5%	2,718	2,750	32	1.2%
61.7%	2,698	2,734	37	1.4%
63.0%	2,653	2,682	29	1.1%
64.2%	2,637	2,665	28	1.1%
65.4%	2,622	2,640	19	0.7%
66.7%	2,591	2,602	12	0.4%
67.9%	2,590	2,544	-46	-1.8%
69.1%	2,567	2,485	-82	-3.2%
70.4%	2,484	2,473	-11	-0.4%
71.6%	2,426	2,369	-56	-2.3%
72.8%	2,398	2,336	-62	-2.6%
74.1%	2,374	2,328	-46	-1.9%
75.3%	2,370	2,303	-67	-2.8%
76.5%	2,224	2,282	58	2.6%
77.8%	2,171	2,248	77	3.6%
79.0%	2,124	2,223	98	4.6%
80.2%	2,097	2,209	112	5.4%
81.5%	2,065	2,143	78	3.8%
82.7%	1,976	2,123	146	7.4%
84.0%	1,947	2,063	116	6.0%
85.2%	1,881	2,037	156	8.3%
86.4%	1,856	2,019	163	8.8%
87.7%	1,834	2,011	177	9.7%
88.9%	1,735	1,820	84	4.9%
90.1%	1,468	1,746	278	18.9%
91.4%	1,378	1,696	318	23.1%
92.6%	1,341	1,693	352	26.3%
93.8%	1,281	1,630	349	27.2%
95.1%	1,238	1,503	264	21.4%
96.3%	1,135	1,475	340	30.0%
97.5%	650	1,053	403	62.0%
98.8%	638	1,053	415	65.1%
100.0%	550	550	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,700	3,700	0	0.0%
1.2%	3,700	3,655	-45	-1.2%
2.5%	3,587	3,414	-173	-4.8%
3.7%	3,563	3,381	-182	-5.1%
4.9%	3,416	3,365	-51	-1.5%
6.2%	3,389	3,339	-49	-1.5%
7.4%	3,363	3,332	-32	-0.9%
8.6%	3,285	3,315	30	0.9%
9.9%	3,252	3,291	38	1.2%
11.1%	3,200	3,242	42	1.3%
12.3%	3,187	3,217	30	1.0%
13.6%	3,179	3,200	21	0.7%
14.8%	3,155	3,150	-5	-0.2%
16.0%	3,152	3,141	-11	-0.4%
17.3%	3,106	3,118	12	0.4%
18.5%	3,091	3,102	11	0.4%
19.8%	3,047	3,073	26	0.9%
21.0%	3,029	3,034	5	0.2%
22.2%	3,028	3,032	4	0.1%
23.5%	3,026	2,982	-43	-1.4%
24.7%	2,997	2,956	-41	-1.4%
25.9%	2,986	2,955	-32	-1.1%
27.2%	2,965	2,949	-15	-0.5%
28.4%	2,958	2,947	-10	-0.3%
29.6%	2,948	2,940	-7	-0.3%
30.9%	2,937	2,923	-15	-0.5%
32.1%	2,918	2,920	2	0.1%
33.3%	2,902	2,919	17	0.6%
34.6%	2,835	2,914	79	2.8%
35.8%	2,816	2,889	73	2.6%
37.0%	2,804	2,859	55	2.0%
38.3%	2,765	2,857	92	3.3%
39.5%	2,751	2,844	93	3.4%
40.7%	2,744	2,826	82	3.0%
42.0%	2,733	2,795	62	2.3%
43.2%	2,699	2,777	78	2.9%
44.4%	2,699	2,755	56	2.1%
45.7%	2,697	2,724	27	1.0%
46.9%	2,666	2,710	44	1.7%
48.1%	2,649	2,680	31	1.2%
49.4%	2,632	2,676	45	1.7%
50.6%	2,621	2,653	32	1.2%
51.9%	2,581	2,648	66	2.6%
53.1%	2,574	2,645	71	2.8%
54.3%	2,554	2,604	50	2.0%
55.6%	2,503	2,603	100	4.0%
56.8%	2,496	2,535	39	1.6%
58.0%	2,483	2,525	42	1.7%
59.3%	2,461	2,497	35	1.4%
60.5%	2,450	2,489	40	1.6%
61.7%	2,427	2,482	55	2.3%
63.0%	2,366	2,461	95	4.0%
64.2%	2,344	2,409	65	2.8%
65.4%	2,343	2,390	47	2.0%
66.7%	2,311	2,367	57	2.5%
67.9%	2,281	2,261	-20	-0.9%
69.1%	2,216	2,239	23	1.1%
70.4%	2,146	2,152	6	0.3%
71.6%	2,134	2,147	14	0.6%
72.8%	2,126	2,140	13	0.6%
74.1%	2,099	2,088	-11	-0.5%
75.3%	2,093	2,043	-50	-2.4%
76.5%	1,951	2,000	49	2.5%
77.8%	1,906	1,997	91	4.7%
79.0%	1,899	1,991	93	4.9%
80.2%	1,824	1,990	166	9.1%
81.5%	1,802	1,920	118	6.6%
82.7%	1,731	1,879	148	8.5%
84.0%	1,711	1,832	121	7.1%
85.2%	1,658	1,822	164	9.9%
86.4%	1,620	1,800	180	11.1%
87.7%	1,511	1,693	182	12.1%
88.9%	1,408	1,611	203	14.4%
90.1%	1,022	1,428	407	39.8%
91.4%	970	1,418	449	46.3%
92.6%	915	1,271	356	38.9%
93.8%	800	1,265	465	58.1%
95.1%	768	1,221	453	59.0%
96.3%	746	1,188	442	59.3%
97.5%	602	849	247	41.1%
98.8%	550	690	140	25.5%
100.0%	550	550	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,275	3,265	-10	-0.3%
1.2%	3,228	3,237	9	0.3%
2.5%	3,200	3,231	31	1.0%
3.7%	3,200	3,200	0	0.0%
4.9%	3,188	3,174	-14	-0.4%
6.2%	3,176	3,150	-26	-0.8%
7.4%	3,174	3,028	-146	-4.6%
8.6%	2,996	3,024	29	1.0%
9.9%	2,987	3,019	33	1.1%
11.1%	2,903	2,969	66	2.3%
12.3%	2,896	2,934	38	1.3%
13.6%	2,870	2,921	50	1.8%
14.8%	2,862	2,919	57	2.0%
16.0%	2,817	2,910	93	3.3%
17.3%	2,811	2,854	43	1.5%
18.5%	2,807	2,843	36	1.3%
19.8%	2,795	2,836	41	1.5%
21.0%	2,780	2,811	31	1.1%
22.2%	2,778	2,810	32	1.2%
23.5%	2,726	2,791	65	2.4%
24.7%	2,721	2,779	58	2.1%
25.9%	2,713	2,773	60	2.2%
27.2%	2,708	2,748	40	1.5%
28.4%	2,641	2,732	91	3.4%
29.6%	2,604	2,719	115	4.4%
30.9%	2,601	2,693	92	3.5%
32.1%	2,601	2,623	23	0.9%
33.3%	2,588	2,601	12	0.5%
34.6%	2,585	2,587	2	0.1%
35.8%	2,571	2,576	4	0.2%
37.0%	2,562	2,568	6	0.2%
38.3%	2,551	2,552	1	0.1%
39.5%	2,543	2,540	-3	-0.1%
40.7%	2,510	2,528	18	0.7%
42.0%	2,479	2,526	47	1.9%
43.2%	2,478	2,498	21	0.8%
44.4%	2,476	2,492	15	0.6%
45.7%	2,468	2,473	5	0.2%
46.9%	2,465	2,467	1	0.1%
48.1%	2,462	2,454	-8	-0.3%
49.4%	2,457	2,449	-8	-0.3%
50.6%	2,422	2,429	6	0.3%
51.9%	2,414	2,428	14	0.6%
53.1%	2,387	2,417	30	1.3%
54.3%	2,355	2,415	60	2.5%
55.6%	2,354	2,408	54	2.3%
56.8%	2,338	2,399	61	2.6%
58.0%	2,311	2,373	62	2.7%
59.3%	2,292	2,363	71	3.1%
60.5%	2,270	2,354	84	3.7%
61.7%	2,249	2,342	93	4.1%
63.0%	2,230	2,287	57	2.5%
64.2%	2,191	2,231	41	1.9%
65.4%	2,172	2,187	15	0.7%
66.7%	2,169	2,151	-18	-0.8%
67.9%	2,155	2,133	-22	-1.0%
69.1%	2,133	2,132	-1	-0.1%
70.4%	2,122	2,063	-59	-2.8%
71.6%	2,031	2,061	31	1.5%
72.8%	2,029	2,019	-10	-0.5%
74.1%	2,011	2,013	2	0.1%
75.3%	1,962	1,893	-70	-3.5%
76.5%	1,921	1,891	-30	-1.5%
77.8%	1,872	1,890	18	1.0%
79.0%	1,842	1,865	24	1.3%
80.2%	1,827	1,839	12	0.7%
81.5%	1,774	1,834	60	3.4%
82.7%	1,759	1,800	41	2.3%
84.0%	1,700	1,773	73	4.3%
85.2%	1,682	1,721	39	2.3%
86.4%	1,612	1,710	98	6.1%
87.7%	1,599	1,625	25	1.6%
88.9%	1,299	1,598	298	22.9%
90.1%	978	1,347	368	37.6%
91.4%	877	1,318	441	50.2%
92.6%	836	1,188	352	42.1%
93.8%	800	1,135	335	41.9%
95.1%	771	1,127	356	46.2%
96.3%	683	1,118	435	63.7%
97.5%	653	800	147	22.5%
98.8%	563	755	193	34.3%
100.0%	550	576	26	4.6%

Figure SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

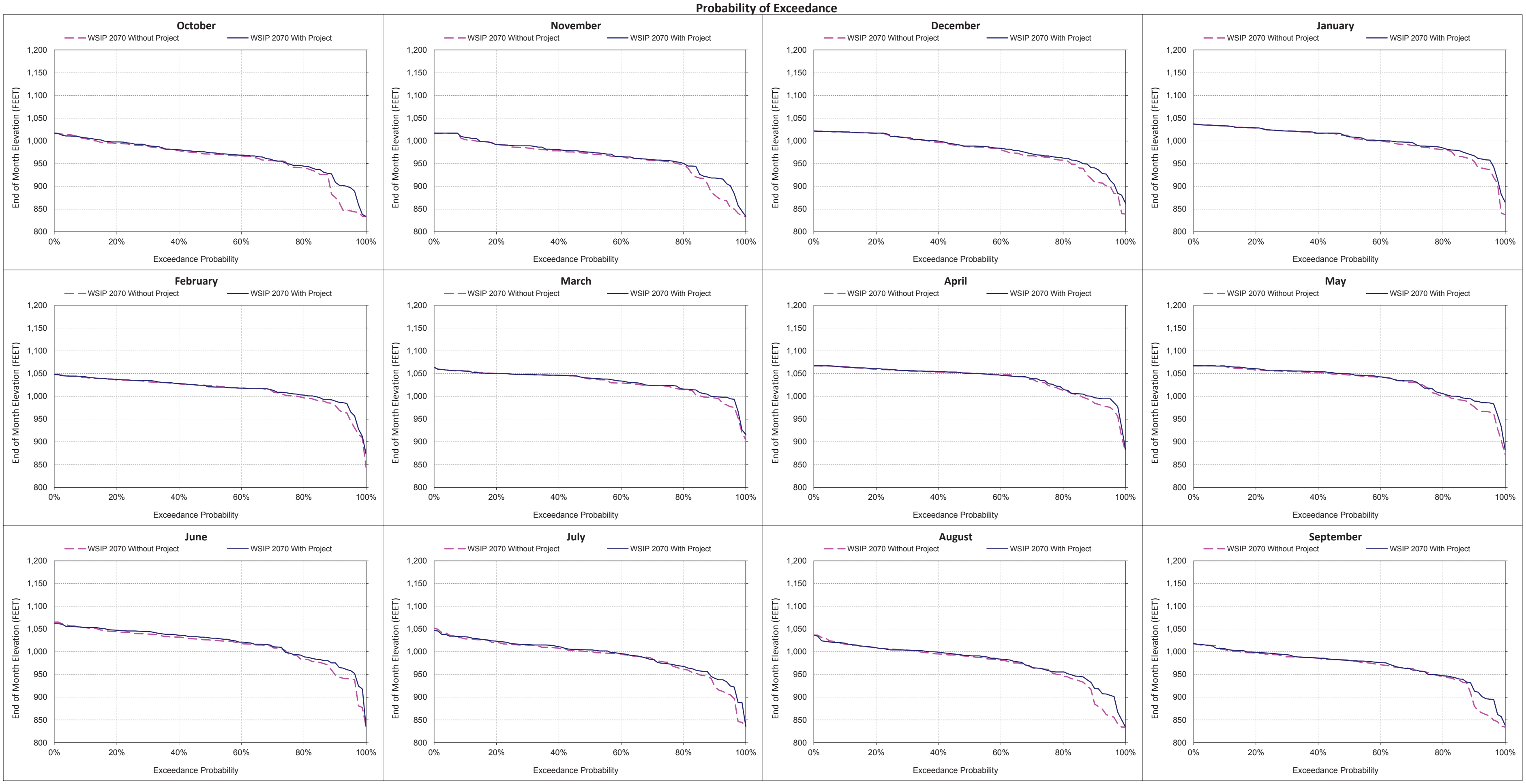


Table SW-08-b
Shasta Lake, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,017	1,017	0	0.0%
1.2%	1,016	1,016	0	0.0%
2.5%	1,015	1,013	-2	-0.2%
3.7%	1,014	1,011	-3	-0.3%
4.9%	1,014	1,011	-3	-0.3%
6.2%	1,012	1,010	-2	-0.2%
7.4%	1,011	1,010	-1	-0.1%
8.6%	1,007	1,008	1	0.1%
9.9%	1,005	1,007	2	0.2%
11.1%	1,003	1,005	3	0.3%
12.3%	1,001	1,004	4	0.4%
13.6%	1,000	1,003	3	0.3%
14.8%	997	1,002	5	0.5%
16.0%	996	1,000	4	0.4%
17.3%	996	999	3	0.3%
18.5%	995	998	3	0.3%
19.8%	995	998	3	0.3%
21.0%	994	998	4	0.4%
22.2%	994	997	4	0.4%
23.5%	993	996	2	0.2%
24.7%	992	995	3	0.3%
25.9%	991	993	2	0.2%
27.2%	990	993	2	0.2%
28.4%	990	992	3	0.3%
29.6%	989	990	1	0.1%
30.9%	987	988	2	0.2%
32.1%	986	988	3	0.3%
33.3%	984	988	4	0.4%
34.6%	983	985	2	0.2%
35.8%	982	982	0	0.0%
37.0%	981	982	0	0.0%
38.3%	981	981	0	0.0%
39.5%	979	981	2	0.2%
40.7%	978	980	2	0.2%
42.0%	977	979	2	0.2%
43.2%	975	978	3	0.3%
44.4%	975	977	2	0.2%
45.7%	974	977	3	0.3%
46.9%	972	976	4	0.4%
48.1%	971	976	5	0.5%
49.4%	971	974	3	0.3%
50.6%	971	974	3	0.3%
51.9%	971	973	3	0.3%
53.1%	971	972	1	0.1%
54.3%	970	971	2	0.2%
55.6%	968	971	3	0.3%
56.8%	968	970	2	0.2%
58.0%	967	970	2	0.3%
59.3%	967	969	2	0.2%
60.5%	967	969	2	0.2%
61.7%	966	968	3	0.3%
63.0%	965	967	2	0.2%
64.2%	963	967	4	0.4%
65.4%	962	966	4	0.4%
66.7%	958	965	7	0.7%
67.9%	958	961	3	0.4%
69.1%	958	960	3	0.3%
70.4%	956	957	1	0.1%
71.6%	956	955	-1	-0.1%
72.8%	956	955	-1	-0.1%
74.1%	955	951	-3	-0.4%
75.3%	944	949	5	0.5%
76.5%	942	946	4	0.4%
77.8%	942	946	4	0.5%
79.0%	941	946	5	0.5%
80.2%	941	944	3	0.3%
81.5%	938	944	5	0.6%
82.7%	935	940	5	0.5%
84.0%	932	937	5	0.6%
85.2%	926	937	11	1.2%
86.4%	926	931	5	0.5%
87.7%	926	929	3	0.3%
88.9%	883	928	45	5.1%
90.1%	876	909	33	3.8%
91.4%	865	903	38	4.4%
92.6%	847	902	55	6.4%
93.8%	847	900	53	6.3%
95.1%	846	897	51	6.0%
96.3%	844	889	45	5.4%
97.5%	843	860	17	2.0%
98.8%	834	838	4	0.5%
100.0%	834	834	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,017	1,017	0	0.0%
1.2%	1,017	1,017	0	0.0%
2.5%	1,017	1,017	0	0.0%
3.7%	1,017	1,017	0	0.0%
4.9%	1,017	1,017	0	0.0%
6.2%	1,017	1,017	0	0.0%
7.4%	1,017	1,017	0	0.0%
8.6%	1,006	1,010	4	0.4%
9.9%	1,003	1,008	5	0.5%
11.1%	1,001	1,007	6	0.6%
12.3%	1,001	1,005	4	0.4%
13.6%	999	1,005	6	0.6%
14.8%	999	998	-1	-0.1%
16.0%	998	998	0	0.0%
17.3%	998	998	0	0.0%
18.5%	996	995	-1	-0.1%
19.8%	993	992	-1	-0.1%
21.0%	992	991	0	0.0%
22.2%	992	991	-1	-0.1%
23.5%	990	991	1	0.1%
24.7%	987	990	3	0.3%
25.9%	986	989	3	0.3%
27.2%	986	989	4	0.4%
28.4%	986	989	4	0.4%
29.6%	985	989	5	0.5%
30.9%	984	989	5	0.5%
32.1%	982	988	6	0.6%
33.3%	982	987	5	0.5%
34.6%	981	986	5	0.5%
35.8%	980	982	1	0.1%
37.0%	979	982	3	0.3%
38.3%	978	981	3	0.3%
39.5%	978	981	3	0.3%
40.7%	978	980	2	0.2%
42.0%	976	979	3	0.3%
43.2%	976	979	3	0.3%
44.4%	976	978	2	0.3%
45.7%	975	978	3	0.3%
46.9%	974	977	3	0.3%
48.1%	973	976	3	0.3%
49.4%	973	975	2	0.2%
50.6%	971	975	4	0.4%
51.9%	970	974	4	0.4%
53.1%	970	973	4	0.4%
54.3%	969	972	3	0.3%
55.6%	968	971	3	0.3%
56.8%	966	971	4	0.5%
58.0%	966	966	0	0.0%
59.3%	966	966	0	0.0%
60.5%	965	965	0	0.0%
61.7%	963	965	2	0.2%
63.0%	962	965	2	0.3%
64.2%	962	962	0	0.0%
65.4%	961	961	0	0.0%
66.7%	960	961	0	0.0%
67.9%	959	960	1	0.1%
69.1%	957	959	2	0.3%
70.4%	956	958	2	0.2%
71.6%	956	958	2	0.2%
72.8%	956	958	1	0.1%
74.1%	956	957	1	0.1%
75.3%	954	957	3	0.3%
76.5%	952	956	3	0.3%
77.8%	951	954	3	0.3%
79.0%	949	953	4	0.4%
80.2%	948	950	2	0.3%
81.5%	940	945	5	0.5%
82.7%	927	944	17	1.9%
84.0%	921	944	23	2.5%
85.2%	918	926	8	0.9%
86.4%	917	922	5	0.5%
87.7%	906	921	15	1.6%
88.9%	887	919	32	3.6%
90.1%	880	919	38	4.3%
91.4%	873	917	44	5.0%
92.6%	870	916	46	5.3%
93.8%	868	906	38	4.4%
95.1%	853	901	49	5.7%
96.3%	850	884	34	4.0%
97.5%	841	858	17	2.0%
98.8%	834	845	11	1.3%
100.0%	834	834	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,022	1,022	0	0.0%
1.2%	1,021	1,021	0	0.0%
2.5%	1,021	1,021	0	0.0%
3.7%	1,021	1,021	0	0.0%
4.9%	1,021	1,021	0	0.0%
6.2%	1,020	1,020	0	0.0%
7.4%	1,020	1,020	0	0.0%
8.6%	1,020	1,020	0	0.0%
9.9%	1,020	1,020	0	0.0%
11.1%	1,020	1,019	0	0.0%
12.3%	1,019	1,019	-1	-0.1%
13.6%	1,019	1,018	0	0.0%
14.8%	1,018	1,018	0	0.0%
16.0%	1,018	1,018	0	0.0%
17.3%	1,018	1,018	0	0.0%
18.5%	1,018	1,017	-1	-0.1%
19.8%	1,017	1,017	0	0.0%
21.0%	1,017	1,017	0	0.0%
22.2%	1,017	1,017	0	0.0%
23.5%	1,014	1,016	2	0.2%
24.7%	1,013	1,010	-4	-0.3%
25.9%	1,010	1,010	-1	-0.1%
27.2%	1,008	1,009	1	0.1%
28.4%	1,008	1,007	-1	-0.1%
29.6%	1,008	1,007	-1	-0.1%
30.9%	1,004	1,007	3	0.3%
32.1%	1,003	1,004	1	0.1%
33.3%	1,003	1,003	1	0.1%
34.6%	1,002	1,003	1	0.1%
35.8%	1,001	1,001	0	0.0%
37.0%	1,000	1,000	1	0.1%
38.3%	998	1,000	3	0.3%
39.5%	997	1,000	3	0.3%
40.7%	996	999	3	0.3%
42.0%	996	997	1	0.1%
43.2%	994	995	1	0.1%
44.4%	992	994	2	0.2%
45.7%	991	992	1	0.1%
46.9%	990	991	1	0.1%
48.1%	988	989	0	0.0%
49.4%	987	989	2	0.2%
50.6%	987	989	2	0.2%
51.9%	987	988	2	0.2%
53.1%	986	988	2	0.2%
54.3%	986	988	2	0.2%
55.6%	986	987	2	0.2%
56.8%	984	986	2	0.2%
58.0%	984	985	1	0.1%
59.3%	983	984	1	0.1%
60.5%	979	983	4	0.4%
61.7%	977	982	5	0.5%
63.0%	973	982	8	0.8%
64.2%	973	979	6	0.6%
65.4%	973	979	6	0.6%
66.7%	970	977	7	0.7%
67.9%	967	975	7	0.8%
69.1%	967	973	6	0.6%
70.4%	967	971	4	0.4%
71.6%	966	969	3	0.4%
72.8%	966	969	3	0.3%
74.1%	965	967	3	0.3%
75.3%	964	967	3	0.3%
76.5%	960	965	6	0.6%
77.8%	959	964	5	0.5%
79.0%	958	963	5	0.6%
80.2%	958	962	4	0.4%
81.5%	956	962	6	0.6%
82.7%	949	958	9	1.0%
84.0%	948	957	9	0.9%
85.2%	940	954	14	1.5%
86.4%	940	950	10	1.1%
87.7%	925	949	25	2.7%
88.9%	918	941	23	2.5%
90.1%	909	941	32	3.5%
91.4%	908	936	28	3.1%
92.6%	907	928	21	2.3%
93.8%	901	927	26	2.9%
95.1%	901	913	12	1.4%
96.3%	885	905	20	2.3%
97.5%	883	885	2	0.2%
98.8%	840	881	41	4.9%
100.0%	839	863	24	2.9%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,037	1,037	0	0.0%
1.2%	1,036	1,036	0	0.0%
2.5%	1,035	1,035	0	0.0%
3.7%	1,035	1,035	0	0.0%
4.9%	1,035	1,035	0	0.0%
6.2%	1,034	1,034	0	0.0%
7.4%	1,034	1,034	0	0.0%
8.6%	1,033	1,033	0	0.0%
9.9%	1,033	1,033	0	0.0%
11.1%	1,033	1,033	0	0.0%
12.3%	1,032	1,032	0	0.0%
13.6%	1,030	1,030	0	0.0%
14.8%	1,030	1,030	0	0.0%
16.0%	1,030	1,030	0	0.0%
17.3%	1,029	1,029	0	0.0%
18.5%	1,029	1,029	0	0.0%
19.8%	1,028	1,028	0	0.0%
21.0%	1,028	1,028	0	0.0%
22.2%	1,026	1,027	1	0.1%
23.5%	1,024	1,025	0	0.0%
24.7%	1,024	1,024	0	0.0%
25.9%	1,024	1,023	0	0.0%
27.2%	1,023	1,023	0	0.0%
28.4%	1,022	1,022	0	0.0%
29.6%	1,022	1,022	0	0.0%
30.9%	1,022	1,022	0	0.0%
32.1%	1,022	1,022	0	0.0%
33.3%	1,021	1,021	0	0.0%
34.6%	1,020	1,020	0	0.0%
35.8%	1,020	1,020	0	0.0%
37.0%	1,020	1,020	0	0.0%
38.3%	1,017	1,020	3	0.3%
39.5%	1,017	1,017	0	0.0%
40.7%	1,017	1,017	0	0.0%
42.0%	1,017	1,017	0	0.0%
43.2%	1,017	1,017	0	0.0%
44.4%	1,017	1,017	0	0.0%
45.7%	1,015	1,017	2	0.2%
46.9%	1,013	1,017	4	0.4%
48.1%	1,013	1,013	1	0.1%
49.4%	1,012	1,010	-2	-0.2%
50.6%	1,006	1,009	3	0.3%
51.9%	1,004	1,008	3	0.3%
53.1%	1,004	1,007	3	0.3%
54.3%	1,003	1,006	3	0.3%
55.6%	1,001	1,002	1	0.1%
56.8%	1,001	1,002	1	0.1%
58.0%	1,000	1,002	1	0.1%
59.3%	1,000	1,001	1	0.1%
60.5%	1,000	1,000	1	0.1%
61.7%	998	1,000	2	0.2%
63.0%	998	1,000	2	0.2%
64.2%	995	999	4	0.4%
65.4%	993	998	5	0.5%
66.7%	992	998	5	0.5%
67.9%	992	997	5	0.5%
69.1%	991	997	6	0.6%
70.4%	990	996	6	0.7%
71.6%	989	991	2	0.2%
72.8%	987	989	2	0.2%
74.1%	986	989	3	0.3%
75.3%	985	988	3	0.3%
76.5%	983	988	5	0.5%
77.8%	982	988	5	0.5%
79.0%	981	986	5	0.5%
80.2%	980	984	4	0.4%
81.5%	979	981	2	0.2%
82.7%	977	980	3	0.3%
84.0%	967	980	12	1.3%
85.2%	966	979	13	1.3%
86.4%	965	976	10	1.1%
87.7%	962	973	10	1.1%
88.9%	961	970	9	0.9%
90.1%	955	967	13	1.3%
91.4%	940	961	21	2.2%
92.6%	940	960	20	2.1%
93.8%	938	958	20	2.2%
95.1%	937	958	21	2.2%
96.3%	920	943	23	2.5%
97.5%	907	915	9	1.0%
98.8%	841	883	42	4.9%
100.0%	838	866	28	3.3%

Table SW-08-b

Shasta Lake, End of Month Elevation

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,048	1,048	0	0.0%
1.2%	1,047	1,047	0	0.0%
2.5%	1,047	1,045	-1	-0.1%
3.7%	1,045	1,045	0	0.0%
4.9%	1,044	1,044	0	0.0%
6.2%	1,044	1,044	0	0.0%
7.4%	1,044	1,044	0	0.0%
8.6%	1,042	1,044	2	0.2%
9.9%	1,041	1,043	2	0.2%
11.1%	1,041	1,042	1	0.1%
12.3%	1,040	1,041	1	0.1%
13.6%	1,040	1,040	0	0.0%
14.8%	1,039	1,040	0	0.0%
16.0%	1,039	1,039	0	0.0%
17.3%	1,038	1,038	0	0.0%
18.5%	1,038	1,038	0	0.0%
19.8%	1,036	1,037	1	0.1%
21.0%	1,036	1,037	0	0.0%
22.2%	1,036	1,036	0	0.0%
23.5%	1,035	1,036	1	0.1%
24.7%	1,035	1,035	0	0.0%
25.9%	1,035	1,035	0	0.0%
27.2%	1,034	1,035	0	0.0%
28.4%	1,034	1,034	1	0.1%
29.6%	1,032	1,034	3	0.3%
30.9%	1,032	1,034	3	0.3%
32.1%	1,031	1,034	3	0.3%
33.3%	1,031	1,032	1	0.1%
34.6%	1,030	1,031	0	0.0%
35.8%	1,030	1,031	1	0.1%
37.0%	1,029	1,030	1	0.1%
38.3%	1,028	1,029	1	0.1%
39.5%	1,028	1,028	1	0.1%
40.7%	1,027	1,028	1	0.1%
42.0%	1,027	1,027	0	0.0%
43.2%	1,026	1,026	0	0.0%
44.4%	1,026	1,026	0	0.0%
45.7%	1,025	1,025	0	0.0%
46.9%	1,024	1,024	0	0.0%
48.1%	1,024	1,024	0	0.0%
49.4%	1,024	1,021	-3	-0.3%
50.6%	1,023	1,021	-3	-0.3%
51.9%	1,023	1,021	-2	-0.2%
53.1%	1,022	1,021	-1	-0.1%
54.3%	1,021	1,020	0	0.0%
55.6%	1,019	1,019	0	0.0%
56.8%	1,019	1,019	0	0.0%
58.0%	1,019	1,019	0	0.0%
59.3%	1,019	1,018	0	0.0%
60.5%	1,018	1,018	0	0.0%
61.7%	1,017	1,018	1	0.1%
63.0%	1,017	1,017	0	0.0%
64.2%	1,017	1,017	0	0.0%
65.4%	1,017	1,017	0	0.0%
66.7%	1,017	1,017	0	0.0%
67.9%	1,016	1,017	1	0.1%
69.1%	1,015	1,015	0	0.0%
70.4%	1,009	1,013	4	0.4%
71.6%	1,008	1,009	1	0.1%
72.8%	1,006	1,009	3	0.3%
74.1%	1,002	1,009	6	0.6%
75.3%	1,001	1,007	5	0.5%
76.5%	1,000	1,005	5	0.5%
77.8%	1,000	1,005	5	0.5%
79.0%	998	1,003	5	0.5%
80.2%	996	1,003	6	0.6%
81.5%	996	1,001	5	0.5%
82.7%	994	1,001	7	0.7%
84.0%	992	999	7	0.8%
85.2%	990	997	6	0.7%
86.4%	990	993	4	0.4%
87.7%	986	993	7	0.8%
88.9%	985	992	7	0.7%
90.1%	980	989	9	1.0%
91.4%	970	987	17	1.8%
92.6%	964	986	22	2.3%
93.8%	964	984	21	2.1%
95.1%	945	966	21	2.2%
96.3%	931	957	26	2.8%
97.5%	917	928	11	1.2%
98.8%	909	912	3	0.3%
100.0%	843	873	29	3.5%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,064	1,064	0	0.0%
1.2%	1,060	1,060	0	0.0%
2.5%	1,059	1,059	0	0.0%
3.7%	1,058	1,058	0	0.0%
4.9%	1,057	1,057	0	0.0%
6.2%	1,056	1,056	0	0.0%
7.4%	1,056	1,056	0	0.0%
8.6%	1,056	1,056	0	0.0%
9.9%	1,055	1,055	0	0.0%
11.1%	1,055	1,055	0	0.0%
12.3%	1,054	1,053	-1	-0.1%
13.6%	1,053	1,052	-1	-0.1%
14.8%	1,052	1,051	-1	-0.1%
16.0%	1,051	1,051	0	0.0%
17.3%	1,051	1,051	0	0.0%
18.5%	1,051	1,050	-1	-0.1%
19.8%	1,050	1,050	0	0.0%
21.0%	1,050	1,050	0	0.0%
22.2%	1,050	1,050	0	0.0%
23.5%	1,050	1,050	0	0.0%
24.7%	1,049	1,049	-1	-0.1%
25.9%	1,048	1,048	0	0.0%
27.2%	1,048	1,048	0	0.0%
28.4%	1,048	1,048	0	0.0%
29.6%	1,048	1,048	0	0.0%
30.9%	1,048	1,048	0	0.0%
32.1%	1,047	1,048	0	0.0%
33.3%	1,047	1,047	0	0.0%
34.6%	1,047	1,047	0	0.0%
35.8%	1,047	1,047	0	0.0%
37.0%	1,047	1,047	0	0.0%
38.3%	1,046	1,047	0	0.0%
39.5%	1,046	1,046	0	0.0%
40.7%	1,046	1,046	0	0.0%
42.0%	1,046	1,046	0	0.0%
43.2%	1,045	1,046	0	0.0%
44.4%	1,045	1,045	0	0.0%
45.7%	1,045	1,045	0	0.0%
46.9%	1,043	1,043	0	0.0%
48.1%	1,041	1,041	0	0.0%
49.4%	1,039	1,040	2	0.1%
50.6%	1,038	1,040	2	0.1%
51.9%	1,038	1,039	1	0.1%
53.1%	1,036	1,039	2	0.2%
54.3%	1,036	1,038	2	0.2%
55.6%	1,034	1,038	4	0.4%
56.8%	1,030	1,037	7	0.7%
58.0%	1,029	1,035	6	0.6%
59.3%	1,029	1,034	5	0.5%
60.5%	1,029	1,033	4	0.4%
61.7%	1,029	1,032	3	0.3%
63.0%	1,028	1,030	2	0.2%
64.2%	1,027	1,030	3	0.3%
65.4%	1,026	1,029	3	0.3%
66.7%	1,025	1,028	3	0.3%
67.9%	1,024	1,025	1	0.1%
69.1%	1,024	1,024	0	0.0%
70.4%	1,024	1,024	0	0.0%
71.6%	1,024	1,024	0	0.0%
72.8%	1,024	1,024	0	0.0%
74.1%	1,023	1,024	1	0.1%
75.3%	1,022	1,024	2	0.2%
76.5%	1,018	1,024	6	0.6%
77.8%	1,017	1,022	5	0.5%
79.0%	1,015	1,017	2	0.2%
80.2%	1,014	1,016	1	0.1%
81.5%	1,014	1,016	2	0.2%
82.7%	1,013	1,015	1	0.1%
84.0%	1,003	1,014	11	1.1%
85.2%	1,001	1,008	7	0.7%
86.4%	999	1,006	8	0.8%
87.7%	998	1,005	7	0.7%
88.9%	997	1,000	3	0.3%
90.1%	996	999	3	0.3%
91.4%	994	999	4	0.4%
92.6%	984	998	14	1.4%
93.8%	981	998	17	1.7%
95.1%	977	995	18	1.8%
96.3%	976	993	17	1.8%
97.5%	952	967	15	1.5%
98.8%	920	926	7	0.7%
100.0%	904	916	12	1.3%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,066	1,067	0	0.0%
7.4%	1,066	1,066	0	0.0%
8.6%	1,066	1,065	-1	-0.1%
9.9%	1,066	1,064	-1	-0.1%
11.1%	1,064	1,064	0	0.0%
12.3%	1,064	1,064	0	0.0%
13.6%	1,063	1,063	0	0.0%
14.8%	1,062	1,063	0	0.0%
16.0%	1,062	1,062	0	0.0%
17.3%	1,061	1,062	1	0.1%
18.5%	1,060	1,061	1	0.1%
19.8%	1,060	1,061	1	0.1%
21.0%	1,059	1,061	1	0.1%
22.2%	1,059	1,060	1	0.1%
23.5%	1,059	1,060	1	0.1%
24.7%	1,058	1,058	1	0.1%
25.9%	1,058	1,058	1	0.1%
27.2%	1,056	1,058	1	0.1%
28.4%	1,056	1,057	0	0.0%
29.6%	1,056	1,057	0	0.0%
30.9%	1,056	1,056	1	0.1%
32.1%	1,055	1,056	1	0.1%
33.3%	1,055	1,056	1	0.1%
34.6%	1,055	1,055	1	0.1%
35.8%	1,055	1,055	1	0.1%
37.0%	1,054	1,055	1	0.1%
38.3%	1,053	1,055	2	0.1%
39.5%	1,053	1,055	1	0.1%
40.7%	1,053	1,055	1	0.1%
42.0%	1,053	1,054	1	0.1%
43.2%	1,053	1,054	1	0.1%
44.4%	1,053	1,053	1	0.1%
45.7%	1,052	1,053	1	0.1%
46.9%	1,052	1,052	1	0.1%
48.1%	1,051	1,051	0	0.0%
49.4%	1,051	1,051	-1	0.0%
50.6%	1,051	1,051	0	0.0%
51.9%	1,051	1,050	0	0.0%
53.1%	1,050	1,050	0	0.0%
54.3%	1,050	1,049	-1	-0.1%
55.6%	1,049	1,049	0	0.0%
56.8%	1,049	1,048	-2	-0.1%
58.0%	1,048	1,047	-1	-0.1%
59.3%	1,048	1,047	-1	-0.1%
60.5%	1,047	1,046	-1	-0.1%
61.7%	1,047	1,045	-2	-0.2%
63.0%	1,047	1,045	-3	-0.2%
64.2%	1,045	1,044	-2	-0.2%
65.4%	1,043	1,044	0	0.0%
66.7%	1,043	1,043	0	0.0%
67.9%	1,042	1,043	1	0.1%
69.1%	1,037	1,040	3	0.3%
70.4%	1,037	1,039	2	0.2%
71.6%	1,032	1,038	6	0.6%
72.8%	1,030	1,035	4	0.4%
74.1%	1,030	1,034	4	0.4%
75.3%	1,024	1,028	4	0.4%
76.5%	1,022	1,027	5	0.5%
77.8%	1,019	1,023	4	0.3%
79.0%	1,015	1,022	6	0.6%
80.2%	1,013	1,015	2	0.2%
81.5%	1,010	1,013	3	0.3%
82.7%	1,007	1,006	-1	-0.1%
84.0%	1,005	1,006	1	0.1%
85.2%	1,002	1,005	3	0.3%
86.4%	998	1,005	7	0.7%
87.7%	995	1,001	6	0.6%
88.9%	991	1,000	9	0.9%
90.1%	985	997	12	1.2%
91.4%	982	996	13	1.3%
92.6%	979	995	15	1.5%
93.8%	977	994	17	1.7%
95.1%	976	994	18	1.9%
96.3%	968	986	18	1.8%
97.5%	956	978	22	2.3%
98.8%	910	933	22	2.4%
100.0%	878	884	6	0.6%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,067	1,067	0	0.0%
1.2%	1,067	1,067	0	0.0%
2.5%	1,067	1,067	0	0.0%
3.7%	1,067	1,067	0	0.0%
4.9%	1,067	1,067	0	0.0%
6.2%	1,067	1,067	0	0.0%
7.4%	1,067	1,067	0	0.0%
8.6%	1,067	1,067	0	0.0%
9.9%	1,067	1,066	-1	-0.1%
11.1%	1,063	1,066	3	0.3%
12.3%	1,062	1,065	3	0.3%
13.6%	1,062	1,064	2	0.2%
14.8%	1,062	1,064	2	0.2%
16.0%	1,062	1,063	1	0.1%
17.3%	1,059	1,062	3	0.3%
18.5%	1,059	1,061	2	0.2%
19.8%	1,058	1,061	3	0.3%
21.0%	1,058	1,060	3	0.3%
22.2%	1,057	1,058	1	0.1%
23.5%	1,057	1,058	1	0.1%
24.7%	1,056	1,058	1	0.1%
25.9%	1,056	1,057	1	0.1%
27.2%	1,056	1,057	1	0.1%
28.4%	1,055	1,056	1	0.1%
29.6%	1,055	1,056	1	0.1%
30.9%	1,055	1,056	2	0.1%
32.1%	1,055	1,056	1	0.1%
33.3%	1,054	1,055	1	0.1%
34.6%	1,054	1,055	2	0.1%
35.8%	1,053	1,055	2	0.2%
37.0%	1,053	1,055	2	0.2%
38.3%	1,052	1,054	2	0.2%
39.5%	1,052	1,054	2	0.2%
40.7%	1,052	1,054	2	0.2%
42.0%	1,051	1,054	3	0.3%
43.2%	1,051	1,053	2	0.2%
44.4%	1,049	1,052	3	0.3%
45.7%	1,049	1,051	2	0.2%
46.9%	1,049	1,050	2	0.2%
48.1%	1,049	1,050	1	0.1%
49.4%	1,047	1,050	3	0.3%
50.6%	1,047	1,049	2	0.1%
51.9%	1,046	1,047	1	0.1%
53.1%	1,045	1,046	1	0.1%
54.3%	1,044	1,046	2	0.2%
55.6%	1,044	1,045	2	0.2%
56.8%	1,043	1,045	2	0.2%
58.0%	1,043	1,045	2	0.2%
59.3%	1,042	1,043	1	0.1%
60.5%	1,042	1,043	1	0.1%
61.7%	1,041	1,041	-1	-0.1%
63.0%	1,040	1,040	0	0.0%
64.2%	1,040	1,037	-2	-0.2%
65.4%	1,035	1,034	0	0.0%
66.7%	1,034	1,034	0	0.0%
67.9%	1,033	1,034	1	0.1%
69.1%	1,031	1,034	3	0.3%
70.4%	1,031	1,034	3	0.3%
71.6%	1,030	1,031	1	0.1%
72.8%	1,028	1,025	-3	-0.3%
74.1%	1,023	1,018	-5	-0.4%
75.3%	1,017	1,018	0	0.0%
76.5%	1,008	1,017	9	0.8%
77.8%	1,006	1,010	4	0.4%
79.0%	1,002	1,008	6	0.6%
80.2%	1,001	1,006	5	0.5%
81.5%	1,001	1,003	2	0.2%
82.7%	996	1,001	5	0.5%
84.0%	995	1,001	6	0.6%
85.2%	992	1,000	8	0.8%
86.4%	991	996	5	0.5%
87.7%	989	995	6	0.6%
88.9%	983	995	12	1.2%
90.1%	977	989	12	1.3%
91.4%	969	989	20	2.1%
92.6%	967	986	19	2.0%
93.8%	967	986	19	2.0%
95.1%	966	985	20	2.1%
96.3%	963	983	21	2.2%
97.5%	930	959	29	3.1%
98.8%	903	933	31	3.4%
100.0%	872	883	11	1.2%

Table SW-08-b

Shasta Lake, End of Month Elevation

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,065	1,062	-3	-0.3%
1.2%	1,065	1,062	-4	-0.3%
2.5%	1,062	1,060	-1	-0.1%
3.7%	1,060	1,056	-4	-0.4%
4.9%	1,057	1,056	-1	-0.1%
6.2%	1,057	1,056	-1	-0.1%
7.4%	1,056	1,055	-1	-0.1%
8.6%	1,054	1,054	1	0.1%
9.9%	1,053	1,053	0	0.0%
11.1%	1,052	1,053	1	0.1%
12.3%	1,052	1,053	1	0.1%
13.6%	1,051	1,053	2	0.2%
14.8%	1,048	1,052	4	0.4%
16.0%	1,047	1,051	3	0.3%
17.3%	1,045	1,049	4	0.3%
18.5%	1,045	1,048	3	0.3%
19.8%	1,044	1,047	3	0.3%
21.0%	1,043	1,047	3	0.3%
22.2%	1,043	1,046	3	0.3%
23.5%	1,043	1,046	3	0.3%
24.7%	1,042	1,046	4	0.4%
25.9%	1,040	1,045	5	0.5%
27.2%	1,040	1,045	5	0.5%
28.4%	1,040	1,044	5	0.5%
29.6%	1,039	1,044	5	0.5%
30.9%	1,039	1,044	5	0.5%
32.1%	1,038	1,042	4	0.4%
33.3%	1,037	1,041	4	0.3%
34.6%	1,035	1,039	5	0.5%
35.8%	1,034	1,038	5	0.5%
37.0%	1,033	1,038	5	0.5%
38.3%	1,032	1,038	6	0.5%
39.5%	1,032	1,036	4	0.4%
40.7%	1,032	1,036	4	0.4%
42.0%	1,030	1,035	5	0.5%
43.2%	1,029	1,033	4	0.4%
44.4%	1,028	1,033	4	0.4%
45.7%	1,028	1,033	5	0.5%
46.9%	1,027	1,032	5	0.5%
48.1%	1,026	1,032	5	0.5%
49.4%	1,026	1,031	4	0.4%
50.6%	1,025	1,030	5	0.5%
51.9%	1,025	1,030	5	0.5%
53.1%	1,024	1,028	4	0.4%
54.3%	1,024	1,028	4	0.4%
55.6%	1,023	1,028	4	0.4%
56.8%	1,023	1,025	2	0.2%
58.0%	1,021	1,024	3	0.3%
59.3%	1,019	1,021	2	0.2%
60.5%	1,017	1,021	4	0.4%
61.7%	1,017	1,020	3	0.3%
63.0%	1,017	1,020	3	0.3%
64.2%	1,015	1,016	1	0.1%
65.4%	1,015	1,016	2	0.2%
66.7%	1,015	1,016	2	0.2%
67.9%	1,014	1,016	2	0.2%
69.1%	1,013	1,015	2	0.2%
70.4%	1,008	1,011	2	0.2%
71.6%	1,008	1,010	2	0.2%
72.8%	1,007	1,010	3	0.3%
74.1%	1,002	999	-4	-0.4%
75.3%	995	997	3	0.3%
76.5%	993	994	1	0.1%
77.8%	991	994	3	0.3%
79.0%	984	993	9	0.9%
80.2%	984	989	5	0.5%
81.5%	983	987	5	0.5%
82.7%	978	985	7	0.7%
84.0%	978	984	5	0.6%
85.2%	977	983	7	0.7%
86.4%	974	981	7	0.7%
87.7%	971	980	9	1.0%
88.9%	960	976	16	1.7%
90.1%	949	975	27	2.8%
91.4%	944	965	21	2.2%
92.6%	941	964	22	2.4%
93.8%	941	961	20	2.1%
95.1%	940	958	18	1.9%
96.3%	938	952	14	1.5%
97.5%	881	925	44	5.0%
98.8%	877	918	40	4.6%
100.0%	834	834	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,052	1,047	-5	-0.5%
1.2%	1,049	1,045	-4	-0.4%
2.5%	1,042	1,038	-4	-0.4%
3.7%	1,041	1,038	-4	-0.3%
4.9%	1,036	1,034	-2	-0.2%
6.2%	1,036	1,034	-2	-0.2%
7.4%	1,031	1,034	3	0.3%
8.6%	1,031	1,033	2	0.2%
9.9%	1,028	1,033	5	0.5%
11.1%	1,028	1,032	4	0.4%
12.3%	1,028	1,030	2	0.2%
13.6%	1,027	1,029	3	0.2%
14.8%	1,026	1,027	1	0.1%
16.0%	1,026	1,027	1	0.1%
17.3%	1,026	1,025	-1	-0.1%
18.5%	1,020	1,024	3	0.3%
19.8%	1,020	1,024	4	0.4%
21.0%	1,020	1,022	2	0.2%
22.2%	1,017	1,021	4	0.4%
23.5%	1,017	1,021	4	0.4%
24.7%	1,016	1,018	1	0.1%
25.9%	1,016	1,017	1	0.1%
27.2%	1,015	1,017	2	0.2%
28.4%	1,015	1,016	1	0.1%
29.6%	1,015	1,016	1	0.1%
30.9%	1,014	1,016	1	0.1%
32.1%	1,014	1,015	1	0.1%
33.3%	1,012	1,015	2	0.2%
34.6%	1,010	1,015	5	0.5%
35.8%	1,010	1,015	5	0.5%
37.0%	1,009	1,014	5	0.5%
38.3%	1,009	1,014	5	0.5%
39.5%	1,008	1,011	3	0.3%
40.7%	1,007	1,010	4	0.4%
42.0%	1,006	1,007	1	0.1%
43.2%	1,003	1,006	3	0.3%
44.4%	1,002	1,005	3	0.3%
45.7%	1,002	1,005	3	0.3%
46.9%	1,002	1,005	3	0.3%
48.1%	1,001	1,004	3	0.3%
49.4%	1,000	1,004	4	0.4%
50.6%	1,000	1,004	3	0.3%
51.9%	998	1,003	5	0.5%
53.1%	998	1,002	4	0.4%
54.3%	997	1,002	5	0.5%
55.6%	997	1,002	5	0.5%
56.8%	997	998	1	0.1%
58.0%	996	998	2	0.2%
59.3%	996	997	1	0.1%
60.5%	994	995	1	0.1%
61.7%	993	995	2	0.2%
63.0%	991	992	1	0.1%
64.2%	990	992	1	0.1%
65.4%	990	990	1	0.1%
66.7%	988	989	1	0.1%
67.9%	988	986	-2	-0.2%
69.1%	987	983	-4	-0.4%
70.4%	983	983	-1	-0.1%
71.6%	980	977	-3	-0.3%
72.8%	978	975	-4	-0.4%
74.1%	977	974	-3	-0.3%
75.3%	977	973	-4	-0.4%
76.5%	968	972	3	0.3%
77.8%	965	970	4	0.5%
79.0%	963	968	6	0.6%
80.2%	961	968	6	0.7%
81.5%	960	964	4	0.5%
82.7%	954	963	8	0.9%
84.0%	953	959	7	0.7%
85.2%	949	958	9	0.9%
86.4%	948	957	9	1.0%
87.7%	946	956	10	1.1%
88.9%	941	946	5	0.5%
90.1%	922	941	19	2.1%
91.4%	915	939	23	2.5%
92.6%	913	938	26	2.8%
93.8%	908	934	26	2.8%
95.1%	905	925	19	2.1%
96.3%	897	923	26	2.9%
97.5%	846	888	42	5.0%
98.8%	845	888	43	5.1%
100.0%	834	834	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,036	1,036	0	0.0%
1.2%	1,036	1,034	-2	-0.2%
2.5%	1,032	1,024	-8	-0.7%
3.7%	1,031	1,023	-8	-0.8%
4.9%	1,024	1,022	-2	-0.2%
6.2%	1,023	1,021	-2	-0.2%
7.4%	1,022	1,020	-1	-0.1%
8.6%	1,018	1,020	1	0.1%
9.9%	1,017	1,019	2	0.2%
11.1%	1,015	1,017	2	0.2%
12.3%	1,014	1,015	1	0.1%
13.6%	1,014	1,015	1	0.1%
14.8%	1,013	1,013	0	0.0%
16.0%	1,013	1,012	0	0.0%
17.3%	1,011	1,011	1	0.1%
18.5%	1,010	1,010	0	0.0%
19.8%	1,008	1,009	1	0.1%
21.0%	1,007	1,008	0	0.0%
22.2%	1,007	1,007	0	0.0%
23.5%	1,007	1,005	-2	-0.2%
24.7%	1,006	1,004	-2	-0.2%
25.9%	1,005	1,004	-1	-0.1%
27.2%	1,005	1,004	-1	-0.1%
28.4%	1,004	1,004	0	0.0%
29.6%	1,004	1,003	0	0.0%
30.9%	1,003	1,003	-1	-0.1%
32.1%	1,002	1,003	0	0.0%
33.3%	1,002	1,003	1	0.1%
34.6%	999	1,002	3	0.3%
35.8%	998	1,001	3	0.3%
37.0%	998	1,000	2	0.2%
38.3%	996	1,000	4	0.4%
39.5%	995	999	4	0.4%
40.7%	995	998	4	0.4%
42.0%	994	997	3	0.3%
43.2%	993	996	3	0.3%
44.4%	993	995	2	0.2%
45.7%	993	994	1	0.1%
46.9%	992	993	2	0.2%
48.1%	991	992	1	0.1%
49.4%	990	992	2	0.2%
50.6%	990	991	1	0.1%
51.9%	988	991	3	0.3%
53.1%	988	991	3	0.3%
54.3%	987	989	2	0.2%
55.6%	984	989	4	0.5%
56.8%	984	986	2	0.2%
58.0%	983	985	2	0.2%
59.3%	982	984	2	0.2%
60.5%	981	984	2	0.2%
61.7%	980	983	3	0.3%
63.0%	977	982	5	0.6%
64.2%	975	979	4	0.4%
65.4%	975	978	3	0.3%
66.7%	973	977	3	0.3%
67.9%	972	971	-1	-0.1%
69.1%	968	969	1	0.1%
70.4%	964	964	0	0.0%
71.6%	963	964	1	0.1%
72.8%	963	964	1	0.1%
74.1%	961	961	-1	-0.1%
75.3%	961	958	-3	-0.3%
76.5%	953	956	3	0.3%
77.8%	950	956	5	0.5%
79.0%	950	955	5	0.6%
80.2%	946	955	9	1.0%
81.5%	945	951	7	0.7%
82.7%	941	949	8	0.9%
84.0%	939	946	7	0.7%
85.2%	936	946	10	1.0%
86.4%	933	944	11	1.2%
87.7%	925	938	13	1.4%
88.9%	918	932	15	1.6%
90.1%	885	919	34	3.9%
91.4%	879	918	39	4.4%
92.6%	874	908	34	3.9%
93.8%	862	907	45	5.3%
95.1%	858	904	46	5.3%
96.3%	856	901	45	5.3%
97.5%	841	867	26	3.1%
98.8%	834	850	16	1.9%
100.0%	834	834	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	1,018	1,018	0	0.0%
1.2%	1,016	1,016	0	0.0%
2.5%	1,015	1,016	1	0.1%
3.7%	1,015	1,015	0	0.0%
4.9%	1,014	1,014	-1	-0.1%
6.2%	1,014	1,013	-1	-0.1%
7.4%	1,014	1,007	-6	-0.6%
8.6%	1,006	1,007	1	0.1%
9.9%	1,005	1,007	1	0.1%
11.1%	1,002	1,005	3	0.3%
12.3%	1,002	1,003	2	0.2%
13.6%	1,000	1,003	2	0.2%
14.8%	1,000	1,003	2	0.2%
16.0%	998	1,002	4	0.4%
17.3%	998	1,000	2	0.2%
18.5%	998	999	2	0.2%
19.8%	997	999	2	0.2%
21.0%	997	998	1	0.1%
22.2%	996	998	1	0.1%
23.5%	994	997	3	0.3%
24.7%	994	996	3	0.3%
25.9%	994	996	3	0.3%
27.2%	993	995	2	0.2%
28.4%	990	994	4	0.4%
29.6%	989	994	5	0.5%
30.9%	989	993	4	0.4%
32.1%	989	990	1	0.1%
33.3%	988	989	1	0.1%
34.6%	988	988	0	0.0%
35.8%	987	988	0	0.0%
37.0%	987	987	0	0.0%
38.3%	987	987	0	0.0%
39.5%	986	986	0	0.0%
40.7%	985	986	1	0.1%
42.0%	983	985	3	0.3%
43.2%	983	984	1	0.1%
44.4%	983	984	1	0.1%
45.7%	982	983	0	0.0%
46.9%	982	982	0	0.0%
48.1%	982	982	0	0.0%
49.4%	982	981	0	0.0%
50.6%	980	980	0	0.0%
51.9%	979	980	1	0.1%
53.1%	978	979	2	0.2%
54.3%	976	979	3	0.3%
55.6%	976	979	3	0.3%
56.8%	975	978	3	0.4%
58.0%	973	977	4	0.4%
59.3%	972	976	4	0.4%
60.5%	971	976	5	0.5%
61.7%	970	975	5	0.5%
63.0%	969	972	3	0.3%
64.2%	967	969	2	0.2%
65.4%	966	966	1	0.1%
66.7%	965	964	-1	-0.1%
67.9%	965	963	-1	-0.1%
69.1%	963	963	0	0.0%
70.4%	963	959	-3	-0.3%
71.6%	958	959	2	0.2%
72.8%	957	957	-1	-0.1%
74.1%	956	957	0	0.0%
75.3%	954	950	-4	-0.4%
76.5%	951	950	-2	-0.2%
77.8%	949	950	1	0.1%
79.0%	947	948	1	0.1%
80.2%	946	947	1	0.1%
81.5%	943	946	3	0.4%
82.7%	942	944	2	0.2%
84.0%	939	943	4	0.4%
85.2%	938	940	2	0.2%
86.4%	933	939	7	0.7%
87.7%	932	933	2	0.2%
88.9%	910	932	22	2.4%
90.1%	880	913	33	3.7%
91.4%	870	911	41	4.7%
92.6%	865	901	36	4.2%
93.8%	862	897	35	4.0%
95.1%	859	896	37	4.3%
96.3%	850	895	45	5.3%
97.5%	846	862	15	1.8%
98.8%	836	857	21	2.5%
100.0%	834	838	4	0.5%

Figure SW-09-b
Shasta Lake, End of Month Area
Probability of Exceedance

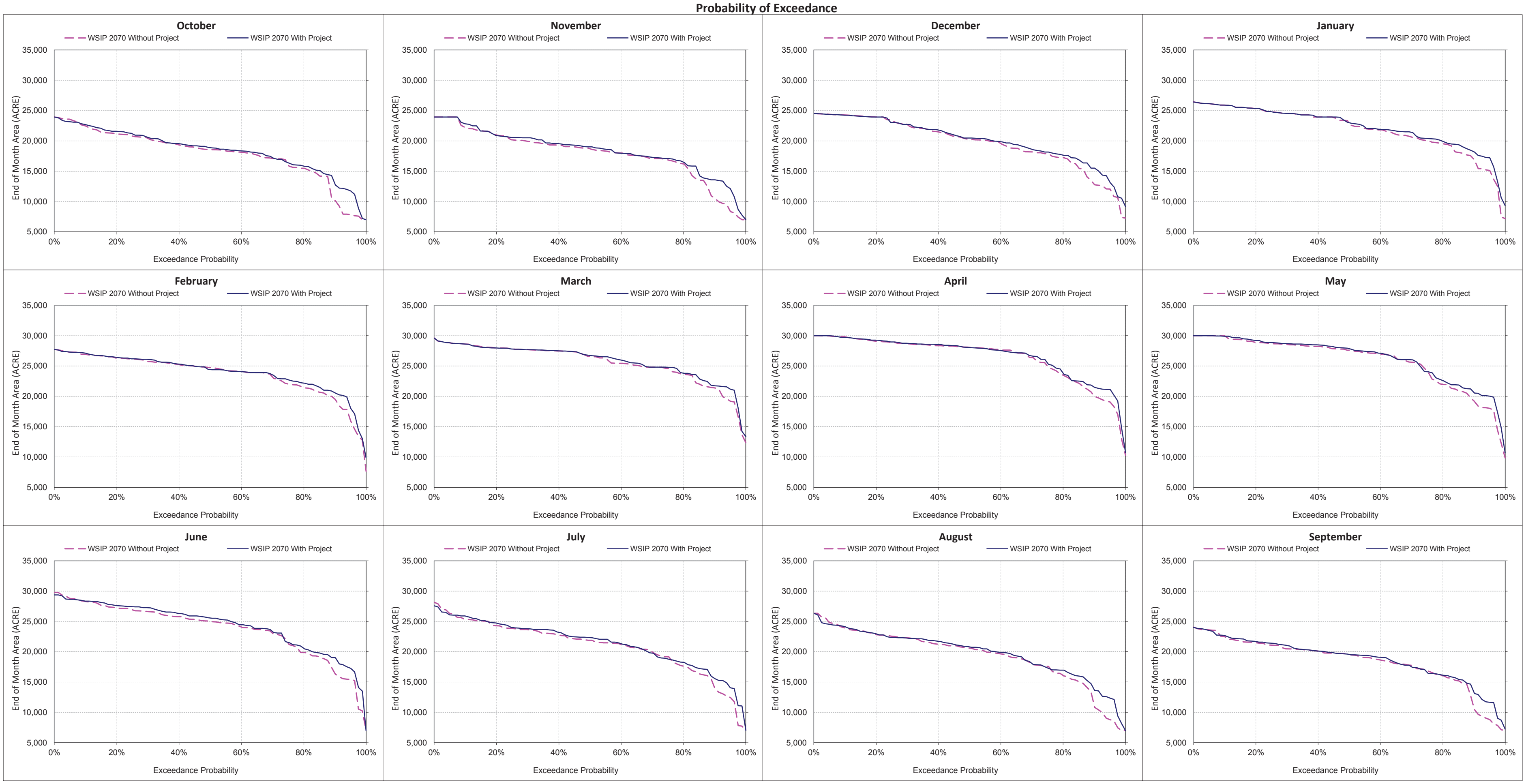


Table SW-09-b

Shasta Lake, End of Month Area

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	23,927	23,927	0	0.0%
1.2%	23,870	23,821	-49	-0.2%
2.5%	23,659	23,392	-268	-1.1%
3.7%	23,608	23,222	-386	-1.6%
4.9%	23,573	23,193	-380	-1.6%
6.2%	23,324	23,095	-229	-1.0%
7.4%	23,144	23,066	-78	-0.3%
8.6%	22,657	22,810	153	0.7%
9.9%	22,496	22,710	214	1.0%
11.1%	22,191	22,522	331	1.5%
12.3%	21,935	22,396	461	2.1%
13.6%	21,825	22,197	372	1.7%
14.8%	21,466	22,104	638	3.0%
16.0%	21,354	21,814	460	2.2%
17.3%	21,315	21,735	420	2.0%
18.5%	21,283	21,601	319	1.5%
19.8%	21,185	21,599	414	2.0%
21.0%	21,103	21,553	450	2.1%
22.2%	21,076	21,520	444	2.1%
23.5%	21,037	21,324	287	1.4%
24.7%	20,828	21,240	411	2.0%
25.9%	20,706	20,965	259	1.3%
27.2%	20,651	20,945	294	1.4%
28.4%	20,605	20,919	315	1.5%
29.6%	20,521	20,667	146	0.7%
30.9%	20,203	20,422	219	1.1%
32.1%	20,080	20,393	314	1.6%
33.3%	19,902	20,342	440	2.2%
34.6%	19,833	20,056	224	1.1%
35.8%	19,678	19,701	22	0.1%
37.0%	19,641	19,673	32	0.2%
38.3%	19,600	19,596	-4	0.0%
39.5%	19,397	19,581	184	0.9%
40.7%	19,246	19,478	232	1.2%
42.0%	19,150	19,345	195	1.0%
43.2%	19,023	19,296	273	1.4%
44.4%	18,996	19,189	194	1.0%
45.7%	18,862	19,175	313	1.7%
46.9%	18,722	19,108	385	2.1%
48.1%	18,614	19,098	483	2.6%
49.4%	18,586	18,915	329	1.8%
50.6%	18,559	18,857	298	1.6%
51.9%	18,533	18,821	288	1.6%
53.1%	18,521	18,639	118	0.6%
54.3%	18,440	18,614	174	0.9%
55.6%	18,302	18,559	257	1.4%
56.8%	18,276	18,462	186	1.0%
58.0%	18,200	18,453	254	1.4%
59.3%	18,164	18,357	193	1.1%
60.5%	18,118	18,318	200	1.1%
61.7%	18,019	18,280	261	1.4%
63.0%	17,988	18,184	196	1.1%
64.2%	17,776	18,142	366	2.1%
65.4%	17,604	18,010	406	2.3%
66.7%	17,230	17,945	715	4.1%
67.9%	17,213	17,567	355	2.1%
69.1%	17,194	17,478	283	1.6%
70.4%	17,068	17,152	83	0.5%
71.6%	17,045	16,984	-61	-0.4%
72.8%	17,038	16,982	-57	-0.3%
74.1%	16,902	16,561	-342	-2.0%
75.3%	15,819	16,339	520	3.3%
76.5%	15,637	16,060	423	2.7%
77.8%	15,589	16,027	438	2.8%
79.0%	15,499	16,001	502	3.2%
80.2%	15,487	15,803	316	2.0%
81.5%	15,211	15,772	560	3.7%
82.7%	14,973	15,440	467	3.1%
84.0%	14,704	15,153	448	3.0%
85.2%	14,199	15,144	946	6.7%
86.4%	14,194	14,600	406	2.9%
87.7%	14,169	14,435	266	1.9%
88.9%	10,665	14,326	3,660	34.3%
90.1%	10,122	12,735	2,613	25.8%
91.4%	9,257	12,231	2,974	32.1%
92.6%	7,917	12,155	4,237	53.5%
93.8%	7,915	12,020	4,105	51.9%
95.1%	7,828	11,742	3,914	50.0%
96.3%	7,661	11,173	3,513	45.9%
97.5%	7,590	8,874	1,284	16.9%
98.8%	7,002	7,219	217	3.1%
100.0%	7,002	7,002	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	23,937	23,937	0	0.0%
1.2%	23,937	23,937	0	0.0%
2.5%	23,937	23,937	0	0.0%
3.7%	23,937	23,937	0	0.0%
4.9%	23,937	23,937	0	0.0%
6.2%	23,937	23,937	0	0.0%
7.4%	23,937	23,937	0	0.0%
8.6%	22,566	23,075	508	2.3%
9.9%	22,225	22,829	604	2.7%
11.1%	22,016	22,725	709	3.2%
12.3%	22,007	22,503	496	2.3%
13.6%	21,784	22,487	703	3.2%
14.8%	21,712	21,619	-93	-0.4%
16.0%	21,619	21,610	-8	0.0%
17.3%	21,572	21,586	14	0.1%
18.5%	21,334	21,264	-70	-0.3%
19.8%	21,013	20,902	-111	-0.5%
21.0%	20,858	20,799	-60	-0.3%
22.2%	20,841	20,746	-95	-0.5%
23.5%	20,602	20,706	104	0.5%
24.7%	20,199	20,575	377	1.9%
25.9%	20,133	20,547	415	2.1%
27.2%	20,106	20,544	439	2.2%
28.4%	20,083	20,537	455	2.3%
29.6%	19,963	20,524	561	2.8%
30.9%	19,888	20,502	614	3.1%
32.1%	19,718	20,375	657	3.3%
33.3%	19,697	20,197	499	2.5%
34.6%	19,594	20,158	564	2.9%
35.8%	19,531	19,654	123	0.6%
37.0%	19,338	19,646	307	1.6%
38.3%	19,331	19,595	265	1.4%
39.5%	19,319	19,586	267	1.4%
40.7%	19,288	19,497	209	1.1%
42.0%	19,066	19,374	308	1.6%
43.2%	19,059	19,364	305	1.6%
44.4%	19,058	19,311	253	1.3%
45.7%	18,984	19,296	312	1.6%
46.9%	18,868	19,186	318	1.7%
48.1%	18,819	19,080	261	1.4%
49.4%	18,812	19,020	208	1.1%
50.6%	18,606	18,999	393	2.1%
51.9%	18,468	18,854	385	2.1%
53.1%	18,425	18,807	382	2.1%
54.3%	18,357	18,687	330	1.8%
55.6%	18,293	18,589	297	1.6%
56.8%	18,110	18,565	455	2.5%
58.0%	18,046	18,022	-24	-0.1%
59.3%	18,019	18,014	-5	0.0%
60.5%	17,978	17,960	-18	-0.1%
61.7%	17,711	17,917	206	1.2%
63.0%	17,666	17,913	247	1.4%
64.2%	17,623	17,659	36	0.2%
65.4%	17,595	17,555	-39	-0.2%
66.7%	17,470	17,512	42	0.2%
67.9%	17,349	17,473	124	0.7%
69.1%	17,118	17,367	248	1.5%
70.4%	17,084	17,262	177	1.0%
71.6%	17,072	17,230	158	0.9%
72.8%	17,069	17,200	131	0.8%
74.1%	17,003	17,104	102	0.6%
75.3%	16,820	17,091	272	1.6%
76.5%	16,680	17,014	334	2.0%
77.8%	16,483	16,804	321	2.0%
79.0%	16,301	16,691	390	2.4%
80.2%	16,183	16,434	251	1.6%
81.5%	15,409	15,912	503	3.3%
82.7%	14,285	15,860	1,575	11.0%
84.0%	13,751	15,832	2,081	15.1%
85.2%	13,534	14,230	696	5.1%
86.4%	13,473	13,889	416	3.1%
87.7%	12,501	13,737	1,237	9.9%
88.9%	10,965	13,571	2,606	23.8%
90.1%	10,483	13,563	3,081	29.4%
91.4%	9,942	13,463	3,521	35.4%
92.6%	9,697	13,351	3,654	37.7%
93.8%	9,535	12,513	2,978	31.2%
95.1%	8,334	12,120	3,786	45.4%
96.3%	8,123	10,785	2,662	32.8%
97.5%	7,422	8,724	1,302	17.5%
98.8%	7,002	7,752	750	10.7%
100.0%	7,002	7,002	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	24,555	24,555	0	0.0%
1.2%	24,482	24,482	0	0.0%
2.5%	24,455	24,455	0	0.0%
3.7%	24,455	24,397	-59	-0.2%
4.9%	24,397	24,389	-8	0.0%
6.2%	24,343	24,343	0	0.0%
7.4%	24,311	24,311	0	0.0%
8.6%	24,295	24,284	-11	0.0%
9.9%	24,284	24,247	-37	-0.2%
11.1%	24,247	24,226	-21	-0.1%
12.3%	24,226	24,147	-79	-0.3%
13.6%	24,147	24,114	-34	-0.1%
14.8%	24,114	24,065	-48	-0.2%
16.0%	24,065	24,017	-48	-0.2%
17.3%	24,017	24,007	-11	0.0%
18.5%	24,007	23,938	-69	-0.3%
19.8%	23,938	23,937	-1	0.0%
21.0%	23,937	23,937	0	0.0%
22.2%	23,937	23,931	-6	0.0%
23.5%	23,514	23,758	244	1.0%
24.7%	23,496	23,064	-432	-1.8%
25.9%	23,119	23,038	-80	-0.3%
27.2%	22,885	22,960	75	0.3%
28.4%	22,863	22,735	-128	-0.6%
29.6%	22,846	22,716	-130	-0.6%
30.9%	22,359	22,710	351	1.6%
32.1%	22,172	22,306	135	0.6%
33.3%	22,168	22,247	79	0.4%
34.6%	22,075	22,184	109	0.5%
35.8%	22,020	21,980	-40	-0.2%
37.0%	21,805	21,896	92	0.4%
38.3%	21,577	21,894	317	1.5%
39.5%	21,527	21,852	325	1.5%
40.7%	21,394	21,705	310	1.4%
42.0%	21,313	21,477	163	0.8%
43.2%	21,061	21,242	182	0.9%
44.4%	20,821	21,089	268	1.3%
45.7%	20,714	20,874	160	0.8%
46.9%	20,642	20,727	85	0.4%
48.1%	20,424	20,469	45	0.2%
49.4%	20,272	20,462	189	0.9%
50.6%	20,237	20,456	219	1.1%
51.9%	20,188	20,426	238	1.2%
53.1%	20,166	20,407	241	1.2%
54.3%	20,134	20,381	247	1.2%
55.6%	20,079	20,301	223	1.1%
56.8%	19,913	20,111	199	1.0%
58.0%	19,862	19,977	115	0.6%
59.3%	19,812	19,934	122	0.6%
60.5%	19,415	19,844	429	2.2%
61.7%	19,157	19,670	513	2.7%
63.0%	18,824	19,652	828	4.4%
64.2%	18,798	19,410	612	3.3%
65.4%	18,773	19,365	592	3.2%
66.7%	18,427	19,134	708	3.8%
67.9%	18,210	18,974	764	4.2%
69.1%	18,201	18,767	567	3.1%
70.4%	18,185	18,559	374	2.1%
71.6%	18,055	18,411	356	2.0%
72.8%	18,045	18,324	280	1.5%
74.1%	17,909	18,180	272	1.5%
75.3%	17,893	18,150	257	1.4%
76.5%	17,441	18,006	565	3.2%
77.8%	17,339	17,877	537	3.1%
79.0%	17,221	17,783	562	3.3%
80.2%	17,216	17,605	389	2.3%
81.5%	17,011	17,605	594	3.5%
82.7%	16,306	17,240	934	5.7%
84.0%	16,252	17,170	918	5.6%
85.2%	15,451	16,858	1,407	9.1%
86.4%	15,374	16,386	1,011	6.6%
87.7%	14,080	16,366	2,286	16.2%
88.9%	13,503	15,517	2,014	14.9%
90.1%	12,767	15,492	2,725	21.3%
91.4%	12,689	15,023	2,333	18.4%
92.6%	12,609	14,373	1,763	14.0%
93.8%	12,083	14,280	2,197	18.2%
95.1%	12,057	13,107	1,050	8.7%
96.3%	10,822	12,404	1,582	14.6%
97.5%	10,678	10,809	132	1.2%
98.8%	7,362	10,524	3,162	43.0%
100.0%	7,268	9,159	1,891	26.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	26,441	26,441	0	0.0%
1.2%	26,320	26,320	0	0.0%
2.5%	26,215	26,215	0	0.0%
3.7%	26,160	26,160	0	0.0%
4.9%	26,155	26,160	5	0.0%
6.2%	26,063	26,063	0	0.0%
7.4%	26,011	26,011	0	0.0%
8.6%	25,925	25,925	0	0.0%
9.9%	25,914	25,914	0	0.0%
11.1%	25,882	25,882	0	0.0%
12.3%	25,818	25,818	0	0.0%
13.6%	25,540	25,540	0	0.0%
14.8%	25,540	25,540	0	0.0%
16.0%	25,535	25,535	0	0.0%
17.3%	25,428	25,428	0	0.0%
18.5%	25,412	25,412	0	0.0%
19.8%	25,343	25,343	0	0.0%
21.0%	25,342	25,342	0	0.0%
22.2%	25,083	25,162	79	0.3%
23.5%	24,828	24,867	40	0.2%
24.7%	24,811	24,828	17	0.1%
25.9%	24,769	24,717	-52	-0.2%
27.2%	24,669	24,669	0	0.0%
28.4%	24,573	24,573	0	0.0%
29.6%	24,557	24,557	0	0.0%
30.9%	24,546	24,546	0	0.0%
32.1%	24,504	24,504	0	0.0%
33.3%	24,399	24,399	0	0.0%
34.6%	24,342	24,306	-36	-0.1%
35.8%	24,306	24,306	0	0.0%
37.0%	24,284	24,284	0	0.0%
38.3%	23,938	24,254	316	1.3%
39.5%	23,938	23,938	0	0.0%
40.7%	23,937	23,938	1	0.0%
42.0%	23,937	23,937	0	0.0%
43.2%	23,937	23,937	0	0.0%
44.4%	23,937	23,937	0	0.0%
45.7%	23,737	23,929	192	0.8%
46.9%	23,407	23,905	498	2.1%
48.1%	23,387	23,478	91	0.4%
49.4%	23,361	23,073	-288	-1.2%
50.6%	22,569	22,907	338	1.5%
51.9%	22,394	22,812	419	1.9%
53.1%	22,389	22,737	348	1.6%
54.3%	22,155	22,526	371	1.7%
55.6%	21,992	22,078	86	0.4%
56.8%	21,928	22,074	146	0.7%
58.0%	21,893	22,050	157	0.7%
59.3%	21,825	21,922	98	0.4%
60.5%	21,817	21,906	89	0.4%
61.7%	21,612	21,870	258	1.2%
63.0%	21,544	21,823	279	1.3%
64.2%	21,214	21,729	515	2.4%
65.4%	21,018	21,584	566	2.7%
66.7%	20,921	21,542	622	3.0%
67.9%	20,906	21,517	611	2.9%
69.1%	20,774	21,495	721	3.5%
70.4%	20,570	21,363	793	3.9%
71.6%	20,516	20,753	237	1.2%
72.8%	20,215	20,455	241	1.2%
74.1%	20,108	20,439	331	1.6%
75.3%	20,027	20,385	358	1.8%
76.5%	19,784	20,351	568	2.9%
77.8%	19,732	20,323	592	3.0%
79.0%	19,632	20,141	509	2.6%
80.2%	19,516	19,878	363	1.9%
81.5%	19,414	19,625	211	1.1%
82.7%	19,189	19,512	322	1.7%
84.0%	18,196	19,460	1,264	6.9%
85.2%	18,079	19,384	1,304	7.2%
86.4%	17,966	19,036	1,070	6.0%
87.7%	17,695	18,742	1,047	5.9%
88.9%	17,573	18,463	890	5.1%
90.1%	16,896	18,181	1,285	7.6%
91.4%	15,437	17,587	2,150	13.9%
92.6%	15,418	17,474	2,056	13.3%
93.8%	15,217	17,278	2,061	13.5%
95.1%	15,123	17,212	2,089	13.8%
96.3%	13,684	15,704	2,020	14.8%
97.5%	12,556	13,288	732	5.8%
98.8%	7,428	10,647	3,219	43.3%
100.0%	7,193	9,336	2,143	29.8%

Table SW-09-b

Shasta Lake, End of Month Area

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	27,726	27,726	0	0.0%
1.2%	27,653	27,653	0	0.0%
2.5%	27,540	27,391	-149	-0.5%
3.7%	27,391	27,367	-24	-0.1%
4.9%	27,288	27,288	0	0.0%
6.2%	27,276	27,276	0	0.0%
7.4%	27,262	27,262	0	0.0%
8.6%	26,944	27,204	260	1.0%
9.9%	26,922	27,132	210	0.8%
11.1%	26,829	26,944	115	0.4%
12.3%	26,748	26,829	81	0.3%
13.6%	26,725	26,748	22	0.1%
14.8%	26,675	26,725	51	0.2%
16.0%	26,665	26,675	10	0.0%
17.3%	26,527	26,527	0	0.0%
18.5%	26,512	26,512	0	0.0%
19.8%	26,303	26,447	144	0.5%
21.0%	26,298	26,357	59	0.2%
22.2%	26,266	26,303	37	0.1%
23.5%	26,197	26,298	102	0.4%
24.7%	26,173	26,197	24	0.1%
25.9%	26,122	26,173	51	0.2%
27.2%	26,085	26,122	37	0.1%
28.4%	25,989	26,090	101	0.4%
29.6%	25,756	26,085	329	1.3%
30.9%	25,732	26,074	342	1.3%
32.1%	25,634	25,989	355	1.4%
33.3%	25,620	25,732	112	0.4%
34.6%	25,583	25,634	51	0.2%
35.8%	25,546	25,620	74	0.3%
37.0%	25,422	25,583	160	0.6%
38.3%	25,348	25,422	75	0.3%
39.5%	25,279	25,348	69	0.3%
40.7%	25,157	25,279	122	0.5%
42.0%	25,155	25,155	0	0.0%
43.2%	25,059	25,059	0	0.0%
44.4%	25,018	25,031	13	0.1%
45.7%	24,893	24,893	0	0.0%
46.9%	24,851	24,851	0	0.0%
48.1%	24,843	24,840	-3	0.0%
49.4%	24,753	24,436	-317	-1.3%
50.6%	24,710	24,378	-332	-1.3%
51.9%	24,626	24,370	-256	-1.0%
53.1%	24,500	24,370	-130	-0.5%
54.3%	24,407	24,366	-41	-0.2%
55.6%	24,194	24,203	9	0.0%
56.8%	24,183	24,151	-32	-0.1%
58.0%	24,151	24,130	-21	-0.1%
59.3%	24,130	24,095	-35	-0.1%
60.5%	24,095	24,049	-46	-0.2%
61.7%	23,938	24,013	76	0.3%
63.0%	23,937	23,938	1	0.0%
64.2%	23,937	23,937	0	0.0%
65.4%	23,937	23,937	0	0.0%
66.7%	23,937	23,937	0	0.0%
67.9%	23,755	23,937	183	0.8%
69.1%	23,669	23,725	57	0.2%
70.4%	22,950	23,440	489	2.1%
71.6%	22,807	22,950	143	0.6%
72.8%	22,549	22,908	359	1.6%
74.1%	22,147	22,897	750	3.4%
75.3%	21,995	22,665	671	3.0%
76.5%	21,908	22,519	611	2.8%
77.8%	21,880	22,441	560	2.6%
79.0%	21,650	22,261	611	2.8%
80.2%	21,387	22,161	774	3.6%
81.5%	21,352	21,987	636	3.0%
82.7%	21,162	21,978	816	3.9%
84.0%	20,828	21,747	920	4.4%
85.2%	20,670	21,464	794	3.8%
86.4%	20,554	20,997	443	2.2%
87.7%	20,087	20,997	910	4.5%
88.9%	20,004	20,875	871	4.4%
90.1%	19,470	20,524	1,054	5.4%
91.4%	18,423	20,220	1,797	9.8%
92.6%	17,827	20,139	2,312	13.0%
93.8%	17,811	19,906	2,095	11.8%
95.1%	15,915	18,030	2,115	13.3%
96.3%	14,573	17,128	2,556	17.5%
97.5%	13,407	14,366	959	7.2%
98.8%	12,772	13,012	240	1.9%
100.0%	7,620	9,901	2,281	29.9%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	29,614	29,614	0	0.0%
1.2%	29,120	29,120	0	0.0%
2.5%	29,018	29,018	0	0.0%
3.7%	28,884	28,884	0	0.0%
4.9%	28,833	28,833	0	0.0%
6.2%	28,730	28,730	0	0.0%
7.4%	28,695	28,695	0	0.0%
8.6%	28,687	28,687	0	0.0%
9.9%	28,614	28,614	0	0.0%
11.1%	28,601	28,601	0	0.0%
12.3%	28,397	28,326	-70	-0.2%
13.6%	28,326	28,241	-86	-0.3%
14.8%	28,241	28,122	-119	-0.4%
16.0%	28,122	28,086	-36	-0.1%
17.3%	28,086	28,043	-43	-0.2%
18.5%	28,060	27,978	-82	-0.3%
19.8%	27,978	27,960	-18	-0.1%
21.0%	27,960	27,959	-1	0.0%
22.2%	27,959	27,940	-19	-0.1%
23.5%	27,936	27,936	0	0.0%
24.7%	27,889	27,800	-90	-0.3%
25.9%	27,773	27,773	0	0.0%
27.2%	27,760	27,760	0	0.0%
28.4%	27,726	27,726	0	0.0%
29.6%	27,713	27,700	-12	0.0%
30.9%	27,674	27,676	3	0.0%
32.1%	27,631	27,674	42	0.2%
33.3%	27,631	27,631	0	0.0%
34.6%	27,592	27,631	40	0.1%
35.8%	27,546	27,592	46	0.2%
37.0%	27,541	27,546	4	0.0%
38.3%	27,527	27,541	15	0.1%
39.5%	27,481	27,527	45	0.2%
40.7%	27,468	27,481	13	0.0%
42.0%	27,430	27,458	29	0.1%
43.2%	27,374	27,430	56	0.2%
44.4%	27,359	27,374	15	0.1%
45.7%	27,316	27,335	19	0.1%
46.9%	27,086	27,086	0	0.0%
48.1%	26,854	26,854	0	0.0%
49.4%	26,584	26,768	183	0.7%
50.6%	26,538	26,718	180	0.7%
51.9%	26,525	26,635	110	0.4%
53.1%	26,330	26,584	254	1.0%
54.3%	26,330	26,538	208	0.8%
55.6%	26,047	26,530	483	1.9%
56.8%	25,495	26,363	868	3.4%
58.0%	25,464	26,174	710	2.8%
59.3%	25,447	26,049	602	2.4%
60.5%	25,444	25,940	497	2.0%
61.7%	25,371	25,736	365	1.4%
63.0%	25,283	25,541	258	1.0%
64.2%	25,140	25,508	368	1.5%
65.4%	25,082	25,444	362	1.4%
66.7%	24,915	25,283	368	1.5%
67.9%	24,819	24,915	96	0.4%
69.1%	24,816	24,819	3	0.0%
70.4%	24,813	24,816	3	0.0%
71.6%	24,813	24,813	0	0.0%
72.8%	24,813	24,813	0	0.0%
74.1%	24,650	24,813	163	0.7%
75.3%	24,565	24,789	224	0.9%
76.5%	24,044	24,764	720	3.0%
77.8%	23,960	24,591	631	2.6%
79.0%	23,717	23,910	193	0.8%
80.2%	23,630	23,806	176	0.7%
81.5%	23,557	23,800	243	1.0%
82.7%	23,460	23,632	172	0.7%
84.0%	22,217	23,585	1,368	6.2%
85.2%	21,988	22,851	863	3.9%
86.4%	21,675	22,606	931	4.3%
87.7%	21,579	22,466	886	4.1%
88.9%	21,460	21,817	357	1.7%
90.1%	21,381	21,749	368	1.7%
91.4%	21,143	21,671	528	2.5%
92.6%	19,927	21,587	1,660	8.3%
93.8%	19,601	21,583	1,982	10.1%
95.1%	19,182	21,185	2,002	10.4%
96.3%	19,072	21,010	1,938	10.2%
97.5%	16,624	18,115	1,492	9.0%
98.8%	13,660	14,223	563	4.1%
100.0%	12,349	13,346	997	8.1%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	30,000	30,000	0	0.0%
1.2%	30,000	30,000	0	0.0%
2.5%	29,974	30,000	26	0.1%
3.7%	29,972	30,000	28	0.1%
4.9%	29,965	29,974	9	0.0%
6.2%	29,905	29,946	41	0.1%
7.4%	29,869	29,850	-19	-0.1%
8.6%	29,831	29,738	-93	-0.3%
9.9%	29,827	29,686	-140	-0.5%
11.1%	29,686	29,675	-11	0.0%
12.3%	29,588	29,588	0	0.0%
13.6%	29,501	29,482	-19	-0.1%
14.8%	29,419	29,475	56	0.2%
16.0%	29,400	29,453	53	0.2%
17.3%	29,278	29,382	104	0.4%
18.5%	29,178	29,278	101	0.3%
19.8%	29,104	29,255	151	0.5%
21.0%	29,072	29,222	150	0.5%
22.2%	29,001	29,136	135	0.5%
23.5%	28,992	29,104	112	0.4%
24.7%	28,896	28,966	70	0.2%
25.9%	28,871	28,952	81	0.3%
27.2%	28,721	28,871	150	0.5%
28.4%	28,711	28,766	56	0.2%
29.6%	28,691	28,748	57	0.2%
30.9%	28,638	28,721	83	0.3%
32.1%	28,567	28,697	130	0.5%
33.3%	28,561	28,627	66	0.2%
34.6%	28,550	28,615	65	0.2%
35.8%	28,514	28,590	77	0.3%
37.0%	28,448	28,567	119	0.4%
38.3%	28,374	28,561	188	0.7%
39.5%	28,358	28,532	174	0.6%
40.7%	28,346	28,521	175	0.6%
42.0%	28,312	28,421	109	0.4%
43.2%	28,311	28,393	82	0.3%
44.4%	28,309	28,378	69	0.2%
45.7%	28,219	28,374	154	0.5%
46.9%	28,150	28,219	69	0.2%
48.1%	28,119	28,101	-19	-0.1%
49.4%	28,112	28,051	-61	-0.2%
50.6%	28,035	28,035	0	0.0%
51.9%	28,021	27,964	-57	-0.2%
53.1%	27,995	27,949	-46	-0.2%
54.3%	27,949	27,880	-69	-0.2%
55.6%	27,880	27,847	-33	-0.1%
56.8%	27,847	27,662	-185	-0.7%
58.0%	27,753	27,645	-109	-0.4%
59.3%	27,732	27,588	-144	-0.5%
60.5%	27,628	27,505	-123	-0.4%
61.7%	27,628	27,392	-236	-0.9%
63.0%	27,623	27,309	-314	-1.1%
64.2%	27,410	27,193	-217	-0.8%
65.4%	27,126	27,184	58	0.2%
66.7%	27,125	27,180	55	0.2%
67.9%	27,050	27,145	95	0.3%
69.1%	26,437	26,759	322	1.2%
70.4%	26,382	26,598	216	0.8%
71.6%	25,814	26,566	751	2.9%
72.8%	25,569	26,105	535	2.1%
74.1%	25,550	26,079	529	2.1%
75.3%	24,755	25,274	519	2.1%
76.5%	24,499	25,124	625	2.6%
77.8%	24,207	24,645	438	1.8%
79.0%	23,722	24,513	791	3.3%
80.2%	23,425	23,637	212	0.9%
81.5%	23,094	23,454	359	1.6%
82.7%	22,675	22,586	-90	-0.4%
84.0%	22,403	22,562	159	0.7%
85.2%	22,118	22,486	368	1.7%
86.4%	21,582	22,439	856	4.0%
87.7%	21,192	21,924	733	3.5%
88.9%	20,760	21,861	1,100	5.3%
90.1%	19,968	21,464	1,496	7.5%
91.4%	19,741	21,304	1,564	7.9%
92.6%	19,428	21,171	1,744	9.0%
93.8%	19,222	21,148	1,926	10.0%
95.1%	19,074	21,146	2,072	10.9%
96.3%	18,312	20,142	1,829	10.0%
97.5%	17,024	19,259	2,235	13.1%
98.8%	12,878	14,747	1,869	14.5%
100.0%	10,286	10,724	438	4.3%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	30,000	30,000	0	0.0%
1.2%	30,000	30,000	0	0.0%
2.5%	30,000	30,000	0	0.0%
3.7%	30,000	30,000	0	0.0%
4.9%	30,000	30,000	0	0.0%
6.2%	30,000	30,000	0	0.0%
7.4%	30,000	29,967	-32	-0.1%
8.6%	30,000	29,961	-39	-0.1%
9.9%	30,000	29,906	-93	-0.3%
11.1%	29,562	29,896	334	1.1%
12.3%	29,422	29,748	326	1.1%
13.6%	29,375	29,657	282	1.0%
14.8%	29,356	29,647	291	1.0%
16.0%	29,350	29,500	150	0.5%
17.3%	29,092	29,423	331	1.1%
18.5%	29,088	29,301	213	0.7%
19.8%	28,913	29,236	323	1.1%
21.0%	28,864	29,215	351	1.2%
22.2%	28,847	28,969	122	0.4%
23.5%	28,793	28,872	78	0.3%
24.7%	28,689	28,869	180	0.6%
25.9%	28,661	28,839	179	0.6%
27.2%	28,660	28,810	150	0.5%
28.4%	28,613	28,706	93	0.3%
29.6%	28,578	28,699	121	0.4%
30.9%	28,502	28,684	182	0.6%
32.1%	28,502	28,633	131	0.5%
33.3%	28,442	28,616	174	0.6%
34.6%	28,423	28,605	182	0.6%
35.8%	28,319	28,572	254	0.9%
37.0%	28,276	28,538	262	0.9%
38.3%	28,247	28,493	246	0.9%
39.5%	28,242	28,476	234	0.8%
40.7%	28,232	28,464	232	0.8%
42.0%	28,072	28,407	335	1.2%
43.2%	28,054	28,300	246	0.9%
44.4%	27,870	28,232	362	1.3%
45.7%	27,830	28,049	220	0.8%
46.9%	27,799	28,016	216	0.8%
48.1%	27,786	27,962	176	0.6%
49.4%	27,605	27,953	348	1.3%
50.6%	27,601	27,784	183	0.7%
51.9%	27,432	27,550	119	0.4%
53.1%	27,400	27,527	127	0.5%
54.3%	27,250	27,467	217	0.8%
55.6%	27,194	27,393	199	0.7%
56.8%	27,124	27,390	266	1.0%
58.0%	27,113	27,321	208	0.8%
59.3%	26,986	27,117	132	0.5%
60.5%	26,952	27,096	144	0.5%
61.7%	26,931	26,860	-71	-0.3%
63.0%	26,733	26,766	33	0.1%
64.2%	26,711	26,426	-285	-1.1%
65.4%	26,107	26,087	-20	-0.1%
66.7%	26,089	26,074	-14	-0.1%
67.9%	25,902	26,055	153	0.6%
69.1%	25,653	26,051	398	1.6%
70.4%	25,616	25,998	382	1.5%
71.6%	25,512	25,657	145	0.6%
72.8%	25,289	24,898	-391	-1.5%
74.1%	24,635	24,077	-558	-2.3%
75.3%	23,981	24,026	44	0.2%
76.5%	22,838	23,891	1,053	4.6%
77.8%	22,587	23,082	495	2.2%
79.0%	22,055	22,804	750	3.4%
80.2%	21,950	22,546	596	2.7%
81.5%	21,945	22,191	246	1.1%
82.7%	21,319	21,916	597	2.8%
84.0%	21,194	21,912	718	3.4%
85.2%	20,897	21,848	951	4.5%
86.4%	20,771	21,404	633	3.0%
87.7%	20,522	21,272	750	3.7%
88.9%	19,781	21,215	1,434	7.2%
90.1%	19,158	20,523	1,364	7.1%
91.4%	18,373	20,512	2,139	11.6%
92.6%	18,148	20,110	1,962	10.8%
93.8%	18,133	20,099	1,966	10.8%
95.1%	18,009	20,042	2,033	11.3%
96.3%	17,717	19,831	2,114	11.9%
97.5%	14,488	17,312	2,825	19.5%
98.8%	12,211	14,817	2,605	21.3%
100.0%	9,839	10,680	841	8.5%

Table SW-09-b

Shasta Lake, End of Month Area

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	29,776	29,379	-398	-1.3%
1.2%	29,776	29,354	-422	-1.4%
2.5%	29,363	29,198	-165	-0.6%
3.7%	29,156	28,670	-486	-1.7%
4.9%	28,784	28,661	-124	-0.4%
6.2%	28,755	28,626	-129	-0.4%
7.4%	28,638	28,547	-90	-0.3%
8.6%	28,406	28,492	87	0.3%
9.9%	28,308	28,353	45	0.2%
11.1%	28,198	28,351	153	0.5%
12.3%	28,187	28,323	136	0.5%
13.6%	28,040	28,316	275	1.0%
14.8%	27,686	28,149	463	1.7%
16.0%	27,644	28,035	391	1.4%
17.3%	27,383	27,807	423	1.5%
18.5%	27,350	27,731	382	1.4%
19.8%	27,281	27,615	334	1.2%
21.0%	27,161	27,556	395	1.5%
22.2%	27,125	27,517	392	1.4%
23.5%	27,119	27,464	345	1.3%
24.7%	26,970	27,440	470	1.7%
25.9%	26,755	27,407	651	2.4%
27.2%	26,736	27,391	655	2.4%
28.4%	26,712	27,296	584	2.2%
29.6%	26,641	27,287	646	2.4%
30.9%	26,601	27,224	623	2.3%
32.1%	26,545	27,022	478	1.8%
33.3%	26,406	26,832	427	1.6%
34.6%	26,101	26,698	597	2.3%
35.8%	25,992	26,565	573	2.2%
37.0%	25,896	26,559	663	2.6%
38.3%	25,823	26,515	693	2.7%
39.5%	25,794	26,317	523	2.0%
40.7%	25,786	26,281	495	1.9%
42.0%	25,547	26,165	618	2.4%
43.2%	25,372	25,900	529	2.1%
44.4%	25,353	25,899	545	2.1%
45.7%	25,302	25,895	594	2.3%
46.9%	25,154	25,807	653	2.6%
48.1%	25,079	25,747	668	2.7%
49.4%	25,064	25,609	544	2.2%
50.6%	24,951	25,518	568	2.3%
51.9%	24,920	25,518	598	2.4%
53.1%	24,802	25,339	537	2.2%
54.3%	24,742	25,244	502	2.0%
55.6%	24,728	25,241	514	2.1%
56.8%	24,679	24,955	276	1.1%
58.0%	24,398	24,800	403	1.7%
59.3%	24,225	24,450	225	0.9%
60.5%	23,979	24,431	452	1.9%
61.7%	23,951	24,319	368	1.5%
63.0%	23,914	24,258	344	1.4%
64.2%	23,693	23,864	171	0.7%
65.4%	23,659	23,849	190	0.8%
66.7%	23,659	23,849	190	0.8%
67.9%	23,518	23,800	282	1.2%
69.1%	23,451	23,659	208	0.9%
70.4%	22,861	23,146	286	1.2%
71.6%	22,842	23,081	239	1.0%
72.8%	22,658	23,066	408	1.8%
74.1%	22,146	21,684	-462	-2.1%
75.3%	21,171	21,506	335	1.6%
76.5%	21,001	21,161	159	0.8%
77.8%	20,758	21,094	336	1.6%
79.0%	19,878	20,954	1,077	5.4%
80.2%	19,872	20,456	584	2.9%
81.5%	19,760	20,293	532	2.7%
82.7%	19,322	20,001	679	3.5%
84.0%	19,301	19,862	561	2.9%
85.2%	19,135	19,802	668	3.5%
86.4%	18,849	19,567	717	3.8%
87.7%	18,563	19,526	963	5.2%
88.9%	17,412	19,038	1,626	9.3%
90.1%	16,293	19,023	2,730	16.8%
91.4%	15,838	17,987	2,149	13.6%
92.6%	15,557	17,849	2,292	14.7%
93.8%	15,466	17,503	2,037	13.2%
95.1%	15,433	17,271	1,838	11.9%
96.3%	15,250	16,659	1,409	9.2%
97.5%	10,535	14,082	3,547	33.7%
98.8%	10,246	13,499	3,253	31.7%
100.0%	7,002	7,002	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	28,161	27,577	-583	-2.1%
1.2%	27,888	27,414	-474	-1.7%
2.5%	26,982	26,540	-442	-1.6%
3.7%	26,940	26,520	-420	-1.6%
4.9%	26,320	26,076	-243	-0.9%
6.2%	26,236	26,031	-205	-0.8%
7.4%	25,678	26,017	339	1.3%
8.6%	25,637	25,926	289	1.1%
9.9%	25,322	25,901	579	2.3%
11.1%	25,307	25,755	448	1.8%
12.3%	25,266	25,513	247	1.0%
13.6%	25,117	25,432	316	1.3%
14.8%	25,093	25,191	99	0.4%
16.0%	25,041	25,181	140	0.6%
17.3%	25,036	24,925	-111	-0.4%
18.5%	24,359	24,774	415	1.7%
19.8%	24,284	24,748	464	1.9%
21.0%	24,263	24,565	302	1.2%
22.2%	23,972	24,486	514	2.1%
23.5%	23,886	24,382	496	2.1%
24.7%	23,866	24,028	162	0.7%
25.9%	23,789	23,955	166	0.7%
27.2%	23,659	23,893	233	1.0%
28.4%	23,659	23,815	156	0.7%
29.6%	23,659	23,803	143	0.6%
30.9%	23,590	23,772	182	0.8%
32.1%	23,533	23,659	126	0.5%
33.3%	23,366	23,659	293	1.3%
34.6%	23,069	23,659	590	2.6%
35.8%	23,059	23,659	600	2.6%
37.0%	23,012	23,608	596	2.6%
38.3%	22,958	23,554	597	2.6%
39.5%	22,843	23,254	411	1.8%
40.7%	22,667	23,103	436	1.9%
42.0%	22,635	22,768	133	0.6%
43.2%	22,174	22,574	399	1.8%
44.4%	22,150	22,471	321	1.5%
45.7%	22,090	22,451	362	1.6%
46.9%	22,082	22,401	319	1.4%
48.1%	21,980	22,395	415	1.9%
49.4%	21,896	22,332	436	2.0%
50.6%	21,886	22,305	419	1.9%
51.9%	21,591	22,166	575	2.7%
53.1%	21,558	22,064	505	2.3%
54.3%	21,476	22,040	564	2.6%
55.6%	21,466	22,036	570	2.7%
56.8%	21,430	21,597	167	0.8%
58.0%	21,354	21,577	222	1.0%
59.3%	21,344	21,441	98	0.5%
60.5%	21,085	21,256	170	0.8%
61.7%	20,977	21,172	195	0.9%
63.0%	20,736	20,892	156	0.8%
64.2%	20,651	20,803	152	0.7%
65.4%	20,570	20,669	99	0.5%
66.7%	20,406	20,467	62	0.3%
67.9%	20,399	20,153	-246	-1.2%
69.1%	20,279	19,828	-451	-2.2%
70.4%	19,822	19,760	-63	-0.3%
71.6%	19,482	19,156	-326	-1.7%
72.8%	19,321	18,963	-358	-1.9%
74.1%	19,184	18,918	-266	-1.4%
75.3%	19,163	18,773	-389	-2.0%
76.5%	18,313	18,650	338	1.8%
77.8%	18,008	18,456	448	2.5%
79.0%	17,738	18,308	570	3.2%
80.2%	17,580	18,230	650	3.7%
81.5%	17,396	17,849	453	2.6%
82.7%	16,881	17,729	848	5.0%
84.0%	16,708	17,380	672	4.0%
85.2%	16,329	17,234	906	5.5%
86.4%	16,184	17,126	942	5.8%
87.7%	16,057	17,083	1,026	6.4%
88.9%	15,486	15,975	489	3.2%
90.1%	13,855	15,548	1,693	12.2%
91.4%	13,297	15,259	1,962	14.8%
92.6%	13,066	15,239	2,173	16.6%
93.8%	12,699	14,853	2,155	17.0%
95.1%	12,435	14,069	1,633	13.1%
96.3%	11,737	13,899	2,163	18.4%
97.5%	7,828	11,075	3,247	41.5%
98.8%	7,729	11,071	3,342	43.2%
100.0%	7,002	7,002	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	26,331	26,331	0	0.0%
1.2%	26,331	26,091	-239	-0.9%
2.5%	25,729	24,804	-925	-3.6%
3.7%	25,601	24,628	-973	-3.8%
4.9%	24,813	24,542	-271	-1.1%
6.2%	24,667	24,403	-264	-1.1%
7.4%	24,532	24,362	-170	-0.7%
8.6%	24,116	24,275	159	0.7%
9.9%	23,940	24,143	203	0.8%
11.1%	23,659	23,882	223	0.9%
12.3%	23,590	23,752	162	0.7%
13.6%	23,546	23,659	113	0.5%
14.8%	23,418	23,390	-28	-0.1%
16.0%	23,405	23,343	-61	-0.3%
17.3%	23,158	23,221	63	0.3%
18.5%	23,078	23,138	59	0.3%
19.8%	22,843	22,982	139	0.6%
21.0%	22,747	22,774	27	0.1%
22.2%	22,743	22,762	19	0.1%
23.5%	22,728	22,496	-231	-1.0%
24.7%	22,574	22,354	-220	-1.0%
25.9%	22,518	22,348	-169	-0.8%
27.2%	22,402	22,320	-83	-0.4%
28.4%	22,364	22,310	-54	-0.2%
29.6%	22,312	22,273	-39	-0.2%
30.9%	22,256	22,177	-79	-0.4%
32.1%	22,153	22,166	13	0.1%
33.3%	22,069	22,158	88	0.4%
34.6%	21,712	22,132	420	1.9%
35.8%	21,607	21,997	390	1.8%
37.0%	21,544	21,838	294	1.4%
38.3%	21,335	21,826	491	2.3%
39.5%	21,263	21,757	494	2.3%
40.7%	21,221	21,661	440	2.1%
42.0%	21,166	21,496	331	1.6%
43.2%	20,985	21,401	416	2.0%
44.4%	20,981	21,281	300	1.4%
45.7%	20,974	21,116	142	0.7%
46.9%	20,806	21,041	236	1.1%
48.1%	20,717	20,883	166	0.8%
49.4%	20,623	20,861	238	1.2%
50.6%	20,565	20,738	172	0.8%
51.9%	20,354	20,708	354	1.7%
53.1%	20,317	20,697	380	1.9%
54.3%	20,207	20,477	270	1.3%
55.6%	19,933	20,472	540	2.7%
56.8%	19,888	20,105	217	1.1%
58.0%	19,817	20,055	238	1.2%
59.3%	19,689	19,894	205	1.0%
60.5%	19,621	19,851	230	1.2%
61.7%	19,488	19,808	320	1.6%
63.0%	19,139	19,689	549	2.9%
64.2%	19,012	19,386	374	2.0%
65.4%	19,005	19,276	271	1.4%
66.7%	18,817	19,146	329	1.7%
67.9%	18,646	18,532	-114	-0.6%
69.1%	18,268	18,404	136	0.7%
70.4%	17,861	17,896	35	0.2%
71.6%	17,793	17,872	79	0.4%
72.8%	17,749	17,827	78	0.4%
74.1%	17,591	17,527	-65	-0.4%
75.3%	17,559	17,269	-290	-1.7%
76.5%	16,736	17,018	282	1.7%
77.8%	16,474	16,998	524	3.2%
79.0%	16,431	16,967	536	3.3%
80.2%	16,000	16,963	963	6.0%
81.5%	15,872	16,557	685	4.3%
82.7%	15,459	16,316	857	5.5%
84.0%	15,342	16,043	701	4.6%
85.2%	15,027	15,987	960	6.4%
86.4%	14,790	15,860	1,071	7.2%
87.7%	14,117	15,239	1,122	7.9%
88.9%	13,480	14,734	1,254	9.3%
90.1%	10,820	13,608	2,788	25.8%
91.4%	10,402	13,546	3,144	30.2%
92.6%	9,962	12,636	2,674	26.8%
93.8%	9,037	12,600	3,563	39.4%
95.1%	8,776	12,326	3,550	40.5%
96.3%	8,598	12,121	3,524	41.0%
97.5%	7,442	9,435	1,993	26.8%
98.8%	7,002	8,152	1,150	16.4%
100.0%	7,002	7,002	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	24,061	24,006	-55	-0.2%
1.2%	23,808	23,858	49	0.2%
2.5%	23,659	23,827	168	0.7%
3.7%	23,659	23,659	0	0.0%
4.9%	23,594	23,522	-72	-0.3%
6.2%	23,531	23,394	-137	-0.6%
7.4%	23,520	22,741	-779	-3.3%
8.6%	22,569	22,721	152	0.7%
9.9%	22,521	22,695	174	0.8%
11.1%	22,072	22,424	351	1.6%
12.3%	22,037	22,239	202	0.9%
13.6%	21,897	22,167	270	1.2%
14.8%	21,852	22,158	306	1.4%
16.0%	21,613	22,110	496	2.3%
17.3%	21,582	21,809	227	1.1%
18.5%	21,561	21,751	190	0.9%
19.8%	21,497	21,716	220	1.0%
21.0%	21,418	21,581	163	0.8%
22.2%	21,406	21,577	171	0.8%
23.5%	21,129	21,474	345	1.6%
24.7%	21,100	21,412	312	1.5%
25.9%	21,060	21,381	321	1.5%
27.2%	21,034	21,246	213	1.0%
28.4%	20,673	21,158	484	2.3%
29.6%	20,474	21,090	616	3.0%
30.9%	20,462	20,953	491	2.4%
32.1%	20,459	20,579	121	0.6%
33.3%	20,392	20,458	66	0.3%
34.6%	20,375	20,386	11	0.1%
35.8%	20,301	20,324	22	0.1%
37.0%	20,253	20,283	31	0.2%
38.3%	20,190	20,198	8	0.0%
39.5%	20,149	20,132	-17	-0.1%
40.7%	19,974	20,070	96	0.5%
42.0%	19,792	20,059	267	1.3%
43.2%	19,784	19,904	120	0.6%
44.4%	19,776	19,864	88	0.4%
45.7%	19,728	19,755	27	0.1%
46.9%	19,712	19,720	8	0.0%
48.1%	19,694	19,646	-47	-0.2%
49.4%	19,662	19,616	-46	-0.2%
50.6%	19,464	19,500	36	0.2%
51.9%	19,413	19,494	80	0.4%
53.1%	19,256	19,430	174	0.9%
54.3%	19,074	19,419	345	1.8%
55.6%	19,068	19,382	314	1.6%
56.8%	18,975	19,328	353	1.9%
58.0%	18,820	19,180	360	1.9%
59.3%	18,709	19,119	410	2.2%
60.5%	18,580	19,070	489	2.6%
61.7%	18,462	19,000	538	2.9%
63.0%	18,352	18,680	328	1.8%
64.2%	18,122	18,358	236	1.3%
65.4%	18,017	18,102	86	0.5%
66.7%	17,995	17,892	-103	-0.6%
67.9%	17,915	17,788	-127	-0.7%
69.1%	17,788	17,781	-7	0.0%
70.4%	17,722	17,381	-341	-1.9%
71.6%	17,195	17,372	177	1.0%
72.8%	17,186	17,128	-58	-0.3%
74.1%	17,082	17,094	12	0.1%
75.3%	16,800	16,397	-402	-2.4%
76.5%	16,559	16,387	-172	-1.0%
77.8%	16,276	16,380	104	0.6%
79.0%	16,101	16,239	138	0.9%
80.2%	16,017	16,086	69	0.4%
81.5%	15,710	16,057	346	2.2%
82.7%	15,624	15,860	236	1.5%
84.0%	15,281	15,704	423	2.8%
85.2%	15,175	15,401	226	1.5%
86.4%	14,745	15,339	594	4.0%
87.7%	14,665	14,821	156	1.1%
88.9%	12,812	14,654	1,842	14.4%
90.1%	10,473	13,103	2,630	25.1%
91.4%	9,659	12,927	3,268	33.8%
92.6%	9,328	12,125	2,797	30.0%
93.8%	9,038	11,736	2,698	29.8%
95.1%	8,803	11,672	2,869	32.6%
96.3%	8,094	11,599	3,505	43.3%
97.5%	7,851	9,034	1,183	15.1%
98.8%	7,115	8,677	1,562	22.0%
100.0%	7,002	7,229	227	3.2%

Figure SW-10-b
Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

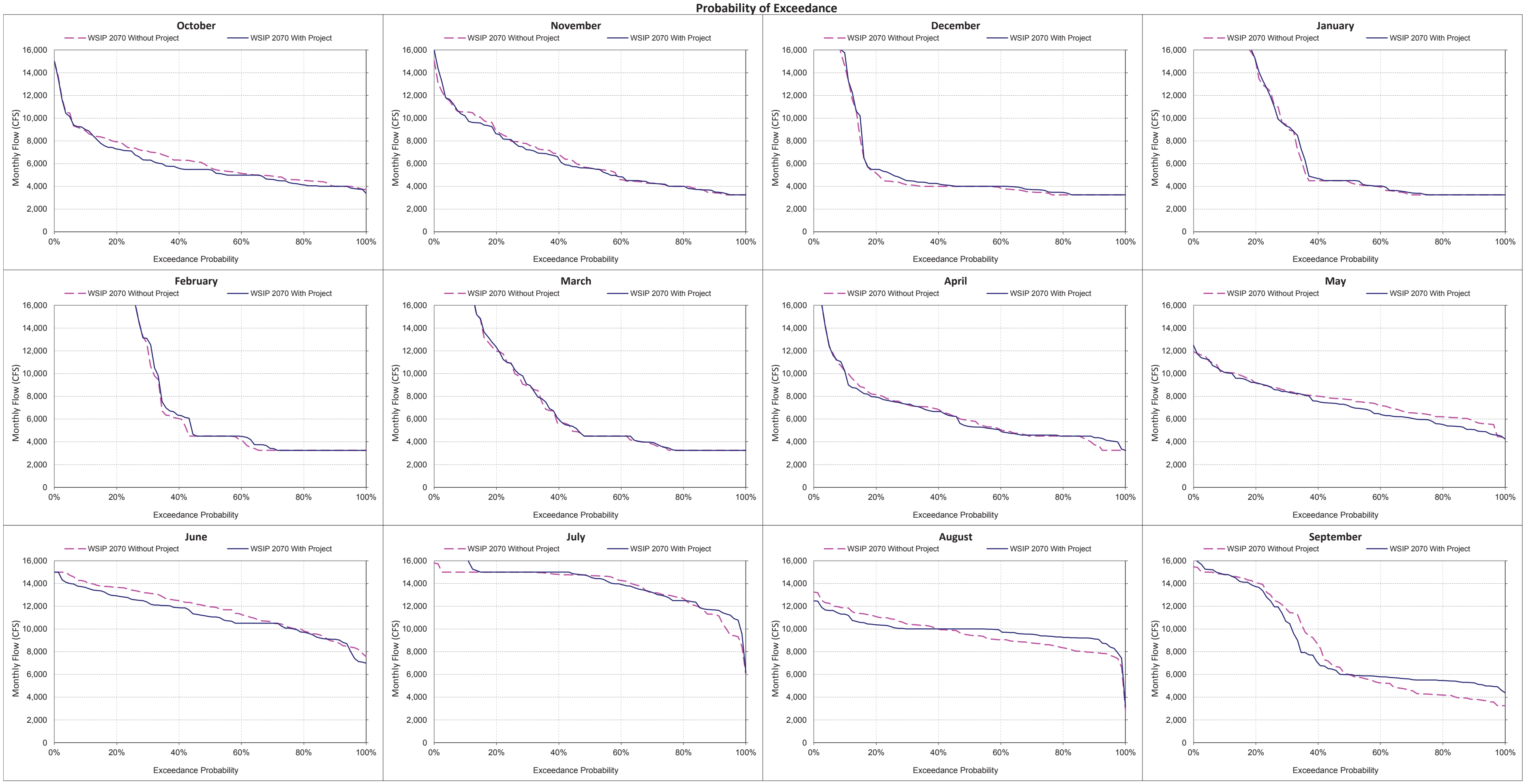


Table SW-10-b
Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,000	15,000	0	0.0%
1.2%	13,684	13,489	-195	-1.4%
2.5%	11,742	11,583	-159	-1.4%
3.7%	10,506	10,411	-95	-0.9%
4.9%	10,456	10,146	-310	-3.0%
6.2%	9,316	9,397	81	0.9%
7.4%	9,196	9,255	59	0.6%
8.6%	9,089	9,226	137	1.5%
9.9%	8,906	8,996	90	1.0%
11.1%	8,618	8,876	258	3.0%
12.3%	8,493	8,475	-18	-0.2%
13.6%	8,389	8,134	-255	-3.0%
14.8%	8,354	7,788	-566	-6.8%
16.0%	8,259	7,579	-680	-8.2%
17.3%	8,148	7,441	-707	-8.7%
18.5%	8,004	7,433	-571	-7.1%
19.8%	7,925	7,300	-625	-7.9%
21.0%	7,923	7,258	-665	-8.4%
22.2%	7,685	7,162	-522	-6.8%
23.5%	7,426	7,127	-299	-4.0%
24.7%	7,380	7,101	-279	-3.8%
25.9%	7,368	6,759	-609	-8.3%
27.2%	7,220	6,602	-617	-8.6%
28.4%	7,143	6,347	-797	-11.2%
29.6%	7,122	6,322	-800	-11.2%
30.9%	7,015	6,304	-711	-10.1%
32.1%	6,980	6,134	-846	-12.1%
33.3%	6,956	6,035	-921	-13.2%
34.6%	6,796	5,990	-806	-11.9%
35.8%	6,691	5,794	-896	-13.4%
37.0%	6,552	5,763	-789	-12.0%
38.3%	6,320	5,762	-558	-8.8%
39.5%	6,315	5,639	-676	-10.7%
40.7%	6,300	5,530	-770	-12.2%
42.0%	6,299	5,500	-799	-12.7%
43.2%	6,280	5,500	-780	-12.4%
44.4%	6,208	5,500	-708	-11.4%
45.7%	6,150	5,500	-650	-10.6%
46.9%	6,131	5,500	-631	-10.3%
48.1%	5,962	5,500	-462	-7.8%
49.4%	5,724	5,500	-224	-3.9%
50.6%	5,560	5,434	-127	-2.3%
51.9%	5,452	5,157	-295	-5.4%
53.1%	5,396	5,120	-276	-5.1%
54.3%	5,368	5,067	-301	-5.6%
55.6%	5,322	5,000	-322	-6.0%
56.8%	5,290	5,000	-290	-5.5%
58.0%	5,288	5,000	-288	-5.5%
59.3%	5,174	5,000	-174	-3.4%
60.5%	5,123	5,000	-123	-2.4%
61.7%	5,095	5,000	-95	-1.9%
63.0%	5,041	5,000	-41	-0.8%
64.2%	5,002	5,000	-2	0.0%
65.4%	4,991	5,000	9	0.2%
66.7%	4,965	4,898	-67	-1.4%
67.9%	4,963	4,647	-316	-6.4%
69.1%	4,930	4,625	-305	-6.2%
70.4%	4,883	4,593	-290	-5.9%
71.6%	4,823	4,505	-318	-6.6%
72.8%	4,822	4,496	-326	-6.8%
74.1%	4,626	4,482	-145	-3.1%
75.3%	4,613	4,327	-286	-6.2%
76.5%	4,593	4,261	-333	-7.2%
77.8%	4,584	4,240	-345	-7.5%
79.0%	4,537	4,170	-366	-8.1%
80.2%	4,520	4,132	-388	-8.6%
81.5%	4,496	4,064	-432	-9.6%
82.7%	4,464	4,057	-407	-9.1%
84.0%	4,457	4,050	-407	-9.1%
85.2%	4,428	4,015	-412	-9.3%
86.4%	4,389	4,000	-389	-8.9%
87.7%	4,290	4,000	-290	-6.8%
88.9%	4,050	4,000	-50	-1.2%
90.1%	4,000	4,000	0	0.0%
91.4%	4,000	4,000	0	0.0%
92.6%	4,000	4,000	0	0.0%
93.8%	4,000	4,000	0	0.0%
95.1%	4,000	3,839	-161	-4.0%
96.3%	3,934	3,799	-135	-3.4%
97.5%	3,854	3,746	-108	-2.8%
98.8%	3,746	3,736	-10	-0.3%
100.0%	3,713	3,390	-323	-8.7%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,071	15,966	895	5.9%
1.2%	13,123	14,423	1,301	9.9%
2.5%	12,351	13,232	882	7.1%
3.7%	11,789	11,784	-6	0.0%
4.9%	11,529	11,650	120	1.0%
6.2%	11,025	11,244	219	2.0%
7.4%	10,627	10,690	62	0.6%
8.6%	10,559	10,376	-183	-1.7%
9.9%	10,555	10,213	-342	-3.2%
11.1%	10,533	9,713	-821	-7.8%
12.3%	10,479	9,626	-853	-8.1%
13.6%	10,121	9,590	-531	-5.2%
14.8%	10,100	9,571	-530	-5.2%
16.0%	9,772	9,396	-376	-3.9%
17.3%	9,639	9,360	-279	-2.9%
18.5%	9,638	9,252	-386	-4.0%
19.8%	8,921	8,637	-284	-3.2%
21.0%	8,693	8,552	-141	-1.6%
22.2%	8,513	8,159	-353	-4.2%
23.5%	8,356	8,139	-217	-2.6%
24.7%	7,979	8,110	131	1.6%
25.9%	7,935	7,780	-155	-2.0%
27.2%	7,925	7,528	-397	-5.0%
28.4%	7,814	7,487	-327	-4.2%
29.6%	7,770	7,218	-552	-7.1%
30.9%	7,575	7,213	-362	-4.8%
32.1%	7,569	7,117	-452	-6.0%
33.3%	7,290	6,925	-365	-5.0%
34.6%	7,230	6,911	-319	-4.4%
35.8%	7,212	6,885	-327	-4.5%
37.0%	7,160	6,789	-371	-5.2%
38.3%	6,905	6,735	-170	-2.5%
39.5%	6,901	6,643	-258	-3.7%
40.7%	6,665	6,118	-547	-8.2%
42.0%	6,394	5,913	-481	-7.5%
43.2%	6,373	5,846	-527	-8.3%
44.4%	6,269	5,735	-533	-8.5%
45.7%	6,001	5,709	-291	-4.9%
46.9%	5,861	5,623	-238	-4.1%
48.1%	5,686	5,621	-65	-1.2%
49.4%	5,654	5,599	-55	-1.0%
50.6%	5,570	5,593	22	0.4%
51.9%	5,543	5,520	-24	-0.4%
53.1%	5,478	5,500	22	0.4%
54.3%	5,449	5,229	-220	-4.0%
55.6%	5,403	5,118	-285	-5.3%
56.8%	5,351	4,971	-380	-7.1%
58.0%	5,221	4,965	-256	-4.9%
59.3%	4,598	4,850	253	5.5%
60.5%	4,583	4,824	241	5.3%
61.7%	4,473	4,500	27	0.6%
63.0%	4,466	4,500	34	0.8%
64.2%	4,455	4,500	45	1.0%
65.4%	4,420	4,500	80	1.8%
66.7%	4,398	4,473	75	1.7%
67.9%	4,279	4,443	163	3.8%
69.1%	4,278	4,279	1	0.0%
70.4%	4,276	4,250	-26	-0.6%
71.6%	4,242	4,242	0	0.0%
72.8%	4,204	4,204	0	0.0%
74.1%	4,143	4,183	41	1.0%
75.3%	4,010	4,000	-10	-0.2%
76.5%	4,000	4,000	0	0.0%
77.8%	4,000	4,000	0	0.0%
79.0%	4,000	4,000	0	0.0%
80.2%	4,000	4,000	0	0.0%
81.5%	4,000	3,817	-183	-4.6%
82.7%	3,885	3,783	-102	-2.6%
84.0%	3,823	3,722	-101	-2.6%
85.2%	3,721	3,716	-5	-0.1%
86.4%	3,681	3,695	14	0.4%
87.7%	3,491	3,681	190	5.4%
88.9%	3,481	3,673	193	5.5%
90.1%	3,419	3,498	79	2.3%
91.4%	3,408	3,481	73	2.2%
92.6%	3,319	3,429	110	3.3%
93.8%	3,250	3,337	87	2.7%
95.1%	3,250	3,252	2	0.1%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	29,404	30,167	763	2.6%
1.2%	27,847	28,967	1,120	4.0%
2.5%	26,238	27,847	1,609	6.1%
3.7%	23,833	23,833	0	0.0%
4.9%	21,917	21,917	0	0.0%
6.2%	18,409	16,991	-1,418	-7.7%
7.4%	17,711	16,287	-1,424	-8.0%
8.6%	15,739	16,042	303	1.9%
9.9%	14,648	15,739	1,091	7.4%
11.1%	13,280	13,280	0	0.0%
12.3%	11,619	12,267	648	5.6%
13.6%	10,723	10,634	-89	-0.8%
14.8%	8,283	10,207	1,924	23.2%
16.0%	6,499	6,499	0	0.0%
17.3%	5,710	5,748	39	0.7%
18.5%	5,365	5,500	135	2.5%
19.8%	5,215	5,500	285	5.5%
21.0%	4,913	5,500	587	11.9%
22.2%	4,498	5,336	839	18.6%
23.5%	4,464	5,262	797	17.9%
24.7%	4,449	5,107	658	14.8%
25.9%	4,378	4,920	542	12.4%
27.2%	4,376	4,833	457	10.4%
28.4%	4,252	4,668	417	9.8%
29.6%	4,160	4,500	340	8.2%
30.9%	4,122	4,493	371	9.0%
32.1%	4,094	4,464	370	9.0%
33.3%	4,048	4,378	329	8.1%
34.6%	4,000	4,376	376	9.4%
35.8%	4,000	4,350	350	8.8%
37.0%	4,000	4,262	262	6.6%
38.3%	4,000	4,261	261	6.5%
39.5%	4,000	4,250	250	6.3%
40.7%	4,000	4,160	160	4.0%
42.0%	4,000	4,113	113	2.8%
43.2%	4,000	4,099	99	2.5%
44.4%	4,000	4,048	48	1.2%
45.7%	4,000	4,000	0	0.0%
46.9%	4,000	4,000	0	0.0%
48.1%	4,000	4,000	0	0.0%
49.4%	4,000	4,000	0	0.0%
50.6%	4,000	4,000	0	0.0%
51.9%	4,000	4,000	0	0.0%
53.1%	4,000	4,000	0	0.0%
54.3%	4,000	4,000	0	0.0%
55.6%	4,000	4,000	0	0.0%
56.8%	4,000	4,000	0	0.0%
58.0%	3,959	4,000	41	1.0%
59.3%	3,929	4,000	71	1.8%
60.5%	3,773	4,000	227	6.0%
61.7%	3,764	4,000	236	6.3%
63.0%	3,744	3,980	236	6.3%
64.2%	3,707	3,959	253	6.8%
65.4%	3,690	3,929	239	6.5%
66.7%	3,650	3,859	209	5.7%
67.9%	3,556	3,764	208	5.8%
69.1%	3,494	3,744	249	7.1%
70.4%	3,490	3,709	220	6.3%
71.6%	3,476	3,707	231	6.6%
72.8%	3,471	3,690	219	6.3%
74.1%	3,439	3,650	211	6.1%
75.3%	3,392	3,494	102	3.0%
76.5%	3,251	3,490	239	7.4%
77.8%	3,250	3,473	223	6.9%
79.0%	3,250	3,472	222	6.8%
80.2%	3,250	3,471	221	6.8%
81.5%	3,250	3,392	142	4.4%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	52,455	52,455	0	0.0%
1.2%	48,778	48,778	0	0.0%
2.5%	46,492	46,492	0	0.0%
3.7%	44,811	44,811	0	0.0%
4.9%	32,871	32,871	0	0.0%
6.2%	28,812	29,481	668	2.3%
7.4%	28,387	29,425	1,038	3.7%
8.6%	26,328	26,328	0	0.0%
9.9%	25,855	25,855	0	0.0%
11.1%	24,575	23,707	-867	-3.5%
12.3%	23,842	22,735	-1,107	-4.6%
13.6%	20,830	20,830	0	0.0%
14.8%	18,467	18,467	0	0.0%
16.0%	16,949	16,253	-696	-4.1%
17.3%	16,253	16,200	-54	-0.3%
18.5%	15,797	16,036	239	1.5%
19.8%	15,259	15,259	0	0.0%
21.0%	13,468	14,091	624	4.6%
22.2%	12,938	13,329	391	3.0%
23.5%	12,666	12,666	0	0.0%
24.7%	12,351	11,875	-475	-3.8%
25.9%	11,133	10,972	-160	-1.4%
27.2%	10,972	9,914	-1,059	-9.7%
28.4%	9,615	9,615	0	0.0%
29.6%	9,455	9,326	-128	-1.4%
30.9%	8,934	9,193	259	2.9%
32.1%	8,865	8,818	-47	-0.5%
33.3%	7,288	8,491	1,203	16.5%
34.6%	6,315	7,288	973	15.4%
35.8%	5,204	6,315	1,111	21.3%
37.0%	4,500	4,905	405	9.0%
38.3%	4,500	4,816	316	7.0%
39.5%	4,500	4,713	213	4.7%
40.7%	4,500	4,636	136	3.0%
42.0%	4,500	4,500	0	0.0%
43.2%	4,500	4,500	0	0.0%
44.4%	4,500	4,500	0	0.0%
45.7%	4,500	4,500	0	0.0%
46.9%	4,500	4,500	0	0.0%
48.1%	4,500	4,500	0	0.0%
49.4%	4,465	4,500	35	0.8%
50.6%	4,297	4,500	203	4.7%
51.9%	4,202	4,500	298	7.1%
53.1%	4,165	4,465	300	7.2%
54.3%	4,087	4,165	78	1.9%
55.6%	4,082	4,087	6	0.1%
56.8%	4,040	4,082	42	1.0%
58.0%	4,025	4,040	14	0.4%
59.3%	3,979	4,033	54	1.4%
60.5%	3,926	4,025	99	2.5%
61.7%	3,638	3,926	288	7.9%
63.0%	3,629	3,645	16	0.4%
64.2%	3,584	3,638	54	1.5%
65.4%	3,502	3,629	128	3.6%
66.7%	3,488	3,584	96	2.7%
67.9%	3,417	3,532	114	3.3%
69.1%	3,255	3,450	195	6.0%
70.4%	3,250	3,417	167	5.2%
71.6%	3,250	3,393	143	4.4%
72.8%	3,250	3,393	143	4.4%
74.1%	3,250	3,292	42	1.3%
75.3%	3,250	3,255	5	0.1%
76.5%	3,250	3,250	0	0.0%
77.8%	3,250	3,250	0	0.0%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

Table SW-10-b
Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,102	59,102	0	0.0%
1.2%	57,345	57,345	0	0.0%
2.5%	45,545	45,545	0	0.0%
3.7%	42,347	43,393	1,045	2.5%
4.9%	42,273	42,289	16	0.0%
6.2%	39,284	39,284	0	0.0%
7.4%	38,512	38,512	0	0.0%
8.6%	33,243	34,430	1,187	3.6%
9.9%	32,421	33,243	821	2.5%
11.1%	31,456	32,421	966	3.1%
12.3%	31,452	31,452	0	0.0%
13.6%	31,128	31,128	0	0.0%
14.8%	30,658	30,658	0	0.0%
16.0%	30,048	29,707	-341	-1.1%
17.3%	29,657	29,657	0	0.0%
18.5%	25,353	25,353	0	0.0%
19.8%	24,234	24,234	0	0.0%
21.0%	23,832	23,832	0	0.0%
22.2%	23,687	23,687	0	0.0%
23.5%	20,417	20,417	0	0.0%
24.7%	20,251	20,251	0	0.0%
25.9%	16,138	16,138	0	0.0%
27.2%	14,527	14,527	0	0.0%
28.4%	13,275	13,155	-120	-0.9%
29.6%	12,692	13,100	409	3.2%
30.9%	10,653	12,529	1,876	17.6%
32.1%	9,806	10,491	685	7.0%
33.3%	9,460	9,806	346	3.7%
34.6%	6,718	7,530	812	12.1%
35.8%	6,344	6,993	649	10.2%
37.0%	6,311	6,718	407	6.5%
38.3%	6,130	6,639	509	8.3%
39.5%	6,062	6,344	282	4.6%
40.7%	5,982	6,311	328	5.5%
42.0%	5,389	6,130	741	13.8%
43.2%	4,500	6,062	1,562	34.7%
44.4%	4,500	4,652	152	3.4%
45.7%	4,500	4,500	0	0.0%
46.9%	4,500	4,500	0	0.0%
48.1%	4,500	4,500	0	0.0%
49.4%	4,500	4,500	0	0.0%
50.6%	4,500	4,500	0	0.0%
51.9%	4,500	4,500	0	0.0%
53.1%	4,500	4,500	0	0.0%
54.3%	4,500	4,500	0	0.0%
55.6%	4,500	4,500	0	0.0%
56.8%	4,491	4,500	9	0.2%
58.0%	4,451	4,500	49	1.1%
59.3%	4,207	4,491	285	6.8%
60.5%	4,054	4,451	397	9.8%
61.7%	3,679	4,375	696	18.9%
63.0%	3,488	4,207	718	20.6%
64.2%	3,414	3,750	336	9.8%
65.4%	3,250	3,750	500	15.4%
66.7%	3,250	3,750	500	15.4%
67.9%	3,250	3,679	429	13.2%
69.1%	3,250	3,414	164	5.0%
70.4%	3,250	3,400	150	4.6%
71.6%	3,250	3,250	0	0.0%
72.8%	3,250	3,250	0	0.0%
74.1%	3,250	3,250	0	0.0%
75.3%	3,250	3,250	0	0.0%
76.5%	3,250	3,250	0	0.0%
77.8%	3,250	3,250	0	0.0%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	55,811	55,811	0	0.0%
1.2%	52,648	52,648	0	0.0%
2.5%	37,838	37,838	0	0.0%
3.7%	37,171	37,171	0	0.0%
4.9%	25,141	24,744	-396	-1.6%
6.2%	24,724	24,724	0	0.0%
7.4%	24,427	23,578	-849	-3.5%
8.6%	23,578	22,948	-630	-2.7%
9.9%	22,631	22,631	0	0.0%
11.1%	16,992	16,992	0	0.0%
12.3%	16,954	16,954	0	0.0%
13.6%	15,193	15,193	0	0.0%
14.8%	14,829	14,829	0	0.0%
16.0%	13,132	13,651	519	4.0%
17.3%	12,788	13,241	453	3.5%
18.5%	12,385	12,788	402	3.2%
19.8%	11,996	12,385	389	3.2%
21.0%	11,921	11,876	-45	-0.4%
22.2%	11,714	11,220	-494	-4.2%
23.5%	10,972	10,972	0	0.0%
24.7%	10,915	10,915	0	0.0%
25.9%	9,972	10,328	356	3.6%
27.2%	9,784	9,972	188	1.9%
28.4%	9,071	9,784	713	7.9%
29.6%	8,950	9,093	142	1.6%
30.9%	8,827	8,950	123	1.4%
32.1%	8,579	8,415	-164	-1.9%
33.3%	8,503	7,930	-573	-6.7%
34.6%	7,484	7,789	305	4.1%
35.8%	6,863	7,484	621	9.1%
37.0%	6,736	6,907	171	2.5%
38.3%	6,735	6,735	0	0.0%
39.5%	5,655	6,118	462	8.2%
40.7%	5,645	5,761	116	2.0%
42.0%	5,627	5,494	-133	-2.4%
43.2%	5,494	5,430	-64	-1.2%
44.4%	4,922	5,375	453	9.2%
45.7%	4,904	5,154	250	5.1%
46.9%	4,800	4,768	-32	-0.7%
48.1%	4,500	4,500	0	0.0%
49.4%	4,500	4,500	0	0.0%
50.6%	4,500	4,500	0	0.0%
51.9%	4,500	4,500	0	0.0%
53.1%	4,500	4,500	0	0.0%
54.3%	4,500	4,500	0	0.0%
55.6%	4,500	4,500	0	0.0%
56.8%	4,500	4,500	0	0.0%
58.0%	4,500	4,500	0	0.0%
59.3%	4,500	4,500	0	0.0%
60.5%	4,500	4,500	0	0.0%
61.7%	4,500	4,500	0	0.0%
63.0%	4,152	4,500	348	8.4%
64.2%	4,133	4,133	0	0.0%
65.4%	4,048	4,048	0	0.0%
66.7%	3,979	3,995	16	0.4%
67.9%	3,973	3,979	6	0.1%
69.1%	3,868	3,973	105	2.7%
70.4%	3,768	3,937	169	4.5%
71.6%	3,602	3,768	166	4.6%
72.8%	3,545	3,602	57	1.6%
74.1%	3,502	3,522	20	0.6%
75.3%	3,250	3,439	189	5.8%
76.5%	3,250	3,278	28	0.9%
77.8%	3,250	3,250	0	0.0%
79.0%	3,250	3,250	0	0.0%
80.2%	3,250	3,250	0	0.0%
81.5%	3,250	3,250	0	0.0%
82.7%	3,250	3,250	0	0.0%
84.0%	3,250	3,250	0	0.0%
85.2%	3,250	3,250	0	0.0%
86.4%	3,250	3,250	0	0.0%
87.7%	3,250	3,250	0	0.0%
88.9%	3,250	3,250	0	0.0%
90.1%	3,250	3,250	0	0.0%
91.4%	3,250	3,250	0	0.0%
92.6%	3,250	3,250	0	0.0%
93.8%	3,250	3,250	0	0.0%
95.1%	3,250	3,250	0	0.0%
96.3%	3,250	3,250	0	0.0%
97.5%	3,250	3,250	0	0.0%
98.8%	3,250	3,250	0	0.0%
100.0%	3,250	3,250	0	0.0%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	30,805	30,805	0	0.0%
1.2%	23,403	23,403	0	0.0%
2.5%	16,165	16,165	0	0.0%
3.7%	14,137	14,137	0	0.0%
4.9%	12,419	12,419	0	0.0%
6.2%	11,772	11,589	-183	-1.6%
7.4%	11,049	11,183	134	1.2%
8.6%	10,686	11,049	363	3.4%
9.9%	10,233	10,224	-9	-0.1%
11.1%	9,967	8,985	-982	-9.9%
12.3%	9,554	8,776	-778	-8.1%
13.6%	9,228	8,728	-500	-5.4%
14.8%	8,857	8,466	-392	-4.4%
16.0%	8,765	8,235	-530	-6.1%
17.3%	8,412	8,198	-214	-2.5%
18.5%	8,198	7,975	-223	-2.7%
19.8%	8,161	7,944	-217	-2.7%
21.0%	8,098	7,881	-217	-2.7%
22.2%	7,980	7,710	-270	-3.4%
23.5%	7,809	7,650	-159	-2.0%
24.7%	7,684	7,580	-104	-1.4%
25.9%	7,580	7,508	-72	-1.0%
27.2%	7,575	7,473	-102	-1.3%
28.4%	7,399	7,368	-31	-0.4%
29.6%	7,301	7,305	4	0.1%
30.9%	7,182	7,298	116	1.6%
32.1%	7,139	7,144	4	0.1%
33.3%	7,110	7,090	-20	-0.3%
34.6%	7,099	6,976	-123	-1.7%
35.8%	7,090	6,822	-269	-3.8%
37.0%	7,055	6,732	-323	-4.6%
38.3%	6,953	6,673	-280	-4.0%
39.5%	6,888	6,668	-220	-3.2%
40.7%	6,738	6,660	-78	-1.2%
42.0%	6,543	6,469	-74	-1.1%
43.2%	6,463	6,314	-149	-2.3%
44.4%	6,308	6,246	-62	-1.0%
45.7%	6,213	6,233	20	0.3%
46.9%	6,010	5,610	-400	-6.7%
48.1%	5,940	5,455	-486	-8.2%
49.4%	5,899	5,369	-530	-9.0%
50.6%	5,836	5,323	-513	-8.8%
51.9%	5,797	5,305	-492	-8.5%
53.1%	5,466	5,286	-180	-3.3%
54.3%	5,419	5,283	-136	-2.5%
55.6%	5,310	5,211	-99	-1.9%
56.8%	5,305	5,155	-151	-2.8%
58.0%	5,286	5,103	-183	-3.5%
59.3%	5,148	5,076	-72	-1.4%
60.5%	4,993	4,861	-133	-2.7%
61.7%	4,929	4,818	-111	-2.3%
63.0%	4,906	4,742	-163	-3.3%
64.2%	4,759	4,735	-23	-0.5%
65.4%	4,742	4,664	-78	-1.6%
66.7%	4,672	4,600	-72	-1.5%
67.9%	4,617	4,600	-17	-0.4%
69.1%	4,500	4,600	100	2.2%
70.4%	4,500	4,600	100	2.2%
71.6%	4,500	4,600	100	2.2%
72.8%	4,500	4,600	100	2.2%
74.1%	4,500	4,600	100	2.2%
75.3%	4,500	4,600	100	2.2%
76.5%	4,500	4,600	100	2.2%
77.8%	4,500	4,600	100	2.2%
79.0%	4,500	4,500	0	0.0%
80.2%	4,500	4,500	0	0.0%
81.5%	4,500	4,500	0	0.0%
82.7%	4,500	4,500	0	0.0%
84.0%	4,500	4,500	0	0.0%
85.2%	4,500	4,500	0	0.0%
86.4%	4,338	4,500	162	3.7%
87.7%	4,203	4,500	297	7.1%
88.9%	3,990	4,500	510	12.8%
90.1%	3,719	4,368	650	17.5%
91.4%	3,700	4,357	657	17.8%
92.6%	3,250	4,283	1,033	31.8%
93.8%	3,250	4,138	888	27.3%
95.1%	3,250	4,087	837	25.7%
96.3%	3,250	4,050	800	24.6%
97.5%	3,250	3,994	744	22.9%
98.8%	3,250	3,357	107	3.3%
100.0%	3,250	3,250	0	0.0%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,924	12,477	553	4.6%
1.2%	11,759	11,725	-34	-0.3%
2.5%	11,631	11,384	-247	-2.1%
3.7%	11,573	11,307	-265	-2.3%
4.9%	11,096	11,227	132	1.2%
6.2%	10,935	10,701	-234	-2.1%
7.4%	10,784	10,554	-230	-2.1%
8.6%	10,172	10,291	120	1.2%
9.9%	10,106	10,115	9	0.1%
11.1%	10,092	10,038	-54	-0.5%
12.3%	10,058	10,010	-48	-0.5%
13.6%	10,038	9,597	-442	-4.4%
14.8%	9,874	9,578	-296	-3.0%
16.0%	9,752	9,531	-221	-2.3%
17.3%	9,581	9,408	-173	-1.8%
18.5%	9,468	9,227	-242	-2.6%
19.8%	9,188	9,223	36	0.4%
21.0%	9,094	9,138	44	0.5%
22.2%	8,956	9,037	80	0.9%
23.5%	8,951	8,951	0	0.0%
24.7%	8,814	8,831	18	0.2%
25.9%	8,805	8,578	-227	-2.6%
27.2%	8,715	8,550	-165	-1.9%
28.4%	8,594	8,429	-164	-1.9%
29.6%	8,506	8,424	-83	-1.0%
30.9%	8,420	8,338	-82	-1.0%
32.1%	8,357	8,271	-87	-1.0%
33.3%	8,165	8,264	100	1.2%
34.6%	8,161	8,183	23	0.3%
35.8%	8,124	8,070	-54	-0.7%
37.0%	8,090	8,028	-62	-0.8%
38.3%	8,088	7,603	-486	-6.0%
39.5%	8,027	7,575	-452	-5.6%
40.7%	7,990	7,481	-508	-6.4%
42.0%	7,941	7,436	-505	-6.4%
43.2%	7,855	7,417	-438	-5.6%
44.4%	7,829	7,404	-425	-5.4%
45.7%	7,811	7,382	-429	-5.5%
46.9%	7,796	7,299	-497	-6.4%
48.1%	7,762	7,294	-468	-6.0%
49.4%	7,720	7,213	-507	-6.6%
50.6%	7,702	7,062	-640	-8.3%
51.9%	7,540	6,954	-585	-7.8%
53.1%	7,522	6,933	-589	-7.8%
54.3%	7,492	6,900	-592	-7.9%
55.6%	7,445	6,850	-595	-8.0%
56.8%	7,418	6,736	-682	-9.2%
58.0%	7,378	6,486	-892	-12.1%
59.3%	7,234	6,481	-753	-10.4%
60.5%	7,165	6,368	-796	-11.1%
61.7%	7,124	6,303	-820	-11.5%
63.0%	7,007	6,292	-716	-10.2%
64.2%	6,894	6,231	-663	-9.6%
65.4%	6,850	6,200	-650	-9.5%
66.7%	6,719	6,200	-519	-7.7%
67.9%	6,644	6,156	-488	-7.4%
69.1%	6,551	6,122	-429	-6.6%
70.4%	6,551	6,056	-495	-7.6%
71.6%	6,504	5,984	-519	-8.0%
72.8%	6,479	5,966	-513	-7.9%
74.1%	6,452	5,951	-501	-7.8%
75.3%	6,405	5,924	-481	-7.5%
76.5%	6,336	5,800	-536	-8.5%
77.8%	6,214	5,595	-618	-9.9%
79.0%	6,213	5,573	-640	-10.3%
80.2%	6,193	5,500	-693	-11.2%
81.5%	6,180	5,389	-791	-12.8%
82.7%	6,131	5,378	-753	-12.3%
84.0%	6,126	5,361	-764	-12.5%
85.2%	6,119	5,352	-767	-12.5%
86.4%	6,053	5,300	-753	-12.4%
87.7%	6,053	5,100	-953	-15.7%
88.9%	5,954	5,095	-859	-14.4%
90.1%	5,792	5,060	-732	-12.6%
91.4%	5,658	4,922	-736	-13.0%
92.6%	5,602	4,900	-702	-12.5%
93.8%	5,584	4,883	-701	-12.5%
95.1%	5,553	4,700	-853	-15.4%
96.3%	5,514	4,601	-914	-16.6%
97.5%	4,463	4,589	126	2.8%
98.8%	4,435	4,487	52	1.2%
100.0%	4,120	4,255	135	3.3%

Table SW-10-b

Sacramento River below Keswick Reservoir, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,000	15,000	0	0.0%
1.2%	15,000	15,000	0	0.0%
2.5%	15,000	14,332	-668	-4.5%
3.7%	15,000	14,126	-874	-5.8%
4.9%	14,723	14,007	-715	-4.9%
6.2%	14,592	13,959	-633	-4.3%
7.4%	14,269	13,785	-484	-3.4%
8.6%	14,267	13,728	-539	-3.8%
9.9%	14,187	13,661	-526	-3.7%
11.1%	13,981	13,557	-424	-3.0%
12.3%	13,977	13,432	-544	-3.9%
13.6%	13,847	13,378	-469	-3.4%
14.8%	13,783	13,375	-408	-3.0%
16.0%	13,750	13,258	-491	-3.6%
17.3%	13,736	13,048	-687	-5.0%
18.5%	13,693	12,953	-740	-5.4%
19.8%	13,662	12,920	-742	-5.4%
21.0%	13,643	12,853	-790	-5.8%
22.2%	13,623	12,807	-816	-6.0%
23.5%	13,527	12,765	-762	-5.6%
24.7%	13,430	12,603	-827	-6.2%
25.9%	13,373	12,564	-809	-6.0%
27.2%	13,302	12,509	-794	-6.0%
28.4%	13,192	12,500	-692	-5.2%
29.6%	13,185	12,389	-797	-6.0%
30.9%	13,129	12,187	-942	-7.2%
32.1%	13,086	12,118	-968	-7.4%
33.3%	13,035	12,114	-921	-7.1%
34.6%	12,861	12,074	-787	-6.1%
35.8%	12,666	12,066	-600	-4.7%
37.0%	12,613	12,031	-582	-4.6%
38.3%	12,559	11,901	-659	-5.2%
39.5%	12,504	11,889	-614	-4.9%
40.7%	12,473	11,862	-610	-4.9%
42.0%	12,343	11,848	-495	-4.0%
43.2%	12,338	11,682	-656	-5.3%
44.4%	12,282	11,328	-955	-7.8%
45.7%	12,174	11,289	-884	-7.3%
46.9%	12,131	11,210	-921	-7.6%
48.1%	12,051	11,166	-884	-7.3%
49.4%	11,947	11,107	-840	-7.0%
50.6%	11,938	11,069	-869	-7.3%
51.9%	11,911	11,056	-855	-7.2%
53.1%	11,759	10,987	-773	-6.6%
54.3%	11,700	10,789	-911	-7.8%
55.6%	11,693	10,708	-984	-8.4%
56.8%	11,691	10,691	-999	-8.5%
58.0%	11,374	10,517	-856	-7.5%
59.3%	11,355	10,500	-855	-7.5%
60.5%	11,220	10,500	-720	-6.4%
61.7%	11,139	10,500	-639	-5.7%
63.0%	11,027	10,500	-527	-4.8%
64.2%	10,944	10,500	-444	-4.1%
65.4%	10,789	10,500	-289	-2.7%
66.7%	10,711	10,500	-211	-2.0%
67.9%	10,694	10,500	-194	-1.8%
69.1%	10,669	10,500	-169	-1.6%
70.4%	10,494	10,500	6	0.1%
71.6%	10,475	10,500	25	0.2%
72.8%	10,439	10,261	-178	-1.7%
74.1%	10,275	10,084	-191	-1.9%
75.3%	10,148	10,076	-72	-0.7%
76.5%	10,053	10,015	-38	-0.4%
77.8%	9,997	9,950	-47	-0.5%
79.0%	9,995	9,731	-264	-2.6%
80.2%	9,798	9,701	-96	-1.0%
81.5%	9,708	9,609	-99	-1.0%
82.7%	9,582	9,508	-74	-0.8%
84.0%	9,563	9,312	-250	-2.6%
85.2%	9,477	9,200	-277	-2.9%
86.4%	9,348	9,141	-208	-2.2%
87.7%	9,080	9,120	39	0.4%
88.9%	8,938	9,100	162	1.8%
90.1%	8,931	9,100	169	1.9%
91.4%	8,740	9,018	278	3.2%
92.6%	8,520	8,817	297	3.5%
93.8%	8,478	8,703	225	2.7%
95.1%	8,414	7,994	-420	-5.0%
96.3%	8,349	7,400	-949	-11.4%
97.5%	8,195	7,127	-1,068	-13.0%
98.8%	7,857	7,087	-770	-9.8%
100.0%	7,564	7,000	-564	-7.5%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,800	20,539	4,740	30.0%
1.2%	15,742	20,390	4,648	29.5%
2.5%	15,000	19,246	4,246	28.3%
3.7%	15,000	18,926	3,926	26.2%
4.9%	15,000	18,657	3,657	24.4%
6.2%	15,000	18,632	3,632	24.2%
7.4%	15,000	18,516	3,516	23.4%
8.6%	15,000	17,682	2,682	17.9%
9.9%	15,000	16,927	1,927	12.8%
11.1%	15,000	15,903	903	6.0%
12.3%	15,000	15,256	256	1.7%
13.6%	15,000	15,140	140	0.9%
14.8%	15,000	15,000	0	0.0%
16.0%	15,000	15,000	0	0.0%
17.3%	15,000	15,000	0	0.0%
18.5%	15,000	15,000	0	0.0%
19.8%	15,000	15,000	0	0.0%
21.0%	15,000	15,000	0	0.0%
22.2%	15,000	15,000	0	0.0%
23.5%	15,000	15,000	0	0.0%
24.7%	15,000	15,000	0	0.0%
25.9%	15,000	15,000	0	0.0%
27.2%	15,000	15,000	0	0.0%
28.4%	15,000	15,000	0	0.0%
29.6%	15,000	15,000	0	0.0%
30.9%	15,000	15,000	0	0.0%
32.1%	15,000	15,000	0	0.0%
33.3%	14,963	15,000	37	0.2%
34.6%	14,959	15,000	41	0.3%
35.8%	14,918	15,000	82	0.6%
37.0%	14,894	15,000	106	0.7%
38.3%	14,829	15,000	171	1.2%
39.5%	14,811	15,000	189	1.3%
40.7%	14,775	15,000	225	1.5%
42.0%	14,773	15,000	227	1.5%
43.2%	14,767	15,000	233	1.6%
44.4%	14,759	14,864	105	0.7%
45.7%	14,758	14,819	61	0.4%
46.9%	14,758	14,777	19	0.1%
48.1%	14,757	14,757	0	0.0%
49.4%	14,751	14,665	-86	-0.6%
50.6%	14,694	14,513	-181	-1.2%
51.9%	14,685	14,437	-248	-1.7%
53.1%	14,662	14,434	-228	-1.6%
54.3%	14,639	14,373	-266	-1.8%
55.6%	14,638	14,175	-463	-3.2%
56.8%	14,583	14,017	-567	-3.9%
58.0%	14,445	13,979	-465	-3.2%
59.3%	14,293	13,977	-317	-2.2%
60.5%	14,246	13,893	-353	-2.5%
61.7%	14,196	13,800	-395	-2.8%
63.0%	14,036	13,775	-262	-1.9%
64.2%	13,910	13,631	-280	-2.0%
65.4%	13,828	13,530	-298	-2.2%
66.7%	13,708	13,457	-252	-1.8%
67.9%	13,374	13,376	3	0.0%
69.1%	13,244	13,306	62	0.5%
70.4%	13,203	13,173	-30	-0.2%
71.6%	13,180	13,012	-168	-1.3%
72.8%	13,066	12,981	-84	-0.6%
74.1%	12,982	12,881	-100	-0.8%
75.3%	12,972	12,740	-233	-1.8%
76.5%	12,894	12,500	-394	-3.1%
77.8%	12,809	12,500	-309	-2.4%
79.0%	12,798	12,500	-298	-2.3%
80.2%	12,636	12,500	-136	-1.1%
81.5%	12,341	12,484	143	1.2%
82.7%	12,139	12,405	266	2.2%
84.0%	12,045	12,356	311	2.6%
85.2%	11,915	11,880	-35	-0.3%
86.4%	11,663	11,758	94	0.8%
87.7%	11,317	11,727	410	3.6%
88.9%	11,311	11,700	389	3.4%
90.1%	11,260	11,675	415	3.7%
91.4%	11,152	11,621	469	4.2%
92.6%	10,436	11,427	992	9.5%
93.8%	9,981	11,309	1,328	13.3%
95.1%	9,419	11,225	1,806	19.2%
96.3%	9,414	10,900	1,486	15.8%
97.5%	9,316	10,785	1,469	15.8%
98.8%	8,441	9,542	1,101	13.0%
100.0%	6,034	6,143	109	1.8%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,240	12,469	-772	-5.8%
1.2%	13,202	12,447	-755	-5.7%
2.5%	12,519	11,913	-606	-4.8%
3.7%	12,304	11,674	-631	-5.1%
4.9%	12,271	11,641	-630	-5.1%
6.2%	11,996	11,628	-368	-3.1%
7.4%	11,983	11,443	-540	-4.5%
8.6%	11,891	11,305	-585	-4.9%
9.9%	11,852	11,305	-548	-4.6%
11.1%	11,850	11,190	-660	-5.6%
12.3%	11,516	10,760	-757	-6.6%
13.6%	11,380	10,681	-699	-6.1%
14.8%	11,370	10,579	-791	-7.0%
16.0%	11,337	10,546	-790	-7.0%
17.3%	11,261	10,444	-818	-7.3%
18.5%	11,217	10,425	-792	-7.1%
19.8%	11,112	10,383	-729	-6.6%
21.0%	11,017	10,348	-669	-6.1%
22.2%	10,989	10,331	-658	-6.0%
23.5%	10,983	10,311	-672	-6.1%
24.7%	10,892	10,215	-677	-6.2%
25.9%	10,846	10,110	-736	-6.8%
27.2%	10,694	10,060	-634	-5.9%
28.4%	10,604	10,057	-547	-5.2%
29.6%	10,460	10,000	-460	-4.4%
30.9%	10,394	10,000	-394	-3.8%
32.1%	10,383	10,000	-383	-3.7%
33.3%	10,350	10,000	-350	-3.4%
34.6%	10,321	10,000	-321	-3.1%
35.8%	10,313	10,000	-313	-3.0%
37.0%	10,258	10,000	-258	-2.5%
38.3%	10,154	10,000	-154	-1.5%
39.5%	10,025	10,000	-25	-0.3%
40.7%	9,934	10,000	66	0.7%
42.0%	9,928	10,000	72	0.7%
43.2%	9,901	10,000	99	1.0%
44.4%	9,890	10,000	110	1.1%
45.7%	9,863	10,000	137	1.4%
46.9%	9,662	10,000	338	3.5%
48.1%	9,540	10,000	460	4.8%
49.4%	9,491	10,000	509	5.4%
50.6%	9,436	10,000	564	6.0%
51.9%	9,418	10,000	582	6.2%
53.1%	9,401	10,000	599	6.4%
54.3%	9,354	10,000	646	6.9%
55.6%	9,168	9,996	829	9.0%
56.8%	9,117	9,987	871	9.5%
58.0%	9,085	9,966	881	9.7%
59.3%	9,053	9,943	890	9.8%
60.5%	9,052	9,723	671	7.4%
61.7%	9,050	9,711	662	7.3%
63.0%	8,954	9,696	741	8.3%
64.2%	8,908	9,678	770	8.6%
65.4%	8,896	9,600	704	7.9%
66.7%	8,865	9,583	719	8.1%
67.9%	8,854	9,562	709	8.0%
69.1%	8,793	9,541	749	8.5%
70.4%	8,756	9,530	774	8.8%
71.6%	8,723	9,477	754	8.6%
72.8%	8,703	9,400	697	8.0%
74.1%	8,620	9,396	776	9.0%
75.3%	8,619	9,375	756	8.8%
76.5%	8,554	9,341	786	9.2%
77.8%	8,481	9,303	823	9.7%
79.0%	8,400	9,300	900	10.7%
80.2%	8,333	9,266	933	11.2%
81.5%	8,266	9,249	982	11.9%
82.7%	8,164	9,240	1,076	13.2%
84.0%	8,059	9,227	1,168	14.5%
85.2%	8,044	9,207	1,162	14.5%
86.4%	8,026	9,200	1,174	14.6%
87.7%	7,971	9,200	1,229	15.4%
88.9%	7,962	9,182	1,219	15.3%
90.1%	7,910	9,107	1,197	15.1%
91.4%	7,902	9,088	1,186	15.0%
92.6%	7,848	8,750	902	11.5%
93.8%	7,828	8,700	872	11.1%
95.1%	7,682	8,400	718	9.3%
96.3%	7,557	8,300	743	9.8%
97.5%	7,399	7,900	501	6.8%
98.8%	6,620	7,418	798	12.1%
100.0%	2,878	3,142	263	9.2%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,466	16,402	936	6.1%
1.2%	15,427	15,946	519	3.4%
2.5%	15,039	15,687	648	4.3%
3.7%	15,000	15,263	263	1.8%
4.9%	15,000	15,242	242	1.6%
6.2%	14,983	15,224	241	1.6%
7.4%	14,866	14,984	118	0.8%
8.6%	14,842	14,898	56	0.4%
9.9%	14,807	14,783	-23	-0.2%
11.1%	14,778	14,771	-7	0.0%
12.3%	14,616	14,648	32	0.2%
13.6%	14,611	14,488	-123	-0.8%
14.8%	14,533	14,188	-345	-2.4%
16.0%	14,493	14,118	-375	-2.6%
17.3%	14,322	14,111	-211	-1.5%
18.5%	14,265	13,887	-378	-2.6%
19.8%	14,059	13,749	-310	-2.2%
21.0%	14,016	13,663	-354	-2.5%
22.2%	13,924	13,364	-560	-4.0%
23.5%	13,229	12,798	-432	-3.3%
24.7%	13,013	12,474	-539	-4.1%
25.9%	12,509	11,943	-566	-4.5%
27.2%	12,379	11,939	-440	-3.6%
28.4%	12,151	11,402	-749	-6.2%
29.6%	11,811	10,678	-1,133	-9.6%
30.9%	11,439	10,455	-984	-8.6%
32.1%	11,408	9,588	-1,820	-16.0%
33.3%	11,307	9,010	-2,297	-20.3%
34.6%	10,458	7,936	-2,522	-24.1%
35.8%	9,732	7,921	-1,811	-18.6%
37.0%	9,407	7,733	-1,674	-17.8%
38.3%	9,243	7,693	-1,551	-16.8%
39.5%	8,781	7,138	-1,643	-18.7%
40.7%	8,293	6,777	-1,516	-18.3%
42.0%	7,304	6,754	-551	-7.5%
43.2%	7,181	6,520	-660	-9.2%
44.4%	6,850	6,474	-376	-5.5%
45.7%	6,682	6,346	-335	-5.0%
46.9%	6,644	6,008	-636	-9.6%
48.1%	6,181	6,000	-181	-2.9%
49.4%	6,025	6,000	-25	-0.4%
50.6%	5,922	5,987	64	1.1%
51.9%	5,768	5,894	126	2.2%
53.1%	5,767	5,890	122	2.1%
54.3%	5,691	5,883	192	3.4%
55.6%	5,587	5,878	291	5.2%
56.8%	5,555	5,878	324	5.8%
58.0%	5,387	5,848	460	8.5%
59.3%	5,282	5,800	518	9.8%
60.5%	5,238	5,790	552	10.5%
61.7%	5,229	5,778	549	10.5%
63.0%	5,211	5,730	519	10.0%
64.2%	4,888	5,708	820	16.8%
65.4%	4,831	5,699	869	18.0%
66.7%	4,779	5,644	865	18.1%
67.9%	4,723	5,615	892	18.9%
69.1%	4,594	5,600	1,006	21.9%
70.4%	4,558	5,524	966	21.2%
71.6%	4,315	5,505	1,190	27.6%
72.8%	4,292	5,504	1,212	28.2%
74.1%	4,283	5,504	1,221	28.5%
75.3%	4,273	5,502	1,229	28.8%
76.5%	4,250	5,501	1,251	29.4%
77.8%	4,221	5,500	1,279	30.3%
79.0%	4,204	5,472	1,268	30.2%
80.2%	4,175	5,454	1,279	30.6%
81.5%	4,167	5,440	1,273	30.6%
82.7%	4,152	5,430	1,279	30.8%
84.0%	4,009	5,421	1,412	35.2%
85.2%	3,937	5,351	1,414	35.9%
86.4%	3,927	5,300	1,373	35.0%
87.7%	3,922	5,300	1,378	35.1%
88.9%	3,823	5,281	1,457	38.1%
90.1%	3,812	5,250	1,438	37.7%
91.4%	3,790	5,124	1,334	35.2%
92.6%	3,734	5,100	1,366	36.6%
93.8%	3,689	4,989	1,301	35.3%
95.1%	3,584	4,984	1,400	39.1%
96.3%	3,575	4,946	1,371	38.4%
97.5%	3,250	4,918	1,668	51.3%
98.8%	3,250	4,621	1,371	42.2%
100.0%	3,250	4,399	1,149	35.4%

Figure SW-11-b
Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

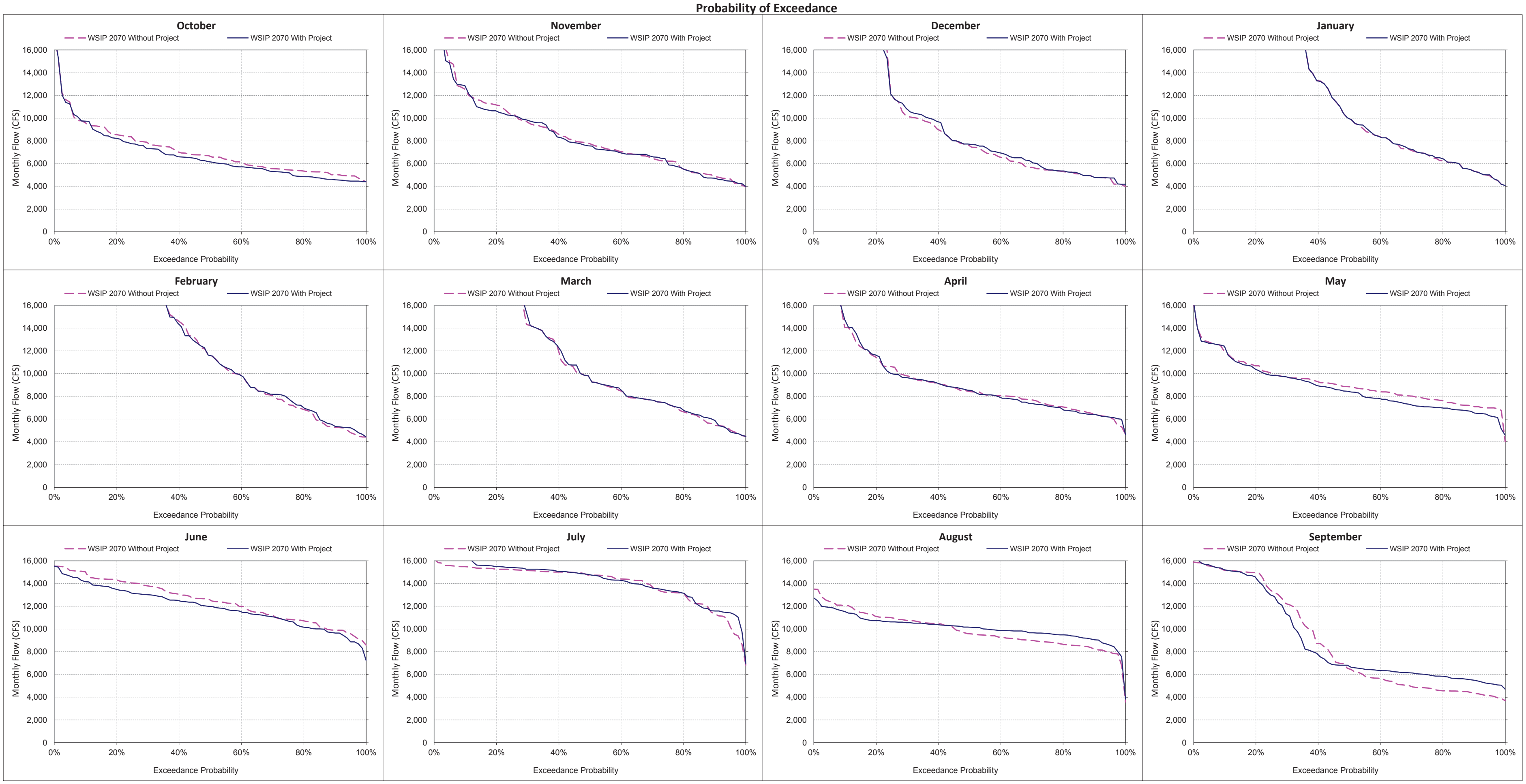


Table SW-11-b
Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,498	17,295	-204	-1.2%
1.2%	15,310	15,310	0	0.0%
2.5%	12,189	12,021	-167	-1.4%
3.7%	11,614	11,376	-238	-2.1%
4.9%	11,420	11,258	-162	-1.4%
6.2%	10,131	10,338	206	2.0%
7.4%	9,783	10,142	360	3.7%
8.6%	9,778	9,754	-24	-0.2%
9.9%	9,607	9,741	134	1.4%
11.1%	9,358	9,710	352	3.8%
12.3%	9,330	9,040	-290	-3.1%
13.6%	9,311	8,850	-461	-5.0%
14.8%	9,238	8,714	-525	-5.7%
16.0%	9,206	8,457	-749	-8.1%
17.3%	8,828	8,441	-388	-4.4%
18.5%	8,571	8,280	-291	-3.4%
19.8%	8,559	8,236	-323	-3.8%
21.0%	8,500	8,163	-337	-4.0%
22.2%	8,445	7,944	-501	-5.9%
23.5%	8,382	7,872	-510	-6.1%
24.7%	8,366	7,758	-608	-7.3%
25.9%	7,994	7,727	-268	-3.3%
27.2%	7,952	7,622	-329	-4.1%
28.4%	7,929	7,610	-319	-4.0%
29.6%	7,884	7,323	-561	-7.1%
30.9%	7,645	7,323	-322	-4.2%
32.1%	7,631	7,299	-332	-4.3%
33.3%	7,570	7,266	-304	-4.0%
34.6%	7,544	6,987	-557	-7.4%
35.8%	7,501	6,798	-703	-9.4%
37.0%	7,465	6,779	-687	-9.2%
38.3%	7,263	6,762	-502	-6.9%
39.5%	7,043	6,613	-430	-6.1%
40.7%	6,944	6,592	-352	-5.1%
42.0%	6,928	6,563	-364	-5.3%
43.2%	6,848	6,541	-308	-4.5%
44.4%	6,790	6,484	-306	-4.5%
45.7%	6,781	6,438	-342	-5.0%
46.9%	6,770	6,289	-481	-7.1%
48.1%	6,719	6,274	-445	-6.6%
49.4%	6,709	6,171	-538	-8.0%
50.6%	6,576	6,124	-452	-6.9%
51.9%	6,575	6,059	-516	-7.8%
53.1%	6,568	6,016	-552	-8.4%
54.3%	6,420	5,998	-422	-6.6%
55.6%	6,363	5,953	-410	-6.4%
56.8%	6,304	5,816	-488	-7.7%
58.0%	6,166	5,751	-415	-6.7%
59.3%	6,159	5,716	-442	-7.2%
60.5%	6,069	5,715	-353	-5.8%
61.7%	5,890	5,677	-213	-3.6%
63.0%	5,848	5,659	-189	-3.2%
64.2%	5,782	5,607	-175	-3.0%
65.4%	5,764	5,587	-177	-3.1%
66.7%	5,737	5,555	-183	-3.2%
67.9%	5,621	5,449	-172	-3.1%
69.1%	5,572	5,322	-251	-4.5%
70.4%	5,553	5,303	-250	-4.5%
71.6%	5,541	5,288	-253	-4.6%
72.8%	5,523	5,269	-254	-4.6%
74.1%	5,466	5,213	-253	-4.6%
75.3%	5,449	5,200	-249	-4.6%
76.5%	5,422	4,936	-487	-9.0%
77.8%	5,400	4,893	-507	-9.4%
79.0%	5,382	4,868	-514	-9.5%
80.2%	5,340	4,853	-487	-9.1%
81.5%	5,288	4,843	-446	-8.4%
82.7%	5,285	4,838	-447	-8.5%
84.0%	5,278	4,758	-520	-9.9%
85.2%	5,278	4,730	-548	-10.4%
86.4%	5,247	4,662	-585	-11.2%
87.7%	5,203	4,627	-576	-11.1%
88.9%	5,030	4,618	-412	-8.2%
90.1%	5,021	4,582	-439	-8.7%
91.4%	5,019	4,547	-472	-9.4%
92.6%	4,951	4,542	-408	-8.2%
93.8%	4,928	4,492	-436	-8.8%
95.1%	4,925	4,475	-450	-9.1%
96.3%	4,918	4,455	-463	-9.4%
97.5%	4,734	4,455	-280	-5.9%
98.8%	4,548	4,424	-124	-2.7%
100.0%	4,407	4,424	17	0.4%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,306	24,192	886	3.8%
1.2%	21,067	23,129	2,062	9.8%
2.5%	18,284	17,433	-852	-4.7%
3.7%	16,142	15,063	-1,079	-6.7%
4.9%	14,954	14,852	-102	-0.7%
6.2%	14,739	13,438	-1,301	-8.8%
7.4%	12,866	12,959	93	0.7%
8.6%	12,737	12,941	203	1.6%
9.9%	12,549	12,871	323	2.6%
11.1%	11,994	12,124	130	1.1%
12.3%	11,831	11,736	-95	-0.8%
13.6%	11,622	11,025	-597	-5.1%
14.8%	11,572	10,899	-673	-5.8%
16.0%	11,361	10,794	-567	-5.0%
17.3%	11,288	10,727	-560	-5.0%
18.5%	11,258	10,660	-597	-5.3%
19.8%	11,176	10,641	-535	-4.8%
21.0%	11,094	10,500	-594	-5.4%
22.2%	10,851	10,424	-427	-3.9%
23.5%	10,567	10,291	-276	-2.6%
24.7%	10,295	10,244	-51	-0.5%
25.9%	10,280	10,186	-93	-0.9%
27.2%	9,917	10,088	172	1.7%
28.4%	9,793	9,903	110	1.1%
29.6%	9,711	9,854	143	1.5%
30.9%	9,501	9,728	226	2.4%
32.1%	9,388	9,638	251	2.7%
33.3%	9,359	9,606	247	2.6%
34.6%	9,241	9,603	362	3.9%
35.8%	9,192	9,422	230	2.5%
37.0%	9,032	8,904	-127	-1.4%
38.3%	8,908	8,815	-93	-1.0%
39.5%	8,657	8,354	-303	-3.5%
40.7%	8,421	8,269	-152	-1.8%
42.0%	8,396	8,139	-257	-3.1%
43.2%	8,153	7,903	-251	-3.1%
44.4%	8,137	7,859	-279	-3.4%
45.7%	7,929	7,829	-100	-1.3%
46.9%	7,907	7,740	-167	-2.1%
48.1%	7,865	7,636	-229	-2.9%
49.4%	7,820	7,562	-258	-3.3%
50.6%	7,677	7,552	-125	-1.6%
51.9%	7,553	7,292	-261	-3.5%
53.1%	7,540	7,255	-285	-3.8%
54.3%	7,387	7,227	-160	-2.2%
55.6%	7,291	7,186	-105	-1.4%
56.8%	7,240	7,135	-105	-1.5%
58.0%	7,219	7,121	-98	-1.4%
59.3%	7,098	6,989	-109	-1.5%
60.5%	7,028	6,917	-111	-1.6%
61.7%	6,913	6,849	-64	-0.9%
63.0%	6,871	6,837	-34	-0.5%
64.2%	6,812	6,831	19	0.3%
65.4%	6,782	6,821	38	0.6%
66.7%	6,688	6,809	121	1.8%
67.9%	6,676	6,806	129	1.9%
69.1%	6,571	6,685	113	1.7%
70.4%	6,435	6,597	162	2.5%
71.6%	6,336	6,573	236	3.7%
72.8%	6,252	6,470	218	3.5%
74.1%	6,246	6,444	198	3.2%
75.3%	6,226	5,881	-345	-5.5%
76.5%	6,215	5,866	-349	-5.6%
77.8%	6,147	5,738	-409	-6.7%
79.0%	5,659	5,664	5	0.1%
80.2%	5,486	5,480	-6	-0.1%
81.5%	5,476	5,372	-104	-1.9%
82.7%	5,215	5,305	90	1.7%
84.0%	5,198	5,225	27	0.5%
85.2%	5,156	5,131	-25	-0.5%
86.4%	5,133	4,805	-328	-6.4%
87.7%	5,048	4,744	-304	-6.0%
88.9%	5,013	4,729	-284	-5.7%
90.1%	4,856	4,719	-136	-2.8%
91.4%	4,801	4,612	-190	-4.0%
92.6%	4,709	4,569	-141	-3.0%
93.8%	4,683	4,486	-197	-4.2%
95.1%	4,646	4,459	-188	-4.0%
96.3%	4,299	4,410	111	2.6%
97.5%	4,236	4,268	32	0.8%
98.8%	4,106	4,237	131	3.2%
100.0%	3,953	3,983	30	0.7%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	50,639	50,217	-422	-0.8%
1.2%	40,890	44,816	3,925	9.6%
2.5%	38,531	38,522	-8	0.0%
3.7%	37,841	37,840	-1	0.0%
4.9%	36,141	35,290	-852	-2.4%
6.2%	35,279	34,720	-559	-1.6%
7.4%	33,508	32,094	-1,414	-4.2%
8.6%	27,964	26,979	-984	-3.5%
9.9%	25,210	26,302	1,092	4.3%
11.1%	24,909	25,211	303	1.2%
12.3%	22,457	22,470	13	0.1%
13.6%	19,712	21,635	1,923	9.8%
14.8%	18,920	18,665	-255	-1.3%
16.0%	18,668	18,481	-187	-1.0%
17.3%	17,642	18,114	472	2.7%
18.5%	17,526	17,529	3	0.0%
19.8%	17,412	17,497	85	0.5%
21.0%	16,623	17,412	789	4.7%
22.2%	16,559	16,075	-484	-2.9%
23.5%	16,070	15,262	-808	-5.0%
24.7%	12,122	12,124	2	0.0%
25.9%	11,674	11,673	-2	0.0%
27.2%	11,446	11,450	3	0.0%
28.4%	10,557	11,312	755	7.2%
29.6%	10,188	10,865	677	6.6%
30.9%	10,097	10,555	458	4.5%
32.1%	10,056	10,441	385	3.8%
33.3%	9,991	10,381	390	3.9%
34.6%	9,886	10,312	426	4.3%
35.8%	9,717	10,102	385	4.0%
37.0%	9,636	9,992	356	3.7%
38.3%	9,452	9,887	435	4.6%
39.5%	9,062	9,707	645	7.1%
40.7%	8,874	9,627	753	8.5%
42.0%	8,630	8,637	7	0.1%
43.2%	8,363	8,364	0	0.0%
44.4%	8,018	8,018	0	0.0%
45.7%	8,003	8,003	0	0.0%
46.9%	7,812	7,884	72	0.9%
48.1%	7,723	7,723	0	0.0%
49.4%	7,676	7,719	43	0.6%
50.6%	7,448	7,676	228	3.1%
51.9%	7,436	7,662	227	3.0%
53.1%	7,371	7,554	183	2.5%
54.3%	7,104	7,551	448	6.3%
55.6%	6,909	7,370	461	6.7%
56.8%	6,883	7,110	227	3.3%
58.0%	6,804	7,062	258	3.8%
59.3%	6,609	6,964	355	5.4%
60.5%	6,509	6,909	399	6.1%
61.7%	6,508	6,800	292	4.5%
63.0%	6,232	6,614	382	6.1%
64.2%	6,202	6,529	327	5.3%
65.4%	6,130	6,513	383	6.3%
66.7%	6,024	6,511	488	8.1%
67.9%	5,746	6,303	557	9.7%
69.1%	5,696	6,277	581	10.2%
70.4%	5,652	6,061	410	7.2%
71.6%	5,552	6,020	468	8.4%
72.8%	5,541	5,750	209	3.8%
74.1%	5,454	5,548	94	1.7%
75.3%	5,450	5,455	5	0.1%
76.5%	5,428	5,448	20	0.4%
77.8%	5,365	5,367	1	0.0%
79.0%	5,346	5,363	17	0.3%
80.2%	5,284	5,354	70	1.3%
81.5%	5,259	5,274	15	0.3%
82.7%	5,255	5,250	-5	-0.1%
84.0%	5,109	5,232	123	2.4%
85.2%	5,107	5,133	25	0.5%
86.4%	4,964	4,958	-6	-0.1%
87.7%	4,964	4,957	-7	-0.1%
88.9%	4,934	4,927	-6	-0.1%
90.1%	4,786	4,785	0	0.0%
91.4%	4,782	4,774	-8	-0.2%
92.6%	4,777	4,760	-16	-0.3%
93.8%	4,740	4,759	19	0.4%
95.1%	4,711	4,738	27	0.6%
96.3%	4,203	4,730	527	12.5%
97.5%	4,193	4,208	15	0.4%
98.8%	4,156	4,200	44	1.1%
100.0%	3,983	4,193	211	5.3%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	83,564	83,594	30	0.0%
1.2%	70,377	70,381	4	0.0%
2.5%	68,954	68,963	9	0.0%
3.7%	65,454	65,448	-6	0.0%
4.9%	61,081	62,176	1,095	1.8%
6.2%	53,961	53,972	12	0.0%
7.4%	46,330	46,944	615	1.3%
8.6%	42,110	41,243	-867	-2.1%
9.9%	38,921	38,926	5	0.0%
11.1%	38,297	38,297	0	0.0%
12.3%	36,064	35,315	-748	-2.1%
13.6%	34,194	34,195	1	0.0%
14.8%	34,106	33,000	-1,106	-3.2%
16.0%	32,395	32,258	-136	-0.4%
17.3%	30,910	30,922	11	0.0%
18.5%	25,847	26,085	239	0.9%
19.8%	25,743	25,747	4	0.0%
21.0%	23,578	24,320	741	3.1%
22.2%	22,587	23,387	801	3.5%
23.5%	22,442	22,420	-21	-0.1%
24.7%	22,233	22,213	-20	-0.1%
25.9%	22,011	22,008	-2	0.0%
27.2%	21,801	21,438	-364	-1.7%
28.4%	20,818	20,806	-12	-0.1%
29.6%	20,156	20,164	8	0.0%
30.9%	19,087	20,049	962	5.0%
32.1%	18,660	18,780	121	0.6%
33.3%	18,387	18,649	261	1.4%
34.6%	16,914	18,388	1,474	8.7%
35.8%	16,299	16,292	-7	0.0%
37.0%	14,329	14,328	0	0.0%
38.3%	13,928	13,926	-2	0.0%
39.5%	13,304	13,298	-6	0.0%
40.7%	13,268	13,234	-34	-0.3%
42.0%	13,019	13,020	1	0.0%
43.2%	12,558	12,561	4	0.0%
44.4%	11,822	11,823	1	0.0%
45.7%	11,447	11,447	1	0.0%
46.9%	11,046	11,040	-6	-0.1%
48.1%	10,415	10,417	2	0.0%
49.4%	10,030	10,028	-2	0.0%
50.6%	9,880	9,882	2	0.0%
51.9%	9,538	9,526	-11	-0.1%
53.1%	9,384	9,410	26	0.3%
54.3%	9,096	9,385	289	3.2%
55.6%	8,797	9,098	301	3.4%
56.8%	8,711	8,793	81	0.9%
58.0%	8,525	8,524	-1	0.0%
59.3%	8,428	8,420	-8	-0.1%
60.5%	8,292	8,279	-12	-0.2%
61.7%	8,279	8,278	-1	0.0%
63.0%	8,066	8,064	-2	0.0%
64.2%	7,750	7,750	0	0.0%
65.4%	7,696	7,700	4	0.0%
66.7%	7,323	7,606	283	3.9%
67.9%	7,308	7,469	160	2.2%
69.1%	7,254	7,304	50	0.7%
70.4%	7,112	7,257	145	2.0%
71.6%	7,020	7,017	-2	0.0%
72.8%	6,945	6,943	-2	0.0%
74.1%	6,911	6,912	1	0.0%
75.3%	6,755	6,751	-5	-0.1%
76.5%	6,508	6,724	216	3.3%
77.8%	6,470	6,526	57	0.9%
79.0%	6,273	6,511	238	3.8%
80.2%	6,230	6,413	183	2.9%
81.5%	6,137	6,137	0	0.0%
82.7%	6,086	6,129	44	0.7%
84.0%	6,082	6,081	-1	0.0%
85.2%	6,013	6,014	2	0.0%
86.4%	5,585	5,592	7	0.1%
87.7%	5,573	5,561	-12	-0.2%
88.9%	5,475	5,475	0	0.0%
90.1%	5,330	5,312	-18	-0.3%
91.4%	5,241	5,239	-1	0.0%
92.6%	5,024	5,071	47	0.9%
93.8%	5,018	5,009	-9	-0.2%
95.1%	4,930	5,008	79	1.6%
96.3%	4,626	4,669	43	0.9%
97.5%	4,538	4,534	-4	-0.1%
98.8%	4,182	4,182	0	0.0%
100.0%	4,082	4,078	-3	-0.1%

Table SW-11-b
Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	96,195	96,198	3	0.0%
1.2%	91,807	91,814	6	0.0%
2.5%	67,869	67,871	3	0.0%
3.7%	64,895	65,941	1,046	1.6%
4.9%	63,317	63,334	16	0.0%
6.2%	60,923	60,923	0	0.0%
7.4%	55,752	55,751	-1	0.0%
8.6%	49,603	49,605	2	0.0%
9.9%	47,788	49,208	1,420	3.0%
11.1%	47,034	47,793	759	1.6%
12.3%	46,522	47,056	533	1.1%
13.6%	46,239	46,183	-57	-0.1%
14.8%	44,669	44,669	0	0.0%
16.0%	43,132	43,132	0	0.0%
17.3%	42,246	42,245	-1	0.0%
18.5%	36,114	36,117	3	0.0%
19.8%	35,792	35,771	-21	-0.1%
21.0%	34,587	34,586	-1	0.0%
22.2%	34,353	34,358	5	0.0%
23.5%	30,197	30,200	3	0.0%
24.7%	29,829	29,824	-5	0.0%
25.9%	25,435	28,140	2,705	10.6%
27.2%	23,863	25,434	1,571	6.6%
28.4%	23,364	24,202	839	3.6%
29.6%	22,627	23,359	733	3.2%
30.9%	21,701	22,454	753	3.5%
32.1%	21,217	22,243	1,026	4.8%
33.3%	20,196	20,035	-161	-0.8%
34.6%	17,087	17,087	0	0.0%
35.8%	16,073	16,071	-3	0.0%
37.0%	15,185	14,964	-222	-1.5%
38.3%	14,969	14,940	-28	-0.2%
39.5%	14,683	14,440	-243	-1.7%
40.7%	14,438	14,117	-321	-2.2%
42.0%	14,117	13,327	-790	-5.6%
43.2%	13,328	13,324	-5	0.0%
44.4%	13,317	12,951	-366	-2.7%
45.7%	12,955	12,694	-261	-2.0%
46.9%	12,285	12,443	158	1.3%
48.1%	12,194	12,285	91	0.7%
49.4%	11,613	11,617	4	0.0%
50.6%	11,538	11,541	3	0.0%
51.9%	11,223	11,217	-6	0.0%
53.1%	10,847	10,850	3	0.0%
54.3%	10,612	10,613	1	0.0%
55.6%	10,331	10,486	156	1.5%
56.8%	10,033	10,331	298	3.0%
58.0%	9,988	10,031	43	0.4%
59.3%	9,936	9,939	2	0.0%
60.5%	9,721	9,720	-1	0.0%
61.7%	9,212	9,214	2	0.0%
63.0%	8,806	8,798	-9	-0.1%
64.2%	8,776	8,776	1	0.0%
65.4%	8,448	8,449	1	0.0%
66.7%	8,447	8,449	1	0.0%
67.9%	8,163	8,320	157	1.9%
69.1%	8,125	8,205	80	1.0%
70.4%	8,003	8,165	163	2.0%
71.6%	7,746	8,162	417	5.4%
72.8%	7,728	8,125	397	5.1%
74.1%	7,459	8,007	547	7.3%
75.3%	7,242	7,745	502	6.9%
76.5%	7,206	7,461	254	3.5%
77.8%	6,957	7,246	289	4.2%
79.0%	6,934	7,206	272	3.9%
80.2%	6,818	6,940	123	1.8%
81.5%	6,715	6,816	101	1.5%
82.7%	6,550	6,721	171	2.6%
84.0%	5,934	6,555	621	10.5%
85.2%	5,803	5,932	129	2.2%
86.4%	5,595	5,805	210	3.8%
87.7%	5,341	5,612	271	5.1%
88.9%	5,315	5,546	231	4.3%
90.1%	5,277	5,340	63	1.2%
91.4%	5,253	5,315	62	1.2%
92.6%	5,221	5,275	54	1.0%
93.8%	5,037	5,253	216	4.3%
95.1%	4,800	5,220	420	8.7%
96.3%	4,666	5,040	374	8.0%
97.5%	4,487	4,801	315	7.0%
98.8%	4,424	4,662	238	5.4%
100.0%	4,421	4,429	8	0.2%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85,259	85,260	0	0.0%
1.2%	78,609	78,612	3	0.0%
2.5%	58,308	58,309	2	0.0%
3.7%	50,260	50,262	2	0.0%
4.9%	39,261	38,864	-396	-1.0%
6.2%	37,371	37,366	-5	0.0%
7.4%	35,389	35,393	4	0.0%
8.6%	35,174	34,304	-870	-2.5%
9.9%	34,322	33,693	-630	-1.8%
11.1%	29,847	29,847	0	0.0%
12.3%	25,305	25,307	3	0.0%
13.6%	22,954	22,953	-1	0.0%
14.8%	22,326	22,410	84	0.4%
16.0%	22,165	22,325	160	0.7%
17.3%	21,866	22,165	299	1.4%
18.5%	21,463	21,868	405	1.9%
19.8%	20,756	20,675	-81	-0.4%
21.0%	20,454	20,563	109	0.5%
22.2%	19,796	19,719	-77	-0.4%
23.5%	19,764	19,235	-529	-2.7%
24.7%	19,235	18,709	-527	-2.7%
25.9%	18,707	18,410	-297	-1.6%
27.2%	17,092	17,093	1	0.0%
28.4%	16,228	16,497	270	1.7%
29.6%	14,326	15,395	1,069	7.5%
30.9%	14,218	14,216	-2	0.0%
32.1%	14,090	14,091	1	0.0%
33.3%	13,929	13,948	19	0.1%
34.6%	13,794	13,792	-2	0.0%
35.8%	13,276	13,274	-1	0.0%
37.0%	13,128	12,994	-134	-1.0%
38.3%	13,006	12,828	-179	-1.4%
39.5%	12,384	12,473	89	0.7%
40.7%	11,162	11,962	799	7.2%
42.0%	10,755	11,163	408	3.8%
43.2%	10,742	10,777	35	0.3%
44.4%	10,642	10,756	114	1.1%
45.7%	10,112	10,743	632	6.2%
46.9%	10,033	10,001	-32	-0.3%
48.1%	9,856	9,851	-6	-0.1%
49.4%	9,814	9,817	2	0.0%
50.6%	9,252	9,254	1	0.0%
51.9%	9,222	9,219	-3	0.0%
53.1%	9,111	9,111	0	0.0%
54.3%	9,026	9,017	-9	-0.1%
55.6%	8,889	8,979	89	1.0%
56.8%	8,790	8,887	96	1.1%
58.0%	8,744	8,790	46	0.5%
59.3%	8,538	8,736	198	2.3%
60.5%	8,425	8,416	-9	-0.1%
61.7%	8,002	8,008	6	0.1%
63.0%	7,878	8,001	123	1.6%
64.2%	7,849	7,905	57	0.7%
65.4%	7,844	7,842	-2	0.0%
66.7%	7,797	7,799	2	0.0%
67.9%	7,746	7,748	2	0.0%
69.1%	7,678	7,682	4	0.0%
70.4%	7,651	7,650	-1	0.0%
71.6%	7,510	7,509	-1	0.0%
72.8%	7,478	7,480	2	0.0%
74.1%	7,450	7,450	0	0.0%
75.3%	7,266	7,266	0	0.0%
76.5%	7,147	7,155	8	0.1%
77.8%	6,977	7,051	74	1.1%
79.0%	6,734	6,978	244	3.6%
80.2%	6,618	6,737	119	1.8%
81.5%	6,507	6,621	113	1.7%
82.7%	6,417	6,507	90	1.4%
84.0%	6,347	6,402	55	0.9%
85.2%	6,150	6,348	199	3.2%
86.4%	5,936	6,152	217	3.6%
87.7%	5,656	6,124	468	8.3%
88.9%	5,614	6,016	402	7.2%
90.1%	5,440	5,863	422	7.8%
91.4%	5,414	5,416	2	0.0%
92.6%	5,383	5,337	-45	-0.8%
93.8%	5,336	5,171	-164	-3.1%
95.1%	5,016	4,866	-151	-3.0%
96.3%	4,866	4,774	-93	-1.9%
97.5%	4,773	4,723	-50	-1.1%
98.8%	4,543	4,565	22	0.5%
100.0%	4,474	4,480	5	0.1%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,544	41,545	1	0.0%
1.2%	32,544	32,544	0	0.0%
2.5%	26,955	26,958	3	0.0%
3.7%	22,882	22,881	-1	0.0%
4.9%	22,055	22,055	0	0.0%
6.2%	19,221	19,221	0	0.0%
7.4%	17,040	16,857	-182	-1.1%
8.6%	15,965	15,967	2	0.0%
9.9%	14,080	14,744	664	4.7%
11.1%	14,044	14,081	37	0.3%
12.3%	13,542	14,046	504	3.7%
13.6%	12,745	13,542	797	6.2%
14.8%	12,385	12,745	360	2.9%
16.0%	12,184	12,156	-28	-0.2%
17.3%	11,970	12,078	108	0.9%
18.5%	11,646	11,724	78	0.7%
19.8%	11,469	11,648	179	1.6%
21.0%	11,194	11,473	279	2.5%
22.2%	10,669	10,670	0	0.0%
23.5%	10,620	10,222	-398	-3.7%
24.7%	10,619	10,027	-591	-5.6%
25.9%	10,558	9,923	-635	-6.0%
27.2%	10,028	9,918	-110	-1.1%
28.4%	9,916	9,665	-251	-2.5%
29.6%	9,821	9,660	-160	-1.6%
30.9%	9,743	9,576	-167	-1.7%
32.1%	9,604	9,513	-91	-1.0%
33.3%	9,432	9,506	73	0.8%
34.6%	9,367	9,475	107	1.1%
35.8%	9,330	9,379	48	0.5%
37.0%	9,263	9,303	41	0.4%
38.3%	9,234	9,296	62	0.7%
39.5%	9,113	9,168	56	0.6%
40.7%	9,049	9,057	8	0.1%
42.0%	9,009	8,919	-90	-1.0%
43.2%	8,837	8,856	19	0.2%
44.4%	8,812	8,815	3	0.0%
45.7%	8,704	8,786	82	0.9%
46.9%	8,538	8,692	154	1.8%
48.1%	8,525	8,617	92	1.1%
49.4%	8,459	8,538	79	0.9%
50.6%	8,397	8,516	118	1.4%
51.9%	8,383	8,323	-60	-0.7%
53.1%	8,377	8,175	-202	-2.4%
54.3%	8,175	8,164	-11	-0.1%
55.6%	8,099	8,136	36	0.4%
56.8%	8,075	8,121	45	0.6%
58.0%	8,063	8,088	25	0.3%
59.3%	8,049	7,975	-73	-0.9%
60.5%	8,046	7,833	-213	-2.7%
61.7%	8,020	7,828	-192	-2.4%
63.0%	8,002	7,795	-208	-2.6%
64.2%	7,975	7,747	-228	-2.9%
65.4%	7,961	7,698	-263	-3.3%
66.7%	7,767	7,495	-272	-3.5%
67.9%	7,734	7,488	-246	-3.2%
69.1%	7,709	7,377	-333	-4.3%
70.4%	7,667	7,342	-325	-4.2%
71.6%	7,580	7,285	-295	-3.9%
72.8%	7,397	7,284	-113	-1.5%
74.1%	7,354	7,206	-148	-2.0%
75.3%	7,237	7,127	-109	-1.5%
76.5%	7,194	7,085	-109	-1.5%
77.8%	7,133	7,025	-108	-1.5%
79.0%	7,107	7,018	-90	-1.3%
80.2%	7,052	6,779	-272	-3.9%
81.5%	7,002	6,752	-249	-3.6%
82.7%	6,872	6,710	-161	-2.3%
84.0%	6,821	6,690	-131	-1.9%
85.2%	6,714	6,520	-194	-2.9%
86.4%	6,713	6,507	-206	-3.1%
87.7%	6,584	6,429	-155	-2.4%
88.9%	6,521	6,425	-96	-1.5%
90.1%	6,415	6,415	0	0.0%
91.4%	6,328	6,330	2	0.0%
92.6%	6,276	6,229	-47	-0.7%
93.8%	6,230	6,206	-24	-0.4%
95.1%	6,139	6,158	20	0.3%
96.3%	5,967	6,118	150	2.5%
97.5%	5,407	6,022	615	11.4%
98.8%	5,320	5,991	672	12.6%
100.0%	4,657	4,666	9	0.2%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,227	16,352	125	0.8%
1.2%	14,007	14,009	2	0.0%
2.5%	13,197	12,860	-338	-2.6%
3.7%	12,877	12,789	-89	-0.7%
4.9%	12,767	12,658	-109	-0.9%
6.2%	12,640	12,639	-1	0.0%
7.4%	12,608	12,556	-51	-0.4%
8.6%	12,478	12,511	33	0.3%
9.9%	11,954	12,422	468	3.9%
11.1%	11,699	11,592	-106	-0.9%
12.3%	11,373	11,319	-54	-0.5%
13.6%	11,159	11,054	-105	-0.9%
14.8%	11,077	10,939	-139	-1.3%
16.0%	11,049	10,768	-281	-2.5%
17.3%	10,830	10,718	-112	-1.0%
18.5%	10,813	10,658	-155	-1.4%
19.8%	10,687	10,418	-269	-2.5%
21.0%	10,684	10,252	-432	-4.0%
22.2%	10,233	10,071	-162	-1.6%
23.5%	10,165	9,927	-237	-2.3%
24.7%	10,069	9,869	-200	-2.0%
25.9%	9,864	9,844	-20	-0.2%
27.2%	9,823	9,821	-2	0.0%
28.4%	9,759	9,737	-23	-0.2%
29.6%	9,693	9,734	42	0.4%
30.9%	9,627	9,634	7	0.1%
32.1%	9,608	9,595	-13	-0.1%
33.3%	9,606	9,492	-114	-1.2%
34.6%	9,574	9,455	-119	-1.2%
35.8%	9,551	9,340	-211	-2.2%
37.0%	9,534	9,268	-266	-2.8%
38.3%	9,410	9,113	-296	-3.1%
39.5%	9,323	8,938	-385	-4.1%
40.7%	9,206	8,890	-316	-3.4%
42.0%	9,194	8,866	-328	-3.6%
43.2%	9,168	8,795	-374	-4.1%
44.4%	9,118	8,715	-403	-4.4%
45.7%	9,052	8,574	-478	-5.3%
46.9%	8,959	8,560	-399	-4.5%
48.1%	8,866	8,467	-400	-4.5%
49.4%	8,853	8,438	-415	-4.7%
50.6%	8,834	8,366	-468	-5.3%
51.9%	8,749	8,348	-401	-4.6%
53.1%	8,683	8,285	-398	-4.6%
54.3%	8,654	7,980	-674	-7.8%
55.6%	8,652	7,898	-754	-8.7%
56.8%	8,520	7,879	-641	-7.5%
58.0%	8,503	7,837	-667	-7.8%
59.3%	8,412	7,833	-579	-6.9%
60.5%	8,392	7,743	-649	-7.7%
61.7%	8,385	7,733	-652	-7.8%
63.0%	8,352	7,595	-757	-9.1%
64.2%	8,293	7,585	-708	-8.5%
65.4%	8,121	7,510	-611	-7.5%
66.7%	8,113	7,432	-681	-8.4%
67.9%	8,050	7,355	-695	-8.6%
69.1%	8,030	7,297	-733	-9.1%
70.4%	8,013	7,206	-808	-10.1%
71.6%	7,916	7,136	-780	-9.8%
72.8%	7,891	7,122	-768	-9.7%
74.1%	7,817	7,079	-738	-9.4%
75.3%	7,748	7,075	-673	-8.7%
76.5%	7,729	7,054	-675	-8.7%
77.8%	7,699	7,003	-696	-9.0%
79.0%	7,653	6,998	-656	-8.6%
80.2%	7,651	6,959	-692	-9.0%
81.5%	7,471	6,953	-517	-6.9%
82.7%	7,445	6,867	-578	-7.8%
84.0%	7,372	6,815	-557	-7.6%
85.2%	7,256	6,810	-446	-6.1%
86.4%	7,224	6,773	-451	-6.2%
87.7%	7,220	6,727	-493	-6.8%
88.9%	7,194	6,689	-505	-7.0%
90.1%	7,089	6,527	-562	-7.9%
91.4%	7,087	6,488	-599	-8.5%
92.6%	7,012	6,478	-534	-7.6%
93.8%	6,987	6,435	-552	-7.9%
95.1%	6,987	6,288	-699	-10.0%
96.3%	6,983	6,210	-772	-11.1%
97.5%	6,925	6,148	-778	-11.2%
98.8%	6,764	5,136	-1,628	-24.1%
100.0%	4,006	4,582	576	14.4%

Table SW-11-b

Sacramento River at Bend Bridge, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,523	15,522	-1	0.0%
1.2%	15,514	15,441	-73	-0.5%
2.5%	15,488	14,862	-626	-4.0%
3.7%	15,439	14,775	-665	-4.3%
4.9%	15,155	14,665	-491	-3.2%
6.2%	15,129	14,538	-591	-3.9%
7.4%	15,081	14,536	-544	-3.6%
8.6%	15,078	14,284	-794	-5.3%
9.9%	15,041	14,159	-882	-5.9%
11.1%	14,530	14,129	-401	-2.8%
12.3%	14,499	13,862	-637	-4.4%
13.6%	14,428	13,835	-593	-4.1%
14.8%	14,395	13,790	-605	-4.2%
16.0%	14,393	13,759	-634	-4.4%
17.3%	14,368	13,738	-630	-4.4%
18.5%	14,368	13,582	-785	-5.5%
19.8%	14,352	13,493	-859	-6.0%
21.0%	14,218	13,399	-819	-5.8%
22.2%	14,152	13,387	-766	-5.4%
23.5%	14,120	13,329	-792	-5.6%
24.7%	14,046	13,159	-887	-6.3%
25.9%	14,032	13,123	-909	-6.5%
27.2%	13,999	13,085	-914	-6.5%
28.4%	13,859	13,042	-817	-5.9%
29.6%	13,811	13,012	-799	-5.8%
30.9%	13,743	12,993	-751	-5.5%
32.1%	13,728	12,943	-785	-5.7%
33.3%	13,636	12,894	-742	-5.4%
34.6%	13,536	12,850	-686	-5.1%
35.8%	13,298	12,672	-626	-4.7%
37.0%	13,180	12,553	-627	-4.8%
38.3%	13,130	12,543	-588	-4.5%
39.5%	13,088	12,528	-560	-4.3%
40.7%	12,982	12,427	-555	-4.3%
42.0%	12,976	12,401	-575	-4.4%
43.2%	12,900	12,366	-533	-4.1%
44.4%	12,719	12,361	-358	-2.8%
45.7%	12,686	12,264	-422	-3.3%
46.9%	12,680	12,085	-595	-4.7%
48.1%	12,661	12,034	-627	-5.0%
49.4%	12,637	12,001	-636	-5.0%
50.6%	12,452	11,975	-477	-3.8%
51.9%	12,412	11,874	-538	-4.3%
53.1%	12,389	11,830	-559	-4.5%
54.3%	12,349	11,802	-547	-4.4%
55.6%	12,276	11,705	-571	-4.6%
56.8%	12,250	11,633	-617	-5.0%
58.0%	12,241	11,622	-619	-5.1%
59.3%	11,991	11,594	-397	-3.3%
60.5%	11,985	11,442	-542	-4.5%
61.7%	11,737	11,440	-297	-2.5%
63.0%	11,579	11,330	-249	-2.2%
64.2%	11,487	11,289	-199	-1.7%
65.4%	11,484	11,270	-214	-1.9%
66.7%	11,462	11,220	-242	-2.1%
67.9%	11,300	11,148	-152	-1.3%
69.1%	11,260	11,113	-146	-1.3%
70.4%	11,145	11,066	-80	-0.7%
71.6%	10,937	10,983	46	0.4%
72.8%	10,903	10,869	-34	-0.3%
74.1%	10,885	10,784	-101	-0.9%
75.3%	10,852	10,679	-173	-1.6%
76.5%	10,811	10,629	-181	-1.7%
77.8%	10,797	10,346	-451	-4.2%
79.0%	10,774	10,217	-557	-5.2%
80.2%	10,702	10,145	-557	-5.2%
81.5%	10,633	10,116	-518	-4.9%
82.7%	10,561	10,030	-531	-5.0%
84.0%	10,534	10,018	-516	-4.9%
85.2%	10,177	10,000	-177	-1.7%
86.4%	10,109	9,983	-127	-1.3%
87.7%	9,959	9,729	-230	-2.3%
88.9%	9,910	9,691	-219	-2.2%
90.1%	9,899	9,641	-258	-2.6%
91.4%	9,898	9,640	-258	-2.6%
92.6%	9,882	9,456	-426	-4.3%
93.8%	9,669	9,236	-433	-4.5%
95.1%	9,577	8,872	-705	-7.4%
96.3%	9,346	8,865	-481	-5.1%
97.5%	9,110	8,689	-420	-4.6%
98.8%	8,963	8,299	-664	-7.4%
100.0%	8,577	7,253	-1,325	-15.4%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,161	20,445	4,284	26.5%
1.2%	15,847	20,068	4,220	26.6%
2.5%	15,795	19,339	3,544	22.4%
3.7%	15,594	19,055	3,462	22.2%
4.9%	15,574	19,006	3,431	22.0%
6.2%	15,547	18,999	3,451	22.2%
7.4%	15,496	18,710	3,214	20.7%
8.6%	15,493	18,173	2,680	17.3%
9.9%	15,492	16,918	1,426	9.2%
11.1%	15,460	16,285	825	5.3%
12.3%	15,422	15,932	510	3.3%
13.6%	15,364	15,630	266	1.7%
14.8%	15,353	15,607	255	1.7%
16.0%	15,348	15,598	250	1.6%
17.3%	15,330	15,585	255	1.7%
18.5%	15,322	15,557	235	1.5%
19.8%	15,268	15,494	226	1.5%
21.0%	15,259	15,492	233	1.5%
22.2%	15,257	15,457	200	1.3%
23.5%	15,254	15,420	166	1.1%
24.7%	15,240	15,414	174	1.1%
25.9%	15,208	15,386	178	1.2%
27.2%	15,186	15,362	176	1.2%
28.4%	15,166	15,349	183	1.2%
29.6%	15,140	15,265	124	0.8%
30.9%	15,137	15,261	124	0.8%
32.1%	15,123	15,256	133	0.9%
33.3%	15,083	15,248	166	1.1%
34.6%	15,069	15,244	175	1.2%
35.8%	15,048	15,204	156	1.0%
37.0%	15,046	15,188	142	0.9%
38.3%	15,012	15,177	165	1.1%
39.5%	15,012	15,071	59	0.4%
40.7%	15,011	15,049	38	0.3%
42.0%	14,995	15,048	53	0.4%
43.2%	14,994	15,014	20	0.1%
44.4%	14,983	14,957	-26	-0.2%
45.7%	14,951	14,948	-3	0.0%
46.9%	14,940	14,873	-67	-0.4%
48.1%	14,872	14,856	-16	-0.1%
49.4%	14,743	14,791	48	0.3%
50.6%	14,737	14,739	2	0.0%
51.9%	14,732	14,713	-19	-0.1%
53.1%	14,725	14,636	-89	-0.6%
54.3%	14,703	14,455	-248	-1.7%
55.6%	14,655	14,393	-262	-1.8%
56.8%	14,619	14,330	-289	-2.0%
58.0%	14,454	14,312	-143	-1.0%
59.3%	14,407	14,298	-109	-0.8%
60.5%	14,393	14,246	-148	-1.0%
61.7%	14,379	14,179	-200	-1.4%
63.0%	14,355	14,055	-301	-2.1%
64.2%	14,295	13,974	-320	-2.2%
65.4%	14,266	13,956	-310	-2.2%
66.7%	14,256	13,902	-354	-2.5%
67.9%	14,006	13,747	-259	-1.8%
69.1%	13,924	13,679	-245	-1.8%
70.4%	13,605	13,567	-38	-0.3%
71.6%	13,463	13,549	86	0.6%
72.8%	13,313	13,492	179	1.3%
74.1%	13,236	13,424	187	1.4%
75.3%	13,225	13,362	137	1.0%
76.5%	13,217	13,319	102	0.8%
77.8%	13,191	13,288	96	0.7%
79.0%	13,180	13,215	35	0.3%
80.2%	13,074	13,142	68	0.5%
81.5%	12,623	12,831	208	1.6%
82.7%	12,299	12,794	495	4.0%
84.0%	12,232	12,236	4	0.0%
85.2%	12,211	12,009	-203	-1.7%
86.4%	12,184	11,835	-349	-2.9%
87.7%	11,995	11,818	-178	-1.5%
88.9%	11,469	11,606	137	1.2%
90.1%	11,308	11,586	277	2.4%
91.4%	11,155	11,578	424	3.8%
92.6%	11,127	11,495	368	3.3%
93.8%	10,966	11,443	477	4.3%
95.1%	10,158	11,419	1,261	12.4%
96.3%	9,550	11,293	1,742	18.2%
97.5%	9,394	11,035	1,641	17.5%
98.8%	8,648	9,758	1,110	12.8%
100.0%	6,814	6,919	106	1.5%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,509	12,733	-775	-5.7%
1.2%	13,495	12,472	-1,023	-7.6%
2.5%	12,836	11,993	-843	-6.6%
3.7%	12,569	11,959	-610	-4.9%
4.9%	12,423	11,908	-515	-4.1%
6.2%	12,362	11,866	-497	-4.0%
7.4%	12,101	11,728	-373	-3.1%
8.6%	12,095	11,630	-465	-3.8%
9.9%	12,058	11,527	-531	-4.4%
11.1%	12,043	11,393	-649	-5.4%
12.3%	11,883	11,385	-498	-4.2%
13.6%	11,585	11,277	-309	-2.7%
14.8%	11,474	10,964	-510	-4.4%
16.0%	11,419	10,882	-537	-4.7%
17.3%	11,333	10,813	-520	-4.6%
18.5%	11,317	10,748	-569	-5.0%
19.8%	11,114	10,744	-370	-3.3%
21.0%	11,048	10,736	-311	-2.8%
22.2%	11,042	10,665	-376	-3.4%
23.5%	11,018	10,656	-362	-3.3%
24.7%	11,003	10,628	-375	-3.4%
25.9%	10,938	10,627	-311	-2.8%
27.2%	10,828	10,610	-218	-2.0%
28.4%	10,820	10,600	-220	-2.0%
29.6%	10,759	10,566	-193	-1.8%
30.9%	10,732	10,554	-178	-1.7%
32.1%	10,716	10,518	-198	-1.8%
33.3%	10,659	10,513	-146	-1.4%
34.6%	10,568	10,502	-65	-0.6%
35.8%	10,535	10,460	-76	-0.7%
37.0%	10,506	10,421	-85	-0.8%
38.3%	10,484	10,418	-66	-0.6%
39.5%	10,474	10,394	-81	-0.8%
40.7%	10,450	10,349	-101	-1.0%
42.0%	10,330	10,319	-11	-0.1%
43.2%	10,326	10,316	-10	-0.1%
44.4%	10,180	10,289	109	1.1%
45.7%	9,903	10,264	361	3.6%
46.9%	9,815	10,248	433	4.4%
48.1%	9,680	10,173	493	5.1%
49.4%	9,592	10,169	577	6.0%
50.6%	9,561	10,142	582	6.1%
51.9%	9,512	10,134	621	6.5%
53.1%	9,487	10,116	630	6.6%
54.3%	9,472	10,006	534	5.6%
55.6%	9,442	9,982	540	5.7%
56.8%	9,410	9,931	521	5.5%
58.0%	9,403	9,922	518	5.5%
59.3%	9,289	9,877	589	6.3%
60.5%	9,286	9,877	591	6.4%
61.7%	9,197	9,872	676	7.3%
63.0%	9,184	9,850	666	7.2%
64.2%	9,139	9,836	697	7.6%
65.4%	9,118	9,835	716	7.9%
66.7%	9,055	9,831	776	8.6%
67.9%	9,036	9,786	751	8.3%
69.1%	9,028	9,671	643	7.1%
70.4%	8,982	9,664	683	7.6%
71.6%	8,928	9,642	714	8.0%
72.8%	8,880	9,634	754	8.5%
74.1%	8,869	9,610	741	8.4%
75.3%	8,844	9,597	753	8.5%
76.5%	8,816	9,560	744	8.4%
77.8%	8,799	9,514	715	8.1%
79.0%	8,696	9,492	797	9.2%
80.2%	8,649	9,474	825	9.5%
81.5%	8,590	9,456	865	10.1%
82.7%	8,579	9,401	821	9.6%
84.0%	8,543	9,360	817	9.6%
85.2%	8,530	9,278	748	8.8%
86.4%	8,489	9,213	724	8.5%
87.7%	8,462	9,195	733	8.7%
88.9%	8,368	9,111	743	8.9%
90.1%	8,216	9,048	832	10.1%
91.4%	8,157	9,027	869	10.7%
92.6%	8,138	8,769	631	7.8%
93.8%	8,010	8,674	663	8.3%
95.1%	7,941	8,580	639	8.0%
96.3%	7,828	8,425	597	7.6%
97.5%	7,814	8,015	200	2.6%
98.8%	6,779	7,562	783	11.6%
100.0%	3,573	3,834	260	7.3%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,890	16,601	711	4.5%
1.2%	15,835	16,131	297	1.9%
2.5%	15,824	15,807	-17	-0.1%
3.7%	15,588	15,677	89	0.6%
4.9%	15,553	15,646	93	0.6%
6.2%	15,508	15,501	-7	0.0%
7.4%	15,453	15,387	-65	-0.4%
8.6%	15,315	15,365	50	0.3%
9.9%	15,169	15,212	43	0.3%
11.1%	15,128	15,157	29	0.2%
12.3%	15,127	15,100	-26	-0.2%
13.6%	15,098	15,044	-54	-0.4%
14.8%	15,058	15,030	-28	-0.2%
16.0%	15,029	14,904	-126	-0.8%
17.3%	15,006	14,721	-285	-1.9%
18.5%	14,959	14,711	-248	-1.7%
19.8%	14,959	14,587	-371	-2.5%
21.0%	14,940	14,166	-774	-5.2%
22.2%	14,481	13,855	-626	-4.3%
23.5%	13,776	13,322	-454	-3.3%
24.7%	13,411	13,010	-401	-3.0%
25.9%	13,205	12,868	-337	-2.6%
27.2%	13,037	12,324	-713	-5.5%
28.4%	12,673	12,086	-587	-4.6%
29.6%	12,233	11,353	-880	-7.2%
30.9%	12,120	11,123	-997	-8.2%
32.1%	11,956	10,150	-1,806	-15.1%
33.3%	11,614	9,756	-1,858	-16.0%
34.6%	10,744	9,168	-1,576	-14.7%
35.8%	10,267	8,224	-2,043	-19.9%
37.0%	10,000	8,143	-1,858	-18.6%
38.3%	9,872	8,002	-1,870	-18.9%
39.5%	8,720	7,857	-863	-9.9%
40.7%	8,716	7,553	-1,163	-13.3%
42.0%	8,415	7,357	-1,058	-12.6%
43.2%	8,162	7,043	-1,118	-13.7%
44.4%	7,640	6,886	-754	-9.9%
45.7%	7,078	6,840	-238	-3.4%
46.9%	6,977	6,817	-159	-2.3%
48.1%	6,954	6,812	-143	-2.1%
49.4%	6,539	6,808	269	4.1%
50.6%	6,435	6,618	184	2.9%
51.9%	6,193	6,587	393	6.4%
53.1%	6,168	6,545	377	6.1%
54.3%	6,011	6,492	481	8.0%
55.6%	5,745	6,427	682	11.9%
56.8%	5,722	6,423	701	12.2%
58.0%	5,675	6,411	735	13.0%
59.3%	5,665	6,351	686	12.1%
60.5%	5,645	6,330	685	12.1%
61.7%	5,464	6,330	866	15.8%
63.0%	5,409	6,299	891	16.5%
64.2%	5,397	6,244	847	15.7%
65.4%	5,119	6,230	1,111	21.7%
66.7%	5,094	6,180	1,085	21.3%
67.9%	5,057	6,168	1,111	22.0%
69.1%	5,016	6,143	1,126	22.5%
70.4%	4,900	6,131	1,230	25.1%
71.6%	4,856	6,069	1,214	25.0%
72.8%	4,836	6,035	1,199	24.8%
74.1%	4,828	6,021	1,193	24.7%
75.3%	4,798	5,964	1,166	24.3%
76.5%	4,746	5,898	1,151	24.3%
77.8%	4,637	5,851	1,214	26.2%
79.0%	4,583	5,850	1,267	27.6%
80.2%	4,562	5,819	1,258	27.6%
81.5%	4,560	5,791	1,231	27.0%
82.7%	4,543	5,666	1,123	24.7%
84.0%	4,541	5,642	1,100	24.2%
85.2%	4,526	5,626	1,101	24.3%
86.4%	4,498	5,621	1,123	25.0%
87.7%	4,495	5,582	1,086	24.2%
88.9%	4,420	5,545	1,125	25.4%
90.1%	4,330	5,494	1,164	26.9%
91.4%	4,296	5,419	1,123	26.1%
92.6%	4,226	5,330	1,104	26.1%
93.8%	4,141	5,245	1,104	26.7%
95.1%	4,129	5,197	1,068	25.9%
96.3%	4,081	5,144	1,063	26.1%
97.5%	3,951	5,085	1,134	28.7%
98.8%	3,898	5,050	1,152	29.6%
100.0%	3,693	4,705	1,012	27.4%

Figure SW-12-b
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

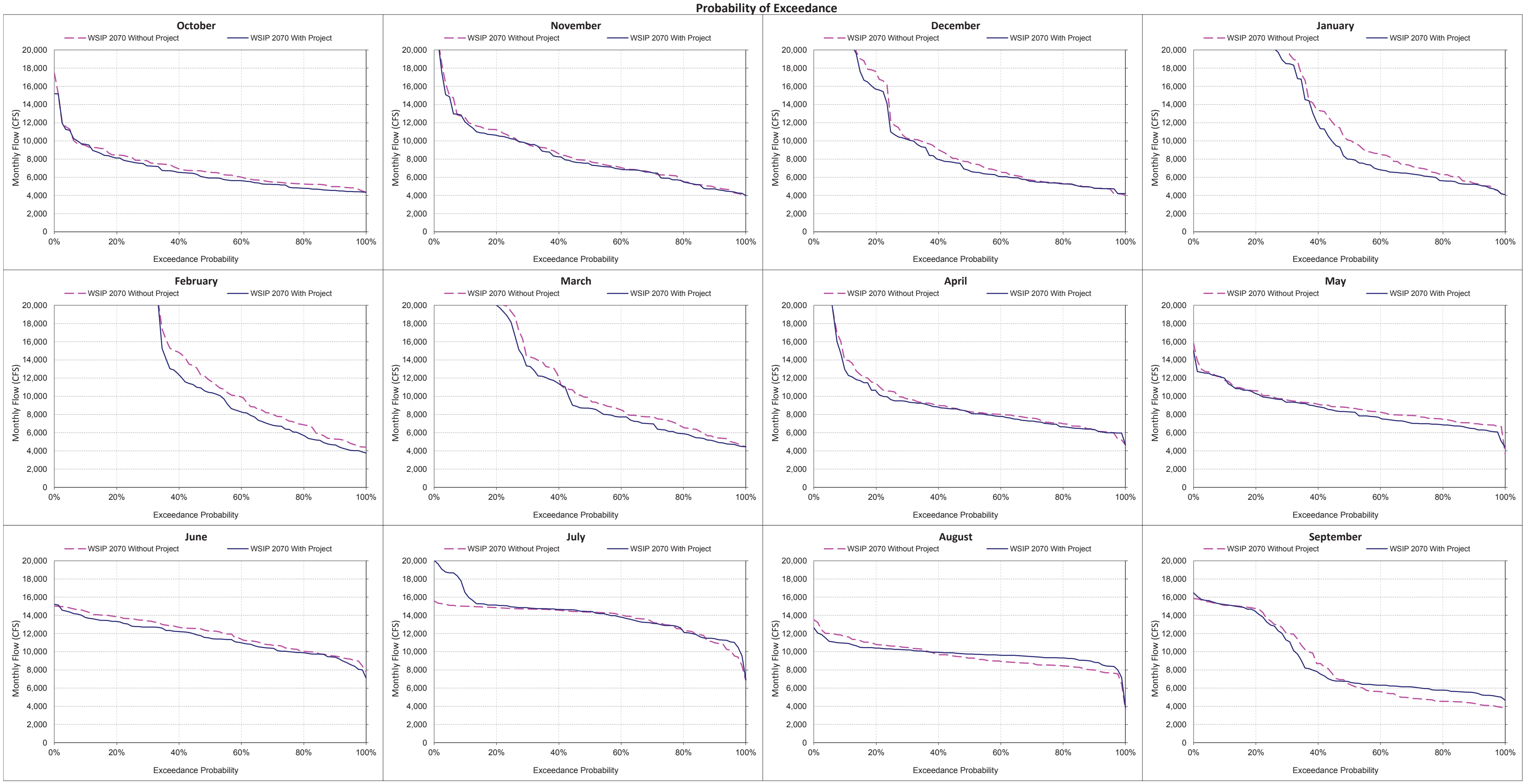


Table SW-12-b

Sacramento River below Red Bluff Diversion Dam, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,452	15,206	-2,246	-12.9%
1.2%	15,206	15,181	-25	-0.2%
2.5%	12,107	11,940	-167	-1.4%
3.7%	11,536	11,259	-277	-2.4%
4.9%	11,302	11,179	-123	-1.1%
6.2%	10,044	10,251	206	2.1%
7.4%	9,695	10,007	311	3.2%
8.6%	9,621	9,690	69	0.7%
9.9%	9,501	9,634	134	1.4%
11.1%	9,304	9,554	251	2.7%
12.3%	9,274	8,937	-337	-3.6%
13.6%	9,257	8,794	-463	-5.0%
14.8%	9,162	8,638	-523	-5.7%
16.0%	9,152	8,403	-749	-8.2%
17.3%	8,692	8,364	-329	-3.8%
18.5%	8,474	8,229	-245	-2.9%
19.8%	8,456	8,114	-342	-4.0%
21.0%	8,425	8,110	-316	-3.7%
22.2%	8,391	7,872	-520	-6.2%
23.5%	8,279	7,772	-507	-6.1%
24.7%	8,243	7,679	-565	-6.8%
25.9%	7,872	7,596	-276	-3.5%
27.2%	7,863	7,546	-318	-4.0%
28.4%	7,829	7,519	-310	-4.0%
29.6%	7,827	7,256	-571	-7.3%
30.9%	7,577	7,243	-334	-4.4%
32.1%	7,531	7,213	-318	-4.2%
33.3%	7,472	7,169	-303	-4.1%
34.6%	7,448	6,759	-688	-9.2%
35.8%	7,416	6,711	-705	-9.5%
37.0%	7,402	6,708	-694	-9.4%
38.3%	7,157	6,662	-496	-6.9%
39.5%	6,990	6,538	-452	-6.5%
40.7%	6,848	6,519	-329	-4.8%
42.0%	6,785	6,501	-284	-4.2%
43.2%	6,739	6,478	-261	-3.9%
44.4%	6,732	6,430	-302	-4.5%
45.7%	6,730	6,335	-394	-5.9%
46.9%	6,716	6,089	-627	-9.3%
48.1%	6,632	6,005	-627	-9.5%
49.4%	6,586	5,916	-670	-10.2%
50.6%	6,521	5,915	-606	-9.3%
51.9%	6,517	5,915	-603	-9.2%
53.1%	6,434	5,901	-533	-8.3%
54.3%	6,278	5,756	-522	-8.3%
55.6%	6,244	5,681	-562	-9.0%
56.8%	6,235	5,648	-587	-9.4%
58.0%	6,089	5,636	-453	-7.4%
59.3%	6,066	5,629	-437	-7.2%
60.5%	5,967	5,605	-362	-6.1%
61.7%	5,836	5,540	-296	-5.1%
63.0%	5,778	5,522	-256	-4.4%
64.2%	5,707	5,401	-306	-5.4%
65.4%	5,700	5,389	-310	-5.4%
66.7%	5,656	5,271	-385	-6.8%
67.9%	5,565	5,250	-315	-5.7%
69.1%	5,510	5,234	-276	-5.0%
70.4%	5,468	5,221	-248	-4.5%
71.6%	5,456	5,214	-241	-4.4%
72.8%	5,430	5,159	-271	-5.0%
74.1%	5,368	5,158	-210	-3.9%
75.3%	5,350	4,882	-468	-8.7%
76.5%	5,328	4,825	-503	-9.4%
77.8%	5,299	4,825	-474	-8.9%
79.0%	5,280	4,796	-484	-9.2%
80.2%	5,256	4,786	-471	-9.0%
81.5%	5,231	4,784	-447	-8.6%
82.7%	5,224	4,694	-530	-10.1%
84.0%	5,220	4,683	-537	-10.3%
85.2%	5,218	4,656	-561	-10.8%
86.4%	5,173	4,608	-565	-10.9%
87.7%	5,093	4,574	-519	-10.2%
88.9%	4,969	4,566	-403	-8.1%
90.1%	4,966	4,546	-419	-8.4%
91.4%	4,965	4,489	-476	-9.6%
92.6%	4,897	4,484	-413	-8.4%
93.8%	4,873	4,439	-434	-8.9%
95.1%	4,842	4,438	-404	-8.3%
96.3%	4,838	4,408	-430	-8.9%
97.5%	4,681	4,398	-283	-6.0%
98.8%	4,494	4,370	-123	-2.7%
100.0%	4,353	4,348	-5	-0.1%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,392	24,270	878	3.8%
1.2%	21,150	21,091	-60	-0.3%
2.5%	18,405	17,545	-860	-4.7%
3.7%	16,267	15,089	-1,179	-7.2%
4.9%	14,971	14,859	-111	-0.7%
6.2%	14,739	12,966	-1,774	-12.0%
7.4%	12,853	12,953	99	0.8%
8.6%	12,731	12,858	127	1.0%
9.9%	12,582	12,115	-467	-3.7%
11.1%	11,993	11,756	-237	-2.0%
12.3%	11,830	11,442	-388	-3.3%
13.6%	11,650	11,011	-640	-5.5%
14.8%	11,558	10,890	-668	-5.8%
16.0%	11,379	10,862	-517	-4.5%
17.3%	11,284	10,722	-561	-5.0%
18.5%	11,264	10,678	-586	-5.2%
19.8%	11,253	10,629	-624	-5.5%
21.0%	11,121	10,525	-596	-5.4%
22.2%	10,831	10,498	-333	-3.1%
23.5%	10,676	10,371	-305	-2.9%
24.7%	10,368	10,233	-135	-1.3%
25.9%	10,304	10,179	-126	-1.2%
27.2%	9,915	9,912	-3	0.0%
28.4%	9,830	9,852	22	0.2%
29.6%	9,712	9,757	45	0.5%
30.9%	9,484	9,607	123	1.3%
32.1%	9,395	9,602	207	2.2%
33.3%	9,339	9,414	75	0.8%
34.6%	9,279	8,903	-376	-4.1%
35.8%	9,224	8,802	-422	-4.6%
37.0%	9,036	8,782	-254	-2.8%
38.3%	8,915	8,347	-568	-6.4%
39.5%	8,682	8,264	-417	-4.8%
40.7%	8,421	8,244	-177	-2.1%
42.0%	8,397	7,926	-471	-5.6%
43.2%	8,250	7,872	-378	-4.6%
44.4%	8,133	7,723	-410	-5.0%
45.7%	7,944	7,644	-300	-3.8%
46.9%	7,909	7,599	-310	-3.9%
48.1%	7,888	7,555	-333	-4.2%
49.4%	7,861	7,552	-310	-3.9%
50.6%	7,656	7,316	-340	-4.4%
51.9%	7,595	7,280	-315	-4.2%
53.1%	7,554	7,237	-316	-4.2%
54.3%	7,403	7,189	-214	-2.9%
55.6%	7,324	7,137	-187	-2.6%
56.8%	7,248	7,132	-117	-1.6%
58.0%	7,238	6,981	-257	-3.5%
59.3%	7,123	6,909	-214	-3.0%
60.5%	7,016	6,841	-175	-2.5%
61.7%	6,913	6,824	-90	-1.3%
63.0%	6,868	6,817	-52	-0.7%
64.2%	6,862	6,797	-64	-0.9%
65.4%	6,783	6,790	7	0.1%
66.7%	6,700	6,698	-2	0.0%
67.9%	6,689	6,578	-112	-1.7%
69.1%	6,571	6,564	-7	-0.1%
70.4%	6,442	6,465	23	0.4%
71.6%	6,320	6,462	142	2.2%
72.8%	6,258	5,935	-324	-5.2%
74.1%	6,253	5,883	-371	-5.9%
75.3%	6,226	5,880	-346	-5.6%
76.5%	6,198	5,723	-475	-7.7%
77.8%	6,147	5,721	-426	-6.9%
79.0%	5,675	5,672	-3	-0.1%
80.2%	5,490	5,472	-18	-0.3%
81.5%	5,461	5,378	-83	-1.5%
82.7%	5,216	5,298	81	1.6%
84.0%	5,181	5,204	23	0.4%
85.2%	5,177	5,167	-11	-0.2%
86.4%	5,139	4,788	-351	-6.8%
87.7%	5,049	4,736	-314	-6.2%
88.9%	5,019	4,725	-294	-5.9%
90.1%	4,880	4,718	-162	-3.3%
91.4%	4,802	4,597	-205	-4.3%
92.6%	4,716	4,555	-161	-3.4%
93.8%	4,668	4,479	-189	-4.0%
95.1%	4,631	4,442	-189	-4.1%
96.3%	4,285	4,394	109	2.5%
97.5%	4,224	4,259	35	0.8%
98.8%	4,090	4,225	136	3.3%
100.0%	3,943	3,981	38	1.0%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	51,011	50,589	-422	-0.8%
1.2%	41,105	42,910	1,804	4.4%
2.5%	38,667	36,537	-2,129	-5.5%
3.7%	37,992	35,870	-2,122	-5.6%
4.9%	36,429	35,008	-1,422	-3.9%
6.2%	35,407	33,297	-2,110	-6.0%
7.4%	33,840	32,426	-1,414	-4.2%
8.6%	28,201	27,217	-984	-3.5%
9.9%	25,338	24,372	-967	-3.8%
11.1%	25,099	23,517	-1,582	-6.3%
12.3%	22,524	20,416	-2,108	-9.4%
13.6%	19,806	19,608	-199	-1.0%
14.8%	19,047	17,654	-1,393	-7.3%
16.0%	18,818	16,694	-2,124	-11.3%
17.3%	17,870	16,487	-1,383	-7.7%
18.5%	17,817	16,042	-1,775	-10.0%
19.8%	17,654	15,699	-1,955	-11.1%
21.0%	16,774	15,604	-1,170	-7.0%
22.2%	16,608	15,413	-1,195	-7.2%
23.5%	16,218	14,102	-2,116	-13.0%
24.7%	12,192	10,993	-1,199	-9.8%
25.9%	11,711	10,690	-1,021	-8.7%
27.2%	11,461	10,443	-1,017	-8.9%
28.4%	10,692	10,352	-340	-3.2%
29.6%	10,316	10,206	-110	-1.1%
30.9%	10,202	10,073	-129	-1.3%
32.1%	10,163	9,964	-199	-2.0%
33.3%	10,132	9,588	-543	-5.4%
34.6%	9,963	9,343	-620	-6.2%
35.8%	9,803	9,297	-505	-5.2%
37.0%	9,680	8,419	-1,261	-13.0%
38.3%	9,505	8,372	-1,133	-11.9%
39.5%	9,102	8,012	-1,091	-12.0%
40.7%	8,902	7,895	-1,007	-11.3%
42.0%	8,692	7,759	-932	-10.7%
43.2%	8,418	7,729	-689	-8.2%
44.4%	8,089	7,672	-417	-5.2%
45.7%	8,059	7,579	-481	-6.0%
46.9%	7,846	7,549	-297	-3.8%
48.1%	7,759	6,935	-824	-10.6%
49.4%	7,713	6,806	-907	-11.8%
50.6%	7,498	6,605	-892	-11.9%
51.9%	7,441	6,553	-888	-11.9%
53.1%	7,377	6,526	-850	-11.5%
54.3%	7,136	6,414	-722	-10.1%
55.6%	6,935	6,339	-596	-8.6%
56.8%	6,908	6,323	-585	-8.5%
58.0%	6,815	6,291	-524	-7.7%
59.3%	6,637	6,086	-550	-8.3%
60.5%	6,535	6,062	-473	-7.2%
61.7%	6,525	6,056	-469	-7.2%
63.0%	6,245	5,968	-278	-4.4%
64.2%	6,212	5,957	-255	-4.1%
65.4%	6,155	5,947	-208	-3.4%
66.7%	6,065	5,789	-276	-4.6%
67.9%	5,750	5,754	4	0.1%
69.1%	5,716	5,569	-147	-2.6%
70.4%	5,656	5,550	-106	-1.9%
71.6%	5,565	5,479	-85	-1.5%
72.8%	5,553	5,462	-92	-1.6%
74.1%	5,461	5,452	-9	-0.2%
75.3%	5,455	5,372	-83	-1.5%
76.5%	5,433	5,371	-61	-1.1%
77.8%	5,368	5,366	-2	0.0%
79.0%	5,364	5,286	-78	-1.5%
80.2%	5,295	5,255	-41	-0.8%
81.5%	5,265	5,254	-10	-0.2%
82.7%	5,258	5,235	-23	-0.4%
84.0%	5,109	5,133	24	0.5%
85.2%	5,107	5,021	-86	-1.7%
86.4%	4,967	4,961	-5	-0.1%
87.7%	4,966	4,959	-7	-0.1%
88.9%	4,936	4,930	-6	-0.1%
90.1%	4,787	4,794	7	0.2%
91.4%	4,785	4,775	-10	-0.2%
92.6%	4,782	4,761	-21	-0.4%
93.8%	4,742	4,760	19	0.4%
95.1%	4,711	4,743	32	0.7%
96.3%	4,204	4,730	525	12.5%
97.5%	4,195	4,209	14	0.3%
98.8%	4,161	4,201	40	1.0%
100.0%	3,984	4,196	212	5.3%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	84,215	83,616	-598	-0.7%
1.2%	70,726	69,724	-1,002	-1.4%
2.5%	69,446	67,333	-2,112	-3.0%
3.7%	66,022	66,016	-6	0.0%
4.9%	62,279	61,252	-1,026	-1.6%
6.2%	54,476	52,367	-2,110	-3.9%
7.4%	46,636	47,251	615	1.3%
8.6%	42,514	39,525	-2,989	-7.0%
9.9%	39,355	38,747	-609	-1.5%
11.1%	38,747	37,239	-1,508	-3.9%
12.3%	36,872	34,002	-2,870	-7.8%
13.6%	34,494	32,374	-2,120	-6.1%
14.8%	34,224	31,577	-2,647	-7.7%
16.0%	32,753	31,236	-1,517	-4.6%
17.3%	31,185	29,075	-2,110	-6.8%
18.5%	26,235	26,474	239	0.9%
19.8%	25,953	23,835	-2,118	-8.2%
21.0%	23,947	22,567	-1,380	-5.8%
22.2%	22,993	21,579	-1,414	-6.2%
23.5%	22,647	20,504	-2,142	-9.5%
24.7%	22,546	20,499	-2,047	-9.1%
25.9%	22,222	20,098	-2,124	-9.6%
27.2%	21,937	19,763	-2,173	-9.9%
28.4%	21,078	18,945	-2,134	-10.1%
29.6%	20,627	18,514	-2,113	-10.2%
30.9%	19,492	18,486	-1,006	-5.2%
32.1%	18,985	18,333	-652	-3.4%
33.3%	18,818	16,852	-1,965	-10.4%
34.6%	17,361	16,795	-566	-3.3%
35.8%	16,672	14,544	-2,128	-12.8%
37.0%	14,440	14,440	0	0.0%
38.3%	14,185	13,060	-1,125	-7.9%
39.5%	13,439	12,062	-1,377	-10.2%
40.7%	13,308	11,337	-1,971	-14.8%
42.0%	13,243	11,311	-1,932	-14.6%
43.2%	12,653	10,535	-2,118	-16.7%
44.4%	12,105	9,985	-2,120	-17.5%
45.7%	11,596	9,476	-2,120	-18.3%
46.9%	11,449	9,322	-2,127	-18.6%
48.1%	10,497	8,377	-2,119	-20.2%
49.4%	10,112	8,004	-2,109	-20.9%
50.6%	10,013	7,989	-2,024	-20.2%
51.9%	9,707	7,894	-1,814	-18.7%
53.1%	9,520	7,575	-1,945	-20.4%
54.3%	9,128	7,557	-1,571	-17.2%
55.6%	8,845	7,399	-1,446	-16.3%
56.8%	8,781	7,359	-1,422	-16.2%
58.0%	8,644	7,008	-1,636	-18.9%
59.3%	8,600	6,856	-1,744	-20.3%
60.5%	8,475	6,770	-1,705	-20.1%
61.7%	8,415	6,720	-1,696	-20.1%
63.0%	8,239	6,564	-1,675	-20.3%
64.2%	7,757	6,559	-1,198	-15.4%
65.4%	7,733	6,522	-1,211	-15.7%
66.7%	7,412	6,471	-941	-12.7%
67.9%	7,399	6,450	-948	-12.8%
69.1%	7,348	6,419	-929	-12.6%
70.4%	7,158	6,341	-816	-11.4%
71.6%	7,049	6,293	-756	-10.7%
72.8%	6,999	6,238	-761	-10.9%
74.1%	6,936	6,133	-804	-11.6%
75.3%	6,813	6,084	-729	-10.7%
76.5%	6,561	6,044	-517	-7.9%
77.8%	6,502	5,987	-515	-7.9%
79.0%	6,337	5,635	-702	-11.1%
80.2%	6,279	5,616	-664	-10.6%
81.5%	6,279	5,592	-687	-10.9%
82.7%	6,089	5,585	-504	-8.3%
84.0%	6,085	5,528	-557	-9.1%
85.2%	6,042	5,312	-730	-12.1%
86.4%	5,597	5,274	-324	-5.8%
87.7%	5,585	5,245	-340	-6.1%
88.9%	5,492	5,234	-258	-4.7%
90.1%	5,330	5,229	-101	-1.9%
91.4%	5,275	5,184	-91	-1.7%
92.6%	5,065	5,055	-10	-0.2%
93.8%	5,043	5,023	-20	-0.4%
95.1%	5,037	4,801	-236	-4.7%
96.3%	4,681	4,724	43	0.9%
97.5%	4,563	4,560	-4	-0.1%
98.8%	4,191	4,192	0	0.0%
100.0%	4,085	4,082	-3	-0.1%

Table SW-12-b
Sacramento River below Red Bluff Diversion Dam, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	96,999	97,002	3	0.0%
1.2%	92,633	90,518	-2,115	-2.3%
2.5%	68,081	65,963	-2,118	-3.1%
3.7%	65,495	64,420	-1,075	-1.6%
4.9%	63,690	61,585	-2,105	-3.3%
6.2%	61,322	61,262	-61	-0.1%
7.4%	55,934	55,933	-1	0.0%
8.6%	50,208	48,088	-2,119	-4.2%
9.9%	48,033	47,507	-526	-1.1%
11.1%	47,387	47,381	-6	0.0%
12.3%	46,874	45,287	-1,587	-3.4%
13.6%	46,533	44,771	-1,762	-3.8%
14.8%	44,847	44,596	-251	-0.6%
16.0%	43,310	43,310	0	0.0%
17.3%	42,545	40,424	-2,122	-5.0%
18.5%	36,540	34,724	-1,816	-5.0%
19.8%	35,943	33,801	-2,142	-6.0%
21.0%	34,756	32,634	-2,122	-6.1%
22.2%	34,671	32,555	-2,116	-6.1%
23.5%	30,313	28,195	-2,118	-7.0%
24.7%	29,959	27,833	-2,126	-7.1%
25.9%	25,547	26,289	743	2.9%
27.2%	24,133	23,424	-709	-2.9%
28.4%	23,473	22,388	-1,085	-4.6%
29.6%	22,787	22,297	-490	-2.2%
30.9%	21,917	21,348	-569	-2.6%
32.1%	21,374	21,000	-374	-1.7%
33.3%	20,309	20,148	-161	-0.8%
34.6%	17,388	15,267	-2,121	-12.2%
35.8%	16,246	14,123	-2,124	-13.1%
37.0%	15,306	13,047	-2,259	-14.8%
38.3%	15,027	12,901	-2,126	-14.1%
39.5%	14,911	12,515	-2,395	-16.1%
40.7%	14,634	12,104	-2,530	-17.3%
42.0%	14,225	11,573	-2,653	-18.6%
43.2%	13,531	11,417	-2,115	-15.6%
44.4%	13,410	11,288	-2,123	-15.8%
45.7%	13,123	10,999	-2,124	-16.2%
46.9%	12,375	10,924	-1,451	-11.7%
48.1%	12,228	10,607	-1,621	-13.3%
49.4%	11,847	10,442	-1,405	-11.9%
50.6%	11,579	10,389	-1,189	-10.3%
51.9%	11,251	10,254	-997	-8.9%
53.1%	10,921	10,059	-861	-7.9%
54.3%	10,777	9,730	-1,047	-9.7%
55.6%	10,389	9,124	-1,265	-12.2%
56.8%	10,137	8,657	-1,480	-14.6%
58.0%	10,061	8,514	-1,548	-15.4%
59.3%	10,010	8,368	-1,641	-16.4%
60.5%	9,851	8,228	-1,623	-16.5%
61.7%	9,329	8,166	-1,163	-12.5%
63.0%	8,873	7,891	-982	-11.1%
64.2%	8,830	7,728	-1,102	-12.5%
65.4%	8,513	7,352	-1,161	-13.6%
66.7%	8,481	7,210	-1,271	-15.0%
67.9%	8,196	7,039	-1,156	-14.1%
69.1%	8,166	6,914	-1,252	-15.3%
70.4%	7,970	6,805	-1,165	-14.6%
71.6%	7,775	6,743	-1,033	-13.3%
72.8%	7,765	6,710	-1,056	-13.6%
74.1%	7,496	6,394	-1,102	-14.7%
75.3%	7,279	6,361	-918	-12.6%
76.5%	7,213	6,077	-1,136	-15.8%
77.8%	6,980	6,044	-936	-13.4%
79.0%	6,943	5,841	-1,103	-15.9%
80.2%	6,838	5,643	-1,195	-17.5%
81.5%	6,772	5,376	-1,396	-20.6%
82.7%	6,583	5,277	-1,307	-19.8%
84.0%	5,962	5,186	-776	-13.0%
85.2%	5,849	5,162	-687	-11.7%
86.4%	5,658	4,901	-758	-13.4%
87.7%	5,384	4,752	-631	-11.7%
88.9%	5,356	4,678	-678	-12.7%
90.1%	5,295	4,647	-648	-12.2%
91.4%	5,277	4,425	-851	-16.1%
92.6%	5,190	4,280	-910	-17.5%
93.8%	5,057	4,160	-897	-17.7%
95.1%	4,803	4,047	-755	-15.7%
96.3%	4,682	4,034	-647	-13.8%
97.5%	4,495	4,017	-478	-10.6%
98.8%	4,424	3,887	-538	-12.2%
100.0%	4,420	3,759	-661	-15.0%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	85,804	85,796	-8	0.0%
1.2%	78,915	76,796	-2,119	-2.7%
2.5%	58,620	56,501	-2,119	-3.6%
3.7%	50,596	50,590	-6	0.0%
4.9%	39,724	38,017	-1,707	-4.3%
6.2%	37,545	35,419	-2,126	-5.7%
7.4%	35,667	33,808	-1,858	-5.2%
8.6%	35,334	33,549	-1,785	-5.1%
9.9%	34,477	32,337	-2,139	-6.2%
11.1%	30,071	27,949	-2,122	-7.1%
12.3%	25,425	25,403	-22	-0.1%
13.6%	23,106	22,980	-126	-0.5%
14.8%	22,348	22,306	-42	-0.2%
16.0%	22,209	21,711	-498	-2.2%
17.3%	22,048	21,376	-672	-3.0%
18.5%	21,744	20,683	-1,061	-4.9%
19.8%	20,944	20,088	-856	-4.1%
21.0%	20,582	19,753	-829	-4.0%
22.2%	20,022	19,312	-710	-3.5%
23.5%	19,912	18,835	-1,077	-5.4%
24.7%	19,328	18,153	-1,174	-6.1%
25.9%	18,781	16,661	-2,120	-11.3%
27.2%	17,244	15,124	-2,120	-12.3%
28.4%	16,304	14,453	-1,852	-11.4%
29.6%	14,416	13,364	-1,052	-7.3%
30.9%	14,322	13,268	-1,053	-7.4%
32.1%	14,185	12,826	-1,359	-9.6%
33.3%	13,960	12,234	-1,726	-12.4%
34.6%	13,868	12,199	-1,670	-12.0%
35.8%	13,278	12,065	-1,213	-9.1%
37.0%	13,187	11,858	-1,328	-10.1%
38.3%	13,140	11,745	-1,395	-10.6%
39.5%	12,472	11,486	-986	-7.9%
40.7%	11,210	11,202	-8	-0.1%
42.0%	10,812	11,053	242	2.2%
43.2%	10,773	9,887	-886	-8.2%
44.4%	10,697	9,018	-1,679	-15.7%
45.7%	10,165	8,904	-1,261	-12.4%
46.9%	10,118	8,737	-1,381	-13.6%
48.1%	9,913	8,711	-1,203	-12.1%
49.4%	9,893	8,691	-1,202	-12.1%
50.6%	9,374	8,654	-721	-7.7%
51.9%	9,352	8,546	-806	-8.6%
53.1%	9,141	8,315	-826	-9.0%
54.3%	9,081	8,012	-1,069	-11.8%
55.6%	8,915	7,990	-925	-10.4%
56.8%	8,840	7,921	-919	-10.4%
58.0%	8,754	7,787	-967	-11.1%
59.3%	8,585	7,743	-842	-9.8%
60.5%	8,449	7,742	-707	-8.4%
61.7%	8,025	7,731	-294	-3.7%
63.0%	7,918	7,387	-532	-6.7%
64.2%	7,918	7,252	-666	-8.4%
65.4%	7,856	7,227	-628	-8.0%
66.7%	7,790	7,041	-750	-9.6%
67.9%	7,752	7,020	-732	-9.4%
69.1%	7,744	6,984	-759	-9.8%
70.4%	7,739	6,952	-788	-10.2%
71.6%	7,528	6,401	-1,127	-15.0%
72.8%	7,484	6,346	-1,138	-15.2%
74.1%	7,451	6,318	-1,132	-15.2%
75.3%	7,303	6,149	-1,154	-15.8%
76.5%	7,177	6,140	-1,037	-14.5%
77.8%	7,008	5,978	-1,030	-14.7%
79.0%	6,760	5,902	-857	-12.7%
80.2%	6,542	5,889	-653	-10.0%
81.5%	6,495	5,795	-700	-10.8%
82.7%	6,396	5,622	-774	-12.1%
84.0%	6,387	5,456	-930	-14.6%
85.2%	6,164	5,429	-735	-11.9%
86.4%	5,969	5,364	-605	-10.1%
87.7%	5,664	5,182	-482	-8.5%
88.9%	5,648	5,156	-492	-8.7%
90.1%	5,430	5,064	-366	-6.7%
91.4%	5,413	4,899	-514	-9.5%
92.6%	5,375	4,867	-508	-9.5%
93.8%	5,350	4,763	-587	-11.0%
95.1%	5,025	4,734	-291	-5.8%
96.3%	4,908	4,723	-185	-3.8%
97.5%	4,771	4,573	-198	-4.2%
98.8%	4,543	4,479	-64	-1.4%
100.0%	4,481	4,466	-15	-0.3%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,672	40,356	-1,316	-3.2%
1.2%	32,625	32,620	-6	0.0%
2.5%	27,098	27,101	3	0.0%
3.7%	22,924	22,921	-3	0.0%
4.9%	22,192	22,189	-3	0.0%
6.2%	19,280	19,280	0	0.0%
7.4%	16,994	16,040	-954	-5.6%
8.6%	16,044	14,683	-1,361	-8.5%
9.9%	13,964	12,956	-1,007	-7.2%
11.1%	13,957	12,297	-1,660	-11.9%
12.3%	13,633	12,129	-1,504	-11.0%
13.6%	12,791	11,846	-945	-7.4%
14.8%	12,416	11,728	-687	-5.5%
16.0%	12,092	11,511	-581	-4.8%
17.3%	11,999	11,499	-500	-4.2%
18.5%	11,566	10,677	-888	-7.7%
19.8%	11,494	10,670	-824	-7.2%
21.0%	11,075	10,153	-921	-8.3%
22.2%	10,680	9,984	-696	-6.5%
23.5%	10,584	9,945	-638	-6.0%
24.7%	10,559	9,654	-905	-8.6%
25.9%	10,488	9,513	-975	-9.3%
27.2%	9,949	9,505	-444	-4.5%
28.4%	9,925	9,505	-420	-4.2%
29.6%	9,747	9,451	-295	-3.0%
30.9%	9,649	9,337	-312	-3.2%
32.1%	9,589	9,316	-273	-2.8%
33.3%	9,390	9,255	-135	-1.4%
34.6%	9,333	9,247	-86	-0.9%
35.8%	9,258	9,140	-118	-1.3%
37.0%	9,247	9,025	-222	-2.4%
38.3%	9,128	8,880	-248	-2.7%
39.5%	9,024	8,848	-176	-2.0%
40.7%	8,962	8,726	-237	-2.6%
42.0%	8,962	8,702	-260	-2.9%
43.2%	8,778	8,634	-144	-1.6%
44.4%	8,710	8,620	-89	-1.0%
45.7%	8,666	8,614	-51	-0.6%
46.9%	8,513	8,503	-10	-0.1%
48.1%	8,449	8,436	-12	-0.1%
49.4%	8,351	8,311	-40	-0.5%
50.6%	8,286	8,098	-188	-2.3%
51.9%	8,225	8,082	-143	-1.7%
53.1%	8,210	8,070	-140	-1.7%
54.3%	8,175	8,054	-121	-1.5%
55.6%	8,083	7,955	-128	-1.6%
56.8%	8,054	7,943	-111	-1.4%
58.0%	8,050	7,844	-205	-2.6%
59.3%	8,024	7,803	-221	-2.8%
60.5%	8,010	7,798	-212	-2.6%
61.7%	7,956	7,687	-269	-3.4%
63.0%	7,945	7,609	-336	-4.2%
64.2%	7,853	7,491	-362	-4.6%
65.4%	7,805	7,476	-329	-4.2%
66.7%	7,751	7,353	-398	-5.1%
67.9%	7,674	7,343	-331	-4.3%
69.1%	7,609	7,270	-340	-4.5%
70.4%	7,589	7,266	-323	-4.3%
71.6%	7,541	7,184	-357	-4.7%
72.8%	7,359	7,159	-199	-2.7%
74.1%	7,146	7,020	-126	-1.8%
75.3%	7,143	6,992	-151	-2.1%
76.5%	7,082	6,945	-137	-1.9%
77.8%	7,080	6,924	-156	-2.2%
79.0%	7,056	6,646	-410	-5.8%
80.2%	6,976	6,637	-340	-4.9%
81.5%	6,936	6,593	-343	-4.9%
82.7%	6,731	6,548	-183	-2.7%
84.0%	6,724	6,491	-234	-3.5%
85.2%	6,711	6,482	-228	-3.4%
86.4%	6,634	6,410	-224	-3.4%
87.7%	6,456	6,394	-62	-1.0%
88.9%	6,419	6,386	-33	-0.5%
90.1%	6,250	6,333	83	1.3%
91.4%	6,138	6,143	4	0.1%
92.6%	6,119	6,074	-46	-0.7%
93.8%	6,092	6,002	-90	-1.5%
95.1%	6,085	5,995	-90	-1.5%
96.3%	5,951	5,992	41	0.7%
97.5%	5,304	5,964	660	12.5%
98.8%	5,198	5,952	754	14.5%
100.0%	4,643	4,652	10	0.2%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,838	15,077	-761	-4.8%
1.2%	13,911	12,718	-1,193	-8.6%
2.5%	13,001	12,636	-365	-2.8%
3.7%	12,731	12,551	-181	-1.4%
4.9%	12,684	12,532	-152	-1.2%
6.2%	12,478	12,339	-139	-1.1%
7.4%	12,211	12,271	59	0.5%
8.6%	12,164	12,120	-44	-0.4%
9.9%	11,740	12,004	264	2.2%
11.1%	11,671	11,393	-278	-2.4%
12.3%	11,285	11,168	-116	-1.0%
13.6%	10,961	10,847	-114	-1.0%
14.8%	10,957	10,844	-113	-1.0%
16.0%	10,836	10,684	-152	-1.4%
17.3%	10,687	10,667	-20	-0.2%
18.5%	10,645	10,553	-92	-0.9%
19.8%	10,606	10,327	-280	-2.6%
21.0%	10,597	10,180	-417	-3.9%
22.2%	10,086	9,924	-162	-1.6%
23.5%	10,086	9,880	-205	-2.0%
24.7%	10,070	9,825	-245	-2.4%
25.9%	9,865	9,733	-132	-1.3%
27.2%	9,739	9,661	-78	-0.8%
28.4%	9,732	9,640	-92	-0.9%
29.6%	9,612	9,372	-241	-2.5%
30.9%	9,544	9,368	-175	-1.8%
32.1%	9,473	9,363	-110	-1.2%
33.3%	9,455	9,302	-153	-1.6%
34.6%	9,342	9,206	-136	-1.5%
35.8%	9,310	9,202	-108	-1.2%
37.0%	9,282	9,043	-239	-2.6%
38.3%	9,233	8,984	-249	-2.7%
39.5%	9,170	8,875	-295	-3.2%
40.7%	9,059	8,813	-245	-2.7%
42.0%	9,052	8,732	-320	-3.5%
43.2%	9,027	8,573	-454	-5.0%
44.4%	8,861	8,514	-347	-3.9%
45.7%	8,854	8,377	-477	-5.4%
46.9%	8,840	8,340	-500	-5.7%
48.1%	8,816	8,326	-491	-5.6%
49.4%	8,767	8,314	-453	-5.2%
50.6%	8,680	8,279	-401	-4.6%
51.9%	8,666	8,234	-431	-5.0%
53.1%	8,575	7,858	-717	-8.4%
54.3%	8,526	7,841	-685	-8.0%
55.6%	8,421	7,837	-584	-6.9%
56.8%	8,354	7,786	-568	-6.8%
58.0%	8,330	7,774	-557	-6.7%
59.3%	8,307	7,710	-597	-7.2%
60.5%	8,221	7,518	-703	-8.6%
61.7%	8,132	7,486	-646	-7.9%
63.0%	7,976	7,423	-553	-6.9%
64.2%	7,965	7,375	-590	-7.4%
65.4%	7,964	7,313	-651	-8.2%
66.7%	7,936	7,311	-625	-7.9%
67.9%	7,903	7,216	-686	-8.7%
69.1%	7,894	7,119	-776	-9.8%
70.4%	7,891	7,025	-866	-11.0%
71.6%	7,864	7,020	-844	-10.7%
72.8%	7,729	7,001	-728	-9.4%
74.1%	7,695	6,995	-700	-9.1%
75.3%	7,590	6,989	-601	-7.9%
76.5%	7,555	6,926	-630	-8.3%
77.8%	7,548	6,924	-625	-8.3%
79.0%	7,535	6,901	-634	-8.4%
80.2%	7,447	6,854	-593	-8.0%
81.5%	7,421	6,852	-569	-7.7%
82.7%	7,336	6,780	-557	-7.6%
84.0%	7,221	6,725	-495	-6.9%
85.2%	7,107	6,722	-384	-5.4%
86.4%	7,105	6,680	-426	-6.0%
87.7%	7,096	6,551	-545	-7.7%
88.9%	7,087	6,479	-608	-8.6%
90.1%	6,992	6,441	-551	-7.9%
91.4%	6,976	6,312	-663	-9.5%
92.6%	6,897	6,309	-587	-8.5%
93.8%	6,894	6,291	-602	-8.7%
95.1%	6,849	6,158	-691	-10.1%
96.3%	6,842	6,104	-738	-10.8%
97.5%	6,688	6,065	-622	-9.3%
98.8%	6,682	5,048	-1,634	-24.5%
100.0%	3,655	4,434	779	21.3%

Table SW-12-b

Sacramento River below Red Bluff Diversion Dam, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,037	15,214	178	1.2%
1.2%	14,993	15,122	129	0.9%
2.5%	14,955	14,555	-400	-2.7%
3.7%	14,927	14,488	-439	-2.9%
4.9%	14,823	14,370	-453	-3.1%
6.2%	14,715	14,195	-521	-3.5%
7.4%	14,620	14,128	-491	-3.4%
8.6%	14,600	14,024	-576	-3.9%
9.9%	14,466	13,776	-690	-4.8%
11.1%	14,332	13,678	-654	-4.6%
12.3%	14,079	13,621	-458	-3.3%
13.6%	14,072	13,536	-536	-3.8%
14.8%	14,039	13,442	-596	-4.2%
16.0%	14,021	13,439	-582	-4.2%
17.3%	13,992	13,417	-575	-4.1%
18.5%	13,916	13,346	-570	-4.1%
19.8%	13,857	13,325	-532	-3.8%
21.0%	13,812	13,273	-539	-3.9%
22.2%	13,668	13,106	-562	-4.1%
23.5%	13,643	13,064	-579	-4.2%
24.7%	13,637	12,823	-814	-6.0%
25.9%	13,562	12,772	-790	-5.8%
27.2%	13,484	12,772	-713	-5.3%
28.4%	13,479	12,717	-762	-5.7%
29.6%	13,389	12,711	-678	-5.1%
30.9%	13,368	12,703	-665	-5.0%
32.1%	13,261	12,698	-563	-4.2%
33.3%	13,247	12,693	-554	-4.2%
34.6%	12,981	12,602	-379	-2.9%
35.8%	12,931	12,334	-597	-4.6%
37.0%	12,851	12,327	-524	-4.1%
38.3%	12,828	12,255	-574	-4.5%
39.5%	12,728	12,238	-490	-3.9%
40.7%	12,638	12,188	-450	-3.6%
42.0%	12,599	12,161	-439	-3.5%
43.2%	12,575	12,103	-472	-3.8%
44.4%	12,568	12,007	-561	-4.5%
45.7%	12,547	11,842	-705	-5.6%
46.9%	12,531	11,759	-772	-6.2%
48.1%	12,368	11,564	-804	-6.5%
49.4%	12,290	11,537	-753	-6.1%
50.6%	12,276	11,435	-841	-6.9%
51.9%	12,264	11,392	-872	-7.1%
53.1%	12,167	11,388	-779	-6.4%
54.3%	11,975	11,367	-608	-5.1%
55.6%	11,948	11,343	-605	-5.1%
56.8%	11,941	11,330	-611	-5.1%
58.0%	11,511	11,080	-431	-3.7%
59.3%	11,500	11,026	-474	-4.1%
60.5%	11,284	10,950	-335	-3.0%
61.7%	11,210	10,856	-355	-3.2%
63.0%	11,208	10,832	-376	-3.4%
64.2%	11,143	10,654	-490	-4.4%
65.4%	11,051	10,550	-501	-4.5%
66.7%	10,906	10,476	-431	-4.0%
67.9%	10,796	10,439	-357	-3.3%
69.1%	10,778	10,392	-386	-3.6%
70.4%	10,690	10,376	-315	-2.9%
71.6%	10,683	10,117	-566	-5.3%
72.8%	10,635	10,070	-565	-5.3%
74.1%	10,415	10,057	-357	-3.4%
75.3%	10,379	10,013	-366	-3.5%
76.5%	10,296	9,959	-337	-3.3%
77.8%	10,260	9,908	-352	-3.4%
79.0%	10,063	9,904	-159	-1.6%
80.2%	10,036	9,899	-137	-1.4%
81.5%	9,989	9,810	-178	-1.8%
82.7%	9,986	9,754	-232	-2.3%
84.0%	9,944	9,749	-195	-2.0%
85.2%	9,729	9,734	5	0.1%
86.4%	9,723	9,717	-5	-0.1%
87.7%	9,632	9,459	-173	-1.8%
88.9%	9,560	9,434	-126	-1.3%
90.1%	9,518	9,400	-118	-1.2%
91.4%	9,437	9,186	-251	-2.7%
92.6%	9,298	8,971	-327	-3.5%
93.8%	9,230	8,798	-432	-4.7%
95.1%	9,180	8,568	-612	-6.7%
96.3%	9,016	8,409	-607	-6.7%
97.5%	8,980	8,050	-930	-10.4%
98.8%	8,430	8,000	-429	-5.1%
100.0%	7,793	7,105	-687	-8.8%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,571	20,059	4,488	28.8%
1.2%	15,350	19,662	4,312	28.1%
2.5%	15,269	19,074	3,806	24.9%
3.7%	15,217	18,774	3,557	23.4%
4.9%	15,104	18,685	3,581	23.7%
6.2%	15,103	18,671	3,568	23.6%
7.4%	15,019	18,327	3,308	22.0%
8.6%	15,011	17,794	2,783	18.5%
9.9%	15,005	16,540	1,535	10.2%
11.1%	14,989	15,965	976	6.5%
12.3%	14,985	15,661	676	4.5%
13.6%	14,944	15,282	338	2.3%
14.8%	14,935	15,278	342	2.3%
16.0%	14,908	15,237	329	2.2%
17.3%	14,899	15,145	246	1.7%
18.5%	14,868	15,145	277	1.9%
19.8%	14,864	15,139	275	1.8%
21.0%	14,810	15,090	279	1.9%
22.2%	14,803	15,069	266	1.8%
23.5%	14,779	15,047	268	1.8%
24.7%	14,762	14,931	169	1.1%
25.9%	14,729	14,909	180	1.2%
27.2%	14,725	14,860	135	0.9%
28.4%	14,716	14,855	140	0.9%
29.6%	14,708	14,850	142	1.0%
30.9%	14,686	14,802	116	0.8%
32.1%	14,677	14,773	96	0.7%
33.3%	14,673	14,749	77	0.5%
34.6%	14,669	14,738	69	0.5%
35.8%	14,655	14,723	67	0.5%
37.0%	14,632	14,722	90	0.6%
38.3%	14,589	14,711	123	0.8%
39.5%	14,585	14,648	63	0.4%
40.7%	14,539	14,643	103	0.7%
42.0%	14,500	14,629	130	0.9%
43.2%	14,474	14,617	142	1.0%
44.4%	14,428	14,616	189	1.3%
45.7%	14,422	14,575	153	1.1%
46.9%	14,391	14,465	73	0.5%
48.1%	14,377	14,457	81	0.6%
49.4%	14,359	14,435	76	0.5%
50.6%	14,355	14,414	59	0.4%
51.9%	14,337	14,242	-95	-0.7%
53.1%	14,304	14,194	-110	-0.8%
54.3%	14,288	14,187	-101	-0.7%
55.6%	14,250	14,086	-164	-1.2%
56.8%	14,243	13,974	-269	-1.9%
58.0%	14,204	13,966	-238	-1.7%
59.3%	14,085	13,847	-238	-1.7%
60.5%	14,001	13,769	-232	-1.7%
61.7%	13,895	13,649	-246	-1.8%
63.0%	13,895	13,562	-333	-2.4%
64.2%	13,664	13,441	-223	-1.6%
65.4%	13,649	13,331	-318	-2.3%
66.7%	13,608	13,264	-344	-2.5%
67.9%	13,605	13,235	-370	-2.7%
69.1%	13,463	13,204	-259	-1.9%
70.4%	13,195	13,120	-75	-0.6%
71.6%	13,145	13,080	-65	-0.5%
72.8%	13,112	12,968	-144	-1.1%
74.1%	12,974	12,894	-81	-0.6%
75.3%	12,927	12,886	-41	-0.3%
76.5%	12,898	12,876	-23	-0.2%
77.8%	12,542	12,806	264	2.1%
79.0%	12,524	12,625	100	0.8%
80.2%	12,317	12,123	-194	-1.6%
81.5%	12,276	12,095	-181	-1.5%
82.7%	12,215	11,996	-218	-1.8%
84.0%	11,926	11,920	-6	-0.1%
85.2%	11,885	11,667	-218	-1.8%
86.4%	11,789	11,523	-265	-2.2%
87.7%	11,186	11,477	292	2.6%
88.9%	11,127	11,472	345	3.1%
90.1%	10,967	11,433	466	4.2%
91.4%	10,902	11,299	396	3.6%
92.6%	10,870	11,296	426	3.9%
93.8%	10,264	11,267	1,003	9.8%
95.1%	10,158	11,089	931	9.2%
96.3%	9,550	11,035	1,485	15.5%
97.5%	9,394	10,475	1,081	11.5%
98.8%	8,441	9,552	1,111	13.2%
100.0%	6,814	6,919	106	1.5%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,509	12,628	-881	-6.5%
1.2%	13,234	12,048	-1,186	-9.0%
2.5%	12,397	11,886	-511	-4.1%
3.7%	12,025	11,549	-476	-4.0%
4.9%	12,006	11,132	-873	-7.3%
6.2%	11,973	11,080	-893	-7.5%
7.4%	11,882	10,996	-886	-7.5%
8.6%	11,850	10,965	-885	-7.5%
9.9%	11,648	10,955	-693	-5.9%
11.1%	11,635	10,926	-709	-6.1%
12.3%	11,357	10,778	-579	-5.1%
13.6%	11,333	10,653	-680	-6.0%
14.8%	11,231	10,471	-761	-6.8%
16.0%	11,053	10,465	-588	-5.3%
17.3%	11,048	10,458	-590	-5.3%
18.5%	11,003	10,451	-552	-5.0%
19.8%	10,820	10,408	-412	-3.8%
21.0%	10,756	10,389	-366	-3.4%
22.2%	10,747	10,345	-402	-3.7%
23.5%	10,684	10,322	-362	-3.4%
24.7%	10,626	10,312	-314	-3.0%
25.9%	10,607	10,266	-341	-3.2%
27.2%	10,599	10,253	-346	-3.3%
28.4%	10,499	10,225	-274	-2.6%
29.6%	10,474	10,207	-267	-2.6%
30.9%	10,442	10,189	-253	-2.4%
32.1%	10,347	10,100	-248	-2.4%
33.3%	10,330	10,083	-248	-2.4%
34.6%	10,294	10,076	-218	-2.1%
35.8%	10,115	10,040	-75	-0.7%
37.0%	9,995	9,983	-13	-0.1%
38.3%	9,900	9,956	57	0.6%
39.5%	9,680	9,940	260	2.7%
40.7%	9,670	9,915	245	2.5%
42.0%	9,667	9,890	223	2.3%
43.2%	9,645	9,882	237	2.5%
44.4%	9,548	9,881	333	3.5%
45.7%	9,487	9,815	328	3.5%
46.9%	9,453	9,788	335	3.5%
48.1%	9,439	9,782	343	3.6%
49.4%	9,302	9,736	435	4.7%
50.6%	9,295	9,731	436	4.7%
51.9%	9,272	9,726	454	4.9%
53.1%	9,143	9,706	563	6.2%
54.3%	9,143	9,699	556	6.1%
55.6%	9,038	9,663	625	6.9%
56.8%	8,999	9,661	663	7.4%
58.0%	8,982	9,661	679	7.6%
59.3%	8,981	9,629	648	7.2%
60.5%	8,900	9,607	707	7.9%
61.7%	8,873	9,605	732	8.2%
63.0%	8,850	9,603	754	8.5%
64.2%	8,831	9,586	755	8.5%
65.4%	8,795	9,582	787	8.9%
66.7%	8,765	9,535	771	8.8%
67.9%	8,751	9,513	761	8.7%
69.1%	8,742	9,497	755	8.6%
70.4%	8,703	9,462	759	8.7%
71.6%	8,559	9,422	863	10.1%
72.8%	8,544	9,394	849	9.9%
74.1%	8,543	9,355	812	9.5%
75.3%	8,540	9,353	813	9.5%
76.5%	8,519	9,341	822	9.6%
77.8%	8,499	9,329	831	9.8%
79.0%	8,474	9,315	842	9.9%
80.2%	8,434	9,308	874	10.4%
81.5%	8,413	9,259	846	10.1%
82.7%	8,371	9,255	885	10.6%
84.0%	8,298	9,195	897	10.8%
85.2%	8,293	9,067	774	9.3%
86.4%	8,157	9,065	908	11.1%
87.7%	8,053	9,020	967	12.0%
88.9%	8,014	8,986	972	12.1%
90.1%	7,982	8,834	852	10.7%
91.4%	7,861	8,794	934	11.9%
92.6%	7,762	8,546	783	10.1%
93.8%	7,686	8,417	731	9.5%
95.1%	7,684	8,413	729	9.5%
96.3%	7,625	8,368	743	9.7%
97.5%	7,578	8,015	437	5.8%
98.8%	6,429	7,183	754	11.7%
100.0%	3,573	3,834	260	7.3%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,834	16,469	634	4.0%
1.2%	15,816	16,087	271	1.7%
2.5%	15,703	15,778	74	0.5%
3.7%	15,536	15,645	109	0.7%
4.9%	15,488	15,621	133	0.9%
6.2%	15,383	15,471	88	0.6%
7.4%	15,336	15,324	-12	-0.1%
8.6%	15,217	15,263	46	0.3%
9.9%	15,105	15,201	95	0.6%
11.1%	15,104	15,132	28	0.2%
12.3%	15,073	15,080	7	0.0%
13.6%	15,041	14,996	-45	-0.3%
14.8%	15,005	14,928	-77	-0.5%
16.0%	14,941	14,872	-70	-0.5%
17.3%	14,896	14,687	-210	-1.4%
18.5%	14,844	14,685	-159	-1.1%
19.8%	14,749	14,467	-282	-1.9%
21.0%	14,674	14,116	-558	-3.8%
22.2%	14,316	13,831	-485	-3.4%
23.5%	13,656	13,289	-367	-2.7%
24.7%	13,395	12,934	-460	-3.4%
25.9%	13,011	12,823	-187	-1.4%
27.2%	12,954	12,308	-646	-5.0%
28.4%	12,646	12,025	-621	-4.9%
29.6%	12,098	11,320	-777	-6.4%
30.9%	11,982	11,093	-889	-7.4%
32.1%	11,930	10,118	-1,812	-15.2%
33.3%	11,409	9,735	-1,674	-14.7%
34.6%	10,717	9,094	-1,623	-15.1%
35.8%	10,241	8,193	-2,047	-20.0%
37.0%	9,983	8,137	-1,846	-18.5%
38.3%	9,853	7,967	-1,886	-19.1%
39.5%	8,703	7,830	-872	-10.0%
40.7%	8,700	7,539	-1,161	-13.3%
42.0%	8,341	7,334	-1,008	-12.1%
43.2%	8,141	7,025	-1,116	-13.7%
44.4%	7,624	6,871	-753	-9.9%
45.7%	7,058	6,782	-275	-3.9%
46.9%	6,936	6,761	-175	-2.5%
48.1%	6,921	6,742	-179	-2.6%
49.4%	6,521	6,742	221	3.4%
50.6%	6,328	6,598	270	4.3%
51.9%	6,151	6,554	403	6.6%
53.1%	6,080	6,520	440	7.2%
54.3%	6,011	6,417	406	6.8%
55.6%	5,745	6,394	649	11.3%
56.8%	5,665	6,390	725	12.8%
58.0%	5,640	6,359	719	12.7%
59.3%	5,632	6,328	697	12.4%
60.5%	5,576	6,313	737	13.2%
61.7%	5,464	6,311	847	15.5%
63.0%	5,397	6,235	838	15.5%
64.2%	5,391	6,220	829	15.4%
65.4%	5,102	6,205	1,103	21.6%
66.7%	4,994	6,157	1,162	23.3%
67.9%	4,983	6,143	1,160	23.3%
69.1%	4,943	6,142	1,200	24.3%
70.4%	4,850	6,116	1,266	26.1%
71.6%	4,844	6,057	1,214	25.1%
72.8%	4,812	5,998	1,186	24.6%
74.1%	4,771	5,951	1,180	24.7%
75.3%	4,731	5,949	1,218	25.7%
76.5%	4,716	5,796	1,080	22.9%
77.8%	4,551	5,767	1,217	26.7%
79.0%	4,546	5,763	1,217	26.8%
80.2%	4,542	5,762	1,220	26.9%
81.5%	4,541	5,754	1,213	26.7%
82.7%	4,538	5,629	1,091	24.0%
84.0%	4,498	5,620	1,122	24.9%
85.2%	4,495	5,618	1,123	25.0%
86.4%	4,477	5,584	1,107	24.7%
87.7%	4,409	5,552	1,143	25.9%
88.9%	4,371	5,540	1,168	26.7%
90.1%	4,315	5,494	1,179	27.3%
91.4%	4,221	5,419	1,198	28.4%
92.6%	4,127	5,236	1,108	26.9%
93.8%	4,098	5,212	1,114	27.2%
95.1%	4,086	5,197	1,111	27.2%
96.3%	4,066	5,139	1,073	26.4%
97.5%	3,951	5,050	1,099	27.8%
98.8%	3,898	5,004	1,107	28.4%
100.0%	3,693	4,668	975	26.4%

Figure SW-13-b
Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

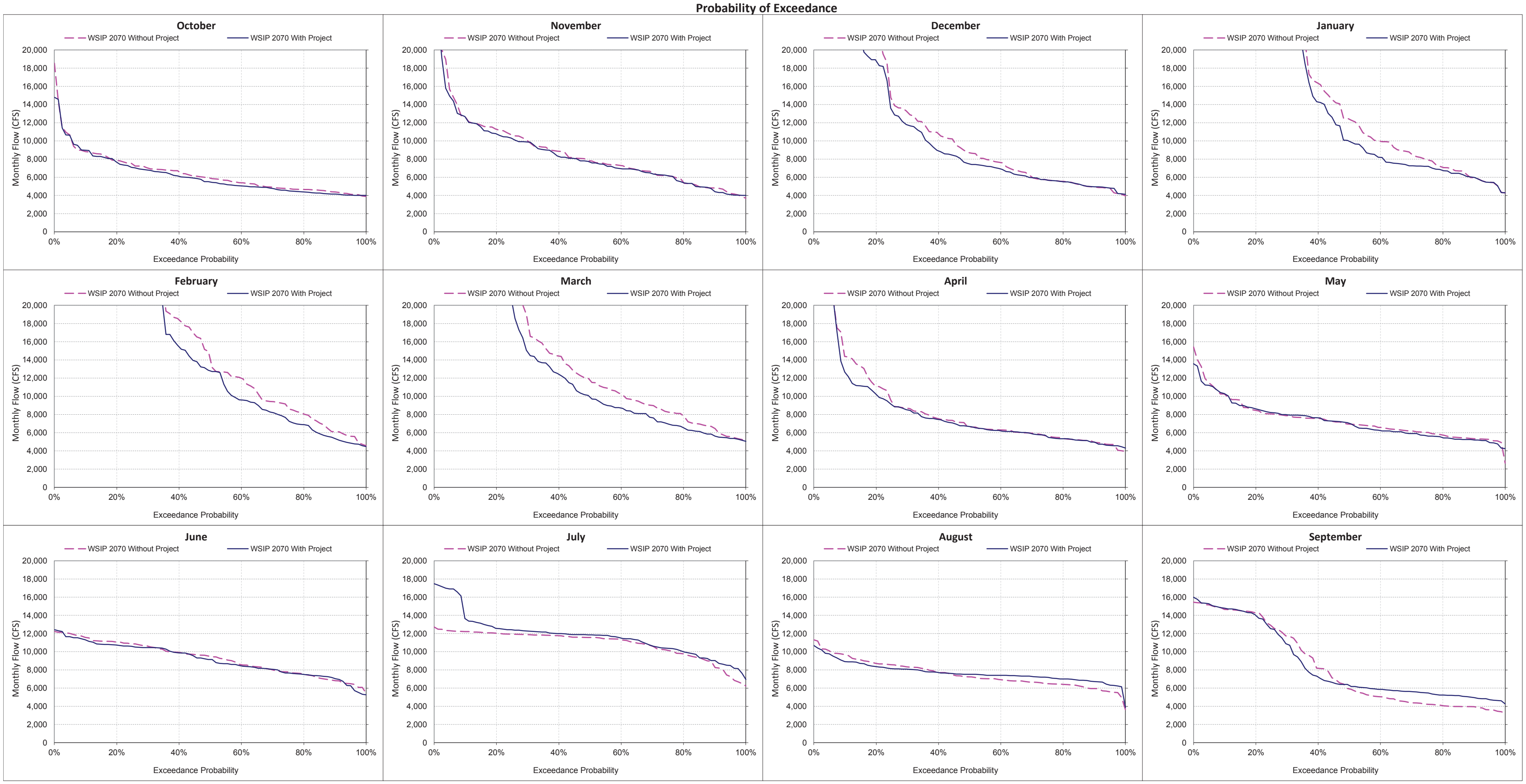


Table SW-13-b

Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,552	14,808	-3,743	-20.2%
1.2%	14,491	14,572	81	0.6%
2.5%	11,541	11,417	-123	-1.1%
3.7%	10,959	10,668	-291	-2.7%
4.9%	10,659	10,640	-19	-0.2%
6.2%	9,420	9,626	206	2.2%
7.4%	8,999	9,511	512	5.7%
8.6%	8,972	9,009	37	0.4%
9.9%	8,833	8,982	149	1.7%
11.1%	8,780	8,953	173	2.0%
12.3%	8,662	8,334	-328	-3.8%
13.6%	8,595	8,289	-306	-3.6%
14.8%	8,564	8,282	-282	-3.3%
16.0%	8,406	8,182	-224	-2.7%
17.3%	8,170	8,066	-104	-1.3%
18.5%	7,884	8,058	174	2.2%
19.8%	7,860	7,715	-146	-1.9%
21.0%	7,816	7,422	-394	-5.0%
22.2%	7,678	7,363	-315	-4.1%
23.5%	7,552	7,297	-255	-3.4%
24.7%	7,534	7,094	-439	-5.8%
25.9%	7,236	7,028	-208	-2.9%
27.2%	7,236	6,915	-320	-4.4%
28.4%	7,230	6,856	-373	-5.2%
29.6%	7,049	6,808	-241	-3.4%
30.9%	6,926	6,744	-183	-2.6%
32.1%	6,900	6,641	-259	-3.8%
33.3%	6,867	6,607	-260	-3.8%
34.6%	6,842	6,555	-287	-4.2%
35.8%	6,789	6,518	-271	-4.0%
37.0%	6,785	6,381	-404	-5.9%
38.3%	6,728	6,195	-533	-7.9%
39.5%	6,722	6,158	-563	-8.4%
40.7%	6,412	6,045	-367	-5.7%
42.0%	6,390	6,014	-376	-5.9%
43.2%	6,256	5,970	-286	-4.6%
44.4%	6,143	5,918	-225	-3.7%
45.7%	6,116	5,869	-247	-4.0%
46.9%	6,049	5,792	-257	-4.3%
48.1%	5,998	5,531	-467	-7.8%
49.4%	5,941	5,529	-412	-6.9%
50.6%	5,847	5,423	-424	-7.3%
51.9%	5,816	5,398	-418	-7.2%
53.1%	5,769	5,303	-465	-8.1%
54.3%	5,689	5,279	-411	-7.2%
55.6%	5,660	5,190	-470	-8.3%
56.8%	5,534	5,159	-375	-6.8%
58.0%	5,492	5,092	-400	-7.3%
59.3%	5,406	5,065	-341	-6.3%
60.5%	5,398	5,036	-362	-6.7%
61.7%	5,323	4,998	-325	-6.1%
63.0%	5,297	4,963	-334	-6.3%
64.2%	5,264	4,942	-322	-6.1%
65.4%	5,054	4,926	-128	-2.5%
66.7%	5,051	4,900	-151	-3.0%
67.9%	4,953	4,898	-55	-1.1%
69.1%	4,933	4,806	-127	-2.6%
70.4%	4,897	4,763	-134	-2.7%
71.6%	4,817	4,637	-180	-3.7%
72.8%	4,794	4,579	-215	-4.5%
74.1%	4,773	4,569	-203	-4.3%
75.3%	4,755	4,495	-259	-5.5%
76.5%	4,690	4,467	-222	-4.7%
77.8%	4,679	4,442	-237	-5.1%
79.0%	4,665	4,405	-259	-5.6%
80.2%	4,656	4,372	-284	-6.1%
81.5%	4,655	4,340	-315	-6.8%
82.7%	4,625	4,290	-335	-7.2%
84.0%	4,613	4,271	-342	-7.4%
85.2%	4,571	4,256	-315	-6.9%
86.4%	4,537	4,207	-330	-7.3%
87.7%	4,467	4,187	-281	-6.3%
88.9%	4,406	4,149	-257	-5.8%
90.1%	4,388	4,142	-246	-5.6%
91.4%	4,329	4,128	-201	-4.6%
92.6%	4,247	4,056	-191	-4.5%
93.8%	4,222	4,053	-170	-4.0%
95.1%	4,126	4,048	-78	-1.9%
96.3%	4,101	4,013	-88	-2.2%
97.5%	4,076	4,011	-65	-1.6%
98.8%	3,939	4,010	72	1.8%
100.0%	3,892	4,003	111	2.8%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	26,641	27,527	886	3.3%
1.2%	25,290	23,939	-1,351	-5.3%
2.5%	20,013	19,161	-852	-4.3%
3.7%	18,964	15,792	-3,172	-16.7%
4.9%	15,683	14,927	-756	-4.8%
6.2%	14,814	14,374	-440	-3.0%
7.4%	13,982	13,015	-967	-6.9%
8.6%	12,793	12,848	55	0.4%
9.9%	12,687	12,692	5	0.0%
11.1%	12,103	12,024	-79	-0.7%
12.3%	11,942	11,959	17	0.1%
13.6%	11,910	11,895	-15	-0.1%
14.8%	11,765	11,561	-205	-1.7%
16.0%	11,581	11,125	-455	-3.9%
17.3%	11,538	11,095	-442	-3.8%
18.5%	11,529	10,857	-672	-5.8%
19.8%	11,302	10,807	-495	-4.4%
21.0%	11,176	10,605	-571	-5.1%
22.2%	11,114	10,457	-657	-5.9%
23.5%	10,896	10,418	-478	-4.4%
24.7%	10,682	10,322	-360	-3.4%
25.9%	10,553	10,079	-474	-4.5%
27.2%	10,533	9,930	-602	-5.7%
28.4%	10,337	9,919	-418	-4.0%
29.6%	10,119	9,900	-219	-2.2%
30.9%	9,760	9,863	103	1.1%
32.1%	9,425	9,519	95	1.0%
33.3%	9,421	9,140	-281	-3.0%
34.6%	9,332	9,047	-285	-3.0%
35.8%	9,304	9,005	-299	-3.2%
37.0%	9,003	8,987	-16	-0.2%
38.3%	8,937	8,702	-235	-2.6%
39.5%	8,869	8,337	-532	-6.0%
40.7%	8,842	8,202	-640	-7.2%
42.0%	8,705	8,193	-513	-5.9%
43.2%	8,181	8,104	-77	-0.9%
44.4%	8,179	8,078	-100	-1.2%
45.7%	8,096	8,029	-67	-0.8%
46.9%	8,071	7,793	-278	-3.4%
48.1%	8,048	7,792	-256	-3.2%
49.4%	7,831	7,757	-74	-0.9%
50.6%	7,791	7,587	-205	-2.6%
51.9%	7,607	7,571	-36	-0.5%
53.1%	7,594	7,466	-128	-1.7%
54.3%	7,544	7,441	-103	-1.4%
55.6%	7,418	7,213	-205	-2.8%
56.8%	7,386	7,197	-189	-2.6%
58.0%	7,385	7,046	-339	-4.6%
59.3%	7,320	6,982	-339	-4.6%
60.5%	7,271	6,925	-345	-4.7%
61.7%	7,089	6,918	-170	-2.4%
63.0%	6,980	6,913	-67	-1.0%
64.2%	6,911	6,859	-53	-0.8%
65.4%	6,769	6,818	49	0.7%
66.7%	6,726	6,622	-105	-1.6%
67.9%	6,684	6,514	-170	-2.5%
69.1%	6,660	6,486	-174	-2.6%
70.4%	6,506	6,350	-155	-2.4%
71.6%	6,219	6,296	77	1.2%
72.8%	6,201	6,254	53	0.8%
74.1%	6,189	6,228	39	0.6%
75.3%	6,151	6,155	5	0.1%
76.5%	6,087	6,093	5	0.1%
77.8%	5,932	5,635	-297	-5.0%
79.0%	5,869	5,512	-357	-6.1%
80.2%	5,340	5,384	44	0.8%
81.5%	5,317	5,336	19	0.4%
82.7%	5,270	5,314	45	0.9%
84.0%	5,152	4,973	-180	-3.5%
85.2%	4,937	4,955	18	0.4%
86.4%	4,908	4,911	3	0.1%
87.7%	4,852	4,904	52	1.1%
88.9%	4,824	4,754	-70	-1.4%
90.1%	4,821	4,405	-415	-8.6%
91.4%	4,782	4,336	-446	-9.3%
92.6%	4,699	4,333	-366	-7.8%
93.8%	4,420	4,155	-265	-6.0%
95.1%	4,226	4,109	-116	-2.7%
96.3%	4,154	4,043	-111	-2.7%
97.5%	4,054	4,028	-26	-0.6%
98.8%	3,868	4,023	155	4.0%
100.0%	3,706	4,011	304	8.2%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,783	59,361	-422	-0.7%
1.2%	47,189	47,554	365	0.8%
2.5%	45,341	43,920	-1,422	-3.1%
3.7%	43,564	39,996	-3,569	-8.2%
4.9%	42,463	38,901	-3,562	-8.4%
6.2%	40,417	37,833	-2,584	-6.4%
7.4%	39,247	36,867	-2,379	-6.1%
8.6%	36,869	35,885	-984	-2.7%
9.9%	30,595	28,428	-2,167	-7.1%
11.1%	28,714	26,893	-1,821	-6.3%
12.3%	25,395	22,520	-2,874	-11.3%
13.6%	24,158	21,847	-2,311	-9.6%
14.8%	23,338	21,717	-1,620	-6.9%
16.0%	23,328	19,765	-3,563	-15.3%
17.3%	22,633	19,338	-3,294	-14.6%
18.5%	22,494	18,936	-3,558	-15.8%
19.8%	21,717	18,928	-2,790	-12.8%
21.0%	21,434	18,290	-3,144	-14.7%
22.2%	19,554	18,192	-1,361	-7.0%
23.5%	18,634	16,629	-2,005	-10.8%
24.7%	14,759	13,611	-1,148	-7.8%
25.9%	13,879	12,844	-1,036	-7.5%
27.2%	13,637	12,723	-914	-6.7%
28.4%	13,613	12,146	-1,467	-10.8%
29.6%	13,310	11,792	-1,518	-11.4%
30.9%	12,877	11,656	-1,221	-9.5%
32.1%	12,718	11,575	-1,143	-9.0%
33.3%	12,167	11,197	-970	-8.0%
34.6%	12,131	10,950	-1,182	-9.7%
35.8%	11,654	10,079	-1,576	-13.5%
37.0%	11,019	9,753	-1,265	-11.5%
38.3%	10,976	9,307	-1,669	-15.2%
39.5%	10,949	8,967	-1,982	-18.1%
40.7%	10,542	8,802	-1,740	-16.5%
42.0%	10,394	8,572	-1,822	-17.5%
43.2%	10,258	8,555	-1,703	-16.6%
44.4%	10,216	8,447	-1,770	-17.3%
45.7%	9,537	8,314	-1,223	-12.8%
46.9%	9,274	8,080	-1,194	-12.9%
48.1%	8,967	7,656	-1,311	-14.6%
49.4%	8,728	7,524	-1,204	-13.8%
50.6%	8,643	7,406	-1,237	-14.3%
51.9%	8,598	7,402	-1,196	-13.9%
53.1%	8,101	7,343	-758	-9.4%
54.3%	8,078	7,294	-784	-9.7%
55.6%	7,943	7,202	-741	-9.3%
56.8%	7,885	7,172	-713	-9.0%
58.0%	7,721	7,055	-666	-8.6%
59.3%	7,656	6,966	-690	-9.0%
60.5%	7,592	6,861	-731	-9.6%
61.7%	7,175	6,645	-530	-7.4%
63.0%	6,969	6,572	-397	-5.7%
64.2%	6,796	6,364	-432	-6.4%
65.4%	6,714	6,252	-462	-6.9%
66.7%	6,594	6,207	-388	-5.9%
67.9%	6,526	6,139	-388	-5.9%
69.1%	6,242	5,980	-262	-4.2%
70.4%	5,925	5,938	13	0.2%
71.6%	5,828	5,930	102	1.7%
72.8%	5,757	5,764	8	0.1%
74.1%	5,748	5,745	-3	0.0%
75.3%	5,672	5,662	-10	-0.2%
76.5%	5,628	5,625	-4	-0.1%
77.8%	5,620	5,621	1	0.0%
79.0%	5,557	5,555	-2	0.0%
80.2%	5,544	5,494	-49	-0.9%
81.5%	5,504	5,483	-21	-0.4%
82.7%	5,438	5,416	-23	-0.4%
84.0%	5,293	5,316	23	0.4%
85.2%	5,199	5,225	25	0.5%
86.4%	5,099	5,108	9	0.2%
87.7%	5,000	5,011	11	0.2%
88.9%	4,961	4,993	32	0.6%
90.1%	4,921	4,960	39	0.8%
91.4%	4,870	4,956	86	1.8%
92.6%	4,867	4,914	47	1.0%
93.8%	4,814	4,855	42	0.9%
95.1%	4,788	4,807	19	0.4%
96.3%	4,297	4,792	495	11.5%
97.5%	4,196	4,197	1	0.0%
98.8%	4,122	4,176	54	1.3%
100.0%	3,959	4,127	168	4.2%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	97,774	97,175	-598	-0.6%
1.2%	78,930	77,928	-1,002	-1.3%
2.5%	77,305	75,379	-1,927	-2.5%
3.7%	75,547	74,884	-663	-0.9%
4.9%	75,385	74,212	-1,172	-1.6%
6.2%	64,256	61,837	-2,419	-3.8%
7.4%	53,646	54,261	615	1.1%
8.6%	47,216	44,013	-3,203	-6.8%
9.9%	46,012	43,919	-2,094	-4.6%
11.1%	44,783	43,587	-1,196	-2.7%
12.3%	44,013	41,605	-2,409	-5.5%
13.6%	38,844	36,628	-2,216	-5.7%
14.8%	38,754	36,415	-2,339	-6.0%
16.0%	38,145	36,107	-2,038	-5.3%
17.3%	34,915	32,496	-2,419	-6.9%
18.5%	31,491	31,730	239	0.8%
19.8%	29,194	26,767	-2,427	-8.3%
21.0%	28,436	26,747	-1,689	-5.9%
22.2%	28,085	25,407	-2,678	-9.5%
23.5%	27,829	24,870	-2,959	-10.6%
24.7%	27,674	24,465	-3,209	-11.6%
25.9%	26,062	24,094	-1,968	-7.5%
27.2%	25,741	23,870	-1,870	-7.3%
28.4%	24,642	23,629	-1,012	-4.1%
29.6%	24,554	22,633	-1,921	-7.8%
30.9%	24,426	22,190	-2,236	-9.2%
32.1%	23,474	22,112	-1,362	-5.8%
33.3%	22,792	21,324	-1,468	-6.4%
34.6%	21,777	21,032	-745	-3.4%
35.8%	20,924	18,487	-2,437	-11.6%
37.0%	17,339	16,428	-911	-5.3%
38.3%	16,673	14,906	-1,767	-10.6%
39.5%	16,428	14,311	-2,117	-12.9%
40.7%	16,187	14,236	-1,951	-12.1%
42.0%	15,464	14,023	-1,440	-9.3%
43.2%	15,041	13,034	-2,007	-13.3%
44.4%	14,559	12,612	-1,946	-13.4%
45.7%	14,199	11,773	-2,427	-17.1%
46.9%	14,081	11,645	-2,436	-17.3%
48.1%	12,510	10,082	-2,428	-19.4%
49.4%	12,493	10,052	-2,441	-19.5%
50.6%	12,281	9,849	-2,432	-19.8%
51.9%	12,090	9,662	-2,428	-20.1%
53.1%	11,670	9,634	-2,036	-17.4%
54.3%	10,937	9,240	-1,697	-15.5%
55.6%	10,599	8,703	-1,896	-17.9%
56.8%	10,433	8,577	-1,857	-17.8%
58.0%	10,068	8,509	-1,560	-15.5%
59.3%	10,035	8,212	-1,823	-18.2%
60.5%	9,920	8,189	-1,730	-17.4%
61.7%	9,910	7,674	-2,236	-22.6%
63.0%	9,869	7,644	-2,225	-22.5%
64.2%	9,293	7,540	-1,753	-18.9%
65.4%	9,027	7,509	-1,517	-16.8%
66.7%	8,923	7,476	-1,447	-16.2%
67.9%	8,873	7,394	-1,479	-16.7%
69.1%	8,783	7,256	-1,527	-17.4%
70.4%	8,431	7,254	-1,177	-14.0%
71.6%	8,269	7,233	-1,036	-12.5%
72.8%	8,176	7,221	-954	-11.7%
74.1%	8,030	7,219	-811	-10.1%
75.3%	7,898	7,199	-698	-8.8%
76.5%	7,790	7,005	-784	-10.1%
77.8%	7,391	6,891	-500	-6.8%
79.0%	7,199	6,862	-337	-4.7%
80.2%	7,060	6,725	-335	-4.7%
81.5%	7,050	6,688	-361	-5.1%
82.7%	6,962	6,446	-515	-7.4%
84.0%	6,724	6,441	-283	-4.2%
85.2%	6,696	6,438	-258	-3.9%
86.4%	6,689	6,293	-395	-5.9%
87.7%	6,306	6,105	-201	-3.2%
88.9%	5,965	6,036	71	1.2%
90.1%	5,964	5,971	8	0.1%
91.4%	5,816	5,814	-1	0.0%
92.6%	5,609	5,599	-10	-0.2%
93.8%	5,479	5,461	-18	-0.3%
95.1%	5,452	5,443	-9	-0.2%
96.3%	5,401	5,438	37	0.7%
97.5%	5,066	5,062	-4	-0.1%
98.8%	4,331	4,332	0	0.0%
100.0%	4,285	4,282	-3	-0.1%

Table SW-13-b

Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	107,871	107,874	3	0.0%
1.2%	103,429	100,869	-2,560	-2.5%
2.5%	77,720	76,200	-1,520	-2.0%
3.7%	76,297	73,734	-2,563	-3.4%
4.9%	70,600	68,276	-2,324	-3.3%
6.2%	68,336	68,050	-286	-0.4%
7.4%	61,965	61,964	-1	0.0%
8.6%	55,647	54,806	-841	-1.5%
9.9%	54,497	53,971	-526	-1.0%
11.1%	54,388	53,083	-1,306	-2.4%
12.3%	53,076	51,980	-1,096	-2.1%
13.6%	52,933	50,655	-2,279	-4.3%
14.8%	52,055	50,547	-1,508	-2.9%
16.0%	48,254	48,093	-162	-0.3%
17.3%	48,092	45,703	-2,389	-5.0%
18.5%	41,049	39,233	-1,816	-4.4%
19.8%	40,635	38,083	-2,552	-6.3%
21.0%	40,215	37,643	-2,572	-6.4%
22.2%	38,936	36,375	-2,561	-6.6%
23.5%	34,867	32,304	-2,563	-7.4%
24.7%	33,725	31,154	-2,571	-7.6%
25.9%	29,333	30,421	1,088	3.7%
27.2%	28,709	28,177	-532	-1.9%
28.4%	27,163	26,807	-356	-1.3%
29.6%	26,691	25,468	-1,224	-4.6%
30.9%	26,423	24,636	-1,787	-6.8%
32.1%	25,532	24,121	-1,411	-5.5%
33.3%	23,169	22,450	-719	-3.1%
34.6%	22,610	20,603	-2,008	-8.9%
35.8%	19,360	16,798	-2,562	-13.2%
37.0%	19,091	16,791	-2,300	-12.0%
38.3%	18,690	16,126	-2,564	-13.7%
39.5%	18,556	15,608	-2,948	-15.9%
40.7%	18,167	15,175	-2,991	-16.5%
42.0%	17,743	15,055	-2,688	-15.2%
43.2%	17,621	14,435	-3,185	-18.1%
44.4%	17,006	13,965	-3,041	-17.9%
45.7%	16,531	13,798	-2,733	-16.5%
46.9%	16,367	13,247	-3,120	-19.1%
48.1%	15,162	13,159	-2,003	-13.2%
49.4%	14,944	12,878	-2,066	-13.8%
50.6%	13,166	12,719	-447	-3.4%
51.9%	12,719	12,714	-5	0.0%
53.1%	12,711	12,616	-95	-0.7%
54.3%	12,674	11,340	-1,333	-10.5%
55.6%	12,619	10,551	-2,068	-16.4%
56.8%	12,174	10,109	-2,065	-17.0%
58.0%	12,155	9,886	-2,269	-18.7%
59.3%	12,089	9,610	-2,479	-20.5%
60.5%	11,921	9,592	-2,329	-19.5%
61.7%	11,342	9,518	-1,824	-16.1%
63.0%	11,137	9,369	-1,769	-15.9%
64.2%	10,861	9,315	-1,546	-14.2%
65.4%	10,234	8,987	-1,246	-12.2%
66.7%	9,604	8,572	-1,032	-10.7%
67.9%	9,498	8,465	-1,034	-10.9%
69.1%	9,434	8,286	-1,148	-12.2%
70.4%	9,415	8,180	-1,235	-13.1%
71.6%	9,329	8,029	-1,300	-13.9%
72.8%	9,251	7,878	-1,373	-14.8%
74.1%	9,161	7,669	-1,491	-16.3%
75.3%	8,599	7,237	-1,362	-15.8%
76.5%	8,485	7,082	-1,403	-16.5%
77.8%	8,315	6,949	-1,366	-16.4%
79.0%	8,209	6,893	-1,316	-16.0%
80.2%	8,026	6,867	-1,158	-14.4%
81.5%	7,911	6,805	-1,106	-14.0%
82.7%	7,516	6,306	-1,210	-16.1%
84.0%	7,315	6,041	-1,274	-17.4%
85.2%	7,051	5,880	-1,171	-16.6%
86.4%	6,864	5,699	-1,165	-17.0%
87.7%	6,472	5,602	-870	-13.4%
88.9%	6,125	5,515	-610	-10.0%
90.1%	6,101	5,337	-764	-12.5%
91.4%	6,098	5,165	-933	-15.3%
92.6%	5,880	5,046	-834	-14.2%
93.8%	5,697	4,933	-763	-13.4%
95.1%	5,606	4,863	-743	-13.3%
96.3%	5,587	4,758	-829	-14.8%
97.5%	4,899	4,725	-174	-3.6%
98.8%	4,723	4,569	-154	-3.3%
100.0%	4,564	4,492	-72	-1.6%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	95,185	95,185	0	0.0%
1.2%	86,530	82,624	-3,906	-4.5%
2.5%	66,097	62,191	-3,907	-5.9%
3.7%	56,822	56,824	2	0.0%
4.9%	45,685	43,985	-1,699	-3.7%
6.2%	41,773	37,860	-3,913	-9.4%
7.4%	40,227	37,438	-2,788	-6.9%
8.6%	39,171	36,322	-2,849	-7.3%
9.9%	38,950	35,245	-3,705	-9.5%
11.1%	34,167	30,258	-3,909	-11.4%
12.3%	28,210	28,196	-14	0.0%
13.6%	27,216	27,098	-117	-0.4%
14.8%	26,137	26,175	38	0.1%
16.0%	25,735	25,373	-362	-1.4%
17.3%	25,401	24,770	-631	-2.5%
18.5%	25,099	23,898	-1,201	-4.8%
19.8%	24,795	23,508	-1,287	-5.2%
21.0%	24,048	22,570	-1,478	-6.1%
22.2%	23,399	21,441	-1,958	-8.4%
23.5%	22,719	20,887	-1,831	-8.1%
24.7%	22,578	20,870	-1,708	-7.6%
25.9%	21,680	18,581	-3,100	-14.3%
27.2%	20,474	17,316	-3,159	-15.4%
28.4%	20,086	16,447	-3,639	-18.1%
29.6%	18,970	15,060	-3,910	-20.6%
30.9%	16,592	14,459	-2,133	-12.9%
32.1%	16,435	14,388	-2,047	-12.5%
33.3%	16,100	13,836	-2,264	-14.1%
34.6%	15,860	13,704	-2,156	-13.6%
35.8%	15,260	13,653	-1,607	-10.5%
37.0%	14,731	13,261	-1,470	-10.0%
38.3%	14,630	12,685	-1,945	-13.3%
39.5%	14,457	12,524	-1,933	-13.4%
40.7%	14,388	12,278	-2,110	-14.7%
42.0%	13,610	11,971	-1,640	-12.0%
43.2%	13,363	11,485	-1,878	-14.1%
44.4%	12,877	11,340	-1,538	-11.9%
45.7%	12,547	10,614	-1,933	-15.4%
46.9%	12,276	10,344	-1,932	-15.7%
48.1%	12,060	10,184	-1,876	-15.6%
49.4%	12,018	10,099	-1,919	-16.0%
50.6%	11,523	9,703	-1,820	-15.8%
51.9%	11,488	9,685	-1,803	-15.7%
53.1%	11,150	9,423	-1,727	-15.5%
54.3%	10,981	9,121	-1,860	-16.9%
55.6%	10,893	8,976	-1,917	-17.6%
56.8%	10,695	8,944	-1,751	-16.4%
58.0%	10,607	8,774	-1,833	-17.3%
59.3%	10,353	8,760	-1,592	-15.4%
60.5%	10,163	8,666	-1,497	-14.7%
61.7%	9,743	8,409	-1,334	-13.7%
63.0%	9,686	8,384	-1,302	-13.4%
64.2%	9,564	8,146	-1,418	-14.8%
65.4%	9,473	8,106	-1,367	-14.4%
66.7%	9,273	8,104	-1,169	-12.6%
67.9%	9,096	8,101	-995	-10.9%
69.1%	9,027	7,703	-1,324	-14.7%
70.4%	8,974	7,606	-1,367	-15.2%
71.6%	8,709	7,198	-1,511	-17.3%
72.8%	8,574	7,195	-1,378	-16.1%
74.1%	8,350	7,082	-1,268	-15.2%
75.3%	8,248	6,926	-1,322	-16.0%
76.5%	8,220	6,829	-1,392	-16.9%
77.8%	8,119	6,787	-1,332	-16.4%
79.0%	8,115	6,713	-1,401	-17.3%
80.2%	7,776	6,502	-1,274	-16.4%
81.5%	7,200	6,286	-914	-12.7%
82.7%	7,058	6,241	-817	-11.6%
84.0%	7,005	6,177	-828	-11.8%
85.2%	6,946	6,135	-811	-11.7%
86.4%	6,830	5,963	-868	-12.7%
87.7%	6,748	5,861	-887	-13.1%
88.9%	6,688	5,860	-828	-12.4%
90.1%	6,448	5,624	-824	-12.8%
91.4%	5,959	5,514	-444	-7.5%
92.6%	5,783	5,484	-299	-5.2%
93.8%	5,593	5,446	-147	-2.6%
95.1%	5,574	5,355	-220	-3.9%
96.3%	5,443	5,355	-88	-1.6%
97.5%	5,333	5,285	-49	-0.9%
98.8%	5,244	5,169	-75	-1.4%
100.0%	5,007	5,052	45	0.9%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,514	41,676	-2,838	-6.4%
1.2%	35,843	36,018	175	0.5%
2.5%	29,983	28,715	-1,268	-4.2%
3.7%	25,075	25,095	20	0.1%
4.9%	24,221	23,780	-442	-1.8%
6.2%	20,817	20,817	0	0.0%
7.4%	17,526	17,114	-412	-2.3%
8.6%	17,080	13,858	-3,222	-18.9%
9.9%	14,389	12,676	-1,713	-11.9%
11.1%	14,325	12,152	-2,173	-15.2%
12.3%	14,116	11,408	-2,708	-19.2%
13.6%	13,566	11,175	-2,391	-17.6%
14.8%	13,351	11,167	-2,185	-16.4%
16.0%	13,067	11,087	-1,979	-15.1%
17.3%	12,147	11,071	-1,076	-8.9%
18.5%	11,567	10,689	-878	-7.6%
19.8%	11,128	10,313	-816	-7.3%
21.0%	11,058	9,885	-1,173	-10.6%
22.2%	10,824	9,723	-1,102	-10.2%
23.5%	10,636	9,505	-1,131	-10.6%
24.7%	9,572	9,157	-415	-4.3%
25.9%	8,885	8,852	-33	-0.4%
27.2%	8,824	8,849	25	0.3%
28.4%	8,761	8,692	-69	-0.8%
29.6%	8,706	8,532	-174	-2.0%
30.9%	8,640	8,436	-204	-2.4%
32.1%	8,383	8,175	-208	-2.5%
33.3%	8,343	8,160	-183	-2.2%
34.6%	8,303	7,757	-546	-6.6%
35.8%	8,071	7,623	-448	-5.6%
37.0%	7,935	7,573	-362	-4.6%
38.3%	7,708	7,573	-136	-1.8%
39.5%	7,580	7,484	-97	-1.3%
40.7%	7,469	7,429	-40	-0.5%
42.0%	7,448	7,247	-201	-2.7%
43.2%	7,360	7,141	-219	-3.0%
44.4%	7,356	7,085	-272	-3.7%
45.7%	7,148	6,948	-200	-2.8%
46.9%	7,132	6,762	-369	-5.2%
48.1%	7,114	6,753	-361	-5.1%
49.4%	6,623	6,700	77	1.2%
50.6%	6,613	6,637	24	0.4%
51.9%	6,612	6,548	-64	-1.0%
53.1%	6,456	6,489	33	0.5%
54.3%	6,434	6,450	16	0.3%
55.6%	6,374	6,330	-44	-0.7%
56.8%	6,365	6,266	-99	-1.6%
58.0%	6,325	6,263	-62	-1.0%
59.3%	6,315	6,241	-73	-1.2%
60.5%	6,302	6,158	-144	-2.3%
61.7%	6,275	6,129	-146	-2.3%
63.0%	6,264	6,127	-137	-2.2%
64.2%	6,073	6,104	31	0.5%
65.4%	6,051	6,066	15	0.2%
66.7%	5,990	6,021	31	0.5%
67.9%	5,981	6,020	39	0.7%
69.1%	5,973	5,964	-9	-0.2%
70.4%	5,933	5,844	-89	-1.5%
71.6%	5,874	5,804	-70	-1.2%
72.8%	5,797	5,765	-32	-0.5%
74.1%	5,680	5,732	52	0.9%
75.3%	5,620	5,489	-131	-2.3%
76.5%	5,525	5,409	-115	-2.1%
77.8%	5,474	5,369	-105	-1.9%
79.0%	5,464	5,339	-125	-2.3%
80.2%	5,362	5,327	-34	-0.6%
81.5%	5,292	5,324	32	0.6%
82.7%	5,267	5,291	24	0.5%
84.0%	5,227	5,195	-32	-0.6%
85.2%	5,202	5,173	-29	-0.6%
86.4%	5,156	5,128	-28	-0.5%
87.7%	5,145	5,125	-20	-0.4%
88.9%	5,103	4,972	-131	-2.6%
90.1%	4,939	4,955	16	0.3%
91.4%	4,906	4,746	-160	-3.3%
92.6%	4,853	4,732	-121	-2.5%
93.8%	4,733	4,624	-109	-2.3%
95.1%	4,712	4,608	-104	-2.2%
96.3%	4,707	4,567	-140	-3.0%
97.5%	4,072	4,559	487	11.9%
98.8%	4,013	4,458	445	11.1%
100.0%	3,934	4,309	375	9.5%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,425	13,589	-1,835	-11.9%
1.2%	14,042	13,317	-724	-5.2%
2.5%	13,283	11,668	-1,615	-12.2%
3.7%	11,943	11,234	-709	-5.9%
4.9%	11,479	11,226	-252	-2.2%
6.2%	11,121	11,070	-51	-0.5%
7.4%	10,684	10,730	46	0.4%
8.6%	10,259	10,412	153	1.5%
9.9%	10,257	10,312	55	0.5%
11.1%	9,904	10,034	131	1.3%
12.3%	9,636	9,266	-371	-3.8%
13.6%	9,635	9,235	-400	-4.1%
14.8%	9,599	8,985	-614	-6.4%
16.0%	8,770	8,974	204	2.3%
17.3%	8,751	8,822	70	0.8%
18.5%	8,544	8,758	215	2.5%
19.8%	8,472	8,634	162	1.9%
21.0%	8,397	8,545	148	1.8%
22.2%	8,095	8,429	334	4.1%
23.5%	8,087	8,294	208	2.6%
24.7%	8,064	8,206	142	1.8%
25.9%	8,040	8,184	144	1.8%
27.2%	7,996	8,139	143	1.8%
28.4%	7,949	7,982	32	0.4%
29.6%	7,876	7,977	101	1.3%
30.9%	7,858	7,938	80	1.0%
32.1%	7,705	7,933	228	3.0%
33.3%	7,683	7,924	241	3.1%
34.6%	7,675	7,906	231	3.0%
35.8%	7,596	7,866	270	3.6%
37.0%	7,593	7,799	206	2.7%
38.3%	7,577	7,645	68	0.9%
39.5%	7,564	7,642	78	1.0%
40.7%	7,546	7,614	68	0.9%
42.0%	7,470	7,340	-131	-1.8%
43.2%	7,290	7,312	22	0.3%
44.4%	7,252	7,275	23	0.3%
45.7%	7,179	7,239	60	0.8%
46.9%	7,175	7,216	41	0.6%
48.1%	7,055	7,152	97	1.4%
49.4%	6,952	7,095	143	2.1%
50.6%	6,925	6,950	25	0.4%
51.9%	6,902	6,716	-186	-2.7%
53.1%	6,878	6,520	-357	-5.2%
54.3%	6,833	6,480	-353	-5.2%
55.6%	6,789	6,464	-325	-4.8%
56.8%	6,735	6,402	-333	-4.9%
58.0%	6,730	6,306	-424	-6.3%
59.3%	6,587	6,288	-299	-4.5%
60.5%	6,575	6,199	-376	-5.7%
61.7%	6,481	6,196	-285	-4.4%
63.0%	6,412	6,186	-227	-3.5%
64.2%	6,371	6,106	-266	-4.2%
65.4%	6,340	6,103	-237	-3.7%
66.7%	6,295	6,099	-195	-3.1%
67.9%	6,238	5,960	-278	-4.5%
69.1%	6,194	5,921	-273	-4.4%
70.4%	6,182	5,914	-268	-4.3%
71.6%	6,095	5,907	-188	-3.1%
72.8%	6,071	5,735	-337	-5.5%
74.1%	6,032	5,719	-313	-5.2%
75.3%	6,026	5,630	-395	-6.6%
76.5%	5,885	5,609	-276	-4.7%
77.8%	5,854	5,601	-253	-4.3%
79.0%	5,807	5,558	-249	-4.3%
80.2%	5,724	5,420	-305	-5.3%
81.5%	5,602	5,409	-193	-3.4%
82.7%	5,524	5,353	-170	-3.1%
84.0%	5,503	5,294	-210	-3.8%
85.2%	5,463	5,285	-178	-3.3%
86.4%	5,437	5,244	-193	-3.5%
87.7%	5,413	5,243	-169	-3.1%
88.9%	5,373	5,242	-131	-2.4%
90.1%	5,341	5,190	-151	-2.8%
91.4%	5,316	5,185	-131	-2.5%
92.6%	5,299	5,147	-152	-2.9%
93.8%	5,285	5,133	-153	-2.9%
95.1%	5,261	4,908	-353	-6.7%
96.3%	5,111	4,880	-231	-4.5%
97.5%	5,101	4,765	-336	-6.6%
98.8%	4,920	4,317	-603	-12.3%
100.0%	2,652	4,244	1,592	60.0%

Table SW-13-b
Sacramento River below Hamilton City, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,232	12,427	195	1.6%
1.2%	12,143	12,302	160	1.3%
2.5%	12,140	12,211	71	0.6%
3.7%	12,081	11,666	-415	-3.4%
4.9%	12,009	11,658	-351	-2.9%
6.2%	11,893	11,547	-345	-2.9%
7.4%	11,781	11,531	-250	-2.1%
8.6%	11,733	11,429	-304	-2.6%
9.9%	11,575	11,310	-266	-2.3%
11.1%	11,513	11,143	-370	-3.2%
12.3%	11,220	11,046	-174	-1.6%
13.6%	11,193	10,860	-333	-3.0%
14.8%	11,165	10,822	-343	-3.1%
16.0%	11,149	10,800	-350	-3.1%
17.3%	11,144	10,790	-354	-3.2%
18.5%	11,133	10,758	-375	-3.4%
19.8%	11,067	10,746	-322	-2.9%
21.0%	11,067	10,698	-369	-3.3%
22.2%	10,951	10,629	-321	-2.9%
23.5%	10,938	10,616	-321	-2.9%
24.7%	10,856	10,589	-267	-2.5%
25.9%	10,856	10,512	-343	-3.2%
27.2%	10,763	10,487	-276	-2.6%
28.4%	10,679	10,458	-221	-2.1%
29.6%	10,647	10,457	-190	-1.8%
30.9%	10,527	10,454	-73	-0.7%
32.1%	10,457	10,453	-4	0.0%
33.3%	10,334	10,420	86	0.8%
34.6%	10,283	10,405	122	1.2%
35.8%	10,053	10,298	245	2.4%
37.0%	9,973	10,069	96	1.0%
38.3%	9,957	9,944	-13	-0.1%
39.5%	9,935	9,879	-56	-0.6%
40.7%	9,882	9,867	-15	-0.2%
42.0%	9,750	9,858	109	1.1%
43.2%	9,731	9,743	11	0.1%
44.4%	9,712	9,561	-151	-1.6%
45.7%	9,658	9,316	-342	-3.5%
46.9%	9,629	9,305	-324	-3.4%
48.1%	9,611	9,237	-374	-3.9%
49.4%	9,522	9,156	-366	-3.8%
50.6%	9,439	9,144	-295	-3.1%
51.9%	9,431	8,811	-620	-6.6%
53.1%	9,263	8,707	-557	-6.0%
54.3%	9,208	8,696	-512	-5.6%
55.6%	9,080	8,690	-390	-4.3%
56.8%	9,021	8,611	-410	-4.5%
58.0%	8,869	8,604	-265	-3.0%
59.3%	8,616	8,500	-117	-1.4%
60.5%	8,535	8,403	-132	-1.5%
61.7%	8,524	8,384	-140	-1.6%
63.0%	8,425	8,353	-71	-0.8%
64.2%	8,363	8,295	-68	-0.8%
65.4%	8,333	8,177	-157	-1.9%
66.7%	8,293	8,168	-125	-1.5%
67.9%	8,151	8,150	-1	0.0%
69.1%	8,085	8,085	0	0.0%
70.4%	7,970	8,070	101	1.3%
71.6%	7,865	8,000	135	1.7%
72.8%	7,805	7,781	-24	-0.3%
74.1%	7,787	7,650	-137	-1.8%
75.3%	7,780	7,650	-130	-1.7%
76.5%	7,659	7,603	-56	-0.7%
77.8%	7,642	7,575	-67	-0.9%
79.0%	7,604	7,547	-57	-0.8%
80.2%	7,507	7,491	-16	-0.2%
81.5%	7,423	7,452	29	0.4%
82.7%	7,385	7,380	-5	-0.1%
84.0%	7,194	7,370	176	2.4%
85.2%	7,082	7,358	277	3.9%
86.4%	7,006	7,288	282	4.0%
87.7%	6,941	7,272	331	4.8%
88.9%	6,883	7,174	291	4.2%
90.1%	6,811	7,024	214	3.1%
91.4%	6,798	6,941	143	2.1%
92.6%	6,553	6,753	200	3.1%
93.8%	6,516	6,297	-219	-3.4%
95.1%	6,482	6,258	-224	-3.5%
96.3%	6,405	5,711	-695	-10.8%
97.5%	6,078	5,508	-570	-9.4%
98.8%	6,075	5,328	-748	-12.3%
100.0%	5,440	5,267	-172	-3.2%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,717	17,490	4,773	37.5%
1.2%	12,474	17,342	4,868	39.0%
2.5%	12,463	17,171	4,709	37.8%
3.7%	12,341	16,984	4,644	37.6%
4.9%	12,315	16,917	4,602	37.4%
6.2%	12,276	16,907	4,632	37.7%
7.4%	12,245	16,572	4,327	35.3%
8.6%	12,242	16,139	3,896	31.8%
9.9%	12,220	13,658	1,438	11.8%
11.1%	12,219	13,368	1,149	9.4%
12.3%	12,165	13,331	1,167	9.6%
13.6%	12,161	13,212	1,051	8.6%
14.8%	12,137	13,124	987	8.1%
16.0%	12,102	13,001	899	7.4%
17.3%	12,073	12,886	814	6.7%
18.5%	12,071	12,809	738	6.1%
19.8%	12,041	12,578	537	4.5%
21.0%	12,014	12,535	521	4.3%
22.2%	11,958	12,492	534	4.5%
23.5%	11,945	12,437	492	4.1%
24.7%	11,938	12,430	492	4.1%
25.9%	11,918	12,375	456	3.8%
27.2%	11,918	12,356	438	3.7%
28.4%	11,901	12,312	411	3.5%
29.6%	11,880	12,292	412	3.5%
30.9%	11,871	12,247	376	3.2%
32.1%	11,840	12,217	377	3.2%
33.3%	11,837	12,207	370	3.1%
34.6%	11,835	12,167	331	2.8%
35.8%	11,814	12,160	346	2.9%
37.0%	11,801	12,068	267	2.3%
38.3%	11,774	12,015	241	2.1%
39.5%	11,774	12,011	237	2.0%
40.7%	11,747	11,999	252	2.1%
42.0%	11,676	11,960	284	2.4%
43.2%	11,660	11,915	255	2.2%
44.4%	11,603	11,895	292	2.5%
45.7%	11,601	11,895	294	2.5%
46.9%	11,601	11,891	290	2.5%
48.1%	11,574	11,873	298	2.6%
49.4%	11,570	11,869	299	2.6%
50.6%	11,563	11,853	289	2.5%
51.9%	11,562	11,838	276	2.4%
53.1%	11,522	11,838	316	2.7%
54.3%	11,434	11,802	367	3.2%
55.6%	11,421	11,785	363	3.2%
56.8%	11,415	11,681	266	2.3%
58.0%	11,407	11,668	261	2.3%
59.3%	11,389	11,565	176	1.5%
60.5%	11,288	11,446	158	1.4%
61.7%	11,242	11,433	191	1.7%
63.0%	11,098	11,432	334	3.0%
64.2%	11,022	11,330	308	2.8%
65.4%	10,929	11,273	344	3.1%
66.7%	10,889	11,089	200	1.8%
67.9%	10,810	10,912	101	0.9%
69.1%	10,719	10,738	19	0.2%
70.4%	10,570	10,603	32	0.3%
71.6%	10,303	10,504	201	2.0%
72.8%	10,258	10,440	182	1.8%
74.1%	10,220	10,392	172	1.7%
75.3%	10,128	10,370	242	2.4%
76.5%	10,081	10,332	252	2.5%
77.8%	9,828	10,259	430	4.4%
79.0%	9,814	10,111	297	3.0%
80.2%	9,760	9,972	213	2.2%
81.5%	9,604	9,891	287	3.0%
82.7%	9,484	9,804	321	3.4%
84.0%	9,395	9,719	324	3.4%
85.2%	9,336	9,305	-31	-0.3%
86.4%	9,153	9,303	150	1.6%
87.7%	8,997	9,247	250	2.8%
88.9%	8,957	9,038	81	0.9%
90.1%	8,255	9,019	764	9.3%
91.4%	8,206	8,705	499	6.1%
92.6%	8,077	8,632	555	6.9%
93.8%	7,441	8,511	1,070	14.4%
95.1%	7,273	8,500	1,226	16.9%
96.3%	6,844	8,170	1,326	19.4%
97.5%	6,685	8,141	1,456	21.8%
98.8%	6,502	7,635	1,133	17.4%
100.0%	6,235	6,950	715	11.5%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,304	10,674	-631	-5.6%
1.2%	11,170	10,393	-778	-7.0%
2.5%	10,302	10,202	-100	-1.0%
3.7%	10,289	9,819	-470	-4.6%
4.9%	10,099	9,761	-337	-3.3%
6.2%	9,832	9,513	-319	-3.2%
7.4%	9,821	9,318	-503	-5.1%
8.6%	9,769	9,073	-696	-7.1%
9.9%	9,687	8,902	-785	-8.1%
11.1%	9,569	8,887	-682	-7.1%
12.3%	9,262	8,878	-384	-4.1%
13.6%	9,183	8,854	-329	-3.6%
14.8%	9,129	8,724	-405	-4.4%
16.0%	8,994	8,700	-294	-3.3%
17.3%	8,942	8,519	-423	-4.7%
18.5%	8,843	8,425	-418	-4.7%
19.8%	8,724	8,365	-359	-4.1%
21.0%	8,662	8,320	-342	-3.9%
22.2%	8,655	8,278	-377	-4.4%
23.5%	8,615	8,209	-406	-4.7%
24.7%	8,568	8,146	-422	-4.9%
25.9%	8,550	8,124	-425	-5.0%
27.2%	8,433	8,113	-320	-3.8%
28.4%	8,420	8,082	-339	-4.0%
29.6%	8,348	8,074	-274	-3.3%
30.9%	8,296	8,063	-233	-2.8%
32.1%	8,293	8,024	-269	-3.2%
33.3%	8,270	8,006	-264	-3.2%
34.6%	8,174	7,908	-267	-3.3%
35.8%	8,126	7,799	-327	-4.0%
37.0%	7,960	7,787	-173	-2.2%
38.3%	7,904	7,774	-129	-1.6%
39.5%	7,720	7,754	34	0.4%
40.7%	7,706	7,664	-41	-0.5%
42.0%	7,702	7,655	-47	-0.6%
43.2%	7,618	7,631	12	0.2%
44.4%	7,475	7,610	135	1.8%
45.7%	7,358	7,540	182	2.5%
46.9%	7,343	7,537	194	2.6%
48.1%	7,260	7,528	268	3.7%
49.4%	7,235	7,516	281	3.9%
50.6%	7,231	7,507	275	3.8%
51.9%	7,166	7,505	339	4.7%
53.1%	7,068	7,495	427	6.0%
54.3%	7,039	7,448	409	5.8%
55.6%	7,035	7,406	371	5.3%
56.8%	7,030	7,402	372	5.3%
58.0%	7,027	7,402	374	5.3%
59.3%	6,945	7,402	457	6.6%
60.5%	6,905	7,401	497	7.2%
61.7%	6,857	7,392	535	7.8%
63.0%	6,806	7,387	581	8.5%
64.2%	6,788	7,364	576	8.5%
65.4%	6,780	7,350	570	8.4%
66.7%	6,779	7,331	551	8.1%
67.9%	6,719	7,307	588	8.7%
69.1%	6,660	7,305	645	9.7%
70.4%	6,649	7,263	614	9.2%
71.6%	6,627	7,236	609	9.2%
72.8%	6,586	7,212	626	9.5%
74.1%	6,504	7,210	706	10.9%
75.3%	6,479	7,183	704	10.9%
76.5%	6,462	7,077	615	9.5%
77.8%	6,451	7,054	603	9.3%
79.0%	6,437	6,999	562	8.7%
80.2%	6,406	6,991	585	9.1%
81.5%	6,383	6,989	606	9.5%
82.7%	6,355	6,968	614	9.7%
84.0%	6,319	6,926	607	9.6%
85.2%	6,231	6,861	630	10.1%
86.4%	6,145	6,852	707	11.5%
87.7%	5,998	6,837	839	14.0%
88.9%	5,953	6,742	789	13.3%
90.1%	5,950	6,726	777	13.1%
91.4%	5,938	6,692	754	12.7%
92.6%	5,694	6,659	965	16.9%
93.8%	5,668	6,439	770	13.6%
95.1%	5,589	6,329	740	13.2%
96.3%	5,531	6,301	770	13.9%
97.5%	5,498	6,222	723	13.2%
98.8%	4,952	6,138	1,186	24.0%
100.0%	3,593	3,853	260	7.2%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,443	16,006	563	3.6%
1.2%	15,394	15,771	377	2.4%
2.5%	15,368	15,364	-4	0.0%
3.7%	15,182	15,322	140	0.9%
4.9%	15,150	15,283	133	0.9%
6.2%	15,022	15,050	28	0.2%
7.4%	14,880	14,963	83	0.6%
8.6%	14,862	14,862	0	0.0%
9.9%	14,654	14,807	153	1.0%
11.1%	14,629	14,711	82	0.6%
12.3%	14,615	14,710	95	0.6%
13.6%	14,576	14,656	80	0.5%
14.8%	14,533	14,531	-2	0.0%
16.0%	14,449	14,456	7	0.0%
17.3%	14,447	14,295	-152	-1.1%
18.5%	14,401	14,284	-117	-0.8%
19.8%	14,291	14,084	-207	-1.4%
21.0%	14,287	13,693	-594	-4.2%
22.2%	13,808	13,607	-201	-1.5%
23.5%	13,176	13,025	-151	-1.1%
24.7%	12,923	12,542	-380	-2.9%
25.9%	12,550	12,455	-96	-0.8%
27.2%	12,443	11,910	-533	-4.3%
28.4%	12,128	11,514	-614	-5.1%
29.6%	11,737	10,877	-859	-7.3%
30.9%	11,687	10,718	-968	-8.3%
32.1%	11,485	9,691	-1,795	-15.6%
33.3%	10,934	9,417	-1,517	-13.9%
34.6%	10,150	8,903	-1,247	-12.3%
35.8%	9,770	8,167	-1,603	-16.4%
37.0%	9,591	7,755	-1,836	-19.1%
38.3%	9,305	7,417	-1,888	-20.3%
39.5%	8,191	7,312	-879	-10.7%
40.7%	8,150	7,060	-1,091	-13.4%
42.0%	8,129	6,819	-1,310	-16.1%
43.2%	7,843	6,755	-1,088	-13.9%
44.4%	7,134	6,641	-493	-6.9%
45.7%	6,915	6,502	-412	-6.0%
46.9%	6,562	6,413	-149	-2.3%
48.1%	6,447	6,409	-38	-0.6%
49.4%	5,963	6,406	443	7.4%
50.6%	5,865	6,189	324	5.5%
51.9%	5,663	6,182	519	9.2%
53.1%	5,528	6,100	573	10.4%
54.3%	5,438	6,068	630	11.6%
55.6%	5,266	6,031	765	14.5%
56.8%	5,186	5,952	766	14.8%
58.0%	5,098	5,919	821	16.1%
59.3%	5,055	5,855	800	15.8%
60.5%	5,035	5,853	818	16.3%
61.7%	4,933	5,811	878	17.8%
63.0%	4,828	5,769	941	19.5%
64.2%	4,825	5,718	893	18.5%
65.4%	4,604	5,705	1,101	23.9%
66.7%	4,574	5,665	1,091	23.9%
67.9%	4,516	5,643	1,127	24.9%
69.1%	4,420	5,620	1,200	27.1%
70.4%	4,373	5,611	1,237	28.3%
71.6%	4,363	5,564	1,201	27.5%
72.8%	4,333	5,519	1,185	27.4%
74.1%	4,250	5,498	1,248	29.4%
75.3%	4,217	5,462	1,244	29.5%
76.5%	4,199	5,362	1,163	27.7%
77.8%	4,159	5,281	1,121	27.0%
79.0%	4,125	5,238	1,113	27.0%
80.2%	4,047	5,221	1,174	29.0%
81.5%	4,022	5,218	1,196	29.7%
82.7%	3,990	5,217	1,227	30.7%
84.0%	3,980	5,186	1,206	30.3%
85.2%	3,974	5,185	1,211	30.5%
86.4%	3,967	5,104	1,136	28.6%
87.7%	3,967	5,071	1,104	27.8%
88.9%	3,964	4,995	1,031	26.0%
90.1%	3,949	4,952	1,003	25.4%
91.4%	3,836	4,852	1,015	26.5%
92.6%	3,828	4,843	1,015	26.5%
93.8%	3,624	4,832	1,208	33.3%
95.1%	3,611	4,710	1,099	30.4%
96.3%	3,585	4,659	1,074	30.0%
97.5%	3,460	4,630	1,171	33.8%
98.8%	3,401	4,613	1,212	35.6%
100.0%	3,257	4,267	1,010	31.0%

Figure SW-14-b
Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Probability of Exceedance

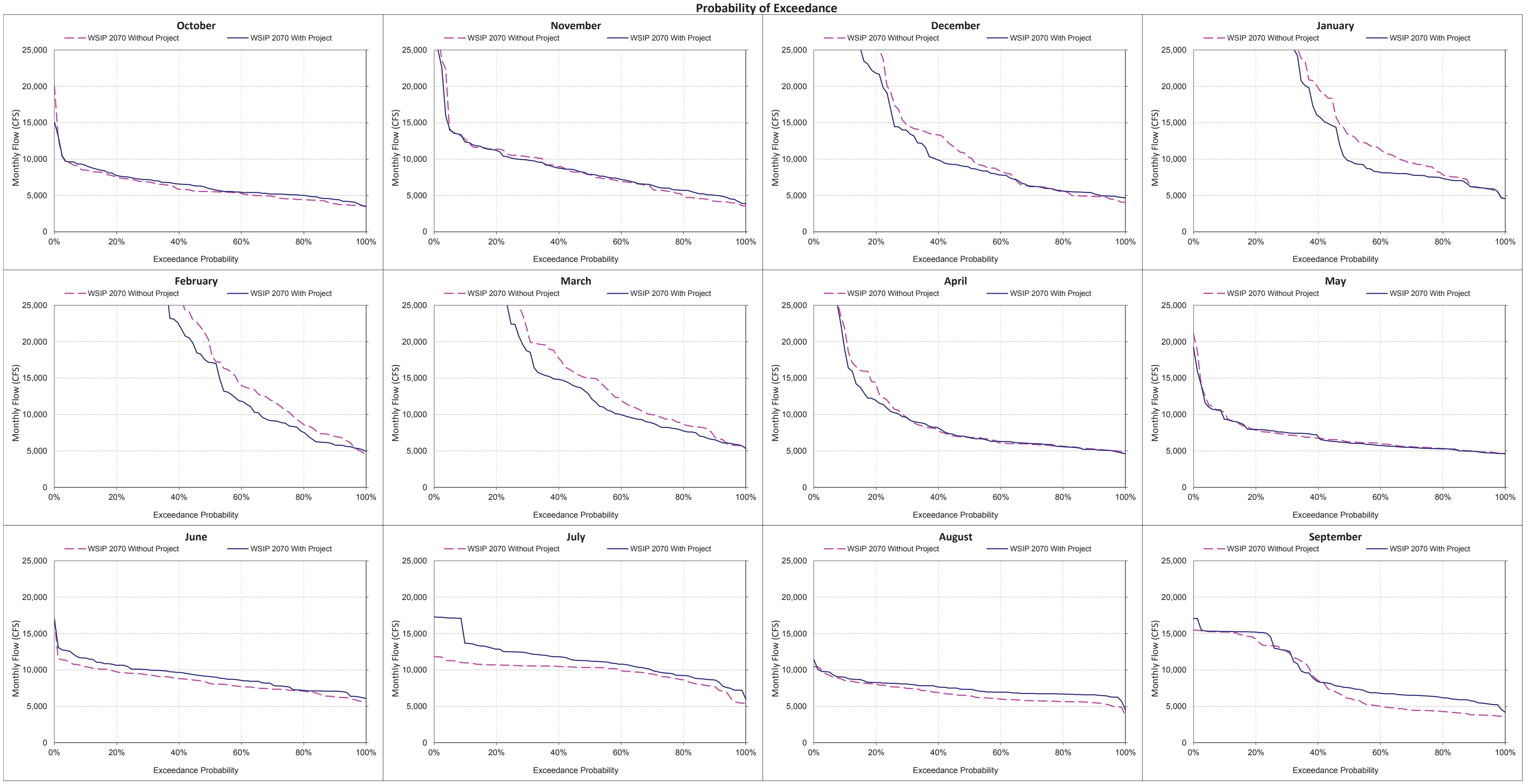


Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,074	15,094	-4,980	-24.8%
1.2%	12,899	13,125	226	1.8%
2.5%	10,431	10,440	9	0.1%
3.7%	9,527	9,693	166	1.7%
4.9%	9,479	9,629	150	1.6%
6.2%	9,164	9,612	448	4.9%
7.4%	9,079	9,327	249	2.7%
8.6%	8,547	9,319	772	9.0%
9.9%	8,487	9,159	672	7.9%
11.1%	8,426	8,953	527	6.3%
12.3%	8,243	8,773	529	6.4%
13.6%	8,240	8,604	364	4.4%
14.8%	8,191	8,486	295	3.6%
16.0%	8,137	8,414	277	3.4%
17.3%	7,830	8,112	281	3.6%
18.5%	7,730	8,063	333	4.3%
19.8%	7,522	7,771	250	3.3%
21.0%	7,409	7,649	240	3.2%
22.2%	7,318	7,573	255	3.5%
23.5%	7,277	7,536	258	3.5%
24.7%	7,227	7,456	229	3.2%
25.9%	7,108	7,322	213	3.0%
27.2%	6,935	7,253	318	4.6%
28.4%	6,926	7,187	261	3.8%
29.6%	6,864	7,187	323	4.7%
30.9%	6,833	7,170	337	4.9%
32.1%	6,667	7,015	348	5.2%
33.3%	6,548	6,998	450	6.9%
34.6%	6,521	6,783	263	4.0%
35.8%	6,443	6,779	336	5.2%
37.0%	6,416	6,757	342	5.3%
38.3%	6,223	6,665	442	7.1%
39.5%	5,891	6,575	684	11.6%
40.7%	5,828	6,546	719	12.3%
42.0%	5,806	6,526	720	12.4%
43.2%	5,772	6,524	753	13.0%
44.4%	5,616	6,370	754	13.4%
45.7%	5,599	6,310	710	12.7%
46.9%	5,551	6,291	740	13.3%
48.1%	5,547	6,190	643	11.6%
49.4%	5,545	5,968	423	7.6%
50.6%	5,514	5,856	342	6.2%
51.9%	5,509	5,739	230	4.2%
53.1%	5,479	5,660	181	3.3%
54.3%	5,465	5,559	93	1.7%
55.6%	5,449	5,553	104	1.9%
56.8%	5,403	5,552	148	2.7%
58.0%	5,392	5,466	74	1.4%
59.3%	5,372	5,463	91	1.7%
60.5%	5,205	5,404	199	3.8%
61.7%	5,132	5,403	272	5.3%
63.0%	5,118	5,403	285	5.6%
64.2%	4,997	5,398	401	8.0%
65.4%	4,993	5,393	401	8.0%
66.7%	4,969	5,299	330	6.6%
67.9%	4,949	5,289	340	6.9%
69.1%	4,940	5,204	265	5.4%
70.4%	4,841	5,188	347	7.2%
71.6%	4,649	5,187	538	11.6%
72.8%	4,605	5,175	571	12.4%
74.1%	4,545	5,166	621	13.7%
75.3%	4,541	5,126	584	12.9%
76.5%	4,527	5,099	572	12.6%
77.8%	4,452	5,084	632	14.2%
79.0%	4,446	5,030	585	13.2%
80.2%	4,423	5,007	584	13.2%
81.5%	4,387	4,909	521	11.9%
82.7%	4,353	4,846	493	11.3%
84.0%	4,346	4,841	495	11.4%
85.2%	4,288	4,640	352	8.2%
86.4%	4,282	4,587	305	7.1%
87.7%	4,055	4,578	523	12.9%
88.9%	3,881	4,530	649	16.7%
90.1%	3,857	4,426	569	14.8%
91.4%	3,762	4,417	655	17.4%
92.6%	3,715	4,181	466	12.5%
93.8%	3,715	4,176	461	12.4%
95.1%	3,652	4,134	482	13.2%
96.3%	3,651	4,086	435	11.9%
97.5%	3,628	3,849	221	6.1%
98.8%	3,623	3,569	-54	-1.5%
100.0%	3,429	3,525	96	2.8%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	28,887	29,760	872	3.0%
1.2%	27,428	25,064	-2,364	-8.6%
2.5%	23,554	22,603	-951	-4.0%
3.7%	22,408	15,971	-6,437	-28.7%
4.9%	13,985	14,151	166	1.2%
6.2%	13,684	13,582	-102	-0.7%
7.4%	13,386	13,473	87	0.6%
8.6%	13,170	13,367	197	1.5%
9.9%	12,789	12,357	-432	-3.4%
11.1%	12,267	12,285	18	0.1%
12.3%	11,679	11,958	278	2.4%
13.6%	11,604	11,814	210	1.8%
14.8%	11,579	11,765	187	1.6%
16.0%	11,570	11,509	-60	-0.5%
17.3%	11,399	11,355	-44	-0.4%
18.5%	11,389	11,312	-77	-0.7%
19.8%	11,376	11,224	-152	-1.3%
21.0%	11,345	11,004	-341	-3.0%
22.2%	11,219	10,415	-804	-7.2%
23.5%	10,667	10,344	-323	-3.0%
24.7%	10,518	10,163	-356	-3.4%
25.9%	10,514	10,050	-464	-4.4%
27.2%	10,493	9,988	-504	-4.8%
28.4%	10,410	9,942	-468	-4.5%
29.6%	10,347	9,917	-430	-4.2%
30.9%	10,267	9,797	-470	-4.6%
32.1%	10,233	9,751	-482	-4.7%
33.3%	10,147	9,596	-551	-5.4%
34.6%	10,106	9,592	-514	-5.1%
35.8%	9,209	9,184	-25	-0.3%
37.0%	9,196	9,105	-91	-1.0%
38.3%	9,189	8,926	-264	-2.9%
39.5%	8,985	8,809	-176	-2.0%
40.7%	8,949	8,721	-228	-2.6%
42.0%	8,705	8,628	-77	-0.9%
43.2%	8,401	8,621	221	2.6%
44.4%	8,238	8,592	353	4.3%
45.7%	8,206	8,441	235	2.9%
46.9%	8,168	8,266	98	1.2%
48.1%	8,042	8,185	143	1.8%
49.4%	7,898	7,900	2	0.0%
50.6%	7,804	7,895	91	1.2%
51.9%	7,462	7,837	375	5.0%
53.1%	7,430	7,661	231	3.1%
54.3%	7,327	7,636	309	4.2%
55.6%	7,315	7,498	183	2.5%
56.8%	7,229	7,420	191	2.6%
58.0%	7,101	7,419	318	4.5%
59.3%	6,989	7,295	306	4.4%
60.5%	6,894	7,136	242	3.5%
61.7%	6,866	7,081	215	3.1%
63.0%	6,788	6,930	142	2.1%
64.2%	6,659	6,841	182	2.7%
65.4%	6,604	6,634	30	0.5%
66.7%	6,516	6,576	60	0.9%
67.9%	6,396	6,563	167	2.6%
69.1%	6,356	6,529	173	2.7%
70.4%	5,749	6,325	576	10.0%
71.6%	5,736	6,159	423	7.4%
72.8%	5,724	6,059	335	5.8%
74.1%	5,623	6,021	398	7.1%
75.3%	5,563	6,015	452	8.1%
76.5%	5,555	5,800	245	4.4%
77.8%	5,286	5,747	462	8.7%
79.0%	5,264	5,716	452	8.6%
80.2%	4,740	5,695	956	20.2%
81.5%	4,714	5,679	964	20.5%
82.7%	4,701	5,509	808	17.2%
84.0%	4,631	5,387	756	16.3%
85.2%	4,564	5,230	666	14.6%
86.4%	4,556	5,212	656	14.4%
87.7%	4,451	5,082	631	14.2%
88.9%	4,311	5,076	765	17.8%
90.1%	4,188	4,999	811	19.4%
91.4%	4,159	4,989	830	20.0%
92.6%	4,145	4,860	715	17.2%
93.8%	4,107	4,734	627	15.3%
95.1%	4,008	4,517	508	12.7%
96.3%	3,969	4,469	501	12.6%
97.5%	3,886	4,174	288	7.4%
98.8%	3,592	3,899	307	8.5%
100.0%	3,543	3,859	317	8.9%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	70,245	70,145	-100	-0.1%
1.2%	52,928	51,634	-1,294	-2.4%
2.5%	51,090	49,674	-1,417	-2.8%
3.7%	50,781	45,264	-5,517	-10.9%
4.9%	48,014	43,483	-4,531	-9.4%
6.2%	46,289	41,853	-4,436	-9.6%
7.4%	43,297	40,417	-2,879	-6.7%
8.6%	40,566	39,588	-978	-2.4%
9.9%	35,989	33,937	-2,052	-5.7%
11.1%	30,893	26,591	-4,301	-13.9%
12.3%	30,890	26,542	-4,348	-14.1%
13.6%	30,000	26,176	-3,824	-12.7%
14.8%	28,116	25,342	-2,773	-9.9%
16.0%	27,116	23,468	-3,649	-13.5%
17.3%	26,795	23,109	-3,686	-13.8%
18.5%	26,508	22,239	-4,269	-16.1%
19.8%	25,127	21,848	-3,279	-13.0%
21.0%	24,974	21,688	-3,286	-13.2%
22.2%	23,827	19,818	-4,009	-16.8%
23.5%	20,075	19,115	-960	-4.8%
24.7%	19,164	16,833	-2,331	-12.2%
25.9%	17,387	14,469	-2,919	-16.8%
27.2%	16,837	14,445	-2,392	-14.2%
28.4%	15,393	14,007	-1,386	-9.0%
29.6%	14,814	13,991	-823	-5.6%
30.9%	14,483	13,426	-1,057	-7.3%
32.1%	14,192	13,235	-957	-6.7%
33.3%	14,105	12,222	-1,884	-13.4%
34.6%	13,973	12,165	-1,808	-12.9%
35.8%	13,757	11,625	-2,132	-15.5%
37.0%	13,534	10,314	-3,220	-23.8%
38.3%	13,390	10,155	-3,236	-24.2%
39.5%	13,348	9,928	-3,420	-25.6%
40.7%	13,277	9,747	-3,531	-26.6%
42.0%	12,857	9,442	-3,415	-26.6%
43.2%	12,220	9,319	-2,901	-23.7%
44.4%	11,825	9,270	-2,555	-21.6%
45.7%	11,466	9,248	-2,218	-19.3%
46.9%	10,958	9,127	-1,831	-16.7%
48.1%	10,871	9,002	-1,869	-17.2%
49.4%	10,308	8,987	-1,321	-12.8%
50.6%	10,107	8,684	-1,422	-14.1%
51.9%	9,337	8,637	-701	-7.5%
53.1%	9,223	8,489	-733	-8.0%
54.3%	9,114	8,364	-750	-8.2%
55.6%	8,859	8,358	-501	-5.7%
56.8%	8,765	8,031	-734	-8.4%
58.0%	8,764	8,000	-764	-8.7%
59.3%	8,482	7,833	-649	-7.7%
60.5%	8,353	7,785	-567	-6.8%
61.7%	8,030	7,750	-280	-3.5%
63.0%	7,985	7,412	-573	-7.2%
64.2%	7,559	7,215	-344	-4.6%
65.4%	6,798	7,081	282	4.2%
66.7%	6,421	6,706	284	4.4%
67.9%	6,345	6,560	215	3.4%
69.1%	6,318	6,230	-88	-1.4%
70.4%	6,269	6,228	-40	-0.6%
71.6%	6,196	6,212	16	0.3%
72.8%	6,182	6,161	-21	-0.3%
74.1%	6,138	5,979	-159	-2.6%
75.3%	5,898	5,976	78	1.3%
76.5%	5,871	5,894	23	0.4%
77.8%	5,713	5,722	9	0.2%
79.0%	5,549	5,698	148	2.7%
80.2%	5,522	5,574	52	0.9%
81.5%	5,434	5,562	127	2.3%
82.7%	5,004	5,517	513	10.2%
84.0%	4,980	5,492	512	10.3%
85.2%	4,954	5,487	533	10.8%
86.4%	4,924	5,446	521	10.6%
87.7%	4,917	5,410	493	10.0%
88.9%	4,881	5,396	515	10.6%
90.1%	4,850	5,209	359	7.4%
91.4%	4,843	5,066	224	4.6%
92.6%	4,795	4,955	160	3.3%
93.8%	4,769	4,932	163	3.4%
95.1%	4,523	4,922	399	8.8%
96.3%	4,457	4,914	457	10.3%
97.5%	4,284	4,791	507	11.8%
98.8%	4,072	4,734	662	16.3%
100.0%	4,071	4,674	603	14.8%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	86,823	85,711	-1,112	-1.3%
1.2%	85,945	84,447	-1,499	-1.7%
2.5%	84,929	82,977	-1,952	-2.3%
3.7%	82,819	81,986	-833	-1.0%
4.9%	80,023	79,242	-781	-1.0%
6.2%	72,250	69,327	-2,924	-4.0%
7.4%	66,371	65,192	-1,179	-1.8%
8.6%	64,863	63,105	-1,758	-2.7%
9.9%	60,536	56,193	-4,343	-7.2%
11.1%	58,969	55,249	-3,720	-6.3%
12.3%	55,116	54,557	-559	-1.0%
13.6%	55,102	50,717	-4,385	-8.0%
14.8%	51,399	49,420	-1,979	-3.8%
16.0%	46,690	42,399	-4,290	-9.2%
17.3%	45,231	42,257	-2,974	-6.6%
18.5%	43,586	40,853	-2,733	-6.3%
19.8%	39,290	39,563	273	0.7%
21.0%	39,156	34,324	-4,833	-12.3%
22.2%	38,815	33,259	-5,556	-14.3%
23.5%	36,870	32,487	-4,382	-11.9%
24.7%	36,535	31,437	-5,098	-14.0%
25.9%	34,401	30,128	-4,273	-12.4%
27.2%	33,495	29,937	-3,558	-10.6%
28.4%	31,358	29,884	-1,474	-4.7%
29.6%	30,596	27,229	-3,367	-11.0%
30.9%	29,365	25,279	-4,086	-13.9%
32.1%	28,113	25,151	-2,962	-10.5%
33.3%	25,201	24,197	-1,004	-4.0%
34.6%	23,844	20,732	-3,112	-13.0%
35.8%	23,456	20,100	-3,356	-14.3%
37.0%	20,894	19,813	-1,081	-5.2%
38.3%	20,787	17,311	-3,477	-16.7%
39.5%	20,107	16,075	-4,032	-20.1%
40.7%	19,319	15,724	-3,595	-18.6%
42.0%	18,929	15,134	-3,795	-20.0%
43.2%	18,367	14,901	-3,467	-18.9%
44.4%	18,352	14,593	-3,759	-20.5%
45.7%	15,839	14,383	-1,456	-9.2%
46.9%	14,787	11,852	-2,935	-19.8%
48.1%	14,332	10,447	-3,886	-27.1%
49.4%	13,444	9,819	-3,624	-27.0%
50.6%	13,293	9,660	-3,633	-27.3%
51.9%	12,958	9,369	-3,589	-27.7%
53.1%	12,357	9,296	-3,061	-24.8%
54.3%	12,296	9,250	-3,046	-24.8%
55.6%	12,174	8,707	-3,467	-28.5%
56.8%	11,807	8,667	-3,139	-26.6%
58.0%	11,791	8,310	-3,481	-29.5%
59.3%	11,557	8,273	-3,284	-28.4%
60.5%	11,119	8,118	-3,001	-27.0%
61.7%	10,775	8,118	-2,657	-24.7%
63.0%	10,664	8,103	-2,561	-24.0%
64.2%	10,462	8,046	-2,416	-23.1%
65.4%	10,086	7,996	-2,090	-20.7%
66.7%	9,892	7,994	-1,899	-19.2%
67.9%	9,740	7,992	-1,749	-18.0%
69.1%	9,491	7,925	-1,567	-16.5%
70.4%	9,474	7,807	-1,667	-17.6%
71.6%	9,288	7,752	-1,535	-16.5%
72.8%	9,260	7,749	-1,511	-16.3%
74.1%	9,194	7,724	-1,470	-16.0%
75.3%	8,959	7,560	-1,400	-15.6%
76.5%	8,943	7,549	-1,394	-15.6%
77.8%	8,294	7,515	-779	-9.4%
79.0%	8,182	7,477	-705	-8.6%
80.2%	7,768	7,297	-471	-6.1%
81.5%	7,700	7,241	-459	-6.0%
82.7%	7,566	7,099	-467	-6.2%
84.0%	7,544	7,055	-489	-6.5%
85.2%	7,493	7,029	-465	-6.2%
86.4%	7,329	7,005	-325	-4.4%
87.7%	7,235	6,661	-574	-7.9%
88.9%	6,282	6,200	-82	-1.3%
90.1%	6,129	6,184	55	0.9%
91.4%	6,079	6,126	47	0.8%
92.6%	6,020	6,054	34	0.6%
93.8%	5,925	5,975	51	0.9%
95.1%	5,897	5,896	0	0.0%
96.3%	5,679	5,891	212	3.7%
97.5%	5,577	5,564	-13	-0.2%
98.8%	4,683	4,683	0	0.0%
100.0%	4,550	4,561	11	0.2%

Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	102,785	100,994	-1,792	-1.7%
1.2%	96,964	97,054	90	0.1%
2.5%	83,659	81,750	-1,909	-2.3%
3.7%	82,459	79,497	-2,963	-3.6%
4.9%	80,729	77,889	-2,840	-3.5%
6.2%	77,780	77,734	-47	-0.1%
7.4%	75,418	75,305	-113	-0.1%
8.6%	66,914	66,428	-486	-0.7%
9.9%	65,784	64,017	-1,767	-2.7%
11.1%	64,196	62,751	-1,445	-2.3%
12.3%	62,556	62,714	158	0.3%
13.6%	61,965	60,324	-1,641	-2.6%
14.8%	61,627	58,145	-3,482	-5.6%
16.0%	54,660	50,129	-4,532	-8.3%
17.3%	50,967	49,097	-1,870	-3.7%
18.5%	49,722	47,128	-2,594	-5.2%
19.8%	49,315	45,507	-3,808	-7.7%
21.0%	47,778	44,918	-2,860	-6.0%
22.2%	46,752	42,420	-4,332	-9.3%
23.5%	43,939	41,686	-2,253	-5.1%
24.7%	41,667	39,454	-2,212	-5.3%
25.9%	38,167	34,158	-4,009	-10.5%
27.2%	36,531	33,624	-2,908	-8.0%
28.4%	33,454	32,014	-1,440	-4.3%
29.6%	33,047	31,475	-1,572	-4.8%
30.9%	32,976	30,208	-2,767	-8.4%
32.1%	32,735	30,000	-2,735	-8.4%
33.3%	32,511	30,000	-2,511	-7.7%
34.6%	32,127	29,485	-2,643	-8.2%
35.8%	30,000	28,290	-1,710	-5.7%
37.0%	27,479	23,230	-4,249	-15.5%
38.3%	26,172	23,123	-3,049	-11.6%
39.5%	26,094	22,653	-3,441	-13.2%
40.7%	25,665	21,776	-3,889	-15.2%
42.0%	24,306	20,786	-3,520	-14.5%
43.2%	24,175	20,541	-3,634	-15.0%
44.4%	22,983	19,792	-3,191	-13.9%
45.7%	22,677	18,460	-4,217	-18.6%
46.9%	22,029	18,309	-3,720	-16.9%
48.1%	21,304	17,596	-3,709	-17.4%
49.4%	20,315	17,186	-3,129	-15.4%
50.6%	17,941	17,124	-817	-4.6%
51.9%	17,252	17,022	-230	-1.3%
53.1%	17,193	14,812	-2,381	-13.8%
54.3%	16,348	13,181	-3,167	-19.4%
55.6%	16,195	13,081	-3,114	-19.2%
56.8%	15,775	12,781	-2,994	-19.0%
58.0%	15,285	12,318	-2,967	-19.4%
59.3%	14,188	11,869	-2,319	-16.3%
60.5%	13,882	11,759	-2,123	-15.3%
61.7%	13,704	11,375	-2,329	-17.0%
63.0%	13,497	11,097	-2,399	-17.8%
64.2%	13,401	10,297	-3,104	-23.2%
65.4%	12,786	10,248	-2,538	-19.8%
66.7%	12,550	9,629	-2,921	-23.3%
67.9%	12,444	9,333	-3,111	-25.0%
69.1%	12,018	9,169	-2,849	-23.7%
70.4%	11,828	9,120	-2,708	-22.9%
71.6%	11,420	9,057	-2,363	-20.7%
72.8%	11,032	8,886	-2,146	-19.5%
74.1%	10,555	8,828	-1,727	-16.4%
75.3%	10,316	8,428	-1,888	-18.3%
76.5%	9,773	8,353	-1,420	-14.5%
77.8%	9,324	8,274	-1,050	-11.3%
79.0%	8,943	7,725	-1,218	-13.6%
80.2%	8,534	7,494	-1,040	-12.2%
81.5%	8,436	6,990	-1,447	-17.1%
82.7%	8,187	6,608	-1,579	-19.3%
84.0%	7,735	6,238	-1,497	-19.4%
85.2%	7,345	6,216	-1,128	-15.4%
86.4%	7,341	6,158	-1,184	-16.1%
87.7%	7,298	6,149	-1,150	-15.8%
88.9%	7,094	6,014	-1,080	-15.2%
90.1%	6,979	5,795	-1,184	-17.0%
91.4%	6,880	5,768	-1,112	-16.2%
92.6%	6,761	5,745	-1,015	-15.0%
93.8%	6,361	5,617	-745	-11.7%
95.1%	6,069	5,562	-508	-8.4%
96.3%	5,407	5,397	-10	-0.2%
97.5%	5,118	5,319	201	3.9%
98.8%	4,838	5,184	347	7.2%
100.0%	4,443	4,941	498	11.2%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	93,879	94,024	145	0.2%
1.2%	86,295	84,890	-1,405	-1.6%
2.5%	77,413	73,475	-3,937	-5.1%
3.7%	56,443	56,442	-2	0.0%
4.9%	55,170	51,199	-3,971	-7.2%
6.2%	53,068	49,268	-3,800	-7.2%
7.4%	47,483	43,818	-3,665	-7.7%
8.6%	46,997	41,581	-5,416	-11.5%
9.9%	45,332	41,054	-4,278	-9.4%
11.1%	42,368	40,119	-2,249	-5.3%
12.3%	40,105	38,495	-1,609	-4.0%
13.6%	38,511	36,466	-2,045	-5.3%
14.8%	34,425	34,708	283	0.8%
16.0%	33,089	30,000	-3,089	-9.3%
17.3%	30,000	30,000	0	0.0%
18.5%	30,000	28,491	-1,509	-5.0%
19.8%	29,869	28,016	-1,853	-6.2%
21.0%	28,524	27,780	-744	-2.6%
22.2%	27,793	27,744	-50	-0.2%
23.5%	26,660	24,994	-1,666	-6.2%
24.7%	25,727	22,443	-3,285	-12.8%
25.9%	25,722	22,391	-3,330	-12.9%
27.2%	25,032	20,767	-4,265	-17.0%
28.4%	23,755	19,603	-4,151	-17.5%
29.6%	22,023	18,783	-3,241	-14.7%
30.9%	19,914	18,528	-1,386	-7.0%
32.1%	19,862	16,401	-3,461	-17.4%
33.3%	19,691	15,749	-3,943	-20.0%
34.6%	19,615	15,548	-4,067	-20.7%
35.8%	19,550	15,320	-4,231	-21.6%
37.0%	18,927	15,216	-3,711	-19.6%
38.3%	18,859	14,922	-3,936	-20.9%
39.5%	17,959	14,838	-3,120	-17.4%
40.7%	17,385	14,754	-2,630	-15.1%
42.0%	16,525	14,601	-1,924	-11.6%
43.2%	16,253	14,332	-1,921	-11.8%
44.4%	15,923	14,030	-1,893	-11.9%
45.7%	15,584	13,805	-1,779	-11.4%
46.9%	15,323	13,692	-1,631	-10.6%
48.1%	15,105	13,307	-1,798	-11.9%
49.4%	15,061	12,860	-2,201	-14.6%
50.6%	14,982	12,076	-2,906	-19.4%
51.9%	14,967	11,704	-3,264	-21.8%
53.1%	14,560	11,131	-3,428	-23.5%
54.3%	13,971	11,004	-2,966	-21.2%
55.6%	13,466	10,605	-2,860	-21.2%
56.8%	12,954	10,447	-2,507	-19.4%
58.0%	12,379	10,143	-2,236	-18.1%
59.3%	12,302	10,046	-2,257	-18.3%
60.5%	11,762	9,930	-1,832	-15.6%
61.7%	11,462	9,736	-1,725	-15.1%
63.0%	11,096	9,586	-1,510	-13.6%
64.2%	10,990	9,462	-1,528	-13.9%
65.4%	10,781	9,350	-1,431	-13.3%
66.7%	10,497	9,320	-1,177	-11.2%
67.9%	10,206	9,025	-1,181	-11.6%
69.1%	10,017	8,928	-1,089	-10.9%
70.4%	9,971	8,779	-1,192	-12.0%
71.6%	9,734	8,540	-1,194	-12.3%
72.8%	9,628	8,232	-1,396	-14.5%
74.1%	9,373	8,222	-1,151	-12.3%
75.3%	9,369	8,194	-1,175	-12.5%
76.5%	9,313	8,085	-1,229	-13.2%
77.8%	8,986	8,032	-954	-10.6%
79.0%	8,873	7,886	-986	-11.1%
80.2%	8,589	7,700	-889	-10.4%
81.5%	8,471	7,614	-858	-10.1%
82.7%	8,348	7,611	-737	-8.8%
84.0%	8,302	7,492	-809	-9.7%
85.2%	8,277	7,014	-1,264	-15.3%
86.4%	8,179	6,953	-1,226	-15.0%
87.7%	8,036	6,736	-1,301	-16.2%
88.9%	7,587	6,586	-1,001	-13.2%
90.1%	6,860	6,537	-324	-4.7%
91.4%	6,658	6,306	-352	-5.3%
92.6%	6,548	6,097	-451	-6.9%
93.8%	5,960	6,084	124	2.1%
95.1%	5,874	6,021	147	2.5%
96.3%	5,764	5,918	153	2.7%
97.5%	5,750	5,852	102	1.8%
98.8%	5,698	5,692	-6	-0.1%
100.0%	5,615	5,310	-304	-5.4%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	49,896	46,796	-3,101	-6.2%
1.2%	42,526	42,473	-53	-0.1%
2.5%	42,211	42,163	-49	-0.1%
3.7%	39,448	37,960	-1,487	-3.8%
4.9%	27,437	27,365	-72	-0.3%
6.2%	26,030	26,019	-11	0.0%
7.4%	25,816	25,358	-458	-1.8%
8.6%	23,595	22,443	-1,152	-4.9%
9.9%	21,879	18,870	-3,010	-13.8%
11.1%	18,536	16,382	-2,155	-11.6%
12.3%	17,097	15,958	-1,138	-6.7%
13.6%	16,579	14,205	-2,374	-14.3%
14.8%	16,057	13,770	-2,287	-14.2%
16.0%	15,948	12,995	-2,953	-18.5%
17.3%	15,941	12,286	-3,655	-22.9%
18.5%	14,523	12,250	-2,274	-15.7%
19.8%	14,452	11,991	-2,460	-17.0%
21.0%	12,757	11,548	-1,209	-9.5%
22.2%	12,332	11,376	-956	-7.8%
23.5%	12,013	10,868	-1,145	-9.5%
24.7%	11,290	10,401	-888	-7.9%
25.9%	10,722	10,220	-502	-4.7%
27.2%	10,585	10,084	-501	-4.7%
28.4%	10,023	9,695	-328	-3.3%
29.6%	9,617	9,648	31	0.3%
30.9%	9,221	9,216	-5	-0.1%
32.1%	8,866	9,029	163	1.8%
33.3%	8,589	8,912	322	3.7%
34.6%	8,462	8,860	398	4.7%
35.8%	8,319	8,712	393	4.7%
37.0%	8,162	8,390	228	2.8%
38.3%	8,132	8,249	117	1.4%
39.5%	8,017	8,227	210	2.6%
40.7%	7,577	7,950	373	4.9%
42.0%	7,445	7,588	143	1.9%
43.2%	7,216	7,397	181	2.5%
44.4%	7,074	7,314	241	3.4%
45.7%	7,007	7,082	76	1.1%
46.9%	6,946	7,035	89	1.3%
48.1%	6,925	7,024	100	1.4%
49.4%	6,857	6,880	22	0.3%
50.6%	6,852	6,736	-116	-1.7%
51.9%	6,847	6,678	-169	-2.5%
53.1%	6,840	6,659	-181	-2.6%
54.3%	6,671	6,634	-37	-0.6%
55.6%	6,656	6,508	-148	-2.2%
56.8%	6,469	6,317	-152	-2.4%
58.0%	6,455	6,317	-138	-2.1%
59.3%	6,111	6,302	190	3.1%
60.5%	6,074	6,297	223	3.7%
61.7%	6,014	6,271	257	4.3%
63.0%	6,004	6,262	258	4.3%
64.2%	5,990	6,182	192	3.2%
65.4%	5,979	6,109	130	2.2%
66.7%	5,974	6,086	112	1.9%
67.9%	5,974	6,061	88	1.5%
69.1%	5,910	6,043	133	2.2%
70.4%	5,868	5,993	125	2.1%
71.6%	5,868	5,987	119	2.0%
72.8%	5,798	5,975	177	3.0%
74.1%	5,795	5,881	87	1.5%
75.3%	5,779	5,878	99	1.7%
76.5%	5,699	5,858	159	2.8%
77.8%	5,688	5,647	-41	-0.7%
79.0%	5,656	5,600	-56	-1.0%
80.2%	5,623	5,570	-53	-0.9%
81.5%	5,579	5,539	-40	-0.7%
82.7%	5,576	5,480	-96	-1.7%
84.0%	5,513	5,473	-41	-0.7%
85.2%	5,386	5,409	23	0.4%
86.4%	5,341	5,217	-125	-2.3%
87.7%	5,322	5,214	-108	-2.0%
88.9%	5,286	5,212	-74	-1.4%
90.1%	5,239	5,204	-34	-0.7%
91.4%	5,196	5,097	-99	-1.9%
92.6%	5,156	5,094	-62	-1.2%
93.8%	5,093	5,067	-26	-0.5%
95.1%	5,091	5,062	-29	-0.6%
96.3%	5,013	4,974	-39	-0.8%
97.5%	4,995	4,858	-137	-2.7%
98.8%	4,884	4,724	-160	-3.3%
100.0%	4,687	4,597	-90	-1.9%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,081	19,266	-1,815	-8.6%
1.2%	18,769	15,975	-2,794	-14.9%
2.5%	13,982	14,017	35	0.2%
3.7%	12,522	11,586	-936	-7.5%
4.9%	11,281	11,012	-269	-2.4%
6.2%	11,119	10,699	-420	-3.8%
7.4%	10,603	10,658	55	0.5%
8.6%	10,541	10,633	92	0.9%
9.9%	10,321	9,359	-962	-9.3%
11.1%	9,216	9,305	88	1.0%
12.3%	9,176	9,084	-92	-1.0%
13.6%	9,113	9,024	-89	-1.0%
14.8%	8,672	8,863	191	2.2%
16.0%	8,385	8,650	265	3.2%
17.3%	8,312	7,997	-315	-3.8%
18.5%	8,035	7,958	-77	-1.0%
19.8%	7,884	7,944	60	0.8%
21.0%	7,698	7,915	217	2.8%
22.2%	7,635	7,908	273	3.6%
23.5%	7,590	7,860	271	3.6%
24.7%	7,542	7,782	240	3.2%
25.9%	7,481	7,747	266	3.6%
27.2%	7,356	7,603	247	3.4%
28.4%	7,336	7,600	264	3.6%
29.6%	7,198	7,513	315	4.4%
30.9%	7,153	7,471	318	4.4%
32.1%	7,127	7,432	305	4.3%
33.3%	7,060	7,432	372	5.3%
34.6%	7,030	7,430	400	5.7%
35.8%	6,890	7,367	477	6.9%
37.0%	6,889	7,348	459	6.7%
38.3%	6,842	7,256	414	6.1%
39.5%	6,748	7,204	456	6.8%
40.7%	6,744	6,547	-197	-2.9%
42.0%	6,659	6,443	-216	-3.3%
43.2%	6,574	6,368	-206	-3.1%
44.4%	6,550	6,329	-221	-3.4%
45.7%	6,542	6,277	-265	-4.1%
46.9%	6,531	6,210	-321	-4.9%
48.1%	6,371	6,171	-200	-3.1%
49.4%	6,253	6,119	-134	-2.1%
50.6%	6,236	6,044	-192	-3.1%
51.9%	6,209	6,038	-171	-2.8%
53.1%	6,171	6,036	-135	-2.2%
54.3%	6,122	6,006	-116	-1.9%
55.6%	6,120	5,896	-224	-3.7%
56.8%	6,119	5,871	-248	-4.1%
58.0%	6,092	5,812	-280	-4.6%
59.3%	6,073	5,759	-314	-5.2%
60.5%	5,968	5,739	-230	-3.8%
61.7%	5,920	5,659	-261	-4.4%
63.0%	5,874	5,631	-243	-4.1%
64.2%	5,805	5,626	-179	-3.1%
65.4%	5,701	5,577	-125	-2.2%
66.7%	5,631	5,527	-104	-1.8%
67.9%	5,609	5,510	-99	-1.8%
69.1%	5,596	5,479	-117	-2.1%
70.4%	5,554	5,446	-108	-1.9%
71.6%	5,505	5,439	-67	-1.2%
72.8%	5,500	5,396	-104	-1.9%
74.1%	5,495	5,355	-140	-2.5%
75.3%	5,452	5,349	-103	-1.9%
76.5%	5,431	5,306	-125	-2.3%
77.8%	5,357	5,301	-56	-1.0%
79.0%	5,346	5,296	-50	-0.9%
80.2%	5,299	5,272	-28	-0.5%
81.5%	5,229	5,271	42	0.8%
82.7%	5,205	5,246	41	0.8%
84.0%	5,136	5,233	97	1.9%
85.2%	5,129	5,006	-123	-2.4%
86.4%	5,087	4,978	-110	-2.2%
87.7%	5,013	4,948	-66	-1.3%
88.9%	5,007	4,942	-65	-1.3%
90.1%	4,978	4,914	-65	-1.3%
91.4%	4,862	4,875	13	0.3%
92.6%	4,857	4,781	-76	-1.6%
93.8%	4,857	4,758	-99	-2.0%
95.1%	4,848	4,719	-129	-2.7%
96.3%	4,786	4,701	-85	-1.8%
97.5%	4,694	4,652	-42	-0.9%
98.8%	4,677	4,647	-31	-0.7%
100.0%	4,575	4,629	54	1.2%

Table SW-14-b

Sacramento River below Delevan Intake and Pipeline, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,971	16,961	-11	-0.1%
1.2%	11,547	13,055	1,508	13.1%
2.5%	11,388	12,743	1,355	11.9%
3.7%	11,325	12,669	1,344	11.9%
4.9%	11,064	12,586	1,522	13.8%
6.2%	10,751	12,135	1,385	12.9%
7.4%	10,748	11,789	1,041	9.7%
8.6%	10,597	11,635	1,038	9.8%
9.9%	10,457	11,627	1,169	11.2%
11.1%	10,349	11,510	1,161	11.2%
12.3%	10,215	11,444	1,230	12.0%
13.6%	10,204	11,033	830	8.1%
14.8%	10,099	11,024	925	9.2%
16.0%	10,091	10,864	772	7.7%
17.3%	10,075	10,854	779	7.7%
18.5%	9,908	10,777	868	8.8%
19.8%	9,749	10,661	913	9.4%
21.0%	9,647	10,649	1,002	10.4%
22.2%	9,639	10,632	994	10.3%
23.5%	9,554	10,457	903	9.4%
24.7%	9,540	10,127	586	6.1%
25.9%	9,494	10,121	628	6.6%
27.2%	9,478	10,108	630	6.6%
28.4%	9,419	10,057	638	6.8%
29.6%	9,319	10,031	713	7.6%
30.9%	9,310	9,972	662	7.1%
32.1%	9,200	9,932	733	8.0%
33.3%	9,107	9,930	823	9.0%
34.6%	9,107	9,909	802	8.8%
35.8%	9,069	9,846	778	8.6%
37.0%	9,023	9,766	744	8.2%
38.3%	8,866	9,710	845	9.5%
39.5%	8,835	9,642	807	9.1%
40.7%	8,781	9,638	856	9.8%
42.0%	8,734	9,539	805	9.2%
43.2%	8,670	9,464	794	9.2%
44.4%	8,609	9,358	748	8.7%
45.7%	8,557	9,298	741	8.7%
46.9%	8,492	9,215	723	8.5%
48.1%	8,402	9,131	728	8.7%
49.4%	8,188	9,113	924	11.3%
50.6%	8,067	9,046	979	12.1%
51.9%	8,044	8,997	953	11.9%
53.1%	8,037	8,874	837	10.4%
54.3%	8,035	8,837	802	10.0%
55.6%	7,949	8,720	771	9.7%
56.8%	7,850	8,710	860	11.0%
58.0%	7,798	8,684	886	11.4%
59.3%	7,732	8,605	873	11.3%
60.5%	7,723	8,510	787	10.2%
61.7%	7,655	8,506	852	11.1%
63.0%	7,654	8,450	796	10.4%
64.2%	7,551	8,434	883	11.7%
65.4%	7,473	8,424	950	12.7%
66.7%	7,454	8,236	783	10.5%
67.9%	7,447	8,189	742	10.0%
69.1%	7,393	8,166	773	10.5%
70.4%	7,345	7,873	528	7.2%
71.6%	7,341	7,796	455	6.2%
72.8%	7,332	7,775	442	6.0%
74.1%	7,328	7,731	403	5.5%
75.3%	7,198	7,657	459	6.4%
76.5%	7,169	7,291	121	1.7%
77.8%	7,168	7,242	74	1.0%
79.0%	7,113	7,232	120	1.7%
80.2%	7,075	7,192	117	1.7%
81.5%	6,991	7,122	131	1.9%
82.7%	6,940	7,119	178	2.6%
84.0%	6,842	7,105	263	3.9%
85.2%	6,648	7,102	454	6.8%
86.4%	6,423	7,081	658	10.2%
87.7%	6,390	7,071	681	10.7%
88.9%	6,363	7,066	702	11.0%
90.1%	6,264	7,062	797	12.7%
91.4%	6,214	7,043	829	13.3%
92.6%	6,195	7,024	828	13.4%
93.8%	6,184	6,910	726	11.7%
95.1%	5,981	6,357	375	6.3%
96.3%	5,930	6,355	424	7.2%
97.5%	5,724	6,280	556	9.7%
98.8%	5,690	6,192	503	8.8%
100.0%	5,649	6,082	433	7.7%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,826	17,274	5,448	46.1%
1.2%	11,798	17,234	5,435	46.1%
2.5%	11,766	17,227	5,461	46.4%
3.7%	11,302	17,167	5,865	51.9%
4.9%	11,272	17,154	5,883	52.2%
6.2%	11,254	17,153	5,899	52.4%
7.4%	11,160	17,106	5,947	53.3%
8.6%	11,016	17,089	6,073	55.1%
9.9%	10,970	13,668	2,698	24.6%
11.1%	10,968	13,641	2,672	24.4%
12.3%	10,887	13,559	2,673	24.5%
13.6%	10,790	13,391	2,601	24.1%
14.8%	10,757	13,281	2,524	23.5%
16.0%	10,725	13,273	2,547	23.8%
17.3%	10,707	13,125	2,418	22.6%
18.5%	10,698	12,992	2,294	21.4%
19.8%	10,693	12,854	2,162	20.2%
21.0%	10,674	12,839	2,165	20.3%
22.2%	10,647	12,535	1,888	17.7%
23.5%	10,647	12,489	1,842	17.3%
24.7%	10,614	12,481	1,868	17.6%
25.9%	10,604	12,477	1,874	17.7%
27.2%	10,578	12,473	1,895	17.9%
28.4%	10,569	12,413	1,844	17.5%
29.6%	10,556	12,347	1,791	17.0%
30.9%	10,552	12,224	1,672	15.8%
32.1%	10,540	12,152	1,612	15.3%
33.3%	10,532	12,094	1,562	14.8%
34.6%	10,530	12,038	1,508	14.3%
35.8%	10,529	12,013	1,484	14.1%
37.0%	10,528	11,886	1,358	12.9%
38.3%	10,522	11,829	1,307	12.4%
39.5%	10,466	11,824	1,359	13.0%
40.7%	10,456	11,787	1,331	12.7%
42.0%	10,434	11,724	1,290	12.4%
43.2%	10,426	11,520	1,094	10.5%
44.4%	10,398	11,374	977	9.4%
45.7%	10,355	11,328	973	9.4%
46.9%	10,340	11,299	959	9.3%
48.1%	10,340	11,294	954	9.2%
49.4%	10,333	11,241	908	8.8%
50.6%	10,330	11,171	841	8.1%
51.9%	10,328	11,162	834	8.1%
53.1%	10,316	11,148	832	8.1%
54.3%	10,304	11,103	800	7.8%
55.6%	10,193	11,055	862	8.5%
56.8%	10,190	10,926	736	7.2%
58.0%	10,178	10,896	718	7.1%
59.3%	10,109	10,779	670	6.6%
60.5%	9,837	10,773	937	9.5%
61.7%	9,802	10,699	897	9.2%
63.0%	9,780	10,613	834	8.5%
64.2%	9,733	10,471	738	7.6%
65.4%	9,699	10,349	650	6.7%
66.7%	9,635	10,331	697	7.2%
67.9%	9,579	10,201	622	6.5%
69.1%	9,449	10,112	663	7.0%
70.4%	9,427	9,860	433	4.6%
71.6%	9,257	9,739	482	5.2%
72.8%	9,086	9,637	551	6.1%
74.1%	9,055	9,568	513	5.7%
75.3%	8,996	9,550	554	6.2%
76.5%	8,882	9,457	575	6.5%
77.8%	8,796	9,248	452	5.1%
79.0%	8,688	9,245	556	6.4%
80.2%	8,622	9,212	590	6.8%
81.5%	8,356	9,190	834	10.0%
82.7%	8,237	9,007	770	9.3%
84.0%	8,067	8,815	748	9.3%
85.2%	8,033	8,791	758	9.4%
86.4%	7,941	8,737	796	10.0%
87.7%	7,815	8,666	851	10.9%
88.9%	7,806	8,650	844	10.8%
90.1%	7,686	8,609	923	12.0%
91.4%	7,207	8,324	1,116	15.5%
92.6%	7,074	7,759	685	9.7%
93.8%	6,925	7,592	668	9.6%
95.1%	6,182	7,478	1,296	21.0%
96.3%	5,662	7,214	1,552	27.4%
97.5%	5,494	7,213	1,719	31.3%
98.8%	5,430	7,185	1,754	32.3%
100.0%	5,417	5,958	540	10.0%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,449	11,414	965	9.2%
1.2%	10,426	10,064	-362	-3.5%
2.5%	10,014	9,802	-212	-2.1%
3.7%	9,465	9,755	289	3.1%
4.9%	9,286	9,700	414	4.5%
6.2%	8,984	9,315	331	3.7%
7.4%	8,929	9,075	146	1.6%
8.6%	8,796	9,051	255	2.9%
9.9%	8,551	9,009	458	5.4%
11.1%	8,472	8,781	308	3.6%
12.3%	8,435	8,715	281	3.3%
13.6%	8,287	8,690	403	4.9%
14.8%	8,236	8,687	451	5.5%
16.0%	8,177	8,499	322	3.9%
17.3%	8,145	8,303	158	1.9%
18.5%	8,095	8,289	194	2.4%
19.8%	8,047	8,267	220	2.7%
21.0%	7,920	8,257	337	4.3%
22.2%	7,887	8,197	310	3.9%
23.5%	7,852	8,196	345	4.4%
24.7%	7,694	8,146	452	5.9%
25.9%	7,658	8,134	477	6.2%
27.2%	7,638	8,115	477	6.2%
28.4%	7,631	8,085	454	5.9%
29.6%	7,456	8,078	623	8.4%
30.9%	7,445	8,012	567	7.6%
32.1%	7,410	7,963	553	7.5%
33.3%	7,386	7,862	476	6.4%
34.6%	7,158	7,842	684	9.6%
35.8%	7,147	7,823	676	9.5%
37.0%	7,128	7,819	691	9.7%
38.3%	6,951	7,810	859	12.4%
39.5%	6,921	7,670	749	10.8%
40.7%	6,783	7,612	829	12.2%
42.0%	6,762	7,604	842	12.5%
43.2%	6,672	7,497	824	12.4%
44.4%	6,657	7,489	832	12.5%
45.7%	6,550	7,488	938	14.3%
46.9%	6,517	7,354	838	12.9%
48.1%	6,515	7,340	825	12.7%
49.4%	6,453	7,336	883	13.7%
50.6%	6,410	7,317	907	14.2%
51.9%	6,248	7,175	927	14.8%
53.1%	6,188	7,070	883	14.3%
54.3%	6,178	7,041	863	14.0%
55.6%	6,154	6,984	830	13.5%
56.8%	6,087	6,954	867	14.2%
58.0%	6,087	6,948	862	14.2%
59.3%	6,032	6,945	913	15.1%
60.5%	5,957	6,937	980	16.4%
61.7%	5,915	6,936	1,021	17.3%
63.0%	5,909	6,887	978	16.6%
64.2%	5,903	6,842	939	15.9%
65.4%	5,862	6,836	974	16.6%
66.7%	5,841	6,770	929	15.9%
67.9%	5,785	6,770	985	17.0%
69.1%	5,779	6,767	988	17.1%
70.4%	5,755	6,766	1,011	17.6%
71.6%	5,750	6,732	981	17.1%
72.8%	5,724	6,730	1,006	17.6%
74.1%	5,724	6,725	1,001	17.5%
75.3%	5,724	6,711	987	17.3%
76.5%	5,716	6,708	991	17.3%
77.8%	5,680	6,707	1,027	18.1%
79.0%	5,643	6,698	1,055	18.7%
80.2%	5,640	6,669	1,030	18.3%
81.5%	5,637	6,650	1,013	18.0%
82.7%	5,623	6,632	1,009	17.9%
84.0%	5,618	6,627	1,009	18.0%
85.2%	5,618	6,618	1,000	17.8%
86.4%	5,595	6,592	997	17.8%
87.7%	5,570	6,576	1,005	18.0%
88.9%	5,528	6,574	1,046	18.9%
90.1%	5,484	6,567	1,083	19.8%
91.4%	5,434	6,492	1,059	19.5%
92.6%	5,383	6,457	1,074	19.9%
93.8%	5,275	6,440	1,165	22.1%
95.1%	5,149	6,289	1,140	22.1%
96.3%	4,947	6,259	1,312	26.5%
97.5%	4,943	6,242	1,299	26.3%
98.8%	4,840	5,688	848	17.5%
100.0%	3,644	4,461	817	22.4%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,457	17,076	1,619	10.5%
1.2%	15,454	17,049	1,596	10.3%
2.5%	15,375	15,499	125	0.8%
3.7%	15,291	15,347	56	0.4%
4.9%	15,255	15,334	78	0.5%
6.2%	15,252	15,324	73	0.5%
7.4%	15,243	15,310	67	0.4%
8.6%	15,214	15,290	76	0.5%
9.9%	15,213	15,286	74	0.5%
11.1%	15,203	15,284	81	0.5%
12.3%	15,145	15,266	121	0.8%
13.6%	15,086	15,262	176	1.2%
14.8%	14,865	15,261	396	2.7%
16.0%	14,749	15,239	490	3.3%
17.3%	14,606	15,231	625	4.3%
18.5%	14,573	15,217	644	4.4%
19.8%	14,316	15,213	897	6.3%
21.0%	13,792	15,149	1,357	9.8%
22.2%	13,391	15,139	1,747	13.0%
23.5%	13,345	15,049	1,704	12.8%
24.7%	13,335	14,552	1,217	9.1%
25.9%	13,307	12,963	-344	-2.6%
27.2%	13,205	12,887	-318	-2.4%
28.4%	12,866	12,755	-111	-0.9%
29.6%	12,620	12,682	62	0.5%
30.9%	12,279	12,548	269	2.2%
32.1%	11,674	11,158	-516	-4.4%
33.3%	11,545	10,809	-736	-6.4%
34.6%	11,200	9,846	-1,354	-12.1%
35.8%	10,993	9,606	-1,387	-12.6%
37.0%	10,294	9,569	-725	-7.0%
38.3%	9,200	8,910	-291	-3.2%
39.5%	8,681	8,481	-200	-2.3%
40.7%	8,347	8,282	-65	-0.8%
42.0%	8,116	8,268	152	1.9%
43.2%	7,374	8,199	825	11.2%
44.4%	7,223	8,044	821	11.4%
45.7%	6,972	7,807	834	12.0%
46.9%	6,691	7,750	1,059	15.8%
48.1%	6,441	7,612	1,172	18.2%
49.4%	6,099	7,573	1,474	24.2%
50.6%	6,045	7,493	1,448	24.0%
51.9%	5,812	7,364	1,552	26.7%
53.1%	5,812	7,315	1,503	25.9%
54.3%	5,476	7,231	1,754	32.0%
55.6%	5,227	7,010	1,783	34.1%
56.8%	5,211	6,879	1,669	32.0%
58.0%	5,120	6,868	1,747	34.1%
59.3%	5,050	6,836	1,786	35.4%
60.5%	4,957	6,753	1,796	36.2%
61.7%	4,855	6,735	1,880	38.7%
63.0%	4,810	6,732	1,922	40.0%
64.2%	4,799	6,714	1,915	39.9%
65.4%	4,678	6,607	1,929	41.2%
66.7%	4,677	6,560	1,883	40.3%
67.9%	4,575	6,557	1,982	43.3%
69.1%	4,517	6,521	2,005	44.4%
70.4%	4,444	6,501	2,057	46.3%
71.6%	4,443	6,496	2,053	46.2%
72.8%	4,434	6,459	2,024	45.7%
74.1%	4,428	6,441	2,013	45.5%
75.3%	4,413	6,401	1,988	45.0%
76.5%	4,381	6,354	1,973	45.0%
77.8%	4,365	6,321	1,956	44.8%
79.0%	4,310	6,258	1,948	45.2%
80.2%	4,282	6,146	1,864	43.5%
81.5%	4,228	6,144	1,916	45.3%
82.7%	4,165	5,989	1,824	43.8%
84.0%	4,127	5,955	1,828	44.3%
85.2%	4,080	5,912	1,832	44.9%
86.4%	4,068	5,907	1,839	45.2%
87.7%	3,982	5,885	1,903	47.8%
88.9%	3,839	5,746	1,907	49.7%
90.1%	3,833	5,694	1,861	48.5%
91.4%	3,822	5,470	1,647	43.1%
92.6%	3,785	5,449	1,664	44.0%
93.8%	3,778	5,361	1,583	41.9%
95.1%	3,754	5,301	1,547	41.2%
96.3%	3,737	5,239	1,502	40.2%
97.5%	3,671	5,212	1,541	42.0%
98.8%	3,624	4,597	974	26.9%
100.0%	3,558	4,179	621	17.4%

Figure SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

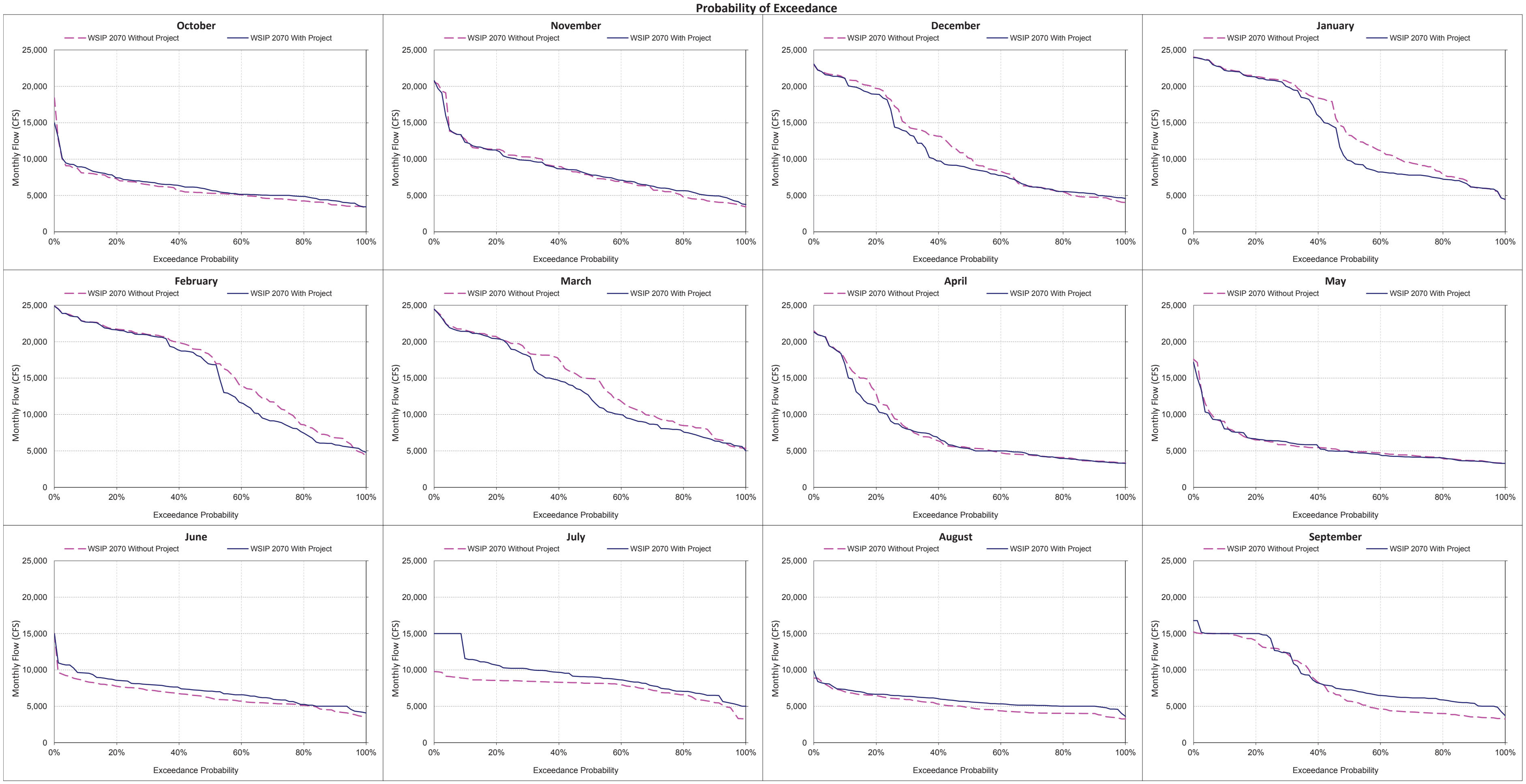


Table SW-15-b

Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	18,434	15,000	-3,434	-18.6%
1.2%	12,719	12,945	226	1.8%
2.5%	10,136	10,113	-22	-0.2%
3.7%	9,083	9,486	402	4.4%
4.9%	9,067	9,302	235	2.6%
6.2%	8,757	9,261	504	5.8%
7.4%	8,730	8,932	202	2.3%
8.6%	8,126	8,927	801	9.9%
9.9%	8,076	8,813	737	9.1%
11.1%	8,040	8,572	531	6.6%
12.3%	8,004	8,328	324	4.0%
13.6%	7,891	8,217	327	4.1%
14.8%	7,870	8,100	230	2.9%
16.0%	7,805	8,058	253	3.2%
17.3%	7,480	7,861	381	5.1%
18.5%	7,423	7,831	408	5.5%
19.8%	7,329	7,426	97	1.3%
21.0%	7,014	7,416	402	5.7%
22.2%	7,002	7,177	175	2.5%
23.5%	6,928	7,135	208	3.0%
24.7%	6,883	7,093	210	3.0%
25.9%	6,865	7,027	162	2.4%
27.2%	6,693	6,995	302	4.5%
28.4%	6,581	6,901	321	4.9%
29.6%	6,507	6,866	360	5.5%
30.9%	6,432	6,814	382	5.9%
32.1%	6,354	6,752	398	6.3%
33.3%	6,241	6,613	372	6.0%
34.6%	6,229	6,534	305	4.9%
35.8%	6,192	6,526	334	5.4%
37.0%	6,149	6,505	355	5.8%
38.3%	6,082	6,435	353	5.8%
39.5%	5,611	6,401	790	14.1%
40.7%	5,611	6,297	686	12.2%
42.0%	5,473	6,157	684	12.5%
43.2%	5,463	6,154	691	12.6%
44.4%	5,449	6,142	693	12.7%
45.7%	5,418	6,131	713	13.2%
46.9%	5,409	6,015	607	11.2%
48.1%	5,325	5,944	620	11.6%
49.4%	5,315	5,803	488	9.2%
50.6%	5,296	5,644	348	6.6%
51.9%	5,295	5,627	332	6.3%
53.1%	5,255	5,475	220	4.2%
54.3%	5,244	5,410	166	3.2%
55.6%	5,200	5,356	156	3.0%
56.8%	5,185	5,248	63	1.2%
58.0%	5,169	5,246	77	1.5%
59.3%	5,119	5,163	44	0.9%
60.5%	5,057	5,153	96	1.9%
61.7%	4,931	5,152	221	4.5%
63.0%	4,927	5,136	210	4.3%
64.2%	4,882	5,104	222	4.5%
65.4%	4,852	5,067	215	4.4%
66.7%	4,653	5,061	408	8.8%
67.9%	4,601	5,042	441	9.6%
69.1%	4,583	5,000	417	9.1%
70.4%	4,558	5,000	442	9.7%
71.6%	4,530	5,000	470	10.4%
72.8%	4,530	5,000	470	10.4%
74.1%	4,457	5,000	543	12.2%
75.3%	4,439	5,000	561	12.6%
76.5%	4,362	4,933	571	13.1%
77.8%	4,328	4,916	588	13.6%
79.0%	4,245	4,871	626	14.7%
80.2%	4,243	4,868	625	14.7%
81.5%	4,191	4,754	563	13.4%
82.7%	4,103	4,648	545	13.3%
84.0%	4,089	4,585	496	12.1%
85.2%	4,080	4,407	328	8.0%
86.4%	4,044	4,401	356	8.8%
87.7%	3,922	4,399	477	12.2%
88.9%	3,720	4,302	583	15.7%
90.1%	3,703	4,266	563	15.2%
91.4%	3,678	4,181	502	13.7%
92.6%	3,622	4,034	412	11.4%
93.8%	3,525	4,007	482	13.7%
95.1%	3,519	3,947	427	12.1%
96.3%	3,514	3,938	424	12.1%
97.5%	3,496	3,623	127	3.6%
98.8%	3,485	3,439	-46	-1.3%
100.0%	3,254	3,437	183	5.6%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,607	20,790	183	0.9%
1.2%	20,332	19,721	-610	-3.0%
2.5%	19,357	19,110	-248	-1.3%
3.7%	19,118	16,010	-3,107	-16.3%
4.9%	13,841	14,033	191	1.4%
6.2%	13,673	13,625	-48	-0.4%
7.4%	13,343	13,397	54	0.4%
8.6%	13,176	13,359	183	1.4%
9.9%	12,759	12,316	-443	-3.5%
11.1%	12,114	12,184	70	0.6%
12.3%	11,586	11,830	244	2.1%
13.6%	11,507	11,692	186	1.6%
14.8%	11,444	11,641	197	1.7%
16.0%	11,438	11,478	40	0.4%
17.3%	11,396	11,289	-107	-0.9%
18.5%	11,357	11,256	-100	-0.9%
19.8%	11,347	11,248	-99	-0.9%
21.0%	11,342	11,005	-337	-3.0%
22.2%	11,119	10,451	-668	-6.0%
23.5%	10,563	10,269	-295	-2.8%
24.7%	10,548	10,139	-409	-3.9%
25.9%	10,517	10,062	-455	-4.3%
27.2%	10,371	9,911	-460	-4.4%
28.4%	10,312	9,869	-443	-4.3%
29.6%	10,309	9,832	-477	-4.6%
30.9%	10,281	9,807	-474	-4.6%
32.1%	10,224	9,640	-585	-5.7%
33.3%	10,090	9,591	-499	-4.9%
34.6%	10,006	9,588	-418	-4.2%
35.8%	9,234	9,141	-93	-1.0%
37.0%	9,159	9,033	-126	-1.4%
38.3%	9,049	8,933	-116	-1.3%
39.5%	8,997	8,689	-308	-3.4%
40.7%	8,948	8,658	-290	-3.2%
42.0%	8,654	8,644	-10	-0.1%
43.2%	8,471	8,542	70	0.8%
44.4%	8,253	8,537	284	3.4%
45.7%	8,242	8,521	279	3.4%
46.9%	8,102	8,301	198	2.4%
48.1%	7,898	8,119	221	2.8%
49.4%	7,886	7,932	46	0.6%
50.6%	7,663	7,811	148	1.9%
51.9%	7,330	7,787	457	6.2%
53.1%	7,309	7,705	395	5.4%
54.3%	7,284	7,558	274	3.8%
55.6%	7,179	7,465	286	4.0%
56.8%	7,115	7,435	320	4.5%
58.0%	6,958	7,254	297	4.3%
59.3%	6,936	7,134	198	2.9%
60.5%	6,893	7,068	175	2.5%
61.7%	6,783	6,956	173	2.6%
63.0%	6,702	6,946	245	3.7%
64.2%	6,557	6,854	297	4.5%
65.4%	6,361	6,603	241	3.8%
66.7%	6,343	6,503	160	2.5%
67.9%	6,330	6,479	149	2.4%
69.1%	6,241	6,349	108	1.7%
70.4%	5,729	6,256	527	9.2%
71.6%	5,724	6,067	343	6.0%
72.8%	5,674	6,014	340	6.0%
74.1%	5,517	5,999	482	8.7%
75.3%	5,516	5,923	407	7.4%
76.5%	5,489	5,783	294	5.4%
77.8%	5,283	5,668	385	7.3%
79.0%	5,114	5,663	549	10.7%
80.2%	4,699	5,656	958	20.4%
81.5%	4,685	5,635	950	20.3%
82.7%	4,551	5,485	935	20.5%
84.0%	4,507	5,348	840	18.6%
85.2%	4,492	5,157	665	14.8%
86.4%	4,437	5,080	643	14.5%
87.7%	4,245	5,000	755	17.8%
88.9%	4,190	4,993	803	19.2%
90.1%	4,120	4,951	831	20.2%
91.4%	4,051	4,938	888	21.9%
92.6%	4,042	4,796	754	18.7%
93.8%	4,010	4,678	668	16.7%
95.1%	3,922	4,489	567	14.4%
96.3%	3,842	4,264	421	11.0%
97.5%	3,736	4,169	433	11.6%
98.8%	3,570	3,827	257	7.2%
100.0%	3,435	3,762	327	9.5%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	22,981	23,069	89	0.4%
1.2%	22,243	22,230	-13	-0.1%
2.5%	22,118	22,043	-74	-0.3%
3.7%	21,813	21,589	-225	-1.0%
4.9%	21,677	21,542	-135	-0.6%
6.2%	21,594	21,392	-202	-0.9%
7.4%	21,567	21,392	-176	-0.8%
8.6%	21,427	21,286	-141	-0.7%
9.9%	21,099	21,121	22	0.1%
11.1%	20,875	20,053	-822	-3.9%
12.3%	20,828	19,957	-871	-4.2%
13.6%	20,791	19,885	-906	-4.4%
14.8%	20,440	19,664	-776	-3.8%
16.0%	20,229	19,348	-881	-4.4%
17.3%	20,147	19,227	-919	-4.6%
18.5%	20,022	18,978	-1,044	-5.2%
19.8%	19,744	18,939	-805	-4.1%
21.0%	19,653	18,872	-781	-4.0%
22.2%	19,381	18,399	-982	-5.1%
23.5%	18,489	18,173	-316	-1.7%
24.7%	18,167	16,872	-1,295	-7.1%
25.9%	17,263	14,396	-2,868	-16.6%
27.2%	16,833	14,269	-2,564	-15.2%
28.4%	15,196	13,976	-1,220	-8.0%
29.6%	14,882	13,834	-1,048	-7.0%
30.9%	14,287	13,305	-982	-6.9%
32.1%	14,168	13,163	-1,005	-7.1%
33.3%	14,092	12,178	-1,914	-13.6%
34.6%	13,961	12,172	-1,789	-12.8%
35.8%	13,746	11,548	-2,199	-16.0%
37.0%	13,322	10,230	-3,092	-23.2%
38.3%	13,287	10,075	-3,212	-24.2%
39.5%	13,162	9,773	-3,389	-25.8%
40.7%	13,121	9,707	-3,414	-26.0%
42.0%	12,713	9,311	-3,402	-26.8%
43.2%	12,173	9,182	-2,992	-24.6%
44.4%	11,606	9,148	-2,457	-21.2%
45.7%	11,375	9,144	-2,232	-19.6%
46.9%	10,880	9,054	-1,826	-16.8%
48.1%	10,870	8,988	-1,882	-17.3%
49.4%	10,196	8,800	-1,396	-13.7%
50.6%	10,015	8,625	-1,390	-13.9%
51.9%	9,234	8,540	-694	-7.5%
53.1%	9,086	8,422	-664	-7.3%
54.3%	9,055	8,363	-692	-7.6%
55.6%	8,641	8,273	-368	-4.3%
56.8%	8,619	7,974	-646	-7.5%
58.0%	8,493	7,931	-563	-6.6%
59.3%	8,417	7,769	-647	-7.7%
60.5%	8,235	7,735	-500	-6.1%
61.7%	8,023	7,600	-424	-5.3%
63.0%	7,938	7,341	-597	-7.5%
64.2%	7,398	7,226	-172	-2.3%
65.4%	6,730	6,948	218	3.2%
66.7%	6,329	6,607	279	4.4%
67.9%	6,324	6,464	140	2.2%
69.1%	6,297	6,219	-78	-1.2%
70.4%	6,218	6,168	-51	-0.8%
71.6%	6,104	6,156	51	0.8%
72.8%	6,100	6,071	-30	-0.5%
74.1%	5,993	5,899	-93	-1.6%
75.3%	5,853	5,888	35	0.6%
76.5%	5,730	5,848	118	2.1%
77.8%	5,638	5,594	-44	-0.8%
79.0%	5,489	5,549	60	1.1%
80.2%	5,471	5,547	77	1.4%
81.5%	5,265	5,527	262	5.0%
82.7%	4,977	5,483	506	10.2%
84.0%	4,964	5,433	469	9.5%
85.2%	4,839	5,368	528	10.9%
86.4%	4,799	5,356	557	11.6%
87.7%	4,786	5,294	508	10.6%
88.9%	4,772	5,276	504	10.6%
90.1%	4,756	5,211	455	9.6%
91.4%	4,729	4,985	256	5.4%
92.6%	4,701	4,963	262	5.6%
93.8%	4,682	4,922	239	5.1%
95.1%	4,477	4,859	382	8.5%
96.3%	4,406	4,777	371	8.4%
97.5%	4,222	4,694	472	11.2%
98.8%	4,075	4,684	610	15.0%
100.0%	4,038	4,596	558	13.8%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,040	23,954	-86	-0.4%
1.2%	23,910	23,919	9	0.0%
2.5%	23,775	23,798	23	0.1%
3.7%	23,757	23,630	-127	-0.5%
4.9%	23,621	23,599	-22	-0.1%
6.2%	23,102	22,995	-107	-0.5%
7.4%	22,817	22,786	-31	-0.1%
8.6%	22,728	22,660	-68	-0.3%
9.9%	22,359	22,208	-151	-0.7%
11.1%	22,323	22,097	-226	-1.0%
12.3%	22,208	22,085	-124	-0.6%
13.6%	22,100	22,044	-56	-0.3%
14.8%	22,054	21,978	-76	-0.3%
16.0%	21,597	21,547	-49	-0.2%
17.3%	21,523	21,397	-125	-0.6%
18.5%	21,515	21,357	-158	-0.7%
19.8%	21,328	21,327	-1	0.0%
21.0%	21,317	21,078	-239	-1.1%
22.2%	21,217	21,057	-160	-0.8%
23.5%	21,081	20,872	-208	-1.0%
24.7%	21,006	20,854	-152	-0.7%
25.9%	20,993	20,824	-169	-0.8%
27.2%	20,908	20,692	-216	-1.0%
28.4%	20,882	20,609	-273	-1.3%
29.6%	20,773	20,037	-736	-3.5%
30.9%	20,507	19,810	-697	-3.4%
32.1%	20,414	19,493	-921	-4.5%
33.3%	19,775	19,438	-337	-1.7%
34.6%	19,328	18,502	-827	-4.3%
35.8%	19,162	18,388	-774	-4.0%
37.0%	18,784	18,196	-588	-3.1%
38.3%	18,574	17,380	-1,194	-6.4%
39.5%	18,427	16,151	-2,276	-12.4%
40.7%	18,334	15,730	-2,603	-14.2%
42.0%	18,210	15,000	-3,210	-17.6%
43.2%	17,964	14,878	-3,086	-17.2%
44.4%	17,925	14,580	-3,345	-18.7%
45.7%	15,602	14,274	-1,328	-8.5%
46.9%	14,657	11,648	-3,009	-20.5%
48.1%	14,416	10,554	-3,862	-26.8%
49.4%	13,304	9,850	-3,453	-26.0%
50.6%	13,234	9,710	-3,525	-26.6%
51.9%	12,843	9,313	-3,530	-27.5%
53.1%	12,387	9,250	-3,136	-25.3%
54.3%	12,341	9,222	-3,120	-25.3%
55.6%	12,012	8,726	-3,286	-27.4%
56.8%	11,871	8,591	-3,280	-27.6%
58.0%	11,533	8,448	-3,085	-26.7%
59.3%	11,255	8,237	-3,017	-26.8%
60.5%	11,113	8,229	-2,884	-26.0%
61.7%	10,624	8,146	-2,479	-23.3%
63.0%	10,571	8,090	-2,481	-23.5%
64.2%	10,439	8,088	-2,351	-22.5%
65.4%	10,102	7,953	-2,150	-21.3%
66.7%	9,864	7,927	-1,937	-19.6%
67.9%	9,571	7,874	-1,697	-17.7%
69.1%	9,560	7,801	-1,758	-18.4%
70.4%	9,417	7,786	-1,631	-17.3%
71.6%	9,315	7,785	-1,530	-16.4%
72.8%	9,107	7,784	-1,323	-14.5%
74.1%	9,105	7,733	-1,373	-15.1%
75.3%	8,948	7,640	-1,308	-14.6%
76.5%	8,947	7,504	-1,443	-16.1%
77.8%	8,390	7,432	-958	-11.4%
79.0%	8,292	7,379	-912	-11.0%
80.2%	7,818	7,208	-610	-7.8%
81.5%	7,607	7,192	-416	-5.5%
82.7%	7,594	7,145	-449	-5.9%
84.0%	7,494	7,061	-433	-5.8%
85.2%	7,356	7,038	-318	-4.3%
86.4%	7,268	6,828	-440	-6.1%
87.7%	7,046	6,613	-433	-6.1%
88.9%	6,171	6,198	27	0.4%
90.1%	6,137	6,126	-11	-0.2%
91.4%	6,007	6,091	84	1.4%
92.6%	5,997	5,998	1	0.0%
93.8%	5,965	5,963	-2	0.0%
95.1%	5,927	5,912	-14	-0.2%
96.3%	5,655	5,860	205	3.6%
97.5%	5,578	5,540	-38	-0.7%
98.8%	4,608	4,640	32	0.7%
100.0%	4,448	4,487	39	0.9%

Table SW-15-b

Sacramento River at Wilken Slough, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,927	24,879	-48	-0.2%
1.2%	24,524	24,510	-14	-0.1%
2.5%	23,973	23,900	-73	-0.3%
3.7%	23,859	23,900	40	0.2%
4.9%	23,743	23,590	-153	-0.6%
6.2%	23,468	23,460	-9	0.0%
7.4%	23,455	23,444	-11	0.0%
8.6%	22,889	22,859	-30	-0.1%
9.9%	22,761	22,718	-43	-0.2%
11.1%	22,722	22,689	-33	-0.1%
12.3%	22,683	22,682	-1	0.0%
13.6%	22,655	22,621	-35	-0.2%
14.8%	22,438	22,282	-156	-0.7%
16.0%	22,141	21,898	-243	-1.1%
17.3%	21,916	21,826	-90	-0.4%
18.5%	21,783	21,668	-114	-0.5%
19.8%	21,757	21,639	-117	-0.5%
21.0%	21,684	21,549	-135	-0.6%
22.2%	21,642	21,504	-138	-0.6%
23.5%	21,525	21,305	-219	-1.0%
24.7%	21,479	21,290	-189	-0.9%
25.9%	21,229	21,054	-175	-0.8%
27.2%	21,157	21,010	-147	-0.7%
28.4%	21,150	21,000	-149	-0.7%
29.6%	21,000	20,979	-21	-0.1%
30.9%	20,967	20,813	-154	-0.7%
32.1%	20,931	20,703	-228	-1.1%
33.3%	20,871	20,650	-221	-1.1%
34.6%	20,704	20,597	-107	-0.5%
35.8%	20,701	20,425	-277	-1.3%
37.0%	20,217	19,375	-842	-4.2%
38.3%	20,032	19,210	-823	-4.1%
39.5%	19,963	18,909	-1,054	-5.3%
40.7%	19,794	18,740	-1,054	-5.3%
42.0%	19,659	18,719	-940	-4.8%
43.2%	19,472	18,644	-828	-4.3%
44.4%	19,013	18,545	-468	-2.5%
45.7%	18,953	18,119	-834	-4.4%
46.9%	18,925	17,941	-985	-5.2%
48.1%	18,543	17,443	-1,101	-5.9%
49.4%	18,353	16,993	-1,360	-7.4%
50.6%	17,895	16,867	-1,028	-5.7%
51.9%	16,987	16,835	-153	-0.9%
53.1%	16,986	14,799	-2,186	-12.9%
54.3%	16,305	13,030	-3,275	-20.1%
55.6%	16,060	12,939	-3,121	-19.4%
56.8%	15,538	12,678	-2,860	-18.4%
58.0%	14,956	12,373	-2,583	-17.3%
59.3%	14,104	11,686	-2,418	-17.1%
60.5%	13,863	11,507	-2,356	-17.0%
61.7%	13,560	11,162	-2,397	-17.7%
63.0%	13,490	10,883	-2,607	-19.3%
64.2%	13,348	10,212	-3,136	-23.5%
65.4%	12,674	10,126	-2,547	-20.1%
66.7%	12,255	9,513	-2,743	-22.4%
67.9%	12,213	9,343	-2,870	-23.5%
69.1%	11,751	9,140	-2,611	-22.2%
70.4%	11,719	9,126	-2,592	-22.1%
71.6%	11,206	9,020	-2,186	-19.5%
72.8%	10,735	8,875	-1,860	-17.3%
74.1%	10,603	8,593	-2,009	-19.0%
75.3%	10,142	8,350	-1,792	-17.7%
76.5%	9,866	8,103	-1,763	-17.9%
77.8%	9,255	8,066	-1,189	-12.8%
79.0%	8,646	7,655	-991	-11.5%
80.2%	8,566	7,396	-1,170	-13.7%
81.5%	8,256	7,070	-1,185	-14.4%
82.7%	8,145	6,738	-1,407	-17.3%
84.0%	7,773	6,220	-1,553	-20.0%
85.2%	7,277	6,076	-1,201	-16.5%
86.4%	7,275	6,062	-1,213	-16.7%
87.7%	7,172	6,034	-1,138	-15.9%
88.9%	6,847	6,018	-829	-12.1%
90.1%	6,811	5,816	-995	-14.6%
91.4%	6,769	5,777	-993	-14.7%
92.6%	6,717	5,625	-1,092	-16.3%
93.8%	6,246	5,582	-664	-10.6%
95.1%	5,929	5,487	-442	-7.5%
96.3%	5,183	5,411	228	4.4%
97.5%	4,901	5,340	438	8.9%
98.8%	4,730	5,000	270	5.7%
100.0%	4,289	4,827	539	12.6%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,461	24,473	12	0.0%
1.2%	23,995	23,943	-53	-0.2%
2.5%	23,539	23,294	-245	-1.0%
3.7%	22,501	22,511	9	0.0%
4.9%	22,084	21,947	-137	-0.6%
6.2%	22,036	21,723	-313	-1.4%
7.4%	21,771	21,534	-237	-1.1%
8.6%	21,745	21,444	-301	-1.4%
9.9%	21,623	21,443	-180	-0.8%
11.1%	21,444	21,401	-42	-0.2%
12.3%	21,347	21,156	-191	-0.9%
13.6%	21,162	21,140	-22	-0.1%
14.8%	21,124	21,046	-78	-0.4%
16.0%	21,109	20,880	-229	-1.1%
17.3%	20,879	20,735	-143	-0.7%
18.5%	20,782	20,462	-320	-1.5%
19.8%	20,737	20,449	-287	-1.4%
21.0%	20,452	20,349	-103	-0.5%
22.2%	20,212	20,206	-6	0.0%
23.5%	20,038	19,755	-282	-1.4%
24.7%	19,769	18,962	-807	-4.1%
25.9%	19,762	18,919	-843	-4.3%
27.2%	19,732	18,602	-1,130	-5.7%
28.4%	19,451	18,320	-1,131	-5.8%
29.6%	18,756	18,195	-561	-3.0%
30.9%	18,337	17,896	-441	-2.4%
32.1%	18,270	16,173	-2,097	-11.5%
33.3%	18,240	15,657	-2,582	-14.2%
34.6%	18,165	15,376	-2,790	-15.4%
35.8%	18,160	15,012	-3,148	-17.3%
37.0%	18,140	15,000	-3,140	-17.3%
38.3%	17,967	14,883	-3,084	-17.2%
39.5%	17,808	14,763	-3,045	-17.1%
40.7%	17,190	14,552	-2,638	-15.3%
42.0%	16,314	14,448	-1,866	-11.4%
43.2%	16,001	14,098	-1,903	-11.9%
44.4%	15,827	13,987	-1,841	-11.6%
45.7%	15,536	13,560	-1,976	-12.7%
46.9%	15,147	13,423	-1,724	-11.4%
48.1%	15,001	13,018	-1,983	-13.2%
49.4%	14,957	12,715	-2,242	-15.0%
50.6%	14,933	11,977	-2,956	-19.8%
51.9%	14,895	11,468	-3,427	-23.0%
53.1%	14,550	10,986	-3,564	-24.5%
54.3%	13,701	10,840	-2,861	-20.9%
55.6%	13,141	10,388	-2,753	-21.0%
56.8%	12,751	10,263	-2,488	-19.5%
58.0%	12,084	10,095	-1,989	-16.5%
59.3%	12,065	10,015	-2,051	-17.0%
60.5%	11,637	9,944	-1,693	-14.6%
61.7%	11,223	9,516	-1,706	-15.2%
63.0%	10,992	9,431	-1,561	-14.2%
64.2%	10,784	9,238	-1,546	-14.3%
65.4%	10,581	9,060	-1,521	-14.4%
66.7%	10,384	9,011	-1,372	-13.2%
67.9%	9,981	8,913	-1,068	-10.7%
69.1%	9,883	8,662	-1,221	-12.4%
70.4%	9,856	8,655	-1,201	-12.2%
71.6%	9,541	8,611	-930	-9.8%
72.8%	9,312	8,067	-1,245	-13.4%
74.1%	9,255	8,050	-1,205	-13.0%
75.3%	9,103	8,010	-1,093	-12.0%
76.5%	9,099	7,958	-1,141	-12.5%
77.8%	8,744	7,953	-791	-9.0%
79.0%	8,538	7,869	-669	-7.8%
80.2%	8,478	7,576	-901	-10.6%
81.5%	8,451	7,480	-971	-11.5%
82.7%	8,409	7,361	-1,048	-12.5%
84.0%	8,174	7,191	-983	-12.0%
85.2%	8,156	7,020	-1,135	-13.9%
86.4%	8,130	6,866	-1,264	-15.6%
87.7%	7,957	6,726	-1,231	-15.5%
88.9%	7,331	6,598	-732	-10.0%
90.1%	6,659	6,333	-325	-4.9%
91.4%	6,553	6,329	-224	-3.4%
92.6%	6,458	6,088	-370	-5.7%
93.8%	5,976	6,053	77	1.3%
95.1%	5,677	6,012	335	5.9%
96.3%	5,552	5,739	186	3.4%
97.5%	5,507	5,674	167	3.0%
98.8%	5,400	5,615	215	4.0%
100.0%	5,367	5,000	-367	-6.8%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,498	21,318	-180	-0.8%
1.2%	20,979	20,977	-2	0.0%
2.5%	20,806	20,821	14	0.1%
3.7%	20,725	20,655	-70	-0.3%
4.9%	19,454	19,444	-10	-0.1%
6.2%	19,255	19,168	-87	-0.5%
7.4%	18,771	18,777	6	0.0%
8.6%	18,560	18,395	-165	-0.9%
9.9%	17,715	16,976	-740	-4.2%
11.1%	16,696	15,000	-1,696	-10.2%
12.3%	15,953	14,884	-1,068	-6.7%
13.6%	15,508	13,129	-2,379	-15.3%
14.8%	15,005	12,658	-2,348	-15.6%
16.0%	15,000	11,918	-3,082	-20.5%
17.3%	14,860	11,515	-3,345	-22.5%
18.5%	13,756	11,401	-2,355	-17.1%
19.8%	13,165	11,183	-1,983	-15.1%
21.0%	11,534	10,301	-1,233	-10.7%
22.2%	11,352	10,210	-1,142	-10.1%
23.5%	11,250	10,018	-1,232	-11.0%
24.7%	10,287	9,087	-1,201	-11.7%
25.9%	9,426	8,739	-687	-7.3%
27.2%	9,264	8,716	-549	-5.9%
28.4%	8,581	8,257	-324	-3.8%
29.6%	8,189	8,028	-161	-2.0%
30.9%	8,028	7,931	-96	-1.2%
32.1%	7,500	7,701	202	2.7%
33.3%	7,277	7,555	278	3.8%
34.6%	6,955	7,500	545	7.8%
35.8%	6,946	7,464	517	7.4%
37.0%	6,904	7,339	435	6.3%
38.3%	6,643	7,043	400	6.0%
39.5%	6,437	6,905	468	7.3%
40.7%	6,269	6,481	212	3.4%
42.0%	5,720	6,312	592	10.4%
43.2%	5,662	5,855	193	3.4%
44.4%	5,586	5,789	203	3.6%
45.7%	5,572	5,615	42	0.8%
46.9%	5,566	5,454	-112	-2.0%
48.1%	5,559	5,383	-176	-3.2%
49.4%	5,433	5,352	-81	-1.5%
50.6%	5,383	5,203	-180	-3.3%
51.9%	5,343	5,007	-336	-6.3%
53.1%	5,314	5,000	-314	-5.9%
54.3%	5,271	5,000	-271	-5.1%
55.6%	5,150	5,000	-150	-2.9%
56.8%	5,030	5,000	-30	-0.6%
58.0%	4,908	5,000	92	1.9%
59.3%	4,840	5,000	160	3.3%
60.5%	4,689	5,000	311	6.6%
61.7%	4,610	5,000	390	8.5%
63.0%	4,575	4,938	363	7.9%
64.2%	4,539	4,864	325	7.2%
65.4%	4,532	4,850	318	7.0%
66.7%	4,499	4,812	313	7.0%
67.9%	4,457	4,705	248	5.6%
69.1%	4,447	4,507	61	1.4%
70.4%	4,368	4,457	89	2.0%
71.6%	4,359	4,442	84	1.9%
72.8%	4,276	4,261	-15	-0.4%
74.1%	4,232	4,213	-19	-0.4%
75.3%	4,146	4,185	39	0.9%
76.5%	4,123	4,159	36	0.9%
77.8%	4,109	4,078	-31	-0.8%
79.0%	4,101	3,948	-153	-3.7%
80.2%	4,078	3,945	-133	-3.3%
81.5%	4,045	3,941	-103	-2.6%
82.7%	3,982	3,871	-111	-2.8%
84.0%	3,879	3,848	-31	-0.8%
85.2%	3,695	3,748	52	1.4%
86.4%	3,646	3,736	90	2.5%
87.7%	3,633	3,702	69	1.9%
88.9%	3,617	3,642	25	0.7%
90.1%	3,608	3,556	-52	-1.5%
91.4%	3,582	3,492	-91	-2.5%
92.6%	3,581	3,487	-93	-2.6%
93.8%	3,542	3,459	-83	-2.4%
95.1%	3,470	3,398	-72	-2.1%
96.3%	3,462	3,395	-67	-1.9%
97.5%	3,394	3,329	-65	-1.9%
98.8%	3,336	3,307	-29	-0.9%
100.0%	3,335	3,297	-38	-1.1%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,592	17,175	-417	-2.4%
1.2%	17,144	15,000	-2,144	-12.5%
2.5%	13,375	13,418	43	0.3%
3.7%	11,563	10,334	-1,230	-10.6%
4.9%	10,470	10,211	-259	-2.5%
6.2%	9,769	9,343	-426	-4.4%
7.4%	9,279	9,258	-22	-0.2%
8.6%	9,100	9,225	125	1.4%
9.9%	9,058	8,017	-1,041	-11.5%
11.1%	8,044	7,999	-44	-0.6%
12.3%	7,873	7,634	-239	-3.0%
13.6%	7,560	7,563	3	0.0%
14.8%	7,362	7,550	188	2.6%
16.0%	6,989	7,493	504	7.2%
17.3%	6,781	6,826	45	0.7%
18.5%	6,689	6,695	6	0.1%
19.8%	6,516	6,670	153	2.4%
21.0%	6,493	6,582	89	1.4%
22.2%	6,389	6,543	154	2.4%
23.5%	6,346	6,435	89	1.4%
24.7%	6,235	6,421	186	3.0%
25.9%	6,223	6,393	170	2.7%
27.2%	5,863	6,392	530	9.0%
28.4%	5,853	6,313	460	7.9%
29.6%	5,839	6,262	423	7.2%
30.9%	5,780	6,085	304	5.3%
32.1%	5,710	6,016	306	5.4%
33.3%	5,598	5,927	328	5.9%
34.6%	5,575	5,873	298	5.3%
35.8%	5,540	5,868	328	5.9%
37.0%	5,458	5,867	409	7.5%
38.3%	5,454	5,858	404	7.4%
39.5%	5,451	5,841	390	7.1%
40.7%	5,448	5,233	-215	-3.9%
42.0%	5,413	5,204	-209	-3.9%
43.2%	5,369	5,005	-364	-6.8%
44.4%	5,292	5,000	-292	-5.5%
45.7%	5,265	4,955	-309	-5.9%
46.9%	5,073	4,953	-120	-2.4%
48.1%	4,998	4,948	-51	-1.0%
49.4%	4,978	4,947	-31	-0.6%
50.6%	4,932	4,797	-135	-2.7%
51.9%	4,931	4,772	-159	-3.2%
53.1%	4,909	4,698	-211	-4.3%
54.3%	4,881	4,693	-188	-3.8%
55.6%	4,879	4,673	-206	-4.2%
56.8%	4,826	4,600	-226	-4.7%
58.0%	4,762	4,583	-179	-3.8%
59.3%	4,750	4,538	-212	-4.5%
60.5%	4,698	4,371	-328	-7.0%
61.7%	4,608	4,366	-242	-5.2%
63.0%	4,538	4,280	-258	-5.7%
64.2%	4,526	4,244	-282	-6.2%
65.4%	4,456	4,229	-227	-5.1%
66.7%	4,453	4,217	-236	-5.3%
67.9%	4,441	4,192	-249	-5.6%
69.1%	4,419	4,159	-260	-5.9%
70.4%	4,362	4,143	-219	-5.0%
71.6%	4,299	4,142	-157	-3.7%
72.8%	4,254	4,138	-117	-2.7%
74.1%	4,233	4,099	-134	-3.2%
75.3%	4,196	4,080	-116	-2.8%
76.5%	4,165	4,079	-86	-2.1%
77.8%	4,130	4,073	-56	-1.4%
79.0%	4,101	4,053	-49	-1.2%
80.2%	3,901	4,035	134	3.4%
81.5%	3,896	3,910	14	0.4%
82.7%	3,895	3,887	-8	-0.2%
84.0%	3,847	3,784	-63	-1.6%
85.2%	3,778	3,663	-115	-3.1%
86.4%	3,725	3,632	-93	-2.5%
87.7%	3,686	3,624	-62	-1.7%
88.9%	3,671	3,597	-74	-2.0%
90.1%	3,667	3,588	-79	-2.2%
91.4%	3,667	3,565	-102	-2.8%
92.6%	3,629	3,563	-66	-1.8%
93.8%	3,542	3,494	-48	-1.4%
95.1%	3,460	3,473	13	0.4%
96.3%	3,377	3,366	-11	-0.3%
97.5%	3,354	3,333	-21	-0.6%
98.8%	3,333	3,298	-34	-1.0%
100.0%	3,319	3,271	-49	-1.5%

Table SW-15-b
Sacramento River at Wilken Slough, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,000	15,000	0	0.0%
1.2%	9,640	10,968	1,328	13.8%
2.5%	9,425	10,800	1,376	14.6%
3.7%	9,225	10,697	1,471	15.9%
4.9%	9,123	10,693	1,570	17.2%
6.2%	8,857	10,251	1,394	15.7%
7.4%	8,737	9,634	897	10.3%
8.6%	8,630	9,617	987	11.4%
9.9%	8,444	9,572	1,128	13.4%
11.1%	8,310	9,551	1,241	14.9%
12.3%	8,264	9,353	1,090	13.2%
13.6%	8,184	8,976	791	9.7%
14.8%	8,035	8,933	899	11.2%
16.0%	8,019	8,861	842	10.5%
17.3%	7,915	8,760	845	10.7%
18.5%	7,908	8,732	824	10.4%
19.8%	7,759	8,590	831	10.7%
21.0%	7,678	8,541	863	11.2%
22.2%	7,636	8,520	884	11.6%
23.5%	7,566	8,465	898	11.9%
24.7%	7,553	8,153	600	7.9%
25.9%	7,518	8,111	593	7.9%
27.2%	7,456	8,096	640	8.6%
28.4%	7,383	8,032	649	8.8%
29.6%	7,223	8,010	787	10.9%
30.9%	7,201	7,967	766	10.6%
32.1%	7,168	7,931	763	10.6%
33.3%	7,066	7,901	835	11.8%
34.6%	7,024	7,879	855	12.2%
35.8%	6,949	7,739	789	11.4%
37.0%	6,882	7,696	814	11.8%
38.3%	6,843	7,665	822	12.0%
39.5%	6,777	7,630	854	12.6%
40.7%	6,684	7,415	731	10.9%
42.0%	6,657	7,366	709	10.6%
43.2%	6,589	7,322	733	11.1%
44.4%	6,518	7,268	750	11.5%
45.7%	6,472	7,231	758	11.7%
46.9%	6,424	7,167	743	11.6%
48.1%	6,292	7,102	810	12.9%
49.4%	6,220	7,080	861	13.8%
50.6%	6,085	7,063	978	16.1%
51.9%	5,930	7,009	1,079	18.2%
53.1%	5,923	7,002	1,079	18.2%
54.3%	5,909	6,719	810	13.7%
55.6%	5,860	6,706	846	14.4%
56.8%	5,857	6,642	785	13.4%
58.0%	5,809	6,594	784	13.5%
59.3%	5,720	6,575	855	14.9%
60.5%	5,710	6,565	854	15.0%
61.7%	5,581	6,501	920	16.5%
63.0%	5,534	6,401	867	15.7%
64.2%	5,506	6,383	877	15.9%
65.4%	5,490	6,259	769	14.0%
66.7%	5,487	6,188	701	12.8%
67.9%	5,457	6,185	728	13.3%
69.1%	5,409	6,122	713	13.2%
70.4%	5,391	5,953	562	10.4%
71.6%	5,342	5,887	545	10.2%
72.8%	5,340	5,850	510	9.5%
74.1%	5,337	5,848	511	9.6%
75.3%	5,307	5,655	348	6.6%
76.5%	5,296	5,641	345	6.5%
77.8%	5,273	5,479	206	3.9%
79.0%	5,129	5,247	119	2.3%
80.2%	5,122	5,244	121	2.4%
81.5%	5,077	5,158	81	1.6%
82.7%	5,027	5,145	118	2.4%
84.0%	4,925	5,007	83	1.7%
85.2%	4,624	5,000	376	8.1%
86.4%	4,554	5,000	446	9.8%
87.7%	4,516	5,000	484	10.7%
88.9%	4,502	5,000	498	11.1%
90.1%	4,247	5,000	753	17.7%
91.4%	4,204	5,000	796	18.9%
92.6%	4,145	5,000	855	20.6%
93.8%	4,091	4,992	901	22.0%
95.1%	3,966	4,563	597	15.1%
96.3%	3,862	4,334	473	12.2%
97.5%	3,691	4,246	555	15.0%
98.8%	3,606	4,194	588	16.3%
100.0%	3,567	4,088	521	14.6%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,770	15,000	5,230	53.5%
1.2%	9,746	15,000	5,254	53.9%
2.5%	9,655	15,000	5,345	55.4%
3.7%	9,126	15,000	5,874	64.4%
4.9%	9,087	15,000	5,913	65.1%
6.2%	9,021	15,000	5,979	66.3%
7.4%	9,005	15,000	5,995	66.6%
8.6%	8,891	15,000	6,109	68.7%
9.9%	8,847	11,587	2,740	31.0%
11.1%	8,783	11,439	2,656	30.2%
12.3%	8,633	11,428	2,795	32.4%
13.6%	8,632	11,331	2,699	31.3%
14.8%	8,626	11,121	2,495	28.9%
16.0%	8,605	11,091	2,486	28.9%
17.3%	8,571	11,010	2,439	28.5%
18.5%	8,564	10,770	2,206	25.8%
19.8%	8,559	10,666	2,107	24.6%
21.0%	8,541	10,582	2,040	23.9%
22.2%	8,519	10,305	1,786	21.0%
23.5%	8,518	10,235	1,717	20.2%
24.7%	8,518	10,230	1,713	20.1%
25.9%	8,513	10,223	1,710	20.1%
27.2%	8,489	10,218	1,729	20.4%
28.4%	8,468	10,207	1,739	20.5%
29.6%	8,442	10,188	1,746	20.7%
30.9%	8,425	10,032	1,607	19.1%
32.1%	8,409	9,952	1,543	18.4%
33.3%	8,403	9,932	1,529	18.2%
34.6%	8,373	9,927	1,554	18.6%
35.8%	8,362	9,885	1,523	18.2%
37.0%	8,335	9,792	1,457	17.5%
38.3%	8,331	9,727	1,396	16.8%
39.5%	8,302	9,666	1,364	16.4%
40.7%	8,296	9,649	1,353	16.3%
42.0%	8,294	9,542	1,248	15.0%
43.2%	8,265	9,534	1,269	15.4%
44.4%	8,247	9,161	914	11.1%
45.7%	8,243	9,121	879	10.7%
46.9%	8,232	9,073	841	10.2%
48.1%	8,162	9,060	898	11.0%
49.4%	8,162	9,053	891	10.9%
50.6%	8,155	9,039	884	10.8%
51.9%	8,154	9,016	862	10.6%
53.1%	8,151	8,967	816	10.0%
54.3%	8,135	8,835	701	8.6%
55.6%	8,126	8,820	694	8.5%
56.8%	8,083	8,781	698	8.6%
58.0%	8,081	8,711	629	7.8%
59.3%	7,987	8,664	677	8.5%
60.5%	7,919	8,626	707	8.9%
61.7%	7,769	8,516	747	9.6%
63.0%	7,715	8,415	700	9.1%
64.2%	7,705	8,321	616	8.0%
65.4%	7,545	8,314	769	10.2%
66.7%	7,449	8,169	720	9.7%
67.9%	7,434	8,161	727	9.8%
69.1%	7,319	7,904	584	8.0%
70.4%	7,160	7,789	629	8.8%
71.6%	7,107	7,717	610	8.6%
72.8%	6,883	7,462	579	8.4%
74.1%	6,850	7,389	539	7.9%
75.3%	6,846	7,346	500	7.3%
76.5%	6,702	7,180	478	7.1%
77.8%	6,678	7,082	404	6.1%
79.0%	6,580	7,080	500	7.6%
80.2%	6,577	7,053	477	7.2%
81.5%	6,490	7,030	540	8.3%
82.7%	6,286	6,943	658	10.5%
84.0%	5,951	6,794	844	14.2%
85.2%	5,870	6,762	891	15.2%
86.4%	5,825	6,632	807	13.9%
87.7%	5,723	6,516	793	13.9%
88.9%	5,661	6,504	842	14.9%
90.1%	5,482	6,498	1,016	18.5%
91.4%	5,470	6,488	1,018	18.6%
92.6%	5,162	5,633	471	9.1%
93.8%	4,897	5,555	658	13.4%
95.1%	4,815	5,450	636	13.2%
96.3%	4,068	5,344	1,276	31.4%
97.5%	3,308	5,181	1,874	56.6%
98.8%	3,283	5,000	1,717	52.3%
100.0%	3,265	5,000	1,735	53.1%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,875	9,821	946	10.7%
1.2%	8,858	8,402	-456	-5.2%
2.5%	8,432	8,227	-205	-2.4%
3.7%	8,022	8,128	107	1.3%
4.9%	7,723	8,074	351	4.5%
6.2%	7,357	7,726	369	5.0%
7.4%	7,324	7,407	82	1.1%
8.6%	7,203	7,346	143	2.0%
9.9%	6,998	7,313	316	4.5%
11.1%	6,853	7,229	376	5.5%
12.3%	6,816	7,138	322	4.7%
13.6%	6,696	7,044	348	5.2%
14.8%	6,600	7,006	406	6.2%
16.0%	6,590	6,896	307	4.7%
17.3%	6,543	6,703	160	2.5%
18.5%	6,530	6,691	161	2.5%
19.8%	6,490	6,665	176	2.7%
21.0%	6,394	6,659	266	4.2%
22.2%	6,276	6,641	365	5.8%
23.5%	6,188	6,629	441	7.1%
24.7%	6,094	6,498	404	6.6%
25.9%	6,067	6,460	394	6.5%
27.2%	6,029	6,458	429	7.1%
28.4%	6,017	6,417	400	6.7%
29.6%	5,914	6,372	458	7.7%
30.9%	5,912	6,349	437	7.4%
32.1%	5,762	6,330	568	9.9%
33.3%	5,747	6,271	524	9.1%
34.6%	5,630	6,212	582	10.3%
35.8%	5,579	6,174	595	10.7%
37.0%	5,550	6,145	596	10.7%
38.3%	5,530	6,132	603	10.9%
39.5%	5,341	6,088	747	14.0%
40.7%	5,250	5,969	718	13.7%
42.0%	5,143	5,941	798	15.5%
43.2%	5,070	5,879	809	16.0%
44.4%	5,044	5,831	786	15.6%
45.7%	5,025	5,769	744	14.8%
46.9%	5,021	5,680	659	13.1%
48.1%	4,937	5,676	740	15.0%
49.4%	4,811	5,658	848	17.6%
50.6%	4,778	5,587	809	16.9%
51.9%	4,665	5,561	895	19.2%
53.1%	4,622	5,492	870	18.8%
54.3%	4,565	5,485	920	20.2%
55.6%	4,543	5,421	878	19.3%
56.8%	4,529	5,381	852	18.8%
58.0%	4,524	5,354	829	18.3%
59.3%	4,381	5,347	966	22.1%
60.5%	4,353	5,343	991	22.8%
61.7%	4,308	5,300	992	23.0%
63.0%	4,294	5,218	924	21.5%
64.2%	4,250	5,195	944	22.2%
65.4%	4,220	5,162	942	22.3%
66.7%	4,216	5,153	937	22.2%
67.9%	4,186	5,144	957	22.9%
69.1%	4,105	5,137	1,032	25.1%
70.4%	4,102	5,133	1,031	25.1%
71.6%	4,087	5,120	1,033	25.3%
72.8%	4,061	5,112	1,051	25.9%
74.1%	4,060	5,108	1,049	25.8%
75.3%	4,055	5,068	1,013	25.0%
76.5%	4,033	5,054	1,021	25.3%
77.8%	4,030	5,039	1,009	25.0%
79.0%	4,029	5,009	980	24.3%
80.2%	4,029	5,000	971	24.1%
81.5%	4,028	5,000	972	24.1%
82.7%	4,019	5,000	981	24.4%
84.0%	4,016	5,000	984	24.5%
85.2%	4,013	5,000	987	24.6%
86.4%	4,012	5,000	988	24.6%
87.7%	4,011	5,000	989	24.6%
88.9%	4,010	5,000	990	24.7%
90.1%	4,010	5,000	990	24.7%
91.4%	3,826	4,942	1,117	29.2%
92.6%	3,779	4,875	1,096	29.0%
93.8%	3,554	4,787	1,234	34.7%
95.1%	3,508	4,631	1,124	32.0%
96.3%	3,464	4,616	1,151	33.2%
97.5%	3,400	4,573	1,173	34.5%
98.8%	3,267	4,013	746	22.8%
100.0%	3,259	3,628	369	11.3%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	15,210	16,787	1,577	10.4%
1.2%	15,061	16,781	1,720	11.4%
2.5%	15,000	15,185	185	1.2%
3.7%	15,000	15,042	42	0.3%
4.9%	15,000	15,029	29	0.2%
6.2%	15,000	15,000	0	0.0%
7.4%	15,000	15,000	0	0.0%
8.6%	15,000	15,000	0	0.0%
9.9%	15,000	15,000	0	0.0%
11.1%	15,000	15,000	0	0.0%
12.3%	14,824	15,000	176	1.2%
13.6%	14,771	15,000	229	1.5%
14.8%	14,604	15,000	396	2.7%
16.0%	14,432	15,000	568	3.9%
17.3%	14,312	15,000	688	4.8%
18.5%	14,308	15,000	692	4.8%
19.8%	14,082	15,000	918	6.5%
21.0%	13,524	15,000	1,476	10.9%
22.2%	13,128	14,824	1,696	12.9%
23.5%	13,053	14,771	1,718	13.2%
24.7%	12,986	14,309	1,323	10.2%
25.9%	12,973	12,669	-305	-2.3%
27.2%	12,915	12,614	-301	-2.3%
28.4%	12,557	12,408	-150	-1.2%
29.6%	12,366	12,404	39	0.3%
30.9%	11,956	12,294	338	2.8%
32.1%	11,321	10,868	-453	-4.0%
33.3%	11,264	10,504	-759	-6.7%
34.6%	10,875	9,513	-1,362	-12.5%
35.8%	10,701	9,324	-1,377	-12.9%
37.0%	10,020	9,287	-733	-7.3%
38.3%	8,957	8,611	-346	-3.9%
39.5%	8,464	8,252	-212	-2.5%
40.7%	8,054	8,115	61	0.8%
42.0%	7,873	7,934	61	0.8%
43.2%	7,030	7,864	834	11.9%
44.4%	6,963	7,791	829	11.9%
45.7%	6,611	7,456	845	12.8%
46.9%	6,535	7,414	879	13.5%
48.1%	6,030	7,328	1,298	21.5%
49.4%	5,716	7,249	1,533	26.8%
50.6%	5,680	7,239	1,559	27.4%
51.9%	5,549	7,158	1,609	29.0%
53.1%	5,443	7,014	1,571	28.9%
54.3%	5,169	6,947	1,778	34.4%
55.6%	5,146	6,776	1,629	31.7%
56.8%	4,842	6,738	1,896	39.2%
58.0%	4,762	6,600	1,838	38.6%
59.3%	4,633	6,523	1,889	40.8%
60.5%	4,621	6,460	1,839	39.8%
61.7%	4,556	6,451	1,895	41.6%
63.0%	4,389	6,377	1,989	45.3%
64.2%	4,357	6,345	1,988	45.6%
65.4%	4,334	6,259	1,925	44.4%
66.7%	4,285	6,238	1,952	45.6%
67.9%	4,249	6,233	1,984	46.7%
69.1%	4,220	6,176	1,956	46.4%
70.4%	4,215	6,166	1,951	46.3%
71.6%	4,177	6,146	1,969	47.2%
72.8%	4,135	6,146	2,011	48.6%
74.1%	4,115	6,137	2,021	49.1%
75.3%	4,093	6,080	1,987	48.6%
76.5%	4,066	6,070	2,004	49.3%
77.8%	4,029	6,066	2,038	50.6%
79.0%	4,007	5,899	1,891	47.2%
80.2%	4,002	5,880	1,878	46.9%
81.5%	3,980	5,808	1,828	45.9%
82.7%	3,855	5,677	1,822	47.3%
84.0%	3,851	5,610	1,758	45.7%
85.2%	3,755	5,553	1,798	47.9%
86.4%	3,745	5,524	1,779	47.5%
87.7%	3,643	5,499	1,857	51.0%
88.9%	3,539	5,431	1,891	53.4%
90.1%	3,520	5,385	1,865	53.0%
91.4%	3,519	5,054	1,535	43.6%
92.6%	3,455	5,000	1,545	44.7%
93.8%	3,438	5,000	1,562	45.4%
95.1%	3,434	5,000	1,566	45.6%
96.3%	3,412	5,000	1,588	46.5%
97.5%	3,320	4,863	1,542	46.4%
98.8%	3,311	4,246	935	28.3%
100.0%	3,254	3,725	471	14.5%

Figure SW-16-b
Sacramento River at Verona, Monthly Flow
Probability of Exceedance

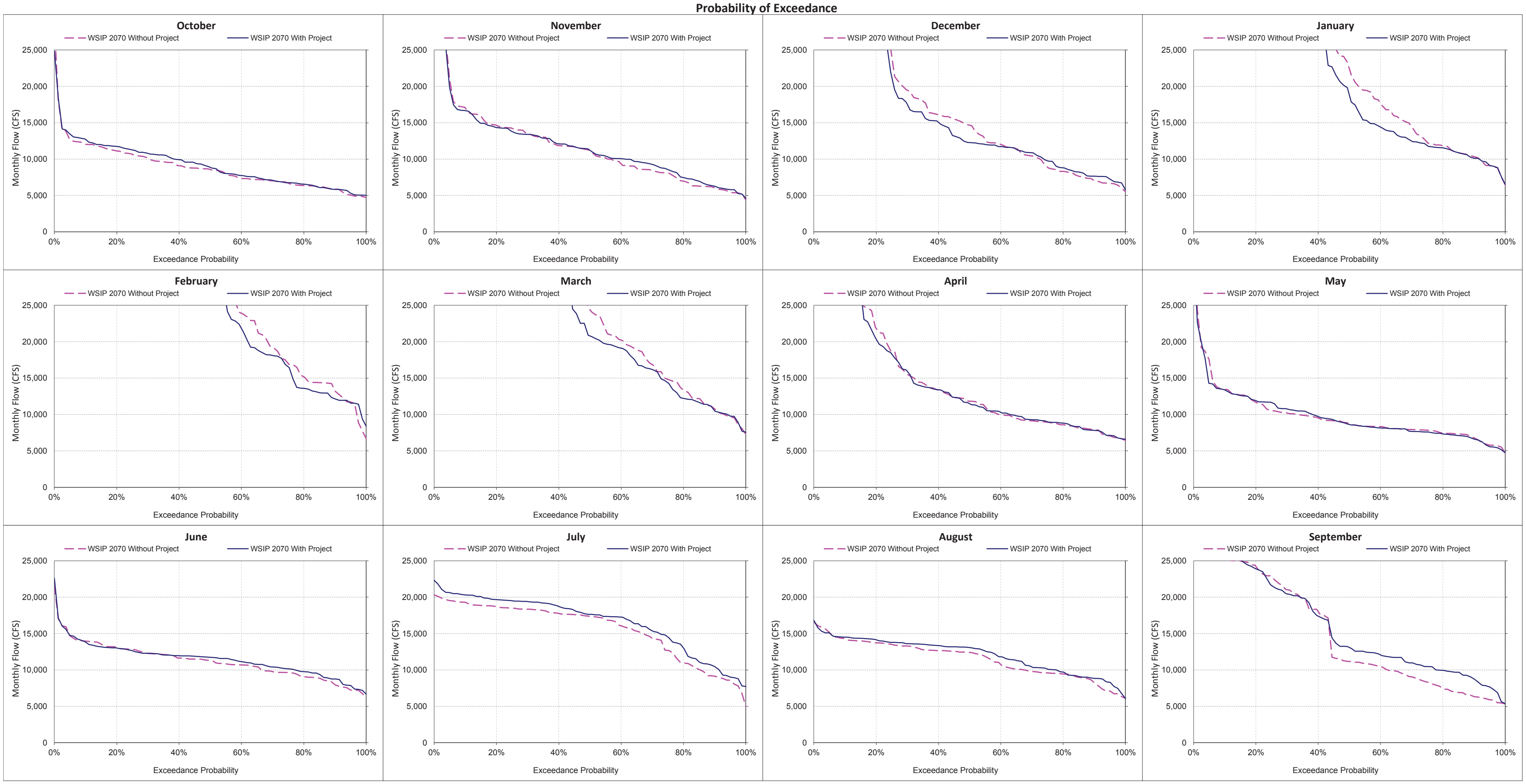


Table SW-16-b
Sacramento River at Verona, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	28,525	24,872	-3,653	-12.8%
1.2%	18,181	18,406	224	1.2%
2.5%	14,161	14,141	-20	-0.1%
3.7%	13,830	14,001	171	1.2%
4.9%	12,661	13,464	802	6.3%
6.2%	12,449	13,055	606	4.9%
7.4%	12,386	12,964	578	4.7%
8.6%	12,331	12,852	521	4.2%
9.9%	12,033	12,755	721	6.0%
11.1%	12,017	12,326	310	2.6%
12.3%	11,996	12,210	214	1.8%
13.6%	11,771	12,005	234	2.0%
14.8%	11,733	11,998	264	2.3%
16.0%	11,520	11,871	351	3.0%
17.3%	11,344	11,854	510	4.5%
18.5%	11,255	11,794	540	4.8%
19.8%	11,142	11,769	627	5.6%
21.0%	11,083	11,672	589	5.3%
22.2%	10,828	11,519	691	6.4%
23.5%	10,811	11,383	572	5.3%
24.7%	10,718	11,309	590	5.5%
25.9%	10,498	11,184	687	6.5%
27.2%	10,423	10,950	528	5.1%
28.4%	10,380	10,927	547	5.3%
29.6%	10,212	10,840	628	6.1%
30.9%	9,895	10,701	807	8.2%
32.1%	9,754	10,636	882	9.0%
33.3%	9,715	10,586	871	9.0%
34.6%	9,672	10,580	908	9.4%
35.8%	9,571	10,523	952	10.0%
37.0%	9,529	10,215	686	7.2%
38.3%	9,527	10,018	490	5.1%
39.5%	9,096	9,931	835	9.2%
40.7%	9,077	9,888	811	8.9%
42.0%	8,882	9,574	692	7.8%
43.2%	8,805	9,569	763	8.7%
44.4%	8,774	9,568	795	9.1%
45.7%	8,766	9,355	588	6.7%
46.9%	8,676	9,325	649	7.5%
48.1%	8,665	9,154	489	5.6%
49.4%	8,648	8,959	311	3.6%
50.6%	8,482	8,745	263	3.1%
51.9%	8,452	8,681	229	2.7%
53.1%	8,379	8,233	-146	-1.7%
54.3%	8,205	8,041	-164	-2.0%
55.6%	7,796	8,007	211	2.7%
56.8%	7,749	7,965	216	2.8%
58.0%	7,647	7,897	250	3.3%
59.3%	7,354	7,769	415	5.6%
60.5%	7,322	7,722	400	5.5%
61.7%	7,318	7,623	305	4.2%
63.0%	7,248	7,577	329	4.5%
64.2%	7,199	7,565	366	5.1%
65.4%	7,188	7,395	207	2.9%
66.7%	7,157	7,303	146	2.0%
67.9%	7,082	7,152	70	1.0%
69.1%	7,036	7,139	102	1.5%
70.4%	7,008	7,049	42	0.6%
71.6%	6,905	6,955	50	0.7%
72.8%	6,887	6,880	-7	-0.1%
74.1%	6,858	6,773	-85	-1.2%
75.3%	6,632	6,758	126	1.9%
76.5%	6,491	6,715	225	3.5%
77.8%	6,425	6,682	257	4.0%
79.0%	6,386	6,582	196	3.1%
80.2%	6,358	6,547	190	3.0%
81.5%	6,339	6,470	131	2.1%
82.7%	6,326	6,392	66	1.0%
84.0%	6,266	6,227	-39	-0.6%
85.2%	6,174	6,096	-78	-1.3%
86.4%	6,159	6,081	-77	-1.3%
87.7%	6,003	5,968	-35	-0.6%
88.9%	5,902	5,862	-40	-0.7%
90.1%	5,898	5,821	-76	-1.3%
91.4%	5,816	5,816	0	0.0%
92.6%	5,417	5,768	351	6.5%
93.8%	5,148	5,682	534	10.4%
95.1%	5,042	5,294	251	5.0%
96.3%	4,914	5,071	156	3.2%
97.5%	4,892	5,065	173	3.5%
98.8%	4,855	5,044	189	3.9%
100.0%	4,720	5,000	280	5.9%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	35,359	33,227	-2,132	-6.0%
1.2%	32,901	29,783	-3,117	-9.5%
2.5%	29,305	26,972	-2,334	-8.0%
3.7%	26,570	25,607	-963	-3.6%
4.9%	21,023	19,829	-1,194	-5.7%
6.2%	17,932	17,458	-474	-2.6%
7.4%	17,300	16,815	-485	-2.8%
8.6%	17,218	16,709	-509	-3.0%
9.9%	17,116	16,664	-452	-2.6%
11.1%	16,365	16,559	194	1.2%
12.3%	16,187	16,083	-103	-0.6%
13.6%	16,180	15,386	-793	-4.9%
14.8%	16,026	14,938	-1,087	-6.8%
16.0%	15,295	14,921	-374	-2.4%
17.3%	14,795	14,629	-166	-1.1%
18.5%	14,751	14,552	-199	-1.4%
19.8%	14,695	14,348	-347	-2.4%
21.0%	14,453	14,300	-153	-1.1%
22.2%	14,353	14,265	-87	-0.6%
23.5%	14,321	14,250	-71	-0.5%
24.7%	14,278	13,866	-413	-2.9%
25.9%	14,073	13,618	-454	-3.2%
27.2%	13,990	13,452	-538	-3.8%
28.4%	13,978	13,414	-564	-4.0%
29.6%	13,505	13,405	-100	-0.7%
30.9%	13,393	13,396	2	0.0%
32.1%	13,159	13,306	147	1.1%
33.3%	13,062	13,191	129	1.0%
34.6%	13,056	12,907	-149	-1.1%
35.8%	12,976	12,843	-132	-1.0%
37.0%	12,243	12,828	585	4.8%
38.3%	12,122	12,357	236	1.9%
39.5%	11,884	12,112	227	1.9%
40.7%	11,841	12,092	251	2.1%
42.0%	11,795	12,077	282	2.4%
43.2%	11,759	11,824	65	0.6%
44.4%	11,713	11,804	91	0.8%
45.7%	11,637	11,598	-39	-0.3%
46.9%	11,510	11,466	-43	-0.4%
48.1%	11,363	11,464	101	0.9%
49.4%	11,281	11,404	122	1.1%
50.6%	10,941	11,007	66	0.6%
51.9%	10,452	10,692	240	2.3%
53.1%	10,308	10,538	230	2.2%
54.3%	10,297	10,510	213	2.1%
55.6%	10,022	10,318	296	3.0%
56.8%	9,963	10,115	152	1.5%
58.0%	9,744	10,093	348	3.6%
59.3%	9,663	10,060	397	4.1%
60.5%	9,129	10,026	897	9.8%
61.7%	9,108	9,975	866	9.5%
63.0%	9,045	9,960	915	10.1%
64.2%	9,031	9,686	655	7.3%
65.4%	8,594	9,646	1,052	12.2%
66.7%	8,579	9,552	972	11.3%
67.9%	8,575	9,468	893	10.4%
69.1%	8,537	9,366	829	9.7%
70.4%	8,381	9,231	850	10.1%
71.6%	8,229	9,024	795	9.7%
72.8%	8,138	8,791	653	8.0%
74.1%	8,122	8,732	610	7.5%
75.3%	8,062	8,499	436	5.4%
76.5%	7,764	8,279	515	6.6%
77.8%	7,423	8,136	713	9.6%
79.0%	7,032	7,546	514	7.3%
80.2%	6,963	7,424	461	6.6%
81.5%	6,773	7,281	508	7.5%
82.7%	6,326	7,249	923	14.6%
84.0%	6,316	7,075	759	12.0%
85.2%	6,285	6,938	652	10.4%
86.4%	6,258	6,664	406	6.5%
87.7%	6,219	6,485	266	4.3%
88.9%	6,219	6,360	142	2.3%
90.1%	6,027	6,263	236	3.9%
91.4%	5,844	6,044	200	3.4%
92.6%	5,788	5,986	197	3.4%
93.8%	5,676	5,874	198	3.5%
95.1%	5,401	5,784	383	7.1%
96.3%	5,365	5,783	418	7.8%
97.5%	5,340	5,276	-64	-1.2%
98.8%	5,197	5,208	10	0.2%
100.0%	4,396	4,590	194	4.4%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	65,543	65,910	366	0.6%
1.2%	59,056	58,453	-603	-1.0%
2.5%	57,309	56,830	-479	-0.8%
3.7%	55,588	55,225	-363	-0.7%
4.9%	53,900	52,240	-1,659	-3.1%
6.2%	48,532	47,238	-1,294	-2.7%
7.4%	47,607	45,447	-2,160	-4.5%
8.6%	45,509	43,052	-2,458	-5.4%
9.9%	44,118	42,700	-1,419	-3.2%
11.1%	42,735	42,609	-125	-0.3%
12.3%	39,123	38,589	-534	-1.4%
13.6%	34,146	32,642	-1,503	-4.4%
14.8%	33,103	31,997	-1,106	-3.3%
16.0%	33,053	31,262	-1,791	-5.4%
17.3%	31,937	29,327	-2,610	-8.2%
18.5%	31,148	28,304	-2,844	-9.1%
19.8%	30,756	26,627	-4,129	-13.4%
21.0%	30,608	25,750	-4,858	-15.9%
22.2%	27,105	25,660	-1,445	-5.3%
23.5%	25,684	25,509	-175	-0.7%
24.7%	25,141	21,965	-3,177	-12.6%
25.9%	21,348	19,577	-1,771	-8.3%
27.2%	20,660	18,365	-2,295	-11.1%
28.4%	20,061	18,317	-1,744	-8.7%
29.6%	19,568	17,827	-1,740	-8.9%
30.9%	19,269	16,749	-2,519	-13.1%
32.1%	18,451	16,518	-1,932	-10.5%
33.3%	18,331	16,514	-1,817	-9.9%
34.6%	18,114	16,505	-1,609	-8.9%
35.8%	17,720	15,563	-2,158	-12.2%
37.0%	16,386	15,324	-1,062	-6.5%
38.3%	16,280	15,273	-1,008	-6.2%
39.5%	16,147	15,237	-910	-5.6%
40.7%	16,007	14,782	-1,225	-7.7%
42.0%	15,853	14,545	-1,307	-8.2%
43.2%	15,840	14,320	-1,520	-9.6%
44.4%	15,541	13,236	-2,305	-14.8%
45.7%	15,413	13,070	-2,343	-15.2%
46.9%	15,214	12,910	-2,304	-15.1%
48.1%	14,947	12,464	-2,482	-16.6%
49.4%	14,712	12,305	-2,407	-16.4%
50.6%	14,608	12,249	-2,358	-16.1%
51.9%	13,778	12,205	-1,573	-11.4%
53.1%	13,394	12,125	-1,269	-9.5%
54.3%	13,137	12,059	-1,077	-8.2%
55.6%	12,338	11,970	-369	-3.0%
56.8%	12,231	11,931	-300	-2.5%
58.0%	12,231	11,929	-302	-2.5%
59.3%	12,107	11,734	-373	-3.1%
60.5%	11,942	11,717	-224	-1.9%
61.7%	11,671	11,627	-44	-0.4%
63.0%	11,588	11,601	13	0.1%
64.2%	11,536	11,542	6	0.1%
65.4%	11,348	11,202	-146	-1.3%
66.7%	10,771	11,110	339	3.1%
67.9%	10,561	10,945	384	3.6%
69.1%	10,478	10,911	433	4.1%
70.4%	10,415	10,851	436	4.2%
71.6%	10,222	10,505	283	2.8%
72.8%	9,941	10,290	349	3.5%
74.1%	9,248	9,914	666	7.2%
75.3%	8,755	9,735	980	11.2%
76.5%	8,639	9,693	1,055	12.2%
77.8%	8,561	9,006	445	5.2%
79.0%	8,320	8,816	496	6.0%
80.2%	8,312	8,781	469	5.6%
81.5%	8,202	8,594	392	4.8%
82.7%	8,200	8,452	252	3.1%
84.0%	7,809	8,254	445	5.7%
85.2%	7,626	8,239	613	8.0%
86.4%	7,560	8,073	513	6.8%
87.7%	7,369	7,681	312	4.2%
88.9%	7,342	7,641	299	4.1%
90.1%	7,012	7,638	626	8.9%
91.4%	6,927	7,611	684	9.9%
92.6%	6,728	7,604	876	13.0%
93.8%	6,695	7,583	888	13.3%
95.1%	6,665	7,211	546	8.2%
96.3%	6,614	6,916	301	4.6%
97.5%	6,409	6,816	407	6.4%
98.8%	6,008	6,735	727	12.1%
100.0%	5,520	5,767	247	4.5%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	76,104	76,129	25	0.0%
1.2%	74,978	74,843	-135	-0.2%
2.5%	70,088	69,440	-648	-0.9%
3.7%	65,796	65,623	-173	-0.3%
4.9%	64,593	64,170	-423	-0.7%
6.2%	63,556	62,628	-929	-1.5%
7.4%	63,306	62,442	-865	-1.4%
8.6%	61,240	61,176	-64	-0.1%
9.9%	60,335	60,555	219	0.4%
11.1%	60,216	59,880	-336	-0.6%
12.3%	57,483	56,680	-804	-1.4%
13.6%	55,487	55,883	396	0.7%
14.8%	55,255	55,466	212	0.4%
16.0%	55,147	54,902	-246	-0.4%
17.3%	52,077	50,571	-1,506	-2.9%
18.5%	51,209	49,551	-1,658	-3.2%
19.8%	50,632	49,438	-1,194	-2.4%
21.0%	50,553	49,249	-1,304	-2.6%
22.2%	49,806	49,106	-700	-1.4%
23.5%	49,641	48,682	-959	-1.9%
24.7%	49,322	48,501	-821	-1.7%
25.9%	48,645	46,599	-2,046	-4.2%
27.2%	45,702	45,445	-256	-0.6%
28.4%	43,368	42,790	-578	-1.3%
29.6%	42,903	41,750	-1,153	-2.7%
30.9%	37,158	36,704	-454	-1.2%
32.1%	36,680	35,351	-1,329	-3.6%
33.3%	36,620	34,380	-2,240	-6.1%
34.6%	33,326	34,375	1,049	3.1%
35.8%	33,186	30,153	-3,032	-9.1%
37.0%	33,078	29,735	-3,342	-10.1%
38.3%	31,841	29,428	-2,414	-7.6%
39.5%	31,323	27,638	-3,685	-11.8%
40.7%	30,780	27,376	-3,404	-11.1%
42.0%	30,404	27,204	-3,200	-10.5%
43.2%	26,903	22,898	-4,005	-14.9%
44.4%	26,160	22,666	-3,494	-13.4%
45.7%	25,118	21,545	-3,573	-14.2%
46.9%	24,157	20,674	-3,483	-14.4%
48.1%	24,128	20,170	-3,959	-16.4%
49.4%	23,303	19,804	-3,499	-15.0%
50.6%	21,578	17,860	-3,718	-17.2%
51.9%	20,569	17,423	-3,146	-15.3%
53.1%	19,951	16,392	-3,559	-17.8%
54.3%	19,499	15,404	-4,095	-21.0%
55.6%	19,443	15,317	-4,126	-21.2%
56.8%	19,213	14,906	-4,306	-22.4%
58.0%	18,310	14,849	-3,461	-18.9%
59.3%	18,140	14,579	-3,561	-19.6%
60.5%	17,371	14,286	-3,085	-17.8%
61.7%	16,801	13,977	-2,824	-16.8%
63.0%	16,778	13,871	-2,907	-17.3%
64.2%	15,991	13,788	-2,203	-13.8%
65.4%	15,815	13,237	-2,578	-16.3%
66.7%	15,418	13,055	-2,364	-15.3%
67.9%	15,158	12,995	-2,162	-14.3%
69.1%	14,954	12,687	-2,268	-15.2%
70.4%	14,224	12,402	-1,822	-12.8%
71.6%	13,434	12,362	-1,072	-8.0%
72.8%	13,206	12,234	-971	-7.4%
74.1%	12,728	12,158	-569	-4.5%
75.3%	12,158	11,771	-387	-3.2%
76.5%	12,100	11,673	-427	-3.5%
77.8%	11,944	11,602	-343	-2.9%
79.0%	11,943	11,584	-359	-3.0%
80.2%	11,794	11,539	-255	-2.2%
81.5%	11,732	11,397	-335	-2.9%
82.7%	11,239	11,203	-36	-0.3%
84.0%	10,960	11,004	44	0.4%
85.2%	10,852	10,850	-1	0.0%
86.4%	10,755	10,730	-26	-0.2%
87.7%	10,662	10,610	-53	-0.5%
88.9%	10,465	10,257	-208	-2.0%
90.1%	10,336	10,122	-215	-2.1%
91.4%	10,151	10,113	-38	-0.4%
92.6%	9,636	9,731	95	1.0%
93.8%	9,130	9,622	491	5.4%
95.1%	9,110	9,126	16	0.2%
96.3%	8,924	9,001	77	0.9%
97.5%	8,810	8,821	11	0.1%
98.8%	7,569	7,624	55	0.7%
100.0%	6,477	6,545	68	1.1%

Table SW-16-b

Sacramento River at Verona, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,246	81,517	271	0.3%
1.2%	71,284	71,007	-277	-0.4%
2.5%	71,009	70,497	-511	-0.7%
3.7%	68,087	67,798	-289	-0.4%
4.9%	67,278	67,267	-12	0.0%
6.2%	67,050	67,026	-24	0.0%
7.4%	66,517	65,845	-672	-1.0%
8.6%	65,216	65,155	-61	-0.1%
9.9%	62,406	62,395	-11	0.0%
11.1%	62,333	62,301	-31	-0.1%
12.3%	62,209	61,904	-305	-0.5%
13.6%	61,866	61,883	18	0.0%
14.8%	60,883	60,682	-201	-0.3%
16.0%	60,282	59,475	-807	-1.3%
17.3%	59,814	59,413	-401	-0.7%
18.5%	59,667	58,598	-1,069	-1.8%
19.8%	58,843	58,450	-392	-0.7%
21.0%	57,720	57,224	-496	-0.9%
22.2%	56,841	56,840	-1	0.0%
23.5%	54,843	53,780	-1,064	-1.9%
24.7%	54,445	53,090	-1,356	-2.5%
25.9%	53,798	52,725	-1,073	-2.0%
27.2%	53,586	52,620	-965	-1.8%
28.4%	50,642	50,404	-238	-0.5%
29.6%	49,731	48,473	-1,258	-2.5%
30.9%	49,330	47,633	-1,698	-3.4%
32.1%	48,221	46,594	-1,627	-3.4%
33.3%	45,577	44,804	-773	-1.7%
34.6%	44,858	42,931	-1,928	-4.3%
35.8%	43,490	42,878	-613	-1.4%
37.0%	43,217	42,269	-948	-2.2%
38.3%	41,629	41,890	262	0.6%
39.5%	41,611	41,617	6	0.0%
40.7%	41,610	41,092	-518	-1.2%
42.0%	41,219	40,702	-517	-1.3%
43.2%	38,034	38,047	13	0.0%
44.4%	35,495	36,105	610	1.7%
45.7%	35,237	32,524	-2,713	-7.7%
46.9%	34,512	31,517	-2,995	-8.7%
48.1%	33,506	31,132	-2,374	-7.1%
49.4%	32,686	30,468	-2,217	-6.8%
50.6%	32,167	29,312	-2,855	-8.9%
51.9%	32,084	27,818	-4,266	-13.3%
53.1%	31,168	27,461	-3,707	-11.9%
54.3%	29,753	27,092	-2,661	-8.9%
55.6%	28,335	24,147	-4,188	-14.8%
56.8%	25,522	23,059	-2,463	-9.7%
58.0%	25,464	22,861	-2,602	-10.2%
59.3%	24,060	22,379	-1,681	-7.0%
60.5%	23,819	21,438	-2,381	-10.0%
61.7%	23,460	20,290	-3,169	-13.5%
63.0%	22,922	19,255	-3,667	-16.0%
64.2%	22,906	19,174	-3,732	-16.3%
65.4%	21,162	18,803	-2,359	-11.1%
66.7%	20,964	18,508	-2,455	-11.7%
67.9%	20,429	18,229	-2,200	-10.8%
69.1%	19,423	18,193	-1,230	-6.3%
70.4%	19,173	18,092	-1,081	-5.6%
71.6%	18,694	18,024	-670	-3.6%
72.8%	17,750	17,719	-31	-0.2%
74.1%	17,495	16,869	-626	-3.6%
75.3%	16,863	16,428	-435	-2.6%
76.5%	16,840	14,840	-2,000	-11.9%
77.8%	16,490	13,721	-2,770	-16.8%
79.0%	15,424	13,632	-1,793	-11.6%
80.2%	15,122	13,599	-1,523	-10.1%
81.5%	14,530	13,484	-1,046	-7.2%
82.7%	14,411	13,245	-1,166	-8.1%
84.0%	14,401	13,117	-1,284	-8.9%
85.2%	14,380	12,995	-1,385	-9.6%
86.4%	14,354	12,940	-1,414	-9.8%
87.7%	14,312	12,930	-1,382	-9.7%
88.9%	14,251	12,335	-1,916	-13.4%
90.1%	13,176	12,130	-1,046	-7.9%
91.4%	12,722	11,951	-771	-6.1%
92.6%	12,277	11,951	-326	-2.7%
93.8%	11,738	11,935	197	1.7%
95.1%	11,718	11,560	-158	-1.3%
96.3%	11,536	11,557	21	0.2%
97.5%	8,895	11,430	2,535	28.5%
98.8%	7,762	9,391	1,629	21.0%
100.0%	6,704	8,427	1,723	25.7%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	74,597	74,618	21	0.0%
1.2%	71,652	70,973	-678	-0.9%
2.5%	66,830	66,013	-817	-1.2%
3.7%	63,320	62,355	-964	-1.5%
4.9%	61,548	61,475	-74	-0.1%
6.2%	61,473	60,704	-769	-1.3%
7.4%	59,822	59,007	-814	-1.4%
8.6%	57,333	57,118	-215	-0.4%
9.9%	57,049	57,041	-8	0.0%
11.1%	55,457	55,460	4	0.0%
12.3%	55,359	55,244	-115	-0.2%
13.6%	54,370	53,673	-697	-1.3%
14.8%	53,669	53,448	-221	-0.4%
16.0%	53,445	52,523	-921	-1.7%
17.3%	50,818	50,815	-3	0.0%
18.5%	49,762	49,763	1	0.0%
19.8%	48,967	49,120	153	0.3%
21.0%	48,341	47,730	-611	-1.3%
22.2%	48,340	46,763	-1,577	-3.3%
23.5%	46,919	45,221	-1,698	-3.6%
24.7%	45,828	44,984	-844	-1.8%
25.9%	43,400	43,385	-15	0.0%
27.2%	42,980	39,904	-3,076	-7.2%
28.4%	42,173	39,026	-3,147	-7.5%
29.6%	41,860	38,977	-2,883	-6.9%
30.9%	40,583	38,792	-1,791	-4.4%
32.1%	39,173	37,293	-1,880	-4.8%
33.3%	37,634	36,696	-937	-2.5%
34.6%	36,681	35,693	-988	-2.7%
35.8%	36,599	33,805	-2,793	-7.6%
37.0%	36,519	33,474	-3,046	-8.3%
38.3%	34,322	32,645	-1,677	-4.9%
39.5%	33,941	32,191	-1,750	-5.2%
40.7%	33,642	30,580	-3,063	-9.1%
42.0%	30,608	30,564	-45	-0.1%
43.2%	30,147	29,609	-538	-1.8%
44.4%	28,668	24,494	-4,174	-14.6%
45.7%	28,565	23,875	-4,690	-16.4%
46.9%	27,990	22,556	-5,434	-19.4%
48.1%	26,641	22,529	-4,112	-15.4%
49.4%	24,725	20,899	-3,826	-15.5%
50.6%	24,053	20,677	-3,376	-14.0%
51.9%	23,685	20,420	-3,265	-13.8%
53.1%	23,587	20,193	-3,394	-14.4%
54.3%	22,378	19,780	-2,598	-11.6%
55.6%	21,120	19,640	-1,480	-7.0%
56.8%	20,919	19,592	-1,328	-6.3%
58.0%	20,852	19,355	-1,497	-7.2%
59.3%	20,322	19,173	-1,149	-5.7%
60.5%	20,163	19,078	-1,084	-5.4%
61.7%	19,594	18,755	-839	-4.3%
63.0%	19,395	18,091	-1,304	-6.7%
64.2%	19,092	17,579	-1,513	-7.9%
65.4%	18,818	16,759	-2,059	-10.9%
66.7%	18,629	16,694	-1,936	-10.4%
67.9%	17,685	16,403	-1,282	-7.2%
69.1%	17,076	16,297	-779	-4.6%
70.4%	16,768	16,126	-642	-3.8%
71.6%	15,892	15,850	-41	-0.3%
72.8%	15,881	14,906	-975	-6.1%
74.1%	14,989	14,641	-348	-2.3%
75.3%	14,781	14,256	-525	-3.5%
76.5%	14,583	13,459	-1,124	-7.7%
77.8%	14,574	13,030	-1,544	-10.6%
79.0%	13,736	12,297	-1,439	-10.5%
80.2%	13,250	12,185	-1,065	-8.0%
81.5%	13,055	12,098	-957	-7.3%
82.7%	12,289	12,040	-248	-2.0%
84.0%	12,199	11,838	-361	-3.0%
85.2%	12,188	11,623	-565	-4.6%
86.4%	11,556	11,424	-132	-1.1%
87.7%	11,291	11,365	74	0.7%
88.9%	11,144	11,134	-11	-0.1%
90.1%	10,719	10,444	-274	-2.6%
91.4%	10,250	10,326	75	0.7%
92.6%	10,092	10,157	65	0.6%
93.8%	9,860	10,051	191	1.9%
95.1%	9,640	9,786	146	1.5%
96.3%	9,552	9,749	197	2.1%
97.5%	8,588	8,932	344	4.0%
98.8%	8,064	7,717	-347	-4.3%
100.0%	7,298	7,562	265	3.6%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,750	59,743	-7	0.0%
1.2%	57,794	57,257	-537	-0.9%
2.5%	57,344	57,140	-204	-0.4%
3.7%	47,482	45,563	-1,919	-4.0%
4.9%	45,568	44,995	-573	-1.3%
6.2%	43,804	43,776	-28	-0.1%
7.4%	41,877	41,812	-66	-0.2%
8.6%	41,177	40,746	-431	-1.0%
9.9%	38,836	38,678	-158	-0.4%
11.1%	37,510	37,531	22	0.1%
12.3%	32,716	29,737	-2,979	-9.1%
13.6%	27,847	28,148	301	1.1%
14.8%	27,828	27,808	-20	-0.1%
16.0%	24,854	23,072	-1,783	-7.2%
17.3%	24,626	22,747	-1,879	-7.6%
18.5%	24,286	21,657	-2,629	-10.8%
19.8%	21,976	20,526	-1,451	-6.6%
21.0%	21,262	19,649	-1,613	-7.6%
22.2%	21,154	19,315	-1,839	-8.7%
23.5%	19,752	18,743	-1,009	-5.1%
24.7%	18,739	18,525	-214	-1.1%
25.9%	18,711	17,791	-920	-4.9%
27.2%	16,615	17,206	591	3.6%
28.4%	16,256	16,262	5	0.0%
29.6%	15,630	16,120	489	3.1%
30.9%	15,287	15,443	156	1.0%
32.1%	15,027	14,319	-709	-4.7%
33.3%	14,461	14,047	-414	-2.9%
34.6%	14,414	13,918	-496	-3.4%
35.8%	14,119	13,758	-361	-2.6%
37.0%	13,748	13,696	-52	-0.4%
38.3%	13,630	13,511	-119	-0.9%
39.5%	13,422	13,425	3	0.0%
40.7%	13,341	13,366	25	0.2%
42.0%	12,956	13,098	142	1.1%
43.2%	12,776	13,031	255	2.0%
44.4%	12,325	12,387	62	0.5%
45.7%	12,309	12,339	30	0.2%
46.9%	12,278	12,194	-84	-0.7%
48.1%	12,180	11,687	-493	-4.0%
49.4%	11,852	11,616	-237	-2.0%
50.6%	11,825	11,328	-497	-4.2%
51.9%	11,779	11,292	-487	-4.1%
53.1%	11,384	11,045	-339	-3.0%
54.3%	11,382	10,975	-407	-3.6%
55.6%	10,774	10,513	-262	-2.4%
56.8%	10,327	10,486	159	1.5%
58.0%	10,263	10,473	210	2.0%
59.3%	10,000	10,463	463	4.6%
60.5%	9,979	10,203	224	2.2%
61.7%	9,877	10,195	318	3.2%
63.0%	9,869	9,992	124	1.3%
64.2%	9,503	9,933	430	4.5%
65.4%	9,439	9,788	349	3.7%
66.7%	9,237	9,691	454	4.9%
67.9%	9,213	9,353	140	1.5%
69.1%	9,146	9,319	174	1.9%
70.4%	9,125	9,284	159	1.7%
71.6%	9,059	9,268	210	2.3%
72.8%	9,036	9,174	138	1.5%
74.1%	8,976	9,144	168	1.9%
75.3%	8,929	8,945	16	0.2%
76.5%	8,829	8,928	99	1.1%
77.8%	8,773	8,910	138	1.6%
79.0%	8,597	8,853	256	3.0%
80.2%	8,590	8,822	232	2.7%
81.5%	8,449	8,698	249	2.9%
82.7%	8,447	8,446	-1	0.0%
84.0%	8,284	8,349	65	0.8%
85.2%	8,129	8,336	207	2.5%
86.4%	8,129	7,944	-185	-2.3%
87.7%	8,055	7,878	-177	-2.2%
88.9%	7,964	7,836	-128	-1.6%
90.1%	7,872	7,804	-68	-0.9%
91.4%	7,856	7,764	-92	-1.2%
92.6%	7,293	7,545	252	3.5%
93.8%	7,097	7,149	51	0.7%
95.1%	7,067	7,131	64	0.9%
96.3%	6,842	7,046	205	3.0%
97.5%	6,799	6,775	-24	-0.4%
98.8%	6,662	6,654	-8	-0.1%
100.0%	6,435	6,617	182	2.8%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	36,127	33,396	-2,731	-7.6%
1.2%	24,399	22,596	-1,803	-7.4%
2.5%	19,205	19,968	763	4.0%
3.7%	18,689	17,647	-1,042	-5.6%
4.9%	17,604	14,319	-3,284	-18.7%
6.2%	14,577	14,189	-388	-2.7%
7.4%	13,814	13,594	-220	-1.6%
8.6%	13,546	13,510	-36	-0.3%
9.9%	13,512	13,423	-89	-0.7%
11.1%	13,383	13,121	-263	-2.0%
12.3%	12,863	12,839	-24	-0.2%
13.6%	12,848	12,774	-74	-0.6%
14.8%	12,678	12,639	-39	-0.3%
16.0%	12,668	12,547	-121	-1.0%
17.3%	12,515	12,503	-12	-0.1%
18.5%	12,045	12,096	51	0.4%
19.8%	11,740	11,949	209	1.8%
21.0%	11,477	11,741	264	2.3%
22.2%	11,377	11,728	352	3.1%
23.5%	10,757	11,716	959	8.9%
24.7%	10,520	11,700	1,180	11.2%
25.9%	10,503	11,481	978	9.3%
27.2%	10,388	10,888	500	4.8%
28.4%	10,270	10,803	534	5.2%
29.6%	10,241	10,798	557	5.4%
30.9%	10,111	10,655	545	5.4%
32.1%	10,104	10,579	475	4.7%
33.3%	10,014	10,504	490	4.9%
34.6%	9,918	10,470	552	5.6%
35.8%	9,862	10,444	582	5.9%
37.0%	9,786	10,185	399	4.1%
38.3%	9,697	9,979	282	2.9%
39.5%	9,607	9,797	190	2.0%
40.7%	9,400	9,583	184	2.0%
42.0%	9,194	9,475	281	3.1%
43.2%	9,186	9,422	237	2.6%
44.4%	9,148	9,355	207	2.3%
45.7%	9,136	9,115	-21	-0.2%
46.9%	9,105	9,002	-103	-1.1%
48.1%	8,915	8,869	-45	-0.5%
49.4%	8,863	8,705	-159	-1.8%
50.6%	8,613	8,552	-61	-0.7%
51.9%	8,546	8,547	1	0.0%
53.1%	8,448	8,452	4	0.0%
54.3%	8,444	8,377	-68	-0.8%
55.6%	8,375	8,357	-18	-0.2%
56.8%	8,370	8,268	-102	-1.2%
58.0%	8,351	8,224	-127	-1.5%
59.3%	8,340	8,164	-176	-2.1%
60.5%	8,337	8,142	-195	-2.3%
61.7%	8,188	8,131	-56	-0.7%
63.0%	8,136	8,072	-65	-0.8%
64.2%	8,058	8,058	0	0.0%
65.4%	8,051	8,045	-6	-0.1%
66.7%	7,991	8,034	43	0.5%
67.9%	7,952	8,021	69	0.9%
69.1%	7,943	7,713	-230	-2.9%
70.4%	7,932	7,656	-276	-3.5%
71.6%	7,909	7,654	-256	-3.2%
72.8%	7,889	7,632	-257	-3.3%
74.1%	7,865	7,611	-254	-3.2%
75.3%	7,841	7,607	-234	-3.0%
76.5%	7,811	7,498	-313	-4.0%
77.8%	7,701	7,435	-267	-3.5%
79.0%	7,536	7,428	-108	-1.4%
80.2%	7,416	7,318	-98	-1.3%
81.5%	7,403	7,279	-124	-1.7%
82.7%	7,403	7,207	-195	-2.6%
84.0%	7,342	7,171	-171	-2.3%
85.2%	7,309	7,089	-220	-3.0%
86.4%	7,297	7,065	-232	-3.2%
87.7%	7,244	6,995	-249	-3.4%
88.9%	7,035	6,826	-209	-3.0%
90.1%	6,766	6,594	-172	-2.5%
91.4%	6,508	6,507	-1	0.0%
92.6%	6,101	6,228	127	2.1%
93.8%	5,928	5,800	-128	-2.2%
95.1%	5,788	5,558	-230	-4.0%
96.3%	5,771	5,526	-244	-4.2%
97.5%	5,714	5,440	-273	-4.8%
98.8%	5,511	5,163	-348	-6.3%
100.0%	4,752	4,733	-19	-0.4%

Table SW-16-b

Sacramento River at Verona, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,593	22,596	1,003	4.6%
1.2%	17,062	17,125	63	0.4%
2.5%	16,051	16,027	-25	-0.2%
3.7%	15,952	15,609	-344	-2.2%
4.9%	14,707	14,751	44	0.3%
6.2%	14,351	14,629	277	1.9%
7.4%	14,035	14,249	215	1.5%
8.6%	14,026	14,086	60	0.4%
9.9%	13,958	13,852	-106	-0.8%
11.1%	13,920	13,486	-434	-3.1%
12.3%	13,850	13,390	-461	-3.3%
13.6%	13,831	13,257	-574	-4.1%
14.8%	13,607	13,174	-433	-3.2%
16.0%	13,235	13,103	-132	-1.0%
17.3%	13,201	13,074	-127	-1.0%
18.5%	13,195	13,040	-155	-1.2%
19.8%	13,159	13,022	-136	-1.0%
21.0%	12,944	12,911	-33	-0.3%
22.2%	12,889	12,889	0	0.0%
23.5%	12,875	12,780	-95	-0.7%
24.7%	12,843	12,665	-178	-1.4%
25.9%	12,775	12,513	-262	-2.0%
27.2%	12,571	12,402	-168	-1.3%
28.4%	12,477	12,294	-183	-1.5%
29.6%	12,284	12,286	3	0.0%
30.9%	12,235	12,280	45	0.4%
32.1%	12,211	12,239	28	0.2%
33.3%	12,154	12,206	52	0.4%
34.6%	12,141	12,079	-61	-0.5%
35.8%	12,103	12,045	-57	-0.5%
37.0%	12,040	12,031	-9	-0.1%
38.3%	11,944	11,964	20	0.2%
39.5%	11,637	11,948	310	2.7%
40.7%	11,626	11,922	296	2.5%
42.0%	11,613	11,921	307	2.6%
43.2%	11,496	11,912	415	3.6%
44.4%	11,491	11,878	387	3.4%
45.7%	11,487	11,874	386	3.4%
46.9%	11,482	11,805	323	2.8%
48.1%	11,374	11,782	408	3.6%
49.4%	11,325	11,759	434	3.8%
50.6%	11,285	11,705	421	3.7%
51.9%	10,941	11,666	725	6.6%
53.1%	10,892	11,573	681	6.3%
54.3%	10,884	11,567	683	6.3%
55.6%	10,791	11,557	766	7.1%
56.8%	10,731	11,427	696	6.5%
58.0%	10,711	11,323	611	5.7%
59.3%	10,706	11,178	472	4.4%
60.5%	10,674	11,112	438	4.1%
61.7%	10,658	11,018	361	3.4%
63.0%	10,574	10,966	392	3.7%
64.2%	10,490	10,776	286	2.7%
65.4%	10,384	10,763	380	3.7%
66.7%	9,897	10,751	854	8.6%
67.9%	9,858	10,555	698	7.1%
69.1%	9,849	10,417	569	5.8%
70.4%	9,721	10,385	664	6.8%
71.6%	9,658	10,370	712	7.4%
72.8%	9,653	10,261	608	6.3%
74.1%	9,649	10,176	526	5.5%
75.3%	9,642	10,149	507	5.3%
76.5%	9,577	10,069	491	5.1%
77.8%	9,408	9,931	523	5.6%
79.0%	9,134	9,802	667	7.3%
80.2%	9,061	9,753	692	7.6%
81.5%	8,998	9,713	715	7.9%
82.7%	8,977	9,588	611	6.8%
84.0%	8,913	9,577	664	7.5%
85.2%	8,849	9,362	513	5.8%
86.4%	8,581	8,965	384	4.5%
87.7%	8,484	8,905	421	5.0%
88.9%	8,361	8,765	404	4.8%
90.1%	7,929	8,742	813	10.3%
91.4%	7,745	8,699	955	12.3%
92.6%	7,645	7,990	345	4.5%
93.8%	7,550	7,885	336	4.4%
95.1%	7,215	7,846	631	8.7%
96.3%	7,200	7,358	157	2.2%
97.5%	7,200	7,313	113	1.6%
98.8%	6,760	7,197	437	6.5%
100.0%	6,200	6,673	473	7.6%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,308	22,292	1,984	9.8%
1.2%	20,108	21,819	1,711	8.5%
2.5%	19,857	21,065	1,208	6.1%
3.7%	19,676	20,666	991	5.0%
4.9%	19,521	20,627	1,106	5.7%
6.2%	19,488	20,495	1,006	5.2%
7.4%	19,339	20,478	1,139	5.9%
8.6%	19,329	20,372	1,043	5.4%
9.9%	19,313	20,326	1,013	5.2%
11.1%	19,095	20,279	1,184	6.2%
12.3%	18,941	20,262	1,321	7.0%
13.6%	18,910	20,114	1,204	6.4%
14.8%	18,874	20,084	1,209	6.4%
16.0%	18,823	19,881	1,058	5.6%
17.3%	18,819	19,852	1,033	5.5%
18.5%	18,810	19,708	898	4.8%
19.8%	18,708	19,675	967	5.2%
21.0%	18,593	19,621	1,028	5.5%
22.2%	18,557	19,593	1,036	5.6%
23.5%	18,538	19,569	1,031	5.6%
24.7%	18,477	19,512	1,035	5.6%
25.9%	18,466	19,470	1,004	5.4%
27.2%	18,380	19,446	1,066	5.8%
28.4%	18,357	19,428	1,071	5.8%
29.6%	18,348	19,410	1,062	5.8%
30.9%	18,345	19,341	997	5.4%
32.1%	18,274	19,312	1,038	5.7%
33.3%	18,266	19,310	1,044	5.7%
34.6%	18,203	19,220	1,016	5.6%
35.8%	18,108	19,174	1,065	5.9%
37.0%	17,871	19,111	1,240	6.9%
38.3%	17,853	18,963	1,110	6.2%
39.5%	17,805	18,808	1,004	5.6%
40.7%	17,689	18,589	900	5.1%
42.0%	17,666	18,454	788	4.5%
43.2%	17,646	18,431	786	4.5%
44.4%	17,619	18,331	712	4.0%
45.7%	17,593	18,027	433	2.5%
46.9%	17,556	17,929	373	2.1%
48.1%	17,453	17,728	275	1.6%
49.4%	17,395	17,653	258	1.5%
50.6%	17,310	17,646	336	1.9%
51.9%	17,296	17,580	285	1.6%
53.1%	17,212	17,556	345	2.0%
54.3%	17,095	17,341	247	1.4%
55.6%	16,832	17,340	508	3.0%
56.8%	16,801	17,330	529	3.1%
58.0%	16,672	17,307	634	3.8%
59.3%	16,152	17,268	1,116	6.9%
60.5%	15,989	17,238	1,249	7.8%
61.7%	15,793	16,964	1,172	7.4%
63.0%	15,753	16,741	988	6.3%
64.2%	15,421	16,360	939	6.1%
65.4%	15,288	16,357	1,069	7.0%
66.7%	15,080	15,963	884	5.9%
67.9%	14,806	15,960	1,154	7.8%
69.1%	14,611	15,573	962	6.6%
70.4%	14,213	15,296	1,083	7.6%
71.6%	14,209	15,160	951	6.7%
72.8%	14,077	14,878	800	5.7%
74.1%	12,728	14,816	2,088	16.4%
75.3%	12,670	14,430	1,760	13.9%
76.5%	12,347	13,830	1,483	12.0%
77.8%	11,611	13,708	2,097	18.1%
79.0%	11,038	13,547	2,509	22.7%
80.2%	10,926	12,894	1,967	18.0%
81.5%	10,873	11,846	973	9.0%
82.7%	10,579	11,649	1,070	10.1%
84.0%	10,271	11,520	1,250	12.2%
85.2%	10,027	11,047	1,020	10.2%
86.4%	9,785	10,844	1,058	10.8%
87.7%	9,204	10,834	1,630	17.7%
88.9%	9,198	10,692	1,493	16.2%
90.1%	9,133	10,439	1,306	14.3%
91.4%	8,959	10,055	1,096	12.2%
92.6%	8,830	9,296	466	5.3%
93.8%	8,599	9,224	625	7.3%
95.1%	8,574	9,013	439	5.1%
96.3%	8,027	8,944	917	11.4%
97.5%	7,795	8,775	979	12.6%
98.8%	6,752	7,779	1,028	15.2%
100.0%	4,975	7,711	2,736	55.0%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	16,591	16,829	238	1.4%
1.2%	16,102	15,810	-292	-1.8%
2.5%	15,853	15,325	-528	-3.3%
3.7%	15,629	15,105	-524	-3.4%
4.9%	15,169	15,104	-64	-0.4%
6.2%	14,513	14,651	138	0.9%
7.4%	14,508	14,580	72	0.5%
8.6%	14,362	14,522	160	1.1%
9.9%	14,317	14,508	191	1.3%
11.1%	14,089	14,493	404	2.9%
12.3%	14,044	14,373	329	2.3%
13.6%	14,006	14,370	363	2.6%
14.8%	14,001	14,347	346	2.5%
16.0%	13,961	14,320	359	2.6%
17.3%	13,889	14,296	407	2.9%
18.5%	13,798	14,254	456	3.3%
19.8%	13,729	14,160	432	3.1%
21.0%	13,708	14,003	294	2.1%
22.2%	13,671	13,961	290	2.1%
23.5%	13,584	13,837	253	1.9%
24.7%	13,531	13,796	265	2.0%
25.9%	13,411	13,769	357	2.7%
27.2%	13,351	13,755	405	3.0%
28.4%	13,292	13,733	441	3.3%
29.6%	13,287	13,621	334	2.5%
30.9%	13,264	13,612	347	2.6%
32.1%	13,122	13,585	463	3.5%
33.3%	13,005	13,567	561	4.3%
34.6%	12,812	13,537	725	5.7%
35.8%	12,712	13,489	778	6.1%
37.0%	12,709	13,430	721	5.7%
38.3%	12,688	13,374	685	5.4%
39.5%	12,654	13,344	690	5.5%
40.7%	12,648	13,308	660	5.2%
42.0%	12,646	13,218	572	4.5%
43.2%	12,594	13,194	600	4.8%
44.4%	12,546	13,190	644	5.1%
45.7%	12,527	13,183	655	5.2%
46.9%	12,452	13,153	701	5.6%
48.1%	12,451	13,136	686	5.5%
49.4%	12,417	13,120	703	5.7%
50.6%	12,379	13,047	668	5.4%
51.9%	12,229	12,914	684	5.6%
53.1%	12,172	12,890	718	5.9%
54.3%	11,990	12,707	717	6.0%
55.6%	11,713	12,494	781	6.7%
56.8%	11,419	12,424	1,005	8.8%
58.0%	11,083	12,216	1,133	10.2%
59.3%	11,042	11,818	777	7.0%
60.5%	10,528	11,786	1,258	11.9%
61.7%	10,395	11,534	1,138	11.0%
63.0%	10,258	11,428	1,170	11.4%
64.2%	10,143	11,376	1,233	12.2%
65.4%	10,110	11,263	1,153	11.4%
66.7%	10,048	11,187	1,139	11.3%
67.9%	9,968	10,655	686	6.9%
69.1%	9,827	10,567	740	7.5%
70.4%	9,770	10,336	567	5.8%
71.6%	9,729	10,327	598	6.1%
72.8%	9,631	10,278	647	6.7%
74.1%	9,598	10,240	642	6.7%
75.3%	9,579	10,057	478	5.0%
76.5%	9,535	10,048	512	5.4%
77.8%	9,526	9,989	463	4.9%
79.0%	9,485	9,755	270	2.8%
80.2%	9,428	9,682	253	2.7%
81.5%	9,418	9,295	-123	-1.3%
82.7%	9,360	9,256	-105	-1.1%
84.0%	9,087	9,222	134	1.5%
85.2%	8,972	9,081	109	1.2%
86.4%	8,909	9,016	107	1.2%
87.7%	8,820	8,996	176	2.0%
88.9%	8,658	8,903	245	2.8%
90.1%	8,199	8,841	642	7.8%
91.4%	7,792	8,839	1,047	13.4%
92.6%	7,359	8,755	1,395	19.0%
93.8%	7,105	8,378	1,273	17.9%
95.1%	7,098	8,291	1,193	16.8%
96.3%	6,736	7,718	982	14.6%
97.5%	6,717	7,474	757	11.3%
98.8%	6,330	6,749	419	6.6%
100.0%	6,095	6,047	-48	-0.8%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	27,830	27,866	36	0.1%
1.2%	27,748	27,715	-33	-0.1%
2.5%	27,478	27,671	193	0.7%
3.7%	26,809	26,763	-46	-0.2%
4.9%	26,566	26,566	0	0.0%
6.2%	26,466	26,499	32	0.1%
7.4%	26,401	26,486	85	0.3%
8.6%	25,427	26,411	984	3.9%
9.9%	25,253	26,253	1,000	4.0%
11.1%	25,135	26,147	1,012	4.0%
12.3%	25,034	25,773	739	3.0%
13.6%	25,021	25,648	627	2.5%
14.8%	24,997	25,211	214	0.9%
16.0%	24,872	24,792	-80	-0.3%
17.3%	24,817	24,451	-366	-1.5%
18.5%	24,451	24,248	-202	-0.8%
19.8%	24,391	23,945	-446	-1.8%
21.0%	23,659	23,745	86	0.4%
22.2%	23,174	23,475	302	1.3%
23.5%	22,948	22,594	-354	-1.5%
24.7%	22,942	21,704	-1,238	-5.4%
25.9%	22,409	21,362	-1,047	-4.7%
27.2%	21,966	21,085	-881	-4.0%
28.4%	21,604	20,943	-660	-3.1%
29.6%	21,064	20,490	-573	-2.7%
30.9%	20,980	20,399	-581	-2.8%
32.1%	20,511	20,221	-289	-1.4%
33.3%	20,393	20,217	-176	-0.9%
34.6%	19,895	19,913	18	0.1%
35.8%	19,868	19,824	-44	-0.2%
37.0%	18,444	19,250	806	4.4%
38.3%	18,333	18,062	-271	-1.5%
39.5%	18,327	17,489	-838	-4.6%
40.7%	17,581	17,253	-328	-1.9%
42.0%	17,465	16,998	-467	-2.7%
43.2%	17,108	16,826	-282	-1.7%
44.4%	11,752	14,385	2,633	22.4%
45.7%	11,581	13,694	2,112	18.2%
46.9%	11,523	13,265	1,741	15.1%
48.1%	11,254	13,236	1,982	17.6%
49.4%	11,181	13,195	2,014	18.0%
50.6%	11,146	12,955	1,809	16.2%
51.9%	11,061	12,578	1,516	13.7%
53.1%	11,049	12,574	1,525	13.8%
54.3%	10,923	12,557	1,634	15.0%
55.6%	10,852	12,445	1,593	14.7%
56.8%	10,789	12,402	1,613	15.0%
58.0%	10,664	12,370	1,706	16.0%
59.3%	10,510	12,224	1,714	16.3%
60.5%	10,416	11,981	1,565	15.0%
61.7%	10,082	11,850	1,768	17.5%
63.0%	9,907	11,794	1,887	19.0%
64.2%	9,883	11,722	1,840	18.6%
65.4%	9,814	11,709	1,895	19.3%
66.7%	9,544	11,698	2,154	22.6%
67.9%	9,370	11,116	1,747	18.6%
69.1%	9,096	10,979	1,883	20.7%
70.4%	9,025	10,978	1,953	21.6%
71.6%	8,801	10,751	1,951	22.2%
72.8%	8,610	10,668	2,058	23.9%
74.1%	8,421	10,463	2,042	24.2%
75.3%	8,290	10,459	2,169	26.2%
76.5%	8,070	10,446	2,376	29.4%
77.8%	7,905	10,012	2,107	26.6%
79.0%	7,741	9,950	2,208	28.5%
80.2%	7,340	9,926	2,586	35.2%
81.5%	7,339	9,809	2,470	33.7%
82.7%	7,074	9,770	2,696	38.1%
84.0%	7,007	9,687	2,680	38.3%
85.2%	6,874	9,678	2,804	40.8%
86.4%	6,871	9,273	2,401	34.9%
87.7%	6,544	9,267	2,724	41.6%
88.9%	6,528	9,031	2,503	38.3%
90.1%	6,307	8,711	2,405	38.1%
91.4%	6,275	8,336	2,061	32.8%
92.6%	6,178	7,894	1,717	27.8%
93.8%	6,036	7,818	1,782	29.5%
95.1%	5,884	7,662	1,779	30.2%
96.3%	5,868	7,280	1,412	24.1%
97.5%	5,487	6,875	1,388	25.3%
98.8%	5,451	5,637	186	3.4%
100.0%	5,330	5,376	46	0.9%

Figure SW-17-b
Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

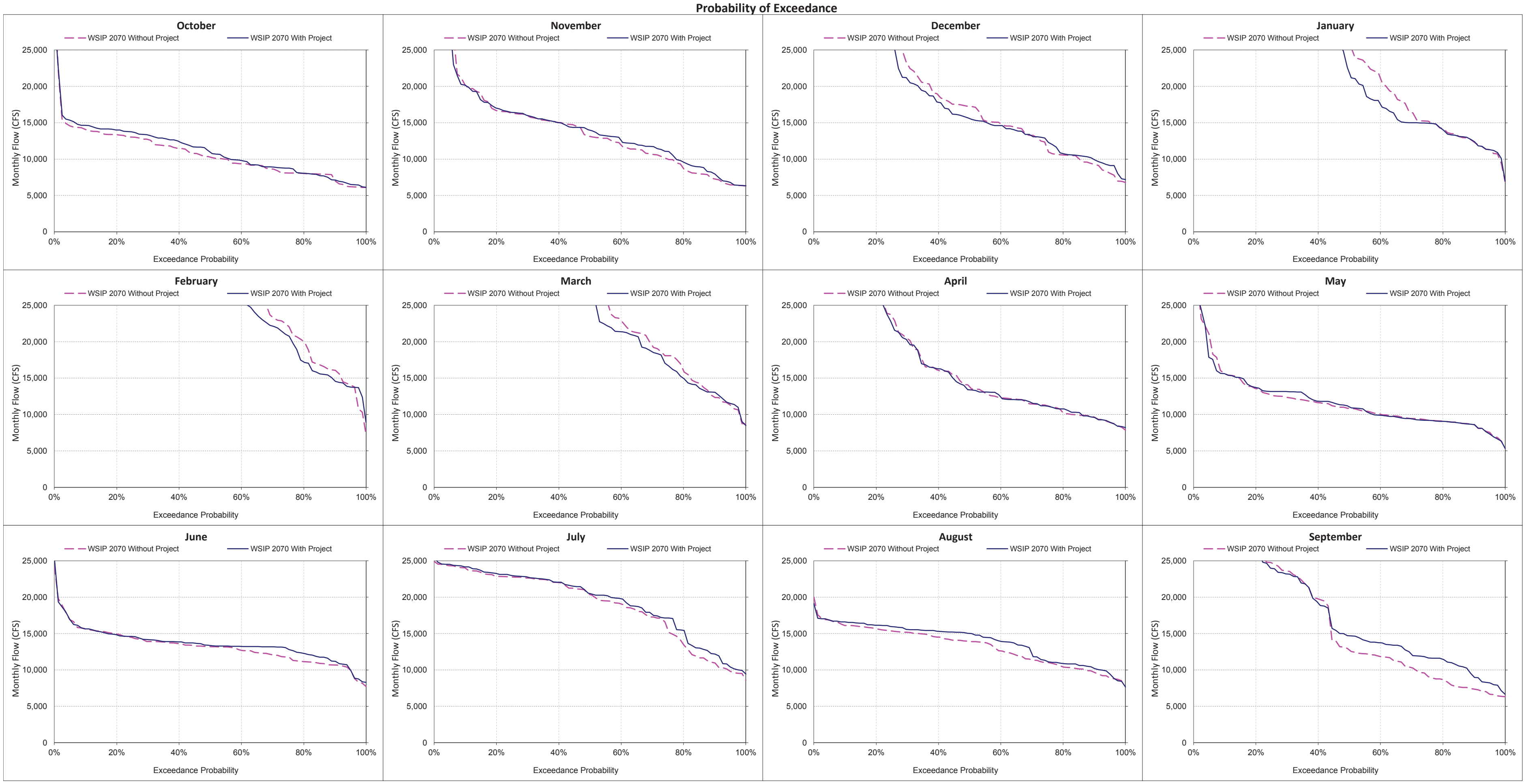


Table SW-17-b
Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,410	29,806	-3,604	-10.8%
1.2%	22,306	22,488	183	0.8%
2.5%	15,504	16,049	545	3.5%
3.7%	14,904	15,503	599	4.0%
4.9%	14,570	15,363	793	5.4%
6.2%	14,398	15,133	735	5.1%
7.4%	14,358	14,795	437	3.0%
8.6%	14,315	14,643	328	2.3%
9.9%	14,086	14,632	546	3.9%
11.1%	13,899	14,602	702	5.1%
12.3%	13,817	14,431	614	4.4%
13.6%	13,809	14,238	429	3.1%
14.8%	13,676	14,162	486	3.6%
16.0%	13,420	14,129	710	5.3%
17.3%	13,387	14,128	741	5.5%
18.5%	13,381	14,100	719	5.4%
19.8%	13,367	13,998	631	4.7%
21.0%	13,296	13,986	690	5.2%
22.2%	13,252	13,827	575	4.3%
23.5%	13,042	13,793	751	5.8%
24.7%	13,034	13,763	729	5.6%
25.9%	13,009	13,661	653	5.0%
27.2%	12,907	13,421	514	4.0%
28.4%	12,750	13,402	652	5.1%
29.6%	12,742	13,343	602	4.7%
30.9%	12,577	13,207	630	5.0%
32.1%	11,986	13,039	1,053	8.8%
33.3%	11,949	12,895	945	7.9%
34.6%	11,893	12,887	994	8.4%
35.8%	11,813	12,803	990	8.4%
37.0%	11,812	12,661	849	7.2%
38.3%	11,609	12,631	1,023	8.8%
39.5%	11,489	12,518	1,030	9.0%
40.7%	11,458	12,243	785	6.9%
42.0%	11,381	12,064	683	6.0%
43.2%	10,960	11,883	923	8.4%
44.4%	10,790	11,668	878	8.1%
45.7%	10,769	11,661	892	8.3%
46.9%	10,562	11,634	1,072	10.1%
48.1%	10,361	11,576	1,215	11.7%
49.4%	10,352	11,145	794	7.7%
50.6%	10,193	10,768	575	5.6%
51.9%	10,094	10,684	590	5.8%
53.1%	10,092	10,652	560	5.6%
54.3%	10,006	10,284	278	2.8%
55.6%	9,973	10,123	151	1.5%
56.8%	9,450	9,933	483	5.1%
58.0%	9,435	9,889	454	4.8%
59.3%	9,369	9,875	506	5.4%
60.5%	9,343	9,760	417	4.5%
61.7%	9,331	9,660	328	3.5%
63.0%	9,172	9,215	44	0.5%
64.2%	9,171	9,214	43	0.5%
65.4%	9,136	9,203	68	0.7%
66.7%	9,098	8,961	-136	-1.5%
67.9%	8,746	8,950	204	2.3%
69.1%	8,675	8,939	264	3.0%
70.4%	8,608	8,891	284	3.3%
71.6%	8,391	8,822	430	5.1%
72.8%	8,100	8,801	701	8.7%
74.1%	8,099	8,752	653	8.1%
75.3%	8,085	8,752	666	8.2%
76.5%	8,079	8,640	561	6.9%
77.8%	8,078	8,164	85	1.1%
79.0%	8,055	8,063	7	0.1%
80.2%	8,028	8,052	24	0.3%
81.5%	7,977	8,008	31	0.4%
82.7%	7,976	7,944	-32	-0.4%
84.0%	7,962	7,915	-48	-0.6%
85.2%	7,937	7,720	-217	-2.7%
86.4%	7,921	7,671	-250	-3.2%
87.7%	7,887	7,506	-381	-4.8%
88.9%	7,861	7,137	-724	-9.2%
90.1%	6,966	7,122	156	2.2%
91.4%	6,592	6,954	361	5.5%
92.6%	6,505	6,878	373	5.7%
93.8%	6,253	6,699	445	7.1%
95.1%	6,198	6,505	307	5.0%
96.3%	6,173	6,487	314	5.1%
97.5%	6,158	6,430	272	4.4%
98.8%	6,109	6,196	87	1.4%
100.0%	6,108	6,108	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,533	38,603	-5,930	-13.3%
1.2%	39,768	38,071	-1,696	-4.3%
2.5%	38,787	37,962	-825	-2.1%
3.7%	33,726	33,615	-111	-0.3%
4.9%	30,116	29,427	-688	-2.3%
6.2%	27,251	22,983	-4,267	-15.7%
7.4%	21,708	21,453	-254	-1.2%
8.6%	21,206	20,280	-926	-4.4%
9.9%	20,224	20,187	-37	-0.2%
11.1%	19,703	19,845	142	0.7%
12.3%	19,698	19,300	-398	-2.0%
13.6%	19,320	19,297	-23	-0.1%
14.8%	19,105	18,170	-935	-4.9%
16.0%	18,066	17,812	-255	-1.4%
17.3%	17,877	17,768	-109	-0.6%
18.5%	16,979	17,355	376	2.2%
19.8%	16,711	17,049	338	2.0%
21.0%	16,561	16,898	336	2.0%
22.2%	16,542	16,688	145	0.9%
23.5%	16,520	16,585	65	0.4%
24.7%	16,324	16,416	92	0.6%
25.9%	16,273	16,396	122	0.8%
27.2%	16,197	16,308	112	0.7%
28.4%	16,196	16,272	77	0.5%
29.6%	16,063	16,046	-17	-0.1%
30.9%	15,761	15,900	139	0.9%
32.1%	15,664	15,767	103	0.7%
33.3%	15,551	15,543	-8	-0.1%
34.6%	15,372	15,527	156	1.0%
35.8%	15,337	15,406	69	0.5%
37.0%	15,228	15,295	67	0.4%
38.3%	15,213	15,190	-22	-0.1%
39.5%	15,031	15,045	14	0.1%
40.7%	15,014	14,981	-33	-0.2%
42.0%	14,853	14,729	-124	-0.8%
43.2%	14,782	14,445	-336	-2.3%
44.4%	14,737	14,372	-365	-2.5%
45.7%	14,505	14,353	-151	-1.0%
46.9%	14,330	14,343	13	0.1%
48.1%	13,366	14,322	957	7.2%
49.4%	13,180	14,031	852	6.5%
50.6%	13,055	13,906	851	6.5%
51.9%	12,980	13,666	685	5.3%
53.1%	12,940	13,321	382	2.9%
54.3%	12,874	13,263	389	3.0%
55.6%	12,866	13,195	329	2.6%
56.8%	12,556	13,099	543	4.3%
58.0%	12,345	13,064	719	5.8%
59.3%	12,269	13,007	738	6.0%
60.5%	11,705	12,288	584	5.0%
61.7%	11,561	12,214	653	5.6%
63.0%	11,389	12,179	790	6.9%
64.2%	11,385	12,137	752	6.6%
65.4%	11,328	11,921	593	5.2%
66.7%	11,256	11,905	649	5.8%
67.9%	10,813	11,765	952	8.8%
69.1%	10,739	11,761	1,023	9.5%
70.4%	10,634	11,716	1,082	10.2%
71.6%	10,574	11,421	847	8.0%
72.8%	10,370	11,336	966	9.3%
74.1%	10,139	11,071	932	9.2%
75.3%	9,940	11,028	1,088	10.9%
76.5%	9,922	10,555	634	6.4%
77.8%	9,484	9,939	455	4.8%
79.0%	9,336	9,783	446	4.8%
80.2%	8,575	9,555	980	11.4%
81.5%	8,321	9,277	955	11.5%
82.7%	8,103	9,069	966	11.9%
84.0%	8,060	8,955	894	11.1%
85.2%	7,960	8,948	988	12.4%
86.4%	7,933	8,822	890	11.2%
87.7%	7,860	8,306	446	5.7%
88.9%	7,377	8,225	848	11.5%
90.1%	7,252	7,955	702	9.7%
91.4%	7,157	7,421	264	3.7%
92.6%	6,778	7,020	241	3.6%
93.8%	6,588	6,941	353	5.4%
95.1%	6,457	6,789	331	5.1%
96.3%	6,452	6,437	-15	-0.2%
97.5%	6,384	6,386	3	0.0%
98.8%	6,361	6,384	23	0.4%
100.0%	6,314	6,315	1	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,196	81,176	-20	0.0%
1.2%	78,525	78,279	-246	-0.3%
2.5%	73,595	73,262	-333	-0.5%
3.7%	70,488	70,077	-410	-0.6%
4.9%	67,004	66,695	-309	-0.5%
6.2%	62,836	61,662	-1,175	-1.9%
7.4%	60,931	56,264	-4,666	-7.7%
8.6%	56,510	55,305	-1,205	-2.1%
9.9%	55,196	54,746	-450	-0.8%
11.1%	54,593	53,728	-865	-1.6%
12.3%	43,867	43,524	-343	-0.8%
13.6%	43,847	42,891	-955	-2.2%
14.8%	38,544	37,563	-981	-2.5%
16.0%	38,067	35,307	-2,760	-7.3%
17.3%	36,965	32,736	-4,229	-11.4%
18.5%	34,576	32,700	-1,876	-5.4%
19.8%	33,974	30,332	-3,642	-10.7%
21.0%	32,640	29,453	-3,187	-9.8%
22.2%	32,088	28,911	-3,177	-9.9%
23.5%	28,930	27,902	-1,028	-3.6%
24.7%	28,861	27,679	-1,182	-4.1%
25.9%	26,999	25,204	-1,795	-6.6%
27.2%	25,715	22,471	-3,244	-12.6%
28.4%	24,942	21,250	-3,692	-14.8%
29.6%	23,359	21,191	-2,168	-9.3%
30.9%	22,445	20,486	-1,958	-8.7%
32.1%	22,092	20,344	-1,748	-7.9%
33.3%	21,367	20,113	-1,254	-5.9%
34.6%	20,585	19,461	-1,124	-5.5%
35.8%	20,437	19,274	-1,163	-5.7%
37.0%	20,322	18,700	-1,622	-8.0%
38.3%	19,121	18,683	-438	-2.3%
39.5%	18,994	17,871	-1,123	-5.9%
40.7%	18,413	17,742	-671	-3.6%
42.0%	18,165	17,015	-1,150	-6.3%
43.2%	17,933	16,899	-1,034	-5.8%
44.4%	17,548	16,177	-1,371	-7.8%
45.7%	17,538	16,153	-1,385	-7.9%
46.9%	17,476	16,037	-1,440	-8.2%
48.1%	17,362	15,862	-1,500	-8.6%
49.4%	17,259	15,678	-1,582	-9.2%
50.6%	17,235	15,474	-1,760	-10.2%
51.9%	17,130	15,307	-1,824	-10.6%
53.1%	16,499	15,260	-1,239	-7.5%
54.3%	15,376	15,205	-171	-1.1%
55.6%	15,171	15,015	-155	-1.0%
56.8%	15,120	14,753	-366	-2.4%
58.0%	15,077	14,619	-458	-3.0%
59.3%	15,069	14,603	-466	-3.1%
60.5%	14,670	14,595	-75	-0.5%
61.7%	14,551	14,179	-372	-2.6%
63.0%	14,544	14,167	-377	-2.6%
64.2%	14,428	14,049	-380	-2.6%
65.4%	14,276	13,875	-400	-2.8%
66.7%	14,198	13,820	-378	-2.7%
67.9%	13,454	13,392	-62	-0.5%
69.1%	13,258	13,383	124	0.9%
70.4%	13,258	13,070	-188	-1.4%
71.6%	12,946	13,063	117	0.9%
72.8%	12,488	13,006	518	4.1%
74.1%	12,357	12,914	557	4.5%
75.3%	10,969	12,292	1,323	12.1%
76.5%	10,742	12,008	1,266	11.8%
77.8%	10,645	11,658	1,013	9.5%
79.0%	10,609	10,868	259	2.4%
80.2%	10,568	10,711	143	1.4%
81.5%	10,539	10,599	60	0.6%
82.7%	10,500	10,584	84	0.8%
84.0%	10,488	10,533	46	0.4%
85.2%	10,005	10,474	469	4.7%
86.4%	9,602	10,416	814	8.5%
87.7%	9,587	10,340	754	7.9%
88.9%	9,407	10,201	795	8.4%
90.1%	9,263	9,888	626	6.8%
91.4%	9,129	9,653	524	5.7%
92.6%	8,503	9,478	975	11.5%
93.8%	8,345	9,242	897	10.7%
95.1%	8,045	9,119	1,074	13.4%
96.3%	7,792	9,099	1,307	16.8%
97.5%	6,967	8,014	1,047	15.0%
98.8%	6,939	7,288	349	5.0%
100.0%	6,782	7,190	408	6.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	81,299	81,092	-207	-0.3%
1.2%	80,473	80,408	-66	-0.1%
2.5%	79,509	79,721	213	0.3%
3.7%	77,859	77,835	-24	0.0%
4.9%	77,525	77,513	-12	0.0%
6.2%	76,582	76,552	-30	0.0%
7.4%	76,554	76,174	-380	-0.5%
8.6%	72,595	71,744	-851	-1.2%
9.9%	71,554	71,097	-458	-0.6%
11.1%	70,873	70,857	-16	0.0%
12.3%	70,683	70,783	100	0.1%
13.6%	69,335	69,251	-84	-0.1%
14.8%	69,321	67,910	-1,411	-2.0%
16.0%	68,303	67,375	-928	-1.4%
17.3%	67,725	66,365	-1,360	-2.0%
18.5%	66,202	65,618	-584	-0.9%
19.8%	63,570	63,620	49	0.1%
21.0%	63,010	63,172	162	0.3%
22.2%	62,916	61,015	-1,901	-3.0%
23.5%	60,531	59,903	-628	-1.0%
24.7%	60,146	59,270	-876	-1.5%
25.9%	58,780	57,677	-1,103	-1.9%
27.2%	54,654	53,086	-1,568	-2.9%
28.4%	50,404	50,292	-112	-0.2%
29.6%	46,449	45,252	-1,196	-2.6%
30.9%	45,078	44,755	-324	-0.7%
32.1%	44,147	44,396	249	0.6%
33.3%	43,499	42,363	-1,136	-2.6%
34.6%	37,887	34,817	-3,071	-8.1%
35.8%	36,618	34,407	-2,210	-6.0%
37.0%	36,527	34,265	-2,262	-6.2%
38.3%	35,438	33,678	-1,760	-5.0%
39.5%	35,146	31,654	-3,491	-9.9%
40.7%	35,132	31,646	-3,487	-9.9%
42.0%	34,335	31,327	-3,008	-8.8%
43.2%	33,195	30,142	-3,053	-9.2%
44.4%	31,988	30,079	-1,909	-6.0%
45.7%	30,705	26,549	-4,157	-13.5%
46.9%	29,332	25,914	-3,417	-11.7%
48.1%	29,035	24,823	-4,211	-14.5%
49.4%	25,888	22,599	-3,288	-12.7%
50.6%	25,329	21,167	-4,162	-16.4%
51.9%	23,925	21,076	-2,848	-11.9%
53.1%	23,784	20,325	-3,459	-14.5%
54.3%	23,613	20,131	-3,482	-14.7%
55.6%	23,065	18,607	-4,459	-19.3%
56.8%	22,368	18,274	-4,095	-18.3%
58.0%	22,116	18,072	-4,044	-18.3%
59.3%	21,910	18,057	-3,854	-17.6%
60.5%	20,507	17,138	-3,369	-16.4%
61.7%	20,019	16,978	-3,041	-15.2%
63.0%	19,361	16,556	-2,804	-14.5%
64.2%	19,159	16,347	-2,812	-14.7%
65.4%	18,195	15,420	-2,775	-15.3%
66.7%	17,972	15,108	-2,865	-15.9%
67.9%	17,667	15,020	-2,647	-15.0%
69.1%	16,526	15,016	-1,510	-9.1%
70.4%	16,346	15,011	-1,336	-8.2%
71.6%	15,392	14,997	-395	-2.6%
72.8%	15,274	14,969	-305	-2.0%
74.1%	15,241	14,968	-273	-1.8%
75.3%	15,213	14,917	-296	-1.9%
76.5%	14,886	14,890	5	0.0%
77.8%	14,818	14,821	3	0.0%
79.0%	14,296	14,347	50	0.4%
80.2%	14,176	13,959	-217	-1.5%
81.5%	13,645	13,436	-210	-1.5%
82.7%	13,491	13,327	-163	-1.2%
84.0%	13,488	13,293	-195	-1.4%
85.2%	13,115	13,103	-12	-0.1%
86.4%	12,944	13,065	120	0.9%
87.7%	12,915	13,004	89	0.7%
88.9%	12,704	12,725	21	0.2%
90.1%	12,311	12,398	87	0.7%
91.4%	11,928	11,818	-109	-0.9%
92.6%	11,721	11,765	44	0.4%
93.8%	11,356	11,367	11	0.1%
95.1%	11,300	11,295	-5	0.0%
96.3%	10,762	11,187	426	4.0%
97.5%	10,732	10,905	173	1.6%
98.8%	9,420	10,118	698	7.4%
100.0%	6,889	6,957	68	1.0%

Table SW-17-b

Sacramento River at Freeport, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	82,108	82,095	-13	0.0%
1.2%	82,073	82,046	-27	0.0%
2.5%	81,782	81,787	4	0.0%
3.7%	81,631	81,578	-53	-0.1%
4.9%	79,859	79,889	30	0.0%
6.2%	79,513	79,543	30	0.0%
7.4%	78,399	78,372	-27	0.0%
8.6%	76,988	77,100	113	0.1%
9.9%	76,479	76,551	72	0.1%
11.1%	75,287	74,949	-338	-0.4%
12.3%	74,720	74,735	15	0.0%
13.6%	74,341	74,124	-217	-0.3%
14.8%	73,623	73,679	56	0.1%
16.0%	73,433	73,426	-7	0.0%
17.3%	73,223	72,357	-866	-1.2%
18.5%	71,516	71,311	-205	-0.3%
19.8%	71,209	70,800	-409	-0.6%
21.0%	69,073	68,356	-717	-1.0%
22.2%	68,665	67,696	-970	-1.4%
23.5%	67,467	65,982	-1,484	-2.2%
24.7%	67,178	65,907	-1,271	-1.9%
25.9%	64,802	64,796	-6	0.0%
27.2%	64,618	64,384	-234	-0.4%
28.4%	64,608	63,453	-1,154	-1.8%
29.6%	63,831	62,806	-1,025	-1.6%
30.9%	57,254	56,295	-959	-1.7%
32.1%	56,899	55,320	-1,579	-2.8%
33.3%	53,947	53,893	-54	-0.1%
34.6%	53,190	53,254	64	0.1%
35.8%	52,593	52,312	-281	-0.5%
37.0%	51,690	51,406	-284	-0.5%
38.3%	51,380	51,277	-103	-0.2%
39.5%	51,203	49,559	-1,644	-3.2%
40.7%	49,645	48,510	-1,135	-2.3%
42.0%	49,590	46,106	-3,484	-7.0%
43.2%	48,636	45,601	-3,035	-6.2%
44.4%	46,451	45,444	-1,008	-2.2%
45.7%	44,431	44,598	167	0.4%
46.9%	43,988	44,444	456	1.0%
48.1%	42,690	43,592	902	2.1%
49.4%	41,146	39,329	-1,817	-4.4%
50.6%	37,820	35,324	-2,496	-6.6%
51.9%	36,874	34,260	-2,613	-7.1%
53.1%	35,825	33,576	-2,250	-6.3%
54.3%	34,288	29,468	-4,819	-14.1%
55.6%	32,817	29,145	-3,671	-11.2%
56.8%	32,223	28,037	-4,186	-13.0%
58.0%	30,191	27,730	-2,462	-8.2%
59.3%	29,046	25,358	-3,688	-12.7%
60.5%	28,088	25,290	-2,798	-10.0%
61.7%	27,185	25,071	-2,114	-7.8%
63.0%	26,514	24,761	-1,754	-6.6%
64.2%	26,495	24,062	-2,432	-9.2%
65.4%	25,659	23,486	-2,173	-8.5%
66.7%	25,536	23,047	-2,489	-9.7%
67.9%	25,115	22,638	-2,477	-9.9%
69.1%	23,704	22,258	-1,446	-6.1%
70.4%	23,235	22,100	-1,135	-4.9%
71.6%	22,956	21,895	-1,061	-4.6%
72.8%	22,880	21,485	-1,395	-6.1%
74.1%	22,535	21,045	-1,491	-6.6%
75.3%	22,041	20,757	-1,284	-5.8%
76.5%	20,905	19,770	-1,135	-5.4%
77.8%	20,676	18,924	-1,753	-8.5%
79.0%	20,345	17,475	-2,869	-14.1%
80.2%	19,966	17,156	-2,810	-14.1%
81.5%	18,882	17,055	-1,828	-9.7%
82.7%	17,205	16,012	-1,193	-6.9%
84.0%	17,009	15,842	-1,166	-6.9%
85.2%	16,818	15,576	-1,242	-7.4%
86.4%	16,591	15,514	-1,077	-6.5%
87.7%	16,276	15,427	-850	-5.2%
88.9%	16,143	15,079	-1,064	-6.6%
90.1%	16,075	14,540	-1,536	-9.6%
91.4%	15,586	14,399	-1,186	-7.6%
92.6%	14,485	14,324	-161	-1.1%
93.8%	14,270	13,886	-384	-2.7%
95.1%	14,047	13,758	-288	-2.1%
96.3%	13,786	13,715	-72	-0.5%
97.5%	10,789	13,699	2,910	27.0%
98.8%	10,318	12,367	2,049	19.9%
100.0%	7,199	8,922	1,723	23.9%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	79,996	79,983	-12	0.0%
1.2%	77,364	76,987	-378	-0.5%
2.5%	76,991	76,784	-208	-0.3%
3.7%	76,917	76,756	-161	-0.2%
4.9%	76,855	76,492	-363	-0.5%
6.2%	75,327	75,328	1	0.0%
7.4%	73,420	72,890	-530	-0.7%
8.6%	67,249	67,252	3	0.0%
9.9%	66,639	66,534	-105	-0.2%
11.1%	65,997	64,620	-1,377	-2.1%
12.3%	64,617	64,239	-378	-0.6%
13.6%	63,952	63,751	-201	-0.3%
14.8%	63,170	63,166	-3	0.0%
16.0%	63,022	63,025	3	0.0%
17.3%	60,801	59,311	-1,491	-2.5%
18.5%	59,017	59,169	152	0.3%
19.8%	58,718	58,719	1	0.0%
21.0%	58,396	58,391	-6	0.0%
22.2%	56,016	56,002	-14	0.0%
23.5%	55,419	54,824	-595	-1.1%
24.7%	55,137	53,230	-1,907	-3.5%
25.9%	52,385	49,867	-2,517	-4.8%
27.2%	52,046	49,376	-2,669	-5.1%
28.4%	50,478	48,807	-1,671	-3.3%
29.6%	50,473	47,060	-3,413	-6.8%
30.9%	48,936	46,261	-2,675	-5.5%
32.1%	47,490	46,168	-1,322	-2.8%
33.3%	45,908	43,674	-2,234	-4.9%
34.6%	44,368	42,576	-1,793	-4.0%
35.8%	44,173	42,021	-2,152	-4.9%
37.0%	43,577	41,008	-2,569	-5.9%
38.3%	42,912	39,178	-3,734	-8.7%
39.5%	38,819	38,651	-168	-0.4%
40.7%	38,520	38,004	-517	-1.3%
42.0%	35,465	34,929	-536	-1.5%
43.2%	35,346	33,377	-1,969	-5.6%
44.4%	34,384	30,862	-3,521	-10.2%
45.7%	33,772	30,713	-3,060	-9.1%
46.9%	33,422	30,312	-3,110	-9.3%
48.1%	32,765	27,331	-5,433	-16.6%
49.4%	30,843	26,731	-4,112	-13.3%
50.6%	28,014	26,218	-1,795	-6.4%
51.9%	27,012	25,228	-1,784	-6.6%
53.1%	26,791	22,739	-4,052	-15.1%
54.3%	26,728	22,493	-4,234	-15.8%
55.6%	25,474	22,195	-3,279	-12.9%
56.8%	23,772	21,943	-1,829	-7.7%
58.0%	23,329	21,450	-1,880	-8.1%
59.3%	23,223	21,385	-1,838	-7.9%
60.5%	22,662	21,371	-1,292	-5.7%
61.7%	22,024	21,248	-776	-3.5%
63.0%	21,490	21,005	-485	-2.3%
64.2%	21,327	20,874	-453	-2.1%
65.4%	21,218	20,668	-550	-2.6%
66.7%	21,122	19,273	-1,850	-8.8%
67.9%	20,888	19,124	-1,764	-8.4%
69.1%	19,986	18,833	-1,152	-5.8%
70.4%	19,217	18,501	-716	-3.7%
71.6%	19,051	18,355	-696	-3.7%
72.8%	18,615	18,192	-423	-2.3%
74.1%	18,085	17,060	-1,025	-5.7%
75.3%	18,084	16,663	-1,421	-7.9%
76.5%	18,080	16,181	-1,899	-10.5%
77.8%	17,581	15,909	-1,672	-9.5%
79.0%	16,992	15,269	-1,723	-10.1%
80.2%	15,833	14,926	-908	-5.7%
81.5%	15,489	14,351	-1,137	-7.3%
82.7%	14,707	14,147	-560	-3.8%
84.0%	14,453	14,098	-355	-2.5%
85.2%	14,287	13,595	-692	-4.8%
86.4%	13,735	13,325	-410	-3.0%
87.7%	13,345	13,104	-241	-1.8%
88.9%	12,654	13,088	433	3.4%
90.1%	12,338	13,057	719	5.8%
91.4%	12,322	12,630	308	2.5%
92.6%	11,737	12,150	413	3.5%
93.8%	11,643	11,707	64	0.5%
95.1%	11,282	11,517	234	2.1%
96.3%	10,780	11,365	584	5.4%
97.5%	10,643	10,987	344	3.2%
98.8%	8,752	9,016	264	3.0%
100.0%	8,684	8,498	-186	-2.1%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	78,071	77,978	-93	-0.1%
1.2%	77,807	77,799	-8	0.0%
2.5%	69,486	69,002	-484	-0.7%
3.7%	55,157	54,729	-428	-0.8%
4.9%	53,520	53,516	-5	0.0%
6.2%	52,111	51,956	-155	-0.3%
7.4%	51,288	51,222	-66	-0.1%
8.6%	51,122	49,588	-1,534	-3.0%
9.9%	49,616	48,635	-981	-2.0%
11.1%	48,426	48,448	22	0.0%
12.3%	40,423	37,444	-2,979	-7.4%
13.6%	32,755	32,132	-624	-1.9%
14.8%	31,838	31,201	-637	-2.0%
16.0%	31,303	29,196	-2,108	-6.7%
17.3%	30,903	28,854	-2,049	-6.6%
18.5%	28,874	28,275	-599	-2.1%
19.8%	27,889	26,050	-1,839	-6.6%
21.0%	26,483	25,285	-1,198	-4.5%
22.2%	25,471	25,032	-439	-1.7%
23.5%	23,906	23,742	-164	-0.7%
24.7%	23,740	22,819	-921	-3.9%
25.9%	22,922	21,588	-1,334	-5.8%
27.2%	21,308	21,314	5	0.0%
28.4%	20,996	20,575	-422	-2.0%
29.6%	20,558	20,327	-231	-1.1%
30.9%	20,171	19,578	-593	-2.9%
32.1%	19,002	19,531	529	2.8%
33.3%	18,893	18,832	-61	-0.3%
34.6%	17,685	16,987	-698	-3.9%
35.8%	16,547	16,848	301	1.8%
37.0%	16,500	16,520	20	0.1%
38.3%	16,493	16,453	-40	-0.2%
39.5%	16,147	16,288	141	0.9%
40.7%	15,951	16,265	314	2.0%
42.0%	15,947	16,016	69	0.4%
43.2%	15,938	15,839	-99	-0.6%
44.4%	15,485	15,087	-398	-2.6%
45.7%	15,390	14,516	-874	-5.7%
46.9%	14,627	14,222	-406	-2.8%
48.1%	14,119	14,003	-116	-0.8%
49.4%	14,087	13,405	-683	-4.8%
50.6%	13,507	13,373	-133	-1.0%
51.9%	13,483	13,288	-194	-1.4%
53.1%	13,457	13,090	-368	-2.7%
54.3%	13,147	13,089	-58	-0.4%
55.6%	12,779	13,086	308	2.4%
56.8%	12,593	13,064	471	3.7%
58.0%	12,518	13,061	543	4.3%
59.3%	12,344	12,727	384	3.1%
60.5%	12,274	12,154	-120	-1.0%
61.7%	12,237	12,108	-130	-1.1%
63.0%	12,165	12,057	-108	-0.9%
64.2%	12,154	12,043	-111	-0.9%
65.4%	12,072	12,033	-40	-0.3%
66.7%	12,043	12,011	-32	-0.3%
67.9%	11,788	11,962	174	1.5%
69.1%	11,476	11,763	287	2.5%
70.4%	11,440	11,512	72	0.6%
71.6%	11,395	11,470	75	0.7%
72.8%	11,319	11,216	-103	-0.9%
74.1%	11,308	11,193	-115	-1.0%
75.3%	11,157	11,123	-35	-0.3%
76.5%	10,999	10,984	-15	-0.1%
77.8%	10,955	10,823	-132	-1.2%
79.0%	10,718	10,767	49	0.5%
80.2%	10,108	10,764	657	6.5%
81.5%	10,099	10,550	451	4.5%
82.7%	9,998	10,312	314	3.1%
84.0%	9,972	10,306	334	3.3%
85.2%	9,887	10,289	401	4.1%
86.4%	9,878	9,814	-64	-0.7%
87.7%	9,853	9,813	-40	-0.4%
88.9%	9,815	9,665	-150	-1.5%
90.1%	9,610	9,610	0	0.0%
91.4%	9,331	9,267	-65	-0.7%
92.6%	9,318	9,265	-53	-0.6%
93.8%	9,095	9,168	73	0.8%
95.1%	8,908	8,908	0	0.0%
96.3%	8,739	8,687	-52	-0.6%
97.5%	8,492	8,398	-94	-1.1%
98.8%	8,244	8,348	104	1.3%
100.0%	7,862	8,206	344	4.4%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	40,509	37,778	-2,731	-6.7%
1.2%	28,375	26,571	-1,803	-6.4%
2.5%	23,126	24,405	1,279	5.5%
3.7%	22,188	22,231	43	0.2%
4.9%	21,082	17,855	-3,228	-15.3%
6.2%	18,280	17,593	-687	-3.8%
7.4%	17,852	16,009	-1,844	-10.3%
8.6%	16,050	15,660	-391	-2.4%
9.9%	15,623	15,621	-2	0.0%
11.1%	15,400	15,400	0	0.0%
12.3%	15,354	15,353	-1	0.0%
13.6%	15,275	15,112	-163	-1.1%
14.8%	14,964	15,102	138	0.9%
16.0%	14,270	14,894	624	4.4%
17.3%	13,875	14,170	295	2.1%
18.5%	13,860	13,875	16	0.1%
19.8%	13,580	13,744	163	1.2%
21.0%	13,496	13,607	111	0.8%
22.2%	13,031	13,262	232	1.8%
23.5%	12,894	13,183	288	2.2%
24.7%	12,744	13,171	427	3.4%
25.9%	12,562	13,171	609	4.8%
27.2%	12,527	13,170	643	5.1%
28.4%	12,512	13,161	649	5.2%
29.6%	12,378	13,148	769	6.2%
30.9%	12,289	13,136	847	6.9%
32.1%	12,214	13,129	915	7.5%
33.3%	12,054	13,103	1,050	8.7%
34.6%	12,048	13,102	1,053	8.7%
35.8%	11,949	12,715	767	6.4%
37.0%	11,841	12,301	460	3.9%
38.3%	11,817	12,035	217	1.8%
39.5%	11,658	11,841	183	1.6%
40.7%	11,603	11,815	212	1.8%
42.0%	11,513	11,807	294	2.6%
43.2%	11,498	11,796	299	2.6%
44.4%	11,209	11,651	443	4.0%
45.7%	11,095	11,493	397	3.6%
46.9%	11,012	11,341	330	3.0%
48.1%	11,000	11,296	295	2.7%
49.4%	10,851	11,203	353	3.2%
50.6%	10,841	10,905	64	0.6%
51.9%	10,779	10,861	82	0.8%
53.1%	10,632	10,840	208	2.0%
54.3%	10,472	10,778	306	2.9%
55.6%	10,466	10,394	-72	-0.7%
56.8%	10,346	10,118	-227	-2.2%
58.0%	10,176	9,965	-212	-2.1%
59.3%	10,134	9,914	-220	-2.2%
60.5%	9,959	9,871	-87	-0.9%
61.7%	9,955	9,803	-152	-1.5%
63.0%	9,860	9,723	-137	-1.4%
64.2%	9,801	9,720	-81	-0.8%
65.4%	9,792	9,647	-146	-1.5%
66.7%	9,647	9,521	-126	-1.3%
67.9%	9,565	9,440	-125	-1.3%
69.1%	9,463	9,437	-26	-0.3%
70.4%	9,440	9,379	-61	-0.6%
71.6%	9,437	9,266	-171	-1.8%
72.8%	9,377	9,250	-127	-1.4%
74.1%	9,313	9,214	-100	-1.1%
75.3%	9,206	9,214	8	0.1%
76.5%	9,194	9,163	-30	-0.3%
77.8%	9,133	9,095	-38	-0.4%
79.0%	9,126	9,073	-53	-0.6%
80.2%	9,071	9,050	-21	-0.2%
81.5%	9,019	9,026	8	0.1%
82.7%	8,966	8,966	0	0.0%
84.0%	8,966	8,932	-34	-0.4%
85.2%	8,848	8,850	2	0.0%
86.4%	8,754	8,757	4	0.0%
87.7%	8,751	8,707	-45	-0.5%
88.9%	8,693	8,665	-28	-0.3%
90.1%	8,623	8,603	-20	-0.2%
91.4%	8,097	8,119	22	0.3%
92.6%	8,079	8,084	5	0.1%
93.8%	7,684	7,640	-44	-0.6%
95.1%	7,542	7,321	-221	-2.9%
96.3%	6,922	6,923	2	0.0%
97.5%	6,852	6,622	-230	-3.4%
98.8%	6,328	6,363	35	0.5%
100.0%	5,374	5,355	-19	-0.4%

Table SW-17-b

Sacramento River at Freeport, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,345	25,349	1,003	4.1%
1.2%	19,823	19,349	-474	-2.4%
2.5%	18,902	18,641	-261	-1.4%
3.7%	17,877	17,941	64	0.4%
4.9%	16,914	16,959	45	0.3%
6.2%	16,638	16,252	-387	-2.3%
7.4%	15,821	16,143	322	2.0%
8.6%	15,775	15,774	-1	0.0%
9.9%	15,636	15,652	15	0.1%
11.1%	15,523	15,628	105	0.7%
12.3%	15,449	15,502	53	0.3%
13.6%	15,371	15,322	-49	-0.3%
14.8%	15,313	15,246	-67	-0.4%
16.0%	15,259	15,095	-164	-1.1%
17.3%	15,128	14,945	-183	-1.2%
18.5%	15,040	14,934	-106	-0.7%
19.8%	14,945	14,853	-92	-0.6%
21.0%	14,846	14,657	-188	-1.3%
22.2%	14,638	14,632	-6	0.0%
23.5%	14,561	14,612	51	0.3%
24.7%	14,490	14,593	103	0.7%
25.9%	14,303	14,576	273	1.9%
27.2%	14,226	14,395	169	1.2%
28.4%	14,153	14,197	44	0.3%
29.6%	13,898	14,159	261	1.9%
30.9%	13,897	14,124	228	1.6%
32.1%	13,888	14,099	211	1.5%
33.3%	13,885	14,051	165	1.2%
34.6%	13,850	13,929	79	0.6%
35.8%	13,818	13,898	80	0.6%
37.0%	13,717	13,888	170	1.2%
38.3%	13,708	13,875	168	1.2%
39.5%	13,630	13,865	234	1.7%
40.7%	13,593	13,844	251	1.8%
42.0%	13,417	13,717	300	2.2%
43.2%	13,416	13,714	297	2.2%
44.4%	13,377	13,706	329	2.5%
45.7%	13,284	13,642	358	2.7%
46.9%	13,278	13,603	324	2.4%
48.1%	13,233	13,416	183	1.4%
49.4%	13,191	13,377	186	1.4%
50.6%	13,189	13,306	116	0.9%
51.9%	13,180	13,292	112	0.9%
53.1%	13,158	13,284	126	1.0%
54.3%	13,155	13,279	124	0.9%
55.6%	13,153	13,278	125	1.0%
56.8%	13,086	13,239	153	1.2%
58.0%	12,976	13,234	259	2.0%
59.3%	12,769	13,233	464	3.6%
60.5%	12,657	13,215	558	4.4%
61.7%	12,636	13,213	577	4.6%
63.0%	12,628	13,211	584	4.6%
64.2%	12,411	13,202	791	6.4%
65.4%	12,361	13,200	839	6.8%
66.7%	12,291	13,189	898	7.3%
67.9%	12,276	13,185	908	7.4%
69.1%	12,146	13,168	1,021	8.4%
70.4%	12,036	13,165	1,130	9.4%
71.6%	12,006	13,155	1,149	9.6%
72.8%	11,833	13,153	1,320	11.2%
74.1%	11,787	13,086	1,299	11.0%
75.3%	11,744	12,772	1,029	8.8%
76.5%	11,303	12,628	1,325	11.7%
77.8%	11,243	12,411	1,168	10.4%
79.0%	11,174	12,356	1,182	10.6%
80.2%	11,132	12,257	1,124	10.1%
81.5%	11,100	12,114	1,015	9.1%
82.7%	11,066	12,047	980	8.9%
84.0%	10,994	11,860	866	7.9%
85.2%	10,893	11,743	851	7.8%
86.4%	10,862	11,740	878	8.1%
87.7%	10,705	11,599	894	8.4%
88.9%	10,687	11,226	539	5.0%
90.1%	10,679	11,174	496	4.6%
91.4%	10,649	10,862	213	2.0%
92.6%	10,522	10,780	258	2.5%
93.8%	10,388	10,705	317	3.0%
95.1%	9,924	9,924	0	0.0%
96.3%	8,805	8,850	46	0.5%
97.5%	8,317	8,739	422	5.1%
98.8%	8,174	8,362	188	2.3%
100.0%	7,714	8,300	586	7.6%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,915	25,476	560	2.2%
1.2%	24,536	24,795	259	1.1%
2.5%	24,515	24,546	31	0.1%
3.7%	24,407	24,536	129	0.5%
4.9%	24,323	24,515	192	0.8%
6.2%	24,315	24,362	47	0.2%
7.4%	24,136	24,358	222	0.9%
8.6%	24,069	24,318	250	1.0%
9.9%	24,035	24,155	120	0.5%
11.1%	23,650	24,148	499	2.1%
12.3%	23,614	23,925	310	1.3%
13.6%	23,602	23,876	274	1.2%
14.8%	23,439	23,704	266	1.1%
16.0%	23,200	23,457	257	1.1%
17.3%	23,135	23,400	264	1.1%
18.5%	23,111	23,345	234	1.0%
19.8%	22,867	23,280	414	1.8%
21.0%	22,852	23,146	293	1.3%
22.2%	22,837	23,114	277	1.2%
23.5%	22,812	23,112	300	1.3%
24.7%	22,796	22,995	199	0.9%
25.9%	22,759	22,930	171	0.8%
27.2%	22,749	22,867	118	0.5%
28.4%	22,745	22,859	115	0.5%
29.6%	22,626	22,814	187	0.8%
30.9%	22,626	22,649	23	0.1%
32.1%	22,528	22,620	92	0.4%
33.3%	22,451	22,544	93	0.4%
34.6%	22,435	22,523	88	0.4%
35.8%	22,416	22,461	45	0.2%
37.0%	22,283	22,364	81	0.4%
38.3%	22,050	22,078	28	0.1%
39.5%	22,038	22,077	39	0.2%
40.7%	21,969	22,053	84	0.4%
42.0%	21,643	21,742	99	0.5%
43.2%	21,252	21,631	380	1.8%
44.4%	21,233	21,520	287	1.3%
45.7%	21,139	21,464	325	1.5%
46.9%	21,098	21,459	361	1.7%
48.1%	21,012	21,075	63	0.3%
49.4%	20,451	20,565	114	0.6%
50.6%	20,273	20,409	136	0.7%
51.9%	19,898	20,274	377	1.9%
53.1%	19,570	20,261	691	3.5%
54.3%	19,511	20,261	750	3.8%
55.6%	19,482	20,210	728	3.7%
56.8%	19,447	19,942	495	2.5%
58.0%	19,209	19,866	657	3.4%
59.3%	19,180	19,838	658	3.4%
60.5%	18,999	19,736	737	3.9%
61.7%	18,584	19,213	629	3.4%
63.0%	18,544	18,801	257	1.4%
64.2%	18,362	18,768	407	2.2%
65.4%	18,035	18,704	669	3.7%
66.7%	17,995	18,529	534	3.0%
67.9%	17,584	17,933	348	2.0%
69.1%	17,274	17,925	651	3.8%
70.4%	17,271	17,502	231	1.3%
71.6%	17,132	17,418	286	1.7%
72.8%	17,103	17,212	109	0.6%
74.1%	16,579	17,150	572	3.4%
75.3%	15,148	17,119	1,971	13.0%
76.5%	14,909	17,082	2,174	14.6%
77.8%	14,634	15,540	907	6.2%
79.0%	14,113	15,496	1,384	9.8%
80.2%	13,365	15,440	2,076	15.5%
81.5%	12,786	13,640	854	6.7%
82.7%	12,092	13,346	1,254	10.4%
84.0%	11,914	13,025	1,111	9.3%
85.2%	11,648	12,989	1,341	11.5%
86.4%	11,648	12,834	1,186	10.2%
87.7%	11,265	12,674	1,409	12.5%
88.9%	11,062	12,243	1,181	10.7%
90.1%	10,946	12,183	1,237	11.3%
91.4%	10,322	11,930	1,608	15.6%
92.6%	10,293	10,850	557	5.4%
93.8%	10,133	10,808	674	6.7%
95.1%	9,792	10,402	610	6.2%
96.3%	9,601	10,158	557	5.8%
97.5%	9,542	10,006	464	4.9%
98.8%	9,512	9,940	428	4.5%
100.0%	8,586	9,419	833	9.7%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,019	19,127	-892	-4.5%
1.2%	17,568	17,099	-469	-2.7%
2.5%	17,099	17,044	-55	-0.3%
3.7%	16,918	17,030	111	0.7%
4.9%	16,866	16,866	0	0.0%
6.2%	16,647	16,723	76	0.5%
7.4%	16,616	16,707	90	0.5%
8.6%	16,321	16,617	296	1.8%
9.9%	16,106	16,610	503	3.1%
11.1%	16,104	16,538	434	2.7%
12.3%	16,099	16,537	439	2.7%
13.6%	16,028	16,462	434	2.7%
14.8%	15,965	16,438	474	3.0%
16.0%	15,916	16,427	511	3.2%
17.3%	15,844	16,213	370	2.3%
18.5%	15,788	16,207	418	2.6%
19.8%	15,708	16,126	417	2.7%
21.0%	15,575	16,120	545	3.5%
22.2%	15,482	16,104	622	4.0%
23.5%	15,438	16,100	662	4.3%
24.7%	15,370	15,965	595	3.9%
25.9%	15,296	15,916	620	4.1%
27.2%	15,237	15,853	617	4.0%
28.4%	15,186	15,826	640	4.2%
29.6%	15,180	15,563	383	2.5%
30.9%	15,148	15,537	389	2.6%
32.1%	15,027	15,534	508	3.4%
33.3%	15,017	15,527	509	3.4%
34.6%	14,959	15,455	496	3.3%
35.8%	14,923	15,424	501	3.4%
37.0%	14,791	15,420	629	4.3%
38.3%	14,589	15,418	829	5.7%
39.5%	14,509	15,321	812	5.6%
40.7%	14,499	15,277	778	5.4%
42.0%	14,278	15,237	959	6.7%
43.2%	14,217	15,208	992	7.0%
44.4%	14,096	15,204	1,108	7.9%
45.7%	14,087	15,186	1,099	7.8%
46.9%	14,068	15,172	1,104	7.8%
48.1%	13,982	15,148	1,166	8.3%
49.4%	13,951	15,026	1,075	7.7%
50.6%	13,891	14,994	1,103	7.9%
51.9%	13,888	14,785	897	6.5%
53.1%	13,839	14,768	929	6.7%
54.3%	13,802	14,506	704	5.1%
55.6%	13,696	14,453	756	5.5%
56.8%	13,478	14,421	943	7.0%
58.0%	13,043	14,183	1,139	8.7%
59.3%	12,637	13,993	1,356	10.7%
60.5%	12,587	13,888	1,302	10.3%
61.7%	12,399	13,871	1,473	11.9%
63.0%	12,335	13,836	1,501	12.2%
64.2%	12,154	13,695	1,542	12.7%
65.4%	11,943	13,437	1,493	12.5%
66.7%	11,878	13,402	1,524	12.8%
67.9%	11,529	13,241	1,712	14.8%
69.1%	11,492	13,056	1,564	13.6%
70.4%	11,338	11,811	473	4.2%
71.6%	11,314	11,795	481	4.3%
72.8%	11,125	11,433	307	2.8%
74.1%	11,017	11,305	288	2.6%
75.3%	11,008	11,095	87	0.8%
76.5%	10,895	11,051	155	1.4%
77.8%	10,752	11,043	291	2.7%
79.0%	10,547	10,917	370	3.5%
80.2%	10,373	10,843	470	4.5%
81.5%	10,341	10,832	492	4.8%
82.7%	10,312	10,828	516	5.0%
84.0%	10,206	10,820	614	6.0%
85.2%	10,130	10,623	493	4.9%
86.4%	10,119	10,595	476	4.7%
87.7%	9,897	10,497	600	6.1%
88.9%	9,880	10,426	547	5.5%
90.1%	9,643	10,171	528	5.5%
91.4%	9,411	10,046	636	6.8%
92.6%	9,217	9,978	760	8.2%
93.8%	9,192	9,874	682	7.4%
95.1%	8,876	9,401	525	5.9%
96.3%	8,793	8,809	16	0.2%
97.5%	8,694	8,491	-203	-2.3%
98.8%	8,502	8,415	-87	-1.0%
100.0%	8,412	7,637	-774	-9.2%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	31,999	31,963	-35	-0.1%
1.2%	31,126	31,549	424	1.4%
2.5%	30,676	31,369	693	2.3%
3.7%	30,629	30,920	291	1.0%
4.9%	30,509	30,368	-141	-0.5%
6.2%	29,438	30,011	574	1.9%
7.4%	29,317	29,109	-207	-0.7%
8.6%	29,019	28,942	-77	-0.3%
9.9%	28,825	28,890	65	0.2%
11.1%	28,086	28,805	719	2.6%
12.3%	28,049	28,423	373	1.3%
13.6%	28,026	27,939	-87	-0.3%
14.8%	27,990	27,832	-159	-0.6%
16.0%	27,747	27,703	-44	-0.2%
17.3%	27,705	27,313	-392	-1.4%
18.5%	27,665	27,168	-498	-1.8%
19.8%	27,050	26,953	-97	-0.4%
21.0%	26,112	26,240	127	0.5%
22.2%	25,645	24,806	-839	-3.3%
23.5%	24,795	24,652	-144	-0.6%
24.7%	24,779	23,973	-806	-3.3%
25.9%	24,553	23,930	-623	-2.5%
27.2%	24,262	23,399	-862	-3.6%
28.4%	23,702	23,381	-321	-1.4%
29.6%	23,614	23,201	-413	-1.7%
30.9%	23,537	23,160	-378	-1.6%
32.1%	23,078	22,827	-251	-1.1%
33.3%	22,854	22,812	-42	-0.2%
34.6%	22,369	21,964	-405	-1.8%
35.8%	21,811	21,856	45	0.2%
37.0%	21,251	21,321	70	0.3%
38.3%	19,883	19,859	-24	-0.1%
39.5%	19,842	19,420	-422	-2.1%
40.7%	19,643	18,833	-810	-4.1%
42.0%	19,478	18,764	-714	-3.7%
43.2%	18,790	18,494	-296	-1.6%
44.4%	14,084	15,710	1,625	11.5%
45.7%	13,977	15,428	1,450	10.4%
46.9%	13,191	14,992	1,800	13.6%
48.1%	13,143	14,983	1,840	14.0%
49.4%	12,950	14,708	1,758	13.6%
50.6%	12,533	14,685	2,152	17.2%
51.9%	12,428	14,653	2,226	17.9%
53.1%	12,285	14,442	2,157	17.6%
54.3%	12,237	14,156	1,919	15.7%
55.6%	12,212	13,998	1,786	14.6%
56.8%	12,094	13,835	1,741	14.4%
58.0%	12,059	13,824	1,765	14.6%
59.3%	11,909	13,761	1,852	15.6%
60.5%	11,774	13,699	1,925	16.3%
61.7%	11,764	13,499	1,735	14.8%
63.0%	11,675	13,445	1,770	15.2%
64.2%	11,287	13,408	2,121	18.8%
65.4%	11,192	13,406	2,214	19.8%
66.7%	11,076	13,262	2,186	19.7%
67.9%	10,500	12,743	2,243	21.4%
69.1%	10,402	12,512	2,111	20.3%
70.4%	10,256	11,982	1,725	16.8%
71.6%	9,892	11,944	2,053	20.8%
72.8%	9,640	11,890	2,250	23.3%
74.1%	9,574	11,835	2,261	23.6%
75.3%	9,078	11,661	2,583	28.4%
76.5%	8,898	11,620	2,722	30.6%
77.8%	8,760	11,595	2,835	32.4%
79.0%	8,760	11,592	2,832	32.3%
80.2%	8,661	11,431	2,770	32.0%
81.5%	8,326	11,078	2,752	33.1%
82.7%	7,919	11,017	3,098	39.1%
84.0%	7,742	10,791	3,049	39.4%
85.2%	7,650	10,552	2,902	37.9%
86.4%	7,588	10,445	2,858	37.7%
87.7%	7,585	10,269	2,684	35.4%
88.9%	7,436	9,555	2,119	28.5%
90.1%	7,354	8,980	1,626	22.1%
91.4%	7,261	8,935	1,675	23.1%
92.6%	7,064	8,349	1,285	18.2%
93.8%	7,009	8,308	1,299	18.5%
95.1%	6,646	8,214	1,568	23.6%
96.3%	6,609	7,963	1,354	20.5%
97.5%	6,429	7,885	1,456	22.7%
98.8%	6,369	7,134	764	12.0%
100.0%	6,310	6,652	342	5.4%

Figure SW-18-b
Lake Oroville, End of Month Storage
Probability of Exceedance

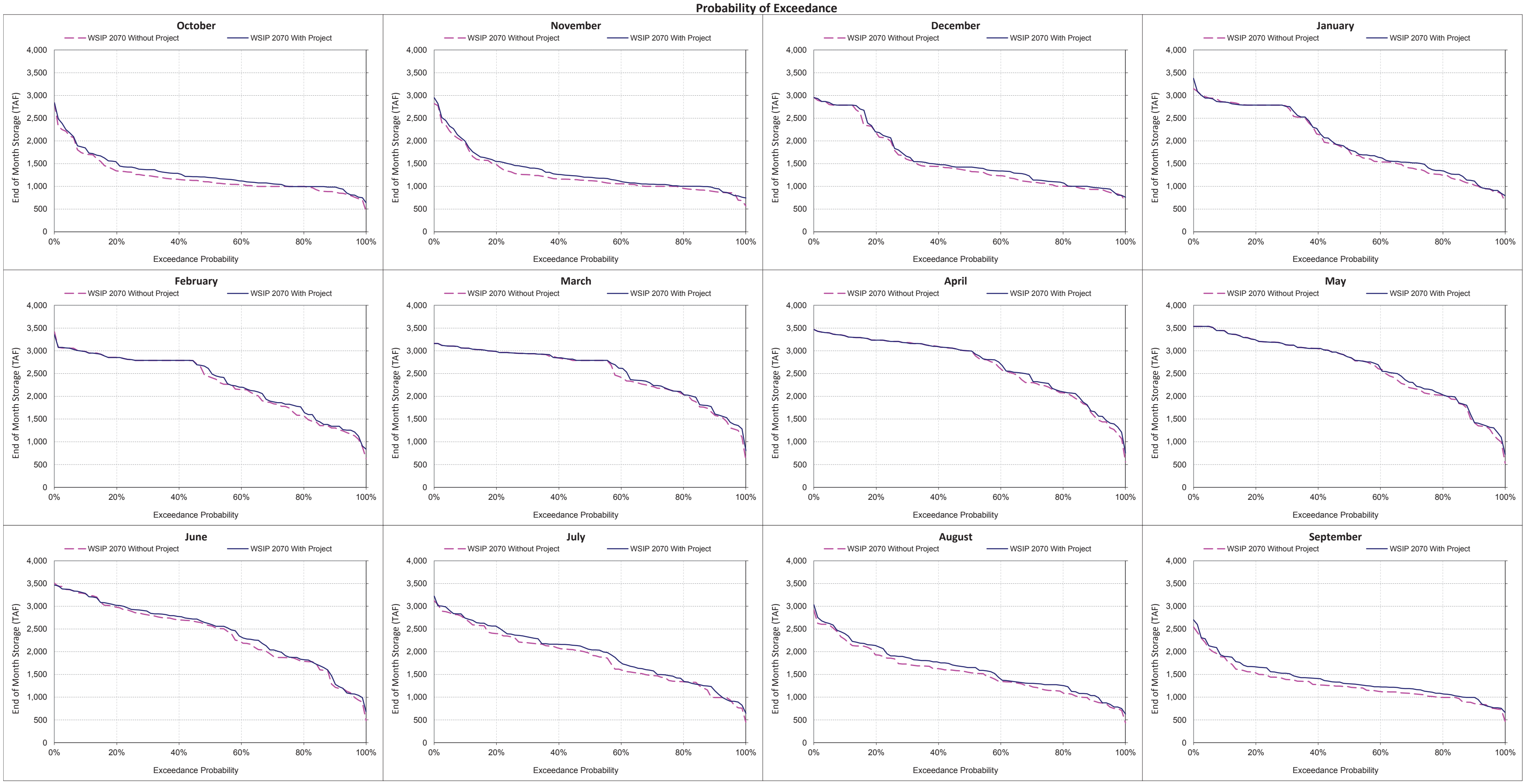


Table SW-18-b

Lake Oroville, End of Month Storage

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,839	2,839	0	0.0%
1.2%	2,323	2,483	160	6.9%
2.5%	2,250	2,383	133	5.9%
3.7%	2,212	2,250	38	1.7%
4.9%	2,108	2,176	68	3.2%
6.2%	2,072	2,095	22	1.1%
7.4%	1,805	1,892	87	4.8%
8.6%	1,741	1,869	128	7.3%
9.9%	1,711	1,844	134	7.8%
11.1%	1,702	1,730	28	1.6%
12.3%	1,694	1,719	25	1.5%
13.6%	1,611	1,684	73	4.6%
14.8%	1,549	1,672	122	7.9%
16.0%	1,457	1,621	165	11.3%
17.3%	1,425	1,561	136	9.5%
18.5%	1,386	1,558	171	12.4%
19.8%	1,342	1,547	204	15.2%
21.0%	1,330	1,446	116	8.7%
22.2%	1,328	1,431	103	7.7%
23.5%	1,316	1,426	110	8.4%
24.7%	1,314	1,423	109	8.3%
25.9%	1,262	1,407	145	11.5%
27.2%	1,261	1,381	120	9.5%
28.4%	1,247	1,375	128	10.3%
29.6%	1,234	1,368	135	10.9%
30.9%	1,231	1,368	137	11.2%
32.1%	1,215	1,366	150	12.4%
33.3%	1,204	1,331	127	10.5%
34.6%	1,192	1,315	124	10.4%
35.8%	1,177	1,306	129	10.9%
37.0%	1,167	1,294	127	10.9%
38.3%	1,158	1,289	131	11.3%
39.5%	1,156	1,288	132	11.4%
40.7%	1,147	1,263	116	10.1%
42.0%	1,139	1,219	80	7.0%
43.2%	1,136	1,217	81	7.1%
44.4%	1,131	1,216	85	7.5%
45.7%	1,130	1,215	85	7.5%
46.9%	1,115	1,208	92	8.3%
48.1%	1,103	1,204	101	9.2%
49.4%	1,101	1,197	96	8.7%
50.6%	1,087	1,189	102	9.4%
51.9%	1,070	1,183	113	10.6%
53.1%	1,067	1,168	101	9.5%
54.3%	1,057	1,164	107	10.1%
55.6%	1,052	1,158	107	10.1%
56.8%	1,043	1,149	106	10.2%
58.0%	1,043	1,139	96	9.2%
59.3%	1,040	1,122	83	7.9%
60.5%	1,037	1,115	78	7.5%
61.7%	1,018	1,100	82	8.0%
63.0%	1,018	1,091	73	7.2%
64.2%	1,004	1,086	82	8.2%
65.4%	999	1,079	80	8.0%
66.7%	999	1,075	76	7.6%
67.9%	998	1,074	75	7.5%
69.1%	998	1,066	68	6.8%
70.4%	998	1,052	54	5.4%
71.6%	998	1,045	47	4.7%
72.8%	998	1,040	42	4.2%
74.1%	998	1,010	12	1.2%
75.3%	998	998	1	0.1%
76.5%	998	998	1	0.1%
77.8%	998	998	1	0.1%
79.0%	998	998	0	0.0%
80.2%	998	998	1	0.1%
81.5%	976	998	21	2.2%
82.7%	973	998	25	2.5%
84.0%	929	998	69	7.4%
85.2%	897	998	101	11.2%
86.4%	889	998	109	12.2%
87.7%	885	986	100	11.4%
88.9%	885	983	98	11.1%
90.1%	874	982	108	12.4%
91.4%	851	954	104	12.2%
92.6%	846	940	93	11.0%
93.8%	825	855	30	3.6%
95.1%	796	812	16	2.0%
96.3%	761	806	45	5.9%
97.5%	729	761	32	4.3%
98.8%	707	751	44	6.3%
100.0%	451	645	193	42.8%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,821	2,946	125	4.4%
1.2%	2,776	2,820	45	1.6%
2.5%	2,401	2,512	111	4.6%
3.7%	2,352	2,453	101	4.3%
4.9%	2,220	2,324	104	4.7%
6.2%	2,128	2,267	139	6.5%
7.4%	2,067	2,139	73	3.5%
8.6%	2,014	2,067	52	2.6%
9.9%	1,968	2,001	33	1.7%
11.1%	1,797	1,856	59	3.3%
12.3%	1,658	1,760	102	6.2%
13.6%	1,597	1,706	109	6.8%
14.8%	1,578	1,644	66	4.2%
16.0%	1,576	1,637	61	3.9%
17.3%	1,571	1,613	42	2.6%
18.5%	1,507	1,590	83	5.5%
19.8%	1,494	1,548	54	3.6%
21.0%	1,423	1,546	123	8.6%
22.2%	1,368	1,528	160	11.7%
23.5%	1,339	1,506	166	12.4%
24.7%	1,318	1,486	168	12.7%
25.9%	1,282	1,458	176	13.7%
27.2%	1,268	1,452	184	14.5%
28.4%	1,260	1,436	176	13.9%
29.6%	1,259	1,424	165	13.1%
30.9%	1,255	1,402	147	11.7%
32.1%	1,240	1,400	160	12.9%
33.3%	1,239	1,392	153	12.3%
34.6%	1,223	1,365	142	11.6%
35.8%	1,212	1,311	99	8.2%
37.0%	1,191	1,308	117	9.8%
38.3%	1,169	1,276	107	9.1%
39.5%	1,166	1,264	97	8.4%
40.7%	1,160	1,259	99	8.6%
42.0%	1,159	1,250	91	7.8%
43.2%	1,157	1,239	82	7.0%
44.4%	1,148	1,238	90	7.8%
45.7%	1,148	1,231	83	7.2%
46.9%	1,138	1,219	81	7.1%
48.1%	1,134	1,204	70	6.2%
49.4%	1,127	1,200	73	6.5%
50.6%	1,124	1,199	75	6.7%
51.9%	1,117	1,184	67	6.0%
53.1%	1,110	1,180	70	6.3%
54.3%	1,089	1,179	91	8.3%
55.6%	1,073	1,171	98	9.1%
56.8%	1,065	1,152	87	8.2%
58.0%	1,062	1,139	77	7.2%
59.3%	1,057	1,120	63	5.9%
60.5%	1,056	1,100	44	4.2%
61.7%	1,051	1,087	36	3.5%
63.0%	1,043	1,077	34	3.3%
64.2%	1,042	1,077	34	3.3%
65.4%	1,016	1,064	48	4.8%
66.7%	1,009	1,055	46	4.6%
67.9%	1,001	1,055	54	5.3%
69.1%	1,001	1,046	45	4.5%
70.4%	1,001	1,045	44	4.4%
71.6%	1,001	1,043	42	4.2%
72.8%	1,001	1,040	39	3.9%
74.1%	1,001	1,040	39	3.9%
75.3%	1,001	1,028	26	2.6%
76.5%	1,000	1,013	13	1.3%
77.8%	1,000	1,012	12	1.2%
79.0%	972	1,002	30	3.1%
80.2%	953	1,001	48	5.0%
81.5%	941	1,001	60	6.4%
82.7%	933	1,001	68	7.3%
84.0%	928	1,001	73	7.8%
85.2%	920	1,001	80	8.7%
86.4%	918	999	80	8.7%
87.7%	910	997	87	9.6%
88.9%	896	984	87	9.7%
90.1%	883	957	73	8.3%
91.4%	872	943	70	8.1%
92.6%	866	878	12	1.4%
93.8%	861	862	2	0.2%
95.1%	859	838	-21	-2.4%
96.3%	855	794	-61	-7.1%
97.5%	697	793	96	13.7%
98.8%	688	762	74	10.7%
100.0%	569	744	175	30.8%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,956	2,955	-1	0.0%
1.2%	2,894	2,930	36	1.2%
2.5%	2,867	2,867	0	0.0%
3.7%	2,866	2,866	0	0.0%
4.9%	2,800	2,844	44	1.6%
6.2%	2,788	2,800	12	0.4%
7.4%	2,788	2,788	0	0.0%
8.6%	2,788	2,788	0	0.0%
9.9%	2,788	2,788	0	0.0%
11.1%	2,788	2,788	0	0.0%
12.3%	2,788	2,788	0	0.0%
13.6%	2,684	2,775	91	3.4%
14.8%	2,625	2,705	80	3.0%
16.0%	2,340	2,675	335	14.3%
17.3%	2,336	2,395	60	2.6%
18.5%	2,318	2,336	17	0.7%
19.8%	2,203	2,203	0	0.0%
21.0%	2,083	2,186	103	4.9%
22.2%	2,075	2,123	48	2.3%
23.5%	2,057	2,090	33	1.6%
24.7%	1,991	2,069	78	3.9%
25.9%	1,789	1,837	48	2.7%
27.2%	1,692	1,803	112	6.6%
28.4%	1,681	1,730	50	3.0%
29.6%	1,602	1,664	62	3.9%
30.9%	1,571	1,637	67	4.2%
32.1%	1,564	1,547	-17	-1.1%
33.3%	1,485	1,543	58	3.9%
34.6%	1,455	1,537	83	5.7%
35.8%	1,442	1,525	83	5.8%
37.0%	1,442	1,506	64	4.5%
38.3%	1,440	1,501	61	4.2%
39.5%	1,439	1,486	47	3.3%
40.7%	1,437	1,478	41	2.9%
42.0%	1,412	1,473	61	4.3%
43.2%	1,411	1,456	46	3.2%
44.4%	1,399	1,433	34	2.4%
45.7%	1,389	1,425	36	2.6%
46.9%	1,375	1,424	49	3.6%
48.1%	1,361	1,424	63	4.7%
49.4%	1,352	1,424	72	5.3%
50.6%	1,323	1,422	99	7.5%
51.9%	1,321	1,412	91	6.9%
53.1%	1,314	1,403	88	6.7%
54.3%	1,310	1,397	87	6.7%
55.6%	1,270	1,364	94	7.4%
56.8%	1,246	1,352	106	8.5%
58.0%	1,243	1,343	100	8.1%
59.3%	1,235	1,339	104	8.4%
60.5%	1,233	1,336	103	8.4%
61.7%	1,217	1,336	119	9.8%
63.0%	1,182	1,327	145	12.3%
64.2%	1,171	1,295	124	10.6%
65.4%	1,145	1,286	141	12.3%
66.7%	1,119	1,283	164	14.6%
67.9%	1,112	1,264	152	13.7%
69.1%	1,101	1,228	127	11.6%
70.4%	1,087	1,139	52	4.8%
71.6%	1,085	1,137	52	4.8%
72.8%	1,071	1,132	62	5.8%
74.1%	1,069	1,120	51	4.7%
75.3%	1,042	1,108	66	6.3%
76.5%	1,034	1,102	68	6.5%
77.8%	1,002	1,100	98	9.8%
79.0%	1,002	1,096	93	9.3%
80.2%	1,002	1,072	70	7.0%
81.5%	1,002	1,010	8	0.8%
82.7%	1,001	1,002	1	0.1%
84.0%	989	1,002	13	1.3%
85.2%	966	1,002	36	3.8%
86.4%	949	1,002	53	5.6%
87.7%	947	1,002	56	5.9%
88.9%	933	983	49	5.3%
90.1%	933	973	41	4.4%
91.4%	932	968	36	3.8%
92.6%	927	957	30	3.2%
93.8%	892	952	61	6.8%
95.1%	867	940	73	8.5%
96.3%	844	872	29	3.4%
97.5%	833	805	-28	-3.3%
98.8%	796	805	8	1.0%
100.0%	655	761	105	16.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,148	3,374	226	7.2%
1.2%	3,091	3,091	0	0.0%
2.5%	3,007	3,007	0	0.0%
3.7%	2,974	2,943	-31	-1.0%
4.9%	2,943	2,940	-3	-0.1%
6.2%	2,940	2,924	-16	-0.5%
7.4%	2,924	2,870	-54	-1.8%
8.6%	2,870	2,854	-16	-0.6%
9.9%	2,854	2,854	0	0.0%
11.1%	2,854	2,846	-8	-0.3%
12.3%	2,846	2,819	-27	-1.0%
13.6%	2,833	2,806	-26	-0.9%
14.8%	2,809	2,794	-15	-0.5%
16.0%	2,794	2,788	-6	-0.2%
17.3%	2,788	2,788	0	0.0%
18.5%	2,788	2,788	0	0.0%
19.8%	2,788	2,788	0	0.0%
21.0%	2,788	2,788	0	0.0%
22.2%	2,788	2,788	0	0.0%
23.5%	2,788	2,788	0	0.0%
24.7%	2,788	2,788	0	0.0%
25.9%	2,788	2,788	0	0.0%
27.2%	2,787	2,787	0	0.0%
28.4%	2,787	2,787	0	0.0%
29.6%	2,772	2,758	-14	-0.5%
30.9%	2,695	2,754	59	2.2%
32.1%	2,541	2,648	108	4.2%
33.3%	2,524	2,561	38	1.5%
34.6%	2,522	2,525	4	0.1%
35.8%	2,503	2,524	21	0.8%
37.0%	2,393	2,440	48	2.0%
38.3%	2,312	2,302	-9	-0.4%
39.5%	2,154	2,275	122	5.6%
40.7%	2,129	2,152	24	1.1%
42.0%	1,969	2,070	100	5.1%
43.2%	1,955	2,062	107	5.5%
44.4%	1,940	1,990	50	2.6%
45.7%	1,927	1,929	2	0.1%
46.9%	1,884	1,907	22	1.2%
48.1%	1,846	1,892	46	2.5%
49.4%	1,841	1,823	-19	-1.0%
50.6%	1,711	1,788	77	4.5%
51.9%	1,682	1,769	87	5.1%
53.1%	1,679	1,705	26	1.5%
54.3%	1,626	1,693	67	4.1%
55.6%	1,611	1,693	81	5.0%
56.8%	1,602	1,678	76	4.8%
58.0%	1,550	1,673	123	7.9%
59.3%	1,545	1,644	99	6.4%
60.5%	1,537	1,625	88	5.7%
61.7%	1,535	1,574	38	2.5%
63.0%	1,532	1,555	23	1.5%
64.2%	1,524	1,552	27	1.8%
65.4%	1,500	1,549	49	3.3%
66.7%	1,484	1,535	52	3.5%
67.9%	1,423	1,531	108	7.6%
69.1%	1,408	1,526	118	8.4%
70.4%	1,398	1,516	118	8.4%
71.6%	1,374	1,515	141	10.3%
72.8%	1,372	1,502	130	9.5%
74.1%	1,342	1,485	144	10.7%
75.3%	1,289	1,405	116	9.0%
76.5%	1,278	1,369	91	7.1%
77.8%	1,268	1,352	84	6.6%
79.0%	1,264	1,351	87	6.9%
80.2%	1,238	1,339	101	8.1%
81.5%	1,234	1,296	62	5.0%
82.7%	1,181	1,269	88	7.5%
84.0%	1,157	1,264	107	9.3%
85.2%	1,152	1,264	112	9.7%
86.4%	1,110	1,216	106	9.5%
87.7%	1,078	1,140	62	5.7%
88.9%	1,071	1,135	65	6.1%
90.1%	1,026	1,115	88	8.6%
91.4%	1,003	1,027	24	2.4%
92.6%	956	965	9	1.0%
93.8%	947	951	4	0.4%
95.1%	944	938	-6	-0.7%
96.3%	886	909	24	2.7%
97.5%	880	908	29	3.3%
98.8%	842	850	8	1.0%
100.0%	651	799	148	22.8%

Table SW-18-b

Lake Oroville, End of Month Storage

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,421	3,355	-65	-1.9%
1.2%	3,078	3,078	0	0.0%
2.5%	3,064	3,073	9	0.3%
3.7%	3,063	3,064	1	0.0%
4.9%	3,058	3,057	-1	0.0%
6.2%	3,057	3,031	-26	-0.8%
7.4%	3,009	3,009	0	0.0%
8.6%	2,997	2,997	0	0.0%
9.9%	2,987	2,987	0	0.0%
11.1%	2,952	2,952	0	0.0%
12.3%	2,951	2,951	0	0.0%
13.6%	2,950	2,941	-9	-0.3%
14.8%	2,925	2,925	0	0.0%
16.0%	2,890	2,890	0	0.0%
17.3%	2,856	2,856	0	0.0%
18.5%	2,856	2,856	0	0.0%
19.8%	2,856	2,856	0	0.0%
21.0%	2,853	2,853	0	0.0%
22.2%	2,832	2,832	0	0.0%
23.5%	2,813	2,813	0	0.0%
24.7%	2,806	2,806	0	0.0%
25.9%	2,788	2,788	0	0.0%
27.2%	2,788	2,788	0	0.0%
28.4%	2,788	2,788	0	0.0%
29.6%	2,788	2,788	0	0.0%
30.9%	2,788	2,788	0	0.0%
32.1%	2,788	2,788	0	0.0%
33.3%	2,788	2,788	0	0.0%
34.6%	2,788	2,788	0	0.0%
35.8%	2,788	2,788	0	0.0%
37.0%	2,788	2,788	0	0.0%
38.3%	2,788	2,788	0	0.0%
39.5%	2,788	2,788	0	0.0%
40.7%	2,788	2,788	0	0.0%
42.0%	2,788	2,788	0	0.0%
43.2%	2,788	2,788	0	0.0%
44.4%	2,787	2,787	0	0.0%
45.7%	2,711	2,696	-15	-0.6%
46.9%	2,648	2,685	37	1.4%
48.1%	2,465	2,662	197	8.0%
49.4%	2,437	2,612	175	7.2%
50.6%	2,404	2,489	85	3.5%
51.9%	2,374	2,446	72	3.0%
53.1%	2,298	2,426	128	5.6%
54.3%	2,267	2,412	146	6.4%
55.6%	2,263	2,274	11	0.5%
56.8%	2,263	2,243	-20	-0.9%
58.0%	2,160	2,229	69	3.2%
59.3%	2,150	2,203	53	2.5%
60.5%	2,149	2,199	50	2.3%
61.7%	2,143	2,159	16	0.8%
63.0%	2,086	2,128	41	2.0%
64.2%	2,044	2,116	72	3.5%
65.4%	2,006	2,097	91	4.5%
66.7%	1,903	2,063	160	8.4%
67.9%	1,878	1,934	56	3.0%
69.1%	1,868	1,894	26	1.4%
70.4%	1,834	1,877	43	2.3%
71.6%	1,825	1,860	35	1.9%
72.8%	1,780	1,859	79	4.4%
74.1%	1,778	1,826	49	2.7%
75.3%	1,744	1,826	82	4.7%
76.5%	1,656	1,805	149	9.0%
77.8%	1,584	1,779	194	12.3%
79.0%	1,581	1,768	187	11.8%
80.2%	1,556	1,639	83	5.3%
81.5%	1,483	1,597	113	7.6%
82.7%	1,450	1,596	146	10.0%
84.0%	1,440	1,471	30	2.1%
85.2%	1,356	1,440	84	6.2%
86.4%	1,356	1,383	28	2.0%
87.7%	1,355	1,381	26	1.9%
88.9%	1,304	1,343	39	3.0%
90.1%	1,304	1,341	37	2.8%
91.4%	1,262	1,339	77	6.1%
92.6%	1,238	1,268	30	2.4%
93.8%	1,203	1,258	55	4.6%
95.1%	1,169	1,253	84	7.2%
96.3%	1,133	1,218	86	7.6%
97.5%	1,055	1,122	66	6.3%
98.8%	895	905	10	1.1%
100.0%	631	837	206	32.6%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,163	3,163	0	0.0%
1.2%	3,162	3,162	0	0.0%
2.5%	3,120	3,120	0	0.0%
3.7%	3,105	3,112	7	0.2%
4.9%	3,105	3,105	0	0.0%
6.2%	3,103	3,105	2	0.1%
7.4%	3,096	3,096	0	0.0%
8.6%	3,063	3,063	0	0.0%
9.9%	3,059	3,059	0	0.0%
11.1%	3,057	3,057	0	0.0%
12.3%	3,036	3,036	0	0.0%
13.6%	3,028	3,028	0	0.0%
14.8%	3,027	3,027	0	0.0%
16.0%	3,018	3,018	0	0.0%
17.3%	2,999	2,999	0	0.0%
18.5%	2,995	2,995	0	0.0%
19.8%	2,988	2,988	0	0.0%
21.0%	2,964	2,964	0	0.0%
22.2%	2,964	2,964	0	0.0%
23.5%	2,964	2,964	0	0.0%
24.7%	2,954	2,954	0	0.0%
25.9%	2,951	2,951	0	0.0%
27.2%	2,944	2,944	0	0.0%
28.4%	2,943	2,943	0	0.0%
29.6%	2,937	2,937	0	0.0%
30.9%	2,936	2,936	0	0.0%
32.1%	2,936	2,936	0	0.0%
33.3%	2,927	2,928	1	0.0%
34.6%	2,922	2,927	5	0.2%
35.8%	2,918	2,922	4	0.1%
37.0%	2,879	2,918	39	1.4%
38.3%	2,878	2,854	-24	-0.8%
39.5%	2,847	2,848	1	0.1%
40.7%	2,833	2,847	14	0.5%
42.0%	2,817	2,833	16	0.6%
43.2%	2,817	2,817	0	0.0%
44.4%	2,788	2,817	29	1.0%
45.7%	2,788	2,788	0	0.0%
46.9%	2,788	2,788	0	0.0%
48.1%	2,788	2,788	0	0.0%
49.4%	2,788	2,788	0	0.0%
50.6%	2,788	2,788	0	0.0%
51.9%	2,788	2,788	0	0.0%
53.1%	2,788	2,788	0	0.0%
54.3%	2,788	2,788	0	0.0%
55.6%	2,781	2,788	7	0.2%
56.8%	2,687	2,729	42	1.6%
58.0%	2,466	2,692	226	9.1%
59.3%	2,436	2,621	185	7.6%
60.5%	2,403	2,612	209	8.7%
61.7%	2,338	2,535	197	8.4%
63.0%	2,334	2,366	32	1.4%
64.2%	2,314	2,359	45	1.9%
65.4%	2,294	2,349	55	2.4%
66.7%	2,268	2,344	76	3.3%
67.9%	2,253	2,335	82	3.6%
69.1%	2,227	2,302	74	3.3%
70.4%	2,211	2,239	28	1.3%
71.6%	2,179	2,237	58	2.7%
72.8%	2,173	2,224	51	2.3%
74.1%	2,172	2,184	12	0.6%
75.3%	2,145	2,154	9	0.4%
76.5%	2,126	2,115	-11	-0.5%
77.8%	2,118	2,110	-9	-0.4%
79.0%	2,076	2,108	33	1.6%
80.2%	2,031	2,032	2	0.1%
81.5%	2,015	2,026	12	0.6%
82.7%	1,915	2,004	89	4.6%
84.0%	1,881	1,979	98	5.2%
85.2%	1,768	1,814	46	2.6%
86.4%	1,762	1,804	42	2.4%
87.7%	1,738	1,799	61	3.5%
88.9%	1,658	1,777	120	7.2%
90.1%	1,579	1,611	32	2.0%
91.4%	1,560	1,589	29	1.9%
92.6%	1,528	1,557	29	1.9%
93.8%	1,446	1,531	86	5.9%
95.1%	1,303	1,426	122	9.4%
96.3%	1,277	1,382	105	8.2%
97.5%	1,248	1,359	110	8.8%
98.8%	1,100	1,285	184	16.8%
100.0%	601	807	206	34.2%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,470	3,470	0	0.0%
1.2%	3,430	3,430	0	0.0%
2.5%	3,413	3,411	-1	0.0%
3.7%	3,402	3,401	-1	0.0%
4.9%	3,396	3,396	0	0.0%
6.2%	3,366	3,366	0	0.0%
7.4%	3,354	3,354	0	0.0%
8.6%	3,352	3,352	0	0.0%
9.9%	3,334	3,334	0	0.0%
11.1%	3,303	3,303	0	0.0%
12.3%	3,298	3,298	0	0.0%
13.6%	3,292	3,292	0	0.0%
14.8%	3,292	3,292	0	0.0%
16.0%	3,281	3,281	0	0.0%
17.3%	3,270	3,270	0	0.0%
18.5%	3,238	3,238	0	0.0%
19.8%	3,236	3,236	0	0.0%
21.0%	3,235	3,235	0	0.0%
22.2%	3,234	3,234	0	0.0%
23.5%	3,218	3,218	0	0.0%
24.7%	3,209	3,208	-1	0.0%
25.9%	3,208	3,208	0	0.0%
27.2%	3,208	3,208	0	0.0%
28.4%	3,186	3,183	-2	-0.1%
29.6%	3,184	3,180	-4	-0.1%
30.9%	3,180	3,160	-20	-0.6%
32.1%	3,160	3,159	-1	0.0%
33.3%	3,159	3,159	-1	0.0%
34.6%	3,154	3,153	-1	0.0%
35.8%	3,132	3,131	-1	0.0%
37.0%	3,117	3,116	0	0.0%
38.3%	3,115	3,098	-16	-0.5%
39.5%	3,099	3,096	-2	-0.1%
40.7%	3,082	3,081	-1	0.0%
42.0%	3,076	3,075	-1	0.0%
43.2%	3,061	3,069	8	0.3%
44.4%	3,060	3,059	-1	0.0%
45.7%	3,043	3,042	-1	0.0%
46.9%	3,017	3,016	-1	0.0%
48.1%	3,005	3,007	2	0.1%
49.4%	3,001	3,000	0	0.0%
50.6%	2,998	2,997	-1	0.0%
51.9%	2,889	2,927	38	1.3%
53.1%	2,827	2,888	61	2.2%
54.3%	2,812	2,827	15	0.5%
55.6%	2,801	2,809	8	0.3%
56.8%	2,761	2,807	46	1.7%
58.0%	2,738	2,802	65	2.4%
59.3%	2,644	2,757	113	4.3%
60.5%	2,572	2,678	106	4.1%
61.7%	2,549	2,558	9	0.4%
63.0%	2,522	2,552	29	1.2%
64.2%	2,497	2,528	31	1.2%
65.4%	2,454	2,522	68	2.8%
66.7%	2,365	2,511	146	6.2%
67.9%	2,303	2,497	194	8.4%
69.1%	2,301	2,482	181	7.9%
70.4%	2,300	2,325	25	1.1%
71.6%	2,277	2,322	45	2.0%
72.8%	2,234	2,308	74	3.3%
74.1%	2,233	2,294	61	2.7%
75.3%	2,204	2,283	79	3.6%
76.5%	2,151	2,174	23	1.1%
77.8%	2,125	2,143	18	0.8%
79.0%	2,080	2,110	30	1.4%
80.2%	2,074	2,094	20	0.9%
81.5%	2,058	2,076	18	0.9%
82.7%	2,013	2,072	59	2.9%
84.0%	1,953	2,059	105	5.4%
85.2%	1,911	1,976	65	3.4%
86.4%	1,838	1,873	35	1.9%
87.7%	1,808	1,817	9	0.5%
88.9%	1,648	1,680	31	1.9%
90.1%	1,553	1,663	110	7.1%
91.4%	1,477	1,562	85	5.7%
92.6%	1,438	1,557	120	8.3%
93.8%	1,437	1,465	28	1.9%
95.1%	1,306	1,410	104	8.0%
96.3%	1,270	1,391	121	9.5%
97.5%	1,172	1,324	152	13.0%
98.8%	1,066	1,209	142	13.4%
100.0%	558	756	198	35.5%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,538	3,538	0	0.0%
1.2%	3,538	3,538	0	0.0%
2.5%	3,538	3,538	0	0.0%
3.7%	3,538	3,538	0	0.0%
4.9%	3,538	3,538	0	0.0%
6.2%	3,514	3,513	-1	0.0%
7.4%	3,448	3,447	-1	0.0%
8.6%	3,446	3,446	-1	0.0%
9.9%	3,445	3,443	-2	-0.1%
11.1%	3,381	3,380	-1	0.0%
12.3%	3,366	3,365	-1	0.0%
13.6%	3,359	3,358	-1	0.0%
14.8%	3,333	3,333	0	0.0%
16.0%	3,299	3,290	-9	-0.3%
17.3%	3,291	3,289	-2	-0.1%
18.5%	3,261	3,260	-1	0.0%
19.8%	3,249	3,248	-1	0.0%
21.0%	3,206	3,205	-1	0.0%
22.2%	3,200	3,199	-1	0.0%
23.5%	3,196	3,195	-1	0.0%
24.7%	3,193	3,192	-1	0.0%
25.9%	3,192	3,191	-1	0.0%
27.2%	3,185	3,184	-1	0.0%
28.4%	3,169	3,168	-1	0.0%
29.6%	3,131	3,131	0	0.0%
30.9%	3,123	3,128	5	0.2%
32.1%	3,122	3,125	2	0.1%
33.3%	3,075	3,074	-1	0.0%
34.6%	3,075	3,073	-2	-0.1%
35.8%	3,066	3,065	-1	0.0%
37.0%	3,063	3,054	-8	-0.3%
38.3%	3,056	3,052	-4	-0.1%
39.5%	3,053	3,051	-1	0.0%
40.7%	3,041	3,051	10	0.3%
42.0%	3,023	3,018	-5	-0.2%
43.2%	3,013	3,012	-1	0.0%
44.4%	2,976	2,973	-3	-0.1%
45.7%	2,964	2,971	7	0.2%
46.9%	2,938	2,937	-1	0.0%
48.1%	2,915	2,914	-1	0.0%
49.4%	2,862	2,871	8	0.3%
50.6%	2,848	2,848	1	0.0%
51.9%	2,781	2,788	8	0.3%
53.1%	2,777	2,783	6	0.2%
54.3%	2,776	2,774	-1	0.0%
55.6%	2,758	2,758	0	0.0%
56.8%	2,717	2,754	37	1.4%
58.0%	2,685	2,727	42	1.6%
59.3%	2,606	2,691	85	3.3%
60.5%	2,587	2,548	-39	-1.5%
61.7%	2,499	2,543	44	1.8%
63.0%	2,445	2,521	76	3.1%
64.2%	2,419	2,512	93	3.8%
65.4%	2,354	2,497	144	6.1%
66.7%	2,284	2,440	156	6.8%
67.9%	2,257	2,360	103	4.5%
69.1%	2,193	2,312	119	5.4%
70.4%	2,176	2,307	131	6.0%
71.6%	2,159	2,220	61	2.8%
72.8%	2,130	2,202	73	3.4%
74.1%	2,073	2,164	91	4.4%
75.3%	2,055	2,155	100	4.9%
76.5%	2,044	2,142	98	4.8%
77.8%	2,032	2,096	63	3.1%
79.0%	2,028	2,066	38	1.9%
80.2%	2,020	2,025	5	0.2%
81.5%	2,006	1,999	-6	-0.3%
82.7%	1,939	1,997	58	3.0%
84.0%	1,932	1,986	54	2.8%
85.2%	1,842	1,855	13	0.7%
86.4%	1,819	1,830	11	0.6%
87.7%	1,746	1,801	55	3.2%
88.9%	1,512	1,605	93	6.2%
90.1%	1,419	1,419	0	0.0%
91.4%	1,352	1,408	56	4.2%
92.6%	1,343	1,380	37	2.7%
93.8%	1,337	1,352	15	1.1%
95.1%	1,277	1,320	43	3.3%
96.3%	1,148	1,305	157	13.7%
97.5%	1,061	1,204	143	13.5%
98.8%	994	1,101	107	10.7%
100.0%	529	726	198	37.4%

Table SW-18-b

Lake Oroville, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,509	3,468	-41	-1.2%
1.2%	3,440	3,448	9	0.3%
2.5%	3,437	3,379	-58	-1.7%
3.7%	3,370	3,377	6	0.2%
4.9%	3,365	3,367	2	0.1%
6.2%	3,339	3,337	-2	-0.1%
7.4%	3,296	3,329	34	1.0%
8.6%	3,292	3,304	13	0.4%
9.9%	3,275	3,285	10	0.3%
11.1%	3,235	3,210	-26	-0.8%
12.3%	3,231	3,204	-27	-0.8%
13.6%	3,203	3,185	-18	-0.5%
14.8%	3,083	3,084	1	0.0%
16.0%	3,022	3,078	56	1.9%
17.3%	3,018	3,063	45	1.5%
18.5%	3,002	3,046	44	1.5%
19.8%	2,982	3,019	37	1.2%
21.0%	2,966	3,015	49	1.7%
22.2%	2,924	3,001	77	2.6%
23.5%	2,921	2,964	43	1.5%
24.7%	2,889	2,929	40	1.4%
25.9%	2,857	2,926	69	2.4%
27.2%	2,853	2,919	65	2.3%
28.4%	2,830	2,905	75	2.7%
29.6%	2,814	2,899	85	3.0%
30.9%	2,799	2,846	46	1.7%
32.1%	2,787	2,834	47	1.7%
33.3%	2,764	2,831	67	2.4%
34.6%	2,748	2,828	80	2.9%
35.8%	2,746	2,816	70	2.6%
37.0%	2,740	2,796	56	2.0%
38.3%	2,716	2,792	76	2.8%
39.5%	2,704	2,778	74	2.7%
40.7%	2,697	2,771	74	2.7%
42.0%	2,691	2,743	52	1.9%
43.2%	2,686	2,733	47	1.7%
44.4%	2,673	2,720	47	1.8%
45.7%	2,656	2,719	63	2.4%
46.9%	2,642	2,679	38	1.4%
48.1%	2,605	2,648	42	1.6%
49.4%	2,580	2,620	41	1.6%
50.6%	2,564	2,595	31	1.2%
51.9%	2,519	2,561	42	1.7%
53.1%	2,508	2,558	50	2.0%
54.3%	2,505	2,557	52	2.1%
55.6%	2,445	2,528	82	3.4%
56.8%	2,396	2,477	81	3.4%
58.0%	2,255	2,465	210	9.3%
59.3%	2,238	2,350	112	5.0%
60.5%	2,188	2,301	112	5.1%
61.7%	2,183	2,279	96	4.4%
63.0%	2,162	2,276	113	5.2%
64.2%	2,098	2,259	161	7.7%
65.4%	2,046	2,249	203	9.9%
66.7%	2,039	2,184	144	7.1%
67.9%	2,011	2,129	118	5.9%
69.1%	1,955	2,042	87	4.5%
70.4%	1,893	2,040	147	7.7%
71.6%	1,874	2,012	138	7.3%
72.8%	1,873	1,989	116	6.2%
74.1%	1,871	1,913	42	2.3%
75.3%	1,866	1,880	14	0.7%
76.5%	1,865	1,873	8	0.4%
77.8%	1,834	1,872	39	2.1%
79.0%	1,794	1,834	39	2.2%
80.2%	1,789	1,825	37	2.0%
81.5%	1,783	1,817	34	1.9%
82.7%	1,780	1,769	-10	-0.6%
84.0%	1,743	1,727	-16	-0.9%
85.2%	1,603	1,692	90	5.6%
86.4%	1,591	1,653	62	3.9%
87.7%	1,588	1,601	13	0.8%
88.9%	1,290	1,472	182	14.1%
90.1%	1,215	1,282	67	5.5%
91.4%	1,191	1,228	37	3.1%
92.6%	1,186	1,197	11	0.9%
93.8%	1,128	1,095	-33	-2.9%
95.1%	1,095	1,077	-18	-1.7%
96.3%	993	1,067	74	7.4%
97.5%	935	1,041	105	11.2%
98.8%	893	992	100	11.2%
100.0%	485	682	197	40.6%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	3,119	3,219	100	3.2%
1.2%	3,037	3,012	-25	-0.8%
2.5%	2,891	3,002	111	3.8%
3.7%	2,881	2,989	108	3.7%
4.9%	2,858	2,910	51	1.8%
6.2%	2,818	2,836	18	0.6%
7.4%	2,815	2,833	17	0.6%
8.6%	2,786	2,832	46	1.6%
9.9%	2,726	2,741	15	0.6%
11.1%	2,665	2,711	46	1.7%
12.3%	2,591	2,691	101	3.9%
13.6%	2,587	2,642	55	2.1%
14.8%	2,576	2,629	54	2.1%
16.0%	2,572	2,629	57	2.2%
17.3%	2,430	2,577	147	6.0%
18.5%	2,408	2,567	160	6.6%
19.8%	2,401	2,565	164	6.8%
21.0%	2,395	2,514	119	5.0%
22.2%	2,347	2,455	108	4.6%
23.5%	2,346	2,395	49	2.1%
24.7%	2,329	2,385	57	2.4%
25.9%	2,303	2,365	62	2.7%
27.2%	2,214	2,358	144	6.5%
28.4%	2,205	2,349	144	6.5%
29.6%	2,201	2,328	127	5.8%
30.9%	2,190	2,316	127	5.8%
32.1%	2,181	2,294	113	5.2%
33.3%	2,169	2,286	117	5.4%
34.6%	2,168	2,178	11	0.5%
35.8%	2,133	2,174	41	1.9%
37.0%	2,124	2,167	44	2.1%
38.3%	2,115	2,165	50	2.4%
39.5%	2,085	2,163	79	3.8%
40.7%	2,065	2,160	96	4.6%
42.0%	2,061	2,158	97	4.7%
43.2%	2,051	2,153	102	5.0%
44.4%	2,046	2,141	95	4.6%
45.7%	2,028	2,135	107	5.3%
46.9%	2,017	2,126	108	5.4%
48.1%	2,000	2,089	89	4.5%
49.4%	1,977	2,059	81	4.1%
50.6%	1,920	2,041	121	6.3%
51.9%	1,910	2,038	128	6.7%
53.1%	1,884	2,035	151	8.0%
54.3%	1,880	1,994	114	6.1%
55.6%	1,861	1,983	122	6.6%
56.8%	1,734	1,934	200	11.5%
58.0%	1,618	1,876	258	15.9%
59.3%	1,617	1,792	175	10.8%
60.5%	1,589	1,734	146	9.2%
61.7%	1,563	1,709	146	9.3%
63.0%	1,553	1,679	126	8.1%
64.2%	1,540	1,661	121	7.8%
65.4%	1,528	1,637	109	7.1%
66.7%	1,518	1,628	110	7.2%
67.9%	1,496	1,606	111	7.4%
69.1%	1,482	1,594	112	7.6%
70.4%	1,473	1,580	106	7.2%
71.6%	1,469	1,500	31	2.1%
72.8%	1,439	1,495	57	3.9%
74.1%	1,431	1,492	60	4.2%
75.3%	1,368	1,475	107	7.8%
76.5%	1,352	1,465	112	8.3%
77.8%	1,348	1,425	77	5.7%
79.0%	1,343	1,419	75	5.6%
80.2%	1,337	1,342	5	0.4%
81.5%	1,334	1,334	0	0.0%
82.7%	1,329	1,304	-24	-1.8%
84.0%	1,327	1,286	-40	-3.0%
85.2%	1,247	1,274	28	2.2%
86.4%	1,203	1,252	49	4.1%
87.7%	1,158	1,245	87	7.5%
88.9%	998	1,234	237	23.7%
90.1%	992	1,137	145	14.6%
91.4%	992	1,057	65	6.6%
92.6%	992	991	-1	-0.1%
93.8%	991	944	-47	-4.8%
95.1%	933	910	-23	-2.5%
96.3%	824	910	86	10.4%
97.5%	767	892	125	16.3%
98.8%	758	823	65	8.5%
100.0%	452	648	196	43.4%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,917	3,030	114	3.9%
1.2%	2,624	2,754	131	5.0%
2.5%	2,605	2,678	74	2.8%
3.7%	2,603	2,645	42	1.6%
4.9%	2,589	2,620	31	1.2%
6.2%	2,521	2,586	65	2.6%
7.4%	2,448	2,476	27	1.1%
8.6%	2,331	2,441	110	4.7%
9.9%	2,276	2,402	126	5.5%
11.1%	2,200	2,345	145	6.6%
12.3%	2,135	2,229	94	4.4%
13.6%	2,127	2,208	81	3.8%
14.8%	2,124	2,189	64	3.0%
16.0%	2,123	2,182	59	2.8%
17.3%	2,096	2,157	60	2.9%
18.5%	2,051	2,149	98	4.8%
19.8%	1,931	2,135	203	10.5%
21.0%	1,926	2,105	179	9.3%
22.2%	1,897	2,070	173	9.1%
23.5%	1,859	1,953	94	5.1%
24.7%	1,857	1,907	50	2.7%
25.9%	1,844	1,906	62	3.4%
27.2%	1,739	1,900	161	9.3%
28.4%	1,730	1,898	169	9.7%
29.6%	1,729	1,873	144	8.3%
30.9%	1,709	1,858	149	8.7%
32.1%	1,699	1,823	124	7.3%
33.3%	1,688	1,815	127	7.5%
34.6%	1,688	1,805	117	7.0%
35.8%	1,684	1,805	121	7.2%
37.0%	1,681	1,798	117	7.0%
38.3%	1,631	1,778	148	9.1%
39.5%	1,629	1,775	146	9.0%
40.7%	1,620	1,755	134	8.3%
42.0%	1,602	1,752	150	9.4%
43.2%	1,602	1,743	141	8.8%
44.4%	1,596	1,706	110	6.9%
45.7%	1,585	1,690	105	6.6%
46.9%	1,580	1,678	97	6.2%
48.1%	1,570	1,667	97	6.2%
49.4%	1,549	1,654	105	6.8%
50.6%	1,535	1,653	118	7.7%
51.9%	1,529	1,651	121	7.9%
53.1%	1,519	1,589	71	4.7%
54.3%	1,518	1,587	69	4.5%
55.6%	1,457	1,577	120	8.2%
56.8%	1,435	1,561	126	8.8%
58.0%	1,398	1,518	120	8.6%
59.3%	1,350	1,437	87	6.5%
60.5%	1,343	1,371	28	2.1%
61.7%	1,337	1,365	28	2.1%
63.0%	1,334	1,356	21	1.6%
64.2%	1,325	1,344	20	1.5%
65.4%	1,308	1,333	25	1.9%
66.7%	1,293	1,323	30	2.3%
67.9%	1,257	1,307	50	4.0%
69.1%	1,255	1,303	48	3.8%
70.4%	1,223	1,301	78	6.4%
71.6%	1,211	1,298	87	7.2%
72.8%	1,182	1,290	108	9.1%
74.1%	1,161	1,276	114	9.8%
75.3%	1,149	1,275	127	11.0%
76.5%	1,145	1,275	130	11.3%
77.8%	1,143	1,274	131	11.5%
79.0%	1,133	1,262	130	11.5%
80.2%	1,083	1,255	172	15.9%
81.5%	1,079	1,232	153	14.2%
82.7%	1,067	1,127	60	5.6%
84.0%	1,028	1,121	93	9.0%
85.2%	1,004	1,084	79	7.9%
86.4%	996	1,081	85	8.6%
87.7%	992	1,076	84	8.5%
88.9%	920	1,036	116	12.6%
90.1%	909	1,035	126	13.8%
91.4%	882	992	110	12.4%
92.6%	871	875	3	0.4%
93.8%	855	874	19	2.3%
95.1%	782	842	60	7.7%
96.3%	752	786	34	4.5%
97.5%	751	786	35	4.6%
98.8%	706	751	45	6.4%
100.0%	435	631	195	44.9%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	2,544	2,703	160	6.3%
1.2%	2,427	2,598	171	7.0%
2.5%	2,300	2,308	7	0.3%
3.7%	2,204	2,287	83	3.8%
4.9%	2,067	2,132	65	3.1%
6.2%	2,004	2,107	103	5.1%
7.4%	1,961	2,090	129	6.6%
8.6%	1,892	1,931	39	2.1%
9.9%	1,881	1,900	19	1.0%
11.1%	1,768	1,889	120	6.8%
12.3%	1,724	1,881	157	9.1%
13.6%	1,617	1,783	166	10.3%
14.8%	1,606	1,766	160	9.9%
16.0%	1,587	1,704	117	7.4%
17.3%	1,560	1,672	113	7.2%
18.5%	1,556	1,672	117	7.5%
19.8%	1,542	1,668	126	8.2%
21.0%	1,499	1,657	158	10.5%
22.2%	1,497	1,650	154	10.3%
23.5%	1,485	1,646	161	10.9%
24.7%	1,441	1,560	119	8.3%
25.9%	1,440	1,554	114	7.9%
27.2%	1,437	1,536	100	6.9%
28.4%	1,416	1,528	111	7.9%
29.6%	1,388	1,525	137	9.9%
30.9%	1,384	1,513	129	9.3%
32.1%	1,379	1,467	88	6.4%
33.3%	1,351	1,445	94	6.9%
34.6%	1,351	1,430	78	5.8%
35.8%	1,346	1,429	83	6.2%
37.0%	1,346	1,426	80	5.9%
38.3%	1,280	1,418	138	10.8%
39.5%	1,278	1,414	137	10.7%
40.7%	1,268	1,407	139	11.0%
42.0%	1,262	1,366	104	8.2%
43.2%	1,257	1,356	99	7.9%
44.4%	1,256	1,337	81	6.4%
45.7%	1,245	1,335	90	7.2%
46.9%	1,244	1,331	87	7.0%
48.1%	1,236	1,303	67	5.4%
49.4%	1,235	1,298	63	5.1%
50.6%	1,215	1,292	77	6.4%
51.9%	1,208	1,288	80	6.6%
53.1%	1,204	1,275	71	5.9%
54.3%	1,202	1,264	61	5.1%
55.6%	1,152	1,250	98	8.5%
56.8%	1,145	1,247	102	8.9%
58.0%	1,144	1,232	88	7.6%
59.3%	1,129	1,231	102	9.0%
60.5%	1,118	1,225	107	9.6%
61.7%	1,117	1,222	105	9.4%
63.0%	1,116	1,220	104	9.3%
64.2%	1,115	1,220	104	9.4%
65.4%	1,114	1,212	98	8.8%
66.7%	1,095	1,195	100	9.2%
67.9%	1,089	1,191	102	9.3%
69.1%	1,085	1,189	105	9.6%
70.4%	1,074	1,185	111	10.3%
71.6%	1,069	1,166	97	9.1%
72.8%	1,058	1,160	101	9.6%
74.1%	1,053	1,134	81	7.7%
75.3%	1,020	1,122	103	10.1%
76.5%	1,016	1,111	95	9.4%
77.8%	1,006	1,087	81	8.0%
79.0%	997	1,086	89	8.9%
80.2%	995	1,071	76	7.7%
81.5%	995	1,065	70	7.0%
82.7%	994	1,050	56	5.6%
84.0%	994	1,032	38	3.8%
85.2%	970	1,019	49	5.0%
86.4%	892	999	107	12.0%
87.7%	890	994	104	11.7%
88.9%	888	994	106	12.0%
90.1%	857	994	137	16.0%
91.4%	850	947	97	11.4%
92.6%	837	847	10	1.2%
93.8%	837	814	-23	-2.8%
95.1%	757	789	32	4.2%
96.3%	754	767	13	1.7%
97.5%	739	765	26	3.5%
98.8%	727	757	30	4.1%
100.0%	468	663	195	41.6%

Figure SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

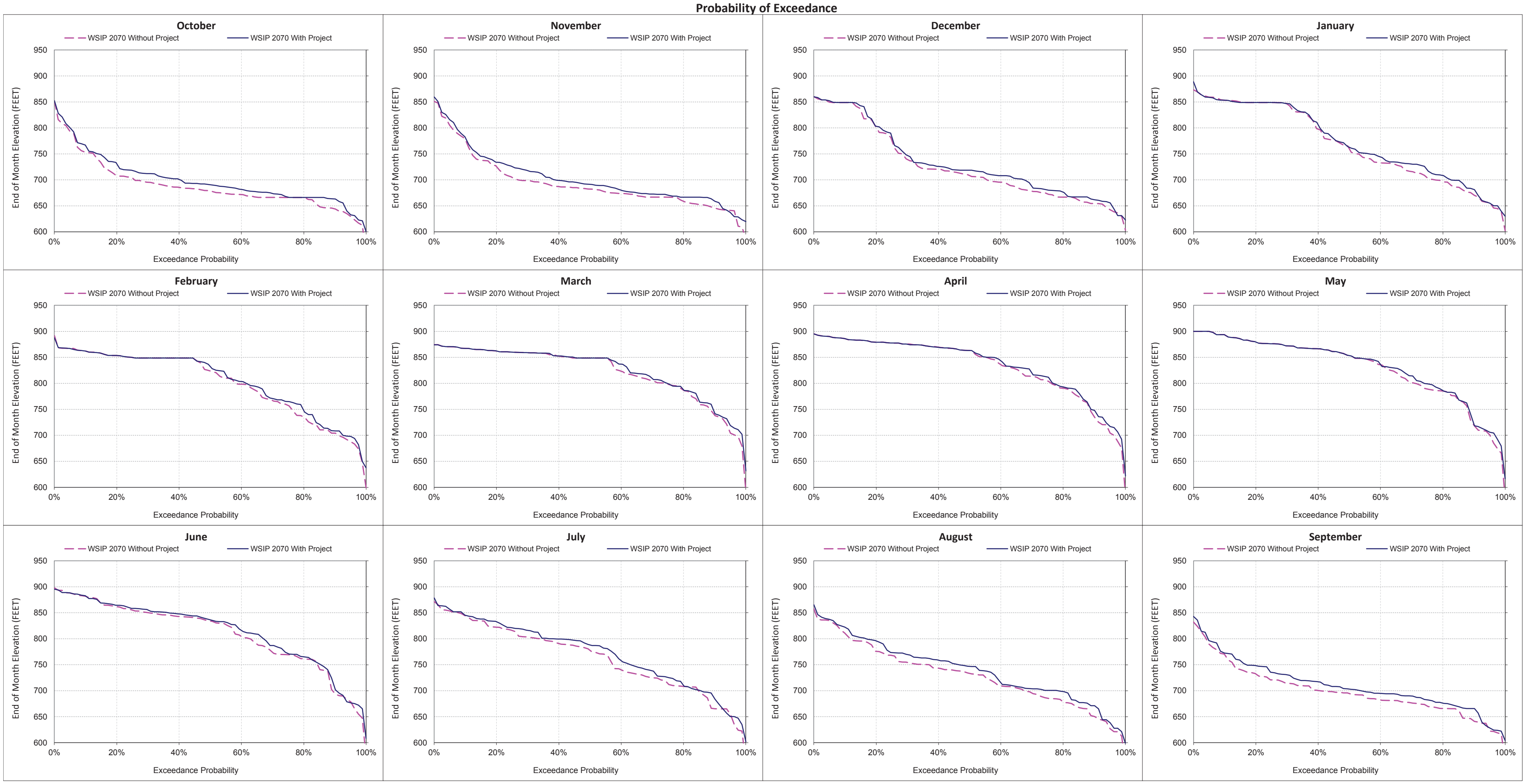


Table SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	852	852	0	0.0%
1.2%	816	828	12	1.5%
2.5%	809	821	13	1.6%
3.7%	805	809	4	0.5%
4.9%	794	801	7	0.9%
6.2%	790	793	2	0.3%
7.4%	763	772	9	1.2%
8.6%	756	769	13	1.7%
9.9%	753	767	14	1.8%
11.1%	752	755	3	0.4%
12.3%	751	754	3	0.3%
13.6%	742	750	9	1.2%
14.8%	734	749	15	2.0%
16.0%	723	743	20	2.8%
17.3%	719	736	17	2.3%
18.5%	714	735	21	2.9%
19.8%	709	734	25	3.5%
21.0%	707	721	14	2.0%
22.2%	707	720	13	1.8%
23.5%	706	719	13	1.9%
24.7%	705	719	13	1.9%
25.9%	699	717	18	2.5%
27.2%	699	713	15	2.1%
28.4%	697	713	16	2.2%
29.6%	696	712	16	2.4%
30.9%	695	712	17	2.4%
32.1%	693	712	18	2.6%
33.3%	692	707	15	2.2%
34.6%	690	706	15	2.2%
35.8%	689	704	16	2.3%
37.0%	687	703	15	2.3%
38.3%	686	702	16	2.3%
39.5%	686	702	16	2.3%
40.7%	685	699	14	2.1%
42.0%	684	694	10	1.4%
43.2%	684	694	10	1.4%
44.4%	683	693	10	1.5%
45.7%	683	693	10	1.5%
46.9%	681	692	11	1.7%
48.1%	680	692	12	1.8%
49.4%	679	691	12	1.7%
50.6%	678	690	12	1.8%
51.9%	676	689	14	2.0%
53.1%	675	688	12	1.8%
54.3%	674	687	13	1.9%
55.6%	673	686	13	1.9%
56.8%	672	685	13	1.9%
58.0%	672	684	12	1.7%
59.3%	672	682	10	1.5%
60.5%	672	681	9	1.4%
61.7%	669	679	10	1.5%
63.0%	669	678	9	1.3%
64.2%	667	678	10	1.5%
65.4%	666	677	10	1.5%
66.7%	666	676	10	1.5%
67.9%	666	676	10	1.5%
69.1%	666	675	9	1.3%
70.4%	666	673	7	1.1%
71.6%	666	673	6	0.9%
72.8%	666	672	6	0.9%
74.1%	666	668	2	0.3%
75.3%	666	666	0	0.0%
76.5%	666	666	0	0.0%
77.8%	666	666	0	0.0%
79.0%	666	666	0	0.0%
80.2%	666	666	0	0.0%
81.5%	662	666	4	0.6%
82.7%	662	666	4	0.7%
84.0%	654	666	12	1.9%
85.2%	648	666	18	2.8%
86.4%	647	666	20	3.0%
87.7%	646	664	18	2.8%
88.9%	646	664	18	2.7%
90.1%	644	663	19	3.0%
91.4%	640	658	19	2.9%
92.6%	639	656	17	2.6%
93.8%	635	640	5	0.9%
95.1%	630	633	3	0.5%
96.3%	623	631	9	1.4%
97.5%	617	623	6	1.0%
98.8%	613	621	8	1.4%
100.0%	560	601	41	7.4%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	851	860	9	1.0%
1.2%	848	851	3	0.4%
2.5%	822	830	8	0.9%
3.7%	819	826	7	0.8%
4.9%	805	816	11	1.3%
6.2%	796	810	14	1.8%
7.4%	790	797	7	0.9%
8.6%	784	790	5	0.7%
9.9%	780	783	3	0.4%
11.1%	762	768	6	0.8%
12.3%	747	758	11	1.5%
13.6%	740	753	13	1.7%
14.8%	738	746	8	1.1%
16.0%	737	745	7	1.0%
17.3%	737	742	5	0.7%
18.5%	729	739	10	1.4%
19.8%	727	734	7	0.9%
21.0%	719	734	15	2.1%
22.2%	712	731	19	2.7%
23.5%	708	729	20	2.9%
24.7%	706	726	21	2.9%
25.9%	701	723	21	3.1%
27.2%	700	722	23	3.2%
28.4%	699	720	21	3.1%
29.6%	699	719	20	2.9%
30.9%	698	716	18	2.6%
32.1%	696	716	20	2.8%
33.3%	696	715	19	2.7%
34.6%	694	712	17	2.5%
35.8%	693	705	12	1.7%
37.0%	690	705	14	2.1%
38.3%	688	701	13	1.9%
39.5%	687	699	12	1.7%
40.7%	686	699	12	1.8%
42.0%	686	698	11	1.6%
43.2%	686	696	10	1.5%
44.4%	685	696	11	1.6%
45.7%	685	695	10	1.5%
46.9%	684	694	10	1.4%
48.1%	683	692	9	1.2%
49.4%	682	691	9	1.3%
50.6%	682	691	9	1.3%
51.9%	681	690	8	1.2%
53.1%	680	689	9	1.3%
54.3%	678	689	11	1.6%
55.6%	676	688	12	1.8%
56.8%	675	686	11	1.6%
58.0%	675	684	9	1.4%
59.3%	674	682	8	1.1%
60.5%	674	679	5	0.8%
61.7%	673	678	4	0.7%
63.0%	672	676	4	0.6%
64.2%	672	676	4	0.6%
65.4%	669	675	6	0.9%
66.7%	668	674	6	0.8%
67.9%	667	674	7	1.0%
69.1%	667	673	6	0.9%
70.4%	667	673	6	0.9%
71.6%	667	672	5	0.8%
72.8%	667	672	5	0.8%
74.1%	667	672	5	0.8%
75.3%	667	670	4	0.5%
76.5%	667	669	2	0.3%
77.8%	667	668	2	0.3%
79.0%	661	667	5	0.8%
80.2%	658	667	9	1.3%
81.5%	656	667	11	1.6%
82.7%	655	667	12	1.9%
84.0%	654	667	13	2.0%
85.2%	652	667	14	2.2%
86.4%	652	666	14	2.2%
87.7%	650	666	16	2.4%
88.9%	648	664	16	2.4%
90.1%	646	659	13	2.0%
91.4%	644	656	13	2.0%
92.6%	642	645	2	0.3%
93.8%	642	642	0	0.0%
95.1%	641	637	-4	-0.6%
96.3%	640	629	-11	-1.8%
97.5%	611	629	18	3.0%
98.8%	609	623	14	2.3%
100.0%	587	620	33	5.6%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	860	860	0	0.0%
1.2%	856	858	2	0.3%
2.5%	854	854	0	0.0%
3.7%	854	854	0	0.0%
4.9%	850	853	3	0.4%
6.2%	849	850	1	0.1%
7.4%	849	849	0	0.0%
8.6%	849	849	0	0.0%
9.9%	849	849	0	0.0%
11.1%	849	849	0	0.0%
12.3%	849	849	0	0.0%
13.6%	842	848	6	0.7%
14.8%	838	843	5	0.7%
16.0%	818	841	23	2.8%
17.3%	817	822	5	0.6%
18.5%	816	817	2	0.2%
19.8%	804	804	0	0.0%
21.0%	791	802	11	1.3%
22.2%	791	795	5	0.6%
23.5%	789	792	3	0.4%
24.7%	782	790	8	1.0%
25.9%	761	766	5	0.6%
27.2%	751	763	11	1.5%
28.4%	750	755	5	0.7%
29.6%	740	748	8	1.0%
30.9%	737	745	8	1.1%
32.1%	736	734	-2	-0.3%
33.3%	726	733	7	1.0%
34.6%	723	733	10	1.4%
35.8%	721	731	10	1.4%
37.0%	721	729	8	1.1%
38.3%	721	728	7	1.0%
39.5%	721	726	6	0.8%
40.7%	720	725	5	0.7%
42.0%	717	725	7	1.0%
43.2%	717	723	6	0.8%
44.4%	716	720	4	0.6%
45.7%	715	719	4	0.6%
46.9%	713	719	6	0.8%
48.1%	711	719	8	1.1%
49.4%	710	719	9	1.2%
50.6%	706	719	12	1.7%
51.9%	706	717	11	1.6%
53.1%	705	716	11	1.5%
54.3%	705	715	11	1.5%
55.6%	700	711	11	1.6%
56.8%	697	710	13	1.9%
58.0%	697	709	12	1.8%
59.3%	696	708	13	1.8%
60.5%	695	708	13	1.8%
61.7%	693	708	14	2.1%
63.0%	689	707	18	2.6%
64.2%	688	703	15	2.2%
65.4%	685	702	17	2.5%
66.7%	682	702	20	2.9%
67.9%	681	699	19	2.7%
69.1%	679	695	16	2.3%
70.4%	678	684	6	0.9%
71.6%	677	684	6	0.9%
72.8%	676	683	8	1.1%
74.1%	675	682	6	0.9%
75.3%	672	680	8	1.2%
76.5%	671	679	8	1.2%
77.8%	667	679	12	1.8%
79.0%	667	679	12	1.8%
80.2%	667	676	9	1.3%
81.5%	667	668	1	0.2%
82.7%	667	667	0	0.0%
84.0%	665	667	2	0.4%
85.2%	660	667	7	1.0%
86.4%	657	667	10	1.5%
87.7%	657	667	10	1.5%
88.9%	655	663	9	1.4%
90.1%	654	662	7	1.1%
91.4%	654	661	6	1.0%
92.6%	653	659	5	0.8%
93.8%	647	658	11	1.7%
95.1%	643	656	13	2.1%
96.3%	639	644	5	0.8%
97.5%	637	631	-5	-0.8%
98.8%	630	631	2	0.2%
100.0%	603	623	20	3.3%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	873	889	15	1.8%
1.2%	869	869	0	0.0%
2.5%	864	864	0	0.0%
3.7%	861	859	-2	-0.2%
4.9%	859	859	0	0.0%
6.2%	859	858	-1	-0.1%
7.4%	858	854	-4	-0.4%
8.6%	854	853	-1	-0.1%
9.9%	853	853	0	0.0%
11.1%	853	853	-1	-0.1%
12.3%	853	851	-2	-0.2%
13.6%	852	850	-2	-0.2%
14.8%	850	849	-1	-0.1%
16.0%	849	849	0	0.0%
17.3%	849	849	0	0.0%
18.5%	849	849	0	0.0%
19.8%	849	849	0	0.0%
21.0%	849	849	0	0.0%
22.2%	849	849	0	0.0%
23.5%	849	849	0	0.0%
24.7%	849	849	0	0.0%
25.9%	849	849	0	0.0%
27.2%	849	849	0	0.0%
28.4%	849	849	0	0.0%
29.6%	848	847	-1	-0.1%
30.9%	842	846	4	0.5%
32.1%	832	839	7	0.9%
33.3%	831	833	3	0.3%
34.6%	831	831	0	0.0%
35.8%	829	831	1	0.2%
37.0%	822	825	3	0.4%
38.3%	815	814	-1	-0.1%
39.5%	799	811	12	1.6%
40.7%	796	798	2	0.3%
42.0%	780	790	10	1.3%
43.2%	778	789	11	1.4%
44.4%	777	782	5	0.7%
45.7%	775	776	0	0.0%
46.9%	771	773	2	0.3%
48.1%	767	772	5	0.6%
49.4%	767	765	-2	-0.2%
50.6%	753	761	8	1.0%
51.9%	750	759	9	1.2%
53.1%	750	753	3	0.4%
54.3%	743	751	8	1.1%
55.6%	742	751	10	1.3%
56.8%	740	750	9	1.3%
58.0%	734	749	15	2.0%
59.3%	733	746	12	1.7%
60.5%	733	743	11	1.5%
61.7%	732	737	5	0.6%
63.0%	732	735	3	0.4%
64.2%	731	734	3	0.5%
65.4%	728	734	6	0.8%
66.7%	726	732	6	0.9%
67.9%	719	732	13	1.8%
69.1%	717	731	14	2.0%
70.4%	716	730	14	2.0%
71.6%	713	730	17	2.4%
72.8%	712	728	16	2.2%
74.1%	709	726	18	2.5%
75.3%	702	716	14	2.0%
76.5%	701	712	11	1.6%
77.8%	700	710	10	1.5%
79.0%	699	710	11	1.5%
80.2%	696	708	12	1.8%
81.5%	696	703	8	1.1%
82.7%	689	700	11	1.6%
84.0%	686	699	13	1.9%
85.2%	686	699	14	2.0%
86.4%	680	693	13	1.9%
87.7%	677	684	8	1.1%
88.9%	676	684	8	1.2%
90.1%	670	681	11	1.6%
91.4%	667	670	3	0.5%
92.6%	659	660	2	0.3%
93.8%	657	658	1	0.1%
95.1%	657	655	-1	-0.2%
96.3%	646	650	4	0.7%
97.5%	645	650	5	0.8%
98.8%	638	640	1	0.2%
100.0%	602	630	28	4.6%

Table SW-19-b

Lake Oroville, End of Month Elevation

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	892	887	-4	-0.5%
1.2%	869	869	0	0.0%
2.5%	868	868	1	0.1%
3.7%	868	868	0	0.0%
4.9%	867	867	0	0.0%
6.2%	867	865	-2	-0.2%
7.4%	864	864	0	0.0%
8.6%	863	863	0	0.0%
9.9%	862	862	0	0.0%
11.1%	860	860	0	0.0%
12.3%	860	860	0	0.0%
13.6%	860	859	-1	-0.1%
14.8%	858	858	0	0.0%
16.0%	856	856	0	0.0%
17.3%	853	853	0	0.0%
18.5%	853	853	0	0.0%
19.8%	853	853	0	0.0%
21.0%	853	853	0	0.0%
22.2%	852	852	0	0.0%
23.5%	850	850	0	0.0%
24.7%	850	850	0	0.0%
25.9%	849	849	0	0.0%
27.2%	849	849	0	0.0%
28.4%	849	849	0	0.0%
29.6%	849	849	0	0.0%
30.9%	849	849	0	0.0%
32.1%	849	849	0	0.0%
33.3%	849	849	0	0.0%
34.6%	849	849	0	0.0%
35.8%	849	849	0	0.0%
37.0%	849	849	0	0.0%
38.3%	849	849	0	0.0%
39.5%	849	849	0	0.0%
40.7%	849	849	0	0.0%
42.0%	849	849	0	0.0%
43.2%	849	849	0	0.0%
44.4%	849	849	0	0.0%
45.7%	844	842	-1	-0.1%
46.9%	839	842	3	0.3%
48.1%	827	840	13	1.6%
49.4%	825	837	12	1.4%
50.6%	823	828	6	0.7%
51.9%	821	825	5	0.6%
53.1%	813	824	11	1.3%
54.3%	810	823	13	1.6%
55.6%	810	811	1	0.1%
56.8%	810	808	-2	-0.3%
58.0%	799	806	7	0.9%
59.3%	798	804	5	0.7%
60.5%	798	803	5	0.6%
61.7%	798	799	2	0.2%
63.0%	792	796	4	0.5%
64.2%	787	795	7	0.9%
65.4%	783	793	9	1.2%
66.7%	773	789	16	2.1%
67.9%	770	776	6	0.7%
69.1%	769	772	3	0.3%
70.4%	766	770	4	0.6%
71.6%	765	768	4	0.5%
72.8%	760	768	8	1.1%
74.1%	760	765	5	0.7%
75.3%	757	765	8	1.1%
76.5%	747	763	16	2.1%
77.8%	738	760	22	3.0%
79.0%	738	759	21	2.9%
80.2%	735	745	10	1.4%
81.5%	726	740	14	1.9%
82.7%	722	740	18	2.5%
84.0%	721	724	4	0.5%
85.2%	711	721	10	1.4%
86.4%	710	714	3	0.5%
87.7%	710	714	3	0.5%
88.9%	704	709	5	0.7%
90.1%	704	709	4	0.6%
91.4%	699	708	9	1.4%
92.6%	696	700	4	0.5%
93.8%	692	698	7	1.0%
95.1%	688	698	10	1.5%
96.3%	683	694	10	1.5%
97.5%	674	682	8	1.2%
98.8%	648	649	2	0.3%
100.0%	598	637	39	6.5%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	874	874	0	0.0%
1.2%	874	874	0	0.0%
2.5%	871	871	0	0.0%
3.7%	870	871	0	0.1%
4.9%	870	870	0	0.0%
6.2%	870	870	0	0.0%
7.4%	870	870	0	0.0%
8.6%	868	868	0	0.0%
9.9%	867	867	0	0.0%
11.1%	867	867	0	0.0%
12.3%	866	866	0	0.0%
13.6%	865	865	0	0.0%
14.8%	865	865	0	0.0%
16.0%	864	864	0	0.0%
17.3%	863	863	0	0.0%
18.5%	863	863	0	0.0%
19.8%	862	862	0	0.0%
21.0%	861	861	0	0.0%
22.2%	861	861	0	0.0%
23.5%	861	861	0	0.0%
24.7%	860	860	0	0.0%
25.9%	860	860	0	0.0%
27.2%	859	859	0	0.0%
28.4%	859	859	0	0.0%
29.6%	859	859	0	0.0%
30.9%	859	859	0	0.0%
32.1%	859	859	0	0.0%
33.3%	858	858	0	0.0%
34.6%	858	858	0	0.0%
35.8%	858	858	0	0.0%
37.0%	855	858	3	0.3%
38.3%	855	853	-2	-0.2%
39.5%	853	853	0	0.0%
40.7%	852	853	1	0.1%
42.0%	851	852	1	0.1%
43.2%	851	851	0	0.0%
44.4%	849	851	2	0.2%
45.7%	849	849	0	0.0%
46.9%	849	849	0	0.0%
48.1%	849	849	0	0.0%
49.4%	849	849	0	0.0%
50.6%	849	849	0	0.0%
51.9%	849	849	0	0.0%
53.1%	849	849	0	0.0%
54.3%	849	849	0	0.0%
55.6%	848	849	0	0.1%
56.8%	842	845	3	0.3%
58.0%	827	842	15	1.9%
59.3%	825	837	13	1.5%
60.5%	822	837	14	1.7%
61.7%	818	831	14	1.7%
63.0%	817	820	3	0.3%
64.2%	815	819	4	0.5%
65.4%	813	819	6	0.7%
66.7%	810	818	8	1.0%
67.9%	809	817	8	1.0%
69.1%	806	814	8	0.9%
70.4%	805	807	3	0.4%
71.6%	801	807	6	0.7%
72.8%	801	806	5	0.7%
74.1%	800	802	1	0.2%
75.3%	798	799	1	0.1%
76.5%	796	795	-1	-0.1%
77.8%	795	794	-1	-0.1%
79.0%	791	794	3	0.4%
80.2%	786	786	0	0.0%
81.5%	784	786	1	0.2%
82.7%	774	783	9	1.2%
84.0%	771	781	10	1.3%
85.2%	759	764	5	0.6%
86.4%	758	763	4	0.6%
87.7%	756	762	6	0.8%
88.9%	747	760	13	1.7%
90.1%	738	742	4	0.5%
91.4%	735	739	4	0.5%
92.6%	731	735	4	0.5%
93.8%	721	732	10	1.5%
95.1%	704	719	15	2.1%
96.3%	701	714	13	1.8%
97.5%	697	711	13	1.9%
98.8%	679	702	23	3.3%
100.0%	593	632	39	6.5%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	895	895	0	0.0%
1.2%	893	893	0	0.0%
2.5%	891	891	0	0.0%
3.7%	891	891	0	0.0%
4.9%	890	890	0	0.0%
6.2%	888	888	0	0.0%
7.4%	887	887	0	0.0%
8.6%	887	887	0	0.0%
9.9%	886	886	0	0.0%
11.1%	884	884	0	0.0%
12.3%	884	884	0	0.0%
13.6%	883	883	0	0.0%
14.8%	883	883	0	0.0%
16.0%	882	882	0	0.0%
17.3%	882	882	0	0.0%
18.5%	879	879	0	0.0%
19.8%	879	879	0	0.0%
21.0%	879	879	0	0.0%
22.2%	879	879	0	0.0%
23.5%	878	878	0	0.0%
24.7%	877	877	0	0.0%
25.9%	877	877	0	0.0%
27.2%	877	877	0	0.0%
28.4%	876	876	0	0.0%
29.6%	876	876	0	0.0%
30.9%	876	874	-1	-0.2%
32.1%	874	874	0	0.0%
33.3%	874	874	0	0.0%
34.6%	874	874	0	0.0%
35.8%	872	872	0	0.0%
37.0%	871	871	0	0.0%
38.3%	871	870	-1	-0.1%
39.5%	870	870	0	0.0%
40.7%	869	869	0	0.0%
42.0%	868	868	0	0.0%
43.2%	867	868	1	0.1%
44.4%	867	867	0	0.0%
45.7%	866	866	0	0.0%
46.9%	864	864	0	0.0%
48.1%	864	864	0	0.0%
49.4%	863	863	0	0.0%
50.6%	863	863	0	0.0%
51.9%	856	858	3	0.3%
53.1%	851	856	4	0.5%
54.3%	850	851	1	0.1%
55.6%	850	850	1	0.1%
56.8%	847	850	3	0.4%
58.0%	845	850	4	0.5%
59.3%	839	847	8	0.9%
60.5%	834	841	7	0.9%
61.7%	832	833	1	0.1%
63.0%	831	833	2	0.2%
64.2%	829	831	2	0.3%
65.4%	826	831	5	0.6%
66.7%	820	830	10	1.2%
67.9%	814	829	15	1.8%
69.1%	814	828	14	1.7%
70.4%	814	816	3	0.3%
71.6%	811	816	5	0.6%
72.8%	807	814	8	0.9%
74.1%	807	813	6	0.8%
75.3%	804	812	8	1.0%
76.5%	798	801	2	0.3%
77.8%	796	798	2	0.2%
79.0%	791	794	3	0.4%
80.2%	791	793	2	0.3%
81.5%	789	791	2	0.2%
82.7%	784	790	6	0.8%
84.0%	778	789	11	1.4%
85.2%	774	780	7	0.9%
86.4%	766	770	4	0.5%
87.7%	763	764	1	0.1%
88.9%	746	750	4	0.5%
90.1%	735	748	13	1.8%
91.4%	725	736	10	1.4%
92.6%	720	735	15	2.0%
93.8%	720	724	3	0.5%
95.1%	704	717	13	1.8%
96.3%	700	715	15	2.1%
97.5%	688	707	19	2.7%
98.8%	675	693	17	2.6%
100.0%	585	622	37	6.4%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	900	900	0	0.0%
1.2%	900	900	0	0.0%
2.5%	900	900	0	0.0%
3.7%	900	900	0	0.0%
4.9%	900	900	0	0.0%
6.2%	898	898	0	0.0%
7.4%	894	894	0	0.0%
8.6%	894	894	0	0.0%
9.9%	894	893	0	0.0%
11.1%	889	889	0	0.0%
12.3%	888	888	0	0.0%
13.6%	888	888	0	0.0%
14.8%	886	886	0	0.0%
16.0%	884	883	-1	-0.1%
17.3%	883	883	0	0.0%
18.5%	881	881	0	0.0%
19.8%	880	880	0	0.0%
21.0%	877	877	0	0.0%
22.2%	877	877	0	0.0%
23.5%	877	877	0	0.0%
24.7%	876	876	0	0.0%
25.9%	876	876	0	0.0%
27.2%	876	876	0	0.0%
28.4%	875	875	0	0.0%
29.6%	872	872	0	0.0%
30.9%	872	872	0	0.0%
32.1%	872	872	0	0.0%
33.3%	868	868	0	0.0%
34.6%	868	868	0	0.0%
35.8%	868	868	0	0.0%
37.0%	867	867	-1	-0.1%
38.3%	867	867	0	0.0%
39.5%	867	867	0	0.0%
40.7%	866	867	1	0.1%
42.0%	865	864	0	0.0%
43.2%	864	864	0	0.0%
44.4%	862	861	0	0.0%
45.7%	861	861	0	0.1%
46.9%	859	859	0	0.0%
48.1%	857	857	0	0.0%
49.4%	854	854	1	0.1%
50.6%	853	853	0	0.0%
51.9%	848	849	1	0.1%
53.1%	848	848	0	0.0%
54.3%	848	848	0	0.0%
55.6%	847	847	0	0.0%
56.8%	844	846	3	0.3%
58.0%	842	845	3	0.3%
59.3%	836	842	6	0.7%
60.5%	835	832	-3	-0.3%
61.7%	829	832	3	0.4%
63.0%	825	831	5	0.6%
64.2%	824	830	6	0.8%
65.4%	819	829	10	1.2%
66.7%	812	825	13	1.6%
67.9%	809	820	10	1.3%
69.1%	803	815	12	1.5%
70.4%	801	814	13	1.7%
71.6%	799	805	6	0.8%
72.8%	796	804	7	0.9%
74.1%	790	800	9	1.2%
75.3%	789	799	10	1.3%
76.5%	787	797	10	1.3%
77.8%	786	793	7	0.8%
79.0%	786	790	4	0.5%
80.2%	785	785	0	0.1%
81.5%	783	783	-1	-0.1%
82.7%	777	783	6	0.8%
84.0%	776	781	6	0.7%
85.2%	767	768	1	0.2%
86.4%	764	765	1	0.2%
87.7%	757	762	6	0.7%
88.9%	730	741	11	1.6%
90.1%	718	718	0	0.0%
91.4%	710	717	7	1.0%
92.6%	709	713	5	0.6%
93.8%	708	710	2	0.3%
95.1%	701	706	5	0.7%
96.3%	685	704	19	2.8%
97.5%	674	692	17	2.6%
98.8%	665	679	14	2.1%
100.0%	579	616	37	6.4%

Table SW-19-b
Lake Oroville, End of Month Elevation
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	898	895	-3	-0.3%
1.2%	893	894	1	0.1%
2.5%	893	889	-4	-0.4%
3.7%	889	889	0	0.0%
4.9%	888	888	0	0.0%
6.2%	886	886	0	0.0%
7.4%	883	886	2	0.3%
8.6%	883	884	1	0.1%
9.9%	882	883	1	0.1%
11.1%	879	878	-2	-0.2%
12.3%	879	877	-2	-0.2%
13.6%	877	876	-1	-0.1%
14.8%	869	869	0	0.0%
16.0%	865	869	4	0.4%
17.3%	864	868	3	0.4%
18.5%	863	866	3	0.3%
19.8%	862	865	2	0.3%
21.0%	861	864	3	0.4%
22.2%	858	863	5	0.6%
23.5%	858	861	3	0.3%
24.7%	856	858	3	0.3%
25.9%	853	858	5	0.6%
27.2%	853	858	4	0.5%
28.4%	852	857	5	0.6%
29.6%	851	856	6	0.7%
30.9%	850	853	3	0.4%
32.1%	849	852	3	0.4%
33.3%	847	852	5	0.5%
34.6%	846	852	5	0.6%
35.8%	846	851	5	0.6%
37.0%	845	849	4	0.5%
38.3%	844	849	5	0.6%
39.5%	843	848	5	0.6%
40.7%	843	848	5	0.6%
42.0%	842	846	4	0.4%
43.2%	842	845	3	0.4%
44.4%	841	844	3	0.4%
45.7%	840	844	4	0.5%
46.9%	839	841	3	0.3%
48.1%	836	839	3	0.3%
49.4%	835	837	3	0.3%
50.6%	833	836	2	0.3%
51.9%	830	833	3	0.3%
53.1%	830	833	3	0.4%
54.3%	829	833	4	0.4%
55.6%	825	831	6	0.7%
56.8%	822	828	6	0.7%
58.0%	809	827	18	2.2%
59.3%	807	819	11	1.4%
60.5%	802	814	12	1.4%
61.7%	802	812	10	1.2%
63.0%	800	811	12	1.5%
64.2%	793	809	17	2.1%
65.4%	788	808	21	2.6%
66.7%	787	802	15	1.9%
67.9%	784	796	12	1.5%
69.1%	778	787	9	1.1%
70.4%	772	787	15	1.9%
71.6%	770	784	14	1.8%
72.8%	770	782	12	1.5%
74.1%	770	774	4	0.6%
75.3%	769	771	1	0.2%
76.5%	769	770	1	0.1%
77.8%	766	770	4	0.5%
79.0%	762	766	4	0.5%
80.2%	761	765	4	0.5%
81.5%	761	764	4	0.5%
82.7%	760	759	-1	-0.1%
84.0%	757	755	-2	-0.2%
85.2%	741	751	11	1.4%
86.4%	739	747	8	1.0%
87.7%	739	740	2	0.2%
88.9%	702	725	22	3.2%
90.1%	693	701	8	1.2%
91.4%	690	695	5	0.7%
92.6%	690	691	1	0.2%
93.8%	683	679	-4	-0.6%
95.1%	679	676	-2	-0.3%
96.3%	665	675	10	1.5%
97.5%	655	672	17	2.6%
98.8%	647	665	18	2.8%
100.0%	571	608	37	6.5%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	871	878	7	0.8%
1.2%	866	864	-2	-0.2%
2.5%	856	863	8	0.9%
3.7%	855	862	7	0.9%
4.9%	854	857	4	0.4%
6.2%	851	852	1	0.1%
7.4%	851	852	1	0.1%
8.6%	849	852	3	0.4%
9.9%	845	846	1	0.1%
11.1%	840	843	3	0.4%
12.3%	835	842	7	0.8%
13.6%	835	839	4	0.4%
14.8%	834	838	4	0.4%
16.0%	834	838	4	0.5%
17.3%	824	834	10	1.2%
18.5%	823	834	11	1.3%
19.8%	822	834	11	1.4%
21.0%	822	830	8	1.0%
22.2%	818	826	8	0.9%
23.5%	818	822	4	0.4%
24.7%	817	821	5	0.6%
25.9%	814	820	6	0.7%
27.2%	805	819	15	1.8%
28.4%	804	819	15	1.8%
29.6%	803	817	13	1.6%
30.9%	802	815	13	1.6%
32.1%	801	813	12	1.5%
33.3%	800	812	12	1.5%
34.6%	800	801	1	0.1%
35.8%	796	801	4	0.5%
37.0%	796	800	4	0.6%
38.3%	795	800	5	0.6%
39.5%	792	800	8	1.0%
40.7%	789	799	10	1.2%
42.0%	789	799	10	1.3%
43.2%	788	799	10	1.3%
44.4%	788	797	10	1.2%
45.7%	786	797	11	1.4%
46.9%	785	796	11	1.4%
48.1%	783	792	9	1.2%
49.4%	781	789	8	1.1%
50.6%	775	787	12	1.6%
51.9%	774	787	13	1.7%
53.1%	771	786	15	2.0%
54.3%	771	782	12	1.5%
55.6%	769	781	13	1.6%
56.8%	756	776	21	2.7%
58.0%	742	770	28	3.7%
59.3%	742	762	19	2.6%
60.5%	739	756	17	2.3%
61.7%	736	753	17	2.3%
63.0%	735	750	15	2.1%
64.2%	733	748	15	2.0%
65.4%	731	745	13	1.8%
66.7%	730	744	13	1.8%
67.9%	728	741	13	1.9%
69.1%	726	739	14	1.9%
70.4%	725	738	13	1.8%
71.6%	724	728	4	0.5%
72.8%	721	727	7	1.0%
74.1%	720	727	7	1.0%
75.3%	712	725	13	1.8%
76.5%	710	724	14	1.9%
77.8%	709	719	9	1.3%
79.0%	709	718	9	1.3%
80.2%	708	709	1	0.1%
81.5%	708	708	0	0.0%
82.7%	707	704	-3	-0.4%
84.0%	707	702	-5	-0.7%
85.2%	697	700	3	0.5%
86.4%	692	698	6	0.9%
87.7%	686	697	11	1.6%
88.9%	666	696	29	4.4%
90.1%	665	684	19	2.8%
91.4%	665	674	9	1.3%
92.6%	665	665	0	0.0%
93.8%	665	656	-8	-1.3%
95.1%	654	650	-4	-0.6%
96.3%	635	650	16	2.4%
97.5%	624	647	23	3.7%
98.8%	622	635	12	2.0%
100.0%	560	602	42	7.5%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	858	865	8	0.9%
1.2%	838	846	9	1.1%
2.5%	836	841	5	0.6%
3.7%	836	839	3	0.3%
4.9%	835	837	2	0.3%
6.2%	831	835	4	0.5%
7.4%	826	827	2	0.2%
8.6%	817	825	8	1.0%
9.9%	811	822	11	1.4%
11.1%	803	818	15	1.8%
12.3%	797	806	10	1.2%
13.6%	796	804	8	1.0%
14.8%	796	802	7	0.8%
16.0%	796	802	6	0.8%
17.3%	793	799	6	0.8%
18.5%	788	798	10	1.3%
19.8%	776	797	21	2.7%
21.0%	775	794	18	2.4%
22.2%	772	790	18	2.3%
23.5%	768	778	10	1.3%
24.7%	768	773	5	0.7%
25.9%	767	773	6	0.8%
27.2%	756	773	17	2.2%
28.4%	755	772	17	2.3%
29.6%	755	770	15	2.0%
30.9%	753	768	15	2.0%
32.1%	752	765	13	1.7%
33.3%	751	764	13	1.7%
34.6%	751	763	12	1.6%
35.8%	750	763	12	1.7%
37.0%	750	762	12	1.6%
38.3%	744	760	16	2.2%
39.5%	744	760	16	2.1%
40.7%	743	758	15	2.0%
42.0%	741	757	17	2.3%
43.2%	740	756	16	2.2%
44.4%	740	753	13	1.7%
45.7%	738	751	13	1.7%
46.9%	738	750	12	1.6%
48.1%	737	748	12	1.6%
49.4%	734	747	13	1.7%
50.6%	732	747	14	2.0%
51.9%	732	746	15	2.0%
53.1%	730	739	9	1.2%
54.3%	730	739	8	1.1%
55.6%	723	737	15	2.0%
56.8%	720	735	15	2.1%
58.0%	716	730	15	2.0%
59.3%	710	720	11	1.5%
60.5%	709	712	3	0.5%
61.7%	708	712	3	0.5%
63.0%	708	710	3	0.4%
64.2%	707	709	2	0.3%
65.4%	705	708	3	0.4%
66.7%	703	706	4	0.5%
67.9%	698	704	6	0.9%
69.1%	698	704	6	0.8%
70.4%	694	704	10	1.4%
71.6%	693	703	11	1.5%
72.8%	689	702	13	1.9%
74.1%	687	701	14	2.0%
75.3%	685	701	15	2.3%
76.5%	685	701	16	2.3%
77.8%	684	700	16	2.3%
79.0%	683	699	16	2.3%
80.2%	677	698	21	3.1%
81.5%	677	695	19	2.8%
82.7%	675	682	7	1.1%
84.0%	670	682	11	1.7%
85.2%	667	677	10	1.5%
86.4%	666	677	11	1.7%
87.7%	665	676	11	1.7%
88.9%	652	671	19	2.9%
90.1%	650	671	21	3.2%
91.4%	645	665	20	3.1%
92.6%	643	644	1	0.1%
93.8%	640	644	3	0.5%
95.1%	627	638	11	1.8%
96.3%	621	628	6	1.0%
97.5%	621	628	7	1.1%
98.8%	613	621	8	1.4%
100.0%	554	598	45	8.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	832	843	11	1.3%
1.2%	824	836	12	1.4%
2.5%	814	814	1	0.1%
3.7%	804	812	9	1.1%
4.9%	790	796	7	0.8%
6.2%	783	794	11	1.3%
7.4%	779	792	13	1.7%
8.6%	772	776	4	0.5%
9.9%	771	773	2	0.3%
11.1%	759	771	12	1.6%
12.3%	754	771	16	2.1%
13.6%	742	761	18	2.5%
14.8%	741	759	18	2.4%
16.0%	739	752	14	1.9%
17.3%	735	749	14	1.9%
18.5%	735	749	14	1.9%
19.8%	733	749	15	2.1%
21.0%	728	747	19	2.6%
22.2%	728	746	19	2.6%
23.5%	726	746	20	2.7%
24.7%	721	735	15	2.0%
25.9%	721	735	14	1.9%
27.2%	720	732	12	1.7%
28.4%	718	731	14	1.9%
29.6%	714	731	17	2.3%
30.9%	714	730	16	2.2%
32.1%	713	724	11	1.5%
33.3%	710	721	11	1.6%
34.6%	710	719	10	1.3%
35.8%	709	719	10	1.4%
37.0%	709	719	10	1.4%
38.3%	701	718	17	2.4%
39.5%	701	718	17	2.4%
40.7%	700	717	17	2.4%
42.0%	699	712	13	1.8%
43.2%	698	710	12	1.7%
44.4%	698	708	10	1.4%
45.7%	697	708	11	1.6%
46.9%	697	707	11	1.5%
48.1%	696	704	8	1.2%
49.4%	696	703	8	1.1%
50.6%	693	703	9	1.4%
51.9%	692	702	10	1.4%
53.1%	692	701	9	1.3%
54.3%	692	699	7	1.1%
55.6%	686	698	12	1.7%
56.8%	685	697	12	1.8%
58.0%	685	695	11	1.6%
59.3%	683	695	12	1.8%
60.5%	681	695	13	1.9%
61.7%	681	694	13	1.9%
63.0%	681	694	13	1.9%
64.2%	681	694	13	1.9%
65.4%	681	693	12	1.8%
66.7%	679	691	12	1.8%
67.9%	678	690	12	1.8%
69.1%	677	690	13	1.9%
70.4%	676	690	14	2.0%
71.6%	675	687	12	1.8%
72.8%	674	687	12	1.8%
74.1%	673	683	10	1.5%
75.3%	669	682	13	1.9%
76.5%	669	681	12	1.7%
77.8%	668	678	10	1.5%
79.0%	666	677	11	1.7%
80.2%	666	676	10	1.5%
81.5%	666	675	9	1.4%
82.7%	665	673	8	1.1%
84.0%	665	671	5	0.8%
85.2%	661	669	8	1.2%
86.4%	647	666	19	3.0%
87.7%	647	666	19	2.9%
88.9%	646	666	19	3.0%
90.1%	641	665	25	3.8%
91.4%	640	657	17	2.7%
92.6%	637	639	2	0.3%
93.8%	637	633	-4	-0.7%
95.1%	622	628	6	1.0%
96.3%	622	624	2	0.4%
97.5%	619	624	5	0.8%
98.8%	617	622	6	0.9%
100.0%	566	604	39	6.9%

Figure SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

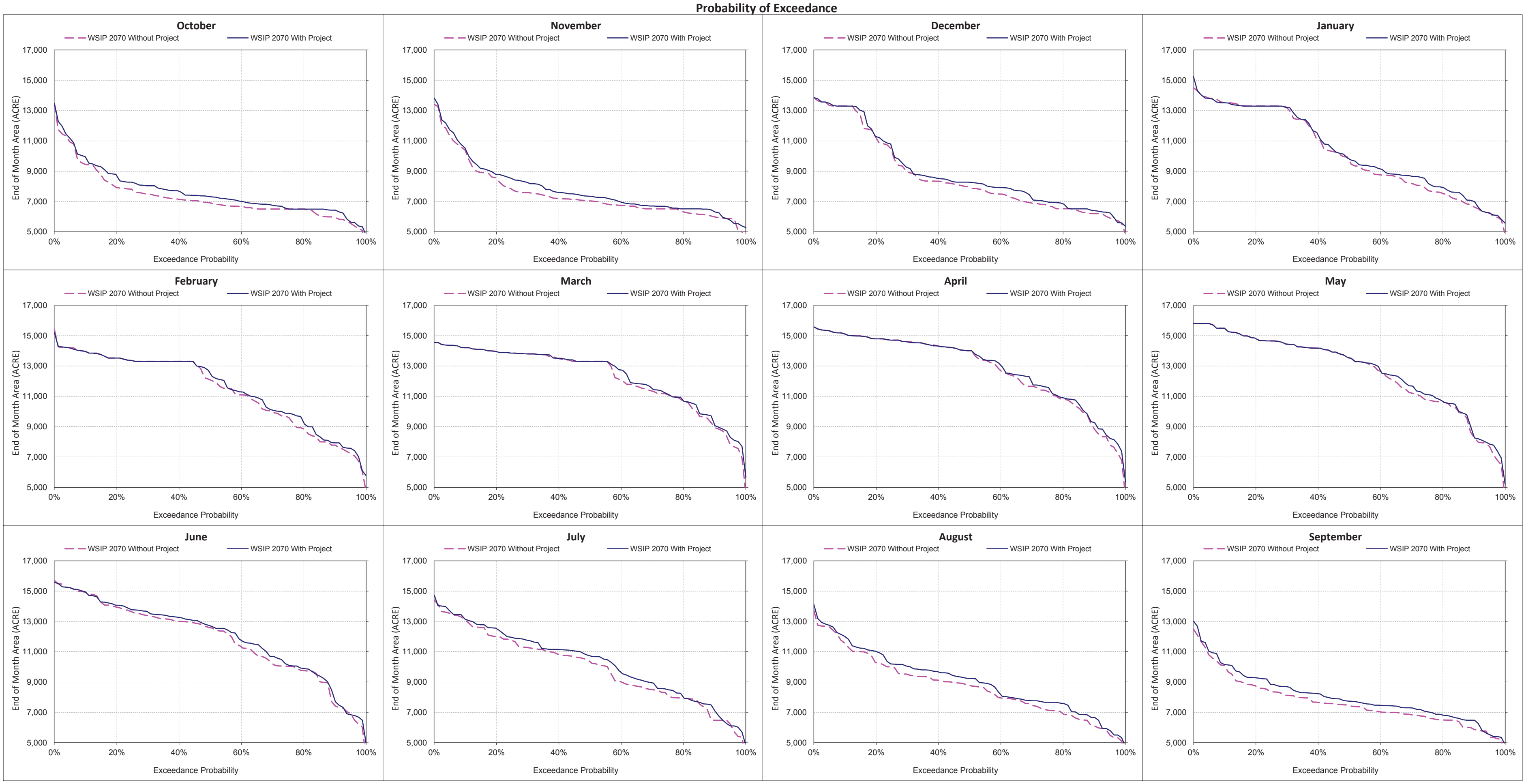


Table SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,474	13,474	0	0.0%
1.2%	11,744	12,288	544	4.6%
2.5%	11,470	11,954	484	4.2%
3.7%	11,329	11,470	141	1.2%
4.9%	10,939	11,194	255	2.3%
6.2%	10,806	10,889	83	0.8%
7.4%	9,806	10,131	326	3.3%
8.6%	9,569	10,045	476	5.0%
9.9%	9,455	9,954	499	5.3%
11.1%	9,421	9,526	105	1.1%
12.3%	9,393	9,486	93	1.0%
13.6%	9,053	9,356	303	3.3%
14.8%	8,798	9,305	508	5.8%
16.0%	8,412	9,097	684	8.1%
17.3%	8,282	8,847	565	6.8%
18.5%	8,120	8,832	711	8.8%
19.8%	7,938	8,787	849	10.7%
21.0%	7,886	8,368	481	6.1%
22.2%	7,881	8,307	426	5.4%
23.5%	7,829	8,286	457	5.8%
24.7%	7,819	8,274	454	5.8%
25.9%	7,604	8,207	603	7.9%
27.2%	7,599	8,097	497	6.5%
28.4%	7,540	8,072	532	7.1%
29.6%	7,487	8,046	559	7.5%
30.9%	7,475	8,046	571	7.6%
32.1%	7,411	8,035	624	8.4%
33.3%	7,365	7,892	527	7.2%
34.6%	7,312	7,827	515	7.0%
35.8%	7,250	7,785	535	7.4%
37.0%	7,211	7,738	527	7.3%
38.3%	7,173	7,718	546	7.6%
39.5%	7,164	7,711	547	7.6%
40.7%	7,125	7,607	481	6.8%
42.0%	7,095	7,427	332	4.7%
43.2%	7,083	7,419	336	4.7%
44.4%	7,059	7,412	352	5.0%
45.7%	7,056	7,408	352	5.0%
46.9%	6,996	7,380	384	5.5%
48.1%	6,946	7,366	419	6.0%
49.4%	6,936	7,335	399	5.8%
50.6%	6,878	7,303	425	6.2%
51.9%	6,807	7,278	470	6.9%
53.1%	6,793	7,214	421	6.2%
54.3%	6,754	7,198	444	6.6%
55.6%	6,732	7,175	443	6.6%
56.8%	6,696	7,136	440	6.6%
58.0%	6,696	7,094	398	5.9%
59.3%	6,682	7,025	343	5.1%
60.5%	6,670	6,992	322	4.8%
61.7%	6,592	6,931	339	5.1%
63.0%	6,591	6,894	303	4.6%
64.2%	6,532	6,876	344	5.3%
65.4%	6,507	6,844	337	5.2%
66.7%	6,507	6,827	321	4.9%
67.9%	6,507	6,823	317	4.9%
69.1%	6,506	6,790	284	4.4%
70.4%	6,505	6,732	227	3.5%
71.6%	6,505	6,703	199	3.1%
72.8%	6,504	6,682	178	2.7%
74.1%	6,504	6,559	56	0.9%
75.3%	6,504	6,506	2	0.0%
76.5%	6,503	6,506	3	0.0%
77.8%	6,503	6,506	3	0.0%
79.0%	6,503	6,505	2	0.0%
80.2%	6,502	6,505	2	0.0%
81.5%	6,406	6,504	98	1.5%
82.7%	6,391	6,503	112	1.8%
84.0%	6,188	6,503	316	5.1%
85.2%	6,042	6,503	461	7.6%
86.4%	6,007	6,503	496	8.3%
87.7%	5,988	6,447	459	7.7%
88.9%	5,986	6,436	450	7.5%
90.1%	5,939	6,433	494	8.3%
91.4%	5,831	6,304	473	8.1%
92.6%	5,809	6,237	429	7.4%
93.8%	5,701	5,849	148	2.6%
95.1%	5,554	5,637	83	1.5%
96.3%	5,378	5,607	229	4.3%
97.5%	5,216	5,377	161	3.1%
98.8%	5,101	5,326	225	4.4%
100.0%	3,760	4,786	1,026	27.3%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,414	13,831	417	3.1%
1.2%	13,263	13,412	149	1.1%
2.5%	12,013	12,383	370	3.1%
3.7%	11,851	12,189	338	2.8%
4.9%	11,358	11,746	388	3.4%
6.2%	11,015	11,535	520	4.7%
7.4%	10,785	11,056	271	2.5%
8.6%	10,590	10,785	196	1.8%
9.9%	10,416	10,540	124	1.2%
11.1%	9,777	9,999	222	2.3%
12.3%	9,251	9,641	390	4.2%
13.6%	8,997	9,437	440	4.9%
14.8%	8,918	9,190	273	3.1%
16.0%	8,909	9,161	252	2.8%
17.3%	8,888	9,060	173	1.9%
18.5%	8,621	8,967	346	4.0%
19.8%	8,568	8,791	224	2.6%
21.0%	8,275	8,784	509	6.2%
22.2%	8,044	8,707	663	8.2%
23.5%	7,926	8,616	690	8.7%
24.7%	7,839	8,536	698	8.9%
25.9%	7,690	8,418	729	9.5%
27.2%	7,629	8,394	766	10.0%
28.4%	7,597	8,326	729	9.6%
29.6%	7,593	8,278	685	9.0%
30.9%	7,574	8,184	610	8.1%
32.1%	7,511	8,176	665	8.8%
33.3%	7,508	8,142	635	8.5%
34.6%	7,444	8,034	590	7.9%
35.8%	7,396	7,808	412	5.6%
37.0%	7,310	7,795	485	6.6%
38.3%	7,218	7,661	443	6.1%
39.5%	7,207	7,611	405	5.6%
40.7%	7,179	7,592	413	5.8%
42.0%	7,177	7,554	376	5.2%
43.2%	7,170	7,509	339	4.7%
44.4%	7,133	7,505	372	5.2%
45.7%	7,132	7,476	344	4.8%
46.9%	7,088	7,425	337	4.8%
48.1%	7,073	7,363	290	4.1%
49.4%	7,043	7,347	304	4.3%
50.6%	7,031	7,341	310	4.4%
51.9%	7,003	7,283	280	4.0%
53.1%	6,973	7,263	290	4.2%
54.3%	6,885	7,262	377	5.5%
55.6%	6,821	7,226	405	5.9%
56.8%	6,786	7,146	360	5.3%
58.0%	6,775	7,094	319	4.7%
59.3%	6,753	7,014	261	3.9%
60.5%	6,749	6,933	184	2.7%
61.7%	6,728	6,878	151	2.2%
63.0%	6,696	6,838	142	2.1%
64.2%	6,692	6,835	143	2.1%
65.4%	6,582	6,782	201	3.1%
66.7%	6,554	6,746	192	2.9%
67.9%	6,520	6,745	225	3.5%
69.1%	6,519	6,708	189	2.9%
70.4%	6,519	6,703	184	2.8%
71.6%	6,519	6,694	175	2.7%
72.8%	6,518	6,685	166	2.5%
74.1%	6,518	6,684	166	2.5%
75.3%	6,518	6,631	113	1.7%
76.5%	6,513	6,571	58	0.9%
77.8%	6,513	6,566	53	0.8%
79.0%	6,384	6,523	138	2.2%
80.2%	6,301	6,520	219	3.5%
81.5%	6,246	6,519	273	4.4%
82.7%	6,209	6,519	309	5.0%
84.0%	6,186	6,518	332	5.4%
85.2%	6,149	6,516	368	6.0%
86.4%	6,140	6,507	367	6.0%
87.7%	6,103	6,501	398	6.5%
88.9%	6,040	6,439	399	6.6%
90.1%	5,981	6,317	336	5.6%
91.4%	5,929	6,251	322	5.4%
92.6%	5,900	5,957	57	1.0%
93.8%	5,878	5,885	7	0.1%
95.1%	5,867	5,767	-100	-1.7%
96.3%	5,850	5,543	-307	-5.2%
97.5%	5,052	5,539	486	9.6%
98.8%	5,005	5,381	375	7.5%
100.0%	4,402	5,291	889	20.2%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,866	13,862	-3	0.0%
1.2%	13,657	13,777	120	0.9%
2.5%	13,567	13,567	0	0.0%
3.7%	13,564	13,564	0	0.0%
4.9%	13,344	13,492	148	1.1%
6.2%	13,306	13,344	38	0.3%
7.4%	13,304	13,304	0	0.0%
8.6%	13,304	13,304	0	0.0%
9.9%	13,304	13,304	0	0.0%
11.1%	13,304	13,304	0	0.0%
12.3%	13,304	13,304	0	0.0%
13.6%	12,959	13,261	302	2.3%
14.8%	12,761	13,027	266	2.1%
16.0%	11,806	12,928	1,122	9.5%
17.3%	11,790	11,995	206	1.7%
18.5%	11,725	11,790	64	0.5%
19.8%	11,294	11,293	-1	0.0%
21.0%	10,846	11,230	384	3.5%
22.2%	10,816	10,994	178	1.6%
23.5%	10,748	10,872	124	1.2%
24.7%	10,502	10,794	292	2.8%
25.9%	9,748	9,928	180	1.8%
27.2%	9,385	9,801	417	4.4%
28.4%	9,343	9,528	186	2.0%
29.6%	9,015	9,274	258	2.9%
30.9%	8,886	9,162	276	3.1%
32.1%	8,858	8,786	-72	-0.8%
33.3%	8,529	8,772	242	2.8%
34.6%	8,405	8,748	343	4.1%
35.8%	8,354	8,698	345	4.1%
37.0%	8,351	8,618	267	3.2%
38.3%	8,345	8,597	253	3.0%
39.5%	8,338	8,535	197	2.4%
40.7%	8,332	8,502	170	2.0%
42.0%	8,226	8,480	254	3.1%
43.2%	8,221	8,412	190	2.3%
44.4%	8,173	8,314	141	1.7%
45.7%	8,134	8,281	148	1.8%
46.9%	8,075	8,279	204	2.5%
48.1%	8,015	8,278	263	3.3%
49.4%	7,977	8,276	299	3.8%
50.6%	7,857	8,270	412	5.2%
51.9%	7,850	8,226	376	4.8%
53.1%	7,821	8,188	367	4.7%
54.3%	7,802	8,165	363	4.7%
55.6%	7,636	8,027	390	5.1%
56.8%	7,537	7,976	440	5.8%
58.0%	7,526	7,943	416	5.5%
59.3%	7,492	7,923	431	5.8%
60.5%	7,485	7,913	428	5.7%
61.7%	7,417	7,910	493	6.6%
63.0%	7,271	7,874	603	8.3%
64.2%	7,227	7,740	513	7.1%
65.4%	7,120	7,706	586	8.2%
66.7%	7,012	7,692	680	9.7%
67.9%	6,981	7,614	633	9.1%
69.1%	6,936	7,465	529	7.6%
70.4%	6,878	7,094	216	3.1%
71.6%	6,870	7,087	217	3.2%
72.8%	6,810	7,066	257	3.8%
74.1%	6,804	7,014	210	3.1%
75.3%	6,691	6,963	273	4.1%
76.5%	6,659	6,940	281	4.2%
77.8%	6,523	6,932	409	6.3%
79.0%	6,523	6,913	390	6.0%
80.2%	6,523	6,817	294	4.5%
81.5%	6,522	6,558	35	0.5%
82.7%	6,520	6,524	4	0.1%
84.0%	6,464	6,524	60	0.9%
85.2%	6,357	6,524	166	2.6%
86.4%	6,280	6,523	243	3.9%
87.7%	6,269	6,523	254	4.1%
88.9%	6,207	6,434	226	3.6%
90.1%	6,205	6,391	185	3.0%
91.4%	6,203	6,367	164	2.6%
92.6%	6,180	6,318	138	2.2%
93.8%	6,019	6,296	277	4.6%
95.1%	5,905	6,241	336	5.7%
96.3%	5,797	5,931	134	2.3%
97.5%	5,743	5,602	-142	-2.5%
98.8%	5,557	5,598	41	0.7%
100.0%	4,841	5,374	534	11.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,504	15,256	752	5.2%
1.2%	14,314	14,314	0	0.0%
2.5%	14,034	14,034	0	0.0%
3.7%	13,924	13,821	-103	-0.7%
4.9%	13,821	13,811	-10	-0.1%
6.2%	13,811	13,757	-53	-0.4%
7.4%	13,757	13,577	-180	-1.3%
8.6%	13,577	13,524	-53	-0.4%
9.9%	13,524	13,524	0	0.0%
11.1%	13,524	13,497	-27	-0.2%
12.3%	13,497	13,407	-91	-0.7%
13.6%	13,453	13,365	-88	-0.7%
14.8%	13,374	13,324	-50	-0.4%
16.0%	13,324	13,304	-20	-0.2%
17.3%	13,304	13,304	0	0.0%
18.5%	13,304	13,304	0	0.0%
19.8%	13,304	13,304	0	0.0%
21.0%	13,304	13,304	0	0.0%
22.2%	13,304	13,304	0	0.0%
23.5%	13,304	13,304	0	0.0%
24.7%	13,304	13,304	0	0.0%
25.9%	13,304	13,304	0	0.0%
27.2%	13,301	13,301	0	0.0%
28.4%	13,301	13,301	0	0.0%
29.6%	13,251	13,205	-46	-0.3%
30.9%	12,995	13,191	196	1.5%
32.1%	12,481	12,839	358	2.9%
33.3%	12,423	12,548	126	1.0%
34.6%	12,416	12,428	12	0.1%
35.8%	12,354	12,423	69	0.6%
37.0%	11,987	12,146	159	1.3%
38.3%	11,701	11,666	-35	-0.3%
39.5%	11,110	11,564	454	4.1%
40.7%	11,016	11,105	89	0.8%
42.0%	10,422	10,797	375	3.6%
43.2%	10,368	10,769	400	3.9%
44.4%	10,311	10,498	187	1.8%
45.7%	10,261	10,270	8	0.1%
46.9%	10,104	10,187	83	0.8%
48.1%	9,961	10,132	171	1.7%
49.4%	9,943	9,874	-69	-0.7%
50.6%	9,456	9,742	286	3.0%
51.9%	9,348	9,672	324	3.5%
53.1%	9,336	9,433	97	1.0%
54.3%	9,117	9,389	271	3.0%
55.6%	9,054	9,387	332	3.7%
56.8%	9,015	9,332	316	3.5%
58.0%	8,801	9,310	509	5.8%
59.3%	8,778	9,190	412	4.7%
60.5%	8,746	9,110	364	4.2%
61.7%	8,740	8,899	159	1.8%
63.0%	8,725	8,820	95	1.1%
64.2%	8,694	8,808	114	1.3%
65.4%	8,591	8,794	203	2.4%
66.7%	8,524	8,740	215	2.5%
67.9%	8,272	8,719	447	5.4%
69.1%	8,211	8,699	489	6.0%
70.4%	8,170	8,659	489	6.0%
71.6%	8,071	8,657	586	7.3%
72.8%	8,061	8,603	541	6.7%
74.1%	7,935	8,532	597	7.5%
75.3%	7,715	8,199	483	6.3%
76.5%	7,671	8,047	377	4.9%
77.8%	7,630	7,977	347	4.5%
79.0%	7,611	7,974	363	4.8%
80.2%	7,505	7,923	418	5.6%
81.5%	7,490	7,746	256	3.4%
82.7%	7,266	7,633	367	5.0%
84.0%	7,169	7,614	446	6.2%
85.2%	7,147	7,612	465	6.5%
86.4%	6,974	7,413	439	6.3%
87.7%	6,842	7,097	256	3.7%
88.9%	6,810	7,079	270	4.0%
90.1%	6,626	6,993	367	5.5%
91.4%	6,526	6,630	103	1.6%
92.6%	6,313	6,355	42	0.7%
93.8%	6,271	6,288	17	0.3%
95.1%	6,258	6,230	-29	-0.5%
96.3%	5,991	6,099	108	1.8%
97.5%	5,963	6,094	131	2.2%
98.8%	5,788	5,829	41	0.7%
100.0%	4,816	5,570	754	15.7%

Table SW-20-b
Lake Oroville, End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,413	15,195	-218	-1.4%
1.2%	14,271	14,271	0	0.0%
2.5%	14,224	14,255	31	0.2%
3.7%	14,222	14,224	2	0.0%
4.9%	14,204	14,201	-4	0.0%
6.2%	14,201	14,115	-85	-0.6%
7.4%	14,041	14,041	0	0.0%
8.6%	14,001	14,001	0	0.0%
9.9%	13,967	13,967	0	0.0%
11.1%	13,851	13,851	0	0.0%
12.3%	13,847	13,847	0	0.0%
13.6%	13,845	13,815	-30	-0.2%
14.8%	13,761	13,761	0	0.0%
16.0%	13,644	13,644	0	0.0%
17.3%	13,531	13,531	0	0.0%
18.5%	13,531	13,531	0	0.0%
19.8%	13,531	13,531	0	0.0%
21.0%	13,521	13,521	0	0.0%
22.2%	13,451	13,451	0	0.0%
23.5%	13,387	13,387	0	0.0%
24.7%	13,364	13,364	0	0.0%
25.9%	13,304	13,304	0	0.0%
27.2%	13,304	13,304	0	0.0%
28.4%	13,304	13,304	0	0.0%
29.6%	13,304	13,304	0	0.0%
30.9%	13,304	13,304	0	0.0%
32.1%	13,304	13,304	0	0.0%
33.3%	13,304	13,304	0	0.0%
34.6%	13,304	13,304	0	0.0%
35.8%	13,304	13,304	0	0.0%
37.0%	13,304	13,304	0	0.0%
38.3%	13,304	13,304	0	0.0%
39.5%	13,304	13,304	0	0.0%
40.7%	13,304	13,304	0	0.0%
42.0%	13,304	13,304	0	0.0%
43.2%	13,304	13,304	0	0.0%
44.4%	13,301	13,301	0	0.0%
45.7%	13,048	12,998	-51	-0.4%
46.9%	12,837	12,960	123	1.0%
48.1%	12,227	12,885	658	5.4%
49.4%	12,133	12,716	583	4.8%
50.6%	12,026	12,308	283	2.3%
51.9%	11,924	12,165	241	2.0%
53.1%	11,650	12,099	449	3.9%
54.3%	11,532	12,051	520	4.5%
55.6%	11,520	11,560	40	0.3%
56.8%	11,518	11,443	-75	-0.6%
58.0%	11,133	11,392	259	2.3%
59.3%	11,097	11,295	198	1.8%
60.5%	11,094	11,281	187	1.7%
61.7%	11,069	11,129	60	0.5%
63.0%	10,858	11,013	155	1.4%
64.2%	10,700	10,969	268	2.5%
65.4%	10,558	10,897	340	3.2%
66.7%	10,173	10,770	597	5.9%
67.9%	10,081	10,291	210	2.1%
69.1%	10,043	10,139	97	1.0%
70.4%	9,915	10,075	160	1.6%
71.6%	9,881	10,011	130	1.3%
72.8%	9,712	10,008	295	3.0%
74.1%	9,706	9,887	182	1.9%
75.3%	9,580	9,885	305	3.2%
76.5%	9,242	9,807	566	6.1%
77.8%	8,943	9,708	765	8.6%
79.0%	8,930	9,670	740	8.3%
80.2%	8,826	9,168	343	3.9%
81.5%	8,522	8,993	471	5.5%
82.7%	8,387	8,991	604	7.2%
84.0%	8,344	8,470	126	1.5%
85.2%	7,997	8,344	347	4.3%
86.4%	7,994	8,108	115	1.4%
87.7%	7,990	8,099	109	1.4%
88.9%	7,781	7,943	162	2.1%
90.1%	7,779	7,931	153	2.0%
91.4%	7,604	7,926	322	4.2%
92.6%	7,506	7,630	124	1.7%
93.8%	7,358	7,587	229	3.1%
95.1%	7,217	7,567	350	4.8%
96.3%	7,067	7,423	356	5.0%
97.5%	6,747	7,022	275	4.1%
98.8%	6,034	6,079	45	0.7%
100.0%	4,717	5,764	1,046	22.2%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,554	14,554	0	0.0%
1.2%	14,551	14,551	0	0.0%
2.5%	14,411	14,411	0	0.0%
3.7%	14,361	14,382	22	0.2%
4.9%	14,361	14,361	0	0.0%
6.2%	14,353	14,361	8	0.1%
7.4%	14,331	14,331	0	0.0%
8.6%	14,221	14,221	0	0.0%
9.9%	14,207	14,207	0	0.0%
11.1%	14,202	14,202	0	0.0%
12.3%	14,131	14,131	0	0.0%
13.6%	14,104	14,104	0	0.0%
14.8%	14,101	14,101	0	0.0%
16.0%	14,071	14,071	0	0.0%
17.3%	14,007	14,007	0	0.0%
18.5%	13,994	13,994	0	0.0%
19.8%	13,971	13,971	0	0.0%
21.0%	13,891	13,891	0	0.0%
22.2%	13,891	13,891	0	0.0%
23.5%	13,891	13,891	0	0.0%
24.7%	13,857	13,857	0	0.0%
25.9%	13,847	13,847	0	0.0%
27.2%	13,824	13,824	0	0.0%
28.4%	13,821	13,821	0	0.0%
29.6%	13,801	13,801	0	0.0%
30.9%	13,797	13,797	0	0.0%
32.1%	13,797	13,797	0	0.0%
33.3%	13,767	13,771	4	0.0%
34.6%	13,751	13,767	17	0.1%
35.8%	13,737	13,751	13	0.1%
37.0%	13,607	13,737	130	1.0%
38.3%	13,606	13,524	-81	-0.6%
39.5%	13,501	13,506	5	0.0%
40.7%	13,454	13,501	47	0.3%
42.0%	13,401	13,454	53	0.4%
43.2%	13,401	13,401	0	0.0%
44.4%	13,304	13,401	97	0.7%
45.7%	13,304	13,304	0	0.0%
46.9%	13,304	13,304	0	0.0%
48.1%	13,304	13,304	0	0.0%
49.4%	13,304	13,304	0	0.0%
50.6%	13,304	13,304	0	0.0%
51.9%	13,304	13,304	0	0.0%
53.1%	13,304	13,304	0	0.0%
54.3%	13,304	13,304	0	0.0%
55.6%	13,281	13,304	23	0.2%
56.8%	12,967	13,106	140	1.1%
58.0%	12,232	12,983	752	6.1%
59.3%	12,132	12,749	617	5.1%
60.5%	12,020	12,717	696	5.8%
61.7%	11,799	12,461	662	5.6%
63.0%	11,784	11,898	114	1.0%
64.2%	11,709	11,873	164	1.4%
65.4%	11,634	11,839	205	1.8%
66.7%	11,536	11,820	283	2.5%
67.9%	11,481	11,787	306	2.7%
69.1%	11,385	11,663	278	2.4%
70.4%	11,325	11,430	105	0.9%
71.6%	11,203	11,420	217	1.9%
72.8%	11,184	11,374	190	1.7%
74.1%	11,177	11,224	46	0.4%
75.3%	11,078	11,110	32	0.3%
76.5%	11,007	10,965	-42	-0.4%
77.8%	10,978	10,945	-32	-0.3%
79.0%	10,818	10,941	123	1.1%
80.2%	10,651	10,657	7	0.1%
81.5%	10,590	10,634	44	0.4%
82.7%	10,217	10,550	332	3.3%
84.0%	10,090	10,456	366	3.6%
85.2%	9,669	9,840	171	1.8%
86.4%	9,647	9,803	155	1.6%
87.7%	9,557	9,785	228	2.4%
88.9%	9,247	9,704	456	4.9%
90.1%	8,921	9,052	132	1.5%
91.4%	8,841	8,962	121	1.4%
92.6%	8,708	8,830	122	1.4%
93.8%	8,367	8,723	356	4.3%
95.1%	7,777	8,285	508	6.5%
96.3%	7,667	8,104	437	5.7%
97.5%	7,548	8,006	458	6.1%
98.8%	6,933	7,698	766	11.0%
100.0%	4,566	5,610	1,044	22.9%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,577	15,577	0	0.0%
1.2%	15,444	15,443	-2	0.0%
2.5%	15,386	15,382	-4	0.0%
3.7%	15,350	15,348	-2	0.0%
4.9%	15,330	15,330	0	0.0%
6.2%	15,232	15,231	-1	0.0%
7.4%	15,190	15,190	0	0.0%
8.6%	15,184	15,184	0	0.0%
9.9%	15,124	15,124	0	0.0%
11.1%	15,020	15,020	0	0.0%
12.3%	15,004	15,004	0	0.0%
13.6%	14,984	14,984	0	0.0%
14.8%	14,984	14,984	0	0.0%
16.0%	14,947	14,947	0	0.0%
17.3%	14,912	14,910	-1	0.0%
18.5%	14,804	14,804	0	0.0%
19.8%	14,797	14,797	0	0.0%
21.0%	14,794	14,794	0	0.0%
22.2%	14,790	14,790	0	0.0%
23.5%	14,737	14,737	0	0.0%
24.7%	14,707	14,706	-2	0.0%
25.9%	14,704	14,704	0	0.0%
27.2%	14,704	14,704	0	0.0%
28.4%	14,629	14,621	-8	-0.1%
29.6%	14,622	14,611	-12	-0.1%
30.9%	14,611	14,544	-66	-0.5%
32.1%	14,544	14,542	-2	0.0%
33.3%	14,541	14,539	-2	0.0%
34.6%	14,524	14,522	-2	0.0%
35.8%	14,450	14,448	-2	0.0%
37.0%	14,400	14,398	-1	0.0%
38.3%	14,392	14,338	-55	-0.4%
39.5%	14,340	14,332	-8	-0.1%
40.7%	14,284	14,281	-3	0.0%
42.0%	14,263	14,260	-2	0.0%
43.2%	14,213	14,240	27	0.2%
44.4%	14,211	14,209	-2	0.0%
45.7%	14,153	14,151	-2	0.0%
46.9%	14,067	14,064	-2	0.0%
48.1%	14,027	14,035	8	0.1%
49.4%	14,013	14,012	-1	0.0%
50.6%	14,003	14,001	-2	0.0%
51.9%	13,640	13,768	128	0.9%
53.1%	13,435	13,637	203	1.5%
54.3%	13,382	13,433	50	0.4%
55.6%	13,347	13,375	27	0.2%
56.8%	13,213	13,367	154	1.2%
58.0%	13,136	13,351	215	1.6%
59.3%	12,826	13,202	376	2.9%
60.5%	12,584	12,937	353	2.8%
61.7%	12,508	12,539	30	0.2%
63.0%	12,419	12,516	97	0.8%
64.2%	12,335	12,438	103	0.8%
65.4%	12,191	12,417	226	1.9%
66.7%	11,895	12,381	486	4.1%
67.9%	11,669	12,334	665	5.7%
69.1%	11,660	12,285	625	5.4%
70.4%	11,657	11,749	92	0.8%
71.6%	11,572	11,740	168	1.5%
72.8%	11,412	11,687	275	2.4%
74.1%	11,405	11,633	228	2.0%
75.3%	11,296	11,592	296	2.6%
76.5%	11,101	11,188	86	0.8%
77.8%	11,004	11,069	66	0.6%
79.0%	10,836	10,947	111	1.0%
80.2%	10,814	10,887	73	0.7%
81.5%	10,752	10,821	69	0.6%
82.7%	10,583	10,803	220	2.1%
84.0%	10,361	10,755	393	3.8%
85.2%	10,202	10,444	243	2.4%
86.4%	9,929	10,060	130	1.3%
87.7%	9,817	9,853	35	0.4%
88.9%	9,209	9,339	130	1.4%
90.1%	8,814	9,270	456	5.2%
91.4%	8,498	8,851	352	4.1%
92.6%	8,334	8,830	496	6.0%
93.8%	8,332	8,447	115	1.4%
95.1%	7,785	8,219	433	5.6%
96.3%	7,637	8,141	503	6.6%
97.5%	7,231	7,864	633	8.7%
98.8%	6,793	7,384	591	8.7%
100.0%	4,347	5,351	1,005	23.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,804	15,804	0	0.0%
1.2%	15,804	15,804	0	0.0%
2.5%	15,804	15,804	0	0.0%
3.7%	15,804	15,804	0	0.0%
4.9%	15,804	15,804	0	0.0%
6.2%	15,722	15,720	-2	0.0%
7.4%	15,504	15,502	-2	0.0%
8.6%	15,497	15,496	-2	0.0%
9.9%	15,495	15,488	-6	0.0%
11.1%	15,280	15,278	-2	0.0%
12.3%	15,230	15,228	-3	0.0%
13.6%	15,207	15,204	-3	0.0%
14.8%	15,121	15,120	0	0.0%
16.0%	15,008	14,978	-30	-0.2%
17.3%	14,981	14,974	-7	0.0%
18.5%	14,881	14,878	-3	0.0%
19.8%	14,840	14,836	-4	0.0%
21.0%	14,698	14,695	-2	0.0%
22.2%	14,677	14,673	-3	0.0%
23.5%	14,663	14,661	-2	0.0%
24.7%	14,653	14,650	-4	0.0%
25.9%	14,651	14,647	-3	0.0%
27.2%	14,627	14,622	-4	0.0%
28.4%	14,575	14,570	-5	0.0%
29.6%	14,448	14,448	0	0.0%
30.9%	14,422	14,438	16	0.1%
32.1%	14,418	14,426	8	0.1%
33.3%	14,261	14,257	-4	0.0%
34.6%	14,259	14,254	-5	0.0%
35.8%	14,232	14,227	-5	0.0%
37.0%	14,219	14,192	-28	-0.2%
38.3%	14,196	14,184	-12	-0.1%
39.5%	14,186	14,182	-4	0.0%
40.7%	14,147	14,181	34	0.2%
42.0%	14,088	14,070	-18	-0.1%
43.2%	14,054	14,049	-5	0.0%
44.4%	13,929	13,920	-9	-0.1%
45.7%	13,891	13,914	24	0.2%
46.9%	13,804	13,800	-4	0.0%
48.1%	13,729	13,724	-5	0.0%
49.4%	13,551	13,579	28	0.2%
50.6%	13,504	13,506	2	0.0%
51.9%	13,279	13,304	25	0.2%
53.1%	13,266	13,287	20	0.2%
54.3%	13,263	13,259	-4	0.0%
55.6%	13,206	13,204	-1	0.0%
56.8%	13,068	13,191	123	0.9%
58.0%	12,962	13,101	140	1.1%
59.3%	12,699	12,982	283	2.2%
60.5%	12,635	12,506	-129	-1.0%
61.7%	12,340	12,486	146	1.2%
63.0%	12,162	12,415	253	2.1%
64.2%	12,074	12,383	309	2.6%
65.4%	11,856	12,335	479	4.0%
66.7%	11,598	12,144	547	4.7%
67.9%	11,497	11,878	380	3.3%
69.1%	11,256	11,701	446	4.0%
70.4%	11,192	11,683	491	4.4%
71.6%	11,128	11,356	228	2.0%
72.8%	11,021	11,292	271	2.5%
74.1%	10,808	11,148	340	3.1%
75.3%	10,743	11,116	373	3.5%
76.5%	10,700	11,066	366	3.4%
77.8%	10,656	10,893	237	2.2%
79.0%	10,641	10,782	142	1.3%
80.2%	10,611	10,628	18	0.2%
81.5%	10,557	10,534	-24	-0.2%
82.7%	10,309	10,525	215	2.1%
84.0%	10,281	10,483	202	2.0%
85.2%	9,944	9,993	49	0.5%
86.4%	9,859	9,901	42	0.4%
87.7%	9,587	9,793	206	2.1%
88.9%	8,643	9,029	387	4.5%
90.1%	8,258	8,257	-1	0.0%
91.4%	7,977	8,211	234	2.9%
92.6%	7,943	8,096	153	1.9%
93.8%	7,918	7,979	61	0.8%
95.1%	7,666	7,843	178	2.3%
96.3%	7,130	7,783	652	9.1%
97.5%	6,769	7,363	594	8.8%
98.8%	6,486	6,935	448	6.9%
100.0%	4,197	5,199	1,003	23.9%

Table SW-20-b

Lake Oroville, End of Month Area

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	15,706	15,570	-136	-0.9%
1.2%	15,476	15,505	29	0.2%
2.5%	15,467	15,274	-193	-1.2%
3.7%	15,245	15,266	20	0.1%
4.9%	15,228	15,234	6	0.0%
6.2%	15,140	15,134	-6	0.0%
7.4%	14,997	15,109	112	0.7%
8.6%	14,983	15,025	42	0.3%
9.9%	14,927	14,959	32	0.2%
11.1%	14,795	14,709	-85	-0.6%
12.3%	14,780	14,691	-89	-0.6%
13.6%	14,687	14,629	-59	-0.4%
14.8%	14,288	14,291	3	0.0%
16.0%	14,082	14,269	187	1.3%
17.3%	14,071	14,220	150	1.1%
18.5%	14,018	14,165	147	1.0%
19.8%	13,951	14,073	122	0.9%
21.0%	13,898	14,062	164	1.2%
22.2%	13,757	14,013	256	1.9%
23.5%	13,747	13,890	143	1.0%
24.7%	13,642	13,775	133	1.0%
25.9%	13,533	13,764	231	1.7%
27.2%	13,522	13,739	217	1.6%
28.4%	13,443	13,694	250	1.9%
29.6%	13,390	13,672	282	2.1%
30.9%	13,342	13,496	154	1.2%
32.1%	13,301	13,457	157	1.2%
33.3%	13,223	13,446	223	1.7%
34.6%	13,172	13,439	266	2.0%
35.8%	13,163	13,397	234	1.8%
37.0%	13,144	13,330	186	1.4%
38.3%	13,065	13,317	252	1.9%
39.5%	13,023	13,270	247	1.9%
40.7%	13,000	13,247	247	1.9%
42.0%	12,980	13,153	173	1.3%
43.2%	12,963	13,119	157	1.2%
44.4%	12,921	13,077	156	1.2%
45.7%	12,863	13,074	211	1.6%
46.9%	12,816	12,941	125	1.0%
48.1%	12,695	12,836	141	1.1%
49.4%	12,609	12,745	136	1.1%
50.6%	12,558	12,661	103	0.8%
51.9%	12,407	12,548	141	1.1%
53.1%	12,370	12,537	167	1.3%
54.3%	12,362	12,535	172	1.4%
55.6%	12,163	12,436	274	2.3%
56.8%	11,997	12,267	270	2.3%
58.0%	11,488	12,227	739	6.4%
59.3%	11,427	11,845	418	3.7%
60.5%	11,239	11,659	420	3.7%
61.7%	11,221	11,580	359	3.2%
63.0%	11,142	11,566	423	3.8%
64.2%	10,901	11,503	602	5.5%
65.4%	10,709	11,466	757	7.1%
66.7%	10,683	11,222	539	5.0%
67.9%	10,575	11,016	441	4.2%
69.1%	10,369	10,694	325	3.1%
70.4%	10,136	10,684	548	5.4%
71.6%	10,064	10,579	515	5.1%
72.8%	10,061	10,493	432	4.3%
74.1%	10,053	10,211	158	1.6%
75.3%	10,036	10,087	51	0.5%
76.5%	10,033	10,061	28	0.3%
77.8%	9,915	10,059	144	1.5%
79.0%	9,768	9,915	147	1.5%
80.2%	9,746	9,883	137	1.4%
81.5%	9,724	9,852	129	1.3%
82.7%	9,713	9,674	-38	-0.4%
84.0%	9,577	9,516	-60	-0.6%
85.2%	9,019	9,385	367	4.1%
86.4%	8,970	9,228	257	2.9%
87.7%	8,957	9,012	55	0.6%
88.9%	7,723	8,477	754	9.8%
90.1%	7,411	7,688	277	3.7%
91.4%	7,310	7,463	153	2.1%
92.6%	7,290	7,334	44	0.6%
93.8%	7,050	6,912	-138	-2.0%
95.1%	6,912	6,837	-75	-1.1%
96.3%	6,482	6,795	313	4.8%
97.5%	6,218	6,686	467	7.5%
98.8%	6,024	6,479	455	7.6%
100.0%	3,977	4,976	1,000	25.1%

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	14,406	14,739	334	2.3%
1.2%	14,134	14,052	-82	-0.6%
2.5%	13,649	14,018	370	2.7%
3.7%	13,614	13,974	359	2.6%
4.9%	13,539	13,710	172	1.3%
6.2%	13,405	13,465	60	0.4%
7.4%	13,395	13,453	58	0.4%
8.6%	13,299	13,452	153	1.1%
9.9%	13,098	13,148	51	0.4%
11.1%	12,893	13,046	153	1.2%
12.3%	12,647	12,982	335	2.6%
13.6%	12,635	12,817	182	1.4%
14.8%	12,596	12,775	179	1.4%
16.0%	12,583	12,773	190	1.5%
17.3%	12,111	12,600	490	4.0%
18.5%	12,037	12,569	532	4.4%
19.8%	12,013	12,559	546	4.5%
21.0%	11,994	12,390	397	3.3%
22.2%	11,832	12,194	362	3.1%
23.5%	11,830	11,994	164	1.4%
24.7%	11,763	11,963	199	1.7%
25.9%	11,668	11,895	227	1.9%
27.2%	11,335	11,870	535	4.7%
28.4%	11,301	11,839	538	4.8%
29.6%	11,286	11,762	475	4.2%
30.9%	11,244	11,718	474	4.2%
32.1%	11,211	11,635	424	3.8%
33.3%	11,168	11,603	436	3.9%
34.6%	11,162	11,202	40	0.4%
35.8%	11,032	11,186	154	1.4%
37.0%	10,998	11,161	163	1.5%
38.3%	10,966	11,153	187	1.7%
39.5%	10,852	11,147	294	2.7%
40.7%	10,777	11,135	358	3.3%
42.0%	10,764	11,127	364	3.4%
43.2%	10,727	11,109	382	3.6%
44.4%	10,709	11,063	353	3.3%
45.7%	10,640	11,039	400	3.8%
46.9%	10,600	11,005	405	3.8%
48.1%	10,535	10,869	333	3.2%
49.4%	10,450	10,754	304	2.9%
50.6%	10,236	10,687	451	4.4%
51.9%	10,199	10,678	479	4.7%
53.1%	10,102	10,666	564	5.6%
54.3%	10,087	10,512	425	4.2%
55.6%	10,016	10,472	457	4.6%
56.8%	9,542	10,290	748	7.8%
58.0%	9,082	10,072	989	10.9%
59.3%	9,078	9,759	681	7.5%
60.5%	8,961	9,543	582	6.5%
61.7%	8,856	9,450	594	6.7%
63.0%	8,813	9,337	524	5.9%
64.2%	8,760	9,262	502	5.7%
65.4%	8,709	9,163	453	5.2%
66.7%	8,667	9,122	455	5.3%
67.9%	8,575	9,034	459	5.4%
69.1%	8,517	8,982	465	5.5%
70.4%	8,482	8,923	441	5.2%
71.6%	8,465	8,593	128	1.5%
72.8%	8,337	8,573	236	2.8%
74.1%	8,308	8,559	251	3.0%
75.3%	8,045	8,488	443	5.5%
76.5%	7,980	8,446	466	5.8%
77.8%	7,961	8,282	321	4.0%
79.0%	7,943	8,256	313	3.9%
80.2%	7,914	7,935	21	0.3%
81.5%	7,904	7,904	1	0.0%
82.7%	7,881	7,780	-102	-1.3%
84.0%	7,873	7,706	-168	-2.1%
85.2%	7,541	7,655	114	1.5%
86.4%	7,360	7,563	203	2.8%
87.7%	7,173	7,536	363	5.1%
88.9%	6,502	7,489	986	15.2%
90.1%	6,476	7,085	609	9.4%
91.4%	6,475	6,753	278	4.3%
92.6%	6,475	6,473	-3	0.0%
93.8%	6,472	6,257	-215	-3.3%
95.1%	6,207	6,102	-105	-1.7%
96.3%	5,697	6,102	404	7.1%
97.5%	5,405	6,020	614	11.4%
98.8%	5,362	5,690	328	6.1%
100.0%	3,761	4,802	1,041	27.7%

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	13,733	14,112	379	2.8%
1.2%	12,757	13,192	435	3.4%
2.5%	12,693	12,938	245	1.9%
3.7%	12,689	12,828	138	1.1%
4.9%	12,641	12,744	103	0.8%
6.2%	12,414	12,631	217	1.7%
7.4%	12,172	12,264	92	0.8%
8.6%	11,772	12,147	376	3.2%
9.9%	11,568	12,018	450	3.9%
11.1%	11,283	11,823	540	4.8%
12.3%	11,042	11,392	350	3.2%
13.6%	11,010	11,314	304	2.8%
14.8%	11,000	11,240	240	2.2%
16.0%	10,996	11,216	220	2.0%
17.3%	10,895	11,121	225	2.1%
18.5%	10,726	11,093	367	3.4%
19.8%	10,279	11,039	760	7.4%
21.0%	10,259	10,929	671	6.5%
22.2%	10,150	10,795	645	6.4%
23.5%	10,009	10,361	352	3.5%
24.7%	10,003	10,189	185	1.9%
25.9%	9,951	10,185	233	2.3%
27.2%	9,559	10,161	601	6.3%
28.4%	9,525	10,155	630	6.6%
29.6%	9,523	10,062	539	5.7%
30.9%	9,449	10,007	558	5.9%
32.1%	9,411	9,874	463	4.9%
33.3%	9,370	9,844	474	5.1%
34.6%	9,368	9,807	439	4.7%
35.8%	9,354	9,805	452	4.8%
37.0%	9,343	9,781	439	4.7%
38.3%	9,135	9,708	573	6.3%
39.5%	9,128	9,694	566	6.2%
40.7%	9,092	9,619	527	5.8%
42.0%	9,017	9,610	593	6.6%
43.2%	9,015	9,574	559	6.2%
44.4%	8,991	9,437	446	5.0%
45.7%	8,947	9,377	430	4.8%
46.9%	8,926	9,331	404	4.5%
48.1%	8,884	9,287	403	4.5%
49.4%	8,797	9,233	436	5.0%
50.6%	8,739	9,228	490	5.6%
51.9%	8,713	9,218	504	5.8%
53.1%	8,670	8,964	294	3.4%
54.3%	8,667	8,952	286	3.3%
55.6%	8,416	8,914	498	5.9%
56.8%	8,323	8,846	523	6.3%
58.0%	8,169	8,667	498	6.1%
59.3%	7,970	8,333	362	4.5%
60.5%	7,941	8,055	115	1.4%
61.7%	7,914	8,031	117	1.5%
63.0%	7,905	7,994	89	1.1%
64.2%	7,866	7,946	81	1.0%
65.4%	7,797	7,899	102	1.3%
66.7%	7,734	7,859	124	1.6%
67.9%	7,585	7,791	207	2.7%
69.1%	7,576	7,776	200	2.6%
70.4%	7,443	7,766	324	4.3%
71.6%	7,394	7,755	361	4.9%
72.8%	7,271	7,719	449	6.2%
74.1%	7,187	7,661	475	6.6%
75.3%	7,134	7,660	527	7.4%
76.5%	7,120	7,659	539	7.6%
77.8%	7,109	7,654	545	7.7%
79.0%	7,067	7,606	539	7.6%
80.2%	6,860	7,574	713	10.4%
81.5%	6,845	7,480	635	9.3%
82.7%	6,794	7,043	249	3.7%
84.0%	6,633	7,019	386	5.8%
85.2%	6,533	6,863	330	5.1%
86.4%	6,493	6,852	359	5.5%
87.7%	6,478	6,833	355	5.5%
88.9%	6,147	6,664	517	8.4%
90.1%	6,097	6,660	563	9.2%
91.4%	5,975	6,476	501	8.4%
92.6%	5,925	5,940	15	0.2%
93.8%	5,850	5,938	89	1.5%
95.1%	5,483	5,788	305	5.6%
96.3%	5,331	5,503	172	3.2%
97.5%	5,325	5,502	176	3.3%
98.8%	5,099	5,327	228	4.5%
100.0%	3,653	4,715	1,063	29.1%

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	12,490	13,022	533	4.3%
1.2%	12,101	12,671	569	4.7%
2.5%	11,658	11,685	27	0.2%
3.7%	11,297	11,608	311	2.8%
4.9%	10,786	11,028	242	2.2%
6.2%	10,551	10,935	384	3.6%
7.4%	10,392	10,872	480	4.6%
8.6%	10,132	10,279	147	1.5%
9.9%	10,089	10,161	72	0.7%
11.1%	9,670	10,120	450	4.7%
12.3%	9,504	10,091	588	6.2%
13.6%	9,079	9,725	646	7.1%
14.8%	9,034	9,661	627	6.9%
16.0%	8,953	9,431	477	5.3%
17.3%	8,841	9,309	467	5.3%
18.5%	8,824	9,308	484	5.5%
19.8%	8,766	9,289	523	6.0%
21.0%	8,590	9,245	654	7.6%
22.2%	8,579	9,217	638	7.4%
23.5%	8,531	9,201	670	7.9%
24.7%	8,347	8,841	495	5.9%
25.9%	8,345	8,817	472	5.7%
27.2%	8,330	8,744	413	5.0%
28.4%	8,246	8,708	462	5.6%
29.6%	8,130	8,698	568	7.0%
30.9%	8,112	8,648	536	6.6%
32.1%	8,090	8,457	367	4.5%
33.3%	7,975	8,365	389	4.9%
34.6%	7,975	8,300	325	4.1%
35.8%	7,953	8,297	344	4.3%
37.0%	7,953	8,284	331	4.2%
38.3%	7,679	8,252	574	7.5%
39.5%	7,670	8,237	567	7.4%
40.7%	7,627	8,205	578	7.6%
42.0%	7,607	8,038	432	5.7%
43.2%	7,583	7,994	412	5.4%
44.4%	7,580	7,915	335	4.4%
45.7%	7,533	7,907	375	5.0%
46.9%	7,530	7,891	361	4.8%
48.1%	7,496	7,773	277	3.7%
49.4%	7,492	7,752	261	3.5%
50.6%	7,409	7,730	320	4.3%
51.9%	7,381	7,712	331	4.5%
53.1%	7,365	7,660	295	4.0%
54.3%	7,357	7,612	254	3.5%
55.6%	7,148	7,554	405	5.7%
56.8%	7,121	7,543	422	5.9%
58.0%	7,115	7,479	363	5.1%
59.3%	7,054	7,476	422	6.0%
60.5%	7,008	7,453	444	6.3%
61.7%	7,003	7,438	435	6.2%
63.0%	6,997	7,430	433	6.2%
64.2%	6,996	7,430	434	6.2%
65.4%	6,991	7,398	408	5.8%
66.7%	6,910	7,326	416	6.0%
67.9%	6,887	7,309	422	6.1%
69.1%	6,868	7,302	434	6.3%
70.4%	6,824	7,284	459	6.7%
71.6%	6,802	7,206	404	5.9%
72.8%	6,760	7,180	421	6.2%
74.1%	6,737	7,072	335	5.0%
75.3%	6,598	7,025	427	6.5%
76.5%	6,582	6,977	395	6.0%
77.8%	6,542	6,878	336	5.1%
79.0%	6,499	6,873	374	5.7%
80.2%	6,490	6,812	322	5.0%
81.5%	6,489	6,785	296	4.6%
82.7%	6,485	6,723	238	3.7%
84.0%	6,485	6,649	163	2.5%
85.2%	6,377	6,595	218	3.4%
86.4%	6,022	6,510	488	8.1%
87.7%	6,012	6,487	475	7.9%
88.9%	6,001	6,487	486	8.1%
90.1%	5,861	6,486	625	10.7%
91.4%	5,828	6,272	444	7.6%
92.6%	5,763	5,814	51	0.9%
93.8%	5,763	5,644	-118	-2.1%
95.1%	5,357	5,518	161	3.0%
96.3%	5,341	5,406	66	1.2%
97.5%	5,266	5,398	133	2.5%
98.8%	5,205	5,356	151	2.9%
100.0%	3,870	4,878	1,009	26.1%

Figure SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

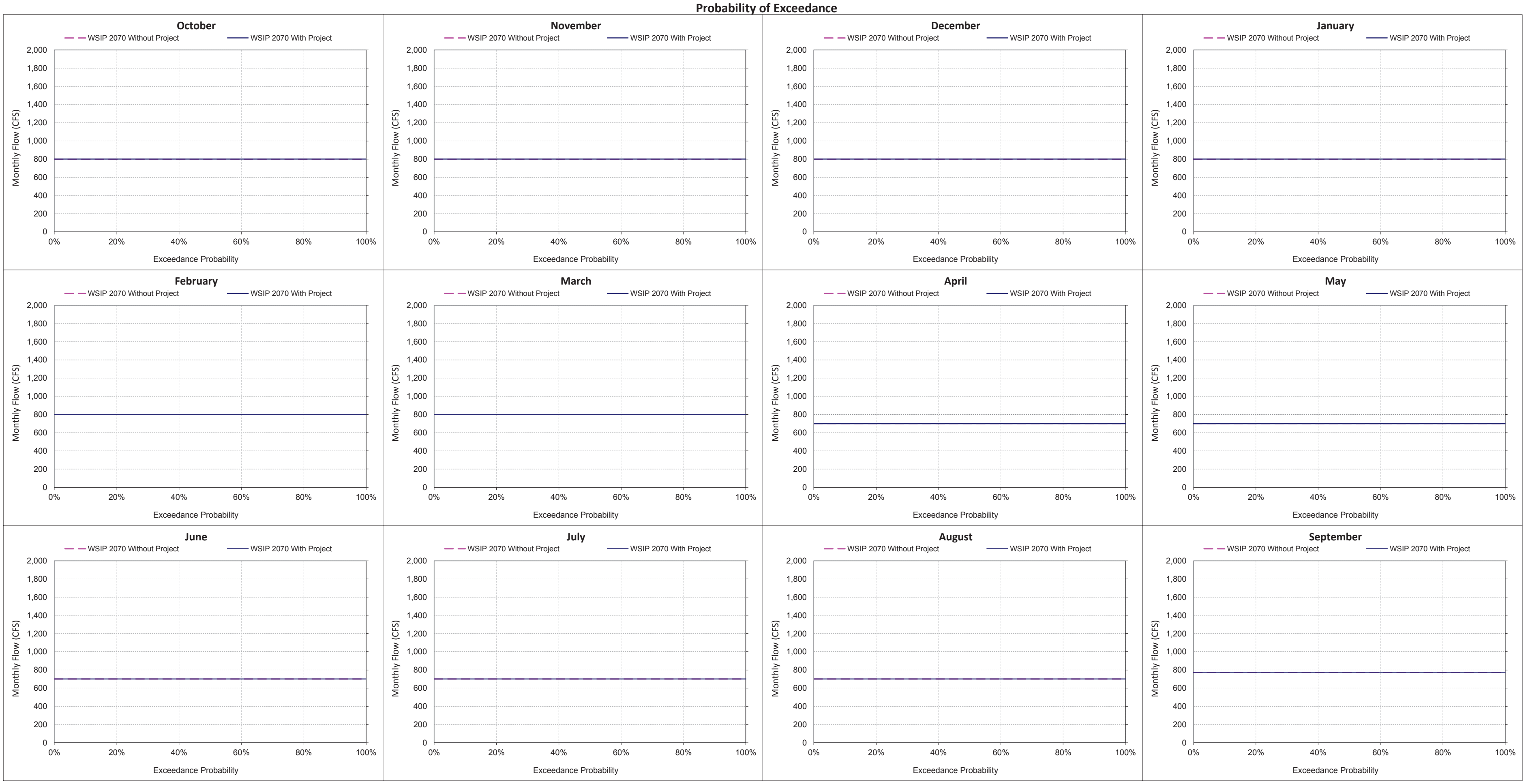


Table SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%
1.2%	800	800	0	0.0%
2.5%	800	800	0	0.0%
3.7%	800	800	0	0.0%
4.9%	800	800	0	0.0%
6.2%	800	800	0	0.0%
7.4%	800	800	0	0.0%
8.6%	800	800	0	0.0%
9.9%	800	800	0	0.0%
11.1%	800	800	0	0.0%
12.3%	800	800	0	0.0%
13.6%	800	800	0	0.0%
14.8%	800	800	0	0.0%
16.0%	800	800	0	0.0%
17.3%	800	800	0	0.0%
18.5%	800	800	0	0.0%
19.8%	800	800	0	0.0%
21.0%	800	800	0	0.0%
22.2%	800	800	0	0.0%
23.5%	800	800	0	0.0%
24.7%	800	800	0	0.0%
25.9%	800	800	0	0.0%
27.2%	800	800	0	0.0%
28.4%	800	800	0	0.0%
29.6%	800	800	0	0.0%
30.9%	800	800	0	0.0%
32.1%	800	800	0	0.0%
33.3%	800	800	0	0.0%
34.6%	800	800	0	0.0%
35.8%	800	800	0	0.0%
37.0%	800	800	0	0.0%
38.3%	800	800	0	0.0%
39.5%	800	800	0	0.0%
40.7%	800	800	0	0.0%
42.0%	800	800	0	0.0%
43.2%	800	800	0	0.0%
44.4%	800	800	0	0.0%
45.7%	800	800	0	0.0%
46.9%	800	800	0	0.0%
48.1%	800	800	0	0.0%
49.4%	800	800	0	0.0%
50.6%	800	800	0	0.0%
51.9%	800	800	0	0.0%
53.1%	800	800	0	0.0%
54.3%	800	800	0	0.0%
55.6%	800	800	0	0.0%
56.8%	800	800	0	0.0%
58.0%	800	800	0	0.0%
59.3%	800	800	0	0.0%
60.5%	800	800	0	0.0%
61.7%	800	800	0	0.0%
63.0%	800	800	0	0.0%
64.2%	800	800	0	0.0%
65.4%	800	800	0	0.0%
66.7%	800	800	0	0.0%
67.9%	800	800	0	0.0%
69.1%	800	800	0	0.0%
70.4%	800	800	0	0.0%
71.6%	800	800	0	0.0%
72.8%	800	800	0	0.0%
74.1%	800	800	0	0.0%
75.3%	800	800	0	0.0%
76.5%	800	800	0	0.0%
77.8%	800	800	0	0.0%
79.0%	800	800	0	0.0%
80.2%	800	800	0	0.0%
81.5%	800	800	0	0.0%
82.7%	800	800	0	0.0%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

Table SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

February					March					April					May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	800	800	0	0.0%	0.0%	800	800	0	0.0%	0.0%	700	700	0	0.0%	0.0%	700	700	0	0.0%
1.2%	800	800	0	0.0%	1.2%	800	800	0	0.0%	1.2%	700	700	0	0.0%	1.2%	700	700	0	0.0%
2.5%	800	800	0	0.0%	2.5%	800	800	0	0.0%	2.5%	700	700	0	0.0%	2.5%	700	700	0	0.0%
3.7%	800	800	0	0.0%	3.7%	800	800	0	0.0%	3.7%	700	700	0	0.0%	3.7%	700	700	0	0.0%
4.9%	800	800	0	0.0%	4.9%	800	800	0	0.0%	4.9%	700	700	0	0.0%	4.9%	700	700	0	0.0%
6.2%	800	800	0	0.0%	6.2%	800	800	0	0.0%	6.2%	700	700	0	0.0%	6.2%	700	700	0	0.0%
7.4%	800	800	0	0.0%	7.4%	800	800	0	0.0%	7.4%	700	700	0	0.0%	7.4%	700	700	0	0.0%
8.6%	800	800	0	0.0%	8.6%	800	800	0	0.0%	8.6%	700	700	0	0.0%	8.6%	700	700	0	0.0%
9.9%	800	800	0	0.0%	9.9%	800	800	0	0.0%	9.9%	700	700	0	0.0%	9.9%	700	700	0	0.0%
11.1%	800	800	0	0.0%	11.1%	800	800	0	0.0%	11.1%	700	700	0	0.0%	11.1%	700	700	0	0.0%
12.3%	800	800	0	0.0%	12.3%	800	800	0	0.0%	12.3%	700	700	0	0.0%	12.3%	700	700	0	0.0%
13.6%	800	800	0	0.0%	13.6%	800	800	0	0.0%	13.6%	700	700	0	0.0%	13.6%	700	700	0	0.0%
14.8%	800	800	0	0.0%	14.8%	800	800	0	0.0%	14.8%	700	700	0	0.0%	14.8%	700	700	0	0.0%
16.0%	800	800	0	0.0%	16.0%	800	800	0	0.0%	16.0%	700	700	0	0.0%	16.0%	700	700	0	0.0%
17.3%	800	800	0	0.0%	17.3%	800	800	0	0.0%	17.3%	700	700	0	0.0%	17.3%	700	700	0	0.0%
18.5%	800	800	0	0.0%	18.5%	800	800	0	0.0%	18.5%	700	700	0	0.0%	18.5%	700	700	0	0.0%
19.8%	800	800	0	0.0%	19.8%	800	800	0	0.0%	19.8%	700	700	0	0.0%	19.8%	700	700	0	0.0%
21.0%	800	800	0	0.0%	21.0%	800	800	0	0.0%	21.0%	700	700	0	0.0%	21.0%	700	700	0	0.0%
22.2%	800	800	0	0.0%	22.2%	800	800	0	0.0%	22.2%	700	700	0	0.0%	22.2%	700	700	0	0.0%
23.5%	800	800	0	0.0%	23.5%	800	800	0	0.0%	23.5%	700	700	0	0.0%	23.5%	700	700	0	0.0%
24.7%	800	800	0	0.0%	24.7%	800	800	0	0.0%	24.7%	700	700	0	0.0%	24.7%	700	700	0	0.0%
25.9%	800	800	0	0.0%	25.9%	800	800	0	0.0%	25.9%	700	700	0	0.0%	25.9%	700	700	0	0.0%
27.2%	800	800	0	0.0%	27.2%	800	800	0	0.0%	27.2%	700	700	0	0.0%	27.2%	700	700	0	0.0%
28.4%	800	800	0	0.0%	28.4%	800	800	0	0.0%	28.4%	700	700	0	0.0%	28.4%	700	700	0	0.0%
29.6%	800	800	0	0.0%	29.6%	800	800	0	0.0%	29.6%	700	700	0	0.0%	29.6%	700	700	0	0.0%
30.9%	800	800	0	0.0%	30.9%	800	800	0	0.0%	30.9%	700	700	0	0.0%	30.9%	700	700	0	0.0%
32.1%	800	800	0	0.0%	32.1%	800	800	0	0.0%	32.1%	700	700	0	0.0%	32.1%	700	700	0	0.0%
33.3%	800	800	0	0.0%	33.3%	800	800	0	0.0%	33.3%	700	700	0	0.0%	33.3%	700	700	0	0.0%
34.6%	800	800	0	0.0%	34.6%	800	800	0	0.0%	34.6%	700	700	0	0.0%	34.6%	700	700	0	0.0%
35.8%	800	800	0	0.0%	35.8%	800	800	0	0.0%	35.8%	700	700	0	0.0%	35.8%	700	700	0	0.0%
37.0%	800	800	0	0.0%	37.0%	800	800	0	0.0%	37.0%	700	700	0	0.0%	37.0%	700	700	0	0.0%
38.3%	800	800	0	0.0%	38.3%	800	800	0	0.0%	38.3%	700	700	0	0.0%	38.3%	700	700	0	0.0%
39.5%	800	800	0	0.0%	39.5%	800	800	0	0.0%	39.5%	700	700	0	0.0%	39.5%	700	700	0	0.0%
40.7%	800	800	0	0.0%	40.7%	800	800	0	0.0%	40.7%	700	700	0	0.0%	40.7%	700	700	0	0.0%
42.0%	800	800	0	0.0%	42.0%	800	800	0	0.0%	42.0%	700	700	0	0.0%	42.0%	700	700	0	0.0%
43.2%	800	800	0	0.0%	43.2%	800	800	0	0.0%	43.2%	700	700	0	0.0%	43.2%	700	700	0	0.0%
44.4%	800	800	0	0.0%	44.4%	800	800	0	0.0%	44.4%	700	700	0	0.0%	44.4%	700	700	0	0.0%
45.7%	800	800	0	0.0%	45.7%	800	800	0	0.0%	45.7%	700	700	0	0.0%	45.7%	700	700	0	0.0%
46.9%	800	800	0	0.0%	46.9%	800	800	0	0.0%	46.9%	700	700	0	0.0%	46.9%	700	700	0	0.0%
48.1%	800	800	0	0.0%	48.1%	800	800	0	0.0%	48.1%	700	700	0	0.0%	48.1%	700	700	0	0.0%
49.4%	800	800	0	0.0%	49.4%	800	800	0	0.0%	49.4%	700	700	0	0.0%	49.4%	700	700	0	0.0%
50.6%	800	800	0	0.0%	50.6%	800	800	0	0.0%	50.6%	700	700	0	0.0%	50.6%	700	700	0	0.0%
51.9%	800	800	0	0.0%	51.9%	800	800	0	0.0%	51.9%	700	700	0	0.0%	51.9%	700	700	0	0.0%
53.1%	800	800	0	0.0%	53.1%	800	800	0	0.0%	53.1%	700	700	0	0.0%	53.1%	700	700	0	0.0%
54.3%	800	800	0	0.0%	54.3%	800	800	0	0.0%	54.3%	700	700	0	0.0%	54.3%	700	700	0	0.0%
55.6%	800	800	0	0.0%	55.6%	800	800	0	0.0%	55.6%	700	700	0	0.0%	55.6%	700	700	0	0.0%
56.8%	800	800	0	0.0%	56.8%	800	800	0	0.0%	56.8%	700	700	0	0.0%	56.8%	700	700	0	0.0%
58.0%	800	800	0	0.0%	58.0%	800	800	0	0.0%	58.0%	700	700	0	0.0%	58.0%	700	700	0	0.0%
59.3%	800	800	0	0.0%	59.3%	800	800	0	0.0%	59.3%	700	700	0	0.0%	59.3%	700	700	0	0.0%
60.5%	800	800	0	0.0%	60.5%	800	800	0	0.0%	60.5%	700	700	0	0.0%	60.5%	700	700	0	0.0%
61.7%	800	800	0	0.0%	61.7%	800	800	0	0.0%	61.7%	700	700	0	0.0%	61.7%	700	700	0	0.0%
63.0%	800	800	0	0.0%	63.0%	800	800	0	0.0%	63.0%	700	700	0	0.0%	63.0%	700	700	0	0.0%
64.2%	800	800	0	0.0%	64.2%	800	800	0	0.0%	64.2%	700	700	0	0.0%	64.2%	700	700	0	0.0%
65.4%	800	800	0	0.0%	65.4%	800	800	0	0.0%	65.4%	700	700	0	0.0%	65.4%	700	700	0	0.0%
66.7%	800	800	0	0.0%	66.7%	800	800	0	0.0%	66.7%	700	700	0	0.0%	66.7%	700	700	0	0.0%
67.9%	800	800	0	0.0%	67.9%	800	800	0	0.0%	67.9%	700	700	0	0.0%	67.9%	700	700	0	0.0%
69.1%	800	800	0	0.0%	69.1%	800	800	0	0.0%	69.1%	700	700	0	0.0%	69.1%	700	700	0	0.0%
70.4%	800	800	0	0.0%	70.4%	800	800	0	0.0%	70.4%	700	700	0	0.0%	70.4%	700	700	0	0.0%
71.6%	800	800	0	0.0%	71.6%	800	800	0	0.0%	71.6%	700	700	0	0.0%	71.6%	700	700	0	0.0%
72.8%	800	800	0	0.0%	72.8%	800	800	0	0.0%	72.8%	700	700	0	0.0%	72.8%	700	700	0	0.0%
74.1%	800	800	0	0.0%	74.1%	800	800	0	0.0%	74.1%	700	700	0	0.0%	74.1%	700	700	0	0.0%
75.3%	800	800	0	0.0%	75.3%	800	800	0	0.0%	75.3%	700	700	0	0.0%	75.3%	700	700	0	0.0%
76.5%	800	800	0	0.0%	76.5%	800	800	0	0.0%	76.5%	700	700	0	0.0%	76.5%	700	700	0	0.0%
77.8%	800	800	0	0.0%	77.8%	800	800	0	0.0%	77.8%	700	700	0	0.0%	77.8%	700	700	0	0.0%
79.0%	800	800	0	0.0%	79.0%	800	800	0	0.0%	79.0%	700	700	0	0.0%	79.0%	700	700	0	0.0%
80.2%	800	800	0	0.0%	80.2%	800	800	0	0.0%	80.2%	700	700	0	0.0%	80.2%	700	700	0	0.0%
81.5%	800	800	0	0.0%	81.5%	800	800	0	0.0%	81.5%	700	700	0	0.0%	81.5%	700	700	0	0.0%
82.7%	800	800	0	0.0%	82.7%	800	800	0	0.0%	82.7%	700	700	0	0.0%	82.7%	700	700	0	0.0%
84.0%	800	800	0	0.0%	84.0%	800	800	0	0.0%	84.0%	700	700	0	0.0%	84.0%	700	700	0	0.0%
85.2%	800	800	0	0.0%	85.2%	800	800	0	0.0%	85.2%	700	700	0	0.0%	85.2%	700	700	0	0.0%
86.4%	800	800	0	0.0%	86.4%	800	800	0	0.0%	86.4%	700	700	0	0.0%	86.4%	700	700	0	0.0%
87.7%	800	800	0	0.0%	87.7%	800	800	0	0.0%	87.7%	700	700	0	0.0%	87.7%	700	700	0	0.0%
88.9%	800	800	0	0.0%	88.9%	800	800	0	0.0%	88.9%	700	700	0	0.0%	88.9%	700	700	0	0.0%
90.1%	800	800	0	0.0%	90.1%	800	800	0	0.0%	90.1%	700	700	0	0.0%	90.1%	700	700	0	0.0%
91.4%	800	800	0	0.0%	91.4%	800	800	0	0.0%	91.4%	700	700	0	0.0%	91.4%	700	700	0	0.0%
92.6%	800	800	0	0.0%	92.6%	800	800	0	0.0%	92.6%	700	700	0	0.0%	92.6%	700	700	0	0.0%
93.8%	800	800	0	0.0%	93.8%	800	800	0	0.0%	93.8%	700	700	0	0.0%	93.8%	700	700	0	0.0%
95.1%	800	800	0	0.0%	95.1%	800	800	0	0.0%	95.1%	700	700	0	0.0%	95.1%	700	700	0	0.0%
96.3%	800	800	0	0.0%	96.3%	800	800	0	0.0%	96.3%	700	700	0	0.0%	96.3%	700	700	0	0.0%
97.5%	800	800	0	0.0%	97.5%	800	800	0	0.0%	97.5%	700	700	0	0.0%	97.5%	700	700	0	0.0%
98.8%	800	800	0	0.0%	98.8%	800	800	0	0.0%	98.8%	700	700	0	0.0%	98.8%	700	700	0	0.0%
100.0%	800	800	0	0.0%	100.0%	800	800	0	0.0%	100.0%	700	700	0	0.0%	100.0%	700	700	0	0.0%

Table SW-21-b
Feather River at Thermalito Low Flow Channel, Monthly Flow
Probability of Exceedance

June					July					August					September				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)	Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	700	700	0	0.0%	0.0%	700	700	0	0.0%	0.0%	700	700	0	0.0%	0.0%	773	773	0	0.0%
1.2%	700	700	0	0.0%	1.2%	700	700	0	0.0%	1.2%	700	700	0	0.0%	1.2%	773	773	0	0.0%
2.5%	700	700	0	0.0%	2.5%	700	700	0	0.0%	2.5%	700	700	0	0.0%	2.5%	773	773	0	0.0%
3.7%	700	700	0	0.0%	3.7%	700	700	0	0.0%	3.7%	700	700	0	0.0%	3.7%	773	773	0	0.0%
4.9%	700	700	0	0.0%	4.9%	700	700	0	0.0%	4.9%	700	700	0	0.0%	4.9%	773	773	0	0.0%
6.2%	700	700	0	0.0%	6.2%	700	700	0	0.0%	6.2%	700	700	0	0.0%	6.2%	773	773	0	0.0%
7.4%	700	700	0	0.0%	7.4%	700	700	0	0.0%	7.4%	700	700	0	0.0%	7.4%	773	773	0	0.0%
8.6%	700	700	0	0.0%	8.6%	700	700	0	0.0%	8.6%	700	700	0	0.0%	8.6%	773	773	0	0.0%
9.9%	700	700	0	0.0%	9.9%	700	700	0	0.0%	9.9%	700	700	0	0.0%	9.9%	773	773	0	0.0%
11.1%	700	700	0	0.0%	11.1%	700	700	0	0.0%	11.1%	700	700	0	0.0%	11.1%	773	773	0	0.0%
12.3%	700	700	0	0.0%	12.3%	700	700	0	0.0%	12.3%	700	700	0	0.0%	12.3%	773	773	0	0.0%
13.6%	700	700	0	0.0%	13.6%	700	700	0	0.0%	13.6%	700	700	0	0.0%	13.6%	773	773	0	0.0%
14.8%	700	700	0	0.0%	14.8%	700	700	0	0.0%	14.8%	700	700	0	0.0%	14.8%	773	773	0	0.0%
16.0%	700	700	0	0.0%	16.0%	700	700	0	0.0%	16.0%	700	700	0	0.0%	16.0%	773	773	0	0.0%
17.3%	700	700	0	0.0%	17.3%	700	700	0	0.0%	17.3%	700	700	0	0.0%	17.3%	773	773	0	0.0%
18.5%	700	700	0	0.0%	18.5%	700	700	0	0.0%	18.5%	700	700	0	0.0%	18.5%	773	773	0	0.0%
19.8%	700	700	0	0.0%	19.8%	700	700	0	0.0%	19.8%	700	700	0	0.0%	19.8%	773	773	0	0.0%
21.0%	700	700	0	0.0%	21.0%	700	700	0	0.0%	21.0%	700	700	0	0.0%	21.0%	773	773	0	0.0%
22.2%	700	700	0	0.0%	22.2%	700	700	0	0.0%	22.2%	700	700	0	0.0%	22.2%	773	773	0	0.0%
23.5%	700	700	0	0.0%	23.5%	700	700	0	0.0%	23.5%	700	700	0	0.0%	23.5%	773	773	0	0.0%
24.7%	700	700	0	0.0%	24.7%	700	700	0	0.0%	24.7%	700	700	0	0.0%	24.7%	773	773	0	0.0%
25.9%	700	700	0	0.0%	25.9%	700	700	0	0.0%	25.9%	700	700	0	0.0%	25.9%	773	773	0	0.0%
27.2%	700	700	0	0.0%	27.2%	700	700	0	0.0%	27.2%	700	700	0	0.0%	27.2%	773	773	0	0.0%
28.4%	700	700	0	0.0%	28.4%	700	700	0	0.0%	28.4%	700	700	0	0.0%	28.4%	773	773	0	0.0%
29.6%	700	700	0	0.0%	29.6%	700	700	0	0.0%	29.6%	700	700	0	0.0%	29.6%	773	773	0	0.0%
30.9%	700	700	0	0.0%	30.9%	700	700	0	0.0%	30.9%	700	700	0	0.0%	30.9%	773	773	0	0.0%
32.1%	700	700	0	0.0%	32.1%	700	700	0	0.0%	32.1%	700	700	0	0.0%	32.1%	773	773	0	0.0%
33.3%	700	700	0	0.0%	33.3%	700	700	0	0.0%	33.3%	700	700	0	0.0%	33.3%	773	773	0	0.0%
34.6%	700	700	0	0.0%	34.6%	700	700	0	0.0%	34.6%	700	700	0	0.0%	34.6%	773	773	0	0.0%
35.8%	700	700	0	0.0%	35.8%	700	700	0	0.0%	35.8%	700	700	0	0.0%	35.8%	773	773	0	0.0%
37.0%	700	700	0	0.0%	37.0%	700	700	0	0.0%	37.0%	700	700	0	0.0%	37.0%	773	773	0	0.0%
38.3%	700	700	0	0.0%	38.3%	700	700	0	0.0%	38.3%	700	700	0	0.0%	38.3%	773	773	0	0.0%
39.5%	700	700	0	0.0%	39.5%	700	700	0	0.0%	39.5%	700	700	0	0.0%	39.5%	773	773	0	0.0%
40.7%	700	700	0	0.0%	40.7%	700	700	0	0.0%	40.7%	700	700	0	0.0%	40.7%	773	773	0	0.0%
42.0%	700	700	0	0.0%	42.0%	700	700	0	0.0%	42.0%	700	700	0	0.0%	42.0%	773	773	0	0.0%
43.2%	700	700	0	0.0%	43.2%	700	700	0	0.0%	43.2%	700	700	0	0.0%	43.2%	773	773	0	0.0%
44.4%	700	700	0	0.0%	44.4%	700	700	0	0.0%	44.4%	700	700	0	0.0%	44.4%	773	773	0	0.0%
45.7%	700	700	0	0.0%	45.7%	700	700	0	0.0%	45.7%	700	700	0	0.0%	45.7%	773	773	0	0.0%
46.9%	700	700	0	0.0%	46.9%	700	700	0	0.0%	46.9%	700	700	0	0.0%	46.9%	773	773	0	0.0%
48.1%	700	700	0	0.0%	48.1%	700	700	0	0.0%	48.1%	700	700	0	0.0%	48.1%	773	773	0	0.0%
49.4%	700	700	0	0.0%	49.4%	700	700	0	0.0%	49.4%	700	700	0	0.0%	49.4%	773	773	0	0.0%
50.6%	700	700	0	0.0%	50.6%	700	700	0	0.0%	50.6%	700	700	0	0.0%	50.6%	773	773	0	0.0%
51.9%	700	700	0	0.0%	51.9%	700	700	0	0.0%	51.9%	700	700	0	0.0%	51.9%	773	773	0	0.0%
53.1%	700	700	0	0.0%	53.1%	700	700	0	0.0%	53.1%	700	700	0	0.0%	53.1%	773	773	0	0.0%
54.3%	700	700	0	0.0%	54.3%	700	700	0	0.0%	54.3%	700	700	0	0.0%	54.3%	773	773	0	0.0%
55.6%	700	700	0	0.0%	55.6%	700	700	0	0.0%	55.6%	700	700	0	0.0%	55.6%	773	773	0	0.0%
56.8%	700	700	0	0.0%	56.8%	700	700	0	0.0%	56.8%	700	700	0	0.0%	56.8%	773	773	0	0.0%
58.0%	700	700	0	0.0%	58.0%	700	700	0	0.0%	58.0%	700	700	0	0.0%	58.0%	773	773	0	0.0%
59.3%	700	700	0	0.0%	59.3%	700	700	0	0.0%	59.3%	700	700	0	0.0%	59.3%	773	773	0	0.0%
60.5%	700	700	0	0.0%	60.5%	700	700	0	0.0%	60.5%	700	700	0	0.0%	60.5%	773	773	0	0.0%
61.7%	700	700	0	0.0%	61.7%	700	700	0	0.0%	61.7%	700	700	0	0.0%	61.7%	773	773	0	0.0%
63.0%	700	700	0	0.0%	63.0%	700	700	0	0.0%	63.0%	700	700	0	0.0%	63.0%	773	773	0	0.0%
64.2%	700	700	0	0.0%	64.2%	700	700	0	0.0%	64.2%	700	700	0	0.0%	64.2%	773	773	0	0.0%
65.4%	700	700	0	0.0%	65.4%	700	700	0	0.0%	65.4%	700	700	0	0.0%	65.4%	773	773	0	0.0%
66.7%	700	700	0	0.0%	66.7%	700	700	0	0.0%	66.7%	700	700	0	0.0%	66.7%	773	773	0	0.0%
67.9%	700	700	0	0.0%	67.9%	700	700	0	0.0%	67.9%	700	700	0	0.0%	67.9%	773	773	0	0.0%
69.1%	700	700	0	0.0%	69.1%	700	700	0	0.0%	69.1%	700	700	0	0.0%	69.1%	773	773	0	0.0%
70.4%	700	700	0	0.0%	70.4%	700	700	0	0.0%	70.4%	700	700	0	0.0%	70.4%	773	773	0	0.0%
71.6%	700	700	0	0.0%	71.6%	700	700	0	0.0%	71.6%	700	700	0	0.0%	71.6%	773	773	0	0.0%
72.8%	700	700	0	0.0%	72.8%	700	700	0	0.0%	72.8%	700	700	0	0.0%	72.8%	773	773	0	0.0%
74.1%	700	700	0	0.0%	74.1%	700	700	0	0.0%	74.1%	700	700	0	0.0%	74.1%	773	773	0	0.0%
75.3%	700	700	0	0.0%	75.3%	700	700	0	0.0%	75.3%	700	700	0	0.0%	75.3%	773	773	0	0.0%
76.5%	700	700	0	0.0%	76.5%	700	700	0	0.0%	76.5%	700	700	0	0.0%	76.5%	773	773	0	0.0%
77.8%	700	700	0	0.0%	77.8%	700	700	0	0.0%	77.8%	700	700	0	0.0%	77.8%	773	773	0	0.0%
79.0%	700	700	0	0.0%	79.0%	700	700	0	0.0%	79.0%	700	700	0	0.0%	79.0%	773	773	0	0.0%
80.2%	700	700	0	0.0%	80.2%	700	700	0	0.0%	80.2%	700	700	0	0.0%	80.2%	773	773	0	0.0%
81.5%	700	700	0	0.0%	81.5%	700	700	0	0.0%	81.5%	700	700	0	0.0%	81.5%	773	773	0	0.0%
82.7%	700	700	0	0.0%	82.7%	700	700	0	0.0%	82.7%	700	700	0	0.0%	82.7%	773	773	0	0.0%
84.0%	700	700	0	0.0%	84.0%	700	700	0	0.0%	84.0%	700	700	0	0.0%	84.0%	773	773	0	0.0%
85.2%	700	700	0	0.0%	85.2%	700	700	0	0.0%	85.2%	700	700	0	0.0%	85.2%	773	773	0	0.0%
86.4%	700	700	0	0.0%	86.4%	700	700	0	0.0%	86.4%	700	700	0	0.0%	86.4%	773	773	0	0.0%
87.7%	700	700	0	0.0%	87.7%	700	700	0	0.0%	87.7%	700	700	0	0.0%	87.7%	773	773	0	0.0%
88.9%	700	700	0	0.0%	88.9%	700	700	0	0.0%	88.9%	700	700	0	0.0%	88.9%	773	773	0	0.0%
90.1%	700	700	0	0.0%	90.1%	700	700	0	0.0%	90.1%	700	700	0	0.0%	90.1%	773	773	0	0.0%
91.4%	700	700	0	0.0%	91.4%	700	700	0	0.0%	91.4%	700	700	0	0.0%	91.4%	773	773	0	0.0%
92.6%	700	700	0	0.0%	92.6%	700	700	0	0.0%	92.6%	700	700	0	0.0%	92.6%	773	773	0	0.0%
93.8%	700	700	0	0.0%	93.8%	700	700	0	0.0%	93.8%	700	700	0	0.0%	93.8%	773	773	0	0.0%
95.1%	700	700	0	0.0%	95.1%	700	700	0	0.0%	95.1%	700	700	0	0.0%	95.1%	773	773	0	0.0%
96.3%	700	700	0	0.0%	96.3%	700	700	0	0.0%	96.3%	700	700	0	0.0%	96.3%	773	773	0	0.0%
97.5%	700	700	0	0.0%	97.5%	700	700	0	0.0%	97.5%	700	700	0	0.0%	97.5%	773	773	0	0.0%
98.8%	700	700	0	0.0%	98.8%	700	700	0	0.0%	98.8%	700	700	0	0.0%	98.8%	773	773	0	0.0%
100.0%	700	700	0	0.0%	100.0%	700	700	0	0.0%	100.0%	700	700	0	0.0%	100.0%	773	773	0	0.0%

Figure SW-22-b
Feather River below Thermalito, Monthly Flow
Probability of Exceedance

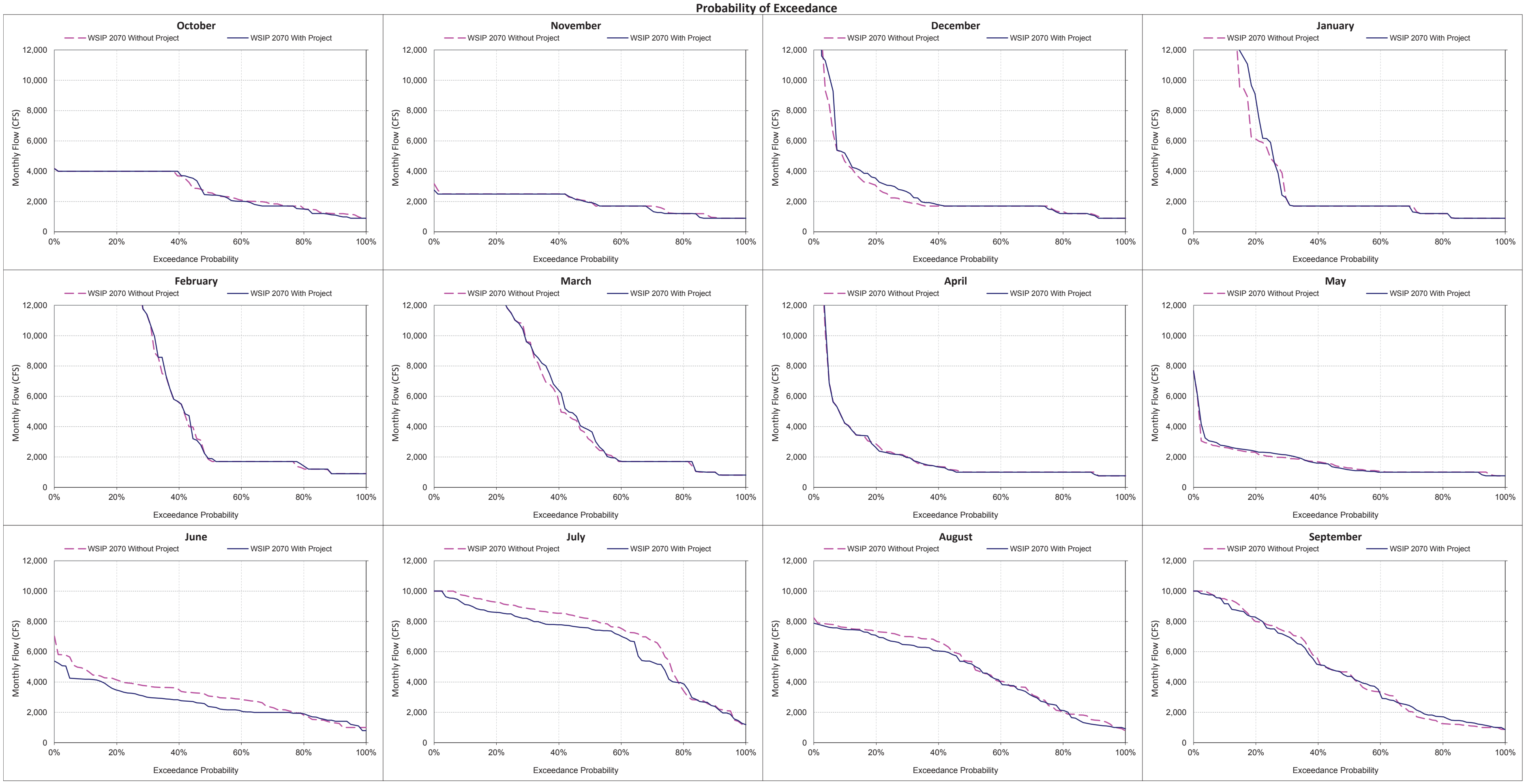


Table SW-22-b
Feather River below Thermalito, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,180	4,178	-2	0.0%
1.2%	4,000	4,000	0	0.0%
2.5%	4,000	4,000	0	0.0%
3.7%	4,000	4,000	0	0.0%
4.9%	4,000	4,000	0	0.0%
6.2%	4,000	4,000	0	0.0%
7.4%	4,000	4,000	0	0.0%
8.6%	4,000	4,000	0	0.0%
9.9%	4,000	4,000	0	0.0%
11.1%	4,000	4,000	0	0.0%
12.3%	4,000	4,000	0	0.0%
13.6%	4,000	4,000	0	0.0%
14.8%	4,000	4,000	0	0.0%
16.0%	4,000	4,000	0	0.0%
17.3%	4,000	4,000	0	0.0%
18.5%	4,000	4,000	0	0.0%
19.8%	4,000	4,000	0	0.0%
21.0%	4,000	4,000	0	0.0%
22.2%	4,000	4,000	0	0.0%
23.5%	4,000	4,000	0	0.0%
24.7%	4,000	4,000	0	0.0%
25.9%	4,000	4,000	0	0.0%
27.2%	4,000	4,000	0	0.0%
28.4%	4,000	4,000	0	0.0%
29.6%	4,000	4,000	0	0.0%
30.9%	4,000	4,000	0	0.0%
32.1%	4,000	4,000	0	0.0%
33.3%	4,000	4,000	0	0.0%
34.6%	4,000	4,000	0	0.0%
35.8%	4,000	4,000	0	0.0%
37.0%	4,000	4,000	0	0.0%
38.3%	4,000	4,000	0	0.0%
39.5%	3,693	4,000	307	8.3%
40.7%	3,683	3,707	24	0.7%
42.0%	3,507	3,687	180	5.1%
43.2%	3,261	3,611	350	10.7%
44.4%	2,880	3,530	651	22.6%
45.7%	2,869	3,362	493	17.2%
46.9%	2,816	2,885	69	2.5%
48.1%	2,718	2,454	-264	-9.7%
49.4%	2,590	2,435	-155	-6.0%
50.6%	2,559	2,423	-137	-5.3%
51.9%	2,415	2,418	3	0.1%
53.1%	2,341	2,387	46	2.0%
54.3%	2,324	2,334	10	0.4%
55.6%	2,318	2,231	-87	-3.8%
56.8%	2,265	2,070	-195	-8.6%
58.0%	2,210	2,031	-179	-8.1%
59.3%	2,116	2,013	-103	-4.9%
60.5%	2,074	2,010	-64	-3.1%
61.7%	2,023	1,989	-34	-1.7%
63.0%	2,011	1,926	-85	-4.2%
64.2%	2,010	1,800	-210	-10.4%
65.4%	1,987	1,748	-239	-12.0%
66.7%	1,987	1,700	-287	-14.4%
67.9%	1,954	1,700	-254	-13.0%
69.1%	1,865	1,700	-165	-8.9%
70.4%	1,844	1,700	-144	-7.8%
71.6%	1,843	1,700	-143	-7.7%
72.8%	1,758	1,700	-58	-3.3%
74.1%	1,713	1,700	-13	-0.8%
75.3%	1,700	1,700	0	0.0%
76.5%	1,700	1,700	0	0.0%
77.8%	1,700	1,539	-161	-9.5%
79.0%	1,700	1,522	-178	-10.5%
80.2%	1,501	1,504	2	0.2%
81.5%	1,491	1,472	-19	-1.3%
82.7%	1,473	1,200	-273	-18.5%
84.0%	1,454	1,200	-254	-17.4%
85.2%	1,287	1,200	-87	-6.7%
86.4%	1,274	1,200	-74	-5.8%
87.7%	1,225	1,179	-46	-3.7%
88.9%	1,213	1,126	-87	-7.2%
90.1%	1,200	1,100	-100	-8.3%
91.4%	1,200	1,031	-169	-14.1%
92.6%	1,200	981	-219	-18.3%
93.8%	1,164	980	-184	-15.8%
95.1%	1,160	900	-260	-22.4%
96.3%	1,121	900	-221	-19.7%
97.5%	991	900	-91	-9.2%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,171	2,744	-427	-13.5%
1.2%	2,741	2,500	-241	-8.8%
2.5%	2,500	2,500	0	0.0%
3.7%	2,500	2,500	0	0.0%
4.9%	2,500	2,500	0	0.0%
6.2%	2,500	2,500	0	0.0%
7.4%	2,500	2,500	0	0.0%
8.6%	2,500	2,500	0	0.0%
9.9%	2,500	2,500	0	0.0%
11.1%	2,500	2,500	0	0.0%
12.3%	2,500	2,500	0	0.0%
13.6%	2,500	2,500	0	0.0%
14.8%	2,500	2,500	0	0.0%
16.0%	2,500	2,500	0	0.0%
17.3%	2,500	2,500	0	0.0%
18.5%	2,500	2,500	0	0.0%
19.8%	2,500	2,500	0	0.0%
21.0%	2,500	2,500	0	0.0%
22.2%	2,500	2,500	0	0.0%
23.5%	2,500	2,500	0	0.0%
24.7%	2,500	2,500	0	0.0%
25.9%	2,500	2,500	0	0.0%
27.2%	2,500	2,500	0	0.0%
28.4%	2,500	2,500	0	0.0%
29.6%	2,500	2,500	0	0.0%
30.9%	2,500	2,500	0	0.0%
32.1%	2,500	2,500	0	0.0%
33.3%	2,500	2,500	0	0.0%
34.6%	2,500	2,500	0	0.0%
35.8%	2,500	2,500	0	0.0%
37.0%	2,500	2,500	0	0.0%
38.3%	2,500	2,500	0	0.0%
39.5%	2,500	2,500	0	0.0%
40.7%	2,500	2,500	0	0.0%
42.0%	2,500	2,500	0	0.0%
43.2%	2,294	2,339	46	2.0%
44.4%	2,260	2,241	-19	-0.8%
45.7%	2,184	2,116	-68	-3.1%
46.9%	2,094	2,106	12	0.6%
48.1%	2,073	2,007	-65	-3.2%
49.4%	2,008	1,950	-58	-2.9%
50.6%	1,918	1,924	6	0.3%
51.9%	1,700	1,848	147	8.7%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,512	-188	-11.1%
70.4%	1,700	1,332	-368	-21.6%
71.6%	1,648	1,279	-369	-22.4%
72.8%	1,584	1,273	-311	-19.6%
74.1%	1,471	1,200	-271	-18.4%
75.3%	1,248	1,200	-48	-3.8%
76.5%	1,224	1,200	-24	-1.9%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	1,200	1,200	0	0.0%
82.7%	1,200	1,200	0	0.0%
84.0%	1,200	1,191	-9	-0.8%
85.2%	1,200	949	-251	-20.9%
86.4%	1,200	901	-299	-24.9%
87.7%	1,094	900	-194	-17.8%
88.9%	961	900	-61	-6.4%
90.1%	945	900	-45	-4.8%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	28,950	31,728	2,778	9.6%
1.2%	20,053	20,368	315	1.6%
2.5%	12,911	11,595	-1,316	-10.2%
3.7%	9,291	11,297	2,006	21.6%
4.9%	8,376	10,295	1,918	22.9%
6.2%	6,508	9,298	2,789	42.9%
7.4%	5,388	5,386	-3	0.0%
8.6%	5,277	5,313	36	0.7%
9.9%	4,668	5,205	537	11.5%
11.1%	4,353	4,777	423	9.7%
12.3%	4,141	4,250	108	2.6%
13.6%	3,773	4,181	408	10.8%
14.8%	3,528	4,073	545	15.4%
16.0%	3,293	3,861	568	17.2%
17.3%	3,267	3,860	593	18.2%
18.5%	3,172	3,619	447	14.1%
19.8%	3,083	3,551	468	15.2%
21.0%	2,758	3,277	519	18.8%
22.2%	2,605	3,173	567	21.8%
23.5%	2,518	3,076	558	22.2%
24.7%	2,243	3,049	806	35.9%
25.9%	2,241	2,996	755	33.7%
27.2%	2,205	2,806	601	27.3%
28.4%	2,047	2,756	709	34.6%
29.6%	1,972	2,657	685	34.7%
30.9%	1,923	2,525	602	31.3%
32.1%	1,861	2,244	384	20.6%
33.3%	1,847	2,240	393	21.3%
34.6%	1,759	1,986	227	12.9%
35.8%	1,702	1,923	221	13.0%
37.0%	1,700	1,921	221	13.0%
38.3%	1,700	1,881	181	10.6%
39.5%	1,700	1,806	106	6.2%
40.7%	1,700	1,758	58	3.4%
42.0%	1,700	1,700	0	0.0%
43.2%	1,700	1,700	0	0.0%
44.4%	1,700	1,700	0	0.0%
45.7%	1,700	1,700	0	0.0%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,694	-6	-0.4%
75.3%	1,700	1,500	-200	-11.8%
76.5%	1,497	1,472	-25	-1.7%
77.8%	1,368	1,306	-63	-4.6%
79.0%	1,319	1,200	-119	-9.0%
80.2%	1,318	1,200	-118	-8.9%
81.5%	1,200	1,200	0	0.0%
82.7%	1,200	1,200	0	0.0%
84.0%	1,200	1,200	0	0.0%
85.2%	1,200	1,200	0	0.0%
86.4%	1,200	1,200	0	0.0%
87.7%	1,200	1,200	0	0.0%
88.9%	1,200	1,123	-77	-6.5%
90.1%	1,123	1,069	-54	-4.8%
91.4%	1,008	900	-108	-10.7%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	50,062	50,064	1	0.0%
1.2%	48,711	48,493	-218	-0.4%
2.5%	42,381	42,426	45	0.1%
3.7%	33,198	31,846	-1,352	-4.1%
4.9%	24,119	25,439	1,320	5.5%
6.2%	21,529	24,022	2,493	11.6%
7.4%	21,130	21,247	118	0.6%
8.6%	19,079	20,998	1,919	10.1%
9.9%	18,153	19,198	1,045	5.8%
11.1%	15,005	15,369	364	2.4%
12.3%	14,783	15,005	222	1.5%
13.6%	13,156	13,033	-123	-0.9%
14.8%	9,515	11,958	2,443	25.7%
16.0%	9,461	11,518	2,057	21.7%
17.3%	8,920	11,073	2,153	24.1%
18.5%	6,264	9,661	3,398	54.2%
19.8%	6,151	9,121	2,970	48.3%
21.0%	5,983	7,528	1,545	25.8%
22.2%	5,898	6,175	276	4.7%
23.5%	5,567	6,162	595	10.7%
24.7%	4,875	5,898	1,024	21.0%
25.9%	4,561	4,544	-17	-0.4%
27.2%	4,317	3,880	-437	-10.1%
28.4%	3,880	2,431	-1,449	-37.3%
29.6%	2,241	2,244	4	0.2%
30.9%	1,745	1,749	5	0.3%
32.1%	1,700	1,700	0	0.0%
33.3%	1,700	1,700	0	0.0%
34.6%	1,700	1,700	0	0.0%
35.8%	1,700	1,700	0	0.0%
37.0%	1,700	1,700	0	0.0%
38.3%	1,700	1,700	0	0.0%
39.5%	1,700	1,700	0	0.0%
40.7%	1,700	1,700	0	0.0%
42.0%	1,700	1,700	0	0.0%
43.2%	1,700	1,700	0	0.0%
44.4%	1,700	1,700	0	0.0%
45.7%	1,700	1,700	0	0.0%
46.9%	1,700	1,700	0	0.0%
48.1%	1,700	1,700	0	0.0%
49.4%	1,700	1,700	0	0.0%
50.6%	1,700	1,700	0	0.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,318	-382	-22.5%
71.6%	1,321	1,279	-42	-3.2%
72.8%	1,200	1,200	0	0.0%
74.1%	1,200	1,200	0	0.0%
75.3%	1,200	1,200	0	0.0%
76.5%	1,200	1,200	0	0.0%
77.8%	1,200	1,200	0	0.0%
79.0%	1,200	1,200	0	0.0%
80.2%	1,200	1,200	0	0.0%
81.5%	1,200	1,200	0	0.0%
82.7%	926	915	-11	-1.2%
84.0%	900	900	0	0.0%
85.2%	900	900	0	0.0%
86.4%	900	900	0	0.0%
87.7%	900	900	0	0.0%
88.9%	900	900	0	0.0%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

Table SW-22-b

Feather River below Thermalito, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	48,991	48,991	0	0.0%
1.2%	39,769	41,219	1,450	3.6%
2.5%	37,252	40,168	2,916	7.8%
3.7%	37,157	37,252	95	0.3%
4.9%	33,914	33,895	-19	-0.1%
6.2%	33,895	30,680	-3,215	-9.5%
7.4%	27,950	27,950	0	0.0%
8.6%	26,002	26,002	0	0.0%
9.9%	25,834	25,996	162	0.6%
11.1%	24,898	25,834	936	3.8%
12.3%	22,618	23,307	689	3.0%
13.6%	21,552	21,545	-7	0.0%
14.8%	21,225	21,200	-25	-0.1%
16.0%	20,169	20,497	328	1.6%
17.3%	19,898	19,898	0	0.0%
18.5%	18,693	18,916	223	1.2%
19.8%	18,665	18,665	0	0.0%
21.0%	18,556	18,556	0	0.0%
22.2%	17,160	17,160	0	0.0%
23.5%	17,083	17,082	-1	0.0%
24.7%	16,494	16,494	0	0.0%
25.9%	16,057	16,057	0	0.0%
27.2%	12,995	14,931	1,936	14.9%
28.4%	11,770	11,770	0	0.0%
29.6%	11,425	11,425	0	0.0%
30.9%	10,687	10,687	0	0.0%
32.1%	8,897	9,949	1,052	11.8%
33.3%	8,581	8,581	0	0.0%
34.6%	7,506	8,572	1,065	14.2%
35.8%	7,311	7,381	70	1.0%
37.0%	6,511	6,510	-1	0.0%
38.3%	5,805	5,798	-8	-0.1%
39.5%	5,667	5,667	0	0.0%
40.7%	5,476	5,476	-1	0.0%
42.0%	4,727	4,848	121	2.6%
43.2%	3,995	4,727	732	18.3%
44.4%	3,979	3,199	-781	-19.6%
45.7%	3,199	3,097	-101	-3.2%
46.9%	3,111	2,796	-315	-10.1%
48.1%	2,241	2,244	4	0.2%
49.4%	1,842	1,894	52	2.8%
50.6%	1,700	1,888	188	11.0%
51.9%	1,700	1,700	0	0.0%
53.1%	1,700	1,700	0	0.0%
54.3%	1,700	1,700	0	0.0%
55.6%	1,700	1,700	0	0.0%
56.8%	1,700	1,700	0	0.0%
58.0%	1,700	1,700	0	0.0%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,700	0	0.0%
75.3%	1,700	1,700	0	0.0%
76.5%	1,700	1,700	0	0.0%
77.8%	1,376	1,700	324	23.6%
79.0%	1,307	1,548	240	18.4%
80.2%	1,200	1,373	173	14.4%
81.5%	1,200	1,200	0	0.0%
82.7%	1,200	1,200	0	0.0%
84.0%	1,200	1,200	0	0.0%
85.2%	1,200	1,200	0	0.0%
86.4%	1,200	1,200	0	0.0%
87.7%	1,168	1,200	32	2.7%
88.9%	900	900	0	0.0%
90.1%	900	900	0	0.0%
91.4%	900	900	0	0.0%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	44,804	44,804	0	0.0%
1.2%	42,912	42,917	5	0.0%
2.5%	35,558	35,353	-205	-0.6%
3.7%	35,353	34,571	-782	-2.2%
4.9%	34,571	34,497	-74	-0.2%
6.2%	31,173	31,173	0	0.0%
7.4%	20,771	20,771	0	0.0%
8.6%	19,683	19,683	0	0.0%
9.9%	18,671	18,671	0	0.0%
11.1%	18,143	18,143	0	0.0%
12.3%	17,405	17,405	0	0.0%
13.6%	17,030	17,030	0	0.0%
14.8%	15,545	15,545	0	0.0%
16.0%	14,851	14,845	-7	0.0%
17.3%	13,977	14,025	49	0.3%
18.5%	13,936	13,977	40	0.3%
19.8%	13,124	13,936	812	6.2%
21.0%	13,040	13,124	85	0.6%
22.2%	12,349	12,349	0	0.0%
23.5%	11,823	11,823	0	0.0%
24.7%	11,499	11,499	0	0.0%
25.9%	11,027	11,027	0	0.0%
27.2%	10,862	10,816	-45	-0.4%
28.4%	10,816	10,425	-391	-3.6%
29.6%	9,596	9,596	0	0.0%
30.9%	9,561	9,412	-149	-1.6%
32.1%	8,539	8,797	257	3.0%
33.3%	8,187	8,539	352	4.3%
34.6%	7,503	8,186	683	9.1%
35.8%	6,938	8,010	1,072	15.4%
37.0%	6,806	7,502	696	10.2%
38.3%	6,512	6,806	294	4.5%
39.5%	6,047	6,512	464	7.7%
40.7%	4,966	6,208	1,242	25.0%
42.0%	4,914	5,184	270	5.5%
43.2%	4,672	4,965	293	6.3%
44.4%	4,497	4,914	417	9.3%
45.7%	4,405	4,670	266	6.0%
46.9%	3,793	4,066	274	7.2%
48.1%	3,646	3,921	275	7.5%
49.4%	3,212	3,804	591	18.4%
50.6%	3,022	3,643	621	20.5%
51.9%	2,666	3,022	357	13.4%
53.1%	2,427	2,655	228	9.4%
54.3%	2,409	2,426	18	0.7%
55.6%	2,146	2,014	-133	-6.2%
56.8%	2,094	1,957	-137	-6.5%
58.0%	1,886	1,930	45	2.4%
59.3%	1,700	1,747	47	2.8%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,700	0	0.0%
67.9%	1,700	1,700	0	0.0%
69.1%	1,700	1,700	0	0.0%
70.4%	1,700	1,700	0	0.0%
71.6%	1,700	1,700	0	0.0%
72.8%	1,700	1,700	0	0.0%
74.1%	1,700	1,700	0	0.0%
75.3%	1,700	1,700	0	0.0%
76.5%	1,700	1,700	0	0.0%
77.8%	1,700	1,700	0	0.0%
79.0%	1,700	1,700	0	0.0%
80.2%	1,700	1,700	0	0.0%
81.5%	1,700	1,700	0	0.0%
82.7%	1,419	1,700	281	19.8%
84.0%	1,050	1,041	-9	-0.9%
85.2%	1,000	1,032	32	3.2%
86.4%	1,000	1,007	7	0.7%
87.7%	1,000	1,000	0	0.0%
88.9%	1,000	1,000	0	0.0%
90.1%	1,000	1,000	0	0.0%
91.4%	822	800	-22	-2.7%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	800	800	0	0.0%
98.8%	800	800	0	0.0%
100.0%	800	800	0	0.0%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	19,207	19,201	-6	0.0%
1.2%	15,954	15,949	-4	0.0%
2.5%	15,081	15,082	1	0.0%
3.7%	10,130	10,961	831	8.2%
4.9%	6,894	6,890	-3	0.0%
6.2%	5,637	5,630	-7	-0.1%
7.4%	5,319	5,315	-4	-0.1%
8.6%	4,770	4,766	-4	-0.1%
9.9%	4,231	4,223	-8	-0.2%
11.1%	4,071	4,066	-5	-0.1%
12.3%	3,776	3,735	-41	-1.1%
13.6%	3,440	3,456	16	0.5%
14.8%	3,432	3,427	-4	-0.1%
16.0%	3,400	3,408	9	0.3%
17.3%	3,067	3,391	323	10.5%
18.5%	2,982	2,897	-85	-2.9%
19.8%	2,897	2,661	-236	-8.2%
21.0%	2,669	2,382	-287	-10.8%
22.2%	2,397	2,328	-69	-2.9%
23.5%	2,349	2,274	-76	-3.2%
24.7%	2,329	2,209	-120	-5.2%
25.9%	2,211	2,181	-30	-1.3%
27.2%	2,172	2,150	-22	-1.0%
28.4%	2,154	2,111	-43	-2.0%
29.6%	2,016	1,964	-51	-2.5%
30.9%	2,007	1,929	-78	-3.9%
32.1%	1,751	1,745	-6	-0.4%
33.3%	1,584	1,675	92	5.8%
34.6%	1,544	1,576	32	2.1%
35.8%	1,454	1,509	55	3.8%
37.0%	1,450	1,445	-6	-0.4%
38.3%	1,428	1,424	-4	-0.3%
39.5%	1,380	1,348	-32	-2.3%
40.7%	1,351	1,317	-34	-2.5%
42.0%	1,342	1,289	-53	-4.0%
43.2%	1,178	1,150	-28	-2.4%
44.4%	1,151	1,117	-35	-3.0%
45.7%	1,126	1,000	-126	-11.2%
46.9%	1,049	1,000	-49	-4.6%
48.1%	1,000	1,000	0	0.0%
49.4%	1,000	1,000	0	0.0%
50.6%	1,000	1,000	0	0.0%
51.9%	1,000	1,000	0	0.0%
53.1%	1,000	1,000	0	0.0%
54.3%	1,000	1,000	0	0.0%
55.6%	1,000	1,000	0	0.0%
56.8%	1,000	1,000	0	0.0%
58.0%	1,000	1,000	0	0.0%
59.3%	1,000	1,000	0	0.0%
60.5%	1,000	1,000	0	0.0%
61.7%	1,000	1,000	0	0.0%
63.0%	1,000	1,000	0	0.0%
64.2%	1,000	1,000	0	0.0%
65.4%	1,000	1,000	0	0.0%
66.7%	1,000	1,000	0	0.0%
67.9%	1,000	1,000	0	0.0%
69.1%	1,000	1,000	0	0.0%
70.4%	1,000	1,000	0	0.0%
71.6%	1,000	1,000	0	0.0%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	1,000	1,000	0	0.0%
90.1%	1,000	846	-154	-15.4%
91.4%	752	750	-2	-0.3%
92.6%	750	750	0	0.0%
93.8%	750	750	0	0.0%
95.1%	750	750	0	0.0%
96.3%	750	750	0	0.0%
97.5%	750	750	0	0.0%
98.8%	750	750	0	0.0%
100.0%	750	750	0	0.0%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,687	7,678	-9	-0.1%
1.2%	6,093	6,094	0	0.0%
2.5%	3,061	4,167	1,106	36.1%
3.7%	2,943	3,248	304	10.3%
4.9%	2,898	3,060	162	5.6%
6.2%	2,765	3,021	256	9.2%
7.4%	2,725	2,943	217	8.0%
8.6%	2,655	2,781	126	4.7%
9.9%	2,626	2,743	117	4.4%
11.1%	2,598	2,693	95	3.7%
12.3%	2,526	2,623	97	3.8%
13.6%	2,461	2,575	113	4.6%
14.8%	2,430	2,526	96	4.0%
16.0%	2,378	2,499	121	5.1%
17.3%	2,339	2,464	125	5.3%
18.5%	2,323	2,436	114	4.9%
19.8%	2,316	2,378	63	2.7%
21.0%	2,152	2,316	165	7.7%
22.2%	2,121	2,308	188	8.8%
23.5%	2,056	2,293	237	11.6%
24.7%	2,040	2,284	244	12.0%
25.9%	1,980	2,227	247	12.5%
27.2%	1,976	2,193	217	11.0%
28.4%	1,974	2,151	177	9.0%
29.6%	1,956	2,144	189	9.6%
30.9%	1,888	2,095	207	10.9%
32.1%	1,884	2,045	160	8.5%
33.3%	1,863	1,964	101	5.4%
34.6%	1,862	1,893	31	1.7%
35.8%	1,777	1,775	-2	-0.1%
37.0%	1,731	1,690	-40	-2.3%
38.3%	1,708	1,647	-62	-3.6%
39.5%	1,695	1,593	-102	-6.0%
40.7%	1,657	1,589	-68	-4.1%
42.0%	1,607	1,553	-54	-3.4%
43.2%	1,573	1,543	-31	-2.0%
44.4%	1,528	1,350	-178	-11.7%
45.7%	1,414	1,297	-117	-8.3%
46.9%	1,364	1,271	-93	-6.8%
48.1%	1,336	1,220	-115	-8.6%
49.4%	1,277	1,160	-117	-9.1%
50.6%	1,267	1,126	-141	-11.2%
51.9%	1,203	1,102	-100	-8.3%
53.1%	1,178	1,096	-81	-6.9%
54.3%	1,161	1,095	-65	-5.6%
55.6%	1,102	1,062	-40	-3.6%
56.8%	1,100	1,046	-54	-4.9%
58.0%	1,099	1,045	-54	-4.9%
59.3%	1,065	1,000	-65	-6.1%
60.5%	1,050	1,000	-50	-4.7%
61.7%	1,000	1,000	0	0.0%
63.0%	1,000	1,000	0	0.0%
64.2%	1,000	1,000	0	0.0%
65.4%	1,000	1,000	0	0.0%
66.7%	1,000	1,000	0	0.0%
67.9%	1,000	1,000	0	0.0%
69.1%	1,000	1,000	0	0.0%
70.4%	1,000	1,000	0	0.0%
71.6%	1,000	1,000	0	0.0%
72.8%	1,000	1,000	0	0.0%
74.1%	1,000	1,000	0	0.0%
75.3%	1,000	1,000	0	0.0%
76.5%	1,000	1,000	0	0.0%
77.8%	1,000	1,000	0	0.0%
79.0%	1,000	1,000	0	0.0%
80.2%	1,000	1,000	0	0.0%
81.5%	1,000	1,000	0	0.0%
82.7%	1,000	1,000	0	0.0%
84.0%	1,000	1,000	0	0.0%
85.2%	1,000	1,000	0	0.0%
86.4%	1,000	1,000	0	0.0%
87.7%	1,000	1,000	0	0.0%
88.9%	1,000	1,000	0	0.0%
90.1%	1,000	1,000	0	0.0%
91.4%	1,000	1,000	0	0.0%
92.6%	1,000	816	-184	-18.4%
93.8%	1,000	750	-250	-25.0%
95.1%	856	750	-106	-12.4%
96.3%	774	750	-24	-3.1%
97.5%	750	750	0	0.0%
98.8%	750	750	0	0.0%
100.0%	750	750	0	0.0%

Table SW-22-b

Feather River below Thermalito, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,027	5,383	-1,644	-23.4%
1.2%	5,815	5,251	-564	-9.7%
2.5%	5,800	5,071	-730	-12.6%
3.7%	5,765	5,050	-715	-12.4%
4.9%	5,649	4,254	-1,395	-24.7%
6.2%	5,112	4,243	-869	-17.0%
7.4%	4,984	4,219	-765	-15.4%
8.6%	4,942	4,199	-742	-15.0%
9.9%	4,844	4,192	-651	-13.4%
11.1%	4,662	4,184	-478	-10.2%
12.3%	4,463	4,159	-304	-6.8%
13.6%	4,455	4,130	-325	-7.3%
14.8%	4,395	4,053	-342	-7.8%
16.0%	4,276	3,935	-341	-8.0%
17.3%	4,268	3,737	-531	-12.4%
18.5%	4,254	3,586	-668	-15.7%
19.8%	4,156	3,481	-674	-16.2%
21.0%	4,072	3,415	-657	-16.1%
22.2%	3,976	3,333	-642	-16.2%
23.5%	3,938	3,271	-667	-16.9%
24.7%	3,917	3,263	-654	-16.7%
25.9%	3,853	3,224	-629	-16.3%
27.2%	3,824	3,137	-687	-18.0%
28.4%	3,768	3,094	-674	-17.9%
29.6%	3,742	2,996	-746	-19.9%
30.9%	3,701	2,970	-732	-19.8%
32.1%	3,667	2,947	-720	-19.6%
33.3%	3,650	2,933	-717	-19.7%
34.6%	3,642	2,915	-727	-20.0%
35.8%	3,641	2,883	-758	-20.8%
37.0%	3,631	2,861	-770	-21.2%
38.3%	3,622	2,834	-787	-21.7%
39.5%	3,561	2,828	-733	-20.6%
40.7%	3,376	2,763	-612	-18.1%
42.0%	3,337	2,745	-592	-17.7%
43.2%	3,330	2,725	-605	-18.2%
44.4%	3,296	2,720	-576	-17.5%
45.7%	3,274	2,624	-650	-19.9%
46.9%	3,264	2,605	-659	-20.2%
48.1%	3,214	2,580	-634	-19.7%
49.4%	3,079	2,390	-690	-22.4%
50.6%	3,050	2,358	-692	-22.7%
51.9%	3,047	2,311	-736	-24.2%
53.1%	2,964	2,212	-752	-25.4%
54.3%	2,953	2,178	-775	-26.2%
55.6%	2,935	2,166	-769	-26.2%
56.8%	2,935	2,166	-768	-26.2%
58.0%	2,894	2,165	-729	-25.2%
59.3%	2,879	2,135	-744	-25.8%
60.5%	2,829	2,037	-792	-28.0%
61.7%	2,804	2,031	-773	-27.6%
63.0%	2,754	2,030	-724	-26.3%
64.2%	2,738	2,000	-738	-27.0%
65.4%	2,694	2,000	-694	-25.8%
66.7%	2,631	2,000	-631	-24.0%
67.9%	2,412	2,000	-412	-17.1%
69.1%	2,357	2,000	-357	-15.1%
70.4%	2,291	2,000	-291	-12.7%
71.6%	2,178	2,000	-178	-8.2%
72.8%	2,175	1,997	-178	-8.2%
74.1%	2,166	1,995	-171	-7.9%
75.3%	2,092	1,985	-107	-5.1%
76.5%	2,033	1,948	-86	-4.2%
77.8%	1,955	1,946	-9	-0.5%
79.0%	1,952	1,934	-18	-0.9%
80.2%	1,777	1,882	106	5.9%
81.5%	1,693	1,781	88	5.2%
82.7%	1,533	1,695	162	10.5%
84.0%	1,521	1,683	162	10.6%
85.2%	1,499	1,592	94	6.3%
86.4%	1,478	1,551	73	5.0%
87.7%	1,393	1,482	89	6.4%
88.9%	1,331	1,475	144	10.8%
90.1%	1,300	1,419	119	9.2%
91.4%	1,264	1,416	152	12.0%
92.6%	1,000	1,413	413	41.3%
93.8%	1,000	1,413	413	41.3%
95.1%	1,000	1,210	210	21.0%
96.3%	1,000	1,156	156	15.6%
97.5%	1,000	1,101	101	10.1%
98.8%	1,000	800	-200	-20.0%
100.0%	1,000	800	-200	-20.0%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,000	10,000	0	0.0%
1.2%	10,000	10,000	0	0.0%
2.5%	10,000	10,000	0	0.0%
3.7%	10,000	9,637	-363	-3.6%
4.9%	10,000	9,538	-462	-4.6%
6.2%	10,000	9,533	-467	-4.7%
7.4%	9,864	9,450	-414	-4.2%
8.6%	9,748	9,283	-464	-4.8%
9.9%	9,714	9,118	-595	-6.1%
11.1%	9,641	9,076	-565	-5.9%
12.3%	9,584	8,982	-602	-6.3%
13.6%	9,501	8,844	-656	-6.9%
14.8%	9,494	8,766	-728	-7.7%
16.0%	9,413	8,754	-659	-7.0%
17.3%	9,357	8,651	-706	-7.5%
18.5%	9,309	8,624	-685	-7.4%
19.8%	9,278	8,607	-671	-7.2%
21.0%	9,257	8,592	-665	-7.2%
22.2%	9,145	8,536	-609	-6.7%
23.5%	9,097	8,506	-591	-6.5%
24.7%	9,092	8,500	-592	-6.5%
25.9%	9,053	8,349	-704	-7.8%
27.2%	8,954	8,272	-683	-7.6%
28.4%	8,923	8,209	-714	-8.0%
29.6%	8,878	8,206	-672	-7.6%
30.9%	8,835	8,098	-736	-8.3%
32.1%	8,818	7,987	-832	-9.4%
33.3%	8,694	7,985	-709	-8.2%
34.6%	8,664	7,896	-768	-8.9%
35.8%	8,641	7,813	-828	-9.6%
37.0%	8,579	7,796	-783	-9.1%
38.3%	8,564	7,795	-769	-9.0%
39.5%	8,542	7,786	-756	-8.8%
40.7%	8,537	7,777	-760	-8.9%
42.0%	8,533	7,747	-785	-9.2%
43.2%	8,445	7,724	-721	-8.5%
44.4%	8,406	7,677	-729	-8.7%
45.7%	8,322	7,637	-685	-8.2%
46.9%	8,272	7,605	-667	-8.1%
48.1%	8,218	7,594	-624	-7.6%
49.4%	8,194	7,570	-624	-7.6%
50.6%	8,052	7,466	-587	-7.3%
51.9%	8,037	7,422	-615	-7.7%
53.1%	7,922	7,416	-505	-6.4%
54.3%	7,865	7,394	-471	-6.0%
55.6%	7,838	7,386	-452	-5.8%
56.8%	7,652	7,363	-288	-3.8%
58.0%	7,625	7,196	-430	-5.6%
59.3%	7,618	7,111	-507	-6.7%
60.5%	7,483	6,980	-503	-6.7%
61.7%	7,314	6,866	-447	-6.1%
63.0%	7,266	6,700	-566	-7.8%
64.2%	7,252	6,668	-583	-8.0%
65.4%	7,179	5,707	-1,471	-20.5%
66.7%	6,984	5,423	-1,562	-22.4%
67.9%	6,983	5,384	-1,599	-22.9%
69.1%	6,799	5,379	-1,420	-20.9%
70.4%	6,708	5,273	-1,435	-21.4%
71.6%	6,572	5,184	-1,388	-21.1%
72.8%	6,207	5,168	-1,038	-16.7%
74.1%	5,663	4,770	-893	-15.8%
75.3%	5,429	4,177	-1,252	-23.1%
76.5%	4,626	4,017	-609	-13.2%
77.8%	4,199	3,975	-224	-5.3%
79.0%	3,730	3,964	234	6.3%
80.2%	3,362	3,851	489	14.6%
81.5%	3,009	3,500	490	16.3%
82.7%	2,835	2,975	140	4.9%
84.0%	2,817	2,868	50	1.8%
85.2%	2,809	2,713	-96	-3.4%
86.4%	2,755	2,672	-82	-3.0%
87.7%	2,581	2,662	81	3.1%
88.9%	2,478	2,453	-25	-1.0%
90.1%	2,441	2,382	-59	-2.4%
91.4%	2,202	2,159	-43	-1.9%
92.6%	2,164	1,964	-200	-9.3%
93.8%	2,104	1,963	-141	-6.7%
95.1%	2,093	1,881	-212	-10.1%
96.3%	1,488	1,558	70	4.7%
97.5%	1,411	1,469	57	4.0%
98.8%	1,212	1,270	58	4.8%
100.0%	1,000	1,182	182	18.2%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	8,233	7,888	-345	-4.2%
1.2%	7,892	7,822	-71	-0.9%
2.5%	7,885	7,749	-135	-1.7%
3.7%	7,844	7,677	-168	-2.1%
4.9%	7,814	7,614	-200	-2.6%
6.2%	7,791	7,574	-216	-2.8%
7.4%	7,727	7,567	-160	-2.1%
8.6%	7,629	7,513	-116	-1.5%
9.9%	7,607	7,468	-139	-1.8%
11.1%	7,579	7,447	-132	-1.7%
12.3%	7,508	7,447	-61	-0.8%
13.6%	7,487	7,439	-48	-0.6%
14.8%	7,476	7,426	-50	-0.7%
16.0%	7,474	7,306	-168	-2.2%
17.3%	7,432	7,285	-147	-2.0%
18.5%	7,422	7,128	-294	-4.0%
19.8%	7,341	7,096	-244	-3.3%
21.0%	7,312	6,942	-369	-5.1%
22.2%	7,289	6,927	-363	-5.0%
23.5%	7,274	6,795	-479	-6.6%
24.7%	7,221	6,702	-519	-7.2%
25.9%	7,184	6,675	-510	-7.1%
27.2%	7,104	6,616	-489	-6.9%
28.4%	7,020	6,487	-533	-7.6%
29.6%	6,997	6,466	-531	-7.6%
30.9%	6,995	6,440	-555	-7.9%
32.1%	6,974	6,411	-562	-8.1%
33.3%	6,951	6,315	-636	-9.1%
34.6%	6,864	6,291	-573	-8.3%
35.8%	6,848	6,284	-564	-8.2%
37.0%	6,847	6,251	-596	-8.7%
38.3%	6,828	6,077	-751	-11.0%
39.5%	6,676	6,043	-634	-9.5%
40.7%	6,625	6,031	-594	-9.0%
42.0%	6,463	6,010	-453	-7.0%
43.2%	6,302	5,952	-350	-5.6%
44.4%	5,994	5,809	-185	-3.1%
45.7%	5,918	5,718	-200	-3.4%
46.9%	5,839	5,371	-468	-8.0%
48.1%	5,425	5,363	-62	-1.1%
49.4%	5,371	5,244	-127	-2.4%
50.6%	5,355	5,198	-157	-2.9%
51.9%	4,792	5,010	219	4.6%
53.1%	4,705	4,888	182	3.9%
54.3%	4,577	4,596	18	0.4%
55.6%	4,538	4,579	41	0.9%
56.8%	4,455	4,359	-97	-2.2%
58.0%	4,151	4,217	67	1.6%
59.3%	4,054	4,144	90	2.2%
60.5%	4,043	3,826	-218	-5.4%
61.7%	3,956	3,808	-148	-3.8%
63.0%	3,732	3,771	39	1.0%
64.2%	3,721	3,758	37	1.0%
65.4%	3,687	3,521	-166	-4.5%
66.7%	3,664	3,470	-194	-5.3%
67.9%	3,655	3,380	-274	-7.5%
69.1%	3,349	3,194	-156	-4.6%
70.4%	3,128	3,049	-79	-2.5%
71.6%	3,029	2,945	-85	-2.8%
72.8%	2,849	2,723	-126	-4.4%
74.1%	2,798	2,677	-121	-4.3%
75.3%	2,440	2,560	120	4.9%
76.5%	2,371	2,524	153	6.5%
77.8%	2,137	2,477	341	15.9%
79.0%	2,094	2,152	58	2.8%
80.2%	2,005	2,104	100	5.0%
81.5%	1,885	2,008	123	6.5%
82.7%	1,875	1,656	-219	-11.7%
84.0%	1,874	1,610	-265	-14.1%
85.2%	1,827	1,469	-358	-19.6%
86.4%	1,820	1,330	-490	-26.9%
87.7%	1,769	1,279	-491	-27.7%
88.9%	1,528	1,215	-313	-20.5%
90.1%	1,490	1,187	-303	-20.3%
91.4%	1,466	1,161	-305	-20.8%
92.6%	1,434	1,121	-313	-21.8%
93.8%	1,357	1,102	-255	-18.8%
95.1%	1,227	1,061	-167	-13.6%
96.3%	1,026	1,000	-26	-2.5%
97.5%	971	1,000	29	3.0%
98.8%	921	1,000	79	8.6%
100.0%	778	920	142	18.2%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,000	10,000	0	0.0%
1.2%	10,000	10,000	0	0.0%
2.5%	10,000	9,842	-158	-1.6%
3.7%	10,000	9,807	-193	-1.9%
4.9%	9,865	9,753	-112	-1.1%
6.2%	9,753	9,746	-7	-0.1%
7.4%	9,653	9,568	-84	-0.9%
8.6%	9,502	9,536	34	0.4%
9.9%	9,501	9,166	-335	-3.5%
11.1%	9,386	9,165	-221	-2.4%
12.3%	9,377	8,788	-589	-6.3%
13.6%	9,255	8,758	-497	-5.4%
14.8%	9,071	8,683	-388	-4.3%
16.0%	8,782	8,651	-131	-1.5%
17.3%	8,559	8,407	-153	-1.8%
18.5%	8,255	8,311	56	0.7%
19.8%	8,008	8,287	279	3.5%
21.0%	7,968	8,133	165	2.1%
22.2%	7,959	7,983	24	0.3%
23.5%	7,797	7,570	-227	-2.9%
24.7%	7,736	7,502	-235	-3.0%
25.9%	7,723	7,499	-224	-2.9%
27.2%	7,530	7,229	-302	-4.0%
28.4%	7,420	7,186	-234	-3.2%
29.6%	7,310	7,062	-248	-3.4%
30.9%	7,306	6,950	-356	-4.9%
32.1%	7,068	6,745	-323	-4.6%
33.3%	7,024	6,524	-500	-7.1%
34.6%	6,940	6,477	-463	-6.7%
35.8%	6,667	6,231	-436	-6.5%
37.0%	6,202	5,833	-369	-6.0%
38.3%	5,784	5,557	-227	-3.9%
39.5%	5,676	5,184	-492	-8.7%
40.7%	5,130	5,126	-5	-0.1%
42.0%	4,968	5,084	115	2.3%
43.2%	4,943	4,889	-54	-1.1%
44.4%	4,794	4,811	16	0.3%
45.7%	4,757	4,738	-19	-0.4%
46.9%	4,677	4,695	19	0.4%
48.1%	4,670	4,493	-177	-3.8%
49.4%	4,669	4,380	-289	-6.2%
50.6%	4,427	4,379	-49	-1.1%
51.9%	4,117	4,154	37	0.9%
53.1%	3,939	4,052	113	2.9%
54.3%	3,649	3,921	272	7.4%
55.6%	3,511	3,873	362	10.3%
56.8%	3,432	3,751	319	9.3%
58.0%	3,386	3,714	328	9.7%
59.3%	3,360	3,509	149	4.4%
60.5%	3,316	2,924	-391	-11.8%
61.7%	3,195	2,902	-293	-9.2%
63.0%	3,109	2,812	-297	-9.5%
64.2%	3,082	2,782	-300	-9.7%
65.4%	2,718	2,641	-77	-2.8%
66.7%	2,414	2,576	162	6.7%
67.9%	2,279	2,518	239	10.5%
69.1%	2,058	2,458	400	19.4%
70.4%	2,026	2,343	317	15.6%
71.6%	1,708	2,145	437	25.6%
72.8%	1,641	2,037	396	24.1%
74.1%	1,584	1,889	305	19.2%
75.3%	1,577	1,828	251	15.9%
76.5%	1,492	1,826	334	22.4%
77.8%	1,461	1,738	278	19.0%
79.0%	1,265	1,726	461	36.5%
80.2%	1,246	1,706	460	36.9%
81.5%	1,230	1,587	357	29.0%
82.7%	1,216	1,485	269	22.1%
84.0%	1,208	1,467	259	21.4%
85.2%	1,203	1,461	258	21.4%
86.4%	1,156	1,430	274	23.7%
87.7%	1,149	1,346	197	17.1%
88.9%	1,106	1,321	216	19.5%
90.1%	1,090	1,295	205	18.8%
91.4%	1,045	1,218	172	16.5%
92.6%	1,000	1,188	188	18.8%
93.8%	1,000	1,145	145	14.5%
95.1%	1,000	1,089	89	8.9%
96.3%	1,000	1,025	25	2.5%
97.5%	1,000	1,000	0	0.0%
98.8%	880	1,000	120	13.7%
100.0%	863	860	-4	-0.4%

Figure SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

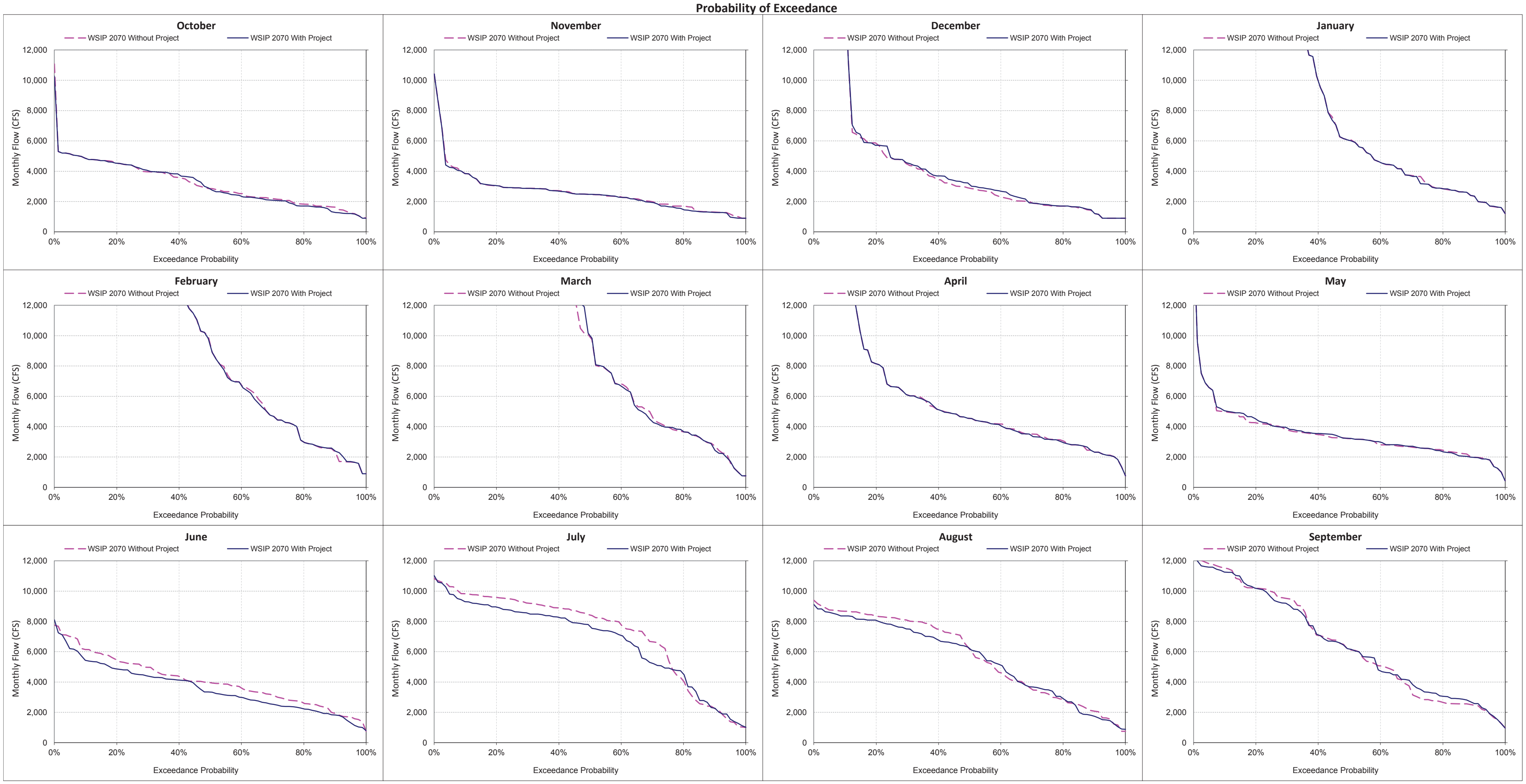


Table SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	11,079	10,285	-794	-7.2%
1.2%	5,307	5,305	-2	0.0%
2.5%	5,193	5,195	2	0.0%
3.7%	5,192	5,192	0	0.0%
4.9%	5,152	5,154	2	0.0%
6.2%	5,051	5,052	1	0.0%
7.4%	5,024	5,023	-1	0.0%
8.6%	4,973	4,969	-4	-0.1%
9.9%	4,857	4,861	4	0.1%
11.1%	4,785	4,777	-7	-0.2%
12.3%	4,768	4,772	4	0.1%
13.6%	4,747	4,746	-1	0.0%
14.8%	4,711	4,698	-12	-0.3%
16.0%	4,698	4,697	-1	0.0%
17.3%	4,685	4,623	-63	-1.3%
18.5%	4,647	4,602	-45	-1.0%
19.8%	4,525	4,535	10	0.2%
21.0%	4,512	4,515	2	0.0%
22.2%	4,453	4,453	0	0.0%
23.5%	4,422	4,421	-2	0.0%
24.7%	4,397	4,405	7	0.2%
25.9%	4,284	4,281	-3	-0.1%
27.2%	4,125	4,220	95	2.3%
28.4%	3,988	4,114	126	3.2%
29.6%	3,961	4,062	101	2.6%
30.9%	3,956	3,987	31	0.8%
32.1%	3,952	3,956	4	0.1%
33.3%	3,935	3,953	18	0.5%
34.6%	3,932	3,938	5	0.1%
35.8%	3,818	3,937	119	3.1%
37.0%	3,814	3,856	42	1.1%
38.3%	3,620	3,824	204	5.6%
39.5%	3,596	3,820	224	6.2%
40.7%	3,549	3,671	123	3.5%
42.0%	3,489	3,663	174	5.0%
43.2%	3,304	3,619	315	9.5%
44.4%	3,245	3,594	350	10.8%
45.7%	3,063	3,402	339	11.1%
46.9%	2,994	3,287	294	9.8%
48.1%	2,921	3,001	81	2.8%
49.4%	2,860	2,903	43	1.5%
50.6%	2,851	2,747	-103	-3.6%
51.9%	2,791	2,654	-138	-4.9%
53.1%	2,745	2,645	-100	-3.6%
54.3%	2,659	2,579	-79	-3.0%
55.6%	2,652	2,544	-109	-4.1%
56.8%	2,644	2,455	-189	-7.1%
58.0%	2,600	2,433	-168	-6.4%
59.3%	2,527	2,411	-115	-4.6%
60.5%	2,520	2,309	-211	-8.4%
61.7%	2,344	2,291	-53	-2.2%
63.0%	2,312	2,284	-29	-1.2%
64.2%	2,293	2,258	-35	-1.5%
65.4%	2,268	2,211	-57	-2.5%
66.7%	2,257	2,178	-79	-3.5%
67.9%	2,256	2,111	-145	-6.4%
69.1%	2,201	2,100	-102	-4.6%
70.4%	2,180	2,086	-94	-4.3%
71.6%	2,149	2,066	-83	-3.9%
72.8%	2,128	2,055	-73	-3.4%
74.1%	2,072	2,044	-27	-1.3%
75.3%	2,071	1,918	-153	-7.4%
76.5%	1,935	1,847	-88	-4.5%
77.8%	1,854	1,726	-127	-6.9%
79.0%	1,842	1,700	-142	-7.7%
80.2%	1,821	1,700	-121	-6.7%
81.5%	1,817	1,700	-117	-6.5%
82.7%	1,789	1,677	-112	-6.3%
84.0%	1,700	1,632	-68	-4.0%
85.2%	1,700	1,630	-70	-4.1%
86.4%	1,688	1,610	-78	-4.6%
87.7%	1,676	1,533	-144	-8.6%
88.9%	1,641	1,334	-307	-18.7%
90.1%	1,629	1,270	-359	-22.0%
91.4%	1,467	1,255	-212	-14.5%
92.6%	1,441	1,228	-213	-14.8%
93.8%	1,335	1,200	-135	-10.1%
95.1%	1,232	1,200	-32	-2.6%
96.3%	1,200	1,176	-24	-2.0%
97.5%	1,061	1,067	6	0.6%
98.8%	960	900	-60	-6.3%
100.0%	912	900	-12	-1.3%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,419	10,420	0	0.0%
1.2%	8,678	8,676	-1	0.0%
2.5%	6,907	6,909	2	0.0%
3.7%	4,750	4,407	-342	-7.2%
4.9%	4,412	4,262	-150	-3.4%
6.2%	4,261	4,215	-46	-1.1%
7.4%	4,214	4,072	-142	-3.4%
8.6%	4,011	4,020	9	0.2%
9.9%	3,846	3,847	1	0.0%
11.1%	3,823	3,827	5	0.1%
12.3%	3,613	3,613	0	0.0%
13.6%	3,486	3,486	0	0.0%
14.8%	3,176	3,189	13	0.4%
16.0%	3,141	3,139	-1	0.0%
17.3%	3,081	3,104	23	0.8%
18.5%	3,060	3,080	21	0.7%
19.8%	3,037	3,061	23	0.8%
21.0%	3,027	3,024	-3	-0.1%
22.2%	2,929	2,931	2	0.1%
23.5%	2,925	2,925	0	0.0%
24.7%	2,912	2,914	3	0.1%
25.9%	2,904	2,904	0	0.0%
27.2%	2,903	2,904	1	0.0%
28.4%	2,884	2,872	-12	-0.4%
29.6%	2,874	2,872	-2	-0.1%
30.9%	2,872	2,871	-1	0.0%
32.1%	2,870	2,850	-19	-0.7%
33.3%	2,858	2,849	-10	-0.3%
34.6%	2,847	2,829	-18	-0.6%
35.8%	2,824	2,827	3	0.1%
37.0%	2,734	2,725	-9	-0.3%
38.3%	2,723	2,719	-4	-0.2%
39.5%	2,719	2,704	-15	-0.6%
40.7%	2,704	2,665	-39	-1.4%
42.0%	2,670	2,640	-29	-1.1%
43.2%	2,640	2,574	-66	-2.5%
44.4%	2,525	2,524	-1	0.0%
45.7%	2,517	2,493	-24	-0.9%
46.9%	2,492	2,489	-3	-0.1%
48.1%	2,490	2,486	-4	-0.2%
49.4%	2,480	2,483	3	0.1%
50.6%	2,461	2,479	18	0.7%
51.9%	2,457	2,459	2	0.1%
53.1%	2,451	2,450	-1	0.0%
54.3%	2,401	2,426	25	1.1%
55.6%	2,365	2,400	36	1.5%
56.8%	2,359	2,365	6	0.3%
58.0%	2,346	2,361	14	0.6%
59.3%	2,343	2,284	-59	-2.5%
60.5%	2,276	2,273	-3	-0.1%
61.7%	2,259	2,261	2	0.1%
63.0%	2,199	2,181	-18	-0.8%
64.2%	2,181	2,168	-13	-0.6%
65.4%	2,168	2,084	-83	-3.8%
66.7%	2,075	2,080	4	0.2%
67.9%	2,044	1,979	-65	-3.2%
69.1%	2,017	1,966	-51	-2.5%
70.4%	1,974	1,935	-39	-2.0%
71.6%	1,841	1,847	6	0.3%
72.8%	1,831	1,700	-131	-7.2%
74.1%	1,830	1,700	-130	-7.1%
75.3%	1,824	1,660	-163	-9.0%
76.5%	1,700	1,629	-71	-4.2%
77.8%	1,700	1,561	-139	-8.2%
79.0%	1,700	1,544	-156	-9.2%
80.2%	1,700	1,440	-260	-15.3%
81.5%	1,656	1,427	-229	-13.8%
82.7%	1,628	1,379	-250	-15.3%
84.0%	1,357	1,359	2	0.1%
85.2%	1,347	1,320	-27	-2.0%
86.4%	1,329	1,317	-12	-0.9%
87.7%	1,326	1,314	-12	-0.9%
88.9%	1,312	1,296	-15	-1.2%
90.1%	1,304	1,284	-19	-1.5%
91.4%	1,281	1,280	-1	0.0%
92.6%	1,275	1,276	1	0.0%
93.8%	1,271	1,250	-21	-1.7%
95.1%	1,160	967	-193	-16.6%
96.3%	1,044	934	-110	-10.5%
97.5%	996	900	-96	-9.6%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	59,089	61,868	2,779	4.7%
1.2%	39,897	40,218	321	0.8%
2.5%	32,392	35,180	2,788	8.6%
3.7%	24,756	26,761	2,005	8.1%
4.9%	19,786	22,940	3,154	15.9%
6.2%	19,719	19,234	-485	-2.5%
7.4%	18,127	17,547	-580	-3.2%
8.6%	16,964	17,184	221	1.3%
9.9%	16,953	16,969	15	0.1%
11.1%	11,170	11,172	2	0.0%
12.3%	6,566	7,047	481	7.3%
13.6%	6,443	6,568	124	1.9%
14.8%	6,223	6,447	225	3.6%
16.0%	6,147	5,901	-246	-4.0%
17.3%	5,894	5,878	-16	-0.3%
18.5%	5,874	5,857	-17	-0.3%
19.8%	5,873	5,717	-156	-2.7%
21.0%	5,679	5,715	35	0.6%
22.2%	5,222	5,680	458	8.8%
23.5%	4,904	5,659	755	15.4%
24.7%	4,851	4,905	54	1.1%
25.9%	4,791	4,791	0	0.0%
27.2%	4,775	4,780	5	0.1%
28.4%	4,761	4,764	3	0.1%
29.6%	4,503	4,567	64	1.4%
30.9%	4,369	4,503	134	3.1%
32.1%	4,347	4,393	46	1.1%
33.3%	4,145	4,347	201	4.9%
34.6%	4,130	4,149	19	0.5%
35.8%	3,893	4,131	238	6.1%
37.0%	3,686	3,892	206	5.6%
38.3%	3,634	3,741	107	2.9%
39.5%	3,461	3,688	227	6.6%
40.7%	3,423	3,682	259	7.6%
42.0%	3,229	3,665	437	13.5%
43.2%	3,226	3,462	236	7.3%
44.4%	3,116	3,425	308	9.9%
45.7%	3,017	3,345	328	10.9%
46.9%	2,994	3,336	342	11.4%
48.1%	2,980	3,237	257	8.6%
49.4%	2,903	3,226	324	11.1%
50.6%	2,850	3,003	154	5.4%
51.9%	2,821	2,982	161	5.7%
53.1%	2,739	2,913	173	6.3%
54.3%	2,712	2,907	194	7.2%
55.6%	2,667	2,843	177	6.6%
56.8%	2,635	2,821	186	7.0%
58.0%	2,439	2,740	301	12.3%
59.3%	2,347	2,715	368	15.7%
60.5%	2,280	2,669	389	17.1%
61.7%	2,219	2,636	417	18.8%
63.0%	2,168	2,443	275	12.7%
64.2%	2,048	2,350	302	14.7%
65.4%	2,036	2,284	249	12.2%
66.7%	2,030	2,224	194	9.6%
67.9%	2,018	2,167	149	7.4%
69.1%	1,998	1,913	-85	-4.3%
70.4%	1,882	1,889	6	0.3%
71.6%	1,865	1,868	3	0.2%
72.8%	1,806	1,819	13	0.7%
74.1%	1,752	1,811	59	3.4%
75.3%	1,744	1,785	41	2.3%
76.5%	1,700	1,746	46	2.7%
77.8%	1,700	1,722	22	1.3%
79.0%	1,700	1,700	0	0.0%
80.2%	1,700	1,700	0	0.0%
81.5%	1,700	1,700	0	0.0%
82.7%	1,655	1,660	5	0.3%
84.0%	1,644	1,656	11	0.7%
85.2%	1,570	1,644	74	4.7%
86.4%	1,556	1,570	15	0.9%
87.7%	1,459	1,499	40	2.7%
88.9%	1,429	1,461	32	2.2%
90.1%	1,200	1,200	0	0.0%
91.4%	1,152	1,156	4	0.4%
92.6%	900	900	0	0.0%
93.8%	900	900	0	0.0%
95.1%	900	900	0	0.0%
96.3%	900	900	0	0.0%
97.5%	900	900	0	0.0%
98.8%	900	900	0	0.0%
100.0%	900	900	0	0.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	115,044	115,031	-13	0.0%
1.2%	88,093	87,877	-216	-0.2%
2.5%	69,602	69,287	-315	-0.5%
3.7%	59,068	57,195	-1,873	-3.2%
4.9%	49,576	52,724	3,148	6.3%
6.2%	48,813	49,696	883	1.8%
7.4%	45,944	45,837	-108	-0.2%
8.6%	44,760	45,805	1,045	2.3%
9.9%	40,482	40,362	-121	-0.3%
11.1%	30,063	30,204	142	0.5%
12.3%	28,284	30,053	1,769	6.3%
13.6%	27,338	29,986	2,648	9.7%
14.8%	26,848	28,896	2,048	7.6%
16.0%	25,240	27,457	2,217	8.8%
17.3%	22,521	25,240	2,719	12.1%
18.5%	22,476	22,615	140	0.6%
19.8%	22,034	22,522	488	2.2%
21.0%	21,543	22,502	959	4.5%
22.2%	20,326	20,594	268	1.3%
23.5%	20,037	20,560	523	2.6%
24.7%	19,900	20,329	429	2.2%
25.9%	17,911	20,239	2,328	13.0%
27.2%	17,713	17,593	-120	-0.7%
28.4%	15,210	15,139	-70	-0.5%
29.6%	15,138	15,105	-33	-0.2%
30.9%	13,920	14,530	611	4.4%
32.1%	13,528	13,529	1	0.0%
33.3%	13,431	13,436	5	0.0%
34.6%	13,354	13,358	4	0.0%
35.8%	12,797	12,802	5	0.0%
37.0%	11,662	11,665	3	0.0%
38.3%	11,568	11,569	1	0.0%
39.5%	10,275	10,268	-7	-0.1%
40.7%	9,522	9,532	10	0.1%
42.0%	8,971	8,988	17	0.2%
43.2%	7,875	7,861	-14	-0.2%
44.4%	7,604	7,397	-207	-2.7%
45.7%	7,045	7,044	-1	0.0%
46.9%	6,268	6,268	0	0.0%
48.1%	6,152	6,154	2	0.0%
49.4%	6,076	6,079	2	0.0%
50.6%	6,060	6,005	-54	-0.9%
51.9%	5,899	5,900	1	0.0%
53.1%	5,666	5,602	-63	-1.1%
54.3%	5,533	5,535	2	0.0%
55.6%	5,226	5,232	6	0.1%
56.8%	5,116	5,117	2	0.0%
58.0%	4,751	4,754	3	0.1%
59.3%	4,640	4,643	3	0.1%
60.5%	4,531	4,537	6	0.1%
61.7%	4,443	4,468	25	0.6%
63.0%	4,424	4,444	20	0.5%
64.2%	4,387	4,385	-2	-0.1%
65.4%	4,174	4,173	-1	0.0%
66.7%	4,166	4,151	-15	-0.4%
67.9%	3,749	3,751	2	0.0%
69.1%	3,733	3,728	-6	-0.2%
70.4%	3,704	3,659	-45	-1.2%
71.6%	3,658	3,656	-2	0.0%
72.8%	3,653	3,183	-470	-12.9%
74.1%	3,322	3,167	-155	-4.7%
75.3%	3,165	3,141	-24	-0.8%
76.5%	2,982	2,934	-49	-1.6%
77.8%	2,892	2,893	0	0.0%
79.0%	2,889	2,881	-8	-0.3%
80.2%	2,837	2,840	3	0.1%
81.5%	2,785	2,830	45	1.6%
82.7%	2,746	2,748	2	0.1%
84.0%	2,736	2,735	0	0.0%
85.2%	2,640	2,643	3	0.1%
86.4%	2,635	2,636	1	0.0%
87.7%	2,615	2,615	0	0.0%
88.9%	2,400	2,401	1	0.0%
90.1%	2,354	2,356	2	0.1%
91.4%	1,989	1,989	0	0.0%
92.6%	1,959	1,958	-1	-0.1%
93.8%	1,930	1,937	7	0.4%
95.1%	1,700	1,700	0	0.0%
96.3%	1,662	1,683	21	1.3%
97.5%	1,623	1,629	6	0.4%
98.8%	1,614	1,594	-20	-1.2%
100.0%	1,200	1,200	0	0.0%

Table SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	107,796	108,198	402	0.4%
1.2%	77,795	77,797	2	0.0%
2.5%	60,774	64,836	4,062	6.7%
3.7%	59,466	59,466	0	0.0%
4.9%	57,446	57,446	0	0.0%
6.2%	55,169	55,143	-26	0.0%
7.4%	49,928	50,500	573	1.1%
8.6%	49,403	49,211	-192	-0.4%
9.9%	49,216	46,682	-2,534	-5.1%
11.1%	42,306	43,009	703	1.7%
12.3%	41,601	41,588	-13	0.0%
13.6%	39,920	39,922	2	0.0%
14.8%	39,625	39,617	-9	0.0%
16.0%	39,302	39,151	-151	-0.4%
17.3%	38,631	38,645	14	0.0%
18.5%	36,503	36,507	4	0.0%
19.8%	35,163	36,414	1,251	3.6%
21.0%	34,628	36,037	1,409	4.1%
22.2%	33,969	33,136	-833	-2.5%
23.5%	31,127	32,935	1,807	5.8%
24.7%	31,102	31,098	-3	0.0%
25.9%	30,932	30,931	-1	0.0%
27.2%	29,158	29,384	226	0.8%
28.4%	28,705	29,159	455	1.6%
29.6%	28,291	28,706	415	1.5%
30.9%	27,872	28,275	403	1.4%
32.1%	27,555	27,878	323	1.2%
33.3%	25,664	25,666	2	0.0%
34.6%	21,337	21,338	1	0.0%
35.8%	19,090	18,766	-324	-1.7%
37.0%	17,111	17,194	83	0.5%
38.3%	15,916	15,919	3	0.0%
39.5%	13,264	13,272	8	0.1%
40.7%	13,161	12,515	-646	-4.9%
42.0%	12,513	12,298	-215	-1.7%
43.2%	11,802	11,799	-2	0.0%
44.4%	11,500	11,501	1	0.0%
45.7%	11,051	11,057	6	0.1%
46.9%	10,299	10,303	4	0.0%
48.1%	10,213	10,215	2	0.0%
49.4%	9,919	9,815	-105	-1.1%
50.6%	8,890	8,895	5	0.1%
51.9%	8,469	8,455	-15	-0.2%
53.1%	8,104	8,095	-9	-0.1%
54.3%	7,973	7,759	-213	-2.7%
55.6%	7,412	7,244	-168	-2.3%
56.8%	7,034	7,034	0	0.0%
58.0%	6,988	6,953	-35	-0.5%
59.3%	6,945	6,948	3	0.0%
60.5%	6,608	6,550	-58	-0.9%
61.7%	6,549	6,391	-158	-2.4%
63.0%	6,389	6,207	-182	-2.9%
64.2%	6,198	5,816	-382	-6.2%
65.4%	5,815	5,550	-265	-4.6%
66.7%	5,545	5,273	-271	-4.9%
67.9%	5,044	5,047	3	0.1%
69.1%	4,756	4,759	3	0.1%
70.4%	4,677	4,677	0	0.0%
71.6%	4,439	4,443	4	0.1%
72.8%	4,437	4,437	0	0.0%
74.1%	4,275	4,282	8	0.2%
75.3%	4,247	4,248	0	0.0%
76.5%	4,145	4,147	2	0.0%
77.8%	3,998	4,005	7	0.2%
79.0%	3,105	3,108	4	0.1%
80.2%	2,953	2,952	0	0.0%
81.5%	2,881	2,883	2	0.1%
82.7%	2,845	2,851	6	0.2%
84.0%	2,731	2,738	6	0.2%
85.2%	2,620	2,680	60	2.3%
86.4%	2,586	2,621	35	1.3%
87.7%	2,582	2,587	5	0.2%
88.9%	2,544	2,582	38	1.5%
90.1%	2,329	2,376	47	2.0%
91.4%	1,700	2,276	576	33.9%
92.6%	1,700	2,019	319	18.8%
93.8%	1,680	1,700	20	1.2%
95.1%	1,669	1,700	31	1.8%
96.3%	1,645	1,650	5	0.3%
97.5%	1,569	1,577	8	0.5%
98.8%	900	900	0	
100.0%	900	900	0	

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	77,390	77,393	3	0.0%
1.2%	74,772	74,775	3	0.0%
2.5%	63,538	62,479	-1,059	-1.7%
3.7%	58,580	58,415	-165	-0.3%
4.9%	57,268	57,269	1	0.0%
6.2%	47,882	47,884	2	0.0%
7.4%	46,320	46,321	1	0.0%
8.6%	45,826	45,821	-5	0.0%
9.9%	38,150	38,153	3	0.0%
11.1%	32,607	33,594	987	3.0%
12.3%	31,510	31,510	0	0.0%
13.6%	30,461	30,458	-3	0.0%
14.8%	30,119	30,131	12	0.0%
16.0%	29,841	29,850	8	0.0%
17.3%	28,265	28,267	3	0.0%
18.5%	27,845	27,854	10	0.0%
19.8%	27,009	27,010	2	0.0%
21.0%	26,956	26,957	0	0.0%
22.2%	26,159	26,163	5	0.0%
23.5%	25,694	25,693	0	0.0%
24.7%	25,577	25,467	-110	-0.4%
25.9%	24,088	24,088	0	0.0%
27.2%	22,119	22,124	4	0.0%
28.4%	20,299	20,629	330	1.6%
29.6%	19,601	20,151	550	2.8%
30.9%	19,423	19,603	181	0.9%
32.1%	18,766	19,425	659	3.5%
33.3%	18,511	18,441	-70	-0.4%
34.6%	17,659	18,372	713	4.0%
35.8%	17,581	17,674	93	0.5%
37.0%	16,982	16,983	1	0.0%
38.3%	15,898	16,405	507	3.2%
39.5%	15,244	15,899	655	4.3%
40.7%	14,388	14,810	422	2.9%
42.0%	14,332	14,389	57	0.4%
43.2%	13,110	13,902	792	6.0%
44.4%	12,869	13,103	235	1.8%
45.7%	11,917	12,870	954	8.0%
46.9%	10,487	12,128	1,641	15.6%
48.1%	10,161	11,921	1,760	17.3%
49.4%	10,084	10,166	81	0.8%
50.6%	9,744	9,825	81	0.8%
51.9%	8,035	8,076	41	0.5%
53.1%	7,963	8,037	73	0.9%
54.3%	7,914	7,964	50	0.6%
55.6%	7,723	7,735	12	0.2%
56.8%	7,527	7,528	2	0.0%
58.0%	6,845	6,838	-7	-0.1%
59.3%	6,840	6,788	-52	-0.8%
60.5%	6,784	6,603	-181	-2.7%
61.7%	6,600	6,428	-173	-2.6%
63.0%	6,288	6,290	2	0.0%
64.2%	5,568	5,429	-139	-2.5%
65.4%	5,307	5,113	-194	-3.7%
66.7%	5,305	5,006	-300	-5.7%
67.9%	5,125	4,831	-295	-5.7%
69.1%	5,002	4,508	-494	-9.9%
70.4%	4,506	4,259	-247	-5.5%
71.6%	4,301	4,182	-120	-2.8%
72.8%	4,178	4,051	-127	-3.0%
74.1%	4,056	3,967	-89	-2.2%
75.3%	3,961	3,963	2	0.0%
76.5%	3,805	3,934	130	3.4%
77.8%	3,749	3,842	93	2.5%
79.0%	3,697	3,816	119	3.2%
80.2%	3,651	3,652	1	0.0%
81.5%	3,624	3,625	1	0.0%
82.7%	3,433	3,450	17	0.5%
84.0%	3,394	3,447	53	1.6%
85.2%	3,284	3,288	4	0.1%
86.4%	3,074	3,074	0	0.0%
87.7%	2,947	2,979	33	1.1%
88.9%	2,902	2,885	-17	-0.6%
90.1%	2,707	2,433	-274	-10.1%
91.4%	2,427	2,243	-183	-7.6%
92.6%	2,243	2,228	-15	-0.7%
93.8%	2,226	1,972	-254	-11.4%
95.1%	1,604	1,716	112	7.0%
96.3%	1,253	1,255	2	0.2%
97.5%	1,000	1,000	0	0.0%
98.8%	750	750	0	
100.0%	750	750	0	

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	51,497	51,495	-3	0.0%
1.2%	37,463	37,461	-2	0.0%
2.5%	32,218	32,216	-2	0.0%
3.7%	27,457	27,452	-5	0.0%
4.9%	22,596	22,590	-6	0.0%
6.2%	19,506	19,504	-3	0.0%
7.4%	16,845	17,635	789	4.7%
8.6%	16,800	16,838	37	0.2%
9.9%	15,233	15,233	0	0.0%
11.1%	14,596	14,595	-1	0.0%
12.3%	13,209	13,207	-2	0.0%
13.6%	11,800	11,801	1	0.0%
14.8%	10,302	10,302	1	0.0%
16.0%	9,112	9,112	0	0.0%
17.3%	9,057	9,063	6	0.1%
18.5%	8,270	8,262	-9	-0.1%
19.8%	8,159	8,162	3	0.0%
21.0%	8,086	8,082	-5	-0.1%
22.2%	7,880	7,872	-8	-0.1%
23.5%	6,813	6,817	4	0.1%
24.7%	6,653	6,641	-12	-0.2%
25.9%	6,640	6,617	-23	-0.3%
27.2%	6,588	6,588	1	0.0%
28.4%	6,362	6,363	1	0.0%
29.6%	6,120	6,117	-3	-0.1%
30.9%	6,031	6,032	1	0.0%
32.1%	6,029	6,027	-1	0.0%
33.3%	6,019	5,910	-109	-1.8%
34.6%	5,909	5,844	-65	-1.1%
35.8%	5,727	5,724	-3	0.0%
37.0%	5,393	5,623	230	4.3%
38.3%	5,324	5,384	60	1.1%
39.5%	5,148	5,153	6	0.1%
40.7%	5,072	5,074	2	0.0%
42.0%	4,984	4,943	-41	-0.8%
43.2%	4,921	4,930	9	0.2%
44.4%	4,864	4,867	3	0.1%
45.7%	4,828	4,828	-1	0.0%
46.9%	4,658	4,661	3	0.1%
48.1%	4,631	4,643	12	0.3%
49.4%	4,548	4,563	15	0.3%
50.6%	4,532	4,541	10	0.2%
51.9%	4,406	4,418	12	0.3%
53.1%	4,367	4,368	1	0.0%
54.3%	4,324	4,325	1	0.0%
55.6%	4,289	4,294	5	0.1%
56.8%	4,203	4,196	-7	-0.2%
58.0%	4,195	4,154	-40	-1.0%
59.3%	4,177	4,150	-27	-0.7%
60.5%	4,169	4,006	-163	-3.9%
61.7%	3,875	3,880	5	0.1%
63.0%	3,867	3,847	-20	-0.5%
64.2%	3,838	3,748	-90	-2.4%
65.4%	3,731	3,665	-66	-1.8%
66.7%	3,610	3,522	-88	-2.4%
67.9%	3,521	3,520	-1	0.0%
69.1%	3,517	3,507	-9	-0.3%
70.4%	3,507	3,338	-169	-4.8%
71.6%	3,493	3,316	-176	-5.0%
72.8%	3,314	3,301	-13	-0.4%
74.1%	3,297	3,174	-123	-3.7%
75.3%	3,172	3,161	-11	-0.3%
76.5%	3,155	3,137	-17	-0.6%
77.8%	3,134	3,134	0	0.0%
79.0%	3,128	3,039	-89	-2.8%
80.2%	3,038	2,930	-108	-3.5%
81.5%	2,854	2,859	4	0.1%
82.7%	2,800	2,800	0	0.0%
84.0%	2,800	2,800	0	0.0%
85.2%	2,777	2,777	1	0.0%
86.4%	2,736	2,729	-7	-0.3%
87.7%	2,449	2,662	214	8.7%
88.9%	2,446	2,434	-12	-0.5%
90.1%	2,318	2,318	0	0.0%
91.4%	2,315	2,315	0	0.0%
92.6%	2,198	2,201	3	0.1%
93.8%	2,119	2,119	0	0.0%
95.1%	2,115	2,094	-21	-1.0%
96.3%	2,024	2,026	1	0.1%
97.5%	1,824	1,825	2	0.1%
98.8%	1,337	1,337	1	0.0%
100.0%	750	751	1	0.2%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	17,490	17,481	-9	-0.1%
1.2%	9,599	9,601	3	0.0%
2.5%	7,529	7,509	-20	-0.3%
3.7%	6,891	6,892	1	0.0%
4.9%	6,583	6,589	7	0.1%
6.2%	6,395	6,395	0	0.0%
7.4%	5,046	5,305	259	5.1%
8.6%	5,019	5,201	182	3.6%
9.9%	4,999	5,047	48	1.0%
11.1%	4,952	4,993	41	0.8%
12.3%	4,928	4,973	46	0.9%
13.6%	4,907	4,921	15	0.3%
14.8%	4,654	4,908	254	5.5%
16.0%	4,650	4,863	212	4.6%
17.3%	4,299	4,657	358	8.3%
18.5%	4,268	4,652	384	9.0%
19.8%	4,263	4,530	267	6.3%
21.0%	4,207	4,360	154	3.7%
22.2%	4,182	4,277	95	2.3%
23.5%	4,162	4,241	79	1.9%
24.7%	4,161	4,096	-65	-1.6%
25.9%	4,045	4,017	-28	-0.7%
27.2%	4,033	3,994	-39	-1.0%
28.4%	3,951	3,977	25	0.6%
29.6%	3,810	3,952	142	3.7%
30.9%	3,735	3,811	76	2.0%
32.1%	3,675	3,802	126	3.4%
33.3%	3,648	3,732	84	2.3%
34.6%	3,626	3,720	94	2.6%
35.8%	3,601	3,618	16	0.5%
37.0%	3,552	3,610	58	1.6%
38.3%	3,546	3,553	7	0.2%
39.5%	3,488	3,547	60	1.7%
40.7%	3,461	3,547	85	2.5%
42.0%	3,422	3,522	100	2.9%
43.2%	3,346	3,515	170	5.1%
44.4%	3,272	3,488	216	6.6%
45.7%	3,270	3,423	153	4.7%
46.9%	3,264	3,319	55	1.7%
48.1%	3,257	3,244	-13	-0.4%
49.4%	3,212	3,242	29	0.9%
50.6%	3,208	3,217	9	0.3%
51.9%	3,168	3,170	2	0.1%
53.1%	3,165	3,164	-1	0.0%
54.3%	3,162	3,151	-10	-0.3%
55.6%	3,112	3,113	1	0.0%
56.8%	3,085	3,089	4	0.1%
58.0%	3,026	3,019	-8	-0.3%
59.3%	2,800	3,016	216	7.7%
60.5%	2,800	2,941	141	5.0%
61.7%	2,800	2,800	0	0.0%
63.0%	2,800	2,800	0	0.0%
64.2%	2,772	2,800	28	1.0%
65.4%	2,730	2,800	70	2.6%
66.7%	2,698	2,772	74	2.8%
67.9%	2,686	2,731	45	1.7%
69.1%	2,682	2,702	20	0.8%
70.4%	2,636	2,698	63	2.4%
71.6%	2,614	2,636	22	0.8%
72.8%	2,590	2,593	3	0.1%
74.1%	2,571	2,574	3	0.1%
75.3%	2,557	2,561	4	0.2%
76.5%	2,512	2,515	3	0.1%
77.8%	2,485	2,429	-56	-2.3%
79.0%	2,484	2,415	-69	-2.8%
80.2%	2,428	2,327	-101	-4.2%
81.5%	2,354	2,298	-57	-2.4%
82.7%	2,339	2,275	-64	-2.7%
84.0%	2,298	2,198	-99	-4.3%
85.2%	2,271	2,067	-204	-9.0%
86.4%	2,221	2,063	-158	-7.1%
87.7%	2,191	2,034	-157	-7.2%
88.9%	2,015	1,982	-33	-1.6%
90.1%	1,980	1,964	-16	-0.8%
91.4%	1,964	1,950	-14	-0.7%
92.6%	1,929	1,872	-57	-3.0%
93.8%	1,871	1,865	-6	-0.3%
95.1%	1,797	1,801	4	0.2%
96.3%	1,417	1,377	-40	-2.8%
97.5%	1,249	1,250	1	0.1%
98.8%	1,000	1,000	0	0.0%
100.0%	435	437	2	0.4%

Table SW-23-b
Feather River at Mouth, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,756	8,109	353	4.5%
1.2%	7,679	7,246	-433	-5.6%
2.5%	7,119	7,114	-5	-0.1%
3.7%	7,106	6,704	-402	-5.7%
4.9%	7,004	6,213	-791	-11.3%
6.2%	6,976	6,163	-814	-11.7%
7.4%	6,838	6,038	-800	-11.7%
8.6%	6,214	5,719	-496	-8.0%
9.9%	6,143	5,440	-703	-11.4%
11.1%	6,138	5,390	-748	-12.2%
12.3%	5,984	5,357	-627	-10.5%
13.6%	5,929	5,323	-606	-10.2%
14.8%	5,890	5,222	-668	-11.3%
16.0%	5,770	5,197	-573	-9.9%
17.3%	5,763	5,053	-710	-12.3%
18.5%	5,612	4,913	-699	-12.5%
19.8%	5,484	4,878	-607	-11.1%
21.0%	5,336	4,838	-497	-9.3%
22.2%	5,298	4,799	-499	-9.4%
23.5%	5,236	4,797	-439	-8.4%
24.7%	5,222	4,578	-644	-12.3%
25.9%	5,195	4,526	-668	-12.9%
27.2%	5,183	4,491	-692	-13.4%
28.4%	4,992	4,473	-519	-10.4%
29.6%	4,976	4,406	-570	-11.5%
30.9%	4,970	4,360	-610	-12.3%
32.1%	4,760	4,312	-448	-9.4%
33.3%	4,623	4,300	-323	-7.0%
34.6%	4,509	4,294	-215	-4.8%
35.8%	4,468	4,205	-262	-5.9%
37.0%	4,454	4,190	-264	-5.9%
38.3%	4,431	4,173	-258	-5.8%
39.5%	4,406	4,134	-272	-6.2%
40.7%	4,325	4,116	-210	-4.8%
42.0%	4,143	4,094	-49	-1.2%
43.2%	4,058	4,073	15	0.4%
44.4%	4,050	3,956	-95	-2.3%
45.7%	4,049	3,730	-319	-7.9%
46.9%	4,042	3,522	-520	-12.9%
48.1%	3,993	3,353	-641	-16.0%
49.4%	3,987	3,349	-638	-16.0%
50.6%	3,936	3,336	-600	-15.2%
51.9%	3,908	3,246	-661	-16.9%
53.1%	3,899	3,210	-689	-17.7%
54.3%	3,867	3,151	-716	-18.5%
55.6%	3,863	3,124	-740	-19.1%
56.8%	3,756	3,109	-646	-17.2%
58.0%	3,753	3,100	-653	-17.4%
59.3%	3,706	3,006	-700	-18.9%
60.5%	3,545	2,962	-583	-16.4%
61.7%	3,432	2,877	-555	-16.2%
63.0%	3,403	2,812	-590	-17.3%
64.2%	3,355	2,800	-555	-16.5%
65.4%	3,329	2,753	-576	-17.3%
66.7%	3,312	2,667	-645	-19.5%
67.9%	3,216	2,625	-591	-18.4%
69.1%	3,188	2,555	-633	-19.9%
70.4%	3,113	2,518	-595	-19.1%
71.6%	2,999	2,479	-521	-17.4%
72.8%	2,941	2,406	-536	-18.2%
74.1%	2,873	2,384	-489	-17.0%
75.3%	2,800	2,379	-421	-15.0%
76.5%	2,778	2,373	-404	-14.6%
77.8%	2,757	2,329	-428	-15.5%
79.0%	2,718	2,284	-433	-15.9%
80.2%	2,583	2,215	-368	-14.2%
81.5%	2,563	2,206	-357	-13.9%
82.7%	2,514	2,127	-387	-15.4%
84.0%	2,509	2,086	-423	-16.9%
85.2%	2,410	2,004	-406	-16.8%
86.4%	2,355	1,919	-436	-18.5%
87.7%	2,279	1,917	-362	-15.9%
88.9%	1,995	1,834	-161	-8.1%
90.1%	1,923	1,823	-100	-5.2%
91.4%	1,812	1,781	-31	-1.7%
92.6%	1,725	1,690	-36	-2.1%
93.8%	1,707	1,479	-228	-13.4%
95.1%	1,700	1,314	-386	-22.7%
96.3%	1,575	1,133	-442	-28.1%
97.5%	1,524	1,040	-484	-31.7%
98.8%	1,391	1,000	-391	-28.1%
100.0%	750	800	50	6.7%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,828	11,016	188	1.7%
1.2%	10,687	10,588	-99	-0.9%
2.5%	10,589	10,545	-43	-0.4%
3.7%	10,544	10,273	-271	-2.6%
4.9%	10,294	9,807	-486	-4.7%
6.2%	10,283	9,775	-509	-4.9%
7.4%	10,054	9,512	-542	-5.4%
8.6%	9,832	9,439	-393	-4.0%
9.9%	9,827	9,307	-520	-5.3%
11.1%	9,803	9,294	-509	-5.2%
12.3%	9,761	9,204	-557	-5.7%
13.6%	9,759	9,191	-568	-5.8%
14.8%	9,720	9,136	-585	-6.0%
16.0%	9,648	9,101	-547	-5.7%
17.3%	9,641	9,100	-542	-5.6%
18.5%	9,605	8,967	-638	-6.6%
19.8%	9,592	8,955	-637	-6.6%
21.0%	9,557	8,889	-668	-7.0%
22.2%	9,538	8,787	-751	-7.9%
23.5%	9,505	8,769	-736	-7.7%
24.7%	9,477	8,742	-735	-7.8%
25.9%	9,433	8,638	-795	-8.4%
27.2%	9,320	8,622	-698	-7.5%
28.4%	9,306	8,587	-719	-7.7%
29.6%	9,215	8,562	-653	-7.1%
30.9%	9,193	8,481	-712	-7.7%
32.1%	9,182	8,478	-704	-7.7%
33.3%	9,114	8,474	-640	-7.0%
34.6%	9,071	8,454	-617	-6.8%
35.8%	9,005	8,382	-623	-6.9%
37.0%	9,002	8,375	-627	-7.0%
38.3%	8,913	8,315	-598	-6.7%
39.5%	8,899	8,299	-601	-6.8%
40.7%	8,869	8,231	-638	-7.2%
42.0%	8,828	8,222	-606	-6.9%
43.2%	8,817	8,029	-788	-8.9%
44.4%	8,703	7,909	-794	-9.1%
45.7%	8,690	7,908	-782	-9.0%
46.9%	8,593	7,862	-730	-8.5%
48.1%	8,555	7,813	-742	-8.7%
49.4%	8,454	7,802	-653	-7.7%
50.6%	8,392	7,541	-851	-10.1%
51.9%	8,247	7,500	-747	-9.1%
53.1%	8,243	7,439	-804	-9.7%
54.3%	8,186	7,386	-800	-9.8%
55.6%	8,055	7,379	-677	-8.4%
56.8%	8,030	7,338	-692	-8.6%
58.0%	8,022	7,249	-772	-9.6%
59.3%	7,974	7,136	-837	-10.5%
60.5%	7,651	7,049	-602	-7.9%
61.7%	7,508	6,730	-777	-10.4%
63.0%	7,475	6,639	-836	-11.2%
64.2%	7,375	6,396	-979	-13.3%
65.4%	7,368	6,290	-1,078	-14.6%
66.7%	7,341	5,591	-1,750	-23.8%
67.9%	7,008	5,502	-1,506	-21.5%
69.1%	6,676	5,300	-1,377	-20.6%
70.4%	6,646	5,208	-1,438	-21.6%
71.6%	6,606	5,085	-1,522	-23.0%
72.8%	6,381	5,081	-1,300	-20.4%
74.1%	6,216	4,929	-1,287	-20.7%
75.3%	5,384	4,916	-467	-8.7%
76.5%	4,804	4,812	8	0.2%
77.8%	4,464	4,767	303	6.8%
79.0%	4,319	4,743	424	9.8%
80.2%	4,004	4,477	473	11.8%
81.5%	3,426	3,680	254	7.4%
82.7%	3,067	3,664	597	19.5%
84.0%	2,796	3,387	592	21.2%
85.2%	2,568	2,776	208	8.1%
86.4%	2,524	2,776	252	10.0%
87.7%	2,409	2,656	247	10.3%
88.9%	2,399	2,311	-88	-3.7%
90.1%	2,244	2,266	21	1.0%
91.4%	2,134	2,018	-116	-5.5%
92.6%	1,829	1,895	66	3.6%
93.8%	1,593	1,885	292	18.3%
95.1%	1,379	1,549	170	12.3%
96.3%	1,328	1,399	71	5.3%
97.5%	1,057	1,274	217	20.5%
98.8%	1,031	1,118	87	8.4%
100.0%	1,000	1,012	12	1.2%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,396	9,117	-279	-3.0%
1.2%	9,167	8,833	-334	-3.6%
2.5%	9,020	8,816	-203	-2.3%
3.7%	8,896	8,631	-265	-3.0%
4.9%	8,756	8,603	-153	-1.7%
6.2%	8,745	8,536	-209	-2.4%
7.4%	8,722	8,468	-254	-2.9%
8.6%	8,685	8,365	-320	-3.7%
9.9%	8,669	8,364	-305	-3.5%
11.1%	8,668	8,363	-305	-3.5%
12.3%	8,632	8,322	-310	-3.6%
13.6%	8,631	8,149	-482	-5.6%
14.8%	8,558	8,141	-417	-4.9%
16.0%	8,508	8,139	-369	-4.3%
17.3%	8,446	8,094	-352	-4.2%
18.5%	8,443	8,085	-357	-4.2%
19.8%	8,366	8,085	-281	-3.4%
21.0%	8,319	7,983	-336	-4.0%
22.2%	8,296	7,901	-396	-4.8%
23.5%	8,265	7,839	-426	-5.2%
24.7%	8,257	7,812	-445	-5.4%
25.9%	8,240	7,705	-535	-6.5%
27.2%	8,166	7,633	-533	-6.5%
28.4%	8,117	7,613	-504	-6.2%
29.6%	8,098	7,500	-598	-7.4%
30.9%	8,016	7,487	-529	-6.6%
32.1%	7,992	7,287	-704	-8.8%
33.3%	7,985	7,244	-741	-9.3%
34.6%	7,970	7,188	-782	-9.8%
35.8%	7,877	7,005	-872	-11.1%
37.0%	7,864	7,004	-860	-10.9%
38.3%	7,644	6,957	-687	-9.0%
39.5%	7,498	6,819	-679	-9.1%
40.7%	7,472	6,691	-781	-10.5%
42.0%	7,289	6,648	-640	-8.8%
43.2%	7,256	6,630	-626	-8.6%
44.4%	7,186	6,565	-621	-8.6%
45.7%	7,151	6,523	-627	-8.8%
46.9%	7,089	6,426	-664	-9.4%
48.1%	6,628	6,401	-227	-3.4%
49.4%	6,315	6,307	-9	-0.1%
50.6%	6,012	6,107	95	1.6%
51.9%	5,624	6,031	407	7.2%
53.1%	5,550	5,990	441	7.9%
54.3%	5,481	5,724	243	4.4%
55.6%	5,293	5,406	113	2.1%
56.8%	5,217	5,402	185	3.5%
58.0%	4,919	5,271	352	7.2%
59.3%	4,650	5,177	527	11.3%
60.5%	4,586	5,067	481	10.5%
61.7%	4,344	4,657	314	7.2%
63.0%	4,164	4,486	322	7.7%
64.2%	4,067	4,350	283	6.9%
65.4%	4,056	4,025	-32	-0.8%
66.7%	4,029	3,938	-91	-2.3%
67.9%	3,809	3,793	-17	-0.4%
69.1%	3,645	3,693	48	1.3%
70.4%	3,472	3,671	200	5.8%
71.6%	3,457	3,632	175	5.1%
72.8%	3,302	3,572	271	8.2%
74.1%	3,297	3,503	206	6.3%
75.3%	3,207	3,485	278	8.7%
76.5%	2,993	3,389	397	13.3%
77.8%	2,968	3,062	95	3.2%
79.0%	2,883	3,062	179	6.2%
80.2%	2,859	2,865	6	0.2%
81.5%	2,631	2,688	57	2.2%
82.7%	2,607	2,687	80	3.1%
84.0%	2,573	2,466	-107	-4.2%
85.2%	2,491	1,998	-493	-19.8%
86.4%	2,376	1,877	-499	-21.0%
87.7%	2,241	1,864	-377	-16.8%
88.9%	2,119	1,805	-313	-14.8%
90.1%	2,070	1,742	-328	-15.8%
91.4%	2,038	1,637	-401	-19.7%
92.6%	1,637	1,515	-122	-7.5%
93.8%	1,633	1,492	-141	-8.6%
95.1%	1,557	1,440	-117	-7.5%
96.3%	1,228	1,241	12	1.0%
97.5%	1,162	1,054	-107	-9.2%
98.8%	750	891	141	18.8%
100.0%	750	882	132	17.6%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	12,794	12,794	0	0.0%
1.2%	12,293	11,994	-299	-2.4%
2.5%	12,027	11,671	-357	-3.0%
3.7%	11,917	11,622	-295	-2.5%
4.9%	11,813	11,583	-230	-1.9%
6.2%	11,767	11,577	-190	-1.6%
7.4%	11,671	11,443	-228	-2.0%
8.6%	11,584	11,379	-205	-1.8%
9.9%	11,535	11,254	-282	-2.4%
11.1%	11,473	11,235	-238	-2.1%
12.3%	11,363	11,232	-131	-1.2%
13.6%	10,842	11,030	188	1.7%
14.8%	10,769	11,006	236	2.2%
16.0%	10,326	10,568	242	2.3%
17.3%	10,223	10,383	160	1.6%
18.5%	10,216	10,321	105	1.0%
19.8%	10,194	10,188	-6	-0.1%
21.0%	10,179	10,144	-35	-0.3%
22.2%	10,156	10,085	-71	-0.7%
23.5%	10,123	9,922	-201	-2.0%
24.7%	9,994	9,626	-368	-3.7%
25.9%	9,908	9,371	-537	-5.4%
27.2%	9,572	9,295	-278	-2.9%
28.4%	9,567	9,215	-352	-3.7%
29.6%	9,526	9,209	-317	-3.3%
30.9%	9,485	9,055	-430	-4.5%
32.1%	9,416	8,811	-605	-6.4%
33.3%	9,060	8,791	-269	-3.0%
34.6%	9,019	8,598	-421	-4.7%
35.8%	8,579	8,308	-271	-3.2%
37.0%	7,790	7,735	-54	-0.7%
38.3%	7,494	7,717	223	3.0%
39.5%	7,097	7,152	55	0.8%
40.7%	7,057	7,062	4	0.1%
42.0%	6,963	6,830	-133	-1.9%
43.2%	6,871	6,705	-166	-2.4%
44.4%	6,777	6,699	-78	-1.2%
45.7%	6,762	6,672	-90	-1.3%
46.9%	6,563	6,581	18	0.3%
48.1%	6,481	6,447	-34	-0.5%
49.4%	6,177	6,200	23	0.4%
50.6%	6,110	6,161	51	0.8%
51.9%	6,086	6,050	-36	-0.6%
53.1%	5,988	6,004	16	0.3%
54.3%	5,610	5,673	63	1.1%
55.6%	5,372	5,650	278	5.2%
56.8%	5,319	5,635	316	5.9%
58.0%	5,231	5,583	352	6.7%
59.3%	5,080	4,807	-273	-5.4%
60.5%	5,052	4,685	-366	-7.3%
61.7%	4,976	4,632	-344	-6.9%
63.0%	4,879	4,604	-274	-5.6%
64.2%	4,764	4,480	-285	-6.0%
65.4%	4,214	4,467	253	6.0%
66.7%	4,145	4,187	42	1.0%
67.9%	3,894	4,166	272	7.0%
69.1%	3,751	4,114	363	9.7%
70.4%	3,137	3,828	691	22.0%
71.6%	3,035	3,620	585	19.3%
72.8%	2,916	3,510	595	20.4%
74.1%	2,843	3,349	506	17.8%
75.3%	2,839	3,332	493	17.4%
76.5%	2,769	3,276	507	18.3%
77.8%	2,765	3,259	494	17.8%
79.0%	2,714	3,095	381	14.0%
80.2%	2,646	3,056	409	15.5%
81.5%	2,571	3,041	470	18.3%
82.7%	2,571	2,923	352	13.7%
84.0%	2,567	2,919	352	13.7%
85.2%	2,563	2,904	341	13.3%
86.4%	2,559	2,871	312	12.2%
87.7%	2,558	2,822	264	10.3%
88.9%	2,514	2,698	184	7.3%
90.1%	2,467	2,573	107	4.3%
91.4%	2,429	2,569	140	5.8%
92.6%	2,192	2,302	109	5.0%
93.8%	2,119	2,192	73	3.5%
95.1%	1,898	1,904	6	0.3%
96.3%	1,661	1,735	73	4.4%
97.5%	1,511	1,507	-4	-0.3%
98.8%	1,256	1,256	0	0.0%
100.0%	971	971	0	0.0%

Figure SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

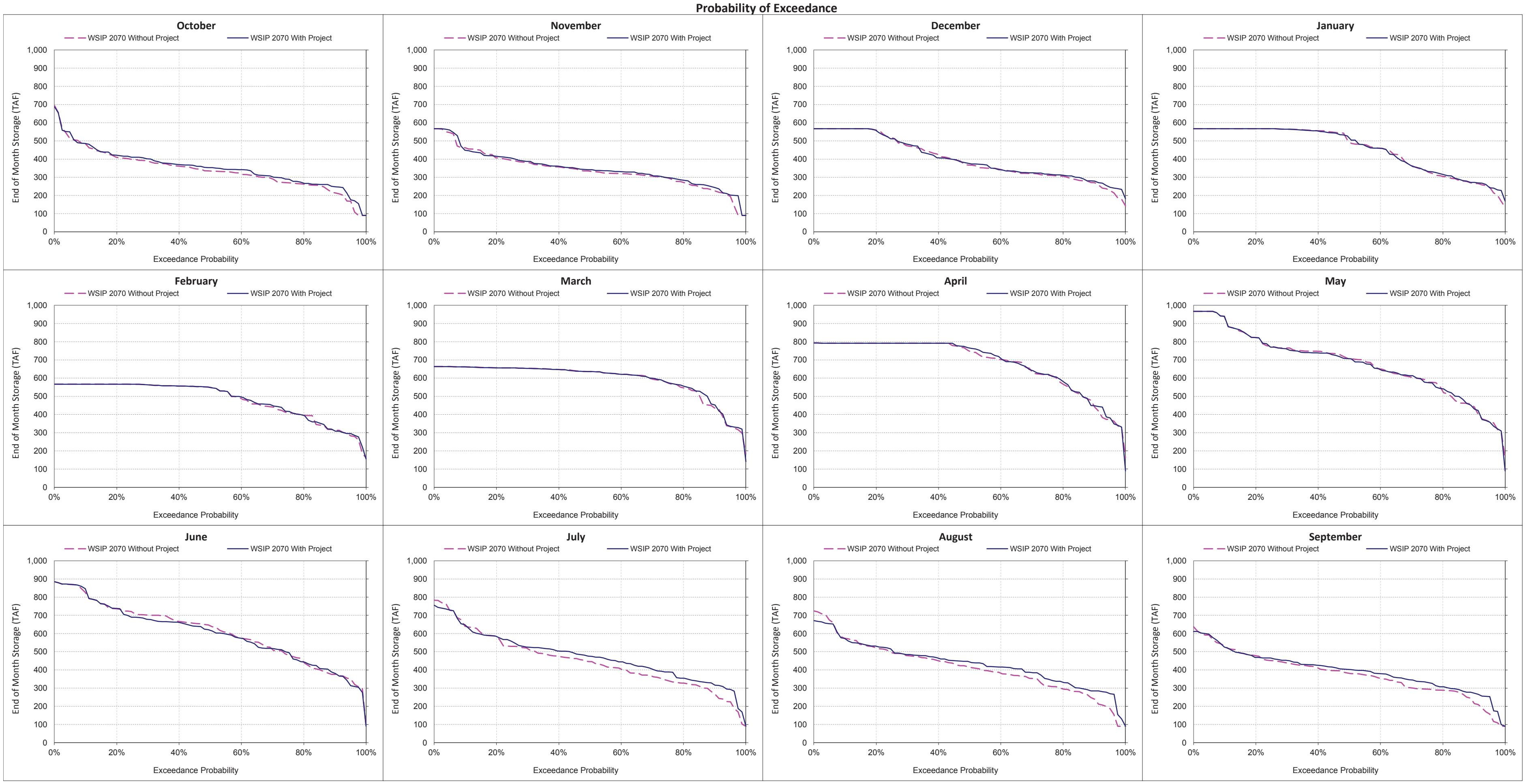


Table SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	695	688	-7	-1.0%
1.2%	657	654	-3	-0.5%
2.5%	572	559	-13	-2.3%
3.7%	545	552	7	1.4%
4.9%	514	549	35	6.8%
6.2%	506	509	4	0.7%
7.4%	503	490	-14	-2.7%
8.6%	489	487	-2	-0.4%
9.9%	486	486	-1	-0.1%
11.1%	462	482	20	4.3%
12.3%	457	467	10	2.2%
13.6%	446	452	6	1.3%
14.8%	441	440	-1	-0.3%
16.0%	437	439	3	0.6%
17.3%	427	438	11	2.6%
18.5%	422	424	2	0.4%
19.8%	410	422	11	2.7%
21.0%	406	418	12	3.0%
22.2%	405	416	11	2.7%
23.5%	403	415	12	3.0%
24.7%	399	411	12	3.1%
25.9%	398	410	12	3.0%
27.2%	393	410	16	4.1%
28.4%	392	408	16	4.0%
29.6%	391	402	11	2.9%
30.9%	384	400	16	4.1%
32.1%	378	390	12	3.1%
33.3%	377	386	10	2.5%
34.6%	375	379	3	0.9%
35.8%	374	377	3	0.8%
37.0%	367	377	10	2.6%
38.3%	364	374	9	2.6%
39.5%	362	370	8	2.3%
40.7%	360	369	9	2.6%
42.0%	358	367	9	2.6%
43.2%	357	367	10	2.9%
44.4%	350	366	16	4.5%
45.7%	345	361	15	4.4%
46.9%	345	361	15	4.4%
48.1%	336	355	19	5.6%
49.4%	335	353	18	5.4%
50.6%	333	353	19	5.8%
51.9%	333	350	16	4.9%
53.1%	332	349	17	5.2%
54.3%	332	344	12	3.8%
55.6%	331	343	12	3.7%
56.8%	328	343	15	4.5%
58.0%	325	343	18	5.5%
59.3%	324	342	18	5.6%
60.5%	315	342	27	8.6%
61.7%	315	340	25	8.0%
63.0%	311	336	25	7.9%
64.2%	311	318	7	2.1%
65.4%	303	311	9	2.9%
66.7%	300	310	10	3.4%
67.9%	300	308	8	2.8%
69.1%	297	307	11	3.6%
70.4%	288	301	12	4.3%
71.6%	273	299	25	9.3%
72.8%	272	298	25	9.2%
74.1%	271	291	20	7.5%
75.3%	269	289	20	7.3%
76.5%	268	278	10	3.7%
77.8%	266	277	12	4.5%
79.0%	264	274	9	3.5%
80.2%	261	266	5	2.0%
81.5%	259	266	7	2.8%
82.7%	257	262	5	2.1%
84.0%	256	261	5	2.0%
85.2%	256	261	5	2.0%
86.4%	247	260	13	5.4%
87.7%	232	260	28	12.1%
88.9%	218	250	32	14.8%
90.1%	214	248	34	16.0%
91.4%	209	246	36	17.4%
92.6%	201	243	42	20.6%
93.8%	170	213	44	25.9%
95.1%	168	176	7	4.4%
96.3%	109	171	62	57.2%
97.5%	90	155	65	72.6%
98.8%	90	90	0	0.0%
100.0%	90	90	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	565	567	2	0.4%
3.7%	550	565	15	2.7%
4.9%	546	560	14	2.6%
6.2%	539	546	7	1.4%
7.4%	472	528	56	11.9%
8.6%	463	472	9	1.9%
9.9%	463	449	-14	-3.0%
11.1%	456	446	-10	-2.1%
12.3%	455	440	-15	-3.3%
13.6%	452	437	-15	-3.4%
14.8%	449	435	-14	-3.1%
16.0%	430	421	-10	-2.3%
17.3%	426	419	-7	-1.5%
18.5%	425	418	-7	-1.6%
19.8%	407	416	8	2.1%
21.0%	405	413	8	1.9%
22.2%	402	412	10	2.6%
23.5%	398	409	11	2.7%
24.7%	394	406	12	3.1%
25.9%	391	400	9	2.3%
27.2%	386	393	7	1.7%
28.4%	384	390	6	1.6%
29.6%	382	388	6	1.5%
30.9%	379	388	8	2.2%
32.1%	371	376	5	1.5%
33.3%	369	374	6	1.6%
34.6%	367	374	7	1.9%
35.8%	362	369	7	1.9%
37.0%	361	363	3	0.7%
38.3%	358	362	5	1.3%
39.5%	358	361	4	1.1%
40.7%	356	359	3	1.0%
42.0%	352	355	3	0.9%
43.2%	350	354	3	0.9%
44.4%	347	354	6	1.8%
45.7%	345	348	3	0.9%
46.9%	337	345	8	2.3%
48.1%	335	343	7	2.2%
49.4%	334	342	8	2.4%
50.6%	332	341	9	2.8%
51.9%	331	338	7	2.2%
53.1%	328	337	9	2.9%
54.3%	324	336	12	3.8%
55.6%	323	335	13	3.9%
56.8%	322	334	12	3.8%
58.0%	321	332	11	3.3%
59.3%	320	332	11	3.5%
60.5%	320	330	11	3.3%
61.7%	319	329	10	3.1%
63.0%	317	329	12	3.6%
64.2%	316	328	12	3.8%
65.4%	315	322	7	2.1%
66.7%	313	321	9	2.8%
67.9%	310	317	7	2.3%
69.1%	308	317	8	2.8%
70.4%	305	307	2	0.7%
71.6%	303	307	3	1.1%
72.8%	303	305	2	0.7%
74.1%	300	299	-1	-0.3%
75.3%	295	298	3	0.9%
76.5%	286	295	9	3.1%
77.8%	277	290	13	4.5%
79.0%	277	286	9	3.2%
80.2%	271	283	12	4.4%
81.5%	264	280	16	6.2%
82.7%	256	265	10	3.8%
84.0%	255	260	5	2.1%
85.2%	248	260	12	4.9%
86.4%	238	259	21	8.7%
87.7%	237	255	17	7.2%
88.9%	232	249	17	7.4%
90.1%	225	243	18	8.1%
91.4%	218	236	19	8.6%
92.6%	214	215	1	0.7%
93.8%	206	210	4	1.8%
95.1%	194	203	8	4.3%
96.3%	141	201	60	42.9%
97.5%	91	199	109	120.1%
98.8%	90	91	1	0.6%
100.0%	90	90	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	565	565	0	0.0%
19.8%	560	560	0	0.1%
21.0%	558	545	-13	-2.4%
22.2%	537	533	-4	-0.7%
23.5%	524	524	0	0.0%
24.7%	520	512	-8	-1.5%
25.9%	512	512	0	-0.1%
27.2%	488	496	8	1.7%
28.4%	488	490	2	0.4%
29.6%	474	482	8	1.7%
30.9%	470	479	9	1.9%
32.1%	469	473	4	0.8%
33.3%	461	471	10	2.1%
34.6%	457	437	-20	-4.3%
35.8%	444	433	-11	-2.4%
37.0%	440	428	-12	-2.8%
38.3%	433	421	-12	-2.7%
39.5%	428	407	-21	-4.9%
40.7%	414	406	-8	-1.8%
42.0%	411	406	-5	-1.2%
43.2%	406	402	-4	-1.0%
44.4%	399	398	-1	-0.3%
45.7%	394	395	1	0.4%
46.9%	390	386	-4	-1.1%
48.1%	373	382	9	2.4%
49.4%	367	377	10	2.8%
50.6%	367	374	7	1.9%
51.9%	363	373	9	2.5%
53.1%	352	372	20	5.6%
54.3%	352	371	19	5.3%
55.6%	350	367	17	4.9%
56.8%	350	350	0	0.0%
58.0%	349	348	-1	-0.3%
59.3%	345	342	-4	-1.1%
60.5%	340	340	-1	-0.2%
61.7%	338	335	-3	-0.8%
63.0%	334	335	1	0.2%
64.2%	330	334	4	1.3%
65.4%	325	331	6	1.8%
66.7%	322	326	5	1.4%
67.9%	321	326	4	1.3%
69.1%	321	325	4	1.3%
70.4%	321	324	3	1.0%
71.6%	319	323	4	1.2%
72.8%	314	323	9	2.7%
74.1%	312	318	6	2.0%
75.3%	311	318	7	2.3%
76.5%	311	315	4	1.4%
77.8%	308	314	6	1.9%
79.0%	306	313	6	2.1%
80.2%	306	310	4	1.3%
81.5%	299	308	9	2.9%
82.7%	292	307	15	5.1%
84.0%	288	300	12	4.1%
85.2%	283	299	16	5.6%
86.4%	281	291	10	3.7%
87.7%	280	281	0	0.1%
88.9%	272	280	9	3.3%
90.1%	270	279	9	3.4%
91.4%	257	270	13	5.0%
92.6%	240	267	27	11.3%
93.8%	237	255	18	7.5%
95.1%	227	245	18	8.0%
96.3%	214	241	27	12.4%
97.5%	187	237	50	26.9%
98.8%	178	234	56	31.1%
100.0%	143	182	39	27.3%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	567	567	0	0.0%
19.8%	567	567	0	0.0%
21.0%	567	567	0	0.0%
22.2%	567	567	0	0.0%
23.5%	567	567	0	0.0%
24.7%	567	567	0	0.0%
25.9%	567	567	0	0.0%
27.2%	566	566	0	0.0%
28.4%	565	565	0	0.0%
29.6%	564	564	0	0.0%
30.9%	564	564	0	0.0%
32.1%	564	563	-1	-0.2%
33.3%	563	562	-1	-0.2%
34.6%	562	560	-2	-0.4%
35.8%	560	559	-1	-0.2%
37.0%	559	557	-2	-0.4%
38.3%	557	556	-1	-0.2%
39.5%	556	556	0	0.0%
40.7%	556	551	-5	-0.9%
42.0%	555	550	-5	-0.9%
43.2%	551	546	-5	-0.9%
44.4%	549	544	-5	-0.9%
45.7%	546	543	-3	-0.5%
46.9%	544	534	-10	-1.8%
48.1%	543	533	-10	-1.8%
49.4%	505	527	22	4.4%
50.6%	486	505	19	3.8%
51.9%	483	504	21	4.4%
53.1%	482	481	-1	-0.2%
54.3%	481	480	-1	-0.3%
55.6%	477	470	-7	-1.5%
56.8%	467	462	-5	-1.1%
58.0%	464	461	-3	-0.6%
59.3%	460	460	0	0.0%
60.5%	459	459	0	0.0%
61.7%	453	453	0	0.0%
63.0%	446	427	-19	-4.3%
64.2%	427	425	-2	-0.5%
65.4%	425	405	-20	-4.6%
66.7%	411	391	-20	-4.9%
67.9%	384	384	0	0.0%
69.1%	370	370	0	0.0%
70.4%	361	359	-2	-0.6%
71.6%	352	355	3	0.7%
72.8%	346	348	2	0.6%
74.1%	342	338	-4	-1.1%
75.3%	328	332	4	1.3%
76.5%	322	330	8	2.5%
77.8%	311	326	15	4.8%
79.0%	309	321	11	3.7%
80.2%	304	315	11	3.7%
81.5%	304	310	6	2.0%
82.7%	294	307	13	4.4%
84.0%	293	294	1	0.5%
85.2%	283	289	6	2.1%
86.4%	279	282	3	0.9%
87.7%	277	279	2	0.8%
88.9%	270	272	3	0.9%
90.1%	266	271	5	2.0%
91.4%	265	269	4	1.3%
92.6%	258	267	9	3.3%
93.8%	255	260	6	2.2%
95.1%	245	241	-3	-1.4%
96.3%	215	240	26	12.0%
97.5%	202	231	29	14.4%
98.8%	167	227	60	35.8%
100.0%	135	169	35	25.7%

Table SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	567	567	0	0.0%
1.2%	567	567	0	0.0%
2.5%	567	567	0	0.0%
3.7%	567	567	0	0.0%
4.9%	567	567	0	0.0%
6.2%	567	567	0	0.0%
7.4%	567	567	0	0.0%
8.6%	567	567	0	0.0%
9.9%	567	567	0	0.0%
11.1%	567	567	0	0.0%
12.3%	567	567	0	0.0%
13.6%	567	567	0	0.0%
14.8%	567	567	0	0.0%
16.0%	567	567	0	0.0%
17.3%	567	567	0	0.0%
18.5%	567	567	0	0.0%
19.8%	567	567	0	0.0%
21.0%	567	567	0	0.0%
22.2%	567	567	0	0.0%
23.5%	567	567	0	0.0%
24.7%	566	566	0	0.0%
25.9%	566	566	0	0.0%
27.2%	566	566	0	0.0%
28.4%	565	565	0	0.0%
29.6%	563	563	0	0.0%
30.9%	562	562	0	0.0%
32.1%	560	560	0	0.0%
33.3%	560	560	0	0.0%
34.6%	558	558	0	0.0%
35.8%	558	558	0	0.0%
37.0%	558	558	0	0.0%
38.3%	558	558	0	0.0%
39.5%	557	557	0	0.0%
40.7%	557	557	0	0.0%
42.0%	556	556	0	0.0%
43.2%	555	555	0	0.0%
44.4%	555	555	0	0.0%
45.7%	553	553	0	0.0%
46.9%	553	553	0	0.0%
48.1%	552	552	0	0.0%
49.4%	551	551	0	0.0%
50.6%	547	547	0	0.0%
51.9%	543	543	0	0.0%
53.1%	530	530	0	0.0%
54.3%	529	529	0	0.0%
55.6%	527	527	0	0.0%
56.8%	499	501	2	0.3%
58.0%	499	499	0	0.0%
59.3%	494	499	5	1.0%
60.5%	483	494	11	2.3%
61.7%	479	482	3	0.7%
63.0%	458	479	21	4.5%
64.2%	458	467	9	2.0%
65.4%	457	458	1	0.2%
66.7%	446	458	12	2.7%
67.9%	446	457	11	2.5%
69.1%	443	455	12	2.7%
70.4%	440	446	6	1.4%
71.6%	427	443	16	3.7%
72.8%	423	440	17	4.1%
74.1%	413	418	5	1.2%
75.3%	408	416	9	2.1%
76.5%	407	407	0	0.0%
77.8%	402	402	0	0.0%
79.0%	400	399	-1	-0.3%
80.2%	395	394	-1	-0.2%
81.5%	394	369	-25	-6.5%
82.7%	394	360	-34	-8.6%
84.0%	345	360	15	4.2%
85.2%	342	353	11	3.2%
86.4%	340	346	6	1.7%
87.7%	319	321	3	0.9%
88.9%	318	320	2	0.7%
90.1%	314	308	-6	-1.8%
91.4%	313	308	-5	-1.7%
92.6%	302	301	0	-0.1%
93.8%	297	296	-1	-0.4%
95.1%	283	295	13	4.5%
96.3%	279	286	6	2.2%
97.5%	261	277	16	6.3%
98.8%	188	221	33	17.6%
100.0%	161	155	-6	-3.4%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	664	664	0	0.0%
1.2%	664	664	0	0.0%
2.5%	664	664	0	0.0%
3.7%	664	664	0	0.0%
4.9%	664	663	-1	-0.2%
6.2%	663	662	-1	-0.2%
7.4%	662	662	0	0.0%
8.6%	662	662	0	0.0%
9.9%	662	662	0	0.0%
11.1%	662	661	-1	-0.2%
12.3%	661	661	0	0.0%
13.6%	661	659	-2	-0.3%
14.8%	659	658	-1	-0.2%
16.0%	658	658	0	0.0%
17.3%	658	657	-1	-0.2%
18.5%	657	657	0	0.0%
19.8%	657	656	-1	-0.1%
21.0%	656	656	0	0.0%
22.2%	656	656	0	0.0%
23.5%	656	656	0	0.0%
24.7%	656	656	0	0.0%
25.9%	656	656	0	0.0%
27.2%	655	655	0	0.0%
28.4%	655	655	0	0.0%
29.6%	654	654	0	0.0%
30.9%	654	654	0	0.0%
32.1%	654	652	-2	-0.3%
33.3%	652	652	0	0.0%
34.6%	652	651	-1	-0.2%
35.8%	651	650	-1	-0.2%
37.0%	650	649	-1	-0.2%
38.3%	649	648	-1	-0.2%
39.5%	648	647	-1	-0.2%
40.7%	647	646	-1	-0.2%
42.0%	646	646	0	0.0%
43.2%	646	642	-4	-0.6%
44.4%	642	640	-2	-0.3%
45.7%	640	637	-3	-0.5%
46.9%	637	637	0	0.0%
48.1%	637	637	0	0.0%
49.4%	636	636	0	0.1%
50.6%	636	636	0	0.1%
51.9%	635	635	0	0.0%
53.1%	635	635	0	0.0%
54.3%	629	629	0	0.0%
55.6%	628	628	0	0.0%
56.8%	626	626	0	0.0%
58.0%	625	625	0	0.0%
59.3%	622	622	0	0.0%
60.5%	621	621	0	0.0%
61.7%	621	621	0	0.0%
63.0%	618	618	0	0.0%
64.2%	616	616	0	0.0%
65.4%	615	615	0	0.0%
66.7%	615	611	-4	-0.6%
67.9%	611	610	-1	-0.2%
69.1%	599	600	1	0.2%
70.4%	593	599	6	1.0%
71.6%	590	593	3	0.5%
72.8%	589	590	1	0.2%
74.1%	581	581	0	0.0%
75.3%	571	574	2	0.4%
76.5%	565	569	4	0.7%
77.8%	565	565	0	0.0%
79.0%	551	562	11	2.1%
80.2%	545	555	10	1.8%
81.5%	542	549	6	1.2%
82.7%	532	544	13	2.4%
84.0%	530	529	0	-0.1%
85.2%	501	528	27	5.5%
86.4%	453	513	60	13.1%
87.7%	453	501	48	10.6%
88.9%	449	458	9	1.9%
90.1%	434	453	19	4.4%
91.4%	429	420	-9	-2.2%
92.6%	389	402	13	3.3%
93.8%	338	342	4	1.1%
95.1%	334	336	2	0.7%
96.3%	326	331	5	1.4%
97.5%	316	328	11	3.6%
98.8%	298	319	21	7.0%
100.0%	183	141	-42	-23.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	794	794	0	0.0%
1.2%	794	794	0	0.0%
2.5%	792	792	0	0.0%
3.7%	792	792	0	0.0%
4.9%	792	792	0	0.0%
6.2%	792	792	0	0.0%
7.4%	792	792	0	0.0%
8.6%	792	792	0	0.0%
9.9%	792	792	0	0.0%
11.1%	792	792	0	0.0%
12.3%	792	792	0	0.0%
13.6%	792	792	0	0.0%
14.8%	792	792	0	0.0%
16.0%	792	792	0	0.0%
17.3%	792	792	0	0.0%
18.5%	792	792	0	0.0%
19.8%	792	792	0	0.0%
21.0%	792	792	0	0.0%
22.2%	792	792	0	0.0%
23.5%	792	792	0	0.0%
24.7%	792	792	0	0.0%
25.9%	792	792	0	0.0%
27.2%	792	792	0	0.0%
28.4%	792	792	0	0.0%
29.6%	792	792	0	0.0%
30.9%	792	792	0	0.0%
32.1%	792	792	0	0.0%
33.3%	792	792	0	0.0%
34.6%	792	792	0	0.0%
35.8%	792	792	0	0.0%
37.0%	792	792	0	0.0%
38.3%	792	792	0	0.0%
39.5%	792	792	0	0.0%
40.7%	792	792	0	0.0%
42.0%	792	792	0	0.0%
43.2%	792	792	0	0.0%
44.4%	779	792	13	1.6%
45.7%	777	779	3	0.3%
46.9%	769	777	7	1.0%
48.1%	768	775	7	0.9%
49.4%	753	767	14	1.9%
50.6%	742	764	22	2.9%
51.9%	742	761	19	2.5%
53.1%	727	753	26	3.5%
54.3%	715	741	26	3.6%
55.6%	715	738	24	3.3%
56.8%	711	736	26	3.6%
58.0%	709	724	15	2.1%
59.3%	702	719	17	2.4%
60.5%	702	702	0	0.1%
61.7%	698	690	-8	-1.1%
63.0%	692	690	-2	-0.3%
64.2%	690	687	-3	-0.4%
65.4%	690	682	-7	-1.1%
66.7%	686	672	-14	-2.0%
67.9%	660	665	5	0.8%
69.1%	654	648	-6	-1.0%
70.4%	627	641	13	2.1%
71.6%	623	629	6	1.0%
72.8%	621	625	3	0.5%
74.1%	619	621	2	0.3%
75.3%	616	620	4	0.7%
76.5%	612	609	-3	-0.5%
77.8%	601	607	5	0.9%
79.0%	578	593	16	2.7%
80.2%	564	578	14	2.5%
81.5%	553	564	10	1.9%
82.7%	534	532	-2	-0.4%
84.0%	522	524	2	0.4%
85.2%	514	522	9	1.7%
86.4%	497	497	0	0.0%
87.7%	487	490	3	0.5%
88.9%	479	449	-30	-6.2%
90.1%	441	448	7	1.5%
91.4%	419	444	25	5.9%
92.6%	383	440	57	14.8%
93.8%	373	386	13	3.4%
95.1%	373	381	8	2.2%
96.3%	363	348	-15	-4.1%
97.5%	339	342	3	0.9%
98.8%	323	331	8	2.4%
100.0%	164	90	-74	-45.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	967	967	0	0.0%
1.2%	967	967	0	0.0%
2.5%	967	967	0	0.0%
3.7%	967	967	0	0.0%
4.9%	967	967	0	0.0%
6.2%	967	967	0	0.0%
7.4%	960	960	0	0.0%
8.6%	942	942	-1	-0.1%
9.9%	940	940	0	0.0%
11.1%	883	883	0	0.0%
12.3%	878	878	0	0.0%
13.6%	872	872	0	0.0%
14.8%	859	866	7	0.9%
16.0%	853	853	-1	-0.1%
17.3%	840	839	-1	-0.1%
18.5%	824	824	0	0.0%
19.8%	824	824	0	0.0%
21.0%	821	821	0	0.0%
22.2%	788	792	4	0.5%
23.5%	779	788	10	1.3%
24.7%	775	770	-5	-0.6%
25.9%	772	770	-1	-0.2%
27.2%	766	765	-1	-0.1%
28.4%	766	763	-3	-0.3%
29.6%	765	762	-3	-0.4%
30.9%	765	754	-12	-1.5%
32.1%	755	750	-4	-0.6%
33.3%	751	749	-2	-0.3%
34.6%	751	742	-9	-1.2%
35.8%	749	741	-8	-1.1%
37.0%	748	740	-8	-1.1%
38.3%	748	739	-9	-1.3%
39.5%	748	738	-10	-1.3%
40.7%	747	738	-9	-1.2%
42.0%	744	738	-7	-0.9%
43.2%	736	737	1	0.1%
44.4%	736	729	-6	-0.9%
45.7%	734	725	-9	-1.3%
46.9%	729	717	-12	-1.7%
48.1%	719	709	-9	-1.3%
49.4%	709	707	-2	-0.3%
50.6%	707	707	0	0.0%
51.9%	703	689	-14	-2.0%
53.1%	702	689	-13	-1.8%
54.3%	701	688	-13	-1.8%
55.6%	688	678	-10	-1.5%
56.8%	686	676	-10	-1.4%
58.0%	664	655	-9	-1.4%
59.3%	653	652	0	0.0%
60.5%	649	642	-7	-1.1%
61.7%	642	639	-3	-0.5%
63.0%	635	634	-1	-0.2%
64.2%	626	633	7	1.1%
65.4%	624	628	4	0.7%
66.7%	618	618	0	0.0%
67.9%	612	617	5	0.9%
69.1%	608	614	6	1.0%
70.4%	603	613	10	1.6%
71.6%	599	601	2	0.3%
72.8%	596	598	2	0.4%
74.1%	593	578	-15	-2.5%
75.3%	577	575	-3	-0.4%
76.5%	577	574	-3	-0.5%
77.8%	575	551	-24	-4.1%
79.0%	555	544	-11	-2.0%
80.2%	520	540	20	3.9%
81.5%	514	526	12	2.4%
82.7%	499	519	20	4.0%
84.0%	477	501	23	4.9%
85.2%	463	499	36	7.8%
86.4%	462	484	22	4.7%
87.7%	461	461	0	0.0%
88.9%	458	452	-6	-1.4%
90.1%	441	430	-11	-2.6%
91.4%	401	422	21	5.3%
92.6%	376	372	-4	-1.0%
93.8%	369	367	-2	-0.5%
95.1%	360	358	-2	-0.6%
96.3%	354	335	-20	-5.5%
97.5%	318	321	3	0.9%
98.8%	302	310	8	2.6%
100.0%	161	90	-71	-44.1%

Table SW-24-b
Folsom Lake, End of Month Storage
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	885	885	0	0.0%
1.2%	880	880	0	0.0%
2.5%	872	872	0	0.0%
3.7%	872	872	0	0.0%
4.9%	870	871	1	0.1%
6.2%	868	870	2	0.2%
7.4%	867	867	0	0.0%
8.6%	848	860	12	1.5%
9.9%	826	847	20	2.4%
11.1%	792	792	0	0.0%
12.3%	788	788	0	0.0%
13.6%	782	782	0	0.0%
14.8%	765	764	-1	-0.2%
16.0%	763	761	-1	-0.2%
17.3%	743	751	8	1.1%
18.5%	738	739	1	0.2%
19.8%	736	738	1	0.2%
21.0%	734	736	2	0.3%
22.2%	724	705	-19	-2.6%
23.5%	723	700	-23	-3.2%
24.7%	721	690	-31	-4.3%
25.9%	707	689	-18	-2.5%
27.2%	704	688	-16	-2.2%
28.4%	703	686	-17	-2.5%
29.6%	702	678	-23	-3.3%
30.9%	700	677	-23	-3.4%
32.1%	700	671	-30	-4.2%
33.3%	700	667	-33	-4.7%
34.6%	698	665	-33	-4.7%
35.8%	697	665	-32	-4.6%
37.0%	684	664	-21	-3.1%
38.3%	674	663	-11	-1.7%
39.5%	668	662	-6	-0.9%
40.7%	665	658	-7	-1.0%
42.0%	662	652	-9	-1.4%
43.2%	660	647	-13	-1.9%
44.4%	657	642	-15	-2.2%
45.7%	655	640	-15	-2.3%
46.9%	654	638	-16	-2.4%
48.1%	650	624	-26	-3.9%
49.4%	647	622	-25	-3.9%
50.6%	637	613	-24	-3.8%
51.9%	633	603	-31	-4.9%
53.1%	617	602	-15	-2.4%
54.3%	609	600	-10	-1.6%
55.6%	606	595	-10	-1.7%
56.8%	597	591	-6	-1.1%
58.0%	584	580	-5	-0.8%
59.3%	575	576	1	0.2%
60.5%	573	572	0	-0.1%
61.7%	569	558	-12	-2.0%
63.0%	566	552	-14	-2.5%
64.2%	554	544	-10	-1.7%
65.4%	552	525	-27	-5.0%
66.7%	540	520	-21	-3.8%
67.9%	527	519	-8	-1.5%
69.1%	525	518	-7	-1.3%
70.4%	506	517	11	2.1%
71.6%	506	513	8	1.5%
72.8%	506	511	6	1.1%
74.1%	488	500	12	2.4%
75.3%	479	494	15	3.2%
76.5%	473	460	-14	-2.9%
77.8%	467	456	-10	-2.2%
79.0%	465	446	-18	-4.0%
80.2%	437	442	5	1.2%
81.5%	425	433	8	2.0%
82.7%	410	426	17	4.1%
84.0%	406	425	19	4.6%
85.2%	400	407	7	1.6%
86.4%	391	405	14	3.6%
87.7%	383	405	21	5.6%
88.9%	376	388	13	3.3%
90.1%	375	381	5	1.5%
91.4%	369	365	-3	-0.9%
92.6%	366	365	-1	-0.4%
93.8%	355	342	-13	-3.6%
95.1%	350	313	-38	-10.7%
96.3%	320	309	-11	-3.3%
97.5%	307	304	-3	-0.9%
98.8%	300	275	-25	-8.2%
100.0%	90	90	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	783	756	-27	-3.5%
1.2%	782	743	-39	-4.9%
2.5%	769	740	-29	-3.8%
3.7%	766	735	-32	-4.1%
4.9%	728	729	1	0.1%
6.2%	724	726	2	0.2%
7.4%	687	683	-5	-0.7%
8.6%	676	654	-21	-3.1%
9.9%	640	649	9	1.4%
11.1%	635	628	-7	-1.1%
12.3%	634	608	-26	-4.0%
13.6%	629	602	-27	-4.3%
14.8%	608	597	-11	-1.8%
16.0%	592	592	0	0.0%
17.3%	589	589	0	0.0%
18.5%	587	589	1	0.2%
19.8%	586	585	-1	-0.1%
21.0%	567	575	8	1.5%
22.2%	532	567	35	6.6%
23.5%	531	567	36	6.8%
24.7%	530	558	29	5.4%
25.9%	530	547	17	3.2%
27.2%	528	535	7	1.4%
28.4%	523	529	7	1.3%
29.6%	521	526	5	0.9%
30.9%	508	524	16	3.1%
32.1%	504	523	19	3.8%
33.3%	492	523	31	6.2%
34.6%	490	519	29	5.9%
35.8%	487	518	31	6.3%
37.0%	481	515	34	7.2%
38.3%	477	512	34	7.2%
39.5%	477	504	28	5.8%
40.7%	472	503	31	6.7%
42.0%	469	503	34	7.3%
43.2%	467	501	35	7.4%
44.4%	463	495	32	7.0%
45.7%	462	488	25	5.4%
46.9%	456	484	28	6.1%
48.1%	453	482	28	6.2%
49.4%	446	476	30	6.8%
50.6%	445	475	29	6.5%
51.9%	434	470	36	8.3%
53.1%	431	470	38	8.9%
54.3%	425	466	41	9.7%
55.6%	416	458	43	10.3%
56.8%	414	452	39	9.4%
58.0%	412	451	39	9.5%
59.3%	410	445	35	8.6%
60.5%	400	444	44	11.0%
61.7%	398	436	38	9.6%
63.0%	383	434	51	13.4%
64.2%	382	425	43	11.3%
65.4%	382	420	38	9.8%
66.7%	371	419	48	12.9%
67.9%	371	415	44	11.7%
69.1%	370	410	39	10.6%
70.4%	362	402	40	11.0%
71.6%	359	394	35	9.8%
72.8%	353	393	40	11.4%
74.1%	346	389	44	12.6%
75.3%	340	388	48	14.2%
76.5%	334	387	53	16.0%
77.8%	331	357	26	7.7%
79.0%	328	355	27	8.2%
80.2%	327	355	27	8.4%
81.5%	323	348	25	7.8%
82.7%	319	344	25	7.8%
84.0%	318	340	22	7.0%
85.2%	309	336	27	8.7%
86.4%	300	333	33	10.9%
87.7%	299	330	31	10.2%
88.9%	281	329	48	17.2%
90.1%	266	316	51	19.0%
91.4%	243	315	72	29.6%
92.6%	240	309	69	28.8%
93.8%	226	294	69	30.5%
95.1%	225	293	69	30.5%
96.3%	187	282	95	50.9%
97.5%	169	188	20	11.6%
98.8%	102	169	67	66.0%
100.0%	90	90	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	724	670	-54	-7.4%
1.2%	719	667	-53	-7.3%
2.5%	709	664	-45	-6.4%
3.7%	705	657	-48	-6.8%
4.9%	675	654	-21	-3.1%
6.2%	660	653	-7	-1.1%
7.4%	605	611	6	0.9%
8.6%	583	577	-6	-1.1%
9.9%	574	573	-1	-0.1%
11.1%	571	558	-13	-2.2%
12.3%	563	551	-12	-2.2%
13.6%	562	548	-14	-2.4%
14.8%	540	546	7	1.2%
16.0%	539	540	1	0.2%
17.3%	531	535	4	0.7%
18.5%	530	532	2	0.4%
19.8%	522	531	9	1.7%
21.0%	516	526	10	1.9%
22.2%	515	524	9	1.8%
23.5%	510	522	12	2.4%
24.7%	496	515	19	3.8%
25.9%	491	493	3	0.5%
27.2%	490	493	3	0.6%
28.4%	490	488	-2	-0.4%
29.6%	479	484	6	1.2%
30.9%	478	484	7	1.4%
32.1%	475	481	7	1.4%
33.3%	474	479	5	1.0%
34.6%	468	478	11	2.3%
35.8%	466	478	12	2.6%
37.0%	460	473	13	2.9%
38.3%	459	472	13	2.8%
39.5%	453	467	14	3.2%
40.7%	446	461	14	3.2%
42.0%	446	460	14	3.2%
43.2%	440	452	12	2.8%
44.4%	437	452	14	3.3%
45.7%	428	450	22	5.1%
46.9%	423	448	25	5.8%
48.1%	423	447	24	5.6%
49.4%	418	447	29	6.8%
50.6%	412	441	28	6.8%
51.9%	409	439	30	7.2%
53.1%	406	439	33	8.0%
54.3%	397	434	37	9.3%
55.6%	396	419	23	5.8%
56.8%	392	418	26	6.6%
58.0%	388	417	30	7.7%
59.3%	387	416	29	7.4%
60.5%	378	416	38	9.9%
61.7%	377	414	37	9.9%
63.0%	375	412	38	10.1%
64.2%	370	407	37	10.1%
65.4%	369	406	37	10.0%
66.7%	365	406	41	11.3%
67.9%	364	388	24	6.5%
69.1%	354	387	34	9.5%
70.4%	353	385	32	9.1%
71.6%	351	384	33	9.4%
72.8%	329	372	43	13.1%
74.1%	312	353	40	12.9%
75.3%	311	348	37	12.0%
76.5%	308	341	33	10.7%
77.8%	308	338	30	9.6%
79.0%	300	337	37	12.4%
80.2%	293	330	37	12.5%
81.5%	292	329	37	12.5%
82.7%	282	316	34	12.2%
84.0%	281	301	20	7.0%
85.2%	281	300	19	6.8%
86.4%	270	296	26	9.6%
87.7%	265	291	26	9.8%
88.9%	248	285	37	14.7%
90.1%	239	285	46	19.4%
91.4%	212	284	72	34.0%
92.6%	207	280	73	35.1%
93.8%	199	277	78	39.1%
95.1%	187	268	81	43.4%
96.3%	155	266	111	72.1%
97.5%	90	155	65	72.3%
98.8%	90	130	40	44.9%
100.0%	90	90	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Storage (TAF)	WSIP 2070 With Project End of Month Storage (TAF)	Absolute Difference (TAF)	Relative Difference (%)
0.0%	638	611	-27	-4.2%
1.2%	614	611	-3	-0.5%
2.5%	600	603	3	0.4%
3.7%	592	600	8	1.4%
4.9%	592	597	5	0.8%
6.2%	566	579	13	2.3%
7.4%	551	564	14	2.5%
8.6%	544	546	2	0.4%
9.9%	534	526	-8	-1.5%
11.1%	518	519	1	0.3%
12.3%	513	507	-6	-1.2%
13.6%	512	497	-15	-2.9%
14.8%	493	494	1	0.2%
16.0%	491	490	-1	-0.1%
17.3%	484	484	0	0.0%
18.5%	482	480	-2	-0.5%
19.8%	479	469	-9	-2.0%
21.0%	475	468	-7	-1.5%
22.2%	459	466	7	1.5%
23.5%	454	466	12	2.7%
24.7%	451	465	14	3.1%
25.9%	450	460	10	2.2%
27.2%	447	458	11	2.4%
28.4%	444	453	10	2.2%
29.6%	439	453	13	3.1%
30.9%	435	450	15	3.4%
32.1%	431	443	12	2.8%
33.3%	428	441	13	3.0%
34.6%	425	430	6	1.3%
35.8%	424	430	5	1.3%
37.0%	421	429	8	1.9%
38.3%	420	428	9	2.1%
39.5%	414	425	11	2.7%
40.7%	404	424	20	5.0%
42.0%	401	422	21	5.3%
43.2%	398	417	19	4.7%
44.4%	396	416	19	4.9%
45.7%	396	411	15	3.9%
46.9%	395	406	11	2.9%
48.1%	387	405	18	4.5%
49.4%	383	403	20	5.1%
50.6%	380	401	21	5.6%
51.9%	379	399	20	5.2%
53.1%	378	398	19	5.1%
54.3%	374	397	23	6.2%
55.6%	371	395	23	6.3%
56.8%	369	392	23	6.2%
58.0%	364	382	17	4.7%
59.3%	357	380	23	6.5%
60.5%	351	379	29	8.2%
61.7%	350	378	28	8.0%
63.0%	342	371	28	8.3%
64.2%	342	360	18	5.3%
65.4%	333	357	24	7.3%
66.7%	330	356	26	7.8%
67.9%	307	350	43	14.1%
69.1%	302	346	43	14.4%
70.4%	300	345	45	14.9%
71.6%	297	337	41	13.7%
72.8%	296	335	39	13.3%
74.1%	295	335	40	13.6%
75.3%	294	330	36	12.2%
76.5%	292	326	34	11.6%
77.8%	289	313	24	8.2%
79.0%	289	308	19	6.6%
80.2%	288	307	19	6.5%
81.5%	287	302	15	5.2%
82.7%	285	297	12	4.0%
84.0%	283	296	13	4.8%
85.2%	277	291	15	5.3%
86.4%	267	283	17	6.2%
87.7%	250	277	27	10.9%
88.9%	245	277	32	13.2%
90.1%	215	271	56	26.3%
91.4%	210	266	56	26.9%
92.6%	190	256	66	34.5%
93.8%	169	254	85	50.1%
95.1%	157	252	96	61.1%
96.3%	116	175	59	50.5%
97.5%	109	172	63	57.2%
98.8%	90	100	10	10.6%
100.0%	90	90	0	0.0%

Figure SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

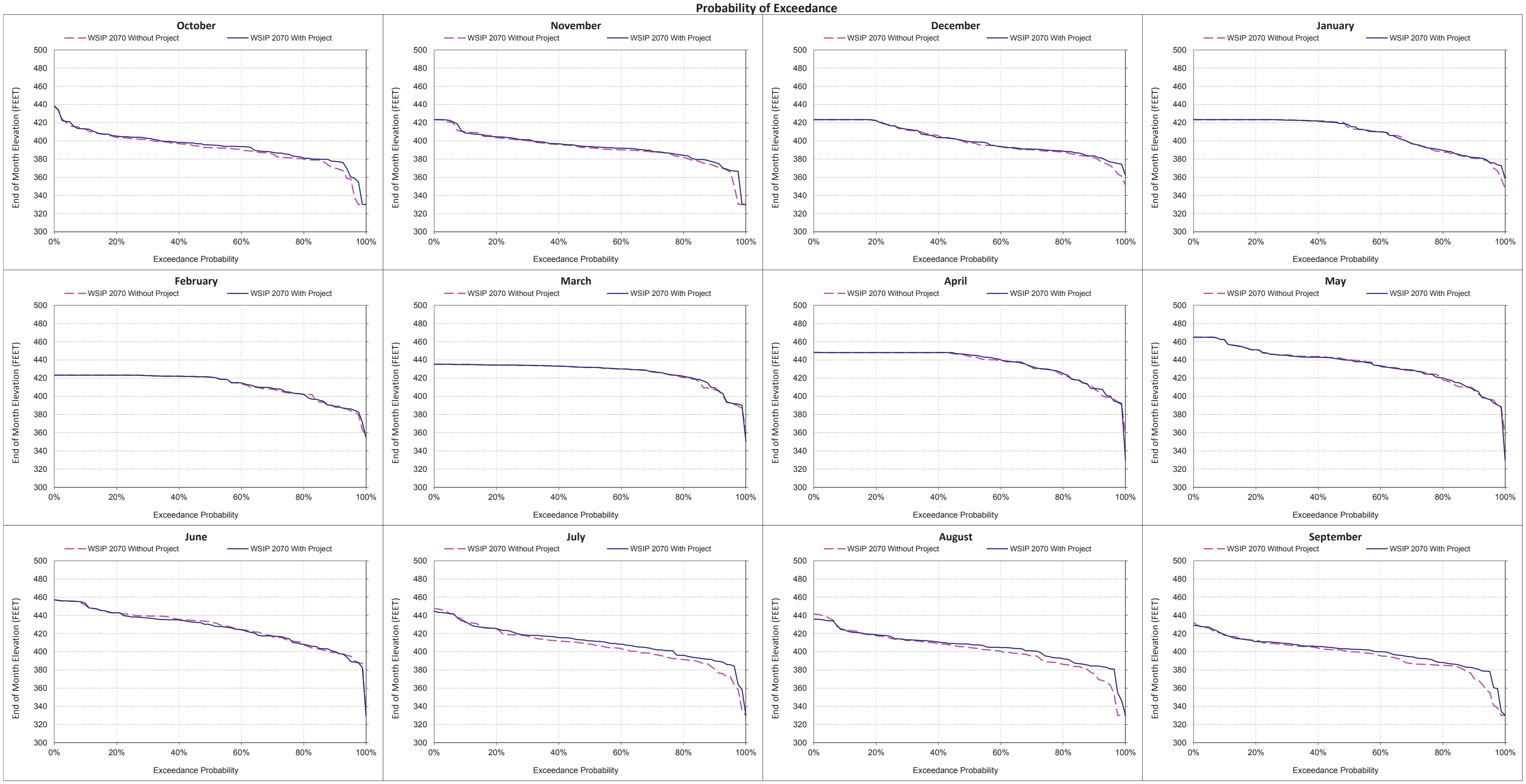


Table SW-25-b

Folsom Lake, End of Month Elevation
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	439	438	-1	-0.2%
1.2%	434	434	0	-0.1%
2.5%	424	422	-2	-0.4%
3.7%	421	421	1	0.2%
4.9%	417	421	4	1.0%
6.2%	416	416	0	0.1%
7.4%	415	414	-2	-0.4%
8.6%	414	413	0	-0.1%
9.9%	413	413	0	0.0%
11.1%	410	413	2	0.6%
12.3%	410	411	1	0.3%
13.6%	408	409	1	0.2%
14.8%	408	408	0	0.0%
16.0%	407	408	0	0.1%
17.3%	406	407	1	0.3%
18.5%	405	406	0	0.1%
19.8%	404	405	1	0.3%
21.0%	403	405	1	0.4%
22.2%	403	405	1	0.3%
23.5%	403	405	2	0.4%
24.7%	403	404	2	0.4%
25.9%	402	404	1	0.4%
27.2%	402	404	2	0.5%
28.4%	402	404	2	0.5%
29.6%	402	403	1	0.3%
30.9%	401	403	2	0.5%
32.1%	400	401	2	0.4%
33.3%	399	401	2	0.4%
34.6%	399	400	1	0.1%
35.8%	399	400	1	0.1%
37.0%	398	399	2	0.4%
38.3%	397	399	2	0.4%
39.5%	397	398	1	0.3%
40.7%	397	398	2	0.4%
42.0%	396	398	1	0.4%
43.2%	396	398	2	0.4%
44.4%	395	398	3	0.6%
45.7%	394	397	3	0.6%
46.9%	394	397	2	0.6%
48.1%	393	396	3	0.8%
49.4%	393	396	3	0.7%
50.6%	392	396	3	0.8%
51.9%	392	395	3	0.7%
53.1%	392	395	3	0.7%
54.3%	392	394	2	0.5%
55.6%	392	394	2	0.5%
56.8%	392	394	2	0.6%
58.0%	391	394	3	0.7%
59.3%	391	394	3	0.8%
60.5%	389	394	4	1.1%
61.7%	389	393	4	1.1%
63.0%	389	393	4	1.0%
64.2%	389	390	1	0.3%
65.4%	387	389	1	0.4%
66.7%	387	389	2	0.4%
67.9%	387	388	1	0.4%
69.1%	386	388	2	0.4%
70.4%	385	387	2	0.5%
71.6%	382	387	5	1.2%
72.8%	382	387	5	1.2%
74.1%	382	385	4	1.0%
75.3%	381	385	4	1.0%
76.5%	381	383	2	0.5%
77.8%	381	383	2	0.6%
79.0%	381	382	2	0.5%
80.2%	380	381	1	0.3%
81.5%	379	381	1	0.4%
82.7%	379	380	1	0.3%
84.0%	379	380	1	0.3%
85.2%	379	380	1	0.3%
86.4%	377	380	3	0.7%
87.7%	374	380	6	1.5%
88.9%	371	378	7	1.9%
90.1%	370	377	7	2.0%
91.4%	369	377	8	2.2%
92.6%	367	376	9	2.5%
93.8%	359	370	11	3.1%
95.1%	358	360	2	0.6%
96.3%	338	359	21	6.2%
97.5%	330	355	25	7.4%
98.8%	330	330	0	0.0%
100.0%	330	330	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.1%
3.7%	421	423	2	0.4%
4.9%	421	422	2	0.4%
6.2%	420	421	1	0.2%
7.4%	412	419	7	1.7%
8.6%	411	412	1	0.3%
9.9%	410	409	-2	-0.4%
11.1%	410	408	-1	-0.3%
12.3%	409	408	-2	-0.4%
13.6%	409	407	-2	-0.5%
14.8%	409	407	-2	-0.4%
16.0%	406	405	-1	-0.3%
17.3%	406	405	-1	-0.2%
18.5%	406	405	-1	-0.2%
19.8%	404	405	1	0.3%
21.0%	403	404	1	0.2%
22.2%	403	404	1	0.3%
23.5%	402	404	1	0.3%
24.7%	402	403	2	0.4%
25.9%	402	403	1	0.3%
27.2%	401	402	1	0.2%
28.4%	401	401	1	0.2%
29.6%	400	401	1	0.2%
30.9%	400	401	1	0.3%
32.1%	398	399	1	0.2%
33.3%	398	399	1	0.2%
34.6%	398	399	1	0.3%
35.8%	397	398	1	0.3%
37.0%	397	397	0	0.1%
38.3%	396	397	1	0.2%
39.5%	396	397	1	0.2%
40.7%	396	397	1	0.1%
42.0%	395	396	1	0.1%
43.2%	395	396	1	0.1%
44.4%	395	396	1	0.3%
45.7%	394	395	1	0.1%
46.9%	393	394	1	0.3%
48.1%	393	394	1	0.3%
49.4%	393	394	1	0.3%
50.6%	392	394	2	0.4%
51.9%	392	393	1	0.3%
53.1%	392	393	2	0.4%
54.3%	391	393	2	0.5%
55.6%	391	393	2	0.5%
56.8%	390	392	2	0.5%
58.0%	390	392	2	0.4%
59.3%	390	392	2	0.5%
60.5%	390	392	2	0.4%
61.7%	390	392	2	0.4%
63.0%	390	392	2	0.5%
64.2%	390	392	2	0.5%
65.4%	389	391	1	0.3%
66.7%	389	390	1	0.4%
67.9%	389	390	1	0.3%
69.1%	388	390	1	0.4%
70.4%	388	388	0	0.1%
71.6%	388	388	1	0.1%
72.8%	387	388	0	0.1%
74.1%	387	387	0	0.0%
75.3%	386	387	0	0.1%
76.5%	385	386	2	0.4%
77.8%	383	385	2	0.6%
79.0%	383	385	2	0.4%
80.2%	382	384	2	0.6%
81.5%	380	384	3	0.8%
82.7%	379	381	2	0.5%
84.0%	379	380	1	0.3%
85.2%	377	380	2	0.6%
86.4%	375	379	4	1.1%
87.7%	375	379	3	0.9%
88.9%	374	378	4	1.0%
90.1%	372	376	4	1.1%
91.4%	371	375	4	1.1%
92.6%	370	370	0	0.1%
93.8%	368	369	1	0.2%
95.1%	365	367	2	0.5%
96.3%	350	367	17	4.8%
97.5%	330	367	36	11.0%
98.8%	330	330	0	0.1%
100.0%	330	330	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	422	422	0	0.0%
21.0%	422	421	-2	-0.4%
22.2%	420	419	0	-0.1%
23.5%	418	418	0	0.0%
24.7%	418	417	-1	-0.2%
25.9%	417	416	0	0.0%
27.2%	414	415	1	0.2%
28.4%	414	414	0	0.1%
29.6%	412	413	1	0.2%
30.9%	411	412	1	0.3%
32.1%	411	412	0	0.1%
33.3%	410	411	1	0.3%
34.6%	410	407	-2	-0.6%
35.8%	408	407	-1	-0.3%
37.0%	408	406	-2	-0.4%
38.3%	407	405	-1	-0.4%
39.5%	406	404	-3	-0.6%
40.7%	404	403	-1	-0.2%
42.0%	404	403	-1	-0.2%
43.2%	403	403	-1	-0.1%
44.4%	403	402	0	0.0%
45.7%	402	402	0	0.0%
46.9%	402	401	-1	-0.1%
48.1%	399	400	1	0.4%
49.4%	398	400	2	0.4%
50.6%	398	399	1	0.3%
51.9%	397	399	2	0.4%
53.1%	395	399	3	0.8%
54.3%	395	398	3	0.8%
55.6%	395	398	3	0.7%
56.8%	395	395	0	0.0%
58.0%	395	395	0	0.0%
59.3%	394	394	-1	-0.2%
60.5%	394	393	0	0.0%
61.7%	393	393	0	-0.1%
63.0%	393	393	0	0.0%
64.2%	392	393	1	0.2%
65.4%	391	392	1	0.2%
66.7%	391	391	1	0.2%
67.9%	390	391	1	0.2%
69.1%	390	391	1	0.2%
70.4%	390	391	1	0.1%
71.6%	390	391	1	0.2%
72.8%	389	391	1	0.4%
74.1%	389	390	1	0.3%
75.3%	389	390	1	0.3%
76.5%	389	389	1	0.2%
77.8%	388	389	1	0.2%
79.0%	388	389	1	0.3%
80.2%	388	389	1	0.2%
81.5%	387	388	1	0.4%
82.7%	386	388	2	0.6%
84.0%	385	387	2	0.5%
85.2%	384	387	3	0.7%
86.4%	384	386	2	0.5%
87.7%	384	384	0	0.0%
88.9%	382	384	2	0.4%
90.1%	382	383	2	0.5%
91.4%	379	382	2	0.6%
92.6%	376	381	5	1.4%
93.8%	375	379	4	0.9%
95.1%	373	377	4	1.1%
96.3%	370	376	6	1.6%
97.5%	364	375	12	3.2%
98.8%	361	374	13	3.7%
100.0%	351	362	11	3.1%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	423	423	0	0.0%
21.0%	423	423	0	0.0%
22.2%	423	423	0	0.0%
23.5%	423	423	0	0.0%
24.7%	423	423	0	0.0%
25.9%	423	423	0	0.0%
27.2%	423	423	0	0.0%
28.4%	423	423	0	0.0%
29.6%	423	423	0	0.0%
30.9%	423	423	0	0.0%
32.1%	423	423	0	0.0%
33.3%	423	423	0	0.0%
34.6%	423	422	0	-0.1%
35.8%	422	422	0	0.0%
37.0%	422	422	0	-0.1%
38.3%	422	422	0	0.0%
39.5%	422	422	0	0.0%
40.7%	422	421	-1	-0.1%
42.0%	422	421	-1	-0.1%
43.2%	421	421	-1	-0.1%
44.4%	421	420	-1	-0.1%
45.7%	421	420	0	-0.1%
46.9%	420	419	-1	-0.3%
48.1%	420	419	-1	-0.3%
49.4%	416	418	3	0.7%
50.6%	413	416	2	0.6%
51.9%	413	416	3	0.6%
53.1%	413	413	0	0.0%
54.3%	413	413	0	0.0%
55.6%	412	411	-1	-0.2%
56.8%	411	410	-1	-0.1%
58.0%	411	410	0	-0.1%
59.3%	410	410	0	0.0%
60.5%	410	410	0	0.0%
61.7%	409	409	0	0.0%
63.0%	408	406	-2	-0.6%
64.2%	406	406	0	-0.1%
65.4%	406	403	-2	-0.6%
66.7%	404	402	-2	-0.6%
67.9%	401	401	0	0.0%
69.1%	398	398	0	0.0%
70.4%	397	397	0	-0.1%
71.6%	395	396	0	0.1%
72.8%	394	395	0	0.1%
74.1%	394	393	-1	-0.1%
75.3%	392	392	1	0.2%
76.5%	391	392	1	0.3%
77.8%	389	391	2	0.6%
79.0%	388	390	2	0.5%
80.2%	388	389	2	0.5%
81.5%	388	389	1	0.2%
82.7%	386	388	2	0.5%
84.0%	386	386	0	0.1%
85.2%	384	385	1	0.3%
86.4%	383	384	0	0.1%
87.7%	383	383	0	0.1%
88.9%	381	382	0	0.1%
90.1%	381	382	1	0.3%
91.4%	381	381	1	0.2%
92.6%	379	381	2	0.4%
93.8%	379	380	1	0.3%
95.1%	377	376	-1	-0.2%
96.3%	370	376	6	1.6%
97.5%	367	374	7	1.8%
98.8%	358	373	15	4.2%
100.0%	348	359	11	3.0%

Table SW-25-b
Folsom Lake, End of Month Elevation
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	423	423	0	0.0%
1.2%	423	423	0	0.0%
2.5%	423	423	0	0.0%
3.7%	423	423	0	0.0%
4.9%	423	423	0	0.0%
6.2%	423	423	0	0.0%
7.4%	423	423	0	0.0%
8.6%	423	423	0	0.0%
9.9%	423	423	0	0.0%
11.1%	423	423	0	0.0%
12.3%	423	423	0	0.0%
13.6%	423	423	0	0.0%
14.8%	423	423	0	0.0%
16.0%	423	423	0	0.0%
17.3%	423	423	0	0.0%
18.5%	423	423	0	0.0%
19.8%	423	423	0	0.0%
21.0%	423	423	0	0.0%
22.2%	423	423	0	0.0%
23.5%	423	423	0	0.0%
24.7%	423	423	0	0.0%
25.9%	423	423	0	0.0%
27.2%	423	423	0	0.0%
28.4%	423	423	0	0.0%
29.6%	423	423	0	0.0%
30.9%	423	423	0	0.0%
32.1%	422	422	0	0.0%
33.3%	422	422	0	0.0%
34.6%	422	422	0	0.0%
35.8%	422	422	0	0.0%
37.0%	422	422	0	0.0%
38.3%	422	422	0	0.0%
39.5%	422	422	0	0.0%
40.7%	422	422	0	0.0%
42.0%	422	422	0	0.0%
43.2%	422	422	0	0.0%
44.4%	422	422	0	0.0%
45.7%	422	422	0	0.0%
46.9%	422	422	0	0.0%
48.1%	421	421	0	0.0%
49.4%	421	421	0	0.0%
50.6%	421	421	0	0.0%
51.9%	420	420	0	0.0%
53.1%	419	419	0	0.0%
54.3%	419	419	0	0.0%
55.6%	418	418	0	0.0%
56.8%	415	415	0	0.0%
58.0%	415	415	0	0.0%
59.3%	414	415	1	0.1%
60.5%	413	414	1	0.3%
61.7%	412	413	0	0.1%
63.0%	410	412	3	0.6%
64.2%	410	411	1	0.3%
65.4%	410	410	0	0.0%
66.7%	408	410	1	0.4%
67.9%	408	410	1	0.3%
69.1%	408	410	1	0.4%
70.4%	408	408	1	0.2%
71.6%	406	408	2	0.5%
72.8%	406	408	2	0.5%
74.1%	404	405	1	0.2%
75.3%	404	405	1	0.3%
76.5%	404	404	0	0.0%
77.8%	403	403	0	0.0%
79.0%	403	403	0	0.0%
80.2%	402	402	0	0.0%
81.5%	402	398	-4	-1.0%
82.7%	402	397	-5	-1.3%
84.0%	394	397	2	0.6%
85.2%	394	396	2	0.5%
86.4%	393	394	1	0.2%
87.7%	390	390	0	0.1%
88.9%	390	390	0	0.1%
90.1%	389	388	-1	-0.2%
91.4%	389	388	-1	-0.2%
92.6%	387	387	0	0.0%
93.8%	386	386	0	-0.1%
95.1%	384	386	2	0.6%
96.3%	383	385	1	0.3%
97.5%	380	383	3	0.8%
98.8%	364	371	8	2.1%
100.0%	356	355	-2	-0.4%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	435	435	0	0.0%
1.2%	435	435	0	0.0%
2.5%	435	435	0	0.0%
3.7%	435	435	0	0.0%
4.9%	435	435	0	0.0%
6.2%	435	435	0	0.0%
7.4%	435	435	0	0.0%
8.6%	435	435	0	0.0%
9.9%	435	435	0	0.0%
11.1%	435	435	0	0.0%
12.3%	435	435	0	0.0%
13.6%	435	435	0	-0.1%
14.8%	435	435	0	0.0%
16.0%	435	435	0	0.0%
17.3%	435	434	0	0.0%
18.5%	434	434	0	0.0%
19.8%	434	434	0	0.0%
21.0%	434	434	0	0.0%
22.2%	434	434	0	0.0%
23.5%	434	434	0	0.0%
24.7%	434	434	0	0.0%
25.9%	434	434	0	0.0%
27.2%	434	434	0	0.0%
28.4%	434	434	0	0.0%
29.6%	434	434	0	0.0%
30.9%	434	434	0	0.0%
32.1%	434	434	0	-0.1%
33.3%	434	434	0	0.0%
34.6%	434	434	0	0.0%
35.8%	434	434	0	0.0%
37.0%	434	433	0	0.0%
38.3%	433	433	0	0.0%
39.5%	433	433	0	0.0%
40.7%	433	433	0	0.0%
42.0%	433	433	0	0.0%
43.2%	433	433	0	-0.1%
44.4%	433	432	0	-0.1%
45.7%	432	432	0	-0.1%
46.9%	432	432	0	0.0%
48.1%	432	432	0	0.0%
49.4%	432	432	0	0.0%
50.6%	432	432	0	0.0%
51.9%	432	432	0	0.0%
53.1%	432	432	0	0.0%
54.3%	431	431	0	0.0%
55.6%	431	431	0	0.0%
56.8%	431	431	0	0.0%
58.0%	430	430	0	0.0%
59.3%	430	430	0	0.0%
60.5%	430	430	0	0.0%
61.7%	430	430	0	0.0%
63.0%	430	430	0	0.0%
64.2%	429	429	0	0.0%
65.4%	429	429	0	0.0%
66.7%	429	429	0	-0.1%
67.9%	429	429	0	0.0%
69.1%	427	427	0	0.0%
70.4%	427	427	1	0.2%
71.6%	426	427	0	0.1%
72.8%	426	426	0	0.0%
74.1%	425	425	0	0.0%
75.3%	424	424	0	0.1%
76.5%	423	424	1	0.1%
77.8%	423	423	0	0.0%
79.0%	421	423	1	0.3%
80.2%	421	422	1	0.3%
81.5%	420	421	1	0.2%
82.7%	419	421	2	0.4%
84.0%	419	419	0	0.0%
85.2%	415	419	3	0.8%
86.4%	409	417	7	1.8%
87.7%	409	415	6	1.4%
88.9%	409	410	1	0.3%
90.1%	407	409	2	0.6%
91.4%	406	405	-1	-0.3%
92.6%	401	403	2	0.4%
93.8%	393	394	1	0.2%
95.1%	392	393	0	0.1%
96.3%	391	392	1	0.2%
97.5%	390	391	2	0.5%
98.8%	387	390	3	0.9%
100.0%	362	350	-12	-3.3%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	448	448	0	0.0%
1.2%	448	448	0	0.0%
2.5%	448	448	0	0.0%
3.7%	448	448	0	0.0%
4.9%	448	448	0	0.0%
6.2%	448	448	0	0.0%
7.4%	448	448	0	0.0%
8.6%	448	448	0	0.0%
9.9%	448	448	0	0.0%
11.1%	448	448	0	0.0%
12.3%	448	448	0	0.0%
13.6%	448	448	0	0.0%
14.8%	448	448	0	0.0%
16.0%	448	448	0	0.0%
17.3%	448	448	0	0.0%
18.5%	448	448	0	0.0%
19.8%	448	448	0	0.0%
21.0%	448	448	0	0.0%
22.2%	448	448	0	0.0%
23.5%	448	448	0	0.0%
24.7%	448	448	0	0.0%
25.9%	448	448	0	0.0%
27.2%	448	448	0	0.0%
28.4%	448	448	0	0.0%
29.6%	448	448	0	0.0%
30.9%	448	448	0	0.0%
32.1%	448	448	0	0.0%
33.3%	448	448	0	0.0%
34.6%	448	448	0	0.0%
35.8%	448	448	0	0.0%
37.0%	448	448	0	0.0%
38.3%	448	448	0	0.0%
39.5%	448	448	0	0.0%
40.7%	448	448	0	0.0%
42.0%	448	448	0	0.0%
43.2%	448	448	0	0.0%
44.4%	447	448	1	0.3%
45.7%	447	447	0	0.1%
46.9%	446	447	1	0.2%
48.1%	446	446	1	0.1%
49.4%	444	446	1	0.3%
50.6%	443	445	2	0.5%
51.9%	443	445	2	0.4%
53.1%	442	444	2	0.6%
54.3%	441	443	3	0.6%
55.6%	441	443	2	0.5%
56.8%	440	443	2	0.6%
58.0%	440	441	1	0.3%
59.3%	439	441	2	0.4%
60.5%	439	439	0	0.0%
61.7%	439	438	-1	-0.2%
63.0%	438	438	0	0.0%
64.2%	438	438	0	-0.1%
65.4%	438	437	-1	-0.2%
66.7%	438	436	-2	-0.3%
67.9%	435	435	1	0.1%
69.1%	434	433	-1	-0.2%
70.4%	431	432	2	0.4%
71.6%	430	431	1	0.2%
72.8%	430	430	0	0.1%
74.1%	430	430	0	0.1%
75.3%	429	430	1	0.1%
76.5%	429	429	0	-0.1%
77.8%	428	428	1	0.2%
79.0%	425	427	2	0.5%
80.2%	423	425	2	0.4%
81.5%	422	423	1	0.3%
82.7%	419	419	0	-0.1%
84.0%	418	418	0	0.1%
85.2%	417	418	1	0.3%
86.4%	415	415	0	0.0%
87.7%	414	414	0	0.1%
88.9%	412	409	-4	-0.9%
90.1%	408	409	1	0.2%
91.4%	405	408	3	0.8%
92.6%	401	408	7	1.8%
93.8%	399	401	2	0.5%
95.1%	399	400	1	0.3%
96.3%	397	395	-2	-0.6%
97.5%	393	394	0	0.1%
98.8%	391	392	1	0.3%
100.0%	357	330	-27	-7.6%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	465	465	0	0.0%
1.2%	465	465	0	0.0%
2.5%	465	465	0	0.0%
3.7%	465	465	0	0.0%
4.9%	465	465	0	0.0%
6.2%	465	465	0	0.0%
7.4%	464	464	0	0.0%
8.6%	463	463	0	0.0%
9.9%	462	462	0	0.0%
11.1%	457	457	0	0.0%
12.3%	456	456	0	0.0%
13.6%	456	456	0	0.0%
14.8%	455	455	1	0.2%
16.0%	454	454	0	0.0%
17.3%	453	453	0	0.0%
18.5%	451	451	0	0.0%
19.8%	451	451	0	0.0%
21.0%	451	451	0	0.0%
22.2%	448	448	0	0.1%
23.5%	447	448	1	0.2%
24.7%	446	446	0	-0.1%
25.9%	446	446	0	0.0%
27.2%	446	445	0	0.0%
28.4%	446	445	0	-0.1%
29.6%	445	445	0	-0.1%
30.9%	445	444	-1	-0.3%
32.1%	444	444	0	-0.1%
33.3%	444	444	0	0.0%
34.6%	444	443	-1	-0.2%
35.8%	444	443	-1	-0.2%
37.0%	444	443	-1	-0.2%
38.3%	444	443	-1	-0.2%
39.5%	444	443	-1	-0.2%
40.7%	444	443	-1	-0.2%
42.0%	443	443	-1	-0.1%
43.2%	443	443	0	0.0%
44.4%	443	442	-1	-0.1%
45.7%	442	442	-1	-0.2%
46.9%	442	441	-1	-0.3%
48.1%	441	440	-1	-0.2%
49.4%	440	440	0	0.0%
50.6%	440	440	0	0.0%
51.9%	439	438	-1	-0.3%
53.1%	439	438	-1	-0.3%
54.3%	439	438	-1	-0.3%
55.6%	438	437	-1	-0.2%
56.8%	438	437	-1	-0.2%
58.0%	435	434	-1	-0.3%
59.3%	434	434	0	0.0%
60.5%	433	433	-1	-0.2%
61.7%	433	432	0	-0.1%
63.0%	432	432	0	0.0%
64.2%	431	431	1	0.2%
65.4%	430	431	1	0.1%
66.7%	430	430	0	0.0%
67.9%	429	430	1	0.2%
69.1%	428	429	1	0.2%
70.4%	428	429	1	0.3%
71.6%	427	428	0	0.1%
72.8%	427	427	0	0.1%
74.1%	426	425	-2	-0.4%
75.3%	425	424	0	-0.1%
76.5%	425	424	0	-0.1%
77.8%	424	421	-3	-0.7%
79.0%	422	421	-1	-0.3%
80.2%	418	420	3	0.6%
81.5%	417	418	2	0.4%
82.7%	415	417	2	0.6%
84.0%	412	415	3	0.7%
85.2%	410	415	4	1.1%
86.4%	410	413	3	0.7%
87.7%	410	410	0	0.0%
88.9%	410	409	-1	-0.2%
90.1%	408	406	-1	-0.3%
91.4%	403	405	3	0.7%
92.6%	399	399	-1	-0.1%
93.8%	398	398	0	-0.1%
95.1%	397	396	0	-0.1%
96.3%	396	393	-3	-0.8%
97.5%	390	390	0	0.1%
98.8%	387	389	1	0.3%
100.0%	356	330	-26	-7.3%

Table SW-25-b

Folsom Lake, End of Month Elevation

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	457	457	0	0.0%
1.2%	457	457	0	0.0%
2.5%	456	456	0	0.0%
3.7%	456	456	0	0.0%
4.9%	456	456	0	0.0%
6.2%	455	456	0	0.0%
7.4%	455	455	0	0.0%
8.6%	453	455	1	0.3%
9.9%	451	453	2	0.4%
11.1%	448	448	0	0.0%
12.3%	448	448	0	0.0%
13.6%	447	447	0	0.0%
14.8%	445	445	0	0.0%
16.0%	445	445	0	0.0%
17.3%	443	444	1	0.2%
18.5%	443	443	0	0.0%
19.8%	443	443	0	0.0%
21.0%	442	443	0	0.1%
22.2%	441	440	-2	-0.4%
23.5%	441	439	-2	-0.5%
24.7%	441	438	-3	-0.7%
25.9%	440	438	-2	-0.4%
27.2%	440	438	-2	-0.3%
28.4%	439	438	-2	-0.4%
29.6%	439	437	-2	-0.5%
30.9%	439	437	-2	-0.5%
32.1%	439	436	-3	-0.7%
33.3%	439	436	-3	-0.8%
34.6%	439	435	-4	-0.8%
35.8%	439	435	-3	-0.8%
37.0%	438	435	-2	-0.6%
38.3%	437	435	-1	-0.3%
39.5%	436	435	-1	-0.2%
40.7%	435	435	-1	-0.2%
42.0%	435	434	-1	-0.3%
43.2%	435	433	-2	-0.4%
44.4%	434	433	-2	-0.4%
45.7%	434	432	-2	-0.4%
46.9%	434	432	-2	-0.4%
48.1%	434	430	-3	-0.7%
49.4%	433	430	-3	-0.7%
50.6%	432	429	-3	-0.7%
51.9%	432	428	-4	-0.9%
53.1%	430	428	-2	-0.4%
54.3%	429	427	-1	-0.3%
55.6%	428	427	-1	-0.3%
56.8%	427	426	-1	-0.2%
58.0%	425	425	-1	-0.1%
59.3%	424	424	0	0.0%
60.5%	424	424	0	0.0%
61.7%	424	422	-1	-0.3%
63.0%	423	421	-2	-0.4%
64.2%	422	420	-1	-0.3%
65.4%	421	418	-3	-0.8%
66.7%	420	417	-3	-0.6%
67.9%	418	417	-1	-0.2%
69.1%	418	417	-1	-0.2%
70.4%	416	417	1	0.3%
71.6%	416	417	1	0.2%
72.8%	416	416	1	0.2%
74.1%	414	415	1	0.4%
75.3%	412	414	2	0.5%
76.5%	412	410	-2	-0.4%
77.8%	411	410	-1	-0.3%
79.0%	411	408	-2	-0.6%
80.2%	407	408	1	0.2%
81.5%	406	407	1	0.3%
82.7%	404	406	2	0.5%
84.0%	403	406	2	0.6%
85.2%	403	404	1	0.2%
86.4%	402	403	2	0.4%
87.7%	401	403	3	0.7%
88.9%	399	401	2	0.5%
90.1%	399	400	1	0.2%
91.4%	398	398	-1	-0.1%
92.6%	398	398	0	-0.1%
93.8%	396	394	-2	-0.5%
95.1%	395	389	-6	-1.6%
96.3%	390	388	-2	-0.4%
97.5%	388	388	0	-0.1%
98.8%	387	383	-4	-1.1%
100.0%	330	330	0	0.0%

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	447	445	-3	-0.6%
1.2%	447	443	-4	-0.8%
2.5%	446	443	-3	-0.6%
3.7%	446	443	-3	-0.7%
4.9%	442	442	0	0.0%
6.2%	442	442	0	0.0%
7.4%	438	437	0	-0.1%
8.6%	437	434	-3	-0.6%
9.9%	432	433	1	0.3%
11.1%	432	431	-1	-0.2%
12.3%	432	428	-3	-0.7%
13.6%	431	428	-3	-0.8%
14.8%	428	427	-1	-0.3%
16.0%	426	426	0	0.0%
17.3%	426	426	0	0.0%
18.5%	426	426	0	0.0%
19.8%	426	426	0	0.0%
21.0%	423	424	1	0.2%
22.2%	419	423	4	1.0%
23.5%	419	423	4	1.1%
24.7%	419	422	4	0.8%
25.9%	419	421	2	0.5%
27.2%	418	419	1	0.2%
28.4%	418	419	1	0.2%
29.6%	418	418	1	0.1%
30.9%	416	418	2	0.5%
32.1%	416	418	2	0.6%
33.3%	414	418	4	0.9%
34.6%	414	417	4	0.9%
35.8%	413	417	4	0.9%
37.0%	413	417	4	1.0%
38.3%	412	417	4	1.0%
39.5%	412	416	3	0.8%
40.7%	412	415	4	0.9%
42.0%	411	415	4	1.0%
43.2%	411	415	4	1.0%
44.4%	410	414	4	1.0%
45.7%	410	414	3	0.8%
46.9%	410	413	3	0.8%
48.1%	409	413	3	0.9%
49.4%	408	412	4	0.9%
50.6%	408	412	4	0.9%
51.9%	407	411	4	1.1%
53.1%	407	411	5	1.2%
54.3%	406	411	5	1.2%
55.6%	405	410	5	1.3%
56.8%	404	409	5	1.2%
58.0%	404	409	5	1.2%
59.3%	404	408	4	1.1%
60.5%	403	408	5	1.3%
61.7%	402	407	5	1.2%
63.0%	400	407	6	1.6%
64.2%	400	406	5	1.4%
65.4%	400	405	5	1.2%
66.7%	399	405	6	1.6%
67.9%	399	405	6	1.5%
69.1%	398	404	5	1.4%
70.4%	397	403	6	1.5%
71.6%	397	402	5	1.4%
72.8%	396	402	6	1.6%
74.1%	394	401	7	1.8%
75.3%	393	401	8	2.0%
76.5%	392	401	9	2.2%
77.8%	392	396	4	1.1%
79.0%	392	396	4	1.1%
80.2%	391	396	4	1.1%
81.5%	391	395	4	1.1%
82.7%	390	394	4	1.0%
84.0%	390	394	4	0.9%
85.2%	388	393	4	1.1%
86.4%	387	392	5	1.4%
87.7%	387	392	5	1.3%
88.9%	384	392	8	2.1%
90.1%	381	390	9	2.3%
91.4%	376	389	13	3.5%
92.6%	376	388	13	3.4%
93.8%	373	386	13	3.6%
95.1%	372	386	14	3.6%
96.3%	364	384	20	5.6%
97.5%	358	364	6	1.5%
98.8%	335	359	23	6.9%
100.0%	330	330	0	0.0%

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	442	436	-5	-1.2%
1.2%	441	436	-5	-1.2%
2.5%	440	435	-5	-1.1%
3.7%	440	434	-5	-1.2%
4.9%	437	434	-3	-0.6%
6.2%	435	434	-1	-0.2%
7.4%	428	429	1	0.2%
8.6%	425	425	-1	-0.2%
9.9%	424	424	0	0.0%
11.1%	424	422	-2	-0.4%
12.3%	423	421	-2	-0.4%
13.6%	423	421	-2	-0.4%
14.8%	420	421	1	0.2%
16.0%	420	420	0	0.0%
17.3%	419	419	0	0.1%
18.5%	419	419	0	0.1%
19.8%	418	419	1	0.3%
21.0%	417	418	1	0.3%
22.2%	417	418	1	0.3%
23.5%	416	418	1	0.4%
24.7%	415	417	2	0.6%
25.9%	414	414	0	0.1%
27.2%	414	414	0	0.1%
28.4%	414	414	0	-0.1%
29.6%	412	413	1	0.2%
30.9%	412	413	1	0.2%
32.1%	412	413	1	0.2%
33.3%	412	412	1	0.1%
34.6%	411	412	1	0.3%
35.8%	411	412	2	0.4%
37.0%	410	412	2	0.4%
38.3%	410	412	2	0.4%
39.5%	409	411	2	0.4%
40.7%	408	410	2	0.4%
42.0%	408	410	2	0.4%
43.2%	408	409	2	0.4%
44.4%	407	409	2	0.4%
45.7%	406	409	3	0.7%
46.9%	406	409	3	0.7%
48.1%	406	408	3	0.7%
49.4%	405	408	4	0.9%
50.6%	404	408	3	0.9%
51.9%	404	408	4	0.9%
53.1%	403	407	4	1.0%
54.3%	402	407	5	1.1%
55.6%	402	405	3	0.7%
56.8%	402	405	3	0.8%
58.0%	401	405	4	0.9%
59.3%	401	405	4	0.9%
60.5%	400	405	5	1.2%
61.7%	400	404	5	1.2%
63.0%	399	404	5	1.3%
64.2%	398	404	5	1.3%
65.4%	398	403	5	1.3%
66.7%	398	403	6	1.5%
67.9%	397	401	4	1.0%
69.1%	396	401	5	1.4%
70.4%	396	401	5	1.3%
71.6%	395	401	5	1.4%
72.8%	392	399	7	1.8%
74.1%	389	396	7	1.7%
75.3%	389	395	6	1.6%
76.5%	388	394	5	1.4%
77.8%	388	393	5	1.2%
79.0%	387	393	6	1.6%
80.2%	386	392	6	1.6%
81.5%	386	392	6	1.5%
82.7%	384	390	6	1.5%
84.0%	384	387	3	0.9%
85.2%	384	387	3	0.9%
86.4%	382	386	5	1.2%
87.7%	381	386	5	1.3%
88.9%	377	384	7	1.9%
90.1%	375	384	9	2.4%
91.4%	369	384	15	4.0%
92.6%	368	383	15	4.1%
93.8%	367	383	16	4.5%
95.1%	364	381	18	4.9%
96.3%	354	381	26	7.4%
97.5%	330	355	25	7.4%
98.8%	330	346	16	4.9%
100.0%	330	330	0	0.0%

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Elevation (FEET)	WSIP 2070 With Project End of Month Elevation (FEET)	Absolute Difference (FEET)	Relative Difference (%)
0.0%	432	429	-3	-0.8%
1.2%	429	429	0	-0.1%
2.5%	427	428	0	0.1%
3.7%	426	427	1	0.2%
4.9%	426	427	1	0.1%
6.2%	423	425	2	0.4%
7.4%	421	423	2	0.4%
8.6%	420	421	0	0.1%
9.9%	419	418	-1	-0.2%
11.1%	417	417	0	0.0%
12.3%	417	416	-1	-0.2%
13.6%	417	415	-2	-0.4%
14.8%	414	414	0	0.0%
16.0%	414	414	0	0.0%
17.3%	413	413	0	0.0%
18.5%	413	413	0	-0.1%
19.8%	412	411	-1	-0.3%
21.0%	412	411	-1	-0.2%
22.2%	410	411	1	0.2%
23.5%	409	411	2	0.4%
24.7%	409	411	2	0.4%
25.9%	409	410	1	0.3%
27.2%	409	410	1	0.3%
28.4%	408	409	1	0.3%
29.6%	408	409	2	0.4%
30.9%	407	409	2	0.5%
32.1%	407	408	1	0.4%
33.3%	406	408	2	0.4%
34.6%	406	406	1	0.2%
35.8%	406	406	1	0.2%
37.0%	405	406	1	0.2%
38.3%	405	406	1	0.3%
39.5%	404	406	1	0.3%
40.7%	403	406	2	0.6%
42.0%	403	405	3	0.7%
43.2%	402	405	2	0.6%
44.4%	402	405	2	0.6%
45.7%	402	404	2	0.5%
46.9%	402	403	1	0.3%
48.1%	401	403	2	0.5%
49.4%	401	403	3	0.6%
50.6%	400	403	3	0.7%
51.9%	400	403	3	0.7%
53.1%	400	402	3	0.7%
54.3%	399	402	3	0.8%
55.6%	399	402	3	0.9%
56.8%	398	402	4	0.9%
58.0%	397	400	3	0.7%
59.3%	396	400	4	1.0%
60.5%	395	400	5	1.2%
61.7%	395	400	5	1.2%
63.0%	394	398	5	1.2%
64.2%	394	397	3	0.7%
65.4%	392	396	4	1.0%
66.7%	392	396	4	1.1%
67.9%	388	395	7	1.8%
69.1%	387	394	7	1.8%
70.4%	387	394	7	1.9%
71.6%	386	393	7	1.7%
72.8%	386	393	6	1.7%
74.1%	386	393	7	1.7%
75.3%	386	392	6	1.5%
76.5%	386	391	6	1.4%
77.8%	385	389	4	1.0%
79.0%	385	388	3	0.8%
80.2%	385	388	3	0.8%
81.5%	385	387	2	0.6%
82.7%	385	386	2	0.5%
84.0%	384	386	2	0.6%
85.2%	383	386	3	0.7%
86.4%	381	384	3	0.8%
87.7%	378	383	5	1.4%
88.9%	377	383	6	1.6%
90.1%	370	382	12	3.2%
91.4%	369	381	12	3.2%
92.6%	364	379	14	3.9%
93.8%	359	379	20	5.6%
95.1%	355	378	23	6.5%
96.3%	341	360	19	5.7%
97.5%	338	359	21	6.2%
98.8%	330	334	4	1.3%
100.0%	330	330	0	0.0%

Figure SW-26-b
Folsom Lake, End of Month Area
Probability of Exceedance

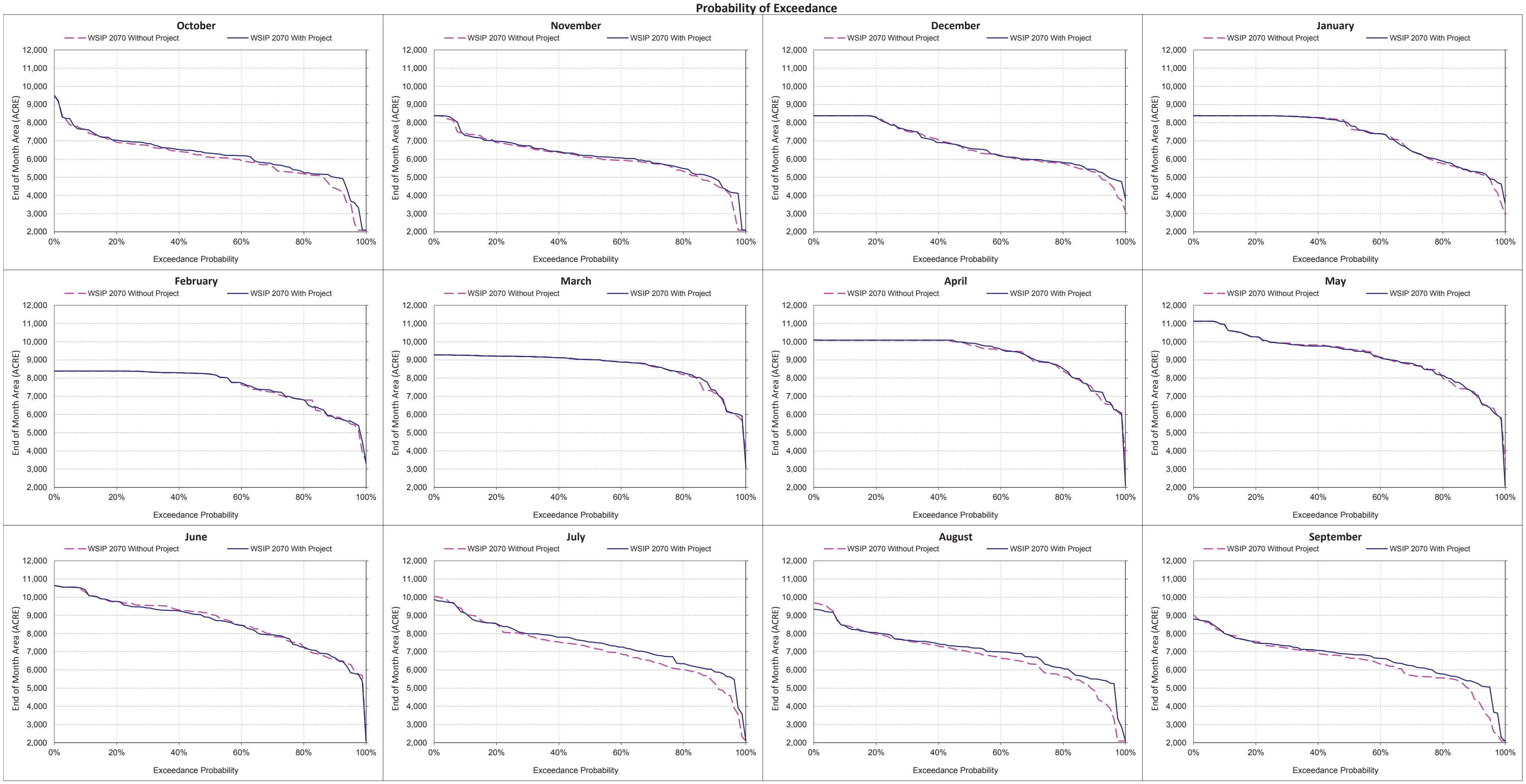


Table SW-26-b
Folsom Lake, End of Month Area
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,510	9,468	-42	-0.4%
1.2%	9,213	9,183	-30	-0.3%
2.5%	8,434	8,312	-121	-1.4%
3.7%	8,180	8,248	68	0.8%
4.9%	7,900	8,223	323	4.1%
6.2%	7,819	7,853	34	0.4%
7.4%	7,800	7,674	-125	-1.6%
8.6%	7,667	7,649	-18	-0.2%
9.9%	7,639	7,634	-5	-0.1%
11.1%	7,420	7,601	181	2.4%
12.3%	7,369	7,462	94	1.3%
13.6%	7,272	7,327	55	0.8%
14.8%	7,228	7,216	-11	-0.2%
16.0%	7,184	7,208	23	0.3%
17.3%	7,096	7,200	104	1.5%
18.5%	7,046	7,063	17	0.2%
19.8%	6,942	7,046	104	1.5%
21.0%	6,904	7,015	111	1.6%
22.2%	6,893	6,991	99	1.4%
23.5%	6,875	6,988	113	1.6%
24.7%	6,833	6,946	113	1.6%
25.9%	6,829	6,940	111	1.6%
27.2%	6,786	6,935	150	2.2%
28.4%	6,777	6,920	143	2.1%
29.6%	6,762	6,865	103	1.5%
30.9%	6,695	6,846	151	2.3%
32.1%	6,621	6,752	131	2.0%
33.3%	6,607	6,720	113	1.7%
34.6%	6,588	6,629	41	0.6%
35.8%	6,577	6,614	37	0.6%
37.0%	6,492	6,606	114	1.8%
38.3%	6,458	6,570	111	1.7%
39.5%	6,431	6,528	97	1.5%
40.7%	6,403	6,517	113	1.8%
42.0%	6,384	6,494	110	1.7%
43.2%	6,366	6,489	122	1.9%
44.4%	6,285	6,473	188	3.0%
45.7%	6,232	6,415	183	2.9%
46.9%	6,232	6,414	183	2.9%
48.1%	6,116	6,342	225	3.7%
49.4%	6,111	6,326	215	3.5%
50.6%	6,089	6,319	230	3.8%
51.9%	6,088	6,284	196	3.2%
53.1%	6,073	6,281	208	3.4%
54.3%	6,069	6,218	149	2.5%
55.6%	6,063	6,208	145	2.4%
56.8%	6,029	6,207	178	2.9%
58.0%	5,987	6,199	213	3.5%
59.3%	5,979	6,194	215	3.6%
60.5%	5,870	6,193	323	5.5%
61.7%	5,867	6,167	300	5.1%
63.0%	5,828	6,121	293	5.0%
64.2%	5,822	5,900	79	1.3%
65.4%	5,723	5,828	105	1.8%
66.7%	5,692	5,815	123	2.2%
67.9%	5,692	5,791	100	1.8%
69.1%	5,653	5,780	127	2.2%
70.4%	5,549	5,698	149	2.7%
71.6%	5,343	5,675	332	6.2%
72.8%	5,332	5,663	331	6.2%
74.1%	5,309	5,584	275	5.2%
75.3%	5,290	5,562	271	5.1%
76.5%	5,274	5,413	139	2.6%
77.8%	5,236	5,402	166	3.2%
79.0%	5,221	5,349	128	2.4%
80.2%	5,177	5,249	72	1.4%
81.5%	5,142	5,244	102	2.0%
82.7%	5,111	5,186	75	1.5%
84.0%	5,108	5,180	72	1.4%
85.2%	5,100	5,172	72	1.4%
86.4%	4,979	5,164	186	3.7%
87.7%	4,727	5,160	433	9.2%
88.9%	4,467	5,027	560	12.5%
90.1%	4,389	4,996	607	13.8%
91.4%	4,298	4,958	660	15.4%
92.6%	4,152	4,922	770	18.6%
93.8%	3,575	4,376	802	22.4%
95.1%	3,552	3,685	133	3.7%
96.3%	2,444	3,596	1,153	47.2%
97.5%	2,091	3,322	1,231	58.9%
98.8%	2,091	2,091	0	0.0%
100.0%	2,091	2,091	0	0.0%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,366	8,385	18	0.2%
3.7%	8,232	8,366	135	1.6%
4.9%	8,191	8,322	131	1.6%
6.2%	8,124	8,191	67	0.8%
7.4%	7,510	8,028	518	6.9%
8.6%	7,428	7,510	81	1.1%
9.9%	7,424	7,298	-127	-1.7%
11.1%	7,358	7,268	-89	-1.2%
12.3%	7,351	7,214	-137	-1.9%
13.6%	7,327	7,186	-141	-1.9%
14.8%	7,298	7,170	-128	-1.8%
16.0%	7,127	7,038	-89	-1.3%
17.3%	7,083	7,022	-61	-0.9%
18.5%	7,079	7,016	-63	-0.9%
19.8%	6,915	6,993	78	1.1%
21.0%	6,895	6,968	73	1.1%
22.2%	6,865	6,960	95	1.4%
23.5%	6,829	6,927	98	1.4%
24.7%	6,787	6,900	113	1.7%
25.9%	6,762	6,846	84	1.2%
27.2%	6,714	6,777	63	0.9%
28.4%	6,690	6,752	62	0.9%
29.6%	6,669	6,733	64	1.0%
30.9%	6,634	6,731	97	1.5%
32.1%	6,534	6,599	65	1.0%
33.3%	6,510	6,579	69	1.1%
34.6%	6,489	6,570	81	1.2%
35.8%	6,435	6,517	82	1.3%
37.0%	6,413	6,444	31	0.5%
38.3%	6,379	6,435	56	0.9%
39.5%	6,379	6,424	46	0.7%
40.7%	6,354	6,395	41	0.6%
42.0%	6,311	6,350	39	0.6%
43.2%	6,293	6,333	39	0.6%
44.4%	6,258	6,332	74	1.2%
45.7%	6,229	6,267	37	0.6%
46.9%	6,129	6,222	93	1.5%
48.1%	6,113	6,199	87	1.4%
49.4%	6,103	6,198	95	1.6%
50.6%	6,072	6,181	110	1.8%
51.9%	6,056	6,144	88	1.5%
53.1%	6,025	6,137	113	1.9%
54.3%	5,974	6,119	145	2.4%
55.6%	5,964	6,114	151	2.5%
56.8%	5,950	6,096	146	2.5%
58.0%	5,943	6,071	128	2.2%
59.3%	5,935	6,070	135	2.3%
60.5%	5,927	6,053	126	2.1%
61.7%	5,921	6,038	117	2.0%
63.0%	5,894	6,032	138	2.3%
64.2%	5,887	6,028	142	2.4%
65.4%	5,872	5,952	80	1.4%
66.7%	5,843	5,946	103	1.8%
67.9%	5,810	5,895	85	1.5%
69.1%	5,790	5,892	101	1.8%
70.4%	5,749	5,776	26	0.5%
71.6%	5,732	5,773	41	0.7%
72.8%	5,725	5,751	27	0.5%
74.1%	5,694	5,682	-12	-0.2%
75.3%	5,632	5,662	30	0.5%
76.5%	5,523	5,634	110	2.0%
77.8%	5,400	5,571	171	3.2%
79.0%	5,393	5,514	122	2.3%
80.2%	5,308	5,474	166	3.1%
81.5%	5,216	5,443	227	4.4%
82.7%	5,097	5,234	137	2.7%
84.0%	5,085	5,159	74	1.5%
85.2%	4,988	5,156	168	3.4%
86.4%	4,841	5,141	300	6.2%
87.7%	4,828	5,083	255	5.3%
88.9%	4,730	5,012	282	6.0%
90.1%	4,591	4,922	331	7.2%
91.4%	4,457	4,808	351	7.9%
92.6%	4,385	4,412	27	0.6%
93.8%	4,241	4,310	69	1.6%
95.1%	4,016	4,173	157	3.9%
96.3%	3,056	4,143	1,087	35.6%
97.5%	2,101	4,113	2,012	95.8%
98.8%	2,091	2,101	10	0.5%
100.0%	2,091	2,091	0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,366	8,366	0	0.0%
19.8%	8,318	8,321	3	0.0%
21.0%	8,304	8,181	-123	-1.5%
22.2%	8,110	8,074	-37	-0.5%
23.5%	7,989	7,989	0	0.0%
24.7%	7,952	7,878	-74	-0.9%
25.9%	7,878	7,875	-3	0.0%
27.2%	7,660	7,735	74	1.0%
28.4%	7,656	7,674	17	0.2%
29.6%	7,532	7,606	73	1.0%
30.9%	7,492	7,575	82	1.1%
32.1%	7,484	7,518	34	0.5%
33.3%	7,412	7,500	88	1.2%
34.6%	7,370	7,189	-181	-2.5%
35.8%	7,249	7,150	-99	-1.4%
37.0%	7,218	7,104	-114	-1.6%
38.3%	7,150	7,043	-107	-1.5%
39.5%	7,104	6,913	-192	-2.7%
40.7%	6,971	6,901	-70	-1.0%
42.0%	6,947	6,901	-45	-0.7%
43.2%	6,901	6,863	-38	-0.6%
44.4%	6,840	6,829	-11	-0.2%
45.7%	6,790	6,804	14	0.2%
46.9%	6,756	6,715	-41	-0.6%
48.1%	6,566	6,672	107	1.6%
49.4%	6,490	6,612	121	1.9%
50.6%	6,488	6,571	83	1.3%
51.9%	6,447	6,557	110	1.7%
53.1%	6,315	6,551	235	3.7%
54.3%	6,311	6,533	222	3.5%
55.6%	6,288	6,490	203	3.2%
56.8%	6,286	6,288	1	0.0%
58.0%	6,279	6,267	-11	-0.2%
59.3%	6,234	6,188	-46	-0.7%
60.5%	6,171	6,164	-7	-0.1%
61.7%	6,143	6,112	-31	-0.5%
63.0%	6,101	6,107	6	0.1%
64.2%	6,049	6,101	52	0.9%
65.4%	5,989	6,060	70	1.2%
66.7%	5,952	6,006	54	0.9%
67.9%	5,947	5,998	51	0.9%
69.1%	5,941	5,991	50	0.8%
70.4%	5,941	5,978	37	0.6%
71.6%	5,922	5,969	47	0.8%
72.8%	5,861	5,963	102	1.7%
74.1%	5,831	5,906	75	1.3%
75.3%	5,819	5,904	85	1.5%
76.5%	5,817	5,869	52	0.9%
77.8%	5,788	5,857	68	1.2%
79.0%	5,769	5,845	76	1.3%
80.2%	5,758	5,807	49	0.9%
81.5%	5,681	5,785	103	1.8%
82.7%	5,602	5,779	177	3.2%
84.0%	5,549	5,692	143	2.6%
85.2%	5,478	5,676	198	3.6%
86.4%	5,446	5,586	140	2.6%
87.7%	5,441	5,446	6	0.1%
88.9%	5,319	5,444	124	2.3%
90.1%	5,301	5,430	129	2.4%
91.4%	5,123	5,302	179	3.5%
92.6%	4,879	5,260	381	7.8%
93.8%	4,823	5,088	265	5.5%
95.1%	4,634	4,954	320	6.9%
96.3%	4,392	4,891	499	11.4%
97.5%	3,882	4,821	939	24.2%
98.8%	3,734	4,764	1,030	27.6%
100.0%	3,098	3,794	696	22.5%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,385	8,385	0	0.0%
19.8%	8,385	8,385	0	0.0%
21.0%	8,385	8,385	0	0.0%
22.2%	8,385	8,385	0	0.0%
23.5%	8,385	8,385	0	0.0%
24.7%	8,385	8,385	0	0.0%
25.9%	8,385	8,385	0	0.0%
27.2%	8,376	8,376	0	0.0%
28.4%	8,366	8,366	0	0.0%
29.6%	8,357	8,357	0	0.0%
30.9%	8,357	8,357	0	0.0%
32.1%	8,357	8,348	-9	-0.1%
33.3%	8,348	8,339	-9	-0.1%
34.6%	8,339	8,320	-18	-0.2%
35.8%	8,320	8,311	-9	-0.1%
37.0%	8,311	8,293	-18	-0.2%
38.3%	8,293	8,283	-9	-0.1%
39.5%	8,283	8,283	0	0.0%
40.7%	8,283	8,237	-46	-0.6%
42.0%	8,278	8,233	-46	-0.6%
43.2%	8,237	8,191	-46	-0.6%
44.4%	8,217	8,173	-44	-0.5%
45.7%	8,191	8,164	-28	-0.3%
46.9%	8,173	8,083	-90	-1.1%
48.1%	8,164	8,076	-88	-1.1%
49.4%	7,814	8,020	206	2.6%
50.6%	7,643	7,814	171	2.2%
51.9%	7,608	7,806	197	2.6%
53.1%	7,603	7,592	-11	-0.1%
54.3%	7,592	7,580	-13	-0.2%
55.6%	7,556	7,492	-65	-0.9%
56.8%	7,463	7,418	-46	-0.6%
58.0%	7,432	7,405	-27	-0.4%
59.3%	7,399	7,399	0	0.0%
60.5%	7,390	7,390	0	0.0%
61.7%	7,334	7,334	0	0.0%
63.0%	7,270	7,095	-175	-2.4%
64.2%	7,095	7,077	-18	-0.3%
65.4%	7,077	6,897	-180	-2.5%
66.7%	6,950	6,765	-186	-2.7%
67.9%	6,693	6,693	0	0.0%
69.1%	6,526	6,526	0	0.0%
70.4%	6,422	6,398	-24	-0.4%
71.6%	6,315	6,346	31	0.5%
72.8%	6,241	6,267	26	0.4%
74.1%	6,193	6,150	-43	-0.7%
75.3%	6,025	6,074	49	0.8%
76.5%	5,953	6,048	95	1.6%
77.8%	5,821	6,000	179	3.1%
79.0%	5,802	5,938	136	2.3%
80.2%	5,739	5,872	132	2.3%
81.5%	5,736	5,806	71	1.2%
82.7%	5,621	5,775	154	2.7%
84.0%	5,603	5,621	17	0.3%
85.2%	5,478	5,559	82	1.5%
86.4%	5,428	5,464	36	0.7%
87.7%	5,397	5,428	32	0.6%
88.9%	5,292	5,327	35	0.7%
90.1%	5,243	5,319	76	1.4%
91.4%	5,234	5,283	49	0.9%
92.6%	5,138	5,258	120	2.3%
93.8%	5,084	5,162	77	1.5%
95.1%	4,950	4,902	-48	-1.0%
96.3%	4,398	4,883	485	11.0%
97.5%	4,156	4,702	546	13.1%
98.8%	3,537	4,639	1,102	31.2%
100.0%	2,943	3,570	627	21.3%

Table SW-26-b
Folsom Lake, End of Month Area
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	8,385	8,385	0	0.0%
1.2%	8,385	8,385	0	0.0%
2.5%	8,385	8,385	0	0.0%
3.7%	8,385	8,385	0	0.0%
4.9%	8,385	8,385	0	0.0%
6.2%	8,385	8,385	0	0.0%
7.4%	8,385	8,385	0	0.0%
8.6%	8,385	8,385	0	0.0%
9.9%	8,385	8,385	0	0.0%
11.1%	8,385	8,385	0	0.0%
12.3%	8,385	8,385	0	0.0%
13.6%	8,385	8,385	0	0.0%
14.8%	8,385	8,385	0	0.0%
16.0%	8,385	8,385	0	0.0%
17.3%	8,385	8,385	0	0.0%
18.5%	8,385	8,385	0	0.0%
19.8%	8,385	8,385	0	0.0%
21.0%	8,385	8,385	0	0.0%
22.2%	8,385	8,385	0	0.0%
23.5%	8,385	8,385	0	0.0%
24.7%	8,376	8,376	0	0.0%
25.9%	8,376	8,376	0	0.0%
27.2%	8,376	8,376	0	0.0%
28.4%	8,366	8,366	0	0.0%
29.6%	8,348	8,348	0	0.0%
30.9%	8,339	8,339	0	0.0%
32.1%	8,320	8,320	0	0.0%
33.3%	8,320	8,320	0	0.0%
34.6%	8,302	8,302	0	0.0%
35.8%	8,302	8,302	0	0.0%
37.0%	8,302	8,302	0	0.0%
38.3%	8,302	8,302	0	0.0%
39.5%	8,293	8,293	0	0.0%
40.7%	8,293	8,293	0	0.0%
42.0%	8,283	8,283	0	0.0%
43.2%	8,274	8,274	0	0.0%
44.4%	8,274	8,274	0	0.0%
45.7%	8,256	8,256	0	0.0%
46.9%	8,256	8,256	0	0.0%
48.1%	8,247	8,247	0	0.0%
49.4%	8,237	8,237	0	0.0%
50.6%	8,201	8,201	0	0.0%
51.9%	8,164	8,164	0	0.0%
53.1%	8,044	8,044	0	0.0%
54.3%	8,035	8,035	0	0.0%
55.6%	8,016	8,016	0	0.0%
56.8%	7,758	7,772	14	0.2%
58.0%	7,758	7,758	0	0.0%
59.3%	7,712	7,758	46	0.6%
60.5%	7,609	7,712	104	1.4%
61.7%	7,570	7,600	30	0.4%
63.0%	7,381	7,570	190	2.6%
64.2%	7,381	7,466	85	1.2%
65.4%	7,371	7,381	9	0.1%
66.7%	7,270	7,381	111	1.5%
67.9%	7,268	7,371	103	1.4%
69.1%	7,242	7,354	112	1.5%
70.4%	7,215	7,270	55	0.8%
71.6%	7,096	7,242	147	2.1%
72.8%	7,056	7,215	159	2.2%
74.1%	6,964	7,009	46	0.7%
75.3%	6,918	6,998	80	1.2%
76.5%	6,911	6,911	0	0.0%
77.8%	6,865	6,865	0	0.0%
79.0%	6,849	6,837	-11	-0.2%
80.2%	6,799	6,791	-8	-0.1%
81.5%	6,791	6,509	-282	-4.2%
82.7%	6,790	6,410	-381	-5.6%
84.0%	6,234	6,407	173	2.8%
85.2%	6,189	6,320	131	2.1%
86.4%	6,168	6,238	70	1.1%
87.7%	5,913	5,946	34	0.6%
88.9%	5,906	5,932	26	0.4%
90.1%	5,854	5,785	-69	-1.2%
91.4%	5,845	5,781	-64	-1.1%
92.6%	5,711	5,707	-4	-0.1%
93.8%	5,654	5,639	-16	-0.3%
95.1%	5,473	5,636	163	3.0%
96.3%	5,430	5,516	86	1.6%
97.5%	5,168	5,397	229	4.4%
98.8%	3,898	4,514	616	15.8%
100.0%	3,421	3,322	-99	-2.9%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,278	9,278	0	0.0%
1.2%	9,278	9,278	0	0.0%
2.5%	9,278	9,278	0	0.0%
3.7%	9,278	9,278	0	0.0%
4.9%	9,278	9,269	-9	-0.1%
6.2%	9,269	9,260	-9	-0.1%
7.4%	9,260	9,260	0	0.0%
8.6%	9,260	9,260	0	0.0%
9.9%	9,260	9,260	0	0.0%
11.1%	9,260	9,251	-9	-0.1%
12.3%	9,251	9,251	0	0.0%
13.6%	9,251	9,232	-18	-0.2%
14.8%	9,232	9,223	-9	-0.1%
16.0%	9,223	9,223	0	0.0%
17.3%	9,223	9,214	-9	-0.1%
18.5%	9,214	9,214	0	0.0%
19.8%	9,214	9,205	-9	-0.1%
21.0%	9,205	9,205	0	0.0%
22.2%	9,205	9,205	0	0.0%
23.5%	9,205	9,205	0	0.0%
24.7%	9,205	9,205	0	0.0%
25.9%	9,205	9,205	0	0.0%
27.2%	9,196	9,196	0	0.0%
28.4%	9,196	9,196	0	0.0%
29.6%	9,187	9,186	0	0.0%
30.9%	9,186	9,186	0	0.0%
32.1%	9,186	9,168	-18	-0.2%
33.3%	9,168	9,168	0	0.0%
34.6%	9,168	9,159	-9	-0.1%
35.8%	9,159	9,149	-9	-0.1%
37.0%	9,149	9,140	-9	-0.1%
38.3%	9,140	9,131	-9	-0.1%
39.5%	9,131	9,122	-9	-0.1%
40.7%	9,122	9,113	-9	-0.1%
42.0%	9,113	9,113	0	0.0%
43.2%	9,113	9,076	-37	-0.4%
44.4%	9,076	9,057	-18	-0.2%
45.7%	9,057	9,030	-28	-0.3%
46.9%	9,030	9,030	0	0.0%
48.1%	9,030	9,029	-1	0.0%
49.4%	9,020	9,024	3	0.0%
50.6%	9,017	9,020	3	0.0%
51.9%	9,011	9,011	0	0.0%
53.1%	9,008	9,008	0	0.0%
54.3%	8,956	8,956	0	0.0%
55.6%	8,947	8,947	0	0.0%
56.8%	8,928	8,928	0	0.0%
58.0%	8,919	8,919	0	0.0%
59.3%	8,891	8,891	0	0.0%
60.5%	8,882	8,882	0	0.0%
61.7%	8,882	8,882	0	0.0%
63.0%	8,855	8,855	0	0.0%
64.2%	8,836	8,836	0	0.0%
65.4%	8,827	8,827	0	0.0%
66.7%	8,827	8,790	-37	-0.4%
67.9%	8,790	8,780	-10	-0.1%
69.1%	8,680	8,689	10	0.1%
70.4%	8,624	8,680	55	0.6%
71.6%	8,597	8,624	28	0.3%
72.8%	8,587	8,597	10	0.1%
74.1%	8,512	8,512	0	0.0%
75.3%	8,424	8,446	22	0.3%
76.5%	8,366	8,404	38	0.5%
77.8%	8,366	8,366	0	0.0%
79.0%	8,237	8,343	106	1.3%
80.2%	8,183	8,273	90	1.1%
81.5%	8,158	8,218	60	0.7%
82.7%	8,059	8,174	116	1.4%
84.0%	8,039	8,037	-3	0.0%
85.2%	7,775	8,028	253	3.3%
86.4%	7,338	7,887	549	7.5%
87.7%	7,333	7,775	441	6.0%
88.9%	7,300	7,378	79	1.1%
90.1%	7,159	7,333	175	2.4%
91.4%	7,113	7,028	-85	-1.2%
92.6%	6,745	6,863	119	1.8%
93.8%	6,148	6,194	46	0.7%
95.1%	6,093	6,120	28	0.5%
96.3%	6,002	6,055	54	0.9%
97.5%	5,884	6,021	137	2.3%
98.8%	5,671	5,921	250	4.4%
100.0%	3,808	3,057	-751	-19.7%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,094	10,094	0	0.0%
1.2%	10,094	10,094	0	0.0%
2.5%	10,084	10,084	0	0.0%
3.7%	10,084	10,084	0	0.0%
4.9%	10,084	10,084	0	0.0%
6.2%	10,084	10,084	0	0.0%
7.4%	10,084	10,084	0	0.0%
8.6%	10,084	10,084	0	0.0%
9.9%	10,084	10,084	0	0.0%
11.1%	10,084	10,084	0	0.0%
12.3%	10,084	10,084	0	0.0%
13.6%	10,084	10,084	0	0.0%
14.8%	10,084	10,084	0	0.0%
16.0%	10,084	10,084	0	0.0%
17.3%	10,084	10,084	0	0.0%
18.5%	10,084	10,084	0	0.0%
19.8%	10,084	10,084	0	0.0%
21.0%	10,084	10,084	0	0.0%
22.2%	10,084	10,084	0	0.0%
23.5%	10,084	10,084	0	0.0%
24.7%	10,084	10,084	0	0.0%
25.9%	10,084	10,084	0	0.0%
27.2%	10,084	10,084	0	0.0%
28.4%	10,084	10,084	0	0.0%
29.6%	10,084	10,084	0	0.0%
30.9%	10,084	10,084	0	0.0%
32.1%	10,084	10,084	0	0.0%
33.3%	10,084	10,084	0	0.0%
34.6%	10,084	10,084	0	0.0%
35.8%	10,084	10,084	0	0.0%
37.0%	10,084	10,084	0	0.0%
38.3%	10,084	10,084	0	0.0%
39.5%	10,084	10,084	0	0.0%
40.7%	10,084	10,084	0	0.0%
42.0%	10,084	10,084	0	0.0%
43.2%	10,083	10,084	1	0.0%
44.4%	10,008	10,083	75	0.7%
45.7%	9,993	10,008	15	0.1%
46.9%	9,949	9,993	44	0.4%
48.1%	9,940	9,980	40	0.4%
49.4%	9,852	9,937	84	0.9%
50.6%	9,787	9,916	129	1.3%
51.9%	9,786	9,898	112	1.1%
53.1%	9,700	9,852	152	1.6%
54.3%	9,628	9,782	155	1.6%
55.6%	9,625	9,765	140	1.5%
56.8%	9,601	9,754	153	1.6%
58.0%	9,594	9,681	87	0.9%
59.3%	9,552	9,653	101	1.1%
60.5%	9,550	9,552	2	0.0%
61.7%	9,527	9,479	-47	-0.5%
63.0%	9,490	9,478	-12	-0.1%
64.2%	9,479	9,461	-18	-0.2%
65.4%	9,475	9,431	-44	-0.5%
66.7%	9,455	9,354	-101	-1.1%
67.9%	9,240	9,287	47	0.5%
69.1%	9,191	9,131	-59	-0.6%
70.4%	8,939	9,062	123	1.4%
71.6%	8,903	8,959	56	0.6%
72.8%	8,885	8,915	31	0.3%
74.1%	8,865	8,884	19	0.2%
75.3%	8,836	8,875	39	0.4%
76.5%	8,803	8,775	-28	-0.3%
77.8%	8,701	8,751	50	0.6%
79.0%	8,484	8,628	144	1.7%
80.2%	8,354	8,484	129	1.5%
81.5%	8,259	8,354	96	1.2%
82.7%	8,084	8,066	-18	-0.2%
84.0%	7,972	7,992	21	0.3%
85.2%	7,892	7,971	79	1.0%
86.4%	7,737	7,737	0	0.0%
87.7%	7,651	7,676	25	0.3%
88.9%	7,570	7,296	-274	-3.6%
90.1%	7,224	7,286	63	0.9%
91.4%	7,023	7,250	228	3.2%
92.6%	6,686	7,217	532	8.0%
93.8%	6,566	6,718	152	2.3%
95.1%	6,562	6,659	96	1.5%
96.3%	6,443	6,265	-178	-2.8%
97.5%	6,152	6,188	36	0.6%
98.8%	5,970	6,064	93	1.6%
100.0%	3,472	2,091	-1,381	-39.8%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	11,124	11,124	0	0.0%
1.2%	11,124	11,124	0	0.0%
2.5%	11,124	11,124	0	0.0%
3.7%	11,124	11,124	0	0.0%
4.9%	11,124	11,124	0	0.0%
6.2%	11,124	11,124	0	0.0%
7.4%	11,080	11,080	0	0.0%
8.6%	10,976	10,973	-4	0.0%
9.9%	10,962	10,962	0	0.0%
11.1%	10,623	10,623	0	0.0%
12.3%	10,593	10,593	0	0.0%
13.6%	10,558	10,558	0	0.0%
14.8%	10,482	10,526	44	0.4%
16.0%	10,449	10,445	-4	0.0%
17.3%	10,367	10,364	-4	0.0%
18.5%	10,275	10,275	0	0.0%
19.8%	10,272	10,272	0	0.0%
21.0%	10,258	10,258	0	0.0%
22.2%	10,063	10,086	22	0.2%
23.5%	10,005	10,063	59	0.6%
24.7%	9,984	9,956	-27	-0.3%
25.9%	9,963	9,954	-9	-0.1%
27.2%	9,929	9,926	-3	0.0%
28.4%	9,929	9,914	-15	-0.2%
29.6%	9,926	9,907	-19	-0.2%
30.9%	9,925	9,856	-70	-0.7%
32.1%	9,862	9,835	-27	-0.3%
33.3%	9,843	9,830	-12	-0.1%
34.6%	9,841	9,789	-52	-0.5%
35.8%	9,826	9,779	-47	-0.5%
37.0%	9,825	9,776	-49	-0.5%
38.3%	9,823	9,766	-56	-0.6%
39.5%	9,822	9,765	-57	-0.6%
40.7%	9,818	9,764	-54	-0.6%
42.0%	9,800	9,761	-39	-0.4%
43.2%	9,754	9,760	6	0.1%
44.4%	9,749	9,711	-38	-0.4%
45.7%	9,742	9,688	-55	-0.6%
46.9%	9,713	9,641	-72	-0.7%
48.1%	9,648	9,592	-56	-0.6%
49.4%	9,592	9,581	-11	-0.1%
50.6%	9,577	9,578	1	0.0%
51.9%	9,558	9,474	-84	-0.9%
53.1%	9,548	9,472	-76	-0.8%
54.3%	9,545	9,468	-77	-0.8%
55.6%	9,464	9,404	-61	-0.6%
56.8%	9,454	9,392	-62	-0.7%
58.0%	9,274	9,191	-83	-0.9%
59.3%	9,173	9,172	-1	0.0%
60.5%	9,139	9,072	-66	-0.7%
61.7%	9,076	9,048	-27	-0.3%
63.0%	9,011	9,002	-10	-0.1%
64.2%	8,929	8,995	66	0.7%
65.4%	8,907	8,947	40	0.5%
66.7%	8,852	8,852	0	0.0%
67.9%	8,800	8,848	48	0.5%
69.1%	8,765	8,818	53	0.6%
70.4%	8,716	8,808	91	1.0%
71.6%	8,681	8,698	17	0.2%
72.8%	8,653	8,672	19	0.2%
74.1%	8,621	8,482	-139	-1.6%
75.3%	8,480	8,457	-23	-0.3%
76.5%	8,474	8,446	-27	-0.3%
77.8%	8,457	8,238	-219	-2.6%
79.0%	8,279	8,174	-104	-1.3%
80.2%	7,953	8,140	187	2.4%
81.5%	7,896	8,008	113	1.4%
82.7%	7,763	7,945	182	2.3%
84.0%	7,557	7,773	216	2.9%
85.2%	7,427	7,759	332	4.5%
86.4%	7,421	7,620	200	2.7%
87.7%	7,412	7,412	0	0.0%
88.9%	7,384	7,326	-57	-0.8%
90.1%	7,223	7,119	-104	-1.4%
91.4%	6,857	7,053	196	2.9%
92.6%	6,593	6,550	-43	-0.6%
93.8%	6,513	6,490	-24	-0.4%
95.1%	6,408	6,381	-26	-0.4%
96.3%	6,339	6,104	-234	-3.7%
97.5%	5,911	5,947	36	0.6%
98.8%	5,716	5,808	92	1.6%
100.0%	3,423	2,091	-1,332	-38.9%

Table SW-26-b

Folsom Lake, End of Month Area

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,636	10,636	-1	0.0%
1.2%	10,605	10,605	0	0.0%
2.5%	10,559	10,559	0	0.0%
3.7%	10,558	10,558	0	0.0%
4.9%	10,547	10,551	4	0.0%
6.2%	10,537	10,547	10	0.1%
7.4%	10,532	10,532	0	0.0%
8.6%	10,416	10,489	73	0.7%
9.9%	10,289	10,408	120	1.2%
11.1%	10,086	10,086	0	0.0%
12.3%	10,062	10,062	0	0.0%
13.6%	10,027	10,027	0	0.0%
14.8%	9,925	9,917	-8	-0.1%
16.0%	9,910	9,901	-9	-0.1%
17.3%	9,791	9,839	48	0.5%
18.5%	9,762	9,769	7	0.1%
19.8%	9,753	9,762	9	0.1%
21.0%	9,740	9,753	14	0.1%
22.2%	9,679	9,568	-111	-1.1%
23.5%	9,676	9,540	-137	-1.4%
24.7%	9,662	9,476	-186	-1.9%
25.9%	9,581	9,474	-106	-1.1%
27.2%	9,561	9,469	-92	-1.0%
28.4%	9,558	9,454	-104	-1.1%
29.6%	9,548	9,409	-138	-1.4%
30.9%	9,540	9,397	-143	-1.5%
32.1%	9,540	9,341	-199	-2.1%
33.3%	9,538	9,308	-230	-2.4%
34.6%	9,526	9,289	-237	-2.5%
35.8%	9,519	9,286	-234	-2.5%
37.0%	9,445	9,274	-171	-1.8%
38.3%	9,372	9,268	-104	-1.1%
39.5%	9,313	9,260	-53	-0.6%
40.7%	9,287	9,223	-64	-0.7%
42.0%	9,257	9,171	-86	-0.9%
43.2%	9,242	9,124	-118	-1.3%
44.4%	9,211	9,075	-136	-1.5%
45.7%	9,193	9,056	-137	-1.5%
46.9%	9,182	9,038	-144	-1.6%
48.1%	9,146	8,910	-236	-2.6%
49.4%	9,122	8,891	-232	-2.5%
50.6%	9,034	8,812	-222	-2.5%
51.9%	8,997	8,713	-283	-3.1%
53.1%	8,848	8,710	-138	-1.6%
54.3%	8,774	8,685	-89	-1.0%
55.6%	8,742	8,647	-95	-1.1%
56.8%	8,662	8,603	-59	-0.7%
58.0%	8,543	8,501	-42	-0.5%
59.3%	8,458	8,468	10	0.1%
60.5%	8,439	8,435	-4	0.0%
61.7%	8,406	8,300	-107	-1.3%
63.0%	8,378	8,247	-130	-1.6%
64.2%	8,263	8,174	-89	-1.1%
65.4%	8,247	7,994	-253	-3.1%
66.7%	8,139	7,950	-190	-2.3%
67.9%	8,014	7,943	-71	-0.9%
69.1%	7,998	7,934	-64	-0.8%
70.4%	7,824	7,921	97	1.2%
71.6%	7,820	7,890	70	0.9%
72.8%	7,819	7,871	52	0.7%
74.1%	7,661	7,770	109	1.4%
75.3%	7,572	7,712	140	1.8%
76.5%	7,522	7,397	-125	-1.7%
77.8%	7,461	7,365	-96	-1.3%
79.0%	7,441	7,272	-169	-2.3%
80.2%	7,189	7,237	48	0.7%
81.5%	7,072	7,149	77	1.1%
82.7%	6,934	7,088	154	2.2%
84.0%	6,899	7,072	173	2.5%
85.2%	6,849	6,909	60	0.9%
86.4%	6,766	6,897	130	1.9%
87.7%	6,684	6,888	204	3.1%
88.9%	6,594	6,738	144	2.2%
90.1%	6,589	6,654	65	1.0%
91.4%	6,510	6,471	-38	-0.6%
92.6%	6,479	6,462	-17	-0.3%
93.8%	6,348	6,197	-152	-2.4%
95.1%	6,293	5,844	-449	-7.1%
96.3%	5,929	5,804	-125	-2.1%
97.5%	5,777	5,745	-32	-0.6%
98.8%	5,692	5,374	-317	-5.6%
100.0%	2,091	2,091	0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	10,030	9,868	-162	-1.6%
1.2%	10,025	9,795	-229	-2.3%
2.5%	9,950	9,776	-173	-1.7%
3.7%	9,931	9,744	-187	-1.9%
4.9%	9,706	9,710	4	0.0%
6.2%	9,682	9,692	10	0.1%
7.4%	9,462	9,434	-28	-0.3%
8.6%	9,386	9,191	-195	-2.1%
9.9%	9,059	9,140	81	0.9%
11.1%	9,012	8,950	-62	-0.7%
12.3%	8,999	8,764	-235	-2.6%
13.6%	8,952	8,704	-248	-2.8%
14.8%	8,759	8,658	-101	-1.1%
16.0%	8,615	8,615	0	0.0%
17.3%	8,589	8,590	1	0.0%
18.5%	8,571	8,583	12	0.1%
19.8%	8,561	8,554	-8	-0.1%
21.0%	8,382	8,459	77	0.9%
22.2%	8,062	8,387	325	4.0%
23.5%	8,052	8,386	334	4.1%
24.7%	8,041	8,305	264	3.3%
25.9%	8,040	8,198	158	2.0%
27.2%	8,022	8,089	67	0.8%
28.4%	7,975	8,037	62	0.8%
29.6%	7,960	8,005	45	0.6%
30.9%	7,842	7,985	144	1.8%
32.1%	7,804	7,983	179	2.3%
33.3%	7,694	7,977	283	3.7%
34.6%	7,679	7,945	266	3.5%
35.8%	7,646	7,930	284	3.7%
37.0%	7,589	7,906	317	4.2%
38.3%	7,559	7,876	317	4.2%
39.5%	7,552	7,806	254	3.4%
40.7%	7,509	7,799	290	3.9%
42.0%	7,478	7,792	314	4.2%
43.2%	7,461	7,781	320	4.3%
44.4%	7,423	7,722	299	4.0%
45.7%	7,421	7,653	232	3.1%
46.9%	7,367	7,623	256	3.5%
48.1%	7,337	7,597	261	3.6%
49.4%	7,268	7,546	278	3.8%
50.6%	7,265	7,533	268	3.7%
51.9%	7,162	7,493	331	4.6%
53.1%	7,135	7,487	352	4.9%
54.3%	7,076	7,455	378	5.3%
55.6%	6,991	7,385	394	5.6%
56.8%	6,972	7,330	358	5.1%
58.0%	6,959	7,319	360	5.2%
59.3%	6,938	7,261	323	4.7%
60.5%	6,846	7,251	405	5.9%
61.7%	6,829	7,179	350	5.1%
63.0%	6,679	7,163	483	7.2%
64.2%	6,673	7,080	407	6.1%
65.4%	6,671	7,028	357	5.3%
66.7%	6,544	7,025	481	7.3%
67.9%	6,544	6,985	441	6.7%
69.1%	6,532	6,935	403	6.2%
70.4%	6,429	6,863	434	6.7%
71.6%	6,395	6,794	399	6.2%
72.8%	6,327	6,786	459	7.3%
74.1%	6,236	6,747	511	8.2%
75.3%	6,164	6,735	571	9.3%
76.5%	6,094	6,726	632	10.4%
77.8%	6,066	6,370	304	5.0%
79.0%	6,025	6,345	320	5.3%
80.2%	6,015	6,343	328	5.4%
81.5%	5,967	6,269	302	5.1%
82.7%	5,916	6,212	296	5.0%
84.0%	5,908	6,172	264	4.5%
85.2%	5,802	6,124	322	5.6%
86.4%	5,692	6,080	389	6.8%
87.7%	5,682	6,047	365	6.4%
88.9%	5,451	6,041	590	10.8%
90.1%	5,242	5,888	647	12.3%
91.4%	4,925	5,872	947	19.2%
92.6%	4,878	5,803	925	19.0%
93.8%	4,608	5,625	1,017	22.1%
95.1%	4,590	5,611	1,021	22.2%
96.3%	3,890	5,471	1,580	40.6%
97.5%	3,558	3,906	348	9.8%
98.8%	2,320	3,574	1,254	54.1%
100.0%	2,091	2,091	0	0.0%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,682	9,338	-344	-3.6%
1.2%	9,653	9,305	-349	-3.6%
2.5%	9,591	9,276	-315	-3.3%
3.7%	9,568	9,213	-355	-3.7%
4.9%	9,376	9,183	-193	-2.1%
6.2%	9,242	9,174	-68	-0.7%
7.4%	8,733	8,786	53	0.6%
8.6%	8,534	8,477	-57	-0.7%
9.9%	8,449	8,441	-8	-0.1%
11.1%	8,419	8,303	-116	-1.4%
12.3%	8,346	8,233	-113	-1.4%
13.6%	8,336	8,211	-125	-1.5%
14.8%	8,133	8,193	60	0.7%
16.0%	8,122	8,133	11	0.1%
17.3%	8,054	8,090	36	0.5%
18.5%	8,040	8,062	22	0.3%
19.8%	7,974	8,055	81	1.0%
21.0%	7,918	8,007	89	1.1%
22.2%	7,902	7,989	87	1.1%
23.5%	7,856	7,967	112	1.4%
24.7%	7,732	7,906	174	2.3%
25.9%	7,682	7,706	24	0.3%
27.2%	7,679	7,705	25	0.3%
28.4%	7,679	7,660	-19	-0.2%
29.6%	7,572	7,623	51	0.7%
30.9%	7,561	7,623	62	0.8%
32.1%	7,534	7,594	60	0.8%
33.3%	7,532	7,577	45	0.6%
34.6%	7,469	7,568	100	1.3%
35.8%	7,452	7,565	113	1.5%
37.0%	7,399	7,521	123	1.7%
38.3%	7,386	7,505	119	1.6%
39.5%	7,330	7,463	133	1.8%
40.7%	7,274	7,404	130	1.8%
42.0%	7,268	7,399	131	1.8%
43.2%	7,217	7,329	112	1.6%
44.4%	7,189	7,322	133	1.9%
45.7%	7,102	7,302	200	2.8%
46.9%	7,062	7,288	226	3.2%
48.1%	7,060	7,278	217	3.1%
49.4%	7,012	7,276	264	3.8%
50.6%	6,961	7,220	259	3.7%
51.9%	6,931	7,204	272	3.9%
53.1%	6,902	7,202	300	4.4%
54.3%	6,819	7,160	341	5.0%
55.6%	6,808	7,019	212	3.1%
56.8%	6,774	7,014	240	3.5%
58.0%	6,731	7,006	275	4.1%
59.3%	6,731	6,995	264	3.9%
60.5%	6,624	6,991	368	5.6%
61.7%	6,611	6,979	368	5.6%
63.0%	6,581	6,961	381	5.8%
64.2%	6,522	6,912	389	6.0%
65.4%	6,516	6,903	387	5.9%
66.7%	6,464	6,900	436	6.8%
67.9%	6,454	6,734	279	4.3%
69.1%	6,333	6,729	396	6.3%
70.4%	6,319	6,703	384	6.1%
71.6%	6,300	6,695	395	6.3%
72.8%	6,039	6,551	513	8.5%
74.1%	5,837	6,318	481	8.2%
75.3%	5,825	6,268	444	7.6%
76.5%	5,787	6,180	392	6.8%
77.8%	5,787	6,140	353	6.1%
79.0%	5,692	6,134	442	7.8%
80.2%	5,613	6,051	438	7.8%
81.5%	5,600	6,037	437	7.8%
82.7%	5,459	5,882	423	7.8%
84.0%	5,458	5,704	247	4.5%
85.2%	5,448	5,692	243	4.5%
86.4%	5,301	5,645	343	6.5%
87.7%	5,235	5,588	353	6.8%
88.9%	4,997	5,505	509	10.2%
90.1%	4,850	5,505	655	13.5%
91.4%	4,349	5,491	1,142	26.3%
92.6%	4,257	5,432	1,175	27.6%
93.8%	4,111	5,398	1,287	31.3%
95.1%	3,886	5,273	1,387	35.7%
96.3%	3,308	5,242	1,934	58.5%
97.5%	2,091	3,317	1,227	58.7%
98.8%	2,091	2,862	772	36.9%
100.0%	2,091	2,091	0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project End of Month Area (ACRE)	WSIP 2070 With Project End of Month Area (ACRE)	Absolute Difference (ACRE)	Relative Difference (%)
0.0%	9,034	8,790	-244	-2.7%
1.2%	8,816	8,788	-28	-0.3%
2.5%	8,690	8,714	25	0.3%
3.7%	8,615	8,691	75	0.9%
4.9%	8,615	8,660	45	0.5%
6.2%	8,377	8,495	119	1.4%
7.4%	8,233	8,360	127	1.5%
8.6%	8,173	8,192	18	0.2%
9.9%	8,078	8,004	-74	-0.9%
11.1%	7,929	7,942	13	0.2%
12.3%	7,890	7,835	-55	-0.7%
13.6%	7,876	7,737	-139	-1.8%
14.8%	7,707	7,714	8	0.1%
16.0%	7,680	7,675	-5	-0.1%
17.3%	7,618	7,618	1	0.0%
18.5%	7,606	7,584	-22	-0.3%
19.8%	7,571	7,484	-87	-1.1%
21.0%	7,540	7,476	-65	-0.9%
22.2%	7,390	7,455	65	0.9%
23.5%	7,341	7,453	113	1.5%
24.7%	7,320	7,449	128	1.8%
25.9%	7,311	7,402	91	1.2%
27.2%	7,279	7,379	100	1.4%
28.4%	7,248	7,336	88	1.2%
29.6%	7,209	7,333	124	1.7%
30.9%	7,173	7,311	138	1.9%
32.1%	7,133	7,244	111	1.6%
33.3%	7,105	7,225	120	1.7%
34.6%	7,073	7,124	51	0.7%
35.8%	7,072	7,122	50	0.7%
37.0%	7,037	7,110	73	1.0%
38.3%	7,027	7,107	81	1.1%
39.5%	6,976	7,078	102	1.5%
40.7%	6,879	7,064	185	2.7%
42.0%	6,853	7,049	196	2.9%
43.2%	6,826	6,999	173	2.5%
44.4%	6,811	6,990	179	2.6%
45.7%	6,806	6,947	140	2.1%
46.9%	6,798	6,902	104	1.5%
48.1%	6,728	6,890	162	2.4%
49.4%	6,683	6,872	189	2.8%
50.6%	6,640	6,855	215	3.2%
51.9%	6,634	6,834	200	3.0%
53.1%	6,627	6,827	200	3.0%
54.3%	6,578	6,823	245	3.7%
55.6%	6,541	6,796	256	3.9%
56.8%	6,514	6,772	258	4.0%
58.0%	6,458	6,663	206	3.2%
59.3%	6,366	6,644	278	4.4%
60.5%	6,294	6,636	341	5.4%
61.7%	6,282	6,618	335	5.3%
63.0%	6,198	6,535	337	5.4%
64.2%	6,194	6,410	215	3.5%
65.4%	6,084	6,374	290	4.8%
66.7%	6,052	6,360	308	5.1%
67.9%	5,773	6,288	515	8.9%
69.1%	5,720	6,238	518	9.1%
70.4%	5,692	6,224	533	9.4%
71.6%	5,652	6,137	485	8.6%
72.8%	5,644	6,112	468	8.3%
74.1%	5,629	6,107	477	8.5%
75.3%	5,623	6,050	427	7.6%
76.5%	5,601	6,005	404	7.2%
77.8%	5,565	5,850	284	5.1%
79.0%	5,558	5,785	227	4.1%
80.2%	5,554	5,777	223	4.0%
81.5%	5,531	5,711	180	3.3%
82.7%	5,513	5,656	143	2.6%
84.0%	5,472	5,643	171	3.1%
85.2%	5,391	5,589	198	3.7%
86.4%	5,253	5,485	232	4.4%
87.7%	5,022	5,402	380	7.6%
88.9%	4,945	5,395	450	9.1%
90.1%	4,399	5,312	913	20.8%
91.4%	4,310	5,247	937	21.7%
92.6%	3,942	5,100	1,158	29.4%
93.8%	3,569	5,077	1,507	42.2%
95.1%	3,348	5,055	1,707	51.0%
96.3%	2,594	3,675	1,082	41.7%
97.5%	2,460	3,620	1,160	47.1%
98.8%	2,091	2,271	180	8.6%
100.0%	2,091	2,091	0	0.0%

Figure SW-27-b
American River below Nimbus Reservoir, Monthly Flow
Probability of Exceedance

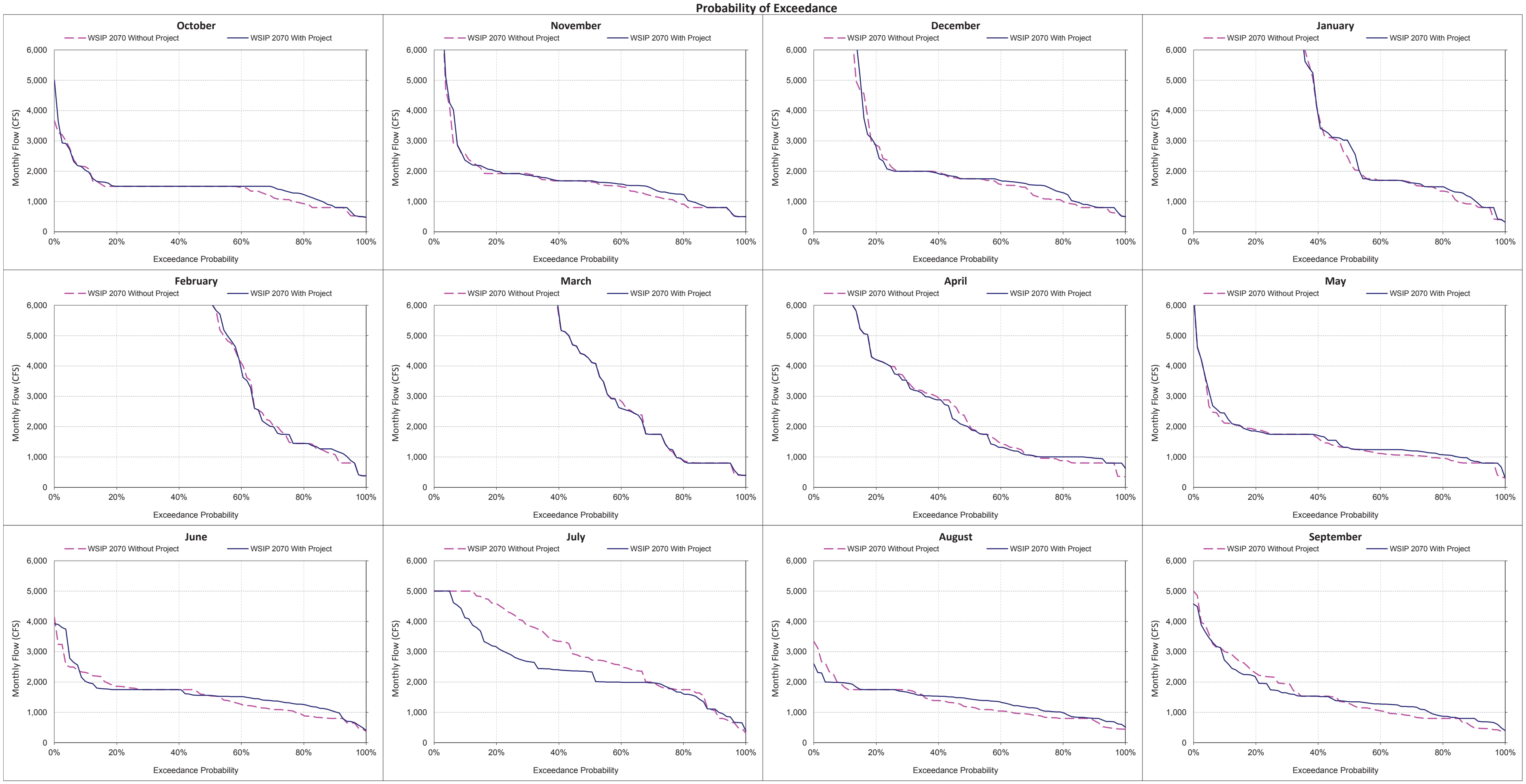


Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,666	5,000	1,334	36.4%
1.2%	3,281	3,625	343	10.5%
2.5%	3,202	2,934	-268	-8.4%
3.7%	3,004	2,912	-92	-3.1%
4.9%	2,755	2,717	-37	-1.4%
6.2%	2,389	2,328	-61	-2.5%
7.4%	2,199	2,187	-12	-0.5%
8.6%	2,160	2,152	-8	-0.4%
9.9%	2,150	2,036	-115	-5.3%
11.1%	2,069	1,962	-107	-5.2%
12.3%	1,666	1,757	91	5.4%
13.6%	1,665	1,662	-4	-0.2%
14.8%	1,581	1,649	68	4.3%
16.0%	1,500	1,641	141	9.4%
17.3%	1,500	1,604	104	6.9%
18.5%	1,500	1,521	21	1.4%
19.8%	1,500	1,500	0	0.0%
21.0%	1,500	1,500	0	0.0%
22.2%	1,500	1,500	0	0.0%
23.5%	1,500	1,500	0	0.0%
24.7%	1,500	1,500	0	0.0%
25.9%	1,500	1,500	0	0.0%
27.2%	1,500	1,500	0	0.0%
28.4%	1,500	1,500	0	0.0%
29.6%	1,500	1,500	0	0.0%
30.9%	1,500	1,500	0	0.0%
32.1%	1,500	1,500	0	0.0%
33.3%	1,500	1,500	0	0.0%
34.6%	1,500	1,500	0	0.0%
35.8%	1,500	1,500	0	0.0%
37.0%	1,500	1,500	0	0.0%
38.3%	1,500	1,500	0	0.0%
39.5%	1,500	1,500	0	0.0%
40.7%	1,500	1,500	0	0.0%
42.0%	1,500	1,500	0	0.0%
43.2%	1,500	1,500	0	0.0%
44.4%	1,500	1,500	0	0.0%
45.7%	1,500	1,500	0	0.0%
46.9%	1,500	1,500	0	0.0%
48.1%	1,500	1,500	0	0.0%
49.4%	1,500	1,500	0	0.0%
50.6%	1,500	1,500	0	0.0%
51.9%	1,500	1,500	0	0.0%
53.1%	1,500	1,500	0	0.0%
54.3%	1,500	1,500	0	0.0%
55.6%	1,500	1,500	0	0.0%
56.8%	1,500	1,500	0	0.0%
58.0%	1,500	1,500	0	0.0%
59.3%	1,478	1,500	22	1.5%
60.5%	1,470	1,500	30	2.0%
61.7%	1,440	1,500	60	4.1%
63.0%	1,346	1,500	154	11.5%
64.2%	1,344	1,500	156	11.6%
65.4%	1,337	1,500	163	12.2%
66.7%	1,286	1,500	214	16.6%
67.9%	1,236	1,500	264	21.4%
69.1%	1,208	1,500	292	24.2%
70.4%	1,121	1,465	344	30.7%
71.6%	1,084	1,407	323	29.8%
72.8%	1,081	1,394	313	29.0%
74.1%	1,065	1,347	281	26.4%
75.3%	1,060	1,312	252	23.8%
76.5%	989	1,282	293	29.6%
77.8%	981	1,280	299	30.5%
79.0%	952	1,264	312	32.8%
80.2%	920	1,222	301	32.8%
81.5%	907	1,166	259	28.5%
82.7%	800	1,127	327	40.9%
84.0%	800	1,078	278	34.8%
85.2%	800	1,032	232	29.0%
86.4%	800	979	179	22.4%
87.7%	800	907	107	13.3%
88.9%	800	875	75	9.3%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	680	800	120	17.6%
95.1%	532	676	144	27.1%
96.3%	523	532	10	1.8%
97.5%	500	508	8	1.5%
98.8%	500	500	0	0.0%
100.0%	479	482	3	0.6%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,815	15,159	344	2.3%
1.2%	12,446	12,107	-339	-2.7%
2.5%	7,635	7,576	-59	-0.8%
3.7%	4,702	5,136	434	9.2%
4.9%	4,140	4,259	119	2.9%
6.2%	2,917	4,021	1,104	37.9%
7.4%	2,875	2,868	-7	-0.2%
8.6%	2,606	2,641	35	1.3%
9.9%	2,589	2,371	-217	-8.4%
11.1%	2,381	2,283	-99	-4.1%
12.3%	2,295	2,203	-91	-4.0%
13.6%	2,202	2,200	-2	-0.1%
14.8%	2,120	2,184	64	3.0%
16.0%	1,931	2,126	195	10.1%
17.3%	1,925	2,067	142	7.4%
18.5%	1,925	2,047	122	6.4%
19.8%	1,925	2,000	75	3.9%
21.0%	1,925	1,992	67	3.5%
22.2%	1,925	1,925	0	0.0%
23.5%	1,925	1,925	0	0.0%
24.7%	1,925	1,925	0	0.0%
25.9%	1,925	1,925	0	0.0%
27.2%	1,925	1,925	0	0.0%
28.4%	1,925	1,896	-29	-1.5%
29.6%	1,925	1,869	-56	-2.9%
30.9%	1,894	1,859	-35	-1.9%
32.1%	1,869	1,825	-45	-2.4%
33.3%	1,806	1,824	18	1.0%
34.6%	1,724	1,791	67	3.9%
35.8%	1,719	1,785	66	3.9%
37.0%	1,713	1,750	36	2.1%
38.3%	1,683	1,720	36	2.2%
39.5%	1,683	1,689	6	0.3%
40.7%	1,683	1,683	0	0.0%
42.0%	1,683	1,683	0	0.0%
43.2%	1,683	1,683	0	0.0%
44.4%	1,683	1,683	0	0.0%
45.7%	1,683	1,683	0	0.0%
46.9%	1,683	1,683	0	0.0%
48.1%	1,671	1,683	13	0.8%
49.4%	1,644	1,683	39	2.4%
50.6%	1,643	1,683	40	2.5%
51.9%	1,630	1,655	25	1.6%
53.1%	1,560	1,635	75	4.8%
54.3%	1,541	1,628	88	5.7%
55.6%	1,527	1,626	99	6.5%
56.8%	1,524	1,615	91	6.0%
58.0%	1,523	1,596	72	4.8%
59.3%	1,510	1,584	74	4.9%
60.5%	1,478	1,572	94	6.4%
61.7%	1,470	1,538	68	4.6%
63.0%	1,344	1,531	187	13.9%
64.2%	1,337	1,528	191	14.3%
65.4%	1,296	1,527	231	17.8%
66.7%	1,291	1,520	229	17.7%
67.9%	1,236	1,513	277	22.4%
69.1%	1,208	1,465	257	21.3%
70.4%	1,170	1,407	237	20.2%
71.6%	1,149	1,347	198	17.2%
72.8%	1,121	1,313	191	17.1%
74.1%	1,084	1,312	228	21.0%
75.3%	1,078	1,282	204	18.9%
76.5%	1,060	1,264	204	19.3%
77.8%	981	1,248	267	27.2%
79.0%	920	1,247	327	35.5%
80.2%	907	1,222	314	34.6%
81.5%	800	1,032	232	29.0%
82.7%	800	995	195	24.4%
84.0%	800	965	165	20.7%
85.2%	800	907	107	13.3%
86.4%	800	865	65	8.1%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	629	668	39	6.2%
96.3%	530	514	-16	-3.0%
97.5%	500	500	0	0.0%
98.8%	500	500	0	0.0%
100.0%	500	500	0	0.0%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	24,088	24,088	0	0.0%
1.2%	21,609	21,610	1	0.0%
2.5%	21,060	21,476	416	2.0%
3.7%	20,341	20,332	-9	0.0%
4.9%	20,144	20,174	30	0.1%
6.2%	19,342	19,338	-4	0.0%
7.4%	18,459	18,459	0	0.0%
8.6%	15,286	15,286	0	0.0%
9.9%	14,596	13,921	-675	-4.6%
11.1%	10,467	9,610	-857	-8.2%
12.3%	6,471	6,931	460	7.1%
13.6%	4,968	6,310	1,342	27.0%
14.8%	4,677	5,116	440	9.4%
16.0%	4,563	3,748	-815	-17.9%
17.3%	3,776	3,211	-564	-14.9%
18.5%	2,930	3,090	160	5.5%
19.8%	2,879	2,879	0	0.0%
21.0%	2,800	2,423	-378	-13.5%
22.2%	2,416	2,337	-79	-3.3%
23.5%	2,372	2,080	-292	-12.3%
24.7%	2,160	2,044	-116	-5.4%
25.9%	2,052	2,000	-52	-2.5%
27.2%	2,000	2,000	0	0.0%
28.4%	2,000	2,000	0	0.0%
29.6%	2,000	2,000	0	0.0%
30.9%	2,000	2,000	0	0.0%
32.1%	2,000	2,000	0	0.0%
33.3%	2,000	2,000	0	0.0%
34.6%	2,000	2,000	0	0.0%
35.8%	2,000	2,000	0	0.0%
37.0%	2,000	1,991	-9	-0.5%
38.3%	2,000	1,968	-32	-1.6%
39.5%	1,968	1,942	-26	-1.3%
40.7%	1,942	1,896	-47	-2.4%
42.0%	1,877	1,894	17	0.9%
43.2%	1,812	1,855	43	2.4%
44.4%	1,787	1,840	53	3.0%
45.7%	1,781	1,819	38	2.1%
46.9%	1,750	1,756	6	0.3%
48.1%	1,750	1,750	0	0.0%
49.4%	1,750	1,750	0	0.0%
50.6%	1,750	1,750	0	0.0%
51.9%	1,750	1,750	0	0.0%
53.1%	1,750	1,750	0	0.0%
54.3%	1,733	1,750	17	1.0%
55.6%	1,696	1,750	54	3.2%
56.8%	1,695	1,750	55	3.2%
58.0%	1,677	1,750	73	4.4%
59.3%	1,582	1,712	130	8.2%
60.5%	1,556	1,675	119	7.7%
61.7%	1,537	1,671	134	8.7%
63.0%	1,532	1,657	124	8.1%
64.2%	1,532	1,648	116	7.6%
65.4%	1,513	1,630	117	7.7%
66.7%	1,478	1,614	136	9.2%
67.9%	1,470	1,599	129	8.7%
69.1%	1,344	1,552	208	15.5%
70.4%	1,208	1,542	334	27.7%
71.6%	1,170	1,539	369	31.5%
72.8%	1,121	1,536	415	37.0%
74.1%	1,084	1,517	433	40.0%
75.3%	1,084	1,465	381	35.2%
76.5%	1,065	1,407	341	32.0%
77.8%	1,064	1,347	282	26.5%
79.0%	1,060	1,312	252	23.8%
80.2%	981	1,282	301	30.7%
81.5%	952	1,222	269	28.3%
82.7%	920	1,032	111	12.1%
84.0%	907	995	88	9.7%
85.2%	800	965	165	20.7%
86.4%	800	907	107	13.3%
87.7%	800	906	106	13.3%
88.9%	800	865	65	8.1%
90.1%	800	826	26	3.2%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	649	800	151	23.2%
96.3%	626	800	174	27.8%
97.5%	611	649	38	6.3%
98.8%	517	517	0	0.0%
100.0%	504	504	0	0.0%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,239	41,238	-1	0.0%
1.2%	30,032	30,027	-5	0.0%
2.5%	29,658	29,528	-131	-0.4%
3.7%	29,190	29,189	0	0.0%
4.9%	27,844	27,846	2	0.0%
6.2%	26,020	26,020	0	0.0%
7.4%	25,327	25,327	0	0.0%
8.6%	22,692	22,692	0	0.0%
9.9%	21,584	21,584	0	0.0%
11.1%	20,743	21,078	335	1.6%
12.3%	20,265	20,265	0	0.0%
13.6%	17,945	17,945	0	0.0%
14.8%	16,713	16,714	1	0.0%
16.0%	15,841	15,842	0	0.0%
17.3%	14,649	14,584	-65	-0.4%
18.5%	14,622	13,531	-1,091	-7.5%
19.8%	13,518	13,509	-9	-0.1%
21.0%	12,894	12,758	-136	-1.1%
22.2%	11,767	11,763	-4	0.0%
23.5%	10,141	10,141	0	0.0%
24.7%	10,023	10,030	7	0.1%
25.9%	9,978	9,978	0	0.0%
27.2%	9,385	9,385	0	0.0%
28.4%	9,186	9,186	0	0.0%
29.6%	8,450	8,452	1	0.0%
30.9%	8,369	8,369	0	0.0%
32.1%	7,214	7,214	0	0.0%
33.3%	7,014	7,014	0	0.0%
34.6%	6,580	6,721	142	2.2%
35.8%	5,979	5,618	-361	-6.0%
37.0%	5,537	5,414	-124	-2.2%
38.3%	5,083	5,246	163	3.2%
39.5%	4,138	4,122	-17	-0.4%
40.7%	3,593	3,413	-179	-5.0%
42.0%	3,177	3,341	164	5.2%
43.2%	3,117	3,260	143	4.6%
44.4%	3,099	3,119	21	0.7%
45.7%	3,039	3,111	72	2.4%
46.9%	2,971	3,099	128	4.3%
48.1%	2,634	3,028	394	15.0%
49.4%	2,481	3,025	545	22.0%
50.6%	2,199	2,789	590	26.8%
51.9%	2,037	2,556	519	25.5%
53.1%	2,032	2,037	5	0.2%
54.3%	1,863	1,750	-113	-6.1%
55.6%	1,750	1,750	0	0.0%
56.8%	1,750	1,712	-38	-2.2%
58.0%	1,750	1,700	-50	-2.9%
59.3%	1,700	1,700	0	0.0%
60.5%	1,700	1,700	0	0.0%
61.7%	1,700	1,700	0	0.0%
63.0%	1,700	1,700	0	0.0%
64.2%	1,700	1,700	0	0.0%
65.4%	1,700	1,700	0	0.0%
66.7%	1,700	1,692	-8	-0.5%
67.9%	1,673	1,657	-16	-1.0%
69.1%	1,651	1,611	-40	-2.4%
70.4%	1,602	1,610	8	0.5%
71.6%	1,519	1,596	77	5.1%
72.8%	1,514	1,577	63	4.2%
74.1%	1,488	1,492	5	0.3%
75.3%	1,488	1,488	0	0.0%
76.5%	1,488	1,488	0	0.0%
77.8%	1,425	1,488	62	4.4%
79.0%	1,345	1,488	143	10.6%
80.2%	1,344	1,488	144	10.7%
81.5%	1,322	1,421	98	7.4%
82.7%	1,256	1,359	103	8.2%
84.0%	1,060	1,311	251	23.7%
85.2%	977	1,308	331	33.8%
86.4%	953	1,282	329	34.5%
87.7%	921	1,196	274	29.8%
88.9%	920	1,145	224	24.4%
90.1%	905	1,038	133	14.7%
91.4%	810	941	131	16.2%
92.6%	800	821	21	2.6%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	426	800	374	87.8%
97.5%	405	426	21	5.1%
98.8%	403	405	2	0.6%
100.0%	323	323	0	

Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,284	42,285	1	0.0%
1.2%	32,838	32,832	-6	0.0%
2.5%	32,535	32,535	0	0.0%
3.7%	23,272	23,272	0	0.0%
4.9%	22,795	22,796	0	0.0%
6.2%	22,260	22,256	-5	0.0%
7.4%	21,383	21,383	0	0.0%
8.6%	21,104	21,103	-1	0.0%
9.9%	20,630	20,630	0	0.0%
11.1%	20,457	20,457	0	0.0%
12.3%	20,425	20,425	0	0.0%
13.6%	20,076	19,921	-155	-0.8%
14.8%	19,921	19,809	-112	-0.6%
16.0%	18,989	18,989	0	0.0%
17.3%	18,019	18,019	0	0.0%
18.5%	17,834	17,880	46	0.3%
19.8%	16,612	16,612	0	0.0%
21.0%	16,454	16,454	0	0.0%
22.2%	14,866	14,866	0	0.0%
23.5%	14,615	14,615	0	0.0%
24.7%	14,430	14,430	0	0.0%
25.9%	12,752	12,750	-2	0.0%
27.2%	12,750	12,559	-191	-1.5%
28.4%	12,559	12,456	-103	-0.8%
29.6%	11,929	11,929	0	0.0%
30.9%	10,728	10,728	0	0.0%
32.1%	10,233	9,724	-508	-5.0%
33.3%	9,660	9,661	0	0.0%
34.6%	9,126	9,245	119	1.3%
35.8%	8,661	8,663	2	0.0%
37.0%	7,937	8,403	466	5.9%
38.3%	7,924	7,925	1	0.0%
39.5%	7,903	7,676	-227	-2.9%
40.7%	7,677	7,654	-22	-0.3%
42.0%	7,642	7,642	1	0.0%
43.2%	7,342	7,337	-5	-0.1%
44.4%	6,901	6,901	0	0.0%
45.7%	6,802	6,802	0	0.0%
46.9%	6,674	6,673	0	0.0%
48.1%	6,411	6,412	1	0.0%
49.4%	6,361	6,361	0	0.0%
50.6%	6,022	6,022	0	0.0%
51.9%	5,833	5,833	0	0.0%
53.1%	5,188	5,711	522	10.1%
54.3%	5,000	5,188	188	3.8%
55.6%	4,830	5,000	170	3.5%
56.8%	4,746	4,830	85	1.8%
58.0%	4,500	4,641	141	3.1%
59.3%	4,205	4,205	0	0.0%
60.5%	4,015	3,619	-396	-9.9%
61.7%	3,619	3,518	-101	-2.8%
63.0%	3,518	3,290	-228	-6.5%
64.2%	2,608	2,605	-3	-0.1%
65.4%	2,550	2,551	1	0.0%
66.7%	2,458	2,188	-270	-11.0%
67.9%	2,241	2,096	-146	-6.5%
69.1%	2,189	2,010	-179	-8.2%
70.4%	2,010	1,995	-16	-0.8%
71.6%	1,995	1,782	-212	-10.7%
72.8%	1,835	1,750	-85	-4.6%
74.1%	1,750	1,750	0	0.0%
75.3%	1,488	1,736	248	16.7%
76.5%	1,445	1,445	0	0.0%
77.8%	1,445	1,445	0	0.0%
79.0%	1,445	1,445	0	0.0%
80.2%	1,445	1,445	0	0.0%
81.5%	1,445	1,438	-7	-0.5%
82.7%	1,422	1,370	-52	-3.7%
84.0%	1,287	1,340	54	4.2%
85.2%	1,264	1,264	0	0.0%
86.4%	1,212	1,264	53	4.4%
87.7%	1,143	1,264	122	10.6%
88.9%	1,124	1,264	141	12.5%
90.1%	1,068	1,208	140	13.1%
91.4%	810	1,155	345	42.6%
92.6%	800	1,112	312	39.0%
93.8%	800	1,016	216	27.0%
95.1%	800	883	83	10.3%
96.3%	800	800	0	0.0%
97.5%	411	411	0	
98.8%	377	378	1	
100.0%	375	375	0	

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,652	25,652	0	0.0%
1.2%	24,740	24,740	0	0.0%
2.5%	21,515	21,510	-5	0.0%
3.7%	17,525	17,525	0	0.0%
4.9%	17,249	17,249	0	0.0%
6.2%	16,753	16,753	0	0.0%
7.4%	15,782	15,782	0	0.0%
8.6%	14,719	14,719	0	0.0%
9.9%	12,936	12,936	0	0.0%
11.1%	11,172	11,172	0	0.0%
12.3%	10,766	10,766	0	0.0%
13.6%	10,582	10,581	-1	0.0%
14.8%	10,491	10,488	-3	0.0%
16.0%	10,215	10,215	0	0.0%
17.3%	10,039	10,038	-1	0.0%
18.5%	9,847	9,847	0	0.0%
19.8%	9,011	9,013	2	0.0%
21.0%	8,646	8,646	0	0.0%
22.2%	8,519	8,519	0	0.0%
23.5%	8,473	8,473	0	0.0%
24.7%	8,461	8,461	0	0.0%
25.9%	8,415	8,415	0	0.0%
27.2%	8,073	7,974	-99	-1.2%
28.4%	7,979	7,970	-9	-0.1%
29.6%	7,749	7,755	6	0.1%
30.9%	6,691	6,690	-1	0.0%
32.1%	6,565	6,565	0	0.0%
33.3%	6,529	6,529	0	0.0%
34.6%	6,499	6,499	0	0.0%
35.8%	6,378	6,378	0	0.0%
37.0%	6,215	6,214	-2	0.0%
38.3%	6,188	6,188	0	0.0%
39.5%	5,968	6,127	159	2.7%
40.7%	5,166	5,166	0	0.0%
42.0%	5,130	5,130	0	0.0%
43.2%	5,000	5,000	0	0.0%
44.4%	4,695	4,695	0	0.0%
45.7%	4,657	4,657	0	0.0%
46.9%	4,417	4,417	0	0.0%
48.1%	4,377	4,378	1	0.0%
49.4%	4,268	4,268	0	0.0%
50.6%	4,113	4,113	-1	0.0%
51.9%	4,082	4,082	0	0.0%
53.1%	3,646	3,646	0	0.0%
54.3%	3,480	3,480	0	0.0%
55.6%	3,064	3,064	0	0.0%
56.8%	2,942	2,922	-20	-0.7%
58.0%	2,923	2,906	-17	-0.6%
59.3%	2,906	2,628	-278	-9.6%
60.5%	2,790	2,587	-204	-7.3%
61.7%	2,584	2,539	-45	-1.7%
63.0%	2,539	2,508	-31	-1.2%
64.2%	2,442	2,442	0	0.0%
65.4%	2,390	2,383	-7	-0.3%
66.7%	2,383	2,209	-175	-7.3%
67.9%	1,760	1,761	1	0.0%
69.1%	1,750	1,750	0	0.0%
70.4%	1,750	1,750	0	0.0%
71.6%	1,750	1,750	0	0.0%
72.8%	1,750	1,750	0	0.0%
74.1%	1,445	1,446	2	0.1%
75.3%	1,232	1,264	32	2.6%
76.5%	1,169	1,232	63	5.4%
77.8%	977	977	0	0.0%
79.0%	957	957	0	0.0%
80.2%	870	838	-33	-3.8%
81.5%	838	800	-38	-4.5%
82.7%	812	800	-12	-1.5%
84.0%	800	800	0	0.0%
85.2%	800	800	0	0.0%
86.4%	800	800	0	0.0%
87.7%	800	800	0	0.0%
88.9%	800	800	0	0.0%
90.1%	800	800	0	0.0%
91.4%	800	800	0	0.0%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	423	562	139	33.0%
97.5%	401	423	21	5.4%
98.8%	396	396	0	0.0%
100.0%	391	392	1	0.2%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	21,023	21,018	-5	0.0%
1.2%	19,755	19,755	0	0.0%
2.5%	12,166	12,166	0	0.0%
3.7%	11,269	11,265	-4	0.0%
4.9%	11,157	11,157	0	0.0%
6.2%	7,925	7,925	0	0.0%
7.4%	7,079	7,079	0	0.0%
8.6%	6,549	6,549	0	0.0%
9.9%	6,392	6,392	0	0.0%
11.1%	6,390	6,390	0	0.0%
12.3%	6,021	6,021	0	0.0%
13.6%	5,824	5,816	-8	-0.1%
14.8%	5,227	5,227	0	0.0%
16.0%	5,068	5,068	0	0.0%
17.3%	5,046	5,046	-1	0.0%
18.5%	4,305	4,296	-10	-0.2%
19.8%	4,219	4,219	0	0.0%
21.0%	4,172	4,172	0	0.0%
22.2%	4,127	4,128	1	0.0%
23.5%	4,049	4,060	11	0.3%
24.7%	3,988	3,988	0	0.0%
25.9%	3,978	3,743	-236	-5.9%
27.2%	3,743	3,706	-37	-1.0%
28.4%	3,707	3,534	-173	-4.7%
29.6%	3,534	3,533	-1	0.0%
30.9%	3,394	3,255	-139	-4.1%
32.1%	3,255	3,198	-57	-1.7%
33.3%	3,209	3,175	-34	-1.1%
34.6%	3,198	3,113	-85	-2.7%
35.8%	3,113	2,989	-124	-4.0%
37.0%	3,091	2,977	-114	-3.7%
38.3%	3,047	2,920	-127	-4.2%
39.5%	2,990	2,885	-105	-3.5%
40.7%	2,885	2,883	-2	-0.1%
42.0%	2,883	2,728	-155	-5.4%
43.2%	2,882	2,690	-191	-6.6%
44.4%	2,727	2,270	-456	-16.7%
45.7%	2,632	2,200	-433	-16.4%
46.9%	2,386	2,099	-287	-12.0%
48.1%	2,385	2,049	-336	-14.1%
49.4%	2,128	2,007	-121	-5.7%
50.6%	1,919	1,887	-32	-1.7%
51.9%	1,882	1,856	-26	-1.4%
53.1%	1,765	1,768	3	0.2%
54.3%	1,750	1,750	0	0.0%
55.6%	1,750	1,750	0	0.0%
56.8%	1,673	1,426	-247	-14.8%
58.0%	1,596	1,392	-205	-12.8%
59.3%	1,493	1,318	-175	-11.7%
60.5%	1,426	1,317	-109	-7.6%
61.7%	1,392	1,281	-111	-8.0%
63.0%	1,318	1,233	-85	-6.5%
64.2%	1,317	1,201	-116	-8.8%
65.4%	1,279	1,186	-93	-7.3%
66.7%	1,234	1,110	-125	-10.1%
67.9%	1,067	1,067	0	0.0%
69.1%	1,064	1,064	0	0.0%
70.4%	1,044	1,044	0	0.0%
71.6%	977	1,008	32	3.2%
72.8%	961	1,000	39	4.1%
74.1%	957	1,000	43	4.4%
75.3%	957	1,000	43	4.5%
76.5%	951	1,000	49	5.1%
77.8%	939	1,000	61	6.5%
79.0%	880	1,000	120	13.6%
80.2%	874	1,000	126	14.4%
81.5%	868	1,000	132	15.2%
82.7%	808	1,000	192	23.7%
84.0%	800	1,000	200	25.0%
85.2%	800	1,000	200	25.0%
86.4%	800	1,000	200	25.0%
87.7%	800	985	185	23.2%
88.9%	800	977	177	22.1%
90.1%	800	957	157	19.6%
91.4%	800	948	148	18.5%
92.6%	800	946	146	18.2%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	360	800	440	122.1%
98.8%	353	800	447	126.7%
100.0%	348	628	280	80.3%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,421	6,421	0	0.0%
1.2%	4,621	4,621	0	0.0%
2.5%	4,216	4,216	0	0.0%
3.7%	3,656	3,656	0	0.0%
4.9%	2,675	3,193	518	19.4%
6.2%	2,476	2,689	214	8.6%
7.4%	2,458	2,579	121	4.9%
8.6%	2,252	2,458	207	9.2%
9.9%	2,118	2,444	327	15.4%
11.1%	2,112	2,245	133	6.3%
12.3%	2,086	2,102	16	0.8%
13.6%	2,053	2,064	11	0.5%
14.8%	2,025	2,046	21	1.0%
16.0%	1,979	1,946	-33	-1.7%
17.3%	1,948	1,900	-47	-2.4%
18.5%	1,937	1,859	-77	-4.0%
19.8%	1,902	1,856	-47	-2.5%
21.0%	1,901	1,834	-67	-3.5%
22.2%	1,859	1,811	-48	-2.6%
23.5%	1,814	1,768	-47	-2.6%
24.7%	1,750	1,750	0	0.0%
25.9%	1,750	1,750	0	0.0%
27.2%	1,750	1,750	0	0.0%
28.4%	1,750	1,750	0	0.0%
29.6%	1,750	1,750	0	0.0%
30.9%	1,750	1,750	0	0.0%
32.1%	1,750	1,750	0	0.0%
33.3%	1,750	1,750	0	0.0%
34.6%	1,750	1,750	0	0.0%
35.8%	1,750	1,750	0	0.0%
37.0%	1,750	1,750	0	0.0%
38.3%	1,727	1,745	18	1.0%
39.5%	1,652	1,725	73	4.4%
40.7%	1,553	1,683	130	8.4%
42.0%	1,464	1,659	195	13.4%
43.2%	1,456	1,553	97	6.6%
44.4%	1,392	1,550	158	11.4%
45.7%	1,378	1,547	169	12.3%
46.9%	1,326	1,392	66	5.0%
48.1%	1,318	1,318	0	0.0%
49.4%	1,317	1,317	0	0.0%
50.6%	1,264	1,264	1	0.1%
51.9%	1,253	1,248	-5	-0.4%
53.1%	1,239	1,246	7	0.5%
54.3%	1,210	1,245	35	2.9%
55.6%	1,194	1,245	51	4.3%
56.8%	1,170	1,245	75	6.4%
58.0%	1,148	1,245	97	8.5%
59.3%	1,120	1,245	125	11.2%
60.5%	1,110	1,245	135	12.2%
61.7%	1,090	1,245	155	14.2%
63.0%	1,089	1,245	156	14.3%
64.2%	1,067	1,245	178	16.7%
65.4%	1,065	1,245	180	16.9%
66.7%	1,064	1,245	181	17.0%
67.9%	1,063	1,225	162	15.3%
69.1%	1,062	1,206	144	13.5%
70.4%	1,044	1,201	157	15.0%
71.6%	1,044	1,196	152	14.6%
72.8%	1,036	1,183	148	14.3%
74.1%	1,024	1,160	137	13.4%
75.3%	1,019	1,138	119	11.7%
76.5%	977	1,131	154	15.8%
77.8%	976	1,123	147	15.0%
79.0%	961	1,075	114	11.9%
80.2%	957	1,073	116	12.1%
81.5%	939	1,061	123	13.1%
82.7%	880	1,051	170	19.4%
84.0%	868	1,017	148	17.1%
85.2%	819	994	175	21.4%
86.4%	800	977	177	22.1%
87.7%	800	973	173	21.6%
88.9%	800	887	87	10.9%
90.1%	800	854	54	6.8%
91.4%	800	851	51	6.4%
92.6%	800	800	0	0.0%
93.8%	800	800	0	0.0%
95.1%	800	800	0	0.0%
96.3%	800	800	0	0.0%
97.5%	396	800	404	102.0%
98.8%	347	665	318	91.7%
100.0%	305	321	15	5.1%

Table SW-27-b

American River below Nimbus Reservoir, Monthly Flow
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,133	3,927	-206	-5.0%
1.2%	3,243	3,896	653	20.1%
2.5%	3,241	3,794	553	17.1%
3.7%	2,561	3,744	1,183	46.2%
4.9%	2,496	2,783	286	11.5%
6.2%	2,492	2,652	160	6.4%
7.4%	2,390	2,566	176	7.3%
8.6%	2,334	2,157	-176	-7.6%
9.9%	2,319	2,024	-295	-12.7%
11.1%	2,284	1,975	-309	-13.5%
12.3%	2,208	1,951	-258	-11.7%
13.6%	2,195	1,805	-390	-17.8%
14.8%	2,185	1,784	-400	-18.3%
16.0%	2,019	1,777	-241	-11.9%
17.3%	1,957	1,769	-188	-9.6%
18.5%	1,901	1,750	-151	-7.9%
19.8%	1,856	1,750	-106	-5.7%
21.0%	1,856	1,750	-106	-5.7%
22.2%	1,846	1,750	-96	-5.2%
23.5%	1,809	1,750	-59	-3.3%
24.7%	1,805	1,750	-55	-3.1%
25.9%	1,790	1,750	-40	-2.2%
27.2%	1,750	1,750	0	0.0%
28.4%	1,750	1,750	0	0.0%
29.6%	1,750	1,750	0	0.0%
30.9%	1,750	1,750	0	0.0%
32.1%	1,750	1,750	0	0.0%
33.3%	1,750	1,750	0	0.0%
34.6%	1,750	1,750	0	0.0%
35.8%	1,750	1,750	0	0.0%
37.0%	1,750	1,750	0	0.0%
38.3%	1,750	1,750	0	0.0%
39.5%	1,750	1,750	0	0.0%
40.7%	1,750	1,741	-9	-0.5%
42.0%	1,750	1,615	-135	-7.7%
43.2%	1,750	1,600	-150	-8.6%
44.4%	1,750	1,568	-182	-10.4%
45.7%	1,692	1,564	-129	-7.6%
46.9%	1,600	1,562	-38	-2.4%
48.1%	1,588	1,561	-27	-1.7%
49.4%	1,553	1,559	6	0.4%
50.6%	1,539	1,553	14	0.9%
51.9%	1,537	1,536	-1	-0.1%
53.1%	1,511	1,532	21	1.4%
54.3%	1,403	1,528	124	8.9%
55.6%	1,392	1,526	134	9.7%
56.8%	1,354	1,522	169	12.5%
58.0%	1,318	1,522	204	15.4%
59.3%	1,287	1,520	233	18.1%
60.5%	1,240	1,520	280	22.6%
61.7%	1,222	1,491	269	22.0%
63.0%	1,217	1,472	254	20.9%
64.2%	1,194	1,452	257	21.6%
65.4%	1,158	1,448	290	25.0%
66.7%	1,148	1,404	256	22.3%
67.9%	1,136	1,402	266	23.4%
69.1%	1,110	1,392	282	25.4%
70.4%	1,092	1,376	285	26.1%
71.6%	1,090	1,373	283	25.9%
72.8%	1,089	1,347	257	23.6%
74.1%	1,067	1,319	252	23.6%
75.3%	1,063	1,317	254	23.9%
76.5%	1,044	1,284	239	22.9%
77.8%	977	1,270	293	30.0%
79.0%	951	1,268	317	33.3%
80.2%	880	1,257	377	42.8%
81.5%	874	1,221	347	39.7%
82.7%	868	1,186	317	36.6%
84.0%	839	1,173	334	39.8%
85.2%	828	1,136	308	37.2%
86.4%	821	1,127	306	37.2%
87.7%	806	1,097	291	36.1%
88.9%	800	1,056	256	32.0%
90.1%	800	1,010	210	26.2%
91.4%	800	977	177	22.1%
92.6%	800	791	-9	-1.2%
93.8%	653	703	50	7.7%
95.1%	652	694	41	6.4%
96.3%	646	664	18	2.8%
97.5%	481	581	100	20.8%
98.8%	466	496	30	6.5%
100.0%	368	408	40	10.9%

July				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,000	5,000	0	0.0%
1.2%	5,000	5,000	0	0.0%
2.5%	5,000	5,000	0	0.0%
3.7%	5,000	5,000	0	0.0%
4.9%	5,000	5,000	0	0.0%
6.2%	5,000	4,620	-380	-7.6%
7.4%	5,000	4,533	-467	-9.3%
8.6%	5,000	4,427	-573	-11.5%
9.9%	5,000	4,121	-879	-17.6%
11.1%	5,000	4,085	-915	-18.3%
12.3%	5,000	3,874	-1,126	-22.5%
13.6%	4,844	3,798	-1,046	-21.6%
14.8%	4,826	3,687	-1,139	-23.6%
16.0%	4,754	3,332	-1,422	-29.9%
17.3%	4,734	3,278	-1,457	-30.8%
18.5%	4,606	3,197	-1,409	-30.6%
19.8%	4,604	3,167	-1,437	-31.2%
21.0%	4,518	3,079	-1,438	-31.8%
22.2%	4,436	3,020	-1,416	-31.9%
23.5%	4,326	2,955	-1,371	-31.7%
24.7%	4,272	2,898	-1,375	-32.2%
25.9%	4,198	2,812	-1,386	-33.0%
27.2%	4,064	2,758	-1,306	-32.1%
28.4%	4,030	2,715	-1,315	-32.6%
29.6%	3,879	2,680	-1,199	-30.9%
30.9%	3,842	2,670	-1,172	-30.5%
32.1%	3,798	2,645	-1,152	-30.3%
33.3%	3,745	2,445	-1,301	-34.7%
34.6%	3,692	2,443	-1,249	-33.8%
35.8%	3,564	2,432	-1,132	-31.8%
37.0%	3,437	2,432	-1,005	-29.2%
38.3%	3,381	2,408	-973	-28.8%
39.5%	3,346	2,407	-939	-28.1%
40.7%	3,339	2,395	-945	-28.3%
42.0%	3,328	2,380	-948	-28.5%
43.2%	3,265	2,375	-889	-27.2%
44.4%	2,930	2,366	-564	-19.2%
45.7%	2,901	2,364	-537	-18.5%
46.9%	2,844	2,362	-482	-17.0%
48.1%	2,819	2,361	-458	-16.3%
49.4%	2,814	2,343	-471	-16.7%
50.6%	2,723	2,330	-393	-14.4%
51.9%	2,723	2,014	-709	-26.0%
53.1%	2,721	2,003	-717	-26.4%
54.3%	2,703	2,003	-701	-25.9%
55.6%	2,667	1,997	-670	-25.1%
56.8%	2,625	1,995	-630	-24.0%
58.0%	2,582	1,995	-587	-22.7%
59.3%	2,572	1,995	-577	-22.4%
60.5%	2,484	1,993	-491	-19.8%
61.7%	2,468	1,992	-476	-19.3%
63.0%	2,421	1,991	-430	-17.7%
64.2%	2,371	1,991	-379	-16.0%
65.4%	2,365	1,991	-374	-15.8%
66.7%	2,358	1,990	-368	-15.6%
67.9%	2,007	1,990	-17	-0.9%
69.1%	2,002	1,975	-27	-1.3%
70.4%	1,996	1,970	-26	-1.3%
71.6%	1,897	1,953	56	3.0%
72.8%	1,837	1,927	90	4.9%
74.1%	1,788	1,863	75	4.2%
75.3%	1,778	1,812	34	1.9%
76.5%	1,777	1,752	-25	-1.4%
77.8%	1,750	1,669	-81	-4.6%
79.0%	1,750	1,662	-88	-5.0%
80.2%	1,750	1,598	-152	-8.7%
81.5%	1,750	1,596	-154	-8.8%
82.7%	1,750	1,574	-176	-10.1%
84.0%	1,644	1,524	-120	-7.3%
85.2%	1,637	1,428	-210	-12.8%
86.4%	1,538	1,351	-188	-12.2%
87.7%	1,147	1,119	-28	-2.5%
88.9%	1,090	1,111	20	1.8%
90.1%	1,057	1,104	48	4.5%
91.4%	800	999	199	24.9%
92.6%	800	950	150	18.7%
93.8%	757	864	106	14.0%
95.1%	677	849	172	25.4%
96.3%	652	673	21	3.2%
97.5%	493	666	173	35.1%
98.8%	466	656	190	40.8%
100.0%	314	381	67	21.3%

August				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,339	2,598	-741	-22.2%
1.2%	3,125	2,318	-807	-25.8%
2.5%	2,672	2,302	-370	-13.9%
3.7%	2,621	2,001	-620	-23.7%
4.9%	2,340	1,998	-343	-14.6%
6.2%	2,282	1,990	-292	-12.8%
7.4%	2,009	1,987	-22	-1.1%
8.6%	1,952	1,980	29	1.5%
9.9%	1,823	1,969	147	8.0%
11.1%	1,750	1,952	202	11.5%
12.3%	1,750	1,931	181	10.3%
13.6%	1,750	1,833	83	4.7%
14.8%	1,750	1,757	7	0.4%
16.0%	1,750	1,750	0	0.0%
17.3%	1,750	1,750	0	0.0%
18.5%	1,750	1,750	0	0.0%
19.8%	1,750	1,750	0	0.0%
21.0%	1,750	1,750	0	0.0%
22.2%	1,750	1,750	0	0.0%
23.5%	1,750	1,750	0	0.0%
24.7%	1,750	1,750	0	0.0%
25.9%	1,750	1,750	0	0.0%
27.2%	1,750	1,703	-47	-2.7%
28.4%	1,750	1,693	-57	-3.2%
29.6%	1,739	1,671	-68	-3.9%
30.9%	1,721	1,634	-87	-5.0%
32.1%	1,691	1,610	-81	-4.8%
33.3%	1,600	1,570	-30	-1.9%
34.6%	1,595	1,559	-36	-2.3%
35.8%	1,471	1,547	76	5.2%
37.0%	1,434	1,546	111	7.8%
38.3%	1,392	1,539	147	10.5%
39.5%	1,386	1,535	149	10.8%
40.7%	1,384	1,530	146	10.6%
42.0%	1,370	1,524	153	11.2%
43.2%	1,328	1,508	180	13.6%
44.4%	1,318	1,507	189	14.3%
45.7%	1,295	1,482	187	14.5%
46.9%	1,275	1,481	206	16.1%
48.1%	1,194	1,478	284	23.8%
49.4%	1,178	1,446	268	22.8%
50.6%	1,170	1,432	262	22.4%
51.9%	1,148	1,420	272	23.7%
53.1%	1,098	1,396	297	27.1%
54.3%	1,092	1,392	300	27.5%
55.6%	1,090	1,390	299	27.4%
56.8%	1,089	1,371	281	25.8%
58.0%	1,063	1,368	305	28.7%
59.3%	1,044	1,353	309	29.6%
60.5%	1,044	1,320	276	26.5%
61.7%	1,033	1,294	262	25.3%
63.0%	1,019	1,261	242	23.8%
64.2%	977	1,223	246	25.2%
65.4%	961	1,215	255	26.5%
66.7%	957	1,194	237	24.8%
67.9%	951	1,177	226	23.7%
69.1%	939	1,152	213	22.7%
70.4%	911	1,151	240	26.3%
71.6%	899	1,132	233	25.9%
72.8%	880	1,075	194	22.1%
74.1%	838	1,042	204	24.4%
75.3%	828	1,038	210	25.4%
76.5%	821	1,020	199	24.2%
77.8%	819	1,015	195	23.8%
79.0%	800	1,010	210	26.3%
80.2%	800	977	177	22.1%
81.5%	800	909	109	13.6%
82.7%	800	858	58	7.2%
84.0%	800	845	45	5.7%
85.2%	800	838	38	4.7%
86.4%	800	832	32	4.0%
87.7%	800	821	21	2.6%
88.9%	792	809	17	2.2%
90.1%	719	800	81	11.3%
91.4%	652	800	148	22.7%
92.6%	525	749	224	42.7%
93.8%	506	696	190	37.6%
95.1%	487	695	208	42.6%
96.3%	466	687	221	47.5%
97.5%	453	617	164	36.1%
98.8%	449	603	155	34.5%
100.0%	443	509	66	14.9%

September				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,000	4,574	-426	-8.5%
1.2%	4,851	4,492	-359	-7.4%
2.5%	3,967	3,879	-87	-2.2%
3.7%	3,897	3,656	-241	-6.2%
4.9%	3,589	3,474	-115	-3.2%
6.2%	3,250	3,311	60	1.9%
7.4%	3,137	3,173	37	1.2%
8.6%	3,133	3,135	2	0.1%
9.9%	3,010	2,726	-284	-9.4%
11.1%	2,965	2,594	-371	-12.5%
12.3%	2,902	2,448	-454	-15.6%
13.6%	2,785	2,405	-380	-13.6%
14.8%	2,673	2,302	-370	-13.8%
16.0%	2,636	2,250	-386	-14.7%
17.3%	2,522	2,250	-272	-10.8%
18.5%	2,397	2,232	-165	-6.9%
19.8%	2,306	2,184	-122	-5.3%
21.0%	2,223	1,956	-267	-12.0%
22.2%	2,195	1,951	-244	-11.1%
23.5%	2,179	1,945	-233	-10.7%
24.7%	2,167	1,744	-424	-19.5%
25.9%	2,160	1,737	-424	-19.6%
27.2%	1,968	1,716	-252	-12.8%
28.4%	1,953	1,650	-303	-15.5%
29.6%	1,940	1,650	-290	-14.9%
30.9%	1,931	1,602	-329	-17.1%
32.1%	1,712	1,593	-120	-7.0%
33.3%	1,654	1,546	-108	-6.5%
34.6%	1,535	1,533	-2	-0.1%
35.8%	1,533	1,533	0	0.0%
37.0%	1,533	1,533	0	0.0%
38.3%	1,533	1,533	0	0.0%
39.5%	1,533	1,533	0	0.0%
40.7%	1,533	1,520	-13	-0.9%
42.0%	1,533	1,518	-15	-1.0%
43.2%	1,533	1,515	-18	-1.2%
44.4%	1,510	1,448	-62	-4.1%
45.7%	1,507	1,383	-124	-8.2%
46.9%	1,357	1,379	21	1.6%
48.1%	1,346	1,371	25	1.9%
49.4%	1,317	1,353	36	2.7%
50.6%	1,261	1,348	87	6.9%
51.9%	1,197	1,346	149	12.5%
53.1%	1,151	1,345	194	16.9%
54.3%	1,149	1,333	184	16.0%
55.6%	1,148	1,317	169	14.7%
56.8%	1,124	1,300	176	15.6%
58.0%	1,089	1,281	192	17.6%
59.3%	1,067	1,279	212	19.9%
60.5%	1,040	1,274	234	22.5%
61.7%	1,033	1,267	234	22.7%
63.0%	961	1,261	300	31.3%
64.2%	957	1,251	294	30.7%
65.4%	942	1,247	305	32.3%
66.7%	939	1,197	258	27.5%
67.9%	909	1,193	285	31.3%
69.1%	899	1,186	287	31.9%
70.4%	868	1,181	313	36.0%
71.6%	828	1,165	337	40.6%
72.8%	819	1,095	276	33.7%
74.1%	800	1,093	293	36.6%
75.3%	800	1,025	225	28.1%
76.5%	800	957	157	19.6%
77.8%	800	918	118	14.7%
79.0%	800	884	84	10.5%
80.2%	800	869	69	8.6%
81.5%	800	867	67	8.4%
82.7%	800	836	36	4.5%
84.0%	800	830	30	3.8%
85.2%	800	800	0	0.0%
86.4%	653	800	147	22.6%
87.7%	652	800	148	22.7%
88.9%	558	800	242	43.4%
90.1%	487	800	313	64.2%
91.4%	476	703	227	47.6%
92.6%	466	685	219	47.1%
93.8%	462	685	222	48.1%
95.1%	461	677	216	46.9%
96.3%	427	666	239	55.9%
97.5%	425	600	174	41.0%
98.8%	375	492	117	31.1%
100.0%	375	400	25	6.7%

Figure SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

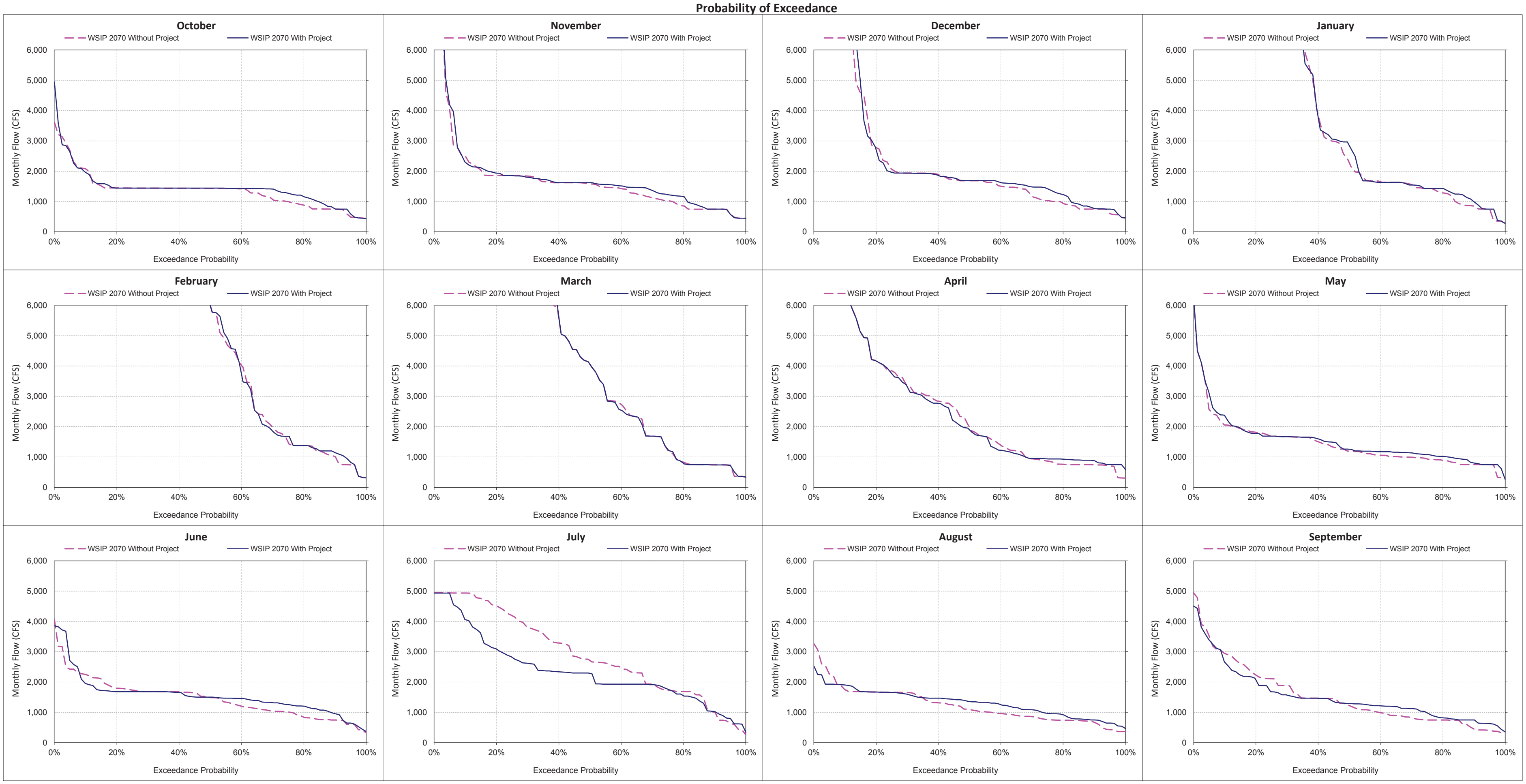


Table SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,616	4,940	1,324	36.6%
1.2%	3,213	3,575	362	11.3%
2.5%	3,141	2,873	-268	-8.5%
3.7%	2,937	2,848	-90	-3.1%
4.9%	2,694	2,648	-45	-1.7%
6.2%	2,314	2,265	-48	-2.1%
7.4%	2,145	2,112	-32	-1.5%
8.6%	2,103	2,085	-19	-0.9%
9.9%	2,090	1,968	-121	-5.8%
11.1%	1,993	1,897	-96	-4.8%
12.3%	1,593	1,679	85	5.4%
13.6%	1,584	1,600	16	1.0%
14.8%	1,528	1,588	60	3.9%
16.0%	1,448	1,584	136	9.4%
17.3%	1,448	1,537	89	6.1%
18.5%	1,448	1,461	13	0.9%
19.8%	1,448	1,446	-2	-0.1%
21.0%	1,448	1,443	-5	-0.3%
22.2%	1,446	1,443	-3	-0.2%
23.5%	1,445	1,442	-3	-0.2%
24.7%	1,444	1,442	-2	-0.1%
25.9%	1,443	1,442	-1	-0.1%
27.2%	1,443	1,442	-1	-0.1%
28.4%	1,443	1,442	-1	0.0%
29.6%	1,442	1,442	-1	-0.1%
30.9%	1,442	1,441	-1	-0.1%
32.1%	1,442	1,441	-1	-0.1%
33.3%	1,441	1,441	1	0.1%
34.6%	1,439	1,441	2	0.1%
35.8%	1,439	1,441	2	0.1%
37.0%	1,439	1,441	2	0.1%
38.3%	1,439	1,441	2	0.1%
39.5%	1,439	1,441	2	0.1%
40.7%	1,439	1,441	2	0.1%
42.0%	1,439	1,441	2	0.1%
43.2%	1,438	1,441	3	0.2%
44.4%	1,435	1,441	5	0.4%
45.7%	1,435	1,440	5	0.4%
46.9%	1,435	1,440	5	0.3%
48.1%	1,433	1,439	6	0.4%
49.4%	1,433	1,439	6	0.4%
50.6%	1,432	1,439	7	0.5%
51.9%	1,429	1,439	10	0.7%
53.1%	1,427	1,439	12	0.8%
54.3%	1,426	1,439	12	0.9%
55.6%	1,426	1,438	12	0.8%
56.8%	1,426	1,438	12	0.8%
58.0%	1,425	1,438	13	0.9%
59.3%	1,418	1,437	19	1.3%
60.5%	1,418	1,437	19	1.4%
61.7%	1,382	1,431	49	3.6%
63.0%	1,284	1,430	146	11.3%
64.2%	1,281	1,429	147	11.5%
65.4%	1,279	1,425	146	11.4%
66.7%	1,196	1,423	227	19.0%
67.9%	1,169	1,420	251	21.5%
69.1%	1,141	1,418	277	24.3%
70.4%	1,042	1,404	362	34.7%
71.6%	1,026	1,350	324	31.6%
72.8%	1,025	1,306	281	27.4%
74.1%	1,011	1,294	282	27.9%
75.3%	989	1,259	270	27.3%
76.5%	937	1,228	291	31.1%
77.8%	932	1,215	283	30.3%
79.0%	901	1,211	310	34.5%
80.2%	875	1,155	280	32.0%
81.5%	856	1,117	261	30.5%
82.7%	756	1,078	322	42.7%
84.0%	755	1,027	272	36.0%
85.2%	755	980	225	29.8%
86.4%	753	925	172	22.8%
87.7%	751	847	95	12.7%
88.9%	748	823	75	10.0%
90.1%	748	751	2	0.3%
91.4%	745	750	5	0.7%
92.6%	730	748	18	2.5%
93.8%	589	748	159	27.0%
95.1%	487	589	102	21.0%
96.3%	478	487	9	1.9%
97.5%	461	460	-1	-0.2%
98.8%	456	451	-5	-1.1%
100.0%	439	439	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,753	15,096	344	2.3%
1.2%	12,384	12,041	-343	-2.8%
2.5%	7,573	7,514	-59	-0.8%
3.7%	4,639	5,074	434	9.4%
4.9%	4,077	4,191	114	2.8%
6.2%	2,849	3,958	1,109	38.9%
7.4%	2,797	2,795	-2	-0.1%
8.6%	2,543	2,577	34	1.3%
9.9%	2,525	2,309	-216	-8.6%
11.1%	2,305	2,207	-98	-4.2%
12.3%	2,232	2,142	-90	-4.0%
13.6%	2,142	2,137	-5	-0.2%
14.8%	2,057	2,122	64	3.1%
16.0%	1,872	2,063	191	10.2%
17.3%	1,862	2,003	141	7.6%
18.5%	1,862	1,977	115	6.2%
19.8%	1,862	1,937	75	4.0%
21.0%	1,862	1,929	67	3.6%
22.2%	1,862	1,862	0	0.0%
23.5%	1,862	1,862	0	0.0%
24.7%	1,861	1,862	1	0.0%
25.9%	1,856	1,849	-7	-0.4%
27.2%	1,851	1,843	-8	-0.4%
28.4%	1,847	1,838	-8	-0.5%
29.6%	1,843	1,806	-37	-2.0%
30.9%	1,831	1,796	-35	-1.9%
32.1%	1,805	1,762	-43	-2.4%
33.3%	1,743	1,761	18	1.0%
34.6%	1,656	1,728	72	4.4%
35.8%	1,653	1,722	69	4.2%
37.0%	1,644	1,687	43	2.6%
38.3%	1,621	1,651	30	1.9%
39.5%	1,621	1,626	6	0.3%
40.7%	1,621	1,621	0	0.0%
42.0%	1,621	1,621	0	0.0%
43.2%	1,621	1,621	0	0.0%
44.4%	1,621	1,621	0	0.0%
45.7%	1,621	1,621	0	0.0%
46.9%	1,621	1,621	0	0.0%
48.1%	1,608	1,621	13	0.8%
49.4%	1,581	1,620	39	2.4%
50.6%	1,580	1,618	38	2.4%
51.9%	1,567	1,592	26	1.6%
53.1%	1,497	1,572	75	5.0%
54.3%	1,478	1,566	88	5.9%
55.6%	1,464	1,563	99	6.7%
56.8%	1,461	1,552	91	6.2%
58.0%	1,460	1,533	73	5.0%
59.3%	1,447	1,521	74	5.1%
60.5%	1,415	1,510	94	6.7%
61.7%	1,408	1,475	67	4.8%
63.0%	1,282	1,468	186	14.5%
64.2%	1,276	1,466	190	14.9%
65.4%	1,237	1,464	227	18.4%
66.7%	1,229	1,457	228	18.6%
67.9%	1,175	1,450	275	23.4%
69.1%	1,148	1,403	255	22.2%
70.4%	1,101	1,345	244	22.1%
71.6%	1,088	1,285	198	18.2%
72.8%	1,062	1,251	188	17.7%
74.1%	1,025	1,249	224	21.8%
75.3%	1,021	1,221	200	19.6%
76.5%	1,002	1,204	202	20.2%
77.8%	923	1,188	265	28.7%
79.0%	864	1,179	315	36.5%
80.2%	852	1,161	310	36.4%
81.5%	752	973	221	29.4%
82.7%	747	936	189	25.3%
84.0%	747	905	158	21.2%
85.2%	746	851	105	14.0%
86.4%	746	809	63	8.4%
87.7%	746	750	3	0.5%
88.9%	746	747	0	0.0%
90.1%	746	746	0	0.0%
91.4%	746	746	0	0.0%
92.6%	746	746	0	0.0%
93.8%	743	741	-2	-0.3%
95.1%	579	574	-5	-0.9%
96.3%	482	467	-16	-3.3%
97.5%	453	453	0	0.0%
98.8%	453	453	0	0.0%
100.0%	452	452	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,931	23,934	3	0.0%
1.2%	21,432	21,430	-2	0.0%
2.5%	21,001	21,414	413	2.0%
3.7%	20,283	20,270	-13	-0.1%
4.9%	20,082	20,115	33	0.2%
6.2%	19,227	19,224	-4	0.0%
7.4%	18,389	18,394	5	0.0%
8.6%	15,197	15,193	-4	0.0%
9.9%	14,531	13,858	-674	-4.6%
11.1%	10,409	9,551	-857	-8.2%
12.3%	6,407	6,864	458	7.1%
13.6%	4,895	6,249	1,354	27.7%
14.8%	4,614	5,053	439	9.5%
16.0%	4,511	3,663	-848	-18.8%
17.3%	3,724	3,160	-564	-15.2%
18.5%	2,863	3,023	160	5.6%
19.8%	2,795	2,796	1	0.0%
21.0%	2,728	2,350	-378	-13.8%
22.2%	2,352	2,275	-77	-3.3%
23.5%	2,309	2,012	-297	-12.9%
24.7%	2,089	1,975	-114	-5.5%
25.9%	2,000	1,942	-58	-2.9%
27.2%	1,942	1,936	-6	-0.3%
28.4%	1,936	1,936	0	0.0%
29.6%	1,936	1,936	0	0.0%
30.9%	1,936	1,936	0	0.0%
32.1%	1,936	1,935	-1	0.0%
33.3%	1,936	1,934	-1	-0.1%
34.6%	1,936	1,934	-2	-0.1%
35.8%	1,936	1,929	-6	-0.3%
37.0%	1,932	1,925	-7	-0.4%
38.3%	1,932	1,901	-31	-1.6%
39.5%	1,904	1,878	-26	-1.4%
40.7%	1,879	1,832	-46	-2.5%
42.0%	1,814	1,831	17	0.9%
43.2%	1,746	1,792	46	2.6%
44.4%	1,724	1,781	57	3.3%
45.7%	1,719	1,756	37	2.2%
46.9%	1,688	1,702	14	0.8%
48.1%	1,688	1,693	6	0.3%
49.4%	1,688	1,688	0	0.0%
50.6%	1,688	1,688	0	0.0%
51.9%	1,688	1,688	0	0.0%
53.1%	1,688	1,688	0	0.0%
54.3%	1,671	1,688	17	1.0%
55.6%	1,634	1,688	53	3.3%
56.8%	1,633	1,688	55	3.3%
58.0%	1,615	1,688	73	4.5%
59.3%	1,521	1,650	129	8.5%
60.5%	1,494	1,613	119	7.9%
61.7%	1,476	1,610	134	9.0%
63.0%	1,471	1,596	125	8.5%
64.2%	1,471	1,595	124	8.5%
65.4%	1,452	1,569	116	8.0%
66.7%	1,418	1,552	135	9.5%
67.9%	1,410	1,537	128	9.1%
69.1%	1,284	1,491	206	16.1%
70.4%	1,150	1,481	332	28.8%
71.6%	1,112	1,478	366	32.9%
72.8%	1,064	1,476	412	38.7%
74.1%	1,032	1,457	424	41.1%
75.3%	1,027	1,405	378	36.8%
76.5%	1,006	1,347	340	33.8%
77.8%	1,003	1,287	284	28.3%
79.0%	1,000	1,253	253	25.3%
80.2%	926	1,223	298	32.2%
81.5%	895	1,163	268	29.9%
82.7%	866	975	109	12.6%
84.0%	854	940	86	10.1%
85.2%	754	910	157	20.8%
86.4%	752	854	103	13.7%
87.7%	748	853	105	14.0%
88.9%	748	812	63	8.5%
90.1%	748	767	19	2.6%
91.4%	748	754	6	0.8%
92.6%	748	754	6	0.8%
93.8%	748	748	0	0.0%
95.1%	598	748	151	25.2%
96.3%	568	736	167	29.5%
97.5%	565	598	33	5.8%
98.8%	472	472	0	0.0%
100.0%	459	459	0	0.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,015	41,012	-2	0.0%
1.2%	29,963	29,959	-5	0.0%
2.5%	29,604	29,466	-138	-0.5%
3.7%	29,124	29,127	3	0.0%
4.9%	27,612	27,610	-2	0.0%
6.2%	25,933	25,917	-15	-0.1%
7.4%	25,101	25,102	1	0.0%
8.6%	22,482	22,482	0	0.0%
9.9%	21,538	21,538	0	0.0%
11.1%	20,680	21,014	334	1.6%
12.3%	20,083	20,083	0	0.0%
13.6%	17,894	17,894	0	0.0%
14.8%	16,477	16,478	1	0.0%
16.0%	15,768	15,767	-1	0.0%
17.3%	14,597	14,533	-65	-0.4%
18.5%	14,564	13,468	-1,096	-7.5%
19.8%	13,456	13,446	-10	-0.1%
21.0%	12,829	12,693	-136	-1.1%
22.2%	11,551	11,547	-4	0.0%
23.5%	10,053	10,049	-4	0.0%
24.7%	9,962	9,969	7	0.1%
25.9%	9,906	9,909	3	0.0%
27.2%	9,245	9,253	8	0.1%
28.4%	9,105	9,110	5	0.1%
29.6%	8,312	8,315	3	0.0%
30.9%	8,275	8,282	7	0.1%
32.1%	6,966	6,966	0	0.0%
33.3%	6,923	6,933	11	0.2%
34.6%	6,528	6,658	130	2.0%
35.8%	5,910	5,553	-357	-6.0%
37.0%	5,479	5,353	-126	-2.3%
38.3%	5,019	5,183	164	3.3%
39.5%	4,076	4,060	-16	-0.4%
40.7%	3,538	3,360	-177	-5.0%
42.0%	3,114	3,285	171	5.5%
43.2%	3,054	3,208	154	5.0%
44.4%	2,994	3,060	66	2.2%
45.7%	2,978	3,048	70	2.3%
46.9%	2,919	2,990	71	2.4%
48.1%	2,568	2,966	399	15.5%
49.4%	2,420	2,962	543	22.4%
50.6%	2,138	2,723	585	27.4%
51.9%	1,980	2,494	514	26.0%
53.1%	1,965	1,965	0	0.0%
54.3%	1,799	1,685	-114	-6.4%
55.6%	1,687	1,685	-2	-0.1%
56.8%	1,685	1,675	-10	-0.6%
58.0%	1,685	1,647	-38	-2.3%
59.3%	1,675	1,635	-40	-2.4%
60.5%	1,635	1,635	0	0.0%
61.7%	1,635	1,635	0	0.0%
63.0%	1,635	1,635	0	0.0%
64.2%	1,635	1,635	0	0.0%
65.4%	1,635	1,635	0	0.0%
66.7%	1,635	1,627	-8	-0.5%
67.9%	1,608	1,595	-13	-0.8%
69.1%	1,586	1,547	-39	-2.5%
70.4%	1,542	1,546	4	0.3%
71.6%	1,455	1,535	79	5.4%
72.8%	1,451	1,513	62	4.3%
74.1%	1,425	1,429	5	0.3%
75.3%	1,425	1,425	0	0.0%
76.5%	1,425	1,425	0	0.0%
77.8%	1,363	1,425	62	4.5%
79.0%	1,284	1,425	140	10.9%
80.2%	1,283	1,425	141	11.0%
81.5%	1,261	1,358	97	7.7%
82.7%	1,196	1,297	102	8.5%
84.0%	1,003	1,250	247	24.6%
85.2%	929	1,247	318	34.2%
86.4%	896	1,223	327	36.5%
87.7%	866	1,136	270	31.1%
88.9%	864	1,085	221	25.5%
90.1%	849	980	132	15.5%
91.4%	755	889	134	17.8%
92.6%	748	766	17	2.3%
93.8%	748	748	0	0.0%
95.1%	748	748	0	0.0%
96.3%	369	746	377	102.1%
97.5%	356	369	13	
98.8%	355	356	2	
100.0%	277	277	0	

Table SW-28-b

American River at Watt Avenue, Monthly Flow

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,202	42,202	0	0.0%
1.2%	32,740	32,732	-8	0.0%
2.5%	32,452	32,452	0	0.0%
3.7%	23,166	23,167	1	0.0%
4.9%	22,717	22,714	-2	0.0%
6.2%	22,095	22,090	-4	0.0%
7.4%	21,267	21,267	0	0.0%
8.6%	20,987	20,985	-2	0.0%
9.9%	20,556	20,547	-9	0.0%
11.1%	20,308	20,308	0	0.0%
12.3%	20,230	20,230	1	0.0%
13.6%	20,009	19,746	-263	-1.3%
14.8%	19,676	19,673	-3	0.0%
16.0%	18,689	18,690	1	0.0%
17.3%	17,835	17,881	46	0.3%
18.5%	17,751	17,751	0	0.0%
19.8%	16,339	16,339	0	0.0%
21.0%	16,324	16,324	0	0.0%
22.2%	14,682	14,682	0	0.0%
23.5%	14,543	14,543	0	0.0%
24.7%	14,235	14,246	11	0.1%
25.9%	12,686	12,523	-163	-1.3%
27.2%	12,523	12,466	-57	-0.5%
28.4%	12,466	12,388	-79	-0.6%
29.6%	11,667	11,667	0	0.0%
30.9%	10,653	10,651	-1	0.0%
32.1%	10,194	9,657	-537	-5.3%
33.3%	9,454	9,454	0	0.0%
34.6%	9,059	9,206	148	1.6%
35.8%	8,380	8,382	2	0.0%
37.0%	7,889	8,346	457	5.8%
38.3%	7,847	7,775	-73	-0.9%
39.5%	7,774	7,593	-181	-2.3%
40.7%	7,428	7,429	1	0.0%
42.0%	7,324	7,323	-1	0.0%
43.2%	7,040	7,035	-5	-0.1%
44.4%	6,785	6,785	0	0.0%
45.7%	6,651	6,651	0	0.0%
46.9%	6,376	6,375	0	0.0%
48.1%	6,331	6,333	2	0.0%
49.4%	6,220	6,220	0	0.0%
50.6%	5,773	5,773	0	0.0%
51.9%	5,762	5,764	1	0.0%
53.1%	5,101	5,642	541	10.6%
54.3%	4,928	5,103	176	3.6%
55.6%	4,677	4,914	238	5.1%
56.8%	4,551	4,572	21	0.5%
58.0%	4,433	4,551	118	2.7%
59.3%	4,121	4,123	1	0.0%
60.5%	3,960	3,476	-484	-12.2%
61.7%	3,476	3,441	-35	-1.0%
63.0%	3,442	3,235	-207	-6.0%
64.2%	2,542	2,539	-3	-0.1%
65.4%	2,417	2,418	1	0.0%
66.7%	2,395	2,081	-314	-13.1%
67.9%	2,181	2,030	-151	-6.9%
69.1%	2,078	1,943	-136	-6.5%
70.4%	1,942	1,818	-124	-6.4%
71.6%	1,817	1,725	-92	-5.1%
72.8%	1,778	1,683	-95	-5.3%
74.1%	1,680	1,680	0	0.0%
75.3%	1,420	1,679	258	18.2%
76.5%	1,378	1,378	0	0.0%
77.8%	1,376	1,376	0	0.0%
79.0%	1,376	1,376	0	0.0%
80.2%	1,376	1,376	0	0.0%
81.5%	1,376	1,369	-6	-0.5%
82.7%	1,353	1,301	-52	-3.8%
84.0%	1,219	1,273	53	4.4%
85.2%	1,197	1,197	0	0.0%
86.4%	1,145	1,197	52	4.6%
87.7%	1,077	1,197	120	11.2%
88.9%	1,058	1,197	139	13.1%
90.1%	1,005	1,141	136	13.5%
91.4%	752	1,089	338	44.9%
92.6%	743	1,046	304	40.9%
93.8%	741	954	213	28.8%
95.1%	740	822	82	11.1%
96.3%	740	742	2	0.2%
97.5%	362	362	0	
98.8%	326	326	0	
100.0%	312	312	0	

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,548	25,548	0	0.0%
1.2%	24,500	24,500	0	0.0%
2.5%	21,232	21,227	-5	0.0%
3.7%	17,296	17,296	0	0.0%
4.9%	16,926	16,926	0	0.0%
6.2%	16,510	16,510	0	0.0%
7.4%	15,651	15,651	0	0.0%
8.6%	14,620	14,620	0	0.0%
9.9%	12,868	12,873	4	0.0%
11.1%	10,981	10,980	0	0.0%
12.3%	10,562	10,562	0	0.0%
13.6%	10,364	10,356	-8	-0.1%
14.8%	10,348	10,347	-1	0.0%
16.0%	10,149	10,149	0	0.0%
17.3%	9,889	9,888	-1	0.0%
18.5%	9,723	9,722	0	0.0%
19.8%	8,919	8,921	2	0.0%
21.0%	8,548	8,548	0	0.0%
22.2%	8,345	8,345	0	0.0%
23.5%	8,315	8,315	0	0.0%
24.7%	8,274	8,274	0	0.0%
25.9%	8,191	8,193	2	0.0%
27.2%	8,013	7,910	-103	-1.3%
28.4%	7,767	7,762	-5	-0.1%
29.6%	7,688	7,692	3	0.0%
30.9%	6,574	6,569	-5	-0.1%
32.1%	6,442	6,431	-11	-0.2%
33.3%	6,392	6,391	-1	0.0%
34.6%	6,273	6,273	0	0.0%
35.8%	6,157	6,157	0	0.0%
37.0%	6,112	6,111	-2	0.0%
38.3%	6,011	6,067	56	0.9%
39.5%	5,908	6,011	103	1.7%
40.7%	5,053	5,053	0	0.0%
42.0%	4,988	4,988	0	0.0%
43.2%	4,809	4,809	0	0.0%
44.4%	4,547	4,547	0	0.0%
45.7%	4,538	4,538	0	0.0%
46.9%	4,298	4,299	1	0.0%
48.1%	4,185	4,185	0	0.0%
49.4%	4,146	4,146	0	0.0%
50.6%	3,954	3,956	2	0.0%
51.9%	3,798	3,798	0	0.0%
53.1%	3,529	3,531	2	0.1%
54.3%	3,389	3,389	0	0.0%
55.6%	2,872	2,838	-33	-1.2%
56.8%	2,853	2,834	-19	-0.7%
58.0%	2,838	2,799	-40	-1.4%
59.3%	2,799	2,577	-222	-7.9%
60.5%	2,691	2,521	-170	-6.3%
61.7%	2,515	2,408	-107	-4.3%
63.0%	2,364	2,364	0	0.0%
64.2%	2,338	2,338	0	0.0%
65.4%	2,314	2,314	-1	0.0%
66.7%	2,252	2,080	-172	-7.7%
67.9%	1,693	1,694	1	0.1%
69.1%	1,686	1,686	0	0.0%
70.4%	1,684	1,684	0	0.0%
71.6%	1,676	1,677	1	0.0%
72.8%	1,662	1,662	0	0.0%
74.1%	1,366	1,368	2	0.1%
75.3%	1,169	1,206	37	3.2%
76.5%	1,117	1,169	52	4.6%
77.8%	916	916	0	0.0%
79.0%	864	864	0	0.0%
80.2%	819	767	-51	-6.3%
81.5%	767	747	-21	-2.7%
82.7%	748	743	-6	-0.8%
84.0%	748	742	-6	-0.8%
85.2%	742	741	-1	-0.1%
86.4%	742	741	0	-0.1%
87.7%	741	741	0	0.0%
88.9%	741	741	0	-0.1%
90.1%	740	740	0	0.1%
91.4%	740	740	0	0.0%
92.6%	740	740	0	0.0%
93.8%	737	737	0	0.0%
95.1%	729	724	-6	-0.8%
96.3%	363	518	156	42.9%
97.5%	357	363	5	1.5%
98.8%	357	357	0	0.0%
100.0%	333	333	0	0.0%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,878	20,872	-5	0.0%
1.2%	19,548	19,548	0	0.0%
2.5%	12,041	12,041	0	0.0%
3.7%	11,198	11,194	-4	0.0%
4.9%	11,077	11,077	0	0.0%
6.2%	7,667	7,667	0	0.0%
7.4%	6,817	6,817	0	0.0%
8.6%	6,409	6,409	0	0.0%
9.9%	6,268	6,268	0	0.0%
11.1%	6,208	6,208	0	0.0%
12.3%	5,880	5,880	0	0.0%
13.6%	5,582	5,574	-8	-0.1%
14.8%	5,140	5,140	0	0.0%
16.0%	4,938	4,938	-1	0.0%
17.3%	4,925	4,925	0	0.0%
18.5%	4,214	4,214	0	0.0%
19.8%	4,185	4,176	-10	-0.2%
21.0%	4,107	4,107	0	0.0%
22.2%	4,036	4,037	1	0.0%
23.5%	3,882	3,938	56	1.4%
24.7%	3,856	3,789	-67	-1.7%
25.9%	3,789	3,641	-148	-3.9%
27.2%	3,642	3,623	-18	-0.5%
28.4%	3,623	3,468	-155	-4.3%
29.6%	3,385	3,385	0	0.0%
30.9%	3,329	3,130	-199	-6.0%
32.1%	3,130	3,114	-16	-0.5%
33.3%	3,114	3,071	-43	-1.4%
34.6%	3,106	3,037	-69	-2.2%
35.8%	3,037	2,923	-114	-3.8%
37.0%	3,020	2,845	-175	-5.8%
38.3%	2,916	2,777	-140	-4.8%
39.5%	2,847	2,776	-70	-2.5%
40.7%	2,828	2,753	-74	-2.6%
42.0%	2,776	2,668	-108	-3.9%
43.2%	2,776	2,617	-159	-5.7%
44.4%	2,667	2,217	-449	-16.9%
45.7%	2,577	2,129	-449	-17.4%
46.9%	2,331	2,039	-293	-12.6%
48.1%	2,326	1,967	-359	-15.4%
49.4%	2,074	1,953	-121	-5.8%
50.6%	1,865	1,823	-42	-2.3%
51.9%	1,806	1,725	-81	-4.5%
53.1%	1,703	1,706	3	0.2%
54.3%	1,685	1,685	0	0.0%
55.6%	1,663	1,663	0	0.0%
56.8%	1,591	1,351	-241	-15.1%
58.0%	1,531	1,296	-234	-15.3%
59.3%	1,439	1,224	-216	-15.0%
60.5%	1,351	1,213	-138	-10.2%
61.7%	1,296	1,192	-104	-8.0%
63.0%	1,224	1,162	-61	-5.0%
64.2%	1,213	1,126	-87	-7.2%
65.4%	1,191	1,095	-95	-8.0%
66.7%	1,164	1,056	-108	-9.2%
67.9%	997	998	2	0.2%
69.1%	940	947	7	0.8%
70.4%	937	947	10	1.1%
71.6%	921	947	26	2.8%
72.8%	900	947	47	5.2%
74.1%	875	940	64	7.3%
75.3%	860	937	76	8.9%
76.5%	833	936	102	12.3%
77.8%	765	935	170	22.2%
79.0%	763	932	169	22.1%
80.2%	757	921	164	21.6%
81.5%	747	914	168	22.4%
82.7%	747	905	158	21.2%
84.0%	747	900	153	20.5%
85.2%	747	899	153	20.4%
86.4%	747	895	148	19.9%
87.7%	747	892	146	19.5%
88.9%	747	891	144	19.3%
90.1%	736	876	140	19.1%
91.4%	735	808	73	9.9%
92.6%	735	797	62	8.4%
93.8%	724	757	32	4.5%
95.1%	705	755	49	7.0%
96.3%	689	747	58	8.5%
97.5%	315	747	432	137.2%
98.8%	307	747	439	142.8%
100.0%	303	582	280	92.3%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,313	6,313	0	0.0%
1.2%	4,506	4,506	0	0.0%
2.5%	4,113	4,113	0	0.0%
3.7%	3,502	3,502	0	0.0%
4.9%	2,572	3,138	566	22.0%
6.2%	2,424	2,632	208	8.6%
7.4%	2,378	2,477	98	4.1%
8.6%	2,181	2,389	208	9.5%
9.9%	2,057	2,378	321	15.6%
11.1%	2,049	2,178	129	6.3%
12.3%	2,006	2,026	20	1.0%
13.6%	1,990	2,008	18	0.9%
14.8%	1,942	1,966	24	1.3%
16.0%	1,906	1,873	-33	-1.7%
17.3%	1,874	1,827	-48	-2.6%
18.5%	1,827	1,785	-42	-2.3%
19.8%	1,819	1,772	-47	-2.6%
21.0%	1,790	1,771	-19	-1.1%
22.2%	1,784	1,689	-95	-5.3%
23.5%	1,740	1,687	-52	-3.0%
24.7%	1,687	1,687	0	0.0%
25.9%	1,687	1,686	-1	-0.1%
27.2%	1,675	1,675	0	0.0%
28.4%	1,673	1,671	-1	-0.1%
29.6%	1,666	1,666	0	0.0%
30.9%	1,665	1,665	0	0.0%
32.1%	1,659	1,664	6	0.3%
33.3%	1,653	1,659	6	0.3%
34.6%	1,650	1,653	3	0.2%
35.8%	1,646	1,652	7	0.4%
37.0%	1,645	1,650	5	0.3%
38.3%	1,583	1,646	62	3.9%
39.5%	1,519	1,612	94	6.2%
40.7%	1,475	1,577	101	6.9%
42.0%	1,412	1,519	107	7.6%
43.2%	1,404	1,495	90	6.4%
44.4%	1,332	1,492	159	12.0%
45.7%	1,306	1,475	170	13.0%
46.9%	1,259	1,332	73	5.8%
48.1%	1,258	1,259	1	0.1%
49.4%	1,193	1,258	65	5.5%
50.6%	1,188	1,246	58	4.9%
51.9%	1,182	1,198	17	1.4%
53.1%	1,181	1,198	17	1.4%
54.3%	1,139	1,189	51	4.5%
55.6%	1,110	1,187	77	6.9%
56.8%	1,103	1,187	84	7.6%
58.0%	1,072	1,185	113	10.5%
59.3%	1,064	1,173	110	10.3%
60.5%	1,054	1,173	119	11.3%
61.7%	1,051	1,172	121	11.5%
63.0%	1,010	1,169	159	15.8%
64.2%	1,008	1,154	146	14.4%
65.4%	1,008	1,152	144	14.3%
66.7%	1,001	1,151	150	15.0%
67.9%	996	1,145	149	15.0%
69.1%	992	1,143	151	15.2%
70.4%	988	1,127	139	14.0%
71.6%	972	1,108	135	13.9%
72.8%	972	1,100	128	13.2%
74.1%	961	1,082	122	12.7%
75.3%	924	1,076	152	16.4%
76.5%	921	1,055	134	14.5%
77.8%	907	1,026	119	13.1%
79.0%	904	1,020	116	12.9%
80.2%	887	1,015	128	14.5%
81.5%	871	998	127	14.6%
82.7%	830	985	156	18.8%
84.0%	816	959	143	17.5%
85.2%	762	940	178	23.4%
86.4%	749	921	172	23.0%
87.7%	748	918	170	22.7%
88.9%	748	822	74	9.8%
90.1%	748	800	51	6.8%
91.4%	748	779	31	4.2%
92.6%	748	748	0	0.0%
93.8%	748	748	0	0.0%
95.1%	746	748	3	0.4%
96.3%	738	748	10	1.4%
97.5%	332	748	416	125.3%
98.8%	309	617	308	99.5%
100.0%	266	266	0	0.0%

Table SW-28-b
American River at Watt Avenue, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,065	3,859	-206	-5.1%
1.2%	3,180	3,818	639	20.1%
2.5%	3,175	3,723	548	17.2%
3.7%	2,496	3,678	1,182	47.4%
4.9%	2,427	2,709	282	11.6%
6.2%	2,426	2,583	156	6.4%
7.4%	2,325	2,505	180	7.8%
8.6%	2,277	2,093	-185	-8.1%
9.9%	2,254	1,959	-295	-13.1%
11.1%	2,212	1,909	-304	-13.7%
12.3%	2,141	1,886	-255	-11.9%
13.6%	2,137	1,747	-389	-18.2%
14.8%	2,116	1,725	-392	-18.5%
16.0%	1,959	1,712	-247	-12.6%
17.3%	1,898	1,706	-193	-10.1%
18.5%	1,837	1,687	-150	-8.2%
19.8%	1,798	1,685	-113	-6.3%
21.0%	1,791	1,685	-106	-5.9%
22.2%	1,780	1,685	-94	-5.3%
23.5%	1,756	1,685	-70	-4.0%
24.7%	1,738	1,685	-53	-3.1%
25.9%	1,719	1,685	-34	-2.0%
27.2%	1,687	1,685	-1	-0.1%
28.4%	1,685	1,685	0	0.0%
29.6%	1,685	1,685	0	0.0%
30.9%	1,685	1,685	0	0.0%
32.1%	1,685	1,684	-1	-0.1%
33.3%	1,685	1,683	-2	-0.1%
34.6%	1,685	1,681	-4	-0.2%
35.8%	1,685	1,679	-6	-0.4%
37.0%	1,685	1,669	-16	-1.0%
38.3%	1,684	1,663	-21	-1.3%
39.5%	1,683	1,659	-24	-1.4%
40.7%	1,669	1,643	-25	-1.5%
42.0%	1,663	1,552	-111	-6.7%
43.2%	1,659	1,528	-131	-7.9%
44.4%	1,643	1,509	-135	-8.2%
45.7%	1,630	1,503	-127	-7.8%
46.9%	1,531	1,502	-29	-1.9%
48.1%	1,527	1,502	-25	-1.7%
49.4%	1,490	1,501	11	0.7%
50.6%	1,484	1,498	15	1.0%
51.9%	1,482	1,493	11	0.7%
53.1%	1,452	1,472	20	1.4%
54.3%	1,345	1,471	126	9.4%
55.6%	1,330	1,467	137	10.3%
56.8%	1,294	1,463	170	13.1%
58.0%	1,257	1,462	205	16.3%
59.3%	1,227	1,460	233	19.0%
60.5%	1,187	1,459	273	23.0%
61.7%	1,163	1,430	268	23.0%
63.0%	1,157	1,412	255	22.0%
64.2%	1,135	1,392	257	22.7%
65.4%	1,124	1,388	264	23.5%
66.7%	1,088	1,336	247	22.7%
67.9%	1,078	1,334	257	23.8%
69.1%	1,051	1,330	279	26.6%
70.4%	1,040	1,317	277	26.6%
71.6%	1,034	1,314	279	27.0%
72.8%	1,031	1,292	261	25.3%
74.1%	1,025	1,260	234	22.8%
75.3%	1,008	1,256	248	24.6%
76.5%	986	1,225	239	24.2%
77.8%	920	1,211	291	31.7%
79.0%	892	1,208	316	35.4%
80.2%	825	1,199	374	45.3%
81.5%	817	1,157	340	41.6%
82.7%	813	1,128	315	38.7%
84.0%	778	1,114	336	43.1%
85.2%	763	1,073	310	40.5%
86.4%	760	1,070	309	40.7%
87.7%	760	1,043	283	37.2%
88.9%	747	991	244	32.7%
90.1%	746	956	209	28.0%
91.4%	740	920	180	24.4%
92.6%	738	737	0	-0.1%
93.8%	599	649	50	8.4%
95.1%	599	643	44	7.4%
96.3%	593	611	18	3.0%
97.5%	428	528	100	23.4%
98.8%	412	443	31	7.4%
100.0%	328	374	46	13.9%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,948	4,939	-10	-0.2%
1.2%	4,948	4,937	-11	-0.2%
2.5%	4,942	4,937	-5	-0.1%
3.7%	4,942	4,937	-5	-0.1%
4.9%	4,938	4,937	-1	0.0%
6.2%	4,937	4,553	-384	-7.8%
7.4%	4,937	4,470	-467	-9.5%
8.6%	4,937	4,366	-571	-11.6%
9.9%	4,937	4,060	-877	-17.8%
11.1%	4,935	4,023	-911	-18.5%
12.3%	4,930	3,813	-1,117	-22.7%
13.6%	4,781	3,735	-1,046	-21.9%
14.8%	4,764	3,625	-1,139	-23.9%
16.0%	4,697	3,271	-1,426	-30.4%
17.3%	4,682	3,216	-1,466	-31.3%
18.5%	4,549	3,137	-1,412	-31.0%
19.8%	4,534	3,104	-1,430	-31.5%
21.0%	4,458	3,016	-1,442	-32.3%
22.2%	4,383	2,959	-1,424	-32.5%
23.5%	4,266	2,892	-1,374	-32.2%
24.7%	4,209	2,837	-1,373	-32.6%
25.9%	4,141	2,749	-1,391	-33.6%
27.2%	4,012	2,699	-1,314	-32.7%
28.4%	3,973	2,635	-1,339	-33.7%
29.6%	3,834	2,620	-1,214	-31.7%
30.9%	3,778	2,607	-1,172	-31.0%
32.1%	3,735	2,585	-1,150	-30.8%
33.3%	3,688	2,382	-1,306	-35.4%
34.6%	3,634	2,382	-1,253	-34.5%
35.8%	3,500	2,370	-1,131	-32.3%
37.0%	3,379	2,369	-1,010	-29.9%
38.3%	3,317	2,345	-971	-29.3%
39.5%	3,291	2,344	-947	-28.8%
40.7%	3,280	2,332	-948	-28.9%
42.0%	3,265	2,320	-945	-28.9%
43.2%	3,200	2,314	-886	-27.7%
44.4%	2,862	2,301	-561	-19.6%
45.7%	2,834	2,301	-533	-18.8%
46.9%	2,788	2,299	-488	-17.5%
48.1%	2,756	2,299	-457	-16.6%
49.4%	2,753	2,295	-457	-16.6%
50.6%	2,661	2,269	-393	-14.8%
51.9%	2,656	1,934	-722	-27.2%
53.1%	2,647	1,934	-713	-26.9%
54.3%	2,635	1,933	-702	-26.7%
55.6%	2,614	1,933	-681	-26.1%
56.8%	2,562	1,933	-630	-24.6%
58.0%	2,519	1,932	-587	-23.3%
59.3%	2,519	1,932	-587	-23.3%
60.5%	2,431	1,932	-499	-20.5%
61.7%	2,417	1,932	-485	-20.1%
63.0%	2,337	1,932	-405	-17.3%
64.2%	2,306	1,932	-374	-16.2%
65.4%	2,302	1,932	-370	-16.1%
66.7%	2,298	1,932	-366	-15.9%
67.9%	1,933	1,932	-1	-0.1%
69.1%	1,933	1,911	-22	-1.1%
70.4%	1,931	1,909	-22	-1.2%
71.6%	1,836	1,895	59	3.2%
72.8%	1,773	1,862	88	5.0%
74.1%	1,736	1,803	67	3.9%
75.3%	1,722	1,753	31	1.8%
76.5%	1,717	1,697	-20	-1.1%
77.8%	1,687	1,608	-80	-4.7%
79.0%	1,687	1,605	-82	-4.9%
80.2%	1,687	1,539	-149	-8.8%
81.5%	1,687	1,538	-149	-8.8%
82.7%	1,687	1,502	-185	-11.0%
84.0%	1,581	1,467	-114	-7.2%
85.2%	1,576	1,370	-206	-13.1%
86.4%	1,472	1,295	-177	-12.0%
87.7%	1,089	1,052	-37	-3.4%
88.9%	1,033	1,038	5	0.5%
90.1%	996	1,022	26	2.7%
91.4%	742	947	206	27.7%
92.6%	741	891	150	20.2%
93.8%	716	804	88	12.3%
95.1%	628	800	171	27.3%
96.3%	603	623	20	3.3%
97.5%	444	617	173	38.8%
98.8%	421	610	189	45.0%
100.0%	256	336	81	31.5%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,267	2,530	-738	-22.6%
1.2%	3,062	2,245	-817	-26.7%
2.5%	2,602	2,234	-368	-14.1%
3.7%	2,544	1,932	-612	-24.1%
4.9%	2,267	1,929	-338	-14.9%
6.2%	2,231	1,925	-305	-13.7%
7.4%	1,931	1,918	-13	-0.7%
8.6%	1,887	1,911	24	1.3%
9.9%	1,754	1,900	146	8.3%
11.1%	1,687	1,883	196	11.6%
12.3%	1,687	1,862	175	10.4%
13.6%	1,687	1,764	77	4.6%
14.8%	1,687	1,679	-8	-0.5%
16.0%	1,680	1,678	-2	-0.1%
17.3%	1,678	1,675	-3	-0.2%
18.5%	1,669	1,670	1	0.1%
19.8%	1,669	1,669	0	0.0%
21.0%	1,667	1,665	-1	-0.1%
22.2%	1,665	1,663	-2	-0.1%
23.5%	1,662	1,662	0	0.0%
24.7%	1,660	1,659	-1	-0.1%
25.9%	1,659	1,659	0	0.0%
27.2%	1,659	1,638	-20	-1.2%
28.4%	1,659	1,625	-33	-2.0%
29.6%	1,659	1,606	-53	-3.2%
30.9%	1,651	1,566	-85	-5.1%
32.1%	1,626	1,539	-87	-5.4%
33.3%	1,537	1,501	-36	-2.3%
34.6%	1,514	1,486	-29	-1.9%
35.8%	1,409	1,478	69	4.9%
37.0%	1,363	1,470	107	7.8%
38.3%	1,321	1,469	148	11.2%
39.5%	1,317	1,466	149	11.3%
40.7%	1,308	1,465	156	11.9%
42.0%	1,306	1,447	141	10.8%
43.2%	1,260	1,443	184	14.6%
44.4%	1,247	1,435	188	15.1%
45.7%	1,219	1,417	198	16.3%
46.9%	1,205	1,416	210	17.4%
48.1%	1,107	1,403	296	26.8%
49.4%	1,103	1,363	260	23.5%
50.6%	1,079	1,350	271	25.2%
51.9%	1,056	1,345	289	27.4%
53.1%	1,033	1,331	297	28.8%
54.3%	1,025	1,327	301	29.4%
55.6%	1,012	1,326	315	31.1%
56.8%	1,005	1,306	302	30.0%
58.0%	975	1,306	331	33.9%
59.3%	961	1,282	321	33.4%
60.5%	954	1,237	282	29.6%
61.7%	941	1,229	288	30.6%
63.0%	940	1,190	250	26.6%
64.2%	914	1,158	245	26.8%
65.4%	889	1,154	266	29.9%
66.7%	874	1,103	229	26.2%
67.9%	867	1,089	222	25.6%
69.1%	866	1,087	221	25.5%
70.4%	854	1,085	231	27.1%
71.6%	831	1,067	236	28.5%
72.8%	794	1,010	216	27.2%
74.1%	774	976	202	26.1%
75.3%	754	959	205	27.2%
76.5%	748	956	207	27.7%
77.8%	742	954	212	28.6%
79.0%	741	945	204	27.6%
80.2%	739	914	175	23.6%
81.5%	739	844	105	14.2%
82.7%	735	803	68	9.3%
84.0%	732	786	54	7.4%
85.2%	730	779	50	6.8%
86.4%	717	773	57	7.9%
87.7%	710	764	54	7.5%
88.9%	709	752	43	6.1%
90.1%	670	747	77	11.6%
91.4%	603	743	139	23.1%
92.6%	493	694	201	40.7%
93.8%	442	647	205	46.4%
95.1%	429	646	217	50.7%
96.3%	420	638	217	51.7%
97.5%	367	549	182	49.6%
98.8%	366	541	175	47.7%
100.0%	366	467	101	27.6%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,940	4,510	-431	-8.7%
1.2%	4,786	4,432	-354	-7.4%
2.5%	3,902	3,813	-89	-2.3%
3.7%	3,832	3,592	-241	-6.3%
4.9%	3,535	3,404	-130	-3.7%
6.2%	3,185	3,246	61	1.9%
7.4%	3,072	3,110	38	1.3%
8.6%	3,060	3,070	10	0.3%
9.9%	2,945	2,665	-280	-9.5%
11.1%	2,902	2,529	-372	-12.8%
12.3%	2,837	2,381	-456	-16.1%
13.6%	2,721	2,342	-379	-13.9%
14.8%	2,615	2,235	-379	-14.5%
16.0%	2,577	2,190	-386	-15.0%
17.3%	2,460	2,190	-270	-11.0%
18.5%	2,332	2,169	-163	-7.0%
19.8%	2,248	2,126	-121	-5.4%
21.0%	2,164	1,889	-275	-12.7%
22.2%	2,131	1,887	-243	-11.4%
23.5%	2,118	1,878	-240	-11.3%
24.7%	2,111	1,681	-430	-20.4%
25.9%	2,103	1,676	-427	-20.3%
27.2%	1,889	1,651	-238	-12.6%
28.4%	1,888	1,583	-306	-16.2%
29.6%	1,882	1,577	-305	-16.2%
30.9%	1,872	1,540	-331	-17.7%
32.1%	1,647	1,523	-125	-7.6%
33.3%	1,596	1,482	-114	-7.1%
34.6%	1,476	1,469	-7	-0.5%
35.8%	1,469	1,469	0	0.0%
37.0%	1,469	1,469	0	0.0%
38.3%	1,469	1,468	0	0.0%
39.5%	1,468	1,468	0	0.0%
40.7%	1,463	1,461	-2	-0.1%
42.0%	1,461	1,456	-5	-0.3%
43.2%	1,456	1,450	-6	-0.4%
44.4%	1,449	1,386	-63	-4.4%
45.7%	1,440	1,320	-121	-8.4%
46.9%	1,304	1,312	8	0.6%
48.1%	1,293	1,308	15	1.2%
49.4%	1,253	1,290	37	3.0%
50.6%	1,196	1,285	89	7.4%
51.9%	1,143	1,283	140	12.3%
53.1%	1,089	1,282	194	17.8%
54.3%	1,084	1,270	186	17.2%
55.6%	1,084	1,255	172	15.9%
56.8%	1,066	1,238	171	16.1%
58.0%	1,031	1,219	189	18.3%
59.3%	1,002	1,217	215	21.5%
60.5%	978	1,212	234	23.9%
61.7%	975	1,205	230	23.6%
63.0%	904	1,201	296	32.8%
64.2%	901	1,190	288	32.0%
65.4%	887	1,186	299	33.7%
66.7%	883	1,136	254	28.7%
67.9%	846	1,131	285	33.7%
69.1%	844	1,124	281	33.3%
70.4%	808	1,121	313	38.8%
71.6%	775	1,105	330	42.6%
72.8%	766	1,036	271	35.3%
74.1%	747	1,033	286	38.3%
75.3%	747	966	219	29.3%
76.5%	747	890	142	19.1%
77.8%	747	862	115	15.5%
79.0%	747	827	80	10.7%
80.2%	747	815	68	9.2%
81.5%	746	809	62	8.4%
82.7%	738	782	43	5.9%
84.0%	738	773	34	4.6%
85.2%	738	747	8	1.1%
86.4%	602	747	145	24.1%
87.7%	601	746	146	24.3%
88.9%	511	746	235	45.9%
90.1%	440	745	305	69.4%
91.4%	419	649	230	54.8%
92.6%	417	634	217	52.0%
93.8%	415	634	218	52.5%
95.1%	406	626	220	54.1%
96.3%	380	614	234	61.6%
97.5%	374	551	177	47.3%
98.8%	327	442	116	35.4%
100.0%	314	352	38	12.3%

Figure SW-29-b
American River at H Street, Monthly Flow
Probability of Exceedance

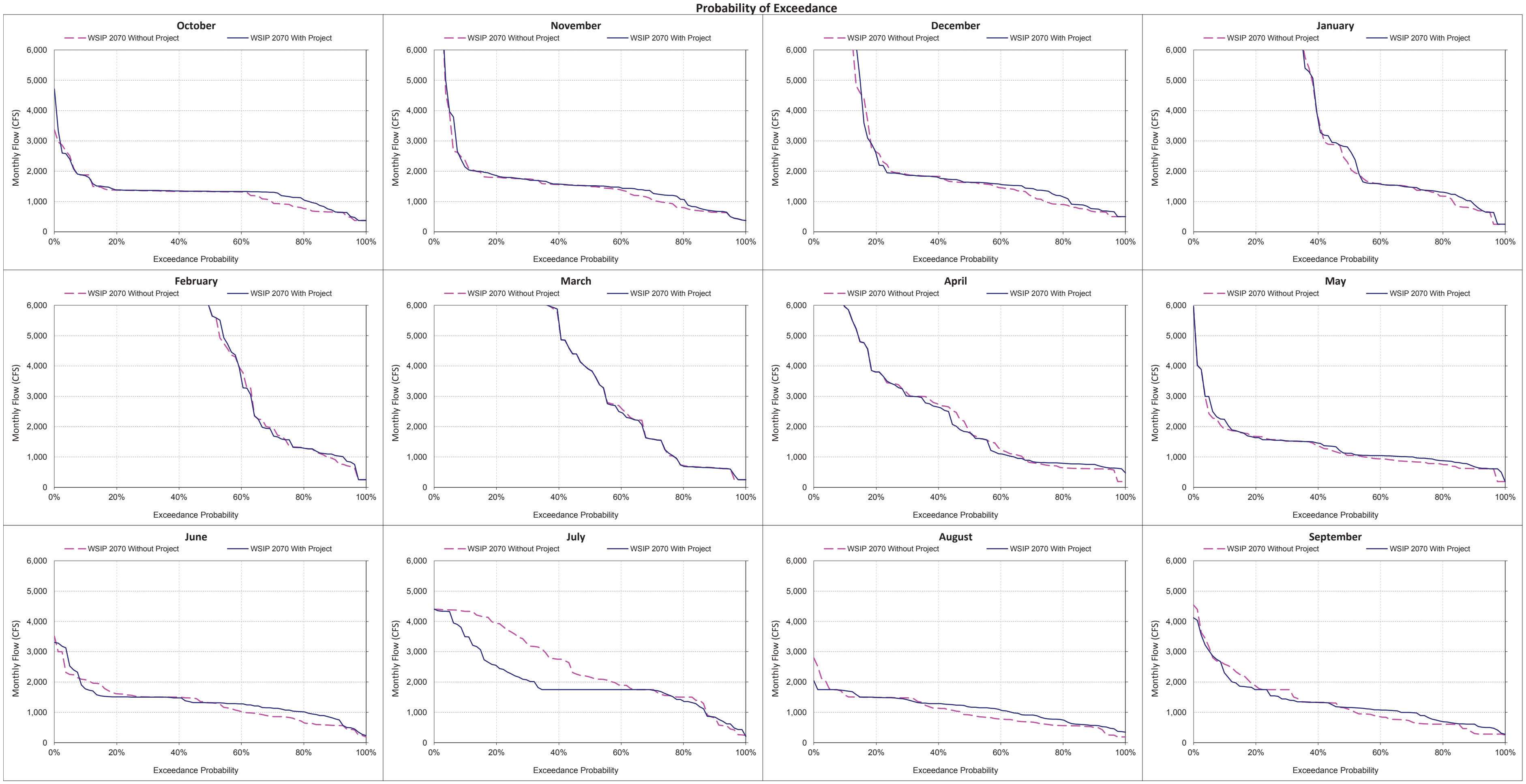


Table SW-29-b

American River at H Street, Monthly Flow

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,366	4,716	1,350	40.1%
1.2%	2,964	3,324	360	12.1%
2.5%	2,865	2,597	-268	-9.4%
3.7%	2,668	2,583	-86	-3.2%
4.9%	2,508	2,400	-109	-4.3%
6.2%	2,107	2,080	-27	-1.3%
7.4%	1,879	1,906	27	1.4%
8.6%	1,879	1,879	0	0.0%
9.9%	1,879	1,854	-25	-1.3%
11.1%	1,879	1,794	-85	-4.5%
12.3%	1,499	1,585	85	5.7%
13.6%	1,486	1,510	24	1.6%
14.8%	1,477	1,509	31	2.1%
16.0%	1,415	1,484	69	4.9%
17.3%	1,382	1,476	94	6.8%
18.5%	1,380	1,427	47	3.4%
19.8%	1,377	1,379	2	0.2%
21.0%	1,375	1,379	4	0.3%
22.2%	1,372	1,377	5	0.3%
23.5%	1,370	1,375	5	0.4%
24.7%	1,367	1,373	6	0.4%
25.9%	1,365	1,372	7	0.5%
27.2%	1,363	1,370	7	0.5%
28.4%	1,358	1,368	10	0.8%
29.6%	1,356	1,368	12	0.9%
30.9%	1,355	1,363	8	0.6%
32.1%	1,355	1,363	8	0.6%
33.3%	1,352	1,362	11	0.8%
34.6%	1,343	1,358	14	1.1%
35.8%	1,341	1,357	16	1.2%
37.0%	1,337	1,354	17	1.3%
38.3%	1,336	1,353	17	1.2%
39.5%	1,336	1,352	16	1.2%
40.7%	1,335	1,348	13	1.0%
42.0%	1,335	1,344	9	0.7%
43.2%	1,335	1,341	7	0.5%
44.4%	1,334	1,340	6	0.4%
45.7%	1,334	1,340	6	0.4%
46.9%	1,331	1,337	6	0.4%
48.1%	1,331	1,336	5	0.4%
49.4%	1,329	1,336	7	0.5%
50.6%	1,327	1,334	8	0.6%
51.9%	1,326	1,333	7	0.6%
53.1%	1,325	1,331	6	0.4%
54.3%	1,323	1,330	6	0.5%
55.6%	1,323	1,330	7	0.5%
56.8%	1,321	1,329	8	0.6%
58.0%	1,321	1,329	8	0.6%
59.3%	1,318	1,328	10	0.8%
60.5%	1,315	1,328	13	1.0%
61.7%	1,303	1,327	25	1.9%
63.0%	1,199	1,327	128	10.7%
64.2%	1,193	1,325	132	11.1%
65.4%	1,178	1,320	143	12.1%
66.7%	1,087	1,318	230	21.2%
67.9%	1,079	1,317	238	22.0%
69.1%	1,046	1,309	263	25.2%
70.4%	935	1,309	373	39.9%
71.6%	932	1,282	350	37.5%
72.8%	918	1,197	280	30.5%
74.1%	912	1,180	269	29.5%
75.3%	906	1,162	256	28.2%
76.5%	836	1,139	302	36.2%
77.8%	822	1,132	310	37.7%
79.0%	800	1,127	328	41.0%
80.2%	763	1,045	282	36.9%
81.5%	756	1,007	250	33.1%
82.7%	683	966	283	41.4%
84.0%	676	935	259	38.3%
85.2%	666	872	205	30.8%
86.4%	663	836	173	26.1%
87.7%	655	760	104	15.9%
88.9%	654	720	66	10.1%
90.1%	643	654	11	1.7%
91.4%	642	647	5	0.7%
92.6%	642	642	0	0.0%
93.8%	500	639	139	27.8%
95.1%	478	500	22	4.7%
96.3%	376	473	97	25.7%
97.5%	375	375	0	0.0%
98.8%	375	375	0	0.0%
100.0%	375	375	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,660	15,003	344	2.3%
1.2%	12,333	11,990	-343	-2.8%
2.5%	7,498	7,439	-59	-0.8%
3.7%	4,575	5,009	434	9.5%
4.9%	3,903	3,967	64	1.6%
6.2%	2,663	3,785	1,121	42.1%
7.4%	2,625	2,661	36	1.4%
8.6%	2,479	2,391	-88	-3.6%
9.9%	2,361	2,142	-220	-9.3%
11.1%	2,090	2,044	-46	-2.2%
12.3%	2,045	2,014	-32	-1.5%
13.6%	2,000	2,000	0	0.0%
14.8%	1,968	2,000	32	1.6%
16.0%	1,817	1,963	147	8.1%
17.3%	1,802	1,951	149	8.3%
18.5%	1,797	1,896	99	5.5%
19.8%	1,797	1,866	70	3.9%
21.0%	1,796	1,822	26	1.4%
22.2%	1,776	1,802	26	1.5%
23.5%	1,775	1,797	22	1.2%
24.7%	1,773	1,790	17	0.9%
25.9%	1,758	1,777	19	1.1%
27.2%	1,758	1,759	1	0.0%
28.4%	1,755	1,740	-15	-0.8%
29.6%	1,745	1,735	-11	-0.6%
30.9%	1,740	1,700	-40	-2.3%
32.1%	1,723	1,696	-27	-1.5%
33.3%	1,700	1,694	-5	-0.3%
34.6%	1,592	1,675	83	5.2%
35.8%	1,582	1,664	82	5.2%
37.0%	1,577	1,613	36	2.3%
38.3%	1,565	1,582	17	1.1%
39.5%	1,562	1,577	15	1.0%
40.7%	1,554	1,575	21	1.4%
42.0%	1,548	1,563	15	1.0%
43.2%	1,547	1,542	-5	-0.3%
44.4%	1,545	1,538	-7	-0.4%
45.7%	1,541	1,531	-9	-0.6%
46.9%	1,530	1,531	1	0.1%
48.1%	1,519	1,528	9	0.6%
49.4%	1,510	1,521	11	0.7%
50.6%	1,492	1,519	27	1.8%
51.9%	1,488	1,516	28	1.9%
53.1%	1,470	1,515	45	3.1%
54.3%	1,446	1,515	69	4.8%
55.6%	1,440	1,493	53	3.7%
56.8%	1,430	1,481	51	3.5%
58.0%	1,409	1,476	68	4.8%
59.3%	1,403	1,474	71	5.1%
60.5%	1,362	1,433	71	5.2%
61.7%	1,335	1,432	97	7.3%
63.0%	1,245	1,431	186	14.9%
64.2%	1,200	1,427	227	18.9%
65.4%	1,197	1,393	196	16.4%
66.7%	1,180	1,390	210	17.8%
67.9%	1,155	1,368	213	18.4%
69.1%	1,112	1,366	253	22.8%
70.4%	1,027	1,264	237	23.1%
71.6%	1,008	1,246	237	23.6%
72.8%	984	1,228	244	24.8%
74.1%	968	1,210	242	25.1%
75.3%	952	1,204	252	26.4%
76.5%	925	1,200	275	29.7%
77.8%	813	1,174	362	44.5%
79.0%	808	1,079	271	33.5%
80.2%	797	1,067	270	33.9%
81.5%	753	877	124	16.4%
82.7%	720	836	115	16.0%
84.0%	707	825	117	16.6%
85.2%	694	777	83	12.0%
86.4%	680	740	61	8.9%
87.7%	679	711	32	4.7%
88.9%	648	694	46	7.1%
90.1%	647	679	33	5.0%
91.4%	637	673	36	5.7%
92.6%	635	671	35	5.6%
93.8%	635	648	13	2.0%
95.1%	500	500	0	0.0%
96.3%	447	447	0	0.0%
97.5%	427	427	0	0.0%
98.8%	391	391	0	0.0%
100.0%	375	375	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,870	23,873	3	0.0%
1.2%	21,347	21,420	73	0.3%
2.5%	21,007	21,344	337	1.6%
3.7%	20,220	20,230	10	0.1%
4.9%	20,042	20,052	10	0.1%
6.2%	19,114	19,111	-4	0.0%
7.4%	18,281	18,286	5	0.0%
8.6%	15,097	15,094	-4	0.0%
9.9%	14,453	13,779	-674	-4.7%
11.1%	10,314	9,456	-857	-8.3%
12.3%	6,291	6,748	458	7.3%
13.6%	4,820	6,167	1,347	28.0%
14.8%	4,591	5,030	439	9.6%
16.0%	4,429	3,588	-841	-19.0%
17.3%	3,658	3,094	-564	-15.4%
18.5%	2,747	2,907	160	5.8%
19.8%	2,656	2,657	1	0.0%
21.0%	2,571	2,193	-378	-14.7%
22.2%	2,307	2,187	-121	-5.2%
23.5%	2,221	1,945	-276	-12.4%
24.7%	2,000	1,940	-60	-3.0%
25.9%	1,956	1,938	-18	-0.9%
27.2%	1,945	1,923	-23	-1.2%
28.4%	1,940	1,905	-35	-1.8%
29.6%	1,898	1,870	-28	-1.5%
30.9%	1,871	1,866	-5	-0.3%
32.1%	1,866	1,862	-3	-0.2%
33.3%	1,862	1,843	-19	-1.0%
34.6%	1,849	1,840	-9	-0.5%
35.8%	1,837	1,838	1	0.0%
37.0%	1,836	1,838	1	0.1%
38.3%	1,832	1,821	-10	-0.6%
39.5%	1,829	1,811	-18	-1.0%
40.7%	1,828	1,757	-71	-3.9%
42.0%	1,724	1,749	25	1.4%
43.2%	1,670	1,735	65	3.9%
44.4%	1,654	1,729	75	4.5%
45.7%	1,645	1,722	77	4.7%
46.9%	1,636	1,693	58	3.5%
48.1%	1,632	1,641	9	0.6%
49.4%	1,631	1,637	7	0.4%
50.6%	1,628	1,632	4	0.3%
51.9%	1,624	1,631	7	0.4%
53.1%	1,590	1,628	37	2.4%
54.3%	1,582	1,624	42	2.7%
55.6%	1,573	1,611	38	2.4%
56.8%	1,556	1,600	44	2.8%
58.0%	1,511	1,589	78	5.2%
59.3%	1,460	1,584	123	8.4%
60.5%	1,447	1,552	105	7.3%
61.7%	1,428	1,544	116	8.1%
63.0%	1,419	1,535	116	8.2%
64.2%	1,403	1,527	123	8.8%
65.4%	1,351	1,526	175	12.9%
66.7%	1,351	1,518	167	12.4%
67.9%	1,325	1,443	119	8.9%
69.1%	1,216	1,433	217	17.9%
70.4%	1,159	1,428	269	23.2%
71.6%	1,085	1,377	292	26.9%
72.8%	1,078	1,375	298	27.6%
74.1%	989	1,356	367	37.1%
75.3%	964	1,340	376	39.0%
76.5%	922	1,254	332	36.0%
77.8%	915	1,201	286	31.2%
79.0%	901	1,194	293	32.5%
80.2%	897	1,142	245	27.3%
81.5%	874	1,089	214	24.5%
82.7%	811	915	105	12.9%
84.0%	806	900	93	11.6%
85.2%	768	891	123	16.0%
86.4%	760	889	129	17.0%
87.7%	742	846	105	14.1%
88.9%	683	764	81	11.9%
90.1%	662	760	98	14.9%
91.4%	660	746	86	13.0%
92.6%	657	693	36	5.5%
93.8%	647	689	42	6.4%
95.1%	500	676	176	35.3%
96.3%	500	667	167	33.5%
97.5%	500	500	0	0.0%
98.8%	500	500	0	0.0%
100.0%	500	500	0	0.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,001	40,999	-2	0.0%
1.2%	29,906	29,901	-5	0.0%
2.5%	29,612	29,474	-138	-0.5%
3.7%	29,182	29,185	3	0.0%
4.9%	27,559	27,557	-2	0.0%
6.2%	25,921	25,906	-15	-0.1%
7.4%	24,999	25,001	1	0.0%
8.6%	22,399	22,399	0	0.0%
9.9%	21,667	21,667	0	0.0%
11.1%	20,605	20,939	334	1.6%
12.3%	19,969	19,969	0	0.0%
13.6%	17,878	17,878	0	0.0%
14.8%	16,349	16,350	1	0.0%
16.0%	15,696	15,695	-1	0.0%
17.3%	14,486	14,422	-65	-0.4%
18.5%	14,486	13,445	-1,041	-7.2%
19.8%	13,432	13,367	-65	-0.5%
21.0%	12,711	12,575	-136	-1.1%
22.2%	11,475	11,471	-4	0.0%
23.5%	9,932	9,933	1	0.0%
24.7%	9,926	9,928	2	0.0%
25.9%	9,790	9,793	3	0.0%
27.2%	9,084	9,091	8	0.1%
28.4%	8,966	8,971	5	0.1%
29.6%	8,162	8,165	3	0.0%
30.9%	8,110	8,117	7	0.1%
32.1%	6,815	6,826	11	0.2%
33.3%	6,792	6,792	0	0.0%
34.6%	6,404	6,533	130	2.0%
35.8%	5,757	5,400	-357	-6.2%
37.0%	5,410	5,285	-126	-2.3%
38.3%	4,905	5,069	164	3.3%
39.5%	3,978	3,962	-16	-0.4%
40.7%	3,439	3,275	-164	-4.8%
42.0%	2,972	3,187	215	7.2%
43.2%	2,891	3,173	282	9.8%
44.4%	2,884	2,951	67	2.3%
45.7%	2,870	2,944	74	2.6%
46.9%	2,862	2,866	4	0.1%
48.1%	2,460	2,820	361	14.7%
49.4%	2,305	2,803	498	21.6%
50.6%	2,042	2,615	574	28.1%
51.9%	1,947	2,380	433	22.2%
53.1%	1,902	1,902	0	0.0%
54.3%	1,770	1,645	-124	-7.0%
55.6%	1,674	1,617	-56	-3.4%
56.8%	1,645	1,600	-45	-2.7%
58.0%	1,600	1,594	-6	-0.4%
59.3%	1,595	1,585	-9	-0.6%
60.5%	1,585	1,563	-22	-1.4%
61.7%	1,548	1,542	-6	-0.4%
63.0%	1,542	1,541	-1	-0.1%
64.2%	1,540	1,540	0	0.0%
65.4%	1,538	1,538	0	0.0%
66.7%	1,531	1,514	-17	-1.1%
67.9%	1,514	1,484	-31	-2.0%
69.1%	1,483	1,476	-7	-0.5%
70.4%	1,466	1,470	4	0.3%
71.6%	1,372	1,463	91	6.6%
72.8%	1,366	1,394	28	2.1%
74.1%	1,362	1,370	8	0.6%
75.3%	1,353	1,367	15	1.1%
76.5%	1,305	1,361	55	4.2%
77.8%	1,299	1,340	40	3.1%
79.0%	1,181	1,317	136	11.5%
80.2%	1,175	1,304	128	10.9%
81.5%	1,173	1,278	105	9.0%
82.7%	1,083	1,238	155	14.3%
84.0%	890	1,236	346	38.8%
85.2%	831	1,162	331	39.8%
86.4%	814	1,110	296	36.4%
87.7%	810	1,028	218	26.9%
88.9%	789	1,023	234	29.6%
90.1%	753	898	145	19.2%
91.4%	696	791	95	13.7%
92.6%	691	707	16	2.3%
93.8%	663	648	-15	-2.3%
95.1%	650	644	-7	-1.0%
96.3%	250	636	386	
97.5%	250	250	0	
98.8%	250	250	0	
100.0%	250	250	0	

Table SW-29-b

American River at H Street, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,203	42,203	0	0.0%
1.2%	32,715	32,707	-8	0.0%
2.5%	32,419	32,419	0	0.0%
3.7%	23,198	23,199	1	0.0%
4.9%	22,674	22,672	-2	0.0%
6.2%	22,020	22,016	-4	0.0%
7.4%	21,197	21,197	0	0.0%
8.6%	20,907	20,905	-2	0.0%
9.9%	20,489	20,480	-9	0.0%
11.1%	20,203	20,203	0	0.0%
12.3%	20,103	20,104	1	0.0%
13.6%	20,003	19,740	-263	-1.3%
14.8%	19,622	19,619	-3	0.0%
16.0%	18,618	18,619	1	0.0%
17.3%	17,754	17,800	46	0.3%
18.5%	17,612	17,612	0	0.0%
19.8%	16,183	16,183	0	0.0%
21.0%	16,182	16,182	0	0.0%
22.2%	14,608	14,608	0	0.0%
23.5%	14,402	14,402	0	0.0%
24.7%	14,152	14,163	11	0.1%
25.9%	12,577	12,436	-141	-1.1%
27.2%	12,436	12,338	-98	-0.8%
28.4%	12,338	12,279	-59	-0.5%
29.6%	11,693	11,693	0	0.0%
30.9%	10,506	10,504	-1	0.0%
32.1%	10,251	9,590	-661	-6.4%
33.3%	9,297	9,297	0	0.0%
34.6%	8,992	9,263	272	3.0%
35.8%	8,232	8,313	81	1.0%
37.0%	7,856	8,234	378	4.8%
38.3%	7,723	7,587	-136	-1.8%
39.5%	7,586	7,469	-117	-1.5%
40.7%	7,269	7,270	1	0.0%
42.0%	7,131	7,130	-1	0.0%
43.2%	6,865	6,860	-5	-0.1%
44.4%	6,603	6,603	0	0.0%
45.7%	6,472	6,472	0	0.0%
46.9%	6,184	6,184	0	0.0%
48.1%	6,169	6,170	2	0.0%
49.4%	6,037	6,037	0	0.0%
50.6%	5,646	5,648	1	0.0%
51.9%	5,591	5,591	0	0.0%
53.1%	4,931	5,510	578	11.7%
54.3%	4,749	4,934	185	3.9%
55.6%	4,568	4,735	167	3.7%
56.8%	4,363	4,463	100	2.3%
58.0%	4,301	4,363	62	1.4%
59.3%	3,961	3,962	1	0.0%
60.5%	3,780	3,279	-501	-13.2%
61.7%	3,279	3,271	-8	-0.3%
63.0%	3,272	3,055	-217	-6.6%
64.2%	2,354	2,351	-3	-0.1%
65.4%	2,243	2,244	1	0.1%
66.7%	2,233	1,978	-255	-11.4%
67.9%	2,002	1,941	-62	-3.1%
69.1%	1,976	1,938	-37	-1.9%
70.4%	1,940	1,690	-250	-12.9%
71.6%	1,714	1,662	-53	-3.1%
72.8%	1,689	1,591	-97	-5.8%
74.1%	1,570	1,570	0	0.0%
75.3%	1,360	1,570	210	15.5%
76.5%	1,329	1,319	-10	-0.8%
77.8%	1,325	1,314	-11	-0.8%
79.0%	1,314	1,308	-6	-0.5%
80.2%	1,282	1,282	0	0.0%
81.5%	1,269	1,269	0	0.0%
82.7%	1,266	1,266	0	0.0%
84.0%	1,156	1,188	31	2.7%
85.2%	1,112	1,134	22	1.9%
86.4%	1,062	1,114	52	4.9%
87.7%	980	1,100	120	12.3%
88.9%	964	1,093	128	13.3%
90.1%	905	1,047	142	15.7%
91.4%	761	1,028	267	35.0%
92.6%	757	1,012	255	33.6%
93.8%	708	854	146	20.6%
95.1%	679	832	153	22.5%
96.3%	635	758	123	19.3%
97.5%	250	250	0	
98.8%	250	250	0	
100.0%	250	250	0	

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,520	25,520	0	0.0%
1.2%	24,488	24,488	0	0.0%
2.5%	21,135	21,131	-5	0.0%
3.7%	17,200	17,200	0	0.0%
4.9%	16,829	16,829	0	0.0%
6.2%	16,404	16,404	0	0.0%
7.4%	15,533	15,533	0	0.0%
8.6%	14,524	14,524	0	0.0%
9.9%	12,805	12,809	4	0.0%
11.1%	10,871	10,871	0	0.0%
12.3%	10,506	10,506	0	0.0%
13.6%	10,305	10,296	-8	-0.1%
14.8%	10,202	10,201	-1	0.0%
16.0%	10,051	10,051	0	0.0%
17.3%	9,940	9,939	-1	0.0%
18.5%	9,586	9,585	0	0.0%
19.8%	8,796	8,798	2	0.0%
21.0%	8,415	8,415	0	0.0%
22.2%	8,238	8,238	0	0.0%
23.5%	8,180	8,180	0	0.0%
24.7%	8,136	8,136	0	0.0%
25.9%	8,029	8,031	2	0.0%
27.2%	7,936	7,833	-103	-1.3%
28.4%	7,615	7,609	-5	-0.1%
29.6%	7,580	7,584	3	0.0%
30.9%	6,430	6,425	-5	-0.1%
32.1%	6,326	6,315	-11	-0.2%
33.3%	6,271	6,271	-1	0.0%
34.6%	6,126	6,126	0	0.0%
35.8%	6,028	6,028	0	0.0%
37.0%	5,977	5,975	-2	0.0%
38.3%	5,883	5,930	47	0.8%
39.5%	5,771	5,883	113	2.0%
40.7%	4,863	4,863	0	0.0%
42.0%	4,853	4,853	0	0.0%
43.2%	4,598	4,598	0	0.0%
44.4%	4,401	4,401	0	0.0%
45.7%	4,399	4,399	0	0.0%
46.9%	4,133	4,134	1	0.0%
48.1%	4,018	4,018	0	0.0%
49.4%	3,906	3,906	0	0.0%
50.6%	3,832	3,833	2	0.0%
51.9%	3,626	3,626	0	0.0%
53.1%	3,378	3,380	2	0.1%
54.3%	3,282	3,283	0	0.0%
55.6%	2,798	2,760	-38	-1.4%
56.8%	2,760	2,712	-47	-1.7%
58.0%	2,731	2,695	-37	-1.3%
59.3%	2,695	2,503	-192	-7.1%
60.5%	2,558	2,449	-109	-4.3%
61.7%	2,443	2,300	-143	-5.9%
63.0%	2,300	2,275	-25	-1.1%
64.2%	2,238	2,225	-13	-0.6%
65.4%	2,226	2,209	-16	-0.7%
66.7%	2,209	2,066	-144	-6.5%
67.9%	1,632	1,633	1	0.1%
69.1%	1,597	1,597	0	0.0%
70.4%	1,587	1,587	0	0.0%
71.6%	1,555	1,555	0	0.0%
72.8%	1,551	1,552	1	0.1%
74.1%	1,239	1,241	2	0.1%
75.3%	1,042	1,124	82	7.9%
76.5%	1,035	1,042	7	0.7%
77.8%	951	951	0	0.0%
79.0%	739	739	0	0.0%
80.2%	710	686	-24	-3.4%
81.5%	685	680	-6	-0.8%
82.7%	680	677	-3	-0.4%
84.0%	677	663	-15	-2.2%
85.2%	663	656	-6	-1.0%
86.4%	657	651	-6	-0.9%
87.7%	656	650	-6	-1.0%
88.9%	651	641	-9	-1.5%
90.1%	642	638	-4	-0.6%
91.4%	634	628	-6	-0.9%
92.6%	615	615	0	0.0%
93.8%	613	613	0	0.1%
95.1%	603	597	-6	-0.9%
96.3%	250	411	161	
97.5%	250	250	0	
98.8%	250	250	0	
100.0%	250	250	0	

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,737	20,731	-5	0.0%
1.2%	19,388	19,388	0	0.0%
2.5%	11,880	11,880	0	0.0%
3.7%	10,987	10,983	-4	0.0%
4.9%	10,960	10,960	0	0.0%
6.2%	7,489	7,489	0	0.0%
7.4%	6,496	6,496	0	0.0%
8.6%	6,170	6,170	0	0.0%
9.9%	5,959	5,959	0	0.0%
11.1%	5,854	5,854	0	0.0%
12.3%	5,506	5,506	0	0.0%
13.6%	5,227	5,219	-8	-0.2%
14.8%	4,798	4,798	0	0.0%
16.0%	4,767	4,766	-1	0.0%
17.3%	4,559	4,559	0	0.0%
18.5%	3,849	3,849	0	0.0%
19.8%	3,807	3,803	-4	-0.1%
21.0%	3,803	3,798	-5	-0.1%
22.2%	3,659	3,660	1	0.0%
23.5%	3,445	3,499	54	1.6%
24.7%	3,434	3,433	0	0.0%
25.9%	3,416	3,382	-34	-1.0%
27.2%	3,382	3,283	-100	-2.9%
28.4%	3,246	3,246	0	0.0%
29.6%	3,143	3,013	-131	-4.2%
30.9%	3,013	3,000	-13	-0.4%
32.1%	3,000	3,000	0	0.0%
33.3%	3,000	2,991	-9	-0.3%
34.6%	3,000	2,965	-35	-1.2%
35.8%	2,991	2,784	-207	-6.9%
37.0%	2,907	2,758	-149	-5.1%
38.3%	2,801	2,677	-125	-4.4%
39.5%	2,759	2,652	-107	-3.9%
40.7%	2,689	2,618	-70	-2.6%
42.0%	2,676	2,531	-146	-5.4%
43.2%	2,652	2,496	-156	-5.9%
44.4%	2,530	2,075	-454	-18.0%
45.7%	2,470	2,016	-455	-18.4%
46.9%	2,224	1,897	-327	-14.7%
48.1%	2,185	1,844	-341	-15.6%
49.4%	1,932	1,823	-109	-5.6%
50.6%	1,735	1,766	30	1.8%
51.9%	1,685	1,610	-75	-4.5%
53.1%	1,604	1,607	3	0.2%
54.3%	1,591	1,591	0	0.0%
55.6%	1,557	1,557	0	0.0%
56.8%	1,473	1,219	-254	-17.3%
58.0%	1,468	1,168	-300	-20.4%
59.3%	1,299	1,108	-192	-14.8%
60.5%	1,219	1,095	-124	-10.1%
61.7%	1,168	1,059	-109	-9.3%
63.0%	1,108	1,025	-83	-7.5%
64.2%	1,095	1,006	-89	-8.2%
65.4%	1,058	953	-104	-9.9%
66.7%	1,026	949	-77	-7.5%
67.9%	892	894	2	0.2%
69.1%	821	892	71	8.6%
70.4%	803	839	36	4.5%
71.6%	787	821	33	4.3%
72.8%	769	816	47	6.1%
74.1%	738	812	73	9.9%
75.3%	718	807	89	12.4%
76.5%	711	804	93	13.1%
77.8%	706	803	97	13.7%
79.0%	653	798	144	22.1%
80.2%	634	787	154	24.3%
81.5%	631	777	147	23.2%
82.7%	625	772	147	23.6%
84.0%	622	769	147	23.6%
85.2%	619	769	150	24.2%
86.4%	616	765	149	24.1%
87.7%	614	757	142	23.1%
88.9%	612	757	145	23.7%
90.1%	605	754	149	24.5%
91.4%	605	712	108	17.8%
92.6%	604	676	72	11.9%
93.8%	598	654	56	9.4%
95.1%	593	635	42	7.2%
96.3%	569	634	65	11.5%
97.5%	188	622	434	231.0%
98.8%	188	605	417	222.0%
100.0%	188	468	280	148.7%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,966	5,966	0	0.0%
1.2%	4,025	4,025	0	0.0%
2.5%	3,888	3,888	0	0.0%
3.7%	3,000	3,000	0	0.0%
4.9%	2,428	3,000	572	23.6%
6.2%	2,281	2,501	221	9.7%
7.4%	2,250	2,332	82	3.6%
8.6%	2,050	2,250	200	9.8%
9.9%	1,919	2,245	326	17.0%
11.1%	1,905	2,041	136	7.1%
12.3%	1,864	1,894	30	1.6%
13.6%	1,856	1,864	9	0.5%
14.8%	1,805	1,824	20	1.1%
16.0%	1,788	1,786	-1	-0.1%
17.3%	1,772	1,693	-79	-4.5%
18.5%	1,695	1,673	-22	-1.3%
19.8%	1,676	1,637	-39	-2.3%
21.0%	1,673	1,635	-38	-2.2%
22.2%	1,662	1,571	-91	-5.5%
23.5%	1,603	1,569	-34	-2.1%
24.7%	1,571	1,568	-3	-0.2%
25.9%	1,570	1,552	-19	-1.2%
27.2%	1,568	1,551	-17	-1.1%
28.4%	1,551	1,548	-3	-0.2%
29.6%	1,522	1,536	14	0.9%
30.9%	1,521	1,522	1	0.0%
32.1%	1,520	1,522	2	0.1%
33.3%	1,517	1,520	3	0.2%
34.6%	1,511	1,517	6	0.4%
35.8%	1,506	1,509	3	0.2%
37.0%	1,501	1,506	5	0.3%
38.3%	1,459	1,501	43	2.9%
39.5%	1,372	1,468	96	7.0%
40.7%	1,333	1,446	113	8.5%
42.0%	1,271	1,372	101	7.9%
43.2%	1,267	1,357	90	7.1%
44.4%	1,211	1,355	143	11.8%
45.7%	1,167	1,333	166	14.2%
46.9%	1,128	1,211	83	7.4%
48.1%	1,123	1,128	5	0.4%
49.4%	1,051	1,123	72	6.8%
50.6%	1,051	1,119	68	6.4%
51.9%	1,050	1,074	23	2.2%
53.1%	1,038	1,064	26	2.5%
54.3%	1,005	1,057	53	5.2%
55.6%	991	1,056	65	6.6%
56.8%	969	1,049	80	8.2%
58.0%	948	1,049	100	10.6%
59.3%	936	1,044	107	11.5%
60.5%	936	1,042	106	11.3%
61.7%	929	1,035	106	11.4%
63.0%	907	1,033	126	13.9%
64.2%	894	1,026	132	14.8%
65.4%	868	1,019	152	17.5%
66.7%	865	1,013	148	17.2%
67.9%	857	1,010	153	17.8%
69.1%	852	1,004	152	17.8%
70.4%	844	1,001	157	18.5%
71.6%	832	966	134	16.1%
72.8%	830	957	126	15.2%
74.1%	829	957	127	15.4%
75.3%	784	944	159	20.3%
76.5%	782	938	156	19.9%
77.8%	782	896	114	14.6%
79.0%	775	878	103	13.3%
80.2%	745	872	127	17.0%
81.5%	741	861	120	16.2%
82.7%	697	855	158	22.7%
84.0%	688	818	130	19.0%
85.2%	629	816	187	29.7%
86.4%	627	784	158	25.1%
87.7%	621	782	160	25.8%
88.9%	619	728	109	17.7%
90.1%	613	680	68	11.0%
91.4%	610	646	36	5.9%
92.6%	609	627	18	2.9%
93.8%	608	621	13	2.1%
95.1%	607	608	1	0.1%
96.3%	605	606	1	0.1%
97.5%	188	605	417	221.7%
98.8%	188	496	308	163.7%
100.0%	188	188	0	0.0%

Table SW-29-b

American River at H Street, Monthly Flow

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,512	3,308	-204	-5.8%
1.2%	3,000	3,285	285	9.5%
2.5%	3,000	3,181	181	6.0%
3.7%	2,313	3,125	812	35.1%
4.9%	2,250	2,532	282	12.5%
6.2%	2,241	2,404	163	7.3%
7.4%	2,146	2,326	180	8.4%
8.6%	2,095	1,908	-187	-8.9%
9.9%	2,077	1,776	-301	-14.5%
11.1%	2,033	1,735	-299	-14.7%
12.3%	1,959	1,710	-249	-12.7%
13.6%	1,957	1,575	-382	-19.5%
14.8%	1,936	1,542	-393	-20.3%
16.0%	1,788	1,530	-259	-14.5%
17.3%	1,715	1,521	-193	-11.3%
18.5%	1,654	1,514	-140	-8.5%
19.8%	1,616	1,511	-105	-6.5%
21.0%	1,607	1,511	-96	-6.0%
22.2%	1,603	1,508	-95	-5.9%
23.5%	1,573	1,507	-66	-4.2%
24.7%	1,564	1,504	-60	-3.9%
25.9%	1,534	1,504	-31	-2.0%
27.2%	1,514	1,504	-10	-0.7%
28.4%	1,511	1,502	-9	-0.6%
29.6%	1,507	1,502	-4	-0.3%
30.9%	1,504	1,502	-2	-0.1%
32.1%	1,504	1,501	-2	-0.2%
33.3%	1,504	1,500	-3	-0.2%
34.6%	1,502	1,500	-2	-0.2%
35.8%	1,502	1,499	-3	-0.2%
37.0%	1,502	1,494	-8	-0.5%
38.3%	1,501	1,479	-22	-1.5%
39.5%	1,500	1,477	-23	-1.6%
40.7%	1,499	1,477	-22	-1.5%
42.0%	1,479	1,379	-100	-6.8%
43.2%	1,477	1,352	-125	-8.4%
44.4%	1,477	1,324	-153	-10.4%
45.7%	1,446	1,322	-124	-8.6%
46.9%	1,351	1,320	-31	-2.3%
48.1%	1,351	1,319	-32	-2.4%
49.4%	1,317	1,316	-1	0.0%
50.6%	1,312	1,315	3	0.3%
51.9%	1,300	1,313	12	1.0%
53.1%	1,269	1,309	40	3.1%
54.3%	1,163	1,302	139	12.0%
55.6%	1,148	1,290	142	12.4%
56.8%	1,122	1,285	163	14.6%
58.0%	1,075	1,285	210	19.6%
59.3%	1,044	1,281	236	22.6%
60.5%	1,005	1,276	271	27.0%
61.7%	989	1,248	259	26.2%
63.0%	980	1,242	261	26.7%
64.2%	972	1,213	240	24.7%
65.4%	949	1,212	263	27.7%
66.7%	926	1,159	233	25.2%
67.9%	895	1,154	259	29.0%
69.1%	871	1,148	277	31.8%
70.4%	859	1,135	276	32.1%
71.6%	857	1,130	274	31.9%
72.8%	856	1,109	253	29.6%
74.1%	849	1,077	228	26.9%
75.3%	832	1,076	244	29.3%
76.5%	806	1,042	236	29.3%
77.8%	748	1,028	280	37.5%
79.0%	720	1,026	306	42.5%
80.2%	646	1,017	371	57.4%
81.5%	634	975	340	53.7%
82.7%	631	949	317	50.3%
84.0%	596	932	336	56.4%
85.2%	594	894	300	50.5%
86.4%	581	893	313	53.8%
87.7%	580	861	281	48.4%
88.9%	570	821	252	44.2%
90.1%	568	784	216	38.0%
91.4%	565	748	183	32.5%
92.6%	560	566	6	1.1%
93.8%	439	503	64	14.5%
95.1%	438	490	52	11.9%
96.3%	422	450	28	6.6%
97.5%	245	345	100	40.7%
98.8%	235	266	31	13.1%
100.0%	188	239	51	26.9%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,401	4,403	2	0.1%
1.2%	4,399	4,351	-49	-1.1%
2.5%	4,386	4,332	-54	-1.2%
3.7%	4,385	4,332	-52	-1.2%
4.9%	4,379	4,326	-53	-1.2%
6.2%	4,377	3,953	-424	-9.7%
7.4%	4,373	3,900	-474	-10.8%
8.6%	4,350	3,805	-545	-12.5%
9.9%	4,332	3,495	-837	-19.3%
11.1%	4,332	3,485	-847	-19.5%
12.3%	4,329	3,216	-1,113	-25.7%
13.6%	4,210	3,174	-1,037	-24.6%
14.8%	4,179	3,070	-1,109	-26.5%
16.0%	4,144	2,737	-1,407	-33.9%
17.3%	4,138	2,657	-1,481	-35.8%
18.5%	3,990	2,584	-1,406	-35.2%
19.8%	3,934	2,551	-1,383	-35.1%
21.0%	3,926	2,442	-1,484	-37.8%
22.2%	3,822	2,419	-1,403	-36.7%
23.5%	3,718	2,330	-1,388	-37.3%
24.7%	3,655	2,275	-1,380	-37.7%
25.9%	3,576	2,200	-1,377	-38.5%
27.2%	3,472	2,159	-1,313	-37.8%
28.4%	3,435	2,089	-1,346	-39.2%
29.6%	3,288	2,075	-1,213	-36.9%
30.9%	3,184	2,017	-1,167	-36.7%
32.1%	3,174	2,013	-1,161	-36.6%
33.3%	3,154	1,820	-1,334	-42.3%
34.6%	3,095	1,750	-1,345	-43.5%
35.8%	2,960	1,750	-1,210	-40.9%
37.0%	2,782	1,750	-1,032	-37.1%
38.3%	2,774	1,750	-1,024	-36.9%
39.5%	2,754	1,750	-1,004	-36.5%
40.7%	2,754	1,750	-1,004	-36.4%
42.0%	2,702	1,750	-952	-35.2%
43.2%	2,639	1,750	-889	-33.7%
44.4%	2,311	1,750	-561	-24.3%
45.7%	2,260	1,750	-510	-22.6%
46.9%	2,219	1,750	-469	-21.1%
48.1%	2,207	1,750	-457	-20.7%
49.4%	2,183	1,750	-433	-19.8%
50.6%	2,143	1,750	-393	-18.3%
51.9%	2,096	1,750	-346	-16.5%
53.1%	2,093	1,750	-343	-16.4%
54.3%	2,086	1,750	-336	-16.1%
55.6%	2,062	1,750	-312	-15.1%
56.8%	2,013	1,750	-263	-13.1%
58.0%	1,979	1,750	-229	-11.6%
59.3%	1,902	1,750	-152	-8.0%
60.5%	1,893	1,750	-143	-7.5%
61.7%	1,887	1,750	-137	-7.3%
63.0%	1,791	1,750	-41	-2.3%
64.2%	1,750	1,750	0	0.0%
65.4%	1,750	1,750	0	0.0%
66.7%	1,750	1,750	0	0.0%
67.9%	1,750	1,750	0	0.0%
69.1%	1,750	1,750	0	0.0%
70.4%	1,750	1,727	-23	-1.3%
71.6%	1,654	1,713	59	3.6%
72.8%	1,592	1,681	88	5.6%
74.1%	1,558	1,622	64	4.1%
75.3%	1,553	1,570	16	1.1%
76.5%	1,541	1,516	-25	-1.6%
77.8%	1,504	1,425	-78	-5.2%
79.0%	1,503	1,422	-80	-5.3%
80.2%	1,503	1,359	-144	-9.6%
81.5%	1,502	1,357	-144	-9.6%
82.7%	1,501	1,319	-182	-12.1%
84.0%	1,397	1,285	-112	-8.0%
85.2%	1,393	1,189	-205	-14.7%
86.4%	1,289	1,114	-176	-13.6%
87.7%	907	870	-37	-4.1%
88.9%	849	856	7	0.8%
90.1%	814	840	26	3.2%
91.4%	578	765	187	32.4%
92.6%	560	709	149	26.6%
93.8%	559	622	63	11.2%
95.1%	446	617	171	38.4%
96.3%	422	485	64	15.1%
97.5%	263	435	173	65.8%
98.8%	256	430	174	67.9%
100.0%	240	203	-37	-15.4%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,793	2,044	-749	-26.8%
1.2%	2,521	1,750	-771	-30.6%
2.5%	2,118	1,750	-368	-17.4%
3.7%	2,049	1,750	-299	-14.6%
4.9%	1,781	1,750	-31	-1.8%
6.2%	1,750	1,750	0	0.0%
7.4%	1,750	1,738	-12	-0.7%
8.6%	1,708	1,730	21	1.2%
9.9%	1,575	1,718	143	9.1%
11.1%	1,508	1,702	194	12.9%
12.3%	1,507	1,683	177	11.7%
13.6%	1,506	1,585	79	5.2%
14.8%	1,505	1,503	-2	-0.1%
16.0%	1,499	1,502	3	0.2%
17.3%	1,497	1,499	1	0.1%
18.5%	1,497	1,498	1	0.1%
19.8%	1,493	1,493	0	0.0%
21.0%	1,489	1,489	0	0.0%
22.2%	1,488	1,484	-4	-0.3%
23.5%	1,487	1,483	-4	-0.3%
24.7%	1,487	1,481	-6	-0.4%
25.9%	1,481	1,477	-4	-0.3%
27.2%	1,480	1,458	-22	-1.5%
28.4%	1,477	1,446	-31	-2.1%
29.6%	1,477	1,425	-52	-3.5%
30.9%	1,472	1,386	-86	-5.8%
32.1%	1,448	1,359	-89	-6.1%
33.3%	1,357	1,322	-35	-2.6%
34.6%	1,336	1,306	-30	-2.2%
35.8%	1,233	1,301	68	5.5%
37.0%	1,186	1,291	105	8.8%
38.3%	1,141	1,290	149	13.1%
39.5%	1,139	1,288	149	13.1%
40.7%	1,129	1,286	157	13.9%
42.0%	1,127	1,268	140	12.5%
43.2%	1,080	1,264	184	17.0%
44.4%	1,068	1,256	189	17.7%
45.7%	1,039	1,239	199	19.2%
46.9%	1,027	1,237	210	20.5%
48.1%	927	1,224	297	32.0%
49.4%	921	1,183	262	28.4%
50.6%	904	1,169	265	29.3%
51.9%	877	1,165	289	32.9%
53.1%	853	1,153	301	35.3%
54.3%	845	1,148	303	35.8%
55.6%	833	1,147	314	37.6%
56.8%	825	1,130	305	36.9%
58.0%	795	1,128	333	41.8%
59.3%	783	1,103	320	40.9%
60.5%	775	1,058	283	36.5%
61.7%	762	1,051	289	37.9%
63.0%	762	1,011	250	32.8%
64.2%	741	978	237	32.0%
65.4%	709	975	266	37.5%
66.7%	696	921	226	32.5%
67.9%	688	911	223	32.4%
69.1%	686	911	224	32.7%
70.4%	675	908	233	34.6%
71.6%	651	888	236	36.3%
72.8%	619	834	215	34.8%
74.1%	614	797	182	29.7%
75.3%	596	781	185	31.1%
76.5%	579	776	198	34.1%
77.8%	570	776	206	36.2%
79.0%	564	765	201	35.6%
80.2%	560	741	181	32.3%
81.5%	560	667	107	19.2%
82.7%	556	624	69	12.4%
84.0%	555	608	53	9.6%
85.2%	552	600	48	8.7%
86.4%	538	595	57	10.6%
87.7%	533	587	53	10.0%
88.9%	530	573	43	8.1%
90.1%	493	568	75	15.2%
91.4%	491	564	74	15.0%
92.6%	425	525	100	23.6%
93.8%	263	515	252	95.9%
95.1%	250	474	224	89.6%
96.3%	248	459	211	84.9%
97.5%	188	370	182	96.8%
98.8%	188	362	174	92.5%
100.0%	188	349	161	85.8%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,542	4,120	-422	-9.3%
1.2%	4,397	4,034	-362	-8.2%
2.5%	3,636	3,547	-89	-2.5%
3.7%	3,446	3,222	-223	-6.5%
4.9%	3,162	3,039	-123	-3.9%
6.2%	2,802	2,866	64	2.3%
7.4%	2,694	2,752	58	2.2%
8.6%	2,678	2,676	-2	-0.1%
9.9%	2,591	2,303	-287	-11.1%
11.1%	2,544	2,149	-395	-15.5%
12.3%	2,468	2,005	-462	-18.7%
13.6%	2,341	1,968	-373	-15.9%
14.8%	2,253	1,859	-394	-17.5%
16.0%	2,223	1,852	-370	-16.7%
17.3%	2,094	1,836	-257	-12.3%
18.5%	1,956	1,829	-127	-6.5%
19.8%	1,885	1,754	-132	-7.0%
21.0%	1,785	1,750	-35	-2.0%
22.2%	1,750	1,750	0	0.0%
23.5%	1,750	1,750	0	0.0%
24.7%	1,750	1,543	-207	-11.8%
25.9%	1,750	1,543	-207	-11.8%
27.2%	1,750	1,526	-224	-12.8%
28.4%	1,750	1,445	-305	-17.4%
29.6%	1,750	1,439	-311	-17.8%
30.9%	1,750	1,402	-348	-19.9%
32.1%	1,508	1,390	-119	-7.9%
33.3%	1,458	1,352	-106	-7.3%
34.6%	1,352	1,344	-8	-0.6%
35.8%	1,345	1,337	-7	-0.5%
37.0%	1,343	1,330	-13	-1.0%
38.3%	1,338	1,330	-8	-0.6%
39.5%	1,330	1,329	-1	-0.1%
40.7%	1,328	1,323	-4	-0.3%
42.0%	1,325	1,318	-7	-0.5%
43.2%	1,318	1,317	-1	-0.1%
44.4%	1,311	1,250	-61	-4.7%
45.7%	1,308	1,181	-127	-9.7%
46.9%	1,166	1,174	8	0.7%
48.1%	1,154	1,169	15	1.3%
49.4%	1,115	1,161	46	4.2%
50.6%	1,071	1,157	87	8.1%
51.9%	1,005	1,150	145	14.4%
53.1%	950	1,144	194	20.4%
54.3%	948	1,132	184	19.4%
55.6%	944	1,118	173	18.4%
56.8%	936	1,107	171	18.3%
58.0%	892	1,086	194	21.8%
59.3%	867	1,081	213	24.6%
60.5%	840	1,076	236	28.1%
61.7%	837	1,072	236	28.2%
63.0%	768	1,067	298	38.8%
64.2%	766	1,055	290	37.8%
65.4%	763	1,048	284	37.3%
66.7%	756	998	242	32.0%
67.9%	749	995	246	32.9%
69.1%	726	993	267	36.8%
70.4%	670	988	318	47.5%
71.6%	637	983	346	54.3%
72.8%	631	898	267	42.3%
74.1%	620	896	276	44.5%
75.3%	616	828	212	34.4%
76.5%	611	772	162	26.5%
77.8%	609	751	142	23.3%
79.0%	609	710	101	16.6%
80.2%	609	688	79	13.0%
81.5%	608	677	69	11.4%
82.7%	607	655	47	7.8%
84.0%	601	637	36	5.9%
85.2%	600	620	20	3.4%
86.4%	464	616	152	32.7%
87.7%	462	610	147	31.9%
88.9%	375	609	234	62.3%
90.1%	302	608	306	101.4%
91.4%	284	533	250	88.0%
92.6%	281	510	229	81.6%
93.8%	281	498	217	77.2%
95.1%	281	496	215	76.4%
96.3%	281	476	195	69.2%
97.5%	281	412	131	46.7%
98.8%	281	308	27	9.6%
100.0%	252	278	26	10.1%

Figure SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

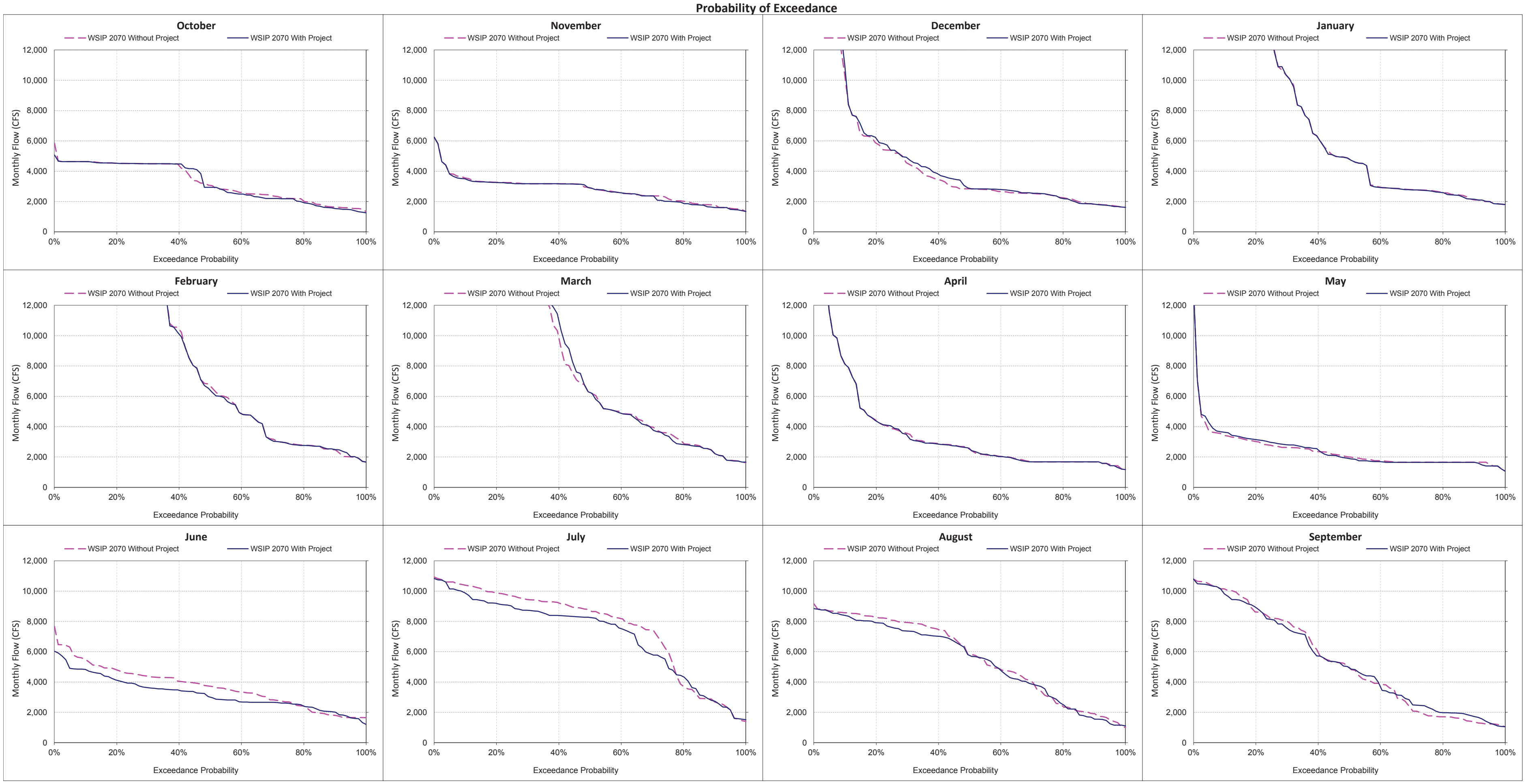


Table SW-46-b

Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,869	5,071	-798	-13.6%
1.2%	4,671	4,669	-2	0.0%
2.5%	4,635	4,635	0	0.0%
3.7%	4,635	4,635	0	0.0%
4.9%	4,635	4,635	0	0.0%
6.2%	4,635	4,635	0	0.0%
7.4%	4,635	4,635	0	0.0%
8.6%	4,635	4,635	0	0.0%
9.9%	4,635	4,635	0	0.0%
11.1%	4,631	4,631	0	0.0%
12.3%	4,631	4,590	-41	-0.9%
13.6%	4,590	4,568	-22	-0.5%
14.8%	4,554	4,554	0	0.0%
16.0%	4,554	4,554	0	0.0%
17.3%	4,546	4,546	0	0.0%
18.5%	4,542	4,542	0	0.0%
19.8%	4,523	4,523	0	0.0%
21.0%	4,520	4,520	0	0.0%
22.2%	4,515	4,515	0	0.0%
23.5%	4,511	4,511	0	0.0%
24.7%	4,507	4,507	0	0.0%
25.9%	4,502	4,504	2	0.0%
27.2%	4,502	4,502	0	0.0%
28.4%	4,500	4,502	2	0.0%
29.6%	4,492	4,500	9	0.2%
30.9%	4,491	4,495	4	0.1%
32.1%	4,491	4,491	0	0.0%
33.3%	4,491	4,491	0	0.0%
34.6%	4,489	4,489	0	0.0%
35.8%	4,487	4,487	0	0.0%
37.0%	4,487	4,487	0	0.0%
38.3%	4,484	4,486	2	0.0%
39.5%	4,484	4,484	0	0.0%
40.7%	4,197	4,484	287	6.8%
42.0%	4,075	4,216	141	3.4%
43.2%	3,747	4,173	426	11.4%
44.4%	3,384	4,161	777	23.0%
45.7%	3,364	4,101	737	21.9%
46.9%	3,215	3,848	633	19.7%
48.1%	3,210	2,940	-270	-8.4%
49.4%	3,078	2,940	-138	-4.5%
50.6%	3,046	2,939	-107	-3.5%
51.9%	2,849	2,933	84	2.9%
53.1%	2,821	2,836	16	0.6%
54.3%	2,810	2,747	-63	-2.2%
55.6%	2,782	2,598	-184	-6.6%
56.8%	2,755	2,578	-176	-6.4%
58.0%	2,696	2,520	-176	-6.5%
59.3%	2,613	2,495	-118	-4.5%
60.5%	2,583	2,493	-90	-3.5%
61.7%	2,512	2,432	-81	-3.2%
63.0%	2,504	2,415	-89	-3.5%
64.2%	2,496	2,318	-178	-7.1%
65.4%	2,491	2,307	-184	-7.4%
66.7%	2,460	2,245	-215	-8.7%
67.9%	2,457	2,206	-251	-10.2%
69.1%	2,428	2,200	-228	-9.4%
70.4%	2,355	2,198	-157	-6.7%
71.6%	2,328	2,197	-131	-5.6%
72.8%	2,254	2,192	-62	-2.8%
74.1%	2,211	2,189	-22	-1.0%
75.3%	2,206	2,188	-18	-0.8%
76.5%	2,200	2,185	-15	-0.7%
77.8%	2,189	2,031	-158	-7.2%
79.0%	2,185	2,000	-185	-8.5%
80.2%	1,990	1,911	-80	-4.0%
81.5%	1,980	1,873	-107	-5.4%
82.7%	1,961	1,818	-143	-7.3%
84.0%	1,824	1,728	-96	-5.3%
85.2%	1,802	1,691	-111	-6.2%
86.4%	1,715	1,611	-105	-6.1%
87.7%	1,670	1,601	-69	-4.1%
88.9%	1,647	1,592	-55	-3.3%
90.1%	1,626	1,540	-86	-5.3%
91.4%	1,614	1,523	-91	-5.7%
92.6%	1,592	1,486	-106	-6.7%
93.8%	1,589	1,482	-107	-6.7%
95.1%	1,562	1,469	-92	-5.9%
96.3%	1,539	1,389	-150	-9.7%
97.5%	1,536	1,331	-204	-13.3%
98.8%	1,496	1,297	-199	-13.3%
100.0%	1,331	1,251	-80	-6.0%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	6,237	6,237	0	0.0%
1.2%	5,818	5,818	0	0.0%
2.5%	4,632	4,632	0	0.0%
3.7%	4,411	4,411	0	0.0%
4.9%	3,843	3,812	-31	-0.8%
6.2%	3,808	3,653	-156	-4.1%
7.4%	3,676	3,551	-125	-3.4%
8.6%	3,653	3,516	-137	-3.8%
9.9%	3,551	3,508	-43	-1.2%
11.1%	3,508	3,398	-110	-3.1%
12.3%	3,398	3,336	-63	-1.8%
13.6%	3,336	3,322	-14	-0.4%
14.8%	3,322	3,300	-22	-0.7%
16.0%	3,300	3,296	-3	-0.1%
17.3%	3,296	3,280	-17	-0.5%
18.5%	3,280	3,266	-14	-0.4%
19.8%	3,266	3,257	-8	-0.3%
21.0%	3,257	3,250	-8	-0.2%
22.2%	3,256	3,248	-8	-0.2%
23.5%	3,250	3,215	-35	-1.1%
24.7%	3,248	3,212	-36	-1.1%
25.9%	3,215	3,175	-39	-1.2%
27.2%	3,212	3,175	-37	-1.2%
28.4%	3,175	3,172	-3	-0.1%
29.6%	3,175	3,172	-3	-0.1%
30.9%	3,172	3,172	0	0.0%
32.1%	3,172	3,172	0	0.0%
33.3%	3,172	3,172	0	0.0%
34.6%	3,172	3,172	0	0.0%
35.8%	3,172	3,172	0	0.0%
37.0%	3,172	3,172	0	0.0%
38.3%	3,172	3,172	0	0.0%
39.5%	3,172	3,171	-1	0.0%
40.7%	3,172	3,167	-6	-0.2%
42.0%	3,171	3,163	-8	-0.3%
43.2%	3,163	3,160	-3	-0.1%
44.4%	3,160	3,159	-1	0.0%
45.7%	3,159	3,141	-18	-0.6%
46.9%	3,145	3,137	-8	-0.3%
48.1%	2,960	3,111	150	5.1%
49.4%	2,932	2,913	-19	-0.7%
50.6%	2,876	2,876	0	0.0%
51.9%	2,827	2,782	-45	-1.6%
53.1%	2,759	2,781	22	0.8%
54.3%	2,730	2,760	31	1.1%
55.6%	2,687	2,687	0	0.0%
56.8%	2,680	2,628	-52	-1.9%
58.0%	2,628	2,623	-5	-0.2%
59.3%	2,599	2,599	0	0.0%
60.5%	2,530	2,567	37	1.5%
61.7%	2,529	2,530	1	0.1%
63.0%	2,515	2,515	0	0.0%
64.2%	2,453	2,505	52	2.1%
65.4%	2,451	2,451	0	0.0%
66.7%	2,405	2,376	-29	-1.2%
67.9%	2,376	2,372	-4	-0.2%
69.1%	2,376	2,372	-4	-0.2%
70.4%	2,372	2,372	0	0.0%
71.6%	2,372	2,084	-288	-12.1%
72.8%	2,372	2,076	-296	-12.5%
74.1%	2,303	2,006	-298	-12.9%
75.3%	2,162	2,006	-156	-7.2%
76.5%	2,076	2,002	-74	-3.6%
77.8%	2,047	1,984	-63	-3.1%
79.0%	2,044	1,963	-81	-3.9%
80.2%	2,006	1,863	-143	-7.1%
81.5%	2,002	1,856	-146	-7.3%
82.7%	1,884	1,788	-96	-5.1%
84.0%	1,856	1,784	-71	-3.8%
85.2%	1,837	1,778	-59	-3.2%
86.4%	1,790	1,753	-37	-2.1%
87.7%	1,788	1,657	-131	-7.4%
88.9%	1,784	1,637	-148	-8.3%
90.1%	1,767	1,605	-162	-9.2%
91.4%	1,611	1,602	-9	-0.6%
92.6%	1,602	1,601	-1	-0.1%
93.8%	1,601	1,599	-3	-0.2%
95.1%	1,549	1,488	-61	-4.0%
96.3%	1,516	1,463	-53	-3.5%
97.5%	1,503	1,455	-48	-3.2%
98.8%	1,463	1,389	-74	-5.0%
100.0%	1,340	1,340	0	0.0%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	45,261	48,039	2,778	6.1%
1.2%	32,039	32,353	315	1.0%
2.5%	29,017	26,402	-2,616	-9.0%
3.7%	22,892	26,110	3,218	14.1%
4.9%	22,648	25,437	2,789	12.3%
6.2%	20,682	22,688	2,006	9.7%
7.4%	14,181	14,020	-161	-1.1%
8.6%	12,139	13,245	1,106	9.1%
9.9%	10,420	11,014	593	5.7%
11.1%	8,403	8,407	4	0.0%
12.3%	7,699	7,699	0	0.0%
13.6%	7,613	7,613	0	0.0%
14.8%	6,527	7,148	621	9.5%
16.0%	6,323	6,524	201	3.2%
17.3%	6,313	6,349	36	0.6%
18.5%	6,245	6,344	98	1.6%
19.8%	5,874	6,246	372	6.3%
21.0%	5,725	5,874	149	2.6%
22.2%	5,412	5,828	416	7.7%
23.5%	5,396	5,725	329	6.1%
24.7%	5,391	5,384	-7	-0.1%
25.9%	5,193	5,381	187	3.6%
27.2%	5,186	5,186	0	0.0%
28.4%	5,004	4,952	-52	-1.0%
29.6%	4,570	4,925	355	7.8%
30.9%	4,423	4,723	300	6.8%
32.1%	4,287	4,570	283	6.6%
33.3%	4,178	4,512	334	8.0%
34.6%	3,945	4,310	365	9.2%
35.8%	3,702	4,281	579	15.6%
37.0%	3,657	4,178	521	14.3%
38.3%	3,554	3,945	391	11.0%
39.5%	3,449	3,856	407	11.8%
40.7%	3,411	3,700	289	8.5%
42.0%	3,308	3,647	339	10.2%
43.2%	3,078	3,554	476	15.5%
44.4%	2,973	3,509	536	18.0%
45.7%	2,955	3,449	493	16.7%
46.9%	2,838	3,411	572	20.2%
48.1%	2,838	3,075	236	8.3%
49.4%	2,838	2,894	56	2.0%
50.6%	2,838	2,838	0	0.0%
51.9%	2,838	2,838	0	0.0%
53.1%	2,813	2,838	26	0.9%
54.3%	2,801	2,838	38	1.3%
55.6%	2,790	2,838	48	1.7%
56.8%	2,764	2,823	58	2.1%
58.0%	2,724	2,813	89	3.3%
59.3%	2,661	2,801	140	5.3%
60.5%	2,656	2,790	134	5.1%
61.7%	2,635	2,767	132	5.0%
63.0%	2,584	2,724	140	5.4%
64.2%	2,579	2,706	127	4.9%
65.4%	2,569	2,656	87	3.4%
66.7%	2,552	2,579	26	1.0%
67.9%	2,545	2,572	27	1.1%
69.1%	2,538	2,569	31	1.2%
70.4%	2,532	2,538	6	0.2%
71.6%	2,506	2,537	31	1.2%
72.8%	2,503	2,532	29	1.2%
74.1%	2,497	2,503	5	0.2%
75.3%	2,451	2,451	0	0.0%
76.5%	2,405	2,405	0	0.0%
77.8%	2,351	2,367	17	0.7%
79.0%	2,263	2,241	-23	-1.0%
80.2%	2,241	2,190	-51	-2.3%
81.5%	2,187	2,158	-29	-1.3%
82.7%	2,170	2,065	-105	-4.8%
84.0%	2,065	1,974	-92	-4.4%
85.2%	1,974	1,877	-97	-4.9%
86.4%	1,970	1,859	-111	-5.6%
87.7%	1,859	1,851	-8	-0.4%
88.9%	1,851	1,851	0	0.0%
90.1%	1,817	1,817	0	0.0%
91.4%	1,816	1,784	-32	-1.7%
92.6%	1,784	1,773	-11	-0.6%
93.8%	1,773	1,755	-19	-1.0%
95.1%	1,755	1,721	-34	-1.9%
96.3%	1,721	1,677	-44	-2.6%
97.5%	1,677	1,668	-9	-0.5%
98.8%	1,633	1,633	0	0.0%
100.0%	1,611	1,611	0	0.0%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	78,332	78,333	1	0.0%
1.2%	71,102	70,884	-218	-0.3%
2.5%	63,346	63,011	-334	-0.5%
3.7%	49,892	48,018	-1,874	-3.8%
4.9%	39,932	41,330	1,397	3.5%
6.2%	37,420	40,050	2,631	7.0%
7.4%	36,548	36,451	-97	-0.3%
8.6%	33,228	34,274	1,045	3.1%
9.9%	32,134	34,053	1,919	6.0%
11.1%	25,047	25,047	0	0.0%
12.3%	23,411	24,127	716	3.1%
13.6%	22,570	23,997	1,428	6.3%
14.8%	22,367	22,783	416	1.9%
16.0%	19,656	22,244	2,589	13.2%
17.3%	19,646	20,233	587	3.0%
18.5%	17,332	19,931	2,599	15.0%
19.8%	15,423	19,856	4,433	28.7%
21.0%	14,319	16,031	1,711	12.0%
22.2%	13,878	13,878	0	0.0%
23.5%	13,610	13,610	0	0.0%
24.7%	12,787	13,325	538	4.2%
25.9%	11,960	11,858	-102	-0.8%
27.2%	10,901	10,901	0	0.0%
28.4%	10,671	10,901	230	2.2%
29.6%	10,376	10,376	0	0.0%
30.9%	10,075	10,079	4	0.0%
32.1%	9,687	9,567	-120	-1.2%
33.3%	8,363	8,363	0	0.0%
34.6%	8,271	8,254	-17	-0.2%
35.8%	7,674	7,674	0	0.0%
37.0%	7,415	7,415	0	0.0%
38.3%	6,494	6,494	0	0.0%
39.5%	6,337	6,337	0	0.0%
40.7%	5,967	5,967	0	0.0%
42.0%	5,597	5,597	0	0.0%
43.2%	5,340	5,133	-207	-3.9%
44.4%	5,089	5,089	0	0.0%
45.7%	4,978	4,978	0	0.0%
46.9%	4,973	4,932	-40	-0.8%
48.1%	4,932	4,918	-14	-0.3%
49.4%	4,876	4,876	0	0.0%
50.6%	4,717	4,717	0	0.0%
51.9%	4,605	4,605	0	0.0%
53.1%	4,528	4,528	0	0.0%
54.3%	4,519	4,519	0	0.0%
55.6%	4,370	4,370	0	0.0%
56.8%	3,083	3,061	-22	-0.7%
58.0%	3,061	2,973	-89	-2.9%
59.3%	2,973	2,930	-43	-1.4%
60.5%	2,912	2,912	0	0.0%
61.7%	2,909	2,909	0	0.0%
63.0%	2,891	2,891	0	0.0%
64.2%	2,865	2,864	-2	-0.1%
65.4%	2,864	2,845	-19	-0.7%
66.7%	2,845	2,811	-33	-1.2%
67.9%	2,811	2,786	-26	-0.9%
69.1%	2,786	2,782	-3	-0.1%
70.4%	2,782	2,761	-22	-0.8%
71.6%	2,761	2,760	-1	0.0%
72.8%	2,760	2,743	-17	-0.6%
74.1%	2,754	2,724	-29	-1.1%
75.3%	2,743	2,712	-31	-1.1%
76.5%	2,712	2,674	-38	-1.4%
77.8%	2,674	2,627	-47	-1.8%
79.0%	2,627	2,618	-10	-0.4%
80.2%	2,576	2,576	0	0.0%
81.5%	2,568	2,450	-118	-4.6%
82.7%	2,475	2,433	-42	-1.7%
84.0%	2,450	2,415	-36	-1.5%
85.2%	2,433	2,406	-27	-1.1%
86.4%	2,406	2,308	-98	-4.1%
87.7%	2,311	2,190	-121	-5.2%
88.9%	2,171	2,171	0	0.0%
90.1%	2,105	2,148	43	2.0%
91.4%	2,101	2,105	4	0.2%
92.6%	2,018	2,104	86	4.2%
93.8%	2,002	2,018	17	0.8%
95.1%	2,000	2,002	2	0.1%
96.3%	1,871	1,857	-15	-0.8%
97.5%	1,857	1,845	-12	-0.6%
98.8%	1,831	1,831	0	0.0%
100.0%	1,794	1,809	15	0.8%

Table SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	71,558	71,558	0	0.0%
1.2%	54,880	55,279	399	0.7%
2.5%	50,217	52,277	2,060	4.1%
3.7%	48,798	50,217	1,419	2.9%
4.9%	48,215	48,798	583	1.2%
6.2%	46,988	46,963	-25	-0.1%
7.4%	45,425	42,191	-3,234	-7.1%
8.6%	39,696	40,793	1,098	2.8%
9.9%	37,959	37,959	0	0.0%
11.1%	36,570	36,416	-154	-0.4%
12.3%	36,277	36,270	-7	0.0%
13.6%	35,960	35,851	-109	-0.3%
14.8%	35,162	35,272	111	0.3%
16.0%	34,818	34,818	0	0.0%
17.3%	33,468	34,472	1,005	3.0%
18.5%	31,903	31,902	-1	0.0%
19.8%	29,940	29,940	0	0.0%
21.0%	29,175	29,175	0	0.0%
22.2%	26,715	29,157	2,442	9.1%
23.5%	24,888	24,888	0	0.0%
24.7%	24,270	24,270	0	0.0%
25.9%	22,546	22,742	196	0.9%
27.2%	21,739	22,546	807	3.7%
28.4%	20,913	21,739	826	3.9%
29.6%	18,664	19,533	869	4.7%
30.9%	18,184	18,184	0	0.0%
32.1%	17,244	17,244	0	0.0%
33.3%	16,644	16,644	0	0.0%
34.6%	14,810	14,485	-325	-2.2%
35.8%	12,673	12,673	0	0.0%
37.0%	10,795	10,644	-151	-1.4%
38.3%	10,565	10,565	-1	0.0%
39.5%	10,565	10,218	-347	-3.3%
40.7%	10,218	9,928	-290	-2.8%
42.0%	9,213	9,244	32	0.3%
43.2%	8,529	8,529	-1	0.0%
44.4%	8,052	8,052	0	0.0%
45.7%	7,866	7,866	0	0.0%
46.9%	7,107	7,100	-8	-0.1%
48.1%	6,852	6,711	-142	-2.1%
49.4%	6,818	6,544	-274	-4.0%
50.6%	6,544	6,266	-278	-4.2%
51.9%	6,266	6,024	-243	-3.9%
53.1%	6,038	6,010	-27	-0.5%
54.3%	6,010	5,916	-94	-1.6%
55.6%	5,916	5,658	-259	-4.4%
56.8%	5,658	5,517	-141	-2.5%
58.0%	5,445	5,445	0	0.0%
59.3%	4,925	4,925	0	0.0%
60.5%	4,804	4,802	-2	-0.1%
61.7%	4,778	4,778	0	0.0%
63.0%	4,762	4,762	0	0.0%
64.2%	4,519	4,519	0	0.0%
65.4%	4,303	4,303	0	0.0%
66.7%	4,185	4,188	4	0.1%
67.9%	3,318	3,318	0	0.0%
69.1%	3,205	3,155	-50	-1.6%
70.4%	3,155	3,035	-120	-3.8%
71.6%	3,010	3,010	0	0.0%
72.8%	2,979	2,979	0	0.0%
74.1%	2,944	2,944	0	0.0%
75.3%	2,891	2,866	-25	-0.9%
76.5%	2,866	2,809	-57	-2.0%
77.8%	2,813	2,793	-20	-0.7%
79.0%	2,793	2,759	-33	-1.2%
80.2%	2,759	2,757	-2	-0.1%
81.5%	2,757	2,755	-3	-0.1%
82.7%	2,755	2,727	-28	-1.0%
84.0%	2,703	2,703	0	0.0%
85.2%	2,681	2,702	21	0.8%
86.4%	2,530	2,596	66	2.6%
87.7%	2,527	2,530	3	0.1%
88.9%	2,490	2,527	37	1.5%
90.1%	2,467	2,490	23	0.9%
91.4%	2,273	2,467	195	8.6%
92.6%	2,029	2,368	339	16.7%
93.8%	2,021	2,273	252	12.5%
95.1%	2,007	2,029	22	1.1%
96.3%	1,979	2,017	38	1.9%
97.5%	1,914	1,914	0	0.0%
98.8%	1,708	1,711	3	0.2%
100.0%	1,667	1,667	0	0.0%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	64,080	64,080	0	0.0%
1.2%	63,565	63,569	5	0.0%
2.5%	48,535	48,030	-505	-1.0%
3.7%	48,030	47,973	-57	-0.1%
4.9%	47,973	47,473	-500	-1.0%
6.2%	42,607	42,437	-170	-0.4%
7.4%	32,392	32,392	0	0.0%
8.6%	29,017	29,017	0	0.0%
9.9%	27,431	27,898	467	1.7%
11.1%	27,096	27,431	335	1.2%
12.3%	26,912	27,096	183	0.7%
13.6%	25,713	25,713	0	0.0%
14.8%	25,154	25,154	0	0.0%
16.0%	24,753	24,652	-101	-0.4%
17.3%	21,311	21,304	-7	0.0%
18.5%	20,267	20,267	0	0.0%
19.8%	20,253	20,253	0	0.0%
21.0%	20,012	20,012	0	0.0%
22.2%	19,278	19,278	0	0.0%
23.5%	18,770	18,770	0	0.0%
24.7%	18,306	18,344	38	0.2%
25.9%	18,006	18,306	300	1.7%
27.2%	16,485	18,006	1,521	9.2%
28.4%	16,076	16,076	0	0.0%
29.6%	15,923	15,487	-437	-2.7%
30.9%	15,181	15,193	12	0.1%
32.1%	14,235	14,087	-149	-1.0%
33.3%	13,295	13,295	0	0.0%
34.6%	12,697	12,783	86	0.7%
35.8%	12,297	12,697	400	3.3%
37.0%	11,887	12,224	337	2.8%
38.3%	10,673	11,887	1,214	11.4%
39.5%	10,328	11,452	1,124	10.9%
40.7%	9,147	10,328	1,181	12.9%
42.0%	8,110	9,463	1,352	16.7%
43.2%	8,032	9,147	1,115	13.9%
44.4%	7,520	8,271	751	10.0%
45.7%	7,078	7,601	522	7.4%
46.9%	6,868	7,520	652	9.5%
48.1%	6,780	6,780	0	0.0%
49.4%	6,305	6,305	0	0.0%
50.6%	6,180	6,191	12	0.2%
51.9%	6,059	5,798	-261	-4.3%
53.1%	5,580	5,578	-2	0.0%
54.3%	5,188	5,188	0	0.0%
55.6%	5,157	5,157	0	0.0%
56.8%	5,098	5,098	0	0.0%
58.0%	5,030	5,030	0	0.0%
59.3%	5,008	4,928	-80	-1.6%
60.5%	4,842	4,840	-2	-0.1%
61.7%	4,840	4,812	-28	-0.6%
63.0%	4,812	4,786	-26	-0.5%
64.2%	4,786	4,589	-197	-4.1%
65.4%	4,481	4,402	-78	-1.7%
66.7%	4,406	4,178	-228	-5.2%
67.9%	4,157	4,108	-50	-1.2%
69.1%	4,010	4,010	0	0.0%
70.4%	3,957	3,748	-209	-5.3%
71.6%	3,748	3,663	-86	-2.3%
72.8%	3,615	3,631	15	0.4%
74.1%	3,599	3,441	-158	-4.4%
75.3%	3,574	3,362	-211	-5.9%
76.5%	3,425	3,063	-362	-10.6%
77.8%	3,249	2,872	-377	-11.6%
79.0%	3,116	2,839	-277	-8.9%
80.2%	2,865	2,806	-59	-2.1%
81.5%	2,839	2,790	-49	-1.7%
82.7%	2,806	2,734	-72	-2.6%
84.0%	2,790	2,702	-88	-3.2%
85.2%	2,734	2,689	-45	-1.6%
86.4%	2,572	2,572	0	0.0%
87.7%	2,555	2,555	0	0.0%
88.9%	2,464	2,464	0	0.0%
90.1%	2,207	2,207	0	0.0%
91.4%	2,111	2,102	-9	-0.4%
92.6%	2,066	2,066	0	0.0%
93.8%	1,784	1,780	-4	-0.2%
95.1%	1,780	1,762	-18	-1.0%
96.3%	1,758	1,734	-25	-1.4%
97.5%	1,734	1,733	0	0.0%
98.8%	1,657	1,659	2	0.1%
100.0%	1,623	1,657	34	2.1%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	33,449	33,443	-6	0.0%
1.2%	26,602	26,598	-4	0.0%
2.5%	23,671	23,672	1	0.0%
3.7%	13,820	14,652	831	6.0%
4.9%	11,611	11,608	-3	0.0%
6.2%	10,051	10,047	-4	0.0%
7.4%	9,849	9,841	-7	-0.1%
8.6%	8,681	8,674	-8	-0.1%
9.9%	8,164	8,132	-32	-0.4%
11.1%	7,916	7,911	-5	-0.1%
12.3%	7,299	7,294	-4	-0.1%
13.6%	6,824	6,820	-4	-0.1%
14.8%	5,229	5,220	-9	-0.2%
16.0%	5,091	5,082	-9	-0.2%
17.3%	4,753	4,753	0	0.0%
18.5%	4,608	4,601	-6	-0.1%
19.8%	4,448	4,407	-41	-0.9%
21.0%	4,241	4,241	0	0.0%
22.2%	4,106	4,128	22	0.5%
23.5%	4,059	4,097	38	0.9%
24.7%	3,886	4,059	173	4.4%
25.9%	3,836	3,886	50	1.3%
27.2%	3,740	3,836	97	2.6%
28.4%	3,654	3,569	-85	-2.3%
29.6%	3,569	3,487	-82	-2.3%
30.9%	3,487	3,166	-321	-9.2%
32.1%	3,166	3,078	-88	-2.8%
33.3%	3,087	3,054	-33	-1.1%
34.6%	3,069	2,989	-80	-2.6%
35.8%	2,989	2,918	-71	-2.4%
37.0%	2,918	2,915	-3	-0.1%
38.3%	2,917	2,898	-19	-0.7%
39.5%	2,899	2,853	-46	-1.6%
40.7%	2,844	2,822	-22	-0.8%
42.0%	2,826	2,814	-12	-0.4%
43.2%	2,814	2,783	-31	-1.1%
44.4%	2,801	2,744	-57	-2.0%
45.7%	2,744	2,726	-19	-0.7%
46.9%	2,688	2,665	-23	-0.8%
48.1%	2,679	2,636	-42	-1.6%
49.4%	2,665	2,601	-64	-2.4%
50.6%	2,410	2,410	0	0.0%
51.9%	2,256	2,348	92	4.1%
53.1%	2,176	2,248	72	3.3%
54.3%	2,171	2,176	5	0.3%
55.6%	2,124	2,171	47	2.2%
56.8%	2,123	2,096	-27	-1.2%
58.0%	2,100	2,089	-11	-0.5%
59.3%	2,052	2,022	-30	-1.5%
60.5%	2,023	2,020	-4	-0.2%
61.7%	2,022	1,981	-41	-2.0%
63.0%	1,981	1,961	-19	-1.0%
64.2%	1,916	1,891	-25	-1.3%
65.4%	1,850	1,822	-28	-1.5%
66.7%	1,823	1,754	-69	-3.8%
67.9%	1,754	1,706	-48	-2.7%
69.1%	1,706	1,672	-34	-2.0%
70.4%	1,672	1,672	0	0.0%
71.6%	1,672	1,672	0	0.0%
72.8%	1,672	1,672	0	0.0%
74.1%	1,672	1,672	0	0.0%
75.3%	1,672	1,672	0	0.0%
76.5%	1,672	1,672	0	0.0%
77.8%	1,672	1,672	0	0.0%
79.0%	1,672	1,672	0	0.0%
80.2%	1,672	1,672	0	0.0%
81.5%	1,672	1,672	0	0.0%
82.7%	1,672	1,672	0	0.0%
84.0%	1,672	1,672	0	0.0%
85.2%	1,672	1,672	0	0.0%
86.4%	1,672	1,672	0	0.0%
87.7%	1,672	1,672	0	0.0%
88.9%	1,672	1,672	0	0.0%
90.1%	1,672	1,672	0	0.0%
91.4%	1,672	1,672	0	0.0%
92.6%	1,576	1,576	0	0.0%
93.8%	1,575	1,575	0	0.0%
95.1%	1,504	1,422	-81	-5.4%
96.3%	1,422	1,422	0	0.0%
97.5%	1,422	1,301	-121	-8.5%
98.8%	1,205	1,205	0	0.0%
100.0%	1,173	1,170	-2	-0.2%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	13,169	13,160	-9	-0.1%
1.2%	7,063	7,063	0	0.0%
2.5%	4,689	4,818	129	2.7%
3.7%	4,287	4,689	402	9.4%
4.9%	3,712	4,267	555	15.0%
6.2%	3,633	3,898	265	7.3%
7.4%	3,594	3,711	117	3.2%
8.6%	3,549	3,672	123	3.5%
9.9%	3,416	3,626	210	6.1%
11.1%	3,376	3,593	217	6.4%
12.3%	3,306	3,432	126	3.8%
13.6%	3,277	3,393	117	3.6%
14.8%	3,249	3,344	95	2.9%
16.0%	3,177	3,274	97	3.1%
17.3%	3,112	3,225	113	3.6%
18.5%	3,081	3,177	96	3.1%
19.8%	3,029	3,150	121	4.0%
21.0%	2,990	3,114	125	4.2%
22.2%	2,828	3,087	259	9.2%
23.5%	2,802	3,029	227	8.1%
24.7%	2,771	2,967	196	7.1%
25.9%	2,706	2,934	228	8.4%
27.2%	2,690	2,878	188	7.0%
28.4%	2,630	2,843	213	8.1%
29.6%	2,626	2,801	175	6.7%
30.9%	2,624	2,798	174	6.6%
32.1%	2,613	2,795	182	7.0%
33.3%	2,606	2,745	139	5.3%
34.6%	2,563	2,695	132	5.2%
35.8%	2,539	2,615	76	3.0%
37.0%	2,535	2,613	78	3.1%
38.3%	2,381	2,561	180	7.6%
39.5%	2,359	2,544	185	7.8%
40.7%	2,345	2,341	-4	-0.2%
42.0%	2,330	2,193	-136	-5.9%
43.2%	2,320	2,105	-215	-9.3%
44.4%	2,179	2,104	-75	-3.4%
45.7%	2,161	2,097	-64	-3.0%
46.9%	2,121	2,000	-121	-5.7%
48.1%	2,064	1,948	-117	-5.7%
49.4%	2,014	1,921	-93	-4.6%
50.6%	1,986	1,871	-115	-5.8%
51.9%	1,927	1,850	-77	-4.0%
53.1%	1,918	1,753	-165	-8.6%
54.3%	1,853	1,747	-106	-5.7%
55.6%	1,850	1,746	-104	-5.6%
56.8%	1,828	1,713	-116	-6.3%
58.0%	1,753	1,696	-56	-3.2%
59.3%	1,750	1,696	-55	-3.1%
60.5%	1,750	1,675	-75	-4.3%
61.7%	1,716	1,651	-65	-3.8%
63.0%	1,700	1,651	-50	-2.9%
64.2%	1,675	1,651	-25	-1.5%
65.4%	1,651	1,651	0	0.0%
66.7%	1,651	1,651	0	0.0%
67.9%	1,651	1,651	0	0.0%
69.1%	1,651	1,651	0	0.0%
70.4%	1,651	1,651	0	0.0%
71.6%	1,651	1,651	0	0.0%
72.8%	1,651	1,651	0	0.0%
74.1%	1,651	1,651	0	0.0%
75.3%	1,651	1,651	0	0.0%
76.5%	1,651	1,651	0	0.0%
77.8%	1,651	1,651	0	0.0%
79.0%	1,651	1,651	0	0.0%
80.2%	1,651	1,651	0	0.0%
81.5%	1,651	1,651	0	0.0%
82.7%	1,651	1,651	0	0.0%
84.0%	1,651	1,651	0	0.0%
85.2%	1,651	1,651	0	0.0%
86.4%	1,651	1,651	0	0.0%
87.7%	1,651	1,651	0	0.0%
88.9%	1,651	1,651	0	0.0%
90.1%	1,651	1,651	0	0.0%
91.4%	1,651	1,592	-58	-3.5%
92.6%	1,651	1,467	-184	-11.1%
93.8%	1,651	1,401	-250	-15.1%
95.1%	1,507	1,401	-106	-7.0%
96.3%	1,401	1,401	0	0.0%
97.5%	1,401	1,401	0	0.0%
98.8%	1,243	1,219	-24	-1.9%
100.0%	1,066	1,066	0	0.0%

Table SW-46-b
Feather River at Shanghai Bend, Monthly Flow
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	7,683	6,039	-1,644	-21.4%
1.2%	6,471	5,907	-564	-8.7%
2.5%	6,456	5,706	-750	-11.6%
3.7%	6,421	5,467	-954	-14.9%
4.9%	6,305	4,899	-1,406	-22.3%
6.2%	5,768	4,875	-893	-15.5%
7.4%	5,640	4,855	-785	-13.9%
8.6%	5,598	4,853	-744	-13.3%
9.9%	5,500	4,840	-660	-12.0%
11.1%	5,318	4,709	-609	-11.4%
12.3%	5,119	4,653	-466	-9.1%
13.6%	5,111	4,591	-520	-10.2%
14.8%	5,051	4,557	-495	-9.8%
16.0%	4,932	4,393	-539	-10.9%
17.3%	4,924	4,354	-570	-11.6%
18.5%	4,910	4,242	-668	-13.6%
19.8%	4,817	4,137	-679	-14.1%
21.0%	4,728	4,071	-657	-13.9%
22.2%	4,632	3,989	-642	-13.9%
23.5%	4,580	3,927	-653	-14.3%
24.7%	4,566	3,920	-646	-14.2%
25.9%	4,509	3,880	-629	-13.9%
27.2%	4,481	3,746	-735	-16.4%
28.4%	4,425	3,668	-757	-17.1%
29.6%	4,398	3,631	-767	-17.4%
30.9%	4,340	3,604	-736	-17.0%
32.1%	4,323	3,587	-737	-17.0%
33.3%	4,306	3,554	-753	-17.5%
34.6%	4,298	3,544	-753	-17.5%
35.8%	4,297	3,517	-780	-18.2%
37.0%	4,292	3,506	-785	-18.3%
38.3%	4,278	3,491	-787	-18.4%
39.5%	4,065	3,484	-581	-14.3%
40.7%	4,032	3,419	-612	-15.2%
42.0%	3,997	3,393	-604	-15.1%
43.2%	3,986	3,381	-605	-15.2%
44.4%	3,952	3,376	-576	-14.6%
45.7%	3,921	3,285	-636	-16.2%
46.9%	3,870	3,261	-609	-15.7%
48.1%	3,773	3,236	-537	-14.2%
49.4%	3,736	3,032	-704	-18.8%
50.6%	3,706	2,967	-740	-20.0%
51.9%	3,620	2,868	-752	-20.8%
53.1%	3,607	2,857	-750	-20.8%
54.3%	3,591	2,835	-756	-21.1%
55.6%	3,490	2,823	-667	-19.1%
56.8%	3,465	2,823	-642	-18.5%
58.0%	3,394	2,821	-574	-16.9%
59.3%	3,355	2,698	-657	-19.6%
60.5%	3,336	2,683	-653	-19.6%
61.7%	3,291	2,677	-614	-18.7%
63.0%	3,278	2,656	-622	-19.0%
64.2%	3,271	2,656	-615	-18.8%
65.4%	3,148	2,656	-492	-15.6%
66.7%	3,058	2,656	-402	-13.1%
67.9%	3,029	2,656	-373	-12.3%
69.1%	2,830	2,656	-174	-6.1%
70.4%	2,823	2,656	-166	-5.9%
71.6%	2,780	2,651	-129	-4.6%
72.8%	2,740	2,604	-136	-5.0%
74.1%	2,690	2,602	-88	-3.3%
75.3%	2,687	2,590	-97	-3.6%
76.5%	2,608	2,539	-69	-2.6%
77.8%	2,454	2,536	82	3.3%
79.0%	2,429	2,501	72	3.0%
80.2%	2,411	2,381	-30	-1.2%
81.5%	2,204	2,352	148	6.7%
82.7%	2,009	2,340	330	16.4%
84.0%	1,985	2,240	255	12.8%
85.2%	1,952	2,124	173	8.8%
86.4%	1,920	2,077	157	8.2%
87.7%	1,847	2,069	222	12.0%
88.9%	1,819	2,050	231	12.7%
90.1%	1,799	2,017	218	12.1%
91.4%	1,743	1,836	93	5.3%
92.6%	1,657	1,830	173	10.4%
93.8%	1,656	1,753	97	5.9%
95.1%	1,656	1,641	-15	-0.9%
96.3%	1,656	1,604	-52	-3.2%
97.5%	1,656	1,574	-82	-5.0%
98.8%	1,656	1,319	-337	-20.3%
100.0%	1,649	1,206	-443	-26.8%

July				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,928	10,824	-104	-1.0%
1.2%	10,824	10,750	-73	-0.7%
2.5%	10,750	10,725	-25	-0.2%
3.7%	10,600	10,600	0	0.0%
4.9%	10,600	10,140	-461	-4.3%
6.2%	10,600	10,138	-462	-4.4%
7.4%	10,472	10,050	-422	-4.0%
8.6%	10,456	10,006	-450	-4.3%
9.9%	10,397	9,884	-514	-4.9%
11.1%	10,346	9,719	-627	-6.1%
12.3%	10,314	9,447	-867	-8.4%
13.6%	10,243	9,445	-798	-7.8%
14.8%	10,184	9,386	-798	-7.8%
16.0%	10,033	9,351	-683	-6.8%
17.3%	9,957	9,226	-731	-7.3%
18.5%	9,951	9,226	-725	-7.3%
19.8%	9,878	9,194	-685	-6.9%
21.0%	9,857	9,138	-719	-7.3%
22.2%	9,814	9,100	-714	-7.3%
23.5%	9,747	9,077	-670	-6.9%
24.7%	9,692	9,035	-658	-6.8%
25.9%	9,654	8,846	-808	-8.4%
27.2%	9,562	8,806	-755	-7.9%
28.4%	9,523	8,742	-782	-8.2%
29.6%	9,452	8,736	-716	-7.6%
30.9%	9,424	8,714	-710	-7.5%
32.1%	9,419	8,687	-732	-7.8%
33.3%	9,399	8,678	-721	-7.7%
34.6%	9,317	8,585	-732	-7.9%
35.8%	9,298	8,492	-806	-8.7%
37.0%	9,294	8,397	-897	-9.7%
38.3%	9,291	8,395	-896	-9.6%
39.5%	9,257	8,392	-864	-9.3%
40.7%	9,159	8,386	-773	-8.4%
42.0%	9,137	8,361	-776	-8.5%
43.2%	9,036	8,341	-694	-7.7%
44.4%	8,935	8,322	-612	-6.9%
45.7%	8,920	8,305	-615	-6.9%
46.9%	8,884	8,302	-581	-6.5%
48.1%	8,820	8,277	-543	-6.2%
49.4%	8,796	8,270	-526	-6.0%
50.6%	8,653	8,238	-415	-4.8%
51.9%	8,653	8,206	-447	-5.2%
53.1%	8,530	8,023	-507	-5.9%
54.3%	8,522	7,996	-526	-6.2%
55.6%	8,466	7,892	-573	-6.8%
56.8%	8,331	7,820	-512	-6.1%
58.0%	8,267	7,811	-456	-5.5%
59.3%	8,218	7,577	-642	-7.8%
60.5%	8,162	7,482	-681	-8.3%
61.7%	7,867	7,382	-485	-6.2%
63.0%	7,867	7,269	-598	-7.6%
64.2%	7,763	7,170	-593	-7.6%
65.4%	7,752	6,440	-1,311	-16.9%
66.7%	7,621	6,280	-1,341	-17.6%
67.9%	7,453	5,980	-1,474	-19.8%
69.1%	7,441	5,875	-1,566	-21.0%
70.4%	7,400	5,785	-1,614	-21.8%
71.6%	7,037	5,769	-1,268	-18.0%
72.8%	6,672	5,643	-1,029	-15.4%
74.1%	6,265	5,524	-740	-11.8%
75.3%	5,904	4,888	-1,016	-17.2%
76.5%	5,227	4,777	-450	-8.6%
77.8%	4,423	4,473	50	1.1%
79.0%	3,875	4,434	559	14.4%
80.2%	3,669	4,326	657	17.9%
81.5%	3,542	4,063	521	14.7%
82.7%	3,502	3,644	142	4.1%
84.0%	3,234	3,575	341	10.5%
85.2%	2,919	3,137	218	7.5%
86.4%	2,914	3,085	171	5.9%
87.7%	2,889	2,928	39	1.3%
88.9%	2,876	2,796	-80	-2.8%
90.1%	2,674	2,731	57	2.1%
91.4%	2,603	2,561	-43	-1.6%
92.6%	2,527	2,348	-180	-7.1%
93.8%	2,360	2,338	-22	-0.9%
95.1%	2,148	2,170	21	1.0%
96.3%	1,617	1,602	-15	-0.9%
97.5%	1,560	1,587	27	1.8%
98.8%	1,449	1,540	92	6.3%
100.0%	1,405	1,506	102	7.2%

August				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	9,162	8,838	-325	-3.5%
1.2%	8,815	8,802	-14	-0.2%
2.5%	8,806	8,765	-41	-0.5%
3.7%	8,776	8,754	-23	-0.3%
4.9%	8,697	8,656	-41	-0.5%
6.2%	8,667	8,535	-132	-1.5%
7.4%	8,611	8,535	-76	-0.9%
8.6%	8,596	8,443	-153	-1.8%
9.9%	8,575	8,394	-181	-2.1%
11.1%	8,564	8,350	-214	-2.5%
12.3%	8,529	8,207	-322	-3.8%
13.6%	8,521	8,068	-452	-5.3%
14.8%	8,478	8,067	-410	-4.8%
16.0%	8,377	8,031	-346	-4.1%
17.3%	8,357	8,029	-328	-3.9%
18.5%	8,347	8,015	-332	-4.0%
19.8%	8,273	7,917	-356	-4.3%
21.0%	8,233	7,907	-326	-4.0%
22.2%	8,229	7,883	-346	-4.2%
23.5%	8,192	7,688	-504	-6.2%
24.7%	8,085	7,631	-454	-5.6%
25.9%	8,062	7,556	-506	-6.3%
27.2%	7,973	7,528	-445	-5.6%
28.4%	7,953	7,380	-573	-7.2%
29.6%	7,937	7,372	-564	-7.1%
30.9%	7,917	7,360	-557	-7.0%
32.1%	7,877	7,339	-537	-6.8%
33.3%	7,849	7,234	-615	-7.8%
34.6%	7,824	7,114	-710	-9.1%
35.8%	7,714	7,114	-600	-7.8%
37.0%	7,604	7,074	-530	-7.0%
38.3%	7,555	7,041	-514	-6.8%
39.5%	7,506	7,030	-476	-6.3%
40.7%	7,402	7,009	-392	-5.3%
42.0%	7,392	6,961	-431	-5.8%
43.2%	7,028	6,897	-131	-1.9%
44.4%	7,006	6,752	-254	-3.6%
45.7%	6,757	6,597	-159	-2.4%
46.9%	6,513	6,459	-54	-0.8%
48.1%	6,402	6,301	-101	-1.6%
49.4%	5,839	5,814	-25	-0.4%
50.6%	5,820	5,684	-136	-2.3%
51.9%	5,749	5,667	-82	-1.4%
53.1%	5,586	5,628	43	0.8%
54.3%	5,551	5,573	22	0.4%
55.6%	5,132	5,491	359	7.0%
56.8%	5,059	5,370	311	6.1%
58.0%	4,929	5,060	132	2.7%
59.3%	4,906	4,896	-11	-0.2%
60.5%	4,776	4,682	-94	-2.0%
61.7%	4,754	4,483	-271	-5.7%
63.0%	4,714	4,294	-420	-8.9%
64.2%	4,648	4,223	-426	-9.2%
65.4%	4,522	4,187	-335	-7.4%
66.7%	4,381	4,057	-324	-7.4%
67.9%	4,188	4,046	-143	-3.4%
69.1%	4,113	3,917	-196	-4.8%
70.4%	3,952	3,848	-105	-2.6%
71.6%	3,512	3,766	254	7.2%
72.8%	3,413	3,709	296	8.7%
74.1%	3,133	3,556	424	13.5%
75.3%	3,024	3,082	58	1.9%
76.5%	2,954	2,992	38	1.3%
77.8%	2,590	2,872	282	10.9%
79.0%	2,556	2,625	69	2.7%
80.2%	2,342	2,473	131	5.6%
81.5%	2,340	2,238	-102	-4.4%
82.7%	2,234	2,224	-10	-0.5%
84.0%	2,139	2,211	73	3.4%
85.2%	2,072	1,815	-256	-12.4%
86.4%	2,045	1,796	-249	-12.2%
87.7%	2,036	1,697	-339	-16.6%
88.9%	1,932	1,686	-245	-12.7%
90.1%	1,907	1,555	-352	-18.4%
91.4%	1,734	1,545	-188	-10.9%
92.6%	1,722	1,533	-189	-11.0%
93.8%	1,661	1,467	-194	-11.7%
95.1%	1,498	1,231	-267	-17.8%
96.3%	1,402	1,159	-243	-17.3%
97.5%	1,321	1,156	-165	-12.5%
98.8%	1,028	1,148	121	11.7%
100.0%	1,014	1,099	85	8.4%

September				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	10,793	10,793	0	0.0%
1.2%	10,646	10,479	-167	-1.6%
2.5%	10,630	10,473	-158	-1.5%
3.7%	10,595	10,453	-142	-1.3%
4.9%	10,479	10,392	-87	-0.8%
6.2%	10,340	10,340	0	0.0%
7.4%	10,270	10,299	29	0.3%
8.6%	10,148	10,153	5	0.0%
9.9%	10,148	9,813	-335	-3.3%
11.1%	10,032	9,652	-380	-3.8%
12.3%	10,023	9,441	-582	-5.8%
13.6%	9,940	9,438	-502	-5.1%
14.8%	9,710	9,404	-306	-3.2%
16.0%	9,558	9,297	-261	-2.7%
17.3%	9,428	9,163	-266	-2.8%
18.5%	8,902	9,092	190	2.1%
19.8%	8,625	8,957	333	3.9%
21.0%	8,611	8,779	168	1.9%
22.2%	8,543	8,559	16	0.2%
23.5%	8,406	8,179	-227	-2.7%
24.7%	8,210	8,148	-62	-0.8%
25.9%	8,202	8,086	-116	-1.4%
27.2%	8,177	7,837	-339	-4.1%
28.4%	8,081	7,833	-248	-3.1%
29.6%	8,066	7,608	-459	-5.7%
30.9%	7,897	7,424	-473	-6.0%
32.1%	7,632	7,299	-333	-4.4%
33.3%	7,614	7,224	-389	-5.1%
34.6%	7,419	7,185	-234	-3.2%
35.8%	7,314	7,123	-190	-2.6%
37.0%	6,954	6,449	-505	-7.3%
38.3%	6,430	6,042	-388	-6.0%
39.5%	6,161	5,720	-441	-7.2%
40.7%	5,659	5,713	54	0.9%
42.0%	5,538	5,567	30	0.5%
43.2%	5,446	5,384	-62	-1.1%
44.4%	5,327	5,367	40	0.8%
45.7%	5,306	5,331	25	0.5%
46.9%	5,279	5,269	-10	-0.2%
48.1%	5,241	5,064	-177	-3.4%
49.4%	5,073	5,027	-47	-0.9%
50.6%	4,819	4,856	37	0.8%
51.9%	4,776	4,817	41	0.9%
53.1%	4,416	4,624	208	4.7%
54.3%	4,200	4,489	289	6.9%
55.6%	4,127	4,410	283	6.9%
56.8%	4,049	4,406	357	8.8%
58.0%	3,916	4,360	445	11.4%
59.3%	3,911	4,003	92	2.4%
60.5%	3,841	3,453	-389	-10.1%
61.7%	3,811	3,409	-401	-10.5%
63.0%	3,593	3,289	-304	-8.4%
64.2%	3,567	3,284	-283	-7.9%
65.4%	2,925	3,141	216	7.4%
66.7%	2,896	3,118	222	7.7%
67.9%	2,729	2,916	187	6.9%
69.1%	2,419	2,827	408	16.9%
70.4%	2,079	2,485	406	19.5%
71.6%	2,072	2,472	400	19.3%
72.8%	1,981	2,455	474	23.9%
74.1%	1,875	2,430	555	29.6%
75.3%	1,767	2,327	559	31.6%
76.5%	1,765	2,208	443	25.1%
77.8%	1,725	2,079	354	20.5%
79.0%	1,709	1,985	276	16.1%
80.2%	1,708	1,977	269	15.8%
81.5%	1,698	1,971	272	16.0%
82.7%	1,686	1,959	273	16.2%
84.0%	1,633	1,951	318	19.5%
85.2%	1,611	1,945	334	20.8%
86.4%	1,567	1,920	353	22.5%
87.7%	1,437	1,851	413	28.7%
88.9%	1,416	1,780	364	25.7%
90.1%	1,365	1,723	358	26.2%
91.4%	1,295	1,670	374	28.9%
92.6%	1,277	1,560	283	22.2%
93.8%	1,234	1,409	175	14.2%
95.1%	1,232	1,294	62	5.1%
96.3%	1,231	1,198	-33	-2.7%
97.5%	1,202	1,099	-103	-8.6%
98.8%	1,119	1,070	-50	-4.4%
100.0%	1,052	1,052	0	0.0%

Figure SW-47-b
American River at Mouth, Monthly Flow
Probability of Exceedance

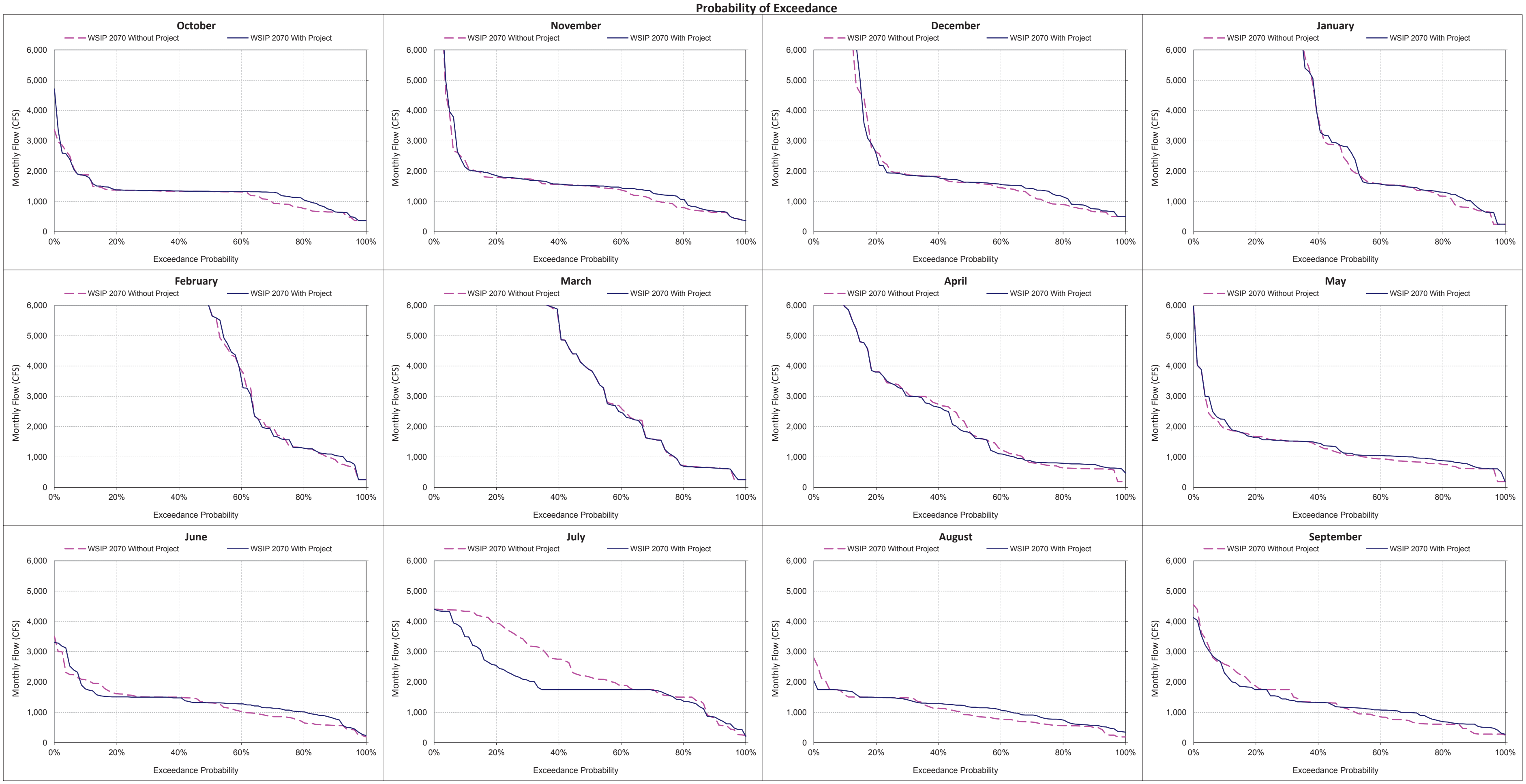


Table SW-47-b
American River at Mouth, Monthly Flow
Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,366	4,716	1,350	40.1%
1.2%	2,964	3,324	360	12.1%
2.5%	2,865	2,597	-268	-9.4%
3.7%	2,668	2,583	-86	-3.2%
4.9%	2,508	2,400	-109	-4.3%
6.2%	2,107	2,080	-27	-1.3%
7.4%	1,879	1,906	27	1.4%
8.6%	1,879	1,879	0	0.0%
9.9%	1,879	1,854	-25	-1.3%
11.1%	1,879	1,794	-85	-4.5%
12.3%	1,499	1,585	85	5.7%
13.6%	1,486	1,510	24	1.6%
14.8%	1,477	1,509	31	2.1%
16.0%	1,415	1,484	69	4.9%
17.3%	1,382	1,476	94	6.8%
18.5%	1,380	1,427	47	3.4%
19.8%	1,377	1,379	2	0.2%
21.0%	1,375	1,379	4	0.3%
22.2%	1,372	1,377	5	0.3%
23.5%	1,370	1,375	5	0.4%
24.7%	1,367	1,373	6	0.4%
25.9%	1,365	1,372	7	0.5%
27.2%	1,363	1,370	7	0.5%
28.4%	1,358	1,368	10	0.8%
29.6%	1,356	1,368	12	0.9%
30.9%	1,355	1,363	8	0.6%
32.1%	1,355	1,363	8	0.6%
33.3%	1,352	1,362	11	0.8%
34.6%	1,343	1,358	14	1.1%
35.8%	1,341	1,357	16	1.2%
37.0%	1,337	1,354	17	1.3%
38.3%	1,336	1,353	17	1.2%
39.5%	1,336	1,352	16	1.2%
40.7%	1,335	1,348	13	1.0%
42.0%	1,335	1,344	9	0.7%
43.2%	1,335	1,341	7	0.5%
44.4%	1,334	1,340	6	0.4%
45.7%	1,334	1,340	6	0.4%
46.9%	1,331	1,337	6	0.4%
48.1%	1,331	1,336	5	0.4%
49.4%	1,329	1,336	7	0.5%
50.6%	1,327	1,334	8	0.6%
51.9%	1,326	1,333	7	0.6%
53.1%	1,325	1,331	6	0.4%
54.3%	1,323	1,330	6	0.5%
55.6%	1,323	1,330	7	0.5%
56.8%	1,321	1,329	8	0.6%
58.0%	1,321	1,329	8	0.6%
59.3%	1,318	1,328	10	0.8%
60.5%	1,315	1,328	13	1.0%
61.7%	1,303	1,327	25	1.9%
63.0%	1,199	1,327	128	10.7%
64.2%	1,193	1,325	132	11.1%
65.4%	1,178	1,320	143	12.1%
66.7%	1,087	1,318	230	21.2%
67.9%	1,079	1,317	238	22.0%
69.1%	1,046	1,309	263	25.2%
70.4%	935	1,309	373	39.9%
71.6%	932	1,282	350	37.5%
72.8%	918	1,197	280	30.5%
74.1%	912	1,180	269	29.5%
75.3%	906	1,162	256	28.2%
76.5%	836	1,139	302	36.2%
77.8%	822	1,132	310	37.7%
79.0%	800	1,127	328	41.0%
80.2%	763	1,045	282	36.9%
81.5%	756	1,007	250	33.1%
82.7%	683	966	283	41.4%
84.0%	676	935	259	38.3%
85.2%	666	872	205	30.8%
86.4%	663	836	173	26.1%
87.7%	655	760	104	15.9%
88.9%	654	720	66	10.1%
90.1%	643	654	11	1.7%
91.4%	642	647	5	0.7%
92.6%	642	642	0	0.0%
93.8%	500	639	139	27.8%
95.1%	478	500	22	4.7%
96.3%	376	473	97	25.7%
97.5%	375	375	0	0.0%
98.8%	375	375	0	0.0%
100.0%	375	375	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	14,660	15,003	344	2.3%
1.2%	12,333	11,990	-343	-2.8%
2.5%	7,498	7,439	-59	-0.8%
3.7%	4,575	5,009	434	9.5%
4.9%	3,903	3,967	64	1.6%
6.2%	2,663	3,785	1,121	42.1%
7.4%	2,625	2,661	36	1.4%
8.6%	2,479	2,391	-88	-3.6%
9.9%	2,361	2,142	-220	-9.3%
11.1%	2,090	2,044	-46	-2.2%
12.3%	2,045	2,014	-32	-1.5%
13.6%	2,000	2,000	0	0.0%
14.8%	1,968	2,000	32	1.6%
16.0%	1,817	1,963	147	8.1%
17.3%	1,802	1,951	149	8.3%
18.5%	1,797	1,896	99	5.5%
19.8%	1,797	1,866	70	3.9%
21.0%	1,796	1,822	26	1.4%
22.2%	1,776	1,802	26	1.5%
23.5%	1,775	1,797	22	1.2%
24.7%	1,773	1,790	17	0.9%
25.9%	1,758	1,777	19	1.1%
27.2%	1,758	1,759	1	0.0%
28.4%	1,755	1,740	-15	-0.8%
29.6%	1,745	1,735	-11	-0.6%
30.9%	1,740	1,700	-40	-2.3%
32.1%	1,723	1,696	-27	-1.5%
33.3%	1,700	1,694	-5	-0.3%
34.6%	1,592	1,675	83	5.2%
35.8%	1,582	1,664	82	5.2%
37.0%	1,577	1,613	36	2.3%
38.3%	1,565	1,582	17	1.1%
39.5%	1,562	1,577	15	1.0%
40.7%	1,554	1,575	21	1.4%
42.0%	1,548	1,563	15	1.0%
43.2%	1,547	1,542	-5	-0.3%
44.4%	1,545	1,538	-7	-0.4%
45.7%	1,541	1,531	-9	-0.6%
46.9%	1,530	1,531	1	0.1%
48.1%	1,519	1,528	9	0.6%
49.4%	1,510	1,521	11	0.7%
50.6%	1,492	1,519	27	1.8%
51.9%	1,488	1,516	28	1.9%
53.1%	1,470	1,515	45	3.1%
54.3%	1,446	1,515	69	4.8%
55.6%	1,440	1,493	53	3.7%
56.8%	1,430	1,481	51	3.5%
58.0%	1,409	1,476	68	4.8%
59.3%	1,403	1,474	71	5.1%
60.5%	1,362	1,433	71	5.2%
61.7%	1,335	1,432	97	7.3%
63.0%	1,245	1,431	186	14.9%
64.2%	1,200	1,427	227	18.9%
65.4%	1,197	1,393	196	16.4%
66.7%	1,180	1,390	210	17.8%
67.9%	1,155	1,368	213	18.4%
69.1%	1,112	1,366	253	22.8%
70.4%	1,027	1,264	237	23.1%
71.6%	1,008	1,246	237	23.6%
72.8%	984	1,228	244	24.8%
74.1%	968	1,210	242	25.1%
75.3%	952	1,204	252	26.4%
76.5%	925	1,200	275	29.7%
77.8%	813	1,174	362	44.5%
79.0%	808	1,079	271	33.5%
80.2%	797	1,067	270	33.9%
81.5%	753	877	124	16.4%
82.7%	720	836	115	16.0%
84.0%	707	825	117	16.6%
85.2%	694	777	83	12.0%
86.4%	680	740	61	8.9%
87.7%	679	711	32	4.7%
88.9%	648	694	46	7.1%
90.1%	647	679	33	5.0%
91.4%	637	673	36	5.7%
92.6%	635	671	35	5.6%
93.8%	635	648	13	2.0%
95.1%	500	500	0	0.0%
96.3%	447	447	0	0.0%
97.5%	427	427	0	0.0%
98.8%	391	391	0	0.0%
100.0%	375	375	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	23,870	23,873	3	0.0%
1.2%	21,347	21,420	73	0.3%
2.5%	21,007	21,344	337	1.6%
3.7%	20,220	20,230	10	0.1%
4.9%	20,042	20,052	10	0.1%
6.2%	19,114	19,111	-4	0.0%
7.4%	18,281	18,286	5	0.0%
8.6%	15,097	15,094	-4	0.0%
9.9%	14,453	13,779	-674	-4.7%
11.1%	10,314	9,456	-857	-8.3%
12.3%	6,291	6,748	458	7.3%
13.6%	4,820	6,167	1,347	28.0%
14.8%	4,591	5,030	439	9.6%
16.0%	4,429	3,588	-841	-19.0%
17.3%	3,658	3,094	-564	-15.4%
18.5%	2,747	2,907	160	5.8%
19.8%	2,656	2,657	1	0.0%
21.0%	2,571	2,193	-378	-14.7%
22.2%	2,307	2,187	-121	-5.2%
23.5%	2,221	1,945	-276	-12.4%
24.7%	2,000	1,940	-60	-3.0%
25.9%	1,956	1,938	-18	-0.9%
27.2%	1,945	1,923	-23	-1.2%
28.4%	1,940	1,905	-35	-1.8%
29.6%	1,898	1,870	-28	-1.5%
30.9%	1,871	1,866	-5	-0.3%
32.1%	1,866	1,862	-3	-0.2%
33.3%	1,862	1,843	-19	-1.0%
34.6%	1,849	1,840	-9	-0.5%
35.8%	1,837	1,838	1	0.0%
37.0%	1,836	1,838	1	0.1%
38.3%	1,832	1,821	-10	-0.6%
39.5%	1,829	1,811	-18	-1.0%
40.7%	1,828	1,757	-71	-3.9%
42.0%	1,724	1,749	25	1.4%
43.2%	1,670	1,735	65	3.9%
44.4%	1,654	1,729	75	4.5%
45.7%	1,645	1,722	77	4.7%
46.9%	1,636	1,693	58	3.5%
48.1%	1,632	1,641	9	0.6%
49.4%	1,631	1,637	7	0.4%
50.6%	1,628	1,632	4	0.3%
51.9%	1,624	1,631	7	0.4%
53.1%	1,590	1,628	37	2.4%
54.3%	1,582	1,624	42	2.7%
55.6%	1,573	1,611	38	2.4%
56.8%	1,556	1,600	44	2.8%
58.0%	1,511	1,589	78	5.2%
59.3%	1,460	1,584	123	8.4%
60.5%	1,447	1,552	105	7.3%
61.7%	1,428	1,544	116	8.1%
63.0%	1,419	1,535	116	8.2%
64.2%	1,403	1,527	123	8.8%
65.4%	1,351	1,526	175	12.9%
66.7%	1,351	1,518	167	12.4%
67.9%	1,325	1,443	119	8.9%
69.1%	1,216	1,433	217	17.9%
70.4%	1,159	1,428	269	23.2%
71.6%	1,085	1,377	292	26.9%
72.8%	1,078	1,375	298	27.6%
74.1%	989	1,356	367	37.1%
75.3%	964	1,340	376	39.0%
76.5%	922	1,254	332	36.0%
77.8%	915	1,201	286	31.2%
79.0%	901	1,194	293	32.5%
80.2%	897	1,142	245	27.3%
81.5%	874	1,089	214	24.5%
82.7%	811	915	105	12.9%
84.0%	806	900	93	11.6%
85.2%	768	891	123	16.0%
86.4%	760	889	129	17.0%
87.7%	742	846	105	14.1%
88.9%	683	764	81	11.9%
90.1%	662	760	98	14.9%
91.4%	660	746	86	13.0%
92.6%	657	693	36	5.5%
93.8%	647	689	42	6.4%
95.1%	500	676	176	35.3%
96.3%	500	667	167	33.5%
97.5%	500	500	0	0.0%
98.8%	500	500	0	0.0%
100.0%	500	500	0	0.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	41,001	40,999	-2	0.0%
1.2%	29,906	29,901	-5	0.0%
2.5%	29,612	29,474	-138	-0.5%
3.7%	29,182	29,185	3	0.0%
4.9%	27,559	27,557	-2	0.0%
6.2%	25,921	25,906	-15	-0.1%
7.4%	24,999	25,001	1	0.0%
8.6%	22,399	22,399	0	0.0%
9.9%	21,667	21,667	0	0.0%
11.1%	20,605	20,939	334	1.6%
12.3%	19,969	19,969	0	0.0%
13.6%	17,878	17,878	0	0.0%
14.8%	16,349	16,350	1	0.0%
16.0%	15,696	15,695	-1	0.0%
17.3%	14,486	14,422	-65	-0.4%
18.5%	14,486	13,445	-1,041	-7.2%
19.8%	13,432	13,367	-65	-0.5%
21.0%	12,711	12,575	-136	-1.1%
22.2%	11,475	11,471	-4	0.0%
23.5%	9,932	9,933	1	0.0%
24.7%	9,926	9,928	2	0.0%
25.9%	9,790	9,793	3	0.0%
27.2%	9,084	9,091	8	0.1%
28.4%	8,966	8,971	5	0.1%
29.6%	8,162	8,165	3	0.0%
30.9%	8,110	8,117	7	0.1%
32.1%	6,815	6,826	11	0.2%
33.3%	6,792	6,792	0	0.0%
34.6%	6,404	6,533	130	2.0%
35.8%	5,757	5,400	-357	-6.2%
37.0%	5,410	5,285	-126	-2.3%
38.3%	4,905	5,069	164	3.3%
39.5%	3,978	3,962	-16	-0.4%
40.7%	3,439	3,275	-164	-4.8%
42.0%	2,972	3,187	215	7.2%
43.2%	2,891	3,173	282	9.8%
44.4%	2,884	2,951	67	2.3%
45.7%	2,870	2,944	74	2.6%
46.9%	2,862	2,866	4	0.1%
48.1%	2,460	2,820	361	14.7%
49.4%	2,305	2,803	498	21.6%
50.6%	2,042	2,615	574	28.1%
51.9%	1,947	2,380	433	22.2%
53.1%	1,902	1,902	0	0.0%
54.3%	1,770	1,645	-124	-7.0%
55.6%	1,674	1,617	-56	-3.4%
56.8%	1,645	1,600	-45	-2.7%
58.0%	1,600	1,594	-6	-0.4%
59.3%	1,595	1,585	-9	-0.6%
60.5%	1,585	1,563	-22	-1.4%
61.7%	1,548	1,542	-6	-0.4%
63.0%	1,542	1,541	-1	-0.1%
64.2%	1,540	1,540	0	0.0%
65.4%	1,538	1,538	0	0.0%
66.7%	1,531	1,514	-17	-1.1%
67.9%	1,514	1,484	-31	-2.0%
69.1%	1,483	1,476	-7	-0.5%
70.4%	1,466	1,470	4	0.3%
71.6%	1,372	1,463	91	6.6%
72.8%	1,366	1,394	28	2.1%
74.1%	1,362	1,370	8	0.6%
75.3%	1,353	1,367	15	1.1%
76.5%	1,305	1,361	55	4.2%
77.8%	1,299	1,340	40	3.1%
79.0%	1,181	1,317	136	11.5%
80.2%	1,175	1,304	128	10.9%
81.5%	1,173	1,278	105	9.0%
82.7%	1,083	1,238	155	14.3%
84.0%	890	1,236	346	38.8%
85.2%	831	1,162	331	39.8%
86.4%	814	1,110	296	36.4%
87.7%	810	1,028	218	26.9%
88.9%	789	1,023	234	29.6%
90.1%	753	898	145	19.2%
91.4%	696	791	95	13.7%
92.6%	691	707	16	2.3%
93.8%	663	648	-15	-2.3%
95.1%	650	644	-7	-1.0%
96.3%	250	636	386	
97.5%	250	250	0	
98.8%	250	250	0	
100.0%	250	250	0	

Table SW-47-b

American River at Mouth, Monthly Flow

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	42,203	42,203	0	0.0%
1.2%	32,715	32,707	-8	0.0%
2.5%	32,419	32,419	0	0.0%
3.7%	23,198	23,199	1	0.0%
4.9%	22,674	22,672	-2	0.0%
6.2%	22,020	22,016	-4	0.0%
7.4%	21,197	21,197	0	0.0%
8.6%	20,907	20,905	-2	0.0%
9.9%	20,489	20,480	-9	0.0%
11.1%	20,203	20,203	0	0.0%
12.3%	20,103	20,104	1	0.0%
13.6%	20,003	19,740	-263	-1.3%
14.8%	19,622	19,619	-3	0.0%
16.0%	18,618	18,619	1	0.0%
17.3%	17,754	17,800	46	0.3%
18.5%	17,612	17,612	0	0.0%
19.8%	16,183	16,183	0	0.0%
21.0%	16,182	16,182	0	0.0%
22.2%	14,608	14,608	0	0.0%
23.5%	14,402	14,402	0	0.0%
24.7%	14,152	14,163	11	0.1%
25.9%	12,577	12,436	-141	-1.1%
27.2%	12,436	12,338	-98	-0.8%
28.4%	12,338	12,279	-59	-0.5%
29.6%	11,693	11,693	0	0.0%
30.9%	10,506	10,504	-1	0.0%
32.1%	10,251	9,590	-661	-6.4%
33.3%	9,297	9,297	0	0.0%
34.6%	8,992	9,263	272	3.0%
35.8%	8,232	8,313	81	1.0%
37.0%	7,856	8,234	378	4.8%
38.3%	7,723	7,587	-136	-1.8%
39.5%	7,586	7,469	-117	-1.5%
40.7%	7,269	7,270	1	0.0%
42.0%	7,131	7,130	-1	0.0%
43.2%	6,865	6,860	-5	-0.1%
44.4%	6,603	6,603	0	0.0%
45.7%	6,472	6,472	0	0.0%
46.9%	6,184	6,184	0	0.0%
48.1%	6,169	6,170	2	0.0%
49.4%	6,037	6,037	0	0.0%
50.6%	5,646	5,648	1	0.0%
51.9%	5,591	5,591	0	0.0%
53.1%	4,931	5,510	578	11.7%
54.3%	4,749	4,934	185	3.9%
55.6%	4,568	4,735	167	3.7%
56.8%	4,363	4,463	100	2.3%
58.0%	4,301	4,363	62	1.4%
59.3%	3,961	3,962	1	0.0%
60.5%	3,780	3,279	-501	-13.2%
61.7%	3,279	3,271	-8	-0.3%
63.0%	3,272	3,055	-217	-6.6%
64.2%	2,354	2,351	-3	-0.1%
65.4%	2,243	2,244	1	0.1%
66.7%	2,233	1,978	-255	-11.4%
67.9%	2,002	1,941	-62	-3.1%
69.1%	1,976	1,938	-37	-1.9%
70.4%	1,940	1,690	-250	-12.9%
71.6%	1,714	1,662	-53	-3.1%
72.8%	1,689	1,591	-97	-5.8%
74.1%	1,570	1,570	0	0.0%
75.3%	1,360	1,570	210	15.5%
76.5%	1,329	1,319	-10	-0.8%
77.8%	1,325	1,314	-11	-0.8%
79.0%	1,314	1,308	-6	-0.5%
80.2%	1,282	1,282	0	0.0%
81.5%	1,269	1,269	0	0.0%
82.7%	1,266	1,266	0	0.0%
84.0%	1,156	1,188	31	2.7%
85.2%	1,112	1,134	22	1.9%
86.4%	1,062	1,114	52	4.9%
87.7%	980	1,100	120	12.3%
88.9%	964	1,093	128	13.3%
90.1%	905	1,047	142	15.7%
91.4%	761	1,028	267	35.0%
92.6%	757	1,012	255	33.6%
93.8%	708	854	146	20.6%
95.1%	679	832	153	22.5%
96.3%	635	758	123	19.3%
97.5%	250	250	0	
98.8%	250	250	0	
100.0%	250	250	0	

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	25,520	25,520	0	0.0%
1.2%	24,488	24,488	0	0.0%
2.5%	21,135	21,131	-5	0.0%
3.7%	17,200	17,200	0	0.0%
4.9%	16,829	16,829	0	0.0%
6.2%	16,404	16,404	0	0.0%
7.4%	15,533	15,533	0	0.0%
8.6%	14,524	14,524	0	0.0%
9.9%	12,805	12,809	4	0.0%
11.1%	10,871	10,871	0	0.0%
12.3%	10,506	10,506	0	0.0%
13.6%	10,305	10,296	-8	-0.1%
14.8%	10,202	10,201	-1	0.0%
16.0%	10,051	10,051	0	0.0%
17.3%	9,940	9,939	-1	0.0%
18.5%	9,586	9,585	0	0.0%
19.8%	8,796	8,798	2	0.0%
21.0%	8,415	8,415	0	0.0%
22.2%	8,238	8,238	0	0.0%
23.5%	8,180	8,180	0	0.0%
24.7%	8,136	8,136	0	0.0%
25.9%	8,029	8,031	2	0.0%
27.2%	7,936	7,833	-103	-1.3%
28.4%	7,615	7,609	-5	-0.1%
29.6%	7,580	7,584	3	0.0%
30.9%	6,430	6,425	-5	-0.1%
32.1%	6,326	6,315	-11	-0.2%
33.3%	6,271	6,271	-1	0.0%
34.6%	6,126	6,126	0	0.0%
35.8%	6,028	6,028	0	0.0%
37.0%	5,977	5,975	-2	0.0%
38.3%	5,883	5,930	47	0.8%
39.5%	5,771	5,883	113	2.0%
40.7%	4,863	4,863	0	0.0%
42.0%	4,853	4,853	0	0.0%
43.2%	4,598	4,598	0	0.0%
44.4%	4,401	4,401	0	0.0%
45.7%	4,399	4,399	0	0.0%
46.9%	4,133	4,134	1	0.0%
48.1%	4,018	4,018	0	0.0%
49.4%	3,906	3,906	0	0.0%
50.6%	3,832	3,833	2	0.0%
51.9%	3,626	3,626	0	0.0%
53.1%	3,378	3,380	2	0.1%
54.3%	3,282	3,283	0	0.0%
55.6%	2,798	2,760	-38	-1.4%
56.8%	2,760	2,712	-47	-1.7%
58.0%	2,731	2,695	-37	-1.3%
59.3%	2,695	2,503	-192	-7.1%
60.5%	2,558	2,449	-109	-4.3%
61.7%	2,443	2,300	-143	-5.9%
63.0%	2,300	2,275	-25	-1.1%
64.2%	2,238	2,225	-13	-0.6%
65.4%	2,226	2,209	-16	-0.7%
66.7%	2,209	2,066	-144	-6.5%
67.9%	1,632	1,633	1	0.1%
69.1%	1,597	1,597	0	0.0%
70.4%	1,587	1,587	0	0.0%
71.6%	1,555	1,555	0	0.0%
72.8%	1,551	1,552	1	0.1%
74.1%	1,239	1,241	2	0.1%
75.3%	1,042	1,124	82	7.9%
76.5%	1,035	1,042	7	0.7%
77.8%	951	951	0	0.0%
79.0%	739	739	0	0.0%
80.2%	710	686	-24	-3.4%
81.5%	685	680	-6	-0.8%
82.7%	680	677	-3	-0.4%
84.0%	677	663	-15	-2.2%
85.2%	663	656	-6	-1.0%
86.4%	657	651	-6	-0.9%
87.7%	656	650	-6	-1.0%
88.9%	651	641	-9	-1.5%
90.1%	642	638	-4	-0.6%
91.4%	634	628	-6	-0.9%
92.6%	615	615	0	0.0%
93.8%	613	613	0	0.1%
95.1%	603	597	-6	-0.9%
96.3%	250	411	161	
97.5%	250	250	0	
98.8%	250	250	0	
100.0%	250	250	0	

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	20,737	20,731	-5	0.0%
1.2%	19,388	19,388	0	0.0%
2.5%	11,880	11,880	0	0.0%
3.7%	10,987	10,983	-4	0.0%
4.9%	10,960	10,960	0	0.0%
6.2%	7,489	7,489	0	0.0%
7.4%	6,496	6,496	0	0.0%
8.6%	6,170	6,170	0	0.0%
9.9%	5,959	5,959	0	0.0%
11.1%	5,854	5,854	0	0.0%
12.3%	5,506	5,506	0	0.0%
13.6%	5,227	5,219	-8	-0.2%
14.8%	4,798	4,798	0	0.0%
16.0%	4,767	4,766	-1	0.0%
17.3%	4,559	4,559	0	0.0%
18.5%	3,849	3,849	0	0.0%
19.8%	3,807	3,803	-4	-0.1%
21.0%	3,803	3,798	-5	-0.1%
22.2%	3,659	3,660	1	0.0%
23.5%	3,445	3,499	54	1.6%
24.7%	3,434	3,433	0	0.0%
25.9%	3,416	3,382	-34	-1.0%
27.2%	3,382	3,283	-100	-2.9%
28.4%	3,246	3,246	0	0.0%
29.6%	3,143	3,013	-131	-4.2%
30.9%	3,013	3,000	-13	-0.4%
32.1%	3,000	3,000	0	0.0%
33.3%	3,000	2,991	-9	-0.3%
34.6%	3,000	2,965	-35	-1.2%
35.8%	2,991	2,784	-207	-6.9%
37.0%	2,907	2,758	-149	-5.1%
38.3%	2,801	2,677	-125	-4.4%
39.5%	2,759	2,652	-107	-3.9%
40.7%	2,689	2,618	-70	-2.6%
42.0%	2,676	2,531	-146	-5.4%
43.2%	2,652	2,496	-156	-5.9%
44.4%	2,530	2,075	-454	-18.0%
45.7%	2,470	2,016	-455	-18.4%
46.9%	2,224	1,897	-327	-14.7%
48.1%	2,185	1,844	-341	-15.6%
49.4%	1,932	1,823	-109	-5.6%
50.6%	1,735	1,766	30	1.8%
51.9%	1,685	1,610	-75	-4.5%
53.1%	1,604	1,607	3	0.2%
54.3%	1,591	1,591	0	0.0%
55.6%	1,557	1,557	0	0.0%
56.8%	1,473	1,219	-254	-17.3%
58.0%	1,468	1,168	-300	-20.4%
59.3%	1,299	1,108	-192	-14.8%
60.5%	1,219	1,095	-124	-10.1%
61.7%	1,168	1,059	-109	-9.3%
63.0%	1,108	1,025	-83	-7.5%
64.2%	1,095	1,006	-89	-8.2%
65.4%	1,058	953	-104	-9.9%
66.7%	1,026	949	-77	-7.5%
67.9%	892	894	2	0.2%
69.1%	821	892	71	8.6%
70.4%	803	839	36	4.5%
71.6%	787	821	33	4.3%
72.8%	769	816	47	6.1%
74.1%	738	812	73	9.9%
75.3%	718	807	89	12.4%
76.5%	711	804	93	13.1%
77.8%	706	803	97	13.7%
79.0%	653	798	144	22.1%
80.2%	634	787	154	24.3%
81.5%	631	777	147	23.2%
82.7%	625	772	147	23.6%
84.0%	622	769	147	23.6%
85.2%	619	769	150	24.2%
86.4%	616	765	149	24.1%
87.7%	614	757	142	23.1%
88.9%	612	757	145	23.7%
90.1%	605	754	149	24.5%
91.4%	605	712	108	17.8%
92.6%	604	676	72	11.9%
93.8%	598	654	56	9.4%
95.1%	593	635	42	7.2%
96.3%	569	634	65	11.5%
97.5%	188	622	434	231.0%
98.8%	188	605	417	222.0%
100.0%	188	468	280	148.7%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	5,966	5,966	0	0.0%
1.2%	4,025	4,025	0	0.0%
2.5%	3,888	3,888	0	0.0%
3.7%	3,000	3,000	0	0.0%
4.9%	2,428	3,000	572	23.6%
6.2%	2,281	2,501	221	9.7%
7.4%	2,250	2,332	82	3.6%
8.6%	2,050	2,250	200	9.8%
9.9%	1,919	2,245	326	17.0%
11.1%	1,905	2,041	136	7.1%
12.3%	1,864	1,894	30	1.6%
13.6%	1,856	1,864	9	0.5%
14.8%	1,805	1,824	20	1.1%
16.0%	1,788	1,786	-1	-0.1%
17.3%	1,772	1,693	-79	-4.5%
18.5%	1,695	1,673	-22	-1.3%
19.8%	1,676	1,637	-39	-2.3%
21.0%	1,673	1,635	-38	-2.2%
22.2%	1,662	1,571	-91	-5.5%
23.5%	1,603	1,569	-34	-2.1%
24.7%	1,571	1,568	-3	-0.2%
25.9%	1,570	1,552	-19	-1.2%
27.2%	1,568	1,551	-17	-1.1%
28.4%	1,551	1,548	-3	-0.2%
29.6%	1,522	1,536	14	0.9%
30.9%	1,521	1,522	1	0.0%
32.1%	1,520	1,522	2	0.1%
33.3%	1,517	1,520	3	0.2%
34.6%	1,511	1,517	6	0.4%
35.8%	1,506	1,509	3	0.2%
37.0%	1,501	1,506	5	0.3%
38.3%	1,459	1,501	43	2.9%
39.5%	1,372	1,468	96	7.0%
40.7%	1,333	1,446	113	8.5%
42.0%	1,271	1,372	101	7.9%
43.2%	1,267	1,357	90	7.1%
44.4%	1,211	1,355	143	11.8%
45.7%	1,167	1,333	166	14.2%
46.9%	1,128	1,211	83	7.4%
48.1%	1,123	1,128	5	0.4%
49.4%	1,051	1,123	72	6.8%
50.6%	1,051	1,119	68	6.4%
51.9%	1,050	1,074	23	2.2%
53.1%	1,038	1,064	26	2.5%
54.3%	1,005	1,057	53	5.2%
55.6%	991	1,056	65	6.6%
56.8%	969	1,049	80	8.2%
58.0%	948	1,049	100	10.6%
59.3%	936	1,044	107	11.5%
60.5%	936	1,042	106	11.3%
61.7%	929	1,035	106	11.4%
63.0%	907	1,033	126	13.9%
64.2%	894	1,026	132	14.8%
65.4%	868	1,019	152	17.5%
66.7%	865	1,013	148	17.2%
67.9%	857	1,010	153	17.8%
69.1%	852	1,004	152	17.8%
70.4%	844	1,001	157	18.5%
71.6%	832	966	134	16.1%
72.8%	830	957	126	15.2%
74.1%	829	957	127	15.4%
75.3%	784	944	159	20.3%
76.5%	782	938	156	19.9%
77.8%	782	896	114	14.6%
79.0%	775	878	103	13.3%
80.2%	745	872	127	17.0%
81.5%	741	861	120	16.2%
82.7%	697	855	158	22.7%
84.0%	688	818	130	19.0%
85.2%	629	816	187	29.7%
86.4%	627	784	158	25.1%
87.7%	621	782	160	25.8%
88.9%	619	728	109	17.7%
90.1%	613	680	68	11.0%
91.4%	610	646	36	5.9%
92.6%	609	627	18	2.9%
93.8%	608	621	13	2.1%
95.1%	607	608	1	0.1%
96.3%	605	606	1	0.1%
97.5%	188	605	417	221.7%
98.8%	188	496	308	163.7%
100.0%	188	188	0	0.0%

Table SW-47-b

American River at Mouth, Monthly Flow
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	3,512	3,308	-204	-5.8%
1.2%	3,000	3,285	285	9.5%
2.5%	3,000	3,181	181	6.0%
3.7%	2,313	3,125	812	35.1%
4.9%	2,250	2,532	282	12.5%
6.2%	2,241	2,404	163	7.3%
7.4%	2,146	2,326	180	8.4%
8.6%	2,095	1,908	-187	-8.9%
9.9%	2,077	1,776	-301	-14.5%
11.1%	2,033	1,735	-299	-14.7%
12.3%	1,959	1,710	-249	-12.7%
13.6%	1,957	1,575	-382	-19.5%
14.8%	1,936	1,542	-393	-20.3%
16.0%	1,788	1,530	-259	-14.5%
17.3%	1,715	1,521	-193	-11.3%
18.5%	1,654	1,514	-140	-8.5%
19.8%	1,616	1,511	-105	-6.5%
21.0%	1,607	1,511	-96	-6.0%
22.2%	1,603	1,508	-95	-5.9%
23.5%	1,573	1,507	-66	-4.2%
24.7%	1,564	1,504	-60	-3.9%
25.9%	1,534	1,504	-31	-2.0%
27.2%	1,514	1,504	-10	-0.7%
28.4%	1,511	1,502	-9	-0.6%
29.6%	1,507	1,502	-4	-0.3%
30.9%	1,504	1,502	-2	-0.1%
32.1%	1,504	1,501	-2	-0.2%
33.3%	1,504	1,500	-3	-0.2%
34.6%	1,502	1,500	-2	-0.2%
35.8%	1,502	1,499	-3	-0.2%
37.0%	1,502	1,494	-8	-0.5%
38.3%	1,501	1,479	-22	-1.5%
39.5%	1,500	1,477	-23	-1.6%
40.7%	1,499	1,477	-22	-1.5%
42.0%	1,479	1,379	-100	-6.8%
43.2%	1,477	1,352	-125	-8.4%
44.4%	1,477	1,324	-153	-10.4%
45.7%	1,446	1,322	-124	-8.6%
46.9%	1,351	1,320	-31	-2.3%
48.1%	1,351	1,319	-32	-2.4%
49.4%	1,317	1,316	-1	0.0%
50.6%	1,312	1,315	3	0.3%
51.9%	1,300	1,313	12	1.0%
53.1%	1,269	1,309	40	3.1%
54.3%	1,163	1,302	139	12.0%
55.6%	1,148	1,290	142	12.4%
56.8%	1,122	1,285	163	14.6%
58.0%	1,075	1,285	210	19.6%
59.3%	1,044	1,281	236	22.6%
60.5%	1,005	1,276	271	27.0%
61.7%	989	1,248	259	26.2%
63.0%	980	1,242	261	26.7%
64.2%	972	1,213	240	24.7%
65.4%	949	1,212	263	27.7%
66.7%	926	1,159	233	25.2%
67.9%	895	1,154	259	29.0%
69.1%	871	1,148	277	31.8%
70.4%	859	1,135	276	32.1%
71.6%	857	1,130	274	31.9%
72.8%	856	1,109	253	29.6%
74.1%	849	1,077	228	26.9%
75.3%	832	1,076	244	29.3%
76.5%	806	1,042	236	29.3%
77.8%	748	1,028	280	37.5%
79.0%	720	1,026	306	42.5%
80.2%	646	1,017	371	57.4%
81.5%	634	975	340	53.7%
82.7%	631	949	317	50.3%
84.0%	596	932	336	56.4%
85.2%	594	894	300	50.5%
86.4%	581	893	313	53.8%
87.7%	580	861	281	48.4%
88.9%	570	821	252	44.2%
90.1%	568	784	216	38.0%
91.4%	565	748	183	32.5%
92.6%	560	566	6	1.1%
93.8%	439	503	64	14.5%
95.1%	438	490	52	11.9%
96.3%	422	450	28	6.6%
97.5%	245	345	100	40.7%
98.8%	235	266	31	13.1%
100.0%	188	239	51	26.9%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,401	4,403	2	0.1%
1.2%	4,399	4,351	-49	-1.1%
2.5%	4,386	4,332	-54	-1.2%
3.7%	4,385	4,332	-52	-1.2%
4.9%	4,379	4,326	-53	-1.2%
6.2%	4,377	3,953	-424	-9.7%
7.4%	4,373	3,900	-474	-10.8%
8.6%	4,350	3,805	-545	-12.5%
9.9%	4,332	3,495	-837	-19.3%
11.1%	4,332	3,485	-847	-19.5%
12.3%	4,329	3,216	-1,113	-25.7%
13.6%	4,210	3,174	-1,037	-24.6%
14.8%	4,179	3,070	-1,109	-26.5%
16.0%	4,144	2,737	-1,407	-33.9%
17.3%	4,138	2,657	-1,481	-35.8%
18.5%	3,990	2,584	-1,406	-35.2%
19.8%	3,934	2,551	-1,383	-35.1%
21.0%	3,926	2,442	-1,484	-37.8%
22.2%	3,822	2,419	-1,403	-36.7%
23.5%	3,718	2,330	-1,388	-37.3%
24.7%	3,655	2,275	-1,380	-37.7%
25.9%	3,576	2,200	-1,377	-38.5%
27.2%	3,472	2,159	-1,313	-37.8%
28.4%	3,435	2,089	-1,346	-39.2%
29.6%	3,288	2,075	-1,213	-36.9%
30.9%	3,184	2,017	-1,167	-36.7%
32.1%	3,174	2,013	-1,161	-36.6%
33.3%	3,154	1,820	-1,334	-42.3%
34.6%	3,095	1,750	-1,345	-43.5%
35.8%	2,960	1,750	-1,210	-40.9%
37.0%	2,782	1,750	-1,032	-37.1%
38.3%	2,774	1,750	-1,024	-36.9%
39.5%	2,754	1,750	-1,004	-36.5%
40.7%	2,754	1,750	-1,004	-36.4%
42.0%	2,702	1,750	-952	-35.2%
43.2%	2,639	1,750	-889	-33.7%
44.4%	2,311	1,750	-561	-24.3%
45.7%	2,260	1,750	-510	-22.6%
46.9%	2,219	1,750	-469	-21.1%
48.1%	2,207	1,750	-457	-20.7%
49.4%	2,183	1,750	-433	-19.8%
50.6%	2,143	1,750	-393	-18.3%
51.9%	2,096	1,750	-346	-16.5%
53.1%	2,093	1,750	-343	-16.4%
54.3%	2,086	1,750	-336	-16.1%
55.6%	2,062	1,750	-312	-15.1%
56.8%	2,013	1,750	-263	-13.1%
58.0%	1,979	1,750	-229	-11.6%
59.3%	1,902	1,750	-152	-8.0%
60.5%	1,893	1,750	-143	-7.5%
61.7%	1,887	1,750	-137	-7.3%
63.0%	1,791	1,750	-41	-2.3%
64.2%	1,750	1,750	0	0.0%
65.4%	1,750	1,750	0	0.0%
66.7%	1,750	1,750	0	0.0%
67.9%	1,750	1,750	0	0.0%
69.1%	1,750	1,750	0	0.0%
70.4%	1,750	1,727	-23	-1.3%
71.6%	1,654	1,713	59	3.6%
72.8%	1,592	1,681	88	5.6%
74.1%	1,558	1,622	64	4.1%
75.3%	1,553	1,570	16	1.1%
76.5%	1,541	1,516	-25	-1.6%
77.8%	1,504	1,425	-78	-5.2%
79.0%	1,503	1,422	-80	-5.3%
80.2%	1,503	1,359	-144	-9.6%
81.5%	1,502	1,357	-144	-9.6%
82.7%	1,501	1,319	-182	-12.1%
84.0%	1,397	1,285	-112	-8.0%
85.2%	1,393	1,189	-205	-14.7%
86.4%	1,289	1,114	-176	-13.6%
87.7%	907	870	-37	-4.1%
88.9%	849	856	7	0.8%
90.1%	814	840	26	3.2%
91.4%	578	765	187	32.4%
92.6%	560	709	149	26.6%
93.8%	559	622	63	11.2%
95.1%	446	617	171	38.4%
96.3%	422	485	64	15.1%
97.5%	263	435	173	65.8%
98.8%	256	430	174	67.9%
100.0%	240	203	-37	-15.4%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	2,793	2,044	-749	-26.8%
1.2%	2,521	1,750	-771	-30.6%
2.5%	2,118	1,750	-368	-17.4%
3.7%	2,049	1,750	-299	-14.6%
4.9%	1,781	1,750	-31	-1.8%
6.2%	1,750	1,750	0	0.0%
7.4%	1,750	1,738	-12	-0.7%
8.6%	1,708	1,730	21	1.2%
9.9%	1,575	1,718	143	9.1%
11.1%	1,508	1,702	194	12.9%
12.3%	1,507	1,683	177	11.7%
13.6%	1,506	1,585	79	5.2%
14.8%	1,505	1,503	-2	-0.1%
16.0%	1,499	1,502	3	0.2%
17.3%	1,497	1,499	1	0.1%
18.5%	1,497	1,498	1	0.1%
19.8%	1,493	1,493	0	0.0%
21.0%	1,489	1,489	0	0.0%
22.2%	1,488	1,484	-4	-0.3%
23.5%	1,487	1,483	-4	-0.3%
24.7%	1,487	1,481	-6	-0.4%
25.9%	1,481	1,477	-4	-0.3%
27.2%	1,480	1,458	-22	-1.5%
28.4%	1,477	1,446	-31	-2.1%
29.6%	1,477	1,425	-52	-3.5%
30.9%	1,472	1,386	-86	-5.8%
32.1%	1,448	1,359	-89	-6.1%
33.3%	1,357	1,322	-35	-2.6%
34.6%	1,336	1,306	-30	-2.2%
35.8%	1,233	1,301	68	5.5%
37.0%	1,186	1,291	105	8.8%
38.3%	1,141	1,290	149	13.1%
39.5%	1,139	1,288	149	13.1%
40.7%	1,129	1,286	157	13.9%
42.0%	1,127	1,268	140	12.5%
43.2%	1,080	1,264	184	17.0%
44.4%	1,068	1,256	189	17.7%
45.7%	1,039	1,239	199	19.2%
46.9%	1,027	1,237	210	20.5%
48.1%	927	1,224	297	32.0%
49.4%	921	1,183	262	28.4%
50.6%	904	1,169	265	29.3%
51.9%	877	1,165	289	32.9%
53.1%	853	1,153	301	35.3%
54.3%	845	1,148	303	35.8%
55.6%	833	1,147	314	37.6%
56.8%	825	1,130	305	36.9%
58.0%	795	1,128	333	41.8%
59.3%	783	1,103	320	40.9%
60.5%	775	1,058	283	36.5%
61.7%	762	1,051	289	37.9%
63.0%	762	1,011	250	32.8%
64.2%	741	978	237	32.0%
65.4%	709	975	266	37.5%
66.7%	696	921	226	32.5%
67.9%	688	911	223	32.4%
69.1%	686	911	224	32.7%
70.4%	675	908	233	34.6%
71.6%	651	888	236	36.3%
72.8%	619	834	215	34.8%
74.1%	614	797	182	29.7%
75.3%	596	781	185	31.1%
76.5%	579	776	198	34.1%
77.8%	570	776	206	36.2%
79.0%	564	765	201	35.6%
80.2%	560	741	181	32.3%
81.5%	560	667	107	19.2%
82.7%	556	624	69	12.4%
84.0%	555	608	53	9.6%
85.2%	552	600	48	8.7%
86.4%	538	595	57	10.6%
87.7%	533	587	53	10.0%
88.9%	530	573	43	8.1%
90.1%	493	568	75	15.2%
91.4%	491	564	74	15.0%
92.6%	425	525	100	23.6%
93.8%	263	515	252	95.9%
95.1%	250	474	224	89.6%
96.3%	248	459	211	84.9%
97.5%	188	370	182	96.8%
98.8%	188	362	174	92.5%
100.0%	188	349	161	85.8%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Flow (CFS)	WSIP 2070 With Project Monthly Flow (CFS)	Absolute Difference (CFS)	Relative Difference (%)
0.0%	4,542	4,120	-422	-9.3%
1.2%	4,397	4,034	-362	-8.2%
2.5%	3,636	3,547	-89	-2.5%
3.7%	3,446	3,222	-223	-6.5%
4.9%	3,162	3,039	-123	-3.9%
6.2%	2,802	2,866	64	2.3%
7.4%	2,694	2,752	58	2.2%
8.6%	2,678	2,676	-2	-0.1%
9.9%	2,591	2,303	-287	-11.1%
11.1%	2,544	2,149	-395	-15.5%
12.3%	2,468	2,005	-462	-18.7%
13.6%	2,341	1,968	-373	-15.9%
14.8%	2,253	1,859	-394	-17.5%
16.0%	2,223	1,852	-370	-16.7%
17.3%	2,094	1,836	-257	-12.3%
18.5%	1,956	1,829	-127	-6.5%
19.8%	1,885	1,754	-132	-7.0%
21.0%	1,785	1,750	-35	-2.0%
22.2%	1,750	1,750	0	0.0%
23.5%	1,750	1,750	0	0.0%
24.7%	1,750	1,543	-207	-11.8%
25.9%	1,750	1,543	-207	-11.8%
27.2%	1,750	1,526	-224	-12.8%
28.4%	1,750	1,445	-305	-17.4%
29.6%	1,750	1,439	-311	-17.8%
30.9%	1,750	1,402	-348	-19.9%
32.1%	1,508	1,390	-119	-7.9%
33.3%	1,458	1,352	-106	-7.3%
34.6%	1,352	1,344	-8	-0.6%
35.8%	1,345	1,337	-7	-0.5%
37.0%	1,343	1,330	-13	-1.0%
38.3%	1,338	1,330	-8	-0.6%
39.5%	1,330	1,329	-1	-0.1%
40.7%	1,328	1,323	-4	-0.3%
42.0%	1,325	1,318	-7	-0.5%
43.2%	1,318	1,317	-1	-0.1%
44.4%	1,311	1,250	-61	-4.7%
45.7%	1,308	1,181	-127	-9.7%
46.9%	1,166	1,174	8	0.7%
48.1%	1,154	1,169	15	1.3%
49.4%	1,115	1,161	46	4.2%
50.6%	1,071	1,157	87	8.1%
51.9%	1,005	1,150	145	14.4%
53.1%	950	1,144	194	20.4%
54.3%	948	1,132	184	19.4%
55.6%	944	1,118	173	18.4%
56.8%	936	1,107	171	18.3%
58.0%	892	1,086	194	21.8%
59.3%	867	1,081	213	24.6%
60.5%	840	1,076	236	28.1%
61.7%	837	1,072	236	28.2%
63.0%	768	1,067	298	38.8%
64.2%	766	1,055	290	37.8%
65.4%	763	1,048	284	37.3%
66.7%	756	998	242	32.0%
67.9%	749	995	246	32.9%
69.1%	726	993	267	36.8%
70.4%	670	988	318	47.5%
71.6%	637	983	346	54.3%
72.8%	631	898	267	42.3%
74.1%	620	896	276	44.5%
75.3%	616	828	212	34.4%
76.5%	611	772	162	26.5%
77.8%	609	751	142	23.3%
79.0%	609	710	101	16.6%
80.2%	609	688	79	13.0%
81.5%	608	677	69	11.4%
82.7%	607	655	47	7.8%
84.0%	601	637	36	5.9%
85.2%	600	620	20	3.4%
86.4%	464	616	152	32.7%
87.7%	462	610	147	31.9%
88.9%	375	609	234	62.3%
90.1%	302	608	306	101.4%
91.4%	284	533	250	88.0%
92.6%	281	510	229	81.6%
93.8%	281	498	217	77.2%
95.1%	281	496	215	76.4%
96.3%	281	476	195	69.2%
97.5%	281	412	131	46.7%
98.8%	281	308	27	9.6%
100.0%	252	278	26	10.1%

Figure SW-53-b
Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

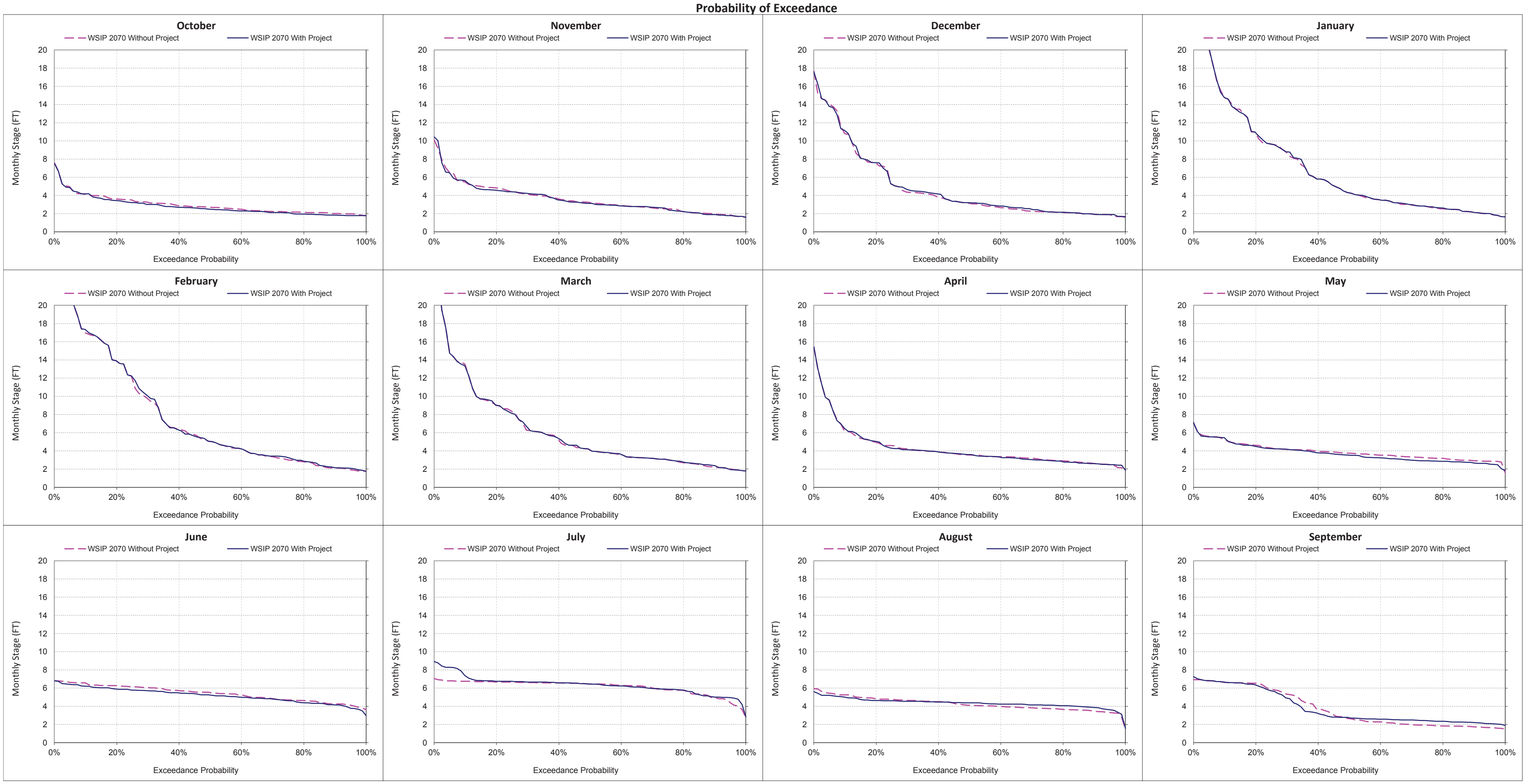


Table SW-53-b

Sacramento River at Bend Bridge, Monthly Stage

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	8	8	0	-1.1%
1.2%	7	7	0	0.0%
2.5%	5	5	0	-0.9%
3.7%	5	5	0	-2.6%
4.9%	5	5	0	-1.7%
6.2%	4	4	0	1.8%
7.4%	4	4	0	4.0%
8.6%	4	4	0	-0.3%
9.9%	4	4	0	1.5%
11.1%	4	4	0	4.1%
12.3%	4	4	0	-3.6%
13.6%	4	4	0	-5.8%
14.8%	4	4	0	-6.6%
16.0%	4	4	0	-9.5%
17.3%	4	4	0	-5.2%
18.5%	4	3	0	-3.9%
19.8%	4	3	0	-4.3%
21.0%	4	3	0	-4.6%
22.2%	4	3	0	-6.8%
23.5%	4	3	0	-7.1%
24.7%	4	3	0	-8.4%
25.9%	3	3	0	-3.9%
27.2%	3	3	0	-4.7%
28.4%	3	3	0	-4.5%
29.6%	3	3	0	-8.0%
30.9%	3	3	0	-4.7%
32.1%	3	3	0	-4.9%
33.3%	3	3	0	-4.5%
34.6%	3	3	0	-8.3%
35.8%	3	3	0	-10.4%
37.0%	3	3	0	-10.3%
38.3%	3	3	0	-7.7%
39.5%	3	3	0	-6.8%
40.7%	3	3	0	-5.6%
42.0%	3	3	0	-5.9%
43.2%	3	3	0	-5.0%
44.4%	3	3	0	-5.0%
45.7%	3	3	0	-5.6%
46.9%	3	3	0	-7.8%
48.1%	3	3	0	-7.3%
49.4%	3	3	0	-8.7%
50.6%	3	2	0	-7.5%
51.9%	3	2	0	-8.5%
53.1%	3	2	0	-9.0%
54.3%	3	2	0	-7.1%
55.6%	3	2	0	-7.0%
56.8%	3	2	0	-8.4%
58.0%	2	2	0	-7.3%
59.3%	2	2	0	-7.7%
60.5%	2	2	0	-6.2%
61.7%	2	2	0	-3.8%
63.0%	2	2	0	-3.5%
64.2%	2	2	0	-3.3%
65.4%	2	2	0	-3.3%
66.7%	2	2	0	-3.3%
67.9%	2	2	0	-3.1%
69.1%	2	2	0	-4.7%
70.4%	2	2	0	-4.7%
71.6%	2	2	0	-4.8%
72.8%	2	2	0	-4.9%
74.1%	2	2	0	-4.7%
75.3%	2	2	0	-4.8%
76.5%	2	2	0	-9.2%
77.8%	2	2	0	-9.6%
79.0%	2	2	0	-9.8%
80.2%	2	2	0	-9.4%
81.5%	2	2	0	-8.6%
82.7%	2	2	0	-8.6%
84.0%	2	2	0	-10.0%
85.2%	2	2	0	-10.5%
86.4%	2	2	0	-11.3%
87.7%	2	2	0	-11.2%
88.9%	2	2	0	-8.2%
90.1%	2	2	0	-8.8%
91.4%	2	2	0	-9.5%
92.6%	2	2	0	-8.2%
93.8%	2	2	0	-8.9%
95.1%	2	2	0	-9.1%
96.3%	2	2	0	-9.5%
97.5%	2	2	0	-5.9%
98.8%	2	2	0	-2.6%
100.0%	2	2	0	0.3%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	10	10	0	3.3%
1.2%	9	10	1	9.3%
2.5%	8	8	0	-4.2%
3.7%	7	7	0	-6.6%
4.9%	7	6	0	-0.8%
6.2%	6	6	-1	-8.5%
7.4%	6	6	0	0.9%
8.6%	6	6	0	1.6%
9.9%	5	6	0	2.6%
11.1%	5	5	0	1.6%
12.3%	5	5	0	-1.0%
13.6%	5	5	0	-5.7%
14.8%	5	5	0	-6.3%
16.0%	5	5	0	-5.8%
17.3%	5	5	0	-5.0%
18.5%	5	5	0	-5.7%
19.8%	5	5	0	-5.0%
21.0%	5	5	0	-5.6%
22.2%	5	5	0	-4.1%
23.5%	5	4	0	-3.0%
24.7%	4	4	0	-0.1%
25.9%	4	4	0	-0.9%
27.2%	4	4	0	1.5%
28.4%	4	4	0	1.1%
29.6%	4	4	0	1.6%
30.9%	4	4	0	2.4%
32.1%	4	4	0	2.9%
33.3%	4	4	0	2.8%
34.6%	4	4	0	4.3%
35.8%	4	4	0	2.9%
37.0%	4	4	0	-1.7%
38.3%	4	4	0	-1.2%
39.5%	4	4	0	-4.0%
40.7%	4	3	0	-2.0%
42.0%	4	3	0	-3.6%
43.2%	3	3	0	-3.5%
44.4%	3	3	0	-3.9%
45.7%	3	3	0	-1.4%
46.9%	3	3	0	-2.4%
48.1%	3	3	0	-3.2%
49.4%	3	3	0	-3.8%
50.6%	3	3	0	-1.8%
51.9%	3	3	0	-3.9%
53.1%	3	3	0	-4.2%
54.3%	3	3	0	-2.5%
55.6%	3	3	0	-1.7%
56.8%	3	3	0	-1.6%
58.0%	3	3	0	-1.5%
59.3%	3	3	0	-1.7%
60.5%	3	3	0	-1.8%
61.7%	3	3	0	-1.1%
63.0%	3	3	0	-0.5%
64.2%	3	3	0	0.3%
65.4%	3	3	0	0.7%
66.7%	3	3	0	2.0%
67.9%	3	3	0	2.2%
69.1%	3	3	0	1.9%
70.4%	3	3	0	2.8%
71.6%	3	3	0	4.1%
72.8%	3	3	0	3.8%
74.1%	3	3	0	3.4%
75.3%	3	2	0	-6.0%
76.5%	3	2	0	-6.0%
77.8%	2	2	0	-7.2%
79.0%	2	2	0	0.1%
80.2%	2	2	0	-0.1%
81.5%	2	2	0	-1.9%
82.7%	2	2	0	1.7%
84.0%	2	2	0	0.5%
85.2%	2	2	0	-0.5%
86.4%	2	2	0	-6.5%
87.7%	2	2	0	-6.2%
88.9%	2	2	0	-5.6%
90.1%	2	2	0	-2.7%
91.4%	2	2	0	-3.9%
92.6%	2	2	0	-2.9%
93.8%	2	2	0	-4.2%
95.1%	2	2	0	-4.0%
96.3%	2	2	0	2.5%
97.5%	2	2	0	0.6%
98.8%	2	2	0	3.1%
100.0%	2	2	0	0.6%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	18	18	0	-0.6%
1.2%	15	16	1	6.6%
2.5%	15	15	0	0.0%
3.7%	14	14	0	0.0%
4.9%	14	14	0	-1.7%
6.2%	14	14	0	-1.0%
7.4%	13	13	0	-3.0%
8.6%	12	11	0	-2.6%
9.9%	11	11	0	3.2%
11.1%	11	11	0	0.9%
12.3%	10	10	0	0.0%
13.6%	9	9	1	9.2%
14.8%	8	8	0	-1.6%
16.0%	8	8	0	-1.1%
17.3%	8	8	0	2.6%
18.5%	8	8	0	0.0%
19.8%	8	8	0	0.1%
21.0%	7	8	0	4.7%
22.2%	7	7	0	-3.0%
23.5%	7	7	0	-4.7%
24.7%	5	5	0	0.0%
25.9%	5	5	0	0.0%
27.2%	5	5	0	0.0%
28.4%	5	5	0	8.0%
29.6%	4	5	0	7.3%
30.9%	4	5	0	5.2%
32.1%	4	5	0	4.1%
33.3%	4	4	0	3.7%
34.6%	4	4	0	4.8%
35.8%	4	4	0	4.7%
37.0%	4	4	0	4.0%
38.3%	4	4	0	4.8%
39.5%	4	4	0	8.1%
40.7%	4	4	0	9.7%
42.0%	4	4	0	0.1%
43.2%	4	4	0	0.0%
44.4%	3	3	0	0.0%
45.7%	3	3	0	0.0%
46.9%	3	3	0	1.0%
48.1%	3	3	0	0.0%
49.4%	3	3	0	0.7%
50.6%	3	3	0	3.4%
51.9%	3	3	0	3.4%
53.1%	3	3	0	2.8%
54.3%	3	3	0	7.2%
55.6%	3	3	0	7.4%
56.8%	3	3	0	3.7%
58.0%	3	3	0	4.3%
59.3%	3	3	0	5.9%
60.5%	3	3	0	6.8%
61.7%	3	3	0	4.9%
63.0%	3	3	0	6.7%
64.2%	3	3	0	5.8%
65.4%	2	3	0	6.9%
66.7%	2	3	0	8.9%
67.9%	2	3	0	10.5%
69.1%	2	3	0	10.9%
70.4%	2	2	0	7.8%
71.6%	2	2	0	9.1%
72.8%	2	2	0	4.0%
74.1%	2	2	0	1.7%
75.3%	2	2	0	0.1%
76.5%	2	2	0	0.5%
77.8%	2	2	0	0.0%
79.0%	2	2	0	0.3%
80.2%	2	2	0	1.4%
81.5%	2	2	0	0.2%
82.7%	2	2	0	-0.1%
84.0%	2	2	0	2.5%
85.2%	2	2	0	0.5%
86.4%	2	2	0	-0.1%
87.7%	2	2	0	-0.2%
88.9%	2	2	0	-0.1%
90.1%	2	2	0	0.0%
91.4%	2	2	0	-0.1%
92.6%	2	2	0	-0.4%
93.8%	2	2	0	0.4%
95.1%	2	2	0	0.6%
96.3%	2	2	0	12.3%
97.5%	2	2	0	0.4%
98.8%	2	2	0	1.0%
100.0%	2	2	0	5.0%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	24	24	0	0.0%
1.2%	22	22	0	0.0%
2.5%	22	22	0	0.0%
3.7%	21	21	0	0.0%
4.9%	20	20	0	1.1%
6.2%	18	18	0	0.0%
7.4%	17	17	0	0.9%
8.6%	16	15	0	-1.5%
9.9%	15	15	0	0.0%
11.1%	15	15	0	0.0%
12.3%	14	14	0	-1.3%
13.6%	13	13	0	0.0%
14.8%	13	13	0	-2.3%
16.0%	13	13	0	-0.3%
17.3%	13	13	0	0.0%
18.5%	11	11	0	0.6%
19.8%	11	11	0	0.0%
21.0%	10	11	0	3.1%
22.2%	10	10	0	3.4%
23.5%	10	10	0	0.0%
24.7%	10	10	0	0.0%
25.9%	10	10	0	0.0%
27.2%	10	9	0	-1.8%
28.4%	9	9	0	0.0%
29.6%	9	9	0	0.0%
30.9%	8	9	0	5.6%
32.1%	8	8	0	0.6%
33.3%	8	8	0	1.7%
34.6%	7	8	1	8.0%
35.8%	7	7	0	0.0%
37.0%	6	6	0	0.0%
38.3%	6	6	0	0.0%
39.5%	6	6	0	-0.5%
40.7%	6	6	0	-0.1%
42.0%	6	6	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	4	4	0	0.0%
50.6%	4	4	0	0.0%
51.9%	4	4	0	-0.1%
53.1%	4	4	0	0.3%
54.3%	4	4	0	3.7%
55.6%	4	4	0	4.0%
56.8%	4	4	0	1.1%
58.0%	4	4	0	0.0%
59.3%	4	4	0	-0.1%
60.5%	3	3	0	-0.2%
61.7%	3	3	0	0.0%
63.0%	3	3	0	0.0%
64.2%	3	3	0	0.0%
65.4%	3	3	0	0.1%
66.7%	3	3	0	4.4%
67.9%	3	3	0	2.5%
69.1%	3	3	0	0.8%
70.4%	3	3	0	2.3%
71.6%	3	3	0	0.0%
72.8%	3	3	0	0.0%
74.1%	3	3	0	0.0%
75.3%	3	3	0	-0.1%
76.5%	3	3	0	3.6%
77.8%	3	3	0	1.0%
79.0%	3	3	0	4.3%
80.2%	3	3	0	3.2%
81.5%	2	2	0	0.0%
82.7%	2	2	0	0.7%
84.0%	2	2	0	0.0%
85.2%	2	2	0	0.0%
86.4%	2	2	0	0.1%
87.7%	2	2	0	-0.3%
88.9%	2	2	0	0.0%
90.1%	2	2	0	-0.4%
91.4%	2	2	0	0.0%
92.6%	2	2	0	0.9%
93.8%	2	2	0	-0.2%
95.1%	2	2	0	1.6%
96.3%	2	2	0	0.9%
97.5%	2	2	0	-0.1%
98.8%	2	2	0	0.0%
100.0%	2	2	0	-0.1%

Table SW-53-b

Sacramento River at Bend Bridge, Monthly Stage

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	26	26	0	0.0%
1.2%	26	26	0	0.0%
2.5%	21	21	0	0.0%
3.7%	21	21	0	1.0%
4.9%	21	21	0	0.0%
6.2%	20	20	0	0.0%
7.4%	19	19	0	0.0%
8.6%	17	17	0	0.0%
9.9%	17	17	0	2.1%
11.1%	17	17	0	1.0%
12.3%	17	17	0	0.7%
13.6%	17	17	0	-0.2%
14.8%	16	16	0	0.0%
16.0%	16	16	0	0.0%
17.3%	16	16	0	0.0%
18.5%	14	14	0	0.0%
19.8%	14	14	0	0.0%
21.0%	14	14	0	0.0%
22.2%	14	14	0	0.0%
23.5%	12	12	0	0.2%
24.7%	12	12	0	0.0%
25.9%	11	12	1	7.8%
27.2%	10	11	1	5.3%
28.4%	10	10	0	3.5%
29.6%	10	10	0	3.0%
30.9%	9	10	0	3.1%
32.1%	9	10	0	4.5%
33.3%	9	9	0	-0.5%
34.6%	7	7	0	0.0%
35.8%	7	7	0	0.0%
37.0%	7	7	0	-1.2%
38.3%	7	7	0	0.0%
39.5%	6	6	0	-1.3%
40.7%	6	6	0	-2.1%
42.0%	6	6	0	-5.5%
43.2%	6	6	0	0.0%
44.4%	6	6	0	-2.8%
45.7%	6	6	0	-2.4%
46.9%	5	5	0	1.6%
48.1%	5	5	0	1.1%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	4	5	0	1.2%
56.8%	4	4	0	3.0%
58.0%	4	4	0	0.6%
59.3%	4	4	0	0.0%
60.5%	4	4	0	0.0%
61.7%	4	4	0	0.0%
63.0%	4	4	0	-0.1%
64.2%	4	4	0	0.0%
65.4%	4	4	0	0.0%
66.7%	4	4	0	0.0%
67.9%	3	3	0	2.3%
69.1%	3	3	0	1.2%
70.4%	3	3	0	2.3%
71.6%	3	3	0	6.2%
72.8%	3	3	0	5.9%
74.1%	3	3	0	8.4%
75.3%	3	3	0	7.9%
76.5%	3	3	0	4.1%
77.8%	3	3	0	4.7%
79.0%	3	3	0	4.3%
80.2%	3	3	0	2.0%
81.5%	3	3	0	1.7%
82.7%	3	3	0	3.0%
84.0%	2	3	0	11.4%
85.2%	2	2	0	2.4%
86.4%	2	2	0	4.0%
87.7%	2	2	0	5.2%
88.9%	2	2	0	4.5%
90.1%	2	2	0	1.3%
91.4%	2	2	0	1.2%
92.6%	2	2	0	1.0%
93.8%	2	2	0	4.4%
95.1%	2	2	0	9.0%
96.3%	2	2	0	8.1%
97.5%	2	2	0	7.0%
98.8%	2	2	0	5.4%
100.0%	2	2	0	0.2%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	25	25	0	0.0%
1.2%	23	23	0	0.0%
2.5%	19	19	0	0.0%
3.7%	18	18	0	0.0%
4.9%	15	15	0	-0.7%
6.2%	14	14	0	0.0%
7.4%	14	14	0	0.0%
8.6%	14	14	0	-1.6%
9.9%	14	13	0	-1.4%
11.1%	12	12	0	0.0%
12.3%	11	11	0	0.0%
13.6%	10	10	0	0.0%
14.8%	10	10	0	0.4%
16.0%	10	10	0	0.8%
17.3%	10	10	0	1.3%
18.5%	9	10	0	1.8%
19.8%	9	9	0	-0.5%
21.0%	9	9	0	0.5%
22.2%	9	9	0	-0.1%
23.5%	9	8	0	-2.7%
24.7%	8	8	0	-2.9%
25.9%	8	8	0	-1.7%
27.2%	7	7	0	0.0%
28.4%	7	7	0	1.4%
29.6%	6	7	0	7.0%
30.9%	6	6	0	0.0%
32.1%	6	6	0	0.0%
33.3%	6	6	0	0.0%
34.6%	6	6	0	0.0%
35.8%	6	6	0	0.0%
37.0%	6	6	0	-1.4%
38.3%	6	6	0	-1.7%
39.5%	5	5	0	0.9%
40.7%	5	5	0	7.6%
42.0%	5	5	0	4.3%
43.2%	5	5	0	0.1%
44.4%	5	5	0	0.9%
45.7%	4	5	0	6.0%
46.9%	4	4	0	-0.1%
48.1%	4	4	0	0.0%
49.4%	4	4	0	0.0%
50.6%	4	4	0	0.0%
51.9%	4	4	0	0.0%
53.1%	4	4	0	0.0%
54.3%	4	4	0	-0.1%
55.6%	4	4	0	1.2%
56.8%	4	4	0	1.3%
58.0%	4	4	0	0.6%
59.3%	4	4	0	2.8%
60.5%	4	4	0	-0.1%
61.7%	3	3	0	0.1%
63.0%	3	3	0	1.9%
64.2%	3	3	0	0.8%
65.4%	3	3	0	0.0%
66.7%	3	3	0	0.0%
67.9%	3	3	0	0.0%
69.1%	3	3	0	0.1%
70.4%	3	3	0	0.0%
71.6%	3	3	0	0.0%
72.8%	3	3	0	0.0%
74.1%	3	3	0	0.0%
75.3%	3	3	0	0.0%
76.5%	3	3	0	0.1%
77.8%	3	3	0	1.3%
79.0%	3	3	0	4.0%
80.2%	3	3	0	2.0%
81.5%	3	3	0	1.8%
82.7%	3	3	0	1.5%
84.0%	3	3	0	1.0%
85.2%	2	3	0	3.5%
86.4%	2	2	0	4.0%
87.7%	2	2	0	8.9%
88.9%	2	2	0	7.8%
90.1%	2	2	0	8.2%
91.4%	2	2	0	0.0%
92.6%	2	2	0	-0.9%
93.8%	2	2	0	-3.3%
95.1%	2	2	0	-3.0%
96.3%	2	2	0	-1.9%
97.5%	2	2	0	-1.1%
98.8%	2	2	0	0.5%
100.0%	2	2	0	0.1%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	15	15	0	0.0%
1.2%	13	13	0	0.0%
2.5%	11	11	0	0.0%
3.7%	10	10	0	0.0%
4.9%	10	10	0	0.0%
6.2%	8	8	0	0.0%
7.4%	7	7	0	-1.2%
8.6%	7	7	0	0.0%
9.9%	6	6	0	4.8%
11.1%	6	6	0	0.1%
12.3%	6	6	0	3.4%
13.6%	6	6	0	6.2%
14.8%	5	6	0	3.6%
16.0%	5	5	0	-0.1%
17.3%	5	5	0	1.0%
18.5%	5	5	0	0.7%
19.8%	5	5	0	2.0%
21.0%	5	5	0	2.6%
22.2%	5	5	0	0.0%
23.5%	5	4	0	-3.9%
24.7%	5	4	0	-5.9%
25.9%	5	4	0	-6.4%
27.2%	4	4	0	-1.4%
28.4%	4	4	0	-2.6%
29.6%	4	4	0	-1.8%
30.9%	4	4	0	-1.7%
32.1%	4	4	0	-0.9%
33.3%	4	4	0	0.9%
34.6%	4	4	0	1.3%
35.8%	4	4	0	0.6%
37.0%	4	4	0	0.5%
38.3%	4	4	0	0.8%
39.5%	4	4	0	0.7%
40.7%	4	4	0	0.1%
42.0%	4	4	0	-1.2%
43.2%	4	4	0	0.3%
44.4%	4	4	0	0.0%
45.7%	4	4	0	1.1%
46.9%	4	4	0	2.1%
48.1%	4	4	0	1.3%
49.4%	4	4	0	1.1%
50.6%	4	4	0	1.6%
51.9%	4	3	0	-0.9%
53.1%	4	3	0	-2.9%
54.3%	3	3	0	-0.2%
55.6%	3	3	0	0.5%
56.8%	3	3	0	0.6%
58.0%	3	3	0	0.2%
59.3%	3	3	0	-1.1%
60.5%	3	3	0	-3.0%
61.7%	3	3	0	-2.7%
63.0%	3	3	0	-3.0%
64.2%	3	3	0	-3.3%
65.4%	3	3	0	-3.8%
66.7%	3	3	0	-4.0%
67.9%	3	3	0	-3.6%
69.1%	3	3	0	-4.9%
70.4%	3	3	0	-4.8%
71.6%	3	3	0	-4.4%
72.8%	3	3	0	-1.7%
74.1%	3	3	0	-2.3%
75.3%	3	3	0	-1.7%
76.5%	3	3	0	-1.7%
77.8%	3	3	0	-1.7%
79.0%	3	3	0	-1.4%
80.2%	3	3	0	-4.4%
81.5%	3	3	0	-4.0%
82.7%	3	3	0	-2.5%
84.0%	3	3	0	-2.2%
85.2%	3	3	0	-3.2%
86.4%	3	3	0	-3.4%
87.7%	3	3	0	-2.6%
88.9%	3	3	0	-1.6%
90.1%	3	3	0	0.0%
91.4%	3	3	0	0.0%
92.6%	3	3	0	-0.7%
93.8%	3	3	0	-0.5%
95.1%	2	2	0	0.4%
96.3%	2	2	0	2.7%
97.5%	2	2	0	12.2%
98.8%	2	2	0	13.4%
100.0%	2	2	0	0.3%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	0.6%
1.2%	6	6	0	0.0%
2.5%	6	6	0	-2.5%
3.7%	6	6	0	-0.7%
4.9%	6	6	0	-0.9%
6.2%	6	6	0	0.0%
7.4%	6	5	0	-0.8%
8.6%	5	5	0	0.8%
9.9%	5	5	0	4.5%
11.1%	5	5	0	-1.0%
12.3%	5	5	0	-0.1%
13.6%	5	5	0	-1.3%
14.8%	5	5	0	-0.9%
16.0%	5	5	0	-2.9%
17.3%	5	5	0	-1.3%
18.5%	5	5	0	-2.0%
19.8%	5	5	0	-2.1%
21.0%	5	4	0	-4.0%
22.2%	4	4	0	-2.0%
23.5%	4	4	0	-2.5%
24.7%	4	4	0	-1.9%
25.9%	4	4	0	-0.2%
27.2%	4	4	0	0.0%
28.4%	4	4	0	-0.3%
29.6%	4	4	0	0.4%
30.9%	4	4	0	0.1%
32.1%	4	4	0	-0.1%
33.3%	4	4	0	-1.1%
34.6%	4	4	0	-1.4%
35.8%	4	4	0	-2.6%
37.0%	4	4	0	-3.2%
38.3%	4	4	0	-3.7%
39.5%	4	4	0	-4.8%
40.7%	4	4	0	-4.0%
42.0%	4	4	0	-4.2%
43.2%	4	4	0	-4.8%
44.4%	4	4	0	-5.2%
45.7%	4	4	0	-6.2%
46.9%	4	4	0	-5.2%
48.1%	4	4	0	-5.3%
49.4%	4	4	0	-5.5%
50.6%	4	4	0	-6.1%
51.9%	4	4	0	-5.3%
53.1%	4	3	0	-5.3%
54.3%	4	3	0	-8.9%
55.6%	4	3	0	-10.0%
56.8%	4	3	0	-8.6%
58.0%	4	3	0	-8.9%
59.3%	4	3	0	-7.8%
60.5%	4	3	0	-8.9%
61.7%	4	3	0	-9.0%
63.0%	4	3	0	-10.3%
64.2%	3	3	0	-9.7%
65.4%	3	3	0	-8.6%
66.7%	3	3	0	-9.5%
67.9%	3	3	0	-9.9%
69.1%	3	3	0	-10.3%
70.4%	3	3	0	-11.5%
71.6%	3	3	0	-11.1%
72.8%	3	3	0	-10.9%
74.1%	3	3	0	-10.7%
75.3%	3	3	0	-9.8%
76.5%	3	3	0	-9.7%
77.8%	3	3	0	-10.1%
79.0%	3	3	0	-9.6%
80.2%	3	3	0	-10.2%
81.5%	3	3	0	-7.8%
82.7%	3	3	0	-8.7%
84.0%	3	3	0	-8.3%
85.2%	3	3	0	-6.8%
86.4%	3	3	0	-6.9%
87.7%	3	3	0	-7.6%
88.9%	3	3	0	-7.7%
90.1%	3	3	0	-8.7%
91.4%	3	3	0	-9.3%
92.6%	3	3	0	-8.4%
93.8%	3	3	0	-8.7%
95.1%	3	3	0	-11.0%
96.3%	3	3	0	-12.1%
97.5%	3	2	0	-12.3%
98.8%	3	2	-1	-25.5%
100.0%	2	2	0	13.8%

Table SW-53-b
Sacramento River at Bend Bridge, Monthly Stage
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	0.0%
1.2%	7	7	0	-0.7%
2.5%	7	6	0	-3.9%
3.7%	7	6	0	-4.4%
4.9%	7	6	0	-3.2%
6.2%	7	6	0	-3.8%
7.4%	7	6	0	-3.3%
8.6%	7	6	0	-5.2%
9.9%	7	6	0	-5.8%
11.1%	6	6	0	-2.7%
12.3%	6	6	0	-4.0%
13.6%	6	6	0	-3.9%
14.8%	6	6	0	-4.0%
16.0%	6	6	0	-4.0%
17.3%	6	6	0	-4.0%
18.5%	6	6	0	-5.2%
19.8%	6	6	0	-6.0%
21.0%	6	6	0	-6.0%
22.2%	6	6	0	-5.4%
23.5%	6	6	0	-5.5%
24.7%	6	6	0	-6.0%
25.9%	6	6	0	-6.0%
27.2%	6	6	0	-6.1%
28.4%	6	6	0	-5.6%
29.6%	6	6	0	-5.6%
30.9%	6	6	0	-5.6%
32.1%	6	6	0	-5.6%
33.3%	6	6	0	-5.8%
34.6%	6	6	0	-5.2%
35.8%	6	6	0	-4.7%
37.0%	6	5	0	-4.9%
38.3%	6	5	0	-4.8%
39.5%	6	5	0	-4.3%
40.7%	6	5	0	-4.3%
42.0%	6	5	0	-4.4%
43.2%	6	5	0	-4.3%
44.4%	6	5	0	-3.5%
45.7%	6	5	0	-3.5%
46.9%	6	5	0	-5.2%
48.1%	6	5	0	-5.3%
49.4%	6	5	0	-5.3%
50.6%	5	5	0	-4.4%
51.9%	5	5	0	-5.2%
53.1%	5	5	0	-4.6%
54.3%	5	5	0	-4.5%
55.6%	5	5	0	-4.8%
56.8%	5	5	0	-5.4%
58.0%	5	5	0	-5.5%
59.3%	5	5	0	-3.6%
60.5%	5	5	0	-4.7%
61.7%	5	5	0	-2.7%
63.0%	5	5	0	-1.9%
64.2%	5	5	0	-1.8%
65.4%	5	5	0	-1.8%
66.7%	5	5	0	-1.9%
67.9%	5	5	0	-1.7%
69.1%	5	5	0	-0.9%
70.4%	5	5	0	-1.2%
71.6%	5	5	0	0.1%
72.8%	5	5	0	-0.7%
74.1%	5	5	0	-1.3%
75.3%	5	5	0	-2.1%
76.5%	5	5	0	-2.1%
77.8%	5	4	0	-4.0%
79.0%	5	4	0	-4.9%
80.2%	5	4	0	-5.5%
81.5%	5	4	0	-4.8%
82.7%	5	4	0	-5.1%
84.0%	5	4	0	-5.1%
85.2%	4	4	0	-1.5%
86.4%	4	4	0	-1.7%
87.7%	4	4	0	-2.4%
88.9%	4	4	0	-2.2%
90.1%	4	4	0	-2.7%
91.4%	4	4	0	-2.7%
92.6%	4	4	0	-4.5%
93.8%	4	4	0	-5.0%
95.1%	4	4	0	-8.5%
96.3%	4	4	0	-6.0%
97.5%	4	4	0	-5.4%
98.8%	4	3	0	-8.6%
100.0%	4	3	-1	-17.5%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	9	2	26.7%
1.2%	7	9	2	26.6%
2.5%	7	8	2	22.6%
3.7%	7	8	1	22.0%
4.9%	7	8	1	22.0%
6.2%	7	8	1	21.4%
7.4%	7	8	1	20.8%
8.6%	7	8	1	16.9%
9.9%	7	7	1	9.4%
11.1%	7	7	0	5.1%
12.3%	7	7	0	3.1%
13.6%	7	7	0	1.9%
14.8%	7	7	0	1.9%
16.0%	7	7	0	1.4%
17.3%	7	7	0	1.4%
18.5%	7	7	0	1.4%
19.8%	7	7	0	1.2%
21.0%	7	7	0	1.2%
22.2%	7	7	0	1.2%
23.5%	7	7	0	1.1%
24.7%	7	7	0	1.2%
25.9%	7	7	0	0.7%
27.2%	7	7	0	1.3%
28.4%	7	7	0	1.3%
29.6%	7	7	0	0.8%
30.9%	7	7	0	0.8%
32.1%	7	7	0	0.8%
33.3%	7	7	0	1.3%
34.6%	7	7	0	1.3%
35.8%	7	7	0	1.3%
37.0%	7	7	0	0.7%
38.3%	7	7	0	0.7%
39.5%	7	7	0	0.1%
40.7%	7	7	0	0.1%
42.0%	7	7	0	0.5%
43.2%	7	7	0	0.5%
44.4%	7	7	0	0.0%
45.7%	7	7	0	0.0%
46.9%	7	6	0	-0.7%
48.1%	6	6	0	0.0%
49.4%	6	6	0	0.1%
50.6%	6	6	0	0.0%
51.9%	6	6	0	0.0%
53.1%	6	6	0	-0.6%
54.3%	6	6	0	-1.8%
55.6%	6	6	0	-2.0%
56.8%	6	6	0	-2.0%
58.0%	6	6	0	-0.9%
59.3%	6	6	0	-1.3%
60.5%	6	6	0	-0.7%
61.7%	6	6	0	-1.3%
63.0%	6	6	0	-2.1%
64.2%	6	6	0	-2.1%
65.4%	6	6	0	-2.1%
66.7%	6	6	0	-2.2%
67.9%	6	6	0	-1.9%
69.1%	6	6	0	-1.9%
70.4%	6	6	0	-0.6%
71.6%	6	6	0	0.8%
72.8%	6	6	0	0.8%
74.1%	6	6	0	1.4%
75.3%	6	6	0	0.8%
76.5%	6	6	0	0.7%
77.8%	6	6	0	0.7%
79.0%	6	6	0	0.6%
80.2%	6	6	0	0.6%
81.5%	6	6	0	1.6%
82.7%	5	6	0	4.5%
84.0%	5	5	0	0.0%
85.2%	5	5	0	-1.9%
86.4%	5	5	0	-2.7%
87.7%	5	5	0	-1.1%
88.9%	5	5	0	1.9%
90.1%	5	5	0	2.0%
91.4%	5	5	0	3.8%
92.6%	5	5	0	2.8%
93.8%	5	5	0	4.8%
95.1%	4	5	1	13.4%
96.3%	4	5	1	18.9%
97.5%	4	5	1	18.5%
98.8%	4	4	1	14.8%
100.0%	3	3	0	1.7%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	6	6	0	-5.8%
1.2%	6	5	0	-7.7%
2.5%	6	5	0	-7.5%
3.7%	5	5	0	-5.3%
4.9%	5	5	0	-4.4%
6.2%	5	5	0	-4.4%
7.4%	5	5	0	-3.5%
8.6%	5	5	0	-3.7%
9.9%	5	5	0	-4.6%
11.1%	5	5	0	-6.2%
12.3%	5	5	0	-4.5%
13.6%	5	5	0	-2.8%
14.8%	5	5	0	-4.7%
16.0%	5	5	0	-5.3%
17.3%	5	5	0	-4.7%
18.5%	5	5	0	-5.8%
19.8%	5	5	0	-4.1%
21.0%	5	5	0	-3.0%
22.2%	5	5	0	-3.7%
23.5%	5	5	0	-3.7%
24.7%	5	5	0	-3.7%
25.9%	5	5	0	-3.0%
27.2%	5	5	0	-2.2%
28.4%	5	5	0	-2.8%
29.6%	5	5	0	-1.7%
30.9%	5	5	0	-1.7%
32.1%	5	5	0	-1.7%
33.3%	5	5	0	-1.0%
34.6%	5	5	0	-0.1%
35.8%	5	5	0	-1.0%
37.0%	5	5	0	-1.1%
38.3%	5	5	0	-0.1%
39.5%	5	4	0	-1.1%
40.7%	5	4	0	-1.1%
42.0%	4	4	0	0.0%
43.2%	4	4	0	0.0%
44.4%	4	4	0	0.9%
45.7%	4	4	0	3.8%
46.9%	4	4	0	4.5%
48.1%	4	4	0	5.2%
49.4%	4	4	0	6.3%
50.6%	4	4	0	6.4%
51.9%	4	4	0	7.0%
53.1%	4	4	0	7.3%
54.3%	4	4	0	6.3%
55.6%	4	4	0	6.0%
56.8%	4	4	0	5.8%
58.0%	4	4	0	5.8%
59.3%	4	4	0	6.9%
60.5%	4	4	0	6.9%
61.7%	4	4	0	8.1%
63.0%	4	4	0	8.1%
64.2%	4	4	0	8.6%
65.4%	4	4	0	8.8%
66.7%	4	4	0	9.7%
67.9%	4	4	0	9.4%
69.1%	4	4	0	8.1%
70.4%	4	4	0	8.7%
71.6%	4	4	0	9.1%
72.8%	4	4	0	9.7%
74.1%	4	4	0	9.6%
75.3%	4	4	0	9.8%
76.5%	4	4	0	9.9%
77.8%	4	4	0	9.6%
79.0%	4	4	0	10.8%
80.2%	4	4	0	11.3%
81.5%	4	4	0	11.9%
82.7%	4	4	0	11.3%
84.0%	4	4	0	11.3%
85.2%	4	4	0	10.4%
86.4%	4	4	0	10.1%
87.7%	4	4	0	10.3%
88.9%	4	4	0	10.4%
90.1%	3	4	0	11.9%
91.4%	3	4	0	12.6%
92.6%	3	4	0	9.1%
93.8%	3	4	0	9.6%
95.1%	3	4	0	9.4%
96.3%	3	4	0	8.7%
97.5%	3	3	0	2.9%
98.8%	3	3	0	13.1%
100.0%	1	2	0	6.4%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	4.6%
1.2%	7	7	0	1.7%
2.5%	7	7	0	0.0%
3.7%	7	7	0	0.6%
4.9%	7	7	0	0.6%
6.2%	7	7	0	0.0%
7.4%	7	7	0	-0.5%
8.6%	7	7	0	0.1%
9.9%	7	7	0	0.7%
11.1%	7	7	0	0.0%
12.3%	7	7	0	0.0%
13.6%	7	7	0	-0.1%
14.8%	7	7	0	0.0%
16.0%	7	7	0	-0.6%
17.3%	7	6	0	-2.0%
18.5%	7	6	0	-1.5%
19.8%	7	6	0	-2.6%
21.0%	7	6	0	-5.2%
22.2%	6	6	0	-4.0%
23.5%	6	6	0	-2.9%
24.7%	6	6	0	-2.7%
25.9%	6	6	0	-3.0%
27.2%	6	5	0	-6.0%
28.4%	6	5	0	-5.2%
29.6%	5	5	0	-8.0%
30.9%	5	5	0	-8.7%
32.1%	5	4	-1	-16.0%
33.3%	5	4	-1	-17.2%
34.6%	5	4	-1	-15.5%
35.8%	4	3	-1	-22.0%
37.0%	4	3	-1	-21.2%
38.3%	4	3	-1	-21.3%
39.5%	4	3	0	-11.4%
40.7%	4	3	-1	-15.2%
42.0%	4	3	-1	-14.3%
43.2%	3	3	-1	-15.3%
44.4%	3	3	0	-11.1%
45.7%	3	3	0	-3.8%
46.9%	3	3	0	-2.4%
48.1%	3	3	0	-2.2%
49.4%	3	3	0	4.7%
50.6%	3	3	0	3.1%
51.9%	3	3	0	7.0%
53.1%	2	3	0	6.6%
54.3%	2	3	0	8.7%
55.6%	2	3	0	13.0%
56.8%	2	3	0	13.3%
58.0%	2	3	0	14.1%
59.3%	2	3	0	13.1%
60.5%	2	3	0	13.1%
61.7%	2	3	0	17.1%
63.0%	2	3	0	17.7%
64.2%	2	3	0	16.9%
65.4%	2	3	0	23.2%
66.7%	2	3	0	22.6%
67.9%	2	2	0	23.4%
69.1%	2	2	0	23.8%
70.4%	2	2	1	26.5%
71.6%	2	2	1	26.3%
72.8%	2	2	1	26.0%
74.1%	2	2	1	25.9%
75.3%	2	2	0	25.4%
76.5%	2	2	0	25.3%
77.8%	2	2	1	27.2%
79.0%	2	2	1	28.7%
80.2%	2	2	1	28.4%
81.5%	2	2	1	27.9%
82.7%	2	2	0	25.4%
84.0%	2	2	0	25.0%
85.2%	2	2	0	24.9%
86.4%	2	2	0	25.6%
87.7%	2	2	0	24.8%
88.9%	2	2	0	25.9%
90.1%	2	2	0	27.2%
91.4%	2	2	0	26.3%
92.6%	2	2	0	26.2%
93.8%	2	2	0	26.6%
95.1%	2	2	0	25.8%
96.3%	2	2	0	25.7%
97.5%	2	2	0	28.1%
98.8%	2	2	0	28.9%
100.0%	1	2	0	26.0%

Figure SW-54-b
Sacramento River below Hamilton City, Monthly Stage
Probability of Exceedance

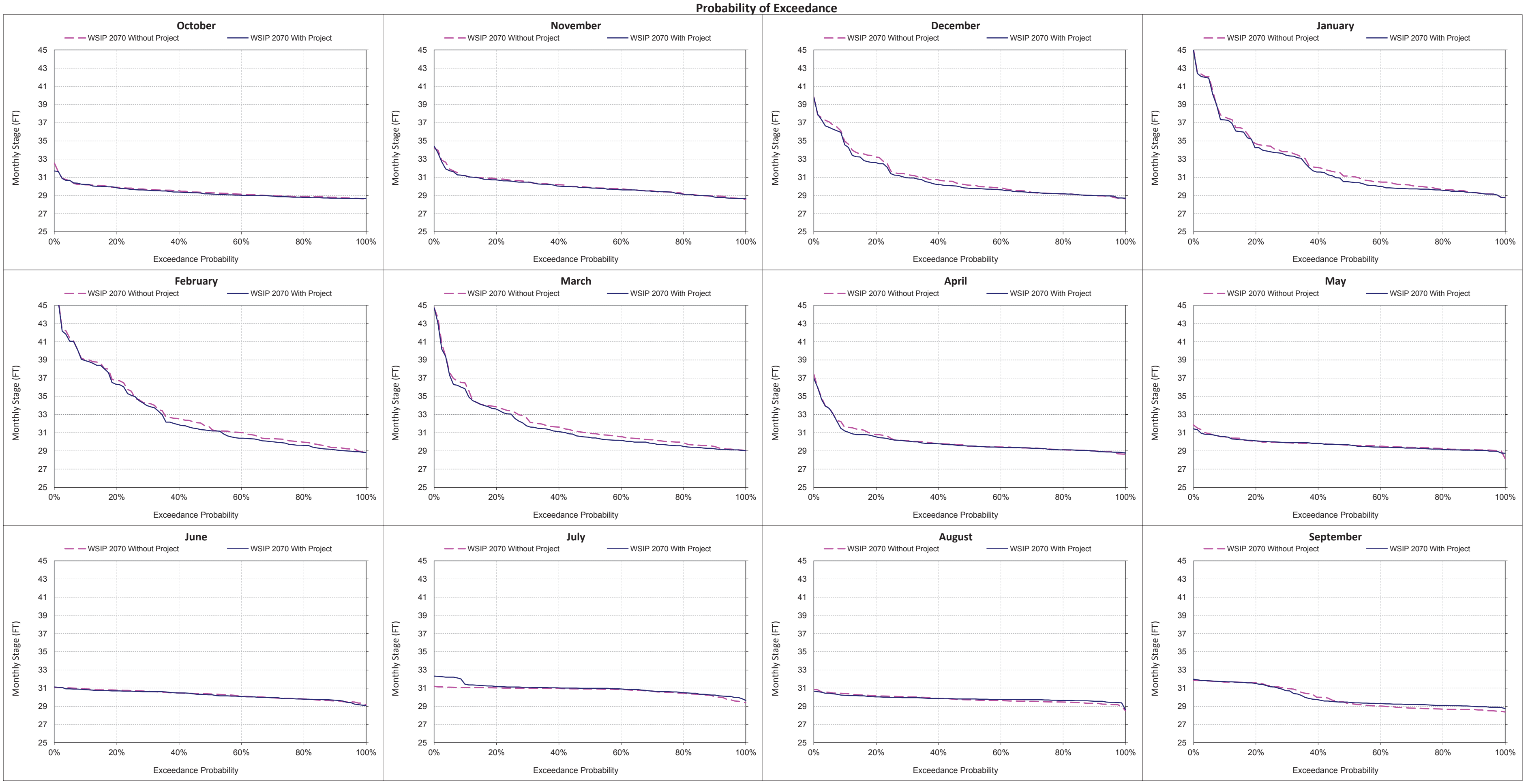


Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	33	32	-1	-2.6%
1.2%	32	32	0	0.1%
2.5%	31	31	0	-0.1%
3.7%	31	31	0	-0.2%
4.9%	31	31	0	0.0%
6.2%	30	30	0	0.2%
7.4%	30	30	0	0.5%
8.6%	30	30	0	0.0%
9.9%	30	30	0	0.1%
11.1%	30	30	0	0.2%
12.3%	30	30	0	-0.3%
13.6%	30	30	0	-0.3%
14.8%	30	30	0	-0.3%
16.0%	30	30	0	-0.2%
17.3%	30	30	0	-0.1%
18.5%	30	30	0	0.2%
19.8%	30	30	0	-0.1%
21.0%	30	30	0	-0.4%
22.2%	30	30	0	-0.3%
23.5%	30	30	0	-0.3%
24.7%	30	30	0	-0.4%
25.9%	30	30	0	-0.2%
27.2%	30	30	0	-0.3%
28.4%	30	30	0	-0.4%
29.6%	30	30	0	-0.2%
30.9%	30	30	0	-0.2%
32.1%	30	30	0	-0.3%
33.3%	30	30	0	-0.3%
34.6%	30	30	0	-0.3%
35.8%	30	29	0	-0.3%
37.0%	30	29	0	-0.4%
38.3%	30	29	0	-0.6%
39.5%	30	29	0	-0.6%
40.7%	29	29	0	-0.4%
42.0%	29	29	0	-0.4%
43.2%	29	29	0	-0.3%
44.4%	29	29	0	-0.2%
45.7%	29	29	0	-0.3%
46.9%	29	29	0	-0.3%
48.1%	29	29	0	-0.5%
49.4%	29	29	0	-0.5%
50.6%	29	29	0	-0.5%
51.9%	29	29	0	-0.5%
53.1%	29	29	0	-0.5%
54.3%	29	29	0	-0.5%
55.6%	29	29	0	-0.5%
56.8%	29	29	0	-0.4%
58.0%	29	29	0	-0.5%
59.3%	29	29	0	-0.4%
60.5%	29	29	0	-0.4%
61.7%	29	29	0	-0.4%
63.0%	29	29	0	-0.4%
64.2%	29	29	0	-0.4%
65.4%	29	29	0	-0.1%
66.7%	29	29	0	-0.2%
67.9%	29	29	0	-0.1%
69.1%	29	29	0	-0.1%
70.4%	29	29	0	-0.2%
71.6%	29	29	0	-0.2%
72.8%	29	29	0	-0.3%
74.1%	29	29	0	-0.2%
75.3%	29	29	0	-0.3%
76.5%	29	29	0	-0.3%
77.8%	29	29	0	-0.3%
79.0%	29	29	0	-0.3%
80.2%	29	29	0	-0.3%
81.5%	29	29	0	-0.4%
82.7%	29	29	0	-0.4%
84.0%	29	29	0	-0.4%
85.2%	29	29	0	-0.4%
86.4%	29	29	0	-0.4%
87.7%	29	29	0	-0.3%
88.9%	29	29	0	-0.3%
90.1%	29	29	0	-0.3%
91.4%	29	29	0	-0.2%
92.6%	29	29	0	-0.2%
93.8%	29	29	0	-0.2%
95.1%	29	29	0	-0.1%
96.3%	29	29	0	-0.1%
97.5%	29	29	0	-0.1%
98.8%	29	29	0	0.1%
100.0%	29	29	0	0.1%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	34	34	0	0.5%
1.2%	34	34	0	-0.8%
2.5%	33	33	0	-0.6%
3.7%	33	32	-1	-2.2%
4.9%	32	32	0	-0.6%
6.2%	32	32	0	-0.3%
7.4%	32	31	0	-0.7%
8.6%	31	31	0	0.0%
9.9%	31	31	0	0.0%
11.1%	31	31	0	-0.1%
12.3%	31	31	0	0.0%
13.6%	31	31	0	0.0%
14.8%	31	31	0	-0.2%
16.0%	31	31	0	-0.4%
17.3%	31	31	0	-0.4%
18.5%	31	31	0	-0.6%
19.8%	31	31	0	-0.4%
21.0%	31	31	0	-0.5%
22.2%	31	31	0	-0.6%
23.5%	31	31	0	-0.4%
24.7%	31	31	0	-0.3%
25.9%	31	31	0	-0.4%
27.2%	31	30	0	-0.5%
28.4%	31	30	0	-0.4%
29.6%	31	30	0	-0.2%
30.9%	30	30	0	0.1%
32.1%	30	30	0	0.1%
33.3%	30	30	0	-0.3%
34.6%	30	30	0	-0.3%
35.8%	30	30	0	-0.3%
37.0%	30	30	0	0.0%
38.3%	30	30	0	-0.2%
39.5%	30	30	0	-0.5%
40.7%	30	30	0	-0.6%
42.0%	30	30	0	-0.5%
43.2%	30	30	0	-0.1%
44.4%	30	30	0	-0.1%
45.7%	30	30	0	-0.1%
46.9%	30	30	0	-0.3%
48.1%	30	30	0	-0.2%
49.4%	30	30	0	-0.1%
50.6%	30	30	0	-0.2%
51.9%	30	30	0	0.0%
53.1%	30	30	0	-0.1%
54.3%	30	30	0	-0.1%
55.6%	30	30	0	-0.2%
56.8%	30	30	0	-0.2%
58.0%	30	30	0	-0.3%
59.3%	30	30	0	-0.3%
60.5%	30	30	0	-0.3%
61.7%	30	30	0	-0.2%
63.0%	30	30	0	-0.1%
64.2%	30	30	0	-0.1%
65.4%	30	30	0	0.1%
66.7%	30	30	0	-0.1%
67.9%	30	29	0	-0.2%
69.1%	30	29	0	-0.2%
70.4%	29	29	0	-0.2%
71.6%	29	29	0	0.1%
72.8%	29	29	0	0.1%
74.1%	29	29	0	0.0%
75.3%	29	29	0	0.0%
76.5%	29	29	0	0.0%
77.8%	29	29	0	-0.3%
79.0%	29	29	0	-0.4%
80.2%	29	29	0	0.0%
81.5%	29	29	0	0.0%
82.7%	29	29	0	0.1%
84.0%	29	29	0	-0.2%
85.2%	29	29	0	0.0%
86.4%	29	29	0	0.0%
87.7%	29	29	0	0.1%
88.9%	29	29	0	-0.1%
90.1%	29	29	0	-0.5%
91.4%	29	29	0	-0.5%
92.6%	29	29	0	-0.4%
93.8%	29	29	0	-0.3%
95.1%	29	29	0	-0.1%
96.3%	29	29	0	-0.1%
97.5%	29	29	0	0.0%
98.8%	29	29	0	0.2%
100.0%	29	29	0	0.4%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	40	40	0	-0.2%
1.2%	38	38	0	0.2%
2.5%	38	37	0	-0.6%
3.7%	37	37	-1	-1.6%
4.9%	37	36	-1	-1.6%
6.2%	37	36	0	-1.2%
7.4%	37	36	0	-1.1%
8.6%	36	36	0	-0.5%
9.9%	35	35	0	-1.2%
11.1%	35	34	0	-1.0%
12.3%	34	33	-1	-1.7%
13.6%	34	33	0	-1.4%
14.8%	34	33	0	-1.0%
16.0%	34	33	-1	-2.2%
17.3%	33	33	-1	-2.1%
18.5%	33	33	-1	-2.3%
19.8%	33	33	-1	-1.8%
21.0%	33	33	-1	-2.0%
22.2%	33	32	0	-0.9%
23.5%	33	32	0	-1.4%
24.7%	32	31	0	-0.9%
25.9%	31	31	0	-0.8%
27.2%	31	31	0	-0.7%
28.4%	31	31	0	-1.2%
29.6%	31	31	0	-1.2%
30.9%	31	31	0	-1.0%
32.1%	31	31	0	-0.9%
33.3%	31	31	0	-0.8%
34.6%	31	31	0	-1.0%
35.8%	31	31	0	-1.3%
37.0%	31	30	0	-1.1%
38.3%	31	30	0	-1.5%
39.5%	31	30	-1	-1.7%
40.7%	31	30	0	-1.5%
42.0%	31	30	0	-1.6%
43.2%	31	30	0	-1.5%
44.4%	31	30	0	-1.6%
45.7%	30	30	0	-1.1%
46.9%	30	30	0	-1.1%
48.1%	30	30	0	-1.2%
49.4%	30	30	0	-1.2%
50.6%	30	30	0	-1.2%
51.9%	30	30	0	-1.1%
53.1%	30	30	0	-0.7%
54.3%	30	30	0	-0.8%
55.6%	30	30	0	-0.7%
56.8%	30	30	0	-0.7%
58.0%	30	30	0	-0.7%
59.3%	30	30	0	-0.7%
60.5%	30	30	0	-0.7%
61.7%	30	30	0	-0.5%
63.0%	30	30	0	-0.4%
64.2%	30	29	0	-0.4%
65.4%	30	29	0	-0.5%
66.7%	30	29	0	-0.4%
67.9%	29	29	0	-0.4%
69.1%	29	29	0	-0.3%
70.4%	29	29	0	0.0%
71.6%	29	29	0	0.1%
72.8%	29	29	0	0.0%
74.1%	29	29	0	0.0%
75.3%	29	29	0	0.0%
76.5%	29	29	0	0.0%
77.8%	29	29	0	0.0%
79.0%	29	29	0	0.0%
80.2%	29	29	0	-0.1%
81.5%	29	29	0	0.0%
82.7%	29	29	0	0.0%
84.0%	29	29	0	0.0%
85.2%	29	29	0	0.0%
86.4%	29	29	0	0.0%
87.7%	29	29	0	0.0%
88.9%	29	29	0	0.0%
90.1%	29	29	0	0.0%
91.4%	29	29	0	0.1%
92.6%	29	29	0	0.1%
93.8%	29	29	0	0.0%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.6%
97.5%	29	29	0	0.0%
98.8%	29	29	0	0.1%
100.0%	29	29	0	0.2%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	45	45	0	-0.2%
1.2%	43	42	0	-0.3%
2.5%	42	42	0	-0.6%
3.7%	42	42	0	-0.2%
4.9%	42	42	0	-0.4%
6.2%	40	40	0	-0.9%
7.4%	39	39	0	0.2%
8.6%	38	37	-1	-1.4%
9.9%	38	37	0	-0.9%
11.1%	37	37	0	-0.5%
12.3%	37	37	0	-1.1%
13.6%	36	36	0	-1.1%
14.8%	36	36	0	-1.1%
16.0%	36	36	0	-1.0%
17.3%	36	35	0	-1.2%
18.5%	35	35	0	0.1%
19.8%	35	34	0	-1.3%
21.0%	35	34	0	-0.9%
22.2%	35	34	-1	-1.5%
23.5%	34	34	-1	-1.7%
24.7%	34	34	-1	-1.8%
25.9%	34	34	0	-1.1%
27.2%	34	34	0	-1.1%
28.4%	34	34	0	-0.6%
29.6%	34	33	0	-1.2%
30.9%	34	33	0	-1.4%
32.1%	34	33	0	-0.8%
33.3%	33	33	0	-0.9%
34.6%	33	33	0	-0.5%
35.8%	33	33	-1	-1.6%
37.0%	32	32	0	-0.6%
38.3%	32	32	0	-1.3%
39.5%	32	32	0	-1.5%
40.7%	32	32	0	-1.4%
42.0%	32	32	0	-1.1%
43.2%	32	31	0	-1.5%
44.4%	32	31	0	-1.5%
45.7%	32	31	-1	-1.9%
46.9%	32	31	-1	-1.9%
48.1%	31	31	-1	-2.0%
49.4%	31	31	-1	-2.0%
50.6%	31	30	-1	-2.0%
51.9%	31	30	-1	-2.1%
53.1%	31	30	-1	-1.7%
54.3%	31	30	0	-1.5%
55.6%	31	30	-1	-1.7%
56.8%	31	30	-1	-1.7%
58.0%	31	30	0	-1.4%
59.3%	31	30	-1	-1.7%
60.5%	30	30	0	-1.6%
61.7%	30	30	-1	-2.1%
63.0%	30	30	-1	-2.1%
64.2%	30	30	0	-1.6%
65.4%	30	30	0	-1.4%
66.7%	30	30	0	-1.4%
67.9%	30	30	0	-1.4%
69.1%	30	30	0	-1.5%
70.4%	30	30	0	-1.1%
71.6%	30	30	0	-1.0%
72.8%	30	30	0	-0.9%
74.1%	30	30	0	-0.8%
75.3%	30	30	0	-0.7%
76.5%	30	30	0	-0.8%
77.8%	30	30	0	-0.5%
79.0%	30	30	0	-0.3%
80.2%	30	30	0	-0.3%
81.5%	30	30	0	-0.4%
82.7%	30	29	0	-0.5%
84.0%	30	29	0	-0.3%
85.2%	30	29	0	-0.3%
86.4%	30	29	0	-0.4%
87.7%	29	29	0	-0.2%
88.9%	29	29	0	0.1%
90.1%	29	29	0	0.0%
91.4%	29	29	0	0.0%
92.6%	29	29	0	0.0%
93.8%	29	29	0	0.0%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.0%
97.5%	29	29	0	0.0%
98.8%	29	29	0	0.0%
100.0%	29	29	0	0.0%

Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	0.0%
1.2%	46	45	0	-0.7%
2.5%	42	42	0	-0.5%
3.7%	42	42	0	-0.8%
4.9%	41	41	0	-0.8%
6.2%	41	41	0	-0.1%
7.4%	40	40	0	0.0%
8.6%	39	39	0	-0.3%
9.9%	39	39	0	-0.2%
11.1%	39	39	0	-0.5%
12.3%	39	39	0	-0.4%
13.6%	39	38	0	-0.9%
14.8%	39	38	0	-0.6%
16.0%	38	38	0	-0.1%
17.3%	38	38	0	-1.0%
18.5%	37	37	0	-0.8%
19.8%	37	36	0	-1.2%
21.0%	37	36	0	-1.2%
22.2%	36	36	0	-1.2%
23.5%	36	35	0	-1.3%
24.7%	36	35	0	-1.3%
25.9%	35	35	0	0.6%
27.2%	35	35	0	-0.3%
28.4%	34	34	0	-0.2%
29.6%	34	34	0	-0.7%
30.9%	34	34	0	-1.0%
32.1%	34	34	0	-0.8%
33.3%	34	33	0	-0.4%
34.6%	33	33	0	-1.3%
35.8%	33	32	-1	-1.7%
37.0%	33	32	-1	-1.6%
38.3%	33	32	-1	-1.8%
39.5%	33	32	-1	-2.0%
40.7%	32	32	-1	-2.1%
42.0%	32	32	-1	-1.9%
43.2%	32	32	-1	-2.3%
44.4%	32	32	-1	-2.2%
45.7%	32	31	-1	-2.0%
46.9%	32	31	-1	-2.3%
48.1%	32	31	0	-1.5%
49.4%	32	31	0	-1.6%
50.6%	31	31	0	-0.4%
51.9%	31	31	0	0.0%
53.1%	31	31	0	-0.1%
54.3%	31	31	0	-1.1%
55.6%	31	31	-1	-1.7%
56.8%	31	31	-1	-1.7%
58.0%	31	30	-1	-1.9%
59.3%	31	30	-1	-2.1%
60.5%	31	30	-1	-2.0%
61.7%	31	30	0	-1.6%
63.0%	31	30	0	-1.5%
64.2%	31	30	0	-1.4%
65.4%	31	30	0	-1.1%
66.7%	30	30	0	-0.9%
67.9%	30	30	0	-0.9%
69.1%	30	30	0	-1.1%
70.4%	30	30	0	-1.1%
71.6%	30	30	0	-1.2%
72.8%	30	30	0	-1.3%
74.1%	30	30	0	-1.4%
75.3%	30	30	0	-1.3%
76.5%	30	30	0	-1.4%
77.8%	30	30	0	-1.3%
79.0%	30	30	0	-1.3%
80.2%	30	30	0	-1.1%
81.5%	30	30	0	-1.1%
82.7%	30	29	0	-1.2%
84.0%	30	29	0	-1.3%
85.2%	30	29	0	-1.2%
86.4%	30	29	0	-1.2%
87.7%	29	29	0	-0.9%
88.9%	29	29	0	-0.7%
90.1%	29	29	0	-0.8%
91.4%	29	29	0	-1.0%
92.6%	29	29	0	-0.9%
93.8%	29	29	0	-0.9%
95.1%	29	29	0	-0.8%
96.3%	29	29	0	-0.9%
97.5%	29	29	0	-0.2%
98.8%	29	29	0	-0.2%
100.0%	29	29	0	-0.1%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	45	45	0	0.0%
1.2%	44	43	-1	-1.2%
2.5%	41	40	-1	-1.4%
3.7%	39	39	0	0.0%
4.9%	38	37	0	-0.7%
6.2%	37	36	-1	-1.8%
7.4%	37	36	0	-1.3%
8.6%	37	36	0	-1.4%
9.9%	36	36	-1	-1.8%
11.1%	36	35	-1	-2.0%
12.3%	35	35	0	0.0%
13.6%	34	34	0	-0.1%
14.8%	34	34	0	0.0%
16.0%	34	34	0	-0.2%
17.3%	34	34	0	-0.4%
18.5%	34	34	0	-0.7%
19.8%	34	34	0	-0.8%
21.0%	34	33	0	-0.9%
22.2%	34	33	0	-1.2%
23.5%	33	33	0	-1.1%
24.7%	33	33	0	-1.1%
25.9%	33	33	-1	-2.0%
27.2%	33	32	-1	-2.1%
28.4%	33	32	-1	-2.4%
29.6%	33	32	-1	-2.7%
30.9%	32	32	0	-1.5%
32.1%	32	32	0	-1.5%
33.3%	32	31	-1	-1.7%
34.6%	32	31	-1	-1.6%
35.8%	32	31	0	-1.2%
37.0%	32	31	0	-1.1%
38.3%	32	31	0	-1.5%
39.5%	32	31	0	-1.5%
40.7%	32	31	-1	-1.6%
42.0%	31	31	0	-1.3%
43.2%	31	31	0	-1.5%
44.4%	31	31	0	-1.2%
45.7%	31	31	0	-1.6%
46.9%	31	31	0	-1.6%
48.1%	31	31	0	-1.6%
49.4%	31	31	-1	-1.6%
50.6%	31	30	0	-1.6%
51.9%	31	30	0	-1.5%
53.1%	31	30	0	-1.5%
54.3%	31	30	0	-1.6%
55.6%	31	30	-1	-1.7%
56.8%	31	30	0	-1.5%
58.0%	31	30	0	-1.6%
59.3%	31	30	0	-1.4%
60.5%	31	30	0	-1.3%
61.7%	30	30	0	-1.2%
63.0%	30	30	0	-1.2%
64.2%	30	30	0	-1.3%
65.4%	30	30	0	-1.3%
66.7%	30	30	0	-1.1%
67.9%	30	30	0	-0.9%
69.1%	30	30	0	-1.2%
70.4%	30	30	0	-1.3%
71.6%	30	30	0	-1.5%
72.8%	30	30	0	-1.3%
74.1%	30	30	0	-1.2%
75.3%	30	30	0	-1.3%
76.5%	30	30	0	-1.4%
77.8%	30	30	0	-1.3%
79.0%	30	30	0	-1.4%
80.2%	30	29	0	-1.3%
81.5%	30	29	0	-0.9%
82.7%	30	29	0	-0.8%
84.0%	30	29	0	-0.9%
85.2%	30	29	0	-0.8%
86.4%	30	29	0	-0.9%
87.7%	30	29	0	-0.9%
88.9%	30	29	0	-0.9%
90.1%	29	29	0	-0.9%
91.4%	29	29	0	-0.5%
92.6%	29	29	0	-0.3%
93.8%	29	29	0	-0.2%
95.1%	29	29	0	-0.2%
96.3%	29	29	0	-0.1%
97.5%	29	29	0	-0.1%
98.8%	29	29	0	-0.1%
100.0%	29	29	0	0.1%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	37	37	0	-1.3%
1.2%	36	36	0	0.1%
2.5%	35	35	0	-0.7%
3.7%	34	34	0	0.0%
4.9%	34	34	0	-0.3%
6.2%	33	33	0	0.0%
7.4%	32	32	0	-0.3%
8.6%	32	31	-1	-2.3%
9.9%	32	31	0	-1.3%
11.1%	32	31	-1	-1.7%
12.3%	32	31	-1	-2.1%
13.6%	31	31	-1	-1.9%
14.8%	31	31	-1	-1.8%
16.0%	31	31	-1	-1.6%
17.3%	31	31	0	-0.9%
18.5%	31	31	0	-0.7%
19.8%	31	31	0	-0.7%
21.0%	31	30	0	-1.0%
22.2%	31	30	0	-1.0%
23.5%	31	30	0	-1.0%
24.7%	30	30	0	-0.4%
25.9%	30	30	0	0.0%
27.2%	30	30	0	0.0%
28.4%	30	30	0	-0.1%
29.6%	30	30	0	-0.2%
30.9%	30	30	0	-0.2%
32.1%	30	30	0	-0.2%
33.3%	30	30	0	-0.2%
34.6%	30	30	0	-0.5%
35.8%	30	30	0	-0.4%
37.0%	30	30	0	-0.4%
38.3%	30	30	0	-0.1%
39.5%	30	30	0	-0.1%
40.7%	30	30	0	0.0%
42.0%	30	30	0	-0.2%
43.2%	30	30	0	-0.2%
44.4%	30	30	0	-0.3%
45.7%	30	30	0	-0.2%
46.9%	30	30	0	-0.4%
48.1%	30	30	0	-0.4%
49.4%	30	30	0	0.1%
50.6%	30	30	0	0.0%
51.9%	30	30	0	-0.1%
53.1%	29	29	0	0.0%
54.3%	29	29	0	0.0%
55.6%	29	29	0	0.0%
56.8%	29	29	0	-0.1%
58.0%	29	29	0	-0.1%
59.3%	29	29	0	-0.1%
60.5%	29	29	0	-0.2%
61.7%	29	29	0	-0.2%
63.0%	29	29	0	-0.1%
64.2%	29	29	0	0.0%
65.4%	29	29	0	0.0%
66.7%	29	29	0	0.0%
67.9%	29	29	0	0.0%
69.1%	29	29	0	0.0%
70.4%	29	29	0	-0.1%
71.6%	29	29	0	-0.1%
72.8%	29	29	0	0.0%
74.1%	29	29	0	0.1%
75.3%	29	29	0	-0.1%
76.5%	29	29	0	-0.1%
77.8%	29	29	0	-0.1%
79.0%	29	29	0	-0.1%
80.2%	29	29	0	0.0%
81.5%	29	29	0	0.0%
82.7%	29	29	0	0.0%
84.0%	29	29	0	0.0%
85.2%	29	29	0	0.0%
86.4%	29	29	0	0.0%
87.7%	29	29	0	0.0%
88.9%	29	29	0	-0.2%
90.1%	29	29	0	0.0%
91.4%	29	29	0	-0.2%
92.6%	29	29	0	-0.1%
93.8%	29	29	0	-0.1%
95.1%	29	29	0	-0.1%
96.3%	29	29	0	-0.2%
97.5%	29	29	0	0.6%
98.8%	29	29	0	0.6%
100.0%	29	29	0	0.5%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	32	31	0	-1.4%
1.2%	32	31	0	-0.6%
2.5%	31	31	0	-1.3%
3.7%	31	31	0	-0.6%
4.9%	31	31	0	-0.2%
6.2%	31	31	0	0.0%
7.4%	31	31	0	0.0%
8.6%	31	31	0	0.1%
9.9%	31	31	0	0.0%
11.1%	30	31	0	0.1%
12.3%	30	30	0	-0.3%
13.6%	30	30	0	-0.4%
14.8%	30	30	0	-0.6%
16.0%	30	30	0	0.2%
17.3%	30	30	0	0.1%
18.5%	30	30	0	0.2%
19.8%	30	30	0	0.2%
21.0%	30	30	0	0.1%
22.2%	30	30	0	0.3%
23.5%	30	30	0	0.2%
24.7%	30	30	0	0.1%
25.9%	30	30	0	0.1%
27.2%	30	30	0	0.1%
28.4%	30	30	0	0.0%
29.6%	30	30	0	0.1%
30.9%	30	30	0	0.1%
32.1%	30	30	0	0.2%
33.3%	30	30	0	0.2%
34.6%	30	30	0	0.2%
35.8%	30	30	0	0.3%
37.0%	30	30	0	0.2%
38.3%	30	30	0	0.1%
39.5%	30	30	0	0.1%
40.7%	30	30	0	0.1%
42.0%	30	30	0	-0.1%
43.2%	30	30	0	0.0%
44.4%	30	30	0	0.0%
45.7%	30	30	0	0.1%
46.9%	30	30	0	0.0%
48.1%	30	30	0	0.1%
49.4%	30	30	0	0.1%
50.6%	30	30	0	0.0%
51.9%	30	30	0	-0.2%
53.1%	30	29	0	-0.4%
54.3%	30	29	0	-0.4%
55.6%	30	29	0	-0.3%
56.8%	30	29	0	-0.3%
58.0%	30	29	0	-0.4%
59.3%	30	29	0	-0.3%
60.5%	30	29	0	-0.4%
61.7%	29	29	0	-0.3%
63.0%	29	29	0	-0.2%
64.2%	29	29	0	-0.3%
65.4%	29	29	0	-0.3%
66.7%	29	29	0	-0.2%
67.9%	29	29	0	-0.3%
69.1%	29	29	0	-0.3%
70.4%	29	29	0	-0.3%
71.6%	29	29	0	-0.2%
72.8%	29	29	0	-0.4%
74.1%	29	29	0	-0.3%
75.3%	29	29	0	-0.4%
76.5%	29	29	0	-0.3%
77.8%	29	29	0	-0.3%
79.0%	29	29	0	-0.3%
80.2%	29	29	0	-0.3%
81.5%	29	29	0	-0.2%
82.7%	29	29	0	-0.2%
84.0%	29	29	0	-0.2%
85.2%	29	29	0	-0.2%
86.4%	29	29	0	-0.2%
87.7%	29	29	0	-0.2%
88.9%	29	29	0	-0.1%
90.1%	29	29	0	-0.2%
91.4%	29	29	0	-0.1%
92.6%	29	29	0	-0.2%
93.8%	29	29	0	-0.2%
95.1%	29	29	0	-0.4%
96.3%	29	29	0	-0.3%
97.5%	29	29	0	-0.4%
98.8%	29	29	0	-0.7%
100.0%	28	29	1	2.2%

Table SW-54-b

Sacramento River below Hamilton City, Monthly Stage

Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	31	0	0.2%
1.2%	31	31	0	0.1%
2.5%	31	31	0	0.1%
3.7%	31	31	0	-0.3%
4.9%	31	31	0	-0.3%
6.2%	31	31	0	-0.3%
7.4%	31	31	0	-0.2%
8.6%	31	31	0	-0.3%
9.9%	31	31	0	-0.2%
11.1%	31	31	0	-0.3%
12.3%	31	31	0	-0.1%
13.6%	31	31	0	-0.3%
14.8%	31	31	0	-0.3%
16.0%	31	31	0	-0.3%
17.3%	31	31	0	-0.3%
18.5%	31	31	0	-0.3%
19.8%	31	31	0	-0.3%
21.0%	31	31	0	-0.3%
22.2%	31	31	0	-0.3%
23.5%	31	31	0	-0.3%
24.7%	31	31	0	-0.2%
25.9%	31	31	0	-0.3%
27.2%	31	31	0	-0.2%
28.4%	31	31	0	-0.2%
29.6%	31	31	0	-0.2%
30.9%	31	31	0	-0.1%
32.1%	31	31	0	0.0%
33.3%	31	31	0	0.1%
34.6%	31	31	0	0.1%
35.8%	31	31	0	0.2%
37.0%	30	31	0	0.1%
38.3%	30	30	0	0.0%
39.5%	30	30	0	0.0%
40.7%	30	30	0	0.0%
42.0%	30	30	0	0.1%
43.2%	30	30	0	0.0%
44.4%	30	30	0	-0.1%
45.7%	30	30	0	-0.3%
46.9%	30	30	0	-0.3%
48.1%	30	30	0	-0.3%
49.4%	30	30	0	-0.3%
50.6%	30	30	0	-0.3%
51.9%	30	30	0	-0.6%
53.1%	30	30	0	-0.5%
54.3%	30	30	0	-0.5%
55.6%	30	30	0	-0.4%
56.8%	30	30	0	-0.4%
58.0%	30	30	0	-0.2%
59.3%	30	30	0	-0.1%
60.5%	30	30	0	-0.1%
61.7%	30	30	0	-0.1%
63.0%	30	30	0	-0.1%
64.2%	30	30	0	-0.1%
65.4%	30	30	0	-0.1%
66.7%	30	30	0	-0.1%
67.9%	30	30	0	0.0%
69.1%	30	30	0	0.0%
70.4%	30	30	0	0.1%
71.6%	30	30	0	0.1%
72.8%	30	30	0	0.0%
74.1%	30	30	0	-0.1%
75.3%	30	30	0	-0.1%
76.5%	30	30	0	-0.1%
77.8%	30	30	0	-0.1%
79.0%	30	30	0	-0.1%
80.2%	30	30	0	0.0%
81.5%	30	30	0	0.0%
82.7%	30	30	0	0.0%
84.0%	30	30	0	0.2%
85.2%	30	30	0	0.3%
86.4%	30	30	0	0.3%
87.7%	30	30	0	0.3%
88.9%	30	30	0	0.3%
90.1%	30	30	0	0.2%
91.4%	30	30	0	0.1%
92.6%	30	30	0	0.2%
93.8%	29	29	0	-0.2%
95.1%	29	29	0	-0.2%
96.3%	29	29	0	-0.7%
97.5%	29	29	0	-0.6%
98.8%	29	29	0	-0.8%
100.0%	29	29	0	-0.2%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	32	1	3.6%
1.2%	31	32	1	3.7%
2.5%	31	32	1	3.6%
3.7%	31	32	1	3.6%
4.9%	31	32	1	3.5%
6.2%	31	32	1	3.6%
7.4%	31	32	1	3.3%
8.6%	31	32	1	3.0%
9.9%	31	31	0	1.1%
11.1%	31	31	0	0.9%
12.3%	31	31	0	0.9%
13.6%	31	31	0	0.8%
14.8%	31	31	0	0.8%
16.0%	31	31	0	0.7%
17.3%	31	31	0	0.7%
18.5%	31	31	0	0.6%
19.8%	31	31	0	0.4%
21.0%	31	31	0	0.4%
22.2%	31	31	0	0.4%
23.5%	31	31	0	0.4%
24.7%	31	31	0	0.4%
25.9%	31	31	0	0.4%
27.2%	31	31	0	0.4%
28.4%	31	31	0	0.3%
29.6%	31	31	0	0.3%
30.9%	31	31	0	0.3%
32.1%	31	31	0	0.3%
33.3%	31	31	0	0.3%
34.6%	31	31	0	0.3%
35.8%	31	31	0	0.3%
37.0%	31	31	0	0.2%
38.3%	31	31	0	0.2%
39.5%	31	31	0	0.2%
40.7%	31	31	0	0.2%
42.0%	31	31	0	0.2%
43.2%	31	31	0	0.2%
44.4%	31	31	0	0.2%
45.7%	31	31	0	0.2%
46.9%	31	31	0	0.2%
48.1%	31	31	0	0.2%
49.4%	31	31	0	0.2%
50.6%	31	31	0	0.2%
51.9%	31	31	0	0.2%
53.1%	31	31	0	0.3%
54.3%	31	31	0	0.3%
55.6%	31	31	0	0.3%
56.8%	31	31	0	0.2%
58.0%	31	31	0	0.2%
59.3%	31	31	0	0.1%
60.5%	31	31	0	0.1%
61.7%	31	31	0	0.2%
63.0%	31	31	0	0.3%
64.2%	31	31	0	0.3%
65.4%	31	31	0	0.3%
66.7%	31	31	0	0.2%
67.9%	31	31	0	0.1%
69.1%	31	31	0	0.0%
70.4%	31	31	0	0.0%
71.6%	31	31	0	0.2%
72.8%	31	31	0	0.2%
74.1%	31	31	0	0.2%
75.3%	31	31	0	0.2%
76.5%	31	31	0	0.2%
77.8%	30	31	0	0.4%
79.0%	30	31	0	0.3%
80.2%	30	30	0	0.2%
81.5%	30	30	0	0.3%
82.7%	30	30	0	0.3%
84.0%	30	30	0	0.3%
85.2%	30	30	0	0.0%
86.4%	30	30	0	0.1%
87.7%	30	30	0	0.2%
88.9%	30	30	0	0.1%
90.1%	30	30	0	0.7%
91.4%	30	30	0	0.5%
92.6%	30	30	0	0.5%
93.8%	30	30	0	1.0%
95.1%	30	30	0	1.2%
96.3%	30	30	0	1.3%
97.5%	30	30	0	1.5%
98.8%	29	30	0	1.2%
100.0%	29	30	0	0.7%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	31	31	0	-0.5%
1.2%	31	31	0	-0.7%
2.5%	31	31	0	-0.1%
3.7%	31	30	0	-0.4%
4.9%	31	30	0	-0.3%
6.2%	30	30	0	-0.3%
7.4%	30	30	0	-0.5%
8.6%	30	30	0	-0.6%
9.9%	30	30	0	-0.7%
11.1%	30	30	0	-0.6%
12.3%	30	30	0	-0.4%
13.6%	30	30	0	-0.3%
14.8%	30	30	0	-0.4%
16.0%	30	30	0	-0.3%
17.3%	30	30	0	-0.4%
18.5%	30	30	0	-0.4%
19.8%	30	30	0	-0.3%
21.0%	30	30	0	-0.3%
22.2%	30	30	0	-0.4%
23.5%	30	30	0	-0.4%
24.7%	30	30	0	-0.4%
25.9%	30	30	0	-0.4%
27.2%	30	30	0	-0.3%
28.4%	30	30	0	-0.3%
29.6%	30	30	0	-0.3%
30.9%	30	30	0	-0.2%
32.1%	30	30	0	-0.3%
33.3%	30	30	0	-0.3%
34.6%	30	30	0	-0.3%
35.8%	30	30	0	-0.3%
37.0%	30	30	0	-0.2%
38.3%	30	30	0	-0.1%
39.5%	30	30	0	0.0%
40.7%	30	30	0	0.0%
42.0%	30	30	0	0.0%
43.2%	30	30	0	0.0%
44.4%	30	30	0	0.1%
45.7%	30	30	0	0.2%
46.9%	30	30	0	0.2%
48.1%	30	30	0	0.3%
49.4%	30	30	0	0.3%
50.6%	30	30	0	0.3%
51.9%	30	30	0	0.3%
53.1%	30	30	0	0.4%
54.3%	30	30	0	0.4%
55.6%	30	30	0	0.4%
56.8%	30	30	0	0.4%
58.0%	30	30	0	0.4%
59.3%	30	30	0	0.5%
60.5%	30	30	0	0.5%
61.7%	30	30	0	0.5%
63.0%	30	30	0	0.6%
64.2%	30	30	0	0.6%
65.4%	30	30	0	0.6%
66.7%	30	30	0	0.6%
67.9%	30	30	0	0.6%
69.1%	30	30	0	0.7%
70.4%	30	30	0	0.6%
71.6%	30	30	0	0.6%
72.8%	30	30	0	0.6%
74.1%	29	30	0	0.7%
75.3%	29	30	0	0.7%
76.5%	29	30	0	0.6%
77.8%	29	30	0	0.6%
79.0%	29	30	0	0.6%
80.2%	29	30	0	0.6%
81.5%	29	30	0	0.6%
82.7%	29	30	0	0.6%
84.0%	29	30	0	0.6%
85.2%	29	30	0	0.7%
86.4%	29	30	0	0.7%
87.7%	29	30	0	0.9%
88.9%	29	30	0	0.8%
90.1%	29	30	0	0.8%
91.4%	29	30	0	0.8%
92.6%	29	30	0	1.0%
93.8%	29	29	0	0.8%
95.1%	29	29	0	0.8%
96.3%	29	29	0	0.8%
97.5%	29	29	0	0.8%
98.8%	29	29	0	1.3%
100.0%	29	29	0	0.3%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	32	32	0	0.4%
1.2%	32	32	0	0.3%
2.5%	32	32	0	0.0%
3.7%	32	32	0	0.1%
4.9%	32	32	0	0.1%
6.2%	32	32	0	0.0%
7.4%	32	32	0	0.1%
8.6%	32	32	0	0.0%
9.9%	32	32	0	0.1%
11.1%	32	32	0	0.1%
12.3%	32	32	0	0.1%
13.6%	32	32	0	0.1%
14.8%	32	32	0	0.0%
16.0%	32	32	0	0.0%
17.3%	32	32	0	-0.1%
18.5%	32	32	0	-0.1%
19.8%	32	32	0	-0.2%
21.0%	32	31	0	-0.5%
22.2%	31	31	0	-0.2%
23.5%	31	31	0	-0.1%
24.7%	31	31	0	-0.3%
25.9%	31	31	0	-0.1%
27.2%	31	31	0	-0.4%
28.4%	31	31	0	-0.5%
29.6%	31	31	0	-0.7%
30.9%	31	31	0	-0.8%
32.1%	31	30	0	-1.5%
33.3%	31	30	0	-1.3%
34.6%	31	30	0	-1.1%
35.8%	30	30	0	-1.5%
37.0%	30	30	-1	-1.7%
38.3%	30	30	-1	-1.8%
39.5%	30	30	0	-0.9%
40.7%	30	30	0	-1.1%
42.0%	30	30	0	-1.3%
43.2%	30	30	0	-1.1%
44.4%	30	30	0	-0.5%
45.7%	30	29	0	-0.4%
46.9%	30	29	0	-0.2%
48.1%	29	29	0	0.0%
49.4%	29	29	0	0.5%
50.6%	29	29	0	0.4%
51.9%	29	29	0	0.6%
53.1%	29	29	0	0.6%
54.3%	29	29	0	0.7%
55.6%	29	29	0	0.9%
56.8%	29	29	0	0.9%
58.0%	29	29	0	0.9%
59.3%	29	29	0	0.9%
60.5%	29	29	0	0.9%
61.7%	29	29	0	1.0%
63.0%	29	29	0	1.1%
64.2%	29	29	0	1.0%
65.4%	29	29	0	1.3%
66.7%	29	29	0	1.3%
67.9%	29	29	0	1.3%
69.1%	29	29	0	1.4%
70.4%	29	29	0	1.5%
71.6%	29	29	0	1.4%
72.8%	29	29	0	1.4%
74.1%	29	29	0	1.5%
75.3%	29	29	0	1.5%
76.5%	29	29	0	1.4%
77.8%	29	29	0	1.3%
79.0%	29	29	0	1.3%
80.2%	29	29	0	1.4%
81.5%	29	29	0	1.4%
82.7%	29	29	0	1.5%
84.0%	29	29	0	1.5%
85.2%	29	29	0	1.5%
86.4%	29	29	0	1.4%
87.7%	29	29	0	1.3%
88.9%	29	29	0	1.3%
90.1%	29	29	0	1.2%
91.4%	29	29	0	1.3%
92.6%	29	29	0	1.3%
93.8%	29	29	0	1.5%
95.1%	29	29	0	1.4%
96.3%	29	29	0	1.4%
97.5%	28	29	0	1.5%
98.8%	28	29	0	1.5%
100.0%	28	29	0	1.3%

Figure SW-56-b
Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

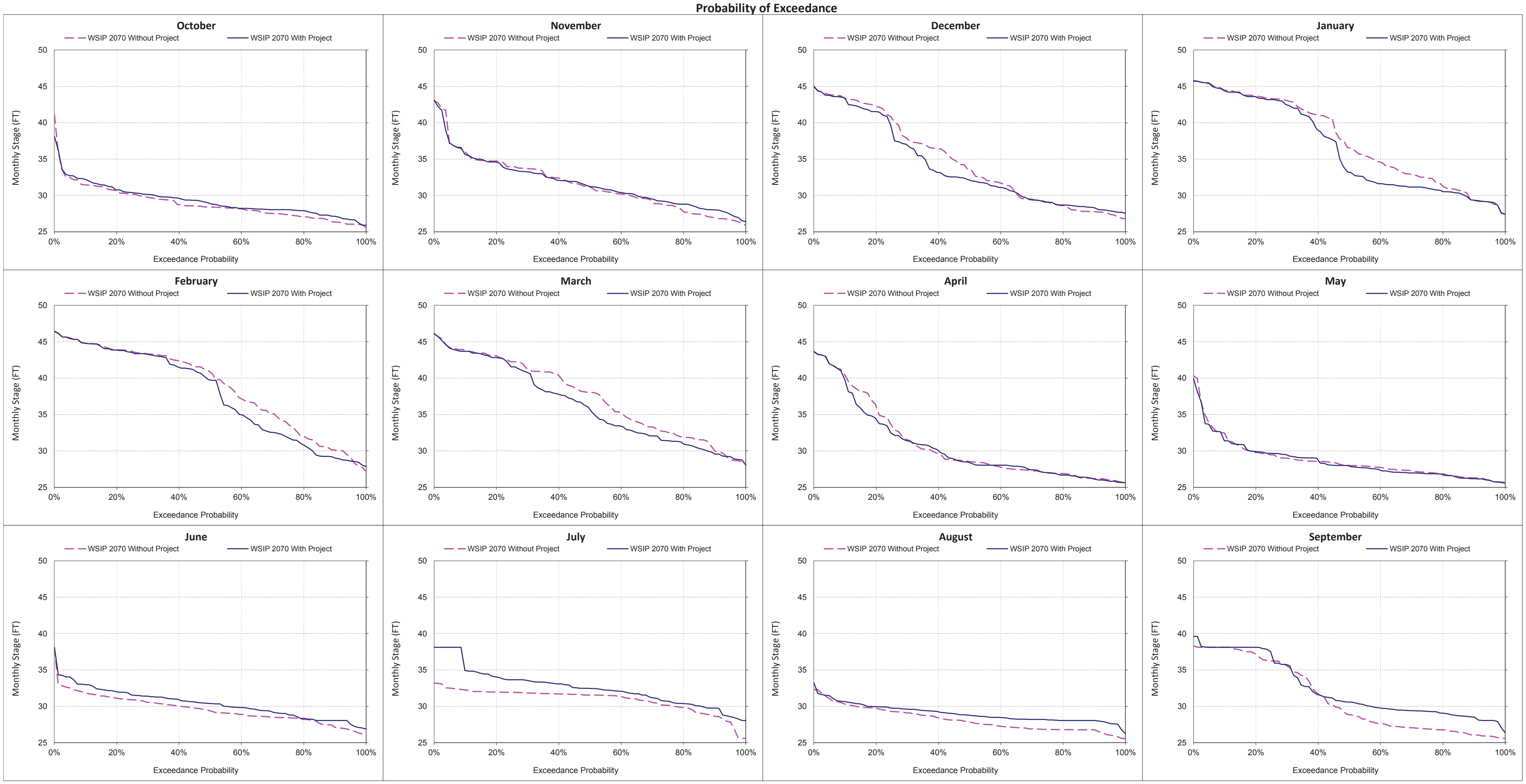


Table SW-56-b

Sacramento River at Wilkins Slough, Monthly Stage

Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	41	38	-3	-7.3%
1.2%	36	36	0	0.5%
2.5%	34	34	0	0.0%
3.7%	32	33	0	1.2%
4.9%	32	33	0	0.7%
6.2%	32	33	1	1.6%
7.4%	32	32	0	0.7%
8.6%	32	32	1	2.6%
9.9%	31	32	1	2.4%
11.1%	31	32	1	1.8%
12.3%	31	32	0	1.1%
13.6%	31	32	0	1.1%
14.8%	31	31	0	0.8%
16.0%	31	31	0	0.9%
17.3%	31	31	0	1.3%
18.5%	31	31	0	1.4%
19.8%	31	31	0	0.4%
21.0%	30	31	0	1.4%
22.2%	30	30	0	0.6%
23.5%	30	30	0	0.8%
24.7%	30	30	0	0.7%
25.9%	30	30	0	0.6%
27.2%	30	30	0	1.1%
28.4%	30	30	0	1.2%
29.6%	30	30	0	1.3%
30.9%	30	30	0	1.4%
32.1%	30	30	0	1.5%
33.3%	29	30	0	1.4%
34.6%	29	30	0	1.2%
35.8%	29	30	0	1.3%
37.0%	29	30	0	1.4%
38.3%	29	30	0	1.3%
39.5%	29	30	1	3.1%
40.7%	29	30	1	2.7%
42.0%	29	29	1	2.7%
43.2%	29	29	1	2.7%
44.4%	29	29	1	2.7%
45.7%	29	29	1	2.8%
46.9%	29	29	1	2.4%
48.1%	28	29	1	2.5%
49.4%	28	29	1	2.0%
50.6%	28	29	0	1.4%
51.9%	28	29	0	1.3%
53.1%	28	29	0	0.9%
54.3%	28	29	0	0.7%
55.6%	28	28	0	0.7%
56.8%	28	28	0	0.3%
58.0%	28	28	0	0.3%
59.3%	28	28	0	0.2%
60.5%	28	28	0	0.4%
61.7%	28	28	0	0.9%
63.0%	28	28	0	0.9%
64.2%	28	28	0	0.9%
65.4%	28	28	0	0.9%
66.7%	28	28	0	1.7%
67.9%	28	28	1	1.9%
69.1%	28	28	1	1.8%
70.4%	28	28	1	2.0%
71.6%	27	28	1	2.1%
72.8%	27	28	1	2.1%
74.1%	27	28	1	2.5%
75.3%	27	28	1	2.6%
76.5%	27	28	1	2.6%
77.8%	27	28	1	2.8%
79.0%	27	28	1	3.0%
80.2%	27	28	1	3.0%
81.5%	27	28	1	2.7%
82.7%	27	28	1	2.7%
84.0%	27	28	1	2.5%
85.2%	27	27	0	1.7%
86.4%	27	27	0	1.8%
87.7%	27	27	1	2.4%
88.9%	26	27	1	3.0%
90.1%	26	27	1	2.9%
91.4%	26	27	1	2.6%
92.6%	26	27	1	2.2%
93.8%	26	27	1	2.7%
95.1%	26	27	1	2.4%
96.3%	26	27	1	2.4%
97.5%	26	26	0	0.9%
98.8%	26	26	0	-0.3%
100.0%	26	26	0	1.3%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	43	43	0	0.2%
1.2%	43	42	-1	-1.2%
2.5%	42	42	0	-0.4%
3.7%	42	39	-3	-6.5%
4.9%	37	37	0	0.5%
6.2%	37	37	0	0.0%
7.4%	37	37	0	0.0%
8.6%	36	37	0	0.5%
9.9%	36	36	0	-1.0%
11.1%	35	35	0	0.0%
12.3%	35	35	0	0.8%
13.6%	35	35	0	0.3%
14.8%	35	35	0	0.5%
16.0%	35	35	0	0.0%
17.3%	35	35	0	-0.3%
18.5%	35	35	0	-0.3%
19.8%	35	35	0	-0.3%
21.0%	35	34	0	-0.8%
22.2%	35	34	-1	-1.9%
23.5%	34	34	0	-0.9%
24.7%	34	34	0	-1.2%
25.9%	34	33	0	-1.4%
27.2%	34	33	0	-1.3%
28.4%	34	33	0	-1.4%
29.6%	34	33	-1	-1.5%
30.9%	34	33	0	-1.3%
32.1%	34	33	-1	-1.8%
33.3%	33	33	0	-1.4%
34.6%	33	33	0	-1.4%
35.8%	33	33	0	-0.3%
37.0%	33	32	0	-0.4%
38.3%	32	32	0	-0.4%
39.5%	32	32	0	-1.0%
40.7%	32	32	0	-0.9%
42.0%	32	32	0	0.0%
43.2%	32	32	0	0.2%
44.4%	32	32	0	0.9%
45.7%	32	32	0	0.9%
46.9%	31	32	0	0.7%
48.1%	31	31	0	0.7%
49.4%	31	31	0	0.1%
50.6%	31	31	0	0.5%
51.9%	31	31	0	1.6%
53.1%	31	31	0	1.4%
54.3%	31	31	0	1.0%
55.6%	30	31	0	1.0%
56.8%	30	31	0	1.1%
58.0%	30	31	0	1.1%
59.3%	30	30	0	0.7%
60.5%	30	30	0	0.6%
61.7%	30	30	0	0.6%
63.0%	30	30	0	0.9%
64.2%	30	30	0	1.1%
65.4%	30	30	0	0.9%
66.7%	30	30	0	0.6%
67.9%	30	30	0	0.5%
69.1%	29	30	0	0.4%
70.4%	29	29	1	2.1%
71.6%	29	29	0	1.3%
72.8%	29	29	0	1.4%
74.1%	29	29	1	1.9%
75.3%	29	29	0	1.6%
76.5%	29	29	0	1.1%
77.8%	28	29	0	1.5%
79.0%	28	29	1	2.2%
80.2%	28	29	1	4.0%
81.5%	28	29	1	4.0%
82.7%	28	29	1	4.1%
84.0%	27	28	1	3.7%
85.2%	27	28	1	3.0%
86.4%	27	28	1	2.9%
87.7%	27	28	1	3.6%
88.9%	27	28	1	3.8%
90.1%	27	28	1	4.0%
91.4%	27	28	1	4.3%
92.6%	27	28	1	3.7%
93.8%	27	28	1	3.4%
95.1%	27	27	1	2.9%
96.3%	27	27	1	2.2%
97.5%	26	27	1	2.2%
98.8%	26	27	0	1.4%
100.0%	26	26	1	2.0%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	45	45	0	0.2%
1.2%	44	44	0	0.0%
2.5%	44	44	0	-0.2%
3.7%	44	44	0	-0.6%
4.9%	44	44	0	-0.2%
6.2%	44	44	0	-0.4%
7.4%	44	44	0	-0.4%
8.6%	44	44	0	-0.4%
9.9%	43	43	0	0.2%
11.1%	43	42	-1	-1.6%
12.3%	43	42	-1	-1.8%
13.6%	43	42	-1	-1.8%
14.8%	43	42	-1	-1.6%
16.0%	43	42	-1	-1.8%
17.3%	43	42	-1	-1.8%
18.5%	42	42	-1	-2.2%
19.8%	42	42	-1	-1.6%
21.0%	42	41	-1	-1.7%
22.2%	42	41	-1	-2.1%
23.5%	41	41	0	-0.6%
24.7%	41	40	-1	-2.8%
25.9%	40	37	-3	-6.4%
27.2%	40	37	-2	-5.8%
28.4%	38	37	-1	-2.8%
29.6%	38	37	-1	-2.4%
30.9%	37	37	-1	-2.2%
32.1%	37	36	-1	-2.4%
33.3%	37	35	-2	-4.7%
34.6%	37	35	-2	-4.5%
35.8%	37	35	-2	-5.5%
37.0%	37	34	-3	-8.0%
38.3%	37	33	-3	-8.4%
39.5%	36	33	-3	-8.9%
40.7%	36	33	-3	-9.0%
42.0%	36	33	-3	-9.2%
43.2%	35	33	-3	-8.1%
44.4%	35	33	-2	-7.0%
45.7%	35	33	-2	-6.3%
46.9%	34	32	-2	-5.2%
48.1%	34	32	-2	-5.4%
49.4%	34	32	-1	-4.1%
50.6%	33	32	-1	-4.3%
51.9%	33	32	-1	-2.2%
53.1%	32	32	-1	-2.1%
54.3%	32	32	-1	-2.2%
55.6%	32	32	0	-1.2%
56.8%	32	31	-1	-2.1%
58.0%	32	31	-1	-1.9%
59.3%	32	31	-1	-2.1%
60.5%	32	31	-1	-1.7%
61.7%	31	31	0	-1.4%
63.0%	31	31	-1	-2.0%
64.2%	31	31	0	-0.6%
65.4%	30	30	0	0.8%
66.7%	30	30	0	1.0%
67.9%	30	30	0	0.5%
69.1%	30	29	0	-0.3%
70.4%	29	29	0	-0.2%
71.6%	29	29	0	0.2%
72.8%	29	29	0	-0.1%
74.1%	29	29	0	-0.4%
75.3%	29	29	0	0.2%
76.5%	29	29	0	0.4%
77.8%	29	29	0	-0.2%
79.0%	29	29	0	0.2%
80.2%	29	29	0	0.3%
81.5%	28	29	0	1.1%
82.7%	28	29	1	2.1%
84.0%	28	29	1	1.9%
85.2%	28	28	1	2.2%
86.4%	28	28	1	2.3%
87.7%	28	28	1	2.1%
88.9%	28	28	1	2.1%
90.1%	28	28	1	1.9%
91.4%	28	28	0	1.1%
92.6%	28	28	0	1.1%
93.8%	28	28	0	1.0%
95.1%	27	28	0	1.8%
96.3%	27	28	0	1.8%
97.5%	27	28	1	2.3%
98.8%	27	28	1	3.1%
100.0%	27	28	1	2.8%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	-0.2%
1.2%	46	46	0	0.0%
2.5%	46	46	0	0.0%
3.7%	46	45	0	-0.2%
4.9%	45	45	0	-0.2%
6.2%	45	45	0	-0.3%
7.4%	45	45	0	-0.2%
8.6%	45	45	0	-0.2%
9.9%	44	44	0	-0.2%
11.1%	44	44	0	-0.5%
12.3%	44	44	0	-0.4%
13.6%	44	44	0	0.0%
14.8%	44	44	0	-0.2%
16.0%	44	44	0	0.0%
17.3%	44	44	0	-0.4%
18.5%	44	44	0	-0.4%
19.8%	44	44	0	0.0%
21.0%	44	43	0	-0.6%
22.2%	44	43	0	-0.4%
23.5%	43	43	0	-0.4%
24.7%	43	43	0	-0.4%
25.9%	43	43	0	-0.2%
27.2%	43	43	0	-0.6%
28.4%	43	43	0	-0.4%
29.6%	43	42	-1	-1.4%
30.9%	43	42	-1	-1.4%
32.1%	43	42	-1	-2.0%
33.3%	42	42	0	-0.6%
34.6%	42	41	-1	-1.7%
35.8%	42	41	-1	-1.7%
37.0%	41	41	-1	-1.3%
38.3%	41	40	-1	-2.6%
39.5%	41	39	-2	-4.9%
40.7%	41	39	-2	-5.5%
42.0%	41	38	-3	-6.9%
43.2%	41	38	-3	-6.7%
44.4%	41	38	-3	-7.3%
45.7%	39	37	-1	-3.2%
46.9%	38	35	-3	-7.3%
48.1%	38	34	-4	-9.7%
49.4%	37	33	-3	-9.1%
50.6%	37	33	-3	-9.3%
51.9%	36	33	-3	-9.4%
53.1%	36	33	-3	-8.4%
54.3%	36	33	-3	-8.5%
55.6%	35	32	-3	-9.2%
56.8%	35	32	-3	-9.1%
58.0%	35	32	-3	-8.8%
59.3%	35	32	-3	-8.7%
60.5%	35	32	-3	-8.4%
61.7%	34	32	-3	-7.4%
63.0%	34	31	-2	-7.3%
64.2%	34	31	-2	-7.0%
65.4%	34	31	-2	-6.6%
66.7%	33	31	-2	-5.9%
67.9%	33	31	-2	-5.3%
69.1%	33	31	-2	-5.5%
70.4%	33	31	-2	-5.1%
71.6%	33	31	-2	-4.8%
72.8%	33	31	-1	-4.2%
74.1%	33	31	-1	-4.4%
75.3%	32	31	-1	-4.2%
76.5%	32	31	-2	-4.6%
77.8%	32	31	-1	-3.2%
79.0%	32	31	-1	-3.0%
80.2%	31	31	-1	-2.1%
81.5%	31	31	0	-1.4%
82.7%	31	30	0	-1.5%
84.0%	31	30	0	-1.5%
85.2%	31	30	0	-1.1%
86.4%	31	30	0	-1.6%
87.7%	30	30	0	-1.6%
88.9%	29	29	0	0.1%
90.1%	29	29	0	0.0%
91.4%	29	29	0	0.4%
92.6%	29	29	0	0.0%
93.8%	29	29	0	0.0%
95.1%	29	29	0	0.0%
96.3%	29	29	0	0.8%
97.5%	29	29	0	-0.2%
98.8%	28	28	0	0.2%
100.0%	27	27	0	0.2%

Table SW-56-b

Sacramento River at Wilkins Slough, Monthly Stage

Probability of Exceedance

February

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	-0.2%
1.2%	46	46	0	0.0%
2.5%	46	46	0	-0.1%
3.7%	46	46	0	0.0%
4.9%	46	45	0	-0.3%
6.2%	45	45	0	0.0%
7.4%	45	45	0	0.0%
8.6%	45	45	0	0.0%
9.9%	45	45	0	0.0%
11.1%	45	45	0	-0.2%
12.3%	45	45	0	0.0%
13.6%	45	45	0	0.0%
14.8%	45	44	0	-0.3%
16.0%	44	44	0	-0.6%
17.3%	44	44	0	-0.2%
18.5%	44	44	0	-0.2%
19.8%	44	44	0	-0.2%
21.0%	44	44	0	-0.2%
22.2%	44	44	0	-0.2%
23.5%	44	44	0	-0.4%
24.7%	44	44	0	-0.4%
25.9%	44	43	0	-0.4%
27.2%	43	43	0	-0.2%
28.4%	43	43	0	-0.2%
29.6%	43	43	0	-0.2%
30.9%	43	43	0	-0.2%
32.1%	43	43	0	-0.4%
33.3%	43	43	0	-0.4%
34.6%	43	43	0	-0.4%
35.8%	43	43	0	-0.6%
37.0%	43	42	-1	-1.8%
38.3%	42	42	-1	-1.6%
39.5%	42	42	-1	-2.1%
40.7%	42	41	-1	-2.0%
42.0%	42	41	-1	-1.9%
43.2%	42	41	-1	-1.7%
44.4%	42	41	0	-1.0%
45.7%	42	41	-1	-1.7%
46.9%	42	41	-1	-2.1%
48.1%	41	40	-1	-2.4%
49.4%	41	40	-1	-3.0%
50.6%	41	40	-1	-2.2%
51.9%	40	40	0	-0.2%
53.1%	40	38	-2	-4.8%
54.3%	39	36	-3	-7.5%
55.6%	39	36	-3	-7.1%
56.8%	39	36	-3	-6.8%
58.0%	38	36	-2	-6.2%
59.3%	37	35	-2	-6.2%
60.5%	37	35	-2	-5.8%
61.7%	37	35	-2	-6.1%
63.0%	37	34	-2	-6.7%
64.2%	37	34	-3	-8.0%
65.4%	36	34	-2	-6.7%
66.7%	36	33	-3	-7.5%
67.9%	36	33	-3	-7.9%
69.1%	35	33	-3	-7.3%
70.4%	35	33	-3	-7.3%
71.6%	35	32	-2	-6.3%
72.8%	34	32	-2	-5.4%
74.1%	34	32	-2	-6.0%
75.3%	34	32	-2	-5.4%
76.5%	33	31	-2	-5.4%
77.8%	33	31	-1	-3.7%
79.0%	32	31	-1	-3.2%
80.2%	32	31	-1	-3.8%
81.5%	32	30	-1	-4.0%
82.7%	32	30	-2	-4.8%
84.0%	31	29	-2	-5.4%
85.2%	31	29	-1	-4.3%
86.4%	31	29	-1	-4.4%
87.7%	30	29	-1	-4.1%
88.9%	30	29	-1	-3.1%
90.1%	30	29	-1	-3.7%
91.4%	30	29	-1	-3.7%
92.6%	30	29	-1	-4.1%
93.8%	29	29	-1	-2.6%
95.1%	29	29	0	-1.7%
96.3%	28	29	0	0.9%
97.5%	28	28	0	1.8%
98.8%	28	28	0	1.2%
100.0%	27	28	1	2.6%

March

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	46	46	0	0.0%
1.2%	46	46	0	0.0%
2.5%	45	45	0	-0.5%
3.7%	45	45	0	0.0%
4.9%	44	44	0	-0.2%
6.2%	44	44	0	-0.6%
7.4%	44	44	0	-0.4%
8.6%	44	44	0	-0.6%
9.9%	44	44	0	-0.4%
11.1%	44	44	0	0.0%
12.3%	44	43	0	-0.4%
13.6%	43	43	0	0.0%
14.8%	43	43	0	-0.2%
16.0%	43	43	0	-0.6%
17.3%	43	43	0	-0.2%
18.5%	43	43	0	-0.6%
19.8%	43	43	0	-0.6%
21.0%	43	43	0	-0.2%
22.2%	43	43	0	0.0%
23.5%	42	42	0	-0.6%
24.7%	42	42	-1	-1.6%
25.9%	42	42	-1	-1.6%
27.2%	42	41	-1	-2.3%
28.4%	42	41	-1	-2.3%
29.6%	41	41	-1	-1.3%
30.9%	41	41	0	-1.1%
32.1%	41	39	-2	-4.5%
33.3%	41	39	-2	-5.6%
34.6%	41	38	-2	-6.0%
35.8%	41	38	-3	-6.7%
37.0%	41	38	-3	-6.7%
38.3%	41	38	-3	-6.7%
39.5%	41	38	-3	-6.7%
40.7%	40	38	-2	-5.7%
42.0%	39	38	-2	-4.3%
43.2%	39	37	-2	-4.5%
44.4%	39	37	-2	-4.4%
45.7%	39	37	-2	-4.6%
46.9%	38	37	-2	-4.0%
48.1%	38	36	-2	-4.7%
49.4%	38	36	-2	-5.3%
50.6%	38	35	-3	-7.2%
51.9%	38	35	-3	-8.3%
53.1%	38	34	-3	-8.9%
54.3%	37	34	-3	-7.3%
55.6%	36	34	-3	-7.3%
56.8%	36	34	-2	-6.6%
58.0%	35	33	-2	-5.5%
59.3%	35	33	-2	-5.5%
60.5%	35	33	-2	-4.7%
61.7%	35	33	-2	-4.9%
63.0%	34	33	-1	-4.4%
64.2%	34	33	-2	-4.4%
65.4%	34	32	-1	-4.4%
66.7%	34	32	-1	-4.0%
67.9%	33	32	-1	-3.2%
69.1%	33	32	-1	-3.7%
70.4%	33	32	-1	-3.6%
71.6%	33	32	-1	-2.9%
72.8%	33	31	-1	-3.9%
74.1%	33	31	-1	-3.8%
75.3%	33	31	-1	-3.5%
76.5%	33	31	-1	-3.6%
77.8%	32	31	-1	-2.6%
79.0%	32	31	-1	-2.2%
80.2%	32	31	-1	-3.0%
81.5%	32	31	-1	-3.2%
82.7%	32	31	-1	-3.5%
84.0%	32	31	-1	-3.3%
85.2%	32	30	-1	-3.8%
86.4%	32	30	-1	-4.3%
87.7%	31	30	-1	-4.2%
88.9%	31	30	-1	-2.6%
90.1%	30	30	0	-1.2%
91.4%	30	30	0	-0.8%
92.6%	30	29	0	-1.4%
93.8%	29	29	0	0.3%
95.1%	29	29	0	1.3%
96.3%	29	29	0	0.7%
97.5%	29	29	0	0.7%
98.8%	29	29	0	0.8%
100.0%	28	28	0	-1.5%

April

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	44	44	0	-0.2%
1.2%	43	43	0	0.0%
2.5%	43	43	0	0.0%
3.7%	43	43	0	-0.2%
4.9%	42	42	0	0.0%
6.2%	42	42	0	-0.2%
7.4%	41	41	0	0.0%
8.6%	41	41	0	-0.4%
9.9%	40	40	-1	-1.7%
11.1%	40	38	-1	-3.6%
12.3%	39	38	-1	-2.5%
13.6%	39	36	-2	-5.6%
14.8%	38	36	-2	-5.7%
16.0%	38	35	-3	-7.4%
17.3%	38	35	-3	-8.0%
18.5%	37	35	-2	-5.8%
19.8%	36	35	-2	-5.2%
21.0%	35	34	-1	-3.3%
22.2%	35	34	-1	-3.1%
23.5%	35	33	-1	-3.4%
24.7%	34	32	-1	-3.5%
25.9%	33	32	-1	-2.1%
27.2%	33	32	-1	-1.7%
28.4%	32	32	0	-1.0%
29.6%	32	31	0	-0.5%
30.9%	31	31	0	-0.3%
32.1%	31	31	0	0.7%
33.3%	31	31	0	1.0%
34.6%	30	31	1	2.0%
35.8%	30	31	1	1.8%
37.0%	30	31	0	1.5%
38.3%	30	30	0	1.5%
39.5%	30	30	1	1.7%
40.7%	29	30	0	0.8%
42.0%	29	30	1	2.3%
43.2%	29	29	0	0.7%
44.4%	29	29	0	0.8%
45.7%	29	29	0	0.1%
46.9%	29	29	0	-0.5%
48.1%	29	28	0	-0.7%
49.4%	29	28	0	-0.3%
50.6%	28	28	0	-0.7%
51.9%	28	28	0	-1.4%
53.1%	28	28	0	-1.3%
54.3%	28	28	0	-1.1%
55.6%	28	28	0	-0.6%
56.8%	28	28	0	-0.1%
58.0%	28	28	0	0.4%
59.3%	28	28	0	0.7%
60.5%	28	28	0	1.3%
61.7%	28	28	0	1.7%
63.0%	28	28	0	1.6%
64.2%	27	28	0	1.5%
65.4%	27	28	0	1.5%
66.7%	27	28	0	1.5%
67.9%	27	28	0	1.2%
69.1%	27	27	0	0.3%
70.4%	27	27	0	0.4%
71.6%	27	27	0	0.4%
72.8%	27	27	0	-0.1%
74.1%	27	27	0	-0.1%
75.3%	27	27	0	0.2%
76.5%	27	27	0	0.2%
77.8%	27	27	0	-0.2%
79.0%	27	27	0	-0.8%
80.2%	27	27	0	-0.7%
81.5%	27	27	0	-0.5%
82.7%	27	27	0	-0.6%
84.0%	27	27	0	-0.2%
85.2%	26	26	0	0.3%
86.4%	26	26	0	0.5%
87.7%	26	26	0	0.4%
88.9%	26	26	0	0.1%
90.1%	26	26	0	-0.4%
91.4%	26	26	0	-0.7%
92.6%	26	26	0	-0.7%
93.8%	26	26	0	-0.6%
95.1%	26	26	0	-0.5%
96.3%	26	26	0	-0.5%
97.5%	26	26	0	-0.5%
98.8%	26	26	0	-0.2%
100.0%	26	26	0	-0.3%

May

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	40	40	0	-0.9%
1.2%	40	38	-2	-4.6%
2.5%	37	37	0	0.2%
3.7%	35	34	-1	-3.3%
4.9%	34	34	0	-0.6%
6.2%	33	33	0	-1.3%
7.4%	33	33	0	-0.1%
8.6%	33	33	0	0.4%
9.9%	32	31	-1	-3.3%
11.1%	31	31	0	-0.1%
12.3%	31	31	0	-0.8%
13.6%	31	31	0	0.0%
14.8%	31	31	0	0.6%
16.0%	30	31	1	1.8%
17.3%	30	30	0	0.1%
18.5%	30	30	0	0.0%
19.8%	30	30	0	0.5%
21.0%	30	30	0	0.3%
22.2%	30	30	0	0.6%
23.5%	30	30	0	0.3%
24.7%	29	30	0	0.7%
25.9%	29	30	0	0.6%
27.2%	29	30	1	2.0%
28.4%	29	30	1	1.8%
29.6%	29	29	0	1.7%
30.9%	29	29	0	1.2%
32.1%	29	29	0	1.2%
33.3%	29	29	0	1.3%
34.6%	29	29	0	1.2%
35.8%	29	29	0	1.3%
37.0%	29	29	0	1.6%
38.3%	29	29	0	1.6%
39.5%	29	29	0	1.5%
40.7%	29	28	0	-0.9%
42.0%	29	28	0	-0.8%
43.2%	28	28	0	-1.5%
44.4%	28	28	0	-1.2%
45.7%	28	28	0	-1.2%
46.9%	28	28	0	-0.5%
48.1%	28	28	0	-0.2%
49.4%	28	28	0	-0.1%
50.6%	28	28	0	-0.6%
51.9%	28	28	0	-0.7%
53.1%	28	28	0	-0.9%
54.3%	28	28	0	-0.8%
55.6%	28	28	0	-0.9%
56.8%	28	28	0	-1.0%
58.0%	28	28	0	-0.8%
59.3%	28	27	0	-1.0%
60.5%	28	27	0	-1.6%
61.7%	28	27	0	-1.2%
63.0%	27	27	0	-1.3%
64.2%	27	27	0	-1.4%
65.4%	27	27	0	-1.1%
66.7%	27	27	0	-1.2%
67.9%	27	27	0	-1.2%
69.1%	27	27	0	-1.3%
70.4%	27	27	0	-1.1%
71.6%	27	27	0	-0.8%
72.8%	27	27	0	-0.6%
74.1%	27	27	0	-0.7%
75.3%	27	27	0	-0.6%
76.5%	27	27	0	-0.4%
77.8%	27	27	0	-0.3%
79.0%	27	27	0	-0.3%
80.2%	27	27	0	0.7%
81.5%	27	27	0	0.1%
82.7%	27	27	0	0.0%
84.0%	27	26	0	-0.3%
85.2%	26	26	0	-0.6%
86.4%	26	26	0	-0.5%
87.7%	26	26	0	-0.3%
88.9%	26	26	0	-0.4%
90.1%	26	26	0	-0.5%
91.4%	26	26	0	-0.6%
92.6%	26	26	0	-0.4%
93.8%	26	26	0	-0.3%
95.1%	26	26	0	0.1%
96.3%	26	26	0	-0.1%
97.5%	26	26	0	-0.2%
98.8%	26	26	0	-0.2%
100.0%	26	26	0	-0.3%

Table SW-56-b
Sacramento River at Wilkins Slough, Monthly Stage
Probability of Exceedance

June				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	38	38	0	0.0%
1.2%	33	34	1	3.9%
2.5%	33	34	1	4.3%
3.7%	33	34	1	4.3%
4.9%	33	34	2	4.7%
6.2%	32	34	1	4.3%
7.4%	32	33	1	2.8%
8.6%	32	33	1	3.1%
9.9%	32	33	1	3.6%
11.1%	32	33	1	4.0%
12.3%	32	33	1	3.5%
13.6%	32	32	1	2.6%
14.8%	31	32	1	3.0%
16.0%	31	32	1	2.8%
17.3%	31	32	1	2.8%
18.5%	31	32	1	2.7%
19.8%	31	32	1	2.8%
21.0%	31	32	1	2.9%
22.2%	31	32	1	3.0%
23.5%	31	32	1	3.1%
24.7%	31	32	1	2.0%
25.9%	31	31	1	2.0%
27.2%	31	31	1	2.2%
28.4%	31	31	1	2.2%
29.6%	31	31	1	2.7%
30.9%	31	31	1	2.7%
32.1%	30	31	1	2.7%
33.3%	30	31	1	2.9%
34.6%	30	31	1	3.0%
35.8%	30	31	1	2.8%
37.0%	30	31	1	2.9%
38.3%	30	31	1	3.0%
39.5%	30	31	1	3.0%
40.7%	30	31	1	2.6%
42.0%	30	31	1	2.6%
43.2%	30	31	1	2.7%
44.4%	30	31	1	2.8%
45.7%	30	31	1	2.8%
46.9%	30	30	1	2.7%
48.1%	30	30	1	3.0%
49.4%	29	30	1	3.2%
50.6%	29	30	1	3.7%
51.9%	29	30	1	4.2%
53.1%	29	30	1	4.2%
54.3%	29	30	1	3.1%
55.6%	29	30	1	3.3%
56.8%	29	30	1	3.0%
58.0%	29	30	1	3.1%
59.3%	29	30	1	3.3%
60.5%	29	30	1	3.3%
61.7%	29	30	1	3.6%
63.0%	29	30	1	3.4%
64.2%	29	30	1	3.4%
65.4%	29	29	1	3.0%
66.7%	29	29	1	2.8%
67.9%	29	29	1	2.9%
69.1%	29	29	1	2.8%
70.4%	29	29	1	2.3%
71.6%	28	29	1	2.2%
72.8%	28	29	1	2.0%
74.1%	28	29	1	2.0%
75.3%	28	29	0	1.4%
76.5%	28	29	0	1.4%
77.8%	28	29	0	0.8%
79.0%	28	28	0	0.5%
80.2%	28	28	0	0.5%
81.5%	28	28	0	0.3%
82.7%	28	28	0	0.5%
84.0%	28	28	0	0.3%
85.2%	28	28	0	1.6%
86.4%	28	28	1	2.0%
87.7%	27	28	1	2.2%
88.9%	27	28	1	2.3%
90.1%	27	28	1	3.6%
91.4%	27	28	1	3.8%
92.6%	27	28	1	4.1%
93.8%	27	28	1	4.3%
95.1%	27	28	1	3.0%
96.3%	27	27	1	2.5%
97.5%	26	27	1	2.9%
98.8%	26	27	1	3.1%
100.0%	26	27	1	2.8%

July				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	33	38	5	14.9%
1.2%	33	38	5	15.0%
2.5%	33	38	5	15.3%
3.7%	33	38	6	17.2%
4.9%	32	38	6	17.3%
6.2%	32	38	6	17.5%
7.4%	32	38	6	17.6%
8.6%	32	38	6	18.0%
9.9%	32	35	3	8.3%
11.1%	32	35	3	8.2%
12.3%	32	35	3	8.7%
13.6%	32	35	3	8.4%
14.8%	32	35	2	7.8%
16.0%	32	34	2	7.6%
17.3%	32	34	2	7.7%
18.5%	32	34	2	6.8%
19.8%	32	34	2	6.5%
21.0%	32	34	2	6.3%
22.2%	32	34	2	5.7%
23.5%	32	34	2	5.4%
24.7%	32	34	2	5.4%
25.9%	32	34	2	5.5%
27.2%	32	34	2	5.5%
28.4%	32	34	2	5.6%
29.6%	32	34	2	5.4%
30.9%	32	33	2	5.1%
32.1%	32	33	2	4.9%
33.3%	32	33	2	4.9%
34.6%	32	33	2	5.0%
35.8%	32	33	2	4.9%
37.0%	32	33	1	4.7%
38.3%	32	33	1	4.5%
39.5%	32	33	1	4.4%
40.7%	32	33	1	4.3%
42.0%	32	33	1	4.0%
43.2%	32	33	1	4.1%
44.4%	32	33	1	3.0%
45.7%	32	33	1	2.8%
46.9%	32	32	1	2.7%
48.1%	32	32	1	2.9%
49.4%	32	32	1	2.9%
50.6%	32	32	1	2.9%
51.9%	32	32	1	2.8%
53.1%	32	32	1	2.7%
54.3%	32	32	1	2.3%
55.6%	32	32	1	2.3%
56.8%	31	32	1	2.3%
58.0%	31	32	1	2.1%
59.3%	31	32	1	2.3%
60.5%	31	32	1	2.4%
61.7%	31	32	1	2.5%
63.0%	31	32	1	2.3%
64.2%	31	32	1	2.1%
65.4%	31	32	1	2.6%
66.7%	31	32	1	2.5%
67.9%	31	32	1	2.5%
69.1%	31	31	1	2.0%
70.4%	30	31	1	2.2%
71.6%	30	31	1	2.1%
72.8%	30	31	1	2.0%
74.1%	30	31	1	2.0%
75.3%	30	31	1	1.8%
76.5%	30	31	1	1.7%
77.8%	30	30	0	1.4%
79.0%	30	30	1	1.8%
80.2%	30	30	1	1.8%
81.5%	30	30	1	2.0%
82.7%	30	30	1	2.5%
84.0%	29	30	1	3.2%
85.2%	29	30	1	3.4%
86.4%	29	30	1	3.1%
87.7%	29	30	1	3.1%
88.9%	29	30	1	3.3%
90.1%	29	30	1	4.0%
91.4%	29	30	1	4.0%
92.6%	28	29	1	1.9%
93.8%	28	29	1	2.7%
95.1%	28	29	1	2.6%
96.3%	27	28	2	6.0%
97.5%	26	28	3	10.1%
98.8%	26	28	2	9.5%
100.0%	26	28	2	9.7%

August				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	32	33	1	2.9%
1.2%	32	32	0	-1.5%
2.5%	32	32	0	-0.6%
3.7%	31	32	0	0.3%
4.9%	31	31	0	1.2%
6.2%	31	31	0	1.3%
7.4%	31	31	0	0.3%
8.6%	31	31	0	0.5%
9.9%	30	31	0	1.1%
11.1%	30	31	0	1.4%
12.3%	30	30	0	1.2%
13.6%	30	30	0	1.3%
14.8%	30	30	0	1.5%
16.0%	30	30	0	1.1%
17.3%	30	30	0	0.6%
18.5%	30	30	0	0.6%
19.8%	30	30	0	0.7%
21.0%	30	30	0	1.0%
22.2%	30	30	0	1.4%
23.5%	29	30	0	1.7%
24.7%	29	30	0	1.6%
25.9%	29	30	0	1.5%
27.2%	29	30	0	1.6%
28.4%	29	30	0	1.5%
29.6%	29	30	1	1.8%
30.9%	29	30	0	1.7%
32.1%	29	30	1	2.2%
33.3%	29	30	1	2.1%
34.6%	29	29	1	2.3%
35.8%	29	29	1	2.3%
37.0%	29	29	1	2.4%
38.3%	29	29	1	2.4%
39.5%	28	29	1	3.0%
40.7%	28	29	1	2.9%
42.0%	28	29	1	3.2%
43.2%	28	29	1	3.3%
44.4%	28	29	1	3.2%
45.7%	28	29	1	3.0%
46.9%	28	29	1	2.7%
48.1%	28	29	1	3.0%
49.4%	28	29	1	3.5%
50.6%	28	29	1	3.4%
51.9%	28	29	1	3.8%
53.1%	28	29	1	3.7%
54.3%	28	29	1	4.0%
55.6%	27	29	1	3.8%
56.8%	27	28	1	3.7%
58.0%	27	28	1	3.6%
59.3%	27	28	1	4.3%
60.5%	27	28	1	4.5%
61.7%	27	28	1	4.5%
63.0%	27	28	1	4.3%
64.2%	27	28	1	4.3%
65.4%	27	28	1	4.4%
66.7%	27	28	1	4.4%
67.9%	27	28	1	4.5%
69.1%	27	28	1	4.9%
70.4%	27	28	1	4.9%
71.6%	27	28	1	4.9%
72.8%	27	28	1	5.0%
74.1%	27	28	1	5.0%
75.3%	27	28	1	4.9%
76.5%	27	28	1	4.9%
77.8%	27	28	1	4.9%
79.0%	27	28	1	4.7%
80.2%	27	28	1	4.7%
81.5%	27	28	1	4.7%
82.7%	27	28	1	4.7%
84.0%	27	28	1	4.8%
85.2%	27	28	1	4.8%
86.4%	27	28	1	4.8%
87.7%	27	28	1	4.8%
88.9%	27	28	1	4.8%
90.1%	27	28	1	4.8%
91.4%	27	28	1	5.5%
92.6%	26	28	1	5.5%
93.8%	26	28	2	6.5%
95.1%	26	28	2	6.1%
96.3%	26	28	2	6.3%
97.5%	26	28	2	6.6%
98.8%	26	27	1	4.7%
100.0%	26	26	1	2.6%

September				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	38	40	1	3.4%
1.2%	38	40	1	3.9%
2.5%	38	38	0	0.3%
3.7%	38	38	0	0.0%
4.9%	38	38	0	0.0%
6.2%	38	38	0	0.0%
7.4%	38	38	0	0.0%
8.6%	38	38	0	0.0%
9.9%	38	38	0	0.0%
11.1%	38	38	0	0.0%
12.3%	38	38	0	0.5%
13.6%	38	38	0	0.7%
14.8%	38	38	0	1.0%
16.0%	38	38	1	1.4%
17.3%	37	38	1	1.7%
18.5%	37	38	1	1.7%
19.8%	37	38	1	2.4%
21.0%	37	38	1	3.7%
22.2%	36	38	2	4.2%
23.5%	36	38	2	4.2%
24.7%	36	37	1	3.5%
25.9%	36	36	0	-0.8%
27.2%	36	36	0	-0.8%
28.4%	36	36	0	-0.3%
29.6%	36	36	0	0.2%
30.9%	35	36	0	0.8%
32.1%	35	34	0	-1.4%
33.3%	35	34	-1	-2.0%
34.6%	34	33	-1	-3.9%
35.8%	34	33	-1	-4.1%
37.0%	33	33	-1	-2.3%
38.3%	32	32	0	-1.1%
39.5%	32	32	0	-0.7%
40.7%	31	31	0	0.2%
42.0%	31	31	0	0.2%
43.2%	30	31	1	2.9%
44.4%	30	31	1	2.9%
45.7%	30	31	1	3.1%
46.9%	30	31	1	3.2%
48.1%	29	31	1	4.9%
49.4%	29	31	2	5.9%
50.6%	29	31	2	6.0%
51.9%	29	30	2	6.3%
53.1%	29	30	2	6.2%
54.3%	28	30	2	7.1%
55.6%	28	30	2	6.5%
56.8%	28	30	2	7.7%
58.0%	28	30	2	7.6%
59.3%	28	30	2	7.9%
60.5%	28	30	2	7.6%
61.7%	28	30	2	8.0%
63.0%	27	30	2	8.6%
64.2%	27	30	2	8.6%
65.4%	27	29	2	8.4%
66.7%	27	29	2	8.5%
67.9%	27	29	2	8.7%
69.1%	27	29	2	8.7%
70.4%	27	29	2	8.7%
71.6%	27	29	2	8.7%
72.8%	27	29	2	9.0%
74.1%	27	29	2	9.0%
75.3%	27	29	2	9.0%
76.5%	27	29	2	9.0%
77.8%	27	29	2	9.2%
79.0%	27	29	2	8.6%
80.2%	27	29	2	8.6%
81.5%	27	29	2	8.5%
82.7%	27	29	2	8.6%
84.0%	27	29	2	8.3%
85.2%	26	29	2	8.6%
86.4%	26	29	2	8.5%
87.7%	26	29	2	9.0%
88.9%	26	29	2	9.5%
90.1%	26	28	2	9.4%
91.4%	26	28	2	7.9%
92.6%	26	28	2	8.2%
93.8%	26	28	2	8.3%
95.1%	26	28	2	8.3%
96.3%	26	28	2	8.5%
97.5%	26	28	2	8.6%
98.8%	26	27	1	5.5%
100.0%	26	26	1	3.2%

Figure SW-57-b
Feather River near Gridley, Monthly Stage
Probability of Exceedance

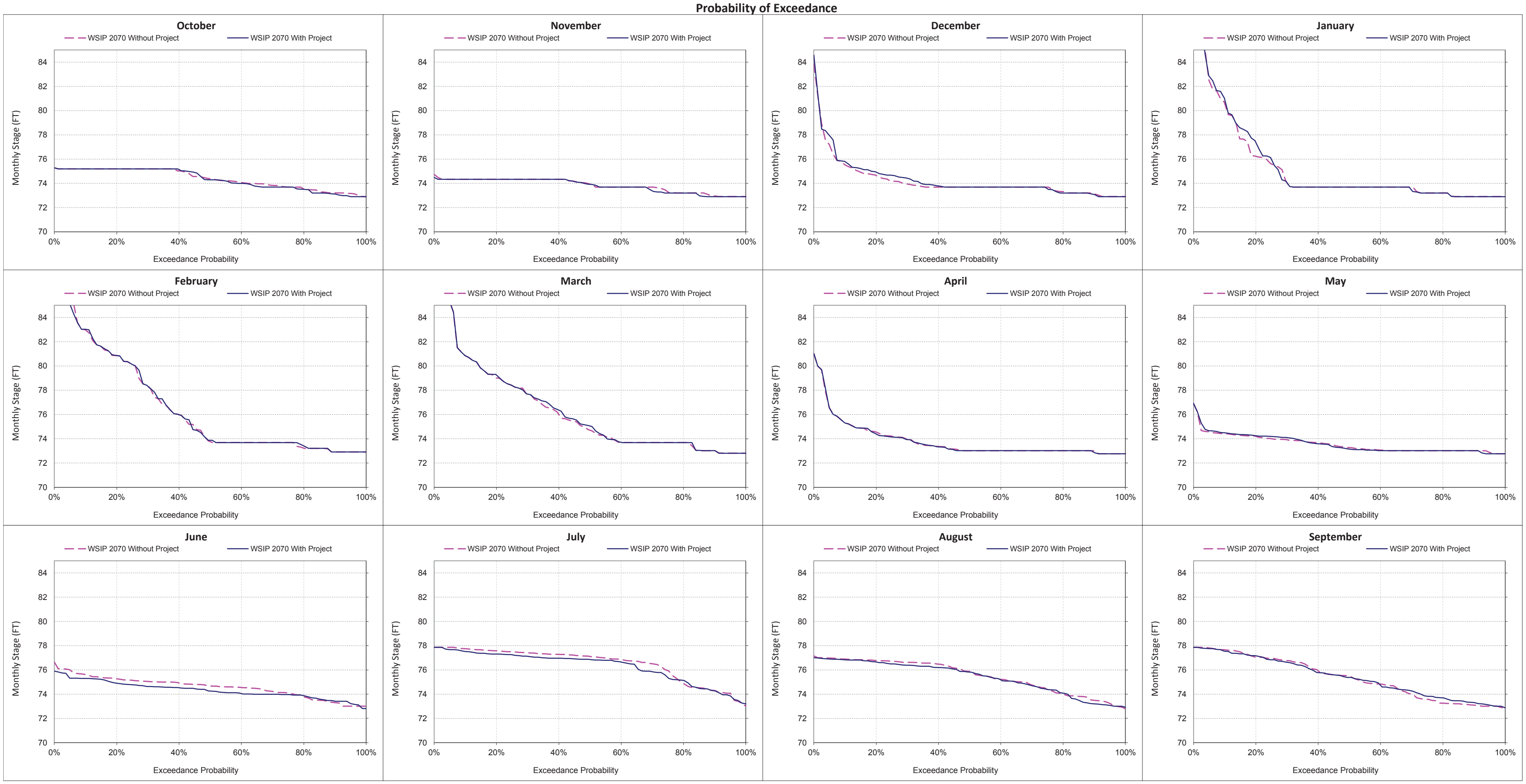


Table SW-57-b

Feather River near Gridley, Monthly Stage

Probability of Exceedance

October

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	75	75	0	0.0%
1.2%	75	75	0	0.0%
2.5%	75	75	0	0.0%
3.7%	75	75	0	0.0%
4.9%	75	75	0	0.0%
6.2%	75	75	0	0.0%
7.4%	75	75	0	0.0%
8.6%	75	75	0	0.0%
9.9%	75	75	0	0.0%
11.1%	75	75	0	0.0%
12.3%	75	75	0	0.0%
13.6%	75	75	0	0.0%
14.8%	75	75	0	0.0%
16.0%	75	75	0	0.0%
17.3%	75	75	0	0.0%
18.5%	75	75	0	0.0%
19.8%	75	75	0	0.0%
21.0%	75	75	0	0.0%
22.2%	75	75	0	0.0%
23.5%	75	75	0	0.0%
24.7%	75	75	0	0.0%
25.9%	75	75	0	0.0%
27.2%	75	75	0	0.0%
28.4%	75	75	0	0.0%
29.6%	75	75	0	0.0%
30.9%	75	75	0	0.0%
32.1%	75	75	0	0.0%
33.3%	75	75	0	0.0%
34.6%	75	75	0	0.0%
35.8%	75	75	0	0.0%
37.0%	75	75	0	0.0%
38.3%	75	75	0	0.0%
39.5%	75	75	0	0.2%
40.7%	75	75	0	0.0%
42.0%	75	75	0	0.1%
43.2%	75	75	0	0.3%
44.4%	75	75	0	0.5%
45.7%	75	75	0	0.4%
46.9%	75	75	0	0.1%
48.1%	74	74	0	-0.2%
49.4%	74	74	0	-0.1%
50.6%	74	74	0	-0.1%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	-0.1%
56.8%	74	74	0	-0.2%
58.0%	74	74	0	-0.2%
59.3%	74	74	0	-0.1%
60.5%	74	74	0	-0.1%
61.7%	74	74	0	0.0%
63.0%	74	74	0	-0.1%
64.2%	74	74	0	-0.3%
65.4%	74	74	0	-0.3%
66.7%	74	74	0	-0.4%
67.9%	74	74	0	-0.3%
69.1%	74	74	0	-0.2%
70.4%	74	74	0	-0.2%
71.6%	74	74	0	-0.2%
72.8%	74	74	0	-0.1%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	74	74	0	0.0%
77.8%	74	74	0	-0.2%
79.0%	74	74	0	-0.2%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	-0.4%
84.0%	73	73	0	-0.3%
85.2%	73	73	0	-0.1%
86.4%	73	73	0	-0.1%
87.7%	73	73	0	-0.1%
88.9%	73	73	0	-0.1%
90.1%	73	73	0	-0.1%
91.4%	73	73	0	-0.2%
92.6%	73	73	0	-0.3%
93.8%	73	73	0	-0.2%
95.1%	73	73	0	-0.3%
96.3%	73	73	0	-0.3%
97.5%	73	73	0	-0.1%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

November

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	75	74	0	-0.3%
1.2%	74	74	0	-0.2%
2.5%	74	74	0	0.0%
3.7%	74	74	0	0.0%
4.9%	74	74	0	0.0%
6.2%	74	74	0	0.0%
7.4%	74	74	0	0.0%
8.6%	74	74	0	0.0%
9.9%	74	74	0	0.0%
11.1%	74	74	0	0.0%
12.3%	74	74	0	0.0%
13.6%	74	74	0	0.0%
14.8%	74	74	0	0.0%
16.0%	74	74	0	0.0%
17.3%	74	74	0	0.0%
18.5%	74	74	0	0.0%
19.8%	74	74	0	0.0%
21.0%	74	74	0	0.0%
22.2%	74	74	0	0.0%
23.5%	74	74	0	0.0%
24.7%	74	74	0	0.0%
25.9%	74	74	0	0.0%
27.2%	74	74	0	0.0%
28.4%	74	74	0	0.0%
29.6%	74	74	0	0.0%
30.9%	74	74	0	0.0%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.0%
34.6%	74	74	0	0.0%
35.8%	74	74	0	0.0%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	-0.1%
46.9%	74	74	0	0.0%
48.1%	74	74	0	-0.1%
49.4%	74	74	0	-0.1%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.2%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	-0.2%
70.4%	74	73	0	-0.5%
71.6%	74	73	0	-0.5%
72.8%	74	73	0	-0.4%
74.1%	73	73	0	-0.4%
75.3%	73	73	0	-0.1%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	-0.3%
86.4%	73	73	0	-0.4%
87.7%	73	73	0	-0.3%
88.9%	73	73	0	-0.1%
90.1%	73	73	0	-0.1%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

December

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	84	85	1	0.9%
1.2%	81	81	0	0.1%
2.5%	79	78	0	-0.6%
3.7%	78	78	1	1.0%
4.9%	77	78	1	1.0%
6.2%	76	78	1	1.5%
7.4%	76	76	0	0.0%
8.6%	76	76	0	0.0%
9.9%	76	76	0	0.4%
11.1%	75	76	0	0.3%
12.3%	75	75	0	0.1%
13.6%	75	75	0	0.3%
14.8%	75	75	0	0.4%
16.0%	75	75	0	0.4%
17.3%	75	75	0	0.4%
18.5%	75	75	0	0.3%
19.8%	75	75	0	0.4%
21.0%	74	75	0	0.4%
22.2%	74	75	0	0.5%
23.5%	74	75	0	0.4%
24.7%	74	75	0	0.7%
25.9%	74	75	0	0.6%
27.2%	74	75	0	0.5%
28.4%	74	74	0	0.6%
29.6%	74	74	0	0.7%
30.9%	74	74	0	0.6%
32.1%	74	74	0	0.4%
33.3%	74	74	0	0.5%
34.6%	74	74	0	0.3%
35.8%	74	74	0	0.3%
37.0%	74	74	0	0.3%
38.3%	74	74	0	0.2%
39.5%	74	74	0	0.1%
40.7%	74	74	0	0.1%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	73	0	-0.3%
76.5%	73	73	0	0.0%
77.8%	73	73	0	-0.1%
79.0%	73	73	0	-0.2%
80.2%	73	73	0	-0.2%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	-0.1%
90.1%	73	73	0	-0.1%
91.4%	73	73	0	-0.1%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

January

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	89	89	0	0.0%
1.2%	89	89	0	-0.1%
2.5%	87	87	0	0.0%
3.7%	85	85	0	-0.4%
4.9%	83	83	0	0.5%
6.2%	82	82	1	0.9%
7.4%	82	82	0	0.0%
8.6%	81	82	1	0.7%
9.9%	81	81	0	0.4%
11.1%	80	80	0	0.2%
12.3%	80	80	0	0.1%
13.6%	79	79	0	-0.1%
14.8%	78	79	1	1.2%
16.0%	78	78	1	1.0%
17.3%	77	78	1	1.1%
18.5%	76	78	1	1.9%
19.8%	76	78	1	1.7%
21.0%	76	77	1	0.9%
22.2%	76	76	0	0.2%
23.5%	76	76	0	0.4%
24.7%	76	76	0	0.6%
25.9%	75	75	0	0.0%
27.2%	75	75	0	-0.3%
28.4%	75	74	-1	-1.1%
29.6%	74	74	0	0.0%
30.9%	74	74	0	0.0%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.0%
34.6%	74	74	0	0.0%
35.8%	74	74	0	0.0%
37.0%	74	74	0	0.0%
38.3%	74	74	0	0.0%
39.5%	74	74	0	0.0%
40.7%	74	74	0	0.0%
42.0%	74	74	0	0.0%
43.2%	74	74	0	0.0%
44.4%	74	74	0	0.0%
45.7%	74	74	0	0.0%
46.9%	74	74	0	0.0%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.0%
50.6%	74	74	0	0.0%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	73	0	-0.5%
71.6%	73	73	0	-0.1%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

Table SW-57-b

Feather River near Gridley, Monthly Stage

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	89	89	0	0.0%
1.2%	87	87	0	0.4%
2.5%	86	87	1	0.8%
3.7%	86	86	0	0.0%
4.9%	85	85	0	0.0%
6.2%	85	84	-1	-1.0%
7.4%	84	84	0	0.0%
8.6%	83	83	0	0.0%
9.9%	83	83	0	0.1%
11.1%	83	83	0	0.3%
12.3%	82	82	0	0.2%
13.6%	82	82	0	0.0%
14.8%	82	82	0	0.0%
16.0%	81	81	0	0.1%
17.3%	81	81	0	0.0%
18.5%	81	81	0	0.1%
19.8%	81	81	0	0.0%
21.0%	81	81	0	0.0%
22.2%	80	80	0	0.0%
23.5%	80	80	0	0.0%
24.7%	80	80	0	0.0%
25.9%	80	80	0	0.0%
27.2%	79	80	1	0.9%
28.4%	79	79	0	0.0%
29.6%	78	78	0	0.0%
30.9%	78	78	0	0.0%
32.1%	77	78	0	0.5%
33.3%	77	77	0	0.0%
34.6%	77	77	0	0.6%
35.8%	77	77	0	0.0%
37.0%	76	76	0	0.0%
38.3%	76	76	0	0.0%
39.5%	76	76	0	0.0%
40.7%	76	76	0	0.0%
42.0%	76	76	0	0.1%
43.2%	75	76	0	0.5%
44.4%	75	75	0	-0.6%
45.7%	75	75	0	-0.1%
46.9%	75	75	0	-0.2%
48.1%	74	74	0	0.0%
49.4%	74	74	0	0.1%
50.6%	74	74	0	0.2%
51.9%	74	74	0	0.0%
53.1%	74	74	0	0.0%
54.3%	74	74	0	0.0%
55.6%	74	74	0	0.0%
56.8%	74	74	0	0.0%
58.0%	74	74	0	0.0%
59.3%	74	74	0	0.0%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	74	74	0	0.0%
77.8%	73	74	0	0.4%
79.0%	73	74	0	0.3%
80.2%	73	73	0	0.2%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	88	88	0	0.0%
1.2%	87	87	0	0.0%
2.5%	86	86	0	-0.1%
3.7%	86	85	0	-0.2%
4.9%	85	85	0	0.0%
6.2%	84	84	0	0.0%
7.4%	82	82	0	0.0%
8.6%	81	81	0	0.0%
9.9%	81	81	0	0.0%
11.1%	81	81	0	0.0%
12.3%	80	80	0	0.0%
13.6%	80	80	0	0.0%
14.8%	80	80	0	0.0%
16.0%	80	80	0	0.0%
17.3%	79	79	0	0.0%
18.5%	79	79	0	0.0%
19.8%	79	79	0	0.4%
21.0%	79	79	0	0.0%
22.2%	79	79	0	0.0%
23.5%	79	79	0	0.0%
24.7%	78	78	0	0.0%
25.9%	78	78	0	0.0%
27.2%	78	78	0	0.0%
28.4%	78	78	0	-0.2%
29.6%	78	78	0	0.0%
30.9%	78	78	0	-0.1%
32.1%	77	77	0	0.1%
33.3%	77	77	0	0.2%
34.6%	77	77	0	0.4%
35.8%	77	77	0	0.6%
37.0%	77	77	0	0.4%
38.3%	76	77	0	0.2%
39.5%	76	76	0	0.3%
40.7%	76	76	1	0.8%
42.0%	76	76	0	0.2%
43.2%	76	76	0	0.2%
44.4%	75	76	0	0.3%
45.7%	75	76	0	0.2%
46.9%	75	75	0	0.2%
48.1%	75	75	0	0.2%
49.4%	75	75	0	0.4%
50.6%	75	75	0	0.5%
51.9%	74	75	0	0.3%
53.1%	74	74	0	0.2%
54.3%	74	74	0	0.0%
55.6%	74	74	0	-0.2%
56.8%	74	74	0	-0.2%
58.0%	74	74	0	0.1%
59.3%	74	74	0	0.1%
60.5%	74	74	0	0.0%
61.7%	74	74	0	0.0%
63.0%	74	74	0	0.0%
64.2%	74	74	0	0.0%
65.4%	74	74	0	0.0%
66.7%	74	74	0	0.0%
67.9%	74	74	0	0.0%
69.1%	74	74	0	0.0%
70.4%	74	74	0	0.0%
71.6%	74	74	0	0.0%
72.8%	74	74	0	0.0%
74.1%	74	74	0	0.0%
75.3%	74	74	0	0.0%
76.5%	74	74	0	0.0%
77.8%	74	74	0	0.0%
79.0%	74	74	0	0.0%
80.2%	74	74	0	0.0%
81.5%	74	74	0	0.0%
82.7%	73	74	0	0.4%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	81	81	0	0.0%
1.2%	80	80	0	0.0%
2.5%	80	80	0	0.0%
3.7%	78	78	0	0.4%
4.9%	77	77	0	0.0%
6.2%	76	76	0	0.0%
7.4%	76	76	0	0.0%
8.6%	76	76	0	0.0%
9.9%	75	75	0	0.0%
11.1%	75	75	0	0.0%
12.3%	75	75	0	0.0%
13.6%	75	75	0	0.0%
14.8%	75	75	0	0.0%
16.0%	75	75	0	0.0%
17.3%	75	75	0	0.2%
18.5%	75	75	0	-0.1%
19.8%	75	74	0	-0.2%
21.0%	74	74	0	-0.2%
22.2%	74	74	0	-0.1%
23.5%	74	74	0	-0.1%
24.7%	74	74	0	-0.1%
25.9%	74	74	0	0.0%
27.2%	74	74	0	0.0%
28.4%	74	74	0	0.0%
29.6%	74	74	0	-0.1%
30.9%	74	74	0	-0.1%
32.1%	74	74	0	0.0%
33.3%	74	74	0	0.1%
34.6%	74	74	0	0.0%
35.8%	73	74	0	0.1%
37.0%	73	73	0	0.0%
38.3%	73	73	0	0.0%
39.5%	73	73	0	0.0%
40.7%	73	73	0	0.0%
42.0%	73	73	0	-0.1%
43.2%	73	73	0	0.0%
44.4%	73	73	0	0.0%
45.7%	73	73	0	-0.2%
46.9%	73	73	0	-0.1%
48.1%	73	73	0	0.0%
49.4%	73	73	0	0.0%
50.6%	73	73	0	0.0%
51.9%	73	73	0	0.0%
53.1%	73	73	0	0.0%
54.3%	73	73	0	0.0%
55.6%	73	73	0	0.0%
56.8%	73	73	0	0.0%
58.0%	73	73	0	0.0%
59.3%	73	73	0	0.0%
60.5%	73	73	0	0.0%
61.7%	73	73	0	0.0%
63.0%	73	73	0	0.0%
64.2%	73	73	0	0.0%
65.4%	73	73	0	0.0%
66.7%	73	73	0	0.0%
67.9%	73	73	0	0.0%
69.1%	73	73	0	0.0%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	-0.2%
91.4%	73	73	0	0.0%
92.6%	73	73	0	0.0%
93.8%	73	73	0	0.0%
95.1%	73	73	0	0.0%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	77	77	0	0.0%
1.2%	76	76	0	0.0%
2.5%	75	75	1	0.8%
3.7%	75	75	0	0.2%
4.9%	75	75	0	0.1%
6.2%	74	75	0	0.2%
7.4%	74	75	0	0.2%
8.6%	74	75	0	0.1%
9.9%	74	74	0	0.1%
11.1%	74	74	0	0.1%
12.3%	74	74	0	0.1%
13.6%	74	74	0	0.1%
14.8%	74	74	0	0.1%
16.0%	74	74	0	0.1%
17.3%	74	74	0	0.1%
18.5%	74	74	0	0.1%
19.8%	74	74	0	0.1%
21.0%	74	74	0	0.1%
22.2%	74	74	0	0.2%
23.5%	74	74	0	0.2%
24.7%	74	74	0	0.2%
25.9%	74	74	0	0.3%
27.2%	74	74	0	0.3%
28.4%	74	74	0	0.2%
29.6%	74	74	0	0.2%
30.9%	74	74	0	0.3%
32.1%	74	74	0	0.2%
33.3%	74	74	0	0.1%
34.6%	74	74	0	0.0%
35.8%	74	74	0	0.0%
37.0%	74	74	0	-0.1%
38.3%	74	74	0	-0.1%
39.5%	74	74	0	-0.1%
40.7%	74	74	0	-0.1%
42.0%	74	74	0	-0.1%
43.2%	74	74	0	0.0%
44.4%	74	73	0	-0.2%
45.7%	73	73	0	-0.2%
46.9%	73	73	0	-0.1%
48.1%	73	73	0	-0.2%
49.4%	73	73	0	-0.2%
50.6%	73	73	0	-0.2%
51.9%	73	73	0	-0.1%
53.1%	73	73	0	-0.1%
54.3%	73	73	0	-0.1%
55.6%	73	73	0	-0.1%
56.8%	73	73	0	-0.1%
58.0%	73	73	0	-0.1%
59.3%	73	73	0	-0.1%
60.5%	73	73	0	-0.1%
61.7%	73	73	0	0.0%
63.0%	73	73	0	0.0%
64.2%	73	73	0	0.0%
65.4%	73	73	0	0.0%
66.7%	73	73	0	0.0%
67.9%	73	73	0	0.0%
69.1%	73	73	0	0.0%
70.4%	73	73	0	0.0%
71.6%	73	73	0	0.0%
72.8%	73	73	0	0.0%
74.1%	73	73	0	0.0%
75.3%	73	73	0	0.0%
76.5%	73	73	0	0.0%
77.8%	73	73	0	0.0%
79.0%	73	73	0	0.0%
80.2%	73	73	0	0.0%
81.5%	73	73	0	0.0%
82.7%	73	73	0	0.0%
84.0%	73	73	0	0.0%
85.2%	73	73	0	0.0%
86.4%	73	73	0	0.0%
87.7%	73	73	0	0.0%
88.9%	73	73	0	0.0%
90.1%	73	73	0	0.0%
91.4%	73	73	0	0.0%
92.6%	73	73	0	-0.2%
93.8%	73	73	0	-0.3%
95.1%	73	73	0	-0.1%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.0%
100.0%	73	73	0	0.0%

Table SW-57-b
Feather River near Gridley, Monthly Stage
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	77	76	-1	-1.0%
1.2%	76	76	0	-0.4%
2.5%	76	76	0	-0.5%
3.7%	76	76	0	-0.4%
4.9%	76	75	-1	-0.9%
6.2%	76	75	0	-0.6%
7.4%	76	75	0	-0.5%
8.6%	76	75	0	-0.5%
9.9%	76	75	0	-0.4%
11.1%	76	75	0	-0.3%
12.3%	75	75	0	-0.2%
13.6%	75	75	0	-0.2%
14.8%	75	75	0	-0.2%
16.0%	75	75	0	-0.2%
17.3%	75	75	0	-0.4%
18.5%	75	75	0	-0.5%
19.8%	75	75	0	-0.5%
21.0%	75	75	0	-0.5%
22.2%	75	75	0	-0.5%
23.5%	75	75	0	-0.5%
24.7%	75	75	0	-0.5%
25.9%	75	75	0	-0.5%
27.2%	75	75	0	-0.5%
28.4%	75	75	0	-0.5%
29.6%	75	75	0	-0.6%
30.9%	75	75	0	-0.5%
32.1%	75	75	0	-0.5%
33.3%	75	75	0	-0.5%
34.6%	75	75	0	-0.5%
35.8%	75	75	0	-0.6%
37.0%	75	75	0	-0.6%
38.3%	75	75	0	-0.6%
39.5%	75	75	0	-0.6%
40.7%	75	74	0	-0.5%
42.0%	75	74	0	-0.5%
43.2%	75	74	0	-0.5%
44.4%	75	74	0	-0.4%
45.7%	75	74	0	-0.5%
46.9%	75	74	0	-0.5%
48.1%	75	74	0	-0.5%
49.4%	75	74	0	-0.6%
50.6%	75	74	0	-0.6%
51.9%	75	74	0	-0.6%
53.1%	75	74	0	-0.6%
54.3%	75	74	0	-0.6%
55.6%	75	74	0	-0.6%
56.8%	75	74	0	-0.6%
58.0%	75	74	0	-0.6%
59.3%	75	74	0	-0.6%
60.5%	75	74	-1	-0.7%
61.7%	75	74	-1	-0.7%
63.0%	74	74	0	-0.7%
64.2%	74	74	-1	-0.7%
65.4%	74	74	0	-0.6%
66.7%	74	74	0	-0.6%
67.9%	74	74	0	-0.4%
69.1%	74	74	0	-0.4%
70.4%	74	74	0	-0.3%
71.6%	74	74	0	-0.2%
72.8%	74	74	0	-0.2%
74.1%	74	74	0	-0.2%
75.3%	74	74	0	-0.1%
76.5%	74	74	0	-0.1%
77.8%	74	74	0	0.0%
79.0%	74	74	0	0.0%
80.2%	74	74	0	0.1%
81.5%	74	74	0	0.1%
82.7%	74	74	0	0.2%
84.0%	74	74	0	0.2%
85.2%	73	74	0	0.1%
86.4%	73	74	0	0.1%
87.7%	73	73	0	0.1%
88.9%	73	73	0	0.2%
90.1%	73	73	0	0.2%
91.4%	73	73	0	0.2%
92.6%	73	73	0	0.6%
93.8%	73	73	0	0.6%
95.1%	73	73	0	0.3%
96.3%	73	73	0	0.2%
97.5%	73	73	0	0.1%
98.8%	73	73	0	-0.3%
100.0%	73	73	0	-0.3%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	78	0	0.0%
1.2%	78	78	0	0.0%
2.5%	78	78	0	0.0%
3.7%	78	78	0	-0.2%
4.9%	78	78	0	-0.2%
6.2%	78	78	0	-0.2%
7.4%	78	78	0	-0.2%
8.6%	78	78	0	-0.2%
9.9%	78	78	0	-0.3%
11.1%	78	77	0	-0.3%
12.3%	78	77	0	-0.3%
13.6%	78	77	0	-0.3%
14.8%	78	77	0	-0.4%
16.0%	78	77	0	-0.3%
17.3%	78	77	0	-0.4%
18.5%	78	77	0	-0.4%
19.8%	78	77	0	-0.3%
21.0%	78	77	0	-0.3%
22.2%	78	77	0	-0.3%
23.5%	78	77	0	-0.3%
24.7%	78	77	0	-0.3%
25.9%	77	77	0	-0.4%
27.2%	77	77	0	-0.4%
28.4%	77	77	0	-0.4%
29.6%	77	77	0	-0.4%
30.9%	77	77	0	-0.4%
32.1%	77	77	0	-0.4%
33.3%	77	77	0	-0.4%
34.6%	77	77	0	-0.4%
35.8%	77	77	0	-0.4%
37.0%	77	77	0	-0.4%
38.3%	77	77	0	-0.4%
39.5%	77	77	0	-0.4%
40.7%	77	77	0	-0.4%
42.0%	77	77	0	-0.4%
43.2%	77	77	0	-0.4%
44.4%	77	77	0	-0.4%
45.7%	77	77	0	-0.4%
46.9%	77	77	0	-0.4%
48.1%	77	77	0	-0.3%
49.4%	77	77	0	-0.3%
50.6%	77	77	0	-0.3%
51.9%	77	77	0	-0.3%
53.1%	77	77	0	-0.3%
54.3%	77	77	0	-0.3%
55.6%	77	77	0	-0.2%
56.8%	77	77	0	-0.2%
58.0%	77	77	0	-0.2%
59.3%	77	77	0	-0.3%
60.5%	77	77	0	-0.3%
61.7%	77	77	0	-0.3%
63.0%	77	76	0	-0.3%
64.2%	77	76	0	-0.3%
65.4%	77	76	-1	-0.9%
66.7%	77	76	-1	-0.9%
67.9%	77	76	-1	-1.0%
69.1%	77	76	-1	-0.9%
70.4%	76	76	-1	-0.9%
71.6%	76	76	-1	-0.8%
72.8%	76	76	0	-0.6%
74.1%	76	76	0	-0.6%
75.3%	76	75	-1	-0.8%
76.5%	76	75	0	-0.4%
77.8%	75	75	0	-0.2%
79.0%	75	75	0	0.2%
80.2%	75	75	0	0.4%
81.5%	75	75	0	0.4%
82.7%	75	75	0	0.1%
84.0%	75	75	0	0.0%
85.2%	75	74	0	-0.1%
86.4%	74	74	0	-0.1%
87.7%	74	74	0	0.1%
88.9%	74	74	0	0.0%
90.1%	74	74	0	0.0%
91.4%	74	74	0	0.0%
92.6%	74	74	0	-0.2%
93.8%	74	74	0	-0.2%
95.1%	74	74	0	-0.3%
96.3%	73	74	0	0.1%
97.5%	73	73	0	0.1%
98.8%	73	73	0	0.1%
100.0%	73	73	0	0.2%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	77	77	0	-0.2%
1.2%	77	77	0	0.0%
2.5%	77	77	0	-0.1%
3.7%	77	77	0	-0.1%
4.9%	77	77	0	-0.1%
6.2%	77	77	0	-0.1%
7.4%	77	77	0	-0.1%
8.6%	77	77	0	-0.1%
9.9%	77	77	0	-0.1%
11.1%	77	77	0	-0.1%
12.3%	77	77	0	0.0%
13.6%	77	77	0	0.0%
14.8%	77	77	0	0.0%
16.0%	77	77	0	-0.1%
17.3%	77	77	0	-0.1%
18.5%	77	77	0	-0.2%
19.8%	77	77	0	-0.1%
21.0%	77	77	0	-0.2%
22.2%	77	77	0	-0.2%
23.5%	77	77	0	-0.3%
24.7%	77	76	0	-0.3%
25.9%	77	76	0	-0.3%
27.2%	77	76	0	-0.3%
28.4%	77	76	0	-0.3%
29.6%	77	76	0	-0.3%
30.9%	77	76	0	-0.3%
32.1%	77	76	0	-0.3%
33.3%	77	76	0	-0.4%
34.6%	77	76	0	-0.3%
35.8%	77	76	0	-0.3%
37.0%	77	76	0	-0.3%
38.3%	77	76	0	-0.4%
39.5%	76	76	0	-0.4%
40.7%	76	76	0	-0.4%
42.0%	76	76	0	-0.3%
43.2%	76	76	0	-0.2%
44.4%	76	76	0	-0.1%
45.7%	76	76	0	-0.1%
46.9%	76	76	0	-0.3%
48.1%	76	76	0	0.0%
49.4%	76	76	0	-0.1%
50.6%	76	76	0	-0.1%
51.9%	76	76	0	0.1%
53.1%	76	76	0	0.1%
54.3%	75	76	0	0.0%
55.6%	75	75	0	0.0%
56.8%	75	75	0	-0.1%
58.0%	75	75	0	0.0%
59.3%	75	75	0	0.1%
60.5%	75	75	0	-0.2%
61.7%	75	75	0	-0.1%
63.0%	75	75	0	0.0%
64.2%	75	75	0	0.0%
65.4%	75	75	0	-0.1%
66.7%	75	75	0	-0.1%
67.9%	75	75	0	-0.2%
69.1%	75	75	0	-0.1%
70.4%	75	75	0	-0.1%
71.6%	75	75	0	-0.1%
72.8%	75	74	0	-0.1%
74.1%	75	74	0	-0.1%
75.3%	74	74	0	0.1%
76.5%	74	74	0	0.1%
77.8%	74	74	0	0.3%
79.0%	74	74	0	0.1%
80.2%	74	74	0	0.1%
81.5%	74	74	0	0.2%
82.7%	74	74	0	-0.3%
84.0%	74	74	0	-0.3%
85.2%	74	73	0	-0.5%
86.4%	74	73	0	-0.6%
87.7%	74	73	0	-0.6%
88.9%	74	73	0	-0.4%
90.1%	73	73	0	-0.4%
91.4%	73	73	0	-0.4%
92.6%	73	73	0	-0.4%
93.8%	73	73	0	-0.3%
95.1%	73	73	0	-0.2%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.1%
100.0%	73	73	0	0.2%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	78	78	0	0.0%
1.2%	78	78	0	0.0%
2.5%	78	78	0	-0.1%
3.7%	78	78	0	-0.1%
4.9%	78	78	0	-0.1%
6.2%	78	78	0	0.0%
7.4%	78	78	0	0.0%
8.6%	78	78	0	0.0%
9.9%	78	78	0	-0.2%
11.1%	78	78	0	-0.1%
12.3%	78	77	0	-0.3%
13.6%	78	77	0	-0.3%
14.8%	77	77	0	-0.2%
16.0%	77	77	0	-0.1%
17.3%	77	77	0	-0.1%
18.5%	77	77	0	0.0%
19.8%	77	77	0	0.2%
21.0%	77	77	0	0.1%
22.2%	77	77	0	0.0%
23.5%	77	77	0	-0.1%
24.7%	77	77	0	-0.1%
25.9%	77	77	0	-0.1%
27.2%	77	77	0	-0.2%
28.4%	77	77	0	-0.1%
29.6%	77	77	0	-0.1%
30.9%	77	77	0	-0.2%
32.1%	77	77	0	-0.2%
33.3%	77	76	0	-0.3%
34.6%	77	76	0	-0.3%
35.8%	76	76	0	-0.3%
37.0%	76	76	0	-0.2%
38.3%	76	76	0	-0.1%
39.5%	76	76	0	-0.3%
40.7%	76	76	0	0.0%
42.0%	76	76	0	0.1%
43.2%	76	76	0	0.0%
44.4%	76	76	0	0.0%
45.7%	76	76	0	0.0%
46.9%	76	76	0	0.0%
48.1%	76	75	0	-0.1%
49.4%	76	75	0	-0.2%
50.6%	75	75	0	0.0%
51.9%	75	75	0	0.0%
53.1%	75	75	0	0.1%
54.3%	75	75	0	0.2%
55.6%	75	75	0	0.3%
56.8%	75	75	0	0.2%
58.0%	75	75	0	0.2%
59.3%	75	75	0	0.1%
60.5%	75	75	0	-0.3%
61.7%	75	75	0	-0.2%
63.0%	75	75	0	-0.2%
64.2%	75	75	0	-0.2%
65.4%	74	74	0	-0.1%
66.7%	74	74	0	0.1%
67.9%	74	74	0	0.2%
69.1%	74	74	0	0.4%
70.4%	74	74	0	0.3%
71.6%	74	74	0	0.6%
72.8%	74	74	0	0.5%
74.1%	74	74	0	0.4%
75.3%	74	74	0	0.3%
76.5%	73	74	0	0.4%
77.8%	73	74	0	0.4%
79.0%	73	74	0	0.6%
80.2%	73	74	0	0.6%
81.5%	73	74	0	0.5%
82.7%	73	73	0	0.4%
84.0%	73	73	0	0.3%
85.2%	73	73	0	0.3%
86.4%	73	73	0	0.4%
87.7%	73	73	0	0.3%
88.9%	73	73	0	0.3%
90.1%	73	73	0	0.3%
91.4%	73	73	0	0.2%
92.6%	73	73	0	0.3%
93.8%	73	73	0	0.2%
95.1%	73	73	0	0.1%
96.3%	73	73	0	0.0%
97.5%	73	73	0	0.0%
98.8%	73	73	0	0.2%
100.0%	73	73	0	0.0%

Figure SW-58-b
American River at Fair Oaks, Monthly Stage
Probability of Exceedance

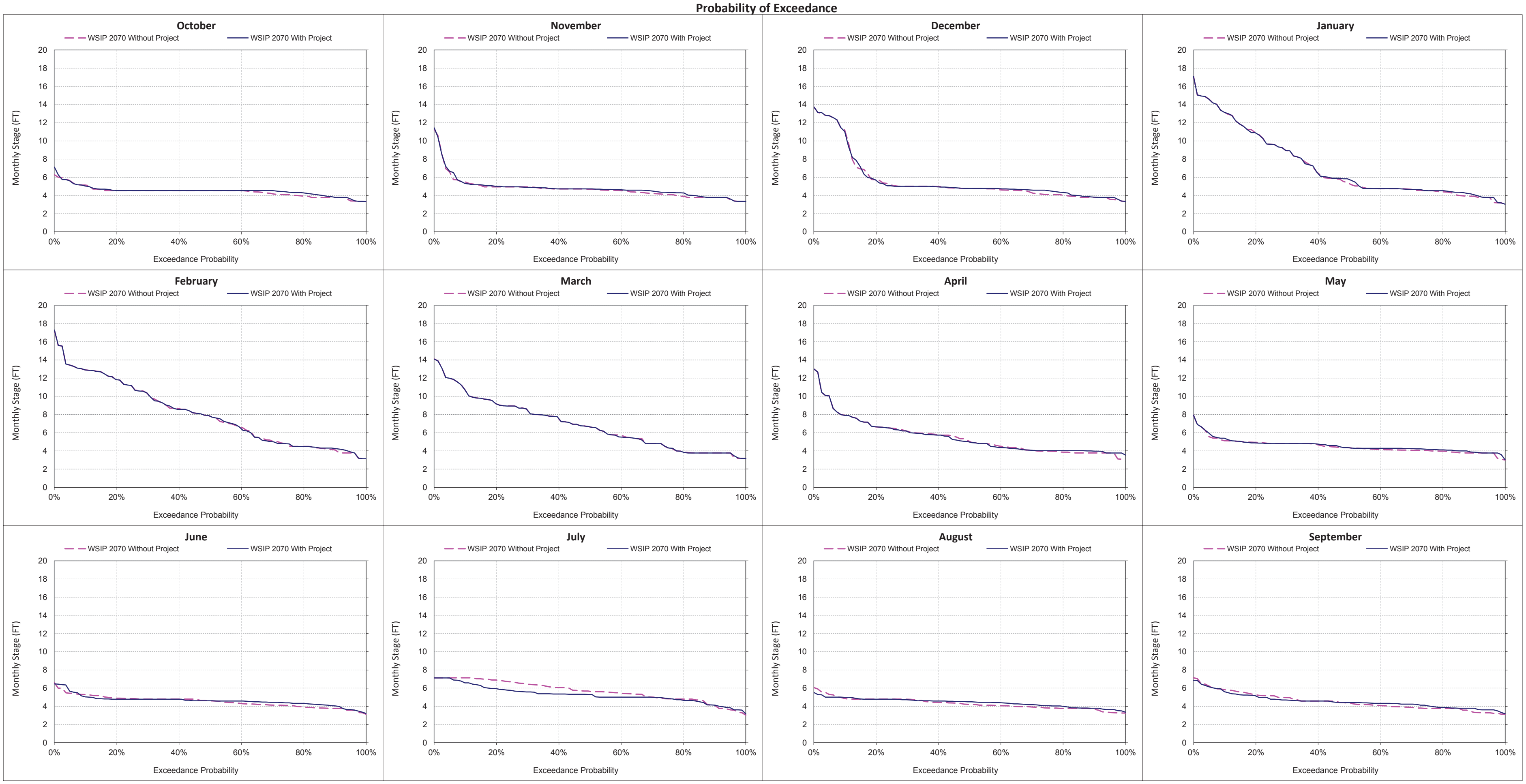


Table SW-58-b
American River at Fair Oaks, Monthly Stage
Probability of Exceedance

October				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	6	7	1	13.5%
1.2%	6	6	0	4.0%
2.5%	6	6	0	-3.3%
3.7%	6	6	0	-1.1%
4.9%	6	6	0	-0.5%
6.2%	5	5	0	-0.9%
7.4%	5	5	0	-0.1%
8.6%	5	5	0	-0.2%
9.9%	5	5	0	-1.8%
11.1%	5	5	0	-1.8%
12.3%	5	5	0	1.8%
13.6%	5	5	0	0.0%
14.8%	5	5	0	1.5%
16.0%	5	5	0	3.1%
17.3%	5	5	0	2.3%
18.5%	5	5	0	0.5%
19.8%	5	5	0	0.0%
21.0%	5	5	0	0.0%
22.2%	5	5	0	0.0%
23.5%	5	5	0	0.0%
24.7%	5	5	0	0.0%
25.9%	5	5	0	0.0%
27.2%	5	5	0	0.0%
28.4%	5	5	0	0.0%
29.6%	5	5	0	0.0%
30.9%	5	5	0	0.0%
32.1%	5	5	0	0.0%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.0%
56.8%	5	5	0	0.0%
58.0%	5	5	0	0.0%
59.3%	5	5	0	0.5%
60.5%	5	5	0	0.7%
61.7%	4	5	0	1.3%
63.0%	4	5	0	3.5%
64.2%	4	5	0	3.6%
65.4%	4	5	0	3.7%
66.7%	4	5	0	4.9%
67.9%	4	5	0	6.4%
69.1%	4	5	0	7.1%
70.4%	4	5	0	8.8%
71.6%	4	4	0	8.3%
72.8%	4	4	0	8.1%
74.1%	4	4	0	7.4%
75.3%	4	4	0	6.6%
76.5%	4	4	0	8.2%
77.8%	4	4	0	8.4%
79.0%	4	4	0	8.9%
80.2%	4	4	0	8.7%
81.5%	4	4	0	7.7%
82.7%	4	4	0	10.2%
84.0%	4	4	0	8.9%
85.2%	4	4	0	7.4%
86.4%	4	4	0	5.8%
87.7%	4	4	0	3.5%
88.9%	4	4	0	2.5%
90.1%	4	4	0	0.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	4.4%
95.1%	3	4	0	6.1%
96.3%	3	3	0	0.5%
97.5%	3	3	0	0.4%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.1%

November				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	11	11	0	0.9%
1.2%	11	10	0	-1.1%
2.5%	9	9	0	-0.3%
3.7%	7	7	0	3.7%
4.9%	7	7	0	1.2%
6.2%	6	7	1	13.3%
7.4%	6	6	0	-0.1%
8.6%	6	6	0	0.5%
9.9%	5	5	0	-3.1%
11.1%	5	5	0	-1.6%
12.3%	5	5	0	-1.5%
13.6%	5	5	0	0.0%
14.8%	5	5	0	1.1%
16.0%	5	5	0	3.5%
17.3%	5	5	0	2.6%
18.5%	5	5	0	2.3%
19.8%	5	5	0	1.3%
21.0%	5	5	0	1.2%
22.2%	5	5	0	0.0%
23.5%	5	5	0	0.0%
24.7%	5	5	0	0.0%
25.9%	5	5	0	0.0%
27.2%	5	5	0	0.0%
28.4%	5	5	0	-0.4%
29.6%	5	5	0	-0.9%
30.9%	5	5	0	-0.7%
32.1%	5	5	0	-0.9%
33.3%	5	5	0	0.3%
34.6%	5	5	0	1.4%
35.8%	5	5	0	1.4%
37.0%	5	5	0	0.8%
38.3%	5	5	0	0.8%
39.5%	5	5	0	0.1%
40.7%	5	5	0	0.0%
42.0%	5	5	0	0.0%
43.2%	5	5	0	0.0%
44.4%	5	5	0	0.0%
45.7%	5	5	0	0.0%
46.9%	5	5	0	0.0%
48.1%	5	5	0	0.2%
49.4%	5	5	0	0.6%
50.6%	5	5	0	0.6%
51.9%	5	5	0	0.5%
53.1%	5	5	0	1.6%
54.3%	5	5	0	1.9%
55.6%	5	5	0	2.2%
56.8%	5	5	0	2.0%
58.0%	5	5	0	1.6%
59.3%	5	5	0	1.6%
60.5%	5	5	0	2.1%
61.7%	5	5	0	1.5%
63.0%	4	5	0	4.3%
64.2%	4	5	0	4.4%
65.4%	4	5	0	5.3%
66.7%	4	5	0	5.3%
67.9%	4	5	0	6.7%
69.1%	4	5	0	6.3%
70.4%	4	4	0	5.9%
71.6%	4	4	0	5.0%
72.8%	4	4	0	5.1%
74.1%	4	4	0	6.0%
75.3%	4	4	0	5.5%
76.5%	4	4	0	5.5%
77.8%	4	4	0	7.4%
79.0%	4	4	0	9.3%
80.2%	4	4	0	9.1%
81.5%	4	4	0	7.4%
82.7%	4	4	0	6.4%
84.0%	4	4	0	5.4%
85.2%	4	4	0	3.5%
86.4%	4	4	0	2.2%
87.7%	4	4	0	0.0%
88.9%	4	4	0	0.0%
90.1%	4	4	0	0.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	1.5%
96.3%	3	3	0	-0.7%
97.5%	3	3	0	0.0%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.0%

December				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	14	14	0	0.0%
1.2%	13	13	0	0.0%
2.5%	13	13	0	0.8%
3.7%	13	13	0	0.0%
4.9%	13	13	0	0.0%
6.2%	13	13	0	0.0%
7.4%	12	12	0	0.0%
8.6%	11	11	0	0.0%
9.9%	11	11	0	-1.7%
11.1%	10	9	0	-3.5%
12.3%	8	8	0	3.1%
13.6%	7	8	1	10.7%
14.8%	7	7	0	3.8%
16.0%	7	6	-1	-7.6%
17.3%	6	6	0	-6.2%
18.5%	6	6	0	2.1%
19.8%	6	6	0	0.0%
21.0%	6	5	0	-5.1%
22.2%	5	5	0	-1.3%
23.5%	5	5	0	-4.7%
24.7%	5	5	0	-1.9%
25.9%	5	5	0	-1.0%
27.2%	5	5	0	0.0%
28.4%	5	5	0	0.0%
29.6%	5	5	0	0.0%
30.9%	5	5	0	0.0%
32.1%	5	5	0	0.0%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	-0.1%
38.3%	5	5	0	-0.4%
39.5%	5	5	0	-0.5%
40.7%	5	5	0	-0.7%
42.0%	5	5	0	0.4%
43.2%	5	5	0	0.9%
44.4%	5	5	0	0.9%
45.7%	5	5	0	0.6%
46.9%	5	5	0	0.1%
48.1%	5	5	0	0.0%
49.4%	5	5	0	0.0%
50.6%	5	5	0	0.0%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.0%
54.3%	5	5	0	0.4%
55.6%	5	5	0	1.1%
56.8%	5	5	0	1.2%
58.0%	5	5	0	1.5%
59.3%	5	5	0	2.6%
60.5%	5	5	0	2.4%
61.7%	5	5	0	2.8%
63.0%	5	5	0	2.7%
64.2%	5	5	0	2.5%
65.4%	5	5	0	2.6%
66.7%	5	5	0	3.0%
67.9%	5	5	0	2.8%
69.1%	4	5	0	4.7%
70.4%	4	5	0	8.1%
71.6%	4	5	0	9.0%
72.8%	4	5	0	10.5%
74.1%	4	5	0	11.0%
75.3%	4	5	0	9.8%
76.5%	4	4	0	8.8%
77.8%	4	4	0	7.4%
79.0%	4	4	0	6.6%
80.2%	4	4	0	8.5%
81.5%	4	4	0	7.6%
82.7%	4	4	0	3.3%
84.0%	4	4	0	2.7%
85.2%	4	4	0	5.4%
86.4%	4	4	0	3.5%
87.7%	4	4	0	3.5%
88.9%	4	4	0	2.2%
90.1%	4	4	0	0.9%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	5.7%
96.3%	4	4	0	6.6%
97.5%	4	4	0	1.5%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.0%

January				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	17	17	0	0.0%
1.2%	15	15	0	0.0%
2.5%	15	15	0	-0.2%
3.7%	15	15	0	0.0%
4.9%	15	15	0	0.0%
6.2%	14	14	0	0.0%
7.4%	14	14	0	0.0%
8.6%	13	13	0	0.0%
9.9%	13	13	0	0.0%
11.1%	13	13	0	0.6%
12.3%	13	13	0	0.0%
13.6%	12	12	0	0.0%
14.8%	12	12	0	0.0%
16.0%	12	12	0	0.0%
17.3%	11	11	0	-0.2%
18.5%	11	11	0	-3.0%
19.8%	11	11	0	0.0%
21.0%	11	11	0	-0.4%
22.2%	10	10	0	0.0%
23.5%	10	10	0	0.0%
24.7%	10	10	0	0.0%
25.9%	10	10	0	0.0%
27.2%	9	9	0	0.0%
28.4%	9	9	0	0.0%
29.6%	9	9	0	0.0%
30.9%	9	9	0	0.0%
32.1%	8	8	0	0.0%
33.3%	8	8	0	0.0%
34.6%	8	8	0	0.9%
35.8%	8	7	0	-2.6%
37.0%	7	7	0	-1.0%
38.3%	7	7	0	1.3%
39.5%	7	7	0	-0.1%
40.7%	6	6	0	-1.9%
42.0%	6	6	0	2.0%
43.2%	6	6	0	1.7%
44.4%	6	6	0	0.2%
45.7%	6	6	0	1.0%
46.9%	6	6	0	1.7%
48.1%	6	6	0	5.4%
49.4%	5	6	0	7.7%
50.6%	5	6	0	9.1%
51.9%	5	5	0	8.5%
53.1%	5	5	0	0.1%
54.3%	5	5	0	-2.1%
55.6%	5	5	0	0.0%
56.8%	5	5	0	-0.8%
58.0%	5	5	0	-1.0%
59.3%	5	5	0	0.0%
60.5%	5	5	0	0.0%
61.7%	5	5	0	0.0%
63.0%	5	5	0	0.0%
64.2%	5	5	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	-0.2%
67.9%	5	5	0	-0.2%
69.1%	5	5	0	-0.8%
70.4%	5	5	0	0.2%
71.6%	5	5	0	1.7%
72.8%	5	5	0	1.4%
74.1%	5	5	0	0.1%
75.3%	5	5	0	0.0%
76.5%	5	5	0	0.0%
77.8%	4	5	0	1.4%
79.0%	4	5	0	3.3%
80.2%	4	5	0	3.3%
81.5%	4	4	0	2.3%
82.7%	4	4	0	2.4%
84.0%	4	4	0	6.6%
85.2%	4	4	0	9.2%
86.4%	4	4	0	9.4%
87.7%	4	4	0	8.0%
88.9%	4	4	0	6.7%
90.1%	4	4	0	4.0%
91.4%	4	4	0	4.3%
92.6%	4	4	0	0.7%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	3	4	1	16.9%
97.5%	3	3	0	1.1%
98.8%	3	3	0	0.1%
100.0%	3	3	0	0.0%

Table SW-58-b

American River at Fair Oaks, Monthly Stage

Probability of Exceedance

February				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	17	17	0	0.0%
1.2%	16	16	0	0.0%
2.5%	16	16	0	0.0%
3.7%	14	14	0	0.0%
4.9%	13	13	0	0.0%
6.2%	13	13	0	0.0%
7.4%	13	13	0	0.0%
8.6%	13	13	0	0.0%
9.9%	13	13	0	0.0%
11.1%	13	13	0	0.0%
12.3%	13	13	0	0.0%
13.6%	13	13	0	-0.2%
14.8%	13	13	0	-0.2%
16.0%	12	12	0	0.0%
17.3%	12	12	0	0.0%
18.5%	12	12	0	0.0%
19.8%	12	12	0	0.0%
21.0%	12	12	0	0.0%
22.2%	11	11	0	0.0%
23.5%	11	11	0	0.0%
24.7%	11	11	0	0.0%
25.9%	11	11	0	0.0%
27.2%	11	11	0	-0.6%
28.4%	11	11	0	-0.4%
29.6%	10	10	0	0.0%
30.9%	10	10	0	0.0%
32.1%	10	9	0	-2.1%
33.3%	9	9	0	0.0%
34.6%	9	9	0	0.5%
35.8%	9	9	0	0.0%
37.0%	9	9	0	2.6%
38.3%	9	9	0	0.0%
39.5%	9	9	0	-1.2%
40.7%	9	9	0	-0.1%
42.0%	9	9	0	0.0%
43.2%	8	8	0	0.0%
44.4%	8	8	0	0.0%
45.7%	8	8	0	0.0%
46.9%	8	8	0	0.0%
48.1%	8	8	0	0.0%
49.4%	8	8	0	0.0%
50.6%	8	8	0	0.0%
51.9%	8	8	0	0.0%
53.1%	7	8	0	4.2%
54.3%	7	7	0	1.5%
55.6%	7	7	0	1.5%
56.8%	7	7	0	0.7%
58.0%	7	7	0	1.3%
59.3%	7	7	0	0.0%
60.5%	7	6	0	-4.1%
61.7%	6	6	0	-1.0%
63.0%	6	6	0	-2.7%
64.2%	6	6	0	0.0%
65.4%	5	5	0	0.0%
66.7%	5	5	0	-4.1%
67.9%	5	5	0	-2.4%
69.1%	5	5	0	-3.1%
70.4%	5	5	0	-0.3%
71.6%	5	5	0	-3.7%
72.8%	5	5	0	-1.5%
74.1%	5	5	0	0.0%
75.3%	5	5	0	5.3%
76.5%	4	4	0	0.0%
77.8%	4	4	0	0.0%
79.0%	4	4	0	0.0%
80.2%	4	4	0	0.0%
81.5%	4	4	0	-0.1%
82.7%	4	4	0	-1.2%
84.0%	4	4	0	1.2%
85.2%	4	4	0	0.0%
86.4%	4	4	0	1.5%
87.7%	4	4	0	3.1%
88.9%	4	4	0	3.9%
90.1%	4	4	0	3.7%
91.4%	4	4	0	10.9%
92.6%	4	4	0	9.8%
93.8%	4	4	0	7.0%
95.1%	4	4	0	2.8%
96.3%	4	4	0	0.0%
97.5%	3	3	0	0.0%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.0%

March				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	14	14	0	0.0%
1.2%	14	14	0	0.0%
2.5%	13	13	0	0.0%
3.7%	12	12	0	0.0%
4.9%	12	12	0	0.0%
6.2%	12	12	0	0.0%
7.4%	12	12	0	0.0%
8.6%	11	11	0	0.0%
9.9%	11	11	0	0.0%
11.1%	10	10	0	0.0%
12.3%	10	10	0	0.0%
13.6%	10	10	0	0.0%
14.8%	10	10	0	0.0%
16.0%	10	10	0	0.0%
17.3%	10	10	0	0.0%
18.5%	10	10	0	0.0%
19.8%	9	9	0	0.0%
21.0%	9	9	0	0.0%
22.2%	9	9	0	0.0%
23.5%	9	9	0	0.0%
24.7%	9	9	0	0.0%
25.9%	9	9	0	0.0%
27.2%	9	9	0	-0.6%
28.4%	9	9	0	-0.1%
29.6%	9	9	0	0.0%
30.9%	8	8	0	0.0%
32.1%	8	8	0	0.0%
33.3%	8	8	0	0.0%
34.6%	8	8	0	0.0%
35.8%	8	8	0	0.0%
37.0%	8	8	0	0.0%
38.3%	8	8	0	0.0%
39.5%	8	8	0	1.1%
40.7%	7	7	0	0.0%
42.0%	7	7	0	0.0%
43.2%	7	7	0	0.0%
44.4%	7	7	0	0.0%
45.7%	7	7	0	0.0%
46.9%	7	7	0	0.0%
48.1%	7	7	0	0.0%
49.4%	7	7	0	0.0%
50.6%	7	7	0	0.0%
51.9%	7	7	0	0.0%
53.1%	6	6	0	0.0%
54.3%	6	6	0	0.0%
55.6%	6	6	0	0.0%
56.8%	6	6	0	-0.3%
58.0%	6	6	0	-0.2%
59.3%	6	6	0	-3.8%
60.5%	6	5	0	-2.8%
61.7%	5	5	0	-0.6%
63.0%	5	5	0	-0.4%
64.2%	5	5	0	0.0%
65.4%	5	5	0	-0.1%
66.7%	5	5	0	-2.8%
67.9%	5	5	0	0.0%
69.1%	5	5	0	0.0%
70.4%	5	5	0	0.0%
71.6%	5	5	0	0.0%
72.8%	5	5	0	0.0%
74.1%	4	4	0	0.0%
75.3%	4	4	0	1.0%
76.5%	4	4	0	1.5%
77.8%	4	4	0	0.0%
79.0%	4	4	0	0.0%
80.2%	4	4	0	-1.1%
81.5%	4	4	0	-1.3%
82.7%	4	4	0	-0.4%
84.0%	4	4	0	0.0%
85.2%	4	4	0	0.0%
86.4%	4	4	0	0.0%
87.7%	4	4	0	0.0%
88.9%	4	4	0	0.0%
90.1%	4	4	0	0.0%
91.4%	4	4	0	0.0%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	3	3	0	7.0%
97.5%	3	3	0	1.2%
98.8%	3	3	0	0.0%
100.0%	3	3	0	0.0%

April				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	13	13	0	0.0%
1.2%	13	13	0	0.0%
2.5%	10	10	0	0.0%
3.7%	10	10	0	0.0%
4.9%	10	10	0	0.0%
6.2%	9	9	0	0.0%
7.4%	8	8	0	0.0%
8.6%	8	8	0	0.0%
9.9%	8	8	0	0.0%
11.1%	8	8	0	0.0%
12.3%	8	8	0	0.0%
13.6%	8	8	0	-0.1%
14.8%	7	7	0	0.0%
16.0%	7	7	0	0.0%
17.3%	7	7	0	0.0%
18.5%	7	7	0	-0.1%
19.8%	7	7	0	0.0%
21.0%	7	7	0	0.0%
22.2%	7	7	0	0.0%
23.5%	7	7	0	0.1%
24.7%	6	6	0	0.0%
25.9%	6	6	0	-2.4%
27.2%	6	6	0	-0.4%
28.4%	6	6	0	-1.9%
29.6%	6	6	0	0.0%
30.9%	6	6	0	-1.6%
32.1%	6	6	0	-0.7%
33.3%	6	6	0	-0.4%
34.6%	6	6	0	-1.0%
35.8%	6	6	0	-1.6%
37.0%	6	6	0	-1.4%
38.3%	6	6	0	-1.6%
39.5%	6	6	0	-1.3%
40.7%	6	6	0	0.0%
42.0%	6	6	0	-2.1%
43.2%	6	6	0	-2.5%
44.4%	6	5	0	-6.5%
45.7%	6	5	0	-6.3%
46.9%	5	5	0	-4.5%
48.1%	5	5	0	-5.2%
49.4%	5	5	0	-2.2%
50.6%	5	5	0	-0.5%
51.9%	5	5	0	-0.5%
53.1%	5	5	0	0.1%
54.3%	5	5	0	0.0%
55.6%	5	5	0	0.0%
56.8%	5	4	0	-5.1%
58.0%	5	4	0	-4.4%
59.3%	5	4	0	-3.8%
60.5%	4	4	0	-2.4%
61.7%	4	4	0	-2.5%
63.0%	4	4	0	-2.2%
64.2%	4	4	0	-2.9%
65.4%	4	4	0	-2.4%
66.7%	4	4	0	-3.2%
67.9%	4	4	0	0.0%
69.1%	4	4	0	0.0%
70.4%	4	4	0	0.0%
71.6%	4	4	0	1.0%
72.8%	4	4	0	1.3%
74.1%	4	4	0	1.4%
75.3%	4	4	0	1.4%
76.5%	4	4	0	1.5%
77.8%	4	4	0	1.9%
79.0%	4	4	0	3.8%
80.2%	4	4	0	4.0%
81.5%	4	4	0	4.2%
82.7%	4	4	0	6.3%
84.0%	4	4	0	6.6%
85.2%	4	4	0	6.6%
86.4%	4	4	0	6.6%
87.7%	4	4	0	6.0%
88.9%	4	4	0	5.8%
90.1%	4	4	0	5.1%
91.4%	4	4	0	4.9%
92.6%	4	4	0	4.8%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	4	1	21.3%
98.8%	3	4	1	21.8%
100.0%	3	4	0	14.7%

May				
Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	8	8	0	0.0%
1.2%	7	7	0	0.0%
2.5%	7	7	0	0.0%
3.7%	6	6	0	0.0%
4.9%	6	6	0	6.9%
6.2%	5	6	0	3.1%
7.4%	5	5	0	1.7%
8.6%	5	5	0	3.2%
9.9%	5	5	0	5.2%
11.1%	5	5	0	2.2%
12.3%	5	5	0	0.3%
13.6%	5	5	0	0.2%
14.8%	5	5	0	0.4%
16.0%	5	5	0	-0.7%
17.3%	5	5	0	-0.8%
18.5%	5	5	0	-1.4%
19.8%	5	5	0	-0.9%
21.0%	5	5	0	-1.3%
22.2%	5	5	0	-1.0%
23.5%	5	5	0	-0.8%
24.7%	5	5	0	0.0%
25.9%	5	5	0	0.0%
27.2%	5	5	0	0.0%
28.4%	5	5	0	0.0%
29.6%	5	5	0	0.0%
30.9%	5	5	0	0.0%
32.1%	5	5	0	0.0%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.4%
39.5%	5	5	0	1.3%
40.7%	5	5	0	2.6%
42.0%	5	5	0	4.3%
43.2%	5	5	0	2.1%
44.4%	4	5	0	3.6%
45.7%	4	5	0	3.8%
46.9%	4	4	0	1.5%
48.1%	4	4	0	0.0%
49.4%	4	4	0	0.0%
50.6%	4	4	0	0.0%
51.9%	4	4	0	-0.4%
53.1%	4	4	0	0.2%
54.3%	4	4	0	0.8%
55.6%	4	4	0	1.2%
56.8%	4	4	0	1.8%
58.0%	4	4	0	2.3%
59.3%	4	4	0	3.3%
60.5%	4	4	0	3.5%
61.7%	4	4	0	4.0%
63.0%	4	4	0	4.0%
64.2%	4	4	0	4.6%
65.4%	4	4	0	4.6%
66.7%	4	4	0	4.7%
67.9%	4	4	0	4.2%
69.1%	4	4	0	3.8%
70.4%	4	4	0	4.3%
71.6%	4	4	0	4.2%
72.8%	4	4	0	4.1%
74.1%	4	4	0	3.9%
75.3%	4	4	0	3.2%
76.5%	4	4	0	4.3%
77.8%	4	4	0	4.1%
79.0%	4	4	0	3.4%
80.2%	4	4	0	3.5%
81.5%	4	4	0	3.7%
82.7%	4	4	0	5.1%
84.0%	4	4	0	4.6%
85.2%	4	4	0	5.6%
86.4%	4	4	0	5.8%
87.7%	4	4	0	5.7%
88.9%	4	4	0	2.9%
90.1%	4	4	0	1.8%
91.4%	4	4	0	1.7%
92.6%	4	4	0	0.0%
93.8%	4	4	0	0.0%
95.1%	4	4	0	0.0%
96.3%	4	4	0	0.0%
97.5%	3	4	1	18.8%
98.8%	3	4	1	16.5%
100.0%	3	3	0	1.0%

Table SW-58-b
American River at Fair Oaks, Monthly Stage
Probability of Exceedance

June

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	6	0	-2.0%
1.2%	6	6	0	7.5%
2.5%	6	6	0	6.4%
3.7%	5	6	1	15.6%
4.9%	5	6	0	4.1%
6.2%	5	6	0	2.4%
7.4%	5	5	0	2.7%
8.6%	5	5	0	-2.8%
9.9%	5	5	0	-4.7%
11.1%	5	5	0	-4.9%
12.3%	5	5	0	-4.2%
13.6%	5	5	0	-6.7%
14.8%	5	5	0	-6.8%
16.0%	5	5	0	-4.2%
17.3%	5	5	0	-3.4%
18.5%	5	5	0	-2.8%
19.8%	5	5	0	-2.0%
21.0%	5	5	0	-2.0%
22.2%	5	5	0	-1.8%
23.5%	5	5	0	-1.0%
24.7%	5	5	0	-1.0%
25.9%	5	5	0	-0.8%
27.2%	5	5	0	0.0%
28.4%	5	5	0	0.0%
29.6%	5	5	0	0.0%
30.9%	5	5	0	0.0%
32.1%	5	5	0	0.0%
33.3%	5	5	0	0.0%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	-0.2%
42.0%	5	5	0	-2.6%
43.2%	5	5	0	-2.9%
44.4%	5	5	0	-3.6%
45.7%	5	5	0	-2.5%
46.9%	5	5	0	-0.8%
48.1%	5	5	0	-0.6%
49.4%	5	5	0	0.1%
50.6%	5	5	0	0.3%
51.9%	5	5	0	0.0%
53.1%	5	5	0	0.5%
54.3%	4	5	0	2.8%
55.6%	4	5	0	3.0%
56.8%	4	5	0	3.8%
58.0%	4	5	0	4.7%
59.3%	4	5	0	5.4%
60.5%	4	5	0	6.8%
61.7%	4	5	0	6.5%
63.0%	4	5	0	6.2%
64.2%	4	5	0	6.3%
65.4%	4	4	0	7.1%
66.7%	4	4	0	6.3%
67.9%	4	4	0	6.9%
69.1%	4	4	0	7.3%
70.4%	4	4	0	7.4%
71.6%	4	4	0	7.3%
72.8%	4	4	0	6.7%
74.1%	4	4	0	6.6%
75.3%	4	4	0	6.7%
76.5%	4	4	0	6.6%
77.8%	4	4	0	8.3%
79.0%	4	4	0	9.1%
80.2%	4	4	0	11.2%
81.5%	4	4	0	10.2%
82.7%	4	4	0	9.5%
84.0%	4	4	0	10.3%
85.2%	4	4	0	9.4%
86.4%	4	4	0	9.4%
87.7%	4	4	0	9.2%
88.9%	4	4	0	8.1%
90.1%	4	4	0	6.9%
91.4%	4	4	0	5.8%
92.6%	4	4	0	-0.3%
93.8%	4	4	0	2.0%
95.1%	4	4	0	1.6%
96.3%	4	4	0	0.7%
97.5%	3	3	0	4.7%
98.8%	3	3	0	1.5%
100.0%	3	3	0	2.3%

July

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	0.0%
1.2%	7	7	0	0.0%
2.5%	7	7	0	0.0%
3.7%	7	7	0	0.0%
4.9%	7	7	0	0.0%
6.2%	7	7	0	-3.2%
7.4%	7	7	0	-4.0%
8.6%	7	7	0	-4.9%
9.9%	7	7	-1	-7.6%
11.1%	7	7	-1	-8.0%
12.3%	7	6	-1	-9.9%
13.6%	7	6	-1	-9.4%
14.8%	7	6	-1	-10.3%
16.0%	7	6	-1	-13.3%
17.3%	7	6	-1	-13.7%
18.5%	7	6	-1	-13.5%
19.8%	7	6	-1	-13.8%
21.0%	7	6	-1	-14.2%
22.2%	7	6	-1	-14.1%
23.5%	7	6	-1	-13.9%
24.7%	7	6	-1	-14.1%
25.9%	7	6	-1	-14.5%
27.2%	7	6	-1	-14.0%
28.4%	7	6	-1	-14.2%
29.6%	6	6	-1	-13.4%
30.9%	6	6	-1	-13.1%
32.1%	6	6	-1	-13.0%
33.3%	6	5	-1	-15.0%
34.6%	6	5	-1	-14.6%
35.8%	6	5	-1	-13.5%
37.0%	6	5	-1	-12.3%
38.3%	6	5	-1	-12.0%
39.5%	6	5	-1	-11.6%
40.7%	6	5	-1	-11.8%
42.0%	6	5	-1	-11.8%
43.2%	6	5	-1	-11.2%
44.4%	6	5	0	-7.5%
45.7%	6	5	0	-7.3%
46.9%	6	5	0	-6.6%
48.1%	6	5	0	-6.3%
49.4%	6	5	0	-6.5%
50.6%	6	5	0	-5.6%
51.9%	6	5	-1	-10.3%
53.1%	6	5	-1	-10.5%
54.3%	6	5	-1	-10.4%
55.6%	6	5	-1	-10.0%
56.8%	6	5	-1	-9.4%
58.0%	5	5	0	-8.8%
59.3%	5	5	0	-8.7%
60.5%	5	5	0	-7.6%
61.7%	5	5	0	-7.4%
63.0%	5	5	0	-6.8%
64.2%	5	5	0	-6.1%
65.4%	5	5	0	-6.0%
66.7%	5	5	0	-5.9%
67.9%	5	5	0	-0.2%
69.1%	5	5	0	-0.3%
70.4%	5	5	0	-0.4%
71.6%	5	5	0	0.9%
72.8%	5	5	0	1.6%
74.1%	5	5	0	1.3%
75.3%	5	5	0	0.5%
76.5%	5	5	0	-0.5%
77.8%	5	5	0	-1.6%
79.0%	5	5	0	-1.6%
80.2%	5	5	0	-3.0%
81.5%	5	5	0	-3.0%
82.7%	5	5	0	-3.5%
84.0%	5	5	0	-2.6%
85.2%	5	4	0	-4.5%
86.4%	5	4	0	-4.1%
87.7%	4	4	0	-0.9%
88.9%	4	4	0	0.5%
90.1%	4	4	0	1.4%
91.4%	4	4	0	6.5%
92.6%	4	4	0	4.9%
93.8%	4	4	0	3.7%
95.1%	4	4	0	6.3%
96.3%	4	4	0	0.8%
97.5%	3	4	0	7.7%
98.8%	3	4	0	8.7%
100.0%	3	3	0	4.3%

August

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	6	6	-1	-9.1%
1.2%	6	5	-1	-10.5%
2.5%	6	5	0	-5.3%
3.7%	6	5	-1	-9.3%
4.9%	5	5	0	-5.5%
6.2%	5	5	0	-4.7%
7.4%	5	5	0	-0.3%
8.6%	5	5	0	0.6%
9.9%	5	5	0	2.8%
11.1%	5	5	0	3.8%
12.3%	5	5	0	3.4%
13.6%	5	5	0	1.5%
14.8%	5	5	0	0.1%
16.0%	5	5	0	0.0%
17.3%	5	5	0	0.0%
18.5%	5	5	0	0.0%
19.8%	5	5	0	0.0%
21.0%	5	5	0	0.0%
22.2%	5	5	0	0.0%
23.5%	5	5	0	0.0%
24.7%	5	5	0	0.0%
25.9%	5	5	0	0.0%
27.2%	5	5	0	-1.0%
28.4%	5	5	0	-1.2%
29.6%	5	5	0	-1.3%
30.9%	5	5	0	-1.6%
32.1%	5	5	0	-1.5%
33.3%	5	5	0	-0.7%
34.6%	5	5	0	-0.8%
35.8%	5	5	0	1.7%
37.0%	4	5	0	2.5%
38.3%	4	5	0	3.3%
39.5%	4	5	0	3.4%
40.7%	4	5	0	3.3%
42.0%	4	5	0	3.5%
43.2%	4	5	0	4.1%
44.4%	4	5	0	4.3%
45.7%	4	5	0	4.3%
46.9%	4	5	0	4.8%
48.1%	4	5	0	6.9%
49.4%	4	4	0	6.6%
50.6%	4	4	0	6.5%
51.9%	4	4	0	6.7%
53.1%	4	4	0	7.7%
54.3%	4	4	0	7.8%
55.6%	4	4	0	7.7%
56.8%	4	4	0	7.3%
58.0%	4	4	0	7.9%
59.3%	4	4	0	8.3%
60.5%	4	4	0	7.5%
61.7%	4	4	0	7.2%
63.0%	4	4	0	6.7%
64.2%	4	4	0	6.9%
65.4%	4	4	0	7.2%
66.7%	4	4	0	6.8%
67.9%	4	4	0	6.5%
69.1%	4	4	0	6.3%
70.4%	4	4	0	7.2%
71.6%	4	4	0	6.9%
72.8%	4	4	0	6.0%
74.1%	4	4	0	6.3%
75.3%	4	4	0	6.6%
76.5%	4	4	0	6.3%
77.8%	4	4	0	6.3%
79.0%	4	4	0	6.9%
80.2%	4	4	0	5.8%
81.5%	4	4	0	3.6%
82.7%	4	4	0	2.0%
84.0%	4	4	0	1.5%
85.2%	4	4	0	1.3%
86.4%	4	4	0	1.1%
87.7%	4	4	0	0.7%
88.9%	4	4	0	0.6%
90.1%	4	4	0	2.9%
91.4%	4	4	0	5.5%
92.6%	3	4	0	9.4%
93.8%	3	4	0	8.3%
95.1%	3	4	0	9.2%
96.3%	3	4	0	10.0%
97.5%	3	4	0	7.8%
98.8%	3	4	0	7.4%
100.0%	3	3	0	3.3%

September

Percent Exceedance Probability	WSIP 2070 Without Project Monthly Stage (FT)	WSIP 2070 With Project Monthly Stage (FT)	Absolute Difference (FT)	Relative Difference (%)
0.0%	7	7	0	-3.6%
1.2%	7	7	0	-3.1%
2.5%	6	6	0	-0.8%
3.7%	6	6	0	-2.5%
4.9%	6	6	0	-1.2%
6.2%	6	6	0	0.8%
7.4%	6	6	0	0.5%
8.6%	6	6	0	0.0%
9.9%	6	6	0	-3.7%
11.1%	6	6	0	-4.9%
12.3%	6	5	0	-6.2%
13.6%	6	5	0	-5.3%
14.8%	6	5	0	-5.3%
16.0%	6	5	0	-5.5%
17.3%	5	5	0	-4.1%
18.5%	5	5	0	-2.5%
19.8%	5	5	0	-1.9%
21.0%	5	5	0	-4.4%
22.2%	5	5	0	-4.1%
23.5%	5	5	0	-3.9%
24.7%	5	5	0	-7.2%
25.9%	5	5	0	-7.3%
27.2%	5	5	0	-4.7%
28.4%	5	5	0	-5.5%
29.6%	5	5	0	-5.2%
30.9%	5	5	0	-6.0%
32.1%	5	5	0	-2.3%
33.3%	5	5	0	-2.3%
34.6%	5	5	0	0.0%
35.8%	5	5	0	0.0%
37.0%	5	5	0	0.0%
38.3%	5	5	0	0.0%
39.5%	5	5	0	0.0%
40.7%	5	5	0	-0.3%
42.0%	5	5	0	-0.3%
43.2%	5	5	0	-0.4%
44.4%	5	4	0	-1.4%
45.7%	5	4	0	-2.7%
46.9%	4	4	0	0.5%
48.1%	4	4	0	0.6%
49.4%	4	4	0	0.8%
50.6%	4	4	0	2.0%
51.9%	4	4	0	3.8%
53.1%	4	4	0	4.9%
54.3%	4	4	0	4.6%
55.6%	4	4	0	4.3%
56.8%	4	4	0	4.7%
58.0%	4	4	0	5.1%
59.3%	4	4	0	5.7%
60.5%	4	4	0	6.5%
61.7%	4	4	0	6.5%
63.0%	4	4	0	8.6%
64.2%	4	4	0	8.5%
65.4%	4	4	0	8.6%
66.7%	4	4	0	7.5%
67.9%	4	4	0	8.4%
69.1%	4	4	0	8.5%
70.4%	4	4	0	9.4%
71.6%	4	4	0	10.4%
72.8%	4	4	0	8.7%
74.1%	4	4	0	9.3%
75.3%	4	4	0	7.2%
76.5%	4	4	0	5.1%
77.8%	4	4	0	3.9%
79.0%	4	4	0	2.8%
80.2%	4	4	0	2.3%
81.5%	4	4	0	2.2%
82.7%	4	4	0	1.2%
84.0%	4	4	0	1.0%
85.2%	4	4	0	0.0%
86.4%	4	4	0	5.5%
87.7%	4	4	0	5.5%
88.9%	3	4	0	9.7%
90.1%	3	4	0	13.4%
91.4%	3	4	0	10.1%
92.6%	3	4	0	9.9%
93.8%	3	4	0	10.1%
95.1%	3	4	0	9.9%
96.3%	3	4	0	11.3%
97.5%	3	3	0	8.5%
98.8%	3	3	0	6.3%
100.0%	3	3	0	1.4%

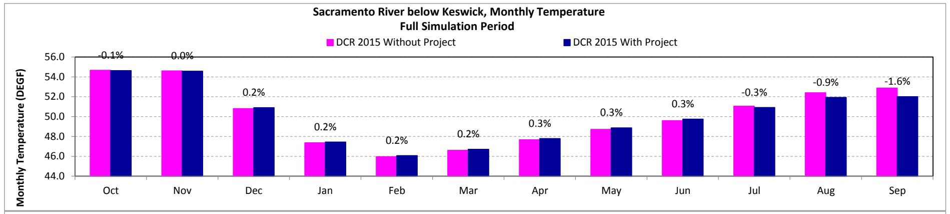
River Temperature Modeling

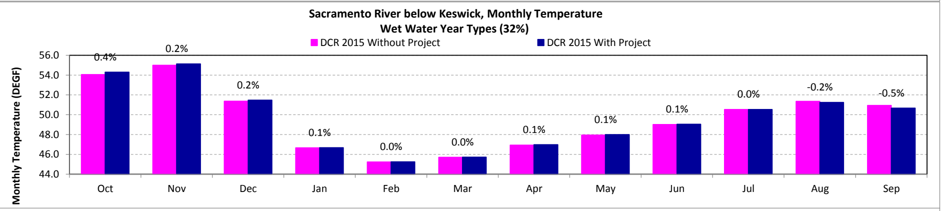
Summary Tables and Bar Charts

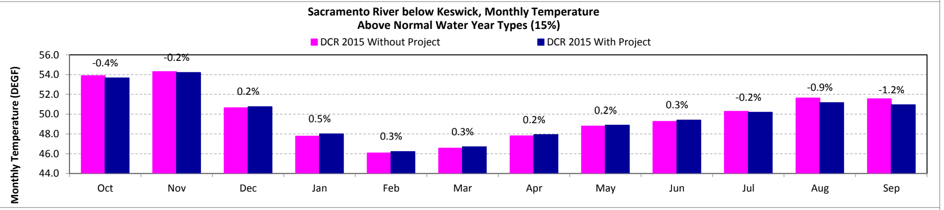
Table SQ2-1a
Sacramento River below Keswick, Monthly Temperature
Long-term Average and Average by Water Year Type

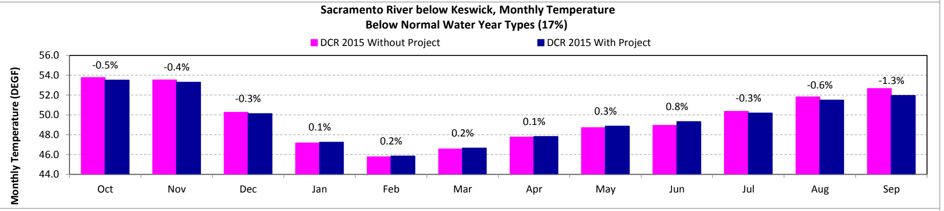
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	54.7	54.6	50.8	47.4	46.0	46.6	47.7	48.7	49.6	51.1	52.4	52.9
DCR 2015 With Project	54.6	54.6	50.9	47.4	46.1	46.7	47.8	48.9	49.7	50.9	51.9	52.0
Difference	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	-0.1	-0.5	-0.9
Percent Difference[3]	-0.1%	0.0%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	-0.3%	-0.9%	-1.6%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	54.1	55.0	51.4	46.7	45.2	45.7	46.9	47.9	49.0	50.5	51.4	50.9
DCR 2015 With Project	54.3	55.1	51.5	46.7	45.3	45.7	47.0	48.0	49.0	50.5	51.2	50.7
Difference	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	-0.3
Percent Difference	0.4%	0.2%	0.2%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	-0.2%	-0.5%
Above Normal (15%)												
DCR 2015 Without Project	53.9	54.3	50.6	47.8	46.1	46.5	47.8	48.8	49.3	50.3	51.6	51.6
DCR 2015 With Project	53.7	54.2	50.8	48.0	46.2	46.7	47.9	48.9	49.4	50.2	51.2	50.9
Difference	-0.2	-0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	-0.1	-0.5	-0.6
Percent Difference	-0.4%	-0.2%	0.2%	0.5%	0.3%	0.3%	0.2%	0.2%	0.3%	-0.2%	-0.9%	-1.2%
Below Normal (17%)												
DCR 2015 Without Project	53.8	53.5	50.3	47.2	45.8	46.6	47.8	48.7	48.9	50.3	51.8	52.7
DCR 2015 With Project	53.5	53.3	50.1	47.2	45.8	46.6	47.8	48.9	49.3	50.2	51.5	52.0
Difference	-0.2	-0.2	-0.1	0.1	0.1	0.1	0.1	0.1	0.4	-0.2	-0.3	-0.7
Percent Difference	-0.5%	-0.4%	-0.3%	0.1%	0.2%	0.2%	0.1%	0.3%	0.8%	-0.3%	-0.6%	-1.3%
Dry (22%)												
DCR 2015 Without Project	54.7	54.3	50.4	47.7	46.6	47.3	48.0	48.8	49.6	51.2	53.0	53.4
DCR 2015 With Project	54.6	54.2	50.4	47.7	46.6	47.4	48.1	49.0	49.9	51.1	52.5	52.4
Difference	-0.1	-0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.3	-0.1	-0.5	-1.1
Percent Difference	-0.1%	-0.3%	-0.1%	0.0%	0.2%	0.3%	0.2%	0.4%	0.5%	-0.2%	-1.0%	-2.0%
Critical (15%)												
DCR 2015 Without Project	57.7	55.6	50.9	48.2	46.8	47.6	48.5	50.2	51.9	53.6	55.3	57.8
DCR 2015 With Project	57.6	55.8	51.5	48.3	47.1	47.9	48.9	50.6	51.8	53.0	53.9	55.5
Difference	-0.1	0.1	0.6	0.2	0.3	0.3	0.4	0.4	0.0	-0.6	-1.4	-2.3
Percent Difference	-0.2%	0.2%	1.1%	0.3%	0.6%	0.6%	0.7%	0.8%	0.0%	-1.1%	-2.5%	-4.0%

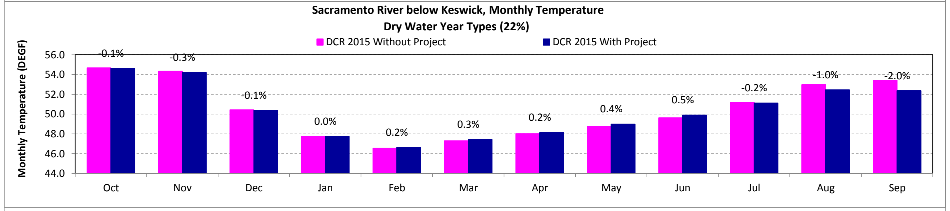
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











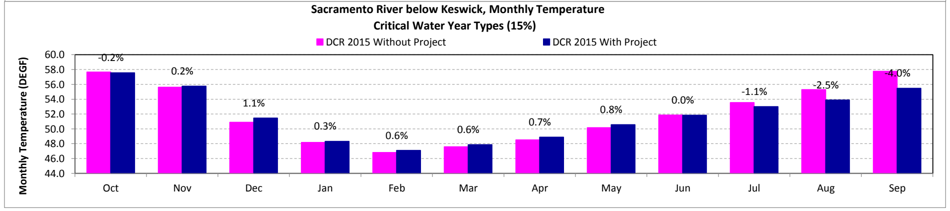


Table SQ3-1a
Sacramento River at Bonnyview Bridge, Monthly Temperature
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	55.0	54.6	50.7	47.4	46.3	47.3	48.6	49.8	50.6	52.0	53.3	53.7
DCR 2015 With Project	55.0	54.6	50.8	47.5	46.4	47.4	48.8	50.0	50.8	51.8	52.9	52.8
Difference	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	-0.1	-0.5	-0.9
Percent Difference[3]	-0.1%	0.0%	0.2%	0.2%	0.2%	0.2%	0.3%	0.4%	0.4%	-0.3%	-0.9%	-1.6%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	54.4	55.0	51.3	46.7	45.5	46.2	47.7	48.9	50.1	51.5	52.3	51.5
DCR 2015 With Project	54.6	55.1	51.4	46.8	45.5	46.2	47.8	49.0	50.1	51.5	52.2	51.3
Difference	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	-0.2
Percent Difference	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	-0.2%	-0.5%
Above Normal (15%)												
DCR 2015 Without Project	54.3	54.3	50.6	47.8	46.3	47.2	48.8	49.9	50.3	51.1	52.5	52.3
DCR 2015 With Project	54.0	54.2	50.7	48.0	46.5	47.3	48.9	50.0	50.5	51.1	52.1	51.8
Difference	-0.2	-0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.2	-0.1	-0.4	-0.6
Percent Difference	-0.4%	-0.2%	0.3%	0.5%	0.3%	0.3%	0.2%	0.1%	0.4%	-0.1%	-0.8%	-1.1%
Below Normal (17%)												
DCR 2015 Without Project	54.2	53.5	50.2	47.2	46.1	47.4	48.9	49.9	49.9	51.3	52.7	53.7
DCR 2015 With Project	53.9	53.3	50.0	47.3	46.2	47.5	48.9	50.1	50.5	51.1	52.5	52.9
Difference	-0.3	-0.2	-0.1	0.1	0.0	0.1	0.1	0.2	0.5	-0.1	-0.3	-0.8
Percent Difference	-0.5%	-0.4%	-0.2%	0.1%	0.1%	0.2%	0.1%	0.4%	1.1%	-0.3%	-0.5%	-1.4%
Dry (22%)												
DCR 2015 Without Project	55.1	54.3	50.3	47.7	47.0	48.3	49.1	49.9	50.6	52.1	53.9	54.5
DCR 2015 With Project	55.0	54.2	50.3	47.8	47.1	48.4	49.2	50.2	51.0	52.0	53.4	53.4
Difference	0.0	-0.1	0.0	0.0	0.1	0.1	0.1	0.3	0.4	-0.1	-0.5	-1.2
Percent Difference	-0.1%	-0.2%	-0.1%	0.0%	0.2%	0.3%	0.2%	0.5%	0.8%	-0.1%	-1.0%	-2.2%
Critical (15%)												
DCR 2015 Without Project	58.0	55.6	50.8	48.2	47.4	48.6	49.5	51.3	52.9	54.5	56.2	58.8
DCR 2015 With Project	57.9	55.7	51.3	48.4	47.6	48.8	49.9	51.9	52.9	54.0	54.8	56.5
Difference	-0.1	0.1	0.5	0.1	0.3	0.2	0.4	0.6	0.0	-0.5	-1.4	-2.3
Percent Difference	-0.2%	0.2%	1.0%	0.3%	0.6%	0.5%	0.8%	1.1%	0.1%	-1.0%	-2.5%	-3.9%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

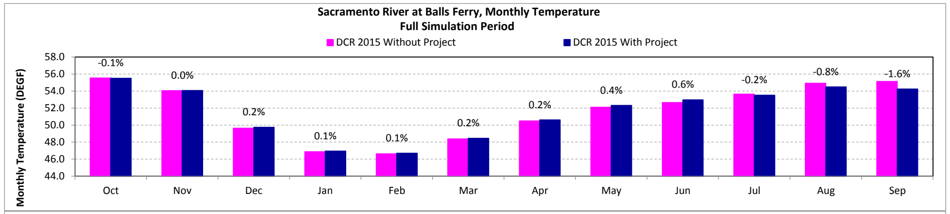
Table SQ4-1a
Sacramento River at Balls Ferry, Monthly Temperature
Long-term Average and Average by Water Year Type

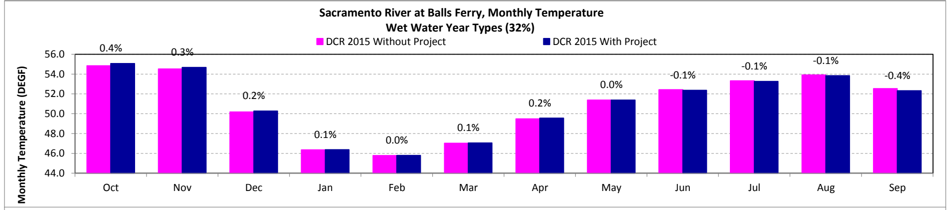
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	55.5	54.0	49.6	46.9	46.6	48.4	50.5	52.1	52.7	53.6	54.9	55.1
DCR 2015 With Project	55.5	54.1	49.7	46.9	46.7	48.5	50.6	52.3	53.0	53.5	54.5	54.2
Difference	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	-0.1	-0.4	-0.9
Percent Difference[3]	-0.1%	0.0%	0.2%	0.1%	0.1%	0.2%	0.2%	0.4%	0.6%	-0.2%	-0.8%	-1.6%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	54.8	54.5	50.2	46.4	45.8	47.0	49.5	51.4	52.4	53.3	53.9	52.5
DCR 2015 With Project	55.1	54.7	50.3	46.4	45.8	47.1	49.6	51.4	52.4	53.3	53.8	52.3
Difference	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	-0.1	-0.1	-0.2
Percent Difference	0.4%	0.3%	0.2%	0.1%	0.0%	0.1%	0.2%	0.0%	-0.1%	-0.1%	-0.1%	-0.4%
Above Normal (15%)												
DCR 2015 Without Project	54.8	53.8	49.4	47.1	46.5	48.2	50.8	52.4	52.4	52.7	54.1	53.7
DCR 2015 With Project	54.5	53.8	49.7	47.2	46.6	48.3	50.8	52.3	52.8	52.7	53.8	53.2
Difference	-0.3	-0.1	0.3	0.1	0.1	0.1	0.0	-0.1	0.4	0.0	-0.4	-0.5
Percent Difference	-0.5%	-0.2%	0.7%	0.3%	0.1%	0.2%	0.0%	-0.1%	0.7%	0.0%	-0.6%	-1.0%
Below Normal (17%)												
DCR 2015 Without Project	54.8	53.0	49.3	46.6	46.4	48.5	50.9	52.3	52.0	52.9	54.3	55.4
DCR 2015 With Project	54.5	52.9	49.2	46.6	46.5	48.6	51.0	52.5	52.7	52.8	54.1	54.6
Difference	-0.3	-0.1	-0.1	0.1	0.0	0.1	0.0	0.2	0.8	-0.1	-0.2	-0.8
Percent Difference	-0.6%	-0.2%	-0.1%	0.2%	0.1%	0.1%	0.1%	0.4%	1.5%	-0.2%	-0.4%	-1.5%
Dry (22%)												
DCR 2015 Without Project	55.6	53.7	49.3	47.1	47.3	49.4	51.0	52.0	52.4	53.6	55.5	56.3
DCR 2015 With Project	55.6	53.6	49.4	47.2	47.4	49.5	51.1	52.3	53.0	53.5	54.9	55.0
Difference	0.0	-0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.6	0.0	-0.5	-1.3
Percent Difference	0.0%	-0.1%	0.0%	0.1%	0.1%	0.2%	0.2%	0.6%	1.1%	-0.1%	-0.9%	-2.3%
Critical (15%)												
DCR 2015 Without Project	58.4	55.0	49.5	47.8	47.8	49.9	51.1	53.3	54.6	56.1	57.7	60.2
DCR 2015 With Project	58.4	55.1	49.8	47.9	48.0	50.0	51.5	54.1	54.7	55.6	56.3	58.0
Difference	-0.1	0.1	0.3	0.1	0.2	0.1	0.4	0.8	0.1	-0.5	-1.4	-2.2
Percent Difference	-0.1%	0.1%	0.7%	0.2%	0.4%	0.3%	0.9%	1.5%	0.2%	-0.9%	-2.4%	-3.6%

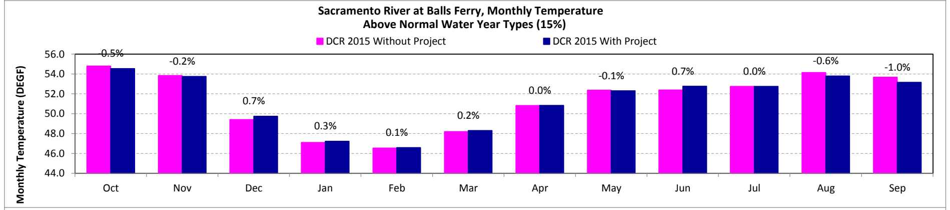
1 Based on the 82-year simulation period

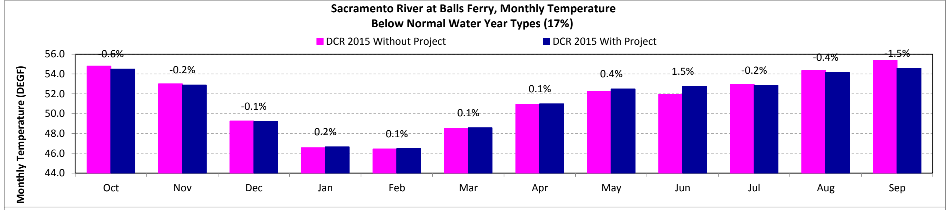
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

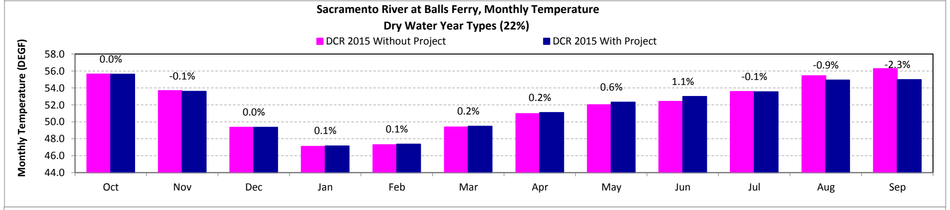
3 Relative difference of the monthly average











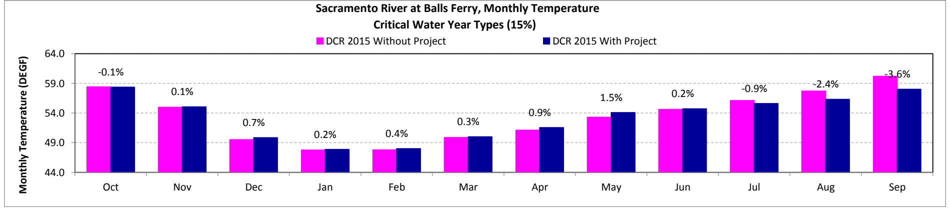


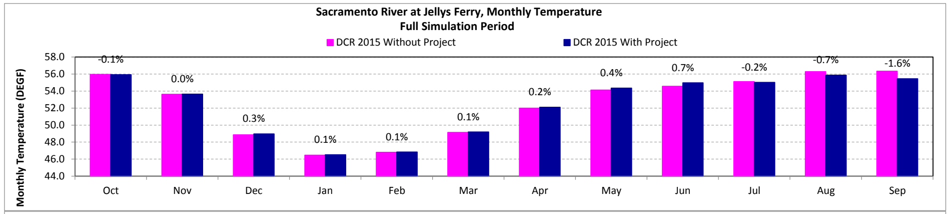
Table SQ5-1a
Sacramento River at Jellys Ferry, Monthly Temperature
Long-term Average and Average by Water Year Type

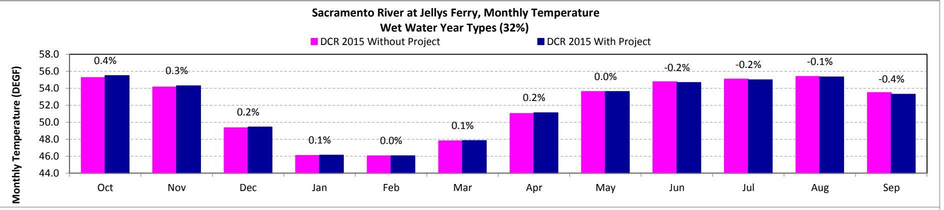
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	56.0	53.6	48.8	46.5	46.8	49.1	52.0	54.1	54.6	55.1	56.3	56.3
DCR 2015 With Project	55.9	53.6	49.0	46.5	46.8	49.2	52.1	54.4	55.0	55.0	55.9	55.4
Difference	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.4	-0.1	-0.4	-0.9
Percent Difference[3]	-0.1%	0.0%	0.3%	0.1%	0.1%	0.1%	0.2%	0.4%	0.7%	-0.2%	-0.7%	-1.6%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	55.3	54.1	49.3	46.1	46.0	47.8	51.0	53.6	54.8	55.1	55.4	53.5
DCR 2015 With Project	55.5	54.3	49.4	46.1	46.0	47.8	51.1	53.6	54.7	55.0	55.3	53.3
Difference	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	-0.1	-0.1	-0.1	-0.2
Percent Difference	0.4%	0.3%	0.2%	0.1%	0.0%	0.1%	0.2%	0.0%	-0.2%	-0.2%	-0.1%	-0.4%
Above Normal (15%)												
DCR 2015 Without Project	55.3	53.5	48.7	46.5	46.6	48.9	52.3	54.6	54.4	54.2	55.5	54.9
DCR 2015 With Project	55.0	53.4	49.0	46.6	46.6	49.0	52.3	54.5	54.9	54.2	55.2	54.4
Difference	-0.3	-0.1	0.4	0.1	0.0	0.1	0.0	-0.1	0.5	0.1	-0.3	-0.5
Percent Difference	-0.5%	-0.2%	0.8%	0.2%	0.0%	0.2%	0.0%	-0.2%	1.0%	0.1%	-0.5%	-0.8%
Below Normal (17%)												
DCR 2015 Without Project	55.3	52.6	48.6	46.1	46.6	49.3	52.5	54.3	53.8	54.4	55.7	56.8
DCR 2015 With Project	55.0	52.5	48.6	46.2	46.6	49.4	52.5	54.5	54.7	54.3	55.5	56.0
Difference	-0.3	-0.1	0.0	0.1	0.0	0.0	0.0	0.2	1.0	-0.1	-0.1	-0.8
Percent Difference	-0.6%	-0.1%	0.0%	0.2%	0.0%	0.1%	0.1%	0.4%	1.8%	-0.1%	-0.2%	-1.5%
Dry (22%)												
DCR 2015 Without Project	56.1	53.2	48.5	46.6	47.4	50.1	52.5	53.9	54.0	54.8	56.7	57.7
DCR 2015 With Project	56.1	53.2	48.6	46.7	47.4	50.2	52.6	54.2	54.8	54.8	56.2	56.4
Difference	0.0	-0.1	0.0	0.1	0.0	0.1	0.1	0.3	0.7	0.0	-0.5	-1.4
Percent Difference	0.0%	-0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.6%	1.4%	0.0%	-0.9%	-2.4%
Critical (15%)												
DCR 2015 Without Project	58.7	54.4	48.7	47.3	48.0	50.6	52.4	55.0	56.1	57.4	58.9	61.3
DCR 2015 With Project	58.6	54.5	48.9	47.4	48.2	50.7	52.8	55.9	56.3	57.0	57.6	59.2
Difference	-0.1	0.0	0.2	0.1	0.2	0.1	0.4	0.9	0.1	-0.4	-1.4	-2.1
Percent Difference	-0.1%	0.1%	0.5%	0.1%	0.3%	0.1%	0.8%	1.6%	0.3%	-0.8%	-2.4%	-3.4%

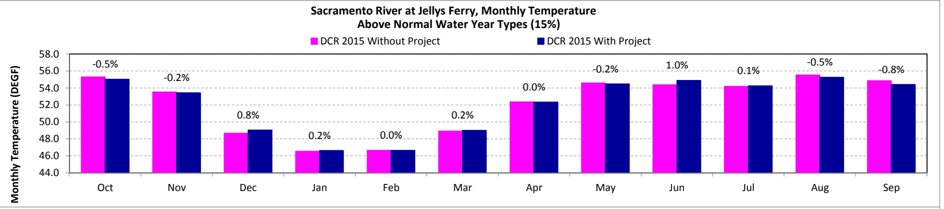
1 Based on the 82-year simulation period

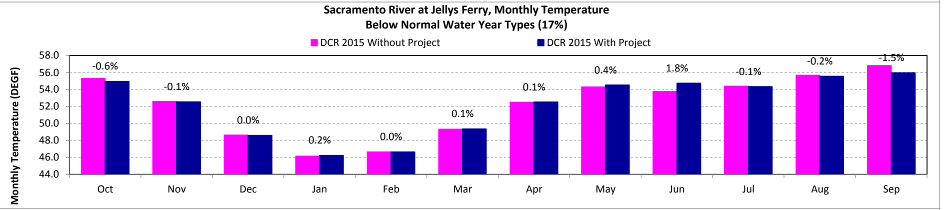
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

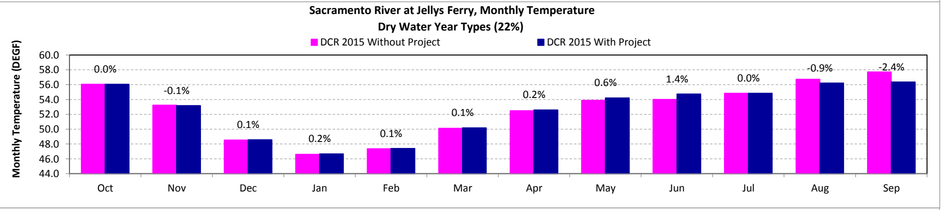
3 Relative difference of the monthly average











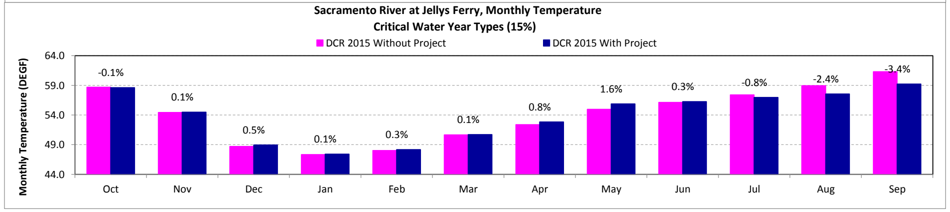


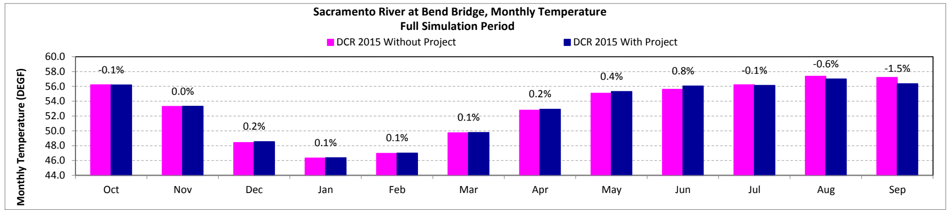
Table SQ6-1a
Sacramento River at Bend Bridge, Monthly Temperature
Long-term Average and Average by Water Year Type

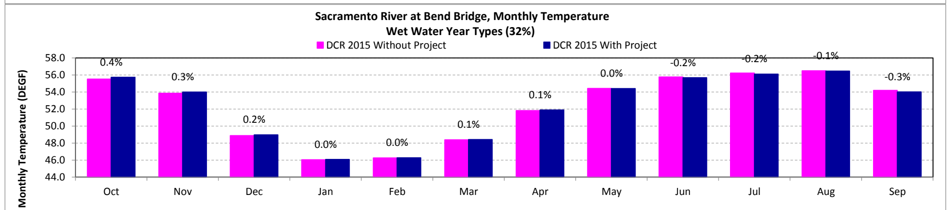
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	56.2	53.3	48.4	46.3	47.0	49.7	52.8	55.1	55.6	56.2	57.4	57.2
DCR 2015 With Project	56.2	53.3	48.5	46.4	47.0	49.8	52.9	55.3	56.1	56.1	57.0	56.3
Difference	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.4	-0.1	-0.4	-0.8
Percent Difference[3]	-0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	0.2%	0.4%	0.8%	-0.1%	-0.6%	-1.5%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	55.5	53.9	48.9	46.1	46.3	48.4	51.8	54.4	55.8	56.2	56.5	54.2
DCR 2015 With Project	55.7	54.0	49.0	46.1	46.3	48.4	51.9	54.4	55.7	56.1	56.5	54.0
Difference	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	-0.1	-0.1	0.0	-0.2
Percent Difference	0.4%	0.3%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%	-0.2%	-0.2%	-0.1%	-0.3%
Above Normal (15%)												
DCR 2015 Without Project	55.6	53.2	48.4	46.5	46.8	49.6	53.2	55.6	55.4	55.2	56.7	55.7
DCR 2015 With Project	55.3	53.1	48.7	46.5	46.8	49.6	53.2	55.4	56.0	55.3	56.5	55.3
Difference	-0.3	-0.1	0.4	0.1	0.0	0.1	0.0	-0.1	0.6	0.1	-0.2	-0.4
Percent Difference	-0.5%	-0.2%	0.8%	0.1%	0.0%	0.1%	0.0%	-0.2%	1.0%	0.2%	-0.4%	-0.7%
Below Normal (17%)												
DCR 2015 Without Project	55.6	52.3	48.2	46.0	46.8	49.9	53.3	55.3	54.8	55.5	56.8	57.8
DCR 2015 With Project	55.3	52.3	48.2	46.1	46.8	50.0	53.3	55.5	55.9	55.5	56.7	57.0
Difference	-0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.2	1.1	0.0	-0.1	-0.8
Percent Difference	-0.6%	-0.1%	0.0%	0.2%	0.0%	0.1%	0.0%	0.4%	2.0%	-0.1%	-0.1%	-1.5%
Dry (22%)												
DCR 2015 Without Project	56.3	52.9	48.1	46.4	47.5	50.7	53.3	55.0	55.1	55.9	57.9	58.8
DCR 2015 With Project	56.3	52.8	48.1	46.5	47.5	50.7	53.4	55.3	55.9	55.9	57.4	57.4
Difference	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.8	0.0	-0.5	-1.4
Percent Difference	0.0%	-0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.6%	1.5%	0.0%	-0.9%	-2.3%
Critical (15%)												
DCR 2015 Without Project	58.9	53.9	48.3	47.1	48.1	51.2	53.2	56.0	57.1	58.5	59.9	62.0
DCR 2015 With Project	58.8	53.9	48.5	47.1	48.3	51.2	53.6	56.9	57.3	58.1	58.5	60.1
Difference	-0.1	0.0	0.2	0.0	0.1	0.0	0.4	0.9	0.2	-0.4	-1.4	-2.0
Percent Difference	-0.1%	0.0%	0.3%	0.1%	0.2%	0.1%	0.8%	1.7%	0.3%	-0.7%	-2.3%	-3.2%

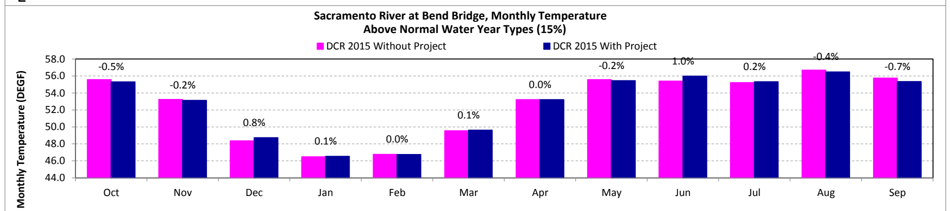
1 Based on the 82-year simulation period

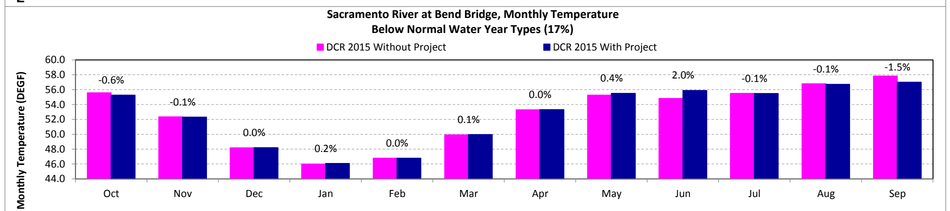
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

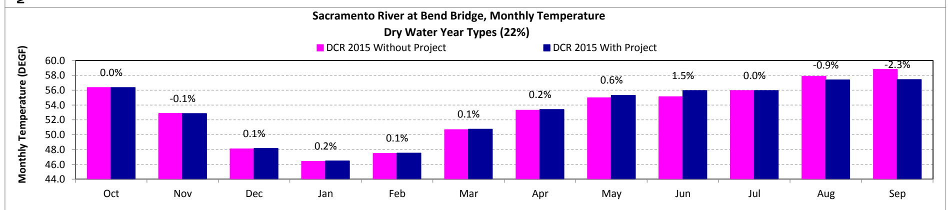
3 Relative difference of the monthly average











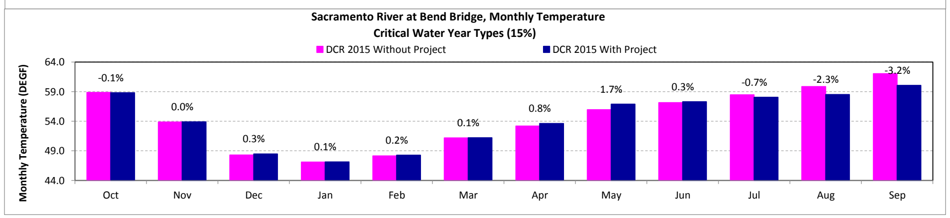


Table SQ7-1a

Sacramento River at Red Bluff, Monthly Temperature

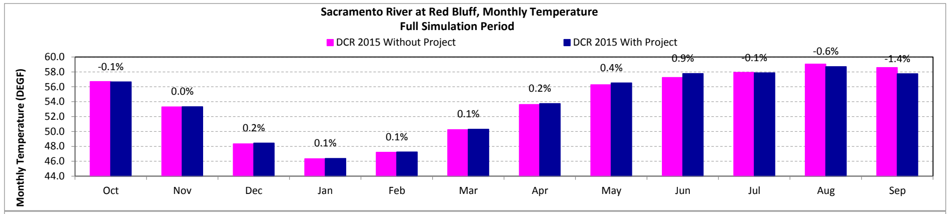
Long-term Average and Average by Water Year Type

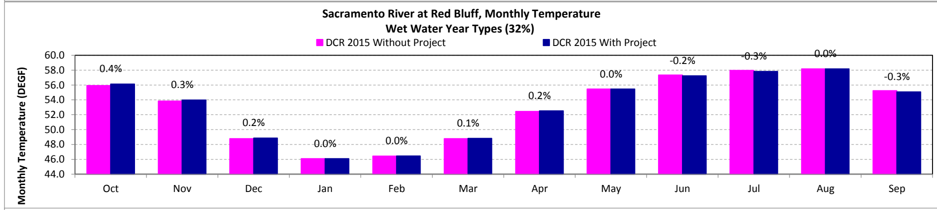
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	56.7	53.3	48.3	46.3	47.2	50.2	53.6	56.3	57.2	57.9	59.0	58.6
DCR 2015 With Project	56.6	53.3	48.4	46.4	47.2	50.3	53.7	56.5	57.8	57.9	58.7	57.7
Difference	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.5	-0.1	-0.3	-0.8
Percent Difference[3]	-0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	0.2%	0.4%	0.9%	-0.1%	-0.6%	-1.4%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	55.9	53.9	48.8	46.1	46.4	48.8	52.4	55.5	57.3	58.0	58.2	55.2
DCR 2015 With Project	56.1	54.0	48.9	46.1	46.5	48.8	52.5	55.5	57.2	57.8	58.2	55.1
Difference	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	-0.1	-0.1	0.0	-0.2
Percent Difference	0.4%	0.3%	0.2%	0.0%	0.0%	0.1%	0.2%	0.0%	-0.2%	-0.3%	0.0%	-0.3%
Above Normal (15%)												
DCR 2015 Without Project	56.1	53.2	48.3	46.5	46.9	50.0	53.9	56.8	57.1	56.9	58.4	57.1
DCR 2015 With Project	55.8	53.1	48.6	46.5	46.9	50.0	54.0	56.6	57.7	57.0	58.2	56.7
Difference	-0.3	-0.1	0.3	0.1	0.0	0.1	0.0	-0.1	0.7	0.1	-0.2	-0.4
Percent Difference	-0.5%	-0.2%	0.7%	0.1%	0.0%	0.2%	0.0%	-0.3%	1.2%	0.2%	-0.3%	-0.6%
Below Normal (17%)												
DCR 2015 Without Project	56.1	52.4	48.1	46.0	47.0	50.5	54.2	56.5	56.5	57.3	58.5	59.5
DCR 2015 With Project	55.7	52.3	48.1	46.1	47.0	50.5	54.2	56.7	57.7	57.3	58.5	58.6
Difference	-0.3	0.0	0.0	0.1	0.0	0.1	0.0	0.2	1.2	0.0	0.0	-0.8
Percent Difference	-0.6%	-0.1%	0.0%	0.2%	0.0%	0.2%	0.0%	0.4%	2.2%	0.0%	0.0%	-1.4%
Dry (22%)												
DCR 2015 Without Project	56.9	52.9	48.0	46.4	47.8	51.3	54.3	56.2	56.8	57.6	59.5	60.5
DCR 2015 With Project	56.9	52.9	48.0	46.4	47.8	51.4	54.4	56.6	57.7	57.6	59.0	59.0
Difference	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.9	0.1	-0.5	-1.4
Percent Difference	0.0%	-0.1%	0.1%	0.2%	0.1%	0.2%	0.2%	0.6%	1.7%	0.1%	-0.8%	-2.4%
Critical (15%)												
DCR 2015 Without Project	59.3	53.9	48.2	47.1	48.5	51.9	54.2	57.2	58.8	60.2	61.5	63.5
DCR 2015 With Project	59.3	53.9	48.4	47.1	48.7	51.9	54.7	58.3	59.0	59.8	60.2	61.6
Difference	0.0	0.0	0.1	0.0	0.1	0.0	0.5	1.0	0.2	-0.3	-1.3	-1.9
Percent Difference	-0.1%	0.0%	0.3%	0.0%	0.3%	0.1%	0.8%	1.8%	0.4%	-0.6%	-2.1%	-3.0%

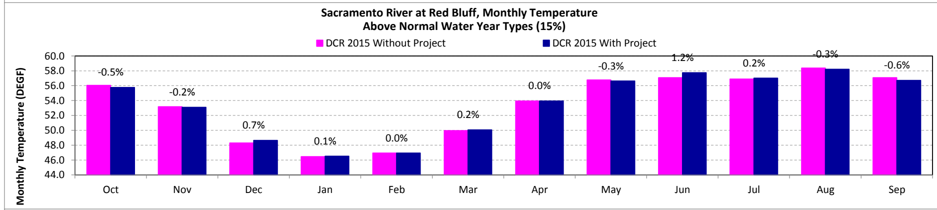
1 Based on the 82-year simulation period

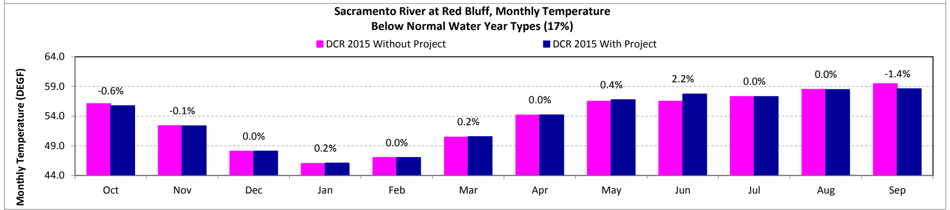
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

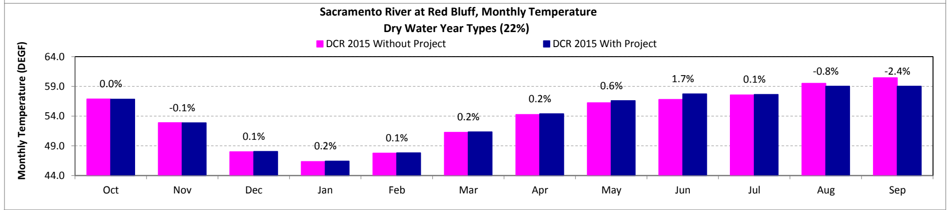
3 Relative difference of the monthly average











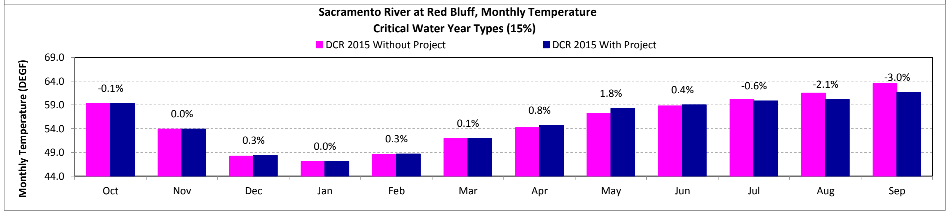
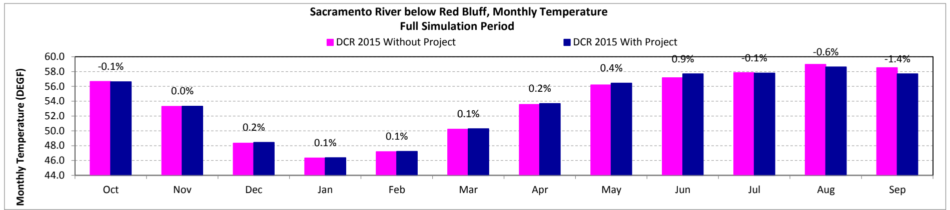
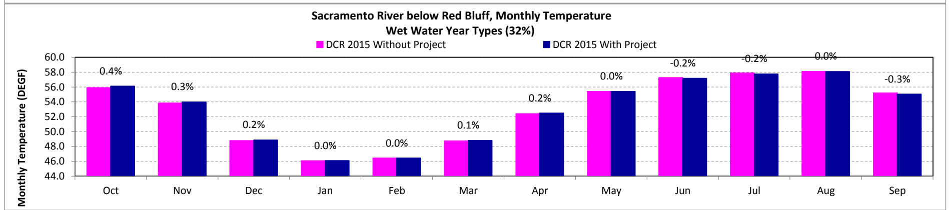


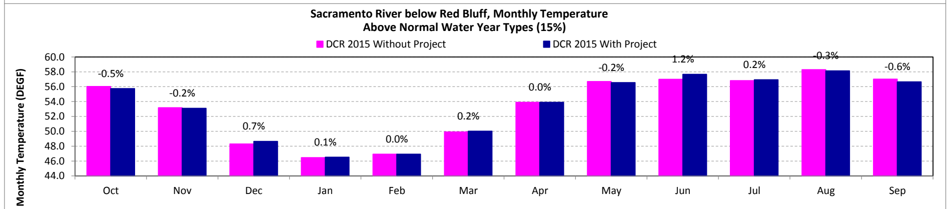
Table SQ8-1a
Sacramento River below Red Bluff, Monthly Temperature
Long-term Average and Average by Water Year Type

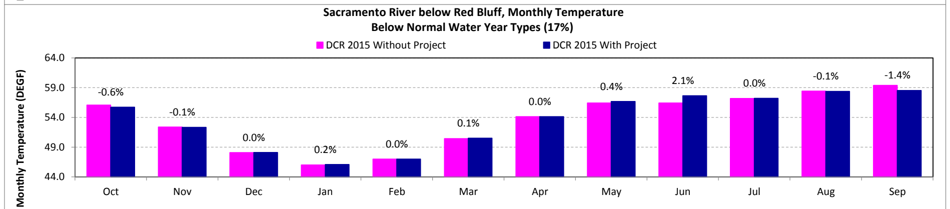
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	56.7	53.3	48.3	46.3	47.2	50.2	53.6	56.2	57.2	57.8	59.0	58.5
DCR 2015 With Project	56.6	53.3	48.4	46.4	47.2	50.3	53.7	56.4	57.7	57.8	58.6	57.7
Difference	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.5	-0.1	-0.3	-0.8
Percent Difference[3]	-0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	0.2%	0.4%	0.9%	-0.1%	-0.6%	-1.4%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	55.9	53.8	48.8	46.1	46.4	48.8	52.4	55.4	57.3	57.9	58.1	55.2
DCR 2015 With Project	56.1	54.0	48.9	46.1	46.4	48.8	52.5	55.4	57.2	57.8	58.1	55.0
Difference	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	-0.1	-0.1	0.0	-0.2
Percent Difference	0.4%	0.3%	0.2%	0.0%	0.0%	0.1%	0.2%	0.0%	-0.2%	-0.2%	0.0%	-0.3%
Above Normal (15%)												
DCR 2015 Without Project	56.0	53.2	48.3	46.5	46.9	49.9	53.9	56.7	57.0	56.8	58.3	57.0
DCR 2015 With Project	55.7	53.1	48.6	46.5	46.9	50.0	53.9	56.6	57.7	56.9	58.1	56.6
Difference	-0.3	-0.1	0.3	0.1	0.0	0.1	0.0	-0.1	0.7	0.1	-0.2	-0.4
Percent Difference	-0.5%	-0.2%	0.7%	0.1%	0.0%	0.2%	0.0%	-0.2%	1.2%	0.2%	-0.3%	-0.6%
Below Normal (17%)												
DCR 2015 Without Project	56.1	52.4	48.1	46.0	47.0	50.4	54.1	56.4	56.4	57.2	58.4	59.4
DCR 2015 With Project	55.7	52.3	48.1	46.1	47.0	50.5	54.1	56.7	57.6	57.2	58.4	58.5
Difference	-0.3	0.0	0.0	0.1	0.0	0.1	0.0	0.2	1.2	0.0	0.0	-0.8
Percent Difference	-0.6%	-0.1%	0.0%	0.2%	0.0%	0.1%	0.0%	0.4%	2.1%	0.0%	-0.1%	-1.4%
Dry (22%)												
DCR 2015 Without Project	56.8	52.9	48.0	46.4	47.7	51.2	54.2	56.2	56.7	57.5	59.4	60.4
DCR 2015 With Project	56.8	52.9	48.0	46.4	47.8	51.3	54.3	56.5	57.7	57.5	58.9	58.9
Difference	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.9	0.1	-0.5	-1.4
Percent Difference	0.0%	-0.1%	0.1%	0.2%	0.1%	0.2%	0.2%	0.6%	1.7%	0.1%	-0.8%	-2.4%
Critical (15%)												
DCR 2015 Without Project	59.3	53.9	48.2	47.1	48.5	51.9	54.1	57.2	58.7	60.1	61.4	63.4
DCR 2015 With Project	59.3	53.9	48.4	47.1	48.6	51.9	54.6	58.2	58.9	59.8	60.1	61.5
Difference	0.0	0.0	0.1	0.0	0.1	0.0	0.5	1.0	0.2	-0.3	-1.3	-1.9
Percent Difference	-0.1%	0.0%	0.3%	0.0%	0.3%	0.1%	0.8%	1.8%	0.4%	-0.6%	-2.1%	-3.0%

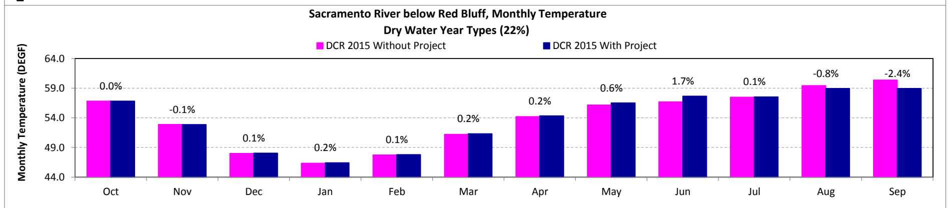
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











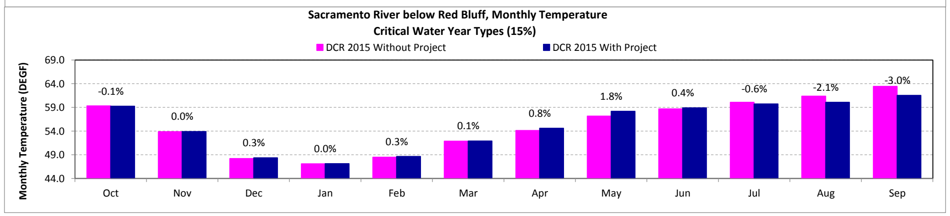


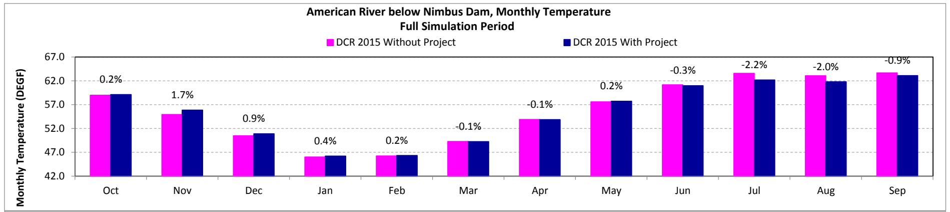
Table SQ9-1a
American River below Nimbus Dam, Monthly Temperature
Long-term Average and Average by Water Year Type

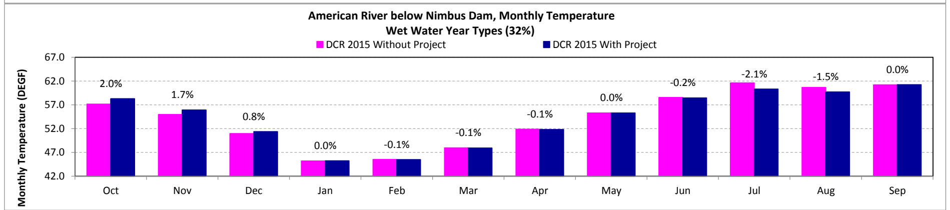
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	59.0	55.0	50.5	46.0	46.3	49.3	53.9	57.6	61.2	63.6	63.1	63.7
DCR 2015 With Project	59.1	55.9	50.9	46.2	46.3	49.3	53.9	57.7	61.0	62.2	61.8	63.1
Difference	0.1	0.9	0.4	0.2	0.1	0.0	0.0	0.1	-0.2	-1.4	-1.3	-0.6
Percent Difference[3]	0.2%	1.7%	0.9%	0.4%	0.2%	-0.1%	-0.1%	0.2%	-0.3%	-2.2%	-2.0%	-0.9%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	57.2	55.0	51.0	45.2	45.5	48.0	51.9	55.3	58.6	61.6	60.7	61.2
DCR 2015 With Project	58.3	55.9	51.4	45.2	45.5	47.9	51.8	55.3	58.5	60.3	59.7	61.2
Difference	1.1	1.0	0.4	0.0	0.0	0.0	0.0	0.0	-0.1	-1.3	-0.9	0.0
Percent Difference	2.0%	1.7%	0.8%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	-0.2%	-2.1%	-1.5%	0.0%
Above Normal (15%)												
DCR 2015 Without Project	58.3	54.8	50.9	46.1	46.0	48.6	53.6	56.9	60.2	62.9	62.1	62.9
DCR 2015 With Project	57.7	55.6	51.5	46.3	46.2	48.6	53.5	56.8	60.0	61.5	61.2	62.1
Difference	-0.6	0.8	0.6	0.3	0.2	0.0	-0.1	-0.1	-0.2	-1.4	-1.0	-0.8
Percent Difference	-1.1%	1.5%	1.2%	0.6%	0.4%	0.1%	-0.2%	-0.2%	-0.3%	-2.2%	-1.6%	-1.2%
Below Normal (17%)												
DCR 2015 Without Project	58.4	54.8	50.6	46.2	45.9	49.1	54.2	57.7	61.1	63.3	63.1	63.9
DCR 2015 With Project	57.7	55.8	51.0	46.3	45.9	49.1	54.1	57.6	60.7	61.7	61.7	62.9
Difference	-0.7	0.9	0.5	0.0	0.0	-0.1	-0.1	-0.1	-0.5	-1.6	-1.4	-1.0
Percent Difference	-1.2%	1.7%	0.9%	0.1%	-0.1%	-0.1%	-0.2%	-0.1%	-0.8%	-2.5%	-2.2%	-1.6%
Dry (22%)												
DCR 2015 Without Project	60.3	55.0	50.0	46.4	46.7	50.0	55.1	59.4	63.2	64.4	64.5	65.3
DCR 2015 With Project	60.2	56.0	50.4	46.7	46.9	50.1	55.1	59.7	63.1	63.1	63.1	64.6
Difference	-0.1	1.0	0.4	0.3	0.2	0.0	0.0	0.4	-0.1	-1.3	-1.5	-0.7
Percent Difference	-0.1%	1.8%	0.8%	0.7%	0.4%	0.0%	0.0%	0.6%	-0.2%	-2.0%	-2.3%	-1.0%
Critical (15%)												
DCR 2015 Without Project	62.3	55.2	49.6	47.0	47.8	51.9	56.5	60.5	64.8	67.7	67.0	67.0
DCR 2015 With Project	62.2	56.0	49.9	47.4	48.0	51.8	56.6	61.0	64.6	66.1	65.2	66.1
Difference	-0.1	0.8	0.3	0.3	0.2	-0.1	0.1	0.5	-0.1	-1.6	-1.8	-0.9
Percent Difference	-0.2%	1.4%	0.7%	0.7%	0.4%	-0.2%	0.1%	0.9%	-0.2%	-2.3%	-2.7%	-1.3%

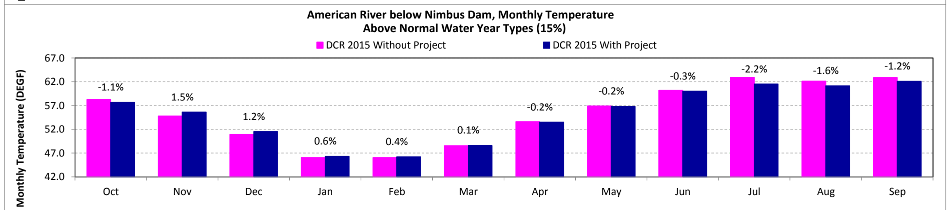
1 Based on the 82-year simulation period

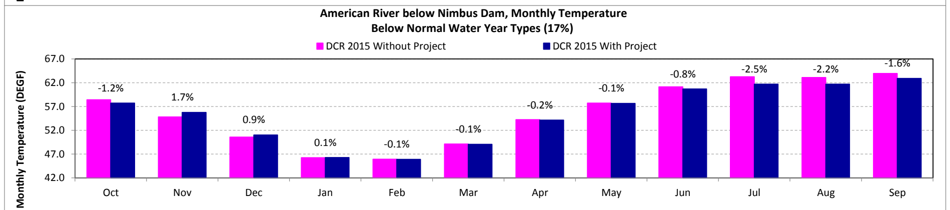
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

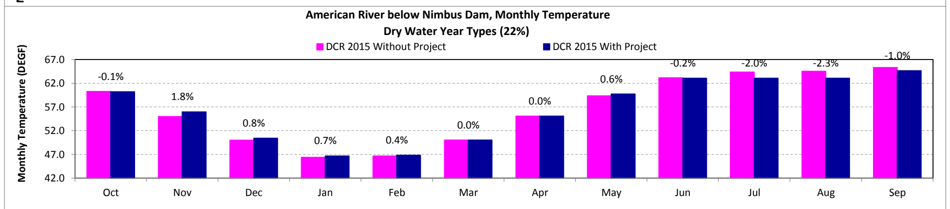
3 Relative difference of the monthly average











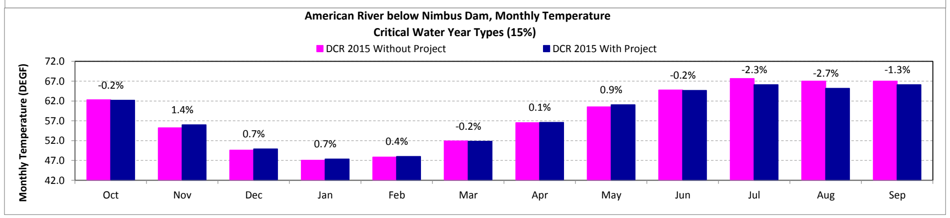


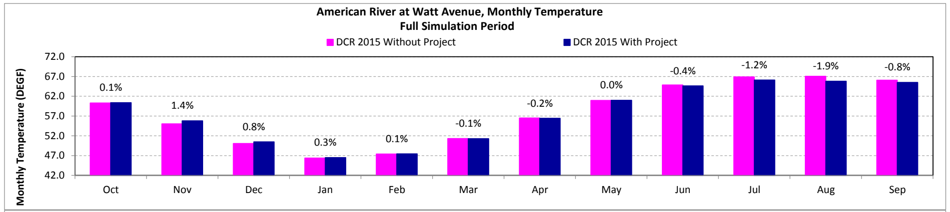
Table SQ10-1a
American River at Watt Avenue, Monthly Temperature
Long-term Average and Average by Water Year Type

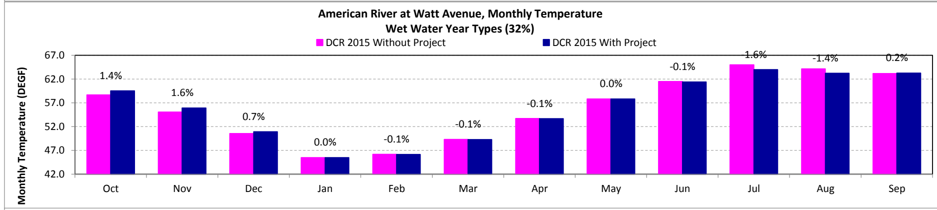
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	60.3	55.0	50.1	46.4	47.4	51.3	56.5	61.0	64.9	66.9	67.1	66.1
DCR 2015 With Project	60.4	55.8	50.5	46.5	47.4	51.3	56.4	61.0	64.6	66.1	65.8	65.5
Difference	0.1	0.8	0.4	0.1	0.1	-0.1	-0.1	0.0	-0.2	-0.8	-1.3	-0.5
Percent Difference[3]	0.1%	1.4%	0.8%	0.3%	0.1%	-0.1%	-0.2%	0.0%	-0.4%	-1.2%	-1.9%	-0.8%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	58.7	55.1	50.6	45.5	46.2	49.3	53.7	57.8	61.5	65.0	64.1	63.2
DCR 2015 With Project	59.5	55.9	50.9	45.5	46.2	49.3	53.7	57.8	61.4	64.0	63.2	63.3
Difference	0.8	0.9	0.4	0.0	0.0	0.0	0.0	0.0	-0.1	-1.0	-0.9	0.1
Percent Difference	1.4%	1.6%	0.7%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	-0.1%	-1.6%	-1.4%	0.2%
Above Normal (15%)												
DCR 2015 Without Project	59.7	54.7	50.5	46.4	47.0	50.0	55.6	60.0	64.1	65.8	65.9	64.8
DCR 2015 With Project	59.2	55.4	51.1	46.7	47.1	50.0	55.5	59.9	64.1	64.9	65.1	64.3
Difference	-0.5	0.7	0.6	0.2	0.1	0.0	-0.1	-0.1	0.0	-1.0	-0.8	-0.6
Percent Difference	-0.9%	1.3%	1.1%	0.5%	0.3%	0.1%	-0.2%	-0.1%	0.0%	-1.5%	-1.2%	-0.9%
Below Normal (17%)												
DCR 2015 Without Project	59.6	54.8	50.1	46.5	46.9	51.2	56.8	60.8	65.2	65.9	67.3	66.5
DCR 2015 With Project	59.1	55.6	50.6	46.6	46.9	51.2	56.6	60.7	64.5	65.1	65.7	65.6
Difference	-0.5	0.8	0.4	0.0	0.0	-0.1	-0.2	-0.1	-0.7	-0.8	-1.5	-1.0
Percent Difference	-0.8%	1.5%	0.9%	0.0%	-0.1%	-0.1%	-0.3%	-0.2%	-1.1%	-1.2%	-2.3%	-1.4%
Dry (22%)												
DCR 2015 Without Project	61.4	55.1	49.6	46.7	48.0	52.7	58.2	63.4	67.0	67.6	68.5	67.9
DCR 2015 With Project	61.3	55.9	50.0	47.0	48.2	52.6	58.2	63.6	66.8	67.2	67.1	67.2
Difference	-0.1	0.8	0.4	0.3	0.1	-0.1	-0.1	0.2	-0.2	-0.3	-1.4	-0.7
Percent Difference	-0.1%	1.5%	0.8%	0.6%	0.3%	-0.1%	-0.1%	0.3%	-0.4%	-0.5%	-2.0%	-1.0%
Critical (15%)												
DCR 2015 Without Project	63.6	55.5	49.2	47.4	50.0	55.1	60.6	65.3	69.3	72.3	72.2	70.2
DCR 2015 With Project	63.4	56.0	49.5	47.6	50.1	54.9	60.4	65.4	69.0	71.3	70.2	69.0
Difference	-0.1	0.5	0.3	0.3	0.1	-0.2	-0.1	0.1	-0.3	-1.0	-2.0	-1.3
Percent Difference	-0.2%	1.0%	0.6%	0.5%	0.2%	-0.3%	-0.2%	0.1%	-0.4%	-1.4%	-2.8%	-1.8%

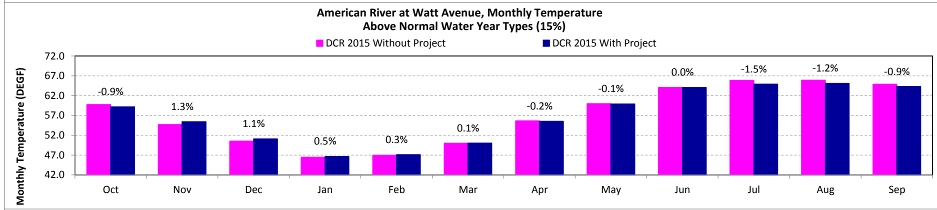
1 Based on the 82-year simulation period

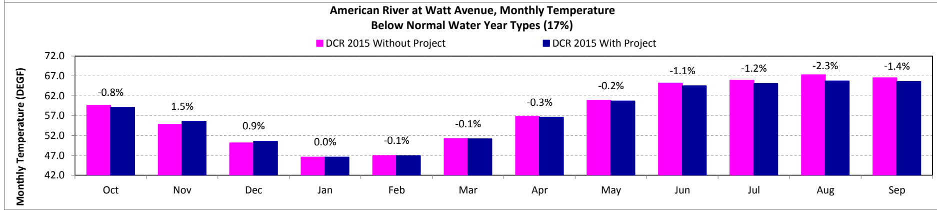
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

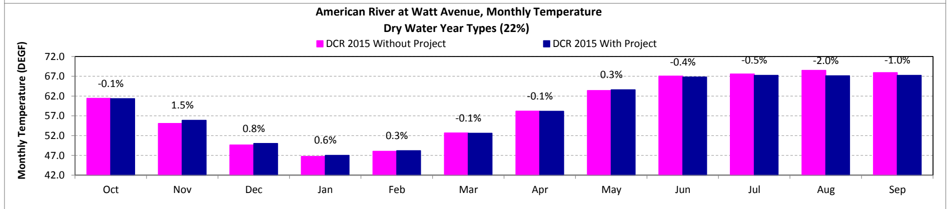
3 Relative difference of the monthly average











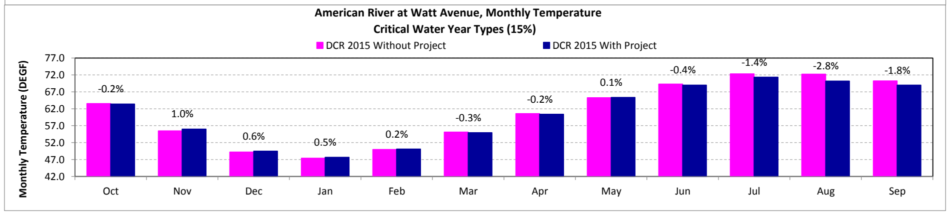


Table SQ11-1a
American River at the Mouth, Monthly Temperature
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	61.4	55.2	49.8	46.6	48.2	52.7	58.3	63.3	67.4	69.3	70.0	67.9
DCR 2015 With Project	61.4	55.8	50.1	46.7	48.2	52.7	58.2	63.2	67.1	69.0	68.8	67.4
Difference	0.0	0.6	0.4	0.1	0.0	-0.1	-0.1	0.0	-0.3	-0.4	-1.2	-0.5
Percent Difference[3]	0.0%	1.2%	0.7%	0.3%	0.1%	-0.1%	-0.2%	-0.1%	-0.4%	-0.5%	-1.8%	-0.8%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	59.9	55.2	50.3	45.7	46.6	50.2	55.0	59.5	63.5	67.5	66.7	64.7
DCR 2015 With Project	60.5	56.0	50.6	45.7	46.6	50.2	54.9	59.5	63.4	66.7	65.8	64.9
Difference	0.6	0.8	0.3	0.0	0.0	0.0	0.0	0.0	-0.1	-0.8	-0.9	0.2
Percent Difference	1.0%	1.4%	0.7%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	-0.1%	-1.1%	-1.3%	0.3%
Above Normal (15%)												
DCR 2015 Without Project	60.9	54.7	50.2	46.7	47.6	50.9	57.1	62.1	66.8	67.9	68.7	66.3
DCR 2015 With Project	60.4	55.3	50.7	46.9	47.7	50.9	57.0	62.0	66.9	67.4	68.0	66.0
Difference	-0.5	0.6	0.5	0.2	0.1	0.0	-0.1	-0.1	0.1	-0.6	-0.7	-0.4
Percent Difference	-0.8%	1.1%	1.1%	0.4%	0.2%	0.1%	-0.2%	-0.1%	0.1%	-0.9%	-1.0%	-0.6%
Below Normal (17%)												
DCR 2015 Without Project	60.5	54.8	49.8	46.8	47.7	52.7	58.6	63.0	68.1	67.8	70.4	68.5
DCR 2015 With Project	60.2	55.5	50.2	46.8	47.6	52.7	58.4	62.8	67.2	67.6	68.7	67.6
Difference	-0.3	0.7	0.4	0.0	0.0	-0.1	-0.2	-0.2	-0.8	-0.1	-1.6	-0.9
Percent Difference	-0.6%	1.2%	0.8%	0.0%	-0.1%	-0.1%	-0.3%	-0.3%	-1.2%	-0.2%	-2.3%	-1.3%
Dry (22%)												
DCR 2015 Without Project	62.4	55.2	49.4	46.9	49.0	54.5	60.5	66.2	69.8	70.0	71.5	70.0
DCR 2015 With Project	62.3	55.9	49.7	47.2	49.2	54.4	60.4	66.3	69.5	70.4	70.2	69.3
Difference	-0.1	0.7	0.4	0.2	0.1	-0.2	-0.1	0.1	-0.3	0.3	-1.3	-0.7
Percent Difference	-0.2%	1.2%	0.7%	0.5%	0.2%	-0.3%	-0.1%	0.1%	-0.5%	0.5%	-1.8%	-1.0%
Critical (15%)												
DCR 2015 Without Project	64.8	55.8	48.9	47.6	51.4	57.4	63.4	68.4	72.3	75.5	75.8	72.8
DCR 2015 With Project	64.6	56.2	49.2	47.9	51.5	57.2	63.2	68.3	71.9	74.9	73.8	71.3
Difference	-0.2	0.3	0.2	0.2	0.1	-0.2	-0.2	-0.1	-0.4	-0.6	-2.0	-1.5
Percent Difference	-0.3%	0.6%	0.5%	0.4%	0.1%	-0.3%	-0.4%	-0.1%	-0.5%	-0.7%	-2.7%	-2.0%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

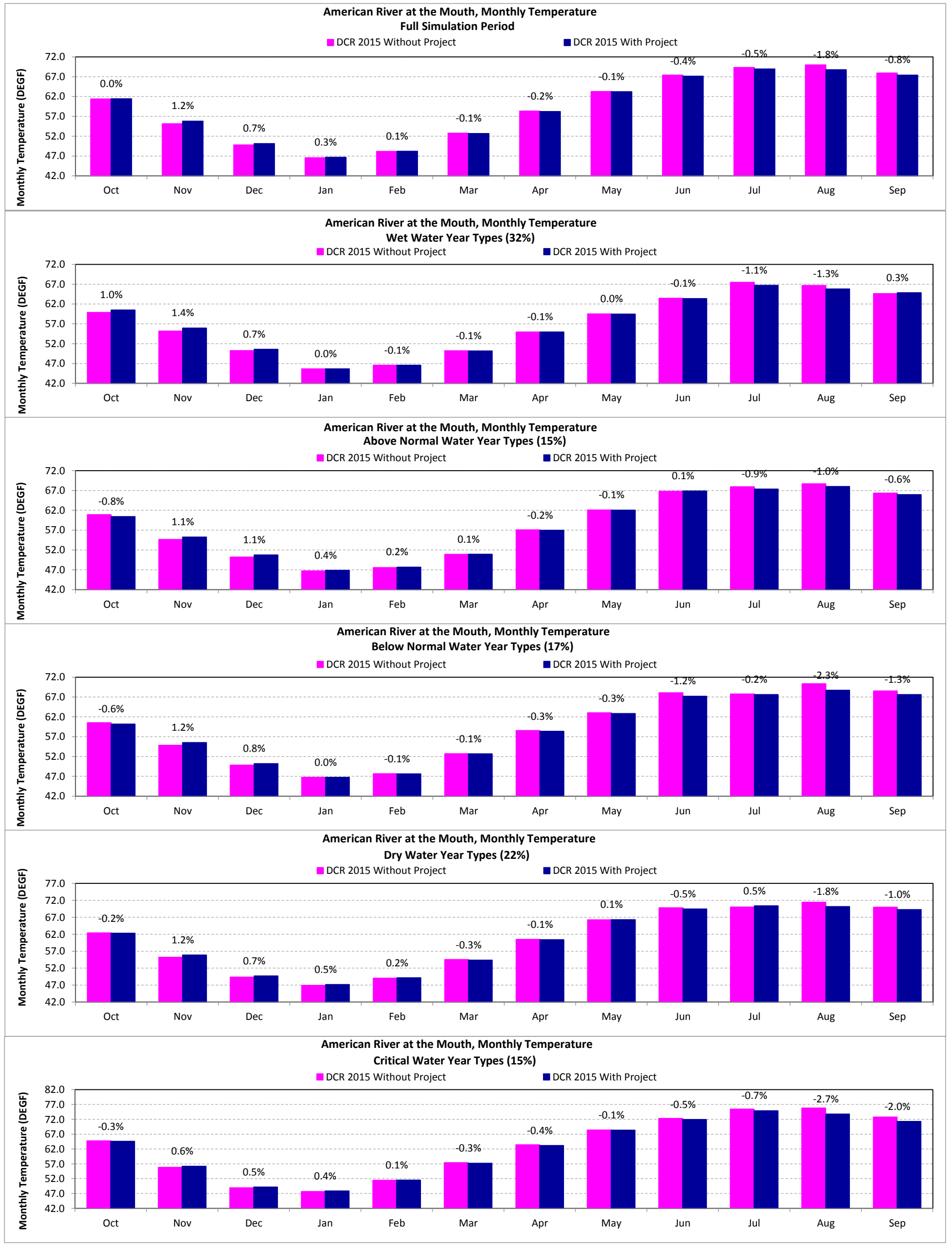


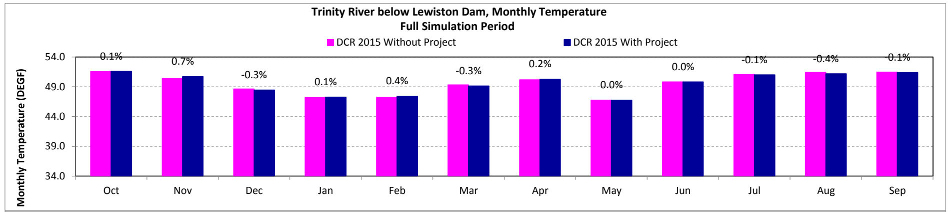
Table SQ12-1a
Trinity River below Lewiston Dam, Monthly Temperature
Long-term Average and Average by Water Year Type

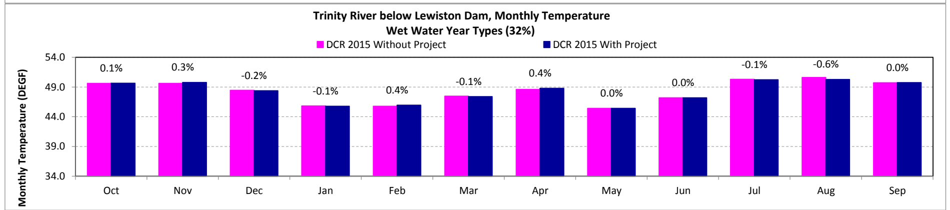
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	51.5	50.4	48.6	47.2	47.2	49.3	50.2	46.7	49.8	51.1	51.4	51.5
DCR 2015 With Project	51.6	50.7	48.5	47.3	47.4	49.1	50.3	46.8	49.8	51.0	51.2	51.4
Difference	0.1	0.3	-0.2	0.1	0.2	-0.2	0.1	0.0	0.0	-0.1	-0.2	-0.1
Percent Difference[3]	0.1%	0.7%	-0.3%	0.1%	0.4%	-0.3%	0.2%	0.0%	0.0%	-0.1%	-0.4%	-0.1%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	49.6	49.6	48.5	45.8	45.8	47.5	48.6	45.4	47.2	50.3	50.6	49.7
DCR 2015 With Project	49.7	49.8	48.4	45.8	46.0	47.4	48.8	45.4	47.2	50.2	50.3	49.7
Difference	0.0	0.1	-0.1	-0.1	0.2	-0.1	0.2	0.0	0.0	-0.1	-0.3	0.0
Percent Difference	0.1%	0.3%	-0.2%	-0.1%	0.4%	-0.1%	0.4%	0.0%	0.0%	-0.1%	-0.6%	0.0%
Above Normal (15%)												
DCR 2015 Without Project	50.7	49.5	49.3	46.7	46.5	49.0	50.0	45.4	48.5	50.7	50.6	50.3
DCR 2015 With Project	50.6	50.1	48.4	46.8	46.8	49.1	50.0	45.4	48.5	50.7	50.2	50.4
Difference	-0.1	0.6	-0.9	0.1	0.3	0.1	0.0	0.0	-0.1	0.0	-0.4	0.1
Percent Difference	-0.2%	1.3%	-1.8%	0.3%	0.6%	0.1%	-0.1%	0.0%	-0.1%	0.0%	-0.8%	0.2%
Below Normal (17%)												
DCR 2015 Without Project	52.1	49.8	47.5	47.5	47.1	49.2	50.5	46.4	50.6	51.1	51.4	52.0
DCR 2015 With Project	51.8	49.9	47.3	47.7	47.2	49.0	50.7	46.4	50.8	51.3	51.7	51.5
Difference	-0.4	0.1	-0.2	0.1	0.1	-0.2	0.2	0.0	0.1	0.1	0.3	-0.6
Percent Difference	-0.7%	0.2%	-0.5%	0.3%	0.2%	-0.4%	0.4%	0.0%	0.2%	0.3%	0.5%	-1.1%
Dry (22%)												
DCR 2015 Without Project	52.5	51.6	48.9	48.3	48.5	50.6	51.5	47.8	51.1	51.1	51.6	52.0
DCR 2015 With Project	52.7	51.6	48.5	48.4	48.8	50.3	51.5	47.8	51.2	51.0	51.4	51.9
Difference	0.2	0.0	-0.4	0.1	0.2	-0.3	0.0	0.0	0.2	-0.2	-0.2	-0.1
Percent Difference	0.3%	0.0%	-0.8%	0.2%	0.5%	-0.5%	0.0%	0.0%	0.3%	-0.4%	-0.3%	-0.2%
Critical (15%)												
DCR 2015 Without Project	54.3	51.6	49.2	48.7	49.4	51.8	51.2	49.8	53.9	52.9	53.6	55.1
DCR 2015 With Project	54.9	52.9	49.9	48.8	49.5	51.3	51.4	49.9	53.6	52.7	53.3	55.2
Difference	0.6	1.3	0.8	0.1	0.1	-0.4	0.2	0.1	-0.3	-0.1	-0.4	0.1
Percent Difference	1.0%	2.6%	1.6%	0.2%	0.2%	-0.9%	0.3%	0.2%	-0.5%	-0.2%	-0.7%	0.2%

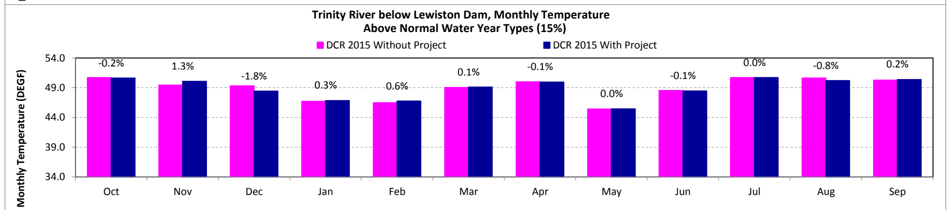
1 Based on the 82-year simulation period

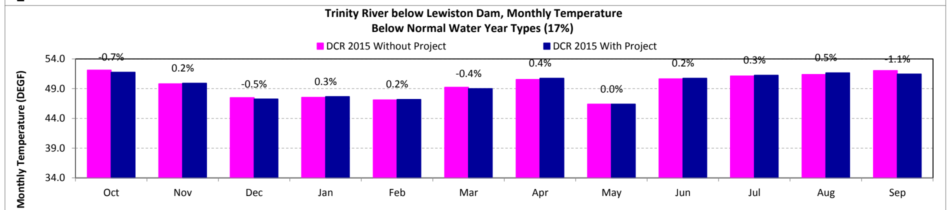
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

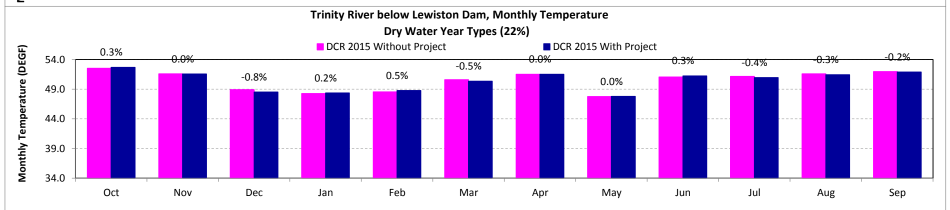
3 Relative difference of the monthly average











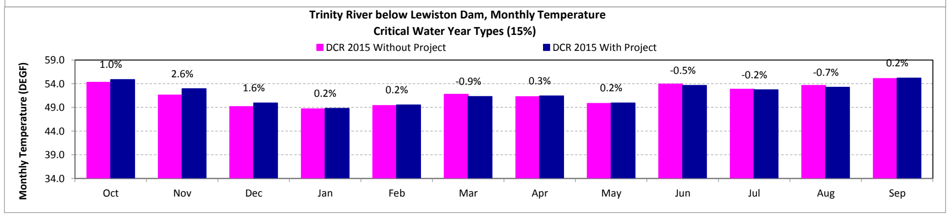


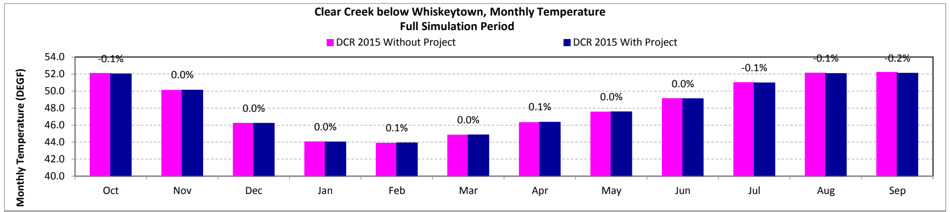
Table SQ13-1a
Clear Creek below Whiskeytown, Monthly Temperature
Long-term Average and Average by Water Year Type

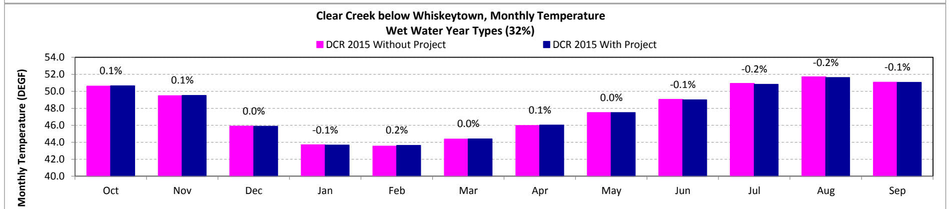
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	52.1	50.1	46.2	44.0	43.9	44.8	46.3	47.5	49.1	51.0	52.1	52.2
DCR 2015 With Project	52.0	50.1	46.2	44.0	43.9	44.8	46.3	47.5	49.1	50.9	52.0	52.1
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Percent Difference[3]	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.2%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	50.6	49.5	45.9	43.7	43.5	44.4	46.0	47.5	49.0	50.9	51.7	51.1
DCR 2015 With Project	50.6	49.5	45.9	43.7	43.6	44.4	46.0	47.5	49.0	50.8	51.6	51.0
Difference	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	-0.1	-0.1	-0.1	0.0
Percent Difference	0.1%	0.1%	0.0%	-0.1%	0.2%	0.0%	0.1%	0.0%	-0.1%	-0.2%	-0.2%	-0.1%
Above Normal (15%)												
DCR 2015 Without Project	51.4	49.6	45.9	44.1	43.9	44.7	46.2	47.7	49.3	51.2	51.9	51.5
DCR 2015 With Project	51.3	49.6	45.9	44.2	43.9	44.7	46.2	47.7	49.3	51.2	51.8	51.3
Difference	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Percent Difference	-0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	-0.1%	-0.2%	-0.4%
Below Normal (17%)												
DCR 2015 Without Project	52.4	50.1	46.3	43.7	43.4	44.5	45.9	47.0	48.5	50.5	51.9	52.3
DCR 2015 With Project	52.2	50.1	46.3	43.7	43.4	44.6	46.0	47.1	48.7	50.6	51.8	52.0
Difference	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	-0.3
Percent Difference	-0.4%	0.1%	-0.1%	-0.1%	0.0%	0.1%	0.1%	0.3%	0.5%	0.3%	-0.1%	-0.6%
Dry (22%)												
DCR 2015 Without Project	52.7	50.4	46.4	44.0	44.1	45.1	46.4	47.3	48.9	51.0	52.3	52.6
DCR 2015 With Project	52.6	50.4	46.3	44.0	44.1	45.1	46.5	47.4	48.9	51.0	52.3	52.6
Difference	-0.1	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Percent Difference	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	-0.1%
Critical (15%)												
DCR 2015 Without Project	54.5	51.3	46.9	45.1	44.9	45.9	47.3	48.4	50.0	51.5	53.2	54.5
DCR 2015 With Project	54.5	51.2	46.9	45.0	44.9	45.9	47.3	48.3	49.8	51.4	53.1	54.5
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.1	0.0
Percent Difference	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.4%	-0.3%	-0.2%	0.0%

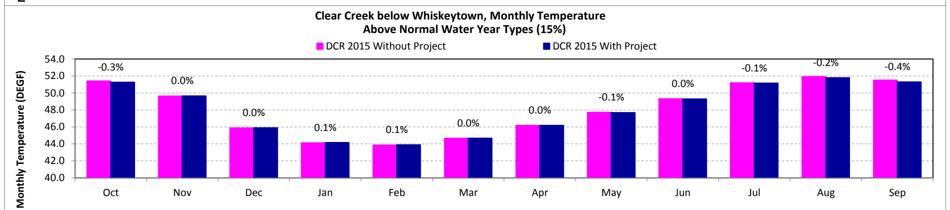
1 Based on the 82-year simulation period

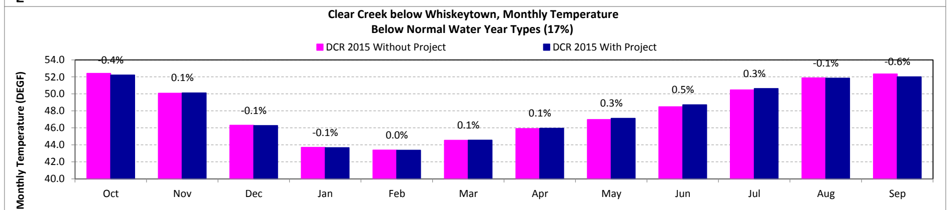
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

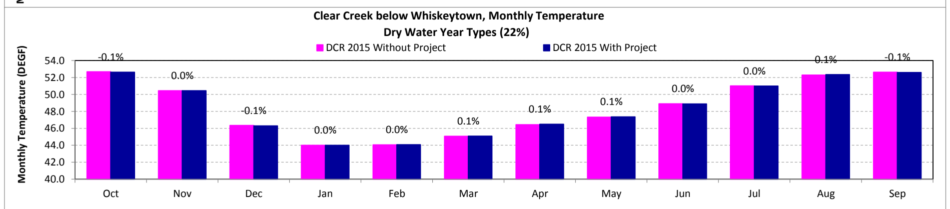
3 Relative difference of the monthly average











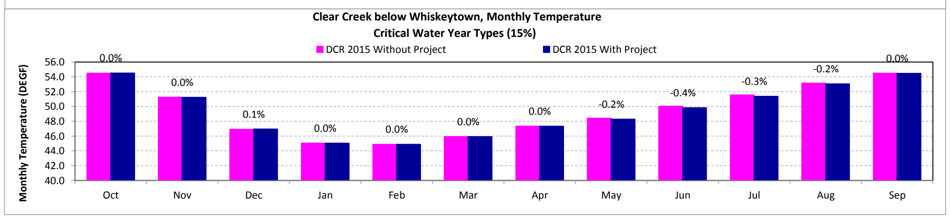


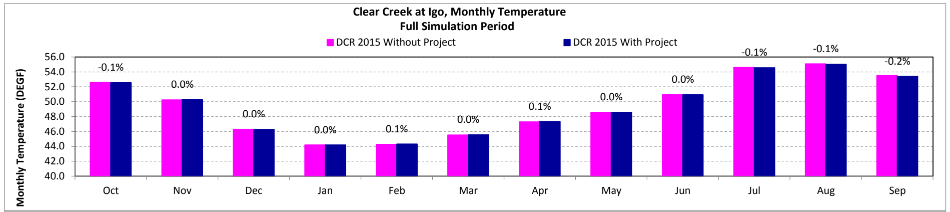
Table SQ14-1a
Clear Creek at Igo, Monthly Temperature
Long-term Average and Average by Water Year Type

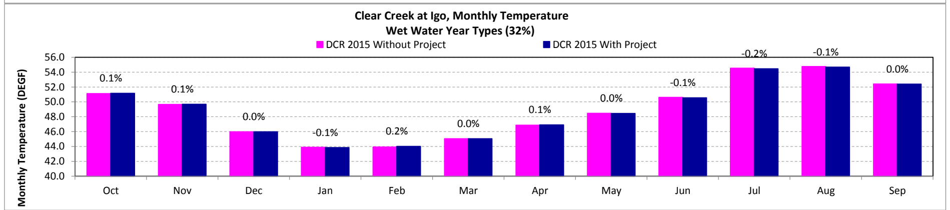
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
DCR 2015 Without Project	52.6	50.3	46.3	44.2	44.3	45.5	47.3	48.6	50.9	54.6	55.1	53.5
DCR 2015 With Project	52.6	50.3	46.3	44.2	44.3	45.5	47.3	48.6	50.9	54.6	55.0	53.4
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Percent Difference[3]	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.2%
Water Year Types[2]												
Wet (32%)												
DCR 2015 Without Project	51.1	49.7	46.0	43.9	43.9	45.0	46.9	48.5	50.6	54.5	54.8	52.4
DCR 2015 With Project	51.2	49.7	46.0	43.9	44.0	45.1	46.9	48.5	50.6	54.5	54.7	52.4
Difference	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0
Percent Difference	0.1%	0.1%	0.0%	-0.1%	0.2%	0.0%	0.1%	0.0%	-0.1%	-0.2%	-0.1%	0.0%
Above Normal (15%)												
DCR 2015 Without Project	51.9	49.8	46.0	44.3	44.3	45.4	47.2	48.7	51.0	54.8	54.9	52.8
DCR 2015 With Project	51.8	49.8	46.0	44.4	44.3	45.4	47.1	48.7	51.0	54.8	54.8	52.6
Difference	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Percent Difference	-0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	-0.1%	-0.2%	-0.4%
Below Normal (17%)												
DCR 2015 Without Project	52.9	50.2	46.4	43.9	43.8	45.2	46.9	48.0	50.2	54.1	54.8	53.6
DCR 2015 With Project	52.7	50.3	46.3	43.8	43.8	45.2	47.0	48.1	50.4	54.2	54.8	53.3
Difference	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	-0.3
Percent Difference	-0.4%	0.1%	-0.1%	-0.1%	0.0%	0.1%	0.1%	0.3%	0.4%	0.3%	0.0%	-0.6%
Dry (22%)												
DCR 2015 Without Project	53.2	50.6	46.4	44.2	44.5	45.8	47.5	48.4	50.8	54.6	55.2	53.9
DCR 2015 With Project	53.2	50.6	46.4	44.1	44.5	45.8	47.5	48.4	50.8	54.6	55.3	53.8
Difference	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Percent Difference	-0.1%	0.0%	-0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	-0.1%
Critical (15%)												
DCR 2015 Without Project	55.2	51.5	47.0	45.2	45.4	46.7	48.5	49.6	52.7	55.2	56.0	56.0
DCR 2015 With Project	55.2	51.4	47.0	45.2	45.4	46.7	48.5	49.5	52.5	55.0	55.9	55.9
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.1	0.0
Percent Difference	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.4%	-0.3%	-0.2%	0.0%

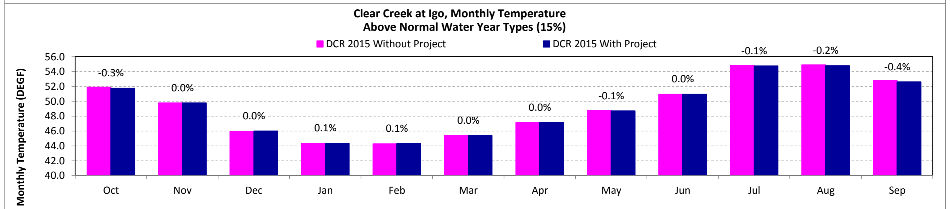
1 Based on the 82-year simulation period

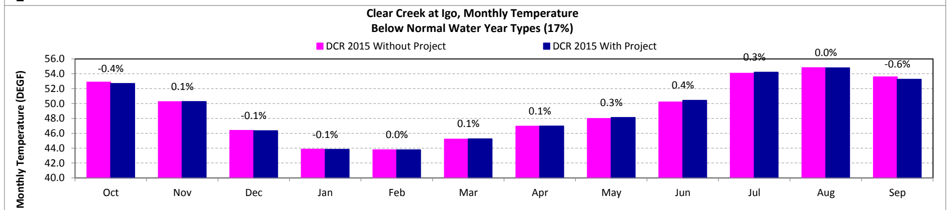
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

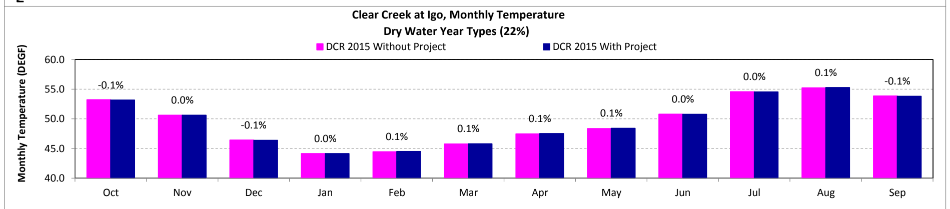
3 Relative difference of the monthly average

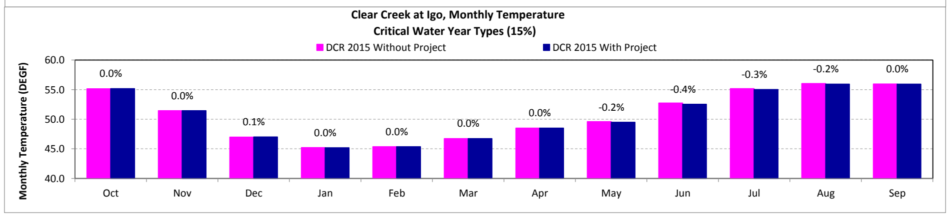












Trinity and Sacramento River Basin Operations

Exceedance Probability Charts and Tables

Figure SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

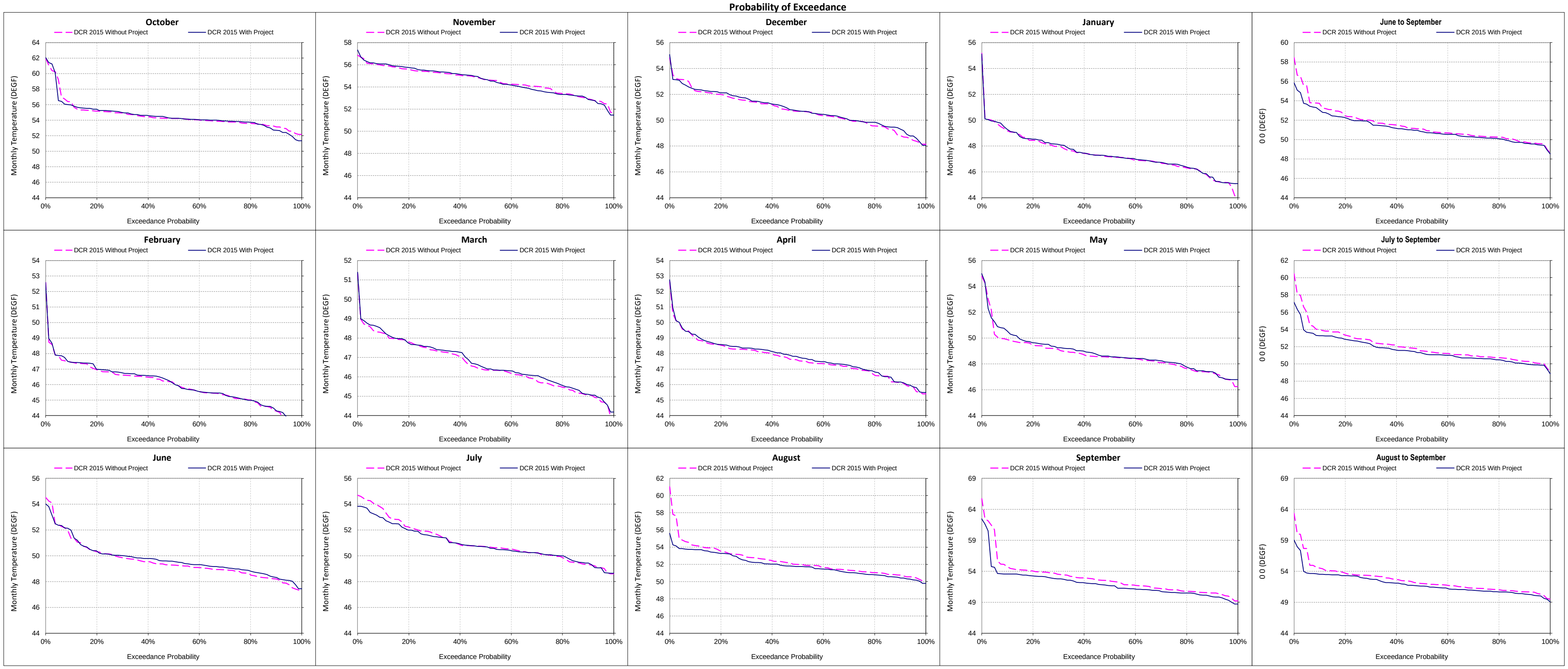


Table SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.0	62.1	0.1	0.1%
1.2%	61.1	61.4	0.4	0.6%
2.5%	60.4	61.3	0.9	1.4%
3.7%	60.2	60.1	-0.1	-0.2%
4.9%	59.3	56.5	-2.7	-4.6%
6.2%	57.0	56.4	-0.6	-1.0%
7.4%	56.7	56.1	-0.6	-1.1%
8.6%	56.4	56.0	-0.4	-0.7%
9.9%	56.4	56.0	-0.4	-0.7%
11.1%	55.7	55.8	0.1	0.2%
12.3%	55.4	55.6	0.2	0.4%
13.6%	55.3	55.6	0.3	0.5%
14.8%	55.3	55.5	0.2	0.4%
16.0%	55.3	55.5	0.3	0.5%
17.3%	55.3	55.5	0.3	0.5%
18.5%	55.2	55.4	0.2	0.4%
19.8%	55.2	55.4	0.2	0.4%
21.0%	55.2	55.3	0.1	0.2%
22.2%	55.1	55.3	0.1	0.2%
23.5%	55.1	55.2	0.1	0.3%
24.7%	55.1	55.2	0.1	0.2%
25.9%	55.1	55.2	0.1	0.2%
27.2%	55.0	55.1	0.2	0.3%
28.4%	55.0	55.1	0.2	0.3%
29.6%	54.9	55.0	0.1	0.1%
30.9%	54.9	54.9	0.0	0.1%
32.1%	54.7	54.9	0.2	0.3%
33.3%	54.7	54.8	0.1	0.2%
34.6%	54.7	54.7	0.0	0.0%
35.8%	54.6	54.7	0.1	0.2%
37.0%	54.5	54.6	0.1	0.2%
38.3%	54.5	54.6	0.2	0.3%
39.5%	54.4	54.6	0.2	0.4%
40.7%	54.4	54.6	0.1	0.3%
42.0%	54.3	54.5	0.2	0.4%
43.2%	54.3	54.5	0.2	0.4%
44.4%	54.3	54.5	0.2	0.4%
45.7%	54.3	54.5	0.2	0.4%
46.9%	54.2	54.4	0.1	0.2%
48.1%	54.2	54.3	0.0	0.1%
49.4%	54.2	54.2	0.0	0.0%
50.6%	54.2	54.2	0.0	0.0%
51.9%	54.2	54.2	0.0	0.0%
53.1%	54.2	54.2	0.0	0.0%
54.3%	54.2	54.2	0.0	0.0%
55.6%	54.1	54.1	0.0	0.1%
56.8%	54.1	54.1	0.1	0.1%
58.0%	54.1	54.1	0.1	0.1%
59.3%	54.1	54.1	0.0	0.1%
60.5%	54.0	54.1	0.1	0.1%
61.7%	54.0	54.0	0.1	0.1%
63.0%	53.9	54.0	0.1	0.2%
64.2%	53.9	54.0	0.1	0.2%
65.4%	53.9	54.0	0.1	0.2%
66.7%	53.9	54.0	0.1	0.2%
67.9%	53.9	54.0	0.1	0.2%
69.1%	53.8	53.9	0.1	0.1%
70.4%	53.8	53.9	0.1	0.2%
71.6%	53.8	53.9	0.1	0.2%
72.8%	53.8	53.9	0.1	0.2%
74.1%	53.8	53.8	0.1	0.1%
75.3%	53.7	53.8	0.1	0.1%
76.5%	53.6	53.8	0.1	0.3%
77.8%	53.6	53.8	0.2	0.3%
79.0%	53.6	53.7	0.2	0.3%
80.2%	53.6	53.7	0.2	0.3%
81.5%	53.6	53.7	0.1	0.2%
82.7%	53.5	53.5	-0.1	-0.1%
84.0%	53.5	53.4	-0.1	-0.2%
85.2%	53.4	53.4	-0.1	-0.1%
86.4%	53.3	53.1	-0.2	-0.3%
87.7%	53.3	53.0	-0.3	-0.5%
88.9%	53.2	52.7	-0.5	-1.0%
90.1%	53.1	52.7	-0.4	-0.8%
91.4%	53.1	52.6	-0.5	-0.9%
92.6%	53.0	52.4	-0.6	-1.1%
93.8%	52.9	52.4	-0.5	-1.0%
95.1%	52.6	52.2	-0.4	-0.8%
96.3%	52.6	51.9	-0.7	-1.3%
97.5%	52.3	51.5	-0.8	-1.5%
98.8%	52.2	51.3	-0.8	-1.6%
100.0%	52.2	51.3	0.0	-1.6%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.9	57.3	0.5	0.8%
1.2%	56.7	56.7	0.0	0.0%
2.5%	56.5	56.4	-0.1	-0.2%
3.7%	56.1	56.3	0.2	0.3%
4.9%	56.1	56.2	0.1	0.1%
6.2%	56.1	56.2	0.1	0.2%
7.4%	56.0	56.1	0.1	0.1%
8.6%	56.0	56.1	0.1	0.2%
9.9%	55.9	56.1	0.1	0.2%
11.1%	55.9	56.1	0.1	0.3%
12.3%	55.9	56.0	0.1	0.2%
13.6%	55.8	55.9	0.1	0.1%
14.8%	55.8	55.9	0.1	0.1%
16.0%	55.7	55.9	0.1	0.2%
17.3%	55.6	55.8	0.2	0.4%
18.5%	55.6	55.8	0.2	0.3%
19.8%	55.6	55.8	0.1	0.3%
21.0%	55.5	55.7	0.2	0.4%
22.2%	55.5	55.7	0.2	0.4%
23.5%	55.4	55.6	0.1	0.2%
24.7%	55.4	55.5	0.1	0.2%
25.9%	55.4	55.5	0.1	0.2%
27.2%	55.4	55.5	0.1	0.1%
28.4%	55.3	55.5	0.1	0.2%
29.6%	55.3	55.4	0.1	0.2%
30.9%	55.3	55.4	0.1	0.2%
32.1%	55.3	55.4	0.1	0.1%
33.3%	55.2	55.4	0.1	0.2%
34.6%	55.2	55.3	0.1	0.2%
35.8%	55.2	55.3	0.1	0.2%
37.0%	55.2	55.2	0.0	0.1%
38.3%	55.1	55.2	0.1	0.2%
39.5%	55.1	55.2	0.1	0.2%
40.7%	55.0	55.1	0.1	0.2%
42.0%	55.0	55.1	0.1	0.1%
43.2%	55.0	55.1	0.1	0.1%
44.4%	55.0	55.0	0.1	0.1%
45.7%	54.9	55.0	0.1	0.1%
46.9%	54.8	54.9	0.1	0.2%
48.1%	54.8	54.8	0.0	0.0%
49.4%	54.7	54.7	0.0	0.0%
50.6%	54.7	54.7	0.0	0.0%
51.9%	54.6	54.5	-0.1	-0.1%
53.1%	54.6	54.5	0.0	-0.1%
54.3%	54.6	54.4	-0.2	-0.3%
55.6%	54.4	54.3	-0.1	-0.2%
56.8%	54.3	54.3	-0.1	-0.1%
58.0%	54.3	54.3	0.0	0.0%
59.3%	54.3	54.2	-0.1	-0.1%
60.5%	54.2	54.1	-0.1	-0.2%
61.7%	54.2	54.1	-0.1	-0.2%
63.0%	54.2	54.1	-0.2	-0.3%
64.2%	54.2	54.0	-0.2	-0.4%
65.4%	54.2	53.9	-0.2	-0.5%
66.7%	54.1	53.9	-0.2	-0.4%
67.9%	54.1	53.8	-0.3	-0.5%
69.1%	54.1	53.7	-0.3	-0.6%
70.4%	54.0	53.7	-0.4	-0.7%
71.6%	54.0	53.6	-0.4	-0.7%
72.8%	53.9	53.6	-0.3	-0.6%
74.1%	53.9	53.5	-0.4	-0.7%
75.3%	53.9	53.5	-0.4	-0.7%
76.5%	53.6	53.5	-0.1	-0.3%
77.8%	53.4	53.4	-0.1	-0.1%
79.0%	53.4	53.3	-0.1	-0.2%
80.2%	53.4	53.3	-0.1	-0.1%
81.5%	53.4	53.3	-0.1	-0.1%
82.7%	53.4	53.3	-0.1	-0.2%
84.0%	53.3	53.3	0.0	0.0%
85.2%	53.2	53.2	0.0	0.0%
86.4%	53.1	53.2	0.1	0.1%
87.7%	53.1	53.2	0.1	0.2%
88.9%	53.0	53.1	0.0	0.1%
90.1%	52.9	52.9	-0.1	-0.1%
91.4%	52.8	52.8	0.0	0.0%
92.6%	52.7	52.8	0.0	0.0%
93.8%	52.7	52.5	-0.2	-0.4%
95.1%	52.7	52.5	-0.2	-0.4%
96.3%	52.5	52.3	-0.1	-0.3%
97.5%	52.5	51.9	-0.6	-1.1%
98.8%	51.7	51.5	-0.2	-0.5%
100.0%	51.7	51.5	-0.2	-0.5%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.8	55.1	0.3	0.5%
1.2%	53.5	53.2	-0.4	-0.7%
2.5%	53.2	53.1	-0.1	-0.2%
3.7%	53.2	53.1	-0.1	-0.1%
4.9%	53.1	52.8	-0.3	-0.6%
6.2%	53.1	52.7	-0.4	-0.8%
7.4%	53.0	52.6	-0.4	-0.8%
8.6%	52.5	52.5	0.0	-0.1%
9.9%	52.3	52.4	0.1	0.2%
11.1%	52.2	52.4	0.1	0.3%
12.3%	52.2	52.3	0.1	0.3%
13.6%	52.2	52.3	0.1	0.2%
14.8%	52.1	52.3	0.1	0.2%
16.0%	52.1	52.2	0.1	0.2%
17.3%	52.0	52.2	0.2	0.4%
18.5%	52.0	52.2	0.2	0.3%
19.8%	52.0	52.1	0.1	0.2%
21.0%	52.0	52.1	0.1	0.3%
22.2%	51.9	52.1	0.3	0.5%
23.5%	51.8	52.0	0.2	0.4%
24.7%	51.7	51.9	0.2	0.4%
25.9%	51.7	51.9	0.2	0.4%
27.2%	51.6	51.8	0.2	0.4%
28.4%	51.6	51.7	0.2	0.4%
29.6%	51.5	51.7	0.2	0.3%
30.9%	51.4	51.6	0.2	0.3%
32.1%	51.4	51.5	0.1	0.1%
33.3%	51.4	51.5	0.1	0.1%
34.6%	51.4	51.4	0.1	0.2%
35.8%	51.3	51.4	0.1	0.2%
37.0%	51.3	51.4	0.1	0.2%
38.3%	51.3	51.3	0.1	0.2%
39.5%	51.3	51.3	0.0	0.0%
40.7%	51.1	51.2	0.1	0.2%
42.0%	51.1	51.2	0.1	0.3%
43.2%	50.9	51.1	0.3	0.5%
44.4%	50.9	51.0	0.2	0.4%
45.7%	50.8	51.0	0.1	0.3%
46.9%	50.7	50.8	0.1	0.1%
48.1%	50.7	50.8	0.1	0.1%
49.4%	50.7	50.7	0.1	0.1%
50.6%	50.7	50.7	0.0	0.1%
51.9%	50.7	50.7	0.0	0.0%
53.1%	50.7	50.7	0.0	0.1%
54.3%	50.6	50.6	0.0	0.0%
55.6%	50.6	50.5	-0.1	-0.1%
56.8%	50.5	50.5	0.0	0.0%
58.0%	50.4	50.5	0.1	0.1%
59.3%	50.4	50.5	0.1	0.2%
60.5%	50.3	50.4	0.1	0.2%
61.7%	50.3	50.4	0.1	0.1%
63.0%	50.3	50.4	0.1	0.1%
64.2%	50.3	50.4	0.1	0.2%
65.4%	50.2	50.3	0.1	0.2%
66.7%	50.2	50.2	0.1	0.1%
67.9%	50.1	50.2	0.1	0.1%
69.1%	50.0	50.1	0.1	0.2%
70.4%	50.0	50.0	0.0	0.0%
71.6%	49.9	50.0	0.1	0.1%
72.8%	49.9	50.0	0.0	0.1%
74.1%	49.9	49.9	0.0	0.0%
75.3%	49.9	49.9	0.0	0.0%
76.5%	49.8	49.8	0.0	0.0%
77.8%	49.6	49.8	0.2	0.4%
79.0%	49.6	49.8	0.3	0.5%
80.2%	49.6	49.8	0.3	0.6%
81.5%	49.5	49.8	0.2	0.4%
82.7%	49.5	49.6	0.1	0.2%
84.0%	49.5	49.5	0.1	0.1%
85.2%	49.3	49.5	0.2	0.3%
86.4%	49.3	49.5	0.2	0.3%
87.7%	49.2	49.5	0.3	0.5%
88.9%	48.9	49.4	0.6	1.2%
90.1%	48.8	49.3	0.5	1.0%
91.4%	48.7	49.2	0.5	1.0%
92.6%	48.7	48.9	0.2	0.5%
93.8%	48.6	48.8	0.2	0.4%
95.1%	48.4	48.8	0.3	0.7%
96.3%	48.4	48.6	0.2	0.4%
97.5%	48.3	48.3	0.1	0.1%
98.8%	48.1	48.1	-0.1	-0.2%
100.0%	48.1	48.1	-0.1	-0.2%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.2	55.1	-0.1	-0.1%
1.2%	50.2	50.1	-0.1	-0.1%
2.5%	50.1	50.1	0.0	0.0%
3.7%	50.0	49.9	-0.1	-0.1%
4.9%	49.9	49.9	0.0	0.1%
6.2%	49.7	49.8	0.1	0.3%
7.4%	49.5	49.8	0.3	0.5%
8.6%	49.4	49.5	0.1	0.3%
9.9%	49.2	49.3	0.1	0.2%
11.1%	49.1	49.1	0.0	0.1%
12.3%	49.1	49.1	0.0	0.0%
13.6%	49.0	49.0	0.1	0.1%
14.8%	48.9	48.7	-0.1	-0.3%
16.0%	48.7	48.6	-0.1	-0.1%
17.3%	48.7	48.6	-0.1	-0.2%
18.5%	48.4	48.6	0.1	0.3%
19.8%	48.4	48.5	0.1	0.2%
21.0%	48.4	48.5	0.1	0.2%
22.2%	48.4	48.5	0.1	0.2%
23.5%	48.3	48.5	0.2	0.4%
24.7%	48.2	48.3	0.1	0.2%
25.9%	48.1	48.3	0.1	0.2%
27.2%	48.1	48.2	0.1	0.2%
28.4%	48.0	48.2	0.2	0.4%
29.6%	48.0	48.1	0.2	0.4%
30.9%	48.0	48.1	0.1	0.3%
32.1%	47.8	48.1	0.2	0.5%
33.3%	47.7	47.9	0.2	0.4%
34.6%	47.6	47.8	0.1	0.2%
35.8%	47.6	47.7	0.1	0.3%
37.0%	47.5	47.5	0.0	0.1%
38.3%	47.5	47.5	0.0	0.1%
39.5%	47.4	47.5	0.0	0.0%
40.7%	47.4	47.4	0.0	0.1%
42.0%	47.4	47.3	0.0	-0.1%
43.2%	47.3	47.3	0.0	0.0%
44.4%	47.3	47.3	0.0	0.0%
45.7%	47.3	47.3	0.0	0.0%
46.9%	47.3	47.3	0.0	0.1%
48.1%	47.2	47.3	0.1	0.1%
49.4%	47.2	47.2	0.0	0.1%
50.6%	47.2	47.2	0.1	0.1%
51.9%	47.1	47.2	0.0	0.0%
53.1%	47.1	47.2	0.0	0.1%
54.3%	47.1	47.1	0.0	0.0%
55.6%	47.1	47.1	0.0	-0.1%
56.8%	47.1	47.0	0.0	-0.1%
58.0%	47.0	47.0	0.0	0.0%
59.3%	46.9	47.0	0.1	0.2%
60.5%	46.9	47.0	0.1	0.1%
61.7%	46.9	46.9	0.1	0.1%
63.0%	46.9	46.9	0.0	0.1%
64.2%	46.9	46.9	0.0	0.1%
65.4%	46.8	46.8	0.0	0.0%
66.7%	46.8	46.8	0.0	-0.1%
67.9%	46.8	46.8	0.0	0.0%
69.1%	46.8	46.7	0.0	0.0%
70.4%	46.7	46.7	0.1	0.2%
71.6%	46.6	46.7	0.0	0.1%
72.8%	46.6	46.6	0.0	0.1%
74.1%	46.6	46.6	0.1	0.1%
75.3%	46.5	46.6	0.1	0.2%
76.5%	46.4	46.6	0.2	0.3%
77.8%	46.4	46.5	0.1	0.2%
79.0%	46.4	46.4	0.1	0.2%
80.2%	46.3	46.4	0.1	0.1%
81.5%	46.2	46.3	0.0	0.1%
82.7%	46.2	46.3	0.0	0.1%
84.0%	46.2	46.2	0.0	0.0%
85.2%	46.1	46.0	0.0	-0.1%
86.4%	45.9	45.9	0.0	-0.1%
87.7%	45.8	45.9	0.1	0.1%
88.9%	45.6	45.6	0.0	0.1%
90.1%	45.4	45.6	0.2	0.5%
91.4%	45.3	45.3	0.0	0.0%
92.6%	45.2	45.3	0.0	0.1%
93.8%	45.2	45.2	0.0	-0.1%
95.1%	45.2	45.2	0.0	-0.1%
96.3%	45.2	45.1	0.0	0.0%
97.5%	44.9	45.1	0.3	0.6%
98.8%	44.2	45.1	0.9	2.1%
100.0%	44.2	45.1	0.9	2.1%

Table SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.6	52.6	0.0	0.0%
1.2%	48.7	49.0	0.2	0.5%
2.5%	48.6	48.7	0.1	0.2%
3.7%	47.9	47.9	0.0	0.0%
4.9%	47.9	47.9	0.0	0.0%
6.2%	47.6	47.9	0.3	0.6%
7.4%	47.5	47.8	0.2	0.5%
8.6%	47.5	47.5	0.0	0.0%
9.9%	47.4	47.4	0.0	0.0%
11.1%	47.4	47.4	0.0	0.0%
12.3%	47.4	47.4	0.1	0.1%
13.6%	47.4	47.4	0.0	0.1%
14.8%	47.3	47.4	0.0	0.1%
16.0%	47.3	47.4	0.0	0.1%
17.3%	47.1	47.4	0.2	0.5%
18.5%	47.0	47.3	0.3	0.6%
19.8%	47.0	47.0	0.0	0.0%
21.0%	46.9	47.0	0.1	0.1%
22.2%	46.8	47.0	0.1	0.3%
23.5%	46.8	46.9	0.1	0.2%
24.7%	46.8	46.9	0.1	0.2%
25.9%	46.8	46.8	0.0	0.0%
27.2%	46.7	46.8	0.2	0.3%
28.4%	46.6	46.8	0.2	0.4%
29.6%	46.6	46.8	0.2	0.3%
30.9%	46.6	46.7	0.1	0.3%
32.1%	46.6	46.7	0.1	0.3%
33.3%	46.6	46.7	0.1	0.3%
34.6%	46.6	46.7	0.1	0.3%
35.8%	46.5	46.6	0.1	0.2%
37.0%	46.5	46.6	0.1	0.1%
38.3%	46.5	46.6	0.1	0.2%
39.5%	46.5	46.6	0.1	0.2%
40.7%	46.5	46.6	0.1	0.2%
42.0%	46.5	46.6	0.1	0.2%
43.2%	46.4	46.5	0.2	0.4%
44.4%	46.3	46.5	0.2	0.3%
45.7%	46.2	46.4	0.2	0.4%
46.9%	46.2	46.3	0.1	0.2%
48.1%	46.2	46.3	0.1	0.1%
49.4%	46.2	46.1	0.0	-0.1%
50.6%	46.0	46.0	0.0	0.0%
51.9%	45.9	45.9	0.0	0.0%
53.1%	45.8	45.7	-0.1	-0.2%
54.3%	45.8	45.7	0.0	-0.1%
55.6%	45.7	45.7	-0.1	-0.1%
56.8%	45.7	45.7	0.0	-0.1%
58.0%	45.6	45.7	0.0	0.0%
59.3%	45.6	45.6	0.0	0.1%
60.5%	45.5	45.5	0.0	0.0%
61.7%	45.5	45.5	0.0	0.1%
63.0%	45.5	45.5	0.0	0.0%
64.2%	45.5	45.5	0.0	0.0%
65.4%	45.5	45.5	0.0	0.0%
66.7%	45.4	45.5	0.0	0.0%
67.9%	45.4	45.4	0.0	0.1%
69.1%	45.4	45.4	0.1	0.2%
70.4%	45.3	45.3	0.0	-0.1%
71.6%	45.3	45.2	0.0	-0.1%
72.8%	45.2	45.2	0.0	0.1%
74.1%	45.1	45.2	0.1	0.2%
75.3%	45.1	45.1	0.0	0.1%
76.5%	45.1	45.1	0.0	0.0%
77.8%	45.1	45.0	0.0	0.0%
79.0%	45.0	45.0	0.0	-0.1%
80.2%	45.0	45.0	0.0	0.0%
81.5%	44.9	44.9	0.0	0.1%
82.7%	44.8	44.9	0.0	0.1%
84.0%	44.6	44.7	0.1	0.2%
85.2%	44.6	44.6	0.0	0.1%
86.4%	44.6	44.6	0.0	0.0%
87.7%	44.5	44.6	0.1	0.1%
88.9%	44.4	44.5	0.1	0.3%
90.1%	44.3	44.3	0.0	0.0%
91.4%	44.2	44.3	0.1	0.1%
92.6%	43.9	44.2	0.3	0.7%
93.8%	43.6	44.0	0.4	0.9%
95.1%	43.4	43.9	0.4	1.0%
96.3%	42.9	43.4	0.5	1.2%
97.5%	42.9	43.4	0.5	1.2%
98.8%	42.8	43.4	0.7	1.5%
100.0%	42.8	43.4	0.7	1.5%

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.4	51.4	0.0	0.1%
1.2%	49.0	49.0	0.0	0.0%
2.5%	48.7	48.9	0.2	0.3%
3.7%	48.7	48.8	0.1	0.2%
4.9%	48.6	48.7	0.1	0.2%
6.2%	48.4	48.7	0.3	0.6%
7.4%	48.3	48.6	0.3	0.6%
8.6%	48.3	48.5	0.2	0.5%
9.9%	48.3	48.4	0.1	0.2%
11.1%	48.2	48.2	0.0	0.0%
12.3%	48.0	48.1	0.1	0.3%
13.6%	48.0	48.0	0.1	0.1%
14.8%	48.0	48.0	0.0	0.0%
16.0%	47.9	48.0	0.0	0.1%
17.3%	47.9	48.0	0.0	0.1%
18.5%	47.9	47.9	0.0	0.0%
19.8%	47.8	47.8	-0.1	-0.1%
21.0%	47.8	47.7	-0.1	-0.2%
22.2%	47.7	47.7	0.0	0.0%
23.5%	47.6	47.6	0.0	0.0%
24.7%	47.6	47.6	0.1	0.1%
25.9%	47.5	47.6	0.1	0.1%
27.2%	47.5	47.6	0.1	0.1%
28.4%	47.4	47.5	0.1	0.3%
29.6%	47.4	47.5	0.1	0.2%
30.9%	47.3	47.4	0.1	0.1%
32.1%	47.3	47.4	0.1	0.1%
33.3%	47.3	47.4	0.1	0.2%
34.6%	47.3	47.3	0.1	0.2%
35.8%	47.2	47.3	0.1	0.2%
37.0%	47.2	47.3	0.1	0.3%
38.3%	47.1	47.3	0.2	0.3%
39.5%	47.1	47.3	0.2	0.4%
40.7%	47.0	47.3	0.2	0.5%
42.0%	46.8	47.0	0.2	0.5%
43.2%	46.6	46.9	0.3	0.5%
44.4%	46.6	46.7	0.1	0.3%
45.7%	46.5	46.7	0.1	0.3%
46.9%	46.4	46.6	0.2	0.4%
48.1%	46.4	46.5	0.1	0.3%
49.4%	46.4	46.5	0.1	0.3%
50.6%	46.4	46.4	0.1	0.1%
51.9%	46.3	46.4	0.1	0.1%
53.1%	46.3	46.4	0.0	0.0%
54.3%	46.3	46.3	0.0	0.0%
55.6%	46.3	46.3	0.0	0.0%
56.8%	46.3	46.3	0.0	0.0%
58.0%	46.3	46.3	0.1	0.1%
59.3%	46.2	46.3	0.1	0.2%
60.5%	46.2	46.3	0.1	0.3%
61.7%	46.1	46.2	0.1	0.2%
63.0%	46.1	46.2	0.1	0.2%
64.2%	46.1	46.1	0.1	0.1%
65.4%	46.1	46.1	0.1	0.1%
66.7%	46.0	46.1	0.1	0.3%
67.9%	45.9	46.1	0.2	0.3%
69.1%	45.9	46.1	0.2	0.4%
70.4%	45.7	46.1	0.3	0.7%
71.6%	45.7	46.0	0.3	0.6%
72.8%	45.7	45.9	0.2	0.5%
74.1%	45.7	45.8	0.2	0.4%
75.3%	45.6	45.8	0.2	0.4%
76.5%	45.5	45.7	0.2	0.4%
77.8%	45.5	45.7	0.1	0.3%
79.0%	45.5	45.6	0.1	0.2%
80.2%	45.5	45.5	0.1	0.2%
81.5%	45.4	45.5	0.0	0.1%
82.7%	45.3	45.5	0.1	0.3%
84.0%	45.3	45.4	0.1	0.2%
85.2%	45.2	45.4	0.2	0.4%
86.4%	45.2	45.3	0.1	0.3%
87.7%	45.1	45.2	0.0	0.0%
88.9%	45.1	45.1	0.0	0.1%
90.1%	45.1	45.1	0.0	0.1%
91.4%	45.1	45.1	0.0	0.0%
92.6%	44.9	45.1	0.1	0.3%
93.8%	44.9	44.9	0.0	0.1%
95.1%	44.7	44.9	0.2	0.4%
96.3%	44.7	44.7	0.0	0.0%
97.5%	44.6	44.5	0.0	-0.1%
98.8%	43.9	44.2	0.3	0.6%
100.0%	43.9	44.2	0.3	0.6%

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.7	52.8	0.1	0.2%
1.2%	50.6	50.9	0.4	0.8%
2.5%	50.1	50.1	0.0	0.0%
3.7%	50.0	50.0	0.0	0.0%
4.9%	49.6	49.6	0.1	0.2%
6.2%	49.5	49.4	0.0	-0.1%
7.4%	49.5	49.4	0.0	-0.1%
8.6%	49.2	49.3	0.0	0.1%
9.9%	49.0	49.2	0.2	0.4%
11.1%	48.9	49.1	0.2	0.4%
12.3%	48.8	49.0	0.1	0.2%
13.6%	48.8	48.8	0.1	0.1%
14.8%	48.7	48.8	0.1	0.2%
16.0%	48.6	48.7	0.1	0.2%
17.3%	48.6	48.6	0.1	0.1%
18.5%	48.6	48.6	0.0	0.0%
19.8%	48.6	48.6	0.0	0.0%
21.0%	48.5	48.6	0.1	0.1%
22.2%	48.4	48.5	0.1	0.3%
23.5%	48.3	48.5	0.2	0.3%
24.7%	48.3	48.5	0.2	0.4%
25.9%	48.3	48.5	0.2	0.3%
27.2%	48.3	48.4	0.1	0.3%
28.4%	48.3	48.4	0.1	0.2%
29.6%	48.3	48.4	0.1	0.2%
30.9%	48.2	48.4	0.1	0.2%
32.1%	48.2	48.3	0.1	0.2%
33.3%	48.2	48.3	0.1	0.2%
34.6%	48.1	48.3	0.2	0.3%
35.8%	48.1	48.3	0.2	0.3%
37.0%	48.1	48.2	0.2	0.4%
38.3%	48.0	48.2	0.2	0.4%
39.5%	48.0	48.1	0.1	0.2%
40.7%	47.9	48.1	0.2	0.4%
42.0%	47.9	48.1	0.2	0.3%
43.2%	47.8	48.1	0.2	0.5%
44.4%	47.8	48.0	0.2	0.3%
45.7%	47.7	47.9	0.2	0.4%
46.9%	47.6	47.9	0.3	0.5%
48.1%	47.6	47.8	0.2	0.4%
49.4%	47.6	47.8	0.2	0.4%
50.6%	47.5	47.8	0.2	0.5%
51.9%	47.5	47.7	0.2	0.4%
53.1%	47.5	47.7	0.2	0.4%
54.3%	47.4	47.6	0.2	0.4%
55.6%	47.4	47.6	0.2	0.5%
56.8%	47.4	47.5	0.1	0.3%
58.0%	47.4	47.5	0.1	0.3%
59.3%	47.4	47.5	0.1	0.2%
60.5%	47.3	47.5	0.1	0.3%
61.7%	47.3	47.4	0.1	0.2%
63.0%	47.3	47.4	0.1	0.3%
64.2%	47.3	47.3	0.1	0.2%
65.4%	47.2	47.3	0.1	0.2%
66.7%	47.2	47.3	0.1	0.2%
67.9%	47.2	47.3	0.1	0.3%
69.1%	47.2	47.3	0.1	0.2%
70.4%	47.1	47.2	0.1	0.3%
71.6%	47.0	47.1	0.1	0.2%
72.8%	47.0	47.1	0.1	0.2%
74.1%	46.9	47.1	0.2	0.3%
75.3%	46.9	47.0	0.1	0.2%
76.5%	46.9	46.9	0.0	0.1%
77.8%	46.9	46.9	0.0	0.1%
79.0%	46.7	46.9	0.2	0.4%
80.2%	46.6	46.8	0.2	0.5%
81.5%	46.6	46.8	0.2	0.4%
82.7%	46.5	46.6	0.0	0.0%
84.0%	46.5	46.5	0.0	-0.1%
85.2%	46.5	46.5	0.0	0.0%
86.4%	46.2	46.5	0.3	0.6%
87.7%	46.2	46.2	0.0	0.0%
88.9%	46.1	46.2	0.0	0.0%
90.1%	46.1	46.2	0.0	0.0%
91.4%	46.1	46.1	0.0	0.1%
92.6%	45.9	46.0	0.1	0.2%
93.8%	45.9	46.0	0.1	0.2%
95.1%	45.9	45.9	0.0	0.0%
96.3%	45.5	45.8	0.3	0.6%
97.5%	45.5	45.5	0.0	0.1%
98.8%	45.4	45.5	0.1	0.2%
100.0%	45.4	45.5	0.1	0.2%

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.8	55.0	0.2	0.4%
1.2%	54.3	54.3	0.1	0.1%
2.5%	53.0	52.3	-0.7	-1.4%
3.7%	52.2	51.6	-0.6	-1.2%
4.9%	50.3	51.3	1.0	1.9%
6.2%	50.1	50.9	0.8	1.7%
7.4%	50.0	50.8	0.8	1.7%
8.6%	50.0	50.8	0.8	1.6%
9.9%	49.9	50.5	0.7	1.3%
11.1%	49.8	50.3	0.5	1.0%
12.3%	49.7	50.2	0.5	1.0%
13.6%	49.7	50.2	0.5	1.0%
14.8%	49.7	49.9	0.3	0.6%
16.0%	49.7	49.8	0.2	0.4%
17.3%	49.7	49.7	0.1	0.2%
18.5%	49.6	49.7	0.1	0.2%
19.8%	49.5	49.6	0.2	0.3%
21.0%	49.4	49.6	0.2	0.4%
22.2%	49.4	49.6	0.2	0.4%
23.5%	49.4	49.5	0.1	0.3%
24.7%	49.2	49.5	0.3	0.6%
25.9%	49.2	49.5	0.3	0.6%
27.2%	49.2	49.4	0.2	0.4%
28.4%	49.2	49.3	0.2	0.3%
29.6%	49.1	49.2	0.1	0.2%
30.9%	49.0	49.2	0.2	0.5%
32.1%	49.0	49.2	0.2	0.5%
33.3%	49.0	49.2	0.2	0.5%
34.6%	48.9	49.2	0.3	0.6%
35.8%	48.9	49.1	0.2	0.5%
37.0%	48.8	49.0	0.2	0.4%
38.3%	48.8	49.0	0.2	0.4%
39.5%	48.7	49.0	0.2	0.5%
40.7%	48.6	48.9	0.3	0.6%
42.0%	48.6	48.9	0.3	0.6%
43.2%	48.6	48.9	0.3	0.5%
44.4%	48.6	48.8	0.2	0.4%
45.7%	48.6	48.7	0.1	0.2%
46.9%	48.6	48.6	0.1	0.1%
48.1%	48.5	48.6	0.1	0.1%
49.4%	48.5	48.6	0.1	0.2%
50.6%	48.5	48.6	0.0	0.1%
51.9%	48.5	48.5	0.0	0.0%
53.1%	48.5	48.5	0.0	0.1%
54.3%	48.5	48.5	0.0	0.1%
55.6%	48.5	48.5	0.0	0.0%
56.8%	48.4	48.5	0.0	0.0%
58.0%	48.4	48.4	0.0	0.0%
59.3%	48.4	48.4	0.0	0.1%
60.5%	48.4	48.4	0.0	0.0%
61.7%	48.3	48.4	0.1	0.2%
63.0%	48.3	48.4	0.1	0.3%
64.2%	48.3	48.4	0.1	0.2%
65.4%	48.3	48.3	0.0	0.1%
66.7%	48.2	48.3	0.1	0.1%
67.9%	48.2	48.3	0.1	0.1%
69.1%	48.1	48.3	0.2	0.3%
70.4%	48.1	48.2	0.1	0.3%
71.6%	48.1	48.1	0.1	0.1%
72.8%	48.0	48.1	0.1	0.2%
74.1%	48.0	48.1	0.1	0.3%
75.3%	47.9	48.1	0.1	0.3%
76.5%	47.9	48.0	0.2	0.4%
77.8%	47.8	48.0	0.2	0.4%
79.0%	47.7	47.9	0.2	0.4%
80.2%	47.6	47.7	0.1	0.2%
81.5%	47.6	47.6	0.1	0.1%
82.7%	47.5	47.6	0.2	0.3%
84.0%	47.4	47.5	0.1	0.1%
85.2%	47.4	47.5	0.1	0.1%
86.4%	47.4	47.5	0.1	0.1%
87.7%	47.4	47.4	0.0	0.0%
88.9%	47.4	47.4	0.1	0.1%
90.1%	47.3	47.4	0.1	0.1%
91.4%	47.2	47.3	0.1	0.1%
92.6%	47.2	47.0	-0.2	-0.4%
93.8%	47.0	46.9	0.0	0.0%
95.1%	46.8	46.8	0.0	0.0%
96.3%	46.8	46.8	0.0	0.0%
97.5%	46.7	46.8	0.0	0.1%
98.8%	46.2	46.8	0.5	1.1%
100.0%	46.2	46.8	0.5	1.1%

Table SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.5	54.0	-0.5	-0.9%
1.2%	54.2	53.8	-0.4	-0.8%
2.5%	54.1	53.2	-0.9	-1.7%
3.7%	52.5	52.5	0.0	0.1%
4.9%	52.4	52.4	-0.1	-0.2%
6.2%	52.3	52.3	0.1	0.1%
7.4%	52.2	52.2	0.0	0.0%
8.6%	52.0	52.1	0.2	0.3%
9.9%	51.4	52.0	0.6	1.2%
11.1%	51.4	51.4	0.0	0.0%
12.3%	51.1	51.2	0.1	0.3%
13.6%	51.0	50.9	-0.2	-0.3%
14.8%	50.7	50.7	0.0	0.0%
16.0%	50.7	50.7	0.0	0.1%
17.3%	50.5	50.5	0.0	0.0%
18.5%	50.4	50.4	0.0	0.0%
19.8%	50.3	50.4	0.1	0.1%
21.0%	50.3	50.2	-0.1	-0.1%
22.2%	50.2	50.1	0.0	0.0%
23.5%	50.2	50.1	0.0	0.0%
24.7%	50.1	50.1	0.0	0.0%
25.9%	50.1	50.1	0.0	-0.1%
27.2%	50.0	50.0	0.1	0.1%
28.4%	49.9	50.0	0.1	0.2%
29.6%	49.9	50.0	0.2	0.3%
30.9%	49.8	50.0	0.2	0.4%
32.1%	49.8	50.0	0.2	0.4%
33.3%	49.7	49.9	0.2	0.4%
34.6%	49.7	49.9	0.1	0.3%
35.8%	49.7	49.8	0.2	0.3%
37.0%	49.6	49.8	0.2	0.4%
38.3%	49.5	49.8	0.2	0.5%
39.5%	49.5	49.8	0.3	0.5%
40.7%	49.5	49.8	0.3	0.5%
42.0%	49.4	49.8	0.3	0.7%
43.2%	49.4	49.7	0.3	0.7%
44.4%	49.4	49.6	0.3	0.5%
45.7%	49.4	49.6	0.2	0.5%
46.9%	49.3	49.6	0.3	0.6%
48.1%	49.3	49.6	0.3	0.6%
49.4%	49.3	49.6	0.3	0.6%
50.6%	49.3	49.5	0.3	0.5%
51.9%	49.2	49.5	0.3	0.5%
53.1%	49.2	49.5	0.3	0.5%
54.3%	49.2	49.4	0.2	0.4%
55.6%	49.2	49.4	0.2	0.4%
56.8%	49.1	49.3	0.2	0.4%
58.0%	49.1	49.3	0.2	0.4%
59.3%	49.1	49.3	0.2	0.4%
60.5%	49.1	49.3	0.2	0.5%
61.7%	49.0	49.3	0.2	0.4%
63.0%	49.0	49.2	0.2	0.4%
64.2%	49.0	49.2	0.2	0.4%
65.4%	48.9	49.2	0.2	0.5%
66.7%	48.9	49.2	0.2	0.5%
67.9%	48.9	49.1	0.2	0.4%
69.1%	48.9	49.1	0.2	0.4%
70.4%	48.9	49.1	0.2	0.4%
71.6%	48.9	49.0	0.2	0.3%
72.8%	48.9	49.0	0.1	0.3%
74.1%	48.8	49.0	0.2	0.4%
75.3%	48.8	49.0	0.2	0.4%
76.5%	48.7	48.9	0.2	0.5%
77.8%	48.7	48.9	0.2	0.5%
79.0%	48.7	48.9	0.2	0.5%
80.2%	48.5	48.8	0.3	0.6%
81.5%	48.5	48.7	0.3	0.6%
82.7%	48.4	48.7	0.3	0.6%
84.0%	48.3	48.6	0.3	0.6%
85.2%	48.3	48.6	0.3	0.6%
86.4%	48.3	48.5	0.2	0.5%
87.7%	48.3	48.4	0.2	0.4%
88.9%	48.2	48.4	0.1	0.3%
90.1%	48.2	48.3	0.1	0.2%
91.4%	48.1	48.2	0.1	0.2%
92.6%	47.9	48.2	0.3	0.5%
93.8%	47.9	48.1	0.2	0.5%
95.1%	47.8	48.1	0.3	0.7%
96.3%	47.5	48.0	0.5	1.1%
97.5%	47.4	47.7	0.3	0.7%
98.8%	47.3	47.5	0.1	0.2%
100.0%	47.3	47.5	0.1	0.2%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.7	53.8	-0.9	-1.6%
1.2%	54.6	53.8	-0.8	-1.4%
2.5%	54.4	53.8	-0.7	-1.2%
3.7%	54.3	53.7	-0.6	-1.1%
4.9%	54.3	53.4	-0.9	-1.7%
6.2%	54.1	53.3	-0.8	-1.5%
7.4%	54.0	53.2	-0.8	-1.5%
8.6%	53.8	53.0	-0.8	-1.6%
9.9%	53.7	52.9	-0.7	-1.3%
11.1%	53.3	52.7	-0.6	-1.1%
12.3%	53.0	52.6	-0.4	-0.7%
13.6%	52.9	52.5	-0.4	-0.7%
14.8%	52.8	52.5	-0.3	-0.6%
16.0%	52.8	52.5	-0.3	-0.7%
17.3%	52.6	52.2	-0.4	-0.8%
18.5%	52.3	52.1	-0.2	-0.3%
19.8%	52.2	52.0	-0.2	-0.5%
21.0%	52.1	52.0	-0.1	-0.3%
22.2%	52.1	51.9	-0.2	-0.3%
23.5%	52.0	51.9	-0.1	-0.2%
24.7%	51.9	51.7	-0.2	-0.4%
25.9%	51.9	51.6	-0.3	-0.5%
27.2%	51.9	51.6	-0.3	-0.6%
28.4%	51.8	51.6	-0.3	-0.6%
29.6%	51.7	51.5	-0.2	-0.5%
30.9%	51.7	51.5	-0.2	-0.4%
32.1%	51.6	51.4	-0.1	-0.2%
33.3%	51.4	51.4	0.0	0.0%
34.6%	51.4	51.4	0.0	0.0%
35.8%	51.1	51.0	-0.1	-0.2%
37.0%	51.0	51.0	0.0	0.0%
38.3%	51.0	51.0	0.0	0.0%
39.5%	50.9	51.0	0.1	0.1%
40.7%	50.8	50.9	0.1	0.1%
42.0%	50.8	50.8	0.0	0.1%
43.2%	50.8	50.8	0.0	0.1%
44.4%	50.8	50.8	0.0	0.0%
45.7%	50.8	50.8	0.0	0.0%
46.9%	50.7	50.7	0.0	0.0%
48.1%	50.7	50.7	0.0	0.0%
49.4%	50.7	50.7	0.0	0.0%
50.6%	50.7	50.7	0.0	0.0%
51.9%	50.7	50.6	-0.1	-0.2%
53.1%	50.6	50.6	-0.1	-0.1%
54.3%	50.6	50.5	-0.1	-0.3%
55.6%	50.6	50.5	-0.1	-0.3%
56.8%	50.6	50.5	-0.1	-0.2%
58.0%	50.5	50.4	-0.1	-0.2%
59.3%	50.5	50.4	-0.1	-0.2%
60.5%	50.5	50.4	-0.1	-0.2%
61.7%	50.4	50.3	-0.1	-0.2%
63.0%	50.4	50.3	-0.1	-0.2%
64.2%	50.3	50.3	0.0	-0.1%
65.4%	50.3	50.3	0.0	0.0%
66.7%	50.2	50.3	0.0	0.0%
67.9%	50.2	50.3	0.0	0.0%
69.1%	50.2	50.2	0.0	0.0%
70.4%	50.2	50.2	0.0	0.0%
71.6%	50.1	50.2	0.1	0.1%
72.8%	50.1	50.1	0.0	0.0%
74.1%	50.1	50.1	0.0	0.0%
75.3%	50.0	50.1	0.0	0.1%
76.5%	50.0	50.0	0.0	0.0%
77.8%	50.0	50.0	0.1	0.1%
79.0%	50.0	50.0	0.0	0.1%
80.2%	49.8	50.0	0.2	0.3%
81.5%	49.7	49.9	0.2	0.4%
82.7%	49.5	49.8	0.2	0.5%
84.0%	49.5	49.6	0.1	0.2%
85.2%	49.5	49.6	0.1	0.2%
86.4%	49.5	49.5	0.1	0.1%
87.7%	49.4	49.5	0.1	0.2%
88.9%	49.3	49.4	0.1	0.2%
90.1%	49.3	49.4	0.1	0.2%
91.4%	49.3	49.3	0.0	0.1%
92.6%	49.2	49.1	-0.1	-0.2%
93.8%	49.1	49.1	0.0	0.0%
95.1%	49.1	49.1	0.0	0.0%
96.3%	49.0	48.7	-0.3	-0.7%
97.5%	48.7	48.7	0.0	0.0%
98.8%	48.6	48.6	0.0	0.1%
100.0%	48.6	48.6	0.0	0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.0	55.6	-5.4	-8.8%
1.2%	57.8	54.3	-3.5	-6.1%
2.5%	57.6	54.2	-3.5	-6.0%
3.7%	55.0	53.8	-1.2	-2.1%
4.9%	54.8	53.8	-1.0	-1.8%
6.2%	54.7	53.8	-0.9	-1.6%
7.4%	54.6	53.8	-0.8	-1.5%
8.6%	54.3	53.7	-0.5	-1.0%
9.9%	54.2	53.7	-0.5	-0.9%
11.1%	54.1	53.7	-0.4	-0.8%
12.3%	54.1	53.7	-0.4	-0.7%
13.6%	53.9	53.6	-0.4	-0.7%
14.8%	53.9	53.5	-0.4	-0.7%
16.0%	53.9	53.4	-0.5	-0.9%
17.3%	53.9	53.4	-0.5	-0.9%
18.5%	53.8	53.4	-0.4	-0.8%
19.8%	53.6	53.3	-0.3	-0.5%
21.0%	53.5	53.3	-0.2	-0.4%
22.2%	53.4	53.2	-0.1	-0.3%
23.5%	53.2	53.2	0.0	0.0%
24.7%	53.2	53.0	-0.2	-0.4%
25.9%	53.2	52.9	-0.2	-0.5%
27.2%	53.1	52.7	-0.4	-0.8%
28.4%	53.1	52.5	-0.5	-1.0%
29.6%	52.9	52.5	-0.4	-0.7%
30.9%	52.8	52.3	-0.5	-0.9%
32.1%	52.8	52.2	-0.5	-1.0%
33.3%	52.8	52.2	-0.6	-1.0%
34.6%	52.7	52.2	-0.5	-0.9%
35.8%	52.6	52.2	-0.5	-0.9%
37.0%	52.6	52.1	-0.5	-1.0%
38.3%	52.5	52.1	-0.4	-0.8%
39.5%	52.5	52.0	-0.4	-0.8%
40.7%	52.4	52.0	-0.3	-0.6%
42.0%	52.3	52.0	-0.3	-0.6%
43.2%	52.3	51.9	-0.4	-0.8%
44.4%	52.3	51.9	-0.4	-0.8%
45.7%	52.2	51.8	-0.4	-0.8%
46.9%	52.2	51.8	-0.4	-0.7%
48.1%	52.0	51.8	-0.2	-0.4%
49.4%	52.0	51.8	-0.2	-0.5%
50.6%	52.0	51.8	-0.2	-0.5%
51.9%	52.0	51.7	-0.2	-0.5%
53.1%	51.9	51.7	-0.2	-0.3%
54.3%	51.9	51.7	-0.1	-0.3%
55.6%	51.9	51.7	-0.2	-0.4%
56.8%	51.9	51.5	-0.4	-0.7%
58.0%	51.9	51.5	-0.4	-0.7%
59.3%	51.7	51.5	-0.2	-0.4%
60.5%	51.6	51.5	-0.2	-0.3%
61.7%	51.6	51.4	-0.2	-0.4%
63.0%	51.5	51.4	-0.1	-0.1%
64.2%	51.5	51.4	-0.1	-0.1%
65.4%	51.4	51.3	-0.1	-0.3%
66.7%	51.4	51.2	-0.2	-0.5%
67.9%	51.4	51.1	-0.3	-0.5%
69.1%	51.4	51.1	-0.3	-0.6%
70.4%	51.3	51.0	-0.3	-0.5%
71.6%	51.3	51.0	-0.3	-0.5%
72.8%	51.2	51.0	-0.3	-0.5%
74.1%	51.2	50.9	-0.3	-0.5%
75.3%	51.1	50.9	-0.2	-0.5%
76.5%	51.1	50.8	-0.3	-0.6%
77.8%	51.1	50.8	-0.3	-0.6%
79.0%	51.1	50.8	-0.2	-0.5%
80.2%	51.0	50.8	-0.3	-0.5%
81.5%	51.0	50.8	-0.3	-0.5%
82.7%	51.0	50.7	-0.3	-0.6%
84.0%	51.0	50.7	-0.3	-0.5%
85.2%	50.8	50.6	-0.3	-0.5%
86.4%	50.8	50.6	-0.3	-0.5%
87.7%	50.8	50.5	-0.3	-0.5%
88.9%	50.8	50.5	-0.3	-0.5%
90.1%	50.8	50.4	-0.3	-0.7%
91.4%	50.6	50.4	-0.2	-0.5%
92.6%	50.6	50.3	-0.2	-0.5%
93.8%	50.6	50.3	-0.3	-0.5%
95.1%	50.5	50.2	-0.3	-0.7%
96.3%	50.4	50.2	-0.3	-0.5%
97.5%	50.2	50.0	-0.2	-0.4%
98.8%	50.1	49.8	-0.3	-0.5%
100.0%	50.1	49.8	-0.3	-0.5%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.7	62.5	-3.2	-4.9%
1.2%	62.5	61.6	-0.8	-1.3%
2.5%	62.1	60.5	-1.6	-2.6%
3.7%	61.4	54.8	-6.7	-10.9%
4.9%	60.7	54.6	-6.1	-10.0%
6.2%	55.7	53.6	-2.0	-3.6%
7.4%	55.2	53.6	-1.5	-2.8%
8.6%	55.1	53.6	-1.5	-2.8%
9.9%	54.8	53.6	-1.2	-2.2%
11.1%	54.5	53.6	-0.9	-1.7%
12.3%	54.4	53.6	-0.8	-1.5%
13.6%	54.3	53.5	-0.7	-1.3%
14.8%	54.2	53.4	-0.8	-1.5%
16.0%	54.2	53.4	-0.8	-1.5%
17.3%	54.2	53.4	-0.8	-1.5%
18.5%	54.1	53.3	-0.8	-1.4%
19.8%	54.1	53.3	-0.8	-1.5%
21.0%	53.9	53.2	-0.7	-1.3%
22.2%	53.9	53.2	-0.7	-1.4%
23.5%	53.9	53.2	-0.7	-1.3%
24.7%	53.9	53.1	-0.7	-1.4%
25.9%	53.8	53.0	-0.8	-1.5%
27.2%	53.7	52.9	-0.8	-1.5%
28.4%	53.7	52.8	-0.9	-1.6%
29.6%	53.5	52.8	-0.8	-1.4%
30.9%	53.5	52.8	-0.7	-1.3%
32.1%	53.4	52.7	-0.7	-1.4%
33.3%	53.4	52.5	-0.8	-1.5%
34.6%	53.2	52.5	-0.6	-1.2%
35.8%	53.1	52.4	-0.7	-1.3%
37.0%	53.0	52.2	-0.8	-1.4%
38.3%	52.9	52.2	-0.8	-1.4%
39.5%	52.9	52.2	-0.8	-1.4%
40.7%	52.9	52.1	-0.8	-1.6%
42.0%	52.8	52.0	-0.8	-1.5%
43.2%	52.8	52.0	-0.8	-1.5%
44.4%	52.7	52.0	-0.7	-1.2%
45.7%	52.6	51.9	-0.7	-1.3%
46.9%	52.5	51.8	-0.7	-1.4%
48.1%	52.5	51.8	-0.7	-1.4%
49.4%	52.5	51.7	-0.8	-1.5%
50.6%	52.4	51.6	-0.7	-1.4%
51.9%	52.3	51.6	-0.7	-1.3%
53.1%	52.3	51.3	-1.0	-1.9%
54.3%	52.1	51.3	-0.8	-1.6%
55.6%	51.8	51.3	-0.6	-1.1%
56.8%	51.8	51.2	-0.6	-1.2%
58.0%	51.8	51.2	-0.6	-1.2%
59.3%	51.8	51.2	-0.6	-1.2%
60.5%	51.7	51.1	-0.6	-1.2%
61.7%	51.7	51.1	-0.6	-1.1%
63.0%	51.6	51.1	-0.6	-1.1%
64.2%	51.6	51.1	-0.5	-1.0%
65.4%	51.5	51.0	-0.5	-1.0%
66.7%	51.3	50.9	-0.4	-0.7%
67.9%	51.3	50.9	-0.4	-0.7%
69.1%	51.2	50.9	-0.4	-0.7%
70.4%	51.2	50.7	-0.5	-0.9%
71.6%	51.2	50.7	-0.5	-1.0%
72.8%	51.0	50.6	-0.4	-0.8%
74.1%	51.0	50.6	-0.4	-0.9%
75.3%	51.0	50.6	-0.4	-0.9%
76.5%	51.0	50.5	-0.5	-0.9%
77.8%	50.8	50.5	-0.3	-0.7%
79.0%	50.8	50.5	-0.3	-0.6%
80.2%	50.8	50.5	-0.3	-0.6%
81.5%	50.7	50.5	-0.3	-0.5%
82.7%	50.7	50.4	-0.3	-0.6%
84.0%	50.7	50.3	-0.4	-0.8%
85.2%	50.6	50.2	-0.4	-0.8%
86.4%	50.6	50.2	-0.4	-0.8%
87.7%	50.6	50.1	-0.4	-0.9%
88.9%	50.5	50.0	-0.5	-1.0%
90.1%	50.5	49.9	-0.6	-1.2%
91.4%	50.5	49.8	-0.6	-1.3%
92.6%	50.4	49.8	-0.5	-1.1%
93.8%	50.2	49.7	-0.5	-1.0%
95.1%	50.1	49.5	-0.5	-1.1%
96.3%	50.0	49.3	-0.7	-1.3%
97.5%	49.6	49.0	-0.6	-1.3%
98.8%	49.2	48.7	-0.5	-1.0%
100.0%	49.2	48.7	-0.5	-1.0%

Table SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.5	55.9	-2.6	-4.5%
1.2%	56.6	55.1	-1.5	-2.7%
2.5%	56.5	54.8	-1.7	-3.0%
3.7%	55.6	53.7	-1.9	-3.3%
4.9%	55.6	53.7	-1.9	-3.4%
6.2%	53.8	53.4	-0.4	-0.7%
7.4%	53.8	53.4	-0.4	-0.8%
8.6%	53.8	53.3	-0.5	-0.9%
9.9%	53.7	53.0	-0.7	-1.3%
11.1%	53.3	52.8	-0.5	-0.9%
12.3%	53.2	52.8	-0.4	-0.8%
13.6%	53.1	52.6	-0.4	-0.8%
14.8%	53.1	52.4	-0.6	-1.2%
16.0%	52.9	52.4	-0.5	-1.0%
17.3%	52.9	52.4	-0.6	-1.1%
18.5%	52.8	52.3	-0.5	-0.9%
19.8%	52.5	52.3	-0.2	-0.3%
21.0%	52.4	52.2	-0.2	-0.4%
22.2%	52.4	52.0	-0.3	-0.6%
23.5%	52.3	52.0	-0.4	-0.7%
24.7%	52.2	51.9	-0.2	-0.5%
25.9%	52.1	51.9	-0.1	-0.3%
27.2%	52.0	51.9	-0.1	-0.2%
28.4%	52.0	51.9	-0.1	-0.2%
29.6%	52.0	51.7	-0.3	-0.5%
30.9%	51.9	51.5	-0.4	-0.8%
32.1%	51.7	51.5	-0.2	-0.4%
33.3%	51.7	51.4	-0.2	-0.5%
34.6%	51.7	51.4	-0.3	-0.5%
35.8%	51.6	51.4	-0.2	-0.4%
37.0%	51.6	51.3	-0.2	-0.4%
38.3%	51.5	51.2	-0.3	-0.6%
39.5%	51.5	51.2	-0.3	-0.6%
40.7%	51.5	51.1	-0.4	-0.7%
42.0%	51.4	51.1	-0.3	-0.5%
43.2%	51.4	51.1	-0.3	-0.5%
44.4%	51.2	51.0	-0.2	-0.3%
45.7%	51.2	51.0	-0.2	-0.3%
46.9%	51.1	51.0	-0.2	-0.4%
48.1%	51.1	50.9	-0.2	-0.3%
49.4%	51.1	50.8	-0.3	-0.5%
50.6%	51.1	50.8	-0.3	-0.6%
51.9%	50.9	50.7	-0.2	-0.4%
53.1%	50.9	50.7	-0.2	-0.4%
54.3%	50.8	50.7	-0.1	-0.2%
55.6%	50.8	50.6	-0.1	-0.2%
56.8%	50.7	50.6	-0.1	-0.2%
58.0%	50.7	50.6	-0.1	-0.2%
59.3%	50.7	50.5	-0.1	-0.3%
60.5%	50.7	50.5	-0.1	-0.3%
61.7%	50.6	50.5	-0.1	-0.2%
63.0%	50.6	50.5	-0.1	-0.2%
64.2%	50.6	50.4	-0.2	-0.4%
65.4%	50.6	50.4	-0.2	-0.4%
66.7%	50.5	50.3	-0.2	-0.4%
67.9%	50.5	50.3	-0.2	-0.5%
69.1%	50.4	50.3	-0.1	-0.3%
70.4%	50.4	50.3	-0.1	-0.3%
71.6%	50.4	50.2	-0.1	-0.3%
72.8%	50.3	50.2	-0.1	-0.3%
74.1%	50.3	50.2	-0.1	-0.3%
75.3%	50.3	50.2	-0.1	-0.3%
76.5%	50.3	50.1	-0.1	-0.3%
77.8%	50.3	50.1	-0.1	-0.3%
79.0%	50.3	50.1	-0.1	-0.3%
80.2%	50.2	50.1	-0.2	-0.3%
81.5%	50.2	50.0	-0.2	-0.4%
82.7%	50.1	49.9	-0.2	-0.3%
84.0%	50.1	49.9	-0.2	-0.4%
85.2%	50.1	49.8	-0.3	-0.6%
86.4%	50.0	49.7	-0.2	-0.5%
87.7%	49.8	49.7	-0.1	-0.2%
88.9%	49.8	49.7	-0.1	-0.1%
90.1%	49.7	49.6	-0.1	-0.3%
91.4%	49.7	49.6	-0.1	-0.2%
92.6%	49.6	49.5	-0.1	-0.2%
93.8%	49.6	49.5	-0.1	-0.2%
95.1%	49.6	49.5	-0.1	-0.2%
96.3%	49.6	49.4	-0.1	-0.3%
97.5%	49.6	49.4	-0.1	-0.3%
98.8%	49.0	48.9	0.0	-0.1%
100.0%	48.6	48.5	-0.1	-0.2%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.5	57.2	-3.3	-5.5%
1.2%	58.1	56.4	-1.8	-3.1%
2.5%	58.0	55.7	-2.2	-3.9%
3.7%	56.6	53.9	-2.7	-4.8%
4.9%	56.0	53.7	-2.3	-4.1%
6.2%	54.5	53.6	-0.9	-1.7%
7.4%	54.4	53.6	-0.8	-1.5%
8.6%	54.0	53.3	-0.7	-1.3%
9.9%	54.0	53.3	-0.7	-1.3%
11.1%	53.9	53.3	-0.6	-1.1%
12.3%	53.8	53.2	-0.6	-1.0%
13.6%	53.8	53.2	-0.6	-1.0%
14.8%	53.7	53.2	-0.5	-0.9%
16.0%	53.7	53.1	-0.6	-1.1%
17.3%	53.7	53.0	-0.7	-1.3%
18.5%	53.5	53.0	-0.5	-1.0%
19.8%	53.4	52.9	-0.5	-0.9%
21.0%	53.3	52.8	-0.5	-0.9%
22.2%	53.2	52.7	-0.4	-0.8%
23.5%	53.0	52.7	-0.3	-0.6%
24.7%	52.9	52.7	-0.3	-0.5%
25.9%	52.9	52.6	-0.3	-0.6%
27.2%	52.9	52.5	-0.4	-0.7%
28.4%	52.8	52.4	-0.4	-0.8%
29.6%	52.8	52.3	-0.5	-0.9%
30.9%	52.5	52.1	-0.4	-0.8%
32.1%	52.4	51.9	-0.5	-0.9%
33.3%	52.4	51.9	-0.5	-0.9%
34.6%	52.3	51.9	-0.4	-0.8%
35.8%	52.3	51.8	-0.5	-0.9%
37.0%	52.3	51.8	-0.5	-0.9%
38.3%	52.2	51.7	-0.5	-1.0%
39.5%	52.2	51.6	-0.6	-1.1%
40.7%	52.0	51.6	-0.4	-0.8%
42.0%	52.0	51.6	-0.4	-0.8%
43.2%	51.9	51.6	-0.4	-0.7%
44.4%	51.9	51.5	-0.3	-0.6%
45.7%	51.9	51.5	-0.4	-0.7%
46.9%	51.8	51.4	-0.4	-0.7%
48.1%	51.8	51.3	-0.4	-0.9%
49.4%	51.5	51.3	-0.2	-0.4%
50.6%	51.5	51.2	-0.3	-0.6%
51.9%	51.5	51.1	-0.4	-0.7%
53.1%	51.4	51.1	-0.3	-0.6%
54.3%	51.3	51.1	-0.3	-0.5%
55.6%	51.3	51.1	-0.2	-0.4%
56.8%	51.3	51.1	-0.2	-0.4%
58.0%	51.2	51.0	-0.2	-0.4%
59.3%	51.2	51.0	-0.2	-0.4%
60.5%	51.2	51.0	-0.2	-0.4%
61.7%	51.1	51.0	-0.1	-0.2%
63.0%	51.1	50.9	-0.2	-0.5%
64.2%	51.1	50.8	-0.3	-0.6%
65.4%	51.1	50.7	-0.4	-0.7%
66.7%	51.1	50.7	-0.4	-0.7%
67.9%	51.1	50.7	-0.4	-0.7%
69.1%	50.9	50.7	-0.2	-0.5%
70.4%	50.9	50.7	-0.3	-0.5%
71.6%	50.9	50.6	-0.3	-0.6%
72.8%	50.8	50.6	-0.2	-0.4%
74.1%	50.8	50.6	-0.2	-0.4%
75.3%	50.8	50.6	-0.2	-0.4%
76.5%	50.8	50.6	-0.2	-0.4%
77.8%	50.8	50.5	-0.2	-0.4%
79.0%	50.7	50.5	-0.2	-0.5%
80.2%	50.7	50.5	-0.2	-0.5%
81.5%	50.7	50.4	-0.3	-0.5%
82.7%	50.7	50.3	-0.4	-0.7%
84.0%	50.6	50.3	-0.4	-0.7%
85.2%	50.5	50.2	-0.3	-0.6%
86.4%	50.5	50.1	-0.4	-0.7%
87.7%	50.4	50.1	-0.3	-0.6%
88.9%	50.3	50.1	-0.3	-0.5%
90.1%	50.3	50.0	-0.3	-0.5%
91.4%	50.3	50.0	-0.3	-0.7%
92.6%	50.3	49.9	-0.3	-0.7%
93.8%	50.1	49.9	-0.2	-0.5%
95.1%	50.1	49.9	-0.2	-0.4%
96.3%	50.0	49.9	-0.2	-0.4%
97.5%	50.0	49.9	-0.2	-0.4%
98.8%	49.5	49.4	-0.1	-0.1%
100.0%	49.1	48.9	-0.3	-0.5%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.4	59.0	-4.3	-6.8%
1.2%	60.1	58.0	-2.1	-3.5%
2.5%	60.0	57.3	-2.6	-4.4%
3.7%	57.7	54.0	-3.7	-6.4%
4.9%	57.7	53.7	-3.9	-6.8%
6.2%	55.0	53.6	-1.3	-2.4%
7.4%	55.0	53.6	-1.3	-2.4%
8.6%	54.7	53.6	-1.1	-2.0%
9.9%	54.5	53.5	-1.0	-1.9%
11.1%	54.4	53.5	-0.9	-1.7%
12.3%	54.1	53.5	-0.6	-1.2%
13.6%	54.1	53.5	-0.7	-1.2%
14.8%	54.1	53.4	-0.6	-1.2%
16.0%	54.1	53.4	-0.6	-1.2%
17.3%	53.9	53.4	-0.5	-0.9%
18.5%	53.9	53.3	-0.6	-1.1%
19.8%	53.7	53.3	-0.4	-0.8%
21.0%	53.6	53.3	-0.3	-0.5%
22.2%	53.5	53.3	-0.3	-0.5%
23.5%	53.4	53.3	-0.2	-0.3%
24.7%	53.4	53.2	-0.2	-0.3%
25.9%	53.4	53.0	-0.4	-0.7%
27.2%	53.4	52.9	-0.5	-0.9%
28.4%	53.4	52.9	-0.5	-0.9%
29.6%	53.3	52.7	-0.6	-1.1%
30.9%	53.2	52.7	-0.5	-1.0%
32.1%	53.2	52.7	-0.5	-1.0%
33.3%	53.2	52.5	-0.7	-1.3%
34.6%	53.1	52.3	-0.8	-1.6%
35.8%	52.9	52.2	-0.7	-1.4%
37.0%	52.9	52.2	-0.7	-1.4%
38.3%	52.8	52.1	-0.6	-1.2%
39.5%	52.7	52.1	-0.6	-1.1%
40.7%	52.6	52.1	-0.6	-1.1%
42.0%	52.5	52.0	-0.5	-1.0%
43.2%	52.5	51.9	-0.5	-1.0%
44.4%	52.4	51.8	-0.7	-1.3%
45.7%	52.4	51.8	-0.6	-1.1%
46.9%	52.2	51.7	-0.5	-0.9%
48.1%	52.1	51.7	-0.5	-0.9%
49.4%	52.0	51.6	-0.4	-0.8%
50.6%	52.0	51.6	-0.4	-0.8%
51.9%	52.0	51.6	-0.4	-0.8%
53.1%	51.9	51.5	-0.4	-0.8%
54.3%	51.9	51.4	-0.5	-0.9%
55.6%	51.8	51.4	-0.4	-0.9%
56.8%	51.8	51.3	-0.5	-1.0%
58.0%	51.8	51.3	-0.5	-1.0%
59.3%	51.8	51.3	-0.5	-0.9%
60.5%	51.7	51.1	-0.6	-1.1%
61.7%	51.7	51.1	-0.6	-1.1%
63.0%	51.6	51.1	-0.5	-1.0%
64.2%	51.5	51.1	-0.5	-0.9%
65.4%	51.5	51.1	-0.4	-0.8%
66.7%	51.4	51.0	-0.4	-0.8%
67.9%	51.3	51.0	-0.3	-0.7%
69.1%	51.3	51.0	-0.3	-0.7%
70.4%	51.3	50.9	-0.4	-0.7%
71.6%	51.2	50.9	-0.4	-0.8%
72.8%	51.2	50.8	-0.4	-0.8%
74.1%	51.2	50.8	-0.4	-0.8%
75.3%	51.1	50.8	-0.3	-0.6%
76.5%	51.1	50.8	-0.3	-0.7%
77.8%	51.1	50.7	-0.4	-0.7%
79.0%	51.1	50.7	-0.4	-0.7%
80.2%	51.0	50.7	-0.3	-0.6%
81.5%	50.9	50.7	-0.3	-0.5%
82.7%	50.9	50.7	-0.3	-0.5%
84.0%	50.9	50.6	-0.3	-0.5%
85.2%	50.9	50.6	-0.3	-0.6%
86.4%	50.8	50.5	-0.3	-0.6%
87.7%	50.7	50.4	-0.3	-0.7%
88.9%	50.7	50.4	-0.3	-0.6%
90.1%	50.7	50.3	-0.4	-0.8%
91.4%	50.7	50.3	-0.4	-0.8%
92.6%	50.7	50.2	-0.4	-0.8%
93.8%	50.6	50.1	-0.5	-1.1%
95.1%	50.4	50.1	-0.3	-0.7%
96.3%	50.3	50.0	-0.3	-0.6%
97.5%	50.1	49.6	-0.5	-0.9%
98.8%	49.6	49.5	-0.1	-0.2%
100.0%	49.5	49.1	-0.4	-0.9%

Figure SQ3-1b
Sacramento River at Bonnyview Bridge, Monthly Temperature
Probability of Exceedance

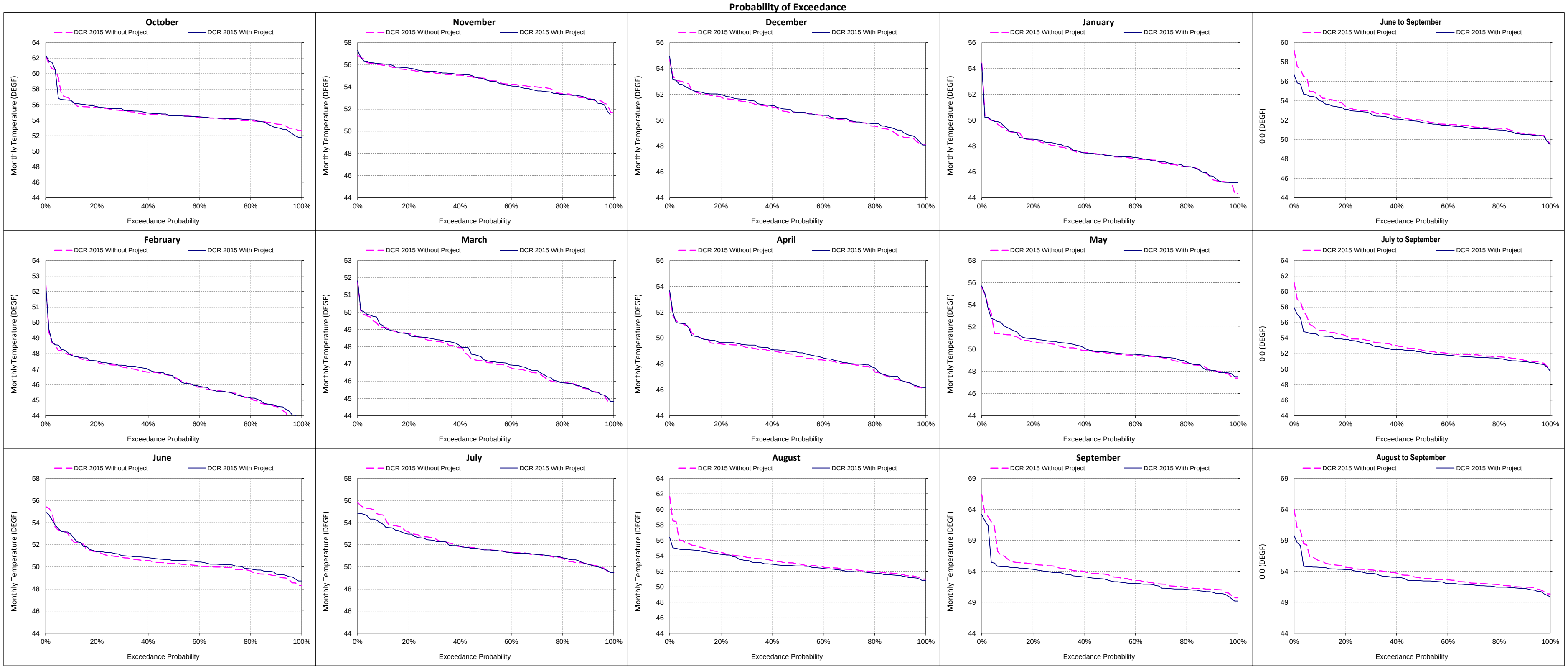


Table SQ3-1b
Sacramento River at Bonnyview Bridge, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.3	62.4	0.2	0.2%
1.2%	61.3	61.6	0.3	0.6%
2.5%	60.7	61.5	0.8	1.3%
3.7%	60.5	60.5	0.0	-0.1%
4.9%	59.5	56.8	-2.7	-4.5%
6.2%	57.3	56.7	-0.6	-1.1%
7.4%	57.0	56.6	-0.4	-0.7%
8.6%	56.9	56.6	-0.3	-0.6%
9.9%	56.6	56.6	0.0	-0.1%
11.1%	56.2	56.2	0.0	-0.1%
12.3%	55.8	56.1	0.3	0.6%
13.6%	55.8	56.1	0.3	0.5%
14.8%	55.7	56.0	0.3	0.6%
16.0%	55.7	56.0	0.2	0.4%
17.3%	55.7	55.9	0.2	0.4%
18.5%	55.7	55.9	0.2	0.4%
19.8%	55.6	55.8	0.2	0.3%
21.0%	55.6	55.7	0.1	0.2%
22.2%	55.5	55.6	0.1	0.2%
23.5%	55.5	55.6	0.1	0.1%
24.7%	55.5	55.5	0.1	0.1%
25.9%	55.3	55.5	0.2	0.4%
27.2%	55.3	55.5	0.2	0.4%
28.4%	55.3	55.5	0.2	0.3%
29.6%	55.2	55.5	0.3	0.5%
30.9%	55.2	55.2	0.0	0.0%
32.1%	55.2	55.2	0.1	0.1%
33.3%	55.1	55.2	0.1	0.2%
34.6%	55.1	55.2	0.1	0.2%
35.8%	54.9	55.2	0.3	0.5%
37.0%	54.9	55.2	0.3	0.5%
38.3%	54.8	55.1	0.3	0.5%
39.5%	54.8	54.9	0.2	0.3%
40.7%	54.8	54.9	0.2	0.3%
42.0%	54.7	54.9	0.1	0.3%
43.2%	54.7	54.8	0.1	0.2%
44.4%	54.7	54.8	0.1	0.3%
45.7%	54.7	54.8	0.1	0.2%
46.9%	54.7	54.8	0.1	0.3%
48.1%	54.6	54.6	-0.1	-0.1%
49.4%	54.6	54.6	0.0	-0.1%
50.6%	54.6	54.6	0.0	-0.1%
51.9%	54.6	54.6	0.0	0.0%
53.1%	54.6	54.6	0.0	0.0%
54.3%	54.5	54.5	0.0	0.0%
55.6%	54.5	54.5	0.0	0.0%
56.8%	54.5	54.5	0.0	0.0%
58.0%	54.5	54.5	0.0	0.0%
59.3%	54.4	54.4	0.0	0.1%
60.5%	54.4	54.4	0.0	0.1%
61.7%	54.3	54.4	0.0	0.1%
63.0%	54.3	54.3	0.0	0.0%
64.2%	54.3	54.3	0.0	0.0%
65.4%	54.3	54.3	0.0	0.0%
66.7%	54.2	54.3	0.1	0.1%
67.9%	54.2	54.2	0.0	0.1%
69.1%	54.2	54.2	0.1	0.1%
70.4%	54.1	54.2	0.1	0.1%
71.6%	54.1	54.2	0.1	0.2%
72.8%	54.1	54.2	0.1	0.2%
74.1%	54.0	54.2	0.1	0.2%
75.3%	54.0	54.2	0.2	0.3%
76.5%	54.0	54.1	0.2	0.3%
77.8%	54.0	54.1	0.1	0.2%
79.0%	53.9	54.1	0.1	0.2%
80.2%	53.9	54.1	0.1	0.2%
81.5%	53.9	54.0	0.2	0.3%
82.7%	53.9	53.8	0.0	0.0%
84.0%	53.8	53.8	0.0	0.0%
85.2%	53.8	53.8	-0.1	-0.1%
86.4%	53.7	53.5	-0.1	-0.3%
87.7%	53.7	53.3	-0.3	-0.6%
88.9%	53.6	53.2	-0.5	-0.9%
90.1%	53.5	53.0	-0.5	-0.9%
91.4%	53.5	53.0	-0.5	-0.9%
92.6%	53.5	52.8	-0.6	-1.1%
93.8%	53.3	52.8	-0.4	-0.8%
95.1%	53.0	52.5	-0.4	-0.8%
96.3%	53.0	52.2	-0.7	-1.4%
97.5%	52.9	52.0	-0.9	-1.7%
98.8%	52.6	51.8	-0.8	-1.6%
100.0%	52.6	51.8	0.0	-1.6%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.9	57.3	0.4	0.8%
1.2%	56.7	56.7	0.0	0.0%
2.5%	56.5	56.4	-0.2	-0.3%
3.7%	56.2	56.3	0.1	0.2%
4.9%	56.2	56.2	0.1	0.1%
6.2%	56.1	56.2	0.1	0.1%
7.4%	56.0	56.1	0.1	0.2%
8.6%	56.0	56.1	0.1	0.2%
9.9%	56.0	56.1	0.1	0.2%
11.1%	55.9	56.1	0.1	0.2%
12.3%	55.9	56.1	0.1	0.2%
13.6%	55.8	56.0	0.2	0.3%
14.8%	55.7	55.8	0.1	0.1%
16.0%	55.6	55.8	0.1	0.3%
17.3%	55.6	55.8	0.2	0.3%
18.5%	55.6	55.8	0.2	0.3%
19.8%	55.5	55.7	0.2	0.3%
21.0%	55.5	55.7	0.2	0.3%
22.2%	55.5	55.6	0.2	0.3%
23.5%	55.4	55.5	0.1	0.2%
24.7%	55.4	55.5	0.1	0.1%
25.9%	55.4	55.4	0.1	0.1%
27.2%	55.3	55.4	0.1	0.2%
28.4%	55.3	55.4	0.1	0.2%
29.6%	55.3	55.4	0.1	0.2%
30.9%	55.2	55.4	0.1	0.3%
32.1%	55.2	55.3	0.1	0.2%
33.3%	55.2	55.3	0.1	0.2%
34.6%	55.1	55.3	0.1	0.2%
35.8%	55.1	55.2	0.1	0.2%
37.0%	55.1	55.2	0.1	0.2%
38.3%	55.1	55.2	0.1	0.2%
39.5%	55.1	55.2	0.1	0.2%
40.7%	55.1	55.1	0.1	0.2%
42.0%	55.0	55.1	0.1	0.3%
43.2%	54.9	55.1	0.2	0.3%
44.4%	54.9	55.0	0.1	0.2%
45.7%	54.8	54.9	0.1	0.1%
46.9%	54.8	54.8	0.0	0.1%
48.1%	54.8	54.8	0.0	0.0%
49.4%	54.8	54.7	-0.1	-0.2%
50.6%	54.6	54.6	0.0	0.0%
51.9%	54.6	54.5	-0.1	-0.1%
53.1%	54.5	54.5	0.0	-0.1%
54.3%	54.5	54.5	-0.1	-0.1%
55.6%	54.4	54.3	-0.1	-0.2%
56.8%	54.3	54.3	0.0	0.0%
58.0%	54.3	54.2	-0.1	-0.2%
59.3%	54.3	54.1	-0.1	-0.3%
60.5%	54.2	54.1	-0.1	-0.3%
61.7%	54.2	54.1	-0.2	-0.3%
63.0%	54.2	54.0	-0.1	-0.2%
64.2%	54.1	53.9	-0.2	-0.3%
65.4%	54.1	53.8	-0.3	-0.5%
66.7%	54.1	53.8	-0.2	-0.4%
67.9%	54.0	53.7	-0.3	-0.5%
69.1%	54.0	53.7	-0.3	-0.6%
70.4%	54.0	53.6	-0.4	-0.7%
71.6%	53.9	53.6	-0.3	-0.6%
72.8%	53.9	53.6	-0.3	-0.6%
74.1%	53.9	53.6	-0.3	-0.6%
75.3%	53.8	53.5	-0.3	-0.5%
76.5%	53.7	53.4	-0.2	-0.4%
77.8%	53.5	53.4	0.0	-0.1%
79.0%	53.4	53.3	-0.1	-0.2%
80.2%	53.4	53.3	-0.1	-0.2%
81.5%	53.4	53.3	-0.1	-0.1%
82.7%	53.4	53.3	-0.1	-0.2%
84.0%	53.3	53.3	0.0	0.0%
85.2%	53.2	53.2	0.0	0.0%
86.4%	53.1	53.2	0.2	0.3%
87.7%	53.0	53.1	0.1	0.2%
88.9%	53.0	53.0	0.0	0.1%
90.1%	53.0	52.9	-0.1	-0.2%
91.4%	52.9	52.9	0.0	0.0%
92.6%	52.8	52.9	0.1	0.1%
93.8%	52.8	52.5	-0.2	-0.5%
95.1%	52.7	52.5	-0.2	-0.4%
96.3%	52.5	52.4	-0.2	-0.3%
97.5%	52.4	51.8	-0.6	-1.1%
98.8%	51.7	51.5	-0.2	-0.5%
100.0%	51.7	51.5	-0.2	-0.5%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.7	54.9	0.3	0.5%
1.2%	53.4	53.1	-0.3	-0.6%
2.5%	53.1	53.1	0.0	0.0%
3.7%	53.0	52.8	-0.3	-0.5%
4.9%	53.0	52.8	-0.2	-0.4%
6.2%	52.9	52.6	-0.3	-0.5%
7.4%	52.8	52.5	-0.4	-0.7%
8.6%	52.3	52.3	0.1	0.1%
9.9%	52.2	52.2	0.0	0.1%
11.1%	52.1	52.2	0.1	0.1%
12.3%	52.0	52.2	0.2	0.3%
13.6%	52.0	52.1	0.1	0.2%
14.8%	52.0	52.1	0.1	0.1%
16.0%	51.9	52.0	0.1	0.3%
17.3%	51.9	52.0	0.2	0.3%
18.5%	51.9	52.0	0.2	0.3%
19.8%	51.8	52.0	0.2	0.3%
21.0%	51.7	51.9	0.2	0.5%
22.2%	51.6	51.8	0.2	0.3%
23.5%	51.6	51.8	0.2	0.3%
24.7%	51.6	51.7	0.1	0.2%
25.9%	51.5	51.6	0.1	0.3%
27.2%	51.5	51.6	0.1	0.3%
28.4%	51.5	51.6	0.2	0.3%
29.6%	51.5	51.6	0.1	0.3%
30.9%	51.4	51.5	0.1	0.2%
32.1%	51.3	51.5	0.2	0.3%
33.3%	51.2	51.5	0.2	0.5%
34.6%	51.2	51.3	0.0	0.1%
35.8%	51.2	51.2	0.1	0.1%
37.0%	51.1	51.2	0.1	0.1%
38.3%	51.1	51.2	0.1	0.2%
39.5%	51.1	51.1	0.1	0.2%
40.7%	51.0	51.1	0.1	0.3%
42.0%	50.9	51.0	0.1	0.1%
43.2%	50.7	50.9	0.2	0.4%
44.4%	50.7	50.9	0.2	0.3%
45.7%	50.7	50.9	0.2	0.4%
46.9%	50.6	50.8	0.2	0.5%
48.1%	50.6	50.7	0.1	0.1%
49.4%	50.6	50.6	0.1	0.1%
50.6%	50.6	50.6	0.0	0.1%
51.9%	50.6	50.6	0.0	0.1%
53.1%	50.6	50.6	0.0	0.0%
54.3%	50.5	50.5	-0.1	-0.1%
55.6%	50.5	50.5	0.0	0.0%
56.8%	50.5	50.4	-0.1	-0.1%
58.0%	50.4	50.4	0.0	0.0%
59.3%	50.4	50.4	0.0	0.0%
60.5%	50.2	50.4	0.2	0.3%
61.7%	50.2	50.4	0.2	0.4%
63.0%	50.1	50.2	0.1	0.2%
64.2%	50.1	50.2	0.1	0.1%
65.4%	50.1	50.1	0.1	0.1%
66.7%	50.0	50.1	0.1	0.2%
67.9%	50.0	50.1	0.1	0.2%
69.1%	50.0	50.1	0.1	0.2%
70.4%	49.9	50.0	0.0	0.1%
71.6%	49.9	49.9	0.1	0.1%
72.8%	49.9	49.9	0.0	0.0%
74.1%	49.8	49.9	0.1	0.1%
75.3%	49.8	49.8	0.0	0.0%
76.5%	49.8	49.8	0.0	0.0%
77.8%	49.6	49.8	0.2	0.4%
79.0%	49.6	49.7	0.2	0.4%
80.2%	49.5	49.7	0.2	0.4%
81.5%	49.5	49.7	0.3	0.5%
82.7%	49.4	49.6	0.2	0.3%
84.0%	49.3	49.5	0.2	0.4%
85.2%	49.3	49.5	0.2	0.3%
86.4%	49.2	49.4	0.2	0.4%
87.7%	49.0	49.3	0.3	0.6%
88.9%	48.9	49.2	0.4	0.8%
90.1%	48.8	49.2	0.4	0.9%
91.4%	48.7	49.0	0.4	0.7%
92.6%	48.7	48.9	0.2	0.5%
93.8%	48.6	48.8	0.2	0.4%
95.1%	48.6	48.8	0.2	0.4%
96.3%	48.4	48.6	0.2	0.5%
97.5%	48.2	48.3	0.1	0.2%
98.8%	48.2	48.1	-0.1	-0.2%
100.0%	48.2	48.1	-0.1	-0.2%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.4	54.4	-0.1	-0.1%
1.2%	50.3	50.2	-0.1	-0.2%
2.5%	50.2	50.2	0.0	0.0%
3.7%	50.0	50.0	0.1	0.1%
4.9%	50.0	49.9	-0.1	-0.1%
6.2%	49.7	49.9	0.2	0.4%
7.4%	49.5	49.8	0.3	0.6%
8.6%	49.4	49.5	0.2	0.3%
9.9%	49.2	49.3	0.1	0.2%
11.1%	49.1	49.1	0.0	0.0%
12.3%	49.1	49.1	0.0	0.1%
13.6%	49.1	49.1	0.0	0.0%
14.8%	49.0	48.7	-0.4	-0.7%
16.0%	48.6	48.6	0.0	0.0%
17.3%	48.5	48.5	0.0	0.0%
18.5%	48.5	48.5	0.0	0.0%
19.8%	48.5	48.5	0.1	0.1%
21.0%	48.4	48.5	0.1	0.2%
22.2%	48.4	48.5	0.1	0.2%
23.5%	48.3	48.5	0.2	0.4%
24.7%	48.2	48.3	0.1	0.1%
25.9%	48.2	48.3	0.1	0.2%
27.2%	48.1	48.3	0.2	0.4%
28.4%	48.0	48.2	0.2	0.4%
29.6%	48.0	48.1	0.2	0.4%
30.9%	47.9	48.1	0.2	0.4%
32.1%	47.9	48.0	0.1	0.2%
33.3%	47.8	48.0	0.2	0.4%
34.6%	47.8	47.9	0.1	0.2%
35.8%	47.6	47.7	0.0	0.1%
37.0%	47.5	47.6	0.1	0.2%
38.3%	47.5	47.6	0.0	0.1%
39.5%	47.5	47.5	0.0	-0.1%
40.7%	47.5	47.5	0.0	-0.1%
42.0%	47.4	47.5	0.0	0.0%
43.2%	47.4	47.4	0.0	0.0%
44.4%	47.4	47.4	0.0	-0.1%
45.7%	47.4	47.4	0.0	0.0%
46.9%	47.3	47.4	0.0	0.1%
48.1%	47.3	47.3	0.0	-0.1%
49.4%	47.3	47.3	0.0	0.0%
50.6%	47.2	47.2	0.0	0.0%
51.9%	47.2	47.2	0.0	0.1%
53.1%	47.2	47.2	0.0	0.1%
54.3%	47.2	47.2	0.0	0.0%
55.6%	47.1	47.2	0.0	0.0%
56.8%	47.1	47.2	0.0	0.1%
58.0%	47.1	47.2	0.1	0.2%
59.3%	47.0	47.1	0.1	0.2%
60.5%	47.0	47.1	0.1	0.2%
61.7%	47.0	47.1	0.1	0.2%
63.0%	47.0	47.0	0.0	0.1%
64.2%	47.0	47.0	0.0	0.0%
65.4%	47.0	46.9	0.0	0.0%
66.7%	46.9	46.9	0.0	-0.1%
67.9%	46.9	46.8	-0.1	-0.1%
69.1%	46.8	46.8	0.0	0.1%
70.4%	46.7	46.8	0.1	0.2%
71.6%	46.7	46.8	0.1	0.2%
72.8%	46.6	46.7	0.1	0.2%
74.1%	46.6	46.6	0.1	0.1%
75.3%	46.6	46.6	0.0	0.1%
76.5%	46.5	46.6	0.1	0.2%
77.8%	46.4	46.6	0.1	0.3%
79.0%	46.4	46.4	0.0	0.0%
80.2%	46.4	46.4	0.0	-0.1%
81.5%	46.4	46.4	0.0	0.1%
82.7%	46.4	46.3	0.0	0.0%
84.0%	46.3	46.3	0.0	0.0%
85.2%	46.1	46.1	0.0	-0.1%
86.4%	46.0	46.0	0.0	-0.1%
87.7%	45.9	46.0	0.0	0.1%
88.9%	45.7	45.7	0.0	0.1%
90.1%	45.4	45.7	0.3	0.6%
91.4%	45.3	45.5	0.2	0.4%
92.6%	45.3	45.3	0.0	0.1%
93.8%	45.3	45.2	0.0	-0.1%
95.1%	45.2	45.2	0.0	0.0%
96.3%	45.2	45.2	0.0	0.0%
97.5%	45.1	45.2	0.0	0.0%
98.8%	44.3	45.2	0.8	1.9%
100.0%	44.3	45.2	0.8	1.9%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.6	52.6	0.0	0.0%
1.2%	49.4	49.6	0.2	0.5%
2.5%	48.7	48.8	0.1	0.2%
3.7%	48.6	48.6	0.0	0.0%
4.9%	48.2	48.6	0.4	0.7%
6.2%	48.2	48.3	0.1	0.2%
7.4%	48.1	48.2	0.1	0.3%
8.6%	48.0	48.1	0.1	0.3%
9.9%	47.9	47.9	0.0	-0.1%
11.1%	47.9	47.8	0.0	-0.1%
12.3%	47.8	47.8	0.0	-0.1%
13.6%	47.7	47.7	0.1	0.1%
14.8%	47.6	47.7	0.1	0.3%
16.0%	47.6	47.7	0.1	0.3%
17.3%	47.6	47.5	0.0	0.0%
18.5%	47.5	47.5	0.0	0.0%
19.8%	47.5	47.5	0.0	0.1%
21.0%	47.4	47.5	0.1	0.2%
22.2%	47.3	47.4	0.1	0.2%
23.5%	47.3	47.4	0.1	0.2%
24.7%	47.3	47.4	0.1	0.2%
25.9%	47.3	47.3	0.1	0.2%
27.2%	47.3	47.3	0.1	0.1%
28.4%	47.3	47.3	0.0	0.0%
29.6%	47.1	47.3	0.1	0.2%
30.9%	47.1	47.2	0.1	0.3%
32.1%	47.1	47.2	0.1	0.3%
33.3%	47.0	47.2	0.2	0.3%
34.6%	47.0	47.2	0.2	0.4%
35.8%	46.9	47.1	0.2	0.4%
37.0%	46.9	47.1	0.2	0.4%
38.3%	46.9	47.1	0.2	0.4%
39.5%	46.8	47.0	0.2	0.5%
40.7%	46.8	46.9	0.1	0.2%
42.0%	46.8	46.8	0.0	0.1%
43.2%	46.8	46.8	0.0	0.0%
44.4%	46.7	46.8	0.1	0.1%
45.7%	46.7	46.8	0.1	0.3%
46.9%	46.6	46.7	0.0	0.0%
48.1%	46.6	46.6	0.0	0.0%
49.4%	46.6	46.6	0.0	0.0%
50.6%	46.5	46.4	-0.1	-0.2%
51.9%	46.3	46.3	0.0	0.0%
53.1%	46.2	46.1	-0.1	-0.2%
54.3%	46.2	46.1	-0.1	-0.3%
55.6%	46.0	46.1	0.0	0.0%
56.8%	46.0	46.0	0.0	0.0%
58.0%	45.9	45.9	0.0	0.0%
59.3%	45.8	45.9	0.1	0.2%
60.5%	45.8	45.9	0.0	0.1%
61.7%	45.8	45.8	0.0	0.0%
63.0%	45.7	45.8	0.1	0.3%
64.2%	45.7	45.7	0.0	0.0%
65.4%	45.6	45.7	0.0	0.0%
66.7%	45.6	45.6	0.0	-0.1%
67.9%	45.6	45.6	0.0	-0.1%
69.1%	45.6	45.6	0.0	0.0%
70.4%	45.5	45.5	0.0	0.0%
71.6%	45.5	45.5	0.0	0.0%
72.8%	45.5	45.5	0.0	0.0%
74.1%	45.4	45.4	-0.1	-0.2%
75.3%	45.4	45.3	-0.1	-0.3%
76.5%	45.3	45.3	0.0	0.0%
77.8%	45.2	45.2	0.0	0.1%
79.0%	45.1	45.2	0.0	0.1%
80.2%	45.1	45.1	0.0	0.1%
81.5%	45.0	45.1	0.2	0.3%
82.7%	44.9	45.1	0.1	0.2%
84.0%	44.8	45.0	0.2	0.4%
85.2%	44.8	44.8	0.1	0.1%
86.4%	44.7	44.7	0.0	0.0%
87.7%	44.7	44.7	0.0	0.0%
88.9%	44.6	44.7	0.1	0.2%
90.1%	44.6	44.6	0.0	0.1%
91.4%	44.4	44.6	0.1	0.3%
92.6%	44.3	44.6	0.2	0.6%
93.8%	44.2	44.4	0.2	0.5%
95.1%	43.6	44.3	0.6	1.5%
96.3%	43.5	44.0	0.5	1.2%
97.5%	43.4	44.0	0.6	1.5%
98.8%	43.3	43.5	0.2	0.6%
100.0%	43.3	43.5	0.2	0.6%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.8	51.8	0.0	0.1%
1.2%	50.1	50.1	0.0	0.0%
2.5%	49.9	50.0	0.1	0.3%
3.7%	49.8	49.9	0.1	0.2%
4.9%	49.7	49.8	0.1	0.2%
6.2%	49.5	49.8	0.3	0.5%
7.4%	49.4	49.7	0.3	0.7%
8.6%	49.1	49.3	0.2	0.4%
9.9%	49.1	49.2	0.1	0.2%
11.1%	49.1	49.0	-0.1	-0.2%
12.3%	49.0	49.0	0.0	-0.1%
13.6%	48.9	48.9	0.0	0.0%
14.8%	48.9	48.9	0.0	0.1%
16.0%	48.8	48.8	0.0	0.0%
17.3%	48.8	48.8	0.0	0.0%
18.5%	48.8	48.8	0.0	0.0%
19.8%	48.7	48.7	0.0	0.0%
21.0%	48.7	48.6	-0.1	-0.3%
22.2%	48.7	48.6	-0.1	-0.1%
23.5%	48.6	48.6	0.0	0.0%
24.7%	48.5	48.6	0.0	0.1%
25.9%	48.5	48.5	0.1	0.1%
27.2%	48.4	48.5	0.1	0.3%
28.4%	48.4	48.5	0.1	0.2%
29.6%	48.3	48.4	0.1	0.3%
30.9%	48.3	48.4	0.1	0.2%
32.1%	48.3	48.4	0.1	0.2%
33.3%	48.2	48.4	0.1	0.2%
34.6%	48.2	48.3	0.1	0.1%
35.8%	48.1	48.3	0.2	0.5%
37.0%	48.1	48.2	0.2	0.4%
38.3%	48.0	48.2	0.2	0.4%
39.5%	47.9	48.1	0.2	0.4%
40.7%	47.9	48.0	0.0	0.0%
42.0%	47.6	48.0	0.3	0.6%
43.2%	47.5	47.9	0.4	0.9%
44.4%	47.3	47.6	0.3	0.6%
45.7%	47.2	47.5	0.3	0.6%
46.9%	47.2	47.5	0.3	0.6%
48.1%	47.2	47.4	0.2	0.5%
49.4%	47.2	47.2	0.1	0.1%
50.6%	47.1	47.2	0.1	0.2%
51.9%	47.1	47.1	0.1	0.2%
53.1%	47.1	47.1	0.1	0.1%
54.3%	47.0	47.1	0.1	0.3%
55.6%	47.0	47.1	0.1	0.3%
56.8%	47.0	47.1	0.1	0.2%
58.0%	46.9	47.0	0.1	0.3%
59.3%	46.8	46.9	0.1	0.3%
60.5%	46.7	46.9	0.2	0.4%
61.7%	46.7	46.9	0.2	0.5%
63.0%	46.7	46.9	0.2	0.4%
64.2%	46.7	46.8	0.2	0.3%
65.4%	46.6	46.8	0.2	0.4%
66.7%	46.6	46.7	0.1	0.2%
67.9%	46.5	46.6	0.1	0.3%
69.1%	46.5	46.6	0.1	0.3%
70.4%	46.5	46.6	0.1	0.3%
71.6%	46.4	46.5	0.1	0.2%
72.8%	46.2	46.4	0.1	0.3%
74.1%	46.1	46.2	0.1	0.3%
75.3%	46.0	46.2	0.2	0.5%
76.5%	46.0	46.0	0.1	0.1%
77.8%	45.9	46.0	0.1	0.1%
79.0%	45.9	45.9	0.0	0.0%
80.2%	45.9	45.9	0.0	-0.1%
81.5%	45.9	45.9	0.0	0.0%
82.7%	45.9	45.9	0.0	0.0%
84.0%	45.9	45.8	0.0	-0.1%
85.2%	45.8	45.8	0.0	-0.1%
86.4%	45.7	45.7	0.1	0.1%
87.7%	45.6	45.6	0.0	0.1%
88.9%	45.6	45.6	0.0	0.1%
90.1%	45.6	45.6	0.0	0.0%
91.4%	45.4	45.4	0.0	0.0%
92.6%	45.4	45.4	0.0	-0.1%
93.8%	45.3	45.4	0.0	0.0%
95.1%	45.2	45.2	0.0	0.0%
96.3%	45.2	45.2	0.0	0.0%
97.5%	44.8	45.1	0.2	0.5%
98.8%	44.8	44.8	0.0	0.1%
100.0%	44.8	44.8	0.0	0.1%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.5	53.7	0.2	0.3%
1.2%	51.7	52.0	0.3	0.6%
2.5%	51.4	51.2	-0.2	-0.3%
3.7%	51.2	51.2	0.0	0.0%
4.9%	51.1	51.1	0.0	0.0%
6.2%	51.0	51.1	0.1	0.2%
7.4%	50.9	50.8	-0.1	-0.3%
8.6%	50.4	50.2	-0.2	-0.4%
9.9%	50.2	50.1	-0.1	-0.1%
11.1%	50.1	50.1	0.0	0.0%
12.3%	50.0	50.0	0.0	0.0%
13.6%	49.9	49.9	-0.1	-0.1%
14.8%	49.9	49.9	0.0	0.0%
16.0%	49.6	49.8	0.2	0.4%
17.3%	49.6	49.8	0.2	0.5%
18.5%	49.6	49.7	0.1	0.3%
19.8%	49.6	49.6	0.1	0.2%
21.0%	49.5	49.6	0.1	0.2%
22.2%	49.5	49.6	0.1	0.3%
23.5%	49.5	49.6	0.1	0.3%
24.7%	49.5	49.6	0.2	0.3%
25.9%	49.5	49.6	0.1	0.3%
27.2%	49.4	49.6	0.1	0.3%
28.4%	49.4	49.5	0.1	0.2%
29.6%	49.3	49.5	0.2	0.4%
30.9%	49.3	49.5	0.2	0.4%
32.1%	49.2	49.5	0.2	0.4%
33.3%	49.2	49.5	0.3	0.5%
34.6%	49.1	49.3	0.2	0.4%
35.8%	49.1	49.3	0.2	0.4%
37.0%	49.1	49.3	0.1	0.3%
38.3%	49.0	49.3	0.2	0.4%
39.5%	49.0	49.1	0.1	0.2%
40.7%	49.0	49.1	0.1	0.2%
42.0%	48.9	49.1	0.1	0.3%
43.2%	48.9	49.1	0.2	0.4%
44.4%	48.9	49.1	0.2	0.4%
45.7%	48.8	49.0	0.1	0.3%
46.9%	48.8	49.0	0.2	0.4%
48.1%	48.8	49.0	0.2	0.4%
49.4%	48.6	48.9	0.4	0.7%
50.6%	48.6	48.9	0.3	0.6%
51.9%	48.6	48.8	0.3	0.6%
53.1%	48.4	48.8	0.3	0.7%
54.3%	48.4	48.7	0.3	0.6%
55.6%	48.4	48.7	0.3	0.5%
56.8%	48.3	48.6	0.3	0.5%
58.0%	48.3	48.6	0.3	0.6%
59.3%	48.3	48.5	0.2	0.4%
60.5%	48.3	48.4	0.2	0.3%
61.7%	48.3	48.4	0.1	0.2%
63.0%	48.2	48.4	0.2	0.3%
64.2%	48.2	48.3	0.1	0.2%
65.4%	48.1	48.2	0.1	0.3%
66.7%	48.0	48.2	0.2	0.3%
67.9%	48.0	48.1	0.1	0.2%
69.1%	48.0	48.1	0.1	0.2%
70.4%	48.0	48.0	0.0	0.1%
71.6%	48.0	48.0	0.0	0.1%
72.8%	47.9	48.0	0.1	0.2%
74.1%	47.9	48.0	0.1	0.2%
75.3%	47.8	48.0	0.1	0.3%
76.5%	47.8	47.9	0.1	0.2%
77.8%	47.8	47.9	0.1	0.3%
79.0%	47.6	47.7	0.1	0.3%
80.2%	47.4	47.7	0.3	0.6%
81.5%	47.3	47.4	0.1	0.1%
82.7%	47.2	47.2	0.0	0.0%
84.0%	47.1	47.2	0.1	0.2%
85.2%	47.0	47.1	0.1	0.1%
86.4%	46.9	47.1	0.1	0.2%
87.7%	46.8	47.1	0.2	0.5%
88.9%	46.8	47.0	0.3	0.6%
90.1%	46.7	46.7	0.0	0.0%
91.4%	46.6	46.7	0.0	0.1%
92.6%	46.6	46.6	0.0	0.0%
93.8%	46.5	46.5	0.0	0.1%
95.1%	46.3	46.4	0.1	0.2%
96.3%	46.2	46.3	0.1	0.2%
97.5%	46.2	46.2	0.0	0.1%
98.8%	46.1	46.2	0.1	0.1%
100.0%	46.1	46.2	0.1	0.1%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.6	55.7	0.1	0.2%
1.2%	54.9	55.0	0.1	0.2%
2.5%	53.9	53.7	-0.2	-0.4%
3.7%	53.2	52.8	-0.5	-0.9%
4.9%	51.4	52.7	1.3	2.4%
6.2%	51.4	52.5	1.1	2.2%
7.4%	51.4	52.4	1.1	2.0%
8.6%	51.3	52.1	0.8	1.5%
9.9%	51.3	52.0	0.7	1.3%
11.1%	51.3	51.8	0.5	1.0%
12.3%	51.2	51.7	0.5	0.9%
13.6%	51.1	51.6	0.4	0.9%
14.8%	50.9	51.3	0.3	0.6%
16.0%	50.8	51.1	0.3	0.5%
17.3%	50.8	51.0	0.2	0.4%
18.5%	50.7	51.0	0.2	0.5%
19.8%	50.6	50.9	0.3	0.6%
21.0%	50.6	50.9	0.3	0.6%
22.2%	50.6	50.8	0.3	0.6%
23.5%	50.6	50.8	0.3	0.5%
24.7%	50.5	50.8	0.2	0.5%
25.9%	50.5	50.7	0.2	0.4%
27.2%	50.5	50.7	0.2	0.4%
28.4%	50.4	50.7	0.2	0.5%
29.6%	50.3	50.6	0.3	0.6%
30.9%	50.3	50.6	0.3	0.6%
32.1%	50.2	50.5	0.4	0.8%
33.3%	50.1	50.5	0.4	0.8%
34.6%	50.1	50.5	0.4	0.7%
35.8%	50.1	50.4	0.3	0.7%
37.0%	50.0	50.3	0.3	0.6%
38.3%	49.9	50.3	0.4	0.7%
39.5%	49.9	50.2	0.3	0.5%
40.7%	49.9	50.0	0.1	0.3%
42.0%	49.8	49.9	0.1	0.1%
43.2%	49.8	49.8	0.0	0.1%
44.4%	49.7	49.8	0.1	0.1%
45.7%	49.7	49.8	0.1	0.1%
46.9%	49.7	49.8	0.1	0.1%
48.1%	49.7	49.8	0.1	0.1%
49.4%	49.6	49.7	0.1	0.3%
50.6%	49.6	49.7	0.1	0.2%
51.9%	49.6	49.7	0.1	0.2%
53.1%	49.5	49.6	0.1	0.2%
54.3%	49.5	49.6	0.1	0.1%
55.6%	49.5	49.6	0.1	0.2%
56.8%	49.5	49.6	0.1	0.2%
58.0%	49.5	49.5	0.1	0.2%
59.3%	49.4	49.5	0.1	0.2%
60.5%	49.4	49.5	0.1	0.2%
61.7%	49.4	49.5	0.1	0.2%
63.0%	49.4	49.5	0.1	0.3%
64.2%	49.3	49.5	0.1	0.2%
65.4%	49.3	49.4	0.1	0.2%
66.7%	49.3	49.4	0.0	0.1%
67.9%	49.3	49.3	0.0	0.1%
69.1%	49.3	49.3	0.1	0.2%
70.4%	49.2	49.3	0.0	0.1%
71.6%	49.2	49.2	0.1	0.2%
72.8%	49.1	49.2	0.1	0.3%
74.1%	49.0	49.2	0.2	0.4%
75.3%	48.9	49.2	0.2	0.5%
76.5%	48.9	49.1	0.2	0.3%
77.8%	48.8	49.0	0.2	0.4%
79.0%	48.8	49.0	0.2	0.4%
80.2%	48.7	48.8	0.1	0.2%
81.5%	48.7	48.7	0.0	0.0%
82.7%	48.6	48.6	0.1	0.1%
84.0%	48.6	48.6	0.1	0.1%
85.2%	48.5	48.6	0.1	0.1%
86.4%	48.5	48.3	-0.2	-0.4%
87.7%	48.3	48.1	-0.2	-0.4%
88.9%	48.1	48.1	0.0	0.0%
90.1%	48.1	48.1	0.0	0.0%
91.4%	48.0	48.0	0.0	0.0%
92.6%	48.0	47.9	-0.1	-0.2%
93.8%	47.9	47.9	0.0	-0.1%
95.1%	47.8	47.9	0.1	0.2%
96.3%	47.8	47.8	0.1	0.2%
97.5%	47.5	47.8	0.3	0.6%
98.8%	47.4	47.5	0.1	0.3%
100.0%	47.4	47.5	0.1	0.3%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.4	55.0	-0.5	-0.9%
1.2%	55.3	54.7	-0.6	-1.0%
2.5%	54.9	54.3	-0.7	-1.2%
3.7%	53.6	53.8	0.2	0.4%
4.9%	53.3	53.4	0.1	0.3%
6.2%	53.2	53.2	0.0	0.0%
7.4%	53.2	53.2	0.0	-0.1%
8.6%	53.0	53.2	0.1	0.3%
9.9%	52.5	52.9	0.4	0.8%
11.1%	52.2	52.5	0.3	0.6%
12.3%	52.2	52.3	0.1	0.1%
13.6%	52.1	52.2	0.1	0.3%
14.8%	52.0	51.8	-0.2	-0.4%
16.0%	51.5	51.8	0.3	0.6%
17.3%	51.5	51.6	0.1	0.1%
18.5%	51.4	51.5	0.1	0.1%
19.8%	51.4	51.4	0.0	0.1%
21.0%	51.3	51.4	0.1	0.2%
22.2%	51.2	51.4	0.2	0.4%
23.5%	51.1	51.3	0.3	0.5%
24.7%	51.0	51.3	0.3	0.5%
25.9%	51.0	51.3	0.3	0.5%
27.2%	51.0	51.2	0.2	0.5%
28.4%	50.9	51.2	0.2	0.5%
29.6%	50.9	51.0	0.2	0.3%
30.9%	50.8	51.0	0.2	0.4%
32.1%	50.8	51.0	0.2	0.4%
33.3%	50.7	51.0	0.2	0.5%
34.6%	50.7	50.9	0.2	0.5%
35.8%	50.6	50.9	0.3	0.5%
37.0%	50.6	50.9	0.3	0.6%
38.3%	50.6	50.9	0.3	0.6%
39.5%	50.6	50.9	0.3	0.6%
40.7%	50.6	50.8	0.2	0.5%
42.0%	50.4	50.8	0.4	0.7%
43.2%	50.4	50.7	0.3	0.6%
44.4%	50.4	50.7	0.3	0.6%
45.7%	50.4	50.7	0.3	0.6%
46.9%	50.3	50.7	0.3	0.6%
48.1%	50.3	50.7	0.3	0.7%
49.4%	50.3	50.6	0.3	0.6%
50.6%	50.3	50.6	0.3	0.6%
51.9%	50.3	50.6	0.3	0.6%
53.1%	50.2	50.6	0.3	0.7%
54.3%	50.2	50.6	0.3	0.7%
55.6%	50.2	50.5	0.3	0.7%
56.8%	50.2	50.5	0.4	0.7%
58.0%	50.2	50.5	0.4	0.7%
59.3%	50.1	50.4	0.3	0.7%
60.5%	50.0	50.4	0.4	0.8%
61.7%	50.0	50.4	0.3	0.7%
63.0%	50.0	50.3	0.3	0.6%
64.2%	50.0	50.3	0.2	0.5%
65.4%	50.0	50.3	0.3	0.5%
66.7%	50.0	50.3	0.3	0.5%
67.9%	50.0	50.2	0.2	0.5%
69.1%	50.0	50.2	0.2	0.5%
70.4%	50.0	50.2	0.2	0.5%
71.6%	49.9	50.2	0.2	0.5%
72.8%	49.9	50.2	0.2	0.5%
74.1%	49.8	50.1	0.3	0.6%
75.3%	49.8	50.0	0.3	0.6%
76.5%	49.8	50.0	0.3	0.6%
77.8%	49.7	49.9	0.1	0.2%
79.0%	49.7	49.8	0.1	0.3%
80.2%	49.6	49.8	0.2	0.4%
81.5%	49.4	49.7	0.3	0.7%
82.7%	49.4	49.7	0.3	0.7%
84.0%	49.4	49.7	0.4	0.7%
85.2%	49.3	49.6	0.3	0.6%
86.4%	49.3	49.6	0.3	0.6%
87.7%	49.3	49.6	0.3	0.6%
88.9%	49.2	49.5	0.3	0.6%
90.1%	49.2	49.3	0.1	0.2%
91.4%	49.1	49.3	0.2	0.5%
92.6%	49.0	49.3	0.3	0.6%
93.8%	49.0	49.2	0.2	0.5%
95.1%	48.8	49.1	0.3	0.5%
96.3%	48.6	49.1	0.5	1.1%
97.5%	48.5	48.9	0.3	0.7%
98.8%	48.3	48.7	0.4	0.9%
100.0%	48.3	48.7	0.4	0.9%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.8	54.8	-1.0	-1.8%
1.2%	55.5	54.8	-0.7	-1.3%
2.5%	55.4	54.7	-0.6	-1.1%
3.7%	55.3	54.6	-0.6	-1.2%
4.9%	55.3	54.3	-0.9	-1.7%
6.2%	55.2	54.3	-0.9	-1.6%
7.4%	54.8	54.2	-0.6	-1.1%
8.6%	54.7	54.0	-0.7	-1.3%
9.9%	54.7	53.9	-0.8	-1.5%
11.1%	54.2	53.6	-0.6	-1.1%
12.3%	53.8	53.5	-0.2	-0.4%
13.6%	53.7	53.5	-0.2	-0.4%
14.8%	53.7	53.3	-0.4	-0.8%
16.0%	53.7	53.3	-0.4	-0.7%
17.3%	53.6	53.1	-0.4	-0.8%
18.5%	53.3	53.0	-0.2	-0.4%
19.8%	53.2	53.0	-0.2	-0.4%
21.0%	53.0	53.0	-0.1	-0.1%
22.2%	53.0	52.8	-0.2	-0.3%
23.5%	52.9	52.6	-0.3	-0.5%
24.7%	52.7	52.6	-0.1	-0.2%
25.9%	52.7	52.6	-0.1	-0.2%
27.2%	52.7	52.4	-0.3	-0.5%
28.4%	52.7	52.4	-0.2	-0.5%
29.6%	52.7	52.4	-0.2	-0.5%
30.9%	52.5	52.3	-0.2	-0.3%
32.1%	52.3	52.3	0.0	-0.1%
33.3%	52.3	52.3	0.0	0.0%
34.6%	52.2	52.2	0.0	0.0%
35.8%	52.1	51.9	-0.2	-0.4%
37.0%	52.1	51.9	-0.2	-0.3%
38.3%	51.9	51.9	0.0	0.0%
39.5%	51.9	51.9	0.1	0.1%
40.7%	51.8	51.8	0.0	-0.1%
42.0%	51.8	51.8	0.0	-0.1%
43.2%	51.8	51.7	0.0	-0.1%
44.4%	51.8	51.7	-0.1	-0.2%
45.7%	51.7	51.7	0.0	-0.1%
46.9%	51.6	51.6	0.0	0.0%
48.1%	51.6	51.6	0.0	0.0%
49.4%	51.6	51.5	-0.1	-0.1%
50.6%	51.6	51.5	0.0	-0.1%
51.9%	51.5	51.5	0.0	0.0%
53.1%	51.5	51.5	0.0	-0.1%
54.3%	51.5	51.5	0.0	0.0%
55.6%	51.5	51.4	-0.1	-0.1%
56.8%	51.4	51.4	0.0	0.0%
58.0%	51.3	51.3	0.0	0.0%
59.3%	51.3	51.3	0.0	0.0%
60.5%	51.3	51.3	-0.1	-0.1%
61.7%	51.3	51.2	-0.1	-0.1%
63.0%	51.3	51.2	0.0	-0.1%
64.2%	51.3	51.2	0.0	-0.1%
65.4%	51.2	51.2	0.0	0.0%
66.7%	51.2	51.2	0.0	0.1%
67.9%	51.1	51.2	0.0	0.1%
69.1%	51.1	51.1	0.0	0.0%
70.4%	51.1	51.1	0.0	0.0%
71.6%	51.1	51.1	0.0	0.1%
72.8%	51.0	51.1	0.0	0.0%
74.1%	51.0	51.0	0.0	0.0%
75.3%	51.0	51.0	0.0	0.1%
76.5%	50.9	51.0	0.1	0.2%
77.8%	50.9	51.0	0.1	0.2%
79.0%	50.9	50.9	0.0	0.1%
80.2%	50.8	50.8	0.0	0.1%
81.5%	50.5	50.8	0.2	0.5%
82.7%	50.5	50.7	0.2	0.3%
84.0%	50.5	50.6	0.2	0.3%
85.2%	50.4	50.6	0.2	0.5%
86.4%	50.4	50.5	0.2	0.3%
87.7%	50.4	50.4	0.0	0.0%
88.9%	50.3	50.3	0.0	0.0%
90.1%	50.2	50.2	0.0	0.0%
91.4%	50.2	50.2	0.0	0.0%
92.6%	50.1	50.1	-0.1	-0.1%
93.8%	50.1	50.0	-0.1	-0.1%
95.1%	49.9	49.9	0.0	0.0%
96.3%	49.9	49.8	-0.1	-0.2%
97.5%	49.6	49.7	0.1	0.2%
98.8%	49.5	49.5	0.0	0.0%
100.0%	49.5	49.5	0.0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.7	56.4	-5.3	-8.6%
1.2%	58.5	55.0	-3.5	-5.9%
2.5%	58.4	54.9	-3.5	-6.0%
3.7%	56.0	54.9	-1.2	-2.1%
4.9%	56.0	54.8	-1.2	-2.1%
6.2%	55.7	54.8	-0.9	-1.6%
7.4%	55.6	54.8	-0.8	-1.5%
8.6%	55.4	54.8	-0.6	-1.1%
9.9%	55.3	54.7	-0.6	-1.1%
11.1%	55.1	54.7	-0.4	-0.8%
12.3%	55.1	54.6	-0.5	-1.0%
13.6%	54.9	54.6	-0.4	-0.7%
14.8%	54.9	54.5	-0.4	-0.7%
16.0%	54.7	54.4	-0.3	-0.6%
17.3%	54.6	54.3	-0.3	-0.5%
18.5%	54.6	54.3	-0.2	-0.5%
19.8%	54.4	54.2	-0.2	-0.4%
21.0%	54.4	54.2	-0.2	-0.4%
22.2%	54.2	54.1	-0.1	-0.1%
23.5%	54.1	54.1	-0.1	-0.1%
24.7%	54.1	53.9	-0.2	-0.4%
25.9%	54.0	53.8	-0.2	-0.3%
27.2%	54.0	53.6	-0.4	-0.8%
28.4%	53.9	53.5	-0.5	-0.8%
29.6%	53.8	53.4	-0.5	-0.9%
30.9%	53.8	53.4	-0.4	-0.7%
32.1%	53.7	53.2	-0.6	-1.1%
33.3%	53.6	53.1	-0.5	-0.9%
34.6%	53.6	53.1	-0.5	-0.9%
35.8%	53.6	53.1	-0.5	-0.9%
37.0%	53.5	53.0	-0.6	-1.1%
38.3%	53.5	52.9	-0.6	-1.1%
39.5%	53.4	52.9	-0.5	-0.9%
40.7%	53.3	52.9	-0.4	-0.7%
42.0%	53.3	52.8	-0.5	-0.9%
43.2%	53.3	52.8	-0.5	-0.9%
44.4%	53.1	52.8	-0.4	-0.7%
45.7%	53.1	52.7	-0.4	-0.7%
46.9%	53.1	52.7	-0.4	-0.7%
48.1%	53.1	52.7	-0.4	-0.7%
49.4%	53.0	52.7	-0.3	-0.5%
50.6%	53.0	52.7	-0.3	-0.5%
51.9%	52.9	52.7	-0.2	-0.3%
53.1%	52.8	52.6	-0.1	-0.2%
54.3%	52.7	52.6	-0.1	-0.2%
55.6%	52.7	52.5	-0.2	-0.4%
56.8%	52.7	52.5	-0.2	-0.5%
58.0%	52.6	52.4	-0.2	-0.3%
59.3%	52.6	52.4	-0.2	-0.4%
60.5%	52.5	52.3	-0.2	-0.3%
61.7%	52.5	52.3	-0.2	-0.4%
63.0%	52.5	52.3	-0.2	-0.3%
64.2%	52.4	52.3	-0.2	-0.3%
65.4%	52.4	52.2	-0.2	-0.4%
66.7%	52.3	52.2	-0.1	-0.3%
67.9%	52.3	52.1	-0.2	-0.4%
69.1%	52.3	52.0	-0.3	-0.6%
70.4%	52.3	51.9	-0.3	-0.6%
71.6%	52.2	51.9	-0.3	-0.6%
72.8%	52.2	51.9	-0.3	-0.5%
74.1%	52.1	51.9	-0.2	-0.3%
75.3%	52.0	51.9	-0.1	-0.2%
76.5%	52.0	51.9	-0.1	-0.3%
77.8%	52.0	51.8	-0.2	-0.4%
79.0%	52.0	51.8	-0.2	-0.4%
80.2%	52.0	51.7	-0.2	-0.5%
81.5%	51.9	51.7	-0.2	-0.4%
82.7%	51.9	51.7	-0.2	-0.3%
84.0%	51.8	51.6	-0.3	-0.5%
85.2%	51.8	51.5	-0.2	-0.5%
86.4%	51.8	51.5	-0.2	-0.4%
87.7%	51.7	51.5	-0.2	-0.4%
88.9%	51.7	51.5	-0.2	-0.4%
90.1%	51.6	51.4	-0.2	-0.4%
91.4%	51.5	51.3	-0.2	-0.4%
92.6%	51.4	51.3	-0.2	-0.3%
93.8%	51.4	51.2	-0.2	-0.5%
95.1%	51.4	51.1	-0.2	-0.5%
96.3%	51.3	51.1	-0.2	-0.3%
97.5%	51.2	51.0	-0.2	-0.4%
98.8%	51.0	50.8	-0.2	-0.4%
100.0%	51.0	50.8	-0.2	-0.4%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.4	63.2	-3.2	-4.8%
1.2%	63.3	62.2	-1.1	-1.7%
2.5%	62.8	61.3	-1.5	-2.4%
3.7%	62.0	55.4	-6.6	-10.6%
4.9%	61.3	55.3	-5.9	-9.7%
6.2%	57.2	54.8	-2.4	-4.2%
7.4%	56.6	54.8	-1.8	-3.3%
8.6%	56.5	54.8	-1.7	-3.1%
9.9%	56.0	54.7	-1.3	-2.4%
11.1%	55.7	54.6	-1.0	-1.9%
12.3%	55.5	54.6	-0.9	-1.6%
13.6%	55.4	54.6	-0.8	-1.5%
14.8%	55.4	54.5	-0.9	-1.5%
16.0%	55.3	54.5	-0.8	-1.5%
17.3%	55.3	54.5	-0.9	-1.6%
18.5%	55.2	54.4	-0.9	-1.6%
19.8%	55.2	54.3	-0.8	-1.5%
21.0%	55.1	54.3	-0.8	-1.5%
22.2%	55.0	54.2	-0.9	-1.6%
23.5%	55.0	54.1	-0.9	-1.7%
24.7%	54.9	54.0	-0.9	-1.7%
25.9%	54.9	53.9	-0.9	-1.7%
27.2%	54.9	53.9	-1.0	-1.8%
28.4%	54.8	53.8	-1.1	-1.9%
29.6%	54.6	53.8	-0.8	-1.5%
30.9%	54.5	53.8	-0.7	-1.4%
32.1%	54.5	53.6	-0.9	-1.7%
33.3%	54.4	53.5	-0.9	-1.7%
34.6%	54.3	53.5	-0.8	-1.5%
35.8%	54.1	53.3	-0.8	-1.5%
37.0%	54.1	53.2	-0.9	-1.6%
38.3%	54.0	53.2	-0.9	-1.6%
39.5%	54.0	53.1	-0.9	-1.7%
40.7%	53.8	53.1	-0.8	-1.4%
42.0%	53.6	53.0	-0.6	-1.2%
43.2%	53.6	52.9	-0.7	-1.3%
44.4%	53.6	52.9	-0.8	-1.4%
45.7%	53.6	52.8	-0.8	-1.5%
46.9%	53.6	52.8	-0.8	-1.5%
48.1%	53.5	52.7	-0.8	-1.5%
49.4%	53.5	52.6	-0.9	-1.6%
50.6%	53.1	52.4	-0.7	-1.4%
51.9%	53.1	52.3	-0.7	-1.4%
53.1%	53.0	52.3	-0.7	-1.4%
54.3%	52.9	52.2	-0.7	-1.3%
55.6%	52.8	52.2	-0.7	-1.3%
56.8%	52.8	52.1	-0.7	-1.3%
58.0%	52.6	52.0	-0.6	-1.1%
59.3%	52.5	52.0	-0.5	-0.9%
60.5%	52.5	52.0	-0.5	-1.0%
61.7%	52.5	52.0	-0.5	-0.9%
63.0%	52.4	51.9	-0.4	-0.9%
64.2%	52.4	51.9	-0.4	-0.8%
65.4%	52.2	51.9	-0.3	-0.5%
66.7%	52.2	51.9	-0.3	-0.5%
67.9%	52.0	51.7	-0.3	-0.5%
69.1%	52.0	51.6	-0.4	-0.7%
70.4%	51.9	51.3	-0.6	-1.2%
71.6%	51.9	51.3	-0.7	-1.3%
72.8%	51.7	51.2	-0.5	-0.9%
74.1%	51.6	51.2	-0.5	-0.9%
75.3%	51.6	51.1	-0.4	-0.9%
76.5%	51.5	51.1	-0.4	-0.7%
77.8%	51.5	51.1	-0.4	-0.7%
79.0%	51.4	51.1	-0.3	-0.6%
80.2%	51.3	51.1	-0.3	-0.5%
81.5%	51.3	51.0	-0.3	-0.5%
82.7%	51.3	51.0	-0.3	-0.6%
84.0%	51.2	51.0	-0.3	-0.5%
85.2%	51.2	50.8	-0.4	-0.7%
86.4%	51.2	50.8	-0.4	-0.8%
87.7%	51.1	50.7	-0.4	-0.8%
88.9%	51.1	50.7	-0.4	-0.8%
90.1%	51.1	50.6	-0.5	-0.9%
91.4%	51.1	50.4	-0.6	-1.2%
92.6%	51.0	50.4	-0.6	-1.2%
93.8%	51.0	50.4	-0.6	-1.1%
95.1%	50.6	50.3	-0.3	-0.6%
96.3%	50.5	50.0	-0.5	-1.1%
97.5%	50.1	49.6	-0.5	-1.0%
98.8%	49.7	49.2	-0.5	-1.1%
100.0%	49.7	49.2	-0.5	-1.1%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.2	56.7	-2.5	-4.3%
1.2%	57.5	55.9	-1.7	-2.9%
2.5%	57.3	55.7	-1.5	-2.7%
3.7%	56.5	54.7	-1.8	-3.2%
4.9%	56.5	54.6	-1.8	-3.2%
6.2%	55.0	54.5	-0.5	-0.9%
7.4%	55.0	54.4	-0.5	-1.0%
8.6%	54.7	54.4	-0.4	-0.7%
9.9%	54.6	54.0	-0.6	-1.0%
11.1%	54.3	53.9	-0.3	-0.6%
12.3%	54.3	53.7	-0.6	-1.1%
13.6%	54.1	53.6	-0.5	-0.9%
14.8%	54.1	53.5	-0.6	-1.1%
16.0%	54.0	53.4	-0.6	-1.2%
17.3%	53.9	53.4	-0.5	-0.9%
18.5%	53.8	53.3	-0.5	-0.9%
19.8%	53.5	53.1	-0.4	-0.7%
21.0%	53.3	53.1	-0.2	-0.3%
22.2%	53.2	53.0	-0.3	-0.5%
23.5%	53.1	52.9	-0.1	-0.3%
24.7%	53.1	52.9	-0.1	-0.3%
25.9%	53.0	52.9	-0.1	-0.2%
27.2%	53.0	52.8	-0.1	-0.3%
28.4%	53.0	52.8	-0.2	-0.3%
29.6%	52.9	52.7	-0.1	-0.3%
30.9%	52.9	52.5	-0.4	-0.7%
32.1%	52.7	52.4	-0.3	-0.6%
33.3%	52.7	52.4	-0.3	-0.5%
34.6%	52.7	52.4	-0.3	-0.5%
35.8%	52.6	52.3	-0.3	-0.6%
37.0%	52.6	52.2	-0.4	-0.7%
38.3%	52.6	52.1	-0.5	-0.9%
39.5%	52.4	52.1	-0.3	-0.5%
40.7%	52.3	52.1	-0.2	-0.4%
42.0%	52.3	52.1	-0.2	-0.4%
43.2%	52.2	52.0	-0.2	-0.4%
44.4%	52.1	52.0	-0.1	-0.3%
45.7%	52.1	52.0	-0.1	-0.2%
46.9%	52.0	51.9	-0.1	-0.2%
48.1%	52.0	51.9	-0.1	-0.2%
49.4%	52.0	51.8	-0.2	-0.4%
50.6%	51.9	51.7	-0.2	-0.4%
51.9%	51.9	51.7	-0.2	-0.3%
53.1%	51.8	51.6	-0.1	-0.3%
54.3%	51.7	51.6	-0.1	-0.2%
55.6%	51.7	51.6	-0.1	-0.2%
56.8%	51.6	51.5	-0.1	-0.1%
58.0%	51.6	51.5	-0.1	-0.2%
59.3%	51.6	51.5	-0.1	-0.2%
60.5%	51.5	51.4	-0.1	-0.2%
61.7%	51.5	51.4	-0.1	-0.3%
63.0%	51.5	51.4	-0.2	-0.3%
64.2%	51.5	51.4	-0.1	-0.3%
65.4%	51.5	51.3	-0.1	-0.3%
66.7%	51.5	51.3	-0.2	-0.4%
67.9%	51.5	51.2	-0.3	-0.5%
69.1%	51.4	51.2	-0.2	-0.4%
70.4%	51.3	51.2	-0.1	-0.3%
71.6%	51.3	51.1	-0.1	-0.2%
72.8%	51.2	51.1	-0.1	-0.2%
74.1%	51.2	51.1	-0.1	-0.2%
75.3%	51.2	51.1	-0.1	-0.2%
76.5%	51.2	51.0	-0.1	-0.3%
77.8%	51.2	51.0	-0.1	-0.3%
79.0%	51.2	51.0	-0.2	-0.3%
80.2%	51.2	51.0	-0.2	-0.3%
81.5%	51.2	51.0	-0.2	-0.4%
82.7%	51.1	50.9	-0.2	-0.4%
84.0%	51.0	50.8	-0.2	-0.4%
85.2%	50.9	50.8	-0.1	-0.2%
86.4%	50.9	50.6	-0.2	-0.5%
87.7%	50.7	50.6	-0.1	-0.2%
88.9%	50.7	50.5	-0.1	-0.2%
90.1%	50.6	50.5	-0.1	-0.2%
91.4%	50.5	50.5	-0.1	-0.1%
92.6%	50.5	50.5	-0.1	-0.1%
93.8%	50.5	50.4	-0.1	-0.1%
95.1%	50.4	50.4	0.0	-0.1%
96.3%	50.4	50.4	0.0	-0.1%
97.5%	50.4	50.4	-0.1	-0.1%
98.8%	49.9	49.8	-0.1	-0.2%
100.0%	49.5	49.5	-0.1	-0.1%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.2	58.0	-3.2	-5.3%
1.2%	59.0	57.1	-1.9	-3.2%
2.5%	58.7	56.6	-2.1	-3.6%
3.7%	57.5	54.8	-2.7	-4.6%
4.9%	56.8	54.7	-2.1	-3.7%
6.2%	55.8	54.6	-1.2	-2.1%
7.4%	55.5	54.6	-1.0	-1.8%
8.6%	55.2	54.5	-0.6	-1.2%
9.9%	55.0	54.3	-0.7	-1.3%
11.1%	55.0	54.3	-0.7	-1.3%
12.3%	54.9	54.2	-0.7	-1.3%
13.6%	54.8	54.2	-0.5	-1.0%
14.8%	54.7	54.2	-0.5	-1.0%
16.0%	54.7	53.9	-0.7	-1.4%
17.3%	54.5	53.9	-0.6	-1.1%
18.5%	54.5	53.9	-0.6	-1.1%
19.8%	54.4	53.8	-0.5	-1.0%
21.0%	54.2	53.8	-0.4	-0.7%
22.2%	53.9	53.7	-0.2	-0.4%
23.5%	53.9	53.6	-0.2	-0.4%
24.7%	53.9	53.6	-0.3	-0.5%
25.9%	53.9	53.5	-0.4	-0.7%
27.2%	53.8	53.4	-0.5	-0.8%
28.4%	53.7	53.3	-0.4	-0.7%
29.6%	53.7	53.2	-0.5	-0.9%
30.9%	53.5	53.0	-0.5	-0.9%
32.1%	53.4	52.9	-0.5	-1.0%
33.3%	53.4	52.9	-0.5	-1.0%
34.6%	53.3	52.8	-0.6	-1.1%
35.8%	53.3	52.7	-0.7	-1.2%
37.0%	53.3	52.7	-0.7	-1.2%
38.3%	53.1	52.5	-0.6	-1.1%
39.5%	53.1	52.5	-0.6	-1.1%
40.7%	53.0	52.5	-0.5	-0.9%
42.0%	52.9	52.5	-0.4	-0.8%
43.2%	52.8	52.4	-0.3	-0.7%
44.4%	52.7	52.4	-0.3	-0.6%
45.7%	52.7	52.4	-0.3	-0.5%
46.9%	52.7	52.4	-0.3	-0.6%
48.1%	52.6	52.2	-0.4	-0.7%
49.4%	52.5	52.2	-0.3	-0.5%
50.6%	52.4	52.1	-0.3	-0.5%
51.9%	52.3	52.1	-0.2	-0.5%
53.1%	52.3	52.0	-0.3	-0.5%
54.3%	52.3	51.9	-0.4	-0.7%
55.6%	52.1	51.9	-0.2	-0.5%
56.8%	52.1	51.9	-0.3	-0.5%
58.0%	52.1	51.9	-0.3	-0.5%
59.3%	52.1	51.8	-0.2	-0.4%
60.5%	52.0	51.7	-0.2	-0.4%
61.7%	51.9	51.7	-0.2	-0.4%
63.0%	51.9	51.7	-0.2	-0.5%
64.2%	51.9	51.7	-0.2	-0.4%
65.4%	51.9	51.6	-0.2	-0.5%
66.7%	51.9	51.6	-0.3	-0.5%
67.9%	51.9	51.6	-0.3	-0.5%
69.1%	51.8	51.6	-0.3	-0.5%
70.4%	51.8	51.5	-0.3	-0.6%
71.6%	51.8	51.5	-0.3	-0.7%
72.8%	51.7	51.5	-0.2	-0.4%
74.1%	51.7	51.5	-0.2	-0.4%
75.3%	51.7	51.5	-0.2	-0.4%
76.5%	51.7	51.5	-0.2	-0.4%
77.8%	51.6	51.4	-0.2	-0.3%
79.0%	51.6	51.4	-0.2	-0.3%
80.2%	51.6	51.3	-0.3	-0.5%
81.5%	51.5	51.3	-0.3	-0.5%
82.7%	51.5	51.2	-0.3	-0.6%
84.0%	51.5	51.1	-0.3	-0.6%
85.2%	51.4	51.1	-0.3	-0.7%
86.4%	51.4	51.0	-0.3	-0.6%
87.7%	51.2	51.0	-0.2	-0.4%
88.9%	51.2	51.0	-0.2	-0.5%
90.1%	51.1	51.0	-0.1	-0.3%
91.4%	51.1	50.9	-0.2	-0.3%
92.6%	51.0	50.8	-0.2	-0.4%
93.8%	51.0	50.8	-0.1	-0.3%
95.1%	50.9	50.7	-0.2	-0.5%
96.3%	50.8	50.6	-0.2	-0.3%
97.5%	50.8	50.6	-0.2	-0.4%
98.8%	50.4	50.3	-0.1	-0.2%
100.0%	50.0	49.7	-0.3	-0.5%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.0	59.8	-4.2	-6.6%
1.2%	60.9	58.6	-2.3	-3.7%
2.5%	60.6	58.1	-2.5	-4.1%
3.7%	58.4	54.8	-3.6	-6.2%
4.9%	58.3	54.8	-3.5	-6.1%
6.2%	56.3	54.8	-1.6	-2.8%
7.4%	56.3	54.7	-1.6	-2.8%
8.6%	55.9	54.7	-1.3	-2.2%
9.9%	55.7	54.6	-1.1	-1.9%
11.1%	55.6	54.6	-1.0	-1.8%
12.3%	55.3	54.6	-0.7	-1.2%
13.6%	55.2	54.4	-0.7	-1.3%
14.8%	55.1	54.4	-0.7	-1.3%
16.0%	55.0	54.4	-0.7	-1.2%
17.3%	55.0	54.4	-0.6	-1.1%
18.5%	54.9	54.4	-0.5	-1.0%
19.8%	54.7	54.3	-0.4	-0.7%
21.0%	54.6	54.3	-0.4	-0.7%
22.2%	54.6	54.2	-0.3	-0.6%
23.5%	54.5	54.1	-0.4	-0.7%
24.7%	54.4	54.0	-0.4	-0.7%
25.9%	54.3	53.9	-0.4	-0.7%
27.2%	54.3	53.8	-0.5	-1.0%
28.4%	54.3	53.7	-0.6	-1.1%
29.6%	54.2	53.7	-0.6	-1.0%
30.9%	54.2	53.7	-0.5	-1.0%
32.1%	54.1	53.5	-0.5	-1.0%
33.3%	54.1	53.4	-0.7	-1.3%
34.6%	54.0	53.2	-0.8	-1.5%
35.8%	53.9	53.2	-0.8	-1.4%
37.0%	53.8	53.1	-0.7	-1.4%
38.3%	53.8	53.1	-0.7	-1.4%
39.5%	53.8	53.0	-0.7	-1.4%
40.7%	53.6	53.0	-0.6	-1.2%
42.0%	53.4	53.0	-0.5	-0.9%
43.2%	53.4	52.8	-0.6	-1.1%
44.4%	53.4	52.5	-0.8	-1.6%
45.7%	53.2	52.5	-0.7	-1.3%
46.9%	53.1	52.5	-0.6	-1.1%
48.1%	53.0	52.5	-0.5	-0.9%
49.4%	52.9	52.5	-0.4	-0.8%
50.6%	52.8	52.4	-0.4	-0.7%
51.9%	52.8	52.4	-0.4	-0.7%
53.1%	52.8	52.4	-0.4	-0.7%
54.3%	52.7	52.4	-0.4	-0.7%
55.6%	52.7	52.3	-0.4	-0.7%
56.8%	52.7	52.3	-0.4	-0.7%
58.0%	52.7	52.3	-0.4	-0.7%
59.3%	52.6	52.1	-0.6	-1.1%
60.5%	52.6	52.0	-0.6	-1.1%
61.7%	52.6	52.0	-0.6	-1.1%
63.0%	52.6	52.0	-0.6	-1.1%
64.2%	52.3	51.9	-0.4	-0.8%
65.4%	52.3	51.9	-0.4	-0.7%
66.7%	52.3	51.9	-0.4	-0.8%
67.9%	52.2	51.9	-0.3	-0.6%
69.1%	52.1	51.8	-0.3	-0.6%
70.4%	52.1	51.8	-0.3	-0.6%
71.6%	52.1	51.7	-0.3	-0.7%
72.8%	52.0	51.7	-0.4	-0.7%
74.1%	52.0	51.6	-0.4	-0.7%
75.3%	52.0	51.6	-0.4	-0.7%
76.5%	51.9	51.6	-0.4	-0.7%
77.8%	51.9	51.6	-0.3	-0.7%
79.0%	51.9	51.5	-0.4	-0.8%
80.2%	51.9	51.5	-0.4	-0.8%
81.5%	51.7	51.5	-0.3	-0.5%
82.7%	51.7	51.4	-0.2	-0.4%
84.0%	51.6	51.4	-0.2	-0.5%
85.2%	51.6	51.4	-0.2	-0.4%
86.4%	51.5	51.3	-0.2	-0.4%
87.7%	51.5	51.3	-0.2	-0.4%
88.9%	51.4	51.2	-0.2	-0.4%
90.1%	51.4	51.2	-0.2	-0.4%
91.4%	51.4	51.2	-0.3	-0.5%
92.6%	51.4	51.0	-0.4	-0.8%
93.8%	51.3	51.0	-0.4	-0.7%
95.1%	51.1	50.8	-0.3	-0.6%
96.3%	51.0	50.7	-0.3	-0.5%
97.5%	50.7	50.4	-0.4	-0.8%
98.8%	50.4	50.1	-0.2	-0.4%
100.0%	50.3	49.9	-0.5	-0.9%

Figure SQ4-1b
Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

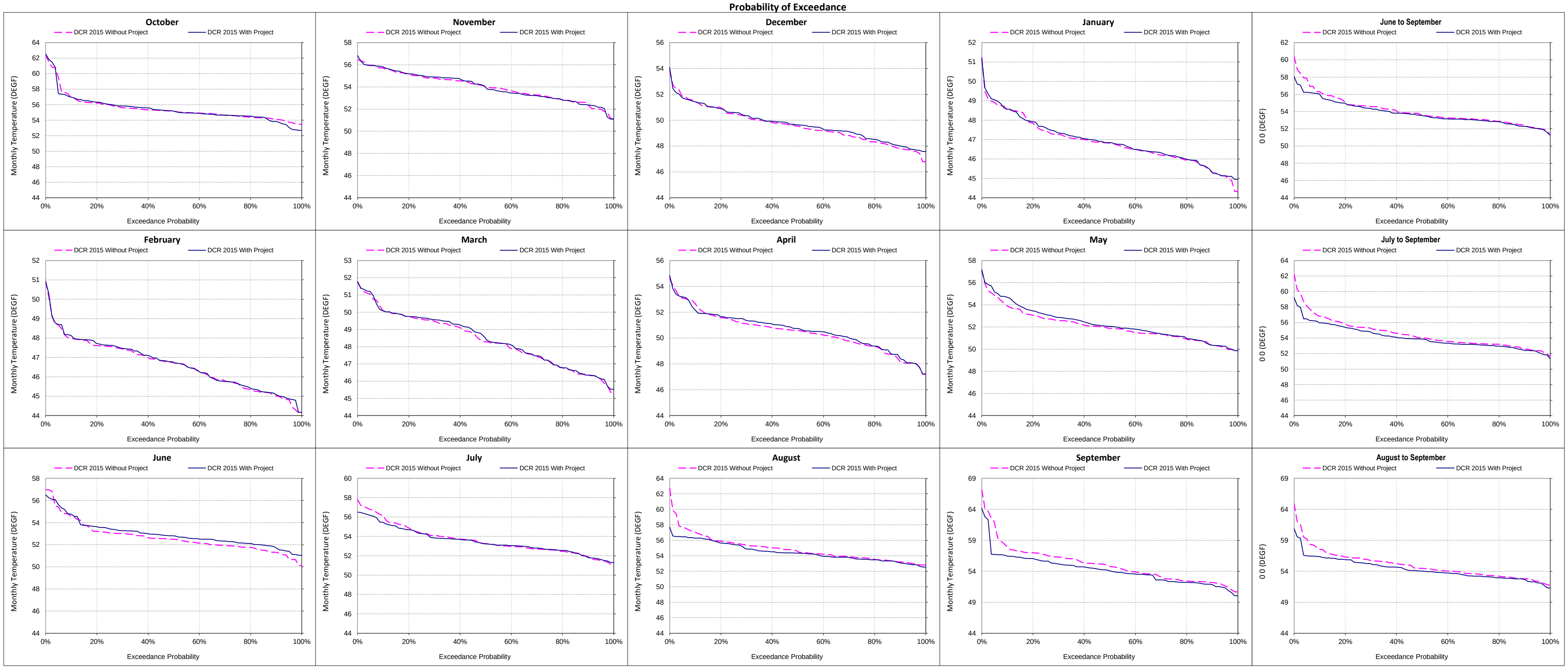


Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature

Probability of Exceedance

October				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.5	62.6	0.1	0.2%
1.2%	61.5	61.8	0.4	0.6%
2.5%	60.8	61.5	0.6	1.1%
3.7%	60.8	60.8	0.1	0.1%
4.9%	59.6	57.4	-2.2	-3.6%
6.2%	57.7	57.3	-0.3	-0.6%
7.4%	57.6	57.3	-0.3	-0.5%
8.6%	57.4	57.1	-0.3	-0.5%
9.9%	56.9	57.0	0.0	0.1%
11.1%	56.8	56.9	0.0	0.1%
12.3%	56.6	56.7	0.1	0.2%
13.6%	56.4	56.7	0.3	0.5%
14.8%	56.4	56.5	0.2	0.3%
16.0%	56.3	56.5	0.2	0.4%
17.3%	56.3	56.5	0.2	0.4%
18.5%	56.3	56.4	0.1	0.2%
19.8%	56.2	56.3	0.1	0.2%
21.0%	56.2	56.3	0.1	0.2%
22.2%	56.0	56.2	0.2	0.3%
23.5%	56.0	56.1	0.1	0.2%
24.7%	56.0	56.0	0.0	0.0%
25.9%	55.9	56.0	0.1	0.2%
27.2%	55.8	55.9	0.2	0.3%
28.4%	55.8	55.8	0.1	0.2%
29.6%	55.6	55.8	0.2	0.4%
30.9%	55.6	55.8	0.2	0.4%
32.1%	55.6	55.8	0.2	0.4%
33.3%	55.5	55.8	0.2	0.4%
34.6%	55.5	55.7	0.2	0.3%
35.8%	55.5	55.7	0.2	0.3%
37.0%	55.4	55.6	0.2	0.4%
38.3%	55.4	55.6	0.2	0.4%
39.5%	55.3	55.6	0.2	0.4%
40.7%	55.3	55.6	0.2	0.4%
42.0%	55.3	55.4	0.1	0.1%
43.2%	55.3	55.3	0.1	0.1%
44.4%	55.3	55.3	0.1	0.1%
45.7%	55.2	55.3	0.0	0.1%
46.9%	55.2	55.2	0.0	0.1%
48.1%	55.2	55.2	0.0	0.0%
49.4%	55.2	55.2	0.0	0.1%
50.6%	55.1	55.1	0.0	0.0%
51.9%	55.1	55.0	0.0	-0.1%
53.1%	55.0	55.0	0.0	-0.1%
54.3%	55.0	54.9	-0.1	-0.1%
55.6%	55.0	54.9	0.0	-0.1%
56.8%	55.0	54.9	0.0	0.0%
58.0%	54.9	54.9	0.0	-0.1%
59.3%	54.9	54.9	0.0	0.0%
60.5%	54.9	54.9	0.0	-0.1%
61.7%	54.9	54.8	-0.1	-0.1%
63.0%	54.9	54.8	-0.1	-0.1%
64.2%	54.9	54.8	-0.1	-0.2%
65.4%	54.8	54.8	-0.1	-0.1%
66.7%	54.8	54.7	-0.1	-0.3%
67.9%	54.7	54.7	-0.1	-0.2%
69.1%	54.7	54.6	0.0	0.0%
70.4%	54.6	54.6	0.0	0.0%
71.6%	54.6	54.6	0.0	0.0%
72.8%	54.6	54.6	0.0	0.0%
74.1%	54.6	54.6	0.0	0.0%
75.3%	54.5	54.6	0.1	0.1%
76.5%	54.5	54.5	0.1	0.1%
77.8%	54.4	54.5	0.1	0.2%
79.0%	54.4	54.5	0.1	0.2%
80.2%	54.4	54.5	0.1	0.2%
81.5%	54.3	54.4	0.1	0.2%
82.7%	54.3	54.4	0.1	0.2%
84.0%	54.3	54.4	0.1	0.1%
85.2%	54.3	54.4	0.1	0.2%
86.4%	54.3	54.2	-0.1	-0.2%
87.7%	54.2	53.9	-0.3	-0.6%
88.9%	54.2	53.8	-0.3	-0.6%
90.1%	54.1	53.8	-0.3	-0.5%
91.4%	54.1	53.7	-0.4	-0.7%
92.6%	54.0	53.5	-0.5	-0.9%
93.8%	53.8	53.5	-0.3	-0.6%
95.1%	53.8	53.0	-0.7	-1.3%
96.3%	53.7	52.8	-0.9	-1.6%
97.5%	53.5	52.8	-0.8	-1.4%
98.8%	53.5	52.7	-0.8	-1.5%
100.0%	53.5	52.7	0.0	-1.5%

November				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.5	56.8	0.4	0.6%
1.2%	56.3	56.3	0.0	0.0%
2.5%	56.3	56.0	-0.2	-0.4%
3.7%	56.0	56.0	0.0	0.0%
4.9%	56.0	55.9	0.0	0.0%
6.2%	56.0	55.9	0.0	0.0%
7.4%	55.8	55.9	0.1	0.1%
8.6%	55.7	55.8	0.1	0.2%
9.9%	55.7	55.8	0.1	0.2%
11.1%	55.6	55.7	0.1	0.2%
12.3%	55.6	55.6	0.0	0.1%
13.6%	55.5	55.5	0.0	0.1%
14.8%	55.3	55.5	0.1	0.2%
16.0%	55.3	55.4	0.2	0.3%
17.3%	55.3	55.3	0.1	0.1%
18.5%	55.3	55.2	-0.1	-0.1%
19.8%	55.2	55.2	0.0	0.0%
21.0%	55.1	55.2	0.1	0.2%
22.2%	55.0	55.1	0.1	0.2%
23.5%	55.0	55.1	0.0	0.1%
24.7%	55.0	55.0	0.0	0.1%
25.9%	54.9	55.0	0.1	0.2%
27.2%	54.8	54.9	0.1	0.2%
28.4%	54.8	54.9	0.1	0.2%
29.6%	54.8	54.9	0.1	0.2%
30.9%	54.8	54.9	0.1	0.2%
32.1%	54.7	54.9	0.2	0.3%
33.3%	54.7	54.8	0.1	0.3%
34.6%	54.7	54.8	0.2	0.3%
35.8%	54.7	54.8	0.2	0.3%
37.0%	54.6	54.8	0.2	0.3%
38.3%	54.6	54.8	0.2	0.4%
39.5%	54.6	54.8	0.2	0.4%
40.7%	54.5	54.6	0.1	0.1%
42.0%	54.5	54.5	0.1	0.1%
43.2%	54.4	54.5	0.1	0.2%
44.4%	54.3	54.5	0.2	0.4%
45.7%	54.3	54.3	0.0	0.0%
46.9%	54.2	54.3	0.1	0.1%
48.1%	54.2	54.2	0.1	0.1%
49.4%	54.1	54.1	0.0	0.0%
50.6%	54.0	53.8	-0.2	-0.4%
51.9%	53.9	53.8	-0.2	-0.3%
53.1%	53.9	53.8	-0.2	-0.3%
54.3%	53.9	53.7	-0.2	-0.4%
55.6%	53.9	53.6	-0.3	-0.5%
56.8%	53.8	53.6	-0.3	-0.5%
58.0%	53.7	53.6	-0.2	-0.4%
59.3%	53.7	53.5	-0.3	-0.5%
60.5%	53.6	53.4	-0.2	-0.3%
61.7%	53.6	53.4	-0.1	-0.2%
63.0%	53.5	53.4	0.0	-0.1%
64.2%	53.4	53.4	-0.1	-0.1%
65.4%	53.4	53.3	-0.1	-0.3%
66.7%	53.3	53.3	-0.1	-0.1%
67.9%	53.3	53.2	-0.1	-0.2%
69.1%	53.3	53.2	-0.1	-0.1%
70.4%	53.3	53.2	-0.1	-0.1%
71.6%	53.3	53.1	-0.1	-0.2%
72.8%	53.2	53.1	-0.1	-0.1%
74.1%	53.1	53.0	-0.1	-0.2%
75.3%	53.0	53.0	0.0	0.0%
76.5%	53.0	53.0	0.0	0.0%
77.8%	52.9	52.9	0.0	0.0%
79.0%	52.9	52.9	0.0	0.0%
80.2%	52.8	52.8	0.0	0.0%
81.5%	52.8	52.8	0.0	0.0%
82.7%	52.8	52.7	0.0	-0.1%
84.0%	52.6	52.7	0.1	0.1%
85.2%	52.6	52.7	0.0	0.1%
86.4%	52.6	52.5	-0.2	-0.3%
87.7%	52.6	52.4	-0.2	-0.4%
88.9%	52.6	52.4	-0.2	-0.4%
90.1%	52.3	52.4	0.1	0.1%
91.4%	52.1	52.3	0.3	0.5%
92.6%	52.0	52.3	0.3	0.5%
93.8%	52.0	52.2	0.2	0.3%
95.1%	52.0	52.2	0.2	0.3%
96.3%	51.8	52.0	0.2	0.5%
97.5%	51.7	51.3	-0.4	-0.8%
98.8%	51.1	51.1	0.0	-0.1%
100.0%	51.1	51.1	0.0	-0.1%

December				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.9	54.1	0.2	0.4%
1.2%	52.7	52.5	-0.2	-0.5%
2.5%	52.4	52.1	-0.3	-0.6%
3.7%	52.3	52.0	-0.3	-0.6%
4.9%	51.8	51.7	-0.1	-0.1%
6.2%	51.8	51.6	-0.2	-0.3%
7.4%	51.6	51.6	0.0	-0.1%
8.6%	51.6	51.5	-0.1	-0.2%
9.9%	51.4	51.4	0.0	0.1%
11.1%	51.4	51.3	0.0	-0.1%
12.3%	51.1	51.3	0.2	0.4%
13.6%	51.1	51.3	0.2	0.3%
14.8%	51.1	51.0	0.0	-0.1%
16.0%	51.0	51.0	0.0	0.0%
17.3%	51.0	51.0	0.0	0.0%
18.5%	51.0	50.9	-0.1	-0.1%
19.8%	51.0	50.9	-0.1	-0.2%
21.0%	50.8	50.9	0.0	0.1%
22.2%	50.5	50.6	0.1	0.2%
23.5%	50.5	50.6	0.1	0.2%
24.7%	50.5	50.6	0.1	0.2%
25.9%	50.5	50.6	0.1	0.2%
27.2%	50.4	50.6	0.1	0.3%
28.4%	50.4	50.4	0.0	0.1%
29.6%	50.3	50.4	0.1	0.1%
30.9%	50.2	50.3	0.2	0.3%
32.1%	50.1	50.2	0.1	0.2%
33.3%	50.0	50.2	0.1	0.2%
34.6%	50.0	50.1	0.1	0.3%
35.8%	50.0	50.1	0.1	0.1%
37.0%	50.0	49.9	0.0	0.0%
38.3%	49.9	49.9	0.1	0.1%
39.5%	49.8	49.9	0.1	0.1%
40.7%	49.8	49.9	0.1	0.2%
42.0%	49.8	49.9	0.1	0.2%
43.2%	49.8	49.9	0.1	0.2%
44.4%	49.7	49.9	0.1	0.3%
45.7%	49.7	49.8	0.1	0.2%
46.9%	49.6	49.7	0.1	0.2%
48.1%	49.6	49.7	0.1	0.2%
49.4%	49.5	49.7	0.1	0.2%
50.6%	49.5	49.6	0.1	0.2%
51.9%	49.4	49.6	0.2	0.4%
53.1%	49.4	49.6	0.2	0.5%
54.3%	49.3	49.5	0.2	0.4%
55.6%	49.3	49.5	0.2	0.4%
56.8%	49.2	49.5	0.2	0.5%
58.0%	49.2	49.5	0.3	0.5%
59.3%	49.2	49.4	0.2	0.4%
60.5%	49.2	49.2	0.1	0.1%
61.7%	49.1	49.2	0.1	0.2%
63.0%	49.1	49.2	0.1	0.3%
64.2%	49.1	49.2	0.1	0.2%
65.4%	49.1	49.2	0.1	0.2%
66.7%	49.0	49.2	0.2	0.4%
67.9%	48.8	49.1	0.3	0.6%
69.1%	48.8	49.1	0.3	0.7%
70.4%	48.8	49.1	0.3	0.6%
71.6%	48.7	49.0	0.4	0.7%
72.8%	48.7	48.9	0.2	0.5%
74.1%	48.7	48.9	0.2	0.5%
75.3%	48.5	48.8	0.3	0.6%
76.5%	48.5	48.6	0.1	0.1%
77.8%	48.3	48.6	0.2	0.5%
79.0%	48.3	48.5	0.2	0.4%
80.2%	48.3	48.5	0.2	0.4%
81.5%	48.3	48.5	0.2	0.4%
82.7%	48.2	48.3	0.1	0.2%
84.0%	48.2	48.3	0.1	0.2%
85.2%	48.1	48.3	0.2	0.4%
86.4%	48.0	48.2	0.2	0.3%
87.7%	47.9	48.1	0.2	0.3%
88.9%	47.8	48.1	0.2	0.4%
90.1%	47.8	48.0	0.2	0.4%
91.4%	47.8	48.0	0.2	0.4%
92.6%	47.7	47.9	0.2	0.4%
93.8%	47.7	47.8	0.1	0.1%
95.1%	47.6	47.8	0.1	0.3%
96.3%	47.6	47.7	0.1	0.3%
97.5%	47.4	47.7	0.2	0.5%
98.8%	46.8	47.6	0.8	1.7%
100.0%	46.8	47.6	0.8	1.7%

January				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.2	51.2	0.0	-0.1%
1.2%	49.5	49.7	0.2	0.4%
2.5%	49.1	49.4	0.3	0.5%
3.7%	49.0	49.1	0.1	0.2%
4.9%	48.9	49.1	0.1	0.3%
6.2%	48.8	49.0	0.2	0.4%
7.4%	48.8	48.9	0.1	0.2%
8.6%	48.7	48.6	-0.1	-0.2%
9.9%	48.5	48.6	0.0	0.1%
11.1%	48.5	48.6	0.1	0.1%
12.3%	48.5	48.5	0.0	-0.1%
13.6%	48.5	48.4	-0.1	-0.1%
14.8%	48.4	48.2	-0.2	-0.5%
16.0%	48.4	48.1	-0.3	-0.6%
17.3%	48.1	48.0	-0.1	-0.3%
18.5%	47.9	48.0	0.1	0.2%
19.8%	47.9	47.9	0.1	0.1%
21.0%	47.7	47.9	0.2	0.3%
22.2%	47.6	47.7	0.1	0.3%
23.5%	47.5	47.7	0.2	0.4%
24.7%	47.5	47.6	0.2	0.3%
25.9%	47.4	47.5	0.1	0.3%
27.2%	47.3	47.5	0.2	0.4%
28.4%	47.3	47.4	0.2	0.4%
29.6%	47.3	47.4	0.1	0.2%
30.9%	47.3	47.3	0.1	0.1%
32.1%	47.2	47.3	0.1	0.3%
33.3%	47.1	47.2	0.1	0.2%
34.6%	47.1	47.2	0.1	0.2%
35.8%	47.1	47.2	0.1	0.2%
37.0%	47.1	47.1	0.1	0.2%
38.3%	47.0	47.1	0.1	0.2%
39.5%	47.0	47.1	0.0	0.1%
40.7%	47.0	47.0	0.0	0.1%
42.0%	47.0	47.0	0.0	0.1%
43.2%	46.9	47.0	0.1	0.2%
44.4%	46.9	47.0	0.1	0.2%
45.7%	46.9	46.9	0.1	0.1%
46.9%	46.9	46.9	0.0	0.1%
48.1%	46.8	46.8	0.0	0.0%
49.4%	46.8	46.8	0.0	0.0%
50.6%	46.8	46.8	0.0	0.1%
51.9%	46.8	46.8	0.0	0.0%
53.1%	46.7	46.8	0.0	0.1%
54.3%	46.7	46.8	0.1	0.2%
55.6%	46.6	46.7	0.2	0.3%
56.8%	46.6	46.6	0.1	0.2%
58.0%	46.5	46.6	0.1	0.2%
59.3%	46.5	46.5	0.0	0.0%
60.5%	46.5	46.5	0.0	0.0%
61.7%	46.4	46.5	0.0	0.1%
63.0%	46.4	46.4	0.0	0.0%
64.2%	46.4	46.4	0.0	0.0%
65.4%	46.4	46.4	0.0	0.0%
66.7%	46.3	46.4	0.1	0.1%
67.9%	46.2	46.4	0.1	0.3%
69.1%	46.2	46.3	0.1	0.3%
70.4%	46.2	46.3	0.1	0.2%
71.6%	46.2	46.2	0.1	0.1%
72.8%	46.2	46.2	0.0	0.0%
74.1%	46.1	46.2	0.0	0.1%
75.3%	46.1	46.2	0.1	0.2%
76.5%	46.1	46.1	0.0	0.1%
77.8%	46.0	46.1	0.0	0.1%
79.0%	46.0	46.0	0.1	0.2%
80.2%	45.9	46.0	0.0	0.1%
81.5%	45.9	45.9	0.0	0.0%
82.7%	45.9	45.9	0.0	0.0%
84.0%	45.8	45.9	0.1	0.2%
85.2%	45.7	45.7	0.0	0.0%
86.4%	45.7	45.7	0.0	0.0%
87.7%	45.6	45.6	0.0	0.1%
88.9%	45.4	45.5	0.0	0.1%
90.1%	45.3	45.3	0.0	0.0%
91.4%	45.3	45.3	0.0	0.0%
92.6%	45.1	45.2	0.0	0.1%
93.8%	45.1	45.1	0.0	0.0%
95.1%	45.1	45.1	0.0	0.0%
96.3%	45.0	45.1	0.1	0.3%
97.5%	44.9	45.1	0.2	0.5%
98.8%	44.3	45.0	0.6	1.4%
100.0%	44.3	45.0	0.6	1.4%

Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.9	50.9	0.0	0.0%
1.2%	50.1	50.3	0.2	0.4%
2.5%	49.2	49.1	0.0	-0.1%
3.7%	48.7	48.8	0.1	0.1%
4.9%	48.7	48.7	0.0	0.0%
6.2%	48.5	48.7	0.2	0.5%
7.4%	48.2	48.2	0.0	0.0%
8.6%	48.0	48.2	0.2	0.3%
9.9%	48.0	48.1	0.2	0.3%
11.1%	48.0	48.0	0.0	0.0%
12.3%	47.9	47.9	0.0	0.0%
13.6%	47.9	47.9	0.0	0.0%
14.8%	47.9	47.9	0.0	0.1%
16.0%	47.9	47.9	0.0	0.1%
17.3%	47.7	47.9	0.2	0.4%
18.5%	47.6	47.9	0.2	0.5%
19.8%	47.6	47.7	0.1	0.2%
21.0%	47.6	47.7	0.1	0.2%
22.2%	47.6	47.6	0.1	0.1%
23.5%	47.6	47.6	0.1	0.1%
24.7%	47.6	47.6	0.1	0.1%
25.9%	47.6	47.6	0.1	0.1%
27.2%	47.5	47.6	0.1	0.2%
28.4%	47.5	47.5	0.0	0.1%
29.6%	47.5	47.5	0.0	0.0%
30.9%	47.4	47.5	0.1	0.1%
32.1%	47.4	47.4	0.1	0.1%
33.3%	47.4	47.4	0.1	0.1%
34.6%	47.2	47.3	0.1	0.2%
35.8%	47.1	47.3	0.2	0.4%
37.0%	47.1	47.2	0.1	0.2%
38.3%	47.1	47.1	0.0	0.0%
39.5%	47.0	47.1	0.1	0.2%
40.7%	46.9	47.1	0.1	0.3%
42.0%	46.9	47.0	0.1	0.1%
43.2%	46.9	47.0	0.1	0.1%
44.4%	46.9	46.9	0.0	0.0%
45.7%	46.8	46.8	0.0	0.0%
46.9%	46.8	46.8	0.0	0.1%
48.1%	46.8	46.8	0.0	0.0%
49.4%	46.7	46.8	0.0	0.1%
50.6%	46.7	46.7	0.0	0.0%
51.9%	46.7	46.7	0.0	0.0%
53.1%	46.7	46.7	0.0	-0.1%
54.3%	46.6	46.6	0.0	0.0%
55.6%	46.5	46.5	0.0	0.0%
56.8%	46.5	46.4	0.0	0.0%
58.0%	46.4	46.4	0.0	0.0%
59.3%	46.3	46.3	0.0	0.1%
60.5%	46.2	46.2	0.0	0.0%
61.7%	46.2	46.2	0.0	0.0%
63.0%	46.1	46.2	0.1	0.1%
64.2%	46.0	46.0	0.0	0.0%
65.4%	46.0	45.9	-0.1	-0.1%
66.7%	45.9	45.8	0.0	-0.1%
67.9%	45.9	45.8	-0.1	-0.2%
69.1%	45.8	45.8	-0.1	-0.2%
70.4%	45.8	45.8	0.0	0.0%
71.6%	45.7	45.7	0.0	0.0%
72.8%	45.7	45.7	0.0	0.0%
74.1%	45.7	45.7	0.0	0.1%
75.3%	45.6	45.6	0.0	-0.1%
76.5%	45.5	45.6	0.1	0.2%
77.8%	45.4	45.5	0.1	0.3%
79.0%	45.4	45.5	0.1	0.3%
80.2%	45.3	45.4	0.1	0.1%
81.5%	45.3	45.4	0.1	0.2%
82.7%	45.2	45.3	0.1	0.2%
84.0%	45.2	45.3	0.0	0.1%
85.2%	45.2	45.2	0.0	0.0%
86.4%	45.2	45.2	0.0	0.1%
87.7%	45.2	45.2	0.0	0.0%
88.9%	45.1	45.2	0.1	0.2%
90.1%	45.0	45.1	0.1	0.1%
91.4%	45.0	45.0	0.0	0.0%
92.6%	44.9	45.0	0.1	0.3%
93.8%	44.8	44.9	0.1	0.2%
95.1%	44.8	44.9	0.0	0.1%
96.3%	44.4	44.8	0.4	0.9%
97.5%	44.3	44.8	0.5	1.1%
98.8%	44.1	44.2	0.0	0.1%
100.0%	44.1	44.2	0.0	0.1%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.7	51.8	0.0	0.1%
1.2%	51.4	51.4	0.0	0.0%
2.5%	51.2	51.3	0.1	0.2%
3.7%	51.1	51.2	0.1	0.3%
4.9%	51.0	51.2	0.2	0.3%
6.2%	50.7	50.9	0.2	0.4%
7.4%	50.7	50.5	-0.2	-0.4%
8.6%	50.4	50.2	-0.2	-0.4%
9.9%	50.1	50.1	0.0	0.0%
11.1%	50.0	50.0	0.0	0.0%
12.3%	50.0	50.0	0.0	0.0%
13.6%	49.9	49.9	0.0	0.0%
14.8%	49.9	49.9	0.0	0.0%
16.0%	49.9	49.9	0.0	0.0%
17.3%	49.9	49.9	0.0	0.0%
18.5%	49.8	49.8	0.0	0.0%
19.8%	49.7	49.8	0.0	0.0%
21.0%	49.7	49.7	0.0	0.0%
22.2%	49.7	49.7	0.1	0.2%
23.5%	49.6	49.7	0.1	0.2%
24.7%	49.6	49.7	0.1	0.1%
25.9%	49.6	49.7	0.1	0.2%
27.2%	49.5	49.7	0.1	0.2%
28.4%	49.5	49.6	0.0	0.1%
29.6%	49.5	49.6	0.1	0.1%
30.9%	49.4	49.6	0.1	0.3%
32.1%	49.3	49.5	0.2	0.4%
33.3%	49.3	49.5	0.2	0.3%
34.6%	49.3	49.5	0.1	0.3%
35.8%	49.2	49.5	0.2	0.4%
37.0%	49.2	49.3	0.1	0.2%
38.3%	49.2	49.3	0.1	0.2%
39.5%	49.1	49.3	0.2	0.3%
40.7%	49.1	49.2	0.2	0.3%
42.0%	48.9	49.2	0.3	0.5%
43.2%	48.9	49.1	0.2	0.5%
44.4%	48.8	49.0	0.2	0.4%
45.7%	48.7	48.9	0.1	0.3%
46.9%	48.5	48.8	0.3	0.7%
48.1%	48.4	48.8	0.4	0.8%
49.4%	48.3	48.6	0.3	0.6%
50.6%	48.3	48.4	0.1	0.2%
51.9%	48.2	48.3	0.1	0.1%
53.1%	48.2	48.3	0.0	0.1%
54.3%	48.2	48.2	0.0	0.1%
55.6%	48.2	48.2	0.0	0.0%
56.8%	48.2	48.2	0.0	0.0%
58.0%	48.2	48.2	0.0	0.0%
59.3%	47.9	48.1	0.2	0.5%
60.5%	47.9	48.1	0.2	0.4%
61.7%	47.9	47.9	0.0	0.1%
63.0%	47.8	47.9	0.1	0.2%
64.2%	47.7	47.8	0.2	0.4%
65.4%	47.6	47.6	0.0	0.0%
66.7%	47.6	47.6	0.0	0.1%
67.9%	47.6	47.6	0.0	0.0%
69.1%	47.5	47.5	0.0	0.0%
70.4%	47.4	47.5	0.1	0.1%
71.6%	47.3	47.4	0.1	0.2%
72.8%	47.2	47.2	0.0	0.0%
74.1%	47.2	47.2	0.0	0.0%
75.3%	47.1	47.1	0.0	-0.1%
76.5%	47.0	46.9	0.0	-0.1%
77.8%	46.9	46.9	0.0	0.0%
79.0%	46.8	46.8	0.0	-0.1%
80.2%	46.8	46.8	0.0	0.0%
81.5%	46.7	46.8	0.1	0.2%
82.7%	46.7	46.7	0.0	0.0%
84.0%	46.6	46.6	0.0	0.0%
85.2%	46.4	46.6	0.2	0.4%
86.4%	46.4	46.5	0.1	0.2%
87.7%	46.4	46.4	0.0	0.1%
88.9%	46.4	46.4	0.0	-0.1%
90.1%	46.3	46.3	0.0	0.0%
91.4%	46.3	46.3	0.0	0.0%
92.6%	46.3	46.3	0.0	0.0%
93.8%	46.2	46.2	0.0	0.0%
95.1%	46.1	46.1	0.0	0.1%
96.3%	45.9	46.1	0.2	0.5%
97.5%	45.7	45.7	0.0	0.0%
98.8%	45.4	45.5	0.2	0.4%
100.0%	45.4	45.5	0.2	0.4%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.6	54.8	0.2	0.4%
1.2%	54.1	53.8	-0.2	-0.4%
2.5%	53.7	53.4	-0.3	-0.5%
3.7%	53.2	53.3	0.0	0.1%
4.9%	53.1	53.2	0.1	0.2%
6.2%	53.0	53.2	0.1	0.2%
7.4%	52.9	52.9	0.0	0.0%
8.6%	52.9	52.5	-0.5	-0.9%
9.9%	52.7	52.2	-0.5	-1.0%
11.1%	52.3	51.9	-0.4	-0.7%
12.3%	52.1	51.9	-0.2	-0.4%
13.6%	51.9	51.9	0.0	-0.1%
14.8%	51.8	51.9	0.0	0.1%
16.0%	51.8	51.9	0.1	0.1%
17.3%	51.7	51.8	0.1	0.2%
18.5%	51.7	51.8	0.1	0.3%
19.8%	51.6	51.7	0.1	0.2%
21.0%	51.6	51.7	0.1	0.2%
22.2%	51.5	51.6	0.0	0.1%
23.5%	51.4	51.6	0.1	0.2%
24.7%	51.4	51.5	0.1	0.3%
25.9%	51.3	51.5	0.2	0.5%
27.2%	51.2	51.5	0.3	0.5%
28.4%	51.1	51.5	0.4	0.7%
29.6%	51.1	51.4	0.3	0.5%
30.9%	51.1	51.3	0.3	0.5%
32.1%	51.0	51.3	0.3	0.6%
33.3%	51.0	51.3	0.3	0.6%
34.6%	51.0	51.2	0.3	0.5%
35.8%	50.9	51.2	0.3	0.5%
37.0%	50.9	51.1	0.2	0.5%
38.3%	50.9	51.1	0.2	0.5%
39.5%	50.8	51.1	0.3	0.6%
40.7%	50.8	51.0	0.3	0.5%
42.0%	50.7	51.0	0.3	0.6%
43.2%	50.7	51.0	0.3	0.6%
44.4%	50.7	51.0	0.3	0.6%
45.7%	50.7	50.9	0.2	0.4%
46.9%	50.6	50.9	0.2	0.5%
48.1%	50.6	50.8	0.2	0.3%
49.4%	50.6	50.7	0.1	0.3%
50.6%	50.6	50.7	0.1	0.3%
51.9%	50.5	50.6	0.1	0.2%
53.1%	50.5	50.6	0.1	0.2%
54.3%	50.4	50.5	0.1	0.3%
55.6%	50.4	50.5	0.1	0.3%
56.8%	50.3	50.5	0.2	0.3%
58.0%	50.3	50.5	0.2	0.4%
59.3%	50.3	50.5	0.2	0.4%
60.5%	50.2	50.5	0.3	0.5%
61.7%	50.2	50.4	0.2	0.4%
63.0%	50.1	50.3	0.3	0.5%
64.2%	50.1	50.2	0.2	0.3%
65.4%	50.0	50.2	0.2	0.3%
66.7%	50.0	50.2	0.2	0.3%
67.9%	49.9	50.1	0.2	0.5%
69.1%	49.8	50.1	0.3	0.6%
70.4%	49.8	50.0	0.2	0.4%
71.6%	49.7	49.9	0.2	0.4%
72.8%	49.6	49.9	0.3	0.6%
74.1%	49.5	49.7	0.2	0.3%
75.3%	49.5	49.6	0.0	0.1%
76.5%	49.5	49.6	0.1	0.2%
77.8%	49.4	49.5	0.1	0.3%
79.0%	49.4	49.4	0.0	0.0%
80.2%	49.3	49.4	0.0	0.1%
81.5%	49.3	49.4	0.1	0.2%
82.7%	49.1	49.1	0.0	0.0%
84.0%	48.8	49.1	0.3	0.5%
85.2%	48.8	49.1	0.3	0.7%
86.4%	48.8	48.8	0.0	0.1%
87.7%	48.7	48.7	0.0	0.1%
88.9%	48.5	48.7	0.3	0.6%
90.1%	48.1	48.4	0.3	0.5%
91.4%	48.1	48.3	0.2	0.5%
92.6%	48.1	48.1	0.0	0.0%
93.8%	48.1	48.1	0.0	0.1%
95.1%	48.0	48.1	0.0	0.1%
96.3%	48.0	48.0	0.0	-0.1%
97.5%	47.7	47.7	0.0	0.0%
98.8%	47.2	47.2	0.0	0.0%
100.0%	47.2	47.2	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.2	57.1	0.0	0.0%
1.2%	55.9	56.0	0.1	0.2%
2.5%	55.3	55.8	0.6	1.0%
3.7%	55.1	55.7	0.6	1.1%
4.9%	54.9	55.2	0.3	0.5%
6.2%	54.7	55.0	0.3	0.6%
7.4%	54.4	54.8	0.4	0.7%
8.6%	54.1	54.8	0.6	1.1%
9.9%	53.9	54.7	0.8	1.5%
11.1%	53.8	54.6	0.8	1.5%
12.3%	53.7	54.3	0.6	1.2%
13.6%	53.6	54.1	0.4	0.8%
14.8%	53.6	53.9	0.3	0.5%
16.0%	53.3	53.8	0.5	0.9%
17.3%	53.2	53.6	0.4	0.8%
18.5%	53.1	53.5	0.4	0.8%
19.8%	53.1	53.5	0.4	0.8%
21.0%	53.0	53.4	0.4	0.7%
22.2%	52.9	53.3	0.4	0.7%
23.5%	52.8	53.2	0.4	0.7%
24.7%	52.7	53.1	0.4	0.8%
25.9%	52.7	53.1	0.4	0.7%
27.2%	52.7	53.0	0.3	0.6%
28.4%	52.6	52.9	0.3	0.6%
29.6%	52.6	52.8	0.2	0.5%
30.9%	52.6	52.8	0.3	0.5%
32.1%	52.6	52.8	0.2	0.4%
33.3%	52.5	52.8	0.2	0.4%
34.6%	52.5	52.7	0.3	0.5%
35.8%	52.5	52.7	0.2	0.5%
37.0%	52.3	52.6	0.3	0.6%
38.3%	52.3	52.6	0.3	0.5%
39.5%	52.2	52.5	0.3	0.6%
40.7%	52.1	52.4	0.3	0.5%
42.0%	52.1	52.3	0.2	0.5%
43.2%	52.1	52.2	0.2	0.3%
44.4%	52.1	52.2	0.1	0.2%
45.7%	52.0	52.2	0.1	0.2%
46.9%	52.0	52.1	0.1	0.2%
48.1%	52.0	52.1	0.1	0.2%
49.4%	51.9	52.0	0.2	0.3%
50.6%	51.9	52.0	0.2	0.3%
51.9%	51.9	52.0	0.1	0.3%
53.1%	51.8	52.0	0.2	0.3%
54.3%	51.8	51.9	0.1	0.1%
55.6%	51.8	51.9	0.1	0.2%
56.8%	51.6	51.9	0.2	0.5%
58.0%	51.6	51.8	0.2	0.5%
59.3%	51.5	51.8	0.3	0.6%
60.5%	51.5	51.8	0.3	0.5%
61.7%	51.4	51.7	0.3	0.6%
63.0%	51.4	51.7	0.2	0.5%
64.2%	51.4	51.6	0.2	0.5%
65.4%	51.4	51.6	0.2	0.3%
66.7%	51.4	51.5	0.1	0.3%
67.9%	51.4	51.4	0.1	0.1%
69.1%	51.4	51.4	0.1	0.1%
70.4%	51.3	51.3	0.0	0.0%
71.6%	51.3	51.3	0.0	0.0%
72.8%	51.2	51.3	0.1	0.2%
74.1%	51.2	51.2	0.1	0.1%
75.3%	51.2	51.2	0.0	0.1%
76.5%	51.1	51.2	0.1	0.1%
77.8%	51.1	51.1	0.1	0.2%
79.0%	51.0	51.1	0.2	0.3%
80.2%	50.9	50.9	0.1	0.1%
81.5%	50.8	50.9	0.1	0.1%
82.7%	50.8	50.9	0.1	0.1%
84.0%	50.8	50.8	0.0	0.1%
85.2%	50.8	50.8	0.0	0.0%
86.4%	50.7	50.7	0.0	0.0%
87.7%	50.7	50.5	-0.1	-0.3%
88.9%	50.4	50.4	0.0	0.0%
90.1%	50.3	50.3	0.0	0.0%
91.4%	50.3	50.3	0.0	0.0%
92.6%	50.3	50.3	0.0	0.1%
93.8%	50.2	50.3	0.1	0.1%
95.1%	50.1	50.3	0.2	0.4%
96.3%	50.0	50.1	0.1	0.2%
97.5%	50.0	50.0	0.0	0.1%
98.8%	49.9	49.8	0.0	-0.1%
100.0%	49.9	49.8	0.0	-0.1%

Table SQ4-1b
Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.0	56.5	-0.5	-0.8%
1.2%	57.0	56.2	-0.7	-1.2%
2.5%	56.8	56.1	-0.7	-1.3%
3.7%	55.5	56.1	0.6	1.1%
4.9%	55.4	55.6	0.2	0.4%
6.2%	54.9	55.3	0.4	0.7%
7.4%	54.8	55.2	0.4	0.7%
8.6%	54.8	54.8	0.0	0.0%
9.9%	54.6	54.8	0.2	0.4%
11.1%	54.5	54.6	0.1	0.1%
12.3%	54.3	54.5	0.3	0.5%
13.6%	54.2	53.8	-0.4	-0.7%
14.8%	53.8	53.7	0.0	0.0%
16.0%	53.7	53.7	0.0	0.0%
17.3%	53.5	53.7	0.2	0.3%
18.5%	53.2	53.7	0.4	0.8%
19.8%	53.2	53.6	0.4	0.8%
21.0%	53.2	53.6	0.4	0.7%
22.2%	53.2	53.6	0.4	0.8%
23.5%	53.1	53.5	0.4	0.7%
24.7%	53.1	53.5	0.4	0.7%
25.9%	53.1	53.4	0.3	0.6%
27.2%	53.0	53.4	0.3	0.6%
28.4%	53.0	53.3	0.3	0.5%
29.6%	53.0	53.3	0.3	0.5%
30.9%	53.0	53.3	0.3	0.5%
32.1%	53.0	53.3	0.3	0.6%
33.3%	52.9	53.3	0.3	0.6%
34.6%	52.9	53.2	0.3	0.6%
35.8%	52.8	53.2	0.4	0.7%
37.0%	52.8	53.1	0.3	0.5%
38.3%	52.8	53.0	0.3	0.5%
39.5%	52.7	53.0	0.3	0.6%
40.7%	52.6	53.0	0.4	0.7%
42.0%	52.6	53.0	0.4	0.7%
43.2%	52.6	52.9	0.4	0.7%
44.4%	52.6	52.9	0.4	0.7%
45.7%	52.6	52.9	0.3	0.6%
46.9%	52.5	52.8	0.3	0.6%
48.1%	52.5	52.8	0.3	0.6%
49.4%	52.5	52.8	0.3	0.6%
50.6%	52.5	52.8	0.3	0.6%
51.9%	52.4	52.7	0.3	0.5%
53.1%	52.4	52.7	0.3	0.6%
54.3%	52.3	52.7	0.3	0.6%
55.6%	52.3	52.6	0.3	0.6%
56.8%	52.2	52.6	0.3	0.6%
58.0%	52.2	52.6	0.3	0.7%
59.3%	52.2	52.6	0.4	0.8%
60.5%	52.1	52.5	0.4	0.7%
61.7%	52.1	52.5	0.4	0.7%
63.0%	52.1	52.5	0.4	0.7%
64.2%	52.0	52.5	0.5	0.9%
65.4%	52.0	52.5	0.5	0.9%
66.7%	52.0	52.4	0.4	0.7%
67.9%	52.0	52.3	0.4	0.7%
69.1%	51.9	52.3	0.4	0.8%
70.4%	51.9	52.3	0.4	0.8%
71.6%	51.9	52.3	0.4	0.8%
72.8%	51.9	52.3	0.4	0.7%
74.1%	51.8	52.2	0.4	0.8%
75.3%	51.8	52.2	0.3	0.7%
76.5%	51.8	52.2	0.4	0.7%
77.8%	51.8	52.1	0.4	0.7%
79.0%	51.8	52.1	0.4	0.7%
80.2%	51.8	52.1	0.4	0.7%
81.5%	51.7	52.0	0.3	0.6%
82.7%	51.6	52.0	0.4	0.9%
84.0%	51.5	52.0	0.5	0.9%
85.2%	51.5	52.0	0.5	0.9%
86.4%	51.4	51.9	0.5	0.9%
87.7%	51.3	51.9	0.6	1.1%
88.9%	51.3	51.9	0.5	1.0%
90.1%	51.3	51.7	0.4	0.7%
91.4%	51.2	51.5	0.3	0.6%
92.6%	51.1	51.5	0.4	0.8%
93.8%	51.1	51.4	0.4	0.7%
95.1%	50.7	51.4	0.7	1.4%
96.3%	50.7	51.1	0.4	0.9%
97.5%	50.7	51.1	0.5	0.9%
98.8%	50.1	51.0	0.9	1.8%
100.0%	50.1	51.0	0.9	1.8%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.8	56.5	-1.3	-2.2%
1.2%	57.2	56.5	-0.7	-1.3%
2.5%	57.1	56.4	-0.7	-1.3%
3.7%	56.9	56.3	-0.7	-1.2%
4.9%	56.8	56.2	-0.6	-1.0%
6.2%	56.7	56.1	-0.6	-1.1%
7.4%	56.5	55.9	-0.6	-1.0%
8.6%	56.3	55.5	-0.8	-1.4%
9.9%	56.2	55.4	-0.7	-1.3%
11.1%	55.7	55.3	-0.4	-0.7%
12.3%	55.4	55.2	-0.2	-0.4%
13.6%	55.4	55.1	-0.3	-0.5%
14.8%	55.4	55.1	-0.3	-0.6%
16.0%	55.3	54.8	-0.4	-0.8%
17.3%	55.2	54.8	-0.4	-0.7%
18.5%	55.1	54.7	-0.4	-0.7%
19.8%	54.9	54.7	-0.2	-0.4%
21.0%	54.7	54.7	0.0	-0.1%
22.2%	54.5	54.6	0.1	0.1%
23.5%	54.5	54.4	-0.1	-0.2%
24.7%	54.3	54.3	-0.1	-0.1%
25.9%	54.3	54.3	-0.1	-0.1%
27.2%	54.3	54.2	-0.1	-0.1%
28.4%	54.1	53.9	-0.2	-0.4%
29.6%	54.1	53.9	-0.3	-0.5%
30.9%	54.1	53.8	-0.3	-0.5%
32.1%	54.0	53.8	-0.2	-0.4%
33.3%	54.0	53.8	-0.2	-0.4%
34.6%	54.0	53.8	-0.2	-0.4%
35.8%	53.9	53.8	-0.1	-0.2%
37.0%	53.8	53.7	-0.1	-0.2%
38.3%	53.8	53.7	0.0	-0.1%
39.5%	53.7	53.7	0.0	0.0%
40.7%	53.7	53.6	-0.1	-0.1%
42.0%	53.7	53.6	-0.1	-0.1%
43.2%	53.7	53.6	-0.1	-0.1%
44.4%	53.6	53.6	0.0	-0.1%
45.7%	53.6	53.5	-0.1	-0.3%
46.9%	53.5	53.4	-0.1	-0.2%
48.1%	53.3	53.3	0.0	0.1%
49.4%	53.3	53.2	0.0	0.0%
50.6%	53.2	53.2	0.0	-0.1%
51.9%	53.2	53.2	0.0	-0.1%
53.1%	53.2	53.2	0.0	0.0%
54.3%	53.1	53.1	0.0	0.1%
55.6%	53.1	53.1	0.0	0.1%
56.8%	53.0	53.1	0.1	0.1%
58.0%	53.0	53.1	0.1	0.1%
59.3%	53.0	53.1	0.1	0.1%
60.5%	53.0	53.0	0.1	0.2%
61.7%	52.9	53.0	0.1	0.2%
63.0%	52.9	53.0	0.1	0.2%
64.2%	52.9	53.0	0.1	0.1%
65.4%	52.8	53.0	0.1	0.2%
66.7%	52.8	52.9	0.2	0.3%
67.9%	52.7	52.8	0.1	0.2%
69.1%	52.7	52.8	0.1	0.2%
70.4%	52.7	52.8	0.1	0.2%
71.6%	52.7	52.8	0.1	0.2%
72.8%	52.7	52.7	0.0	0.0%
74.1%	52.6	52.7	0.0	0.1%
75.3%	52.6	52.7	0.1	0.1%
76.5%	52.6	52.6	0.0	0.1%
77.8%	52.6	52.6	0.0	0.1%
79.0%	52.5	52.6	0.1	0.2%
80.2%	52.5	52.6	0.1	0.2%
81.5%	52.4	52.5	0.1	0.3%
82.7%	52.3	52.4	0.1	0.3%
84.0%	52.3	52.4	0.1	0.2%
85.2%	52.3	52.2	-0.1	-0.1%
86.4%	52.3	52.2	-0.1	-0.1%
87.7%	52.1	52.0	-0.1	-0.2%
88.9%	52.0	52.0	0.0	-0.1%
90.1%	51.9	51.8	-0.1	-0.2%
91.4%	51.7	51.8	0.1	0.2%
92.6%	51.6	51.7	0.1	0.3%
93.8%	51.6	51.7	0.1	0.2%
95.1%	51.5	51.6	0.1	0.2%
96.3%	51.5	51.5	0.0	0.1%
97.5%	51.3	51.5	0.1	0.3%
98.8%	51.1	51.3	0.2	0.3%
100.0%	51.1	51.3	0.2	0.3%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.7	57.7	-5.0	-8.0%
1.2%	59.9	56.6	-3.3	-5.5%
2.5%	59.5	56.5	-3.0	-5.0%
3.7%	57.8	56.5	-1.3	-2.3%
4.9%	57.7	56.4	-1.3	-2.2%
6.2%	57.6	56.4	-1.1	-2.0%
7.4%	57.4	56.4	-1.0	-1.7%
8.6%	57.2	56.4	-0.8	-1.4%
9.9%	57.1	56.3	-0.8	-1.3%
11.1%	56.9	56.3	-0.6	-1.0%
12.3%	56.7	56.3	-0.4	-0.8%
13.6%	56.5	56.2	-0.4	-0.7%
14.8%	56.5	56.1	-0.4	-0.7%
16.0%	56.1	56.0	-0.1	-0.1%
17.3%	56.0	55.9	-0.1	-0.2%
18.5%	55.9	55.8	-0.1	-0.2%
19.8%	55.9	55.6	-0.2	-0.4%
21.0%	55.9	55.6	-0.2	-0.4%
22.2%	55.8	55.6	-0.2	-0.3%
23.5%	55.7	55.6	-0.2	-0.3%
24.7%	55.7	55.5	-0.2	-0.4%
25.9%	55.6	55.4	-0.2	-0.3%
27.2%	55.5	55.4	-0.1	-0.3%
28.4%	55.5	55.2	-0.3	-0.5%
29.6%	55.4	54.9	-0.5	-0.9%
30.9%	55.3	54.9	-0.5	-0.8%
32.1%	55.3	54.9	-0.4	-0.8%
33.3%	55.3	54.7	-0.5	-0.9%
34.6%	55.2	54.6	-0.6	-1.1%
35.8%	55.2	54.6	-0.6	-1.0%
37.0%	55.2	54.6	-0.6	-1.0%
38.3%	55.0	54.6	-0.5	-0.8%
39.5%	55.0	54.5	-0.5	-0.9%
40.7%	55.0	54.5	-0.5	-0.9%
42.0%	55.0	54.4	-0.6	-1.0%
43.2%	54.9	54.4	-0.5	-1.0%
44.4%	54.8	54.4	-0.4	-0.8%
45.7%	54.8	54.4	-0.4	-0.8%
46.9%	54.8	54.4	-0.4	-0.8%
48.1%	54.7	54.4	-0.4	-0.7%
49.4%	54.7	54.4	-0.3	-0.6%
50.6%	54.4	54.3	-0.1	-0.2%
51.9%	54.4	54.3	-0.1	-0.2%
53.1%	54.4	54.3	-0.1	-0.2%
54.3%	54.3	54.2	-0.1	-0.2%
55.6%	54.3	54.2	-0.1	-0.1%
56.8%	54.3	54.2	-0.1	-0.1%
58.0%	54.3	54.1	-0.2	-0.3%
59.3%	54.2	54.0	-0.2	-0.4%
60.5%	54.2	53.9	-0.3	-0.5%
61.7%	54.2	53.9	-0.2	-0.4%
63.0%	54.2	53.9	-0.3	-0.6%
64.2%	53.9	53.8	-0.1	-0.2%
65.4%	53.9	53.8	-0.1	-0.2%
66.7%	53.9	53.8	-0.1	-0.2%
67.9%	53.9	53.8	-0.1	-0.2%
69.1%	53.9	53.8	-0.1	-0.2%
70.4%	53.9	53.7	-0.1	-0.3%
71.6%	53.8	53.7	-0.2	-0.3%
72.8%	53.8	53.6	-0.2	-0.3%
74.1%	53.8	53.6	-0.2	-0.3%
75.3%	53.7	53.6	-0.2	-0.3%
76.5%	53.7	53.5	-0.2	-0.4%
77.8%	53.7	53.5	-0.2	-0.3%
79.0%	53.7	53.5	-0.2	-0.3%
80.2%	53.5	53.5	0.0	0.0%
81.5%	53.5	53.5	0.0	0.0%
82.7%	53.5	53.3	-0.1	-0.2%
84.0%	53.4	53.3	-0.1	-0.2%
85.2%	53.4	53.3	-0.1	-0.1%
86.4%	53.3	53.3	0.0	0.0%
87.7%	53.3	53.3	0.0	0.0%
88.9%	53.2	53.2	-0.1	-0.1%
90.1%	53.2	53.1	-0.2	-0.3%
91.4%	53.2	53.0	-0.2	-0.3%
92.6%	53.2	53.0	-0.2	-0.4%
93.8%	53.0	52.9	-0.2	-0.3%
95.1%	53.0	52.9	-0.1	-0.2%
96.3%	52.9	52.8	-0.1	-0.2%
97.5%	52.8	52.6	-0.2	-0.3%
98.8%	52.8	52.6	-0.3	-0.5%
100.0%	52.8	52.6	-0.3	-0.5%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.2	64.1	-3.0	-4.5%
1.2%	64.1	62.8	-1.3	-2.1%
2.5%	63.7	62.3	-1.3	-2.1%
3.7%	62.6	56.8	-5.8	-9.3%
4.9%	61.9	56.7	-5.2	-8.4%
6.2%	59.5	56.7	-2.8	-4.7%
7.4%	58.9	56.7	-2.2	-3.7%
8.6%	58.5	56.6	-1.9	-3.2%
9.9%	58.0	56.5	-1.5	-2.6%
11.1%	57.5	56.4	-1.1	-1.9%
12.3%	57.4	56.4	-1.0	-1.8%
13.6%	57.3	56.3	-1.0	-1.8%
14.8%	57.3	56.3	-1.0	-1.8%
16.0%	57.1	56.2	-1.0	-1.7%
17.3%	57.0	56.1	-1.0	-1.7%
18.5%	57.0	56.1	-1.0	-1.7%
19.8%	57.0	56.0	-0.9	-1.7%
21.0%	57.0	55.9	-1.0	-1.8%
22.2%	56.9	55.8	-1.1	-2.0%
23.5%	56.7	55.7	-1.0	-1.8%
24.7%	56.7	55.6	-1.1	-1.9%
25.9%	56.5	55.6	-0.9	-1.5%
27.2%	56.4	55.3	-1.1	-1.9%
28.4%	56.3	55.3	-1.0	-1.8%
29.6%	56.3	55.2	-1.1	-2.0%
30.9%	56.3	55.1	-1.2	-2.1%
32.1%	56.2	55.0	-1.2	-2.1%
33.3%	56.1	55.0	-1.1	-1.9%
34.6%	56.0	55.0	-1.1	-1.9%
35.8%	56.0	54.9	-1.1	-1.9%
37.0%	55.9	54.7	-1.1	-2.1%
38.3%	55.6	54.7	-0.9	-1.6%
39.5%	55.4	54.7	-0.7	-1.2%
40.7%	55.3	54.6	-0.7	-1.2%
42.0%	55.3	54.6	-0.7	-1.3%
43.2%	55.3	54.5	-0.8	-1.4%
44.4%	55.2	54.4	-0.8	-1.5%
45.7%	55.2	54.3	-0.8	-1.5%
46.9%	55.2	54.3	-0.9	-1.6%
48.1%	55.1	54.2	-0.9	-1.6%
49.4%	54.8	54.1	-0.7	-1.3%
50.6%	54.7	54.0	-0.7	-1.4%
51.9%	54.7	53.9	-0.8	-1.5%
53.1%	54.6	53.8	-0.8	-1.4%
54.3%	54.4	53.8	-0.6	-1.2%
55.6%	54.3	53.7	-0.5	-1.0%
56.8%	54.0	53.7	-0.4	-0.7%
58.0%	54.0	53.6	-0.4	-0.7%
59.3%	53.9	53.6	-0.3	-0.6%
60.5%	53.9	53.5	-0.3	-0.6%
61.7%	53.8	53.5	-0.3	-0.6%
63.0%	53.7	53.5	-0.2	-0.3%
64.2%	53.6	53.4	-0.2	-0.4%
65.4%	53.5	53.4	-0.1	-0.2%
66.7%	53.5	53.4	-0.2	-0.3%
67.9%	53.5	52.6	-0.9	-1.7%
69.1%	53.2	52.6	-0.6	-1.1%
70.4%	53.1	52.6	-0.5	-0.9%
71.6%	52.8	52.5	-0.2	-0.4%
72.8%	52.8	52.4	-0.4	-0.8%
74.1%	52.7	52.3	-0.4	-0.8%
75.3%	52.7	52.3	-0.4	-0.7%
76.5%	52.7	52.3	-0.4	-0.8%
77.8%	52.5	52.2	-0.3	-0.5%
79.0%	52.4	52.2	-0.2	-0.4%
80.2%	52.4	52.2	-0.2	-0.4%
81.5%	52.4	52.2	-0.2	-0.4%
82.7%	52.4	52.2	-0.2	-0.3%
84.0%	52.3	52.1	-0.2	-0.4%
85.2%	52.3	52.1	-0.2	-0.4%
86.4%	52.3	52.0	-0.3	-0.6%
87.7%	52.3	51.9	-0.4	-0.7%
88.9%	52.2	51.9	-0.3	-0.6%
90.1%	52.2	51.8	-0.3	-0.7%
91.4%	52.1	51.5	-0.6	-1.1%
92.6%	52.1	51.5	-0.6	-1.1%
93.8%	51.9	51.4	-0.4	-0.9%
95.1%	51.6	51.3	-0.3	-0.6%
96.3%	51.5	50.9	-0.6	-1.1%
97.5%	51.0	50.6	-0.4	-0.8%
98.8%	50.7	50.1	-0.6	-1.2%
100.0%	50.7	50.1	-0.6	-1.2%

Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.4	58.1	-2.3	-3.9%
1.2%	58.9	57.2	-1.7	-2.9%
2.5%	58.4	57.1	-1.4	-2.3%
3.7%	57.9	56.2	-1.7	-2.9%
4.9%	57.9	56.2	-1.6	-2.8%
6.2%	56.9	56.2	-0.7	-1.3%
7.4%	56.9	56.1	-0.8	-1.4%
8.6%	56.3	56.1	-0.2	-0.4%
9.9%	56.3	56.1	-0.3	-0.4%
11.1%	56.1	55.5	-0.6	-1.0%
12.3%	55.9	55.4	-0.5	-0.8%
13.6%	55.8	55.4	-0.5	-0.9%
14.8%	55.8	55.3	-0.5	-1.0%
16.0%	55.6	55.1	-0.5	-0.9%
17.3%	55.6	55.0	-0.5	-0.9%
18.5%	55.4	55.0	-0.4	-0.8%
19.8%	55.2	55.0	-0.2	-0.3%
21.0%	54.8	54.8	0.0	0.0%
22.2%	54.8	54.8	0.0	0.0%
23.5%	54.8	54.6	-0.1	-0.2%
24.7%	54.7	54.6	-0.1	-0.1%
25.9%	54.7	54.6	-0.1	-0.2%
27.2%	54.7	54.4	-0.2	-0.4%
28.4%	54.6	54.4	-0.2	-0.4%
29.6%	54.6	54.4	-0.2	-0.4%
30.9%	54.6	54.3	-0.3	-0.5%
32.1%	54.6	54.3	-0.3	-0.5%
33.3%	54.5	54.1	-0.4	-0.7%
34.6%	54.4	54.1	-0.2	-0.5%
35.8%	54.3	54.1	-0.2	-0.4%
37.0%	54.3	54.0	-0.3	-0.5%
38.3%	54.2	53.8	-0.4	-0.7%
39.5%	54.2	53.8	-0.4	-0.7%
40.7%	53.9	53.8	-0.1	-0.2%
42.0%	53.9	53.8	-0.1	-0.1%
43.2%	53.9	53.8	-0.1	-0.1%
44.4%	53.8	53.8	-0.1	-0.1%
45.7%	53.8	53.7	-0.1	-0.2%
46.9%	53.8	53.7	-0.1	-0.2%
48.1%	53.8	53.6	-0.2	-0.4%
49.4%	53.7	53.6	-0.1	-0.2%
50.6%	53.6	53.5	-0.1	-0.2%
51.9%	53.5	53.5	0.0	-0.1%
53.1%	53.4	53.3	-0.1	-0.2%
54.3%	53.4	53.3	-0.2	-0.3%
55.6%	53.4	53.3	-0.1	-0.3%
56.8%	53.4	53.2	-0.2	-0.3%
58.0%	53.3	53.2	-0.1	-0.3%
59.3%	53.3	53.1	-0.1	-0.2%
60.5%	53.3	53.1	-0.1	-0.2%
61.7%	53.2	53.1	-0.1	-0.2%
63.0%	53.2	53.1	-0.1	-0.2%
64.2%	53.2	53.1	-0.1	-0.2%
65.4%	53.2	53.1	-0.1	-0.1%
66.7%	53.2	53.1	-0.1	-0.2%
67.9%	53.2	53.1	-0.1	-0.2%
69.1%	53.2	53.1	-0.1	-0.2%
70.4%	53.1	53.0	-0.1	-0.2%
71.6%	53.1	53.0	-0.1	-0.1%
72.8%	53.1	53.0	-0.1	-0.2%
74.1%	53.1	52.9	-0.1	-0.2%
75.3%	53.0	52.9	-0.1	-0.2%
76.5%	53.0	52.8	-0.1	-0.2%
77.8%	52.9	52.8	-0.1	-0.2%
79.0%	52.9	52.8	0.0	-0.1%
80.2%	52.9	52.8	0.0	-0.1%
81.5%	52.8	52.7	-0.1	-0.2%
82.7%	52.7	52.6	-0.2	-0.3%
84.0%	52.7	52.6	-0.1	-0.2%
85.2%	52.6	52.5	-0.1	-0.1%
86.4%	52.6	52.4	-0.1	-0.3%
87.7%	52.5	52.3	-0.2	-0.3%
88.9%	52.5	52.3	-0.2	-0.3%
90.1%	52.4	52.3	-0.1	-0.2%
91.4%	52.2	52.2	0.0	0.0%
92.6%	52.2	52.1	0.0	-0.1%
93.8%	52.2	52.1	-0.1	-0.2%
95.1%	52.0	52.0	0.0	0.1%
96.3%	52.0	52.0	0.0	0.1%
97.5%	51.9	51.9	-0.1	-0.2%
98.8%	51.8	51.6	-0.1	-0.3%
100.0%	51.2	51.3	0.0	0.1%

July to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.3	59.2	-3.0	-4.9%
1.2%	60.2	58.2	-2.0	-3.4%
2.5%	59.8	58.0	-1.8	-3.1%
3.7%	58.8	56.5	-2.3	-3.9%
4.9%	58.2	56.5	-1.7	-2.9%
6.2%	57.7	56.3	-1.5	-2.5%
7.4%	57.4	56.2	-1.2	-2.1%
8.6%	57.0	56.2	-0.8	-1.4%
9.9%	56.8	56.0	-0.8	-1.5%
11.1%	56.8	56.0	-0.8	-1.4%
12.3%	56.6	55.9	-0.8	-1.4%
13.6%	56.5	55.9	-0.6	-1.1%
14.8%	56.3	55.7	-0.5	-0.9%
16.0%	56.2	55.7	-0.5	-0.9%
17.3%	56.1	55.6	-0.5	-0.9%
18.5%	56.0	55.5	-0.5	-0.9%
19.8%	55.8	55.4	-0.4	-0.8%
21.0%	55.6	55.3	-0.3	-0.6%
22.2%	55.5	55.3	-0.3	-0.5%
23.5%	55.5	55.1	-0.3	-0.6%
24.7%	55.4	55.1	-0.3	-0.5%
25.9%	55.4	54.9	-0.4	-0.8%
27.2%	55.4	54.9	-0.5	-0.9%
28.4%	55.4	54.9	-0.5	-0.8%
29.6%	55.3	54.8	-0.5	-0.8%
30.9%	55.1	54.6	-0.5	-0.9%
32.1%	55.1	54.5	-0.5	-1.0%
33.3%	55.0	54.5	-0.5	-0.9%
34.6%	55.0	54.3	-0.6	-1.2%
35.8%	55.0	54.3	-0.7	-1.3%
37.0%	54.9	54.3	-0.7	-1.2%
38.3%	54.7	54.2	-0.6	-1.0%
39.5%	54.6	54.1	-0.5	-1.0%
40.7%	54.5	54.0	-0.5	-0.9%
42.0%	54.5	54.0	-0.5	-0.9%
43.2%	54.4	54.0	-0.5	-0.9%
44.4%	54.4	53.9	-0.5	-0.9%
45.7%	54.3	53.9	-0.4	-0.7%
46.9%	54.2	53.9	-0.3	-0.6%
48.1%	54.1	53.9	-0.2	-0.3%
49.4%	54.0	53.9	-0.1	-0.3%
50.6%	54.0	53.9	-0.1	-0.2%
51.9%	54.0	53.8	-0.2	-0.4%
53.1%	53.9	53.5	-0.4	-0.7%
54.3%	53.8	53.5	-0.3	-0.5%
55.6%	53.7	53.5	-0.3	-0.5%
56.8%	53.7	53.4	-0.3	-0.5%
58.0%	53.7	53.4	-0.3	-0.6%
59.3%	53.6	53.4	-0.2	-0.4%
60.5%	53.6	53.3	-0.2	-0.4%
61.7%	53.5	53.3	-0.3	-0.5%
63.0%	53.5	53.2	-0.2	-0.4%
64.2%	53.4	53.2	-0.2	-0.4%
65.4%	53.4	53.2	-0.2	-0.4%
66.7%	53.4	53.2	-0.2	-0.4%
67.9%	53.4	53.2	-0.2	-0.4%
69.1%	53.3	53.2	-0.1	-0.3%
70.4%	53.3	53.2	-0.1	-0.2%
71.6%	53.3	53.1	-0.1	-0.3%
72.8%	53.3	53.1	-0.2	-0.3%
74.1%	53.3	53.1	-0.2	-0.3%
75.3%	53.2	53.1	-0.2	-0.3%
76.5%	53.2	53.0	-0.2	-0.4%
77.8%	53.2	53.0	-0.2	-0.4%
79.0%	53.2	53.0	-0.2	-0.5%
80.2%	53.2	53.0	-0.2	-0.5%
81.5%	53.1	52.9	-0.2	-0.3%
82.7%	53.1	52.9	-0.2	-0.4%
84.0%	53.0	52.8	-0.1	-0.3%
85.2%	53.0	52.8	-0.2	-0.4%
86.4%	52.9	52.7	-0.2	-0.4%
87.7%	52.9	52.6	-0.3	-0.5%
88.9%	52.7	52.5	-0.2	-0.3%
90.1%	52.6	52.4	-0.2	-0.3%
91.4%	52.5	52.4	-0.2	-0.3%
92.6%	52.5	52.4	-0.1	-0.2%
93.8%	52.4	52.4	0.0	0.0%
95.1%	52.4	52.2	-0.2	-0.4%
96.3%	52.4	52.0	-0.3	-0.6%
97.5%	52.2	51.8	-0.3	-0.6%
98.8%	52.0	51.8	-0.2	-0.3%
100.0%	51.6	51.3	-0.3	-0.6%

August to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.9	60.9	-4.0	-6.2%
1.2%	62.0	59.6	-2.4	-3.9%
2.5%	61.6	59.3	-2.3	-3.7%
3.7%	59.5	56.6	-2.9	-4.9%
4.9%	59.2	56.5	-2.7	-4.6%
6.2%	58.3	56.5	-1.9	-3.2%
7.4%	58.3	56.5	-1.8	-3.1%
8.6%	57.9	56.4	-1.5	-2.6%
9.9%	57.5	56.4	-1.1	-2.0%
11.1%	57.5	56.2	-1.3	-2.2%
12.3%	57.1	56.1	-0.9	-1.7%
13.6%	56.9	56.1	-0.7	-1.3%
14.8%	56.7	56.1	-0.6	-1.1%
16.0%	56.6	56.1	-0.6	-1.0%
17.3%	56.6	55.9	-0.6	-1.1%
18.5%	56.5	55.9	-0.6	-1.0%
19.8%	56.3	55.9	-0.5	-0.8%
21.0%	56.3	55.8	-0.4	-0.7%
22.2%	56.2	55.8	-0.3	-0.6%
23.5%	56.1	55.5	-0.7	-1.2%
24.7%	56.1	55.4	-0.7	-1.3%
25.9%	56.1	55.4	-0.7	-1.3%
27.2%	56.0	55.3	-0.6	-1.1%
28.4%	55.9	55.3	-0.7	-1.2%
29.6%	55.8	55.2	-0.5	-1.0%
30.9%	55.7	55.1	-0.6	-1.1%
32.1%	55.7	55.1	-0.6	-1.1%
33.3%	55.6	54.9	-0.7	-1.3%
34.6%	55.6	54.8	-0.8	-1.4%
35.8%	55.6	54.7	-0.9	-1.6%
37.0%	55.4	54.7	-0.7	-1.2%
38.3%	55.4	54.7	-0.7	-1.2%
39.5%	55.2	54.7	-0.5	-1.0%
40.7%	55.2	54.6	-0.6	-1.0%
42.0%	55.1	54.6	-0.5	-0.9%
43.2%	55.1	54.3	-0.7	-1.3%
44.4%	55.0	54.2	-0.9	-1.6%
45.7%	54.9	54.1	-0.8	-1.5%
46.9%	54.5	54.1	-0.4	-0.8%
48.1%	54.5	54.1	-0.5	-0.8%
49.4%	54.5	54.0	-0.4	-0.8%
50.6%	54.5	54.0	-0.5	-0.8%
51.9%	54.4	54.0	-0.4	-0.8%
53.1%	54.4	53.9	-0.4	-0.8%
54.3%	54.3	53.9	-0.4	-0.7%
55.6%	54.2	53.8	-0.4	-0.7%
56.8%	54.2	53.8	-0.4	-0.7%
58.0%	54.1	53.8	-0.3	-0.6%
59.3%	54.1	53.7	-0.3	-0.6%
60.5%	54.0	53.7	-0.3	-0.6%
61.7%	54.0	53.7	-0.4	-0.7%
63.0%	54.0	53.7	-0.3	-0.6%
64.2%	53.9	53.6	-0.3	-0.6%
65.4%	53.9	53.5	-0.4	-0.8%
66.7%	53.7	53.4	-0.3	-0.6%
67.9%	53.6	53.3	-0.4	-0.7%
69.1%	53.6	53.2	-0.4	-0.7%
70.4%	53.6	53.2	-0.4	-0.8%
71.6%	53.6	53.2	-0.3	-0.6%
72.8%	53.5	53.2	-0.3	-0.6%
74.1%	53.4	53.1	-0.3	-0.6%
75.3%	53.3	53.1	-0.2	-0.4%
76.5%	53.3	53.1	-0.2	-0.4%
77.8%	53.3	53.0	-0.3	-0.5%
79.0%	53.2	53.0	-0.3	-0.5%
80.2%	53.2	53.0	-0.2	-0.4%
81.5%	53.1	52.9	-0.2	-0.4%
82.7%	53.1	52.9	-0.2	-0.4%
84.0%	53.1	52.9	-0.2	-0.3%
85.2%	53.0	52.8	-0.1	-0.3%
86.4%	52.9	52.8	-0.1	-0.2%
87.7%	52.9	52.8	-0.1	-0.1%
88.9%	52.8	52.8	0.0	0.0%
90.1%	52.8	52.7	-0.1	-0.2%
91.4%	52.8	52.3	-0.4	-0.8%
92.6%	52.8	52.3	-0.5	-0.9%
93.8%	52.4	52.3	-0.1	-0.3%
95.1%	52.4	52.1	-0.3	-0.5%
96.3%	52.3	52.1	-0.2	-0.4%
97.5%	52.0	51.7	-0.3	-0.6%
98.8%	51.8	51.3	-0.5	-1.0%
100.0%	51.7	51.3	-0.5	-0.9%

Figure SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

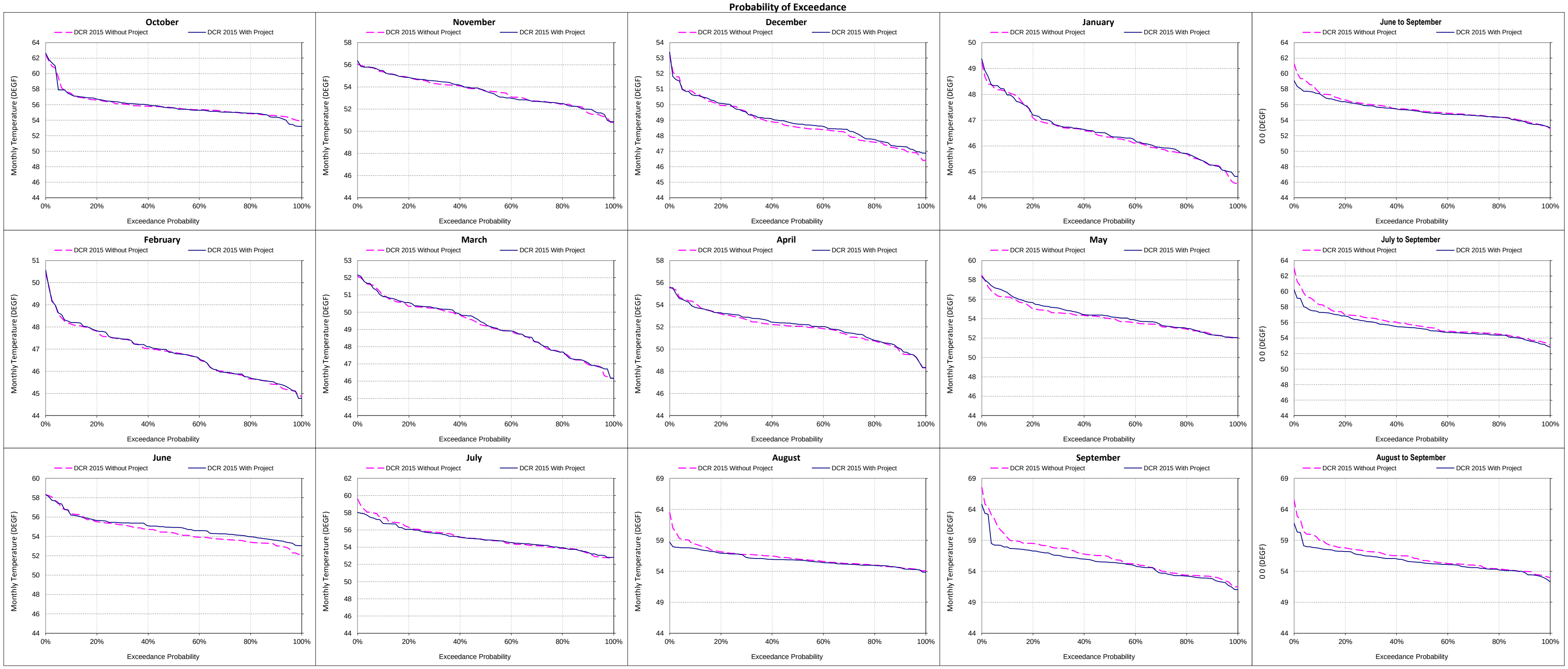


Table SQ5-1b

Sacramento River at Jellys Ferry, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.5	62.7	0.2	0.3%
1.2%	61.6	61.8	0.2	0.4%
2.5%	60.9	61.4	0.5	0.8%
3.7%	60.7	61.0	0.3	0.4%
4.9%	59.5	57.9	-1.6	-2.7%
6.2%	58.2	57.9	-0.3	-0.5%
7.4%	57.8	57.9	0.0	0.1%
8.6%	57.6	57.5	-0.1	-0.2%
9.9%	57.5	57.3	-0.2	-0.3%
11.1%	57.0	57.1	0.1	0.1%
12.3%	57.0	57.1	0.1	0.2%
13.6%	56.9	57.0	0.1	0.1%
14.8%	56.9	57.0	0.1	0.2%
16.0%	56.8	56.9	0.1	0.2%
17.3%	56.7	56.9	0.2	0.4%
18.5%	56.6	56.9	0.2	0.4%
19.8%	56.6	56.7	0.1	0.2%
21.0%	56.6	56.7	0.1	0.2%
22.2%	56.5	56.6	0.1	0.2%
23.5%	56.4	56.5	0.1	0.2%
24.7%	56.4	56.4	0.1	0.1%
25.9%	56.4	56.4	0.1	0.1%
27.2%	56.1	56.4	0.3	0.5%
28.4%	56.1	56.4	0.2	0.4%
29.6%	56.1	56.3	0.1	0.3%
30.9%	56.0	56.2	0.2	0.3%
32.1%	56.0	56.1	0.1	0.2%
33.3%	55.9	56.1	0.2	0.4%
34.6%	55.9	56.1	0.2	0.4%
35.8%	55.9	56.1	0.2	0.4%
37.0%	55.8	56.0	0.2	0.4%
38.3%	55.8	56.0	0.2	0.4%
39.5%	55.8	56.0	0.2	0.4%
40.7%	55.8	55.9	0.1	0.2%
42.0%	55.8	55.9	0.1	0.2%
43.2%	55.8	55.9	0.1	0.2%
44.4%	55.7	55.8	0.1	0.1%
45.7%	55.7	55.7	0.0	-0.1%
46.9%	55.7	55.6	0.0	-0.1%
48.1%	55.7	55.6	-0.1	-0.1%
49.4%	55.6	55.6	0.0	-0.1%
50.6%	55.6	55.6	0.0	0.0%
51.9%	55.6	55.4	-0.1	-0.2%
53.1%	55.5	55.4	-0.1	-0.1%
54.3%	55.4	55.4	0.0	0.0%
55.6%	55.4	55.4	0.0	-0.1%
56.8%	55.4	55.3	-0.1	-0.1%
58.0%	55.4	55.3	-0.1	-0.1%
59.3%	55.4	55.3	-0.1	-0.1%
60.5%	55.4	55.3	-0.1	-0.1%
61.7%	55.3	55.3	-0.1	-0.1%
63.0%	55.3	55.2	-0.1	-0.2%
64.2%	55.3	55.2	-0.1	-0.3%
65.4%	55.3	55.2	-0.1	-0.2%
66.7%	55.3	55.1	-0.1	-0.2%
67.9%	55.2	55.1	-0.1	-0.3%
69.1%	55.2	55.1	-0.1	-0.2%
70.4%	55.1	55.0	0.0	-0.1%
71.6%	55.0	55.0	0.0	0.0%
72.8%	55.0	55.0	0.0	0.0%
74.1%	55.0	55.0	0.0	0.0%
75.3%	55.0	55.0	0.0	0.1%
76.5%	54.9	54.9	0.0	0.1%
77.8%	54.9	54.9	0.1	0.1%
79.0%	54.9	54.9	0.1	0.1%
80.2%	54.8	54.9	0.1	0.1%
81.5%	54.8	54.9	0.1	0.1%
82.7%	54.8	54.9	0.1	0.2%
84.0%	54.7	54.8	0.1	0.2%
85.2%	54.7	54.7	0.0	0.1%
86.4%	54.7	54.7	0.0	0.0%
87.7%	54.6	54.4	-0.2	-0.4%
88.9%	54.6	54.4	-0.2	-0.4%
90.1%	54.6	54.4	-0.2	-0.3%
91.4%	54.6	54.3	-0.2	-0.4%
92.6%	54.5	54.2	-0.3	-0.6%
93.8%	54.5	54.0	-0.5	-0.8%
95.1%	54.3	53.5	-0.9	-1.6%
96.3%	54.2	53.4	-0.7	-1.4%
97.5%	54.0	53.3	-0.8	-1.4%
98.8%	53.9	53.2	-0.7	-1.3%
100.0%	53.9	53.2	0.0	-1.3%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.1	56.4	0.3	0.5%
1.2%	55.9	55.9	-0.1	-0.1%
2.5%	55.9	55.8	-0.1	-0.1%
3.7%	55.8	55.8	-0.1	-0.1%
4.9%	55.8	55.8	0.0	0.0%
6.2%	55.7	55.7	0.0	0.0%
7.4%	55.6	55.6	0.1	0.1%
8.6%	55.4	55.5	0.1	0.2%
9.9%	55.4	55.5	0.1	0.2%
11.1%	55.3	55.2	0.0	-0.1%
12.3%	55.2	55.2	0.0	-0.1%
13.6%	55.2	55.1	0.0	-0.1%
14.8%	55.1	55.1	0.0	0.0%
16.0%	54.9	55.0	0.0	0.0%
17.3%	54.9	54.9	0.0	-0.1%
18.5%	54.9	54.9	-0.1	-0.1%
19.8%	54.8	54.9	0.0	0.0%
21.0%	54.8	54.8	0.0	0.0%
22.2%	54.7	54.8	0.1	0.1%
23.5%	54.7	54.7	0.0	0.1%
24.7%	54.6	54.7	0.0	0.1%
25.9%	54.6	54.7	0.1	0.2%
27.2%	54.5	54.6	0.1	0.1%
28.4%	54.4	54.6	0.2	0.4%
29.6%	54.3	54.5	0.2	0.4%
30.9%	54.3	54.5	0.2	0.4%
32.1%	54.2	54.5	0.2	0.4%
33.3%	54.2	54.5	0.2	0.4%
34.6%	54.2	54.4	0.2	0.5%
35.8%	54.2	54.4	0.2	0.4%
37.0%	54.2	54.3	0.1	0.2%
38.3%	54.2	54.2	0.1	0.1%
39.5%	54.1	54.2	0.1	0.2%
40.7%	54.1	54.1	0.0	0.0%
42.0%	53.9	54.0	0.1	0.2%
43.2%	53.9	54.0	0.1	0.2%
44.4%	53.8	53.9	0.0	0.1%
45.7%	53.8	53.9	0.1	0.1%
46.9%	53.8	53.9	0.1	0.1%
48.1%	53.8	53.8	0.0	-0.1%
49.4%	53.6	53.7	0.1	0.1%
50.6%	53.6	53.6	-0.1	-0.1%
51.9%	53.6	53.5	-0.1	-0.3%
53.1%	53.6	53.4	-0.2	-0.3%
54.3%	53.6	53.2	-0.3	-0.6%
55.6%	53.5	53.1	-0.4	-0.8%
56.8%	53.5	53.1	-0.4	-0.8%
58.0%	53.4	53.0	-0.4	-0.8%
59.3%	53.1	53.0	-0.1	-0.2%
60.5%	53.1	53.0	-0.1	-0.2%
61.7%	53.1	52.9	-0.2	-0.3%
63.0%	53.1	52.8	-0.2	-0.4%
64.2%	53.0	52.8	-0.2	-0.4%
65.4%	52.9	52.8	-0.1	-0.2%
66.7%	52.8	52.8	0.0	0.1%
67.9%	52.7	52.7	0.0	0.0%
69.1%	52.7	52.7	0.0	-0.1%
70.4%	52.7	52.7	0.0	0.0%
71.6%	52.7	52.7	0.0	0.0%
72.8%	52.7	52.6	0.0	-0.1%
74.1%	52.6	52.6	0.0	0.0%
75.3%	52.6	52.6	0.0	0.1%
76.5%	52.5	52.6	0.1	0.1%
77.8%	52.5	52.5	0.0	0.0%
79.0%	52.4	52.5	0.1	0.1%
80.2%	52.4	52.5	0.1	0.1%
81.5%	52.4	52.4	-0.1	-0.1%
82.7%	52.4	52.3	-0.2	-0.3%
84.0%	52.3	52.3	0.0	0.0%
85.2%	52.3	52.3	0.0	0.0%
86.4%	52.2	52.2	-0.1	-0.1%
87.7%	52.2	52.0	-0.2	-0.3%
88.9%	51.8	52.0	0.2	0.4%
90.1%	51.6	52.0	0.4	0.7%
91.4%	51.5	52.0	0.4	0.8%
92.6%	51.5	51.8	0.3	0.5%
93.8%	51.5	51.7	0.1	0.3%
95.1%	51.4	51.7	0.3	0.5%
96.3%	51.3	51.5	0.2	0.4%
97.5%	51.2	51.0	-0.2	-0.4%
98.8%	50.8	50.9	0.1	0.1%
100.0%	50.8	50.9	0.1	0.1%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.2	53.4	0.2	0.4%
1.2%	52.1	51.8	-0.3	-0.6%
2.5%	51.8	51.6	-0.2	-0.4%
3.7%	51.8	51.5	-0.2	-0.5%
4.9%	51.0	51.0	0.0	0.1%
6.2%	50.9	50.9	0.0	-0.1%
7.4%	50.9	50.9	-0.1	-0.1%
8.6%	50.9	50.6	-0.2	-0.5%
9.9%	50.7	50.6	-0.1	-0.2%
11.1%	50.7	50.6	-0.1	-0.2%
12.3%	50.5	50.5	0.0	0.0%
13.6%	50.4	50.5	0.1	0.1%
14.8%	50.2	50.4	0.2	0.4%
16.0%	50.2	50.3	0.1	0.2%
17.3%	50.1	50.3	0.1	0.3%
18.5%	50.1	50.1	0.1	0.1%
19.8%	50.0	50.1	0.1	0.3%
21.0%	49.9	50.1	0.1	0.2%
22.2%	49.9	50.0	0.1	0.2%
23.5%	49.9	50.0	0.1	0.3%
24.7%	49.9	49.9	0.0	-0.1%
25.9%	49.9	49.7	-0.2	-0.3%
27.2%	49.7	49.7	0.0	0.0%
28.4%	49.7	49.6	-0.1	-0.1%
29.6%	49.6	49.5	0.0	-0.1%
30.9%	49.4	49.3	0.0	-0.1%
32.1%	49.4	49.3	-0.1	-0.1%
33.3%	49.1	49.3	0.1	0.3%
34.6%	49.1	49.2	0.1	0.1%
35.8%	49.1	49.2	0.1	0.2%
37.0%	49.0	49.1	0.1	0.3%
38.3%	48.9	49.1	0.2	0.4%
39.5%	48.9	49.1	0.2	0.4%
40.7%	48.9	49.0	0.1	0.3%
42.0%	48.9	49.0	0.1	0.3%
43.2%	48.8	49.0	0.1	0.3%
44.4%	48.7	49.0	0.3	0.6%
45.7%	48.7	48.9	0.2	0.5%
46.9%	48.6	48.8	0.2	0.4%
48.1%	48.6	48.8	0.2	0.4%
49.4%	48.6	48.8	0.2	0.4%
50.6%	48.5	48.7	0.2	0.5%
51.9%	48.5	48.7	0.2	0.5%
53.1%	48.5	48.7	0.2	0.5%
54.3%	48.4	48.7	0.2	0.5%
55.6%	48.4	48.7	0.2	0.5%
56.8%	48.4	48.7	0.2	0.5%
58.0%	48.4	48.6	0.2	0.4%
59.3%	48.4	48.6	0.2	0.5%
60.5%	48.4	48.6	0.2	0.4%
61.7%	48.4	48.5	0.1	0.2%
63.0%	48.3	48.4	0.1	0.2%
64.2%	48.3	48.4	0.1	0.3%
65.4%	48.3	48.4	0.2	0.3%
66.7%	48.3	48.4	0.2	0.3%
67.9%	48.3	48.4	0.2	0.3%
69.1%	48.1	48.4	0.3	0.6%
70.4%	47.9	48.3	0.3	0.7%
71.6%	47.9	48.3	0.4	0.8%
72.8%	47.9	48.2	0.3	0.6%
74.1%	47.7	48.1	0.4	0.7%
75.3%	47.7	47.9	0.2	0.5%
76.5%	47.6	47.8	0.1	0.3%
77.8%	47.6	47.8	0.2	0.3%
79.0%	47.6	47.8	0.2	0.4%
80.2%	47.6	47.7	0.2	0.3%
81.5%	47.6	47.7	0.1	0.2%
82.7%	47.6	47.6	0.1	0.2%
84.0%	47.4	47.6	0.2	0.4%
85.2%	47.4	47.6	0.2	0.4%
86.4%	47.2	47.4	0.1	0.2%
87.7%	47.2	47.3	0.1	0.2%
88.9%	47.2	47.3	0.1	0.3%
90.1%	47.1	47.3	0.2	0.3%
91.4%	47.1	47.3	0.2	0.4%
92.6%	47.0	47.3	0.3	0.7%
93.8%	46.9	47.1	0.2	0.5%
95.1%	46.9	47.1	0.2	0.4%
96.3%	46.9	47.0	0.1	0.1%
97.5%	46.7	46.9	0.2	0.5%
98.8%	46.4	46.9	0.5	1.0%
100.0%	46.4	46.9	0.5	1.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.2	49.4	0.1	0.3%
1.2%	48.7	48.9	0.2	0.5%
2.5%	48.4	48.7	0.3	0.6%
3.7%	48.4	48.4	0.0	-0.1%
4.9%	48.2	48.3	0.1	0.2%
6.2%	48.2	48.3	0.2	0.3%
7.4%	48.2	48.2	0.1	0.1%
8.6%	48.1	48.2	0.1	0.2%
9.9%	48.1	48.0	-0.1	-0.3%
11.1%	48.0	48.0	-0.1	-0.1%
12.3%	48.0	47.9	-0.1	-0.3%
13.6%	47.9	47.7	-0.2	-0.4%
14.8%	47.8	47.7	-0.1	-0.3%
16.0%	47.7	47.6	0.0	-0.1%
17.3%	47.6	47.5	-0.1	-0.1%
18.5%	47.4	47.5	0.0	0.0%
19.8%	47.1	47.2	0.1	0.2%
21.0%	47.0	47.2	0.2	0.4%
22.2%	47.0	47.1	0.2	0.4%
23.5%	46.9	47.0	0.1	0.2%
24.7%	46.9	47.0	0.1	0.3%
25.9%	46.9	47.0	0.1	0.3%
27.2%	46.9	46.9	0.1	0.2%
28.4%	46.8	46.8	0.0	0.0%
29.6%	46.8	46.8	0.0	0.0%
30.9%	46.7	46.8	0.0	0.1%
32.1%	46.7	46.7	0.0	0.1%
33.3%	46.7	46.7	0.0	0.1%
34.6%	46.7	46.7	0.0	0.1%
35.8%	46.7	46.7	0.0	0.0%
37.0%	46.7	46.7	0.0	0.0%
38.3%	46.7	46.7	0.0	0.0%
39.5%	46.6	46.6	0.0	0.1%
40.7%	46.6	46.6	0.0	0.1%
42.0%	46.6	46.6	0.0	0.1%
43.2%	46.6	46.6	0.0	0.1%
44.4%	46.5	46.5	0.1	0.1%
45.7%	46.4	46.5	0.1	0.3%
46.9%	46.4	46.5	0.1	0.3%
48.1%	46.4	46.5	0.2	0.3%
49.4%	46.3	46.4	0.1	0.2%
50.6%	46.3	46.4	0.0	0.1%
51.9%	46.3	46.4	0.1	0.1%
53.1%	46.3	46.3	0.1	0.2%
54.3%	46.3	46.3	0.1	0.2%
55.6%	46.2	46.3	0.1	0.2%
56.8%	46.2	46.3	0.1	0.2%
58.0%	46.2	46.3	0.1	0.3%
59.3%	46.1	46.3	0.1	0.3%
60.5%	46.1	46.2	0.0	0.1%
61.7%	46.1	46.2	0.0	0.1%
63.0%	46.1	46.1	0.0	0.0%
64.2%	46.0	46.1	0.1	0.1%
65.4%	46.0	46.1	0.1	0.2%
66.7%	45.9	46.0	0.1	0.2%
67.9%	45.9	46.0	0.0	0.1%
69.1%	45.9	46.0	0.1	0.1%
70.4%	45.9	45.9	0.1	0.1%
71.6%	45.8	45.9	0.1	0.2%
72.8%	45.8	45.9	0.1	0.3%
74.1%	45.8	45.9	0.1	0.3%
75.3%	45.8	45.9	0.1	0.2%
76.5%	45.7	45.8	0.1	0.2%
77.8%	45.7	45.7	0.0	0.0%
79.0%	45.7	45.7	0.0	0.0%
80.2%	45.7	45.7	0.0	0.0%
81.5%	45.6	45.7	0.1	0.1%
82.7%	45.5	45.6	0.1	0.1%
84.0%	45.5	45.5	0.0	0.1%
85.2%	45.5	45.5	0.0	0.0%
86.4%	45.4	45.4	0.0	0.1%
87.7%	45.3	45.4	0.0	0.1%
88.9%	45.3	45.3	0.0	0.0%
90.1%	45.3	45.3	0.0	0.0%
91.4%	45.3	45.2	0.0	0.0%
92.6%	45.2	45.2	0.0	0.0%
93.8%	45.1	45.1	0.0	-0.1%
95.1%	45.0	45.0	0.0	0.0%
96.3%	44.8	45.0	0.2	0.4%
97.5%	44.6	45.0	0.4	0.8%
98.8%	44.6	44.8	0.3	0.6%
100.0%	44.6	44.8	0.3	0.6%

Table SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.4	50.6	0.2	0.3%
1.2%	49.8	49.8	0.0	0.0%
2.5%	49.2	49.2	0.0	-0.1%
3.7%	49.0	49.0	0.0	0.0%
4.9%	48.6	48.6	0.1	0.1%
6.2%	48.4	48.6	0.1	0.3%
7.4%	48.3	48.3	0.1	0.1%
8.6%	48.2	48.3	0.1	0.2%
9.9%	48.1	48.2	0.1	0.1%
11.1%	48.1	48.2	0.1	0.2%
12.3%	48.1	48.2	0.1	0.3%
13.6%	48.0	48.2	0.1	0.3%
14.8%	48.0	48.0	0.0	0.0%
16.0%	48.0	48.0	0.0	0.1%
17.3%	48.0	48.0	0.0	0.0%
18.5%	47.9	47.9	0.0	0.0%
19.8%	47.8	47.8	0.0	0.0%
21.0%	47.7	47.8	0.1	0.3%
22.2%	47.6	47.8	0.2	0.5%
23.5%	47.6	47.8	0.2	0.4%
24.7%	47.5	47.6	0.0	0.0%
25.9%	47.5	47.5	0.0	0.0%
27.2%	47.5	47.5	0.0	0.0%
28.4%	47.5	47.5	0.0	0.1%
29.6%	47.5	47.5	0.0	0.0%
30.9%	47.4	47.4	0.0	0.0%
32.1%	47.4	47.4	0.0	0.0%
33.3%	47.3	47.4	0.1	0.1%
34.6%	47.2	47.2	0.0	0.0%
35.8%	47.2	47.2	0.0	0.0%
37.0%	47.2	47.2	0.0	0.1%
38.3%	47.0	47.2	0.2	0.3%
39.5%	47.0	47.1	0.1	0.2%
40.7%	47.0	47.1	0.1	0.2%
42.0%	47.0	47.0	0.0	0.1%
43.2%	47.0	47.0	0.0	0.1%
44.4%	47.0	47.0	0.0	0.1%
45.7%	46.9	47.0	0.0	0.1%
46.9%	46.9	47.0	0.1	0.2%
48.1%	46.9	46.9	0.0	-0.1%
49.4%	46.9	46.9	0.0	0.0%
50.6%	46.8	46.8	0.0	-0.1%
51.9%	46.8	46.8	0.0	-0.1%
53.1%	46.8	46.8	0.0	-0.1%
54.3%	46.7	46.8	0.0	0.0%
55.6%	46.7	46.7	0.0	0.0%
56.8%	46.7	46.7	0.0	0.0%
58.0%	46.7	46.7	0.0	0.0%
59.3%	46.6	46.6	0.0	0.0%
60.5%	46.5	46.5	0.0	0.1%
61.7%	46.4	46.5	0.0	0.1%
63.0%	46.4	46.4	0.0	0.0%
64.2%	46.2	46.2	0.0	0.0%
65.4%	46.1	46.1	0.0	0.0%
66.7%	46.0	46.1	0.0	0.1%
67.9%	46.0	46.0	0.0	-0.1%
69.1%	46.0	46.0	0.0	-0.1%
70.4%	45.9	46.0	0.0	0.0%
71.6%	45.9	45.9	0.0	0.1%
72.8%	45.9	45.9	0.0	0.0%
74.1%	45.9	45.9	0.0	0.0%
75.3%	45.8	45.9	0.0	0.1%
76.5%	45.8	45.9	0.1	0.1%
77.8%	45.8	45.8	0.0	0.0%
79.0%	45.7	45.8	0.1	0.2%
80.2%	45.7	45.7	0.0	0.1%
81.5%	45.7	45.6	0.0	0.0%
82.7%	45.6	45.6	0.0	0.1%
84.0%	45.6	45.6	0.0	0.0%
85.2%	45.6	45.6	0.0	0.0%
86.4%	45.6	45.6	0.0	0.0%
87.7%	45.4	45.5	0.1	0.2%
88.9%	45.4	45.5	0.1	0.3%
90.1%	45.4	45.4	0.0	0.1%
91.4%	45.3	45.4	0.1	0.2%
92.6%	45.2	45.4	0.2	0.4%
93.8%	45.2	45.3	0.1	0.3%
95.1%	45.2	45.2	0.1	0.2%
96.3%	45.1	45.1	0.0	0.0%
97.5%	45.1	45.1	0.0	0.0%
98.8%	44.9	44.8	-0.1	-0.2%
100.0%	44.9	44.8	-0.1	-0.2%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.1	52.2	0.1	0.2%
1.2%	52.0	52.1	0.1	0.2%
2.5%	51.8	51.8	0.0	-0.1%
3.7%	51.6	51.7	0.0	0.1%
4.9%	51.6	51.7	0.1	0.1%
6.2%	51.6	51.4	-0.2	-0.3%
7.4%	51.4	51.3	-0.1	-0.2%
8.6%	51.2	51.0	-0.2	-0.3%
9.9%	50.9	50.9	0.0	-0.1%
11.1%	50.9	50.9	0.0	-0.1%
12.3%	50.8	50.8	0.1	0.1%
13.6%	50.7	50.8	0.0	0.1%
14.8%	50.6	50.7	0.1	0.2%
16.0%	50.6	50.6	0.1	0.1%
17.3%	50.6	50.6	0.0	0.1%
18.5%	50.5	50.6	0.1	0.1%
19.8%	50.3	50.6	0.2	0.4%
21.0%	50.3	50.5	0.2	0.3%
22.2%	50.3	50.4	0.0	0.1%
23.5%	50.3	50.4	0.1	0.1%
24.7%	50.3	50.3	0.0	0.1%
25.9%	50.3	50.3	0.1	0.1%
27.2%	50.3	50.3	0.1	0.1%
28.4%	50.2	50.3	0.1	0.1%
29.6%	50.2	50.3	0.0	0.0%
30.9%	50.2	50.2	0.0	0.1%
32.1%	50.2	50.2	0.0	0.0%
33.3%	50.1	50.2	0.1	0.2%
34.6%	50.1	50.2	0.1	0.2%
35.8%	50.0	50.2	0.1	0.3%
37.0%	50.0	50.1	0.1	0.3%
38.3%	49.9	50.0	0.1	0.1%
39.5%	49.9	49.9	0.0	0.1%
40.7%	49.8	49.8	0.1	0.1%
42.0%	49.7	49.8	0.1	0.2%
43.2%	49.6	49.8	0.2	0.4%
44.4%	49.6	49.8	0.2	0.4%
45.7%	49.5	49.7	0.2	0.4%
46.9%	49.4	49.6	0.2	0.4%
48.1%	49.3	49.4	0.2	0.4%
49.4%	49.2	49.4	0.1	0.3%
50.6%	49.2	49.2	0.0	0.1%
51.9%	49.1	49.2	0.1	0.1%
53.1%	49.1	49.1	0.0	0.1%
54.3%	49.0	49.1	0.0	0.1%
55.6%	49.0	49.0	0.0	0.0%
56.8%	48.9	48.9	0.0	0.0%
58.0%	48.9	48.9	0.0	0.0%
59.3%	48.9	48.9	0.0	0.0%
60.5%	48.9	48.9	0.0	0.1%
61.7%	48.8	48.8	0.1	0.2%
63.0%	48.7	48.7	0.0	0.0%
64.2%	48.7	48.7	0.0	0.0%
65.4%	48.6	48.6	0.0	0.0%
66.7%	48.5	48.6	0.0	0.0%
67.9%	48.4	48.5	0.2	0.3%
69.1%	48.3	48.3	0.0	0.0%
70.4%	48.3	48.3	0.0	0.0%
71.6%	48.2	48.1	0.0	-0.1%
72.8%	48.0	48.0	0.0	0.0%
74.1%	47.9	48.0	0.1	0.3%
75.3%	47.8	47.8	0.0	0.0%
76.5%	47.8	47.8	0.0	0.0%
77.8%	47.8	47.7	0.0	-0.1%
79.0%	47.7	47.7	0.0	0.0%
80.2%	47.6	47.7	0.1	0.2%
81.5%	47.6	47.5	-0.1	-0.1%
82.7%	47.4	47.3	-0.1	-0.2%
84.0%	47.3	47.3	0.0	0.0%
85.2%	47.2	47.3	0.0	0.1%
86.4%	47.2	47.2	0.0	0.0%
87.7%	47.2	47.2	0.0	0.0%
88.9%	47.1	47.1	0.1	0.1%
90.1%	47.0	47.0	0.1	0.2%
91.4%	46.9	46.9	0.0	0.0%
92.6%	46.9	46.9	0.0	0.1%
93.8%	46.9	46.8	0.0	-0.1%
95.1%	46.8	46.8	0.0	0.0%
96.3%	46.3	46.7	0.4	0.9%
97.5%	46.3	46.7	0.4	1.0%
98.8%	46.2	46.2	0.0	0.0%
100.0%	46.2	46.2	0.0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.6	55.5	-0.1	-0.1%
1.2%	55.4	55.5	0.1	0.2%
2.5%	55.3	55.0	-0.3	-0.6%
3.7%	54.7	54.6	-0.1	-0.3%
4.9%	54.5	54.5	0.0	-0.1%
6.2%	54.5	54.3	-0.1	-0.3%
7.4%	54.4	54.2	-0.1	-0.2%
8.6%	54.3	53.9	-0.4	-0.8%
9.9%	54.2	53.8	-0.4	-0.7%
11.1%	53.9	53.7	-0.2	-0.4%
12.3%	53.7	53.7	0.0	0.0%
13.6%	53.5	53.6	0.1	0.1%
14.8%	53.5	53.5	0.0	0.0%
16.0%	53.4	53.5	0.0	0.0%
17.3%	53.4	53.3	-0.1	-0.2%
18.5%	53.3	53.3	0.0	0.0%
19.8%	53.2	53.3	0.1	0.2%
21.0%	53.1	53.2	0.1	0.2%
22.2%	53.1	53.2	0.1	0.2%
23.5%	53.0	53.2	0.1	0.3%
24.7%	53.0	53.1	0.2	0.3%
25.9%	52.9	53.1	0.2	0.3%
27.2%	52.9	53.1	0.2	0.4%
28.4%	52.8	52.9	0.1	0.3%
29.6%	52.7	52.9	0.2	0.4%
30.9%	52.6	52.9	0.3	0.5%
32.1%	52.5	52.8	0.3	0.6%
33.3%	52.5	52.8	0.3	0.6%
34.6%	52.4	52.8	0.3	0.6%
35.8%	52.3	52.7	0.4	0.7%
37.0%	52.3	52.7	0.4	0.7%
38.3%	52.3	52.6	0.3	0.6%
39.5%	52.2	52.4	0.2	0.4%
40.7%	52.2	52.4	0.2	0.4%
42.0%	52.2	52.4	0.2	0.4%
43.2%	52.2	52.4	0.2	0.4%
44.4%	52.2	52.4	0.2	0.4%
45.7%	52.1	52.4	0.2	0.5%
46.9%	52.1	52.3	0.3	0.5%
48.1%	52.1	52.3	0.2	0.4%
49.4%	52.1	52.3	0.2	0.4%
50.6%	52.1	52.2	0.2	0.3%
51.9%	52.1	52.2	0.2	0.3%
53.1%	52.0	52.2	0.2	0.3%
54.3%	52.0	52.2	0.2	0.4%
55.6%	51.9	52.1	0.1	0.2%
56.8%	51.9	52.1	0.1	0.2%
58.0%	51.9	52.0	0.1	0.2%
59.3%	51.9	52.0	0.2	0.3%
60.5%	51.8	52.0	0.2	0.4%
61.7%	51.8	51.9	0.1	0.3%
63.0%	51.8	51.8	0.0	0.1%
64.2%	51.7	51.8	0.1	0.2%
65.4%	51.7	51.8	0.1	0.2%
66.7%	51.5	51.7	0.2	0.4%
67.9%	51.4	51.5	0.1	0.3%
69.1%	51.3	51.5	0.2	0.3%
70.4%	51.1	51.5	0.4	0.7%
71.6%	51.1	51.4	0.3	0.7%
72.8%	51.1	51.4	0.3	0.6%
74.1%	51.0	51.3	0.3	0.7%
75.3%	51.0	51.3	0.3	0.6%
76.5%	50.8	51.1	0.2	0.5%
77.8%	50.8	51.0	0.2	0.3%
79.0%	50.8	50.9	0.1	0.2%
80.2%	50.7	50.8	0.1	0.1%
81.5%	50.6	50.7	0.1	0.2%
82.7%	50.6	50.6	0.0	0.1%
84.0%	50.5	50.6	0.1	0.1%
85.2%	50.4	50.5	0.1	0.2%
86.4%	50.3	50.5	0.2	0.3%
87.7%	50.2	50.4	0.2	0.3%
88.9%	50.1	50.1	0.0	0.1%
90.1%	49.7	50.0	0.3	0.7%
91.4%	49.5	49.7	0.2	0.4%
92.6%	49.5	49.7	0.2	0.4%
93.8%	49.5	49.5	0.0	0.1%
95.1%	49.5	49.5	0.0	0.0%
96.3%	49.3	49.2	0.0	0.0%
97.5%	48.8	48.8	0.0	-0.1%
98.8%	48.3	48.3	0.0	0.0%
100.0%	48.3	48.3	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.5	58.3	-0.1	-0.2%
1.2%	58.0	58.0	0.0	0.1%
2.5%	57.3	57.7	0.5	0.8%
3.7%	56.9	57.4	0.5	0.9%
4.9%	56.6	57.2	0.6	1.0%
6.2%	56.3	57.1	0.8	1.4%
7.4%	56.3	57.0	0.8	1.3%
8.6%	56.3	56.9	0.6	1.1%
9.9%	56.2	56.7	0.5	0.8%
11.1%	56.2	56.4	0.2	0.4%
12.3%	56.0	56.2	0.2	0.4%
13.6%	55.9	56.1	0.2	0.4%
14.8%	55.7	56.0	0.3	0.5%
16.0%	55.6	55.9	0.2	0.4%
17.3%	55.5	55.7	0.2	0.4%
18.5%	55.3	55.7	0.4	0.7%
19.8%	55.0	55.7	0.6	1.1%
21.0%	55.0	55.5	0.5	0.9%
22.2%	54.9	55.4	0.5	1.0%
23.5%	54.9	55.3	0.4	0.8%
24.7%	54.9	55.3	0.4	0.8%
25.9%	54.8	55.3	0.4	0.8%
27.2%	54.6	55.2	0.5	1.0%
28.4%	54.6	55.2	0.6	1.0%
29.6%	54.6	55.1	0.5	0.9%
30.9%	54.6	55.0	0.4	0.8%
32.1%	54.5	54.9	0.4	0.7%
33.3%	54.5	54.8	0.3	0.6%
34.6%	54.5	54.8	0.3	0.5%
35.8%	54.4	54.7	0.3	0.5%
37.0%	54.4	54.7	0.3	0.6%
38.3%	54.4	54.5	0.2	0.3%
39.5%	54.3	54.4	0.1	0.1%
40.7%	54.3	54.4	0.1	0.2%
42.0%	54.3	54.4	0.1	0.2%
43.2%	54.3	54.4	0.1	0.2%
44.4%	54.3	54.4	0.1	0.2%
45.7%	54.2	54.4	0.2	0.3%
46.9%	54.2	54.4	0.2	0.3%
48.1%	54.1	54.3	0.3	0.5%
49.4%	54.0	54.3	0.2	0.4%
50.6%	54.0	54.2	0.2	0.4%
51.9%	54.0	54.2	0.2	0.3%
53.1%	53.8	54.1	0.3	0.6%
54.3%	53.7	54.1	0.4	0.7%
55.6%	53.7	54.1	0.4	0.7%
56.8%	53.7	54.1	0.4	0.7%
58.0%	53.6	53.9	0.3	0.5%
59.3%	53.6	53.9	0.3	0.6%
60.5%	53.6	53.8	0.2	0.4%
61.7%	53.5	53.7	0.2	0.4%
63.0%	53.5	53.7	0.2	0.5%
64.2%	53.5	53.7	0.2	0.5%
65.4%	53.4	53.7	0.2	0.4%
66.7%	53.4	53.7	0.2	0.4%
67.9%	53.4	53.6	0.2	0.4%
69.1%	53.4	53.5	0.1	0.2%
70.4%	53.2	53.3	0.1	0.3%
71.6%	53.1	53.2	0.1	0.2%
72.8%	53.1	53.2	0.1	0.1%
74.1%	53.1	53.2	0.1	0.1%
75.3%	53.0	53.1	0.1	0.1%
76.5%	53.0	53.1	0.1	0.1%
77.8%	53.0	53.1	0.0	0.1%
79.0%	53.0	53.1	0.1	0.2%
80.2%	52.9	53.0	0.1	0.1%
81.5%	52.8	52.9	0.1	0.3%
82.7%	52.8	52.9	0.1	0.2%
84.0%	52.7	52.8	0.0	0.1%
85.2%	52.7	52.6	-0.1	-0.2%
86.4%	52.6	52.6	0.0	0.0%
87.7%	52.6	52.5	-0.1	-0.2%
88.9%	52.5	52.3	-0.1	-0.3%
90.1%	52.3	52.3	0.0	0.0%
91.4%	52.3	52.3	0.0	0.0%
92.6%	52.3	52.3	0.0	0.0%
93.8%	52.2	52.2	0.0	0.0%
95.1%	52.1	52.1	0.0	0.0%
96.3%	52.1	52.1	0.0	0.0%
97.5%	52.0	52.1	0.0	0.1%
98.8%	52.0	52.0	0.0	0.1%
100.0%	52.0	52.0	0.0	0.1%

Table SQ5-1b

Sacramento River at Jellys Ferry, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.3	58.3	0.0	0.0%
1.2%	58.2	58.1	-0.1	-0.2%
2.5%	58.1	57.7	-0.3	-0.6%
3.7%	57.7	57.7	0.0	-0.1%
4.9%	57.5	57.4	-0.1	-0.2%
6.2%	56.9	57.4	0.4	0.7%
7.4%	56.8	56.8	0.0	0.0%
8.6%	56.8	56.7	0.0	-0.1%
9.9%	56.4	56.2	-0.2	-0.3%
11.1%	56.3	56.2	-0.1	-0.2%
12.3%	56.3	56.1	-0.2	-0.3%
13.6%	56.3	56.0	-0.2	-0.4%
14.8%	56.0	55.9	-0.1	-0.1%
16.0%	55.7	55.9	0.2	0.3%
17.3%	55.7	55.8	0.1	0.2%
18.5%	55.6	55.7	0.1	0.1%
19.8%	55.5	55.7	0.1	0.3%
21.0%	55.5	55.6	0.2	0.3%
22.2%	55.5	55.6	0.2	0.3%
23.5%	55.4	55.6	0.2	0.4%
24.7%	55.4	55.5	0.1	0.2%
25.9%	55.3	55.4	0.1	0.2%
27.2%	55.3	55.4	0.1	0.3%
28.4%	55.2	55.4	0.2	0.4%
29.6%	55.2	55.4	0.2	0.4%
30.9%	55.2	55.4	0.2	0.4%
32.1%	55.1	55.4	0.3	0.5%
33.3%	55.0	55.4	0.3	0.6%
34.6%	54.9	55.4	0.4	0.8%
35.8%	54.9	55.4	0.5	0.9%
37.0%	54.9	55.4	0.5	0.9%
38.3%	54.8	55.4	0.6	1.1%
39.5%	54.8	55.1	0.4	0.7%
40.7%	54.7	55.1	0.4	0.7%
42.0%	54.7	55.1	0.4	0.7%
43.2%	54.6	55.1	0.5	0.9%
44.4%	54.5	55.0	0.5	1.0%
45.7%	54.5	55.0	0.5	1.0%
46.9%	54.4	55.0	0.5	1.0%
48.1%	54.4	54.9	0.5	1.0%
49.4%	54.4	54.9	0.5	1.0%
50.6%	54.3	54.9	0.6	1.1%
51.9%	54.2	54.9	0.7	1.3%
53.1%	54.1	54.9	0.8	1.4%
54.3%	54.1	54.8	0.7	1.3%
55.6%	54.1	54.7	0.6	1.1%
56.8%	54.1	54.7	0.6	1.1%
58.0%	53.9	54.6	0.7	1.2%
59.3%	53.9	54.6	0.7	1.2%
60.5%	53.9	54.6	0.7	1.3%
61.7%	53.9	54.6	0.7	1.3%
63.0%	53.9	54.6	0.7	1.3%
64.2%	53.8	54.3	0.5	0.9%
65.4%	53.8	54.3	0.5	0.9%
66.7%	53.7	54.3	0.5	1.0%
67.9%	53.7	54.3	0.5	1.0%
69.1%	53.7	54.3	0.6	1.1%
70.4%	53.7	54.3	0.6	1.1%
71.6%	53.7	54.2	0.6	1.0%
72.8%	53.6	54.2	0.6	1.1%
74.1%	53.6	54.2	0.6	1.0%
75.3%	53.6	54.1	0.5	1.0%
76.5%	53.6	54.1	0.5	1.0%
77.8%	53.5	54.1	0.6	1.1%
79.0%	53.4	54.0	0.5	1.0%
80.2%	53.4	54.0	0.6	1.1%
81.5%	53.3	53.9	0.6	1.1%
82.7%	53.3	53.8	0.5	0.9%
84.0%	53.3	53.8	0.5	1.0%
85.2%	53.3	53.8	0.5	0.9%
86.4%	53.3	53.7	0.4	0.8%
87.7%	53.3	53.7	0.4	0.8%
88.9%	53.2	53.6	0.4	0.8%
90.1%	53.0	53.6	0.6	1.1%
91.4%	53.0	53.5	0.5	1.0%
92.6%	52.9	53.5	0.6	1.1%
93.8%	52.9	53.4	0.5	1.0%
95.1%	52.7	53.3	0.6	1.1%
96.3%	52.3	53.3	1.0	1.9%
97.5%	52.3	53.1	0.8	1.5%
98.8%	52.2	53.1	0.9	1.7%
100.0%	52.2	53.1	0.9	1.7%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.6	58.0	-1.6	-2.6%
1.2%	58.9	57.9	-0.9	-1.6%
2.5%	58.4	57.9	-0.5	-0.9%
3.7%	58.1	57.7	-0.4	-0.6%
4.9%	58.1	57.5	-0.6	-1.0%
6.2%	58.0	57.4	-0.6	-1.0%
7.4%	57.9	57.2	-0.7	-1.2%
8.6%	57.5	57.2	-0.3	-0.5%
9.9%	57.5	56.8	-0.7	-1.2%
11.1%	57.4	56.7	-0.7	-1.2%
12.3%	56.9	56.7	-0.2	-0.3%
13.6%	56.9	56.7	-0.2	-0.4%
14.8%	56.9	56.7	-0.2	-0.3%
16.0%	56.8	56.3	-0.5	-1.0%
17.3%	56.8	56.3	-0.5	-0.9%
18.5%	56.5	56.1	-0.4	-0.7%
19.8%	56.4	56.1	-0.3	-0.5%
21.0%	56.2	56.1	-0.1	-0.1%
22.2%	56.1	56.0	-0.1	-0.2%
23.5%	56.1	56.0	-0.1	-0.2%
24.7%	56.0	55.9	-0.2	-0.3%
25.9%	55.8	55.8	0.0	-0.1%
27.2%	55.8	55.7	-0.1	-0.2%
28.4%	55.8	55.7	-0.1	-0.2%
29.6%	55.8	55.6	-0.1	-0.3%
30.9%	55.7	55.6	-0.1	-0.2%
32.1%	55.7	55.6	-0.1	-0.2%
33.3%	55.6	55.5	-0.2	-0.3%
34.6%	55.6	55.4	-0.2	-0.3%
35.8%	55.6	55.3	-0.3	-0.5%
37.0%	55.5	55.3	-0.2	-0.4%
38.3%	55.2	55.3	0.0	0.0%
39.5%	55.2	55.2	0.1	0.1%
40.7%	55.1	55.1	0.0	-0.1%
42.0%	55.1	55.1	0.0	-0.1%
43.2%	55.1	55.0	0.0	-0.1%
44.4%	55.0	55.0	0.0	0.0%
45.7%	55.0	55.0	0.0	0.0%
46.9%	54.9	55.0	0.0	0.0%
48.1%	54.9	54.9	0.0	0.1%
49.4%	54.9	54.8	0.0	0.0%
50.6%	54.8	54.8	0.0	0.0%
51.9%	54.8	54.8	0.0	0.0%
53.1%	54.8	54.8	0.0	0.1%
54.3%	54.7	54.8	0.0	0.0%
55.6%	54.7	54.7	0.0	0.0%
56.8%	54.7	54.7	0.0	0.0%
58.0%	54.5	54.6	0.2	0.3%
59.3%	54.4	54.6	0.1	0.3%
60.5%	54.4	54.5	0.1	0.2%
61.7%	54.3	54.5	0.1	0.2%
63.0%	54.3	54.5	0.1	0.2%
64.2%	54.3	54.4	0.1	0.2%
65.4%	54.3	54.4	0.1	0.2%
66.7%	54.2	54.4	0.2	0.3%
67.9%	54.2	54.3	0.1	0.2%
69.1%	54.2	54.3	0.1	0.2%
70.4%	54.2	54.3	0.1	0.2%
71.6%	54.1	54.2	0.1	0.2%
72.8%	54.1	54.2	0.1	0.2%
74.1%	54.0	54.2	0.2	0.3%
75.3%	54.0	54.1	0.1	0.1%
76.5%	54.0	54.0	0.1	0.1%
77.8%	53.9	54.0	0.1	0.1%
79.0%	53.9	53.9	0.1	0.1%
80.2%	53.9	53.9	0.1	0.1%
81.5%	53.9	53.8	0.0	0.0%
82.7%	53.8	53.7	-0.1	-0.2%
84.0%	53.8	53.7	-0.1	-0.1%
85.2%	53.8	53.7	0.0	0.0%
86.4%	53.7	53.6	-0.1	-0.2%
87.7%	53.6	53.5	0.0	0.0%
88.9%	53.4	53.5	0.1	0.2%
90.1%	53.3	53.4	0.1	0.2%
91.4%	53.1	53.2	0.1	0.1%
92.6%	52.9	53.2	0.3	0.6%
93.8%	52.9	53.1	0.2	0.3%
95.1%	52.8	53.0	0.2	0.4%
96.3%	52.8	53.0	0.2	0.4%
97.5%	52.8	52.8	0.0	0.1%
98.8%	52.7	52.8	0.1	0.1%
100.0%	52.7	52.8	0.1	0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.5	58.7	-4.8	-7.5%
1.2%	60.9	57.9	-3.0	-4.9%
2.5%	60.3	57.9	-2.4	-4.0%
3.7%	59.3	57.8	-1.5	-2.5%
4.9%	59.1	57.8	-1.3	-2.2%
6.2%	59.1	57.8	-1.3	-2.2%
7.4%	59.0	57.8	-1.3	-2.2%
8.6%	58.5	57.7	-0.7	-1.3%
9.9%	58.4	57.7	-0.7	-1.3%
11.1%	58.2	57.6	-0.7	-1.1%
12.3%	58.1	57.5	-0.6	-1.1%
13.6%	57.9	57.4	-0.6	-1.0%
14.8%	57.8	57.3	-0.5	-0.9%
16.0%	57.4	57.2	-0.2	-0.4%
17.3%	57.4	57.2	-0.2	-0.3%
18.5%	57.3	57.0	-0.2	-0.4%
19.8%	57.2	56.9	-0.2	-0.4%
21.0%	57.1	56.9	-0.2	-0.4%
22.2%	57.0	56.9	-0.1	-0.2%
23.5%	56.9	56.8	-0.1	-0.2%
24.7%	56.9	56.8	-0.1	-0.2%
25.9%	56.9	56.8	-0.1	-0.2%
27.2%	56.7	56.7	0.0	0.0%
28.4%	56.7	56.6	-0.1	-0.1%
29.6%	56.7	56.3	-0.5	-0.8%
30.9%	56.7	56.1	-0.6	-1.0%
32.1%	56.7	56.1	-0.6	-1.1%
33.3%	56.6	56.1	-0.6	-1.0%
34.6%	56.6	56.1	-0.5	-0.9%
35.8%	56.6	56.0	-0.5	-1.0%
37.0%	56.5	56.0	-0.5	-0.9%
38.3%	56.5	56.0	-0.5	-0.9%
39.5%	56.5	55.9	-0.5	-0.9%
40.7%	56.4	55.9	-0.5	-1.0%
42.0%	56.3	55.9	-0.4	-0.8%
43.2%	56.2	55.9	-0.3	-0.6%
44.4%	56.2	55.9	-0.3	-0.6%
45.7%	56.2	55.9	-0.4	-0.6%
46.9%	56.1	55.9	-0.3	-0.5%
48.1%	56.0	55.9	-0.2	-0.3%
49.4%	56.0	55.8	-0.2	-0.3%
50.6%	55.9	55.8	-0.1	-0.2%
51.9%	55.9	55.8	-0.2	-0.3%
53.1%	55.9	55.7	-0.2	-0.3%
54.3%	55.8	55.6	-0.2	-0.3%
55.6%	55.8	55.6	-0.2	-0.3%
56.8%	55.7	55.5	-0.2	-0.4%
58.0%	55.7	55.5	-0.2	-0.4%
59.3%	55.6	55.4	-0.2	-0.3%
60.5%	55.6	55.4	-0.2	-0.4%
61.7%	55.5	55.4	-0.1	-0.2%
63.0%	55.4	55.3	-0.1	-0.2%
64.2%	55.4	55.3	-0.1	-0.2%
65.4%	55.4	55.2	-0.2	-0.3%
66.7%	55.3	55.2	-0.2	-0.3%
67.9%	55.3	55.2	-0.1	-0.2%
69.1%	55.2	55.2	-0.1	-0.2%
70.4%	55.2	55.1	-0.1	-0.2%
71.6%	55.2	55.1	-0.1	-0.2%
72.8%	55.2	55.1	-0.1	-0.2%
74.1%	55.2	55.0	-0.1	-0.2%
75.3%	55.1	55.0	-0.1	-0.2%
76.5%	55.1	55.0	-0.1	-0.2%
77.8%	55.1	55.0	-0.1	-0.2%
79.0%	55.0	55.0	0.0	-0.1%
80.2%	55.0	54.9	0.0	-0.1%
81.5%	55.0	54.9	-0.1	-0.1%
82.7%	54.8	54.9	0.1	0.1%
84.0%	54.8	54.9	0.1	0.2%
85.2%	54.8	54.9	0.1	0.2%
86.4%	54.7	54.7	0.0	0.0%
87.7%	54.7	54.7	0.0	0.0%
88.9%	54.6	54.6	0.0	0.0%
90.1%	54.6	54.6	0.0	0.0%
91.4%	54.5	54.4	-0.1	-0.2%
92.6%	54.5	54.4	-0.1	-0.2%
93.8%	54.4	54.3	-0.1	-0.2%
95.1%	54.4	54.3	-0.1	-0.2%
96.3%	54.3	54.3	0.0	0.0%
97.5%	54.2	54.2	0.0	0.0%
98.8%	54.1	53.8	-0.2	-0.4%
100.0%	54.1	53.8	-0.2	-0.4%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.6	64.8	-2.8	-4.1%
1.2%	64.9	63.4	-1.5	-2.3%
2.5%	64.4	63.2	-1.2	-1.9%
3.7%	63.1	58.5	-4.6	-7.3%
4.9%	62.5	58.2	-4.2	-6.8%
6.2%	61.2	58.2	-3.0	-4.9%
7.4%	60.6	58.2	-2.5	-4.1%
8.6%	60.1	57.9	-2.2	-3.6%
9.9%	59.5	57.9	-1.5	-2.6%
11.1%	59.0	57.7	-1.3	-2.2%
12.3%	58.9	57.7	-1.3	-2.1%
13.6%	58.9	57.6	-1.3	-2.1%
14.8%	58.8	57.6	-1.3	-2.1%
16.0%	58.5	57.5	-1.0	-1.7%
17.3%	58.5	57.5	-1.1	-1.8%
18.5%	58.5	57.4	-1.1	-1.9%
19.8%	58.5	57.3	-1.2	-2.1%
21.0%	58.5	57.3	-1.2	-2.0%
22.2%	58.4	57.2	-1.2	-2.1%
23.5%	58.2	57.0	-1.1	-1.9%
24.7%	58.1	57.0	-1.2	-2.0%
25.9%	58.1	57.0	-1.2	-2.0%
27.2%	57.9	56.8	-1.1	-1.9%
28.4%	57.8	56.6	-1.2	-2.0%
29.6%	57.7	56.6	-1.2	-2.0%
30.9%	57.7	56.5	-1.3	-2.2%
32.1%	57.7	56.3	-1.4	-2.4%
33.3%	57.6	56.3	-1.4	-2.4%
34.6%	57.4	56.2	-1.2	-2.0%
35.8%	57.4	56.2	-1.1	-2.0%
37.0%	57.1	56.1	-0.9	-1.6%
38.3%	56.9	56.0	-0.9	-1.5%
39.5%	56.8	56.0	-0.8	-1.5%
40.7%	56.7	55.9	-0.8	-1.4%
42.0%	56.7	55.9	-0.8	-1.4%
43.2%	56.6	55.8	-0.9	-1.5%
44.4%	56.5	55.6	-1.0	-1.7%
45.7%	56.5	55.6	-1.0	-1.7%
46.9%	56.5	55.5	-1.0	-1.8%
48.1%	56.5	55.5	-1.0	-1.8%
49.4%	56.4	55.5	-0.9	-1.6%
50.6%	56.1	55.4	-0.6	-1.2%
51.9%	55.9	55.4	-0.5	-0.8%
53.1%	55.8	55.3	-0.5	-0.9%
54.3%	55.8	55.3	-0.5	-0.9%
55.6%	55.3	55.2	-0.1	-0.1%
56.8%	55.2	55.1	-0.1	-0.3%
58.0%	55.2	55.1	-0.2	-0.3%
59.3%	55.2	55.0	-0.2	-0.4%
60.5%	55.2	54.7	-0.4	-0.8%
61.7%	55.0	54.7	-0.2	-0.4%
63.0%	54.9	54.6	-0.3	-0.6%
64.2%	54.9	54.6	-0.3	-0.5%
65.4%	54.6	54.6	0.0	-0.1%
66.7%	54.6	54.6	0.0	0.0%
67.9%	54.3	54.1	-0.2	-0.4%
69.1%	54.3	53.8	-0.5	-1.0%
70.4%	54.0	53.7	-0.3	-0.5%
71.6%	54.0	53.7	-0.3	-0.5%
72.8%	53.8	53.5	-0.3	-0.6%
74.1%	53.7	53.4	-0.3	-0.6%
75.3%	53.7	53.3	-0.4	-0.7%
76.5%	53.6	53.3	-0.3	-0.6%
77.8%	53.5	53.3	-0.2	-0.4%
79.0%	53.4	53.2	-0.1	-0.3%
80.2%	53.4	53.2	-0.1	-0.3%
81.5%	53.3	53.1	-0.2	-0.4%
82.7%	53.3	53.1	-0.2	-0.4%
84.0%	53.3	53.0	-0.3	-0.6%
85.2%	53.3	53.0	-0.3	-0.6%
86.4%	53.2	52.9	-0.3	-0.6%
87.7%	53.2	52.9	-0.3	-0.6%
88.9%	53.2	52.9	-0.3	-0.6%
90.1%	53.1	52.8	-0.3	-0.5%
91.4%	53.0	52.5	-0.6	-1.1%
92.6%	52.9	52.4	-0.6	-1.1%
93.8%	52.7	52.3	-0.4	-0.8%
95.1%	52.4	52.2	-0.3	-0.5%
96.3%	52.3	51.7	-0.6	-1.2%
97.5%	51.8	51.5	-0.3	-0.6%
98.8%	51.5	51.0	-0.5	-0.9%
100.0%	51.5	51.0	-0.5	-0.9%

Table SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.3	59.1	-2.2	-3.5%
1.2%	60.0	58.4	-1.7	-2.8%
2.5%	59.4	58.1	-1.3	-2.2%
3.7%	59.3	57.7	-1.6	-2.7%
4.9%	59.0	57.7	-1.3	-2.1%
6.2%	58.6	57.7	-0.9	-1.5%
7.4%	58.5	57.6	-0.9	-1.6%
8.6%	57.9	57.5	-0.5	-0.8%
9.9%	57.6	57.4	-0.1	-0.3%
11.1%	57.3	57.2	-0.2	-0.3%
12.3%	57.3	56.9	-0.4	-0.8%
13.6%	57.3	56.8	-0.6	-1.0%
14.8%	57.2	56.7	-0.5	-0.9%
16.0%	57.0	56.6	-0.4	-0.6%
17.3%	56.9	56.5	-0.4	-0.7%
18.5%	56.7	56.4	-0.3	-0.5%
19.8%	56.7	56.4	-0.3	-0.5%
21.0%	56.5	56.3	-0.2	-0.3%
22.2%	56.4	56.2	-0.1	-0.3%
23.5%	56.3	56.2	-0.1	-0.2%
24.7%	56.3	56.1	-0.2	-0.3%
25.9%	56.2	56.0	-0.2	-0.3%
27.2%	56.2	55.9	-0.3	-0.5%
28.4%	56.0	55.9	-0.2	-0.3%
29.6%	56.0	55.9	-0.2	-0.3%
30.9%	56.0	55.8	-0.2	-0.3%
32.1%	56.0	55.7	-0.3	-0.5%
33.3%	55.9	55.6	-0.3	-0.5%
34.6%	55.9	55.6	-0.2	-0.4%
35.8%	55.8	55.5	-0.2	-0.4%
37.0%	55.8	55.5	-0.2	-0.4%
38.3%	55.5	55.5	0.0	0.0%
39.5%	55.5	55.5	0.0	0.0%
40.7%	55.5	55.4	-0.1	-0.1%
42.0%	55.5	55.4	-0.1	-0.2%
43.2%	55.5	55.3	-0.1	-0.2%
44.4%	55.4	55.3	-0.1	-0.1%
45.7%	55.4	55.3	-0.1	-0.2%
46.9%	55.4	55.2	-0.1	-0.2%
48.1%	55.3	55.2	-0.1	-0.1%
49.4%	55.3	55.1	-0.2	-0.3%
50.6%	55.1	55.0	-0.1	-0.2%
51.9%	55.1	55.0	-0.1	-0.2%
53.1%	55.1	54.9	-0.2	-0.3%
54.3%	55.0	54.9	-0.1	-0.2%
55.6%	55.0	54.9	-0.2	-0.3%
56.8%	55.0	54.9	-0.1	-0.3%
58.0%	55.0	54.8	-0.2	-0.4%
59.3%	54.9	54.8	-0.1	-0.3%
60.5%	54.9	54.8	-0.1	-0.2%
61.7%	54.9	54.7	-0.1	-0.3%
63.0%	54.8	54.7	-0.1	-0.2%
64.2%	54.8	54.7	-0.1	-0.2%
65.4%	54.8	54.7	-0.1	-0.1%
66.7%	54.8	54.7	-0.1	-0.2%
67.9%	54.7	54.7	0.0	-0.1%
69.1%	54.7	54.6	0.0	-0.1%
70.4%	54.6	54.6	0.0	0.0%
71.6%	54.6	54.6	-0.1	-0.1%
72.8%	54.6	54.5	-0.1	-0.1%
74.1%	54.6	54.5	0.0	-0.1%
75.3%	54.5	54.4	0.0	-0.1%
76.5%	54.4	54.4	0.0	0.0%
77.8%	54.4	54.4	0.0	0.1%
79.0%	54.4	54.4	0.0	0.1%
80.2%	54.3	54.4	0.1	0.1%
81.5%	54.3	54.4	0.0	0.0%
82.7%	54.3	54.3	0.0	-0.1%
84.0%	54.3	54.2	0.0	-0.1%
85.2%	54.2	54.1	-0.2	-0.3%
86.4%	54.1	54.0	-0.1	-0.2%
87.7%	54.0	53.9	-0.1	-0.2%
88.9%	54.0	53.9	-0.1	-0.2%
90.1%	53.9	53.8	-0.1	-0.2%
91.4%	53.8	53.6	-0.2	-0.3%
92.6%	53.6	53.5	-0.1	-0.2%
93.8%	53.6	53.5	-0.1	-0.2%
95.1%	53.5	53.5	0.0	-0.1%
96.3%	53.4	53.4	0.0	0.1%
97.5%	53.3	53.3	0.1	0.1%
98.8%	53.2	53.2	0.0	-0.1%
100.0%	52.9	53.0	0.1	0.2%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.0	60.2	-2.8	-4.5%
1.2%	61.3	59.1	-2.1	-3.5%
2.5%	60.7	59.1	-1.6	-2.7%
3.7%	59.9	58.1	-1.8	-3.0%
4.9%	59.3	57.9	-1.4	-2.3%
6.2%	59.2	57.6	-1.6	-2.7%
7.4%	59.0	57.5	-1.5	-2.5%
8.6%	58.5	57.5	-1.0	-1.7%
9.9%	58.3	57.3	-1.0	-1.7%
11.1%	58.3	57.3	-1.0	-1.7%
12.3%	58.0	57.3	-0.7	-1.3%
13.6%	57.8	57.3	-0.6	-1.0%
14.8%	57.5	57.1	-0.4	-0.7%
16.0%	57.4	57.0	-0.4	-0.7%
17.3%	57.4	57.0	-0.4	-0.7%
18.5%	57.4	56.9	-0.5	-0.9%
19.8%	57.0	56.8	-0.2	-0.3%
21.0%	57.0	56.8	-0.2	-0.3%
22.2%	56.9	56.5	-0.4	-0.7%
23.5%	56.9	56.4	-0.5	-0.9%
24.7%	56.9	56.4	-0.5	-0.9%
25.9%	56.8	56.3	-0.6	-1.0%
27.2%	56.7	56.2	-0.4	-0.8%
28.4%	56.6	56.1	-0.5	-0.8%
29.6%	56.6	56.1	-0.5	-0.9%
30.9%	56.6	56.1	-0.5	-0.9%
32.1%	56.5	55.9	-0.5	-1.0%
33.3%	56.3	55.8	-0.5	-0.9%
34.6%	56.3	55.8	-0.5	-0.9%
35.8%	56.2	55.7	-0.5	-0.9%
37.0%	56.1	55.7	-0.4	-0.8%
38.3%	56.1	55.6	-0.5	-0.9%
39.5%	56.1	55.5	-0.6	-1.0%
40.7%	56.0	55.4	-0.5	-1.0%
42.0%	55.9	55.4	-0.5	-0.9%
43.2%	55.9	55.4	-0.5	-0.9%
44.4%	55.8	55.4	-0.4	-0.7%
45.7%	55.7	55.3	-0.4	-0.7%
46.9%	55.7	55.3	-0.3	-0.6%
48.1%	55.6	55.3	-0.3	-0.6%
49.4%	55.5	55.2	-0.3	-0.5%
50.6%	55.5	55.2	-0.3	-0.6%
51.9%	55.4	55.1	-0.3	-0.5%
53.1%	55.3	55.0	-0.4	-0.7%
54.3%	55.3	54.9	-0.4	-0.7%
55.6%	55.3	54.9	-0.4	-0.7%
56.8%	55.0	54.8	-0.1	-0.2%
58.0%	54.9	54.8	-0.1	-0.2%
59.3%	54.9	54.8	-0.1	-0.2%
60.5%	54.9	54.7	-0.1	-0.3%
61.7%	54.9	54.7	-0.2	-0.3%
63.0%	54.8	54.7	-0.1	-0.2%
64.2%	54.8	54.7	-0.1	-0.2%
65.4%	54.8	54.7	-0.1	-0.2%
66.7%	54.8	54.6	-0.1	-0.3%
67.9%	54.8	54.6	-0.2	-0.3%
69.1%	54.7	54.6	-0.2	-0.3%
70.4%	54.7	54.6	-0.2	-0.3%
71.6%	54.7	54.5	-0.2	-0.3%
72.8%	54.7	54.5	-0.2	-0.3%
74.1%	54.7	54.5	-0.1	-0.3%
75.3%	54.6	54.5	-0.1	-0.3%
76.5%	54.6	54.4	-0.2	-0.4%
77.8%	54.6	54.4	-0.2	-0.4%
79.0%	54.5	54.4	-0.1	-0.2%
80.2%	54.5	54.4	-0.1	-0.2%
81.5%	54.4	54.4	-0.1	-0.1%
82.7%	54.4	54.3	-0.1	-0.2%
84.0%	54.3	54.1	-0.2	-0.3%
85.2%	54.2	54.1	-0.1	-0.2%
86.4%	54.2	54.1	-0.1	-0.3%
87.7%	54.1	54.0	-0.2	-0.3%
88.9%	53.9	54.0	0.0	0.0%
90.1%	53.9	53.8	-0.1	-0.3%
91.4%	53.9	53.7	-0.2	-0.4%
92.6%	53.7	53.6	-0.1	-0.2%
93.8%	53.7	53.5	-0.2	-0.3%
95.1%	53.6	53.4	-0.2	-0.3%
96.3%	53.6	53.2	-0.3	-0.6%
97.5%	53.4	53.2	-0.2	-0.4%
98.8%	53.3	53.0	-0.4	-0.7%
100.0%	53.1	52.8	-0.3	-0.6%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.5	61.7	-3.8	-5.8%
1.2%	62.9	60.3	-2.6	-4.1%
2.5%	62.3	60.3	-2.1	-3.3%
3.7%	60.4	58.1	-2.3	-3.8%
4.9%	60.0	58.0	-2.0	-3.4%
6.2%	60.0	58.0	-2.0	-3.3%
7.4%	59.9	57.8	-2.0	-3.4%
8.6%	59.6	57.8	-1.8	-3.0%
9.9%	59.0	57.7	-1.3	-2.2%
11.1%	59.0	57.6	-1.4	-2.4%
12.3%	58.5	57.5	-1.0	-1.7%
13.6%	58.3	57.5	-0.8	-1.4%
14.8%	58.0	57.4	-0.6	-1.1%
16.0%	58.0	57.3	-0.8	-1.3%
17.3%	57.9	57.2	-0.6	-1.1%
18.5%	57.8	57.2	-0.6	-1.1%
19.8%	57.8	57.2	-0.6	-1.1%
21.0%	57.7	57.2	-0.5	-0.9%
22.2%	57.6	57.1	-0.5	-0.8%
23.5%	57.6	56.8	-0.7	-1.3%
24.7%	57.4	56.7	-0.7	-1.3%
25.9%	57.4	56.7	-0.7	-1.3%
27.2%	57.3	56.5	-0.8	-1.3%
28.4%	57.2	56.5	-0.7	-1.3%
29.6%	57.2	56.4	-0.7	-1.3%
30.9%	57.1	56.4	-0.8	-1.3%
32.1%	57.1	56.3	-0.8	-1.4%
33.3%	57.0	56.2	-0.8	-1.4%
34.6%	56.9	56.1	-0.7	-1.3%
35.8%	56.7	56.1	-0.6	-1.1%
37.0%	56.6	56.0	-0.6	-1.0%
38.3%	56.5	56.0	-0.5	-0.9%
39.5%	56.5	56.0	-0.5	-0.8%
40.7%	56.5	55.9	-0.6	-1.0%
42.0%	56.5	55.9	-0.6	-1.0%
43.2%	56.5	55.7	-0.7	-1.3%
44.4%	56.5	55.6	-0.9	-1.6%
45.7%	56.4	55.6	-0.8	-1.4%
46.9%	56.1	55.5	-0.6	-1.1%
48.1%	56.1	55.5	-0.6	-1.1%
49.4%	55.8	55.5	-0.3	-0.5%
50.6%	55.7	55.3	-0.4	-0.8%
51.9%	55.7	55.3	-0.4	-0.8%
53.1%	55.6	55.3	-0.4	-0.6%
54.3%	55.6	55.2	-0.4	-0.7%
55.6%	55.5	55.2	-0.3	-0.5%
56.8%	55.4	55.2	-0.2	-0.4%
58.0%	55.4	55.1	-0.2	-0.4%
59.3%	55.3	55.1	-0.2	-0.3%
60.5%	55.2	55.1	-0.2	-0.3%
61.7%	55.2	55.1	-0.2	-0.3%
63.0%	55.2	55.0	-0.2	-0.3%
64.2%	55.2	55.0	-0.2	-0.4%
65.4%	55.1	54.7	-0.4	-0.7%
66.7%	55.1	54.7	-0.4	-0.7%
67.9%	55.0	54.6	-0.4	-0.7%
69.1%	55.0	54.6	-0.4	-0.7%
70.4%	55.0	54.6	-0.4	-0.7%
71.6%	54.9	54.6	-0.3	-0.6%
72.8%	54.9	54.5	-0.4	-0.7%
74.1%	54.6	54.5	-0.1	-0.2%
75.3%	54.5	54.4	-0.1	-0.3%
76.5%	54.5	54.3	-0.1	-0.2%
77.8%	54.4	54.3	-0.1	-0.2%
79.0%	54.4	54.3	-0.1	-0.1%
80.2%	54.3	54.2	-0.2	-0.3%
81.5%	54.3	54.2	-0.2	-0.3%
82.7%	54.2	54.1	-0.1	-0.2%
84.0%	54.2	54.1	-0.1	-0.2%
85.2%	54.2	54.1	0.0	-0.1%
86.4%	54.1	54.1	0.0	-0.1%
87.7%	54.0	54.0	0.0	0.0%
88.9%	54.0	54.0	0.0	0.0%
90.1%	54.0	53.8	-0.2	-0.4%
91.4%	54.0	53.4	-0.5	-1.0%
92.6%	53.9	53.4	-0.5	-1.0%
93.8%	53.5	53.4	-0.2	-0.3%
95.1%	53.4	53.3	-0.1	-0.3%
96.3%	53.4	53.2	-0.2	-0.4%
97.5%	53.2	52.9	-0.3	-0.5%
98.8%	53.1	52.7	-0.4	-0.8%
100.0%	52.9	52.3	-0.6	-1.2%

Figure SQ6-1b
Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

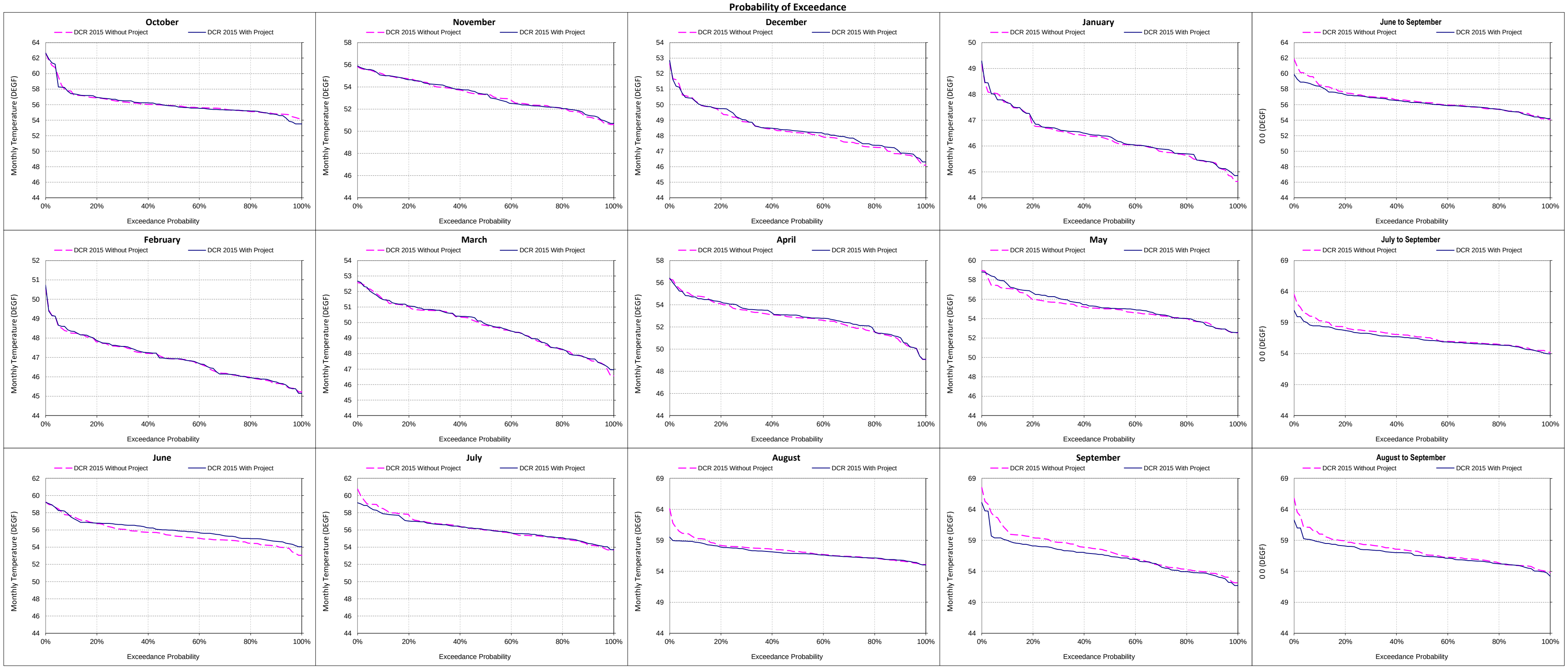


Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.6	62.7	0.0	0.0%
1.2%	61.7	61.9	0.2	0.3%
2.5%	61.1	61.4	0.3	0.6%
3.7%	60.8	61.2	0.4	0.7%
4.9%	59.6	58.3	-1.4	-2.3%
6.2%	58.5	58.2	-0.3	-0.5%
7.4%	58.0	58.2	0.2	0.4%
8.6%	57.8	57.7	-0.1	-0.1%
9.9%	57.8	57.4	-0.3	-0.6%
11.1%	57.2	57.4	0.2	0.3%
12.3%	57.2	57.3	0.1	0.2%
13.6%	57.2	57.2	0.0	0.0%
14.8%	57.2	57.2	0.0	0.1%
16.0%	57.1	57.2	0.1	0.2%
17.3%	57.0	57.2	0.2	0.4%
18.5%	56.9	57.1	0.2	0.4%
19.8%	56.9	56.9	0.0	0.1%
21.0%	56.8	56.9	0.1	0.1%
22.2%	56.8	56.8	0.0	0.0%
23.5%	56.7	56.8	0.1	0.1%
24.7%	56.7	56.8	0.1	0.2%
25.9%	56.6	56.7	0.1	0.3%
27.2%	56.5	56.7	0.2	0.4%
28.4%	56.4	56.6	0.1	0.2%
29.6%	56.4	56.5	0.2	0.3%
30.9%	56.3	56.5	0.2	0.3%
32.1%	56.3	56.5	0.2	0.3%
33.3%	56.2	56.5	0.3	0.5%
34.6%	56.2	56.3	0.1	0.2%
35.8%	56.2	56.3	0.1	0.1%
37.0%	56.1	56.2	0.1	0.3%
38.3%	56.1	56.2	0.2	0.3%
39.5%	56.0	56.2	0.2	0.4%
40.7%	56.0	56.2	0.2	0.3%
42.0%	56.0	56.2	0.2	0.3%
43.2%	56.0	56.1	0.1	0.2%
44.4%	56.0	56.1	0.1	0.2%
45.7%	56.0	56.0	0.0	0.0%
46.9%	56.0	55.9	0.0	-0.1%
48.1%	55.9	55.9	0.0	0.0%
49.4%	55.9	55.8	-0.1	-0.1%
50.6%	55.8	55.8	0.0	0.0%
51.9%	55.8	55.7	-0.1	-0.2%
53.1%	55.8	55.7	-0.1	-0.2%
54.3%	55.7	55.6	-0.1	-0.2%
55.6%	55.7	55.6	-0.1	-0.1%
56.8%	55.7	55.5	-0.1	-0.2%
58.0%	55.7	55.5	-0.1	-0.2%
59.3%	55.6	55.5	-0.1	-0.1%
60.5%	55.6	55.5	-0.1	-0.1%
61.7%	55.6	55.5	-0.1	-0.2%
63.0%	55.6	55.4	-0.1	-0.3%
64.2%	55.6	55.4	-0.2	-0.3%
65.4%	55.6	55.4	-0.2	-0.3%
66.7%	55.6	55.4	-0.2	-0.3%
67.9%	55.5	55.3	-0.2	-0.3%
69.1%	55.5	55.3	-0.2	-0.3%
70.4%	55.4	55.3	-0.1	-0.1%
71.6%	55.3	55.3	0.0	0.0%
72.8%	55.3	55.3	0.0	0.0%
74.1%	55.3	55.3	0.0	0.0%
75.3%	55.3	55.3	0.0	0.0%
76.5%	55.2	55.2	0.0	0.0%
77.8%	55.2	55.2	0.0	0.1%
79.0%	55.1	55.2	0.1	0.1%
80.2%	55.1	55.2	0.1	0.1%
81.5%	55.1	55.2	0.1	0.1%
82.7%	55.0	55.1	0.1	0.2%
84.0%	55.0	55.0	0.0	0.0%
85.2%	55.0	55.0	0.0	0.0%
86.4%	54.9	54.9	0.0	0.0%
87.7%	54.9	54.8	-0.1	-0.2%
88.9%	54.8	54.8	0.0	0.0%
90.1%	54.8	54.7	-0.1	-0.1%
91.4%	54.8	54.6	-0.2	-0.3%
92.6%	54.8	54.6	-0.2	-0.3%
93.8%	54.8	54.3	-0.5	-0.8%
95.1%	54.7	53.9	-0.9	-1.6%
96.3%	54.5	53.8	-0.7	-1.3%
97.5%	54.3	53.5	-0.8	-1.5%
98.8%	54.2	53.5	-0.7	-1.3%
100.0%	54.2	53.5	0.0	-1.3%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.8	55.9	0.1	0.1%
1.2%	55.7	55.7	0.1	0.1%
2.5%	55.6	55.6	0.1	0.1%
3.7%	55.5	55.6	0.0	0.0%
4.9%	55.5	55.6	0.0	0.1%
6.2%	55.4	55.5	0.1	0.1%
7.4%	55.3	55.3	0.0	0.0%
8.6%	55.3	55.1	-0.2	-0.3%
9.9%	55.2	55.0	-0.1	-0.3%
11.1%	55.0	55.0	0.0	0.1%
12.3%	55.0	55.0	0.0	0.1%
13.6%	54.9	55.0	0.0	0.0%
14.8%	54.9	54.9	0.0	0.1%
16.0%	54.8	54.9	0.1	0.1%
17.3%	54.8	54.8	0.0	0.1%
18.5%	54.8	54.7	-0.1	-0.1%
19.8%	54.7	54.7	-0.1	-0.1%
21.0%	54.7	54.7	-0.1	-0.1%
22.2%	54.6	54.6	-0.1	-0.1%
23.5%	54.5	54.6	0.0	0.1%
24.7%	54.5	54.5	0.0	0.1%
25.9%	54.4	54.4	-0.1	-0.1%
27.2%	54.4	54.3	-0.1	-0.2%
28.4%	54.1	54.3	0.1	0.2%
29.6%	54.1	54.2	0.1	0.2%
30.9%	54.0	54.2	0.2	0.4%
32.1%	54.0	54.2	0.2	0.4%
33.3%	54.0	54.2	0.2	0.4%
34.6%	53.9	54.0	0.1	0.2%
35.8%	53.9	54.0	0.1	0.1%
37.0%	53.9	53.9	0.0	0.0%
38.3%	53.8	53.8	0.0	0.1%
39.5%	53.7	53.8	0.1	0.1%
40.7%	53.7	53.8	0.1	0.1%
42.0%	53.6	53.7	0.1	0.2%
43.2%	53.5	53.7	0.2	0.4%
44.4%	53.4	53.6	0.2	0.4%
45.7%	53.4	53.6	0.2	0.4%
46.9%	53.4	53.5	0.1	0.2%
48.1%	53.3	53.4	0.1	0.1%
49.4%	53.3	53.4	0.0	0.0%
50.6%	53.3	53.3	0.1	0.1%
51.9%	53.3	53.0	-0.3	-0.5%
53.1%	53.1	53.0	-0.1	-0.3%
54.3%	53.0	52.9	-0.1	-0.2%
55.6%	53.0	52.8	-0.2	-0.3%
56.8%	53.0	52.7	-0.2	-0.4%
58.0%	52.9	52.7	-0.3	-0.5%
59.3%	52.9	52.5	-0.4	-0.8%
60.5%	52.7	52.5	-0.2	-0.4%
61.7%	52.5	52.5	-0.1	-0.1%
63.0%	52.5	52.5	-0.1	-0.1%
64.2%	52.5	52.4	-0.1	-0.2%
65.4%	52.5	52.4	-0.1	-0.2%
66.7%	52.4	52.4	-0.1	-0.1%
67.9%	52.4	52.3	-0.1	-0.1%
69.1%	52.4	52.3	-0.1	-0.1%
70.4%	52.3	52.3	-0.1	-0.1%
71.6%	52.3	52.3	-0.1	-0.1%
72.8%	52.3	52.2	-0.1	-0.2%
74.1%	52.3	52.2	-0.1	-0.2%
75.3%	52.2	52.2	0.0	0.0%
76.5%	52.2	52.2	0.0	0.0%
77.8%	52.1	52.1	0.0	0.0%
79.0%	52.1	52.1	0.0	0.0%
80.2%	52.0	52.0	0.1	0.1%
81.5%	52.0	52.0	0.1	0.1%
82.7%	51.8	52.0	0.1	0.3%
84.0%	51.8	52.0	0.2	0.3%
85.2%	51.8	51.9	0.1	0.3%
86.4%	51.7	51.9	0.1	0.2%
87.7%	51.6	51.8	0.2	0.3%
88.9%	51.3	51.5	0.2	0.4%
90.1%	51.3	51.4	0.2	0.3%
91.4%	51.2	51.4	0.2	0.3%
92.6%	51.1	51.4	0.2	0.5%
93.8%	51.1	51.3	0.2	0.3%
95.1%	51.0	51.0	0.1	0.1%
96.3%	50.7	51.0	0.2	0.5%
97.5%	50.7	50.8	0.1	0.2%
98.8%	50.6	50.7	0.1	0.2%
100.0%	50.6	50.7	0.1	0.2%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.6	52.8	0.2	0.4%
1.2%	51.7	51.6	0.0	-0.1%
2.5%	51.6	51.2	-0.4	-0.8%
3.7%	51.3	51.1	-0.2	-0.4%
4.9%	50.6	50.7	0.1	0.2%
6.2%	50.6	50.5	-0.1	-0.2%
7.4%	50.5	50.4	-0.1	-0.2%
8.6%	50.5	50.4	0.0	-0.1%
9.9%	50.2	50.2	0.0	0.0%
11.1%	50.1	50.1	-0.1	-0.1%
12.3%	49.9	50.0	0.0	0.0%
13.6%	49.9	49.9	0.0	0.0%
14.8%	49.9	49.9	0.0	0.0%
16.0%	49.8	49.9	0.0	0.1%
17.3%	49.8	49.8	0.0	-0.1%
18.5%	49.7	49.8	0.0	0.1%
19.8%	49.5	49.8	0.2	0.4%
21.0%	49.4	49.8	0.4	0.8%
22.2%	49.3	49.7	0.4	0.8%
23.5%	49.3	49.6	0.3	0.6%
24.7%	49.2	49.5	0.3	0.5%
25.9%	49.2	49.2	0.0	0.1%
27.2%	49.1	49.1	0.1	0.1%
28.4%	48.9	49.0	0.1	0.3%
29.6%	48.9	49.0	0.1	0.3%
30.9%	48.9	48.9	0.0	0.0%
32.1%	48.8	48.9	0.0	0.1%
33.3%	48.6	48.6	0.0	0.0%
34.6%	48.6	48.6	0.0	0.0%
35.8%	48.5	48.5	0.0	-0.1%
37.0%	48.5	48.5	0.0	0.0%
38.3%	48.4	48.5	0.1	0.1%
39.5%	48.4	48.5	0.0	0.1%
40.7%	48.4	48.5	0.1	0.1%
42.0%	48.3	48.4	0.1	0.2%
43.2%	48.3	48.4	0.1	0.2%
44.4%	48.3	48.4	0.1	0.2%
45.7%	48.3	48.4	0.1	0.2%
46.9%	48.3	48.4	0.1	0.2%
48.1%	48.2	48.3	0.1	0.3%
49.4%	48.2	48.3	0.1	0.3%
50.6%	48.2	48.3	0.1	0.2%
51.9%	48.2	48.3	0.1	0.2%
53.1%	48.2	48.2	0.1	0.2%
54.3%	48.2	48.2	0.1	0.1%
55.6%	48.1	48.2	0.1	0.3%
56.8%	48.1	48.2	0.2	0.3%
58.0%	48.0	48.2	0.2	0.3%
59.3%	48.0	48.2	0.2	0.5%
60.5%	47.9	48.1	0.2	0.4%
61.7%	47.9	48.1	0.2	0.4%
63.0%	47.9	48.0	0.2	0.3%
64.2%	47.9	48.0	0.2	0.4%
65.4%	47.8	48.0	0.2	0.3%
66.7%	47.7	47.9	0.3	0.6%
67.9%	47.6	47.9	0.3	0.7%
69.1%	47.6	47.9	0.3	0.6%
70.4%	47.6	47.9	0.3	0.6%
71.6%	47.6	47.8	0.3	0.6%
72.8%	47.5	47.7	0.2	0.5%
74.1%	47.5	47.6	0.1	0.3%
75.3%	47.3	47.5	0.2	0.4%
76.5%	47.3	47.5	0.2	0.4%
77.8%	47.3	47.5	0.2	0.4%
79.0%	47.3	47.4	0.1	0.3%
80.2%	47.3	47.4	0.1	0.3%
81.5%	47.2	47.4	0.1	0.3%
82.7%	47.2	47.4	0.1	0.3%
84.0%	47.2	47.3	0.1	0.1%
85.2%	47.0	47.3	0.3	0.6%
86.4%	47.0	47.2	0.3	0.6%
87.7%	46.8	47.2	0.4	0.8%
88.9%	46.8	47.1	0.2	0.5%
90.1%	46.8	46.9	0.0	0.1%
91.4%	46.8	46.9	0.1	0.2%
92.6%	46.8	46.9	0.1	0.2%
93.8%	46.7	46.8	0.1	0.2%
95.1%	46.7	46.8	0.2	0.3%
96.3%	46.6	46.6	0.0	0.0%
97.5%	46.3	46.5	0.2	0.4%
98.8%	46.1	46.3	0.2	0.4%
100.0%	46.1	46.3	0.2	0.4%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.2	49.3	0.1	0.3%
1.2%	48.4	48.5	0.0	0.0%
2.5%	48.1	48.4	0.4	0.7%
3.7%	48.1	48.0	0.0	-0.1%
4.9%	48.0	48.0	0.0	-0.1%
6.2%	48.0	47.8	-0.2	-0.5%
7.4%	47.9	47.8	-0.1	-0.3%
8.6%	47.7	47.8	0.1	0.1%
9.9%	47.7	47.7	0.0	0.0%
11.1%	47.6	47.6	0.0	0.1%
12.3%	47.5	47.5	0.0	0.1%
13.6%	47.5	47.5	0.0	0.0%
14.8%	47.5	47.5	0.0	0.1%
16.0%	47.4	47.3	0.0	-0.1%
17.3%	47.3	47.3	0.0	0.0%
18.5%	47.2	47.3	0.0	0.0%
19.8%	46.8	47.0	0.2	0.4%
21.0%	46.8	46.8	0.1	0.2%
22.2%	46.8	46.8	0.1	0.2%
23.5%	46.7	46.7	0.0	0.0%
24.7%	46.7	46.7	0.0	0.0%
25.9%	46.7	46.7	0.0	0.1%
27.2%	46.7	46.7	0.0	0.1%
28.4%	46.6	46.7	0.1	0.2%
29.6%	46.6	46.7	0.1	0.2%
30.9%	46.6	46.6	0.0	0.1%
32.1%	46.5	46.6	0.1	0.1%
33.3%	46.5	46.6	0.0	0.1%
34.6%	46.5	46.6	0.1	0.1%
35.8%	46.5	46.6	0.1	0.2%
37.0%	46.4	46.6	0.1	0.2%
38.3%	46.4	46.5	0.1	0.2%
39.5%	46.4	46.5	0.1	0.2%
40.7%	46.4	46.5	0.1	0.2%
42.0%	46.4	46.4	0.1	0.1%
43.2%	46.4	46.4	0.1	0.1%
44.4%	46.4	46.4	0.1	0.1%
45.7%	46.4	46.4	0.1	0.1%
46.9%	46.3	46.4	0.1	0.1%
48.1%	46.3	46.4	0.1	0.2%
49.4%	46.3	46.4	0.1	0.3%
50.6%	46.2	46.3	0.1	0.2%
51.9%	46.1	46.3	0.1	0.2%
53.1%	46.1	46.2	0.1	0.2%
54.3%	46.1	46.2	0.1	0.2%
55.6%	46.1	46.1	0.0	0.1%
56.8%	46.1	46.1	0.0	0.0%
58.0%	46.0	46.1	0.0	0.0%
59.3%	46.0	46.1	0.0	0.0%
60.5%	46.0	46.0	0.0	0.0%
61.7%	46.0	46.0	0.0	0.0%
63.0%	46.0	46.0	0.0	0.0%
64.2%	46.0	46.0	0.0	0.0%
65.4%	45.9	46.0	0.0	0.1%
66.7%	45.9	45.9	0.0	0.0%
67.9%	45.9	45.9	0.0	0.0%
69.1%	45.8	45.9	0.1	0.2%
70.4%	45.8	45.9	0.1	0.2%
71.6%	45.8	45.9	0.1	0.2%
72.8%	45.8	45.9	0.1	0.2%
74.1%	45.7	45.8	0.1	0.2%
75.3%	45.7	45.7	0.0	0.0%
76.5%	45.7	45.7	0.0	0.1%
77.8%	45.7	45.7	0.0	0.0%
79.0%	45.7	45.7	0.1	0.1%
80.2%	45.6	45.7	0.0	0.1%
81.5%	45.6	45.7	0.1	0.2%
82.7%	45.5	45.7	0.2	0.4%
84.0%	45.5	45.5	0.0	0.0%
85.2%	45.4	45.4	0.0	0.0%
86.4%	45.4	45.4	0.0	0.0%
87.7%	45.4	45.4	0.0	0.0%
88.9%	45.4	45.4	0.0	0.0%
90.1%	45.4	45.4	0.0	0.0%
91.4%	45.3	45.3	0.0	-0.1%
92.6%	45.2	45.2	0.0	0.0%
93.8%	45.1	45.1	0.0	0.0%
95.1%	45.1	45.1	0.1	0.1%
96.3%	44.9	45.1	0.2	0.4%
97.5%	44.8	45.0	0.1	0.3%
98.8%	44.6	44.9	0.2	0.5%
100.0%	44.6	44.9	0.2	0.5%

Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.6	50.7	0.1	0.3%
1.2%	49.4	49.4	0.0	-0.1%
2.5%	49.2	49.2	0.0	0.0%
3.7%	49.1	49.1	0.0	0.0%
4.9%	48.6	48.7	0.1	0.1%
6.2%	48.5	48.6	0.1	0.2%
7.4%	48.4	48.6	0.2	0.5%
8.6%	48.3	48.4	0.1	0.2%
9.9%	48.3	48.3	0.1	0.2%
11.1%	48.3	48.3	0.1	0.2%
12.3%	48.2	48.2	0.0	0.0%
13.6%	48.2	48.2	0.0	0.0%
14.8%	48.2	48.2	0.0	0.0%
16.0%	48.1	48.1	0.1	0.2%
17.3%	48.1	48.1	0.0	0.0%
18.5%	48.0	48.0	0.0	0.0%
19.8%	47.8	47.9	0.1	0.2%
21.0%	47.8	47.8	0.0	0.0%
22.2%	47.7	47.7	0.0	0.0%
23.5%	47.7	47.7	0.0	0.0%
24.7%	47.6	47.7	0.1	0.2%
25.9%	47.6	47.6	0.0	0.1%
27.2%	47.6	47.6	0.0	0.1%
28.4%	47.6	47.6	0.0	0.1%
29.6%	47.6	47.6	0.0	0.0%
30.9%	47.5	47.6	0.0	0.0%
32.1%	47.5	47.5	0.1	0.2%
33.3%	47.4	47.5	0.0	0.1%
34.6%	47.3	47.4	0.1	0.2%
35.8%	47.3	47.3	0.1	0.2%
37.0%	47.3	47.3	0.1	0.1%
38.3%	47.2	47.3	0.0	0.0%
39.5%	47.2	47.3	0.0	0.1%
40.7%	47.2	47.2	0.0	0.1%
42.0%	47.2	47.2	0.0	0.1%
43.2%	47.2	47.2	0.0	0.1%
44.4%	47.1	47.0	-0.1	-0.2%
45.7%	47.0	47.0	0.0	-0.1%
46.9%	47.0	46.9	0.0	-0.1%
48.1%	46.9	46.9	0.0	0.0%
49.4%	46.9	46.9	0.0	0.0%
50.6%	46.9	46.9	0.0	0.0%
51.9%	46.9	46.9	0.0	0.0%
53.1%	46.9	46.9	0.0	0.1%
54.3%	46.9	46.9	0.0	-0.1%
55.6%	46.8	46.8	0.0	0.0%
56.8%	46.8	46.8	0.0	0.0%
58.0%	46.8	46.8	0.0	0.0%
59.3%	46.7	46.7	0.1	0.1%
60.5%	46.7	46.7	0.0	0.0%
61.7%	46.6	46.6	0.1	0.1%
63.0%	46.5	46.5	0.0	0.0%
64.2%	46.4	46.5	0.1	0.2%
65.4%	46.3	46.4	0.1	0.3%
66.7%	46.3	46.3	0.0	0.0%
67.9%	46.2	46.2	0.0	-0.1%
69.1%	46.2	46.2	0.0	-0.1%
70.4%	46.2	46.1	0.0	-0.1%
71.6%	46.1	46.1	0.0	0.0%
72.8%	46.1	46.1	0.0	0.0%
74.1%	46.1	46.1	0.0	0.1%
75.3%	46.1	46.0	0.0	-0.1%
76.5%	46.0	46.0	0.0	0.0%
77.8%	46.0	46.0	0.0	0.0%
79.0%	46.0	46.0	0.0	-0.1%
80.2%	46.0	45.9	0.0	0.0%
81.5%	45.9	45.9	0.0	0.0%
82.7%	45.9	45.9	0.0	0.1%
84.0%	45.9	45.9	0.0	0.0%
85.2%	45.8	45.9	0.0	0.1%
86.4%	45.8	45.9	0.1	0.1%
87.7%	45.8	45.8	0.0	0.1%
88.9%	45.7	45.8	0.1	0.2%
90.1%	45.7	45.7	0.1	0.2%
91.4%	45.7	45.7	0.0	0.0%
92.6%	45.6	45.7	0.0	0.1%
93.8%	45.5	45.6	0.1	0.1%
95.1%	45.4	45.4	0.0	0.0%
96.3%	45.4	45.4	0.0	-0.1%
97.5%	45.4	45.4	0.0	0.0%
98.8%	45.2	45.2	-0.1	-0.2%
100.0%	45.2	45.2	-0.1	-0.2%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.6	52.7	0.1	0.2%
1.2%	52.5	52.6	0.1	0.1%
2.5%	52.4	52.3	-0.1	-0.2%
3.7%	52.2	52.3	0.1	0.2%
4.9%	52.2	52.0	-0.1	-0.3%
6.2%	52.0	51.9	-0.1	-0.3%
7.4%	51.9	51.8	-0.1	-0.2%
8.6%	51.7	51.6	-0.1	-0.2%
9.9%	51.5	51.5	0.0	0.0%
11.1%	51.5	51.4	0.0	-0.1%
12.3%	51.2	51.4	0.2	0.4%
13.6%	51.2	51.3	0.1	0.1%
14.8%	51.2	51.2	0.0	0.1%
16.0%	51.2	51.2	0.0	0.0%
17.3%	51.1	51.2	0.0	0.1%
18.5%	51.1	51.2	0.1	0.3%
19.8%	51.0	51.1	0.0	0.0%
21.0%	50.9	51.0	0.2	0.3%
22.2%	50.8	51.0	0.2	0.4%
23.5%	50.8	50.9	0.1	0.2%
24.7%	50.8	50.9	0.1	0.2%
25.9%	50.8	50.8	0.1	0.1%
27.2%	50.8	50.8	0.1	0.1%
28.4%	50.8	50.8	0.1	0.1%
29.6%	50.8	50.8	0.0	0.1%
30.9%	50.8	50.8	0.0	0.0%
32.1%	50.8	50.8	0.0	0.0%
33.3%	50.7	50.7	0.0	0.0%
34.6%	50.7	50.6	-0.1	-0.1%
35.8%	50.6	50.6	0.0	0.0%
37.0%	50.6	50.6	0.0	0.0%
38.3%	50.4	50.4	0.0	0.1%
39.5%	50.3	50.4	0.1	0.1%
40.7%	50.3	50.4	0.1	0.1%
42.0%	50.3	50.4	0.1	0.1%
43.2%	50.3	50.4	0.1	0.1%
44.4%	50.2	50.4	0.2	0.3%
45.7%	50.1	50.3	0.2	0.4%
46.9%	50.0	50.1	0.1	0.1%
48.1%	49.9	50.1	0.2	0.5%
49.4%	49.8	50.0	0.1	0.3%
50.6%	49.8	49.9	0.0	0.1%
51.9%	49.7	49.8	0.1	0.1%
53.1%	49.7	49.7	0.0	0.1%
54.3%	49.7	49.7	0.0	0.0%
55.6%	49.6	49.7	0.1	0.1%
56.8%	49.5	49.6	0.1	0.2%
58.0%	49.5	49.6	0.1	0.1%
59.3%	49.5	49.5	0.0	0.0%
60.5%	49.4	49.4	0.0	0.1%
61.7%	49.4	49.4	0.0	0.0%
63.0%	49.4	49.4	0.0	0.0%
64.2%	49.3	49.3	0.0	0.0%
65.4%	49.2	49.2	0.0	0.0%
66.7%	49.1	49.1	0.0	-0.1%
67.9%	49.0	49.0	0.0	0.0%
69.1%	48.9	49.0	0.0	0.1%
70.4%	48.8	48.9	0.1	0.3%
71.6%	48.8	48.7	0.0	-0.1%
72.8%	48.6	48.7	0.1	0.3%
74.1%	48.5	48.6	0.1	0.2%
75.3%	48.4	48.4	0.0	0.0%
76.5%	48.4	48.4	0.0	0.0%
77.8%	48.4	48.4	0.0	-0.1%
79.0%	48.3	48.3	0.1	0.1%
80.2%	48.3	48.3	0.0	0.0%
81.5%	48.2	48.2	0.0	0.0%
82.7%	48.1	48.0	-0.2	-0.3%
84.0%	47.9	47.9	0.0	0.0%
85.2%	47.9	47.9	0.0	0.0%
86.4%	47.9	47.9	0.0	0.0%
87.7%	47.8	47.8	0.0	-0.1%
88.9%	47.7	47.8	0.1	0.2%
90.1%	47.7	47.7	0.0	0.0%
91.4%	47.5	47.7	0.1	0.3%
92.6%	47.5	47.7	0.1	0.3%
93.8%	47.4	47.4	0.0	0.0%
95.1%	47.4	47.4	0.0	-0.1%
96.3%	47.3	47.3	0.0	0.0%
97.5%	47.0	47.1	0.2	0.4%
98.8%	46.6	47.0	0.4	0.8%
100.0%	46.6	47.0	0.4	0.8%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.3	56.4	0.1	0.2%
1.2%	56.2	56.0	-0.3	-0.5%
2.5%	55.8	55.6	-0.1	-0.3%
3.7%	55.5	55.2	-0.2	-0.4%
4.9%	55.2	55.2	0.0	-0.1%
6.2%	55.2	54.8	-0.3	-0.6%
7.4%	55.1	54.8	-0.3	-0.5%
8.6%	54.8	54.7	-0.1	-0.2%
9.9%	54.8	54.7	-0.1	-0.1%
11.1%	54.8	54.6	-0.2	-0.4%
12.3%	54.7	54.5	-0.2	-0.4%
13.6%	54.7	54.5	-0.2	-0.4%
14.8%	54.6	54.5	-0.1	-0.2%
16.0%	54.4	54.4	0.1	0.1%
17.3%	54.2	54.3	0.1	0.2%
18.5%	54.1	54.3	0.2	0.4%
19.8%	54.1	54.3	0.2	0.3%
21.0%	54.0	54.1	0.1	0.3%
22.2%	54.0	54.1	0.1	0.3%
23.5%	53.9	54.1	0.1	0.3%
24.7%	53.7	54.1	0.4	0.7%
25.9%	53.6	54.0	0.4	0.7%
27.2%	53.6	53.9	0.3	0.5%
28.4%	53.5	53.7	0.2	0.3%
29.6%	53.5	53.6	0.1	0.2%
30.9%	53.4	53.6	0.2	0.3%
32.1%	53.4	53.6	0.2	0.4%
33.3%	53.3	53.6	0.3	0.5%
34.6%	53.3	53.5	0.2	0.4%
35.8%	53.3	53.5	0.3	0.5%
37.0%	53.2	53.5	0.3	0.6%
38.3%	53.2	53.5	0.4	0.7%
39.5%	53.1	53.3	0.2	0.4%
40.7%	53.1	53.1	0.0	0.0%
42.0%	53.1	53.1	0.1	0.1%
43.2%	53.0	53.1	0.0	0.1%
44.4%	53.0	53.1	0.1	0.1%
45.7%	52.9	53.1	0.2	0.3%
46.9%	52.9	53.1	0.2	0.3%
48.1%	52.9	53.1	0.2	0.3%
49.4%	52.8	53.1	0.2	0.4%
50.6%	52.8	53.0	0.2	0.4%
51.9%	52.8	52.9	0.1	0.2%
53.1%	52.8	52.9	0.1	0.2%
54.3%	52.8	52.9	0.1	0.1%
55.6%	52.8	52.8	0.0	0.1%
56.8%	52.8	52.8	0.0	0.1%
58.0%	52.6	52.8	0.2	0.3%
59.3%	52.6	52.8	0.2	0.3%
60.5%	52.6	52.8	0.2	0.4%
61.7%	52.5	52.8	0.2	0.4%
63.0%	52.5	52.7	0.2	0.3%
64.2%	52.5	52.6	0.1	0.3%
65.4%	52.4	52.6	0.2	0.4%
66.7%	52.3	52.5	0.2	0.4%
67.9%	52.2	52.4	0.2	0.3%
69.1%	52.1	52.4	0.3	0.5%
70.4%	52.0	52.4	0.4	0.7%
71.6%	52.0	52.3	0.3	0.6%
72.8%	51.9	52.2	0.4	0.7%
74.1%	51.9	52.1	0.3	0.5%
75.3%	51.9	52.1	0.3	0.5%
76.5%	51.7	52.1	0.4	0.7%
77.8%	51.7	52.1	0.4	0.8%
79.0%	51.6	52.0	0.3	0.6%
80.2%	51.5	51.5	0.0	-0.1%
81.5%	51.4	51.4	0.0	0.0%
82.7%	51.4	51.4	0.1	0.1%
84.0%	51.3	51.4	0.1	0.1%
85.2%	51.2	51.4	0.1	0.2%
86.4%	51.2	51.3	0.1	0.3%
87.7%	51.1	51.2	0.1	0.1%
88.9%	51.0	51.1	0.2	0.3%
90.1%	50.6	51.0	0.4	0.8%
91.4%	50.6	50.6	0.0	0.0%
92.6%	50.3	50.5	0.2	0.4%
93.8%	50.2	50.2	0.0	0.0%
95.1%	50.1	50.2	0.0	0.0%
96.3%	50.1	50.1	0.0	0.0%
97.5%	49.4	49.4	0.0	-0.1%
98.8%	49.1	49.1	0.0	0.0%
100.0%	49.1	49.1	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.0	58.8	-0.2	-0.3%
1.2%	58.9	58.8	-0.1	-0.2%
2.5%	58.1	58.6	0.5	0.8%
3.7%	57.4	58.4	1.0	1.7%
4.9%	57.4	58.3	0.9	1.5%
6.2%	57.4	58.0	0.6	1.0%
7.4%	57.2	57.9	0.7	1.3%
8.6%	57.1	57.9	0.8	1.3%
9.9%	57.1	57.6	0.5	0.8%
11.1%	57.1	57.2	0.1	0.3%
12.3%	57.1	57.2	0.1	0.2%
13.6%	57.0	57.1	0.0	0.0%
14.8%	56.7	57.0	0.3	0.5%
16.0%	56.7	56.9	0.3	0.5%
17.3%	56.5	56.9	0.4	0.6%
18.5%	56.3	56.9	0.6	1.1%
19.8%	56.0	56.7	0.7	1.3%
21.0%	56.0	56.5	0.5	1.0%
22.2%	55.9	56.5	0.6	1.0%
23.5%	55.9	56.4	0.5	1.0%
24.7%	55.8	56.4	0.6	1.1%
25.9%	55.7	56.3	0.6	1.0%
27.2%	55.7	56.3	0.6	1.0%
28.4%	55.7	56.3	0.6	1.0%
29.6%	55.6	56.1	0.5	0.9%
30.9%	55.6	56.0	0.4	0.7%
32.1%	55.5	56.0	0.4	0.7%
33.3%	55.5	55.9	0.4	0.7%
34.6%	55.5	55.8	0.3	0.5%
35.8%	55.5	55.7	0.3	0.5%
37.0%	55.3	55.7	0.4	0.7%
38.3%	55.3	55.7	0.4	0.7%
39.5%	55.2	55.5	0.2	0.4%
40.7%	55.2	55.4	0.3	0.5%
42.0%	55.1	55.3	0.2	0.4%
43.2%	55.1	55.3	0.2	0.4%
44.4%	55.1	55.3	0.2	0.3%
45.7%	55.0	55.2	0.2	0.3%
46.9%	55.0	55.1	0.1	0.1%
48.1%	55.0	55.1	0.1	0.2%
49.4%	55.0	55.1	0.1	0.2%
50.6%	55.0	55.1	0.1	0.1%
51.9%	55.0	55.0	0.0	0.1%
53.1%	54.9	55.0	0.1	0.2%
54.3%	54.9	55.0	0.1	0.2%
55.6%	54.8	55.0	0.2	0.3%
56.8%	54.7	55.0	0.3	0.6%
58.0%	54.7	55.0	0.3	0.6%
59.3%	54.6	55.0	0.3	0.6%
60.5%	54.6	54.9	0.3	0.5%
61.7%	54.6	54.9	0.3	0.6%
63.0%	54.5	54.8	0.3	0.6%
64.2%	54.5	54.8	0.3	0.6%
65.4%	54.5	54.7	0.2	0.4%
66.7%	54.4	54.6	0.2	0.4%
67.9%	54.4	54.5	0.1	0.2%
69.1%	54.4	54.4	0.1	0.1%
70.4%	54.3	54.4	0.1	0.2%
71.6%	54.3	54.4	0.1	0.2%
72.8%	54.2	54.3	0.1	0.1%
74.1%	54.1	54.2	0.1	0.1%
75.3%	54.1	54.1	0.0	-0.1%
76.5%	54.1	54.1	0.0	-0.1%
77.8%	54.0	54.0	0.0	0.0%
79.0%	54.0	54.0	0.0	0.0%
80.2%	54.0	54.0	0.0	0.0%
81.5%	53.8	54.0	0.2	0.3%
82.7%	53.7	53.9	0.1	0.2%
84.0%	53.7	53.7	0.0	0.0%
85.2%	53.7	53.7	0.0	0.0%
86.4%	53.7	53.6	0.0	0.0%
87.7%	53.6	53.3	-0.3	-0.5%
88.9%	53.5	53.2	-0.3	-0.5%
90.1%	53.2	53.2	-0.1	-0.1%
91.4%	53.0	53.0	0.0	0.0%
92.6%	53.0	53.0	0.0	0.0%
93.8%	52.9	52.9	0.0	0.1%
95.1%	52.9	52.9	0.0	0.1%
96.3%	52.7	52.7	0.0	0.0%
97.5%	52.6	52.6	0.0	0.1%
98.8%	52.5	52.6	0.0	0.0%
100.0%	52.5	52.6	0.0	0.0%

Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.3	59.2	0.0	0.0%
1.2%	59.0	59.1	0.1	0.2%
2.5%	58.9	58.9	0.0	0.0%
3.7%	58.6	58.6	0.0	0.0%
4.9%	58.5	58.3	-0.2	-0.3%
6.2%	58.1	58.3	0.1	0.2%
7.4%	57.8	58.2	0.4	0.7%
8.6%	57.7	57.9	0.1	0.2%
9.9%	57.7	57.5	-0.2	-0.3%
11.1%	57.5	57.3	-0.2	-0.4%
12.3%	57.3	57.1	-0.2	-0.4%
13.6%	57.2	56.9	-0.3	-0.5%
14.8%	57.1	56.9	-0.2	-0.3%
16.0%	57.1	56.9	-0.2	-0.3%
17.3%	56.9	56.9	-0.1	-0.1%
18.5%	56.8	56.8	0.0	0.0%
19.8%	56.7	56.8	0.1	0.1%
21.0%	56.7	56.8	0.0	0.1%
22.2%	56.7	56.8	0.1	0.2%
23.5%	56.4	56.8	0.3	0.6%
24.7%	56.4	56.8	0.4	0.7%
25.9%	56.3	56.7	0.4	0.8%
27.2%	56.2	56.7	0.5	0.8%
28.4%	56.1	56.7	0.5	0.9%
29.6%	56.1	56.6	0.6	1.0%
30.9%	56.1	56.6	0.5	0.9%
32.1%	56.0	56.6	0.5	1.0%
33.3%	55.9	56.6	0.7	1.2%
34.6%	55.9	56.5	0.7	1.2%
35.8%	55.9	56.5	0.6	1.1%
37.0%	55.8	56.5	0.7	1.2%
38.3%	55.8	56.4	0.6	1.2%
39.5%	55.7	56.3	0.5	1.0%
40.7%	55.7	56.2	0.5	0.9%
42.0%	55.7	56.2	0.5	0.9%
43.2%	55.7	56.1	0.4	0.6%
44.4%	55.7	56.0	0.4	0.7%
45.7%	55.6	56.0	0.4	0.8%
46.9%	55.4	56.0	0.6	1.0%
48.1%	55.4	56.0	0.6	1.1%
49.4%	55.4	56.0	0.6	1.1%
50.6%	55.3	56.0	0.7	1.2%
51.9%	55.3	55.9	0.7	1.2%
53.1%	55.2	55.9	0.6	1.1%
54.3%	55.2	55.8	0.7	1.2%
55.6%	55.1	55.8	0.7	1.2%
56.8%	55.1	55.8	0.7	1.3%
58.0%	55.1	55.8	0.7	1.3%
59.3%	55.1	55.8	0.7	1.3%
60.5%	55.0	55.6	0.6	1.2%
61.7%	54.9	55.6	0.7	1.2%
63.0%	54.9	55.6	0.7	1.2%
64.2%	54.9	55.6	0.7	1.2%
65.4%	54.9	55.5	0.7	1.2%
66.7%	54.9	55.5	0.6	1.1%
67.9%	54.9	55.5	0.6	1.1%
69.1%	54.8	55.4	0.5	1.0%
70.4%	54.8	55.3	0.5	0.8%
71.6%	54.8	55.3	0.4	0.8%
72.8%	54.8	55.3	0.5	0.9%
74.1%	54.8	55.2	0.5	0.8%
75.3%	54.7	55.1	0.4	0.7%
76.5%	54.6	55.0	0.4	0.7%
77.8%	54.6	55.0	0.4	0.7%
79.0%	54.5	55.0	0.5	1.0%
80.2%	54.4	55.0	0.6	1.0%
81.5%	54.4	55.0	0.6	1.0%
82.7%	54.4	55.0	0.6	1.0%
84.0%	54.3	55.0	0.7	1.3%
85.2%	54.3	54.9	0.6	1.2%
86.4%	54.2	54.8	0.6	1.1%
87.7%	54.2	54.8	0.6	1.0%
88.9%	54.2	54.7	0.5	1.0%
90.1%	54.1	54.7	0.5	1.0%
91.4%	54.0	54.6	0.6	1.2%
92.6%	54.0	54.6	0.6	1.2%
93.8%	53.9	54.5	0.6	1.1%
95.1%	53.9	54.4	0.5	1.0%
96.3%	53.4	54.3	0.9	1.7%
97.5%	53.3	54.2	0.9	1.7%
98.8%	53.1	54.1	1.0	1.9%
100.0%	53.1	54.1	1.0	1.9%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.8	59.2	-1.6	-2.6%
1.2%	60.0	59.0	-0.9	-1.6%
2.5%	59.5	58.9	-0.6	-1.0%
3.7%	59.0	58.9	-0.2	-0.3%
4.9%	59.0	58.6	-0.4	-0.7%
6.2%	59.0	58.4	-0.6	-1.0%
7.4%	59.0	58.3	-0.7	-1.2%
8.6%	58.6	58.1	-0.5	-0.8%
9.9%	58.5	57.9	-0.6	-1.0%
11.1%	58.3	57.8	-0.4	-0.8%
12.3%	58.0	57.8	-0.3	-0.5%
13.6%	58.0	57.8	-0.2	-0.4%
14.8%	58.0	57.7	-0.3	-0.4%
16.0%	57.9	57.7	-0.2	-0.4%
17.3%	57.9	57.4	-0.5	-0.8%
18.5%	57.8	57.1	-0.7	-1.3%
19.8%	57.8	57.0	-0.8	-1.4%
21.0%	57.3	57.0	-0.3	-0.5%
22.2%	57.1	57.0	-0.1	-0.2%
23.5%	57.1	57.0	-0.1	-0.2%
24.7%	57.0	57.0	0.0	-0.1%
25.9%	57.0	56.9	0.0	-0.1%
27.2%	56.9	56.8	-0.1	-0.2%
28.4%	56.8	56.8	-0.1	-0.1%
29.6%	56.8	56.7	-0.1	-0.2%
30.9%	56.7	56.7	0.0	-0.1%
32.1%	56.7	56.6	-0.1	-0.1%
33.3%	56.7	56.6	-0.1	-0.1%
34.6%	56.7	56.6	0.0	-0.1%
35.8%	56.6	56.5	-0.1	-0.2%
37.0%	56.6	56.5	-0.1	-0.2%
38.3%	56.5	56.4	-0.1	-0.2%
39.5%	56.4	56.4	0.1	0.1%
40.7%	56.4	56.3	0.0	0.0%
42.0%	56.3	56.3	0.0	-0.1%
43.2%	56.2	56.2	0.0	0.1%
44.4%	56.2	56.2	0.0	0.1%
45.7%	56.2	56.2	0.0	0.0%
46.9%	56.1	56.2	0.1	0.1%
48.1%	56.1	56.1	0.0	0.1%
49.4%	56.0	56.1	0.1	0.1%
50.6%	56.0	56.0	0.0	0.1%
51.9%	56.0	56.0	0.0	0.0%
53.1%	55.9	55.9	0.0	0.0%
54.3%	55.9	55.8	-0.1	-0.1%
55.6%	55.8	55.8	0.0	0.0%
56.8%	55.7	55.8	0.1	0.1%
58.0%	55.7	55.8	0.1	0.1%
59.3%	55.7	55.7	0.0	0.1%
60.5%	55.6	55.6	0.1	0.1%
61.7%	55.5	55.6	0.1	0.2%
63.0%	55.4	55.6	0.2	0.4%
64.2%	55.4	55.6	0.2	0.4%
65.4%	55.4	55.6	0.2	0.4%
66.7%	55.4	55.5	0.2	0.3%
67.9%	55.3	55.5	0.2	0.3%
69.1%	55.3	55.5	0.2	0.3%
70.4%	55.3	55.4	0.1	0.2%
71.6%	55.2	55.4	0.1	0.3%
72.8%	55.2	55.3	0.1	0.1%
74.1%	55.2	55.2	0.0	0.0%
75.3%	55.2	55.2	0.0	0.0%
76.5%	55.1	55.2	0.1	0.1%
77.8%	55.0	55.1	0.1	0.2%
79.0%	55.0	55.1	0.1	0.2%
80.2%	54.9	55.1	0.1	0.2%
81.5%	54.9	55.0	0.0	0.1%
82.7%	54.9	55.0	0.1	0.2%
84.0%	54.8	54.9	0.2	0.3%
85.2%	54.8	54.9	0.1	0.2%
86.4%	54.7	54.7	0.0	0.0%
87.7%	54.6	54.7	0.1	0.2%
88.9%	54.5	54.5	0.1	0.1%
90.1%	54.2	54.4	0.2	0.4%
91.4%	54.2	54.4	0.2	0.4%
92.6%	54.2	54.3	0.1	0.2%
93.8%	54.1	54.2	0.1	0.1%
95.1%	54.1	54.1	0.1	0.1%
96.3%	53.9	54.1	0.2	0.4%
97.5%	53.7	54.0	0.4	0.7%
98.8%	53.7	53.7	0.0	0.1%
100.0%	53.7	53.7	0.0	0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.1	59.5	-4.6	-7.1%
1.2%	61.8	59.0	-2.8	-4.5%
2.5%	61.0	58.9	-2.1	-3.5%
3.7%	60.5	58.9	-1.6	-2.6%
4.9%	60.1	58.9	-1.3	-2.1%
6.2%	60.1	58.9	-1.2	-2.0%
7.4%	60.0	58.8	-1.2	-2.0%
8.6%	59.7	58.8	-0.8	-1.4%
9.9%	59.4	58.7	-0.7	-1.1%
11.1%	59.3	58.6	-0.6	-1.0%
12.3%	59.3	58.6	-0.7	-1.1%
13.6%	59.2	58.5	-0.7	-1.2%
14.8%	59.0	58.3	-0.7	-1.2%
16.0%	58.6	58.2	-0.4	-0.7%
17.3%	58.6	58.1	-0.4	-0.7%
18.5%	58.3	58.1	-0.2	-0.4%
19.8%	58.2	57.9	-0.3	-0.5%
21.0%	58.1	57.8	-0.3	-0.5%
22.2%	58.1	57.8	-0.2	-0.4%
23.5%	58.0	57.8	-0.2	-0.4%
24.7%	58.0	57.8	-0.2	-0.4%
25.9%	58.0	57.7	-0.2	-0.4%
27.2%	57.9	57.7	-0.3	-0.5%
28.4%	57.9	57.6	-0.3	-0.5%
29.6%	57.8	57.5	-0.3	-0.5%
30.9%	57.8	57.4	-0.4	-0.6%
32.1%	57.8	57.3	-0.4	-0.7%
33.3%	57.7	57.3	-0.4	-0.7%
34.6%	57.7	57.3	-0.4	-0.7%
35.8%	57.7	57.3	-0.4	-0.7%
37.0%	57.7	57.2	-0.4	-0.7%
38.3%	57.6	57.2	-0.4	-0.8%
39.5%	57.6	57.1	-0.4	-0.8%
40.7%	57.5	57.1	-0.4	-0.7%
42.0%	57.5	57.1	-0.4	-0.7%
43.2%	57.5	57.0	-0.4	-0.8%
44.4%	57.4	56.9	-0.5	-0.9%
45.7%	57.4	56.9	-0.4	-0.7%
46.9%	57.3	56.9	-0.4	-0.7%
48.1%	57.2	56.9	-0.3	-0.6%
49.4%	57.2	56.9	-0.3	-0.5%
50.6%	57.2	56.9	-0.3	-0.5%
51.9%	57.1	56.8	-0.2	-0.4%
53.1%	57.1	56.8	-0.2	-0.4%
54.3%	57.0	56.8	-0.1	-0.3%
55.6%	56.9	56.8	-0.1	-0.2%
56.8%	56.8	56.8	0.0	0.0%
58.0%	56.8	56.7	-0.1	-0.2%
59.3%	56.7	56.6	-0.1	-0.2%
60.5%	56.7	56.6	-0.1	-0.1%
61.7%	56.7	56.5	-0.1	-0.2%
63.0%	56.6	56.5	-0.1	-0.2%
64.2%	56.5	56.5	0.0	0.0%
65.4%	56.5	56.5	0.0	-0.1%
66.7%	56.5	56.4	-0.1	-0.1%
67.9%	56.4	56.4	0.0	-0.1%
69.1%	56.4	56.4	-0.1	-0.1%
70.4%	56.4	56.3	-0.1	-0.1%
71.6%	56.4	56.3	-0.1	-0.1%
72.8%	56.3	56.3	-0.1	-0.1%
74.1%	56.3	56.2	-0.1	-0.2%
75.3%	56.2	56.2	0.0	0.0%
76.5%	56.2	56.2	0.0	0.0%
77.8%	56.2	56.1	0.0	0.0%
79.0%	56.1	56.1	0.0	0.1%
80.2%	56.1	56.1	0.1	0.1%
81.5%	56.1	56.1	0.1	0.1%
82.7%	56.0	56.0	0.1	0.1%
84.0%	55.9	55.9	0.0	0.0%
85.2%	55.9	55.9	0.0	0.1%
86.4%	55.8	55.9	0.1	0.1%
87.7%	55.8	55.9	0.1	0.2%
88.9%	55.6	55.8	0.2	0.3%
90.1%	55.6	55.8	0.2	0.3%
91.4%	55.6	55.8	0.1	0.3%
92.6%	55.5	55.6	0.1	0.2%
93.8%	55.5	55.6	0.1	0.1%
95.1%	55.4	55.5	0.1	0.2%
96.3%	55.3	55.4	0.1	0.3%
97.5%	55.3	55.1	-0.1	-0.2%
98.8%	55.1	55.0	-0.1	-0.1%
100.0%	55.1	55.0	-0.1	-0.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.5	65.1	-2.4	-3.6%
1.2%	65.3	63.7	-1.5	-2.4%
2.5%	64.8	63.7	-1.1	-1.7%
3.7%	63.4	59.7	-3.8	-6.0%
4.9%	62.8	59.4	-3.4	-5.4%
6.2%	62.6	59.4	-3.3	-5.2%
7.4%	61.8	59.4	-2.4	-3.9%
8.6%	61.1	59.1	-2.0	-3.2%
9.9%	60.6	59.0	-1.6	-2.6%
11.1%	60.0	58.8	-1.2	-2.0%
12.3%	59.9	58.6	-1.3	-2.2%
13.6%	59.9	58.5	-1.3	-2.2%
14.8%	59.9	58.5	-1.4	-2.3%
16.0%	59.8	58.4	-1.4	-2.4%
17.3%	59.7	58.4	-1.3	-2.2%
18.5%	59.6	58.2	-1.4	-2.3%
19.8%	59.4	58.1	-1.3	-2.2%
21.0%	59.4	58.1	-1.3	-2.1%
22.2%	59.4	58.0	-1.4	-2.3%
23.5%	59.3	58.0	-1.3	-2.2%
24.7%	59.2	58.0	-1.3	-2.1%
25.9%	59.1	57.9	-1.2	-2.0%
27.2%	58.8	57.8	-1.0	-1.7%
28.4%	58.7	57.7	-1.1	-1.9%
29.6%	58.7	57.5	-1.2	-2.0%
30.9%	58.7	57.5	-1.2	-2.0%
32.1%	58.6	57.3	-1.3	-2.2%
33.3%	58.6	57.3	-1.2	-2.1%
34.6%	58.4	57.3	-1.1	-1.9%
35.8%	58.4	57.2	-1.1	-2.0%
37.0%	58.2	57.1	-1.1	-1.9%
38.3%	58.0	57.1	-0.9	-1.6%
39.5%	57.9	57.0	-0.9	-1.5%
40.7%	57.8	56.9	-0.9	-1.5%
42.0%	57.8	56.9	-0.9	-1.6%
43.2%	57.7	56.8	-0.9	-1.5%
44.4%	57.6	56.8	-0.8	-1.4%
45.7%	57.6	56.7	-0.8	-1.5%
46.9%	57.5	56.7	-0.8	-1.4%
48.1%	57.4	56.6	-0.8	-1.4%
49.4%	57.3	56.5	-0.7	-1.2%
50.6%	57.1	56.3	-0.7	-1.3%
51.9%	56.9	56.3	-0.6	-1.0%
53.1%	56.7	56.3	-0.4	-0.8%
54.3%	56.6	56.2	-0.4	-0.7%
55.6%	56.5	56.1	-0.3	-0.6%
56.8%	56.4	56.1	-0.3	-0.5%
58.0%	56.2	56.0	-0.3	-0.5%
59.3%	56.1	55.9	-0.2	-0.3%
60.5%	56.0	55.9	-0.1	-0.1%
61.7%	55.9	55.6	-0.3	-0.5%
63.0%	55.8	55.6	-0.2	-0.4%
64.2%	55.6	55.5	0.0	-0.1%
65.4%	55.5	55.5	0.1	0.1%
66.7%	55.2	55.3	0.1	0.1%
67.9%	55.1	55.2	0.1	0.2%
69.1%	55.0	54.9	-0.1	-0.2%
70.4%	55.0	54.7	-0.3	-0.6%
71.6%	54.8	54.5	-0.3	-0.5%
72.8%	54.7	54.5	-0.2	-0.3%
74.1%	54.6	54.2	-0.4	-0.7%
75.3%	54.6	54.1	-0.4	-0.8%
76.5%	54.5	54.1	-0.4	-0.7%
77.8%	54.4	54.0	-0.4	-0.8%
79.0%	54.3	53.9	-0.4	-0.7%
80.2%	54.2	53.9	-0.3	-0.5%
81.5%	54.2	53.9	-0.3	-0.6%
82.7%	54.1	53.8	-0.3	-0.6%
84.0%	54.1	53.8	-0.3	-0.5%
85.2%	54.0	53.7	-0.2	-0.4%
86.4%	53.9	53.7	-0.2	-0.4%
87.7%	53.9	53.7	-0.2	-0.4%
88.9%	53.7	53.5	-0.2	-0.3%
90.1%	53.7	53.4	-0.3	-0.5%
91.4%	53.6	53.3	-0.4	-0.7%
92.6%	53.4	53.0	-0.3	-0.6%
93.8%	53.3	53.0	-0.3	-0.6%
95.1%	53.1	52.8	-0.3	-0.5%
96.3%	53.0	52.2	-0.8	-1.6%
97.5%	52.3	52.2	-0.1	-0.2%
98.8%	52.1	51.7	-0.4	-0.9%
100.0%	52.1	51.7	-0.4	-0.9%

Table SQ6-1b
Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.9	59.9	-2.0	-3.2%
1.2%	60.9	59.3	-1.6	-2.6%
2.5%	60.1	58.9	-1.2	-2.1%
3.7%	60.1	58.9	-1.2	-2.0%
4.9%	59.8	58.8	-1.0	-1.7%
6.2%	59.6	58.7	-0.9	-1.5%
7.4%	59.6	58.6	-1.0	-1.7%
8.6%	59.0	58.4	-0.6	-1.0%
9.9%	58.5	58.4	-0.1	-0.2%
11.1%	58.5	58.2	-0.3	-0.6%
12.3%	58.3	58.0	-0.4	-0.6%
13.6%	58.3	57.6	-0.7	-1.1%
14.8%	58.1	57.6	-0.5	-0.9%
16.0%	58.1	57.6	-0.5	-0.8%
17.3%	57.8	57.5	-0.3	-0.5%
18.5%	57.7	57.4	-0.3	-0.5%
19.8%	57.6	57.3	-0.3	-0.5%
21.0%	57.5	57.2	-0.2	-0.4%
22.2%	57.5	57.2	-0.2	-0.4%
23.5%	57.4	57.1	-0.2	-0.4%
24.7%	57.3	57.1	-0.1	-0.2%
25.9%	57.3	57.1	-0.1	-0.2%
27.2%	57.1	57.1	-0.1	-0.1%
28.4%	57.1	57.0	-0.1	-0.2%
29.6%	57.0	56.9	-0.1	-0.2%
30.9%	57.0	56.9	-0.1	-0.2%
32.1%	57.0	56.9	-0.1	-0.2%
33.3%	56.9	56.8	-0.1	-0.2%
34.6%	56.9	56.8	-0.1	-0.2%
35.8%	56.9	56.8	-0.1	-0.2%
37.0%	56.8	56.6	-0.2	-0.3%
38.3%	56.8	56.6	-0.2	-0.4%
39.5%	56.6	56.6	-0.1	-0.1%
40.7%	56.6	56.5	-0.1	-0.1%
42.0%	56.6	56.5	-0.1	-0.2%
43.2%	56.6	56.4	-0.2	-0.4%
44.4%	56.5	56.4	-0.1	-0.2%
45.7%	56.5	56.3	-0.2	-0.3%
46.9%	56.5	56.3	-0.2	-0.3%
48.1%	56.4	56.3	-0.1	-0.2%
49.4%	56.3	56.3	-0.1	-0.1%
50.6%	56.3	56.2	-0.1	-0.1%
51.9%	56.3	56.2	-0.1	-0.2%
53.1%	56.3	56.1	-0.1	-0.2%
54.3%	56.2	56.0	-0.2	-0.3%
55.6%	56.1	56.0	-0.1	-0.1%
56.8%	56.1	56.0	-0.1	-0.1%
58.0%	56.0	55.9	-0.1	-0.1%
59.3%	56.0	55.9	-0.1	-0.2%
60.5%	56.0	55.9	-0.1	-0.2%
61.7%	55.9	55.9	-0.1	-0.1%
63.0%	55.9	55.9	-0.1	-0.1%
64.2%	55.9	55.8	-0.1	-0.1%
65.4%	55.9	55.8	-0.1	-0.1%
66.7%	55.8	55.8	-0.1	-0.1%
67.9%	55.7	55.8	0.0	0.1%
69.1%	55.7	55.7	0.0	0.0%
70.4%	55.7	55.7	0.0	0.1%
71.6%	55.7	55.7	0.0	0.0%
72.8%	55.6	55.7	0.0	0.0%
74.1%	55.5	55.6	0.1	0.2%
75.3%	55.5	55.6	0.1	0.2%
76.5%	55.5	55.5	0.0	0.1%
77.8%	55.5	55.5	0.0	0.0%
79.0%	55.4	55.4	0.0	-0.1%
80.2%	55.4	55.4	0.0	0.1%
81.5%	55.3	55.3	0.0	0.0%
82.7%	55.2	55.3	0.0	0.1%
84.0%	55.2	55.2	0.0	0.0%
85.2%	55.2	55.1	0.0	-0.1%
86.4%	55.1	55.1	0.0	0.0%
87.7%	55.1	55.1	0.0	0.0%
88.9%	55.0	54.9	-0.1	-0.2%
90.1%	54.9	54.7	-0.1	-0.3%
91.4%	54.9	54.7	-0.2	-0.4%
92.6%	54.6	54.5	-0.1	-0.1%
93.8%	54.6	54.4	-0.2	-0.3%
95.1%	54.6	54.4	-0.2	-0.3%
96.3%	54.2	54.3	0.1	0.3%
97.5%	54.2	54.3	0.1	0.2%
98.8%	54.2	54.2	0.1	0.1%
100.0%	54.1	54.2	0.2	0.3%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.5	61.0	-2.6	-4.1%
1.2%	62.0	59.9	-2.1	-3.3%
2.5%	61.5	59.9	-1.5	-2.5%
3.7%	60.6	59.2	-1.4	-2.3%
4.9%	60.4	59.0	-1.4	-2.3%
6.2%	60.0	58.6	-1.4	-2.4%
7.4%	60.0	58.5	-1.5	-2.6%
8.6%	59.7	58.5	-1.2	-2.0%
9.9%	59.3	58.5	-0.8	-1.4%
11.1%	59.3	58.4	-0.9	-1.5%
12.3%	59.1	58.3	-0.8	-1.3%
13.6%	59.0	58.3	-0.7	-1.2%
14.8%	58.5	58.2	-0.3	-0.5%
16.0%	58.4	57.9	-0.5	-0.8%
17.3%	58.4	57.9	-0.5	-0.8%
18.5%	58.4	57.8	-0.5	-0.9%
19.8%	58.3	57.8	-0.6	-0.9%
21.0%	58.0	57.7	-0.4	-0.6%
22.2%	57.9	57.6	-0.4	-0.7%
23.5%	57.8	57.4	-0.4	-0.7%
24.7%	57.8	57.3	-0.5	-0.8%
25.9%	57.8	57.3	-0.5	-0.9%
27.2%	57.7	57.3	-0.5	-0.8%
28.4%	57.7	57.3	-0.4	-0.7%
29.6%	57.6	57.2	-0.4	-0.7%
30.9%	57.6	57.1	-0.5	-0.8%
32.1%	57.5	57.0	-0.5	-0.9%
33.3%	57.5	56.9	-0.6	-1.1%
34.6%	57.4	56.8	-0.6	-1.0%
35.8%	57.3	56.8	-0.5	-0.9%
37.0%	57.3	56.8	-0.5	-0.9%
38.3%	57.1	56.7	-0.4	-0.7%
39.5%	57.1	56.7	-0.4	-0.7%
40.7%	57.1	56.7	-0.4	-0.7%
42.0%	57.0	56.6	-0.4	-0.7%
43.2%	57.0	56.6	-0.4	-0.7%
44.4%	57.0	56.6	-0.4	-0.7%
45.7%	56.8	56.5	-0.3	-0.5%
46.9%	56.8	56.5	-0.3	-0.6%
48.1%	56.7	56.5	-0.2	-0.4%
49.4%	56.7	56.3	-0.4	-0.7%
50.6%	56.6	56.2	-0.5	-0.8%
51.9%	56.6	56.2	-0.4	-0.7%
53.1%	56.5	56.1	-0.4	-0.7%
54.3%	56.3	56.1	-0.2	-0.4%
55.6%	56.3	56.1	-0.2	-0.3%
56.8%	56.0	56.0	0.0	0.0%
58.0%	56.0	55.9	-0.1	-0.2%
59.3%	56.0	55.9	-0.1	-0.2%
60.5%	56.0	55.8	-0.1	-0.2%
61.7%	55.9	55.8	-0.1	-0.2%
63.0%	55.9	55.8	-0.1	-0.2%
64.2%	55.9	55.8	-0.1	-0.3%
65.4%	55.8	55.7	-0.1	-0.2%
66.7%	55.8	55.7	-0.2	-0.3%
67.9%	55.8	55.7	-0.1	-0.3%
69.1%	55.8	55.6	-0.1	-0.3%
70.4%	55.8	55.6	-0.1	-0.3%
71.6%	55.7	55.6	-0.1	-0.3%
72.8%	55.7	55.5	-0.1	-0.2%
74.1%	55.6	55.5	-0.1	-0.1%
75.3%	55.6	55.5	-0.1	-0.2%
76.5%	55.6	55.5	-0.1	-0.2%
77.8%	55.6	55.4	-0.1	-0.3%
79.0%	55.5	55.4	-0.1	-0.2%
80.2%	55.5	55.4	-0.1	-0.2%
81.5%	55.4	55.3	-0.1	-0.1%
82.7%	55.4	55.3	0.0	-0.1%
84.0%	55.4	55.3	0.0	-0.1%
85.2%	55.3	55.2	-0.1	-0.2%
86.4%	55.2	55.1	-0.1	-0.2%
87.7%	55.2	55.1	-0.1	-0.2%
88.9%	55.0	54.9	-0.1	-0.1%
90.1%	54.9	54.7	-0.2	-0.4%
91.4%	54.9	54.6	-0.3	-0.5%
92.6%	54.6	54.6	0.0	0.0%
93.8%	54.5	54.5	0.0	-0.1%
95.1%	54.5	54.4	-0.1	-0.2%
96.3%	54.5	54.2	-0.3	-0.5%
97.5%	54.5	54.1	-0.4	-0.8%
98.8%	54.3	54.0	-0.3	-0.5%
100.0%	54.2	53.9	-0.2	-0.4%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.8	62.3	-3.5	-5.3%
1.2%	63.5	61.0	-2.5	-4.0%
2.5%	62.9	61.0	-1.9	-3.1%
3.7%	61.2	59.3	-1.9	-3.1%
4.9%	61.1	59.2	-2.0	-3.2%
6.2%	61.1	59.1	-2.0	-3.2%
7.4%	60.6	59.0	-1.6	-2.6%
8.6%	60.5	58.8	-1.7	-2.8%
9.9%	60.0	58.8	-1.2	-2.1%
11.1%	60.0	58.6	-1.4	-2.3%
12.3%	59.6	58.5	-1.1	-1.8%
13.6%	59.4	58.5	-0.9	-1.6%
14.8%	59.2	58.4	-0.8	-1.4%
16.0%	59.1	58.3	-0.8	-1.3%
17.3%	59.0	58.2	-0.8	-1.4%
18.5%	59.0	58.1	-0.8	-1.4%
19.8%	58.9	58.1	-0.8	-1.4%
21.0%	58.7	58.0	-0.7	-1.1%
22.2%	58.7	58.0	-0.7	-1.1%
23.5%	58.5	58.0	-0.6	-1.0%
24.7%	58.5	57.7	-0.8	-1.3%
25.9%	58.4	57.5	-0.9	-1.5%
27.2%	58.3	57.5	-0.8	-1.4%
28.4%	58.3	57.5	-0.8	-1.4%
29.6%	58.3	57.5	-0.8	-1.4%
30.9%	58.2	57.4	-0.8	-1.3%
32.1%	58.1	57.4	-0.7	-1.3%
33.3%	58.1	57.4	-0.7	-1.2%
34.6%	57.9	57.3	-0.7	-1.2%
35.8%	57.8	57.1	-0.7	-1.2%
37.0%	57.8	57.1	-0.7	-1.2%
38.3%	57.7	57.1	-0.7	-1.2%
39.5%	57.6	57.0	-0.5	-0.9%
40.7%	57.6	57.0	-0.5	-0.9%
42.0%	57.5	57.0	-0.5	-0.9%
43.2%	57.4	57.0	-0.5	-0.8%
44.4%	57.3	57.0	-0.4	-0.7%
45.7%	57.3	56.9	-0.3	-0.6%
46.9%	57.3	56.6	-0.7	-1.1%
48.1%	57.2	56.5	-0.7	-1.2%
49.4%	57.1	56.5	-0.5	-0.9%
50.6%	56.8	56.4	-0.4	-0.7%
51.9%	56.6	56.4	-0.2	-0.4%
53.1%	56.6	56.4	-0.2	-0.4%
54.3%	56.6	56.4	-0.2	-0.4%
55.6%	56.6	56.3	-0.2	-0.4%
56.8%	56.4	56.2	-0.2	-0.4%
58.0%	56.3	56.2	-0.1	-0.1%
59.3%	56.3	56.1	-0.2	-0.3%
60.5%	56.3	56.1	-0.2	-0.3%
61.7%	56.2	56.1	-0.2	-0.3%
63.0%	56.2	55.9	-0.3	-0.6%
64.2%	56.2	55.9	-0.3	-0.5%
65.4%	56.2	55.9	-0.3	-0.6%
66.7%	56.0	55.8	-0.2	-0.4%
67.9%	56.0	55.7	-0.3	-0.5%
69.1%	56.0	55.7	-0.3	-0.5%
70.4%	55.9	55.7	-0.2	-0.4%
71.6%	55.9	55.6	-0.3	-0.5%
72.8%	55.8	55.6	-0.2	-0.4%
74.1%	55.8	55.6	-0.2	-0.4%
75.3%	55.7	55.5	-0.2	-0.4%
76.5%	55.6	55.5	-0.1	-0.3%
77.8%	55.5	55.3	-0.2	-0.4%
79.0%	55.5	55.2	-0.2	-0.4%
80.2%	55.3	55.2	-0.1	-0.2%
81.5%	55.2	55.2	0.0	0.0%
82.7%	55.0	55.1	0.1	0.2%
84.0%	55.0	55.1	0.0	0.1%
85.2%	55.0	55.0	0.0	0.1%
86.4%	54.9	55.0	0.0	0.1%
87.7%	54.9	55.0	0.0	0.1%
88.9%	54.9	54.8	-0.1	-0.2%
90.1%	54.9	54.6	-0.3	-0.5%
91.4%	54.8	54.5	-0.3	-0.6%
92.6%	54.8	54.4	-0.3	-0.6%
93.8%	54.5	54.1	-0.4	-0.8%
95.1%	54.3	54.0	-0.3	-0.5%
96.3%	54.1	54.0	-0.2	-0.4%
97.5%	54.1	53.9	-0.2	-0.4%
98.8%	53.9	53.7	-0.2	-0.3%
100.0%	53.8	53.2	-0.6	-1.1%

Figure SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

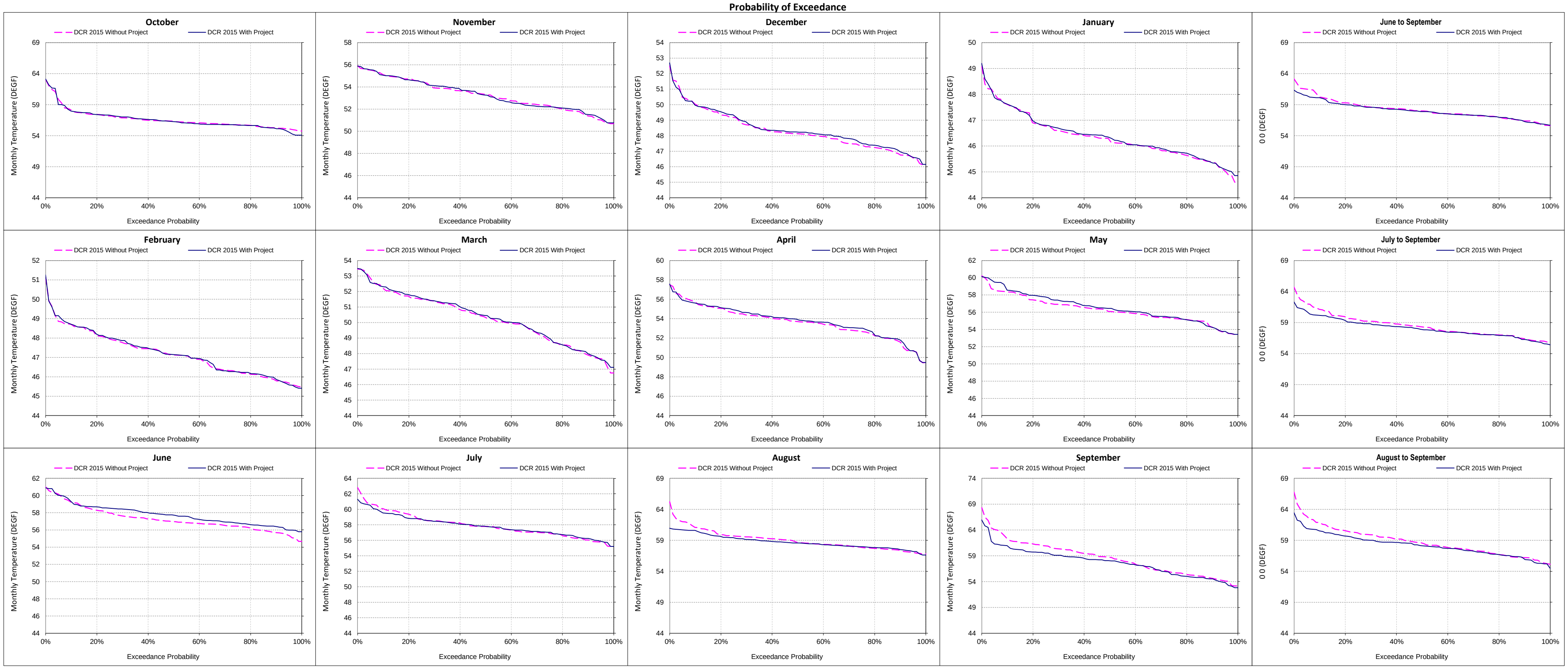


Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.0	63.1	0.1	0.2%
1.2%	62.0	62.2	0.1	0.2%
2.5%	61.4	61.7	0.3	0.4%
3.7%	61.1	61.6	0.5	0.9%
4.9%	59.9	59.0	-0.9	-1.4%
6.2%	59.3	59.0	-0.3	-0.5%
7.4%	58.5	58.9	0.4	0.7%
8.6%	58.4	58.3	-0.1	-0.2%
9.9%	58.2	58.0	-0.2	-0.3%
11.1%	57.8	57.9	0.1	0.1%
12.3%	57.7	57.8	0.0	0.1%
13.6%	57.7	57.7	0.0	0.0%
14.8%	57.7	57.7	0.1	0.1%
16.0%	57.5	57.7	0.1	0.2%
17.3%	57.4	57.7	0.2	0.4%
18.5%	57.4	57.5	0.0	0.1%
19.8%	57.4	57.4	0.0	0.0%
21.0%	57.4	57.4	0.0	-0.1%
22.2%	57.3	57.4	0.1	0.1%
23.5%	57.2	57.3	0.1	0.2%
24.7%	57.2	57.3	0.1	0.2%
25.9%	57.2	57.2	0.1	0.1%
27.2%	57.0	57.1	0.1	0.3%
28.4%	57.0	57.1	0.1	0.3%
29.6%	56.9	57.0	0.2	0.3%
30.9%	56.9	57.0	0.2	0.3%
32.1%	56.8	57.0	0.2	0.3%
33.3%	56.8	56.9	0.2	0.3%
34.6%	56.8	56.8	0.0	0.1%
35.8%	56.7	56.7	0.0	0.0%
37.0%	56.6	56.7	0.1	0.2%
38.3%	56.5	56.7	0.1	0.2%
39.5%	56.5	56.6	0.1	0.2%
40.7%	56.5	56.6	0.1	0.2%
42.0%	56.4	56.6	0.1	0.3%
43.2%	56.4	56.5	0.1	0.2%
44.4%	56.4	56.4	0.0	0.0%
45.7%	56.4	56.4	0.0	-0.1%
46.9%	56.4	56.4	0.0	-0.1%
48.1%	56.4	56.3	0.0	-0.1%
49.4%	56.3	56.3	-0.1	-0.1%
50.6%	56.3	56.3	0.0	0.0%
51.9%	56.2	56.2	0.0	-0.1%
53.1%	56.2	56.1	-0.1	-0.2%
54.3%	56.2	56.1	-0.1	-0.2%
55.6%	56.1	56.0	-0.1	-0.2%
56.8%	56.1	56.0	-0.1	-0.1%
58.0%	56.1	56.0	-0.2	-0.3%
59.3%	56.1	55.9	-0.1	-0.3%
60.5%	56.1	55.9	-0.2	-0.3%
61.7%	56.0	55.9	-0.2	-0.3%
63.0%	56.0	55.8	-0.2	-0.3%
64.2%	56.0	55.8	-0.2	-0.3%
65.4%	56.0	55.8	-0.1	-0.3%
66.7%	55.9	55.8	-0.1	-0.2%
67.9%	55.9	55.8	-0.1	-0.2%
69.1%	55.9	55.8	-0.1	-0.2%
70.4%	55.8	55.8	-0.1	-0.1%
71.6%	55.8	55.8	-0.1	-0.1%
72.8%	55.8	55.8	0.0	0.0%
74.1%	55.8	55.8	0.0	0.0%
75.3%	55.8	55.7	-0.1	-0.1%
76.5%	55.7	55.7	0.0	-0.1%
77.8%	55.7	55.7	0.0	-0.1%
79.0%	55.7	55.7	0.0	-0.1%
80.2%	55.7	55.7	0.0	0.0%
81.5%	55.6	55.6	0.1	0.1%
82.7%	55.5	55.6	0.1	0.3%
84.0%	55.5	55.4	-0.1	-0.1%
85.2%	55.4	55.4	0.0	0.0%
86.4%	55.4	55.3	-0.1	-0.1%
87.7%	55.3	55.3	0.0	-0.1%
88.9%	55.3	55.3	0.0	-0.1%
90.1%	55.3	55.1	-0.1	-0.2%
91.4%	55.2	55.1	-0.1	-0.1%
92.6%	55.2	55.1	-0.1	-0.2%
93.8%	55.1	54.8	-0.3	-0.5%
95.1%	55.1	54.6	-0.5	-1.0%
96.3%	55.0	54.3	-0.7	-1.3%
97.5%	54.9	54.1	-0.8	-1.5%
98.8%	54.8	54.1	-0.7	-1.2%
100.0%	54.8	54.1	0.0	-1.2%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.9	55.9	0.0	-0.1%
1.2%	55.7	55.8	0.2	0.3%
2.5%	55.6	55.6	0.0	0.0%
3.7%	55.5	55.6	0.1	0.1%
4.9%	55.5	55.6	0.0	0.0%
6.2%	55.5	55.5	0.1	0.1%
7.4%	55.4	55.4	0.0	0.1%
8.6%	55.3	55.1	-0.2	-0.3%
9.9%	55.1	55.1	0.0	-0.1%
11.1%	55.0	55.0	0.0	0.0%
12.3%	55.0	55.0	0.1	0.1%
13.6%	54.9	55.0	0.1	0.1%
14.8%	54.9	54.9	0.0	0.1%
16.0%	54.9	54.9	0.0	0.0%
17.3%	54.8	54.8	0.0	0.1%
18.5%	54.7	54.7	-0.1	-0.1%
19.8%	54.7	54.7	-0.1	-0.1%
21.0%	54.7	54.6	-0.1	-0.2%
22.2%	54.6	54.6	0.0	0.0%
23.5%	54.6	54.6	0.0	0.0%
24.7%	54.5	54.4	-0.1	-0.2%
25.9%	54.4	54.4	0.0	0.1%
27.2%	54.3	54.2	-0.1	-0.2%
28.4%	54.1	54.2	0.1	0.2%
29.6%	53.9	54.1	0.2	0.4%
30.9%	53.9	54.1	0.2	0.4%
32.1%	53.9	54.1	0.2	0.4%
33.3%	53.9	54.1	0.2	0.4%
34.6%	53.9	54.0	0.2	0.3%
35.8%	53.8	54.0	0.1	0.2%
37.0%	53.8	53.9	0.2	0.3%
38.3%	53.7	53.9	0.2	0.4%
39.5%	53.7	53.9	0.2	0.4%
40.7%	53.6	53.7	0.0	0.1%
42.0%	53.6	53.7	0.1	0.1%
43.2%	53.6	53.7	0.1	0.2%
44.4%	53.4	53.6	0.2	0.3%
45.7%	53.4	53.6	0.2	0.3%
46.9%	53.4	53.4	0.0	0.0%
48.1%	53.4	53.3	0.0	-0.1%
49.4%	53.3	53.3	-0.1	-0.1%
50.6%	53.3	53.2	0.0	-0.1%
51.9%	53.3	53.1	-0.2	-0.3%
53.1%	53.1	53.1	0.0	0.0%
54.3%	53.0	52.9	-0.1	-0.1%
55.6%	53.0	52.8	-0.2	-0.3%
56.8%	52.9	52.8	-0.2	-0.3%
58.0%	52.9	52.7	-0.3	-0.5%
59.3%	52.8	52.6	-0.1	-0.3%
60.5%	52.7	52.5	-0.2	-0.4%
61.7%	52.7	52.5	-0.2	-0.4%
63.0%	52.6	52.5	0.0	-0.1%
64.2%	52.5	52.5	-0.1	-0.1%
65.4%	52.5	52.4	-0.1	-0.3%
66.7%	52.5	52.3	-0.2	-0.3%
67.9%	52.5	52.3	-0.1	-0.3%
69.1%	52.4	52.3	-0.2	-0.3%
70.4%	52.4	52.2	-0.2	-0.3%
71.6%	52.4	52.2	-0.1	-0.3%
72.8%	52.4	52.2	-0.1	-0.3%
74.1%	52.3	52.2	-0.1	-0.3%
75.3%	52.3	52.2	-0.1	-0.1%
76.5%	52.2	52.2	0.0	0.0%
77.8%	52.1	52.1	0.0	0.0%
79.0%	52.1	52.1	0.1	0.1%
80.2%	52.0	52.1	0.1	0.2%
81.5%	51.9	52.1	0.2	0.3%
82.7%	51.9	52.1	0.2	0.4%
84.0%	51.8	52.0	0.2	0.3%
85.2%	51.8	52.0	0.2	0.3%
86.4%	51.8	52.0	0.2	0.4%
87.7%	51.6	51.8	0.2	0.3%
88.9%	51.5	51.5	0.1	0.2%
90.1%	51.4	51.5	0.1	0.3%
91.4%	51.3	51.5	0.1	0.3%
92.6%	51.2	51.4	0.3	0.5%
93.8%	51.0	51.3	0.3	0.5%
95.1%	51.0	51.1	0.1	0.2%
96.3%	50.9	51.0	0.1	0.2%
97.5%	50.8	50.8	0.0	0.0%
98.8%	50.7	50.8	0.1	0.1%
100.0%	50.7	50.8	0.1	0.1%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.5	52.7	0.2	0.4%
1.2%	51.6	51.5	0.0	-0.1%
2.5%	51.5	51.1	-0.4	-0.8%
3.7%	51.1	51.0	-0.2	-0.3%
4.9%	50.5	50.6	0.1	0.2%
6.2%	50.4	50.3	-0.1	-0.3%
7.4%	50.3	50.2	-0.1	-0.1%
8.6%	50.2	50.2	0.0	0.0%
9.9%	50.0	50.0	-0.1	-0.1%
11.1%	49.9	49.9	-0.1	-0.1%
12.3%	49.8	49.9	0.0	0.1%
13.6%	49.8	49.8	0.1	0.1%
14.8%	49.7	49.8	0.1	0.2%
16.0%	49.6	49.7	0.1	0.1%
17.3%	49.5	49.7	0.2	0.3%
18.5%	49.5	49.6	0.1	0.2%
19.8%	49.4	49.6	0.2	0.4%
21.0%	49.3	49.5	0.2	0.3%
22.2%	49.3	49.4	0.1	0.2%
23.5%	49.2	49.4	0.2	0.3%
24.7%	49.2	49.3	0.2	0.3%
25.9%	49.2	49.2	0.0	0.1%
27.2%	48.9	49.0	0.1	0.2%
28.4%	48.8	49.0	0.2	0.4%
29.6%	48.7	48.9	0.2	0.4%
30.9%	48.7	48.7	0.1	0.1%
32.1%	48.7	48.7	0.0	0.0%
33.3%	48.5	48.5	0.0	0.1%
34.6%	48.5	48.5	0.0	0.0%
35.8%	48.5	48.4	-0.1	-0.2%
37.0%	48.5	48.4	-0.1	-0.2%
38.3%	48.3	48.4	0.0	0.1%
39.5%	48.3	48.4	0.1	0.1%
40.7%	48.3	48.3	0.1	0.2%
42.0%	48.2	48.3	0.1	0.2%
43.2%	48.2	48.3	0.1	0.2%
44.4%	48.2	48.3	0.1	0.3%
45.7%	48.2	48.3	0.1	0.2%
46.9%	48.2	48.2	0.1	0.2%
48.1%	48.1	48.2	0.1	0.2%
49.4%	48.1	48.2	0.1	0.2%
50.6%	48.1	48.2	0.1	0.2%
51.9%	48.1	48.2	0.1	0.3%
53.1%	48.1	48.2	0.1	0.2%
54.3%	48.1	48.2	0.1	0.2%
55.6%	48.0	48.2	0.2	0.3%
56.8%	48.0	48.1	0.1	0.3%
58.0%	48.0	48.1	0.1	0.3%
59.3%	48.0	48.1	0.1	0.3%
60.5%	47.9	48.0	0.1	0.2%
61.7%	47.9	48.0	0.2	0.3%
63.0%	47.8	48.0	0.2	0.5%
64.2%	47.8	48.0	0.2	0.4%
65.4%	47.8	48.0	0.2	0.3%
66.7%	47.6	47.9	0.3	0.6%
67.9%	47.5	47.9	0.3	0.7%
69.1%	47.5	47.8	0.3	0.7%
70.4%	47.5	47.8	0.3	0.7%
71.6%	47.5	47.8	0.3	0.6%
72.8%	47.5	47.7	0.2	0.5%
74.1%	47.4	47.6	0.2	0.4%
75.3%	47.4	47.5	0.1	0.2%
76.5%	47.3	47.5	0.2	0.4%
77.8%	47.3	47.4	0.1	0.2%
79.0%	47.2	47.4	0.2	0.3%
80.2%	47.2	47.4	0.1	0.3%
81.5%	47.2	47.3	0.1	0.3%
82.7%	47.2	47.3	0.1	0.2%
84.0%	47.1	47.2	0.1	0.3%
85.2%	47.1	47.2	0.1	0.3%
86.4%	47.0	47.2	0.2	0.4%
87.7%	46.9	47.2	0.3	0.6%
88.9%	46.9	47.1	0.2	0.4%
90.1%	46.8	46.9	0.2	0.4%
91.4%	46.7	46.9	0.1	0.3%
92.6%	46.7	46.8	0.1	0.2%
93.8%	46.7	46.7	0.0	0.0%
95.1%	46.6	46.6	0.0	0.1%
96.3%	46.5	46.6	0.0	0.1%
97.5%	46.2	46.5	0.3	0.6%
98.8%	46.1	46.2	0.1	0.1%
100.0%	46.1	46.2	0.1	0.1%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.1	49.2	0.1	0.3%
1.2%	48.4	48.6	0.2	0.4%
2.5%	48.2	48.4	0.2	0.4%
3.7%	48.2	48.2	0.0	-0.1%
4.9%	48.0	47.9	-0.2	-0.3%
6.2%	47.8	47.8	0.0	-0.1%
7.4%	47.8	47.8	0.0	-0.1%
8.6%	47.7	47.7	0.0	0.0%
9.9%	47.6	47.6	0.0	0.0%
11.1%	47.6	47.6	0.0	0.0%
12.3%	47.5	47.5	0.0	0.0%
13.6%	47.4	47.5	0.0	0.1%
14.8%	47.4	47.3	-0.1	-0.1%
16.0%	47.3	47.3	0.0	0.0%
17.3%	47.3	47.3	0.0	0.0%
18.5%	47.3	47.2	-0.1	-0.2%
19.8%	46.9	47.0	0.1	0.2%
21.0%	46.9	46.9	0.0	0.1%
22.2%	46.8	46.9	0.0	0.0%
23.5%	46.8	46.8	0.0	0.0%
24.7%	46.8	46.8	0.0	0.1%
25.9%	46.8	46.8	0.0	0.1%
27.2%	46.7	46.8	0.0	0.1%
28.4%	46.6	46.7	0.1	0.2%
29.6%	46.6	46.7	0.1	0.2%
30.9%	46.6	46.7	0.1	0.2%
32.1%	46.5	46.6	0.1	0.2%
33.3%	46.5	46.6	0.1	0.2%
34.6%	46.5	46.6	0.1	0.3%
35.8%	46.5	46.6	0.1	0.3%
37.0%	46.4	46.5	0.0	0.1%
38.3%	46.4	46.5	0.0	0.1%
39.5%	46.4	46.5	0.0	0.1%
40.7%	46.4	46.5	0.1	0.1%
42.0%	46.4	46.4	0.1	0.1%
43.2%	46.4	46.4	0.1	0.1%
44.4%	46.3	46.4	0.1	0.2%
45.7%	46.3	46.4	0.1	0.2%
46.9%	46.3	46.4	0.1	0.3%
48.1%	46.3	46.4	0.1	0.2%
49.4%	46.3	46.3	0.1	0.1%
50.6%	46.1	46.3	0.2	0.4%
51.9%	46.1	46.2	0.1	0.2%
53.1%	46.1	46.2	0.1	0.2%
54.3%	46.1	46.2	0.1	0.1%
55.6%	46.1	46.1	0.0	0.1%
56.8%	46.1	46.1	0.0	-0.1%
58.0%	46.1	46.1	0.0	0.0%
59.3%	46.0	46.1	0.0	0.0%
60.5%	46.0	46.0	0.0	0.0%
61.7%	46.0	46.0	0.0	0.0%
63.0%	46.0	46.0	0.0	0.0%
64.2%	46.0	46.0	0.0	0.0%
65.4%	46.0	46.0	0.0	0.1%
66.7%	45.9	46.0	0.1	0.2%
67.9%	45.9	45.9	0.0	0.1%
69.1%	45.9	45.9	0.1	0.1%
70.4%	45.8	45.9	0.1	0.2%
71.6%	45.8	45.9	0.1	0.1%
72.8%	45.8	45.8	0.1	0.1%
74.1%	45.8	45.8	0.0	0.0%
75.3%	45.8	45.8	0.0	0.1%
76.5%	45.7	45.8	0.1	0.1%
77.8%	45.7	45.7	0.0	0.1%
79.0%	45.7	45.7	0.1	0.2%
80.2%	45.6	45.7	0.1	0.2%
81.5%	45.6	45.7	0.1	0.2%
82.7%	45.5	45.6	0.1	0.2%
84.0%	45.5	45.6	0.1	0.1%
85.2%	45.5	45.5	0.0	0.0%
86.4%	45.5	45.5	0.0	0.1%
87.7%	45.4	45.4	0.0	0.1%
88.9%	45.4	45.4	0.0	0.0%
90.1%	45.4	45.3	0.0	-0.1%
91.4%	45.3	45.3	0.0	0.0%
92.6%	45.2	45.2	0.0	0.0%
93.8%	45.1	45.2	0.0	0.1%
95.1%	45.0	45.1	0.1	0.2%
96.3%	44.9	45.0	0.2	0.4%
97.5%	44.9	45.0	0.1	0.3%
98.8%	44.6	44.9	0.3	0.6%
100.0%	44.6	44.9	0.3	0.6%

Table SQ7-1b

Sacramento River at Red Bluff, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.1	51.3	0.1	0.3%
1.2%	49.9	49.9	0.0	0.0%
2.5%	49.6	49.6	0.0	0.0%
3.7%	49.2	49.2	0.0	0.0%
4.9%	48.9	49.2	0.3	0.6%
6.2%	48.8	49.0	0.2	0.3%
7.4%	48.7	48.9	0.1	0.2%
8.6%	48.7	48.8	0.1	0.1%
9.9%	48.7	48.7	0.0	0.0%
11.1%	48.6	48.7	0.1	0.1%
12.3%	48.6	48.6	0.0	0.0%
13.6%	48.6	48.6	0.0	0.0%
14.8%	48.5	48.6	0.0	0.0%
16.0%	48.4	48.5	0.1	0.2%
17.3%	48.4	48.4	0.1	0.1%
18.5%	48.4	48.4	0.0	0.0%
19.8%	48.1	48.2	0.1	0.2%
21.0%	48.1	48.1	0.0	0.1%
22.2%	48.1	48.1	0.1	0.1%
23.5%	48.0	48.1	0.0	0.1%
24.7%	48.0	48.0	0.0	0.1%
25.9%	47.9	48.0	0.1	0.2%
27.2%	47.9	48.0	0.1	0.2%
28.4%	47.8	47.9	0.1	0.2%
29.6%	47.8	47.9	0.1	0.2%
30.9%	47.7	47.9	0.2	0.3%
32.1%	47.7	47.7	0.0	0.1%
33.3%	47.6	47.7	0.1	0.1%
34.6%	47.5	47.6	0.0	0.1%
35.8%	47.5	47.6	0.1	0.2%
37.0%	47.5	47.5	0.1	0.1%
38.3%	47.5	47.5	0.1	0.1%
39.5%	47.5	47.5	0.0	0.1%
40.7%	47.4	47.5	0.0	0.0%
42.0%	47.4	47.4	0.0	0.0%
43.2%	47.4	47.4	0.0	-0.1%
44.4%	47.3	47.3	0.0	0.0%
45.7%	47.2	47.2	0.0	0.0%
46.9%	47.2	47.2	-0.1	-0.1%
48.1%	47.1	47.2	0.0	0.0%
49.4%	47.1	47.2	0.0	0.1%
50.6%	47.1	47.1	0.0	0.0%
51.9%	47.1	47.1	0.0	0.0%
53.1%	47.1	47.1	0.0	0.0%
54.3%	47.1	47.1	0.0	0.0%
55.6%	47.1	47.1	0.0	0.0%
56.8%	47.0	47.0	0.0	0.0%
58.0%	46.9	47.0	0.0	0.1%
59.3%	46.9	46.9	0.0	0.1%
60.5%	46.9	46.9	0.0	0.1%
61.7%	46.8	46.9	0.1	0.2%
63.0%	46.7	46.8	0.1	0.2%
64.2%	46.5	46.7	0.2	0.4%
65.4%	46.5	46.6	0.2	0.4%
66.7%	46.4	46.4	-0.1	-0.1%
67.9%	46.4	46.3	0.0	-0.1%
69.1%	46.4	46.3	0.0	-0.1%
70.4%	46.4	46.3	0.0	-0.1%
71.6%	46.3	46.3	0.0	-0.1%
72.8%	46.3	46.3	-0.1	-0.1%
74.1%	46.3	46.3	0.0	0.0%
75.3%	46.3	46.2	0.0	-0.1%
76.5%	46.2	46.2	0.0	0.1%
77.8%	46.2	46.2	0.0	0.1%
79.0%	46.2	46.2	0.1	0.1%
80.2%	46.1	46.2	0.0	0.1%
81.5%	46.1	46.2	0.0	0.1%
82.7%	46.1	46.1	0.0	0.0%
84.0%	46.0	46.1	0.1	0.2%
85.2%	46.0	46.1	0.1	0.2%
86.4%	46.0	46.0	0.1	0.1%
87.7%	45.9	46.0	0.1	0.2%
88.9%	45.9	46.0	0.1	0.2%
90.1%	45.8	45.9	0.1	0.1%
91.4%	45.8	45.8	0.0	0.0%
92.6%	45.7	45.7	0.0	0.0%
93.8%	45.7	45.7	-0.1	-0.2%
95.1%	45.7	45.6	-0.1	-0.2%
96.3%	45.6	45.6	0.0	0.0%
97.5%	45.6	45.5	-0.1	-0.2%
98.8%	45.5	45.4	-0.1	-0.2%
100.0%	45.5	45.4	-0.1	-0.2%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.4	53.5	0.0	0.1%
1.2%	53.4	53.4	0.0	0.0%
2.5%	53.4	53.3	-0.1	-0.1%
3.7%	53.1	53.1	-0.1	-0.1%
4.9%	52.9	52.6	-0.3	-0.5%
6.2%	52.6	52.5	-0.1	-0.1%
7.4%	52.5	52.5	0.1	0.1%
8.6%	52.4	52.4	-0.1	-0.2%
9.9%	52.2	52.3	0.1	0.2%
11.1%	52.1	52.3	0.2	0.5%
12.3%	52.0	52.1	0.1	0.2%
13.6%	52.0	52.1	0.1	0.2%
14.8%	52.0	52.0	0.0	0.1%
16.0%	51.8	52.0	0.1	0.2%
17.3%	51.7	51.9	0.2	0.4%
18.5%	51.7	51.8	0.1	0.2%
19.8%	51.7	51.8	0.1	0.2%
21.0%	51.6	51.7	0.2	0.3%
22.2%	51.6	51.7	0.1	0.3%
23.5%	51.6	51.7	0.1	0.2%
24.7%	51.5	51.6	0.1	0.2%
25.9%	51.5	51.5	0.0	0.0%
27.2%	51.5	51.5	0.0	0.1%
28.4%	51.4	51.4	0.0	0.0%
29.6%	51.4	51.4	0.0	0.1%
30.9%	51.3	51.4	0.1	0.1%
32.1%	51.3	51.3	0.0	0.1%
33.3%	51.2	51.3	0.1	0.1%
34.6%	51.2	51.3	0.1	0.1%
35.8%	51.2	51.2	0.1	0.1%
37.0%	51.1	51.2	0.1	0.2%
38.3%	51.0	51.2	0.2	0.4%
39.5%	50.9	51.1	0.2	0.4%
40.7%	50.8	50.9	0.2	0.3%
42.0%	50.8	50.9	0.1	0.3%
43.2%	50.7	50.8	0.0	0.1%
44.4%	50.6	50.8	0.2	0.3%
45.7%	50.6	50.7	0.1	0.2%
46.9%	50.4	50.5	0.1	0.2%
48.1%	50.4	50.5	0.1	0.1%
49.4%	50.4	50.5	0.1	0.2%
50.6%	50.3	50.4	0.2	0.4%
51.9%	50.3	50.3	0.0	0.0%
53.1%	50.2	50.3	0.1	0.1%
54.3%	50.1	50.3	0.2	0.4%
55.6%	50.1	50.2	0.2	0.3%
56.8%	50.0	50.1	0.0	0.1%
58.0%	50.0	50.0	0.0	0.1%
59.3%	50.0	50.0	0.1	0.1%
60.5%	49.9	50.0	0.1	0.1%
61.7%	49.9	50.0	0.1	0.2%
63.0%	49.9	50.0	0.1	0.1%
64.2%	49.9	49.9	0.0	0.0%
65.4%	49.8	49.8	0.0	0.0%
66.7%	49.6	49.6	0.0	0.1%
67.9%	49.5	49.6	0.1	0.2%
69.1%	49.4	49.4	0.0	0.1%
70.4%	49.3	49.3	0.1	0.1%
71.6%	49.2	49.3	0.2	0.3%
72.8%	49.1	49.2	0.1	0.2%
74.1%	48.9	49.1	0.1	0.3%
75.3%	48.8	48.9	0.1	0.3%
76.5%	48.7	48.7	0.0	0.0%
77.8%	48.7	48.7	0.0	-0.1%
79.0%	48.6	48.6	0.0	0.1%
80.2%	48.6	48.5	0.0	0.0%
81.5%	48.5	48.5	0.0	-0.1%
82.7%	48.5	48.4	-0.1	-0.2%
84.0%	48.3	48.2	-0.1	-0.2%
85.2%	48.2	48.2	0.0	0.0%
86.4%	48.2	48.2	0.0	0.0%
87.7%	48.1	48.2	0.1	0.1%
88.9%	48.0	48.1	0.2	0.3%
90.1%	47.9	48.0	0.1	0.2%
91.4%	47.8	47.9	0.1	0.2%
92.6%	47.7	47.8	0.1	0.2%
93.8%	47.7	47.7	0.0	0.1%
95.1%	47.7	47.6	-0.1	-0.2%
96.3%	47.6	47.6	0.0	0.0%
97.5%	47.1	47.4	0.3	0.6%
98.8%	46.7	47.1	0.4	0.8%
100.0%	46.7	47.1	0.4	0.8%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.5	57.6	0.1	0.1%
1.2%	57.3	56.8	-0.6	-1.0%
2.5%	56.6	56.7	0.1	0.3%
3.7%	56.5	56.3	-0.3	-0.5%
4.9%	56.2	55.9	-0.3	-0.5%
6.2%	56.1	55.8	-0.3	-0.5%
7.4%	56.0	55.7	-0.2	-0.4%
8.6%	55.8	55.7	-0.2	-0.3%
9.9%	55.8	55.6	-0.1	-0.3%
11.1%	55.5	55.5	0.1	0.1%
12.3%	55.4	55.5	0.1	0.2%
13.6%	55.3	55.5	0.2	0.3%
14.8%	55.3	55.3	0.1	0.1%
16.0%	55.2	55.3	0.0	0.1%
17.3%	55.2	55.3	0.1	0.2%
18.5%	55.1	55.3	0.2	0.3%
19.8%	55.1	55.1	0.1	0.1%
21.0%	55.1	55.1	0.0	0.1%
22.2%	54.8	55.1	0.3	0.5%
23.5%	54.7	55.0	0.3	0.6%
24.7%	54.6	54.9	0.3	0.5%
25.9%	54.5	54.9	0.4	0.7%
27.2%	54.5	54.8	0.3	0.5%
28.4%	54.5	54.7	0.2	0.3%
29.6%	54.4	54.6	0.2	0.5%
30.9%	54.3	54.6	0.3	0.5%
32.1%	54.3	54.5	0.1	0.3%
33.3%	54.3	54.5	0.2	0.3%
34.6%	54.3	54.5	0.2	0.4%
35.8%	54.2	54.3	0.1	0.1%
37.0%	54.2	54.3	0.1	0.2%
38.3%	54.1	54.2	0.1	0.2%
39.5%	54.1	54.2	0.1	0.2%
40.7%	54.0	54.1	0.1	0.2%
42.0%	54.0	54.1	0.1	0.2%
43.2%	53.9	54.1	0.1	0.3%
44.4%	53.9	54.1	0.2	0.3%
45.7%	53.9	54.0	0.1	0.2%
46.9%	53.8	54.0	0.2	0.4%
48.1%	53.7	54.0	0.2	0.4%
49.4%	53.7	54.0	0.2	0.5%
50.6%	53.7	53.8	0.2	0.3%
51.9%	53.7	53.8	0.2	0.3%
53.1%	53.7	53.8	0.1	0.2%
54.3%	53.6	53.8	0.1	0.2%
55.6%	53.6	53.7	0.1	0.2%
56.8%	53.6	53.7	0.1	0.2%
58.0%	53.5	53.7	0.1	0.2%
59.3%	53.5	53.6	0.2	0.3%
60.5%	53.4	53.6	0.2	0.5%
61.7%	53.4	53.6	0.2	0.4%
63.0%	53.4	53.5	0.1	0.3%
64.2%	53.3	53.4	0.1	0.1%
65.4%	53.0	53.3	0.3	0.6%
66.7%	52.9	53.2	0.4	0.7%
67.9%	52.9	53.1	0.2	0.4%
69.1%	52.9	53.1	0.2	0.4%
70.4%	52.8	53.1	0.3	0.5%
71.6%	52.8	53.1	0.3	0.5%
72.8%	52.7	53.0	0.3	0.6%
74.1%	52.7	53.0	0.3	0.5%
75.3%	52.7	53.0	0.3	0.7%
76.5%	52.6	52.9	0.3	0.5%
77.8%	52.5	52.8	0.2	0.5%
79.0%	52.4	52.7	0.3	0.5%
80.2%	52.2	52.2	0.0	0.0%
81.5%	52.2	52.2	0.0	0.0%
82.7%	52.1	52.0	-0.1	-0.1%
84.0%	52.0	52.0	0.0	0.1%
85.2%	52.0	52.0	0.0	0.1%
86.4%	51.9	52.0	0.0	0.0%
87.7%	51.9	51.9	0.1	0.2%
88.9%	51.7	51.9	0.2	0.4%
90.1%	51.6	51.8	0.2	0.4%
91.4%	51.0	51.5	0.5	1.0%
92.6%	50.7	51.0	0.3	0.5%
93.8%	50.7	50.7	0.0	0.0%
95.1%	50.7	50.7	0.0	0.0%
96.3%	50.6	50.5	0.0	0.0%
97.5%	49.7	49.7	0.0	0.0%
98.8%	49.5	49.5	0.0	0.0%
100.0%	49.5	49.5	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.2	60.1	-0.1	-0.1%
1.2%	60.0	60.0	0.1	0.1%
2.5%	59.6	60.0	0.4	0.6%
3.7%	58.7	59.7	1.0	1.7%
4.9%	58.6	59.5	0.9	1.5%
6.2%	58.5	59.5	1.0	1.7%
7.4%	58.4	59.4	1.0	1.7%
8.6%	58.4	59.2	0.8	1.4%
9.9%	58.3	58.6	0.2	0.4%
11.1%	58.3	58.5	0.2	0.3%
12.3%	58.3	58.5	0.1	0.2%
13.6%	58.2	58.4	0.3	0.4%
14.8%	58.1	58.4	0.3	0.5%
16.0%	58.0	58.1	0.2	0.3%
17.3%	57.9	58.1	0.2	0.3%
18.5%	57.5	58.0	0.5	0.9%
19.8%	57.4	58.0	0.5	0.9%
21.0%	57.4	57.9	0.5	0.9%
22.2%	57.3	57.9	0.6	1.0%
23.5%	57.3	57.8	0.5	1.0%
24.7%	57.1	57.8	0.7	1.3%
25.9%	57.0	57.7	0.6	1.1%
27.2%	57.0	57.5	0.5	0.8%
28.4%	56.9	57.4	0.5	0.9%
29.6%	56.9	57.4	0.5	0.8%
30.9%	56.9	57.3	0.4	0.8%
32.1%	56.9	57.3	0.4	0.7%
33.3%	56.9	57.2	0.4	0.7%
34.6%	56.8	57.2	0.4	0.7%
35.8%	56.8	57.2	0.4	0.8%
37.0%	56.7	57.0	0.3	0.5%
38.3%	56.6	56.9	0.3	0.6%
39.5%	56.6	56.8	0.2	0.3%
40.7%	56.5	56.8	0.2	0.4%
42.0%	56.5	56.8	0.3	0.5%
43.2%	56.4	56.7	0.2	0.4%
44.4%	56.4	56.6	0.2	0.3%
45.7%	56.4	56.5	0.1	0.2%
46.9%	56.4	56.5	0.1	0.2%
48.1%	56.3	56.5	0.1	0.2%
49.4%	56.1	56.4	0.4	0.6%
50.6%	56.1	56.4	0.4	0.6%
51.9%	56.0	56.3	0.3	0.5%
53.1%	56.0	56.2	0.2	0.3%
54.3%	56.0	56.2	0.2	0.3%
55.6%	56.0	56.1	0.2	0.3%
56.8%	55.9	56.1	0.2	0.3%
58.0%	55.9	56.1	0.2	0.3%
59.3%	55.9	56.1	0.2	0.4%
60.5%	55.8	56.0	0.2	0.4%
61.7%	55.7	56.0	0.3	0.5%
63.0%	55.7	55.9	0.2	0.3%
64.2%	55.7	55.9	0.3	0.5%
65.4%	55.5	55.8	0.3	0.5%
66.7%	55.5	55.5	0.1	0.1%
67.9%	55.4	55.5	0.1	0.2%
69.1%	55.4	55.5	0.1	0.2%
70.4%	55.4	55.5	0.1	0.2%
71.6%	55.4	55.5	0.1	0.2%
72.8%	55.4	55.5	0.1	0.1%
74.1%	55.3	55.4	0.1	0.3%
75.3%	55.3	55.4	0.2	0.3%
76.5%	55.2	55.4	0.1	0.3%
77.8%	55.2	55.2	0.0	0.0%
79.0%	55.2	55.2	0.0	0.0%
80.2%	55.1	55.1	0.0	0.0%
81.5%	55.1	55.0	0.0	-0.1%
82.7%	55.0	55.0	0.0	0.0%
84.0%	55.0	55.0	0.0	-0.1%
85.2%	55.0	54.9	-0.1	-0.1%
86.4%	55.0	54.7	-0.2	-0.4%
87.7%	54.9	54.4	-0.5	-0.9%
88.9%	54.4	54.3	-0.1	-0.1%
90.1%	54.2	54.2	0.0	0.0%
91.4%	54.1	54.1	0.0	0.0%
92.6%	53.9	53.9	0.0	0.1%
93.8%	53.7	53.8	0.0	0.1%
95.1%	53.7	53.8	0.0	0.1%
96.3%	53.5	53.6	0.0	0.1%
97.5%	53.5	53.5	0.0	0.0%
98.8%	53.4	53.4	0.0	0.0%
100.0%	53.4	53.4	0.0	0.0%

Table SQ7-1b

Sacramento River at Red Bluff, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.0	60.9	-0.1	-0.2%
1.2%	60.6	60.8	0.2	0.4%
2.5%	60.4	60.8	0.4	0.7%
3.7%	60.3	60.2	-0.1	-0.1%
4.9%	60.2	60.0	-0.1	-0.2%
6.2%	59.9	60.0	0.1	0.2%
7.4%	59.6	59.9	0.3	0.5%
8.6%	59.5	59.7	0.2	0.4%
9.9%	59.2	59.3	0.1	0.1%
11.1%	59.2	59.0	-0.2	-0.3%
12.3%	59.1	58.9	-0.2	-0.3%
13.6%	58.9	58.8	-0.1	-0.1%
14.8%	58.6	58.8	0.1	0.3%
16.0%	58.6	58.7	0.1	0.2%
17.3%	58.5	58.7	0.2	0.4%
18.5%	58.4	58.7	0.3	0.6%
19.8%	58.3	58.7	0.4	0.7%
21.0%	58.2	58.7	0.4	0.7%
22.2%	58.2	58.6	0.4	0.6%
23.5%	58.1	58.6	0.5	0.8%
24.7%	58.0	58.6	0.6	1.0%
25.9%	57.9	58.5	0.6	1.0%
27.2%	57.7	58.5	0.8	1.3%
28.4%	57.7	58.5	0.7	1.3%
29.6%	57.6	58.4	0.8	1.4%
30.9%	57.6	58.4	0.8	1.5%
32.1%	57.5	58.4	0.9	1.5%
33.3%	57.5	58.4	0.9	1.5%
34.6%	57.4	58.3	0.9	1.5%
35.8%	57.4	58.2	0.8	1.4%
37.0%	57.4	58.1	0.7	1.2%
38.3%	57.4	58.0	0.6	1.1%
39.5%	57.3	58.0	0.7	1.3%
40.7%	57.3	58.0	0.7	1.2%
42.0%	57.3	57.9	0.7	1.2%
43.2%	57.2	57.9	0.7	1.3%
44.4%	57.1	57.9	0.7	1.3%
45.7%	57.1	57.8	0.7	1.3%
46.9%	57.0	57.8	0.7	1.3%
48.1%	57.0	57.8	0.7	1.3%
49.4%	57.0	57.7	0.8	1.4%
50.6%	57.0	57.7	0.7	1.3%
51.9%	56.9	57.6	0.7	1.2%
53.1%	56.9	57.6	0.7	1.2%
54.3%	56.8	57.6	0.7	1.3%
55.6%	56.8	57.6	0.7	1.3%
56.8%	56.8	57.4	0.6	1.1%
58.0%	56.8	57.3	0.5	0.8%
59.3%	56.8	57.3	0.5	0.9%
60.5%	56.7	57.2	0.5	0.8%
61.7%	56.7	57.1	0.4	0.8%
63.0%	56.7	57.1	0.4	0.7%
64.2%	56.7	57.1	0.4	0.7%
65.4%	56.7	57.1	0.4	0.7%
66.7%	56.7	57.1	0.4	0.7%
67.9%	56.6	57.0	0.4	0.7%
69.1%	56.6	56.9	0.4	0.6%
70.4%	56.5	56.9	0.4	0.7%
71.6%	56.5	56.9	0.5	0.8%
72.8%	56.4	56.9	0.4	0.8%
74.1%	56.4	56.8	0.4	0.7%
75.3%	56.4	56.8	0.4	0.6%
76.5%	56.4	56.7	0.4	0.7%
77.8%	56.4	56.7	0.4	0.7%
79.0%	56.3	56.7	0.4	0.6%
80.2%	56.2	56.6	0.4	0.7%
81.5%	56.0	56.6	0.5	1.0%
82.7%	56.0	56.6	0.6	1.0%
84.0%	56.0	56.5	0.6	1.0%
85.2%	55.9	56.5	0.5	1.0%
86.4%	55.9	56.5	0.6	1.1%
87.7%	55.8	56.5	0.6	1.2%
88.9%	55.7	56.4	0.7	1.3%
90.1%	55.7	56.4	0.7	1.3%
91.4%	55.7	56.3	0.7	1.2%
92.6%	55.6	56.3	0.7	1.2%
93.8%	55.5	56.0	0.5	0.9%
95.1%	55.4	56.0	0.6	1.1%
96.3%	55.1	56.0	0.9	1.6%
97.5%	55.0	55.9	0.9	1.6%
98.8%	54.7	55.8	1.1	2.1%
100.0%	54.7	55.8	1.1	2.1%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.8	61.3	-1.5	-2.4%
1.2%	62.1	60.8	-1.3	-2.0%
2.5%	61.4	60.7	-0.7	-1.1%
3.7%	60.8	60.6	-0.2	-0.4%
4.9%	60.7	60.5	-0.1	-0.2%
6.2%	60.6	60.1	-0.5	-0.9%
7.4%	60.5	60.0	-0.5	-0.9%
8.6%	60.1	59.8	-0.3	-0.6%
9.9%	60.1	59.5	-0.5	-0.9%
11.1%	59.9	59.5	-0.4	-0.7%
12.3%	59.8	59.5	-0.4	-0.6%
13.6%	59.8	59.4	-0.4	-0.6%
14.8%	59.8	59.3	-0.5	-0.8%
16.0%	59.6	59.3	-0.3	-0.5%
17.3%	59.6	59.2	-0.4	-0.7%
18.5%	59.5	58.9	-0.5	-0.9%
19.8%	59.4	58.9	-0.5	-0.9%
21.0%	59.3	58.8	-0.4	-0.7%
22.2%	59.1	58.8	-0.3	-0.5%
23.5%	58.8	58.8	0.0	0.0%
24.7%	58.7	58.8	0.1	0.1%
25.9%	58.7	58.6	-0.1	-0.1%
27.2%	58.5	58.6	0.0	0.0%
28.4%	58.5	58.5	0.0	0.0%
29.6%	58.5	58.5	0.0	-0.1%
30.9%	58.5	58.5	0.0	-0.1%
32.1%	58.5	58.4	-0.1	-0.1%
33.3%	58.4	58.4	0.0	0.0%
34.6%	58.3	58.3	0.0	0.0%
35.8%	58.3	58.3	0.0	-0.1%
37.0%	58.3	58.2	-0.1	-0.1%
38.3%	58.3	58.2	-0.1	-0.1%
39.5%	58.3	58.1	-0.2	-0.3%
40.7%	58.1	58.1	-0.1	-0.1%
42.0%	58.1	58.1	0.0	-0.1%
43.2%	57.9	58.0	0.1	0.2%
44.4%	57.9	58.0	0.2	0.3%
45.7%	57.8	57.9	0.0	0.0%
46.9%	57.8	57.9	0.1	0.1%
48.1%	57.8	57.8	0.0	0.1%
49.4%	57.8	57.8	0.0	0.1%
50.6%	57.8	57.8	0.0	0.0%
51.9%	57.8	57.7	-0.1	-0.1%
53.1%	57.8	57.7	-0.1	-0.1%
54.3%	57.5	57.7	0.2	0.3%
55.6%	57.5	57.7	0.2	0.4%
56.8%	57.5	57.5	0.0	0.1%
58.0%	57.4	57.4	0.0	0.0%
59.3%	57.3	57.4	0.0	0.1%
60.5%	57.3	57.4	0.0	0.0%
61.7%	57.2	57.3	0.1	0.3%
63.0%	57.2	57.3	0.1	0.3%
64.2%	57.1	57.3	0.2	0.4%
65.4%	57.1	57.2	0.2	0.3%
66.7%	57.1	57.2	0.2	0.3%
67.9%	57.1	57.2	0.1	0.2%
69.1%	57.0	57.1	0.1	0.2%
70.4%	57.0	57.1	0.1	0.2%
71.6%	57.0	57.1	0.1	0.2%
72.8%	57.0	57.1	0.1	0.2%
74.1%	57.0	57.0	0.1	0.1%
75.3%	56.9	57.0	0.2	0.3%
76.5%	56.8	56.8	0.0	0.0%
77.8%	56.8	56.8	0.0	0.0%
79.0%	56.8	56.8	0.0	0.0%
80.2%	56.6	56.7	0.1	0.2%
81.5%	56.5	56.7	0.2	0.3%
82.7%	56.4	56.7	0.3	0.5%
84.0%	56.3	56.6	0.3	0.5%
85.2%	56.3	56.4	0.2	0.3%
86.4%	56.2	56.3	0.1	0.2%
87.7%	56.2	56.3	0.1	0.1%
88.9%	56.0	56.3	0.2	0.4%
90.1%	56.0	56.2	0.2	0.4%
91.4%	55.8	56.1	0.3	0.5%
92.6%	55.8	56.0	0.2	0.3%
93.8%	55.8	56.0	0.2	0.3%
95.1%	55.8	55.9	0.1	0.1%
96.3%	55.7	55.8	0.0	0.0%
97.5%	55.2	55.7	0.5	0.9%
98.8%	55.2	55.2	0.0	0.0%
100.0%	55.2	55.2	0.0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.2	60.9	-4.3	-6.6%
1.2%	63.2	60.8	-2.4	-3.8%
2.5%	62.5	60.8	-1.8	-2.8%
3.7%	62.2	60.7	-1.4	-2.3%
4.9%	62.0	60.7	-1.3	-2.1%
6.2%	62.0	60.7	-1.3	-2.1%
7.4%	61.8	60.6	-1.2	-1.9%
8.6%	61.4	60.6	-0.8	-1.3%
9.9%	61.1	60.6	-0.5	-0.8%
11.1%	61.1	60.4	-0.7	-1.1%
12.3%	60.9	60.2	-0.6	-1.1%
13.6%	60.8	60.1	-0.7	-1.2%
14.8%	60.7	60.0	-0.7	-1.1%
16.0%	60.6	59.8	-0.8	-1.3%
17.3%	60.5	59.7	-0.8	-1.3%
18.5%	60.0	59.7	-0.4	-0.6%
19.8%	59.9	59.6	-0.3	-0.5%
21.0%	59.9	59.5	-0.4	-0.7%
22.2%	59.8	59.5	-0.3	-0.5%
23.5%	59.7	59.4	-0.3	-0.5%
24.7%	59.7	59.4	-0.3	-0.5%
25.9%	59.7	59.3	-0.3	-0.6%
27.2%	59.6	59.3	-0.4	-0.6%
28.4%	59.6	59.3	-0.3	-0.6%
29.6%	59.6	59.1	-0.4	-0.7%
30.9%	59.5	59.1	-0.4	-0.7%
32.1%	59.5	59.1	-0.4	-0.7%
33.3%	59.5	59.1	-0.4	-0.7%
34.6%	59.4	59.0	-0.4	-0.8%
35.8%	59.4	58.9	-0.5	-0.8%
37.0%	59.3	58.9	-0.4	-0.7%
38.3%	59.3	58.9	-0.4	-0.7%
39.5%	59.3	58.8	-0.4	-0.7%
40.7%	59.2	58.8	-0.5	-0.8%
42.0%	59.2	58.8	-0.4	-0.7%
43.2%	59.1	58.7	-0.4	-0.7%
44.4%	59.1	58.7	-0.4	-0.6%
45.7%	59.1	58.6	-0.4	-0.7%
46.9%	59.0	58.6	-0.4	-0.7%
48.1%	58.9	58.6	-0.3	-0.6%
49.4%	58.7	58.6	-0.1	-0.3%
50.6%	58.6	58.6	-0.1	-0.1%
51.9%	58.6	58.5	0.0	-0.1%
53.1%	58.5	58.5	-0.1	-0.1%
54.3%	58.5	58.5	-0.1	-0.1%
55.6%	58.5	58.4	-0.1	-0.1%
56.8%	58.4	58.4	0.0	0.0%
58.0%	58.4	58.4	0.0	0.1%
59.3%	58.4	58.3	-0.1	-0.1%
60.5%	58.3	58.3	0.0	-0.1%
61.7%	58.3	58.3	0.0	-0.1%
63.0%	58.3	58.2	-0.1	-0.2%
64.2%	58.3	58.2	-0.1	-0.2%
65.4%	58.3	58.2	-0.1	-0.2%
66.7%	58.2	58.2	-0.1	-0.1%
67.9%	58.2	58.1	-0.1	-0.2%
69.1%	58.2	58.1	-0.1	-0.2%
70.4%	58.1	58.0	0.0	0.0%
71.6%	58.0	58.0	0.1	0.1%
72.8%	57.9	58.0	0.1	0.1%
74.1%	57.9	58.0	0.1	0.1%
75.3%	57.8	58.0	0.1	0.2%
76.5%	57.8	57.9	0.1	0.3%
77.8%	57.8	57.9	0.1	0.2%
79.0%	57.7	57.8	0.1	0.2%
80.2%	57.7	57.8	0.1	0.2%
81.5%	57.7	57.8	0.1	0.3%
82.7%	57.6	57.8	0.1	0.3%
84.0%	57.6	57.8	0.2	0.4%
85.2%	57.6	57.8	0.2	0.4%
86.4%	57.5	57.7	0.2	0.3%
87.7%	57.5	57.7	0.2	0.3%
88.9%	57.4	57.6	0.2	0.3%
90.1%	57.4	57.5	0.1	0.2%
91.4%	57.2	57.5	0.3	0.5%
92.6%	57.1	57.4	0.2	0.4%
93.8%	57.1	57.3	0.2	0.4%
95.1%	57.0	57.2	0.2	0.3%
96.3%	56.9	57.2	0.3	0.4%
97.5%	56.9	56.8	-0.1	-0.2%
98.8%	56.8	56.6	-0.2	-0.3%
100.0%	56.8	56.6	-0.2	-0.3%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.3	65.9	-2.4	-3.5%
1.2%	66.5	64.8	-1.7	-2.5%
2.5%	65.8	64.5	-1.4	-2.1%
3.7%	64.4	61.8	-2.6	-4.0%
4.9%	64.1	61.3	-2.8	-4.4%
6.2%	64.0	61.2	-2.7	-4.3%
7.4%	63.6	61.1	-2.5	-3.9%
8.6%	63.0	61.0	-2.0	-3.2%
9.9%	62.3	61.0	-1.4	-2.2%
11.1%	61.9	60.4	-1.5	-2.4%
12.3%	61.8	60.3	-1.5	-2.5%
13.6%	61.8	60.2	-1.5	-2.5%
14.8%	61.5	60.2	-1.3	-2.2%
16.0%	61.5	60.1	-1.4	-2.2%
17.3%	61.5	59.8	-1.7	-2.7%
18.5%	61.4	59.8	-1.6	-2.7%
19.8%	61.3	59.7	-1.6	-2.7%
21.0%	61.2	59.7	-1.5	-2.4%
22.2%	61.2	59.7	-1.5	-2.4%
23.5%	61.0	59.7	-1.3	-2.2%
24.7%	60.9	59.5	-1.4	-2.3%
25.9%	60.9	59.5	-1.4	-2.3%
27.2%	60.5	59.2	-1.3	-2.1%
28.4%	60.4	59.1	-1.3	-2.2%
29.6%	60.4	59.1	-1.3	-2.1%
30.9%	60.3	59.1	-1.2	-2.0%
32.1%	60.2	58.9	-1.3	-2.2%
33.3%	60.2	58.8	-1.3	-2.2%
34.6%	60.1	58.8	-1.3	-2.2%
35.8%	59.9	58.8	-1.1	-1.8%
37.0%	59.8	58.7	-1.0	-1.7%
38.3%	59.6	58.7	-0.9	-1.5%
39.5%	59.5	58.6	-0.9	-1.6%
40.7%	59.5	58.4	-1.1	-1.8%
42.0%	59.3	58.3	-1.1	-1.8%
43.2%	59.3	58.3	-1.1	-1.8%
44.4%	59.2	58.2	-1.0	-1.6%
45.7%	58.8	58.2	-0.6	-1.1%
46.9%	58.8	58.2	-0.6	-1.0%
48.1%	58.8	58.1	-0.7	-1.3%
49.4%	58.7	58.0	-0.7	-1.2%
50.6%	58.7	58.0	-0.7	-1.1%
51.9%	58.4	58.0	-0.4	-0.7%
53.1%	58.3	57.8	-0.5	-0.9%
54.3%	58.1	57.7	-0.4	-0.7%
55.6%	57.9	57.6	-0.3	-0.5%
56.8%	57.8	57.5	-0.4	-0.6%
58.0%	57.7	57.4	-0.3	-0.6%
59.3%	57.6	57.3	-0.3	-0.4%
60.5%	57.2	57.2	-0.1	-0.1%
61.7%	57.1	57.1	0.0	0.0%
63.0%	57.1	57.1	-0.1	-0.1%
64.2%	56.8	56.9	0.2	0.3%
65.4%	56.5	56.9	0.4	0.7%
66.7%	56.4	56.7	0.3	0.6%
67.9%	56.2	56.4	0.1	0.3%
69.1%	56.2	56.2	0.0	0.0%
70.4%	56.2	56.0	-0.2	-0.3%
71.6%	56.1	55.9	-0.2	-0.3%
72.8%	55.9	55.9	-0.1	-0.1%
74.1%	55.8	55.4	-0.4	-0.8%
75.3%	55.7	55.4	-0.3	-0.6%
76.5%	55.7	55.3	-0.4	-0.7%
77.8%	55.7	55.1	-0.6	-1.0%
79.0%	55.5	55.1	-0.4	-0.8%
80.2%	55.4	55.0	-0.4	-0.7%
81.5%	55.3	54.9	-0.4	-0.7%
82.7%	55.2	54.8	-0.4	-0.7%
84.0%	55.1	54.8	-0.3	-0.5%
85.2%	55.1	54.8	-0.3	-0.5%
86.4%	55.0	54.8	-0.3	-0.5%
87.7%	54.7	54.6	-0.2	-0.3%
88.9%	54.7	54.5	-0.2	-0.4%
90.1%	54.6	54.5	-0.1	-0.2%
91.4%	54.5	54.3	-0.2	-0.5%
92.6%	54.3	54.1	-0.3	-0.5%
93.8%	54.2	53.9	-0.3	-0.6%
95.1%	54.1	53.8	-0.3	-0.5%
96.3%	54.1	53.3	-0.8	-1.5%
97.5%	53.2	53.1	-0.1	-0.2%
98.8%	53.2	52.8	-0.3	-0.6%
100.0%	53.2	52.8	-0.3	-0.6%

Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.1	61.3	-1.8	-2.9%
1.2%	62.4	61.0	-1.4	-2.3%
2.5%	61.6	60.8	-0.8	-1.3%
3.7%	61.6	60.5	-1.0	-1.7%
4.9%	61.5	60.5	-1.0	-1.7%
6.2%	61.4	60.2	-1.2	-1.9%
7.4%	61.4	60.2	-1.2	-2.0%
8.6%	60.8	60.1	-0.7	-1.1%
9.9%	60.2	60.1	-0.1	-0.2%
11.1%	60.2	60.0	-0.2	-0.3%
12.3%	60.0	59.8	-0.2	-0.3%
13.6%	59.9	59.4	-0.6	-1.0%
14.8%	59.8	59.2	-0.6	-1.0%
16.0%	59.6	59.2	-0.4	-0.7%
17.3%	59.4	59.2	-0.3	-0.5%
18.5%	59.3	59.1	-0.3	-0.4%
19.8%	59.3	59.0	-0.3	-0.5%
21.0%	59.3	59.0	-0.3	-0.5%
22.2%	59.2	59.0	-0.2	-0.4%
23.5%	59.1	58.8	-0.3	-0.5%
24.7%	59.0	58.8	-0.2	-0.3%
25.9%	58.8	58.8	0.0	-0.1%
27.2%	58.8	58.7	-0.1	-0.2%
28.4%	58.7	58.6	-0.1	-0.1%
29.6%	58.6	58.6	-0.1	-0.1%
30.9%	58.5	58.6	0.0	0.1%
32.1%	58.5	58.5	0.0	0.0%
33.3%	58.5	58.5	0.0	0.0%
34.6%	58.5	58.4	-0.1	-0.2%
35.8%	58.4	58.3	-0.1	-0.1%
37.0%	58.4	58.3	-0.1	-0.2%
38.3%	58.4	58.3	-0.1	-0.2%
39.5%	58.4	58.3	-0.1	-0.2%
40.7%	58.4	58.2	-0.2	-0.3%
42.0%	58.3	58.2	-0.1	-0.2%
43.2%	58.3	58.2	-0.1	-0.2%
44.4%	58.2	58.1	-0.1	-0.2%
45.7%	58.1	58.0	-0.1	-0.2%
46.9%	58.0	58.0	-0.1	-0.1%
48.1%	58.0	58.0	-0.1	-0.1%
49.4%	58.0	57.9	-0.1	-0.2%
50.6%	58.0	57.9	-0.1	-0.1%
51.9%	57.9	57.9	-0.1	-0.1%
53.1%	57.8	57.8	0.0	0.0%
54.3%	57.6	57.8	0.2	0.3%
55.6%	57.6	57.7	0.1	0.2%
56.8%	57.6	57.6	0.0	0.0%
58.0%	57.5	57.6	0.0	0.1%
59.3%	57.5	57.6	0.0	0.0%
60.5%	57.5	57.5	0.0	0.0%
61.7%	57.5	57.4	-0.1	-0.2%
63.0%	57.5	57.4	-0.1	-0.1%
64.2%	57.5	57.4	-0.1	-0.2%
65.4%	57.5	57.4	-0.1	-0.2%
66.7%	57.4	57.4	-0.1	-0.1%
67.9%	57.4	57.3	0.0	-0.1%
69.1%	57.3	57.3	0.0	0.0%
70.4%	57.3	57.3	0.0	0.0%
71.6%	57.2	57.3	0.1	0.1%
72.8%	57.2	57.3	0.1	0.1%
74.1%	57.2	57.2	0.0	0.1%
75.3%	57.1	57.2	0.0	0.1%
76.5%	57.1	57.1	0.0	-0.1%
77.8%	57.1	57.1	-0.1	-0.1%
79.0%	57.0	57.1	0.0	0.1%
80.2%	57.0	57.0	0.0	-0.1%
81.5%	56.8	56.9	0.1	0.2%
82.7%	56.8	56.9	0.2	0.3%
84.0%	56.7	56.8	0.1	0.2%
85.2%	56.7	56.8	0.1	0.2%
86.4%	56.6	56.6	0.0	0.0%
87.7%	56.5	56.6	0.1	0.1%
88.9%	56.4	56.5	0.1	0.2%
90.1%	56.4	56.2	-0.1	-0.2%
91.4%	56.4	56.2	-0.2	-0.4%
92.6%	56.4	56.1	-0.2	-0.4%
93.8%	56.2	56.1	-0.1	-0.2%
95.1%	56.1	55.9	-0.2	-0.3%
96.3%	55.8	55.9	0.1	0.2%
97.5%	55.7	55.9	0.2	0.3%
98.8%	55.7	55.8	0.1	0.2%
100.0%	55.6	55.7	0.0	0.1%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.7	62.3	-2.4	-3.7%
1.2%	63.5	61.4	-2.0	-3.2%
2.5%	62.7	61.3	-1.4	-2.2%
3.7%	62.4	61.2	-1.3	-2.0%
4.9%	62.0	60.8	-1.2	-1.9%
6.2%	62.0	60.4	-1.6	-2.5%
7.4%	61.5	60.2	-1.3	-2.1%
8.6%	61.4	60.2	-1.2	-1.9%
9.9%	61.1	60.1	-1.0	-1.6%
11.1%	61.0	60.1	-0.9	-1.5%
12.3%	60.8	60.1	-0.7	-1.1%
13.6%	60.8	59.9	-0.9	-1.5%
14.8%	60.1	59.9	-0.3	-0.4%
16.0%	60.1	59.7	-0.4	-0.7%
17.3%	60.1	59.6	-0.5	-0.8%
18.5%	60.0	59.5	-0.5	-0.8%
19.8%	60.0	59.4	-0.6	-1.0%
21.0%	59.6	59.1	-0.5	-0.9%
22.2%	59.6	59.1	-0.6	-1.0%
23.5%	59.6	59.0	-0.6	-0.9%
24.7%	59.5	58.9	-0.6	-1.0%
25.9%	59.4	58.9	-0.5	-0.8%
27.2%	59.2	58.8	-0.4	-0.7%
28.4%	59.2	58.8	-0.4	-0.7%
29.6%	59.2	58.8	-0.4	-0.6%
30.9%	59.2	58.6	-0.6	-0.9%
32.1%	59.2	58.6	-0.5	-0.9%
33.3%	59.0	58.6	-0.4	-0.6%
34.6%	59.0	58.5	-0.4	-0.8%
35.8%	59.0	58.5	-0.5	-0.8%
37.0%	59.0	58.5	-0.5	-0.9%
38.3%	58.9	58.4	-0.6	-1.0%
39.5%	58.8	58.4	-0.4	-0.7%
40.7%	58.8	58.3	-0.4	-0.7%
42.0%	58.6	58.3	-0.3	-0.6%
43.2%	58.6	58.3	-0.3	-0.6%
44.4%	58.6	58.2	-0.3	-0.6%
45.7%	58.5	58.2	-0.3	-0.5%
46.9%	58.5	58.1	-0.4	-0.6%
48.1%	58.4	58.0	-0.4	-0.7%
49.4%	58.3	57.9	-0.4	-0.7%
50.6%	58.3	57.8	-0.4	-0.7%
51.9%	58.2	57.8	-0.4	-0.7%
53.1%	58.2	57.8	-0.4	-0.7%
54.3%	57.9	57.8	-0.1	-0.2%
55.6%	57.8	57.6	-0.2	-0.4%
56.8%	57.8	57.6	-0.2	-0.3%
58.0%	57.7	57.6	-0.1	-0.1%
59.3%	57.6	57.5	-0.1	-0.1%
60.5%	57.6	57.4	-0.1	-0.2%
61.7%	57.5	57.4	-0.1	-0.2%
63.0%	57.5	57.4	-0.1	-0.1%
64.2%	57.4	57.4	0.0	0.0%
65.4%	57.4	57.4	0.0	0.0%
66.7%	57.4	57.3	0.0	-0.1%
67.9%	57.3	57.2	-0.1	-0.1%
69.1%	57.3	57.2	-0.1	-0.1%
70.4%	57.3	57.2	-0.1	-0.2%
71.6%	57.2	57.1	-0.1	-0.2%
72.8%	57.2	57.1	-0.1	-0.2%
74.1%	57.1	57.1	-0.1	-0.1%
75.3%	57.0	57.1	0.0	0.0%
76.5%	57.0	57.1	0.0	0.0%
77.8%	57.0	57.0	0.0	0.0%
79.0%	57.0	57.0	-0.1	-0.1%
80.2%	57.0	56.9	-0.1	-0.1%
81.5%	57.0	56.9	-0.1	-0.1%
82.7%	56.9	56.9	-0.1	-0.1%
84.0%	56.9	56.9	0.0	0.0%
85.2%	56.9	56.9	0.0	0.0%
86.4%	56.8	56.6	-0.3	-0.5%
87.7%	56.5	56.6	0.1	0.1%
88.9%	56.5	56.3	-0.2	-0.3%
90.1%	56.4	56.3	-0.1	-0.2%
91.4%	56.3	56.2	-0.1	-0.1%
92.6%	56.1	56.0	-0.1	-0.2%
93.8%	56.1	56.0	-0.1	-0.2%
95.1%	56.0	55.9	-0.2	-0.3%
96.3%	56.0	55.8	-0.2	-0.4%
97.5%	56.0	55.6	-0.4	-0.8%
98.8%	55.9	55.5	-0.3	-0.6%
100.0%	55.6	55.4	-0.2	-0.4%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.8	63.4	-3.3	-5.0%
1.2%	64.8	62.3	-2.6	-4.0%
2.5%	64.0	62.1	-1.9	-3.0%
3.7%	63.2	61.3	-1.9	-3.1%
4.9%	62.9	60.9	-2.0	-3.1%
6.2%	62.4	60.8	-1.6	-2.5%
7.4%	62.3	60.8	-1.6	-2.5%
8.6%	61.9	60.7	-1.2	-1.9%
9.9%	61.9	60.5	-1.4	-2.2%
11.1%	61.6	60.4	-1.1	-1.8%
12.3%	61.5	60.2	-1.3	-2.0%
13.6%	61.1	60.2	-0.9	-1.5%
14.8%	61.0	60.1	-0.9	-1.5%
16.0%	60.8	60.0	-0.8	-1.4%
17.3%	60.7	59.9	-0.8	-1.3%
18.5%	60.7	59.8	-0.9	-1.5%
19.8%	60.6	59.7	-0.9	-1.4%
21.0%	60.4	59.7	-0.8	-1.3%
22.2%	60.3	59.6	-0.7	-1.2%
23.5%	60.3	59.4	-0.9	-1.5%
24.7%	60.2	59.3	-0.9	-1.6%
25.9%	60.0	59.2	-0.8	-1.4%
27.2%	60.0	59.1	-0.9	-1.5%
28.4%	60.0	59.0	-0.9	-1.5%
29.6%	59.9	59.0	-0.9	-1.5%
30.9%	59.9	59.0	-0.9	-1.5%
32.1%	59.7	58.8	-0.9	-1.5%
33.3%	59.5	58.8	-0.8	-1.3%
34.6%	59.5	58.7	-0.8	-1.4%
35.8%	59.5	58.7	-0.8	-1.4%
37.0%	59.5	58.7	-0.8	-1.3%
38.3%	59.4	58.7	-0.7	-1.2%
39.5%	59.2	58.7	-0.5	-0.9%
40.7%	59.2	58.6	-0.6	-0.9%
42.0%	59.2	58.6	-0.6	-1.0%
43.2%	59.0	58.6	-0.4	-0.7%
44.4%	58.9	58.5	-0.3	-0.6%
45.7%	58.8	58.5	-0.3	-0.5%
46.9%	58.7	58.3	-0.4	-0.7%
48.1%	58.7	58.3	-0.4	-0.6%
49.4%	58.6	58.1	-0.5	-0.8%
50.6%	58.5	58.1	-0.4	-0.6%
51.9%	58.2	58.1	-0.2	-0.3%
53.1%	58.2	58.0	-0.2	-0.3%
54.3%	58.2	58.0	-0.2	-0.4%
55.6%	58.2	57.9	-0.3	-0.5%
56.8%	58.0	57.9	-0.1	-0.2%
58.0%	58.0	57.8	-0.2	-0.4%
59.3%	57.9	57.7	-0.2	-0.3%
60.5%	57.8	57.7	-0.1	-0.2%
61.7%	57.8	57.7	-0.1	-0.2%
63.0%	57.8	57.7	-0.1	-0.2%
64.2%	57.7	57.6	-0.1	-0.2%
65.4%	57.7	57.5	-0.2	-0.3%
66.7%	57.6	57.4	-0.2	-0.4%
67.9%	57.5	57.3	-0.2	-0.3%
69.1%	57.4	57.3	0.0	-0.1%
70.4%	57.4	57.2	-0.1	-0.2%
71.6%	57.3	57.1	-0.2	-0.3%
72.8%	57.2	57.1	-0.2	-0.3%
74.1%	57.2	57.0	-0.2	-0.4%
75.3%	57.2	57.0	-0.2	-0.4%
76.5%	56.9	56.8	-0.1	-0.2%
77.8%	56.9	56.8	-0.1	-0.2%
79.0%	56.8	56.7	-0.1	-0.1%
80.2%	56.7	56.7	0.0	0.0%
81.5%	56.6	56.6	-0.1	-0.1%
82.7%	56.5	56.5	0.0	0.0%
84.0%	56.4	56.5	0.1	0.2%
85.2%	56.3	56.4	0.1	0.2%
86.4%	56.3	56.4	0.1	0.2%
87.7%	56.3	56.3	0.1	0.1%
88.9%	56.2	56.3	0.0	0.1%
90.1%	56.2	55.9	-0.3	-0.5%
91.4%	56.2	55.9	-0.3	-0.6%
92.6%	56.1	55.8	-0.4	-0.6%
93.8%	55.8	55.4	-0.4	-0.7%
95.1%	55.8	55.3	-0.5	-0.9%
96.3%	55.5	55.3	-0.2	-0.3%
97.5%	55.3	55.2	-0.1	-0.2%
98.8%	55.2	55.2	0.0	-0.1%
100.0%	55.1	54.5	-0.7	-1.2%

Figure SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

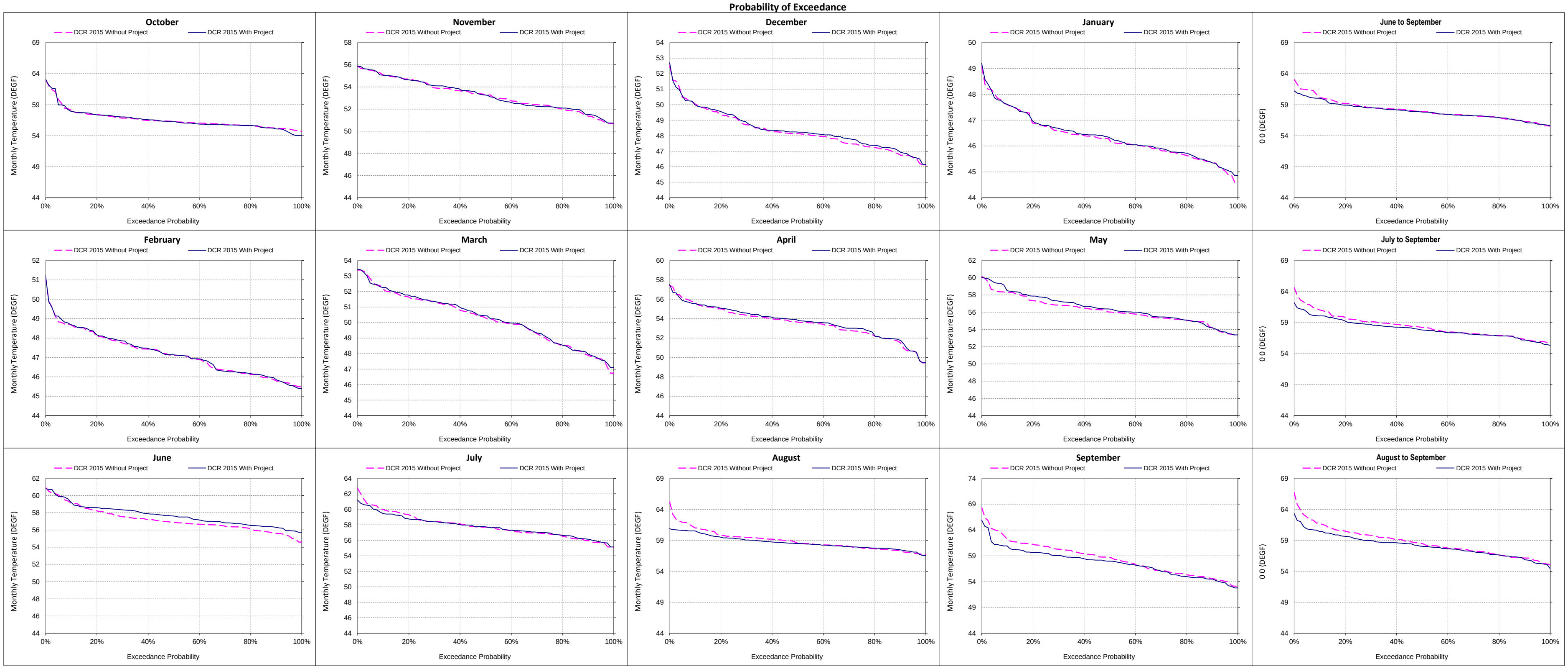


Table SQ8-1b

Sacramento River below Red Bluff, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.0	63.1	0.1	0.2%
1.2%	62.0	62.2	0.1	0.2%
2.5%	61.4	61.7	0.2	0.4%
3.7%	61.1	61.6	0.5	0.9%
4.9%	59.8	59.0	-0.9	-1.5%
6.2%	59.2	58.9	-0.3	-0.5%
7.4%	58.4	58.8	0.4	0.7%
8.6%	58.4	58.2	-0.1	-0.2%
9.9%	58.1	57.9	-0.2	-0.4%
11.1%	57.8	57.8	0.1	0.1%
12.3%	57.7	57.8	0.0	0.1%
13.6%	57.7	57.7	0.0	0.0%
14.8%	57.6	57.7	0.1	0.2%
16.0%	57.5	57.7	0.1	0.3%
17.3%	57.4	57.6	0.2	0.4%
18.5%	57.4	57.5	0.0	0.1%
19.8%	57.4	57.4	0.0	0.0%
21.0%	57.4	57.3	0.0	-0.1%
22.2%	57.3	57.3	0.1	0.1%
23.5%	57.2	57.3	0.1	0.2%
24.7%	57.1	57.3	0.1	0.3%
25.9%	57.1	57.2	0.1	0.1%
27.2%	57.0	57.1	0.2	0.3%
28.4%	56.9	57.1	0.1	0.2%
29.6%	56.8	57.0	0.2	0.3%
30.9%	56.8	57.0	0.2	0.3%
32.1%	56.8	57.0	0.2	0.3%
33.3%	56.7	56.9	0.2	0.3%
34.6%	56.7	56.8	0.0	0.0%
35.8%	56.7	56.7	0.0	0.0%
37.0%	56.6	56.7	0.1	0.2%
38.3%	56.5	56.6	0.1	0.2%
39.5%	56.5	56.6	0.1	0.2%
40.7%	56.5	56.6	0.1	0.2%
42.0%	56.4	56.6	0.1	0.3%
43.2%	56.4	56.5	0.1	0.2%
44.4%	56.4	56.4	0.0	0.0%
45.7%	56.4	56.3	0.0	-0.1%
46.9%	56.4	56.3	0.0	-0.1%
48.1%	56.3	56.3	0.0	-0.1%
49.4%	56.3	56.2	-0.1	-0.1%
50.6%	56.2	56.2	0.0	0.0%
51.9%	56.2	56.2	0.0	-0.1%
53.1%	56.2	56.1	-0.1	-0.2%
54.3%	56.1	56.0	-0.1	-0.2%
55.6%	56.1	56.0	-0.1	-0.2%
56.8%	56.1	56.0	-0.1	-0.1%
58.0%	56.1	55.9	-0.1	-0.3%
59.3%	56.0	55.9	-0.1	-0.3%
60.5%	56.0	55.8	-0.2	-0.3%
61.7%	56.0	55.8	-0.2	-0.3%
63.0%	56.0	55.8	-0.2	-0.3%
64.2%	55.9	55.8	-0.2	-0.3%
65.4%	55.9	55.8	-0.2	-0.3%
66.7%	55.9	55.8	-0.1	-0.2%
67.9%	55.9	55.8	-0.1	-0.2%
69.1%	55.9	55.8	-0.1	-0.2%
70.4%	55.8	55.7	-0.1	-0.1%
71.6%	55.8	55.7	-0.1	-0.1%
72.8%	55.7	55.7	0.0	0.0%
74.1%	55.7	55.7	0.0	0.0%
75.3%	55.7	55.7	-0.1	-0.1%
76.5%	55.7	55.7	0.0	-0.1%
77.8%	55.7	55.6	0.0	-0.1%
79.0%	55.7	55.6	0.0	-0.1%
80.2%	55.6	55.6	0.0	0.0%
81.5%	55.5	55.6	0.1	0.1%
82.7%	55.5	55.6	0.1	0.3%
84.0%	55.4	55.4	-0.1	-0.1%
85.2%	55.3	55.3	0.0	0.0%
86.4%	55.3	55.3	-0.1	-0.1%
87.7%	55.3	55.2	0.0	0.0%
88.9%	55.3	55.2	0.0	-0.1%
90.1%	55.2	55.1	-0.1	-0.2%
91.4%	55.2	55.1	-0.1	-0.1%
92.6%	55.2	55.0	-0.1	-0.2%
93.8%	55.1	54.8	-0.3	-0.5%
95.1%	55.1	54.5	-0.6	-1.0%
96.3%	55.0	54.2	-0.7	-1.3%
97.5%	54.9	54.1	-0.8	-1.5%
98.8%	54.7	54.0	-0.7	-1.2%
100.0%	54.7	54.0	0.0	-1.2%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.9	55.9	0.0	-0.1%
1.2%	55.7	55.8	0.2	0.3%
2.5%	55.6	55.6	0.0	0.0%
3.7%	55.5	55.6	0.1	0.1%
4.9%	55.5	55.5	0.0	0.0%
6.2%	55.5	55.5	0.1	0.1%
7.4%	55.4	55.4	0.0	0.1%
8.6%	55.3	55.1	-0.2	-0.3%
9.9%	55.1	55.1	0.0	-0.1%
11.1%	55.0	55.0	0.0	0.0%
12.3%	55.0	55.0	0.1	0.1%
13.6%	54.9	55.0	0.1	0.1%
14.8%	54.9	54.9	0.0	0.1%
16.0%	54.9	54.9	0.0	0.0%
17.3%	54.8	54.8	0.0	0.1%
18.5%	54.7	54.7	-0.1	-0.1%
19.8%	54.7	54.7	-0.1	-0.1%
21.0%	54.7	54.6	-0.1	-0.2%
22.2%	54.6	54.6	0.0	0.0%
23.5%	54.5	54.5	0.0	0.0%
24.7%	54.5	54.4	-0.1	-0.1%
25.9%	54.4	54.4	0.0	0.0%
27.2%	54.3	54.2	-0.1	-0.2%
28.4%	54.1	54.2	0.1	0.2%
29.6%	53.9	54.1	0.2	0.3%
30.9%	53.9	54.1	0.2	0.4%
32.1%	53.9	54.1	0.2	0.4%
33.3%	53.9	54.1	0.2	0.4%
34.6%	53.9	54.0	0.2	0.3%
35.8%	53.8	53.9	0.1	0.2%
37.0%	53.8	53.9	0.2	0.3%
38.3%	53.7	53.9	0.2	0.4%
39.5%	53.7	53.9	0.2	0.4%
40.7%	53.6	53.7	0.1	0.1%
42.0%	53.6	53.7	0.1	0.1%
43.2%	53.6	53.7	0.1	0.2%
44.4%	53.4	53.6	0.2	0.3%
45.7%	53.4	53.6	0.2	0.3%
46.9%	53.4	53.4	0.0	0.0%
48.1%	53.4	53.3	0.0	-0.1%
49.4%	53.3	53.3	-0.1	-0.1%
50.6%	53.3	53.2	0.0	-0.1%
51.9%	53.3	53.1	-0.2	-0.3%
53.1%	53.1	53.1	0.0	0.0%
54.3%	53.0	52.9	-0.1	-0.1%
55.6%	53.0	52.8	-0.2	-0.3%
56.8%	52.9	52.7	-0.2	-0.3%
58.0%	52.9	52.7	-0.3	-0.5%
59.3%	52.8	52.6	-0.1	-0.3%
60.5%	52.7	52.5	-0.2	-0.3%
61.7%	52.7	52.5	-0.2	-0.4%
63.0%	52.5	52.5	0.0	-0.1%
64.2%	52.5	52.5	-0.1	-0.1%
65.4%	52.5	52.4	-0.1	-0.3%
66.7%	52.5	52.3	-0.2	-0.4%
67.9%	52.4	52.3	-0.1	-0.3%
69.1%	52.4	52.3	-0.1	-0.3%
70.4%	52.4	52.2	-0.2	-0.3%
71.6%	52.4	52.2	-0.1	-0.3%
72.8%	52.4	52.2	-0.2	-0.3%
74.1%	52.3	52.2	-0.1	-0.3%
75.3%	52.3	52.2	-0.1	-0.1%
76.5%	52.2	52.2	0.0	0.0%
77.8%	52.1	52.1	0.0	0.0%
79.0%	52.0	52.1	0.1	0.1%
80.2%	52.0	52.1	0.1	0.2%
81.5%	51.9	52.1	0.2	0.4%
82.7%	51.9	52.0	0.2	0.4%
84.0%	51.8	52.0	0.2	0.3%
85.2%	51.8	52.0	0.2	0.3%
86.4%	51.8	52.0	0.2	0.4%
87.7%	51.6	51.8	0.2	0.3%
88.9%	51.4	51.5	0.1	0.2%
90.1%	51.4	51.5	0.1	0.3%
91.4%	51.3	51.5	0.1	0.3%
92.6%	51.2	51.4	0.3	0.5%
93.8%	51.0	51.3	0.2	0.5%
95.1%	51.0	51.1	0.1	0.2%
96.3%	50.8	51.0	0.1	0.2%
97.5%	50.8	50.8	0.0	0.0%
98.8%	50.7	50.7	0.1	0.1%
100.0%	50.7	50.7	0.1	0.1%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.5	52.7	0.2	0.4%
1.2%	51.6	51.5	0.0	-0.1%
2.5%	51.5	51.1	-0.4	-0.8%
3.7%	51.2	51.0	-0.2	-0.3%
4.9%	50.5	50.6	0.1	0.2%
6.2%	50.4	50.3	-0.1	-0.3%
7.4%	50.3	50.2	-0.1	-0.1%
8.6%	50.2	50.2	0.0	0.0%
9.9%	50.0	50.0	-0.1	-0.1%
11.1%	49.9	49.9	-0.1	-0.1%
12.3%	49.8	49.9	0.0	0.1%
13.6%	49.8	49.8	0.1	0.1%
14.8%	49.7	49.8	0.1	0.2%
16.0%	49.6	49.7	0.1	0.1%
17.3%	49.5	49.7	0.1	0.3%
18.5%	49.5	49.6	0.1	0.2%
19.8%	49.4	49.6	0.2	0.4%
21.0%	49.3	49.5	0.2	0.4%
22.2%	49.3	49.4	0.1	0.2%
23.5%	49.2	49.4	0.2	0.4%
24.7%	49.2	49.3	0.2	0.3%
25.9%	49.2	49.2	0.0	0.1%
27.2%	48.9	49.0	0.1	0.2%
28.4%	48.8	49.0	0.2	0.4%
29.6%	48.7	48.9	0.2	0.4%
30.9%	48.7	48.7	0.1	0.1%
32.1%	48.7	48.7	0.0	0.0%
33.3%	48.5	48.5	0.0	0.1%
34.6%	48.5	48.5	0.0	0.0%
35.8%	48.5	48.4	-0.1	-0.2%
37.0%	48.5	48.4	-0.1	-0.2%
38.3%	48.3	48.4	0.1	0.1%
39.5%	48.3	48.4	0.1	0.1%
40.7%	48.2	48.3	0.1	0.2%
42.0%	48.2	48.3	0.1	0.2%
43.2%	48.2	48.3	0.1	0.2%
44.4%	48.2	48.3	0.1	0.3%
45.7%	48.2	48.3	0.1	0.2%
46.9%	48.1	48.2	0.1	0.2%
48.1%	48.1	48.2	0.1	0.2%
49.4%	48.1	48.2	0.1	0.2%
50.6%	48.1	48.2	0.1	0.2%
51.9%	48.1	48.2	0.1	0.3%
53.1%	48.1	48.2	0.1	0.2%
54.3%	48.1	48.2	0.1	0.2%
55.6%	48.0	48.2	0.2	0.3%
56.8%	48.0	48.1	0.1	0.3%
58.0%	48.0	48.1	0.1	0.3%
59.3%	48.0	48.1	0.1	0.3%
60.5%	47.9	48.0	0.1	0.2%
61.7%	47.9	48.0	0.2	0.3%
63.0%	47.8	48.0	0.2	0.5%
64.2%	47.8	48.0	0.2	0.4%
65.4%	47.8	47.9	0.2	0.3%
66.7%	47.6	47.9	0.3	0.6%
67.9%	47.5	47.8	0.3	0.6%
69.1%	47.5	47.8	0.3	0.7%
70.4%	47.5	47.8	0.3	0.7%
71.6%	47.5	47.8	0.3	0.6%
72.8%	47.5	47.7	0.3	0.5%
74.1%	47.4	47.6	0.2	0.4%
75.3%	47.4	47.5	0.1	0.2%
76.5%	47.3	47.5	0.2	0.4%
77.8%	47.3	47.4	0.1	0.2%
79.0%	47.2	47.4	0.2	0.3%
80.2%	47.2	47.4	0.1	0.3%
81.5%	47.2	47.3	0.1	0.3%
82.7%	47.2	47.3	0.1	0.2%
84.0%	47.1	47.2	0.1	0.3%
85.2%	47.1	47.2	0.1	0.3%
86.4%	47.0	47.2	0.2	0.4%
87.7%	46.9	47.2	0.3	0.6%
88.9%	46.9	47.1	0.2	0.4%
90.1%	46.7	46.9	0.2	0.4%
91.4%	46.7	46.9	0.1	0.3%
92.6%	46.7	46.8	0.1	0.2%
93.8%	46.7	46.7	0.0	0.0%
95.1%	46.6	46.6	0.0	0.1%
96.3%	46.5	46.6	0.0	0.1%
97.5%	46.2	46.5	0.3	0.6%
98.8%	46.1	46.2	0.1	0.1%
100.0%	46.1	46.2	0.1	0.1%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.1	49.2	0.1	0.3%
1.2%	48.4	48.6	0.2	0.4%
2.5%	48.2	48.4	0.2	0.4%
3.7%	48.2	48.2	0.0	-0.1%
4.9%	48.0	47.9	-0.2	-0.3%
6.2%	47.8	47.8	-0.1	-0.1%
7.4%	47.8	47.8	0.0	-0.1%
8.6%	47.7	47.7	0.0	0.0%
9.9%	47.6	47.6	0.0	0.0%
11.1%	47.5	47.6	0.0	0.0%
12.3%	47.5	47.5	0.0	0.0%
13.6%	47.4	47.5	0.0	0.1%
14.8%	47.4	47.3	-0.1	-0.1%
16.0%	47.3	47.3	0.0	0.0%
17.3%	47.3	47.3	0.0	0.0%
18.5%	47.3	47.2	-0.1	-0.2%
19.8%	46.9	47.0	0.1	0.2%
21.0%	46.9	46.9	0.0	0.1%
22.2%	46.8	46.9	0.0	0.1%
23.5%	46.8	46.8	0.0	0.0%
24.7%	46.8	46.8	0.0	0.1%
25.9%	46.8	46.8	0.0	0.1%
27.2%	46.7	46.7	0.0	0.1%
28.4%	46.6	46.7	0.1	0.2%
29.6%	46.6	46.7	0.1	0.2%
30.9%	46.6	46.7	0.1	0.2%
32.1%	46.5	46.6	0.1	0.2%
33.3%	46.5	46.6	0.1	0.2%
34.6%	46.5	46.6	0.1	0.3%
35.8%	46.5	46.6	0.1	0.3%
37.0%	46.4	46.5	0.0	0.1%
38.3%	46.4	46.5	0.0	0.1%
39.5%	46.4	46.4	0.0	0.1%
40.7%	46.4	46.4	0.1	0.1%
42.0%	46.4	46.4	0.1	0.1%
43.2%	46.4	46.4	0.1	0.1%
44.4%	46.3	46.4	0.1	0.2%
45.7%	46.3	46.4	0.1	0.2%
46.9%	46.3	46.4	0.1	0.3%
48.1%	46.3	46.4	0.1	0.2%
49.4%	46.3	46.3	0.1	0.1%
50.6%	46.1	46.3	0.2	0.3%
51.9%	46.1	46.2	0.1	0.2%
53.1%	46.1	46.2	0.1	0.2%
54.3%	46.1	46.2	0.1	0.1%
55.6%	46.1	46.1	0.0	0.1%
56.8%	46.1	46.1	0.0	-0.1%
58.0%	46.1	46.1	0.0	0.0%
59.3%	46.0	46.0	0.0	0.0%
60.5%	46.0	46.0	0.0	0.0%
61.7%	46.0	46.0	0.0	0.0%
63.0%	46.0	46.0	0.0	0.0%
64.2%	46.0	46.0	0.0	0.0%
65.4%	46.0	46.0	0.0	0.0%
66.7%	45.9	46.0	0.1	0.2%
67.9%	45.9	45.9	0.0	0.1%
69.1%	45.9	45.9	0.1	0.1%
70.4%	45.8	45.9	0.1	0.2%
71.6%	45.8	45.9	0.1	0.1%
72.8%	45.8	45.8	0.1	0.1%
74.1%	45.8	45.8	0.0	0.0%
75.3%	45.7	45.8	0.0	0.0%
76.5%	45.7	45.8	0.0	0.1%
77.8%	45.7	45.7	0.0	0.1%
79.0%	45.7	45.7	0.1	0.2%
80.2%	45.6	45.7	0.1	0.2%
81.5%	45.6	45.7	0.1	0.2%
82.7%	45.5	45.6	0.1	0.2%
84.0%	45.5	45.5	0.0	0.1%
85.2%	45.5	45.5	0.0	0.0%
86.4%	45.5	45.5	0.0	0.1%
87.7%	45.4	45.4	0.0	0.1%
88.9%	45.4	45.4	0.0	0.0%
90.1%	45.4	45.3	0.0	-0.1%
91.4%	45.3	45.3	0.0	0.0%
92.6%	45.2	45.2	0.0	0.0%
93.8%	45.1	45.1	0.0	0.1%
95.1%	45.0	45.1	0.1	0.1%
96.3%	44.9	45.0	0.2	0.4%
97.5%	44.9	45.0	0.1	0.3%
98.8%	44.6	44.9	0.3	0.6%
100.0%	44.6	44.9	0.3	0.6%

Table SQ8-1b

Sacramento River below Red Bluff, Monthly Temperature

Probability of Exceedance

February				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.1	51.2	0.1	0.3%
1.2%	49.9	49.9	0.0	0.0%
2.5%	49.6	49.6	0.0	0.0%
3.7%	49.2	49.1	0.0	0.0%
4.9%	48.8	49.1	0.3	0.6%
6.2%	48.8	49.0	0.2	0.3%
7.4%	48.7	48.8	0.1	0.2%
8.6%	48.7	48.8	0.1	0.1%
9.9%	48.7	48.7	0.0	0.0%
11.1%	48.6	48.6	0.1	0.1%
12.3%	48.5	48.5	0.0	0.0%
13.6%	48.5	48.5	0.0	0.0%
14.8%	48.5	48.5	0.0	0.0%
16.0%	48.4	48.5	0.1	0.2%
17.3%	48.4	48.4	0.0	0.1%
18.5%	48.3	48.4	0.0	0.0%
19.8%	48.1	48.2	0.1	0.2%
21.0%	48.1	48.1	0.0	0.1%
22.2%	48.1	48.1	0.0	0.1%
23.5%	48.0	48.0	0.0	0.1%
24.7%	47.9	48.0	0.0	0.1%
25.9%	47.9	48.0	0.1	0.2%
27.2%	47.9	47.9	0.1	0.1%
28.4%	47.8	47.9	0.1	0.2%
29.6%	47.8	47.9	0.1	0.2%
30.9%	47.7	47.8	0.1	0.3%
32.1%	47.7	47.7	0.0	0.0%
33.3%	47.6	47.7	0.1	0.2%
34.6%	47.5	47.6	0.0	0.1%
35.8%	47.5	47.6	0.1	0.2%
37.0%	47.4	47.5	0.1	0.1%
38.3%	47.4	47.5	0.1	0.1%
39.5%	47.4	47.5	0.1	0.1%
40.7%	47.4	47.4	0.0	0.0%
42.0%	47.4	47.4	0.0	0.0%
43.2%	47.4	47.4	0.0	-0.1%
44.4%	47.3	47.3	0.0	0.0%
45.7%	47.2	47.2	0.0	0.0%
46.9%	47.2	47.1	-0.1	-0.1%
48.1%	47.1	47.1	0.0	0.0%
49.4%	47.1	47.1	0.0	0.0%
50.6%	47.1	47.1	0.0	0.0%
51.9%	47.1	47.1	0.0	0.0%
53.1%	47.1	47.1	0.0	0.0%
54.3%	47.1	47.1	0.0	0.0%
55.6%	47.1	47.1	0.0	0.0%
56.8%	46.9	46.9	0.0	0.0%
58.0%	46.9	46.9	0.0	0.0%
59.3%	46.9	46.9	0.0	0.1%
60.5%	46.9	46.9	0.0	0.1%
61.7%	46.8	46.9	0.1	0.2%
63.0%	46.7	46.8	0.1	0.2%
64.2%	46.5	46.7	0.2	0.4%
65.4%	46.4	46.6	0.2	0.4%
66.7%	46.4	46.4	-0.1	-0.1%
67.9%	46.4	46.3	0.0	-0.1%
69.1%	46.4	46.3	-0.1	-0.1%
70.4%	46.3	46.3	-0.1	-0.1%
71.6%	46.3	46.3	-0.1	-0.1%
72.8%	46.3	46.3	0.0	-0.1%
74.1%	46.3	46.3	0.0	0.0%
75.3%	46.3	46.2	0.0	-0.1%
76.5%	46.2	46.2	0.0	0.1%
77.8%	46.2	46.2	0.0	0.1%
79.0%	46.1	46.2	0.0	0.1%
80.2%	46.1	46.2	0.0	0.1%
81.5%	46.1	46.1	0.0	0.0%
82.7%	46.1	46.1	0.0	0.0%
84.0%	46.0	46.1	0.1	0.2%
85.2%	46.0	46.1	0.1	0.2%
86.4%	46.0	46.0	0.1	0.1%
87.7%	45.9	46.0	0.1	0.2%
88.9%	45.9	46.0	0.1	0.2%
90.1%	45.8	45.8	0.1	0.1%
91.4%	45.8	45.8	0.0	0.0%
92.6%	45.7	45.7	0.0	0.0%
93.8%	45.7	45.7	0.0	-0.1%
95.1%	45.7	45.6	-0.1	-0.2%
96.3%	45.6	45.6	0.0	0.0%
97.5%	45.5	45.5	-0.1	-0.2%
98.8%	45.5	45.4	-0.1	-0.2%
100.0%	45.5	45.4	-0.1	-0.2%

March				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.4	53.4	0.0	0.1%
1.2%	53.4	53.4	0.0	0.0%
2.5%	53.3	53.2	-0.1	-0.2%
3.7%	53.1	53.0	-0.1	-0.1%
4.9%	52.8	52.5	-0.3	-0.5%
6.2%	52.5	52.5	-0.1	-0.1%
7.4%	52.4	52.5	0.1	0.1%
8.6%	52.4	52.3	-0.1	-0.2%
9.9%	52.2	52.3	0.1	0.1%
11.1%	52.0	52.3	0.2	0.5%
12.3%	52.0	52.1	0.1	0.2%
13.6%	51.9	52.0	0.1	0.2%
14.8%	51.9	52.0	0.0	0.1%
16.0%	51.8	51.9	0.1	0.2%
17.3%	51.7	51.9	0.2	0.4%
18.5%	51.7	51.8	0.1	0.2%
19.8%	51.7	51.8	0.1	0.2%
21.0%	51.5	51.7	0.2	0.3%
22.2%	51.5	51.7	0.2	0.3%
23.5%	51.5	51.6	0.1	0.2%
24.7%	51.5	51.5	0.1	0.1%
25.9%	51.4	51.5	0.0	0.0%
27.2%	51.4	51.5	0.0	0.0%
28.4%	51.4	51.4	0.0	0.0%
29.6%	51.3	51.4	0.0	0.1%
30.9%	51.3	51.3	0.0	0.1%
32.1%	51.2	51.3	0.1	0.1%
33.3%	51.2	51.2	0.0	0.1%
34.6%	51.2	51.2	0.1	0.1%
35.8%	51.2	51.2	0.0	0.1%
37.0%	51.1	51.2	0.1	0.2%
38.3%	51.0	51.1	0.2	0.4%
39.5%	50.8	51.0	0.2	0.4%
40.7%	50.8	50.9	0.2	0.3%
42.0%	50.7	50.9	0.1	0.3%
43.2%	50.7	50.8	0.1	0.1%
44.4%	50.6	50.7	0.2	0.3%
45.7%	50.6	50.6	0.1	0.2%
46.9%	50.4	50.5	0.1	0.1%
48.1%	50.4	50.5	0.1	0.1%
49.4%	50.4	50.4	0.1	0.2%
50.6%	50.2	50.4	0.2	0.4%
51.9%	50.2	50.2	0.0	0.0%
53.1%	50.2	50.2	0.1	0.1%
54.3%	50.0	50.2	0.2	0.4%
55.6%	50.0	50.2	0.1	0.3%
56.8%	50.0	50.0	0.0	0.1%
58.0%	50.0	50.0	0.0	0.1%
59.3%	49.9	50.0	0.1	0.1%
60.5%	49.9	50.0	0.1	0.1%
61.7%	49.9	50.0	0.1	0.2%
63.0%	49.9	49.9	0.1	0.1%
64.2%	49.9	49.9	0.0	0.0%
65.4%	49.7	49.7	0.0	0.0%
66.7%	49.6	49.6	0.0	0.0%
67.9%	49.4	49.5	0.1	0.1%
69.1%	49.4	49.4	0.0	0.1%
70.4%	49.3	49.3	0.1	0.1%
71.6%	49.1	49.3	0.2	0.3%
72.8%	49.1	49.1	0.1	0.2%
74.1%	48.9	49.0	0.1	0.3%
75.3%	48.8	48.9	0.1	0.3%
76.5%	48.7	48.7	0.0	0.0%
77.8%	48.7	48.6	0.0	-0.1%
79.0%	48.6	48.6	0.1	0.1%
80.2%	48.5	48.5	0.0	0.0%
81.5%	48.5	48.5	-0.1	-0.1%
82.7%	48.5	48.4	-0.1	-0.3%
84.0%	48.3	48.2	-0.1	-0.2%
85.2%	48.2	48.2	0.0	0.0%
86.4%	48.2	48.2	0.0	0.0%
87.7%	48.1	48.2	0.1	0.1%
88.9%	48.0	48.1	0.2	0.3%
90.1%	47.9	48.0	0.1	0.2%
91.4%	47.8	47.9	0.1	0.2%
92.6%	47.7	47.8	0.1	0.2%
93.8%	47.7	47.7	0.0	0.1%
95.1%	47.7	47.6	-0.1	-0.2%
96.3%	47.5	47.6	0.0	0.0%
97.5%	47.1	47.4	0.3	0.6%
98.8%	46.7	47.1	0.4	0.8%
100.0%	46.7	47.1	0.4	0.8%

April				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.4	57.5	0.1	0.1%
1.2%	57.3	56.7	-0.5	-0.9%
2.5%	56.5	56.7	0.1	0.3%
3.7%	56.5	56.2	-0.3	-0.5%
4.9%	56.1	55.9	-0.2	-0.4%
6.2%	56.0	55.8	-0.3	-0.5%
7.4%	55.9	55.7	-0.2	-0.4%
8.6%	55.8	55.6	-0.2	-0.3%
9.9%	55.7	55.5	-0.2	-0.3%
11.1%	55.4	55.5	0.0	0.1%
12.3%	55.3	55.4	0.1	0.2%
13.6%	55.3	55.4	0.2	0.3%
14.8%	55.2	55.3	0.1	0.1%
16.0%	55.2	55.2	0.0	0.1%
17.3%	55.1	55.2	0.1	0.2%
18.5%	55.0	55.2	0.2	0.3%
19.8%	55.0	55.1	0.1	0.2%
21.0%	55.0	55.1	0.1	0.1%
22.2%	54.7	55.0	0.3	0.5%
23.5%	54.6	55.0	0.3	0.6%
24.7%	54.6	54.8	0.2	0.4%
25.9%	54.4	54.8	0.4	0.7%
27.2%	54.4	54.7	0.3	0.5%
28.4%	54.4	54.6	0.2	0.3%
29.6%	54.4	54.6	0.2	0.4%
30.9%	54.3	54.5	0.3	0.5%
32.1%	54.3	54.4	0.2	0.3%
33.3%	54.3	54.4	0.2	0.3%
34.6%	54.2	54.4	0.2	0.4%
35.8%	54.2	54.3	0.1	0.1%
37.0%	54.1	54.2	0.1	0.2%
38.3%	54.1	54.2	0.1	0.3%
39.5%	54.1	54.2	0.1	0.2%
40.7%	53.9	54.1	0.1	0.2%
42.0%	53.9	54.1	0.1	0.2%
43.2%	53.9	54.0	0.1	0.2%
44.4%	53.9	54.0	0.2	0.3%
45.7%	53.9	54.0	0.1	0.2%
46.9%	53.7	54.0	0.2	0.4%
48.1%	53.7	53.9	0.2	0.5%
49.4%	53.7	53.9	0.2	0.5%
50.6%	53.6	53.8	0.2	0.3%
51.9%	53.6	53.7	0.1	0.2%
53.1%	53.6	53.7	0.1	0.2%
54.3%	53.6	53.7	0.1	0.2%
55.6%	53.6	53.7	0.1	0.2%
56.8%	53.5	53.6	0.1	0.2%
58.0%	53.5	53.6	0.1	0.3%
59.3%	53.5	53.6	0.1	0.3%
60.5%	53.3	53.6	0.2	0.4%
61.7%	53.3	53.6	0.2	0.4%
63.0%	53.3	53.5	0.2	0.3%
64.2%	53.3	53.4	0.1	0.2%
65.4%	53.0	53.3	0.3	0.6%
66.7%	52.8	53.2	0.3	0.7%
67.9%	52.8	53.1	0.2	0.4%
69.1%	52.8	53.0	0.2	0.4%
70.4%	52.8	53.0	0.3	0.5%
71.6%	52.7	53.0	0.3	0.5%
72.8%	52.7	53.0	0.3	0.5%
74.1%	52.7	53.0	0.3	0.5%
75.3%	52.6	53.0	0.4	0.7%
76.5%	52.6	52.8	0.3	0.5%
77.8%	52.5	52.7	0.3	0.5%
79.0%	52.4	52.6	0.2	0.5%
80.2%	52.2	52.2	0.0	0.0%
81.5%	52.2	52.2	0.0	0.0%
82.7%	52.0	52.0	-0.1	-0.1%
84.0%	52.0	52.0	0.0	0.0%
85.2%	51.9	52.0	0.0	0.0%
86.4%	51.9	51.9	0.0	0.1%
87.7%	51.8	51.9	0.1	0.2%
88.9%	51.7	51.9	0.2	0.4%
90.1%	51.5	51.7	0.2	0.5%
91.4%	50.9	51.4	0.5	0.9%
92.6%	50.7	51.0	0.3	0.5%
93.8%	50.7	50.7	0.0	0.0%
95.1%	50.6	50.7	0.0	0.0%
96.3%	50.5	50.5	0.0	0.0%
97.5%	49.7	49.6	0.0	0.0%
98.8%	49.4	49.5	0.0	0.0%
100.0%	49.4	49.5	0.0	0.0%

May				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.1	60.1	-0.1	-0.1%
1.2%	59.9	60.0	0.0	0.1%
2.5%	59.5	59.9	0.4	0.6%
3.7%	58.6	59.7	1.0	1.8%
4.9%	58.5	59.4	0.9	1.5%
6.2%	58.4	59.4	1.0	1.7%
7.4%	58.4	59.4	1.0	1.7%
8.6%	58.4	59.1	0.8	1.4%
9.9%	58.3	58.5	0.2	0.4%
11.1%	58.3	58.4	0.2	0.3%
12.3%	58.3	58.4	0.1	0.2%
13.6%	58.1	58.4	0.3	0.5%
14.8%	58.0	58.3	0.3	0.5%
16.0%	57.9	58.1	0.2	0.3%
17.3%	57.9	58.1	0.2	0.3%
18.5%	57.4	57.9	0.5	0.9%
19.8%	57.4	57.9	0.5	0.9%
21.0%	57.3	57.9	0.6	1.0%
22.2%	57.2	57.8	0.6	1.0%
23.5%	57.2	57.7	0.5	0.9%
24.7%	57.0	57.7	0.7	1.3%
25.9%	57.0	57.6	0.6	1.1%
27.2%	56.9	57.4	0.5	0.9%
28.4%	56.8	57.3	0.5	0.9%
29.6%	56.8	57.3	0.5	0.9%
30.9%	56.8	57.2	0.4	0.8%
32.1%	56.8	57.2	0.4	0.7%
33.3%	56.8	57.1	0.4	0.6%
34.6%	56.7	57.1	0.4	0.8%
35.8%	56.7	57.1	0.4	0.8%
37.0%	56.7	56.9	0.3	0.5%
38.3%	56.5	56.9	0.3	0.6%
39.5%	56.5	56.7	0.2	0.3%
40.7%	56.4	56.7	0.2	0.4%
42.0%	56.4	56.7	0.3	0.5%
43.2%	56.3	56.6	0.3	0.4%
44.4%	56.3	56.5	0.2	0.3%
45.7%	56.3	56.4	0.1	0.2%
46.9%	56.3	56.4	0.1	0.2%
48.1%	56.3	56.4	0.1	0.2%
49.4%	56.0	56.4	0.3	0.6%
50.6%	56.0	56.4	0.3	0.6%
51.9%	56.0	56.2	0.2	0.4%
53.1%	56.0	56.1	0.2	0.3%
54.3%	55.9	56.1	0.2	0.3%
55.6%	55.9	56.1	0.2	0.3%
56.8%	55.9	56.0	0.2	0.3%
58.0%	55.8	56.0	0.2	0.3%
59.3%	55.8	56.0	0.2	0.4%
60.5%	55.8	56.0	0.2	0.4%
61.7%	55.7	56.0	0.3	0.5%
63.0%	55.7	55.9	0.2	0.4%
64.2%	55.6	55.8	0.2	0.4%
65.4%	55.4	55.7	0.3	0.6%
66.7%	55.4	55.5	0.1	0.1%
67.9%	55.3	55.5	0.1	0.2%
69.1%	55.3	55.4	0.1	0.2%
70.4%	55.3	55.4	0.1	0.2%
71.6%	55.3	55.4	0.1	0.2%
72.8%	55.3	55.4	0.1	0.1%
74.1%	55.2	55.4	0.2	0.3%
75.3%	55.2	55.3	0.1	0.3%
76.5%	55.2	55.3	0.1	0.2%
77.8%	55.1	55.2	0.0	0.0%
79.0%	55.1	55.1	0.0	0.0%
80.2%	55.0	55.1	0.0	0.0%
81.5%	55.0	55.0	-0.1	-0.1%
82.7%	54.9	54.9	0.0	0.0%
84.0%	54.9	54.9	0.0	0.0%
85.2%	54.9	54.8	-0.1	-0.1%
86.4%	54.9	54.7	-0.2	-0.4%
87.7%	54.8	54.4	-0.5	-0.8%
88.9%	54.3	54.2	-0.1	-0.1%
90.1%	54.2	54.2	0.0	0.0%
91.4%	54.1	54.1	0.0	0.0%
92.6%	53.8	53.8	0.0	0.1%
93.8%	53.7	53.7	0.0	0.1%
95.1%	53.7	53.7	0.1	0.1%
96.3%	53.5	53.5	0.0	0.1%
97.5%	53.5	53.5	0.0	0.0%
98.8%	53.4	53.4	0.0	0.0%
100.0%	53.4	53.4	0.0	0.0%

Table SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.9	60.8	-0.1	-0.2%
1.2%	60.5	60.7	0.2	0.4%
2.5%	60.3	60.7	0.4	0.7%
3.7%	60.2	60.2	-0.1	-0.1%
4.9%	60.1	59.9	-0.2	-0.3%
6.2%	59.8	59.9	0.1	0.2%
7.4%	59.5	59.8	0.3	0.5%
8.6%	59.4	59.6	0.2	0.4%
9.9%	59.1	59.2	0.1	0.1%
11.1%	59.1	58.9	-0.2	-0.3%
12.3%	59.0	58.8	-0.2	-0.4%
13.6%	58.8	58.7	-0.1	-0.1%
14.8%	58.6	58.7	0.1	0.2%
16.0%	58.5	58.6	0.1	0.2%
17.3%	58.4	58.6	0.2	0.3%
18.5%	58.3	58.6	0.3	0.5%
19.8%	58.2	58.6	0.4	0.6%
21.0%	58.2	58.6	0.4	0.7%
22.2%	58.1	58.5	0.3	0.6%
23.5%	58.0	58.5	0.5	0.8%
24.7%	57.9	58.5	0.6	1.0%
25.9%	57.9	58.4	0.5	0.9%
27.2%	57.6	58.4	0.8	1.3%
28.4%	57.6	58.4	0.7	1.3%
29.6%	57.6	58.4	0.8	1.4%
30.9%	57.5	58.3	0.8	1.4%
32.1%	57.5	58.3	0.8	1.5%
33.3%	57.4	58.3	0.9	1.5%
34.6%	57.4	58.2	0.9	1.5%
35.8%	57.3	58.2	0.8	1.4%
37.0%	57.3	58.0	0.7	1.2%
38.3%	57.3	58.0	0.6	1.1%
39.5%	57.2	57.9	0.7	1.2%
40.7%	57.2	57.9	0.7	1.1%
42.0%	57.2	57.9	0.7	1.2%
43.2%	57.1	57.8	0.7	1.3%
44.4%	57.0	57.8	0.7	1.3%
45.7%	57.0	57.7	0.7	1.3%
46.9%	57.0	57.7	0.7	1.2%
48.1%	56.9	57.7	0.7	1.3%
49.4%	56.9	57.6	0.8	1.3%
50.6%	56.9	57.6	0.7	1.3%
51.9%	56.8	57.5	0.7	1.2%
53.1%	56.8	57.5	0.7	1.2%
54.3%	56.8	57.5	0.7	1.3%
55.6%	56.8	57.5	0.7	1.3%
56.8%	56.7	57.4	0.7	1.1%
58.0%	56.7	57.2	0.5	0.9%
59.3%	56.7	57.2	0.5	0.9%
60.5%	56.7	57.1	0.5	0.8%
61.7%	56.6	57.1	0.4	0.7%
63.0%	56.6	57.0	0.4	0.7%
64.2%	56.6	57.0	0.4	0.7%
65.4%	56.6	57.0	0.4	0.7%
66.7%	56.6	57.0	0.4	0.7%
67.9%	56.5	57.0	0.4	0.7%
69.1%	56.5	56.9	0.4	0.6%
70.4%	56.4	56.8	0.4	0.7%
71.6%	56.4	56.8	0.4	0.8%
72.8%	56.4	56.8	0.4	0.8%
74.1%	56.4	56.7	0.4	0.7%
75.3%	56.4	56.7	0.4	0.6%
76.5%	56.3	56.7	0.4	0.8%
77.8%	56.3	56.6	0.4	0.7%
79.0%	56.2	56.6	0.4	0.7%
80.2%	56.1	56.5	0.4	0.7%
81.5%	56.0	56.5	0.6	1.0%
82.7%	55.9	56.5	0.6	1.0%
84.0%	55.9	56.4	0.6	1.0%
85.2%	55.9	56.4	0.5	1.0%
86.4%	55.8	56.4	0.6	1.1%
87.7%	55.7	56.4	0.6	1.1%
88.9%	55.6	56.4	0.7	1.3%
90.1%	55.6	56.3	0.7	1.2%
91.4%	55.6	56.2	0.6	1.2%
92.6%	55.5	56.2	0.7	1.2%
93.8%	55.4	55.9	0.5	0.9%
95.1%	55.3	55.9	0.6	1.1%
96.3%	55.0	55.9	0.9	1.6%
97.5%	55.0	55.9	0.9	1.6%
98.8%	54.6	55.7	1.1	2.1%
100.0%	54.6	55.7	1.1	2.1%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.7	61.2	-1.5	-2.4%
1.2%	62.0	60.8	-1.2	-2.0%
2.5%	61.3	60.6	-0.7	-1.1%
3.7%	60.8	60.5	-0.2	-0.3%
4.9%	60.6	60.4	-0.2	-0.3%
6.2%	60.5	60.0	-0.5	-0.9%
7.4%	60.5	59.9	-0.5	-0.9%
8.6%	60.0	59.7	-0.4	-0.6%
9.9%	60.0	59.5	-0.6	-0.9%
11.1%	59.8	59.4	-0.4	-0.7%
12.3%	59.7	59.4	-0.4	-0.6%
13.6%	59.7	59.4	-0.3	-0.6%
14.8%	59.7	59.2	-0.5	-0.8%
16.0%	59.6	59.2	-0.3	-0.6%
17.3%	59.5	59.1	-0.4	-0.7%
18.5%	59.4	58.8	-0.5	-0.9%
19.8%	59.3	58.8	-0.6	-0.9%
21.0%	59.2	58.7	-0.4	-0.8%
22.2%	59.0	58.7	-0.3	-0.5%
23.5%	58.7	58.7	0.0	0.0%
24.7%	58.6	58.7	0.1	0.2%
25.9%	58.6	58.5	-0.1	-0.1%
27.2%	58.4	58.5	0.0	0.0%
28.4%	58.4	58.4	0.0	0.0%
29.6%	58.4	58.4	0.0	-0.1%
30.9%	58.4	58.4	0.0	-0.1%
32.1%	58.4	58.3	-0.1	-0.1%
33.3%	58.3	58.3	0.0	0.0%
34.6%	58.3	58.3	0.0	0.0%
35.8%	58.3	58.2	0.0	-0.1%
37.0%	58.2	58.1	-0.1	-0.1%
38.3%	58.2	58.1	-0.1	-0.2%
39.5%	58.2	58.0	-0.2	-0.3%
40.7%	58.0	58.0	-0.1	-0.1%
42.0%	58.0	58.0	0.0	0.0%
43.2%	57.8	58.0	0.2	0.3%
44.4%	57.8	57.9	0.1	0.2%
45.7%	57.8	57.8	0.0	0.0%
46.9%	57.7	57.8	0.0	0.1%
48.1%	57.7	57.8	0.0	0.1%
49.4%	57.7	57.8	0.0	0.1%
50.6%	57.7	57.7	0.0	0.0%
51.9%	57.7	57.6	0.0	-0.1%
53.1%	57.7	57.6	0.0	-0.1%
54.3%	57.5	57.6	0.2	0.3%
55.6%	57.4	57.6	0.2	0.4%
56.8%	57.4	57.4	0.0	0.0%
58.0%	57.4	57.3	0.0	0.0%
59.3%	57.3	57.3	0.1	0.1%
60.5%	57.3	57.3	0.0	0.1%
61.7%	57.1	57.2	0.1	0.3%
63.0%	57.1	57.2	0.1	0.2%
64.2%	57.0	57.2	0.2	0.4%
65.4%	57.0	57.2	0.2	0.3%
66.7%	57.0	57.1	0.2	0.3%
67.9%	57.0	57.1	0.1	0.2%
69.1%	56.9	57.1	0.1	0.2%
70.4%	56.9	57.1	0.1	0.2%
71.6%	56.9	57.0	0.1	0.2%
72.8%	56.9	57.0	0.1	0.2%
74.1%	56.9	57.0	0.1	0.1%
75.3%	56.8	56.9	0.2	0.3%
76.5%	56.7	56.7	0.0	0.0%
77.8%	56.7	56.7	0.0	0.0%
79.0%	56.7	56.7	0.0	0.0%
80.2%	56.5	56.6	0.1	0.3%
81.5%	56.4	56.6	0.2	0.3%
82.7%	56.3	56.6	0.3	0.5%
84.0%	56.2	56.5	0.3	0.5%
85.2%	56.2	56.4	0.2	0.3%
86.4%	56.2	56.3	0.1	0.2%
87.7%	56.1	56.2	0.1	0.1%
88.9%	56.0	56.2	0.2	0.4%
90.1%	56.0	56.1	0.2	0.3%
91.4%	55.8	56.0	0.3	0.5%
92.6%	55.7	55.9	0.2	0.4%
93.8%	55.7	55.9	0.2	0.3%
95.1%	55.7	55.8	0.1	0.2%
96.3%	55.7	55.7	0.0	0.0%
97.5%	55.2	55.6	0.5	0.9%
98.8%	55.1	55.1	0.0	0.0%
100.0%	55.1	55.1	0.0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.2	60.9	-4.3	-6.6%
1.2%	63.2	60.7	-2.4	-3.9%
2.5%	62.4	60.7	-1.7	-2.8%
3.7%	62.1	60.7	-1.5	-2.4%
4.9%	61.9	60.6	-1.3	-2.1%
6.2%	61.9	60.6	-1.3	-2.1%
7.4%	61.7	60.5	-1.2	-1.9%
8.6%	61.3	60.5	-0.8	-1.3%
9.9%	61.0	60.5	-0.5	-0.8%
11.1%	61.0	60.3	-0.7	-1.1%
12.3%	60.8	60.1	-0.6	-1.1%
13.6%	60.8	60.1	-0.7	-1.2%
14.8%	60.6	59.9	-0.7	-1.1%
16.0%	60.5	59.7	-0.8	-1.3%
17.3%	60.4	59.7	-0.8	-1.3%
18.5%	60.0	59.6	-0.3	-0.6%
19.8%	59.8	59.5	-0.3	-0.5%
21.0%	59.8	59.4	-0.4	-0.7%
22.2%	59.7	59.4	-0.3	-0.5%
23.5%	59.7	59.4	-0.3	-0.5%
24.7%	59.6	59.3	-0.3	-0.5%
25.9%	59.6	59.2	-0.3	-0.6%
27.2%	59.6	59.2	-0.4	-0.6%
28.4%	59.5	59.2	-0.3	-0.6%
29.6%	59.5	59.1	-0.4	-0.7%
30.9%	59.5	59.0	-0.4	-0.7%
32.1%	59.4	59.0	-0.4	-0.7%
33.3%	59.4	59.0	-0.4	-0.7%
34.6%	59.4	58.9	-0.4	-0.7%
35.8%	59.3	58.9	-0.5	-0.8%
37.0%	59.2	58.8	-0.4	-0.7%
38.3%	59.2	58.8	-0.4	-0.7%
39.5%	59.2	58.8	-0.4	-0.7%
40.7%	59.2	58.7	-0.5	-0.8%
42.0%	59.1	58.7	-0.4	-0.7%
43.2%	59.1	58.6	-0.4	-0.7%
44.4%	59.0	58.6	-0.4	-0.7%
45.7%	59.0	58.6	-0.4	-0.7%
46.9%	59.0	58.5	-0.4	-0.8%
48.1%	58.8	58.5	-0.3	-0.6%
49.4%	58.6	58.5	-0.2	-0.3%
50.6%	58.5	58.5	-0.1	-0.1%
51.9%	58.5	58.5	0.0	-0.1%
53.1%	58.5	58.4	-0.1	-0.1%
54.3%	58.5	58.4	-0.1	-0.1%
55.6%	58.4	58.4	-0.1	-0.1%
56.8%	58.3	58.3	0.0	0.0%
58.0%	58.3	58.3	0.0	0.0%
59.3%	58.3	58.2	-0.1	-0.1%
60.5%	58.3	58.2	0.0	-0.1%
61.7%	58.2	58.2	0.0	-0.1%
63.0%	58.2	58.1	-0.1	-0.1%
64.2%	58.2	58.1	-0.1	-0.2%
65.4%	58.2	58.1	-0.1	-0.2%
66.7%	58.1	58.1	-0.1	-0.1%
67.9%	58.1	58.0	-0.1	-0.2%
69.1%	58.1	58.0	-0.1	-0.2%
70.4%	58.0	58.0	0.0	0.0%
71.6%	57.9	57.9	0.0	0.1%
72.8%	57.9	57.9	0.1	0.1%
74.1%	57.8	57.9	0.0	0.1%
75.3%	57.7	57.9	0.1	0.3%
76.5%	57.7	57.8	0.1	0.2%
77.8%	57.7	57.8	0.1	0.2%
79.0%	57.7	57.8	0.1	0.2%
80.2%	57.6	57.7	0.1	0.2%
81.5%	57.6	57.7	0.1	0.2%
82.7%	57.6	57.7	0.2	0.3%
84.0%	57.5	57.7	0.2	0.4%
85.2%	57.5	57.7	0.2	0.4%
86.4%	57.4	57.6	0.2	0.4%
87.7%	57.4	57.6	0.2	0.3%
88.9%	57.4	57.5	0.2	0.3%
90.1%	57.3	57.4	0.1	0.2%
91.4%	57.1	57.4	0.3	0.5%
92.6%	57.1	57.3	0.2	0.4%
93.8%	57.0	57.2	0.2	0.4%
95.1%	57.0	57.1	0.2	0.3%
96.3%	56.8	57.1	0.2	0.4%
97.5%	56.8	56.7	-0.1	-0.2%
98.8%	56.7	56.5	-0.2	-0.3%
100.0%	56.7	56.5	-0.2	-0.3%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.3	65.9	-2.4	-3.5%
1.2%	66.4	64.7	-1.7	-2.6%
2.5%	65.8	64.4	-1.3	-2.0%
3.7%	64.3	61.7	-2.6	-4.0%
4.9%	64.1	61.2	-2.9	-4.5%
6.2%	63.9	61.2	-2.7	-4.2%
7.4%	63.5	61.0	-2.5	-4.0%
8.6%	62.9	60.9	-2.0	-3.2%
9.9%	62.2	60.9	-1.3	-2.2%
11.1%	61.8	60.4	-1.5	-2.4%
12.3%	61.7	60.2	-1.5	-2.5%
13.6%	61.7	60.2	-1.5	-2.5%
14.8%	61.5	60.1	-1.3	-2.2%
16.0%	61.4	60.1	-1.4	-2.2%
17.3%	61.4	59.7	-1.7	-2.8%
18.5%	61.3	59.7	-1.6	-2.7%
19.8%	61.2	59.6	-1.6	-2.6%
21.0%	61.1	59.6	-1.5	-2.4%
22.2%	61.1	59.6	-1.5	-2.4%
23.5%	60.9	59.6	-1.3	-2.2%
24.7%	60.8	59.4	-1.4	-2.3%
25.9%	60.8	59.4	-1.4	-2.3%
27.2%	60.4	59.2	-1.3	-2.1%
28.4%	60.3	59.0	-1.3	-2.2%
29.6%	60.3	59.0	-1.2	-2.1%
30.9%	60.2	59.0	-1.2	-2.0%
32.1%	60.2	58.8	-1.3	-2.2%
33.3%	60.1	58.8	-1.3	-2.2%
34.6%	60.1	58.7	-1.3	-2.2%
35.8%	59.8	58.7	-1.1	-1.8%
37.0%	59.7	58.7	-1.0	-1.8%
38.3%	59.5	58.6	-0.9	-1.5%
39.5%	59.4	58.5	-0.9	-1.6%
40.7%	59.4	58.3	-1.1	-1.8%
42.0%	59.2	58.2	-1.0	-1.8%
43.2%	59.2	58.2	-1.0	-1.8%
44.4%	59.1	58.2	-1.0	-1.6%
45.7%	58.8	58.2	-0.6	-1.1%
46.9%	58.8	58.2	-0.6	-1.0%
48.1%	58.8	58.0	-0.7	-1.3%
49.4%	58.7	58.0	-0.7	-1.2%
50.6%	58.6	57.9	-0.7	-1.1%
51.9%	58.3	57.9	-0.4	-0.7%
53.1%	58.3	57.8	-0.5	-0.9%
54.3%	58.0	57.6	-0.4	-0.7%
55.6%	57.9	57.6	-0.3	-0.5%
56.8%	57.8	57.4	-0.4	-0.6%
58.0%	57.6	57.3	-0.3	-0.5%
59.3%	57.5	57.3	-0.2	-0.4%
60.5%	57.2	57.1	0.0	-0.1%
61.7%	57.0	57.0	0.0	0.0%
63.0%	57.0	57.0	-0.1	-0.1%
64.2%	56.7	56.9	0.2	0.3%
65.4%	56.4	56.8	0.4	0.7%
66.7%	56.4	56.7	0.3	0.6%
67.9%	56.2	56.3	0.1	0.2%
69.1%	56.2	56.2	0.0	0.0%
70.4%	56.1	55.9	-0.2	-0.3%
71.6%	56.1	55.9	-0.2	-0.4%
72.8%	55.9	55.8	-0.1	-0.1%
74.1%	55.7	55.3	-0.4	-0.8%
75.3%	55.6	55.3	-0.3	-0.6%
76.5%	55.6	55.2	-0.4	-0.7%
77.8%	55.6	55.0	-0.6	-1.0%
79.0%	55.4	55.0	-0.4	-0.7%
80.2%	55.3	54.9	-0.4	-0.7%
81.5%	55.2	54.8	-0.4	-0.7%
82.7%	55.2	54.8	-0.4	-0.8%
84.0%	55.1	54.8	-0.3	-0.5%
85.2%	55.0	54.7	-0.3	-0.5%
86.4%	55.0	54.7	-0.3	-0.5%
87.7%	54.7	54.5	-0.2	-0.3%
88.9%	54.7	54.5	-0.2	-0.4%
90.1%	54.6	54.5	-0.1	-0.2%
91.4%	54.5	54.2	-0.3	-0.5%
92.6%	54.3	54.0	-0.3	-0.5%
93.8%	54.2	53.9	-0.3	-0.6%
95.1%	54.0	53.8	-0.3	-0.5%
96.3%	54.0	53.2	-0.8	-1.5%
97.5%	53.2	53.1	-0.1	-0.2%
98.8%	53.1	52.8	-0.3	-0.6%
100.0%	53.1	52.8	-0.3	-0.6%

Table SQ8-1b

Sacramento River below Red Bluff, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.1	61.3	-1.8	-2.9%
1.2%	62.3	60.9	-1.4	-2.3%
2.5%	61.5	60.7	-0.8	-1.3%
3.7%	61.5	60.5	-1.0	-1.7%
4.9%	61.4	60.4	-1.0	-1.6%
6.2%	61.4	60.2	-1.2	-1.9%
7.4%	61.3	60.1	-1.2	-2.0%
8.6%	60.7	60.1	-0.7	-1.1%
9.9%	60.1	60.0	-0.1	-0.2%
11.1%	60.1	59.9	-0.2	-0.3%
12.3%	60.0	59.8	-0.2	-0.3%
13.6%	59.9	59.3	-0.6	-1.0%
14.8%	59.7	59.2	-0.6	-0.9%
16.0%	59.5	59.1	-0.4	-0.7%
17.3%	59.4	59.1	-0.3	-0.5%
18.5%	59.2	59.0	-0.3	-0.4%
19.8%	59.2	58.9	-0.3	-0.5%
21.0%	59.2	58.9	-0.3	-0.5%
22.2%	59.1	58.9	-0.2	-0.4%
23.5%	59.0	58.7	-0.3	-0.5%
24.7%	58.9	58.7	-0.2	-0.3%
25.9%	58.7	58.7	0.0	-0.1%
27.2%	58.7	58.6	-0.1	-0.2%
28.4%	58.6	58.5	-0.1	-0.1%
29.6%	58.6	58.5	-0.1	-0.1%
30.9%	58.5	58.5	0.0	0.1%
32.1%	58.4	58.4	0.0	0.0%
33.3%	58.4	58.4	0.0	0.0%
34.6%	58.4	58.3	-0.1	-0.2%
35.8%	58.3	58.3	-0.1	-0.1%
37.0%	58.3	58.2	-0.1	-0.3%
38.3%	58.3	58.2	-0.1	-0.2%
39.5%	58.3	58.2	-0.1	-0.2%
40.7%	58.3	58.1	-0.1	-0.2%
42.0%	58.3	58.1	-0.1	-0.2%
43.2%	58.2	58.1	-0.1	-0.2%
44.4%	58.1	58.0	-0.1	-0.2%
45.7%	58.1	57.9	-0.1	-0.2%
46.9%	58.0	57.9	-0.1	-0.1%
48.1%	57.9	57.9	-0.1	-0.1%
49.4%	57.9	57.8	-0.1	-0.2%
50.6%	57.9	57.8	-0.1	-0.1%
51.9%	57.9	57.8	-0.1	-0.1%
53.1%	57.8	57.8	0.0	0.0%
54.3%	57.6	57.7	0.2	0.3%
55.6%	57.5	57.6	0.1	0.2%
56.8%	57.5	57.5	0.0	0.0%
58.0%	57.5	57.5	0.0	0.0%
59.3%	57.5	57.5	0.0	0.0%
60.5%	57.5	57.4	0.0	0.0%
61.7%	57.4	57.4	-0.1	-0.2%
63.0%	57.4	57.3	-0.1	-0.2%
64.2%	57.4	57.3	-0.1	-0.2%
65.4%	57.4	57.3	-0.1	-0.2%
66.7%	57.3	57.3	-0.1	-0.1%
67.9%	57.3	57.3	0.0	-0.1%
69.1%	57.2	57.2	0.0	0.0%
70.4%	57.2	57.2	0.0	0.1%
71.6%	57.1	57.2	0.1	0.1%
72.8%	57.1	57.2	0.1	0.1%
74.1%	57.1	57.1	0.0	0.1%
75.3%	57.1	57.1	0.0	0.1%
76.5%	57.1	57.0	0.0	-0.1%
77.8%	57.1	57.0	0.0	-0.1%
79.0%	56.9	57.0	0.0	0.1%
80.2%	56.9	56.9	0.0	-0.1%
81.5%	56.7	56.9	0.1	0.2%
82.7%	56.7	56.9	0.2	0.3%
84.0%	56.6	56.7	0.1	0.1%
85.2%	56.6	56.7	0.1	0.1%
86.4%	56.5	56.5	0.0	0.0%
87.7%	56.4	56.5	0.1	0.1%
88.9%	56.3	56.4	0.1	0.2%
90.1%	56.3	56.2	-0.1	-0.2%
91.4%	56.3	56.1	-0.2	-0.4%
92.6%	56.3	56.1	-0.2	-0.4%
93.8%	56.1	56.0	-0.1	-0.2%
95.1%	56.0	55.9	-0.2	-0.3%
96.3%	55.7	55.8	0.1	0.2%
97.5%	55.6	55.8	0.2	0.3%
98.8%	55.6	55.7	0.1	0.2%
100.0%	55.6	55.6	0.0	0.1%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.6	62.2	-2.4	-3.7%
1.2%	63.4	61.4	-2.0	-3.2%
2.5%	62.6	61.2	-1.4	-2.3%
3.7%	62.3	61.1	-1.2	-2.0%
4.9%	61.9	60.7	-1.2	-1.9%
6.2%	61.9	60.3	-1.6	-2.5%
7.4%	61.4	60.1	-1.3	-2.1%
8.6%	61.3	60.1	-1.2	-1.9%
9.9%	61.0	60.1	-1.0	-1.6%
11.1%	61.0	60.0	-0.9	-1.5%
12.3%	60.7	60.0	-0.7	-1.1%
13.6%	60.7	59.8	-0.9	-1.5%
14.8%	60.0	59.8	-0.2	-0.4%
16.0%	60.0	59.6	-0.4	-0.7%
17.3%	60.0	59.6	-0.5	-0.8%
18.5%	60.0	59.5	-0.5	-0.8%
19.8%	59.9	59.3	-0.6	-1.0%
21.0%	59.6	59.0	-0.5	-0.9%
22.2%	59.6	59.0	-0.6	-0.9%
23.5%	59.5	58.9	-0.6	-0.9%
24.7%	59.5	58.9	-0.6	-1.0%
25.9%	59.3	58.8	-0.5	-0.8%
27.2%	59.2	58.8	-0.4	-0.7%
28.4%	59.2	58.8	-0.4	-0.7%
29.6%	59.1	58.7	-0.4	-0.6%
30.9%	59.1	58.6	-0.5	-0.9%
32.1%	59.1	58.6	-0.5	-0.9%
33.3%	58.9	58.5	-0.4	-0.6%
34.6%	58.9	58.5	-0.5	-0.8%
35.8%	58.9	58.4	-0.5	-0.8%
37.0%	58.9	58.4	-0.5	-0.9%
38.3%	58.8	58.3	-0.6	-0.9%
39.5%	58.7	58.3	-0.4	-0.7%
40.7%	58.7	58.3	-0.4	-0.7%
42.0%	58.6	58.2	-0.3	-0.6%
43.2%	58.5	58.2	-0.3	-0.6%
44.4%	58.5	58.2	-0.3	-0.6%
45.7%	58.4	58.1	-0.3	-0.5%
46.9%	58.4	58.0	-0.4	-0.6%
48.1%	58.3	58.0	-0.4	-0.6%
49.4%	58.2	57.8	-0.4	-0.7%
50.6%	58.2	57.8	-0.4	-0.7%
51.9%	58.2	57.7	-0.4	-0.7%
53.1%	58.1	57.7	-0.4	-0.7%
54.3%	57.8	57.7	-0.1	-0.2%
55.6%	57.8	57.6	-0.2	-0.3%
56.8%	57.7	57.5	-0.2	-0.3%
58.0%	57.6	57.5	-0.1	-0.1%
59.3%	57.5	57.4	-0.1	-0.2%
60.5%	57.5	57.4	-0.1	-0.2%
61.7%	57.5	57.4	-0.1	-0.2%
63.0%	57.4	57.4	-0.1	-0.1%
64.2%	57.4	57.4	0.0	0.0%
65.4%	57.3	57.3	0.0	0.0%
66.7%	57.3	57.3	0.0	-0.1%
67.9%	57.2	57.1	-0.1	-0.1%
69.1%	57.2	57.1	-0.1	-0.1%
70.4%	57.2	57.1	-0.1	-0.2%
71.6%	57.1	57.1	-0.1	-0.2%
72.8%	57.1	57.0	-0.1	-0.2%
74.1%	57.1	57.0	-0.1	-0.1%
75.3%	57.0	57.0	0.0	0.0%
76.5%	56.9	57.0	0.0	0.0%
77.8%	56.9	56.9	0.0	0.0%
79.0%	56.9	56.9	-0.1	-0.1%
80.2%	56.9	56.8	-0.1	-0.1%
81.5%	56.9	56.8	-0.1	-0.1%
82.7%	56.9	56.8	-0.1	-0.1%
84.0%	56.8	56.8	0.0	0.0%
85.2%	56.8	56.8	0.0	0.0%
86.4%	56.8	56.5	-0.3	-0.4%
87.7%	56.4	56.5	0.1	0.1%
88.9%	56.4	56.2	-0.2	-0.3%
90.1%	56.3	56.2	-0.1	-0.2%
91.4%	56.2	56.1	-0.1	-0.1%
92.6%	56.1	56.0	-0.1	-0.2%
93.8%	56.0	55.9	-0.1	-0.2%
95.1%	56.0	55.8	-0.1	-0.3%
96.3%	56.0	55.7	-0.2	-0.4%
97.5%	55.9	55.5	-0.4	-0.8%
98.8%	55.8	55.5	-0.3	-0.6%
100.0%	55.5	55.3	-0.2	-0.4%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.7	63.4	-3.3	-5.0%
1.2%	64.8	62.2	-2.6	-4.0%
2.5%	64.0	62.0	-1.9	-3.0%
3.7%	63.1	61.2	-1.9	-3.1%
4.9%	62.8	60.8	-2.0	-3.1%
6.2%	62.3	60.7	-1.6	-2.5%
7.4%	62.3	60.7	-1.6	-2.5%
8.6%	61.8	60.6	-1.2	-1.9%
9.9%	61.8	60.4	-1.4	-2.2%
11.1%	61.5	60.4	-1.2	-1.9%
12.3%	61.4	60.2	-1.3	-2.0%
13.6%	61.1	60.1	-0.9	-1.5%
14.8%	60.9	60.0	-0.9	-1.5%
16.0%	60.7	59.9	-0.8	-1.4%
17.3%	60.6	59.9	-0.8	-1.3%
18.5%	60.6	59.7	-0.9	-1.5%
19.8%	60.5	59.6	-0.9	-1.4%
21.0%	60.4	59.6	-0.8	-1.3%
22.2%	60.2	59.5	-0.7	-1.2%
23.5%	60.2	59.3	-0.9	-1.5%
24.7%	60.1	59.2	-0.9	-1.6%
25.9%	59.9	59.1	-0.8	-1.4%
27.2%	59.9	59.0	-0.9	-1.5%
28.4%	59.9	59.0	-0.9	-1.5%
29.6%	59.8	58.9	-0.9	-1.5%
30.9%	59.8	58.9	-0.9	-1.5%
32.1%	59.7	58.8	-0.9	-1.5%
33.3%	59.4	58.7	-0.8	-1.3%
34.6%	59.4	58.6	-0.8	-1.4%
35.8%	59.4	58.6	-0.8	-1.3%
37.0%	59.4	58.6	-0.8	-1.3%
38.3%	59.3	58.6	-0.7	-1.2%
39.5%	59.1	58.6	-0.5	-0.9%
40.7%	59.1	58.6	-0.6	-0.9%
42.0%	59.1	58.5	-0.6	-1.0%
43.2%	58.9	58.5	-0.4	-0.7%
44.4%	58.8	58.5	-0.3	-0.6%
45.7%	58.8	58.5	-0.3	-0.5%
46.9%	58.6	58.2	-0.4	-0.8%
48.1%	58.6	58.2	-0.4	-0.7%
49.4%	58.6	58.1	-0.5	-0.9%
50.6%	58.4	58.0	-0.4	-0.6%
51.9%	58.2	58.0	-0.2	-0.3%
53.1%	58.1	57.9	-0.2	-0.3%
54.3%	58.1	57.9	-0.2	-0.4%
55.6%	58.1	57.8	-0.3	-0.5%
56.8%	58.0	57.8	-0.1	-0.2%
58.0%	57.9	57.7	-0.2	-0.4%
59.3%	57.8	57.6	-0.2	-0.3%
60.5%	57.7	57.6	-0.1	-0.1%
61.7%	57.7	57.6	-0.1	-0.2%
63.0%	57.7	57.6	-0.1	-0.2%
64.2%	57.6	57.5	-0.1	-0.2%
65.4%	57.6	57.4	-0.2	-0.3%
66.7%	57.5	57.3	-0.2	-0.4%
67.9%	57.4	57.3	-0.2	-0.3%
69.1%	57.3	57.2	-0.1	-0.1%
70.4%	57.3	57.1	-0.1	-0.2%
71.6%	57.2	57.0	-0.2	-0.3%
72.8%	57.2	57.0	-0.2	-0.3%
74.1%	57.2	56.9	-0.2	-0.4%
75.3%	57.1	56.9	-0.2	-0.4%
76.5%	56.8	56.7	-0.1	-0.2%
77.8%	56.8	56.7	-0.1	-0.2%
79.0%	56.8	56.7	-0.1	-0.1%
80.2%	56.6	56.6	0.0	0.0%
81.5%	56.6	56.5	-0.1	-0.1%
82.7%	56.4	56.5	0.0	0.0%
84.0%	56.3	56.5	0.1	0.2%
85.2%	56.3	56.3	0.1	0.2%
86.4%	56.2	56.3	0.1	0.2%
87.7%	56.2	56.3	0.1	0.1%
88.9%	56.2	56.2	0.0	0.1%
90.1%	56.1	55.8	-0.3	-0.5%
91.4%	56.1	55.8	-0.3	-0.6%
92.6%	56.1	55.7	-0.4	-0.7%
93.8%	55.7	55.4	-0.4	-0.7%
95.1%	55.7	55.2	-0.5	-0.9%
96.3%	55.4	55.2	-0.2	-0.3%
97.5%	55.3	55.1	-0.1	-0.2%
98.8%	55.2	55.1	0.0	-0.1%
100.0%	55.1	54.4	-0.7	-1.2%

Figure SQ9-1b
American River below Nimbus Dam, Monthly Temperature
Probability of Exceedance

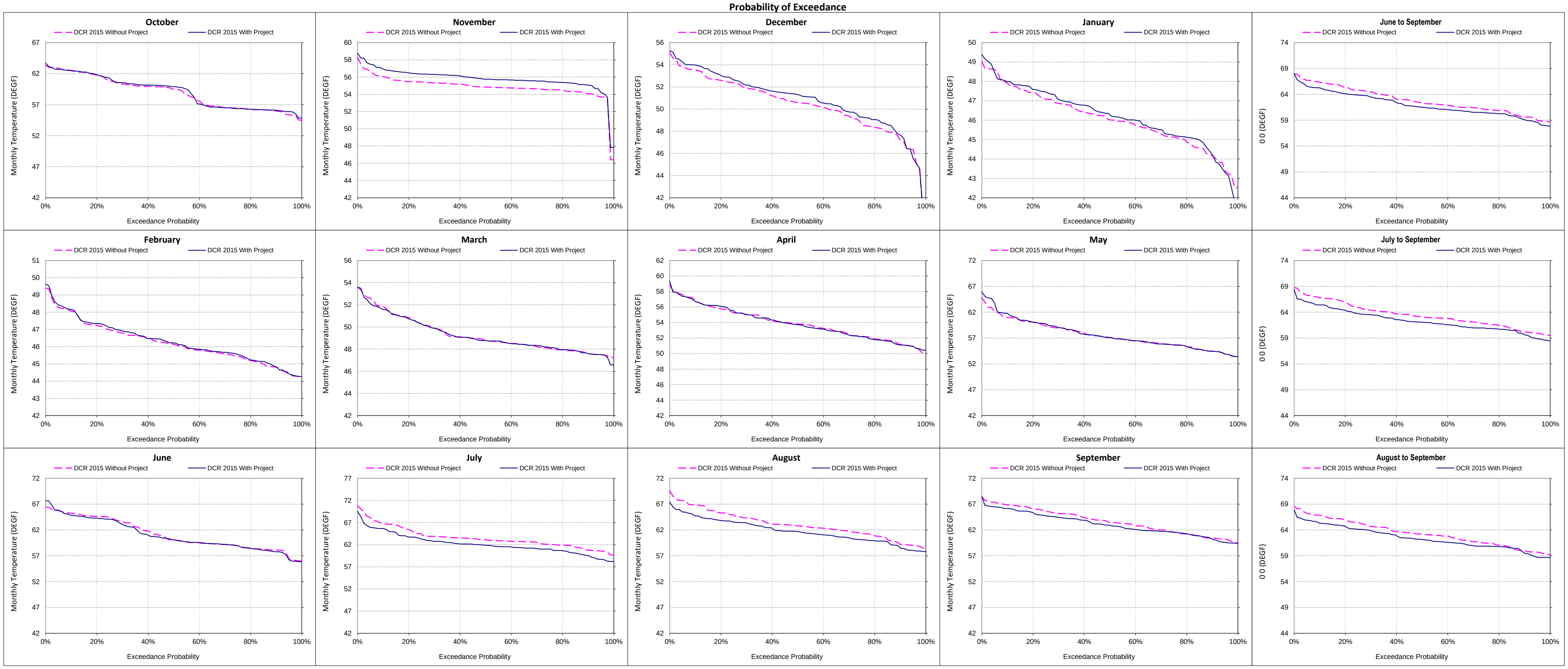


Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.3	63.8	0.4	0.7%
1.2%	63.0	63.1	0.1	0.2%
2.5%	63.0	63.0	0.1	0.1%
3.7%	62.9	62.7	-0.2	-0.3%
4.9%	62.9	62.7	-0.2	-0.3%
6.2%	62.7	62.7	0.0	-0.1%
7.4%	62.6	62.6	0.0	-0.1%
8.6%	62.6	62.5	-0.1	-0.1%
9.9%	62.5	62.5	0.1	0.1%
11.1%	62.4	62.4	0.1	0.1%
12.3%	62.3	62.4	0.2	0.3%
13.6%	62.3	62.3	0.1	0.1%
14.8%	62.2	62.2	0.0	0.0%
16.0%	62.2	62.2	0.0	0.0%
17.3%	62.0	62.1	0.1	0.1%
18.5%	61.9	62.0	0.1	0.2%
19.8%	61.8	61.8	0.1	0.1%
21.0%	61.7	61.7	0.0	0.0%
22.2%	61.6	61.5	-0.1	-0.1%
23.5%	61.1	61.4	0.2	0.4%
24.7%	60.8	61.3	0.5	0.9%
25.9%	60.8	60.9	0.2	0.3%
27.2%	60.7	60.6	-0.1	-0.1%
28.4%	60.4	60.6	0.2	0.4%
29.6%	60.3	60.6	0.2	0.4%
30.9%	60.3	60.5	0.2	0.4%
32.1%	60.2	60.4	0.2	0.3%
33.3%	60.2	60.4	0.2	0.4%
34.6%	60.1	60.4	0.3	0.5%
35.8%	60.0	60.2	0.2	0.4%
37.0%	60.0	60.2	0.2	0.4%
38.3%	60.0	60.2	0.2	0.3%
39.5%	59.9	60.2	0.2	0.4%
40.7%	59.9	60.1	0.2	0.3%
42.0%	59.9	60.1	0.3	0.4%
43.2%	59.9	60.1	0.2	0.4%
44.4%	59.9	60.1	0.2	0.4%
45.7%	59.9	60.1	0.2	0.3%
46.9%	59.8	60.0	0.3	0.4%
48.1%	59.8	60.0	0.2	0.4%
49.4%	59.5	59.9	0.4	0.6%
50.6%	59.5	59.9	0.4	0.6%
51.9%	59.4	59.8	0.4	0.7%
53.1%	59.3	59.8	0.5	0.8%
54.3%	58.8	59.6	0.8	1.4%
55.6%	58.5	59.4	0.9	1.5%
56.8%	58.2	58.8	0.6	1.0%
58.0%	58.1	58.2	0.1	0.1%
59.3%	57.7	57.1	-0.6	-1.0%
60.5%	57.5	57.1	-0.4	-0.7%
61.7%	56.9	56.9	0.0	0.0%
63.0%	56.9	56.8	-0.1	-0.2%
64.2%	56.8	56.6	-0.2	-0.3%
65.4%	56.8	56.6	-0.2	-0.3%
66.7%	56.8	56.6	-0.2	-0.3%
67.9%	56.7	56.6	-0.1	-0.3%
69.1%	56.6	56.5	0.0	-0.1%
70.4%	56.5	56.5	0.0	-0.1%
71.6%	56.5	56.5	0.0	-0.1%
72.8%	56.5	56.4	0.0	-0.1%
74.1%	56.5	56.4	-0.1	-0.1%
75.3%	56.4	56.4	-0.1	-0.1%
76.5%	56.4	56.4	-0.1	-0.1%
77.8%	56.3	56.3	0.0	0.0%
79.0%	56.3	56.3	0.0	0.0%
80.2%	56.2	56.3	0.1	0.1%
81.5%	56.2	56.3	0.0	0.1%
82.7%	56.2	56.2	0.0	0.1%
84.0%	56.2	56.2	0.0	0.0%
85.2%	56.2	56.2	0.0	0.0%
86.4%	56.1	56.1	0.0	0.0%
87.7%	56.1	56.1	0.0	0.0%
88.9%	56.0	56.1	0.1	0.2%
90.1%	56.0	56.1	0.1	0.2%
91.4%	55.9	56.0	0.1	0.2%
92.6%	55.8	56.0	0.1	0.2%
93.8%	55.4	55.9	0.5	0.9%
95.1%	55.4	55.9	0.5	0.9%
96.3%	55.3	55.8	0.5	1.0%
97.5%	55.3	55.6	0.3	0.5%
98.8%	54.5	54.8	0.3	0.6%
100.0%	54.5	54.8	0.0	0.6%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.3	58.8	0.5	0.8%
1.2%	57.5	58.2	0.7	1.2%
2.5%	57.0	58.2	1.2	2.2%
3.7%	56.9	57.7	0.7	1.3%
4.9%	56.7	57.5	0.8	1.5%
6.2%	56.4	57.4	1.1	1.9%
7.4%	56.2	57.1	1.0	1.7%
8.6%	56.1	57.1	1.0	1.7%
9.9%	56.0	57.0	0.9	1.7%
11.1%	56.0	56.8	0.8	1.4%
12.3%	55.8	56.8	0.9	1.7%
13.6%	55.7	56.7	1.1	1.9%
14.8%	55.6	56.7	1.0	1.8%
16.0%	55.6	56.6	1.0	1.8%
17.3%	55.6	56.6	1.0	1.7%
18.5%	55.5	56.6	1.0	1.9%
19.8%	55.5	56.5	1.0	1.9%
21.0%	55.5	56.4	1.0	1.8%
22.2%	55.5	56.4	0.9	1.7%
23.5%	55.5	56.4	0.9	1.7%
24.7%	55.4	56.4	0.9	1.7%
25.9%	55.4	56.3	0.9	1.7%
27.2%	55.4	56.3	1.0	1.8%
28.4%	55.3	56.3	1.0	1.8%
29.6%	55.3	56.3	1.0	1.8%
30.9%	55.3	56.3	1.0	1.8%
32.1%	55.3	56.3	1.0	1.8%
33.3%	55.3	56.3	1.0	1.8%
34.6%	55.3	56.3	1.0	1.7%
35.8%	55.3	56.2	1.0	1.7%
37.0%	55.2	56.2	1.0	1.8%
38.3%	55.2	56.2	1.0	1.8%
39.5%	55.2	56.2	1.0	1.8%
40.7%	55.2	56.1	0.9	1.7%
42.0%	55.1	56.0	0.9	1.6%
43.2%	55.0	56.0	1.0	1.8%
44.4%	55.0	56.0	1.0	1.8%
45.7%	54.9	55.9	1.0	1.8%
46.9%	54.9	55.8	1.0	1.7%
48.1%	54.9	55.8	1.0	1.8%
49.4%	54.9	55.8	0.9	1.6%
50.6%	54.8	55.7	0.9	1.6%
51.9%	54.8	55.7	0.9	1.7%
53.1%	54.8	55.7	0.9	1.7%
54.3%	54.8	55.7	0.9	1.7%
55.6%	54.8	55.7	0.9	1.7%
56.8%	54.8	55.7	0.9	1.7%
58.0%	54.8	55.7	0.9	1.7%
59.3%	54.8	55.7	0.9	1.7%
60.5%	54.7	55.7	0.9	1.7%
61.7%	54.7	55.6	0.9	1.7%
63.0%	54.7	55.6	0.9	1.7%
64.2%	54.7	55.6	0.9	1.7%
65.4%	54.7	55.6	0.9	1.7%
66.7%	54.7	55.6	0.9	1.6%
67.9%	54.7	55.6	0.9	1.6%
69.1%	54.6	55.6	0.9	1.7%
70.4%	54.6	55.5	0.9	1.7%
71.6%	54.6	55.5	0.9	1.7%
72.8%	54.6	55.5	1.0	1.8%
74.1%	54.5	55.4	0.9	1.6%
75.3%	54.5	55.4	0.9	1.7%
76.5%	54.5	55.4	0.9	1.6%
77.8%	54.5	55.4	0.9	1.6%
79.0%	54.5	55.4	0.9	1.6%
80.2%	54.5	55.4	0.9	1.6%
81.5%	54.4	55.3	1.0	1.8%
82.7%	54.3	55.3	1.0	1.8%
84.0%	54.3	55.3	1.0	1.8%
85.2%	54.3	55.2	0.9	1.7%
86.4%	54.3	55.1	0.9	1.6%
87.7%	54.3	55.1	0.9	1.6%
88.9%	54.1	55.1	1.0	1.8%
90.1%	54.1	55.1	1.0	1.8%
91.4%	54.0	55.0	1.0	1.8%
92.6%	54.0	54.7	0.7	1.3%
93.8%	53.8	54.7	0.9	1.6%
95.1%	53.7	54.2	0.5	0.9%
96.3%	53.7	54.0	0.4	0.7%
97.5%	53.5	53.7	0.2	0.4%
98.8%	46.4	47.8	1.4	3.1%
100.0%	46.4	47.8	1.4	3.1%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.1	55.3	0.2	0.3%
1.2%	54.6	55.1	0.5	1.0%
2.5%	54.5	54.6	0.1	0.2%
3.7%	53.9	54.5	0.6	1.1%
4.9%	53.8	54.3	0.4	0.8%
6.2%	53.7	54.0	0.3	0.6%
7.4%	53.6	54.0	0.4	0.8%
8.6%	53.6	54.0	0.4	0.8%
9.9%	53.5	54.0	0.5	0.9%
11.1%	53.5	53.9	0.4	0.8%
12.3%	53.4	53.9	0.5	0.9%
13.6%	53.1	53.7	0.6	1.1%
14.8%	52.8	53.6	0.8	1.6%
16.0%	52.7	53.4	0.7	1.3%
17.3%	52.7	53.3	0.6	1.1%
18.5%	52.7	53.2	0.5	1.0%
19.8%	52.6	53.1	0.5	0.9%
21.0%	52.5	52.9	0.4	0.7%
22.2%	52.5	52.9	0.4	0.8%
23.5%	52.4	52.9	0.4	0.8%
24.7%	52.4	52.7	0.3	0.5%
25.9%	52.3	52.6	0.3	0.5%
27.2%	52.3	52.5	0.2	0.4%
28.4%	52.0	52.3	0.3	0.6%
29.6%	51.9	52.2	0.2	0.4%
30.9%	51.8	52.2	0.3	0.6%
32.1%	51.8	52.0	0.2	0.3%
33.3%	51.8	52.0	0.2	0.4%
34.6%	51.7	52.0	0.3	0.5%
35.8%	51.6	51.9	0.2	0.4%
37.0%	51.5	51.8	0.2	0.5%
38.3%	51.4	51.7	0.3	0.6%
39.5%	51.2	51.6	0.4	0.8%
40.7%	51.2	51.6	0.4	0.8%
42.0%	51.0	51.6	0.6	1.1%
43.2%	51.0	51.5	0.6	1.1%
44.4%	51.0	51.5	0.5	1.0%
45.7%	50.7	51.4	0.7	1.4%
46.9%	50.7	51.4	0.7	1.3%
48.1%	50.7	51.4	0.7	1.4%
49.4%	50.6	51.3	0.7	1.4%
50.6%	50.6	51.3	0.7	1.4%
51.9%	50.5	51.2	0.6	1.2%
53.1%	50.5	51.1	0.6	1.2%
54.3%	50.5	51.1	0.6	1.2%
55.6%	50.4	51.1	0.7	1.4%
56.8%	50.3	51.1	0.7	1.5%
58.0%	50.3	50.7	0.4	0.9%
59.3%	50.2	50.6	0.4	0.8%
60.5%	50.1	50.5	0.4	0.8%
61.7%	50.0	50.5	0.5	1.0%
63.0%	49.9	50.5	0.6	1.1%
64.2%	49.9	50.3	0.4	0.9%
65.4%	49.9	50.3	0.5	0.9%
66.7%	49.8	50.2	0.4	0.9%
67.9%	49.5	49.9	0.4	0.8%
69.1%	49.4	49.8	0.4	0.7%
70.4%	49.3	49.7	0.4	0.9%
71.6%	49.1	49.7	0.6	1.2%
72.8%	49.1	49.6	0.5	0.9%
74.1%	48.9	49.3	0.4	0.7%
75.3%	48.5	49.3	0.7	1.5%
76.5%	48.5	49.2	0.7	1.5%
77.8%	48.5	49.2	0.7	1.5%
79.0%	48.5	49.1	0.6	1.2%
80.2%	48.3	49.1	0.7	1.5%
81.5%	48.3	49.0	0.7	1.4%
82.7%	48.2	48.8	0.5	1.1%
84.0%	48.1	48.7	0.7	1.4%
85.2%	47.9	48.6	0.6	1.3%
86.4%	47.9	48.5	0.6	1.3%
87.7%	47.9	48.1	0.2	0.5%
88.9%	47.6	47.8	0.2	0.4%
90.1%	47.1	47.6	0.5	1.0%
91.4%	47.1	47.4	0.3	0.7%
92.6%	46.4	46.4	0.0	0.0%
93.8%	46.4	46.4	0.0	0.0%
95.1%	46.3	45.6	-0.8	-1.7%
96.3%	45.1	45.1	0.0	-0.1%
97.5%	44.6	44.7	0.1	0.1%
98.8%	41.0	41.2	0.2	0.5%
100.0%	41.0	41.2	0.2	0.5%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.0	49.4	0.4	0.8%
1.2%	48.7	49.2	0.5	1.0%
2.5%	48.7	49.0	0.4	0.8%
3.7%	48.6	48.9	0.2	0.5%
4.9%	48.6	48.5	-0.1	-0.3%
6.2%	48.5	48.1	-0.4	-0.8%
7.4%	48.0	48.1	0.1	0.2%
8.6%	48.0	48.1	0.1	0.1%
9.9%	47.9	48.0	0.1	0.1%
11.1%	47.8	48.0	0.2	0.4%
12.3%	47.8	47.9	0.1	0.2%
13.6%	47.7	47.8	0.1	0.2%
14.8%	47.6	47.8	0.2	0.5%
16.0%	47.6	47.8	0.2	0.5%
17.3%	47.5	47.8	0.3	0.5%
18.5%	47.4	47.8	0.3	0.7%
19.8%	47.4	47.6	0.2	0.3%
21.0%	47.4	47.6	0.2	0.4%
22.2%	47.3	47.5	0.3	0.5%
23.5%	47.2	47.5	0.3	0.7%
24.7%	47.1	47.5	0.4	0.8%
25.9%	47.1	47.4	0.3	0.7%
27.2%	47.1	47.3	0.3	0.6%
28.4%	46.9	47.3	0.4	0.9%
29.6%	46.9	47.1	0.2	0.5%
30.9%	46.8	47.0	0.2	0.4%
32.1%	46.8	47.0	0.1	0.3%
33.3%	46.8	46.9	0.2	0.3%
34.6%	46.8	46.9	0.2	0.3%
35.8%	46.6	46.9	0.3	0.6%
37.0%	46.6	46.8	0.3	0.6%
38.3%	46.5	46.8	0.3	0.7%
39.5%	46.4	46.8	0.3	0.7%
40.7%	46.4	46.8	0.4	0.8%
42.0%	46.3	46.7	0.4	0.8%
43.2%	46.3	46.6	0.3	0.6%
44.4%	46.3	46.5	0.2	0.5%
45.7%	46.3	46.4	0.2	0.4%
46.9%	46.2	46.4	0.2	0.4%
48.1%	46.2	46.4	0.1	0.3%
49.4%	46.0	46.3	0.3	0.7%
50.6%	46.0	46.2	0.2	0.4%
51.9%	46.0	46.2	0.2	0.4%
53.1%	45.9	46.2	0.2	0.5%
54.3%	45.9	46.1	0.2	0.4%
55.6%	45.9	46.1	0.2	0.3%
56.8%	45.9	46.0	0.1	0.3%
58.0%	45.9	46.0	0.1	0.3%
59.3%	45.8	46.0	0.2	0.4%
60.5%	45.7	46.0	0.3	0.7%
61.7%	45.7	46.0	0.3	0.6%
63.0%	45.6	45.7	0.1	0.3%
64.2%	45.6	45.7	0.1	0.3%
65.4%	45.5	45.6	0.1	0.2%
66.7%	45.5	45.6	0.1	0.2%
67.9%	45.4	45.6	0.2	0.3%
69.1%	45.3	45.5	0.2	0.4%
70.4%	45.3	45.5	0.2	0.5%
71.6%	45.2	45.3	0.1	0.3%
72.8%	45.2	45.3	0.1	0.2%
74.1%	45.1	45.3	0.1	0.3%
75.3%	45.1	45.2	0.1	0.2%
76.5%	45.1	45.2	0.1	0.2%
77.8%	45.0	45.2	0.1	0.3%
79.0%	45.0	45.2	0.1	0.3%
80.2%	44.9	45.1	0.3	0.6%
81.5%	44.8	45.1	0.3	0.7%
82.7%	44.6	45.1	0.4	0.9%
84.0%	44.6	45.0	0.5	1.0%
85.2%	44.6	45.0	0.4	0.9%
86.4%	44.5	44.8	0.3	0.7%
87.7%	44.3	44.6	0.3	0.7%
88.9%	44.2	44.4	0.2	0.5%
90.1%	44.2	44.2	0.0	0.0%
91.4%	44.0	43.8	-0.2	-0.4%
92.6%	43.8	43.7	-0.1	-0.2%
93.8%	43.8	43.5	-0.3	-0.7%
95.1%	43.4	43.3	-0.1	-0.2%
96.3%	43.2	43.1	-0.1	-0.3%
97.5%	43.1	42.5	-0.6	-1.4%
98.8%	42.5	41.8	-0.7	-1.7%
100.0%	42.5	41.8	-0.7	-1.7%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.4	49.6	0.2	0.5%
1.2%	49.3	49.5	0.2	0.4%
2.5%	48.8	48.9	0.1	0.3%
3.7%	48.4	48.6	0.2	0.4%
4.9%	48.3	48.4	0.1	0.3%
6.2%	48.2	48.4	0.1	0.3%
7.4%	48.2	48.3	0.0	0.1%
8.6%	48.2	48.2	0.0	0.0%
9.9%	48.1	48.2	0.1	0.2%
11.1%	48.0	48.1	0.1	0.2%
12.3%	47.8	47.8	0.0	0.0%
13.6%	47.5	47.5	0.0	0.0%
14.8%	47.4	47.4	0.1	0.2%
16.0%	47.3	47.4	0.1	0.3%
17.3%	47.3	47.4	0.1	0.2%
18.5%	47.3	47.4	0.1	0.2%
19.8%	47.2	47.3	0.1	0.2%
21.0%	47.2	47.3	0.1	0.3%
22.2%	47.2	47.3	0.1	0.3%
23.5%	47.0	47.2	0.2	0.4%
24.7%	47.0	47.1	0.1	0.3%
25.9%	46.9	47.1	0.2	0.3%
27.2%	46.9	47.0	0.1	0.2%
28.4%	46.8	47.0	0.1	0.3%
29.6%	46.8	46.9	0.1	0.3%
30.9%	46.8	46.9	0.1	0.2%
32.1%	46.7	46.9	0.2	0.4%
33.3%	46.7	46.8	0.1	0.3%
34.6%	46.7	46.8	0.1	0.3%
35.8%	46.7	46.7	0.0	0.0%
37.0%	46.6	46.6	0.0	0.1%
38.3%	46.6	46.6	0.0	0.1%
39.5%	46.5	46.5	-0.1	-0.1%
40.7%	46.5	46.5	0.0	-0.1%
42.0%	46.4	46.5	0.1	0.2%
43.2%	46.3	46.5	0.2	0.3%
44.4%	46.3	46.4	0.2	0.3%
45.7%	46.3	46.4	0.1	0.3%
46.9%	46.2	46.3	0.1	0.2%
48.1%	46.2	46.2	0.0	0.1%
49.4%	46.2	46.2	0.1	0.2%
50.6%	46.1	46.2	0.1	0.2%
51.9%	46.1	46.1	0.1	0.1%
53.1%	46.0	46.1	0.1	0.1%
54.3%	46.0	46.1	0.1	0.2%
55.6%	45.9	45.9	0.0	0.1%
56.8%	45.9	45.9	0.0	0.1%
58.0%	45.8	45.9	0.0	0.1%
59.3%	45.8	45.9	0.1	0.1%
60.5%	45.8	45.8	0.1	0.1%
61.7%	45.8	45.8	0.0	0.1%
63.0%	45.7	45.8	0.1	0.2%
64.2%	45.7	45.7	0.0	0.1%
65.4%	45.7	45.7	0.1	0.1%
66.7%	45.7	45.7	0.1	0.1%
67.9%	45.6	45.7	0.1	0.1%
69.1%	45.6	45.7	0.1	0.2%
70.4%	45.6	45.7	0.1	0.2%
71.6%	45.5	45.6	0.1	0.2%
72.8%	45.5	45.6	0.1	0.3%
74.1%	45.5	45.6	0.1	0.3%
75.3%	45.4	45.5	0.1	0.2%
76.5%	45.4	45.5	0.1	0.2%
77.8%	45.3	45.4	0.1	0.2%
79.0%	45.2	45.3	0.1	0.2%
80.2%	45.2	45.2	0.0	0.0%
81.5%	45.1	45.2	0.1	0.1%
82.7%	45.1	45.2	0.0	0.1%
84.0%	45.1	45.2	0.1	0.2%
85.2%	45.0	45.1	0.2	0.4%
86.4%	44.9	45.1	0.2	0.5%
87.7%	44.8	45.0	0.1	0.3%
88.9%	44.8	44.9	0.1	0.1%
90.1%	44.8	44.8	0.0	0.0%
91.4%	44.7	44.6	-0.1	-0.2%
92.6%	44.6	44.6	0.1	0.1%
93.8%	44.6	44.5	0.0	-0.1%
95.1%	44.5	44.4	-0.1	-0.2%
96.3%	44.3	44.3	0.0	0.1%
97.5%	44.3	44.3	0.0	0.0%
98.8%	44.3	44.3	0.0	0.0%
100.0%	44.3	44.3	0.0	0.0%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.6	53.6	0.0	0.1%
1.2%	53.4	53.5	0.1	0.3%
2.5%	52.9	52.7	-0.3	-0.5%
3.7%	52.7	52.5	-0.2	-0.4%
4.9%	52.6	52.1	-0.5	-0.9%
6.2%	52.4	51.9	-0.5	-0.9%
7.4%	51.9	51.9	-0.1	-0.1%
8.6%	51.9	51.7	-0.2	-0.3%
9.9%	51.9	51.6	-0.3	-0.6%
11.1%	51.7	51.6	-0.1	-0.2%
12.3%	51.3	51.4	0.1	0.1%
13.6%	51.2	51.1	-0.1	-0.2%
14.8%	51.1	51.1	0.0	0.0%
16.0%	51.1	51.0	-0.1	-0.1%
17.3%	51.0	50.9	0.0	0.0%
18.5%	50.9	50.9	0.0	-0.1%
19.8%	50.8	50.8	-0.1	-0.2%
21.0%	50.8	50.6	-0.2	-0.3%
22.2%	50.6	50.6	0.0	0.1%
23.5%	50.4	50.4	0.0	0.0%
24.7%	50.3	50.3	0.0	0.0%
25.9%	50.2	50.2	0.0	0.0%
27.2%	50.1	50.1	0.0	-0.1%
28.4%	50.1	50.0	-0.1	-0.2%
29.6%	49.9	49.9	0.0	-0.1%
30.9%	49.9	49.8	0.0	0.0%
32.1%	49.8	49.7	-0.1	-0.2%
33.3%	49.7	49.6	-0.1	-0.2%
34.6%	49.3	49.5	0.2	0.3%
35.8%	49.1	49.3	0.2	0.3%
37.0%	49.1	49.2	0.1	0.2%
38.3%	49.1	49.1	0.0	0.0%
39.5%	49.1	49.1	0.0	-0.1%
40.7%	49.1	49.1	0.0	-0.1%
42.0%	49.1	49.1	0.0	0.0%
43.2%	49.0	49.0	0.0	0.0%
44.4%	49.0	49.0	0.0	-0.1%
45.7%	49.0	48.9	-0.1	-0.1%
46.9%	49.0	48.8	-0.1	-0.3%
48.1%	48.9	48.8	-0.1	-0.3%
49.4%	48.8	48.8	-0.1	-0.2%
50.6%	48.7	48.8	0.0	0.0%
51.9%	48.7	48.7	0.0	0.0%
53.1%	48.7	48.7	0.0	0.0%
54.3%	48.7	48.7	0.1	0.1%
55.6%	48.7	48.7	0.1	0.1%
56.8%	48.6	48.6	0.0	0.0%
58.0%	48.6	48.6	0.0	0.0%
59.3%	48.6	48.5	-0.1	-0.1%
60.5%	48.5	48.5	0.0	0.0%
61.7%	48.5	48.5	0.0	0.0%
63.0%	48.5	48.4	0.0	0.0%
64.2%	48.4	48.4	0.0	0.0%
65.4%	48.4	48.4	0.0	0.0%
66.7%	48.3	48.4	0.0	0.0%
67.9%	48.3	48.3	0.0	0.0%
69.1%	48.3	48.3	0.1	0.1%
70.4%	48.2	48.3	0.1	0.3%
71.6%	48.2	48.3	0.1	0.3%
72.8%	48.1	48.2	0.1	0.2%
74.1%	48.1	48.2	0.1	0.2%
75.3%	48.1	48.1	0.1	0.2%
76.5%	48.0	48.1	0.2	0.4%
77.8%	47.9	48.1	0.1	0.2%
79.0%	47.9	48.0	0.0	0.0%
80.2%	47.9	47.9	0.0	0.0%
81.5%	47.9	47.9	0.0	0.1%
82.7%	47.9	47.9	0.1	0.1%
84.0%	47.8	47.9	0.1	0.1%
85.2%	47.8	47.9	0.0	0.0%
86.4%	47.8	47.8	0.0	0.0%
87.7%	47.8	47.7	-0.1	-0.2%
88.9%	47.7	47.7	0.0	0.0%
90.1%	47.6	47.6	0.0	0.0%
91.4%	47.6	47.6	0.0	0.0%
92.6%	47.5	47.5	0.0	0.0%
93.8%	47.5	47.5	0.0	0.0%
95.1%	47.5	47.5	0.0	0.0%
96.3%	47.5	47.5	0.0	0.0%
97.5%	47.4	47.3	-0.1	-0.2%
98.8%	47.3	46.6	-0.7	-1.4%
100.0%	47.3	46.6	-0.7	-1.4%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.9	59.3	0.5	0.8%
1.2%	58.1	57.9	-0.2	-0.3%
2.5%	57.9	57.9	0.0	-0.1%
3.7%	57.7	57.6	-0.1	-0.2%
4.9%	57.6	57.4	-0.2	-0.4%
6.2%	57.3	57.3	0.0	0.0%
7.4%	57.3	57.2	-0.1	-0.2%
8.6%	57.2	57.1	-0.2	-0.3%
9.9%	56.9	56.7	-0.2	-0.3%
11.1%	56.6	56.6	0.0	-0.1%
12.3%	56.4	56.5	0.0	0.0%
13.6%	56.3	56.3	0.0	0.0%
14.8%	56.2	56.2	0.0	0.1%
16.0%	56.1	56.2	0.1	0.3%
17.3%	56.0	56.2	0.2	0.4%
18.5%	55.8	56.2	0.4	0.6%
19.8%	55.8	56.1	0.3	0.5%
21.0%	55.7	56.0	0.3	0.5%
22.2%	55.7	56.0	0.3	0.5%
23.5%	55.5	55.6	0.1	0.2%
24.7%	55.3	55.5	0.2	0.4%
25.9%	55.2	55.2	0.0	0.0%
27.2%	55.2	55.2	0.0	0.0%
28.4%	55.2	55.2	0.0	0.0%
29.6%	55.0	55.1	0.0	0.1%
30.9%	55.0	55.0	0.0	0.0%
32.1%	55.0	55.0	0.0	0.0%
33.3%	55.0	54.6	-0.4	-0.7%
34.6%	54.9	54.6	-0.3	-0.6%
35.8%	54.8	54.6	-0.2	-0.3%
37.0%	54.6	54.6	0.0	0.0%
38.3%	54.3	54.6	0.2	0.5%
39.5%	54.3	54.3	0.1	0.1%
40.7%	54.2	54.3	0.1	0.2%
42.0%	54.1	54.2	0.1	0.2%
43.2%	54.1	54.1	0.0	0.0%
44.4%	54.0	54.0	0.0	0.0%
45.7%	54.0	53.9	0.0	-0.1%
46.9%	54.0	53.8	-0.1	-0.2%
48.1%	53.8	53.8	0.0	-0.1%
49.4%	53.8	53.7	-0.1	-0.1%
50.6%	53.8	53.7	-0.1	-0.2%
51.9%	53.8	53.7	-0.1	-0.3%
53.1%	53.8	53.5	-0.3	-0.5%
54.3%	53.7	53.4	-0.3	-0.6%
55.6%	53.6	53.3	-0.3	-0.6%
56.8%	53.4	53.3	-0.1	-0.2%
58.0%	53.3	53.2	-0.1	-0.2%
59.3%	53.3	53.2	-0.1	-0.2%
60.5%	53.2	53.1	-0.1	-0.2%
61.7%	53.2	52.9	-0.2	-0.5%
63.0%	53.1	52.9	-0.2	-0.4%
64.2%	52.9	52.9	0.0	-0.1%
65.4%	52.9	52.9	0.0	-0.1%
66.7%	52.9	52.8	-0.1	-0.1%
67.9%	52.8	52.6	-0.2	-0.4%
69.1%	52.6	52.5	-0.1	-0.2%
70.4%	52.3	52.3	0.0	0.0%
71.6%	52.3	52.3	0.0	0.0%
72.8%	52.3	52.3	0.0	0.0%
74.1%	52.3	52.2	-0.1	-0.1%
75.3%	52.2	52.2	0.0	-0.1%
76.5%	52.2	52.2	0.0	0.0%
77.8%	52.2	51.9	-0.2	-0.4%
79.0%	51.9	51.8	-0.1	-0.2%
80.2%	51.9	51.8	-0.1	-0.2%
81.5%	51.8	51.8	-0.1	-0.1%
82.7%	51.8	51.7	-0.1	-0.2%
84.0%	51.8	51.6	-0.1	-0.2%
85.2%	51.7	51.6	-0.1	-0.2%
86.4%	51.6	51.6	0.0	-0.1%
87.7%	51.6	51.3	-0.3	-0.6%
88.9%	51.3	51.2	-0.1	-0.3%
90.1%	51.2	51.1	-0.1	-0.2%
91.4%	51.1	51.1	0.0	0.0%
92.6%	51.1	51.1	0.0	0.0%
93.8%	51.0	51.0	0.0	0.0%
95.1%	50.9	50.9	0.0	0.0%
96.3%	50.8	50.6	-0.1	-0.3%
97.5%	50.5	50.6	0.1	0.3%
98.8%	50.0	50.5	0.5	0.9%
100.0%	50.0	50.5	0.5	0.9%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.8	65.9	1.1	1.7%
1.2%	63.9	65.1	1.2	1.9%
2.5%	62.9	64.7	1.8	2.9%
3.7%	62.9	64.7	1.8	2.8%
4.9%	62.2	63.8	1.6	2.6%
6.2%	62.1	61.9	-0.2	-0.3%
7.4%	61.6	61.9	0.4	0.6%
8.6%	61.0	61.8	0.8	1.3%
9.9%	61.0	61.8	0.8	1.3%
11.1%	61.0	61.3	0.4	0.6%
12.3%	60.9	61.1	0.3	0.4%
13.6%	60.8	61.0	0.2	0.3%
14.8%	60.5	60.5	0.0	0.0%
16.0%	60.3	60.4	0.2	0.3%
17.3%	60.2	60.4	0.2	0.3%
18.5%	60.1	60.2	0.1	0.2%
19.8%	60.1	60.1	0.0	0.0%
21.0%	60.0	60.0	0.1	0.1%
22.2%	59.8	59.9	0.1	0.2%
23.5%	59.7	59.8	0.1	0.2%
24.7%	59.3	59.8	0.4	0.7%
25.9%	59.3	59.5	0.1	0.2%
27.2%	59.1	59.4	0.3	0.5%
28.4%	59.0	59.3	0.3	0.5%
29.6%	59.0	59.1	0.2	0.3%
30.9%	59.0	58.9	0.0	0.0%
32.1%	58.9	58.9	0.0	0.0%
33.3%	58.6	58.6	0.0	0.0%
34.6%	58.5	58.6	0.1	0.2%
35.8%	58.4	58.5	0.2	0.3%
37.0%	58.3	58.4	0.1	0.1%
38.3%	58.3	57.9	-0.4	-0.7%
39.5%	58.2	57.7	-0.4	-0.7%
40.7%	57.7	57.6	-0.1	-0.2%
42.0%	57.6	57.6	0.0	0.0%
43.2%	57.5	57.6	0.1	0.1%
44.4%	57.4	57.5	0.1	0.2%
45.7%	57.4	57.4	0.0	0.0%
46.9%	57.3	57.3	0.0	0.0%
48.1%	57.3	57.1	-0.2	-0.3%
49.4%	57.1	57.1	0.0	0.0%
50.6%	57.1	57.1	0.0	0.0%
51.9%	56.9	56.9	0.0	-0.1%
53.1%	56.9	56.9	0.0	0.0%
54.3%	56.8	56.8	0.0	0.0%
55.6%	56.7	56.7	0.0	0.0%
56.8%	56.6	56.7	0.0	0.1%
58.0%	56.6	56.6	0.0	0.0%
59.3%	56.5	56.5	0.0	0.0%
60.5%	56.4	56.4	0.0	0.0%
61.7%	56.4	56.4	0.0	0.0%
63.0%	56.2	56.4	0.2	0.3%
64.2%	56.2	56.3	0.1	0.1%
65.4%	56.2	56.1	0.0	-0.1%
66.7%	56.1	56.1	-0.1	-0.1%
67.9%	56.1	55.9	-0.2	-0.3%
69.1%	56.0	55.9	-0.1	-0.2%
70.4%	55.9	55.8	-0.1	-0.1%
71.6%	55.9	55.8	-0.1	-0.1%
72.8%	55.8	55.8	0.0	0.0%
74.1%	55.8	55.7	-0.1	-0.1%
75.3%	55.7	55.7	0.0	-0.1%
76.5%	55.7	55.7	0.0	0.0%
77.8%	55.7	55.6	-0.1	-0.2%
79.0%	55.6	55.6	0.0	0.0%
80.2%	55.3	55.3	0.0	0.1%
81.5%	55.3	55.1	-0.1	-0.3%
82.7%	55.1	54.9	-0.2	-0.4%
84.0%	54.9	54.8	-0.1	-0.1%
85.2%	54.8	54.8	0.0	0.0%
86.4%	54.7	54.7	0.0	0.0%
87.7%	54.5	54.5	0.0	0.0%
88.9%	54.5	54.5	0.0	0.0%
90.1%	54.5	54.5	0.0	0.0%
91.4%	54.4	54.4	0.0	0.0%
92.6%	54.4	54.4	0.0	0.0%
93.8%	54.2	54.2	0.0	0.0%
95.1%	53.9	53.9	0.0	0.0%
96.3%	53.9	53.8	0.0	0.0%
97.5%	53.5	53.6	0.0	0.1%
98.8%	53.4	53.4	0.0	0.0%
100.0%	53.4	53.4	0.0	0.0%

Table SQ9-1b
American River below Nimbus Dam, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.4	67.6	1.2	1.8%
1.2%	66.3	67.6	1.3	1.9%
2.5%	66.0	66.7	0.8	1.2%
3.7%	66.0	65.8	-0.2	-0.2%
4.9%	65.8	65.7	-0.1	-0.1%
6.2%	65.5	65.6	0.0	0.0%
7.4%	65.4	65.2	-0.2	-0.4%
8.6%	65.3	65.1	-0.3	-0.4%
9.9%	65.2	64.8	-0.4	-0.7%
11.1%	65.2	64.8	-0.4	-0.6%
12.3%	65.0	64.7	-0.3	-0.5%
13.6%	65.0	64.6	-0.4	-0.6%
14.8%	64.8	64.6	-0.2	-0.3%
16.0%	64.7	64.4	-0.3	-0.5%
17.3%	64.7	64.3	-0.4	-0.6%
18.5%	64.7	64.3	-0.3	-0.5%
19.8%	64.6	64.3	-0.3	-0.5%
21.0%	64.6	64.2	-0.4	-0.6%
22.2%	64.6	64.2	-0.4	-0.6%
23.5%	64.5	64.1	-0.5	-0.7%
24.7%	64.5	64.1	-0.4	-0.6%
25.9%	64.2	64.1	-0.2	-0.2%
27.2%	63.9	63.8	-0.1	-0.2%
28.4%	63.8	63.5	-0.3	-0.4%
29.6%	63.7	63.2	-0.6	-0.9%
30.9%	63.4	62.9	-0.6	-0.9%
32.1%	63.4	62.7	-0.7	-1.1%
33.3%	63.4	62.6	-0.8	-1.2%
34.6%	62.6	62.4	-0.2	-0.3%
35.8%	62.6	61.9	-0.7	-1.1%
37.0%	62.2	61.3	-0.9	-1.4%
38.3%	61.9	61.2	-0.7	-1.2%
39.5%	61.8	61.1	-0.7	-1.1%
40.7%	61.7	60.8	-0.9	-1.5%
42.0%	61.2	60.7	-0.5	-0.8%
43.2%	61.1	60.7	-0.5	-0.7%
44.4%	61.0	60.6	-0.3	-0.5%
45.7%	61.0	60.4	-0.5	-0.9%
46.9%	60.4	60.4	0.0	0.0%
48.1%	60.1	60.3	0.2	0.3%
49.4%	60.1	60.1	0.0	0.0%
50.6%	60.1	60.1	0.0	0.0%
51.9%	60.0	59.9	-0.1	-0.1%
53.1%	59.9	59.9	0.0	0.0%
54.3%	59.8	59.8	0.0	0.0%
55.6%	59.6	59.7	0.1	0.1%
56.8%	59.6	59.6	0.0	0.0%
58.0%	59.6	59.6	0.0	0.0%
59.3%	59.6	59.6	0.0	0.0%
60.5%	59.5	59.5	0.1	0.1%
61.7%	59.4	59.5	0.1	0.2%
63.0%	59.4	59.4	0.0	0.0%
64.2%	59.4	59.4	0.0	0.0%
65.4%	59.3	59.3	0.0	0.0%
66.7%	59.3	59.3	0.0	0.0%
67.9%	59.2	59.3	0.1	0.1%
69.1%	59.2	59.2	0.0	0.1%
70.4%	59.2	59.2	0.0	0.1%
71.6%	59.1	59.1	0.0	-0.1%
72.8%	59.1	59.1	0.0	0.0%
74.1%	59.0	59.0	0.0	0.0%
75.3%	58.9	58.9	0.0	0.0%
76.5%	58.8	58.6	-0.2	-0.3%
77.8%	58.6	58.6	0.0	0.0%
79.0%	58.6	58.5	-0.1	-0.2%
80.2%	58.5	58.4	-0.1	-0.2%
81.5%	58.4	58.3	0.0	-0.1%
82.7%	58.3	58.3	-0.1	-0.1%
84.0%	58.3	58.1	-0.2	-0.4%
85.2%	58.3	58.1	-0.2	-0.3%
86.4%	58.2	58.0	-0.2	-0.3%
87.7%	58.1	57.9	-0.2	-0.4%
88.9%	58.1	57.8	-0.3	-0.5%
90.1%	58.1	57.8	-0.3	-0.6%
91.4%	58.1	57.8	-0.3	-0.5%
92.6%	58.0	57.6	-0.4	-0.7%
93.8%	57.6	57.2	-0.4	-0.7%
95.1%	56.4	56.1	-0.2	-0.4%
96.3%	56.1	56.0	-0.2	-0.3%
97.5%	56.1	55.9	-0.2	-0.3%
98.8%	56.0	55.9	-0.2	-0.3%
100.0%	56.0	55.9	-0.2	-0.3%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.8	69.5	-1.3	-1.8%
1.2%	70.1	68.3	-1.8	-2.5%
2.5%	69.4	66.8	-2.5	-3.7%
3.7%	68.4	66.3	-2.1	-3.1%
4.9%	68.1	65.9	-2.2	-3.2%
6.2%	67.5	65.8	-1.6	-2.4%
7.4%	67.3	65.7	-1.6	-2.4%
8.6%	67.0	65.7	-1.3	-2.0%
9.9%	66.8	65.6	-1.2	-1.8%
11.1%	66.6	65.5	-1.2	-1.8%
12.3%	66.6	65.0	-1.7	-2.5%
13.6%	66.6	64.9	-1.7	-2.5%
14.8%	66.6	64.8	-1.8	-2.6%
16.0%	66.2	64.1	-2.2	-3.3%
17.3%	65.9	64.0	-1.9	-2.8%
18.5%	65.6	64.0	-1.6	-2.4%
19.8%	65.4	63.7	-1.7	-2.6%
21.0%	65.2	63.7	-1.5	-2.3%
22.2%	64.6	63.7	-0.9	-1.4%
23.5%	64.5	63.6	-1.0	-1.5%
24.7%	64.5	63.3	-1.2	-1.9%
25.9%	64.0	63.2	-0.8	-1.2%
27.2%	63.9	63.0	-1.0	-1.5%
28.4%	63.9	62.9	-1.0	-1.5%
29.6%	63.9	62.8	-1.1	-1.7%
30.9%	63.9	62.8	-1.1	-1.7%
32.1%	63.8	62.8	-1.1	-1.7%
33.3%	63.8	62.7	-1.1	-1.7%
34.6%	63.7	62.5	-1.2	-1.8%
35.8%	63.7	62.5	-1.2	-1.8%
37.0%	63.6	62.4	-1.2	-1.9%
38.3%	63.6	62.3	-1.3	-2.1%
39.5%	63.5	62.2	-1.3	-2.1%
40.7%	63.5	62.2	-1.4	-2.1%
42.0%	63.5	62.2	-1.3	-2.1%
43.2%	63.5	62.2	-1.3	-2.1%
44.4%	63.4	62.1	-1.3	-2.0%
45.7%	63.4	62.0	-1.3	-2.1%
46.9%	63.2	62.0	-1.2	-1.9%
48.1%	63.2	62.0	-1.2	-2.0%
49.4%	63.2	61.9	-1.2	-2.0%
50.6%	63.0	61.9	-1.2	-1.8%
51.9%	63.0	61.8	-1.1	-1.8%
53.1%	63.0	61.7	-1.3	-2.1%
54.3%	63.0	61.6	-1.4	-2.2%
55.6%	62.9	61.6	-1.3	-2.1%
56.8%	62.9	61.5	-1.4	-2.2%
58.0%	62.8	61.5	-1.3	-2.0%
59.3%	62.8	61.5	-1.3	-2.0%
60.5%	62.8	61.4	-1.3	-2.1%
61.7%	62.8	61.4	-1.4	-2.2%
63.0%	62.7	61.4	-1.4	-2.2%
64.2%	62.7	61.3	-1.4	-2.3%
65.4%	62.7	61.2	-1.4	-2.2%
66.7%	62.7	61.2	-1.4	-2.3%
67.9%	62.6	61.2	-1.4	-2.2%
69.1%	62.6	61.2	-1.4	-2.3%
70.4%	62.5	61.1	-1.4	-2.3%
71.6%	62.2	61.0	-1.2	-2.0%
72.8%	62.1	61.0	-1.1	-1.8%
74.1%	62.1	61.0	-1.1	-1.8%
75.3%	62.1	61.0	-1.1	-1.7%
76.5%	62.0	60.7	-1.3	-2.1%
77.8%	62.0	60.7	-1.2	-2.0%
79.0%	61.9	60.7	-1.2	-2.0%
80.2%	61.9	60.7	-1.2	-2.0%
81.5%	61.9	60.5	-1.3	-2.2%
82.7%	61.8	60.3	-1.6	-2.5%
84.0%	61.8	60.1	-1.7	-2.7%
85.2%	61.4	60.1	-1.4	-2.2%
86.4%	61.4	59.9	-1.5	-2.4%
87.7%	61.1	59.8	-1.3	-2.2%
88.9%	60.8	59.6	-1.2	-2.0%
90.1%	60.8	59.5	-1.2	-2.0%
91.4%	60.7	59.2	-1.5	-2.5%
92.6%	60.7	59.0	-1.7	-2.8%
93.8%	60.7	58.7	-2.0	-3.2%
95.1%	60.6	58.7	-1.9	-3.1%
96.3%	60.5	58.6	-1.9	-3.2%
97.5%	60.3	58.3	-2.0	-3.3%
98.8%	59.7	58.2	-1.5	-2.5%
100.0%	59.7	58.2	-1.5	-2.5%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.6	67.4	-2.2	-3.1%
1.2%	68.5	66.5	-2.1	-3.0%
2.5%	67.9	66.0	-1.9	-2.9%
3.7%	67.7	66.0	-1.8	-2.6%
4.9%	67.7	65.5	-2.2	-3.2%
6.2%	67.6	65.4	-2.2	-3.2%
7.4%	67.0	65.2	-1.7	-2.6%
8.6%	66.9	65.1	-1.7	-2.6%
9.9%	66.8	64.7	-2.1	-3.2%
11.1%	66.8	64.7	-2.1	-3.1%
12.3%	66.7	64.4	-2.3	-3.5%
13.6%	66.7	64.3	-2.4	-3.6%
14.8%	65.9	64.2	-1.6	-2.5%
16.0%	65.8	64.2	-1.6	-2.4%
17.3%	65.7	64.1	-1.7	-2.5%
18.5%	65.4	63.9	-1.5	-2.3%
19.8%	65.3	63.8	-1.5	-2.3%
21.0%	65.3	63.8	-1.5	-2.3%
22.2%	65.3	63.7	-1.6	-2.4%
23.5%	65.0	63.7	-1.3	-2.0%
24.7%	64.9	63.5	-1.4	-2.2%
25.9%	64.6	63.5	-1.1	-1.7%
27.2%	64.6	63.4	-1.1	-1.8%
28.4%	64.4	63.4	-1.0	-1.5%
29.6%	64.4	63.4	-0.9	-1.5%
30.9%	64.3	63.2	-1.0	-1.6%
32.1%	64.2	63.1	-1.2	-1.8%
33.3%	64.1	62.9	-1.2	-1.8%
34.6%	63.9	62.8	-1.1	-1.7%
35.8%	63.9	62.7	-1.2	-1.8%
37.0%	63.6	62.6	-1.0	-1.6%
38.3%	63.3	62.4	-0.9	-1.3%
39.5%	63.2	62.4	-0.8	-1.3%
40.7%	63.1	62.0	-1.1	-1.7%
42.0%	63.1	61.9	-1.2	-1.9%
43.2%	63.1	61.9	-1.2	-1.9%
44.4%	63.0	61.8	-1.2	-2.0%
45.7%	63.0	61.8	-1.3	-2.0%
46.9%	62.9	61.8	-1.2	-1.9%
48.1%	62.9	61.8	-1.2	-1.9%
49.4%	62.8	61.7	-1.1	-1.7%
50.6%	62.8	61.6	-1.1	-1.8%
51.9%	62.7	61.5	-1.2	-1.9%
53.1%	62.7	61.4	-1.3	-2.0%
54.3%	62.6	61.3	-1.2	-1.9%
55.6%	62.5	61.3	-1.1	-1.8%
56.8%	62.4	61.2	-1.2	-1.9%
58.0%	62.4	61.1	-1.3	-2.0%
59.3%	62.4	61.1	-1.3	-2.1%
60.5%	62.3	61.0	-1.3	-2.0%
61.7%	62.2	61.0	-1.3	-2.0%
63.0%	62.2	61.0	-1.2	-2.0%
64.2%	62.1	60.8	-1.2	-2.0%
65.4%	62.0	60.7	-1.4	-2.2%
66.7%	62.0	60.6	-1.3	-2.2%
67.9%	61.9	60.6	-1.3	-2.1%
69.1%	61.8	60.6	-1.3	-2.0%
70.4%	61.7	60.4	-1.3	-2.0%
71.6%	61.6	60.3	-1.3	-2.1%
72.8%	61.5	60.2	-1.3	-2.1%
74.1%	61.4	60.2	-1.2	-2.0%
75.3%	61.3	60.1	-1.2	-1.9%
76.5%	61.3	60.0	-1.2	-2.0%
77.8%	61.2	59.9	-1.3	-2.1%
79.0%	61.1	59.9	-1.1	-1.9%
80.2%	60.8	59.9	-0.9	-1.6%
81.5%	60.8	59.9	-0.9	-1.5%
82.7%	60.7	59.9	-0.8	-1.4%
84.0%	60.7	59.8	-0.8	-1.4%
85.2%	60.0	59.7	-0.3	-0.6%
86.4%	59.9	59.1	-0.7	-1.2%
87.7%	59.8	59.1	-0.8	-1.3%
88.9%	59.6	59.0	-0.6	-1.0%
90.1%	59.2	58.5	-0.7	-1.2%
91.4%	59.2	58.5	-0.7	-1.2%
92.6%	59.1	58.1	-1.0	-1.7%
93.8%	59.1	58.1	-1.0	-1.7%
95.1%	59.0	58.0	-1.0	-1.7%
96.3%	58.9	58.0	-1.0	-1.7%
97.5%	58.9	57.9	-0.9	-1.6%
98.8%	58.5	57.8	-0.7	-1.2%
100.0%	58.5	57.8	-0.7	-1.2%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.5	68.5	0.0	0.0%
1.2%	67.7	66.8	-0.9	-1.3%
2.5%	67.6	66.6	-1.0	-1.5%
3.7%	67.4	66.5	-0.9	-1.3%
4.9%	67.4	66.5	-0.9	-1.3%
6.2%	67.2	66.4	-0.8	-1.1%
7.4%	67.0	66.4	-0.7	-1.0%
8.6%	67.0	66.2	-0.8	-1.2%
9.9%	66.8	66.2	-0.7	-1.0%
11.1%	66.8	66.1	-0.7	-1.0%
12.3%	66.8	66.0	-0.7	-1.1%
13.6%	66.7	65.8	-0.9	-1.4%
14.8%	66.6	65.7	-0.9	-1.4%
16.0%	66.6	65.7	-0.9	-1.4%
17.3%	66.5	65.6	-0.9	-1.3%
18.5%	66.3	65.5	-0.8	-1.1%
19.8%	66.1	65.4	-0.7	-1.1%
21.0%	66.1	65.1	-1.0	-1.5%
22.2%	66.0	64.9	-1.1	-1.6%
23.5%	65.9	64.9	-1.0	-1.5%
24.7%	65.7	64.8	-0.9	-1.3%
25.9%	65.6	64.7	-0.9	-1.4%
27.2%	65.4	64.6	-0.8	-1.2%
28.4%	65.3	64.6	-0.7	-1.1%
29.6%	65.2	64.5	-0.7	-1.1%
30.9%	65.2	64.4	-0.8	-1.2%
32.1%	65.2	64.3	-0.9	-1.3%
33.3%	65.1	64.2	-0.9	-1.4%
34.6%	65.1	64.2	-0.9	-1.4%
35.8%	65.1	64.2	-0.9	-1.4%
37.0%	64.8	64.1	-0.7	-1.0%
38.3%	64.6	63.9	-0.7	-1.0%
39.5%	64.5	63.9	-0.6	-1.0%
40.7%	64.3	63.8	-0.4	-0.7%
42.0%	64.2	63.7	-0.5	-0.8%
43.2%	64.1	63.2	-0.9	-1.4%
44.4%	63.9	63.2	-0.8	-1.2%
45.7%	63.9	63.1	-0.8	-1.2%
46.9%	63.9	63.1	-0.8	-1.2%
48.1%	63.8	63.0	-0.8	-1.3%
49.4%	63.5	62.9	-0.6	-0.9%
50.6%	63.5	62.8	-0.7	-1.1%
51.9%	63.5	62.8	-0.7	-1.1%
53.1%	63.3	62.7	-0.6	-1.0%
54.3%	63.3	62.6	-0.7	-1.1%
55.6%	63.2	62.4	-0.8	-1.3%
56.8%	63.2	62.3	-0.9	-1.5%
58.0%	63.2	62.2	-1.0	-1.5%
59.3%	62.9	62.1	-0.8	-1.3%
60.5%	62.8	62.1	-0.7	-1.1%
61.7%	62.8	62.0	-0.8	-1.3%
63.0%	62.8	61.9	-0.8	-1.3%
64.2%	62.8	61.8	-0.9	-1.4%
65.4%	62.3	61.8	-0.5	-0.8%
66.7%	62.2	61.8	-0.4	-0.6%
67.9%	62.1	61.8	-0.3	-0.5%
69.1%	62.1	61.8	-0.3	-0.5%
70.4%	62.0	61.7	-0.3	-0.4%
71.6%	62.0	61.7	-0.3	-0.4%
72.8%	61.6	61.7	0.0	0.0%
74.1%	61.6	61.6	0.0	0.1%
75.3%	61.5	61.6	0.0	0.1%
76.5%	61.4	61.5	0.1	0.1%
77.8%	61.3	61.4	0.1	0.1%
79.0%	61.2	61.3	0.1	0.2%
80.2%	61.2	61.3	0.0	0.1%
81.5%	61.2	61.1	-0.1	-0.1%
82.7%	61.0	60.9	-0.1	-0.2%
84.0%	60.9	60.9	0.1	0.1%
85.2%	60.8	60.8	0.0	0.0%
86.4%	60.6	60.7	0.1	0.1%
87.7%	60.5	60.6	0.1	0.2%
88.9%	60.4	60.5	0.1	0.1%
90.1%	60.4	60.2	-0.3	-0.4%
91.4%	60.4	60.1	-0.3	-0.6%
92.6%	60.3	59.8	-0.5	-0.8%
93.8%	60.3	59.7	-0.6	-1.0%
95.1%	60.2	59.6	-0.7	-1.1%
96.3%	60.1	59.5	-0.6	-1.0%
97.5%	59.8	59.5	-0.4	-0.6%
98.8%	59.6	59.5	-0.1	-0.2%
100.0%	59.6	59.5	-0.1	-0.2%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.9	68.0	0.1	0.1%
1.2%	67.9	66.8	-1.1	-1.6%
2.5%	67.3	66.4	-0.9	-1.3%
3.7%	67.0	66.1	-0.9	-1.3%
4.9%	66.7	65.6	-1.1	-1.7%
6.2%	66.7	65.4	-1.2	-1.9%
7.4%	66.6	65.3	-1.3	-1.9%
8.6%	66.4	65.3	-1.2	-1.7%
9.9%	66.4	65.3	-1.1	-1.7%
11.1%	66.2	65.1	-1.2	-1.7%
12.3%	66.2	64.8	-1.3	-2.0%
13.6%	66.0	64.8	-1.3	-1.9%
14.8%	66.0	64.6	-1.3	-2.0%
16.0%	65.9	64.5	-1.4	-2.1%
17.3%	65.9	64.3	-1.6	-2.4%
18.5%	65.6	64.2	-1.4	-2.1%
19.8%	65.3	64.1	-1.2	-1.8%
21.0%	65.3	64.0	-1.3	-1.9%
22.2%	65.0	64.0	-1.0	-1.5%
23.5%	64.8	63.9	-0.9	-1.4%
24.7%	64.8	63.9	-0.9	-1.5%
25.9%	64.8	63.8	-0.9	-1.5%
27.2%	64.7	63.8	-0.9	-1.4%
28.4%	64.5	63.8	-0.8	-1.2%
29.6%	64.5	63.5	-1.0	-1.5%
30.9%	64.4	63.4	-1.0	-1.5%
32.1%	64.1	63.2	-0.9	-1.4%
33.3%	64.0	63.2	-0.9	-1.3%
34.6%	64.0	63.2	-0.8	-1.3%
35.8%	63.8	63.0	-0.9	-1.4%
37.0%	63.8	62.9	-0.9	-1.3%
38.3%	63.7	62.8	-0.9	-1.3%
39.5%	63.1	62.5	-0.6	-1.0%
40.7%	63.0	62.3	-0.7	-1.1%
42.0%	63.0	62.2	-0.7	-1.2%
43.2%	63.0	61.9	-1.1	-1.7%
44.4%	63.0	61.8	-1.2	-1.9%
45.7%	62.8	61.7	-1.0	-1.6%
46.9%	62.6	61.7	-0.9	-1.4%
48.1%	62.5	61.6	-0.9	-1.5%
49.4%	62.4	61.5	-0.9	-1.5%
50.6%	62.3	61.5	-0.8	-1.3%
51.9%	62.2	61.4	-0.8	-1.3%
53.1%	62.2	61.3	-0.8	-1.3%
54.3%	62.1	61.3	-0.8	-1.3%
55.6%	62.1	61.2	-0.9	-1.5%
56.8%	62.0	61.1	-0.9	-1.4%
58.0%	62.0	61.1	-0.8	-1.4%
59.3%	61.9	61.1	-0.9	-1.4%
60.5%	61.8	61.0	-0.8	-1.3%
61.7%	61.8	60.9	-0.8	-1.3%
63.0%	61.6	60.9	-0.7	-1.1%
64.2%	61.6	60.9	-0.7	-1.1%
65.4%	61.5	60.8	-0.7	-1.1%
66.7%	61.5	60.7	-0.8	-1.2%
67.9%	61.5	60.7	-0.8	-1.3%
69.1%	61.5	60.6	-0.9	-1.4%
70.4%	61.4	60.5	-0.9	-1.4%
71.6%	61.4	60.5	-0.9	-1.4%
72.8%	61.3	60.5	-0.8	-1.3%
74.1%	61.1	60.5	-0.7	-1.1%
75.3%	61.1	60.4	-0.7	-1.1%
76.5%	61.0	60.4	-0.7	-1.1%
77.8%	61.0	60.4	-0.6	-1.0%
79.0%	60.9	60.3	-0.6	-1.0%
80.2%	60.9	60.3	-0.6	-1.0%
81.5%	60.9	60.2	-0.6	-1.0%
82.7%	60.8	60.2	-0.6	-1.0%
84.0%	60.5	59.9	-0.6	-1.0%
85.2%	60.1	59.8	-0.3	-0.5%
86.4%	60.0	59.8	-0.2	-0.4%
87.7%	59.9	59.5	-0.4	-0.6%
88.9%	59.6	59.3	-0.4	-0.7%
90.1%	59.6	59.1	-0.6	-0.9%
91.4%	59.6	58.9	-0.7	-1.2%
92.6%	59.6	58.9	-0.7	-1.2%
93.8%	59.6	58.7	-0.9	-1.5%
95.1%	58.9	58.6	-0.3	-0.6%
96.3%	58.9	58.1	-0.8	-1.3%
97.5%	58.8	58.0	-0.8	-1.3%
98.8%	58.8	57.9	-0.9	-1.5%
100.0%	58.6	57.8	-0.8	-1.4%

July to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.8	68.5	-0.3	-0.4%
1.2%	68.6	66.5	-2.1	-3.1%
2.5%	67.8	66.5	-1.3	-1.9%
3.7%	67.6	66.2	-1.4	-2.1%
4.9%	67.3	66.0	-1.2	-1.8%
6.2%	67.2	65.9	-1.4	-2.0%
7.4%	67.1	65.7	-1.4	-2.1%
8.6%	67.0	65.4	-1.5	-2.3%
9.9%	66.8	65.4	-1.4	-2.0%
11.1%	66.8	65.4	-1.4	-2.0%
12.3%	66.7	65.3	-1.3	-2.0%
13.6%	66.6	65.0	-1.7	-2.5%
14.8%	66.6	64.8	-1.8	-2.6%
16.0%	66.5	64.7	-1.8	-2.7%
17.3%	66.4	64.7	-1.7	-2.6%
18.5%	66.2	64.5	-1.8	-2.7%
19.8%	65.9	64.4	-1.4	-2.2%
21.0%	65.7	64.2	-1.5	-2.3%
22.2%	65.3	64.1	-1.2	-1.8%
23.5%	65.0	63.9	-1.2	-1.8%
24.7%	65.0	63.8	-1.2	-1.9%
25.9%	64.9	63.7	-1.2	-1.8%
27.2%	64.6	63.6	-1.0	-1.5%
28.4%	64.4	63.5	-0.9	-1.4%
29.6%	64.4	63.5	-0.9	-1.3%
30.9%	64.3	63.4	-0.9	-1.4%
32.1%	64.3	63.4	-0.9	-1.4%
33.3%	64.2	63.3	-0.9	-1.4%
34.6%	64.1	63.1	-1.0	-1.6%
35.8%	64.1	62.9	-1.2	-1.8%
37.0%	64.0	62.9	-1.2	-1.8%
38.3%	64.0	62.9	-1.1	-1.7%
39.5%	63.7	62.6	-1.1	-1.7%
40.7%	63.6	62.6	-1.1	-1.7%
42.0%	63.6	62.5	-1.1	-1.8%
43.2%	63.6	62.4	-1.2	-1.8%
44.4%	63.6	62.2	-1.3	-2.1%
45.7%	63.6	62.2	-1.4	-2.1%
46.9%	63.2	62.1	-1.1	-1.8%
48.1%	63.2	62.1	-1.1	-1.7%
49.4%	63.2	62.1	-1.1	-1.7%
50.6%	63.1	62.0	-1.1	-1.7%
51.9%	63.0	62.0	-1.0	-1.6%
53.1%	62.9	62.0	-1.0	-1.5%
54.3%	62.9	61.8	-1.1	-1.8%
55.6%	62.9	61.8	-1.1	-1.8%
56.8%	62.9	61.8	-1.1	-1.8%
58.0%	62.8	61.7	-1.1	-1.8%
59.3%	62.8	61.6	-1.3	-2.0%
60.5%	62.8	61.6	-1.2	-1.9%
61.7%	62.7	61.5	-1.2	-2.0%
63.0%	62.4	61.5	-0.9	-1.4%
64.2%	62.4	61.3	-1.1	-1.7%
65.4%	62.3	61.2	-1.2	-1.9%
66.7%	62.2	61.1	-1.1	-1.7%
67.9%	62.2	61.0	-1.1	-1.8%
69.1%	62.1	61.0	-1.1	-1.8%
70.4%	62.1	61.0	-1.1	-1.8%
71.6%	62.0	61.0	-1.0	-1.7%
72.8%	61.9	61.0	-1.0	-1.5%
74.1%	61.8	61.0	-0.9	-1.4%
75.3%	61.7	60.8	-0.9	-1.4%
76.5%	61.6	60.8	-0.8	-1.3%
77.8%	61.6	60.8	-0.8	-1.3%
79.0%	61.6	60.8	-0.8	-1.3%
80.2%	61.4	60.7	-0.7	-1.2%
81.5%	61.4	60.7	-0.7	-1.1%
82.7%	61.3	60.6	-0.6	-1.0%
84.0%	61.0	60.5	-0.5	-0.7%
85.2%	60.7	60.5	-0.2	-0.4%
86.4%	60.6	60.5	-0.1	-0.2%
87.7%	60.4	60.0	-0.5	-0.8%
88.9%	60.2	59.9	-0.3	-0.5%
90.1%	60.2	59.6	-0.5	-0.9%
91.4%	60.1	59.5	-0.6	-1.0%
92.6%	60.1	59.1	-0.9	-1.6%
93.8%	60.0	59.0	-1.0	-1.7%
95.1%	59.9	58.8	-1.1	-1.8%
96.3%	59.8	58.8	-1.0	-1.7%
97.5%	59.7	58.7	-1.0	-1.7%
98.8%	59.6	58.6	-1.0	-1.8%
100.0%	59.5	58.4	-1.0	-1.7%

August to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.6	67.9	-0.7	-1.0%
1.2%	68.1	66.4	-1.7	-2.5%
2.5%	68.1	66.3	-1.7	-2.6%
3.7%	67.6	66.0	-1.6	-2.3%
4.9%	67.2	65.9	-1.3	-2.0%
6.2%	67.1	65.8	-1.2	-1.9%
7.4%	66.9	65.7	-1.2	-1.8%
8.6%	66.9	65.6	-1.3	-1.9%
9.9%	66.9	65.3	-1.5	-2.3%
11.1%	66.8	65.3	-1.5	-2.3%
12.3%	66.6	65.2	-1.3	-2.0%
13.6%	66.3	65.2	-1.2	-1.7%
14.8%	66.2	65.0	-1.2	-1.8%
16.0%	66.2	65.0	-1.2	-1.9%
17.3%	66.2	64.9	-1.2	-1.9%
18.5%	66.2	64.8	-1.4	-2.1%
19.8%	65.9	64.8	-1.2	-1.7%
21.0%	65.8	64.4	-1.4	-2.1%
22.2%	65.5	64.2	-1.3	-2.0%
23.5%	65.5	64.2	-1.3	-2.0%
24.7%	65.5	64.2	-1.3	-2.0%
25.9%	65.3	64.1	-1.1	-1.7%
27.2%	65.1	64.1	-1.0	-1.6%
28.4%	64.8	64.0	-0.8	-1.2%
29.6%	64.7	63.9	-0.8	-1.2%
30.9%	64.6	63.7	-1.0	-1.5%
32.1%	64.6	63.5	-1.0	-1.6%
33.3%	64.5	63.5	-1.0	-1.6%
34.6%	64.5	63.4	-1.1	-1.7%
35.8%	64.5	63.4	-1.1	-1.8%
37.0%	64.2	63.3	-0.9	-1.4%
38.3%	63.8	63.1	-0.7	-1.1%
39.5%	63.7	63.0	-0.7	-1.1%
40.7%	63.7	62.7	-1.0	-1.5%
42.0%	63.6	62.5	-1.1	-1.7%
43.2%	63.6	62.5	-1.1	-1.7%
44.4%	63.5	62.4	-1.0	-1.7%
45.7%	63.4	62.4	-1.0	-1.6%
46.9%	63.3	62.2	-1.1	-1.7%
48.1%	63.2	62.2	-1.0	-1.6%
49.4%	63.2	62.2	-1.0	-1.6%
50.6%	63.1	62.1	-1.0	-1.6%
51.9%	63.1	62.1	-1.0	-1.7%
53.1%	63.0	62.0	-1.0	-1.6%
54.3%	63.0	61.8	-1.2	-1.9%
55.6%	62.9	61.8	-1.1	-1.8%
56.8%	62.9	61.7	-1.2	-1.9%
58.0%	62.8	61.7	-1.2	-1.8%
59.3%	62.8	61.6	-1.2	-1.9%
60.5%	62.8	61.6	-1.2	-1.9%
61.7%	62.5	61.6	-0.9	-1.5%
63.0%	62.4	61.5	-0.9	-1.5%
64.2%	62.2	61.5	-0.8	-1.2%
65.4%	62.0	61.4	-0.7	-1.1%
66.7%	62.0	61.3	-0.8	-1.2%
67.9%	61.9	61.1	-0.8	-1.4%
69.1%	61.8	61.0	-0.8	-1.2%
70.4%	61.7	60.9	-0.8	-1.3%
71.6%	61.7	60.9	-0.8	-1.3%
72.8%	61.6	60.9	-0.7	-1.2%
74.1%	61.4	60.8	-0.6	-1.0%
75.3%	61.4	60.8	-0.6	-1.0%
76.5%	61.4	60.8	-0.6	-1.0%
77.8%	61.3	60.8	-0.5	-0.9%
79.0%	61.1	60.8	-0.3	-0.5%
80.2%	61.1	60.8	-0.3	-0.5%
81.5%	61.0	60.8	-0.2	-0.4%
82.7%	60.9	60.7	-0.2	-0.4%
84.0%	60.7	60.5	-0.2	-0.3%
85.2%	60.6	60.5	-0.1	-0.2%
86.4%	60.2	60.4	0.3	0.5%
87.7%	60.1	60.4	0.3	0.6%
88.9%	60.0	59.9	-0.1	-0.2%
90.1%	60.0	59.5	-0.5	-0.8%
91.4%	59.8	59.4	-0.4	-0.7%
92.6%	59.8	59.1	-0.7	-1.1%
93.8%	59.8	58.9	-0.9	-1.4%
95.1%	59.7	58.7	-1.0	-1.7%
96.3%	59.6	58.7	-0.9	-1.5%
97.5%	59.4	58.7	-0.7	-1.2%
98.8%	59.3	58.7	-0.7	-1.1%
100.0%	59.2	58.6	-0.5	-0.9%

Figure SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

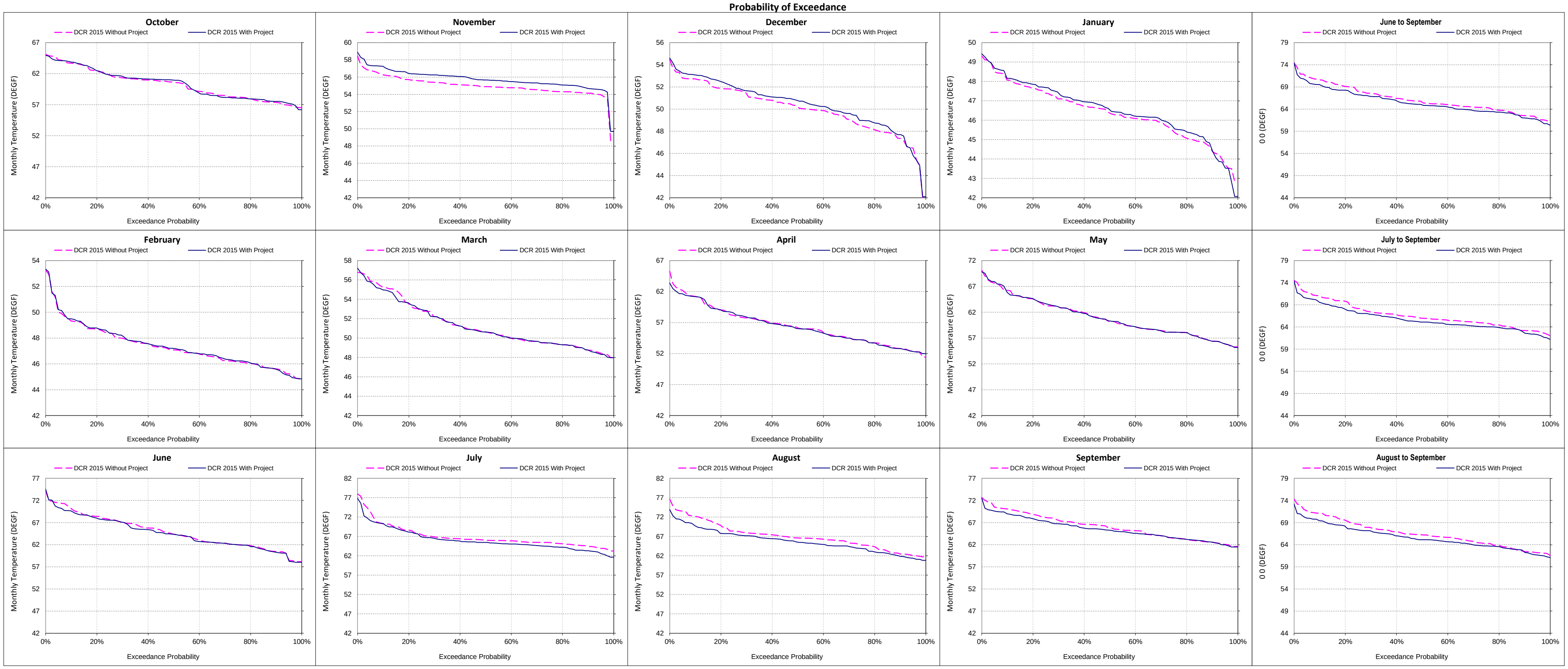


Table SQ10-1b

American River at Watt Avenue, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.1	65.0	-0.2	-0.2%
1.2%	64.9	64.8	0.0	-0.1%
2.5%	64.8	64.4	-0.4	-0.6%
3.7%	64.7	64.2	-0.6	-0.9%
4.9%	64.2	64.1	-0.1	-0.1%
6.2%	64.2	64.1	-0.1	-0.1%
7.4%	64.0	64.1	0.1	0.2%
8.6%	63.7	64.0	0.3	0.4%
9.9%	63.7	63.9	0.2	0.3%
11.1%	63.7	63.8	0.2	0.3%
12.3%	63.6	63.6	0.0	0.1%
13.6%	63.5	63.6	0.1	0.1%
14.8%	63.4	63.3	0.0	0.0%
16.0%	63.2	63.3	0.1	0.1%
17.3%	62.6	63.1	0.4	0.7%
18.5%	62.5	62.8	0.3	0.5%
19.8%	62.5	62.5	0.0	-0.1%
21.0%	62.3	62.4	0.1	0.2%
22.2%	62.3	62.2	-0.1	-0.2%
23.5%	61.9	61.9	0.0	0.0%
24.7%	61.9	61.8	-0.1	-0.1%
25.9%	61.6	61.7	0.1	0.2%
27.2%	61.4	61.7	0.3	0.5%
28.4%	61.4	61.7	0.3	0.4%
29.6%	61.3	61.6	0.3	0.5%
30.9%	61.3	61.4	0.1	0.2%
32.1%	61.2	61.3	0.1	0.1%
33.3%	61.2	61.3	0.1	0.2%
34.6%	61.2	61.3	0.1	0.2%
35.8%	61.1	61.2	0.1	0.2%
37.0%	61.0	61.2	0.2	0.3%
38.3%	61.0	61.2	0.2	0.3%
39.5%	61.0	61.1	0.1	0.2%
40.7%	61.0	61.1	0.2	0.3%
42.0%	60.9	61.1	0.1	0.2%
43.2%	60.9	61.1	0.2	0.3%
44.4%	60.8	61.1	0.2	0.4%
45.7%	60.8	61.0	0.2	0.4%
46.9%	60.8	61.0	0.3	0.4%
48.1%	60.7	61.0	0.3	0.6%
49.4%	60.7	61.0	0.3	0.6%
50.6%	60.6	60.9	0.4	0.6%
51.9%	60.5	60.9	0.4	0.6%
53.1%	60.4	60.8	0.4	0.7%
54.3%	60.4	60.5	0.1	0.2%
55.6%	59.5	60.1	0.6	1.0%
56.8%	59.5	59.6	0.1	0.1%
58.0%	59.3	59.4	0.0	0.1%
59.3%	59.2	59.0	-0.1	-0.2%
60.5%	59.1	58.7	-0.4	-0.7%
61.7%	59.1	58.7	-0.4	-0.6%
63.0%	58.9	58.7	-0.2	-0.3%
64.2%	58.9	58.5	-0.3	-0.6%
65.4%	58.8	58.5	-0.3	-0.5%
66.7%	58.5	58.5	-0.1	-0.1%
67.9%	58.5	58.3	-0.2	-0.4%
69.1%	58.5	58.2	-0.3	-0.6%
70.4%	58.5	58.2	-0.3	-0.5%
71.6%	58.3	58.2	-0.1	-0.2%
72.8%	58.2	58.1	-0.2	-0.3%
74.1%	58.2	58.1	-0.2	-0.3%
75.3%	58.2	58.1	-0.1	-0.2%
76.5%	58.2	58.1	-0.1	-0.2%
77.8%	58.1	58.0	-0.1	-0.1%
79.0%	58.0	57.9	-0.1	-0.2%
80.2%	58.0	57.9	0.0	-0.1%
81.5%	57.8	57.9	0.1	0.3%
82.7%	57.6	57.9	0.2	0.4%
84.0%	57.6	57.8	0.2	0.4%
85.2%	57.5	57.8	0.4	0.6%
86.4%	57.5	57.6	0.1	0.3%
87.7%	57.4	57.6	0.2	0.3%
88.9%	57.4	57.5	0.1	0.3%
90.1%	57.4	57.5	0.2	0.3%
91.4%	57.3	57.5	0.2	0.4%
92.6%	57.0	57.5	0.4	0.8%
93.8%	57.0	57.3	0.3	0.6%
95.1%	56.9	57.2	0.3	0.5%
96.3%	56.8	57.1	0.3	0.5%
97.5%	56.6	56.8	0.2	0.3%
98.8%	56.5	56.2	-0.4	-0.6%
100.0%	56.5	56.2	0.0	-0.6%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.4	58.9	0.4	0.7%
1.2%	57.4	58.3	0.8	1.5%
2.5%	57.1	58.1	1.0	1.8%
3.7%	56.9	57.4	0.6	1.0%
4.9%	56.8	57.3	0.6	1.0%
6.2%	56.7	57.3	0.6	1.1%
7.4%	56.6	57.3	0.7	1.3%
8.6%	56.4	57.3	0.9	1.6%
9.9%	56.3	57.2	1.0	1.7%
11.1%	56.2	57.0	0.8	1.5%
12.3%	56.2	56.9	0.7	1.3%
13.6%	56.1	56.8	0.7	1.2%
14.8%	56.1	56.7	0.6	1.0%
16.0%	56.0	56.7	0.7	1.2%
17.3%	55.8	56.6	0.8	1.5%
18.5%	55.7	56.6	0.9	1.6%
19.8%	55.7	56.4	0.7	1.3%
21.0%	55.7	56.4	0.7	1.3%
22.2%	55.6	56.4	0.7	1.3%
23.5%	55.6	56.4	0.8	1.4%
24.7%	55.6	56.3	0.8	1.4%
25.9%	55.6	56.3	0.7	1.3%
27.2%	55.4	56.3	0.8	1.5%
28.4%	55.4	56.3	0.9	1.5%
29.6%	55.4	56.3	0.9	1.5%
30.9%	55.4	56.3	0.9	1.6%
32.1%	55.4	56.2	0.8	1.5%
33.3%	55.3	56.2	0.9	1.5%
34.6%	55.3	56.2	0.9	1.6%
35.8%	55.2	56.1	1.0	1.7%
37.0%	55.2	56.1	1.0	1.7%
38.3%	55.1	56.1	1.0	1.7%
39.5%	55.1	56.1	1.0	1.8%
40.7%	55.1	56.1	1.0	1.7%
42.0%	55.1	56.0	0.9	1.7%
43.2%	55.1	55.9	0.9	1.6%
44.4%	55.0	55.8	0.8	1.4%
45.7%	55.0	55.8	0.7	1.4%
46.9%	55.0	55.7	0.7	1.3%
48.1%	54.9	55.7	0.8	1.5%
49.4%	54.9	55.7	0.8	1.4%
50.6%	54.9	55.7	0.8	1.4%
51.9%	54.9	55.6	0.8	1.4%
53.1%	54.9	55.6	0.8	1.4%
54.3%	54.8	55.6	0.8	1.4%
55.6%	54.8	55.6	0.8	1.4%
56.8%	54.8	55.6	0.8	1.4%
58.0%	54.8	55.5	0.8	1.4%
59.3%	54.8	55.5	0.7	1.3%
60.5%	54.8	55.5	0.7	1.3%
61.7%	54.8	55.4	0.7	1.3%
63.0%	54.7	55.4	0.7	1.2%
64.2%	54.7	55.4	0.6	1.2%
65.4%	54.6	55.4	0.7	1.3%
66.7%	54.6	55.3	0.7	1.4%
67.9%	54.6	55.3	0.8	1.4%
69.1%	54.6	55.3	0.8	1.4%
70.4%	54.5	55.3	0.8	1.4%
71.6%	54.5	55.2	0.7	1.3%
72.8%	54.4	55.2	0.8	1.4%
74.1%	54.4	55.2	0.8	1.4%
75.3%	54.4	55.2	0.8	1.5%
76.5%	54.3	55.2	0.9	1.6%
77.8%	54.3	55.2	0.8	1.6%
79.0%	54.3	55.1	0.8	1.5%
80.2%	54.3	55.1	0.8	1.4%
81.5%	54.3	55.1	0.8	1.4%
82.7%	54.3	55.0	0.8	1.4%
84.0%	54.3	55.0	0.8	1.4%
85.2%	54.2	55.0	0.8	1.5%
86.4%	54.2	55.0	0.7	1.4%
87.7%	54.2	54.9	0.7	1.3%
88.9%	54.1	54.8	0.6	1.1%
90.1%	54.1	54.7	0.5	1.0%
91.4%	54.1	54.6	0.5	0.9%
92.6%	54.0	54.6	0.6	1.1%
93.8%	54.0	54.6	0.6	1.1%
95.1%	53.9	54.6	0.6	1.1%
96.3%	53.7	54.4	0.7	1.4%
97.5%	53.5	54.3	0.8	1.5%
98.8%	48.6	49.7	1.0	2.2%
100.0%	48.6	49.7	1.0	2.2%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.5	54.6	0.1	0.3%
1.2%	53.7	54.2	0.5	0.9%
2.5%	53.3	53.6	0.3	0.5%
3.7%	53.3	53.5	0.1	0.2%
4.9%	52.8	53.3	0.4	0.8%
6.2%	52.8	53.2	0.5	0.9%
7.4%	52.7	53.1	0.4	0.8%
8.6%	52.7	53.1	0.4	0.8%
9.9%	52.7	53.1	0.4	0.7%
11.1%	52.7	53.1	0.4	0.7%
12.3%	52.6	53.0	0.4	0.7%
13.6%	52.6	52.9	0.3	0.7%
14.8%	52.5	52.9	0.3	0.7%
16.0%	52.1	52.7	0.6	1.2%
17.3%	52.0	52.7	0.7	1.3%
18.5%	51.9	52.6	0.7	1.3%
19.8%	51.9	52.5	0.6	1.2%
21.0%	51.8	52.4	0.6	1.1%
22.2%	51.8	52.3	0.5	0.9%
23.5%	51.8	52.2	0.3	0.7%
24.7%	51.7	52.0	0.3	0.6%
25.9%	51.7	51.9	0.2	0.3%
27.2%	51.7	51.9	0.2	0.3%
28.4%	51.6	51.7	0.1	0.3%
29.6%	51.5	51.7	0.1	0.3%
30.9%	51.1	51.6	0.5	1.1%
32.1%	51.1	51.6	0.6	1.1%
33.3%	51.0	51.6	0.5	1.0%
34.6%	51.0	51.3	0.3	0.7%
35.8%	50.9	51.3	0.4	0.7%
37.0%	50.9	51.2	0.3	0.7%
38.3%	50.8	51.2	0.3	0.7%
39.5%	50.8	51.1	0.3	0.6%
40.7%	50.8	51.1	0.3	0.6%
42.0%	50.6	51.1	0.4	0.9%
43.2%	50.6	51.1	0.4	0.9%
44.4%	50.5	51.0	0.5	1.0%
45.7%	50.5	51.0	0.5	0.9%
46.9%	50.5	50.9	0.5	0.9%
48.1%	50.4	50.9	0.5	1.1%
49.4%	50.3	50.8	0.5	1.0%
50.6%	50.1	50.7	0.7	1.3%
51.9%	50.0	50.7	0.7	1.3%
53.1%	50.0	50.6	0.6	1.1%
54.3%	50.0	50.5	0.5	0.9%
55.6%	49.9	50.4	0.5	0.9%
56.8%	49.9	50.4	0.4	0.9%
58.0%	49.9	50.3	0.4	0.8%
59.3%	49.9	50.2	0.4	0.7%
60.5%	49.9	50.2	0.4	0.7%
61.7%	49.7	50.1	0.4	0.8%
63.0%	49.7	50.0	0.2	0.5%
64.2%	49.6	49.9	0.3	0.6%
65.4%	49.5	49.8	0.3	0.6%
66.7%	49.4	49.8	0.4	0.8%
67.9%	49.4	49.6	0.3	0.5%
69.1%	49.1	49.6	0.5	1.0%
70.4%	49.1	49.6	0.6	1.1%
71.6%	48.9	49.5	0.6	1.2%
72.8%	48.7	49.4	0.8	1.6%
74.1%	48.5	49.0	0.4	0.9%
75.3%	48.5	49.0	0.5	1.1%
76.5%	48.4	48.9	0.6	1.2%
77.8%	48.3	48.9	0.6	1.3%
79.0%	48.2	48.8	0.6	1.3%
80.2%	48.1	48.7	0.6	1.3%
81.5%	48.0	48.7	0.7	1.4%
82.7%	47.9	48.6	0.7	1.4%
84.0%	47.9	48.5	0.6	1.3%
85.2%	47.9	48.4	0.5	1.1%
86.4%	47.8	48.1	0.3	0.6%
87.7%	47.8	47.9	0.1	0.2%
88.9%	47.4	47.7	0.3	0.7%
90.1%	47.3	47.7	0.3	0.7%
91.4%	47.1	47.6	0.4	0.9%
92.6%	46.6	46.6	0.0	0.0%
93.8%	46.6	46.5	-0.1	-0.1%
95.1%	46.5	45.8	-0.7	-1.5%
96.3%	45.4	45.4	0.0	-0.1%
97.5%	44.9	44.9	0.1	0.1%
98.8%	42.0	42.1	0.1	0.2%
100.0%	42.0	42.1	0.1	0.2%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.3	49.4	0.1	0.3%
1.2%	49.1	49.3	0.1	0.3%
2.5%	49.1	49.1	0.0	-0.1%
3.7%	48.9	48.9	0.0	0.0%
4.9%	48.5	48.7	0.2	0.4%
6.2%	48.4	48.6	0.2	0.4%
7.4%	48.4	48.6	0.2	0.3%
8.6%	48.4	48.6	0.2	0.3%
9.9%	48.1	48.2	0.1	0.2%
11.1%	48.1	48.2	0.1	0.2%
12.3%	47.9	48.1	0.2	0.4%
13.6%	47.9	48.1	0.2	0.4%
14.8%	47.9	48.0	0.2	0.3%
16.0%	47.8	47.9	0.1	0.3%
17.3%	47.7	47.9	0.2	0.4%
18.5%	47.7	47.9	0.2	0.4%
19.8%	47.6	47.9	0.2	0.5%
21.0%	47.6	47.8	0.2	0.5%
22.2%	47.6	47.7	0.2	0.3%
23.5%	47.5	47.7	0.2	0.4%
24.7%	47.4	47.7	0.3	0.6%
25.9%	47.4	47.7	0.3	0.6%
27.2%	47.3	47.5	0.3	0.5%
28.4%	47.3	47.5	0.2	0.5%
29.6%	47.1	47.5	0.4	0.8%
30.9%	47.1	47.3	0.2	0.4%
32.1%	47.1	47.2	0.1	0.3%
33.3%	47.0	47.2	0.2	0.3%
34.6%	46.9	47.2	0.2	0.4%
35.8%	46.9	47.0	0.1	0.2%
37.0%	46.8	47.0	0.2	0.5%
38.3%	46.8	47.0	0.2	0.5%
39.5%	46.7	47.0	0.2	0.5%
40.7%	46.7	46.9	0.2	0.5%
42.0%	46.7	46.9	0.3	0.6%
43.2%	46.7	46.9	0.2	0.5%
44.4%	46.6	46.9	0.2	0.5%
45.7%	46.6	46.8	0.2	0.4%
46.9%	46.6	46.8	0.2	0.4%
48.1%	46.6	46.7	0.1	0.2%
49.4%	46.4	46.6	0.2	0.5%
50.6%	46.3	46.5	0.1	0.3%
51.9%	46.3	46.4	0.1	0.3%
53.1%	46.3	46.4	0.1	0.3%
54.3%	46.3	46.4	0.1	0.3%
55.6%	46.2	46.3	0.2	0.3%
56.8%	46.1	46.3	0.2	0.3%
58.0%	46.1	46.3	0.2	0.3%
59.3%	46.1	46.2	0.1	0.3%
60.5%	46.1	46.2	0.1	0.2%
61.7%	46.1	46.2	0.1	0.2%
63.0%	46.0	46.2	0.2	0.3%
64.2%	46.0	46.2	0.1	0.3%
65.4%	46.0	46.2	0.1	0.3%
66.7%	46.0	46.2	0.2	0.3%
67.9%	46.0	46.1	0.2	0.3%
69.1%	45.9	46.1	0.2	0.4%
70.4%	45.9	46.0	0.1	0.2%
71.6%	45.7	45.9	0.2	0.5%
72.8%	45.7	45.9	0.2	0.5%
74.1%	45.5	45.7	0.2	0.5%
75.3%	45.4	45.5	0.2	0.4%
76.5%	45.3	45.5	0.3	0.6%
77.8%	45.2	45.5	0.3	0.6%
79.0%	45.1	45.5	0.3	0.8%
80.2%	45.1	45.4	0.3	0.7%
81.5%	45.0	45.4	0.3	0.7%
82.7%	45.0	45.3	0.3	0.7%
84.0%	44.9	45.2	0.3	0.7%
85.2%	44.9	45.2	0.3	0.6%
86.4%	44.9	45.1	0.3	0.6%
87.7%	44.8	44.9	0.1	0.3%
88.9%	44.7	44.8	0.2	0.4%
90.1%	44.4	44.4	0.0	0.0%
91.4%	44.3	44.1	-0.2	-0.5%
92.6%	44.2	43.9	-0.4	-0.8%
93.8%	44.0	43.8	-0.1	-0.3%
95.1%	43.7	43.5	-0.2	-0.4%
96.3%	43.5	43.5	0.0	0.0%
97.5%	43.5	42.8	-0.7	-1.5%
98.8%	42.8	42.1	-0.8	-1.8%
100.0%	42.8	42.1	-0.8	-1.8%

Table SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.2	53.3	0.1	0.2%
1.2%	52.9	53.1	0.2	0.4%
2.5%	51.6	51.5	-0.1	-0.2%
3.7%	51.2	51.3	0.1	0.3%
4.9%	50.0	50.2	0.2	0.4%
6.2%	49.9	50.1	0.2	0.4%
7.4%	49.7	49.8	0.1	0.2%
8.6%	49.5	49.5	-0.1	-0.1%
9.9%	49.3	49.5	0.2	0.3%
11.1%	49.3	49.4	0.2	0.3%
12.3%	49.3	49.3	0.1	0.1%
13.6%	49.2	49.3	0.1	0.2%
14.8%	49.1	49.1	0.0	0.0%
16.0%	48.7	48.9	0.2	0.3%
17.3%	48.7	48.8	0.1	0.1%
18.5%	48.7	48.8	0.1	0.1%
19.8%	48.7	48.8	0.1	0.1%
21.0%	48.6	48.7	0.1	0.1%
22.2%	48.5	48.6	0.1	0.2%
23.5%	48.4	48.6	0.2	0.4%
24.7%	48.4	48.4	0.0	0.1%
25.9%	48.4	48.4	0.0	0.0%
27.2%	48.0	48.3	0.3	0.6%
28.4%	48.0	48.2	0.2	0.5%
29.6%	48.0	48.2	0.2	0.5%
30.9%	47.9	48.0	0.1	0.2%
32.1%	47.8	47.8	0.0	0.0%
33.3%	47.8	47.8	0.0	0.1%
34.6%	47.7	47.8	0.1	0.1%
35.8%	47.7	47.7	0.1	0.2%
37.0%	47.6	47.7	0.1	0.2%
38.3%	47.6	47.6	0.0	0.1%
39.5%	47.6	47.6	0.0	0.0%
40.7%	47.6	47.5	0.0	-0.1%
42.0%	47.3	47.5	0.1	0.2%
43.2%	47.3	47.4	0.1	0.1%
44.4%	47.3	47.4	0.1	0.2%
45.7%	47.3	47.4	0.1	0.2%
46.9%	47.2	47.3	0.0	0.1%
48.1%	47.1	47.2	0.1	0.2%
49.4%	47.1	47.2	0.1	0.3%
50.6%	47.1	47.2	0.1	0.2%
51.9%	47.1	47.1	0.1	0.1%
53.1%	47.0	47.1	0.1	0.3%
54.3%	46.9	47.0	0.2	0.3%
55.6%	46.9	46.9	0.0	0.0%
56.8%	46.9	46.9	0.0	0.0%
58.0%	46.9	46.8	0.0	-0.1%
59.3%	46.8	46.8	0.0	0.0%
60.5%	46.7	46.8	0.0	0.1%
61.7%	46.7	46.8	0.1	0.1%
63.0%	46.6	46.7	0.1	0.2%
64.2%	46.6	46.7	0.1	0.3%
65.4%	46.6	46.7	0.1	0.3%
66.7%	46.5	46.6	0.1	0.3%
67.9%	46.4	46.5	0.0	0.1%
69.1%	46.3	46.4	0.2	0.4%
70.4%	46.3	46.4	0.1	0.2%
71.6%	46.2	46.3	0.1	0.2%
72.8%	46.2	46.3	0.1	0.2%
74.1%	46.2	46.2	0.1	0.1%
75.3%	46.2	46.2	0.1	0.2%
76.5%	46.1	46.2	0.1	0.2%
77.8%	46.1	46.2	0.1	0.2%
79.0%	46.0	46.2	0.1	0.3%
80.2%	46.0	46.0	0.0	0.0%
81.5%	46.0	46.0	0.0	0.0%
82.7%	45.9	46.0	0.1	0.1%
84.0%	45.9	45.7	-0.2	-0.4%
85.2%	45.7	45.7	0.0	0.0%
86.4%	45.7	45.7	0.0	0.0%
87.7%	45.7	45.7	0.0	0.0%
88.9%	45.6	45.7	0.0	0.1%
90.1%	45.6	45.6	0.0	-0.1%
91.4%	45.6	45.5	-0.1	-0.2%
92.6%	45.5	45.3	-0.2	-0.4%
93.8%	45.3	45.2	-0.1	-0.2%
95.1%	45.2	45.1	-0.1	-0.3%
96.3%	45.2	44.9	-0.2	-0.5%
97.5%	44.9	44.9	0.0	0.0%
98.8%	44.9	44.8	0.0	-0.1%
100.0%	44.9	44.8	0.0	-0.1%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.8	57.2	0.4	0.8%
1.2%	56.7	56.7	0.0	0.0%
2.5%	56.6	56.4	-0.2	-0.3%
3.7%	56.4	55.9	-0.6	-1.0%
4.9%	55.9	55.8	-0.1	-0.1%
6.2%	55.8	55.5	-0.3	-0.5%
7.4%	55.7	55.2	-0.5	-0.9%
8.6%	55.4	55.1	-0.3	-0.5%
9.9%	55.2	55.0	-0.3	-0.5%
11.1%	55.2	54.9	-0.3	-0.5%
12.3%	55.1	54.8	-0.3	-0.5%
13.6%	55.1	54.7	-0.4	-0.7%
14.8%	54.9	54.2	-0.7	-1.3%
16.0%	54.7	53.8	-0.9	-1.7%
17.3%	54.3	53.8	-0.6	-1.1%
18.5%	53.7	53.7	0.0	-0.1%
19.8%	53.6	53.6	0.0	0.1%
21.0%	53.2	53.4	0.2	0.4%
22.2%	53.1	53.3	0.3	0.5%
23.5%	53.0	53.1	0.0	0.1%
24.7%	52.8	52.9	0.1	0.3%
25.9%	52.8	52.9	0.1	0.2%
27.2%	52.7	52.8	0.1	0.2%
28.4%	52.7	52.2	-0.5	-0.9%
29.6%	52.2	52.2	0.0	0.0%
30.9%	52.2	52.2	0.0	0.0%
32.1%	52.0	52.0	0.0	0.0%
33.3%	51.8	52.0	0.2	0.3%
34.6%	51.7	51.7	0.0	-0.1%
35.8%	51.6	51.6	0.0	0.0%
37.0%	51.4	51.6	0.2	0.5%
38.3%	51.3	51.3	0.0	0.0%
39.5%	51.3	51.3	0.0	0.0%
40.7%	51.1	51.2	0.1	0.2%
42.0%	51.0	50.9	-0.1	-0.3%
43.2%	50.9	50.9	0.0	0.0%
44.4%	50.9	50.9	0.0	-0.1%
45.7%	50.9	50.8	0.0	-0.1%
46.9%	50.8	50.7	-0.1	-0.1%
48.1%	50.7	50.6	-0.1	-0.1%
49.4%	50.7	50.6	0.0	-0.1%
50.6%	50.6	50.6	0.0	0.0%
51.9%	50.5	50.6	0.1	0.1%
53.1%	50.5	50.5	0.0	0.0%
54.3%	50.3	50.4	0.0	0.1%
55.6%	50.3	50.3	0.0	0.0%
56.8%	50.3	50.1	-0.1	-0.3%
58.0%	50.1	50.1	0.0	0.0%
59.3%	50.1	50.0	-0.1	-0.2%
60.5%	49.9	50.0	0.1	0.1%
61.7%	49.9	50.0	0.1	0.1%
63.0%	49.9	50.0	0.1	0.1%
64.2%	49.8	49.9	0.1	0.2%
65.4%	49.7	49.8	0.1	0.3%
66.7%	49.7	49.7	0.0	0.0%
67.9%	49.7	49.7	0.0	0.1%
69.1%	49.7	49.7	0.0	0.0%
70.4%	49.6	49.7	0.0	0.0%
71.6%	49.5	49.5	0.0	0.0%
72.8%	49.5	49.5	0.0	0.0%
74.1%	49.5	49.5	0.0	0.0%
75.3%	49.5	49.5	0.0	0.1%
76.5%	49.4	49.4	0.0	0.0%
77.8%	49.4	49.4	0.0	0.0%
79.0%	49.3	49.3	0.0	0.0%
80.2%	49.3	49.3	0.0	0.0%
81.5%	49.3	49.3	0.0	0.0%
82.7%	49.2	49.3	0.0	0.0%
84.0%	49.2	49.2	0.0	0.0%
85.2%	49.1	49.0	-0.1	-0.2%
86.4%	49.0	49.0	0.0	0.0%
87.7%	49.0	49.0	0.0	0.0%
88.9%	48.8	48.8	0.0	0.0%
90.1%	48.7	48.7	0.0	0.0%
91.4%	48.7	48.6	-0.1	-0.3%
92.6%	48.6	48.5	-0.1	-0.1%
93.8%	48.5	48.4	-0.1	-0.2%
95.1%	48.4	48.3	-0.1	-0.3%
96.3%	48.3	48.3	0.0	0.0%
97.5%	48.3	48.0	-0.3	-0.5%
98.8%	48.0	48.0	0.0	0.0%
100.0%	48.0	48.0	0.0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.3	63.4	-1.9	-2.9%
1.2%	63.3	62.5	-0.8	-1.3%
2.5%	62.7	62.0	-0.6	-1.0%
3.7%	62.4	61.7	-0.7	-1.1%
4.9%	62.2	61.7	-0.5	-0.9%
6.2%	61.8	61.4	-0.4	-0.6%
7.4%	61.3	61.3	0.0	0.0%
8.6%	61.3	61.2	-0.1	-0.1%
9.9%	61.2	61.2	0.0	-0.1%
11.1%	61.1	61.1	0.0	0.0%
12.3%	60.9	61.0	0.1	0.1%
13.6%	60.0	60.7	0.7	1.1%
14.8%	59.9	59.8	-0.2	-0.3%
16.0%	59.7	59.3	-0.4	-0.7%
17.3%	59.3	59.2	-0.1	-0.2%
18.5%	59.1	59.2	0.1	0.2%
19.8%	59.0	59.0	0.0	0.0%
21.0%	59.0	58.8	-0.2	-0.3%
22.2%	58.8	58.8	0.0	0.0%
23.5%	58.3	58.7	0.5	0.8%
24.7%	58.2	58.6	0.4	0.7%
25.9%	58.0	58.2	0.2	0.3%
27.2%	57.9	58.2	0.2	0.4%
28.4%	57.8	58.1	0.3	0.4%
29.6%	57.7	57.9	0.2	0.4%
30.9%	57.7	57.8	0.0	0.0%
32.1%	57.7	57.7	0.1	0.1%
33.3%	57.5	57.7	0.2	0.3%
34.6%	57.5	57.4	-0.1	-0.2%
35.8%	57.4	57.3	0.0	0.0%
37.0%	57.3	57.2	-0.1	-0.2%
38.3%	57.1	56.9	-0.2	-0.4%
39.5%	56.9	56.8	-0.1	-0.1%
40.7%	56.9	56.8	-0.1	-0.2%
42.0%	56.8	56.7	-0.1	-0.2%
43.2%	56.8	56.6	-0.1	-0.2%
44.4%	56.7	56.5	-0.2	-0.4%
45.7%	56.5	56.5	0.0	0.0%
46.9%	56.5	56.4	-0.1	-0.1%
48.1%	56.4	56.3	-0.1	-0.2%
49.4%	56.3	56.0	-0.2	-0.4%
50.6%	56.0	56.0	-0.1	-0.1%
51.9%	56.0	56.0	0.0	-0.1%
53.1%	56.0	56.0	0.0	0.0%
54.3%	56.0	55.9	0.0	-0.1%
55.6%	56.0	55.8	-0.1	-0.2%
56.8%	55.9	55.7	-0.3	-0.5%
58.0%	55.8	55.5	-0.3	-0.5%
59.3%	55.7	55.4	-0.3	-0.5%
60.5%	55.2	55.2	0.0	0.0%
61.7%	55.1	55.1	0.0	0.0%
63.0%	55.0	54.8	-0.2	-0.3%
64.2%	54.8	54.8	-0.1	-0.1%
65.4%	54.8	54.8	0.0	0.0%
66.7%	54.8	54.8	0.0	0.0%
67.9%	54.8	54.6	-0.2	-0.3%
69.1%	54.6	54.5	-0.1	-0.1%
70.4%	54.5	54.5	0.0	0.0%
71.6%	54.3	54.3	0.0	0.0%
72.8%	54.2	54.2	0.0	0.0%
74.1%	54.2	54.2	0.0	0.0%
75.3%	54.2	54.2	0.0	-0.1%
76.5%	54.1	54.1	0.0	0.0%
77.8%	53.8	53.8	0.0	0.0%
79.0%	53.8	53.7	0.0	-0.1%
80.2%	53.7	53.7	0.0	0.0%
81.5%	53.7	53.4	-0.3	-0.6%
82.7%	53.4	53.3	0.0	-0.1%
84.0%	53.3	53.2	-0.1	-0.2%
85.2%	53.2	53.1	-0.1	-0.2%
86.4%	53.2	52.9	-0.3	-0.6%
87.7%	52.9	52.8	-0.1	-0.2%
88.9%	52.8	52.8	0.0	0.0%
90.1%	52.8	52.8	0.0	0.0%
91.4%	52.8	52.7	-0.1	-0.2%
92.6%	52.6	52.6	0.0	0.0%
93.8%	52.4	52.4	0.0	0.0%
95.1%	52.4	52.3	-0.1	-0.1%
96.3%	52.3	52.2	-0.1	-0.1%
97.5%	52.2	52.2	0.0	0.0%
98.8%	51.4	52.0	0.5	1.1%
100.0%	51.4	52.0	0.5	1.1%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.1	69.8	-0.3	-0.4%
1.2%	69.0	69.5	0.6	0.8%
2.5%	68.2	68.4	0.2	0.3%
3.7%	67.8	68.0	0.1	0.2%
4.9%	67.6	67.9	0.3	0.4%
6.2%	67.5	67.4	-0.1	-0.1%
7.4%	67.0	67.4	0.4	0.5%
8.6%	66.3	67.0	0.7	1.1%
9.9%	66.2	65.8	-0.4	-0.6%
11.1%	66.1	65.3	-0.8	-1.3%
12.3%	65.2	65.3	0.0	0.1%
13.6%	65.2	65.2	0.0	0.0%
14.8%	65.1	65.2	0.1	0.1%
16.0%	64.9	64.9	0.0	0.0%
17.3%	64.7	64.9	0.1	0.2%
18.5%	64.6	64.7	0.1	0.2%
19.8%	64.6	64.6	0.0	0.1%
21.0%	64.4	64.3	-0.1	-0.1%
22.2%	64.0	64.0	0.0	0.0%
23.5%	63.7	63.9	0.2	0.4%
24.7%	63.3	63.6	0.4	0.6%
25.9%	63.2	63.5	0.3	0.5%
27.2%	63.2	63.4	0.2	0.3%
28.4%	63.2	63.2	0.0	0.1%
29.6%	63.1	63.1	0.0	0.0%
30.9%	62.8	62.8	0.0	0.0%
32.1%	62.8	62.8	0.0	0.0%
33.3%	62.8	62.7	0.0	-0.1%
34.6%	62.6	62.4	-0.1	-0.2%
35.8%	62.3	62.1	-0.2	-0.3%
37.0%	62.2	62.1	-0.1	-0.2%
38.3%	62.2	62.0	-0.2	-0.4%
39.5%	62.0	61.8	-0.2	-0.3%
40.7%	61.8	61.7	-0.1	-0.2%
42.0%	61.5	61.4	-0.1	-0.2%
43.2%	61.1	61.1	0.0	0.0%
44.4%	61.1	60.9	-0.1	-0.2%
45.7%	60.9	60.8	-0.1	-0.2%
46.9%	60.7	60.7	0.0	0.0%
48.1%	60.7	60.7	0.0	0.0%
49.4%	60.3	60.3	0.1	0.1%
50.6%	60.2	60.3	0.1	0.1%
51.9%	60.2	60.2	0.0	0.0%
53.1%	59.8	60.2	0.4	0.6%
54.3%	59.7	59.8	0.1	0.2%
55.6%	59.6	59.7	0.1	0.2%
56.8%	59.4	59.4	0.0	0.0%
58.0%	59.3	59.3	0.0	0.0%
59.3%	59.3	59.2	0.0	0.0%
60.5%	59.1	59.1	0.0	0.1%
61.7%	58.9	58.9	0.0	0.0%
63.0%	58.8	58.8	0.0	0.0%
64.2%	58.8	58.8	0.0	0.1%
65.4%	58.7	58.8	0.1	0.1%
66.7%	58.7	58.7	0.0	0.0%
67.9%	58.6	58.6	0.1	0.1%
69.1%	58.5	58.5	0.0	0.0%
70.4%	58.4	58.3	-0.1	-0.2%
71.6%	58.3	58.1	-0.2	-0.3%
72.8%	58.1	58.1	0.0	0.0%
74.1%	58.1	58.1	0.0	0.0%
75.3%	58.1	58.1	0.0	0.0%
76.5%	58.1	58.1	0.0	0.0%
77.8%	58.1	58.1	0.0	0.0%
79.0%	58.1	58.1	0.0	-0.1%
80.2%	58.0	58.0	0.0	0.0%
81.5%	57.7	57.7	0.0	0.0%
82.7%	57.5	57.4	0.0	0.0%
84.0%	57.4	57.3	-0.1	-0.2%
85.2%	57.3	57.0	-0.3	-0.5%
86.4%	56.9	56.9	0.0	0.0%
87.7%	56.7	56.7	0.0	0.0%
88.9%	56.5	56.5	0.0	0.0%
90.1%	56.4	56.4	0.0	0.0%
91.4%	56.4	56.4	0.0	0.0%
92.6%	56.3	56.3	0.0	0.0%
93.8%	56.1	56.1	0.0	0.0%
95.1%	55.8	55.8	0.0	0.0%
96.3%	55.7	55.7	0.0	0.0%
97.5%	55.3	55.5	0.1	0.2%
98.8%	55.3	55.2	-0.1	-0.2%
100.0%	55.3	55.2	-0.1	-0.2%

Table SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	74.2	74.6	0.5	0.6%
1.2%	72.0	72.1	0.2	0.2%
2.5%	71.8	72.1	0.2	0.3%
3.7%	71.5	70.8	-0.8	-1.1%
4.9%	71.5	70.4	-1.1	-1.5%
6.2%	71.4	70.2	-1.1	-1.6%
7.4%	71.3	69.7	-1.5	-2.1%
8.6%	70.8	69.7	-1.0	-1.4%
9.9%	70.2	69.7	-0.5	-0.7%
11.1%	69.7	69.3	-0.4	-0.6%
12.3%	69.5	68.9	-0.5	-0.8%
13.6%	69.3	68.8	-0.5	-0.7%
14.8%	68.7	68.7	0.0	0.0%
16.0%	68.7	68.7	0.1	0.1%
17.3%	68.5	68.5	-0.1	-0.1%
18.5%	68.5	68.2	-0.3	-0.4%
19.8%	68.4	68.0	-0.4	-0.5%
21.0%	68.4	67.8	-0.6	-0.9%
22.2%	68.0	67.7	-0.2	-0.3%
23.5%	67.9	67.6	-0.3	-0.5%
24.7%	67.7	67.6	-0.2	-0.3%
25.9%	67.7	67.5	-0.2	-0.3%
27.2%	67.5	67.5	-0.1	-0.1%
28.4%	67.3	67.3	0.0	0.0%
29.6%	67.0	67.1	0.1	0.1%
30.9%	66.9	67.0	0.1	0.2%
32.1%	66.8	66.5	-0.3	-0.4%
33.3%	66.8	65.8	-1.0	-1.5%
34.6%	66.8	65.6	-1.2	-1.8%
35.8%	66.4	65.6	-0.8	-1.3%
37.0%	66.1	65.5	-0.6	-0.8%
38.3%	65.9	65.5	-0.4	-0.7%
39.5%	65.8	65.5	-0.3	-0.5%
40.7%	65.8	65.4	-0.4	-0.6%
42.0%	65.8	65.2	-0.5	-0.8%
43.2%	65.5	64.8	-0.7	-1.1%
44.4%	65.4	64.7	-0.7	-1.1%
45.7%	65.0	64.7	-0.4	-0.6%
46.9%	64.8	64.5	-0.3	-0.4%
48.1%	64.7	64.4	-0.2	-0.3%
49.4%	64.5	64.4	-0.1	-0.2%
50.6%	64.3	64.3	0.0	0.1%
51.9%	64.2	64.2	0.0	0.0%
53.1%	64.1	64.1	0.1	0.1%
54.3%	63.9	64.0	0.1	0.2%
55.6%	63.8	63.9	0.1	0.1%
56.8%	63.6	63.8	0.1	0.2%
58.0%	63.4	62.9	-0.5	-0.8%
59.3%	63.2	62.7	-0.4	-0.7%
60.5%	62.9	62.7	-0.2	-0.3%
61.7%	62.8	62.7	-0.1	-0.2%
63.0%	62.6	62.6	0.0	0.1%
64.2%	62.5	62.6	0.0	0.1%
65.4%	62.5	62.5	0.0	0.0%
66.7%	62.4	62.4	0.0	0.0%
67.9%	62.4	62.4	0.0	0.0%
69.1%	62.3	62.3	0.0	0.0%
70.4%	62.3	62.3	0.0	0.0%
71.6%	62.1	62.2	0.0	0.0%
72.8%	62.1	62.1	0.0	0.0%
74.1%	62.0	62.0	0.0	-0.1%
75.3%	62.0	62.0	0.0	0.0%
76.5%	61.9	61.9	0.0	0.0%
77.8%	61.9	61.9	0.0	0.0%
79.0%	61.9	61.9	0.0	0.0%
80.2%	61.8	61.6	-0.2	-0.3%
81.5%	61.6	61.5	0.0	0.0%
82.7%	61.5	61.2	-0.3	-0.5%
84.0%	61.2	61.1	-0.2	-0.3%
85.2%	61.1	61.0	-0.1	-0.2%
86.4%	60.7	60.7	0.0	0.0%
87.7%	60.6	60.5	-0.1	-0.1%
88.9%	60.5	60.4	-0.1	-0.2%
90.1%	60.5	60.3	-0.2	-0.3%
91.4%	60.4	60.2	-0.2	-0.4%
92.6%	60.4	60.1	-0.3	-0.4%
93.8%	60.1	60.1	0.0	0.0%
95.1%	58.5	58.2	-0.2	-0.4%
96.3%	58.4	58.2	-0.2	-0.4%
97.5%	58.2	58.1	-0.1	-0.3%
98.8%	58.2	58.0	-0.1	-0.2%
100.0%	58.2	58.0	-0.1	-0.2%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.0	76.8	-1.2	-1.5%
1.2%	77.4	75.5	-1.9	-2.4%
2.5%	75.3	72.3	-3.0	-4.0%
3.7%	74.5	71.8	-2.6	-3.5%
4.9%	73.5	71.1	-2.3	-3.2%
6.2%	71.9	70.8	-1.2	-1.6%
7.4%	70.8	70.6	-0.2	-0.2%
8.6%	70.5	70.4	0.0	-0.1%
9.9%	70.3	70.3	0.1	0.1%
11.1%	70.2	69.8	-0.4	-0.6%
12.3%	70.2	69.5	-0.7	-1.0%
13.6%	69.7	69.5	-0.3	-0.4%
14.8%	69.4	69.2	-0.2	-0.3%
16.0%	69.4	68.8	-0.6	-0.8%
17.3%	68.9	68.6	-0.3	-0.4%
18.5%	68.6	68.4	-0.2	-0.3%
19.8%	68.6	68.1	-0.5	-0.7%
21.0%	68.5	68.0	-0.5	-0.7%
22.2%	67.9	67.8	-0.1	-0.2%
23.5%	67.8	67.7	-0.1	-0.2%
24.7%	67.5	66.9	-0.6	-0.9%
25.9%	67.2	66.7	-0.4	-0.6%
27.2%	67.1	66.7	-0.4	-0.6%
28.4%	67.0	66.7	-0.3	-0.5%
29.6%	66.9	66.6	-0.3	-0.5%
30.9%	66.8	66.4	-0.4	-0.6%
32.1%	66.7	66.2	-0.4	-0.7%
33.3%	66.7	66.1	-0.5	-0.8%
34.6%	66.6	66.1	-0.5	-0.7%
35.8%	66.5	66.0	-0.5	-0.8%
37.0%	66.5	66.0	-0.5	-0.7%
38.3%	66.4	65.9	-0.6	-0.9%
39.5%	66.4	65.8	-0.6	-0.9%
40.7%	66.3	65.7	-0.7	-1.0%
42.0%	66.3	65.7	-0.6	-0.9%
43.2%	66.2	65.6	-0.6	-0.9%
44.4%	66.2	65.6	-0.6	-0.9%
45.7%	66.2	65.6	-0.6	-0.9%
46.9%	66.2	65.5	-0.7	-1.1%
48.1%	66.1	65.5	-0.7	-1.0%
49.4%	66.1	65.4	-0.6	-0.9%
50.6%	66.0	65.4	-0.6	-0.8%
51.9%	66.0	65.3	-0.7	-1.0%
53.1%	66.0	65.3	-0.7	-1.0%
54.3%	65.9	65.3	-0.7	-1.0%
55.6%	65.9	65.2	-0.8	-1.2%
56.8%	65.9	65.1	-0.8	-1.3%
58.0%	65.9	65.1	-0.8	-1.2%
59.3%	65.9	65.1	-0.8	-1.3%
60.5%	65.9	65.0	-0.8	-1.2%
61.7%	65.8	65.0	-0.8	-1.2%
63.0%	65.8	65.0	-0.8	-1.2%
64.2%	65.6	64.9	-0.7	-1.0%
65.4%	65.6	64.9	-0.7	-1.0%
66.7%	65.5	64.8	-0.7	-1.0%
67.9%	65.5	64.8	-0.7	-1.1%
69.1%	65.5	64.7	-0.8	-1.2%
70.4%	65.5	64.6	-0.8	-1.3%
71.6%	65.5	64.5	-0.9	-1.4%
72.8%	65.4	64.5	-1.0	-1.5%
74.1%	65.4	64.5	-1.0	-1.5%
75.3%	65.4	64.4	-1.0	-1.5%
76.5%	65.3	64.3	-1.0	-1.5%
77.8%	65.2	64.3	-0.9	-1.4%
79.0%	65.1	64.2	-0.9	-1.4%
80.2%	65.1	64.2	-0.9	-1.4%
81.5%	65.0	64.1	-0.8	-1.3%
82.7%	65.0	63.9	-1.1	-1.7%
84.0%	64.8	63.8	-1.1	-1.7%
85.2%	64.8	63.5	-1.3	-2.1%
86.4%	64.7	63.5	-1.3	-2.0%
87.7%	64.6	63.4	-1.2	-1.9%
88.9%	64.6	63.3	-1.3	-2.0%
90.1%	64.4	63.3	-1.1	-1.7%
91.4%	64.4	63.2	-1.2	-1.9%
92.6%	64.3	63.1	-1.2	-1.8%
93.8%	64.1	63.0	-1.1	-1.7%
95.1%	63.9	62.6	-1.3	-2.1%
96.3%	63.9	62.3	-1.6	-2.5%
97.5%	63.6	62.0	-1.6	-2.6%
98.8%	63.2	61.6	-1.6	-2.5%
100.0%	63.2	61.6	-1.6	-2.5%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	76.6	73.9	-2.7	-3.5%
1.2%	74.9	72.4	-2.5	-3.4%
2.5%	73.9	71.6	-2.3	-3.1%
3.7%	73.7	71.5	-2.2	-2.9%
4.9%	73.5	71.1	-2.4	-3.3%
6.2%	73.5	70.6	-2.9	-3.9%
7.4%	72.5	70.5	-1.9	-2.7%
8.6%	72.3	70.4	-1.9	-2.7%
9.9%	72.2	69.7	-2.5	-3.4%
11.1%	72.0	69.4	-2.7	-3.7%
12.3%	71.7	69.3	-2.5	-3.5%
13.6%	71.7	69.0	-2.8	-3.8%
14.8%	71.2	68.8	-2.4	-3.3%
16.0%	71.0	68.8	-2.2	-3.0%
17.3%	70.5	68.8	-1.7	-2.4%
18.5%	70.3	68.6	-1.7	-2.4%
19.8%	69.9	67.8	-2.1	-3.0%
21.0%	69.3	67.7	-1.5	-2.2%
22.2%	69.2	67.7	-1.5	-2.1%
23.5%	68.4	67.7	-0.7	-1.0%
24.7%	68.4	67.7	-0.7	-1.0%
25.9%	68.3	67.4	-0.8	-1.2%
27.2%	68.3	67.3	-0.9	-1.4%
28.4%	68.1	67.2	-0.8	-1.2%
29.6%	68.0	67.2	-0.8	-1.2%
30.9%	67.9	67.2	-0.7	-1.1%
32.1%	67.8	67.1	-0.7	-1.0%
33.3%	67.8	67.0	-0.7	-1.1%
34.6%	67.7	66.7	-0.9	-1.4%
35.8%	67.6	66.6	-1.0	-1.5%
37.0%	67.6	66.6	-1.0	-1.5%
38.3%	67.5	66.5	-1.1	-1.6%
39.5%	67.5	66.4	-1.0	-1.5%
40.7%	67.3	66.4	-0.9	-1.4%
42.0%	67.3	66.4	-0.9	-1.4%
43.2%	67.1	66.3	-0.8	-1.3%
44.4%	67.0	66.1	-1.0	-1.4%
45.7%	66.9	65.9	-1.0	-1.5%
46.9%	66.8	65.9	-0.9	-1.3%
48.1%	66.7	65.9	-0.8	-1.2%
49.4%	66.6	65.6	-1.0	-1.5%
50.6%	66.6	65.5	-1.1	-1.7%
51.9%	66.6	65.4	-1.1	-1.7%
53.1%	66.6	65.3	-1.2	-1.9%
54.3%	66.5	65.2	-1.3	-2.0%
55.6%	66.5	65.2	-1.3	-1.9%
56.8%	66.5	65.1	-1.4	-2.1%
58.0%	66.4	65.0	-1.4	-2.1%
59.3%	66.3	64.9	-1.4	-2.1%
60.5%	66.2	64.9	-1.3	-2.0%
61.7%	66.1	64.6	-1.5	-2.3%
63.0%	66.1	64.6	-1.5	-2.3%
64.2%	66.0	64.6	-1.5	-2.2%
65.4%	65.9	64.6	-1.3	-2.0%
66.7%	65.9	64.6	-1.3	-2.0%
67.9%	65.9	64.6	-1.3	-2.0%
69.1%	65.6	64.5	-1.1	-1.7%
70.4%	65.3	64.3	-0.9	-1.4%
71.6%	65.2	64.2	-1.0	-1.5%
72.8%	65.2	64.0	-1.2	-1.8%
74.1%	64.8	63.9	-0.9	-1.4%
75.3%	64.8	63.8	-0.9	-1.4%
76.5%	64.7	63.8	-1.0	-1.5%
77.8%	64.7	63.2	-1.5	-2.3%
79.0%	64.5	63.1	-1.4	-2.1%
80.2%	64.3	63.0	-1.3	-2.0%
81.5%	63.7	62.8	-0.8	-1.3%
82.7%	63.6	62.8	-0.8	-1.2%
84.0%	63.5	62.7	-0.8	-1.3%
85.2%	63.2	62.6	-0.6	-0.9%
86.4%	62.8	62.4	-0.4	-0.6%
87.7%	62.7	62.3	-0.5	-0.7%
88.9%	62.7	62.1	-0.6	-1.0%
90.1%	62.4	61.8	-0.6	-1.0%
91.4%	62.4	61.8	-0.7	-1.0%
92.6%	62.4	61.6	-0.8	-1.3%
93.8%	62.3	61.5	-0.8	-1.3%
95.1%	62.0	61.4	-0.7	-1.1%
96.3%	62.0	61.1	-0.9	-1.4%
97.5%	61.9	61.1	-0.8	-1.2%
98.8%	61.7	60.8	-0.9	-1.5%
100.0%	61.7	60.8	-0.9	-1.5%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.7	72.5	-0.1	-0.2%
1.2%	72.0	70.3	-1.7	-2.4%
2.5%	71.7	69.9	-1.8	-2.5%
3.7%	71.5	69.8	-1.7	-2.4%
4.9%	70.5	69.6	-0.9	-1.2%
6.2%	70.4	69.5	-0.9	-1.2%
7.4%	70.2	69.4	-0.8	-1.1%
8.6%	70.2	69.4	-0.8	-1.1%
9.9%	70.1	69.0	-1.1	-1.6%
11.1%	70.0	68.9	-1.1	-1.6%
12.3%	69.8	68.7	-1.1	-1.6%
13.6%	69.7	68.6	-1.1	-1.5%
14.8%	69.5	68.6	-0.9	-1.3%
16.0%	69.4	68.4	-1.0	-1.4%
17.3%	69.3	68.1	-1.2	-1.7%
18.5%	69.1	68.1	-1.0	-1.4%
19.8%	68.9	67.9	-1.0	-1.4%
21.0%	68.7	67.7	-1.1	-1.5%
22.2%	68.6	67.5	-1.1	-1.6%
23.5%	68.2	67.4	-0.8	-1.2%
24.7%	68.2	67.4	-0.8	-1.2%
25.9%	68.1	67.2	-0.8	-1.2%
27.2%	68.1	67.0	-1.1	-1.6%
28.4%	67.9	66.8	-1.1	-1.6%
29.6%	67.6	66.7	-0.8	-1.2%
30.9%	67.3	66.7	-0.6	-1.0%
32.1%	67.3	66.6	-0.7	-1.0%
33.3%	67.2	66.6	-0.6	-0.9%
34.6%	67.2	66.3	-0.9	-1.3%
35.8%	67.0	66.3	-0.7	-1.1%
37.0%	66.9	66.3	-0.6	-0.9%
38.3%	66.7	65.9	-0.8	-1.2%
39.5%	66.6	65.8	-0.8	-1.3%
40.7%	66.6	65.6	-1.0	-1.4%
42.0%	66.6	65.6	-0.9	-1.4%
43.2%	66.5	65.6	-0.9	-1.4%
44.4%	66.5	65.6	-0.9	-1.4%
45.7%	66.3	65.5	-0.8	-1.2%
46.9%	66.3	65.5	-0.8	-1.2%
48.1%	66.3	65.4	-0.9	-1.4%
49.4%	65.9	65.3	-0.6	-0.9%
50.6%	65.8	65.2	-0.6	-0.8%
51.9%	65.5	65.1	-0.4	-0.7%
53.1%	65.5	65.0	-0.5	-0.8%
54.3%	65.5	65.0	-0.5	-0.8%
55.6%	65.3	64.9	-0.3	-0.5%
56.8%	65.2	64.8	-0.4	-0.7%
58.0%	65.2	64.7	-0.6	-0.9%
59.3%	65.2	64.6	-0.6	-1.0%
60.5%	65.2	64.6	-0.6	-0.9%
61.7%	65.1	64.5	-0.7	-1.0%
63.0%	65.1	64.4	-0.6	-1.0%
64.2%	64.4	64.4	0.0	0.0%
65.4%	64.3	64.3	0.0	0.1%
66.7%	64.2	64.3	0.1	0.2%
67.9%	64.1	64.1	0.0	0.0%
69.1%	64.1	64.1	0.0	0.0%
70.4%	64.0	64.0	0.1	0.1%
71.6%	63.9	63.9	0.0	0.0%
72.8%	63.7	63.6	-0.1	-0.1%
74.1%	63.5	63.6	0.1	0.1%
75.3%	63.5	63.6	0.1	0.1%
76.5%	63.5	63.4	0.0	-0.1%
77.8%	63.4	63.3	-0.1	-0.1%
79.0%	63.3	63.3	0.0	0.0%
80.2%	63.1	63.2	0.1	0.1%
81.5%	63.0	63.2	0.1	0.2%
82.7%	63.0	63.1	0.1	0.2%
84.0%	62.9	63.0	0.1	0.2%
85.2%	62.8	63.0	0.1	0.2%
86.4%	62.7	62.9	0.2	0.3%
87.7%	62.7	62.7	0.0	0.1%
88.9%	62.6	62.6	0.0	0.1%
90.1%	62.6	62.6	0.0	0.0%
91.4%	62.4	62.4	0.0	0.0%
92.6%	62.4	62.3	-0.1	-0.2%
93.8%	62.1	62.0	-0.2	-0.3%
95.1%	62.1	62.0	-0.1	-0.2%
96.3%	62.0	61.7	-0.2	-0.4%
97.5%	61.6	61.5	-0.1	-0.2%
98.8%	61.6	61.5	-0.1	-0.2%
100.0%	61.6	61.5	-0.1	-0.2%

Table SQ10-1b

American River at Watt Avenue, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	74.4	74.5	0.1	0.1%
1.2%	73.4	71.8	-1.6	-2.2%
2.5%	71.9	71.0	-0.9	-1.3%
3.7%	71.9	70.8	-1.1	-1.5%
4.9%	71.2	70.4	-0.8	-1.1%
6.2%	71.2	69.8	-1.4	-1.9%
7.4%	70.9	69.7	-1.2	-1.7%
8.6%	70.8	69.6	-1.2	-1.7%
9.9%	70.6	69.5	-1.1	-1.6%
11.1%	70.5	69.2	-1.4	-1.9%
12.3%	70.2	69.0	-1.2	-1.7%
13.6%	70.1	68.9	-1.2	-1.7%
14.8%	70.0	68.5	-1.5	-2.2%
16.0%	69.6	68.4	-1.2	-1.7%
17.3%	69.5	68.3	-1.3	-1.8%
18.5%	69.3	68.3	-1.1	-1.6%
19.8%	69.1	68.2	-0.9	-1.3%
21.0%	69.1	68.2	-0.8	-1.2%
22.2%	69.0	67.7	-1.3	-1.8%
23.5%	68.9	67.4	-1.5	-2.2%
24.7%	68.1	67.2	-0.8	-1.2%
25.9%	67.9	67.2	-0.7	-1.0%
27.2%	67.8	67.1	-0.8	-1.1%
28.4%	67.6	67.1	-0.5	-0.8%
29.6%	67.6	66.9	-0.7	-1.0%
30.9%	67.5	66.9	-0.7	-1.0%
32.1%	67.4	66.8	-0.6	-0.9%
33.3%	67.2	66.8	-0.3	-0.5%
34.6%	66.9	66.4	-0.5	-0.8%
35.8%	66.9	66.4	-0.5	-0.8%
37.0%	66.8	66.3	-0.5	-0.8%
38.3%	66.8	66.2	-0.6	-0.9%
39.5%	66.4	66.0	-0.4	-0.6%
40.7%	66.4	65.7	-0.7	-1.1%
42.0%	66.3	65.4	-0.9	-1.4%
43.2%	66.1	65.4	-0.8	-1.2%
44.4%	66.0	65.2	-0.7	-1.1%
45.7%	65.9	65.2	-0.7	-1.1%
46.9%	65.8	65.1	-0.7	-1.1%
48.1%	65.8	65.1	-0.7	-1.1%
49.4%	65.8	65.1	-0.7	-1.0%
50.6%	65.4	64.9	-0.5	-0.8%
51.9%	65.3	64.8	-0.5	-0.8%
53.1%	65.2	64.8	-0.5	-0.7%
54.3%	65.2	64.7	-0.5	-0.7%
55.6%	65.2	64.7	-0.5	-0.7%
56.8%	65.1	64.7	-0.5	-0.7%
58.0%	65.1	64.6	-0.5	-0.8%
59.3%	65.0	64.6	-0.5	-0.7%
60.5%	65.0	64.4	-0.6	-0.9%
61.7%	64.9	64.3	-0.6	-0.9%
63.0%	64.8	64.0	-0.8	-1.2%
64.2%	64.7	64.0	-0.7	-1.1%
65.4%	64.6	64.0	-0.6	-0.9%
66.7%	64.6	63.9	-0.6	-1.0%
67.9%	64.6	63.9	-0.7	-1.1%
69.1%	64.5	63.8	-0.7	-1.1%
70.4%	64.4	63.6	-0.8	-1.2%
71.6%	64.4	63.5	-0.9	-1.3%
72.8%	64.4	63.5	-0.9	-1.4%
74.1%	64.4	63.5	-0.9	-1.3%
75.3%	64.3	63.5	-0.9	-1.3%
76.5%	64.2	63.4	-0.8	-1.2%
77.8%	63.8	63.4	-0.4	-0.6%
79.0%	63.8	63.3	-0.5	-0.7%
80.2%	63.8	63.3	-0.4	-0.7%
81.5%	63.7	63.3	-0.5	-0.7%
82.7%	63.7	63.2	-0.5	-0.8%
84.0%	63.4	63.2	-0.2	-0.4%
85.2%	63.2	63.0	-0.2	-0.4%
86.4%	62.8	62.7	-0.1	-0.2%
87.7%	62.6	62.7	0.1	0.2%
88.9%	62.6	62.0	-0.5	-0.9%
90.1%	62.5	62.0	-0.5	-0.9%
91.4%	62.5	62.0	-0.5	-0.9%
92.6%	62.4	61.8	-0.6	-0.9%
93.8%	62.4	61.8	-0.6	-1.0%
95.1%	61.8	61.6	-0.2	-0.4%
96.3%	61.6	61.3	-0.3	-0.5%
97.5%	61.6	60.7	-0.8	-1.3%
98.8%	61.4	60.7	-0.7	-1.1%
100.0%	61.1	60.4	-0.7	-1.1%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	74.5	74.4	-0.1	-0.1%
1.2%	74.0	71.7	-2.3	-3.2%
2.5%	72.6	71.4	-1.3	-1.8%
3.7%	72.0	70.6	-1.4	-1.9%
4.9%	71.9	70.5	-1.4	-1.9%
6.2%	71.7	70.4	-1.3	-1.9%
7.4%	71.2	70.2	-0.9	-1.3%
8.6%	71.1	70.1	-1.0	-1.4%
9.9%	71.0	69.6	-1.4	-2.0%
11.1%	70.7	69.3	-1.3	-1.9%
12.3%	70.5	69.2	-1.3	-1.9%
13.6%	70.5	69.0	-1.5	-2.1%
14.8%	70.4	68.7	-1.6	-2.3%
16.0%	69.9	68.7	-1.3	-1.8%
17.3%	69.9	68.5	-1.5	-2.1%
18.5%	69.9	68.4	-1.5	-2.2%
19.8%	69.8	68.1	-1.7	-2.5%
21.0%	69.6	67.7	-1.9	-2.7%
22.2%	68.6	67.6	-1.0	-1.4%
23.5%	68.3	67.6	-0.7	-1.0%
24.7%	68.2	67.1	-1.1	-1.6%
25.9%	68.2	67.1	-1.1	-1.6%
27.2%	67.8	67.0	-0.8	-1.1%
28.4%	67.5	67.0	-0.5	-0.7%
29.6%	67.4	66.9	-0.6	-0.8%
30.9%	67.3	66.8	-0.5	-0.7%
32.1%	67.2	66.7	-0.5	-0.8%
33.3%	67.1	66.6	-0.5	-0.7%
34.6%	67.1	66.4	-0.7	-1.1%
35.8%	67.0	66.4	-0.6	-0.9%
37.0%	66.9	66.3	-0.7	-1.0%
38.3%	66.9	66.2	-0.7	-1.1%
39.5%	66.9	66.1	-0.8	-1.2%
40.7%	66.6	65.9	-0.7	-1.1%
42.0%	66.5	65.7	-0.8	-1.2%
43.2%	66.4	65.5	-0.9	-1.3%
44.4%	66.4	65.3	-1.1	-1.6%
45.7%	66.4	65.3	-1.0	-1.5%
46.9%	66.3	65.3	-1.0	-1.5%
48.1%	66.2	65.2	-0.9	-1.4%
49.4%	66.0	65.1	-0.9	-1.3%
50.6%	66.0	65.1	-0.9	-1.3%
51.9%	65.9	65.1	-0.8	-1.3%
53.1%	65.9	65.0	-0.8	-1.2%
54.3%	65.8	64.9	-0.8	-1.3%
55.6%	65.8	64.9	-0.8	-1.3%
56.8%	65.7	64.9	-0.8	-1.3%
58.0%	65.6	64.9	-0.8	-1.2%
59.3%	65.6	64.6	-1.0	-1.5%
60.5%	65.5	64.6	-0.9	-1.4%
61.7%	65.4	64.5	-0.9	-1.4%
63.0%	65.4	64.5	-0.9	-1.4%
64.2%	65.4	64.5	-0.9	-1.3%
65.4%	65.3	64.5	-0.8	-1.2%
66.7%	65.2	64.4	-0.8	-1.2%
67.9%	65.2	64.3	-0.9	-1.3%
69.1%	65.1	64.3	-0.9	-1.4%
70.4%	65.1	64.2	-0.9	-1.4%
71.6%	65.0	64.1	-0.9	-1.3%
72.8%	64.9	64.1	-0.9	-1.3%
74.1%	64.9	64.1	-0.9	-1.3%
75.3%	64.8	64.0	-0.8	-1.2%
76.5%	64.7	64.0	-0.7	-1.1%
77.8%	64.4	64.0	-0.5	-0.7%
79.0%	64.4	64.0	-0.5	-0.8%
80.2%	64.4	63.8	-0.6	-0.9%
81.5%	64.2	63.7	-0.5	-0.8%
82.7%	64.2	63.6	-0.6	-0.9%
84.0%	64.0	63.6	-0.4	-0.7%
85.2%	63.9	63.6	-0.3	-0.5%
86.4%	63.6	63.5	-0.1	-0.1%
87.7%	63.3	63.4	0.1	0.2%
88.9%	63.2	63.1	-0.1	-0.2%
90.1%	63.2	62.6	-0.6	-1.0%
91.4%	63.2	62.5	-0.6	-1.0%
92.6%	63.2	62.4	-0.8	-1.2%
93.8%	63.1	62.4	-0.7	-1.1%
95.1%	63.1	62.3	-0.8	-1.2%
96.3%	62.7	62.1	-0.7	-1.1%
97.5%	62.6	61.7	-1.0	-1.6%
98.8%	62.4	61.5	-0.8	-1.3%
100.0%	62.0	61.2	-0.9	-1.4%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	74.3	73.2	-1.1	-1.5%
1.2%	73.2	71.1	-2.1	-2.9%
2.5%	73.1	70.9	-2.1	-2.9%
3.7%	72.1	70.3	-1.7	-2.4%
4.9%	71.7	70.0	-1.7	-2.3%
6.2%	71.3	70.0	-1.3	-1.9%
7.4%	71.3	69.8	-1.5	-2.1%
8.6%	71.1	69.8	-1.4	-2.0%
9.9%	71.1	69.4	-1.7	-2.4%
11.1%	71.1	69.3	-1.7	-2.4%
12.3%	70.6	69.0	-1.6	-2.2%
13.6%	70.5	68.8	-1.8	-2.5%
14.8%	70.4	68.7	-1.7	-2.5%
16.0%	70.3	68.5	-1.8	-2.6%
17.3%	69.9	68.5	-1.5	-2.1%
18.5%	69.7	68.4	-1.3	-1.9%
19.8%	69.6	68.3	-1.3	-1.9%
21.0%	69.3	67.6	-1.6	-2.4%
22.2%	68.9	67.6	-1.3	-1.9%
23.5%	68.7	67.5	-1.2	-1.8%
24.7%	68.6	67.4	-1.3	-1.8%
25.9%	68.6	67.2	-1.3	-1.9%
27.2%	68.0	67.2	-0.8	-1.1%
28.4%	67.9	67.2	-0.7	-1.1%
29.6%	67.9	67.2	-0.8	-1.1%
30.9%	67.6	66.9	-0.8	-1.1%
32.1%	67.6	66.7	-0.8	-1.2%
33.3%	67.4	66.6	-0.8	-1.2%
34.6%	67.4	66.6	-0.8	-1.2%
35.8%	67.3	66.5	-0.8	-1.2%
37.0%	67.2	66.5	-0.8	-1.2%
38.3%	67.0	66.3	-0.7	-1.0%
39.5%	66.9	66.0	-0.9	-1.4%
40.7%	66.9	65.9	-0.9	-1.4%
42.0%	66.7	65.8	-0.8	-1.3%
43.2%	66.4	65.7	-0.7	-1.1%
44.4%	66.4	65.7	-0.7	-1.1%
45.7%	66.4	65.4	-1.0	-1.5%
46.9%	66.3	65.4	-1.0	-1.4%
48.1%	66.3	65.2	-1.1	-1.7%
49.4%	66.3	65.1	-1.1	-1.7%
50.6%	66.2	65.1	-1.1	-1.7%
51.9%	66.2	65.1	-1.1	-1.6%
53.1%	66.0	65.1	-0.9	-1.3%
54.3%	65.9	65.0	-0.9	-1.3%
55.6%	65.8	65.0	-0.8	-1.2%
56.8%	65.8	64.9	-0.9	-1.4%
58.0%	65.7	64.8	-0.9	-1.4%
59.3%	65.7	64.7	-1.0	-1.5%
60.5%	65.7	64.7	-1.0	-1.5%
61.7%	65.6	64.6	-1.0	-1.6%
63.0%	65.4	64.5	-0.9	-1.4%
64.2%	65.4	64.5	-0.8	-1.3%
65.4%	65.1	64.4	-0.8	-1.2%
66.7%	65.1	64.3	-0.8	-1.2%
67.9%	64.9	64.2	-0.7	-1.1%
69.1%	64.8	64.1	-0.7	-1.1%
70.4%	64.7	63.9	-0.8	-1.2%
71.6%	64.5	63.9	-0.6	-0.9%
72.8%	64.4	63.8	-0.6	-1.0%
74.1%	64.3	63.8	-0.6	-0.9%
75.3%	64.3	63.7	-0.5	-0.8%
76.5%	64.3	63.7	-0.6	-0.9%
77.8%	63.9	63.6	-0.3	-0.4%
79.0%	63.9	63.6	-0.2	-0.4%
80.2%	63.8	63.6	-0.2	-0.3%
81.5%	63.5	63.3	-0.2	-0.3%
82.7%	63.5	63.2	-0.3	-0.4%
84.0%	63.4	63.1	-0.3	-0.4%
85.2%	63.1	63.0	-0.1	-0.2%
86.4%	63.0	62.9	-0.1	-0.1%
87.7%	62.6	62.9	0.3	0.4%
88.9%	62.6	62.8	0.2	0.4%
90.1%	62.5	62.2	-0.3	-0.4%
91.4%	62.4	62.1	-0.3	-0.5%
92.6%	62.4	61.9	-0.5	-0.8%
93.8%	62.3	61.7	-0.6	-0.9%
95.1%	62.2	61.7	-0.5	-0.8%
96.3%	62.2	61.5	-0.7	-1.0%
97.5%	62.1	61.5	-0.6	-1.0%
98.8%	62.0	61.3	-0.7	-1.2%
100.0%	61.6	61.1	-0.4	-0.7%

Figure SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

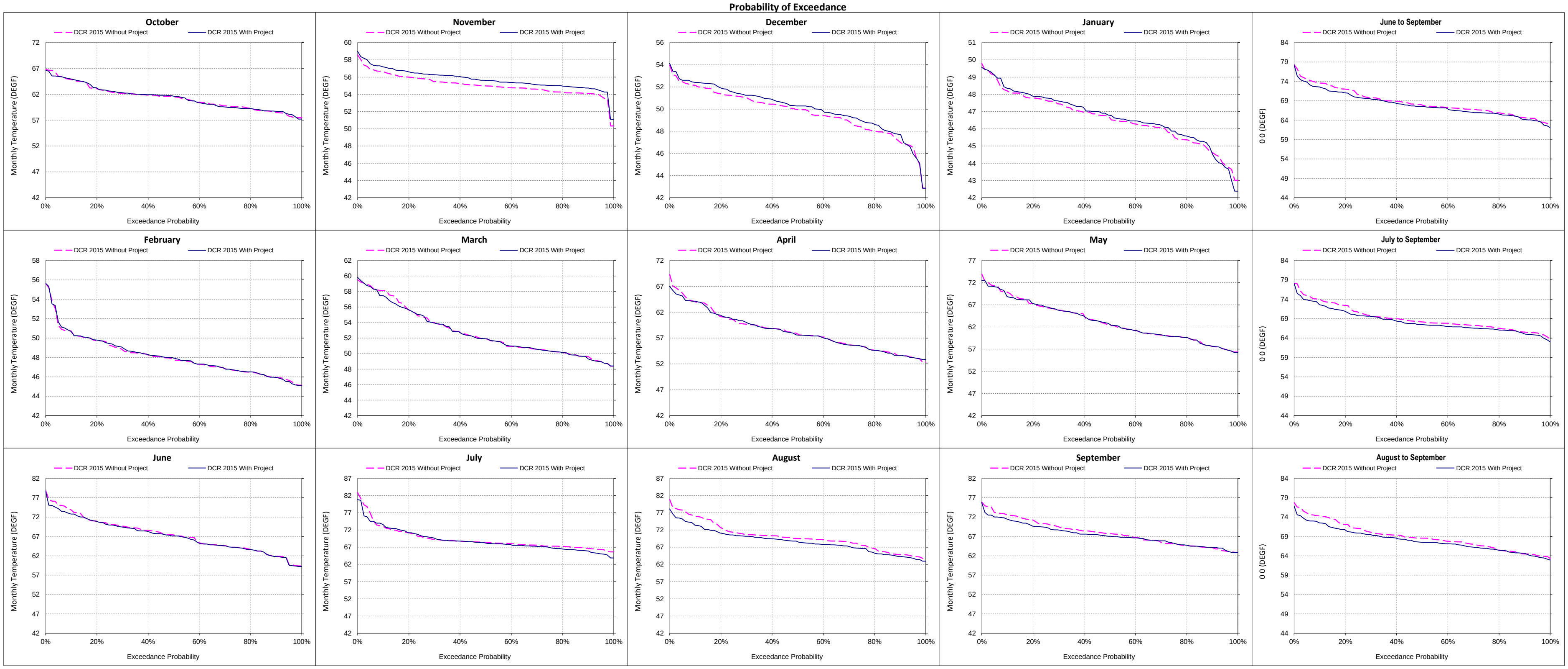


Table SQ11-1b

American River at the Mouth, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.8	66.7	-0.2	-0.2%
1.2%	66.7	66.5	-0.2	-0.3%
2.5%	66.6	65.5	-1.1	-1.6%
3.7%	66.3	65.5	-0.8	-1.2%
4.9%	65.5	65.5	0.0	0.0%
6.2%	65.5	65.4	-0.1	-0.1%
7.4%	65.1	65.2	0.1	0.2%
8.6%	65.0	65.1	0.1	0.2%
9.9%	64.9	65.0	0.1	0.2%
11.1%	64.7	64.8	0.1	0.2%
12.3%	64.5	64.7	0.2	0.3%
13.6%	64.5	64.6	0.0	0.0%
14.8%	64.5	64.4	0.0	0.0%
16.0%	64.1	64.3	0.2	0.2%
17.3%	63.2	63.9	0.7	1.1%
18.5%	63.2	63.3	0.1	0.2%
19.8%	63.1	63.3	0.1	0.2%
21.0%	62.9	62.9	0.0	0.0%
22.2%	62.8	62.9	0.1	0.1%
23.5%	62.7	62.8	0.2	0.3%
24.7%	62.6	62.7	0.1	0.2%
25.9%	62.4	62.6	0.2	0.4%
27.2%	62.3	62.5	0.2	0.3%
28.4%	62.2	62.4	0.1	0.2%
29.6%	62.2	62.3	0.1	0.2%
30.9%	62.2	62.2	0.0	0.1%
32.1%	62.2	62.2	0.0	0.1%
33.3%	62.2	62.1	-0.1	-0.1%
34.6%	62.0	62.1	0.1	0.1%
35.8%	61.9	62.0	0.1	0.2%
37.0%	61.9	62.0	0.0	0.1%
38.3%	61.9	62.0	0.0	0.1%
39.5%	61.9	61.9	0.1	0.1%
40.7%	61.8	61.9	0.1	0.1%
42.0%	61.8	61.9	0.1	0.1%
43.2%	61.8	61.9	0.1	0.1%
44.4%	61.6	61.8	0.2	0.3%
45.7%	61.6	61.8	0.2	0.4%
46.9%	61.6	61.8	0.2	0.3%
48.1%	61.6	61.8	0.2	0.3%
49.4%	61.5	61.7	0.2	0.3%
50.6%	61.5	61.6	0.1	0.2%
51.9%	61.4	61.6	0.1	0.2%
53.1%	61.2	61.4	0.2	0.3%
54.3%	61.1	61.3	0.1	0.2%
55.6%	61.0	60.8	-0.2	-0.3%
56.8%	60.8	60.7	-0.1	-0.2%
58.0%	60.6	60.7	0.1	0.2%
59.3%	60.5	60.4	-0.1	-0.1%
60.5%	60.5	60.3	-0.2	-0.3%
61.7%	60.4	60.2	-0.2	-0.3%
63.0%	60.4	60.1	-0.3	-0.5%
64.2%	60.1	60.1	-0.1	-0.1%
65.4%	60.1	60.0	-0.1	-0.1%
66.7%	60.1	59.8	-0.3	-0.4%
67.9%	60.0	59.6	-0.4	-0.6%
69.1%	59.8	59.6	-0.2	-0.3%
70.4%	59.8	59.6	-0.2	-0.4%
71.6%	59.7	59.5	-0.2	-0.4%
72.8%	59.6	59.5	-0.2	-0.3%
74.1%	59.6	59.4	-0.2	-0.3%
75.3%	59.6	59.3	-0.3	-0.4%
76.5%	59.6	59.3	-0.3	-0.5%
77.8%	59.5	59.3	-0.2	-0.4%
79.0%	59.3	59.3	-0.1	-0.1%
80.2%	59.3	59.2	-0.1	-0.1%
81.5%	59.0	59.1	0.1	0.2%
82.7%	58.9	59.1	0.2	0.3%
84.0%	58.8	59.0	0.1	0.2%
85.2%	58.8	58.8	0.0	0.1%
86.4%	58.8	58.8	0.0	0.1%
87.7%	58.7	58.8	0.0	0.1%
88.9%	58.5	58.8	0.3	0.4%
90.1%	58.5	58.7	0.2	0.4%
91.4%	58.4	58.7	0.3	0.5%
92.6%	58.4	58.7	0.3	0.6%
93.8%	58.1	58.3	0.1	0.3%
95.1%	57.8	58.1	0.4	0.7%
96.3%	57.6	58.0	0.4	0.7%
97.5%	57.5	57.6	0.1	0.1%
98.8%	57.5	57.2	-0.3	-0.5%
100.0%	57.5	57.2	0.0	-0.5%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.6	59.0	0.4	0.7%
1.2%	58.0	58.4	0.3	0.5%
2.5%	57.4	58.2	0.8	1.4%
3.7%	57.3	58.0	0.8	1.4%
4.9%	56.9	57.5	0.7	1.2%
6.2%	56.8	57.4	0.5	0.9%
7.4%	56.7	57.3	0.6	1.1%
8.6%	56.7	57.3	0.6	1.1%
9.9%	56.7	57.2	0.5	0.9%
11.1%	56.5	57.1	0.6	1.1%
12.3%	56.4	57.0	0.6	1.1%
13.6%	56.3	57.0	0.7	1.2%
14.8%	56.2	56.8	0.6	1.0%
16.0%	56.1	56.7	0.6	1.1%
17.3%	56.1	56.7	0.7	1.2%
18.5%	56.0	56.7	0.7	1.2%
19.8%	56.0	56.6	0.6	1.1%
21.0%	56.0	56.5	0.6	1.0%
22.2%	55.9	56.5	0.6	1.0%
23.5%	55.9	56.5	0.6	1.1%
24.7%	55.8	56.4	0.6	1.0%
25.9%	55.8	56.3	0.5	1.0%
27.2%	55.8	56.3	0.5	1.0%
28.4%	55.7	56.3	0.6	1.1%
29.6%	55.5	56.3	0.8	1.4%
30.9%	55.5	56.3	0.8	1.4%
32.1%	55.4	56.2	0.8	1.4%
33.3%	55.4	56.2	0.8	1.4%
34.6%	55.4	56.2	0.8	1.5%
35.8%	55.4	56.2	0.8	1.5%
37.0%	55.3	56.2	0.8	1.5%
38.3%	55.3	56.1	0.8	1.4%
39.5%	55.3	56.1	0.8	1.5%
40.7%	55.2	56.0	0.8	1.4%
42.0%	55.1	56.0	0.8	1.5%
43.2%	55.1	55.9	0.8	1.4%
44.4%	55.1	55.8	0.7	1.3%
45.7%	55.1	55.7	0.7	1.2%
46.9%	55.0	55.7	0.6	1.2%
48.1%	55.0	55.6	0.6	1.1%
49.4%	55.0	55.6	0.6	1.1%
50.6%	55.0	55.6	0.6	1.1%
51.9%	55.0	55.6	0.6	1.2%
53.1%	54.9	55.6	0.6	1.1%
54.3%	54.9	55.6	0.7	1.2%
55.6%	54.9	55.4	0.6	1.0%
56.8%	54.8	55.4	0.6	1.1%
58.0%	54.8	55.4	0.6	1.1%
59.3%	54.8	55.4	0.6	1.1%
60.5%	54.8	55.4	0.6	1.1%
61.7%	54.8	55.3	0.6	1.1%
63.0%	54.7	55.3	0.6	1.1%
64.2%	54.7	55.3	0.6	1.1%
65.4%	54.7	55.3	0.6	1.0%
66.7%	54.7	55.3	0.6	1.1%
67.9%	54.6	55.2	0.6	1.1%
69.1%	54.6	55.1	0.5	0.9%
70.4%	54.6	55.1	0.5	0.9%
71.6%	54.6	55.1	0.5	0.9%
72.8%	54.5	55.1	0.6	1.0%
74.1%	54.4	55.0	0.7	1.2%
75.3%	54.4	55.0	0.7	1.2%
76.5%	54.3	55.0	0.7	1.4%
77.8%	54.3	55.0	0.7	1.4%
79.0%	54.3	55.0	0.7	1.3%
80.2%	54.2	55.0	0.7	1.3%
81.5%	54.2	54.9	0.8	1.4%
82.7%	54.2	54.9	0.7	1.3%
84.0%	54.2	54.9	0.7	1.3%
85.2%	54.2	54.8	0.7	1.2%
86.4%	54.2	54.8	0.7	1.2%
87.7%	54.1	54.8	0.7	1.2%
88.9%	54.1	54.7	0.6	1.2%
90.1%	54.1	54.7	0.6	1.1%
91.4%	54.1	54.7	0.6	1.1%
92.6%	54.0	54.6	0.6	1.1%
93.8%	54.0	54.5	0.5	0.9%
95.1%	53.8	54.4	0.6	1.1%
96.3%	53.5	54.3	0.7	1.4%
97.5%	53.5	54.3	0.8	1.4%
98.8%	50.3	51.1	0.8	1.5%
100.0%	50.3	51.1	0.8	1.5%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.0	54.1	0.1	0.3%
1.2%	53.1	53.4	0.3	0.6%
2.5%	53.0	53.4	0.4	0.7%
3.7%	52.5	52.7	0.2	0.4%
4.9%	52.5	52.6	0.1	0.3%
6.2%	52.3	52.6	0.3	0.5%
7.4%	52.3	52.6	0.3	0.7%
8.6%	52.2	52.5	0.3	0.6%
9.9%	52.2	52.4	0.3	0.5%
11.1%	52.0	52.4	0.4	0.8%
12.3%	52.0	52.4	0.4	0.7%
13.6%	51.9	52.3	0.4	0.8%
14.8%	51.9	52.3	0.4	0.9%
16.0%	51.9	52.3	0.4	0.8%
17.3%	51.5	52.3	0.7	1.4%
18.5%	51.4	52.1	0.6	1.2%
19.8%	51.4	51.9	0.5	1.1%
21.0%	51.3	51.8	0.5	1.0%
22.2%	51.3	51.8	0.6	1.1%
23.5%	51.3	51.6	0.4	0.7%
24.7%	51.2	51.6	0.4	0.7%
25.9%	51.2	51.5	0.3	0.5%
27.2%	51.1	51.4	0.2	0.5%
28.4%	51.1	51.3	0.3	0.5%
29.6%	51.1	51.3	0.2	0.4%
30.9%	50.9	51.3	0.3	0.7%
32.1%	50.8	51.3	0.5	1.0%
33.3%	50.6	51.2	0.5	1.1%
34.6%	50.6	51.1	0.5	1.0%
35.8%	50.6	51.1	0.5	1.0%
37.0%	50.5	51.0	0.4	0.9%
38.3%	50.5	50.9	0.5	0.9%
39.5%	50.4	50.9	0.5	0.9%
40.7%	50.4	50.8	0.3	0.7%
42.0%	50.4	50.7	0.3	0.6%
43.2%	50.3	50.6	0.3	0.6%
44.4%	50.3	50.6	0.3	0.6%
45.7%	50.2	50.5	0.3	0.5%
46.9%	50.1	50.3	0.3	0.5%
48.1%	50.1	50.3	0.3	0.5%
49.4%	50.0	50.3	0.3	0.7%
50.6%	50.0	50.3	0.3	0.7%
51.9%	49.9	50.3	0.3	0.7%
53.1%	49.9	50.3	0.3	0.7%
54.3%	49.8	50.2	0.4	0.8%
55.6%	49.5	50.2	0.7	1.4%
56.8%	49.4	50.0	0.6	1.2%
58.0%	49.4	50.0	0.6	1.1%
59.3%	49.4	49.9	0.5	1.1%
60.5%	49.4	49.7	0.3	0.6%
61.7%	49.3	49.7	0.4	0.7%
63.0%	49.3	49.7	0.4	0.7%
64.2%	49.3	49.6	0.3	0.6%
65.4%	49.3	49.5	0.3	0.5%
66.7%	49.2	49.5	0.3	0.6%
67.9%	49.0	49.4	0.4	0.8%
69.1%	49.0	49.4	0.4	0.7%
70.4%	48.8	49.3	0.5	1.0%
71.6%	48.6	49.2	0.7	1.4%
72.8%	48.5	49.2	0.7	1.5%
74.1%	48.4	49.0	0.6	1.2%
75.3%	48.4	48.9	0.5	1.1%
76.5%	48.2	48.8	0.6	1.3%
77.8%	48.1	48.8	0.6	1.3%
79.0%	48.1	48.7	0.7	1.4%
80.2%	48.0	48.6	0.6	1.2%
81.5%	47.9	48.6	0.6	1.3%
82.7%	47.9	48.2	0.3	0.6%
84.0%	47.9	48.1	0.2	0.4%
85.2%	47.8	48.0	0.2	0.4%
86.4%	47.8	47.9	0.1	0.3%
87.7%	47.5	47.8	0.3	0.7%
88.9%	47.2	47.8	0.5	1.2%
90.1%	47.0	47.7	0.7	1.5%
91.4%	46.8	47.0	0.2	0.3%
92.6%	46.8	46.8	0.0	0.1%
93.8%	46.7	46.6	-0.1	-0.3%
95.1%	46.5	45.9	-0.6	-1.3%
96.3%	45.6	45.6	0.0	-0.1%
97.5%	45.0	45.1	0.1	0.1%
98.8%	42.9	42.9	0.0	0.0%
100.0%	42.9	42.9	0.0	0.0%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.8	49.6	-0.2	-0.5%
1.2%	49.4	49.5	0.0	0.1%
2.5%	49.4	49.4	0.0	0.0%
3.7%	49.2	49.3	0.1	0.2%
4.9%	49.1	49.1	0.0	0.0%
6.2%	48.8	48.9	0.1	0.3%
7.4%	48.4	48.9	0.5	1.0%
8.6%	48.3	48.5	0.2	0.4%
9.9%	48.2	48.4	0.1	0.3%
11.1%	48.1	48.3	0.2	0.5%
12.3%	48.1	48.2	0.1	0.2%
13.6%	48.1	48.2	0.1	0.2%
14.8%	48.1	48.1	0.1	0.2%
16.0%	47.9	48.1	0.2	0.4%
17.3%	47.8	48.1	0.2	0.5%
18.5%	47.8	48.0	0.2	0.4%
19.8%	47.8	47.9	0.1	0.3%
21.0%	47.8	47.9	0.1	0.2%
22.2%	47.7	47.9	0.1	0.3%
23.5%	47.7	47.9	0.1	0.3%
24.7%	47.7	47.8	0.1	0.2%
25.9%	47.6	47.8	0.2	0.4%
27.2%	47.6	47.8	0.2	0.3%
28.4%	47.6	47.6	0.1	0.1%
29.6%	47.4	47.6	0.2	0.4%
30.9%	47.4	47.6	0.1	0.3%
32.1%	47.3	47.5	0.2	0.4%
33.3%	47.2	47.5	0.3	0.6%
34.6%	47.2	47.4	0.2	0.5%
35.8%	47.1	47.4	0.3	0.7%
37.0%	47.0	47.3	0.3	0.5%
38.3%	47.0	47.3	0.3	0.6%
39.5%	47.0	47.3	0.3	0.6%
40.7%	47.0	47.0	0.1	0.1%
42.0%	47.0	47.0	0.1	0.1%
43.2%	46.9	47.0	0.1	0.3%
44.4%	46.9	47.0	0.2	0.3%
45.7%	46.8	47.0	0.2	0.4%
46.9%	46.8	46.9	0.1	0.3%
48.1%	46.8	46.9	0.1	0.3%
49.4%	46.8	46.8	0.0	0.1%
50.6%	46.5	46.8	0.3	0.6%
51.9%	46.5	46.6	0.1	0.3%
53.1%	46.5	46.6	0.1	0.3%
54.3%	46.4	46.6	0.1	0.3%
55.6%	46.4	46.6	0.1	0.3%
56.8%	46.4	46.5	0.1	0.2%
58.0%	46.4	46.5	0.1	0.2%
59.3%	46.3	46.5	0.2	0.4%
60.5%	46.3	46.5	0.2	0.4%
61.7%	46.2	46.4	0.2	0.4%
63.0%	46.2	46.3	0.1	0.3%
64.2%	46.2	46.3	0.1	0.3%
65.4%	46.1	46.3	0.2	0.4%
66.7%	46.1	46.3	0.2	0.4%
67.9%	46.1	46.3	0.2	0.4%
69.1%	46.1	46.3	0.2	0.4%
70.4%	46.1	46.2	0.1	0.2%
71.6%	46.0	46.1	0.1	0.2%
72.8%	45.8	46.1	0.3	0.6%
74.1%	45.8	45.9	0.1	0.2%
75.3%	45.5	45.9	0.4	0.8%
76.5%	45.4	45.7	0.3	0.6%
77.8%	45.4	45.7	0.3	0.7%
79.0%	45.4	45.6	0.2	0.5%
80.2%	45.4	45.6	0.2	0.5%
81.5%	45.3	45.5	0.2	0.5%
82.7%	45.2	45.5	0.3	0.7%
84.0%	45.2	45.3	0.2	0.4%
85.2%	45.1	45.3	0.2	0.3%
86.4%	45.1	45.3	0.2	0.4%
87.7%	44.9	45.2	0.3	0.6%
88.9%	44.7	45.0	0.3	0.6%
90.1%	44.6	44.5	-0.1	-0.3%
91.4%	44.5	44.2	-0.3	-0.6%
92.6%	44.4	44.0	-0.4	-0.8%
93.8%	44.1	44.0	-0.1	-0.2%
95.1%	43.9	43.8	-0.1	-0.3%
96.3%	43.8	43.7	-0.1	-0.2%
97.5%	43.6	43.0	-0.6	-1.4%
98.8%	43.0	42.4	-0.6	-1.5%
100.0%	43.0	42.4	-0.6	-1.5%

Table SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.6	55.7	0.0	0.1%
1.2%	55.2	55.3	0.1	0.2%
2.5%	53.8	53.5	-0.3	-0.5%
3.7%	53.1	53.4	0.3	0.5%
4.9%	51.3	51.6	0.3	0.7%
6.2%	50.9	51.1	0.2	0.4%
7.4%	50.8	51.0	0.3	0.5%
8.6%	50.8	50.8	0.1	0.2%
9.9%	50.7	50.7	-0.1	-0.1%
11.1%	50.2	50.2	0.0	0.0%
12.3%	50.2	50.2	0.0	0.1%
13.6%	50.2	50.2	0.0	0.1%
14.8%	50.1	50.1	0.0	0.1%
16.0%	50.0	50.1	0.1	0.1%
17.3%	50.0	50.0	0.0	0.0%
18.5%	49.8	49.8	0.0	0.1%
19.8%	49.7	49.8	0.1	0.2%
21.0%	49.7	49.8	0.0	0.1%
22.2%	49.7	49.7	0.0	0.0%
23.5%	49.6	49.5	-0.1	-0.3%
24.7%	49.3	49.4	0.2	0.3%
25.9%	49.2	49.4	0.2	0.4%
27.2%	49.0	49.2	0.1	0.3%
28.4%	49.0	49.1	0.1	0.2%
29.6%	48.9	49.1	0.2	0.4%
30.9%	48.6	48.9	0.2	0.5%
32.1%	48.6	48.7	0.1	0.2%
33.3%	48.5	48.6	0.2	0.3%
34.6%	48.5	48.6	0.1	0.2%
35.8%	48.5	48.5	0.0	0.1%
37.0%	48.4	48.5	0.1	0.1%
38.3%	48.4	48.4	0.0	-0.1%
39.5%	48.3	48.3	0.0	0.0%
40.7%	48.2	48.2	0.1	0.1%
42.0%	48.1	48.2	0.1	0.2%
43.2%	48.1	48.2	0.1	0.1%
44.4%	48.1	48.1	0.1	0.2%
45.7%	48.0	48.0	0.1	0.1%
46.9%	48.0	48.0	0.0	0.1%
48.1%	47.9	48.0	0.1	0.1%
49.4%	47.8	48.0	0.1	0.3%
50.6%	47.7	47.9	0.2	0.4%
51.9%	47.7	47.8	0.1	0.3%
53.1%	47.7	47.7	0.0	0.0%
54.3%	47.6	47.7	0.0	0.1%
55.6%	47.6	47.7	0.1	0.1%
56.8%	47.6	47.6	0.1	0.1%
58.0%	47.4	47.4	0.0	0.0%
59.3%	47.3	47.3	0.0	0.0%
60.5%	47.3	47.3	0.0	0.0%
61.7%	47.2	47.3	0.1	0.1%
63.0%	47.2	47.2	0.0	0.0%
64.2%	47.1	47.1	0.1	0.1%
65.4%	47.0	47.1	0.1	0.2%
66.7%	47.0	47.1	0.1	0.2%
67.9%	47.0	47.0	0.0	0.0%
69.1%	46.9	47.0	0.0	0.0%
70.4%	46.8	46.8	0.0	0.0%
71.6%	46.8	46.8	0.0	0.0%
72.8%	46.7	46.7	0.0	0.1%
74.1%	46.7	46.7	0.0	0.0%
75.3%	46.6	46.6	0.0	0.0%
76.5%	46.6	46.6	0.0	-0.1%
77.8%	46.5	46.5	0.0	0.0%
79.0%	46.5	46.5	0.0	0.0%
80.2%	46.5	46.5	0.0	0.1%
81.5%	46.4	46.5	0.1	0.1%
82.7%	46.4	46.4	0.0	0.0%
84.0%	46.2	46.3	0.0	0.0%
85.2%	46.2	46.2	0.0	0.1%
86.4%	46.1	46.1	0.0	0.0%
87.7%	46.0	46.0	0.0	-0.1%
88.9%	46.0	45.9	0.0	0.0%
90.1%	46.0	45.9	0.0	0.0%
91.4%	45.9	45.9	0.0	-0.1%
92.6%	45.9	45.7	-0.1	-0.3%
93.8%	45.7	45.5	-0.2	-0.5%
95.1%	45.6	45.5	-0.1	-0.3%
96.3%	45.5	45.3	-0.2	-0.5%
97.5%	45.2	45.1	-0.1	-0.2%
98.8%	45.1	45.1	0.0	-0.1%
100.0%	45.1	45.1	0.0	-0.1%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.5	59.8	0.3	0.5%
1.2%	59.2	59.4	0.2	0.3%
2.5%	59.1	59.1	0.0	0.0%
3.7%	58.9	58.8	-0.2	-0.3%
4.9%	58.7	58.7	-0.1	-0.2%
6.2%	58.4	58.3	-0.1	-0.2%
7.4%	58.2	58.2	0.0	0.0%
8.6%	58.1	57.5	-0.7	-1.1%
9.9%	58.1	57.5	-0.7	-1.1%
11.1%	58.1	57.3	-0.9	-1.5%
12.3%	57.6	56.9	-0.7	-1.2%
13.6%	57.5	56.6	-0.9	-1.5%
14.8%	57.4	56.4	-1.0	-1.7%
16.0%	56.6	56.2	-0.5	-0.8%
17.3%	56.5	56.0	-0.5	-0.9%
18.5%	56.1	55.9	-0.2	-0.4%
19.8%	55.7	55.7	0.0	0.1%
21.0%	55.4	55.5	0.1	0.1%
22.2%	55.3	55.2	-0.1	-0.2%
23.5%	54.9	55.0	0.2	0.3%
24.7%	54.8	55.0	0.2	0.3%
25.9%	54.7	54.8	0.1	0.3%
27.2%	54.6	54.1	-0.4	-0.8%
28.4%	54.1	54.1	0.0	0.1%
29.6%	54.0	53.9	-0.1	-0.2%
30.9%	53.8	53.8	0.0	0.0%
32.1%	53.8	53.8	0.0	0.0%
33.3%	53.7	53.8	0.1	0.2%
34.6%	53.4	53.5	0.1	0.1%
35.8%	53.3	53.4	0.1	0.3%
37.0%	52.9	52.8	-0.1	-0.2%
38.3%	52.9	52.8	0.0	0.0%
39.5%	52.8	52.8	0.0	0.0%
40.7%	52.6	52.5	0.0	-0.1%
42.0%	52.5	52.4	-0.1	-0.3%
43.2%	52.4	52.4	0.0	-0.1%
44.4%	52.3	52.3	0.0	0.0%
45.7%	52.3	52.1	-0.1	-0.3%
46.9%	52.1	52.0	-0.1	-0.2%
48.1%	51.9	52.0	0.0	0.0%
49.4%	51.9	51.9	0.0	0.0%
50.6%	51.9	51.9	0.0	0.1%
51.9%	51.7	51.7	0.0	0.0%
53.1%	51.6	51.6	0.0	0.1%
54.3%	51.6	51.6	0.0	0.0%
55.6%	51.6	51.6	0.0	0.0%
56.8%	51.4	51.3	-0.1	-0.3%
58.0%	51.0	51.1	0.1	0.2%
59.3%	50.9	51.0	0.0	0.1%
60.5%	50.9	51.0	0.0	0.1%
61.7%	50.9	51.0	0.1	0.1%
63.0%	50.8	50.9	0.1	0.2%
64.2%	50.8	50.8	0.0	0.1%
65.4%	50.8	50.8	0.0	0.0%
66.7%	50.8	50.8	0.0	0.0%
67.9%	50.6	50.7	0.1	0.2%
69.1%	50.6	50.6	0.0	0.1%
70.4%	50.5	50.5	0.0	0.0%
71.6%	50.5	50.5	0.0	-0.1%
72.8%	50.5	50.4	-0.1	-0.1%
74.1%	50.4	50.4	0.0	0.0%
75.3%	50.3	50.3	0.0	0.0%
76.5%	50.3	50.3	0.0	0.0%
77.8%	50.2	50.2	0.0	0.0%
79.0%	50.2	50.2	0.0	0.0%
80.2%	50.1	50.1	0.0	0.0%
81.5%	50.1	50.1	0.0	0.0%
82.7%	49.9	49.8	-0.1	-0.2%
84.0%	49.8	49.8	0.0	0.0%
85.2%	49.8	49.8	0.0	0.0%
86.4%	49.7	49.7	0.0	0.0%
87.7%	49.7	49.7	0.0	0.0%
88.9%	49.6	49.6	0.0	0.0%
90.1%	49.6	49.3	-0.3	-0.6%
91.4%	49.3	49.2	-0.1	-0.3%
92.6%	49.2	49.0	-0.1	-0.2%
93.8%	49.1	49.0	-0.1	-0.2%
95.1%	49.0	49.0	0.0	0.0%
96.3%	48.7	48.7	0.0	0.0%
97.5%	48.7	48.7	0.0	0.0%
98.8%	48.4	48.4	0.0	0.0%
100.0%	48.4	48.4	0.0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.3	67.0	-2.3	-3.3%
1.2%	67.1	66.2	-0.8	-1.3%
2.5%	66.7	65.5	-1.2	-1.8%
3.7%	66.2	65.3	-0.9	-1.4%
4.9%	65.7	65.1	-0.5	-0.8%
6.2%	65.0	64.3	-0.6	-1.0%
7.4%	64.4	64.2	-0.1	-0.2%
8.6%	64.2	64.1	-0.1	-0.1%
9.9%	64.0	64.1	0.1	0.2%
11.1%	63.8	64.0	0.1	0.2%
12.3%	63.8	63.9	0.0	0.1%
13.6%	63.8	63.4	-0.4	-0.6%
14.8%	63.3	62.9	-0.5	-0.7%
16.0%	63.0	61.9	-1.1	-1.7%
17.3%	62.1	61.8	-0.3	-0.5%
18.5%	61.5	61.5	0.0	0.0%
19.8%	61.2	61.4	0.3	0.4%
21.0%	61.1	61.1	0.1	0.1%
22.2%	60.9	61.0	0.1	0.2%
23.5%	60.6	60.9	0.3	0.5%
24.7%	60.6	60.6	0.0	0.0%
25.9%	60.1	60.6	0.5	0.8%
27.2%	59.8	60.4	0.6	1.0%
28.4%	59.8	60.3	0.6	1.0%
29.6%	59.7	60.1	0.4	0.7%
30.9%	59.6	59.8	0.2	0.3%
32.1%	59.6	59.6	0.0	0.1%
33.3%	59.5	59.5	0.0	0.0%
34.6%	59.4	59.2	-0.2	-0.4%
35.8%	59.2	59.1	-0.1	-0.2%
37.0%	59.0	58.9	-0.1	-0.2%
38.3%	58.9	58.9	0.0	0.0%
39.5%	58.9	58.9	0.0	0.0%
40.7%	58.8	58.8	-0.1	-0.1%
42.0%	58.8	58.8	0.0	0.0%
43.2%	58.7	58.7	0.0	0.0%
44.4%	58.7	58.2	-0.4	-0.8%
45.7%	58.2	58.2	0.0	-0.1%
46.9%	58.2	58.1	-0.1	-0.2%
48.1%	58.0	58.0	-0.1	-0.1%
49.4%	57.9	57.6	-0.3	-0.6%
50.6%	57.6	57.6	0.0	0.0%
51.9%	57.6	57.6	0.0	0.0%
53.1%	57.6	57.5	-0.1	-0.1%
54.3%	57.5	57.5	0.0	0.0%
55.6%	57.5	57.4	-0.1	-0.1%
56.8%	57.4	57.4	0.0	0.0%
58.0%	57.4	57.4	0.0	-0.1%
59.3%	57.2	57.2	0.0	0.0%
60.5%	57.2	56.9	-0.3	-0.5%
61.7%	56.8	56.9	0.0	0.0%
63.0%	56.6	56.6	0.0	0.0%
64.2%	56.3	56.3	0.0	0.0%
65.4%	56.1	56.1	0.0	-0.1%
66.7%	56.1	56.0	-0.1	-0.2%
67.9%	56.0	55.8	-0.2	-0.3%
69.1%	55.8	55.7	-0.1	-0.2%
70.4%	55.7	55.6	-0.1	-0.1%
71.6%	55.6	55.6	0.0	0.0%
72.8%	55.6	55.6	0.0	0.0%
74.1%	55.5	55.5	0.0	0.0%
75.3%	55.4	55.3	0.0	-0.1%
76.5%	55.2	55.2	0.0	0.0%
77.8%	54.8	54.8	0.0	0.0%
79.0%	54.7	54.6	-0.1	-0.1%
80.2%	54.6	54.6	0.0	-0.1%
81.5%	54.6	54.5	0.0	-0.1%
82.7%	54.5	54.4	-0.1	-0.2%
84.0%	54.4	54.3	-0.1	-0.3%
85.2%	54.3	54.1	-0.2	-0.4%
86.4%	54.2	54.1	-0.1	-0.3%
87.7%	54.1	53.7	-0.4	-0.7%
88.9%	53.7	53.7	0.0	0.0%
90.1%	53.7	53.7	0.0	0.0%
91.4%	53.6	53.5	0.0	0.0%
92.6%	53.5	53.5	0.0	0.0%
93.8%	53.4	53.2	-0.1	-0.2%
95.1%	53.2	53.2	0.0	0.0%
96.3%	53.1	53.1	0.0	0.0%
97.5%	53.0	53.0	0.0	0.0%
98.8%	52.3	52.8	0.5	1.0%
100.0%	52.3	52.8	0.5	1.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.9	72.5	-1.4	-1.9%
1.2%	72.3	72.5	0.2	0.3%
2.5%	72.0	71.2	-0.8	-1.2%
3.7%	71.4	71.2	-0.3	-0.4%
4.9%	71.3	71.1	-0.2	-0.3%
6.2%	71.3	71.0	-0.3	-0.4%
7.4%	70.1	70.5	0.4	0.6%
8.6%	69.9	70.2	0.3	0.4%
9.9%	69.9	68.8	-1.1	-1.5%
11.1%	69.5	68.7	-0.8	-1.2%
12.3%	68.9	68.6	-0.2	-0.4%
13.6%	68.8	68.2	-0.6	-0.8%
14.8%	68.4	68.2	-0.3	-0.4%
16.0%	68.3	68.1	-0.2	-0.2%
17.3%	68.3	68.1	-0.2	-0.2%
18.5%	67.3	68.1	0.8	1.2%
19.8%	67.3	67.3	0.0	0.0%
21.0%	67.0	67.1	0.2	0.3%
22.2%	66.8	67.0	0.2	0.3%
23.5%	66.6	66.9	0.3	0.5%
24.7%	66.5	66.6	0.1	0.1%
25.9%	66.3	66.5	0.2	0.3%
27.2%	66.2	66.2	-0.1	-0.1%
28.4%	66.0	66.1	0.1	0.1%
29.6%	65.8	65.9	0.0	0.0%
30.9%	65.8	65.6	-0.1	-0.2%
32.1%	65.6	65.6	0.0	0.0%
33.3%	65.5	65.5	0.0	0.0%
34.6%	65.4	65.4	0.0	0.0%
35.8%	65.2	65.2	0.0	0.0%
37.0%	65.1	65.1	0.0	0.0%
38.3%	65.1	64.7	-0.3	-0.5%
39.5%	65.0	64.5	-0.5	-0.7%
40.7%	63.8	64.1	0.3	0.5%
42.0%	63.8	63.6	-0.1	-0.2%
43.2%	63.7	63.5	-0.2	-0.3%
44.4%	63.4	63.5	0.0	0.0%
45.7%	63.4	63.3	-0.1	-0.1%
46.9%	63.0	63.1	0.1	0.2%
48.1%	62.8	63.0	0.2	0.3%
49.4%	62.4	62.8	0.4	0.7%
50.6%	62.3	62.4	0.0	0.1%
51.9%	62.3	62.3	0.1	0.1%
53.1%	61.9	62.3	0.3	0.5%
54.3%	61.8	61.8	0.0	0.0%
55.6%	61.7	61.7	0.0	0.0%
56.8%	61.5	61.5	0.0	0.0%
58.0%	61.5	61.5	0.0	0.0%
59.3%	61.2	61.2	0.0	0.0%
60.5%	61.2	61.2	0.0	0.0%
61.7%	60.9	60.9	0.0	0.1%
63.0%	60.6	60.6	0.0	0.0%
64.2%	60.6	60.6	0.0	0.0%
65.4%	60.5	60.5	0.0	-0.1%
66.7%	60.4	60.4	0.1	0.1%
67.9%	60.3	60.4	0.1	0.2%
69.1%	60.2	60.2	0.0	0.0%
70.4%	60.2	60.2	0.0	0.0%
71.6%	60.1	60.0	-0.1	-0.1%
72.8%	60.0	59.9	-0.1	-0.2%
74.1%	59.9	59.9	0.0	0.0%
75.3%	59.9	59.9	0.0	0.0%
76.5%	59.9	59.8	0.0	0.0%
77.8%	59.7	59.7	0.0	0.0%
79.0%	59.6	59.6	0.0	0.0%
80.2%	59.6	59.6	0.0	0.0%
81.5%	59.3	59.3	0.0	0.0%
82.7%	59.1	59.1	0.0	0.0%
84.0%	59.0	59.1	0.0	0.0%
85.2%	58.7	58.3	-0.4	-0.7%
86.4%	58.1	58.1	0.0	0.0%
87.7%	57.8	57.8	0.0	0.0%
88.9%	57.8	57.8	0.0	0.0%
90.1%	57.6	57.6	0.0	0.0%
91.4%	57.5	57.5	0.0	0.0%
92.6%	57.5	57.5	0.0	0.0%
93.8%	57.2	57.2	0.0	0.0%
95.1%	57.0	56.9	0.0	0.0%
96.3%	56.7	56.7	0.0	0.0%
97.5%	56.4	56.6	0.1	0.2%
98.8%	56.3	56.2	-0.1	-0.2%
100.0%	56.3	56.2	-0.1	-0.2%

Table SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.8	78.8	-0.1	-0.1%
1.2%	76.5	75.1	-1.5	-1.9%
2.5%	76.1	75.0	-1.1	-1.5%
3.7%	76.1	74.6	-1.5	-2.0%
4.9%	75.0	74.2	-0.9	-1.2%
6.2%	75.0	73.5	-1.5	-2.1%
7.4%	74.8	73.4	-1.4	-1.8%
8.6%	74.1	73.0	-1.1	-1.5%
9.9%	73.9	72.8	-1.1	-1.4%
11.1%	73.2	72.8	-0.4	-0.5%
12.3%	73.1	72.3	-0.8	-1.2%
13.6%	72.9	72.1	-0.9	-1.2%
14.8%	71.9	72.0	0.1	0.2%
16.0%	71.6	71.6	0.0	0.0%
17.3%	71.2	71.3	0.1	0.2%
18.5%	71.0	71.0	0.0	0.0%
19.8%	71.0	70.9	-0.1	-0.1%
21.0%	70.6	70.6	0.0	0.0%
22.2%	70.6	70.6	0.0	0.1%
23.5%	70.5	70.2	-0.4	-0.5%
24.7%	70.1	70.0	-0.1	-0.2%
25.9%	70.1	69.9	-0.2	-0.3%
27.2%	70.0	69.8	-0.2	-0.3%
28.4%	69.8	69.5	-0.3	-0.4%
29.6%	69.7	69.5	-0.2	-0.3%
30.9%	69.6	69.3	-0.3	-0.4%
32.1%	69.4	69.2	-0.2	-0.3%
33.3%	69.3	69.1	-0.2	-0.3%
34.6%	69.2	69.1	-0.2	-0.2%
35.8%	69.2	68.5	-0.6	-0.9%
37.0%	68.9	68.4	-0.4	-0.6%
38.3%	68.6	68.4	-0.2	-0.3%
39.5%	68.6	68.3	-0.2	-0.4%
40.7%	68.5	68.1	-0.4	-0.6%
42.0%	68.4	67.8	-0.6	-0.8%
43.2%	68.3	67.8	-0.5	-0.7%
44.4%	68.1	67.7	-0.4	-0.5%
45.7%	67.7	67.6	-0.1	-0.2%
46.9%	67.5	67.4	-0.2	-0.2%
48.1%	67.4	67.3	-0.1	-0.2%
49.4%	67.4	67.1	-0.3	-0.4%
50.6%	67.3	67.1	-0.2	-0.3%
51.9%	67.1	67.1	0.0	0.0%
53.1%	67.1	66.9	-0.2	-0.2%
54.3%	66.8	66.7	0.0	-0.1%
55.6%	66.8	66.6	-0.2	-0.3%
56.8%	66.8	66.2	-0.5	-0.8%
58.0%	66.7	66.1	-0.6	-0.9%
59.3%	65.5	65.5	0.0	0.0%
60.5%	65.3	65.1	-0.2	-0.3%
61.7%	65.1	65.0	0.0	0.0%
63.0%	65.0	65.0	0.0	-0.1%
64.2%	64.9	64.9	0.0	0.0%
65.4%	64.9	64.9	0.0	0.0%
66.7%	64.8	64.8	-0.1	-0.1%
67.9%	64.8	64.6	-0.1	-0.2%
69.1%	64.6	64.6	0.0	0.0%
70.4%	64.6	64.6	0.0	0.0%
71.6%	64.2	64.3	0.0	0.0%
72.8%	64.2	64.2	0.0	0.0%
74.1%	64.2	64.2	0.0	0.0%
75.3%	64.2	64.0	-0.1	-0.2%
76.5%	64.0	64.0	-0.1	-0.1%
77.8%	64.0	63.8	-0.2	-0.3%
79.0%	63.8	63.6	-0.2	-0.3%
80.2%	63.6	63.6	0.0	-0.1%
81.5%	63.4	63.4	0.0	0.0%
82.7%	63.2	63.2	0.0	0.0%
84.0%	63.2	63.2	0.0	0.0%
85.2%	62.9	62.9	0.0	0.0%
86.4%	62.3	62.3	0.0	0.0%
87.7%	62.1	62.1	0.0	0.0%
88.9%	62.0	61.9	-0.1	-0.2%
90.1%	61.9	61.8	-0.1	-0.1%
91.4%	61.8	61.7	-0.2	-0.2%
92.6%	61.8	61.6	-0.2	-0.3%
93.8%	61.8	61.6	-0.2	-0.3%
95.1%	59.7	59.5	-0.2	-0.4%
96.3%	59.7	59.5	-0.2	-0.3%
97.5%	59.5	59.4	-0.1	-0.2%
98.8%	59.4	59.2	-0.1	-0.2%
100.0%	59.4	59.2	-0.1	-0.2%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	82.9	80.8	-2.1	-2.5%
1.2%	81.2	80.6	-0.6	-0.8%
2.5%	79.3	76.1	-3.2	-4.1%
3.7%	78.8	75.9	-2.9	-3.7%
4.9%	76.9	74.5	-2.4	-3.1%
6.2%	74.7	74.5	-0.2	-0.2%
7.4%	73.5	74.0	0.5	0.7%
8.6%	73.2	74.0	0.8	1.0%
9.9%	73.1	73.6	0.5	0.7%
11.1%	72.5	72.7	0.2	0.3%
12.3%	72.4	72.6	0.2	0.3%
13.6%	71.9	72.4	0.5	0.7%
14.8%	71.9	72.4	0.5	0.7%
16.0%	71.6	72.1	0.5	0.7%
17.3%	71.5	71.9	0.3	0.4%
18.5%	71.4	71.7	0.3	0.5%
19.8%	71.2	71.2	0.0	0.0%
21.0%	71.0	71.2	0.1	0.2%
22.2%	70.9	71.0	0.1	0.2%
23.5%	70.2	70.7	0.5	0.7%
24.7%	70.2	70.3	0.1	0.2%
25.9%	69.7	70.1	0.3	0.5%
27.2%	69.6	70.0	0.4	0.6%
28.4%	69.5	69.8	0.4	0.5%
29.6%	69.2	69.7	0.4	0.6%
30.9%	69.2	69.3	0.1	0.1%
32.1%	69.1	69.2	0.0	0.1%
33.3%	69.0	69.0	0.0	0.0%
34.6%	69.0	69.0	0.0	0.0%
35.8%	69.0	68.9	-0.1	-0.2%
37.0%	68.9	68.8	-0.1	-0.1%
38.3%	68.8	68.8	0.1	0.1%
39.5%	68.7	68.8	0.1	0.1%
40.7%	68.7	68.8	0.1	0.1%
42.0%	68.6	68.7	0.0	0.0%
43.2%	68.6	68.6	0.0	0.0%
44.4%	68.6	68.6	0.0	0.0%
45.7%	68.5	68.4	-0.1	-0.2%
46.9%	68.5	68.4	-0.1	-0.2%
48.1%	68.5	68.3	-0.1	-0.2%
49.4%	68.4	68.3	-0.1	-0.1%
50.6%	68.3	68.1	-0.3	-0.4%
51.9%	68.3	68.0	-0.3	-0.4%
53.1%	68.2	68.0	-0.3	-0.4%
54.3%	68.2	68.0	-0.2	-0.3%
55.6%	68.2	68.0	-0.2	-0.3%
56.8%	68.1	67.9	-0.2	-0.3%
58.0%	68.1	67.9	-0.3	-0.4%
59.3%	68.1	67.8	-0.3	-0.4%
60.5%	68.0	67.6	-0.4	-0.6%
61.7%	68.0	67.6	-0.4	-0.6%
63.0%	67.8	67.5	-0.3	-0.4%
64.2%	67.8	67.5	-0.3	-0.4%
65.4%	67.7	67.4	-0.3	-0.5%
66.7%	67.6	67.4	-0.3	-0.4%
67.9%	67.6	67.3	-0.3	-0.4%
69.1%	67.6	67.3	-0.3	-0.5%
70.4%	67.6	67.2	-0.4	-0.6%
71.6%	67.5	67.1	-0.4	-0.5%
72.8%	67.3	67.1	-0.2	-0.3%
74.1%	67.3	67.1	-0.3	-0.4%
75.3%	67.3	66.8	-0.5	-0.7%
76.5%	67.3	66.7	-0.6	-1.0%
77.8%	67.3	66.6	-0.7	-1.0%
79.0%	67.2	66.6	-0.7	-1.0%
80.2%	67.2	66.5	-0.8	-1.1%
81.5%	67.2	66.4	-0.8	-1.2%
82.7%	67.1	66.3	-0.8	-1.2%
84.0%	66.9	66.3	-0.7	-1.0%
85.2%	66.9	66.2	-0.7	-1.1%
86.4%	66.9	66.1	-0.8	-1.2%
87.7%	66.9	66.0	-0.8	-1.2%
88.9%	66.7	66.0	-0.7	-1.1%
90.1%	66.7	65.9	-0.7	-1.1%
91.4%	66.5	65.4	-1.1	-1.7%
92.6%	66.5	65.4	-1.1	-1.7%
93.8%	66.4	65.2	-1.2	-1.8%
95.1%	66.3	65.0	-1.3	-2.0%
96.3%	66.2	65.0	-1.2	-1.8%
97.5%	65.8	64.7	-1.0	-1.6%
98.8%	65.6	63.9	-1.7	-2.6%
100.0%	65.6	63.9	-1.7	-2.6%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	80.9	78.1	-2.8	-3.4%
1.2%	78.4	76.6	-1.8	-2.3%
2.5%	78.2	75.5	-2.7	-3.5%
3.7%	77.9	75.5	-2.4	-3.1%
4.9%	77.8	75.2	-2.6	-3.3%
6.2%	77.3	74.5	-2.8	-3.6%
7.4%	76.6	74.3	-2.3	-3.0%
8.6%	76.3	74.2	-2.2	-2.8%
9.9%	76.0	73.4	-2.6	-3.5%
11.1%	75.9	73.2	-2.6	-3.5%
12.3%	75.7	73.0	-2.7	-3.6%
13.6%	75.2	72.2	-2.9	-3.9%
14.8%	75.1	72.2	-2.9	-3.9%
16.0%	75.0	71.9	-3.1	-4.1%
17.3%	73.9	71.9	-2.0	-2.7%
18.5%	73.6	71.5	-2.1	-2.9%
19.8%	72.8	71.1	-1.7	-2.3%
21.0%	72.3	71.0	-1.3	-1.8%
22.2%	71.8	70.7	-1.1	-1.5%
23.5%	71.5	70.6	-0.9	-1.2%
24.7%	71.4	70.5	-0.8	-1.2%
25.9%	71.2	70.3	-0.9	-1.2%
27.2%	71.0	70.3	-0.7	-1.0%
28.4%	70.9	70.2	-0.7	-0.9%
29.6%	70.7	70.2	-0.5	-0.6%
30.9%	70.6	70.2	-0.5	-0.7%
32.1%	70.6	70.1	-0.5	-0.7%
33.3%	70.5	69.9	-0.7	-0.9%
34.6%	70.5	69.8	-0.7	-1.0%
35.8%	70.5	69.8	-0.7	-1.0%
37.0%	70.4	69.6	-0.8	-1.2%
38.3%	70.3	69.5	-0.9	-1.2%
39.5%	70.3	69.5	-0.8	-1.2%
40.7%	70.3	69.4	-0.9	-1.3%
42.0%	70.3	69.3	-1.0	-1.4%
43.2%	70.0	69.2	-0.7	-1.1%
44.4%	69.9	69.1	-0.8	-1.2%
45.7%	69.9	68.9	-0.9	-1.4%
46.9%	69.8	68.8	-1.0	-1.4%
48.1%	69.6	68.8	-0.8	-1.2%
49.4%	69.5	68.7	-0.8	-1.2%
50.6%	69.5	68.4	-1.1	-1.6%
51.9%	69.5	68.3	-1.2	-1.7%
53.1%	69.4	68.3	-1.2	-1.7%
54.3%	69.4	68.2	-1.2	-1.8%
55.6%	69.4	68.2	-1.2	-1.7%
56.8%	69.3	67.9	-1.3	-1.9%
58.0%	69.2	67.9	-1.3	-1.9%
59.3%	69.2	67.8	-1.4	-2.0%
60.5%	69.1	67.8	-1.3	-1.9%
61.7%	68.9	67.7	-1.1	-1.6%
63.0%	68.8	67.7	-1.1	-1.6%
64.2%	68.8	67.7	-1.1	-1.6%
65.4%	68.8	67.6	-1.2	-1.7%
66.7%	68.7	67.5	-1.2	-1.8%
67.9%	68.7	67.4	-1.3	-1.9%
69.1%	68.6	67.3	-1.2	-1.8%
70.4%	68.4	67.1	-1.3	-1.9%
71.6%	68.2	66.8	-1.3	-2.0%
72.8%	68.2	66.7	-1.4	-2.1%
74.1%	67.6	66.7	-0.9	-1.4%
75.3%	67.5	66.6	-0.9	-1.4%
76.5%	67.4	66.6	-0.8	-1.2%
77.8%	66.9	65.7	-1.3	-1.9%
79.0%	66.7	65.6	-1.1	-1.7%
80.2%	66.6	65.2	-1.3	-2.0%
81.5%	65.8	65.0	-0.8	-1.2%
82.7%	65.8	65.0	-0.7	-1.1%
84.0%	65.7	64.8	-0.8	-1.3%
85.2%	65.5	64.8	-0.7	-1.1%
86.4%	65.0	64.7	-0.3	-0.5%
87.7%	65.0	64.6	-0.4	-0.6%
88.9%	64.9	64.4	-0.5	-0.8%
90.1%	64.8	64.4	-0.5	-0.8%
91.4%	64.8	64.2	-0.6	-1.0%
92.6%	64.8	64.1	-0.7	-1.0%
93.8%	64.6	64.0	-0.6	-1.0%
95.1%	64.3	63.8	-0.5	-0.8%
96.3%	64.2	63.4	-0.8	-1.3%
97.5%	64.2	63.4	-0.8	-1.2%
98.8%	63.7	62.9	-0.8	-1.3%
100.0%	63.7	62.9	-0.8	-1.3%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	75.9	75.8	-0.1	-0.1%
1.2%	74.9	73.2	-1.7	-2.2%
2.5%	74.6	72.5	-2.1	-2.8%
3.7%	74.6	72.5	-2.1	-2.8%
4.9%	73.2	72.0	-1.1	-1.5%
6.2%	73.1	72.0	-1.1	-1.5%
7.4%	72.9	71.9	-1.0	-1.4%
8.6%	72.9	71.8	-1.1	-1.5%
9.9%	72.6	71.5	-1.1	-1.5%
11.1%	72.4	71.2	-1.3	-1.7%
12.3%	72.4	71.0	-1.4	-2.0%
13.6%	72.2	70.9	-1.3	-1.8%
14.8%	71.9	70.7	-1.2	-1.7%
16.0%	71.7	70.5	-1.2	-1.7%
17.3%	71.5	70.4	-1.0	-1.5%
18.5%	71.4	70.1	-1.3	-1.9%
19.8%	71.3	69.7	-1.6	-2.3%
21.0%	70.8	69.6	-1.3	-1.8%
22.2%	70.3	69.5	-0.8	-1.1%
23.5%	70.3	69.5	-0.8	-1.1%
24.7%	70.3	69.4	-0.9	-1.2%
25.9%	70.2	69.2	-1.0	-1.4%
27.2%	69.8	68.8	-1.0	-1.5%
28.4%	69.8	68.7	-1.1	-1.5%
29.6%	69.6	68.7	-0.9	-1.3%
30.9%	69.3	68.5	-0.7	-1.0%
32.1%	69.1	68.4	-0.7	-1.0%
33.3%	69.0	68.3	-0.7	-1.0%
34.6%	68.9	68.1	-0.8	-1.2%
35.8%	68.8	67.9	-0.9	-1.3%
37.0%	68.8	67.9	-0.9	-1.2%
38.3%	68.6	67.6	-1.0	-1.4%
39.5%	68.4	67.6	-0.9	-1.3%
40.7%	68.4	67.6	-0.9	-1.3%
42.0%	68.4	67.5	-0.8	-1.2%
43.2%	68.2	67.5	-0.7	-1.0%
44.4%	68.1	67.5	-0.6	-0.9%
45.7%	68.0	67.4	-0.7	-1.0%
46.9%	67.9	67.3	-0.7	-1.0%
48.1%	67.8	67.2	-0.6	-0.9%
49.4%	67.7	67.1	-0.7	-1.0%
50.6%	67.7	67.1	-0.6	-0.9%
51.9%	67.6	66.9	-0.7	-1.0%
53.1%	67.6	66.9	-0.7	-1.0%
54.3%	67.5	66.8	-0.8	-1.1%
55.6%	67.2	66.7	-0.5	-0.7%
56.8%	67.2	66.7	-0.5	-0.7%
58.0%	67.2	66.7	-0.5	-0.7%
59.3%	66.8	66.6	-0.1	-0.2%
60.5%	66.8	66.6	-0.1	-0.2%
61.7%	66.6	66.5	-0.1	-0.1%
63.0%	66.1	66.5	0.3	0.5%
64.2%	66.1	66.2	0.1	0.1%
65.4%	66.0	66.1	0.1	0.1%
66.7%	66.0	66.0	0.1	0.1%
67.9%	66.0	66.0	0.1	0.1%
69.1%	65.8	65.9	0.1	0.1%
70.4%	65.3	65.9	0.6	0.9%
71.6%	65.2	65.9	0.6	1.0%
72.8%	65.2	65.5	0.3	0.5%
74.1%	65.1	65.4	0.2	0.3%
75.3%	65.0	65.2	0.2	0.3%
76.5%	64.9	65.0	0.0	0.0%
77.8%	64.8	64.8	0.1	0.1%
79.0%	64.7	64.8	0.1	0.2%
80.2%	64.6	64.7	0.1	0.1%
81.5%	64.5	64.5	0.0	-0.1%
82.7%	64.5	64.5	0.0	-0.1%
84.0%	64.4	64.5	0.0	0.0%
85.2%	64.3	64.4	0.1	0.2%
86.4%	64.2	64.3	0.1	0.2%
87.7%	64.2	64.2	0.0	0.0%
88.9%	64.2	64.2	0.0	0.0%
90.1%	64.1	64.2	0.1	0.1%
91.4%	63.8	64.1	0.3	0.5%
92.6%	63.8	64.0	0.2	0.4%
93.8%	63.3	64.0	0.6	1.0%
95.1%	63.2	63.4	0.2	0.3%
96.3%	63.1	63.1	0.1	0.1%
97.5%	63.0	62.9	-0.2	-0.3%
98.8%	62.9	62.8	0.0	-0.1%
100.0%	62.9	62.8	0.0	-0.1%

Table SQ11-1b

American River at the Mouth, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.3	78.4	0.1	0.1%
1.2%	77.2	75.4	-1.9	-2.4%
2.5%	75.4	74.5	-0.9	-1.2%
3.7%	75.0	74.1	-0.9	-1.2%
4.9%	74.6	73.9	-0.7	-1.0%
6.2%	74.3	73.1	-1.2	-1.6%
7.4%	74.0	72.7	-1.3	-1.7%
8.6%	73.8	72.7	-1.1	-1.5%
9.9%	73.6	72.6	-1.0	-1.4%
11.1%	73.5	72.3	-1.2	-1.7%
12.3%	73.5	72.1	-1.4	-1.9%
13.6%	72.9	71.5	-1.3	-1.8%
14.8%	72.8	71.4	-1.4	-1.9%
16.0%	72.4	71.4	-1.0	-1.3%
17.3%	72.3	71.3	-1.0	-1.4%
18.5%	72.1	71.3	-0.8	-1.1%
19.8%	72.0	71.0	-1.0	-1.4%
21.0%	71.9	71.0	-0.9	-1.3%
22.2%	71.7	70.5	-1.3	-1.7%
23.5%	71.6	70.0	-1.6	-2.2%
24.7%	70.7	69.9	-0.8	-1.1%
25.9%	70.6	69.7	-0.9	-1.2%
27.2%	70.1	69.7	-0.4	-0.6%
28.4%	69.9	69.6	-0.3	-0.4%
29.6%	69.8	69.5	-0.3	-0.4%
30.9%	69.8	69.3	-0.4	-0.6%
32.1%	69.7	69.3	-0.4	-0.6%
33.3%	69.5	69.2	-0.3	-0.5%
34.6%	69.1	69.0	-0.1	-0.1%
35.8%	69.0	68.9	-0.1	-0.2%
37.0%	69.0	68.7	-0.3	-0.5%
38.3%	69.0	68.6	-0.4	-0.5%
39.5%	68.9	68.4	-0.5	-0.7%
40.7%	68.9	68.2	-0.7	-1.0%
42.0%	68.7	68.1	-0.6	-0.9%
43.2%	68.5	68.0	-0.6	-0.8%
44.4%	68.4	67.9	-0.6	-0.9%
45.7%	68.2	67.7	-0.5	-0.7%
46.9%	68.2	67.6	-0.5	-0.8%
48.1%	68.1	67.6	-0.6	-0.9%
49.4%	68.1	67.5	-0.5	-0.7%
50.6%	67.7	67.5	-0.2	-0.3%
51.9%	67.6	67.4	-0.3	-0.4%
53.1%	67.6	67.3	-0.3	-0.4%
54.3%	67.5	67.3	-0.3	-0.4%
55.6%	67.5	67.2	-0.3	-0.4%
56.8%	67.4	67.2	-0.2	-0.4%
58.0%	67.4	67.2	-0.2	-0.3%
59.3%	67.3	67.2	-0.1	-0.2%
60.5%	67.3	66.7	-0.6	-0.8%
61.7%	67.1	66.6	-0.6	-0.8%
63.0%	67.1	66.5	-0.6	-0.9%
64.2%	67.1	66.4	-0.6	-0.9%
65.4%	67.0	66.3	-0.7	-1.0%
66.7%	66.9	66.2	-0.7	-1.0%
67.9%	66.8	66.1	-0.7	-1.1%
69.1%	66.8	66.1	-0.8	-1.1%
70.4%	66.8	66.0	-0.8	-1.3%
71.6%	66.6	65.9	-0.7	-1.1%
72.8%	66.6	65.9	-0.7	-1.0%
74.1%	66.6	65.9	-0.7	-1.0%
75.3%	66.5	65.8	-0.7	-1.0%
76.5%	66.3	65.8	-0.5	-0.7%
77.8%	66.0	65.8	-0.2	-0.3%
79.0%	65.9	65.7	-0.2	-0.4%
80.2%	65.9	65.5	-0.4	-0.6%
81.5%	65.7	65.3	-0.4	-0.6%
82.7%	65.6	65.3	-0.3	-0.5%
84.0%	65.6	65.3	-0.3	-0.5%
85.2%	65.5	65.2	-0.3	-0.5%
86.4%	64.9	65.0	0.1	0.2%
87.7%	64.8	64.8	0.1	0.1%
88.9%	64.7	64.3	-0.4	-0.6%
90.1%	64.6	64.2	-0.4	-0.7%
91.4%	64.5	64.1	-0.4	-0.7%
92.6%	64.5	64.1	-0.4	-0.6%
93.8%	64.5	63.9	-0.6	-0.9%
95.1%	63.9	63.8	-0.1	-0.1%
96.3%	63.5	63.5	0.0	0.0%
97.5%	63.4	62.7	-0.7	-1.1%
98.8%	63.2	62.6	-0.6	-0.9%
100.0%	62.7	62.1	-0.6	-1.0%

July to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.1	78.2	0.1	0.1%
1.2%	78.0	75.5	-2.5	-3.2%
2.5%	76.1	74.9	-1.2	-1.6%
3.7%	75.2	73.9	-1.3	-1.7%
4.9%	75.0	73.8	-1.1	-1.5%
6.2%	74.7	73.6	-1.0	-1.4%
7.4%	74.2	73.5	-0.7	-0.9%
8.6%	74.1	73.4	-0.6	-0.9%
9.9%	74.1	72.6	-1.4	-1.9%
11.1%	73.6	72.4	-1.2	-1.6%
12.3%	73.3	72.2	-1.1	-1.5%
13.6%	73.3	71.7	-1.6	-2.1%
14.8%	73.1	71.7	-1.5	-2.0%
16.0%	73.0	71.4	-1.7	-2.3%
17.3%	72.6	71.3	-1.3	-1.8%
18.5%	72.5	71.1	-1.4	-1.9%
19.8%	72.4	71.0	-1.4	-2.0%
21.0%	72.4	70.5	-1.8	-2.5%
22.2%	71.4	70.1	-1.2	-1.7%
23.5%	70.8	70.1	-0.7	-1.0%
24.7%	70.8	69.8	-1.0	-1.4%
25.9%	70.4	69.7	-0.7	-1.0%
27.2%	70.2	69.7	-0.5	-0.8%
28.4%	69.9	69.6	-0.3	-0.4%
29.6%	69.8	69.6	-0.2	-0.3%
30.9%	69.5	69.5	0.0	0.0%
32.1%	69.5	69.5	-0.1	-0.1%
33.3%	69.4	69.3	-0.2	-0.2%
34.6%	69.4	68.9	-0.5	-0.7%
35.8%	69.2	68.8	-0.4	-0.6%
37.0%	69.1	68.8	-0.3	-0.5%
38.3%	69.1	68.8	-0.3	-0.5%
39.5%	69.0	68.5	-0.5	-0.7%
40.7%	69.0	68.3	-0.7	-1.0%
42.0%	68.8	68.2	-0.6	-0.8%
43.2%	68.8	67.8	-0.9	-1.4%
44.4%	68.5	67.8	-0.7	-1.0%
45.7%	68.4	67.8	-0.6	-0.9%
46.9%	68.3	67.8	-0.6	-0.9%
48.1%	68.3	67.5	-0.8	-1.2%
49.4%	68.2	67.5	-0.7	-1.1%
50.6%	68.1	67.4	-0.7	-1.0%
51.9%	68.0	67.3	-0.7	-1.0%
53.1%	67.9	67.3	-0.6	-0.9%
54.3%	67.9	67.3	-0.6	-0.9%
55.6%	67.9	67.3	-0.6	-0.8%
56.8%	67.8	67.3	-0.5	-0.8%
58.0%	67.8	67.2	-0.7	-1.0%
59.3%	67.8	67.1	-0.8	-1.1%
60.5%	67.8	67.0	-0.8	-1.1%
61.7%	67.6	66.9	-0.7	-1.1%
63.0%	67.6	66.9	-0.7	-1.1%
64.2%	67.5	66.9	-0.6	-0.9%
65.4%	67.5	66.9	-0.6	-0.9%
66.7%	67.4	66.7	-0.7	-1.1%
67.9%	67.4	66.7	-0.7	-1.1%
69.1%	67.3	66.6	-0.7	-1.0%
70.4%	67.3	66.6	-0.7	-1.1%
71.6%	67.3	66.5	-0.7	-1.1%
72.8%	67.1	66.5	-0.6	-0.9%
74.1%	67.1	66.4	-0.6	-0.9%
75.3%	67.0	66.4	-0.6	-0.9%
76.5%	66.9	66.4	-0.5	-0.8%
77.8%	66.8	66.3	-0.4	-0.7%
79.0%	66.5	66.2	-0.3	-0.5%
80.2%	66.5	66.1	-0.4	-0.7%
81.5%	66.4	66.0	-0.3	-0.5%
82.7%	66.3	66.0	-0.4	-0.6%
84.0%	66.2	65.9	-0.2	-0.4%
85.2%	66.1	65.9	-0.2	-0.3%
86.4%	65.9	65.8	0.0	0.0%
87.7%	65.7	65.6	-0.1	-0.1%
88.9%	65.6	65.4	-0.2	-0.3%
90.1%	65.5	65.0	-0.5	-0.8%
91.4%	65.4	64.9	-0.5	-0.7%
92.6%	65.4	64.9	-0.5	-0.8%
93.8%	65.4	64.8	-0.5	-0.8%
95.1%	65.3	64.7	-0.6	-0.9%
96.3%	64.8	64.5	-0.3	-0.5%
97.5%	64.8	63.9	-0.9	-1.4%
98.8%	64.3	63.6	-0.7	-1.1%
100.0%	63.8	63.0	-0.8	-1.2%

August to September				
Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	77.8	76.9	-0.8	-1.1%
1.2%	76.6	74.6	-2.0	-2.6%
2.5%	76.5	74.3	-2.2	-2.8%
3.7%	75.5	73.6	-1.9	-2.5%
4.9%	75.1	73.2	-1.9	-2.6%
6.2%	74.6	73.0	-1.6	-2.1%
7.4%	74.6	73.0	-1.6	-2.1%
8.6%	74.4	72.9	-1.5	-2.0%
9.9%	74.3	72.5	-1.8	-2.4%
11.1%	74.2	72.4	-1.8	-2.4%
12.3%	74.1	72.3	-1.8	-2.4%
13.6%	73.8	71.6	-2.3	-3.1%
14.8%	73.4	71.3	-2.1	-2.9%
16.0%	73.4	71.1	-2.3	-3.1%
17.3%	72.7	71.0	-1.7	-2.3%
18.5%	72.2	70.8	-1.4	-1.9%
19.8%	72.1	70.7	-1.4	-1.9%
21.0%	72.1	70.2	-1.9	-2.6%
22.2%	71.2	70.1	-1.1	-1.5%
23.5%	71.2	69.9	-1.2	-1.7%
24.7%	71.1	69.9	-1.2	-1.7%
25.9%	71.0	69.9	-1.2	-1.7%
27.2%	70.7	69.7	-1.0	-1.4%
28.4%	70.3	69.5	-0.7	-1.1%
29.6%	70.1	69.5	-0.6	-0.9%
30.9%	70.0	69.3	-0.7	-1.0%
32.1%	69.7	69.2	-0.5	-0.7%
33.3%	69.7	69.0	-0.6	-0.9%
34.6%	69.5	68.8	-0.7	-1.0%
35.8%	69.5	68.8	-0.7	-1.0%
37.0%	69.4	68.7	-0.8	-1.1%
38.3%	69.4	68.7	-0.7	-1.0%
39.5%	69.3	68.7	-0.7	-1.0%
40.7%	69.3	68.4	-0.9	-1.3%
42.0%	69.2	68.3	-0.9	-1.3%
43.2%	68.8	68.3	-0.5	-0.8%
44.4%	68.8	68.0	-0.8	-1.1%
45.7%	68.7	68.0	-0.7	-1.0%
46.9%	68.6	67.7	-1.0	-1.4%
48.1%	68.6	67.6	-1.0	-1.4%
49.4%	68.6	67.5	-1.0	-1.5%
50.6%	68.6	67.5	-1.1	-1.6%
51.9%	68.5	67.5	-1.1	-1.6%
53.1%	68.5	67.4	-1.0	-1.5%
54.3%	68.3	67.4	-0.8	-1.2%
55.6%	68.1	67.4	-0.7	-1.1%
56.8%	68.1	67.2	-0.9	-1.3%
58.0%	68.0	67.2	-0.8	-1.2%
59.3%	67.8	67.1	-0.6	-1.0%
60.5%	67.8	67.1	-0.7	-1.0%
61.7%	67.7	67.0	-0.6	-0.9%
63.0%	67.6	67.0	-0.6	-0.9%
64.2%	67.6	66.8	-0.8	-1.2%
65.4%	67.6	66.7	-0.8	-1.2%
66.7%	67.3	66.5	-0.8	-1.2%
67.9%	67.2	66.3	-0.8	-1.2%
69.1%	67.0	66.3	-0.7	-1.1%
70.4%	67.0	66.2	-0.8	-1.1%
71.6%	66.7	66.1	-0.6	-0.9%
72.8%	66.6	66.0	-0.6	-0.9%
74.1%	66.5	66.0	-0.6	-0.9%
75.3%	66.4	66.0	-0.5	-0.7%
76.5%	66.3	65.8	-0.5	-0.8%
77.8%	66.1	65.7	-0.4	-0.6%
79.0%	65.9	65.6	-0.3	-0.4%
80.2%	65.4	65.4	0.0	0.0%
81.5%	65.3	65.4	0.0	0.0%
82.7%	65.2	65.3	0.1	0.2%
84.0%	65.2	65.0	-0.2	-0.3%
85.2%	65.1	64.9	-0.2	-0.4%
86.4%	65.0	64.8	-0.2	-0.4%
87.7%	64.6	64.7	0.1	0.2%
88.9%	64.5	64.7	0.2	0.2%
90.1%	64.5	64.6	0.2	0.3%
91.4%	64.5	64.3	-0.2	-0.3%
92.6%	64.4	64.0	-0.4	-0.6%
93.8%	64.3	63.9	-0.4	-0.6%
95.1%	64.0	63.7	-0.3	-0.5%
96.3%	64.0	63.5	-0.4	-0.7%
97.5%	63.9	63.4	-0.5	-0.7%
98.8%	63.9	63.2	-0.7	-1.1%
100.0%	63.3	62.9	-0.4	-0.7%

Figure SQ12-1b
Trinity River below Lewiston Dam, Monthly Temperature
Probability of Exceedance

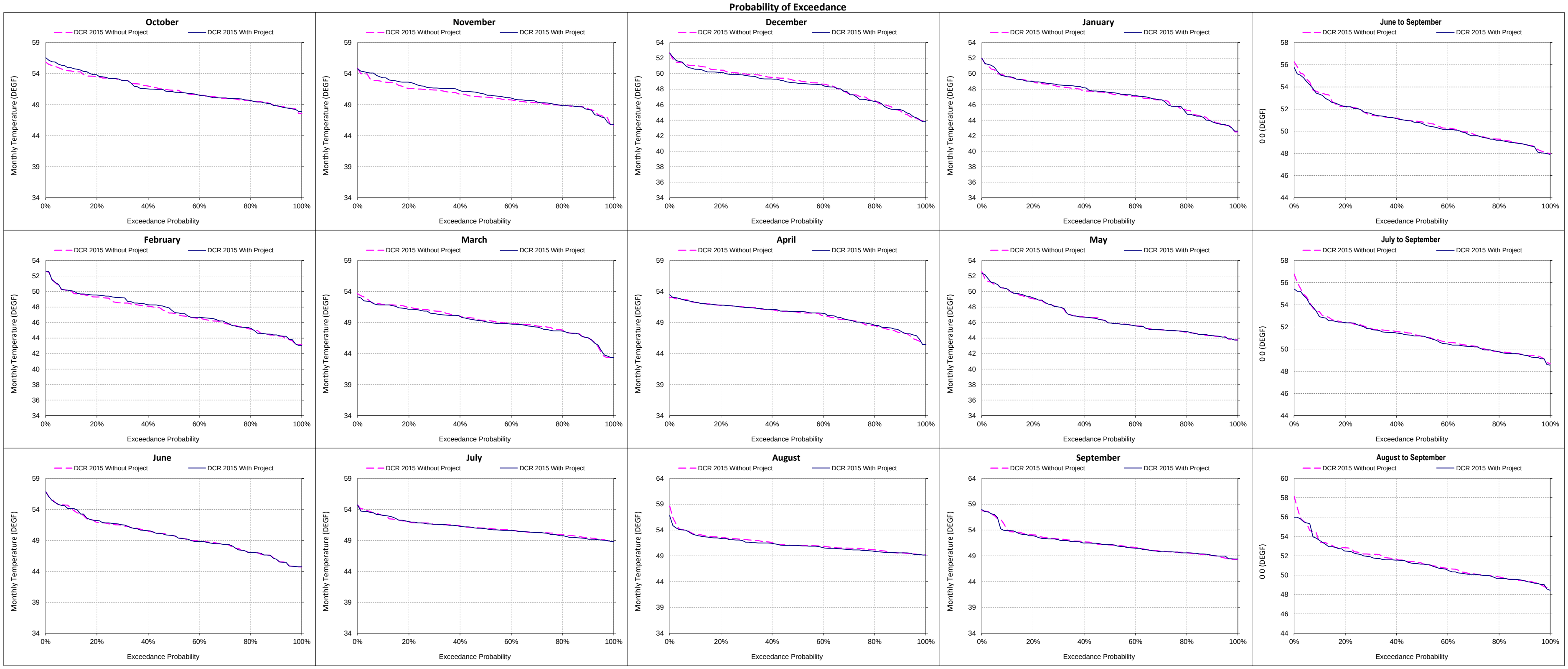


Table SQ12-1b
Trinity River below Lewiston Dam, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.9	56.6	0.7	1.3%
1.2%	55.5	56.2	0.7	1.2%
2.5%	55.3	55.9	0.6	1.0%
3.7%	55.2	55.9	0.7	1.3%
4.9%	55.0	55.5	0.6	1.0%
6.2%	54.8	55.4	0.6	1.1%
7.4%	54.6	55.3	0.7	1.3%
8.6%	54.5	55.0	0.5	0.9%
9.9%	54.4	54.9	0.5	0.9%
11.1%	54.3	54.8	0.5	0.9%
12.3%	54.3	54.7	0.4	0.8%
13.6%	54.3	54.6	0.3	0.5%
14.8%	53.8	54.4	0.5	1.0%
16.0%	53.6	54.3	0.7	1.3%
17.3%	53.6	54.0	0.4	0.8%
18.5%	53.6	53.8	0.3	0.5%
19.8%	53.5	53.8	0.3	0.6%
21.0%	53.4	53.5	0.1	0.2%
22.2%	53.3	53.5	0.2	0.3%
23.5%	53.3	53.4	0.1	0.2%
24.7%	53.3	53.2	0.0	-0.1%
25.9%	53.2	53.2	0.0	-0.1%
27.2%	53.2	53.2	0.0	0.0%
28.4%	53.0	53.1	0.1	0.2%
29.6%	52.9	52.9	0.0	0.0%
30.9%	52.9	52.9	0.0	0.0%
32.1%	52.9	52.8	0.0	0.0%
33.3%	52.5	52.5	0.0	0.0%
34.6%	52.4	51.9	-0.4	-0.8%
35.8%	52.4	51.9	-0.5	-0.9%
37.0%	52.3	51.6	-0.7	-1.3%
38.3%	52.1	51.6	-0.5	-1.0%
39.5%	52.0	51.5	-0.5	-1.0%
40.7%	51.9	51.5	-0.4	-0.8%
42.0%	51.8	51.5	-0.3	-0.6%
43.2%	51.7	51.5	-0.2	-0.5%
44.4%	51.6	51.5	-0.1	-0.2%
45.7%	51.5	51.5	-0.1	-0.2%
46.9%	51.5	51.2	-0.3	-0.5%
48.1%	51.4	51.1	-0.2	-0.4%
49.4%	51.3	51.1	-0.2	-0.4%
50.6%	51.3	51.0	-0.3	-0.6%
51.9%	51.3	51.0	-0.3	-0.6%
53.1%	51.0	50.9	-0.1	-0.2%
54.3%	50.9	50.9	0.1	0.1%
55.6%	50.7	50.8	0.1	0.2%
56.8%	50.7	50.8	0.1	0.2%
58.0%	50.7	50.8	0.1	0.2%
59.3%	50.6	50.6	0.0	0.1%
60.5%	50.5	50.5	0.0	0.0%
61.7%	50.5	50.4	-0.1	-0.1%
63.0%	50.3	50.4	0.1	0.1%
64.2%	50.3	50.3	-0.1	-0.1%
65.4%	50.3	50.1	-0.2	-0.3%
66.7%	50.2	50.1	-0.1	-0.2%
67.9%	50.1	50.1	0.0	0.1%
69.1%	50.0	50.1	0.0	0.1%
70.4%	50.0	50.1	0.1	0.1%
71.6%	50.0	50.0	0.0	0.1%
72.8%	50.0	50.0	0.0	0.1%
74.1%	49.9	50.0	0.1	0.1%
75.3%	49.8	50.0	0.2	0.3%
76.5%	49.8	49.9	0.1	0.3%
77.8%	49.7	49.8	0.1	0.2%
79.0%	49.6	49.7	0.1	0.2%
80.2%	49.6	49.7	0.1	0.1%
81.5%	49.5	49.5	0.0	-0.1%
82.7%	49.5	49.5	0.0	0.0%
84.0%	49.5	49.4	0.0	0.0%
85.2%	49.4	49.3	-0.1	-0.2%
86.4%	49.3	49.2	-0.1	-0.2%
87.7%	49.2	49.2	0.0	0.0%
88.9%	49.0	48.9	-0.1	-0.2%
90.1%	48.8	48.8	0.0	0.1%
91.4%	48.7	48.7	0.0	0.1%
92.6%	48.7	48.6	-0.1	-0.3%
93.8%	48.6	48.5	-0.1	-0.2%
95.1%	48.4	48.4	0.0	0.0%
96.3%	48.4	48.3	-0.1	-0.1%
97.5%	48.3	48.2	-0.1	-0.2%
98.8%	47.6	47.9	0.3	0.7%
100.0%	47.6	47.9	0.0	0.7%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.9	54.8	-0.1	-0.2%
1.2%	54.0	54.4	0.4	0.7%
2.5%	54.0	54.3	0.4	0.7%
3.7%	54.0	54.2	0.2	0.5%
4.9%	53.1	54.1	1.0	1.9%
6.2%	52.9	54.1	1.2	2.2%
7.4%	52.9	53.7	0.8	1.5%
8.6%	52.8	53.5	0.7	1.3%
9.9%	52.7	53.3	0.6	1.2%
11.1%	52.6	53.3	0.7	1.3%
12.3%	52.6	53.0	0.4	0.8%
13.6%	52.6	52.9	0.3	0.7%
14.8%	52.5	52.9	0.4	0.8%
16.0%	52.1	52.7	0.6	1.1%
17.3%	52.0	52.6	0.7	1.3%
18.5%	51.7	52.6	0.9	1.7%
19.8%	51.6	52.6	1.0	1.9%
21.0%	51.6	52.6	1.0	1.9%
22.2%	51.6	52.4	0.8	1.6%
23.5%	51.5	52.2	0.7	1.3%
24.7%	51.5	52.0	0.5	1.0%
25.9%	51.4	52.0	0.6	1.1%
27.2%	51.4	51.8	0.3	0.6%
28.4%	51.4	51.7	0.3	0.6%
29.6%	51.4	51.7	0.3	0.6%
30.9%	51.4	51.7	0.3	0.6%
32.1%	51.3	51.7	0.4	0.7%
33.3%	51.2	51.6	0.4	0.8%
34.6%	51.1	51.6	0.5	1.0%
35.8%	51.0	51.6	0.6	1.1%
37.0%	50.9	51.6	0.6	1.2%
38.3%	50.9	51.6	0.6	1.2%
39.5%	50.7	51.3	0.6	1.2%
40.7%	50.7	51.2	0.5	0.9%
42.0%	50.7	51.2	0.5	1.0%
43.2%	50.4	51.1	0.7	1.3%
44.4%	50.4	51.1	0.7	1.4%
45.7%	50.3	51.0	0.7	1.4%
46.9%	50.3	50.9	0.6	1.3%
48.1%	50.2	50.8	0.6	1.1%
49.4%	50.2	50.7	0.5	1.0%
50.6%	50.2	50.5	0.3	0.7%
51.9%	50.2	50.5	0.4	0.7%
53.1%	50.1	50.4	0.4	0.7%
54.3%	50.0	50.4	0.4	0.8%
55.6%	50.0	50.3	0.4	0.7%
56.8%	49.8	50.2	0.4	0.8%
58.0%	49.8	50.1	0.3	0.6%
59.3%	49.8	50.1	0.3	0.6%
60.5%	49.7	50.0	0.2	0.5%
61.7%	49.6	49.8	0.2	0.4%
63.0%	49.5	49.8	0.3	0.6%
64.2%	49.5	49.8	0.3	0.6%
65.4%	49.4	49.7	0.3	0.6%
66.7%	49.4	49.7	0.3	0.7%
67.9%	49.3	49.7	0.3	0.7%
69.1%	49.3	49.6	0.3	0.6%
70.4%	49.3	49.4	0.1	0.3%
71.6%	49.2	49.3	0.1	0.2%
72.8%	49.1	49.3	0.2	0.4%
74.1%	49.1	49.3	0.2	0.4%
75.3%	49.1	49.2	0.1	0.2%
76.5%	49.0	49.1	0.1	0.3%
77.8%	49.0	49.0	0.0	0.0%
79.0%	48.9	48.9	0.0	0.0%
80.2%	48.9	48.9	0.0	0.0%
81.5%	48.9	48.8	0.0	0.0%
82.7%	48.8	48.8	0.0	0.0%
84.0%	48.7	48.8	0.1	0.1%
85.2%	48.7	48.7	0.0	-0.1%
86.4%	48.7	48.7	-0.1	-0.1%
87.7%	48.6	48.6	0.0	0.0%
88.9%	48.6	48.3	-0.3	-0.6%
90.1%	48.3	48.2	0.0	-0.1%
91.4%	48.2	48.1	-0.1	-0.2%
92.6%	48.0	47.4	-0.6	-1.2%
93.8%	47.4	47.3	-0.1	-0.2%
95.1%	47.3	47.0	-0.3	-0.6%
96.3%	47.0	46.9	-0.1	-0.2%
97.5%	46.9	46.2	-0.7	-1.4%
98.8%	45.7	45.8	0.1	0.2%
100.0%	45.7	45.8	0.1	0.2%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.7	52.7	0.0	0.0%
1.2%	51.9	52.1	0.3	0.5%
2.5%	51.5	51.7	0.2	0.4%
3.7%	51.4	51.6	0.1	0.3%
4.9%	51.4	51.5	0.1	0.2%
6.2%	51.2	51.0	-0.2	-0.4%
7.4%	51.1	50.8	-0.3	-0.6%
8.6%	51.1	50.7	-0.4	-0.7%
9.9%	51.0	50.6	-0.5	-0.9%
11.1%	51.0	50.6	-0.4	-0.9%
12.3%	50.9	50.5	-0.4	-0.8%
13.6%	50.9	50.4	-0.5	-1.0%
14.8%	50.8	50.2	-0.6	-1.2%
16.0%	50.6	50.2	-0.3	-0.7%
17.3%	50.5	50.2	-0.3	-0.6%
18.5%	50.5	50.2	-0.3	-0.6%
19.8%	50.5	50.2	-0.3	-0.6%
21.0%	50.4	50.1	-0.3	-0.7%
22.2%	50.2	50.0	-0.3	-0.5%
23.5%	50.2	49.9	-0.3	-0.5%
24.7%	50.1	49.9	-0.2	-0.5%
25.9%	50.1	49.9	-0.2	-0.4%
27.2%	50.1	49.9	-0.2	-0.4%
28.4%	50.0	49.9	-0.1	-0.3%
29.6%	50.0	49.8	-0.2	-0.4%
30.9%	49.9	49.7	-0.2	-0.4%
32.1%	49.9	49.7	-0.2	-0.4%
33.3%	49.9	49.6	-0.2	-0.4%
34.6%	49.8	49.4	-0.4	-0.8%
35.8%	49.7	49.4	-0.4	-0.7%
37.0%	49.7	49.3	-0.4	-0.8%
38.3%	49.6	49.3	-0.2	-0.5%
39.5%	49.5	49.3	-0.2	-0.4%
40.7%	49.5	49.3	-0.2	-0.4%
42.0%	49.5	49.3	-0.2	-0.4%
43.2%	49.4	49.1	-0.3	-0.6%
44.4%	49.4	49.1	-0.3	-0.6%
45.7%	49.4	49.0	-0.4	-0.8%
46.9%	49.3	48.9	-0.4	-0.8%
48.1%	49.2	48.8	-0.3	-0.7%
49.4%	49.1	48.8	-0.3	-0.6%
50.6%	49.1	48.7	-0.4	-0.8%
51.9%	49.0	48.7	-0.3	-0.5%
53.1%	48.9	48.7	-0.3	-0.5%
54.3%	48.9	48.7	-0.2	-0.5%
55.6%	48.8	48.6	-0.2	-0.4%
56.8%	48.8	48.6	-0.2	-0.4%
58.0%	48.8	48.6	-0.2	-0.5%
59.3%	48.7	48.6	-0.1	-0.2%
60.5%	48.6	48.4	-0.3	-0.6%
61.7%	48.5	48.3	-0.2	-0.4%
63.0%	48.5	48.3	-0.2	-0.4%
64.2%	48.3	48.3	0.0	-0.1%
65.4%	48.1	48.1	0.0	-0.1%
66.7%	47.9	48.1	0.1	0.3%
67.9%	47.8	47.7	0.0	-0.1%
69.1%	47.5	47.7	0.2	0.4%
70.4%	47.4	47.3	-0.1	-0.3%
71.6%	47.3	47.3	0.0	0.1%
72.8%	47.3	47.1	-0.2	-0.5%
74.1%	47.1	46.7	-0.4	-0.8%
75.3%	47.1	46.7	-0.3	-0.7%
76.5%	47.0	46.7	-0.3	-0.6%
77.8%	46.6	46.5	-0.1	-0.2%
79.0%	46.5	46.5	0.0	-0.1%
80.2%	46.5	46.4	-0.1	-0.2%
81.5%	46.2	46.4	0.2	0.3%
82.7%	46.1	46.1	0.0	0.1%
84.0%	46.0	45.7	-0.2	-0.5%
85.2%	45.9	45.6	-0.3	-0.7%
86.4%	45.7	45.4	-0.3	-0.7%
87.7%	45.4	45.4	0.0	0.0%
88.9%	45.3	45.4	0.0	0.1%
90.1%	45.2	45.4	0.2	0.4%
91.4%	44.8	45.2	0.4	0.9%
92.6%	44.7	44.9	0.2	0.4%
93.8%	44.5	44.8	0.3	0.8%
95.1%	44.3	44.5	0.2	0.3%
96.3%	44.3	44.3	0.1	0.1%
97.5%	44.0	44.1	0.0	0.1%
98.8%	43.9	43.8	-0.1	-0.2%
100.0%	43.9	43.8	-0.1	-0.2%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.0	52.0	0.0	0.0%
1.2%	51.3	51.3	0.0	0.0%
2.5%	51.0	51.2	0.2	0.4%
3.7%	50.6	51.1	0.5	0.9%
4.9%	50.5	50.8	0.3	0.6%
6.2%	50.0	50.3	0.3	0.6%
7.4%	49.9	49.8	-0.1	-0.3%
8.6%	49.8	49.7	-0.1	-0.2%
9.9%	49.6	49.6	0.0	0.0%
11.1%	49.5	49.6	0.0	0.1%
12.3%	49.4	49.5	0.0	0.1%
13.6%	49.4	49.3	-0.1	-0.2%
14.8%	49.3	49.3	0.0	0.0%
16.0%	49.2	49.2	0.0	-0.1%
17.3%	49.1	49.0	-0.1	-0.2%
18.5%	49.0	49.0	0.0	0.0%
19.8%	49.0	49.0	-0.1	-0.2%
21.0%	48.8	48.9	0.1	0.3%
22.2%	48.8	48.9	0.1	0.3%
23.5%	48.7	48.9	0.2	0.3%
24.7%	48.7	48.8	0.1	0.3%
25.9%	48.7	48.7	0.1	0.2%
27.2%	48.5	48.7	0.2	0.3%
28.4%	48.5	48.6	0.2	0.3%
29.6%	48.3	48.5	0.2	0.5%
30.9%	48.3	48.5	0.2	0.5%
32.1%	48.3	48.5	0.2	0.5%
33.3%	48.2	48.5	0.3	0.6%
34.6%	48.2	48.5	0.3	0.6%
35.8%	48.1	48.4	0.3	0.7%
37.0%	48.1	48.4	0.3	0.6%
38.3%	48.0	48.4	0.3	0.7%
39.5%	47.8	48.2	0.4	0.9%
40.7%	47.8	48.1	0.4	0.8%
42.0%	47.8	47.8	0.1	0.2%
43.2%	47.7	47.8	0.0	0.1%
44.4%	47.7	47.8	0.1	0.2%
45.7%	47.6	47.7	0.1	0.2%
46.9%	47.6	47.7	0.1	0.2%
48.1%	47.6	47.7	0.1	0.2%
49.4%	47.5	47.6	0.1	0.2%
50.6%	47.4	47.6	0.2	0.4%
51.9%	47.3	47.5	0.2	0.5%
53.1%	47.3	47.5	0.2	0.3%
54.3%	47.3	47.4	0.1	0.2%
55.6%	47.2	47.3	0.1	0.2%
56.8%	47.2	47.3	0.1	0.2%
58.0%	47.1	47.3	0.2	0.3%
59.3%	47.1	47.2	0.0	0.1%
60.5%	47.1	47.1	0.1	0.2%
61.7%	47.1	47.1	0.0	0.0%
63.0%	46.9	47.1	0.2	0.4%
64.2%	46.8	47.0	0.2	0.4%
65.4%	46.8	46.9	0.1	0.3%
66.7%	46.7	46.8	0.0	0.0%
67.9%	46.6	46.7	0.1	0.2%
69.1%	46.6	46.6	0.0	0.0%
70.4%	46.6	46.6	0.0	0.0%
71.6%	46.6	46.4	-0.2	-0.4%
72.8%	46.4	45.9	-0.5	-1.0%
74.1%	45.8	45.8	0.0	0.0%
75.3%	45.8	45.8	0.0	0.1%
76.5%	45.8	45.8	0.0	0.1%
77.8%	45.4	45.8	0.3	0.7%
79.0%	45.4	45.3	-0.2	-0.3%
80.2%	45.2	44.8	-0.5	-1.0%
81.5%	45.2	44.7	-0.5	-1.0%
82.7%	44.7	44.6	-0.1	-0.2%
84.0%	44.7	44.5	-0.1	-0.3%
85.2%	44.5	44.5	0.0	-0.1%
86.4%	44.5	44.4	-0.1	-0.3%
87.7%	44.4	44.0	-0.4	-0.8%
88.9%	44.0	44.0	0.0	0.0%
90.1%	44.0	43.8	-0.2	-0.4%
91.4%	43.7	43.6	0.0	-0.1%
92.6%	43.6	43.5	-0.1	-0.3%
93.8%	43.4	43.5	0.0	0.1%
95.1%	43.3	43.4	0.1	0.2%
96.3%	43.3	43.3	-0.1	-0.2%
97.5%	43.1	43.1	0.0	0.0%
98.8%	42.5	42.6	0.1	0.3%
100.0%	42.5	42.6	0.1	0.3%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.6	52.6	0.0	0.0%
1.2%	52.5	52.6	0.1	0.2%
2.5%	51.6	51.5	-0.1	-0.2%
3.7%	51.2	51.2	0.0	0.0%
4.9%	50.8	50.9	0.1	0.3%
6.2%	50.3	50.3	0.0	0.0%
7.4%	50.2	50.2	0.0	0.0%
8.6%	50.1	50.2	0.1	0.2%
9.9%	50.1	50.1	0.0	0.0%
11.1%	49.7	50.0	0.3	0.7%
12.3%	49.7	49.8	0.1	0.1%
13.6%	49.6	49.7	0.1	0.2%
14.8%	49.6	49.7	0.1	0.1%
16.0%	49.5	49.7	0.2	0.3%
17.3%	49.4	49.6	0.2	0.3%
18.5%	49.3	49.6	0.3	0.5%
19.8%	49.3	49.5	0.2	0.5%
21.0%	49.3	49.5	0.2	0.4%
22.2%	49.2	49.5	0.3	0.6%
23.5%	49.2	49.4	0.3	0.5%
24.7%	49.1	49.4	0.3	0.5%
25.9%	48.7	49.3	0.6	1.2%
27.2%	48.6	49.2	0.6	1.3%
28.4%	48.6	49.2	0.7	1.4%
29.6%	48.5	49.2	0.7	1.4%
30.9%	48.5	49.2	0.6	1.3%
32.1%	48.5	48.7	0.2	0.4%
33.3%	48.4	48.7	0.3	0.6%
34.6%	48.3	48.5	0.2	0.3%
35.8%	48.3	48.5	0.2	0.5%
37.0%	48.2	48.5	0.3	0.5%
38.3%	48.1	48.4	0.3	0.7%
39.5%	48.1	48.3	0.2	0.4%
40.7%	48.1	48.3	0.2	0.4%
42.0%	48.0	48.3	0.3	0.6%
43.2%	47.9	48.3	0.3	0.7%
44.4%	47.9	48.2	0.3	0.5%
45.7%	47.6	48.1	0.5	1.1%
46.9%	47.4	48.0	0.6	1.2%
48.1%	47.2	47.9	0.7	1.4%
49.4%	47.2	47.6	0.3	0.7%
50.6%	47.1	47.3	0.1	0.3%
51.9%	47.0	47.2	0.2	0.5%
53.1%	46.9	47.1	0.3	0.6%
54.3%	46.8	47.1	0.3	0.6%
55.6%	46.7	46.8	0.1	0.3%
56.8%	46.7	46.7	0.0	0.0%
58.0%	46.6	46.7	0.1	0.2%
59.3%	46.6	46.7	0.1	0.2%
60.5%	46.5	46.7	0.1	0.3%
61.7%	46.4	46.6	0.2	0.4%
63.0%	46.3	46.6	0.2	0.5%
64.2%	46.3	46.5	0.3	0.6%
65.4%	46.2	46.5	0.3	0.7%
66.7%	46.2	46.4	0.2	0.4%
67.9%	46.2	46.2	0.0	0.1%
69.1%	46.0	46.2	0.2	0.3%
70.4%	45.8	46.0	0.2	0.5%
71.6%	45.8	45.8	0.0	0.0%
72.8%	45.8	45.6	-0.2	-0.4%
74.1%	45.6	45.5	-0.1	-0.2%
75.3%	45.5	45.4	0.0	-0.1%
76.5%	45.4	45.4	0.0	0.0%
77.8%	45.4	45.4	0.0	0.0%
79.0%	45.2	45.4	0.2	0.4%
80.2%	45.2	45.3	0.1	0.2%
81.5%	45.0	44.9	0.0	-0.1%
82.7%	45.0	44.6	-0.3	-0.8%
84.0%	44.6	44.6	0.0	0.0%
85.2%	44.5	44.6	0.1	0.2%
86.4%	44.5	44.5	0.0	0.1%
87.7%	44.4	44.5	0.1	0.3%
88.9%	44.4	44.4	0.0	0.1%
90.1%	44.3	44.4	0.1	0.2%
91.4%	44.2	44.3	0.1	0.2%
92.6%	44.2	44.2	0.0	0.0%
93.8%	43.8	44.2	0.4	0.9%
95.1%	43.8	43.9	0.1	0.2%
96.3%	43.7	43.8	0.1	0.3%
97.5%	43.2	43.2	0.0	0.0%
98.8%	43.1	43.1	-0.1	-0.2%
100.0%	43.1	43.1	-0.1	-0.2%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.6	53.1	-0.5	-1.0%
1.2%	53.3	53.0	-0.4	-0.7%
2.5%	53.1	52.5	-0.6	-1.2%
3.7%	52.8	52.5	-0.4	-0.7%
4.9%	52.4	52.4	0.0	0.0%
6.2%	52.1	52.1	0.0	-0.1%
7.4%	52.0	51.9	-0.1	-0.3%
8.6%	52.0	51.8	-0.2	-0.3%
9.9%	51.9	51.8	0.0	-0.1%
11.1%	51.9	51.8	0.0	0.0%
12.3%	51.8	51.8	0.0	0.0%
13.6%	51.8	51.7	-0.1	-0.3%
14.8%	51.8	51.6	-0.2	-0.3%
16.0%	51.8	51.4	-0.4	-0.8%
17.3%	51.7	51.3	-0.4	-0.8%
18.5%	51.6	51.3	-0.4	-0.7%
19.8%	51.4	51.1	-0.3	-0.5%
21.0%	51.4	51.1	-0.3	-0.5%
22.2%	51.3	51.1	-0.1	-0.3%
23.5%	51.2	51.1	-0.2	-0.3%
24.7%	51.1	51.0	-0.2	-0.4%
25.9%	51.1	50.8	-0.2	-0.5%
27.2%	51.1	50.8	-0.2	-0.5%
28.4%	51.0	50.5	-0.5	-0.9%
29.6%	50.9	50.5	-0.4	-0.8%
30.9%	50.8	50.4	-0.5	-0.9%
32.1%	50.8	50.3	-0.5	-1.1%
33.3%	50.8	50.2	-0.5	-1.1%
34.6%	50.5	50.2	-0.3	-0.5%
35.8%	50.4	50.2	-0.2	-0.4%
37.0%	50.2	50.1	-0.1	-0.2%
38.3%	50.1	50.1	0.0	0.0%
39.5%	50.1	50.1	0.0	0.0%
40.7%	49.9	49.8	-0.1	-0.2%
42.0%	49.9	49.7	-0.2	-0.3%
43.2%	49.8	49.6	-0.2	-0.4%
44.4%	49.7	49.5	-0.3	-0.5%
45.7%	49.7	49.4	-0.3	-0.5%
46.9%	49.4	49.3	-0.1	-0.2%
48.1%	49.4	49.3	-0.1	-0.2%
49.4%	49.4	49.2	-0.2	-0.4%
50.6%	49.3	49.1	-0.3	-0.5%
51.9%	49.3	49.0	-0.2	-0.5%
53.1%	49.2	48.9	-0.3	-0.6%
54.3%	49.1	48.9	-0.2	-0.4%
55.6%	49.0	48.8	-0.2	-0.4%
56.8%	49.0	48.8	-0.2	-0.3%
58.0%	48.9	48.8	-0.1	-0.3%
59.3%	48.9	48.8	-0.2	-0.3%
60.5%	48.8	48.7	-0.1	-0.2%
61.7%	48.8	48.7	-0.1	-0.2%
63.0%	48.8	48.7	-0.1	-0.1%
64.2%	48.7	48.7	-0.1	-0.2%
65.4%	48.7	48.5	-0.1	-0.3%
66.7%	48.7	48.4	-0.3	-0.5%
67.9%	48.6	48.4	-0.2	-0.5%
69.1%	48.5	48.3	-0.2	-0.5%
70.4%	48.4	48.3	-0.2	-0.4%
71.6%	48.4	48.1	-0.3	-0.6%
72.8%	48.4	47.9	-0.5	-1.0%
74.1%	48.3	47.9	-0.4	-0.8%
75.3%	48.2	47.8	-0.5	-1.0%
76.5%	47.9	47.6	-0.3	-0.5%
77.8%	47.9	47.6	-0.2	-0.5%
79.0%	47.9	47.6	-0.2	-0.5%
80.2%	47.8	47.6	-0.1	-0.3%
81.5%	47.4	47.4	0.1	0.1%
82.7%	47.3	47.3	0.0	0.0%
84.0%	47.3	47.3	0.0	0.0%
85.2%	47.2	47.3	0.0	0.0%
86.4%	47.2	47.1	-0.1	-0.1%
87.7%	46.8	46.7	0.0	-0.1%
88.9%	46.6	46.6	0.0	0.0%
90.1%	46.5	46.5	0.1	0.2%
91.4%	46.2	46.2	0.0	0.0%
92.6%	45.8	45.7	-0.1	-0.2%
93.8%	45.1	45.3	0.2	0.5%
95.1%	44.2	44.5	0.3	0.7%
96.3%	43.5	43.8	0.3	0.6%
97.5%	43.3	43.6	0.2	0.5%
98.8%	43.3	43.4	0.0	0.1%
100.0%	43.3	43.4	0.0	0.1%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.0	53.5	0.5	0.9%
1.2%	53.0	53.0	0.0	0.1%
2.5%	52.8	53.0	0.2	0.4%
3.7%	52.8	52.9	0.0	0.1%
4.9%	52.7	52.7	0.0	0.1%
6.2%	52.7	52.6	-0.1	-0.2%
7.4%	52.6	52.5	-0.1	-0.2%
8.6%	52.3	52.4	0.1	0.2%
9.9%	52.3	52.3	0.0	0.0%
11.1%	52.2	52.2	-0.1	-0.1%
12.3%	52.1	52.1	0.0	0.0%
13.6%	52.0	52.1	0.0	0.1%
14.8%	52.0	52.0	0.0	0.0%
16.0%	52.0	52.0	0.0	0.0%
17.3%	51.9	51.9	0.0	0.1%
18.5%	51.8	51.8	0.0	0.0%
19.8%	51.8	51.8	0.0	0.0%
21.0%	51.8	51.8	0.0	0.0%
22.2%	51.7	51.7	0.0	0.0%
23.5%	51.7	51.7	0.0	0.0%
24.7%	51.7	51.7	0.0	0.0%
25.9%	51.6	51.6	0.0	0.1%
27.2%	51.6	51.5	0.0	-0.1%
28.4%	51.5	51.5	0.0	0.0%
29.6%	51.5	51.4	-0.1	-0.2%
30.9%	51.5	51.4	-0.1	-0.1%
32.1%	51.4	51.3	-0.1	-0.1%
33.3%	51.4	51.3	-0.1	-0.2%
34.6%	51.3	51.3	0.0	0.0%
35.8%	51.2	51.2	0.1	0.2%
37.0%	51.1	51.2	0.0	0.0%
38.3%	51.1	51.2	0.1	0.1%
39.5%	51.1	51.1	0.1	0.1%
40.7%	51.0	51.1	0.1	0.2%
42.0%	50.9	51.1	0.2	0.4%
43.2%	50.8	50.8	0.0	0.1%
44.4%	50.8	50.8	0.0	0.1%
45.7%	50.8	50.8	0.0	0.1%
46.9%	50.8	50.8	0.1	0.1%
48.1%	50.7	50.8	0.0	0.1%
49.4%	50.7	50.8	0.1	0.1%
50.6%	50.6	50.8	0.2	0.4%
51.9%	50.5	50.8	0.2	0.4%
53.1%	50.5	50.7	0.2	0.4%
54.3%	50.5	50.6	0.0	0.1%
55.6%	50.5	50.5	0.0	0.0%
56.8%	50.5	50.5	0.0	0.1%
58.0%	50.5	50.5	0.1	0.1%
59.3%	50.1	50.5	0.4	0.7%
60.5%	50.1	50.4	0.4	0.8%
61.7%	50.0	50.1	0.1	0.2%
63.0%	49.8	50.1	0.3	0.6%
64.2%	49.8	50.1	0.3	0.7%
65.4%	49.6	49.8	0.3	0.5%
66.7%	49.5	49.8	0.3	0.6%
67.9%	49.5	49.6	0.1	0.2%
69.1%	49.4	49.5	0.1	0.2%
70.4%	49.4	49.4	0.0	0.0%
71.6%	49.3	49.2	-0.1	-0.1%
72.8%	49.2	49.1	-0.1	-0.3%
74.1%	49.1	49.1	0.0	-0.1%
75.3%	48.9	49.0	0.1	0.2%
76.5%	48.6	48.9	0.3	0.6%
77.8%	48.5	48.8	0.3	0.6%
79.0%	48.5	48.7	0.2	0.5%
80.2%	48.5	48.5	0.0	0.1%
81.5%	48.3	48.5	0.2	0.5%
82.7%	48.2	48.2	0.1	0.2%
84.0%	48.0	48.2	0.2	0.4%
85.2%	47.9	48.2	0.3	0.6%
86.4%	47.8	48.1	0.3	0.7%
87.7%	47.7	47.9	0.3	0.5%
88.9%	47.5	47.9	0.5	1.0%
90.1%	47.4	47.6	0.2	0.5%
91.4%	47.2	47.4	0.1	0.3%
92.6%	47.2	47.2	-0.1	-0.1%
93.8%	46.9	47.2	0.3	0.6%
95.1%	46.4	47.0	0.6	1.4%
96.3%	46.2	46.9	0.7	1.5%
97.5%	46.0	46.3	0.3	0.6%
98.8%	45.4	45.4	0.0	0.0%
100.0%	45.4	45.4	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.6	52.4	-0.2	-0.4%
1.2%	51.6	52.2	0.5	1.0%
2.5%	51.3	51.7	0.4	0.7%
3.7%	51.2	51.2	0.0	-0.1%
4.9%	50.9	51.1	0.2	0.4%
6.2%	50.9	50.9	0.0	0.0%
7.4%	50.5	50.5	0.0	0.0%
8.6%	50.4	50.4	0.0	0.0%
9.9%	50.4	50.4	0.0	0.0%
11.1%	50.0	50.0	0.0	0.0%
12.3%	49.8	49.8	0.0	0.0%
13.6%	49.8	49.8	0.0	-0.1%
14.8%	49.5	49.7	0.2	0.3%
16.0%	49.4	49.6	0.1	0.3%
17.3%	49.3	49.4	0.2	0.3%
18.5%	49.2	49.4	0.2	0.4%
19.8%	49.1	49.2	0.1	0.3%
21.0%	49.0	49.1	0.1	0.2%
22.2%	48.9	48.9	0.0	0.1%
23.5%	48.8	48.9	0.1	0.2%
24.7%	48.5	48.6	0.0	0.1%
25.9%	48.4	48.4	0.0	0.0%
27.2%	48.3	48.3	0.0	0.0%
28.4%	48.1	48.1	0.0	-0.1%
29.6%	48.1	48.0	0.0	-0.1%
30.9%	48.0	48.0	0.0	-0.1%
32.1%	47.7	47.8	0.1	0.1%
33.3%	47.0	47.1	0.1	0.2%
34.6%	47.0	47.0	0.0	-0.1%
35.8%	46.9	46.9	0.0	0.0%
37.0%	46.9	46.8	-0.1	-0.1%
38.3%	46.8	46.7	-0.1	-0.2%
39.5%	46.7	46.7	0.0	0.0%
40.7%	46.7	46.7	0.0	0.0%
42.0%	46.7	46.7	0.0	0.0%
43.2%	46.7	46.6	-0.1	-0.1%
44.4%	46.6	46.6	-0.1	-0.1%
45.7%	46.6	46.4	-0.2	-0.4%
46.9%	46.4	46.3	0.0	0.0%
48.1%	46.3	46.3	0.0	0.0%
49.4%	46.0	45.9	0.0	0.0%
50.6%	45.9	45.9	0.0	0.0%
51.9%	45.9	45.9	0.0	0.0%
53.1%	45.9	45.8	0.0	0.0%
54.3%	45.9	45.8	-0.1	-0.1%
55.6%	45.8	45.8	0.0	0.0%
56.8%	45.8	45.7	0.0	-0.1%
58.0%	45.7	45.7	0.0	0.0%
59.3%	45.6	45.6	0.0	0.0%
60.5%	45.6	45.5	0.0	0.0%
61.7%	45.5	45.5	0.0	-0.1%
63.0%	45.5	45.5	0.0	0.0%
64.2%	45.2	45.2	0.0	0.0%
65.4%	45.2	45.1	-0.1	-0.2%
66.7%	45.1	45.1	0.0	0.0%
67.9%	45.1	45.1	0.0	0.0%
69.1%	45.1	45.1	0.0	0.0%
70.4%	45.1	45.1	0.0	0.0%
71.6%	45.0	45.0	0.0	0.0%
72.8%	45.0	45.0	0.0	0.0%
74.1%	45.0	45.0	0.0	0.0%
75.3%	44.9	44.9	0.0	0.0%
76.5%	44.9	44.9	0.0	0.0%
77.8%	44.9	44.9	0.0	0.0%
79.0%	44.8	44.8	0.1	0.1%
80.2%	44.8	44.8	0.1	0.1%
81.5%	44.7	44.7	0.0	0.1%
82.7%	44.6	44.6	0.0	0.0%
84.0%	44.6	44.5	0.0	-0.1%
85.2%	44.5	44.5	0.0	0.0%
86.4%	44.5	44.4	0.0	-0.1%
87.7%	44.3	44.4	0.1	0.2%
88.9%	44.3	44.3	0.0	0.0%
90.1%	44.3	44.3	0.0	-0.1%
91.4%	44.2	44.3	0.0	0.1%
92.6%	44.2	44.2	0.1	0.1%
93.8%	44.2	44.1	0.0	0.0%
95.1%	44.2	44.1	0.0	0.0%
96.3%	43.9	43.9	0.0	0.1%
97.5%	43.8	43.9	0.0	0.1%
98.8%	43.8	43.8	0.0	0.0%
100.0%	43.8	43.8	0.0	0.0%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.9	56.9	0.0	0.0%
1.2%	56.0	56.0	0.0	0.0%
2.5%	55.7	55.4	-0.2	-0.4%
3.7%	55.1	55.1	0.0	0.0%
4.9%	54.8	54.8	0.0	0.0%
6.2%	54.7	54.6	-0.1	-0.2%
7.4%	54.7	54.6	-0.1	-0.2%
8.6%	54.7	54.1	-0.5	-1.0%
9.9%	54.1	54.1	0.0	0.0%
11.1%	53.8	54.1	0.3	0.6%
12.3%	53.4	53.9	0.5	0.9%
13.6%	53.4	53.3	-0.1	-0.2%
14.8%	53.0	53.2	0.3	0.5%
16.0%	52.5	52.6	0.1	0.3%
17.3%	52.4	52.4	0.0	0.0%
18.5%	52.3	52.2	0.0	0.0%
19.8%	51.9	52.2	0.3	0.6%
21.0%	51.9	52.1	0.3	0.5%
22.2%	51.8	51.9	0.0	0.1%
23.5%	51.8	51.8	0.0	0.1%
24.7%	51.6	51.8	0.2	0.3%
25.9%	51.6	51.7	0.1	0.2%
27.2%	51.5	51.7	0.2	0.3%
28.4%	51.5	51.6	0.1	0.2%
29.6%	51.4	51.5	0.1	0.1%
30.9%	51.3	51.5	0.2	0.4%
32.1%	51.3	51.3	0.0	0.0%
33.3%	51.0	51.0	0.0	0.0%
34.6%	51.0	50.9	-0.1	-0.2%
35.8%	50.9	50.8	-0.1	-0.2%
37.0%	50.8	50.7	-0.1	-0.3%
38.3%	50.6	50.6	-0.1	-0.1%
39.5%	50.6	50.6	0.0	0.0%
40.7%	50.4	50.5	0.1	0.3%
42.0%	50.4	50.3	0.0	0.0%
43.2%	50.1	50.1	0.0	0.0%
44.4%	50.1	50.1	0.0	0.0%
45.7%	50.1	50.0	-0.1	-0.1%
46.9%	50.1	49.9	-0.2	-0.4%
48.1%	49.8	49.8	0.0	0.0%
49.4%	49.8	49.8	0.0	-0.1%
50.6%	49.7	49.7	0.0	0.1%
51.9%	49.4	49.4	0.0	0.0%
53.1%	49.3	49.3	0.0	0.0%
54.3%	49.2	49.2	0.0	0.0%
55.6%	49.1	49.2	0.0	0.0%
56.8%	49.0	49.0	0.0	0.0%
58.0%	48.9	48.8	-0.1	-0.2%
59.3%	48.9	48.8	-0.1	-0.2%
60.5%	48.8	48.8	0.0	0.0%
61.7%	48.8	48.8	0.0	-0.1%
63.0%	48.7	48.7	-0.1	-0.2%
64.2%	48.7	48.6	-0.1	-0.2%
65.4%	48.7	48.5	-0.2	-0.4%
66.7%	48.6	48.5	-0.1	-0.2%
67.9%	48.5	48.4	0.0	-0.1%
69.1%	48.4	48.3	0.0	-0.1%
70.4%	48.3	48.3	0.0	-0.1%
71.6%	48.2	48.3	0.1	0.2%
72.8%	47.9	48.1	0.2	0.4%
74.1%	47.7	47.7	0.0	0.0%
75.3%	47.7	47.4	-0.3	-0.5%
76.5%	47.4	47.4	0.1	0.1%
77.8%	47.3	47.3	0.0	0.0%
79.0%	47.1	47.1	0.0	0.0%
80.2%	47.1	47.0	0.0	-0.1%
81.5%	47.0	47.0	0.0	0.0%
82.7%	47.0	47.0	0.0	0.0%
84.0%	46.8	46.9	0.2	0.4%
85.2%	46.7	46.6	0.0	0.0%
86.4%	46.6	46.6	0.0	0.1%
87.7%	46.6	46.6	0.0	0.0%
88.9%	46.2	46.1	-0.1	-0.1%
90.1%	45.9	45.9	0.0	0.1%
91.4%	45.5	45.5	0.0	0.0%
92.6%	45.5	45.5	0.0	0.0%
93.8%	45.4	45.5	0.0	0.1%
95.1%	44.8	44.8	0.0	0.0%
96.3%	44.8	44.8	0.0	-0.1%
97.5%	44.8	44.8	0.0	0.1%
98.8%	44.7	44.7	0.0	0.0%
100.0%	44.7	44.7	0.0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.7	54.7	0.0	0.0%
1.2%	54.1	53.7	-0.4	-0.7%
2.5%	54.1	53.7	-0.4	-0.7%
3.7%	53.8	53.7	-0.1	-0.2%
4.9%	53.6	53.5	-0.2	-0.3%
6.2%	53.4	53.4	0.0	0.1%
7.4%	53.4	53.2	-0.2	-0.5%
8.6%	53.1	53.1	0.0	0.0%
9.9%	53.0	53.0	0.0	0.0%
11.1%	53.0	53.0	0.0	0.0%
12.3%	52.5	52.9	0.4	0.9%
13.6%	52.4	52.8	0.3	0.7%
14.8%	52.3	52.6	0.2	0.5%
16.0%	52.3	52.2	0.0	-0.1%
17.3%	52.1	52.2	0.1	0.2%
18.5%	52.1	52.1	0.0	0.0%
19.8%	51.9	52.0	0.1	0.2%
21.0%	51.9	51.9	0.1	0.2%
22.2%	51.8	51.9	0.1	0.2%
23.5%	51.8	51.8	0.0	-0.1%
24.7%	51.8	51.8	0.0	0.0%
25.9%	51.8	51.8	0.0	0.0%
27.2%	51.8	51.7	-0.1	-0.3%
28.4%	51.8	51.7	-0.1	-0.3%
29.6%	51.6	51.6	0.0	0.1%
30.9%	51.5	51.6	0.0	0.1%
32.1%	51.5	51.6	0.0	0.1%
33.3%	51.5	51.5	0.0	0.1%
34.6%	51.5	51.5	0.0	0.0%
35.8%	51.5	51.4	-0.1	-0.2%
37.0%	51.5	51.4	-0.1	-0.1%
38.3%	51.4	51.4	0.0	0.0%
39.5%	51.4	51.3	-0.1	-0.2%
40.7%	51.2	51.2	0.0	0.0%
42.0%	51.1	51.2	0.0	0.1%
43.2%	51.1	51.2	0.1	0.1%
44.4%	51.1	51.1	0.0	0.1%
45.7%	51.1	51.0	-0.1	-0.1%
46.9%	51.0	50.9	-0.1	-0.1%
48.1%	51.0	50.9	-0.1	-0.1%
49.4%	51.0	50.9	-0.1	-0.1%
50.6%	50.9	50.8	-0.1	-0.3%
51.9%	50.9	50.7	-0.2	-0.3%
53.1%	50.8	50.7	-0.2	-0.3%
54.3%	50.8	50.7	-0.1	-0.2%
55.6%	50.8	50.6	-0.1	-0.3%
56.8%	50.8	50.6	-0.2	-0.3%
58.0%	50.7	50.6	-0.1	-0.2%
59.3%	50.7	50.6	-0.1	-0.1%
60.5%	50.6	50.6	0.0	0.1%
61.7%	50.6	50.5	0.0	0.0%
63.0%	50.4	50.4	0.0	0.0%
64.2%	50.4	50.4	0.0	0.0%
65.4%	50.4	50.4	0.0	0.1%
66.7%	50.3	50.4	0.0	0.1%
67.9%	50.3	50.3	0.0	-0.1%
69.1%	50.3	50.3	0.0	0.0%
70.4%	50.3	50.3	0.0	0.0%
71.6%	50.2	50.2	0.0	0.0%
72.8%	50.2	50.2	0.0	-0.1%
74.1%	50.2	50.1	-0.1	-0.2%
75.3%	50.2	50.0	-0.2	-0.4%
76.5%	50.2	49.9	-0.2	-0.4%
77.8%	50.0	49.9	-0.1	-0.2%
79.0%	49.9	49.8	-0.2	-0.3%
80.2%	49.9	49.7	-0.2	-0.3%
81.5%	49.9	49.6	-0.3	-0.6%
82.7%	49.8	49.5	-0.3	-0.6%
84.0%	49.8	49.5	-0.3	-0.6%
85.2%	49.7	49.4	-0.3	-0.5%
86.4%	49.6	49.4	-0.3	-0.5%
87.7%	49.5	49.4	-0.1	-0.3%
88.9%	49.5	49.3	-0.2	-0.3%
90.1%	49.5	49.2	-0.3	-0.5%
91.4%	49.3	49.2	-0.1	-0.3%
92.6%	49.3	49.2	-0.2	-0.3%
93.8%	49.1	49.1	0.0	-0.1%
95.1%	49.1	49.0	-0.1	-0.2%
96.3%	49.1	49.0	-0.1	-0.2%
97.5%	48.9	49.0	0.0	0.1%
98.8%	48.8	48.8	0.0	0.0%
100.0%	48.8	48.8	0.0	0.0%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.6	56.8	-1.8	-3.2%
1.2%	56.4	54.9	-1.5	-2.7%
2.5%	55.2	54.4	-0.8	-1.4%
3.7%	54.2	54.1	-0.1	-0.1%
4.9%	54.1	54.0	-0.1	-0.1%
6.2%	53.9	54.0	0.1	0.2%
7.4%	53.8	53.7	-0.1	-0.2%
8.6%	53.4	53.3	-0.1	-0.3%
9.9%	53.1	53.0	-0.1	-0.1%
11.1%	53.1	52.9	-0.2	-0.4%
12.3%	53.0	52.8	-0.3	-0.5%
13.6%	52.9	52.7	-0.2	-0.4%
14.8%	52.8	52.6	-0.2	-0.4%
16.0%	52.7	52.5	-0.2	-0.4%
17.3%	52.7	52.5	-0.2	-0.4%
18.5%	52.6	52.5	-0.2	-0.3%
19.8%	52.6	52.3	-0.2	-0.4%
21.0%	52.6	52.3	-0.2	-0.5%
22.2%	52.4	52.3	-0.1	-0.2%
23.5%	52.4	52.1	-0.2	-0.5%
24.7%	52.3	52.1	-0.2	-0.5%
25.9%	52.3	52.1	-0.2	-0.4%
27.2%	52.2	52.0	-0.2	-0.4%
28.4%	52.2	51.9	-0.2	-0.4%
29.6%	52.1	51.7	-0.5	-0.9%
30.9%	52.1	51.6	-0.4	-0.8%
32.1%	52.0	51.5	-0.5	-1.0%
33.3%	52.0	51.5	-0.5	-0.9%
34.6%	51.9	51.5	-0.4	-0.8%
35.8%	51.8	51.5	-0.3	-0.6%
37.0%	51.8	51.5	-0.3	-0.5%
38.3%	51.7	51.5	-0.2	-0.4%
39.5%	51.6	51.4	-0.2	-0.4%
40.7%	51.4	51.3	-0.1	-0.2%
42.0%	51.2	51.2	0.0	0.1%
43.2%	51.2	51.1	-0.1	-0.3%
44.4%	51.2	51.0	-0.1	-0.2%
45.7%	51.1	51.0	-0.1	-0.1%
46.9%	51.1	51.0	0.0	-0.1%
48.1%	51.0	51.0	0.0	0.0%
49.4%	51.0	51.0	0.0	0.0%
50.6%	51.0	51.0	0.0	0.0%
51.9%	51.0	50.9	-0.1	-0.1%
53.1%	51.0	50.9	-0.1	-0.2%
54.3%	51.0	50.9	-0.1	-0.2%
55.6%	51.0	50.9	-0.1	-0.2%
56.8%	50.9	50.8	-0.1	-0.2%
58.0%	50.9	50.8	-0.1	-0.1%
59.3%	50.9	50.7	-0.2	-0.5%
60.5%	50.8	50.5	-0.3	-0.7%
61.7%	50.7	50.5	-0.3	-0.5%
63.0%	50.7	50.5	-0.2	-0.4%
64.2%	50.7	50.4	-0.2	-0.4%
65.4%	50.5	50.4	-0.1	-0.2%
66.7%	50.5	50.4	-0.1	-0.3%
67.9%	50.5	50.3	-0.2	-0.5%
69.1%	50.5	50.2	-0.3	-0.5%
70.4%	50.5	50.2	-0.3	-0.6%
71.6%	50.5	50.1	-0.3	-0.6%
72.8%	50.5	50.1	-0.3	-0.7%
74.1%	50.4	50.1	-0.3	-0.6%
75.3%	50.3	50.0	-0.3	-0.6%
76.5%	50.3	50.0	-0.3	-0.6%
77.8%	50.3	50.0	-0.3	-0.6%
79.0%	50.2	49.9	-0.2	-0.5%
80.2%	50.1	49.8	-0.3	-0.6%
81.5%	50.0	49.8	-0.2	-0.5%
82.7%	50.0	49.7	-0.2	-0.5%
84.0%	49.9	49.7	-0.3	-0.5%
85.2%	49.7	49.6	-0.1	-0.2%
86.4%	49.6	49.6	0.0	0.0%
87.7%	49.6	49.6	0.0	0.0%
88.9%	49.6	49.6	0.0	0.1%
90.1%	49.6	49.6	0.0	0.0%
91.4%	49.6	49.6	0.0	0.0%
92.6%	49.4	49.6	0.1	0.2%
93.8%	49.4	49.5	0.1	0.2%
95.1%	49.4	49.3	-0.1	-0.2%
96.3%	49.3	49.3	0.0	-0.1%
97.5%	49.2	49.2	0.0	0.1%
98.8%	49.2	49.1	0.0	-0.1%
100.0%	49.2	49.1	0.0	-0.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.7	58.0	0.3	0.5%
1.2%	57.6	57.6	-0.1	-0.1%
2.5%	57.6	57.5	-0.1	-0.1%
3.7%	57.1	57.1	0.1	0.1%
4.9%	56.8	57.0	0.2	0.4%
6.2%	56.2	56.4	0.3	0.5%
7.4%	56.1	54.2	-1.9	-3.3%
8.6%	55.2	53.9	-1.3	-2.3%
9.9%	54.0	53.9	-0.1	-0.3%
11.1%	53.7	53.9	0.2	0.4%
12.3%	53.6	53.8	0.2	0.4%
13.6%	53.6	53.6	0.0	0.0%
14.8%	53.6	53.2	-0.3	-0.6%
16.0%	53.4	53.1	-0.2	-0.4%
17.3%	53.1	53.1	0.0	0.0%
18.5%	53.1	52.9	-0.2	-0.4%
19.8%	53.0	52.9	-0.2	-0.3%
21.0%	53.0	52.8	-0.2	-0.4%
22.2%	52.8	52.5	-0.2	-0.5%
23.5%	52.6	52.4	-0.2	-0.5%
24.7%	52.5	52.4	-0.2	-0.3%
25.9%	52.5	52.3	-0.2	-0.3%
27.2%	52.4	52.3	-0.1	-0.2%
28.4%	52.3	52.2	-0.1	-0.2%
29.6%	52.3	52.2	-0.1	-0.1%
30.9%	52.2	52.0	-0.3	-0.5%
32.1%	52.2	51.9	-0.3	-0.5%
33.3%	52.1	51.9	-0.1	-0.3%
34.6%	52.0	51.8	-0.2	-0.5%
35.8%	51.9	51.8	-0.1	-0.2%
37.0%	51.8	51.7	-0.1	-0.2%
38.3%	51.8	51.7	-0.1	-0.2%
39.5%	51.8	51.5	-0.3	-0.5%
40.7%	51.7	51.5	-0.2	-0.3%
42.0%	51.6	51.5	-0.2	-0.4%
43.2%	51.5	51.4	0.0	-0.1%
44.4%	51.4	51.4	0.0	0.1%
45.7%	51.2	51.4	0.2	0.3%
46.9%	51.2	51.2	0.1	0.1%
48.1%	51.2	51.2	0.0	0.0%
49.4%	51.1	51.2	0.1	0.1%
50.6%	51.1	51.2	0.1	0.1%
51.9%	51.1	51.1	0.0	0.0%
53.1%	51.0	50.9	-0.2	-0.3%
54.3%	51.0	50.8	-0.1	-0.2%
55.6%	50.9	50.8	-0.1	-0.2%
56.8%	50.8	50.6	-0.1	-0.3%
58.0%	50.7	50.5	-0.2	-0.3%
59.3%	50.7	50.5	-0.2	-0.4%
60.5%	50.6	50.5	-0.1	-0.2%
61.7%	50.4	50.4	0.0	0.0%
63.0%	50.3	50.2	-0.1	-0.3%
64.2%	50.2	50.2	0.0	0.0%
65.4%	50.2	50.1	-0.1	-0.1%
66.7%	50.1	50.0	-0.1	-0.2%
67.9%	50.0	49.9	-0.1	-0.2%
69.1%	49.9	49.8	-0.1	-0.2%
70.4%	49.9	49.8	-0.1	-0.2%
71.6%	49.8	49.8	-0.1	-0.1%
72.8%	49.8	49.8	0.0	0.1%
74.1%	49.8	49.8	0.0	0.0%
75.3%	49.7	49.7	0.0	0.0%
76.5%	49.7	49.7	0.0	0.0%
77.8%	49.7	49.6	-0.1	-0.2%
79.0%	49.7	49.6	-0.1	-0.1%
80.2%	49.6	49.6	0.0	-0.1%
81.5%	49.5	49.5	0.0	0.1%
82.7%	49.4	49.5	0.1	0.2%
84.0%	49.4	49.5	0.1	0.2%
85.2%	49.3	49.4	0.1	0.1%
86.4%	49.2	49.4	0.1	0.2%
87.7%	49.2	49.3	0.1	0.2%
88.9%	49.1	49.2	0.1	0.2%
90.1%	49.0	49.0	0.0	-0.1%
91.4%	49.0	49.0	0.0	0.1%
92.6%	48.9	49.0	0.1	0.1%
93.8%	48.7	48.9	0.3	0.6%
95.1%	48.5	48.9	0.4	0.8%
96.3%	48.4	48.4	0.0	0.1%
97.5%	48.3	48.4	0.1	0.2%
98.8%	48.3	48.4	0.1	0.2%
100.0%	48.3	48.4	0.1	0.2%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.3	55.8	-0.5	-0.9%
1.2%	55.8	55.2	-0.6	-1.2%
2.5%	55.3	55.1	-0.2	-0.4%
3.7%	55.2	54.8	-0.3	-0.6%
4.9%	54.7	54.5	-0.2	-0.4%
6.2%	54.4	54.2	-0.2	-0.4%
7.4%	53.7	53.9	0.1	0.3%
8.6%	53.6	53.4	-0.2	-0.3%
9.9%	53.5	53.4	-0.1	-0.3%
11.1%	53.4	53.2	-0.2	-0.4%
12.3%	53.3	53.0	-0.4	-0.7%
13.6%	53.3	52.8	-0.5	-0.9%
14.8%	52.7	52.6	-0.1	-0.1%
16.0%	52.5	52.6	0.1	0.1%
17.3%	52.3	52.4	0.2	0.3%
18.5%	52.3	52.3	0.1	0.1%
19.8%	52.3	52.2	0.0	-0.1%
21.0%	52.2	52.2	0.1	0.1%
22.2%	52.2	52.2	0.0	0.1%
23.5%	52.1	52.0	-0.1	-0.2%
24.7%	52.1	52.0	0.0	-0.1%
25.9%	52.0	52.0	0.0	0.0%
27.2%	51.8	51.8	0.0	0.0%
28.4%	51.6	51.7	0.1	0.2%
29.6%	51.5	51.6	0.1	0.3%
30.9%	51.4	51.5	0.1	0.2%
32.1%	51.4	51.4	0.0	0.1%
33.3%	51.4	51.4	0.0	0.1%
34.6%	51.4	51.4	0.0	0.0%
35.8%	51.3	51.3	0.0	0.1%
37.0%	51.3	51.2	0.0	0.0%
38.3%	51.2	51.2	0.0	0.1%
39.5%	51.2	51.2	0.0	0.0%
40.7%	51.2	51.1	-0.1	-0.2%
42.0%	51.0	51.0	0.0	0.1%
43.2%	51.0	51.0	0.0	0.0%
44.4%	51.0	51.0	0.0	0.0%
45.7%	50.9	50.9	0.0	0.0%
46.9%	50.9	50.8	-0.1	-0.2%
48.1%	50.9	50.8	-0.1	-0.2%
49.4%	50.9	50.7	-0.1	-0.2%
50.6%	50.8	50.6	-0.2	-0.4%
51.9%	50.8	50.5	-0.3	-0.6%
53.1%	50.7	50.5	-0.2	-0.4%
54.3%	50.7	50.4	-0.3	-0.5%
55.6%	50.5	50.3	-0.2	-0.4%
56.8%	50.4	50.2	-0.2	-0.4%
58.0%	50.3	50.2	-0.1	-0.2%
59.3%	50.3	50.2	-0.1	-0.2%
60.5%	50.3	50.2	-0.1	-0.2%
61.7%	50.2	50.1	-0.1	-0.2%
63.0%	50.2	50.1	-0.1	-0.1%
64.2%	50.1	50.1	0.0	0.0%
65.4%	50.0	49.9	0.0	-0.1%
66.7%	49.9	49.9	0.0	-0.1%
67.9%	49.9	49.7	-0.2	-0.4%
69.1%	49.8	49.6	-0.2	-0.5%
70.4%	49.7	49.6	-0.1	-0.2%
71.6%	49.6	49.6	0.0	0.0%
72.8%	49.5	49.5	0.0	-0.1%
74.1%	49.5	49.4	-0.1	-0.1%
75.3%	49.4	49.4	0.0	0.0%
76.5%	49.4	49.3	-0.1	-0.2%
77.8%	49.3	49.3	0.0	-0.1%
79.0%	49.3	49.2	-0.1	-0.2%
80.2%	49.3	49.2	-0.1	-0.2%
81.5%	49.3	49.1	-0.1	-0.3%
82.7%	49.1	49.1	-0.1	-0.2%
84.0%	49.1	49.0	-0.1	-0.2%
85.2%	49.0	49.0	0.0	0.0%
86.4%	49.0	48.9	0.0	-0.1%
87.7%	48.9	48.9	0.0	0.0%
88.9%	48.9	48.9	0.0	0.0%
90.1%	48.8	48.8	0.0	-0.1%
91.4%	48.7	48.8	0.0	0.1%
92.6%	48.7	48.7	0.0	-0.1%
93.8%	48.6	48.6	0.0	-0.1%
95.1%	48.4	48.1	-0.2	-0.5%
96.3%	48.2	48.1	-0.2	-0.4%
97.5%	48.1	48.0	-0.1	-0.2%
98.8%	48.1	48.0	-0.1	-0.2%
100.0%	48.0	47.9	-0.1	-0.2%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.8	55.4	-1.4	-2.4%
1.2%	56.0	55.2	-0.8	-1.4%
2.5%	55.5	55.2	-0.3	-0.5%
3.7%	55.0	54.8	-0.1	-0.3%
4.9%	54.7	54.6	-0.1	-0.2%
6.2%	54.2	54.1	-0.1	-0.3%
7.4%	53.7	53.8	0.1	0.2%
8.6%	53.4	53.4	0.0	0.0%
9.9%	53.4	52.9	-0.5	-0.9%
11.1%	53.0	52.9	-0.1	-0.3%
12.3%	53.0	52.8	-0.2	-0.3%
13.6%	52.9	52.6	-0.3	-0.6%
14.8%	52.7	52.6	-0.1	-0.2%
16.0%	52.6	52.5	-0.1	-0.1%
17.3%	52.5	52.4	-0.1	-0.2%
18.5%	52.5	52.4	0.0	0.0%
19.8%	52.4	52.4	0.0	0.0%
21.0%	52.4	52.4	0.0	0.0%
22.2%	52.4	52.4	0.0	0.0%
23.5%	52.3	52.4	0.1	0.2%
24.7%	52.2	52.2	0.0	-0.1%
25.9%	52.2	52.1	-0.1	-0.2%
27.2%	52.1	52.0	-0.1	-0.1%
28.4%	52.0	51.9	-0.1	-0.2%
29.6%	51.9	51.8	-0.1	-0.2%
30.9%	51.8	51.7	0.0	-0.1%
32.1%	51.8	51.7	0.0	-0.1%
33.3%	51.8	51.7	-0.1	-0.2%
34.6%	51.7	51.6	-0.2	-0.3%
35.8%	51.7	51.5	-0.2	-0.3%
37.0%	51.7	51.5	-0.2	-0.3%
38.3%	51.7	51.5	-0.2	-0.3%
39.5%	51.6	51.5	-0.1	-0.3%
40.7%	51.6	51.4	-0.1	-0.3%
42.0%	51.5	51.4	-0.1	-0.3%
43.2%	51.5	51.3	-0.2	-0.4%
44.4%	51.5	51.3	-0.2	-0.4%
45.7%	51.4	51.3	-0.2	-0.4%
46.9%	51.3	51.2	-0.1	-0.2%
48.1%	51.3	51.2	-0.1	-0.1%
49.4%	51.2	51.2	0.0	0.0%
50.6%	51.1	51.2	0.0	0.1%
51.9%	51.0	51.1	0.0	0.0%
53.1%	51.0	51.0	-0.1	-0.1%
54.3%	50.9	50.9	-0.1	-0.1%
55.6%	50.9	50.8	-0.1	-0.2%
56.8%	50.8	50.6	-0.2	-0.3%
58.0%	50.7	50.5	-0.2	-0.3%
59.3%	50.7	50.5	-0.2	-0.3%
60.5%	50.6	50.4	-0.2	-0.3%
61.7%	50.6	50.4	-0.2	-0.4%
63.0%	50.6	50.4	-0.2	-0.4%
64.2%	50.5	50.4	-0.1	-0.2%
65.4%	50.4	50.3	-0.1	-0.2%
66.7%	50.4	50.3	-0.1	-0.2%
67.9%	50.3	50.3	-0.1	-0.2%
69.1%	50.3	50.2	-0.1	-0.1%
70.4%	50.3	50.2	-0.1	-0.2%
71.6%	50.2	50.2	0.0	0.0%
72.8%	50.1	50.0	-0.1	-0.1%
74.1%	50.0	49.9	-0.1	-0.2%
75.3%	49.9	49.9	0.0	0.0%
76.5%	49.9	49.9	0.0	0.0%
77.8%	49.8	49.8	0.0	0.1%
79.0%	49.8	49.8	0.0	0.1%
80.2%	49.8	49.7	0.0	-0.1%
81.5%	49.7	49.7	-0.1	-0.2%
82.7%	49.7	49.6	-0.1	-0.2%
84.0%	49.7	49.6	-0.1	-0.1%
85.2%	49.6	49.6	0.0	-0.1%
86.4%	49.6	49.6	0.0	0.0%
87.7%	49.6	49.6	0.0	0.0%
88.9%	49.5	49.5	0.0	-0.1%
90.1%	49.5	49.4	0.0	-0.1%
91.4%	49.4	49.4	0.0	-0.1%
92.6%	49.4	49.3	-0.2	-0.3%
93.8%	49.4	49.3	-0.2	-0.4%
95.1%	49.4	49.2	-0.1	-0.3%
96.3%	49.3	49.1	-0.1	-0.3%
97.5%	49.1	49.1	0.0	0.0%
98.8%	48.8	48.6	-0.2	-0.4%
100.0%	48.7	48.6	-0.1	-0.3%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.2	56.0	-2.2	-3.7%
1.2%	57.0	56.0	-1.0	-1.8%
2.5%	55.9	55.8	-0.1	-0.1%
3.7%	55.6	55.5	-0.1	-0.1%
4.9%	55.3	55.4	0.1	0.1%
6.2%	54.6	55.3	0.7	1.3%
7.4%	54.5	54.0	-0.5	-1.0%
8.6%	54.4	53.8	-0.6	-1.1%
9.9%	53.4	53.6	0.2	0.4%
11.1%	53.4	53.4	0.0	0.0%
12.3%	53.4	53.2	-0.2	-0.4%
13.6%	53.1	53.0	-0.2	-0.3%
14.8%	53.1	52.9	-0.1	-0.3%
16.0%	52.9	52.9	0.0	0.1%
17.3%	52.9	52.7	-0.1	-0.2%
18.5%	52.8	52.7	-0.1	-0.3%
19.8%	52.8	52.5	-0.3	-0.6%
21.0%	52.8	52.5	-0.3	-0.7%
22.2%	52.8	52.4	-0.3	-0.6%
23.5%	52.4	52.3	-0.1	-0.3%
24.7%	52.4	52.2	-0.2	-0.4%
25.9%	52.2	52.1	-0.1	-0.2%
27.2%	52.2	52.0	-0.2	-0.4%
28.4%	52.2	51.9	-0.2	-0.5%
29.6%	52.2	51.9	-0.2	-0.4%
30.9%	52.2	51.8	-0.4	-0.7%
32.1%	52.1	51.7	-0.4	-0.8%
33.3%	52.1	51.7	-0.4	-0.8%
34.6%	51.9	51.6	-0.3	-0.5%
35.8%	51.8	51.6	-0.2	-0.4%
37.0%	51.8	51.6	-0.2	-0.4%
38.3%	51.7	51.6	-0.2	-0.3%
39.5%	51.7	51.6	-0.2	-0.3%
40.7%	51.6	51.6	0.0	0.0%
42.0%	51.6	51.5	-0.1	-0.1%
43.2%	51.5	51.5	0.0	-0.1%
44.4%	51.4	51.3	-0.1	-0.1%
45.7%	51.4	51.2	-0.2	-0.3%
46.9%	51.4	51.2	-0.2	-0.4%
48.1%	51.3	51.2	-0.1	-0.2%
49.4%	51.3	51.1	-0.2	-0.3%
50.6%	51.1	51.1	0.0	0.0%
51.9%	51.1	51.1	0.0	0.0%
53.1%	51.0	51.1	0.0	0.1%
54.3%	51.0	50.9	-0.1	-0.2%
55.6%	50.9	50.8	-0.1	-0.2%
56.8%	50.8	50.7	-0.1	-0.3%
58.0%	50.8	50.7	-0.1	-0.2%
59.3%	50.7	50.6	-0.1	-0.2%
60.5%	50.7	50.4	-0.2	-0.5%
61.7%	50.6	50.3	-0.3	-0.6%
63.0%	50.6	50.3	-0.3	-0.6%
64.2%	50.5	50.2	-0.3	-0.5%
65.4%	50.3	50.2	-0.1	-0.2%
66.7%	50.3	50.1	-0.2	-0.3%
67.9%	50.2	50.1	-0.1	-0.2%
69.1%	50.2	50.1	-0.1	-0.2%
70.4%	50.1	50.1	0.0	-0.1%
71.6%	50.1	50.1	0.0	0.0%
72.8%	50.1	50.0	-0.1	-0.1%
74.1%	50.0	50.0	0.0	0.0%
75.3%	50.0	50.0	0.0	0.0%
76.5%	49.9	49.9	0.0	0.0%
77.8%	49.9	49.8	0.0	-0.1%
79.0%	49.8	49.7	-0.2	-0.4%
80.2%	49.8	49.7	-0.1	-0.3%
81.5%	49.7	49.7	-0.1	-0.2%
82.7%	49.6	49.6	0.0	0.0%
84.0%	49.6	49.6	0.0	0.0%
85.2%	49.6	49.6	0.0	0.0%
86.4%	49.5	49.6	0.0	0.1%
87.7%	49.4	49.5	0.1	0.2%
88.9%	49.4	49.5	0.0	0.1%
90.1%	49.4	49.4	0.0	0.0%
91.4%	49.4	49.3	-0.1	-0.2%
92.6%	49.3	49.3	-0.1	-0.2%
93.8%	49.2	49.2	0.0	-0.1%
95.1%	49.2	49.1	0.0	-0.1%
96.3%	49.0	49.0	0.0	0.0%
97.5%	48.8	49.0	0.2	0.4%
98.8%	48.7	48.6	-0.1	-0.2%
100.0%	48.6	48.4	-0.2	-0.4%

Figure SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

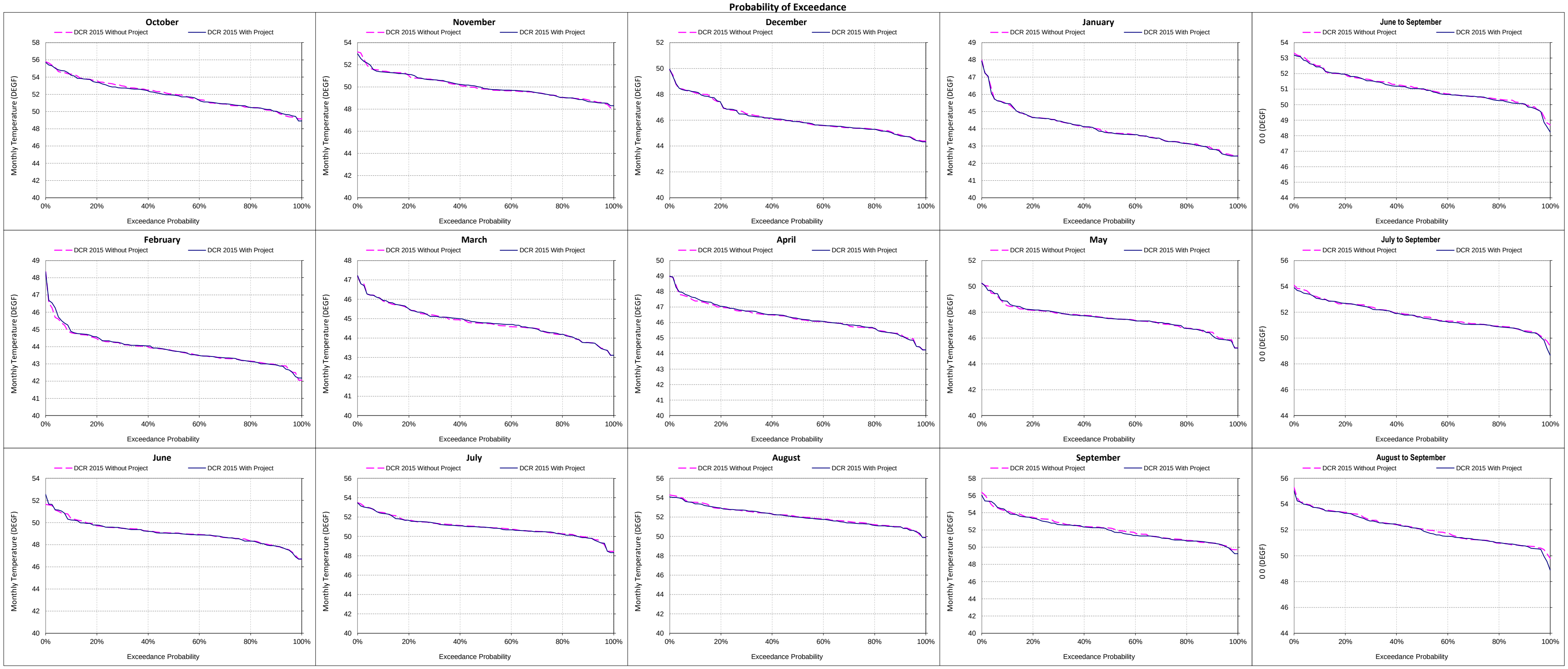


Table SQ13-1b

Clear Creek below Whiskeytown, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.8	55.7	-0.1	-0.1%
1.2%	55.6	55.4	-0.2	-0.4%
2.5%	55.4	55.3	-0.1	-0.1%
3.7%	55.1	55.0	-0.1	-0.2%
4.9%	54.6	54.8	0.2	0.4%
6.2%	54.6	54.8	0.2	0.4%
7.4%	54.5	54.7	0.2	0.4%
8.6%	54.4	54.5	0.2	0.3%
9.9%	54.3	54.2	-0.1	-0.2%
11.1%	54.3	54.1	-0.2	-0.3%
12.3%	54.1	53.8	-0.3	-0.5%
13.6%	53.9	53.8	0.0	0.0%
14.8%	53.9	53.8	-0.1	-0.1%
16.0%	53.8	53.8	0.0	0.0%
17.3%	53.7	53.7	0.0	0.0%
18.5%	53.6	53.5	-0.1	-0.3%
19.8%	53.6	53.4	-0.2	-0.4%
21.0%	53.4	53.4	-0.1	-0.1%
22.2%	53.4	53.2	-0.2	-0.4%
23.5%	53.3	53.1	-0.2	-0.4%
24.7%	53.3	52.9	-0.3	-0.6%
25.9%	53.2	52.9	-0.4	-0.7%
27.2%	53.1	52.8	-0.3	-0.5%
28.4%	53.1	52.8	-0.4	-0.7%
29.6%	53.0	52.7	-0.3	-0.5%
30.9%	52.9	52.7	-0.2	-0.4%
32.1%	52.8	52.7	-0.1	-0.1%
33.3%	52.7	52.6	-0.1	-0.2%
34.6%	52.7	52.6	-0.1	-0.2%
35.8%	52.7	52.6	-0.1	-0.1%
37.0%	52.6	52.6	-0.1	-0.1%
38.3%	52.6	52.5	-0.1	-0.2%
39.5%	52.5	52.5	0.0	-0.1%
40.7%	52.5	52.3	-0.2	-0.3%
42.0%	52.4	52.3	-0.2	-0.3%
43.2%	52.3	52.2	-0.1	-0.3%
44.4%	52.3	52.1	-0.2	-0.4%
45.7%	52.3	52.0	-0.3	-0.6%
46.9%	52.2	52.0	-0.2	-0.4%
48.1%	52.1	51.9	-0.1	-0.2%
49.4%	52.0	51.9	-0.1	-0.2%
50.6%	52.0	51.9	-0.1	-0.2%
51.9%	52.0	51.8	-0.1	-0.2%
53.1%	51.9	51.7	-0.2	-0.4%
54.3%	51.8	51.7	-0.1	-0.3%
55.6%	51.7	51.7	0.0	0.0%
56.8%	51.5	51.7	0.1	0.3%
58.0%	51.5	51.6	0.1	0.3%
59.3%	51.4	51.4	0.0	0.0%
60.5%	51.4	51.2	-0.2	-0.3%
61.7%	51.3	51.1	-0.2	-0.4%
63.0%	51.2	51.1	-0.1	-0.1%
64.2%	51.0	51.1	0.1	0.2%
65.4%	51.0	51.1	0.1	0.1%
66.7%	50.9	51.0	0.1	0.2%
67.9%	50.9	50.9	0.0	0.0%
69.1%	50.9	50.9	0.0	0.0%
70.4%	50.9	50.9	0.0	0.0%
71.6%	50.7	50.9	0.1	0.3%
72.8%	50.7	50.8	0.1	0.2%
74.1%	50.7	50.7	0.1	0.1%
75.3%	50.7	50.7	0.1	0.1%
76.5%	50.7	50.7	0.0	0.1%
77.8%	50.5	50.7	0.2	0.3%
79.0%	50.5	50.5	0.0	0.0%
80.2%	50.5	50.5	0.0	0.0%
81.5%	50.5	50.4	0.0	-0.1%
82.7%	50.4	50.4	0.0	-0.1%
84.0%	50.4	50.4	0.0	0.0%
85.2%	50.3	50.3	0.1	0.1%
86.4%	50.2	50.3	0.1	0.1%
87.7%	50.2	50.2	0.1	0.2%
88.9%	50.0	50.1	0.0	0.1%
90.1%	50.0	50.0	0.0	0.0%
91.4%	49.7	49.9	0.1	0.3%
92.6%	49.6	49.7	0.1	0.2%
93.8%	49.5	49.7	0.2	0.3%
95.1%	49.4	49.6	0.3	0.5%
96.3%	49.4	49.5	0.1	0.3%
97.5%	49.3	49.4	0.1	0.3%
98.8%	49.2	48.9	-0.2	-0.5%
100.0%	49.2	48.9	0.0	-0.5%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.2	53.0	-0.2	-0.3%
1.2%	53.1	52.6	-0.5	-1.0%
2.5%	52.5	52.3	-0.2	-0.4%
3.7%	52.0	52.2	0.2	0.4%
4.9%	51.7	52.0	0.3	0.6%
6.2%	51.6	51.6	0.0	0.0%
7.4%	51.5	51.4	-0.1	-0.2%
8.6%	51.5	51.4	-0.1	-0.3%
9.9%	51.4	51.4	-0.1	-0.1%
11.1%	51.4	51.3	-0.1	-0.2%
12.3%	51.3	51.3	0.0	-0.1%
13.6%	51.3	51.3	0.0	-0.1%
14.8%	51.3	51.3	0.0	-0.1%
16.0%	51.3	51.2	-0.1	-0.1%
17.3%	51.3	51.2	-0.1	-0.1%
18.5%	51.2	51.2	-0.1	-0.1%
19.8%	51.1	51.1	0.1	0.2%
21.0%	50.8	51.1	0.3	0.6%
22.2%	50.8	51.0	0.2	0.4%
23.5%	50.8	50.8	0.0	0.1%
24.7%	50.8	50.8	0.0	0.1%
25.9%	50.8	50.7	0.0	-0.1%
27.2%	50.7	50.7	0.0	0.0%
28.4%	50.7	50.7	0.0	-0.1%
29.6%	50.6	50.7	0.0	0.1%
30.9%	50.6	50.6	0.0	0.1%
32.1%	50.6	50.6	0.0	0.0%
33.3%	50.5	50.6	0.1	0.1%
34.6%	50.5	50.5	0.0	-0.1%
35.8%	50.3	50.4	0.1	0.2%
37.0%	50.3	50.4	0.1	0.2%
38.3%	50.2	50.3	0.0	0.1%
39.5%	50.2	50.2	0.0	0.1%
40.7%	50.1	50.2	0.1	0.3%
42.0%	50.1	50.2	0.1	0.2%
43.2%	50.0	50.2	0.2	0.3%
44.4%	50.0	50.1	0.1	0.3%
45.7%	50.0	50.1	0.1	0.3%
46.9%	49.9	50.0	0.2	0.3%
48.1%	49.8	50.0	0.1	0.3%
49.4%	49.8	49.9	0.0	0.1%
50.6%	49.8	49.8	0.0	0.0%
51.9%	49.7	49.8	0.1	0.1%
53.1%	49.7	49.8	0.0	0.1%
54.3%	49.7	49.7	0.1	0.1%
55.6%	49.7	49.7	0.0	0.1%
56.8%	49.7	49.7	0.0	0.1%
58.0%	49.7	49.7	0.1	0.1%
59.3%	49.6	49.7	0.1	0.1%
60.5%	49.6	49.7	0.1	0.1%
61.7%	49.6	49.7	0.1	0.1%
63.0%	49.6	49.7	0.1	0.1%
64.2%	49.6	49.6	0.1	0.1%
65.4%	49.6	49.6	0.0	0.1%
66.7%	49.6	49.6	0.0	0.1%
67.9%	49.6	49.6	0.0	0.0%
69.1%	49.5	49.5	0.0	0.1%
70.4%	49.5	49.5	0.0	0.0%
71.6%	49.4	49.4	0.0	-0.1%
72.8%	49.4	49.4	0.0	0.0%
74.1%	49.3	49.3	0.0	0.1%
75.3%	49.2	49.3	0.0	0.1%
76.5%	49.2	49.2	0.0	0.0%
77.8%	49.2	49.2	0.0	-0.1%
79.0%	49.1	49.1	0.0	0.0%
80.2%	49.0	49.0	0.0	0.0%
81.5%	49.0	49.0	0.0	0.0%
82.7%	49.0	49.0	0.0	0.0%
84.0%	49.0	49.0	0.0	0.0%
85.2%	49.0	48.9	0.0	0.0%
86.4%	48.9	48.9	-0.1	-0.1%
87.7%	48.9	48.9	-0.1	-0.1%
88.9%	48.9	48.8	-0.1	-0.2%
90.1%	48.8	48.7	-0.1	-0.3%
91.4%	48.7	48.6	-0.1	-0.2%
92.6%	48.7	48.6	-0.1	-0.2%
93.8%	48.6	48.6	0.0	-0.1%
95.1%	48.6	48.5	-0.1	-0.1%
96.3%	48.5	48.5	0.0	0.1%
97.5%	48.4	48.5	0.1	0.2%
98.8%	48.1	48.3	0.2	0.4%
100.0%	48.1	48.3	0.2	0.4%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.9	49.9	0.0	0.1%
1.2%	49.5	49.4	-0.1	-0.2%
2.5%	48.8	48.8	0.1	0.1%
3.7%	48.4	48.5	0.0	0.1%
4.9%	48.4	48.4	0.0	-0.1%
6.2%	48.3	48.3	0.0	0.0%
7.4%	48.2	48.3	0.1	0.1%
8.6%	48.2	48.2	0.0	0.0%
9.9%	48.1	48.2	0.1	0.2%
11.1%	48.1	48.1	0.1	0.2%
12.3%	48.0	47.9	-0.1	-0.1%
13.6%	48.0	47.9	-0.1	-0.3%
14.8%	48.0	47.8	-0.2	-0.3%
16.0%	47.8	47.8	0.0	-0.1%
17.3%	47.6	47.7	0.2	0.4%
18.5%	47.5	47.5	0.0	0.1%
19.8%	47.4	47.4	0.0	0.0%
21.0%	46.9	47.0	0.0	0.1%
22.2%	46.9	46.9	0.0	-0.1%
23.5%	46.8	46.8	0.1	0.1%
24.7%	46.8	46.8	0.1	0.1%
25.9%	46.8	46.7	0.0	0.0%
27.2%	46.7	46.5	-0.3	-0.6%
28.4%	46.7	46.5	-0.2	-0.4%
29.6%	46.5	46.5	-0.1	-0.1%
30.9%	46.5	46.3	-0.1	-0.3%
32.1%	46.4	46.3	-0.1	-0.2%
33.3%	46.4	46.3	-0.1	-0.2%
34.6%	46.3	46.3	-0.1	-0.2%
35.8%	46.3	46.2	-0.1	-0.1%
37.0%	46.2	46.2	0.0	0.0%
38.3%	46.2	46.2	0.0	0.0%
39.5%	46.1	46.2	0.1	0.2%
40.7%	46.1	46.1	0.0	0.1%
42.0%	46.0	46.1	0.0	0.1%
43.2%	46.0	46.1	0.1	0.2%
44.4%	46.0	46.0	0.1	0.1%
45.7%	46.0	46.0	0.0	0.0%
46.9%	46.0	46.0	0.0	0.0%
48.1%	45.9	45.9	0.0	-0.1%
49.4%	45.9	45.9	0.0	0.0%
50.6%	45.9	45.9	0.0	0.0%
51.9%	45.8	45.8	0.0	-0.1%
53.1%	45.7	45.8	0.1	0.1%
54.3%	45.7	45.8	0.0	0.1%
55.6%	45.7	45.7	0.1	0.2%
56.8%	45.6	45.6	0.0	0.0%
58.0%	45.6	45.6	0.0	0.0%
59.3%	45.6	45.6	0.0	0.1%
60.5%	45.6	45.6	0.0	0.0%
61.7%	45.6	45.6	0.0	0.0%
63.0%	45.5	45.6	0.0	0.0%
64.2%	45.5	45.6	0.0	0.1%
65.4%	45.5	45.5	0.0	0.1%
66.7%	45.5	45.5	0.0	0.1%
67.9%	45.4	45.5	0.0	0.1%
69.1%	45.4	45.4	0.0	0.0%
70.4%	45.4	45.4	0.0	0.1%
71.6%	45.4	45.4	0.0	0.1%
72.8%	45.4	45.4	0.0	0.0%
74.1%	45.4	45.4	0.0	0.0%
75.3%	45.4	45.4	0.0	0.0%
76.5%	45.4	45.3	0.0	-0.1%
77.8%	45.3	45.3	-0.1	-0.1%
79.0%	45.3	45.3	0.0	0.0%
80.2%	45.3	45.3	0.0	0.0%
81.5%	45.3	45.2	-0.1	-0.1%
82.7%	45.2	45.2	0.0	-0.1%
84.0%	45.2	45.1	-0.1	-0.1%
85.2%	45.2	45.1	-0.1	-0.2%
86.4%	45.1	45.1	0.0	-0.1%
87.7%	45.0	44.9	-0.1	-0.2%
88.9%	44.9	44.9	-0.1	-0.1%
90.1%	44.9	44.8	-0.1	-0.2%
91.4%	44.8	44.8	0.0	0.0%
92.6%	44.7	44.7	0.0	0.0%
93.8%	44.7	44.7	0.0	0.0%
95.1%	44.6	44.5	-0.1	-0.2%
96.3%	44.4	44.4	0.0	0.0%
97.5%	44.4	44.4	-0.1	-0.1%
98.8%	44.4	44.3	-0.1	-0.1%
100.0%	44.4	44.3	-0.1	-0.1%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	48.0	47.9	-0.1	-0.1%
1.2%	47.2	47.2	0.0	0.0%
2.5%	47.0	47.0	0.0	0.1%
3.7%	46.4	46.1	-0.3	-0.6%
4.9%	45.7	45.7	0.0	0.1%
6.2%	45.6	45.6	0.0	0.0%
7.4%	45.6	45.6	0.0	0.0%
8.6%	45.5	45.5	0.0	-0.1%
9.9%	45.4	45.5	0.0	0.1%
11.1%	45.4	45.4	0.1	0.2%
12.3%	45.2	45.2	0.0	0.1%
13.6%	45.1	45.0	0.0	-0.1%
14.8%	44.9	44.9	0.0	0.0%
16.0%	44.9	44.9	0.0	0.0%
17.3%	44.7	44.8	0.1	0.2%
18.5%	44.7	44.7	0.0	0.0%
19.8%	44.7	44.7	0.0	0.0%
21.0%	44.7	44.6	0.0	0.0%
22.2%	44.6	44.6	0.0	-0.1%
23.5%	44.6	44.6	0.0	0.0%
24.7%	44.6	44.6	0.0	0.0%
25.9%	44.6	44.6	0.0	0.0%
27.2%	44.6	44.5	0.0	0.0%
28.4%	44.5	44.5	0.0	0.0%
29.6%	44.4	44.4	0.0	0.1%
30.9%	44.4	44.4	0.0	0.1%
32.1%	44.4	44.4	0.0	0.0%
33.3%	44.3	44.3	0.0	0.0%
34.6%	44.3	44.3	0.0	0.1%
35.8%	44.2	44.2	0.0	0.0%
37.0%	44.2	44.2	0.0	0.1%
38.3%	44.2	44.2	0.0	0.1%
39.5%	44.1	44.1	0.0	0.0%
40.7%	44.1	44.1	0.0	0.0%
42.0%	44.1	44.1	0.0	0.0%
43.2%	44.0	44.1	0.0	0.1%
44.4%	44.0	44.0	0.0	-0.1%
45.7%	44.0	43.9	-0.1	-0.3%
46.9%	43.9	43.9	0.0	-0.1%
48.1%	43.9	43.8	-0.1	-0.2%
49.4%	43.8	43.8	0.0	0.0%
50.6%	43.8	43.8	0.0	0.0%
51.9%	43.7	43.7	0.0	0.0%
53.1%	43.7	43.7	0.0	-0.1%
54.3%	43.7	43.7	0.0	-0.1%
55.6%	43.7	43.7	-0.1	-0.1%
56.8%	43.7	43.7	0.0	-0.1%
58.0%	43.7	43.7	0.0	-0.1%
59.3%	43.7	43.7	0.0	0.0%
60.5%	43.6	43.7	0.0	0.1%
61.7%	43.6	43.6	0.0	0.0%
63.0%	43.6	43.6	0.0	0.0%
64.2%	43.6	43.6	0.0	0.1%
65.4%	43.5	43.5	0.0	0.0%
66.7%	43.5	43.5	0.0	-0.1%
67.9%	43.5	43.5	0.0	0.0%
69.1%	43.4	43.5	0.0	0.1%
70.4%	43.4	43.4	0.0	0.0%
71.6%	43.3	43.3	0.0	0.0%
72.8%	43.3	43.3	0.0	0.0%
74.1%	43.3	43.3	0.0	0.0%
75.3%	43.3	43.3	0.0	0.0%
76.5%	43.2	43.2	0.0	0.0%
77.8%	43.2	43.2	0.0	-0.1%
79.0%	43.2	43.1	0.0	-0.1%
80.2%	43.1	43.1	0.0	0.0%
81.5%	43.1	43.1	0.0	0.0%
82.7%	43.1	43.1	0.0	-0.1%
84.0%	43.1	43.0	-0.1	-0.2%
85.2%	43.0	43.0	0.0	0.0%
86.4%	43.0	43.0	0.0	0.0%
87.7%	43.0	43.0	0.0	0.0%
88.9%	42.9	42.8	-0.1	-0.3%
90.1%	42.8	42.8	0.0	-0.1%
91.4%	42.8	42.8	0.0	0.0%
92.6%	42.8	42.7	-0.1	-0.1%
93.8%	42.6	42.5	0.0	-0.1%
95.1%	42.6	42.5	-0.1	-0.1%
96.3%	42.5	42.5	-0.1	-0.2%
97.5%	42.5	42.4	0.0	-0.1%
98.8%	42.4	42.4	0.0	0.0%
100.0%	42.4	42.4	0.0	0.0%

Table SQ13-1b

Clear Creek below Whiskeytown, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	48.4	48.4	0.0	0.0%
1.2%	46.5	46.7	0.1	0.3%
2.5%	46.3	46.5	0.3	0.6%
3.7%	45.7	46.2	0.5	1.2%
4.9%	45.6	45.7	0.1	0.3%
6.2%	45.4	45.5	0.1	0.3%
7.4%	45.2	45.4	0.1	0.3%
8.6%	44.9	45.3	0.4	0.8%
9.9%	44.8	44.9	0.1	0.2%
11.1%	44.8	44.8	0.0	0.1%
12.3%	44.8	44.8	0.0	0.0%
13.6%	44.7	44.7	0.0	0.1%
14.8%	44.7	44.7	0.0	0.1%
16.0%	44.7	44.7	0.0	0.1%
17.3%	44.6	44.7	0.1	0.2%
18.5%	44.5	44.6	0.0	0.1%
19.8%	44.5	44.6	0.1	0.2%
21.0%	44.4	44.5	0.1	0.3%
22.2%	44.3	44.3	0.0	0.0%
23.5%	44.3	44.3	0.0	0.1%
24.7%	44.3	44.3	0.1	0.1%
25.9%	44.3	44.3	0.0	0.0%
27.2%	44.2	44.3	0.0	0.1%
28.4%	44.2	44.3	0.0	0.0%
29.6%	44.1	44.2	0.1	0.2%
30.9%	44.1	44.1	0.0	0.0%
32.1%	44.1	44.1	0.0	0.1%
33.3%	44.1	44.1	0.0	0.0%
34.6%	44.1	44.1	0.0	0.0%
35.8%	44.0	44.1	0.0	0.1%
37.0%	44.0	44.1	0.0	0.1%
38.3%	44.0	44.1	0.0	0.1%
39.5%	44.0	44.0	0.0	0.1%
40.7%	43.9	44.0	0.1	0.3%
42.0%	43.9	43.9	0.0	0.0%
43.2%	43.9	43.9	0.0	0.0%
44.4%	43.9	43.9	0.0	0.1%
45.7%	43.9	43.9	0.0	0.0%
46.9%	43.8	43.8	0.0	0.0%
48.1%	43.8	43.8	0.0	-0.1%
49.4%	43.8	43.8	0.0	0.0%
50.6%	43.7	43.7	0.0	0.0%
51.9%	43.7	43.7	0.0	0.0%
53.1%	43.7	43.7	0.0	0.0%
54.3%	43.6	43.7	0.0	0.1%
55.6%	43.6	43.6	0.0	-0.1%
56.8%	43.6	43.5	-0.1	-0.1%
58.0%	43.5	43.5	0.0	0.0%
59.3%	43.5	43.5	0.0	0.1%
60.5%	43.5	43.5	0.0	0.0%
61.7%	43.5	43.5	0.0	0.0%
63.0%	43.5	43.5	0.0	0.0%
64.2%	43.4	43.4	0.0	0.1%
65.4%	43.4	43.4	0.0	0.0%
66.7%	43.4	43.4	0.0	0.0%
67.9%	43.3	43.4	0.0	0.1%
69.1%	43.3	43.4	0.0	0.1%
70.4%	43.3	43.3	0.0	0.1%
71.6%	43.3	43.3	0.0	0.1%
72.8%	43.3	43.3	0.0	0.1%
74.1%	43.3	43.3	0.0	0.1%
75.3%	43.3	43.2	0.0	-0.1%
76.5%	43.2	43.2	0.0	0.0%
77.8%	43.2	43.2	0.0	0.0%
79.0%	43.2	43.2	0.0	0.0%
80.2%	43.2	43.1	0.0	-0.1%
81.5%	43.1	43.1	0.0	0.0%
82.7%	43.1	43.1	0.0	0.0%
84.0%	43.1	43.0	-0.1	-0.2%
85.2%	43.0	43.0	0.0	-0.1%
86.4%	43.0	43.0	0.0	0.0%
87.7%	43.0	43.0	0.0	-0.1%
88.9%	43.0	43.0	0.0	-0.1%
90.1%	42.9	42.9	0.0	0.0%
91.4%	42.9	42.9	0.0	0.0%
92.6%	42.9	42.9	0.0	-0.1%
93.8%	42.9	42.7	-0.2	-0.4%
95.1%	42.7	42.7	0.0	0.0%
96.3%	42.5	42.5	0.0	0.0%
97.5%	42.5	42.3	-0.2	-0.6%
98.8%	42.1	42.2	0.1	0.3%
100.0%	42.1	42.2	0.1	0.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	47.2	47.2	0.0	0.0%
1.2%	46.8	46.8	0.0	0.0%
2.5%	46.8	46.7	-0.1	-0.2%
3.7%	46.3	46.3	0.0	0.0%
4.9%	46.2	46.2	0.0	0.0%
6.2%	46.2	46.2	0.0	0.0%
7.4%	46.1	46.1	0.0	-0.1%
8.6%	46.1	46.1	0.0	0.0%
9.9%	45.9	45.9	0.0	0.0%
11.1%	45.8	45.9	0.1	0.2%
12.3%	45.8	45.8	0.0	0.1%
13.6%	45.7	45.8	0.1	0.2%
14.8%	45.7	45.7	0.0	0.0%
16.0%	45.7	45.7	0.0	0.0%
17.3%	45.7	45.7	0.0	0.0%
18.5%	45.6	45.7	0.0	0.1%
19.8%	45.5	45.5	0.0	0.1%
21.0%	45.4	45.4	0.0	0.0%
22.2%	45.4	45.4	0.0	0.0%
23.5%	45.3	45.3	0.0	0.0%
24.7%	45.3	45.3	0.1	0.2%
25.9%	45.2	45.3	0.1	0.1%
27.2%	45.2	45.2	0.0	0.0%
28.4%	45.2	45.1	-0.1	-0.2%
29.6%	45.2	45.1	-0.1	-0.2%
30.9%	45.2	45.1	0.0	-0.1%
32.1%	45.1	45.1	0.0	-0.1%
33.3%	45.1	45.1	0.0	0.0%
34.6%	45.1	45.1	0.0	0.0%
35.8%	45.0	45.1	0.1	0.2%
37.0%	45.0	45.0	0.1	0.2%
38.3%	44.9	45.0	0.1	0.2%
39.5%	44.9	45.0	0.1	0.1%
40.7%	44.9	45.0	0.1	0.2%
42.0%	44.9	44.9	0.0	0.1%
43.2%	44.8	44.9	0.1	0.2%
44.4%	44.8	44.8	0.1	0.1%
45.7%	44.8	44.8	0.1	0.1%
46.9%	44.8	44.8	0.0	0.1%
48.1%	44.8	44.8	0.0	0.1%
49.4%	44.7	44.8	0.0	0.1%
50.6%	44.7	44.8	0.0	0.1%
51.9%	44.7	44.8	0.0	0.1%
53.1%	44.7	44.7	0.0	0.1%
54.3%	44.7	44.7	0.1	0.2%
55.6%	44.6	44.7	0.1	0.2%
56.8%	44.6	44.7	0.1	0.2%
58.0%	44.6	44.7	0.1	0.2%
59.3%	44.6	44.7	0.1	0.3%
60.5%	44.6	44.7	0.1	0.3%
61.7%	44.6	44.7	0.1	0.2%
63.0%	44.6	44.7	0.1	0.2%
64.2%	44.6	44.6	0.0	0.0%
65.4%	44.5	44.6	0.0	0.1%
66.7%	44.5	44.5	0.0	0.0%
67.9%	44.5	44.5	0.0	0.0%
69.1%	44.5	44.5	0.0	0.0%
70.4%	44.5	44.5	0.0	-0.1%
71.6%	44.4	44.4	-0.1	-0.2%
72.8%	44.3	44.3	0.0	0.1%
74.1%	44.3	44.3	0.0	0.0%
75.3%	44.2	44.3	0.0	0.1%
76.5%	44.2	44.3	0.1	0.1%
77.8%	44.2	44.2	0.1	0.1%
79.0%	44.2	44.2	0.0	0.0%
80.2%	44.2	44.2	0.0	0.0%
81.5%	44.1	44.1	0.0	-0.1%
82.7%	44.1	44.1	0.0	0.0%
84.0%	44.1	44.1	0.0	0.0%
85.2%	43.9	44.0	0.0	0.1%
86.4%	43.9	43.9	0.0	0.0%
87.7%	43.8	43.8	0.0	0.0%
88.9%	43.8	43.8	0.0	0.0%
90.1%	43.8	43.8	0.0	0.0%
91.4%	43.7	43.7	0.0	0.0%
92.6%	43.7	43.7	0.0	0.0%
93.8%	43.6	43.6	0.0	0.0%
95.1%	43.5	43.5	0.0	-0.1%
96.3%	43.4	43.4	0.0	-0.1%
97.5%	43.3	43.4	0.0	0.0%
98.8%	43.1	43.1	0.0	0.0%
100.0%	43.1	43.1	0.0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.0	49.0	0.0	0.0%
1.2%	48.9	48.9	0.0	0.0%
2.5%	48.4	48.3	-0.2	-0.3%
3.7%	47.8	48.0	0.2	0.4%
4.9%	47.8	48.0	0.2	0.4%
6.2%	47.7	47.8	0.1	0.2%
7.4%	47.7	47.7	0.1	0.2%
8.6%	47.5	47.6	0.1	0.3%
9.9%	47.4	47.6	0.2	0.4%
11.1%	47.4	47.5	0.1	0.2%
12.3%	47.3	47.4	0.1	0.1%
13.6%	47.3	47.4	0.1	0.1%
14.8%	47.2	47.3	0.1	0.2%
16.0%	47.2	47.3	0.1	0.3%
17.3%	47.1	47.2	0.1	0.1%
18.5%	47.0	47.1	0.1	0.3%
19.8%	47.0	47.1	0.1	0.2%
21.0%	47.0	47.0	0.1	0.1%
22.2%	46.9	47.0	0.0	0.1%
23.5%	46.9	46.9	0.0	0.0%
24.7%	46.9	46.9	0.1	0.1%
25.9%	46.8	46.9	0.1	0.2%
27.2%	46.7	46.8	0.1	0.1%
28.4%	46.7	46.8	0.1	0.1%
29.6%	46.7	46.7	0.0	0.0%
30.9%	46.7	46.7	0.0	0.0%
32.1%	46.6	46.7	0.1	0.2%
33.3%	46.6	46.7	0.1	0.3%
34.6%	46.6	46.7	0.1	0.2%
35.8%	46.5	46.6	0.1	0.1%
37.0%	46.5	46.5	0.0	0.1%
38.3%	46.5	46.5	0.0	0.0%
39.5%	46.5	46.5	0.0	0.0%
40.7%	46.5	46.5	0.0	0.1%
42.0%	46.5	46.5	0.0	0.0%
43.2%	46.4	46.5	0.0	0.1%
44.4%	46.4	46.5	0.0	0.1%
45.7%	46.4	46.4	0.0	-0.1%
46.9%	46.4	46.3	0.0	-0.1%
48.1%	46.3	46.3	0.1	0.1%
49.4%	46.2	46.3	0.1	0.1%
50.6%	46.2	46.2	0.1	0.1%
51.9%	46.2	46.2	0.0	0.1%
53.1%	46.2	46.2	0.0	0.1%
54.3%	46.1	46.2	0.1	0.1%
55.6%	46.1	46.1	0.0	0.0%
56.8%	46.1	46.1	0.0	0.0%
58.0%	46.1	46.1	0.0	0.1%
59.3%	46.1	46.1	0.0	0.1%
60.5%	46.0	46.1	0.0	0.1%
61.7%	46.0	46.0	0.0	0.0%
63.0%	46.0	46.0	0.0	0.0%
64.2%	46.0	46.0	0.0	0.0%
65.4%	46.0	46.0	0.0	0.0%
66.7%	45.9	45.9	0.0	0.0%
67.9%	45.9	45.9	-0.1	-0.1%
69.1%	45.9	45.9	0.0	-0.1%
70.4%	45.8	45.8	0.1	0.2%
71.6%	45.7	45.8	0.1	0.3%
72.8%	45.7	45.8	0.1	0.2%
74.1%	45.7	45.8	0.1	0.2%
75.3%	45.7	45.7	0.0	0.1%
76.5%	45.7	45.7	0.0	0.1%
77.8%	45.6	45.7	0.0	0.1%
79.0%	45.6	45.7	0.0	0.1%
80.2%	45.6	45.6	0.0	0.0%
81.5%	45.5	45.5	0.0	0.0%
82.7%	45.5	45.4	0.0	-0.1%
84.0%	45.4	45.4	0.0	-0.1%
85.2%	45.3	45.4	0.0	0.0%
86.4%	45.3	45.3	0.0	0.0%
87.7%	45.3	45.3	0.0	0.0%
88.9%	45.3	45.3	0.0	-0.1%
90.1%	45.3	45.1	-0.1	-0.2%
91.4%	45.1	45.1	0.0	0.0%
92.6%	45.0	45.0	-0.1	-0.1%
93.8%	45.0	44.9	-0.1	-0.2%
95.1%	45.0	44.9	-0.1	-0.2%
96.3%	44.5	44.5	0.0	0.0%
97.5%	44.4	44.4	0.0	0.0%
98.8%	44.2	44.2	0.0	0.0%
100.0%	44.2	44.2	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.2	50.2	0.0	0.0%
1.2%	50.1	50.0	0.0	0.0%
2.5%	50.0	49.7	-0.3	-0.7%
3.7%	49.5	49.7	0.2	0.4%
4.9%	49.4	49.5	0.0	0.0%
6.2%	49.2	49.4	0.2	0.4%
7.4%	49.0	49.0	0.0	0.0%
8.6%	48.7	48.9	0.2	0.4%
9.9%	48.5	48.8	0.3	0.7%
11.1%	48.4	48.6	0.1	0.3%
12.3%	48.4	48.5	0.1	0.1%
13.6%	48.4	48.5	0.0	0.1%
14.8%	48.3	48.4	0.2	0.4%
16.0%	48.2	48.3	0.1	0.1%
17.3%	48.2	48.2	0.1	0.1%
18.5%	48.2	48.2	0.0	0.1%
19.8%	48.1	48.2	0.0	0.1%
21.0%	48.1	48.2	0.0	0.1%
22.2%	48.1	48.2	0.0	0.1%
23.5%	48.1	48.1	0.0	0.0%
24.7%	48.1	48.1	0.0	0.0%
25.9%	48.1	48.1	0.0	0.1%
27.2%	48.0	48.1	0.0	0.0%
28.4%	48.0	48.0	0.1	0.2%
29.6%	47.9	48.0	0.1	0.1%
30.9%	47.9	47.9	0.0	0.1%
32.1%	47.9	47.9	0.0	0.0%
33.3%	47.8	47.8	0.0	0.0%
34.6%	47.8	47.8	0.0	-0.1%
35.8%	47.8	47.8	-0.1	-0.1%
37.0%	47.8	47.8	0.0	-0.1%
38.3%	47.8	47.7	0.0	-0.1%
39.5%	47.8	47.7	0.0	-0.1%
40.7%	47.7	47.7	0.0	0.0%
42.0%	47.7	47.7	0.0	-0.1%
43.2%	47.7	47.7	-0.1	-0.1%
44.4%	47.7	47.6	0.0	-0.1%
45.7%	47.6	47.6	0.0	-0.1%
46.9%	47.6	47.6	0.0	0.0%
48.1%	47.6	47.5	-0.1	-0.1%
49.4%	47.5	47.5	0.0	0.0%
50.6%	47.5	47.5	0.0	-0.1%
51.9%	47.5	47.5	0.0	0.0%
53.1%	47.5	47.5	0.0	0.0%
54.3%	47.5	47.5	0.0	0.0%
55.6%	47.5	47.4	0.0	0.0%
56.8%	47.5	47.4	0.0	0.0%
58.0%	47.4	47.4	0.0	-0.1%
59.3%	47.4	47.4	-0.1	-0.1%
60.5%	47.3	47.3	0.0	0.0%
61.7%	47.3	47.3	0.0	0.0%
63.0%	47.3	47.3	0.0	0.0%
64.2%	47.3	47.3	0.0	0.0%
65.4%	47.3	47.3	0.1	0.1%
66.7%	47.3	47.3	0.0	0.0%
67.9%	47.2	47.2	-0.1	-0.1%
69.1%	47.1	47.2	0.1	0.2%
70.4%	47.1	47.2	0.1	0.2%
71.6%	47.1	47.1	0.1	0.2%
72.8%	47.1	47.1	0.1	0.2%
74.1%	47.0	47.1	0.0	0.1%
75.3%	47.0	47.0	0.0	0.1%
76.5%	46.9	47.0	0.1	0.1%
77.8%	46.8	47.0	0.2	0.3%
79.0%	46.8	46.8	-0.1	-0.1%
80.2%	46.8	46.7	0.0	0.0%
81.5%	46.7	46.7	0.0	-0.1%
82.7%	46.7	46.7	0.0	0.0%
84.0%	46.7	46.7	0.0	0.0%
85.2%	46.7	46.6	-0.1	-0.1%
86.4%	46.5	46.6	0.1	0.2%
87.7%	46.5	46.4	0.0	-0.1%
88.9%	46.5	46.4	-0.1	-0.1%
90.1%	46.4	46.2	-0.3	-0.6%
91.4%	46.2	46.0	-0.2	-0.4%
92.6%	46.0	45.9	-0.1	-0.2%
93.8%	46.0	45.9	-0.1	-0.2%
95.1%	45.9	45.9	0.0	-0.1%
96.3%	45.9	45.8	0.0	-0.1%
97.5%	45.9	45.8	-0.1	-0.2%
98.8%	45.2	45.2	0.0	0.0%
100.0%	45.2	45.2	0.0	0.0%

Table SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.6	52.6	0.9	1.8%
1.2%	51.6	51.7	0.1	0.1%
2.5%	51.5	51.6	0.1	0.2%
3.7%	51.1	51.2	0.0	0.0%
4.9%	51.0	51.1	0.1	0.2%
6.2%	50.9	51.0	0.2	0.3%
7.4%	50.8	50.8	0.0	0.0%
8.6%	50.8	50.3	-0.5	-0.9%
9.9%	50.4	50.2	-0.1	-0.2%
11.1%	50.3	50.2	-0.1	-0.2%
12.3%	50.2	50.2	-0.1	-0.1%
13.6%	50.2	50.0	-0.2	-0.4%
14.8%	50.1	50.0	-0.1	-0.3%
16.0%	50.0	49.9	-0.1	-0.1%
17.3%	49.9	49.9	0.0	0.0%
18.5%	49.9	49.8	-0.1	-0.3%
19.8%	49.7	49.8	0.1	0.1%
21.0%	49.7	49.8	0.1	0.1%
22.2%	49.7	49.7	0.0	0.1%
23.5%	49.6	49.6	0.0	0.0%
24.7%	49.6	49.6	0.0	0.0%
25.9%	49.6	49.6	0.0	0.1%
27.2%	49.5	49.6	0.0	0.0%
28.4%	49.5	49.6	0.0	0.1%
29.6%	49.5	49.5	0.0	0.0%
30.9%	49.5	49.5	0.0	0.0%
32.1%	49.5	49.4	0.0	-0.1%
33.3%	49.4	49.4	-0.1	-0.1%
34.6%	49.4	49.4	-0.1	-0.1%
35.8%	49.4	49.4	-0.1	-0.1%
37.0%	49.4	49.4	0.0	0.0%
38.3%	49.3	49.2	0.0	-0.1%
39.5%	49.2	49.2	0.0	-0.1%
40.7%	49.2	49.2	0.0	-0.1%
42.0%	49.2	49.2	0.0	-0.1%
43.2%	49.1	49.1	-0.1	-0.1%
44.4%	49.1	49.1	-0.1	-0.1%
45.7%	49.1	49.1	0.0	0.0%
46.9%	49.1	49.0	0.0	-0.1%
48.1%	49.1	49.0	0.0	-0.1%
49.4%	49.1	49.0	0.0	0.0%
50.6%	49.1	49.0	0.0	0.0%
51.9%	49.1	49.0	0.0	-0.1%
53.1%	49.0	49.0	0.0	0.0%
54.3%	49.0	48.9	0.0	-0.1%
55.6%	49.0	48.9	0.0	0.0%
56.8%	49.0	48.9	-0.1	-0.1%
58.0%	48.9	48.9	0.0	-0.1%
59.3%	48.9	48.9	0.0	-0.1%
60.5%	48.9	48.9	0.0	-0.1%
61.7%	48.9	48.9	0.0	0.0%
63.0%	48.9	48.9	0.0	0.0%
64.2%	48.9	48.8	0.0	0.0%
65.4%	48.8	48.8	0.0	0.0%
66.7%	48.7	48.8	0.0	0.1%
67.9%	48.7	48.8	0.0	0.1%
69.1%	48.7	48.7	0.0	0.0%
70.4%	48.7	48.7	0.0	0.0%
71.6%	48.6	48.6	0.0	0.0%
72.8%	48.6	48.6	0.0	0.0%
74.1%	48.6	48.5	0.0	-0.1%
75.3%	48.6	48.5	0.0	-0.1%
76.5%	48.5	48.5	-0.1	-0.1%
77.8%	48.5	48.3	-0.2	-0.4%
79.0%	48.4	48.3	-0.1	-0.2%
80.2%	48.3	48.3	0.0	0.0%
81.5%	48.3	48.3	0.0	0.0%
82.7%	48.3	48.2	-0.1	-0.1%
84.0%	48.1	48.1	0.0	0.0%
85.2%	48.1	48.1	0.0	0.0%
86.4%	48.0	48.0	-0.1	-0.2%
87.7%	48.0	47.9	-0.1	-0.1%
88.9%	48.0	47.9	-0.1	-0.1%
90.1%	47.8	47.9	0.0	0.0%
91.4%	47.8	47.8	0.0	0.0%
92.6%	47.7	47.7	0.0	0.1%
93.8%	47.6	47.6	0.0	0.0%
95.1%	47.5	47.5	0.0	0.0%
96.3%	47.3	47.3	-0.1	-0.2%
97.5%	47.0	46.9	-0.1	-0.3%
98.8%	46.7	46.7	0.0	0.0%
100.0%	46.7	46.7	0.0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.5	53.5	0.0	0.0%
1.2%	53.4	53.1	-0.2	-0.4%
2.5%	53.1	53.0	-0.1	-0.2%
3.7%	53.0	53.0	0.0	-0.1%
4.9%	52.9	52.9	0.0	0.0%
6.2%	52.8	52.8	0.0	0.0%
7.4%	52.5	52.6	0.0	0.0%
8.6%	52.5	52.4	-0.1	-0.1%
9.9%	52.5	52.4	-0.1	-0.2%
11.1%	52.4	52.3	-0.1	-0.1%
12.3%	52.2	52.3	0.1	0.1%
13.6%	52.2	52.1	-0.1	-0.2%
14.8%	52.1	51.8	-0.3	-0.6%
16.0%	52.0	51.8	-0.1	-0.3%
17.3%	51.8	51.7	-0.1	-0.1%
18.5%	51.7	51.7	0.0	0.0%
19.8%	51.7	51.7	0.0	0.0%
21.0%	51.7	51.6	-0.1	-0.2%
22.2%	51.6	51.6	0.0	0.0%
23.5%	51.5	51.5	0.0	0.1%
24.7%	51.5	51.5	0.0	0.1%
25.9%	51.5	51.5	0.0	0.0%
27.2%	51.5	51.5	0.0	0.0%
28.4%	51.4	51.5	0.1	0.1%
29.6%	51.4	51.4	0.0	0.1%
30.9%	51.3	51.3	0.0	0.0%
32.1%	51.3	51.2	-0.1	-0.2%
33.3%	51.3	51.2	-0.1	-0.2%
34.6%	51.3	51.2	-0.1	-0.2%
35.8%	51.2	51.1	-0.1	-0.2%
37.0%	51.2	51.1	-0.1	-0.2%
38.3%	51.2	51.1	0.0	-0.1%
39.5%	51.1	51.1	0.0	-0.1%
40.7%	51.1	51.1	0.0	0.0%
42.0%	51.1	51.0	-0.1	-0.1%
43.2%	51.1	51.0	-0.1	-0.1%
44.4%	51.1	51.0	-0.1	-0.1%
45.7%	51.1	51.0	-0.1	-0.1%
46.9%	51.0	51.0	0.0	-0.1%
48.1%	51.0	51.0	0.0	0.0%
49.4%	51.0	51.0	0.0	0.0%
50.6%	50.9	50.9	0.0	0.0%
51.9%	50.9	50.9	0.0	0.0%
53.1%	50.9	50.8	0.0	-0.1%
54.3%	50.9	50.8	0.0	-0.1%
55.6%	50.9	50.8	0.0	-0.1%
56.8%	50.8	50.7	-0.1	-0.3%
58.0%	50.8	50.7	-0.1	-0.3%
59.3%	50.8	50.7	-0.1	-0.2%
60.5%	50.7	50.7	-0.1	-0.1%
61.7%	50.7	50.6	-0.1	-0.1%
63.0%	50.6	50.6	0.0	0.0%
64.2%	50.6	50.6	0.0	0.0%
65.4%	50.6	50.6	0.0	0.0%
66.7%	50.6	50.5	0.0	0.0%
67.9%	50.5	50.5	0.0	0.0%
69.1%	50.5	50.5	0.0	-0.1%
70.4%	50.5	50.5	0.0	-0.1%
71.6%	50.5	50.5	0.0	0.0%
72.8%	50.5	50.5	0.0	0.0%
74.1%	50.4	50.5	0.0	0.1%
75.3%	50.4	50.5	0.1	0.1%
76.5%	50.4	50.4	0.0	0.0%
77.8%	50.4	50.3	-0.1	-0.1%
79.0%	50.3	50.3	0.0	0.0%
80.2%	50.3	50.2	0.0	-0.1%
81.5%	50.3	50.1	-0.1	-0.2%
82.7%	50.2	50.1	-0.1	-0.2%
84.0%	50.2	50.1	-0.1	-0.2%
85.2%	50.1	50.0	0.0	-0.1%
86.4%	50.1	50.0	-0.1	-0.2%
87.7%	50.0	49.9	-0.1	-0.2%
88.9%	49.9	49.9	-0.1	-0.1%
90.1%	49.9	49.8	-0.1	-0.1%
91.4%	49.8	49.8	0.0	0.0%
92.6%	49.7	49.6	-0.1	-0.1%
93.8%	49.6	49.5	-0.2	-0.4%
95.1%	49.4	49.3	-0.1	-0.1%
96.3%	49.2	49.3	0.1	0.3%
97.5%	48.5	48.5	0.0	0.0%
98.8%	48.5	48.3	-0.1	-0.3%
100.0%	48.5	48.3	-0.1	-0.3%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	54.1	-0.2	-0.4%
1.2%	54.2	54.0	-0.2	-0.4%
2.5%	54.2	54.0	-0.2	-0.3%
3.7%	54.0	54.0	-0.1	-0.1%
4.9%	54.0	53.9	-0.1	-0.2%
6.2%	53.7	53.6	-0.1	-0.2%
7.4%	53.6	53.6	0.0	0.0%
8.6%	53.5	53.5	0.0	0.0%
9.9%	53.5	53.4	-0.2	-0.3%
11.1%	53.5	53.4	-0.2	-0.3%
12.3%	53.5	53.3	-0.2	-0.3%
13.6%	53.4	53.2	-0.2	-0.4%
14.8%	53.3	53.1	-0.2	-0.3%
16.0%	53.1	53.1	0.0	0.0%
17.3%	52.9	53.0	0.1	0.1%
18.5%	52.9	53.0	0.1	0.1%
19.8%	52.9	53.0	0.1	0.1%
21.0%	52.9	52.8	-0.1	-0.1%
22.2%	52.8	52.8	0.0	-0.1%
23.5%	52.8	52.8	0.0	0.0%
24.7%	52.8	52.8	0.0	0.0%
25.9%	52.7	52.7	0.0	0.0%
27.2%	52.7	52.7	0.0	0.0%
28.4%	52.6	52.7	0.1	0.1%
29.6%	52.6	52.7	0.1	0.1%
30.9%	52.6	52.6	0.0	0.1%
32.1%	52.5	52.6	0.1	0.1%
33.3%	52.5	52.6	0.1	0.2%
34.6%	52.4	52.5	0.1	0.1%
35.8%	52.4	52.4	0.0	0.0%
37.0%	52.4	52.4	0.0	0.0%
38.3%	52.4	52.4	0.0	-0.1%
39.5%	52.4	52.3	0.0	0.0%
40.7%	52.2	52.3	0.0	0.0%
42.0%	52.2	52.2	0.0	0.0%
43.2%	52.2	52.2	0.0	0.0%
44.4%	52.2	52.2	-0.1	-0.1%
45.7%	52.2	52.1	-0.1	-0.2%
46.9%	52.2	52.1	-0.1	-0.2%
48.1%	52.1	52.0	-0.1	-0.2%
49.4%	52.0	52.0	0.0	0.0%
50.6%	52.0	52.0	0.0	-0.1%
51.9%	52.0	52.0	0.0	-0.1%
53.1%	52.0	51.9	-0.1	-0.1%
54.3%	52.0	51.9	-0.1	-0.2%
55.6%	51.9	51.9	-0.1	-0.1%
56.8%	51.9	51.8	0.0	-0.1%
58.0%	51.8	51.8	0.0	-0.1%
59.3%	51.8	51.8	-0.1	-0.1%
60.5%	51.8	51.7	0.0	-0.1%
61.7%	51.8	51.7	-0.1	-0.2%
63.0%	51.7	51.6	0.0	-0.1%
64.2%	51.7	51.6	-0.1	-0.1%
65.4%	51.6	51.6	-0.1	-0.1%
66.7%	51.6	51.5	-0.1	-0.2%
67.9%	51.6	51.5	-0.1	-0.3%
69.1%	51.6	51.4	-0.2	-0.3%
70.4%	51.5	51.4	-0.1	-0.3%
71.6%	51.5	51.4	-0.1	-0.2%
72.8%	51.4	51.3	-0.1	-0.2%
74.1%	51.4	51.3	-0.1	-0.2%
75.3%	51.4	51.3	-0.1	-0.2%
76.5%	51.4	51.3	-0.1	-0.1%
77.8%	51.3	51.3	0.0	-0.1%
79.0%	51.2	51.2	-0.1	-0.1%
80.2%	51.2	51.1	-0.1	-0.2%
81.5%	51.2	51.1	-0.1	-0.1%
82.7%	51.1	51.1	0.0	-0.1%
84.0%	51.1	51.1	0.0	-0.1%
85.2%	51.1	51.0	-0.1	-0.2%
86.4%	51.1	51.0	0.0	-0.1%
87.7%	51.0	51.0	0.0	-0.1%
88.9%	51.0	51.0	0.0	0.0%
90.1%	51.0	51.0	0.0	0.0%
91.4%	50.9	50.8	-0.1	-0.1%
92.6%	50.9	50.8	-0.1	-0.1%
93.8%	50.7	50.6	-0.1	-0.2%
95.1%	50.6	50.6	0.1	0.1%
96.3%	50.5	50.5	-0.1	-0.2%
97.5%	50.2	50.3	0.1	0.2%
98.8%	49.9	49.9	0.0	0.0%
100.0%	49.9	49.9	0.0	0.0%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.4	56.0	-0.3	-0.6%
1.2%	56.1	55.4	-0.7	-1.2%
2.5%	55.5	55.3	-0.2	-0.4%
3.7%	55.0	55.3	0.4	0.6%
4.9%	54.6	55.0	0.4	0.7%
6.2%	54.6	54.6	0.0	0.1%
7.4%	54.4	54.5	0.1	0.2%
8.6%	54.3	54.4	0.2	0.3%
9.9%	54.2	54.1	-0.1	-0.2%
11.1%	54.1	53.9	-0.2	-0.4%
12.3%	53.9	53.8	-0.1	-0.1%
13.6%	53.9	53.8	-0.1	-0.2%
14.8%	53.8	53.6	-0.2	-0.4%
16.0%	53.7	53.5	-0.1	-0.2%
17.3%	53.5	53.5	0.0	0.0%
18.5%	53.5	53.5	0.0	-0.1%
19.8%	53.5	53.4	-0.1	-0.2%
21.0%	53.4	53.3	-0.1	-0.1%
22.2%	53.3	53.2	-0.1	-0.3%
23.5%	53.3	53.1	-0.2	-0.4%
24.7%	53.3	53.0	-0.3	-0.6%
25.9%	53.3	52.9	-0.3	-0.6%
27.2%	53.2	52.8	-0.4	-0.8%
28.4%	53.0	52.8	-0.2	-0.3%
29.6%	52.9	52.6	-0.2	-0.5%
30.9%	52.9	52.6	-0.3	-0.5%
32.1%	52.7	52.6	-0.2	-0.3%
33.3%	52.6	52.6	0.0	-0.1%
34.6%	52.6	52.6	-0.1	-0.1%
35.8%	52.6	52.5	-0.1	-0.1%
37.0%	52.5	52.5	0.0	0.0%
38.3%	52.4	52.5	0.1	0.2%
39.5%	52.4	52.4	0.0	-0.1%
40.7%	52.4	52.3	-0.1	-0.1%
42.0%	52.4	52.3	-0.1	-0.1%
43.2%	52.4	52.3	-0.1	-0.2%
44.4%	52.3	52.3	-0.1	-0.2%
45.7%	52.3	52.3	-0.1	-0.2%
46.9%	52.3	52.2	0.0	0.0%
48.1%	52.3	52.2	0.0	-0.1%
49.4%	52.2	52.0	-0.2	-0.4%
50.6%	52.2	51.9	-0.3	-0.5%
51.9%	52.1	51.7	-0.4	-0.7%
53.1%	51.9	51.7	-0.2	-0.4%
54.3%	51.9	51.7	-0.2	-0.4%
55.6%	51.9	51.6	-0.3	-0.6%
56.8%	51.8	51.5	-0.3	-0.5%
58.0%	51.8	51.5	-0.3	-0.5%
59.3%	51.7	51.4	-0.4	-0.7%
60.5%	51.6	51.4	-0.2	-0.4%
61.7%	51.5	51.3	-0.2	-0.4%
63.0%	51.5	51.3	-0.2	-0.4%
64.2%	51.5	51.3	-0.2	-0.4%
65.4%	51.3	51.3	0.0	0.0%
66.7%	51.2	51.3	0.0	0.0%
67.9%	51.2	51.2	0.0	-0.1%
69.1%	51.2	51.2	0.0	0.1%
70.4%	51.1	51.1	0.0	0.0%
71.6%	51.1	51.0	-0.1	-0.1%
72.8%	51.0	51.0	0.0	0.0%
74.1%	51.0	50.9	-0.1	-0.2%
75.3%	51.0	50.8	-0.1	-0.2%
76.5%	50.9	50.8	-0.1	-0.2%
77.8%	50.9	50.8	-0.1	-0.2%
79.0%	50.8	50.8	0.0	0.0%
80.2%	50.8	50.7	-0.1	-0.1%
81.5%	50.8	50.7	-0.1	-0.1%
82.7%	50.7	50.7	0.0	-0.1%
84.0%	50.7	50.7	0.0	0.0%
85.2%	50.6	50.7	0.1	0.2%
86.4%	50.5	50.6	0.1	0.2%
87.7%	50.5	50.6	0.0	0.1%
88.9%	50.5	50.5	0.0	0.0%
90.1%	50.5	50.5	0.0	0.0%
91.4%	50.5	50.4	0.0	-0.1%
92.6%	50.3	50.4	0.1	0.1%
93.8%	50.2	50.3	0.0	0.1%
95.1%	50.2	50.1	-0.1	-0.2%
96.3%	50.1	49.9	-0.1	-0.3%
97.5%	49.7	49.6	-0.1	-0.2%
98.8%	49.7	49.3	-0.4	-0.9%
100.0%	49.7	49.3	-0.4	-0.9%

Table SQ13-1b

Clear Creek below Whiskeytown, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.3	53.2	-0.1	-0.2%
1.2%	53.2	53.1	-0.1	-0.1%
2.5%	53.1	53.1	0.0	-0.1%
3.7%	53.1	52.9	-0.2	-0.4%
4.9%	52.9	52.8	-0.1	-0.2%
6.2%	52.7	52.6	-0.1	-0.2%
7.4%	52.6	52.6	0.0	-0.1%
8.6%	52.5	52.4	-0.1	-0.2%
9.9%	52.5	52.4	-0.1	-0.1%
11.1%	52.5	52.4	-0.1	-0.2%
12.3%	52.1	52.1	0.0	0.0%
13.6%	52.0	52.1	0.1	0.1%
14.8%	52.0	52.0	0.0	0.0%
16.0%	52.0	52.0	0.0	0.0%
17.3%	52.0	52.0	0.0	0.0%
18.5%	52.0	52.0	0.0	-0.1%
19.8%	52.0	52.0	0.0	0.0%
21.0%	51.8	51.9	0.1	0.2%
22.2%	51.8	51.8	0.0	0.1%
23.5%	51.8	51.8	0.1	0.1%
24.7%	51.7	51.8	0.1	0.1%
25.9%	51.7	51.7	0.0	0.0%
27.2%	51.7	51.6	0.0	0.0%
28.4%	51.6	51.5	-0.1	-0.2%
29.6%	51.6	51.5	-0.1	-0.2%
30.9%	51.5	51.5	0.0	0.0%
32.1%	51.5	51.5	0.0	0.0%
33.3%	51.5	51.4	0.0	-0.1%
34.6%	51.5	51.4	-0.1	-0.1%
35.8%	51.5	51.3	-0.2	-0.3%
37.0%	51.4	51.3	-0.1	-0.3%
38.3%	51.3	51.2	-0.1	-0.2%
39.5%	51.3	51.2	-0.1	-0.2%
40.7%	51.3	51.2	-0.1	-0.1%
42.0%	51.2	51.2	-0.1	-0.2%
43.2%	51.2	51.2	0.0	-0.1%
44.4%	51.2	51.1	-0.1	-0.2%
45.7%	51.2	51.0	-0.1	-0.3%
46.9%	51.1	51.0	-0.1	-0.1%
48.1%	51.1	51.0	-0.1	-0.1%
49.4%	51.0	51.0	0.0	0.1%
50.6%	51.0	51.0	0.0	0.1%
51.9%	51.0	50.9	0.0	-0.1%
53.1%	50.9	50.9	0.0	0.0%
54.3%	50.9	50.8	-0.1	-0.1%
55.6%	50.8	50.8	0.0	-0.1%
56.8%	50.8	50.7	-0.1	-0.1%
58.0%	50.7	50.7	-0.1	-0.1%
59.3%	50.7	50.7	0.0	-0.1%
60.5%	50.7	50.7	0.0	-0.1%
61.7%	50.6	50.6	0.0	0.0%
63.0%	50.6	50.6	0.0	0.0%
64.2%	50.6	50.6	0.0	0.0%
65.4%	50.6	50.6	0.0	0.0%
66.7%	50.6	50.6	0.0	0.0%
67.9%	50.6	50.6	0.0	0.0%
69.1%	50.5	50.5	0.0	0.0%
70.4%	50.5	50.5	0.0	0.0%
71.6%	50.5	50.5	0.0	0.0%
72.8%	50.5	50.5	0.0	0.0%
74.1%	50.5	50.5	0.0	0.1%
75.3%	50.4	50.4	0.0	0.0%
76.5%	50.4	50.4	-0.1	-0.1%
77.8%	50.4	50.3	-0.1	-0.2%
79.0%	50.4	50.3	-0.1	-0.2%
80.2%	50.3	50.3	-0.1	-0.1%
81.5%	50.3	50.3	-0.1	-0.1%
82.7%	50.3	50.2	-0.1	-0.2%
84.0%	50.3	50.2	-0.1	-0.3%
85.2%	50.3	50.1	-0.2	-0.4%
86.4%	50.2	50.1	-0.1	-0.1%
87.7%	50.2	50.1	-0.1	-0.2%
88.9%	50.1	50.1	0.0	0.0%
90.1%	50.0	50.0	0.0	0.1%
91.4%	49.9	49.9	-0.1	-0.2%
92.6%	49.9	49.8	0.0	-0.1%
93.8%	49.9	49.8	-0.1	-0.2%
95.1%	49.7	49.7	0.0	0.0%
96.3%	49.6	49.6	-0.1	-0.2%
97.5%	49.2	48.9	-0.4	-0.7%
98.8%	48.8	48.6	-0.2	-0.5%
100.0%	48.7	48.2	-0.5	-1.0%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.1	53.9	-0.2	-0.3%
1.2%	53.8	53.7	-0.1	-0.3%
2.5%	53.8	53.6	-0.2	-0.4%
3.7%	53.7	53.5	-0.3	-0.5%
4.9%	53.7	53.4	-0.2	-0.4%
6.2%	53.4	53.4	0.0	-0.1%
7.4%	53.3	53.3	0.0	0.0%
8.6%	53.2	53.1	-0.1	-0.3%
9.9%	53.1	53.0	-0.1	-0.1%
11.1%	53.1	53.0	-0.1	-0.2%
12.3%	53.0	53.0	0.0	0.0%
13.6%	52.9	52.9	0.0	0.0%
14.8%	52.8	52.9	0.0	0.0%
16.0%	52.8	52.8	0.0	0.1%
17.3%	52.7	52.8	0.1	0.2%
18.5%	52.6	52.7	0.1	0.1%
19.8%	52.6	52.7	0.0	0.1%
21.0%	52.6	52.7	0.0	0.0%
22.2%	52.6	52.6	0.0	0.0%
23.5%	52.6	52.6	0.0	0.0%
24.7%	52.6	52.5	-0.1	-0.1%
25.9%	52.6	52.5	-0.1	-0.2%
27.2%	52.6	52.5	-0.1	-0.2%
28.4%	52.5	52.4	0.0	-0.1%
29.6%	52.4	52.3	-0.1	-0.2%
30.9%	52.4	52.2	-0.2	-0.3%
32.1%	52.3	52.2	-0.1	-0.2%
33.3%	52.2	52.2	0.0	0.0%
34.6%	52.2	52.2	0.0	0.0%
35.8%	52.2	52.1	0.0	-0.1%
37.0%	52.1	52.1	0.0	0.0%
38.3%	52.0	52.0	0.0	-0.1%
39.5%	51.9	51.9	0.0	-0.1%
40.7%	51.9	51.9	0.0	-0.1%
42.0%	51.9	51.8	-0.1	-0.1%
43.2%	51.9	51.8	-0.1	-0.1%
44.4%	51.8	51.8	-0.1	-0.1%
45.7%	51.8	51.8	0.0	-0.1%
46.9%	51.7	51.8	0.0	0.1%
48.1%	51.7	51.6	0.0	-0.1%
49.4%	51.7	51.6	0.0	0.0%
50.6%	51.6	51.5	-0.1	-0.2%
51.9%	51.6	51.5	-0.1	-0.2%
53.1%	51.6	51.5	-0.2	-0.3%
54.3%	51.4	51.4	0.0	0.0%
55.6%	51.4	51.4	0.0	0.0%
56.8%	51.4	51.3	0.0	-0.1%
58.0%	51.4	51.3	-0.1	-0.1%
59.3%	51.3	51.3	0.0	-0.1%
60.5%	51.3	51.2	-0.1	-0.2%
61.7%	51.3	51.2	-0.1	-0.2%
63.0%	51.3	51.2	-0.1	-0.2%
64.2%	51.3	51.2	-0.1	-0.2%
65.4%	51.2	51.1	-0.2	-0.3%
66.7%	51.2	51.1	-0.1	-0.2%
67.9%	51.2	51.1	-0.1	-0.2%
69.1%	51.1	51.1	-0.1	-0.1%
70.4%	51.1	51.1	-0.1	-0.1%
71.6%	51.1	51.0	0.0	-0.1%
72.8%	51.1	51.0	0.0	0.0%
74.1%	51.0	51.0	0.0	0.0%
75.3%	51.0	51.0	0.0	0.0%
76.5%	51.0	51.0	0.0	0.1%
77.8%	50.9	50.9	0.0	0.0%
79.0%	50.9	50.9	0.0	-0.1%
80.2%	50.9	50.9	-0.1	-0.1%
81.5%	50.9	50.8	-0.1	-0.1%
82.7%	50.9	50.8	0.0	-0.1%
84.0%	50.9	50.8	-0.1	-0.1%
85.2%	50.8	50.8	0.0	-0.1%
86.4%	50.7	50.7	0.0	0.0%
87.7%	50.7	50.7	0.0	0.1%
88.9%	50.6	50.6	0.0	0.0%
90.1%	50.6	50.5	-0.1	-0.2%
91.4%	50.5	50.5	-0.1	-0.2%
92.6%	50.5	50.4	-0.1	-0.2%
93.8%	50.5	50.4	-0.1	-0.2%
95.1%	50.3	50.3	0.0	0.0%
96.3%	50.2	50.0	-0.1	-0.2%
97.5%	50.0	49.8	-0.1	-0.3%
98.8%	49.8	49.2	-0.5	-1.1%
100.0%	49.4	48.7	-0.7	-1.4%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.3	55.0	-0.3	-0.5%
1.2%	54.5	54.2	-0.2	-0.4%
2.5%	54.2	54.2	0.0	0.0%
3.7%	54.1	54.0	-0.1	-0.3%
4.9%	54.0	54.0	0.0	-0.1%
6.2%	53.9	53.9	-0.1	-0.1%
7.4%	53.8	53.8	-0.1	-0.1%
8.6%	53.7	53.7	0.0	0.0%
9.9%	53.7	53.7	0.0	0.0%
11.1%	53.6	53.6	0.1	0.1%
12.3%	53.6	53.5	-0.1	-0.2%
13.6%	53.5	53.5	-0.1	-0.1%
14.8%	53.5	53.4	0.0	-0.1%
16.0%	53.4	53.4	0.0	0.0%
17.3%	53.4	53.4	0.0	0.0%
18.5%	53.4	53.4	0.0	-0.1%
19.8%	53.4	53.3	-0.1	-0.2%
21.0%	53.4	53.3	-0.1	-0.1%
22.2%	53.3	53.3	0.0	0.0%
23.5%	53.2	53.1	-0.1	-0.2%
24.7%	53.2	53.0	-0.2	-0.3%
25.9%	53.2	53.0	-0.2	-0.4%
27.2%	53.0	52.9	-0.1	-0.1%
28.4%	52.9	52.8	-0.1	-0.2%
29.6%	52.8	52.7	-0.1	-0.1%
30.9%	52.8	52.7	-0.1	-0.1%
32.1%	52.7	52.6	-0.1	-0.2%
33.3%	52.6	52.5	0.0	0.0%
34.6%	52.6	52.5	0.0	0.0%
35.8%	52.5	52.5	-0.1	-0.1%
37.0%	52.5	52.5	0.0	0.0%
38.3%	52.5	52.5	0.0	0.0%
39.5%	52.4	52.5	0.0	0.1%
40.7%	52.4	52.4	0.0	0.0%
42.0%	52.4	52.3	-0.1	-0.2%
43.2%	52.3	52.3	0.0	-0.1%
44.4%	52.3	52.3	0.0	0.0%
45.7%	52.2	52.2	-0.1	-0.1%
46.9%	52.2	52.2	0.0	-0.1%
48.1%	52.1	52.1	0.0	0.1%
49.4%	52.1	52.1	0.0	0.0%
50.6%	52.1	51.9	-0.2	-0.3%
51.9%	52.0	51.8	-0.2	-0.4%
53.1%	52.0	51.7	-0.2	-0.4%
54.3%	52.0	51.7	-0.3	-0.5%
55.6%	51.8	51.6	-0.2	-0.4%
56.8%	51.8	51.6	-0.2	-0.4%
58.0%	51.8	51.5	-0.3	-0.5%
59.3%	51.8	51.5	-0.2	-0.5%
60.5%	51.7	51.5	-0.2	-0.4%
61.7%	51.6	51.5	-0.1	-0.2%
63.0%	51.5	51.4	-0.1	-0.2%
64.2%	51.4	51.4	0.0	0.0%
65.4%	51.3	51.4	0.1	0.1%
66.7%	51.3	51.4	0.0	0.0%
67.9%	51.3	51.3	0.1	0.2%
69.1%	51.3	51.3	0.1	0.1%
70.4%	51.3	51.3	0.0	0.0%
71.6%	51.2	51.3	0.0	0.0%
72.8%	51.2	51.2	0.0	0.0%
74.1%	51.2	51.2	0.0	0.0%
75.3%	51.2	51.1	0.0	-0.1%
76.5%	51.1	51.1	0.0	0.0%
77.8%	51.1	51.1	0.0	0.0%
79.0%	51.0	51.0	0.0	0.1%
80.2%	51.0	51.0	0.0	0.1%
81.5%	51.0	51.0	0.0	0.0%
82.7%	51.0	50.9	0.0	0.0%
84.0%	50.9	50.9	0.0	0.0%
85.2%	50.8	50.9	0.1	0.1%
86.4%	50.8	50.9	0.0	0.1%
87.7%	50.8	50.8	0.0	0.0%
88.9%	50.8	50.8	0.0	0.0%
90.1%	50.8	50.8	0.0	0.0%
91.4%	50.8	50.7	0.0	-0.1%
92.6%	50.7	50.6	-0.2	-0.3%
93.8%	50.7	50.6	-0.2	-0.3%
95.1%	50.6	50.5	-0.1	-0.2%
96.3%	50.6	50.5	-0.1	-0.2%
97.5%	50.5	50.0	-0.5	-1.0%
98.8%	50.1	49.6	-0.6	-1.2%
100.0%	49.8	48.9	-0.9	-1.8%

Figure SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

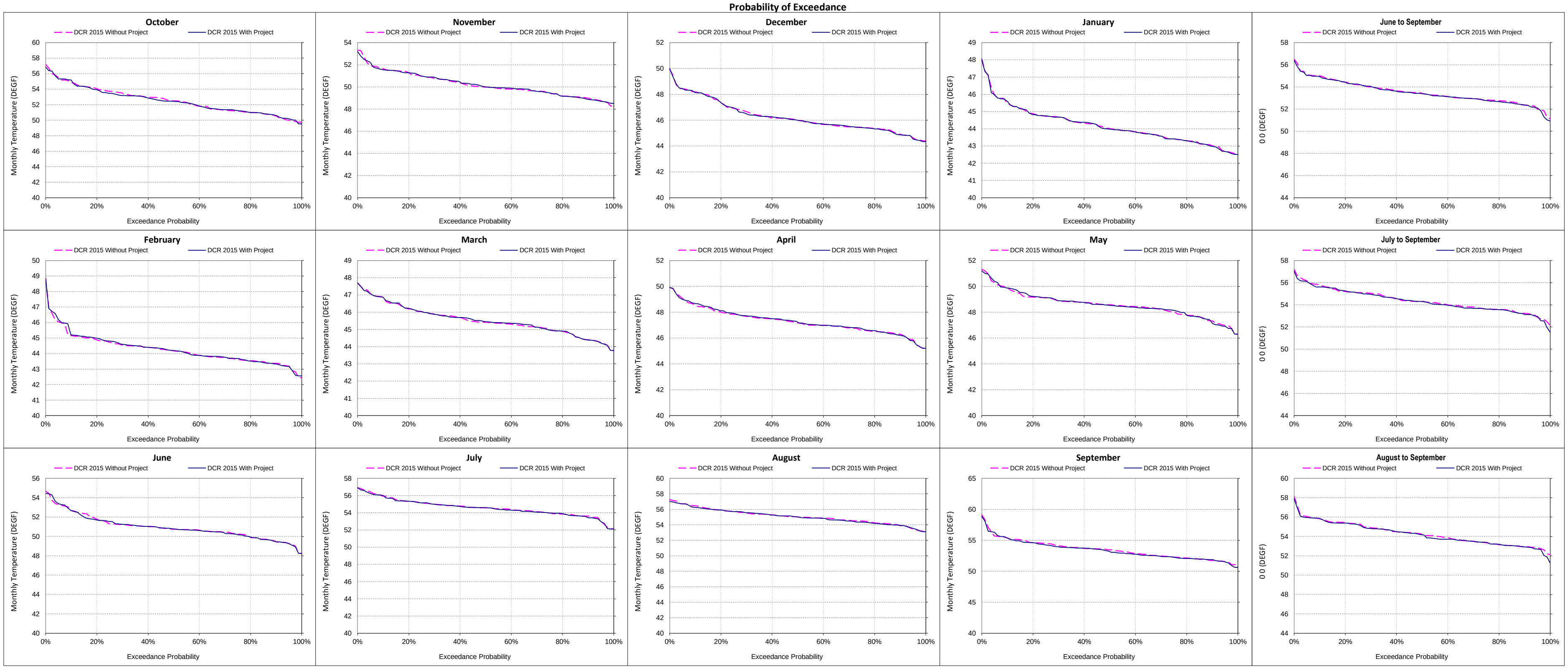


Table SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.2	56.9	-0.3	-0.6%
1.2%	56.7	56.4	-0.3	-0.5%
2.5%	56.0	56.3	0.3	0.6%
3.7%	55.8	55.7	-0.1	-0.2%
4.9%	55.5	55.3	-0.2	-0.3%
6.2%	55.2	55.3	0.1	0.3%
7.4%	55.2	55.3	0.1	0.3%
8.6%	55.1	55.2	0.1	0.2%
9.9%	54.8	55.2	0.4	0.7%
11.1%	54.8	54.6	-0.2	-0.3%
12.3%	54.5	54.4	-0.1	-0.2%
13.6%	54.4	54.4	0.0	-0.1%
14.8%	54.4	54.3	0.0	-0.1%
16.0%	54.3	54.3	0.0	0.0%
17.3%	54.3	54.2	-0.1	-0.2%
18.5%	54.2	54.0	-0.2	-0.5%
19.8%	54.1	53.9	-0.2	-0.3%
21.0%	53.9	53.8	-0.1	-0.2%
22.2%	53.9	53.6	-0.3	-0.6%
23.5%	53.8	53.6	-0.2	-0.4%
24.7%	53.7	53.5	-0.3	-0.5%
25.9%	53.7	53.5	-0.3	-0.5%
27.2%	53.6	53.3	-0.3	-0.6%
28.4%	53.6	53.2	-0.3	-0.6%
29.6%	53.5	53.2	-0.3	-0.6%
30.9%	53.4	53.2	-0.2	-0.4%
32.1%	53.3	53.2	-0.2	-0.3%
33.3%	53.2	53.2	0.0	0.0%
34.6%	53.2	53.2	0.0	0.0%
35.8%	53.1	53.1	0.0	0.0%
37.0%	53.1	53.1	0.0	0.0%
38.3%	53.0	53.0	0.0	-0.1%
39.5%	53.0	52.9	-0.1	-0.1%
40.7%	52.9	52.8	-0.2	-0.3%
42.0%	52.9	52.7	-0.2	-0.4%
43.2%	52.9	52.6	-0.3	-0.6%
44.4%	52.9	52.6	-0.3	-0.6%
45.7%	52.8	52.5	-0.3	-0.6%
46.9%	52.7	52.5	-0.2	-0.4%
48.1%	52.5	52.5	-0.1	-0.1%
49.4%	52.5	52.4	0.0	-0.1%
50.6%	52.5	52.4	-0.1	-0.2%
51.9%	52.5	52.4	-0.1	-0.2%
53.1%	52.4	52.3	-0.2	-0.3%
54.3%	52.3	52.3	-0.1	-0.1%
55.6%	52.2	52.2	0.0	0.0%
56.8%	52.0	52.2	0.1	0.3%
58.0%	52.0	52.0	0.1	0.1%
59.3%	51.8	51.9	0.1	0.1%
60.5%	51.8	51.7	-0.1	-0.1%
61.7%	51.8	51.7	-0.1	-0.2%
63.0%	51.8	51.6	-0.2	-0.4%
64.2%	51.5	51.5	0.1	0.2%
65.4%	51.4	51.5	0.1	0.1%
66.7%	51.4	51.5	0.1	0.1%
67.9%	51.4	51.4	0.0	0.0%
69.1%	51.3	51.3	0.0	0.1%
70.4%	51.3	51.3	0.0	0.1%
71.6%	51.2	51.3	0.1	0.2%
72.8%	51.2	51.3	0.1	0.2%
74.1%	51.2	51.3	0.1	0.2%
75.3%	51.2	51.2	0.0	0.1%
76.5%	51.1	51.2	0.0	0.1%
77.8%	51.0	51.2	0.1	0.2%
79.0%	51.0	51.0	0.0	0.1%
80.2%	51.0	51.0	0.0	0.0%
81.5%	51.0	51.0	0.0	0.0%
82.7%	51.0	51.0	0.0	0.0%
84.0%	50.9	50.9	0.0	0.0%
85.2%	50.8	50.8	0.0	0.1%
86.4%	50.8	50.8	0.0	0.1%
87.7%	50.7	50.8	0.1	0.1%
88.9%	50.7	50.7	0.0	0.1%
90.1%	50.5	50.6	0.1	0.1%
91.4%	50.3	50.4	0.1	0.3%
92.6%	50.2	50.3	0.0	0.0%
93.8%	50.0	50.2	0.2	0.4%
95.1%	50.0	50.2	0.2	0.4%
96.3%	49.9	50.0	0.1	0.2%
97.5%	49.8	50.0	0.2	0.3%
98.8%	49.7	49.5	-0.2	-0.4%
100.0%	49.7	49.5	0.0	-0.4%

November

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.3	53.2	-0.1	-0.2%
1.2%	53.3	52.8	-0.5	-0.9%
2.5%	52.7	52.5	-0.2	-0.4%
3.7%	52.2	52.4	0.2	0.4%
4.9%	51.9	52.2	0.3	0.6%
6.2%	51.9	51.8	-0.1	-0.2%
7.4%	51.8	51.7	-0.2	-0.3%
8.6%	51.7	51.6	-0.1	-0.2%
9.9%	51.7	51.5	-0.1	-0.2%
11.1%	51.5	51.5	0.0	-0.1%
12.3%	51.5	51.5	0.0	0.0%
13.6%	51.5	51.5	0.0	0.0%
14.8%	51.5	51.5	0.0	0.0%
16.0%	51.4	51.4	0.0	0.0%
17.3%	51.4	51.3	-0.1	-0.2%
18.5%	51.4	51.3	-0.1	-0.3%
19.8%	51.3	51.3	0.0	-0.1%
21.0%	51.1	51.3	0.1	0.3%
22.2%	51.1	51.2	0.2	0.3%
23.5%	51.1	51.1	0.1	0.1%
24.7%	51.0	51.0	0.0	0.0%
25.9%	51.0	51.0	0.0	0.0%
27.2%	50.9	50.9	0.0	0.1%
28.4%	50.9	50.9	0.0	0.0%
29.6%	50.8	50.9	0.1	0.2%
30.9%	50.8	50.8	0.1	0.1%
32.1%	50.7	50.7	0.0	0.0%
33.3%	50.7	50.7	0.0	0.0%
34.6%	50.6	50.7	0.0	0.1%
35.8%	50.5	50.6	0.1	0.1%
37.0%	50.5	50.6	0.1	0.1%
38.3%	50.4	50.5	0.1	0.2%
39.5%	50.4	50.5	0.1	0.2%
40.7%	50.3	50.3	0.0	0.1%
42.0%	50.2	50.3	0.1	0.3%
43.2%	50.2	50.3	0.1	0.3%
44.4%	50.1	50.2	0.2	0.3%
45.7%	50.1	50.2	0.2	0.4%
46.9%	50.0	50.2	0.1	0.3%
48.1%	50.0	50.1	0.1	0.1%
49.4%	50.0	50.0	0.0	0.1%
50.6%	50.0	50.0	0.0	0.0%
51.9%	50.0	50.0	0.0	-0.1%
53.1%	49.9	49.9	0.0	0.0%
54.3%	49.9	49.9	0.0	0.1%
55.6%	49.9	49.9	0.1	0.1%
56.8%	49.8	49.9	0.1	0.2%
58.0%	49.8	49.9	0.1	0.2%
59.3%	49.8	49.9	0.1	0.2%
60.5%	49.8	49.9	0.1	0.2%
61.7%	49.8	49.8	0.0	0.1%
63.0%	49.8	49.8	0.1	0.1%
64.2%	49.8	49.8	0.1	0.1%
65.4%	49.7	49.8	0.1	0.2%
66.7%	49.7	49.8	0.1	0.3%
67.9%	49.7	49.7	0.0	0.0%
69.1%	49.7	49.6	0.0	0.0%
70.4%	49.6	49.6	0.0	-0.1%
71.6%	49.6	49.6	0.0	0.0%
72.8%	49.6	49.5	-0.1	-0.1%
74.1%	49.5	49.5	0.0	0.1%
75.3%	49.4	49.4	0.0	0.1%
76.5%	49.4	49.4	0.0	0.0%
77.8%	49.4	49.4	0.0	0.0%
79.0%	49.2	49.2	0.0	0.0%
80.2%	49.2	49.2	0.0	0.0%
81.5%	49.2	49.1	0.0	-0.1%
82.7%	49.1	49.1	0.0	0.0%
84.0%	49.1	49.1	0.0	0.0%
85.2%	49.1	49.1	0.0	0.0%
86.4%	49.1	49.0	-0.1	-0.1%
87.7%	49.1	49.0	-0.1	-0.1%
88.9%	49.0	48.9	-0.1	-0.2%
90.1%	49.0	48.9	-0.1	-0.2%
91.4%	48.9	48.8	-0.1	-0.1%
92.6%	48.9	48.8	0.0	-0.1%
93.8%	48.8	48.8	0.0	-0.1%
95.1%	48.8	48.7	-0.1	-0.1%
96.3%	48.6	48.7	0.1	0.1%
97.5%	48.6	48.6	0.0	0.1%
98.8%	48.3	48.5	0.3	0.5%
100.0%	48.3	48.5	0.3	0.5%

December

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.9	50.0	0.0	0.1%
1.2%	49.5	49.4	-0.1	-0.2%
2.5%	48.8	48.8	0.1	0.1%
3.7%	48.5	48.5	0.0	0.1%
4.9%	48.4	48.4	0.0	0.0%
6.2%	48.4	48.3	-0.1	-0.2%
7.4%	48.3	48.3	0.0	0.0%
8.6%	48.2	48.3	0.1	0.2%
9.9%	48.2	48.1	-0.1	-0.1%
11.1%	48.1	48.1	0.0	0.0%
12.3%	48.1	48.1	0.0	0.1%
13.6%	48.0	48.0	0.0	0.0%
14.8%	48.0	47.9	-0.1	-0.2%
16.0%	47.9	47.8	-0.1	-0.1%
17.3%	47.6	47.7	0.1	0.2%
18.5%	47.6	47.6	0.0	0.1%
19.8%	47.4	47.4	0.0	0.1%
21.0%	47.2	47.2	0.0	-0.1%
22.2%	47.0	47.1	0.0	0.1%
23.5%	46.9	47.0	0.1	0.2%
24.7%	46.9	47.0	0.0	0.1%
25.9%	46.9	46.9	0.0	0.0%
27.2%	46.8	46.6	-0.2	-0.4%
28.4%	46.8	46.6	-0.2	-0.4%
29.6%	46.7	46.5	-0.2	-0.3%
30.9%	46.6	46.4	-0.2	-0.4%
32.1%	46.5	46.4	-0.1	-0.2%
33.3%	46.4	46.4	0.0	-0.1%
34.6%	46.4	46.3	0.0	-0.1%
35.8%	46.4	46.3	-0.1	-0.2%
37.0%	46.3	46.3	0.0	0.0%
38.3%	46.3	46.3	0.0	0.0%
39.5%	46.2	46.3	0.1	0.2%
40.7%	46.2	46.2	0.1	0.1%
42.0%	46.2	46.2	0.1	0.1%
43.2%	46.2	46.2	0.0	0.0%
44.4%	46.1	46.2	0.0	0.1%
45.7%	46.1	46.1	0.0	0.0%
46.9%	46.1	46.1	0.0	-0.1%
48.1%	46.1	46.0	0.0	-0.1%
49.4%	46.0	46.0	0.0	0.1%
50.6%	46.0	46.0	0.0	0.0%
51.9%	46.0	45.9	0.0	-0.1%
53.1%	45.9	45.9	0.1	0.1%
54.3%	45.9	45.9	0.0	0.0%
55.6%	45.8	45.8	0.0	-0.1%
56.8%	45.8	45.7	0.0	-0.1%
58.0%	45.7	45.7	0.0	0.1%
59.3%	45.7	45.7	0.1	0.1%
60.5%	45.7	45.7	0.0	0.0%
61.7%	45.7	45.7	0.0	0.0%
63.0%	45.6	45.6	0.0	0.0%
64.2%	45.6	45.6	0.1	0.1%
65.4%	45.5	45.6	0.1	0.2%
66.7%	45.5	45.6	0.1	0.1%
67.9%	45.5	45.6	0.1	0.1%
69.1%	45.5	45.5	0.1	0.1%
70.4%	45.5	45.5	0.0	0.1%
71.6%	45.5	45.5	0.0	0.0%
72.8%	45.4	45.5	0.0	0.1%
74.1%	45.4	45.5	0.0	0.1%
75.3%	45.4	45.4	0.0	0.0%
76.5%	45.4	45.4	0.0	0.0%
77.8%	45.4	45.4	0.0	0.0%
79.0%	45.4	45.4	0.0	0.0%
80.2%	45.3	45.3	0.0	-0.1%
81.5%	45.3	45.3	0.0	-0.1%
82.7%	45.3	45.3	0.0	-0.1%
84.0%	45.3	45.2	-0.1	-0.1%
85.2%	45.3	45.2	-0.1	-0.2%
86.4%	45.2	45.1	-0.1	-0.1%
87.7%	45.1	45.0	-0.1	-0.2%
88.9%	45.0	44.9	-0.1	-0.2%
90.1%	44.9	44.9	0.0	-0.1%
91.4%	44.8	44.8	0.0	0.0%
92.6%	44.8	44.8	0.0	0.0%
93.8%	44.8	44.8	0.0	0.0%
95.1%	44.6	44.5	-0.1	-0.2%
96.3%	44.5	44.5	0.0	-0.1%
97.5%	44.5	44.4	-0.1	-0.1%
98.8%	44.4	44.3	-0.1	-0.1%
100.0%	44.4	44.3	-0.1	-0.1%

January

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	48.1	48.0	0.0	-0.1%
1.2%	47.3	47.3	0.0	0.0%
2.5%	47.1	47.1	0.0	0.1%
3.7%	46.4	46.1	-0.3	-0.6%
4.9%	46.0	46.0	0.0	0.1%
6.2%	45.8	45.8	0.0	0.0%
7.4%	45.8	45.8	0.0	0.0%
8.6%	45.8	45.7	0.0	-0.1%
9.9%	45.5	45.6	0.1	0.3%
11.1%	45.4	45.4	0.0	0.0%
12.3%	45.3	45.3	0.0	0.0%
13.6%	45.3	45.3	0.0	0.1%
14.8%	45.2	45.2	0.0	-0.1%
16.0%	45.1	45.1	0.0	0.0%
17.3%	45.0	45.1	0.1	0.2%
18.5%	44.9	44.9	0.0	0.0%
19.8%	44.9	44.8	-0.1	-0.1%
21.0%	44.8	44.8	0.0	0.0%
22.2%	44.8	44.8	0.0	-0.1%
23.5%	44.8	44.8	0.0	0.0%
24.7%	44.7	44.8	0.0	0.0%
25.9%	44.7	44.7	0.0	0.0%
27.2%	44.7	44.7	0.0	0.0%
28.4%	44.7	44.7	0.0	-0.1%
29.6%	44.7	44.7	0.0	0.0%
30.9%	44.7	44.7	0.0	0.0%
32.1%	44.6	44.6	0.0	0.0%
33.3%	44.6	44.5	0.0	-0.1%
34.6%	44.4	44.5	0.0	0.1%
35.8%	44.4	44.4	0.0	0.0%
37.0%	44.4	44.4	0.0	0.1%
38.3%	44.4	44.4	0.0	0.1%
39.5%	44.3	44.4	0.0	0.1%
40.7%	44.3	44.4	0.1	0.1%
42.0%	44.3	44.4	0.1	0.1%
43.2%	44.3	44.3	0.0	0.0%
44.4%	44.3	44.3	0.0	0.0%
45.7%	44.2	44.1	0.0	-0.1%
46.9%	44.1	44.0	-0.1	-0.2%
48.1%	44.0	44.0	0.0	-0.1%
49.4%	44.0	44.0	0.0	-0.1%
50.6%	44.0	44.0	0.0	-0.1%
51.9%	44.0	43.9	0.0	-0.1%
53.1%	43.9	43.9	0.0	0.0%
54.3%	43.9	43.9	0.0	0.0%
55.6%	43.9	43.9	0.0	0.0%
56.8%	43.9	43.9	0.0	0.0%
58.0%	43.9	43.9	0.0	0.0%
59.3%	43.8	43.9	0.0	0.0%
60.5%	43.8	43.8	0.0	-0.1%
61.7%	43.8	43.8	0.0	0.0%
63.0%	43.8	43.7	0.0	-0.1%
64.2%	43.7	43.7	0.0	0.0%
65.4%	43.7	43.7	0.0	0.0%
66.7%	43.7	43.7	0.0	0.0%
67.9%	43.7	43.6	0.0	0.0%
69.1%	43.6	43.6	0.0	-0.1%
70.4%	43.6	43.6	0.0	0.0%
71.6%	43.5	43.4	-0.1	-0.2%
72.8%	43.4	43.4	0.0	0.0%
74.1%	43.4	43.4	0.0	0.0%
75.3%	43.4	43.4	0.0	0.0%
76.5%	43.4	43.4	0.0	0.0%
77.8%	43.4	43.4	0.0	0.0%
79.0%	43.3	43.3	0.0	0.0%
80.2%	43.3	43.3	0.0	0.0%
81.5%	43.3	43.3	0.0	-0.1%
82.7%	43.3	43.2	0.0	-0.1%
84.0%	43.3	43.2	-0.1	-0.1%
85.2%	43.1	43.2	0.0	0.1%
86.4%	43.1	43.1	0.0	0.0%
87.7%	43.1	43.1	0.0	0.0%
88.9%	43.1	43.0	-0.1	-0.2%
90.1%	43.0	43.0	0.0	-0.1%
91.4%	43.0	43.0	0.0	0.0%
92.6%	43.0	42.8	-0.1	-0.3%
93.8%	42.7	42.7	0.0	-0.1%
95.1%	42.7	42.7	0.0	-0.1%
96.3%	42.7	42.6	0.0	-0.1%
97.5%	42.6	42.6	-0.1	-0.1%
98.8%	42.6	42.5	0.0	-0.1%
100.0%	42.6	42.5	0.0	-0.1%

Table SQ14-1b

Clear Creek at Igo, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	48.9	48.9	0.0	0.0%
1.2%	46.9	46.9	0.0	0.0%
2.5%	46.6	46.7	0.1	0.3%
3.7%	46.2	46.6	0.4	0.9%
4.9%	46.1	46.2	0.1	0.3%
6.2%	46.0	46.0	0.0	0.0%
7.4%	45.9	46.0	0.0	0.0%
8.6%	45.2	45.9	0.7	1.6%
9.9%	45.2	45.2	0.0	0.1%
11.1%	45.1	45.2	0.1	0.1%
12.3%	45.1	45.2	0.0	0.1%
13.6%	45.1	45.1	0.0	0.0%
14.8%	45.0	45.1	0.1	0.2%
16.0%	45.0	45.1	0.1	0.1%
17.3%	45.0	45.1	0.1	0.2%
18.5%	45.0	45.0	0.0	0.1%
19.8%	44.9	45.0	0.1	0.3%
21.0%	44.8	45.0	0.1	0.3%
22.2%	44.8	44.9	0.1	0.2%
23.5%	44.8	44.8	0.0	0.0%
24.7%	44.7	44.8	0.1	0.1%
25.9%	44.7	44.8	0.1	0.2%
27.2%	44.6	44.8	0.1	0.3%
28.4%	44.6	44.7	0.1	0.1%
29.6%	44.6	44.6	0.1	0.1%
30.9%	44.5	44.6	0.0	0.1%
32.1%	44.5	44.6	0.0	0.1%
33.3%	44.5	44.5	0.0	0.1%
34.6%	44.5	44.5	0.0	0.0%
35.8%	44.5	44.5	0.0	0.0%
37.0%	44.5	44.5	0.0	0.0%
38.3%	44.4	44.4	0.0	0.0%
39.5%	44.4	44.4	0.0	0.0%
40.7%	44.4	44.4	0.0	0.0%
42.0%	44.4	44.4	0.0	0.0%
43.2%	44.4	44.4	0.0	0.0%
44.4%	44.3	44.3	0.1	0.1%
45.7%	44.3	44.3	0.0	0.1%
46.9%	44.2	44.3	0.0	0.1%
48.1%	44.2	44.2	0.0	0.0%
49.4%	44.2	44.2	0.0	0.0%
50.6%	44.2	44.2	0.0	0.1%
51.9%	44.2	44.2	0.0	0.0%
53.1%	44.1	44.1	0.0	0.0%
54.3%	44.1	44.1	0.0	-0.1%
55.6%	44.1	44.0	0.0	-0.1%
56.8%	44.0	43.9	-0.1	-0.2%
58.0%	44.0	43.9	-0.1	-0.1%
59.3%	43.9	43.9	0.0	0.0%
60.5%	43.9	43.9	0.0	0.0%
61.7%	43.8	43.8	0.0	0.0%
63.0%	43.8	43.8	0.0	0.0%
64.2%	43.8	43.8	0.0	0.1%
65.4%	43.8	43.8	0.0	0.1%
66.7%	43.8	43.8	0.0	0.1%
67.9%	43.8	43.8	0.1	0.1%
69.1%	43.8	43.8	0.0	0.1%
70.4%	43.7	43.7	0.0	0.0%
71.6%	43.7	43.7	0.0	0.0%
72.8%	43.7	43.7	0.0	0.0%
74.1%	43.7	43.7	0.0	0.1%
75.3%	43.6	43.7	0.1	0.1%
76.5%	43.6	43.6	0.0	0.1%
77.8%	43.6	43.6	0.0	0.1%
79.0%	43.5	43.5	0.0	0.0%
80.2%	43.5	43.5	0.0	0.0%
81.5%	43.5	43.5	-0.1	-0.1%
82.7%	43.5	43.5	0.0	0.0%
84.0%	43.5	43.5	0.0	-0.1%
85.2%	43.5	43.4	-0.1	-0.2%
86.4%	43.4	43.4	0.0	0.0%
87.7%	43.4	43.4	0.0	0.0%
88.9%	43.4	43.3	0.0	-0.1%
90.1%	43.4	43.3	0.0	-0.1%
91.4%	43.4	43.3	-0.1	-0.2%
92.6%	43.3	43.2	0.0	-0.1%
93.8%	43.2	43.2	0.0	-0.1%
95.1%	43.2	43.2	0.0	0.0%
96.3%	42.9	42.9	0.0	0.0%
97.5%	42.8	42.6	-0.2	-0.5%
98.8%	42.4	42.6	0.1	0.3%
100.0%	42.4	42.6	0.1	0.3%

March

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	47.7	47.7	0.0	0.0%
1.2%	47.5	47.5	0.0	0.0%
2.5%	47.3	47.3	0.0	-0.1%
3.7%	47.3	47.2	-0.1	-0.2%
4.9%	47.1	47.1	0.0	0.0%
6.2%	47.0	47.0	0.0	0.0%
7.4%	46.9	46.9	0.0	0.0%
8.6%	46.9	46.9	0.0	-0.1%
9.9%	46.9	46.9	0.0	0.0%
11.1%	46.6	46.7	0.1	0.1%
12.3%	46.5	46.6	0.1	0.2%
13.6%	46.5	46.5	0.0	0.0%
14.8%	46.5	46.5	0.0	0.0%
16.0%	46.5	46.5	0.1	0.1%
17.3%	46.3	46.4	0.0	0.1%
18.5%	46.3	46.2	0.0	0.0%
19.8%	46.2	46.2	0.0	0.1%
21.0%	46.2	46.2	0.0	0.0%
22.2%	46.1	46.1	0.0	0.1%
23.5%	46.0	46.1	0.0	0.1%
24.7%	46.0	46.0	0.0	0.0%
25.9%	46.0	46.0	0.0	0.0%
27.2%	46.0	46.0	0.0	0.0%
28.4%	45.9	45.9	0.0	0.0%
29.6%	45.9	45.9	0.0	-0.1%
30.9%	45.8	45.9	0.0	0.0%
32.1%	45.8	45.8	0.0	0.0%
33.3%	45.8	45.8	0.0	-0.1%
34.6%	45.8	45.8	0.0	0.0%
35.8%	45.8	45.7	-0.1	-0.1%
37.0%	45.8	45.7	-0.1	-0.2%
38.3%	45.7	45.7	0.0	-0.1%
39.5%	45.7	45.7	0.0	0.0%
40.7%	45.7	45.7	0.0	0.0%
42.0%	45.6	45.7	0.1	0.2%
43.2%	45.5	45.6	0.1	0.3%
44.4%	45.5	45.6	0.1	0.3%
45.7%	45.5	45.5	0.1	0.2%
46.9%	45.4	45.5	0.1	0.2%
48.1%	45.4	45.5	0.1	0.2%
49.4%	45.4	45.5	0.0	0.1%
50.6%	45.4	45.5	0.0	0.1%
51.9%	45.4	45.4	0.0	0.1%
53.1%	45.4	45.4	0.0	0.0%
54.3%	45.4	45.4	0.0	0.1%
55.6%	45.4	45.4	0.0	0.1%
56.8%	45.3	45.4	0.0	0.1%
58.0%	45.3	45.4	0.0	0.1%
59.3%	45.3	45.4	0.0	0.1%
60.5%	45.3	45.4	0.1	0.1%
61.7%	45.3	45.4	0.1	0.1%
63.0%	45.2	45.3	0.1	0.2%
64.2%	45.2	45.3	0.1	0.1%
65.4%	45.2	45.3	0.1	0.3%
66.7%	45.2	45.3	0.1	0.2%
67.9%	45.2	45.3	0.1	0.2%
69.1%	45.2	45.1	0.0	0.0%
70.4%	45.1	45.1	0.0	0.0%
71.6%	45.1	45.1	0.0	-0.1%
72.8%	45.1	45.0	0.0	0.0%
74.1%	45.1	45.0	-0.1	-0.2%
75.3%	45.0	44.9	0.0	-0.1%
76.5%	44.9	44.9	0.0	0.0%
77.8%	44.9	44.9	0.0	0.0%
79.0%	44.9	44.9	0.0	0.0%
80.2%	44.9	44.9	0.0	0.0%
81.5%	44.8	44.9	0.1	0.1%
82.7%	44.8	44.8	0.0	0.0%
84.0%	44.7	44.7	0.0	0.0%
85.2%	44.6	44.6	0.0	0.1%
86.4%	44.5	44.5	0.0	0.0%
87.7%	44.5	44.4	0.0	0.0%
88.9%	44.4	44.4	0.0	0.0%
90.1%	44.4	44.4	0.0	0.0%
91.4%	44.4	44.4	0.0	0.0%
92.6%	44.4	44.3	0.0	0.0%
93.8%	44.3	44.3	0.0	0.0%
95.1%	44.2	44.2	0.0	-0.1%
96.3%	44.2	44.1	0.0	-0.1%
97.5%	44.1	44.1	0.0	0.0%
98.8%	43.8	43.8	0.0	0.0%
100.0%	43.8	43.8	0.0	0.0%

April

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.9	49.9	0.0	0.0%
1.2%	49.8	49.8	0.0	0.0%
2.5%	49.5	49.4	0.0	-0.1%
3.7%	49.3	49.1	-0.1	-0.3%
4.9%	49.1	49.0	-0.1	-0.1%
6.2%	48.9	48.9	0.0	0.1%
7.4%	48.7	48.9	0.2	0.3%
8.6%	48.7	48.7	0.0	0.1%
9.9%	48.5	48.7	0.1	0.3%
11.1%	48.4	48.6	0.2	0.4%
12.3%	48.4	48.6	0.1	0.2%
13.6%	48.4	48.5	0.1	0.2%
14.8%	48.4	48.4	0.1	0.1%
16.0%	48.3	48.4	0.1	0.1%
17.3%	48.1	48.2	0.1	0.3%
18.5%	48.1	48.2	0.1	0.3%
19.8%	48.0	48.1	0.1	0.2%
21.0%	47.9	48.1	0.2	0.3%
22.2%	47.9	48.0	0.0	0.1%
23.5%	47.8	47.9	0.1	0.2%
24.7%	47.8	47.9	0.1	0.2%
25.9%	47.8	47.8	0.0	0.0%
27.2%	47.8	47.8	0.0	-0.1%
28.4%	47.7	47.7	0.0	0.0%
29.6%	47.7	47.7	0.1	0.1%
30.9%	47.7	47.7	0.0	0.1%
32.1%	47.6	47.7	0.1	0.2%
33.3%	47.6	47.6	0.1	0.1%
34.6%	47.5	47.6	0.1	0.1%
35.8%	47.5	47.6	0.0	0.1%
37.0%	47.5	47.6	0.0	0.1%
38.3%	47.5	47.5	0.0	0.1%
39.5%	47.5	47.5	0.0	0.0%
40.7%	47.5	47.5	0.0	0.0%
42.0%	47.4	47.5	0.1	0.1%
43.2%	47.4	47.5	0.0	0.1%
44.4%	47.4	47.4	0.0	-0.1%
45.7%	47.3	47.4	0.1	0.1%
46.9%	47.3	47.4	0.1	0.2%
48.1%	47.2	47.3	0.1	0.1%
49.4%	47.2	47.3	0.1	0.3%
50.6%	47.2	47.2	0.0	0.0%
51.9%	47.1	47.2	0.0	0.1%
53.1%	47.0	47.1	0.1	0.2%
54.3%	47.0	47.0	0.0	0.1%
55.6%	47.0	47.0	0.1	0.1%
56.8%	47.0	47.0	0.0	0.1%
58.0%	47.0	47.0	0.0	0.0%
59.3%	47.0	47.0	0.0	0.0%
60.5%	47.0	47.0	0.0	0.0%
61.7%	47.0	47.0	0.0	0.0%
63.0%	46.9	47.0	0.0	0.1%
64.2%	46.9	46.9	0.0	0.0%
65.4%	46.9	46.9	0.0	0.0%
66.7%	46.9	46.9	0.1	0.1%
67.9%	46.9	46.9	0.0	0.0%
69.1%	46.8	46.8	0.0	0.1%
70.4%	46.8	46.8	0.0	0.1%
71.6%	46.8	46.8	0.1	0.1%
72.8%	46.8	46.8	0.0	0.1%
74.1%	46.6	46.8	0.1	0.3%
75.3%	46.6	46.7	0.1	0.2%
76.5%	46.6	46.6	0.0	0.1%
77.8%	46.6	46.6	0.0	0.1%
79.0%	46.5	46.6	0.1	0.1%
80.2%	46.5	46.6	0.1	0.2%
81.5%	46.5	46.5	0.0	0.0%
82.7%	46.5	46.5	0.0	-0.1%
84.0%	46.5	46.4	0.0	0.0%
85.2%	46.4	46.4	-0.1	-0.2%
86.4%	46.4	46.3	-0.1	-0.2%
87.7%	46.4	46.3	-0.1	-0.1%
88.9%	46.3	46.2	-0.1	-0.2%
90.1%	46.3	46.2	-0.1	-0.2%
91.4%	46.2	46.2	0.0	0.0%
92.6%	46.0	46.0	0.0	0.0%
93.8%	45.9	45.8	-0.1	-0.2%
95.1%	45.9	45.8	-0.1	-0.2%
96.3%	45.5	45.5	0.0	0.0%
97.5%	45.3	45.3	0.0	0.0%
98.8%	45.2	45.2	0.0	0.0%
100.0%	45.2	45.2	0.0	0.0%

May

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.3	51.2	-0.1	-0.3%
1.2%	51.2	51.0	-0.2	-0.4%
2.5%	51.0	51.0	0.0	0.0%
3.7%	50.4	50.6	0.2	0.4%
4.9%	50.3	50.4	0.1	0.2%
6.2%	50.1	50.3	0.2	0.4%
7.4%	50.0	50.0	-0.1	-0.2%
8.6%	50.0	49.9	-0.1	-0.1%
9.9%	50.0	49.9	-0.1	-0.2%
11.1%	49.7	49.8	0.1	0.3%
12.3%	49.6	49.8	0.2	0.3%
13.6%	49.5	49.7	0.2	0.4%
14.8%	49.5	49.5	0.1	0.2%
16.0%	49.2	49.5	0.3	0.5%
17.3%	49.2	49.5	0.3	0.5%
18.5%	49.2	49.3	0.1	0.2%
19.8%	49.2	49.2	0.0	0.1%
21.0%	49.2	49.2	0.0	0.1%
22.2%	49.1	49.2	0.0	0.1%
23.5%	49.1	49.1	0.0	0.0%
24.7%	49.1	49.1	0.0	0.0%
25.9%	49.1	49.1	0.0	0.0%
27.2%	49.1	49.1	0.1	0.1%
28.4%	49.0	49.0	0.0	0.1%
29.6%	48.9	48.9	0.0	0.0%
30.9%	48.8	48.9	0.0	0.1%
32.1%	48.8	48.9	0.0	0.1%
33.3%	48.8	48.9	0.0	0.0%
34.6%	48.8	48.8	0.0	0.1%
35.8%	48.8	48.8	0.1	0.1%
37.0%	48.8	48.8	0.0	0.0%
38.3%	48.8	48.8	0.0	0.0%
39.5%	48.8	48.8	0.0	0.0%
40.7%	48.8	48.7	-0.1	-0.1%
42.0%	48.7	48.7	0.0	-0.1%
43.2%	48.7	48.6	-0.1	-0.2%
44.4%	48.7	48.6	-0.1	-0.2%
45.7%	48.6	48.6	0.0	0.0%
46.9%	48.6	48.6	0.0	0.0%
48.1%	48.6	48.6	0.0	0.0%
49.4%	48.6	48.5	0.0	-0.1%
50.6%	48.6	48.5	0.0	-0.1%
51.9%	48.5	48.5	0.0	-0.1%
53.1%	48.5	48.5	0.0	-0.1%
54.3%	48.5	48.5	0.0	-0.1%
55.6%	48.5	48.4	0.0	-0.1%
56.8%	48.5	48.4	0.0	-0.1%
58.0%	48.5	48.4	-0.1	-0.1%
59.3%	48.4	48.4	-0.1	-0.1%
60.5%	48.4	48.4	-0.1	-0.1%
61.7%	48.4	48.3	-0.1	-0.2%
63.0%	48.4	48.3	-0.1	-0.2%
64.2%	48.4	48.3	-0.1	-0.1%
65.4%	48.3	48.3	0.0	-0.1%
66.7%	48.3	48.3	0.0	-0.1%
67.9%	48.3	48.3	0.0	-0.1%
69.1%	48.2	48.3	0.0	0.0%
70.4%	48.2	48.3	0.1	0.1%
71.6%	48.2	48.2	0.0	0.1%
72.8%	48.1	48.2	0.1	0.3%
74.1%	48.0	48.2	0.1	0.3%
75.3%	48.0	48.1	0.1	0.2%
76.5%	47.9	48.1	0.2	0.4%
77.8%	47.8	48.0	0.2	0.3%
79.0%	47.8	48.0	0.2	0.3%
80.2%	47.8	47.7	0.0	-0.1%
81.5%	47.8	47.7	-0.1	-0.1%
82.7%	47.7	47.7	0.0	-0.1%
84.0%	47.7	47.6	0.0	-0.1%
85.2%	47.6	47.6	0.0	0.0%
86.4%	47.6	47.5	-0.1	-0.1%
87.7%	47.4	47.5	0.1	0.2%
88.9%	47.3	47.4	0.1	0.2%
90.1%	47.3	47.1	-0.2	-0.5%
91.4%	47.1	47.0	-0.1	-0.2%
92.6%	47.1	47.0	-0.1	-0.2%
93.8%	47.0	46.9	-0.1	-0.2%
95.1%	47.0	46.9	-0.1	-0.2%
96.3%	47.0	46.7	-0.2	-0.5%
97.5%	46.7	46.7	0.0	0.0%
98.8%	46.3	46.3	0.0	0.0%
100.0%	46.3	46.3	0.0	0.0%

Table SQ14-1b

Clear Creek at Igo, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.7	54.5	-0.2	-0.4%
1.2%	54.4	54.4	0.0	0.0%
2.5%	53.7	54.3	0.6	1.0%
3.7%	53.4	53.6	0.2	0.4%
4.9%	53.3	53.4	0.1	0.2%
6.2%	53.2	53.3	0.1	0.1%
7.4%	53.1	53.3	0.1	0.2%
8.6%	53.1	53.0	-0.1	-0.2%
9.9%	52.7	52.7	0.0	0.0%
11.1%	52.6	52.6	-0.1	-0.1%
12.3%	52.5	52.5	0.0	0.0%
13.6%	52.4	52.2	-0.2	-0.4%
14.8%	52.4	52.0	-0.3	-0.6%
16.0%	52.3	51.9	-0.4	-0.9%
17.3%	52.0	51.8	-0.2	-0.4%
18.5%	52.0	51.8	-0.2	-0.3%
19.8%	51.8	51.7	-0.1	-0.2%
21.0%	51.7	51.6	0.0	0.0%
22.2%	51.6	51.6	0.0	0.0%
23.5%	51.5	51.6	0.1	0.2%
24.7%	51.3	51.5	0.2	0.5%
25.9%	51.3	51.5	0.2	0.5%
27.2%	51.3	51.3	0.0	0.1%
28.4%	51.2	51.3	0.1	0.1%
29.6%	51.2	51.3	0.0	0.1%
30.9%	51.2	51.2	0.0	0.1%
32.1%	51.2	51.2	0.1	0.1%
33.3%	51.1	51.2	0.0	0.1%
34.6%	51.1	51.1	0.0	0.1%
35.8%	51.1	51.1	0.0	0.0%
37.0%	51.1	51.1	0.0	0.0%
38.3%	51.0	51.0	0.0	0.0%
39.5%	51.0	51.0	0.0	0.0%
40.7%	51.0	51.0	0.0	0.0%
42.0%	51.0	51.0	0.0	0.0%
43.2%	51.0	51.0	0.0	0.0%
44.4%	50.9	50.9	0.0	-0.1%
45.7%	50.9	50.9	0.0	0.0%
46.9%	50.8	50.9	0.0	0.0%
48.1%	50.8	50.8	0.1	0.1%
49.4%	50.7	50.8	0.0	0.1%
50.6%	50.7	50.8	0.0	0.1%
51.9%	50.7	50.7	0.0	-0.1%
53.1%	50.7	50.7	0.0	0.0%
54.3%	50.7	50.7	0.0	0.0%
55.6%	50.7	50.7	0.0	0.0%
56.8%	50.7	50.7	0.0	-0.1%
58.0%	50.7	50.7	0.0	-0.1%
59.3%	50.7	50.6	-0.1	-0.1%
60.5%	50.6	50.6	0.0	-0.1%
61.7%	50.6	50.5	0.0	0.0%
63.0%	50.5	50.5	0.0	0.0%
64.2%	50.5	50.5	0.0	0.0%
65.4%	50.5	50.5	0.0	0.0%
66.7%	50.5	50.5	0.0	-0.1%
67.9%	50.5	50.5	0.0	-0.1%
69.1%	50.5	50.4	0.0	-0.1%
70.4%	50.4	50.3	-0.1	-0.3%
71.6%	50.4	50.3	-0.1	-0.2%
72.8%	50.3	50.3	-0.1	-0.1%
74.1%	50.3	50.2	0.0	-0.1%
75.3%	50.2	50.2	-0.1	-0.2%
76.5%	50.2	50.2	-0.1	-0.1%
77.8%	50.2	50.1	-0.1	-0.3%
79.0%	50.1	50.0	0.0	-0.1%
80.2%	49.9	49.9	0.0	0.0%
81.5%	49.9	49.9	0.0	0.0%
82.7%	49.8	49.8	0.0	0.0%
84.0%	49.7	49.7	0.0	-0.1%
85.2%	49.7	49.7	0.0	-0.1%
86.4%	49.7	49.7	0.0	-0.1%
87.7%	49.6	49.6	0.0	0.1%
88.9%	49.6	49.5	-0.1	-0.1%
90.1%	49.4	49.4	0.0	0.0%
91.4%	49.4	49.4	0.0	0.1%
92.6%	49.4	49.4	0.0	0.0%
93.8%	49.4	49.4	0.0	0.0%
95.1%	49.3	49.3	0.0	0.0%
96.3%	49.2	49.1	-0.1	-0.2%
97.5%	49.0	48.9	-0.1	-0.1%
98.8%	48.2	48.2	0.0	0.0%
100.0%	48.2	48.2	0.0	0.0%

July

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.9	56.9	0.0	0.0%
1.2%	56.8	56.7	-0.2	-0.3%
2.5%	56.6	56.6	-0.1	-0.1%
3.7%	56.6	56.4	-0.2	-0.3%
4.9%	56.4	56.2	-0.2	-0.3%
6.2%	56.2	56.1	-0.1	-0.2%
7.4%	56.2	56.1	-0.1	-0.2%
8.6%	56.1	56.0	0.0	-0.1%
9.9%	55.9	56.0	0.1	0.2%
11.1%	55.9	55.7	-0.2	-0.4%
12.3%	55.7	55.7	-0.1	-0.1%
13.6%	55.7	55.7	0.0	-0.1%
14.8%	55.5	55.4	-0.1	-0.3%
16.0%	55.5	55.4	-0.2	-0.3%
17.3%	55.4	55.4	0.0	-0.1%
18.5%	55.3	55.4	0.0	0.0%
19.8%	55.3	55.4	0.0	0.1%
21.0%	55.3	55.3	0.0	0.0%
22.2%	55.3	55.3	0.0	0.0%
23.5%	55.2	55.2	-0.1	-0.1%
24.7%	55.2	55.2	0.0	0.0%
25.9%	55.1	55.2	0.0	0.1%
27.2%	55.1	55.2	0.1	0.1%
28.4%	55.1	55.0	0.0	-0.1%
29.6%	55.0	55.0	0.0	-0.1%
30.9%	55.0	55.0	0.0	0.0%
32.1%	54.9	54.9	0.0	-0.1%
33.3%	54.9	54.9	0.0	0.0%
34.6%	54.8	54.9	0.0	0.0%
35.8%	54.8	54.9	0.0	0.0%
37.0%	54.8	54.9	0.0	0.0%
38.3%	54.8	54.8	0.0	-0.1%
39.5%	54.8	54.8	0.0	0.0%
40.7%	54.8	54.7	-0.1	-0.2%
42.0%	54.8	54.6	-0.1	-0.2%
43.2%	54.6	54.6	0.0	0.0%
44.4%	54.6	54.6	0.0	0.0%
45.7%	54.6	54.6	0.0	0.0%
46.9%	54.6	54.6	0.0	0.0%
48.1%	54.6	54.6	0.0	0.0%
49.4%	54.6	54.6	0.0	0.0%
50.6%	54.6	54.6	0.0	0.0%
51.9%	54.6	54.6	0.0	0.0%
53.1%	54.5	54.5	0.0	0.0%
54.3%	54.5	54.4	-0.1	-0.1%
55.6%	54.5	54.4	-0.1	-0.1%
56.8%	54.4	54.4	-0.1	-0.1%
58.0%	54.4	54.3	-0.1	-0.3%
59.3%	54.4	54.3	-0.1	-0.2%
60.5%	54.3	54.3	-0.1	-0.1%
61.7%	54.3	54.3	0.0	-0.1%
63.0%	54.3	54.3	0.0	0.0%
64.2%	54.3	54.2	-0.1	-0.2%
65.4%	54.2	54.2	-0.1	-0.1%
66.7%	54.2	54.2	-0.1	-0.1%
67.9%	54.2	54.1	-0.1	-0.1%
69.1%	54.2	54.1	-0.1	-0.1%
70.4%	54.1	54.1	0.0	-0.1%
71.6%	54.1	54.1	0.0	0.0%
72.8%	54.0	54.0	0.0	0.0%
74.1%	54.0	54.0	0.0	0.0%
75.3%	54.0	54.0	0.0	0.0%
76.5%	53.9	53.9	0.1	0.1%
77.8%	53.9	53.9	0.1	0.1%
79.0%	53.9	53.9	0.1	0.1%
80.2%	53.9	53.9	0.0	0.0%
81.5%	53.8	53.8	0.0	0.0%
82.7%	53.8	53.7	-0.1	-0.2%
84.0%	53.8	53.7	-0.1	-0.2%
85.2%	53.7	53.7	0.0	0.0%
86.4%	53.6	53.6	0.0	0.0%
87.7%	53.6	53.6	0.0	0.0%
88.9%	53.6	53.6	0.0	-0.1%
90.1%	53.6	53.4	-0.2	-0.4%
91.4%	53.5	53.4	-0.1	-0.1%
92.6%	53.5	53.3	-0.1	-0.2%
93.8%	53.4	53.3	-0.1	-0.3%
95.1%	53.0	52.9	-0.1	-0.1%
96.3%	52.6	52.8	0.1	0.2%
97.5%	52.3	52.2	-0.1	-0.2%
98.8%	52.1	52.1	0.0	-0.1%
100.0%	52.1	52.1	0.0	-0.1%

August

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.3	57.0	-0.3	-0.4%
1.2%	57.1	56.9	-0.2	-0.3%
2.5%	57.1	56.8	-0.2	-0.4%
3.7%	56.7	56.8	0.1	0.1%
4.9%	56.7	56.7	0.0	0.0%
6.2%	56.7	56.7	0.0	0.0%
7.4%	56.6	56.5	-0.1	-0.2%
8.6%	56.5	56.3	-0.2	-0.3%
9.9%	56.5	56.3	-0.2	-0.4%
11.1%	56.4	56.2	-0.2	-0.3%
12.3%	56.3	56.2	-0.1	-0.2%
13.6%	56.2	56.1	-0.1	-0.2%
14.8%	56.1	56.0	-0.1	-0.1%
16.0%	56.1	56.0	-0.1	-0.2%
17.3%	56.0	56.0	0.0	0.0%
18.5%	55.9	55.9	0.0	0.0%
19.8%	55.9	55.9	0.0	0.0%
21.0%	55.8	55.9	0.1	0.1%
22.2%	55.8	55.8	0.0	0.0%
23.5%	55.8	55.7	0.0	-0.1%
24.7%	55.7	55.7	0.0	-0.1%
25.9%	55.7	55.7	0.0	-0.1%
27.2%	55.6	55.7	0.1	0.1%
28.4%	55.6	55.7	0.1	0.1%
29.6%	55.5	55.6	0.1	0.1%
30.9%	55.5	55.6	0.1	0.1%
32.1%	55.4	55.5	0.1	0.2%
33.3%	55.4	55.5	0.1	0.2%
34.6%	55.4	55.5	0.1	0.2%
35.8%	55.4	55.4	0.0	0.1%
37.0%	55.4	55.4	0.0	0.1%
38.3%	55.3	55.4	0.0	0.0%
39.5%	55.3	55.3	0.0	-0.1%
40.7%	55.3	55.2	0.0	0.0%
42.0%	55.2	55.2	0.0	0.0%
43.2%	55.2	55.2	0.0	0.0%
44.4%	55.1	55.2	0.0	0.0%
45.7%	55.1	55.1	0.1	0.1%
46.9%	55.1	55.1	0.1	0.2%
48.1%	55.0	55.1	0.0	0.0%
49.4%	55.0	55.0	0.0	0.0%
50.6%	55.0	55.0	0.0	0.0%
51.9%	55.0	54.9	-0.1	-0.1%
53.1%	55.0	54.9	-0.1	-0.2%
54.3%	55.0	54.9	-0.1	-0.1%
55.6%	54.9	54.9	0.0	0.0%
56.8%	54.9	54.9	0.0	0.0%
58.0%	54.9	54.9	0.0	0.0%
59.3%	54.9	54.8	0.0	-0.1%
60.5%	54.9	54.8	0.0	-0.1%
61.7%	54.9	54.7	-0.2	-0.3%
63.0%	54.8	54.6	-0.2	-0.3%
64.2%	54.8	54.6	-0.2	-0.3%
65.4%	54.6	54.6	0.0	0.0%
66.7%	54.6	54.6	0.0	0.0%
67.9%	54.6	54.6	-0.1	-0.1%
69.1%	54.6	54.5	-0.1	-0.2%
70.4%	54.6	54.5	-0.1	-0.1%
71.6%	54.5	54.5	-0.1	-0.1%
72.8%	54.5	54.4	-0.1	-0.3%
74.1%	54.5	54.3	-0.2	-0.3%
75.3%	54.5	54.3	-0.2	-0.3%
76.5%	54.5	54.3	-0.1	-0.3%
77.8%	54.4	54.3	-0.1	-0.2%
79.0%	54.3	54.2	-0.1	-0.2%
80.2%	54.2	54.2	-0.1	-0.1%
81.5%	54.2	54.2	-0.1	-0.1%
82.7%	54.2	54.1	-0.1	-0.1%
84.0%	54.2	54.1	-0.1	-0.1%
85.2%	54.1	54.0	-0.1	-0.2%
86.4%	54.1	54.0	-0.1	-0.2%
87.7%	54.0	54.0	-0.1	-0.1%
88.9%	54.0	54.0	-0.1	-0.1%
90.1%	53.9	53.9	0.0	0.1%
91.4%	53.9	53.9	0.0	0.1%
92.6%	53.8	53.8	-0.1	-0.1%
93.8%	53.6	53.7	0.1	0.1%
95.1%	53.4	53.5	0.1	0.2%
96.3%	53.3	53.4	0.1	0.1%
97.5%	53.2	53.2	0.0	0.0%
98.8%	53.2	53.1	-0.1	-0.1%
100.0%	53.2	53.1	-0.1	-0.1%

September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.1	58.9	-0.3	-0.5%
1.2%	58.3	58.1	-0.2	-0.3%
2.5%	57.1	56.5	-0.6	-1.1%
3.7%	56.3	56.4	0.1	0.1%
4.9%	55.7	56.3	0.6	1.1%
6.2%	55.7	55.8	0.1	0.2%
7.4%	55.5	55.6	0.1	0.1%
8.6%	55.5	55.6	0.1	0.1%
9.9%	55.4	55.4	0.0	0.0%
11.1%	55.2	55.1	-0.1	-0.1%
12.3%	55.2	55.0	-0.1	-0.2%
13.6%	55.2	54.9	-0.2	-0.4%
14.8%	55.1	54.9	-0.2	-0.4%
16.0%	55.0	54.7	-0.3	-0.5%
17.3%	54.9	54.7	-0.3	-0.5%
18.5%	54.7	54.6	0.0	0.0%
19.8%	54.6	54.6	0.0	0.0%
21.0%	54.6	54.6	-0.1	-0.1%
22.2%	54.6	54.4	-0.2	-0.4%
23.5%	54.5	54.4	-0.2	-0.3%
24.7%	54.5	54.3	-0.3	-0.5%
25.9%	54.4	54.2	-0.2	-0.5%
27.2%	54.4	54.2	-0.3	-0.5%
28.4%	54.2	54.0	-0.2	-0.4%
29.6%	54.1	54.0	-0.1	-0.2%
30.9%	54.1	53.9	-0.2	-0.4%
32.1%	54.0	53.9	-0.1	-0.2%
33.3%	53.9	53.8	-0.1	-0.2%
34.6%	53.9	53.8	0.0	-0.1%
35.8%	53.8	53.8	-0.1	-0.1%
37.0%	53.8	53.8	-0.1	-0.1%
38.3%	53.8	53.8	0.0	0.0%
39.5%	53.7	53.7	0.0	0.0%
40.7%	53.7	53.7	0.1	0.1%
42.0%	53.7	53.7	0.0	0.0%
43.2%	53.6	53.6	0.0	0.0%
44.4%	53.6	53.6	0.0	-0.1%
45.7%	53.6	53.5	-0.1	-0.2%
46.9%	53.6	53.5	-0.1	-0.2%
48.1%	53.6	53.3	-0.2	-0.4%
49.4%	53.5	53.3	-0.2	-0.4%
50.6%	53.5	53.1	-0.4	-0.7%
51.9%	53.3	53.1	-0.3	-0.5%
53.1%	53.3	53.0	-0.3	-0.6%
54.3%	53.2	52.9	-0.3	-0.6%
55.6%	53.1	52.9	-0.2	-0.4%
56.8%	53.1	52.8	-0.3	-0.5%
58.0%	53.0	52.8	-0.2	-0.3%
59.3%	52.9	52.7	-0.2	-0.3%
60.5%	52.8	52.7	-0.1	-0.2%
61.7%	52.8	52.6	-0.2	-0.3%
63.0%	52.8	52.6	-0.2	-0.3%
64.2%	52.7	52.6	-0.2	-0.3%
65.4%	52.6	52.6	0.0	0.0%
66.7%	52.6	52.5	0.0	0.0%
67.9%	52.5	52.5	0.0	0.0%
69.1%	52.5	52.4	0.0	-0.1%
70.4%	52.5	52.4	-0.1	-0.2%
71.6%	52.4	52.4	0.0	-0.1%
72.8%	52.4	52.3	0.0	0.0%
74.1%	52.3	52.3	0.0	-0.1%
75.3%	52.3	52.2	0.0	-0.1%
76.5%	52.3	52.1	-0.1	-0.2%
77.8%	52.2	52.1	-0.1	-0.2%
79.0%	52.2	52.1	-0.1	-0.2%
80.2%	52.1	52.1	-0.1	-0.1%
81.5%	52.1	52.0	0.0	0.0%
82.7%	52.0	52.0	0.0	0.0%
84.0%	52.0	52.0	0.0	-0.1%
85.2%	51.9	52.0	0.0	0.1%
86.4%	51.9	52.0	0.1	0.1%
87.7%	51.9	51.9	0.0	0.0%
88.9%	51.8	51.9	0.1	0.2%
90.1%	51.7	51.9	0.1	0.3%
91.4%	51.7	51.7	0.0	0.0%
92.6%	51.7	51.6	0.0	0.0%
93.8%	51.6	51.6	0.0	0.0%
95.1%	51.6	51.5	-0.1	-0.1%
96.3%	51.5	51.3	-0.1	-0.3%
97.5%	51.1	50.9	-0.1	-0.3%
98.8%	51.0	50.6	-0.4	-0.8%
100.0%	51.0	50.6	-0.4	-0.8%

Table SQ14-1b

Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.5	56.4	-0.1	-0.2%
1.2%	56.1	55.9	-0.3	-0.5%
2.5%	55.4	55.4	0.0	0.0%
3.7%	55.4	55.3	-0.1	-0.2%
4.9%	55.1	55.0	-0.1	-0.2%
6.2%	55.1	55.0	0.0	-0.1%
7.4%	55.0	55.0	0.0	-0.1%
8.6%	55.0	55.0	0.0	-0.1%
9.9%	55.0	54.9	-0.1	-0.1%
11.1%	54.9	54.8	-0.1	-0.2%
12.3%	54.8	54.7	-0.1	-0.1%
13.6%	54.8	54.7	-0.1	-0.2%
14.8%	54.7	54.6	0.0	-0.1%
16.0%	54.6	54.6	0.0	-0.1%
17.3%	54.5	54.6	0.1	0.1%
18.5%	54.5	54.5	0.0	0.0%
19.8%	54.4	54.5	0.0	0.0%
21.0%	54.4	54.3	-0.1	-0.2%
22.2%	54.3	54.3	0.0	-0.1%
23.5%	54.2	54.3	0.0	0.1%
24.7%	54.2	54.3	0.0	0.1%
25.9%	54.2	54.2	0.0	0.0%
27.2%	54.1	54.1	0.0	-0.1%
28.4%	54.0	54.1	0.1	0.1%
29.6%	54.0	54.1	0.1	0.1%
30.9%	53.9	54.0	0.1	0.1%
32.1%	53.9	53.9	0.0	0.0%
33.3%	53.9	53.8	-0.1	-0.2%
34.6%	53.9	53.7	-0.1	-0.2%
35.8%	53.9	53.7	-0.1	-0.2%
37.0%	53.8	53.7	0.0	0.0%
38.3%	53.7	53.7	-0.1	-0.2%
39.5%	53.7	53.6	-0.1	-0.1%
40.7%	53.6	53.6	-0.1	-0.1%
42.0%	53.6	53.5	-0.1	-0.1%
43.2%	53.5	53.5	0.0	-0.1%
44.4%	53.5	53.5	0.0	0.0%
45.7%	53.5	53.5	0.0	0.0%
46.9%	53.5	53.4	-0.1	-0.1%
48.1%	53.5	53.4	-0.1	-0.1%
49.4%	53.5	53.4	-0.1	-0.1%
50.6%	53.4	53.4	0.0	0.0%
51.9%	53.3	53.4	0.0	0.0%
53.1%	53.3	53.3	0.0	0.0%
54.3%	53.3	53.2	-0.1	-0.1%
55.6%	53.2	53.2	-0.1	-0.1%
56.8%	53.2	53.2	-0.1	-0.1%
58.0%	53.2	53.2	0.0	0.0%
59.3%	53.2	53.1	0.0	-0.1%
60.5%	53.1	53.1	0.0	-0.1%
61.7%	53.1	53.1	0.0	0.1%
63.0%	53.0	53.1	0.1	0.1%
64.2%	53.0	53.0	0.0	0.0%
65.4%	53.0	53.0	0.0	0.0%
66.7%	53.0	53.0	0.0	0.0%
67.9%	53.0	53.0	0.0	0.0%
69.1%	53.0	53.0	0.0	0.0%
70.4%	52.9	52.9	0.0	0.0%
71.6%	52.9	52.9	0.0	0.0%
72.8%	52.9	52.9	0.0	0.1%
74.1%	52.8	52.8	0.0	-0.1%
75.3%	52.8	52.8	-0.1	-0.1%
76.5%	52.8	52.7	-0.1	-0.1%
77.8%	52.8	52.7	-0.1	-0.2%
79.0%	52.8	52.7	-0.1	-0.1%
80.2%	52.8	52.7	-0.1	-0.2%
81.5%	52.7	52.6	-0.1	-0.2%
82.7%	52.7	52.6	-0.1	-0.2%
84.0%	52.7	52.6	-0.1	-0.2%
85.2%	52.6	52.5	-0.1	-0.2%
86.4%	52.6	52.5	-0.1	-0.2%
87.7%	52.5	52.5	-0.1	-0.2%
88.9%	52.4	52.4	0.0	0.0%
90.1%	52.3	52.4	0.0	0.1%
91.4%	52.3	52.3	0.0	0.0%
92.6%	52.3	52.2	-0.1	-0.2%
93.8%	52.3	52.2	-0.1	-0.2%
95.1%	52.0	52.1	0.1	0.2%
96.3%	51.9	51.8	-0.1	-0.1%
97.5%	51.9	51.3	-0.6	-1.1%
98.8%	51.3	51.0	-0.2	-0.4%
100.0%	51.1	50.9	-0.2	-0.4%

July to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.2	57.1	-0.2	-0.3%
1.2%	56.6	56.4	-0.3	-0.5%
2.5%	56.4	56.2	-0.3	-0.5%
3.7%	56.3	56.1	-0.1	-0.3%
4.9%	56.2	56.1	-0.1	-0.1%
6.2%	56.0	55.9	0.0	-0.1%
7.4%	55.9	55.7	-0.1	-0.2%
8.6%	55.9	55.6	-0.2	-0.4%
9.9%	55.8	55.6	-0.2	-0.3%
11.1%	55.7	55.6	-0.1	-0.2%
12.3%	55.6	55.6	0.0	0.0%
13.6%	55.6	55.5	-0.1	-0.1%
14.8%	55.4	55.5	0.1	0.2%
16.0%	55.4	55.5	0.1	0.1%
17.3%	55.2	55.3	0.1	0.2%
18.5%	55.2	55.3	0.1	0.1%
19.8%	55.2	55.3	0.1	0.1%
21.0%	55.2	55.2	0.0	0.1%
22.2%	55.2	55.2	0.0	0.0%
23.5%	55.1	55.1	0.0	0.0%
24.7%	55.1	55.1	0.0	0.0%
25.9%	55.1	55.1	0.0	-0.1%
27.2%	55.1	55.0	-0.1	-0.2%
28.4%	55.1	55.0	-0.1	-0.2%
29.6%	55.1	55.0	-0.1	-0.2%
30.9%	55.0	54.9	-0.1	-0.2%
32.1%	55.0	54.9	-0.1	-0.2%
33.3%	55.0	54.8	-0.1	-0.2%
34.6%	54.8	54.7	-0.1	-0.2%
35.8%	54.7	54.7	0.0	-0.1%
37.0%	54.7	54.7	0.0	0.0%
38.3%	54.7	54.6	0.0	0.0%
39.5%	54.5	54.6	0.0	0.1%
40.7%	54.5	54.5	0.0	0.0%
42.0%	54.4	54.5	0.1	0.2%
43.2%	54.4	54.4	0.0	0.1%
44.4%	54.4	54.4	0.0	0.1%
45.7%	54.3	54.4	0.1	0.1%
46.9%	54.3	54.3	0.0	0.0%
48.1%	54.3	54.3	0.0	0.0%
49.4%	54.3	54.3	0.0	0.0%
50.6%	54.3	54.3	0.0	-0.1%
51.9%	54.2	54.2	0.0	0.0%
53.1%	54.2	54.1	-0.1	-0.2%
54.3%	54.2	54.1	-0.1	-0.3%
55.6%	54.2	54.1	-0.1	-0.2%
56.8%	54.1	54.0	-0.1	-0.2%
58.0%	54.1	54.0	-0.1	-0.1%
59.3%	54.0	54.0	-0.1	-0.1%
60.5%	54.0	54.0	0.0	0.0%
61.7%	54.0	53.9	0.0	-0.1%
63.0%	53.9	53.8	-0.1	-0.2%
64.2%	53.9	53.8	-0.1	-0.2%
65.4%	53.9	53.8	-0.1	-0.2%
66.7%	53.9	53.7	-0.2	-0.3%
67.9%	53.8	53.7	-0.1	-0.2%
69.1%	53.8	53.7	-0.1	-0.2%
70.4%	53.8	53.7	-0.1	-0.2%
71.6%	53.7	53.7	0.0	0.0%
72.8%	53.7	53.7	0.0	0.0%
74.1%	53.6	53.6	0.0	0.0%
75.3%	53.6	53.6	0.0	0.0%
76.5%	53.6	53.6	0.0	0.0%
77.8%	53.6	53.6	0.0	0.0%
79.0%	53.6	53.6	0.0	0.0%
80.2%	53.6	53.6	0.0	0.0%
81.5%	53.6	53.5	0.0	0.0%
82.7%	53.6	53.5	0.0	-0.1%
84.0%	53.5	53.5	0.0	-0.1%
85.2%	53.5	53.4	-0.1	-0.2%
86.4%	53.3	53.3	0.0	0.0%
87.7%	53.2	53.2	0.0	0.0%
88.9%	53.2	53.2	0.0	0.0%
90.1%	53.2	53.1	-0.1	-0.2%
91.4%	53.2	53.1	-0.1	-0.2%
92.6%	53.1	53.1	0.0	0.0%
93.8%	53.1	53.0	-0.1	-0.1%
95.1%	52.9	52.9	0.1	0.2%
96.3%	52.7	52.6	-0.2	-0.3%
97.5%	52.7	52.5	-0.1	-0.3%
98.8%	52.5	52.0	-0.5	-0.9%
100.0%	52.1	51.5	-0.6	-1.1%

August to September

Percent Exceedance Probability (%)	DCR 2015 Without Project Monthly Temperature (DEGF)	DCR 2015 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.1	57.9	-0.2	-0.4%
1.2%	57.2	57.0	-0.2	-0.4%
2.5%	56.2	56.1	-0.1	-0.2%
3.7%	56.1	56.0	-0.2	-0.3%
4.9%	56.1	55.9	-0.1	-0.2%
6.2%	56.0	55.9	-0.1	-0.1%
7.4%	55.9	55.9	0.0	0.0%
8.6%	55.9	55.9	0.0	0.0%
9.9%	55.8	55.9	0.0	0.0%
11.1%	55.7	55.7	0.0	0.0%
12.3%	55.7	55.6	-0.1	-0.2%
13.6%	55.5	55.4	-0.1	-0.1%
14.8%	55.5	55.4	-0.1	-0.1%
16.0%	55.5	55.4	-0.1	-0.1%
17.3%	55.5	55.4	-0.1	-0.2%
18.5%	55.5	55.4	-0.1	-0.2%
19.8%	55.5	55.4	-0.1	-0.1%
21.0%	55.4	55.4	0.0	0.0%
22.2%	55.4	55.3	-0.1	-0.1%
23.5%	55.3	55.3	0.0	-0.1%
24.7%	55.3	55.2	-0.1	-0.1%
25.9%	55.3	55.1	-0.1	-0.2%
27.2%	55.0	54.9	-0.1	-0.1%
28.4%	54.9	54.8	-0.1	-0.2%
29.6%	54.9	54.8	-0.1	-0.2%
30.9%	54.9	54.8	-0.1	-0.1%
32.1%	54.9	54.8	-0.1	-0.1%
33.3%	54.8	54.8	0.0	-0.1%
34.6%	54.8	54.8	0.0	0.0%
35.8%	54.7	54.7	0.0	0.1%
37.0%	54.6	54.7	0.0	0.0%
38.3%	54.5	54.6	0.1	0.1%
39.5%	54.5	54.5	0.0	0.0%
40.7%	54.5	54.5	0.0	0.0%
42.0%	54.4	54.5	0.0	0.1%
43.2%	54.4	54.4	0.0	0.0%
44.4%	54.4	54.4	0.0	-0.1%
45.7%	54.4	54.3	-0.1	-0.2%
46.9%	54.3	54.3	0.0	-0.1%
48.1%	54.3	54.3	0.0	-0.1%
49.4%	54.3	54.2	-0.1	-0.2%
50.6%	54.1	54.1	0.1	0.1%
51.9%	54.1	53.9	-0.2	-0.4%
53.1%	54.1	53.9	-0.2	-0.4%
54.3%	54.1	53.8	-0.3	-0.5%
55.6%	54.0	53.8	-0.3	-0.5%
56.8%	54.0	53.7	-0.3	-0.5%
58.0%	53.9	53.7	-0.2	-0.4%
59.3%	53.9	53.7	-0.2	-0.3%
60.5%	53.8	53.7	-0.1	-0.3%
61.7%	53.7	53.7	0.0	0.0%
63.0%	53.7	53.7	-0.1	-0.1%
64.2%	53.7	53.6	-0.1	-0.2%
65.4%	53.6	53.6	0.0	0.0%
66.7%	53.6	53.6	0.0	0.1%
67.9%	53.6	53.5	0.0	0.0%
69.1%	53.5	53.5	0.0	0.0%
70.4%	53.5	53.5	0.0	-0.1%
71.6%	53.4	53.4	0.0	0.1%
72.8%	53.4	53.4	0.0	0.0%
74.1%	53.4	53.4	0.0	0.0%
75.3%	53.3	53.4	0.1	0.1%
76.5%	53.3	53.2	-0.1	-0.1%
77.8%	53.2	53.2	0.0	0.0%
79.0%	53.2	53.2	0.0	0.0%
80.2%	53.1	53.2	0.0	0.1%
81.5%	53.1	53.1	0.0	0.0%
82.7%	53.1	53.1	0.0	0.0%
84.0%	53.1	53.1	0.0	0.0%
85.2%	53.0	53.0	0.0	0.0%
86.4%	53.0	53.0	0.0	0.0%
87.7%	53.0	53.0	0.1	0.1%
88.9%	53.0	52.9	0.0	-0.1%
90.1%	53.0	52.9	-0.1	-0.1%
91.4%	52.9	52.9	0.0	-0.1%
92.6%	52.9	52.8	0.0	-0.1%
93.8%	52.9	52.7	-0.2	-0.3%
95.1%	52.8	52.7	-0.1	-0.2%
96.3%	52.7	52.7	-0.1	-0.1%
97.5%	52.6	52.0	-0.6	-1.1%
98.8%	52.2	51.9	-0.3	-0.6%
100.0%	52.1	51.3	-0.9	-1.7%

River Temperature Modeling

Summary Tables and Bar Charts

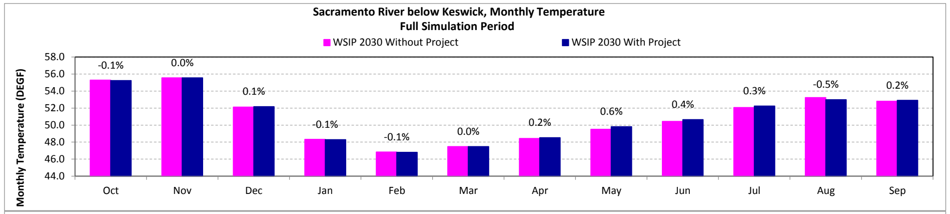
Table SQ2-1a
Sacramento River below Keswick, Monthly Temperature
Long-term Average and Average by Water Year Type

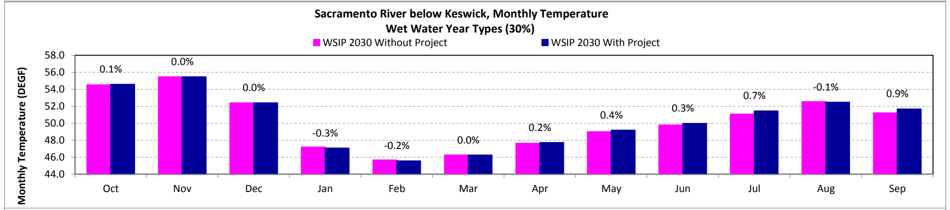
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	55.3	55.5	52.1	48.3	46.8	47.5	48.4	49.5	50.4	52.1	53.2	52.8
WSIP 2030 With Project	55.2	55.5	52.2	48.3	46.8	47.5	48.5	49.8	50.6	52.2	53.0	52.9
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.2	0.2	-0.2	0.1
Percent Difference[3]	-0.1%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.2%	0.6%	0.4%	0.3%	-0.5%	0.2%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	54.5	55.5	52.4	47.2	45.7	46.3	47.6	49.0	49.8	51.1	52.5	51.2
WSIP 2030 With Project	54.6	55.5	52.4	47.1	45.6	46.3	47.7	49.2	50.0	51.5	52.5	51.7
Difference	0.0	0.0	0.0	-0.1	-0.1	0.0	0.1	0.2	0.2	0.4	-0.1	0.5
Percent Difference	0.1%	0.0%	0.0%	-0.3%	-0.2%	0.0%	0.2%	0.4%	0.3%	0.7%	-0.1%	0.9%
Above Normal (15%)												
WSIP 2030 Without Project	54.5	55.3	52.2	48.3	46.7	47.1	48.4	49.5	49.8	51.3	52.3	51.7
WSIP 2030 With Project	54.4	55.2	52.0	48.3	46.6	47.1	48.5	49.7	50.1	51.3	52.1	52.1
Difference	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.1	0.3	0.3	0.1	-0.2	0.4
Percent Difference	-0.2%	-0.1%	-0.3%	0.0%	-0.1%	-0.1%	0.2%	0.5%	0.5%	0.2%	-0.4%	0.8%
Below Normal (21%)												
WSIP 2030 Without Project	54.9	55.2	52.0	48.7	47.0	47.9	48.6	49.5	50.2	51.8	53.0	52.5
WSIP 2030 With Project	55.0	55.2	52.0	48.7	47.0	47.9	48.6	49.7	50.5	52.1	52.8	52.7
Difference	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	-0.2	0.2
Percent Difference	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	-0.3%	0.3%
Dry (20%)												
WSIP 2030 Without Project	55.2	55.5	51.5	49.0	47.5	48.0	48.8	49.7	50.7	52.7	53.6	53.5
WSIP 2030 With Project	55.3	55.5	51.6	48.9	47.5	48.1	48.8	49.9	51.1	52.8	53.3	53.4
Difference	0.1	0.0	0.1	-0.1	-0.1	0.1	0.0	0.2	0.3	0.1	-0.3	-0.1
Percent Difference	0.2%	0.0%	0.1%	-0.2%	-0.1%	0.1%	0.1%	0.4%	0.7%	0.3%	-0.5%	-0.1%
Critical (15%)												
WSIP 2030 Without Project	58.2	56.5	52.4	49.4	48.3	49.1	49.5	50.5	52.3	54.5	55.4	56.8
WSIP 2030 With Project	57.7	56.5	52.8	49.5	48.4	49.1	49.8	51.2	52.3	54.2	54.7	55.9
Difference	-0.5	-0.1	0.4	0.1	0.1	0.0	0.3	0.7	0.0	-0.3	-0.7	-0.8
Percent Difference	-0.9%	-0.1%	0.7%	0.2%	0.3%	0.0%	0.6%	1.4%	0.0%	-0.5%	-1.3%	-1.5%

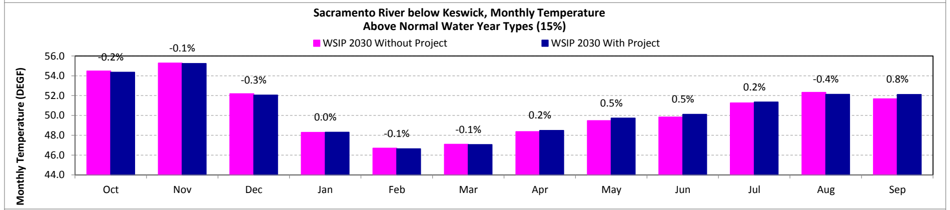
1 Based on the 82-year simulation period

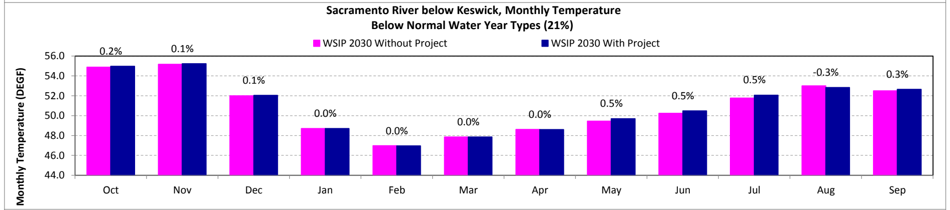
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

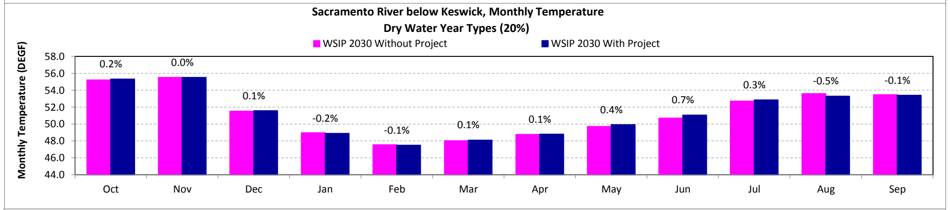
3 Relative difference of the monthly average











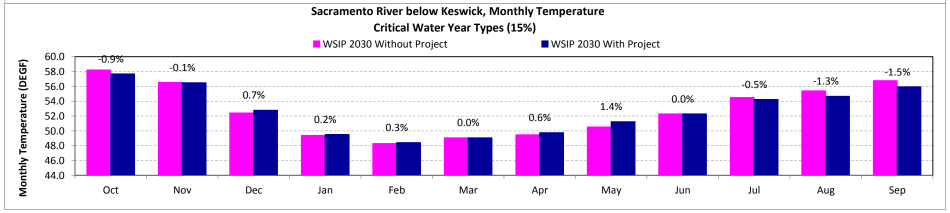


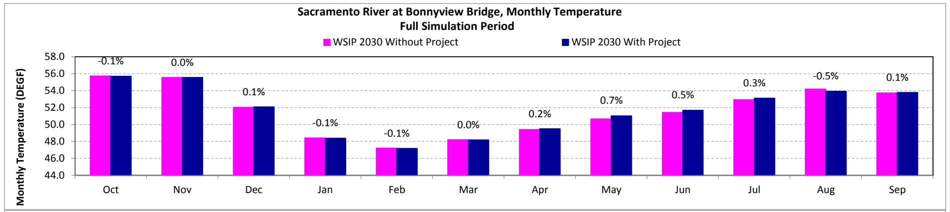
Table SQ3-1a
Sacramento River at Bonnyview Bridge, Monthly Temperature
Long-term Average and Average by Water Year Type

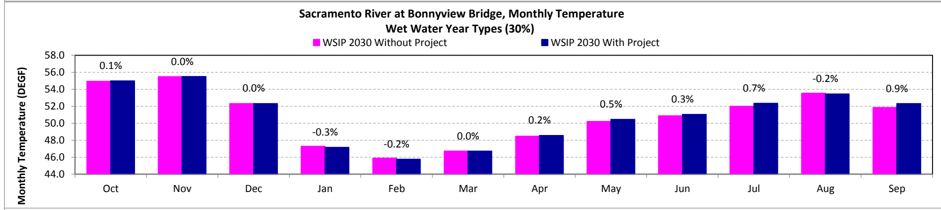
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	55.7	55.6	52.0	48.4	47.2	48.2	49.4	50.7	51.4	52.9	54.2	53.7
WSIP 2030 With Project	55.7	55.6	52.1	48.4	47.2	48.2	49.5	51.0	51.7	53.1	53.9	53.8
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.2	0.2	-0.3	0.0
Percent Difference[3]	-0.1%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.2%	0.7%	0.5%	0.3%	-0.5%	0.1%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	54.9	55.5	52.3	47.3	45.9	46.7	48.5	50.2	50.9	52.0	53.5	51.8
WSIP 2030 With Project	55.0	55.5	52.3	47.2	45.8	46.7	48.6	50.4	51.0	52.4	53.4	52.3
Difference	0.0	0.0	0.0	-0.1	-0.1	0.0	0.1	0.2	0.1	0.4	-0.1	0.5
Percent Difference	0.1%	0.0%	0.0%	-0.3%	-0.2%	0.0%	0.2%	0.5%	0.3%	0.7%	-0.2%	0.9%
Above Normal (15%)												
WSIP 2030 Without Project	54.9	55.3	52.1	48.4	47.0	47.6	49.4	50.6	50.8	52.1	53.2	52.5
WSIP 2030 With Project	54.8	55.2	52.0	48.4	46.9	47.6	49.5	51.0	51.2	52.2	53.1	52.9
Difference	-0.1	0.0	-0.1	0.0	-0.1	-0.1	0.1	0.3	0.4	0.1	-0.2	0.5
Percent Difference	-0.2%	-0.1%	-0.2%	0.0%	-0.2%	-0.1%	0.3%	0.7%	0.8%	0.2%	-0.3%	0.9%
Below Normal (21%)												
WSIP 2030 Without Project	55.4	55.2	51.9	48.8	47.4	48.8	49.7	50.5	51.2	52.6	53.9	53.6
WSIP 2030 With Project	55.5	55.2	51.9	48.8	47.4	48.8	49.6	50.8	51.5	52.9	53.8	53.6
Difference	0.1	0.1	0.1	0.0	0.0	0.0	-0.1	0.3	0.3	0.3	-0.2	0.0
Percent Difference	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.6%	0.6%	0.5%	-0.3%	0.1%
Dry (20%)												
WSIP 2030 Without Project	55.7	55.5	51.5	49.0	48.0	48.9	49.8	50.8	51.7	53.6	54.6	54.7
WSIP 2030 With Project	55.8	55.5	51.5	48.9	47.9	49.0	49.8	51.1	52.0	53.7	54.2	54.5
Difference	0.1	0.0	0.1	-0.1	-0.1	0.0	0.0	0.3	0.4	0.1	-0.4	-0.2
Percent Difference	0.2%	0.0%	0.1%	-0.2%	-0.1%	0.1%	0.1%	0.5%	0.7%	0.3%	-0.6%	-0.4%
Critical (15%)												
WSIP 2030 Without Project	58.7	56.5	52.3	49.5	48.8	50.0	50.4	51.6	53.2	55.4	56.4	57.9
WSIP 2030 With Project	58.2	56.5	52.6	49.6	48.9	50.0	50.8	52.5	53.3	55.1	55.6	57.0
Difference	-0.5	-0.1	0.3	0.1	0.1	0.0	0.3	0.8	0.0	-0.2	-0.8	-0.9
Percent Difference	-0.8%	-0.1%	0.6%	0.2%	0.2%	0.0%	0.6%	1.6%	0.1%	-0.4%	-1.3%	-1.6%

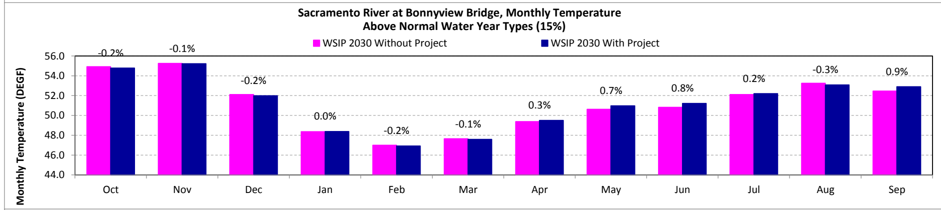
1 Based on the 82-year simulation period

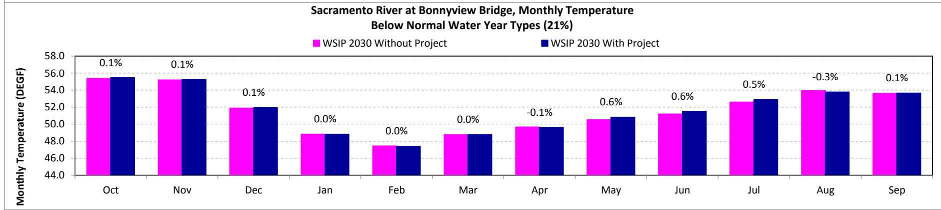
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

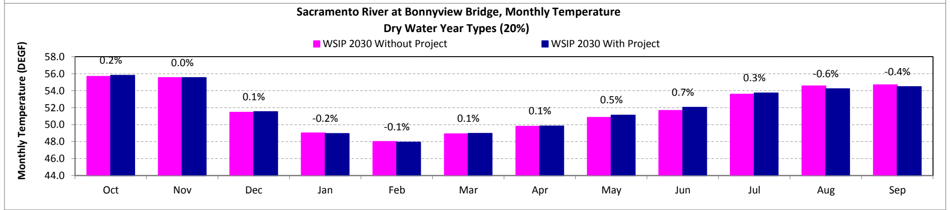
3 Relative difference of the monthly average











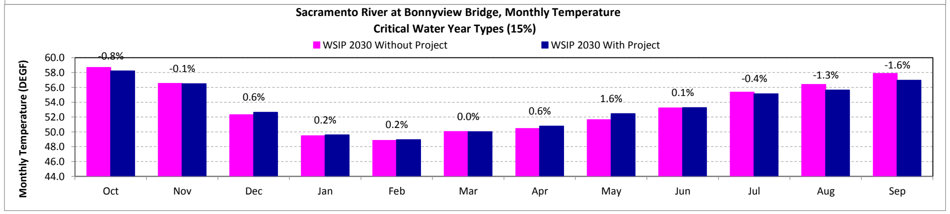


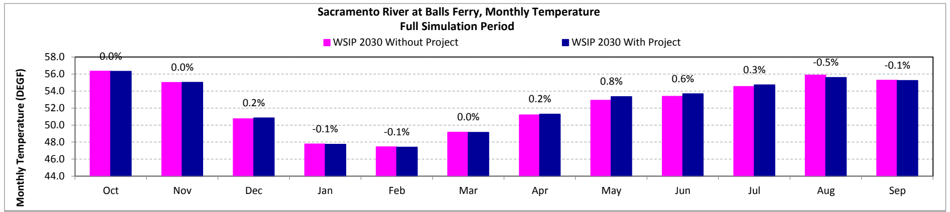
Table SQ4-1a
Sacramento River at Balls Ferry, Monthly Temperature
Long-term Average and Average by Water Year Type

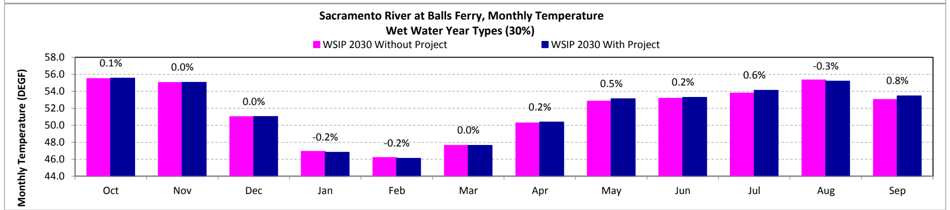
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	56.3	55.0	50.7	47.8	47.4	49.2	51.2	52.9	53.4	54.5	55.9	55.3
WSIP 2030 With Project	56.3	55.0	50.8	47.7	47.4	49.1	51.3	53.3	53.7	54.7	55.6	55.2
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.3	0.2	-0.3	0.0
Percent Difference[3]	0.0%	0.0%	0.2%	-0.1%	-0.1%	0.0%	0.2%	0.8%	0.6%	0.3%	-0.5%	-0.1%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	55.5	55.0	51.0	46.9	46.2	47.6	50.3	52.8	53.2	53.8	55.3	53.0
WSIP 2030 With Project	55.5	55.0	51.0	46.8	46.1	47.6	50.4	53.1	53.3	54.1	55.2	53.5
Difference	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1	0.3	0.1	0.3	-0.1	0.4
Percent Difference	0.1%	0.0%	0.0%	-0.2%	-0.2%	0.0%	0.2%	0.5%	0.2%	0.6%	-0.3%	0.8%
Above Normal (15%)												
WSIP 2030 Without Project	55.5	54.8	50.8	47.5	47.1	48.5	51.3	52.9	52.9	53.7	54.9	53.8
WSIP 2030 With Project	55.4	54.8	50.9	47.4	47.0	48.4	51.4	53.4	53.5	53.8	54.8	54.3
Difference	-0.1	0.0	0.1	0.0	-0.1	-0.1	0.1	0.4	0.6	0.1	-0.1	0.5
Percent Difference	-0.3%	0.0%	0.3%	-0.1%	-0.2%	-0.2%	0.3%	0.8%	1.1%	0.2%	-0.2%	0.9%
Below Normal (21%)												
WSIP 2030 Without Project	56.1	54.6	50.7	48.0	47.7	49.8	51.6	52.6	53.0	54.1	55.5	55.4
WSIP 2030 With Project	56.1	54.7	50.8	48.0	47.7	49.8	51.4	53.0	53.4	54.4	55.4	55.3
Difference	0.0	0.1	0.1	0.0	0.0	0.0	-0.1	0.4	0.4	0.3	-0.2	-0.1
Percent Difference	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	-0.2%	0.7%	0.8%	0.5%	-0.3%	-0.2%
Dry (20%)												
WSIP 2030 Without Project	56.3	54.8	50.3	48.2	48.1	49.9	51.6	52.8	53.4	55.1	56.2	56.6
WSIP 2030 With Project	56.5	54.9	50.4	48.2	48.0	50.0	51.7	53.2	53.8	55.2	55.8	56.2
Difference	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.4	0.1	-0.4	-0.4
Percent Difference	0.3%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.1%	0.7%	0.8%	0.3%	-0.8%	-0.7%
Critical (15%)												
WSIP 2030 Without Project	59.2	56.0	50.7	48.9	49.2	51.1	52.0	53.6	54.8	56.8	58.0	59.5
WSIP 2030 With Project	58.8	55.9	51.0	49.0	49.2	51.1	52.3	54.5	54.9	56.7	57.3	58.6
Difference	-0.4	-0.1	0.2	0.1	0.1	0.0	0.4	0.9	0.1	-0.1	-0.8	-1.0
Percent Difference	-0.6%	-0.1%	0.4%	0.2%	0.1%	0.0%	0.7%	1.7%	0.2%	-0.3%	-1.3%	-1.6%

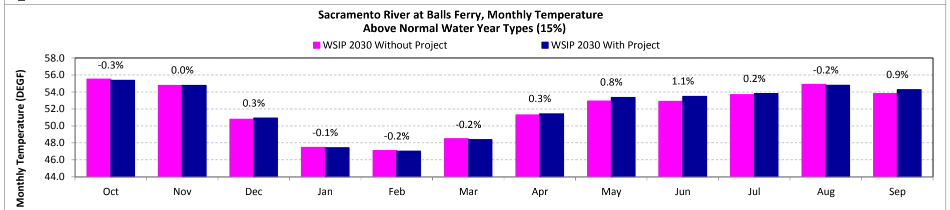
1 Based on the 82-year simulation period

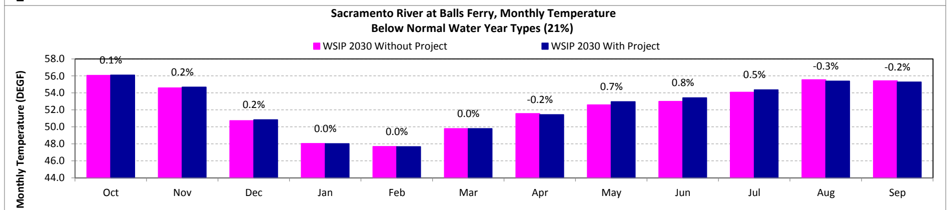
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

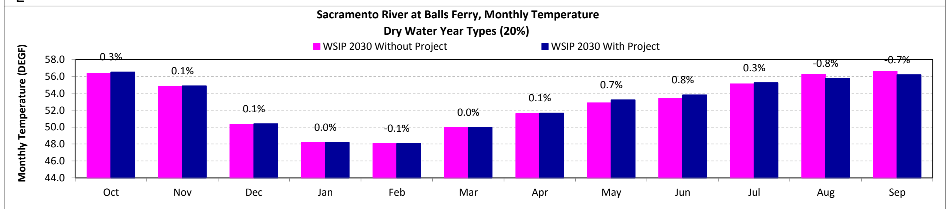
3 Relative difference of the monthly average











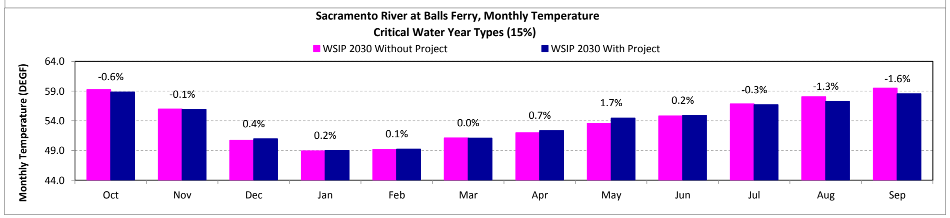


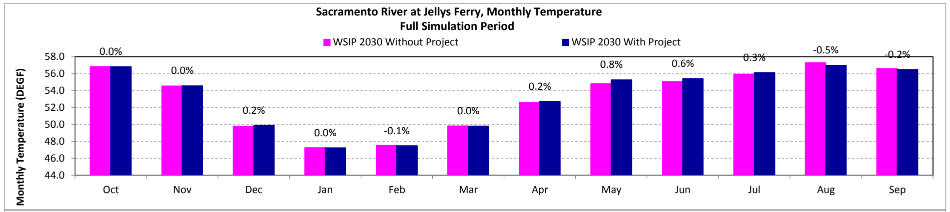
Table SQ5-1a
Sacramento River at Jellys Ferry, Monthly Temperature
Long-term Average and Average by Water Year Type

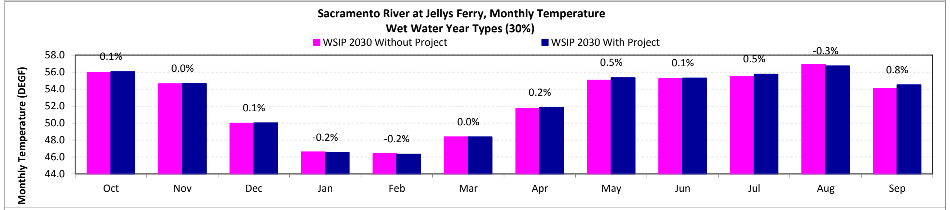
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	56.8	54.5	49.8	47.3	47.5	49.8	52.6	54.8	55.1	55.9	57.3	56.6
WSIP 2030 With Project	56.8	54.6	49.9	47.2	47.5	49.8	52.7	55.3	55.4	56.1	57.0	56.5
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.5	0.3	0.2	-0.3	-0.1
Percent Difference[3]	0.0%	0.0%	0.2%	0.0%	-0.1%	0.0%	0.2%	0.8%	0.6%	0.3%	-0.5%	-0.2%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	56.0	54.6	50.0	46.6	46.4	48.4	51.7	55.0	55.2	55.5	56.9	54.1
WSIP 2030 With Project	56.0	54.6	50.0	46.5	46.3	48.4	51.8	55.3	55.3	55.8	56.7	54.5
Difference	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1	0.3	0.1	0.3	-0.2	0.4
Percent Difference	0.1%	0.0%	0.1%	-0.2%	-0.2%	0.0%	0.2%	0.5%	0.1%	0.5%	-0.3%	0.8%
Above Normal (15%)												
WSIP 2030 Without Project	56.0	54.4	49.9	46.9	47.1	49.2	52.8	54.9	54.7	55.1	56.3	55.0
WSIP 2030 With Project	55.9	54.4	50.2	46.9	47.1	49.1	52.9	55.4	55.4	55.3	56.2	55.5
Difference	-0.1	0.0	0.2	0.0	-0.1	-0.1	0.1	0.5	0.7	0.1	0.0	0.5
Percent Difference	-0.3%	0.0%	0.5%	-0.1%	-0.1%	-0.2%	0.2%	0.9%	1.4%	0.2%	-0.1%	0.9%
Below Normal (21%)												
WSIP 2030 Without Project	56.6	54.1	49.8	47.4	47.8	50.5	53.0	54.4	54.6	55.3	56.9	57.0
WSIP 2030 With Project	56.6	54.2	50.0	47.4	47.7	50.5	52.9	54.8	55.1	55.6	56.7	56.7
Difference	0.0	0.1	0.2	0.0	0.0	0.0	-0.1	0.4	0.5	0.3	-0.1	-0.3
Percent Difference	0.0%	0.2%	0.3%	0.0%	0.0%	0.0%	-0.2%	0.7%	1.0%	0.5%	-0.2%	-0.5%
Dry (20%)												
WSIP 2030 Without Project	56.8	54.3	49.4	47.6	48.0	50.6	53.0	54.5	54.8	56.3	57.5	58.1
WSIP 2030 With Project	57.0	54.4	49.5	47.6	48.0	50.5	53.1	55.0	55.3	56.5	57.0	57.6
Difference	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.4	0.2	-0.5	-0.5
Percent Difference	0.3%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.1%	0.8%	0.8%	0.3%	-0.9%	-0.9%
Critical (15%)												
WSIP 2030 Without Project	59.6	55.4	49.8	48.3	49.3	51.7	53.2	55.2	56.1	58.0	59.3	60.8
WSIP 2030 With Project	59.3	55.3	49.9	48.4	49.3	51.7	53.6	56.1	56.3	58.0	58.6	59.8
Difference	-0.3	-0.1	0.1	0.1	0.0	0.0	0.4	0.9	0.1	-0.1	-0.8	-1.0
Percent Difference	-0.5%	-0.1%	0.3%	0.2%	0.1%	0.0%	0.7%	1.7%	0.3%	-0.1%	-1.3%	-1.6%

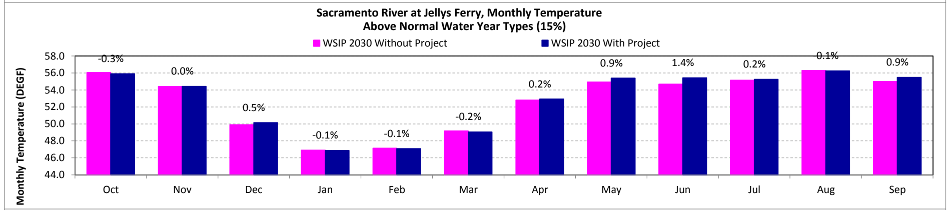
1 Based on the 82-year simulation period

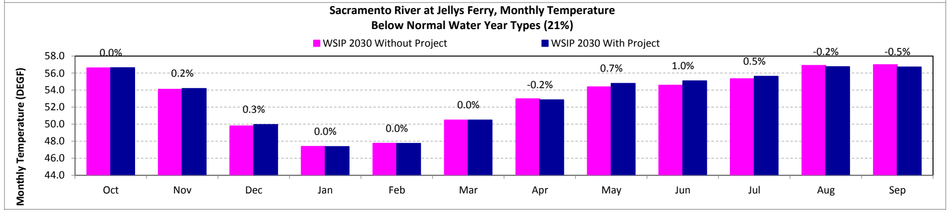
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

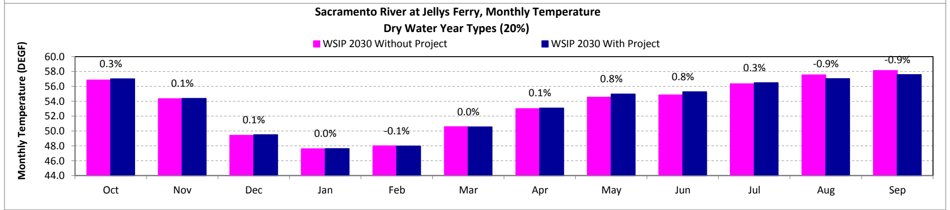
3 Relative difference of the monthly average











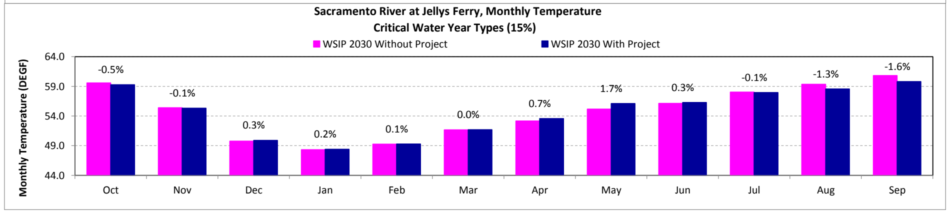
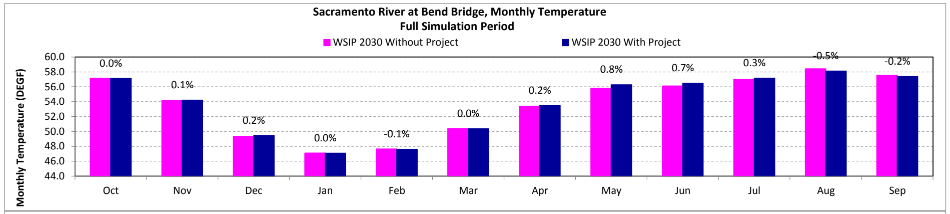
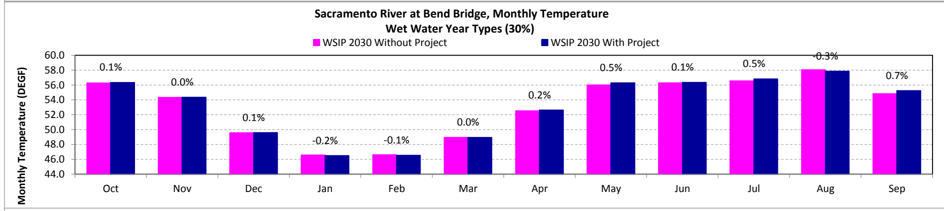


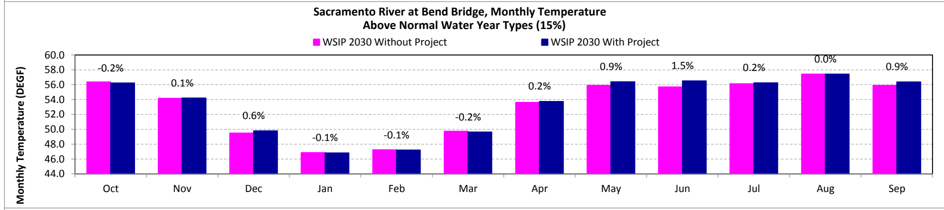
Table SQ6-1a
Sacramento River at Bend Bridge, Monthly Temperature
Long-term Average and Average by Water Year Type

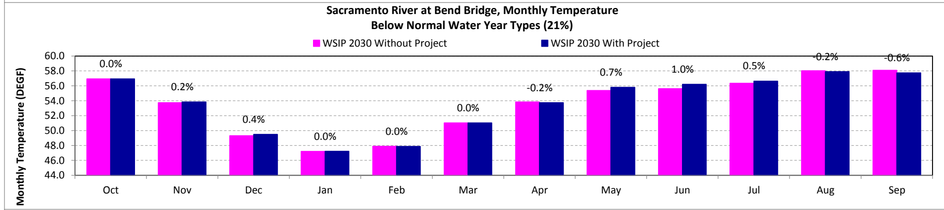
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	57.1	54.2	49.3	47.1	47.6	50.4	53.4	55.8	56.1	57.0	58.4	57.5
WSIP 2030 With Project	57.1	54.2	49.5	47.1	47.6	50.4	53.5	56.3	56.5	57.2	58.1	57.4
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.5	0.4	0.2	-0.3	-0.1
Percent Difference[3]	0.0%	0.1%	0.2%	0.0%	-0.1%	0.0%	0.2%	0.8%	0.7%	0.3%	-0.5%	-0.2%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	56.3	54.3	49.6	46.6	46.6	49.0	52.5	56.0	56.3	56.6	58.1	54.8
WSIP 2030 With Project	56.3	54.4	49.6	46.5	46.5	48.9	52.6	56.3	56.4	56.8	57.9	55.2
Difference	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1	0.3	0.1	0.3	-0.2	0.4
Percent Difference	0.1%	0.0%	0.1%	-0.2%	-0.1%	0.0%	0.2%	0.5%	0.1%	0.5%	-0.3%	0.7%
Above Normal (15%)												
WSIP 2030 Without Project	56.4	54.2	49.5	46.9	47.3	49.7	53.6	55.9	55.7	56.1	57.4	55.9
WSIP 2030 With Project	56.2	54.2	49.8	46.8	47.2	49.6	53.7	56.4	56.5	56.3	57.4	56.4
Difference	-0.1	0.0	0.3	0.0	-0.1	-0.1	0.1	0.5	0.8	0.1	0.0	0.5
Percent Difference	-0.2%	0.1%	0.6%	-0.1%	-0.1%	-0.2%	0.2%	0.9%	1.5%	0.2%	0.0%	0.9%
Below Normal (21%)												
WSIP 2030 Without Project	56.9	53.7	49.3	47.2	47.9	51.0	53.8	55.4	55.6	56.4	58.0	58.1
WSIP 2030 With Project	56.9	53.8	49.5	47.2	47.9	51.0	53.7	55.8	56.2	56.6	57.9	57.8
Difference	0.0	0.1	0.2	0.0	0.0	0.0	-0.1	0.4	0.6	0.3	-0.1	-0.3
Percent Difference	0.0%	0.2%	0.4%	0.0%	0.0%	0.0%	-0.2%	0.7%	1.0%	0.5%	-0.2%	-0.6%
Dry (20%)												
WSIP 2030 Without Project	57.2	53.9	48.9	47.3	48.1	51.1	53.7	55.6	55.9	57.4	58.7	59.3
WSIP 2030 With Project	57.3	54.0	49.0	47.3	48.0	51.1	53.8	56.1	56.3	57.6	58.2	58.7
Difference	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.5	0.5	0.2	-0.5	-0.6
Percent Difference	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%	0.2%	0.8%	0.8%	0.3%	-0.9%	-1.0%
Critical (15%)												
WSIP 2030 Without Project	59.8	54.8	49.3	48.0	49.3	52.1	53.9	56.1	57.1	59.0	60.3	61.7
WSIP 2030 With Project	59.6	54.8	49.4	48.1	49.3	52.1	54.3	57.1	57.3	59.0	59.6	60.7
Difference	-0.3	-0.1	0.1	0.1	0.0	0.0	0.4	0.9	0.2	0.0	-0.8	-1.0
Percent Difference	-0.4%	-0.1%	0.2%	0.1%	0.0%	0.0%	0.8%	1.7%	0.3%	0.0%	-1.3%	-1.6%

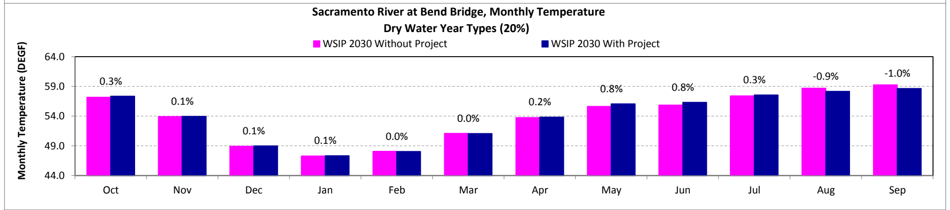
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











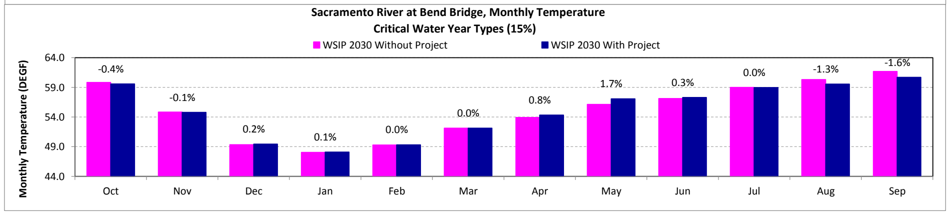


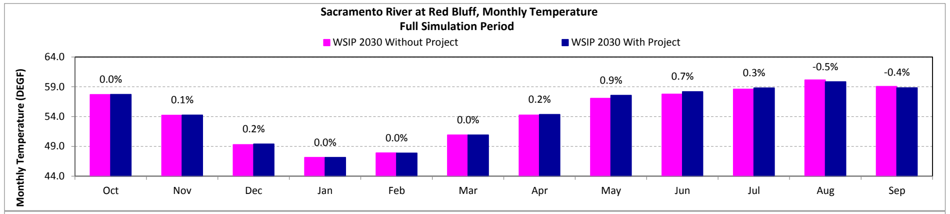
Table SQ7-1a
Sacramento River at Red Bluff, Monthly Temperature
Long-term Average and Average by Water Year Type

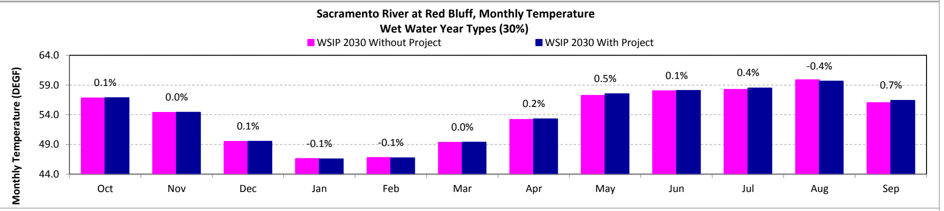
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	57.7	54.2	49.3	47.1	47.9	50.9	54.2	57.1	57.8	58.6	60.2	59.1
WSIP 2030 With Project	57.7	54.3	49.4	47.1	47.9	50.9	54.4	57.6	58.2	58.8	59.8	58.8
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.5	0.4	0.2	-0.3	-0.2
Percent Difference[3]	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.2%	0.9%	0.7%	0.3%	-0.5%	-0.4%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	56.8	54.4	49.5	46.6	46.8	49.4	53.2	57.2	58.0	58.3	59.9	56.0
WSIP 2030 With Project	56.9	54.4	49.5	46.6	46.7	49.4	53.3	57.5	58.1	58.5	59.6	56.4
Difference	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1	0.3	0.1	0.2	-0.2	0.4
Percent Difference	0.1%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.2%	0.5%	0.1%	0.4%	-0.4%	0.7%
Above Normal (15%)												
WSIP 2030 Without Project	56.9	54.1	49.5	46.9	47.5	50.2	54.4	57.2	57.3	57.8	59.1	57.3
WSIP 2030 With Project	56.8	54.2	49.7	46.8	47.4	50.1	54.5	57.7	58.3	57.9	59.2	57.8
Difference	-0.1	0.0	0.3	0.0	0.0	-0.1	0.1	0.5	0.9	0.1	0.0	0.5
Percent Difference	-0.2%	0.1%	0.5%	-0.1%	-0.1%	-0.2%	0.2%	0.9%	1.6%	0.2%	0.1%	0.8%
Below Normal (21%)												
WSIP 2030 Without Project	57.5	53.8	49.2	47.3	48.2	51.6	54.7	56.6	57.3	57.9	59.7	59.8
WSIP 2030 With Project	57.5	53.9	49.4	47.3	48.2	51.6	54.6	57.1	57.9	58.2	59.6	59.3
Difference	0.0	0.1	0.2	0.0	0.0	0.0	-0.1	0.4	0.7	0.3	-0.1	-0.4
Percent Difference	0.0%	0.2%	0.4%	0.0%	0.0%	0.1%	-0.2%	0.8%	1.1%	0.5%	-0.2%	-0.8%
Dry (20%)												
WSIP 2030 Without Project	57.8	54.0	48.9	47.3	48.3	51.7	54.7	56.9	57.5	59.0	60.4	61.1
WSIP 2030 With Project	58.0	54.0	49.0	47.4	48.4	51.7	54.8	57.4	58.0	59.2	59.8	60.4
Difference	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.5	0.2	-0.6	-0.7
Percent Difference	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%	0.2%	0.9%	0.8%	0.3%	-1.0%	-1.2%
Critical (15%)												
WSIP 2030 Without Project	60.4	54.9	49.3	48.1	49.7	52.8	54.9	57.5	58.7	60.6	62.1	63.3
WSIP 2030 With Project	60.2	54.9	49.4	48.2	49.7	52.9	55.4	58.4	58.9	60.7	61.3	62.3
Difference	-0.2	-0.1	0.1	0.1	0.0	0.0	0.4	1.0	0.2	0.1	-0.8	-1.0
Percent Difference	-0.3%	-0.1%	0.2%	0.1%	0.1%	0.1%	0.8%	1.7%	0.4%	0.1%	-1.2%	-1.6%

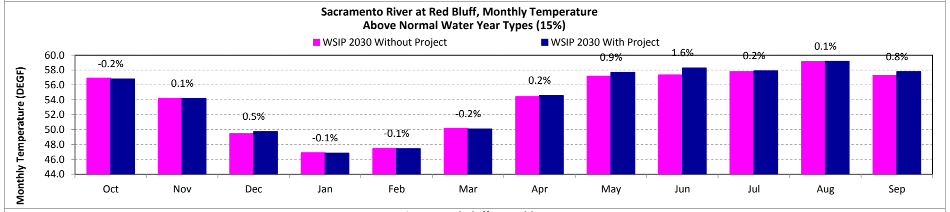
1 Based on the 82-year simulation period

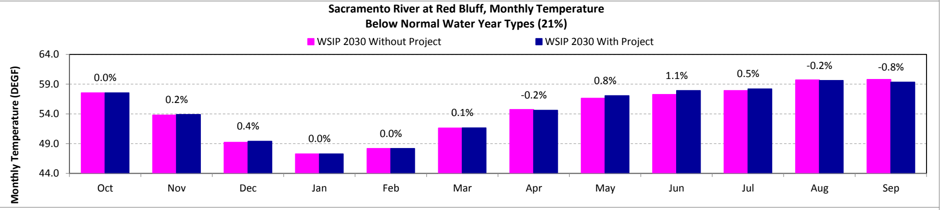
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

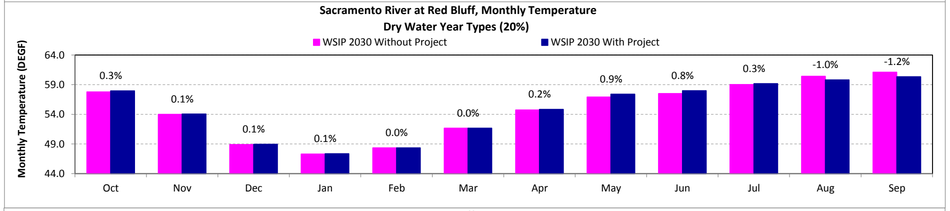
3 Relative difference of the monthly average











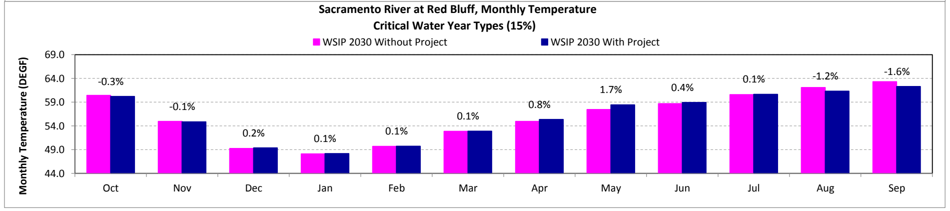


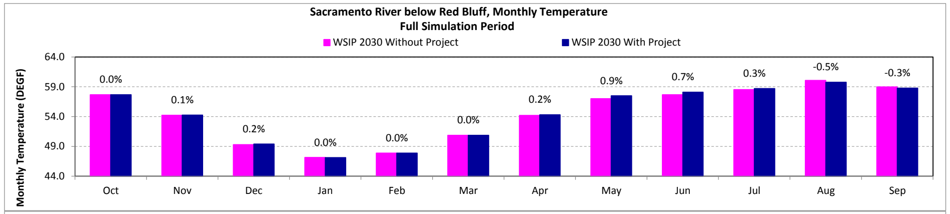
Table SQ8-1a
Sacramento River below Red Bluff, Monthly Temperature
Long-term Average and Average by Water Year Type

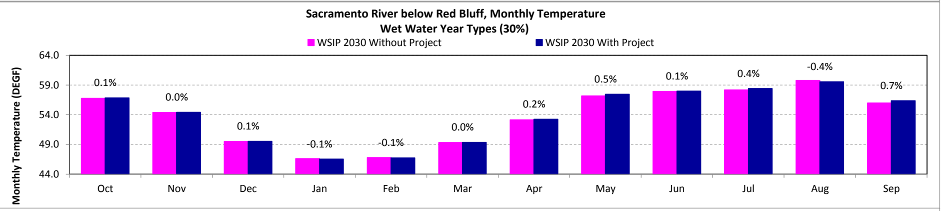
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	57.7	54.2	49.3	47.1	47.9	50.9	54.2	57.0	57.7	58.5	60.1	59.0
WSIP 2030 With Project	57.7	54.3	49.4	47.1	47.9	50.9	54.3	57.5	58.1	58.7	59.8	58.8
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.5	0.4	0.2	-0.3	-0.2
Percent Difference[3]	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.2%	0.9%	0.7%	0.3%	-0.5%	-0.3%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	56.8	54.4	49.5	46.6	46.8	49.3	53.1	57.2	57.9	58.2	59.8	56.0
WSIP 2030 With Project	56.8	54.4	49.5	46.5	46.7	49.3	53.2	57.5	58.0	58.4	59.6	56.3
Difference	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1	0.3	0.1	0.2	-0.2	0.4
Percent Difference	0.1%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.2%	0.5%	0.1%	0.4%	-0.4%	0.7%
Above Normal (15%)												
WSIP 2030 Without Project	56.9	54.1	49.5	46.9	47.5	50.1	54.4	57.1	57.3	57.7	59.1	57.2
WSIP 2030 With Project	56.8	54.2	49.7	46.8	47.4	50.0	54.5	57.6	58.2	57.8	59.1	57.7
Difference	-0.1	0.0	0.3	0.0	0.0	-0.1	0.1	0.5	0.9	0.1	0.0	0.5
Percent Difference	-0.2%	0.1%	0.5%	-0.1%	-0.1%	-0.2%	0.2%	0.9%	1.6%	0.2%	0.1%	0.8%
Below Normal (21%)												
WSIP 2030 Without Project	57.5	53.8	49.2	47.3	48.2	51.6	54.7	56.6	57.2	57.8	59.6	59.7
WSIP 2030 With Project	57.5	53.9	49.4	47.3	48.2	51.6	54.6	57.0	57.8	58.1	59.5	59.3
Difference	0.0	0.1	0.2	0.0	0.0	0.0	-0.1	0.4	0.6	0.3	-0.1	-0.4
Percent Difference	0.0%	0.2%	0.4%	0.0%	0.0%	0.0%	-0.2%	0.8%	1.1%	0.5%	-0.2%	-0.7%
Dry (20%)												
WSIP 2030 Without Project	57.7	54.0	48.9	47.3	48.3	51.6	54.7	56.9	57.4	58.9	60.3	61.0
WSIP 2030 With Project	57.9	54.0	49.0	47.3	48.3	51.6	54.8	57.3	57.9	59.1	59.7	60.3
Difference	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.5	0.2	-0.6	-0.7
Percent Difference	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%	0.2%	0.9%	0.8%	0.3%	-1.0%	-1.2%
Critical (15%)												
WSIP 2030 Without Project	60.4	54.9	49.3	48.1	49.7	52.8	54.9	57.4	58.6	60.5	62.0	63.3
WSIP 2030 With Project	60.2	54.9	49.4	48.1	49.7	52.8	55.3	58.4	58.9	60.6	61.2	62.2
Difference	-0.2	-0.1	0.1	0.1	0.0	0.0	0.4	1.0	0.2	0.1	-0.8	-1.0
Percent Difference	-0.3%	-0.1%	0.2%	0.1%	0.1%	0.1%	0.8%	1.7%	0.4%	0.1%	-1.2%	-1.6%

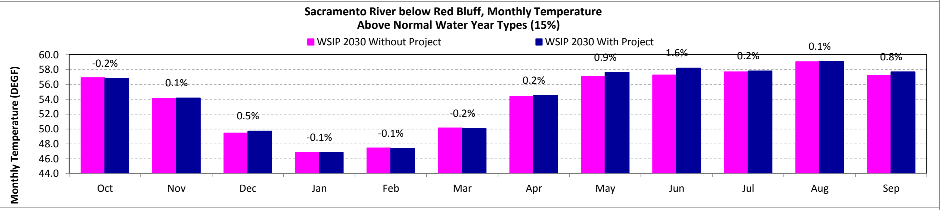
1 Based on the 82-year simulation period

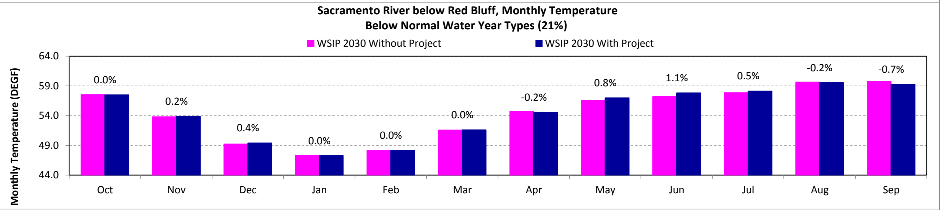
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

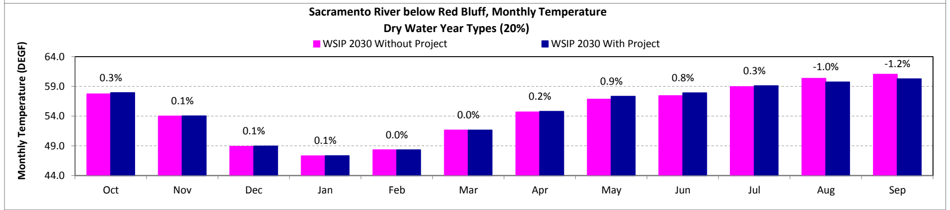
3 Relative difference of the monthly average











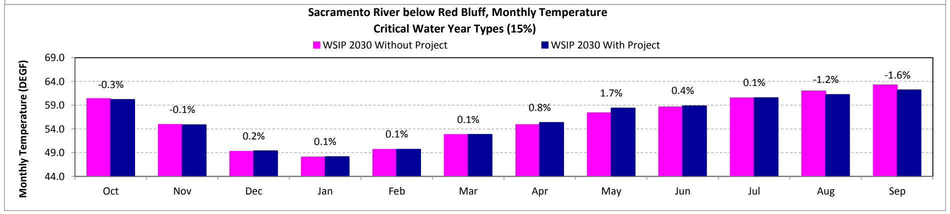


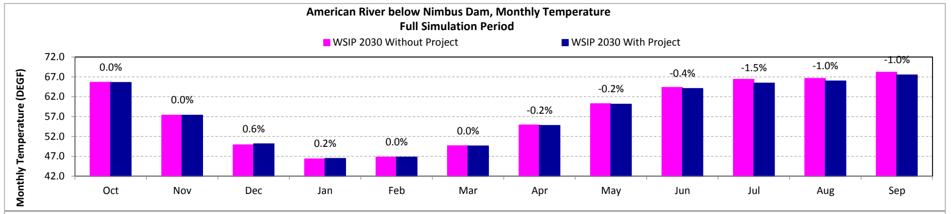
Table SQ9-1a
American River below Nimbus Dam, Monthly Temperature
Long-term Average and Average by Water Year Type

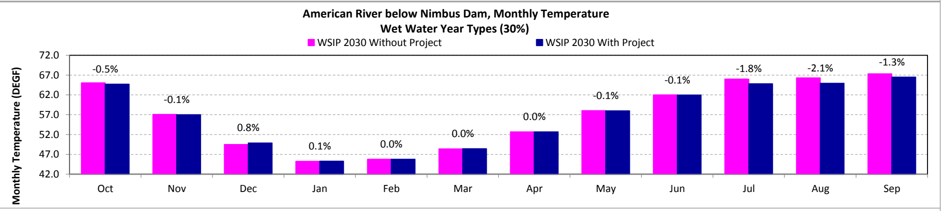
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	65.6	57.3	49.8	46.3	46.8	49.6	54.9	60.2	64.3	66.4	66.6	68.2
WSIP 2030 With Project	65.6	57.4	50.1	46.4	46.8	49.6	54.8	60.1	64.1	65.4	66.0	67.5
Difference	0.0	0.0	0.3	0.1	0.0	0.0	-0.1	-0.1	-0.2	-1.0	-0.7	-0.7
Percent Difference[3]	0.0%	0.0%	0.6%	0.2%	0.0%	0.0%	-0.2%	-0.2%	-0.4%	-1.5%	-1.0%	-1.0%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	65.1	57.1	49.5	45.2	45.8	48.4	52.7	58.0	62.0	66.0	66.3	67.3
WSIP 2030 With Project	64.7	57.0	49.9	45.3	45.8	48.4	52.7	58.0	62.0	64.8	64.9	66.5
Difference	-0.3	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	-1.2	-1.4	-0.8
Percent Difference	-0.5%	-0.1%	0.8%	0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-1.8%	-2.1%	-1.3%
Above Normal (15%)												
WSIP 2030 Without Project	65.2	56.6	49.9	46.4	46.4	48.7	54.5	60.1	64.8	65.8	66.1	67.6
WSIP 2030 With Project	65.2	56.6	50.3	46.5	46.4	48.7	54.5	60.1	64.4	64.8	65.6	67.0
Difference	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	-0.4	-1.0	-0.5	-0.6
Percent Difference	0.0%	0.0%	0.7%	0.2%	0.1%	0.0%	0.0%	-0.1%	-0.6%	-1.5%	-0.7%	-0.9%
Below Normal (21%)												
WSIP 2030 Without Project	65.5	57.9	50.3	46.6	46.8	49.4	55.6	61.2	65.3	65.5	66.9	68.5
WSIP 2030 With Project	65.6	57.8	50.7	46.7	46.8	49.4	55.6	60.9	64.5	64.6	66.1	67.4
Difference	0.1	-0.1	0.4	0.1	0.0	0.0	0.0	-0.3	-0.8	-0.9	-0.7	-1.1
Percent Difference	0.1%	-0.2%	0.8%	0.1%	0.0%	0.0%	-0.1%	-0.6%	-1.2%	-1.4%	-1.1%	-1.6%
Dry (20%)												
WSIP 2030 Without Project	65.7	56.6	49.1	46.7	47.2	50.4	56.2	61.6	65.5	65.9	66.4	68.7
WSIP 2030 With Project	66.0	56.7	49.3	46.8	47.2	50.4	56.1	61.4	65.2	65.2	66.5	68.1
Difference	0.3	0.1	0.2	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.8	0.1	-0.6
Percent Difference	0.5%	0.2%	0.4%	0.3%	0.1%	0.0%	-0.2%	-0.3%	-0.5%	-1.1%	0.1%	-0.8%
Critical (15%)												
WSIP 2030 Without Project	67.1	58.8	50.8	47.6	48.8	52.4	57.0	61.7	65.7	69.6	67.7	69.3
WSIP 2030 With Project	67.2	58.9	50.7	47.9	48.8	52.2	56.5	61.9	66.1	68.7	67.5	69.2
Difference	0.1	0.1	-0.1	0.3	0.0	-0.2	-0.5	0.2	0.3	-0.9	-0.2	-0.1
Percent Difference	0.1%	0.1%	-0.2%	0.6%	0.0%	-0.4%	-0.8%	0.3%	0.5%	-1.3%	-0.3%	-0.2%

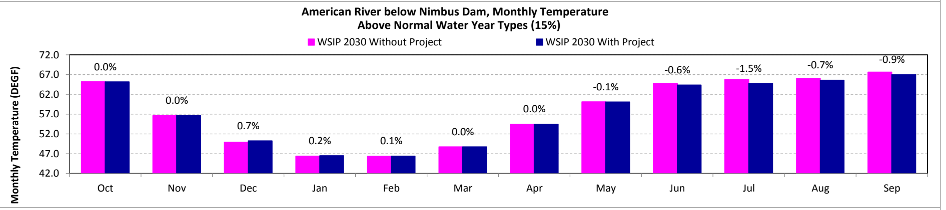
1 Based on the 82-year simulation period

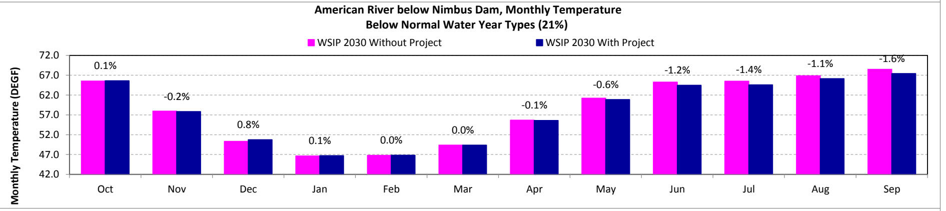
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

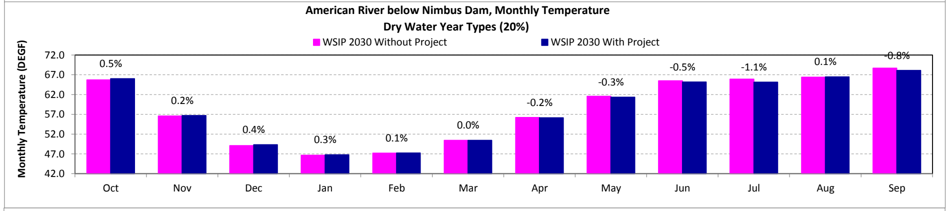
3 Relative difference of the monthly average











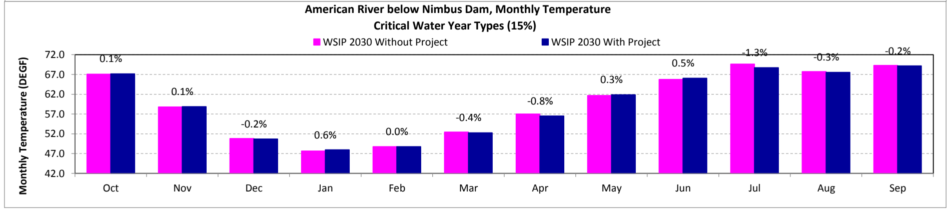


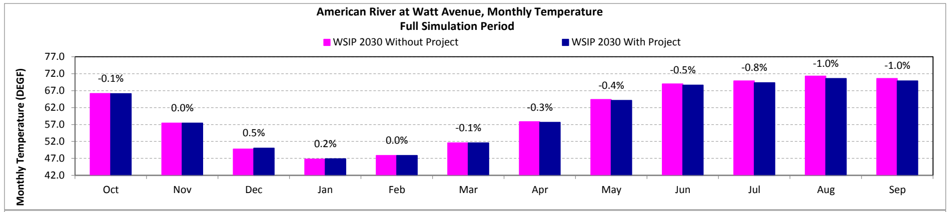
Table SQ10-1a
American River at Watt Avenue, Monthly Temperature
Long-term Average and Average by Water Year Type

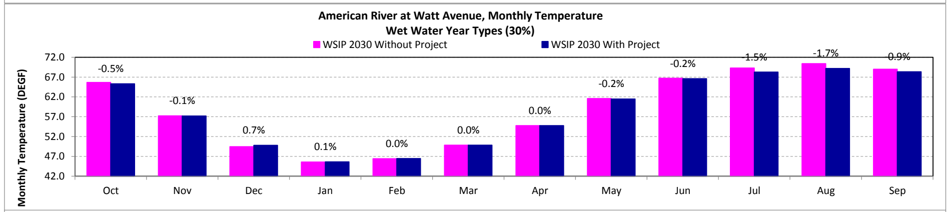
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	66.2	57.4	49.8	46.8	47.9	51.6	57.8	64.4	69.0	69.8	71.3	70.6
WSIP 2030 With Project	66.1	57.4	50.0	46.9	47.9	51.6	57.6	64.1	68.6	69.3	70.6	69.9
Difference	-0.1	0.0	0.3	0.1	0.0	0.0	-0.2	-0.3	-0.3	-0.5	-0.7	-0.7
Percent Difference[3]	-0.1%	0.0%	0.5%	0.2%	0.0%	-0.1%	-0.3%	-0.4%	-0.5%	-0.8%	-1.0%	-1.0%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	65.7	57.2	49.5	45.6	46.4	49.8	54.8	61.6	66.7	69.3	70.4	69.0
WSIP 2030 With Project	65.3	57.2	49.8	45.6	46.5	49.9	54.8	61.5	66.6	68.3	69.2	68.3
Difference	-0.3	0.0	0.4	0.1	0.0	0.0	0.0	-0.1	-0.1	-1.0	-1.2	-0.6
Percent Difference	-0.5%	-0.1%	0.7%	0.1%	0.0%	0.0%	0.0%	-0.2%	-0.2%	-1.5%	-1.7%	-0.9%
Above Normal (15%)												
WSIP 2030 Without Project	65.6	56.6	49.9	46.8	47.2	50.1	57.0	64.2	69.3	68.6	70.5	69.9
WSIP 2030 With Project	65.6	56.7	50.2	46.9	47.2	50.1	57.0	64.0	68.8	68.1	70.0	69.3
Difference	0.0	0.0	0.3	0.1	0.0	0.0	0.0	-0.2	-0.5	-0.5	-0.5	-0.6
Percent Difference	-0.1%	0.1%	0.6%	0.2%	0.1%	0.0%	0.0%	-0.3%	-0.7%	-0.7%	-0.7%	-0.8%
Below Normal (21%)												
WSIP 2030 Without Project	66.0	57.9	50.1	47.1	47.8	51.0	58.7	65.2	69.8	68.4	71.6	71.1
WSIP 2030 With Project	66.0	57.8	50.5	47.2	47.9	51.0	58.5	64.8	68.8	68.2	70.7	70.1
Difference	0.0	-0.1	0.4	0.1	0.0	0.0	-0.2	-0.4	-1.0	-0.2	-0.9	-1.0
Percent Difference	0.0%	-0.2%	0.8%	0.1%	0.1%	0.0%	-0.3%	-0.6%	-1.5%	-0.3%	-1.3%	-1.4%
Dry (20%)												
WSIP 2030 Without Project	66.3	56.7	49.1	47.1	48.4	53.1	59.8	65.9	69.7	69.5	71.1	71.5
WSIP 2030 With Project	66.5	56.8	49.3	47.2	48.5	53.1	59.6	65.4	69.5	69.4	71.2	70.8
Difference	0.2	0.1	0.2	0.1	0.0	0.0	-0.2	-0.5	-0.2	-0.1	0.1	-0.8
Percent Difference	0.2%	0.2%	0.4%	0.2%	0.1%	0.0%	-0.4%	-0.7%	-0.3%	-0.1%	0.1%	-1.1%
Critical (15%)												
WSIP 2030 Without Project	67.7	58.7	50.7	48.2	50.7	55.6	61.1	66.9	71.0	74.7	73.6	72.5
WSIP 2030 With Project	67.7	58.8	50.6	48.5	50.7	55.3	60.4	66.7	71.4	74.1	73.1	72.2
Difference	0.0	0.1	-0.1	0.2	-0.1	-0.3	-0.7	-0.2	0.3	-0.7	-0.5	-0.3
Percent Difference	0.1%	0.1%	-0.1%	0.5%	-0.1%	-0.5%	-1.1%	-0.3%	0.4%	-0.9%	-0.7%	-0.4%

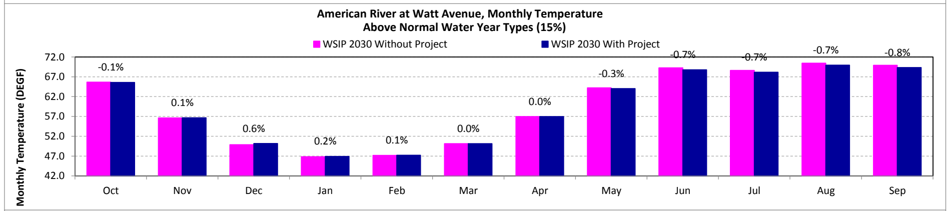
1 Based on the 82-year simulation period

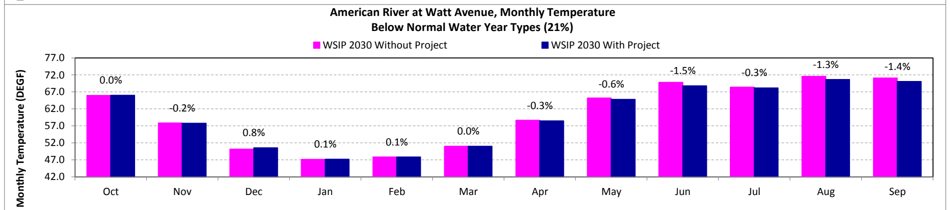
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

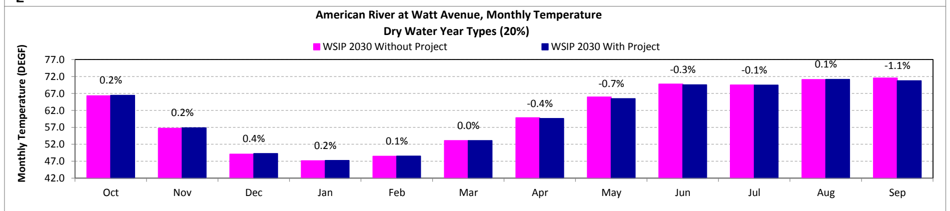
3 Relative difference of the monthly average











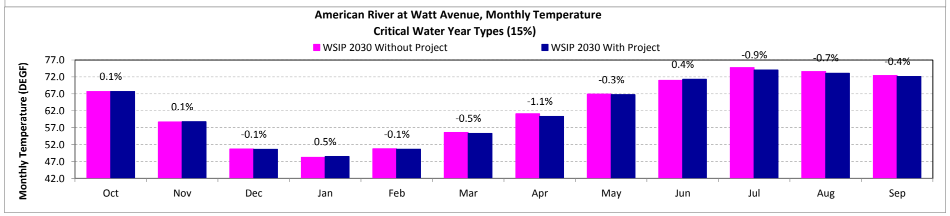
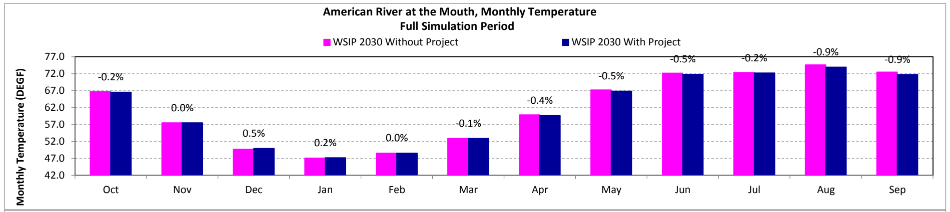
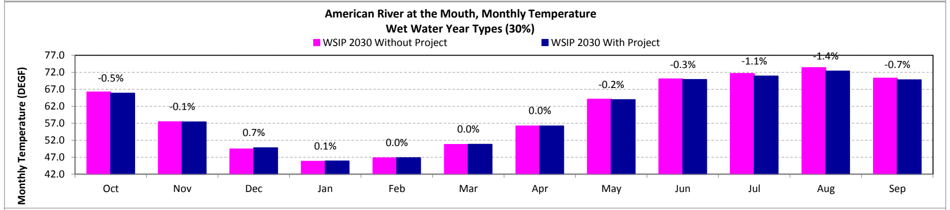


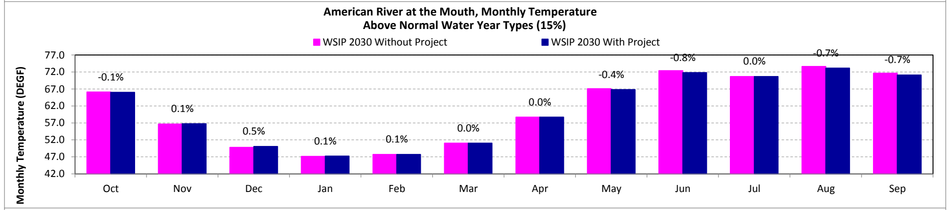
Table SQ11-1a
American River at the Mouth, Monthly Temperature
Long-term Average and Average by Water Year Type

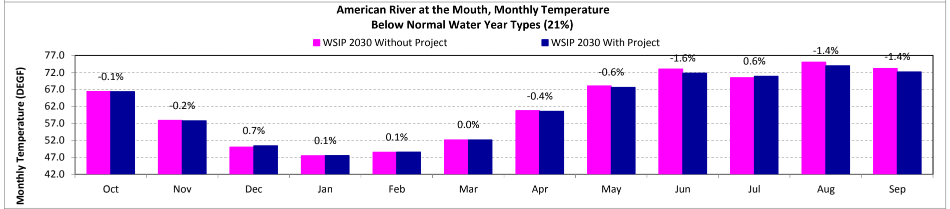
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	66.7	57.5	49.7	47.1	48.6	52.9	59.9	67.2	72.2	72.3	74.6	72.5
WSIP 2030 With Project	66.5	57.5	50.0	47.2	48.6	52.9	59.6	66.9	71.8	72.2	73.9	71.8
Difference	-0.1	0.0	0.2	0.1	0.0	0.0	-0.2	-0.4	-0.4	-0.2	-0.7	-0.7
Percent Difference[3]	-0.2%	0.0%	0.5%	0.2%	0.0%	-0.1%	-0.4%	-0.5%	-0.5%	-0.2%	-0.9%	-0.9%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	66.2	57.4	49.4	45.8	46.8	50.8	56.2	64.1	70.0	71.6	73.4	70.3
WSIP 2030 With Project	65.8	57.4	49.8	45.9	46.8	50.8	56.2	63.9	69.9	70.9	72.4	69.8
Difference	-0.4	0.0	0.3	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.8	-1.0	-0.5
Percent Difference	-0.5%	-0.1%	0.7%	0.1%	0.0%	0.0%	0.0%	-0.2%	-0.3%	-1.1%	-1.4%	-0.7%
Above Normal (15%)												
WSIP 2030 Without Project	66.1	56.7	49.8	47.2	47.7	51.0	58.7	67.1	72.4	70.7	73.6	71.6
WSIP 2030 With Project	66.0	56.7	50.1	47.2	47.7	51.1	58.7	66.8	71.8	70.7	73.1	71.1
Difference	-0.1	0.1	0.3	0.1	0.0	0.0	0.0	-0.3	-0.6	0.0	-0.5	-0.5
Percent Difference	-0.1%	0.1%	0.5%	0.1%	0.1%	0.0%	0.0%	-0.4%	-0.8%	0.0%	-0.7%	-0.7%
Below Normal (21%)												
WSIP 2030 Without Project	66.4	57.9	50.0	47.5	48.5	52.1	60.8	68.0	73.0	70.5	75.0	73.2
WSIP 2030 With Project	66.4	57.8	50.4	47.5	48.6	52.1	60.5	67.6	71.8	70.9	74.0	72.1
Difference	0.0	-0.1	0.4	0.1	0.0	0.0	-0.2	-0.4	-1.2	0.4	-1.1	-1.0
Percent Difference	-0.1%	-0.2%	0.7%	0.1%	0.1%	0.0%	-0.4%	-0.6%	-1.6%	0.6%	-1.4%	-1.4%
Dry (20%)												
WSIP 2030 Without Project	66.9	56.9	49.0	47.4	49.3	54.9	62.4	69.0	72.8	72.3	74.5	73.8
WSIP 2030 With Project	66.9	57.0	49.2	47.5	49.4	54.9	62.1	68.3	72.6	72.7	74.6	72.9
Difference	0.0	0.1	0.2	0.1	0.1	0.0	-0.3	-0.7	-0.2	0.4	0.1	-0.9
Percent Difference	0.0%	0.1%	0.4%	0.1%	0.1%	0.0%	-0.5%	-1.0%	-0.2%	0.6%	0.1%	-1.2%
Critical (15%)												
WSIP 2030 Without Project	68.3	58.7	50.6	48.7	52.1	57.8	64.0	70.4	74.5	78.3	77.7	75.0
WSIP 2030 With Project	68.3	58.8	50.6	48.9	52.0	57.5	63.2	70.1	74.8	77.7	77.1	74.6
Difference	0.0	0.1	0.0	0.2	-0.1	-0.3	-0.8	-0.4	0.3	-0.6	-0.6	-0.4
Percent Difference	0.0%	0.1%	-0.1%	0.4%	-0.2%	-0.6%	-1.2%	-0.5%	0.4%	-0.7%	-0.8%	-0.5%

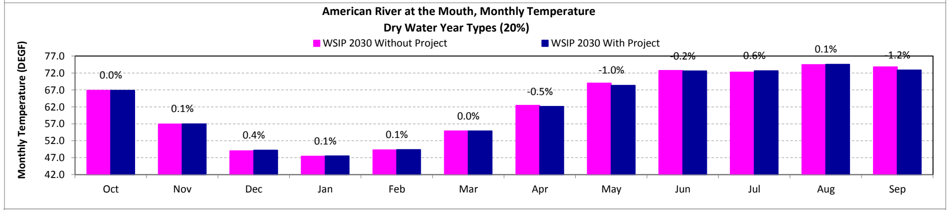
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











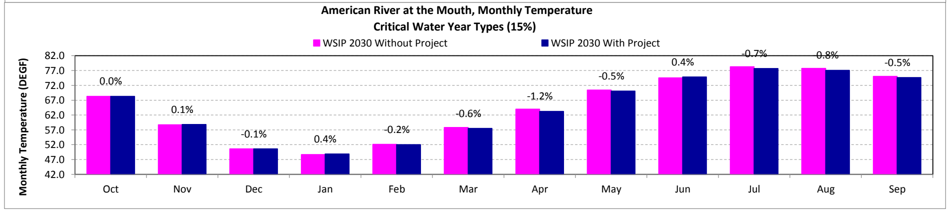


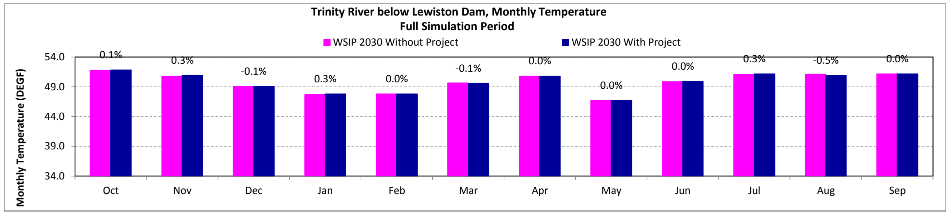
Table SQ12-1a
Trinity River below Lewiston Dam, Monthly Temperature
Long-term Average and Average by Water Year Type

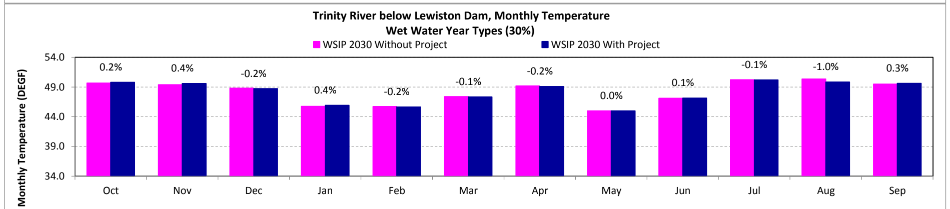
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	51.8	50.8	49.1	47.7	47.8	49.6	50.8	46.7	49.8	51.0	51.1	51.2
WSIP 2030 With Project	51.8	50.9	49.0	47.8	47.8	49.6	50.8	46.7	49.9	51.2	50.9	51.1
Difference	0.1	0.1	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.1	-0.3	0.0
Percent Difference[3]	0.1%	0.3%	-0.1%	0.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.3%	-0.5%	0.0%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	49.7	49.4	48.8	45.7	45.7	47.4	49.2	45.0	47.1	50.2	50.4	49.5
WSIP 2030 With Project	49.8	49.6	48.7	45.9	45.6	47.4	49.1	45.0	47.1	50.2	49.9	49.6
Difference	0.1	0.2	-0.1	0.2	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.5	0.1
Percent Difference	0.2%	0.4%	-0.2%	0.4%	-0.2%	-0.1%	-0.2%	0.0%	0.1%	-0.1%	-1.0%	0.3%
Above Normal (15%)												
WSIP 2030 Without Project	50.3	49.6	49.9	47.3	47.1	49.2	51.0	45.4	48.6	50.3	50.2	50.0
WSIP 2030 With Project	50.4	49.9	49.5	47.3	47.1	49.3	51.0	45.4	48.4	50.5	50.1	49.8
Difference	0.1	0.2	-0.5	0.0	0.0	0.1	0.0	0.0	-0.3	0.2	-0.1	-0.2
Percent Difference	0.2%	0.5%	-0.9%	0.1%	0.0%	0.2%	-0.1%	0.0%	-0.5%	0.4%	-0.2%	-0.4%
Below Normal (21%)												
WSIP 2030 Without Project	51.6	50.6	48.7	48.4	48.3	50.8	51.2	46.6	50.3	51.3	50.7	51.3
WSIP 2030 With Project	51.6	50.4	48.4	48.5	48.3	50.7	51.2	46.6	50.2	51.3	50.7	51.3
Difference	0.0	-0.1	-0.2	0.1	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0%	-0.3%	-0.5%	0.3%	-0.1%	-0.2%	0.1%	0.0%	-0.1%	0.1%	-0.1%	0.0%
Dry (20%)												
WSIP 2030 Without Project	53.4	52.2	48.5	48.7	49.1	50.4	51.8	48.0	51.2	51.0	51.4	52.1
WSIP 2030 With Project	53.3	52.0	48.5	48.9	49.2	50.1	51.9	48.0	51.5	51.7	51.2	52.1
Difference	-0.1	-0.1	0.0	0.2	0.1	-0.3	0.1	0.0	0.3	0.7	-0.1	0.0
Percent Difference	-0.2%	-0.2%	0.1%	0.4%	0.1%	-0.7%	0.3%	0.0%	0.5%	1.3%	-0.3%	-0.1%
Critical (15%)												
WSIP 2030 Without Project	55.5	53.0	50.1	49.7	50.2	52.1	52.1	49.9	54.3	53.1	53.8	54.4
WSIP 2030 With Project	55.7	53.6	50.8	49.7	50.4	52.2	52.0	50.1	54.3	52.9	53.5	54.2
Difference	0.2	0.6	0.7	0.0	0.2	0.2	-0.1	0.1	0.0	-0.2	-0.3	-0.2
Percent Difference	0.4%	1.2%	1.3%	0.0%	0.4%	0.3%	-0.2%	0.3%	0.1%	-0.3%	-0.6%	-0.4%

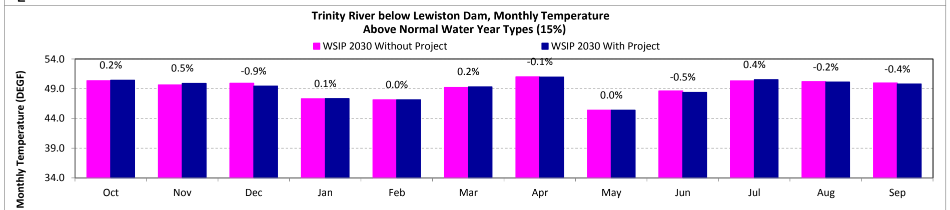
1 Based on the 82-year simulation period

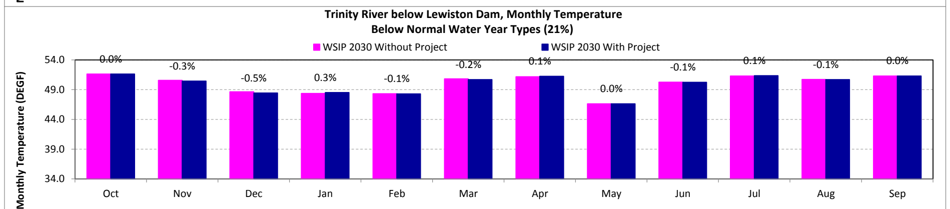
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

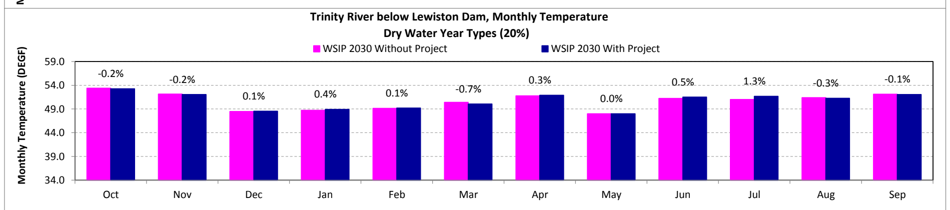
3 Relative difference of the monthly average











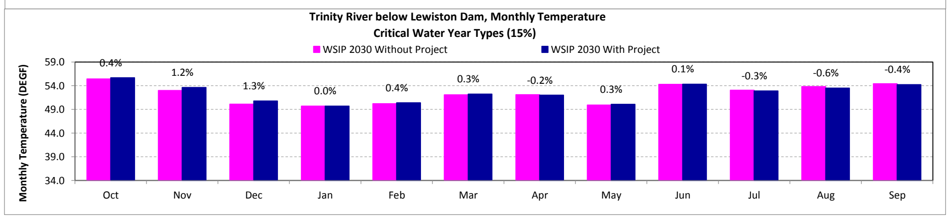


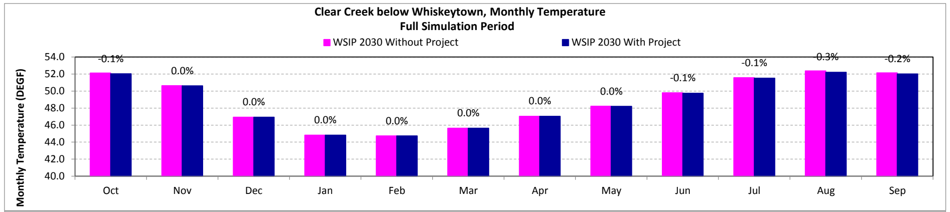
Table SQ13-1a
Clear Creek below Whiskeytown, Monthly Temperature
Long-term Average and Average by Water Year Type

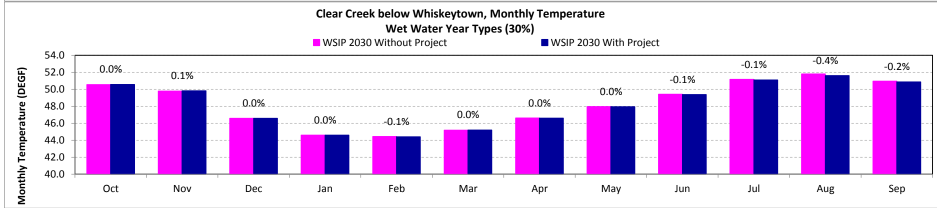
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	52.1	50.6	46.9	44.8	44.7	45.6	47.0	48.2	49.8	51.6	52.4	52.1
WSIP 2030 With Project	52.0	50.6	46.9	44.8	44.7	45.6	47.0	48.2	49.8	51.5	52.2	52.0
Difference	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.1
Percent Difference[3]	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.3%	-0.2%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	50.5	49.8	46.6	44.6	44.4	45.2	46.6	48.0	49.4	51.2	51.8	51.0
WSIP 2030 With Project	50.6	49.8	46.6	44.6	44.4	45.2	46.6	47.9	49.4	51.1	51.6	50.9
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.1
Percent Difference	0.0%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.4%	-0.2%
Above Normal (15%)												
WSIP 2030 Without Project	51.1	49.9	46.7	44.8	44.5	45.3	46.7	48.0	49.5	51.3	51.8	51.3
WSIP 2030 With Project	50.9	49.8	46.7	44.8	44.5	45.2	46.6	47.9	49.4	51.3	51.6	51.1
Difference	-0.2	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
Percent Difference	-0.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.4%
Below Normal (21%)												
WSIP 2030 Without Project	52.2	50.6	46.9	44.6	44.6	45.6	46.9	47.9	49.6	51.5	52.1	51.9
WSIP 2030 With Project	52.1	50.6	46.8	44.6	44.6	45.6	46.9	47.9	49.5	51.5	51.9	51.8
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
Percent Difference	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.3%	-0.2%
Dry (20%)												
WSIP 2030 Without Project	53.0	51.2	47.0	44.7	44.7	45.7	47.3	48.3	49.7	51.7	52.7	52.7
WSIP 2030 With Project	52.9	51.1	47.0	44.7	44.7	45.8	47.4	48.3	49.7	51.6	52.6	52.6
Difference	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-0.2	-0.1
Percent Difference	-0.2%	-0.1%	0.0%	0.1%	0.0%	0.1%	0.3%	0.0%	0.0%	-0.1%	-0.3%	-0.2%
Critical (15%)												
WSIP 2030 Without Project	55.1	52.3	47.9	45.9	45.9	46.8	48.2	49.4	51.3	52.6	54.1	55.0
WSIP 2030 With Project	54.9	52.2	47.9	45.9	45.9	46.7	48.1	49.4	51.3	52.6	54.0	54.8
Difference	-0.2	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.2
Percent Difference	-0.3%	-0.1%	0.0%	-0.1%	0.0%	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.4%

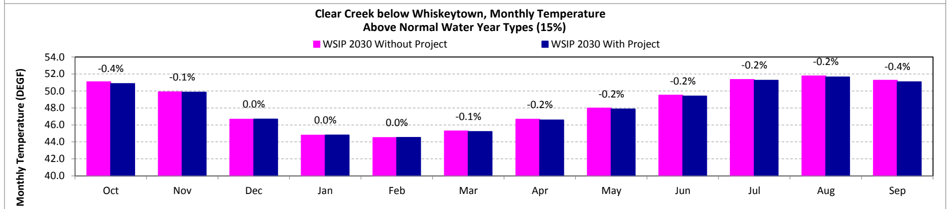
1 Based on the 82-year simulation period

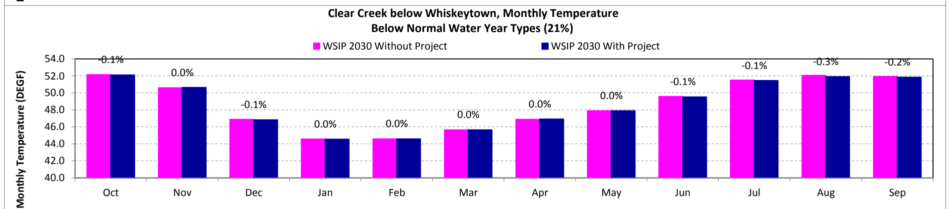
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

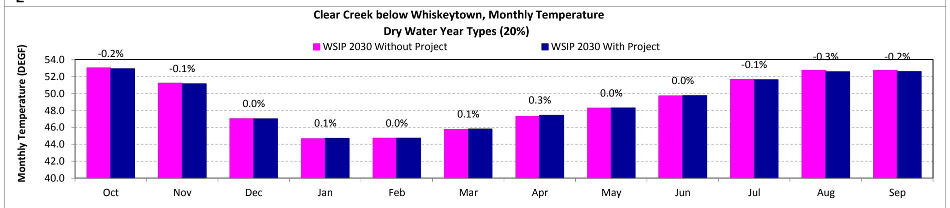
3 Relative difference of the monthly average











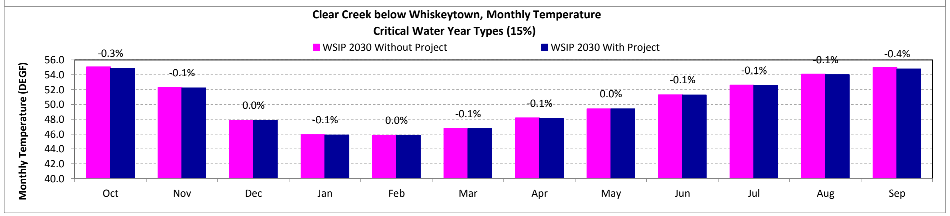


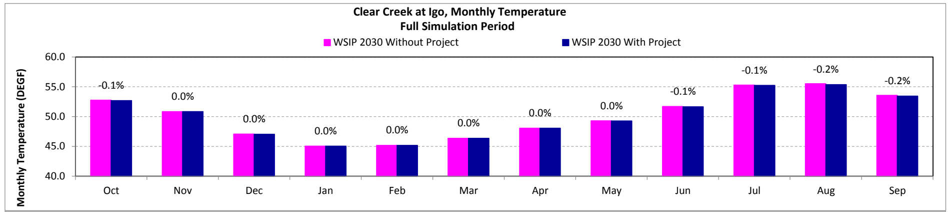
Table SQ14-1a
Clear Creek at Igo, Monthly Temperature
Long-term Average and Average by Water Year Type

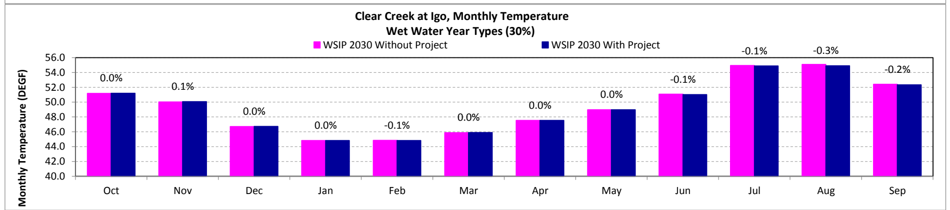
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2030 Without Project	52.7	50.8	47.1	45.0	45.2	46.4	48.0	49.3	51.7	55.3	55.5	53.6
WSIP 2030 With Project	52.7	50.8	47.0	45.0	45.2	46.4	48.1	49.3	51.7	55.2	55.4	53.4
Difference	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
Percent Difference[3]	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.2%	-0.2%
Water Year Types[2]												
Wet (30%)												
WSIP 2030 Without Project	51.2	50.0	46.7	44.8	44.9	45.9	47.5	49.0	51.1	55.0	55.1	52.4
WSIP 2030 With Project	51.2	50.1	46.7	44.8	44.8	45.9	47.5	49.0	51.0	54.9	54.9	52.3
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.1
Percent Difference	0.0%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.3%	-0.2%
Above Normal (15%)												
WSIP 2030 Without Project	51.7	50.1	46.8	45.0	44.9	46.0	47.6	49.0	51.2	55.1	54.9	52.7
WSIP 2030 With Project	51.4	50.0	46.8	45.0	45.0	45.9	47.6	48.9	51.1	55.0	54.8	52.5
Difference	-0.2	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2
Percent Difference	-0.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.2%	-0.2%	-0.1%	-0.2%	-0.3%
Below Normal (21%)												
WSIP 2030 Without Project	52.7	50.8	47.0	44.8	45.0	46.4	47.9	48.9	51.4	55.2	55.2	53.3
WSIP 2030 With Project	52.7	50.8	46.9	44.8	45.0	46.4	48.0	48.9	51.4	55.1	55.1	53.2
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
Percent Difference	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.2%	-0.2%
Dry (20%)												
WSIP 2030 Without Project	53.6	51.4	47.2	44.8	45.1	46.5	48.3	49.3	51.6	55.3	55.8	54.0
WSIP 2030 With Project	53.6	51.4	47.1	44.9	45.1	46.5	48.4	49.3	51.6	55.2	55.6	53.9
Difference	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-0.2	-0.1
Percent Difference	-0.2%	-0.1%	0.0%	0.1%	0.0%	0.1%	0.3%	0.0%	0.0%	-0.1%	-0.3%	-0.2%
Critical (15%)												
WSIP 2030 Without Project	55.8	52.5	48.0	46.1	46.4	47.6	49.3	50.6	54.0	56.3	57.1	56.5
WSIP 2030 With Project	55.7	52.5	48.0	46.1	46.4	47.5	49.3	50.6	54.0	56.3	57.0	56.4
Difference	-0.2	-0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.2
Percent Difference	-0.3%	-0.1%	0.0%	-0.1%	0.0%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.3%

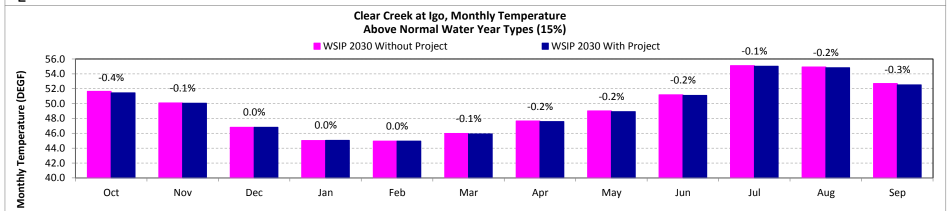
1 Based on the 82-year simulation period

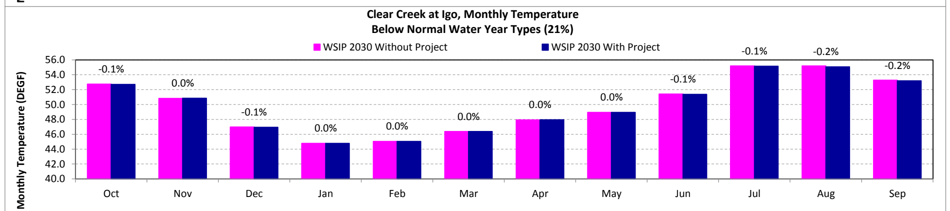
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

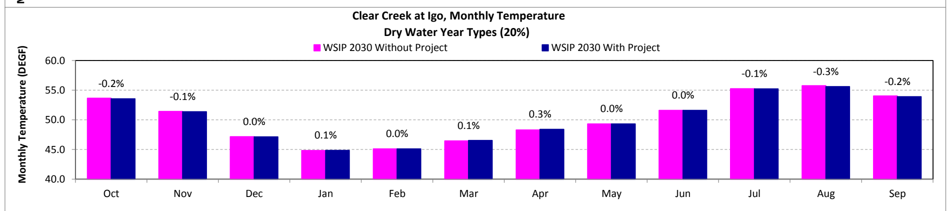
3 Relative difference of the monthly average

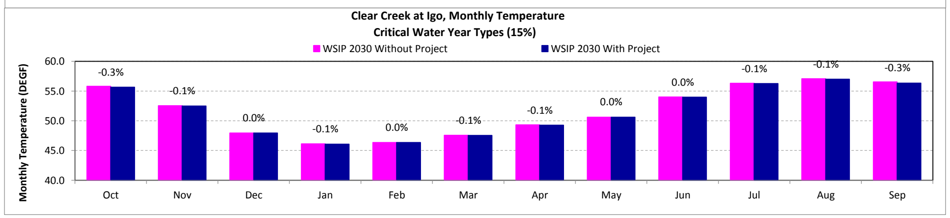












Trinity and Sacramento River Basin Operations

Exceedance Probability Charts and Tables

Figure SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

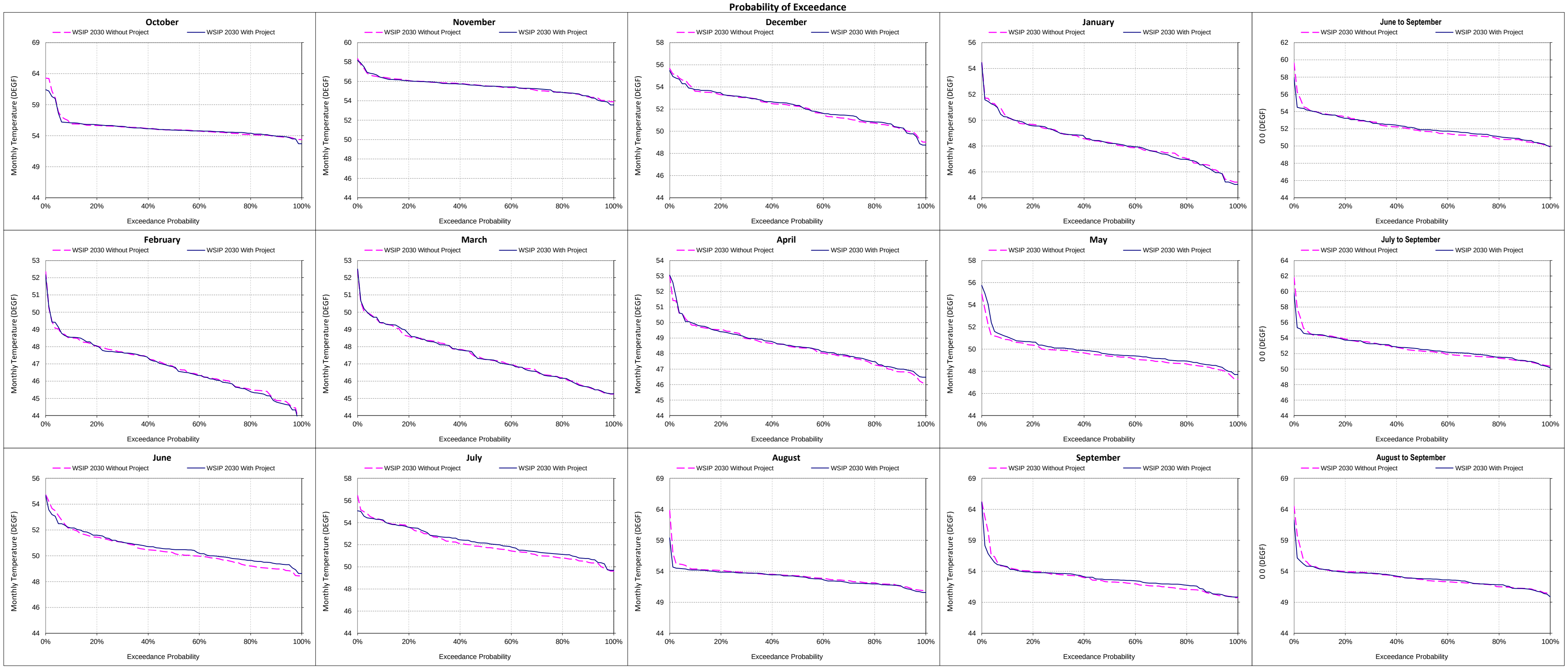


Table SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.3	61.4	-1.8	-2.9%
1.2%	63.2	61.2	-2.0	-3.2%
2.5%	61.2	60.3	-0.8	-1.4%
3.7%	60.1	60.0	-0.1	-0.2%
4.9%	57.8	57.6	-0.2	-0.4%
6.2%	57.0	56.2	-0.8	-1.5%
7.4%	56.7	56.2	-0.6	-1.0%
8.6%	56.5	56.1	-0.4	-0.7%
9.9%	55.9	56.1	0.2	0.3%
11.1%	55.9	56.1	0.2	0.3%
12.3%	55.9	56.0	0.1	0.2%
13.6%	55.9	56.0	0.1	0.2%
14.8%	55.8	55.8	0.0	0.0%
16.0%	55.7	55.8	0.2	0.3%
17.3%	55.7	55.8	0.1	0.3%
18.5%	55.7	55.8	0.1	0.2%
19.8%	55.6	55.8	0.1	0.3%
21.0%	55.6	55.7	0.1	0.2%
22.2%	55.6	55.7	0.1	0.2%
23.5%	55.6	55.7	0.1	0.2%
24.7%	55.6	55.7	0.1	0.2%
25.9%	55.5	55.6	0.1	0.2%
27.2%	55.5	55.5	0.0	0.0%
28.4%	55.5	55.5	0.0	0.0%
29.6%	55.4	55.5	0.1	0.2%
30.9%	55.4	55.5	0.1	0.1%
32.1%	55.4	55.3	-0.1	-0.1%
33.3%	55.3	55.3	-0.1	-0.1%
34.6%	55.3	55.2	-0.1	-0.2%
35.8%	55.3	55.2	-0.1	-0.1%
37.0%	55.3	55.2	0.0	-0.1%
38.3%	55.2	55.2	-0.1	-0.1%
39.5%	55.2	55.1	0.0	0.0%
40.7%	55.2	55.1	0.0	0.0%
42.0%	55.1	55.1	-0.1	-0.1%
43.2%	55.0	55.1	0.1	0.1%
44.4%	55.0	55.0	0.0	0.1%
45.7%	55.0	55.0	0.0	0.0%
46.9%	55.0	55.0	0.0	0.0%
48.1%	55.0	55.0	0.0	0.0%
49.4%	54.9	54.9	0.0	0.0%
50.6%	54.9	54.9	0.0	-0.1%
51.9%	54.9	54.9	-0.1	-0.1%
53.1%	54.9	54.9	-0.1	-0.1%
54.3%	54.9	54.8	0.0	-0.1%
55.6%	54.9	54.8	-0.1	-0.1%
56.8%	54.9	54.8	-0.1	-0.1%
58.0%	54.8	54.8	0.0	0.0%
59.3%	54.8	54.8	0.0	0.0%
60.5%	54.7	54.8	0.0	0.1%
61.7%	54.7	54.7	0.0	0.1%
63.0%	54.7	54.7	0.1	0.1%
64.2%	54.6	54.7	0.1	0.1%
65.4%	54.6	54.7	0.1	0.1%
66.7%	54.6	54.7	0.1	0.2%
67.9%	54.6	54.6	0.1	0.1%
69.1%	54.5	54.6	0.1	0.2%
70.4%	54.5	54.6	0.1	0.1%
71.6%	54.4	54.6	0.1	0.2%
72.8%	54.4	54.6	0.2	0.3%
74.1%	54.4	54.5	0.2	0.3%
75.3%	54.3	54.5	0.2	0.3%
76.5%	54.2	54.5	0.3	0.5%
77.8%	54.2	54.5	0.3	0.5%
79.0%	54.2	54.4	0.2	0.4%
80.2%	54.2	54.4	0.2	0.4%
81.5%	54.1	54.3	0.1	0.2%
82.7%	54.1	54.3	0.1	0.2%
84.0%	54.1	54.2	0.1	0.3%
85.2%	54.1	54.2	0.1	0.1%
86.4%	54.1	54.2	0.1	0.1%
87.7%	54.0	54.1	0.0	0.0%
88.9%	53.9	54.0	0.1	0.2%
90.1%	53.9	53.9	0.0	0.1%
91.4%	53.8	53.9	0.1	0.2%
92.6%	53.8	53.9	0.1	0.1%
93.8%	53.8	53.8	0.0	0.1%
95.1%	53.7	53.7	0.0	-0.1%
96.3%	53.7	53.5	-0.2	-0.3%
97.5%	53.4	53.5	0.1	0.1%
98.8%	53.4	52.7	-0.7	-1.3%
100.0%	53.4	52.7	0.0	-1.3%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.4	58.2	-0.2	-0.3%
1.2%	57.7	57.9	0.1	0.2%
2.5%	57.4	57.5	0.1	0.2%
3.7%	56.9	56.9	0.1	0.1%
4.9%	56.6	56.8	0.2	0.4%
6.2%	56.6	56.8	0.2	0.4%
7.4%	56.5	56.7	0.2	0.3%
8.6%	56.4	56.5	0.0	0.0%
9.9%	56.4	56.4	0.0	-0.1%
11.1%	56.4	56.3	-0.1	-0.2%
12.3%	56.3	56.2	-0.1	-0.2%
13.6%	56.3	56.2	-0.1	-0.1%
14.8%	56.3	56.2	-0.1	-0.1%
16.0%	56.2	56.2	-0.1	-0.1%
17.3%	56.2	56.1	-0.1	-0.2%
18.5%	56.1	56.1	0.0	-0.1%
19.8%	56.1	56.1	0.0	0.0%
21.0%	56.0	56.0	0.0	0.0%
22.2%	56.0	56.0	0.0	0.0%
23.5%	56.0	56.0	0.0	0.0%
24.7%	56.0	56.0	0.0	0.0%
25.9%	56.0	56.0	0.0	0.0%
27.2%	56.0	56.0	0.0	-0.1%
28.4%	55.9	56.0	0.0	0.1%
29.6%	55.9	55.9	0.0	0.0%
30.9%	55.9	55.9	0.0	0.0%
32.1%	55.9	55.9	0.0	-0.1%
33.3%	55.8	55.8	-0.1	-0.1%
34.6%	55.8	55.8	-0.1	-0.1%
35.8%	55.8	55.8	-0.1	-0.1%
37.0%	55.8	55.8	-0.1	-0.1%
38.3%	55.8	55.8	-0.1	-0.1%
39.5%	55.8	55.7	0.0	-0.1%
40.7%	55.8	55.7	-0.1	-0.1%
42.0%	55.7	55.7	0.0	0.0%
43.2%	55.7	55.6	0.0	-0.1%
44.4%	55.7	55.6	0.0	-0.1%
45.7%	55.6	55.6	0.0	-0.1%
46.9%	55.6	55.6	0.0	-0.1%
48.1%	55.6	55.6	0.0	0.0%
49.4%	55.5	55.5	0.0	0.0%
50.6%	55.5	55.5	0.0	0.0%
51.9%	55.5	55.5	0.0	0.0%
53.1%	55.5	55.5	0.0	0.0%
54.3%	55.5	55.5	0.0	0.0%
55.6%	55.4	55.5	0.0	0.1%
56.8%	55.4	55.4	0.0	0.1%
58.0%	55.4	55.4	0.1	0.1%
59.3%	55.4	55.4	0.1	0.1%
60.5%	55.4	55.4	0.0	0.1%
61.7%	55.4	55.4	0.1	0.1%
63.0%	55.3	55.3	0.0	0.0%
64.2%	55.3	55.3	0.0	0.0%
65.4%	55.3	55.3	0.0	0.1%
66.7%	55.2	55.3	0.1	0.2%
67.9%	55.2	55.3	0.1	0.1%
69.1%	55.1	55.3	0.1	0.3%
70.4%	55.0	55.2	0.2	0.4%
71.6%	55.0	55.2	0.2	0.3%
72.8%	55.0	55.2	0.2	0.3%
74.1%	55.0	55.2	0.2	0.3%
75.3%	55.0	55.1	0.2	0.3%
76.5%	55.0	54.9	-0.1	-0.1%
77.8%	54.9	54.9	0.0	0.0%
79.0%	54.9	54.9	0.0	0.0%
80.2%	54.9	54.8	0.0	0.0%
81.5%	54.8	54.8	0.0	0.0%
82.7%	54.8	54.8	0.0	0.0%
84.0%	54.7	54.8	0.0	0.1%
85.2%	54.7	54.7	0.0	0.1%
86.4%	54.7	54.7	0.0	0.1%
87.7%	54.6	54.6	0.0	0.0%
88.9%	54.5	54.5	0.0	0.1%
90.1%	54.4	54.5	0.1	0.2%
91.4%	54.4	54.3	-0.1	-0.1%
92.6%	54.3	54.3	-0.1	-0.1%
93.8%	54.3	54.0	-0.2	-0.4%
95.1%	54.0	54.0	-0.1	-0.1%
96.3%	54.0	53.9	-0.1	-0.2%
97.5%	54.0	53.9	-0.1	-0.2%
98.8%	53.9	53.6	-0.3	-0.6%
100.0%	53.9	53.6	-0.3	-0.6%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.7	55.5	-0.2	-0.3%
1.2%	55.2	54.9	-0.2	-0.4%
2.5%	55.1	54.8	-0.3	-0.6%
3.7%	54.8	54.7	-0.1	-0.2%
4.9%	54.6	54.3	-0.3	-0.6%
6.2%	54.6	54.3	-0.3	-0.6%
7.4%	54.2	53.9	-0.3	-0.6%
8.6%	54.0	53.8	-0.1	-0.3%
9.9%	53.6	53.8	0.1	0.3%
11.1%	53.6	53.8	0.2	0.3%
12.3%	53.5	53.7	0.1	0.3%
13.6%	53.5	53.7	0.2	0.3%
14.8%	53.5	53.7	0.2	0.3%
16.0%	53.5	53.7	0.2	0.3%
17.3%	53.5	53.6	0.1	0.2%
18.5%	53.4	53.5	0.1	0.2%
19.8%	53.3	53.5	0.2	0.4%
21.0%	53.3	53.3	0.0	0.1%
22.2%	53.2	53.2	0.0	0.0%
23.5%	53.2	53.2	0.0	0.0%
24.7%	53.2	53.2	0.0	0.0%
25.9%	53.1	53.2	0.1	0.2%
27.2%	53.1	53.2	0.1	0.2%
28.4%	53.1	53.1	0.0	0.1%
29.6%	53.0	53.1	0.0	0.1%
30.9%	53.0	53.0	0.0	0.0%
32.1%	53.0	52.9	0.0	-0.1%
33.3%	52.9	52.9	0.0	0.0%
34.6%	52.9	52.9	0.0	-0.1%
35.8%	52.7	52.8	0.2	0.3%
37.0%	52.6	52.7	0.1	0.1%
38.3%	52.6	52.7	0.1	0.1%
39.5%	52.5	52.7	0.2	0.3%
40.7%	52.5	52.6	0.2	0.3%
42.0%	52.5	52.6	0.1	0.3%
43.2%	52.4	52.6	0.1	0.3%
44.4%	52.4	52.6	0.1	0.3%
45.7%	52.4	52.5	0.1	0.3%
46.9%	52.3	52.5	0.1	0.3%
48.1%	52.3	52.4	0.1	0.2%
49.4%	52.3	52.3	0.1	0.1%
50.6%	52.2	52.3	0.1	0.2%
51.9%	52.2	52.1	0.0	-0.1%
53.1%	52.1	52.0	-0.1	-0.2%
54.3%	52.0	51.9	-0.1	-0.2%
55.6%	51.8	51.8	0.0	0.1%
56.8%	51.7	51.8	0.1	0.2%
58.0%	51.7	51.7	0.1	0.2%
59.3%	51.6	51.7	0.0	0.0%
60.5%	51.4	51.6	0.2	0.3%
61.7%	51.3	51.6	0.3	0.5%
63.0%	51.3	51.5	0.2	0.4%
64.2%	51.3	51.5	0.2	0.4%
65.4%	51.2	51.5	0.2	0.4%
66.7%	51.2	51.5	0.3	0.5%
67.9%	51.2	51.5	0.3	0.5%
69.1%	51.2	51.4	0.3	0.6%
70.4%	51.1	51.4	0.3	0.6%
71.6%	51.0	51.4	0.4	0.7%
72.8%	51.0	51.3	0.3	0.6%
74.1%	50.9	51.0	0.2	0.4%
75.3%	50.8	51.0	0.1	0.2%
76.5%	50.8	50.9	0.1	0.2%
77.8%	50.8	50.9	0.1	0.2%
79.0%	50.8	50.8	0.1	0.2%
80.2%	50.7	50.8	0.1	0.2%
81.5%	50.7	50.8	0.1	0.3%
82.7%	50.6	50.8	0.2	0.4%
84.0%	50.6	50.7	0.2	0.3%
85.2%	50.5	50.7	0.1	0.3%
86.4%	50.5	50.7	0.1	0.3%
87.7%	50.4	50.4	0.1	0.1%
88.9%	50.3	50.4	0.0	0.0%
90.1%	50.2	50.3	0.1	0.3%
91.4%	50.2	50.3	0.1	0.2%
92.6%	50.0	49.8	-0.2	-0.3%
93.8%	50.0	49.8	-0.2	-0.4%
95.1%	49.9	49.8	-0.2	-0.4%
96.3%	49.7	49.5	-0.2	-0.4%
97.5%	49.3	48.9	-0.4	-0.8%
98.8%	49.0	48.7	-0.3	-0.6%
100.0%	49.0	48.7	-0.3	-0.6%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.5	54.5	0.0	0.0%
1.2%	51.7	51.6	-0.1	-0.2%
2.5%	51.7	51.4	-0.2	-0.5%
3.7%	51.3	51.3	0.0	-0.1%
4.9%	51.3	51.2	-0.1	-0.3%
6.2%	51.0	51.0	0.0	0.0%
7.4%	50.9	50.5	-0.5	-1.0%
8.6%	50.5	50.3	-0.3	-0.5%
9.9%	50.2	50.2	0.1	0.1%
11.1%	50.1	50.1	0.0	0.0%
12.3%	50.0	50.0	0.0	0.0%
13.6%	50.0	50.0	0.0	0.0%
14.8%	49.7	49.9	0.2	0.3%
16.0%	49.7	49.8	0.1	0.3%
17.3%	49.7	49.7	0.0	0.0%
18.5%	49.7	49.6	-0.1	-0.2%
19.8%	49.7	49.6	-0.1	-0.2%
21.0%	49.6	49.5	-0.1	-0.2%
22.2%	49.6	49.5	0.0	-0.1%
23.5%	49.4	49.5	0.1	0.2%
24.7%	49.4	49.5	0.1	0.2%
25.9%	49.3	49.3	0.0	0.0%
27.2%	49.3	49.3	0.0	0.1%
28.4%	49.3	49.2	-0.1	-0.1%
29.6%	49.1	49.1	0.0	0.0%
30.9%	49.0	49.0	0.0	-0.1%
32.1%	48.9	49.0	0.0	0.1%
33.3%	48.9	48.9	0.0	0.0%
34.6%	48.8	48.9	0.0	0.1%
35.8%	48.8	48.9	0.0	0.1%
37.0%	48.8	48.9	0.1	0.1%
38.3%	48.7	48.9	0.2	0.4%
39.5%	48.6	48.8	0.2	0.5%
40.7%	48.5	48.6	0.0	0.1%
42.0%	48.5	48.6	0.1	0.2%
43.2%	48.4	48.4	0.0	0.0%
44.4%	48.4	48.4	0.0	0.1%
45.7%	48.4	48.4	0.0	0.1%
46.9%	48.3	48.4	0.1	0.1%
48.1%	48.3	48.3	0.0	0.0%
49.4%	48.3	48.2	-0.1	-0.2%
50.6%	48.2	48.2	0.0	-0.1%
51.9%	48.2	48.2	0.0	0.0%
53.1%	48.1	48.2	0.1	0.2%
54.3%	48.0	48.1	0.1	0.2%
55.6%	48.0	48.1	0.1	0.2%
56.8%	48.0	48.0	0.0	0.1%
58.0%	47.9	48.0	0.1	0.2%
59.3%	47.9	48.0	0.1	0.2%
60.5%	47.9	47.9	0.1	0.2%
61.7%	47.8	47.9	0.1	0.1%
63.0%	47.7	47.8	0.1	0.3%
64.2%	47.6	47.7	0.1	0.2%
65.4%	47.6	47.7	0.0	0.1%
66.7%	47.6	47.6	0.0	0.0%
67.9%	47.6	47.6	0.0	-0.1%
69.1%	47.6	47.5	-0.1	-0.2%
70.4%	47.6	47.4	-0.1	-0.3%
71.6%	47.5	47.4	-0.1	-0.2%
72.8%	47.5	47.3	-0.2	-0.3%
74.1%	47.5	47.2	-0.3	-0.6%
75.3%	47.5	47.1	-0.3	-0.7%
76.5%	47.3	47.0	-0.2	-0.5%
77.8%	47.1	47.0	-0.1	-0.3%
79.0%	47.1	47.0	-0.1	-0.3%
80.2%	47.0	47.0	0.0	-0.1%
81.5%	47.0	46.9	-0.1	-0.2%
82.7%	46.7	46.8	0.2	0.3%
84.0%	46.7	46.8	0.1	0.2%
85.2%	46.7	46.5	-0.1	-0.3%
86.4%	46.6	46.5	0.0	-0.1%
87.7%	46.6	46.4	-0.2	-0.4%
88.9%	46.5	46.3	-0.2	-0.5%
90.1%	46.2	46.1	-0.1	-0.2%
91.4%	46.2	45.9	-0.2	-0.4%
92.6%	46.0	45.9	-0.1	-0.1%
93.8%	45.9	45.9	0.0	0.0%
95.1%	45.4	45.2	-0.2	-0.5%
96.3%	45.4	45.2	-0.2	-0.4%
97.5%	45.3	45.1	-0.2	-0.3%
98.8%	45.2	45.0	-0.2	-0.4%
100.0%	45.2	45.0	-0.2	-0.4%

Table SQ2-1b

Sacramento River below Keswick, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.4	52.2	-0.2	-0.3%
1.2%	50.2	50.4	0.1	0.2%
2.5%	49.4	49.4	0.0	0.0%
3.7%	49.1	49.4	0.3	0.7%
4.9%	49.0	49.1	0.1	0.2%
6.2%	48.7	48.8	0.0	0.1%
7.4%	48.7	48.6	-0.1	-0.1%
8.6%	48.5	48.6	0.0	0.1%
9.9%	48.5	48.5	0.0	0.1%
11.1%	48.5	48.5	0.0	0.1%
12.3%	48.5	48.5	0.0	0.1%
13.6%	48.3	48.5	0.2	0.3%
14.8%	48.3	48.4	0.2	0.3%
16.0%	48.2	48.3	0.0	0.1%
17.3%	48.2	48.3	0.1	0.2%
18.5%	48.1	48.1	0.1	0.1%
19.8%	48.1	48.0	0.0	0.0%
21.0%	48.0	48.0	0.0	-0.1%
22.2%	48.0	47.8	-0.2	-0.4%
23.5%	47.9	47.7	-0.2	-0.3%
24.7%	47.8	47.7	-0.1	-0.2%
25.9%	47.8	47.7	-0.1	-0.2%
27.2%	47.8	47.7	-0.1	-0.2%
28.4%	47.7	47.7	0.0	-0.1%
29.6%	47.7	47.7	0.0	-0.1%
30.9%	47.6	47.6	0.0	0.0%
32.1%	47.6	47.6	0.0	0.0%
33.3%	47.6	47.6	0.1	0.1%
34.6%	47.5	47.6	0.1	0.1%
35.8%	47.5	47.6	0.0	0.1%
37.0%	47.5	47.5	0.0	0.0%
38.3%	47.5	47.5	0.0	0.0%
39.5%	47.4	47.4	0.0	0.0%
40.7%	47.3	47.2	0.0	0.0%
42.0%	47.2	47.2	-0.1	-0.1%
43.2%	47.1	47.1	0.0	0.0%
44.4%	47.1	47.0	-0.1	-0.2%
45.7%	47.0	47.0	-0.1	-0.1%
46.9%	47.0	46.9	0.0	-0.1%
48.1%	46.9	46.9	0.0	-0.1%
49.4%	46.9	46.9	0.0	-0.1%
50.6%	46.7	46.8	0.1	0.1%
51.9%	46.7	46.6	-0.1	-0.3%
53.1%	46.7	46.5	-0.1	-0.2%
54.3%	46.6	46.5	-0.1	-0.3%
55.6%	46.5	46.5	0.0	0.0%
56.8%	46.4	46.4	0.0	0.0%
58.0%	46.4	46.4	0.0	-0.1%
59.3%	46.4	46.3	-0.1	-0.1%
60.5%	46.4	46.3	0.0	-0.1%
61.7%	46.2	46.2	0.0	0.0%
63.0%	46.2	46.2	0.0	0.0%
64.2%	46.2	46.1	-0.1	-0.1%
65.4%	46.1	46.1	0.0	0.0%
66.7%	46.1	46.1	-0.1	-0.2%
67.9%	46.1	46.0	0.0	0.0%
69.1%	46.1	45.9	-0.1	-0.3%
70.4%	46.0	45.9	-0.1	-0.3%
71.6%	46.0	45.9	-0.1	-0.3%
72.8%	45.8	45.8	0.0	0.0%
74.1%	45.7	45.6	0.0	-0.1%
75.3%	45.7	45.6	0.0	-0.1%
76.5%	45.6	45.6	0.0	-0.1%
77.8%	45.6	45.6	0.0	-0.1%
79.0%	45.6	45.5	-0.1	-0.2%
80.2%	45.5	45.4	-0.1	-0.3%
81.5%	45.5	45.3	-0.1	-0.3%
82.7%	45.5	45.3	-0.1	-0.3%
84.0%	45.5	45.3	-0.2	-0.4%
85.2%	45.4	45.3	-0.2	-0.4%
86.4%	45.4	45.2	-0.2	-0.5%
87.7%	45.2	45.1	-0.1	-0.1%
88.9%	45.0	44.9	-0.1	-0.2%
90.1%	44.9	44.8	-0.1	-0.2%
91.4%	44.9	44.7	-0.1	-0.3%
92.6%	44.8	44.7	-0.2	-0.3%
93.8%	44.8	44.6	-0.2	-0.4%
95.1%	44.7	44.6	-0.1	-0.1%
96.3%	44.5	44.3	-0.1	-0.3%
97.5%	44.4	44.3	-0.1	-0.3%
98.8%	43.7	43.6	-0.1	-0.2%
100.0%	43.7	43.6	-0.1	-0.2%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.4	52.5	0.1	0.1%
1.2%	50.6	50.7	0.0	0.1%
2.5%	50.1	50.2	0.1	0.3%
3.7%	50.0	50.0	0.1	0.1%
4.9%	49.9	49.8	-0.1	-0.1%
6.2%	49.7	49.7	0.0	-0.1%
7.4%	49.6	49.7	0.1	0.2%
8.6%	49.4	49.4	0.0	0.0%
9.9%	49.4	49.4	0.0	0.1%
11.1%	49.3	49.3	0.0	0.0%
12.3%	49.3	49.3	0.0	0.0%
13.6%	49.2	49.3	0.0	0.1%
14.8%	49.1	49.3	0.2	0.4%
16.0%	49.1	49.1	0.1	0.2%
17.3%	48.8	49.0	0.2	0.5%
18.5%	48.7	49.0	0.3	0.7%
19.8%	48.6	48.8	0.2	0.4%
21.0%	48.5	48.6	0.1	0.1%
22.2%	48.5	48.6	0.1	0.1%
23.5%	48.5	48.5	0.0	0.1%
24.7%	48.5	48.4	0.0	-0.1%
25.9%	48.4	48.4	0.1	0.1%
27.2%	48.4	48.3	0.0	-0.1%
28.4%	48.4	48.3	-0.1	-0.1%
29.6%	48.3	48.3	0.0	-0.1%
30.9%	48.3	48.2	-0.1	-0.2%
32.1%	48.2	48.1	-0.1	-0.2%
33.3%	48.2	48.1	-0.1	-0.2%
34.6%	48.1	48.1	-0.1	-0.1%
35.8%	48.0	48.1	0.0	0.1%
37.0%	47.9	47.9	0.0	0.0%
38.3%	47.8	47.9	0.0	0.1%
39.5%	47.8	47.8	0.0	-0.1%
40.7%	47.8	47.8	0.0	-0.1%
42.0%	47.8	47.8	0.0	0.0%
43.2%	47.7	47.7	0.0	0.0%
44.4%	47.6	47.7	0.1	0.3%
45.7%	47.4	47.5	0.0	0.1%
46.9%	47.4	47.3	-0.1	-0.3%
48.1%	47.4	47.3	0.0	-0.1%
49.4%	47.3	47.3	0.0	0.0%
50.6%	47.2	47.3	0.0	0.0%
51.9%	47.2	47.2	0.0	0.0%
53.1%	47.2	47.2	0.0	0.1%
54.3%	47.2	47.1	0.0	-0.1%
55.6%	47.1	47.1	-0.1	-0.2%
56.8%	47.1	47.0	-0.1	-0.2%
58.0%	47.0	47.0	0.0	-0.1%
59.3%	47.0	47.0	0.0	-0.1%
60.5%	46.9	46.9	0.0	0.0%
61.7%	46.9	46.8	-0.1	-0.1%
63.0%	46.8	46.8	0.0	0.1%
64.2%	46.8	46.8	0.0	0.1%
65.4%	46.7	46.7	-0.1	-0.1%
66.7%	46.7	46.6	-0.1	-0.2%
67.9%	46.7	46.6	-0.1	-0.3%
69.1%	46.7	46.6	-0.1	-0.2%
70.4%	46.5	46.5	0.1	0.1%
71.6%	46.4	46.4	0.0	0.1%
72.8%	46.4	46.3	0.0	-0.1%
74.1%	46.4	46.3	0.0	-0.1%
75.3%	46.3	46.3	0.0	-0.1%
76.5%	46.3	46.3	0.0	0.0%
77.8%	46.3	46.3	0.0	0.0%
79.0%	46.2	46.2	0.0	-0.1%
80.2%	46.2	46.2	0.0	-0.1%
81.5%	46.1	46.1	0.1	0.1%
82.7%	46.0	46.1	0.0	0.1%
84.0%	46.0	45.9	-0.1	-0.1%
85.2%	45.9	45.9	-0.1	-0.2%
86.4%	45.8	45.8	0.0	-0.1%
87.7%	45.7	45.7	0.0	0.0%
88.9%	45.7	45.7	0.0	0.0%
90.1%	45.6	45.7	0.0	0.1%
91.4%	45.6	45.6	0.0	0.1%
92.6%	45.5	45.5	0.0	-0.1%
93.8%	45.5	45.5	0.0	0.0%
95.1%	45.4	45.4	0.0	0.1%
96.3%	45.3	45.3	0.0	0.1%
97.5%	45.3	45.3	0.0	0.0%
98.8%	45.3	45.3	0.0	0.0%
100.0%	45.3	45.3	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.0	53.1	0.0	0.0%
1.2%	51.4	52.6	1.2	2.3%
2.5%	51.4	51.6	0.2	0.5%
3.7%	50.6	50.6	0.0	0.0%
4.9%	50.6	50.6	0.0	0.0%
6.2%	50.2	50.1	-0.2	-0.4%
7.4%	50.0	50.1	0.0	0.0%
8.6%	49.8	50.0	0.1	0.3%
9.9%	49.8	49.9	0.1	0.2%
11.1%	49.7	49.8	0.1	0.2%
12.3%	49.7	49.8	0.1	0.2%
13.6%	49.7	49.8	0.1	0.2%
14.8%	49.6	49.7	0.1	0.1%
16.0%	49.6	49.6	0.0	0.1%
17.3%	49.6	49.5	0.0	-0.1%
18.5%	49.5	49.5	-0.1	-0.1%
19.8%	49.5	49.4	-0.1	-0.2%
21.0%	49.5	49.4	-0.1	-0.3%
22.2%	49.4	49.4	-0.1	-0.2%
23.5%	49.4	49.3	-0.1	-0.2%
24.7%	49.4	49.2	-0.1	-0.2%
25.9%	49.3	49.2	-0.1	-0.2%
27.2%	49.3	49.2	-0.1	-0.2%
28.4%	49.0	49.1	0.1	0.2%
29.6%	49.0	49.1	0.1	0.2%
30.9%	49.0	49.0	0.0	0.1%
32.1%	48.9	49.0	0.1	0.1%
33.3%	48.9	49.0	0.1	0.1%
34.6%	48.8	48.9	0.1	0.3%
35.8%	48.7	48.9	0.2	0.4%
37.0%	48.7	48.8	0.1	0.2%
38.3%	48.7	48.8	0.1	0.2%
39.5%	48.7	48.8	0.1	0.3%
40.7%	48.6	48.7	0.1	0.2%
42.0%	48.6	48.6	0.0	0.0%
43.2%	48.6	48.6	0.0	0.0%
44.4%	48.6	48.6	0.0	0.0%
45.7%	48.5	48.5	0.0	0.0%
46.9%	48.5	48.5	0.1	0.2%
48.1%	48.4	48.5	0.1	0.1%
49.4%	48.4	48.4	0.1	0.1%
50.6%	48.4	48.4	0.1	0.1%
51.9%	48.4	48.4	0.1	0.1%
53.1%	48.4	48.4	0.0	0.1%
54.3%	48.3	48.4	0.0	0.1%
55.6%	48.3	48.3	0.0	0.0%
56.8%	48.2	48.3	0.1	0.1%
58.0%	48.0	48.3	0.2	0.4%
59.3%	48.0	48.1	0.1	0.2%
60.5%	48.0	48.1	0.1	0.2%
61.7%	48.0	48.1	0.1	0.2%
63.0%	47.9	48.1	0.1	0.2%
64.2%	47.9	48.0	0.1	0.2%
65.4%	47.9	47.9	0.1	0.1%
66.7%	47.8	47.9	0.1	0.2%
67.9%	47.8	47.9	0.1	0.2%
69.1%	47.8	47.9	0.1	0.1%
70.4%	47.8	47.8	0.1	0.1%
71.6%	47.7	47.8	0.1	0.2%
72.8%	47.6	47.7	0.1	0.2%
74.1%	47.6	47.7	0.1	0.2%
75.3%	47.6	47.7	0.1	0.3%
76.5%	47.5	47.6	0.1	0.2%
77.8%	47.5	47.6	0.1	0.2%
79.0%	47.3	47.5	0.2	0.3%
80.2%	47.3	47.5	0.2	0.5%
81.5%	47.2	47.3	0.1	0.1%
82.7%	47.2	47.3	0.1	0.2%
84.0%	47.2	47.2	0.0	0.0%
85.2%	47.0	47.2	0.2	0.3%
86.4%	47.0	47.1	0.2	0.3%
87.7%	46.9	47.1	0.2	0.5%
88.9%	46.8	47.0	0.2	0.4%
90.1%	46.8	47.0	0.2	0.4%
91.4%	46.8	47.0	0.2	0.4%
92.6%	46.8	46.9	0.1	0.3%
93.8%	46.8	46.9	0.1	0.3%
95.1%	46.7	46.9	0.2	0.4%
96.3%	46.5	46.7	0.2	0.4%
97.5%	46.2	46.5	0.3	0.6%
98.8%	46.1	46.5	0.4	0.8%
100.0%	46.1	46.5	0.4	0.8%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.0	55.8	0.8	1.5%
1.2%	53.6	55.0	1.4	2.7%
2.5%	52.2	54.1	1.9	3.6%
3.7%	51.2	52.4	1.2	2.3%
4.9%	51.2	51.6	0.4	0.8%
6.2%	51.1	51.5	0.3	0.7%
7.4%	51.0	51.3	0.3	0.6%
8.6%	50.9	51.2	0.3	0.7%
9.9%	50.9	51.1	0.3	0.5%
11.1%	50.8	51.0	0.2	0.4%
12.3%	50.6	50.9	0.2	0.4%
13.6%	50.6	50.8	0.1	0.3%
14.8%	50.6	50.7	0.1	0.3%
16.0%	50.5	50.7	0.2	0.3%
17.3%	50.4	50.7	0.2	0.5%
18.5%	50.4	50.7	0.3	0.6%
19.8%	50.4	50.6	0.3	0.5%
21.0%	50.3	50.6	0.3	0.6%
22.2%	50.2	50.4	0.2	0.3%
23.5%	50.0	50.4	0.4	0.7%
24.7%	50.0	50.3	0.3	0.7%
25.9%	50.0	50.2	0.3	0.5%
27.2%	49.9	50.2	0.2	0.5%
28.4%	49.9	50.1	0.2	0.4%
29.6%	49.9	50.1	0.2	0.4%
30.9%	49.9	50.1	0.2	0.4%
32.1%	49.9	50.1	0.2	0.4%
33.3%	49.9	50.0	0.2	0.4%
34.6%	49.8	50.0	0.2	0.4%
35.8%	49.8	50.0	0.2	0.5%
37.0%	49.7	49.9	0.2	0.4%
38.3%	49.7	49.9	0.2	0.4%
39.5%	49.7	49.9	0.2	0.5%
40.7%	49.6	49.9	0.2	0.5%
42.0%	49.6	49.9	0.3	0.6%
43.2%	49.5	49.8	0.3	0.6%
44.4%	49.5	49.8	0.3	0.6%
45.7%	49.5	49.7	0.3	0.5%
46.9%	49.5	49.6	0.2	0.3%
48.1%	49.4	49.6	0.2	0.4%
49.4%	49.4	49.5	0.2	0.3%
50.6%	49.4	49.5	0.2	0.3%
51.9%	49.3	49.5	0.1	0.3%
53.1%	49.3	49.5	0.1	0.3%
54.3%	49.3	49.4	0.2	0.3%
55.6%	49.3	49.4	0.1	0.3%
56.8%	49.3	49.4	0.2	0.3%
58.0%	49.2	49.4	0.2	0.3%
59.3%	49.1	49.4	0.3	0.6%
60.5%	49.1	49.4	0.3	0.6%
61.7%	49.0	49.3	0.3	0.6%
63.0%	49.0	49.3	0.3	0.6%
64.2%	49.0	49.3	0.3	0.6%
65.4%	49.0	49.2	0.3	0.5%
66.7%	49.0	49.2	0.2	0.4%
67.9%	48.9	49.2	0.3	0.6%
69.1%	48.9	49.1	0.3	0.5%
70.4%	48.9	49.1	0.2	0.5%
71.6%	48.8	49.1	0.3	0.6%
72.8%	48.8	49.0	0.3	0.5%
74.1%	48.8	49.0	0.2	0.5%
75.3%	48.7	49.0	0.2	0.5%
76.5%	48.7	49.0	0.2	0.5%
77.8%	48.7	48.9	0.2	0.5%
79.0%	48.7	48.9	0.2	0.5%
80.2%	48.6	48.9	0.3	0.6%
81.5%	48.6	48.9	0.3	0.6%
82.7%	48.6	48.8	0.2	0.5%
84.0%	48.5	48.8	0.3	0.6%
85.2%	48.5	48.7	0.2	0.4%
86.4%	48.5	48.7	0.2	0.4%
87.7%	48.4	48.6	0.2	0.4%
88.9%	48.4	48.6	0.2	0.4%
90.1%	48.3	48.5	0.3	0.6%
91.4%	48.2	48.5	0.3	0.6%
92.6%	48.1	48.4	0.3	0.6%
93.8%	48.1	48.4	0.3	0.6%
95.1%	48.0	48.1	0.1	0.3%
96.3%	47.8	48.0	0.2	0.4%
97.5%	47.5	47.9	0.4	0.9%
98.8%	47.3	47.7	0.4	0.9%
100.0%	47.3	47.7	0.4	0.9%

Table SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.7	54.7	0.0	-0.1%
1.2%	54.2	53.6	-0.6	-1.2%
2.5%	53.7	53.2	-0.5	-0.9%
3.7%	53.5	53.1	-0.4	-0.8%
4.9%	53.1	52.5	-0.6	-1.2%
6.2%	52.8	52.5	-0.3	-0.6%
7.4%	52.5	52.4	-0.1	-0.2%
8.6%	52.2	52.2	0.1	0.1%
9.9%	52.1	52.2	0.1	0.1%
11.1%	52.0	52.2	0.2	0.3%
12.3%	51.9	52.0	0.1	0.2%
13.6%	51.7	52.0	0.3	0.5%
14.8%	51.7	51.9	0.2	0.4%
16.0%	51.6	51.9	0.3	0.5%
17.3%	51.5	51.7	0.2	0.4%
18.5%	51.5	51.6	0.1	0.3%
19.8%	51.4	51.6	0.1	0.3%
21.0%	51.4	51.6	0.2	0.3%
22.2%	51.3	51.5	0.2	0.4%
23.5%	51.3	51.4	0.1	0.2%
24.7%	51.2	51.3	0.1	0.2%
25.9%	51.2	51.2	0.0	0.1%
27.2%	51.1	51.2	0.1	0.1%
28.4%	51.1	51.1	0.0	0.0%
29.6%	51.1	51.1	0.0	0.1%
30.9%	51.0	51.0	0.0	0.1%
32.1%	50.9	51.0	0.0	0.1%
33.3%	50.9	50.9	0.1	0.2%
34.6%	50.8	50.9	0.0	0.1%
35.8%	50.6	50.9	0.3	0.5%
37.0%	50.6	50.8	0.3	0.6%
38.3%	50.5	50.8	0.3	0.5%
39.5%	50.5	50.7	0.3	0.5%
40.7%	50.5	50.7	0.3	0.5%
42.0%	50.4	50.7	0.3	0.5%
43.2%	50.4	50.6	0.2	0.4%
44.4%	50.4	50.6	0.2	0.4%
45.7%	50.3	50.5	0.2	0.4%
46.9%	50.3	50.5	0.2	0.5%
48.1%	50.3	50.5	0.2	0.5%
49.4%	50.3	50.5	0.2	0.5%
50.6%	50.1	50.5	0.3	0.7%
51.9%	50.1	50.5	0.4	0.8%
53.1%	50.1	50.5	0.4	0.8%
54.3%	50.0	50.5	0.4	0.9%
55.6%	50.0	50.5	0.4	0.8%
56.8%	50.0	50.5	0.4	0.8%
58.0%	50.0	50.4	0.4	0.9%
59.3%	50.0	50.2	0.3	0.5%
60.5%	50.0	50.2	0.2	0.4%
61.7%	49.9	50.2	0.2	0.5%
63.0%	49.9	50.0	0.1	0.3%
64.2%	49.9	50.0	0.2	0.3%
65.4%	49.8	50.0	0.2	0.4%
66.7%	49.8	50.0	0.2	0.4%
67.9%	49.8	49.9	0.2	0.4%
69.1%	49.7	49.9	0.2	0.5%
70.4%	49.7	49.9	0.2	0.5%
71.6%	49.6	49.9	0.3	0.5%
72.8%	49.5	49.8	0.2	0.5%
74.1%	49.5	49.8	0.3	0.6%
75.3%	49.5	49.8	0.3	0.6%
76.5%	49.3	49.7	0.4	0.8%
77.8%	49.3	49.7	0.4	0.8%
79.0%	49.2	49.7	0.4	0.9%
80.2%	49.2	49.6	0.4	0.9%
81.5%	49.2	49.6	0.4	0.9%
82.7%	49.1	49.6	0.4	0.9%
84.0%	49.1	49.6	0.5	1.0%
85.2%	49.1	49.5	0.4	0.9%
86.4%	49.0	49.5	0.5	0.9%
87.7%	49.0	49.5	0.5	0.9%
88.9%	49.0	49.4	0.4	0.9%
90.1%	49.0	49.4	0.4	0.8%
91.4%	49.0	49.4	0.4	0.8%
92.6%	49.0	49.3	0.4	0.8%
93.8%	48.9	49.3	0.5	0.9%
95.1%	48.8	49.3	0.5	1.0%
96.3%	48.8	49.1	0.3	0.6%
97.5%	48.5	48.9	0.4	0.9%
98.8%	48.4	48.6	0.2	0.4%
100.0%	48.4	48.6	0.2	0.4%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.4	55.1	-1.4	-2.4%
1.2%	55.2	55.0	-0.1	-0.3%
2.5%	55.0	54.6	-0.4	-0.7%
3.7%	54.8	54.4	-0.4	-0.7%
4.9%	54.5	54.4	-0.1	-0.3%
6.2%	54.4	54.4	-0.1	-0.1%
7.4%	54.4	54.3	-0.1	-0.1%
8.6%	54.3	54.3	0.0	0.0%
9.9%	54.2	54.2	0.1	0.1%
11.1%	54.0	54.0	0.0	0.0%
12.3%	53.9	53.9	0.0	-0.1%
13.6%	53.9	53.8	0.0	-0.1%
14.8%	53.8	53.8	0.0	-0.1%
16.0%	53.8	53.7	-0.1	-0.2%
17.3%	53.8	53.7	-0.1	-0.1%
18.5%	53.8	53.7	-0.1	-0.2%
19.8%	53.6	53.6	0.0	0.0%
21.0%	53.5	53.5	0.0	0.1%
22.2%	53.3	53.5	0.2	0.4%
23.5%	53.2	53.5	0.3	0.5%
24.7%	53.2	53.3	0.1	0.3%
25.9%	53.0	53.2	0.2	0.4%
27.2%	53.0	53.1	0.1	0.2%
28.4%	52.9	52.8	-0.1	-0.1%
29.6%	52.7	52.8	0.1	0.2%
30.9%	52.7	52.8	0.1	0.2%
32.1%	52.6	52.7	0.1	0.2%
33.3%	52.5	52.7	0.2	0.4%
34.6%	52.3	52.7	0.4	0.7%
35.8%	52.3	52.7	0.3	0.7%
37.0%	52.2	52.6	0.3	0.6%
38.3%	52.2	52.6	0.3	0.7%
39.5%	52.1	52.5	0.3	0.6%
40.7%	52.1	52.4	0.3	0.6%
42.0%	52.0	52.4	0.4	0.7%
43.2%	52.0	52.4	0.4	0.7%
44.4%	52.0	52.3	0.3	0.5%
45.7%	51.9	52.3	0.4	0.8%
46.9%	51.9	52.2	0.3	0.6%
48.1%	51.8	52.2	0.3	0.6%
49.4%	51.8	52.2	0.4	0.7%
50.6%	51.7	52.1	0.4	0.8%
51.9%	51.7	52.1	0.3	0.7%
53.1%	51.7	52.0	0.3	0.7%
54.3%	51.6	52.0	0.4	0.7%
55.6%	51.6	52.0	0.4	0.7%
56.8%	51.6	51.9	0.3	0.6%
58.0%	51.6	51.9	0.3	0.6%
59.3%	51.5	51.8	0.4	0.7%
60.5%	51.4	51.8	0.3	0.7%
61.7%	51.4	51.7	0.3	0.6%
63.0%	51.4	51.5	0.1	0.3%
64.2%	51.3	51.5	0.2	0.3%
65.4%	51.3	51.5	0.2	0.3%
66.7%	51.3	51.4	0.1	0.3%
67.9%	51.2	51.4	0.2	0.5%
69.1%	51.1	51.4	0.2	0.5%
70.4%	51.0	51.3	0.3	0.6%
71.6%	51.0	51.3	0.3	0.5%
72.8%	51.0	51.3	0.3	0.5%
74.1%	51.0	51.2	0.3	0.5%
75.3%	51.0	51.2	0.3	0.5%
76.5%	50.9	51.2	0.3	0.6%
77.8%	50.9	51.2	0.3	0.6%
79.0%	50.8	51.1	0.3	0.6%
80.2%	50.8	51.1	0.3	0.6%
81.5%	50.8	51.1	0.3	0.7%
82.7%	50.7	51.1	0.4	0.8%
84.0%	50.7	51.0	0.3	0.6%
85.2%	50.7	50.9	0.3	0.5%
86.4%	50.5	50.8	0.3	0.5%
87.7%	50.5	50.8	0.3	0.5%
88.9%	50.5	50.8	0.2	0.5%
90.1%	50.4	50.7	0.4	0.7%
91.4%	50.4	50.6	0.3	0.6%
92.6%	50.4	50.6	0.3	0.5%
93.8%	50.3	50.4	0.1	0.2%
95.1%	50.0	50.4	0.3	0.7%
96.3%	49.9	50.3	0.4	0.8%
97.5%	49.8	49.7	0.0	0.0%
98.8%	49.6	49.7	0.1	0.2%
100.0%	49.6	49.7	0.1	0.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.8	59.4	-4.4	-6.9%
1.2%	56.9	54.7	-2.3	-4.0%
2.5%	55.2	54.5	-0.7	-1.3%
3.7%	55.2	54.5	-0.7	-1.3%
4.9%	55.1	54.4	-0.7	-1.2%
6.2%	54.9	54.4	-0.6	-1.1%
7.4%	54.6	54.2	-0.3	-0.6%
8.6%	54.4	54.2	-0.1	-0.3%
9.9%	54.4	54.2	-0.2	-0.3%
11.1%	54.4	54.2	-0.2	-0.3%
12.3%	54.2	54.2	-0.1	-0.1%
13.6%	54.2	54.2	-0.1	-0.1%
14.8%	54.2	54.1	-0.1	-0.3%
16.0%	54.2	54.0	-0.1	-0.3%
17.3%	54.2	54.0	-0.2	-0.3%
18.5%	54.2	53.9	-0.2	-0.4%
19.8%	54.1	53.9	-0.2	-0.5%
21.0%	54.1	53.9	-0.2	-0.4%
22.2%	54.0	53.9	-0.2	-0.3%
23.5%	54.0	53.8	-0.1	-0.2%
24.7%	53.9	53.8	-0.1	-0.2%
25.9%	53.9	53.8	-0.1	-0.3%
27.2%	53.9	53.8	-0.1	-0.2%
28.4%	53.8	53.7	-0.1	-0.2%
29.6%	53.7	53.7	0.0	0.0%
30.9%	53.7	53.7	0.0	0.0%
32.1%	53.7	53.7	0.0	-0.1%
33.3%	53.7	53.7	0.0	0.0%
34.6%	53.6	53.7	0.1	0.1%
35.8%	53.6	53.6	0.1	0.1%
37.0%	53.5	53.5	0.0	0.0%
38.3%	53.5	53.5	-0.1	-0.1%
39.5%	53.5	53.4	-0.1	-0.2%
40.7%	53.5	53.4	-0.1	-0.1%
42.0%	53.4	53.4	0.0	0.0%
43.2%	53.4	53.4	0.0	0.0%
44.4%	53.4	53.3	-0.1	-0.2%
45.7%	53.3	53.3	-0.1	-0.1%
46.9%	53.3	53.2	-0.1	-0.2%
48.1%	53.3	53.2	0.0	-0.1%
49.4%	53.3	53.2	-0.1	-0.2%
50.6%	53.3	53.1	-0.1	-0.2%
51.9%	53.2	53.1	-0.1	-0.2%
53.1%	53.1	53.0	-0.1	-0.2%
54.3%	53.0	52.8	-0.2	-0.4%
55.6%	53.0	52.8	-0.2	-0.4%
56.8%	52.9	52.8	-0.1	-0.3%
58.0%	52.9	52.8	-0.1	-0.2%
59.3%	52.9	52.7	-0.1	-0.3%
60.5%	52.9	52.5	-0.3	-0.6%
61.7%	52.7	52.5	-0.3	-0.6%
63.0%	52.6	52.4	-0.2	-0.4%
64.2%	52.6	52.4	-0.2	-0.4%
65.4%	52.6	52.4	-0.2	-0.4%
66.7%	52.6	52.4	-0.2	-0.4%
67.9%	52.5	52.3	-0.2	-0.4%
69.1%	52.5	52.2	-0.3	-0.5%
70.4%	52.4	52.1	-0.3	-0.6%
71.6%	52.3	52.1	-0.2	-0.4%
72.8%	52.3	52.1	-0.2	-0.4%
74.1%	52.3	52.0	-0.3	-0.5%
75.3%	52.2	52.0	-0.2	-0.3%
76.5%	52.2	52.0	-0.1	-0.3%
77.8%	52.2	52.0	-0.2	-0.3%
79.0%	52.1	52.0	-0.2	-0.3%
80.2%	52.1	52.0	-0.2	-0.3%
81.5%	52.0	51.9	0.0	0.0%
82.7%	51.9	51.8	-0.1	-0.2%
84.0%	51.9	51.8	-0.1	-0.3%
85.2%	51.9	51.8	-0.1	-0.2%
86.4%	51.9	51.8	-0.1	-0.3%
87.7%	51.9	51.8	-0.1	-0.2%
88.9%	51.7	51.8	0.1	0.1%
90.1%	51.6	51.6	0.1	0.1%
91.4%	51.5	51.4	-0.1	-0.2%
92.6%	51.5	51.2	-0.3	-0.5%
93.8%	51.3	51.1	-0.2	-0.4%
95.1%	51.1	50.9	-0.1	-0.3%
96.3%	51.0	50.7	-0.3	-0.6%
97.5%	50.9	50.7	-0.2	-0.5%
98.8%	50.9	50.6	-0.3	-0.7%
100.0%	50.9	50.6	-0.3	-0.7%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.2	65.2	0.0	0.0%
1.2%	62.7	58.1	-4.6	-7.3%
2.5%	60.4	56.8	-3.6	-5.9%
3.7%	56.5	56.1	-0.4	-0.7%
4.9%	56.4	55.4	-0.9	-1.7%
6.2%	55.4	55.1	-0.3	-0.6%
7.4%	54.9	55.0	0.1	0.2%
8.6%	54.8	54.9	0.0	0.0%
9.9%	54.7	54.8	0.1	0.2%
11.1%	54.5	54.3	-0.2	-0.4%
12.3%	54.4	54.3	-0.1	-0.2%
13.6%	54.3	54.1	-0.2	-0.3%
14.8%	54.2	54.0	-0.1	-0.3%
16.0%	54.1	54.0	-0.1	-0.3%
17.3%	54.1	53.9	-0.2	-0.3%
18.5%	54.1	53.9	-0.2	-0.3%
19.8%	54.0	53.8	-0.2	-0.3%
21.0%	53.9	53.8	-0.2	-0.3%
22.2%	53.9	53.8	-0.2	-0.3%
23.5%	53.9	53.8	-0.1	-0.2%
24.7%	53.8	53.8	0.0	0.0%
25.9%	53.7	53.7	0.0	0.1%
27.2%	53.6	53.7	0.2	0.3%
28.4%	53.6	53.7	0.2	0.3%
29.6%	53.5	53.7	0.1	0.3%
30.9%	53.4	53.6	0.2	0.4%
32.1%	53.4	53.6	0.2	0.4%
33.3%	53.4	53.6	0.2	0.5%
34.6%	53.3	53.6	0.3	0.5%
35.8%	53.3	53.5	0.2	0.4%
37.0%	53.2	53.4	0.2	0.3%
38.3%	53.2	53.3	0.1	0.3%
39.5%	53.0	53.2	0.2	0.3%
40.7%	52.9	53.1	0.1	0.2%
42.0%	52.9	53.1	0.1	0.2%
43.2%	52.6	53.0	0.5	0.9%
44.4%	52.6	52.8	0.2	0.5%
45.7%	52.5	52.7	0.2	0.4%
46.9%	52.5	52.7	0.2	0.4%
48.1%	52.3	52.7	0.3	0.6%
49.4%	52.3	52.7	0.4	0.7%
50.6%	52.3	52.6	0.4	0.7%
51.9%	52.3	52.6	0.4	0.7%
53.1%	52.2	52.6	0.4	0.7%
54.3%	52.2	52.6	0.4	0.7%
55.6%	52.2	52.5	0.4	0.7%
56.8%	52.1	52.5	0.4	0.8%
58.0%	52.0	52.5	0.5	0.9%
59.3%	52.0	52.5	0.5	0.9%
60.5%	51.9	52.4	0.5	0.9%
61.7%	51.8	52.4	0.6	1.1%
63.0%	51.7	52.2	0.5	0.9%
64.2%	51.7	52.1	0.4	0.7%
65.4%	51.7	52.1	0.4	0.9%
66.7%	51.6	52.1	0.5	0.9%
67.9%	51.6	52.1	0.5	0.9%
69.1%	51.6	52.0	0.4	0.7%
70.4%	51.5	52.0	0.5	0.9%
71.6%	51.5	52.0	0.5	0.9%
72.8%	51.4	51.9	0.5	1.0%
74.1%	51.4	51.9	0.6	1.1%
75.3%	51.3	51.9	0.6	1.2%
76.5%	51.2	51.9	0.7	1.4%
77.8%	51.2	51.9	0.7	1.4%
79.0%	51.1	51.8	0.7	1.4%
80.2%	51.1	51.8	0.7	1.4%
81.5%	51.0	51.7	0.6	1.2%
82.7%	51.0	51.6	0.6	1.2%
84.0%	51.0	51.6	0.6	1.2%
85.2%	50.9	51.2	0.3	0.6%
86.4%	50.8	51.1	0.3	0.6%
87.7%	50.6	50.7	0.1	0.2%
88.9%	50.4	50.6	0.2	0.4%
90.1%	50.3	50.4	0.0	0.1%
91.4%	50.2	50.3	0.1	0.2%
92.6%	50.1	50.3	0.2	0.4%
93.8%	50.1	50.2	0.2	0.3%
95.1%	50.1	50.0	0.0	-0.1%
96.3%	50.0	49.9	0.0	-0.1%
97.5%	49.9	49.9	0.0	0.0%
98.8%	49.7	49.8	0.1	0.2%
100.0%	49.7	49.8	0.1	0.2%

Table SQ2-1b

Sacramento River below Keswick, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.6	57.9	-1.7	-2.8%
1.2%	56.3	54.5	-1.8	-3.1%
2.5%	55.5	54.4	-1.1	-2.0%
3.7%	54.6	54.4	-0.2	-0.3%
4.9%	54.4	54.2	-0.2	-0.4%
6.2%	54.2	54.1	0.0	-0.1%
7.4%	54.0	54.0	0.0	0.1%
8.6%	54.0	54.0	0.0	0.0%
9.9%	53.8	53.8	0.0	0.0%
11.1%	53.8	53.7	-0.1	-0.2%
12.3%	53.7	53.7	-0.1	-0.1%
13.6%	53.6	53.6	0.0	-0.1%
14.8%	53.6	53.6	0.0	0.0%
16.0%	53.6	53.6	0.0	0.0%
17.3%	53.5	53.4	-0.1	-0.2%
18.5%	53.5	53.3	-0.2	-0.3%
19.8%	53.4	53.2	-0.2	-0.3%
21.0%	53.4	53.2	-0.2	-0.3%
22.2%	53.2	53.1	-0.1	-0.2%
23.5%	53.2	53.1	-0.1	-0.2%
24.7%	52.9	53.1	0.1	0.2%
25.9%	52.9	53.0	0.1	0.1%
27.2%	52.9	53.0	0.1	0.1%
28.4%	52.9	52.8	0.0	0.0%
29.6%	52.9	52.8	0.0	-0.1%
30.9%	52.8	52.6	-0.2	-0.3%
32.1%	52.8	52.6	-0.2	-0.3%
33.3%	52.5	52.6	0.1	0.2%
34.6%	52.4	52.6	0.2	0.3%
35.8%	52.3	52.5	0.2	0.4%
37.0%	52.3	52.5	0.2	0.4%
38.3%	52.2	52.5	0.2	0.5%
39.5%	52.2	52.5	0.2	0.4%
40.7%	52.2	52.4	0.2	0.3%
42.0%	52.1	52.3	0.2	0.4%
43.2%	52.1	52.3	0.2	0.3%
44.4%	52.0	52.2	0.2	0.3%
45.7%	52.0	52.2	0.2	0.3%
46.9%	51.9	52.1	0.2	0.5%
48.1%	51.8	52.0	0.2	0.3%
49.4%	51.7	51.9	0.2	0.3%
50.6%	51.7	51.9	0.2	0.3%
51.9%	51.7	51.9	0.2	0.4%
53.1%	51.7	51.9	0.2	0.4%
54.3%	51.6	51.8	0.2	0.4%
55.6%	51.6	51.8	0.2	0.4%
56.8%	51.5	51.8	0.3	0.6%
58.0%	51.5	51.7	0.3	0.5%
59.3%	51.4	51.7	0.3	0.6%
60.5%	51.4	51.7	0.3	0.6%
61.7%	51.4	51.7	0.3	0.7%
63.0%	51.4	51.7	0.3	0.6%
64.2%	51.3	51.7	0.4	0.7%
65.4%	51.3	51.6	0.3	0.6%
66.7%	51.3	51.6	0.3	0.6%
67.9%	51.3	51.5	0.3	0.5%
69.1%	51.2	51.5	0.2	0.5%
70.4%	51.2	51.4	0.2	0.4%
71.6%	51.2	51.4	0.2	0.5%
72.8%	51.1	51.4	0.2	0.5%
74.1%	51.1	51.4	0.2	0.5%
75.3%	51.1	51.3	0.3	0.5%
76.5%	51.1	51.2	0.1	0.3%
77.8%	51.0	51.2	0.1	0.3%
79.0%	50.9	51.2	0.2	0.5%
80.2%	50.8	51.1	0.3	0.5%
81.5%	50.8	51.0	0.3	0.5%
82.7%	50.8	51.0	0.2	0.4%
84.0%	50.8	51.0	0.2	0.4%
85.2%	50.8	50.9	0.2	0.3%
86.4%	50.7	50.9	0.2	0.3%
87.7%	50.7	50.9	0.1	0.3%
88.9%	50.6	50.7	0.1	0.2%
90.1%	50.5	50.7	0.2	0.3%
91.4%	50.5	50.7	0.2	0.4%
92.6%	50.4	50.6	0.2	0.4%
93.8%	50.3	50.4	0.1	0.2%
95.1%	50.3	50.4	0.1	0.2%
96.3%	50.3	50.3	0.0	0.0%
97.5%	50.1	50.2	0.1	0.2%
98.8%	50.1	50.1	-0.1	-0.1%
100.0%	49.9	49.9	0.0	0.1%

July to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.8	59.9	-1.9	-3.1%
1.2%	57.8	55.4	-2.5	-4.2%
2.5%	56.6	55.2	-1.5	-2.6%
3.7%	55.3	54.6	-0.6	-1.1%
4.9%	55.0	54.5	-0.4	-0.8%
6.2%	54.6	54.5	-0.1	-0.2%
7.4%	54.4	54.5	0.1	0.1%
8.6%	54.4	54.4	0.1	0.1%
9.9%	54.3	54.4	0.1	0.1%
11.1%	54.3	54.4	0.1	0.1%
12.3%	54.3	54.3	0.0	0.0%
13.6%	54.3	54.2	-0.1	-0.2%
14.8%	54.2	54.1	-0.1	-0.2%
16.0%	54.1	54.1	-0.1	-0.1%
17.3%	54.1	54.0	-0.1	-0.2%
18.5%	54.0	53.9	-0.1	-0.2%
19.8%	53.9	53.8	-0.1	-0.2%
21.0%	53.8	53.7	-0.1	-0.2%
22.2%	53.7	53.7	0.0	0.0%
23.5%	53.6	53.7	0.1	0.1%
24.7%	53.6	53.7	0.1	0.2%
25.9%	53.6	53.6	0.1	0.2%
27.2%	53.5	53.4	-0.1	-0.2%
28.4%	53.5	53.3	-0.2	-0.4%
29.6%	53.4	53.3	-0.2	-0.3%
30.9%	53.4	53.3	-0.1	-0.2%
32.1%	53.3	53.3	-0.1	-0.1%
33.3%	53.2	53.2	0.0	0.1%
34.6%	53.1	53.2	0.1	0.1%
35.8%	53.0	53.2	0.1	0.2%
37.0%	53.0	53.1	0.1	0.2%
38.3%	52.8	52.9	0.1	0.2%
39.5%	52.8	52.9	0.0	0.1%
40.7%	52.8	52.8	0.0	0.1%
42.0%	52.7	52.8	0.1	0.2%
43.2%	52.6	52.8	0.2	0.3%
44.4%	52.5	52.7	0.2	0.5%
45.7%	52.4	52.7	0.3	0.5%
46.9%	52.4	52.7	0.3	0.6%
48.1%	52.4	52.6	0.3	0.5%
49.4%	52.3	52.5	0.2	0.4%
50.6%	52.3	52.5	0.2	0.4%
51.9%	52.3	52.5	0.2	0.4%
53.1%	52.3	52.4	0.2	0.3%
54.3%	52.2	52.4	0.1	0.2%
55.6%	52.2	52.3	0.2	0.4%
56.8%	52.1	52.3	0.2	0.4%
58.0%	52.1	52.3	0.2	0.4%
59.3%	51.9	52.2	0.3	0.5%
60.5%	51.9	52.2	0.2	0.5%
61.7%	51.8	52.1	0.3	0.6%
63.0%	51.8	52.1	0.3	0.6%
64.2%	51.8	52.1	0.3	0.6%
65.4%	51.7	52.1	0.4	0.7%
66.7%	51.7	52.1	0.3	0.7%
67.9%	51.7	52.0	0.4	0.7%
69.1%	51.7	52.0	0.3	0.6%
70.4%	51.7	51.9	0.3	0.5%
71.6%	51.6	51.9	0.3	0.5%
72.8%	51.6	51.9	0.3	0.5%
74.1%	51.6	51.8	0.2	0.4%
75.3%	51.6	51.8	0.2	0.4%
76.5%	51.5	51.7	0.2	0.3%
77.8%	51.5	51.6	0.1	0.1%
79.0%	51.5	51.6	0.1	0.2%
80.2%	51.4	51.5	0.1	0.3%
81.5%	51.4	51.5	0.1	0.3%
82.7%	51.3	51.5	0.2	0.3%
84.0%	51.3	51.5	0.2	0.4%
85.2%	51.2	51.4	0.2	0.5%
86.4%	51.1	51.2	0.1	0.2%
87.7%	51.1	51.1	0.0	0.1%
88.9%	51.1	51.1	0.0	0.1%
90.1%	51.1	51.1	0.0	0.0%
91.4%	50.9	51.0	0.1	0.1%
92.6%	50.9	51.0	0.1	0.2%
93.8%	50.8	50.9	0.1	0.2%
95.1%	50.7	50.7	0.0	0.0%
96.3%	50.7	50.5	-0.2	-0.4%
97.5%	50.5	50.4	-0.1	-0.1%
98.8%	50.5	50.3	-0.1	-0.2%
100.0%	50.4	50.2	-0.2	-0.4%

August to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.5	62.3	-2.2	-3.4%
1.2%	59.8	56.2	-3.6	-6.1%
2.5%	57.8	55.6	-2.2	-3.7%
3.7%	55.8	55.2	-0.6	-1.2%
4.9%	55.5	54.8	-0.7	-1.3%
6.2%	55.0	54.8	-0.2	-0.3%
7.4%	54.9	54.8	-0.1	-0.3%
8.6%	54.7	54.5	-0.1	-0.3%
9.9%	54.4	54.4	0.0	-0.1%
11.1%	54.3	54.3	0.0	0.0%
12.3%	54.3	54.3	0.0	0.0%
13.6%	54.1	54.3	0.1	0.2%
14.8%	54.1	54.0	0.0	-0.1%
16.0%	54.1	54.0	-0.1	-0.1%
17.3%	54.1	53.9	-0.1	-0.2%
18.5%	54.0	53.9	-0.1	-0.2%
19.8%	54.0	53.8	-0.1	-0.3%
21.0%	54.0	53.8	-0.2	-0.3%
22.2%	53.9	53.8	-0.2	-0.3%
23.5%	53.9	53.7	-0.2	-0.3%
24.7%	53.9	53.7	-0.1	-0.2%
25.9%	53.8	53.7	-0.1	-0.2%
27.2%	53.8	53.7	-0.1	-0.2%
28.4%	53.8	53.7	-0.1	-0.2%
29.6%	53.8	53.7	-0.1	-0.2%
30.9%	53.6	53.7	0.1	0.1%
32.1%	53.6	53.6	0.1	0.1%
33.3%	53.6	53.6	0.0	0.0%
34.6%	53.4	53.5	0.1	0.1%
35.8%	53.4	53.5	0.1	0.2%
37.0%	53.4	53.4	0.0	0.1%
38.3%	53.2	53.3	0.1	0.2%
39.5%	53.1	53.2	0.1	0.2%
40.7%	53.1	53.2	0.1	0.1%
42.0%	53.0	53.1	0.2	0.3%
43.2%	53.0	53.0	0.0	0.0%
44.4%	52.9	52.9	0.0	0.0%
45.7%	52.9	52.9	0.0	0.0%
46.9%	52.9	52.9	0.0	0.0%
48.1%	52.7	52.8	0.1	0.2%
49.4%	52.7	52.8	0.1	0.2%
50.6%	52.7	52.8	0.1	0.2%
51.9%	52.5	52.8	0.3	0.5%
53.1%	52.5	52.8	0.3	0.5%
54.3%	52.4	52.7	0.3	0.6%
55.6%	52.4	52.7	0.3	0.6%
56.8%	52.4	52.7	0.3	0.6%
58.0%	52.3	52.6	0.3	0.5%
59.3%	52.3	52.6	0.3	0.5%
60.5%	52.3	52.6	0.3	0.6%
61.7%	52.3	52.6	0.3	0.6%
63.0%	52.2	52.5	0.3	0.6%
64.2%	52.2	52.5	0.3	0.6%
65.4%	52.2	52.4	0.3	0.5%
66.7%	52.1	52.4	0.3	0.6%
67.9%	52.1	52.3	0.2	0.3%
69.1%	52.1	52.1	0.1	0.1%
70.4%	52.0	52.0	0.0	0.0%
71.6%	52.0	52.0	0.0	0.0%
72.8%	52.0	52.0	0.0	0.0%
74.1%	51.9	52.0	0.1	0.1%
75.3%	51.9	51.9	0.0	0.1%
76.5%	51.8	51.9	0.1	0.1%
77.8%	51.8	51.9	0.0	0.1%
79.0%	51.5	51.8	0.3	0.6%
80.2%	51.5	51.8	0.3	0.6%
81.5%	51.5	51.8	0.3	0.7%
82.7%	51.4	51.6	0.2	0.4%
84.0%	51.4	51.6	0.1	0.3%
85.2%	51.4	51.3	-0.1	-0.2%
86.4%	51.3	51.2	-0.1	-0.1%
87.7%	51.3	51.2	0.0	-0.1%
88.9%	51.2	51.2	0.0	-0.1%
90.1%	51.2	51.2	0.0	-0.1%
91.4%	51.2	51.1	0.0	-0.1%
92.6%	51.1	51.0	-0.1	-0.2%
93.8%	50.9	50.9	0.0	-0.1%
95.1%	50.9	50.8	-0.1	-0.3%
96.3%	50.8	50.7	-0.1	-0.2%
97.5%	50.5	50.4	-0.2	-0.3%
98.8%	50.5	50.3	-0.2	-0.3%
100.0%	50.3	49.9	-0.5	-1.0%

Figure SQ3-1b
Sacramento River at Bonnyview Bridge, Monthly Temperature
Probability of Exceedance

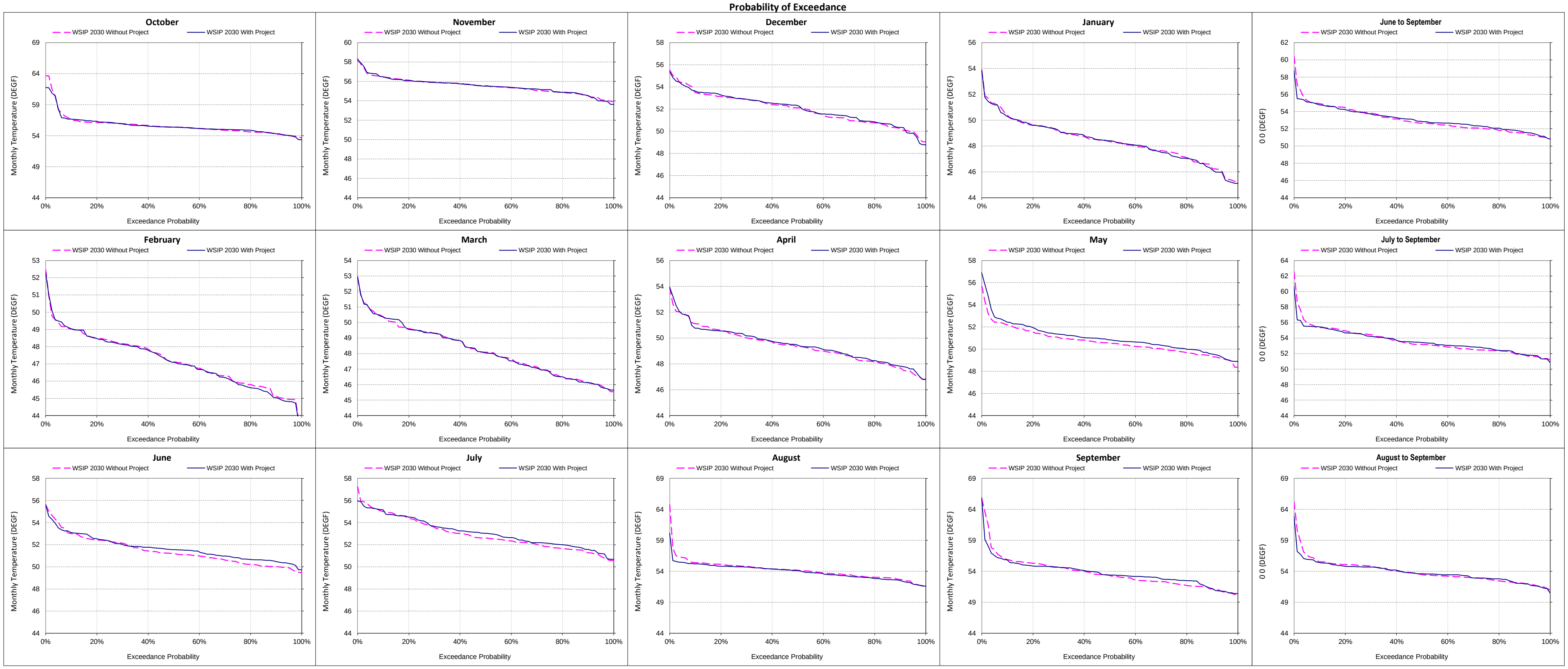


Table SQ3-1b
Sacramento River at Bonnyview Bridge, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.7	61.8	-1.9	-3.0%
1.2%	63.6	61.7	-1.9	-3.0%
2.5%	61.5	60.9	-0.6	-1.0%
3.7%	60.4	60.4	0.0	0.0%
4.9%	58.2	58.3	0.1	0.1%
6.2%	57.7	56.9	-0.8	-1.3%
7.4%	57.2	56.8	-0.4	-0.6%
8.6%	56.9	56.7	-0.2	-0.4%
9.9%	56.6	56.7	0.1	0.1%
11.1%	56.5	56.6	0.2	0.3%
12.3%	56.4	56.6	0.2	0.3%
13.6%	56.2	56.5	0.3	0.5%
14.8%	56.2	56.5	0.2	0.4%
16.0%	56.2	56.4	0.3	0.5%
17.3%	56.2	56.4	0.3	0.5%
18.5%	56.1	56.3	0.2	0.4%
19.8%	56.1	56.3	0.2	0.3%
21.0%	56.1	56.2	0.1	0.1%
22.2%	56.1	56.2	0.1	0.1%
23.5%	56.1	56.2	0.1	0.2%
24.7%	56.1	56.2	0.1	0.2%
25.9%	56.1	56.1	0.0	0.1%
27.2%	56.0	56.0	0.1	0.1%
28.4%	56.0	56.0	0.0	0.0%
29.6%	55.9	56.0	0.0	0.0%
30.9%	55.9	55.8	-0.1	-0.2%
32.1%	55.9	55.8	-0.1	-0.2%
33.3%	55.8	55.7	-0.1	-0.3%
34.6%	55.8	55.7	-0.2	-0.3%
35.8%	55.8	55.7	-0.1	-0.3%
37.0%	55.7	55.6	0.0	-0.1%
38.3%	55.7	55.6	0.0	-0.1%
39.5%	55.7	55.5	-0.1	-0.2%
40.7%	55.6	55.5	-0.1	-0.2%
42.0%	55.5	55.5	0.0	-0.1%
43.2%	55.5	55.4	-0.1	-0.1%
44.4%	55.5	55.4	-0.1	-0.1%
45.7%	55.5	55.4	0.0	-0.1%
46.9%	55.4	55.4	0.0	0.0%
48.1%	55.4	55.4	0.0	0.0%
49.4%	55.4	55.4	0.0	0.0%
50.6%	55.4	55.4	0.0	0.0%
51.9%	55.4	55.4	0.0	0.0%
53.1%	55.4	55.3	0.0	0.0%
54.3%	55.3	55.3	0.0	-0.1%
55.6%	55.3	55.3	0.0	0.0%
56.8%	55.3	55.2	-0.1	-0.1%
58.0%	55.2	55.2	0.0	0.0%
59.3%	55.2	55.2	0.0	0.0%
60.5%	55.2	55.2	0.0	0.0%
61.7%	55.1	55.1	0.0	-0.1%
63.0%	55.1	55.1	0.0	0.0%
64.2%	55.1	55.1	0.0	0.1%
65.4%	55.0	55.1	0.1	0.1%
66.7%	55.0	55.1	0.1	0.1%
67.9%	54.9	55.1	0.1	0.2%
69.1%	54.9	55.0	0.1	0.2%
70.4%	54.9	55.0	0.1	0.2%
71.6%	54.8	55.0	0.1	0.3%
72.8%	54.8	55.0	0.2	0.3%
74.1%	54.8	55.0	0.2	0.3%
75.3%	54.8	55.0	0.2	0.3%
76.5%	54.8	54.9	0.2	0.3%
77.8%	54.7	54.9	0.2	0.4%
79.0%	54.6	54.9	0.3	0.5%
80.2%	54.6	54.9	0.3	0.5%
81.5%	54.6	54.8	0.2	0.4%
82.7%	54.6	54.7	0.1	0.1%
84.0%	54.6	54.6	0.1	0.1%
85.2%	54.5	54.6	0.1	0.2%
86.4%	54.5	54.5	0.0	-0.1%
87.7%	54.5	54.4	-0.1	-0.1%
88.9%	54.3	54.4	0.1	0.1%
90.1%	54.2	54.3	0.1	0.1%
91.4%	54.2	54.3	0.1	0.2%
92.6%	54.2	54.2	0.0	0.0%
93.8%	54.1	54.1	0.0	-0.1%
95.1%	54.0	54.1	0.1	0.1%
96.3%	54.0	53.9	-0.1	-0.2%
97.5%	53.9	53.8	-0.2	-0.3%
98.8%	53.7	53.4	-0.3	-0.6%
100.0%	53.7	53.4	0.0	-0.6%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.4	58.2	-0.2	-0.3%
1.2%	57.8	57.9	0.1	0.2%
2.5%	57.4	57.5	0.1	0.2%
3.7%	56.8	56.9	0.1	0.1%
4.9%	56.7	56.9	0.2	0.3%
6.2%	56.6	56.8	0.2	0.4%
7.4%	56.6	56.8	0.2	0.4%
8.6%	56.6	56.5	0.0	-0.1%
9.9%	56.5	56.5	0.0	0.0%
11.1%	56.4	56.4	0.0	-0.1%
12.3%	56.4	56.3	-0.1	-0.1%
13.6%	56.3	56.2	0.0	-0.1%
14.8%	56.3	56.2	-0.1	-0.1%
16.0%	56.2	56.2	0.0	-0.1%
17.3%	56.2	56.2	0.0	-0.1%
18.5%	56.2	56.1	-0.1	-0.2%
19.8%	56.1	56.1	-0.1	-0.1%
21.0%	56.1	56.1	0.0	-0.1%
22.2%	56.0	56.0	0.0	0.0%
23.5%	56.0	56.0	0.0	0.0%
24.7%	56.0	56.0	0.0	0.0%
25.9%	55.9	56.0	0.0	0.1%
27.2%	55.9	56.0	0.0	0.0%
28.4%	55.9	55.9	0.0	0.0%
29.6%	55.9	55.9	0.0	0.0%
30.9%	55.9	55.9	0.0	-0.1%
32.1%	55.9	55.9	0.0	0.0%
33.3%	55.8	55.8	0.0	0.0%
34.6%	55.8	55.8	0.0	0.0%
35.8%	55.8	55.8	0.0	0.0%
37.0%	55.8	55.8	0.0	0.0%
38.3%	55.8	55.8	0.0	0.0%
39.5%	55.8	55.7	-0.1	-0.1%
40.7%	55.8	55.7	0.0	-0.1%
42.0%	55.7	55.7	0.0	0.0%
43.2%	55.7	55.7	0.0	-0.1%
44.4%	55.7	55.6	0.0	0.0%
45.7%	55.6	55.6	0.0	0.0%
46.9%	55.6	55.6	0.0	0.0%
48.1%	55.6	55.5	0.0	-0.1%
49.4%	55.6	55.5	0.0	-0.1%
50.6%	55.5	55.5	0.0	-0.1%
51.9%	55.5	55.5	0.0	0.0%
53.1%	55.5	55.5	0.0	0.0%
54.3%	55.5	55.5	0.0	0.0%
55.6%	55.4	55.4	0.0	0.0%
56.8%	55.4	55.4	0.0	0.0%
58.0%	55.4	55.4	0.1	0.1%
59.3%	55.4	55.4	0.0	0.1%
60.5%	55.3	55.4	0.0	0.1%
61.7%	55.3	55.3	0.0	0.0%
63.0%	55.3	55.3	0.0	0.0%
64.2%	55.3	55.3	0.0	0.0%
65.4%	55.2	55.3	0.1	0.1%
66.7%	55.2	55.2	0.0	0.1%
67.9%	55.2	55.2	0.1	0.1%
69.1%	55.1	55.2	0.1	0.3%
70.4%	55.0	55.2	0.2	0.3%
71.6%	55.0	55.2	0.1	0.2%
72.8%	55.0	55.2	0.1	0.2%
74.1%	55.0	55.1	0.2	0.3%
75.3%	55.0	55.1	0.2	0.3%
76.5%	54.9	54.9	0.0	0.0%
77.8%	54.9	54.9	0.0	0.0%
79.0%	54.9	54.9	0.0	0.0%
80.2%	54.9	54.9	0.0	-0.1%
81.5%	54.8	54.9	0.1	0.1%
82.7%	54.8	54.8	0.0	0.1%
84.0%	54.8	54.8	0.1	0.1%
85.2%	54.8	54.8	0.1	0.1%
86.4%	54.7	54.7	0.0	0.1%
87.7%	54.7	54.6	-0.1	-0.1%
88.9%	54.6	54.6	0.0	0.0%
90.1%	54.5	54.5	0.0	0.0%
91.4%	54.4	54.3	-0.1	-0.1%
92.6%	54.4	54.3	-0.1	-0.1%
93.8%	54.3	54.0	-0.3	-0.6%
95.1%	54.1	54.0	-0.1	-0.2%
96.3%	54.1	54.0	-0.1	-0.2%
97.5%	54.0	53.9	-0.1	-0.2%
98.8%	53.9	53.6	-0.3	-0.6%
100.0%	53.9	53.6	-0.3	-0.6%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.5	55.4	-0.2	-0.3%
1.2%	55.0	54.9	-0.2	-0.3%
2.5%	54.9	54.5	-0.4	-0.8%
3.7%	54.5	54.4	0.0	0.0%
4.9%	54.4	54.2	-0.2	-0.3%
6.2%	54.4	54.1	-0.3	-0.5%
7.4%	54.2	53.9	-0.2	-0.4%
8.6%	54.0	53.7	-0.3	-0.6%
9.9%	53.5	53.6	0.1	0.3%
11.1%	53.4	53.5	0.1	0.2%
12.3%	53.4	53.5	0.1	0.3%
13.6%	53.3	53.5	0.1	0.3%
14.8%	53.3	53.5	0.2	0.3%
16.0%	53.3	53.5	0.2	0.3%
17.3%	53.3	53.4	0.2	0.3%
18.5%	53.2	53.4	0.2	0.5%
19.8%	53.1	53.3	0.2	0.3%
21.0%	53.1	53.2	0.1	0.2%
22.2%	53.0	53.2	0.1	0.2%
23.5%	53.0	53.1	0.1	0.2%
24.7%	53.0	53.1	0.1	0.1%
25.9%	53.0	53.0	0.0	0.0%
27.2%	53.0	53.0	0.0	0.0%
28.4%	52.9	52.9	0.0	0.0%
29.6%	52.9	52.9	0.0	0.0%
30.9%	52.8	52.9	0.1	0.1%
32.1%	52.8	52.8	0.0	-0.1%
33.3%	52.8	52.8	0.0	0.0%
34.6%	52.8	52.8	0.0	0.0%
35.8%	52.7	52.7	0.0	0.1%
37.0%	52.6	52.6	0.0	0.0%
38.3%	52.5	52.6	0.1	0.2%
39.5%	52.4	52.5	0.1	0.3%
40.7%	52.4	52.5	0.1	0.2%
42.0%	52.4	52.5	0.1	0.3%
43.2%	52.4	52.5	0.1	0.2%
44.4%	52.3	52.4	0.1	0.2%
45.7%	52.3	52.4	0.1	0.2%
46.9%	52.1	52.4	0.2	0.5%
48.1%	52.1	52.4	0.2	0.4%
49.4%	52.1	52.4	0.2	0.5%
50.6%	52.1	52.3	0.1	0.3%
51.9%	52.1	52.0	-0.1	-0.2%
53.1%	52.0	51.9	-0.1	-0.2%
54.3%	52.0	51.8	-0.2	-0.3%
55.6%	51.7	51.8	0.1	0.2%
56.8%	51.6	51.7	0.1	0.2%
58.0%	51.6	51.6	0.0	-0.1%
59.3%	51.5	51.6	0.0	0.0%
60.5%	51.4	51.6	0.2	0.3%
61.7%	51.3	51.5	0.2	0.5%
63.0%	51.3	51.5	0.3	0.5%
64.2%	51.2	51.5	0.2	0.5%
65.4%	51.2	51.5	0.2	0.4%
66.7%	51.2	51.4	0.2	0.4%
67.9%	51.2	51.4	0.2	0.4%
69.1%	51.1	51.4	0.3	0.6%
70.4%	51.0	51.3	0.3	0.6%
71.6%	51.0	51.2	0.3	0.6%
72.8%	50.9	51.2	0.3	0.6%
74.1%	50.9	51.0	0.1	0.2%
75.3%	50.9	50.9	0.1	0.1%
76.5%	50.8	50.9	0.1	0.2%
77.8%	50.8	50.9	0.1	0.2%
79.0%	50.8	50.9	0.1	0.2%
80.2%	50.8	50.8	0.1	0.1%
81.5%	50.7	50.8	0.0	0.0%
82.7%	50.6	50.7	0.1	0.2%
84.0%	50.6	50.7	0.1	0.2%
85.2%	50.4	50.7	0.2	0.4%
86.4%	50.4	50.6	0.3	0.5%
87.7%	50.3	50.4	0.1	0.2%
88.9%	50.3	50.3	0.0	0.1%
90.1%	50.2	50.3	0.1	0.3%
91.4%	50.1	50.3	0.3	0.5%
92.6%	50.1	49.9	-0.2	-0.4%
93.8%	50.0	49.8	-0.2	-0.3%
95.1%	50.0	49.8	-0.2	-0.3%
96.3%	49.7	49.5	-0.2	-0.3%
97.5%	49.3	48.9	-0.4	-0.8%
98.8%	49.0	48.8	-0.3	-0.6%
100.0%	49.0	48.8	-0.3	-0.6%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.9	53.9	0.0	0.0%
1.2%	51.9	51.8	-0.1	-0.2%
2.5%	51.7	51.5	-0.2	-0.5%
3.7%	51.3	51.3	0.0	-0.1%
4.9%	51.3	51.2	-0.1	-0.2%
6.2%	51.1	51.2	0.0	0.1%
7.4%	51.0	50.6	-0.4	-0.8%
8.6%	50.7	50.5	-0.2	-0.4%
9.9%	50.4	50.3	-0.1	-0.3%
11.1%	50.1	50.2	0.0	0.1%
12.3%	50.1	50.1	0.0	0.0%
13.6%	50.0	50.0	0.1	0.1%
14.8%	49.9	50.0	0.1	0.2%
16.0%	49.8	49.8	0.1	0.1%
17.3%	49.8	49.8	0.1	0.1%
18.5%	49.8	49.7	-0.1	-0.2%
19.8%	49.6	49.6	0.0	0.0%
21.0%	49.6	49.6	0.0	0.0%
22.2%	49.6	49.6	0.0	0.0%
23.5%	49.6	49.5	0.0	-0.1%
24.7%	49.5	49.5	0.0	0.0%
25.9%	49.4	49.4	0.0	-0.1%
27.2%	49.4	49.4	0.0	-0.1%
28.4%	49.3	49.4	0.1	0.1%
29.6%	49.2	49.3	0.1	0.2%
30.9%	49.1	49.0	0.0	0.0%
32.1%	49.1	49.0	0.0	-0.1%
33.3%	48.9	49.0	0.1	0.1%
34.6%	48.9	49.0	0.1	0.1%
35.8%	48.9	49.0	0.1	0.2%
37.0%	48.8	48.9	0.1	0.2%
38.3%	48.8	48.9	0.1	0.3%
39.5%	48.8	48.9	0.1	0.2%
40.7%	48.7	48.7	0.0	0.1%
42.0%	48.5	48.7	0.2	0.3%
43.2%	48.5	48.6	0.1	0.2%
44.4%	48.5	48.5	0.0	0.0%
45.7%	48.5	48.5	0.0	0.0%
46.9%	48.5	48.5	0.0	0.0%
48.1%	48.5	48.4	0.0	-0.1%
49.4%	48.4	48.4	0.0	0.1%
50.6%	48.3	48.4	0.1	0.2%
51.9%	48.3	48.3	0.0	0.1%
53.1%	48.3	48.2	0.0	-0.1%
54.3%	48.2	48.2	0.0	0.0%
55.6%	48.1	48.2	0.1	0.1%
56.8%	48.1	48.2	0.1	0.1%
58.0%	48.1	48.1	0.0	0.1%
59.3%	48.0	48.1	0.1	0.2%
60.5%	47.9	48.1	0.1	0.3%
61.7%	47.9	48.0	0.1	0.2%
63.0%	47.9	48.0	0.1	0.2%
64.2%	47.9	48.0	0.1	0.1%
65.4%	47.7	47.8	0.1	0.1%
66.7%	47.7	47.7	0.0	-0.1%
67.9%	47.7	47.6	0.0	-0.1%
69.1%	47.7	47.6	-0.1	-0.2%
70.4%	47.6	47.5	-0.1	-0.3%
71.6%	47.6	47.5	-0.1	-0.3%
72.8%	47.5	47.5	-0.1	-0.1%
74.1%	47.5	47.2	-0.3	-0.6%
75.3%	47.5	47.2	-0.3	-0.6%
76.5%	47.4	47.1	-0.3	-0.6%
77.8%	47.2	47.1	-0.1	-0.3%
79.0%	47.2	47.1	-0.1	-0.2%
80.2%	47.1	47.0	0.0	-0.1%
81.5%	47.0	47.0	-0.1	-0.1%
82.7%	46.8	46.9	0.2	0.3%
84.0%	46.8	46.9	0.1	0.3%
85.2%	46.7	46.6	-0.1	-0.2%
86.4%	46.7	46.6	0.0	-0.1%
87.7%	46.6	46.4	-0.2	-0.4%
88.9%	46.6	46.3	-0.3	-0.6%
90.1%	46.2	46.1	-0.1	-0.2%
91.4%	46.2	46.0	-0.2	-0.5%
92.6%	46.2	46.0	-0.2	-0.4%
93.8%	46.0	46.0	-0.1	-0.2%
95.1%	45.5	45.4	-0.1	-0.2%
96.3%	45.4	45.3	-0.2	-0.4%
97.5%	45.4	45.2	-0.2	-0.4%
98.8%	45.3	45.1	-0.2	-0.3%
100.0%	45.3	45.1	-0.2	-0.3%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.5	52.3	-0.2	-0.3%
1.2%	50.9	51.0	0.1	0.2%
2.5%	49.8	50.1	0.3	0.7%
3.7%	49.6	49.5	0.0	-0.1%
4.9%	49.4	49.5	0.1	0.2%
6.2%	49.2	49.4	0.3	0.5%
7.4%	49.2	49.2	0.1	0.1%
8.6%	49.1	49.1	0.1	0.1%
9.9%	49.0	49.0	0.0	0.0%
11.1%	49.0	49.0	0.0	0.0%
12.3%	49.0	49.0	0.0	0.0%
13.6%	49.0	49.0	0.0	0.0%
14.8%	48.7	49.0	0.2	0.4%
16.0%	48.7	48.6	-0.1	-0.1%
17.3%	48.6	48.6	0.0	0.0%
18.5%	48.5	48.5	0.0	0.1%
19.8%	48.5	48.5	0.0	0.0%
21.0%	48.5	48.4	-0.1	-0.1%
22.2%	48.5	48.4	0.0	-0.1%
23.5%	48.4	48.3	-0.1	-0.2%
24.7%	48.4	48.3	-0.1	-0.3%
25.9%	48.3	48.3	0.0	-0.1%
27.2%	48.3	48.2	0.0	-0.1%
28.4%	48.2	48.2	-0.1	-0.1%
29.6%	48.2	48.1	0.0	-0.1%
30.9%	48.2	48.1	-0.1	-0.1%
32.1%	48.1	48.1	0.0	-0.1%
33.3%	48.1	48.0	0.0	-0.1%
34.6%	48.1	48.0	0.0	-0.1%
35.8%	48.0	48.0	0.0	-0.1%
37.0%	48.0	47.9	-0.1	-0.2%
38.3%	48.0	47.9	-0.1	-0.2%
39.5%	47.9	47.8	-0.1	-0.2%
40.7%	47.8	47.7	0.0	-0.1%
42.0%	47.6	47.7	0.0	0.1%
43.2%	47.6	47.6	0.0	-0.1%
44.4%	47.6	47.5	-0.1	-0.2%
45.7%	47.5	47.4	-0.1	-0.2%
46.9%	47.3	47.2	0.0	0.0%
48.1%	47.2	47.2	0.0	0.0%
49.4%	47.1	47.1	0.0	-0.1%
50.6%	47.1	47.1	0.0	-0.1%
51.9%	47.1	47.0	-0.1	-0.2%
53.1%	47.1	47.0	-0.1	-0.2%
54.3%	47.0	47.0	0.0	-0.1%
55.6%	46.9	46.9	0.0	0.0%
56.8%	46.9	46.9	0.0	0.0%
58.0%	46.8	46.9	0.1	0.2%
59.3%	46.8	46.7	-0.1	-0.2%
60.5%	46.7	46.7	-0.1	-0.1%
61.7%	46.6	46.6	0.1	0.1%
63.0%	46.6	46.5	-0.1	-0.1%
64.2%	46.5	46.5	0.0	0.0%
65.4%	46.4	46.5	0.1	0.1%
66.7%	46.3	46.4	0.1	0.2%
67.9%	46.3	46.2	-0.1	-0.2%
69.1%	46.3	46.2	-0.1	-0.2%
70.4%	46.3	46.2	-0.1	-0.2%
71.6%	46.3	46.1	-0.2	-0.4%
72.8%	46.0	46.0	0.0	-0.1%
74.1%	46.0	45.9	0.0	-0.1%
75.3%	45.9	45.8	-0.1	-0.2%
76.5%	45.9	45.8	-0.1	-0.2%
77.8%	45.9	45.7	-0.2	-0.4%
79.0%	45.8	45.7	-0.1	-0.3%
80.2%	45.8	45.6	-0.2	-0.4%
81.5%	45.7	45.6	-0.1	-0.3%
82.7%	45.7	45.6	-0.1	-0.3%
84.0%	45.7	45.5	-0.2	-0.4%
85.2%	45.7	45.4	-0.2	-0.5%
86.4%	45.6	45.4	-0.2	-0.4%
87.7%	45.6	45.2	-0.3	-0.7%
88.9%	45.1	45.1	-0.1	-0.1%
90.1%	45.1	45.0	-0.1	-0.2%
91.4%	45.0	45.0	-0.1	-0.1%
92.6%	45.0	44.9	-0.1	-0.3%
93.8%	45.0	44.8	-0.1	-0.3%
95.1%	44.9	44.8	-0.1	-0.3%
96.3%	44.9	44.8	-0.1	-0.3%
97.5%	44.9	44.7	-0.2	-0.5%
98.8%	43.8	43.7	-0.1	-0.2%
100.0%	43.8	43.7	-0.1	-0.2%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.9	52.9	0.1	0.1%
1.2%	51.8	51.8	0.0	0.1%
2.5%	51.3	51.2	-0.1	-0.2%
3.7%	51.1	51.2	0.0	0.0%
4.9%	50.9	50.8	0.0	-0.1%
6.2%	50.7	50.6	-0.2	-0.3%
7.4%	50.5	50.5	0.0	0.0%
8.6%	50.5	50.4	-0.1	-0.1%
9.9%	50.4	50.4	0.0	-0.1%
11.1%	50.2	50.3	0.1	0.1%
12.3%	50.1	50.3	0.2	0.3%
13.6%	50.0	50.2	0.2	0.3%
14.8%	50.0	50.2	0.2	0.3%
16.0%	49.7	50.2	0.5	0.9%
17.3%	49.7	50.0	0.3	0.6%
18.5%	49.7	49.7	0.0	0.1%
19.8%	49.6	49.6	0.0	-0.1%
21.0%	49.6	49.5	0.0	-0.1%
22.2%	49.5	49.5	0.0	0.0%
23.5%	49.5	49.5	0.0	0.1%
24.7%	49.4	49.5	0.0	0.1%
25.9%	49.4	49.4	0.0	-0.1%
27.2%	49.4	49.3	-0.1	-0.1%
28.4%	49.4	49.3	0.0	-0.1%
29.6%	49.3	49.3	0.0	0.0%
30.9%	49.3	49.3	0.0	-0.1%
32.1%	49.3	49.3	0.0	0.0%
33.3%	49.1	49.0	-0.1	-0.2%
34.6%	49.0	49.0	0.0	-0.1%
35.8%	48.9	49.0	0.0	0.1%
37.0%	48.9	48.9	0.0	0.1%
38.3%	48.9	48.9	0.0	0.0%
39.5%	48.8	48.9	0.0	0.0%
40.7%	48.8	48.8	0.0	-0.1%
42.0%	48.4	48.4	0.0	0.0%
43.2%	48.4	48.4	0.0	0.1%
44.4%	48.3	48.4	0.1	0.1%
45.7%	48.3	48.3	0.0	0.0%
46.9%	48.1	48.1	0.0	0.0%
48.1%	48.1	48.1	0.0	0.0%
49.4%	48.1	48.1	0.0	-0.1%
50.6%	48.1	48.0	-0.1	-0.1%
51.9%	48.1	48.0	0.0	-0.1%
53.1%	48.0	48.0	0.0	-0.1%
54.3%	47.9	47.9	0.0	0.0%
55.6%	47.8	47.8	-0.1	-0.1%
56.8%	47.8	47.8	0.0	0.0%
58.0%	47.8	47.7	0.0	-0.1%
59.3%	47.7	47.5	-0.2	-0.3%
60.5%	47.6	47.5	-0.1	-0.2%
61.7%	47.4	47.5	0.0	0.1%
63.0%	47.4	47.3	-0.1	-0.2%
64.2%	47.4	47.3	-0.1	-0.1%
65.4%	47.3	47.2	-0.1	-0.2%
66.7%	47.2	47.2	0.0	0.1%
67.9%	47.2	47.1	-0.1	-0.1%
69.1%	47.2	47.1	-0.1	-0.2%
70.4%	47.1	47.0	-0.1	-0.1%
71.6%	46.9	46.9	0.0	0.0%
72.8%	46.9	46.9	0.0	0.0%
74.1%	46.9	46.9	0.0	0.1%
75.3%	46.8	46.7	-0.1	-0.2%
76.5%	46.6	46.6	-0.1	-0.1%
77.8%	46.6	46.5	-0.1	-0.2%
79.0%	46.5	46.5	0.0	0.0%
80.2%	46.5	46.5	0.0	0.0%
81.5%	46.4	46.4	0.0	0.0%
82.7%	46.4	46.4	0.0	0.0%
84.0%	46.4	46.3	0.0	-0.1%
85.2%	46.4	46.3	0.0	-0.1%
86.4%	46.3	46.2	-0.1	-0.3%
87.7%	46.2	46.2	-0.1	-0.2%
88.9%	46.2	46.1	0.0	-0.1%
90.1%	46.1	46.1	0.0	0.0%
91.4%	46.1	46.1	0.0	0.1%
92.6%	46.0	46.0	0.0	0.0%
93.8%	46.0	46.0	0.0	0.0%
95.1%	45.9	45.8	-0.1	-0.3%
96.3%	45.8	45.8	0.0	-0.1%
97.5%	45.7	45.7	0.0	0.0%
98.8%	45.5	45.6	0.1	0.2%
100.0%	45.5	45.6	0.1	0.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.9	53.9	0.0	0.0%
1.2%	52.6	53.3	0.6	1.2%
2.5%	52.1	52.5	0.4	0.9%
3.7%	52.0	52.1	0.0	0.1%
4.9%	52.0	51.9	-0.1	-0.2%
6.2%	51.8	51.8	0.0	0.0%
7.4%	51.7	51.7	0.1	0.1%
8.6%	51.2	51.0	-0.2	-0.4%
9.9%	51.1	50.8	-0.4	-0.7%
11.1%	51.1	50.8	-0.3	-0.7%
12.3%	50.9	50.7	-0.2	-0.5%
13.6%	50.9	50.7	-0.2	-0.4%
14.8%	50.9	50.6	-0.3	-0.5%
16.0%	50.7	50.6	-0.1	-0.1%
17.3%	50.7	50.6	-0.1	-0.2%
18.5%	50.7	50.6	-0.1	-0.2%
19.8%	50.6	50.6	-0.1	-0.1%
21.0%	50.6	50.5	0.0	-0.1%
22.2%	50.5	50.5	0.0	0.0%
23.5%	50.4	50.5	0.1	0.3%
24.7%	50.3	50.4	0.1	0.2%
25.9%	50.3	50.4	0.1	0.2%
27.2%	50.2	50.4	0.2	0.4%
28.4%	50.1	50.4	0.3	0.5%
29.6%	50.0	50.2	0.1	0.3%
30.9%	50.0	50.2	0.2	0.4%
32.1%	49.9	50.1	0.2	0.4%
33.3%	49.9	50.1	0.2	0.3%
34.6%	49.8	49.9	0.1	0.2%
35.8%	49.8	49.9	0.1	0.2%
37.0%	49.8	49.9	0.1	0.2%
38.3%	49.8	49.8	0.0	0.1%
39.5%	49.7	49.8	0.0	0.0%
40.7%	49.6	49.7	0.1	0.2%
42.0%	49.5	49.7	0.1	0.3%
43.2%	49.5	49.6	0.1	0.2%
44.4%	49.5	49.6	0.1	0.2%
45.7%	49.5	49.6	0.1	0.2%
46.9%	49.5	49.5	0.1	0.1%
48.1%	49.4	49.5	0.1	0.2%
49.4%	49.4	49.5	0.1	0.3%
50.6%	49.3	49.4	0.1	0.1%
51.9%	49.3	49.3	0.0	0.0%
53.1%	49.3	49.3	0.1	0.1%
54.3%	49.2	49.3	0.1	0.2%
55.6%	49.2	49.3	0.1	0.3%
56.8%	49.0	49.3	0.3	0.6%
58.0%	49.0	49.3	0.2	0.5%
59.3%	49.0	49.2	0.2	0.3%
60.5%	49.0	49.1	0.1	0.2%
61.7%	48.9	49.1	0.1	0.3%
63.0%	48.9	49.1	0.2	0.3%
64.2%	48.9	49.0	0.1	0.2%
65.4%	48.8	48.9	0.1	0.2%
66.7%	48.8	48.9	0.1	0.2%
67.9%	48.7	48.8	0.1	0.2%
69.1%	48.6	48.8	0.1	0.2%
70.4%	48.6	48.6	0.0	0.0%
71.6%	48.6	48.5	-0.1	-0.2%
72.8%	48.4	48.5	0.1	0.3%
74.1%	48.3	48.5	0.2	0.5%
75.3%	48.2	48.5	0.2	0.4%
76.5%	48.2	48.5	0.2	0.4%
77.8%	48.2	48.4	0.1	0.3%
79.0%	48.2	48.3	0.1	0.1%
80.2%	48.1	48.2	0.1	0.3%
81.5%	48.1	48.2	0.1	0.2%
82.7%	48.0	48.2	0.1	0.2%
84.0%	48.0	48.1	0.1	0.2%
85.2%	47.9	48.1	0.2	0.3%
86.4%	47.9	47.9	0.1	0.1%
87.7%	47.8	47.9	0.1	0.3%
88.9%	47.7	47.9	0.2	0.4%
90.1%	47.7	47.8	0.1	0.3%
91.4%	47.5	47.8	0.3	0.6%
92.6%	47.5	47.7	0.3	0.6%
93.8%	47.4	47.6	0.2	0.4%
95.1%	47.2	47.6	0.4	0.8%
96.3%	47.1	47.3	0.3	0.5%
97.5%	47.0	47.0	0.0	0.0%
98.8%	46.8	46.8	0.0	0.0%
100.0%	46.8	46.8	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.7	56.9	1.2	2.1%
1.2%	54.3	55.8	1.5	2.8%
2.5%	53.2	54.8	1.6	3.0%
3.7%	52.7	53.6	0.9	1.7%
4.9%	52.4	52.9	0.5	0.9%
6.2%	52.4	52.8	0.3	0.6%
7.4%	52.4	52.7	0.3	0.7%
8.6%	52.3	52.6	0.3	0.6%
9.9%	52.2	52.5	0.3	0.5%
11.1%	52.2	52.4	0.2	0.5%
12.3%	52.0	52.3	0.3	0.5%
13.6%	51.9	52.3	0.4	0.7%
14.8%	51.9	52.2	0.4	0.7%
16.0%	51.8	52.2	0.4	0.8%
17.3%	51.7	52.1	0.4	0.8%
18.5%	51.6	52.1	0.4	0.8%
19.8%	51.6	52.0	0.4	0.8%
21.0%	51.4	51.8	0.4	0.8%
22.2%	51.4	51.7	0.3	0.5%
23.5%	51.4	51.6	0.3	0.5%
24.7%	51.3	51.5	0.3	0.5%
25.9%	51.2	51.5	0.3	0.6%
27.2%	51.1	51.5	0.3	0.7%
28.4%	51.1	51.4	0.3	0.5%
29.6%	51.1	51.4	0.3	0.5%
30.9%	51.0	51.3	0.4	0.7%
32.1%	51.0	51.3	0.3	0.7%
33.3%	50.9	51.2	0.3	0.6%
34.6%	50.9	51.2	0.3	0.7%
35.8%	50.9	51.2	0.3	0.6%
37.0%	50.9	51.2	0.3	0.6%
38.3%	50.8	51.1	0.3	0.5%
39.5%	50.8	51.0	0.2	0.4%
40.7%	50.8	51.0	0.2	0.4%
42.0%	50.7	51.0	0.3	0.5%
43.2%	50.7	51.0	0.3	0.6%
44.4%	50.6	51.0	0.4	0.7%
45.7%	50.6	51.0	0.4	0.7%
46.9%	50.6	50.9	0.3	0.7%
48.1%	50.6	50.9	0.3	0.7%
49.4%	50.6	50.8	0.3	0.5%
50.6%	50.5	50.8	0.3	0.6%
51.9%	50.5	50.8	0.3	0.5%
53.1%	50.5	50.8	0.3	0.5%
54.3%	50.4	50.7	0.3	0.6%
55.6%	50.4	50.7	0.3	0.6%
56.8%	50.4	50.7	0.3	0.6%
58.0%	50.3	50.7	0.4	0.8%
59.3%	50.3	50.7	0.4	0.8%
60.5%	50.2	50.6	0.4	0.8%
61.7%	50.2	50.6	0.4	0.8%
63.0%	50.2	50.6	0.4	0.8%
64.2%	50.2	50.6	0.4	0.7%
65.4%	50.2	50.5	0.3	0.7%
66.7%	50.1	50.4	0.3	0.7%
67.9%	50.1	50.4	0.4	0.7%
69.1%	50.1	50.4	0.3	0.7%
70.4%	50.0	50.3	0.3	0.6%
71.6%	49.9	50.3	0.3	0.7%
72.8%	49.9	50.3	0.4	0.7%
74.1%	49.9	50.2	0.3	0.6%
75.3%	49.9	50.1	0.2	0.5%
76.5%	49.8	50.1	0.3	0.5%
77.8%	49.8	50.1	0.3	0.6%
79.0%	49.7	50.1	0.3	0.7%
80.2%	49.7	50.0	0.3	0.7%
81.5%	49.6	50.0	0.3	0.7%
82.7%	49.6	50.0	0.4	0.7%
84.0%	49.5	49.9	0.4	0.9%
85.2%	49.5	49.9	0.4	0.8%
86.4%	49.5	49.7	0.2	0.5%
87.7%	49.5	49.7	0.2	0.5%
88.9%	49.4	49.6	0.2	0.4%
90.1%	49.3	49.5	0.2	0.5%
91.4%	49.3	49.5	0.2	0.4%
92.6%	49.2	49.4	0.2	0.4%
93.8%	49.2	49.3	0.1	0.2%
95.1%	49.1	49.1	0.0	0.1%
96.3%	49.0	49.0	0.0	0.0%
97.5%	48.9	48.9	0.0	0.0%
98.8%	48.4	48.9	0.5	1.1%
100.0%	48.4	48.9	0.5	1.1%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.6	55.6	0.0	0.0%
1.2%	55.0	54.6	-0.4	-0.8%
2.5%	54.6	54.3	-0.4	-0.7%
3.7%	54.3	53.9	-0.4	-0.7%
4.9%	54.0	53.5	-0.5	-0.9%
6.2%	53.6	53.3	-0.2	-0.4%
7.4%	53.5	53.3	-0.3	-0.5%
8.6%	53.1	53.2	0.2	0.3%
9.9%	53.0	53.1	0.1	0.2%
11.1%	53.0	53.0	0.1	0.2%
12.3%	53.0	53.0	0.1	0.2%
13.6%	52.7	53.0	0.3	0.5%
14.8%	52.6	53.0	0.3	0.7%
16.0%	52.6	52.9	0.4	0.7%
17.3%	52.5	52.8	0.2	0.5%
18.5%	52.5	52.6	0.1	0.2%
19.8%	52.5	52.5	0.1	0.2%
21.0%	52.4	52.5	0.0	0.1%
22.2%	52.4	52.5	0.1	0.1%
23.5%	52.4	52.4	0.0	0.1%
24.7%	52.3	52.4	0.1	0.1%
25.9%	52.3	52.2	0.0	-0.1%
27.2%	52.2	52.1	-0.1	-0.2%
28.4%	52.2	52.1	-0.1	-0.2%
29.6%	52.2	52.1	-0.1	-0.2%
30.9%	52.1	51.9	-0.2	-0.3%
32.1%	51.9	51.9	0.0	-0.1%
33.3%	51.9	51.8	-0.1	-0.1%
34.6%	51.7	51.8	0.1	0.2%
35.8%	51.7	51.8	0.1	0.2%
37.0%	51.6	51.8	0.2	0.4%
38.3%	51.5	51.8	0.3	0.6%
39.5%	51.5	51.8	0.3	0.6%
40.7%	51.4	51.8	0.4	0.7%
42.0%	51.4	51.7	0.3	0.7%
43.2%	51.4	51.7	0.3	0.7%
44.4%	51.3	51.7	0.4	0.8%
45.7%	51.3	51.6	0.4	0.7%
46.9%	51.2	51.6	0.4	0.7%
48.1%	51.2	51.6	0.3	0.7%
49.4%	51.2	51.6	0.4	0.7%
50.6%	51.2	51.6	0.4	0.7%
51.9%	51.1	51.5	0.4	0.8%
53.1%	51.1	51.5	0.4	0.8%
54.3%	51.1	51.5	0.4	0.8%
55.6%	51.1	51.5	0.4	0.8%
56.8%	51.1	51.5	0.4	0.8%
58.0%	51.0	51.4	0.4	0.8%
59.3%	51.0	51.4	0.4	0.8%
60.5%	51.0	51.3	0.3	0.6%
61.7%	50.9	51.2	0.3	0.6%
63.0%	50.9	51.1	0.3	0.6%
64.2%	50.8	51.1	0.3	0.6%
65.4%	50.8	51.1	0.3	0.6%
66.7%	50.8	51.1	0.3	0.6%
67.9%	50.7	51.0	0.3	0.6%
69.1%	50.7	51.0	0.3	0.6%
70.4%	50.6	51.0	0.4	0.8%
71.6%	50.6	50.9	0.3	0.7%
72.8%	50.5	50.9	0.4	0.7%
74.1%	50.5	50.8	0.3	0.7%
75.3%	50.4	50.8	0.4	0.9%
76.5%	50.3	50.7	0.4	0.8%
77.8%	50.3	50.7	0.4	0.9%
79.0%	50.2	50.7	0.5	0.9%
80.2%	50.2	50.7	0.4	0.9%
81.5%	50.2	50.6	0.4	0.9%
82.7%	50.2	50.6	0.5	0.9%
84.0%	50.1	50.6	0.5	1.1%
85.2%	50.1	50.6	0.5	1.1%
86.4%	50.1	50.6	0.5	1.1%
87.7%	50.0	50.6	0.6	1.1%
88.9%	50.0	50.5	0.5	1.0%
90.1%	50.0	50.5	0.5	0.9%
91.4%	50.0	50.4	0.4	0.8%
92.6%	50.0	50.4	0.4	0.8%
93.8%	49.9	50.4	0.4	0.9%
95.1%	49.9	50.3	0.4	0.8%
96.3%	49.7	50.3	0.5	1.0%
97.5%	49.6	50.1	0.5	1.1%
98.8%	49.5	49.7	0.2	0.5%
100.0%	49.5	49.7	0.2	0.5%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.3	56.0	-1.3	-2.3%
1.2%	56.0	55.9	-0.1	-0.1%
2.5%	55.9	55.5	-0.4	-0.7%
3.7%	55.7	55.3	-0.4	-0.7%
4.9%	55.5	55.3	-0.1	-0.3%
6.2%	55.3	55.3	0.0	0.1%
7.4%	55.2	55.2	0.0	0.0%
8.6%	55.1	55.2	0.1	0.2%
9.9%	55.0	55.2	0.2	0.3%
11.1%	55.0	54.8	-0.2	-0.4%
12.3%	54.9	54.7	-0.2	-0.3%
13.6%	54.9	54.7	-0.2	-0.3%
14.8%	54.7	54.7	-0.1	-0.1%
16.0%	54.6	54.6	0.0	0.0%
17.3%	54.6	54.6	0.0	0.0%
18.5%	54.6	54.6	0.0	0.1%
19.8%	54.4	54.5	0.1	0.3%
21.0%	54.3	54.5	0.1	0.3%
22.2%	54.3	54.4	0.2	0.3%
23.5%	54.0	54.2	0.2	0.4%
24.7%	54.0	54.2	0.2	0.3%
25.9%	53.9	54.1	0.3	0.5%
27.2%	53.8	54.0	0.2	0.3%
28.4%	53.7	53.7	0.0	0.1%
29.6%	53.6	53.7	0.1	0.1%
30.9%	53.5	53.6	0.1	0.3%
32.1%	53.4	53.6	0.2	0.4%
33.3%	53.4	53.5	0.1	0.2%
34.6%	53.2	53.5	0.3	0.6%
35.8%	53.1	53.4	0.3	0.6%
37.0%	53.1	53.4	0.3	0.6%
38.3%	53.0	53.4	0.3	0.6%
39.5%	53.0	53.2	0.2	0.4%
40.7%	53.0	53.2	0.2	0.4%
42.0%	53.0	53.2	0.3	0.5%
43.2%	52.9	53.2	0.3	0.5%
44.4%	52.8	53.2	0.4	0.7%
45.7%	52.7	53.1	0.5	0.9%
46.9%	52.6	53.1	0.5	0.9%
48.1%	52.6	53.1	0.5	0.9%
49.4%	52.6	53.0	0.4	0.8%
50.6%	52.6	53.0	0.4	0.8%
51.9%	52.6	53.0	0.4	0.8%
53.1%	52.5	53.0	0.4	0.8%
54.3%	52.5	52.9	0.4	0.8%
55.6%	52.5	52.8	0.3	0.7%
56.8%	52.4	52.7	0.3	0.5%
58.0%	52.4	52.7	0.3	0.5%
59.3%	52.4	52.7	0.3	0.6%
60.5%	52.3	52.7	0.3	0.6%
61.7%	52.2	52.6	0.3	0.7%
63.0%	52.2	52.4	0.2	0.4%
64.2%	52.2	52.4	0.2	0.4%
65.4%	52.2	52.3	0.1	0.3%
66.7%	52.2	52.3	0.1	0.3%
67.9%	52.1	52.2	0.0	0.1%
69.1%	52.1	52.2	0.1	0.2%
70.4%	52.0	52.2	0.2	0.4%
71.6%	51.9	52.2	0.2	0.5%
72.8%	51.8	52.2	0.3	0.6%
74.1%	51.8	52.1	0.3	0.6%
75.3%	51.8	52.1	0.3	0.6%
76.5%	51.7	52.1	0.3	0.7%
77.8%	51.7	52.0	0.3	0.6%
79.0%	51.7	52.0	0.3	0.6%
80.2%	51.6	52.0	0.3	0.7%
81.5%	51.6	52.0	0.3	0.7%
82.7%	51.6	51.9	0.3	0.7%
84.0%	51.6	51.8	0.3	0.5%
85.2%	51.5	51.8	0.2	0.5%
86.4%	51.5	51.8	0.2	0.5%
87.7%	51.5	51.7	0.2	0.4%
88.9%	51.3	51.6	0.3	0.5%
90.1%	51.3	51.6	0.3	0.6%
91.4%	51.3	51.5	0.2	0.4%
92.6%	51.2	51.5	0.3	0.6%
93.8%	51.1	51.2	0.1	0.2%
95.1%	50.9	51.2	0.3	0.5%
96.3%	50.8	51.2	0.4	0.7%
97.5%	50.7	50.7	0.1	0.2%
98.8%	50.6	50.7	0.1	0.2%
100.0%	50.6	50.7	0.1	0.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.8	60.2	-4.6	-7.0%
1.2%	57.7	55.7	-2.0	-3.4%
2.5%	56.5	55.6	-0.9	-1.6%
3.7%	56.3	55.4	-0.9	-1.6%
4.9%	56.2	55.4	-0.8	-1.4%
6.2%	56.2	55.4	-0.8	-1.5%
7.4%	55.7	55.2	-0.5	-0.8%
8.6%	55.5	55.2	-0.2	-0.4%
9.9%	55.4	55.2	-0.2	-0.3%
11.1%	55.4	55.2	-0.2	-0.3%
12.3%	55.3	55.2	-0.2	-0.3%
13.6%	55.3	55.1	-0.2	-0.4%
14.8%	55.2	55.0	-0.2	-0.4%
16.0%	55.2	54.9	-0.2	-0.4%
17.3%	55.1	54.9	-0.2	-0.4%
18.5%	55.1	54.9	-0.3	-0.5%
19.8%	55.1	54.8	-0.3	-0.6%
21.0%	55.1	54.8	-0.3	-0.5%
22.2%	55.0	54.8	-0.2	-0.3%
23.5%	54.9	54.8	-0.2	-0.3%
24.7%	54.9	54.7	-0.2	-0.3%
25.9%	54.9	54.7	-0.2	-0.3%
27.2%	54.8	54.7	-0.1	-0.2%
28.4%	54.8	54.7	-0.1	-0.2%
29.6%	54.8	54.7	-0.1	-0.2%
30.9%	54.8	54.7	-0.1	-0.1%
32.1%	54.7	54.6	-0.1	-0.2%
33.3%	54.6	54.6	-0.1	-0.1%
34.6%	54.6	54.6	0.0	-0.1%
35.8%	54.5	54.5	0.0	0.1%
37.0%	54.4	54.4	0.0	0.0%
38.3%	54.4	54.4	0.0	0.0%
39.5%	54.4	54.4	0.0	0.1%
40.7%	54.3	54.4	0.0	0.1%
42.0%	54.3	54.3	0.0	0.0%
43.2%	54.3	54.3	0.0	-0.1%
44.4%	54.3	54.2	-0.1	-0.1%
45.7%	54.2	54.2	0.0	-0.1%
46.9%	54.2	54.2	0.0	-0.1%
48.1%	54.2	54.1	-0.1	-0.1%
49.4%	54.2	54.1	-0.1	-0.2%
50.6%	54.1	54.1	-0.1	-0.1%
51.9%	54.1	54.0	-0.1	-0.3%
53.1%	54.1	53.8	-0.2	-0.4%
54.3%	54.0	53.8	-0.2	-0.4%
55.6%	53.9	53.8	-0.2	-0.3%
56.8%	53.9	53.7	-0.1	-0.3%
58.0%	53.8	53.7	-0.1	-0.2%
59.3%	53.8	53.7	-0.1	-0.2%
60.5%	53.7	53.5	-0.2	-0.3%
61.7%	53.7	53.5	-0.2	-0.3%
63.0%	53.6	53.4	-0.2	-0.4%
64.2%	53.6	53.4	-0.2	-0.3%
65.4%	53.6	53.4	-0.2	-0.4%
66.7%	53.6	53.3	-0.3	-0.5%
67.9%	53.5	53.3	-0.2	-0.4%
69.1%	53.5	53.2	-0.2	-0.4%
70.4%	53.4	53.1	-0.3	-0.6%
71.6%	53.3	53.1	-0.2	-0.4%
72.8%	53.2	53.1	-0.1	-0.2%
74.1%	53.2	53.1	-0.1	-0.2%
75.3%	53.2	53.0	-0.2	-0.3%
76.5%	53.1	53.0	-0.1	-0.1%
77.8%	53.0	53.0	0.0	-0.1%
79.0%	53.0	52.9	-0.1	-0.2%
80.2%	53.0	52.8	-0.2	-0.4%
81.5%	53.0	52.8	-0.2	-0.4%
82.7%	53.0	52.7	-0.3	-0.5%
84.0%	53.0	52.7	-0.3	-0.5%
85.2%	52.9	52.6	-0.3	-0.6%
86.4%	52.9	52.6	-0.3	-0.6%
87.7%	52.9	52.6	-0.3	-0.5%
88.9%	52.7	52.6	-0.1	-0.2%
90.1%	52.7	52.5	-0.2	-0.3%
91.4%	52.6	52.4	-0.2	-0.4%
92.6%	52.4	52.2	-0.2	-0.5%
93.8%	52.4	52.2	-0.3	-0.5%
95.1%	51.9	51.9	0.0	0.0%
96.3%	51.9	51.8	-0.1	-0.1%
97.5%	51.7	51.7	0.0	0.0%
98.8%	51.7	51.6	-0.1	-0.2%
100.0%	51.7	51.6	-0.1	-0.2%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.7	65.9	0.2	0.3%
1.2%	63.5	59.1	-4.4	-6.9%
2.5%	61.5	58.1	-3.4	-5.6%
3.7%	57.8	56.9	-0.9	-1.5%
4.9%	57.5	56.5	-1.0	-1.7%
6.2%	56.8	56.2	-0.6	-1.0%
7.4%	56.4	56.1	-0.3	-0.5%
8.6%	56.1	55.9	-0.2	-0.3%
9.9%	55.9	55.9	0.0	0.0%
11.1%	55.8	55.4	-0.4	-0.8%
12.3%	55.6	55.4	-0.2	-0.4%
13.6%	55.6	55.3	-0.3	-0.5%
14.8%	55.6	55.2	-0.4	-0.6%
16.0%	55.5	55.0	-0.5	-0.8%
17.3%	55.4	55.0	-0.4	-0.8%
18.5%	55.4	55.0	-0.4	-0.7%
19.8%	55.3	54.8	-0.5	-0.8%
21.0%	55.3	54.8	-0.5	-0.8%
22.2%	55.2	54.8	-0.4	-0.7%
23.5%	55.1	54.8	-0.3	-0.6%
24.7%	55.0	54.8	-0.2	-0.4%
25.9%	54.9	54.8	-0.2	-0.3%
27.2%	54.7	54.8	0.1	0.1%
28.4%	54.6	54.7	0.1	0.1%
29.6%	54.6	54.7	0.0	0.1%
30.9%	54.6	54.6	0.0	0.0%
32.1%	54.6	54.6	0.0	0.0%
33.3%	54.5	54.6	0.1	0.2%
34.6%	54.2	54.6	0.3	0.6%
35.8%	54.2	54.4	0.2	0.4%
37.0%	54.1	54.3	0.2	0.4%
38.3%	54.1	54.2	0.1	0.2%
39.5%	54.1	54.2	0.1	0.1%
40.7%	53.9	54.0	0.1	0.2%
42.0%	53.9	54.0	0.1	0.2%
43.2%	53.6	53.9	0.4	0.7%
44.4%	53.5	53.9	0.4	0.7%
45.7%	53.5	53.8	0.3	0.6%
46.9%	53.5	53.5	0.0	0.0%
48.1%	53.5	53.4	0.0	-0.1%
49.4%	53.4	53.4	0.0	0.0%
50.6%	53.2	53.4	0.2	0.3%
51.9%	53.2	53.4	0.2	0.3%
53.1%	53.1	53.4	0.2	0.4%
54.3%	53.0	53.3	0.3	0.6%
55.6%	53.0	53.3	0.3	0.6%
56.8%	52.9	53.2	0.3	0.6%
58.0%	52.9	53.2	0.3	0.5%
59.3%	52.7	53.2	0.5	1.0%
60.5%	52.6	53.2	0.5	1.0%
61.7%	52.5	53.2	0.7	1.3%
63.0%	52.5	53.1	0.7	1.3%
64.2%	52.5	53.1	0.6	1.2%
65.4%	52.5	53.1	0.6	1.2%
66.7%	52.4	53.0	0.7	1.2%
67.9%	52.4	53.0	0.6	1.2%
69.1%	52.4	52.9	0.6	1.1%
70.4%	52.3	52.7	0.4	0.8%
71.6%	52.3	52.7	0.4	0.8%
72.8%	52.2	52.7	0.5	0.9%
74.1%	52.1	52.7	0.6	1.1%
75.3%	52.0	52.6	0.6	1.2%
76.5%	51.9	52.6	0.6	1.2%
77.8%	51.9	52.5	0.7	1.3%
79.0%	51.8	52.5	0.7	1.4%
80.2%	51.7	52.5	0.8	1.5%
81.5%	51.6	52.5	0.8	1.6%
82.7%	51.6	52.4	0.9	1.7%
84.0%	51.6	52.4	0.9	1.7%
85.2%	51.6	52.0	0.4	0.8%
86.4%	51.6	51.8	0.2	0.4%
87.7%	51.5	51.5	0.0	0.0%
88.9%	51.2	51.3	0.1	0.3%
90.1%	51.1	51.2	0.0	0.0%
91.4%	51.0	50.9	-0.2	-0.3%
92.6%	51.0	50.8	-0.1	-0.3%
93.8%	50.7	50.8	0.1	0.2%
95.1%	50.6	50.8	0.1	0.3%
96.3%	50.5	50.5	0.0	0.0%
97.5%	50.4	50.5	0.1	0.2%
98.8%	50.2	50.4	0.1	0.3%
100.0%	50.2	50.4	0.1	0.3%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.4	58.8	-1.6	-2.7%
1.2%	57.1	55.5	-1.6	-2.8%
2.5%	56.5	55.5	-1.0	-1.8%
3.7%	55.7	55.4	-0.3	-0.6%
4.9%	55.3	55.1	-0.2	-0.4%
6.2%	55.1	55.1	0.0	-0.1%
7.4%	55.0	55.0	0.0	0.1%
8.6%	55.0	54.9	-0.1	-0.2%
9.9%	54.9	54.8	-0.1	-0.3%
11.1%	54.8	54.7	-0.1	-0.2%
12.3%	54.8	54.6	-0.1	-0.2%
13.6%	54.6	54.6	-0.1	-0.1%
14.8%	54.6	54.6	0.0	0.0%
16.0%	54.6	54.6	0.0	0.0%
17.3%	54.5	54.3	-0.2	-0.4%
18.5%	54.5	54.3	-0.3	-0.5%
19.8%	54.5	54.2	-0.2	-0.4%
21.0%	54.3	54.1	-0.1	-0.2%
22.2%	54.2	54.0	-0.2	-0.4%
23.5%	54.1	54.0	-0.2	-0.3%
24.7%	53.9	54.0	0.0	0.1%
25.9%	53.9	53.9	0.0	0.1%
27.2%	53.9	53.9	0.0	-0.1%
28.4%	53.9	53.8	-0.1	-0.2%
29.6%	53.8	53.7	-0.1	-0.1%
30.9%	53.8	53.6	-0.2	-0.3%
32.1%	53.7	53.6	-0.1	-0.2%
33.3%	53.6	53.6	0.0	-0.1%
34.6%	53.3	53.5	0.2	0.3%
35.8%	53.3	53.5	0.1	0.2%
37.0%	53.3	53.4	0.1	0.2%
38.3%	53.2	53.4	0.2	0.4%
39.5%	53.1	53.3	0.2	0.3%
40.7%	53.1	53.3	0.1	0.2%
42.0%	53.0	53.2	0.2	0.4%
43.2%	52.9	53.2	0.3	0.5%
44.4%	52.9	53.1	0.2	0.5%
45.7%	52.8	53.1	0.3	0.6%
46.9%	52.8	53.0	0.3	0.5%
48.1%	52.7	52.9	0.2	0.4%
49.4%	52.7	52.9	0.2	0.4%
50.6%	52.7	52.8	0.2	0.3%
51.9%	52.6	52.8	0.2	0.3%
53.1%	52.6	52.7	0.1	0.2%
54.3%	52.6	52.7	0.1	0.2%
55.6%	52.5	52.7	0.2	0.4%
56.8%	52.5	52.7	0.2	0.4%
58.0%	52.4	52.7	0.2	0.4%
59.3%	52.4	52.7	0.2	0.4%
60.5%	52.4	52.7	0.2	0.5%
61.7%	52.3	52.6	0.3	0.6%
63.0%	52.3	52.6	0.3	0.6%
64.2%	52.2	52.6	0.4	0.7%
65.4%	52.2	52.5	0.3	0.7%
66.7%	52.1	52.5	0.4	0.8%
67.9%	52.1	52.5	0.4	0.8%
69.1%	52.1	52.4	0.3	0.6%
70.4%	52.1	52.4	0.3	0.5%
71.6%	52.1	52.4	0.3	0.5%
72.8%	52.1	52.3	0.3	0.5%
74.1%	52.0	52.3	0.2	0.5%
75.3%	52.0	52.2	0.3	0.5%
76.5%	52.0	52.1	0.1	0.3%
77.8%	52.0	52.1	0.1	0.2%
79.0%	51.9	52.1	0.2	0.3%
80.2%	51.8	52.1	0.3	0.5%
81.5%	51.8	51.9	0.1	0.3%
82.7%	51.8	51.9	0.1	0.2%
84.0%	51.6	51.9	0.3	0.5%
85.2%	51.6	51.8	0.2	0.5%
86.4%	51.6	51.8	0.3	0.5%
87.7%	51.5	51.8	0.2	0.4%
88.9%	51.5	51.7	0.1	0.3%
90.1%	51.5	51.6	0.1	0.2%
91.4%	51.3	51.5	0.2	0.4%
92.6%	51.3	51.5	0.3	0.5%
93.8%	51.2	51.4	0.2	0.4%
95.1%	51.1	51.3	0.2	0.3%
96.3%	51.1	51.2	0.1	0.2%
97.5%	51.0	51.2	0.1	0.3%
98.8%	51.0	50.9	-0.1	-0.2%
100.0%	50.9	50.8	-0.1	-0.2%

July to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.6	60.7	-1.9	-3.0%
1.2%	58.6	56.3	-2.3	-3.9%
2.5%	57.7	56.3	-1.4	-2.4%
3.7%	56.4	55.5	-0.9	-1.6%
4.9%	56.0	55.5	-0.5	-0.9%
6.2%	55.8	55.5	-0.3	-0.5%
7.4%	55.6	55.5	-0.2	-0.3%
8.6%	55.4	55.5	0.1	0.2%
9.9%	55.4	55.4	0.1	0.1%
11.1%	55.3	55.4	0.1	0.1%
12.3%	55.3	55.3	0.0	-0.1%
13.6%	55.3	55.2	-0.1	-0.2%
14.8%	55.3	55.1	-0.1	-0.3%
16.0%	55.2	55.0	-0.2	-0.3%
17.3%	55.1	54.9	-0.2	-0.4%
18.5%	55.0	54.8	-0.2	-0.3%
19.8%	55.0	54.7	-0.3	-0.5%
21.0%	54.8	54.7	-0.2	-0.3%
22.2%	54.8	54.7	-0.1	-0.2%
23.5%	54.6	54.6	0.0	0.0%
24.7%	54.6	54.6	0.0	0.0%
25.9%	54.6	54.6	0.0	0.0%
27.2%	54.5	54.4	-0.1	-0.2%
28.4%	54.5	54.3	-0.2	-0.5%
29.6%	54.4	54.2	-0.2	-0.4%
30.9%	54.4	54.2	-0.2	-0.4%
32.1%	54.2	54.1	-0.1	-0.1%
33.3%	54.2	54.1	-0.1	-0.1%
34.6%	54.1	54.1	0.0	-0.1%
35.8%	54.0	54.0	0.0	0.0%
37.0%	53.9	54.0	0.0	0.1%
38.3%	53.7	53.9	0.2	0.4%
39.5%	53.7	53.8	0.1	0.1%
40.7%	53.6	53.6	0.0	0.0%
42.0%	53.5	53.6	0.0	0.1%
43.2%	53.4	53.5	0.2	0.3%
44.4%	53.4	53.5	0.1	0.3%
45.7%	53.3	53.5	0.3	0.5%
46.9%	53.2	53.5	0.3	0.6%
48.1%	53.2	53.5	0.3	0.5%
49.4%	53.2	53.4	0.3	0.5%
50.6%	53.2	53.4	0.2	0.4%
51.9%	53.2	53.4	0.2	0.4%
53.1%	53.1	53.3	0.2	0.4%
54.3%	53.1	53.3	0.3	0.5%
55.6%	53.1	53.2	0.1	0.2%
56.8%	53.0	53.1	0.2	0.3%
58.0%	52.9	53.1	0.2	0.3%
59.3%	52.9	53.1	0.2	0.4%
60.5%	52.8	53.1	0.2	0.4%
61.7%	52.8	53.0	0.2	0.4%
63.0%	52.8	53.0	0.2	0.4%
64.2%	52.7	53.0	0.3	0.6%
65.4%	52.6	53.0	0.4	0.7%
66.7%	52.6	53.0	0.3	0.7%
67.9%	52.6	52.9	0.3	0.6%
69.1%	52.5	52.9	0.3	0.6%
70.4%	52.5	52.8	0.3	0.6%
71.6%	52.5	52.8	0.4	0.7%
72.8%	52.5	52.8	0.3	0.7%
74.1%	52.5	52.7	0.3	0.5%
75.3%	52.4	52.7	0.2	0.5%
76.5%	52.4	52.6	0.2	0.4%
77.8%	52.4	52.5	0.2	0.3%
79.0%	52.4	52.4	0.1	0.1%
80.2%	52.4	52.4	0.0	0.0%
81.5%	52.3	52.4	0.1	0.1%
82.7%	52.3	52.4	0.1	0.1%
84.0%	52.2	52.4	0.1	0.3%
85.2%	52.1	52.3	0.2	0.3%
86.4%	51.9	52.0	0.1	0.2%
87.7%	51.9	52.0	0.1	0.2%
88.9%	51.9	51.9	0.0	0.1%
90.1%	51.8	51.8	0.1	0.1%
91.4%	51.7	51.8	0.1	0.2%
92.6%	51.7	51.8	0.1	0.3%
93.8%	51.6	51.8	0.1	0.2%
95.1%	51.6	51.7	0.1	0.2%
96.3%	51.5	51.3	-0.2	-0.3%
97.5%	51.4	51.3	0.0	-0.1%
98.8%	51.4	51.3	-0.1	-0.1%
100.0%	51.2	50.9	-0.3	-0.6%

August to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.2	63.0	-2.2	-3.4%
1.2%	60.6	57.2	-3.4	-5.7%
2.5%	58.9	56.8	-2.1	-3.6%
3.7%	57.1	56.1	-1.1	-1.9%
4.9%	56.6	55.9	-0.7	-1.2%
6.2%	56.3	55.9	-0.4	-0.7%
7.4%	56.2	55.8	-0.4	-0.6%
8.6%	55.8	55.5	-0.3	-0.5%
9.9%	55.5	55.4	-0.1	-0.2%
11.1%	55.5	55.3	-0.2	-0.4%
12.3%	55.5	55.3	-0.2	-0.4%
13.6%	55.3	55.3	0.0	-0.1%
14.8%	55.3	55.1	-0.2	-0.3%
16.0%	55.2	55.0	-0.2	-0.3%
17.3%	55.2	55.0	-0.2	-0.4%
18.5%	55.1	54.9	-0.2	-0.4%
19.8%	55.1	54.8	-0.3	-0.5%
21.0%	55.1	54.8	-0.3	-0.5%
22.2%	55.1	54.8	-0.3	-0.5%
23.5%	55.0	54.8	-0.3	-0.5%
24.7%	55.0	54.7	-0.2	-0.4%
25.9%	54.9	54.7	-0.2	-0.4%
27.2%	54.9	54.7	-0.2	-0.4%
28.4%	54.9	54.7	-0.2	-0.3%
29.6%	54.9	54.7	-0.2	-0.3%
30.9%	54.8	54.7	-0.1	-0.2%
32.1%	54.6	54.6	0.0	0.0%
33.3%	54.6	54.5	-0.1	-0.2%
34.6%	54.4	54.5	0.0	0.1%
35.8%	54.3	54.5	0.2	0.3%
37.0%	54.2	54.2	0.0	0.0%
38.3%	54.1	54.2	0.1	0.2%
39.5%	54.0	54.2	0.2	0.3%
40.7%	54.0	54.1	0.1	0.2%
42.0%	53.9	54.0	0.0	0.0%
43.2%	53.9	53.8	-0.1	-0.2%
44.4%	53.8	53.8	0.0	0.0%
45.7%	53.8	53.7	-0.1	-0.1%
46.9%	53.7	53.7	0.1	0.1%
48.1%	53.6	53.6	0.0	0.1%
49.4%	53.5	53.6	0.1	0.1%
50.6%	53.4	53.6	0.2	0.3%
51.9%	53.4	53.6	0.2	0.3%
53.1%	53.4	53.6	0.2	0.3%
54.3%	53.3	53.6	0.2	0.4%
55.6%	53.3	53.5	0.2	0.4%
56.8%	53.3	53.5	0.2	0.4%
58.0%	53.2	53.4	0.2	0.4%
59.3%	53.2	53.4	0.2	0.4%
60.5%	53.2	53.4	0.2	0.5%
61.7%	53.2	53.4	0.3	0.5%
63.0%	53.1	53.4	0.3	0.6%
64.2%	53.1	53.4	0.3	0.6%
65.4%	53.1	53.3	0.2	0.4%
66.7%	53.0	53.3	0.3	0.5%
67.9%	53.0	53.3	0.2	0.5%
69.1%	53.0	52.9	-0.1	-0.1%
70.4%	52.9	52.9	0.0	0.0%
71.6%	52.9	52.9	0.0	0.0%
72.8%	52.8	52.9	0.0	0.1%
74.1%	52.8	52.9	0.1	0.1%
75.3%	52.7	52.9	0.1	0.2%
76.5%	52.7	52.8	0.2	0.3%
77.8%	52.6	52.8	0.2	0.4%
79.0%	52.4	52.8	0.3	0.7%
80.2%	52.4	52.8	0.3	0.7%
81.5%	52.4	52.7	0.3	0.6%
82.7%	52.3	52.7	0.4	0.7%
84.0%	52.3	52.5	0.2	0.4%
85.2%	52.2	52.3	0.1	0.2%
86.4%	52.2	52.1	-0.1	-0.2%
87.7%	52.1	52.1	0.0	-0.1%
88.9%	52.1	52.0	-0.1	-0.1%
90.1%	52.0	52.0	0.0	-0.1%
91.4%	52.0	52.0	0.0	0.0%
92.6%	51.8	51.7	-0.1	-0.2%
93.8%	51.8	51.7	-0.1	-0.2%
95.1%	51.6	51.6	0.0	0.0%
96.3%	51.6	51.4	-0.2	-0.3%
97.5%	51.5	51.2	-0.2	-0.4%
98.8%	51.2	51.2	0.0	0.0%
100.0%	51.0	50.5	-0.5	-0.9%

Figure SQ4-1b
Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

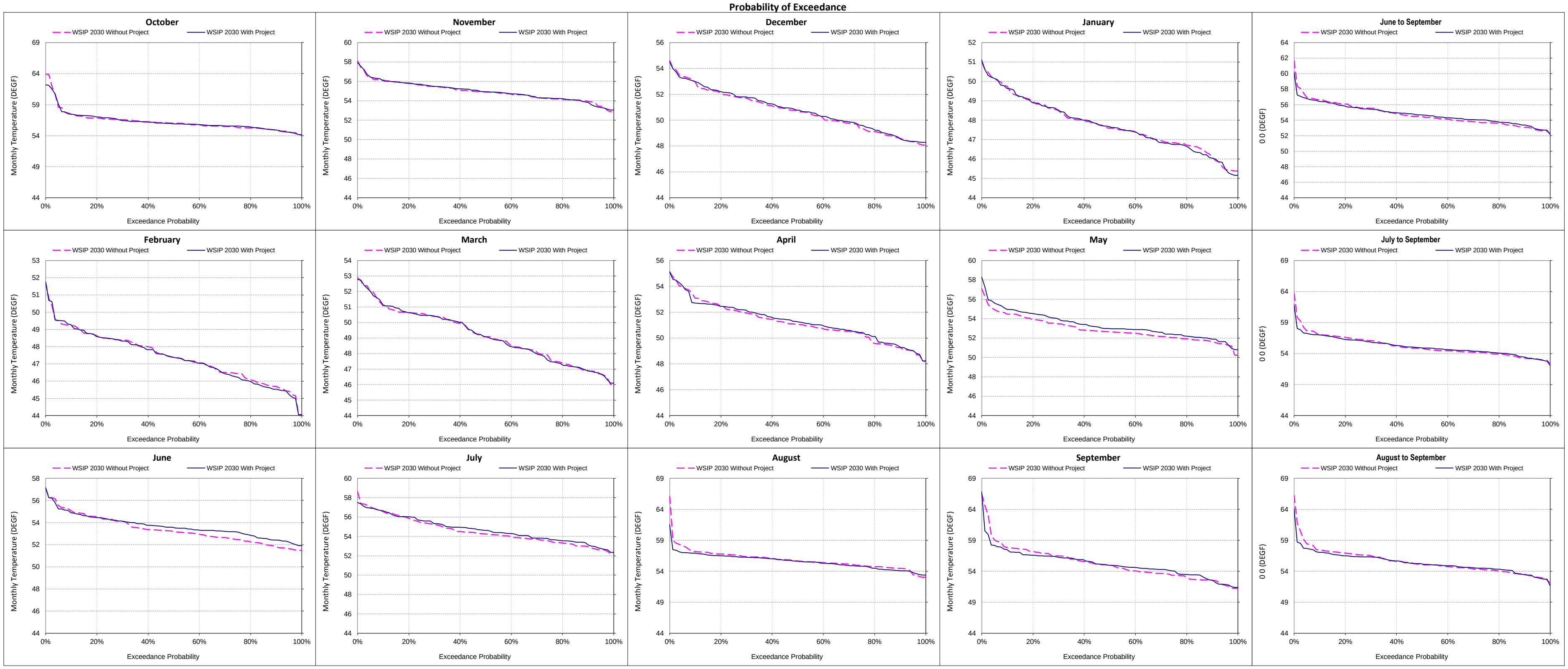


Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.9	62.2	-1.7	-2.7%
1.2%	63.9	62.1	-1.7	-2.7%
2.5%	61.9	61.5	-0.4	-0.7%
3.7%	60.6	60.7	0.0	0.1%
4.9%	58.6	59.1	0.5	0.9%
6.2%	58.6	57.9	-0.7	-1.2%
7.4%	57.8	57.9	0.1	0.1%
8.6%	57.7	57.6	-0.1	-0.2%
9.9%	57.5	57.4	0.0	0.0%
11.1%	57.4	57.4	0.0	0.1%
12.3%	57.2	57.3	0.1	0.2%
13.6%	57.2	57.3	0.1	0.1%
14.8%	57.1	57.3	0.2	0.3%
16.0%	56.9	57.2	0.4	0.6%
17.3%	56.9	57.2	0.3	0.6%
18.5%	56.9	57.1	0.3	0.5%
19.8%	56.8	57.0	0.2	0.3%
21.0%	56.8	57.0	0.2	0.3%
22.2%	56.8	56.9	0.1	0.3%
23.5%	56.7	56.9	0.2	0.3%
24.7%	56.7	56.9	0.2	0.4%
25.9%	56.6	56.8	0.2	0.3%
27.2%	56.6	56.7	0.1	0.2%
28.4%	56.6	56.6	0.0	0.0%
29.6%	56.6	56.5	-0.1	-0.2%
30.9%	56.6	56.4	-0.1	-0.3%
32.1%	56.5	56.4	-0.1	-0.3%
33.3%	56.5	56.3	-0.2	-0.3%
34.6%	56.4	56.3	-0.1	-0.3%
35.8%	56.4	56.3	-0.1	-0.2%
37.0%	56.3	56.3	-0.1	-0.1%
38.3%	56.3	56.2	-0.1	-0.1%
39.5%	56.3	56.2	-0.1	-0.1%
40.7%	56.3	56.2	-0.1	-0.2%
42.0%	56.2	56.2	-0.1	-0.1%
43.2%	56.1	56.0	-0.1	-0.2%
44.4%	56.1	56.0	-0.1	-0.2%
45.7%	56.1	56.0	-0.1	-0.2%
46.9%	56.1	56.0	-0.1	-0.2%
48.1%	56.0	56.0	0.0	-0.1%
49.4%	56.0	55.9	-0.1	-0.1%
50.6%	56.0	55.9	-0.1	-0.2%
51.9%	56.0	55.9	-0.1	-0.2%
53.1%	56.0	55.9	-0.1	-0.2%
54.3%	55.9	55.9	-0.1	-0.1%
55.6%	55.9	55.9	-0.1	-0.1%
56.8%	55.8	55.9	0.1	0.1%
58.0%	55.8	55.8	0.1	0.1%
59.3%	55.7	55.8	0.1	0.1%
60.5%	55.7	55.8	0.0	0.1%
61.7%	55.6	55.7	0.1	0.2%
63.0%	55.6	55.7	0.1	0.2%
64.2%	55.6	55.7	0.1	0.2%
65.4%	55.6	55.7	0.1	0.2%
66.7%	55.5	55.6	0.1	0.2%
67.9%	55.5	55.6	0.1	0.2%
69.1%	55.5	55.6	0.1	0.1%
70.4%	55.5	55.6	0.1	0.1%
71.6%	55.5	55.6	0.1	0.2%
72.8%	55.5	55.6	0.1	0.2%
74.1%	55.4	55.5	0.1	0.2%
75.3%	55.3	55.5	0.2	0.4%
76.5%	55.3	55.5	0.2	0.4%
77.8%	55.3	55.5	0.2	0.4%
79.0%	55.3	55.5	0.2	0.4%
80.2%	55.3	55.4	0.1	0.2%
81.5%	55.2	55.3	0.1	0.1%
82.7%	55.2	55.3	0.1	0.1%
84.0%	55.2	55.2	0.0	0.1%
85.2%	55.1	55.1	0.0	0.0%
86.4%	55.1	55.0	-0.1	-0.1%
87.7%	55.0	55.0	0.0	0.0%
88.9%	55.0	55.0	0.0	0.0%
90.1%	54.9	54.9	0.0	0.0%
91.4%	54.7	54.8	0.1	0.1%
92.6%	54.7	54.6	-0.1	-0.2%
93.8%	54.7	54.6	-0.1	-0.2%
95.1%	54.6	54.5	-0.1	-0.1%
96.3%	54.5	54.5	0.0	0.0%
97.5%	54.5	54.3	-0.1	-0.3%
98.8%	54.1	54.2	0.1	0.2%
100.0%	54.1	54.2	0.0	0.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.1	57.9	-0.2	-0.3%
1.2%	57.5	57.6	0.1	0.2%
2.5%	57.1	57.2	0.1	0.2%
3.7%	56.6	56.8	0.2	0.4%
4.9%	56.5	56.5	-0.1	-0.1%
6.2%	56.2	56.4	0.1	0.3%
7.4%	56.2	56.3	0.1	0.2%
8.6%	56.2	56.3	0.1	0.2%
9.9%	56.1	56.1	-0.1	-0.1%
11.1%	56.1	56.0	-0.1	-0.1%
12.3%	56.0	56.0	0.0	-0.1%
13.6%	56.0	56.0	0.0	0.0%
14.8%	56.0	55.9	0.0	0.0%
16.0%	55.9	55.9	0.0	0.0%
17.3%	55.9	55.9	0.0	0.0%
18.5%	55.8	55.8	0.0	0.0%
19.8%	55.8	55.8	0.0	0.1%
21.0%	55.8	55.8	0.0	0.1%
22.2%	55.8	55.7	0.0	-0.1%
23.5%	55.6	55.7	0.1	0.1%
24.7%	55.6	55.7	0.1	0.2%
25.9%	55.6	55.6	0.0	0.0%
27.2%	55.5	55.6	0.1	0.1%
28.4%	55.5	55.5	0.0	0.1%
29.6%	55.5	55.5	0.0	0.0%
30.9%	55.5	55.5	0.0	0.0%
32.1%	55.4	55.5	0.0	0.1%
33.3%	55.4	55.4	0.0	0.0%
34.6%	55.3	55.4	0.1	0.1%
35.8%	55.3	55.4	0.1	0.1%
37.0%	55.3	55.3	0.0	0.0%
38.3%	55.2	55.3	0.1	0.2%
39.5%	55.1	55.2	0.1	0.3%
40.7%	55.1	55.2	0.1	0.3%
42.0%	55.1	55.2	0.2	0.3%
43.2%	55.0	55.2	0.2	0.3%
44.4%	55.0	55.1	0.1	0.2%
45.7%	55.0	55.1	0.1	0.2%
46.9%	55.0	55.1	0.1	0.2%
48.1%	54.9	55.0	0.0	0.0%
49.4%	54.9	54.9	0.0	0.0%
50.6%	54.9	54.9	0.0	0.0%
51.9%	54.9	54.9	0.0	0.0%
53.1%	54.9	54.9	0.0	0.0%
54.3%	54.9	54.9	0.0	0.1%
55.6%	54.8	54.9	0.1	0.2%
56.8%	54.8	54.8	0.0	0.1%
58.0%	54.8	54.8	0.0	0.1%
59.3%	54.7	54.7	0.0	0.0%
60.5%	54.6	54.7	0.1	0.1%
61.7%	54.6	54.7	0.1	0.1%
63.0%	54.6	54.7	0.0	0.1%
64.2%	54.6	54.7	0.0	0.1%
65.4%	54.6	54.6	0.0	0.0%
66.7%	54.6	54.6	0.0	0.0%
67.9%	54.4	54.5	0.0	0.1%
69.1%	54.4	54.4	0.0	0.1%
70.4%	54.4	54.3	-0.1	-0.1%
71.6%	54.3	54.3	0.0	0.0%
72.8%	54.3	54.3	0.0	0.1%
74.1%	54.2	54.3	0.0	0.1%
75.3%	54.2	54.3	0.0	0.1%
76.5%	54.2	54.3	0.1	0.1%
77.8%	54.2	54.2	0.1	0.1%
79.0%	54.2	54.2	0.1	0.2%
80.2%	54.1	54.2	0.1	0.1%
81.5%	54.1	54.1	0.0	0.0%
82.7%	54.1	54.1	0.0	0.0%
84.0%	54.1	54.1	0.0	0.0%
85.2%	54.1	54.1	0.0	0.0%
86.4%	54.1	54.1	0.0	0.0%
87.7%	54.1	53.9	-0.1	-0.2%
88.9%	54.0	53.9	-0.1	-0.2%
90.1%	53.9	53.8	-0.1	-0.2%
91.4%	53.9	53.6	-0.3	-0.6%
92.6%	53.8	53.4	-0.4	-0.8%
93.8%	53.5	53.4	-0.1	-0.2%
95.1%	53.4	53.3	-0.1	-0.3%
96.3%	53.3	53.2	-0.1	-0.1%
97.5%	53.0	53.1	0.1	0.3%
98.8%	52.9	53.1	0.2	0.3%
100.0%	52.9	53.1	0.2	0.3%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.6	54.5	-0.1	-0.2%
1.2%	54.0	54.0	0.0	0.0%
2.5%	53.9	53.7	-0.2	-0.3%
3.7%	53.5	53.3	-0.2	-0.3%
4.9%	53.4	53.2	-0.1	-0.2%
6.2%	53.4	53.2	-0.1	-0.2%
7.4%	53.3	53.1	-0.1	-0.2%
8.6%	53.2	53.1	-0.1	-0.2%
9.9%	53.0	53.0	0.0	0.0%
11.1%	52.5	52.9	0.4	0.7%
12.3%	52.5	52.8	0.3	0.6%
13.6%	52.4	52.6	0.2	0.3%
14.8%	52.3	52.6	0.2	0.4%
16.0%	52.3	52.4	0.0	0.1%
17.3%	52.3	52.3	0.1	0.1%
18.5%	52.2	52.3	0.1	0.1%
19.8%	52.1	52.2	0.1	0.2%
21.0%	52.0	52.2	0.2	0.3%
22.2%	52.0	52.1	0.2	0.3%
23.5%	51.9	52.1	0.2	0.4%
24.7%	51.8	52.0	0.2	0.4%
25.9%	51.8	51.8	0.0	0.0%
27.2%	51.8	51.8	0.1	0.1%
28.4%	51.7	51.8	0.1	0.1%
29.6%	51.7	51.8	0.1	0.2%
30.9%	51.6	51.7	0.1	0.2%
32.1%	51.5	51.7	0.2	0.4%
33.3%	51.5	51.7	0.2	0.4%
34.6%	51.4	51.5	0.1	0.2%
35.8%	51.4	51.5	0.1	0.3%
37.0%	51.3	51.4	0.1	0.3%
38.3%	51.2	51.3	0.1	0.3%
39.5%	51.1	51.3	0.1	0.3%
40.7%	51.1	51.2	0.2	0.3%
42.0%	51.0	51.1	0.1	0.2%
43.2%	51.0	51.0	0.1	0.2%
44.4%	50.9	51.0	0.0	0.1%
45.7%	50.9	51.0	0.1	0.1%
46.9%	50.8	50.9	0.1	0.3%
48.1%	50.8	50.9	0.1	0.2%
49.4%	50.8	50.8	0.0	0.1%
50.6%	50.6	50.8	0.1	0.2%
51.9%	50.6	50.7	0.0	0.0%
53.1%	50.6	50.7	0.0	0.0%
54.3%	50.6	50.6	0.0	0.1%
55.6%	50.4	50.6	0.1	0.3%
56.8%	50.4	50.5	0.2	0.3%
58.0%	50.3	50.4	0.0	0.1%
59.3%	50.3	50.3	0.0	0.0%
60.5%	50.0	50.3	0.3	0.5%
61.7%	50.0	50.2	0.2	0.5%
63.0%	50.0	50.1	0.1	0.3%
64.2%	50.0	50.1	0.1	0.3%
65.4%	49.9	50.0	0.1	0.1%
66.7%	49.9	50.0	0.1	0.1%
67.9%	49.8	49.9	0.1	0.2%
69.1%	49.8	49.9	0.1	0.2%
70.4%	49.8	49.8	0.1	0.2%
71.6%	49.7	49.8	0.1	0.2%
72.8%	49.7	49.7	0.0	0.1%
74.1%	49.4	49.6	0.2	0.4%
75.3%	49.4	49.6	0.2	0.4%
76.5%	49.2	49.5	0.2	0.5%
77.8%	49.1	49.4	0.3	0.6%
79.0%	49.1	49.4	0.3	0.5%
80.2%	49.1	49.2	0.1	0.2%
81.5%	49.1	49.2	0.1	0.3%
82.7%	49.0	49.1	0.0	0.1%
84.0%	48.9	49.0	0.1	0.3%
85.2%	48.8	48.9	0.1	0.2%
86.4%	48.8	48.9	0.1	0.2%
87.7%	48.7	48.8	0.1	0.2%
88.9%	48.6	48.7	0.1	0.1%
90.1%	48.6	48.5	-0.1	-0.2%
91.4%	48.5	48.4	0.0	0.0%
92.6%	48.4	48.4	0.0	0.0%
93.8%	48.4	48.4	0.0	0.0%
95.1%	48.3	48.4	0.0	0.1%
96.3%	48.3	48.3	0.1	0.2%
97.5%	48.2	48.3	0.1	0.3%
98.8%	48.1	48.3	0.2	0.4%
100.0%	48.1	48.3	0.2	0.4%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.0	51.1	0.1	0.2%
1.2%	50.6	50.6	0.0	0.0%
2.5%	50.5	50.3	-0.2	-0.3%
3.7%	50.2	50.2	0.0	-0.1%
4.9%	50.1	50.2	0.0	0.0%
6.2%	50.0	50.1	0.0	0.1%
7.4%	50.0	49.8	-0.2	-0.3%
8.6%	49.8	49.8	0.0	-0.1%
9.9%	49.7	49.6	-0.1	-0.2%
11.1%	49.5	49.6	0.1	0.3%
12.3%	49.3	49.6	0.2	0.5%
13.6%	49.3	49.3	0.0	0.0%
14.8%	49.2	49.2	0.0	0.1%
16.0%	49.2	49.2	0.1	0.1%
17.3%	49.1	49.1	0.0	-0.1%
18.5%	49.1	49.0	0.0	-0.1%
19.8%	49.0	48.9	-0.1	-0.2%
21.0%	48.8	48.9	0.0	0.1%
22.2%	48.8	48.9	0.0	0.1%
23.5%	48.8	48.7	-0.1	-0.2%
24.7%	48.8	48.7	-0.1	-0.1%
25.9%	48.6	48.7	0.0	0.1%
27.2%	48.6	48.6	0.0	0.1%
28.4%	48.6	48.6	0.1	0.1%
29.6%	48.5	48.5	0.0	0.1%
30.9%	48.4	48.4	0.1	0.1%
32.1%	48.3	48.4	0.1	0.2%
33.3%	48.1	48.2	0.1	0.2%
34.6%	48.1	48.1	0.0	0.1%
35.8%	48.1	48.1	0.0	0.1%
37.0%	48.0	48.1	0.1	0.1%
38.3%	48.0	48.1	0.0	0.1%
39.5%	48.0	48.0	0.0	0.0%
40.7%	47.9	48.0	0.1	0.1%
42.0%	47.9	48.0	0.0	0.1%
43.2%	47.9	47.9	0.0	0.1%
44.4%	47.9	47.8	0.0	0.0%
45.7%	47.8	47.8	0.0	0.0%
46.9%	47.7	47.7	0.0	-0.1%
48.1%	47.6	47.7	0.1	0.1%
49.4%	47.6	47.7	0.1	0.2%
50.6%	47.6	47.6	0.0	0.1%
51.9%	47.6	47.6	0.0	0.1%
53.1%	47.5	47.6	0.1	0.2%
54.3%	47.5	47.5	0.0	0.0%
55.6%	47.5	47.5	0.0	0.1%
56.8%	47.5	47.5	0.0	0.0%
58.0%	47.5	47.4	0.0	0.0%
59.3%	47.4	47.4	0.0	-0.1%
60.5%	47.4	47.4	0.0	0.0%
61.7%	47.3	47.2	0.0	-0.1%
63.0%	47.3	47.2	0.0	-0.1%
64.2%	47.2	47.1	-0.1	-0.2%
65.4%	47.1	47.1	-0.1	-0.1%
66.7%	47.0	47.1	0.0	0.1%
67.9%	47.0	47.0	0.0	0.0%
69.1%	47.0	46.9	-0.1	-0.3%
70.4%	46.9	46.8	-0.1	-0.2%
71.6%	46.9	46.8	0.0	-0.1%
72.8%	46.9	46.8	0.0	-0.1%
74.1%	46.8	46.8	-0.1	-0.2%
75.3%	46.8	46.7	-0.1	-0.2%
76.5%	46.8	46.7	-0.1	-0.1%
77.8%	46.8	46.7	-0.1	-0.1%
79.0%	46.8	46.7	-0.1	-0.2%
80.2%	46.7	46.6	-0.1	-0.2%
81.5%	46.7	46.5	-0.2	-0.4%
82.7%	46.6	46.4	-0.3	-0.6%
84.0%	46.6	46.3	-0.3	-0.6%
85.2%	46.5	46.3	-0.2	-0.5%
86.4%	46.5	46.2	-0.3	-0.6%
87.7%	46.3	46.2	-0.1	-0.3%
88.9%	46.3	46.1	-0.2	-0.4%
90.1%	46.1	46.0	0.0	-0.1%
91.4%	45.9	46.0	0.1	0.1%
92.6%	45.8	45.8	0.0	0.0%
93.8%	45.6	45.8	0.2	0.5%
95.1%	45.5	45.5	0.0	0.0%
96.3%	45.4	45.3	-0.1	-0.3%
97.5%	45.4	45.2	-0.2	-0.5%
98.8%	45.4	45.2	-0.2	-0.5%
100.0%	45.4	45.2	-0.2	-0.5%

Table SQ4-1b
Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.7	51.8	0.1	0.2%
1.2%	50.8	50.7	-0.1	-0.2%
2.5%	50.4	50.6	0.3	0.5%
3.7%	49.5	49.6	0.0	0.0%
4.9%	49.5	49.5	0.0	0.0%
6.2%	49.3	49.5	0.2	0.4%
7.4%	49.3	49.5	0.2	0.4%
8.6%	49.2	49.3	0.1	0.2%
9.9%	49.2	49.3	0.0	0.1%
11.1%	49.2	49.0	-0.2	-0.3%
12.3%	49.1	49.0	-0.1	-0.2%
13.6%	49.0	49.0	0.0	0.0%
14.8%	48.8	49.0	0.2	0.3%
16.0%	48.8	48.8	0.0	0.0%
17.3%	48.8	48.8	0.0	0.0%
18.5%	48.7	48.7	0.0	0.0%
19.8%	48.7	48.6	-0.1	-0.1%
21.0%	48.5	48.6	0.0	0.0%
22.2%	48.5	48.5	0.0	0.0%
23.5%	48.5	48.5	0.0	0.0%
24.7%	48.5	48.5	0.0	0.0%
25.9%	48.4	48.5	0.0	0.1%
27.2%	48.4	48.4	0.0	0.0%
28.4%	48.4	48.4	0.0	0.0%
29.6%	48.4	48.3	-0.1	-0.1%
30.9%	48.4	48.3	-0.1	-0.1%
32.1%	48.4	48.3	-0.1	-0.1%
33.3%	48.3	48.1	-0.1	-0.3%
34.6%	48.3	48.1	-0.1	-0.3%
35.8%	48.1	48.1	0.0	0.1%
37.0%	48.1	48.0	-0.1	-0.1%
38.3%	48.0	48.0	-0.1	-0.2%
39.5%	48.0	47.8	-0.2	-0.4%
40.7%	48.0	47.8	-0.1	-0.3%
42.0%	47.9	47.8	-0.1	-0.2%
43.2%	47.7	47.6	-0.1	-0.2%
44.4%	47.6	47.6	0.0	0.0%
45.7%	47.6	47.6	0.0	0.1%
46.9%	47.5	47.5	0.0	0.0%
48.1%	47.5	47.4	0.0	-0.1%
49.4%	47.4	47.4	0.0	0.0%
50.6%	47.4	47.4	0.0	-0.1%
51.9%	47.4	47.3	0.0	0.0%
53.1%	47.3	47.3	0.0	0.1%
54.3%	47.2	47.2	0.0	0.0%
55.6%	47.2	47.2	0.0	0.0%
56.8%	47.2	47.2	0.0	0.0%
58.0%	47.1	47.2	0.1	0.1%
59.3%	47.1	47.0	0.0	-0.1%
60.5%	47.1	47.0	0.0	0.0%
61.7%	47.0	47.0	0.0	-0.1%
63.0%	46.9	46.9	0.0	0.1%
64.2%	46.9	46.8	-0.1	-0.2%
65.4%	46.8	46.8	0.0	0.0%
66.7%	46.7	46.7	0.1	0.1%
67.9%	46.5	46.6	0.1	0.2%
69.1%	46.5	46.5	0.0	-0.1%
70.4%	46.5	46.4	-0.1	-0.2%
71.6%	46.5	46.4	-0.1	-0.2%
72.8%	46.5	46.3	-0.2	-0.4%
74.1%	46.5	46.3	-0.2	-0.4%
75.3%	46.4	46.2	-0.2	-0.5%
76.5%	46.4	46.1	-0.4	-0.8%
77.8%	46.2	46.1	-0.1	-0.3%
79.0%	46.1	46.0	-0.1	-0.2%
80.2%	46.1	46.0	-0.1	-0.2%
81.5%	46.0	45.8	-0.2	-0.4%
82.7%	45.9	45.8	-0.1	-0.2%
84.0%	45.9	45.7	-0.1	-0.3%
85.2%	45.8	45.7	-0.2	-0.4%
86.4%	45.8	45.6	-0.1	-0.3%
87.7%	45.7	45.6	-0.1	-0.2%
88.9%	45.7	45.5	-0.2	-0.4%
90.1%	45.7	45.5	-0.2	-0.4%
91.4%	45.6	45.5	-0.1	-0.3%
92.6%	45.6	45.5	-0.1	-0.2%
93.8%	45.4	45.4	0.0	0.0%
95.1%	45.4	45.2	-0.2	-0.4%
96.3%	45.2	45.1	-0.2	-0.3%
97.5%	45.2	45.0	-0.2	-0.4%
98.8%	44.0	44.1	0.0	0.0%
100.0%	44.0	44.1	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.9	52.8	-0.1	-0.2%
1.2%	52.7	52.7	0.0	0.1%
2.5%	52.4	52.4	0.0	0.1%
3.7%	52.4	52.2	-0.2	-0.3%
4.9%	52.0	52.0	0.1	0.1%
6.2%	52.0	51.7	-0.2	-0.4%
7.4%	51.6	51.6	0.0	0.1%
8.6%	51.3	51.5	0.1	0.2%
9.9%	51.1	51.1	0.0	0.1%
11.1%	51.1	51.1	0.0	0.0%
12.3%	50.9	51.1	0.2	0.4%
13.6%	50.8	51.0	0.2	0.4%
14.8%	50.8	50.9	0.2	0.4%
16.0%	50.7	50.9	0.2	0.4%
17.3%	50.7	50.7	0.1	0.1%
18.5%	50.7	50.7	0.1	0.1%
19.8%	50.7	50.6	0.0	-0.1%
21.0%	50.6	50.6	0.0	0.0%
22.2%	50.6	50.6	0.0	-0.1%
23.5%	50.6	50.5	-0.1	-0.1%
24.7%	50.6	50.5	-0.1	-0.2%
25.9%	50.6	50.5	-0.1	-0.2%
27.2%	50.5	50.5	0.0	0.0%
28.4%	50.4	50.5	0.0	0.1%
29.6%	50.4	50.4	0.0	0.0%
30.9%	50.4	50.4	0.0	0.0%
32.1%	50.4	50.3	-0.1	-0.1%
33.3%	50.4	50.2	-0.1	-0.3%
34.6%	50.2	50.2	0.0	-0.1%
35.8%	50.1	50.2	0.0	0.1%
37.0%	50.1	50.1	0.1	0.1%
38.3%	50.0	50.1	0.1	0.2%
39.5%	50.0	50.0	0.1	0.1%
40.7%	49.9	50.0	0.1	0.1%
42.0%	49.8	49.8	0.0	-0.1%
43.2%	49.6	49.5	0.0	-0.1%
44.4%	49.4	49.5	0.1	0.2%
45.7%	49.3	49.3	0.0	0.0%
46.9%	49.3	49.2	0.0	-0.1%
48.1%	49.2	49.2	0.0	-0.1%
49.4%	49.1	49.1	0.0	0.0%
50.6%	49.1	49.1	0.0	-0.1%
51.9%	49.1	49.0	-0.1	-0.2%
53.1%	49.0	48.9	-0.1	-0.1%
54.3%	48.9	48.9	0.0	-0.1%
55.6%	48.9	48.8	0.0	0.0%
56.8%	48.8	48.8	0.0	0.0%
58.0%	48.8	48.6	-0.2	-0.4%
59.3%	48.6	48.5	-0.1	-0.2%
60.5%	48.5	48.4	0.0	-0.1%
61.7%	48.4	48.4	-0.1	-0.1%
63.0%	48.4	48.4	-0.1	-0.1%
64.2%	48.3	48.3	0.0	0.0%
65.4%	48.3	48.3	0.0	0.0%
66.7%	48.3	48.3	0.0	0.0%
67.9%	48.2	48.2	-0.1	-0.1%
69.1%	48.2	48.1	-0.2	-0.4%
70.4%	48.0	47.9	-0.1	-0.2%
71.6%	48.0	47.9	-0.1	-0.1%
72.8%	47.9	47.8	-0.1	-0.3%
74.1%	47.9	47.6	-0.3	-0.7%
75.3%	47.6	47.5	-0.1	-0.2%
76.5%	47.5	47.5	0.0	-0.1%
77.8%	47.5	47.4	-0.1	-0.2%
79.0%	47.5	47.4	-0.1	-0.2%
80.2%	47.4	47.2	-0.1	-0.3%
81.5%	47.3	47.2	-0.1	-0.2%
82.7%	47.3	47.2	-0.1	-0.2%
84.0%	47.2	47.2	0.0	0.0%
85.2%	47.2	47.1	0.0	0.0%
86.4%	47.1	47.1	0.0	0.1%
87.7%	47.0	47.0	0.1	0.1%
88.9%	46.9	46.9	0.1	0.1%
90.1%	46.9	46.9	0.0	0.0%
91.4%	46.9	46.9	0.0	0.0%
92.6%	46.8	46.8	-0.1	-0.1%
93.8%	46.7	46.8	0.0	0.1%
95.1%	46.7	46.7	0.0	0.0%
96.3%	46.6	46.5	-0.1	-0.1%
97.5%	46.4	46.3	-0.1	-0.2%
98.8%	46.0	46.1	0.1	0.2%
100.0%	46.0	46.1	0.1	0.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.1	55.1	0.0	0.0%
1.2%	54.7	54.5	-0.2	-0.4%
2.5%	54.5	54.5	0.0	0.0%
3.7%	54.0	54.3	0.2	0.4%
4.9%	54.0	54.1	0.1	0.1%
6.2%	53.8	53.7	-0.1	-0.1%
7.4%	53.7	53.6	-0.1	-0.2%
8.6%	53.5	52.7	-0.7	-1.4%
9.9%	53.1	52.7	-0.4	-0.7%
11.1%	53.1	52.7	-0.4	-0.7%
12.3%	52.9	52.7	-0.2	-0.4%
13.6%	52.9	52.7	-0.2	-0.4%
14.8%	52.8	52.6	-0.2	-0.3%
16.0%	52.7	52.6	-0.1	-0.2%
17.3%	52.7	52.6	-0.1	-0.2%
18.5%	52.6	52.5	-0.1	-0.2%
19.8%	52.5	52.5	0.0	-0.1%
21.0%	52.4	52.4	0.0	0.0%
22.2%	52.2	52.4	0.2	0.4%
23.5%	52.2	52.4	0.2	0.3%
24.7%	52.2	52.4	0.2	0.4%
25.9%	52.1	52.3	0.1	0.2%
27.2%	52.0	52.2	0.2	0.3%
28.4%	52.0	52.2	0.2	0.4%
29.6%	52.0	52.2	0.2	0.4%
30.9%	51.9	52.0	0.1	0.2%
32.1%	51.9	52.0	0.1	0.2%
33.3%	51.9	51.9	0.1	0.2%
34.6%	51.6	51.9	0.3	0.5%
35.8%	51.6	51.8	0.3	0.5%
37.0%	51.5	51.8	0.3	0.6%
38.3%	51.5	51.6	0.2	0.3%
39.5%	51.5	51.6	0.2	0.3%
40.7%	51.5	51.5	0.1	0.1%
42.0%	51.3	51.5	0.2	0.4%
43.2%	51.3	51.5	0.2	0.3%
44.4%	51.2	51.5	0.2	0.4%
45.7%	51.1	51.4	0.3	0.6%
46.9%	51.1	51.4	0.3	0.6%
48.1%	51.1	51.3	0.2	0.4%
49.4%	51.1	51.3	0.2	0.4%
50.6%	51.0	51.2	0.2	0.4%
51.9%	51.0	51.2	0.2	0.3%
53.1%	51.0	51.1	0.2	0.4%
54.3%	50.9	51.1	0.2	0.3%
55.6%	50.9	51.1	0.1	0.3%
56.8%	50.8	51.0	0.2	0.4%
58.0%	50.8	51.0	0.2	0.5%
59.3%	50.8	51.0	0.2	0.5%
60.5%	50.7	50.9	0.2	0.5%
61.7%	50.7	50.8	0.2	0.4%
63.0%	50.6	50.8	0.2	0.3%
64.2%	50.6	50.8	0.1	0.3%
65.4%	50.6	50.7	0.2	0.3%
66.7%	50.6	50.7	0.1	0.2%
67.9%	50.6	50.7	0.1	0.2%
69.1%	50.5	50.6	0.1	0.1%
70.4%	50.5	50.6	0.1	0.1%
71.6%	50.5	50.5	0.0	0.0%
72.8%	50.4	50.5	0.1	0.1%
74.1%	50.4	50.4	0.1	0.1%
75.3%	50.4	50.4	0.1	0.1%
76.5%	50.1	50.3	0.2	0.3%
77.8%	50.1	50.3	0.2	0.4%
79.0%	49.7	50.1	0.5	0.9%
80.2%	49.6	50.1	0.5	1.1%
81.5%	49.6	49.7	0.1	0.2%
82.7%	49.6	49.7	0.1	0.2%
84.0%	49.5	49.6	0.1	0.2%
85.2%	49.5	49.6	0.1	0.2%
86.4%	49.4	49.6	0.1	0.3%
87.7%	49.4	49.5	0.2	0.3%
88.9%	49.3	49.4	0.2	0.3%
90.1%	49.3	49.3	0.0	0.0%
91.4%	49.1	49.3	0.2	0.4%
92.6%	49.1	49.1	0.1	0.1%
93.8%	49.1	49.1	0.0	0.0%
95.1%	49.0	49.0	0.0	0.0%
96.3%	48.7	48.8	0.1	0.2%
97.5%	48.7	48.7	0.0	0.1%
98.8%	48.2	48.2	0.0	0.0%
100.0%	48.2	48.2	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.1	58.3	1.2	2.1%
1.2%	56.3	57.3	1.0	1.7%
2.5%	55.5	55.9	0.5	0.8%
3.7%	55.1	55.9	0.7	1.3%
4.9%	54.9	55.6	0.7	1.2%
6.2%	54.8	55.5	0.7	1.3%
7.4%	54.6	55.4	0.7	1.3%
8.6%	54.6	55.2	0.5	0.9%
9.9%	54.5	55.0	0.5	0.9%
11.1%	54.5	54.9	0.5	0.8%
12.3%	54.5	54.9	0.4	0.8%
13.6%	54.4	54.8	0.4	0.7%
14.8%	54.3	54.7	0.4	0.7%
16.0%	54.3	54.7	0.4	0.7%
17.3%	54.1	54.7	0.6	1.1%
18.5%	54.1	54.6	0.5	0.9%
19.8%	53.9	54.5	0.6	1.2%
21.0%	53.9	54.5	0.6	1.1%
22.2%	53.9	54.4	0.6	1.0%
23.5%	53.8	54.4	0.6	1.1%
24.7%	53.8	54.3	0.6	1.0%
25.9%	53.6	54.2	0.6	1.1%
27.2%	53.5	54.1	0.5	1.0%
28.4%	53.5	54.1	0.5	1.0%
29.6%	53.5	54.0	0.5	1.0%
30.9%	53.5	53.8	0.3	0.6%
32.1%	53.4	53.8	0.4	0.7%
33.3%	53.3	53.8	0.5	0.8%
34.6%	53.2	53.7	0.4	0.8%
35.8%	53.2	53.7	0.5	0.9%
37.0%	53.1	53.5	0.4	0.7%
38.3%	52.8	53.4	0.6	1.1%
39.5%	52.8	53.4	0.6	1.1%
40.7%	52.8	53.4	0.6	1.2%
42.0%	52.8	53.3	0.5	0.9%
43.2%	52.8	53.2	0.4	0.8%
44.4%	52.7	53.2	0.5	0.9%
45.7%	52.7	53.1	0.4	0.8%
46.9%	52.7	53.0	0.3	0.6%
48.1%	52.7	53.0	0.3	0.6%
49.4%	52.7	53.0	0.3	0.6%
50.6%	52.6	53.0	0.3	0.6%
51.9%	52.6	53.0	0.3	0.7%
53.1%	52.6	53.0	0.4	0.7%
54.3%	52.6	53.0	0.4	0.7%
55.6%	52.6	53.0	0.4	0.7%
56.8%	52.5	52.9	0.4	0.7%
58.0%	52.5	52.9	0.4	0.7%
59.3%	52.5	52.9	0.4	0.7%
60.5%	52.5	52.9	0.4	0.8%
61.7%	52.4	52.9	0.4	0.8%
63.0%	52.4	52.9	0.5	1.0%
64.2%	52.4	52.9	0.5	1.0%
65.4%	52.3	52.8	0.5	0.9%
66.7%	52.3	52.7	0.4	0.8%
67.9%	52.2	52.7	0.4	0.8%
69.1%	52.2	52.6	0.4	0.8%
70.4%	52.2	52.6	0.4	0.8%
71.6%	52.2	52.4	0.3	0.5%
72.8%	52.1	52.4	0.3	0.6%
74.1%	52.1	52.4	0.3	0.7%
75.3%	52.1	52.4	0.3	0.6%
76.5%	52.0	52.4	0.3	0.6%
77.8%	51.9	52.4	0.4	0.8%
79.0%	51.9	52.2	0.3	0.5%
80.2%	51.9	52.2	0.3	0.5%
81.5%	51.9	52.2	0.3	0.5%
82.7%	51.8	52.1	0.3	0.5%
84.0%	51.8	52.1	0.3	0.6%
85.2%	51.8	52.1	0.3	0.6%
86.4%	51.8	52.0	0.2	0.5%
87.7%	51.8	52.0	0.3	0.5%
88.9%	51.7	51.9	0.3	0.5%
90.1%	51.6	51.9	0.3	0.5%
91.4%	51.5	51.9	0.3	0.7%
92.6%	51.4	51.6	0.2	0.4%
93.8%	51.4	51.6	0.2	0.4%
95.1%	51.4	51.6	0.3	0.5%
96.3%	51.3	51.3	0.0	0.0%
97.5%	51.2	50.9	-0.2	-0.5%
98.8%	50.2	50.8	0.6	1.1%
100.0%	50.2	50.8	0.6	1.1%

Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.1	57.2	0.1	0.2%
1.2%	56.3	56.3	0.0	0.0%
2.5%	56.3	56.2	0.0	-0.1%
3.7%	56.2	55.8	-0.4	-0.7%
4.9%	55.6	55.2	-0.3	-0.6%
6.2%	55.4	55.2	-0.1	-0.2%
7.4%	55.3	55.1	-0.2	-0.4%
8.6%	55.3	55.1	-0.2	-0.3%
9.9%	55.1	54.9	-0.2	-0.3%
11.1%	54.9	54.8	-0.1	-0.1%
12.3%	54.9	54.8	-0.1	-0.2%
13.6%	54.9	54.7	-0.1	-0.2%
14.8%	54.8	54.6	-0.2	-0.4%
16.0%	54.6	54.6	0.0	0.0%
17.3%	54.6	54.5	-0.1	-0.1%
18.5%	54.6	54.5	-0.1	-0.1%
19.8%	54.5	54.4	-0.1	-0.2%
21.0%	54.5	54.4	-0.1	-0.2%
22.2%	54.3	54.4	0.1	0.2%
23.5%	54.3	54.4	0.0	0.1%
24.7%	54.3	54.3	0.0	0.0%
25.9%	54.3	54.2	-0.1	-0.1%
27.2%	54.2	54.2	0.1	0.1%
28.4%	54.1	54.2	0.0	0.0%
29.6%	54.1	54.1	0.0	0.1%
30.9%	54.1	54.1	0.0	-0.1%
32.1%	53.9	54.0	0.1	0.3%
33.3%	53.6	54.0	0.4	0.7%
34.6%	53.6	54.0	0.4	0.8%
35.8%	53.5	53.9	0.4	0.7%
37.0%	53.5	53.9	0.4	0.8%
38.3%	53.4	53.9	0.5	0.8%
39.5%	53.4	53.8	0.4	0.7%
40.7%	53.4	53.8	0.4	0.7%
42.0%	53.3	53.7	0.4	0.7%
43.2%	53.3	53.7	0.3	0.7%
44.4%	53.3	53.7	0.4	0.7%
45.7%	53.3	53.7	0.4	0.7%
46.9%	53.3	53.6	0.3	0.6%
48.1%	53.3	53.6	0.3	0.6%
49.4%	53.2	53.6	0.3	0.6%
50.6%	53.2	53.5	0.4	0.7%
51.9%	53.1	53.5	0.3	0.7%
53.1%	53.1	53.5	0.4	0.7%
54.3%	53.1	53.5	0.4	0.8%
55.6%	53.1	53.4	0.3	0.7%
56.8%	53.1	53.4	0.3	0.7%
58.0%	53.0	53.3	0.3	0.6%
59.3%	53.0	53.3	0.4	0.7%
60.5%	52.9	53.3	0.4	0.7%
61.7%	52.9	53.3	0.4	0.8%
63.0%	52.8	53.3	0.5	1.0%
64.2%	52.8	53.3	0.5	1.0%
65.4%	52.7	53.3	0.6	1.1%
66.7%	52.7	53.3	0.6	1.1%
67.9%	52.7	53.2	0.6	1.1%
69.1%	52.7	53.2	0.6	1.1%
70.4%	52.6	53.2	0.5	1.0%
71.6%	52.6	53.2	0.6	1.1%
72.8%	52.5	53.2	0.6	1.2%
74.1%	52.5	53.2	0.7	1.3%
75.3%	52.5	53.1	0.7	1.3%
76.5%	52.5	53.0	0.6	1.1%
77.8%	52.3	52.9	0.6	1.2%
79.0%	52.3	52.9	0.6	1.1%
80.2%	52.2	52.8	0.6	1.1%
81.5%	52.2	52.8	0.6	1.1%
82.7%	52.2	52.6	0.4	0.8%
84.0%	52.2	52.6	0.4	0.8%
85.2%	52.0	52.6	0.5	1.0%
86.4%	52.0	52.5	0.6	1.1%
87.7%	51.9	52.5	0.5	1.0%
88.9%	51.9	52.4	0.5	1.0%
90.1%	51.8	52.4	0.6	1.2%
91.4%	51.7	52.4	0.7	1.3%
92.6%	51.7	52.3	0.6	1.2%
93.8%	51.7	52.3	0.6	1.2%
95.1%	51.6	52.2	0.6	1.1%
96.3%	51.6	52.1	0.5	1.0%
97.5%	51.5	52.0	0.5	1.0%
98.8%	51.5	51.9	0.4	0.8%
100.0%	51.5	51.9	0.4	0.8%

July				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.6	57.5	-1.1	-1.9%
1.2%	57.4	57.4	0.0	0.0%
2.5%	57.3	57.1	-0.3	-0.4%
3.7%	57.2	57.0	-0.3	-0.5%
4.9%	57.0	56.9	-0.1	-0.2%
6.2%	56.9	56.9	0.0	0.0%
7.4%	56.8	56.8	0.0	0.0%
8.6%	56.7	56.7	0.0	-0.1%
9.9%	56.6	56.6	0.1	0.1%
11.1%	56.4	56.5	0.1	0.2%
12.3%	56.4	56.4	0.1	0.1%
13.6%	56.4	56.2	-0.1	-0.2%
14.8%	56.2	56.1	-0.1	-0.2%
16.0%	56.2	56.0	-0.1	-0.2%
17.3%	56.1	56.0	-0.1	-0.2%
18.5%	56.0	56.0	0.0	0.1%
19.8%	55.9	56.0	0.1	0.2%
21.0%	55.8	56.0	0.2	0.4%
22.2%	55.7	56.0	0.3	0.6%
23.5%	55.6	55.7	0.1	0.2%
24.7%	55.4	55.6	0.2	0.4%
25.9%	55.4	55.6	0.2	0.3%
27.2%	55.4	55.6	0.2	0.4%
28.4%	55.3	55.6	0.3	0.5%
29.6%	55.2	55.4	0.1	0.2%
30.9%	55.2	55.3	0.1	0.2%
32.1%	55.1	55.3	0.2	0.3%
33.3%	55.0	55.2	0.2	0.4%
34.6%	54.8	55.0	0.2	0.3%
35.8%	54.8	55.0	0.2	0.3%
37.0%	54.8	55.0	0.2	0.3%
38.3%	54.5	55.0	0.4	0.8%
39.5%	54.5	55.0	0.4	0.8%
40.7%	54.5	54.9	0.4	0.8%
42.0%	54.4	54.9	0.5	0.9%
43.2%	54.4	54.8	0.4	0.7%
44.4%	54.4	54.8	0.4	0.7%
45.7%	54.4	54.8	0.4	0.7%
46.9%	54.3	54.7	0.4	0.7%
48.1%	54.3	54.7	0.4	0.7%
49.4%	54.3	54.6	0.4	0.7%
50.6%	54.2	54.6	0.4	0.7%
51.9%	54.2	54.5	0.3	0.6%
53.1%	54.2	54.4	0.2	0.4%
54.3%	54.2	54.4	0.2	0.4%
55.6%	54.1	54.4	0.3	0.5%
56.8%	54.1	54.4	0.3	0.5%
58.0%	54.1	54.3	0.3	0.5%
59.3%	54.0	54.3	0.3	0.5%
60.5%	53.9	54.3	0.4	0.7%
61.7%	53.9	54.2	0.3	0.6%
63.0%	53.9	54.1	0.2	0.4%
64.2%	53.8	54.1	0.3	0.5%
65.4%	53.8	54.1	0.3	0.6%
66.7%	53.8	54.1	0.3	0.5%
67.9%	53.7	53.8	0.1	0.2%
69.1%	53.7	53.8	0.1	0.2%
70.4%	53.7	53.8	0.1	0.2%
71.6%	53.6	53.8	0.2	0.4%
72.8%	53.6	53.8	0.2	0.4%
74.1%	53.6	53.8	0.2	0.4%
75.3%	53.5	53.7	0.2	0.3%
76.5%	53.4	53.7	0.3	0.5%
77.8%	53.4	53.6	0.3	0.5%
79.0%	53.4	53.6	0.2	0.4%
80.2%	53.3	53.6	0.2	0.4%
81.5%	53.3	53.5	0.2	0.5%
82.7%	53.2	53.5	0.3	0.5%
84.0%	53.2	53.5	0.3	0.5%
85.2%	53.0	53.4	0.4	0.7%
86.4%	53.0	53.4	0.4	0.7%
87.7%	53.0	53.4	0.4	0.7%
88.9%	53.0	53.3	0.3	0.6%
90.1%	52.9	53.1	0.2	0.3%
91.4%	52.8	53.0	0.2	0.4%
92.6%	52.7	53.0	0.2	0.4%
93.8%	52.6	52.8	0.2	0.4%
95.1%	52.6	52.7	0.1	0.2%
96.3%	52.6	52.7	0.1	0.1%
97.5%	52.5	52.6	0.2	0.3%
98.8%	52.2	52.4	0.2	0.3%
100.0%	52.2	52.4	0.2	0.3%

August				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.1	61.5	-4.6	-7.0%
1.2%	59.0	57.5	-1.5	-2.5%
2.5%	58.6	57.4	-1.2	-2.0%
3.7%	58.4	57.1	-1.2	-2.1%
4.9%	58.2	57.0	-1.1	-1.9%
6.2%	57.9	57.0	-0.9	-1.6%
7.4%	57.6	57.0	-0.6	-1.0%
8.6%	57.3	56.9	-0.3	-0.6%
9.9%	57.2	56.9	-0.3	-0.5%
11.1%	57.1	56.8	-0.3	-0.5%
12.3%	57.1	56.8	-0.3	-0.6%
13.6%	57.1	56.7	-0.4	-0.6%
14.8%	57.1	56.6	-0.4	-0.7%
16.0%	56.9	56.6	-0.3	-0.6%
17.3%	56.9	56.5	-0.4	-0.6%
18.5%	56.8	56.5	-0.3	-0.5%
19.8%	56.8	56.5	-0.3	-0.5%
21.0%	56.8	56.5	-0.3	-0.5%
22.2%	56.7	56.5	-0.2	-0.4%
23.5%	56.7	56.4	-0.3	-0.4%
24.7%	56.7	56.4	-0.3	-0.5%
25.9%	56.6	56.4	-0.3	-0.5%
27.2%	56.5	56.3	-0.3	-0.4%
28.4%	56.4	56.3	-0.1	-0.2%
29.6%	56.4	56.3	-0.1	-0.2%
30.9%	56.3	56.2	-0.1	-0.2%
32.1%	56.3	56.2	-0.1	-0.2%
33.3%	56.3	56.2	-0.1	-0.2%
34.6%	56.3	56.2	-0.1	-0.2%
35.8%	56.3	56.1	-0.1	-0.2%
37.0%	56.3	56.1	-0.1	-0.3%
38.3%	56.2	56.1	-0.1	-0.2%
39.5%	56.0	56.0	0.0	0.0%
40.7%	56.0	56.0	0.0	0.0%
42.0%	55.9	55.9	0.0	0.1%
43.2%	55.9	55.9	0.0	0.0%
44.4%	55.9	55.8	-0.1	-0.1%
45.7%	55.9	55.8	-0.1	-0.2%
46.9%	55.8	55.8	-0.1	-0.2%
48.1%	55.7	55.7	-0.1	-0.1%
49.4%	55.7	55.6	-0.1	-0.1%
50.6%	55.6	55.6	-0.1	-0.1%
51.9%	55.6	55.5	-0.1	-0.1%
53.1%	55.5	55.5	0.0	-0.1%
54.3%	55.5	55.5	0.0	-0.1%
55.6%	55.5	55.5	0.0	0.0%
56.8%	55.5	55.5	0.0	0.0%
58.0%	55.5	55.4	-0.1	-0.1%
59.3%	55.4	55.3	-0.2	-0.3%
60.5%	55.4	55.3	-0.1	-0.2%
61.7%	55.3	55.3	-0.1	-0.1%
63.0%	55.3	55.2	-0.1	-0.1%
64.2%	55.3	55.2	-0.1	-0.2%
65.4%	55.3	55.1	-0.2	-0.3%
66.7%	55.3	55.0	-0.2	-0.4%
67.9%	55.2	55.0	-0.2	-0.3%
69.1%	55.2	54.9	-0.3	-0.5%
70.4%	55.1	54.9	-0.2	-0.4%
71.6%	55.1	54.9	-0.2	-0.4%
72.8%	55.0	54.9	-0.1	-0.2%
74.1%	55.0	54.8	-0.1	-0.3%
75.3%	54.9	54.8	-0.1	-0.1%
76.5%	54.8	54.8	0.0	-0.1%
77.8%	54.8	54.7	-0.1	-0.2%
79.0%	54.8	54.5	-0.3	-0.5%
80.2%	54.8	54.5	-0.3	-0.5%
81.5%	54.8	54.3	-0.4	-0.8%
82.7%	54.7	54.3	-0.4	-0.7%
84.0%	54.7	54.3	-0.4	-0.7%
85.2%	54.6	54.2	-0.4	-0.7%
86.4%	54.6	54.2	-0.3	-0.6%
87.7%	54.5	54.2	-0.3	-0.6%
88.9%	54.5	54.1	-0.4	-0.7%
90.1%	54.5	54.1	-0.4	-0.7%
91.4%	54.4	54.1	-0.4	-0.7%
92.6%	54.4	54.1	-0.3	-0.6%
93.8%	54.1	54.0	-0.1	-0.2%
95.1%	53.4	53.8	0.4	0.7%
96.3%	53.4	53.6	0.2	0.4%
97.5%	53.1	53.5	0.3	0.6%
98.8%	53.0	53.4	0.3	0.6%
100.0%	53.0	53.4	0.3	0.6%

September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.5	66.8	0.4	0.6%
1.2%	64.5	60.5	-4.0	-6.3%
2.5%	63.1	60.0	-3.1	-4.9%
3.7%	59.8	58.2	-1.6	-2.6%
4.9%	59.1	58.2	-0.9	-1.5%
6.2%	58.8	58.0	-0.8	-1.4%
7.4%	58.7	57.9	-0.8	-1.4%
8.6%	58.0	57.6	-0.4	-0.7%
9.9%	57.9	57.5	-0.4	-0.6%
11.1%	57.8	57.1	-0.7	-1.2%
12.3%	57.7	57.1	-0.6	-1.1%
13.6%	57.7	57.1	-0.6	-1.1%
14.8%	57.6	57.1	-0.5	-0.9%
16.0%	57.6	56.7	-0.9	-1.5%
17.3%	57.6	56.7	-0.9	-1.5%
18.5%	57.3	56.6	-0.6	-1.1%
19.8%	57.2	56.6	-0.6	-1.1%
21.0%	57.1	56.6	-0.5	-0.9%
22.2%	57.1	56.5	-0.5	-1.0%
23.5%	56.9	56.5	-0.4	-0.7%
24.7%	56.9	56.5	-0.4	-0.7%
25.9%	56.9	56.4	-0.4	-0.8%
27.2%	56.6	56.4	-0.1	-0.3%
28.4%	56.5	56.4	-0.1	-0.2%
29.6%	56.5	56.3	-0.2	-0.4%
30.9%	56.5	56.2	-0.3	-0.5%
32.1%	56.4	56.2	-0.2	-0.4%
33.3%	56.3	56.2	-0.2	-0.3%
34.6%	56.0	56.2	0.2	0.3%
35.8%	56.0	56.1	0.1	0.2%
37.0%	55.8	55.9	0.1	0.2%
38.3%	55.7	55.9	0.2	0.4%
39.5%	55.6	55.9	0.3	0.5%
40.7%	55.6	55.6	0.1	0.2%
42.0%	55.4	55.6	0.2	0.3%
43.2%	55.3	55.5	0.2	0.3%
44.4%	55.2	55.2	0.0	0.0%
45.7%	55.2	55.2	0.0	0.0%
46.9%	55.1	55.1	0.0	0.1%
48.1%	55.1	55.1	0.0	0.0%
49.4%	55.0	55.0	-0.1	-0.1%
50.6%	55.0	55.0	0.0	-0.1%
51.9%	54.8	54.9	0.2	0.3%
53.1%	54.6	54.9	0.3	0.6%
54.3%	54.5	54.8	0.3	0.5%
55.6%	54.4	54.7	0.3	0.6%
56.8%	54.2	54.7	0.5	0.9%
58.0%	54.1	54.6	0.5	1.0%
59.3%	54.1	54.6	0.5	1.0%
60.5%	54.0	54.6	0.6	1.0%
61.7%	53.9	54.5	0.5	1.0%
63.0%	53.9	54.5	0.6	1.1%
64.2%	53.9	54.5	0.6	1.1%
65.4%	53.8	54.4	0.6	1.1%
66.7%	53.8	54.4	0.6	1.1%
67.9%	53.7	54.3	0.6	1.2%
69.1%	53.7	54.3	0.6	1.2%
70.4%	53.7	54.3	0.6	1.2%
71.6%	53.6	54.3	0.6	1.2%
72.8%	53.6	54.2	0.6	1.1%
74.1%	53.4	54.1	0.7	1.4%
75.3%	53.3	54.0	0.7	1.3%
76.5%	53.3	53.6	0.3	0.5%
77.8%	53.3	53.5	0.2	0.4%
79.0%	53.3	53.5	0.2	0.4%
80.2%	52.9	53.5	0.6	1.2%
81.5%	52.7	53.4	0.7	1.3%
82.7%	52.7	53.4	0.7	1.4%
84.0%	52.6	53.4	0.8	1.5%
85.2%	52.6	53.4	0.7	1.4%
86.4%	52.6	53.1	0.4	0.8%
87.7%	52.6	52.8	0.2	0.4%
88.9%	52.6	52.6	0.0	0.1%
90.1%	52.5	52.6	0.0	0.1%
91.4%	52.5	52.2	-0.3	-0.6%
92.6%	52.2	51.9	-0.3	-0.6%
93.8%	51.9	51.9	0.0	0.0%
95.1%	51.7	51.9	0.1	0.2%
96.3%	51.6	51.8	0.2	0.4%
97.5%	51.3	51.5	0.3	0.6%
98.8%	51.2	51.4	0.1	0.3%
100.0%	51.2	51.4	0.1	0.3%

Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.7	60.2	-1.5	-2.4%
1.2%	58.4	57.2	-1.1	-1.9%
2.5%	58.1	57.1	-1.0	-1.8%
3.7%	57.5	56.9	-0.6	-1.1%
4.9%	56.9	56.8	-0.1	-0.3%
6.2%	56.8	56.7	-0.2	-0.3%
7.4%	56.8	56.6	-0.2	-0.4%
8.6%	56.7	56.6	-0.1	-0.2%
9.9%	56.6	56.4	-0.2	-0.3%
11.1%	56.6	56.4	-0.2	-0.4%
12.3%	56.5	56.4	-0.1	-0.2%
13.6%	56.4	56.2	-0.2	-0.3%
14.8%	56.3	56.2	-0.1	-0.1%
16.0%	56.3	56.1	-0.2	-0.3%
17.3%	56.2	55.9	-0.2	-0.4%
18.5%	56.1	55.9	-0.2	-0.4%
19.8%	56.1	55.8	-0.3	-0.5%
21.0%	56.1	55.7	-0.4	-0.7%
22.2%	55.8	55.7	-0.1	-0.2%
23.5%	55.8	55.6	-0.1	-0.2%
24.7%	55.7	55.6	0.0	0.0%
25.9%	55.6	55.5	-0.1	-0.2%
27.2%	55.6	55.5	-0.1	-0.2%
28.4%	55.6	55.4	-0.1	-0.2%
29.6%	55.6	55.4	-0.1	-0.2%
30.9%	55.5	55.4	-0.1	-0.3%
32.1%	55.5	55.4	-0.2	-0.3%
33.3%	55.3	55.3	0.0	0.0%
34.6%	55.2	55.2	0.0	-0.1%
35.8%	55.0	55.1	0.1	0.2%
37.0%	55.0	55.1	0.1	0.1%
38.3%	55.0	55.0	0.0	0.0%
39.5%	54.9	55.0	0.1	0.2%
40.7%	54.9	54.9	0.1	0.2%
42.0%	54.7	54.9	0.2	0.3%
43.2%	54.6	54.9	0.3	0.5%
44.4%	54.6	54.8	0.2	0.4%
45.7%	54.5	54.8	0.3	0.6%
46.9%	54.5	54.8	0.3	0.5%
48.1%	54.5	54.7	0.2	0.4%
49.4%	54.5	54.7	0.2	0.3%
50.6%	54.4	54.6	0.2	0.4%
51.9%	54.4	54.6	0.3	0.5%
53.1%	54.4	54.6	0.2	0.4%
54.3%	54.3	54.5	0.3	0.5%
55.6%	54.3	54.4	0.1	0.3%
56.8%	54.2	54.4	0.2	0.4%
58.0%	54.2	54.4	0.2	0.4%
59.3%	54.2	54.3	0.2	0.3%
60.5%	54.1	54.3	0.2	0.3%
61.7%	54.0	54.3	0.3	0.5%
63.0%	54.0	54.3	0.3	0.5%
64.2%	53.9	54.2	0.3	0.5%
65.4%	53.9	54.2	0.3	0.5%
66.7%	53.9	54.1	0.2	0.4%
67.9%	53.9	54.1	0.2	0.4%
69.1%	53.8	54.1	0.2	0.5%
70.4%	53.8	54.1	0.3	0.5%
71.6%	53.8	54.0	0.3	0.5%
72.8%	53.7	54.0	0.3	0.6%
74.1%	53.7	54.0	0.3	0.6%
75.3%	53.7	54.0	0.3	0.6%
76.5%	53.7	53.9	0.2	0.4%
77.8%	53.7	53.9	0.2	0.4%
79.0%	53.6	53.8	0.2	0.4%
80.2%	53.6	53.7	0.2	0.3%
81.5%	53.6	53.7	0.2	0.3%
82.7%	53.4	53.7	0.3	0.5%
84.0%	53.4	53.7	0.3	0.5%
85.2%	53.3	53.6	0.2	0.4%
86.4%	53.3	53.6	0.3	0.5%
87.7%	53.2	53.5	0.3	0.6%
88.9%	53.1	53.4	0.3	0.5%
90.1%	53.1	53.4	0.3	0.5%
91.4%	53.1	53.3	0.2	0.3%
92.6%	53.0	53.2	0.2	0.4%
93.8%	52.8	52.9	0.2	0.3%
95.1%	52.7	52.8	0.1	0.2%
96.3%	52.6	52.8	0.1	0.2%
97.5%	52.6	52.7	0.1	0.2%
98.8%	52.6	52.7	0.1	0.3%
100.0%	52.3	52.1	-0.2	-0.3%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.7	61.9	-1.8	-2.8%
1.2%	59.8	58.1	-1.7	-2.9%
2.5%	59.3	57.8	-1.4	-2.4%
3.7%	58.2	57.3	-0.9	-1.6%
4.9%	57.7	57.3	-0.4	-0.7%
6.2%	57.6	57.2	-0.5	-0.8%
7.4%	57.6	57.1	-0.6	-1.0%
8.6%	57.3	57.0	-0.3	-0.5%
9.9%	57.0	57.0	0.0	-0.1%
11.1%	57.0	57.0	0.0	-0.1%
12.3%	57.0	56.9	-0.1	-0.2%
13.6%	56.9	56.8	-0.1	-0.2%
14.8%	56.9	56.7	-0.1	-0.2%
16.0%	56.8	56.6	-0.2	-0.3%
17.3%	56.7	56.5	-0.2	-0.4%
18.5%	56.7	56.4	-0.3	-0.5%
19.8%	56.6	56.3	-0.4	-0.7%
21.0%	56.5	56.2	-0.3	-0.5%
22.2%	56.5	56.2	-0.3	-0.5%
23.5%	56.4	56.2	-0.2	-0.3%
24.7%	56.3	56.1	-0.2	-0.3%
25.9%	56.3	56.1	-0.2	-0.4%
27.2%	56.3	56.1	-0.2	-0.4%
28.4%	56.1	55.9	-0.2	-0.4%
29.6%	56.1	55.9	-0.2	-0.4%
30.9%	56.0	55.8	-0.3	-0.5%
32.1%	56.0	55.8	-0.3	-0.4%
33.3%	55.8	55.7	-0.2	-0.3%
34.6%	55.7	55.7	0.0	0.0%
35.8%	55.6	55.6	0.1	0.1%
37.0%	55.5	55.5	0.0	0.0%
38.3%	55.3	55.4	0.2	0.3%
39.5%	55.2	55.3	0.1	0.2%
40.7%	55.2	55.3	0.1	0.2%
42.0%	55.1	55.2	0.2	0.3%
43.2%	55.0	55.1	0.1	0.2%
44.4%	55.0	55.1	0.1	0.2%
45.7%	54.9	55.1	0.2	0.3%
46.9%	54.9	55.0	0.2	0.3%
48.1%	54.9	55.0	0.1	0.2%
49.4%	54.8	54.9	0.1	0.2%
50.6%	54.8	54.9	0.1	0.2%
51.9%	54.7	54.9	0.2	0.4%
53.1%	54.6	54.9	0.2	0.4%
54.3%	54.6	54.9	0.3	0.6%
55.6%	54.5	54.8	0.3	0.5%
56.8%	54.5	54.8	0.3	0.5%
58.0%	54.5	54.7	0.2	0.4%
59.3%	54.5	54.6	0.2	0.3%
60.5%	54.5	54.6	0.2	0.3%
61.7%	54.5	54.6	0.1	0.2%
63.0%	54.4	54.5	0.1	0.2%
64.2%	54.4	54.5	0.1	0.3%
65.4%	54.3	54.5	0.2	0.4%
66.7%	54.3	54.5	0.2	0.4%
67.9%	54.3	54.5	0.2	0.5%
69.1%	54.2	54.4	0.2	0.3%
70.4%	54.2	54.4	0.2	0.3%
71.6%	54.2	54.4	0.2	0.4%
72.8%	54.2	54.3	0.1	0.3%
74.1%	54.2	54.3	0.1	0.2%
75.3%	54.1	54.3	0.2	0.3%
76.5%	54.0	54.2	0.2	0.3%
77.8%	54.0	54.1	0.2	0.3%
79.0%	53.9	54.1	0.2	0.3%
80.2%	53.9	54.1	0.2	0.3%
81.5%	53.9	54.0	0.2	0.3%
82.7%	53.8	54.0	0.2	0.4%
84.0%	53.7	53.9	0.2	0.4%
85.2%	53.6	53.9	0.2	0.4%
86.4%	53.6	53.8	0.2	0.5%
87.7%	53.4	53.6	0.2	0.4%
88.9%	53.3	53.5	0.2	0.3%
90.1%	53.3	53.4	0.2	0.3%
91.4%	53.2	53.3	0.1	0.1%
92.6%	53.2	53.2	0.1	0.1%
93.8%	53.1	53.1	0.0	0.0%
95.1%	53.1	53.1	0.0	-0.1%
96.3%	53.0	53.0	0.1	0.2%
97.5%	52.9	52.9	0.0	-0.1%
98.8%	52.9	52.8	-0.1	-0.3%
100.0%	52.4	52.1	-0.3	-0.6%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.3	64.2	-2.1	-3.2%
1.2%	61.7	58.7	-3.0	-4.9%
2.5%	60.5	58.5	-2.0	-3.2%
3.7%	59.2	57.7	-1.5	-2.5%
4.9%	58.5	57.7	-0.8	-1.3%
6.2%	58.3	57.6	-0.7	-1.3%
7.4%	58.2	57.5	-0.7	-1.2%
8.6%	57.5	57.1	-0.4	-0.7%
9.9%	57.5	57.1	-0.4	-0.8%
11.1%	57.4	57.0	-0.3	-0.6%
12.3%	57.3	57.0	-0.3	-0.6%
13.6%	57.2	56.9	-0.3	-0.6%
14.8%	57.1	56.7	-0.4	-0.7%
16.0%	57.1	56.7	-0.5	-0.8%
17.3%	57.1	56.6	-0.5	-0.8%
18.5%	57.0	56.5	-0.5	-0.8%
19.8%	57.0	56.5	-0.5	-0.8%
21.0%	56.9	56.5	-0.4	-0.7%
22.2%	56.8	56.4	-0.4	-0.7%
23.5%	56.8	56.4	-0.4	-0.7%
24.7%	56.7	56.4	-0.3	-0.6%
25.9%	56.6	56.3	-0.3	-0.5%
27.2%	56.6	56.3	-0.3	-0.5%
28.4%	56.6	56.3	-0.3	-0.5%
29.6%	56.6	56.3	-0.3	-0.4%
30.9%	56.4	56.3	-0.1	-0.2%
32.1%	56.3	56.3	-0.1	-0.1%
33.3%	56.3	56.1	-0.2	-0.3%
34.6%	56.0	56.1	0.1	0.2%
35.8%	55.9	55.9	0.0	0.0%
37.0%	55.7	55.8	0.1	0.2%
38.3%	55.7	55.7	0.0	0.0%
39.5%	55.6	55.7	0.0	0.1%
40.7%	55.6	55.7	0.1	0.1%
42.0%	55.6	55.6	0.0	0.0%
43.2%	55.4	55.4	-0.1	-0.1%
44.4%	55.4	55.4	-0.1	-0.1%
45.7%	55.4	55.3	-0.1	-0.2%
46.9%	55.2	55.3	0.0	0.0%
48.1%	55.2	55.3	0.1	0.2%
49.4%	55.2	55.2	0.1	0.1%
50.6%	55.1	55.1	0.1	0.1%
51.9%	55.1	55.1	0.1	0.1%
53.1%	55.0	55.1	0.0	0.1%
54.3%	55.0	55.0	0.0	0.0%
55.6%	55.0	55.0	0.0	0.0%
56.8%	54.9	55.0	0.1	0.1%
58.0%	54.9	54.9	0.1	0.1%
59.3%	54.8	54.9	0.1	0.2%
60.5%	54.7	54.9	0.2	0.3%
61.7%	54.7	54.9	0.2	0.4%
63.0%	54.7	54.9	0.2	0.3%
64.2%	54.6	54.7	0.1	0.2%
65.4%	54.6	54.7	0.1	0.2%
66.7%	54.6	54.7	0.1	0.2%
67.9%	54.5	54.6	0.2	0.3%
69.1%	54.4	54.6	0.1	0.3%
70.4%	54.4	54.5	0.2	0.3%
71.6%	54.4	54.5	0.2	0.3%
72.8%	54.3	54.5	0.2	0.3%
74.1%	54.3	54.5	0.2	0.4%
75.3%	54.2	54.5	0.2	0.4%
76.5%	54.2	54.5	0.3	0.5%
77.8%	54.2	54.4	0.2	0.4%
79.0%	54.1	54.3	0.2	0.5%
80.2%	54.1	54.3	0.3	0.5%
81.5%	54.0	54.2	0.3	0.5%
82.7%	53.9	54.2	0.3	0.5%
84.0%	53.9	54.2	0.3	0.6%
85.2%	53.7	54.1	0.4	0.8%
86.4%	53.7	53.6	0.0	-0.1%
87.7%	53.6	53.6	-0.1	-0.1%
88.9%	53.6	53.5	-0.1	-0.1%
90.1%	53.5	53.4	-0.1	-0.2%
91.4%	53.3	53.4	0.1	0.1%
92.6%	53.3	53.4	0.1	0.2%
93.8%	53.0	53.0	0.0	-0.1%
95.1%	53.0	52.9	-0.1	-0.2%
96.3%	53.0	52.8	-0.2	-0.3%
97.5%	52.9	52.7	-0.2	-0.3%
98.8%	52.6	52.7	0.1	0.3%
100.0%	52.1	51.6	-0.4	-0.8%

Figure SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

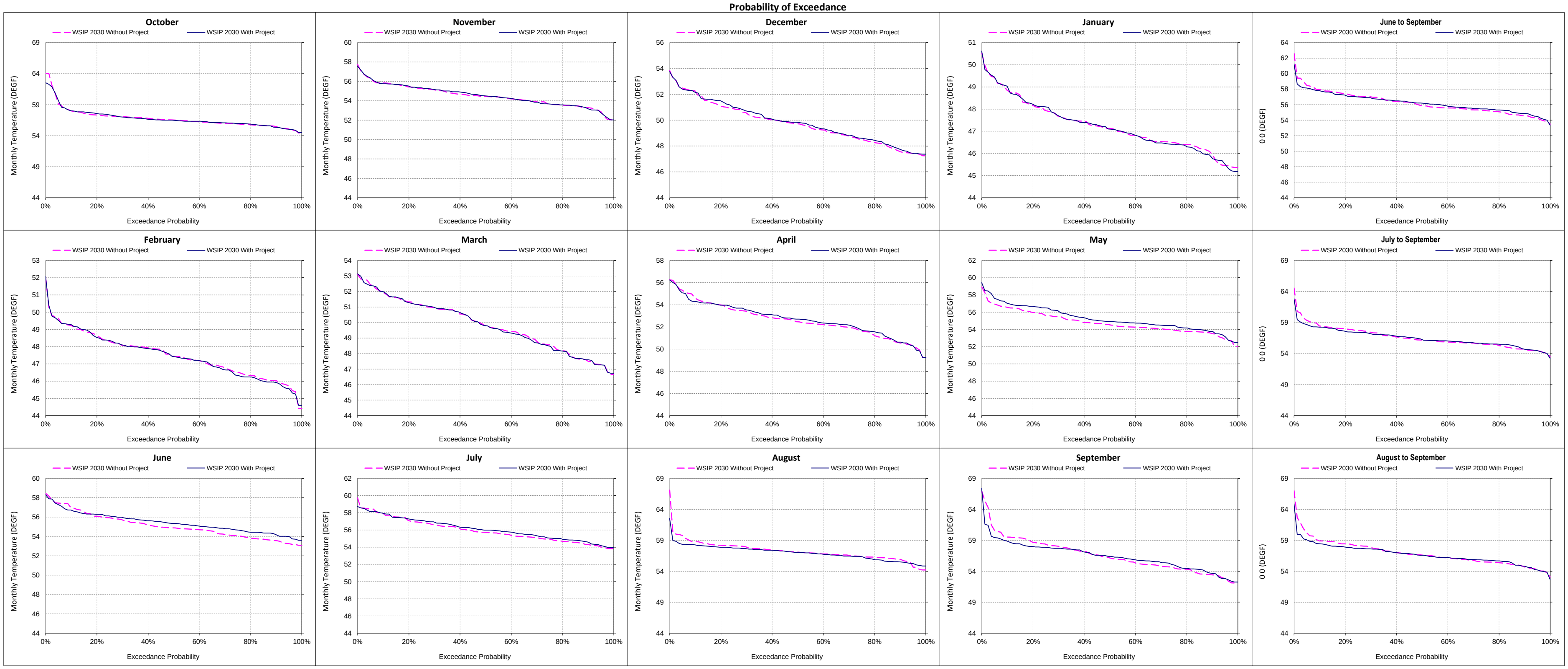


Table SQ5-1b

Sacramento River at Jellys Ferry, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.1	62.5	-1.5	-2.4%
1.2%	64.0	62.3	-1.7	-2.7%
2.5%	62.1	61.9	-0.2	-0.3%
3.7%	60.8	60.9	0.1	0.1%
4.9%	59.1	59.6	0.5	0.9%
6.2%	58.8	58.6	-0.3	-0.4%
7.4%	58.3	58.5	0.1	0.2%
8.6%	58.2	58.2	0.0	-0.1%
9.9%	58.0	58.0	0.0	0.0%
11.1%	57.9	58.0	0.1	0.2%
12.3%	57.8	57.8	0.0	0.0%
13.6%	57.8	57.8	0.0	0.1%
14.8%	57.6	57.8	0.2	0.3%
16.0%	57.5	57.8	0.2	0.4%
17.3%	57.4	57.7	0.3	0.5%
18.5%	57.4	57.7	0.3	0.5%
19.8%	57.3	57.6	0.3	0.4%
21.0%	57.3	57.5	0.2	0.3%
22.2%	57.2	57.5	0.3	0.5%
23.5%	57.2	57.4	0.3	0.4%
24.7%	57.2	57.4	0.2	0.4%
25.9%	57.2	57.3	0.1	0.2%
27.2%	57.1	57.2	0.0	0.1%
28.4%	57.1	57.1	-0.1	-0.1%
29.6%	57.1	57.0	-0.1	-0.1%
30.9%	57.1	57.0	-0.1	-0.1%
32.1%	57.0	56.9	-0.1	-0.2%
33.3%	57.0	56.9	-0.1	-0.1%
34.6%	57.0	56.9	-0.1	-0.2%
35.8%	56.9	56.8	-0.1	-0.2%
37.0%	56.9	56.8	-0.1	-0.2%
38.3%	56.9	56.8	-0.1	-0.3%
39.5%	56.8	56.7	-0.1	-0.2%
40.7%	56.7	56.6	-0.2	-0.3%
42.0%	56.7	56.6	-0.1	-0.2%
43.2%	56.7	56.5	-0.1	-0.2%
44.4%	56.6	56.5	-0.1	-0.2%
45.7%	56.6	56.5	-0.1	-0.2%
46.9%	56.6	56.5	-0.1	-0.2%
48.1%	56.5	56.5	0.0	-0.1%
49.4%	56.5	56.5	0.0	-0.1%
50.6%	56.5	56.5	0.0	-0.1%
51.9%	56.5	56.4	-0.1	-0.1%
53.1%	56.4	56.4	-0.1	-0.1%
54.3%	56.4	56.3	-0.1	-0.1%
55.6%	56.4	56.3	-0.1	-0.1%
56.8%	56.3	56.3	0.1	0.1%
58.0%	56.3	56.3	0.1	0.1%
59.3%	56.3	56.3	0.1	0.1%
60.5%	56.2	56.3	0.1	0.2%
61.7%	56.2	56.3	0.1	0.2%
63.0%	56.2	56.3	0.1	0.1%
64.2%	56.2	56.1	0.0	-0.1%
65.4%	56.1	56.1	0.0	0.0%
66.7%	56.1	56.1	0.1	0.1%
67.9%	56.0	56.1	0.1	0.2%
69.1%	56.0	56.1	0.1	0.1%
70.4%	55.9	56.1	0.1	0.3%
71.6%	55.9	56.0	0.1	0.2%
72.8%	55.9	56.0	0.1	0.1%
74.1%	55.9	56.0	0.1	0.2%
75.3%	55.9	56.0	0.1	0.2%
76.5%	55.8	56.0	0.1	0.2%
77.8%	55.8	55.9	0.1	0.2%
79.0%	55.8	55.9	0.1	0.2%
80.2%	55.8	55.9	0.1	0.2%
81.5%	55.7	55.8	0.1	0.2%
82.7%	55.7	55.7	0.1	0.1%
84.0%	55.6	55.7	0.0	0.1%
85.2%	55.6	55.7	0.0	0.0%
86.4%	55.6	55.6	0.0	0.0%
87.7%	55.6	55.6	0.0	0.0%
88.9%	55.5	55.4	-0.1	-0.3%
90.1%	55.5	55.3	-0.1	-0.3%
91.4%	55.2	55.3	0.1	0.1%
92.6%	55.2	55.2	0.0	-0.1%
93.8%	55.2	55.1	-0.1	-0.2%
95.1%	55.1	55.0	0.0	-0.1%
96.3%	54.9	55.0	0.1	0.1%
97.5%	54.8	54.9	0.0	0.1%
98.8%	54.4	54.5	0.1	0.2%
100.0%	54.4	54.5	0.0	0.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.8	57.6	-0.2	-0.3%
1.2%	57.1	57.2	0.1	0.1%
2.5%	56.7	56.8	0.0	0.0%
3.7%	56.5	56.5	0.1	0.1%
4.9%	56.3	56.4	0.0	0.0%
6.2%	56.0	56.1	0.1	0.1%
7.4%	55.9	55.9	0.1	0.1%
8.6%	55.8	55.8	-0.1	-0.1%
9.9%	55.8	55.8	-0.1	-0.1%
11.1%	55.8	55.8	-0.1	-0.1%
12.3%	55.8	55.7	-0.1	-0.1%
13.6%	55.8	55.7	-0.1	-0.1%
14.8%	55.7	55.7	0.0	0.0%
16.0%	55.7	55.7	0.0	0.0%
17.3%	55.6	55.7	0.1	0.2%
18.5%	55.5	55.6	0.0	0.1%
19.8%	55.4	55.5	0.1	0.2%
21.0%	55.4	55.4	0.0	0.0%
22.2%	55.4	55.4	0.0	0.0%
23.5%	55.3	55.3	0.0	0.1%
24.7%	55.3	55.3	0.1	0.1%
25.9%	55.2	55.3	0.1	0.1%
27.2%	55.2	55.3	0.0	0.1%
28.4%	55.2	55.2	0.1	0.1%
29.6%	55.1	55.2	0.0	0.1%
30.9%	55.1	55.1	0.0	0.1%
32.1%	55.0	55.1	0.1	0.1%
33.3%	55.0	55.0	0.0	0.0%
34.6%	54.9	55.0	0.1	0.2%
35.8%	54.8	55.0	0.2	0.3%
37.0%	54.8	54.9	0.2	0.3%
38.3%	54.7	54.9	0.2	0.4%
39.5%	54.7	54.9	0.2	0.5%
40.7%	54.7	54.9	0.2	0.4%
42.0%	54.6	54.9	0.2	0.4%
43.2%	54.6	54.8	0.2	0.4%
44.4%	54.6	54.7	0.1	0.3%
45.7%	54.5	54.6	0.1	0.2%
46.9%	54.5	54.6	0.1	0.2%
48.1%	54.5	54.5	0.1	0.2%
49.4%	54.4	54.5	0.1	0.1%
50.6%	54.4	54.5	0.1	0.1%
51.9%	54.4	54.5	0.0	0.1%
53.1%	54.4	54.4	0.0	0.1%
54.3%	54.4	54.4	0.0	0.1%
55.6%	54.4	54.3	-0.1	-0.1%
56.8%	54.3	54.3	0.0	0.0%
58.0%	54.3	54.3	0.0	0.0%
59.3%	54.2	54.3	0.1	0.1%
60.5%	54.2	54.2	0.0	0.0%
61.7%	54.2	54.1	0.0	0.0%
63.0%	54.1	54.1	0.0	-0.1%
64.2%	54.1	54.0	0.0	-0.1%
65.4%	54.1	54.0	0.0	0.0%
66.7%	54.0	54.0	0.0	0.0%
67.9%	53.9	53.9	0.0	0.0%
69.1%	53.9	53.9	-0.1	-0.1%
70.4%	53.9	53.8	-0.1	-0.1%
71.6%	53.9	53.7	-0.2	-0.3%
72.8%	53.9	53.7	-0.2	-0.4%
74.1%	53.7	53.7	0.0	0.0%
75.3%	53.6	53.7	0.0	0.0%
76.5%	53.6	53.6	0.0	0.0%
77.8%	53.6	53.6	0.0	0.0%
79.0%	53.6	53.6	0.0	0.0%
80.2%	53.5	53.6	0.0	0.1%
81.5%	53.5	53.6	0.0	0.0%
82.7%	53.5	53.5	0.0	0.1%
84.0%	53.5	53.5	0.0	0.0%
85.2%	53.5	53.5	0.0	0.0%
86.4%	53.5	53.4	0.0	0.0%
87.7%	53.3	53.4	0.1	0.1%
88.9%	53.3	53.3	0.0	0.0%
90.1%	53.3	53.2	-0.1	-0.2%
91.4%	53.2	53.0	-0.2	-0.4%
92.6%	53.1	53.0	-0.1	-0.1%
93.8%	53.0	53.0	0.0	0.0%
95.1%	52.9	52.7	-0.1	-0.2%
96.3%	52.4	52.5	0.1	0.2%
97.5%	52.1	52.2	0.2	0.3%
98.8%	52.1	52.0	0.0	-0.1%
100.0%	52.1	52.0	0.0	-0.1%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.8	53.7	-0.1	-0.2%
1.2%	53.3	53.3	0.1	0.1%
2.5%	53.1	53.1	0.0	0.0%
3.7%	52.5	52.6	0.0	0.1%
4.9%	52.5	52.4	-0.1	-0.1%
6.2%	52.4	52.3	-0.1	-0.2%
7.4%	52.3	52.3	0.0	-0.1%
8.6%	52.3	52.3	0.0	0.0%
9.9%	52.3	52.1	-0.1	-0.2%
11.1%	51.9	52.1	0.2	0.4%
12.3%	51.9	51.7	-0.2	-0.4%
13.6%	51.5	51.6	0.1	0.2%
14.8%	51.5	51.6	0.1	0.2%
16.0%	51.4	51.6	0.2	0.4%
17.3%	51.3	51.5	0.2	0.4%
18.5%	51.2	51.5	0.3	0.6%
19.8%	51.1	51.5	0.4	0.8%
21.0%	51.0	51.4	0.4	0.7%
22.2%	51.0	51.3	0.2	0.5%
23.5%	50.9	51.2	0.3	0.5%
24.7%	50.9	51.0	0.1	0.2%
25.9%	50.8	51.0	0.1	0.3%
27.2%	50.8	50.9	0.1	0.2%
28.4%	50.6	50.8	0.2	0.4%
29.6%	50.6	50.7	0.1	0.3%
30.9%	50.4	50.7	0.2	0.5%
32.1%	50.3	50.7	0.3	0.7%
33.3%	50.2	50.5	0.3	0.6%
34.6%	50.2	50.5	0.3	0.6%
35.8%	50.2	50.5	0.3	0.6%
37.0%	50.2	50.2	0.0	0.0%
38.3%	50.1	50.2	0.1	0.1%
39.5%	50.0	50.1	0.1	0.2%
40.7%	50.0	50.0	0.0	0.0%
42.0%	50.0	50.0	0.0	0.1%
43.2%	49.9	49.9	0.0	0.0%
44.4%	49.9	49.9	0.0	0.1%
45.7%	49.8	49.9	0.1	0.1%
46.9%	49.8	49.9	0.1	0.2%
48.1%	49.8	49.8	0.1	0.2%
49.4%	49.7	49.8	0.1	0.2%
50.6%	49.7	49.8	0.1	0.2%
51.9%	49.6	49.8	0.1	0.3%
53.1%	49.6	49.8	0.2	0.3%
54.3%	49.5	49.6	0.1	0.2%
55.6%	49.4	49.6	0.3	0.5%
56.8%	49.3	49.5	0.2	0.3%
58.0%	49.3	49.4	0.1	0.3%
59.3%	49.3	49.3	0.1	0.2%
60.5%	49.2	49.3	0.1	0.2%
61.7%	49.1	49.2	0.1	0.3%
63.0%	49.0	49.2	0.2	0.4%
64.2%	49.0	49.1	0.1	0.1%
65.4%	49.0	49.0	0.0	0.0%
66.7%	48.9	49.0	0.1	0.2%
67.9%	48.9	48.9	0.1	0.1%
69.1%	48.8	48.9	0.0	0.1%
70.4%	48.7	48.8	0.1	0.2%
71.6%	48.7	48.8	0.1	0.2%
72.8%	48.6	48.7	0.0	0.1%
74.1%	48.5	48.6	0.1	0.2%
75.3%	48.5	48.6	0.1	0.2%
76.5%	48.4	48.6	0.1	0.2%
77.8%	48.3	48.5	0.2	0.3%
79.0%	48.3	48.5	0.2	0.4%
80.2%	48.3	48.4	0.2	0.4%
81.5%	48.2	48.4	0.1	0.3%
82.7%	48.2	48.4	0.2	0.4%
84.0%	48.2	48.2	0.0	0.0%
85.2%	48.0	48.1	0.2	0.3%
86.4%	47.9	48.0	0.2	0.3%
87.7%	47.8	47.9	0.2	0.3%
88.9%	47.7	47.8	0.2	0.4%
90.1%	47.6	47.7	0.2	0.3%
91.4%	47.5	47.6	0.1	0.3%
92.6%	47.5	47.6	0.1	0.2%
93.8%	47.5	47.5	0.0	0.0%
95.1%	47.4	47.4	0.0	0.0%
96.3%	47.4	47.4	0.0	0.0%
97.5%	47.4	47.4	0.0	0.0%
98.8%	47.2	47.4	0.1	0.3%
100.0%	47.2	47.4	0.1	0.3%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.5	50.6	0.1	0.2%
1.2%	50.0	49.8	-0.2	-0.4%
2.5%	49.6	49.7	0.0	0.1%
3.7%	49.5	49.5	0.1	0.1%
4.9%	49.4	49.5	0.0	0.0%
6.2%	49.2	49.2	0.0	0.0%
7.4%	49.1	49.1	0.0	0.0%
8.6%	49.0	49.1	0.0	0.1%
9.9%	48.8	49.0	0.2	0.4%
11.1%	48.8	48.7	0.0	-0.1%
12.3%	48.7	48.7	-0.1	-0.1%
13.6%	48.7	48.7	-0.1	-0.1%
14.8%	48.6	48.6	-0.1	-0.2%
16.0%	48.3	48.4	0.1	0.3%
17.3%	48.3	48.3	0.0	0.0%
18.5%	48.2	48.3	0.1	0.1%
19.8%	48.2	48.2	0.0	0.1%
21.0%	48.1	48.2	0.0	0.1%
22.2%	48.1	48.1	0.1	0.1%
23.5%	48.1	48.1	0.0	0.1%
24.7%	47.9	48.1	0.2	0.4%
25.9%	47.9	48.1	0.2	0.4%
27.2%	47.9	47.9	0.0	0.0%
28.4%	47.8	47.8	0.0	0.0%
29.6%	47.7	47.7	0.0	0.0%
30.9%	47.6	47.6	0.0	0.1%
32.1%	47.6	47.6	0.0	-0.1%
33.3%	47.5	47.5	0.0	0.0%
34.6%	47.5	47.5	0.0	0.0%
35.8%	47.5	47.5	0.0	0.0%
37.0%	47.5	47.5	0.0	0.0%
38.3%	47.5	47.4	-0.1	-0.1%
39.5%	47.5	47.4	-0.1	-0.1%
40.7%	47.4	47.4	-0.1	-0.1%
42.0%	47.3	47.4	0.1	0.2%
43.2%	47.3	47.3	0.1	0.1%
44.4%	47.2	47.3	0.1	0.1%
45.7%	47.2	47.3	0.0	0.1%
46.9%	47.2	47.2	0.0	0.1%
48.1%	47.1	47.2	0.1	0.2%
49.4%	47.1	47.1	0.0	-0.1%
50.6%	47.1	47.1	0.0	-0.1%
51.9%	47.1	47.1	0.0	0.0%
53.1%	47.0	47.0	0.0	0.1%
54.3%	47.0	47.0	0.0	0.0%
55.6%	46.9	47.0	0.0	0.0%
56.8%	46.9	46.9	0.0	0.1%
58.0%	46.8	46.9	0.1	0.2%
59.3%	46.8	46.8	0.0	0.1%
60.5%	46.8	46.8	0.0	0.0%
61.7%	46.7	46.7	0.0	0.0%
63.0%	46.7	46.7	-0.1	-0.2%
64.2%	46.7	46.6	-0.1	-0.3%
65.4%	46.6	46.6	0.0	-0.1%
66.7%	46.5	46.6	0.0	0.1%
67.9%	46.5	46.5	-0.1	-0.1%
69.1%	46.5	46.5	-0.1	-0.1%
70.4%	46.5	46.5	-0.1	-0.1%
71.6%	46.5	46.4	-0.1	-0.2%
72.8%	46.5	46.4	-0.1	-0.2%
74.1%	46.5	46.4	-0.1	-0.2%
75.3%	46.5	46.4	-0.1	-0.2%
76.5%	46.5	46.4	-0.1	-0.1%
77.8%	46.4	46.4	0.0	0.0%
79.0%	46.4	46.4	0.0	0.0%
80.2%	46.4	46.3	-0.1	-0.2%
81.5%	46.4	46.3	-0.1	-0.2%
82.7%	46.3	46.2	-0.1	-0.2%
84.0%	46.3	46.1	-0.2	-0.4%
85.2%	46.2	46.1	-0.1	-0.3%
86.4%	46.2	46.0	-0.2	-0.5%
87.7%	46.2	45.9	-0.2	-0.4%
88.9%	46.1	45.9	-0.2	-0.4%
90.1%	45.9	45.8	-0.2	-0.4%
91.4%	45.7	45.7	0.0	0.1%
92.6%	45.5	45.7	0.2	0.4%
93.8%	45.5	45.7	0.2	0.5%
95.1%	45.5	45.5	0.0	0.1%
96.3%	45.5	45.3	-0.1	-0.3%
97.5%	45.4	45.2	-0.2	-0.4%
98.8%	45.4	45.2	-0.2	-0.4%
100.0%	45.4	45.2	-0.2	-0.4%

Table SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.0	52.1	0.1	0.1%
1.2%	50.2	50.4	0.2	0.4%
2.5%	49.8	49.8	0.0	-0.1%
3.7%	49.7	49.7	-0.1	-0.1%
4.9%	49.6	49.5	-0.1	-0.3%
6.2%	49.4	49.3	0.0	0.0%
7.4%	49.3	49.3	0.0	0.0%
8.6%	49.3	49.3	0.0	0.1%
9.9%	49.2	49.3	0.1	0.1%
11.1%	49.1	49.2	0.0	0.0%
12.3%	49.0	49.1	0.1	0.3%
13.6%	49.0	49.0	0.0	0.0%
14.8%	48.9	49.0	0.1	0.2%
16.0%	48.9	49.0	0.1	0.2%
17.3%	48.8	48.9	0.0	0.1%
18.5%	48.8	48.6	-0.1	-0.2%
19.8%	48.7	48.5	-0.1	-0.3%
21.0%	48.5	48.5	-0.1	-0.1%
22.2%	48.4	48.4	0.0	-0.1%
23.5%	48.4	48.4	0.0	0.0%
24.7%	48.3	48.4	0.0	0.1%
25.9%	48.2	48.3	0.1	0.1%
27.2%	48.2	48.2	0.0	0.0%
28.4%	48.2	48.2	0.0	0.0%
29.6%	48.1	48.1	0.0	0.0%
30.9%	48.1	48.1	0.0	0.0%
32.1%	48.1	48.0	-0.1	-0.1%
33.3%	48.1	48.0	-0.1	-0.1%
34.6%	48.0	48.0	0.0	-0.1%
35.8%	48.0	48.0	0.0	-0.1%
37.0%	48.0	47.9	0.0	-0.1%
38.3%	48.0	47.9	-0.1	-0.1%
39.5%	48.0	47.9	-0.1	-0.1%
40.7%	47.9	47.9	0.0	-0.1%
42.0%	47.9	47.8	0.0	-0.1%
43.2%	47.9	47.8	0.0	-0.1%
44.4%	47.9	47.8	-0.1	-0.1%
45.7%	47.8	47.7	-0.1	-0.2%
46.9%	47.6	47.7	0.1	0.2%
48.1%	47.6	47.6	0.0	0.0%
49.4%	47.5	47.4	0.0	0.0%
50.6%	47.4	47.4	0.0	0.0%
51.9%	47.4	47.4	0.0	-0.1%
53.1%	47.4	47.3	-0.1	-0.2%
54.3%	47.3	47.3	0.0	0.0%
55.6%	47.3	47.3	0.0	0.1%
56.8%	47.2	47.3	0.1	0.1%
58.0%	47.2	47.2	0.0	0.0%
59.3%	47.2	47.2	0.0	0.0%
60.5%	47.2	47.2	0.0	0.0%
61.7%	47.1	47.1	0.0	0.1%
63.0%	47.0	47.1	0.1	0.2%
64.2%	46.9	47.0	0.1	0.1%
65.4%	46.9	46.9	-0.1	-0.2%
66.7%	46.9	46.8	-0.1	-0.2%
67.9%	46.9	46.8	-0.1	-0.2%
69.1%	46.8	46.7	-0.2	-0.3%
70.4%	46.7	46.6	-0.1	-0.2%
71.6%	46.7	46.6	0.0	-0.1%
72.8%	46.6	46.5	-0.1	-0.2%
74.1%	46.5	46.3	-0.2	-0.4%
75.3%	46.5	46.3	-0.2	-0.4%
76.5%	46.4	46.3	-0.2	-0.4%
77.8%	46.4	46.2	-0.1	-0.3%
79.0%	46.3	46.2	-0.1	-0.2%
80.2%	46.3	46.2	-0.1	-0.2%
81.5%	46.3	46.2	-0.1	-0.2%
82.7%	46.2	46.1	-0.1	-0.1%
84.0%	46.2	46.0	-0.1	-0.3%
85.2%	46.1	46.0	-0.1	-0.3%
86.4%	46.1	46.0	-0.1	-0.2%
87.7%	46.0	46.0	-0.1	-0.2%
88.9%	46.0	45.9	-0.1	-0.2%
90.1%	46.0	45.9	-0.1	-0.2%
91.4%	45.9	45.8	0.0	-0.1%
92.6%	45.8	45.7	-0.2	-0.4%
93.8%	45.8	45.6	-0.2	-0.5%
95.1%	45.7	45.6	-0.2	-0.3%
96.3%	45.5	45.3	-0.1	-0.3%
97.5%	45.4	45.2	-0.1	-0.3%
98.8%	44.4	44.6	0.2	0.4%
100.0%	44.4	44.6	0.2	0.4%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.1	53.1	0.0	0.1%
1.2%	52.8	53.0	0.2	0.3%
2.5%	52.8	52.6	-0.2	-0.4%
3.7%	52.7	52.5	-0.2	-0.5%
4.9%	52.5	52.4	-0.1	-0.2%
6.2%	52.3	52.4	0.0	0.0%
7.4%	52.2	52.3	0.1	0.2%
8.6%	52.1	52.0	0.0	-0.1%
9.9%	51.9	52.0	0.1	0.2%
11.1%	51.8	51.9	0.1	0.1%
12.3%	51.7	51.7	0.0	0.1%
13.6%	51.7	51.6	0.0	0.0%
14.8%	51.6	51.6	0.0	0.1%
16.0%	51.6	51.6	0.0	0.0%
17.3%	51.4	51.5	0.1	0.2%
18.5%	51.4	51.4	0.0	-0.1%
19.8%	51.3	51.3	0.0	-0.1%
21.0%	51.3	51.2	-0.1	-0.2%
22.2%	51.2	51.2	0.0	0.0%
23.5%	51.2	51.2	0.0	0.0%
24.7%	51.1	51.1	0.0	-0.1%
25.9%	51.1	51.1	0.0	0.0%
27.2%	51.0	51.1	0.1	0.1%
28.4%	51.0	51.0	0.0	0.1%
29.6%	51.0	51.0	0.0	0.1%
30.9%	50.9	50.9	0.0	0.0%
32.1%	50.9	50.9	0.0	0.1%
33.3%	50.8	50.9	0.0	0.1%
34.6%	50.8	50.9	0.0	0.1%
35.8%	50.8	50.8	0.0	0.0%
37.0%	50.8	50.8	0.0	0.0%
38.3%	50.7	50.7	0.0	0.0%
39.5%	50.6	50.7	0.1	0.2%
40.7%	50.5	50.6	0.0	0.1%
42.0%	50.5	50.5	0.0	0.0%
43.2%	50.4	50.4	0.0	-0.1%
44.4%	50.2	50.2	0.0	0.0%
45.7%	50.1	50.1	0.0	-0.1%
46.9%	50.1	50.0	0.0	0.0%
48.1%	50.0	49.9	-0.1	-0.2%
49.4%	49.8	49.8	0.0	0.0%
50.6%	49.8	49.8	0.0	0.0%
51.9%	49.7	49.7	0.0	0.0%
53.1%	49.7	49.6	0.0	-0.1%
54.3%	49.6	49.6	0.0	0.0%
55.6%	49.6	49.6	0.0	0.0%
56.8%	49.5	49.4	-0.1	-0.3%
58.0%	49.5	49.4	-0.1	-0.2%
59.3%	49.4	49.3	-0.1	-0.2%
60.5%	49.4	49.3	-0.1	-0.2%
61.7%	49.4	49.2	-0.2	-0.3%
63.0%	49.3	49.2	-0.1	-0.1%
64.2%	49.2	49.1	-0.1	-0.2%
65.4%	49.2	49.0	-0.2	-0.4%
66.7%	49.1	49.0	-0.1	-0.2%
67.9%	49.0	48.9	-0.1	-0.2%
69.1%	48.9	48.7	-0.2	-0.4%
70.4%	48.7	48.7	0.0	-0.1%
71.6%	48.6	48.6	0.0	-0.1%
72.8%	48.6	48.6	0.0	-0.1%
74.1%	48.6	48.5	0.0	-0.1%
75.3%	48.6	48.5	-0.1	-0.2%
76.5%	48.5	48.2	-0.3	-0.5%
77.8%	48.3	48.2	-0.1	-0.1%
79.0%	48.2	48.2	0.0	0.0%
80.2%	48.2	48.2	0.0	-0.1%
81.5%	48.1	48.1	0.0	0.0%
82.7%	47.9	47.8	-0.1	-0.2%
84.0%	47.8	47.8	0.0	-0.1%
85.2%	47.7	47.7	0.0	0.0%
86.4%	47.6	47.7	0.0	0.1%
87.7%	47.6	47.7	0.0	0.1%
88.9%	47.6	47.6	0.0	0.0%
90.1%	47.5	47.6	0.1	0.2%
91.4%	47.5	47.6	0.1	0.2%
92.6%	47.3	47.3	0.0	-0.1%
93.8%	47.3	47.3	0.0	-0.1%
95.1%	47.3	47.3	0.0	0.0%
96.3%	47.3	47.3	0.0	0.0%
97.5%	46.8	46.8	0.0	0.0%
98.8%	46.7	46.7	0.1	0.1%
100.0%	46.7	46.7	0.1	0.1%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.3	56.2	0.0	0.0%
1.2%	56.2	56.0	-0.2	-0.3%
2.5%	55.8	55.8	0.0	0.0%
3.7%	55.4	55.3	-0.1	-0.2%
4.9%	55.3	55.1	-0.2	-0.4%
6.2%	55.1	55.0	-0.1	-0.1%
7.4%	55.0	54.5	-0.5	-1.0%
8.6%	55.0	54.3	-0.7	-1.2%
9.9%	54.6	54.3	-0.3	-0.5%
11.1%	54.4	54.2	-0.2	-0.4%
12.3%	54.3	54.2	-0.1	-0.2%
13.6%	54.3	54.2	-0.2	-0.3%
14.8%	54.2	54.2	0.0	-0.1%
16.0%	54.2	54.2	0.0	0.0%
17.3%	54.1	54.1	0.0	0.0%
18.5%	54.0	54.0	0.0	0.1%
19.8%	54.0	54.0	0.0	0.0%
21.0%	54.0	54.0	0.0	0.0%
22.2%	53.7	54.0	0.2	0.4%
23.5%	53.6	53.9	0.3	0.5%
24.7%	53.6	53.8	0.2	0.4%
25.9%	53.5	53.7	0.2	0.4%
27.2%	53.5	53.7	0.2	0.4%
28.4%	53.5	53.7	0.2	0.4%
29.6%	53.4	53.5	0.1	0.2%
30.9%	53.4	53.5	0.1	0.3%
32.1%	53.2	53.4	0.2	0.4%
33.3%	53.1	53.3	0.2	0.4%
34.6%	53.1	53.3	0.2	0.4%
35.8%	53.0	53.2	0.1	0.3%
37.0%	53.0	53.1	0.2	0.3%
38.3%	52.9	53.1	0.2	0.4%
39.5%	52.9	53.1	0.3	0.5%
40.7%	52.8	53.1	0.3	0.5%
42.0%	52.7	53.1	0.3	0.6%
43.2%	52.7	52.9	0.2	0.3%
44.4%	52.7	52.8	0.1	0.2%
45.7%	52.7	52.8	0.1	0.2%
46.9%	52.7	52.8	0.1	0.3%
48.1%	52.6	52.7	0.1	0.2%
49.4%	52.5	52.7	0.2	0.5%
50.6%	52.5	52.7	0.3	0.5%
51.9%	52.4	52.7	0.3	0.6%
53.1%	52.4	52.7	0.3	0.6%
54.3%	52.3	52.6	0.3	0.5%
55.6%	52.3	52.5	0.2	0.5%
56.8%	52.3	52.5	0.2	0.5%
58.0%	52.3	52.4	0.2	0.3%
59.3%	52.2	52.4	0.1	0.3%
60.5%	52.2	52.4	0.2	0.3%
61.7%	52.2	52.3	0.2	0.3%
63.0%	52.2	52.3	0.1	0.3%
64.2%	52.1	52.3	0.2	0.3%
65.4%	52.1	52.3	0.2	0.3%
66.7%	52.1	52.2	0.1	0.3%
67.9%	52.0	52.2	0.2	0.4%
69.1%	52.0	52.2	0.2	0.4%
70.4%	51.9	52.1	0.2	0.4%
71.6%	51.9	52.1	0.1	0.3%
72.8%	51.8	51.9	0.1	0.3%
74.1%	51.7	51.8	0.1	0.3%
75.3%	51.6	51.7	0.1	0.1%
76.5%	51.6	51.7	0.1	0.1%
77.8%	51.5	51.6	0.1	0.1%
79.0%	51.4	51.6	0.2	0.4%
80.2%	51.2	51.6	0.4	0.7%
81.5%	51.1	51.5	0.4	0.7%
82.7%	51.1	51.5	0.4	0.8%
84.0%	51.0	51.2	0.2	0.5%
85.2%	50.9	51.1	0.1	0.2%
86.4%	50.9	51.0	0.1	0.2%
87.7%	50.7	50.8	0.1	0.3%
88.9%	50.6	50.6	0.0	0.0%
90.1%	50.5	50.6	0.1	0.2%
91.4%	50.5	50.6	0.0	0.0%
92.6%	50.4	50.6	0.1	0.2%
93.8%	50.4	50.4	0.0	-0.1%
95.1%	50.3	50.3	0.0	0.0%
96.3%	50.1	49.9	-0.2	-0.4%
97.5%	49.9	49.8	-0.1	-0.1%
98.8%	49.3	49.3	0.0	0.0%
100.0%	49.3	49.3	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.9	59.4	0.5	0.8%
1.2%	58.2	58.5	0.3	0.4%
2.5%	57.3	58.5	1.2	2.0%
3.7%	57.1	58.2	1.1	1.9%
4.9%	57.0	57.6	0.7	1.1%
6.2%	56.8	57.5	0.7	1.2%
7.4%	56.7	57.3	0.6	1.1%
8.6%	56.7	57.3	0.6	1.1%
9.9%	56.6	57.0	0.5	0.8%
11.1%	56.5	56.9	0.4	0.8%
12.3%	56.5	56.8	0.4	0.6%
13.6%	56.5	56.8	0.3	0.6%
14.8%	56.4	56.8	0.4	0.7%
16.0%	56.2	56.8	0.6	1.0%
17.3%	56.2	56.7	0.6	1.0%
18.5%	56.1	56.7	0.6	1.1%
19.8%	56.0	56.7	0.7	1.3%
21.0%	56.0	56.6	0.7	1.2%
22.2%	55.9	56.6	0.7	1.3%
23.5%	55.8	56.5	0.7	1.2%
24.7%	55.6	56.5	0.9	1.5%
25.9%	55.6	56.5	0.9	1.6%
27.2%	55.6	56.2	0.7	1.2%
28.4%	55.5	56.2	0.7	1.3%
29.6%	55.5	56.2	0.7	1.3%
30.9%	55.5	55.9	0.4	0.8%
32.1%	55.3	55.9	0.6	1.0%
33.3%	55.1	55.8	0.6	1.2%
34.6%	55.1	55.6	0.5	1.0%
35.8%	55.1	55.6	0.5	0.9%
37.0%	55.1	55.5	0.4	0.7%
38.3%	55.0	55.4	0.4	0.8%
39.5%	54.8	55.4	0.6	1.0%
40.7%	54.8	55.3	0.5	0.9%
42.0%	54.8	55.2	0.4	0.7%
43.2%	54.7	55.1	0.4	0.7%
44.4%	54.7	55.1	0.4	0.7%
45.7%	54.7	55.0	0.3	0.6%
46.9%	54.7	55.0	0.3	0.6%
48.1%	54.6	54.9	0.4	0.6%
49.4%	54.6	54.9	0.4	0.7%
50.6%	54.5	54.9	0.4	0.7%
51.9%	54.5	54.9	0.4	0.7%
53.1%	54.4	54.9	0.5	0.9%
54.3%	54.3	54.9	0.5	0.9%
55.6%	54.3	54.8	0.5	1.0%
56.8%	54.3	54.8	0.5	0.9%
58.0%	54.3	54.8	0.5	0.9%
59.3%	54.3	54.8	0.5	0.9%
60.5%	54.3	54.7	0.5	0.9%
61.7%	54.2	54.7	0.5	0.9%
63.0%	54.2	54.7	0.5	0.9%
64.2%	54.2	54.7	0.5	0.9%
65.4%	54.1	54.6	0.5	0.9%
66.7%	54.1	54.6	0.4	0.8%
67.9%	54.1	54.5	0.4	0.8%
69.1%	54.1	54.5	0.4	0.8%
70.4%	54.1	54.5	0.4	0.8%
71.6%	54.0	54.5	0.4	0.8%
72.8%	54.0	54.5	0.4	0.8%
74.1%	54.0	54.4	0.5	0.9%
75.3%	53.9	54.4	0.5	1.0%
76.5%	53.9	54.3	0.4	0.8%
77.8%	53.8	54.2	0.4	0.7%
79.0%	53.8	54.2	0.4	0.8%
80.2%	53.8	54.2	0.4	0.7%
81.5%	53.8	54.1	0.3	0.5%
82.7%	53.8	54.0	0.3	0.5%
84.0%	53.7	54.0	0.3	0.5%
85.2%	53.7	54.0	0.3	0.5%
86.4%	53.7	53.9	0.2	0.4%
87.7%	53.6	53.9	0.2	0.4%
88.9%	53.6	53.8	0.2	0.3%
90.1%	53.5	53.8	0.3	0.5%
91.4%	53.5	53.5	0.0	0.1%
92.6%	53.2	53.5	0.3	0.6%
93.8%	53.0	53.4	0.4	0.7%
95.1%	52.8	53.1	0.3	0.6%
96.3%	52.7	52.8	0.0	0.1%
97.5%	52.7	52.6	-0.1	-0.1%
98.8%	52.0	52.5	0.5	1.0%
100.0%	52.0	52.5	0.5	1.0%

Table SQ5-1b

Sacramento River at Jellys Ferry, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.5	58.3	-0.1	-0.2%
1.2%	58.2	57.9	-0.3	-0.5%
2.5%	57.8	57.9	0.1	0.2%
3.7%	57.5	57.4	0.0	-0.1%
4.9%	57.4	57.3	-0.2	-0.3%
6.2%	57.4	57.1	-0.3	-0.5%
7.4%	57.4	56.9	-0.5	-0.9%
8.6%	57.4	56.7	-0.7	-1.1%
9.9%	57.0	56.7	-0.2	-0.4%
11.1%	56.9	56.6	-0.3	-0.6%
12.3%	56.8	56.5	-0.2	-0.4%
13.6%	56.7	56.4	-0.3	-0.5%
14.8%	56.6	56.4	-0.2	-0.4%
16.0%	56.4	56.3	-0.1	-0.1%
17.3%	56.4	56.3	-0.1	-0.1%
18.5%	56.1	56.3	0.2	0.4%
19.8%	56.1	56.3	0.2	0.4%
21.0%	56.1	56.3	0.2	0.4%
22.2%	56.0	56.2	0.3	0.5%
23.5%	56.0	56.1	0.2	0.3%
24.7%	55.9	56.1	0.2	0.3%
25.9%	55.9	56.1	0.2	0.3%
27.2%	55.8	56.0	0.2	0.4%
28.4%	55.8	56.0	0.2	0.3%
29.6%	55.7	56.0	0.2	0.4%
30.9%	55.6	55.9	0.3	0.5%
32.1%	55.6	55.8	0.3	0.5%
33.3%	55.4	55.8	0.4	0.7%
34.6%	55.4	55.8	0.4	0.7%
35.8%	55.4	55.7	0.3	0.6%
37.0%	55.4	55.7	0.3	0.6%
38.3%	55.3	55.7	0.3	0.6%
39.5%	55.2	55.6	0.4	0.8%
40.7%	55.1	55.6	0.5	0.9%
42.0%	55.1	55.6	0.5	0.9%
43.2%	55.0	55.5	0.5	1.0%
44.4%	55.0	55.5	0.6	1.1%
45.7%	55.0	55.5	0.5	1.0%
46.9%	54.9	55.4	0.5	0.9%
48.1%	54.9	55.4	0.5	0.8%
49.4%	54.9	55.3	0.5	0.8%
50.6%	54.9	55.3	0.5	0.8%
51.9%	54.8	55.3	0.5	0.9%
53.1%	54.8	55.2	0.5	0.8%
54.3%	54.8	55.2	0.5	0.8%
55.6%	54.8	55.2	0.4	0.8%
56.8%	54.8	55.2	0.4	0.7%
58.0%	54.7	55.1	0.4	0.7%
59.3%	54.7	55.1	0.4	0.7%
60.5%	54.7	55.0	0.4	0.7%
61.7%	54.7	55.0	0.4	0.7%
63.0%	54.6	55.0	0.3	0.6%
64.2%	54.6	55.0	0.4	0.7%
65.4%	54.5	55.0	0.4	0.8%
66.7%	54.3	54.9	0.6	1.1%
67.9%	54.3	54.8	0.6	1.1%
69.1%	54.2	54.8	0.6	1.1%
70.4%	54.2	54.8	0.6	1.1%
71.6%	54.1	54.8	0.6	1.2%
72.8%	54.1	54.7	0.6	1.2%
74.1%	54.1	54.7	0.6	1.1%
75.3%	54.1	54.7	0.6	1.1%
76.5%	54.0	54.6	0.6	1.1%
77.8%	53.9	54.5	0.6	1.1%
79.0%	53.9	54.5	0.6	1.1%
80.2%	53.8	54.4	0.6	1.2%
81.5%	53.8	54.4	0.6	1.2%
82.7%	53.7	54.4	0.7	1.3%
84.0%	53.7	54.4	0.7	1.3%
85.2%	53.7	54.4	0.6	1.2%
86.4%	53.7	54.3	0.7	1.3%
87.7%	53.6	54.3	0.7	1.3%
88.9%	53.6	54.3	0.7	1.3%
90.1%	53.6	54.2	0.6	1.1%
91.4%	53.5	54.0	0.5	1.0%
92.6%	53.3	54.0	0.7	1.2%
93.8%	53.3	54.0	0.7	1.3%
95.1%	53.3	54.0	0.7	1.4%
96.3%	53.2	53.7	0.5	1.0%
97.5%	53.2	53.7	0.6	1.0%
98.8%	53.1	53.6	0.5	1.0%
100.0%	53.1	53.6	0.5	1.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.7	58.7	-1.0	-1.7%
1.2%	58.6	58.6	0.0	0.0%
2.5%	58.5	58.5	0.0	-0.1%
3.7%	58.5	58.3	-0.1	-0.2%
4.9%	58.4	58.1	-0.3	-0.6%
6.2%	58.4	58.1	-0.3	-0.5%
7.4%	58.1	58.1	0.0	0.1%
8.6%	58.0	58.0	0.1	0.1%
9.9%	57.9	57.9	0.0	0.0%
11.1%	57.7	57.8	0.2	0.3%
12.3%	57.6	57.8	0.2	0.3%
13.6%	57.6	57.5	-0.1	-0.2%
14.8%	57.5	57.5	-0.1	-0.1%
16.0%	57.5	57.4	-0.1	-0.1%
17.3%	57.4	57.4	0.0	-0.1%
18.5%	57.4	57.4	-0.1	-0.1%
19.8%	57.1	57.3	0.2	0.3%
21.0%	57.0	57.2	0.2	0.4%
22.2%	56.9	57.2	0.2	0.4%
23.5%	56.9	57.1	0.2	0.4%
24.7%	56.9	57.1	0.2	0.4%
25.9%	56.8	57.1	0.3	0.5%
27.2%	56.8	57.0	0.2	0.4%
28.4%	56.7	57.0	0.3	0.5%
29.6%	56.6	57.0	0.4	0.6%
30.9%	56.6	56.8	0.2	0.4%
32.1%	56.5	56.8	0.3	0.5%
33.3%	56.4	56.8	0.3	0.6%
34.6%	56.4	56.7	0.3	0.6%
35.8%	56.4	56.7	0.2	0.4%
37.0%	56.4	56.6	0.2	0.4%
38.3%	56.3	56.5	0.2	0.3%
39.5%	56.2	56.4	0.2	0.3%
40.7%	56.1	56.3	0.2	0.4%
42.0%	56.0	56.3	0.2	0.4%
43.2%	56.0	56.3	0.3	0.6%
44.4%	55.9	56.2	0.3	0.5%
45.7%	55.8	56.2	0.4	0.7%
46.9%	55.8	56.1	0.3	0.5%
48.1%	55.7	56.0	0.3	0.6%
49.4%	55.7	56.0	0.3	0.5%
50.6%	55.7	56.0	0.3	0.5%
51.9%	55.7	56.0	0.3	0.5%
53.1%	55.7	55.9	0.3	0.5%
54.3%	55.7	55.9	0.3	0.5%
55.6%	55.5	55.9	0.4	0.6%
56.8%	55.5	55.8	0.3	0.5%
58.0%	55.5	55.8	0.3	0.5%
59.3%	55.5	55.8	0.3	0.5%
60.5%	55.3	55.7	0.4	0.7%
61.7%	55.3	55.6	0.4	0.6%
63.0%	55.3	55.6	0.3	0.5%
64.2%	55.3	55.5	0.3	0.5%
65.4%	55.2	55.5	0.3	0.5%
66.7%	55.2	55.5	0.3	0.5%
67.9%	55.2	55.4	0.3	0.5%
69.1%	55.1	55.4	0.3	0.5%
70.4%	55.1	55.3	0.2	0.4%
71.6%	55.0	55.2	0.2	0.4%
72.8%	55.0	55.2	0.3	0.5%
74.1%	54.9	55.1	0.2	0.3%
75.3%	54.9	55.1	0.1	0.2%
76.5%	54.8	55.0	0.2	0.4%
77.8%	54.8	55.0	0.3	0.5%
79.0%	54.7	55.0	0.3	0.5%
80.2%	54.7	54.9	0.2	0.4%
81.5%	54.6	54.9	0.2	0.4%
82.7%	54.6	54.8	0.2	0.4%
84.0%	54.6	54.8	0.3	0.5%
85.2%	54.6	54.8	0.2	0.5%
86.4%	54.5	54.8	0.3	0.5%
87.7%	54.5	54.7	0.2	0.4%
88.9%	54.3	54.6	0.3	0.6%
90.1%	54.3	54.6	0.3	0.5%
91.4%	54.2	54.4	0.2	0.3%
92.6%	54.2	54.3	0.2	0.3%
93.8%	54.2	54.3	0.1	0.3%
95.1%	54.0	54.2	0.2	0.3%
96.3%	54.0	54.1	0.1	0.2%
97.5%	53.9	54.0	0.2	0.3%
98.8%	53.8	54.0	0.1	0.2%
100.0%	53.8	54.0	0.1	0.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.1	62.5	-4.6	-6.8%
1.2%	60.2	58.9	-1.3	-2.1%
2.5%	60.0	58.8	-1.2	-1.9%
3.7%	59.9	58.5	-1.5	-2.4%
4.9%	59.8	58.4	-1.4	-2.4%
6.2%	59.3	58.4	-1.0	-1.6%
7.4%	59.1	58.3	-0.7	-1.3%
8.6%	58.8	58.3	-0.5	-0.8%
9.9%	58.8	58.3	-0.5	-0.9%
11.1%	58.8	58.2	-0.6	-1.0%
12.3%	58.6	58.1	-0.5	-0.9%
13.6%	58.5	58.1	-0.4	-0.6%
14.8%	58.4	58.1	-0.4	-0.6%
16.0%	58.3	58.0	-0.3	-0.4%
17.3%	58.3	57.9	-0.3	-0.5%
18.5%	58.2	57.9	-0.3	-0.5%
19.8%	58.2	57.9	-0.3	-0.5%
21.0%	58.2	57.9	-0.3	-0.5%
22.2%	58.2	57.9	-0.3	-0.5%
23.5%	58.1	57.8	-0.3	-0.5%
24.7%	58.1	57.7	-0.4	-0.6%
25.9%	58.1	57.7	-0.3	-0.6%
27.2%	58.1	57.7	-0.3	-0.6%
28.4%	58.0	57.7	-0.4	-0.6%
29.6%	58.0	57.7	-0.3	-0.5%
30.9%	57.8	57.6	-0.2	-0.3%
32.1%	57.7	57.6	-0.1	-0.2%
33.3%	57.7	57.5	-0.2	-0.3%
34.6%	57.6	57.5	-0.2	-0.3%
35.8%	57.6	57.5	-0.2	-0.3%
37.0%	57.6	57.4	-0.2	-0.3%
38.3%	57.5	57.4	-0.1	-0.2%
39.5%	57.4	57.4	-0.1	-0.1%
40.7%	57.4	57.4	0.0	0.0%
42.0%	57.4	57.3	-0.1	-0.1%
43.2%	57.4	57.3	-0.1	-0.2%
44.4%	57.3	57.3	0.0	0.0%
45.7%	57.2	57.2	0.0	0.1%
46.9%	57.1	57.2	0.0	0.0%
48.1%	57.1	57.1	0.0	-0.1%
49.4%	57.1	57.0	-0.1	-0.2%
50.6%	57.1	57.0	0.0	-0.1%
51.9%	57.0	57.0	0.0	0.0%
53.1%	57.0	57.0	0.0	0.0%
54.3%	57.0	57.0	0.0	-0.1%
55.6%	57.0	56.9	-0.1	-0.1%
56.8%	56.9	56.9	0.0	-0.1%
58.0%	56.9	56.8	-0.1	-0.1%
59.3%	56.8	56.8	0.0	0.0%
60.5%	56.8	56.7	-0.1	-0.1%
61.7%	56.8	56.7	-0.1	-0.2%
63.0%	56.8	56.6	-0.1	-0.2%
64.2%	56.7	56.6	-0.1	-0.1%
65.4%	56.7	56.6	-0.1	-0.2%
66.7%	56.7	56.6	-0.1	-0.1%
67.9%	56.6	56.5	-0.2	-0.3%
69.1%	56.6	56.5	-0.2	-0.3%
70.4%	56.5	56.4	-0.1	-0.2%
71.6%	56.5	56.4	-0.1	-0.1%
72.8%	56.5	56.4	-0.1	-0.1%
74.1%	56.4	56.4	0.0	0.0%
75.3%	56.3	56.3	0.0	0.0%
76.5%	56.3	56.1	-0.2	-0.3%
77.8%	56.3	56.1	-0.2	-0.4%
79.0%	56.3	56.0	-0.3	-0.6%
80.2%	56.3	55.9	-0.4	-0.7%
81.5%	56.2	55.9	-0.3	-0.6%
82.7%	56.2	55.8	-0.4	-0.7%
84.0%	56.2	55.6	-0.5	-1.0%
85.2%	56.1	55.6	-0.5	-0.9%
86.4%	56.1	55.6	-0.5	-0.9%
87.7%	56.0	55.6	-0.5	-0.8%
88.9%	55.9	55.5	-0.4	-0.7%
90.1%	55.9	55.5	-0.4	-0.7%
91.4%	55.7	55.5	-0.2	-0.4%
92.6%	55.6	55.4	-0.2	-0.4%
93.8%	55.5	55.3	-0.2	-0.4%
95.1%	54.7	55.3	0.6	1.1%
96.3%	54.7	55.0	0.4	0.7%
97.5%	54.3	54.9	0.7	1.2%
98.8%	54.2	54.9	0.7	1.2%
100.0%	54.2	54.9	0.7	1.2%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.9	67.3	0.4	0.7%
1.2%	65.3	61.6	-3.7	-5.7%
2.5%	64.3	61.4	-2.9	-4.4%
3.7%	61.5	59.6	-1.9	-3.0%
4.9%	60.6	59.4	-1.2	-1.9%
6.2%	60.4	59.4	-1.0	-1.7%
7.4%	60.3	59.2	-1.1	-1.8%
8.6%	59.6	59.0	-0.6	-1.0%
9.9%	59.5	58.9	-0.6	-1.1%
11.1%	59.5	58.7	-0.8	-1.4%
12.3%	59.5	58.5	-1.0	-1.6%
13.6%	59.4	58.5	-1.0	-1.6%
14.8%	59.4	58.4	-0.9	-1.6%
16.0%	59.4	58.2	-1.1	-1.9%
17.3%	59.2	58.1	-1.1	-1.8%
18.5%	59.0	58.0	-1.0	-1.6%
19.8%	58.7	58.0	-0.7	-1.2%
21.0%	58.6	57.9	-0.7	-1.1%
22.2%	58.5	57.9	-0.6	-1.1%
23.5%	58.4	57.9	-0.6	-0.9%
24.7%	58.4	57.9	-0.5	-0.9%
25.9%	58.2	57.8	-0.4	-0.6%
27.2%	58.1	57.8	-0.4	-0.6%
28.4%	58.1	57.7	-0.4	-0.7%
29.6%	58.1	57.7	-0.4	-0.6%
30.9%	58.0	57.7	-0.3	-0.5%
32.1%	57.8	57.6	-0.2	-0.4%
33.3%	57.8	57.6	-0.2	-0.3%
34.6%	57.6	57.6	-0.1	-0.1%
35.8%	57.4	57.6	0.1	0.2%
37.0%	57.4	57.5	0.0	0.1%
38.3%	57.2	57.4	0.2	0.4%
39.5%	57.2	57.2	0.0	-0.1%
40.7%	57.2	57.0	-0.1	-0.2%
42.0%	56.9	57.0	0.1	0.2%
43.2%	56.7	56.7	0.0	-0.1%
44.4%	56.7	56.6	0.0	-0.1%
45.7%	56.6	56.6	0.0	0.0%
46.9%	56.4	56.6	0.2	0.3%
48.1%	56.4	56.5	0.2	0.3%
49.4%	56.2	56.4	0.2	0.3%
50.6%	56.1	56.4	0.3	0.6%
51.9%	56.0	56.3	0.3	0.5%
53.1%	55.9	56.3	0.4	0.7%
54.3%	55.9	56.2	0.3	0.6%
55.6%	55.9	56.1	0.2	0.4%
56.8%	55.6	56.0	0.5	0.9%
58.0%	55.5	56.0	0.4	0.8%
59.3%	55.5	55.9	0.4	0.7%
60.5%	55.2	55.8	0.5	1.0%
61.7%	55.2	55.7	0.5	1.0%
63.0%	55.1	55.7	0.6	1.1%
64.2%	55.1	55.7	0.6	1.0%
65.4%	55.1	55.7	0.6	1.0%
66.7%	55.0	55.6	0.6	1.0%
67.9%	55.0	55.6	0.5	1.0%
69.1%	54.9	55.5	0.7	1.2%
70.4%	54.8	55.4	0.6	1.1%
71.6%	54.7	55.4	0.6	1.1%
72.8%	54.7	55.3	0.6	1.2%
74.1%	54.7	55.1	0.4	0.7%
75.3%	54.5	55.0	0.5	0.9%
76.5%	54.4	54.8	0.4	0.7%
77.8%	54.3	54.5	0.2	0.3%
79.0%	54.3	54.5	0.1	0.3%
80.2%	54.3	54.5	0.1	0.2%
81.5%	54.3	54.4	0.1	0.2%
82.7%	53.8	54.4	0.6	1.1%
84.0%	53.8	54.3	0.6	1.1%
85.2%	53.6	54.3	0.7	1.4%
86.4%	53.5	54.2	0.7	1.3%
87.7%	53.5	53.9	0.4	0.7%
88.9%	53.5	53.7	0.3	0.5%
90.1%	53.4	53.6	0.2	0.4%
91.4%	53.4	53.6	0.2	0.4%
92.6%	53.3	53.0	-0.2	-0.4%
93.8%	52.9	52.8	-0.1	-0.2%
95.1%	52.8	52.8	0.0	0.0%
96.3%	52.4	52.6	0.2	0.4%
97.5%	52.1	52.4	0.3	0.5%
98.8%	52.1	52.2	0.1	0.3%
100.0%	52.1	52.2	0.1	0.3%

Table SQ5-1b

Sacramento River at Jellys Ferry, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.6	61.3	-1.3	-2.1%
1.2%	59.4	58.7	-0.7	-1.3%
2.5%	59.4	58.3	-1.1	-1.9%
3.7%	59.0	58.2	-0.8	-1.4%
4.9%	58.5	58.2	-0.3	-0.6%
6.2%	58.4	58.1	-0.3	-0.5%
7.4%	58.3	57.9	-0.4	-0.6%
8.6%	58.0	57.8	-0.1	-0.3%
9.9%	57.9	57.8	-0.1	-0.2%
11.1%	57.9	57.7	-0.2	-0.4%
12.3%	57.8	57.6	-0.1	-0.2%
13.6%	57.8	57.6	-0.1	-0.2%
14.8%	57.7	57.6	-0.1	-0.3%
16.0%	57.6	57.3	-0.3	-0.6%
17.3%	57.5	57.3	-0.2	-0.4%
18.5%	57.5	57.3	-0.2	-0.3%
19.8%	57.4	57.3	-0.2	-0.3%
21.0%	57.3	57.1	-0.3	-0.5%
22.2%	57.2	57.1	-0.2	-0.3%
23.5%	57.2	57.0	-0.1	-0.2%
24.7%	57.1	57.0	-0.1	-0.2%
25.9%	57.1	57.0	-0.1	-0.2%
27.2%	57.1	57.0	-0.1	-0.2%
28.4%	57.1	56.9	-0.1	-0.2%
29.6%	57.0	56.9	-0.1	-0.2%
30.9%	57.0	56.8	-0.2	-0.3%
32.1%	57.0	56.7	-0.2	-0.4%
33.3%	56.9	56.7	-0.2	-0.4%
34.6%	56.8	56.7	-0.1	-0.1%
35.8%	56.6	56.6	0.0	0.0%
37.0%	56.5	56.6	0.1	0.1%
38.3%	56.5	56.6	0.1	0.2%
39.5%	56.4	56.5	0.1	0.1%
40.7%	56.4	56.5	0.1	0.2%
42.0%	56.4	56.5	0.1	0.2%
43.2%	56.3	56.5	0.1	0.2%
44.4%	56.3	56.4	0.0	0.1%
45.7%	56.3	56.3	0.0	0.1%
46.9%	56.2	56.3	0.1	0.2%
48.1%	56.0	56.2	0.2	0.3%
49.4%	55.9	56.2	0.3	0.6%
50.6%	55.8	56.2	0.3	0.6%
51.9%	55.8	56.2	0.3	0.6%
53.1%	55.7	56.1	0.4	0.7%
54.3%	55.7	56.1	0.4	0.7%
55.6%	55.7	56.0	0.4	0.7%
56.8%	55.6	56.0	0.4	0.7%
58.0%	55.6	55.9	0.3	0.6%
59.3%	55.6	55.9	0.3	0.5%
60.5%	55.6	55.8	0.2	0.3%
61.7%	55.6	55.7	0.2	0.3%
63.0%	55.6	55.7	0.1	0.2%
64.2%	55.5	55.7	0.1	0.2%
65.4%	55.5	55.6	0.1	0.3%
66.7%	55.5	55.6	0.2	0.3%
67.9%	55.4	55.6	0.1	0.3%
69.1%	55.3	55.6	0.2	0.4%
70.4%	55.3	55.5	0.2	0.3%
71.6%	55.3	55.5	0.2	0.3%
72.8%	55.3	55.5	0.2	0.3%
74.1%	55.3	55.5	0.2	0.3%
75.3%	55.2	55.4	0.2	0.4%
76.5%	55.2	55.4	0.2	0.4%
77.8%	55.1	55.4	0.3	0.5%
79.0%	55.1	55.3	0.2	0.4%
80.2%	55.1	55.3	0.2	0.4%
81.5%	55.0	55.3	0.3	0.5%
82.7%	54.9	55.3	0.3	0.6%
84.0%	54.8	55.2	0.5	0.9%
85.2%	54.7	55.0	0.3	0.5%
86.4%	54.7	55.0	0.3	0.5%
87.7%	54.7	54.9	0.2	0.4%
88.9%	54.6	54.9	0.3	0.5%
90.1%	54.6	54.9	0.3	0.5%
91.4%	54.5	54.8	0.3	0.5%
92.6%	54.4	54.7	0.3	0.5%
93.8%	54.3	54.5	0.2	0.4%
95.1%	54.2	54.5	0.3	0.5%
96.3%	54.1	54.2	0.2	0.3%
97.5%	53.9	54.1	0.2	0.3%
98.8%	53.9	54.0	0.2	0.3%
100.0%	53.5	53.3	-0.2	-0.3%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.6	62.9	-1.7	-2.7%
1.2%	60.8	59.5	-1.3	-2.1%
2.5%	60.6	59.1	-1.5	-2.4%
3.7%	59.7	58.8	-0.9	-1.5%
4.9%	59.4	58.7	-0.7	-1.1%
6.2%	59.1	58.5	-0.7	-1.1%
7.4%	58.9	58.3	-0.6	-1.1%
8.6%	58.9	58.3	-0.6	-1.1%
9.9%	58.4	58.3	-0.2	-0.3%
11.1%	58.4	58.3	-0.1	-0.2%
12.3%	58.3	58.2	-0.1	-0.2%
13.6%	58.2	58.1	-0.1	-0.2%
14.8%	58.2	58.1	-0.1	-0.2%
16.0%	58.1	58.0	-0.1	-0.3%
17.3%	58.1	57.7	-0.3	-0.6%
18.5%	58.0	57.7	-0.3	-0.6%
19.8%	58.0	57.6	-0.4	-0.7%
21.0%	57.9	57.5	-0.5	-0.8%
22.2%	57.9	57.5	-0.4	-0.7%
23.5%	57.8	57.4	-0.3	-0.6%
24.7%	57.8	57.4	-0.3	-0.6%
25.9%	57.7	57.4	-0.3	-0.6%
27.2%	57.6	57.4	-0.2	-0.4%
28.4%	57.6	57.3	-0.2	-0.4%
29.6%	57.5	57.2	-0.2	-0.4%
30.9%	57.3	57.1	-0.2	-0.4%
32.1%	57.3	57.1	-0.2	-0.4%
33.3%	57.3	57.1	-0.2	-0.4%
34.6%	57.0	57.1	0.1	0.2%
35.8%	56.9	57.0	0.1	0.2%
37.0%	56.9	57.0	0.1	0.2%
38.3%	56.8	56.9	0.1	0.2%
39.5%	56.7	56.9	0.2	0.3%
40.7%	56.7	56.8	0.1	0.2%
42.0%	56.5	56.7	0.2	0.3%
43.2%	56.5	56.7	0.2	0.4%
44.4%	56.5	56.6	0.1	0.2%
45.7%	56.4	56.6	0.2	0.3%
46.9%	56.3	56.5	0.3	0.5%
48.1%	56.2	56.5	0.3	0.5%
49.4%	56.2	56.3	0.2	0.3%
50.6%	56.2	56.2	0.0	0.0%
51.9%	56.1	56.2	0.0	0.1%
53.1%	56.1	56.1	0.0	0.0%
54.3%	56.1	56.1	0.0	0.0%
55.6%	55.9	56.1	0.2	0.3%
56.8%	55.9	56.1	0.2	0.3%
58.0%	55.9	56.1	0.2	0.3%
59.3%	55.9	56.1	0.2	0.3%
60.5%	55.9	56.0	0.2	0.3%
61.7%	55.8	56.0	0.1	0.2%
63.0%	55.8	55.9	0.1	0.2%
64.2%	55.8	55.9	0.1	0.3%
65.4%	55.8	55.9	0.1	0.2%
66.7%	55.7	55.8	0.1	0.2%
67.9%	55.7	55.8	0.1	0.1%
69.1%	55.7	55.8	0.1	0.2%
70.4%	55.7	55.7	0.0	0.1%
71.6%	55.6	55.7	0.1	0.2%
72.8%	55.5	55.7	0.1	0.2%
74.1%	55.5	55.6	0.1	0.1%
75.3%	55.5	55.6	0.1	0.2%
76.5%	55.5	55.5	0.1	0.1%
77.8%	55.4	55.5	0.1	0.2%
79.0%	55.4	55.5	0.1	0.2%
80.2%	55.3	55.5	0.2	0.4%
81.5%	55.2	55.5	0.3	0.5%
82.7%	55.1	55.5	0.4	0.8%
84.0%	55.0	55.4	0.4	0.8%
85.2%	54.9	55.3	0.5	0.9%
86.4%	54.8	55.2	0.4	0.8%
87.7%	54.7	55.1	0.3	0.6%
88.9%	54.7	54.8	0.1	0.1%
90.1%	54.7	54.7	0.0	-0.1%
91.4%	54.5	54.6	0.1	0.2%
92.6%	54.5	54.6	0.1	0.1%
93.8%	54.5	54.6	0.1	0.1%
95.1%	54.5	54.4	0.0	0.0%
96.3%	54.3	54.3	0.0	-0.1%
97.5%	54.1	54.1	0.0	0.0%
98.8%	54.0	54.0	0.0	0.0%
100.0%	53.5	53.2	-0.3	-0.5%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.0	64.9	-2.1	-3.1%
1.2%	62.7	60.0	-2.7	-4.3%
2.5%	61.8	60.0	-1.9	-3.0%
3.7%	60.9	59.2	-1.7	-2.7%
4.9%	60.2	59.1	-1.1	-1.8%
6.2%	59.7	58.8	-0.9	-1.5%
7.4%	59.7	58.8	-0.9	-1.5%
8.6%	59.1	58.5	-0.6	-1.1%
9.9%	58.9	58.4	-0.5	-0.8%
11.1%	58.9	58.4	-0.5	-0.9%
12.3%	58.9	58.3	-0.6	-1.0%
13.6%	58.8	58.2	-0.6	-1.0%
14.8%	58.8	58.1	-0.7	-1.2%
16.0%	58.7	58.0	-0.7	-1.2%
17.3%	58.5	58.0	-0.5	-0.9%
18.5%	58.4	58.0	-0.4	-0.8%
19.8%	58.4	57.9	-0.5	-0.9%
21.0%	58.4	57.9	-0.6	-1.0%
22.2%	58.4	57.8	-0.5	-0.9%
23.5%	58.2	57.7	-0.5	-0.8%
24.7%	58.1	57.7	-0.4	-0.7%
25.9%	58.1	57.7	-0.4	-0.7%
27.2%	58.1	57.6	-0.4	-0.7%
28.4%	58.1	57.6	-0.4	-0.7%
29.6%	57.9	57.6	-0.3	-0.5%
30.9%	57.7	57.6	-0.1	-0.2%
32.1%	57.6	57.6	0.0	-0.1%
33.3%	57.6	57.5	-0.1	-0.1%
34.6%	57.3	57.5	0.2	0.3%
35.8%	57.3	57.2	-0.1	-0.2%
37.0%	57.3	57.2	-0.1	-0.2%
38.3%	57.1	57.1	0.1	0.1%
39.5%	57.0	57.0	0.0	0.0%
40.7%	57.0	57.0	0.0	0.0%
42.0%	56.9	56.9	0.0	-0.1%
43.2%	56.9	56.9	0.0	0.0%
44.4%	56.8	56.9	0.1	0.2%
45.7%	56.7	56.8	0.1	0.2%
46.9%	56.7	56.7	0.1	0.1%
48.1%	56.7	56.6	0.0	-0.1%
49.4%	56.6	56.6	0.0	-0.1%
50.6%	56.6	56.6	0.0	0.0%
51.9%	56.6	56.5	-0.1	-0.1%
53.1%	56.6	56.4	-0.2	-0.3%
54.3%	56.4	56.4	-0.1	-0.1%
55.6%	56.4	56.3	-0.2	-0.3%
56.8%	56.3	56.2	0.0	-0.1%
58.0%	56.2	56.2	0.0	0.0%
59.3%	56.2	56.2	0.0	0.0%
60.5%	56.2	56.2	0.0	0.0%
61.7%	56.1	56.1	0.0	0.1%
63.0%	56.1	56.1	0.0	0.1%
64.2%	56.0	56.1	0.1	0.2%
65.4%	55.9	56.1	0.1	0.2%
66.7%	55.9	56.0	0.1	0.2%
67.9%	55.8	55.9	0.1	0.1%
69.1%	55.8	55.9	0.1	0.2%
70.4%	55.7	55.9	0.1	0.3%
71.6%	55.6	55.8	0.3	0.5%
72.8%	55.5	55.8	0.3	0.5%
74.1%	55.5	55.8	0.3	0.5%
75.3%	55.5	55.8	0.3	0.5%
76.5%	55.5	55.8	0.3	0.5%
77.8%	55.5	55.7	0.3	0.5%
79.0%	55.4	55.7	0.3	0.5%
80.2%	55.4	55.7	0.3	0.6%
81.5%	55.3	55.6	0.3	0.5%
82.7%	55.3	55.6	0.3	0.6%
84.0%	55.2	55.6	0.3	0.6%
85.2%	55.1	55.3	0.3	0.5%
86.4%	55.0	55.0	0.0	-0.1%
87.7%	55.0	55.0	0.0	0.0%
88.9%	54.9	54.9	0.0	0.0%
90.1%	54.7	54.8	0.1	0.2%
91.4%	54.5	54.6	0.1	0.2%
92.6%	54.5	54.6	0.1	0.2%
93.8%	54.4	54.3	-0.1	-0.3%
95.1%	54.2	54.2	0.0	0.1%
96.3%	54.0	54.0	0.0	0.0%
97.5%	54.0	53.9	-0.1	-0.2%
98.8%	53.7	53.9	0.1	0.2%
100.0%	53.1	52.7	-0.4	-0.8%

Figure SQ6-1b
Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

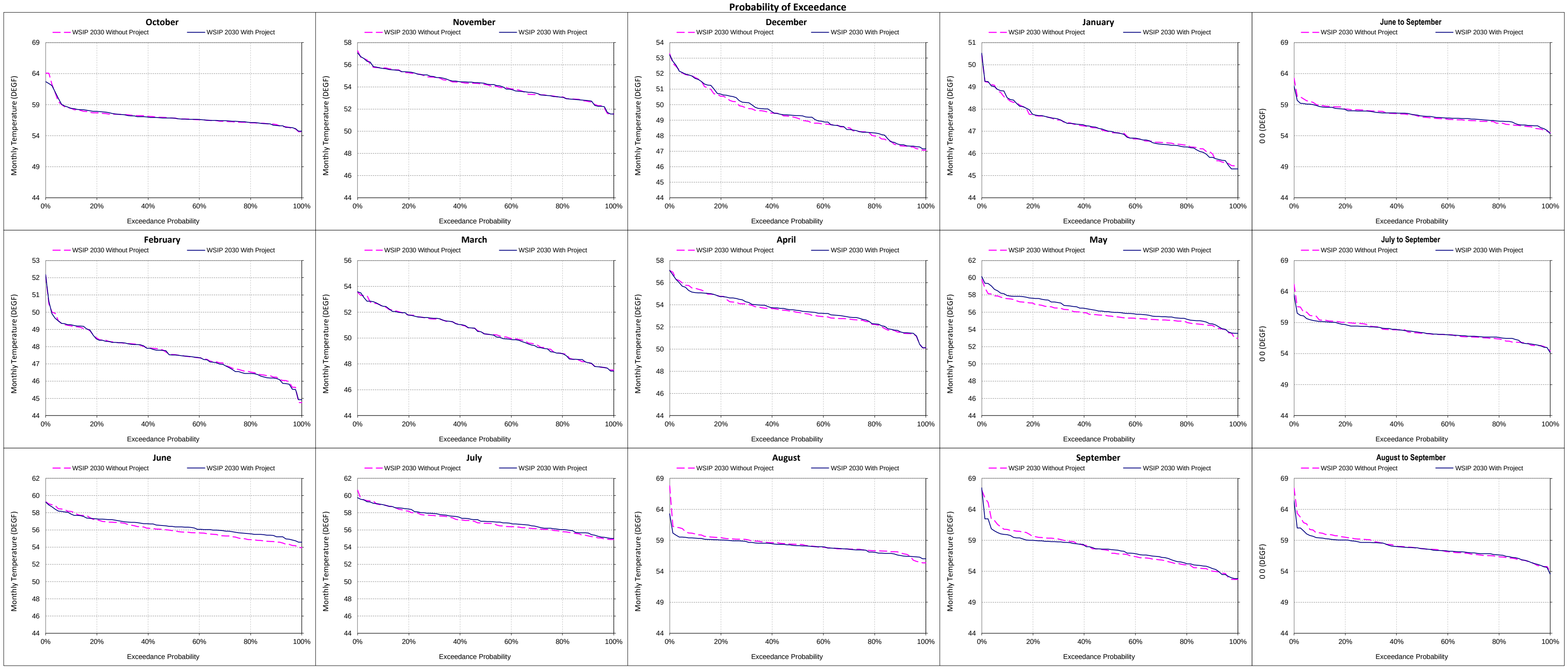


Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.1	62.7	-1.4	-2.1%
1.2%	64.1	62.4	-1.7	-2.6%
2.5%	62.2	62.1	-0.2	-0.2%
3.7%	60.9	61.0	0.1	0.2%
4.9%	59.5	60.0	0.5	0.9%
6.2%	59.0	59.1	0.0	0.0%
7.4%	58.7	58.8	0.1	0.2%
8.6%	58.5	58.6	0.1	0.1%
9.9%	58.4	58.4	0.0	-0.1%
11.1%	58.2	58.4	0.2	0.3%
12.3%	58.2	58.2	0.1	0.1%
13.6%	58.1	58.2	0.1	0.2%
14.8%	57.9	58.2	0.3	0.4%
16.0%	57.9	58.1	0.2	0.3%
17.3%	57.8	58.0	0.2	0.4%
18.5%	57.7	57.9	0.2	0.4%
19.8%	57.7	57.9	0.2	0.4%
21.0%	57.7	57.9	0.2	0.4%
22.2%	57.6	57.9	0.3	0.4%
23.5%	57.6	57.8	0.2	0.4%
24.7%	57.5	57.7	0.2	0.4%
25.9%	57.5	57.6	0.1	0.2%
27.2%	57.5	57.5	0.0	0.0%
28.4%	57.5	57.4	0.0	0.0%
29.6%	57.4	57.4	0.0	0.0%
30.9%	57.4	57.4	0.0	0.0%
32.1%	57.4	57.2	-0.1	-0.3%
33.3%	57.3	57.2	-0.1	-0.1%
34.6%	57.3	57.2	-0.1	-0.1%
35.8%	57.2	57.1	-0.2	-0.3%
37.0%	57.2	57.1	-0.2	-0.3%
38.3%	57.2	57.1	-0.2	-0.3%
39.5%	57.2	57.0	-0.1	-0.3%
40.7%	57.1	57.0	-0.1	-0.3%
42.0%	57.1	56.9	-0.2	-0.3%
43.2%	57.0	56.9	0.0	-0.1%
44.4%	57.0	56.9	-0.1	-0.1%
45.7%	57.0	56.8	-0.1	-0.2%
46.9%	56.9	56.8	-0.1	-0.2%
48.1%	56.9	56.8	0.0	0.0%
49.4%	56.8	56.8	0.0	0.0%
50.6%	56.8	56.8	0.0	-0.1%
51.9%	56.7	56.7	0.0	0.0%
53.1%	56.7	56.7	0.0	0.0%
54.3%	56.7	56.7	0.0	-0.1%
55.6%	56.7	56.7	0.0	0.0%
56.8%	56.7	56.6	0.0	-0.1%
58.0%	56.6	56.6	0.0	0.1%
59.3%	56.6	56.6	0.1	0.1%
60.5%	56.6	56.6	0.0	0.0%
61.7%	56.6	56.5	0.0	0.0%
63.0%	56.5	56.5	0.0	0.1%
64.2%	56.5	56.5	0.0	0.0%
65.4%	56.4	56.4	0.0	0.0%
66.7%	56.4	56.4	0.0	0.0%
67.9%	56.3	56.4	0.1	0.2%
69.1%	56.3	56.4	0.1	0.1%
70.4%	56.3	56.4	0.1	0.1%
71.6%	56.3	56.4	0.1	0.2%
72.8%	56.3	56.3	0.1	0.2%
74.1%	56.2	56.3	0.1	0.2%
75.3%	56.2	56.3	0.1	0.2%
76.5%	56.2	56.2	0.1	0.1%
77.8%	56.2	56.2	0.1	0.1%
79.0%	56.1	56.2	0.1	0.1%
80.2%	56.1	56.1	0.0	0.1%
81.5%	56.1	56.1	0.0	0.1%
82.7%	56.0	56.1	0.1	0.1%
84.0%	56.0	56.0	0.0	0.0%
85.2%	56.0	56.0	0.0	-0.1%
86.4%	55.9	55.9	0.0	0.0%
87.7%	55.9	55.9	0.0	0.0%
88.9%	55.9	55.7	-0.2	-0.4%
90.1%	55.8	55.6	-0.1	-0.3%
91.4%	55.6	55.6	0.0	0.1%
92.6%	55.4	55.6	0.1	0.3%
93.8%	55.4	55.3	-0.1	-0.2%
95.1%	55.3	55.3	0.0	0.0%
96.3%	55.1	55.3	0.1	0.3%
97.5%	55.1	55.1	0.0	0.0%
98.8%	54.6	54.7	0.1	0.2%
100.0%	54.6	54.7	0.0	0.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.3	57.1	-0.2	-0.3%
1.2%	56.7	56.7	0.0	0.1%
2.5%	56.6	56.6	0.0	0.0%
3.7%	56.4	56.3	-0.1	-0.2%
4.9%	56.1	56.3	0.2	0.3%
6.2%	55.8	55.8	0.1	0.1%
7.4%	55.7	55.8	0.0	0.1%
8.6%	55.7	55.7	0.0	-0.1%
9.9%	55.7	55.7	0.0	-0.1%
11.1%	55.7	55.7	-0.1	-0.1%
12.3%	55.6	55.6	-0.1	-0.1%
13.6%	55.6	55.5	-0.1	-0.1%
14.8%	55.5	55.5	0.0	0.0%
16.0%	55.5	55.5	0.0	-0.1%
17.3%	55.3	55.4	0.0	0.1%
18.5%	55.3	55.4	0.1	0.1%
19.8%	55.3	55.3	0.1	0.1%
21.0%	55.2	55.3	0.1	0.1%
22.2%	55.2	55.3	0.0	0.1%
23.5%	55.2	55.2	0.0	0.0%
24.7%	55.1	55.1	0.0	0.0%
25.9%	55.0	55.1	0.1	0.2%
27.2%	54.9	55.1	0.2	0.3%
28.4%	54.9	55.0	0.1	0.1%
29.6%	54.9	54.9	0.1	0.1%
30.9%	54.8	54.8	0.0	0.0%
32.1%	54.8	54.8	0.0	0.1%
33.3%	54.7	54.8	0.2	0.3%
34.6%	54.6	54.7	0.1	0.2%
35.8%	54.6	54.6	0.0	0.1%
37.0%	54.5	54.5	0.1	0.2%
38.3%	54.4	54.5	0.1	0.2%
39.5%	54.4	54.5	0.1	0.1%
40.7%	54.4	54.5	0.0	0.1%
42.0%	54.4	54.4	0.1	0.2%
43.2%	54.3	54.4	0.1	0.2%
44.4%	54.3	54.4	0.1	0.2%
45.7%	54.3	54.4	0.1	0.1%
46.9%	54.3	54.4	0.1	0.1%
48.1%	54.3	54.4	0.1	0.2%
49.4%	54.2	54.3	0.1	0.2%
50.6%	54.2	54.2	0.0	0.1%
51.9%	54.1	54.2	0.1	0.2%
53.1%	54.1	54.2	0.1	0.2%
54.3%	54.0	54.1	0.1	0.2%
55.6%	53.9	54.1	0.1	0.3%
56.8%	53.9	54.0	0.1	0.1%
58.0%	53.9	53.8	-0.1	-0.2%
59.3%	53.8	53.8	0.0	-0.1%
60.5%	53.8	53.7	-0.1	-0.1%
61.7%	53.8	53.6	-0.1	-0.2%
63.0%	53.7	53.6	-0.1	-0.2%
64.2%	53.6	53.6	0.0	-0.1%
65.4%	53.5	53.6	0.1	0.1%
66.7%	53.3	53.5	0.2	0.4%
67.9%	53.3	53.5	0.2	0.3%
69.1%	53.3	53.5	0.1	0.3%
70.4%	53.3	53.4	0.1	0.1%
71.6%	53.3	53.3	0.0	0.0%
72.8%	53.3	53.3	0.0	-0.1%
74.1%	53.2	53.2	0.0	0.0%
75.3%	53.2	53.2	0.0	0.0%
76.5%	53.2	53.1	-0.1	-0.1%
77.8%	53.1	53.1	0.0	0.0%
79.0%	53.1	53.1	0.0	0.0%
80.2%	53.1	53.1	0.0	-0.1%
81.5%	52.9	52.9	0.0	0.0%
82.7%	52.9	52.9	0.0	-0.1%
84.0%	52.9	52.9	0.0	-0.1%
85.2%	52.9	52.9	0.0	-0.1%
86.4%	52.9	52.8	0.0	-0.1%
87.7%	52.7	52.8	0.1	0.2%
88.9%	52.7	52.8	0.0	0.1%
90.1%	52.7	52.8	0.1	0.2%
91.4%	52.6	52.7	0.1	0.1%
92.6%	52.4	52.3	-0.1	-0.2%
93.8%	52.3	52.3	-0.1	-0.1%
95.1%	52.3	52.3	-0.1	-0.1%
96.3%	52.1	52.2	0.1	0.2%
97.5%	51.6	51.7	0.1	0.2%
98.8%	51.6	51.6	0.0	0.0%
100.0%	51.6	51.6	0.0	0.0%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.3	53.2	-0.1	-0.2%
1.2%	52.7	52.8	0.1	0.3%
2.5%	52.5	52.5	0.1	0.1%
3.7%	52.2	52.2	-0.1	-0.2%
4.9%	52.0	52.1	0.0	0.1%
6.2%	51.9	52.0	0.0	0.0%
7.4%	51.9	51.9	0.0	0.1%
8.6%	51.9	51.9	0.0	0.0%
9.9%	51.8	51.7	-0.1	-0.1%
11.1%	51.7	51.6	0.0	0.0%
12.3%	51.5	51.5	0.0	0.0%
13.6%	51.2	51.3	0.2	0.3%
14.8%	51.1	51.3	0.2	0.3%
16.0%	51.0	51.2	0.3	0.5%
17.3%	50.7	51.0	0.3	0.6%
18.5%	50.7	50.7	0.0	0.1%
19.8%	50.5	50.7	0.1	0.3%
21.0%	50.5	50.6	0.1	0.1%
22.2%	50.4	50.6	0.2	0.4%
23.5%	50.3	50.5	0.3	0.5%
24.7%	50.2	50.5	0.3	0.6%
25.9%	50.2	50.5	0.3	0.5%
27.2%	49.9	50.3	0.3	0.7%
28.4%	49.9	50.2	0.3	0.6%
29.6%	49.8	50.1	0.3	0.7%
30.9%	49.7	50.1	0.4	0.8%
32.1%	49.7	50.0	0.2	0.5%
33.3%	49.6	49.8	0.2	0.4%
34.6%	49.6	49.8	0.1	0.3%
35.8%	49.6	49.7	0.1	0.3%
37.0%	49.6	49.7	0.1	0.3%
38.3%	49.5	49.7	0.2	0.4%
39.5%	49.5	49.6	0.1	0.3%
40.7%	49.5	49.5	0.0	0.0%
42.0%	49.4	49.4	0.0	0.0%
43.2%	49.4	49.4	0.0	-0.1%
44.4%	49.3	49.4	0.1	0.2%
45.7%	49.3	49.4	0.1	0.2%
46.9%	49.2	49.3	0.1	0.2%
48.1%	49.2	49.3	0.1	0.2%
49.4%	49.2	49.3	0.1	0.3%
50.6%	49.1	49.3	0.2	0.4%
51.9%	49.0	49.3	0.3	0.6%
53.1%	49.0	49.2	0.3	0.5%
54.3%	48.9	49.2	0.3	0.6%
55.6%	48.8	49.2	0.4	0.8%
56.8%	48.8	49.0	0.2	0.5%
58.0%	48.8	49.0	0.2	0.3%
59.3%	48.8	48.9	0.2	0.4%
60.5%	48.7	48.9	0.1	0.3%
61.7%	48.7	48.9	0.1	0.3%
63.0%	48.7	48.7	0.0	0.0%
64.2%	48.7	48.7	0.0	0.0%
65.4%	48.7	48.7	0.0	0.0%
66.7%	48.6	48.6	0.0	0.1%
67.9%	48.6	48.6	0.0	0.1%
69.1%	48.5	48.4	-0.1	-0.3%
70.4%	48.5	48.4	-0.1	-0.2%
71.6%	48.3	48.4	0.1	0.1%
72.8%	48.3	48.3	0.0	0.1%
74.1%	48.3	48.3	0.0	0.0%
75.3%	48.2	48.2	0.0	-0.1%
76.5%	48.2	48.2	0.0	-0.1%
77.8%	48.2	48.2	0.0	0.0%
79.0%	48.0	48.2	0.2	0.4%
80.2%	48.0	48.2	0.2	0.4%
81.5%	47.9	48.1	0.2	0.4%
82.7%	47.8	48.1	0.3	0.6%
84.0%	47.8	48.0	0.3	0.6%
85.2%	47.6	47.8	0.2	0.3%
86.4%	47.6	47.6	0.0	-0.1%
87.7%	47.4	47.6	0.1	0.3%
88.9%	47.4	47.5	0.1	0.2%
90.1%	47.3	47.4	0.1	0.1%
91.4%	47.3	47.4	0.1	0.2%
92.6%	47.3	47.4	0.0	0.1%
93.8%	47.3	47.3	0.1	0.1%
95.1%	47.3	47.3	0.1	0.1%
96.3%	47.2	47.3	0.1	0.3%
97.5%	47.1	47.3	0.1	0.3%
98.8%	47.1	47.1	0.1	0.2%
100.0%	47.1	47.1	0.1	0.2%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.4	50.5	0.1	0.2%
1.2%	49.2	49.3	0.0	0.0%
2.5%	49.2	49.2	0.0	0.1%
3.7%	49.1	49.0	-0.1	-0.1%
4.9%	49.1	49.0	-0.1	-0.1%
6.2%	48.8	48.9	0.1	0.1%
7.4%	48.8	48.8	0.1	0.2%
8.6%	48.6	48.8	0.3	0.5%
9.9%	48.5	48.5	0.0	0.1%
11.1%	48.4	48.4	0.1	0.1%
12.3%	48.3	48.4	0.1	0.2%
13.6%	48.3	48.3	0.0	0.0%
14.8%	48.2	48.1	-0.1	-0.1%
16.0%	48.1	48.1	0.0	0.0%
17.3%	48.1	48.0	0.0	-0.1%
18.5%	47.8	48.0	0.2	0.4%
19.8%	47.8	47.8	0.0	0.0%
21.0%	47.7	47.7	0.0	0.0%
22.2%	47.7	47.7	0.0	0.0%
23.5%	47.7	47.7	0.0	0.0%
24.7%	47.7	47.7	0.0	0.0%
25.9%	47.6	47.6	0.0	0.0%
27.2%	47.6	47.6	0.0	0.0%
28.4%	47.5	47.6	0.1	0.1%
29.6%	47.5	47.6	0.0	0.1%
30.9%	47.5	47.5	0.0	0.0%
32.1%	47.4	47.4	0.0	0.0%
33.3%	47.4	47.4	0.0	-0.1%
34.6%	47.4	47.4	0.0	0.0%
35.8%	47.3	47.3	0.0	0.0%
37.0%	47.3	47.3	0.0	0.1%
38.3%	47.3	47.3	0.0	0.1%
39.5%	47.2	47.3	0.0	0.1%
40.7%	47.2	47.2	0.0	0.0%
42.0%	47.2	47.2	0.0	0.1%
43.2%	47.2	47.2	0.0	0.1%
44.4%	47.2	47.2	0.0	0.1%
45.7%	47.1	47.1	0.0	0.0%
46.9%	47.1	47.1	0.1	0.1%
48.1%	47.0	47.1	0.0	0.1%
49.4%	47.0	47.0	0.0	0.0%
50.6%	46.9	47.0	0.1	0.1%
51.9%	46.9	46.9	0.0	0.0%
53.1%	46.9	46.9	0.0	0.0%
54.3%	46.9	46.9	0.0	0.0%
55.6%	46.9	46.9	0.0	-0.1%
56.8%	46.8	46.7	0.0	-0.1%
58.0%	46.7	46.7	0.0	0.1%
59.3%	46.7	46.7	0.0	0.1%
60.5%	46.7	46.7	0.0	0.1%
61.7%	46.7	46.6	0.0	0.0%
63.0%	46.6	46.6	0.0	0.1%
64.2%	46.6	46.6	0.0	0.1%
65.4%	46.6	46.6	0.0	0.0%
66.7%	46.5	46.5	-0.1	-0.1%
67.9%	46.5	46.5	-0.1	-0.1%
69.1%	46.5	46.4	-0.1	-0.2%
70.4%	46.5	46.4	-0.1	-0.2%
71.6%	46.5	46.4	-0.1	-0.2%
72.8%	46.5	46.4	-0.1	-0.2%
74.1%	46.5	46.4	-0.1	-0.2%
75.3%	46.4	46.4	-0.1	-0.1%
76.5%	46.4	46.4	-0.1	-0.1%
77.8%	46.4	46.3	-0.1	-0.2%
79.0%	46.4	46.3	-0.1	-0.2%
80.2%	46.4	46.3	-0.1	-0.2%
81.5%	46.3	46.3	0.0	-0.1%
82.7%	46.3	46.3	0.0	-0.1%
84.0%	46.3	46.2	-0.1	-0.2%
85.2%	46.2	46.1	-0.1	-0.3%
86.4%	46.2	46.1	-0.2	-0.3%
87.7%	46.1	46.0	-0.1	-0.3%
88.9%	46.1	45.8	-0.3	-0.6%
90.1%	46.0	45.8	-0.2	-0.3%
91.4%	45.7	45.8	0.1	0.2%
92.6%	45.7	45.7	0.1	0.1%
93.8%	45.6	45.7	0.1	0.2%
95.1%	45.6	45.7	0.1	0.2%
96.3%	45.5	45.5	-0.1	-0.2%
97.5%	45.5	45.3	-0.2	-0.3%
98.8%	45.4	45.3	-0.1	-0.3%
100.0%	45.4	45.3	-0.1	-0.3%

Table SQ6-1b
Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.1	52.2	0.1	0.1%
1.2%	50.5	50.7	0.2	0.3%
2.5%	50.0	49.9	-0.1	-0.2%
3.7%	49.9	49.6	-0.3	-0.6%
4.9%	49.5	49.5	0.0	0.0%
6.2%	49.4	49.4	0.0	0.0%
7.4%	49.3	49.3	0.1	0.1%
8.6%	49.2	49.3	0.0	0.1%
9.9%	49.2	49.3	0.1	0.1%
11.1%	49.2	49.2	0.1	0.2%
12.3%	49.2	49.2	0.0	0.1%
13.6%	49.1	49.2	0.1	0.2%
14.8%	49.1	49.2	0.1	0.3%
16.0%	49.0	49.0	0.0	0.0%
17.3%	48.9	49.0	0.0	0.1%
18.5%	48.7	48.7	0.0	0.0%
19.8%	48.5	48.5	-0.1	-0.1%
21.0%	48.4	48.4	0.0	-0.1%
22.2%	48.4	48.4	0.0	0.0%
23.5%	48.4	48.3	-0.1	-0.1%
24.7%	48.3	48.3	0.0	0.0%
25.9%	48.3	48.3	0.0	-0.1%
27.2%	48.3	48.2	0.0	0.0%
28.4%	48.2	48.2	0.0	0.0%
29.6%	48.2	48.2	0.0	0.0%
30.9%	48.2	48.2	0.0	0.1%
32.1%	48.2	48.2	0.0	0.0%
33.3%	48.2	48.1	0.0	-0.1%
34.6%	48.2	48.1	0.0	0.0%
35.8%	48.1	48.1	0.0	-0.1%
37.0%	48.1	48.1	0.0	0.1%
38.3%	48.0	48.0	0.0	0.1%
39.5%	47.9	47.9	0.0	0.0%
40.7%	47.9	47.9	0.0	0.0%
42.0%	47.9	47.8	-0.1	-0.1%
43.2%	47.9	47.8	-0.1	-0.2%
44.4%	47.9	47.8	-0.1	-0.1%
45.7%	47.8	47.8	0.0	0.0%
46.9%	47.7	47.8	0.1	0.1%
48.1%	47.6	47.5	0.0	-0.1%
49.4%	47.5	47.5	0.0	-0.1%
50.6%	47.5	47.5	0.0	0.0%
51.9%	47.5	47.5	0.0	0.0%
53.1%	47.5	47.5	0.0	0.0%
54.3%	47.4	47.5	0.0	0.0%
55.6%	47.4	47.4	0.0	0.0%
56.8%	47.4	47.4	0.0	0.1%
58.0%	47.4	47.4	0.0	0.0%
59.3%	47.4	47.4	0.0	0.0%
60.5%	47.3	47.3	0.0	0.0%
61.7%	47.3	47.3	0.0	-0.1%
63.0%	47.3	47.2	0.0	0.0%
64.2%	47.2	47.1	0.0	-0.1%
65.4%	47.1	47.1	0.0	-0.1%
66.7%	47.1	47.1	-0.1	-0.1%
67.9%	47.1	47.0	-0.1	-0.2%
69.1%	47.1	47.0	-0.1	-0.2%
70.4%	46.9	46.9	0.0	0.0%
71.6%	46.8	46.8	-0.1	-0.1%
72.8%	46.7	46.7	-0.1	-0.2%
74.1%	46.7	46.6	-0.2	-0.3%
75.3%	46.7	46.6	-0.1	-0.3%
76.5%	46.6	46.5	-0.1	-0.3%
77.8%	46.6	46.4	-0.1	-0.3%
79.0%	46.6	46.4	-0.1	-0.3%
80.2%	46.5	46.4	-0.1	-0.2%
81.5%	46.5	46.4	-0.1	-0.1%
82.7%	46.4	46.4	0.0	-0.1%
84.0%	46.4	46.3	-0.1	-0.2%
85.2%	46.4	46.2	-0.1	-0.2%
86.4%	46.3	46.2	-0.1	-0.3%
87.7%	46.3	46.2	-0.1	-0.3%
88.9%	46.2	46.2	-0.1	-0.1%
90.1%	46.2	46.1	-0.1	-0.2%
91.4%	46.1	46.1	0.0	0.0%
92.6%	46.0	45.9	-0.2	-0.4%
93.8%	46.0	45.9	-0.2	-0.4%
95.1%	46.0	45.8	-0.1	-0.3%
96.3%	45.6	45.5	-0.1	-0.3%
97.5%	45.6	45.5	-0.1	-0.3%
98.8%	44.8	44.9	0.2	0.4%
100.0%	44.8	44.9	0.2	0.4%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.5	53.6	0.0	0.0%
1.2%	53.3	53.5	0.2	0.4%
2.5%	53.3	53.1	-0.2	-0.3%
3.7%	53.3	52.9	-0.4	-0.8%
4.9%	52.8	52.8	0.1	0.1%
6.2%	52.7	52.8	0.1	0.2%
7.4%	52.7	52.7	0.0	0.1%
8.6%	52.6	52.6	0.0	-0.1%
9.9%	52.4	52.5	0.1	0.1%
11.1%	52.4	52.4	0.0	0.1%
12.3%	52.2	52.3	0.1	0.1%
13.6%	52.2	52.1	-0.1	-0.2%
14.8%	52.1	52.0	-0.1	-0.1%
16.0%	52.0	52.0	0.0	-0.1%
17.3%	52.0	52.0	0.0	0.0%
18.5%	51.9	52.0	0.1	0.2%
19.8%	51.8	51.8	0.0	0.0%
21.0%	51.8	51.7	0.0	0.0%
22.2%	51.8	51.7	-0.1	-0.2%
23.5%	51.6	51.6	0.0	0.0%
24.7%	51.6	51.6	0.0	0.0%
25.9%	51.6	51.6	0.0	0.0%
27.2%	51.5	51.6	0.1	0.1%
28.4%	51.5	51.5	0.0	0.1%
29.6%	51.5	51.5	0.1	0.1%
30.9%	51.5	51.5	0.1	0.1%
32.1%	51.5	51.5	0.0	0.0%
33.3%	51.4	51.4	0.0	0.0%
34.6%	51.3	51.3	0.0	0.0%
35.8%	51.3	51.3	0.0	0.1%
37.0%	51.3	51.3	0.0	0.0%
38.3%	51.1	51.1	0.0	0.0%
39.5%	51.1	51.1	0.0	0.0%
40.7%	51.0	51.0	0.0	0.1%
42.0%	50.9	51.0	0.0	0.1%
43.2%	50.8	50.8	0.0	0.0%
44.4%	50.8	50.8	0.0	0.0%
45.7%	50.8	50.8	0.0	0.0%
46.9%	50.6	50.5	0.0	-0.1%
48.1%	50.5	50.5	0.0	-0.1%
49.4%	50.3	50.3	0.0	0.0%
50.6%	50.3	50.3	0.0	0.0%
51.9%	50.3	50.3	0.0	0.0%
53.1%	50.3	50.2	0.0	-0.1%
54.3%	50.2	50.1	-0.2	-0.3%
55.6%	50.2	50.0	-0.1	-0.2%
56.8%	50.1	50.0	-0.1	-0.3%
58.0%	50.1	49.9	-0.1	-0.3%
59.3%	50.0	49.9	-0.1	-0.2%
60.5%	49.9	49.9	-0.1	-0.2%
61.7%	49.9	49.9	-0.1	-0.2%
63.0%	49.9	49.8	-0.1	-0.1%
64.2%	49.8	49.7	-0.1	-0.2%
65.4%	49.8	49.6	-0.1	-0.3%
66.7%	49.6	49.5	-0.1	-0.1%
67.9%	49.6	49.5	-0.1	-0.3%
69.1%	49.5	49.4	-0.1	-0.3%
70.4%	49.4	49.3	-0.1	-0.3%
71.6%	49.3	49.2	0.0	0.0%
72.8%	49.3	49.2	-0.1	-0.2%
74.1%	49.1	49.2	0.0	0.0%
75.3%	49.1	48.9	-0.2	-0.4%
76.5%	48.9	48.9	0.0	0.0%
77.8%	48.9	48.8	0.0	0.0%
79.0%	48.8	48.8	0.0	0.0%
80.2%	48.8	48.8	0.0	0.0%
81.5%	48.8	48.6	-0.1	-0.2%
82.7%	48.4	48.4	-0.1	-0.1%
84.0%	48.4	48.4	0.0	0.0%
85.2%	48.3	48.4	0.0	0.1%
86.4%	48.3	48.3	0.0	0.1%
87.7%	48.2	48.3	0.2	0.3%
88.9%	48.2	48.1	0.0	0.0%
90.1%	48.1	48.1	0.0	-0.1%
91.4%	48.0	48.1	0.0	0.1%
92.6%	47.8	47.8	0.0	0.0%
93.8%	47.8	47.8	0.0	0.0%
95.1%	47.7	47.8	0.0	0.1%
96.3%	47.7	47.7	0.0	0.0%
97.5%	47.7	47.7	0.0	0.0%
98.8%	47.5	47.4	-0.1	-0.2%
100.0%	47.5	47.4	-0.1	-0.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.1	57.1	0.0	0.0%
1.2%	56.9	56.7	-0.2	-0.4%
2.5%	56.3	56.3	0.0	0.0%
3.7%	56.2	56.0	-0.2	-0.4%
4.9%	56.0	55.7	-0.3	-0.5%
6.2%	55.8	55.6	-0.2	-0.3%
7.4%	55.7	55.3	-0.5	-0.8%
8.6%	55.5	55.1	-0.4	-0.7%
9.9%	55.5	55.1	-0.4	-0.7%
11.1%	55.4	55.1	-0.3	-0.6%
12.3%	55.3	55.1	-0.3	-0.5%
13.6%	55.2	55.1	-0.1	-0.3%
14.8%	55.0	55.0	0.1	0.1%
16.0%	55.0	55.0	0.1	0.1%
17.3%	54.9	54.9	0.0	0.0%
18.5%	54.8	54.8	0.0	0.0%
19.8%	54.8	54.7	0.0	0.0%
21.0%	54.8	54.7	0.0	0.0%
22.2%	54.5	54.7	0.2	0.4%
23.5%	54.3	54.6	0.3	0.6%
24.7%	54.2	54.6	0.4	0.7%
25.9%	54.2	54.6	0.3	0.6%
27.2%	54.1	54.5	0.4	0.7%
28.4%	54.1	54.5	0.4	0.7%
29.6%	54.1	54.3	0.2	0.4%
30.9%	54.0	54.2	0.2	0.3%
32.1%	54.0	54.0	0.1	0.2%
33.3%	53.8	54.0	0.2	0.3%
34.6%	53.8	54.0	0.2	0.4%
35.8%	53.7	54.0	0.2	0.4%
37.0%	53.7	54.0	0.3	0.5%
38.3%	53.7	53.8	0.2	0.3%
39.5%	53.7	53.7	0.1	0.1%
40.7%	53.6	53.7	0.1	0.2%
42.0%	53.6	53.7	0.1	0.2%
43.2%	53.5	53.7	0.1	0.3%
44.4%	53.5	53.7	0.2	0.3%
45.7%	53.5	53.6	0.1	0.2%
46.9%	53.4	53.6	0.1	0.2%
48.1%	53.4	53.5	0.1	0.3%
49.4%	53.3	53.5	0.2	0.3%
50.6%	53.3	53.5	0.2	0.3%
51.9%	53.2	53.4	0.2	0.3%
53.1%	53.2	53.4	0.2	0.3%
54.3%	53.2	53.4	0.2	0.4%
55.6%	53.0	53.3	0.3	0.6%
56.8%	53.0	53.3	0.3	0.5%
58.0%	53.0	53.2	0.3	0.5%
59.3%	52.9	53.2	0.3	0.5%
60.5%	52.9	53.2	0.3	0.6%
61.7%	52.9	53.2	0.3	0.6%
63.0%	52.8	53.1	0.3	0.6%
64.2%	52.8	53.1	0.3	0.5%
65.4%	52.8	53.0	0.3	0.5%
66.7%	52.8	53.0	0.3	0.5%
67.9%	52.8	53.0	0.2	0.4%
69.1%	52.7	52.9	0.2	0.4%
70.4%	52.7	52.9	0.2	0.3%
71.6%	52.7	52.9	0.2	0.4%
72.8%	52.6	52.9	0.2	0.4%
74.1%	52.6	52.8	0.2	0.3%
75.3%	52.6	52.7	0.1	0.1%
76.5%	52.5	52.6	0.1	0.3%
77.8%	52.5	52.5	0.0	0.1%
79.0%	52.2	52.3	0.1	0.1%
80.2%	52.2	52.3	0.0	0.1%
81.5%	52.2	52.3	0.1	0.2%
82.7%	52.0	52.1	0.1	0.1%
84.0%	51.9	52.0	0.2	0.4%
85.2%	51.7	51.8	0.1	0.2%
86.4%	51.7	51.8	0.1	0.2%
87.7%	51.7	51.7	0.0	0.0%
88.9%	51.5	51.7	0.2	0.3%
90.1%	51.5	51.6	0.0	0.1%
91.4%	51.4	51.5	0.1	0.1%
92.6%	51.4	51.5	0.1	0.1%
93.8%	51.4	51.5	0.1	0.1%
95.1%	51.4	51.4	0.1	0.1%
96.3%	51.2	51.2	0.0	0.0%
97.5%	50.4	50.4	0.0	0.0%
98.8%	50.1	50.1	0.0	0.0%
100.0%	50.1	50.1	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.8	60.1	0.3	0.5%
1.2%	58.8	59.3	0.5	0.9%
2.5%	58.1	59.3	1.2	2.1%
3.7%	58.1	59.1	0.9	1.6%
4.9%	57.9	58.7	0.8	1.3%
6.2%	57.9	58.5	0.6	1.1%
7.4%	57.8	58.2	0.5	0.8%
8.6%	57.6	58.1	0.5	0.9%
9.9%	57.6	57.9	0.4	0.6%
11.1%	57.5	57.9	0.3	0.6%
12.3%	57.5	57.8	0.4	0.6%
13.6%	57.3	57.8	0.5	0.9%
14.8%	57.2	57.8	0.6	1.1%
16.0%	57.2	57.8	0.6	1.1%
17.3%	57.1	57.7	0.6	1.0%
18.5%	57.1	57.7	0.6	1.0%
19.8%	57.1	57.6	0.6	1.0%
21.0%	56.9	57.6	0.7	1.3%
22.2%	56.9	57.6	0.7	1.3%
23.5%	56.8	57.5	0.7	1.2%
24.7%	56.7	57.4	0.7	1.3%
25.9%	56.7	57.4	0.7	1.3%
27.2%	56.6	57.2	0.6	1.0%
28.4%	56.5	57.2	0.7	1.2%
29.6%	56.5	57.1	0.7	1.2%
30.9%	56.5	57.1	0.6	1.1%
32.1%	56.3	56.8	0.5	0.9%
33.3%	56.3	56.8	0.5	0.8%
34.6%	56.3	56.7	0.5	0.8%
35.8%	56.1	56.7	0.6	1.0%
37.0%	56.0	56.6	0.6	1.1%
38.3%	56.0	56.5	0.4	0.8%
39.5%	55.9	56.5	0.5	0.9%
40.7%	55.9	56.4	0.5	0.9%
42.0%	55.8	56.3	0.6	1.0%
43.2%	55.7	56.3	0.6	1.0%
44.4%	55.7	56.2	0.5	0.9%
45.7%	55.7	56.1	0.5	0.8%
46.9%	55.7	56.1	0.5	0.8%
48.1%	55.6	56.1	0.4	0.8%
49.4%	55.6	56.1	0.5	0.9%
50.6%	55.5	56.0	0.5	0.8%
51.9%	55.5	56.0	0.5	0.9%
53.1%	55.5	56.0	0.5	1.0%
54.3%	55.4	55.9	0.5	1.0%
55.6%	55.4	55.9	0.5	1.0%
56.8%	55.3	55.9	0.5	1.0%
58.0%	55.3	55.9	0.5	1.0%
59.3%	55.3	55.8	0.5	0.9%
60.5%	55.3	55.8	0.5	0.9%
61.7%	55.3	55.7	0.5	0.9%
63.0%	55.2	55.7	0.5	0.9%
64.2%	55.2	55.7	0.5	0.9%
65.4%	55.2	55.6	0.5	0.8%
66.7%	55.2	55.5	0.4	0.7%
67.9%	55.1	55.5	0.4	0.6%
69.1%	55.1	55.5	0.4	0.7%
70.4%	55.1	55.5	0.4	0.7%
71.6%	55.1	55.5	0.4	0.7%
72.8%	55.1	55.5	0.4	0.7%
74.1%	55.1	55.4	0.4	0.7%
75.3%	55.0	55.4	0.3	0.6%
76.5%	55.0	55.3	0.3	0.6%
77.8%	55.0	55.3	0.3	0.6%
79.0%	55.0	55.3	0.3	0.6%
80.2%	54.8	55.2	0.4	0.7%
81.5%	54.7	55.1	0.4	0.6%
82.7%	54.7	55.0	0.4	0.7%
84.0%	54.6	55.0	0.4	0.7%
85.2%	54.6	55.0	0.4	0.7%
86.4%	54.6	55.0	0.4	0.7%
87.7%	54.5	54.8	0.3	0.6%
88.9%	54.5	54.7	0.2	0.3%
90.1%	54.5	54.7	0.2	0.4%
91.4%	54.2	54.5	0.3	0.5%
92.6%	54.1	54.3	0.2	0.3%
93.8%	54.1	54.1	0.0	0.0%
95.1%	54.0	54.0	0.0	0.1%
96.3%	53.6	53.7	0.1	0.1%
97.5%	53.6	53.6	0.0	0.0%
98.8%	53.0	53.6	0.6	1.1%
100.0%	53.0	53.6	0.6	1.1%

Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.3	59.2	0.0	-0.1%
1.2%	59.0	58.9	-0.1	-0.2%
2.5%	58.9	58.7	-0.2	-0.4%
3.7%	58.8	58.4	-0.4	-0.7%
4.9%	58.5	58.2	-0.3	-0.4%
6.2%	58.4	58.1	-0.3	-0.5%
7.4%	58.4	58.1	-0.3	-0.4%
8.6%	58.2	58.1	-0.1	-0.2%
9.9%	58.2	57.8	-0.3	-0.5%
11.1%	58.0	57.7	-0.3	-0.6%
12.3%	57.8	57.7	-0.1	-0.2%
13.6%	57.7	57.7	0.0	0.0%
14.8%	57.7	57.6	-0.1	-0.2%
16.0%	57.7	57.4	-0.3	-0.5%
17.3%	57.4	57.4	-0.1	-0.1%
18.5%	57.2	57.3	0.1	0.1%
19.8%	57.2	57.3	0.1	0.2%
21.0%	57.1	57.3	0.2	0.3%
22.2%	57.0	57.3	0.3	0.5%
23.5%	57.0	57.2	0.3	0.5%
24.7%	56.9	57.2	0.3	0.5%
25.9%	56.9	57.2	0.3	0.5%
27.2%	56.9	57.1	0.3	0.5%
28.4%	56.9	57.1	0.2	0.3%
29.6%	56.8	57.0	0.2	0.3%
30.9%	56.8	56.9	0.2	0.3%
32.1%	56.6	56.9	0.3	0.5%
33.3%	56.6	56.9	0.3	0.6%
34.6%	56.5	56.9	0.4	0.7%
35.8%	56.4	56.9	0.5	0.8%
37.0%	56.4	56.8	0.4	0.7%
38.3%	56.3	56.7	0.4	0.7%
39.5%	56.2	56.7	0.5	0.9%
40.7%	56.2	56.7	0.5	0.9%
42.0%	56.2	56.7	0.5	1.0%
43.2%	56.1	56.6	0.5	0.9%
44.4%	56.1	56.5	0.5	0.8%
45.7%	56.1	56.5	0.4	0.8%
46.9%	56.0	56.5	0.4	0.8%
48.1%	56.0	56.4	0.4	0.8%
49.4%	55.9	56.4	0.5	0.8%
50.6%	55.9	56.4	0.5	0.8%
51.9%	55.8	56.4	0.6	1.0%
53.1%	55.8	56.3	0.6	1.0%
54.3%	55.7	56.3	0.6	1.0%
55.6%	55.7	56.3	0.6	1.0%
56.8%	55.7	56.3	0.6	1.1%
58.0%	55.7	56.2	0.6	1.0%
59.3%	55.7	56.1	0.4	0.8%
60.5%	55.6	56.1	0.4	0.8%
61.7%	55.6	56.1	0.4	0.7%
63.0%	55.6	56.1	0.5	0.9%
64.2%	55.5	56.0	0.5	0.9%
65.4%	55.5	56.0	0.5	0.9%
66.7%	55.5	56.0	0.5	0.9%
67.9%	55.3	56.0	0.6	1.1%
69.1%	55.3	55.9	0.6	1.1%
70.4%	55.3	55.9	0.6	1.0%
71.6%	55.3	55.9	0.6	1.0%
72.8%	55.2	55.8	0.6	1.0%
74.1%	55.2	55.7	0.5	1.0%
75.3%	55.1	55.7	0.6	1.1%
76.5%	55.0	55.6	0.7	1.2%
77.8%	55.0	55.6	0.6	1.1%
79.0%	54.9	55.6	0.7	1.3%
80.2%	54.9	55.6	0.7	1.3%
81.5%	54.8	55.5	0.7	1.2%
82.7%	54.8	55.5	0.7	1.3%
84.0%	54.8	55.5	0.7	1.3%
85.2%	54.7	55.5	0.7	1.4%
86.4%	54.7	55.4	0.7	1.3%
87.7%	54.7	55.4	0.7	1.3%
88.9%	54.7	55.4	0.7	1.3%
90.1%	54.6	55.2	0.6	1.1%
91.4%	54.6	55.2	0.6	1.1%
92.6%	54.5	55.2	0.7	1.3%
93.8%	54.3	55.0	0.6	1.2%
95.1%	54.3	54.9	0.6	1.1%
96.3%	54.2	54.8	0.6	1.2%
97.5%	54.2	54.7	0.6	1.0%
98.8%	54.0	54.6	0.6	1.1%
100.0%	54.0	54.6	0.6	1.1%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.6	59.7	-0.9	-1.5%
1.2%	59.7	59.6	-0.1	-0.1%
2.5%	59.5	59.5	0.0	0.0%
3.7%	59.4	59.3	-0.1	-0.2%
4.9%	59.4	59.2	-0.1	-0.2%
6.2%	59.3	59.1	-0.2	-0.4%
7.4%	59.0	59.1	0.0	0.0%
8.6%	58.9	59.0	0.0	0.1%
9.9%	58.9	58.9	0.0	0.0%
11.1%	58.8	58.9	0.0	0.0%
12.3%	58.7	58.7	0.0	0.0%
13.6%	58.7	58.7	0.0	0.0%
14.8%	58.6	58.6	0.0	-0.1%
16.0%	58.4	58.6	0.2	0.3%
17.3%	58.3	58.5	0.2	0.3%
18.5%	58.2	58.5	0.2	0.4%
19.8%	58.2	58.5	0.3	0.4%
21.0%	58.0	58.4	0.4	0.6%
22.2%	58.0	58.1	0.1	0.2%
23.5%	58.0	58.1	0.1	0.2%
24.7%	57.8	58.0	0.2	0.4%
25.9%	57.7	58.0	0.3	0.5%
27.2%	57.7	57.9	0.2	0.4%
28.4%	57.7	57.9	0.2	0.4%
29.6%	57.7	57.9	0.2	0.4%
30.9%	57.6	57.9	0.2	0.4%
32.1%	57.6	57.8	0.2	0.3%
33.3%	57.6	57.8	0.2	0.3%
34.6%	57.6	57.7	0.2	0.3%
35.8%	57.5	57.6	0.2	0.3%
37.0%	57.4	57.6	0.2	0.3%
38.3%	57.2	57.6	0.3	0.6%
39.5%	57.2	57.5	0.3	0.6%
40.7%	57.2	57.4	0.2	0.3%
42.0%	57.1	57.4	0.2	0.4%
43.2%	57.1	57.3	0.2	0.4%
44.4%	57.1	57.2	0.1	0.2%
45.7%	57.0	57.2	0.2	0.4%
46.9%	56.8	57.2	0.4	0.6%
48.1%	56.8	57.0	0.2	0.3%
49.4%	56.8	57.0	0.2	0.4%
50.6%	56.8	57.0	0.2	0.4%
51.9%	56.8	57.0	0.2	0.4%
53.1%	56.8	57.0	0.2	0.3%
54.3%	56.6	56.9	0.4	0.6%
55.6%	56.5	56.9	0.4	0.8%
56.8%	56.5	56.8	0.3	0.6%
58.0%	56.4	56.8	0.4	0.7%
59.3%	56.4	56.8	0.4	0.7%
60.5%	56.4	56.7	0.3	0.6%
61.7%	56.3	56.7	0.3	0.6%
63.0%	56.3	56.7	0.3	0.6%
64.2%	56.3	56.6	0.4	0.6%
65.4%	56.3	56.6	0.3	0.6%
66.7%	56.2	56.6	0.4	0.7%
67.9%	56.2	56.5	0.3	0.5%
69.1%	56.2	56.5	0.3	0.5%
70.4%	56.2	56.4	0.2	0.4%
71.6%	56.1	56.3	0.2	0.3%
72.8%	56.1	56.2	0.1	0.3%
74.1%	56.1	56.2	0.1	0.3%
75.3%	56.1	56.2	0.1	0.3%
76.5%	55.9	56.1	0.2	0.4%
77.8%	55.9	56.1	0.2	0.3%
79.0%	55.9	56.1	0.2	0.4%
80.2%	55.8	56.0	0.2	0.4%
81.5%	55.8	56.0	0.2	0.4%
82.7%	55.7	55.9	0.2	0.4%
84.0%	55.7	55.9	0.2	0.4%
85.2%	55.6	55.7	0.1	0.2%
86.4%	55.5	55.7	0.1	0.2%
87.7%	55.4	55.7	0.3	0.5%
88.9%	55.4	55.7	0.3	0.5%
90.1%	55.3	55.6	0.3	0.6%
91.4%	55.2	55.5	0.2	0.4%
92.6%	55.2	55.4	0.2	0.3%
93.8%	55.1	55.3	0.2	0.3%
95.1%	55.1	55.2	0.1	0.2%
96.3%	55.0	55.1	0.2	0.3%
97.5%	54.9	55.1	0.2	0.3%
98.8%	54.9	55.0	0.1	0.2%
100.0%	54.9	55.0	0.1	0.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.8	63.3	-4.5	-6.7%
1.2%	61.2	60.2	-1.1	-1.8%
2.5%	61.1	59.8	-1.3	-2.1%
3.7%	61.0	59.5	-1.5	-2.5%
4.9%	60.9	59.5	-1.4	-2.2%
6.2%	60.4	59.5	-0.9	-1.5%
7.4%	60.2	59.4	-0.8	-1.3%
8.6%	60.2	59.4	-0.8	-1.3%
9.9%	60.0	59.3	-0.7	-1.1%
11.1%	59.9	59.3	-0.6	-1.0%
12.3%	59.9	59.3	-0.6	-0.9%
13.6%	59.6	59.2	-0.5	-0.8%
14.8%	59.6	59.2	-0.5	-0.8%
16.0%	59.5	59.1	-0.4	-0.7%
17.3%	59.5	59.1	-0.4	-0.7%
18.5%	59.5	59.1	-0.4	-0.6%
19.8%	59.4	59.1	-0.4	-0.7%
21.0%	59.3	59.0	-0.3	-0.5%
22.2%	59.3	59.0	-0.3	-0.5%
23.5%	59.2	59.0	-0.3	-0.5%
24.7%	59.2	58.9	-0.3	-0.5%
25.9%	59.2	58.9	-0.3	-0.4%
27.2%	59.2	58.9	-0.3	-0.4%
28.4%	59.2	58.9	-0.3	-0.5%
29.6%	59.1	58.8	-0.3	-0.5%
30.9%	59.0	58.7	-0.4	-0.7%
32.1%	58.9	58.7	-0.2	-0.4%
33.3%	58.9	58.6	-0.3	-0.5%
34.6%	58.9	58.5	-0.3	-0.5%
35.8%	58.8	58.5	-0.2	-0.4%
37.0%	58.7	58.5	-0.2	-0.4%
38.3%	58.6	58.5	-0.1	-0.2%
39.5%	58.6	58.5	-0.1	-0.2%
40.7%	58.6	58.4	-0.2	-0.3%
42.0%	58.6	58.4	-0.2	-0.4%
43.2%	58.5	58.3	-0.2	-0.3%
44.4%	58.5	58.3	-0.1	-0.2%
45.7%	58.5	58.3	-0.2	-0.3%
46.9%	58.4	58.3	-0.1	-0.2%
48.1%	58.4	58.2	-0.2	-0.3%
49.4%	58.4	58.1	-0.2	-0.4%
50.6%	58.3	58.1	-0.2	-0.3%
51.9%	58.3	58.1	-0.2	-0.4%
53.1%	58.2	58.1	-0.1	-0.1%
54.3%	58.1	58.0	-0.1	-0.2%
55.6%	58.1	58.0	-0.1	-0.1%
56.8%	58.0	58.0	0.0	0.0%
58.0%	57.9	58.0	0.1	0.1%
59.3%	57.9	57.9	0.1	0.1%
60.5%	57.9	57.9	0.1	0.1%
61.7%	57.8	57.8	0.0	0.0%
63.0%	57.8	57.7	0.0	0.0%
64.2%	57.7	57.7	0.0	-0.1%
65.4%	57.6	57.7	0.1	0.1%
66.7%	57.6	57.7	0.1	0.1%
67.9%	57.6	57.6	0.0	0.0%
69.1%	57.6	57.6	0.0	0.0%
70.4%	57.6	57.5	0.0	-0.1%
71.6%	57.6	57.5	-0.1	-0.1%
72.8%	57.6	57.5	-0.1	-0.2%
74.1%	57.6	57.5	-0.1	-0.2%
75.3%	57.4	57.4	0.0	0.0%
76.5%	57.4	57.4	0.0	0.0%
77.8%	57.4	57.1	-0.3	-0.5%
79.0%	57.3	57.1	-0.2	-0.4%
80.2%	57.3	57.0	-0.3	-0.5%
81.5%	57.3	56.9	-0.4	-0.6%
82.7%	57.3	56.9	-0.3	-0.6%
84.0%	57.3	56.9	-0.4	-0.6%
85.2%	57.2	56.9	-0.4	-0.6%
86.4%	57.2	56.9	-0.3	-0.5%
87.7%	57.2	56.8	-0.3	-0.6%
88.9%	57.1	56.6	-0.5	-0.9%
90.1%	57.0	56.5	-0.4	-0.7%
91.4%	56.8	56.5	-0.4	-0.6%
92.6%	56.7	56.4	-0.3	-0.5%
93.8%	56.5	56.4	0.0	-0.1%
95.1%	55.8	56.4	0.6	1.0%
96.3%	55.6	56.3	0.7	1.3%
97.5%	55.5	56.3	0.8	1.4%
98.8%	55.4	56.0	0.7	1.2%
100.0%	55.4	56.0	0.7	1.2%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.1	67.5	0.4	0.6%
1.2%	65.8	62.5	-3.4	-5.1%
2.5%	65.1	62.4	-2.7	-4.1%
3.7%	62.5	60.9	-1.6	-2.6%
4.9%	62.2	60.5	-1.7	-2.7%
6.2%	61.6	60.3	-1.3	-2.1%
7.4%	61.2	60.0	-1.1	-1.9%
8.6%	60.8	59.9	-0.8	-1.4%
9.9%	60.8	59.9	-0.8	-1.4%
11.1%	60.6	59.8	-0.8	-1.4%
12.3%	60.6	59.5	-1.1	-1.8%
13.6%	60.5	59.4	-1.1	-1.8%
14.8%	60.4	59.4	-1.1	-1.8%
16.0%	60.3	59.2	-1.1	-1.8%
17.3%	60.3	59.1	-1.2	-2.0%
18.5%	60.0	59.0	-1.0	-1.6%
19.8%	59.7	59.0	-0.6	-1.1%
21.0%	59.6	58.9	-0.6	-1.1%
22.2%	59.5	58.9	-0.6	-0.9%
23.5%	59.4	58.9	-0.5	-0.9%
24.7%	59.4	58.8	-0.5	-0.9%
25.9%	59.4	58.8	-0.5	-0.9%
27.2%	59.3	58.8	-0.5	-0.9%
28.4%	59.3	58.8	-0.5	-0.8%
29.6%	59.2	58.8	-0.5	-0.8%
30.9%	59.1	58.7	-0.4	-0.6%
32.1%	59.0	58.7	-0.3	-0.5%
33.3%	58.8	58.7	-0.2	-0.3%
34.6%	58.8	58.6	-0.2	-0.3%
35.8%	58.8	58.5	-0.3	-0.5%
37.0%	58.5	58.4	-0.1	-0.1%
38.3%	58.4	58.4	-0.1	-0.1%
39.5%	58.2	58.4	0.1	0.2%
40.7%	58.2	58.0	-0.2	-0.4%
42.0%	58.0	58.0	0.0	0.0%
43.2%	57.6	57.8	0.2	0.3%
44.4%	57.6	57.6	0.0	0.0%
45.7%	57.6	57.6	0.0	0.0%
46.9%	57.5	57.6	0.1	0.1%
48.1%	57.5	57.6	0.1	0.2%
49.4%	57.4	57.6	0.2	0.3%
50.6%	56.9	57.5	0.6	1.0%
51.9%	56.9	57.4	0.5	0.9%
53.1%	56.8	57.4	0.6	1.1%
54.3%	56.8	57.3	0.5	0.8%
55.6%	56.8	57.2	0.5	0.8%
56.8%	56.7	56.9	0.2	0.4%
58.0%	56.5	56.9	0.4	0.8%
59.3%	56.4	56.9	0.5	0.9%
60.5%	56.3	56.8	0.5	0.9%
61.7%	56.2	56.7	0.5	0.8%
63.0%	56.2	56.6	0.5	0.8%
64.2%	56.1	56.6	0.5	0.8%
65.4%	56.1	56.5	0.4	0.8%
66.7%	56.0	56.4	0.5	0.9%
67.9%	55.9	56.4	0.5	0.9%
69.1%	55.8	56.4	0.5	0.9%
70.4%	55.8	56.2	0.4	0.8%
71.6%	55.7	56.2	0.5	0.8%
72.8%	55.5	56.1	0.5	0.9%
74.1%	55.4	55.8	0.4	0.7%
75.3%	55.3	55.7	0.4	0.7%
76.5%	55.3	55.5	0.3	0.5%
77.8%	55.1	55.5	0.4	0.7%
79.0%	55.1	55.4	0.3	0.5%
80.2%	55.0	55.2	0.2	0.3%
81.5%	54.9	55.2	0.2	0.4%
82.7%	54.6	55.0	0.5	0.9%
84.0%	54.6	55.0	0.4	0.8%
85.2%	54.5	54.9	0.4	0.8%
86.4%	54.4	54.8	0.4	0.7%
87.7%	54.4	54.8	0.4	0.7%
88.9%	54.1	54.6	0.5	1.0%
90.1%	54.0	54.4	0.4	0.8%
91.4%	54.0	54.3	0.3	0.6%
92.6%	53.9	54.0	0.0	0.1%
93.8%	53.7	53.5	-0.2	-0.4%
95.1%	53.6	53.5	-0.2	-0.3%
96.3%	53.0	53.2	0.2	0.3%
97.5%	52.7	53.0	0.3	0.5%
98.8%	52.7	52.8	0.1	0.2%
100.0%	52.7	52.8	0.1	0.2%

Table SQ6-1b
Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.3	62.0	-1.2	-2.0%
1.2%	60.3	59.7	-0.6	-1.1%
2.5%	60.3	59.2	-1.0	-1.7%
3.7%	59.9	59.2	-0.7	-1.2%
4.9%	59.6	59.1	-0.5	-0.9%
6.2%	59.5	59.1	-0.4	-0.7%
7.4%	59.4	59.0	-0.4	-0.7%
8.6%	59.0	58.9	-0.1	-0.2%
9.9%	58.9	58.7	-0.2	-0.3%
11.1%	58.9	58.6	-0.2	-0.4%
12.3%	58.8	58.6	-0.2	-0.3%
13.6%	58.7	58.6	-0.1	-0.2%
14.8%	58.7	58.6	-0.1	-0.2%
16.0%	58.7	58.4	-0.3	-0.5%
17.3%	58.6	58.4	-0.3	-0.4%
18.5%	58.6	58.3	-0.3	-0.5%
19.8%	58.3	58.3	0.0	-0.1%
21.0%	58.3	58.0	-0.3	-0.4%
22.2%	58.2	58.0	-0.2	-0.4%
23.5%	58.2	58.0	-0.2	-0.3%
24.7%	58.2	58.0	-0.2	-0.3%
25.9%	58.1	58.0	-0.2	-0.3%
27.2%	58.1	58.0	-0.1	-0.3%
28.4%	58.0	58.0	-0.1	-0.1%
29.6%	58.0	57.9	-0.1	-0.1%
30.9%	58.0	57.9	-0.1	-0.2%
32.1%	58.0	57.7	-0.2	-0.4%
33.3%	57.9	57.7	-0.2	-0.4%
34.6%	57.9	57.7	-0.2	-0.4%
35.8%	57.7	57.7	0.0	0.0%
37.0%	57.6	57.7	0.0	0.1%
38.3%	57.6	57.7	0.1	0.1%
39.5%	57.6	57.7	0.1	0.2%
40.7%	57.5	57.6	0.1	0.2%
42.0%	57.5	57.6	0.1	0.2%
43.2%	57.5	57.6	0.1	0.2%
44.4%	57.4	57.6	0.2	0.3%
45.7%	57.4	57.5	0.1	0.1%
46.9%	57.4	57.4	0.0	0.0%
48.1%	57.2	57.3	0.1	0.2%
49.4%	57.0	57.2	0.2	0.3%
50.6%	57.0	57.2	0.2	0.3%
51.9%	56.9	57.1	0.2	0.3%
53.1%	56.9	57.1	0.2	0.4%
54.3%	56.8	57.0	0.2	0.3%
55.6%	56.8	57.0	0.2	0.3%
56.8%	56.8	56.9	0.2	0.3%
58.0%	56.7	56.9	0.2	0.3%
59.3%	56.7	56.9	0.2	0.3%
60.5%	56.6	56.9	0.2	0.4%
61.7%	56.6	56.8	0.2	0.4%
63.0%	56.6	56.8	0.3	0.4%
64.2%	56.6	56.8	0.2	0.4%
65.4%	56.6	56.8	0.2	0.4%
66.7%	56.5	56.8	0.3	0.5%
67.9%	56.5	56.8	0.3	0.5%
69.1%	56.4	56.7	0.3	0.5%
70.4%	56.4	56.7	0.3	0.5%
71.6%	56.4	56.6	0.2	0.4%
72.8%	56.3	56.6	0.3	0.5%
74.1%	56.3	56.6	0.2	0.4%
75.3%	56.3	56.5	0.2	0.4%
76.5%	56.3	56.5	0.2	0.3%
77.8%	56.3	56.5	0.2	0.3%
79.0%	56.0	56.4	0.4	0.6%
80.2%	56.0	56.4	0.3	0.6%
81.5%	56.0	56.3	0.3	0.6%
82.7%	55.8	56.3	0.5	0.8%
84.0%	55.8	56.3	0.5	0.9%
85.2%	55.8	56.2	0.4	0.8%
86.4%	55.7	56.0	0.3	0.5%
87.7%	55.7	55.8	0.1	0.2%
88.9%	55.6	55.7	0.2	0.3%
90.1%	55.5	55.7	0.2	0.4%
91.4%	55.5	55.7	0.2	0.3%
92.6%	55.4	55.6	0.2	0.4%
93.8%	55.2	55.6	0.4	0.7%
95.1%	55.1	55.6	0.5	0.8%
96.3%	55.1	55.3	0.2	0.4%
97.5%	54.9	55.1	0.2	0.4%
98.8%	54.7	54.9	0.1	0.3%
100.0%	54.5	54.3	-0.1	-0.2%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.2	63.5	-1.7	-2.5%
1.2%	61.6	60.5	-1.0	-1.7%
2.5%	61.5	60.1	-1.4	-2.2%
3.7%	60.7	60.1	-0.6	-1.0%
4.9%	60.7	59.7	-1.0	-1.7%
6.2%	60.1	59.5	-0.7	-1.1%
7.4%	60.1	59.4	-0.7	-1.2%
8.6%	60.0	59.2	-0.8	-1.3%
9.9%	59.4	59.2	-0.3	-0.4%
11.1%	59.4	59.2	-0.2	-0.4%
12.3%	59.4	59.1	-0.2	-0.4%
13.6%	59.2	59.1	-0.2	-0.3%
14.8%	59.2	59.1	-0.2	-0.3%
16.0%	59.2	59.0	-0.2	-0.3%
17.3%	59.1	58.9	-0.3	-0.4%
18.5%	59.0	58.7	-0.3	-0.5%
19.8%	59.0	58.7	-0.3	-0.5%
21.0%	59.0	58.6	-0.4	-0.7%
22.2%	58.9	58.4	-0.5	-0.9%
23.5%	58.9	58.4	-0.5	-0.8%
24.7%	58.9	58.4	-0.5	-0.8%
25.9%	58.8	58.4	-0.4	-0.8%
27.2%	58.8	58.4	-0.4	-0.7%
28.4%	58.7	58.4	-0.3	-0.5%
29.6%	58.4	58.3	-0.1	-0.2%
30.9%	58.3	58.3	-0.1	-0.1%
32.1%	58.3	58.3	-0.1	-0.1%
33.3%	58.3	58.2	-0.1	-0.1%
34.6%	57.9	58.1	0.2	0.3%
35.8%	57.9	58.0	0.2	0.3%
37.0%	57.9	58.0	0.2	0.3%
38.3%	57.8	57.9	0.1	0.1%
39.5%	57.8	57.9	0.1	0.1%
40.7%	57.8	57.8	0.0	0.0%
42.0%	57.8	57.8	0.0	-0.1%
43.2%	57.8	57.7	-0.1	-0.2%
44.4%	57.5	57.6	0.2	0.3%
45.7%	57.4	57.6	0.2	0.4%
46.9%	57.4	57.5	0.2	0.3%
48.1%	57.3	57.5	0.1	0.3%
49.4%	57.3	57.4	0.1	0.2%
50.6%	57.3	57.3	0.1	0.1%
51.9%	57.2	57.2	0.0	0.0%
53.1%	57.2	57.2	0.0	0.1%
54.3%	57.1	57.1	0.0	0.0%
55.6%	57.1	57.1	0.0	0.0%
56.8%	57.1	57.1	0.0	0.0%
58.0%	57.1	57.1	0.0	0.0%
59.3%	57.0	57.0	0.0	0.0%
60.5%	57.0	57.0	0.0	-0.1%
61.7%	57.0	57.0	0.0	-0.1%
63.0%	56.9	57.0	0.1	0.2%
64.2%	56.8	56.9	0.1	0.2%
65.4%	56.7	56.9	0.1	0.2%
66.7%	56.7	56.9	0.1	0.3%
67.9%	56.7	56.8	0.1	0.2%
69.1%	56.7	56.8	0.1	0.2%
70.4%	56.7	56.8	0.1	0.2%
71.6%	56.6	56.8	0.1	0.2%
72.8%	56.6	56.7	0.1	0.2%
74.1%	56.5	56.7	0.1	0.3%
75.3%	56.5	56.7	0.2	0.3%
76.5%	56.5	56.7	0.2	0.4%
77.8%	56.4	56.7	0.2	0.4%
79.0%	56.4	56.6	0.3	0.5%
80.2%	56.3	56.6	0.2	0.4%
81.5%	56.2	56.5	0.3	0.5%
82.7%	56.0	56.5	0.4	0.8%
84.0%	56.0	56.5	0.4	0.8%
85.2%	55.9	56.4	0.6	1.0%
86.4%	55.8	56.3	0.4	0.8%
87.7%	55.8	56.2	0.3	0.6%
88.9%	55.8	55.7	-0.1	-0.1%
90.1%	55.7	55.6	-0.1	-0.2%
91.4%	55.6	55.6	0.0	-0.1%
92.6%	55.3	55.5	0.2	0.3%
93.8%	55.3	55.5	0.2	0.3%
95.1%	55.3	55.3	0.1	0.1%
96.3%	55.3	55.2	0.0	-0.1%
97.5%	55.1	55.0	-0.1	-0.2%
98.8%	54.9	55.0	0.1	0.2%
100.0%	54.4	54.2	-0.3	-0.5%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.4	65.4	-2.1	-3.0%
1.2%	63.4	61.0	-2.4	-3.7%
2.5%	62.7	61.0	-1.8	-2.8%
3.7%	61.9	60.5	-1.3	-2.2%
4.9%	61.7	60.1	-1.6	-2.6%
6.2%	60.7	59.8	-1.0	-1.6%
7.4%	60.7	59.7	-1.0	-1.6%
8.6%	60.2	59.4	-0.8	-1.3%
9.9%	60.2	59.4	-0.8	-1.4%
11.1%	60.1	59.3	-0.8	-1.3%
12.3%	59.9	59.3	-0.7	-1.1%
13.6%	59.9	59.2	-0.7	-1.2%
14.8%	59.9	59.1	-0.7	-1.2%
16.0%	59.7	59.1	-0.6	-1.0%
17.3%	59.7	59.1	-0.7	-1.1%
18.5%	59.6	59.1	-0.5	-0.9%
19.8%	59.5	59.0	-0.5	-0.8%
21.0%	59.4	59.0	-0.4	-0.7%
22.2%	59.4	58.9	-0.5	-0.8%
23.5%	59.3	58.9	-0.4	-0.6%
24.7%	59.2	58.8	-0.4	-0.7%
25.9%	59.2	58.7	-0.5	-0.9%
27.2%	59.2	58.6	-0.5	-0.9%
28.4%	59.1	58.6	-0.5	-0.8%
29.6%	59.1	58.6	-0.5	-0.8%
30.9%	58.8	58.6	-0.2	-0.3%
32.1%	58.7	58.6	-0.1	-0.2%
33.3%	58.6	58.6	-0.1	-0.1%
34.6%	58.5	58.6	0.1	0.1%
35.8%	58.3	58.4	0.0	0.1%
37.0%	58.3	58.2	-0.2	-0.3%
38.3%	58.3	58.1	-0.2	-0.4%
39.5%	58.1	58.0	-0.1	-0.1%
40.7%	58.0	57.9	0.0	-0.1%
42.0%	58.0	57.9	-0.1	-0.2%
43.2%	58.0	57.9	-0.1	-0.2%
44.4%	57.9	57.8	-0.1	-0.1%
45.7%	57.9	57.8	-0.1	-0.1%
46.9%	57.8	57.8	0.0	-0.1%
48.1%	57.7	57.8	0.1	0.1%
49.4%	57.7	57.6	0.0	-0.1%
50.6%	57.7	57.6	-0.1	-0.1%
51.9%	57.6	57.6	0.0	0.0%
53.1%	57.6	57.5	0.0	0.0%
54.3%	57.5	57.4	-0.1	-0.2%
55.6%	57.5	57.4	-0.2	-0.3%
56.8%	57.4	57.3	-0.1	-0.1%
58.0%	57.3	57.3	0.0	0.0%
59.3%	57.2	57.3	0.1	0.2%
60.5%	57.1	57.2	0.1	0.1%
61.7%	57.1	57.2	0.1	0.2%
63.0%	57.0	57.2	0.2	0.3%
64.2%	57.0	57.2	0.2	0.3%
65.4%	57.0	57.1	0.1	0.2%
66.7%	56.9	57.1	0.2	0.3%
67.9%	56.9	57.0	0.1	0.2%
69.1%	56.8	57.0	0.2	0.4%
70.4%	56.7	57.0	0.2	0.4%
71.6%	56.7	56.9	0.2	0.4%
72.8%	56.6	56.9	0.2	0.4%
74.1%	56.5	56.8	0.3	0.5%
75.3%	56.5	56.8	0.3	0.6%
76.5%	56.5	56.8	0.3	0.5%
77.8%	56.5	56.7	0.2	0.4%
79.0%	56.4	56.6	0.3	0.5%
80.2%	56.3	56.6	0.3	0.5%
81.5%	56.3	56.6	0.3	0.5%
82.7%	56.2	56.4	0.2	0.3%
84.0%	56.2	56.4	0.2	0.4%
85.2%	56.1	56.2	0.1	0.2%
86.4%	56.0	56.2	0.2	0.3%
87.7%	55.8	56.1	0.2	0.4%
88.9%	55.8	55.8	0.0	0.0%
90.1%	55.8	55.8	0.0	0.0%
91.4%	55.6	55.6	0.0	0.0%
92.6%	55.4	55.4	0.0	0.0%
93.8%	55.2	55.2	0.0	0.0%
95.1%	54.9	55.1	0.2	0.4%
96.3%	54.9	54.9	0.1	0.2%
97.5%	54.8	54.7	0.0	0.0%
98.8%	54.7	54.6	-0.1	-0.2%
100.0%	54.0	53.6	-0.4	-0.7%

Figure SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

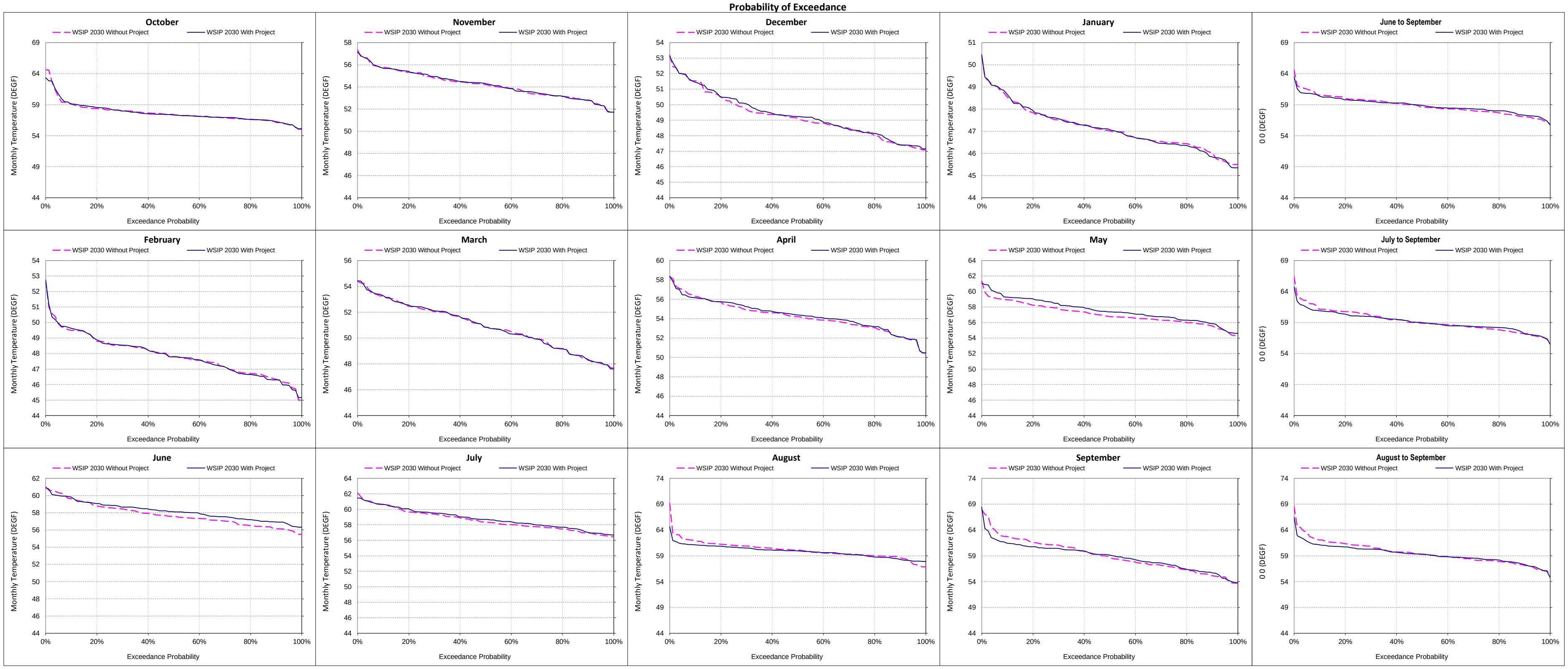


Table SQ7-1b

Sacramento River at Red Bluff, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.6	63.4	-1.3	-2.0%
1.2%	64.6	62.8	-1.7	-2.7%
2.5%	62.7	62.8	0.1	0.2%
3.7%	61.4	61.6	0.2	0.3%
4.9%	60.2	60.7	0.5	0.8%
6.2%	59.4	59.9	0.5	0.9%
7.4%	59.4	59.5	0.1	0.1%
8.6%	59.3	59.4	0.2	0.3%
9.9%	59.2	59.1	-0.1	-0.1%
11.1%	58.9	59.1	0.1	0.3%
12.3%	58.9	59.0	0.1	0.2%
13.6%	58.7	58.9	0.2	0.4%
14.8%	58.6	58.9	0.3	0.5%
16.0%	58.5	58.8	0.2	0.4%
17.3%	58.4	58.7	0.3	0.5%
18.5%	58.4	58.7	0.3	0.5%
19.8%	58.4	58.5	0.2	0.3%
21.0%	58.3	58.5	0.2	0.3%
22.2%	58.3	58.5	0.1	0.2%
23.5%	58.2	58.5	0.3	0.5%
24.7%	58.1	58.3	0.2	0.4%
25.9%	58.1	58.2	0.1	0.1%
27.2%	58.1	58.1	0.0	0.0%
28.4%	58.1	58.1	0.0	0.0%
29.6%	58.0	58.0	0.0	-0.1%
30.9%	58.0	58.0	0.0	-0.1%
32.1%	58.0	57.9	-0.1	-0.1%
33.3%	58.0	57.8	-0.1	-0.2%
34.6%	57.9	57.8	-0.1	-0.2%
35.8%	57.8	57.8	0.0	0.0%
37.0%	57.8	57.6	-0.2	-0.3%
38.3%	57.7	57.6	-0.1	-0.1%
39.5%	57.7	57.5	-0.1	-0.3%
40.7%	57.6	57.5	-0.1	-0.2%
42.0%	57.6	57.5	-0.1	-0.2%
43.2%	57.6	57.5	-0.1	-0.2%
44.4%	57.6	57.5	-0.1	-0.2%
45.7%	57.5	57.4	0.0	-0.1%
46.9%	57.5	57.4	-0.1	-0.1%
48.1%	57.5	57.4	-0.1	-0.1%
49.4%	57.5	57.4	-0.1	-0.2%
50.6%	57.3	57.3	0.0	0.0%
51.9%	57.3	57.3	0.0	0.0%
53.1%	57.2	57.2	0.0	0.0%
54.3%	57.2	57.2	0.0	0.0%
55.6%	57.2	57.2	0.0	0.0%
56.8%	57.2	57.2	0.0	0.0%
58.0%	57.2	57.1	-0.1	-0.1%
59.3%	57.1	57.1	0.0	0.0%
60.5%	57.1	57.1	0.0	0.0%
61.7%	57.1	57.1	-0.1	-0.1%
63.0%	57.1	57.1	-0.1	-0.1%
64.2%	57.0	57.0	0.0	0.0%
65.4%	57.0	57.0	0.0	-0.1%
66.7%	57.0	57.0	0.0	-0.1%
67.9%	57.0	57.0	0.0	0.0%
69.1%	56.9	56.9	0.0	0.1%
70.4%	56.8	56.9	0.1	0.2%
71.6%	56.8	56.9	0.1	0.2%
72.8%	56.8	56.9	0.1	0.3%
74.1%	56.7	56.9	0.1	0.3%
75.3%	56.7	56.8	0.1	0.2%
76.5%	56.7	56.8	0.0	0.1%
77.8%	56.7	56.7	0.0	0.0%
79.0%	56.6	56.6	0.0	0.0%
80.2%	56.6	56.6	0.0	0.1%
81.5%	56.6	56.6	0.0	0.0%
82.7%	56.6	56.6	0.0	0.1%
84.0%	56.5	56.6	0.0	0.0%
85.2%	56.5	56.5	0.0	0.1%
86.4%	56.5	56.5	0.0	0.0%
87.7%	56.4	56.5	0.0	0.1%
88.9%	56.3	56.4	0.1	0.1%
90.1%	56.3	56.1	-0.2	-0.3%
91.4%	56.1	56.1	0.0	-0.1%
92.6%	55.9	56.1	0.1	0.3%
93.8%	55.9	55.9	0.0	0.0%
95.1%	55.8	55.8	0.0	0.0%
96.3%	55.6	55.8	0.2	0.3%
97.5%	55.4	55.4	0.0	0.0%
98.8%	55.0	55.1	0.1	0.2%
100.0%	55.0	55.1	0.0	0.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.3	57.1	-0.2	-0.3%
1.2%	56.8	56.8	0.0	0.1%
2.5%	56.6	56.7	0.0	0.0%
3.7%	56.6	56.5	-0.1	-0.1%
4.9%	56.2	56.4	0.2	0.3%
6.2%	55.9	56.0	0.1	0.1%
7.4%	55.9	55.9	0.0	0.0%
8.6%	55.8	55.8	0.0	-0.1%
9.9%	55.8	55.7	-0.1	-0.2%
11.1%	55.7	55.7	-0.1	-0.1%
12.3%	55.7	55.7	0.0	-0.1%
13.6%	55.7	55.6	0.0	-0.1%
14.8%	55.6	55.6	0.0	0.0%
16.0%	55.5	55.5	0.1	0.1%
17.3%	55.4	55.5	0.1	0.1%
18.5%	55.3	55.4	0.1	0.2%
19.8%	55.3	55.4	0.1	0.2%
21.0%	55.3	55.3	0.0	-0.1%
22.2%	55.3	55.3	0.0	0.0%
23.5%	55.3	55.2	-0.1	-0.1%
24.7%	55.3	55.2	-0.1	-0.2%
25.9%	55.0	55.2	0.2	0.3%
27.2%	54.9	55.1	0.2	0.3%
28.4%	54.9	55.0	0.0	0.1%
29.6%	54.8	54.9	0.1	0.2%
30.9%	54.8	54.9	0.1	0.2%
32.1%	54.8	54.8	0.0	0.1%
33.3%	54.6	54.8	0.1	0.2%
34.6%	54.6	54.7	0.1	0.3%
35.8%	54.6	54.7	0.1	0.2%
37.0%	54.5	54.7	0.1	0.2%
38.3%	54.5	54.6	0.1	0.2%
39.5%	54.4	54.5	0.1	0.1%
40.7%	54.4	54.5	0.0	0.1%
42.0%	54.4	54.5	0.0	0.1%
43.2%	54.4	54.4	0.0	0.1%
44.4%	54.3	54.4	0.1	0.2%
45.7%	54.3	54.4	0.1	0.2%
46.9%	54.3	54.4	0.1	0.2%
48.1%	54.3	54.4	0.1	0.2%
49.4%	54.2	54.3	0.1	0.2%
50.6%	54.2	54.3	0.1	0.1%
51.9%	54.1	54.2	0.1	0.2%
53.1%	54.0	54.1	0.1	0.1%
54.3%	54.0	54.1	0.1	0.2%
55.6%	54.0	54.1	0.1	0.2%
56.8%	54.0	54.0	0.0	0.0%
58.0%	54.0	53.9	-0.1	-0.1%
59.3%	53.9	53.9	0.0	0.0%
60.5%	53.9	53.8	0.0	-0.1%
61.7%	53.8	53.6	-0.2	-0.3%
63.0%	53.8	53.6	-0.2	-0.3%
64.2%	53.7	53.6	-0.1	-0.1%
65.4%	53.5	53.6	0.1	0.2%
66.7%	53.5	53.6	0.1	0.2%
67.9%	53.4	53.6	0.2	0.4%
69.1%	53.4	53.5	0.1	0.3%
70.4%	53.4	53.4	0.1	0.2%
71.6%	53.3	53.4	0.1	0.1%
72.8%	53.3	53.4	0.1	0.2%
74.1%	53.3	53.3	0.1	0.1%
75.3%	53.3	53.3	0.0	0.0%
76.5%	53.2	53.2	0.0	0.0%
77.8%	53.2	53.2	0.0	0.0%
79.0%	53.2	53.2	0.0	0.1%
80.2%	53.1	53.2	0.0	0.0%
81.5%	53.1	53.0	-0.1	-0.1%
82.7%	53.1	53.0	-0.1	-0.2%
84.0%	53.0	52.9	-0.1	-0.2%
85.2%	52.9	52.9	0.0	-0.1%
86.4%	52.9	52.9	-0.1	-0.1%
87.7%	52.9	52.9	0.0	-0.1%
88.9%	52.8	52.8	0.0	0.0%
90.1%	52.8	52.8	0.0	0.0%
91.4%	52.7	52.8	0.0	0.1%
92.6%	52.5	52.4	-0.1	-0.2%
93.8%	52.5	52.4	0.0	-0.1%
95.1%	52.3	52.3	0.0	0.0%
96.3%	52.2	52.3	0.1	0.1%
97.5%	51.8	51.8	0.1	0.1%
98.8%	51.7	51.7	0.0	0.1%
100.0%	51.7	51.7	0.0	0.1%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.2	53.1	-0.1	-0.1%
1.2%	52.5	52.7	0.3	0.5%
2.5%	52.4	52.4	0.0	0.0%
3.7%	52.0	52.0	0.0	-0.1%
4.9%	52.0	52.0	0.0	0.0%
6.2%	51.9	52.0	0.0	0.1%
7.4%	51.6	51.7	0.1	0.1%
8.6%	51.5	51.5	0.0	0.0%
9.9%	51.5	51.5	-0.1	-0.2%
11.1%	51.5	51.4	-0.1	-0.2%
12.3%	51.4	51.3	-0.1	-0.2%
13.6%	50.8	51.2	0.4	0.8%
14.8%	50.8	51.0	0.2	0.3%
16.0%	50.8	51.0	0.2	0.3%
17.3%	50.7	50.9	0.2	0.4%
18.5%	50.7	50.7	0.1	0.1%
19.8%	50.5	50.5	0.0	0.0%
21.0%	50.4	50.5	0.1	0.2%
22.2%	50.3	50.5	0.2	0.4%
23.5%	50.2	50.4	0.2	0.4%
24.7%	50.0	50.4	0.3	0.7%
25.9%	50.0	50.4	0.4	0.7%
27.2%	49.9	50.1	0.2	0.5%
28.4%	49.9	50.1	0.3	0.5%
29.6%	49.7	50.1	0.3	0.7%
30.9%	49.6	50.0	0.4	0.8%
32.1%	49.5	49.8	0.3	0.6%
33.3%	49.5	49.7	0.3	0.5%
34.6%	49.5	49.6	0.2	0.3%
35.8%	49.5	49.6	0.1	0.2%
37.0%	49.4	49.6	0.1	0.3%
38.3%	49.4	49.5	0.1	0.3%
39.5%	49.4	49.5	0.1	0.2%
40.7%	49.4	49.4	0.0	0.1%
42.0%	49.4	49.4	0.0	0.0%
43.2%	49.4	49.3	0.0	0.0%
44.4%	49.3	49.3	0.0	0.0%
45.7%	49.2	49.3	0.1	0.1%
46.9%	49.2	49.3	0.1	0.2%
48.1%	49.2	49.2	0.1	0.2%
49.4%	49.2	49.2	0.1	0.2%
50.6%	49.0	49.2	0.2	0.4%
51.9%	49.0	49.2	0.2	0.4%
53.1%	48.9	49.2	0.3	0.5%
54.3%	48.9	49.2	0.2	0.5%
55.6%	48.9	49.2	0.3	0.6%
56.8%	48.8	49.1	0.2	0.5%
58.0%	48.8	49.1	0.2	0.5%
59.3%	48.8	49.0	0.1	0.3%
60.5%	48.8	48.8	0.0	0.1%
61.7%	48.7	48.8	0.1	0.2%
63.0%	48.7	48.8	0.1	0.1%
64.2%	48.7	48.7	0.0	0.0%
65.4%	48.6	48.7	0.0	0.0%
66.7%	48.6	48.6	0.0	0.0%
67.9%	48.5	48.5	0.0	-0.1%
69.1%	48.5	48.5	0.0	-0.1%
70.4%	48.5	48.4	-0.1	-0.2%
71.6%	48.3	48.4	0.0	0.0%
72.8%	48.3	48.3	0.0	0.1%
74.1%	48.3	48.3	0.0	0.1%
75.3%	48.2	48.2	0.0	-0.1%
76.5%	48.2	48.2	0.0	-0.1%
77.8%	48.2	48.2	-0.1	-0.1%
79.0%	48.1	48.2	0.1	0.1%
80.2%	48.0	48.1	0.2	0.3%
81.5%	48.0	48.1	0.1	0.2%
82.7%	47.8	48.0	0.3	0.6%
84.0%	47.6	47.9	0.3	0.6%
85.2%	47.6	47.8	0.2	0.3%
86.4%	47.6	47.7	0.1	0.1%
87.7%	47.5	47.6	0.1	0.1%
88.9%	47.5	47.4	0.0	-0.1%
90.1%	47.4	47.4	0.0	0.0%
91.4%	47.4	47.4	0.0	0.0%
92.6%	47.4	47.4	0.0	0.1%
93.8%	47.3	47.4	0.0	0.1%
95.1%	47.2	47.4	0.1	0.2%
96.3%	47.2	47.4	0.2	0.3%
97.5%	47.2	47.3	0.1	0.3%
98.8%	47.1	47.2	0.1	0.2%
100.0%	47.1	47.2	0.1	0.2%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.4	50.5	0.1	0.1%
1.2%	49.4	49.4	0.0	0.1%
2.5%	49.3	49.3	0.0	0.1%
3.7%	49.2	49.1	-0.1	-0.1%
4.9%	49.1	49.1	0.0	0.0%
6.2%	49.0	49.0	0.0	0.1%
7.4%	48.8	48.9	0.1	0.2%
8.6%	48.7	48.8	0.1	0.2%
9.9%	48.6	48.7	0.1	0.3%
11.1%	48.4	48.5	0.1	0.1%
12.3%	48.3	48.3	-0.1	-0.2%
13.6%	48.3	48.3	0.0	-0.1%
14.8%	48.3	48.2	0.0	-0.1%
16.0%	48.1	48.1	0.0	0.1%
17.3%	47.9	48.1	0.2	0.3%
18.5%	47.9	48.0	0.2	0.3%
19.8%	47.8	48.0	0.1	0.2%
21.0%	47.8	47.8	0.1	0.1%
22.2%	47.8	47.8	0.1	0.1%
23.5%	47.7	47.8	0.0	0.0%
24.7%	47.7	47.7	0.0	-0.1%
25.9%	47.6	47.6	0.0	0.1%
27.2%	47.6	47.6	0.0	0.1%
28.4%	47.5	47.6	0.1	0.2%
29.6%	47.5	47.6	0.1	0.1%
30.9%	47.5	47.5	0.0	0.0%
32.1%	47.5	47.5	-0.1	-0.1%
33.3%	47.5	47.4	0.0	-0.1%
34.6%	47.4	47.4	0.0	-0.1%
35.8%	47.4	47.4	0.0	0.1%
37.0%	47.3	47.4	0.1	0.1%
38.3%	47.3	47.3	0.0	0.0%
39.5%	47.3	47.3	0.0	0.0%
40.7%	47.3	47.3	0.0	0.0%
42.0%	47.2	47.2	0.0	-0.1%
43.2%	47.2	47.2	0.0	-0.1%
44.4%	47.1	47.2	0.0	0.1%
45.7%	47.1	47.1	0.0	0.1%
46.9%	47.1	47.1	0.0	0.1%
48.1%	47.0	47.1	0.1	0.2%
49.4%	47.0	47.1	0.1	0.2%
50.6%	47.0	47.0	0.0	0.1%
51.9%	47.0	47.0	0.0	0.1%
53.1%	47.0	47.0	0.0	0.0%
54.3%	47.0	46.9	0.0	-0.1%
55.6%	47.0	46.9	-0.1	-0.2%
56.8%	46.8	46.8	0.0	0.0%
58.0%	46.8	46.8	0.0	0.1%
59.3%	46.7	46.7	0.0	0.0%
60.5%	46.7	46.7	0.0	0.0%
61.7%	46.7	46.7	0.0	0.0%
63.0%	46.7	46.7	0.0	0.0%
64.2%	46.6	46.6	0.0	0.1%
65.4%	46.6	46.6	0.0	0.1%
66.7%	46.6	46.6	0.0	0.0%
67.9%	46.6	46.5	-0.1	-0.1%
69.1%	46.5	46.5	-0.1	-0.2%
70.4%	46.5	46.4	-0.1	-0.2%
71.6%	46.5	46.4	-0.1	-0.1%
72.8%	46.5	46.4	-0.1	-0.1%
74.1%	46.5	46.4	-0.1	-0.1%
75.3%	46.5	46.4	-0.1	-0.1%
76.5%	46.5	46.4	-0.1	-0.2%
77.8%	46.5	46.4	-0.1	-0.2%
79.0%	46.4	46.4	-0.1	-0.2%
80.2%	46.4	46.4	-0.1	-0.2%
81.5%	46.4	46.3	-0.1	-0.2%
82.7%	46.3	46.3	-0.1	-0.1%
84.0%	46.3	46.2	0.0	-0.1%
85.2%	46.3	46.1	-0.1	-0.3%
86.4%	46.3	46.1	-0.1	-0.3%
87.7%	46.1	46.0	-0.1	-0.2%
88.9%	46.1	45.9	-0.2	-0.4%
90.1%	46.0	45.8	-0.2	-0.4%
91.4%	45.8	45.8	0.0	0.1%
92.6%	45.7	45.8	0.1	0.2%
93.8%	45.7	45.7	0.1	0.1%
95.1%	45.6	45.7	0.1	0.2%
96.3%	45.6	45.5	-0.1	-0.2%
97.5%	45.5	45.4	-0.1	-0.3%
98.8%	45.5	45.3	-0.1	-0.3%
100.0%	45.5	45.3	-0.1	-0.3%

Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.7	52.8	0.0	0.1%
1.2%	51.0	51.2	0.2	0.4%
2.5%	50.6	50.4	-0.2	-0.5%
3.7%	50.4	50.2	-0.2	-0.4%
4.9%	49.9	50.0	0.1	0.1%
6.2%	49.7	49.8	0.1	0.1%
7.4%	49.7	49.8	0.1	0.1%
8.6%	49.5	49.7	0.1	0.3%
9.9%	49.5	49.6	0.1	0.3%
11.1%	49.5	49.6	0.1	0.2%
12.3%	49.5	49.5	0.0	0.1%
13.6%	49.5	49.5	0.0	0.0%
14.8%	49.4	49.5	0.0	0.0%
16.0%	49.3	49.3	0.0	0.1%
17.3%	49.2	49.2	0.0	0.0%
18.5%	49.0	49.0	0.0	0.0%
19.8%	48.9	48.9	0.1	0.2%
21.0%	48.8	48.8	0.0	0.1%
22.2%	48.8	48.7	-0.1	-0.2%
23.5%	48.7	48.6	-0.1	-0.2%
24.7%	48.7	48.6	0.0	-0.1%
25.9%	48.5	48.6	0.0	0.1%
27.2%	48.5	48.6	0.0	0.1%
28.4%	48.5	48.6	0.0	0.1%
29.6%	48.5	48.5	0.0	0.0%
30.9%	48.5	48.5	0.0	0.0%
32.1%	48.5	48.5	0.0	0.0%
33.3%	48.5	48.5	0.0	0.0%
34.6%	48.4	48.5	0.0	0.1%
35.8%	48.4	48.5	0.1	0.2%
37.0%	48.4	48.4	0.1	0.2%
38.3%	48.4	48.4	0.0	0.0%
39.5%	48.3	48.3	0.0	0.0%
40.7%	48.1	48.2	0.0	0.1%
42.0%	48.1	48.1	0.0	0.0%
43.2%	48.1	48.0	0.0	-0.1%
44.4%	48.1	48.0	0.0	-0.1%
45.7%	48.0	48.0	0.0	0.0%
46.9%	48.0	48.0	-0.1	-0.1%
48.1%	47.8	47.8	0.0	-0.1%
49.4%	47.8	47.8	0.0	0.0%
50.6%	47.8	47.8	0.0	0.0%
51.9%	47.8	47.8	0.0	0.0%
53.1%	47.7	47.8	0.1	0.1%
54.3%	47.7	47.7	0.0	0.1%
55.6%	47.7	47.7	0.0	0.1%
56.8%	47.6	47.7	0.1	0.2%
58.0%	47.6	47.6	0.0	0.0%
59.3%	47.6	47.6	0.0	0.1%
60.5%	47.6	47.6	0.0	0.0%
61.7%	47.5	47.5	-0.1	-0.1%
63.0%	47.5	47.4	-0.1	-0.2%
64.2%	47.4	47.4	-0.1	-0.1%
65.4%	47.4	47.3	-0.1	-0.3%
66.7%	47.4	47.3	-0.2	-0.3%
67.9%	47.2	47.2	0.0	0.0%
69.1%	47.2	47.2	0.0	0.0%
70.4%	47.1	47.1	0.0	0.0%
71.6%	47.0	47.0	0.0	0.0%
72.8%	46.9	46.9	0.0	-0.1%
74.1%	46.9	46.8	-0.1	-0.1%
75.3%	46.8	46.7	-0.1	-0.2%
76.5%	46.8	46.7	-0.1	-0.2%
77.8%	46.7	46.7	-0.1	-0.2%
79.0%	46.7	46.6	-0.1	-0.2%
80.2%	46.7	46.6	-0.1	-0.1%
81.5%	46.7	46.6	-0.1	-0.2%
82.7%	46.7	46.6	-0.1	-0.2%
84.0%	46.7	46.5	-0.1	-0.3%
85.2%	46.6	46.5	-0.1	-0.1%
86.4%	46.5	46.3	-0.2	-0.4%
87.7%	46.5	46.3	-0.1	-0.3%
88.9%	46.4	46.3	-0.1	-0.2%
90.1%	46.3	46.3	0.0	-0.1%
91.4%	46.3	46.3	0.0	0.1%
92.6%	46.2	46.0	-0.2	-0.4%
93.8%	46.1	46.0	-0.1	-0.3%
95.1%	46.1	45.9	-0.2	-0.4%
96.3%	45.8	45.7	-0.1	-0.3%
97.5%	45.7	45.6	-0.1	-0.3%
98.8%	45.0	45.2	0.2	0.4%
100.0%	45.0	45.2	0.2	0.4%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.4	54.4	0.0	0.1%
1.2%	54.3	54.4	0.2	0.3%
2.5%	54.2	54.1	-0.1	-0.3%
3.7%	53.9	53.7	-0.2	-0.4%
4.9%	53.6	53.7	0.1	0.2%
6.2%	53.4	53.5	0.1	0.1%
7.4%	53.4	53.4	0.0	0.1%
8.6%	53.3	53.4	0.1	0.2%
9.9%	53.3	53.3	0.0	0.1%
11.1%	53.1	53.1	0.0	0.0%
12.3%	53.1	53.1	0.1	0.1%
13.6%	53.0	52.9	-0.1	-0.2%
14.8%	52.9	52.8	-0.1	-0.3%
16.0%	52.8	52.8	0.0	0.0%
17.3%	52.7	52.7	0.1	0.1%
18.5%	52.6	52.6	0.0	-0.1%
19.8%	52.5	52.6	0.1	0.2%
21.0%	52.4	52.5	0.0	0.0%
22.2%	52.4	52.4	0.0	0.0%
23.5%	52.4	52.4	0.1	0.1%
24.7%	52.3	52.4	0.1	0.3%
25.9%	52.2	52.3	0.1	0.3%
27.2%	52.2	52.3	0.1	0.1%
28.4%	52.2	52.2	0.0	0.1%
29.6%	52.1	52.1	0.1	0.1%
30.9%	52.0	52.1	0.0	0.1%
32.1%	52.0	52.1	0.1	0.1%
33.3%	52.0	52.1	0.1	0.1%
34.6%	52.0	52.0	0.0	0.1%
35.8%	51.8	51.9	0.0	0.1%
37.0%	51.7	51.8	0.0	0.1%
38.3%	51.7	51.7	0.0	0.1%
39.5%	51.7	51.7	0.1	0.1%
40.7%	51.5	51.5	0.0	0.0%
42.0%	51.5	51.5	0.0	0.1%
43.2%	51.4	51.5	0.1	0.2%
44.4%	51.2	51.3	0.1	0.2%
45.7%	51.2	51.2	0.1	0.1%
46.9%	51.1	51.1	0.0	0.0%
48.1%	51.1	51.1	0.0	0.0%
49.4%	50.9	50.9	0.0	0.0%
50.6%	50.8	50.8	0.0	0.0%
51.9%	50.8	50.7	0.0	-0.1%
53.1%	50.7	50.7	0.0	0.0%
54.3%	50.7	50.7	0.0	0.0%
55.6%	50.7	50.7	0.0	0.0%
56.8%	50.6	50.6	-0.1	-0.1%
58.0%	50.6	50.5	-0.2	-0.3%
59.3%	50.6	50.3	-0.2	-0.4%
60.5%	50.4	50.3	-0.1	-0.3%
61.7%	50.4	50.3	-0.1	-0.2%
63.0%	50.3	50.3	-0.1	-0.1%
64.2%	50.3	50.3	0.0	-0.1%
65.4%	50.3	50.1	-0.1	-0.3%
66.7%	50.0	50.1	0.0	0.1%
67.9%	50.0	50.0	0.0	0.0%
69.1%	50.0	49.9	-0.1	-0.1%
70.4%	49.9	49.9	0.0	0.0%
71.6%	49.9	49.8	-0.1	-0.1%
72.8%	49.8	49.6	-0.2	-0.5%
74.1%	49.6	49.5	-0.1	-0.2%
75.3%	49.4	49.4	0.1	0.1%
76.5%	49.2	49.2	0.0	0.0%
77.8%	49.2	49.2	0.0	0.0%
79.0%	49.2	49.2	0.0	-0.1%
80.2%	49.2	49.2	0.0	-0.1%
81.5%	49.2	49.1	0.0	-0.1%
82.7%	48.7	48.8	0.0	0.0%
84.0%	48.7	48.7	0.0	0.0%
85.2%	48.7	48.7	0.0	-0.1%
86.4%	48.7	48.7	0.0	0.0%
87.7%	48.5	48.6	0.2	0.3%
88.9%	48.4	48.5	0.0	0.0%
90.1%	48.3	48.3	-0.1	-0.1%
91.4%	48.2	48.2	0.1	0.1%
92.6%	48.1	48.2	0.0	0.0%
93.8%	48.1	48.1	0.0	0.0%
95.1%	48.0	48.1	0.1	0.1%
96.3%	48.0	47.9	0.0	0.0%
97.5%	48.0	47.9	0.0	0.0%
98.8%	47.7	47.6	-0.1	-0.2%
100.0%	47.7	47.6	-0.1	-0.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.4	58.4	0.0	0.0%
1.2%	58.1	57.8	-0.3	-0.5%
2.5%	57.3	57.1	-0.2	-0.4%
3.7%	57.1	57.0	-0.1	-0.2%
4.9%	57.0	56.5	-0.5	-1.0%
6.2%	56.8	56.4	-0.4	-0.7%
7.4%	56.5	56.2	-0.3	-0.5%
8.6%	56.5	56.2	-0.3	-0.5%
9.9%	56.3	56.1	-0.2	-0.3%
11.1%	56.3	56.1	-0.2	-0.3%
12.3%	56.1	56.1	0.0	0.0%
13.6%	56.0	56.1	0.1	0.1%
14.8%	56.0	55.9	0.0	-0.1%
16.0%	55.8	55.9	0.1	0.1%
17.3%	55.8	55.8	0.0	0.0%
18.5%	55.7	55.7	0.0	0.0%
19.8%	55.7	55.7	0.0	0.0%
21.0%	55.5	55.7	0.2	0.4%
22.2%	55.5	55.7	0.2	0.4%
23.5%	55.3	55.7	0.3	0.6%
24.7%	55.3	55.6	0.3	0.6%
25.9%	55.2	55.5	0.3	0.5%
27.2%	55.2	55.5	0.3	0.5%
28.4%	55.0	55.4	0.4	0.6%
29.6%	54.9	55.3	0.3	0.6%
30.9%	54.9	55.2	0.3	0.5%
32.1%	54.8	55.1	0.3	0.5%
33.3%	54.8	55.1	0.3	0.5%
34.6%	54.8	55.0	0.2	0.4%
35.8%	54.7	54.8	0.2	0.3%
37.0%	54.6	54.8	0.2	0.3%
38.3%	54.6	54.8	0.2	0.3%
39.5%	54.6	54.8	0.2	0.3%
40.7%	54.6	54.7	0.1	0.1%
42.0%	54.6	54.6	0.0	0.1%
43.2%	54.5	54.6	0.1	0.1%
44.4%	54.5	54.6	0.1	0.2%
45.7%	54.4	54.5	0.2	0.3%
46.9%	54.3	54.5	0.2	0.4%
48.1%	54.3	54.5	0.2	0.4%
49.4%	54.2	54.4	0.2	0.4%
50.6%	54.2	54.4	0.2	0.3%
51.9%	54.1	54.3	0.2	0.4%
53.1%	54.1	54.3	0.2	0.4%
54.3%	54.0	54.3	0.3	0.5%
55.6%	54.0	54.2	0.3	0.5%
56.8%	53.9	54.2	0.3	0.5%
58.0%	53.9	54.1	0.3	0.5%
59.3%	53.9	54.1	0.3	0.5%
60.5%	53.9	54.0	0.2	0.3%
61.7%	53.8	54.0	0.2	0.3%
63.0%	53.8	54.0	0.2	0.4%
64.2%	53.8	54.0	0.2	0.4%
65.4%	53.7	54.0	0.2	0.4%
66.7%	53.7	53.9	0.2	0.4%
67.9%	53.6	53.9	0.3	0.6%
69.1%	53.6	53.8	0.3	0.5%
70.4%	53.4	53.7	0.3	0.6%
71.6%	53.4	53.7	0.3	0.6%
72.8%	53.3	53.6	0.2	0.4%
74.1%	53.3	53.5	0.1	0.2%
75.3%	53.2	53.3	0.1	0.2%
76.5%	53.2	53.3	0.1	0.2%
77.8%	53.1	53.3	0.1	0.2%
79.0%	53.1	53.2	0.1	0.3%
80.2%	53.1	53.2	0.1	0.2%
81.5%	52.9	53.2	0.3	0.6%
82.7%	52.9	52.9	0.1	0.1%
84.0%	52.7	52.9	0.1	0.3%
85.2%	52.7	52.9	0.2	0.4%
86.4%	52.5	52.4	-0.2	-0.3%
87.7%	52.3	52.3	0.0	0.0%
88.9%	52.1	52.2	0.0	0.0%
90.1%	52.1	52.1	0.0	0.0%
91.4%	52.0	52.1	0.1	0.1%
92.6%	52.0	51.9	-0.1	-0.1%
93.8%	51.8	51.9	0.1	0.1%
95.1%	51.8	51.9	0.1	0.1%
96.3%	51.8	51.8	0.1	0.1%
97.5%	50.7	50.7	0.0	0.0%
98.8%	50.5	50.5	0.0	0.0%
100.0%	50.5	50.5	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.4	61.1	-0.2	-0.4%
1.2%	59.9	60.9	1.0	1.7%
2.5%	59.4	60.9	1.4	2.4%
3.7%	59.3	60.2	0.9	1.5%
4.9%	59.2	60.0	0.8	1.4%
6.2%	59.1	59.8	0.7	1.2%
7.4%	59.0	59.8	0.7	1.2%
8.6%	59.0	59.3	0.3	0.5%
9.9%	58.9	59.3	0.3	0.6%
11.1%	58.9	59.2	0.3	0.6%
12.3%	58.9	59.2	0.3	0.5%
13.6%	58.7	59.2	0.5	0.8%
14.8%	58.7	59.2	0.5	0.8%
16.0%	58.5	59.1	0.6	1.0%
17.3%	58.5	59.1	0.6	1.0%
18.5%	58.4	59.1	0.7	1.3%
19.8%	58.3	59.1	0.8	1.4%
21.0%	58.2	58.9	0.7	1.2%
22.2%	58.2	58.9	0.7	1.2%
23.5%	58.1	58.8	0.7	1.2%
24.7%	58.0	58.7	0.7	1.2%
25.9%	58.0	58.7	0.7	1.2%
27.2%	57.9	58.7	0.7	1.2%
28.4%	57.9	58.5	0.6	1.0%
29.6%	57.9	58.5	0.6	1.0%
30.9%	57.7	58.2	0.5	0.9%
32.1%	57.6	58.2	0.6	1.0%
33.3%	57.5	58.2	0.6	1.1%
34.6%	57.5	58.1	0.6	1.0%
35.8%	57.5	58.0	0.5	0.9%
37.0%	57.5	58.0	0.6	1.0%
38.3%	57.4	58.0	0.5	0.9%
39.5%	57.4	58.0	0.6	1.0%
40.7%	57.3	57.8	0.5	0.9%
42.0%	57.2	57.8	0.6	1.1%
43.2%	57.2	57.6	0.5	0.8%
44.4%	57.1	57.6	0.5	0.9%
45.7%	57.0	57.5	0.5	0.9%
46.9%	57.0	57.4	0.5	0.8%
48.1%	56.9	57.4	0.6	1.0%
49.4%	56.8	57.4	0.6	1.0%
50.6%	56.7	57.4	0.6	1.1%
51.9%	56.7	57.3	0.6	1.1%
53.1%	56.7	57.3	0.6	1.1%
54.3%	56.7	57.3	0.6	1.1%
55.6%	56.7	57.3	0.6	1.0%
56.8%	56.7	57.3	0.6	1.1%
58.0%	56.7	57.2	0.5	1.0%
59.3%	56.6	57.1	0.5	0.9%
60.5%	56.5	57.1	0.5	1.0%
61.7%	56.5	57.1	0.6	1.0%
63.0%	56.5	57.1	0.6	1.0%
64.2%	56.5	56.9	0.4	0.7%
65.4%	56.5	56.9	0.4	0.7%
66.7%	56.4	56.8	0.4	0.7%
67.9%	56.4	56.8	0.4	0.6%
69.1%	56.3	56.7	0.4	0.7%
70.4%	56.3	56.7	0.4	0.8%
71.6%	56.3	56.7	0.4	0.8%
72.8%	56.3	56.7	0.4	0.8%
74.1%	56.2	56.6	0.4	0.7%
75.3%	56.2	56.6	0.4	0.8%
76.5%	56.2	56.4	0.2	0.4%
77.8%	56.1	56.3	0.2	0.3%
79.0%	56.1	56.3	0.2	0.4%
80.2%	56.0	56.3	0.3	0.6%
81.5%	56.0	56.3	0.3	0.6%
82.7%	56.0	56.3	0.3	0.5%
84.0%	55.9	56.3	0.4	0.7%
85.2%	55.8	56.1	0.3	0.6%
86.4%	55.8	56.1	0.3	0.5%
87.7%	55.8	56.0	0.3	0.5%
88.9%	55.6	55.9	0.3	0.5%
90.1%	55.5	55.9	0.3	0.6%
91.4%	55.4	55.8	0.4	0.8%
92.6%	55.2	55.4	0.3	0.5%
93.8%	55.1	55.2	0.1	0.1%
95.1%	55.0	54.9	0.0	0.0%
96.3%	54.7	54.7	0.0	0.0%
97.5%	54.4	54.7	0.3	0.6%
98.8%	54.3	54.6	0.3	0.5%
100.0%	54.3	54.6	0.3	0.5%

Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.0	60.9	-0.1	-0.2%
1.2%	60.6	60.8	0.2	0.3%
2.5%	60.6	60.1	-0.4	-0.7%
3.7%	60.5	60.1	-0.4	-0.7%
4.9%	60.3	60.0	-0.3	-0.6%
6.2%	60.3	59.9	-0.3	-0.5%
7.4%	60.1	59.9	-0.2	-0.3%
8.6%	59.7	59.9	0.2	0.3%
9.9%	59.6	59.8	0.2	0.3%
11.1%	59.5	59.6	0.1	0.1%
12.3%	59.4	59.3	-0.1	-0.2%
13.6%	59.4	59.3	0.0	-0.1%
14.8%	59.3	59.2	0.0	0.0%
16.0%	59.2	59.2	0.0	0.0%
17.3%	59.2	59.2	0.0	0.0%
18.5%	58.9	59.1	0.2	0.4%
19.8%	58.8	59.1	0.3	0.5%
21.0%	58.7	59.1	0.3	0.6%
22.2%	58.7	58.9	0.2	0.4%
23.5%	58.7	58.9	0.2	0.4%
24.7%	58.6	58.9	0.3	0.5%
25.9%	58.6	58.9	0.3	0.5%
27.2%	58.5	58.8	0.3	0.6%
28.4%	58.5	58.8	0.3	0.5%
29.6%	58.5	58.7	0.2	0.4%
30.9%	58.4	58.7	0.2	0.4%
32.1%	58.3	58.6	0.4	0.6%
33.3%	58.3	58.6	0.4	0.7%
34.6%	58.2	58.6	0.4	0.7%
35.8%	58.1	58.6	0.5	0.8%
37.0%	58.0	58.5	0.5	0.8%
38.3%	57.9	58.5	0.5	0.9%
39.5%	57.9	58.5	0.5	0.9%
40.7%	57.9	58.4	0.5	0.8%
42.0%	57.8	58.3	0.5	0.9%
43.2%	57.7	58.3	0.6	1.0%
44.4%	57.7	58.2	0.5	0.9%
45.7%	57.7	58.2	0.6	1.0%
46.9%	57.7	58.2	0.6	1.0%
48.1%	57.6	58.1	0.6	1.0%
49.4%	57.6	58.1	0.6	1.0%
50.6%	57.6	58.1	0.5	0.9%
51.9%	57.5	58.1	0.6	1.0%
53.1%	57.5	58.1	0.6	1.1%
54.3%	57.4	58.0	0.6	1.0%
55.6%	57.4	58.0	0.6	1.1%
56.8%	57.4	58.0	0.6	1.1%
58.0%	57.3	58.0	0.7	1.2%
59.3%	57.3	58.0	0.7	1.1%
60.5%	57.3	57.9	0.5	0.9%
61.7%	57.3	57.8	0.5	0.9%
63.0%	57.3	57.7	0.4	0.7%
64.2%	57.2	57.6	0.5	0.8%
65.4%	57.1	57.6	0.5	0.8%
66.7%	57.1	57.6	0.5	0.8%
67.9%	57.1	57.5	0.4	0.8%
69.1%	57.1	57.5	0.5	0.8%
70.4%	57.0	57.5	0.5	0.9%
71.6%	57.0	57.5	0.5	0.8%
72.8%	57.0	57.4	0.5	0.8%
74.1%	56.9	57.4	0.5	0.9%
75.3%	56.6	57.3	0.7	1.2%
76.5%	56.6	57.3	0.7	1.2%
77.8%	56.6	57.3	0.7	1.2%
79.0%	56.6	57.2	0.7	1.2%
80.2%	56.5	57.2	0.7	1.2%
81.5%	56.4	57.1	0.7	1.2%
82.7%	56.4	57.1	0.7	1.2%
84.0%	56.4	57.0	0.6	1.1%
85.2%	56.4	57.0	0.6	1.1%
86.4%	56.4	57.0	0.6	1.1%
87.7%	56.4	57.0	0.6	1.1%
88.9%	56.2	57.0	0.8	1.4%
90.1%	56.1	56.9	0.8	1.4%
91.4%	56.1	56.9	0.8	1.4%
92.6%	56.1	56.9	0.8	1.4%
93.8%	56.1	56.8	0.7	1.3%
95.1%	56.0	56.6	0.6	1.1%
96.3%	55.9	56.4	0.5	0.9%
97.5%	55.7	56.4	0.7	1.3%
98.8%	55.5	56.3	0.8	1.5%
100.0%	55.5	56.3	0.8	1.5%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.1	61.5	-0.6	-1.0%
1.2%	61.7	61.4	-0.2	-0.4%
2.5%	61.2	61.2	0.0	0.1%
3.7%	61.1	61.1	0.0	0.0%
4.9%	61.1	60.9	-0.1	-0.2%
6.2%	60.8	60.8	0.0	0.0%
7.4%	60.7	60.7	0.0	0.0%
8.6%	60.7	60.6	0.0	-0.1%
9.9%	60.6	60.6	0.0	0.0%
11.1%	60.6	60.6	0.0	0.0%
12.3%	60.5	60.4	-0.1	-0.2%
13.6%	60.4	60.4	0.0	0.1%
14.8%	60.3	60.3	0.0	0.1%
16.0%	60.1	60.3	0.2	0.4%
17.3%	59.9	60.1	0.2	0.3%
18.5%	59.7	60.1	0.4	0.6%
19.8%	59.6	60.1	0.4	0.7%
21.0%	59.6	59.9	0.3	0.4%
22.2%	59.6	59.7	0.1	0.2%
23.5%	59.5	59.7	0.1	0.2%
24.7%	59.5	59.7	0.1	0.2%
25.9%	59.5	59.6	0.1	0.2%
27.2%	59.4	59.6	0.2	0.4%
28.4%	59.4	59.6	0.2	0.3%
29.6%	59.4	59.5	0.1	0.2%
30.9%	59.3	59.5	0.1	0.3%
32.1%	59.3	59.5	0.2	0.4%
33.3%	59.2	59.5	0.2	0.4%
34.6%	59.1	59.4	0.3	0.5%
35.8%	59.1	59.3	0.3	0.4%
37.0%	59.0	59.3	0.3	0.4%
38.3%	59.0	59.3	0.3	0.4%
39.5%	58.9	59.0	0.1	0.2%
40.7%	58.8	59.0	0.2	0.3%
42.0%	58.8	59.0	0.2	0.3%
43.2%	58.8	59.0	0.2	0.3%
44.4%	58.6	58.8	0.2	0.4%
45.7%	58.6	58.8	0.2	0.3%
46.9%	58.5	58.7	0.2	0.3%
48.1%	58.4	58.7	0.3	0.5%
49.4%	58.4	58.7	0.3	0.5%
50.6%	58.3	58.7	0.3	0.6%
51.9%	58.3	58.6	0.3	0.6%
53.1%	58.3	58.6	0.3	0.6%
54.3%	58.2	58.5	0.3	0.5%
55.6%	58.1	58.5	0.4	0.7%
56.8%	58.1	58.4	0.4	0.6%
58.0%	58.0	58.4	0.4	0.7%
59.3%	58.0	58.4	0.4	0.7%
60.5%	58.0	58.4	0.4	0.6%
61.7%	58.0	58.3	0.2	0.4%
63.0%	57.9	58.2	0.3	0.5%
64.2%	57.9	58.2	0.3	0.5%
65.4%	57.8	58.2	0.4	0.6%
66.7%	57.8	58.2	0.4	0.6%
67.9%	57.8	58.1	0.3	0.6%
69.1%	57.8	58.0	0.2	0.4%
70.4%	57.7	58.0	0.2	0.4%
71.6%	57.7	58.0	0.2	0.4%
72.8%	57.7	57.9	0.2	0.4%
74.1%	57.6	57.9	0.2	0.4%
75.3%	57.6	57.8	0.2	0.4%
76.5%	57.6	57.8	0.2	0.3%
77.8%	57.6	57.7	0.2	0.3%
79.0%	57.5	57.7	0.2	0.4%
80.2%	57.5	57.7	0.2	0.4%
81.5%	57.5	57.7	0.2	0.4%
82.7%	57.3	57.5	0.2	0.4%
84.0%	57.3	57.5	0.2	0.4%
85.2%	57.2	57.5	0.3	0.5%
86.4%	57.1	57.4	0.3	0.5%
87.7%	57.0	57.3	0.3	0.5%
88.9%	57.0	57.1	0.1	0.3%
90.1%	56.9	57.0	0.0	0.1%
91.4%	56.9	56.9	0.0	0.0%
92.6%	56.8	56.9	0.1	0.2%
93.8%	56.7	56.9	0.2	0.4%
95.1%	56.7	56.9	0.2	0.4%
96.3%	56.6	56.8	0.2	0.3%
97.5%	56.6	56.7	0.2	0.3%
98.8%	56.5	56.7	0.2	0.4%
100.0%	56.5	56.7	0.2	0.4%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.2	64.6	-4.5	-6.5%
1.2%	63.2	62.0	-1.3	-2.0%
2.5%	63.1	61.8	-1.4	-2.2%
3.7%	63.0	61.5	-1.6	-2.5%
4.9%	62.3	61.3	-1.0	-1.6%
6.2%	62.2	61.3	-1.0	-1.5%
7.4%	62.1	61.2	-0.9	-1.5%
8.6%	62.0	61.2	-0.9	-1.4%
9.9%	61.9	61.1	-0.8	-1.3%
11.1%	61.8	61.0	-0.7	-1.2%
12.3%	61.8	61.0	-0.8	-1.2%
13.6%	61.4	61.0	-0.4	-0.7%
14.8%	61.4	60.9	-0.5	-0.8%
16.0%	61.4	60.9	-0.5	-0.8%
17.3%	61.4	60.9	-0.5	-0.7%
18.5%	61.3	60.9	-0.5	-0.7%
19.8%	61.3	60.8	-0.4	-0.7%
21.0%	61.2	60.8	-0.4	-0.7%
22.2%	61.2	60.7	-0.5	-0.8%
23.5%	61.1	60.7	-0.4	-0.6%
24.7%	61.0	60.7	-0.4	-0.6%
25.9%	61.0	60.7	-0.3	-0.5%
27.2%	61.0	60.6	-0.4	-0.6%
28.4%	60.9	60.6	-0.4	-0.6%
29.6%	60.9	60.5	-0.4	-0.6%
30.9%	60.9	60.5	-0.4	-0.6%
32.1%	60.9	60.4	-0.5	-0.8%
33.3%	60.7	60.3	-0.4	-0.6%
34.6%	60.6	60.2	-0.4	-0.7%
35.8%	60.6	60.2	-0.4	-0.6%
37.0%	60.5	60.2	-0.4	-0.6%
38.3%	60.5	60.2	-0.4	-0.6%
39.5%	60.5	60.1	-0.3	-0.6%
40.7%	60.4	60.1	-0.3	-0.5%
42.0%	60.3	60.1	-0.2	-0.4%
43.2%	60.2	60.1	-0.2	-0.3%
44.4%	60.2	60.0	-0.2	-0.3%
45.7%	60.2	60.0	-0.2	-0.4%
46.9%	60.2	60.0	-0.2	-0.3%
48.1%	60.1	60.0	-0.1	-0.2%
49.4%	60.1	60.0	-0.1	-0.2%
50.6%	60.1	59.9	-0.2	-0.3%
51.9%	60.0	59.9	-0.1	-0.2%
53.1%	59.9	59.8	-0.1	-0.1%
54.3%	59.9	59.8	-0.1	-0.2%
55.6%	59.7	59.8	0.1	0.1%
56.8%	59.7	59.7	0.1	0.1%
58.0%	59.6	59.7	0.1	0.2%
59.3%	59.6	59.6	0.1	0.1%
60.5%	59.5	59.6	0.1	0.2%
61.7%	59.5	59.6	0.1	0.2%
63.0%	59.5	59.6	0.1	0.2%
64.2%	59.4	59.6	0.1	0.2%
65.4%	59.4	59.5	0.1	0.2%
66.7%	59.4	59.4	0.1	0.1%
67.9%	59.3	59.4	0.0	0.1%
69.1%	59.3	59.3	-0.1	-0.1%
70.4%	59.3	59.2	-0.1	-0.1%
71.6%	59.3	59.2	-0.1	-0.1%
72.8%	59.3	59.2	-0.1	-0.2%
74.1%	59.1	59.2	0.0	0.1%
75.3%	59.1	59.1	0.0	0.0%
76.5%	59.1	59.0	-0.1	-0.2%
77.8%	59.1	58.9	-0.2	-0.3%
79.0%	59.0	58.9	-0.2	-0.3%
80.2%	59.0	58.7	-0.3	-0.5%
81.5%	59.0	58.7	-0.2	-0.4%
82.7%	58.9	58.7	-0.3	-0.4%
84.0%	58.9	58.7	-0.2	-0.4%
85.2%	58.9	58.7	-0.2	-0.4%
86.4%	58.9	58.6	-0.3	-0.5%
87.7%	58.9	58.5	-0.4	-0.6%
88.9%	58.8	58.4	-0.4	-0.7%
90.1%	58.6	58.3	-0.3	-0.5%
91.4%	58.5	58.2	-0.3	-0.5%
92.6%	58.3	58.1	-0.2	-0.3%
93.8%	58.0	58.0	0.1	0.1%
95.1%	57.4	58.0	0.6	1.0%
96.3%	57.3	57.9	0.7	1.2%
97.5%	57.0	57.9	0.9	1.6%
98.8%	56.8	57.9	1.0	1.8%
100.0%	56.8	57.9	1.0	1.8%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.9	68.4	0.5	0.7%
1.2%	67.0	64.3	-2.7	-4.1%
2.5%	66.7	63.8	-2.9	-4.3%
3.7%	64.5	62.5	-2.0	-3.0%
4.9%	64.1	62.2	-1.9	-2.9%
6.2%	63.4	62.0	-1.4	-2.2%
7.4%	62.9	61.7	-1.2	-1.8%
8.6%	62.7	61.7	-1.1	-1.7%
9.9%	62.7	61.4	-1.3	-2.1%
11.1%	62.6	61.4	-1.2	-1.9%
12.3%	62.4	61.3	-1.1	-1.7%
13.6%	62.3	61.2	-1.1	-1.8%
14.8%	62.2	61.1	-1.1	-1.7%
16.0%	62.2	61.0	-1.2	-2.0%
17.3%	62.2	60.9	-1.3	-2.1%
18.5%	61.8	60.7	-1.1	-1.8%
19.8%	61.6	60.7	-0.9	-1.4%
21.0%	61.5	60.7	-0.8	-1.3%
22.2%	61.4	60.5	-0.9	-1.4%
23.5%	61.3	60.5	-0.7	-1.2%
24.7%	61.2	60.5	-0.8	-1.3%
25.9%	61.2	60.5	-0.7	-1.1%
27.2%	61.1	60.5	-0.7	-1.1%
28.4%	61.1	60.5	-0.6	-1.0%
29.6%	61.1	60.5	-0.6	-1.0%
30.9%	60.9	60.3	-0.6	-1.0%
32.1%	60.7	60.2	-0.5	-0.9%
33.3%	60.7	60.1	-0.5	-0.9%
34.6%	60.6	60.1	-0.5	-0.9%
35.8%	60.6	60.1	-0.5	-0.8%
37.0%	60.3	60.1	-0.3	-0.4%
38.3%	60.0	60.0	0.0	0.1%
39.5%	59.9	60.0	0.1	0.1%
40.7%	59.8	59.8	0.0	0.0%
42.0%	59.6	59.6	0.0	-0.1%
43.2%	59.4	59.3	-0.1	-0.2%
44.4%	59.3	59.3	0.0	0.0%
45.7%	59.2	59.3	0.1	0.1%
46.9%	59.0	59.3	0.3	0.5%
48.1%	59.0	59.3	0.3	0.4%
49.4%	58.9	59.2	0.4	0.6%
50.6%	58.5	59.0	0.5	0.9%
51.9%	58.4	58.9	0.6	1.0%
53.1%	58.4	58.8	0.4	0.7%
54.3%	58.3	58.8	0.5	0.9%
55.6%	58.1	58.6	0.5	0.8%
56.8%	58.1	58.5	0.5	0.8%
58.0%	57.9	58.5	0.5	0.9%
59.3%	57.9	58.3	0.4	0.7%
60.5%	57.7	58.2	0.5	0.8%
61.7%	57.6	58.0	0.4	0.7%
63.0%	57.6	57.9	0.4	0.6%
64.2%	57.5	57.9	0.3	0.6%
65.4%	57.3	57.8	0.5	0.9%
66.7%	57.3	57.7	0.4	0.7%
67.9%	57.3	57.6	0.4	0.6%
69.1%	57.3	57.6	0.4	0.6%
70.4%	57.1	57.6	0.5	0.9%
71.6%	57.1	57.5	0.3	0.6%
72.8%	56.9	57.3	0.4	0.7%
74.1%	56.9	57.2	0.3	0.5%
75.3%	56.8	57.2	0.4	0.7%
76.5%	56.8	56.9	0.2	0.3%
77.8%	56.4	56.6	0.2	0.4%
79.0%	56.4	56.5	0.1	0.2%
80.2%	56.2	56.3	0.2	0.3%
81.5%	56.1	56.2	0.1	0.2%
82.7%	56.1	56.2	0.2	0.3%
84.0%	55.6	56.1	0.5	0.9%
85.2%	55.5	56.0	0.4	0.8%
86.4%	55.5	55.9	0.4	0.8%
87.7%	55.5	55.8	0.3	0.6%
88.9%	55.3	55.8	0.6	1.0%
90.1%	55.1	55.7	0.6	1.0%
91.4%	55.0	55.6	0.6	1.1%
92.6%	55.0	55.3	0.3	0.6%
93.8%	54.9	54.7	-0.2	-0.3%
95.1%	54.9	54.6	-0.3	-0.6%
96.3%	54.1	54.2	0.2	0.3%
97.5%	53.7	54.0	0.3	0.5%
98.8%	53.7	53.8	0.1	0.2%
100.0%	53.7	53.8	0.1	0.2%

Table SQ7-1b

Sacramento River at Red Bluff, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.6	63.5	-1.1	-1.7%
1.2%	62.1	61.6	-0.5	-0.8%
2.5%	61.8	61.0	-0.8	-1.3%
3.7%	61.7	60.9	-0.8	-1.3%
4.9%	61.5	60.8	-0.7	-1.1%
6.2%	61.4	60.8	-0.5	-0.9%
7.4%	61.3	60.7	-0.6	-0.9%
8.6%	60.7	60.7	0.0	0.0%
9.9%	60.5	60.4	-0.2	-0.3%
11.1%	60.5	60.2	-0.3	-0.5%
12.3%	60.5	60.2	-0.3	-0.4%
13.6%	60.4	60.2	-0.2	-0.4%
14.8%	60.4	60.2	-0.2	-0.4%
16.0%	60.3	60.0	-0.3	-0.4%
17.3%	60.3	60.0	-0.3	-0.4%
18.5%	60.3	59.9	-0.3	-0.5%
19.8%	60.1	59.8	-0.3	-0.4%
21.0%	59.9	59.8	-0.1	-0.2%
22.2%	59.9	59.7	-0.2	-0.3%
23.5%	59.9	59.7	-0.2	-0.3%
24.7%	59.8	59.7	-0.2	-0.3%
25.9%	59.8	59.7	-0.2	-0.3%
27.2%	59.8	59.6	-0.2	-0.3%
28.4%	59.7	59.6	-0.1	-0.2%
29.6%	59.7	59.5	-0.1	-0.2%
30.9%	59.7	59.5	-0.2	-0.3%
32.1%	59.7	59.4	-0.2	-0.4%
33.3%	59.6	59.3	-0.3	-0.5%
34.6%	59.5	59.3	-0.2	-0.3%
35.8%	59.4	59.3	-0.1	-0.2%
37.0%	59.4	59.3	-0.1	-0.2%
38.3%	59.3	59.3	0.0	0.0%
39.5%	59.2	59.3	0.1	0.1%
40.7%	59.2	59.3	0.1	0.1%
42.0%	59.1	59.3	0.1	0.2%
43.2%	59.0	59.3	0.2	0.4%
44.4%	59.0	59.1	0.1	0.2%
45.7%	59.0	59.1	0.1	0.2%
46.9%	59.0	59.0	0.0	0.1%
48.1%	58.9	59.0	0.1	0.1%
49.4%	58.6	58.9	0.3	0.5%
50.6%	58.6	58.8	0.3	0.5%
51.9%	58.6	58.7	0.2	0.3%
53.1%	58.5	58.7	0.1	0.2%
54.3%	58.5	58.6	0.1	0.2%
55.6%	58.5	58.5	0.1	0.1%
56.8%	58.4	58.5	0.1	0.2%
58.0%	58.3	58.5	0.2	0.3%
59.3%	58.3	58.5	0.2	0.3%
60.5%	58.3	58.5	0.1	0.2%
61.7%	58.3	58.4	0.1	0.2%
63.0%	58.3	58.4	0.1	0.2%
64.2%	58.2	58.4	0.2	0.3%
65.4%	58.2	58.4	0.2	0.4%
66.7%	58.2	58.4	0.3	0.4%
67.9%	58.1	58.3	0.2	0.4%
69.1%	58.1	58.3	0.3	0.4%
70.4%	58.0	58.3	0.4	0.6%
71.6%	58.0	58.3	0.3	0.6%
72.8%	57.9	58.3	0.3	0.6%
74.1%	57.9	58.3	0.4	0.6%
75.3%	57.9	58.1	0.2	0.3%
76.5%	57.8	58.1	0.2	0.4%
77.8%	57.8	58.0	0.2	0.4%
79.0%	57.7	58.0	0.3	0.5%
80.2%	57.7	58.0	0.3	0.6%
81.5%	57.5	58.0	0.5	0.8%
82.7%	57.5	58.0	0.5	0.9%
84.0%	57.4	57.8	0.4	0.7%
85.2%	57.3	57.8	0.4	0.7%
86.4%	57.3	57.6	0.3	0.5%
87.7%	57.1	57.4	0.2	0.4%
88.9%	57.1	57.4	0.3	0.5%
90.1%	57.0	57.3	0.3	0.4%
91.4%	57.0	57.3	0.2	0.4%
92.6%	56.9	57.2	0.2	0.4%
93.8%	56.7	57.1	0.4	0.7%
95.1%	56.7	57.1	0.4	0.7%
96.3%	56.7	56.9	0.3	0.5%
97.5%	56.4	56.6	0.3	0.5%
98.8%	56.2	56.4	0.1	0.2%
100.0%	55.8	55.7	-0.1	-0.2%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.4	64.8	-1.6	-2.4%
1.2%	63.2	62.4	-0.8	-1.3%
2.5%	62.9	61.9	-1.0	-1.6%
3.7%	62.6	61.7	-0.9	-1.4%
4.9%	62.5	61.5	-1.1	-1.7%
6.2%	62.0	61.2	-0.9	-1.4%
7.4%	62.0	61.0	-1.0	-1.7%
8.6%	61.8	61.0	-0.8	-1.3%
9.9%	61.1	60.9	-0.2	-0.4%
11.1%	61.1	60.8	-0.3	-0.5%
12.3%	61.1	60.8	-0.3	-0.5%
13.6%	61.1	60.8	-0.3	-0.5%
14.8%	60.9	60.8	-0.2	-0.3%
16.0%	60.9	60.7	-0.2	-0.3%
17.3%	60.8	60.5	-0.4	-0.6%
18.5%	60.8	60.4	-0.4	-0.6%
19.8%	60.8	60.4	-0.4	-0.6%
21.0%	60.7	60.2	-0.5	-0.8%
22.2%	60.7	60.1	-0.6	-1.0%
23.5%	60.7	60.1	-0.6	-1.0%
24.7%	60.6	60.1	-0.5	-0.9%
25.9%	60.5	60.0	-0.4	-0.7%
27.2%	60.4	60.0	-0.4	-0.7%
28.4%	60.4	60.0	-0.4	-0.7%
29.6%	60.1	60.0	-0.2	-0.3%
30.9%	60.0	59.9	-0.1	-0.2%
32.1%	60.0	59.9	-0.2	-0.3%
33.3%	60.0	59.8	-0.2	-0.3%
34.6%	59.7	59.7	0.0	0.1%
35.8%	59.7	59.6	0.0	-0.1%
37.0%	59.5	59.6	0.1	0.2%
38.3%	59.5	59.6	0.1	0.2%
39.5%	59.5	59.5	0.1	0.1%
40.7%	59.5	59.5	0.0	0.0%
42.0%	59.4	59.4	0.0	0.0%
43.2%	59.4	59.4	0.0	0.0%
44.4%	59.0	59.3	0.3	0.4%
45.7%	59.0	59.1	0.0	0.1%
46.9%	59.0	59.1	0.0	0.1%
48.1%	59.0	59.0	0.0	0.1%
49.4%	58.9	59.0	0.1	0.2%
50.6%	58.9	59.0	0.1	0.1%
51.9%	58.9	58.9	0.0	0.1%
53.1%	58.8	58.8	0.0	0.1%
54.3%	58.8	58.8	0.0	0.1%
55.6%	58.8	58.8	0.0	-0.1%
56.8%	58.7	58.8	0.0	0.1%
58.0%	58.7	58.6	-0.1	-0.2%
59.3%	58.7	58.5	-0.1	-0.3%
60.5%	58.6	58.5	-0.1	-0.3%
61.7%	58.6	58.5	-0.1	-0.2%
63.0%	58.5	58.5	0.0	-0.1%
64.2%	58.5	58.5	0.0	-0.1%
65.4%	58.5	58.5	0.0	0.0%
66.7%	58.4	58.4	0.0	0.0%
67.9%	58.3	58.4	0.1	0.2%
69.1%	58.3	58.4	0.1	0.2%
70.4%	58.2	58.4	0.1	0.2%
71.6%	58.2	58.3	0.1	0.2%
72.8%	58.2	58.3	0.1	0.2%
74.1%	58.1	58.3	0.2	0.3%
75.3%	58.0	58.3	0.3	0.4%
76.5%	58.0	58.2	0.3	0.5%
77.8%	57.9	58.2	0.3	0.5%
79.0%	57.9	58.2	0.3	0.6%
80.2%	57.8	58.2	0.4	0.6%
81.5%	57.7	58.2	0.4	0.8%
82.7%	57.7	58.1	0.5	0.8%
84.0%	57.6	58.1	0.4	0.8%
85.2%	57.5	58.0	0.5	0.9%
86.4%	57.4	57.9	0.5	0.8%
87.7%	57.4	57.7	0.3	0.6%
88.9%	57.2	57.5	0.2	0.4%
90.1%	57.2	57.2	-0.1	-0.1%
91.4%	57.2	57.1	-0.1	-0.2%
92.6%	56.9	57.0	0.1	0.2%
93.8%	56.9	57.0	0.1	0.2%
95.1%	56.7	56.9	0.2	0.3%
96.3%	56.7	56.8	0.1	0.1%
97.5%	56.6	56.5	-0.1	-0.2%
98.8%	56.3	56.4	0.1	0.2%
100.0%	55.7	55.5	-0.2	-0.4%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.5	66.5	-2.0	-2.9%
1.2%	64.6	62.9	-1.8	-2.7%
2.5%	64.5	62.6	-1.9	-3.0%
3.7%	63.9	62.2	-1.6	-2.5%
4.9%	63.6	61.9	-1.7	-2.7%
6.2%	62.7	61.5	-1.2	-1.9%
7.4%	62.5	61.3	-1.2	-1.9%
8.6%	62.2	61.2	-1.0	-1.5%
9.9%	62.1	61.1	-1.0	-1.6%
11.1%	62.1	61.0	-1.0	-1.6%
12.3%	61.8	61.0	-0.8	-1.2%
13.6%	61.7	60.9	-0.8	-1.3%
14.8%	61.6	60.9	-0.7	-1.2%
16.0%	61.6	60.8	-0.8	-1.2%
17.3%	61.6	60.8	-0.8	-1.2%
18.5%	61.5	60.8	-0.7	-1.1%
19.8%	61.4	60.7	-0.6	-1.1%
21.0%	61.3	60.7	-0.6	-0.9%
22.2%	61.2	60.6	-0.6	-1.0%
23.5%	61.1	60.5	-0.6	-1.0%
24.7%	61.1	60.3	-0.7	-1.2%
25.9%	61.0	60.3	-0.7	-1.1%
27.2%	61.0	60.3	-0.6	-1.1%
28.4%	60.9	60.3	-0.6	-1.0%
29.6%	60.9	60.3	-0.6	-0.9%
30.9%	60.5	60.3	-0.2	-0.4%
32.1%	60.5	60.3	-0.2	-0.3%
33.3%	60.4	60.3	-0.2	-0.3%
34.6%	60.1	60.1	0.0	0.1%
35.8%	60.0	60.1	0.1	0.1%
37.0%	59.9	59.8	-0.1	-0.1%
38.3%	59.8	59.7	-0.1	-0.1%
39.5%	59.8	59.7	-0.1	-0.1%
40.7%	59.7	59.6	-0.1	-0.2%
42.0%	59.7	59.6	-0.2	-0.3%
43.2%	59.7	59.5	-0.2	-0.3%
44.4%	59.7	59.4	-0.3	-0.5%
45.7%	59.6	59.4	-0.2	-0.3%
46.9%	59.4	59.4	-0.1	-0.2%
48.1%	59.4	59.3	0.0	0.0%
49.4%	59.3	59.3	0.0	-0.1%
50.6%	59.3	59.3	-0.1	-0.1%
51.9%	59.2	59.3	0.1	0.2%
53.1%	59.1	59.2	0.0	0.0%
54.3%	59.1	59.1	0.0	0.0%
55.6%	59.0	59.0	0.0	-0.1%
56.8%	58.9	58.8	-0.1	-0.1%
58.0%	58.9	58.8	-0.1	-0.1%
59.3%	58.9	58.8	-0.1	-0.1%
60.5%	58.8	58.8	0.0	0.0%
61.7%	58.7	58.8	0.1	0.1%
63.0%	58.7	58.8	0.1	0.1%
64.2%	58.6	58.7	0.1	0.2%
65.4%	58.5	58.7	0.2	0.4%
66.7%	58.5	58.6	0.2	0.3%
67.9%	58.5	58.6	0.2	0.3%
69.1%	58.4	58.6	0.2	0.3%
70.4%	58.2	58.5	0.4	0.6%
71.6%	58.1	58.5	0.4	0.7%
72.8%	58.1	58.4	0.3	0.5%
74.1%	58.1	58.3	0.2	0.3%
75.3%	58.1	58.3	0.2	0.3%
76.5%	58.1	58.3	0.2	0.3%
77.8%	58.1	58.3	0.2	0.3%
79.0%	58.0	58.2	0.3	0.5%
80.2%	57.8	58.1	0.3	0.5%
81.5%	57.8	58.0	0.1	0.2%
82.7%	57.8	57.9	0.1	0.2%
84.0%	57.7	57.8	0.1	0.2%
85.2%	57.6	57.8	0.2	0.3%
86.4%	57.5	57.7	0.3	0.5%
87.7%	57.3	57.6	0.3	0.5%
88.9%	57.3	57.4	0.1	0.2%
90.1%	57.1	57.3	0.2	0.3%
91.4%	57.1	57.1	0.0	0.0%
92.6%	57.0	56.9	-0.1	-0.1%
93.8%	56.6	56.9	0.3	0.5%
95.1%	56.3	56.6	0.3	0.6%
96.3%	56.2	56.4	0.2	0.3%
97.5%	56.1	56.1	-0.1	-0.1%
98.8%	56.1	56.0	-0.1	-0.2%
100.0%	55.2	54.8	-0.4	-0.6%

Figure SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

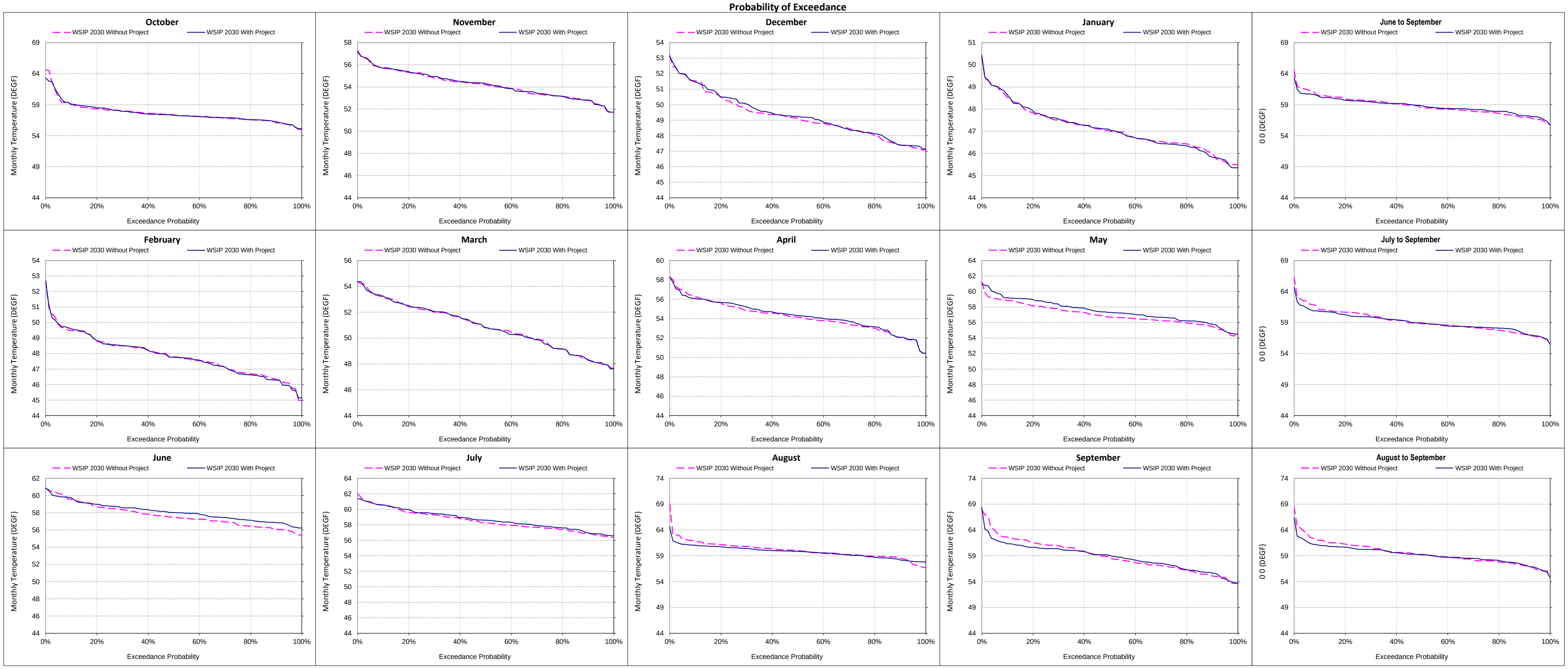


Table SQ8-1b

Sacramento River below Red Bluff, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.6	63.3	-1.3	-2.0%
1.2%	64.5	62.8	-1.7	-2.7%
2.5%	62.6	62.7	0.1	0.2%
3.7%	61.4	61.5	0.2	0.3%
4.9%	60.2	60.7	0.5	0.8%
6.2%	59.4	59.9	0.5	0.8%
7.4%	59.3	59.4	0.1	0.1%
8.6%	59.2	59.4	0.2	0.3%
9.9%	59.1	59.1	-0.1	-0.1%
11.1%	58.9	59.0	0.2	0.3%
12.3%	58.8	58.9	0.1	0.2%
13.6%	58.6	58.9	0.2	0.4%
14.8%	58.5	58.9	0.3	0.5%
16.0%	58.5	58.7	0.2	0.4%
17.3%	58.4	58.7	0.3	0.5%
18.5%	58.3	58.6	0.3	0.5%
19.8%	58.3	58.5	0.2	0.3%
21.0%	58.3	58.5	0.2	0.3%
22.2%	58.3	58.4	0.1	0.3%
23.5%	58.2	58.4	0.3	0.4%
24.7%	58.1	58.3	0.2	0.4%
25.9%	58.1	58.1	0.1	0.1%
27.2%	58.1	58.1	0.0	0.0%
28.4%	58.1	58.1	0.0	0.0%
29.6%	58.0	57.9	0.0	-0.1%
30.9%	58.0	57.9	0.0	-0.1%
32.1%	57.9	57.9	-0.1	-0.1%
33.3%	57.9	57.8	-0.2	-0.3%
34.6%	57.9	57.8	-0.1	-0.2%
35.8%	57.8	57.7	0.0	0.0%
37.0%	57.8	57.6	-0.2	-0.3%
38.3%	57.6	57.6	-0.1	-0.1%
39.5%	57.6	57.5	-0.1	-0.3%
40.7%	57.6	57.5	-0.1	-0.2%
42.0%	57.6	57.4	-0.1	-0.2%
43.2%	57.5	57.4	-0.1	-0.2%
44.4%	57.5	57.4	-0.1	-0.2%
45.7%	57.5	57.4	0.0	-0.1%
46.9%	57.4	57.4	0.0	-0.1%
48.1%	57.4	57.4	0.0	-0.1%
49.4%	57.4	57.3	-0.1	-0.2%
50.6%	57.3	57.3	0.0	0.0%
51.9%	57.3	57.2	0.0	0.0%
53.1%	57.2	57.2	0.0	0.0%
54.3%	57.2	57.2	0.0	0.0%
55.6%	57.2	57.2	0.0	0.0%
56.8%	57.2	57.2	0.0	0.0%
58.0%	57.2	57.1	-0.1	-0.1%
59.3%	57.1	57.1	0.0	0.0%
60.5%	57.1	57.1	0.0	-0.1%
61.7%	57.1	57.0	-0.1	-0.1%
63.0%	57.1	57.0	-0.1	-0.1%
64.2%	57.0	57.0	0.0	0.0%
65.4%	57.0	56.9	0.0	-0.1%
66.7%	57.0	56.9	0.0	-0.1%
67.9%	56.9	56.9	0.0	0.0%
69.1%	56.9	56.9	0.0	0.1%
70.4%	56.8	56.9	0.1	0.2%
71.6%	56.8	56.9	0.1	0.2%
72.8%	56.7	56.9	0.2	0.3%
74.1%	56.7	56.9	0.2	0.3%
75.3%	56.7	56.8	0.1	0.2%
76.5%	56.7	56.7	0.0	0.1%
77.8%	56.6	56.6	0.0	0.0%
79.0%	56.6	56.6	0.0	0.0%
80.2%	56.6	56.6	0.0	0.1%
81.5%	56.6	56.6	0.0	0.0%
82.7%	56.5	56.5	0.0	0.0%
84.0%	56.5	56.5	0.0	0.0%
85.2%	56.5	56.5	0.0	0.1%
86.4%	56.4	56.5	0.0	0.0%
87.7%	56.4	56.4	0.0	0.1%
88.9%	56.3	56.3	0.1	0.1%
90.1%	56.3	56.1	-0.2	-0.3%
91.4%	56.1	56.1	0.0	-0.1%
92.6%	55.9	56.0	0.1	0.3%
93.8%	55.9	55.9	0.0	-0.1%
95.1%	55.8	55.8	0.0	0.0%
96.3%	55.6	55.8	0.2	0.3%
97.5%	55.4	55.3	0.0	0.0%
98.8%	55.0	55.1	0.1	0.2%
100.0%	55.0	55.1	0.0	0.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.3	57.1	-0.2	-0.3%
1.2%	56.8	56.8	0.0	0.1%
2.5%	56.6	56.7	0.0	0.0%
3.7%	56.6	56.5	-0.1	-0.1%
4.9%	56.2	56.3	0.2	0.3%
6.2%	55.9	56.0	0.1	0.1%
7.4%	55.9	55.9	0.0	0.0%
8.6%	55.8	55.8	0.0	-0.1%
9.9%	55.8	55.7	-0.1	-0.2%
11.1%	55.7	55.7	-0.1	-0.1%
12.3%	55.7	55.6	0.0	-0.1%
13.6%	55.6	55.6	0.0	-0.1%
14.8%	55.6	55.6	0.0	0.0%
16.0%	55.5	55.5	0.1	0.1%
17.3%	55.4	55.5	0.0	0.1%
18.5%	55.3	55.4	0.1	0.2%
19.8%	55.3	55.4	0.1	0.2%
21.0%	55.3	55.3	0.0	-0.1%
22.2%	55.3	55.3	0.0	0.0%
23.5%	55.3	55.2	-0.1	-0.1%
24.7%	55.3	55.2	-0.1	-0.2%
25.9%	55.0	55.2	0.2	0.3%
27.2%	54.9	55.1	0.2	0.3%
28.4%	54.9	55.0	0.0	0.1%
29.6%	54.8	54.9	0.1	0.2%
30.9%	54.8	54.9	0.1	0.2%
32.1%	54.8	54.8	0.0	0.1%
33.3%	54.6	54.7	0.1	0.2%
34.6%	54.6	54.7	0.2	0.3%
35.8%	54.6	54.7	0.1	0.2%
37.0%	54.5	54.6	0.1	0.2%
38.3%	54.5	54.6	0.1	0.2%
39.5%	54.4	54.5	0.1	0.1%
40.7%	54.4	54.5	0.0	0.1%
42.0%	54.4	54.4	0.0	0.1%
43.2%	54.4	54.4	0.0	0.1%
44.4%	54.3	54.4	0.1	0.1%
45.7%	54.3	54.4	0.1	0.2%
46.9%	54.3	54.4	0.1	0.2%
48.1%	54.3	54.4	0.1	0.2%
49.4%	54.2	54.3	0.1	0.2%
50.6%	54.2	54.3	0.1	0.1%
51.9%	54.1	54.2	0.1	0.2%
53.1%	54.0	54.1	0.1	0.1%
54.3%	54.0	54.1	0.1	0.2%
55.6%	54.0	54.1	0.1	0.2%
56.8%	54.0	54.0	0.0	0.0%
58.0%	54.0	53.9	-0.1	-0.2%
59.3%	53.9	53.9	0.0	0.0%
60.5%	53.9	53.8	0.0	0.0%
61.7%	53.8	53.6	-0.2	-0.3%
63.0%	53.8	53.6	-0.2	-0.3%
64.2%	53.7	53.6	-0.1	-0.1%
65.4%	53.5	53.6	0.1	0.2%
66.7%	53.4	53.6	0.1	0.2%
67.9%	53.4	53.6	0.2	0.3%
69.1%	53.4	53.5	0.1	0.3%
70.4%	53.3	53.4	0.1	0.2%
71.6%	53.3	53.4	0.0	0.1%
72.8%	53.3	53.4	0.1	0.2%
74.1%	53.3	53.3	0.1	0.1%
75.3%	53.3	53.3	0.0	0.0%
76.5%	53.2	53.2	0.0	0.0%
77.8%	53.2	53.2	0.0	0.0%
79.0%	53.2	53.2	0.0	0.1%
80.2%	53.1	53.1	0.0	0.0%
81.5%	53.1	53.0	-0.1	-0.1%
82.7%	53.1	53.0	-0.1	-0.2%
84.0%	53.0	52.9	-0.1	-0.2%
85.2%	52.9	52.9	0.0	-0.1%
86.4%	52.9	52.9	-0.1	-0.1%
87.7%	52.9	52.8	0.0	0.0%
88.9%	52.8	52.8	0.0	0.0%
90.1%	52.8	52.8	0.0	0.0%
91.4%	52.7	52.8	0.0	0.1%
92.6%	52.5	52.4	-0.1	-0.2%
93.8%	52.5	52.4	0.0	-0.1%
95.1%	52.3	52.3	0.0	0.0%
96.3%	52.2	52.3	0.1	0.1%
97.5%	51.8	51.8	0.1	0.1%
98.8%	51.7	51.7	0.0	0.1%
100.0%	51.7	51.7	0.0	0.1%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.2	53.1	-0.1	-0.1%
1.2%	52.5	52.7	0.3	0.5%
2.5%	52.4	52.4	0.0	0.0%
3.7%	52.1	52.0	0.0	-0.1%
4.9%	52.0	52.0	0.0	0.0%
6.2%	51.9	52.0	0.0	0.1%
7.4%	51.6	51.7	0.1	0.1%
8.6%	51.5	51.5	0.0	0.0%
9.9%	51.5	51.5	-0.1	-0.1%
11.1%	51.5	51.4	-0.1	-0.2%
12.3%	51.4	51.3	-0.1	-0.2%
13.6%	50.8	51.2	0.4	0.8%
14.8%	50.8	51.0	0.2	0.3%
16.0%	50.8	50.9	0.1	0.3%
17.3%	50.7	50.9	0.2	0.4%
18.5%	50.7	50.7	0.1	0.1%
19.8%	50.5	50.5	0.0	0.0%
21.0%	50.4	50.5	0.1	0.2%
22.2%	50.3	50.5	0.2	0.4%
23.5%	50.2	50.4	0.2	0.4%
24.7%	50.0	50.4	0.3	0.7%
25.9%	50.0	50.4	0.4	0.7%
27.2%	49.9	50.1	0.2	0.5%
28.4%	49.8	50.1	0.3	0.5%
29.6%	49.7	50.1	0.3	0.7%
30.9%	49.6	50.0	0.4	0.8%
32.1%	49.5	49.8	0.3	0.6%
33.3%	49.5	49.7	0.3	0.5%
34.6%	49.5	49.6	0.2	0.3%
35.8%	49.5	49.6	0.1	0.2%
37.0%	49.4	49.6	0.1	0.3%
38.3%	49.4	49.5	0.1	0.3%
39.5%	49.4	49.5	0.1	0.2%
40.7%	49.4	49.4	0.0	0.1%
42.0%	49.4	49.3	0.0	0.0%
43.2%	49.4	49.3	0.0	-0.1%
44.4%	49.3	49.3	0.0	0.0%
45.7%	49.2	49.3	0.1	0.1%
46.9%	49.2	49.3	0.1	0.2%
48.1%	49.2	49.2	0.1	0.2%
49.4%	49.2	49.2	0.1	0.2%
50.6%	49.0	49.2	0.2	0.4%
51.9%	49.0	49.2	0.2	0.4%
53.1%	48.9	49.2	0.3	0.5%
54.3%	48.9	49.2	0.3	0.5%
55.6%	48.9	49.2	0.3	0.6%
56.8%	48.8	49.1	0.2	0.5%
58.0%	48.8	49.0	0.2	0.5%
59.3%	48.8	48.9	0.2	0.3%
60.5%	48.8	48.8	0.0	0.1%
61.7%	48.7	48.8	0.1	0.2%
63.0%	48.7	48.8	0.1	0.1%
64.2%	48.7	48.7	0.0	0.0%
65.4%	48.6	48.7	0.0	0.0%
66.7%	48.6	48.6	0.0	0.0%
67.9%	48.5	48.5	0.0	-0.1%
69.1%	48.5	48.5	-0.1	-0.1%
70.4%	48.5	48.4	-0.1	-0.2%
71.6%	48.3	48.4	0.0	0.0%
72.8%	48.3	48.3	0.0	0.0%
74.1%	48.3	48.3	0.0	0.1%
75.3%	48.2	48.2	0.0	-0.1%
76.5%	48.2	48.2	0.0	-0.1%
77.8%	48.2	48.2	0.0	-0.1%
79.0%	48.1	48.2	0.1	0.1%
80.2%	48.0	48.1	0.1	0.3%
81.5%	48.0	48.1	0.1	0.3%
82.7%	47.8	48.0	0.3	0.6%
84.0%	47.6	47.9	0.3	0.6%
85.2%	47.6	47.8	0.2	0.3%
86.4%	47.6	47.7	0.1	0.1%
87.7%	47.5	47.6	0.1	0.2%
88.9%	47.5	47.4	0.0	-0.1%
90.1%	47.4	47.4	0.0	0.0%
91.4%	47.4	47.4	0.0	0.0%
92.6%	47.3	47.4	0.0	0.1%
93.8%	47.3	47.4	0.0	0.1%
95.1%	47.2	47.3	0.1	0.2%
96.3%	47.2	47.3	0.2	0.3%
97.5%	47.2	47.3	0.1	0.3%
98.8%	47.1	47.2	0.1	0.2%
100.0%	47.1	47.2	0.1	0.2%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.4	50.5	0.1	0.1%
1.2%	49.4	49.4	0.0	0.1%
2.5%	49.3	49.3	0.0	0.1%
3.7%	49.1	49.1	-0.1	-0.1%
4.9%	49.1	49.0	0.0	0.0%
6.2%	49.0	49.0	0.0	0.0%
7.4%	48.8	48.9	0.1	0.2%
8.6%	48.7	48.8	0.1	0.3%
9.9%	48.5	48.7	0.1	0.2%
11.1%	48.4	48.5	0.1	0.1%
12.3%	48.3	48.3	-0.1	-0.1%
13.6%	48.3	48.2	0.0	-0.1%
14.8%	48.3	48.2	-0.1	-0.1%
16.0%	48.1	48.1	0.0	0.0%
17.3%	47.9	48.1	0.2	0.3%
18.5%	47.9	48.0	0.1	0.3%
19.8%	47.8	47.9	0.1	0.2%
21.0%	47.8	47.8	0.1	0.1%
22.2%	47.8	47.8	0.0	0.1%
23.5%	47.7	47.7	0.0	0.0%
24.7%	47.7	47.7	0.0	-0.1%
25.9%	47.6	47.6	0.0	0.1%
27.2%	47.6	47.6	0.0	0.1%
28.4%	47.5	47.6	0.1	0.2%
29.6%	47.5	47.6	0.1	0.1%
30.9%	47.5	47.5	0.0	0.0%
32.1%	47.5	47.4	-0.1	-0.1%
33.3%	47.4	47.4	0.0	-0.1%
34.6%	47.4	47.4	0.0	-0.1%
35.8%	47.4	47.4	0.0	0.1%
37.0%	47.3	47.4	0.1	0.1%
38.3%	47.3	47.3	0.0	0.0%
39.5%	47.3	47.3	0.0	0.0%
40.7%	47.3	47.3	0.0	0.0%
42.0%	47.3	47.2	0.0	-0.1%
43.2%	47.2	47.2	0.0	-0.1%
44.4%	47.1	47.2	0.0	0.1%
45.7%	47.1	47.1	0.0	0.1%
46.9%	47.1	47.1	0.0	0.0%
48.1%	47.0	47.1	0.1	0.1%
49.4%	47.0	47.1	0.1	0.2%
50.6%	47.0	47.0	0.1	0.1%
51.9%	47.0	47.0	0.0	0.1%
53.1%	47.0	47.0	0.0	0.0%
54.3%	47.0	46.9	0.0	-0.1%
55.6%	47.0	46.9	-0.1	-0.2%
56.8%	46.8	46.8	0.0	0.0%
58.0%	46.8	46.8	0.0	0.0%
59.3%	46.7	46.7	0.0	0.0%
60.5%	46.7	46.7	0.0	0.0%
61.7%	46.7	46.7	0.0	0.0%
63.0%	46.7	46.7	0.0	0.0%
64.2%	46.6	46.6	0.0	0.1%
65.4%	46.6	46.6	0.0	0.1%
66.7%	46.6	46.5	0.0	0.0%
67.9%	46.6	46.5	-0.1	-0.1%
69.1%	46.5	46.5	-0.1	-0.2%
70.4%	46.5	46.4	-0.1	-0.2%
71.6%	46.5	46.4	-0.1	-0.1%
72.8%	46.5	46.4	-0.1	-0.1%
74.1%	46.5	46.4	-0.1	-0.1%
75.3%	46.5	46.4	-0.1	-0.1%
76.5%	46.5	46.4	-0.1	-0.2%
77.8%	46.4	46.4	-0.1	-0.2%
79.0%	46.4	46.4	-0.1	-0.2%
80.2%	46.4	46.3	-0.1	-0.2%
81.5%	46.4	46.3	-0.1	-0.2%
82.7%	46.3	46.3	-0.1	-0.1%
84.0%	46.3	46.2	0.0	-0.1%
85.2%	46.3	46.1	-0.1	-0.3%
86.4%	46.2	46.1	-0.1	-0.3%
87.7%	46.1	46.0	-0.1	-0.2%
88.9%	46.1	45.9	-0.2	-0.4%
90.1%	46.0	45.8	-0.2	-0.4%
91.4%	45.8	45.8	0.0	0.1%
92.6%	45.7	45.8	0.1	0.2%
93.8%	45.7	45.7	0.1	0.1%
95.1%	45.6	45.7	0.1	0.2%
96.3%	45.6	45.5	-0.1	-0.1%
97.5%	45.5	45.4	-0.1	-0.3%
98.8%	45.5	45.3	-0.2	-0.3%
100.0%	45.5	45.3	-0.2	-0.3%

Table SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.7	52.7	0.0	0.1%
1.2%	50.9	51.2	0.2	0.4%
2.5%	50.6	50.3	-0.2	-0.5%
3.7%	50.4	50.1	-0.2	-0.4%
4.9%	49.9	49.9	0.0	0.1%
6.2%	49.7	49.7	0.1	0.1%
7.4%	49.7	49.7	0.1	0.1%
8.6%	49.5	49.7	0.1	0.3%
9.9%	49.5	49.6	0.1	0.2%
11.1%	49.5	49.6	0.1	0.2%
12.3%	49.5	49.5	0.1	0.1%
13.6%	49.4	49.5	0.0	0.0%
14.8%	49.4	49.5	0.0	0.1%
16.0%	49.3	49.3	0.0	0.0%
17.3%	49.2	49.2	0.0	0.0%
18.5%	49.0	49.0	0.0	0.0%
19.8%	48.8	48.9	0.1	0.2%
21.0%	48.8	48.8	0.0	0.1%
22.2%	48.8	48.6	-0.1	-0.2%
23.5%	48.7	48.6	-0.1	-0.1%
24.7%	48.6	48.6	-0.1	-0.1%
25.9%	48.5	48.6	0.1	0.1%
27.2%	48.5	48.6	0.0	0.1%
28.4%	48.5	48.5	0.0	0.1%
29.6%	48.5	48.5	0.0	0.0%
30.9%	48.5	48.5	0.0	0.0%
32.1%	48.5	48.5	0.0	0.0%
33.3%	48.5	48.4	0.0	0.0%
34.6%	48.4	48.4	0.0	0.1%
35.8%	48.4	48.4	0.1	0.1%
37.0%	48.4	48.4	0.1	0.1%
38.3%	48.3	48.4	0.0	0.1%
39.5%	48.2	48.3	0.0	0.0%
40.7%	48.1	48.1	0.0	0.1%
42.0%	48.1	48.1	0.0	0.0%
43.2%	48.1	48.0	0.0	-0.1%
44.4%	48.0	48.0	0.0	-0.1%
45.7%	48.0	48.0	0.0	0.0%
46.9%	48.0	47.9	-0.1	-0.1%
48.1%	47.8	47.8	0.0	-0.1%
49.4%	47.8	47.8	0.0	0.0%
50.6%	47.8	47.8	0.0	0.0%
51.9%	47.8	47.8	0.0	0.0%
53.1%	47.7	47.7	0.1	0.1%
54.3%	47.7	47.7	0.0	0.1%
55.6%	47.7	47.7	0.0	0.1%
56.8%	47.6	47.7	0.1	0.2%
58.0%	47.6	47.6	0.0	0.0%
59.3%	47.5	47.6	0.1	0.1%
60.5%	47.5	47.6	0.0	0.0%
61.7%	47.5	47.4	-0.1	-0.1%
63.0%	47.5	47.4	-0.1	-0.2%
64.2%	47.4	47.4	0.0	-0.1%
65.4%	47.4	47.3	-0.2	-0.3%
66.7%	47.4	47.2	-0.2	-0.3%
67.9%	47.2	47.2	0.0	-0.1%
69.1%	47.2	47.2	0.0	0.0%
70.4%	47.1	47.1	0.0	0.0%
71.6%	47.0	47.0	0.0	0.0%
72.8%	46.9	46.9	0.0	-0.1%
74.1%	46.9	46.8	-0.1	-0.1%
75.3%	46.8	46.7	-0.1	-0.2%
76.5%	46.8	46.7	-0.1	-0.2%
77.8%	46.7	46.7	-0.1	-0.2%
79.0%	46.7	46.6	-0.1	-0.2%
80.2%	46.7	46.6	-0.1	-0.1%
81.5%	46.7	46.6	-0.1	-0.2%
82.7%	46.7	46.6	-0.1	-0.2%
84.0%	46.7	46.5	-0.1	-0.3%
85.2%	46.6	46.5	-0.1	-0.1%
86.4%	46.5	46.3	-0.2	-0.4%
87.7%	46.5	46.3	-0.1	-0.3%
88.9%	46.4	46.3	-0.1	-0.2%
90.1%	46.3	46.3	0.0	-0.1%
91.4%	46.2	46.3	0.0	0.1%
92.6%	46.2	46.0	-0.2	-0.4%
93.8%	46.1	46.0	-0.1	-0.3%
95.1%	46.1	45.9	-0.2	-0.4%
96.3%	45.8	45.7	-0.1	-0.3%
97.5%	45.7	45.6	-0.1	-0.3%
98.8%	45.0	45.2	0.2	0.4%
100.0%	45.0	45.2	0.2	0.4%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	54.4	0.0	0.1%
1.2%	54.2	54.4	0.2	0.3%
2.5%	54.2	54.0	-0.1	-0.3%
3.7%	53.9	53.7	-0.2	-0.5%
4.9%	53.5	53.6	0.1	0.2%
6.2%	53.4	53.4	0.1	0.2%
7.4%	53.3	53.4	0.0	0.1%
8.6%	53.2	53.3	0.1	0.2%
9.9%	53.2	53.2	0.0	0.1%
11.1%	53.1	53.1	0.0	0.1%
12.3%	53.0	53.1	0.1	0.1%
13.6%	53.0	52.9	-0.2	-0.3%
14.8%	52.9	52.8	-0.1	-0.3%
16.0%	52.7	52.7	0.0	0.0%
17.3%	52.6	52.7	0.1	0.1%
18.5%	52.6	52.6	0.0	-0.1%
19.8%	52.4	52.5	0.1	0.2%
21.0%	52.4	52.4	0.0	0.0%
22.2%	52.4	52.4	0.0	0.0%
23.5%	52.3	52.4	0.1	0.1%
24.7%	52.2	52.4	0.1	0.3%
25.9%	52.2	52.3	0.1	0.2%
27.2%	52.2	52.2	0.1	0.1%
28.4%	52.1	52.2	0.0	0.1%
29.6%	52.0	52.1	0.1	0.1%
30.9%	52.0	52.0	0.0	0.1%
32.1%	52.0	52.0	0.0	0.1%
33.3%	52.0	52.0	0.1	0.1%
34.6%	52.0	52.0	0.0	0.0%
35.8%	51.8	51.8	0.0	0.1%
37.0%	51.7	51.8	0.0	0.1%
38.3%	51.7	51.7	0.0	0.1%
39.5%	51.6	51.7	0.1	0.1%
40.7%	51.5	51.5	0.0	0.0%
42.0%	51.4	51.5	0.0	0.0%
43.2%	51.3	51.4	0.1	0.2%
44.4%	51.2	51.3	0.1	0.2%
45.7%	51.1	51.2	0.1	0.1%
46.9%	51.1	51.1	0.0	0.0%
48.1%	51.1	51.1	0.0	0.0%
49.4%	50.8	50.8	0.0	0.0%
50.6%	50.8	50.8	0.0	0.0%
51.9%	50.7	50.7	0.0	-0.1%
53.1%	50.7	50.7	0.0	0.0%
54.3%	50.7	50.7	0.0	0.0%
55.6%	50.6	50.6	0.0	0.0%
56.8%	50.6	50.5	-0.1	-0.1%
58.0%	50.6	50.4	-0.2	-0.3%
59.3%	50.5	50.3	-0.2	-0.5%
60.5%	50.4	50.3	-0.1	-0.2%
61.7%	50.3	50.3	-0.1	-0.1%
63.0%	50.3	50.2	-0.1	-0.1%
64.2%	50.3	50.2	0.0	-0.1%
65.4%	50.3	50.1	-0.2	-0.4%
66.7%	50.0	50.0	0.0	0.1%
67.9%	50.0	50.0	0.0	0.0%
69.1%	50.0	49.9	-0.1	-0.2%
70.4%	49.9	49.9	0.0	-0.1%
71.6%	49.9	49.8	0.0	-0.1%
72.8%	49.8	49.6	-0.2	-0.5%
74.1%	49.6	49.5	-0.1	-0.2%
75.3%	49.4	49.4	0.0	0.1%
76.5%	49.2	49.2	0.0	0.0%
77.8%	49.2	49.2	0.0	0.0%
79.0%	49.2	49.1	0.0	-0.1%
80.2%	49.2	49.1	0.0	-0.1%
81.5%	49.1	49.1	0.0	-0.1%
82.7%	48.7	48.7	0.0	0.0%
84.0%	48.7	48.7	0.0	0.0%
85.2%	48.7	48.6	0.0	-0.1%
86.4%	48.6	48.6	0.0	0.0%
87.7%	48.4	48.6	0.2	0.3%
88.9%	48.4	48.4	0.0	0.0%
90.1%	48.3	48.3	-0.1	-0.1%
91.4%	48.2	48.2	0.1	0.1%
92.6%	48.1	48.1	0.0	0.0%
93.8%	48.1	48.1	0.0	0.0%
95.1%	48.0	48.1	0.1	0.1%
96.3%	48.0	47.9	0.0	0.0%
97.5%	47.9	47.9	0.0	-0.1%
98.8%	47.7	47.6	-0.1	-0.2%
100.0%	47.7	47.6	-0.1	-0.2%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.3	58.3	0.0	0.0%
1.2%	58.0	57.8	-0.3	-0.5%
2.5%	57.3	57.0	-0.2	-0.4%
3.7%	57.1	57.0	-0.1	-0.2%
4.9%	56.9	56.4	-0.5	-0.9%
6.2%	56.8	56.4	-0.4	-0.6%
7.4%	56.5	56.2	-0.3	-0.5%
8.6%	56.4	56.1	-0.3	-0.5%
9.9%	56.3	56.1	-0.2	-0.3%
11.1%	56.2	56.0	-0.2	-0.3%
12.3%	56.0	56.0	0.0	0.0%
13.6%	55.9	56.0	0.1	0.1%
14.8%	55.9	55.9	0.0	-0.1%
16.0%	55.8	55.8	0.1	0.1%
17.3%	55.7	55.7	0.0	0.0%
18.5%	55.7	55.7	0.0	0.0%
19.8%	55.7	55.7	0.0	0.0%
21.0%	55.4	55.7	0.2	0.4%
22.2%	55.4	55.6	0.2	0.4%
23.5%	55.3	55.6	0.3	0.6%
24.7%	55.2	55.6	0.3	0.6%
25.9%	55.2	55.5	0.3	0.5%
27.2%	55.1	55.4	0.3	0.5%
28.4%	55.0	55.3	0.3	0.6%
29.6%	54.9	55.2	0.4	0.7%
30.9%	54.8	55.1	0.3	0.5%
32.1%	54.8	55.0	0.2	0.5%
33.3%	54.7	55.0	0.3	0.5%
34.6%	54.7	55.0	0.2	0.4%
35.8%	54.6	54.8	0.2	0.3%
37.0%	54.6	54.8	0.2	0.3%
38.3%	54.6	54.7	0.2	0.3%
39.5%	54.6	54.7	0.2	0.3%
40.7%	54.6	54.6	0.1	0.1%
42.0%	54.5	54.6	0.0	0.1%
43.2%	54.5	54.5	0.1	0.1%
44.4%	54.4	54.5	0.1	0.2%
45.7%	54.3	54.5	0.2	0.3%
46.9%	54.2	54.4	0.2	0.4%
48.1%	54.2	54.4	0.2	0.4%
49.4%	54.2	54.3	0.2	0.3%
50.6%	54.1	54.3	0.2	0.3%
51.9%	54.1	54.3	0.2	0.4%
53.1%	54.0	54.2	0.2	0.4%
54.3%	53.9	54.2	0.3	0.5%
55.6%	53.9	54.2	0.3	0.5%
56.8%	53.9	54.1	0.2	0.4%
58.0%	53.8	54.1	0.3	0.5%
59.3%	53.8	54.1	0.3	0.5%
60.5%	53.8	54.0	0.2	0.3%
61.7%	53.8	54.0	0.2	0.3%
63.0%	53.7	53.9	0.2	0.4%
64.2%	53.7	53.9	0.2	0.4%
65.4%	53.7	53.9	0.2	0.4%
66.7%	53.6	53.9	0.3	0.5%
67.9%	53.5	53.8	0.3	0.6%
69.1%	53.5	53.8	0.3	0.5%
70.4%	53.4	53.7	0.3	0.6%
71.6%	53.3	53.7	0.3	0.6%
72.8%	53.3	53.5	0.2	0.4%
74.1%	53.3	53.4	0.1	0.2%
75.3%	53.2	53.3	0.1	0.2%
76.5%	53.2	53.2	0.1	0.2%
77.8%	53.1	53.2	0.1	0.2%
79.0%	53.0	53.2	0.1	0.3%
80.2%	53.0	53.2	0.1	0.3%
81.5%	52.8	53.1	0.3	0.6%
82.7%	52.8	52.9	0.1	0.2%
84.0%	52.7	52.8	0.1	0.3%
85.2%	52.6	52.8	0.2	0.3%
86.4%	52.5	52.3	-0.1	-0.3%
87.7%	52.2	52.2	0.0	0.0%
88.9%	52.1	52.1	0.0	0.0%
90.1%	52.1	52.1	0.0	0.0%
91.4%	52.0	52.1	0.1	0.1%
92.6%	51.9	51.9	0.0	-0.1%
93.8%	51.8	51.9	0.1	0.1%
95.1%	51.8	51.9	0.1	0.1%
96.3%	51.8	51.8	0.1	0.1%
97.5%	50.7	50.7	0.0	0.0%
98.8%	50.4	50.5	0.0	0.0%
100.0%	50.4	50.5	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.3	61.0	-0.2	-0.3%
1.2%	59.8	60.8	1.0	1.6%
2.5%	59.3	60.8	1.4	2.4%
3.7%	59.2	60.1	0.9	1.6%
4.9%	59.1	59.9	0.8	1.4%
6.2%	59.0	59.8	0.7	1.2%
7.4%	58.9	59.7	0.7	1.2%
8.6%	58.9	59.2	0.3	0.5%
9.9%	58.9	59.2	0.3	0.6%
11.1%	58.8	59.1	0.3	0.5%
12.3%	58.8	59.1	0.3	0.5%
13.6%	58.7	59.1	0.5	0.8%
14.8%	58.6	59.1	0.5	0.9%
16.0%	58.5	59.1	0.6	1.0%
17.3%	58.4	59.1	0.6	1.0%
18.5%	58.3	59.0	0.8	1.3%
19.8%	58.2	59.0	0.8	1.4%
21.0%	58.1	58.8	0.7	1.2%
22.2%	58.1	58.8	0.7	1.2%
23.5%	58.1	58.8	0.7	1.2%
24.7%	57.9	58.7	0.7	1.2%
25.9%	57.9	58.6	0.7	1.2%
27.2%	57.9	58.6	0.7	1.3%
28.4%	57.8	58.4	0.6	1.0%
29.6%	57.8	58.4	0.6	1.0%
30.9%	57.6	58.1	0.5	0.9%
32.1%	57.6	58.1	0.6	1.0%
33.3%	57.5	58.1	0.6	1.1%
34.6%	57.5	58.0	0.6	1.0%
35.8%	57.4	57.9	0.5	0.9%
37.0%	57.4	57.9	0.5	0.9%
38.3%	57.4	57.9	0.5	0.9%
39.5%	57.3	57.9	0.6	1.0%
40.7%	57.2	57.8	0.5	0.9%
42.0%	57.1	57.7	0.6	1.1%
43.2%	57.1	57.6	0.5	0.8%
44.4%	57.0	57.5	0.5	0.9%
45.7%	56.9	57.4	0.5	0.9%
46.9%	56.9	57.4	0.5	0.8%
48.1%	56.8	57.4	0.6	1.0%
49.4%	56.7	57.3	0.6	1.1%
50.6%	56.7	57.3	0.6	1.1%
51.9%	56.7	57.3	0.6	1.1%
53.1%	56.6	57.3	0.6	1.1%
54.3%	56.6	57.3	0.6	1.1%
55.6%	56.6	57.2	0.6	1.0%
56.8%	56.6	57.2	0.6	1.1%
58.0%	56.6	57.1	0.6	1.0%
59.3%	56.5	57.1	0.5	1.0%
60.5%	56.5	57.0	0.5	1.0%
61.7%	56.4	57.0	0.5	1.0%
63.0%	56.4	57.0	0.6	1.0%
64.2%	56.4	56.8	0.4	0.7%
65.4%	56.4	56.8	0.4	0.7%
66.7%	56.4	56.7	0.4	0.7%
67.9%	56.3	56.7	0.4	0.6%
69.1%	56.3	56.7	0.4	0.7%
70.4%	56.2	56.7	0.4	0.8%
71.6%	56.2	56.6	0.4	0.8%
72.8%	56.2	56.6	0.4	0.7%
74.1%	56.2	56.6	0.4	0.7%
75.3%	56.2	56.6	0.4	0.8%
76.5%	56.1	56.3	0.2	0.4%
77.8%	56.1	56.2	0.2	0.3%
79.0%	56.0	56.2	0.2	0.4%
80.2%	55.9	56.2	0.3	0.5%
81.5%	55.9	56.2	0.3	0.6%
82.7%	55.9	56.2	0.3	0.6%
84.0%	55.8	56.2	0.4	0.7%
85.2%	55.7	56.1	0.3	0.6%
86.4%	55.7	56.1	0.3	0.6%
87.7%	55.7	56.0	0.3	0.5%
88.9%	55.6	55.8	0.3	0.5%
90.1%	55.5	55.8	0.3	0.5%
91.4%	55.3	55.7	0.4	0.8%
92.6%	55.1	55.4	0.3	0.5%
93.8%	55.1	55.1	0.1	0.1%
95.1%	54.9	54.9	0.0	0.0%
96.3%	54.7	54.7	0.0	0.0%
97.5%	54.3	54.6	0.3	0.6%
98.8%	54.3	54.5	0.2	0.4%
100.0%	54.3	54.5	0.2	0.4%

Table SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.9	60.8	-0.1	-0.1%
1.2%	60.5	60.7	0.1	0.2%
2.5%	60.5	60.0	-0.4	-0.7%
3.7%	60.4	60.0	-0.5	-0.7%
4.9%	60.2	59.9	-0.3	-0.5%
6.2%	60.2	59.8	-0.3	-0.5%
7.4%	60.0	59.8	-0.2	-0.3%
8.6%	59.6	59.8	0.2	0.4%
9.9%	59.6	59.7	0.2	0.3%
11.1%	59.4	59.5	0.1	0.1%
12.3%	59.3	59.2	-0.1	-0.2%
13.6%	59.3	59.2	0.0	-0.1%
14.8%	59.2	59.2	0.0	0.0%
16.0%	59.2	59.1	0.0	0.0%
17.3%	59.1	59.1	0.0	-0.1%
18.5%	58.8	59.0	0.2	0.4%
19.8%	58.7	59.0	0.3	0.5%
21.0%	58.6	59.0	0.3	0.6%
22.2%	58.6	58.8	0.2	0.4%
23.5%	58.6	58.8	0.2	0.4%
24.7%	58.5	58.8	0.3	0.5%
25.9%	58.5	58.8	0.3	0.5%
27.2%	58.4	58.8	0.3	0.6%
28.4%	58.4	58.7	0.3	0.5%
29.6%	58.4	58.6	0.2	0.4%
30.9%	58.3	58.6	0.2	0.4%
32.1%	58.2	58.6	0.3	0.6%
33.3%	58.2	58.6	0.4	0.7%
34.6%	58.2	58.6	0.4	0.7%
35.8%	58.0	58.5	0.5	0.8%
37.0%	57.9	58.4	0.5	0.9%
38.3%	57.9	58.4	0.5	0.9%
39.5%	57.8	58.4	0.5	0.9%
40.7%	57.8	58.3	0.5	0.8%
42.0%	57.8	58.3	0.5	0.9%
43.2%	57.7	58.2	0.6	1.0%
44.4%	57.7	58.2	0.5	0.9%
45.7%	57.6	58.2	0.6	1.0%
46.9%	57.6	58.1	0.5	0.9%
48.1%	57.5	58.1	0.5	0.9%
49.4%	57.5	58.0	0.5	1.0%
50.6%	57.5	58.0	0.5	0.9%
51.9%	57.4	58.0	0.6	1.0%
53.1%	57.4	58.0	0.6	1.1%
54.3%	57.4	57.9	0.6	1.0%
55.6%	57.3	57.9	0.6	1.1%
56.8%	57.3	57.9	0.6	1.1%
58.0%	57.3	57.9	0.7	1.1%
59.3%	57.3	57.9	0.7	1.2%
60.5%	57.2	57.8	0.5	0.9%
61.7%	57.2	57.7	0.5	0.9%
63.0%	57.2	57.6	0.4	0.7%
64.2%	57.1	57.5	0.5	0.8%
65.4%	57.1	57.5	0.5	0.8%
66.7%	57.0	57.5	0.5	0.8%
67.9%	57.0	57.5	0.4	0.8%
69.1%	57.0	57.5	0.5	0.8%
70.4%	56.9	57.4	0.5	0.9%
71.6%	56.9	57.4	0.5	0.9%
72.8%	56.9	57.3	0.4	0.8%
74.1%	56.8	57.3	0.5	0.9%
75.3%	56.5	57.2	0.7	1.2%
76.5%	56.5	57.2	0.7	1.2%
77.8%	56.5	57.2	0.7	1.2%
79.0%	56.5	57.1	0.7	1.2%
80.2%	56.4	57.1	0.7	1.2%
81.5%	56.4	57.0	0.7	1.2%
82.7%	56.3	57.0	0.7	1.2%
84.0%	56.3	56.9	0.6	1.1%
85.2%	56.3	56.9	0.6	1.1%
86.4%	56.3	56.9	0.6	1.1%
87.7%	56.3	56.9	0.6	1.1%
88.9%	56.1	56.9	0.8	1.4%
90.1%	56.1	56.8	0.8	1.4%
91.4%	56.1	56.8	0.8	1.4%
92.6%	56.0	56.8	0.8	1.4%
93.8%	56.0	56.7	0.7	1.3%
95.1%	55.9	56.5	0.6	1.1%
96.3%	55.8	56.4	0.5	1.0%
97.5%	55.6	56.3	0.7	1.3%
98.8%	55.4	56.2	0.8	1.5%
100.0%	55.4	56.2	0.8	1.5%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.0	61.4	-0.7	-1.1%
1.2%	61.6	61.3	-0.2	-0.4%
2.5%	61.1	61.1	0.0	0.0%
3.7%	61.0	61.0	0.0	0.0%
4.9%	61.0	60.9	-0.1	-0.2%
6.2%	60.8	60.8	0.0	0.0%
7.4%	60.6	60.6	0.0	0.0%
8.6%	60.6	60.6	-0.1	-0.1%
9.9%	60.5	60.6	0.0	0.0%
11.1%	60.5	60.5	0.0	0.0%
12.3%	60.5	60.3	-0.1	-0.2%
13.6%	60.3	60.3	0.0	0.0%
14.8%	60.2	60.2	0.0	0.1%
16.0%	60.0	60.2	0.2	0.3%
17.3%	59.8	60.0	0.2	0.3%
18.5%	59.6	60.0	0.4	0.6%
19.8%	59.6	60.0	0.4	0.7%
21.0%	59.6	59.8	0.3	0.4%
22.2%	59.5	59.6	0.1	0.2%
23.5%	59.5	59.6	0.1	0.2%
24.7%	59.4	59.6	0.1	0.2%
25.9%	59.4	59.6	0.1	0.2%
27.2%	59.3	59.6	0.2	0.4%
28.4%	59.3	59.5	0.2	0.3%
29.6%	59.3	59.5	0.1	0.2%
30.9%	59.2	59.4	0.2	0.3%
32.1%	59.2	59.4	0.2	0.4%
33.3%	59.2	59.4	0.2	0.4%
34.6%	59.0	59.3	0.3	0.5%
35.8%	59.0	59.3	0.3	0.5%
37.0%	59.0	59.2	0.3	0.4%
38.3%	59.0	59.2	0.3	0.4%
39.5%	58.9	59.0	0.1	0.2%
40.7%	58.7	58.9	0.2	0.3%
42.0%	58.7	58.9	0.2	0.4%
43.2%	58.7	58.9	0.2	0.3%
44.4%	58.5	58.7	0.2	0.4%
45.7%	58.5	58.7	0.2	0.3%
46.9%	58.5	58.6	0.2	0.3%
48.1%	58.3	58.6	0.3	0.6%
49.4%	58.3	58.6	0.3	0.5%
50.6%	58.3	58.6	0.3	0.6%
51.9%	58.2	58.6	0.3	0.6%
53.1%	58.2	58.5	0.4	0.6%
54.3%	58.1	58.4	0.3	0.5%
55.6%	58.0	58.4	0.4	0.7%
56.8%	58.0	58.4	0.4	0.6%
58.0%	57.9	58.3	0.4	0.7%
59.3%	57.9	58.3	0.4	0.7%
60.5%	57.9	58.3	0.4	0.6%
61.7%	57.9	58.2	0.3	0.4%
63.0%	57.8	58.1	0.3	0.5%
64.2%	57.8	58.1	0.3	0.5%
65.4%	57.8	58.1	0.4	0.6%
66.7%	57.7	58.1	0.4	0.6%
67.9%	57.7	58.0	0.3	0.6%
69.1%	57.7	57.9	0.3	0.4%
70.4%	57.7	57.9	0.2	0.4%
71.6%	57.7	57.9	0.2	0.4%
72.8%	57.6	57.8	0.2	0.4%
74.1%	57.6	57.8	0.2	0.4%
75.3%	57.5	57.8	0.2	0.4%
76.5%	57.5	57.7	0.2	0.3%
77.8%	57.5	57.7	0.2	0.3%
79.0%	57.4	57.6	0.2	0.4%
80.2%	57.4	57.6	0.2	0.4%
81.5%	57.4	57.6	0.2	0.4%
82.7%	57.2	57.4	0.2	0.4%
84.0%	57.2	57.4	0.2	0.4%
85.2%	57.1	57.4	0.3	0.5%
86.4%	57.1	57.3	0.3	0.5%
87.7%	56.9	57.2	0.3	0.6%
88.9%	56.9	57.0	0.2	0.3%
90.1%	56.9	56.9	0.1	0.1%
91.4%	56.8	56.9	0.0	0.1%
92.6%	56.7	56.8	0.1	0.2%
93.8%	56.6	56.8	0.2	0.4%
95.1%	56.6	56.8	0.2	0.4%
96.3%	56.5	56.7	0.2	0.3%
97.5%	56.5	56.7	0.2	0.3%
98.8%	56.4	56.6	0.2	0.4%
100.0%	56.4	56.6	0.2	0.4%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.1	64.6	-4.5	-6.5%
1.2%	63.2	61.9	-1.3	-2.0%
2.5%	63.0	61.7	-1.4	-2.1%
3.7%	63.0	61.4	-1.6	-2.5%
4.9%	62.2	61.2	-1.0	-1.6%
6.2%	62.2	61.2	-1.0	-1.6%
7.4%	62.0	61.1	-0.9	-1.5%
8.6%	62.0	61.1	-0.9	-1.4%
9.9%	61.9	61.1	-0.8	-1.3%
11.1%	61.7	61.0	-0.7	-1.2%
12.3%	61.7	60.9	-0.8	-1.2%
13.6%	61.4	60.9	-0.4	-0.7%
14.8%	61.3	60.8	-0.5	-0.8%
16.0%	61.3	60.8	-0.5	-0.8%
17.3%	61.3	60.8	-0.5	-0.8%
18.5%	61.3	60.8	-0.5	-0.7%
19.8%	61.2	60.8	-0.4	-0.7%
21.0%	61.1	60.7	-0.4	-0.7%
22.2%	61.1	60.6	-0.5	-0.8%
23.5%	61.0	60.6	-0.4	-0.6%
24.7%	60.9	60.6	-0.4	-0.6%
25.9%	60.9	60.6	-0.3	-0.5%
27.2%	60.9	60.5	-0.4	-0.6%
28.4%	60.8	60.5	-0.4	-0.6%
29.6%	60.8	60.4	-0.4	-0.6%
30.9%	60.8	60.4	-0.4	-0.6%
32.1%	60.8	60.3	-0.5	-0.8%
33.3%	60.6	60.2	-0.4	-0.6%
34.6%	60.6	60.1	-0.4	-0.7%
35.8%	60.5	60.1	-0.4	-0.6%
37.0%	60.5	60.1	-0.4	-0.6%
38.3%	60.4	60.1	-0.4	-0.6%
39.5%	60.4	60.0	-0.4	-0.6%
40.7%	60.3	60.0	-0.3	-0.5%
42.0%	60.2	60.0	-0.2	-0.3%
43.2%	60.2	60.0	-0.2	-0.3%
44.4%	60.2	60.0	-0.2	-0.3%
45.7%	60.1	59.9	-0.2	-0.4%
46.9%	60.1	59.9	-0.2	-0.3%
48.1%	60.0	59.9	-0.1	-0.2%
49.4%	60.0	59.9	-0.1	-0.2%
50.6%	60.0	59.8	-0.2	-0.3%
51.9%	59.9	59.8	-0.1	-0.2%
53.1%	59.8	59.8	-0.1	-0.1%
54.3%	59.8	59.7	-0.1	-0.2%
55.6%	59.6	59.7	0.1	0.1%
56.8%	59.6	59.7	0.1	0.1%
58.0%	59.5	59.6	0.1	0.2%
59.3%	59.5	59.5	0.0	0.1%
60.5%	59.5	59.5	0.1	0.1%
61.7%	59.4	59.5	0.1	0.2%
63.0%	59.4	59.5	0.1	0.2%
64.2%	59.3	59.5	0.2	0.3%
65.4%	59.3	59.4	0.1	0.2%
66.7%	59.3	59.3	0.1	0.1%
67.9%	59.2	59.3	0.0	0.0%
69.1%	59.2	59.2	-0.1	-0.1%
70.4%	59.2	59.2	-0.1	-0.1%
71.6%	59.2	59.1	-0.1	-0.1%
72.8%	59.2	59.1	-0.1	-0.2%
74.1%	59.1	59.1	0.0	0.0%
75.3%	59.0	59.1	0.0	0.0%
76.5%	59.0	58.9	-0.1	-0.2%
77.8%	59.0	58.8	-0.2	-0.3%
79.0%	59.0	58.8	-0.2	-0.3%
80.2%	58.9	58.7	-0.3	-0.5%
81.5%	58.9	58.6	-0.3	-0.4%
82.7%	58.9	58.6	-0.3	-0.5%
84.0%	58.9	58.6	-0.3	-0.5%
85.2%	58.8	58.6	-0.2	-0.4%
86.4%	58.8	58.5	-0.3	-0.5%
87.7%	58.8	58.4	-0.3	-0.6%
88.9%	58.8	58.4	-0.4	-0.7%
90.1%	58.5	58.2	-0.3	-0.5%
91.4%	58.4	58.1	-0.3	-0.5%
92.6%	58.2	58.0	-0.2	-0.3%
93.8%	57.9	58.0	0.1	0.1%
95.1%	57.3	57.9	0.6	1.0%
96.3%	57.2	57.9	0.7	1.2%
97.5%	57.0	57.9	0.9	1.6%
98.8%	56.8	57.8	1.0	1.8%
100.0%	56.8	57.8	1.0	1.8%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.9	68.4	0.5	0.7%
1.2%	67.0	64.2	-2.8	-4.1%
2.5%	66.6	63.8	-2.8	-4.3%
3.7%	64.4	62.4	-1.9	-3.0%
4.9%	64.0	62.2	-1.9	-2.9%
6.2%	63.3	61.9	-1.4	-2.2%
7.4%	62.8	61.7	-1.2	-1.9%
8.6%	62.7	61.6	-1.1	-1.7%
9.9%	62.6	61.3	-1.3	-2.1%
11.1%	62.5	61.3	-1.2	-1.9%
12.3%	62.3	61.2	-1.1	-1.7%
13.6%	62.2	61.1	-1.1	-1.8%
14.8%	62.1	61.1	-1.1	-1.7%
16.0%	62.1	60.9	-1.2	-1.9%
17.3%	62.1	60.8	-1.3	-2.1%
18.5%	61.7	60.7	-1.1	-1.7%
19.8%	61.5	60.7	-0.9	-1.4%
21.0%	61.4	60.6	-0.8	-1.3%
22.2%	61.3	60.5	-0.8	-1.4%
23.5%	61.2	60.5	-0.7	-1.2%
24.7%	61.2	60.4	-0.8	-1.2%
25.9%	61.1	60.4	-0.7	-1.1%
27.2%	61.1	60.4	-0.7	-1.1%
28.4%	61.0	60.4	-0.6	-1.0%
29.6%	61.0	60.4	-0.6	-1.0%
30.9%	60.9	60.2	-0.6	-1.0%
32.1%	60.6	60.1	-0.5	-0.8%
33.3%	60.6	60.1	-0.5	-0.9%
34.6%	60.6	60.1	-0.5	-0.8%
35.8%	60.5	60.0	-0.5	-0.7%
37.0%	60.2	60.0	-0.3	-0.4%
38.3%	59.9	59.9	0.0	0.1%
39.5%	59.8	59.9	0.1	0.1%
40.7%	59.7	59.7	0.0	0.0%
42.0%	59.5	59.5	0.0	-0.1%
43.2%	59.4	59.2	-0.1	-0.2%
44.4%	59.2	59.2	0.0	0.0%
45.7%	59.1	59.2	0.1	0.1%
46.9%	58.9	59.2	0.3	0.4%
48.1%	58.9	59.2	0.3	0.4%
49.4%	58.8	59.1	0.4	0.6%
50.6%	58.4	59.0	0.5	0.9%
51.9%	58.3	58.9	0.6	1.0%
53.1%	58.3	58.7	0.4	0.8%
54.3%	58.2	58.7	0.5	0.9%
55.6%	58.1	58.5	0.5	0.8%
56.8%	58.0	58.4	0.4	0.8%
58.0%	57.9	58.4	0.5	0.9%
59.3%	57.8	58.2	0.4	0.7%
60.5%	57.6	58.1	0.5	0.8%
61.7%	57.5	57.9	0.4	0.7%
63.0%	57.5	57.9	0.4	0.7%
64.2%	57.5	57.8	0.3	0.6%
65.4%	57.2	57.8	0.5	0.9%
66.7%	57.2	57.6	0.4	0.7%
67.9%	57.2	57.6	0.4	0.7%
69.1%	57.2	57.6	0.4	0.7%
70.4%	57.1	57.6	0.5	0.9%
71.6%	57.1	57.4	0.3	0.6%
72.8%	56.9	57.3	0.4	0.7%
74.1%	56.8	57.1	0.3	0.5%
75.3%	56.7	57.1	0.4	0.7%
76.5%	56.7	56.9	0.2	0.3%
77.8%	56.3	56.6	0.2	0.4%
79.0%	56.3	56.4	0.1	0.2%
80.2%	56.1	56.3	0.2	0.3%
81.5%	56.0	56.2	0.2	0.3%
82.7%	56.0	56.2	0.2	0.3%
84.0%	55.6	56.1	0.5	0.9%
85.2%	55.5	55.9	0.4	0.8%
86.4%	55.5	55.9	0.4	0.8%
87.7%	55.4	55.8	0.3	0.6%
88.9%	55.2	55.8	0.6	1.0%
90.1%	55.1	55.6	0.6	1.0%
91.4%	55.0	55.6	0.6	1.0%
92.6%	54.9	55.2	0.3	0.6%
93.8%	54.8	54.7	-0.2	-0.3%
95.1%	54.8	54.5	-0.3	-0.6%
96.3%	54.0	54.2	0.2	0.3%
97.5%	53.7	54.0	0.3	0.5%
98.8%	53.7	53.8	0.1	0.2%
100.0%	53.7	53.8	0.1	0.2%

Table SQ8-1b

Sacramento River below Red Bluff, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.6	63.5	-1.1	-1.7%
1.2%	62.0	61.5	-0.5	-0.8%
2.5%	61.7	60.9	-0.8	-1.3%
3.7%	61.6	60.8	-0.8	-1.3%
4.9%	61.4	60.8	-0.7	-1.1%
6.2%	61.3	60.7	-0.5	-0.9%
7.4%	61.2	60.7	-0.6	-0.9%
8.6%	60.6	60.6	0.0	-0.1%
9.9%	60.5	60.3	-0.2	-0.3%
11.1%	60.4	60.1	-0.3	-0.5%
12.3%	60.4	60.1	-0.3	-0.4%
13.6%	60.3	60.1	-0.2	-0.3%
14.8%	60.3	60.1	-0.2	-0.4%
16.0%	60.2	60.0	-0.3	-0.4%
17.3%	60.2	60.0	-0.3	-0.4%
18.5%	60.2	59.9	-0.3	-0.5%
19.8%	60.0	59.7	-0.3	-0.4%
21.0%	59.8	59.7	-0.1	-0.2%
22.2%	59.8	59.6	-0.2	-0.3%
23.5%	59.8	59.6	-0.2	-0.3%
24.7%	59.8	59.6	-0.2	-0.3%
25.9%	59.7	59.6	-0.2	-0.3%
27.2%	59.7	59.6	-0.2	-0.3%
28.4%	59.6	59.5	-0.1	-0.3%
29.6%	59.6	59.5	-0.1	-0.2%
30.9%	59.6	59.4	-0.2	-0.3%
32.1%	59.6	59.4	-0.2	-0.4%
33.3%	59.6	59.3	-0.3	-0.5%
34.6%	59.4	59.3	-0.2	-0.3%
35.8%	59.4	59.2	-0.1	-0.2%
37.0%	59.3	59.2	-0.1	-0.2%
38.3%	59.2	59.2	0.0	0.0%
39.5%	59.1	59.2	0.1	0.1%
40.7%	59.1	59.2	0.1	0.1%
42.0%	59.0	59.2	0.1	0.2%
43.2%	58.9	59.2	0.2	0.4%
44.4%	58.9	59.1	0.1	0.2%
45.7%	58.9	59.0	0.1	0.2%
46.9%	58.9	58.9	0.0	0.1%
48.1%	58.8	58.9	0.1	0.1%
49.4%	58.6	58.9	0.3	0.5%
50.6%	58.5	58.8	0.3	0.5%
51.9%	58.5	58.7	0.2	0.3%
53.1%	58.5	58.6	0.1	0.2%
54.3%	58.4	58.6	0.1	0.2%
55.6%	58.4	58.5	0.1	0.2%
56.8%	58.3	58.4	0.1	0.2%
58.0%	58.3	58.4	0.2	0.3%
59.3%	58.2	58.4	0.2	0.3%
60.5%	58.2	58.4	0.1	0.2%
61.7%	58.2	58.4	0.1	0.3%
63.0%	58.2	58.4	0.1	0.2%
64.2%	58.2	58.3	0.2	0.3%
65.4%	58.1	58.3	0.2	0.4%
66.7%	58.1	58.3	0.3	0.4%
67.9%	58.1	58.3	0.2	0.4%
69.1%	58.0	58.3	0.3	0.4%
70.4%	57.9	58.2	0.4	0.6%
71.6%	57.9	58.2	0.3	0.6%
72.8%	57.9	58.2	0.3	0.6%
74.1%	57.8	58.2	0.4	0.6%
75.3%	57.8	58.0	0.2	0.3%
76.5%	57.7	58.0	0.2	0.4%
77.8%	57.7	57.9	0.2	0.4%
79.0%	57.7	57.9	0.3	0.5%
80.2%	57.6	57.9	0.3	0.6%
81.5%	57.5	57.9	0.5	0.8%
82.7%	57.4	57.9	0.5	0.9%
84.0%	57.4	57.7	0.4	0.7%
85.2%	57.3	57.7	0.4	0.7%
86.4%	57.2	57.5	0.3	0.5%
87.7%	57.1	57.3	0.2	0.4%
88.9%	57.0	57.3	0.3	0.5%
90.1%	57.0	57.2	0.2	0.4%
91.4%	56.9	57.2	0.2	0.4%
92.6%	56.9	57.1	0.2	0.4%
93.8%	56.6	57.1	0.4	0.7%
95.1%	56.6	57.0	0.4	0.7%
96.3%	56.6	56.9	0.3	0.5%
97.5%	56.3	56.6	0.3	0.5%
98.8%	56.2	56.3	0.1	0.2%
100.0%	55.8	55.7	-0.1	-0.2%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.3	64.8	-1.6	-2.4%
1.2%	63.2	62.3	-0.8	-1.3%
2.5%	62.8	61.8	-1.0	-1.6%
3.7%	62.5	61.7	-0.8	-1.3%
4.9%	62.5	61.4	-1.1	-1.7%
6.2%	61.9	61.1	-0.8	-1.4%
7.4%	61.9	60.9	-1.0	-1.7%
8.6%	61.7	60.9	-0.8	-1.3%
9.9%	61.1	60.8	-0.2	-0.4%
11.1%	61.1	60.8	-0.3	-0.5%
12.3%	61.0	60.7	-0.3	-0.5%
13.6%	61.0	60.7	-0.3	-0.5%
14.8%	60.9	60.7	-0.2	-0.3%
16.0%	60.8	60.6	-0.2	-0.3%
17.3%	60.8	60.4	-0.4	-0.6%
18.5%	60.7	60.3	-0.4	-0.6%
19.8%	60.7	60.3	-0.4	-0.6%
21.0%	60.7	60.2	-0.5	-0.8%
22.2%	60.6	60.0	-0.6	-1.0%
23.5%	60.6	60.0	-0.6	-1.0%
24.7%	60.5	60.0	-0.5	-0.9%
25.9%	60.4	59.9	-0.4	-0.7%
27.2%	60.4	59.9	-0.4	-0.7%
28.4%	60.3	59.9	-0.4	-0.7%
29.6%	60.1	59.9	-0.2	-0.3%
30.9%	60.0	59.9	-0.1	-0.2%
32.1%	59.9	59.8	-0.2	-0.3%
33.3%	59.9	59.7	-0.2	-0.3%
34.6%	59.6	59.7	0.0	0.1%
35.8%	59.6	59.6	0.0	-0.1%
37.0%	59.4	59.5	0.1	0.2%
38.3%	59.4	59.5	0.1	0.2%
39.5%	59.4	59.5	0.1	0.1%
40.7%	59.4	59.4	0.0	0.0%
42.0%	59.3	59.3	0.0	0.0%
43.2%	59.3	59.3	0.0	0.0%
44.4%	59.0	59.2	0.3	0.4%
45.7%	59.0	59.0	0.0	0.1%
46.9%	58.9	59.0	0.1	0.1%
48.1%	58.9	58.9	0.0	0.1%
49.4%	58.8	58.9	0.1	0.2%
50.6%	58.8	58.9	0.1	0.2%
51.9%	58.8	58.8	0.0	0.1%
53.1%	58.7	58.8	0.0	0.1%
54.3%	58.7	58.8	0.0	0.0%
55.6%	58.7	58.7	0.0	-0.1%
56.8%	58.6	58.7	0.0	0.1%
58.0%	58.6	58.5	-0.1	-0.2%
59.3%	58.6	58.5	-0.1	-0.2%
60.5%	58.6	58.4	-0.2	-0.3%
61.7%	58.5	58.4	-0.1	-0.2%
63.0%	58.4	58.4	0.0	-0.1%
64.2%	58.4	58.4	0.0	-0.1%
65.4%	58.4	58.4	0.0	0.0%
66.7%	58.3	58.3	0.0	0.0%
67.9%	58.2	58.3	0.1	0.2%
69.1%	58.2	58.3	0.1	0.2%
70.4%	58.1	58.3	0.1	0.2%
71.6%	58.1	58.3	0.1	0.2%
72.8%	58.1	58.2	0.1	0.2%
74.1%	58.0	58.2	0.2	0.3%
75.3%	57.9	58.2	0.3	0.4%
76.5%	57.9	58.2	0.3	0.5%
77.8%	57.9	58.1	0.3	0.4%
79.0%	57.8	58.1	0.3	0.6%
80.2%	57.7	58.1	0.3	0.6%
81.5%	57.7	58.1	0.4	0.7%
82.7%	57.6	58.1	0.5	0.8%
84.0%	57.5	58.0	0.4	0.8%
85.2%	57.4	57.9	0.5	0.9%
86.4%	57.3	57.8	0.5	0.8%
87.7%	57.3	57.6	0.3	0.6%
88.9%	57.2	57.4	0.2	0.4%
90.1%	57.1	57.1	-0.1	-0.1%
91.4%	57.1	57.0	-0.1	-0.2%
92.6%	56.9	57.0	0.1	0.2%
93.8%	56.8	56.9	0.1	0.2%
95.1%	56.7	56.8	0.2	0.3%
96.3%	56.7	56.7	0.1	0.1%
97.5%	56.5	56.5	-0.1	-0.2%
98.8%	56.2	56.3	0.1	0.2%
100.0%	55.7	55.4	-0.2	-0.4%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.5	66.5	-2.0	-2.9%
1.2%	64.6	62.8	-1.8	-2.8%
2.5%	64.4	62.5	-1.9	-3.0%
3.7%	63.8	62.2	-1.6	-2.5%
4.9%	63.5	61.8	-1.7	-2.7%
6.2%	62.6	61.4	-1.2	-1.9%
7.4%	62.4	61.2	-1.2	-1.9%
8.6%	62.1	61.1	-0.9	-1.5%
9.9%	62.0	61.0	-1.0	-1.6%
11.1%	62.0	61.0	-1.0	-1.6%
12.3%	61.7	61.0	-0.8	-1.2%
13.6%	61.6	60.8	-0.8	-1.3%
14.8%	61.5	60.8	-0.7	-1.2%
16.0%	61.5	60.8	-0.8	-1.2%
17.3%	61.5	60.7	-0.8	-1.2%
18.5%	61.4	60.7	-0.7	-1.1%
19.8%	61.3	60.6	-0.6	-1.0%
21.0%	61.2	60.6	-0.6	-0.9%
22.2%	61.1	60.5	-0.6	-1.0%
23.5%	61.0	60.4	-0.6	-0.9%
24.7%	61.0	60.3	-0.7	-1.2%
25.9%	60.9	60.2	-0.7	-1.1%
27.2%	60.9	60.2	-0.6	-1.1%
28.4%	60.8	60.2	-0.6	-0.9%
29.6%	60.8	60.2	-0.6	-0.9%
30.9%	60.4	60.2	-0.2	-0.4%
32.1%	60.4	60.2	-0.2	-0.3%
33.3%	60.3	60.2	-0.2	-0.3%
34.6%	60.0	60.1	0.0	0.1%
35.8%	59.9	60.0	0.1	0.1%
37.0%	59.8	59.8	-0.1	-0.2%
38.3%	59.7	59.6	-0.1	-0.1%
39.5%	59.7	59.6	0.0	-0.1%
40.7%	59.6	59.5	-0.1	-0.2%
42.0%	59.6	59.5	-0.2	-0.3%
43.2%	59.6	59.5	-0.2	-0.3%
44.4%	59.6	59.3	-0.3	-0.5%
45.7%	59.5	59.3	-0.2	-0.3%
46.9%	59.4	59.3	-0.1	-0.1%
48.1%	59.3	59.3	0.0	0.0%
49.4%	59.2	59.2	0.0	-0.1%
50.6%	59.2	59.2	-0.1	-0.1%
51.9%	59.1	59.2	0.1	0.2%
53.1%	59.1	59.1	0.0	0.0%
54.3%	59.0	59.0	0.0	0.0%
55.6%	58.9	58.9	0.0	-0.1%
56.8%	58.8	58.8	-0.1	-0.1%
58.0%	58.8	58.7	-0.1	-0.1%
59.3%	58.8	58.7	-0.1	-0.1%
60.5%	58.7	58.7	0.0	0.0%
61.7%	58.6	58.7	0.1	0.1%
63.0%	58.6	58.7	0.1	0.1%
64.2%	58.6	58.7	0.1	0.2%
65.4%	58.4	58.6	0.2	0.4%
66.7%	58.4	58.6	0.2	0.3%
67.9%	58.4	58.5	0.1	0.3%
69.1%	58.3	58.5	0.2	0.3%
70.4%	58.1	58.5	0.4	0.6%
71.6%	58.0	58.5	0.4	0.7%
72.8%	58.0	58.3	0.3	0.5%
74.1%	58.0	58.2	0.2	0.4%
75.3%	58.0	58.2	0.2	0.3%
76.5%	58.0	58.2	0.2	0.3%
77.8%	58.0	58.2	0.2	0.3%
79.0%	57.9	58.2	0.3	0.5%
80.2%	57.8	58.1	0.3	0.5%
81.5%	57.8	57.9	0.1	0.2%
82.7%	57.7	57.8	0.1	0.2%
84.0%	57.6	57.8	0.1	0.2%
85.2%	57.6	57.7	0.2	0.3%
86.4%	57.4	57.7	0.3	0.5%
87.7%	57.2	57.5	0.3	0.5%
88.9%	57.2	57.3	0.1	0.2%
90.1%	57.1	57.2	0.2	0.3%
91.4%	57.0	57.0	0.0	0.0%
92.6%	56.9	56.8	-0.1	-0.1%
93.8%	56.6	56.8	0.3	0.5%
95.1%	56.2	56.6	0.3	0.6%
96.3%	56.1	56.3	0.2	0.3%
97.5%	56.1	56.0	-0.1	-0.1%
98.8%	56.0	55.9	-0.1	-0.2%
100.0%	55.1	54.7	-0.4	-0.6%

Figure SQ9-1b
American River below Nimbus Dam, Monthly Temperature
Probability of Exceedance

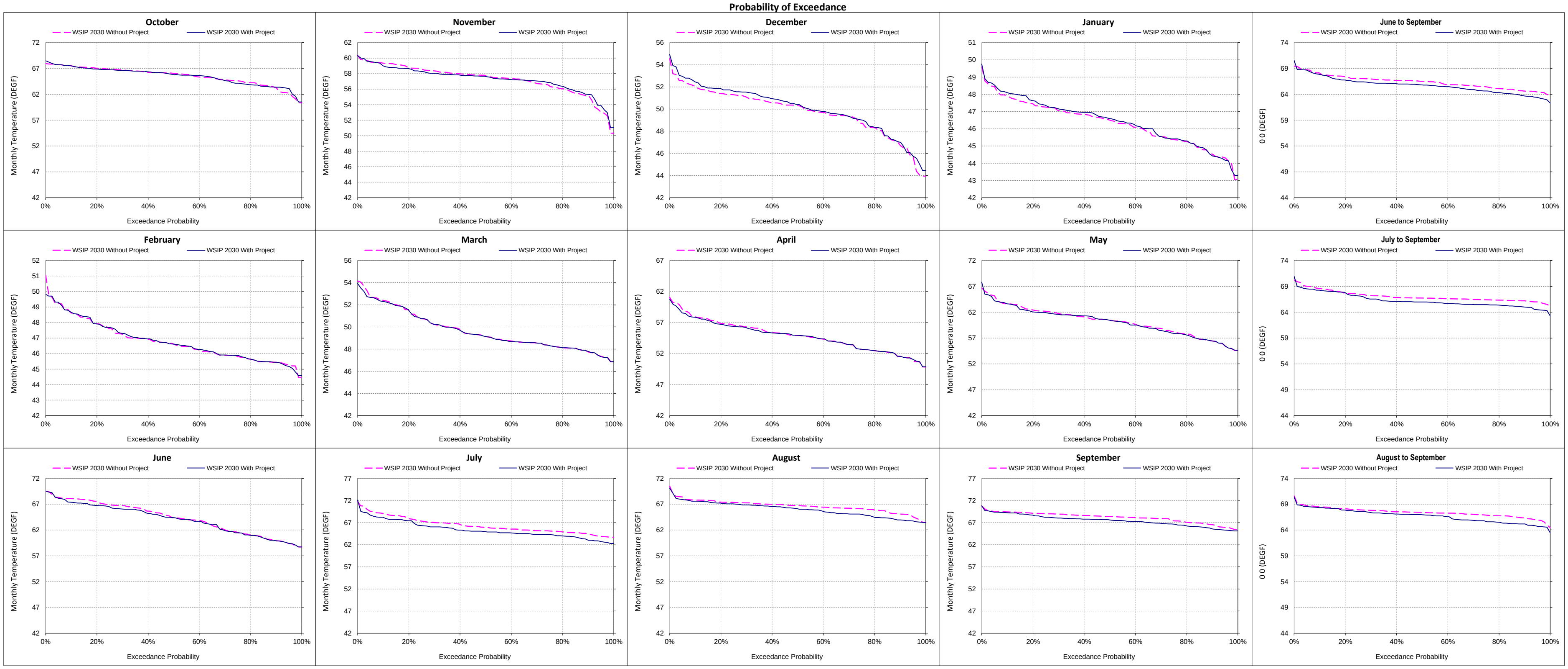


Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.9	68.5	0.6	0.8%
1.2%	67.9	68.3	0.4	0.6%
2.5%	67.9	68.0	0.1	0.2%
3.7%	67.8	67.8	-0.1	-0.1%
4.9%	67.7	67.7	0.0	0.0%
6.2%	67.7	67.7	0.0	0.0%
7.4%	67.6	67.6	0.0	0.0%
8.6%	67.5	67.5	0.0	0.0%
9.9%	67.5	67.5	0.0	0.0%
11.1%	67.4	67.4	0.0	0.0%
12.3%	67.3	67.3	-0.1	-0.1%
13.6%	67.3	67.2	-0.1	-0.2%
14.8%	67.2	67.1	-0.1	-0.2%
16.0%	67.2	67.0	-0.2	-0.2%
17.3%	67.2	67.0	-0.2	-0.3%
18.5%	67.1	66.9	-0.2	-0.3%
19.8%	67.1	66.9	-0.2	-0.2%
21.0%	67.0	66.8	-0.2	-0.3%
22.2%	67.0	66.8	-0.2	-0.3%
23.5%	66.9	66.8	-0.1	-0.2%
24.7%	66.9	66.8	-0.1	-0.2%
25.9%	66.9	66.7	-0.1	-0.2%
27.2%	66.8	66.7	-0.1	-0.2%
28.4%	66.8	66.6	-0.1	-0.2%
29.6%	66.7	66.6	-0.1	-0.2%
30.9%	66.7	66.6	-0.1	-0.1%
32.1%	66.6	66.6	0.0	0.0%
33.3%	66.6	66.5	-0.1	-0.1%
34.6%	66.5	66.5	0.0	0.0%
35.8%	66.5	66.5	0.0	0.0%
37.0%	66.5	66.5	0.0	0.0%
38.3%	66.4	66.5	0.1	0.1%
39.5%	66.2	66.4	0.1	0.2%
40.7%	66.2	66.3	0.1	0.1%
42.0%	66.2	66.2	0.0	0.0%
43.2%	66.2	66.2	0.0	0.0%
44.4%	66.2	66.2	0.0	0.1%
45.7%	66.2	66.2	0.0	0.0%
46.9%	66.2	66.1	-0.1	-0.2%
48.1%	66.2	65.9	-0.2	-0.3%
49.4%	66.1	65.9	-0.2	-0.3%
50.6%	66.0	65.8	-0.1	-0.2%
51.9%	66.0	65.8	-0.2	-0.3%
53.1%	65.9	65.7	-0.2	-0.4%
54.3%	65.8	65.7	-0.1	-0.2%
55.6%	65.8	65.7	-0.1	-0.2%
56.8%	65.8	65.7	-0.1	-0.1%
58.0%	65.5	65.7	0.2	0.3%
59.3%	65.4	65.7	0.3	0.4%
60.5%	65.3	65.6	0.3	0.4%
61.7%	65.2	65.6	0.3	0.5%
63.0%	65.2	65.4	0.2	0.4%
64.2%	65.2	65.4	0.2	0.3%
65.4%	65.2	65.2	0.0	0.0%
66.7%	65.0	65.1	0.1	0.1%
67.9%	64.9	64.8	-0.1	-0.2%
69.1%	64.9	64.8	-0.1	-0.1%
70.4%	64.8	64.6	-0.2	-0.3%
71.6%	64.7	64.6	-0.1	-0.2%
72.8%	64.7	64.2	-0.5	-0.7%
74.1%	64.7	64.2	-0.5	-0.8%
75.3%	64.6	64.1	-0.5	-0.7%
76.5%	64.5	64.0	-0.5	-0.8%
77.8%	64.3	64.0	-0.3	-0.5%
79.0%	64.3	63.9	-0.4	-0.6%
80.2%	64.2	63.8	-0.4	-0.6%
81.5%	64.2	63.8	-0.5	-0.7%
82.7%	64.1	63.8	-0.3	-0.5%
84.0%	63.8	63.6	-0.2	-0.3%
85.2%	63.7	63.6	-0.2	-0.3%
86.4%	63.7	63.5	-0.2	-0.3%
87.7%	63.7	63.4	-0.2	-0.4%
88.9%	63.5	63.4	0.0	-0.1%
90.1%	63.2	63.4	0.2	0.3%
91.4%	62.5	63.4	0.8	1.3%
92.6%	62.4	63.3	1.0	1.6%
93.8%	62.3	63.2	0.9	1.4%
95.1%	62.2	63.1	0.9	1.5%
96.3%	61.6	62.0	0.4	0.6%
97.5%	61.1	61.6	0.5	0.8%
98.8%	60.4	60.5	0.2	0.3%
100.0%	60.4	60.5	0.0	0.3%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.4	60.3	0.0	-0.1%
1.2%	59.8	60.0	0.2	0.3%
2.5%	59.7	59.9	0.2	0.3%
3.7%	59.7	59.6	-0.1	-0.2%
4.9%	59.5	59.6	0.1	0.1%
6.2%	59.5	59.5	0.0	0.1%
7.4%	59.4	59.4	0.0	0.0%
8.6%	59.4	59.4	-0.1	-0.2%
9.9%	59.4	59.0	-0.3	-0.6%
11.1%	59.3	58.9	-0.5	-0.8%
12.3%	59.3	58.8	-0.5	-0.8%
13.6%	59.3	58.8	-0.5	-0.8%
14.8%	59.2	58.8	-0.4	-0.7%
16.0%	59.1	58.7	-0.4	-0.7%
17.3%	59.1	58.7	-0.4	-0.7%
18.5%	59.0	58.7	-0.3	-0.6%
19.8%	58.8	58.7	-0.1	-0.2%
21.0%	58.7	58.6	-0.2	-0.3%
22.2%	58.7	58.4	-0.3	-0.6%
23.5%	58.7	58.4	-0.3	-0.6%
24.7%	58.7	58.3	-0.4	-0.7%
25.9%	58.5	58.3	-0.2	-0.4%
27.2%	58.4	58.1	-0.3	-0.5%
28.4%	58.4	58.0	-0.3	-0.6%
29.6%	58.4	58.0	-0.3	-0.6%
30.9%	58.3	58.0	-0.3	-0.5%
32.1%	58.2	58.0	-0.2	-0.4%
33.3%	58.2	57.9	-0.3	-0.5%
34.6%	58.2	57.9	-0.3	-0.5%
35.8%	58.1	57.9	-0.2	-0.3%
37.0%	58.0	57.9	-0.2	-0.3%
38.3%	58.0	57.8	-0.2	-0.3%
39.5%	58.0	57.8	-0.1	-0.3%
40.7%	58.0	57.8	-0.2	-0.3%
42.0%	57.9	57.8	-0.1	-0.3%
43.2%	57.9	57.8	-0.1	-0.3%
44.4%	57.8	57.7	-0.1	-0.2%
45.7%	57.8	57.7	-0.1	-0.2%
46.9%	57.8	57.7	-0.1	-0.2%
48.1%	57.8	57.7	-0.1	-0.2%
49.4%	57.8	57.7	-0.1	-0.3%
50.6%	57.7	57.6	-0.1	-0.1%
51.9%	57.6	57.5	-0.1	-0.1%
53.1%	57.5	57.4	-0.1	-0.2%
54.3%	57.5	57.4	-0.1	-0.2%
55.6%	57.5	57.3	-0.1	-0.2%
56.8%	57.4	57.3	-0.1	-0.2%
58.0%	57.4	57.3	-0.1	-0.2%
59.3%	57.4	57.3	-0.1	-0.2%
60.5%	57.4	57.2	-0.2	-0.3%
61.7%	57.3	57.2	-0.1	-0.2%
63.0%	57.3	57.2	-0.1	-0.2%
64.2%	57.3	57.2	-0.1	-0.2%
65.4%	57.1	57.2	0.0	0.1%
66.7%	57.1	57.1	0.1	0.1%
67.9%	56.9	57.1	0.2	0.3%
69.1%	56.8	57.1	0.3	0.5%
70.4%	56.7	57.1	0.4	0.6%
71.6%	56.7	57.0	0.3	0.6%
72.8%	56.6	57.0	0.4	0.6%
74.1%	56.6	56.9	0.3	0.5%
75.3%	56.3	56.8	0.5	0.9%
76.5%	56.2	56.6	0.4	0.7%
77.8%	56.2	56.6	0.4	0.7%
79.0%	56.1	56.4	0.3	0.6%
80.2%	56.1	56.4	0.3	0.6%
81.5%	56.0	56.2	0.2	0.4%
82.7%	55.8	56.0	0.2	0.4%
84.0%	55.6	55.9	0.3	0.6%
85.2%	55.4	55.7	0.3	0.6%
86.4%	55.4	55.7	0.3	0.5%
87.7%	55.3	55.6	0.3	0.5%
88.9%	55.2	55.4	0.2	0.3%
90.1%	55.2	55.3	0.1	0.2%
91.4%	54.6	55.3	0.7	1.2%
92.6%	53.7	54.6	1.0	1.8%
93.8%	53.4	53.9	0.5	0.9%
95.1%	53.0	53.9	0.8	1.6%
96.3%	52.9	53.3	0.4	0.8%
97.5%	52.5	53.0	0.4	0.8%
98.8%	50.3	51.0	0.7	1.4%
100.0%	50.3	51.0	0.7	1.4%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.6	54.9	0.4	0.7%
1.2%	53.2	53.9	0.8	1.4%
2.5%	53.1	53.8	0.7	1.3%
3.7%	52.6	53.0	0.5	0.9%
4.9%	52.6	53.0	0.4	0.8%
6.2%	52.4	52.8	0.4	0.8%
7.4%	52.3	52.8	0.5	1.0%
8.6%	52.2	52.7	0.5	0.9%
9.9%	52.1	52.4	0.4	0.7%
11.1%	51.9	52.4	0.5	0.9%
12.3%	51.8	52.1	0.3	0.6%
13.6%	51.7	52.0	0.3	0.5%
14.8%	51.7	51.9	0.2	0.4%
16.0%	51.6	51.9	0.3	0.6%
17.3%	51.5	51.9	0.3	0.7%
18.5%	51.4	51.9	0.5	0.9%
19.8%	51.4	51.9	0.5	0.9%
21.0%	51.4	51.7	0.4	0.7%
22.2%	51.3	51.7	0.4	0.8%
23.5%	51.3	51.7	0.4	0.8%
24.7%	51.3	51.6	0.3	0.6%
25.9%	51.3	51.6	0.3	0.6%
27.2%	51.2	51.6	0.3	0.7%
28.4%	51.2	51.5	0.3	0.7%
29.6%	51.1	51.5	0.4	0.8%
30.9%	51.0	51.5	0.5	1.0%
32.1%	51.0	51.4	0.5	1.0%
33.3%	50.9	51.4	0.5	1.0%
34.6%	50.9	51.3	0.4	0.8%
35.8%	50.8	51.1	0.4	0.7%
37.0%	50.7	51.1	0.3	0.7%
38.3%	50.7	51.1	0.4	0.8%
39.5%	50.6	51.0	0.4	0.7%
40.7%	50.6	50.9	0.4	0.7%
42.0%	50.6	50.9	0.3	0.7%
43.2%	50.5	50.8	0.3	0.5%
44.4%	50.4	50.7	0.3	0.7%
45.7%	50.4	50.7	0.3	0.7%
46.9%	50.4	50.5	0.2	0.3%
48.1%	50.4	50.5	0.2	0.3%
49.4%	50.3	50.4	0.1	0.2%
50.6%	50.3	50.4	0.1	0.2%
51.9%	50.2	50.2	0.0	0.0%
53.1%	49.9	50.1	0.2	0.4%
54.3%	49.9	50.0	0.1	0.3%
55.6%	49.9	49.9	0.0	0.1%
56.8%	49.8	49.9	0.1	0.2%
58.0%	49.7	49.9	0.1	0.2%
59.3%	49.7	49.8	0.1	0.2%
60.5%	49.7	49.8	0.1	0.1%
61.7%	49.5	49.7	0.2	0.4%
63.0%	49.5	49.6	0.2	0.3%
64.2%	49.4	49.6	0.2	0.3%
65.4%	49.4	49.6	0.1	0.3%
66.7%	49.4	49.5	0.1	0.2%
67.9%	49.4	49.5	0.1	0.2%
69.1%	49.4	49.4	0.0	0.0%
70.4%	49.4	49.3	-0.1	-0.1%
71.6%	49.3	49.2	-0.1	-0.2%
72.8%	49.1	49.1	0.0	0.0%
74.1%	48.7	49.1	0.3	0.7%
75.3%	48.7	49.0	0.3	0.6%
76.5%	48.4	48.9	0.5	1.1%
77.8%	48.3	48.5	0.1	0.3%
79.0%	48.3	48.4	0.1	0.2%
80.2%	48.3	48.3	0.0	0.1%
81.5%	48.1	48.3	0.2	0.5%
82.7%	48.1	48.2	0.2	0.4%
84.0%	47.5	47.6	0.1	0.2%
85.2%	47.4	47.6	0.2	0.3%
86.4%	47.2	47.3	0.1	0.1%
87.7%	47.2	47.2	0.0	0.1%
88.9%	47.1	47.1	0.0	0.0%
90.1%	46.7	47.0	0.3	0.6%
91.4%	46.5	46.6	0.1	0.3%
92.6%	46.5	46.1	-0.4	-0.9%
93.8%	45.9	46.1	0.2	0.5%
95.1%	45.7	45.7	0.1	0.1%
96.3%	44.4	45.6	1.2	2.7%
97.5%	44.1	45.0	1.0	2.2%
98.8%	43.9	44.5	0.5	1.1%
100.0%	43.9	44.5	0.5	1.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.6	49.8	0.2	0.3%
1.2%	48.8	48.9	0.1	0.3%
2.5%	48.6	48.7	0.1	0.2%
3.7%	48.5	48.7	0.2	0.4%
4.9%	48.4	48.5	0.1	0.2%
6.2%	48.1	48.4	0.2	0.5%
7.4%	48.0	48.2	0.2	0.4%
8.6%	48.0	48.2	0.2	0.4%
9.9%	47.9	48.1	0.2	0.3%
11.1%	47.8	48.0	0.2	0.5%
12.3%	47.7	48.0	0.3	0.6%
13.6%	47.7	48.0	0.3	0.6%
14.8%	47.6	48.0	0.4	0.8%
16.0%	47.6	47.9	0.3	0.7%
17.3%	47.5	47.9	0.4	0.8%
18.5%	47.5	47.7	0.2	0.4%
19.8%	47.5	47.6	0.2	0.3%
21.0%	47.3	47.6	0.3	0.6%
22.2%	47.3	47.4	0.1	0.3%
23.5%	47.3	47.4	0.1	0.3%
24.7%	47.3	47.4	0.1	0.2%
25.9%	47.2	47.3	0.0	0.1%
27.2%	47.2	47.2	0.0	0.0%
28.4%	47.2	47.2	0.0	0.0%
29.6%	47.1	47.2	0.1	0.2%
30.9%	47.0	47.1	0.1	0.2%
32.1%	47.0	47.1	0.1	0.2%
33.3%	46.9	47.1	0.1	0.3%
34.6%	46.9	47.1	0.1	0.3%
35.8%	46.9	47.0	0.1	0.2%
37.0%	46.9	47.0	0.1	0.3%
38.3%	46.9	47.0	0.1	0.3%
39.5%	46.8	47.0	0.1	0.2%
40.7%	46.8	47.0	0.1	0.3%
42.0%	46.8	47.0	0.2	0.3%
43.2%	46.7	46.9	0.2	0.5%
44.4%	46.7	46.8	0.1	0.3%
45.7%	46.7	46.7	0.1	0.1%
46.9%	46.6	46.7	0.1	0.2%
48.1%	46.6	46.7	0.1	0.3%
49.4%	46.5	46.6	0.1	0.2%
50.6%	46.5	46.6	0.1	0.2%
51.9%	46.4	46.5	0.1	0.2%
53.1%	46.3	46.5	0.1	0.3%
54.3%	46.3	46.4	0.1	0.2%
55.6%	46.3	46.4	0.1	0.2%
56.8%	46.3	46.3	0.1	0.1%
58.0%	46.2	46.3	0.1	0.2%
59.3%	46.1	46.3	0.2	0.4%
60.5%	46.1	46.2	0.1	0.2%
61.7%	46.0	46.1	0.1	0.2%
63.0%	46.0	46.0	0.0	0.1%
64.2%	45.9	46.0	0.1	0.3%
65.4%	45.9	46.0	0.2	0.3%
66.7%	45.6	46.0	0.4	0.9%
67.9%	45.6	45.7	0.2	0.4%
69.1%	45.6	45.6	0.0	0.0%
70.4%	45.5	45.5	0.0	0.0%
71.6%	45.5	45.5	-0.1	-0.1%
72.8%	45.5	45.4	0.0	0.0%
74.1%	45.4	45.4	0.0	0.1%
75.3%	45.4	45.4	0.1	0.1%
76.5%	45.4	45.4	0.1	0.1%
77.8%	45.3	45.4	0.0	0.1%
79.0%	45.3	45.3	0.0	0.1%
80.2%	45.3	45.3	0.0	0.1%
81.5%	45.2	45.2	0.0	0.0%
82.7%	45.2	45.1	0.0	0.0%
84.0%	44.9	45.0	0.1	0.1%
85.2%	44.9	44.9	0.0	0.1%
86.4%	44.8	44.9	0.1	0.3%
87.7%	44.8	44.8	0.0	0.0%
88.9%	44.6	44.5	0.0	0.0%
90.1%	44.5	44.4	-0.1	-0.2%
91.4%	44.4	44.4	0.0	0.0%
92.6%	44.4	44.3	0.0	-0.1%
93.8%	44.4	44.3	-0.1	-0.2%
95.1%	44.3	44.2	-0.1	-0.3%
96.3%	44.1	44.1	0.0	0.0%
97.5%	44.0	43.6	-0.3	-0.8%
98.8%	43.1	43.3	0.2	0.6%
100.0%	43.1	43.3	0.2	0.6%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.0	49.8	-1.2	-2.4%
1.2%	49.7	49.7	0.0	-0.1%
2.5%	49.6	49.7	0.1	0.1%
3.7%	49.2	49.3	0.1	0.2%
4.9%	49.2	49.3	0.1	0.2%
6.2%	49.2	49.1	-0.1	-0.2%
7.4%	48.9	48.8	0.0	-0.1%
8.6%	48.8	48.8	-0.1	-0.1%
9.9%	48.6	48.7	0.1	0.1%
11.1%	48.6	48.6	0.0	-0.1%
12.3%	48.5	48.5	0.0	0.1%
13.6%	48.3	48.5	0.1	0.2%
14.8%	48.3	48.4	0.1	0.1%
16.0%	48.3	48.4	0.1	0.2%
17.3%	48.2	48.3	0.1	0.2%
18.5%	47.9	47.9	0.0	0.0%
19.8%	47.9	47.9	0.0	-0.1%
21.0%	47.9	47.9	0.0	0.0%
22.2%	47.8	47.8	0.0	-0.1%
23.5%	47.8	47.7	-0.1	-0.2%
24.7%	47.6	47.7	0.1	0.1%
25.9%	47.6	47.7	0.1	0.1%
27.2%	47.3	47.6	0.3	0.5%
28.4%	47.3	47.4	0.1	0.2%
29.6%	47.3	47.3	0.0	0.1%
30.9%	47.1	47.3	0.1	0.3%
32.1%	47.0	47.2	0.2	0.4%
33.3%	47.0	47.1	0.1	0.2%
34.6%	47.0	47.0	0.0	0.1%
35.8%	47.0	47.0	0.0	0.1%
37.0%	47.0	47.0	0.0	0.0%
38.3%	47.0	47.0	0.0	0.0%
39.5%	46.9	47.0	0.0	0.1%
40.7%	46.9	46.9	0.0	0.1%
42.0%	46.8	46.9	0.1	0.2%
43.2%	46.8	46.8	0.1	0.2%
44.4%	46.7	46.7	0.0	0.0%
45.7%	46.7	46.7	0.0	0.0%
46.9%	46.7	46.7	0.0	0.0%
48.1%	46.7	46.6	0.0	-0.1%
49.4%	46.7	46.6	0.0	-0.1%
50.6%	46.6	46.6	0.0	0.1%
51.9%	46.5	46.6	0.1	0.2%
53.1%	46.5	46.5	0.1	0.1%
54.3%	46.5	46.5	0.1	0.1%
55.6%	46.5	46.5	0.0	0.1%
56.8%	46.4	46.5	0.0	0.1%
58.0%	46.3	46.3	0.0	0.1%
59.3%	46.3	46.3	0.0	0.0%
60.5%	46.2	46.3	0.1	0.2%
61.7%	46.1	46.2	0.1	0.2%
63.0%	46.1	46.2	0.1	0.2%
64.2%	46.1	46.1	0.0	0.1%
65.4%	46.1	46.1	0.0	0.0%
66.7%	46.0	46.0	0.0	0.0%
67.9%	45.9	45.9	0.0	0.0%
69.1%	45.9	45.9	0.0	0.0%
70.4%	45.9	45.9	0.0	0.0%
71.6%	45.9	45.9	0.0	0.0%
72.8%	45.9	45.9	0.0	0.0%
74.1%	45.9	45.9	0.0	0.0%
75.3%	45.8	45.9	0.1	0.1%
76.5%	45.8	45.8	0.0	0.1%
77.8%	45.7	45.7	0.0	0.1%
79.0%	45.7	45.7	0.0	0.0%
80.2%	45.6	45.6	0.0	0.0%
81.5%	45.6	45.6	0.0	0.0%
82.7%	45.5	45.5	0.0	0.1%
84.0%	45.5	45.5	0.0	0.0%
85.2%	45.5	45.5	0.0	0.0%
86.4%	45.5	45.5	0.0	0.0%
87.7%	45.4	45.5	0.0	0.0%
88.9%	45.4	45.5	0.0	0.0%
90.1%	45.4	45.4	0.0	0.0%
91.4%	45.4	45.4	0.0	-0.1%
92.6%	45.4	45.3	0.0	-0.1%
93.8%	45.3	45.2	-0.1	-0.2%
95.1%	45.3	45.2	-0.1	-0.2%
96.3%	45.2	45.0	-0.2	-0.4%
97.5%	45.2	44.8	-0.4	-0.9%
98.8%	44.4	44.6	0.1	0.3%
100.0%	44.4	44.6	0.1	0.3%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.1	53.9	-0.2	-0.4%
1.2%	54.1	53.5	-0.6	-1.0%
2.5%	53.7	53.2	-0.5	-0.9%
3.7%	53.3	52.7	-0.5	-1.0%
4.9%	52.7	52.7	0.0	0.0%
6.2%	52.7	52.6	0.0	0.0%
7.4%	52.6	52.5	-0.1	-0.2%
8.6%	52.5	52.4	-0.1	-0.2%
9.9%	52.4	52.3	-0.1	-0.2%
11.1%	52.3	52.2	-0.1	-0.2%
12.3%	52.3	52.2	-0.1	-0.2%
13.6%	52.0	52.1	0.1	0.1%
14.8%	52.0	51.9	-0.1	-0.2%
16.0%	51.9	51.9	0.0	-0.1%
17.3%	51.9	51.9	-0.1	-0.2%
18.5%	51.6	51.7	0.2	0.3%
19.8%	51.6	51.6	0.0	0.0%
21.0%	51.2	51.2	0.0	0.0%
22.2%	51.1	50.9	-0.2	-0.4%
23.5%	50.8	50.9	0.1	0.1%
24.7%	50.7	50.8	0.0	0.0%
25.9%	50.7	50.8	0.0	0.1%
27.2%	50.7	50.7	0.0	0.0%
28.4%	50.4	50.4	0.0	0.0%
29.6%	50.2	50.3	0.0	0.0%
30.9%	50.2	50.2	0.0	0.1%
32.1%	50.2	50.2	0.0	0.0%
33.3%	50.1	50.0	0.0	-0.1%
34.6%	50.0	50.0	0.0	0.0%
35.8%	50.0	50.0	0.0	0.0%
37.0%	50.0	49.9	0.0	0.0%
38.3%	49.9	49.9	-0.1	-0.1%
39.5%	49.9	49.8	-0.1	-0.1%
40.7%	49.6	49.6	0.0	0.1%
42.0%	49.4	49.5	0.0	0.0%
43.2%	49.4	49.4	0.0	0.0%
44.4%	49.4	49.4	0.0	0.0%
45.7%	49.3	49.3	0.0	0.0%
46.9%	49.3	49.3	0.0	0.0%
48.1%	49.3	49.3	0.0	0.0%
49.4%	49.2	49.2	0.0	0.0%
50.6%	49.1	49.1	0.0	0.0%
51.9%	49.1	49.1	0.0	0.0%
53.1%	49.0	48.9	0.0	0.0%
54.3%	48.9	48.9	0.0	0.0%
55.6%	48.9	48.8	0.0	-0.1%
56.8%	48.8	48.8	0.0	0.0%
58.0%	48.8	48.8	0.0	0.0%
59.3%	48.8	48.7	-0.1	-0.2%
60.5%	48.7	48.7	0.0	-0.1%
61.7%	48.7	48.7	0.0	0.0%
63.0%	48.6	48.7	0.0	0.0%
64.2%	48.6	48.6	0.0	0.0%
65.4%	48.6	48.6	0.0	0.0%
66.7%	48.6	48.6	0.0	0.0%
67.9%	48.6	48.6	0.0	0.0%
69.1%	48.6	48.6	0.0	0.0%
70.4%	48.5	48.5	0.0	0.0%
71.6%	48.5	48.5	0.0	0.0%
72.8%	48.4	48.4	0.0	0.0%
74.1%	48.4	48.4	0.0	0.0%
75.3%	48.3	48.3	0.0	0.0%
76.5%	48.2	48.2	0.0	0.0%
77.8%	48.2	48.2	0.0	0.0%
79.0%	48.2	48.2	0.0	0.0%
80.2%	48.1	48.1	0.0	0.0%
81.5%	48.1	48.1	0.0	0.0%
82.7%	48.1	48.1	0.0	0.0%
84.0%	48.1	48.1	0.0	0.0%
85.2%	48.1	48.1	0.0	0.0%
86.4%	48.0	48.0	0.0	0.0%
87.7%	47.9	47.9	0.0	0.0%
88.9%	47.9	47.9	0.0	0.0%
90.1%	47.7	47.8	0.0	0.1%
91.4%	47.7	47.7	0.0	0.0%
92.6%	47.7	47.7	0.0	0.0%
93.8%	47.4	47.5	0.0	0.0%
95.1%	47.3	47.3	-0.1	-0.1%
96.3%	47.3	47.3	0.0	0.0%
97.5%	47.3	47.3	0.0	0.0%
98.8%	46.9	46.9	0.0	0.0%
100.0%	46.9	46.9	0.0	0.0%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.1	60.8	-0.3	-0.4%
1.2%	60.2	60.0	-0.3	-0.4%
2.5%	60.2	59.7	-0.5	-0.9%
3.7%	59.9	59.1	-0.8	-1.3%
4.9%	59.2	58.5	-0.6	-1.0%
6.2%	58.8	58.5	-0.3	-0.6%
7.4%	58.6	58.0	-0.6	-1.1%
8.6%	58.0	57.9	-0.1	-0.2%
9.9%	57.9	57.9	-0.1	-0.1%
11.1%	57.8	57.7	-0.1	-0.1%
12.3%	57.7	57.6	-0.2	-0.3%
13.6%	57.7	57.5	-0.2	-0.3%
14.8%	57.6	57.4	-0.2	-0.4%
16.0%	57.3	57.2	-0.1	-0.2%
17.3%	57.3	56.9	-0.4	-0.7%
18.5%	57.1	56.8	-0.4	-0.7%
19.8%	56.9	56.7	-0.1	-0.3%
21.0%	56.8	56.6	-0.2	-0.3%
22.2%	56.8	56.5	-0.3	-0.4%
23.5%	56.7	56.5	-0.3	-0.5%
24.7%	56.6	56.4	-0.2	-0.4%
25.9%	56.5	56.4	-0.1	-0.3%
27.2%	56.5	56.3	-0.2	-0.3%
28.4%	56.4	56.3	-0.1	-0.2%
29.6%	56.3	56.2	-0.1	-0.1%
30.9%	56.3	56.0	-0.3	-0.5%
32.1%	56.2	55.9	-0.3	-0.4%
33.3%	56.1	55.7	-0.3	-0.6%
34.6%	56.1	55.7	-0.3	-0.6%
35.8%	55.9	55.5	-0.4	-0.8%
37.0%	55.7	55.4	-0.2	-0.4%
38.3%	55.4	55.4	0.0	0.0%
39.5%	55.4	55.4	0.0	0.0%
40.7%	55.3	55.3	0.0	-0.1%
42.0%	55.3	55.3	0.0	-0.1%
43.2%	55.3	55.2	-0.1	-0.1%
44.4%	55.2	55.2	0.0	0.0%
45.7%	55.1	55.2	0.1	0.1%
46.9%	55.0	55.1	0.2	0.3%
48.1%	55.0	55.0	0.0	0.0%
49.4%	54.9	55.0	0.0	0.1%
50.6%	54.9	54.9	0.0	0.0%
51.9%	54.9	54.9	0.0	0.1%
53.1%	54.8	54.8	0.1	0.1%
54.3%	54.7	54.8	0.1	0.1%
55.6%	54.6	54.8	0.2	0.3%
56.8%	54.6	54.6	0.0	0.0%
58.0%	54.4	54.4	0.0	0.1%
59.3%	54.4	54.4	0.0	0.0%
60.5%	54.3	54.3	0.0	0.1%
61.7%	54.0	54.0	0.0	0.0%
63.0%	54.0	54.0	0.0	0.0%
64.2%	54.0	53.9	-0.1	-0.2%
65.4%	53.9	53.9	0.0	0.0%
66.7%	53.8	53.9	0.0	0.1%
67.9%	53.7	53.7	0.0	0.0%
69.1%	53.5	53.5	0.0	0.0%
70.4%	53.4	53.4	0.0	0.0%
71.6%	53.4	53.4	0.0	0.0%
72.8%	52.8	52.8	0.0	0.0%
74.1%	52.7	52.7	0.0	0.0%
75.3%	52.6	52.7	0.0	0.0%
76.5%	52.6	52.6	0.0	0.0%
77.8%	52.6	52.6	0.0	0.0%
79.0%	52.5	52.5	0.0	0.0%
80.2%	52.5	52.5	0.0	0.0%
81.5%	52.4	52.4	0.0	0.0%
82.7%	52.3	52.3	0.0	0.0%
84.0%	52.3	52.3	0.0	0.0%
85.2%	52.2	52.2	0.0	0.0%
86.4%	52.2	52.2	0.0	0.0%
87.7%	52.1	52.1	0.0	0.0%
88.9%	51.6	51.6	0.0	0.0%
90.1%	51.5	51.5	0.0	0.0%
91.4%	51.4	51.4	0.0	0.0%
92.6%	51.3	51.3	0.0	-0.1%
93.8%	51.3	51.3	0.0	-0.1%
95.1%	50.8	51.0	0.3	0.5%
96.3%	50.7	50.8	0.1	0.2%
97.5%	50.7	50.7	0.0	0.1%
98.8%	49.8	49.9	0.0	0.1%
100.0%	49.8	49.9	0.0	0.1%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.7	67.8	1.1	1.7%
1.2%	66.1	65.5	-0.6	-0.9%
2.5%	65.7	65.4	-0.3	-0.4%
3.7%	65.3	65.1	-0.2	-0.3%
4.9%	65.2	64.2	-1.0	-1.5%
6.2%	64.2	64.1	-0.1	-0.2%
7.4%	63.9	63.9	0.0	0.1%
8.6%	63.7	63.9	0.2	0.3%
9.9%	63.6	63.6	0.0	0.0%
11.1%	63.6	63.6	0.0	-0.1%
12.3%	63.5	63.4	-0.1	-0.1%
13.6%	63.5	63.3	-0.1	-0.2%
14.8%	63.2	62.6	-0.6	-1.0%
16.0%	62.9	62.5	-0.4	-0.7%
17.3%	62.6	62.4	-0.3	-0.4%
18.5%	62.6	62.2	-0.3	-0.5%
19.8%	62.5	62.0	-0.4	-0.7%
21.0%	62.3	62.0	-0.3	-0.5%
22.2%	62.2	62.0	-0.3	-0.4%
23.5%	62.2	61.9	-0.3	-0.5%
24.7%	62.2	61.9	-0.3	-0.4%
25.9%	62.1	61.8	-0.3	-0.5%
27.2%	62.0	61.7	-0.3	-0.4%
28.4%	61.9	61.7	-0.3	-0.4%
29.6%	61.8	61.6	-0.2	-0.3%
30.9%	61.6	61.5	-0.1	-0.2%
32.1%	61.6	61.5	-0.1	-0.1%
33.3%	61.6	61.5	-0.1	-0.1%
34.6%	61.5	61.4	-0.1	-0.1%
35.8%	61.3	61.4	0.1	0.1%
37.0%	61.2	61.3	0.1	0.2%
38.3%	61.1	61.3	0.2	0.3%
39.5%	61.1	61.3	0.2	0.3%
40.7%	61.0	61.3	0.2	0.4%
42.0%	60.8	61.2	0.4	0.7%
43.2%	60.7	61.1	0.5	0.8%
44.4%	60.6	60.7	0.1	0.2%
45.7%	60.6	60.7	0.1	0.1%
46.9%	60.6	60.6	0.1	0.1%
48.1%	60.6	60.6	0.0	0.1%
49.4%	60.5	60.5	-0.1	-0.1%
50.6%	60.4	60.4	-0.1	-0.1%
51.9%	60.3	60.3	0.0	0.0%
53.1%	60.3	60.2	-0.1	-0.2%
54.3%	60.2	60.1	0.0	-0.1%
55.6%	60.2	60.0	-0.1	-0.2%
56.8%	60.0	59.9	-0.1	-0.2%
58.0%	59.8	59.5	-0.3	-0.5%
59.3%	59.8	59.5	-0.2	-0.4%
60.5%	59.5	59.5	0.0	0.0%
61.7%	59.3	59.3	0.0	0.0%
63.0%	59.3	59.1	-0.2	-0.3%
64.2%	59.3	59.1	-0.2	-0.3%
65.4%	59.2	58.9	-0.3	-0.5%
66.7%	59.1	58.9	-0.2	-0.4%
67.9%	58.9	58.8	-0.1	-0.2%
69.1%	58.9	58.5	-0.4	-0.7%
70.4%	58.8	58.5	-0.4	-0.6%
71.6%	58.5	58.3	-0.2	-0.3%
72.8%	58.5	58.2	-0.3	-0.4%
74.1%	58.3	58.0	-0.3	-0.5%
75.3%	58.2	57.9	-0.3	-0.5%
76.5%	58.0	57.9	-0.1	-0.2%
77.8%	57.9	57.8	-0.1	-0.1%
79.0%	57.9	57.7	-0.1	-0.3%
80.2%	57.8	57.6	-0.2	-0.4%
81.5%	57.7	57.3	-0.4	-0.7%
82.7%	57.3	57.1	-0.2	-0.4%
84.0%	56.9	56.9	0.0	0.0%
85.2%	56.8	56.8	0.0	0.0%
86.4%	56.8	56.8	0.0	0.0%
87.7%	56.6	56.7	0.1	0.2%
88.9%	56.5	56.5	0.0	0.0%
90.1%	56.4	56.4	0.0	0.0%
91.4%	56.3	56.4	0.0	0.0%
92.6%	56.0	56.0	0.0	0.0%
93.8%	56.0	56.0	0.0	0.0%
95.1%	55.4	55.4	0.0	0.0%
96.3%	55.1	55.1	0.0	0.0%
97.5%	55.0	55.0	0.0	0.0%
98.8%	54.6	54.6	0.1	0.1%
100.0%	54.6	54.6	0.1	0.1%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.5	69.5	0.0	0.0%
1.2%	69.4	69.4	-0.1	-0.1%
2.5%	68.9	69.3	0.3	0.5%
3.7%	68.3	68.4	0.0	0.0%
4.9%	68.3	68.1	-0.2	-0.3%
6.2%	68.2	68.1	-0.1	-0.2%
7.4%	68.1	67.9	-0.2	-0.3%
8.6%	68.1	67.4	-0.7	-1.0%
9.9%	68.1	67.4	-0.7	-1.0%
11.1%	68.0	67.3	-0.7	-1.1%
12.3%	68.0	67.2	-0.8	-1.2%
13.6%	68.0	67.2	-0.8	-1.1%
14.8%	67.9	67.2	-0.7	-1.1%
16.0%	67.9	67.1	-0.7	-1.1%
17.3%	67.8	66.9	-0.9	-1.3%
18.5%	67.6	66.8	-0.8	-1.2%
19.8%	67.5	66.7	-0.8	-1.2%
21.0%	67.2	66.7	-0.5	-0.8%
22.2%	67.1	66.7	-0.4	-0.6%
23.5%	67.0	66.6	-0.3	-0.5%
24.7%	66.9	66.5	-0.3	-0.5%
25.9%	66.8	66.2	-0.6	-0.9%
27.2%	66.8	66.2	-0.6	-0.9%
28.4%	66.8	66.1	-0.7	-1.0%
29.6%	66.7	66.1	-0.6	-1.0%
30.9%	66.7	66.0	-0.7	-1.0%
32.1%	66.5	66.0	-0.5	-0.7%
33.3%	66.5	66.0	-0.5	-0.7%
34.6%	66.4	66.0	-0.4	-0.6%
35.8%	66.3	65.8	-0.4	-0.6%
37.0%	66.2	65.8	-0.4	-0.6%
38.3%	66.1	65.5	-0.5	-0.8%
39.5%	65.7	65.2	-0.4	-0.6%
40.7%	65.6	65.2	-0.4	-0.7%
42.0%	65.5	65.0	-0.4	-0.6%
43.2%	65.3	65.0	-0.3	-0.4%
44.4%	65.3	64.8	-0.5	-0.7%
45.7%	65.1	64.6	-0.4	-0.7%
46.9%	64.9	64.5	-0.4	-0.6%
48.1%	64.8	64.5	-0.3	-0.5%
49.4%	64.4	64.4	0.0	0.1%
50.6%	64.3	64.4	0.0	0.0%
51.9%	64.3	64.1	-0.2	-0.3%
53.1%	64.2	64.0	-0.2	-0.3%
54.3%	64.1	64.0	-0.1	-0.1%
55.6%	64.0	64.0	0.1	0.1%
56.8%	63.9	63.9	0.0	0.0%
58.0%	63.9	63.7	-0.2	-0.4%
59.3%	63.8	63.7	-0.2	-0.3%
60.5%	63.8	63.7	-0.1	-0.2%
61.7%	63.6	63.3	-0.3	-0.5%
63.0%	63.4	63.2	-0.2	-0.2%
64.2%	63.1	63.1	0.0	0.0%
65.4%	62.8	63.1	0.3	0.6%
66.7%	62.6	63.1	0.5	0.8%
67.9%	62.5	62.2	-0.3	-0.5%
69.1%	62.2	62.0	-0.2	-0.3%
70.4%	61.9	61.8	-0.1	-0.2%
71.6%	61.8	61.7	-0.1	-0.2%
72.8%	61.7	61.7	0.0	0.0%
74.1%	61.7	61.5	-0.2	-0.3%
75.3%	61.5	61.4	0.0	0.0%
76.5%	61.4	61.4	0.0	0.0%
77.8%	61.2	61.0	-0.2	-0.3%
79.0%	61.2	61.0	-0.2	-0.2%
80.2%	61.0	60.9	0.0	-0.1%
81.5%	60.9	60.9	0.0	0.0%
82.7%	60.9	60.8	0.0	0.0%
84.0%	60.8	60.6	-0.1	-0.2%
85.2%	60.6	60.4	-0.2	-0.3%
86.4%	60.2	60.2	0.0	0.0%
87.7%	60.2	60.0	-0.2	-0.3%
88.9%	60.0	60.0	0.0	0.0%
90.1%	59.9	59.9	0.0	0.0%
91.4%	59.9	59.9	0.0	0.0%
92.6%	59.8	59.8	0.0	0.0%
93.8%	59.6	59.6	0.0	0.0%
95.1%	59.4	59.4	0.0	0.0%
96.3%	59.3	59.3	0.0	0.0%
97.5%	58.9	59.1	0.1	0.2%
98.8%	58.7	58.7	0.0	0.0%
100.0%	58.7	58.7	0.0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.7	72.1	0.3	0.4%
1.2%	70.8	69.6	-1.2	-1.7%
2.5%	70.7	69.3	-1.4	-2.0%
3.7%	70.0	69.2	-0.8	-1.1%
4.9%	69.5	68.7	-0.9	-1.2%
6.2%	69.5	68.5	-1.1	-1.5%
7.4%	69.2	68.3	-0.9	-1.3%
8.6%	69.2	68.2	-0.9	-1.4%
9.9%	69.1	68.2	-0.9	-1.3%
11.1%	68.9	67.9	-1.0	-1.5%
12.3%	68.7	67.7	-1.0	-1.4%
13.6%	68.6	67.7	-0.9	-1.3%
14.8%	68.6	67.7	-0.9	-1.3%
16.0%	68.6	67.7	-0.9	-1.3%
17.3%	68.4	67.7	-0.7	-1.1%
18.5%	68.3	67.5	-0.9	-1.2%
19.8%	67.9	67.4	-0.5	-0.7%
21.0%	67.8	67.4	-0.4	-0.6%
22.2%	67.7	66.7	-1.0	-1.4%
23.5%	67.4	66.4	-1.0	-1.5%
24.7%	67.4	66.3	-1.0	-1.5%
25.9%	67.3	66.3	-1.0	-1.5%
27.2%	67.1	66.2	-0.9	-1.4%
28.4%	67.1	66.1	-1.0	-1.5%
29.6%	67.0	66.0	-1.0	-1.5%
30.9%	67.0	66.0	-0.9	-1.4%
32.1%	66.9	66.0	-0.9	-1.4%
33.3%	66.9	66.0	-1.0	-1.5%
34.6%	66.9	65.9	-1.0	-1.5%
35.8%	66.8	65.8	-1.0	-1.5%
37.0%	66.8	65.7	-1.1	-1.6%
38.3%	66.8	65.4	-1.4	-2.1%
39.5%	66.7	65.3	-1.4	-2.1%
40.7%	66.4	65.3	-1.1	-1.6%
42.0%	66.3	65.1	-1.1	-1.7%
43.2%	66.2	65.1	-1.1	-1.6%
44.4%	66.1	65.1	-1.1	-1.6%
45.7%	66.1	65.1	-1.1	-1.6%
46.9%	66.1	65.1	-1.0	-1.6%
48.1%	66.0	65.0	-0.9	-1.4%
49.4%	66.0	65.0	-0.9	-1.4%
50.6%	65.9	64.9	-1.0	-1.6%
51.9%	65.8	64.9	-0.9	-1.4%
53.1%	65.7	64.9	-0.9	-1.3%
54.3%	65.7	64.8	-0.9	-1.3%
55.6%	65.7	64.7	-1.0	-1.5%
56.8%	65.7	64.7	-1.0	-1.5%
58.0%	65.6	64.7	-0.9	-1.4%
59.3%	65.5	64.7	-0.9	-1.3%
60.5%	65.5	64.6	-0.9	-1.4%
61.7%	65.5	64.6	-0.9	-1.4%
63.0%	65.5	64.5	-0.9	-1.4%
64.2%	65.3	64.5	-0.8	-1.2%
65.4%	65.3	64.5	-0.8	-1.2%
66.7%	65.3	64.5	-0.8	-1.2%
67.9%	65.3	64.4	-0.9	-1.3%
69.1%	65.2	64.3	-0.8	-1.3%
70.4%	65.2	64.3	-0.8	-1.3%
71.6%	65.1	64.3	-0.8	-1.3%
72.8%	65.1	64.3	-0.8	-1.3%
74.1%	65.1	64.3	-0.9	-1.3%
75.3%	65.1	64.3	-0.8	-1.3%
76.5%	65.0	64.2	-0.8	-1.3%
77.8%	65.0	64.0	-1.0	-1.5%
79.0%	64.9	64.0	-0.9	-1.4%
80.2%	64.9	63.9	-1.0	-1.5%
81.5%	64.8	63.9	-0.9	-1.3%
82.7%	64.7	63.9	-0.8	-1.3%
84.0%	64.7	63.8	-0.9	-1.4%
85.2%	64.7	63.7	-1.0	-1.5%
86.4%	64.7	63.5	-1.1	-1.8%
87.7%	64.6	63.4	-1.2	-1.9%
88.9%	64.6	63.3	-1.2	-1.9%
90.1%	64.4	63.0	-1.4	-2.2%
91.4%	64.2	63.0	-1.2	-1.9%
92.6%	64.1	62.9	-1.2	-1.8%
93.8%	63.9	62.9	-1.1	-1.7%
95.1%	63.9	62.7	-1.2	-1.9%
96.3%	63.8	62.6	-1.2	-1.9%
97.5%	63.8	62.5	-1.2	-1.9%
98.8%	63.7	62.3	-1.4	-2.2%
100.0%	63.7	62.3	-1.4	-2.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.5	70.1	-0.4	-0.5%
1.2%	69.0	69.1	0.1	0.2%
2.5%	68.5	68.1	-0.4	-0.6%
3.7%	68.5	68.0	-0.5	-0.7%
4.9%	68.4	67.9	-0.5	-0.8%
6.2%	67.9	67.9	0.0	0.0%
7.4%	67.9	67.7	-0.2	-0.2%
8.6%	67.8	67.6	-0.2	-0.3%
9.9%	67.8	67.6	-0.2	-0.3%
11.1%	67.8	67.6	-0.2	-0.3%
12.3%	67.8	67.5	-0.3	-0.4%
13.6%	67.8	67.5	-0.3	-0.4%
14.8%	67.8	67.5	-0.3	-0.4%
16.0%	67.7	67.3	-0.4	-0.6%
17.3%	67.7	67.3	-0.4	-0.6%
18.5%	67.4	67.2	-0.2	-0.3%
19.8%	67.4	67.2	-0.2	-0.3%
21.0%	67.4	67.1	-0.2	-0.3%
22.2%	67.4	67.1	-0.3	-0.4%
23.5%	67.4	67.0	-0.3	-0.5%
24.7%	67.3	67.0	-0.3	-0.5%
25.9%	67.3	67.0	-0.3	-0.4%
27.2%	67.3	66.9	-0.3	-0.5%
28.4%	67.3	66.9	-0.4	-0.6%
29.6%	67.3	66.9	-0.4	-0.6%
30.9%	67.2	66.8	-0.4	-0.6%
32.1%	67.2	66.8	-0.4	-0.6%
33.3%	67.1	66.8	-0.3	-0.5%
34.6%	67.1	66.8	-0.3	-0.5%
35.8%	67.0	66.7	-0.3	-0.5%
37.0%	67.0	66.6	-0.4	-0.6%
38.3%	67.0	66.6	-0.4	-0.6%
39.5%	67.0	66.5	-0.5	-0.7%
40.7%	67.0	66.5	-0.5	-0.7%
42.0%	67.0	66.5	-0.5	-0.7%
43.2%	67.0	66.5	-0.5	-0.7%
44.4%	66.9	66.4	-0.5	-0.7%
45.7%	66.8	66.3	-0.5	-0.8%
46.9%	66.8	66.3	-0.5	-0.8%
48.1%	66.7	66.2	-0.5	-0.8%
49.4%	66.7	66.2	-0.5	-0.8%
50.6%	66.7	66.0	-0.7	-1.0%
51.9%	66.7	66.0	-0.6	-0.9%
53.1%	66.6	66.0	-0.6	-0.9%
54.3%	66.6	65.9	-0.7	-1.1%
55.6%	66.6	65.9	-0.7	-1.0%
56.8%	66.5	65.9	-0.7	-1.0%
58.0%	66.4	65.9	-0.6	-0.9%
59.3%	66.4	65.7	-0.7	-1.1%
60.5%	66.4	65.5	-0.9	-1.4%
61.7%	66.4	65.4	-1.0	-1.4%
63.0%	66.3	65.3	-0.9	-1.4%
64.2%	66.3	65.3	-0.9	-1.4%
65.4%	66.3	65.2	-1.1	-1.6%
66.7%	66.3	65.2	-1.0	-1.6%
67.9%	66.2	65.1	-1.1	-1.6%
69.1%	66.2	65.1	-1.1	-1.6%
70.4%	66.2	65.1	-1.1	-1.7%
71.6%	66.2	65.1	-1.1	-1.6%
72.8%	66.1	65.1	-1.1	-1.6%
74.1%	66.1	65.1	-1.1	-1.6%
75.3%	66.1	65.0	-1.1	-1.7%
76.5%	66.0	64.8	-1.1	-1.7%
77.8%	66.0	64.8	-1.2	-1.7%
79.0%	66.0	64.6	-1.3	-2.0%
80.2%	65.9	64.4	-1.4	-2.2%
81.5%	65.8	64.4	-1.4	-2.2%
82.7%	65.7	64.4	-1.4	-2.1%
84.0%	65.7	64.3	-1.4	-2.1%
85.2%	65.4	64.3	-1.1	-1.7%
86.4%	65.2	64.2	-1.0	-1.5%
87.7%	65.2	64.1	-1.1	-1.7%
88.9%	65.1	64.0	-1.2	-1.8%
90.1%	65.1	63.9	-1.1	-1.7%
91.4%	65.0	63.9	-1.2	-1.8%
92.6%	65.0	63.8	-1.2	-1.9%
93.8%	65.0	63.8	-1.2	-1.8%
95.1%	64.5	63.8	-0.8	-1.2%
96.3%	64.2	63.6	-0.7	-1.1%
97.5%	64.0	63.5	-0.5	-0.7%
98.8%	63.5	63.5	0.0	0.0%
100.0%	63.5	63.5	0.0	0.0%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.7	70.8	0.1	0.1%
1.2%	70.1	69.7	-0.4	-0.5%
2.5%	69.7	69.6	0.0	-0.1%
3.7%	69.6	69.5	-0.1	-0.2%
4.9%	69.5	69.4	-0.1	-0.2%
6.2%	69.5	69.4	-0.1	-0.2%
7.4%	69.5	69.3	-0.2	-0.3%
8.6%	69.5	69.3	-0.2	-0.3%
9.9%	69.4	69.2	-0.2	-0.3%
11.1%	69.4	69.2	-0.2	-0.3%
12.3%	69.4	69.2	-0.2	-0.3%
13.6%	69.4	69.2	-0.2	-0.3%
14.8%	69.3	68.9	-0.4	-0.6%
16.0%	69.3	68.9	-0.3	-0.5%
17.3%	69.2	68.9	-0.4	-0.5%
18.5%	69.2	68.8	-0.4	-0.6%
19.8%	69.1	68.7	-0.4	-0.6%
21.0%	69.1	68.5	-0.6	-0.8%
22.2%	69.1	68.5	-0.6	-0.9%
23.5%	69.1	68.3	-0.8	-1.1%
24.7%	69.0	68.2	-0.8	-1.2%
25.9%	69.0	68.2	-0.8	-1.2%
27.2%	69.0	68.1	-0.8	-1.2%
28.4%	68.9	68.1	-0.9	-1.3%
29.6%	68.9	68.0	-0.9	-1.3%
30.9%	68.9	68.0	-0.9	-1.3%
32.1%	68.9	68.0	-0.9	-1.3%
33.3%	68.8	67.9	-0.8	-1.2%
34.6%	68.7	67.9	-0.8	-1.2%
35.8%	68.7	67.9	-0.8	-1.2%
37.0%	68.7	67.9	-0.8	-1.1%
38.3%	68.6	67.9	-0.8	-1.1%
39.5%	68.6	67.8	-0.8	-1.2%
40.7%	68.6	67.8	-0.8	-1.2%
42.0%	68.6	67.8	-0.8	-1.2%
43.2%	68.5	67.7	-0.8	-1.1%
44.4%	68.5	67.7	-0.8	-1.2%
45.7%	68.5	67.7	-0.8	-1.1%
46.9%	68.4	67.7	-0.8	-1.1%
48.1%	68.4	67.7	-0.7	-1.1%
49.4%	68.4	67.6	-0.7	-1.1%
50.6%	68.4	67.5	-0.8	-1.2%
51.9%	68.3	67.5	-0.8	-1.2%
53.1%	68.3	67.5	-0.8	-1.2%
54.3%	68.3	67.5	-0.8	-1.2%
55.6%	68.2	67.4	-0.8	-1.2%
56.8%	68.2	67.3	-0.9	-1.3%
58.0%	68.2	67.3	-0.9	-1.3%
59.3%	68.2	67.2	-0.9	-1.3%
60.5%	68.1	67.2	-0.8	-1.2%
61.7%	68.1	67.2	-0.8	-1.2%
63.0%	68.0	67.2	-0.9	-1.3%
64.2%	68.0	67.1	-1.0	-1.4%
65.4%	68.0	67.0	-1.0	-1.5%
66.7%	68.0	66.9	-1.1	-1.6%
67.9%	67.9	66.9	-1.0	-1.5%
69.1%	67.9	66.9	-1.1	-1.6%
70.4%	67.9	66.8	-1.1	-1.6%
71.6%	67.9	66.7	-1.2	-1.7%
72.8%	67.9	66.7	-1.2	-1.7%
74.1%	67.5	66.7	-0.8	-1.2%
75.3%	67.4	66.6	-0.7	-1.1%
76.5%	67.4	66.5	-0.9	-1.3%
77.8%	67.3	66.4	-0.9	-1.3%
79.0%	67.2	66.4	-0.7	-1.1%
80.2%	67.1	66.2	-0.8	-1.3%
81.5%	67.0	66.2	-0.8	-1.2%
82.7%	67.0	66.2	-0.8	-1.2%
84.0%	66.9	66.1	-0.9	-1.3%
85.2%	66.9	66.0	-0.9	-1.3%
86.4%	66.8	66.0	-0.9	-1.3%
87.7%	66.8	65.8	-0.9	-1.4%
88.9%	66.6	65.8	-0.7	-1.1%
90.1%	66.5	65.5	-1.0	-1.5%
91.4%	66.4	65.5	-0.9	-1.3%
92.6%	66.0	65.4	-0.6	-0.9%
93.8%	66.0	65.4	-0.6	-0.9%
95.1%	65.9	65.3	-0.6	-0.9%
96.3%	65.9	65.2	-0.7	-1.0%
97.5%	65.7	65.2	-0.5	-0.7%
98.8%	65.4	65.1	-0.3	-0.5%
100.0%	65.4	65.1	-0.3	-0.5%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.5	70.6	1.1	1.6%
1.2%	69.4	68.8	-0.6	-0.9%
2.5%	69.0	68.8	-0.2	-0.3%
3.7%	68.8	68.8	0.0	0.0%
4.9%	68.7	68.7	0.0	-0.1%
6.2%	68.7	68.4	-0.3	-0.4%
7.4%	68.3	68.1	-0.2	-0.3%
8.6%	68.2	68.0	-0.2	-0.3%
9.9%	68.1	67.9	-0.2	-0.4%
11.1%	67.7	67.7	0.0	0.0%
12.3%	67.7	67.6	-0.1	-0.1%
13.6%	67.7	67.4	-0.3	-0.4%
14.8%	67.6	67.2	-0.5	-0.7%
16.0%	67.5	67.0	-0.6	-0.8%
17.3%	67.5	67.0	-0.6	-0.9%
18.5%	67.5	66.8	-0.7	-1.1%
19.8%	67.4	66.8	-0.6	-0.9%
21.0%	67.3	66.7	-0.6	-1.0%
22.2%	67.1	66.6	-0.4	-0.7%
23.5%	67.1	66.4	-0.6	-0.9%
24.7%	67.1	66.4	-0.6	-0.9%
25.9%	67.0	66.4	-0.6	-0.9%
27.2%	67.0	66.4	-0.7	-1.0%
28.4%	67.0	66.4	-0.6	-0.9%
29.6%	67.0	66.3	-0.7	-1.1%
30.9%	66.9	66.2	-0.7	-1.1%
32.1%	66.9	66.2	-0.7	-1.0%
33.3%	66.8	66.2	-0.7	-1.0%
34.6%	66.8	66.2	-0.7	-1.0%
35.8%	66.8	66.1	-0.6	-1.0%
37.0%	66.8	66.1	-0.7	-1.0%
38.3%	66.8	66.1	-0.7	-1.0%
39.5%	66.7	66.1	-0.6	-0.9%
40.7%	66.7	66.0	-0.7	-1.0%
42.0%	66.7	66.0	-0.7	-1.0%
43.2%	66.7	66.0	-0.7	-1.0%
44.4%	66.7	66.0	-0.7	-1.0%
45.7%	66.6	65.9	-0.7	-1.0%
46.9%	66.6	65.9	-0.7	-1.0%
48.1%	66.6	65.9	-0.7	-1.0%
49.4%	66.5	65.8	-0.7	-1.0%
50.6%	66.5	65.8	-0.7	-1.1%
51.9%	66.5	65.8	-0.7	-1.0%
53.1%	66.4	65.8	-0.7	-1.0%
54.3%	66.4	65.7	-0.7	-1.1%
55.6%	66.3	65.6	-0.7	-1.0%
56.8%	66.3	65.5	-0.8	-1.2%
58.0%	66.0	65.5	-0.5	-0.8%
59.3%	65.9	65.5	-0.4	-0.6%
60.5%	65.9	65.5	-0.4	-0.6%
61.7%	65.9	65.4	-0.5	-0.7%
63.0%	65.9	65.3	-0.5	-0.8%
64.2%	65.8	65.3	-0.6	-0.8%
65.4%	65.8	65.1	-0.7	-1.1%
66.7%	65.8	65.1	-0.7	-1.1%
67.9%	65.7	65.0	-0.8	-1.2%
69.1%	65.7	64.9	-0.8	-1.2%
70.4%	65.6	64.9	-0.7	-1.1%
71.6%	65.6	64.7	-0.8	-1.3%
72.8%	65.5	64.7	-0.8	-1.3%
74.1%	65.5	64.6	-0.9	-1.3%
75.3%	65.4	64.6	-0.8	-1.2%
76.5%	65.3	64.6	-0.7	-1.1%
77.8%	65.2	64.4	-0.8	-1.2%
79.0%	65.1	64.3	-0.8	-1.2%
80.2%	65.1	64.3	-0.8	-1.2%
81.5%	65.1	64.2	-0.8	-1.3%
82.7%	65.0	64.2	-0.8	-1.2%
84.0%	65.0	64.1	-0.8	-1.3%
85.2%	65.0	64.1	-0.9	-1.4%
86.4%	64.8	64.0	-0.7	-1.2%
87.7%	64.7	63.9	-0.8	-1.2%
88.9%	64.7	63.8	-0.9	-1.4%
90.1%	64.6	63.7	-1.0	-1.5%
91.4%	64.6	63.6	-1.0	-1.5%
92.6%	64.6	63.6	-1.0	-1.6%
93.8%	64.5	63.4	-1.1	-1.7%
95.1%	64.4	63.4	-1.0	-1.6%
96.3%	64.4	63.2	-1.2	-1.9%
97.5%	64.3	63.1	-1.2	-1.9%
98.8%	64.0	62.9	-1.0	-1.6%
100.0%	63.9	62.3	-1.6	-2.5%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.3	71.0	0.7	1.1%
1.2%	69.9	69.0	-0.9	-1.3%
2.5%	69.7	68.8	-0.9	-1.3%
3.7%	69.1	68.6	-0.5	-0.7%
4.9%	69.0	68.5	-0.5	-0.7%
6.2%	69.0	68.5	-0.5	-0.7%
7.4%	68.9	68.4	-0.5	-0.7%
8.6%	68.7	68.2	-0.4	-0.6%
9.9%	68.6	68.2	-0.4	-0.5%
11.1%	68.5	68.2	-0.3	-0.5%
12.3%	68.5	68.1	-0.4	-0.5%
13.6%	68.3	68.1	-0.3	-0.4%
14.8%	68.3	68.0	-0.3	-0.4%
16.0%	68.1	68.0	-0.1	-0.1%
17.3%	68.0	67.9	-0.1	-0.2%
18.5%	67.9	67.9	0.0	0.0%
19.8%	67.6	67.8	0.2	0.3%
21.0%	67.6	67.4	-0.2	-0.2%
22.2%	67.6	67.3	-0.3	-0.5%
23.5%	67.6	67.2	-0.3	-0.5%
24.7%	67.5	67.2	-0.3	-0.5%
25.9%	67.5	67.1	-0.3	-0.5%
27.2%	67.4	67.0	-0.5	-0.7%
28.4%	67.2	66.7	-0.6	-0.9%
29.6%	67.2	66.6	-0.6	-1.0%
30.9%	67.2	66.6	-0.6	-0.9%
32.1%	67.2	66.5	-0.6	-1.0%
33.3%	67.2	66.4	-0.8	-1.1%
34.6%	67.1	66.2	-0.9	-1.4%
35.8%	67.1	66.2	-0.9	-1.4%
37.0%	67.0	66.1	-0.9	-1.4%
38.3%	66.9	66.1	-0.8	-1.2%
39.5%	66.8	66.1	-0.8	-1.2%
40.7%	66.8	66.1	-0.8	-1.1%
42.0%	66.8	66.0	-0.8	-1.1%
43.2%	66.8	66.0	-0.8	-1.1%
44.4%	66.8	66.0	-0.8	-1.1%
45.7%	66.8	66.0	-0.8	-1.1%
46.9%	66.8	66.0	-0.8	-1.1%
48.1%	66.8	66.0	-0.8	-1.2%
49.4%	66.7	66.0	-0.8	-1.1%
50.6%	66.7	66.0	-0.7	-1.1%
51.9%	66.7	66.0	-0.7	-1.1%
53.1%	66.7	65.9	-0.8	-1.2%
54.3%	66.7	65.9	-0.8	-1.2%
55.6%	66.7	65.8	-0.8	-1.3%
56.8%	66.7	65.8	-0.8	-1.3%
58.0%	66.7	65.8	-0.9	-1.4%
59.3%	66.6	65.7	-0.9	-1.4%
60.5%	66.6	65.6	-0.9	-1.4%
61.7%	66.6	65.6	-0.9	-1.4%
63.0%	66.6	65.6	-1.0	-1.4%
64.2%	66.6	65.6	-1.0	-1.4%
65.4%	66.6	65.6	-1.0	-1.5%
66.7%	66.5	65.5	-1.0	-1.6%
67.9%	66.5	65.5	-1.0	-1.5%
69.1%	66.5	65.5	-1.0	-1.5%
70.4%	66.5	65.5	-1.0	-1.5%
71.6%	66.4	65.5	-1.0	-1.5%
72.8%	66.4	65.5	-1.0	-1.5%
74.1%	66.4	65.5	-1.0	-1.4%
75.3%	66.4	65.4	-1.0	-1.4%
76.5%	66.4	65.4	-1.0	-1.5%
77.8%	66.4	65.4	-1.0	-1.5%
79.0%	66.4	65.4	-1.0	-1.5%
80.2%	66.3	65.4	-1.0	-1.4%
81.5%	66.3	65.3	-1.0	-1.5%
82.7%	66.3	65.3	-1.0	-1.5%
84.0%	66.3	65.2	-1.0	-1.6%
85.2%	66.2	65.2	-1.0	-1.6%
86.4%	66.2	65.2	-1.1	-1.6%
87.7%	66.2	65.1	-1.1	-1.6%
88.9%	66.2	65.0	-1.2	-1.8%
90.1%	66.2	65.0	-1.2	-1.8%
91.4%	66.1	64.9	-1.1	-1.7%
92.6%	66.0	64.9	-1.1	-1.7%
93.8%	66.0	64.5	-1.5	-2.2%
95.1%	66.0	64.5	-1.5	-2.3%
96.3%	65.8	64.4	-1.4	-2.1%
97.5%	65.6	64.4	-1.3	-2.0%
98.8%	65.5	64.3	-1.2	-1.8%
100.0%	65.2	63.3	-1.9	-2.9%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.6	70.5	-0.1	-0.2%
1.2%	69.2	68.9	-0.4	-0.5%
2.5%	69.0	68.8	-0.2	-0.3%
3.7%	68.9	68.6	-0.3	-0.4%
4.9%	68.7	68.5	-0.2	-0.3%
6.2%	68.7	68.5	-0.2	-0.3%
7.4%	68.6	68.4	-0.2	-0.3%
8.6%	68.6	68.4	-0.2	-0.3%
9.9%	68.5	68.3	-0.1	-0.2%
11.1%	68.4	68.3	-0.1	-0.2%
12.3%	68.4	68.2	-0.2	-0.3%
13.6%	68.4	68.2	-0.2	-0.2%
14.8%	68.3	68.2	-0.1	-0.1%
16.0%	68.2	68.2	0.0	0.0%
17.3%	68.2	68.1	0.0	-0.1%
18.5%	68.1	67.9	-0.3	-0.4%
19.8%	68.1	67.9	-0.2	-0.3%
21.0%	68.1	67.8	-0.3	-0.4%
22.2%	68.0	67.7	-0.3	-0.4%
23.5%	68.0	67.7	-0.3	-0.4%
24.7%	67.9	67.6	-0.3	-0.5%
25.9%	67.9	67.6	-0.3	-0.5%
27.2%	67.9	67.6	-0.3	-0.4%
28.4%	67.8	67.5	-0.3	-0.5%
29.6%	67.8	67.4	-0.4	-0.6%
30.9%	67.8	67.3	-0.5	-0.7%
32.1%	67.8	67.3	-0.5	-0.7%
33.3%	67.7	67.3	-0.4	-0.6%
34.6%	67.7	67.2	-0.5	-0.7%
35.8%	67.7	67.2	-0.5	-0.7%
37.0%	67.6	67.2	-0.4	-0.6%
38.3%	67.5	67.1	-0.4	-0.6%
39.5%	67.5	67.1	-0.4	-0.6%
40.7%	67.5	67.1	-0.4	-0.6%
42.0%	67.5	67.1	-0.4	-0.7%
43.2%	67.5	67.0	-0.4	-0.7%
44.4%	67.5	67.0	-0.4	-0.7%
45.7%	67.5	67.0	-0.5	-0.7%
46.9%	67.5	67.0	-0.5	-0.7%
48.1%	67.4	67.0	-0.5	-0.7%
49.4%	67.4	67.0	-0.5	-0.7%
50.6%	67.4	66.9	-0.5	-0.7%
51.9%	67.4	66.9	-0.5	-0.7%
53.1%	67.3	66.9	-0.5	-0.7%
54.3%	67.3	66.8	-0.5	-0.8%
55.6%	67.3	66.7	-0.5	-0.8%
56.8%	67.3	66.7	-0.6	-0.8%
58.0%	67.3	66.7	-0.6	-0.9%
59.3%	67.3	66.6	-0.7	-1.0%
60.5%	67.3	66.5	-0.7	-1.1%
61.7%	67.3	66.1	-1.1	-1.7%
63.0%	67.2	66.0	-1.2	-1.8%
64.2%	67.2	66.0	-1.2	-1.8%
65.4%	67.2	65.9	-1.2	-1.8%
66.7%	67.1	65.9	-1.1	-1.7%
67.9%	67.1	65.9	-1.1	-1.7%
69.1%	67.1	65.9	-1.2	-1.7%
70.4%	67.0	65.8	-1.2	-1.8%
71.6%	67.0	65.8	-1.2	-1.7%
72.8%	66.9	65.8	-1.2	-1.7%
74.1%	66.9	65.8	-1.1	-1.7%
75.3%	66.9	65.6	-1.3	-1.9%
76.5%	66.8	65.6	-1.2	-1.8%
77.8%	66.8	65.6	-1.2	-1.8%
79.0%	66.8	65.5	-1.2	-1.9%
80.2%	66.7	65.5	-1.2	-1.9%
81.5%	66.7	65.3	-1.4	-2.1%
82.7%	66.7	65.3	-1.4	-2.1%
84.0%	66.7	65.3	-1.4	-2.1%
85.2%	66.6	65.2	-1.3	-2.0%
86.4%	66.5	65.2	-1.3	-2.0%
87.7%	66.4	65.2	-1.2	-1.9%
88.9%	66.4	65.2	-1.2	-1.8%
90.1%	66.3	65.2	-1.2	-1.8%
91.4%	66.2	64.9	-1.3	-1.9%
92.6%	66.1	64.9	-1.2	-1.9%
93.8%	66.0	64.9	-1.2	-1.7%
95.1%	65.9	64.7	-1.2	-1.8%
96.3%	65.9	64.7	-1.2	-1.8%
97.5%	65.6	64.6	-1.0	-1.5%
98.8%	65.0	64.5	-0.5	-0.7%
100.0%	64.4	63.4	-1.0	-1.5%

Figure SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

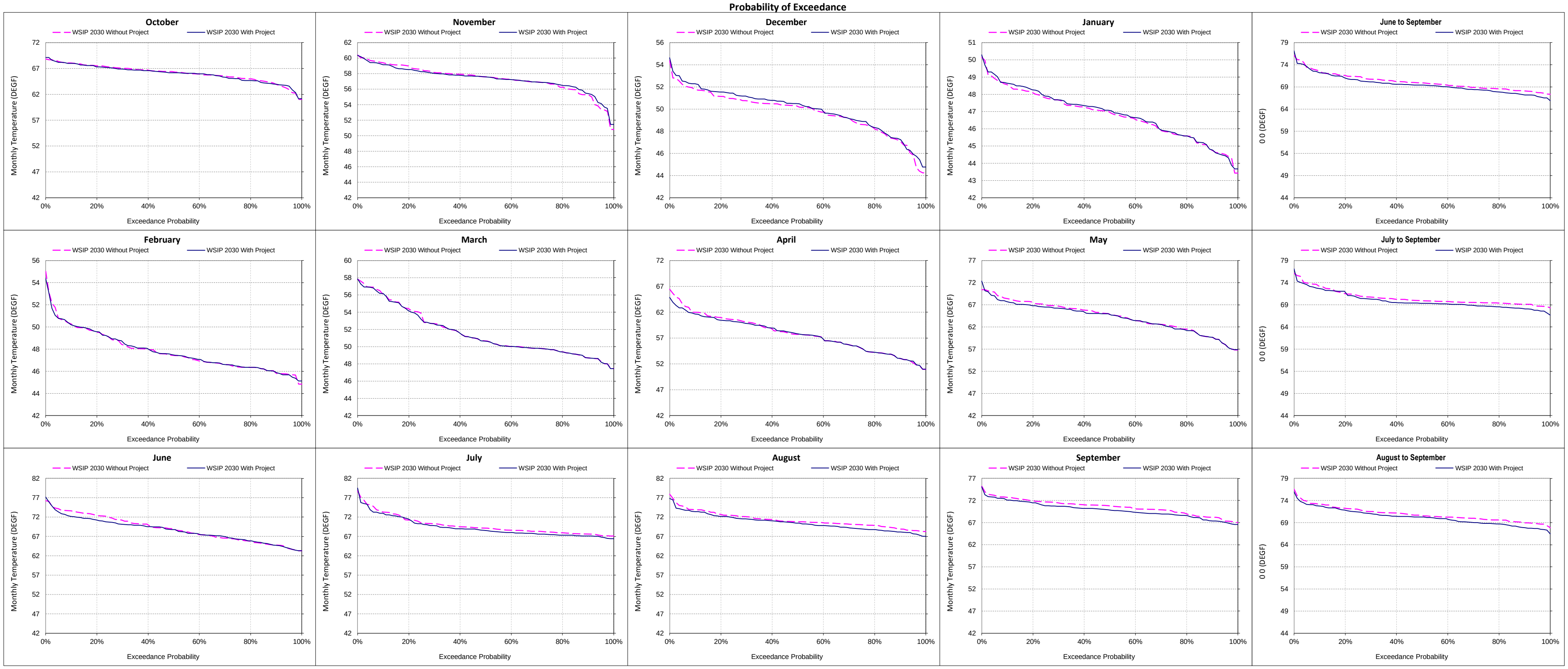


Table SQ10-1b

American River at Watt Avenue, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.8	69.1	0.3	0.4%
1.2%	68.7	69.1	0.4	0.6%
2.5%	68.7	68.6	-0.1	-0.1%
3.7%	68.6	68.4	-0.2	-0.4%
4.9%	68.4	68.2	-0.2	-0.3%
6.2%	68.2	68.2	0.0	0.0%
7.4%	68.1	68.2	0.0	0.1%
8.6%	68.1	68.0	-0.1	-0.1%
9.9%	68.1	68.0	-0.1	-0.1%
11.1%	68.0	68.0	0.0	0.0%
12.3%	67.9	67.9	0.0	-0.1%
13.6%	67.9	67.7	-0.2	-0.3%
14.8%	67.7	67.7	0.0	0.0%
16.0%	67.7	67.6	-0.1	-0.1%
17.3%	67.6	67.6	0.0	-0.1%
18.5%	67.6	67.6	0.0	-0.1%
19.8%	67.5	67.3	-0.2	-0.3%
21.0%	67.5	67.3	-0.2	-0.3%
22.2%	67.5	67.2	-0.2	-0.4%
23.5%	67.4	67.2	-0.2	-0.3%
24.7%	67.3	67.1	-0.2	-0.2%
25.9%	67.2	67.1	-0.1	-0.2%
27.2%	67.1	67.0	-0.1	-0.2%
28.4%	67.1	66.9	-0.2	-0.3%
29.6%	67.0	66.9	-0.2	-0.2%
30.9%	67.0	66.9	-0.2	-0.2%
32.1%	67.0	66.8	-0.3	-0.4%
33.3%	66.9	66.8	-0.2	-0.3%
34.6%	66.8	66.7	-0.1	-0.2%
35.8%	66.8	66.7	-0.1	-0.2%
37.0%	66.7	66.7	-0.1	-0.1%
38.3%	66.7	66.6	-0.1	-0.2%
39.5%	66.7	66.6	-0.2	-0.2%
40.7%	66.6	66.6	0.0	0.0%
42.0%	66.5	66.5	0.0	-0.1%
43.2%	66.5	66.4	-0.1	-0.1%
44.4%	66.5	66.4	-0.1	-0.2%
45.7%	66.4	66.3	-0.1	-0.1%
46.9%	66.4	66.3	-0.1	-0.2%
48.1%	66.4	66.2	-0.2	-0.3%
49.4%	66.4	66.2	-0.2	-0.3%
50.6%	66.3	66.2	-0.1	-0.2%
51.9%	66.3	66.2	-0.1	-0.2%
53.1%	66.2	66.1	-0.1	-0.2%
54.3%	66.1	66.1	-0.1	-0.1%
55.6%	66.0	66.1	0.0	0.1%
56.8%	66.0	66.1	0.1	0.1%
58.0%	66.0	66.1	0.1	0.1%
59.3%	65.9	66.0	0.0	0.1%
60.5%	65.9	66.0	0.0	0.0%
61.7%	65.8	65.9	0.2	0.3%
63.0%	65.8	65.8	0.1	0.1%
64.2%	65.7	65.8	0.1	0.1%
65.4%	65.7	65.7	0.1	0.1%
66.7%	65.6	65.6	0.0	-0.1%
67.9%	65.6	65.6	0.0	0.0%
69.1%	65.6	65.3	-0.3	-0.4%
70.4%	65.5	65.3	-0.2	-0.3%
71.6%	65.4	65.1	-0.3	-0.4%
72.8%	65.4	65.1	-0.3	-0.4%
74.1%	65.4	65.0	-0.3	-0.5%
75.3%	65.2	65.0	-0.2	-0.3%
76.5%	65.1	64.7	-0.3	-0.5%
77.8%	65.1	64.7	-0.4	-0.6%
79.0%	65.0	64.7	-0.3	-0.5%
80.2%	65.0	64.7	-0.3	-0.5%
81.5%	64.9	64.6	-0.3	-0.4%
82.7%	64.6	64.6	0.0	0.0%
84.0%	64.6	64.3	-0.3	-0.5%
85.2%	64.6	64.2	-0.3	-0.5%
86.4%	64.4	64.1	-0.3	-0.5%
87.7%	64.4	64.1	-0.2	-0.4%
88.9%	64.2	64.0	-0.2	-0.2%
90.1%	63.9	64.0	0.1	0.1%
91.4%	63.7	63.8	0.1	0.2%
92.6%	63.5	63.8	0.3	0.5%
93.8%	63.2	63.7	0.5	0.8%
95.1%	62.9	63.6	0.7	1.0%
96.3%	62.3	62.9	0.6	0.9%
97.5%	62.2	62.4	0.1	0.2%
98.8%	61.0	61.1	0.1	0.2%
100.0%	61.0	61.1	0.0	0.2%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.4	60.4	0.0	0.0%
1.2%	60.1	60.2	0.1	0.2%
2.5%	60.0	60.0	-0.1	-0.2%
3.7%	59.9	59.7	-0.2	-0.3%
4.9%	59.7	59.4	-0.3	-0.4%
6.2%	59.6	59.4	-0.2	-0.3%
7.4%	59.6	59.4	-0.2	-0.3%
8.6%	59.5	59.3	-0.2	-0.3%
9.9%	59.4	59.2	-0.2	-0.4%
11.1%	59.3	59.1	-0.2	-0.3%
12.3%	59.2	59.1	-0.1	-0.2%
13.6%	59.2	58.9	-0.2	-0.4%
14.8%	59.1	58.7	-0.4	-0.6%
16.0%	59.1	58.6	-0.5	-0.8%
17.3%	59.1	58.6	-0.5	-0.8%
18.5%	59.1	58.6	-0.5	-0.9%
19.8%	59.0	58.5	-0.5	-0.8%
21.0%	58.7	58.5	-0.2	-0.3%
22.2%	58.6	58.4	-0.2	-0.3%
23.5%	58.6	58.3	-0.2	-0.4%
24.7%	58.6	58.3	-0.3	-0.6%
25.9%	58.4	58.2	-0.1	-0.2%
27.2%	58.4	58.2	-0.2	-0.3%
28.4%	58.3	58.1	-0.2	-0.3%
29.6%	58.2	58.0	-0.1	-0.2%
30.9%	58.1	58.0	-0.1	-0.2%
32.1%	58.1	58.0	-0.1	-0.2%
33.3%	58.1	58.0	-0.1	-0.2%
34.6%	58.0	57.9	-0.1	-0.2%
35.8%	58.0	57.8	-0.2	-0.3%
37.0%	58.0	57.8	-0.1	-0.2%
38.3%	57.9	57.8	-0.1	-0.3%
39.5%	57.9	57.8	-0.1	-0.2%
40.7%	57.9	57.8	-0.1	-0.3%
42.0%	57.9	57.7	-0.2	-0.3%
43.2%	57.8	57.7	-0.1	-0.2%
44.4%	57.8	57.7	-0.1	-0.2%
45.7%	57.8	57.7	-0.1	-0.2%
46.9%	57.6	57.7	0.0	0.0%
48.1%	57.6	57.6	0.0	0.0%
49.4%	57.6	57.6	0.0	0.0%
50.6%	57.6	57.6	0.0	0.0%
51.9%	57.5	57.5	0.0	0.0%
53.1%	57.5	57.5	0.0	-0.1%
54.3%	57.4	57.3	-0.1	-0.2%
55.6%	57.4	57.3	-0.1	-0.1%
56.8%	57.3	57.3	0.0	-0.1%
58.0%	57.3	57.3	0.0	-0.1%
59.3%	57.3	57.2	0.0	-0.1%
60.5%	57.2	57.2	0.0	0.0%
61.7%	57.1	57.2	0.0	0.1%
63.0%	57.1	57.1	0.0	0.0%
64.2%	57.1	57.1	-0.1	-0.1%
65.4%	57.1	57.1	0.0	0.0%
66.7%	57.0	57.0	0.1	0.1%
67.9%	57.0	56.9	0.0	0.0%
69.1%	56.9	56.9	0.0	0.0%
70.4%	56.9	56.9	0.0	0.0%
71.6%	56.9	56.9	0.0	0.0%
72.8%	56.8	56.9	0.0	0.1%
74.1%	56.8	56.8	0.1	0.1%
75.3%	56.7	56.8	0.1	0.2%
76.5%	56.7	56.8	0.1	0.2%
77.8%	56.5	56.6	0.1	0.1%
79.0%	56.3	56.6	0.3	0.5%
80.2%	56.2	56.5	0.2	0.4%
81.5%	56.0	56.4	0.4	0.7%
82.7%	56.0	56.4	0.4	0.8%
84.0%	55.9	56.3	0.4	0.6%
85.2%	55.9	56.3	0.3	0.6%
86.4%	55.4	56.0	0.5	1.0%
87.7%	55.3	55.9	0.6	1.0%
88.9%	55.3	55.5	0.2	0.4%
90.1%	55.3	55.4	0.2	0.3%
91.4%	55.0	55.3	0.3	0.6%
92.6%	54.0	55.0	1.0	1.9%
93.8%	53.8	54.3	0.4	0.8%
95.1%	53.4	54.2	0.8	1.5%
96.3%	53.3	53.7	0.4	0.7%
97.5%	53.1	53.5	0.4	0.7%
98.8%	50.8	51.5	0.7	1.3%
100.0%	50.8	51.5	0.7	1.3%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.4	54.6	0.3	0.5%
1.2%	52.8	53.4	0.6	1.2%
2.5%	52.8	53.0	0.3	0.5%
3.7%	52.5	53.0	0.5	0.9%
4.9%	52.2	52.5	0.3	0.6%
6.2%	52.1	52.5	0.4	0.8%
7.4%	52.0	52.3	0.3	0.7%
8.6%	51.9	52.3	0.4	0.7%
9.9%	51.8	52.3	0.5	1.0%
11.1%	51.7	52.2	0.5	1.0%
12.3%	51.7	51.8	0.1	0.3%
13.6%	51.7	51.8	0.1	0.3%
14.8%	51.6	51.7	0.2	0.3%
16.0%	51.5	51.6	0.1	0.2%
17.3%	51.2	51.6	0.4	0.8%
18.5%	51.2	51.6	0.4	0.8%
19.8%	51.2	51.6	0.4	0.8%
21.0%	51.1	51.5	0.4	0.8%
22.2%	51.0	51.5	0.5	1.0%
23.5%	51.0	51.4	0.5	0.9%
24.7%	51.0	51.4	0.5	0.9%
25.9%	50.9	51.3	0.4	0.7%
27.2%	50.9	51.2	0.3	0.6%
28.4%	50.8	51.2	0.4	0.8%
29.6%	50.8	51.2	0.4	0.8%
30.9%	50.7	51.1	0.3	0.7%
32.1%	50.6	51.0	0.4	0.8%
33.3%	50.6	50.9	0.3	0.7%
34.6%	50.5	50.9	0.4	0.7%
35.8%	50.5	50.9	0.4	0.7%
37.0%	50.5	50.9	0.4	0.8%
38.3%	50.5	50.8	0.3	0.6%
39.5%	50.5	50.8	0.3	0.6%
40.7%	50.5	50.8	0.3	0.6%
42.0%	50.5	50.7	0.3	0.5%
43.2%	50.4	50.7	0.3	0.6%
44.4%	50.4	50.7	0.3	0.7%
45.7%	50.4	50.5	0.2	0.4%
46.9%	50.3	50.5	0.2	0.4%
48.1%	50.3	50.5	0.2	0.4%
49.4%	50.3	50.5	0.2	0.4%
50.6%	50.2	50.5	0.3	0.6%
51.9%	50.2	50.3	0.2	0.3%
53.1%	50.2	50.2	0.1	0.2%
54.3%	50.1	50.2	0.1	0.2%
55.6%	50.1	50.1	0.0	0.0%
56.8%	49.8	50.0	0.2	0.4%
58.0%	49.8	50.0	0.2	0.5%
59.3%	49.7	50.0	0.3	0.5%
60.5%	49.7	49.6	-0.1	-0.2%
61.7%	49.5	49.6	0.2	0.4%
63.0%	49.4	49.6	0.2	0.3%
64.2%	49.4	49.6	0.2	0.3%
65.4%	49.4	49.5	0.1	0.3%
66.7%	49.3	49.4	0.1	0.2%
67.9%	49.3	49.3	0.0	0.0%
69.1%	49.2	49.2	0.0	0.0%
70.4%	49.1	49.1	0.0	0.0%
71.6%	48.9	49.1	0.2	0.4%
72.8%	48.8	49.0	0.2	0.5%
74.1%	48.6	48.9	0.3	0.6%
75.3%	48.6	48.9	0.3	0.6%
76.5%	48.6	48.9	0.3	0.6%
77.8%	48.5	48.6	0.1	0.2%
79.0%	48.4	48.4	0.0	0.0%
80.2%	48.2	48.3	0.2	0.3%
81.5%	48.1	48.3	0.2	0.3%
82.7%	47.9	48.1	0.1	0.3%
84.0%	47.8	47.9	0.1	0.2%
85.2%	47.5	47.7	0.2	0.4%
86.4%	47.4	47.4	0.0	0.1%
87.7%	47.3	47.4	0.0	0.1%
88.9%	47.2	47.4	0.1	0.3%
90.1%	47.1	47.2	0.2	0.4%
91.4%	46.8	46.9	0.1	0.3%
92.6%	46.7	46.4	-0.3	-0.7%
93.8%	46.0	46.3	0.2	0.5%
95.1%	45.9	45.9	0.1	0.1%
96.3%	44.7	45.7	1.0	2.3%
97.5%	44.4	45.4	1.0	2.3%
98.8%	44.2	44.8	0.5	1.2%
100.0%	44.2	44.8	0.5	1.2%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.1	50.3	0.2	0.3%
1.2%	50.0	49.7	-0.3	-0.5%
2.5%	49.1	49.3	0.2	0.4%
3.7%	49.1	49.3	0.2	0.5%
4.9%	48.9	49.2	0.2	0.5%
6.2%	48.8	49.0	0.2	0.5%
7.4%	48.8	48.7	-0.1	-0.1%
8.6%	48.6	48.7	0.1	0.2%
9.9%	48.6	48.6	0.1	0.2%
11.1%	48.4	48.6	0.2	0.3%
12.3%	48.3	48.6	0.3	0.6%
13.6%	48.3	48.5	0.2	0.4%
14.8%	48.3	48.5	0.2	0.5%
16.0%	48.2	48.5	0.2	0.4%
17.3%	48.2	48.4	0.2	0.5%
18.5%	48.2	48.3	0.2	0.3%
19.8%	48.1	48.3	0.1	0.3%
21.0%	48.0	48.2	0.2	0.5%
22.2%	48.0	48.2	0.2	0.4%
23.5%	47.9	48.0	0.1	0.2%
24.7%	47.8	47.9	0.1	0.2%
25.9%	47.8	47.9	0.1	0.3%
27.2%	47.7	47.8	0.1	0.2%
28.4%	47.7	47.7	0.0	0.0%
29.6%	47.7	47.7	0.0	0.0%
30.9%	47.6	47.7	0.0	0.0%
32.1%	47.4	47.6	0.2	0.4%
33.3%	47.4	47.5	0.1	0.2%
34.6%	47.4	47.4	0.1	0.2%
35.8%	47.3	47.4	0.1	0.2%
37.0%	47.3	47.4	0.1	0.2%
38.3%	47.3	47.4	0.1	0.2%
39.5%	47.3	47.4	0.1	0.2%
40.7%	47.2	47.3	0.1	0.2%
42.0%	47.2	47.3	0.1	0.3%
43.2%	47.1	47.3	0.2	0.4%
44.4%	47.1	47.3	0.2	0.4%
45.7%	47.1	47.2	0.1	0.3%
46.9%	47.1	47.2	0.1	0.2%
48.1%	47.0	47.1	0.0	0.1%
49.4%	47.0	47.1	0.1	0.1%
50.6%	46.9	47.1	0.1	0.3%
51.9%	46.8	46.9	0.1	0.2%
53.1%	46.8	46.9	0.1	0.2%
54.3%	46.7	46.9	0.1	0.2%
55.6%	46.7	46.8	0.1	0.3%
56.8%	46.7	46.8	0.1	0.2%
58.0%	46.6	46.7	0.0	0.1%
59.3%	46.6	46.7	0.0	0.1%
60.5%	46.5	46.6	0.1	0.3%
61.7%	46.5	46.6	0.1	0.3%
63.0%	46.4	46.5	0.1	0.3%
64.2%	46.4	46.4	0.0	0.1%
65.4%	46.3	46.4	0.1	0.3%
66.7%	46.2	46.4	0.2	0.3%
67.9%	46.2	46.3	0.1	0.3%
69.1%	46.0	46.0	0.1	0.1%
70.4%	45.9	45.9	0.0	0.1%
71.6%	45.8	45.9	0.0	0.1%
72.8%	45.8	45.9	0.0	0.1%
74.1%	45.7	45.8	0.1	0.1%
75.3%	45.7	45.8	0.1	0.2%
76.5%	45.7	45.7	0.0	0.0%
77.8%	45.6	45.6	0.0	0.0%
79.0%	45.6	45.6	0.0	0.0%
80.2%	45.6	45.6	0.0	0.0%
81.5%	45.6	45.5	-0.1	-0.1%
82.7%	45.5	45.5	0.0	0.0%
84.0%	45.2	45.2	0.0	0.1%
85.2%	45.2	45.2	0.1	0.1%
86.4%	45.1	45.2	0.1	0.2%
87.7%	45.1	45.1	0.0	0.0%
88.9%	44.8	44.8	0.0	0.0%
90.1%	44.7	44.8	0.0	0.0%
91.4%	44.6	44.6	0.0	0.0%
92.6%	44.6	44.5	-0.1	-0.1%
93.8%	44.6	44.5	-0.1	-0.2%
95.1%	44.5	44.4	-0.1	-0.2%
96.3%	44.4	44.3	-0.1	-0.2%
97.5%	44.3	43.9	-0.4	-0.9%
98.8%	43.4	43.7	0.2	0.6%
100.0%	43.4	43.7	0.2	0.6%

Table SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.0	54.4	-0.6	-1.1%
1.2%	53.1	53.1	0.0	0.0%
2.5%	52.1	51.7	-0.5	-0.9%
3.7%	51.8	51.1	-0.7	-1.4%
4.9%	50.8	50.8	0.0	0.0%
6.2%	50.7	50.7	0.1	0.1%
7.4%	50.6	50.7	0.1	0.2%
8.6%	50.4	50.4	0.0	0.0%
9.9%	50.3	50.2	-0.1	-0.2%
11.1%	50.1	50.1	0.0	0.0%
12.3%	50.0	50.0	0.1	0.2%
13.6%	49.9	50.0	0.0	0.1%
14.8%	49.9	49.9	0.0	0.0%
16.0%	49.8	49.9	0.0	0.1%
17.3%	49.7	49.8	0.1	0.2%
18.5%	49.7	49.7	0.0	0.0%
19.8%	49.5	49.6	0.0	0.1%
21.0%	49.5	49.6	0.1	0.1%
22.2%	49.3	49.3	-0.1	-0.1%
23.5%	49.3	49.2	0.0	-0.1%
24.7%	49.1	49.1	0.0	0.0%
25.9%	48.8	48.9	0.1	0.1%
27.2%	48.8	48.9	0.1	0.2%
28.4%	48.8	48.8	0.0	0.1%
29.6%	48.4	48.7	0.3	0.6%
30.9%	48.3	48.5	0.1	0.3%
32.1%	48.2	48.3	0.1	0.2%
33.3%	48.1	48.3	0.2	0.4%
34.6%	48.1	48.2	0.1	0.3%
35.8%	48.1	48.1	0.0	0.1%
37.0%	48.0	48.1	0.1	0.1%
38.3%	48.0	48.1	0.1	0.1%
39.5%	48.0	48.1	0.1	0.1%
40.7%	47.9	47.9	0.0	-0.1%
42.0%	47.9	47.8	-0.2	-0.4%
43.2%	47.7	47.7	0.0	0.0%
44.4%	47.6	47.6	0.0	0.1%
45.7%	47.6	47.6	0.0	0.0%
46.9%	47.6	47.6	0.0	0.1%
48.1%	47.5	47.6	0.1	0.3%
49.4%	47.4	47.5	0.0	0.1%
50.6%	47.4	47.4	0.0	0.1%
51.9%	47.4	47.4	0.0	0.0%
53.1%	47.4	47.4	0.0	0.0%
54.3%	47.3	47.3	0.1	0.1%
55.6%	47.3	47.2	0.0	-0.1%
56.8%	47.1	47.2	0.1	0.3%
58.0%	47.1	47.2	0.1	0.2%
59.3%	47.0	47.1	0.1	0.2%
60.5%	46.9	47.1	0.2	0.4%
61.7%	46.9	46.9	0.0	0.0%
63.0%	46.8	46.8	0.0	0.0%
64.2%	46.8	46.8	0.0	0.1%
65.4%	46.8	46.8	0.0	0.0%
66.7%	46.7	46.8	0.0	0.1%
67.9%	46.7	46.8	0.0	0.1%
69.1%	46.6	46.6	0.0	0.0%
70.4%	46.6	46.6	0.0	0.0%
71.6%	46.6	46.6	0.0	0.0%
72.8%	46.5	46.6	0.1	0.2%
74.1%	46.4	46.5	0.0	0.1%
75.3%	46.4	46.5	0.1	0.2%
76.5%	46.4	46.4	0.0	0.0%
77.8%	46.4	46.4	0.0	0.0%
79.0%	46.4	46.4	0.0	0.0%
80.2%	46.4	46.4	0.0	0.0%
81.5%	46.4	46.4	0.0	0.0%
82.7%	46.3	46.3	0.0	0.0%
84.0%	46.2	46.2	0.0	0.0%
85.2%	46.2	46.2	0.0	0.0%
86.4%	46.1	46.1	0.0	0.0%
87.7%	46.1	46.1	0.0	0.0%
88.9%	46.1	46.0	0.0	0.0%
90.1%	45.8	45.9	0.1	0.1%
91.4%	45.8	45.8	0.0	0.0%
92.6%	45.8	45.7	-0.1	-0.2%
93.8%	45.8	45.7	-0.1	-0.2%
95.1%	45.7	45.7	0.0	-0.1%
96.3%	45.7	45.5	-0.2	-0.5%
97.5%	45.7	45.4	-0.3	-0.6%
98.8%	44.8	45.1	0.3	0.6%
100.0%	44.8	45.1	0.3	0.6%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.8	57.9	0.0	0.0%
1.2%	57.6	57.3	-0.3	-0.6%
2.5%	57.3	56.9	-0.4	-0.7%
3.7%	56.9	56.9	0.0	0.0%
4.9%	56.9	56.9	0.0	0.0%
6.2%	56.9	56.8	-0.1	-0.2%
7.4%	56.6	56.5	-0.2	-0.3%
8.6%	56.5	56.2	-0.3	-0.6%
9.9%	56.0	56.2	0.1	0.3%
11.1%	55.9	55.9	0.0	0.0%
12.3%	55.4	55.3	-0.2	-0.3%
13.6%	55.4	55.2	-0.2	-0.4%
14.8%	55.2	55.2	0.0	0.0%
16.0%	55.2	55.1	-0.1	-0.1%
17.3%	54.7	54.7	0.0	0.0%
18.5%	54.5	54.5	0.0	0.0%
19.8%	54.4	54.2	-0.2	-0.4%
21.0%	54.2	54.0	-0.2	-0.3%
22.2%	54.1	53.9	-0.2	-0.3%
23.5%	54.1	53.7	-0.4	-0.7%
24.7%	53.9	53.2	-0.7	-1.3%
25.9%	52.8	52.8	0.0	0.1%
27.2%	52.8	52.8	0.0	0.0%
28.4%	52.7	52.7	0.0	0.0%
29.6%	52.7	52.7	0.0	0.0%
30.9%	52.6	52.5	-0.1	-0.3%
32.1%	52.5	52.5	0.0	0.0%
33.3%	52.3	52.5	0.2	0.4%
34.6%	52.2	52.2	0.0	0.0%
35.8%	52.0	52.0	0.0	0.0%
37.0%	52.0	52.0	0.0	0.1%
38.3%	51.9	51.9	0.0	0.0%
39.5%	51.7	51.7	0.0	0.0%
40.7%	51.4	51.4	0.0	0.0%
42.0%	51.2	51.2	0.0	0.0%
43.2%	51.2	51.2	0.0	0.0%
44.4%	51.0	51.0	0.0	0.1%
45.7%	51.0	51.0	0.0	0.0%
46.9%	50.9	50.9	0.1	0.1%
48.1%	50.7	50.7	0.0	-0.1%
49.4%	50.7	50.7	0.0	-0.1%
50.6%	50.6	50.6	0.0	0.0%
51.9%	50.5	50.5	0.0	0.0%
53.1%	50.3	50.3	0.0	0.0%
54.3%	50.3	50.3	0.0	0.0%
55.6%	50.1	50.1	0.0	0.0%
56.8%	50.1	50.1	0.0	0.0%
58.0%	50.1	50.1	0.0	-0.1%
59.3%	50.0	50.0	0.0	0.0%
60.5%	50.0	50.0	0.0	0.0%
61.7%	50.0	50.0	0.0	0.0%
63.0%	50.0	50.0	0.0	-0.1%
64.2%	50.0	49.9	-0.1	-0.1%
65.4%	49.9	49.9	0.0	0.0%
66.7%	49.9	49.9	0.0	0.0%
67.9%	49.8	49.8	0.0	0.0%
69.1%	49.8	49.8	0.0	0.0%
70.4%	49.8	49.8	0.0	0.0%
71.6%	49.8	49.8	0.0	0.0%
72.8%	49.8	49.8	0.0	0.0%
74.1%	49.7	49.7	0.0	0.0%
75.3%	49.6	49.6	0.0	0.0%
76.5%	49.6	49.6	0.0	0.0%
77.8%	49.5	49.5	0.0	0.0%
79.0%	49.4	49.4	0.0	0.0%
80.2%	49.4	49.4	0.0	0.0%
81.5%	49.3	49.3	0.0	0.0%
82.7%	49.2	49.2	0.0	0.0%
84.0%	49.2	49.2	0.0	0.0%
85.2%	49.1	49.1	0.0	0.0%
86.4%	49.0	49.1	0.0	0.1%
87.7%	49.0	49.0	0.0	0.0%
88.9%	48.7	48.7	0.0	0.0%
90.1%	48.7	48.7	0.0	0.0%
91.4%	48.7	48.7	0.0	0.0%
92.6%	48.6	48.6	0.0	0.0%
93.8%	48.6	48.6	0.0	0.1%
95.1%	48.3	48.2	-0.1	-0.2%
96.3%	48.0	48.0	0.0	0.0%
97.5%	48.0	48.0	0.0	0.0%
98.8%	47.5	47.5	0.0	0.0%
100.0%	47.5	47.5	0.0	0.0%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.4	64.9	-1.6	-2.3%
1.2%	65.6	63.9	-1.7	-2.6%
2.5%	65.0	63.3	-1.7	-2.6%
3.7%	64.6	62.8	-1.8	-2.8%
4.9%	63.6	62.8	-0.8	-1.2%
6.2%	63.1	62.4	-0.7	-1.1%
7.4%	63.0	62.0	-1.0	-1.6%
8.6%	62.0	61.9	-0.1	-0.2%
9.9%	62.0	61.6	-0.3	-0.5%
11.1%	62.0	61.6	-0.4	-0.6%
12.3%	61.9	61.3	-0.6	-1.0%
13.6%	61.8	61.1	-0.7	-1.1%
14.8%	61.3	61.1	-0.2	-0.3%
16.0%	61.2	61.0	-0.2	-0.3%
17.3%	61.2	61.0	-0.2	-0.3%
18.5%	61.0	60.6	-0.5	-0.8%
19.8%	61.0	60.4	-0.5	-0.9%
21.0%	60.8	60.4	-0.4	-0.7%
22.2%	60.7	60.4	-0.3	-0.5%
23.5%	60.6	60.3	-0.3	-0.5%
24.7%	60.6	60.2	-0.4	-0.7%
25.9%	60.6	60.1	-0.4	-0.7%
27.2%	60.4	60.1	-0.3	-0.6%
28.4%	60.3	60.0	-0.3	-0.5%
29.6%	60.1	59.8	-0.3	-0.5%
30.9%	60.0	59.8	-0.2	-0.4%
32.1%	60.0	59.7	-0.3	-0.5%
33.3%	59.8	59.5	-0.3	-0.5%
34.6%	59.8	59.5	-0.3	-0.5%
35.8%	59.3	59.4	0.1	0.2%
37.0%	59.0	59.3	0.3	0.5%
38.3%	58.9	59.0	0.1	0.1%
39.5%	58.9	58.9	0.0	0.0%
40.7%	58.4	58.9	0.5	0.9%
42.0%	58.4	58.4	0.1	0.1%
43.2%	58.2	58.4	0.1	0.2%
44.4%	58.2	58.4	0.2	0.3%
45.7%	58.1	58.2	0.2	0.3%
46.9%	57.9	58.1	0.2	0.4%
48.1%	57.8	58.0	0.3	0.5%
49.4%	57.7	57.9	0.1	0.2%
50.6%	57.7	57.8	0.0	0.1%
51.9%	57.7	57.7	0.0	0.0%
53.1%	57.6	57.6	0.0	0.0%
54.3%	57.6	57.6	0.1	0.1%
55.6%	57.5	57.6	0.1	0.2%
56.8%	57.4	57.5	0.1	0.1%
58.0%	57.3	57.3	0.0	0.1%
59.3%	57.2	57.2	-0.1	-0.1%
60.5%	56.5	56.5	0.0	0.0%
61.7%	56.5	56.4	0.0	0.0%
63.0%	56.4	56.4	0.0	0.0%
64.2%	56.4	56.3	-0.1	-0.2%
65.4%	56.2	56.2	0.0	0.0%
66.7%	56.2	56.2	0.0	0.0%
67.9%	55.9	55.9	0.0	0.0%
69.1%	55.8	55.8	0.0	0.0%
70.4%	55.7	55.7	0.0	0.0%
71.6%	55.5	55.5	0.0	0.0%
72.8%	55.5	55.5	0.0	0.0%
74.1%	55.2	55.2	0.0	0.0%
75.3%	54.9	54.9	0.0	0.1%
76.5%	54.5	54.5	0.0	0.0%
77.8%	54.3	54.3	0.0	0.0%
79.0%	54.3	54.3	0.0	0.0%
80.2%	54.2	54.2	0.0	0.0%
81.5%	54.1	54.1	0.0	0.0%
82.7%	54.1	54.1	0.0	0.0%
84.0%	54.0	54.0	0.0	0.0%
85.2%	53.9	53.9	0.0	0.0%
86.4%	53.9	53.9	0.0	0.0%
87.7%	53.6	53.6	0.0	0.0%
88.9%	53.1	53.1	0.0	0.0%
90.1%	53.0	53.0	0.0	0.0%
91.4%	52.9	52.8	0.0	0.0%
92.6%	52.8	52.8	-0.1	-0.1%
93.8%	52.6	52.6	0.0	0.0%
95.1%	52.2	52.5	0.3	0.6%
96.3%	51.8	51.8	0.0	0.0%
97.5%	51.7	51.7	0.0	0.1%
98.8%	51.0	51.0	0.0	0.1%
100.0%	51.0	51.0	0.0	0.1%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.4	72.4	1.9	2.8%
1.2%	70.4	70.2	-0.3	-0.4%
2.5%	70.1	69.9	-0.2	-0.3%
3.7%	70.0	69.2	-0.8	-1.2%
4.9%	69.9	69.0	-0.9	-1.3%
6.2%	69.1	68.2	-0.9	-1.3%
7.4%	69.0	68.0	-1.0	-1.4%
8.6%	68.5	68.0	-0.6	-0.8%
9.9%	68.4	67.7	-0.7	-1.0%
11.1%	68.3	67.5	-0.8	-1.1%
12.3%	68.1	67.4	-0.6	-0.9%
13.6%	67.9	67.1	-0.8	-1.2%
14.8%	67.8	67.1	-0.7	-1.0%
16.0%	67.8	67.1	-0.7	-1.0%
17.3%	67.8	67.0	-0.7	-1.1%
18.5%	67.8	67.0	-0.8	-1.1%
19.8%	67.6	66.8	-0.8	-1.2%
21.0%	67.3	66.8	-0.5	-0.7%
22.2%	67.2	66.6	-0.6	-0.9%
23.5%	67.2	66.6	-0.6	-0.9%
24.7%	67.0	66.5	-0.5	-0.8%
25.9%	66.9	66.5	-0.4	-0.6%
27.2%	66.8	66.4	-0.4	-0.6%
28.4%	66.8	66.2	-0.6	-0.8%
29.6%	66.7	66.2	-0.5	-0.8%
30.9%	66.6	66.2	-0.4	-0.6%
32.1%	66.4	66.1	-0.3	-0.5%
33.3%	66.2	66.0	-0.2	-0.3%
34.6%	66.2	66.0	-0.2	-0.3%
35.8%	66.1	65.7	-0.4	-0.7%
37.0%	66.1	65.6	-0.5	-0.7%
38.3%	66.0	65.6	-0.4	-0.6%
39.5%	65.8	65.5	-0.3	-0.5%
40.7%	65.8	65.1	-0.7	-1.0%
42.0%	65.7	65.1	-0.7	-1.0%
43.2%	65.6	65.1	-0.6	-0.8%
44.4%	65.3	65.0	-0.3	-0.4%
45.7%	65.3	65.0	-0.3	-0.4%
46.9%	65.1	65.0	-0.1	-0.2%
48.1%	65.1	65.0	-0.1	-0.1%
49.4%	65.0	65.0	-0.1	-0.1%
50.6%	64.7	64.7	0.0	0.0%
51.9%	64.6	64.6	0.0	-0.1%
53.1%	64.5	64.5	0.0	0.0%
54.3%	64.4	64.1	-0.3	-0.5%
55.6%	64.2	64.0	-0.2	-0.3%
56.8%	64.0	63.9	-0.1	-0.2%
58.0%	63.7	63.7	0.0	0.0%
59.3%	63.4	63.4	0.0	0.0%
60.5%	63.4	63.4	0.0	0.0%
61.7%	63.3	63.4	0.1	0.1%
63.0%	63.1	63.2	0.0	0.1%
64.2%	62.8	63.1	0.3	0.4%
65.4%	62.7	62.8	0.1	0.2%
66.7%	62.7	62.7	0.0	0.0%
67.9%	62.7	62.7	0.0	0.0%
69.1%	62.6	62.6	0.0	0.0%
70.4%	62.6	62.5	-0.1	-0.1%
71.6%	62.5	62.2	-0.2	-0.4%
72.8%	62.3	62.1	-0.2	-0.4%
74.1%	62.2	62.0	-0.3	-0.4%
75.3%	62.1	61.5	-0.5	-0.9%
76.5%	62.0	61.5	-0.4	-0.7%
77.8%	61.5	61.5	0.0	0.0%
79.0%	61.5	61.4	-0.1	-0.2%
80.2%	61.5	61.2	-0.3	-0.6%
81.5%	61.4	61.2	-0.2	-0.4%
82.7%	61.2	61.1	0.0	-0.1%
84.0%	60.6	60.6	0.0	0.0%
85.2%	60.1	60.1	0.0	0.0%
86.4%	59.9	59.9	0.0	0.0%
87.7%	59.8	59.8	0.0	0.0%
88.9%	59.8	59.7	-0.1	-0.1%
90.1%	59.6	59.6	0.0	0.0%
91.4%	59.3	59.2	0.0	0.0%
92.6%	59.2	59.2	0.0	0.0%
93.8%	58.4	58.4	0.0	0.0%
95.1%	58.0	58.0	0.0	0.0%
96.3%	57.3	57.3	0.0	0.0%
97.5%	57.0	57.0	0.0	0.0%
98.8%	56.8	56.9	0.0	0.1%
100.0%	56.8	56.9	0.0	0.1%

Table SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	76.2	77.2	1.0	1.3%
1.2%	76.1	76.0	-0.1	-0.1%
2.5%	74.8	74.9	0.1	0.2%
3.7%	74.3	73.9	-0.5	-0.6%
4.9%	74.2	73.3	-0.9	-1.2%
6.2%	73.7	72.8	-0.9	-1.2%
7.4%	73.7	72.7	-1.0	-1.4%
8.6%	73.6	72.3	-1.3	-1.8%
9.9%	73.6	72.1	-1.5	-2.0%
11.1%	73.4	72.1	-1.3	-1.8%
12.3%	73.3	72.0	-1.3	-1.8%
13.6%	73.1	71.9	-1.2	-1.7%
14.8%	73.0	71.7	-1.3	-1.8%
16.0%	73.0	71.7	-1.3	-1.8%
17.3%	72.9	71.6	-1.3	-1.8%
18.5%	72.7	71.4	-1.3	-1.8%
19.8%	72.4	71.2	-1.2	-1.7%
21.0%	72.3	71.1	-1.3	-1.7%
22.2%	72.3	71.0	-1.3	-1.8%
23.5%	72.2	70.8	-1.4	-2.0%
24.7%	71.9	70.7	-1.2	-1.7%
25.9%	71.7	70.6	-1.1	-1.6%
27.2%	71.4	70.5	-0.9	-1.2%
28.4%	71.4	70.2	-1.1	-1.6%
29.6%	71.2	70.2	-1.1	-1.5%
30.9%	70.9	70.1	-0.8	-1.2%
32.1%	70.9	70.0	-0.9	-1.2%
33.3%	70.5	70.0	-0.5	-0.7%
34.6%	70.3	69.9	-0.5	-0.6%
35.8%	70.3	69.9	-0.4	-0.6%
37.0%	70.2	69.8	-0.4	-0.5%
38.3%	70.2	69.7	-0.4	-0.6%
39.5%	70.2	69.5	-0.6	-0.9%
40.7%	69.7	69.5	-0.1	-0.2%
42.0%	69.3	69.5	0.1	0.2%
43.2%	69.3	69.5	0.2	0.3%
44.4%	69.2	69.4	0.2	0.3%
45.7%	69.2	69.3	0.1	0.1%
46.9%	69.2	68.9	-0.3	-0.4%
48.1%	69.0	68.8	-0.2	-0.3%
49.4%	69.0	68.8	-0.2	-0.3%
50.6%	68.6	68.8	0.1	0.2%
51.9%	68.5	68.3	-0.2	-0.3%
53.1%	68.5	68.2	-0.2	-0.3%
54.3%	68.2	68.2	0.0	0.0%
55.6%	68.1	67.8	-0.3	-0.5%
56.8%	67.9	67.8	-0.1	-0.1%
58.0%	67.8	67.8	0.0	0.0%
59.3%	67.5	67.7	0.2	0.2%
60.5%	67.4	67.4	0.0	0.0%
61.7%	67.4	67.4	0.0	0.0%
63.0%	67.3	67.3	0.0	0.0%
64.2%	67.2	67.3	0.1	0.1%
65.4%	67.0	67.2	0.2	0.3%
66.7%	66.8	67.2	0.4	0.7%
67.9%	66.7	67.2	0.4	0.6%
69.1%	66.6	67.1	0.5	0.7%
70.4%	66.6	66.9	0.4	0.6%
71.6%	66.5	66.6	0.1	0.2%
72.8%	66.4	66.6	0.2	0.3%
74.1%	66.4	66.4	0.0	0.0%
75.3%	66.1	66.3	0.2	0.3%
76.5%	66.1	66.2	0.2	0.2%
77.8%	65.9	66.1	0.2	0.3%
79.0%	65.9	65.9	0.0	0.0%
80.2%	65.7	65.8	0.1	0.2%
81.5%	65.4	65.6	0.2	0.3%
82.7%	65.4	65.5	0.1	0.2%
84.0%	65.3	65.4	0.2	0.3%
85.2%	65.1	65.3	0.1	0.2%
86.4%	65.0	65.1	0.2	0.2%
87.7%	64.9	65.0	0.1	0.1%
88.9%	64.8	64.8	-0.1	-0.1%
90.1%	64.8	64.7	0.0	-0.1%
91.4%	64.7	64.6	-0.1	-0.2%
92.6%	64.6	64.4	-0.2	-0.3%
93.8%	64.2	64.1	0.0	0.0%
95.1%	63.8	63.9	0.1	0.2%
96.3%	63.7	63.7	0.0	0.0%
97.5%	63.5	63.5	0.0	0.0%
98.8%	63.3	63.3	0.0	0.0%
100.0%	63.3	63.3	0.0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.8	79.5	0.7	0.9%
1.2%	77.1	75.8	-1.4	-1.8%
2.5%	76.4	75.5	-0.9	-1.2%
3.7%	75.2	75.3	0.1	0.1%
4.9%	75.2	73.9	-1.3	-1.7%
6.2%	74.7	73.3	-1.5	-2.0%
7.4%	73.9	73.3	-0.6	-0.8%
8.6%	73.7	73.0	-0.6	-0.9%
9.9%	73.3	73.0	-0.3	-0.4%
11.1%	73.2	72.6	-0.7	-0.9%
12.3%	73.2	72.6	-0.6	-0.8%
13.6%	72.8	72.4	-0.4	-0.6%
14.8%	72.8	72.3	-0.5	-0.6%
16.0%	72.5	72.1	-0.4	-0.6%
17.3%	72.1	72.0	-0.1	-0.1%
18.5%	71.3	71.7	0.4	0.6%
19.8%	71.2	71.6	0.3	0.4%
21.0%	71.2	71.0	-0.2	-0.3%
22.2%	71.2	70.5	-0.7	-1.0%
23.5%	70.9	70.3	-0.6	-0.9%
24.7%	70.5	70.3	-0.2	-0.4%
25.9%	70.4	70.1	-0.3	-0.5%
27.2%	70.4	70.0	-0.3	-0.4%
28.4%	70.3	69.8	-0.5	-0.7%
29.6%	70.3	69.8	-0.4	-0.6%
30.9%	70.2	69.7	-0.5	-0.7%
32.1%	70.1	69.4	-0.7	-1.0%
33.3%	69.9	69.3	-0.6	-0.8%
34.6%	69.9	69.3	-0.6	-0.9%
35.8%	69.7	69.3	-0.4	-0.6%
37.0%	69.7	69.1	-0.6	-0.8%
38.3%	69.6	69.0	-0.6	-0.8%
39.5%	69.5	69.0	-0.5	-0.8%
40.7%	69.5	69.0	-0.5	-0.8%
42.0%	69.5	68.9	-0.5	-0.8%
43.2%	69.4	68.9	-0.5	-0.7%
44.4%	69.4	68.9	-0.4	-0.6%
45.7%	69.3	68.9	-0.4	-0.5%
46.9%	69.2	68.7	-0.5	-0.7%
48.1%	69.2	68.6	-0.5	-0.8%
49.4%	69.1	68.6	-0.6	-0.9%
50.6%	69.1	68.5	-0.6	-0.9%
51.9%	69.0	68.3	-0.7	-1.0%
53.1%	69.0	68.3	-0.7	-1.1%
54.3%	68.9	68.2	-0.7	-1.0%
55.6%	68.8	68.2	-0.6	-0.9%
56.8%	68.7	68.0	-0.7	-1.0%
58.0%	68.6	68.0	-0.6	-0.9%
59.3%	68.6	68.0	-0.6	-0.9%
60.5%	68.6	68.0	-0.6	-0.9%
61.7%	68.6	67.9	-0.7	-1.0%
63.0%	68.6	67.9	-0.7	-1.0%
64.2%	68.5	67.9	-0.7	-1.0%
65.4%	68.4	67.8	-0.6	-0.9%
66.7%	68.4	67.8	-0.6	-0.9%
67.9%	68.3	67.8	-0.5	-0.8%
69.1%	68.3	67.8	-0.6	-0.8%
70.4%	68.3	67.6	-0.7	-1.0%
71.6%	68.3	67.6	-0.7	-1.0%
72.8%	68.2	67.6	-0.6	-0.9%
74.1%	68.2	67.5	-0.7	-1.0%
75.3%	68.1	67.5	-0.6	-0.9%
76.5%	68.1	67.5	-0.6	-0.9%
77.8%	68.0	67.4	-0.6	-0.8%
79.0%	68.0	67.3	-0.6	-0.9%
80.2%	67.9	67.3	-0.6	-0.9%
81.5%	67.9	67.3	-0.5	-0.8%
82.7%	67.8	67.3	-0.5	-0.8%
84.0%	67.7	67.3	-0.5	-0.7%
85.2%	67.7	67.2	-0.5	-0.8%
86.4%	67.7	67.2	-0.5	-0.7%
87.7%	67.6	67.1	-0.5	-0.8%
88.9%	67.6	67.1	-0.5	-0.8%
90.1%	67.6	67.1	-0.5	-0.8%
91.4%	67.6	67.1	-0.5	-0.7%
92.6%	67.5	67.1	-0.5	-0.7%
93.8%	67.4	67.0	-0.4	-0.5%
95.1%	67.2	66.8	-0.4	-0.6%
96.3%	67.2	66.7	-0.4	-0.7%
97.5%	67.2	66.5	-0.6	-0.9%
98.8%	67.1	66.4	-0.7	-1.0%
100.0%	67.1	66.4	-0.7	-1.0%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	77.9	76.8	-1.1	-1.4%
1.2%	76.8	76.4	-0.4	-0.5%
2.5%	75.7	74.3	-1.5	-1.9%
3.7%	75.0	74.1	-0.9	-1.2%
4.9%	74.9	74.0	-0.9	-1.2%
6.2%	74.6	73.8	-0.8	-1.1%
7.4%	74.0	73.7	-0.3	-0.4%
8.6%	74.0	73.5	-0.5	-0.6%
9.9%	73.9	73.4	-0.5	-0.7%
11.1%	73.9	73.4	-0.5	-0.7%
12.3%	73.9	73.3	-0.6	-0.8%
13.6%	73.7	73.2	-0.4	-0.6%
14.8%	73.6	72.9	-0.7	-1.0%
16.0%	73.2	72.6	-0.6	-0.8%
17.3%	73.2	72.4	-0.9	-1.2%
18.5%	72.8	72.3	-0.5	-0.6%
19.8%	72.7	72.1	-0.6	-0.8%
21.0%	72.5	72.1	-0.4	-0.5%
22.2%	72.5	72.1	-0.3	-0.5%
23.5%	72.5	72.0	-0.4	-0.6%
24.7%	72.4	71.9	-0.5	-0.8%
25.9%	72.3	71.6	-0.7	-1.0%
27.2%	72.2	71.6	-0.5	-0.7%
28.4%	72.1	71.5	-0.6	-0.8%
29.6%	72.1	71.5	-0.6	-0.8%
30.9%	72.0	71.5	-0.6	-0.8%
32.1%	71.9	71.4	-0.5	-0.7%
33.3%	71.6	71.2	-0.4	-0.5%
34.6%	71.6	71.2	-0.4	-0.5%
35.8%	71.5	71.2	-0.4	-0.5%
37.0%	71.4	71.2	-0.3	-0.4%
38.3%	71.4	71.2	-0.2	-0.3%
39.5%	71.4	71.0	-0.4	-0.5%
40.7%	71.4	71.0	-0.4	-0.5%
42.0%	71.1	70.9	-0.2	-0.3%
43.2%	71.0	70.8	-0.2	-0.3%
44.4%	70.9	70.8	-0.2	-0.2%
45.7%	70.9	70.7	-0.2	-0.3%
46.9%	70.9	70.7	-0.2	-0.3%
48.1%	70.8	70.6	-0.3	-0.4%
49.4%	70.8	70.4	-0.4	-0.5%
50.6%	70.8	70.4	-0.4	-0.5%
51.9%	70.8	70.2	-0.5	-0.8%
53.1%	70.7	70.2	-0.5	-0.8%
54.3%	70.7	70.1	-0.6	-0.8%
55.6%	70.6	70.1	-0.6	-0.8%
56.8%	70.6	69.9	-0.7	-1.0%
58.0%	70.6	69.8	-0.8	-1.1%
59.3%	70.6	69.8	-0.8	-1.1%
60.5%	70.5	69.8	-0.7	-1.0%
61.7%	70.4	69.8	-0.7	-1.0%
63.0%	70.4	69.7	-0.8	-1.1%
64.2%	70.4	69.7	-0.7	-1.0%
65.4%	70.3	69.6	-0.7	-1.0%
66.7%	70.3	69.4	-0.9	-1.3%
67.9%	70.2	69.4	-0.9	-1.3%
69.1%	70.2	69.3	-0.9	-1.3%
70.4%	70.1	69.2	-0.9	-1.3%
71.6%	70.1	69.1	-1.0	-1.5%
72.8%	70.1	69.1	-1.0	-1.5%
74.1%	70.1	69.0	-1.1	-1.5%
75.3%	70.0	68.9	-1.1	-1.6%
76.5%	69.9	68.9	-1.1	-1.5%
77.8%	69.9	68.8	-1.1	-1.6%
79.0%	69.9	68.8	-1.1	-1.6%
80.2%	69.8	68.7	-1.1	-1.5%
81.5%	69.8	68.6	-1.2	-1.7%
82.7%	69.6	68.5	-1.0	-1.5%
84.0%	69.5	68.4	-1.1	-1.5%
85.2%	69.4	68.4	-1.0	-1.5%
86.4%	69.3	68.3	-1.0	-1.4%
87.7%	69.2	68.3	-0.9	-1.3%
88.9%	69.0	68.2	-0.8	-1.2%
90.1%	68.9	68.2	-0.7	-1.1%
91.4%	68.9	68.1	-0.8	-1.2%
92.6%	68.6	68.0	-0.6	-0.9%
93.8%	68.6	68.0	-0.6	-0.9%
95.1%	68.5	67.6	-0.9	-1.3%
96.3%	68.5	67.6	-0.9	-1.3%
97.5%	68.4	67.3	-1.1	-1.6%
98.8%	68.3	67.1	-1.2	-1.8%
100.0%	68.3	67.1	-1.2	-1.8%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	75.2	75.1	-0.1	-0.2%
1.2%	74.0	73.3	-0.7	-0.9%
2.5%	73.4	72.9	-0.5	-0.7%
3.7%	73.3	72.8	-0.5	-0.7%
4.9%	73.2	72.7	-0.4	-0.6%
6.2%	72.9	72.5	-0.4	-0.5%
7.4%	72.8	72.5	-0.3	-0.4%
8.6%	72.8	72.4	-0.4	-0.5%
9.9%	72.7	72.1	-0.6	-0.9%
11.1%	72.7	72.1	-0.7	-0.9%
12.3%	72.5	72.0	-0.6	-0.8%
13.6%	72.5	71.9	-0.5	-0.7%
14.8%	72.3	71.8	-0.4	-0.6%
16.0%	72.3	71.8	-0.5	-0.7%
17.3%	72.2	71.7	-0.5	-0.6%
18.5%	72.0	71.7	-0.3	-0.5%
19.8%	72.0	71.5	-0.5	-0.7%
21.0%	71.8	71.5	-0.3	-0.5%
22.2%	71.8	71.3	-0.5	-0.7%
23.5%	71.7	71.0	-0.8	-1.1%
24.7%	71.7	70.8	-0.8	-1.2%
25.9%	71.6	70.8	-0.9	-1.2%
27.2%	71.6	70.8	-0.9	-1.2%
28.4%	71.6	70.7	-0.8	-1.1%
29.6%	71.5	70.7	-0.8	-1.1%
30.9%	71.3	70.7	-0.7	-0.9%
32.1%	71.3	70.7	-0.6	-0.9%
33.3%	71.2	70.6	-0.6	-0.9%
34.6%	71.2	70.6	-0.7	-0.9%
35.8%	71.2	70.4	-0.8	-1.2%
37.0%	71.1	70.3	-0.8	-1.1%
38.3%	71.1	70.3	-0.8	-1.1%
39.5%	71.0	70.2	-0.8	-1.2%
40.7%	71.0	70.2	-0.8	-1.1%
42.0%	71.0	70.2	-0.8	-1.1%
43.2%	71.0	70.2	-0.8	-1.1%
44.4%	71.0	70.1	-0.8	-1.2%
45.7%	70.9	70.1	-0.9	-1.2%
46.9%	70.9	70.0	-0.9	-1.3%
48.1%	70.9	70.0	-0.9	-1.3%
49.4%	70.8	69.9	-0.9	-1.3%
50.6%	70.7	69.8	-1.0	-1.3%
51.9%	70.7	69.7	-0.9	-1.3%
53.1%	70.6	69.7	-0.9	-1.2%
54.3%	70.5	69.7	-0.9	-1.3%
55.6%	70.5	69.6	-0.9	-1.3%
56.8%	70.5	69.5	-1.0	-1.4%
58.0%	70.5	69.5	-1.0	-1.4%
59.3%	70.2	69.4	-0.8	-1.1%
60.5%	70.1	69.3	-0.8	-1.1%
61.7%	70.1	69.2	-0.8	-1.2%
63.0%	70.1	69.2	-0.9	-1.2%
64.2%	70.0	69.1	-0.9	-1.3%
65.4%	70.0	69.1	-0.9	-1.3%
66.7%	70.0	69.1	-0.9	-1.3%
67.9%	70.0	69.1	-0.9	-1.3%
69.1%	69.9	69.0	-0.9	-1.3%
70.4%	69.9	68.9	-1.0	-1.4%
71.6%	69.8	68.9	-0.9	-1.3%
72.8%	69.8	68.9	-0.9	-1.3%
74.1%	69.7	68.9	-0.8	-1.2%
75.3%	69.4	68.8	-0.6	-0.9%
76.5%	69.3	68.7	-0.7	-1.0%
77.8%	69.3	68.7	-0.6	-0.9%
79.0%	69.2	68.7	-0.5	-0.7%
80.2%	68.9	68.6	-0.3	-0.5%
81.5%	68.7	68.3	-0.4	-0.5%
82.7%	68.7	68.2	-0.5	-0.7%
84.0%	68.4	68.2	-0.3	-0.4%
85.2%	68.4	68.1	-0.3	-0.4%
86.4%	68.4	67.6	-0.8	-1.1%
87.7%	68.3	67.6	-0.7	-1.0%
88.9%	68.2	67.4	-0.8	-1.2%
90.1%	68.2	67.4	-0.8	-1.2%
91.4%	68.2	67.3	-0.9	-1.3%
92.6%	68.1	67.3	-0.8	-1.2%
93.8%	67.7	67.2	-0.5	-0.8%
95.1%	67.3	67.1	-0.3	-0.4%
96.3%	67.3	66.9	-0.4	-0.6%
97.5%	67.3	66.7	-0.6	-0.9%
98.8%	67.0	66.6	-0.5	-0.7%
100.0%	67.0	66.6	-0.5	-0.7%

Table SQ10-1b

American River at Watt Avenue, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	76.1	77.1	1.0	1.3%
1.2%	75.1	74.3	-0.8	-1.1%
2.5%	75.1	74.3	-0.8	-1.1%
3.7%	74.6	74.1	-0.5	-0.7%
4.9%	73.4	73.6	0.2	0.3%
6.2%	73.3	73.0	-0.3	-0.4%
7.4%	73.0	72.6	-0.4	-0.6%
8.6%	72.8	72.5	-0.3	-0.4%
9.9%	72.6	72.2	-0.4	-0.5%
11.1%	72.2	72.2	0.0	0.0%
12.3%	72.0	72.1	0.1	0.1%
13.6%	72.0	71.9	-0.1	-0.2%
14.8%	72.0	71.6	-0.4	-0.6%
16.0%	72.0	71.5	-0.5	-0.7%
17.3%	71.7	71.5	-0.2	-0.3%
18.5%	71.6	71.4	-0.2	-0.3%
19.8%	71.6	71.0	-0.6	-0.8%
21.0%	71.4	70.8	-0.6	-0.8%
22.2%	71.4	70.7	-0.7	-0.9%
23.5%	71.4	70.7	-0.7	-1.0%
24.7%	71.3	70.6	-0.7	-1.0%
25.9%	71.3	70.3	-1.0	-1.4%
27.2%	71.0	70.2	-0.7	-1.0%
28.4%	70.8	70.2	-0.6	-0.9%
29.6%	70.7	70.1	-0.6	-0.9%
30.9%	70.7	70.1	-0.6	-0.9%
32.1%	70.7	70.0	-0.7	-1.0%
33.3%	70.7	69.9	-0.7	-1.0%
34.6%	70.5	69.8	-0.7	-1.0%
35.8%	70.5	69.8	-0.7	-1.0%
37.0%	70.4	69.8	-0.6	-0.9%
38.3%	70.4	69.6	-0.8	-1.1%
39.5%	70.2	69.6	-0.6	-0.9%
40.7%	70.2	69.6	-0.6	-0.9%
42.0%	70.2	69.6	-0.6	-0.9%
43.2%	70.2	69.6	-0.6	-0.8%
44.4%	70.0	69.6	-0.5	-0.7%
45.7%	70.0	69.5	-0.5	-0.7%
46.9%	70.0	69.4	-0.6	-0.8%
48.1%	70.0	69.4	-0.5	-0.8%
49.4%	69.9	69.4	-0.5	-0.7%
50.6%	69.9	69.4	-0.5	-0.7%
51.9%	69.8	69.3	-0.5	-0.7%
53.1%	69.7	69.3	-0.4	-0.6%
54.3%	69.7	69.3	-0.4	-0.6%
55.6%	69.7	69.3	-0.4	-0.6%
56.8%	69.6	69.2	-0.4	-0.6%
58.0%	69.6	69.1	-0.5	-0.7%
59.3%	69.5	69.1	-0.4	-0.6%
60.5%	69.3	69.0	-0.3	-0.4%
61.7%	69.3	68.9	-0.4	-0.6%
63.0%	69.2	68.8	-0.4	-0.6%
64.2%	69.2	68.8	-0.4	-0.6%
65.4%	69.2	68.7	-0.4	-0.6%
66.7%	69.1	68.6	-0.6	-0.8%
67.9%	69.1	68.5	-0.6	-0.9%
69.1%	68.9	68.4	-0.5	-0.7%
70.4%	68.9	68.4	-0.5	-0.7%
71.6%	68.8	68.4	-0.5	-0.7%
72.8%	68.8	68.4	-0.4	-0.6%
74.1%	68.7	68.3	-0.4	-0.6%
75.3%	68.7	68.3	-0.4	-0.6%
76.5%	68.7	68.2	-0.5	-0.7%
77.8%	68.7	68.0	-0.7	-1.0%
79.0%	68.6	67.9	-0.7	-1.0%
80.2%	68.6	67.9	-0.7	-1.1%
81.5%	68.6	67.8	-0.8	-1.1%
82.7%	68.5	67.7	-0.9	-1.3%
84.0%	68.4	67.6	-0.7	-1.1%
85.2%	68.3	67.6	-0.7	-1.0%
86.4%	68.2	67.6	-0.6	-0.9%
87.7%	68.2	67.4	-0.7	-1.1%
88.9%	68.2	67.3	-0.8	-1.2%
90.1%	68.1	67.2	-0.9	-1.3%
91.4%	68.0	67.2	-0.9	-1.3%
92.6%	68.0	67.2	-0.8	-1.2%
93.8%	67.9	67.1	-0.8	-1.1%
95.1%	67.7	66.8	-0.9	-1.3%
96.3%	67.7	66.7	-1.0	-1.4%
97.5%	67.6	66.5	-1.1	-1.6%
98.8%	67.4	66.5	-0.9	-1.3%
100.0%	67.4	65.9	-1.4	-2.1%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	76.1	77.1	1.0	1.3%
1.2%	75.6	74.3	-1.3	-1.7%
2.5%	75.4	74.1	-1.3	-1.8%
3.7%	74.1	73.8	-0.3	-0.4%
4.9%	73.9	73.5	-0.4	-0.5%
6.2%	73.8	73.1	-0.7	-0.9%
7.4%	73.7	73.0	-0.6	-0.8%
8.6%	73.6	72.8	-0.8	-1.1%
9.9%	73.2	72.6	-0.5	-0.7%
11.1%	73.1	72.5	-0.5	-0.7%
12.3%	72.7	72.2	-0.5	-0.6%
13.6%	72.6	72.2	-0.4	-0.6%
14.8%	72.6	72.2	-0.4	-0.6%
16.0%	72.1	72.1	0.1	0.1%
17.3%	71.9	72.1	0.2	0.2%
18.5%	71.7	72.1	0.3	0.5%
19.8%	71.5	72.0	0.5	0.7%
21.0%	71.4	71.1	-0.3	-0.4%
22.2%	71.4	71.1	-0.3	-0.4%
23.5%	71.3	71.0	-0.3	-0.4%
24.7%	71.1	70.7	-0.5	-0.7%
25.9%	70.9	70.5	-0.5	-0.7%
27.2%	70.9	70.4	-0.5	-0.7%
28.4%	70.8	70.4	-0.4	-0.6%
29.6%	70.8	70.3	-0.4	-0.6%
30.9%	70.7	70.3	-0.4	-0.6%
32.1%	70.6	70.3	-0.4	-0.5%
33.3%	70.5	70.1	-0.4	-0.6%
34.6%	70.5	69.9	-0.6	-0.8%
35.8%	70.5	69.9	-0.6	-0.9%
37.0%	70.4	69.7	-0.8	-1.1%
38.3%	70.4	69.5	-0.9	-1.2%
39.5%	70.3	69.5	-0.7	-1.1%
40.7%	70.2	69.5	-0.8	-1.1%
42.0%	70.2	69.5	-0.8	-1.1%
43.2%	70.2	69.4	-0.8	-1.1%
44.4%	70.1	69.4	-0.7	-1.0%
45.7%	70.0	69.4	-0.6	-0.9%
46.9%	70.0	69.4	-0.6	-0.8%
48.1%	70.0	69.4	-0.6	-0.9%
49.4%	70.0	69.3	-0.6	-0.9%
50.6%	69.9	69.3	-0.6	-0.8%
51.9%	69.9	69.3	-0.6	-0.8%
53.1%	69.9	69.3	-0.6	-0.8%
54.3%	69.9	69.3	-0.6	-0.8%
55.6%	69.8	69.3	-0.5	-0.8%
56.8%	69.8	69.2	-0.6	-0.8%
58.0%	69.8	69.2	-0.6	-0.8%
59.3%	69.7	69.2	-0.6	-0.8%
60.5%	69.7	69.1	-0.6	-0.8%
61.7%	69.7	69.1	-0.5	-0.8%
63.0%	69.6	69.1	-0.5	-0.7%
64.2%	69.6	69.1	-0.5	-0.7%
65.4%	69.6	69.1	-0.5	-0.7%
66.7%	69.6	69.0	-0.5	-0.8%
67.9%	69.5	68.9	-0.6	-0.9%
69.1%	69.5	68.9	-0.6	-0.9%
70.4%	69.5	68.9	-0.7	-1.0%
71.6%	69.5	68.8	-0.8	-1.1%
72.8%	69.5	68.7	-0.8	-1.1%
74.1%	69.5	68.7	-0.7	-1.1%
75.3%	69.4	68.7	-0.8	-1.1%
76.5%	69.4	68.6	-0.8	-1.1%
77.8%	69.4	68.6	-0.8	-1.2%
79.0%	69.4	68.6	-0.9	-1.2%
80.2%	69.4	68.5	-0.8	-1.2%
81.5%	69.4	68.4	-0.9	-1.3%
82.7%	69.3	68.4	-0.9	-1.3%
84.0%	69.3	68.4	-0.9	-1.3%
85.2%	69.3	68.3	-0.9	-1.3%
86.4%	69.2	68.2	-1.0	-1.4%
87.7%	69.1	68.2	-0.9	-1.3%
88.9%	69.1	68.2	-1.0	-1.4%
90.1%	69.1	68.0	-1.1	-1.6%
91.4%	69.1	68.0	-1.1	-1.6%
92.6%	69.1	68.0	-1.1	-1.6%
93.8%	68.7	67.8	-1.0	-1.4%
95.1%	68.7	67.8	-0.9	-1.4%
96.3%	68.7	67.6	-1.1	-1.6%
97.5%	68.7	67.6	-1.1	-1.6%
98.8%	68.6	67.2	-1.4	-2.1%
100.0%	68.3	66.7	-1.6	-2.4%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	76.6	75.9	-0.6	-0.8%
1.2%	75.1	74.5	-0.6	-0.8%
2.5%	74.6	73.8	-0.8	-1.0%
3.7%	74.0	73.4	-0.6	-0.8%
4.9%	73.9	73.1	-0.8	-1.0%
6.2%	73.4	73.1	-0.3	-0.4%
7.4%	73.3	73.0	-0.3	-0.4%
8.6%	73.3	72.8	-0.4	-0.6%
9.9%	73.1	72.7	-0.4	-0.5%
11.1%	73.1	72.7	-0.4	-0.6%
12.3%	73.0	72.4	-0.6	-0.8%
13.6%	73.0	72.3	-0.6	-0.9%
14.8%	72.5	72.3	-0.2	-0.3%
16.0%	72.4	72.3	-0.1	-0.2%
17.3%	72.3	72.1	-0.2	-0.3%
18.5%	72.3	71.9	-0.4	-0.5%
19.8%	72.2	71.8	-0.4	-0.6%
21.0%	72.1	71.7	-0.5	-0.7%
22.2%	72.1	71.5	-0.6	-0.8%
23.5%	72.1	71.5	-0.6	-0.8%
24.7%	72.0	71.4	-0.6	-0.9%
25.9%	71.8	71.3	-0.5	-0.7%
27.2%	71.7	71.2	-0.5	-0.7%
28.4%	71.5	71.1	-0.4	-0.6%
29.6%	71.5	71.0	-0.5	-0.6%
30.9%	71.5	70.9	-0.6	-0.8%
32.1%	71.3	70.9	-0.5	-0.6%
33.3%	71.3	70.7	-0.6	-0.8%
34.6%	71.2	70.6	-0.6	-0.8%
35.8%	71.2	70.6	-0.6	-0.8%
37.0%	71.2	70.6	-0.6	-0.8%
38.3%	71.2	70.5	-0.7	-1.0%
39.5%	71.2	70.4	-0.7	-1.1%
40.7%	71.1	70.4	-0.7	-1.0%
42.0%	71.1	70.4	-0.7	-0.9%
43.2%	71.0	70.4	-0.6	-0.8%
44.4%	70.9	70.4	-0.5	-0.7%
45.7%	70.8	70.3	-0.4	-0.6%
46.9%	70.7	70.3	-0.4	-0.6%
48.1%	70.7	70.3	-0.4	-0.6%
49.4%	70.7	70.2	-0.4	-0.6%
50.6%	70.5	70.2	-0.3	-0.4%
51.9%	70.5	70.2	-0.3	-0.5%
53.1%	70.4	70.1	-0.3	-0.4%
54.3%	70.4	70.1	-0.3	-0.4%
55.6%	70.4	69.9	-0.4	-0.6%
56.8%	70.3	69.9	-0.4	-0.6%
58.0%	70.3	69.9	-0.4	-0.5%
59.3%	70.2	69.9	-0.4	-0.5%
60.5%	70.2	69.6	-0.6	-0.8%
61.7%	70.2	69.6	-0.7	-0.9%
63.0%	70.2	69.5	-0.7	-0.9%
64.2%	70.1	69.3	-0.9	-1.3%
65.4%	70.1	69.2	-0.9	-1.3%
66.7%	70.1	69.1	-0.9	-1.3%
67.9%	70.0	69.1	-0.9	-1.3%
69.1%	70.0	69.1	-0.9	-1.3%
70.4%	70.0	69.0	-1.0	-1.4%
71.6%	69.9	69.0	-0.9	-1.3%
72.8%	69.8	68.9	-0.9	-1.4%
74.1%	69.7	68.8	-0.9	-1.3%
75.3%	69.7	68.8	-0.8	-1.2%
76.5%	69.6	68.8	-0.8	-1.1%
77.8%	69.6	68.8	-0.9	-1.2%
79.0%	69.6	68.7	-0.9	-1.3%
80.2%	69.6	68.7	-0.9	-1.3%
81.5%	69.6	68.6	-0.9	-1.3%
82.7%	69.6	68.5	-1.1	-1.5%
84.0%	69.3	68.4	-0.9	-1.3%
85.2%	69.3	68.2	-1.0	-1.5%
86.4%	69.2	68.2	-1.0	-1.4%
87.7%	69.2	68.0	-1.1	-1.6%
88.9%	69.1	67.9	-1.2	-1.7%
90.1%	68.9	67.8	-1.1	-1.6%
91.4%	68.9	67.7	-1.2	-1.8%
92.6%	68.9	67.7	-1.2	-1.7%
93.8%	68.9	67.7	-1.2	-1.7%
95.1%	68.7	67.6	-1.1	-1.6%
96.3%	68.7	67.5	-1.2	-1.7%
97.5%	68.7	67.4	-1.2	-1.8%
98.8%	68.3	67.3	-1.0	-1.5%
100.0%	67.8	66.5	-1.4	-2.0%

Figure SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

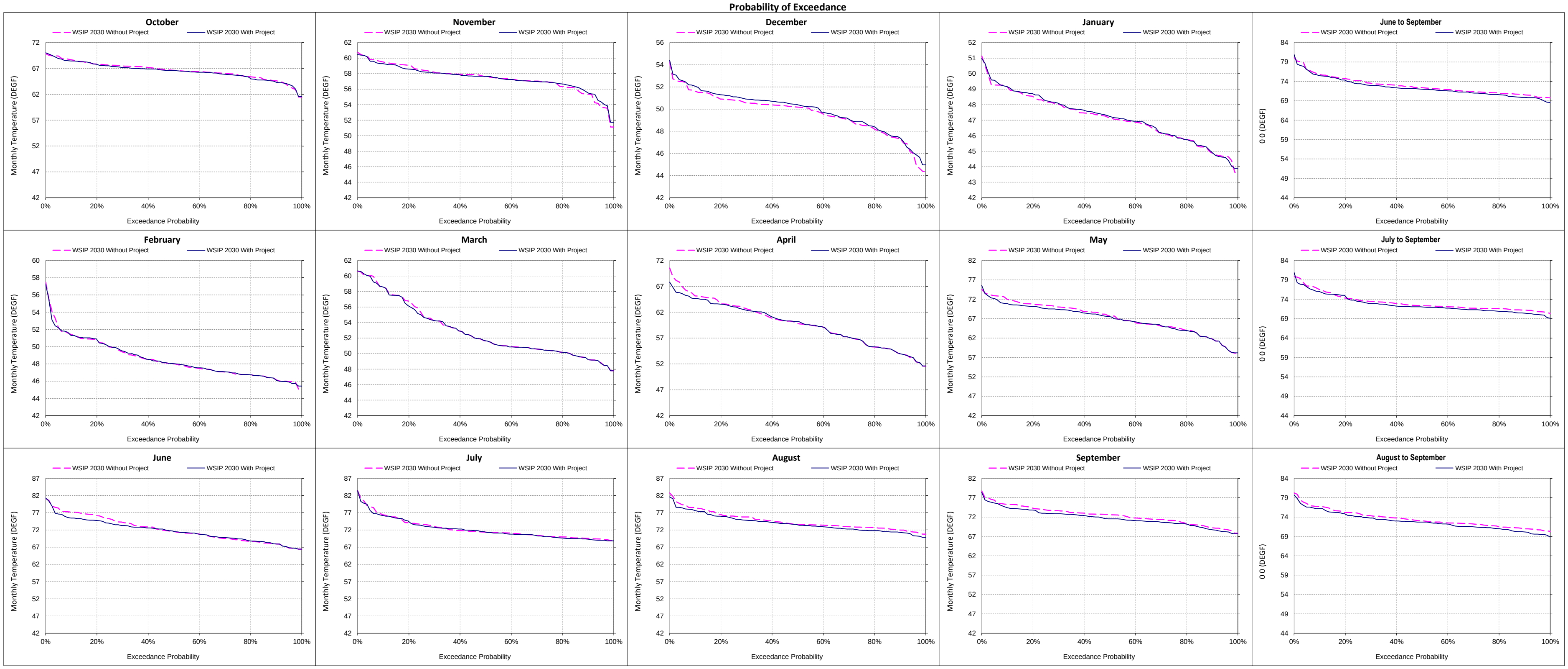


Table SQ11-1b

American River at the Mouth, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.9	70.1	0.2	0.3%
1.2%	69.6	69.8	0.2	0.3%
2.5%	69.5	69.6	0.1	0.1%
3.7%	69.5	69.2	-0.2	-0.3%
4.9%	69.4	68.9	-0.5	-0.7%
6.2%	69.0	68.8	-0.2	-0.3%
7.4%	68.9	68.6	-0.4	-0.5%
8.6%	68.8	68.5	-0.3	-0.4%
9.9%	68.7	68.5	-0.2	-0.3%
11.1%	68.6	68.4	-0.1	-0.2%
12.3%	68.4	68.4	0.0	0.0%
13.6%	68.3	68.3	-0.1	-0.1%
14.8%	68.3	68.3	0.0	0.0%
16.0%	68.1	68.3	0.1	0.2%
17.3%	68.1	68.1	0.1	0.1%
18.5%	67.9	67.9	0.0	0.0%
19.8%	67.8	67.8	0.0	-0.1%
21.0%	67.8	67.6	-0.2	-0.3%
22.2%	67.8	67.6	-0.2	-0.3%
23.5%	67.7	67.5	-0.1	-0.2%
24.7%	67.7	67.5	-0.2	-0.2%
25.9%	67.6	67.4	-0.2	-0.4%
27.2%	67.6	67.4	-0.2	-0.4%
28.4%	67.6	67.3	-0.3	-0.4%
29.6%	67.5	67.2	-0.3	-0.4%
30.9%	67.5	67.2	-0.2	-0.4%
32.1%	67.5	67.1	-0.3	-0.5%
33.3%	67.4	67.0	-0.4	-0.6%
34.6%	67.4	67.0	-0.4	-0.6%
35.8%	67.4	67.0	-0.4	-0.5%
37.0%	67.3	67.0	-0.4	-0.6%
38.3%	67.3	66.9	-0.3	-0.5%
39.5%	67.2	66.9	-0.3	-0.5%
40.7%	67.2	66.9	-0.3	-0.4%
42.0%	67.1	66.9	-0.2	-0.3%
43.2%	66.9	66.9	-0.1	-0.1%
44.4%	66.9	66.7	-0.2	-0.3%
45.7%	66.8	66.7	-0.2	-0.2%
46.9%	66.7	66.7	-0.1	-0.1%
48.1%	66.7	66.6	-0.1	-0.2%
49.4%	66.7	66.6	-0.1	-0.1%
50.6%	66.6	66.6	0.0	-0.1%
51.9%	66.6	66.6	0.0	0.0%
53.1%	66.5	66.5	-0.1	-0.1%
54.3%	66.5	66.5	0.0	0.0%
55.6%	66.5	66.4	0.0	-0.1%
56.8%	66.4	66.3	-0.1	-0.2%
58.0%	66.4	66.3	-0.1	-0.1%
59.3%	66.4	66.3	-0.1	-0.2%
60.5%	66.4	66.3	-0.1	-0.1%
61.7%	66.3	66.3	-0.1	-0.1%
63.0%	66.3	66.2	-0.1	-0.1%
64.2%	66.3	66.2	-0.1	-0.1%
65.4%	66.2	66.1	-0.1	-0.2%
66.7%	66.1	66.1	0.0	-0.1%
67.9%	66.1	66.0	-0.2	-0.2%
69.1%	66.1	65.9	-0.2	-0.3%
70.4%	66.0	65.9	-0.1	-0.2%
71.6%	66.0	65.8	-0.2	-0.3%
72.8%	66.0	65.8	-0.2	-0.3%
74.1%	65.9	65.7	-0.2	-0.3%
75.3%	65.7	65.7	0.0	0.0%
76.5%	65.6	65.6	0.1	0.1%
77.8%	65.5	65.4	-0.1	-0.2%
79.0%	65.5	65.4	-0.1	-0.1%
80.2%	65.4	65.0	-0.4	-0.6%
81.5%	65.3	64.9	-0.3	-0.5%
82.7%	65.3	64.8	-0.5	-0.8%
84.0%	65.2	64.8	-0.5	-0.7%
85.2%	64.9	64.8	-0.1	-0.2%
86.4%	64.8	64.7	-0.1	-0.1%
87.7%	64.8	64.6	-0.1	-0.2%
88.9%	64.6	64.6	-0.1	-0.1%
90.1%	64.6	64.3	-0.3	-0.4%
91.4%	64.5	64.2	-0.2	-0.4%
92.6%	64.3	64.2	-0.1	-0.2%
93.8%	64.0	64.1	0.1	0.2%
95.1%	63.5	63.9	0.4	0.7%
96.3%	63.2	63.6	0.4	0.6%
97.5%	62.9	63.0	0.1	0.2%
98.8%	61.5	61.6	0.1	0.1%
100.0%	61.5	61.6	0.0	0.1%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.7	60.5	-0.3	-0.4%
1.2%	60.5	60.4	-0.1	-0.1%
2.5%	60.3	60.4	0.0	0.1%
3.7%	60.3	60.2	-0.1	-0.2%
4.9%	59.8	59.6	-0.2	-0.3%
6.2%	59.8	59.6	-0.2	-0.3%
7.4%	59.7	59.4	-0.3	-0.5%
8.6%	59.6	59.3	-0.3	-0.5%
9.9%	59.5	59.3	-0.2	-0.4%
11.1%	59.4	59.2	-0.2	-0.3%
12.3%	59.4	59.2	-0.2	-0.4%
13.6%	59.3	59.1	-0.1	-0.2%
14.8%	59.3	59.1	-0.1	-0.2%
16.0%	59.2	59.0	-0.2	-0.3%
17.3%	59.2	58.7	-0.4	-0.7%
18.5%	59.1	58.6	-0.5	-0.8%
19.8%	59.1	58.6	-0.5	-0.8%
21.0%	59.0	58.6	-0.4	-0.7%
22.2%	58.6	58.5	-0.1	-0.2%
23.5%	58.6	58.4	-0.2	-0.3%
24.7%	58.5	58.2	-0.3	-0.4%
25.9%	58.4	58.2	-0.2	-0.4%
27.2%	58.4	58.2	-0.2	-0.4%
28.4%	58.2	58.2	0.0	-0.1%
29.6%	58.2	58.1	-0.1	-0.2%
30.9%	58.1	58.1	0.0	0.0%
32.1%	58.1	58.1	0.0	0.0%
33.3%	58.0	58.0	0.0	0.0%
34.6%	58.0	58.0	0.0	-0.1%
35.8%	58.0	58.0	0.0	-0.1%
37.0%	58.0	57.9	0.0	-0.1%
38.3%	58.0	57.9	0.0	-0.1%
39.5%	57.9	57.9	-0.1	-0.1%
40.7%	57.9	57.8	-0.1	-0.2%
42.0%	57.9	57.8	-0.1	-0.2%
43.2%	57.9	57.7	-0.2	-0.3%
44.4%	57.9	57.7	-0.2	-0.3%
45.7%	57.9	57.7	-0.2	-0.3%
46.9%	57.9	57.7	-0.2	-0.3%
48.1%	57.8	57.7	-0.1	-0.2%
49.4%	57.6	57.6	0.0	0.0%
50.6%	57.6	57.6	0.1	0.1%
51.9%	57.5	57.6	0.1	0.1%
53.1%	57.5	57.5	0.0	0.0%
54.3%	57.4	57.5	0.0	0.1%
55.6%	57.4	57.3	0.0	-0.1%
56.8%	57.4	57.3	-0.1	-0.1%
58.0%	57.4	57.3	-0.1	-0.2%
59.3%	57.3	57.3	-0.1	-0.1%
60.5%	57.2	57.2	0.0	0.0%
61.7%	57.2	57.1	-0.1	-0.1%
63.0%	57.1	57.1	0.0	0.0%
64.2%	57.1	57.1	0.0	0.0%
65.4%	57.1	57.1	0.0	0.0%
66.7%	57.1	57.0	0.0	-0.1%
67.9%	57.1	57.0	0.0	-0.1%
69.1%	57.0	57.0	-0.1	-0.1%
70.4%	57.0	57.0	-0.1	-0.1%
71.6%	57.0	57.0	-0.1	-0.1%
72.8%	57.0	56.9	0.0	0.0%
74.1%	56.9	56.9	0.0	0.0%
75.3%	56.9	56.8	-0.1	-0.1%
76.5%	56.9	56.8	0.0	0.0%
77.8%	56.7	56.8	0.1	0.2%
79.0%	56.3	56.7	0.4	0.6%
80.2%	56.3	56.7	0.3	0.6%
81.5%	56.2	56.6	0.3	0.6%
82.7%	56.2	56.5	0.3	0.5%
84.0%	56.2	56.4	0.2	0.4%
85.2%	56.1	56.3	0.2	0.3%
86.4%	55.7	56.2	0.5	0.9%
87.7%	55.4	56.0	0.6	1.0%
88.9%	55.4	55.7	0.4	0.7%
90.1%	55.4	55.5	0.1	0.3%
91.4%	55.3	55.4	0.1	0.1%
92.6%	54.2	55.4	1.1	2.1%
93.8%	54.2	54.6	0.4	0.7%
95.1%	53.7	54.4	0.7	1.3%
96.3%	53.6	54.0	0.4	0.7%
97.5%	53.5	53.9	0.3	0.6%
98.8%	51.1	51.7	0.6	1.2%
100.0%	51.1	51.7	0.6	1.2%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	54.4	0.2	0.3%
1.2%	52.7	53.2	0.4	0.8%
2.5%	52.6	53.1	0.5	0.9%
3.7%	52.5	52.6	0.1	0.3%
4.9%	52.5	52.6	0.1	0.2%
6.2%	52.4	52.4	0.0	0.1%
7.4%	51.7	52.2	0.5	0.9%
8.6%	51.7	52.2	0.4	0.9%
9.9%	51.6	52.1	0.4	0.8%
11.1%	51.5	51.9	0.4	0.8%
12.3%	51.5	51.7	0.2	0.3%
13.6%	51.5	51.6	0.2	0.3%
14.8%	51.5	51.6	0.2	0.3%
16.0%	51.4	51.5	0.1	0.3%
17.3%	51.1	51.4	0.3	0.5%
18.5%	51.1	51.3	0.3	0.5%
19.8%	50.9	51.3	0.4	0.8%
21.0%	50.9	51.3	0.4	0.7%
22.2%	50.9	51.2	0.4	0.7%
23.5%	50.8	51.2	0.4	0.7%
24.7%	50.8	51.1	0.3	0.6%
25.9%	50.8	51.1	0.3	0.6%
27.2%	50.8	51.0	0.3	0.5%
28.4%	50.7	51.0	0.3	0.6%
29.6%	50.6	50.9	0.3	0.7%
30.9%	50.6	50.9	0.3	0.7%
32.1%	50.5	50.9	0.3	0.7%
33.3%	50.5	50.8	0.3	0.6%
34.6%	50.4	50.8	0.4	0.7%
35.8%	50.4	50.8	0.4	0.8%
37.0%	50.4	50.8	0.4	0.7%
38.3%	50.4	50.8	0.4	0.7%
39.5%	50.4	50.7	0.3	0.6%
40.7%	50.4	50.7	0.3	0.7%
42.0%	50.3	50.6	0.3	0.6%
43.2%	50.3	50.6	0.3	0.6%
44.4%	50.3	50.6	0.3	0.6%
45.7%	50.3	50.5	0.3	0.5%
46.9%	50.2	50.5	0.3	0.5%
48.1%	50.2	50.5	0.2	0.5%
49.4%	50.2	50.4	0.2	0.5%
50.6%	50.2	50.4	0.2	0.4%
51.9%	50.1	50.3	0.1	0.2%
53.1%	50.1	50.2	0.1	0.3%
54.3%	50.1	50.2	0.1	0.2%
55.6%	49.9	50.2	0.4	0.7%
56.8%	49.8	50.2	0.3	0.7%
58.0%	49.8	50.1	0.3	0.7%
59.3%	49.6	49.7	0.1	0.2%
60.5%	49.5	49.7	0.2	0.4%
61.7%	49.4	49.6	0.2	0.4%
63.0%	49.4	49.6	0.2	0.4%
64.2%	49.3	49.5	0.2	0.3%
65.4%	49.3	49.4	0.1	0.2%
66.7%	49.2	49.3	0.0	0.1%
67.9%	49.1	49.2	0.1	0.1%
69.1%	49.1	49.2	0.1	0.2%
70.4%	49.0	49.0	0.0	0.0%
71.6%	48.8	48.9	0.1	0.2%
72.8%	48.6	48.9	0.2	0.5%
74.1%	48.6	48.9	0.2	0.5%
75.3%	48.5	48.8	0.3	0.7%
76.5%	48.5	48.7	0.2	0.4%
77.8%	48.5	48.5	0.0	0.0%
79.0%	48.3	48.5	0.1	0.3%
80.2%	48.1	48.4	0.2	0.4%
81.5%	48.1	48.1	0.0	0.1%
82.7%	47.9	48.0	0.1	0.2%
84.0%	47.8	47.9	0.1	0.3%
85.2%	47.6	47.7	0.2	0.4%
86.4%	47.5	47.6	0.1	0.2%
87.7%	47.4	47.5	0.1	0.2%
88.9%	47.4	47.5	0.2	0.3%
90.1%	47.3	47.4	0.1	0.1%
91.4%	46.9	47.0	0.1	0.2%
92.6%	46.9	46.6	-0.3	-0.7%
93.8%	46.2	46.4	0.2	0.4%
95.1%	46.0	46.0	0.1	0.1%
96.3%	44.9	45.8	0.9	2.1%
97.5%	44.6	45.6	1.0	2.2%
98.8%	44.4	45.0	0.6	1.3%
100.0%	44.4	45.0	0.6	1.3%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.1	51.0	-0.2	-0.3%
1.2%	50.5	50.7	0.1	0.3%
2.5%	49.9	50.1	0.2	0.3%
3.7%	49.3	49.6	0.3	0.6%
4.9%	49.3	49.6	0.3	0.6%
6.2%	49.3	49.4	0.2	0.3%
7.4%	49.3	49.3	0.0	0.0%
8.6%	49.3	49.2	0.0	-0.1%
9.9%	49.2	49.2	0.0	0.0%
11.1%	48.9	49.1	0.1	0.3%
12.3%	48.9	48.9	0.0	0.0%
13.6%	48.9	48.9	0.0	0.0%
14.8%	48.8	48.8	0.0	0.1%
16.0%	48.7	48.8	0.1	0.2%
17.3%	48.6	48.8	0.2	0.4%
18.5%	48.6	48.7	0.2	0.4%
19.8%	48.5	48.7	0.2	0.3%
21.0%	48.4	48.6	0.2	0.5%
22.2%	48.3	48.6	0.3	0.6%
23.5%	48.3	48.4	0.1	0.3%
24.7%	48.2	48.3	0.1	0.2%
25.9%	48.2	48.2	0.1	0.1%
27.2%	48.1	48.2	0.0	0.1%
28.4%	48.1	48.2	0.1	0.2%
29.6%	48.0	48.1	0.1	0.1%
30.9%	48.0	48.0	0.0	0.0%
32.1%	47.8	48.0	0.1	0.3%
33.3%	47.8	47.8	0.0	0.1%
34.6%	47.7	47.8	0.0	0.1%
35.8%	47.7	47.7	0.0	0.1%
37.0%	47.7	47.7	0.0	0.1%
38.3%	47.5	47.7	0.2	0.5%
39.5%	47.5	47.7	0.2	0.4%
40.7%	47.5	47.6	0.1	0.3%
42.0%	47.4	47.6	0.1	0.2%
43.2%	47.4	47.5	0.1	0.2%
44.4%	47.4	47.5	0.1	0.2%
45.7%	47.3	47.4	0.1	0.2%
46.9%	47.3	47.4	0.1	0.2%
48.1%	47.3	47.3	0.1	0.1%
49.4%	47.2	47.3	0.1	0.2%
50.6%	47.2	47.2	0.1	0.1%
51.9%	47.1	47.2	0.1	0.2%
53.1%	47.0	47.1	0.1	0.2%
54.3%	47.0	47.1	0.1	0.2%
55.6%	47.0	47.1	0.1	0.2%
56.8%	46.9	47.0	0.1	0.2%
58.0%	46.9	47.0	0.1	0.1%
59.3%	46.9	46.9	0.0	0.1%
60.5%	46.9	46.9	0.1	0.2%
61.7%	46.8	46.9	0.1	0.2%
63.0%	46.7	46.9	0.2	0.4%
64.2%	46.7	46.8	0.1	0.1%
65.4%	46.6	46.7	0.0	0.1%
66.7%	46.5	46.6	0.1	0.3%
67.9%	46.4	46.5	0.1	0.3%
69.1%	46.2	46.2	0.0	0.0%
70.4%	46.1	46.2	0.0	0.1%
71.6%	46.1	46.1	0.0	0.1%
72.8%	46.1	46.1	0.1	0.1%
74.1%	46.0	46.0	0.0	0.1%
75.3%	45.9	46.0	0.1	0.2%
76.5%	45.9	45.8	0.0	-0.1%
77.8%	45.8	45.8	0.0	0.0%
79.0%	45.8	45.8	0.0	0.0%
80.2%	45.7	45.7	0.0	0.0%
81.5%	45.7	45.7	-0.1	-0.1%
82.7%	45.7	45.6	0.0	-0.1%
84.0%	45.3	45.4	0.0	0.1%
85.2%	45.3	45.4	0.1	0.2%
86.4%	45.3	45.3	0.1	0.1%
87.7%	45.3	45.3	0.0	0.0%
88.9%	45.0	45.1	0.1	0.2%
90.1%	44.9	44.9	0.0	0.0%
91.4%	44.8	44.7	0.0	-0.1%
92.6%	44.7	44.7	-0.1	-0.2%
93.8%	44.7	44.6	-0.1	-0.2%
95.1%	44.6	44.6	0.0	-0.1%
96.3%	44.6	44.4	-0.2	-0.5%
97.5%	44.4	44.0	-0.4	-0.8%
98.8%	43.6	43.9	0.2	0.6%
100.0%	43.6	43.9	0.2	0.6%

Table SQ11-1b

American River at the Mouth, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.5	57.3	-0.2	-0.4%
1.2%	55.5	55.5	0.0	0.0%
2.5%	54.1	53.1	-1.0	-1.8%
3.7%	53.3	52.4	-0.9	-1.7%
4.9%	52.2	52.2	0.0	0.0%
6.2%	51.8	51.8	0.1	0.1%
7.4%	51.8	51.8	0.0	0.1%
8.6%	51.6	51.7	0.1	0.2%
9.9%	51.4	51.3	-0.1	-0.2%
11.1%	51.3	51.3	0.0	0.0%
12.3%	51.2	51.1	-0.1	-0.2%
13.6%	51.0	51.1	0.1	0.3%
14.8%	50.9	51.0	0.1	0.2%
16.0%	50.9	51.0	0.1	0.3%
17.3%	50.9	51.0	0.1	0.2%
18.5%	50.9	50.9	0.1	0.1%
19.8%	50.8	50.9	0.1	0.2%
21.0%	50.5	50.4	0.0	0.0%
22.2%	50.4	50.4	0.0	-0.1%
23.5%	50.3	50.3	0.0	-0.1%
24.7%	50.0	50.0	0.1	0.1%
25.9%	49.9	49.9	0.0	0.0%
27.2%	49.9	49.9	0.0	0.0%
28.4%	49.6	49.7	0.1	0.3%
29.6%	49.4	49.5	0.1	0.2%
30.9%	49.3	49.5	0.2	0.3%
32.1%	49.1	49.3	0.2	0.4%
33.3%	49.0	49.3	0.2	0.4%
34.6%	49.0	49.1	0.1	0.2%
35.8%	48.9	49.0	0.1	0.2%
37.0%	48.7	48.8	0.1	0.2%
38.3%	48.6	48.7	0.1	0.1%
39.5%	48.5	48.6	0.0	0.0%
40.7%	48.5	48.5	0.0	-0.1%
42.0%	48.5	48.4	-0.1	-0.3%
43.2%	48.3	48.3	0.0	0.1%
44.4%	48.2	48.3	0.1	0.2%
45.7%	48.1	48.2	0.0	0.1%
46.9%	48.1	48.1	0.0	0.0%
48.1%	48.0	48.1	0.0	0.1%
49.4%	48.0	48.1	0.0	0.1%
50.6%	48.0	48.0	0.0	0.0%
51.9%	47.9	48.0	0.1	0.2%
53.1%	47.9	47.9	0.0	0.1%
54.3%	47.8	47.9	0.1	0.2%
55.6%	47.6	47.8	0.1	0.3%
56.8%	47.6	47.7	0.2	0.3%
58.0%	47.6	47.6	0.0	0.1%
59.3%	47.5	47.6	0.0	0.1%
60.5%	47.5	47.6	0.1	0.2%
61.7%	47.4	47.5	0.1	0.2%
63.0%	47.4	47.4	0.0	0.0%
64.2%	47.4	47.4	0.0	0.0%
65.4%	47.2	47.2	0.0	0.0%
66.7%	47.1	47.1	0.0	0.0%
67.9%	47.1	47.1	0.0	0.1%
69.1%	47.1	47.1	0.0	0.1%
70.4%	47.1	47.1	0.0	0.0%
71.6%	47.0	47.0	0.0	0.0%
72.8%	47.0	47.0	0.0	0.0%
74.1%	46.8	46.9	0.1	0.3%
75.3%	46.8	46.8	0.1	0.1%
76.5%	46.8	46.8	0.0	0.0%
77.8%	46.8	46.8	0.0	0.0%
79.0%	46.7	46.8	0.0	0.0%
80.2%	46.7	46.7	0.0	0.0%
81.5%	46.7	46.7	0.0	0.0%
82.7%	46.6	46.6	0.0	0.0%
84.0%	46.6	46.6	0.0	0.0%
85.2%	46.6	46.6	0.0	0.0%
86.4%	46.4	46.4	0.0	-0.1%
87.7%	46.4	46.4	0.0	0.0%
88.9%	46.4	46.4	0.0	0.0%
90.1%	46.1	46.1	0.0	-0.1%
91.4%	46.0	46.0	0.0	0.0%
92.6%	46.0	46.0	0.0	-0.1%
93.8%	46.0	46.0	0.0	-0.1%
95.1%	46.0	45.9	-0.1	-0.2%
96.3%	46.0	45.7	-0.2	-0.5%
97.5%	45.9	45.7	-0.2	-0.3%
98.8%	45.1	45.4	0.4	0.8%
100.0%	45.1	45.4	0.4	0.8%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.6	60.7	0.1	0.1%
1.2%	60.5	60.6	0.0	0.1%
2.5%	60.1	60.3	0.2	0.3%
3.7%	60.1	60.1	0.0	0.0%
4.9%	60.1	60.0	-0.1	-0.2%
6.2%	60.0	59.2	-0.7	-1.2%
7.4%	59.3	59.1	-0.2	-0.4%
8.6%	58.6	58.7	0.0	0.1%
9.9%	58.6	58.6	0.0	0.0%
11.1%	58.4	58.4	0.0	0.0%
12.3%	57.7	57.5	-0.1	-0.2%
13.6%	57.6	57.5	-0.1	-0.1%
14.8%	57.5	57.5	0.0	0.0%
16.0%	57.5	57.5	0.0	0.0%
17.3%	57.4	57.3	-0.1	-0.1%
18.5%	56.8	56.5	-0.3	-0.6%
19.8%	56.8	56.2	-0.6	-1.1%
21.0%	56.5	55.9	-0.6	-1.0%
22.2%	56.1	55.7	-0.4	-0.7%
23.5%	55.9	55.2	-0.7	-1.3%
24.7%	55.3	55.0	-0.3	-0.6%
25.9%	54.7	54.7	0.0	0.0%
27.2%	54.6	54.6	0.0	0.0%
28.4%	54.5	54.4	-0.2	-0.3%
29.6%	54.3	54.3	0.0	0.0%
30.9%	54.2	54.2	0.0	0.0%
32.1%	54.2	54.2	0.0	0.0%
33.3%	53.7	54.1	0.4	0.7%
34.6%	53.5	53.6	0.0	0.0%
35.8%	53.5	53.5	0.0	0.0%
37.0%	53.3	53.3	0.0	0.1%
38.3%	53.3	53.3	0.0	0.0%
39.5%	52.9	52.9	0.0	0.0%
40.7%	52.8	52.8	0.0	0.0%
42.0%	52.5	52.5	0.0	0.0%
43.2%	52.5	52.5	0.0	0.0%
44.4%	52.3	52.3	0.0	0.0%
45.7%	52.0	52.0	0.0	0.0%
46.9%	52.0	51.9	0.0	-0.1%
48.1%	51.9	51.9	0.0	0.1%
49.4%	51.7	51.7	0.0	0.0%
50.6%	51.6	51.6	0.0	0.0%
51.9%	51.5	51.5	0.0	0.0%
53.1%	51.2	51.2	0.0	0.0%
54.3%	51.1	51.1	0.0	0.0%
55.6%	51.1	51.0	-0.1	-0.1%
56.8%	51.0	51.0	0.0	0.0%
58.0%	51.0	51.0	0.0	0.0%
59.3%	51.0	50.9	-0.1	-0.2%
60.5%	50.9	50.8	0.0	-0.1%
61.7%	50.9	50.8	0.0	-0.1%
63.0%	50.8	50.8	0.0	0.0%
64.2%	50.8	50.8	0.0	0.0%
65.4%	50.8	50.8	0.0	0.0%
66.7%	50.8	50.7	0.0	-0.1%
67.9%	50.6	50.6	0.0	0.0%
69.1%	50.6	50.6	0.0	0.0%
70.4%	50.6	50.6	0.0	0.0%
71.6%	50.6	50.6	0.0	0.0%
72.8%	50.5	50.5	0.0	0.0%
74.1%	50.4	50.4	0.0	-0.1%
75.3%	50.4	50.4	0.0	0.0%
76.5%	50.3	50.4	0.0	0.1%
77.8%	50.3	50.3	0.0	0.0%
79.0%	50.2	50.2	0.0	0.0%
80.2%	50.2	50.2	0.0	0.0%
81.5%	50.1	50.1	0.0	0.0%
82.7%	50.0	50.0	0.0	0.0%
84.0%	49.8	49.8	0.0	0.0%
85.2%	49.7	49.7	0.0	0.0%
86.4%	49.6	49.6	0.0	0.1%
87.7%	49.5	49.6	0.0	0.0%
88.9%	49.5	49.5	0.0	0.0%
90.1%	49.2	49.2	0.0	0.0%
91.4%	49.2	49.2	0.0	0.0%
92.6%	49.2	49.2	0.0	0.0%
93.8%	49.1	49.1	0.0	0.1%
95.1%	48.8	48.7	-0.1	-0.2%
96.3%	48.4	48.5	0.0	0.0%
97.5%	48.4	48.4	0.0	0.0%
98.8%	47.8	47.8	0.0	0.0%
100.0%	47.8	47.8	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.5	67.8	-2.8	-3.9%
1.2%	68.8	66.8	-2.0	-2.9%
2.5%	68.2	65.8	-2.3	-3.4%
3.7%	67.9	65.8	-2.1	-3.1%
4.9%	66.9	65.6	-1.4	-2.0%
6.2%	66.3	65.3	-1.0	-1.5%
7.4%	66.0	65.1	-0.9	-1.3%
8.6%	65.7	64.7	-1.0	-1.5%
9.9%	65.1	64.7	-0.5	-0.7%
11.1%	65.1	64.6	-0.5	-0.8%
12.3%	65.0	64.5	-0.5	-0.7%
13.6%	64.9	64.5	-0.4	-0.6%
14.8%	64.8	64.3	-0.4	-0.7%
16.0%	64.7	63.6	-1.1	-1.7%
17.3%	64.7	63.6	-1.1	-1.7%
18.5%	64.4	63.6	-0.8	-1.2%
19.8%	63.6	63.6	0.0	0.0%
21.0%	63.6	63.5	-0.1	-0.1%
22.2%	63.6	63.4	-0.1	-0.2%
23.5%	63.4	63.2	-0.2	-0.3%
24.7%	63.3	63.1	-0.2	-0.3%
25.9%	63.2	63.0	-0.2	-0.3%
27.2%	63.2	62.7	-0.4	-0.6%
28.4%	62.9	62.6	-0.3	-0.5%
29.6%	62.7	62.4	-0.3	-0.5%
30.9%	62.5	62.3	-0.2	-0.4%
32.1%	62.4	62.2	-0.2	-0.3%
33.3%	62.1	62.1	0.0	0.0%
34.6%	61.9	62.0	0.2	0.3%
35.8%	61.7	62.0	0.4	0.6%
37.0%	61.5	61.9	0.4	0.6%
38.3%	61.2	61.5	0.4	0.6%
39.5%	60.9	61.2	0.3	0.4%
40.7%	60.7	60.9	0.2	0.4%
42.0%	60.6	60.7	0.1	0.2%
43.2%	60.4	60.6	0.1	0.2%
44.4%	60.3	60.4	0.1	0.1%
45.7%	60.3	60.3	0.0	0.0%
46.9%	60.3	60.3	0.0	0.0%
48.1%	60.2	60.2	0.0	0.0%
49.4%	59.8	60.2	0.4	0.6%
50.6%	59.7	60.2	0.4	0.7%
51.9%	59.7	59.8	0.1	0.2%
53.1%	59.7	59.6	-0.1	-0.1%
54.3%	59.5	59.6	0.0	0.0%
55.6%	59.5	59.5	0.0	0.0%
56.8%	59.4	59.5	0.1	0.2%
58.0%	59.2	59.2	0.0	0.0%
59.3%	59.2	59.2	0.0	0.0%
60.5%	59.0	59.0	0.0	0.0%
61.7%	58.4	58.4	0.0	0.0%
63.0%	58.0	57.9	-0.1	-0.3%
64.2%	57.8	57.8	0.0	0.0%
65.4%	57.8	57.7	-0.1	-0.2%
66.7%	57.7	57.7	0.0	0.0%
67.9%	57.2	57.3	0.0	0.0%
69.1%	57.2	57.2	0.0	0.0%
70.4%	57.1	57.1	0.0	0.0%
71.6%	56.9	56.9	0.0	0.0%
72.8%	56.8	56.8	0.0	0.1%
74.1%	56.7	56.7	0.0	0.0%
75.3%	56.4	56.4	0.0	0.0%
76.5%	55.7	55.7	0.0	0.0%
77.8%	55.4	55.4	0.0	0.0%
79.0%	55.3	55.3	0.0	0.0%
80.2%	55.3	55.3	0.0	0.0%
81.5%	55.3	55.3	0.0	0.0%
82.7%	55.1	55.1	0.0	0.0%
84.0%	55.1	55.1	0.0	0.0%
85.2%	54.9	54.9	0.0	0.0%
86.4%	54.9	54.9	0.0	0.0%
87.7%	54.5	54.5	0.0	0.0%
88.9%	54.1	54.1	0.0	0.0%
90.1%	53.9	53.9	0.0	0.0%
91.4%	53.8	53.8	0.0	0.0%
92.6%	53.7	53.6	-0.1	-0.1%
93.8%	53.2	53.4	0.2	0.3%
95.1%	53.1	53.2	0.1	0.2%
96.3%	52.4	52.4	0.0	0.0%
97.5%	52.2	52.3	0.0	0.1%
98.8%	51.6	51.6	0.0	0.1%
100.0%	51.6	51.6	0.0	0.1%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	74.6	75.6	1.0	1.4%
1.2%	73.6	73.5	-0.1	-0.2%
2.5%	73.3	72.9	-0.4	-0.6%
3.7%	73.1	72.3	-0.7	-1.0%
4.9%	72.9	72.2	-0.7	-1.0%
6.2%	72.8	71.8	-1.1	-1.5%
7.4%	72.8	71.1	-1.7	-2.3%
8.6%	72.6	71.0	-1.7	-2.3%
9.9%	72.0	70.9	-1.1	-1.5%
11.1%	71.7	70.6	-1.1	-1.5%
12.3%	71.6	70.6	-1.0	-1.5%
13.6%	71.4	70.5	-0.9	-1.3%
14.8%	71.1	70.5	-0.6	-0.9%
16.0%	70.9	70.3	-0.6	-0.8%
17.3%	70.9	70.3	-0.6	-0.8%
18.5%	70.8	70.2	-0.6	-0.9%
19.8%	70.8	70.1	-0.7	-0.9%
21.0%	70.6	70.1	-0.5	-0.7%
22.2%	70.6	70.0	-0.6	-0.9%
23.5%	70.5	69.7	-0.8	-1.2%
24.7%	70.5	69.7	-0.8	-1.1%
25.9%	70.4	69.5	-0.9	-1.3%
27.2%	70.4	69.5	-0.9	-1.2%
28.4%	70.2	69.5	-0.7	-1.0%
29.6%	70.0	69.3	-0.7	-1.0%
30.9%	70.0	69.3	-0.6	-0.9%
32.1%	69.9	69.3	-0.6	-0.8%
33.3%	69.8	69.2	-0.6	-0.8%
34.6%	69.8	69.1	-0.7	-1.0%
35.8%	69.7	68.9	-0.8	-1.1%
37.0%	69.5	68.8	-0.7	-1.0%
38.3%	69.3	68.8	-0.5	-0.8%
39.5%	68.9	68.5	-0.4	-0.6%
40.7%	68.9	68.4	-0.4	-0.6%
42.0%	68.8	68.3	-0.5	-0.8%
43.2%	68.7	68.2	-0.5	-0.7%
44.4%	68.7	68.2	-0.5	-0.7%
45.7%	68.5	68.0	-0.5	-0.7%
46.9%	68.2	67.8	-0.4	-0.6%
48.1%	68.2	67.7	-0.5	-0.7%
49.4%	67.8	67.5	-0.2	-0.3%
50.6%	67.7	67.5	-0.2	-0.4%
51.9%	67.7	67.0	-0.7	-1.0%
53.1%	66.9	66.9	0.0	0.0%
54.3%	66.6	66.9	0.2	0.4%
55.6%	66.6	66.5	-0.1	-0.1%
56.8%	66.5	66.5	-0.1	-0.1%
58.0%	66.4	66.4	0.0	0.0%
59.3%	66.3	66.3	0.0	0.0%
60.5%	65.9	66.1	0.2	0.4%
61.7%	65.8	65.9	0.1	0.2%
63.0%	65.8	65.8	0.0	0.1%
64.2%	65.6	65.8	0.1	0.2%
65.4%	65.6	65.6	0.0	0.0%
66.7%	65.5	65.6	0.0	0.1%
67.9%	65.5	65.5	0.0	0.1%
69.1%	65.2	65.5	0.3	0.4%
70.4%	65.0	65.1	0.1	0.1%
71.6%	65.0	64.9	-0.1	-0.1%
72.8%	64.9	64.9	0.0	0.0%
74.1%	64.9	64.5	-0.3	-0.5%
75.3%	64.7	64.4	-0.3	-0.4%
76.5%	64.6	64.1	-0.4	-0.6%
77.8%	64.4	64.0	-0.4	-0.6%
79.0%	64.1	64.0	-0.1	-0.2%
80.2%	64.0	64.0	0.0	0.0%
81.5%	64.0	63.7	-0.3	-0.4%
82.7%	63.7	63.7	0.0	0.0%
84.0%	63.3	63.3	0.0	0.0%
85.2%	62.5	62.5	0.0	0.0%
86.4%	62.4	62.4	0.0	0.0%
87.7%	62.3	62.3	0.0	0.0%
88.9%	62.1	61.9	-0.2	-0.3%
90.1%	61.7	61.7	0.0	0.0%
91.4%	61.2	61.2	0.0	0.0%
92.6%	61.2	61.2	0.0	0.0%
93.8%	60.1	60.1	0.0	0.0%
95.1%	59.7	59.7	0.0	0.0%
96.3%	58.8	58.8	0.0	0.0%
97.5%	58.3	58.3	0.0	0.0%
98.8%	58.1	58.2	0.0	0.1%
100.0%	58.1	58.2	0.0	0.1%

Table SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	81.2	81.3	0.1	0.1%
1.2%	80.6	80.4	-0.2	-0.2%
2.5%	78.9	78.9	0.0	0.0%
3.7%	78.6	76.8	-1.7	-2.2%
4.9%	78.4	76.7	-1.7	-2.2%
6.2%	77.4	76.5	-0.9	-1.1%
7.4%	77.3	76.0	-1.4	-1.8%
8.6%	77.3	75.6	-1.7	-2.1%
9.9%	77.2	75.5	-1.7	-2.3%
11.1%	77.2	75.4	-1.7	-2.3%
12.3%	77.2	75.3	-1.8	-2.4%
13.6%	76.9	75.3	-1.6	-2.1%
14.8%	76.7	75.1	-1.6	-2.1%
16.0%	76.6	74.9	-1.7	-2.2%
17.3%	76.5	74.9	-1.7	-2.2%
18.5%	76.5	74.8	-1.7	-2.2%
19.8%	76.1	74.7	-1.4	-1.8%
21.0%	76.1	74.7	-1.4	-1.8%
22.2%	75.7	74.5	-1.2	-1.6%
23.5%	75.4	74.0	-1.3	-1.7%
24.7%	75.3	74.0	-1.3	-1.7%
25.9%	75.0	73.7	-1.3	-1.7%
27.2%	74.5	73.5	-1.0	-1.3%
28.4%	74.3	73.5	-0.8	-1.1%
29.6%	74.3	73.3	-1.0	-1.4%
30.9%	74.1	73.3	-0.8	-1.1%
32.1%	74.1	73.2	-0.9	-1.2%
33.3%	73.8	72.9	-1.0	-1.3%
34.6%	73.3	72.8	-0.5	-0.7%
35.8%	73.1	72.8	-0.3	-0.4%
37.0%	73.0	72.8	-0.2	-0.2%
38.3%	72.9	72.7	-0.2	-0.2%
39.5%	72.9	72.6	-0.3	-0.4%
40.7%	72.9	72.6	-0.3	-0.4%
42.0%	72.8	72.5	-0.3	-0.4%
43.2%	72.3	72.4	0.1	0.1%
44.4%	72.1	72.3	0.2	0.3%
45.7%	71.9	72.3	0.3	0.5%
46.9%	71.8	72.0	0.1	0.2%
48.1%	71.7	71.8	0.1	0.2%
49.4%	71.6	71.7	0.1	0.1%
50.6%	71.5	71.5	0.0	0.0%
51.9%	71.3	71.5	0.2	0.2%
53.1%	71.3	71.3	0.0	0.0%
54.3%	71.1	71.3	0.2	0.2%
55.6%	71.1	71.2	0.1	0.1%
56.8%	71.1	71.1	0.0	0.0%
58.0%	71.0	71.1	0.0	0.1%
59.3%	70.9	70.9	0.0	0.0%
60.5%	70.7	70.7	-0.1	-0.1%
61.7%	70.7	70.6	-0.1	-0.1%
63.0%	70.3	70.6	0.3	0.4%
64.2%	70.2	70.2	0.0	0.0%
65.4%	70.0	70.1	0.1	0.2%
66.7%	69.9	70.0	0.2	0.3%
67.9%	69.7	69.9	0.2	0.3%
69.1%	69.6	69.8	0.2	0.3%
70.4%	69.5	69.7	0.3	0.4%
71.6%	69.5	69.7	0.2	0.3%
72.8%	69.3	69.6	0.3	0.4%
74.1%	69.2	69.6	0.4	0.6%
75.3%	69.1	69.4	0.3	0.4%
76.5%	68.9	69.4	0.4	0.6%
77.8%	68.9	69.2	0.3	0.5%
79.0%	68.7	68.9	0.2	0.2%
80.2%	68.7	68.8	0.1	0.2%
81.5%	68.6	68.8	0.1	0.2%
82.7%	68.5	68.7	0.2	0.2%
84.0%	68.4	68.7	0.2	0.3%
85.2%	68.2	68.6	0.4	0.6%
86.4%	68.2	68.3	0.1	0.2%
87.7%	68.1	68.3	0.2	0.3%
88.9%	68.0	68.0	0.0	0.0%
90.1%	67.9	67.9	0.0	0.0%
91.4%	67.9	67.9	0.0	0.0%
92.6%	67.3	67.3	0.0	0.0%
93.8%	67.2	67.3	0.1	0.1%
95.1%	66.7	66.9	0.1	0.2%
96.3%	66.7	66.7	0.0	0.0%
97.5%	66.6	66.6	0.0	0.0%
98.8%	66.4	66.4	0.0	0.0%
100.0%	66.4	66.4	0.0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	83.4	83.4	0.0	-0.1%
1.2%	81.3	80.3	-1.0	-1.2%
2.5%	80.4	79.8	-0.6	-0.8%
3.7%	79.1	79.5	0.4	0.6%
4.9%	78.8	77.7	-1.1	-1.4%
6.2%	78.5	76.8	-1.7	-2.2%
7.4%	77.2	76.7	-0.5	-0.6%
8.6%	76.8	76.4	-0.5	-0.6%
9.9%	76.4	76.2	-0.2	-0.3%
11.1%	76.3	76.0	-0.2	-0.3%
12.3%	75.9	76.0	0.1	0.2%
13.6%	75.8	75.7	-0.1	-0.1%
14.8%	75.8	75.4	-0.3	-0.5%
16.0%	75.3	75.4	0.1	0.1%
17.3%	75.0	75.3	0.3	0.4%
18.5%	74.2	74.8	0.7	0.9%
19.8%	74.1	74.6	0.5	0.7%
21.0%	73.9	73.8	-0.1	-0.1%
22.2%	73.9	73.5	-0.4	-0.5%
23.5%	73.7	73.4	-0.3	-0.4%
24.7%	73.7	73.4	-0.3	-0.4%
25.9%	73.6	73.1	-0.5	-0.6%
27.2%	73.5	72.9	-0.5	-0.7%
28.4%	73.3	72.9	-0.5	-0.6%
29.6%	73.2	72.8	-0.4	-0.6%
30.9%	72.8	72.6	-0.2	-0.2%
32.1%	72.8	72.6	-0.2	-0.3%
33.3%	72.7	72.5	-0.1	-0.2%
34.6%	72.5	72.5	0.0	0.0%
35.8%	72.1	72.4	0.3	0.4%
37.0%	72.0	72.3	0.3	0.4%
38.3%	71.8	72.3	0.5	0.7%
39.5%	71.8	72.3	0.5	0.6%
40.7%	71.8	72.3	0.5	0.7%
42.0%	71.7	72.0	0.2	0.3%
43.2%	71.7	72.0	0.3	0.4%
44.4%	71.5	71.9	0.3	0.4%
45.7%	71.5	71.8	0.3	0.4%
46.9%	71.5	71.8	0.3	0.4%
48.1%	71.4	71.6	0.1	0.2%
49.4%	71.4	71.5	0.1	0.2%
50.6%	71.3	71.3	-0.1	-0.1%
51.9%	71.3	71.2	-0.1	-0.1%
53.1%	71.3	71.1	-0.1	-0.2%
54.3%	71.2	71.1	-0.1	-0.1%
55.6%	71.2	71.1	-0.1	-0.1%
56.8%	71.2	71.1	-0.1	-0.1%
58.0%	71.2	70.9	-0.3	-0.4%
59.3%	71.1	70.8	-0.3	-0.4%
60.5%	71.0	70.8	-0.2	-0.2%
61.7%	71.0	70.7	-0.3	-0.4%
63.0%	70.9	70.7	-0.2	-0.3%
64.2%	70.7	70.7	0.0	-0.1%
65.4%	70.7	70.7	0.0	0.0%
66.7%	70.6	70.6	0.0	0.0%
67.9%	70.6	70.6	0.0	0.1%
69.1%	70.5	70.4	0.0	-0.1%
70.4%	70.4	70.3	-0.1	-0.2%
71.6%	70.3	70.3	-0.1	-0.1%
72.8%	70.2	70.1	-0.1	-0.1%
74.1%	70.1	70.0	-0.1	-0.1%
75.3%	70.1	70.0	-0.1	-0.1%
76.5%	70.1	69.8	-0.2	-0.4%
77.8%	70.0	69.8	-0.2	-0.3%
79.0%	70.0	69.7	-0.3	-0.4%
80.2%	70.0	69.6	-0.3	-0.5%
81.5%	70.0	69.5	-0.4	-0.6%
82.7%	70.0	69.5	-0.4	-0.6%
84.0%	69.7	69.5	-0.2	-0.3%
85.2%	69.7	69.4	-0.2	-0.3%
86.4%	69.7	69.4	-0.2	-0.3%
87.7%	69.7	69.4	-0.3	-0.4%
88.9%	69.6	69.4	-0.2	-0.3%
90.1%	69.6	69.3	-0.2	-0.3%
91.4%	69.5	69.2	-0.3	-0.4%
92.6%	69.4	69.1	-0.3	-0.5%
93.8%	69.4	69.0	-0.4	-0.6%
95.1%	69.4	69.0	-0.4	-0.5%
96.3%	69.2	69.0	-0.2	-0.3%
97.5%	69.1	68.9	-0.3	-0.4%
98.8%	69.0	68.8	-0.1	-0.2%
100.0%	69.0	68.8	-0.1	-0.2%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	82.7	81.6	-1.2	-1.4%
1.2%	81.8	81.0	-0.7	-0.9%
2.5%	80.2	78.6	-1.6	-2.0%
3.7%	79.8	78.6	-1.2	-1.5%
4.9%	79.3	78.4	-0.9	-1.1%
6.2%	79.3	78.1	-1.2	-1.5%
7.4%	78.6	78.0	-0.5	-0.7%
8.6%	78.5	77.9	-0.6	-0.7%
9.9%	78.5	77.6	-0.9	-1.1%
11.1%	78.3	77.4	-0.9	-1.1%
12.3%	78.2	77.3	-0.9	-1.1%
13.6%	77.9	77.3	-0.6	-0.8%
14.8%	77.7	76.6	-1.1	-1.5%
16.0%	77.3	76.5	-0.8	-1.0%
17.3%	77.3	76.1	-1.2	-1.6%
18.5%	76.6	76.0	-0.6	-0.7%
19.8%	76.6	76.0	-0.6	-0.8%
21.0%	76.2	75.9	-0.3	-0.4%
22.2%	76.2	75.9	-0.3	-0.4%
23.5%	76.1	75.6	-0.4	-0.5%
24.7%	76.0	75.4	-0.6	-0.8%
25.9%	76.0	75.1	-0.9	-1.1%
27.2%	75.8	75.1	-0.8	-1.0%
28.4%	75.8	74.9	-0.9	-1.2%
29.6%	75.8	74.8	-0.9	-1.2%
30.9%	75.8	74.8	-1.0	-1.3%
32.1%	75.7	74.7	-1.0	-1.3%
33.3%	75.1	74.7	-0.4	-0.6%
34.6%	75.1	74.5	-0.5	-0.7%
35.8%	75.0	74.5	-0.5	-0.7%
37.0%	74.9	74.4	-0.5	-0.6%
38.3%	74.7	74.4	-0.3	-0.4%
39.5%	74.7	74.2	-0.5	-0.7%
40.7%	74.5	74.1	-0.4	-0.6%
42.0%	74.4	74.1	-0.3	-0.4%
43.2%	74.3	73.9	-0.4	-0.6%
44.4%	74.1	73.9	-0.2	-0.3%
45.7%	74.0	73.8	-0.1	-0.2%
46.9%	73.9	73.8	-0.1	-0.1%
48.1%	73.7	73.7	0.0	0.0%
49.4%	73.7	73.6	-0.1	-0.1%
50.6%	73.6	73.3	-0.3	-0.4%
51.9%	73.6	73.3	-0.3	-0.4%
53.1%	73.5	73.3	-0.2	-0.3%
54.3%	73.5	73.3	-0.2	-0.3%
55.6%	73.5	73.1	-0.3	-0.5%
56.8%	73.5	73.1	-0.4	-0.5%
58.0%	73.4	73.1	-0.4	-0.5%
59.3%	73.4	72.9	-0.5	-0.6%
60.5%	73.4	72.9	-0.5	-0.7%
61.7%	73.3	72.8	-0.5	-0.7%
63.0%	73.3	72.7	-0.6	-0.8%
64.2%	73.3	72.6	-0.7	-0.9%
65.4%	73.2	72.5	-0.7	-1.0%
66.7%	73.1	72.5	-0.7	-0.9%
67.9%	73.0	72.3	-0.7	-1.0%
69.1%	72.9	72.3	-0.6	-0.9%
70.4%	72.9	72.3	-0.7	-0.9%
71.6%	72.9	72.3	-0.6	-0.9%
72.8%	72.8	72.1	-0.7	-1.0%
74.1%	72.8	71.9	-0.9	-1.2%
75.3%	72.8	71.9	-0.9	-1.2%
76.5%	72.8	71.9	-0.9	-1.2%
77.8%	72.8	71.8	-1.0	-1.3%
79.0%	72.7	71.8	-0.9	-1.3%
80.2%	72.7	71.8	-0.9	-1.2%
81.5%	72.5	71.8	-0.8	-1.1%
82.7%	72.5	71.6	-0.9	-1.3%
84.0%	72.5	71.5	-1.0	-1.4%
85.2%	72.4	71.5	-0.9	-1.3%
86.4%	72.2	71.4	-0.8	-1.1%
87.7%	72.2	71.4	-0.8	-1.1%
88.9%	72.1	71.4	-0.7	-1.0%
90.1%	72.0	71.2	-0.7	-1.0%
91.4%	72.0	71.2	-0.8	-1.1%
92.6%	71.7	71.1	-0.5	-0.7%
93.8%	71.5	71.0	-0.5	-0.7%
95.1%	71.4	70.3	-1.1	-1.5%
96.3%	71.4	70.3	-1.1	-1.5%
97.5%	71.0	70.2	-0.8	-1.1%
98.8%	70.8	69.8	-0.9	-1.3%
100.0%	70.8	69.8	-0.9	-1.3%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.7	78.4	-0.3	-0.4%
1.2%	77.0	76.4	-0.6	-0.8%
2.5%	76.9	76.1	-0.9	-1.1%
3.7%	76.6	75.8	-0.7	-1.0%
4.9%	76.4	75.6	-0.8	-1.0%
6.2%	75.6	75.5	-0.1	-0.1%
7.4%	75.5	75.1	-0.4	-0.6%
8.6%	75.4	74.7	-0.7	-0.9%
9.9%	75.3	74.4	-0.9	-1.2%
11.1%	75.3	74.2	-1.0	-1.4%
12.3%	75.2	74.2	-1.0	-1.3%
13.6%	75.2	74.2	-1.1	-1.4%
14.8%	74.8	74.1	-0.8	-1.1%
16.0%	74.8	74.0	-0.8	-1.1%
17.3%	74.7	74.0	-0.7	-0.9%
18.5%	74.6	73.8	-0.8	-1.1%
19.8%	74.3	73.8	-0.5	-0.7%
21.0%	74.2	73.7	-0.4	-0.6%
22.2%	74.1	73.1	-0.9	-1.3%
23.5%	74.0	73.0	-1.0	-1.4%
24.7%	73.9	73.0	-0.9	-1.2%
25.9%	73.8	72.9	-0.8	-1.1%
27.2%	73.7	72.9	-0.8	-1.1%
28.4%	73.7	72.9	-0.8	-1.1%
29.6%	73.7	72.8	-0.8	-1.1%
30.9%	73.6	72.8	-0.7	-1.0%
32.1%	73.6	72.8	-0.8	-1.1%
33.3%	73.4	72.7	-0.7	-1.0%
34.6%	73.2	72.7	-0.4	-0.6%
35.8%	73.2	72.6	-0.5	-0.7%
37.0%	73.1	72.6	-0.5	-0.7%
38.3%	73.1	72.4	-0.6	-0.9%
39.5%	73.0	72.4	-0.6	-0.9%
40.7%	73.0	72.3	-0.7	-0.9%
42.0%	72.8	72.1	-0.6	-0.9%
43.2%	72.8	72.1	-0.7	-0.9%
44.4%	72.8	72.1	-0.7	-1.0%
45.7%	72.8	72.0	-0.7	-1.0%
46.9%	72.7	71.8	-1.0	-1.3%
48.1%	72.7	71.6	-1.1	-1.5%
49.4%	72.7	71.5	-1.2	-1.6%
50.6%	72.6	71.5	-1.1	-1.5%
51.9%	72.6	71.5	-1.0	-1.4%
53.1%	72.5	71.5	-1.0	-1.4%
54.3%	72.4	71.4	-0.9	-1.3%
55.6%	72.3	71.3	-1.0	-1.4%
56.8%	72.1	71.2	-0.9	-1.3%
58.0%	71.8	71.2	-0.6	-0.9%
59.3%	71.8	71.1	-0.6	-0.9%
60.5%	71.7	71.1	-0.7	-0.9%
61.7%	71.7	71.1	-0.6	-0.9%
63.0%	71.7	71.0	-0.7	-1.0%
64.2%	71.6	70.9	-0.7	-0.9%
65.4%	71.5	70.9	-0.7	-0.9%
66.7%	71.5	70.8	-0.6	-0.8%
67.9%	71.4	70.8	-0.6	-0.8%
69.1%	71.4	70.8	-0.6	-0.9%
70.4%	71.4	70.6	-0.7	-1.0%
71.6%	71.3	70.6	-0.7	-1.0%
72.8%	71.1	70.5	-0.6	-0.8%
74.1%	71.1	70.5	-0.7	-0.9%
75.3%	71.1	70.3	-0.8	-1.1%
76.5%	71.0	70.3	-0.7	-1.0%
77.8%	70.7	70.3	-0.4	-0.5%
79.0%	70.5	70.3	-0.2	-0.3%
80.2%	70.2	70.2	0.0	-0.1%
81.5%	70.1	69.8	-0.2	-0.3%
82.7%	70.0	69.8	-0.2	-0.3%
84.0%	70.0	69.6	-0.4	-0.6%
85.2%	69.9	69.4	-0.5	-0.7%
86.4%	69.8	69.2	-0.5	-0.8%
87.7%	69.5	68.9	-0.6	-0.9%
88.9%	69.4	68.9	-0.5	-0.7%
90.1%	69.2	68.7	-0.5	-0.8%
91.4%	69.1	68.6	-0.5	-0.7%
92.6%	69.1	68.4	-0.7	-1.1%
93.8%	68.9	68.3	-0.6	-0.9%
95.1%	68.8	68.2	-0.6	-0.9%
96.3%	68.7	68.1	-0.5	-0.8%
97.5%	68.5	67.8	-0.7	-1.0%
98.8%	67.8	67.7	-0.2	-0.3%
100.0%	67.8	67.7	-0.2	-0.3%

Table SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	80.2	81.0	0.9	1.1%
1.2%	79.2	78.4	-0.8	-1.0%
2.5%	79.1	78.1	-1.0	-1.2%
3.7%	78.8	77.9	-1.0	-1.2%
4.9%	76.8	77.1	0.3	0.4%
6.2%	76.8	76.5	-0.3	-0.4%
7.4%	76.4	75.9	-0.5	-0.7%
8.6%	76.1	75.8	-0.3	-0.4%
9.9%	75.8	75.4	-0.4	-0.5%
11.1%	75.6	75.4	-0.2	-0.3%
12.3%	75.6	75.3	-0.3	-0.4%
13.6%	75.3	75.2	-0.1	-0.1%
14.8%	75.2	74.9	-0.3	-0.3%
16.0%	75.1	74.9	-0.2	-0.2%
17.3%	74.9	74.7	-0.3	-0.4%
18.5%	74.7	74.4	-0.3	-0.5%
19.8%	74.7	74.4	-0.3	-0.5%
21.0%	74.6	74.0	-0.6	-0.8%
22.2%	74.5	73.9	-0.7	-0.9%
23.5%	74.2	73.5	-0.7	-1.0%
24.7%	74.2	73.4	-0.8	-1.1%
25.9%	74.2	73.4	-0.8	-1.1%
27.2%	74.1	73.2	-0.9	-1.2%
28.4%	73.6	73.0	-0.6	-0.8%
29.6%	73.6	73.0	-0.6	-0.8%
30.9%	73.4	73.0	-0.5	-0.6%
32.1%	73.3	73.0	-0.4	-0.5%
33.3%	73.3	72.8	-0.5	-0.7%
34.6%	73.2	72.8	-0.5	-0.6%
35.8%	73.2	72.6	-0.6	-0.8%
37.0%	73.2	72.6	-0.6	-0.8%
38.3%	73.1	72.4	-0.7	-0.9%
39.5%	73.1	72.4	-0.7	-0.9%
40.7%	72.9	72.3	-0.6	-0.8%
42.0%	72.9	72.2	-0.6	-0.8%
43.2%	72.7	72.2	-0.5	-0.7%
44.4%	72.7	72.2	-0.6	-0.8%
45.7%	72.7	72.2	-0.6	-0.8%
46.9%	72.4	72.1	-0.3	-0.4%
48.1%	72.4	72.1	-0.3	-0.4%
49.4%	72.4	72.0	-0.4	-0.6%
50.6%	72.4	71.9	-0.4	-0.6%
51.9%	72.3	71.9	-0.3	-0.4%
53.1%	72.2	71.9	-0.3	-0.5%
54.3%	72.1	71.9	-0.3	-0.4%
55.6%	72.1	71.7	-0.4	-0.5%
56.8%	72.0	71.7	-0.3	-0.5%
58.0%	72.0	71.7	-0.3	-0.4%
59.3%	71.9	71.6	-0.3	-0.4%
60.5%	71.9	71.6	-0.4	-0.5%
61.7%	71.8	71.5	-0.3	-0.4%
63.0%	71.7	71.4	-0.3	-0.4%
64.2%	71.6	71.3	-0.3	-0.5%
65.4%	71.5	71.3	-0.3	-0.4%
66.7%	71.5	71.2	-0.2	-0.3%
67.9%	71.4	71.2	-0.2	-0.3%
69.1%	71.4	71.0	-0.4	-0.6%
70.4%	71.3	71.0	-0.4	-0.5%
71.6%	71.3	71.0	-0.3	-0.4%
72.8%	71.3	70.9	-0.3	-0.5%
74.1%	71.2	70.8	-0.3	-0.5%
75.3%	71.1	70.7	-0.4	-0.6%
76.5%	71.1	70.7	-0.5	-0.6%
77.8%	71.1	70.6	-0.4	-0.6%
79.0%	71.1	70.6	-0.5	-0.6%
80.2%	70.9	70.6	-0.4	-0.5%
81.5%	70.8	70.5	-0.4	-0.5%
82.7%	70.8	70.4	-0.4	-0.6%
84.0%	70.8	70.1	-0.7	-1.0%
85.2%	70.8	70.1	-0.7	-1.0%
86.4%	70.7	70.0	-0.7	-1.0%
87.7%	70.7	70.0	-0.7	-1.0%
88.9%	70.7	69.9	-0.8	-1.1%
90.1%	70.5	69.9	-0.6	-0.9%
91.4%	70.5	69.8	-0.6	-0.9%
92.6%	70.4	69.8	-0.6	-0.9%
93.8%	70.2	69.8	-0.4	-0.6%
95.1%	69.9	69.6	-0.3	-0.4%
96.3%	69.9	69.4	-0.5	-0.7%
97.5%	69.9	69.0	-0.9	-1.3%
98.8%	69.8	68.6	-1.2	-1.7%
100.0%	69.7	68.5	-1.2	-1.7%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	79.8	80.9	1.1	1.4%
1.2%	79.7	78.3	-1.4	-1.8%
2.5%	79.3	77.8	-1.5	-1.9%
3.7%	78.2	77.8	-0.5	-0.6%
4.9%	77.4	77.2	-0.2	-0.3%
6.2%	77.4	76.7	-0.7	-1.0%
7.4%	77.3	76.4	-0.9	-1.1%
8.6%	76.9	76.1	-0.9	-1.1%
9.9%	76.5	76.0	-0.5	-0.7%
11.1%	76.3	75.6	-0.7	-0.9%
12.3%	75.9	75.4	-0.5	-0.7%
13.6%	75.7	75.3	-0.4	-0.5%
14.8%	75.7	75.3	-0.4	-0.5%
16.0%	75.1	75.2	0.2	0.2%
17.3%	74.8	75.2	0.4	0.6%
18.5%	74.6	75.0	0.4	0.5%
19.8%	74.3	75.0	0.7	0.9%
21.0%	74.2	74.0	-0.2	-0.3%
22.2%	74.2	73.8	-0.4	-0.5%
23.5%	74.2	73.8	-0.4	-0.5%
24.7%	73.8	73.4	-0.4	-0.5%
25.9%	73.7	73.4	-0.3	-0.4%
27.2%	73.5	73.3	-0.3	-0.4%
28.4%	73.5	73.0	-0.5	-0.7%
29.6%	73.5	72.9	-0.5	-0.7%
30.9%	73.4	72.9	-0.6	-0.8%
32.1%	73.4	72.9	-0.5	-0.7%
33.3%	73.3	72.7	-0.6	-0.8%
34.6%	73.3	72.7	-0.6	-0.8%
35.8%	73.2	72.7	-0.5	-0.7%
37.0%	73.1	72.5	-0.7	-0.9%
38.3%	73.1	72.4	-0.7	-0.9%
39.5%	72.9	72.3	-0.6	-0.9%
40.7%	72.8	72.2	-0.6	-0.9%
42.0%	72.8	72.1	-0.7	-0.9%
43.2%	72.6	72.1	-0.5	-0.7%
44.4%	72.5	72.1	-0.5	-0.6%
45.7%	72.5	72.1	-0.4	-0.5%
46.9%	72.4	72.1	-0.3	-0.5%
48.1%	72.4	72.1	-0.3	-0.4%
49.4%	72.4	72.1	-0.3	-0.4%
50.6%	72.3	72.0	-0.4	-0.5%
51.9%	72.3	71.9	-0.4	-0.5%
53.1%	72.3	71.9	-0.3	-0.5%
54.3%	72.3	71.9	-0.4	-0.5%
55.6%	72.2	71.9	-0.3	-0.4%
56.8%	72.2	71.9	-0.3	-0.5%
58.0%	72.2	71.9	-0.3	-0.4%
59.3%	72.1	71.7	-0.4	-0.5%
60.5%	72.1	71.7	-0.3	-0.5%
61.7%	72.0	71.6	-0.4	-0.6%
63.0%	72.0	71.6	-0.4	-0.6%
64.2%	72.0	71.5	-0.5	-0.7%
65.4%	71.9	71.5	-0.4	-0.6%
66.7%	71.8	71.4	-0.4	-0.6%
67.9%	71.7	71.3	-0.4	-0.6%
69.1%	71.7	71.3	-0.4	-0.6%
70.4%	71.7	71.3	-0.4	-0.6%
71.6%	71.7	71.3	-0.4	-0.6%
72.8%	71.7	71.2	-0.5	-0.6%
74.1%	71.6	71.1	-0.5	-0.8%
75.3%	71.6	71.1	-0.6	-0.8%
76.5%	71.6	71.0	-0.6	-0.8%
77.8%	71.6	71.0	-0.6	-0.8%
79.0%	71.6	70.9	-0.7	-1.0%
80.2%	71.6	70.9	-0.7	-1.0%
81.5%	71.6	70.9	-0.7	-1.0%
82.7%	71.5	70.8	-0.7	-1.0%
84.0%	71.4	70.7	-0.7	-0.9%
85.2%	71.3	70.7	-0.6	-0.8%
86.4%	71.3	70.5	-0.8	-1.1%
87.7%	71.3	70.5	-0.8	-1.1%
88.9%	71.2	70.4	-0.8	-1.1%
90.1%	71.2	70.4	-0.8	-1.2%
91.4%	71.1	70.3	-0.8	-1.1%
92.6%	71.1	70.3	-0.9	-1.2%
93.8%	70.9	70.2	-0.7	-1.0%
95.1%	70.8	70.1	-0.7	-1.0%
96.3%	70.8	70.0	-0.8	-1.1%
97.5%	70.7	69.9	-0.8	-1.1%
98.8%	70.5	69.3	-1.2	-1.8%
100.0%	70.4	69.1	-1.3	-1.8%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	80.2	79.7	-0.5	-0.6%
1.2%	79.9	78.8	-1.1	-1.3%
2.5%	78.4	77.5	-0.9	-1.1%
3.7%	77.8	77.0	-0.8	-1.0%
4.9%	77.5	76.6	-0.9	-1.2%
6.2%	76.9	76.6	-0.3	-0.4%
7.4%	76.9	76.4	-0.5	-0.6%
8.6%	76.7	76.2	-0.5	-0.7%
9.9%	76.7	76.2	-0.5	-0.7%
11.1%	76.7	76.1	-0.5	-0.7%
12.3%	76.5	75.7	-0.8	-1.1%
13.6%	76.3	75.4	-1.0	-1.3%
14.8%	75.9	75.3	-0.7	-0.9%
16.0%	75.6	75.2	-0.4	-0.6%
17.3%	75.6	75.2	-0.4	-0.6%
18.5%	75.5	75.0	-0.5	-0.7%
19.8%	75.2	74.9	-0.3	-0.4%
21.0%	75.2	74.4	-0.8	-1.0%
22.2%	75.1	74.4	-0.7	-1.0%
23.5%	75.1	74.2	-0.9	-1.2%
24.7%	75.0	74.2	-0.8	-1.1%
25.9%	74.8	74.1	-0.6	-0.9%
27.2%	74.4	73.9	-0.5	-0.7%
28.4%	74.4	73.9	-0.5	-0.7%
29.6%	74.4	73.7	-0.7	-0.9%
30.9%	74.2	73.7	-0.5	-0.7%
32.1%	74.2	73.4	-0.8	-1.1%
33.3%	74.2	73.4	-0.8	-1.1%
34.6%	74.1	73.4	-0.7	-0.9%
35.8%	74.0	73.3	-0.7	-0.9%
37.0%	73.9	73.2	-0.7	-1.0%
38.3%	73.8	73.0	-0.8	-1.1%
39.5%	73.8	73.0	-0.8	-1.0%
40.7%	73.7	73.0	-0.8	-1.0%
42.0%	73.7	72.9	-0.8	-1.0%
43.2%	73.5	72.9	-0.6	-0.8%
44.4%	73.4	72.8	-0.6	-0.8%
45.7%	73.4	72.8	-0.5	-0.7%
46.9%	73.2	72.8	-0.4	-0.6%
48.1%	73.1	72.7	-0.4	-0.5%
49.4%	73.0	72.7	-0.3	-0.4%
50.6%	73.0	72.7	-0.3	-0.4%
51.9%	72.9	72.7	-0.2	-0.3%
53.1%	72.8	72.6	-0.2	-0.3%
54.3%	72.7	72.5	-0.3	-0.4%
55.6%	72.7	72.4	-0.3	-0.4%
56.8%	72.7	72.3	-0.4	-0.6%
58.0%	72.6	72.3	-0.4	-0.5%
59.3%	72.5	72.2	-0.2	-0.3%
60.5%	72.5	72.1	-0.3	-0.5%
61.7%	72.4	71.9	-0.5	-0.8%
63.0%	72.4	71.6	-0.8	-1.1%
64.2%	72.4	71.6	-0.8	-1.1%
65.4%	72.4	71.6	-0.8	-1.1%
66.7%	72.4	71.6	-0.8	-1.1%
67.9%	72.3	71.6	-0.7	-1.0%
69.1%	72.3	71.5	-0.7	-1.0%
70.4%	72.2	71.5	-0.7	-1.0%
71.6%	72.1	71.4	-0.7	-1.0%
72.8%	72.1	71.3	-0.7	-1.0%
74.1%	71.9	71.3	-0.6	-0.9%
75.3%	71.8	71.3	-0.6	-0.8%
76.5%	71.8	71.2	-0.5	-0.8%
77.8%	71.8	71.1	-0.6	-0.9%
79.0%	71.7	71.0	-0.6	-0.9%
80.2%	71.4	71.0	-0.4	-0.6%
81.5%	71.4	70.9	-0.5	-0.8%
82.7%	71.4	70.8	-0.6	-0.8%
84.0%	71.3	70.7	-0.7	-0.9%
85.2%	71.3	70.4	-0.9	-1.2%
86.4%	71.2	70.3	-1.0	-1.3%
87.7%	71.2	70.2	-1.0	-1.4%
88.9%	71.1	70.2	-0.9	-1.2%
90.1%	71.0	70.1	-0.8	-1.1%
91.4%	71.0	70.1	-0.9	-1.2%
92.6%	70.9	69.7	-1.2	-1.7%
93.8%	70.9	69.6	-1.3	-1.8%
95.1%	70.7	69.6	-1.1	-1.6%
96.3%	70.7	69.5	-1.1	-1.6%
97.5%	70.4	69.5	-0.9	-1.3%
98.8%	70.4	69.3	-1.1	-1.6%
100.0%	70.3	68.8	-1.5	-2.1%

Figure SQ12-1b
Trinity River below Lewiston Dam, Monthly Temperature
Probability of Exceedance

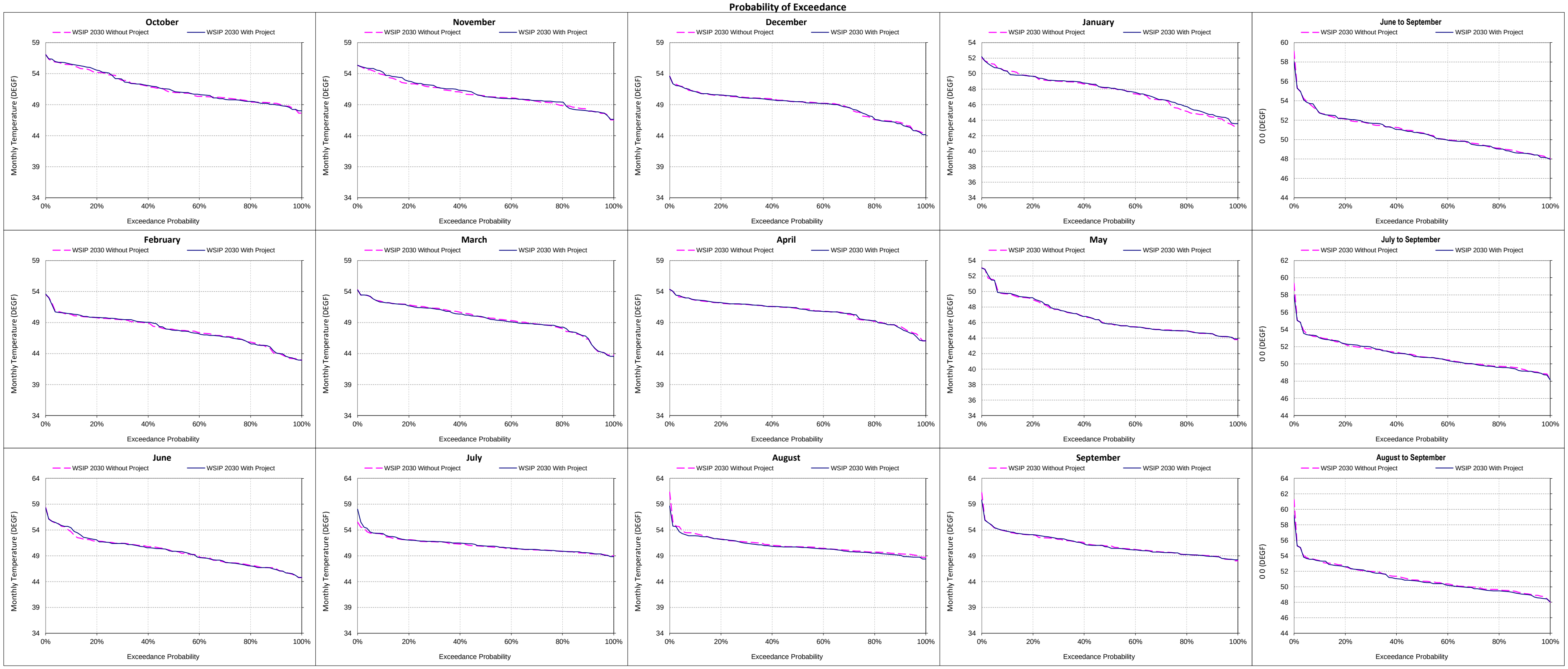


Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.1	57.1	0.0	0.0%
1.2%	56.3	56.4	0.1	0.1%
2.5%	56.0	56.3	0.3	0.6%
3.7%	55.9	56.0	0.1	0.2%
4.9%	55.8	55.8	0.0	0.0%
6.2%	55.6	55.8	0.2	0.3%
7.4%	55.5	55.8	0.3	0.5%
8.6%	55.5	55.7	0.2	0.3%
9.9%	55.5	55.5	0.1	0.1%
11.1%	55.2	55.4	0.2	0.4%
12.3%	55.1	55.4	0.3	0.6%
13.6%	54.8	55.2	0.4	0.8%
14.8%	54.8	55.2	0.4	0.8%
16.0%	54.8	55.0	0.3	0.5%
17.3%	54.6	55.0	0.4	0.8%
18.5%	54.3	54.8	0.5	0.9%
19.8%	54.2	54.6	0.3	0.6%
21.0%	54.2	54.5	0.3	0.6%
22.2%	54.2	54.2	0.1	0.1%
23.5%	54.0	54.2	0.2	0.4%
24.7%	53.8	54.1	0.3	0.5%
25.9%	53.8	53.7	-0.1	-0.1%
27.2%	53.7	53.2	-0.5	-1.0%
28.4%	53.2	53.2	0.0	-0.1%
29.6%	52.9	53.2	0.2	0.4%
30.9%	52.9	52.6	-0.3	-0.6%
32.1%	52.9	52.6	-0.3	-0.5%
33.3%	52.4	52.4	0.0	-0.1%
34.6%	52.4	52.4	0.0	0.0%
35.8%	52.4	52.3	0.0	-0.1%
37.0%	52.2	52.3	0.1	0.2%
38.3%	52.1	52.2	0.1	0.2%
39.5%	52.0	52.1	0.1	0.2%
40.7%	51.8	52.0	0.2	0.5%
42.0%	51.8	52.0	0.2	0.3%
43.2%	51.7	51.9	0.2	0.4%
44.4%	51.6	51.7	0.1	0.2%
45.7%	51.6	51.6	-0.1	-0.1%
46.9%	51.3	51.5	0.3	0.5%
48.1%	51.1	51.5	0.4	0.8%
49.4%	51.0	51.3	0.3	0.5%
50.6%	51.0	51.1	0.1	0.3%
51.9%	50.9	51.0	0.1	0.1%
53.1%	50.9	51.0	0.1	0.3%
54.3%	50.9	50.9	0.1	0.1%
55.6%	50.9	50.9	0.1	0.2%
56.8%	50.8	50.8	0.0	0.0%
58.0%	50.5	50.7	0.2	0.5%
59.3%	50.3	50.7	0.4	0.7%
60.5%	50.3	50.6	0.3	0.6%
61.7%	50.3	50.6	0.3	0.5%
63.0%	50.3	50.5	0.2	0.4%
64.2%	50.3	50.5	0.2	0.5%
65.4%	50.2	50.1	-0.1	-0.3%
66.7%	50.2	50.1	-0.1	-0.2%
67.9%	50.2	49.9	-0.2	-0.5%
69.1%	50.1	49.9	-0.2	-0.4%
70.4%	50.1	49.8	-0.3	-0.6%
71.6%	50.0	49.8	-0.2	-0.4%
72.8%	50.0	49.8	-0.2	-0.4%
74.1%	49.9	49.8	-0.1	-0.3%
75.3%	49.9	49.7	-0.2	-0.3%
76.5%	49.8	49.7	-0.1	-0.2%
77.8%	49.7	49.6	-0.1	-0.3%
79.0%	49.6	49.5	0.0	-0.1%
80.2%	49.4	49.5	0.1	0.2%
81.5%	49.4	49.5	0.1	0.2%
82.7%	49.4	49.3	-0.1	-0.1%
84.0%	49.4	49.2	-0.1	-0.3%
85.2%	49.4	49.2	-0.1	-0.3%
86.4%	49.3	49.2	-0.1	-0.2%
87.7%	49.3	49.1	-0.3	-0.5%
88.9%	49.2	49.0	-0.2	-0.4%
90.1%	49.2	49.0	-0.2	-0.5%
91.4%	49.1	48.9	-0.1	-0.3%
92.6%	48.9	48.8	-0.1	-0.1%
93.8%	48.8	48.7	0.0	0.0%
95.1%	48.8	48.6	-0.2	-0.4%
96.3%	48.5	48.2	-0.2	-0.5%
97.5%	48.3	48.2	0.0	-0.1%
98.8%	47.6	48.0	0.4	0.8%
100.0%	47.6	48.0	0.0	0.8%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.3	55.4	0.0	0.0%
1.2%	55.1	55.1	0.0	0.0%
2.5%	54.9	55.0	0.1	0.2%
3.7%	54.6	54.9	0.2	0.5%
4.9%	54.6	54.9	0.2	0.4%
6.2%	54.4	54.8	0.4	0.7%
7.4%	54.3	54.6	0.3	0.5%
8.6%	54.0	54.5	0.5	1.0%
9.9%	53.8	54.3	0.4	0.8%
11.1%	53.7	53.7	0.0	0.0%
12.3%	53.3	53.7	0.4	0.7%
13.6%	53.3	53.5	0.2	0.5%
14.8%	53.1	53.5	0.4	0.8%
16.0%	52.9	53.4	0.5	1.0%
17.3%	52.6	53.4	0.8	1.6%
18.5%	52.5	53.0	0.5	1.0%
19.8%	52.4	52.8	0.4	0.7%
21.0%	52.4	52.7	0.4	0.7%
22.2%	52.4	52.5	0.2	0.3%
23.5%	52.3	52.4	0.2	0.3%
24.7%	52.2	52.4	0.2	0.3%
25.9%	52.0	52.3	0.2	0.4%
27.2%	51.9	52.2	0.3	0.6%
28.4%	51.9	52.2	0.3	0.6%
29.6%	51.8	52.1	0.3	0.7%
30.9%	51.8	51.8	0.1	0.1%
32.1%	51.7	51.7	0.0	-0.1%
33.3%	51.4	51.7	0.3	0.5%
34.6%	51.3	51.6	0.2	0.4%
35.8%	51.3	51.6	0.3	0.5%
37.0%	51.2	51.5	0.3	0.6%
38.3%	51.1	51.5	0.4	0.8%
39.5%	51.1	51.3	0.2	0.5%
40.7%	51.0	51.3	0.3	0.7%
42.0%	50.7	51.2	0.5	1.0%
43.2%	50.6	51.1	0.5	1.0%
44.4%	50.6	51.1	0.5	0.9%
45.7%	50.6	50.8	0.2	0.4%
46.9%	50.6	50.6	0.0	0.0%
48.1%	50.5	50.5	0.0	0.0%
49.4%	50.4	50.3	-0.1	-0.3%
50.6%	50.3	50.2	0.0	-0.1%
51.9%	50.3	50.2	0.0	-0.1%
53.1%	50.2	50.2	-0.1	-0.2%
54.3%	50.2	50.1	-0.1	-0.3%
55.6%	50.1	50.0	-0.1	-0.3%
56.8%	50.1	50.0	-0.1	-0.3%
58.0%	50.1	50.0	-0.1	-0.2%
59.3%	50.1	49.9	-0.1	-0.3%
60.5%	50.1	49.9	-0.1	-0.3%
61.7%	50.0	49.9	-0.1	-0.2%
63.0%	49.9	49.9	0.0	-0.1%
64.2%	49.9	49.9	0.0	-0.1%
65.4%	49.8	49.8	0.0	0.1%
66.7%	49.7	49.8	0.1	0.3%
67.9%	49.7	49.7	0.0	0.0%
69.1%	49.6	49.7	0.1	0.1%
70.4%	49.5	49.7	0.2	0.3%
71.6%	49.4	49.6	0.2	0.5%
72.8%	49.4	49.6	0.2	0.4%
74.1%	49.4	49.6	0.2	0.4%
75.3%	49.3	49.6	0.2	0.5%
76.5%	49.3	49.5	0.2	0.4%
77.8%	49.0	49.4	0.4	0.8%
79.0%	48.9	49.4	0.5	1.1%
80.2%	48.9	49.4	0.5	1.1%
81.5%	48.8	48.7	-0.1	-0.1%
82.7%	48.8	48.4	-0.4	-0.8%
84.0%	48.6	48.3	-0.3	-0.7%
85.2%	48.6	48.2	-0.4	-0.8%
86.4%	48.4	48.1	-0.3	-0.6%
87.7%	48.4	48.1	-0.2	-0.5%
88.9%	48.3	48.1	-0.3	-0.6%
90.1%	47.9	48.0	0.0	0.0%
91.4%	47.9	48.0	0.0	0.0%
92.6%	47.9	47.9	0.0	-0.1%
93.8%	47.7	47.9	0.1	0.2%
95.1%	47.6	47.7	0.1	0.2%
96.3%	47.6	47.6	0.0	0.1%
97.5%	47.4	47.3	-0.1	-0.3%
98.8%	46.6	46.6	0.1	0.2%
100.0%	46.6	46.6	0.1	0.2%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.6	53.6	0.0	0.0%
1.2%	52.4	52.4	0.0	0.0%
2.5%	52.3	52.1	-0.2	-0.5%
3.7%	52.0	52.0	0.0	0.0%
4.9%	51.9	51.8	-0.1	-0.2%
6.2%	51.8	51.6	-0.2	-0.3%
7.4%	51.3	51.5	0.2	0.5%
8.6%	51.3	51.2	-0.1	-0.1%
9.9%	51.2	51.1	-0.1	-0.2%
11.1%	51.1	51.0	-0.1	-0.2%
12.3%	50.8	50.8	0.0	0.0%
13.6%	50.7	50.8	0.1	0.1%
14.8%	50.7	50.8	0.1	0.1%
16.0%	50.6	50.7	0.0	0.1%
17.3%	50.5	50.6	0.1	0.1%
18.5%	50.5	50.6	0.1	0.1%
19.8%	50.5	50.6	0.0	0.1%
21.0%	50.5	50.5	0.0	0.0%
22.2%	50.4	50.5	0.1	0.2%
23.5%	50.3	50.4	0.1	0.2%
24.7%	50.3	50.4	0.1	0.2%
25.9%	50.3	50.4	0.1	0.2%
27.2%	50.2	50.2	0.0	-0.1%
28.4%	50.2	50.1	-0.1	-0.2%
29.6%	50.2	50.1	-0.1	-0.2%
30.9%	50.2	50.0	-0.1	-0.2%
32.1%	50.1	50.0	0.0	-0.1%
33.3%	50.1	50.0	0.0	-0.1%
34.6%	50.1	50.0	-0.1	-0.1%
35.8%	50.1	50.0	-0.1	-0.2%
37.0%	50.0	49.9	-0.1	-0.2%
38.3%	50.0	49.8	-0.2	-0.3%
39.5%	49.9	49.8	-0.2	-0.3%
40.7%	49.9	49.8	-0.2	-0.3%
42.0%	49.7	49.7	-0.1	-0.1%
43.2%	49.7	49.7	0.0	-0.1%
44.4%	49.7	49.7	0.0	-0.1%
45.7%	49.6	49.6	0.0	0.0%
46.9%	49.6	49.5	0.0	-0.1%
48.1%	49.5	49.5	0.0	0.1%
49.4%	49.5	49.5	0.0	0.0%
50.6%	49.5	49.5	0.0	0.0%
51.9%	49.4	49.5	0.0	0.1%
53.1%	49.4	49.3	-0.1	-0.2%
54.3%	49.4	49.3	-0.1	-0.3%
55.6%	49.4	49.3	-0.1	-0.2%
56.8%	49.3	49.3	-0.1	-0.1%
58.0%	49.3	49.2	-0.1	-0.1%
59.3%	49.2	49.2	0.0	-0.1%
60.5%	49.2	49.2	0.0	-0.1%
61.7%	49.2	49.1	-0.1	-0.1%
63.0%	49.2	49.1	-0.1	-0.1%
64.2%	49.2	49.0	-0.1	-0.3%
65.4%	49.0	49.0	0.0	-0.1%
66.7%	49.0	48.8	-0.2	-0.4%
67.9%	48.9	48.7	-0.2	-0.4%
69.1%	48.6	48.6	0.0	0.0%
70.4%	48.5	48.5	0.0	0.0%
71.6%	48.0	48.2	0.2	0.5%
72.8%	47.8	48.1	0.3	0.7%
74.1%	47.8	47.9	0.1	0.2%
75.3%	47.2	47.6	0.5	1.0%
76.5%	47.1	47.5	0.4	0.8%
77.8%	47.0	47.2	0.2	0.3%
79.0%	46.6	47.1	0.5	1.0%
80.2%	46.6	46.6	0.0	0.1%
81.5%	46.5	46.5	0.1	0.1%
82.7%	46.4	46.4	-0.1	-0.1%
84.0%	46.4	46.3	-0.1	-0.2%
85.2%	46.4	46.3	-0.1	-0.2%
86.4%	46.3	46.3	-0.1	-0.2%
87.7%	46.3	46.2	-0.1	-0.3%
88.9%	46.2	45.9	-0.3	-0.6%
90.1%	46.1	45.9	-0.2	-0.4%
91.4%	45.9	45.6	-0.3	-0.7%
92.6%	45.6	45.5	-0.1	-0.3%
93.8%	45.6	45.3	-0.2	-0.5%
95.1%	44.9	44.8	-0.1	-0.2%
96.3%	44.8	44.8	0.0	-0.1%
97.5%	44.7	44.5	-0.1	-0.3%
98.8%	44.5	44.2	-0.3	-0.6%
100.0%	44.5	44.2	-0.3	-0.6%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.1	52.2	0.1	0.3%
1.2%	51.6	51.6	0.0	0.0%
2.5%	51.5	51.3	-0.2	-0.4%
3.7%	51.3	51.0	-0.3	-0.5%
4.9%	51.2	50.8	-0.4	-0.9%
6.2%	50.8	50.7	0.0	0.0%
7.4%	50.7	50.6	-0.1	-0.1%
8.6%	50.4	50.4	0.0	-0.1%
9.9%	50.3	50.3	0.0	0.0%
11.1%	50.3	49.9	-0.5	-0.9%
12.3%	50.3	49.8	-0.4	-0.9%
13.6%	50.2	49.8	-0.4	-0.7%
14.8%	49.9	49.8	-0.1	-0.1%
16.0%	49.8	49.8	0.0	0.0%
17.3%	49.8	49.7	-0.1	-0.1%
18.5%	49.7	49.7	0.0	0.1%
19.8%	49.7	49.7	0.0	0.0%
21.0%	49.6	49.6	-0.1	-0.1%
22.2%	49.3	49.4	0.2	0.3%
23.5%	49.2	49.4	0.1	0.3%
24.7%	49.2	49.3	0.1	0.3%
25.9%	49.1	49.2	0.0	0.1%
27.2%	49.1	49.1	0.1	0.1%
28.4%	49.1	49.1	0.1	0.1%
29.6%	49.0	49.1	0.1	0.1%
30.9%	49.0	49.1	0.1	0.2%
32.1%	49.0	49.1	0.1	0.2%
33.3%	49.0	49.0	0.1	0.1%
34.6%	48.9	49.0	0.1	0.1%
35.8%	48.9	49.0	0.1	0.2%
37.0%	48.8	49.0	0.2	0.3%
38.3%	48.8	48.9	0.1	0.3%
39.5%	48.7	48.8	0.1	0.2%
40.7%	48.6	48.8	0.1	0.3%
42.0%	48.6	48.7	0.1	0.2%
43.2%	48.6	48.6	0.1	0.1%
44.4%	48.5	48.6	0.2	0.3%
45.7%	48.3	48.3	0.0	-0.1%
46.9%	48.2	48.2	0.0	0.1%
48.1%	48.2	48.2	0.1	0.2%
49.4%	48.2	48.2	0.1	0.2%
50.6%	48.1	48.1	0.0	0.0%
51.9%	48.1	48.1	0.0	0.1%
53.1%	47.9	48.0	0.0	0.1%
54.3%	47.9	47.9	0.0	0.0%
55.6%	47.9	47.9	0.0	0.0%
56.8%	47.7	47.7	0.0	-0.1%
58.0%	47.7	47.7	0.0	0.1%
59.3%	47.4	47.6	0.2	0.5%
60.5%	47.4	47.5	0.1	0.3%
61.7%	47.3	47.4	0.1	0.2%
63.0%	47.3	47.4	0.1	0.3%
64.2%	47.2	47.3	0.1	0.2%
65.4%	46.8	47.1	0.4	0.8%
66.7%	46.7	47.0	0.3	0.7%
67.9%	46.7	46.8	0.1	0.3%
69.1%	46.6	46.7	0.0	0.1%
70.4%	46.6	46.7	0.0	0.1%
71.6%	46.6	46.6	0.0	0.0%
72.8%	46.4	46.5	0.2	0.4%
74.1%	45.8	46.4	0.5	1.2%
75.3%	45.6	46.3	0.7	1.5%
76.5%	45.6	46.1	0.5	1.1%
77.8%	45.4	46.0	0.6	1.4%
79.0%	45.2	45.8	0.6	1.4%
80.2%	45.1	45.7	0.6	1.3%
81.5%	44.9	45.5	0.6	1.3%
82.7%	44.8	45.3	0.5	1.1%
84.0%	44.8	45.3	0.5	1.0%
85.2%	44.7	45.2	0.4	1.0%
86.4%	44.7	45.0	0.3	0.7%
87.7%	44.7	44.9	0.2	0.4%
88.9%	44.5	44.7	0.3	0.6%
90.1%	44.4	44.7	0.3	0.7%
91.4%	44.4	44.5	0.2	0.4%
92.6%	44.2	44.4	0.2	0.5%
93.8%	44.1	44.4	0.2	0.6%
95.1%	43.8	44.4	0.6	1.3%
96.3%	43.6	44.2	0.6	1.3%
97.5%	43.4	43.6	0.2	0.4%
98.8%	43.2	43.6	0.4	0.9%
100.0%	43.2	43.6	0.4	0.9%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.5	53.6	0.1	0.2%
1.2%	53.0	53.0	0.0	0.0%
2.5%	52.1	51.9	-0.2	-0.5%
3.7%	50.9	50.7	-0.2	-0.3%
4.9%	50.8	50.6	-0.2	-0.3%
6.2%	50.6	50.6	-0.1	-0.1%
7.4%	50.4	50.6	0.1	0.2%
8.6%	50.3	50.4	0.1	0.2%
9.9%	50.3	50.4	0.1	0.2%
11.1%	50.1	50.3	0.3	0.5%
12.3%	50.1	50.3	0.2	0.5%
13.6%	50.0	50.2	0.1	0.3%
14.8%	49.9	50.0	0.1	0.1%
16.0%	49.9	50.0	0.1	0.2%
17.3%	49.9	49.9	0.0	-0.1%
18.5%	49.8	49.9	0.0	0.1%
19.8%	49.8	49.8	0.0	0.0%
21.0%	49.7	49.8	0.1	0.2%
22.2%	49.7	49.8	0.1	0.2%
23.5%	49.7	49.8	0.1	0.2%
24.7%	49.6	49.7	0.1	0.1%
25.9%	49.6	49.7	0.1	0.1%
27.2%	49.5	49.6	0.1	0.2%
28.4%	49.5	49.5	0.0	0.0%
29.6%	49.5	49.5	0.1	0.2%
30.9%	49.4	49.5	0.0	0.1%
32.1%	49.4	49.5	0.1	0.2%
33.3%	49.1	49.4	0.3	0.6%
34.6%	49.1	49.3	0.1	0.3%
35.8%	49.1	49.2	0.1	0.2%
37.0%	49.0	49.1	0.1	0.1%
38.3%	49.0	49.1	0.1	0.2%
39.5%	48.9	49.0	0.1	0.2%
40.7%	48.8	49.0	0.2	0.5%
42.0%	48.4	48.9	0.5	1.1%
43.2%	48.3	48.8	0.5	1.0%
44.4%	48.3	48.3	0.1	0.2%
45.7%	48.1	48.3	0.3	0.6%
46.9%	48.0	48.0	0.0	-0.1%
48.1%	48.0	47.9	0.0	-0.1%
49.4%	47.9	47.8	-0.2	-0.3%
50.6%	47.8	47.8	-0.1	-0.1%
51.9%	47.8	47.7	0.0	-0.1%
53.1%	47.7	47.6	-0.1	-0.2%
54.3%	47.7	47.6	-0.1	-0.2%
55.6%	47.6	47.6	-0.1	-0.1%
56.8%	47.6	47.4	-0.2	-0.5%
58.0%	47.6	47.3	-0.3	-0.6%
59.3%	47.4	47.3	-0.2	-0.3%
60.5%	47.3	47.1	-0.2	-0.5%
61.7%	47.3	47.0	-0.2	-0.5%
63.0%	47.2	47.0	-0.2	-0.5%
64.2%	47.2	46.9	-0.3	-0.5%
65.4%	47.0	46.9	-0.1	-0.2%
66.7%	46.9	46.9	0.0	-0.1%
67.9%	46.9	46.8	-0.1	-0.1%
69.1%	46.8	46.7	-0.1	-0.2%
70.4%	46.7	46.7	-0.1	-0.2%
71.6%	46.7	46.6	-0.1	-0.2%
72.8%	46.7	46.5	-0.2	-0.4%
74.1%	46.5	46.4	-0.1	-0.2%
75.3%	46.5	46.3	-0.1	-0.3%
76.5%	46.3	46.3	0.0	-0.1%
77.8%	46.1	46.1	0.0	0.1%
79.0%	45.9	45.9	0.0	0.0%
80.2%	45.8	45.5	-0.3	-0.6%
81.5%	45.7	45.5	-0.2	-0.4%
82.7%	45.6	45.4	-0.2	-0.4%
84.0%	45.4	45.3	0.0	0.0%
85.2%	45.3	45.3	0.0	0.0%
86.4%	45.0	45.3	0.3	0.6%
87.7%	44.8	45.1	0.2	0.5%
88.9%	44.1	44.5	0.4	0.8%
90.1%	44.0	44.1	0.0	0.1%
91.4%	44.0	44.0	0.0	-0.1%
92.6%	43.7	44.0	0.2	0.5%
93.8%	43.5	43.5	0.1	0.1%
95.1%	43.2	43.4	0.1	0.3%
96.3%	43.2	43.3	0.1	0.2%
97.5%	43.2	43.1	-0.1	-0.3%
98.8%	43.0	43.0	0.0	0.0%
100.0%	43.0	43.0	0.0	0.0%

March				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	54.3	0.0	0.0%
1.2%	53.4	53.4	0.0	0.0%
2.5%	53.4	53.4	0.0	0.0%
3.7%	53.4	53.4	0.0	0.0%
4.9%	53.2	53.2	0.0	0.0%
6.2%	52.8	52.8	0.0	0.1%
7.4%	52.5	52.5	0.0	0.0%
8.6%	52.5	52.3	-0.2	-0.3%
9.9%	52.3	52.3	0.0	-0.1%
11.1%	52.2	52.2	0.0	0.0%
12.3%	52.2	52.2	0.0	0.0%
13.6%	52.1	52.0	0.0	0.0%
14.8%	52.0	52.0	0.0	0.0%
16.0%	52.0	52.0	0.0	0.0%
17.3%	52.0	51.9	0.0	-0.1%
18.5%	52.0	51.9	0.0	-0.1%
19.8%	51.9	51.7	-0.2	-0.4%
21.0%	51.8	51.6	-0.1	-0.3%
22.2%	51.7	51.5	-0.2	-0.4%
23.5%	51.6	51.4	-0.2	-0.4%
24.7%	51.6	51.4	-0.2	-0.4%
25.9%	51.6	51.4	-0.2	-0.4%
27.2%	51.4	51.3	-0.1	-0.2%
28.4%	51.3	51.3	0.0	-0.1%
29.6%	51.3	51.3	-0.1	-0.1%
30.9%	51.3	51.1	-0.2	-0.3%
32.1%	51.3	51.1	-0.1	-0.3%
33.3%	51.1	51.0	-0.1	-0.3%
34.6%	51.0	50.8	-0.2	-0.4%
35.8%	50.9	50.8	-0.1	-0.1%
37.0%	50.8	50.5	-0.3	-0.6%
38.3%	50.8	50.4	-0.4	-0.8%
39.5%	50.7	50.4	-0.3	-0.6%
40.7%	50.6	50.4	-0.2	-0.5%
42.0%	50.5	50.2	-0.3	-0.6%
43.2%	50.4	50.2	-0.2	-0.5%
44.4%	50.3	50.1	-0.3	-0.5%
45.7%	50.0	50.0	0.0	0.0%
46.9%	50.0	50.0	0.0	0.0%
48.1%	49.9	50.0	0.1	0.2%
49.4%	49.9	49.9	0.0	0.0%
50.6%	49.8	49.7	-0.1	-0.2%
51.9%	49.7	49.5	-0.2	-0.4%
53.1%	49.7	49.5	-0.2	-0.5%
54.3%	49.6	49.4	-0.2	-0.4%
55.6%	49.5	49.4	-0.1	-0.3%
56.8%	49.5	49.3	-0.2	-0.3%
58.0%	49.4	49.2	-0.2	-0.4%
59.3%	49.3	49.1	-0.2	-0.5%
60.5%	49.3	49.1	-0.2	-0.5%
61.7%	49.2	49.0	-0.2	-0.4%
63.0%	49.1	48.9	-0.2	-0.4%
64.2%	49.1	48.9	-0.2	-0.4%
65.4%	49.1	48.8	-0.2	-0.4%
66.7%	48.9	48.8	-0.1	-0.1%
67.9%	48.9	48.8	0.0	-0.1%
69.1%	48.8	48.7	-0.1	-0.2%
70.4%	48.7	48.7	0.0	0.0%
71.6%	48.7	48.7	0.0	0.0%
72.8%	48.6	48.6	0.0	0.0%
74.1%	48.6	48.6	0.0	0.0%
75.3%	48.5	48.6	0.1	0.1%
76.5%	48.4	48.6	0.2	0.4%
77.8%	48.3	48.4	0.1	0.2%
79.0%	48.1	48.3	0.2	0.3%
80.2%	48.0	48.3	0.3	0.5%
81.5%	47.5	48.0	0.5	1.0%
82.7%	47.5	47.5	0.0	-0.1%
84.0%	47.4	47.5	0.1	0.2%
85.2%	47.2	47.4	0.2	0.5%
86.4%	47.1	47.1	0.0	0.0%
87.7%	46.9	46.9	0.1	0.1%
88.9%	46.4	46.8	0.5	1.0%
90.1%	46.3	46.4	0.1	0.2%
91.4%	45.5	45.5	0.0	0.0%
92.6%	44.8	44.8	0.0	0.0%
93.8%	44.3	44.4	0.1	0.2%
95.1%	44.3	44.3	-0.1	-0.1%
96.3%	44.1	44.1	0.0	0.0%
97.5%	43.8	43.7	-0.1	-0.2%
98.8%	43.8	43.6	-0.2	-0.4%
100.0%	43.8	43.6	-0.2	-0.4%

April				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	54.3	0.0	0.0%
1.2%	54.0	54.0	0.0	0.0%
2.5%	53.3	53.4	0.1	0.1%
3.7%	53.1	53.4	0.2	0.5%
4.9%	53.1	53.1	0.0	0.0%
6.2%	53.0	53.0	0.0	0.0%
7.4%	52.9	53.0	0.0	0.0%
8.6%	52.7	52.7	0.0	0.0%
9.9%	52.6	52.7	0.1	0.1%
11.1%	52.6	52.6	0.0	0.0%
12.3%	52.5	52.6	0.1	0.2%
13.6%	52.4	52.5	0.1	0.2%
14.8%	52.4	52.4	0.1	0.1%
16.0%	52.3	52.4	0.0	0.1%
17.3%	52.2	52.3	0.0	0.1%
18.5%	52.2	52.2	0.0	0.0%
19.8%	52.1	52.2	0.1	0.1%
21.0%	52.1	52.1	0.1	0.2%
22.2%	52.0	52.1	0.1	0.2%
23.5%	52.0	52.0	0.0	0.0%
24.7%	52.0	52.0	0.0	0.0%
25.9%	52.0	52.0	0.0	0.0%
27.2%	52.0	52.0	0.0	0.1%
28.4%	51.9	52.0	0.0	0.1%
29.6%	51.9	52.0	0.0	0.1%
30.9%	51.9	51.9	0.0	0.1%
32.1%	51.8	51.8	0.0	0.0%
33.3%	51.8	51.8	0.0	0.0%
34.6%	51.8	51.8	0.0	0.0%
35.8%	51.8	51.8	0.0	0.0%
37.0%	51.6	51.7	0.1	0.1%
38.3%	51.6	51.6	0.0	0.0%
39.5%	51.6	51.6	0.0	0.0%
40.7%	51.6	51.6	0.0	0.0%
42.0%	51.5	51.6	0.0	0.1%
43.2%	51.5	51.6	0.1	0.1%
44.4%	51.5	51.5	0.0	0.0%
45.7%	51.4	51.5	0.0	0.1%
46.9%	51.4	51.4	0.0	0.0%
48.1%	51.4	51.4	0.1	0.1%
49.4%	51.3	51.4	0.1	0.2%
50.6%	51.3	51.2	-0.1	-0.2%
51.9%	51.2	51.2	0.0	-0.1%
53.1%	51.2	51.1	-0.1	-0.1%
54.3%	51.2	50.9	-0.2	-0.5%
55.6%	51.0	50.9	-0.2	-0.3%
56.8%	50.9	50.9	0.0	0.0%
58.0%	50.9	50.9	0.0	0.0%
59.3%	50.9	50.8	-0.1	-0.1%
60.5%	50.8	50.8	-0.1	-0.1%
61.7%	50.8	50.8	0.0	0.0%
63.0%	50.7	50.7	0.0	0.0%
64.2%	50.7	50.7	0.0	0.0%
65.4%	50.7	50.7	0.0	0.0%
66.7%	50.7	50.5	-0.1	-0.2%
67.9%	50.5	50.5	0.0	-0.1%
69.1%	50.3	50.5	0.1	0.2%
70.4%	50.3	50.5	0.2	0.4%
71.6%	50.3	50.3	0.0	0.0%
72.8%	49.6	50.2	0.6	1.2%
74.1%	49.5	49.6	0.1	0.2%
75.3%	49.4	49.5	0.1	0.2%
76.5%	49.4	49.4	0.0	0.0%
77.8%	49.4	49.4	0.0	0.0%
79.0%	49.3	49.3	0.0	0.0%
80.2%	49.1	49.3	0.2	0.3%
81.5%	49.1	49.0	-0.1	-0.2%
82.7%	49.0	48.9	-0.1	-0.2%
84.0%	48.8	48.9	0.0	0.1%
85.2%	48.8	48.7	-0.1	-0.3%
86.4%	48.6	48.6	0.0	0.0%
87.7%	48.6	48.6	0.0	0.0%
88.9%	48.4	48.3	-0.1	-0.2%
90.1%	48.4	48.1	-0.3	-0.6%
91.4%	48.1	47.7	-0.3	-0.7%
92.6%	47.7	47.6	-0.2	-0.4%
93.8%	47.6	47.3	-0.2	-0.5%
95.1%	47.3	47.2	-0.2	-0.3%
96.3%	47.2	46.7	-0.5	-1.0%
97.5%	46.7	46.2	-0.5	-1.1%
98.8%	46.0	46.1	0.0	0.0%
100.0%	46.0	46.1	0.0	0.0%

May				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.0	53.0	0.0	0.0%
1.2%	52.9	52.9	0.0	0.0%
2.5%	51.7	52.1	0.4	0.7%
3.7%	51.6	51.5	-0.1	-0.2%
4.9%	51.5	51.4	-0.1	-0.1%
6.2%	50.2	49.9	-0.3	-0.6%
7.4%	49.8	49.8	0.0	0.1%
8.6%	49.7	49.8	0.1	0.1%
9.9%	49.7	49.8	0.1	0.2%
11.1%	49.7	49.7	0.1	0.1%
12.3%	49.5	49.6	0.1	0.3%
13.6%	49.3	49.5	0.2	0.3%
14.8%	49.3	49.4	0.1	0.2%
16.0%	49.2	49.3	0.1	0.1%
17.3%	49.2	49.3	0.1	0.1%
18.5%	49.2	49.2	0.0	0.1%
19.8%	49.0	49.2	0.2	0.4%
21.0%	48.8	49.0	0.1	0.3%
22.2%	48.7	48.8	0.2	0.3%
23.5%	48.4	48.7	0.3	0.6%
24.7%	48.3	48.3	0.0	0.1%
25.9%	48.1	48.3	0.2	0.4%
27.2%	47.7	47.9	0.2	0.4%
28.4%	47.7	47.8	0.1	0.1%
29.6%	47.7	47.7	0.0	0.0%
30.9%	47.5	47.6	0.0	0.0%
32.1%	47.5	47.5	0.0	-0.1%
33.3%	47.3	47.4	0.0	0.1%
34.6%	47.2	47.3	0.1	0.1%
35.8%	47.2	47.2	-0.1	-0.1%
37.0%	47.1	47.1	0.0	0.0%
38.3%	47.0	46.9	0.0	-0.1%
39.5%	46.8	46.8	0.0	0.0%
40.7%	46.7	46.8	0.1	0.3%
42.0%	46.7	46.7	0.0	0.1%
43.2%	46.6	46.5	0.0	0.0%
44.4%	46.4	46.4	0.0	0.0%
45.7%	46.4	46.4	0.0	0.0%
46.9%	46.1	46.0	-0.1	-0.2%
48.1%	45.9	45.9	0.0	0.0%
49.4%	45.8	45.8	0.0	0.0%
50.6%	45.8	45.8	0.0	0.0%
51.9%	45.7	45.7	0.1	0.1%
53.1%	45.7	45.7	0.0	0.0%
54.3%	45.6	45.6	0.0	0.0%
55.6%	45.6	45.6	0.0	0.0%
56.8%	45.6	45.6	0.0	0.0%
58.0%	45.5	45.4	0.0	-0.1%
59.3%	45.5	45.4	0.0	0.0%
60.5%	45.4	45.4	0.0	0.0%
61.7%	45.4	45.4	0.0	0.1%
63.0%	45.3	45.3	0.0	0.0%
64.2%	45.3	45.2	0.0	-0.1%
65.4%	45.2	45.2	0.0	0.1%
66.7%	45.2	45.1	0.0	-0.1%
67.9%	45.1	45.1	0.0	-0.1%
69.1%	45.1	45.1	0.0	-0.1%
70.4%	45.1	45.0	0.0	0.0%
71.6%	45.1	45.0	-0.1	-0.1%
72.8%	45.0	45.0	-0.1	-0.1%
74.1%	45.0	45.0	-0.1	-0.2%
75.3%	45.0	45.0	0.0	0.0%
76.5%	44.9	44.9	0.0	0.0%
77.8%	44.9	44.9	0.0	0.0%
79.0%	44.9	44.9	0.0	0.0%
80.2%	44.9	44.9	0.0	0.0%
81.5%	44.8	44.8	0.0	0.0%
82.7%	44.8	44.7	0.0	-0.1%
84.0%	44.7	44.7	0.0	0.0%
85.2%	44.6	44.7	0.1	0.1%
86.4%	44.6	44.7	0.0	0.1%
87.7%	44.6	44.6	0.0	0.0%
88.9%	44.6	44.6	0.0	0.0%
90.1%	44.5	44.5	0.0	0.0%
91.4%	44.3	44.3	0.0	0.0%
92.6%	44.2	44.2	0.0	0.0%
93.8%	44.2	44.2	0.0	0.0%
95.1%	44.2	44.2	0.0	0.0%
96.3%	44.2	44.2	0.0	0.0%
97.5%	44.1	44.1	0.0	-0.1%
98.8%	43.8	43.9	0.1	0.2%
100.0%	43.8	43.9	0.1	0.2%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.4	58.4	0.0	0.0%
1.2%	56.1	56.1	0.0	0.0%
2.5%	55.7	55.7	0.0	0.0%
3.7%	55.4	55.5	0.1	0.2%
4.9%	55.3	55.2	-0.1	-0.2%
6.2%	54.7	54.9	0.2	0.3%
7.4%	54.6	54.7	0.1	0.1%
8.6%	54.1	54.7	0.6	1.1%
9.9%	53.7	54.5	0.8	1.5%
11.1%	53.0	53.7	0.7	1.3%
12.3%	52.5	53.4	0.9	1.8%
13.6%	52.4	53.1	0.7	1.3%
14.8%	52.2	52.6	0.4	0.7%
16.0%	52.2	52.5	0.3	0.5%
17.3%	52.1	52.3	0.2	0.4%
18.5%	51.9	52.2	0.3	0.6%
19.8%	51.8	52.1	0.3	0.5%
21.0%	51.8	51.7	-0.1	-0.2%
22.2%	51.8	51.7	-0.1	-0.1%
23.5%	51.7	51.6	0.0	-0.1%
24.7%	51.6	51.6	0.0	0.0%
25.9%	51.6	51.4	-0.2	-0.4%
27.2%	51.4	51.4	0.0	-0.1%
28.4%	51.4	51.4	0.0	-0.1%
29.6%	51.4	51.4	0.0	-0.1%
30.9%	51.4	51.4	0.0	0.0%
32.1%	51.3	51.2	-0.1	-0.3%
33.3%	51.2	51.2	0.0	-0.1%
34.6%	51.2	51.1	-0.1	-0.1%
35.8%	51.0	51.0	-0.1	-0.1%
37.0%	51.0	50.8	-0.2	-0.3%
38.3%	51.0	50.8	-0.2	-0.4%
39.5%	50.8	50.5	-0.3	-0.5%
40.7%	50.8	50.5	-0.2	-0.5%
42.0%	50.8	50.5	-0.2	-0.5%
43.2%	50.6	50.4	-0.2	-0.5%
44.4%	50.5	50.4	-0.1	-0.3%
45.7%	50.5	50.4	-0.1	-0.2%
46.9%	50.2	50.3	0.0	0.1%
48.1%	50.1	50.0	-0.2	-0.4%
49.4%	49.9	49.9	0.0	0.0%
50.6%	49.8	49.9	0.1	0.1%
51.9%	49.8	49.8	0.1	0.1%
53.1%	49.5	49.8	0.3	0.6%
54.3%	49.5	49.7	0.2	0.4%
55.6%	49.3	49.5	0.2	0.4%
56.8%	49.3	49.3	0.1	0.1%
58.0%	49.2	49.2	0.0	-0.1%
59.3%	49.2	48.7	-0.5	-1.0%
60.5%	48.6	48.6	0.0	0.0%
61.7%	48.6	48.6	-0.1	-0.1%
63.0%	48.6	48.5	-0.1	-0.1%
64.2%	48.5	48.4	-0.1	-0.3%
65.4%	48.1	48.2	0.1	0.1%
66.7%	48.1	48.2	0.0	0.1%
67.9%	48.0	48.2	0.2	0.3%
69.1%	47.9	48.0	0.1	0.2%
70.4%	47.7	47.7	0.0	0.0%
71.6%	47.7	47.7	0.0	-0.1%
72.8%	47.6	47.6	0.0	0.0%
74.1%	47.6	47.6	-0.1	-0.1%
75.3%	47.5	47.4	-0.1	-0.3%
76.5%	47.5	47.3	-0.1	-0.3%
77.8%	47.4	47.3	-0.1	-0.2%
79.0%	47.3	47.1	-0.2	-0.4%
80.2%	47.1	47.0	0.0	-0.1%
81.5%	47.1	46.9	-0.2	-0.4%
82.7%	46.9	46.7	-0.2	-0.4%
84.0%	46.8	46.7	0.0	-0.1%
85.2%	46.7	46.7	0.0	0.0%
86.4%	46.7	46.7	0.0	0.0%
87.7%	46.7	46.7	0.0	-0.1%
88.9%	46.7	46.5	-0.2	-0.5%
90.1%	46.5	46.3	-0.2	-0.4%
91.4%	46.1	46.1	0.0	0.1%
92.6%	46.0	46.0	0.0	0.0%
93.8%	45.8	45.7	-0.1	-0.2%
95.1%	45.6	45.6	0.0	0.0%
96.3%	45.4	45.5	0.1	0.2%
97.5%	45.1	45.2	0.1	0.1%
98.8%	44.8	44.8	0.0	0.0%
100.0%	44.8	44.8	0.0	0.0%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.5	58.0	2.5	4.5%
1.2%	54.6	55.5	1.0	1.8%
2.5%	54.4	54.5	0.2	0.3%
3.7%	53.7	54.3	0.7	1.3%
4.9%	53.4	53.6	0.2	0.4%
6.2%	53.3	53.4	0.1	0.1%
7.4%	53.3	53.4	0.0	0.0%
8.6%	53.3	53.3	0.1	0.1%
9.9%	53.1	53.3	0.2	0.3%
11.1%	52.7	52.9	0.3	0.5%
12.3%	52.6	52.7	0.1	0.3%
13.6%	52.4	52.7	0.3	0.5%
14.8%	52.4	52.6	0.2	0.4%
16.0%	52.2	52.4	0.1	0.2%
17.3%	52.1	52.2	0.1	0.2%
18.5%	52.1	52.1	0.0	0.0%
19.8%	52.1	52.0	-0.1	-0.1%
21.0%	52.1	52.0	-0.1	-0.2%
22.2%	52.0	52.0	0.0	-0.1%
23.5%	51.9	51.9	-0.1	-0.1%
24.7%	51.8	51.9	0.1	0.2%
25.9%	51.8	51.8	0.1	0.2%
27.2%	51.7	51.8	0.1	0.1%
28.4%	51.7	51.8	0.1	0.1%
29.6%	51.7	51.8	0.1	0.1%
30.9%	51.7	51.8	0.1	0.1%
32.1%	51.7	51.8	0.1	0.2%
33.3%	51.7	51.7	0.0	0.1%
34.6%	51.6	51.7	0.1	0.2%
35.8%	51.4	51.6	0.3	0.6%
37.0%	51.3	51.5	0.2	0.3%
38.3%	51.3	51.5	0.2	0.4%
39.5%	51.3	51.5	0.2	0.4%
40.7%	51.2	51.4	0.2	0.4%
42.0%	51.2	51.4	0.2	0.4%
43.2%	51.0	51.3	0.3	0.6%
44.4%	51.0	51.3	0.4	0.7%
45.7%	50.9	51.2	0.3	0.5%
46.9%	50.9	51.0	0.1	0.1%
48.1%	50.9	51.0	0.1	0.2%
49.4%	50.8	50.9	0.1	0.1%
50.6%	50.8	50.9	0.1	0.3%
51.9%	50.7	50.9	0.2	0.3%
53.1%	50.7	50.8	0.2	0.3%
54.3%	50.6	50.8	0.2	0.3%
55.6%	50.6	50.7	0.0	0.1%
56.8%	50.6	50.6	0.0	0.1%
58.0%	50.4	50.5	0.1	0.2%
59.3%	50.4	50.5	0.1	0.2%
60.5%	50.4	50.4	0.0	0.1%
61.7%	50.3	50.4	0.1	0.2%
63.0%	50.3	50.3	0.0	0.1%
64.2%	50.3	50.3	0.0	0.0%
65.4%	50.2	50.3	0.0	0.1%
66.7%	50.2	50.3	0.0	0.1%
67.9%	50.2	50.2	0.1	0.1%
69.1%	50.1	50.2	0.1	0.2%
70.4%	50.1	50.2	0.1	0.1%
71.6%	50.1	50.1	0.0	0.0%
72.8%	50.1	50.1	0.0	0.0%
74.1%	50.1	50.0	0.0	-0.1%
75.3%	50.0	50.0	0.0	0.1%
76.5%	49.9	50.0	0.1	0.2%
77.8%	49.9	49.9	0.0	0.0%
79.0%	49.9	49.9	0.0	-0.1%
80.2%	49.8	49.9	0.0	0.1%
81.5%	49.8	49.8	0.0	0.1%
82.7%	49.8	49.8	0.0	0.0%
84.0%	49.8	49.8	0.0	0.0%
85.2%	49.6	49.8	0.2	0.4%
86.4%	49.6	49.7	0.2	0.4%
87.7%	49.5	49.6	0.1	0.1%
88.9%	49.5	49.6	0.1	0.2%
90.1%	49.4	49.6	0.1	0.3%
91.4%	49.4	49.5	0.2	0.3%
92.6%	49.4	49.4	0.0	0.0%
93.8%	49.3	49.3	0.0	0.0%
95.1%	49.2	49.3	0.1	0.2%
96.3%	49.2	49.1	-0.1	-0.2%
97.5%	49.0	49.1	0.1	0.1%
98.8%	49.0	48.8	-0.2	-0.4%
100.0%	49.0	48.8	-0.2	-0.4%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.3	58.6	-2.7	-4.4%
1.2%	55.6	54.7	-0.9	-1.6%
2.5%	54.7	54.7	-0.1	-0.1%
3.7%	54.6	53.6	-1.0	-1.8%
4.9%	53.8	53.3	-0.5	-0.9%
6.2%	53.5	53.1	-0.4	-0.7%
7.4%	53.5	52.9	-0.6	-1.1%
8.6%	53.4	52.9	-0.6	-1.1%
9.9%	53.3	52.9	-0.4	-0.8%
11.1%	53.2	52.9	-0.3	-0.6%
12.3%	53.0	52.7	-0.3	-0.6%
13.6%	52.8	52.7	-0.1	-0.2%
14.8%	52.7	52.7	0.0	-0.1%
16.0%	52.5	52.5	0.0	0.1%
17.3%	52.4	52.3	-0.1	-0.1%
18.5%	52.3	52.3	0.0	0.1%
19.8%	52.2	52.2	0.0	-0.1%
21.0%	52.2	52.1	-0.1	-0.2%
22.2%	52.0	52.1	0.1	0.2%
23.5%	51.9	52.0	0.1	0.1%
24.7%	51.9	51.9	0.1	0.1%
25.9%	51.9	51.8	0.0	-0.1%
27.2%	51.8	51.7	-0.1	-0.1%
28.4%	51.7	51.5	-0.2	-0.4%
29.6%	51.7	51.4	-0.2	-0.4%
30.9%	51.6	51.4	-0.3	-0.5%
32.1%	51.6	51.3	-0.3	-0.6%
33.3%	51.5	51.2	-0.3	-0.6%
34.6%	51.5	51.1	-0.4	-0.7%
35.8%	51.5	51.1	-0.4	-0.7%
37.0%	51.2	51.0	-0.2	-0.5%
38.3%	51.2	51.0	-0.2	-0.4%
39.5%	51.1	50.8	-0.3	-0.6%
40.7%	51.0	50.8	-0.2	-0.4%
42.0%	51.0	50.8	-0.2	-0.4%
43.2%	50.9	50.7	-0.2	-0.4%
44.4%	50.8	50.7	-0.1	-0.2%
45.7%	50.8	50.7	-0.1	-0.1%
46.9%	50.8	50.7	-0.1	-0.1%
48.1%	50.8	50.7	-0.1	-0.1%
49.4%	50.7	50.7	0.0	-0.1%
50.6%	50.7	50.7	-0.1	-0.2%
51.9%	50.7	50.6	-0.1	-0.3%
53.1%	50.7	50.6	-0.1	-0.2%
54.3%	50.7	50.5	-0.2	-0.4%
55.6%	50.7	50.5	-0.2	-0.4%
56.8%	50.7	50.4	-0.2	-0.4%
58.0%	50.5	50.4	-0.1	-0.3%
59.3%	50.5	50.4	-0.1	-0.2%
60.5%	50.4	50.3	-0.1	-0.2%
61.7%	50.3	50.3	0.0	-0.1%
63.0%	50.3	50.3	0.0	0.0%
64.2%	50.3	50.2	-0.1	-0.1%
65.4%	50.2	50.1	-0.1	-0.1%
66.7%	50.2	50.1	-0.1	-0.2%
67.9%	50.1	49.9	-0.2	-0.4%
69.1%	50.1	49.9	-0.2	-0.5%
70.4%	50.1	49.8	-0.3	-0.6%
71.6%	50.0	49.8	-0.2	-0.4%
72.8%	49.9	49.7	-0.2	-0.4%
74.1%	49.9	49.7	-0.2	-0.4%
75.3%	49.9	49.7	-0.2	-0.4%
76.5%	49.8	49.7	-0.1	-0.2%
77.8%	49.8	49.6	-0.1	-0.3%
79.0%	49.7	49.5	-0.2	-0.4%
80.2%	49.7	49.5	-0.2	-0.4%
81.5%	49.7	49.5	-0.2	-0.4%
82.7%	49.7	49.4	-0.3	-0.5%
84.0%	49.7	49.4	-0.3	-0.6%
85.2%	49.6	49.3	-0.3	-0.6%
86.4%	49.5	49.3	-0.2	-0.4%
87.7%	49.5	49.2	-0.2	-0.5%
88.9%	49.4	49.1	-0.3	-0.6%
90.1%	49.4	49.1	-0.2	-0.5%
91.4%	49.3	48.8	-0.5	-1.0%
92.6%	49.3	48.8	-0.5	-1.0%
93.8%	49.3	48.8	-0.5	-1.0%
95.1%	49.2	48.7	-0.4	-0.9%
96.3%	49.1	48.7	-0.4	-0.8%
97.5%	48.8	48.7	-0.1	-0.3%
98.8%	48.7	48.4	-0.3	-0.7%
100.0%	48.7	48.4	-0.3	-0.7%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.2	59.9	-1.4	-2.2%
1.2%	55.9	55.9	-0.1	-0.1%
2.5%	55.4	55.4	0.0	0.0%
3.7%	55.0	55.0	0.1	0.1%
4.9%	54.4	54.5	0.1	0.1%
6.2%	54.3	54.2	0.0	0.0%
7.4%	54.0	54.0	0.0	0.0%
8.6%	53.9	53.9	0.1	0.1%
9.9%	53.7	53.7	0.0	0.0%
11.1%	53.5	53.6	0.1	0.2%
12.3%	53.4	53.5	0.1	0.2%
13.6%	53.3	53.3	0.0	0.1%
14.8%	53.2	53.3	0.1	0.1%
16.0%	53.2	53.2	0.0	0.1%
17.3%	53.1	53.1	0.1	0.1%
18.5%	53.1	53.1	0.0	0.0%
19.8%	53.0	53.1	0.1	0.2%
21.0%	53.0	53.0	0.0	0.1%
22.2%	52.6	52.9	0.4	0.7%
23.5%	52.5	52.8	0.3	0.6%
24.7%	52.5	52.8	0.3	0.5%
25.9%	52.4	52.7	0.2	0.5%
27.2%	52.4	52.6	0.2	0.3%
28.4%	52.4	52.5	0.1	0.2%
29.6%	52.2	52.3	0.1	0.3%
30.9%	52.2	52.3	0.1	0.2%
32.1%	52.0	52.2	0.3	0.5%
33.3%	51.9	52.0	0.1	0.2%
34.6%	51.9	51.9	0.1	0.1%
35.8%	51.8	51.9	0.1	0.2%
37.0%	51.7	51.6	-0.1	-0.2%
38.3%	51.7	51.6	-0.1	-0.1%
39.5%	51.6	51.4	-0.3	-0.5%
40.7%	51.3	51.1	-0.1	-0.2%
42.0%	51.2	51.0	-0.2	-0.3%
43.2%	51.1	51.0	-0.1	-0.2%
44.4%	51.0	51.0	0.0	0.0%
45.7%	51.0	51.0	0.0	0.0%
46.9%	51.0	51.0	0.0	0.0%
48.1%	50.9	50.8	-0.1	-0.3%
49.4%	50.9	50.7	-0.2	-0.4%
50.6%	50.9	50.5	-0.4	-0.8%
51.9%	50.6	50.5	-0.2	-0.4%
53.1%	50.6	50.4	-0.2	-0.3%
54.3%	50.4	50.4	0.0	0.0%
55.6%	50.4	50.3	-0.1	-0.1%
56.8%	50.4	50.2	-0.2	-0.3%
58.0%	50.3	50.2	-0.1	-0.3%
59.3%	50.3	50.1	-0.2	-0.3%
60.5%	50.2	50.1	-0.1	-0.1%
61.7%	50.1	50.0	-0.1	-0.2%
63.0%	50.1	50.0	-0.1	-0.2%
64.2%	50.1	50.0	-0.1	-0.2%
65.4%	50.0	49.9	0.0	-0.1%
66.7%	49.9	49.7	-0.2	-0.4%
67.9%	49.8	49.7	-0.1	-0.2%
69.1%	49.8	49.7	-0.1	-0.1%
70.4%	49.7	49.7	-0.1	-0.1%
71.6%	49.7	49.6	-0.1	-0.2%
72.8%	49.7	49.6	-0.1	-0.2%
74.1%	49.6	49.6	0.0	-0.1%
75.3%	49.5	49.6	0.0	0.0%
76.5%	49.4	49.5	0.1	0.2%
77.8%	49.3	49.3	0.0	-0.1%
79.0%	49.2	49.2	0.0	0.0%
80.2%	49.2	49.2	0.0	0.0%
81.5%	49.2	49.2	0.0	0.0%
82.7%	49.2	49.2	0.0	0.0%
84.0%	49.1	49.1	0.0	0.0%
85.2%	49.1	49.1	0.0	0.0%
86.4%	49.1	49.0	0.0	-0.1%
87.7%	49.0	48.9	-0.1	-0.2%
88.9%	49.0	48.9	-0.1	-0.3%
90.1%	48.9	48.9	0.0	0.0%
91.4%	48.9	48.8	-0.1	-0.1%
92.6%	48.8	48.8	0.0	-0.1%
93.8%	48.5	48.5	-0.1	-0.1%
95.1%	48.3	48.4	0.1	0.2%
96.3%	48.3	48.3	0.0	0.0%
97.5%	48.3	48.3	0.0	0.1%
98.8%	48.0	48.2	0.2	0.4%
100.0%	48.0	48.2	0.2	0.4%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.1	58.1	-1.0	-1.7%
1.2%	55.3	55.3	0.0	0.0%
2.5%	54.9	55.0	0.1	0.1%
3.7%	54.3	54.1	-0.2	-0.3%
4.9%	53.9	53.8	-0.1	-0.2%
6.2%	53.7	53.7	0.1	0.1%
7.4%	53.4	53.7	0.3	0.6%
8.6%	53.1	53.2	0.1	0.2%
9.9%	52.8	52.8	0.0	0.0%
11.1%	52.7	52.6	0.0	0.0%
12.3%	52.6	52.5	-0.1	-0.1%
13.6%	52.5	52.5	0.1	0.2%
14.8%	52.4	52.5	0.1	0.3%
16.0%	52.3	52.5	0.2	0.4%
17.3%	52.2	52.2	-0.1	-0.1%
18.5%	52.2	52.2	0.0	-0.1%
19.8%	52.1	52.2	0.0	0.1%
21.0%	52.1	52.1	0.1	0.1%
22.2%	51.9	52.1	0.1	0.3%
23.5%	51.9	52.1	0.2	0.3%
24.7%	51.8	52.0	0.1	0.3%
25.9%	51.8	52.0	0.1	0.3%
27.2%	51.8	51.8	0.0	0.0%
28.4%	51.7	51.8	0.1	0.1%
29.6%	51.7	51.7	0.0	0.1%
30.9%	51.5	51.7	0.2	0.3%
32.1%	51.5	51.7	0.2	0.4%
33.3%	51.5	51.6	0.2	0.4%
34.6%	51.4	51.6	0.1	0.2%
35.8%	51.3	51.3	0.0	0.0%
37.0%	51.3	51.3	0.0	0.0%
38.3%	51.3	51.2	-0.1	-0.1%
39.5%	51.3	51.1	-0.2	-0.4%
40.7%	51.2	51.0	-0.2	-0.4%
42.0%	51.1	51.0	-0.1	-0.2%
43.2%	51.0	50.9	0.0	-0.1%
44.4%	51.0	50.9	-0.1	-0.2%
45.7%	50.9	50.8	-0.1	-0.2%
46.9%	50.9	50.7	-0.2	-0.3%
48.1%	50.7	50.7	0.0	0.0%
49.4%	50.7	50.7	-0.1	-0.1%
50.6%	50.7	50.6	0.0	-0.1%
51.9%	50.6	50.5	-0.1	-0.2%
53.1%	50.4	50.4	0.0	0.0%
54.3%	50.4	50.3	-0.1	-0.2%
55.6%	50.1	50.1	0.0	0.0%
56.8%	50.1	50.1	0.0	0.0%
58.0%	50.1	50.0	0.0	0.0%
59.3%	50.0	50.0	0.0	0.0%
60.5%	50.0	49.9	-0.1	-0.2%
61.7%	49.9	49.9	0.0	-0.1%
63.0%	49.9	49.8	0.0	-0.1%
64.2%	49.9	49.8	0.0	-0.1%
65.4%	49.8	49.8	0.0	0.0%
66.7%	49.8	49.8	0.0	0.0%
67.9%	49.7	49.8	0.1	0.2%
69.1%	49.6	49.5	-0.1	-0.2%
70.4%	49.6	49.4	-0.2	-0.3%
71.6%	49.6	49.4	-0.2	-0.3%
72.8%	49.5	49.4	-0.1	-0.2%
74.1%	49.4	49.4	0.0	-0.1%
75.3%	49.3	49.3	0.0	0.1%
76.5%	49.2	49.3	0.1	0.2%
77.8%	49.2	49.1	0.0	-0.1%
79.0%	49.1	49.0	-0.1	-0.2%
80.2%	49.1	49.0	-0.1	-0.2%
81.5%	49.0	49.0	0.0	0.0%
82.7%	49.0	48.9	-0.1	-0.3%
84.0%	48.9	48.8	-0.1	-0.2%
85.2%	48.9	48.7	-0.2	-0.4%
86.4%	48.8	48.6	-0.2	-0.4%
87.7%	48.7	48.6	-0.1	-0.2%
88.9%	48.7	48.6	0.0	-0.1%
90.1%	48.6	48.6	0.0	-0.1%
91.4%	48.6	48.5	0.0	0.0%
92.6%	48.5	48.5	0.0	0.0%
93.8%	48.4	48.4	0.0	0.0%
95.1%	48.4	48.4	0.0	0.0%
96.3%	48.3	48.2	-0.2	-0.4%
97.5%	48.3	48.2	-0.1	-0.3%
98.8%	48.1	48.1	0.0	0.1%
100.0%	48.1	48.0	-0.1	-0.2%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.4	58.0	-1.3	-2.3%
1.2%	55.1	55.0	0.0	0.0%
2.5%	54.8	54.8	0.0	0.0%
3.7%	53.9	53.6	-0.4	-0.6%
4.9%	53.5	53.4	-0.1	-0.2%
6.2%	53.4	53.3	0.0	0.0%
7.4%	53.2	53.3	0.1	0.3%
8.6%	53.2	53.3	0.1	0.2%
9.9%	53.1	53.0	-0.1	-0.2%
11.1%	53.0	52.9	-0.1	-0.2%
12.3%	52.9	52.8	-0.1	-0.2%
13.6%	52.9	52.8	-0.1	-0.2%
14.8%	52.8	52.7	-0.1	-0.2%
16.0%	52.6	52.7	0.1	0.2%
17.3%	52.5	52.7	0.1	0.2%
18.5%	52.4	52.4	0.0	0.0%
19.8%	52.3	52.3	0.0	0.0%
21.0%	52.1	52.3	0.2	0.3%
22.2%	52.1	52.2	0.1	0.3%
23.5%	52.0	52.2	0.2	0.4%
24.7%	52.0	52.2	0.2	0.4%
25.9%	51.9	52.1	0.1	0.3%
27.2%	51.9	52.0	0.1	0.3%
28.4%	51.8	52.0	0.2	0.5%
29.6%	51.8	52.0	0.2	0.5%
30.9%	51.7	51.8	0.1	0.2%
32.1%	51.7	51.7	0.0	0.1%
33.3%	51.7	51.7	0.0	0.1%
34.6%	51.6	51.5	-0.1	-0.2%
35.8%	51.6	51.5	-0.1	-0.1%
37.0%	51.4	51.4	0.0	-0.1%
38.3%	51.4	51.3	-0.1	-0.3%
39.5%	51.3	51.2	-0.1	-0.2%
40.7%	51.3	51.2	-0.1	-0.2%
42.0%	51.2	51.2	0.0	0.0%
43.2%	51.2	51.2	0.0	0.0%
44.4%	51.1	51.1	0.0	-0.1%
45.7%	51.1	51.0	-0.1	-0.2%
46.9%	51.0	50.9	-0.2	-0.3%
48.1%	50.9	50.9	0.0	0.0%
49.4%	50.8	50.8	-0.1	-0.1%
50.6%	50.8	50.8	-0.1	-0.1%
51.9%	50.8	50.8	0.0	0.0%
53.1%	50.8	50.7	0.0	-0.1%
54.3%	50.7	50.7	0.0	0.0%
55.6%	50.6	50.7	0.0	0.1%
56.8%	50.6	50.6	0.0	-0.1%
58.0%	50.5	50.6	0.0	0.1%
59.3%	50.5	50.4	0.0	-0.1%
60.5%	50.5	50.4	-0.1	-0.2%
61.7%	50.4	50.3	-0.1	-0.2%
63.0%	50.3	50.2	0.0	-0.1%
64.2%	50.2	50.2	0.0	-0.1%
65.4%	50.1	50.2	0.0	0.1%
66.7%	50.0	50.1	0.1	0.1%
67.9%	50.0	50.0	0.0	0.0%
69.1%	50.0	50.0	0.0	0.0%
70.4%	50.0	50.0	0.0	0.0%
71.6%	50.0	49.9	-0.1	-0.1%
72.8%	50.0	49.8	-0.1	-0.2%
74.1%	49.9	49.8	-0.1	-0.2%
75.3%	49.9	49.7	-0.1	-0.2%
76.5%	49.8	49.7	0.0	-0.1%
77.8%	49.7	49.7	0.0	-0.1%
79.0%	49.7	49.6	-0.1	-0.2%
80.2%	49.7	49.6	-0.1	-0.3%
81.5%	49.7	49.6	-0.1	-0.3%
82.7%	49.7	49.6	-0.1	-0.3%
84.0%	49.7	49.5	-0.1	-0.3%
85.2%	49.6	49.5	-0.1	-0.3%
86.4%	49.6	49.4	-0.1	-0.3%
87.7%	49.6	49.2	-0.3	-0.6%
88.9%	49.4	49.2	-0.2	-0.4%
90.1%	49.3	49.2	-0.2	-0.3%
91.4%	49.2	49.2	0.0	0.0%
92.6%	49.1	49.1	0.0	0.0%
93.8%	49.1	49.0	0.0	-0.1%
95.1%	49.1	49.0	-0.1	-0.1%
96.3%	48.9	48.9	0.0	0.1%
97.5%	48.9	48.7	-0.1	-0.3%
98.8%	48.8	48.7	-0.1	-0.2%
100.0%	48.1	48.1	0.0	0.0%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.3	59.3	-2.0	-3.3%
1.2%	55.3	55.3	0.0	0.0%
2.5%	55.1	55.1	0.0	0.0%
3.7%	54.0	53.8	-0.2	-0.4%
4.9%	53.8	53.7	-0.1	-0.2%
6.2%	53.6	53.6	0.0	0.0%
7.4%	53.6	53.5	0.0	-0.1%
8.6%	53.5	53.4	0.0	-0.1%
9.9%	53.4	53.3	0.0	-0.1%
11.1%	53.1	53.3	0.2	0.3%
12.3%	53.1	53.3	0.2	0.5%
13.6%	53.1	52.9	-0.1	-0.3%
14.8%	53.0	52.8	-0.2	-0.4%
16.0%	52.9	52.7	-0.2	-0.4%
17.3%	52.8	52.7	-0.1	-0.2%
18.5%	52.8	52.7	-0.1	-0.2%
19.8%	52.6	52.6	0.0	-0.1%
21.0%	52.5	52.6	0.1	0.2%
22.2%	52.3	52.3	0.0	0.0%
23.5%	52.3	52.3	0.0	-0.1%
24.7%	52.2	52.2	0.1	0.1%
25.9%	52.1	52.2	0.1	0.2%
27.2%	52.1	52.2	0.1	0.2%
28.4%	52.1	52.0	-0.1	-0.2%
29.6%	52.0	52.0	0.0	0.0%
30.9%	52.0	51.8	-0.1	-0.3%
32.1%	51.9	51.8	-0.2	-0.3%
33.3%	51.9	51.8	-0.1	-0.2%
34.6%	51.7	51.7	0.0	0.1%
35.8%	51.6	51.6	0.0	0.0%
37.0%	51.5	51.2	-0.2	-0.5%
38.3%	51.4	51.1	-0.2	-0.5%
39.5%	51.4	51.1	-0.3	-0.6%
40.7%	51.3	51.0	-0.3	-0.7%
42.0%	51.2	51.0	-0.2	-0.4%
43.2%	51.1	50.9	-0.2	-0.5%
44.4%	51.0	50.9	-0.2	-0.3%
45.7%	50.9	50.8	0.0	-0.1%
46.9%	50.9	50.8	-0.1	-0.2%
48.1%	50.9	50.8	-0.1	-0.2%
49.4%	50.7	50.7	-0.1	-0.2%
50.6%	50.7	50.6	-0.2	-0.3%
51.9%	50.7	50.5	-0.2	-0.3%
53.1%	50.6	50.5	-0.1	-0.2%
54.3%	50.6	50.4	-0.2	-0.5%
55.6%	50.5	50.4	-0.1	-0.2%
56.8%	50.5	50.4	-0.1	-0.2%
58.0%	50.4	50.4	0.0	-0.1%
59.3%	50.4	50.2	-0.1	-0.3%
60.5%	50.4	50.2	-0.2	-0.4%
61.7%	50.2	50.1	-0.1	-0.3%
63.0%	50.2	50.1	-0.1	-0.3%
64.2%	50.1	50.0	0.0	-0.1%
65.4%	50.1	50.0	-0.1	-0.2%
66.7%	50.0	49.9	-0.1	-0.2%
67.9%	50.0	49.9	-0.1	-0.2%
69.1%	50.0	49.9	-0.1	-0.1%
70.4%	50.0	49.7	-0.2	-0.5%
71.6%	49.9	49.7	-0.1	-0.3%
72.8%	49.8	49.7	-0.2	-0.3%
74.1%	49.7	49.6	-0.1	-0.2%
75.3%	49.7	49.5	-0.1	-0.3%
76.5%	49.7	49.5	-0.2	-0.3%
77.8%	49.7	49.5	-0.2	-0.3%
79.0%	49.7	49.5	-0.2	-0.4%
80.2%	49.6	49.5	-0.2	-0.3%
81.5%	49.5	49.4	-0.1	-0.2%
82.7%	49.5	49.4	-0.1	-0.2%
84.0%	49.5	49.4	-0.2	-0.3%
85.2%	49.5	49.3	-0.2	-0.4%
86.4%	49.4	49.2	-0.2	-0.4%
87.7%	49.3	49.1	-0.2	-0.3%
88.9%	49.2	49.0	-0.2	-0.4%
90.1%	49.1	49.0	-0.1	-0.2%
91.4%	49.1	49.0	-0.1	-0.2%
92.6%	49.0	48.9	-0.1	-0.2%
93.8%	48.9	48.7	-0.2	-0.4%
95.1%	48.9	48.6	-0.3	-0.7%
96.3%	48.8	48.5	-0.3	-0.6%
97.5%	48.7	48.5	-0.3	-0.6%
98.8%	48.4	48.4	0.0	0.0%
100.0%	48.0	48.0	0.0	0.1%

Sites 4_A. Modeling Results Compendium

Table of Contents Page

Performance Measures Scorecard for Sites Reservoir Potential Beneficiaries 1

Delta Modeling DCR with Project vs DCR 2015 without Project 77

Delta Modeling WSIP 2030 with Project vs WSIP 2030 without Project 139

Delta Modeling WSIP 2070 with Project vs WSIP 2070 without Project 201

Delta Operations DCR 2015 with Project vs DCR 2015 without Project 263

Delta Operations WSIP 2030 with Project vs WSIP 2030 without Project 345

Delta Operations WSIP 2070 with Project vs WSIP 2070 without Project 427

Regional Deliveries DCR 2015 with Project vs without Project 509

Regional Deliveries WSIP 2030 with Project vs without Project... 517

Regional Deliveries WSIP 2070 with Project vs without Project... 525

Project Operations DCR 2015 with Project vs DCR 2015 without Project 533

Project Operations WSIP 2030 with Project vs without Project 589

Project Operations WSIP 2070 with Project vs without Project 646

River Operations DCR 2015 with Project vs DCR 2015 without Project 703

River Operations WSIP 2030 with Project vs without Project 885

River Operations WSIP 2070 with Project vs without Project 1,067

Temperature Results DCR 2015 with Project vs DCR 2015 without Project... 1,249

Temperature Results WSIP 2030 with Project vs without Project.. 1,329

Temperature Results WSIP 2070 with Project vs without Project.. 1,409

Figure SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

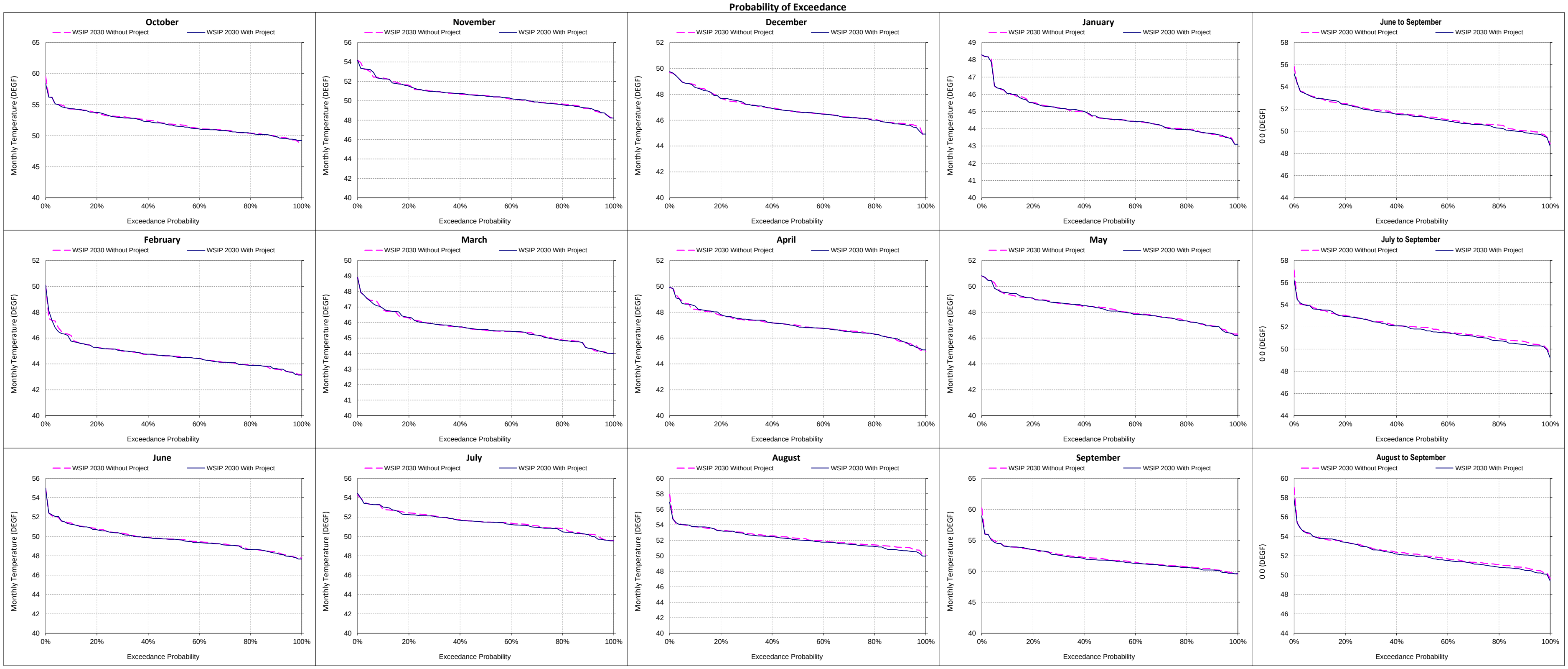


Table SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.5	58.4	-1.1	-1.8%
1.2%	56.2	56.2	0.0	0.0%
2.5%	56.2	56.2	0.0	0.0%
3.7%	55.0	55.1	0.1	0.2%
4.9%	55.0	55.0	0.0	0.0%
6.2%	55.0	54.7	-0.3	-0.5%
7.4%	54.8	54.6	-0.2	-0.4%
8.6%	54.3	54.5	0.1	0.2%
9.9%	54.3	54.4	0.1	0.1%
11.1%	54.3	54.3	0.0	0.1%
12.3%	54.3	54.2	0.0	-0.1%
13.6%	54.1	54.2	0.1	0.1%
14.8%	54.1	54.1	-0.1	-0.1%
16.0%	54.1	54.0	0.0	0.0%
17.3%	54.0	53.8	-0.2	-0.3%
18.5%	53.8	53.8	0.0	0.0%
19.8%	53.6	53.8	0.1	0.2%
21.0%	53.5	53.7	0.1	0.3%
22.2%	53.4	53.6	0.2	0.3%
23.5%	53.2	53.4	0.2	0.4%
24.7%	53.2	53.2	0.1	0.1%
25.9%	53.2	53.1	-0.1	-0.2%
27.2%	53.1	53.0	-0.1	-0.2%
28.4%	53.1	52.9	-0.2	-0.3%
29.6%	53.0	52.9	-0.1	-0.2%
30.9%	53.0	52.9	-0.2	-0.3%
32.1%	52.9	52.8	-0.1	-0.2%
33.3%	52.8	52.8	0.0	0.0%
34.6%	52.8	52.8	0.0	0.0%
35.8%	52.8	52.7	-0.1	-0.1%
37.0%	52.7	52.5	-0.1	-0.2%
38.3%	52.6	52.3	-0.3	-0.6%
39.5%	52.5	52.3	-0.2	-0.4%
40.7%	52.5	52.3	-0.2	-0.4%
42.0%	52.4	52.1	-0.3	-0.6%
43.2%	52.3	52.1	-0.2	-0.5%
44.4%	52.1	52.1	0.0	-0.1%
45.7%	52.0	52.0	-0.1	-0.1%
46.9%	52.0	51.9	-0.2	-0.3%
48.1%	51.9	51.7	-0.1	-0.3%
49.4%	51.9	51.7	-0.1	-0.3%
50.6%	51.8	51.5	-0.3	-0.5%
51.9%	51.8	51.5	-0.3	-0.5%
53.1%	51.7	51.5	-0.2	-0.4%
54.3%	51.7	51.4	-0.3	-0.5%
55.6%	51.5	51.4	-0.1	-0.3%
56.8%	51.3	51.2	-0.1	-0.2%
58.0%	51.3	51.2	-0.1	-0.3%
59.3%	51.2	51.1	-0.1	-0.2%
60.5%	51.1	51.0	-0.1	-0.1%
61.7%	51.1	51.0	-0.1	-0.1%
63.0%	51.1	51.0	-0.1	-0.2%
64.2%	51.0	51.0	-0.1	-0.2%
65.4%	51.0	50.9	-0.1	-0.1%
66.7%	51.0	50.9	0.0	-0.1%
67.9%	51.0	50.8	-0.1	-0.2%
69.1%	50.9	50.8	-0.1	-0.2%
70.4%	50.9	50.8	-0.1	-0.2%
71.6%	50.9	50.8	-0.1	-0.2%
72.8%	50.7	50.6	-0.1	-0.2%
74.1%	50.6	50.6	0.0	0.1%
75.3%	50.5	50.5	0.0	0.0%
76.5%	50.5	50.5	0.0	0.0%
77.8%	50.5	50.5	0.0	0.0%
79.0%	50.4	50.5	0.1	0.1%
80.2%	50.4	50.4	0.0	0.0%
81.5%	50.4	50.3	-0.1	-0.2%
82.7%	50.4	50.2	-0.1	-0.3%
84.0%	50.3	50.2	-0.1	-0.2%
85.2%	50.2	50.2	0.0	0.0%
86.4%	50.2	50.2	0.0	0.0%
87.7%	50.1	50.1	0.0	0.1%
88.9%	50.1	49.9	-0.1	-0.3%
90.1%	49.8	49.9	0.1	0.2%
91.4%	49.8	49.6	-0.2	-0.3%
92.6%	49.7	49.6	-0.2	-0.3%
93.8%	49.6	49.5	-0.1	-0.2%
95.1%	49.5	49.5	-0.1	-0.2%
96.3%	49.3	49.4	0.1	0.2%
97.5%	49.3	49.3	0.0	0.1%
98.8%	49.0	49.2	0.3	0.6%
100.0%	49.0	49.2	0.0	0.6%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.2	54.2	0.0	0.0%
1.2%	53.9	53.3	-0.6	-1.1%
2.5%	53.3	53.3	0.1	0.1%
3.7%	53.2	53.3	0.1	0.1%
4.9%	53.0	53.2	0.2	0.5%
6.2%	52.4	53.0	0.5	1.0%
7.4%	52.4	52.4	-0.1	-0.1%
8.6%	52.4	52.3	-0.1	-0.1%
9.9%	52.4	52.2	-0.1	-0.2%
11.1%	52.3	52.2	0.0	-0.1%
12.3%	52.2	52.2	0.0	0.1%
13.6%	52.0	51.8	-0.1	-0.3%
14.8%	51.9	51.8	-0.2	-0.3%
16.0%	51.8	51.7	-0.1	-0.2%
17.3%	51.7	51.7	0.0	0.0%
18.5%	51.7	51.6	-0.1	-0.1%
19.8%	51.6	51.5	-0.1	-0.2%
21.0%	51.5	51.4	-0.1	-0.2%
22.2%	51.2	51.3	0.1	0.3%
23.5%	51.1	51.2	0.0	0.1%
24.7%	51.1	51.2	0.0	0.1%
25.9%	51.1	51.0	-0.1	-0.1%
27.2%	51.1	51.0	-0.1	-0.1%
28.4%	51.0	50.9	-0.1	-0.1%
29.6%	51.0	50.9	0.0	-0.1%
30.9%	51.0	50.9	0.0	-0.1%
32.1%	50.9	50.9	0.0	0.0%
33.3%	50.8	50.9	0.0	0.0%
34.6%	50.8	50.8	0.0	0.0%
35.8%	50.8	50.8	0.1	0.1%
37.0%	50.8	50.8	0.0	0.0%
38.3%	50.7	50.8	0.0	0.0%
39.5%	50.7	50.7	0.0	0.1%
40.7%	50.7	50.7	0.1	0.1%
42.0%	50.7	50.7	0.1	0.1%
43.2%	50.6	50.6	0.0	0.0%
44.4%	50.6	50.6	0.0	0.0%
45.7%	50.6	50.6	0.0	-0.1%
46.9%	50.6	50.6	0.0	-0.1%
48.1%	50.6	50.5	0.0	0.0%
49.4%	50.6	50.5	0.0	-0.1%
50.6%	50.5	50.5	-0.1	-0.1%
51.9%	50.5	50.4	0.0	-0.1%
53.1%	50.4	50.4	0.0	0.0%
54.3%	50.4	50.4	0.0	0.0%
55.6%	50.4	50.4	0.0	0.1%
56.8%	50.4	50.3	0.0	-0.1%
58.0%	50.3	50.3	0.1	0.1%
59.3%	50.2	50.3	0.1	0.2%
60.5%	50.2	50.2	0.0	0.0%
61.7%	50.1	50.2	0.0	0.1%
63.0%	50.1	50.1	0.0	0.0%
64.2%	50.1	50.1	0.0	0.1%
65.4%	50.0	50.1	0.1	0.2%
66.7%	50.0	50.0	0.0	0.0%
67.9%	49.9	50.0	0.0	0.1%
69.1%	49.9	49.9	0.0	0.0%
70.4%	49.8	49.9	0.0	0.1%
71.6%	49.8	49.8	0.0	0.0%
72.8%	49.8	49.8	0.0	-0.1%
74.1%	49.8	49.7	0.0	-0.1%
75.3%	49.8	49.7	0.0	0.0%
76.5%	49.7	49.7	0.0	-0.1%
77.8%	49.7	49.7	-0.1	-0.1%
79.0%	49.7	49.6	-0.1	-0.2%
80.2%	49.7	49.6	-0.1	-0.1%
81.5%	49.6	49.5	-0.1	-0.3%
82.7%	49.6	49.5	-0.1	-0.1%
84.0%	49.6	49.5	-0.1	-0.1%
85.2%	49.5	49.4	-0.1	-0.2%
86.4%	49.5	49.4	-0.1	-0.1%
87.7%	49.2	49.3	0.1	0.2%
88.9%	49.2	49.3	0.0	0.1%
90.1%	49.2	49.2	0.0	0.0%
91.4%	49.1	49.2	0.1	0.2%
92.6%	48.9	49.0	0.1	0.1%
93.8%	48.9	49.0	0.1	0.2%
95.1%	48.7	48.8	0.0	0.1%
96.3%	48.7	48.7	0.0	0.1%
97.5%	48.5	48.5	0.0	-0.1%
98.8%	48.3	48.2	-0.1	-0.1%
100.0%	48.3	48.2	-0.1	-0.1%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.7	49.8	0.1	0.2%
1.2%	49.6	49.6	0.0	0.0%
2.5%	49.4	49.4	0.0	0.0%
3.7%	49.2	49.2	0.0	0.0%
4.9%	49.0	49.0	0.0	0.0%
6.2%	48.9	48.9	0.0	0.0%
7.4%	48.8	48.8	0.0	0.0%
8.6%	48.8	48.8	0.0	-0.1%
9.9%	48.7	48.5	-0.2	-0.4%
11.1%	48.5	48.5	0.0	-0.1%
12.3%	48.5	48.4	-0.1	-0.1%
13.6%	48.4	48.3	-0.1	-0.3%
14.8%	48.3	48.3	0.0	0.0%
16.0%	48.1	48.2	0.0	0.0%
17.3%	48.0	47.9	-0.1	-0.2%
18.5%	47.9	47.9	0.0	0.0%
19.8%	47.7	47.7	0.0	0.0%
21.0%	47.6	47.7	0.1	0.1%
22.2%	47.5	47.7	0.1	0.3%
23.5%	47.5	47.6	0.1	0.3%
24.7%	47.4	47.6	0.1	0.2%
25.9%	47.4	47.5	0.1	0.2%
27.2%	47.4	47.5	0.1	0.2%
28.4%	47.3	47.4	0.1	0.2%
29.6%	47.2	47.3	0.0	0.1%
30.9%	47.2	47.2	0.0	0.0%
32.1%	47.2	47.1	0.0	-0.1%
33.3%	47.2	47.1	0.0	0.0%
34.6%	47.1	47.1	0.1	0.1%
35.8%	47.0	47.1	0.1	0.2%
37.0%	47.0	47.0	0.0	0.1%
38.3%	47.0	47.0	0.0	0.0%
39.5%	47.0	46.9	0.0	-0.1%
40.7%	46.9	46.9	-0.1	-0.2%
42.0%	46.9	46.8	0.0	-0.1%
43.2%	46.8	46.8	0.0	0.0%
44.4%	46.7	46.8	0.0	0.1%
45.7%	46.7	46.7	0.0	0.0%
46.9%	46.7	46.7	0.0	0.0%
48.1%	46.7	46.7	0.0	0.1%
49.4%	46.6	46.7	0.0	0.0%
50.6%	46.6	46.6	0.0	0.0%
51.9%	46.6	46.6	0.0	0.0%
53.1%	46.6	46.6	0.0	0.0%
54.3%	46.6	46.6	0.0	0.0%
55.6%	46.6	46.6	0.0	0.1%
56.8%	46.5	46.5	0.0	0.1%
58.0%	46.5	46.5	0.0	0.0%
59.3%	46.5	46.5	0.0	0.0%
60.5%	46.5	46.5	0.0	0.0%
61.7%	46.4	46.4	0.0	0.0%
63.0%	46.4	46.4	0.0	0.0%
64.2%	46.4	46.4	0.0	0.0%
65.4%	46.3	46.4	0.0	0.1%
66.7%	46.3	46.3	0.0	0.0%
67.9%	46.3	46.2	0.0	-0.1%
69.1%	46.2	46.2	0.0	-0.1%
70.4%	46.2	46.2	0.0	-0.1%
71.6%	46.2	46.2	0.0	-0.1%
72.8%	46.2	46.2	0.0	0.0%
74.1%	46.2	46.2	0.0	0.0%
75.3%	46.2	46.1	0.0	0.0%
76.5%	46.1	46.1	0.0	0.0%
77.8%	46.1	46.1	0.0	0.0%
79.0%	46.1	46.0	-0.1	-0.1%
80.2%	46.1	46.0	-0.1	-0.1%
81.5%	46.0	46.0	0.0	0.0%
82.7%	45.9	45.9	0.0	-0.1%
84.0%	45.9	45.8	0.0	0.0%
85.2%	45.8	45.8	0.0	0.0%
86.4%	45.8	45.8	0.0	-0.1%
87.7%	45.8	45.7	-0.1	-0.2%
88.9%	45.8	45.7	-0.1	-0.1%
90.1%	45.8	45.7	-0.1	-0.1%
91.4%	45.8	45.7	-0.1	-0.2%
92.6%	45.7	45.6	-0.1	-0.2%
93.8%	45.7	45.6	-0.1	-0.1%
95.1%	45.6	45.5	-0.2	-0.4%
96.3%	45.6	45.4	-0.1	-0.3%
97.5%	45.5	45.1	-0.4	-0.8%
98.8%	44.9	44.9	0.0	0.1%
100.0%	44.9	44.9	0.0	0.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	48.3	48.3	0.0	0.0%
1.2%	48.2	48.2	0.0	0.0%
2.5%	48.2	48.2	0.0	0.0%
3.7%	48.1	47.9	-0.2	-0.5%
4.9%	46.5	46.5	0.0	0.0%
6.2%	46.3	46.4	0.0	0.1%
7.4%	46.3	46.3	0.1	0.1%
8.6%	46.2	46.3	0.0	0.0%
9.9%	46.0	46.0	0.0	0.0%
11.1%	46.0	46.0	0.1	0.1%
12.3%	46.0	46.0	0.0	0.0%
13.6%	45.9	46.0	0.1	0.2%
14.8%	45.9	45.8	-0.1	-0.2%
16.0%	45.8	45.7	-0.1	-0.2%
17.3%	45.8	45.7	-0.1	-0.2%
18.5%	45.5	45.5	0.0	0.0%
19.8%	45.5	45.5	0.0	0.0%
21.0%	45.5	45.5	-0.1	-0.1%
22.2%	45.4	45.4	0.0	-0.1%
23.5%	45.4	45.3	-0.1	-0.1%
24.7%	45.3	45.3	0.0	-0.1%
25.9%	45.3	45.3	0.0	0.0%
27.2%	45.3	45.3	0.0	0.0%
28.4%	45.3	45.3	0.0	0.0%
29.6%	45.2	45.2	0.0	0.0%
30.9%	45.2	45.2	0.0	-0.1%
32.1%	45.2	45.2	0.0	0.0%
33.3%	45.1	45.1	0.0	0.0%
34.6%	45.1	45.1	0.1	0.2%
35.8%	45.0	45.1	0.1	0.2%
37.0%	45.0	45.1	0.1	0.2%
38.3%	45.0	45.0	0.0	0.1%
39.5%	45.0	45.0	0.0	0.1%
40.7%	45.0	45.0	0.0	0.0%
42.0%	44.8	44.9	0.1	0.1%
43.2%	44.7	44.7	0.0	0.1%
44.4%	44.7	44.7	0.1	0.1%
45.7%	44.6	44.6	0.0	0.0%
46.9%	44.6	44.6	0.0	0.1%
48.1%	44.6	44.6	0.0	0.1%
49.4%	44.6	44.6	0.0	0.0%
50.6%	44.6	44.5	0.0	0.0%
51.9%	44.5	44.5	0.0	0.1%
53.1%	44.5	44.5	0.0	0.0%
54.3%	44.5	44.5	0.0	0.0%
55.6%	44.5	44.5	0.0	0.0%
56.8%	44.5	44.5	0.0	-0.1%
58.0%	44.4	44.4	0.0	0.0%
59.3%	44.4	44.4	0.0	0.0%
60.5%	44.4	44.4	0.0	0.0%
61.7%	44.4	44.4	0.0	0.0%
63.0%	44.4	44.4	0.0	0.1%
64.2%	44.4	44.4	0.0	0.1%
65.4%	44.3	44.3	0.0	0.0%
66.7%	44.3	44.3	0.0	-0.1%
67.9%	44.2	44.3	0.0	0.0%
69.1%	44.2	44.2	0.0	0.0%
70.4%	44.2	44.2	0.0	0.0%
71.6%	44.1	44.1	0.0	0.0%
72.8%	44.1	44.0	-0.1	-0.1%
74.1%	44.0	44.0	0.0	-0.1%
75.3%	44.0	44.0	0.0	-0.1%
76.5%	44.0	44.0	-0.1	-0.1%
77.8%	44.0	44.0	-0.1	-0.1%
79.0%	44.0	44.0	0.0	-0.1%
80.2%	44.0	43.9	0.0	0.0%
81.5%	43.9	43.9	0.0	0.0%
82.7%	43.9	43.9	0.0	-0.1%
84.0%	43.9	43.8	-0.1	-0.2%
85.2%	43.8	43.8	0.0	0.0%
86.4%	43.8	43.8	0.0	0.1%
87.7%	43.7	43.8	0.0	0.0%
88.9%	43.7	43.7	0.0	0.0%
90.1%	43.7	43.7	0.1	0.1%
91.4%	43.7	43.7	0.0	0.1%
92.6%	43.6	43.7	0.1	0.1%
93.8%	43.6	43.6	0.1	0.2%
95.1%	43.5	43.5	0.0	-0.1%
96.3%	43.5	43.5	0.0	-0.1%
97.5%	43.5	43.4	0.0	-0.1%
98.8%	43.1	43.1	0.0	0.0%
100.0%	43.1	43.1	0.0	0.0%

Table SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.1	50.1	0.0	0.0%
1.2%	47.5	48.1	0.6	1.3%
2.5%	47.4	47.4	0.0	0.0%
3.7%	47.3	46.8	-0.5	-1.1%
4.9%	46.8	46.5	-0.3	-0.7%
6.2%	46.5	46.3	-0.2	-0.4%
7.4%	46.3	46.3	0.0	-0.1%
8.6%	46.3	46.2	-0.1	-0.2%
9.9%	46.2	45.8	-0.4	-1.0%
11.1%	45.8	45.7	-0.1	-0.2%
12.3%	45.7	45.7	0.0	0.0%
13.6%	45.6	45.6	0.0	0.0%
14.8%	45.5	45.6	0.0	0.0%
16.0%	45.5	45.5	0.0	0.0%
17.3%	45.5	45.5	0.0	0.0%
18.5%	45.3	45.3	0.0	0.0%
19.8%	45.3	45.3	0.0	0.0%
21.0%	45.3	45.2	0.0	-0.1%
22.2%	45.2	45.2	0.0	0.0%
23.5%	45.2	45.2	0.0	0.0%
24.7%	45.2	45.2	0.0	0.0%
25.9%	45.2	45.1	0.0	0.0%
27.2%	45.1	45.1	0.0	0.0%
28.4%	45.1	45.0	-0.1	-0.2%
29.6%	45.0	45.0	0.0	0.1%
30.9%	45.0	45.0	0.0	0.0%
32.1%	45.0	45.0	0.0	0.0%
33.3%	44.9	44.9	0.0	0.0%
34.6%	44.9	44.9	0.0	0.1%
35.8%	44.9	44.9	0.0	0.0%
37.0%	44.8	44.9	0.0	0.1%
38.3%	44.7	44.8	0.0	0.1%
39.5%	44.7	44.8	0.0	0.0%
40.7%	44.7	44.8	0.0	0.0%
42.0%	44.7	44.7	0.0	0.1%
43.2%	44.7	44.7	0.0	0.0%
44.4%	44.6	44.7	0.0	0.1%
45.7%	44.6	44.7	0.0	0.0%
46.9%	44.6	44.6	0.0	0.0%
48.1%	44.6	44.6	0.0	0.0%
49.4%	44.6	44.6	0.0	0.0%
50.6%	44.6	44.5	0.0	-0.1%
51.9%	44.6	44.5	-0.1	-0.2%
53.1%	44.5	44.5	0.0	0.0%
54.3%	44.5	44.5	0.0	-0.1%
55.6%	44.5	44.5	0.0	0.0%
56.8%	44.5	44.5	0.0	0.0%
58.0%	44.5	44.4	0.0	0.0%
59.3%	44.4	44.4	0.0	0.0%
60.5%	44.4	44.4	0.0	-0.1%
61.7%	44.3	44.3	0.0	0.0%
63.0%	44.3	44.3	0.0	0.0%
64.2%	44.3	44.3	0.0	0.0%
65.4%	44.2	44.2	0.0	-0.1%
66.7%	44.2	44.2	0.0	0.0%
67.9%	44.2	44.1	-0.1	-0.1%
69.1%	44.1	44.1	0.0	0.0%
70.4%	44.1	44.1	0.0	0.1%
71.6%	44.1	44.1	0.0	0.0%
72.8%	44.1	44.1	0.0	0.0%
74.1%	44.1	44.1	0.0	0.0%
75.3%	44.0	44.0	0.0	0.0%
76.5%	44.0	43.9	0.0	0.0%
77.8%	44.0	43.9	0.0	-0.1%
79.0%	43.9	43.9	0.0	-0.1%
80.2%	43.9	43.9	0.0	-0.1%
81.5%	43.9	43.9	0.0	0.0%
82.7%	43.9	43.9	0.0	0.0%
84.0%	43.9	43.9	0.0	0.0%
85.2%	43.8	43.8	0.0	0.0%
86.4%	43.8	43.8	0.0	0.1%
87.7%	43.6	43.8	0.2	0.4%
88.9%	43.6	43.6	0.0	0.0%
90.1%	43.6	43.6	0.0	0.1%
91.4%	43.6	43.6	0.0	0.1%
92.6%	43.5	43.6	0.1	0.3%
93.8%	43.4	43.4	0.0	0.0%
95.1%	43.4	43.4	0.0	0.0%
96.3%	43.3	43.4	0.0	0.0%
97.5%	43.3	43.2	-0.1	-0.2%
98.8%	43.2	43.1	0.0	-0.1%
100.0%	43.2	43.1	0.0	-0.1%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	48.9	48.9	0.0	0.0%
1.2%	48.0	48.0	0.0	0.0%
2.5%	47.8	47.8	0.0	0.0%
3.7%	47.6	47.5	0.0	0.0%
4.9%	47.4	47.4	0.0	-0.1%
6.2%	47.4	47.2	-0.2	-0.4%
7.4%	47.4	47.1	-0.3	-0.6%
8.6%	47.1	47.1	0.0	-0.1%
9.9%	46.8	46.9	0.1	0.2%
11.1%	46.7	46.8	0.1	0.2%
12.3%	46.7	46.8	0.0	0.1%
13.6%	46.7	46.7	0.0	0.0%
14.8%	46.7	46.7	0.0	0.0%
16.0%	46.4	46.7	0.2	0.5%
17.3%	46.3	46.4	0.1	0.2%
18.5%	46.3	46.4	0.0	0.1%
19.8%	46.3	46.3	0.0	0.1%
21.0%	46.2	46.3	0.1	0.3%
22.2%	46.1	46.1	0.0	0.0%
23.5%	46.1	46.0	-0.1	-0.2%
24.7%	46.1	46.0	-0.1	-0.1%
25.9%	46.0	46.0	0.0	-0.1%
27.2%	46.0	46.0	0.0	0.0%
28.4%	46.0	45.9	0.0	0.0%
29.6%	45.9	45.9	0.0	0.0%
30.9%	45.9	45.9	0.0	-0.1%
32.1%	45.8	45.9	0.0	0.1%
33.3%	45.8	45.8	0.0	0.0%
34.6%	45.8	45.8	0.0	0.1%
35.8%	45.8	45.8	0.1	0.1%
37.0%	45.7	45.8	0.0	0.1%
38.3%	45.7	45.7	0.0	0.0%
39.5%	45.7	45.7	0.0	0.0%
40.7%	45.7	45.7	0.0	0.0%
42.0%	45.7	45.7	0.0	0.0%
43.2%	45.6	45.6	0.0	0.1%
44.4%	45.6	45.6	0.0	0.1%
45.7%	45.5	45.6	0.0	0.1%
46.9%	45.5	45.6	0.0	0.1%
48.1%	45.5	45.6	0.0	0.1%
49.4%	45.5	45.6	0.0	0.1%
50.6%	45.5	45.5	0.1	0.2%
51.9%	45.5	45.5	0.0	0.0%
53.1%	45.5	45.5	0.0	0.0%
54.3%	45.5	45.5	0.0	0.0%
55.6%	45.4	45.5	0.0	0.0%
56.8%	45.4	45.5	0.0	0.0%
58.0%	45.4	45.5	0.0	0.1%
59.3%	45.4	45.4	0.0	0.1%
60.5%	45.4	45.4	0.0	0.1%
61.7%	45.4	45.4	0.0	0.1%
63.0%	45.4	45.4	0.0	0.1%
64.2%	45.4	45.4	0.0	0.0%
65.4%	45.4	45.4	0.0	0.0%
66.7%	45.3	45.3	-0.1	-0.2%
67.9%	45.3	45.2	-0.1	-0.2%
69.1%	45.2	45.2	0.0	-0.1%
70.4%	45.2	45.2	0.0	0.0%
71.6%	45.1	45.2	0.0	0.0%
72.8%	45.1	45.0	-0.1	-0.2%
74.1%	45.0	45.0	0.0	-0.1%
75.3%	45.0	45.0	-0.1	-0.2%
76.5%	44.9	44.9	0.0	0.0%
77.8%	44.9	44.9	0.0	0.0%
79.0%	44.9	44.9	0.0	-0.1%
80.2%	44.9	44.8	0.0	-0.1%
81.5%	44.8	44.8	0.0	0.0%
82.7%	44.8	44.8	0.0	-0.1%
84.0%	44.8	44.8	-0.1	-0.1%
85.2%	44.8	44.8	0.0	-0.1%
86.4%	44.8	44.8	0.0	-0.1%
87.7%	44.8	44.7	0.0	-0.1%
88.9%	44.4	44.4	0.0	0.0%
90.1%	44.4	44.3	0.0	0.0%
91.4%	44.3	44.3	0.0	0.0%
92.6%	44.2	44.3	0.1	0.2%
93.8%	44.1	44.2	0.0	0.1%
95.1%	44.1	44.1	0.0	0.0%
96.3%	44.1	44.1	-0.1	-0.1%
97.5%	44.0	44.0	0.0	0.0%
98.8%	44.0	44.0	0.0	0.0%
100.0%	44.0	44.0	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.9	49.9	0.0	0.0%
1.2%	49.8	49.8	0.0	0.0%
2.5%	49.4	49.1	-0.3	-0.5%
3.7%	49.1	49.0	0.0	0.0%
4.9%	48.9	48.7	-0.2	-0.4%
6.2%	48.7	48.6	-0.1	-0.1%
7.4%	48.6	48.6	0.0	0.0%
8.6%	48.2	48.6	0.3	0.7%
9.9%	48.2	48.5	0.2	0.5%
11.1%	48.2	48.2	0.0	0.1%
12.3%	48.1	48.2	0.1	0.1%
13.6%	48.0	48.1	0.1	0.2%
14.8%	48.0	48.1	0.1	0.1%
16.0%	48.0	48.1	0.1	0.1%
17.3%	48.0	48.0	0.0	0.1%
18.5%	47.8	48.0	0.2	0.4%
19.8%	47.8	47.8	0.1	0.2%
21.0%	47.7	47.7	0.0	0.1%
22.2%	47.6	47.7	0.0	0.1%
23.5%	47.6	47.7	0.0	0.0%
24.7%	47.5	47.6	0.1	0.2%
25.9%	47.5	47.5	0.0	0.1%
27.2%	47.5	47.5	0.1	0.1%
28.4%	47.4	47.5	0.0	0.1%
29.6%	47.4	47.5	0.1	0.2%
30.9%	47.4	47.4	0.0	0.1%
32.1%	47.4	47.4	0.0	0.0%
33.3%	47.4	47.4	0.0	0.0%
34.6%	47.3	47.4	0.0	0.1%
35.8%	47.3	47.4	0.1	0.1%
37.0%	47.2	47.4	0.1	0.3%
38.3%	47.2	47.2	0.0	0.0%
39.5%	47.2	47.2	0.0	0.0%
40.7%	47.2	47.1	0.0	0.0%
42.0%	47.1	47.1	0.0	0.0%
43.2%	47.1	47.1	0.0	0.0%
44.4%	47.1	47.1	0.0	0.0%
45.7%	47.1	47.1	0.0	0.0%
46.9%	47.0	47.0	0.0	-0.1%
48.1%	47.0	47.0	0.0	-0.1%
49.4%	47.0	46.9	-0.1	-0.2%
50.6%	47.0	46.9	-0.1	-0.2%
51.9%	46.9	46.8	-0.1	-0.1%
53.1%	46.9	46.8	0.0	-0.1%
54.3%	46.8	46.8	0.0	-0.1%
55.6%	46.8	46.8	0.0	0.0%
56.8%	46.8	46.8	0.0	0.0%
58.0%	46.8	46.8	0.0	0.0%
59.3%	46.8	46.8	0.0	0.0%
60.5%	46.7	46.7	0.0	0.0%
61.7%	46.7	46.7	0.0	0.0%
63.0%	46.7	46.7	0.0	0.0%
64.2%	46.7	46.6	0.0	-0.1%
65.4%	46.7	46.6	0.0	0.0%
66.7%	46.6	46.6	0.0	-0.1%
67.9%	46.6	46.5	0.0	-0.1%
69.1%	46.6	46.5	-0.1	-0.2%
70.4%	46.6	46.5	-0.1	-0.1%
71.6%	46.5	46.5	-0.1	-0.2%
72.8%	46.5	46.4	-0.1	-0.2%
74.1%	46.5	46.4	-0.1	-0.1%
75.3%	46.5	46.4	-0.1	-0.2%
76.5%	46.4	46.4	0.0	0.0%
77.8%	46.3	46.4	0.0	0.1%
79.0%	46.3	46.4	0.0	0.0%
80.2%	46.3	46.3	0.0	0.0%
81.5%	46.3	46.3	0.0	0.0%
82.7%	46.2	46.2	0.0	0.0%
84.0%	46.1	46.1	0.0	0.0%
85.2%	46.1	46.1	0.0	0.0%
86.4%	46.0	46.0	0.0	-0.1%
87.7%	46.0	46.0	0.0	0.0%
88.9%	45.8	45.9	0.1	0.3%
90.1%	45.7	45.8	0.1	0.2%
91.4%	45.7	45.7	0.0	0.0%
92.6%	45.6	45.7	0.1	0.2%
93.8%	45.6	45.4	-0.1	-0.3%
95.1%	45.4	45.4	0.0	0.0%
96.3%	45.4	45.3	-0.1	-0.3%
97.5%	45.1	45.2	0.1	0.2%
98.8%	45.0	45.1	0.1	0.2%
100.0%	45.0	45.1	0.1	0.2%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.8	50.8	0.0	0.1%
1.2%	50.7	50.7	0.0	0.0%
2.5%	50.5	50.5	0.0	-0.1%
3.7%	50.4	50.4	0.0	0.0%
4.9%	50.3	49.9	-0.4	-0.8%
6.2%	49.8	49.7	-0.1	-0.3%
7.4%	49.6	49.6	0.0	-0.1%
8.6%	49.4	49.5	0.1	0.2%
9.9%	49.4	49.5	0.1	0.2%
11.1%	49.3	49.5	0.1	0.2%
12.3%	49.3	49.4	0.1	0.3%
13.6%	49.2	49.4	0.2	0.4%
14.8%	49.2	49.3	0.1	0.2%
16.0%	49.2	49.2	0.1	0.2%
17.3%	49.1	49.1	0.0	0.0%
18.5%	49.1	49.1	0.0	0.0%
19.8%	49.1	49.1	0.0	0.0%
21.0%	49.0	49.0	0.0	-0.1%
22.2%	49.0	48.9	0.0	-0.1%
23.5%	49.0	48.9	0.0	0.0%
24.7%	48.9	48.9	0.0	-0.1%
25.9%	48.9	48.8	-0.1	-0.1%
27.2%	48.8	48.8	-0.1	-0.1%
28.4%	48.7	48.8	0.0	0.0%
29.6%	48.7	48.7	0.0	0.1%
30.9%	48.7	48.7	0.1	0.1%
32.1%	48.7	48.7	0.0	0.1%
33.3%	48.6	48.7	0.0	0.1%
34.6%	48.6	48.6	0.0	0.0%
35.8%	48.6	48.6	0.0	0.1%
37.0%	48.5	48.6	0.0	0.1%
38.3%	48.5	48.6	0.1	0.1%
39.5%	48.5	48.5	0.0	0.1%
40.7%	48.5	48.5	0.0	0.1%
42.0%	48.5	48.5	0.0	0.0%
43.2%	48.4	48.4	0.0	0.0%
44.4%	48.4	48.4	-0.1	-0.1%
45.7%	48.4	48.3	-0.1	-0.1%
46.9%	48.4	48.3	-0.1	-0.2%
48.1%	48.4	48.2	-0.1	-0.3%
49.4%	48.3	48.1	-0.2	-0.3%
50.6%	48.2	48.1	-0.2	-0.3%
51.9%	48.2	48.1	-0.1	-0.3%
53.1%	48.1	48.1	0.0	0.0%
54.3%	48.1	48.0	-0.1	-0.1%
55.6%	48.0	48.0	0.0	0.0%
56.8%	48.0	48.0	0.0	-0.1%
58.0%	48.0	47.9	0.0	0.0%
59.3%	47.9	47.8	-0.1	-0.1%
60.5%	47.9	47.8	-0.1	-0.1%
61.7%	47.9	47.8	-0.1	-0.1%
63.0%	47.8	47.8	-0.1	-0.1%
64.2%	47.8	47.8	-0.1	-0.1%
65.4%	47.8	47.8	-0.1	-0.1%
66.7%	47.8	47.7	0.0	-0.1%
67.9%	47.7	47.7	0.0	0.0%
69.1%	47.7	47.7	0.0	0.0%
70.4%	47.7	47.6	-0.1	-0.1%
71.6%	47.6	47.6	0.0	0.0%
72.8%	47.6	47.5	0.0	-0.1%
74.1%	47.5	47.5	0.0	0.0%
75.3%	47.5	47.5	0.0	0.0%
76.5%	47.5	47.4	-0.1	-0.2%
77.8%	47.5	47.4	-0.1	-0.2%
79.0%	47.3	47.3	0.0	0.1%
80.2%	47.3	47.3	0.0	0.0%
81.5%	47.2	47.2	0.0	0.0%
82.7%	47.2	47.2	0.0	0.0%
84.0%	47.2	47.2	0.0	0.0%
85.2%	47.1	47.1	0.0	0.0%
86.4%	47.1	47.1	0.0	0.1%
87.7%	47.0	47.0	-0.1	-0.1%
88.9%	47.0	46.9	-0.1	-0.1%
90.1%	46.9	46.9	0.0	0.0%
91.4%	46.9	46.9	0.0	0.0%
92.6%	46.8	46.9	0.1	0.2%
93.8%	46.7	46.6	-0.1	-0.1%
95.1%	46.6	46.5	-0.2	-0.4%
96.3%	46.4	46.4	0.0	0.0%
97.5%	46.4	46.4	0.0	0.0%
98.8%	46.3	46.2	-0.1	-0.2%
100.0%	46.3	46.2	-0.1	-0.2%

Table SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.0	55.0	0.0	0.1%
1.2%	52.4	52.4	0.0	0.0%
2.5%	52.1	52.2	0.1	0.2%
3.7%	52.1	52.1	0.0	0.0%
4.9%	52.0	52.1	0.1	0.2%
6.2%	51.6	51.6	0.0	0.0%
7.4%	51.6	51.5	-0.1	-0.2%
8.6%	51.4	51.3	-0.1	-0.2%
9.9%	51.4	51.3	-0.1	-0.3%
11.1%	51.2	51.2	0.0	0.0%
12.3%	51.2	51.1	0.0	0.0%
13.6%	51.1	51.0	0.0	-0.1%
14.8%	51.0	51.0	0.0	-0.1%
16.0%	51.0	51.0	0.0	0.0%
17.3%	50.9	50.9	0.0	0.0%
18.5%	50.9	50.7	-0.2	-0.3%
19.8%	50.8	50.7	-0.1	-0.2%
21.0%	50.7	50.6	-0.1	-0.2%
22.2%	50.7	50.6	-0.1	-0.3%
23.5%	50.6	50.6	0.0	0.0%
24.7%	50.5	50.4	0.0	-0.1%
25.9%	50.4	50.4	0.0	-0.1%
27.2%	50.4	50.4	0.0	0.0%
28.4%	50.4	50.4	0.0	0.0%
29.6%	50.3	50.3	-0.1	-0.2%
30.9%	50.3	50.2	-0.1	-0.2%
32.1%	50.2	50.1	-0.1	-0.2%
33.3%	50.1	50.1	0.0	-0.1%
34.6%	50.1	50.0	-0.1	-0.2%
35.8%	50.0	50.0	0.0	0.0%
37.0%	49.9	50.0	0.0	0.0%
38.3%	49.9	49.9	-0.1	-0.1%
39.5%	49.9	49.9	0.0	0.0%
40.7%	49.9	49.9	0.0	0.0%
42.0%	49.9	49.8	-0.1	-0.1%
43.2%	49.8	49.8	0.0	0.0%
44.4%	49.8	49.8	0.0	0.0%
45.7%	49.8	49.7	0.0	0.0%
46.9%	49.7	49.7	0.0	0.0%
48.1%	49.7	49.7	0.0	0.0%
49.4%	49.7	49.7	0.0	0.0%
50.6%	49.7	49.7	0.0	0.0%
51.9%	49.7	49.6	0.0	-0.1%
53.1%	49.7	49.6	0.0	0.0%
54.3%	49.6	49.5	-0.1	-0.3%
55.6%	49.5	49.5	-0.1	-0.1%
56.8%	49.5	49.5	0.0	-0.1%
58.0%	49.5	49.4	-0.1	-0.2%
59.3%	49.5	49.4	-0.1	-0.3%
60.5%	49.5	49.3	-0.1	-0.2%
61.7%	49.4	49.3	-0.1	-0.2%
63.0%	49.4	49.3	-0.1	-0.2%
64.2%	49.4	49.3	-0.1	-0.2%
65.4%	49.3	49.3	0.0	0.0%
66.7%	49.3	49.2	0.0	0.0%
67.9%	49.2	49.2	0.0	0.0%
69.1%	49.2	49.1	-0.1	-0.2%
70.4%	49.2	49.1	-0.1	-0.2%
71.6%	49.1	49.1	0.0	-0.1%
72.8%	49.1	49.1	0.0	-0.1%
74.1%	49.1	49.0	0.0	0.0%
75.3%	49.0	49.0	0.0	0.0%
76.5%	49.0	48.8	-0.2	-0.3%
77.8%	48.8	48.7	-0.1	-0.3%
79.0%	48.7	48.7	0.0	0.0%
80.2%	48.7	48.7	0.0	0.0%
81.5%	48.7	48.6	0.0	0.0%
82.7%	48.6	48.6	0.0	0.0%
84.0%	48.6	48.6	0.1	0.1%
85.2%	48.5	48.5	0.0	0.0%
86.4%	48.5	48.5	-0.1	-0.1%
87.7%	48.4	48.4	0.0	-0.1%
88.9%	48.4	48.3	-0.1	-0.3%
90.1%	48.4	48.3	-0.1	-0.3%
91.4%	48.3	48.2	-0.1	-0.2%
92.6%	48.1	48.1	0.0	-0.1%
93.8%	48.1	48.0	-0.1	-0.2%
95.1%	47.9	47.9	0.0	0.0%
96.3%	47.9	47.9	-0.1	-0.1%
97.5%	47.8	47.8	0.0	0.0%
98.8%	47.8	47.7	-0.1	-0.2%
100.0%	47.8	47.7	-0.1	-0.2%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	54.4	0.2	0.3%
1.2%	54.0	54.0	0.0	0.0%
2.5%	53.6	53.4	-0.2	-0.3%
3.7%	53.4	53.4	0.0	0.0%
4.9%	53.3	53.3	0.0	0.0%
6.2%	53.3	53.3	0.0	0.0%
7.4%	53.3	53.3	0.0	0.0%
8.6%	53.3	53.3	0.0	0.0%
9.9%	52.8	53.0	0.2	0.4%
11.1%	52.8	53.0	0.2	0.5%
12.3%	52.7	52.9	0.2	0.4%
13.6%	52.7	52.8	0.1	0.1%
14.8%	52.7	52.7	0.0	0.0%
16.0%	52.6	52.6	0.0	-0.1%
17.3%	52.6	52.3	-0.2	-0.4%
18.5%	52.5	52.3	-0.2	-0.4%
19.8%	52.4	52.2	-0.2	-0.4%
21.0%	52.4	52.2	-0.2	-0.3%
22.2%	52.4	52.2	-0.2	-0.3%
23.5%	52.3	52.2	-0.1	-0.3%
24.7%	52.3	52.2	-0.1	-0.3%
25.9%	52.3	52.2	-0.1	-0.2%
27.2%	52.2	52.1	-0.1	-0.2%
28.4%	52.2	52.1	-0.1	-0.1%
29.6%	52.1	52.1	0.0	-0.1%
30.9%	52.1	52.0	-0.1	-0.1%
32.1%	52.0	52.0	0.0	-0.1%
33.3%	52.0	52.0	0.0	0.0%
34.6%	51.9	52.0	0.0	0.0%
35.8%	51.8	51.9	0.0	0.1%
37.0%	51.8	51.8	0.0	0.1%
38.3%	51.8	51.7	0.0	0.0%
39.5%	51.7	51.7	-0.1	-0.1%
40.7%	51.7	51.6	0.0	-0.1%
42.0%	51.6	51.6	0.0	-0.1%
43.2%	51.6	51.6	0.0	0.0%
44.4%	51.6	51.6	0.0	0.0%
45.7%	51.6	51.6	0.0	0.0%
46.9%	51.5	51.6	0.0	0.1%
48.1%	51.5	51.5	0.0	0.0%
49.4%	51.5	51.5	0.0	0.0%
50.6%	51.5	51.5	0.0	0.0%
51.9%	51.5	51.5	0.0	0.0%
53.1%	51.5	51.5	0.0	0.0%
54.3%	51.4	51.5	0.0	0.0%
55.6%	51.4	51.4	0.0	0.0%
56.8%	51.4	51.4	0.0	0.0%
58.0%	51.4	51.3	-0.1	-0.3%
59.3%	51.4	51.3	-0.1	-0.3%
60.5%	51.4	51.2	-0.1	-0.3%
61.7%	51.3	51.2	-0.1	-0.2%
63.0%	51.3	51.2	-0.1	-0.2%
64.2%	51.3	51.2	-0.1	-0.2%
65.4%	51.3	51.1	-0.1	-0.2%
66.7%	51.2	51.1	-0.1	-0.2%
67.9%	51.1	51.0	-0.1	-0.3%
69.1%	51.1	51.0	-0.1	-0.3%
70.4%	51.1	50.9	-0.2	-0.4%
71.6%	50.9	50.9	0.0	0.0%
72.8%	50.9	50.9	-0.1	-0.1%
74.1%	50.9	50.8	0.0	-0.1%
75.3%	50.9	50.8	0.0	-0.1%
76.5%	50.9	50.8	0.0	-0.1%
77.8%	50.9	50.8	-0.1	-0.1%
79.0%	50.8	50.6	-0.2	-0.4%
80.2%	50.8	50.5	-0.3	-0.7%
81.5%	50.7	50.4	-0.2	-0.5%
82.7%	50.5	50.4	0.0	-0.1%
84.0%	50.5	50.4	-0.1	-0.1%
85.2%	50.4	50.3	-0.1	-0.2%
86.4%	50.4	50.3	-0.1	-0.2%
87.7%	50.3	50.3	0.0	0.0%
88.9%	50.2	50.2	0.0	0.0%
90.1%	50.2	50.2	0.0	-0.1%
91.4%	50.2	50.0	-0.2	-0.4%
92.6%	50.2	50.0	-0.2	-0.5%
93.8%	50.0	49.7	-0.3	-0.6%
95.1%	49.8	49.7	-0.1	-0.2%
96.3%	49.7	49.6	0.0	-0.1%
97.5%	49.6	49.6	0.0	0.0%
98.8%	49.6	49.5	0.0	-0.1%
100.0%	49.6	49.5	0.0	-0.1%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.9	56.9	-1.0	-1.7%
1.2%	54.8	54.7	-0.1	-0.1%
2.5%	54.2	54.3	0.1	0.2%
3.7%	54.1	54.0	-0.1	-0.2%
4.9%	54.0	54.0	0.0	0.0%
6.2%	53.9	54.0	0.1	0.1%
7.4%	53.9	54.0	0.0	0.1%
8.6%	53.8	53.8	0.0	0.1%
9.9%	53.7	53.8	0.0	0.1%
11.1%	53.7	53.7	0.0	0.0%
12.3%	53.7	53.7	0.0	0.0%
13.6%	53.6	53.7	0.1	0.2%
14.8%	53.5	53.7	0.2	0.3%
16.0%	53.5	53.6	0.0	0.1%
17.3%	53.5	53.5	0.0	-0.1%
18.5%	53.3	53.3	0.0	-0.1%
19.8%	53.3	53.3	0.0	0.0%
21.0%	53.3	53.2	-0.1	-0.2%
22.2%	53.3	53.2	-0.1	-0.1%
23.5%	53.1	53.2	0.0	0.0%
24.7%	53.1	53.2	0.1	0.1%
25.9%	53.1	53.0	-0.1	-0.1%
27.2%	53.1	53.0	-0.1	-0.2%
28.4%	53.0	52.9	-0.1	-0.2%
29.6%	52.9	52.8	-0.2	-0.3%
30.9%	52.8	52.7	-0.2	-0.3%
32.1%	52.8	52.7	-0.2	-0.3%
33.3%	52.7	52.6	-0.1	-0.2%
34.6%	52.7	52.6	-0.2	-0.3%
35.8%	52.7	52.6	-0.1	-0.3%
37.0%	52.6	52.5	-0.1	-0.2%
38.3%	52.6	52.5	-0.1	-0.2%
39.5%	52.6	52.5	-0.1	-0.2%
40.7%	52.6	52.5	-0.1	-0.2%
42.0%	52.5	52.4	-0.1	-0.2%
43.2%	52.5	52.3	-0.1	-0.3%
44.4%	52.5	52.3	-0.2	-0.3%
45.7%	52.4	52.2	-0.2	-0.4%
46.9%	52.3	52.2	-0.1	-0.2%
48.1%	52.3	52.1	-0.2	-0.4%
49.4%	52.3	52.1	-0.2	-0.4%
50.6%	52.2	52.0	-0.2	-0.4%
51.9%	52.2	52.0	-0.2	-0.4%
53.1%	52.2	52.0	-0.2	-0.5%
54.3%	52.0	52.0	-0.1	-0.1%
55.6%	52.0	51.9	-0.1	-0.1%
56.8%	52.0	51.9	-0.1	-0.2%
58.0%	52.0	51.8	-0.1	-0.2%
59.3%	51.9	51.8	-0.2	-0.4%
60.5%	51.9	51.7	-0.1	-0.2%
61.7%	51.9	51.7	-0.1	-0.2%
63.0%	51.8	51.7	0.0	-0.1%
64.2%	51.8	51.7	-0.1	-0.1%
65.4%	51.7	51.6	-0.1	-0.2%
66.7%	51.7	51.6	-0.2	-0.3%
67.9%	51.7	51.6	-0.2	-0.3%
69.1%	51.7	51.5	-0.1	-0.2%
70.4%	51.6	51.5	-0.1	-0.3%
71.6%	51.5	51.5	-0.1	-0.1%
72.8%	51.5	51.4	-0.1	-0.2%
74.1%	51.5	51.3	-0.2	-0.4%
75.3%	51.5	51.3	-0.2	-0.4%
76.5%	51.4	51.3	-0.2	-0.3%
77.8%	51.4	51.2	-0.2	-0.4%
79.0%	51.4	51.2	-0.2	-0.4%
80.2%	51.4	51.2	-0.2	-0.4%
81.5%	51.4	51.1	-0.2	-0.4%
82.7%	51.3	51.1	-0.2	-0.3%
84.0%	51.3	51.0	-0.3	-0.6%
85.2%	51.3	50.8	-0.4	-0.8%
86.4%	51.2	50.8	-0.4	-0.8%
87.7%	51.2	50.8	-0.4	-0.7%
88.9%	51.1	50.7	-0.4	-0.7%
90.1%	51.1	50.7	-0.4	-0.8%
91.4%	51.1	50.7	-0.4	-0.8%
92.6%	51.1	50.7	-0.4	-0.8%
93.8%	51.0	50.6	-0.4	-0.9%
95.1%	50.8	50.6	-0.3	-0.6%
96.3%	50.8	50.5	-0.2	-0.5%
97.5%	50.7	50.3	-0.4	-0.8%
98.8%	50.1	50.0	-0.2	-0.3%
100.0%	50.1	50.0	-0.2	-0.3%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.2	58.9	-1.3	-2.2%
1.2%	56.0	56.0	0.0	0.0%
2.5%	56.0	55.9	0.0	0.0%
3.7%	55.2	55.0	-0.2	-0.3%
4.9%	54.9	54.7	-0.3	-0.5%
6.2%	54.7	54.5	-0.2	-0.4%
7.4%	54.5	54.5	0.0	-0.1%
8.6%	54.1	54.0	-0.1	-0.1%
9.9%	54.0	54.0	0.0	-0.1%
11.1%	54.0	53.9	0.0	-0.1%
12.3%	53.9	53.9	0.0	0.0%
13.6%	53.9	53.9	0.0	0.1%
14.8%	53.7	53.9	0.1	0.3%
16.0%	53.7	53.8	0.1	0.3%
17.3%	53.6	53.7	0.1	0.1%
18.5%	53.6	53.6	0.0	-0.1%
19.8%	53.5	53.5	0.0	0.0%
21.0%	53.5	53.5	0.0	0.0%
22.2%	53.2	53.3	0.1	0.2%
23.5%	53.2	53.3	0.1	0.1%
24.7%	53.2	53.2	0.0	0.1%
25.9%	53.1	53.1	0.1	0.1%
27.2%	53.0	52.8	-0.3	-0.5%
28.4%	52.9	52.7	-0.2	-0.4%
29.6%	52.7	52.6	-0.1	-0.2%
30.9%	52.7	52.5	-0.2	-0.3%
32.1%	52.7	52.4	-0.3	-0.5%
33.3%	52.5	52.4	-0.2	-0.3%
34.6%	52.5	52.3	-0.2	-0.3%
35.8%	52.4	52.3	-0.1	-0.2%
37.0%	52.4	52.2	-0.1	-0.3%
38.3%	52.4	52.2	-0.2	-0.4%
39.5%	52.3	52.1	-0.2	-0.3%
40.7%	52.2	51.9	-0.3	-0.5%
42.0%	52.2	51.9	-0.3	-0.5%
43.2%	52.1	51.9	-0.3	-0.5%
44.4%	52.1	51.9	-0.3	-0.5%
45.7%	52.1	51.8	-0.3	-0.6%
46.9%	52.1	51.8	-0.3	-0.5%
48.1%	51.9	51.8	-0.2	-0.3%
49.4%	51.9	51.8	-0.1	-0.2%
50.6%	51.8	51.7	-0.1	-0.1%
51.9%	51.8	51.7	-0.1	-0.2%
53.1%	51.7	51.6	-0.2	-0.4%
54.3%	51.7	51.5	-0.2	-0.4%
55.6%	51.7	51.5	-0.2	-0.3%
56.8%	51.6	51.4	-0.3	-0.5%
58.0%	51.5	51.4	-0.1	-0.3%
59.3%	51.5	51.3	-0.2	-0.4%
60.5%	51.4	51.3	-0.2	-0.3%
61.7%	51.3	51.2	-0.1	-0.1%
63.0%	51.3	51.2	-0.1	-0.1%
64.2%	51.2	51.1	-0.1	-0.2%
65.4%	51.2	51.1	0.0	-0.1%
66.7%	51.2	51.1	0.0	-0.1%
67.9%	51.1	51.1	0.0	0.0%
69.1%	51.1	51.0	-0.1	-0.2%
70.4%	51.0	51.0	-0.1	-0.2%
71.6%	51.0	50.9	-0.1	-0.1%
72.8%	50.9	50.8	-0.1	-0.2%
74.1%	50.9	50.8	-0.1	-0.2%
75.3%	50.9	50.8	-0.1	-0.2%
76.5%	50.9	50.8	-0.1	-0.2%
77.8%	50.8	50.7	-0.2	-0.3%
79.0%	50.7	50.7	-0.1	-0.2%
80.2%	50.7	50.6	-0.1	-0.1%
81.5%	50.7	50.5	-0.2	-0.3%
82.7%	50.6	50.5	-0.1	-0.3%
84.0%	50.6	50.5	-0.1	-0.2%
85.2%	50.5	50.4	-0.2	-0.4%
86.4%	50.5	50.2	-0.3	-0.5%
87.7%	50.5	50.2	-0.3	-0.5%
88.9%	50.5	50.2	-0.3	-0.5%
90.1%	50.3	50.2	-0.1	-0.3%
91.4%	50.2	50.2	0.0	-0.1%
92.6%	50.2	50.2	0.0	0.0%
93.8%	50.1	49.8	-0.3	-0.6%
95.1%	50.0	49.8	-0.2	-0.3%
96.3%	49.9	49.7	-0.2	-0.3%
97.5%	49.8	49.7	-0.1	-0.2%
98.8%	49.6	49.6	0.0	0.1%
100.0%	49.6	49.6	0.0	0.1%

Table SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.9	55.2	-0.6	-1.2%
1.2%	54.3	54.4	0.1	0.2%
2.5%	53.6	53.6	0.0	0.0%
3.7%	53.5	53.5	-0.1	-0.1%
4.9%	53.4	53.3	0.0	-0.1%
6.2%	53.2	53.2	0.0	0.0%
7.4%	53.1	53.1	-0.1	-0.1%
8.6%	53.1	53.0	-0.1	-0.2%
9.9%	53.0	52.9	0.0	-0.1%
11.1%	52.9	52.9	0.0	0.1%
12.3%	52.8	52.9	0.1	0.3%
13.6%	52.7	52.8	0.2	0.3%
14.8%	52.6	52.8	0.1	0.3%
16.0%	52.6	52.8	0.2	0.3%
17.3%	52.5	52.7	0.2	0.3%
18.5%	52.5	52.5	0.0	-0.1%
19.8%	52.5	52.4	-0.1	-0.1%
21.0%	52.5	52.4	-0.1	-0.2%
22.2%	52.4	52.3	-0.1	-0.1%
23.5%	52.3	52.2	-0.1	-0.1%
24.7%	52.2	52.2	0.0	-0.1%
25.9%	52.1	52.1	0.0	-0.1%
27.2%	52.1	52.0	-0.1	-0.2%
28.4%	52.0	51.9	-0.1	-0.2%
29.6%	52.0	51.9	-0.1	-0.1%
30.9%	51.9	51.9	-0.1	-0.2%
32.1%	51.9	51.8	-0.1	-0.3%
33.3%	51.9	51.8	-0.2	-0.3%
34.6%	51.8	51.7	-0.1	-0.2%
35.8%	51.8	51.7	-0.1	-0.2%
37.0%	51.8	51.7	-0.1	-0.3%
38.3%	51.7	51.6	0.0	-0.1%
39.5%	51.6	51.5	0.0	-0.1%
40.7%	51.6	51.5	-0.1	-0.1%
42.0%	51.6	51.5	-0.1	-0.2%
43.2%	51.6	51.5	-0.1	-0.1%
44.4%	51.5	51.5	0.0	-0.1%
45.7%	51.5	51.4	-0.1	-0.2%
46.9%	51.5	51.3	-0.1	-0.2%
48.1%	51.4	51.3	-0.1	-0.2%
49.4%	51.4	51.3	-0.1	-0.3%
50.6%	51.3	51.3	0.0	-0.1%
51.9%	51.3	51.3	0.0	-0.1%
53.1%	51.3	51.2	-0.1	-0.2%
54.3%	51.3	51.1	-0.2	-0.3%
55.6%	51.2	51.1	-0.2	-0.3%
56.8%	51.2	51.1	-0.1	-0.3%
58.0%	51.1	51.0	-0.1	-0.2%
59.3%	51.1	51.0	-0.1	-0.2%
60.5%	51.0	50.9	-0.1	-0.3%
61.7%	51.0	50.9	-0.1	-0.2%
63.0%	51.0	50.8	-0.2	-0.3%
64.2%	50.9	50.8	-0.1	-0.3%
65.4%	50.9	50.7	-0.2	-0.4%
66.7%	50.8	50.7	-0.1	-0.1%
67.9%	50.7	50.7	0.0	0.0%
69.1%	50.7	50.6	-0.1	-0.1%
70.4%	50.7	50.6	-0.1	-0.1%
71.6%	50.7	50.6	-0.1	-0.1%
72.8%	50.6	50.6	0.0	-0.1%
74.1%	50.6	50.6	-0.1	-0.1%
75.3%	50.6	50.5	-0.1	-0.2%
76.5%	50.6	50.5	-0.1	-0.2%
77.8%	50.6	50.4	-0.2	-0.4%
79.0%	50.6	50.3	-0.3	-0.5%
80.2%	50.6	50.3	-0.3	-0.5%
81.5%	50.5	50.3	-0.3	-0.5%
82.7%	50.4	50.1	-0.3	-0.5%
84.0%	50.2	50.1	-0.1	-0.3%
85.2%	50.2	50.1	-0.2	-0.3%
86.4%	50.1	50.0	-0.1	-0.3%
87.7%	50.1	50.0	-0.1	-0.2%
88.9%	50.1	50.0	-0.1	-0.1%
90.1%	50.0	49.9	-0.2	-0.3%
91.4%	50.0	49.8	-0.2	-0.4%
92.6%	50.0	49.8	-0.2	-0.4%
93.8%	50.0	49.8	-0.2	-0.4%
95.1%	49.9	49.7	-0.2	-0.4%
96.3%	49.8	49.7	-0.1	-0.2%
97.5%	49.7	49.6	-0.1	-0.3%
98.8%	49.5	49.4	0.0	0.0%
100.0%	48.9	48.7	-0.2	-0.4%

July to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.1	56.3	-0.9	-1.5%
1.2%	54.5	54.5	0.0	-0.1%
2.5%	54.0	54.2	0.1	0.2%
3.7%	54.0	54.0	0.0	0.0%
4.9%	54.0	53.9	0.0	-0.1%
6.2%	54.0	53.9	0.0	-0.1%
7.4%	53.8	53.6	-0.1	-0.2%
8.6%	53.7	53.6	-0.1	-0.1%
9.9%	53.5	53.6	0.1	0.1%
11.1%	53.5	53.5	0.0	0.1%
12.3%	53.4	53.5	0.1	0.2%
13.6%	53.3	53.5	0.2	0.4%
14.8%	53.2	53.4	0.2	0.3%
16.0%	53.2	53.2	0.0	0.0%
17.3%	53.1	53.0	-0.1	-0.1%
18.5%	53.1	53.0	-0.1	-0.1%
19.8%	53.1	52.9	-0.1	-0.2%
21.0%	53.0	52.9	-0.1	-0.1%
22.2%	53.0	52.9	-0.1	-0.1%
23.5%	52.9	52.9	0.0	-0.1%
24.7%	52.8	52.8	0.0	0.1%
25.9%	52.8	52.8	0.0	0.0%
27.2%	52.7	52.7	0.0	-0.1%
28.4%	52.7	52.7	0.0	0.0%
29.6%	52.6	52.6	0.0	0.1%
30.9%	52.5	52.5	-0.1	-0.1%
32.1%	52.5	52.5	-0.1	-0.1%
33.3%	52.5	52.4	-0.1	-0.1%
34.6%	52.5	52.3	-0.2	-0.3%
35.8%	52.4	52.3	-0.1	-0.2%
37.0%	52.3	52.1	-0.2	-0.3%
38.3%	52.2	52.1	-0.1	-0.1%
39.5%	52.2	52.1	0.0	-0.1%
40.7%	52.1	52.1	0.0	0.0%
42.0%	52.1	52.1	0.0	0.0%
43.2%	52.1	52.1	0.0	0.0%
44.4%	52.1	52.0	-0.1	-0.2%
45.7%	52.0	51.8	-0.2	-0.4%
46.9%	52.0	51.8	-0.2	-0.4%
48.1%	52.0	51.8	-0.2	-0.3%
49.4%	52.0	51.8	-0.2	-0.3%
50.6%	52.0	51.8	-0.2	-0.4%
51.9%	51.9	51.7	-0.3	-0.6%
53.1%	51.9	51.6	-0.3	-0.5%
54.3%	51.8	51.5	-0.2	-0.5%
55.6%	51.8	51.5	-0.3	-0.5%
56.8%	51.7	51.5	-0.2	-0.4%
58.0%	51.6	51.5	-0.1	-0.2%
59.3%	51.5	51.5	-0.1	-0.1%
60.5%	51.5	51.5	-0.1	-0.1%
61.7%	51.5	51.4	-0.1	-0.1%
63.0%	51.5	51.4	-0.1	-0.1%
64.2%	51.4	51.3	-0.1	-0.3%
65.4%	51.4	51.3	-0.1	-0.3%
66.7%	51.4	51.2	-0.1	-0.3%
67.9%	51.3	51.2	-0.1	-0.2%
69.1%	51.3	51.2	-0.1	-0.2%
70.4%	51.3	51.2	-0.1	-0.2%
71.6%	51.2	51.1	-0.2	-0.3%
72.8%	51.2	51.1	-0.1	-0.2%
74.1%	51.1	51.0	-0.1	-0.2%
75.3%	51.1	51.0	-0.2	-0.3%
76.5%	51.1	50.9	-0.2	-0.5%
77.8%	51.1	50.8	-0.3	-0.5%
79.0%	50.9	50.8	-0.2	-0.4%
80.2%	50.9	50.8	-0.2	-0.3%
81.5%	50.9	50.7	-0.2	-0.3%
82.7%	50.8	50.7	-0.2	-0.3%
84.0%	50.8	50.5	-0.3	-0.5%
85.2%	50.8	50.5	-0.2	-0.5%
86.4%	50.8	50.5	-0.2	-0.5%
87.7%	50.7	50.5	-0.3	-0.5%
88.9%	50.7	50.4	-0.3	-0.6%
90.1%	50.7	50.4	-0.2	-0.5%
91.4%	50.6	50.3	-0.3	-0.5%
92.6%	50.5	50.3	-0.2	-0.3%
93.8%	50.4	50.3	-0.1	-0.3%
95.1%	50.4	50.3	-0.1	-0.3%
96.3%	50.3	50.3	0.0	-0.1%
97.5%	50.3	50.2	-0.1	-0.2%
98.8%	50.0	50.0	-0.1	-0.1%
100.0%	49.5	49.2	-0.3	-0.6%

August to September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.1	57.9	-1.2	-2.0%
1.2%	55.4	55.4	0.0	-0.1%
2.5%	54.8	54.8	0.0	0.0%
3.7%	54.6	54.5	-0.1	-0.2%
4.9%	54.3	54.4	0.1	0.1%
6.2%	54.3	54.3	0.1	0.2%
7.4%	54.0	54.0	0.0	0.0%
8.6%	53.9	53.9	0.0	0.0%
9.9%	53.9	53.8	-0.1	-0.1%
11.1%	53.8	53.8	-0.1	-0.1%
12.3%	53.7	53.8	0.1	0.1%
13.6%	53.6	53.8	0.1	0.2%
14.8%	53.6	53.7	0.1	0.2%
16.0%	53.6	53.6	0.1	0.1%
17.3%	53.6	53.6	0.0	0.0%
18.5%	53.5	53.4	-0.1	-0.2%
19.8%	53.4	53.4	0.0	0.0%
21.0%	53.4	53.4	0.0	0.0%
22.2%	53.3	53.3	0.0	0.0%
23.5%	53.2	53.2	0.0	0.0%
24.7%	53.2	53.2	-0.1	-0.1%
25.9%	53.1	53.0	-0.1	-0.3%
27.2%	53.0	53.0	0.0	0.0%
28.4%	52.9	52.9	0.1	0.1%
29.6%	52.9	52.8	-0.1	-0.2%
30.9%	52.7	52.6	-0.1	-0.2%
32.1%	52.7	52.6	-0.1	-0.1%
33.3%	52.6	52.6	-0.1	-0.1%
34.6%	52.6	52.5	-0.1	-0.1%
35.8%	52.5	52.4	-0.1	-0.2%
37.0%	52.5	52.4	-0.1	-0.2%
38.3%	52.5	52.3	-0.2	-0.3%
39.5%	52.4	52.2	-0.2	-0.4%
40.7%	52.3	52.2	-0.2	-0.3%
42.0%	52.3	52.1	-0.2	-0.4%
43.2%	52.3	52.1	-0.2	-0.4%
44.4%	52.2	52.1	-0.1	-0.2%
45.7%	52.2	52.0	-0.2	-0.3%
46.9%	52.2	52.0	-0.2	-0.4%
48.1%	52.2	51.9	-0.3	-0.5%
49.4%	52.1	51.9	-0.2	-0.3%
50.6%	52.0	51.9	-0.1	-0.2%
51.9%	52.0	51.9	-0.1	-0.2%
53.1%	52.0	51.8	-0.2	-0.3%
54.3%	51.9	51.7	-0.2	-0.4%
55.6%	51.9	51.7	-0.2	-0.4%
56.8%	51.8	51.6	-0.2	-0.4%
58.0%	51.8	51.6	-0.2	-0.4%
59.3%	51.7	51.5	-0.2	-0.4%
60.5%	51.6	51.5	-0.2	-0.3%
61.7%	51.6	51.4	-0.2	-0.3%
63.0%	51.6	51.4	-0.2	-0.3%
64.2%	51.6	51.4	-0.2	-0.3%
65.4%	51.5	51.4	-0.1	-0.2%
66.7%	51.4	51.3	-0.1	-0.1%
67.9%	51.4	51.3	-0.1	-0.2%
69.1%	51.3	51.3	-0.1	-0.1%
70.4%	51.3	51.1	-0.2	-0.4%
71.6%	51.3	51.1	-0.2	-0.3%
72.8%	51.3	51.1	-0.2	-0.4%
74.1%	51.2	51.1	-0.2	-0.4%
75.3%	51.2	51.0	-0.2	-0.4%
76.5%	51.2	51.0	-0.2	-0.4%
77.8%	51.2	50.9	-0.2	-0.5%
79.0%	51.1	50.9	-0.2	-0.4%
80.2%	51.1	50.8	-0.3	-0.6%
81.5%	51.0	50.8	-0.2	-0.4%
82.7%	51.0	50.7	-0.2	-0.5%
84.0%	51.0	50.7	-0.2	-0.5%
85.2%	50.9	50.7	-0.2	-0.3%
86.4%	50.8	50.7	-0.2	-0.3%
87.7%	50.8	50.7	-0.2	-0.3%
88.9%	50.8	50.6	-0.2	-0.5%
90.1%	50.8	50.5	-0.3	-0.5%
91.4%	50.7	50.5	-0.2	-0.5%
92.6%	50.6	50.4	-0.2	-0.3%
93.8%	50.6	50.3	-0.3	-0.5%
95.1%	50.5	50.2	-0.2	-0.4%
96.3%	50.4	50.2	-0.2	-0.4%
97.5%	50.3	50.1	-0.1	-0.2%
98.8%	50.2	50.1	-0.1	-0.2%
100.0%	49.7	49.4	-0.3	-0.5%

Figure SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

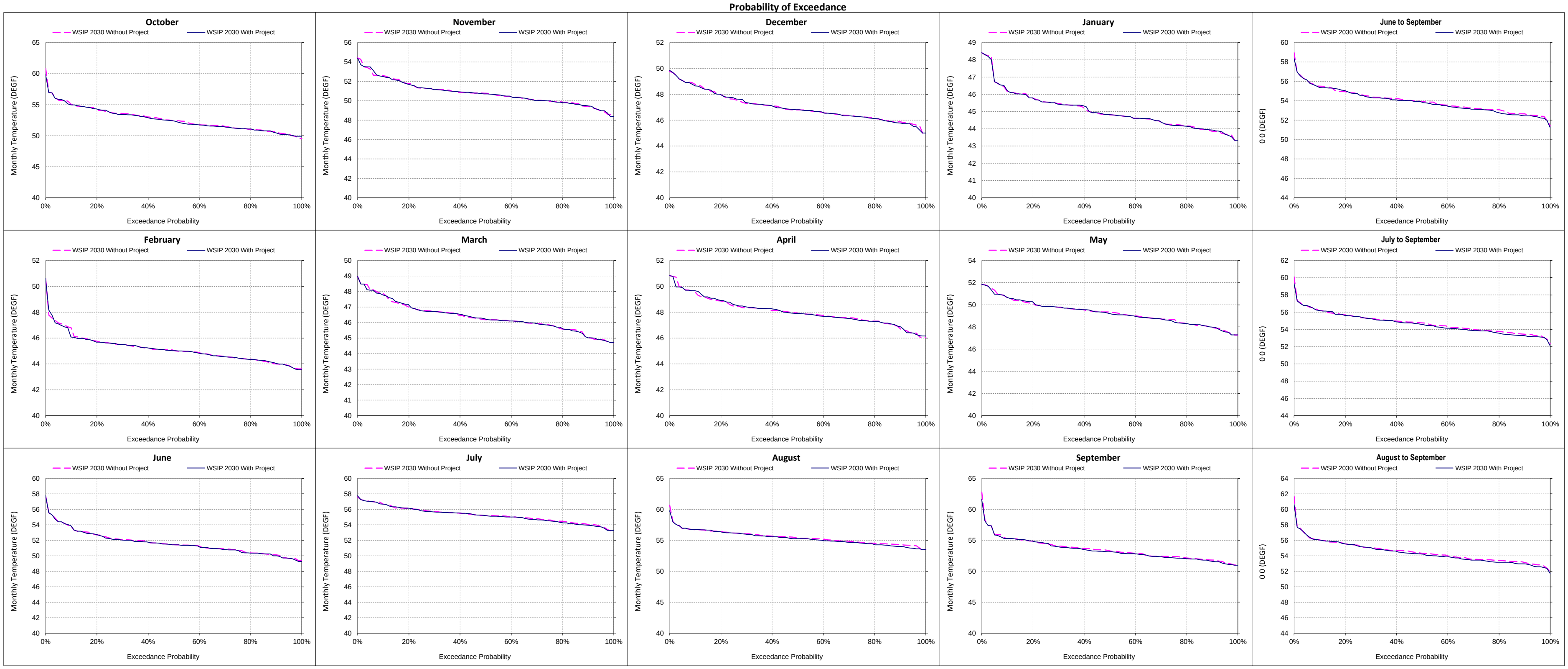


Table SQ14-1b

Clear Creek at Igo, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.9	59.9	-1.0	-1.6%
1.2%	57.0	57.0	0.0	0.0%
2.5%	56.9	56.9	0.0	0.0%
3.7%	56.2	56.0	-0.2	-0.3%
4.9%	55.7	55.9	0.1	0.3%
6.2%	55.7	55.8	0.2	0.3%
7.4%	55.6	55.6	0.0	0.0%
8.6%	55.6	55.2	-0.4	-0.8%
9.9%	55.1	55.0	-0.1	-0.2%
11.1%	54.8	54.9	0.1	0.2%
12.3%	54.8	54.9	0.1	0.1%
13.6%	54.7	54.8	0.0	0.0%
14.8%	54.7	54.7	0.0	0.0%
16.0%	54.6	54.6	-0.1	-0.1%
17.3%	54.6	54.5	0.0	0.0%
18.5%	54.5	54.4	-0.2	-0.3%
19.8%	54.1	54.3	0.2	0.4%
21.0%	54.1	54.2	0.1	0.2%
22.2%	54.0	54.1	0.1	0.1%
23.5%	53.9	54.1	0.2	0.3%
24.7%	53.8	53.8	0.1	0.1%
25.9%	53.7	53.6	-0.1	-0.1%
27.2%	53.6	53.6	0.0	-0.1%
28.4%	53.6	53.4	-0.2	-0.3%
29.6%	53.6	53.4	-0.2	-0.4%
30.9%	53.5	53.4	-0.1	-0.3%
32.1%	53.5	53.4	-0.2	-0.3%
33.3%	53.5	53.4	-0.1	-0.2%
34.6%	53.3	53.3	-0.1	-0.1%
35.8%	53.3	53.2	0.0	-0.1%
37.0%	53.2	53.1	-0.1	-0.3%
38.3%	53.2	53.0	-0.2	-0.3%
39.5%	53.0	52.9	-0.1	-0.2%
40.7%	53.0	52.8	-0.2	-0.3%
42.0%	52.9	52.7	-0.2	-0.3%
43.2%	52.9	52.7	-0.2	-0.5%
44.4%	52.7	52.6	-0.1	-0.2%
45.7%	52.7	52.5	-0.2	-0.3%
46.9%	52.5	52.5	-0.1	-0.1%
48.1%	52.5	52.4	-0.1	-0.1%
49.4%	52.4	52.4	0.0	-0.1%
50.6%	52.4	52.3	-0.1	-0.2%
51.9%	52.4	52.2	-0.3	-0.5%
53.1%	52.3	52.0	-0.3	-0.6%
54.3%	52.3	51.9	-0.4	-0.7%
55.6%	52.1	51.9	-0.2	-0.4%
56.8%	51.9	51.9	-0.1	-0.1%
58.0%	51.9	51.8	0.0	-0.1%
59.3%	51.7	51.8	0.0	0.0%
60.5%	51.7	51.7	0.0	0.0%
61.7%	51.7	51.7	-0.1	-0.1%
63.0%	51.7	51.6	-0.1	-0.2%
64.2%	51.7	51.6	-0.1	-0.2%
65.4%	51.7	51.6	-0.1	-0.2%
66.7%	51.6	51.5	-0.1	-0.2%
67.9%	51.6	51.5	-0.2	-0.3%
69.1%	51.6	51.5	-0.1	-0.3%
70.4%	51.5	51.4	-0.1	-0.1%
71.6%	51.4	51.3	-0.1	-0.1%
72.8%	51.3	51.3	0.0	0.0%
74.1%	51.2	51.2	0.0	0.0%
75.3%	51.2	51.2	0.0	0.0%
76.5%	51.2	51.1	0.0	0.0%
77.8%	51.1	51.1	0.0	0.0%
79.0%	51.1	51.1	0.0	0.1%
80.2%	51.0	51.1	0.1	0.1%
81.5%	51.0	50.9	-0.1	-0.1%
82.7%	50.9	50.9	0.0	-0.1%
84.0%	50.9	50.8	-0.1	-0.2%
85.2%	50.8	50.8	0.0	-0.1%
86.4%	50.7	50.8	0.1	0.2%
87.7%	50.7	50.8	0.1	0.2%
88.9%	50.7	50.6	-0.1	-0.2%
90.1%	50.6	50.4	-0.1	-0.2%
91.4%	50.4	50.3	-0.1	-0.3%
92.6%	50.3	50.2	-0.2	-0.3%
93.8%	50.3	50.2	-0.1	-0.2%
95.1%	50.2	50.2	-0.1	-0.2%
96.3%	50.0	50.0	0.0	0.1%
97.5%	49.9	49.9	0.0	0.0%
98.8%	49.6	49.9	0.4	0.7%
100.0%	49.6	49.9	0.0	0.7%

November

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.4	54.4	0.0	0.0%
1.2%	54.3	53.7	-0.5	-1.0%
2.5%	53.5	53.5	0.0	0.0%
3.7%	53.4	53.5	0.1	0.1%
4.9%	53.3	53.5	0.2	0.4%
6.2%	52.6	53.1	0.5	0.9%
7.4%	52.6	52.7	0.0	0.1%
8.6%	52.6	52.6	-0.1	-0.1%
9.9%	52.6	52.5	-0.1	-0.2%
11.1%	52.5	52.4	-0.1	-0.2%
12.3%	52.4	52.4	0.0	0.1%
13.6%	52.3	52.2	-0.1	-0.2%
14.8%	52.2	52.1	-0.1	-0.2%
16.0%	52.2	52.1	-0.1	-0.3%
17.3%	51.9	51.9	0.0	0.0%
18.5%	51.8	51.8	0.0	0.0%
19.8%	51.8	51.7	-0.1	-0.1%
21.0%	51.8	51.6	-0.1	-0.2%
22.2%	51.5	51.5	0.0	0.1%
23.5%	51.3	51.4	0.0	0.0%
24.7%	51.3	51.4	0.0	0.1%
25.9%	51.3	51.3	0.0	0.0%
27.2%	51.3	51.3	0.0	0.0%
28.4%	51.3	51.3	0.0	0.0%
29.6%	51.2	51.2	0.0	-0.1%
30.9%	51.2	51.2	0.0	0.0%
32.1%	51.2	51.1	0.0	-0.1%
33.3%	51.2	51.1	-0.1	-0.1%
34.6%	51.1	51.0	-0.1	-0.1%
35.8%	51.1	51.0	-0.1	-0.1%
37.0%	51.0	51.0	0.0	0.0%
38.3%	51.0	51.0	0.0	0.0%
39.5%	50.9	50.9	0.1	0.1%
40.7%	50.8	50.9	0.0	0.1%
42.0%	50.8	50.9	0.0	0.1%
43.2%	50.8	50.9	0.1	0.1%
44.4%	50.8	50.9	0.0	0.1%
45.7%	50.8	50.8	0.0	0.0%
46.9%	50.8	50.8	0.0	0.0%
48.1%	50.8	50.7	-0.1	-0.1%
49.4%	50.8	50.7	-0.1	-0.1%
50.6%	50.8	50.7	-0.1	-0.1%
51.9%	50.7	50.7	0.0	-0.1%
53.1%	50.6	50.7	0.0	0.0%
54.3%	50.6	50.6	0.1	0.1%
55.6%	50.5	50.6	0.0	0.1%
56.8%	50.5	50.5	0.0	0.1%
58.0%	50.5	50.5	0.0	0.1%
59.3%	50.4	50.5	0.0	0.1%
60.5%	50.4	50.4	0.0	-0.1%
61.7%	50.4	50.4	0.0	0.0%
63.0%	50.4	50.3	0.0	-0.1%
64.2%	50.3	50.3	0.0	0.1%
65.4%	50.3	50.3	0.0	0.0%
66.7%	50.2	50.2	0.0	0.0%
67.9%	50.2	50.1	0.0	0.0%
69.1%	50.1	50.1	0.0	-0.1%
70.4%	50.1	50.0	0.0	0.0%
71.6%	50.0	50.0	0.0	-0.1%
72.8%	50.0	50.0	0.0	0.0%
74.1%	50.0	50.0	0.0	0.0%
75.3%	49.9	50.0	0.1	0.1%
76.5%	49.9	49.9	0.0	0.0%
77.8%	49.9	49.8	-0.1	-0.2%
79.0%	49.9	49.8	-0.1	-0.1%
80.2%	49.9	49.8	-0.1	-0.1%
81.5%	49.9	49.8	-0.1	-0.1%
82.7%	49.8	49.7	-0.1	-0.2%
84.0%	49.8	49.7	-0.1	-0.2%
85.2%	49.7	49.6	-0.1	-0.1%
86.4%	49.7	49.6	-0.1	-0.1%
87.7%	49.5	49.5	0.0	0.1%
88.9%	49.4	49.5	0.1	0.2%
90.1%	49.4	49.5	0.0	0.1%
91.4%	49.3	49.4	0.2	0.3%
92.6%	49.2	49.2	0.0	0.0%
93.8%	49.1	49.1	0.0	0.1%
95.1%	49.0	49.0	0.0	0.1%
96.3%	48.9	49.0	0.1	0.2%
97.5%	48.6	48.7	0.1	0.2%
98.8%	48.6	48.4	-0.2	-0.4%
100.0%	48.6	48.4	-0.2	-0.4%

December

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.8	49.9	0.1	0.2%
1.2%	49.7	49.7	0.0	0.0%
2.5%	49.5	49.5	0.0	0.0%
3.7%	49.2	49.2	0.0	0.0%
4.9%	49.1	49.1	0.0	0.0%
6.2%	48.9	48.9	0.0	0.0%
7.4%	48.9	48.9	0.0	0.0%
8.6%	48.9	48.8	-0.1	-0.2%
9.9%	48.8	48.7	-0.1	-0.2%
11.1%	48.7	48.6	-0.1	-0.1%
12.3%	48.6	48.5	-0.1	-0.2%
13.6%	48.4	48.4	0.0	0.0%
14.8%	48.4	48.4	0.0	0.0%
16.0%	48.2	48.3	0.1	0.2%
17.3%	48.2	48.1	-0.1	-0.3%
18.5%	48.0	48.0	0.0	0.0%
19.8%	48.0	48.0	0.0	0.0%
21.0%	47.9	47.9	0.0	0.0%
22.2%	47.7	47.8	0.1	0.2%
23.5%	47.6	47.8	0.1	0.2%
24.7%	47.6	47.7	0.1	0.2%
25.9%	47.6	47.6	0.1	0.2%
27.2%	47.5	47.6	0.1	0.2%
28.4%	47.4	47.6	0.2	0.5%
29.6%	47.3	47.4	0.1	0.1%
30.9%	47.3	47.3	0.0	0.1%
32.1%	47.3	47.3	0.0	0.0%
33.3%	47.3	47.3	0.0	0.0%
34.6%	47.2	47.2	0.0	0.0%
35.8%	47.2	47.2	0.0	0.1%
37.0%	47.2	47.2	0.0	0.0%
38.3%	47.1	47.2	0.0	0.0%
39.5%	47.1	47.1	0.0	0.1%
40.7%	47.1	47.0	-0.1	-0.1%
42.0%	47.1	47.0	-0.1	-0.2%
43.2%	47.0	46.9	0.0	-0.1%
44.4%	46.9	46.9	0.0	0.1%
45.7%	46.8	46.9	0.0	0.1%
46.9%	46.8	46.8	0.0	0.1%
48.1%	46.8	46.8	0.0	0.1%
49.4%	46.8	46.8	0.0	0.0%
50.6%	46.8	46.8	0.0	0.0%
51.9%	46.8	46.8	0.0	0.0%
53.1%	46.8	46.7	0.0	-0.1%
54.3%	46.7	46.7	0.0	0.0%
55.6%	46.7	46.7	0.0	0.1%
56.8%	46.7	46.7	0.0	0.0%
58.0%	46.7	46.7	0.0	0.0%
59.3%	46.6	46.6	0.0	0.0%
60.5%	46.6	46.5	0.0	0.0%
61.7%	46.5	46.5	0.0	0.0%
63.0%	46.5	46.5	0.0	-0.1%
64.2%	46.5	46.5	0.0	0.1%
65.4%	46.4	46.5	0.0	0.1%
66.7%	46.4	46.4	0.0	0.1%
67.9%	46.4	46.3	-0.1	-0.1%
69.1%	46.4	46.3	-0.1	-0.1%
70.4%	46.4	46.3	0.0	-0.1%
71.6%	46.3	46.3	0.0	-0.1%
72.8%	46.3	46.3	0.0	0.0%
74.1%	46.3	46.3	0.0	0.0%
75.3%	46.3	46.2	0.0	0.0%
76.5%	46.2	46.2	0.0	0.0%
77.8%	46.2	46.2	-0.1	-0.1%
79.0%	46.2	46.2	-0.1	-0.1%
80.2%	46.1	46.1	0.0	0.0%
81.5%	46.1	46.1	0.0	0.0%
82.7%	46.1	46.0	0.0	0.0%
84.0%	46.0	46.0	-0.1	-0.1%
85.2%	46.0	45.9	0.0	-0.1%
86.4%	45.9	45.9	0.0	0.0%
87.7%	45.9	45.8	-0.1	-0.1%
88.9%	45.9	45.8	-0.1	-0.2%
90.1%	45.9	45.8	-0.1	-0.2%
91.4%	45.8	45.7	-0.1	-0.2%
92.6%	45.8	45.7	-0.1	-0.1%
93.8%	45.8	45.7	0.0	-0.1%
95.1%	45.7	45.5	-0.2	-0.3%
96.3%	45.6	45.5	-0.1	-0.3%
97.5%	45.6	45.2	-0.3	-0.8%
98.8%	45.0	45.0	0.0	0.1%
100.0%	45.0	45.0	0.0	0.1%

January

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	48.4	48.4	0.0	0.0%
1.2%	48.3	48.3	0.0	0.0%
2.5%	48.3	48.2	-0.1	-0.1%
3.7%	48.2	48.0	-0.2	-0.4%
4.9%	46.7	46.7	0.0	0.0%
6.2%	46.6	46.6	0.0	0.0%
7.4%	46.5	46.5	0.0	0.0%
8.6%	46.5	46.5	0.1	0.2%
9.9%	46.2	46.2	0.0	0.1%
11.1%	46.1	46.1	0.0	0.0%
12.3%	46.1	46.1	0.0	0.0%
13.6%	46.1	46.0	0.0	-0.1%
14.8%	46.1	46.0	0.0	-0.1%
16.0%	46.0	46.0	0.0	0.0%
17.3%	46.0	46.0	0.0	-0.1%
18.5%	45.8	45.8	0.0	0.0%
19.8%	45.8	45.8	0.0	0.0%
21.0%	45.7	45.7	0.0	-0.1%
22.2%	45.7	45.7	0.0	0.0%
23.5%	45.6	45.6	0.0	-0.1%
24.7%	45.6	45.6	0.0	0.0%
25.9%	45.5	45.5	0.0	0.0%
27.2%	45.5	45.5	0.0	0.0%
28.4%	45.5	45.5	0.0	0.0%
29.6%	45.5	45.4	0.0	-0.1%
30.9%	45.4	45.4	0.0	-0.1%
32.1%	45.4	45.4	0.0	-0.1%
33.3%	45.4	45.4	0.0	0.0%
34.6%	45.4	45.4	0.0	0.0%
35.8%	45.4	45.4	0.0	0.0%
37.0%	45.3	45.4	0.0	0.1%
38.3%	45.3	45.4	0.0	0.1%
39.5%	45.3	45.3	0.1	0.2%
40.7%	45.1	45.3	0.2	0.5%
42.0%	45.0	45.0	0.0	0.0%
43.2%	44.9	44.9	0.0	0.0%
44.4%	44.9	44.9	0.0	0.1%
45.7%	44.9	44.9	0.1	0.1%
46.9%	44.9	44.9	0.0	0.1%
48.1%	44.8	44.8	0.0	0.0%
49.4%	44.8	44.8	0.0	0.0%
50.6%	44.8	44.8	0.0	0.0%
51.9%	44.8	44.8	0.0	0.0%
53.1%	44.8	44.8	0.0	0.0%
54.3%	44.8	44.8	0.0	0.0%
55.6%	44.7	44.7	0.0	0.0%
56.8%	44.7	44.7	0.0	0.0%
58.0%	44.7	44.7	0.0	0.0%
59.3%	44.6	44.6	0.0	0.0%
60.5%	44.6	44.6	0.0	0.0%
61.7%	44.6	44.6	0.0	0.0%
63.0%	44.6	44.6	0.0	0.0%
64.2%	44.6	44.6	0.0	0.0%
65.4%	44.6	44.6	0.0	0.0%
66.7%	44.5	44.5	0.0	0.0%
67.9%	44.5	44.5	0.0	0.0%
69.1%	44.5	44.5	0.0	0.0%
70.4%	44.4	44.4	0.0	0.0%
71.6%	44.3	44.3	0.0	0.0%
72.8%	44.3	44.2	0.0	-0.1%
74.1%	44.3	44.2	-0.1	-0.1%
75.3%	44.2	44.2	-0.1	-0.1%
76.5%	44.2	44.2	-0.1	-0.1%
77.8%	44.2	44.2	0.0	-0.1%
79.0%	44.2	44.2	0.0	0.0%
80.2%	44.2	44.1	0.0	-0.1%
81.5%	44.2	44.1	0.0	-0.1%
82.7%	44.1	44.0	-0.1	-0.1%
84.0%	44.1	44.0	-0.1	-0.1%
85.2%	44.0	44.0	0.0	0.1%
86.4%	44.0	44.0	0.0	0.0%
87.7%	44.0	44.0	0.0	0.0%
88.9%	43.9	43.9	0.0	0.1%
90.1%	43.8	43.9	0.1	0.2%
91.4%	43.8	43.9	0.0	0.1%
92.6%	43.8	43.9	0.0	0.1%
93.8%	43.7	43.8	0.1	0.2%
95.1%	43.7	43.7	0.0	0.0%
96.3%	43.7	43.6	-0.1	-0.1%
97.5%	43.6	43.5	-0.1	-0.2%
98.8%	43.3	43.3	0.0	0.0%
100.0%	43.3	43.3	0.0	0.0%

Table SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.6	50.6	0.0	0.0%
1.2%	47.8	48.2	0.4	0.8%
2.5%	47.5	47.8	0.2	0.5%
3.7%	47.4	47.2	-0.2	-0.4%
4.9%	47.2	47.1	-0.1	-0.2%
6.2%	47.1	47.0	-0.1	-0.3%
7.4%	47.0	46.9	-0.1	-0.3%
8.6%	46.9	46.8	-0.1	-0.1%
9.9%	46.8	46.1	-0.7	-1.5%
11.1%	46.1	46.1	-0.1	-0.1%
12.3%	46.1	46.0	-0.1	-0.2%
13.6%	46.0	46.0	0.0	-0.1%
14.8%	46.0	46.0	0.0	-0.1%
16.0%	45.9	45.9	-0.1	-0.2%
17.3%	45.9	45.9	0.0	0.0%
18.5%	45.8	45.8	0.0	0.0%
19.8%	45.8	45.7	-0.1	-0.2%
21.0%	45.7	45.7	0.0	-0.1%
22.2%	45.7	45.7	0.0	0.0%
23.5%	45.7	45.6	0.0	-0.1%
24.7%	45.6	45.6	0.0	0.0%
25.9%	45.6	45.6	0.0	0.0%
27.2%	45.5	45.6	0.0	0.1%
28.4%	45.5	45.5	0.0	0.0%
29.6%	45.5	45.5	0.0	0.0%
30.9%	45.5	45.5	0.0	0.0%
32.1%	45.4	45.4	0.0	0.0%
33.3%	45.4	45.4	0.0	0.1%
34.6%	45.4	45.4	0.1	0.2%
35.8%	45.3	45.4	0.0	0.1%
37.0%	45.3	45.3	0.0	0.0%
38.3%	45.3	45.3	0.0	0.0%
39.5%	45.2	45.3	0.0	0.0%
40.7%	45.2	45.2	0.0	0.0%
42.0%	45.1	45.2	0.1	0.1%
43.2%	45.1	45.1	0.0	0.1%
44.4%	45.1	45.1	0.0	0.0%
45.7%	45.1	45.1	0.0	0.0%
46.9%	45.1	45.1	0.0	-0.1%
48.1%	45.1	45.0	-0.1	-0.1%
49.4%	45.1	45.0	-0.1	-0.1%
50.6%	45.0	45.0	0.0	0.0%
51.9%	45.0	45.0	0.0	0.0%
53.1%	45.0	45.0	0.0	0.0%
54.3%	45.0	45.0	0.0	0.0%
55.6%	44.9	45.0	0.0	0.1%
56.8%	44.9	45.0	0.0	0.1%
58.0%	44.9	44.9	0.0	-0.1%
59.3%	44.9	44.9	-0.1	-0.1%
60.5%	44.8	44.8	0.0	-0.1%
61.7%	44.8	44.8	0.0	0.0%
63.0%	44.8	44.8	0.0	0.0%
64.2%	44.7	44.7	0.0	-0.1%
65.4%	44.6	44.6	0.0	0.0%
66.7%	44.6	44.6	0.0	0.0%
67.9%	44.6	44.6	0.0	-0.1%
69.1%	44.6	44.6	0.0	-0.1%
70.4%	44.6	44.5	0.0	0.0%
71.6%	44.5	44.5	0.0	0.0%
72.8%	44.5	44.5	0.0	0.0%
74.1%	44.5	44.5	0.0	0.1%
75.3%	44.5	44.5	0.0	0.0%
76.5%	44.4	44.4	0.0	0.1%
77.8%	44.4	44.4	0.0	0.0%
79.0%	44.4	44.3	0.0	-0.1%
80.2%	44.4	44.3	0.0	-0.1%
81.5%	44.3	44.3	0.0	0.0%
82.7%	44.3	44.3	0.0	0.0%
84.0%	44.3	44.3	0.0	0.0%
85.2%	44.2	44.3	0.1	0.2%
86.4%	44.2	44.2	0.1	0.1%
87.7%	44.1	44.1	0.0	0.1%
88.9%	44.0	44.1	0.1	0.2%
90.1%	44.0	44.0	0.0	0.1%
91.4%	44.0	44.0	0.0	0.0%
92.6%	44.0	44.0	0.0	0.0%
93.8%	43.9	43.9	0.0	0.0%
95.1%	43.9	43.9	0.0	0.0%
96.3%	43.7	43.7	0.0	-0.1%
97.5%	43.6	43.6	0.0	-0.1%
98.8%	43.6	43.6	-0.1	-0.1%
100.0%	43.6	43.6	-0.1	-0.1%

March

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.0	49.0	0.0	0.0%
1.2%	48.5	48.5	0.0	0.0%
2.5%	48.5	48.5	0.0	0.0%
3.7%	48.4	48.1	-0.3	-0.7%
4.9%	48.1	48.1	0.0	0.0%
6.2%	48.1	48.1	0.0	0.0%
7.4%	48.0	47.9	-0.1	-0.2%
8.6%	47.9	47.9	0.0	-0.1%
9.9%	47.9	47.8	-0.1	-0.2%
11.1%	47.7	47.7	0.0	0.0%
12.3%	47.5	47.6	0.1	0.3%
13.6%	47.3	47.5	0.2	0.4%
14.8%	47.3	47.4	0.1	0.1%
16.0%	47.2	47.3	0.1	0.2%
17.3%	47.2	47.2	0.0	0.1%
18.5%	47.1	47.2	0.1	0.1%
19.8%	47.0	47.2	0.2	0.3%
21.0%	46.9	46.9	0.0	0.0%
22.2%	46.9	46.9	0.0	0.0%
23.5%	46.8	46.8	0.0	0.0%
24.7%	46.8	46.8	-0.1	-0.1%
25.9%	46.8	46.7	0.0	-0.1%
27.2%	46.8	46.7	0.0	-0.1%
28.4%	46.7	46.7	0.0	-0.1%
29.6%	46.7	46.7	0.0	0.0%
30.9%	46.7	46.7	0.0	0.0%
32.1%	46.7	46.7	0.0	0.0%
33.3%	46.7	46.6	0.0	0.0%
34.6%	46.7	46.6	-0.1	-0.1%
35.8%	46.6	46.6	0.0	0.0%
37.0%	46.6	46.6	0.0	-0.1%
38.3%	46.6	46.6	0.0	0.0%
39.5%	46.5	46.5	0.1	0.2%
40.7%	46.5	46.5	0.1	0.1%
42.0%	46.4	46.5	0.1	0.2%
43.2%	46.4	46.4	0.1	0.1%
44.4%	46.3	46.4	0.1	0.1%
45.7%	46.3	46.3	0.0	0.0%
46.9%	46.3	46.3	0.0	0.1%
48.1%	46.2	46.3	0.1	0.1%
49.4%	46.2	46.3	0.1	0.2%
50.6%	46.2	46.2	0.0	0.0%
51.9%	46.2	46.2	0.0	0.0%
53.1%	46.2	46.2	0.0	0.0%
54.3%	46.2	46.2	0.0	0.0%
55.6%	46.2	46.1	0.0	0.0%
56.8%	46.1	46.1	0.0	0.0%
58.0%	46.1	46.1	0.0	-0.1%
59.3%	46.1	46.1	0.0	0.0%
60.5%	46.1	46.1	0.0	0.0%
61.7%	46.1	46.1	0.0	0.0%
63.0%	46.1	46.1	0.0	0.0%
64.2%	46.1	46.1	0.0	0.0%
65.4%	46.0	46.0	0.0	0.1%
66.7%	46.0	46.0	0.0	0.0%
67.9%	46.0	46.0	0.0	0.1%
69.1%	45.9	46.0	0.0	0.0%
70.4%	45.9	45.9	0.0	-0.1%
71.6%	45.9	45.9	0.0	-0.1%
72.8%	45.9	45.9	0.0	-0.1%
74.1%	45.9	45.8	0.0	-0.1%
75.3%	45.8	45.8	0.0	-0.1%
76.5%	45.8	45.8	0.0	0.0%
77.8%	45.7	45.7	0.0	0.0%
79.0%	45.6	45.7	0.1	0.2%
80.2%	45.6	45.6	0.0	0.0%
81.5%	45.6	45.5	0.0	0.0%
82.7%	45.6	45.5	0.0	0.0%
84.0%	45.5	45.5	-0.1	-0.2%
85.2%	45.5	45.4	-0.1	-0.2%
86.4%	45.5	45.4	-0.1	-0.2%
87.7%	45.4	45.3	-0.1	-0.2%
88.9%	45.1	45.1	0.0	0.0%
90.1%	45.0	45.0	0.0	0.0%
91.4%	45.0	45.0	0.0	0.1%
92.6%	44.9	45.0	0.1	0.2%
93.8%	44.9	44.9	0.0	0.0%
95.1%	44.9	44.9	0.0	0.0%
96.3%	44.9	44.8	0.0	-0.1%
97.5%	44.8	44.8	0.0	0.0%
98.8%	44.7	44.7	0.0	0.0%
100.0%	44.7	44.7	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.8	50.8	0.0	0.0%
1.2%	50.8	50.8	0.0	0.0%
2.5%	50.7	50.0	-0.8	-1.5%
3.7%	50.0	49.9	0.0	-0.1%
4.9%	49.9	49.9	0.0	0.0%
6.2%	49.7	49.7	0.0	0.0%
7.4%	49.7	49.7	0.0	0.0%
8.6%	49.6	49.7	0.0	0.0%
9.9%	49.6	49.7	0.1	0.2%
11.1%	49.3	49.6	0.3	0.6%
12.3%	49.2	49.4	0.2	0.4%
13.6%	49.2	49.2	0.0	0.0%
14.8%	49.1	49.2	0.1	0.2%
16.0%	49.0	49.1	0.1	0.2%
17.3%	48.9	49.1	0.1	0.3%
18.5%	48.9	49.0	0.1	0.2%
19.8%	48.9	48.9	0.0	0.1%
21.0%	48.8	48.9	0.1	0.1%
22.2%	48.8	48.8	0.0	0.1%
23.5%	48.6	48.8	0.2	0.4%
24.7%	48.5	48.6	0.1	0.3%
25.9%	48.5	48.5	0.1	0.2%
27.2%	48.4	48.5	0.0	0.1%
28.4%	48.3	48.5	0.1	0.3%
29.6%	48.3	48.4	0.1	0.2%
30.9%	48.3	48.4	0.1	0.1%
32.1%	48.3	48.4	0.0	0.1%
33.3%	48.3	48.3	0.0	0.0%
34.6%	48.3	48.3	0.0	0.0%
35.8%	48.3	48.3	0.0	0.0%
37.0%	48.3	48.3	0.0	0.0%
38.3%	48.3	48.3	0.0	0.0%
39.5%	48.1	48.3	0.1	0.2%
40.7%	48.1	48.2	0.1	0.2%
42.0%	48.1	48.2	0.1	0.1%
43.2%	48.1	48.1	0.0	0.0%
44.4%	48.1	48.0	-0.1	-0.1%
45.7%	48.0	48.0	-0.1	-0.1%
46.9%	48.0	47.9	-0.1	-0.1%
48.1%	48.0	47.9	0.0	-0.1%
49.4%	47.9	47.9	0.0	-0.1%
50.6%	47.9	47.9	0.0	0.0%
51.9%	47.9	47.9	0.0	0.0%
53.1%	47.9	47.9	0.0	0.0%
54.3%	47.8	47.8	0.0	0.0%
55.6%	47.8	47.8	0.0	0.0%
56.8%	47.8	47.8	0.0	-0.1%
58.0%	47.8	47.7	-0.1	-0.1%
59.3%	47.8	47.7	-0.1	-0.2%
60.5%	47.7	47.7	-0.1	-0.1%
61.7%	47.7	47.7	0.0	-0.1%
63.0%	47.7	47.7	0.0	0.0%
64.2%	47.6	47.6	0.0	-0.1%
65.4%	47.6	47.6	0.0	0.0%
66.7%	47.6	47.6	0.0	-0.1%
67.9%	47.6	47.6	0.0	-0.1%
69.1%	47.6	47.5	0.0	-0.1%
70.4%	47.6	47.5	-0.1	-0.1%
71.6%	47.6	47.5	-0.1	-0.2%
72.8%	47.5	47.4	-0.1	-0.1%
74.1%	47.5	47.4	-0.1	-0.2%
75.3%	47.4	47.4	0.0	-0.1%
76.5%	47.4	47.3	0.0	0.0%
77.8%	47.3	47.3	0.0	-0.1%
79.0%	47.3	47.3	0.0	0.0%
80.2%	47.3	47.3	0.0	0.0%
81.5%	47.3	47.3	0.0	-0.1%
82.7%	47.2	47.2	0.0	0.0%
84.0%	47.1	47.2	0.0	0.0%
85.2%	47.1	47.1	0.0	0.1%
86.4%	47.1	47.1	0.0	0.1%
87.7%	47.0	47.1	0.1	0.2%
88.9%	46.9	46.9	0.0	0.0%
90.1%	46.7	46.9	0.2	0.3%
91.4%	46.6	46.7	0.0	0.1%
92.6%	46.6	46.4	-0.1	-0.3%
93.8%	46.4	46.4	0.0	0.0%
95.1%	46.4	46.4	0.0	0.0%
96.3%	46.4	46.3	-0.1	-0.3%
97.5%	46.1	46.2	0.1	0.2%
98.8%	46.0	46.2	0.1	0.3%
100.0%	46.0	46.2	0.1	0.3%

May

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.8	51.8	0.0	0.0%
1.2%	51.8	51.8	0.0	-0.1%
2.5%	51.7	51.7	0.0	0.0%
3.7%	51.5	51.3	-0.2	-0.3%
4.9%	51.3	51.0	-0.4	-0.7%
6.2%	51.0	51.0	0.0	-0.1%
7.4%	50.9	50.9	0.0	0.0%
8.6%	50.9	50.9	0.0	0.0%
9.9%	50.7	50.7	0.0	0.0%
11.1%	50.6	50.6	0.0	0.0%
12.3%	50.4	50.5	0.1	0.2%
13.6%	50.4	50.5	0.1	0.2%
14.8%	50.4	50.4	0.1	0.2%
16.0%	50.3	50.4	0.1	0.2%
17.3%	50.2	50.3	0.1	0.2%
18.5%	50.2	50.3	0.1	0.2%
19.8%	50.1	50.3	0.1	0.3%
21.0%	50.0	50.0	0.0	0.1%
22.2%	49.9	50.0	0.0	0.0%
23.5%	49.9	49.9	0.0	0.0%
24.7%	49.9	49.8	0.0	0.0%
25.9%	49.9	49.8	0.0	0.0%
27.2%	49.9	49.8	0.0	0.0%
28.4%	49.8	49.8	0.0	0.0%
29.6%	49.8	49.8	0.0	0.0%
30.9%	49.7	49.8	0.0	0.1%
32.1%	49.7	49.7	0.0	0.0%
33.3%	49.7	49.7	0.0	0.1%
34.6%	49.6	49.7	0.0	0.1%
35.8%	49.6	49.6	0.0	0.0%
37.0%	49.6	49.6	0.0	0.0%
38.3%	49.6	49.6	0.0	0.0%
39.5%	49.6	49.6	0.0	0.0%
40.7%	49.5	49.6	0.1	0.2%
42.0%	49.5	49.5	0.1	0.1%
43.2%	49.4	49.4	0.0	0.0%
44.4%	49.4	49.4	-0.1	-0.1%
45.7%	49.4	49.4	0.0	-0.1%
46.9%	49.4	49.3	0.0	0.0%
48.1%	49.4	49.3	0.0	-0.1%
49.4%	49.4	49.2	-0.1	-0.2%
50.6%	49.3	49.2	-0.1	-0.3%
51.9%	49.3	49.1	-0.2	-0.4%
53.1%	49.3	49.1	-0.1	-0.3%
54.3%	49.2	49.1	-0.1	-0.1%
55.6%	49.1	49.1	0.0	-0.1%
56.8%	49.1	49.1	0.0	0.0%
58.0%	49.0	49.0	0.0	0.0%
59.3%	49.0	49.0	0.0	0.0%
60.5%	49.0	48.9	0.0	-0.1%
61.7%	48.9	48.9	-0.1	-0.2%
63.0%	48.9	48.9	0.0	-0.1%
64.2%	48.8	48.8	0.0	0.0%
65.4%	48.8	48.8	0.0	-0.1%
66.7%	48.8	48.8	0.0	0.0%
67.9%	48.8	48.8	0.0	0.0%
69.1%	48.8	48.8	0.0	0.0%
70.4%	48.7	48.7	0.0	0.0%
71.6%	48.7	48.6	-0.1	-0.1%
72.8%	48.7	48.6	-0.1	-0.2%
74.1%	48.7	48.6	-0.1	-0.2%
75.3%	48.7	48.4	-0.2	-0.5%
76.5%	48.4	48.4	0.0	0.0%
77.8%	48.4	48.3	0.0	0.0%
79.0%	48.4	48.3	0.0	-0.1%
80.2%	48.3	48.3	0.0	0.0%
81.5%	48.2	48.2	0.0	0.0%
82.7%	48.2	48.2	0.0	0.0%
84.0%	48.1	48.2	0.1	0.2%
85.2%	48.1	48.2	0.1	0.2%
86.4%	48.1	48.1	0.0	0.0%
87.7%	48.1	48.1	0.0	0.0%
88.9%	48.0	48.0	0.0	0.0%
90.1%	48.0	48.0	0.0	0.0%
91.4%	47.9	48.0	0.1	0.1%
92.6%	47.9	47.8	-0.1	-0.2%
93.8%	47.8	47.6	-0.1	-0.3%
95.1%	47.6	47.5	-0.1	-0.2%
96.3%	47.5	47.5	0.0	0.0%
97.5%	47.4	47.3	-0.1	-0.2%
98.8%	47.3	47.3	0.0	0.0%
100.0%	47.3	47.3	0.0	0.0%

Table SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.7	57.8	0.0	0.1%
1.2%	55.5	55.5	0.0	0.0%
2.5%	55.3	55.3	0.0	-0.1%
3.7%	54.9	54.7	-0.1	-0.2%
4.9%	54.4	54.4	0.0	0.0%
6.2%	54.4	54.4	0.0	0.0%
7.4%	54.2	54.1	0.0	-0.1%
8.6%	54.0	54.0	0.1	0.1%
9.9%	53.8	53.9	0.1	0.2%
11.1%	53.3	53.3	0.0	0.0%
12.3%	53.2	53.2	0.0	0.0%
13.6%	53.2	53.2	0.0	0.0%
14.8%	53.1	53.0	-0.1	-0.1%
16.0%	53.1	52.9	-0.2	-0.3%
17.3%	53.0	52.9	-0.2	-0.3%
18.5%	52.8	52.8	0.0	0.0%
19.8%	52.7	52.8	0.1	0.1%
21.0%	52.7	52.6	-0.1	-0.1%
22.2%	52.6	52.5	0.0	0.0%
23.5%	52.4	52.3	-0.2	-0.3%
24.7%	52.3	52.2	-0.1	-0.2%
25.9%	52.2	52.2	-0.1	-0.1%
27.2%	52.2	52.1	-0.1	-0.1%
28.4%	52.2	52.1	0.0	-0.1%
29.6%	52.1	52.1	0.0	-0.1%
30.9%	52.1	52.0	-0.1	-0.1%
32.1%	52.1	52.0	0.0	-0.1%
33.3%	52.0	52.0	0.0	-0.1%
34.6%	52.0	51.9	-0.1	-0.2%
35.8%	52.0	51.9	-0.1	-0.2%
37.0%	51.9	51.8	-0.1	-0.2%
38.3%	51.9	51.8	-0.1	-0.2%
39.5%	51.9	51.8	-0.1	-0.2%
40.7%	51.7	51.7	0.0	0.0%
42.0%	51.7	51.7	0.0	0.0%
43.2%	51.6	51.7	0.0	0.0%
44.4%	51.6	51.6	0.0	0.1%
45.7%	51.6	51.5	-0.1	-0.1%
46.9%	51.5	51.5	0.0	0.0%
48.1%	51.5	51.5	0.0	-0.1%
49.4%	51.5	51.4	0.0	-0.1%
50.6%	51.4	51.4	0.0	0.0%
51.9%	51.4	51.4	0.0	0.0%
53.1%	51.4	51.4	0.0	-0.1%
54.3%	51.4	51.3	0.0	-0.1%
55.6%	51.4	51.3	0.0	-0.1%
56.8%	51.3	51.3	0.0	0.0%
58.0%	51.3	51.3	0.0	-0.1%
59.3%	51.3	51.3	-0.1	-0.1%
60.5%	51.2	51.1	-0.1	-0.2%
61.7%	51.1	51.1	0.0	0.0%
63.0%	51.0	51.1	0.1	0.1%
64.2%	51.0	51.0	0.0	0.0%
65.4%	51.0	50.9	0.0	0.0%
66.7%	50.9	50.9	0.0	0.0%
67.9%	50.9	50.9	0.0	0.0%
69.1%	50.9	50.8	-0.1	-0.2%
70.4%	50.9	50.8	-0.1	-0.2%
71.6%	50.9	50.8	-0.1	-0.2%
72.8%	50.8	50.8	-0.1	-0.1%
74.1%	50.8	50.8	0.0	-0.1%
75.3%	50.7	50.7	0.0	-0.1%
76.5%	50.7	50.4	-0.3	-0.5%
77.8%	50.5	50.4	-0.1	-0.2%
79.0%	50.4	50.4	0.0	-0.1%
80.2%	50.4	50.3	0.0	0.0%
81.5%	50.4	50.3	0.0	0.0%
82.7%	50.3	50.3	0.0	0.0%
84.0%	50.3	50.3	-0.1	-0.2%
85.2%	50.3	50.2	0.0	0.0%
86.4%	50.2	50.2	0.0	0.1%
87.7%	50.2	50.2	0.1	0.1%
88.9%	50.1	50.0	-0.1	-0.2%
90.1%	50.1	50.0	-0.1	-0.2%
91.4%	50.1	49.9	-0.1	-0.2%
92.6%	49.7	49.7	0.0	0.0%
93.8%	49.7	49.7	0.0	0.0%
95.1%	49.7	49.7	0.0	0.0%
96.3%	49.7	49.6	0.0	-0.1%
97.5%	49.6	49.5	-0.2	-0.4%
98.8%	49.4	49.3	-0.1	-0.2%
100.0%	49.4	49.3	-0.1	-0.2%

July

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.6	57.7	0.1	0.3%
1.2%	57.3	57.3	0.0	0.0%
2.5%	57.2	57.1	0.0	-0.1%
3.7%	57.1	57.0	-0.1	-0.1%
4.9%	57.0	57.0	0.0	0.0%
6.2%	57.0	57.0	0.0	0.0%
7.4%	56.9	56.9	0.0	0.0%
8.6%	56.9	56.7	-0.2	-0.4%
9.9%	56.7	56.7	0.0	0.0%
11.1%	56.6	56.6	0.0	0.0%
12.3%	56.6	56.4	-0.1	-0.3%
13.6%	56.4	56.3	0.0	-0.1%
14.8%	56.2	56.3	0.1	0.3%
16.0%	56.2	56.3	0.1	0.2%
17.3%	56.2	56.2	0.0	0.0%
18.5%	56.2	56.2	0.0	0.0%
19.8%	56.1	56.2	0.0	0.0%
21.0%	56.0	56.1	0.1	0.2%
22.2%	56.0	56.0	-0.1	-0.1%
23.5%	56.0	56.0	0.0	-0.1%
24.7%	56.0	55.8	-0.1	-0.2%
25.9%	55.9	55.8	-0.1	-0.2%
27.2%	55.8	55.7	-0.1	-0.2%
28.4%	55.8	55.7	-0.1	-0.1%
29.6%	55.7	55.7	-0.1	-0.1%
30.9%	55.7	55.6	-0.1	-0.1%
32.1%	55.7	55.6	0.0	0.0%
33.3%	55.6	55.6	0.0	0.0%
34.6%	55.6	55.6	0.0	0.0%
35.8%	55.6	55.6	0.0	0.0%
37.0%	55.5	55.6	0.0	0.0%
38.3%	55.5	55.5	0.0	0.0%
39.5%	55.5	55.5	0.0	0.0%
40.7%	55.5	55.5	0.0	0.1%
42.0%	55.4	55.5	0.1	0.1%
43.2%	55.4	55.5	0.1	0.1%
44.4%	55.4	55.4	0.0	0.0%
45.7%	55.3	55.3	0.0	0.0%
46.9%	55.3	55.3	0.0	0.0%
48.1%	55.2	55.2	0.0	0.1%
49.4%	55.2	55.2	0.0	0.0%
50.6%	55.2	55.1	-0.1	-0.1%
51.9%	55.2	55.1	-0.1	-0.1%
53.1%	55.2	55.1	-0.1	-0.1%
54.3%	55.2	55.1	0.0	-0.1%
55.6%	55.1	55.1	-0.1	-0.1%
56.8%	55.1	55.0	-0.1	-0.2%
58.0%	55.1	55.0	-0.1	-0.2%
59.3%	55.0	55.0	0.0	0.0%
60.5%	55.0	55.0	0.0	0.0%
61.7%	55.0	55.0	0.0	0.0%
63.0%	55.0	54.9	0.0	0.0%
64.2%	55.0	54.9	0.0	-0.1%
65.4%	54.9	54.8	-0.1	-0.2%
66.7%	54.9	54.7	-0.1	-0.2%
67.9%	54.8	54.7	-0.1	-0.2%
69.1%	54.8	54.7	-0.1	-0.2%
70.4%	54.8	54.6	-0.2	-0.3%
71.6%	54.7	54.6	-0.1	-0.2%
72.8%	54.7	54.6	-0.1	-0.1%
74.1%	54.6	54.5	-0.1	-0.2%
75.3%	54.6	54.5	-0.1	-0.2%
76.5%	54.5	54.4	0.0	-0.1%
77.8%	54.5	54.4	-0.1	-0.1%
79.0%	54.5	54.3	-0.1	-0.2%
80.2%	54.5	54.3	-0.2	-0.4%
81.5%	54.4	54.2	-0.2	-0.3%
82.7%	54.3	54.2	-0.2	-0.4%
84.0%	54.2	54.1	-0.1	-0.2%
85.2%	54.2	54.1	-0.1	-0.2%
86.4%	54.2	54.0	-0.2	-0.3%
87.7%	54.2	54.0	-0.2	-0.3%
88.9%	54.1	54.0	-0.1	-0.3%
90.1%	54.0	53.9	-0.1	-0.2%
91.4%	54.0	53.9	-0.1	-0.3%
92.6%	54.0	53.8	-0.2	-0.3%
93.8%	53.9	53.8	-0.2	-0.3%
95.1%	53.8	53.7	0.0	-0.1%
96.3%	53.7	53.6	-0.1	-0.2%
97.5%	53.4	53.3	-0.1	-0.2%
98.8%	53.2	53.3	0.0	0.1%
100.0%	53.2	53.3	0.0	0.1%

August

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.6	59.8	-0.9	-1.4%
1.2%	58.0	58.0	-0.1	-0.1%
2.5%	57.4	57.5	0.1	0.2%
3.7%	57.4	57.3	-0.1	-0.2%
4.9%	56.9	57.0	0.1	0.1%
6.2%	56.9	57.0	0.1	0.2%
7.4%	56.8	56.8	0.0	-0.1%
8.6%	56.7	56.7	0.0	0.0%
9.9%	56.7	56.7	0.0	0.1%
11.1%	56.7	56.7	0.0	0.0%
12.3%	56.7	56.7	0.0	0.0%
13.6%	56.7	56.7	0.0	0.0%
14.8%	56.5	56.7	0.1	0.2%
16.0%	56.5	56.6	0.1	0.2%
17.3%	56.5	56.4	0.0	-0.1%
18.5%	56.5	56.4	0.0	-0.1%
19.8%	56.5	56.4	-0.1	-0.1%
21.0%	56.3	56.2	-0.1	-0.2%
22.2%	56.3	56.2	-0.1	-0.2%
23.5%	56.3	56.2	-0.1	-0.1%
24.7%	56.2	56.2	0.0	0.0%
25.9%	56.1	56.2	0.0	0.0%
27.2%	56.1	56.1	0.0	-0.1%
28.4%	56.1	56.1	0.0	0.0%
29.6%	56.0	56.0	-0.1	-0.1%
30.9%	56.0	55.9	-0.1	-0.2%
32.1%	56.0	55.9	-0.1	-0.1%
33.3%	56.0	55.8	-0.2	-0.4%
34.6%	55.9	55.7	-0.1	-0.3%
35.8%	55.8	55.7	-0.1	-0.2%
37.0%	55.8	55.7	-0.1	-0.2%
38.3%	55.7	55.6	-0.1	-0.1%
39.5%	55.7	55.6	-0.1	-0.2%
40.7%	55.6	55.6	-0.1	-0.1%
42.0%	55.6	55.6	-0.1	-0.1%
43.2%	55.6	55.5	-0.1	-0.3%
44.4%	55.6	55.4	-0.1	-0.2%
45.7%	55.6	55.4	-0.1	-0.2%
46.9%	55.5	55.3	-0.2	-0.4%
48.1%	55.5	55.3	-0.2	-0.4%
49.4%	55.4	55.3	-0.1	-0.2%
50.6%	55.3	55.3	-0.1	-0.1%
51.9%	55.3	55.2	-0.1	-0.1%
53.1%	55.3	55.2	-0.1	-0.1%
54.3%	55.3	55.2	-0.1	-0.1%
55.6%	55.3	55.1	-0.2	-0.3%
56.8%	55.3	55.1	-0.2	-0.3%
58.0%	55.2	55.1	-0.2	-0.3%
59.3%	55.2	55.0	-0.2	-0.4%
60.5%	55.2	54.9	-0.3	-0.5%
61.7%	55.1	54.9	-0.2	-0.3%
63.0%	55.0	54.9	-0.1	-0.3%
64.2%	55.0	54.9	-0.1	-0.3%
65.4%	54.9	54.8	-0.1	-0.2%
66.7%	54.9	54.8	-0.1	-0.1%
67.9%	54.9	54.8	-0.1	-0.2%
69.1%	54.9	54.7	-0.2	-0.3%
70.4%	54.8	54.7	-0.2	-0.3%
71.6%	54.8	54.7	-0.2	-0.3%
72.8%	54.7	54.7	-0.1	-0.1%
74.1%	54.7	54.6	-0.1	-0.2%
75.3%	54.7	54.5	-0.1	-0.3%
76.5%	54.6	54.5	-0.2	-0.3%
77.8%	54.5	54.4	-0.1	-0.2%
79.0%	54.5	54.4	-0.1	-0.2%
80.2%	54.5	54.3	-0.2	-0.4%
81.5%	54.5	54.3	-0.2	-0.4%
82.7%	54.4	54.3	-0.2	-0.3%
84.0%	54.4	54.2	-0.2	-0.4%
85.2%	54.4	54.2	-0.2	-0.4%
86.4%	54.4	54.1	-0.3	-0.5%
87.7%	54.4	54.0	-0.3	-0.6%
88.9%	54.3	54.0	-0.3	-0.6%
90.1%	54.3	54.0	-0.3	-0.6%
91.4%	54.2	54.0	-0.3	-0.5%
92.6%	54.2	53.9	-0.4	-0.7%
93.8%	54.2	53.7	-0.5	-0.8%
95.1%	54.2	53.7	-0.4	-0.8%
96.3%	54.1	53.6	-0.5	-0.9%
97.5%	53.7	53.6	-0.1	-0.3%
98.8%	53.5	53.5	0.0	-0.1%
100.0%	53.5	53.5	0.0	-0.1%

September

Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.8	61.6	-1.2	-1.8%
1.2%	58.2	58.1	-0.2	-0.3%
2.5%	57.4	57.4	0.0	0.0%
3.7%	57.3	57.3	0.0	0.0%
4.9%	56.0	55.9	-0.1	-0.2%
6.2%	55.9	55.8	-0.1	-0.2%
7.4%	55.9	55.6	-0.3	-0.6%
8.6%	55.5	55.3	-0.1	-0.3%
9.9%	55.3	55.3	0.0	0.1%
11.1%	55.2	55.3	0.1	0.1%
12.3%	55.2	55.2	0.0	0.0%
13.6%	55.2	55.2	0.0	-0.1%
14.8%	55.1	55.1	0.0	0.0%
16.0%	55.0	55.1	0.1	0.2%
17.3%	55.0	55.1	0.1	0.2%
18.5%	54.9	54.9	0.0	0.1%
19.8%	54.9	54.9	0.0	0.0%
21.0%	54.9	54.7	-0.1	-0.2%
22.2%	54.6	54.7	0.1	0.2%
23.5%	54.5	54.6	0.1	0.2%
24.7%	54.5	54.5	0.0	0.1%
25.9%	54.4	54.5	0.1	0.2%
27.2%	54.3	54.1	-0.2	-0.4%
28.4%	54.1	54.0	-0.1	-0.2%
29.6%	54.1	54.0	-0.1	-0.2%
30.9%	54.1	53.9	-0.2	-0.3%
32.1%	54.0	53.8	-0.2	-0.3%
33.3%	53.9	53.8	-0.1	-0.2%
34.6%	53.9	53.7	-0.2	-0.3%
35.8%	53.9	53.7	-0.2	-0.3%
37.0%	53.8	53.7	-0.1	-0.3%
38.3%	53.7	53.6	-0.1	-0.1%
39.5%	53.7	53.5	-0.2	-0.3%
40.7%	53.7	53.4	-0.2	-0.4%
42.0%	53.6	53.4	-0.3	-0.5%
43.2%	53.6	53.3	-0.3	-0.6%
44.4%	53.5	53.3	-0.2	-0.4%
45.7%	53.5	53.2	-0.2	-0.5%
46.9%	53.5	53.2	-0.2	-0.4%
48.1%	53.4	53.2	-0.3	-0.5%
49.4%	53.3	53.2	-0.2	-0.4%
50.6%	53.2	53.1	-0.1	-0.2%
51.9%	53.2	53.1	-0.1	-0.2%
53.1%	53.2	53.1	-0.1	-0.2%
54.3%	53.1	52.9	-0.2	-0.4%
55.6%	53.1	52.9	-0.2	-0.4%
56.8%	53.0	52.9	-0.2	-0.3%
58.0%	53.0	52.8	-0.1	-0.3%
59.3%	52.9	52.8	-0.1	-0.2%
60.5%	52.9	52.8	-0.1	-0.2%
61.7%	52.9	52.7	-0.2	-0.3%
63.0%	52.8	52.7	-0.1	-0.2%
64.2%	52.5	52.6	0.1	0.2%
65.4%	52.5	52.4	-0.1	-0.1%
66.7%	52.4	52.4	0.0	0.0%
67.9%	52.4	52.4	0.0	0.0%
69.1%	52.4	52.4	0.0	-0.1%
70.4%	52.4	52.3	-0.1	-0.2%
71.6%	52.4	52.3	-0.2	-0.3%
72.8%	52.4	52.2	-0.2	-0.3%
74.1%	52.4	52.2	-0.2	-0.4%
75.3%	52.4	52.1	-0.2	-0.5%
76.5%	52.4	52.1	-0.2	-0.4%
77.8%	52.3	52.1	-0.2	-0.3%
79.0%	52.2	52.1	-0.1	-0.2%
80.2%	52.1	52.0	-0.1	-0.2%
81.5%	52.1	52.0	-0.1	-0.2%
82.7%	52.1	52.0	-0.1	-0.2%
84.0%	52.0	52.0	-0.1	-0.1%
85.2%	52.0	51.8	-0.1	-0.2%
86.4%	51.9	51.8	-0.1	-0.2%
87.7%	51.9	51.8	-0.1	-0.2%
88.9%	51.8	51.7	-0.2	-0.3%
90.1%	51.8	51.6	-0.2	-0.4%
91.4%	51.8	51.6	-0.2	-0.5%
92.6%	51.6	51.5	-0.1	-0.2%
93.8%	51.6	51.3	-0.3	-0.6%
95.1%	51.3	51.2	-0.1	-0.3%
96.3%	51.3	51.1	-0.2	-0.4%
97.5%	51.2	51.1	-0.1	-0.1%
98.8%	51.0	51.0	0.0	0.0%
100.0%	51.0	51.0	0.0	0.0%

Table SQ14-1b

Clear Creek at Igo, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.0	58.4	-0.6	-1.0%
1.2%	56.9	56.9	0.1	0.2%
2.5%	56.6	56.6	-0.1	-0.1%
3.7%	56.3	56.3	0.0	0.0%
4.9%	56.2	56.2	0.0	0.0%
6.2%	55.9	55.8	0.0	-0.1%
7.4%	55.7	55.7	-0.1	-0.1%
8.6%	55.5	55.6	0.0	0.0%
9.9%	55.5	55.4	-0.1	-0.3%
11.1%	55.5	55.4	-0.1	-0.3%
12.3%	55.4	55.3	-0.1	-0.1%
13.6%	55.4	55.3	-0.1	-0.1%
14.8%	55.3	55.3	0.0	0.0%
16.0%	55.0	55.3	0.2	0.4%
17.3%	55.0	55.2	0.2	0.4%
18.5%	55.0	55.1	0.1	0.3%
19.8%	54.9	55.1	0.1	0.2%
21.0%	54.9	54.9	0.1	0.1%
22.2%	54.8	54.8	0.0	-0.1%
23.5%	54.8	54.8	0.0	-0.1%
24.7%	54.7	54.7	0.0	0.0%
25.9%	54.7	54.5	-0.2	-0.3%
27.2%	54.6	54.5	-0.1	-0.1%
28.4%	54.5	54.4	-0.1	-0.2%
29.6%	54.5	54.4	-0.1	-0.2%
30.9%	54.4	54.3	-0.1	-0.2%
32.1%	54.4	54.3	-0.1	-0.2%
33.3%	54.4	54.3	-0.1	-0.1%
34.6%	54.3	54.3	-0.1	-0.1%
35.8%	54.3	54.3	0.0	0.0%
37.0%	54.3	54.2	-0.1	-0.1%
38.3%	54.3	54.1	-0.1	-0.3%
39.5%	54.2	54.1	-0.1	-0.2%
40.7%	54.2	54.1	-0.2	-0.3%
42.0%	54.2	54.0	-0.1	-0.2%
43.2%	54.1	54.0	0.0	0.0%
44.4%	54.0	54.0	0.0	0.0%
45.7%	54.0	54.0	0.0	0.0%
46.9%	54.0	53.9	-0.1	-0.2%
48.1%	54.0	53.9	-0.1	-0.1%
49.4%	53.9	53.9	0.0	0.0%
50.6%	53.9	53.8	-0.1	-0.2%
51.9%	53.9	53.8	-0.1	-0.2%
53.1%	53.9	53.7	-0.2	-0.3%
54.3%	53.9	53.6	-0.3	-0.5%
55.6%	53.7	53.6	-0.1	-0.1%
56.8%	53.6	53.6	0.0	-0.1%
58.0%	53.6	53.5	-0.1	-0.1%
59.3%	53.6	53.5	-0.1	-0.1%
60.5%	53.5	53.4	-0.1	-0.2%
61.7%	53.5	53.3	-0.1	-0.2%
63.0%	53.4	53.3	-0.1	-0.2%
64.2%	53.4	53.3	-0.1	-0.3%
65.4%	53.4	53.2	-0.1	-0.3%
66.7%	53.4	53.2	-0.1	-0.2%
67.9%	53.3	53.2	-0.1	-0.1%
69.1%	53.3	53.1	-0.1	-0.2%
70.4%	53.2	53.1	-0.1	-0.1%
71.6%	53.2	53.1	-0.1	-0.1%
72.8%	53.2	53.1	-0.1	-0.1%
74.1%	53.1	53.1	0.0	-0.1%
75.3%	53.1	53.1	-0.1	-0.1%
76.5%	53.1	53.0	-0.1	-0.1%
77.8%	53.1	53.0	-0.1	-0.2%
79.0%	53.1	52.8	-0.2	-0.4%
80.2%	53.1	52.7	-0.3	-0.6%
81.5%	53.0	52.7	-0.3	-0.6%
82.7%	52.9	52.7	-0.3	-0.5%
84.0%	52.7	52.6	-0.1	-0.2%
85.2%	52.7	52.6	-0.1	-0.2%
86.4%	52.7	52.6	-0.1	-0.2%
87.7%	52.7	52.5	-0.1	-0.2%
88.9%	52.7	52.5	-0.2	-0.4%
90.1%	52.6	52.5	-0.2	-0.4%
91.4%	52.5	52.4	-0.1	-0.2%
92.6%	52.5	52.4	-0.1	-0.1%
93.8%	52.5	52.4	-0.1	-0.2%
95.1%	52.5	52.3	-0.1	-0.3%
96.3%	52.4	52.2	-0.2	-0.4%
97.5%	52.4	52.2	-0.2	-0.4%
98.8%	52.0	52.0	0.0	0.0%
100.0%	51.4	51.2	-0.2	-0.4%

July to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.1	59.4	-0.8	-1.3%
1.2%	57.4	57.3	0.0	-0.1%
2.5%	57.1	57.0	-0.1	-0.1%
3.7%	56.8	56.8	0.0	0.0%
4.9%	56.8	56.8	0.0	0.0%
6.2%	56.6	56.7	0.1	0.2%
7.4%	56.5	56.5	-0.1	-0.1%
8.6%	56.4	56.2	-0.1	-0.2%
9.9%	56.2	56.2	0.0	0.1%
11.1%	56.2	56.1	0.0	-0.1%
12.3%	56.1	56.1	0.1	0.1%
13.6%	55.9	56.1	0.2	0.3%
14.8%	55.9	56.1	0.2	0.4%
16.0%	55.9	55.8	-0.1	-0.2%
17.3%	55.8	55.8	-0.1	-0.1%
18.5%	55.7	55.8	0.0	0.0%
19.8%	55.7	55.6	-0.1	-0.1%
21.0%	55.7	55.6	-0.1	-0.1%
22.2%	55.6	55.6	0.0	0.0%
23.5%	55.5	55.5	0.0	0.0%
24.7%	55.5	55.5	0.0	0.0%
25.9%	55.4	55.5	0.1	0.2%
27.2%	55.3	55.4	0.0	0.0%
28.4%	55.3	55.3	0.0	0.0%
29.6%	55.3	55.3	0.0	0.0%
30.9%	55.3	55.2	-0.1	-0.1%
32.1%	55.2	55.1	-0.1	-0.2%
33.3%	55.1	55.1	-0.1	-0.1%
34.6%	55.1	55.1	-0.1	-0.1%
35.8%	55.1	55.1	0.0	0.0%
37.0%	55.0	55.1	0.0	0.0%
38.3%	55.0	55.0	0.0	0.0%
39.5%	55.0	54.9	-0.1	-0.2%
40.7%	54.9	54.8	-0.1	-0.2%
42.0%	54.9	54.8	-0.1	-0.2%
43.2%	54.9	54.8	-0.1	-0.2%
44.4%	54.9	54.8	-0.1	-0.2%
45.7%	54.9	54.7	-0.1	-0.2%
46.9%	54.8	54.7	-0.1	-0.3%
48.1%	54.8	54.7	-0.1	-0.3%
49.4%	54.8	54.6	-0.2	-0.3%
50.6%	54.8	54.5	-0.2	-0.4%
51.9%	54.7	54.5	-0.2	-0.4%
53.1%	54.6	54.5	-0.1	-0.2%
54.3%	54.5	54.4	-0.1	-0.1%
55.6%	54.5	54.3	-0.1	-0.3%
56.8%	54.4	54.3	-0.2	-0.3%
58.0%	54.4	54.2	-0.2	-0.4%
59.3%	54.4	54.1	-0.3	-0.5%
60.5%	54.3	54.1	-0.1	-0.2%
61.7%	54.2	54.1	-0.1	-0.2%
63.0%	54.2	54.1	-0.1	-0.2%
64.2%	54.2	54.1	-0.2	-0.3%
65.4%	54.2	54.0	-0.1	-0.3%
66.7%	54.1	54.0	-0.1	-0.2%
67.9%	54.1	53.9	-0.2	-0.4%
69.1%	54.0	53.9	-0.1	-0.2%
70.4%	54.0	53.9	-0.1	-0.2%
71.6%	53.9	53.9	-0.1	-0.1%
72.8%	53.9	53.8	-0.1	-0.2%
74.1%	53.9	53.8	-0.1	-0.2%
75.3%	53.9	53.8	0.0	-0.1%
76.5%	53.8	53.8	-0.1	-0.2%
77.8%	53.8	53.7	-0.1	-0.2%
79.0%	53.8	53.6	-0.2	-0.3%
80.2%	53.8	53.5	-0.2	-0.4%
81.5%	53.7	53.5	-0.3	-0.5%
82.7%	53.7	53.4	-0.2	-0.4%
84.0%	53.6	53.4	-0.2	-0.4%
85.2%	53.6	53.4	-0.2	-0.4%
86.4%	53.5	53.3	-0.2	-0.3%
87.7%	53.5	53.3	-0.2	-0.4%
88.9%	53.5	53.3	-0.2	-0.3%
90.1%	53.4	53.3	-0.2	-0.3%
91.4%	53.4	53.2	-0.2	-0.5%
92.6%	53.4	53.2	-0.2	-0.5%
93.8%	53.3	53.1	-0.2	-0.3%
95.1%	53.3	53.1	-0.2	-0.3%
96.3%	53.3	53.1	-0.1	-0.3%
97.5%	53.1	53.1	0.0	0.0%
98.8%	52.9	52.8	-0.1	-0.1%
100.0%	52.4	52.1	-0.3	-0.5%

August to September				
Percent Exceedance Probability (%)	WSIP 2030 Without Project Monthly Temperature (DEGF)	WSIP 2030 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.7	60.7	-1.0	-1.6%
1.2%	57.7	57.7	0.0	-0.1%
2.5%	57.6	57.4	-0.1	-0.2%
3.7%	57.1	57.1	0.0	0.0%
4.9%	56.7	56.7	0.0	0.1%
6.2%	56.3	56.4	0.1	0.1%
7.4%	56.2	56.1	-0.1	-0.1%
8.6%	56.1	56.1	0.0	0.0%
9.9%	56.1	56.0	0.0	0.0%
11.1%	56.0	56.0	0.0	0.0%
12.3%	56.0	55.9	-0.1	-0.1%
13.6%	55.8	55.9	0.1	0.2%
14.8%	55.8	55.9	0.1	0.2%
16.0%	55.8	55.8	0.1	0.1%
17.3%	55.8	55.8	0.0	0.1%
18.5%	55.7	55.6	-0.1	-0.1%
19.8%	55.5	55.5	0.0	0.0%
21.0%	55.5	55.5	0.0	0.0%
22.2%	55.5	55.5	0.0	0.0%
23.5%	55.4	55.5	0.1	0.1%
24.7%	55.4	55.3	-0.1	-0.2%
25.9%	55.3	55.2	-0.2	-0.3%
27.2%	55.1	55.1	0.1	0.1%
28.4%	55.1	55.1	0.0	0.0%
29.6%	55.0	55.1	0.1	0.1%
30.9%	55.0	54.9	-0.1	-0.2%
32.1%	55.0	54.8	-0.2	-0.3%
33.3%	54.9	54.8	-0.1	-0.2%
34.6%	54.8	54.8	-0.1	-0.1%
35.8%	54.8	54.7	-0.1	-0.1%
37.0%	54.7	54.7	-0.1	-0.1%
38.3%	54.7	54.6	-0.1	-0.1%
39.5%	54.7	54.6	-0.1	-0.1%
40.7%	54.7	54.5	-0.2	-0.3%
42.0%	54.7	54.5	-0.2	-0.4%
43.2%	54.6	54.4	-0.3	-0.5%
44.4%	54.6	54.4	-0.3	-0.5%
45.7%	54.5	54.3	-0.2	-0.4%
46.9%	54.5	54.3	-0.2	-0.3%
48.1%	54.4	54.3	-0.2	-0.3%
49.4%	54.4	54.2	-0.1	-0.2%
50.6%	54.3	54.2	-0.1	-0.2%
51.9%	54.3	54.0	-0.2	-0.4%
53.1%	54.3	54.0	-0.2	-0.4%
54.3%	54.2	54.0	-0.2	-0.4%
55.6%	54.2	54.0	-0.2	-0.3%
56.8%	54.1	53.9	-0.2	-0.3%
58.0%	54.1	53.9	-0.2	-0.3%
59.3%	54.1	53.9	-0.2	-0.4%
60.5%	53.9	53.9	-0.1	-0.2%
61.7%	53.9	53.8	-0.1	-0.3%
63.0%	53.8	53.7	-0.1	-0.2%
64.2%	53.8	53.7	-0.1	-0.1%
65.4%	53.8	53.6	-0.2	-0.4%
66.7%	53.8	53.5	-0.2	-0.4%
67.9%	53.6	53.5	-0.1	-0.2%
69.1%	53.6	53.5	-0.1	-0.2%
70.4%	53.5	53.4	-0.1	-0.2%
71.6%	53.5	53.4	-0.1	-0.2%
72.8%	53.5	53.4	-0.1	-0.2%
74.1%	53.5	53.4	-0.1	-0.2%
75.3%	53.5	53.3	-0.2	-0.3%
76.5%	53.5	53.2	-0.3	-0.5%
77.8%	53.4	53.2	-0.2	-0.4%
79.0%	53.4	53.2	-0.2	-0.5%
80.2%	53.4	53.2	-0.2	-0.4%
81.5%	53.4	53.2	-0.2	-0.4%
82.7%	53.3	53.2	-0.2	-0.3%
84.0%	53.3	53.2	-0.1	-0.2%
85.2%	53.3	53.1	-0.1	-0.3%
86.4%	53.3	53.0	-0.3	-0.5%
87.7%	53.2	53.0	-0.3	-0.5%
88.9%	53.2	53.0	-0.3	-0.5%
90.1%	53.1	52.9	-0.2	-0.3%
91.4%	53.0	52.9	-0.1	-0.3%
92.6%	52.9	52.8	-0.2	-0.3%
93.8%	52.9	52.6	-0.3	-0.5%
95.1%	52.8	52.6	-0.2	-0.5%
96.3%	52.8	52.6	-0.3	-0.5%
97.5%	52.7	52.5	-0.2	-0.4%
98.8%	52.4	52.4	0.0	0.0%
100.0%	52.0	51.7	-0.3	-0.5%

River Temperature Modeling

Summary Tables and Bar Charts

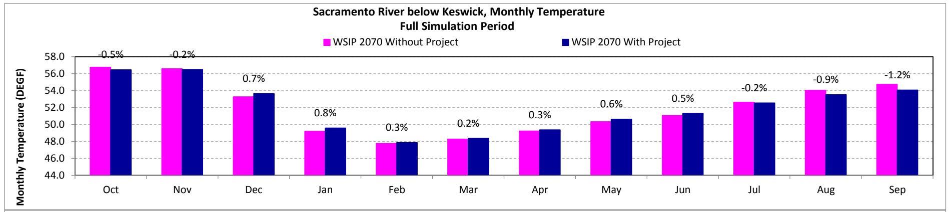
Table SQ2-1a
Sacramento River below Keswick, Monthly Temperature
Long-term Average and Average by Water Year Type

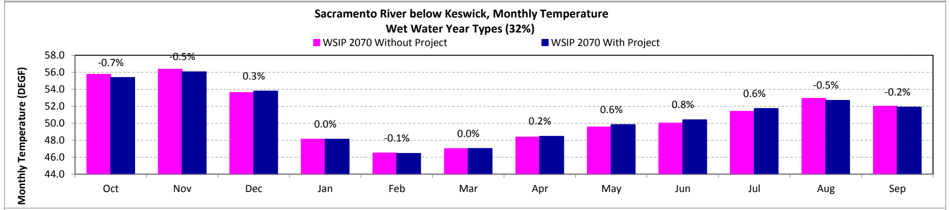
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	56.8	56.6	53.3	49.2	47.8	48.3	49.2	50.3	51.1	52.6	54.0	54.7
WSIP 2070 With Project	56.5	56.5	53.6	49.6	47.9	48.4	49.4	50.6	51.3	52.5	53.5	54.1
Difference	-0.3	-0.1	0.4	0.4	0.1	0.1	0.1	0.3	0.3	-0.1	-0.5	-0.7
Percent Difference[3]	-0.5%	-0.2%	0.7%	0.8%	0.3%	0.2%	0.3%	0.6%	0.5%	-0.2%	-0.9%	-1.2%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	55.7	56.4	53.6	48.1	46.5	47.0	48.4	49.6	50.0	51.4	52.9	52.0
WSIP 2070 With Project	55.4	56.1	53.8	48.1	46.4	47.0	48.5	49.8	50.4	51.7	52.7	51.9
Difference	-0.4	-0.3	0.2	0.0	0.0	0.0	0.1	0.3	0.4	0.3	-0.2	-0.1
Percent Difference	-0.7%	-0.5%	0.3%	0.0%	-0.1%	0.0%	0.2%	0.6%	0.8%	0.6%	-0.5%	-0.2%
Above Normal (13%)												
WSIP 2070 Without Project	55.0	55.9	53.8	49.5	47.7	48.0	49.2	50.1	50.4	51.4	52.5	52.3
WSIP 2070 With Project	54.8	55.8	54.0	49.6	47.7	47.9	49.2	50.3	50.6	51.4	52.3	52.8
Difference	-0.2	-0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.2	0.0	-0.2	0.4
Percent Difference	-0.4%	-0.1%	0.4%	0.2%	0.0%	-0.1%	0.1%	0.3%	0.3%	0.0%	-0.4%	0.8%
Below Normal (16%)												
WSIP 2070 Without Project	55.3	55.8	52.8	49.6	47.8	48.6	49.5	50.0	50.5	52.0	53.4	53.9
WSIP 2070 With Project	55.3	56.0	53.3	50.1	47.8	48.6	49.4	50.4	51.1	52.3	52.9	53.1
Difference	0.0	0.2	0.5	0.5	0.1	0.0	-0.1	0.4	0.5	0.3	-0.5	-0.8
Percent Difference	0.0%	0.4%	1.0%	0.9%	0.1%	0.1%	-0.2%	0.8%	1.0%	0.5%	-1.0%	-1.4%
Dry (24%)												
WSIP 2070 Without Project	56.4	56.9	53.3	49.7	48.7	49.0	49.6	50.5	51.4	53.3	53.8	54.8
WSIP 2070 With Project	56.2	56.6	53.6	50.4	48.9	49.3	49.9	51.0	51.9	53.1	53.4	54.1
Difference	-0.1	-0.3	0.3	0.7	0.2	0.3	0.3	0.5	0.5	-0.2	-0.4	-0.7
Percent Difference	-0.2%	-0.5%	0.6%	1.3%	0.4%	0.6%	0.6%	0.9%	0.9%	-0.4%	-0.7%	-1.2%
Critical (15%)												
WSIP 2070 Without Project	62.7	58.1	52.6	49.9	48.9	49.8	50.3	52.2	53.9	55.9	58.9	63.7
WSIP 2070 With Project	61.7	58.3	53.4	50.8	49.5	49.9	50.6	52.3	53.3	54.7	57.3	60.9
Difference	-1.0	0.2	0.8	0.9	0.6	0.2	0.3	0.1	-0.6	-1.2	-1.6	-2.8
Percent Difference	-1.5%	0.3%	1.5%	1.8%	1.2%	0.3%	0.6%	0.3%	-1.1%	-2.2%	-2.7%	-4.4%

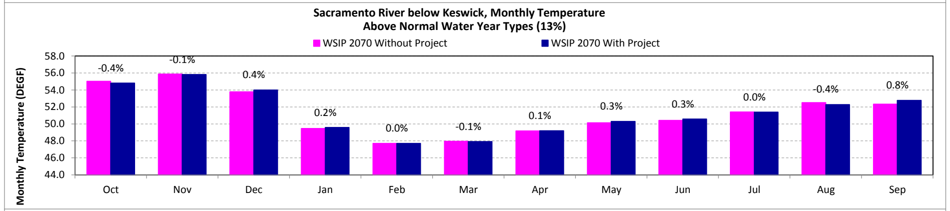
1 Based on the 82-year simulation period

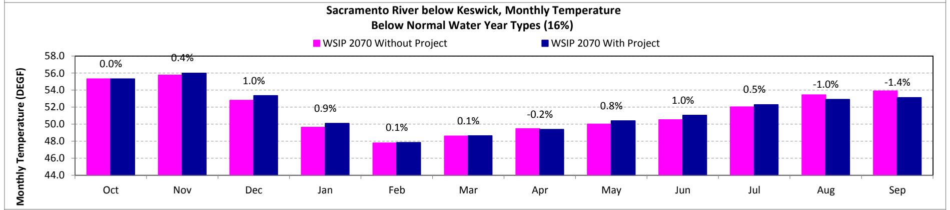
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

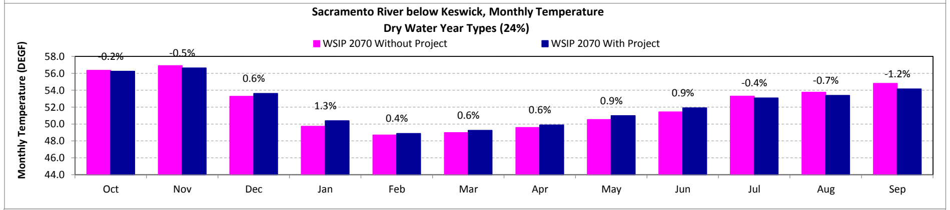
3 Relative difference of the monthly average











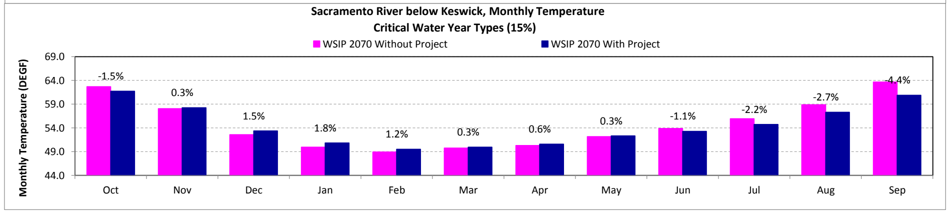


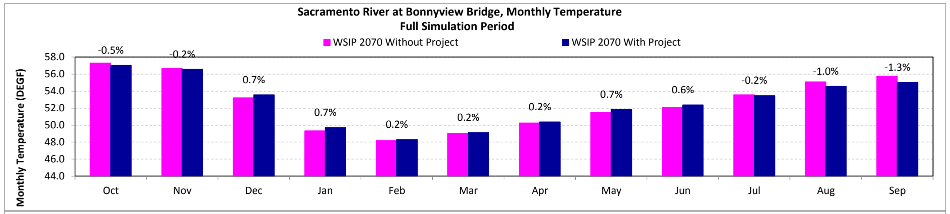
Table SQ3-1a
Sacramento River at Bonnyview Bridge, Monthly Temperature
Long-term Average and Average by Water Year Type

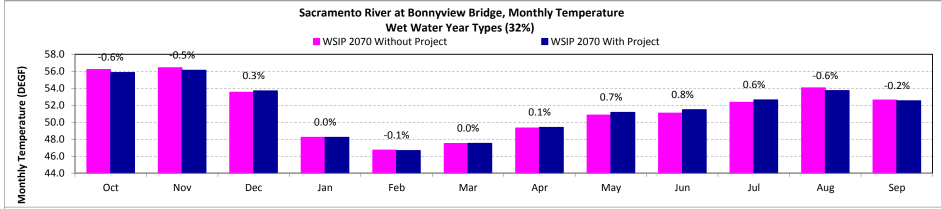
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	57.3	56.6	53.2	49.3	48.2	49.0	50.2	51.5	52.1	53.6	55.1	55.7
WSIP 2070 With Project	57.0	56.5	53.6	49.7	48.3	49.1	50.4	51.9	52.4	53.4	54.6	55.0
Difference	-0.3	-0.1	0.4	0.4	0.1	0.1	0.1	0.4	0.3	-0.1	-0.5	-0.7
Percent Difference[3]	-0.5%	-0.2%	0.7%	0.7%	0.2%	0.2%	0.2%	0.7%	0.6%	-0.2%	-1.0%	-1.3%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	56.2	56.4	53.5	48.2	46.7	47.5	49.3	50.8	51.1	52.3	54.0	52.6
WSIP 2070 With Project	55.9	56.1	53.7	48.2	46.7	47.5	49.4	51.2	51.5	52.6	53.7	52.5
Difference	-0.4	-0.3	0.2	0.0	0.0	0.0	0.1	0.3	0.4	0.3	-0.3	-0.1
Percent Difference	-0.6%	-0.5%	0.3%	0.0%	-0.1%	0.0%	0.1%	0.7%	0.8%	0.6%	-0.6%	-0.2%
Above Normal (13%)												
WSIP 2070 Without Project	55.6	55.9	53.7	49.6	48.0	48.5	50.2	51.3	51.5	52.3	53.6	53.1
WSIP 2070 With Project	55.4	55.8	53.9	49.7	48.0	48.5	50.3	51.5	51.7	52.2	53.3	53.7
Difference	-0.2	-0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.2	-0.1	-0.3	0.6
Percent Difference	-0.3%	-0.1%	0.4%	0.2%	0.0%	-0.1%	0.1%	0.4%	0.5%	-0.1%	-0.5%	1.1%
Below Normal (16%)												
WSIP 2070 Without Project	56.0	55.8	52.8	49.8	48.3	49.6	50.6	51.2	51.5	52.9	54.5	55.3
WSIP 2070 With Project	56.0	56.0	53.3	50.2	48.3	49.6	50.4	51.6	52.1	53.1	53.9	54.3
Difference	0.0	0.2	0.5	0.4	0.0	0.0	-0.2	0.4	0.5	0.2	-0.6	-1.0
Percent Difference	0.0%	0.4%	1.0%	0.9%	0.1%	0.1%	-0.4%	0.9%	1.1%	0.5%	-1.0%	-1.9%
Dry (24%)												
WSIP 2070 Without Project	56.9	56.9	53.2	49.9	49.3	49.9	50.6	51.6	52.4	54.2	54.8	56.2
WSIP 2070 With Project	56.9	56.7	53.5	50.5	49.4	50.1	50.9	52.1	52.9	54.0	54.4	55.3
Difference	0.0	-0.2	0.3	0.6	0.2	0.2	0.3	0.5	0.5	-0.2	-0.3	-0.9
Percent Difference	-0.1%	-0.4%	0.6%	1.3%	0.3%	0.5%	0.5%	1.0%	1.0%	-0.4%	-0.6%	-1.6%
Critical (15%)												
WSIP 2070 Without Project	63.1	58.1	52.6	50.1	49.6	50.8	51.2	53.3	54.8	57.0	59.8	64.6
WSIP 2070 With Project	62.2	58.3	53.3	50.9	50.1	50.9	51.6	53.5	54.3	55.8	58.3	61.8
Difference	-0.9	0.2	0.7	0.8	0.5	0.1	0.4	0.2	-0.5	-1.2	-1.5	-2.8
Percent Difference	-1.4%	0.3%	1.4%	1.7%	1.0%	0.3%	0.7%	0.5%	-1.0%	-2.1%	-2.5%	-4.3%

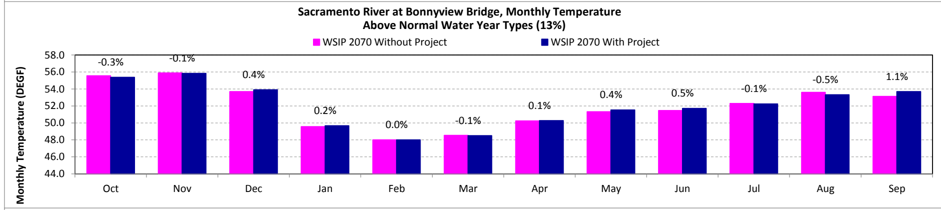
1 Based on the 82-year simulation period

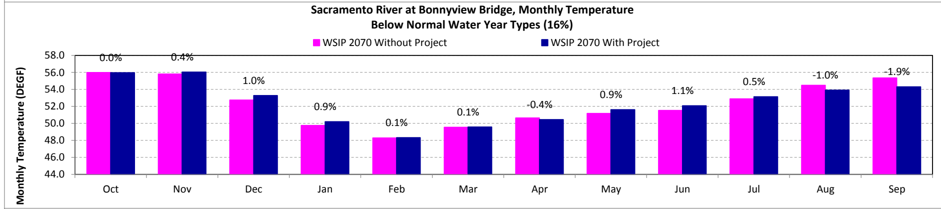
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

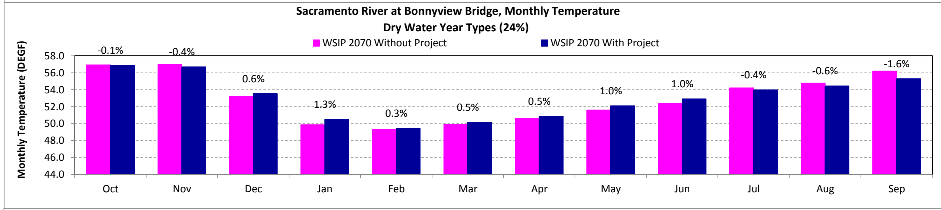
3 Relative difference of the monthly average











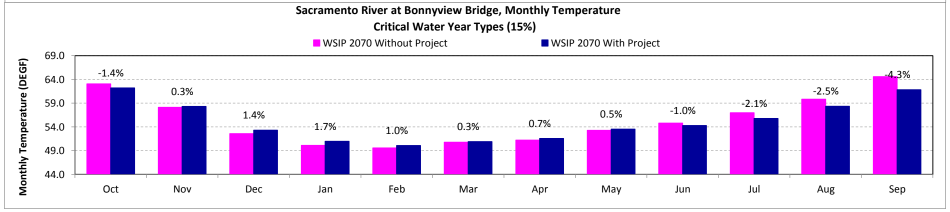
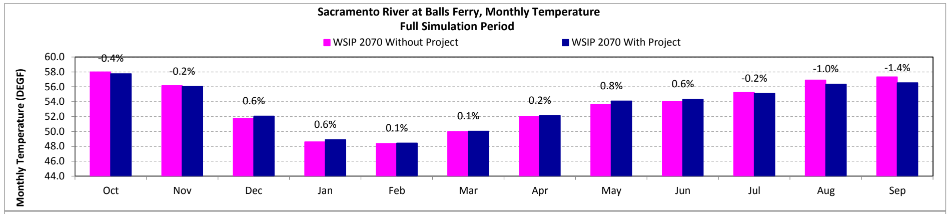
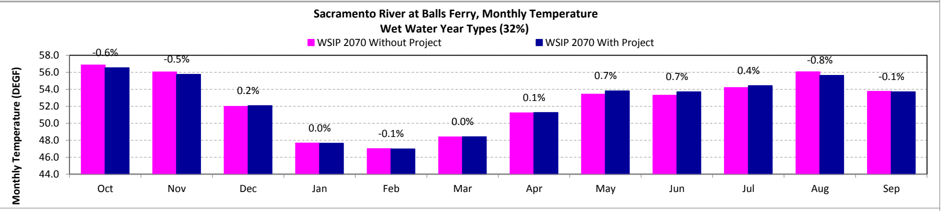


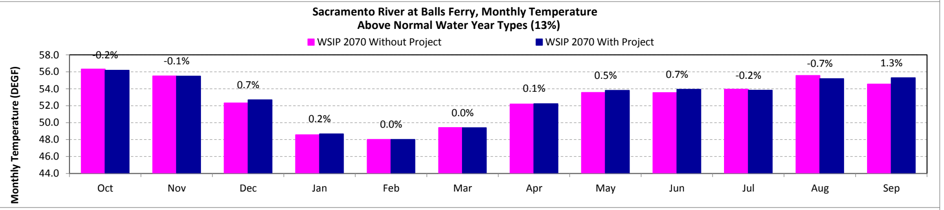
Table SQ4-1a
Sacramento River at Balls Ferry, Monthly Temperature
Long-term Average and Average by Water Year Type

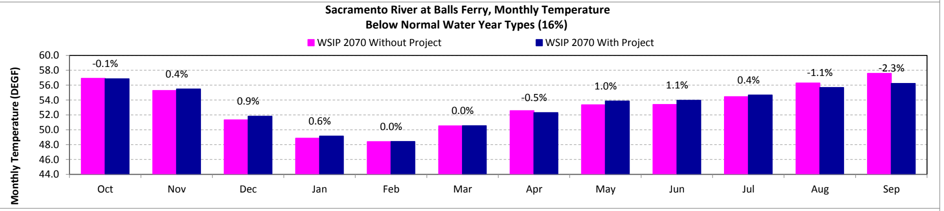
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	58.0	56.1	51.8	48.6	48.4	50.0	52.0	53.7	54.0	55.2	56.9	57.3
WSIP 2070 With Project	57.8	56.1	52.1	48.9	48.4	50.0	52.1	54.1	54.3	55.1	56.4	56.5
Difference	-0.2	-0.1	0.3	0.3	0.1	0.1	0.1	0.4	0.3	-0.1	-0.5	-0.8
Percent Difference[3]	-0.4%	-0.2%	0.6%	0.6%	0.1%	0.1%	0.2%	0.8%	0.6%	-0.2%	-1.0%	-1.4%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	56.9	56.0	52.0	47.7	47.0	48.4	51.2	53.4	53.3	54.2	56.1	53.7
WSIP 2070 With Project	56.5	55.7	52.1	47.6	47.0	48.4	51.2	53.8	53.7	54.4	55.6	53.7
Difference	-0.3	-0.3	0.1	0.0	0.0	0.0	0.0	0.4	0.4	0.2	-0.4	0.0
Percent Difference	-0.6%	-0.5%	0.2%	0.0%	-0.1%	0.0%	0.1%	0.7%	0.7%	0.4%	-0.8%	-0.1%
Above Normal (13%)												
WSIP 2070 Without Project	56.3	55.5	52.3	48.5	48.0	49.4	52.2	53.6	53.5	53.9	55.5	54.5
WSIP 2070 With Project	56.2	55.5	52.7	48.7	48.0	49.4	52.2	53.8	53.9	53.8	55.2	55.3
Difference	-0.1	0.0	0.4	0.1	0.0	0.0	0.0	0.3	0.4	-0.1	-0.4	0.7
Percent Difference	-0.2%	-0.1%	0.7%	0.2%	0.0%	0.0%	0.1%	0.5%	0.7%	-0.2%	-0.7%	1.3%
Below Normal (16%)												
WSIP 2070 Without Project	56.9	55.3	51.3	48.9	48.4	50.5	52.6	53.4	53.4	54.4	56.3	57.6
WSIP 2070 With Project	56.9	55.5	51.8	49.1	48.4	50.5	52.3	53.9	54.0	54.7	55.7	56.2
Difference	0.0	0.2	0.5	0.3	0.0	0.0	-0.3	0.5	0.6	0.2	-0.6	-1.3
Percent Difference	-0.1%	0.4%	0.9%	0.6%	0.0%	0.0%	-0.5%	1.0%	1.1%	0.4%	-1.1%	-2.3%
Dry (24%)												
WSIP 2070 Without Project	57.7	56.3	51.9	49.1	49.3	50.8	52.3	53.4	54.1	55.8	56.5	58.3
WSIP 2070 With Project	57.8	56.1	52.2	49.6	49.5	51.0	52.5	53.9	54.6	55.6	56.2	57.1
Difference	0.1	-0.2	0.3	0.5	0.1	0.2	0.2	0.5	0.5	-0.2	-0.3	-1.2
Percent Difference	0.1%	-0.4%	0.5%	1.0%	0.2%	0.3%	0.4%	1.0%	1.0%	-0.4%	-0.6%	-2.0%
Critical (15%)												
WSIP 2070 Without Project	63.4	57.6	51.1	49.6	50.0	52.0	52.7	55.1	56.4	58.7	61.3	65.7
WSIP 2070 With Project	62.7	57.8	51.6	50.3	50.4	52.0	53.1	55.5	56.0	57.5	60.0	63.1
Difference	-0.8	0.2	0.5	0.7	0.4	0.1	0.4	0.4	-0.4	-1.2	-1.3	-2.6
Percent Difference	-1.2%	0.3%	1.1%	1.4%	0.7%	0.1%	0.9%	0.7%	-0.8%	-2.0%	-2.1%	-3.9%

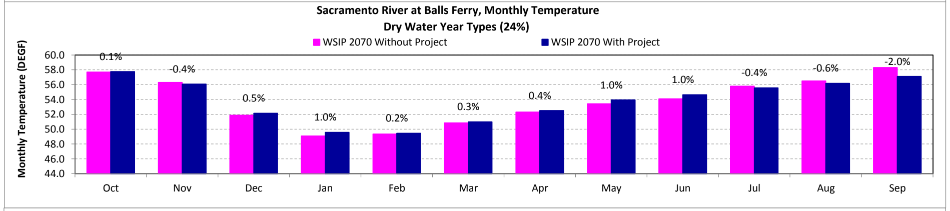
1 Based on the 82-year simulation period
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)
3 Relative difference of the monthly average











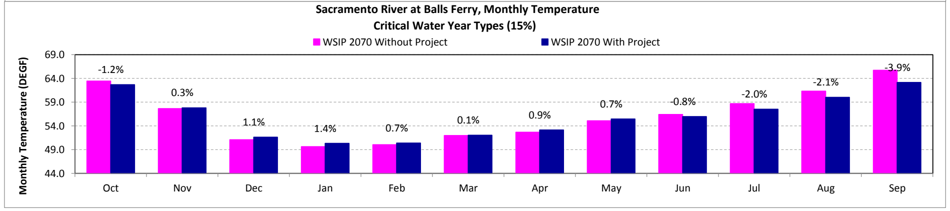


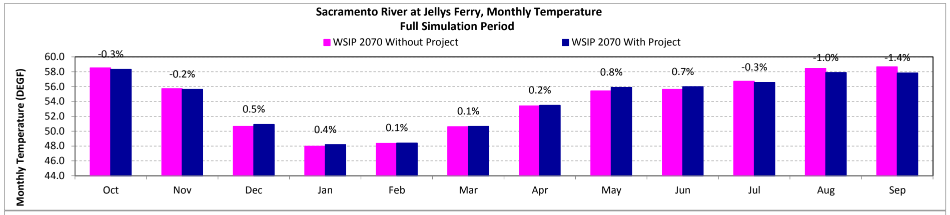
Table SQ5-1a
Sacramento River at Jellys Ferry, Monthly Temperature
Long-term Average and Average by Water Year Type

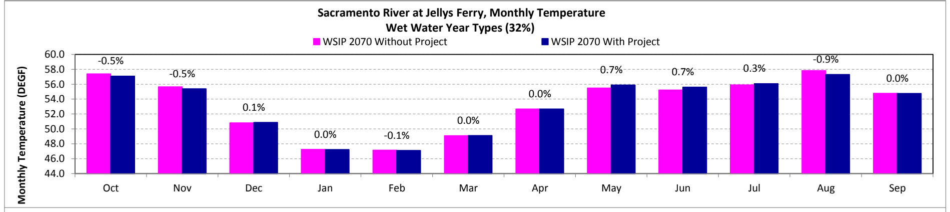
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	58.5	55.7	50.7	48.0	48.3	50.6	53.4	55.4	55.6	56.7	58.4	58.7
WSIP 2070 With Project	58.3	55.6	50.9	48.2	48.4	50.6	53.5	55.9	56.0	56.6	57.9	57.8
Difference	-0.2	-0.1	0.3	0.2	0.1	0.0	0.1	0.5	0.4	-0.2	-0.6	-0.8
Percent Difference[3]	-0.3%	-0.2%	0.5%	0.4%	0.1%	0.1%	0.2%	0.8%	0.7%	-0.3%	-1.0%	-1.4%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	57.4	55.7	50.8	47.2	47.1	49.1	52.7	55.5	55.2	55.9	57.8	54.8
WSIP 2070 With Project	57.1	55.4	50.9	47.2	47.1	49.1	52.7	55.9	55.6	56.1	57.3	54.8
Difference	-0.3	-0.3	0.1	0.0	0.0	0.0	0.0	0.4	0.4	0.2	-0.5	0.0
Percent Difference	-0.5%	-0.5%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.7%	0.7%	0.3%	-0.9%	0.0%
Above Normal (13%)												
WSIP 2070 Without Project	56.9	55.2	51.2	47.7	47.9	50.0	53.6	55.4	55.3	55.4	57.2	55.8
WSIP 2070 With Project	56.8	55.2	51.6	47.8	47.9	50.0	53.7	55.7	55.8	55.2	56.8	56.7
Difference	-0.1	0.0	0.4	0.1	0.0	0.0	0.1	0.3	0.5	-0.2	-0.4	0.9
Percent Difference	-0.2%	0.0%	0.8%	0.2%	0.0%	0.0%	0.1%	0.5%	0.9%	-0.4%	-0.8%	1.6%
Below Normal (16%)												
WSIP 2070 Without Project	57.6	54.8	50.2	48.1	48.4	51.2	53.9	55.1	55.0	55.8	57.8	59.4
WSIP 2070 With Project	57.6	55.0	50.7	48.3	48.4	51.2	53.7	55.6	55.6	55.9	57.2	57.9
Difference	-0.1	0.2	0.4	0.2	0.0	0.0	-0.2	0.5	0.6	0.2	-0.6	-1.6
Percent Difference	-0.1%	0.3%	0.9%	0.4%	0.0%	0.0%	-0.5%	1.0%	1.1%	0.3%	-1.1%	-2.6%
Dry (24%)												
WSIP 2070 Without Project	58.3	55.8	50.8	48.4	49.1	51.4	53.6	54.9	55.5	57.1	57.9	60.0
WSIP 2070 With Project	58.4	55.6	51.0	48.7	49.2	51.5	53.8	55.5	56.1	56.9	57.6	58.6
Difference	0.1	-0.2	0.2	0.4	0.1	0.1	0.2	0.5	0.6	-0.2	-0.3	-1.4
Percent Difference	0.2%	-0.4%	0.4%	0.8%	0.2%	0.2%	0.3%	1.0%	1.0%	-0.4%	-0.5%	-2.3%
Critical (15%)												
WSIP 2070 Without Project	63.6	57.1	50.1	49.0	50.1	52.6	53.8	56.5	57.7	60.0	62.5	66.6
WSIP 2070 With Project	62.9	57.2	50.5	49.5	50.4	52.6	54.3	57.0	57.3	58.9	61.3	64.2
Difference	-0.7	0.1	0.4	0.5	0.3	0.0	0.5	0.5	-0.3	-1.1	-1.1	-2.4
Percent Difference	-1.1%	0.2%	0.8%	1.1%	0.5%	0.1%	0.9%	0.9%	-0.6%	-1.9%	-1.8%	-3.6%

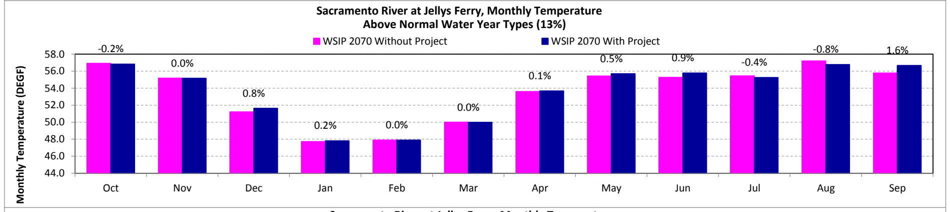
1 Based on the 82-year simulation period

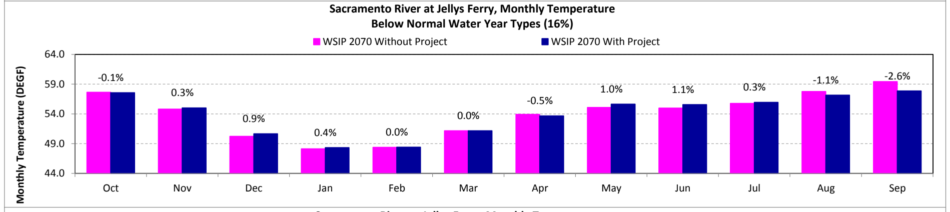
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

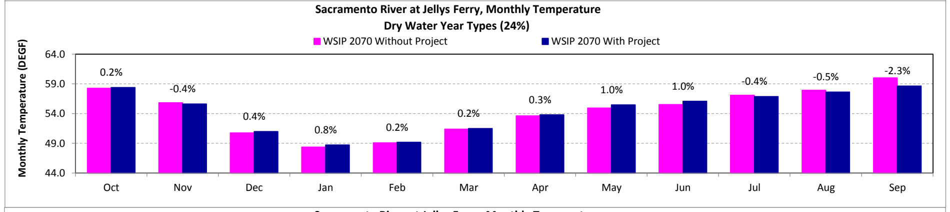
3 Relative difference of the monthly average











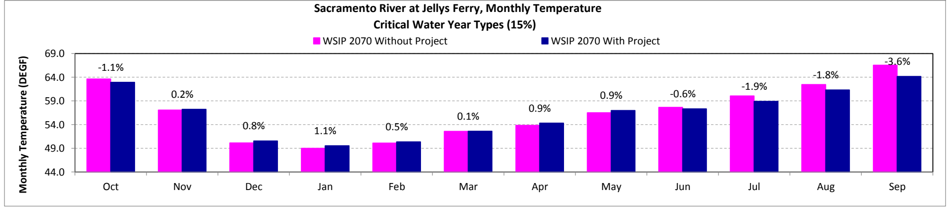


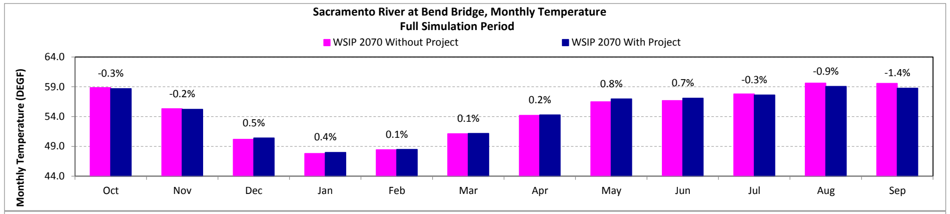
Table SQ6-1a
Sacramento River at Bend Bridge, Monthly Temperature
Long-term Average and Average by Water Year Type

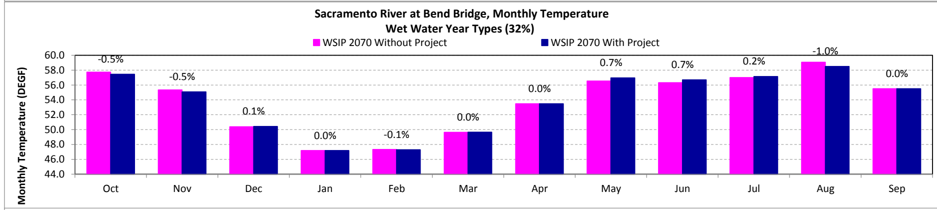
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	58.8	55.3	50.2	47.8	48.4	51.1	54.2	56.5	56.7	57.8	59.6	59.6
WSIP 2070 With Project	58.7	55.2	50.4	48.0	48.5	51.2	54.3	57.0	57.1	57.6	59.1	58.8
Difference	-0.2	-0.1	0.2	0.2	0.0	0.0	0.1	0.5	0.4	-0.2	-0.6	-0.8
Percent Difference[3]	-0.3%	-0.2%	0.5%	0.4%	0.1%	0.1%	0.2%	0.8%	0.7%	-0.3%	-0.9%	-1.4%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	57.7	55.3	50.4	47.2	47.3	49.6	53.5	56.5	56.3	57.0	59.1	55.5
WSIP 2070 With Project	57.4	55.1	50.4	47.2	47.3	49.7	53.5	57.0	56.7	57.1	58.5	55.5
Difference	-0.3	-0.3	0.1	0.0	0.0	0.0	0.0	0.4	0.4	0.1	-0.6	0.0
Percent Difference	-0.5%	-0.5%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.7%	0.7%	0.2%	-1.0%	0.0%
Above Normal (13%)												
WSIP 2070 Without Project	57.3	54.9	50.6	47.6	48.0	50.6	54.5	56.6	56.4	56.5	58.5	56.7
WSIP 2070 With Project	57.3	54.9	51.1	47.7	48.0	50.5	54.5	56.8	57.0	56.3	58.0	57.7
Difference	-0.1	0.0	0.4	0.1	0.0	0.0	0.1	0.3	0.6	-0.2	-0.5	1.0
Percent Difference	-0.1%	0.0%	0.8%	0.2%	0.0%	0.0%	0.1%	0.5%	1.0%	-0.4%	-0.8%	1.7%
Below Normal (16%)												
WSIP 2070 Without Project	58.1	54.3	49.7	47.9	48.5	51.7	54.7	56.2	56.1	56.8	59.0	60.7
WSIP 2070 With Project	58.0	54.5	50.1	48.0	48.5	51.7	54.5	56.7	56.7	57.0	58.4	59.1
Difference	-0.1	0.2	0.4	0.2	0.0	0.0	-0.2	0.5	0.6	0.2	-0.6	-1.6
Percent Difference	-0.1%	0.3%	0.8%	0.3%	0.0%	0.0%	-0.4%	0.9%	1.1%	0.3%	-1.1%	-2.7%
Dry (24%)												
WSIP 2070 Without Project	58.6	55.4	50.2	48.1	49.2	51.9	54.4	56.0	56.6	58.2	59.1	61.2
WSIP 2070 With Project	58.8	55.2	50.4	48.5	49.2	52.0	54.5	56.5	57.1	58.0	58.9	59.7
Difference	0.1	-0.2	0.2	0.3	0.1	0.1	0.2	0.5	0.6	-0.2	-0.3	-1.5
Percent Difference	0.2%	-0.4%	0.4%	0.7%	0.2%	0.2%	0.3%	0.9%	1.0%	-0.4%	-0.5%	-2.4%
Critical (15%)												
WSIP 2070 Without Project	63.8	56.4	49.8	48.7	50.1	53.0	54.6	57.4	58.6	61.1	63.3	67.1
WSIP 2070 With Project	63.1	56.6	50.1	49.2	50.3	53.0	55.1	58.0	58.3	60.0	62.3	64.9
Difference	-0.7	0.1	0.4	0.5	0.2	0.0	0.5	0.5	-0.3	-1.1	-1.0	-2.2
Percent Difference	-1.0%	0.2%	0.7%	1.0%	0.4%	0.0%	0.9%	0.9%	-0.5%	-1.8%	-1.6%	-3.3%

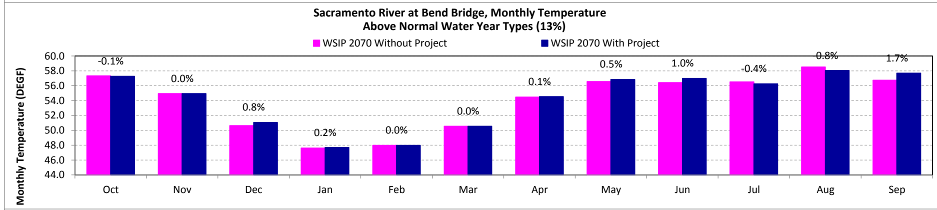
1 Based on the 82-year simulation period

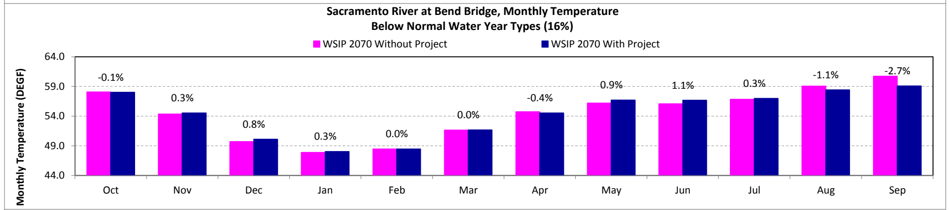
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

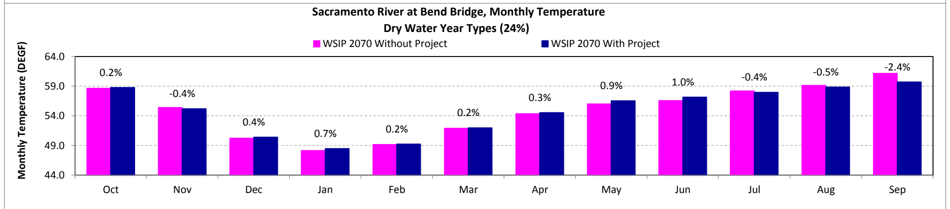
3 Relative difference of the monthly average











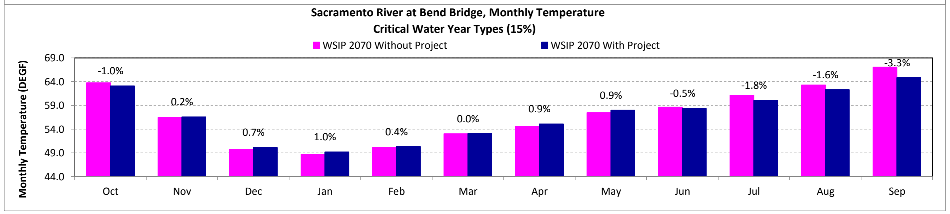


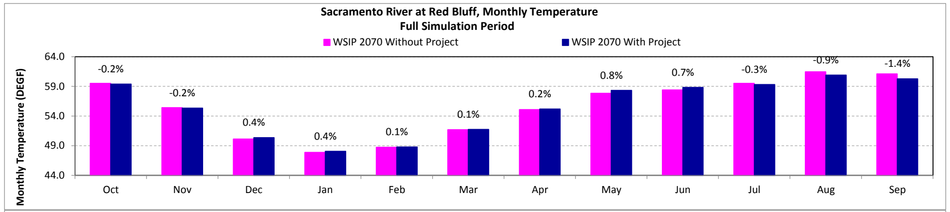
Table SQ7-1a
Sacramento River at Red Bluff, Monthly Temperature
Long-term Average and Average by Water Year Type

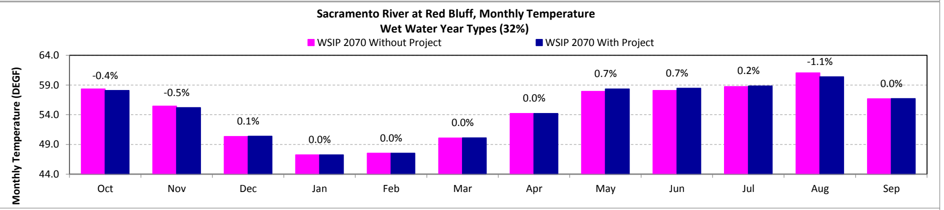
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	59.5	55.4	50.1	47.9	48.7	51.7	55.1	57.8	58.4	59.5	61.5	61.1
WSIP 2070 With Project	59.4	55.3	50.4	48.1	48.8	51.7	55.2	58.3	58.8	59.3	60.9	60.3
Difference	-0.1	-0.1	0.2	0.2	0.1	0.0	0.1	0.5	0.4	-0.2	-0.6	-0.8
Percent Difference[3]	-0.2%	-0.2%	0.4%	0.4%	0.1%	0.1%	0.2%	0.8%	0.7%	-0.3%	-0.9%	-1.4%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	58.3	55.4	50.3	47.3	47.5	50.1	54.2	57.9	58.1	58.7	61.0	56.7
WSIP 2070 With Project	58.1	55.2	50.4	47.2	47.5	50.1	54.2	58.3	58.5	58.8	60.4	56.7
Difference	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.1	-0.7	0.0
Percent Difference	-0.4%	-0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	0.2%	-1.1%	0.0%
Above Normal (13%)												
WSIP 2070 Without Project	58.0	55.0	50.6	47.7	48.2	51.0	55.3	57.9	58.1	58.2	60.4	58.2
WSIP 2070 With Project	58.0	55.0	51.0	47.7	48.2	51.1	55.4	58.2	58.8	57.9	59.9	59.2
Difference	0.0	0.0	0.4	0.1	0.0	0.0	0.1	0.3	0.7	-0.3	-0.5	1.1
Percent Difference	0.0%	0.0%	0.8%	0.2%	0.0%	0.1%	0.1%	0.5%	1.2%	-0.6%	-0.9%	1.8%
Below Normal (16%)												
WSIP 2070 Without Project	58.9	54.5	49.7	48.0	48.8	52.3	55.7	57.6	57.8	58.5	60.9	62.7
WSIP 2070 With Project	58.8	54.6	50.1	48.1	48.8	52.3	55.5	58.1	58.4	58.6	60.3	60.9
Difference	-0.1	0.2	0.4	0.1	0.0	0.0	-0.2	0.5	0.6	0.1	-0.6	-1.8
Percent Difference	-0.2%	0.3%	0.8%	0.3%	0.0%	0.1%	-0.4%	0.9%	1.1%	0.2%	-1.0%	-2.9%
Dry (24%)												
WSIP 2070 Without Project	59.4	55.5	50.2	48.2	49.5	52.6	55.4	57.3	58.2	59.9	60.9	63.1
WSIP 2070 With Project	59.5	55.3	50.3	48.5	49.6	52.7	55.5	57.9	58.8	59.7	60.7	61.5
Difference	0.2	-0.2	0.2	0.3	0.1	0.1	0.2	0.5	0.6	-0.2	-0.2	-1.6
Percent Difference	0.3%	-0.3%	0.3%	0.6%	0.2%	0.2%	0.3%	0.9%	1.0%	-0.3%	-0.4%	-2.5%
Critical (15%)												
WSIP 2070 Without Project	64.3	56.6	49.8	48.8	50.6	53.8	55.6	58.8	60.2	62.9	64.9	68.4
WSIP 2070 With Project	63.7	56.7	50.1	49.3	50.8	53.8	56.2	59.4	60.1	61.9	64.1	66.3
Difference	-0.6	0.1	0.3	0.4	0.2	0.0	0.5	0.6	-0.2	-1.0	-0.8	-2.1
Percent Difference	-0.9%	0.2%	0.6%	0.9%	0.4%	0.0%	0.9%	1.1%	-0.3%	-1.6%	-1.3%	-3.1%

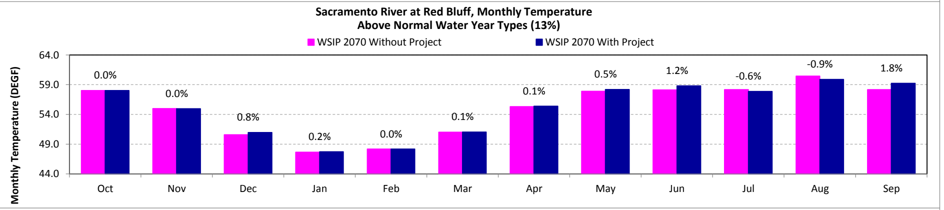
1 Based on the 82-year simulation period

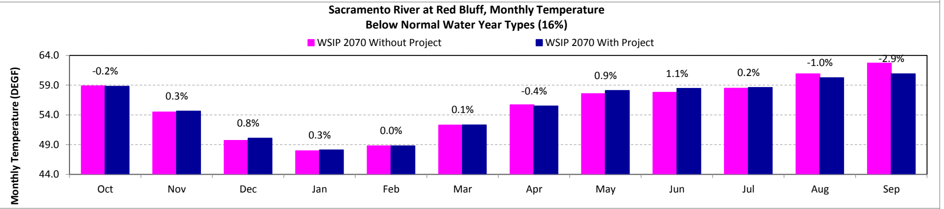
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

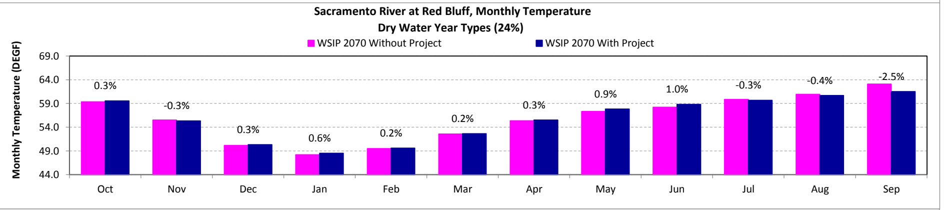
3 Relative difference of the monthly average











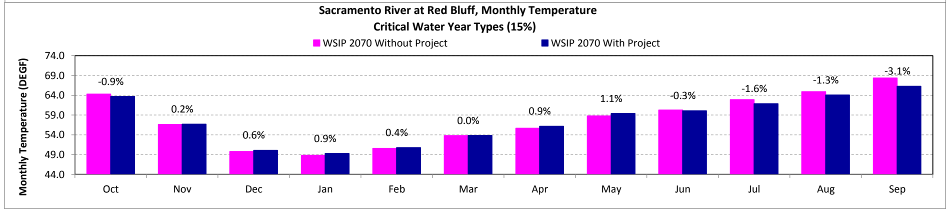


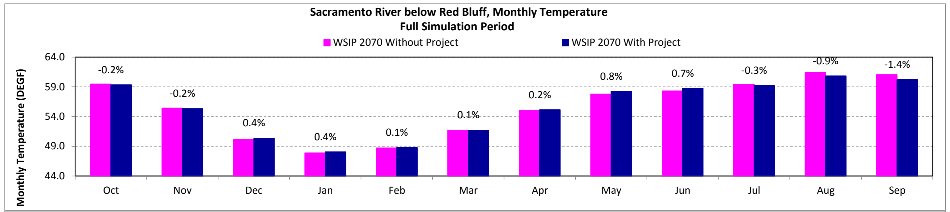
Table SQ8-1a
Sacramento River below Red Bluff, Monthly Temperature
Long-term Average and Average by Water Year Type

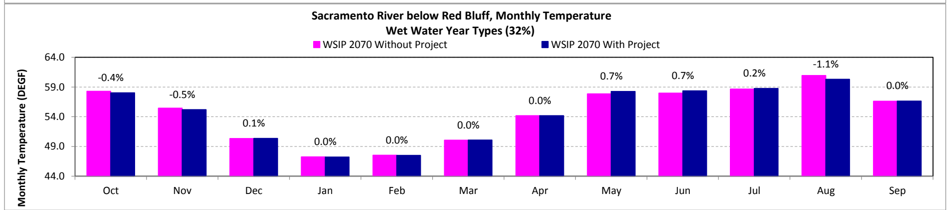
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	59.5	55.4	50.1	47.9	48.7	51.7	55.0	57.8	58.3	59.4	61.4	61.0
WSIP 2070 With Project	59.3	55.3	50.3	48.0	48.8	51.7	55.1	58.2	58.7	59.2	60.8	60.2
Difference	-0.1	-0.1	0.2	0.2	0.0	0.0	0.1	0.5	0.4	-0.2	-0.6	-0.8
Percent Difference[3]	-0.2%	-0.2%	0.4%	0.4%	0.1%	0.1%	0.2%	0.8%	0.7%	-0.3%	-0.9%	-1.4%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	58.3	55.4	50.3	47.2	47.5	50.1	54.2	57.8	58.0	58.7	60.9	56.6
WSIP 2070 With Project	58.0	55.2	50.4	47.2	47.5	50.1	54.2	58.3	58.4	58.8	60.3	56.6
Difference	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.1	-0.6	0.0
Percent Difference	-0.4%	-0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	0.2%	-1.1%	0.0%
Above Normal (13%)												
WSIP 2070 Without Project	58.0	55.0	50.6	47.6	48.2	51.0	55.3	57.8	58.0	58.1	60.3	58.1
WSIP 2070 With Project	58.0	55.0	51.0	47.7	48.2	51.0	55.3	58.1	58.7	57.8	59.8	59.2
Difference	0.0	0.0	0.4	0.1	0.0	0.0	0.1	0.3	0.7	-0.3	-0.5	1.1
Percent Difference	0.0%	0.0%	0.8%	0.2%	0.0%	0.0%	0.1%	0.5%	1.2%	-0.5%	-0.9%	1.8%
Below Normal (16%)												
WSIP 2070 Without Project	58.8	54.5	49.7	47.9	48.8	52.2	55.6	57.5	57.7	58.4	60.8	62.6
WSIP 2070 With Project	58.8	54.6	50.1	48.1	48.8	52.3	55.4	58.0	58.4	58.5	60.2	60.8
Difference	-0.1	0.2	0.4	0.1	0.0	0.0	-0.2	0.5	0.6	0.1	-0.6	-1.8
Percent Difference	-0.1%	0.3%	0.8%	0.3%	0.0%	0.1%	-0.4%	0.9%	1.1%	0.2%	-1.0%	-2.9%
Dry (24%)												
WSIP 2070 Without Project	59.3	55.5	50.2	48.2	49.5	52.5	55.3	57.2	58.1	59.8	60.9	63.0
WSIP 2070 With Project	59.5	55.3	50.3	48.5	49.6	52.6	55.5	57.8	58.7	59.6	60.6	61.4
Difference	0.2	-0.2	0.2	0.3	0.1	0.1	0.2	0.5	0.6	-0.2	-0.2	-1.6
Percent Difference	0.3%	-0.3%	0.3%	0.6%	0.2%	0.2%	0.3%	0.9%	1.0%	-0.3%	-0.4%	-2.5%
Critical (15%)												
WSIP 2070 Without Project	64.2	56.6	49.8	48.8	50.5	53.8	55.6	58.7	60.2	62.8	64.8	68.3
WSIP 2070 With Project	63.7	56.7	50.1	49.3	50.7	53.8	56.1	59.3	60.0	61.8	64.0	66.2
Difference	-0.6	0.1	0.3	0.4	0.2	0.0	0.5	0.6	-0.2	-1.0	-0.8	-2.1
Percent Difference	-0.9%	0.2%	0.6%	0.9%	0.3%	0.0%	0.9%	1.0%	-0.3%	-1.6%	-1.3%	-3.1%

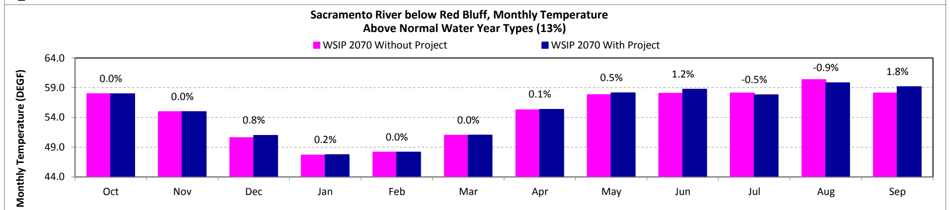
1 Based on the 82-year simulation period

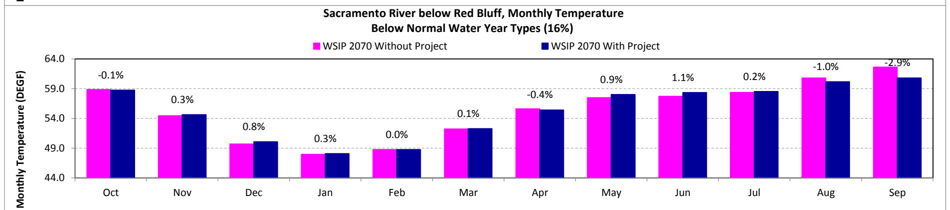
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

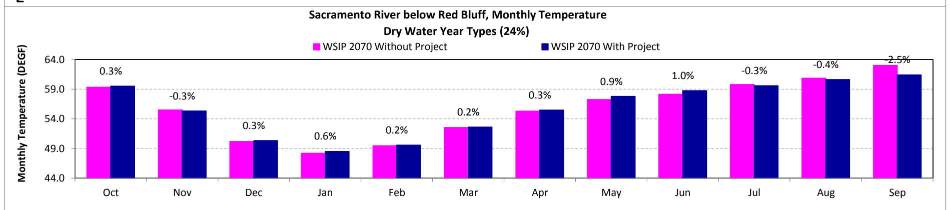
3 Relative difference of the monthly average











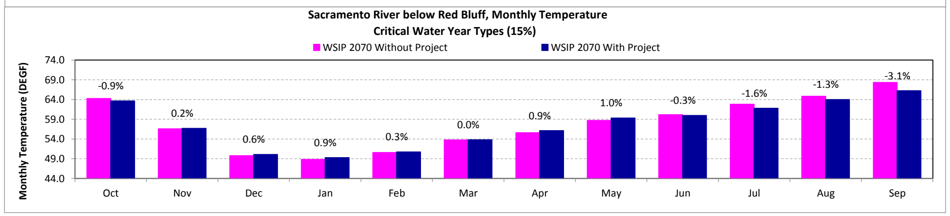


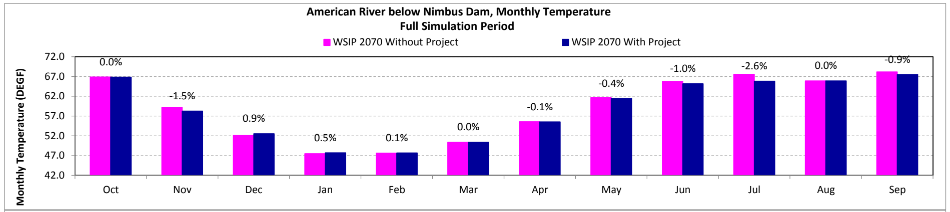
Table SQ9-1a
American River below Nimbus Dam, Monthly Temperature
Long-term Average and Average by Water Year Type

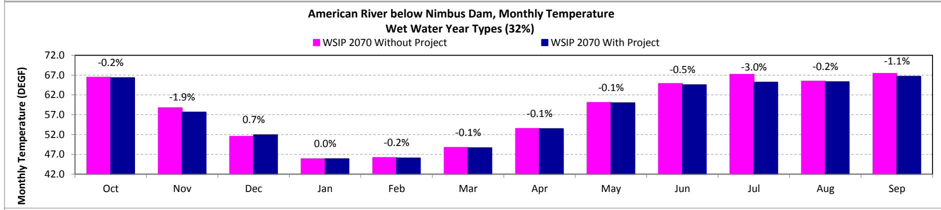
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	66.9	59.2	52.1	47.5	47.6	50.4	55.6	61.7	65.8	67.6	65.9	68.2
WSIP 2070 With Project	66.8	58.3	52.5	47.7	47.7	50.4	55.5	61.4	65.2	65.8	65.9	67.5
Difference	0.0	-0.9	0.5	0.2	0.0	0.0	0.0	-0.2	-0.6	-1.7	0.0	-0.6
Percent Difference[3]	0.0%	-1.5%	0.9%	0.5%	0.1%	0.0%	-0.1%	-0.4%	-1.0%	-2.6%	0.0%	-0.9%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	66.5	58.8	51.6	45.9	46.2	48.7	53.5	60.1	64.9	67.2	65.5	67.4
WSIP 2070 With Project	66.4	57.6	51.9	45.9	46.1	48.7	53.5	60.0	64.6	65.2	65.3	66.7
Difference	-0.1	-1.1	0.4	0.0	-0.1	-0.1	0.0	-0.1	-0.3	-2.0	-0.1	-0.7
Percent Difference	-0.2%	-1.9%	0.7%	0.0%	-0.2%	-0.1%	-0.1%	-0.1%	-0.5%	-3.0%	-0.2%	-1.1%
Above Normal (13%)												
WSIP 2070 Without Project	66.8	59.1	52.3	47.6	46.9	49.3	55.1	61.3	66.5	65.9	65.7	67.8
WSIP 2070 With Project	66.6	57.8	53.1	47.7	46.9	49.3	55.1	61.2	65.7	64.3	65.3	67.3
Difference	-0.1	-1.2	0.8	0.1	0.0	0.0	0.0	-0.1	-0.8	-1.6	-0.3	-0.5
Percent Difference	-0.2%	-2.1%	1.5%	0.3%	0.0%	0.0%	0.0%	-0.1%	-1.3%	-2.5%	-0.5%	-0.7%
Below Normal (16%)												
WSIP 2070 Without Project	66.9	59.0	52.5	47.9	47.6	49.9	55.6	61.3	65.7	66.8	65.7	68.0
WSIP 2070 With Project	66.9	58.1	53.1	48.2	47.7	50.0	55.5	61.2	65.2	65.3	65.6	67.5
Difference	0.0	-1.0	0.6	0.3	0.1	0.0	-0.1	-0.2	-0.6	-1.4	0.0	-0.6
Percent Difference	0.0%	-1.6%	1.2%	0.5%	0.3%	0.0%	-0.3%	-0.3%	-0.9%	-2.2%	-0.1%	-0.8%
Dry (24%)												
WSIP 2070 Without Project	67.0	59.6	52.0	48.2	48.4	51.3	56.8	62.6	65.3	67.6	65.7	68.3
WSIP 2070 With Project	67.1	58.8	52.4	48.6	48.5	51.3	56.9	62.2	64.4	66.1	66.2	67.8
Difference	0.1	-0.8	0.4	0.3	0.1	0.0	0.1	-0.4	-1.0	-1.5	0.5	-0.5
Percent Difference	0.2%	-1.3%	0.8%	0.7%	0.2%	0.0%	0.2%	-0.6%	-1.5%	-2.3%	0.8%	-0.8%
Critical (15%)												
WSIP 2070 Without Project	67.5	59.7	52.5	49.1	50.2	53.9	58.2	64.2	67.8	70.7	67.5	69.9
WSIP 2070 With Project	67.6	59.3	53.0	49.8	50.5	53.9	58.0	63.7	67.2	68.7	67.4	69.0
Difference	0.1	-0.4	0.5	0.7	0.2	0.1	-0.3	-0.5	-0.6	-2.0	-0.1	-0.8
Percent Difference	0.1%	-0.6%	0.9%	1.3%	0.5%	0.1%	-0.5%	-0.8%	-0.9%	-2.8%	-0.1%	-1.2%

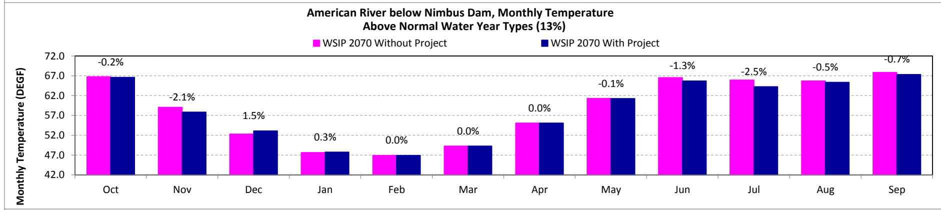
1 Based on the 82-year simulation period

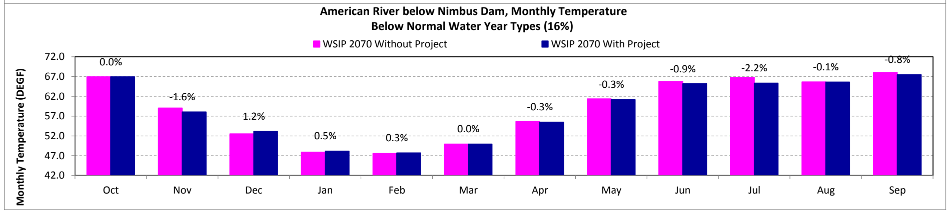
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

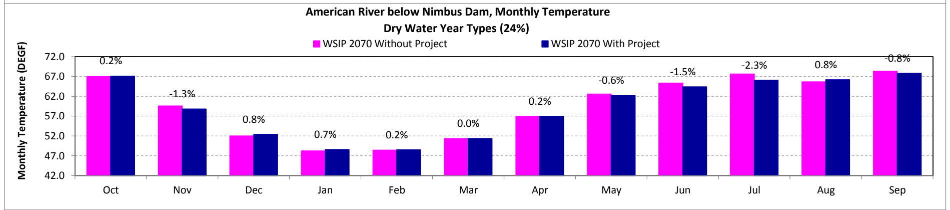
3 Relative difference of the monthly average











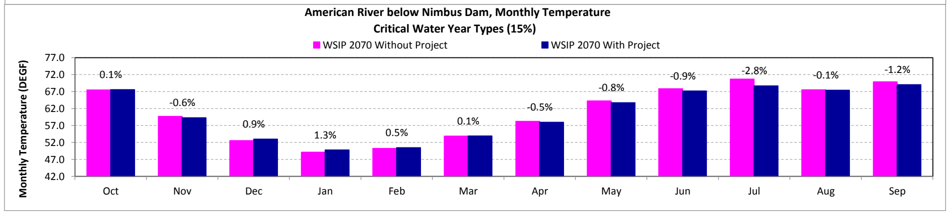


Table SQ10-1a
American River at Watt Avenue, Monthly Temperature
Long-term Average and Average by Water Year Type

Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	67.8	59.4	52.0	48.1	48.9	52.6	58.8	66.3	71.1	71.8	72.2	71.6
WSIP 2070 With Project	67.7	58.7	52.4	48.3	48.9	52.6	58.6	65.9	70.4	70.9	71.7	70.9
Difference	-0.1	-0.8	0.4	0.2	0.0	0.0	-0.1	-0.4	-0.7	-0.9	-0.4	-0.6
Percent Difference[3]	-0.1%	-1.3%	0.8%	0.4%	0.0%	0.0%	-0.2%	-0.5%	-1.0%	-1.3%	-0.6%	-0.9%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	67.4	59.1	51.6	46.3	46.9	50.2	56.0	64.5	69.9	71.0	71.1	69.8
WSIP 2070 With Project	67.3	58.2	51.9	46.3	46.8	50.1	56.0	64.3	69.5	69.5	70.6	69.3
Difference	-0.2	-0.9	0.3	0.0	-0.1	-0.1	-0.1	-0.2	-0.4	-1.6	-0.5	-0.5
Percent Difference	-0.2%	-1.6%	0.6%	0.0%	-0.2%	-0.1%	-0.1%	-0.2%	-0.6%	-2.2%	-0.7%	-0.7%
Above Normal (13%)												
WSIP 2070 Without Project	67.6	59.2	52.2	48.1	47.8	50.9	57.9	65.9	71.8	69.2	71.8	71.0
WSIP 2070 With Project	67.4	58.1	52.9	48.3	47.8	50.9	57.9	65.7	70.7	68.7	70.6	70.5
Difference	-0.2	-1.0	0.7	0.1	0.0	0.0	0.0	-0.2	-1.1	-0.5	-1.2	-0.5
Percent Difference	-0.3%	-1.8%	1.3%	0.3%	0.0%	0.0%	0.0%	-0.3%	-1.5%	-0.8%	-1.7%	-0.7%
Below Normal (16%)												
WSIP 2070 Without Project	67.7	59.1	52.4	48.4	48.7	51.7	59.0	66.0	71.2	70.5	71.8	71.7
WSIP 2070 With Project	67.6	58.3	52.9	48.6	48.8	51.7	58.7	65.6	70.5	70.1	71.1	70.9
Difference	-0.1	-0.8	0.5	0.2	0.1	0.0	-0.3	-0.4	-0.6	-0.4	-0.7	-0.8
Percent Difference	-0.1%	-1.4%	1.0%	0.4%	0.2%	0.0%	-0.5%	-0.6%	-0.9%	-0.6%	-1.0%	-1.1%
Dry (24%)												
WSIP 2070 Without Project	67.9	59.8	51.9	49.0	49.8	54.2	60.4	66.9	70.7	72.0	72.2	72.3
WSIP 2070 With Project	67.9	59.2	52.2	49.2	49.8	54.2	60.6	66.4	69.6	71.4	72.5	71.7
Difference	0.0	-0.7	0.3	0.2	0.1	0.0	0.2	-0.5	-1.1	-0.6	0.2	-0.6
Percent Difference	0.0%	-1.1%	0.7%	0.5%	0.2%	0.1%	0.3%	-0.7%	-1.5%	-0.8%	0.3%	-0.9%
Critical (15%)												
WSIP 2070 Without Project	69.0	60.1	52.5	49.9	52.7	57.5	62.7	69.6	73.6	77.0	75.1	74.6
WSIP 2070 With Project	68.9	59.8	52.9	50.4	52.8	57.5	61.9	68.8	73.2	75.8	74.6	73.6
Difference	-0.1	-0.3	0.4	0.5	0.1	0.0	-0.8	-0.8	-0.4	-1.1	-0.5	-1.0
Percent Difference	-0.1%	-0.4%	0.7%	1.0%	0.2%	0.0%	-1.2%	-1.1%	-0.6%	-1.5%	-0.7%	-1.3%

1 Based on the 82-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

3 Relative difference of the monthly average

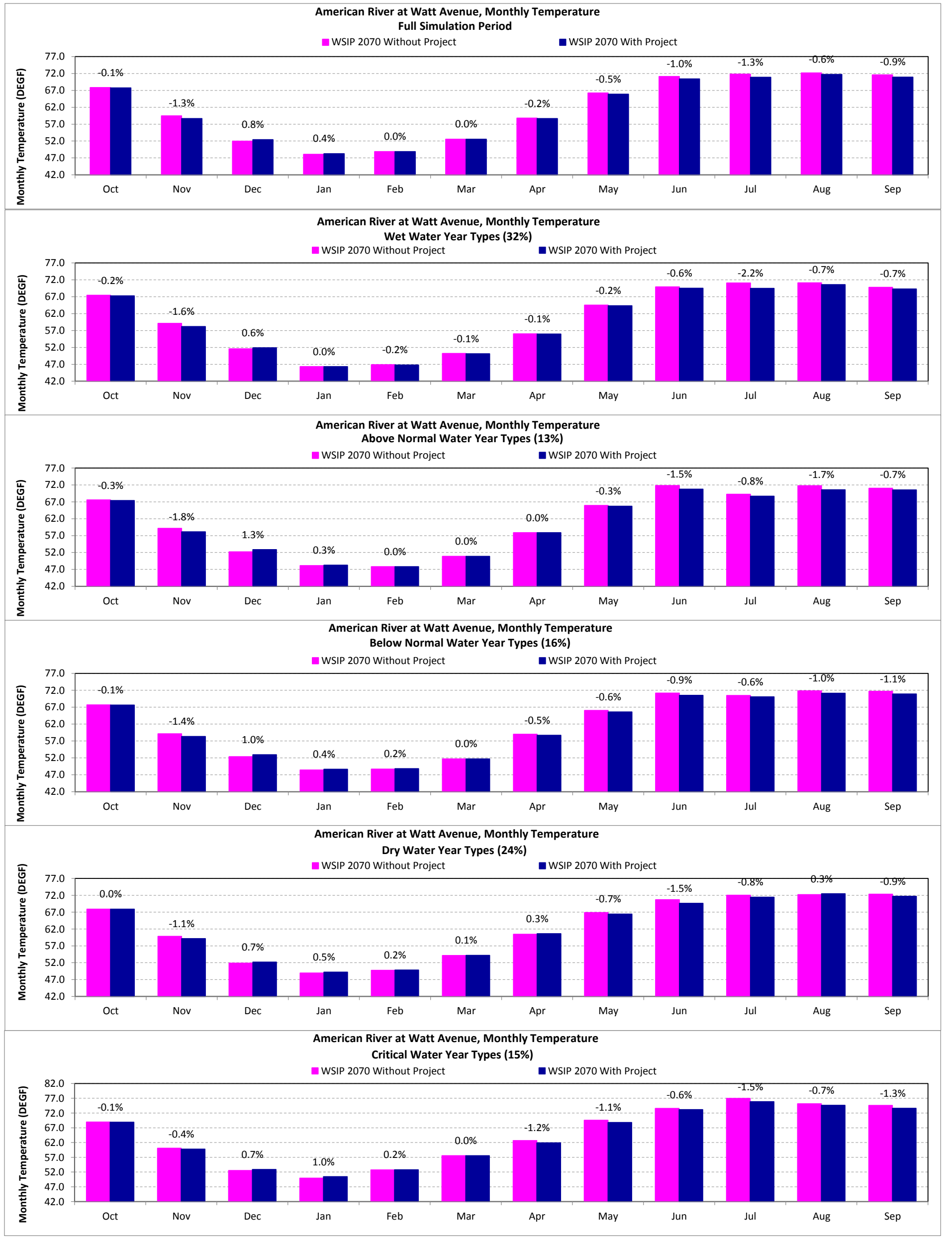


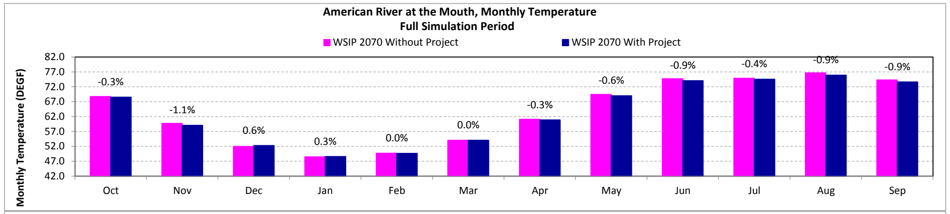
Table SQ11-1a
American River at the Mouth, Monthly Temperature
Long-term Average and Average by Water Year Type

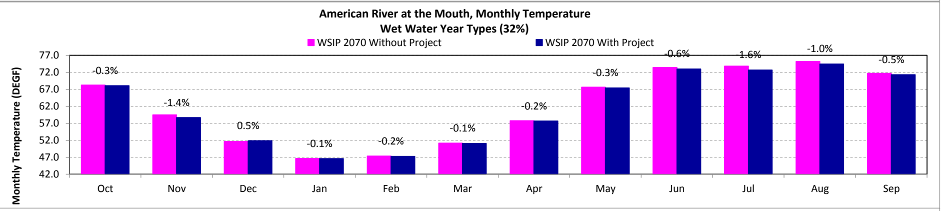
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	68.7	59.7	52.0	48.5	49.7	54.1	61.1	69.4	74.7	74.8	76.7	74.3
WSIP 2070 With Project	68.5	59.1	52.3	48.6	49.7	54.1	60.9	69.0	74.0	74.5	75.9	73.6
Difference	-0.2	-0.7	0.3	0.1	0.0	0.0	-0.2	-0.4	-0.7	-0.3	-0.7	-0.7
Percent Difference[3]	-0.3%	-1.1%	0.6%	0.3%	0.0%	0.0%	-0.3%	-0.6%	-0.9%	-0.4%	-0.9%	-0.9%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	68.2	59.5	51.6	46.6	47.3	51.1	57.8	67.6	73.4	73.8	75.2	71.7
WSIP 2070 With Project	68.0	58.7	51.9	46.6	47.3	51.1	57.7	67.4	73.0	72.7	74.4	71.3
Difference	-0.2	-0.8	0.2	0.0	-0.1	-0.1	-0.1	-0.2	-0.4	-1.2	-0.8	-0.4
Percent Difference	-0.3%	-1.4%	0.5%	-0.1%	-0.2%	-0.1%	-0.2%	-0.3%	-0.6%	-1.6%	-1.0%	-0.5%
Above Normal (13%)												
WSIP 2070 Without Project	68.3	59.3	52.1	48.5	48.4	51.9	59.8	69.1	75.4	71.6	76.1	73.5
WSIP 2070 With Project	68.1	58.4	52.7	48.6	48.4	51.9	59.8	68.8	74.2	72.0	74.3	73.0
Difference	-0.2	-0.9	0.6	0.1	0.0	0.0	0.0	-0.3	-1.2	0.4	-1.7	-0.5
Percent Difference	-0.3%	-1.5%	1.1%	0.3%	-0.1%	0.0%	0.0%	-0.4%	-1.6%	0.6%	-2.3%	-0.7%
Below Normal (16%)												
WSIP 2070 Without Project	68.4	59.3	52.3	48.8	49.5	52.9	61.4	69.3	75.0	73.3	76.3	74.7
WSIP 2070 With Project	68.2	58.6	52.8	49.0	49.6	52.9	61.0	68.8	74.3	73.6	75.2	73.6
Difference	-0.2	-0.7	0.5	0.2	0.1	0.0	-0.4	-0.6	-0.7	0.4	-1.1	-1.0
Percent Difference	-0.2%	-1.2%	0.9%	0.4%	0.2%	0.0%	-0.7%	-0.8%	-0.9%	0.5%	-1.5%	-1.4%
Dry (24%)												
WSIP 2070 Without Project	68.8	60.1	51.8	49.5	50.7	56.1	63.0	69.9	74.4	75.3	76.9	75.5
WSIP 2070 With Project	68.6	59.6	52.1	49.6	50.8	56.2	63.2	69.4	73.3	75.3	77.0	74.8
Difference	-0.1	-0.6	0.3	0.2	0.1	0.1	0.2	-0.5	-1.1	0.0	0.1	-0.7
Percent Difference	-0.2%	-1.0%	0.5%	0.3%	0.1%	0.1%	0.4%	-0.7%	-1.4%	0.0%	0.1%	-0.9%
Critical (15%)												
WSIP 2070 Without Project	70.4	60.5	52.5	50.6	54.4	60.2	65.8	73.0	77.3	81.1	80.3	78.3
WSIP 2070 With Project	70.2	60.3	52.8	50.9	54.4	60.1	64.8	72.2	77.0	80.6	79.7	77.3
Difference	-0.2	-0.2	0.3	0.4	0.0	-0.1	-1.0	-0.8	-0.2	-0.5	-0.6	-1.0
Percent Difference	-0.3%	-0.3%	0.5%	0.7%	-0.1%	-0.1%	-1.6%	-1.2%	-0.3%	-0.6%	-0.7%	-1.3%

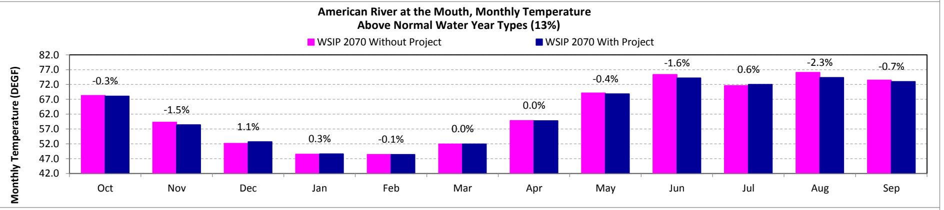
1 Based on the 82-year simulation period

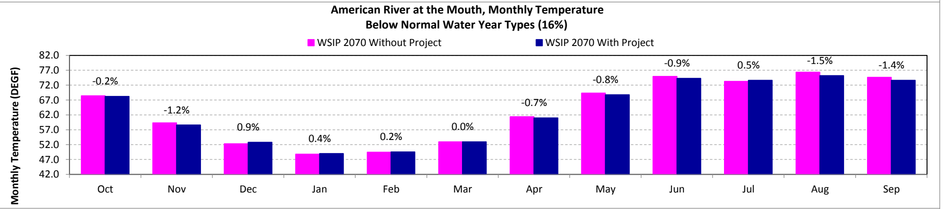
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

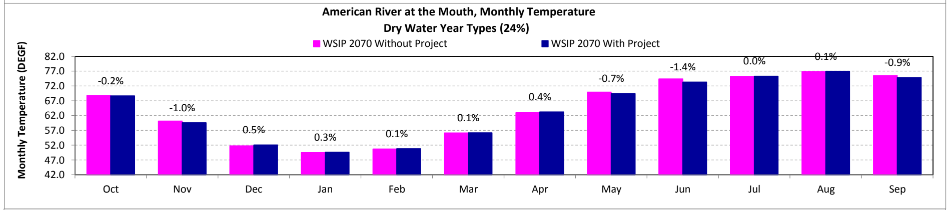
3 Relative difference of the monthly average











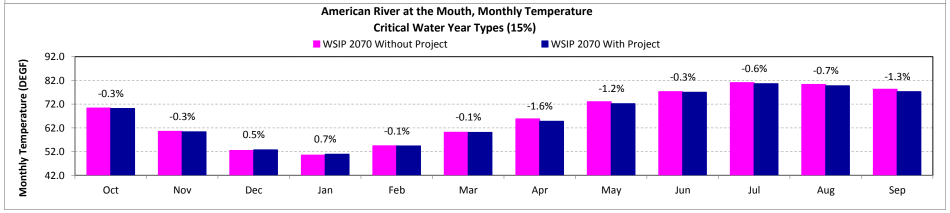


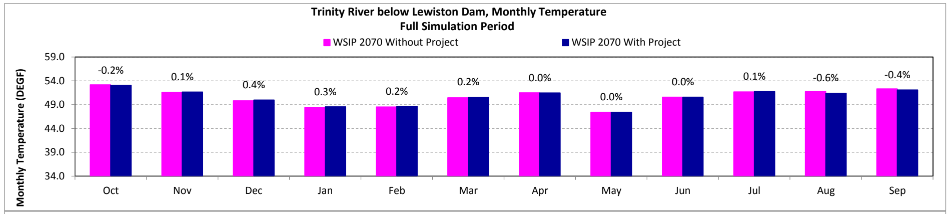
Table SQ12-1a
Trinity River below Lewiston Dam, Monthly Temperature
Long-term Average and Average by Water Year Type

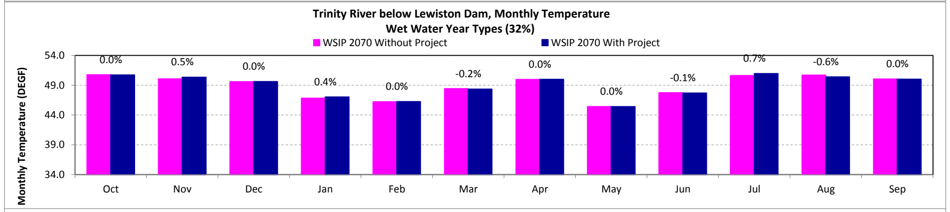
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	53.2	51.6	49.8	48.4	48.5	50.5	51.5	47.4	50.6	51.7	51.7	52.3
WSIP 2070 With Project	53.1	51.7	50.0	48.5	48.6	50.5	51.5	47.4	50.6	51.8	51.4	52.1
Difference	-0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	-0.3	-0.2
Percent Difference[3]	-0.2%	0.1%	0.4%	0.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.1%	-0.6%	-0.4%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	50.8	50.1	49.6	46.8	46.2	48.4	50.0	45.4	47.7	50.6	50.7	50.1
WSIP 2070 With Project	50.7	50.3	49.6	47.0	46.2	48.3	50.0	45.4	47.7	51.0	50.4	50.0
Difference	0.0	0.3	0.0	0.2	0.0	-0.1	0.0	0.0	-0.1	0.3	-0.3	0.0
Percent Difference	0.0%	0.5%	0.0%	0.4%	0.0%	-0.2%	0.0%	0.0%	-0.1%	0.7%	-0.6%	0.0%
Above Normal (13%)												
WSIP 2070 Without Project	51.0	50.0	49.9	47.3	47.7	49.5	51.4	45.6	49.1	50.9	51.1	50.6
WSIP 2070 With Project	50.9	50.2	49.8	47.4	47.9	49.8	51.5	45.7	48.9	50.9	50.8	50.3
Difference	-0.1	0.2	-0.1	0.1	0.2	0.3	0.0	0.1	-0.2	0.0	-0.4	-0.3
Percent Difference	-0.2%	0.5%	-0.2%	0.2%	0.4%	0.6%	0.0%	0.1%	-0.4%	0.0%	-0.8%	-0.6%
Below Normal (16%)												
WSIP 2070 Without Project	53.3	51.9	49.3	48.9	49.2	51.6	52.1	47.6	51.3	51.2	51.1	51.7
WSIP 2070 With Project	53.5	51.5	48.9	48.8	49.2	51.4	52.1	47.6	51.4	51.4	51.0	51.6
Difference	0.2	-0.4	-0.4	-0.1	0.0	-0.1	-0.1	0.0	0.1	0.2	-0.1	-0.1
Percent Difference	0.3%	-0.7%	-0.8%	-0.2%	0.1%	-0.3%	-0.1%	0.1%	0.2%	0.4%	-0.3%	-0.2%
Dry (24%)												
WSIP 2070 Without Project	55.0	53.0	49.8	49.5	50.0	51.7	52.5	48.7	51.9	51.8	52.4	53.8
WSIP 2070 With Project	54.9	53.0	50.1	49.7	50.2	52.0	52.5	48.7	51.8	51.7	52.2	53.4
Difference	-0.1	0.0	0.4	0.2	0.3	0.2	-0.1	0.0	-0.1	-0.1	-0.2	-0.4
Percent Difference	-0.1%	-0.1%	0.7%	0.4%	0.5%	0.5%	-0.1%	0.0%	-0.1%	-0.2%	-0.3%	-0.7%
Critical (15%)												
WSIP 2070 Without Project	56.9	53.5	50.8	50.4	51.1	52.4	52.3	51.0	55.0	55.1	54.1	56.9
WSIP 2070 With Project	56.3	53.7	51.9	50.7	51.2	52.6	52.4	50.9	55.3	54.8	53.3	56.4
Difference	-0.6	0.2	1.0	0.3	0.1	0.3	0.0	-0.1	0.3	-0.4	-0.8	-0.5
Percent Difference	-1.1%	0.3%	2.1%	0.5%	0.3%	0.5%	0.1%	-0.1%	0.5%	-0.7%	-1.4%	-0.8%

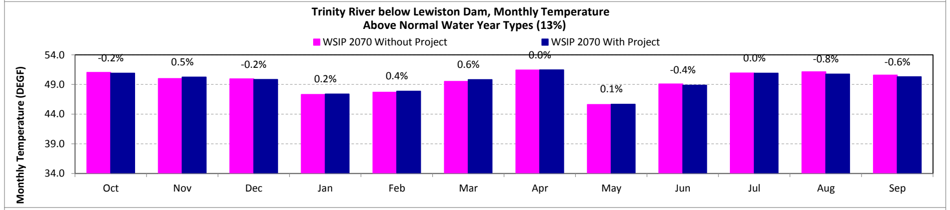
1 Based on the 82-year simulation period

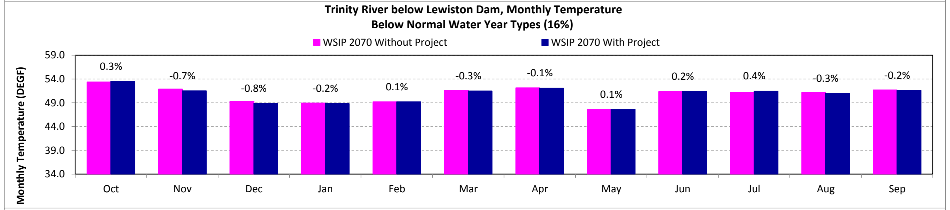
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

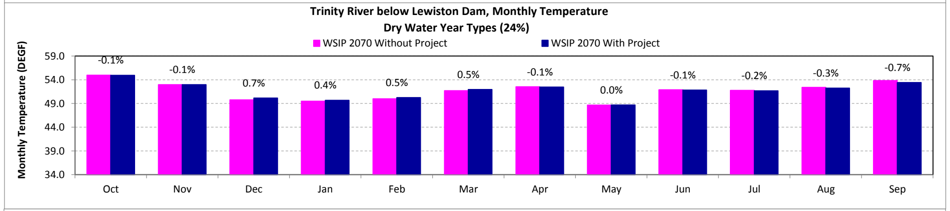
3 Relative difference of the monthly average











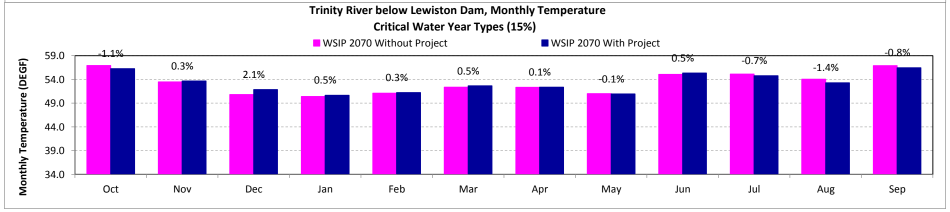


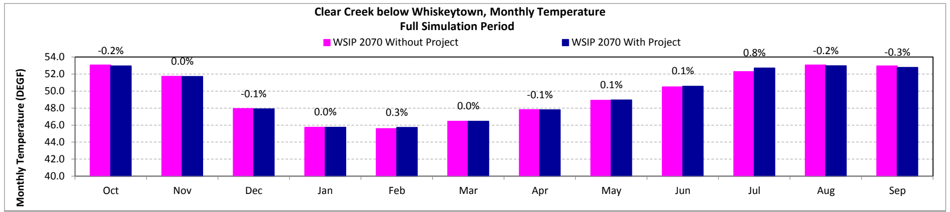
Table SQ13-1a
Clear Creek below Whiskeytown, Monthly Temperature
Long-term Average and Average by Water Year Type

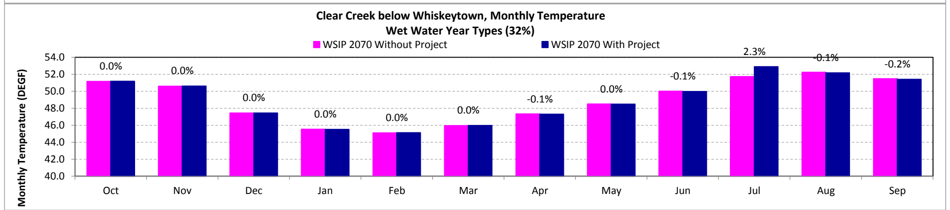
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	53.1	51.7	47.9	45.7	45.6	46.5	47.8	48.9	50.5	52.3	53.1	53.0
WSIP 2070 With Project	52.9	51.7	47.9	45.7	45.7	46.4	47.8	49.0	50.6	52.7	53.0	52.8
Difference	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.4	-0.1	-0.2
Percent Difference[3]	-0.2%	0.0%	-0.1%	0.0%	0.3%	0.0%	-0.1%	0.1%	0.1%	0.8%	-0.2%	-0.3%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	51.2	50.6	47.4	45.5	45.1	46.0	47.3	48.5	50.0	51.7	52.2	51.5
WSIP 2070 With Project	51.2	50.6	47.5	45.5	45.1	46.0	47.3	48.5	50.0	52.9	52.2	51.4
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	-0.1	-0.1
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.1%	2.3%	-0.1%	-0.2%
Above Normal (13%)												
WSIP 2070 Without Project	51.7	50.8	47.5	45.7	45.4	46.0	47.4	48.5	49.9	51.7	52.1	51.6
WSIP 2070 With Project	51.5	50.7	47.5	45.7	45.4	46.0	47.3	48.4	49.7	51.5	51.9	51.4
Difference	-0.2	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.2
Percent Difference	-0.4%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.2%	-0.2%	-0.3%	-0.3%	-0.5%	-0.4%
Below Normal (16%)												
WSIP 2070 Without Project	52.8	51.5	47.6	45.2	45.0	46.1	47.5	48.5	50.1	52.0	52.7	52.4
WSIP 2070 With Project	52.7	51.6	47.5	45.2	45.0	46.1	47.5	48.5	50.2	52.2	52.6	52.4
Difference	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	-0.1
Percent Difference	-0.2%	0.1%	-0.2%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	0.3%	0.3%	-0.2%	-0.1%
Dry (24%)												
WSIP 2070 Without Project	54.2	52.6	48.4	45.6	45.9	46.8	48.1	49.1	50.8	52.6	53.5	53.7
WSIP 2070 With Project	54.1	52.6	48.3	45.6	45.8	46.8	48.1	49.2	50.9	52.8	53.5	53.6
Difference	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	-0.1
Percent Difference	-0.2%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.1%	-0.2%
Critical (15%)												
WSIP 2070 Without Project	56.6	53.7	48.9	47.0	46.9	47.8	49.2	50.3	52.1	53.7	55.4	56.7
WSIP 2070 With Project	56.3	53.6	48.9	47.1	47.9	47.7	49.1	50.6	52.5	53.7	55.2	56.1
Difference	-0.3	-0.1	0.0	0.1	1.0	0.0	0.0	0.3	0.3	0.0	-0.2	-0.6
Percent Difference	-0.5%	-0.3%	-0.1%	0.2%	2.1%	0.0%	-0.1%	0.5%	0.6%	0.0%	-0.4%	-1.0%

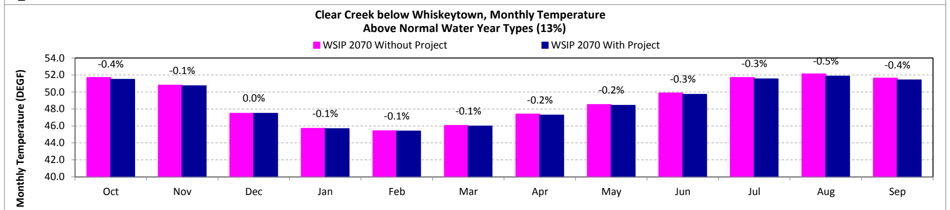
1 Based on the 82-year simulation period

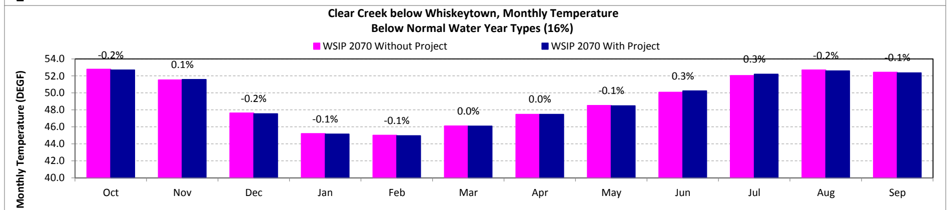
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

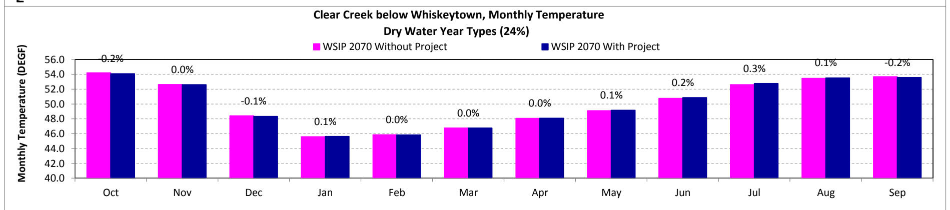
3 Relative difference of the monthly average











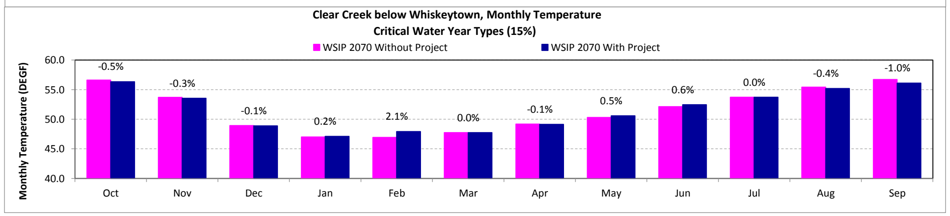


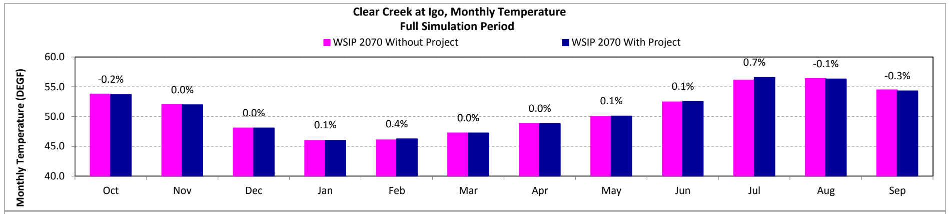
Table SQ14-1a
Clear Creek at Igo, Monthly Temperature
Long-term Average and Average by Water Year Type

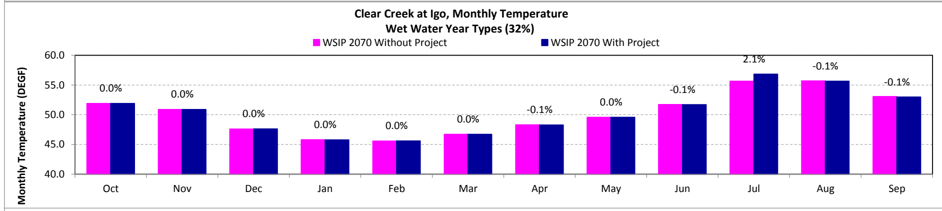
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Temperature (DEGF)											
Long-term												
Full Simulation Period[1]												
WSIP 2070 Without Project	53.8	52.0	48.1	46.0	46.1	47.2	48.9	50.0	52.5	56.1	56.4	54.5
WSIP 2070 With Project	53.7	52.0	48.1	46.0	46.2	47.2	48.8	50.1	52.5	56.5	56.3	54.3
Difference	-0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.4	-0.1	-0.2
Percent Difference[3]	-0.2%	0.0%	0.0%	0.1%	0.4%	0.0%	0.0%	0.1%	0.1%	0.7%	-0.1%	-0.3%
Water Year Types[2]												
Wet (32%)												
WSIP 2070 Without Project	51.9	50.9	47.6	45.8	45.6	46.7	48.3	49.6	51.7	55.7	55.7	53.1
WSIP 2070 With Project	51.9	50.9	47.6	45.8	45.6	46.7	48.3	49.6	51.7	56.8	55.7	53.0
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	-0.1	-0.1
Percent Difference	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.1%	2.1%	-0.1%	-0.1%
Above Normal (13%)												
WSIP 2070 Without Project	52.4	51.0	47.6	46.0	45.9	46.8	48.4	49.6	51.7	55.6	55.5	53.2
WSIP 2070 With Project	52.2	51.0	47.6	46.0	45.9	46.8	48.3	49.5	51.6	55.5	55.3	53.0
Difference	-0.2	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Percent Difference	-0.4%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.2%	-0.2%	-0.3%	-0.3%	-0.4%	-0.4%
Below Normal (16%)												
WSIP 2070 Without Project	53.4	51.8	47.8	45.5	45.5	46.9	48.5	49.6	51.9	55.9	56.0	53.9
WSIP 2070 With Project	53.4	51.8	47.7	45.4	45.5	46.9	48.5	49.6	52.1	56.0	55.9	53.8
Difference	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	-0.1
Percent Difference	-0.2%	0.1%	-0.2%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	0.3%	0.3%	-0.2%	-0.1%
Dry (24%)												
WSIP 2070 Without Project	54.9	52.9	48.5	45.8	46.3	47.5	49.1	50.2	52.7	56.4	56.7	55.1
WSIP 2070 With Project	54.8	52.8	48.6	45.8	46.3	47.5	49.1	50.2	52.8	56.5	56.7	55.0
Difference	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	-0.1
Percent Difference	-0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.1%	-0.2%
Critical (15%)												
WSIP 2070 Without Project	57.5	54.0	49.1	47.2	47.5	48.6	50.4	51.6	55.0	57.5	58.5	58.3
WSIP 2070 With Project	57.2	53.8	49.0	47.5	48.7	48.7	50.4	51.9	55.3	57.5	58.3	57.8
Difference	-0.3	-0.1	0.0	0.3	1.2	0.0	0.0	0.3	0.3	0.0	-0.2	-0.6
Percent Difference	-0.5%	-0.2%	-0.1%	0.6%	2.6%	0.0%	0.0%	0.5%	0.6%	0.0%	-0.3%	-1.0%

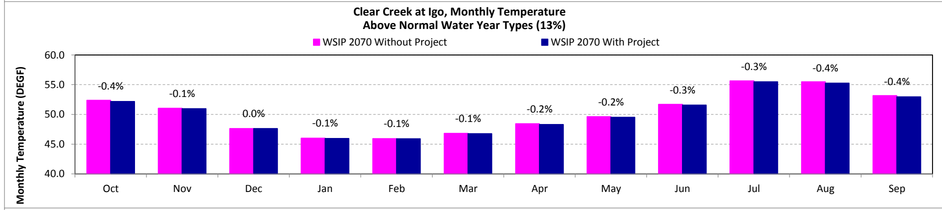
1 Based on the 82-year simulation period

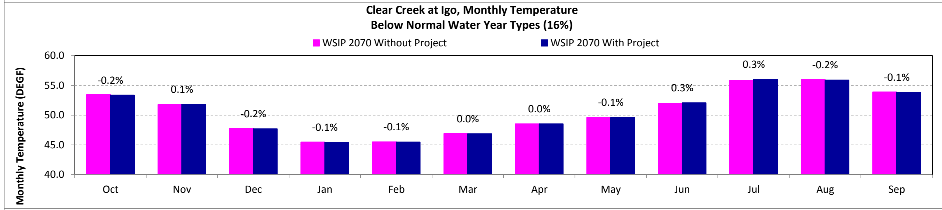
2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999)

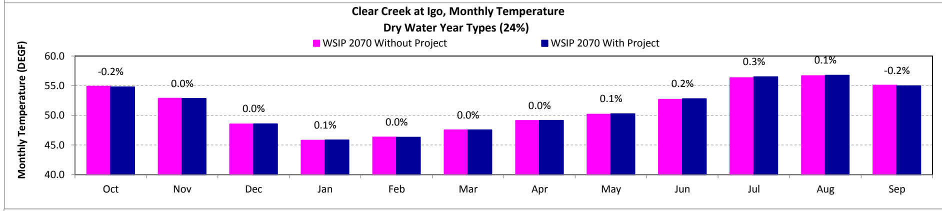
3 Relative difference of the monthly average

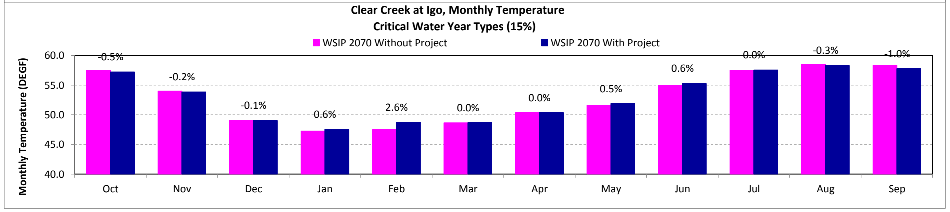












Trinity and Sacramento River Basin Operations
Exceedance Probability Charts and Tables

Figure SQ2-1b
Sacramento River below Keswick, Monthly Temperature
Probability of Exceedance

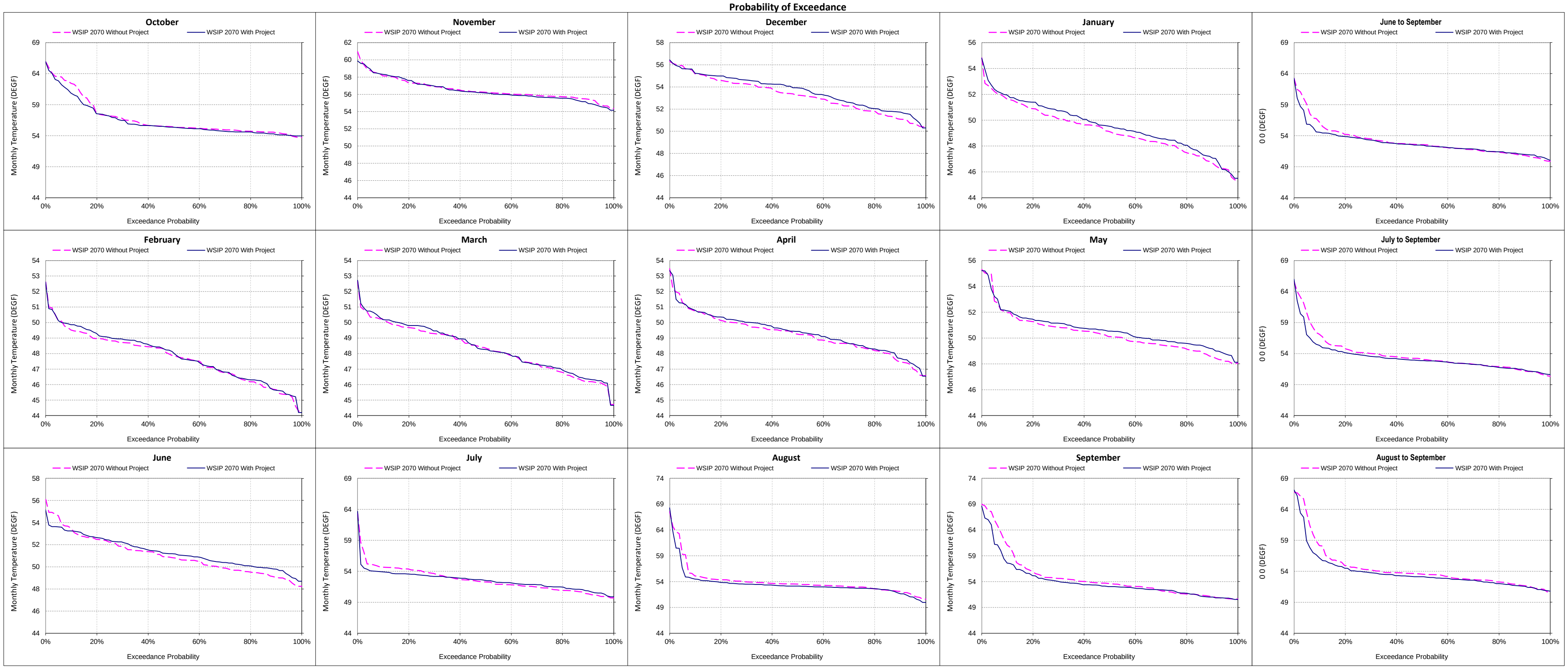


Table SQ2-1b

Sacramento River below Keswick, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.9	65.9	0.0	0.0%
1.2%	65.0	64.5	-0.4	-0.7%
2.5%	64.1	64.1	0.0	-0.1%
3.7%	63.6	63.1	-0.5	-0.8%
4.9%	63.5	62.9	-0.7	-1.1%
6.2%	63.5	62.2	-1.3	-2.0%
7.4%	62.9	61.8	-1.1	-1.7%
8.6%	62.8	61.4	-1.4	-2.3%
9.9%	62.4	60.8	-1.6	-2.6%
11.1%	62.3	60.6	-1.7	-2.8%
12.3%	61.8	60.3	-1.5	-2.4%
13.6%	60.9	59.6	-1.4	-2.2%
14.8%	60.3	59.0	-1.3	-2.1%
16.0%	60.1	58.9	-1.2	-2.0%
17.3%	59.3	58.6	-0.6	-1.1%
18.5%	59.0	58.5	-0.5	-0.9%
19.8%	57.6	57.5	-0.1	-0.2%
21.0%	57.4	57.5	0.1	0.1%
22.2%	57.3	57.4	0.1	0.2%
23.5%	57.3	57.3	0.0	0.0%
24.7%	57.2	57.2	0.0	0.0%
25.9%	57.1	56.9	-0.2	-0.3%
27.2%	57.1	56.9	-0.2	-0.4%
28.4%	56.9	56.6	-0.3	-0.5%
29.6%	56.8	56.5	-0.4	-0.7%
30.9%	56.5	56.5	-0.1	-0.1%
32.1%	56.5	55.9	-0.6	-1.1%
33.3%	56.4	55.9	-0.5	-0.9%
34.6%	56.4	55.9	-0.5	-0.9%
35.8%	56.2	55.8	-0.4	-0.8%
37.0%	55.9	55.7	-0.3	-0.5%
38.3%	55.8	55.6	-0.2	-0.3%
39.5%	55.7	55.6	-0.1	-0.1%
40.7%	55.6	55.6	0.0	0.0%
42.0%	55.6	55.6	0.0	0.0%
43.2%	55.6	55.6	0.0	0.0%
44.4%	55.5	55.5	0.0	0.0%
45.7%	55.5	55.5	0.0	0.0%
46.9%	55.5	55.4	-0.1	-0.2%
48.1%	55.5	55.4	-0.1	-0.2%
49.4%	55.4	55.4	-0.1	-0.1%
50.6%	55.4	55.3	0.0	-0.1%
51.9%	55.3	55.3	0.0	0.0%
53.1%	55.3	55.3	-0.1	-0.1%
54.3%	55.3	55.2	-0.1	-0.2%
55.6%	55.3	55.2	-0.1	-0.2%
56.8%	55.3	55.1	-0.1	-0.2%
58.0%	55.2	55.1	-0.1	-0.2%
59.3%	55.2	55.1	-0.1	-0.2%
60.5%	55.2	55.1	-0.1	-0.1%
61.7%	55.1	55.0	-0.1	-0.2%
63.0%	55.1	54.9	-0.2	-0.3%
64.2%	55.1	54.9	-0.2	-0.4%
65.4%	55.1	54.9	-0.2	-0.3%
66.7%	55.1	54.8	-0.2	-0.4%
67.9%	55.0	54.8	-0.2	-0.4%
69.1%	55.0	54.7	-0.2	-0.4%
70.4%	54.9	54.7	-0.3	-0.5%
71.6%	54.9	54.7	-0.3	-0.5%
72.8%	54.9	54.6	-0.3	-0.5%
74.1%	54.9	54.6	-0.3	-0.5%
75.3%	54.8	54.6	-0.2	-0.4%
76.5%	54.7	54.6	-0.1	-0.2%
77.8%	54.7	54.6	-0.1	-0.2%
79.0%	54.7	54.6	-0.1	-0.2%
80.2%	54.7	54.6	-0.1	-0.2%
81.5%	54.7	54.5	-0.2	-0.4%
82.7%	54.7	54.4	-0.2	-0.4%
84.0%	54.6	54.4	-0.2	-0.4%
85.2%	54.6	54.4	-0.2	-0.4%
86.4%	54.6	54.3	-0.3	-0.5%
87.7%	54.6	54.3	-0.2	-0.4%
88.9%	54.6	54.3	-0.3	-0.5%
90.1%	54.5	54.2	-0.3	-0.6%
91.4%	54.4	54.2	-0.3	-0.5%
92.6%	54.3	54.2	-0.2	-0.3%
93.8%	54.3	54.1	-0.1	-0.2%
95.1%	54.3	54.0	-0.2	-0.4%
96.3%	53.9	54.0	0.1	0.2%
97.5%	53.8	53.9	0.2	0.3%
98.8%	53.7	53.9	0.2	0.4%
100.0%	53.7	53.9	0.0	0.4%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.9	59.9	-1.1	-1.8%
1.2%	59.9	59.6	-0.4	-0.6%
2.5%	59.4	59.5	0.1	0.2%
3.7%	58.9	59.2	0.2	0.4%
4.9%	58.8	58.9	0.2	0.3%
6.2%	58.6	58.5	-0.1	-0.1%
7.4%	58.5	58.5	0.0	0.0%
8.6%	58.4	58.4	0.0	0.0%
9.9%	58.1	58.3	0.2	0.3%
11.1%	58.1	58.3	0.1	0.3%
12.3%	58.1	58.2	0.1	0.2%
13.6%	58.0	58.1	0.1	0.1%
14.8%	58.0	58.0	0.1	0.1%
16.0%	57.7	58.0	0.3	0.5%
17.3%	57.7	57.9	0.2	0.4%
18.5%	57.6	57.8	0.2	0.3%
19.8%	57.4	57.6	0.3	0.5%
21.0%	57.3	57.6	0.3	0.5%
22.2%	57.3	57.3	0.0	0.1%
23.5%	57.3	57.2	-0.1	-0.2%
24.7%	57.3	57.2	-0.1	-0.2%
25.9%	57.2	57.1	-0.1	-0.2%
27.2%	57.0	57.1	0.1	0.1%
28.4%	57.0	57.0	0.1	0.1%
29.6%	56.9	57.0	0.1	0.1%
30.9%	56.9	56.9	0.0	0.0%
32.1%	56.9	56.9	0.0	0.0%
33.3%	56.7	56.9	0.1	0.3%
34.6%	56.7	56.6	0.0	0.0%
35.8%	56.7	56.5	-0.1	-0.3%
37.0%	56.6	56.5	-0.1	-0.3%
38.3%	56.6	56.5	-0.1	-0.2%
39.5%	56.5	56.4	-0.1	-0.2%
40.7%	56.4	56.4	-0.1	-0.1%
42.0%	56.4	56.3	-0.1	-0.1%
43.2%	56.4	56.3	-0.1	-0.1%
44.4%	56.3	56.3	0.0	0.0%
45.7%	56.3	56.3	0.0	-0.1%
46.9%	56.3	56.2	-0.1	-0.2%
48.1%	56.3	56.2	-0.1	-0.1%
49.4%	56.3	56.2	-0.1	-0.2%
50.6%	56.2	56.1	-0.1	-0.1%
51.9%	56.2	56.1	-0.1	-0.1%
53.1%	56.2	56.0	-0.1	-0.3%
54.3%	56.1	56.0	-0.1	-0.2%
55.6%	56.1	56.0	-0.1	-0.2%
56.8%	56.1	56.0	-0.1	-0.2%
58.0%	56.1	56.0	-0.1	-0.2%
59.3%	56.1	56.0	-0.1	-0.2%
60.5%	56.0	55.9	-0.1	-0.2%
61.7%	56.0	55.9	-0.1	-0.2%
63.0%	56.0	55.9	-0.1	-0.2%
64.2%	56.0	55.9	-0.1	-0.2%
65.4%	56.0	55.9	-0.1	-0.2%
66.7%	56.0	55.8	-0.2	-0.3%
67.9%	56.0	55.8	-0.2	-0.3%
69.1%	55.9	55.7	-0.2	-0.3%
70.4%	55.9	55.7	-0.2	-0.3%
71.6%	55.8	55.7	-0.2	-0.3%
72.8%	55.8	55.7	-0.1	-0.3%
74.1%	55.8	55.6	-0.2	-0.3%
75.3%	55.8	55.6	-0.2	-0.3%
76.5%	55.8	55.6	-0.2	-0.3%
77.8%	55.8	55.6	-0.2	-0.3%
79.0%	55.7	55.6	-0.2	-0.3%
80.2%	55.7	55.6	-0.2	-0.3%
81.5%	55.7	55.6	-0.2	-0.3%
82.7%	55.7	55.5	-0.1	-0.3%
84.0%	55.7	55.4	-0.2	-0.4%
85.2%	55.6	55.3	-0.2	-0.4%
86.4%	55.5	55.2	-0.3	-0.6%
87.7%	55.5	55.2	-0.3	-0.6%
88.9%	55.5	55.2	-0.3	-0.6%
90.1%	55.4	54.9	-0.5	-0.9%
91.4%	55.4	54.9	-0.5	-0.8%
92.6%	55.3	54.8	-0.5	-0.9%
93.8%	54.9	54.7	-0.2	-0.4%
95.1%	54.8	54.6	-0.2	-0.4%
96.3%	54.6	54.5	-0.2	-0.3%
97.5%	54.6	54.4	-0.2	-0.4%
98.8%	54.4	54.1	-0.2	-0.4%
100.0%	54.4	54.1	-0.2	-0.4%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.3	56.4	0.1	0.2%
1.2%	56.1	56.1	0.0	0.0%
2.5%	56.0	55.9	-0.1	-0.2%
3.7%	55.9	55.8	-0.1	-0.2%
4.9%	55.9	55.6	-0.3	-0.5%
6.2%	55.6	55.6	0.0	0.0%
7.4%	55.6	55.6	0.0	0.0%
8.6%	55.5	55.6	0.1	0.1%
9.9%	55.2	55.2	0.0	0.1%
11.1%	55.2	55.2	0.0	0.0%
12.3%	55.1	55.1	0.0	0.1%
13.6%	55.1	55.1	0.1	0.1%
14.8%	54.9	55.1	0.2	0.3%
16.0%	54.8	55.0	0.2	0.4%
17.3%	54.7	55.0	0.3	0.5%
18.5%	54.6	55.0	0.4	0.7%
19.8%	54.6	55.0	0.4	0.7%
21.0%	54.5	55.0	0.4	0.8%
22.2%	54.5	54.8	0.4	0.6%
23.5%	54.5	54.8	0.3	0.6%
24.7%	54.3	54.8	0.5	0.8%
25.9%	54.3	54.8	0.4	0.8%
27.2%	54.3	54.7	0.4	0.7%
28.4%	54.3	54.7	0.4	0.7%
29.6%	54.3	54.6	0.3	0.6%
30.9%	54.2	54.6	0.4	0.7%
32.1%	54.2	54.6	0.3	0.6%
33.3%	54.1	54.5	0.4	0.7%
34.6%	54.0	54.5	0.5	1.0%
35.8%	54.0	54.3	0.3	0.6%
37.0%	54.0	54.3	0.3	0.6%
38.3%	53.9	54.3	0.3	0.6%
39.5%	53.9	54.3	0.3	0.6%
40.7%	53.7	54.3	0.5	1.0%
42.0%	53.6	54.2	0.7	1.3%
43.2%	53.5	54.2	0.7	1.4%
44.4%	53.5	54.2	0.7	1.4%
45.7%	53.4	54.1	0.7	1.2%
46.9%	53.4	54.1	0.7	1.3%
48.1%	53.4	53.9	0.6	1.0%
49.4%	53.3	53.9	0.7	1.3%
50.6%	53.2	53.9	0.6	1.2%
51.9%	53.2	53.9	0.7	1.3%
53.1%	53.2	53.8	0.6	1.1%
54.3%	53.1	53.7	0.5	1.0%
55.6%	53.1	53.5	0.4	0.7%
56.8%	53.1	53.4	0.3	0.6%
58.0%	53.0	53.3	0.4	0.7%
59.3%	52.9	53.3	0.4	0.8%
60.5%	52.9	53.2	0.4	0.7%
61.7%	52.8	53.2	0.5	0.9%
63.0%	52.5	53.1	0.6	1.1%
64.2%	52.5	53.0	0.4	0.8%
65.4%	52.5	52.9	0.4	0.7%
66.7%	52.5	52.8	0.3	0.7%
67.9%	52.3	52.7	0.5	0.9%
69.1%	52.3	52.6	0.3	0.6%
70.4%	52.3	52.6	0.3	0.6%
71.6%	52.3	52.6	0.3	0.6%
72.8%	52.1	52.4	0.3	0.6%
74.1%	52.0	52.4	0.4	0.7%
75.3%	51.9	52.4	0.5	0.9%
76.5%	51.9	52.3	0.4	0.8%
77.8%	51.8	52.1	0.3	0.6%
79.0%	51.8	52.1	0.2	0.5%
80.2%	51.8	52.0	0.3	0.5%
81.5%	51.6	52.0	0.5	0.9%
82.7%	51.5	51.9	0.3	0.6%
84.0%	51.5	51.8	0.4	0.7%
85.2%	51.4	51.8	0.4	0.9%
86.4%	51.3	51.8	0.4	0.9%
87.7%	51.3	51.8	0.5	1.0%
88.9%	51.1	51.8	0.6	1.2%
90.1%	51.1	51.7	0.6	1.3%
91.4%	51.1	51.6	0.5	1.1%
92.6%	51.0	51.6	0.6	1.1%
93.8%	50.7	51.5	0.8	1.6%
95.1%	50.7	51.2	0.5	1.0%
96.3%	50.6	51.0	0.4	0.8%
97.5%	50.4	50.7	0.3	0.6%
98.8%	50.4	50.3	-0.1	-0.2%
100.0%	50.4	50.3	-0.1	-0.2%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.8	54.8	0.0	0.0%
1.2%	52.8	53.9	1.1	2.1%
2.5%	52.7	53.1	0.4	0.8%
3.7%	52.5	52.7	0.2	0.5%
4.9%	52.2	52.4	0.2	0.3%
6.2%	52.0	52.2	0.2	0.4%
7.4%	52.0	52.1	0.1	0.2%
8.6%	51.8	52.0	0.2	0.3%
9.9%	51.6	51.9	0.3	0.6%
11.1%	51.6	51.7	0.2	0.3%
12.3%	51.5	51.7	0.2	0.4%
13.6%	51.4	51.6	0.2	0.4%
14.8%	51.3	51.5	0.2	0.4%
16.0%	51.2	51.5	0.3	0.5%
17.3%	51.1	51.4	0.3	0.7%
18.5%	50.9	51.4	0.5	1.0%
19.8%	50.9	51.4	0.5	1.0%
21.0%	50.9	51.4	0.5	1.0%
22.2%	50.7	51.1	0.4	0.8%
23.5%	50.5	51.1	0.6	1.1%
24.7%	50.4	51.0	0.6	1.2%
25.9%	50.4	50.9	0.5	1.1%
27.2%	50.3	50.9	0.5	1.1%
28.4%	50.3	50.8	0.6	1.2%
29.6%	50.1	50.7	0.6	1.2%
30.9%	50.1	50.7	0.6	1.3%
32.1%	50.1	50.7	0.6	1.2%
33.3%	49.9	50.6	0.7	1.3%
34.6%	49.9	50.4	0.5	0.9%
35.8%	49.9	50.4	0.5	1.0%
37.0%	49.8	50.3	0.6	1.2%
38.3%	49.7	50.2	0.5	0.9%
39.5%	49.6	50.1	0.4	0.9%
40.7%	49.6	50.1	0.4	0.9%
42.0%	49.6	49.9	0.3	0.5%
43.2%	49.6	49.8	0.2	0.5%
44.4%	49.6	49.8	0.2	0.5%
45.7%	49.5	49.6	0.1	0.2%
46.9%	49.4	49.6	0.2	0.4%
48.1%	49.2	49.6	0.4	0.8%
49.4%	49.1	49.5	0.4	0.8%
50.6%	49.1	49.5	0.4	0.9%
51.9%	48.9	49.4	0.5	0.9%
53.1%	48.9	49.4	0.5	1.0%
54.3%	48.8	49.3	0.5	1.0%
55.6%	48.8	49.3	0.5	1.0%
56.8%	48.8	49.2	0.4	0.8%
58.0%	48.8	49.2	0.4	0.9%
59.3%	48.7	49.2	0.5	1.0%
60.5%	48.6	49.1	0.4	0.9%
61.7%	48.6	49.0	0.5	1.0%
63.0%	48.5	48.9	0.4	0.9%
64.2%	48.4	48.8	0.4	0.9%
65.4%	48.4	48.8	0.5	0.9%
66.7%	48.4	48.7	0.4	0.8%
67.9%	48.3	48.6	0.3	0.6%
69.1%	48.3	48.6	0.3	0.7%
70.4%	48.2	48.6	0.3	0.7%
71.6%	48.2	48.5	0.4	0.8%
72.8%	48.1	48.5	0.4	0.9%
74.1%	48.0	48.5	0.4	0.9%
75.3%	48.0	48.5	0.4	0.9%
76.5%	47.8	48.2	0.4	0.8%
77.8%	47.7	48.2	0.5	1.0%
79.0%	47.5	48.1	0.5	1.1%
80.2%	47.5	48.1	0.6	1.2%
81.5%	47.4	47.8	0.4	0.9%
82.7%	47.4	47.7	0.4	0.8%
84.0%	47.2	47.7	0.4	0.9%
85.2%	47.2	47.5	0.3	0.6%
86.4%	47.1	47.3	0.2	0.5%
87.7%	46.9	47.2	0.4	0.8%
88.9%	46.8	47.2	0.4	0.8%
90.1%	46.7	47.1	0.4	0.8%
91.4%	46.5	47.0	0.6	1.2%
92.6%	46.3	46.6	0.3	0.7%
93.8%	46.3	46.2	-0.1	-0.2%
95.1%	46.2	46.2	-0.1	-0.1%
96.3%	46.2	46.0	-0.2	-0.3%
97.5%	45.6	45.8	0.2	0.5%
98.8%	45.4	45.5	0.1	0.2%
100.0%	45.4	45.5	0.1	0.2%

Table SQ2-1b

Sacramento River below Keswick, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.6	52.6	0.0	0.0%
1.2%	51.0	50.9	-0.1	-0.2%
2.5%	50.9	50.8	-0.1	-0.2%
3.7%	50.5	50.5	0.0	0.0%
4.9%	50.1	50.1	0.0	0.0%
6.2%	50.1	50.0	-0.1	-0.2%
7.4%	49.8	50.0	0.2	0.4%
8.6%	49.7	49.9	0.3	0.5%
9.9%	49.5	49.9	0.3	0.7%
11.1%	49.5	49.9	0.4	0.8%
12.3%	49.4	49.8	0.3	0.7%
13.6%	49.4	49.8	0.3	0.7%
14.8%	49.3	49.7	0.3	0.6%
16.0%	49.3	49.5	0.2	0.5%
17.3%	49.1	49.5	0.4	0.8%
18.5%	49.0	49.4	0.4	0.8%
19.8%	49.0	49.3	0.3	0.7%
21.0%	49.0	49.1	0.2	0.3%
22.2%	48.9	49.1	0.2	0.3%
23.5%	48.9	49.1	0.2	0.4%
24.7%	48.9	49.0	0.2	0.4%
25.9%	48.8	49.0	0.2	0.3%
27.2%	48.8	49.0	0.1	0.3%
28.4%	48.7	48.9	0.2	0.4%
29.6%	48.7	48.9	0.2	0.5%
30.9%	48.7	48.9	0.2	0.4%
32.1%	48.7	48.9	0.2	0.4%
33.3%	48.7	48.9	0.2	0.4%
34.6%	48.5	48.9	0.3	0.7%
35.8%	48.5	48.8	0.3	0.5%
37.0%	48.5	48.7	0.3	0.5%
38.3%	48.5	48.7	0.2	0.4%
39.5%	48.4	48.6	0.2	0.4%
40.7%	48.4	48.5	0.1	0.2%
42.0%	48.4	48.5	0.0	0.1%
43.2%	48.4	48.4	0.1	0.1%
44.4%	48.4	48.4	0.1	0.1%
45.7%	48.3	48.3	0.0	0.0%
46.9%	48.1	48.2	0.2	0.4%
48.1%	48.0	48.2	0.2	0.5%
49.4%	47.9	48.1	0.3	0.6%
50.6%	47.8	47.9	0.1	0.2%
51.9%	47.8	47.8	0.0	0.0%
53.1%	47.7	47.7	-0.1	-0.2%
54.3%	47.7	47.6	-0.1	-0.1%
55.6%	47.7	47.6	-0.1	-0.2%
56.8%	47.6	47.6	0.0	-0.1%
58.0%	47.6	47.5	0.0	0.0%
59.3%	47.6	47.5	0.0	-0.1%
60.5%	47.5	47.4	-0.1	-0.2%
61.7%	47.2	47.2	0.1	0.2%
63.0%	47.1	47.2	0.1	0.2%
64.2%	47.1	47.2	0.1	0.1%
65.4%	47.1	47.2	0.1	0.1%
66.7%	47.0	47.0	-0.1	-0.1%
67.9%	46.8	46.9	0.1	0.2%
69.1%	46.8	46.8	0.0	0.1%
70.4%	46.8	46.8	0.0	0.1%
71.6%	46.7	46.8	0.1	0.2%
72.8%	46.7	46.6	-0.1	-0.2%
74.1%	46.6	46.5	0.0	-0.1%
75.3%	46.5	46.4	0.0	-0.1%
76.5%	46.3	46.4	0.1	0.1%
77.8%	46.3	46.4	0.1	0.2%
79.0%	46.2	46.3	0.1	0.3%
80.2%	46.2	46.3	0.1	0.2%
81.5%	46.2	46.3	0.1	0.3%
82.7%	46.0	46.3	0.2	0.5%
84.0%	46.0	46.2	0.2	0.5%
85.2%	45.8	46.1	0.3	0.7%
86.4%	45.8	46.1	0.2	0.5%
87.7%	45.8	45.8	0.0	0.0%
88.9%	45.7	45.7	0.0	-0.1%
90.1%	45.7	45.6	0.0	-0.1%
91.4%	45.4	45.6	0.2	0.4%
92.6%	45.4	45.6	0.2	0.4%
93.8%	45.4	45.4	0.0	0.0%
95.1%	45.4	45.3	0.0	0.0%
96.3%	45.2	45.3	0.1	0.2%
97.5%	44.6	45.2	0.6	1.4%
98.8%	44.3	44.2	-0.1	-0.2%
100.0%	44.3	44.2	-0.1	-0.2%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.7	52.7	0.1	0.1%
1.2%	51.0	51.2	0.2	0.4%
2.5%	50.8	50.9	0.1	0.2%
3.7%	50.7	50.7	0.1	0.1%
4.9%	50.4	50.7	0.4	0.8%
6.2%	50.3	50.7	0.3	0.7%
7.4%	50.3	50.5	0.2	0.4%
8.6%	50.2	50.3	0.1	0.2%
9.9%	50.2	50.2	-0.1	-0.1%
11.1%	50.1	50.2	0.1	0.2%
12.3%	50.0	50.2	0.2	0.4%
13.6%	49.9	50.1	0.2	0.4%
14.8%	49.8	50.0	0.2	0.4%
16.0%	49.8	50.0	0.2	0.4%
17.3%	49.7	49.9	0.2	0.5%
18.5%	49.7	49.9	0.2	0.3%
19.8%	49.7	49.8	0.1	0.3%
21.0%	49.7	49.8	0.1	0.3%
22.2%	49.6	49.8	0.2	0.4%
23.5%	49.6	49.8	0.2	0.5%
24.7%	49.5	49.8	0.3	0.7%
25.9%	49.4	49.8	0.3	0.6%
27.2%	49.4	49.7	0.3	0.6%
28.4%	49.3	49.6	0.3	0.6%
29.6%	49.3	49.5	0.2	0.4%
30.9%	49.3	49.5	0.2	0.4%
32.1%	49.3	49.3	0.1	0.1%
33.3%	49.2	49.3	0.1	0.2%
34.6%	49.2	49.2	0.0	0.0%
35.8%	49.2	49.2	-0.1	-0.1%
37.0%	49.2	49.1	-0.1	-0.1%
38.3%	48.9	49.1	0.2	0.3%
39.5%	48.9	49.0	0.0	0.1%
40.7%	48.9	48.9	0.1	0.1%
42.0%	48.7	48.9	0.3	0.5%
43.2%	48.7	48.7	0.0	0.1%
44.4%	48.5	48.6	0.0	0.1%
45.7%	48.5	48.5	0.0	0.0%
46.9%	48.5	48.3	-0.1	-0.3%
48.1%	48.4	48.3	-0.1	-0.2%
49.4%	48.4	48.3	-0.1	-0.2%
50.6%	48.3	48.2	-0.1	-0.1%
51.9%	48.3	48.2	-0.1	-0.2%
53.1%	48.2	48.1	0.0	0.0%
54.3%	48.1	48.1	0.0	0.0%
55.6%	48.1	48.1	0.0	-0.1%
56.8%	48.1	48.1	0.0	0.0%
58.0%	48.0	48.0	0.0	0.0%
59.3%	47.9	48.0	0.1	0.1%
60.5%	47.9	47.8	0.0	-0.1%
61.7%	47.8	47.8	0.0	0.0%
63.0%	47.7	47.8	0.1	0.2%
64.2%	47.5	47.5	-0.1	-0.1%
65.4%	47.5	47.4	0.0	-0.1%
66.7%	47.4	47.4	0.0	0.0%
67.9%	47.4	47.3	-0.1	-0.1%
69.1%	47.4	47.3	-0.1	-0.1%
70.4%	47.3	47.3	0.0	-0.1%
71.6%	47.1	47.2	0.1	0.2%
72.8%	47.1	47.2	0.1	0.3%
74.1%	47.1	47.2	0.1	0.2%
75.3%	47.1	47.2	0.1	0.3%
76.5%	47.0	47.1	0.1	0.1%
77.8%	46.9	47.1	0.2	0.4%
79.0%	46.8	47.0	0.2	0.5%
80.2%	46.8	46.9	0.1	0.3%
81.5%	46.6	46.8	0.2	0.5%
82.7%	46.6	46.8	0.2	0.4%
84.0%	46.5	46.7	0.2	0.5%
85.2%	46.4	46.6	0.2	0.4%
86.4%	46.4	46.5	0.1	0.3%
87.7%	46.3	46.4	0.2	0.4%
88.9%	46.2	46.4	0.2	0.4%
90.1%	46.2	46.4	0.2	0.4%
91.4%	46.2	46.3	0.1	0.3%
92.6%	46.2	46.3	0.1	0.3%
93.8%	46.1	46.3	0.1	0.3%
95.1%	46.1	46.2	0.1	0.3%
96.3%	46.0	46.1	0.1	0.2%
97.5%	45.9	46.1	0.2	0.5%
98.8%	44.7	44.7	-0.1	-0.1%
100.0%	44.7	44.7	-0.1	-0.1%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.5	53.4	-0.1	-0.2%
1.2%	52.2	53.1	0.9	1.7%
2.5%	52.0	51.5	-0.5	-0.9%
3.7%	51.9	51.3	-0.6	-1.2%
4.9%	51.3	51.3	-0.1	-0.1%
6.2%	51.1	51.2	0.1	0.1%
7.4%	50.9	51.0	0.1	0.1%
8.6%	50.8	50.9	0.1	0.1%
9.9%	50.7	50.8	0.0	0.1%
11.1%	50.7	50.7	0.0	-0.1%
12.3%	50.7	50.7	0.0	0.0%
13.6%	50.5	50.7	0.1	0.2%
14.8%	50.5	50.5	0.0	0.0%
16.0%	50.5	50.5	0.0	-0.1%
17.3%	50.3	50.4	0.1	0.2%
18.5%	50.3	50.4	0.1	0.2%
19.8%	50.1	50.4	0.2	0.4%
21.0%	50.1	50.3	0.2	0.5%
22.2%	50.0	50.2	0.2	0.4%
23.5%	50.0	50.2	0.2	0.3%
24.7%	50.0	50.2	0.2	0.4%
25.9%	50.0	50.2	0.2	0.3%
27.2%	49.9	50.1	0.2	0.3%
28.4%	49.9	50.1	0.2	0.3%
29.6%	49.9	50.0	0.1	0.3%
30.9%	49.8	50.0	0.3	0.5%
32.1%	49.7	50.0	0.3	0.6%
33.3%	49.7	50.0	0.3	0.5%
34.6%	49.7	50.0	0.3	0.6%
35.8%	49.7	49.9	0.2	0.5%
37.0%	49.6	49.9	0.2	0.5%
38.3%	49.6	49.8	0.3	0.5%
39.5%	49.5	49.8	0.2	0.5%
40.7%	49.5	49.7	0.1	0.2%
42.0%	49.5	49.7	0.1	0.3%
43.2%	49.5	49.6	0.1	0.3%
44.4%	49.5	49.5	0.1	0.1%
45.7%	49.5	49.5	0.0	0.1%
46.9%	49.5	49.4	0.0	0.0%
48.1%	49.3	49.4	0.1	0.2%
49.4%	49.3	49.4	0.2	0.3%
50.6%	49.2	49.4	0.2	0.4%
51.9%	49.2	49.3	0.1	0.2%
53.1%	49.2	49.3	0.1	0.2%
54.3%	49.2	49.3	0.1	0.2%
55.6%	49.2	49.3	0.1	0.2%
56.8%	49.0	49.2	0.2	0.5%
58.0%	48.9	49.2	0.3	0.7%
59.3%	48.9	49.1	0.2	0.5%
60.5%	48.9	49.1	0.2	0.5%
61.7%	48.8	49.0	0.2	0.5%
63.0%	48.8	48.9	0.1	0.3%
64.2%	48.7	48.9	0.2	0.5%
65.4%	48.7	48.9	0.2	0.5%
66.7%	48.7	48.9	0.2	0.5%
67.9%	48.7	48.8	0.1	0.2%
69.1%	48.7	48.7	0.0	0.1%
70.4%	48.6	48.6	0.0	0.0%
71.6%	48.6	48.6	0.0	0.0%
72.8%	48.4	48.6	0.2	0.3%
74.1%	48.4	48.5	0.1	0.2%
75.3%	48.4	48.5	0.1	0.3%
76.5%	48.3	48.4	0.1	0.1%
77.8%	48.3	48.3	0.0	0.1%
79.0%	48.2	48.3	0.1	0.1%
80.2%	48.2	48.3	0.1	0.2%
81.5%	48.2	48.2	0.1	0.1%
82.7%	48.1	48.2	0.1	0.3%
84.0%	48.0	48.2	0.2	0.4%
85.2%	48.0	48.1	0.1	0.3%
86.4%	48.0	48.1	0.1	0.3%
87.7%	47.7	48.1	0.4	0.8%
88.9%	47.5	47.7	0.2	0.4%
90.1%	47.5	47.7	0.2	0.5%
91.4%	47.4	47.6	0.2	0.4%
92.6%	47.4	47.6	0.2	0.4%
93.8%	47.3	47.4	0.1	0.2%
95.1%	47.0	47.3	0.3	0.7%
96.3%	46.9	47.2	0.3	0.6%
97.5%	46.6	47.0	0.4	0.9%
98.8%	46.6	46.5	0.0	-0.1%
100.0%	46.6	46.5	0.0	-0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.3	55.2	-0.1	-0.1%
1.2%	55.0	55.2	0.2	0.3%
2.5%	55.0	54.9	-0.1	-0.2%
3.7%	55.0	53.8	-1.2	-2.1%
4.9%	52.9	53.2	0.4	0.7%
6.2%	52.7	53.0	0.3	0.6%
7.4%	52.2	52.2	0.0	0.0%
8.6%	52.1	52.2	0.1	0.2%
9.9%	52.0	52.1	0.1	0.3%
11.1%	52.0	52.1	0.1	0.2%
12.3%	51.6	51.8	0.3	0.5%
13.6%	51.6	51.8	0.2	0.4%
14.8%	51.4	51.6	0.3	0.5%
16.0%	51.4	51.6	0.2	0.4%
17.3%	51.3	51.5	0.2	0.4%
18.5%	51.3	51.5	0.2	0.3%
19.8%	51.3	51.5	0.2	0.4%
21.0%	51.2	51.4	0.1	0.3%
22.2%	51.1	51.4	0.3	0.6%
23.5%	51.0	51.3	0.3	0.6%
24.7%	51.0	51.3	0.3	0.6%
25.9%	50.9	51.3	0.3	0.6%
27.2%	50.9	51.2	0.3	0.5%
28.4%	50.9	51.2	0.3	0.6%
29.6%	50.9	51.2	0.3	0.6%
30.9%	50.8	51.1	0.3	0.7%
32.1%	50.8	51.1	0.3	0.6%
33.3%	50.8	51.0	0.2	0.4%
34.6%	50.7	51.0	0.3	0.6%
35.8%	50.6	50.9	0.3	0.5%
37.0%	50.6	50.8	0.2	0.4%
38.3%	50.6	50.8	0.2	0.4%
39.5%	50.5	50.8	0.2	0.4%
40.7%	50.5	50.7	0.2	0.4%
42.0%	50.5	50.7	0.2	0.4%
43.2%	50.5	50.7	0.2	0.4%
44.4%	50.4	50.7	0.3	0.6%
45.7%	50.4	50.6	0.3	0.5%
46.9%	50.3	50.6	0.4	0.7%
48.1%	50.2	50.6	0.4	0.7%
49.4%	50.1	50.5	0.4	0.8%
50.6%	50.1	50.5	0.4	0.8%
51.9%	50.1	50.5	0.4	0.8%
53.1%	50.1	50.5	0.4	0.9%
54.3%	50.1	50.5	0.4	0.8%
55.6%	50.0	50.4	0.4	0.9%
56.8%	49.8	50.4	0.6	1.1%
58.0%	49.8	50.2	0.5	1.0%
59.3%	49.7	50.1	0.4	0.8%
60.5%	49.7	50.0	0.3	0.7%
61.7%	49.7	50.0	0.3	0.7%
63.0%	49.6	50.0	0.4	0.7%
64.2%	49.6	50.0	0.4	0.7%
65.4%	49.6	50.0	0.4	0.8%
66.7%	49.6	49.9	0.3	0.6%
67.9%	49.6	49.9	0.3	0.6%
69.1%	49.5	49.8	0.4	0.7%
70.4%	49.5	49.8	0.4	0.7%
71.6%	49.4	49.8	0.4	0.8%
72.8%	49.4	49.7	0.3	0.7%
74.1%	49.4	49.7	0.3	0.7%
75.3%	49.3	49.7	0.4	0.7%
76.5%	49.3	49.6	0.3	0.6%
77.8%	49.3	49.6	0.4	0.7%
79.0%	49.2	49.6	0.4	0.8%
80.2%	49.1	49.6	0.4	0.9%
81.5%	49.1	49.5	0.5	1.0%
82.7%	49.0	49.5	0.5	0.9%
84.0%	49.0	49.5	0.5	1.0%
85.2%	49.0	49.5	0.5	0.9%
86.4%	48.8	49.4	0.6	1.2%
87.7%	48.8	49.3	0.5	1.1%
88.9%	48.6	49.2	0.6	1.2%
90.1%	48.6	49.2	0.6	1.3%
91.4%	48.4	49.0	0.6	1.1%
92.6%	48.3	49.0	0.7	1.3%
93.8%	48.3	48.9	0.6	1.2%
95.1%	48.2	48.8	0.6	1.2%
96.3%	48.2	48.7	0.5	1.0%
97.5%	48.1	48.6	0.6	1.2%
98.8%	48.0	48.1	0.1	0.2%
100.0%	48.0	48.1	0.1	0.2%

Table SQ2-1b

Sacramento River below Keswick, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.1	55.1	-1.0	-1.7%
1.2%	54.9	53.8	-1.2	-2.1%
2.5%	54.9	53.6	-1.3	-2.3%
3.7%	54.8	53.6	-1.1	-2.1%
4.9%	54.6	53.6	-1.0	-1.8%
6.2%	53.9	53.6	-0.3	-0.6%
7.4%	53.7	53.3	-0.4	-0.7%
8.6%	53.7	53.2	-0.4	-0.8%
9.9%	53.5	53.2	-0.3	-0.5%
11.1%	53.1	53.2	0.1	0.2%
12.3%	53.0	53.2	0.2	0.4%
13.6%	52.8	53.1	0.3	0.6%
14.8%	52.7	52.9	0.2	0.4%
16.0%	52.7	52.8	0.2	0.3%
17.3%	52.6	52.7	0.1	0.2%
18.5%	52.6	52.7	0.1	0.2%
19.8%	52.5	52.6	0.2	0.3%
21.0%	52.5	52.6	0.2	0.3%
22.2%	52.4	52.6	0.1	0.3%
23.5%	52.4	52.4	0.1	0.1%
24.7%	52.2	52.4	0.2	0.4%
25.9%	52.2	52.3	0.1	0.2%
27.2%	52.1	52.3	0.2	0.3%
28.4%	51.9	52.2	0.4	0.7%
29.6%	51.8	52.2	0.4	0.8%
30.9%	51.8	52.2	0.4	0.8%
32.1%	51.6	52.1	0.5	1.1%
33.3%	51.5	51.9	0.4	0.7%
34.6%	51.5	51.8	0.3	0.7%
35.8%	51.5	51.8	0.3	0.7%
37.0%	51.5	51.7	0.2	0.5%
38.3%	51.4	51.7	0.3	0.5%
39.5%	51.4	51.6	0.2	0.3%
40.7%	51.4	51.5	0.1	0.2%
42.0%	51.4	51.4	0.1	0.2%
43.2%	51.1	51.4	0.3	0.6%
44.4%	51.1	51.4	0.3	0.5%
45.7%	50.9	51.2	0.3	0.6%
46.9%	50.9	51.2	0.3	0.6%
48.1%	50.9	51.2	0.3	0.6%
49.4%	50.8	51.2	0.3	0.7%
50.6%	50.8	51.2	0.4	0.7%
51.9%	50.7	51.1	0.4	0.7%
53.1%	50.6	51.1	0.4	0.9%
54.3%	50.6	51.0	0.4	0.8%
55.6%	50.6	51.0	0.4	0.8%
56.8%	50.6	51.0	0.4	0.8%
58.0%	50.6	50.9	0.3	0.6%
59.3%	50.5	50.9	0.4	0.8%
60.5%	50.5	50.9	0.4	0.7%
61.7%	50.2	50.7	0.6	1.1%
63.0%	50.2	50.7	0.5	1.0%
64.2%	50.1	50.6	0.5	1.0%
65.4%	50.1	50.5	0.4	0.9%
66.7%	50.0	50.5	0.4	0.9%
67.9%	50.0	50.5	0.5	1.0%
69.1%	49.9	50.4	0.5	1.0%
70.4%	49.9	50.4	0.5	1.0%
71.6%	49.8	50.4	0.6	1.1%
72.8%	49.7	50.3	0.7	1.3%
74.1%	49.7	50.2	0.5	1.1%
75.3%	49.7	50.2	0.5	1.1%
76.5%	49.6	50.2	0.5	1.0%
77.8%	49.6	50.1	0.5	1.0%
79.0%	49.6	50.1	0.5	1.1%
80.2%	49.5	50.1	0.6	1.1%
81.5%	49.5	50.0	0.5	1.1%
82.7%	49.5	49.9	0.5	1.0%
84.0%	49.4	49.9	0.5	1.1%
85.2%	49.4	49.9	0.5	1.0%
86.4%	49.4	49.9	0.5	1.1%
87.7%	49.2	49.9	0.7	1.4%
88.9%	49.1	49.8	0.7	1.4%
90.1%	49.0	49.8	0.8	1.5%
91.4%	49.0	49.7	0.7	1.4%
92.6%	49.0	49.7	0.7	1.4%
93.8%	48.9	49.4	0.5	1.1%
95.1%	48.8	49.2	0.5	0.9%
96.3%	48.5	49.0	0.5	1.0%
97.5%	48.3	48.9	0.6	1.3%
98.8%	48.2	48.7	0.5	0.9%
100.0%	48.2	48.7	0.5	0.9%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.3	63.7	0.3	0.5%
1.2%	58.7	55.1	-3.6	-6.1%
2.5%	57.1	54.5	-2.6	-4.5%
3.7%	55.2	54.3	-0.9	-1.6%
4.9%	55.2	54.1	-1.1	-2.0%
6.2%	55.1	54.0	-1.0	-1.9%
7.4%	54.9	54.0	-0.9	-1.7%
8.6%	54.7	53.9	-0.8	-1.4%
9.9%	54.7	53.9	-0.8	-1.4%
11.1%	54.6	53.8	-0.8	-1.4%
12.3%	54.6	53.8	-0.8	-1.5%
13.6%	54.6	53.6	-1.0	-1.8%
14.8%	54.5	53.6	-0.9	-1.7%
16.0%	54.5	53.6	-0.9	-1.7%
17.3%	54.4	53.6	-0.8	-1.5%
18.5%	54.4	53.6	-0.8	-1.5%
19.8%	54.4	53.6	-0.8	-1.5%
21.0%	54.2	53.5	-0.7	-1.3%
22.2%	54.2	53.5	-0.7	-1.3%
23.5%	54.1	53.4	-0.7	-1.3%
24.7%	54.1	53.4	-0.7	-1.3%
25.9%	53.9	53.3	-0.5	-1.0%
27.2%	53.8	53.3	-0.5	-1.0%
28.4%	53.7	53.2	-0.5	-1.0%
29.6%	53.7	53.2	-0.5	-0.9%
30.9%	53.5	53.2	-0.3	-0.6%
32.1%	53.3	53.2	-0.2	-0.3%
33.3%	53.3	53.2	-0.1	-0.2%
34.6%	53.1	53.1	0.0	-0.1%
35.8%	53.1	53.0	0.0	-0.1%
37.0%	52.9	53.0	0.1	0.1%
38.3%	52.8	53.0	0.2	0.3%
39.5%	52.7	52.9	0.2	0.3%
40.7%	52.6	52.9	0.2	0.5%
42.0%	52.6	52.9	0.3	0.5%
43.2%	52.6	52.8	0.2	0.3%
44.4%	52.5	52.7	0.2	0.3%
45.7%	52.5	52.7	0.2	0.4%
46.9%	52.4	52.6	0.3	0.5%
48.1%	52.3	52.6	0.3	0.6%
49.4%	52.3	52.6	0.3	0.6%
50.6%	52.3	52.5	0.2	0.4%
51.9%	52.2	52.5	0.2	0.4%
53.1%	51.9	52.4	0.4	0.8%
54.3%	51.9	52.2	0.3	0.6%
55.6%	51.9	52.2	0.3	0.6%
56.8%	51.9	52.2	0.3	0.6%
58.0%	51.8	52.2	0.3	0.7%
59.3%	51.8	52.2	0.3	0.6%
60.5%	51.8	52.1	0.3	0.5%
61.7%	51.8	52.0	0.3	0.5%
63.0%	51.7	51.9	0.2	0.4%
64.2%	51.6	51.9	0.3	0.5%
65.4%	51.6	51.9	0.3	0.6%
66.7%	51.6	51.9	0.3	0.6%
67.9%	51.6	51.9	0.3	0.6%
69.1%	51.5	51.9	0.4	0.7%
70.4%	51.4	51.8	0.4	0.7%
71.6%	51.3	51.8	0.5	0.9%
72.8%	51.3	51.6	0.3	0.6%
74.1%	51.3	51.5	0.2	0.5%
75.3%	51.1	51.5	0.4	0.7%
76.5%	51.0	51.5	0.5	0.9%
77.8%	51.0	51.5	0.5	0.9%
79.0%	50.9	51.5	0.6	1.1%
80.2%	50.9	51.4	0.5	1.1%
81.5%	50.9	51.2	0.3	0.6%
82.7%	50.9	51.2	0.3	0.6%
84.0%	50.9	51.1	0.3	0.5%
85.2%	50.8	51.1	0.3	0.6%
86.4%	50.7	51.1	0.4	0.7%
87.7%	50.7	51.1	0.4	0.8%
88.9%	50.4	50.9	0.4	0.9%
90.1%	50.4	50.8	0.5	0.9%
91.4%	50.2	50.7	0.5	0.9%
92.6%	50.2	50.5	0.3	0.6%
93.8%	50.1	50.5	0.4	0.8%
95.1%	49.9	50.5	0.6	1.1%
96.3%	49.9	50.3	0.4	0.8%
97.5%	49.9	50.0	0.1	0.1%
98.8%	49.7	49.9	0.2	0.3%
100.0%	49.7	49.9	0.2	0.3%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.6	68.3	0.7	1.1%
1.2%	64.7	63.7	-0.9	-1.5%
2.5%	63.7	60.5	-3.2	-5.0%
3.7%	63.3	60.4	-2.9	-4.5%
4.9%	59.3	56.7	-2.6	-4.4%
6.2%	59.2	54.9	-4.3	-7.3%
7.4%	55.7	54.8	-0.8	-1.5%
8.6%	55.6	54.6	-1.0	-1.7%
9.9%	55.1	54.5	-0.6	-1.1%
11.1%	55.1	54.4	-0.6	-1.2%
12.3%	54.9	54.2	-0.7	-1.2%
13.6%	54.7	54.1	-0.6	-1.1%
14.8%	54.6	54.1	-0.5	-0.9%
16.0%	54.5	54.0	-0.5	-0.8%
17.3%	54.5	54.0	-0.5	-0.8%
18.5%	54.4	53.9	-0.5	-0.9%
19.8%	54.4	53.8	-0.5	-1.0%
21.0%	54.3	53.8	-0.5	-1.0%
22.2%	54.3	53.8	-0.5	-1.0%
23.5%	54.2	53.7	-0.6	-1.1%
24.7%	54.2	53.6	-0.5	-1.0%
25.9%	54.1	53.6	-0.5	-0.9%
27.2%	54.1	53.6	-0.5	-1.0%
28.4%	54.1	53.6	-0.5	-1.0%
29.6%	54.0	53.5	-0.4	-0.8%
30.9%	53.9	53.5	-0.4	-0.8%
32.1%	53.9	53.5	-0.4	-0.8%
33.3%	53.8	53.5	-0.4	-0.7%
34.6%	53.8	53.4	-0.4	-0.7%
35.8%	53.8	53.4	-0.4	-0.7%
37.0%	53.7	53.4	-0.4	-0.7%
38.3%	53.7	53.4	-0.4	-0.7%
39.5%	53.7	53.3	-0.3	-0.6%
40.7%	53.6	53.3	-0.3	-0.6%
42.0%	53.6	53.2	-0.4	-0.7%
43.2%	53.6	53.2	-0.4	-0.7%
44.4%	53.6	53.2	-0.4	-0.7%
45.7%	53.6	53.2	-0.4	-0.8%
46.9%	53.5	53.1	-0.4	-0.8%
48.1%	53.5	53.1	-0.4	-0.8%
49.4%	53.5	53.1	-0.4	-0.8%
50.6%	53.5	53.1	-0.4	-0.7%
51.9%	53.4	53.1	-0.4	-0.7%
53.1%	53.4	53.1	-0.4	-0.7%
54.3%	53.4	53.1	-0.4	-0.7%
55.6%	53.3	53.0	-0.3	-0.5%
56.8%	53.3	53.0	-0.3	-0.6%
58.0%	53.3	53.0	-0.3	-0.6%
59.3%	53.3	53.0	-0.3	-0.6%
60.5%	53.3	53.0	-0.3	-0.6%
61.7%	53.2	52.9	-0.3	-0.6%
63.0%	53.2	52.9	-0.3	-0.6%
64.2%	53.2	52.9	-0.3	-0.6%
65.4%	53.2	52.9	-0.3	-0.5%
66.7%	53.1	52.8	-0.3	-0.6%
67.9%	53.1	52.8	-0.3	-0.5%
69.1%	53.1	52.8	-0.2	-0.5%
70.4%	53.0	52.8	-0.2	-0.3%
71.6%	53.0	52.8	-0.2	-0.3%
72.8%	53.0	52.7	-0.2	-0.4%
74.1%	52.9	52.7	-0.2	-0.4%
75.3%	52.9	52.7	-0.2	-0.4%
76.5%	52.9	52.7	-0.2	-0.3%
77.8%	52.8	52.7	-0.2	-0.3%
79.0%	52.7	52.6	0.0	0.0%
80.2%	52.6	52.6	0.0	0.0%
81.5%	52.6	52.5	0.0	0.0%
82.7%	52.4	52.4	0.0	0.1%
84.0%	52.4	52.4	0.0	0.1%
85.2%	52.3	52.4	0.1	0.2%
86.4%	52.3	52.3	0.0	0.0%
87.7%	52.2	52.1	-0.2	-0.3%
88.9%	52.1	51.8	-0.3	-0.6%
90.1%	52.1	51.6	-0.5	-0.9%
91.4%	51.9	51.6	-0.3	-0.5%
92.6%	51.9	51.4	-0.5	-1.0%
93.8%	51.7	51.1	-0.6	-1.2%
95.1%	51.3	51.0	-0.3	-0.6%
96.3%	51.0	50.6	-0.4	-0.9%
97.5%	50.9	50.4	-0.5	-1.1%
98.8%	50.6	50.0	-0.6	-1.3%
100.0%	50.6	50.0	-0.6	-1.3%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.0	68.6	-0.4	-0.5%
1.2%	68.7	66.3	-2.3	-3.4%
2.5%	67.7	66.0	-1.7	-2.6%
3.7%	67.6	65.0	-2.6	-3.8%
4.9%	65.9	61.2	-4.7	-7.1%
6.2%	64.8	61.1	-3.7	-5.7%
7.4%	63.6	60.0	-3.5	-5.6%
8.6%	62.2	58.4	-3.7	-6.0%
9.9%	61.1	57.6	-3.5	-5.8%
11.1%	60.6	57.5	-3.1	-5.2%
12.3%	59.4	57.2	-2.2	-3.6%
13.6%	57.7	56.3	-1.3	-2.3%
14.8%	57.3	56.3	-0.9	-1.7%
16.0%	57.2	56.1	-1.1	-1.9%
17.3%	56.5	55.6	-0.9	-1.6%
18.5%	56.3	55.6	-0.7	-1.2%
19.8%	56.0	55.2	-0.8	-1.4%
21.0%	55.5	55.1	-0.4	-0.7%
22.2%	55.4	54.6	-0.7	-1.3%
23.5%	55.1	54.6	-0.5	-0.9%
24.7%	54.8	54.4	-0.4	-0.7%
25.9%	54.8	54.3	-0.5	-0.8%
27.2%	54.8	54.3	-0.5	-1.0%
28.4%	54.7	54.2	-0.5	-0.9%
29.6%	54.6	54.1	-0.6	-1.0%
30.9%	54.6	53.9	-0.7	-1.2%
32.1%	54.6	53.8	-0.7	-1.3%
33.3%	54.5	53.8	-0.7	-1.3%
34.6%	54.4	53.7	-0.7	-1.3%
35.8%	54.4	53.7	-0.7	-1.3%
37.0%	54.1	53.7	-0.5	-0.9%
38.3%	54.1	53.5	-0.5	-1.0%
39.5%	54.0	53.4	-0.6	-1.2%
40.7%	54.0	53.4	-0.6	-1.1%
42.0%	53.9	53.4	-0.5	-1.0%
43.2%	53.8	53.3	-0.5	-0.9%
44.4%	53.8	53.3	-0.4	-0.8%
45.7%	53.8	53.3	-0.5	-0.9%
46.9%	53.7	53.2	-0.6	-1.0%
48.1%	53.7	53.1	-0.6	-1.1%
49.4%	53.6	53.0	-0.6	-1.2%
50.6%	53.6	53.0	-0.6	-1.1%
51.9%	53.5	53.0	-0.5	-1.0%
53.1%	53.5	53.0	-0.5	-1.0%
54.3%	53.3	52.9	-0.4	-0.8%
55.6%	53.3	52.9	-0.4	-0.7%
56.8%	53.1	52.9	-0.2	-0.4%
58.0%	53.1	52.9	-0.2	-0.5%
59.3%	53.1	52.8	-0.3	-0.5%
60.5%	53.1	52.7	-0.4	-0.7%
61.7%	53.0	52.7	-0.4	-0.7%
63.0%	52.9	52.6	-0.3	-0.6%
64.2%	52.8	52.5	-0.3	-0.6%
65.4%	52.8	52.5	-0.3	-0.6%
66.7%	52.8	52.5	-0.3	-0.5%
67.9%	52.6	52.4	-0.1	-0.2%
69.1%	52.4	52.4	0.1	0.1%
70.4%	52.2	52.4	0.2	0.4%
71.6%	52.2	52.3	0.2	0.4%
72.8%	52.0	52.3	0.3	0.5%
74.1%	52.0	52.3	0.3	0.6%
75.3%	51.8	52.2	0.4	0.7%
76.5%	51.7	51.9	0.2	0.3%
77.8%	51.7	51.8	0.1	0.2%
79.0%	51.6	51.8	0.1	0.3%
80.2%	51.6	51.7	0.1	0.3%
81.5%	51.6	51.6	0.0	0.0%
82.7%	51.6	51.6	0.0	0.0%
84.0%	51.5	51.4	0.0	-0.1%
85.2%	51.4	51.2	-0.2	-0.4%
86.4%	51.3	51.1	-0.2	-0.4%
87.7%	51.3	51.1	-0.2	-0.4%
88.9%	51.2	51.0	-0.1	-0.3%
90.1%	51.2	51.0	-0.1	-0.3%
91.4%	50.9	50.9	0.0	-0.1%
92.6%	50.9	50.8	0.0	0.0%
93.8%	50.8	50.8	0.0	0.1%
95.1%	50.8	50.8	0.0	0.1%
96.3%	50.7	50.8	0.1	0.2%
97.5%	50.6	50.7	0.1	0.1%
98.8%	50.6	50.6	-0.1	-0.1%
100.0%	50.6	50.6	-0.1	-0.1%

Table SQ2-1b

Sacramento River below Keswick, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.2	63.3	0.0	0.1%
1.2%	61.5	60.0	-1.4	-2.3%
2.5%	61.1	58.7	-2.4	-3.8%
3.7%	60.1	58.1	-1.9	-3.2%
4.9%	59.1	55.8	-3.3	-5.5%
6.2%	57.6	55.8	-1.7	-3.0%
7.4%	56.8	55.3	-1.5	-2.6%
8.6%	56.8	54.6	-2.1	-3.8%
9.9%	56.2	54.6	-1.6	-2.9%
11.1%	55.5	54.4	-1.1	-1.9%
12.3%	55.1	54.4	-0.7	-1.3%
13.6%	54.8	54.4	-0.4	-0.8%
14.8%	54.8	54.2	-0.5	-1.0%
16.0%	54.8	54.2	-0.6	-1.1%
17.3%	54.6	54.0	-0.6	-1.2%
18.5%	54.5	53.9	-0.6	-1.1%
19.8%	54.2	53.9	-0.3	-0.6%
21.0%	54.2	53.8	-0.4	-0.7%
22.2%	54.1	53.7	-0.3	-0.6%
23.5%	54.0	53.7	-0.3	-0.6%
24.7%	53.8	53.6	-0.2	-0.3%
25.9%	53.7	53.6	-0.1	-0.1%
27.2%	53.6	53.5	-0.1	-0.3%
28.4%	53.6	53.3	-0.2	-0.4%
29.6%	53.5	53.3	-0.2	-0.4%
30.9%	53.4	53.3	-0.2	-0.3%
32.1%	53.2	53.1	-0.1	-0.2%
33.3%	53.2	53.0	-0.2	-0.4%
34.6%	53.1	52.9	-0.3	-0.5%
35.8%	53.1	52.9	-0.2	-0.5%
37.0%	52.9	52.8	0.0	0.0%
38.3%	52.8	52.8	-0.1	-0.1%
39.5%	52.8	52.8	0.0	-0.1%
40.7%	52.7	52.7	-0.1	-0.1%
42.0%	52.7	52.7	-0.1	-0.1%
43.2%	52.7	52.6	-0.1	-0.1%
44.4%	52.7	52.6	-0.1	-0.2%
45.7%	52.6	52.6	0.0	-0.1%
46.9%	52.6	52.5	-0.1	-0.2%
48.1%	52.6	52.5	-0.1	-0.2%
49.4%	52.6	52.5	-0.1	-0.2%
50.6%	52.5	52.4	-0.1	-0.2%
51.9%	52.5	52.3	-0.2	-0.4%
53.1%	52.4	52.3	-0.1	-0.2%
54.3%	52.3	52.3	0.0	-0.1%
55.6%	52.3	52.2	-0.1	-0.1%
56.8%	52.3	52.2	-0.1	-0.1%
58.0%	52.1	52.2	0.1	0.1%
59.3%	52.1	52.2	0.0	0.1%
60.5%	52.0	52.0	0.0	0.0%
61.7%	52.0	52.0	0.0	0.1%
63.0%	52.0	52.0	0.0	0.1%
64.2%	52.0	51.9	0.0	0.0%
65.4%	51.9	51.9	0.0	0.0%
66.7%	51.8	51.9	0.1	0.2%
67.9%	51.8	51.9	0.1	0.2%
69.1%	51.8	51.9	0.1	0.2%
70.4%	51.8	51.8	0.1	0.1%
71.6%	51.7	51.8	0.1	0.2%
72.8%	51.6	51.7	0.1	0.2%
74.1%	51.5	51.7	0.2	0.4%
75.3%	51.5	51.5	0.0	0.0%
76.5%	51.5	51.5	0.0	0.0%
77.8%	51.4	51.4	0.0	0.0%
79.0%	51.4	51.4	0.0	0.1%
80.2%	51.3	51.4	0.1	0.2%
81.5%	51.3	51.4	0.1	0.2%
82.7%	51.2	51.2	0.1	0.1%
84.0%	51.1	51.2	0.1	0.2%
85.2%	51.1	51.2	0.1	0.1%
86.4%	51.0	51.2	0.2	0.3%
87.7%	50.9	51.1	0.2	0.3%
88.9%	50.9	51.0	0.2	0.3%
90.1%	50.8	51.0	0.1	0.3%
91.4%	50.7	50.9	0.2	0.4%
92.6%	50.5	50.9	0.4	0.8%
93.8%	50.5	50.9	0.4	0.8%
95.1%	50.4	50.6	0.2	0.4%
96.3%	50.3	50.6	0.3	0.6%
97.5%	50.0	50.5	0.5	0.9%
98.8%	49.9	50.2	0.3	0.6%
100.0%	49.9	50.0	0.2	0.3%

July to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	65.6	66.0	0.4	0.6%
1.2%	64.0	62.5	-1.5	-2.4%
2.5%	63.1	60.4	-2.7	-4.3%
3.7%	62.2	59.9	-2.3	-3.7%
4.9%	60.6	57.0	-3.6	-5.9%
6.2%	59.1	56.5	-2.6	-4.3%
7.4%	58.2	55.9	-2.3	-3.9%
8.6%	57.4	55.5	-1.9	-3.3%
9.9%	57.1	55.3	-1.8	-3.1%
11.1%	56.7	54.9	-1.8	-3.1%
12.3%	55.9	54.9	-1.0	-1.8%
13.6%	55.5	54.8	-0.7	-1.2%
14.8%	55.3	54.6	-0.7	-1.3%
16.0%	55.3	54.6	-0.7	-1.2%
17.3%	55.2	54.3	-0.9	-1.6%
18.5%	55.2	54.3	-0.9	-1.7%
19.8%	54.8	54.2	-0.6	-1.2%
21.0%	54.7	54.1	-0.6	-1.1%
22.2%	54.5	54.0	-0.5	-0.9%
23.5%	54.2	53.9	-0.3	-0.6%
24.7%	54.2	53.9	-0.3	-0.6%
25.9%	54.2	53.8	-0.4	-0.7%
27.2%	54.1	53.7	-0.4	-0.8%
28.4%	54.1	53.6	-0.5	-0.9%
29.6%	54.0	53.6	-0.4	-0.8%
30.9%	54.0	53.5	-0.5	-0.9%
32.1%	53.9	53.5	-0.4	-0.8%
33.3%	53.9	53.5	-0.4	-0.7%
34.6%	53.7	53.4	-0.3	-0.6%
35.8%	53.6	53.3	-0.3	-0.6%
37.0%	53.6	53.2	-0.3	-0.6%
38.3%	53.5	53.2	-0.3	-0.6%
39.5%	53.5	53.2	-0.3	-0.6%
40.7%	53.4	53.1	-0.3	-0.6%
42.0%	53.4	53.1	-0.3	-0.5%
43.2%	53.3	53.0	-0.3	-0.5%
44.4%	53.3	53.0	-0.2	-0.4%
45.7%	53.3	52.9	-0.3	-0.6%
46.9%	53.2	52.9	-0.3	-0.5%
48.1%	53.2	52.9	-0.3	-0.6%
49.4%	53.2	52.9	-0.3	-0.6%
50.6%	53.0	52.9	-0.2	-0.3%
51.9%	53.0	52.8	-0.2	-0.4%
53.1%	52.9	52.8	-0.1	-0.2%
54.3%	52.9	52.8	-0.1	-0.2%
55.6%	52.8	52.8	-0.1	-0.1%
56.8%	52.8	52.7	-0.1	-0.1%
58.0%	52.8	52.7	-0.1	-0.1%
59.3%	52.7	52.7	-0.1	-0.1%
60.5%	52.6	52.6	0.1	0.1%
61.7%	52.6	52.5	0.0	-0.1%
63.0%	52.5	52.4	0.0	-0.1%
64.2%	52.5	52.4	0.0	-0.1%
65.4%	52.4	52.4	0.0	0.0%
66.7%	52.4	52.4	0.0	0.0%
67.9%	52.4	52.4	0.0	-0.1%
69.1%	52.3	52.3	-0.1	-0.1%
70.4%	52.3	52.3	0.0	0.0%
71.6%	52.2	52.2	0.0	0.0%
72.8%	52.2	52.2	0.0	0.0%
74.1%	52.1	52.1	0.0	0.1%
75.3%	52.1	52.0	0.0	-0.1%
76.5%	52.0	51.9	-0.1	-0.2%
77.8%	51.9	51.9	0.0	0.0%
79.0%	51.9	51.8	-0.1	-0.2%
80.2%	51.9	51.8	-0.1	-0.2%
81.5%	51.9	51.7	-0.2	-0.3%
82.7%	51.8	51.7	-0.1	-0.3%
84.0%	51.8	51.6	-0.2	-0.3%
85.2%	51.7	51.6	-0.1	-0.2%
86.4%	51.5	51.6	0.1	0.2%
87.7%	51.4	51.5	0.1	0.2%
88.9%	51.3	51.5	0.2	0.3%
90.1%	51.2	51.3	0.2	0.3%
91.4%	51.1	51.2	0.1	0.1%
92.6%	51.1	51.2	0.0	0.1%
93.8%	51.0	51.1	0.1	0.2%
95.1%	51.0	51.0	0.1	0.1%
96.3%	50.7	50.9	0.2	0.4%
97.5%	50.6	50.7	0.2	0.4%
98.8%	50.4	50.7	0.2	0.5%
100.0%	50.3	50.6	0.3	0.6%

August to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.7	67.1	0.4	0.6%
1.2%	66.7	66.2	-0.5	-0.7%
2.5%	66.1	63.4	-2.7	-4.1%
3.7%	65.7	62.7	-3.0	-4.6%
4.9%	63.4	58.9	-4.5	-7.1%
6.2%	61.4	57.8	-3.5	-5.8%
7.4%	60.0	57.0	-2.9	-4.9%
8.6%	58.9	56.7	-2.2	-3.8%
9.9%	58.1	56.2	-2.0	-3.4%
11.1%	58.1	55.7	-2.4	-4.1%
12.3%	56.6	55.7	-0.9	-1.6%
13.6%	56.2	55.4	-0.8	-1.5%
14.8%	55.8	55.2	-0.6	-1.0%
16.0%	55.8	55.0	-0.8	-1.5%
17.3%	55.6	54.8	-0.8	-1.4%
18.5%	55.5	54.8	-0.7	-1.3%
19.8%	54.9	54.5	-0.4	-0.8%
21.0%	54.9	54.5	-0.4	-0.8%
22.2%	54.7	54.1	-0.6	-1.0%
23.5%	54.7	54.1	-0.6	-1.1%
24.7%	54.5	54.0	-0.5	-1.0%
25.9%	54.4	54.0	-0.4	-0.8%
27.2%	54.3	53.9	-0.4	-0.7%
28.4%	54.3	53.8	-0.4	-0.8%
29.6%	54.3	53.8	-0.5	-0.9%
30.9%	54.1	53.7	-0.4	-0.7%
32.1%	54.0	53.7	-0.4	-0.7%
33.3%	54.0	53.6	-0.5	-0.9%
34.6%	53.9	53.5	-0.4	-0.7%
35.8%	53.8	53.5	-0.3	-0.6%
37.0%	53.8	53.5	-0.3	-0.6%
38.3%	53.8	53.5	-0.3	-0.6%
39.5%	53.8	53.3	-0.5	-0.9%
40.7%	53.8	53.3	-0.5	-0.9%
42.0%	53.7	53.3	-0.5	-0.9%
43.2%	53.7	53.2	-0.5	-0.8%
44.4%	53.7	53.2	-0.5	-0.9%
45.7%	53.7	53.2	-0.5	-0.9%
46.9%	53.6	53.1	-0.5	-0.9%
48.1%	53.6	53.1	-0.5	-0.9%
49.4%	53.6	53.1	-0.5	-0.9%
50.6%	53.5	53.1	-0.4	-0.7%
51.9%	53.5	53.0	-0.4	-0.8%
53.1%	53.5	53.0	-0.5	-0.9%
54.3%	53.5	53.0	-0.5	-0.8%
55.6%	53.4	52.9	-0.5	-1.0%
56.8%	53.4	52.9	-0.5	-0.9%
58.0%	53.3	52.9	-0.4	-0.8%
59.3%	53.2	52.9	-0.3	-0.6%
60.5%	53.2	52.8	-0.3	-0.7%
61.7%	52.9	52.7	-0.2	-0.4%
63.0%	52.9	52.7	-0.2	-0.3%
64.2%	52.8	52.7	-0.1	-0.3%
65.4%	52.8	52.7	-0.1	-0.3%
66.7%	52.8	52.6	-0.2	-0.3%
67.9%	52.7	52.6	-0.2	-0.3%
69.1%	52.7	52.6	-0.1	-0.2%
70.4%	52.6	52.6	-0.1	-0.1%
71.6%	52.6	52.4	-0.2	-0.4%
72.8%	52.6	52.4	-0.2	-0.4%
74.1%	52.6	52.3	-0.3	-0.6%
75.3%	52.6	52.3	-0.3	-0.6%
76.5%	52.5	52.2	-0.4	-0.7%
77.8%	52.5	52.2	-0.3	-0.6%
79.0%	52.3	52.0	-0.3	-0.5%
80.2%	52.3	52.0	-0.3	-0.5%
81.5%	52.2	52.0	-0.3	-0.5%
82.7%	52.2	51.9	-0.3	-0.6%
84.0%	52.0	51.9	-0.1	-0.3%
85.2%	51.9	51.7	-0.2	-0.4%
86.4%	51.9	51.7	-0.2	-0.4%
87.7%	51.8	51.7	-0.1	-0.2%
88.9%	51.7	51.6	-0.1	-0.2%
90.1%	51.7	51.6	-0.1	-0.2%
91.4%	51.6	51.4	-0.2	-0.5%
92.6%	51.4	51.4	-0.1	-0.1%
93.8%	51.3	51.3	0.0	0.1%
95.1%	51.2	51.1	-0.1	-0.3%
96.3%	51.1	51.0	-0.1	-0.2%
97.5%	51.1	50.9	-0.2	-0.3%
98.8%	50.7	50.9	0.2	0.4%
100.0%	50.6	50.8	0.2	0.3%

Figure SQ3-1b
Sacramento River at Bonnyview Bridge, Monthly Temperature
Probability of Exceedance

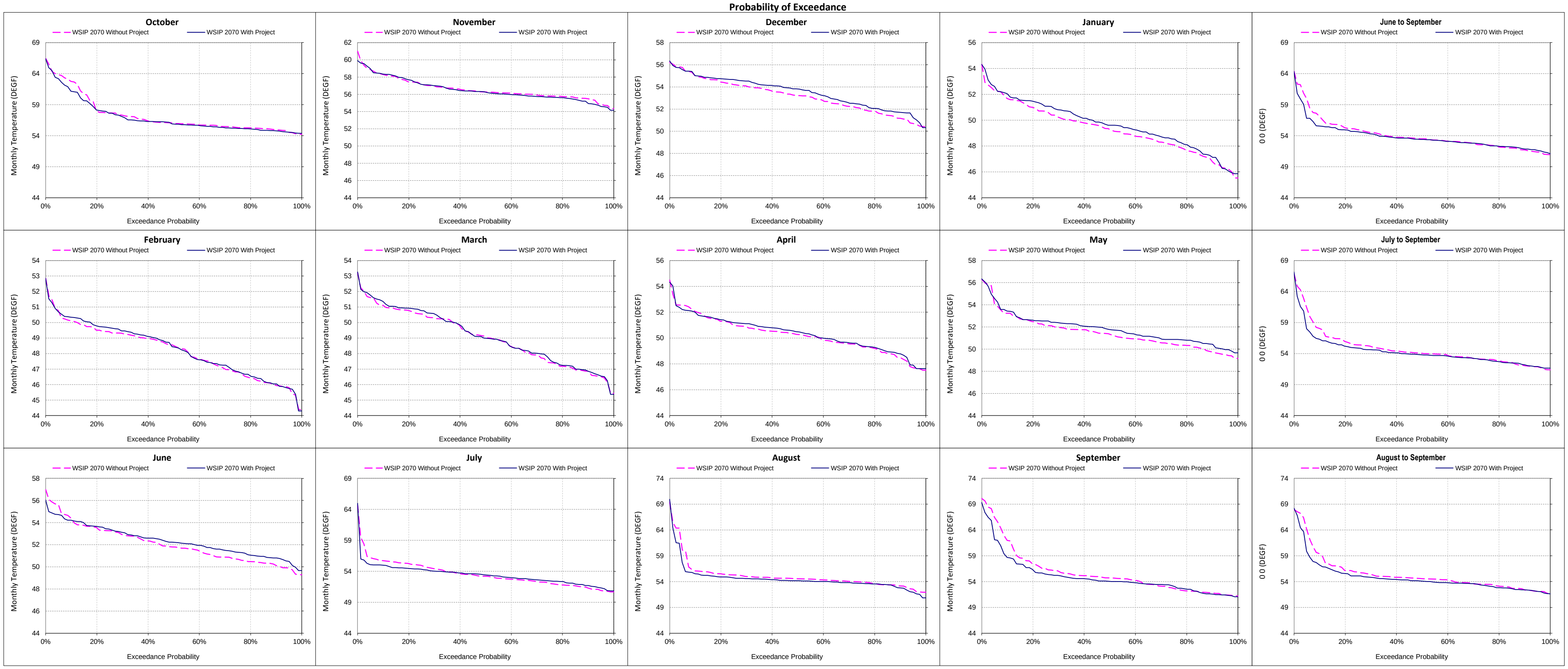


Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.5	66.4	0.0	0.0%
1.2%	65.5	65.0	-0.5	-0.8%
2.5%	64.3	64.5	0.2	0.2%
3.7%	64.0	63.4	-0.6	-0.9%
4.9%	63.8	63.2	-0.6	-1.0%
6.2%	63.7	62.6	-1.1	-1.7%
7.4%	63.3	62.2	-1.1	-1.8%
8.6%	63.1	61.9	-1.2	-2.0%
9.9%	62.8	61.2	-1.6	-2.5%
11.1%	62.6	61.1	-1.6	-2.5%
12.3%	62.3	61.0	-1.3	-2.1%
13.6%	61.2	60.1	-1.1	-1.8%
14.8%	60.7	59.7	-1.1	-1.8%
16.0%	60.6	59.6	-0.9	-1.5%
17.3%	59.7	59.2	-0.5	-0.8%
18.5%	59.5	58.7	-0.8	-1.4%
19.8%	58.0	58.1	0.1	0.2%
21.0%	57.7	58.0	0.3	0.5%
22.2%	57.7	58.0	0.2	0.4%
23.5%	57.7	57.9	0.2	0.4%
24.7%	57.7	57.6	-0.1	-0.1%
25.9%	57.7	57.6	0.0	-0.1%
27.2%	57.7	57.4	-0.3	-0.5%
28.4%	57.3	57.3	0.0	0.0%
29.6%	57.3	57.1	-0.2	-0.4%
30.9%	57.2	56.9	-0.3	-0.5%
32.1%	57.1	56.6	-0.6	-1.0%
33.3%	57.1	56.5	-0.5	-0.9%
34.6%	57.1	56.5	-0.6	-1.0%
35.8%	56.8	56.4	-0.4	-0.7%
37.0%	56.7	56.4	-0.3	-0.5%
38.3%	56.6	56.4	-0.3	-0.5%
39.5%	56.4	56.3	-0.1	-0.2%
40.7%	56.3	56.3	0.0	0.1%
42.0%	56.2	56.3	0.1	0.1%
43.2%	56.2	56.3	0.1	0.1%
44.4%	56.1	56.3	0.1	0.2%
45.7%	56.1	56.3	0.1	0.2%
46.9%	56.1	56.2	0.1	0.1%
48.1%	56.1	56.1	0.1	0.1%
49.4%	56.1	55.9	-0.2	-0.3%
50.6%	56.0	55.9	-0.1	-0.2%
51.9%	55.9	55.8	-0.1	-0.2%
53.1%	55.9	55.8	-0.2	-0.3%
54.3%	55.9	55.8	-0.2	-0.3%
55.6%	55.9	55.7	-0.2	-0.3%
56.8%	55.9	55.7	-0.1	-0.3%
58.0%	55.8	55.7	-0.1	-0.3%
59.3%	55.8	55.7	-0.1	-0.2%
60.5%	55.7	55.6	-0.1	-0.2%
61.7%	55.7	55.5	-0.2	-0.3%
63.0%	55.7	55.5	-0.2	-0.3%
64.2%	55.7	55.5	-0.2	-0.3%
65.4%	55.7	55.4	-0.2	-0.4%
66.7%	55.6	55.4	-0.2	-0.4%
67.9%	55.5	55.3	-0.1	-0.3%
69.1%	55.5	55.3	-0.2	-0.3%
70.4%	55.5	55.3	-0.2	-0.4%
71.6%	55.5	55.2	-0.2	-0.4%
72.8%	55.4	55.2	-0.2	-0.4%
74.1%	55.3	55.2	-0.2	-0.3%
75.3%	55.3	55.2	-0.1	-0.2%
76.5%	55.3	55.2	-0.1	-0.2%
77.8%	55.3	55.1	-0.2	-0.3%
79.0%	55.3	55.1	-0.2	-0.3%
80.2%	55.3	55.1	-0.2	-0.3%
81.5%	55.2	55.1	-0.2	-0.3%
82.7%	55.2	55.0	-0.2	-0.3%
84.0%	55.2	54.9	-0.3	-0.6%
85.2%	55.1	54.9	-0.2	-0.4%
86.4%	55.1	54.9	-0.3	-0.5%
87.7%	55.1	54.8	-0.2	-0.4%
88.9%	55.0	54.8	-0.2	-0.3%
90.1%	54.9	54.8	-0.1	-0.3%
91.4%	54.9	54.8	-0.2	-0.3%
92.6%	54.8	54.7	-0.2	-0.4%
93.8%	54.8	54.6	-0.2	-0.4%
95.1%	54.5	54.5	0.0	0.0%
96.3%	54.5	54.5	0.0	0.1%
97.5%	54.3	54.4	0.1	0.2%
98.8%	54.2	54.4	0.2	0.3%
100.0%	54.2	54.4	0.0	0.3%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.0	59.9	-1.1	-1.8%
1.2%	59.9	59.6	-0.3	-0.5%
2.5%	59.4	59.6	0.2	0.3%
3.7%	59.0	59.3	0.3	0.5%
4.9%	58.9	59.0	0.1	0.2%
6.2%	58.7	58.5	-0.2	-0.3%
7.4%	58.5	58.5	0.0	0.0%
8.6%	58.4	58.5	0.0	0.1%
9.9%	58.3	58.3	0.0	0.1%
11.1%	58.2	58.3	0.1	0.2%
12.3%	58.2	58.3	0.1	0.2%
13.6%	58.1	58.2	0.1	0.2%
14.8%	58.1	58.1	0.0	0.0%
16.0%	57.8	58.0	0.1	0.2%
17.3%	57.7	57.9	0.2	0.4%
18.5%	57.7	57.8	0.2	0.3%
19.8%	57.5	57.7	0.2	0.4%
21.0%	57.5	57.6	0.2	0.3%
22.2%	57.4	57.4	0.0	0.0%
23.5%	57.4	57.3	-0.1	-0.1%
24.7%	57.2	57.2	0.0	0.0%
25.9%	57.1	57.1	0.0	0.0%
27.2%	57.0	57.1	0.1	0.1%
28.4%	57.0	57.1	0.1	0.1%
29.6%	57.0	57.0	0.0	0.0%
30.9%	56.9	57.0	0.1	0.2%
32.1%	56.9	57.0	0.1	0.2%
33.3%	56.8	56.9	0.1	0.1%
34.6%	56.7	56.7	0.0	0.0%
35.8%	56.7	56.6	-0.1	-0.2%
37.0%	56.7	56.6	-0.1	-0.2%
38.3%	56.6	56.6	-0.1	-0.1%
39.5%	56.6	56.5	-0.2	-0.3%
40.7%	56.5	56.4	-0.1	-0.2%
42.0%	56.5	56.4	-0.1	-0.2%
43.2%	56.4	56.4	0.0	-0.1%
44.4%	56.4	56.4	0.0	0.0%
45.7%	56.4	56.3	-0.1	-0.1%
46.9%	56.3	56.3	0.0	0.0%
48.1%	56.3	56.3	0.0	0.1%
49.4%	56.3	56.3	0.0	0.0%
50.6%	56.3	56.2	-0.1	-0.1%
51.9%	56.3	56.1	-0.1	-0.2%
53.1%	56.2	56.1	-0.1	-0.2%
54.3%	56.2	56.1	-0.1	-0.2%
55.6%	56.2	56.0	-0.1	-0.3%
56.8%	56.2	56.0	-0.1	-0.2%
58.0%	56.2	56.0	-0.1	-0.2%
59.3%	56.2	56.0	-0.2	-0.3%
60.5%	56.1	56.0	-0.1	-0.2%
61.7%	56.1	56.0	-0.1	-0.2%
63.0%	56.1	55.9	-0.1	-0.3%
64.2%	56.1	55.9	-0.2	-0.3%
65.4%	56.0	55.9	-0.1	-0.3%
66.7%	56.0	55.8	-0.2	-0.4%
67.9%	56.0	55.8	-0.2	-0.4%
69.1%	56.0	55.8	-0.2	-0.4%
70.4%	55.9	55.7	-0.1	-0.3%
71.6%	55.9	55.7	-0.1	-0.2%
72.8%	55.8	55.7	-0.1	-0.2%
74.1%	55.8	55.7	-0.1	-0.2%
75.3%	55.8	55.7	-0.1	-0.2%
76.5%	55.8	55.7	-0.1	-0.2%
77.8%	55.8	55.6	-0.1	-0.2%
79.0%	55.8	55.6	-0.2	-0.3%
80.2%	55.7	55.6	-0.1	-0.2%
81.5%	55.7	55.5	-0.2	-0.3%
82.7%	55.7	55.5	-0.2	-0.3%
84.0%	55.7	55.5	-0.2	-0.4%
85.2%	55.6	55.4	-0.2	-0.4%
86.4%	55.6	55.3	-0.3	-0.5%
87.7%	55.5	55.2	-0.3	-0.6%
88.9%	55.5	55.2	-0.3	-0.6%
90.1%	55.5	54.9	-0.6	-1.0%
91.4%	55.4	54.9	-0.5	-0.9%
92.6%	55.3	54.9	-0.5	-0.9%
93.8%	54.9	54.7	-0.1	-0.3%
95.1%	54.8	54.6	-0.3	-0.5%
96.3%	54.7	54.5	-0.2	-0.3%
97.5%	54.7	54.5	-0.2	-0.4%
98.8%	54.4	54.2	-0.2	-0.3%
100.0%	54.4	54.2	-0.2	-0.3%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.2	56.3	0.1	0.2%
1.2%	56.1	55.9	-0.1	-0.2%
2.5%	55.8	55.8	-0.1	-0.1%
3.7%	55.8	55.7	-0.1	-0.1%
4.9%	55.8	55.6	-0.2	-0.3%
6.2%	55.4	55.4	0.0	0.0%
7.4%	55.4	55.4	0.0	0.0%
8.6%	55.3	55.4	0.1	0.2%
9.9%	55.0	55.0	0.0	0.0%
11.1%	54.9	55.0	0.1	0.1%
12.3%	54.9	55.0	0.1	0.1%
13.6%	54.8	54.9	0.1	0.2%
14.8%	54.7	54.9	0.1	0.2%
16.0%	54.7	54.8	0.2	0.3%
17.3%	54.7	54.8	0.2	0.3%
18.5%	54.6	54.8	0.1	0.2%
19.8%	54.4	54.7	0.3	0.5%
21.0%	54.4	54.7	0.3	0.6%
22.2%	54.3	54.7	0.4	0.7%
23.5%	54.3	54.7	0.4	0.6%
24.7%	54.2	54.7	0.4	0.8%
25.9%	54.2	54.6	0.4	0.8%
27.2%	54.1	54.6	0.4	0.8%
28.4%	54.1	54.5	0.4	0.8%
29.6%	54.1	54.5	0.4	0.8%
30.9%	54.0	54.5	0.5	0.9%
32.1%	54.0	54.4	0.4	0.8%
33.3%	53.9	54.3	0.4	0.8%
34.6%	53.9	54.2	0.3	0.6%
35.8%	53.9	54.2	0.3	0.6%
37.0%	53.8	54.2	0.4	0.7%
38.3%	53.7	54.1	0.4	0.7%
39.5%	53.7	54.1	0.5	0.9%
40.7%	53.6	54.1	0.5	1.0%
42.0%	53.5	54.1	0.5	1.0%
43.2%	53.5	54.1	0.6	1.0%
44.4%	53.5	54.0	0.5	0.9%
45.7%	53.4	53.9	0.6	1.1%
46.9%	53.4	53.9	0.5	1.0%
48.1%	53.3	53.8	0.6	1.1%
49.4%	53.2	53.8	0.6	1.1%
50.6%	53.2	53.8	0.6	1.1%
51.9%	53.2	53.7	0.5	1.0%
53.1%	53.2	53.7	0.5	0.9%
54.3%	53.1	53.7	0.6	1.1%
55.6%	53.1	53.5	0.4	0.8%
56.8%	52.9	53.5	0.6	1.1%
58.0%	52.9	53.4	0.4	0.8%
59.3%	52.8	53.3	0.4	0.8%
60.5%	52.7	53.2	0.5	1.0%
61.7%	52.7	53.1	0.4	0.8%
63.0%	52.5	53.0	0.4	0.8%
64.2%	52.5	52.9	0.4	0.8%
65.4%	52.5	52.9	0.4	0.7%
66.7%	52.5	52.7	0.3	0.5%
67.9%	52.3	52.7	0.4	0.7%
69.1%	52.3	52.6	0.3	0.7%
70.4%	52.2	52.5	0.3	0.6%
71.6%	52.2	52.5	0.3	0.6%
72.8%	52.1	52.5	0.3	0.6%
74.1%	52.1	52.5	0.4	0.7%
75.3%	51.9	52.4	0.4	0.8%
76.5%	51.9	52.3	0.4	0.8%
77.8%	51.8	52.1	0.3	0.6%
79.0%	51.8	52.1	0.3	0.5%
80.2%	51.8	52.1	0.3	0.5%
81.5%	51.6	52.0	0.4	0.8%
82.7%	51.6	51.9	0.3	0.7%
84.0%	51.5	51.9	0.4	0.7%
85.2%	51.4	51.8	0.4	0.8%
86.4%	51.4	51.8	0.4	0.8%
87.7%	51.3	51.7	0.4	0.8%
88.9%	51.2	51.7	0.6	1.1%
90.1%	51.2	51.7	0.5	1.0%
91.4%	51.1	51.7	0.6	1.1%
92.6%	51.1	51.6	0.6	1.1%
93.8%	50.8	51.6	0.9	1.8%
95.1%	50.7	51.2	0.5	1.0%
96.3%	50.6	51.0	0.4	0.8%
97.5%	50.5	50.8	0.3	0.6%
98.8%	50.4	50.3	-0.1	-0.2%
100.0%	50.4	50.3	-0.1	-0.2%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	54.3	0.0	0.0%
1.2%	52.9	54.0	1.0	2.0%
2.5%	52.7	53.1	0.4	0.7%
3.7%	52.5	52.8	0.2	0.4%
4.9%	52.3	52.6	0.3	0.6%
6.2%	52.2	52.2	0.0	0.0%
7.4%	52.2	52.2	0.0	0.0%
8.6%	51.9	52.1	0.2	0.4%
9.9%	51.7	52.1	0.4	0.7%
11.1%	51.6	51.8	0.2	0.4%
12.3%	51.6	51.7	0.1	0.3%
13.6%	51.5	51.7	0.2	0.4%
14.8%	51.5	51.6	0.1	0.1%
16.0%	51.4	51.5	0.2	0.3%
17.3%	51.2	51.5	0.3	0.6%
18.5%	51.0	51.5	0.5	0.9%
19.8%	51.0	51.5	0.5	0.9%
21.0%	50.9	51.4	0.5	1.0%
22.2%	50.7	51.3	0.6	1.2%
23.5%	50.7	51.2	0.5	1.0%
24.7%	50.7	51.1	0.4	0.7%
25.9%	50.6	51.1	0.5	0.9%
27.2%	50.4	51.0	0.6	1.3%
28.4%	50.4	50.9	0.5	1.0%
29.6%	50.3	50.8	0.6	1.1%
30.9%	50.2	50.8	0.6	1.3%
32.1%	50.1	50.7	0.7	1.3%
33.3%	50.1	50.7	0.7	1.3%
34.6%	50.0	50.7	0.6	1.3%
35.8%	49.9	50.5	0.5	1.1%
37.0%	49.9	50.4	0.4	0.9%
38.3%	49.9	50.2	0.4	0.8%
39.5%	49.8	50.2	0.3	0.7%
40.7%	49.8	50.1	0.4	0.8%
42.0%	49.7	50.0	0.3	0.7%
43.2%	49.7	50.0	0.3	0.6%
44.4%	49.6	49.9	0.2	0.5%
45.7%	49.6	49.9	0.3	0.6%
46.9%	49.5	49.8	0.3	0.6%
48.1%	49.4	49.7	0.3	0.7%
49.4%	49.3	49.6	0.3	0.5%
50.6%	49.2	49.6	0.4	0.8%
51.9%	49.1	49.6	0.5	0.9%
53.1%	49.1	49.6	0.5	1.0%
54.3%	49.1	49.5	0.4	0.9%
55.6%	48.9	49.4	0.5	1.0%
56.8%	48.9	49.4	0.5	1.0%
58.0%	48.9	49.4	0.5	0.9%
59.3%	48.8	49.3	0.5	1.0%
60.5%	48.7	49.2	0.5	1.0%
61.7%	48.7	49.1	0.4	0.9%
63.0%	48.7	49.1	0.4	0.9%
64.2%	48.6	49.1	0.4	0.9%
65.4%	48.6	48.9	0.3	0.7%
66.7%	48.5	48.9	0.4	0.8%
67.9%	48.4	48.8	0.4	0.8%
69.1%	48.3	48.8	0.5	1.0%
70.4%	48.3	48.7	0.4	0.8%
71.6%	48.2	48.6	0.4	0.8%
72.8%	48.2	48.6	0.5	1.0%
74.1%	48.1	48.5	0.4	0.9%
75.3%	48.1	48.5	0.5	1.0%
76.5%	47.9	48.4	0.4	0.9%
77.8%	47.9	48.3	0.4	0.8%
79.0%	47.8	48.1	0.4	0.8%
80.2%	47.6	48.1	0.5	1.0%
81.5%	47.6	47.9	0.3	0.7%
82.7%	47.5	47.9	0.3	0.7%
84.0%	47.5	47.8	0.3	0.6%
85.2%	47.3	47.6	0.3	0.6%
86.4%	47.2	47.4	0.2	0.3%
87.7%	47.1	47.4	0.2	0.5%
88.9%	47.1	47.3	0.2	0.5%
90.1%	46.8	47.1	0.3	0.7%
91.4%	46.6	47.1	0.6	1.2%
92.6%	46.5	46.7	0.2	0.4%
93.8%	46.3	46.3	-0.1	-0.2%
95.1%	46.3	46.2	0.0	-0.1%
96.3%	46.2	46.1	-0.2	-0.3%
97.5%	46.0	45.9	-0.1	-0.2%
98.8%	45.5	45.9	0.3	0.7%
100.0%	45.5	45.9	0.3	0.7%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.9	52.9	0.0	0.0%
1.2%	51.7	51.5	-0.2	-0.3%
2.5%	51.5	51.3	-0.2	-0.4%
3.7%	50.9	50.9	0.0	0.0%
4.9%	50.8	50.7	-0.1	-0.2%
6.2%	50.3	50.5	0.2	0.5%
7.4%	50.2	50.4	0.2	0.3%
8.6%	50.2	50.4	0.2	0.4%
9.9%	50.1	50.3	0.2	0.4%
11.1%	50.1	50.3	0.3	0.5%
12.3%	50.0	50.3	0.3	0.6%
13.6%	49.9	50.2	0.4	0.7%
14.8%	49.9	50.1	0.2	0.5%
16.0%	49.7	50.1	0.3	0.6%
17.3%	49.7	50.0	0.3	0.6%
18.5%	49.7	49.9	0.2	0.3%
19.8%	49.5	49.8	0.3	0.6%
21.0%	49.5	49.7	0.2	0.5%
22.2%	49.4	49.7	0.3	0.6%
23.5%	49.4	49.7	0.3	0.6%
24.7%	49.4	49.7	0.3	0.5%
25.9%	49.3	49.6	0.3	0.6%
27.2%	49.3	49.6	0.3	0.6%
28.4%	49.3	49.6	0.3	0.5%
29.6%	49.3	49.5	0.2	0.3%
30.9%	49.3	49.5	0.2	0.4%
32.1%	49.2	49.4	0.2	0.4%
33.3%	49.2	49.4	0.2	0.4%
34.6%	49.1	49.3	0.1	0.3%
35.8%	49.1	49.2	0.2	0.3%
37.0%	49.0	49.2	0.2	0.4%
38.3%	49.0	49.2	0.2	0.4%
39.5%	49.0	49.1	0.1	0.3%
40.7%	49.0	49.1	0.1	0.2%
42.0%	48.9	49.0	0.1	0.2%
43.2%	48.9	49.0	0.1	0.3%
44.4%	48.8	48.9	0.1	0.2%
45.7%	48.8	48.8	0.1	0.2%
46.9%	48.6	48.7	0.1	0.2%
48.1%	48.6	48.7	0.1	0.3%
49.4%	48.6	48.5	-0.1	-0.2%
50.6%	48.5	48.4	-0.1	-0.1%
51.9%	48.4	48.4	0.0	0.0%
53.1%	48.3	48.2	-0.1	-0.2%
54.3%	48.3	48.2	-0.1	-0.2%
55.6%	48.1	48.1	0.0	-0.1%
56.8%	47.8	47.8	0.0	0.1%
58.0%	47.8	47.7	-0.1	-0.1%
59.3%	47.7	47.6	0.0	-0.1%
60.5%	47.6	47.6	0.0	0.0%
61.7%	47.6	47.5	0.0	-0.1%
63.0%	47.5	47.4	-0.1	-0.2%
64.2%	47.5	47.4	-0.1	-0.2%
65.4%	47.3	47.4	0.0	0.0%
66.7%	47.2	47.4	0.1	0.2%
67.9%	47.2	47.3	0.1	0.2%
69.1%	47.1	47.3	0.2	0.4%
70.4%	47.0	47.2	0.3	0.6%
71.6%	47.0	47.1	0.2	0.3%
72.8%	46.9	47.0	0.1	0.2%
74.1%	46.8	46.9	0.1	0.1%
75.3%	46.8	46.8	0.0	0.0%
76.5%	46.7	46.7	0.0	0.1%
77.8%	46.5	46.7	0.1	0.3%
79.0%	46.5	46.7	0.2	0.4%
80.2%	46.4	46.5	0.1	0.3%
81.5%	46.4	46.5	0.1	0.2%
82.7%	46.3	46.4	0.2	0.3%
84.0%	46.2	46.4	0.2	0.4%
85.2%	46.1	46.2	0.1	0.2%
86.4%	46.1	46.1	0.0	0.0%
87.7%	46.1	46.1	0.0	0.0%
88.9%	46.0	46.1	0.0	0.1%
90.1%	45.9	46.0	0.1	0.2%
91.4%	45.9	45.9	0.0	0.0%
92.6%	45.9	45.9	0.0	0.0%
93.8%	45.9	45.8	-0.1	-0.1%
95.1%	45.8	45.7	-0.1	-0.1%
96.3%	45.4	45.7	0.3	0.7%
97.5%	45.3	45.4	0.0	0.1%
98.8%	44.4	44.3	-0.1	-0.2%
100.0%	44.4	44.3	-0.1	-0.2%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.2	53.3	0.1	0.1%
1.2%	52.2	52.1	-0.1	-0.2%
2.5%	52.0	52.0	0.0	0.0%
3.7%	51.7	51.9	0.3	0.5%
4.9%	51.6	51.8	0.2	0.3%
6.2%	51.6	51.6	0.0	0.0%
7.4%	51.3	51.5	0.3	0.5%
8.6%	51.1	51.5	0.4	0.7%
9.9%	51.1	51.4	0.2	0.5%
11.1%	51.0	51.2	0.2	0.4%
12.3%	50.9	51.1	0.1	0.2%
13.6%	50.9	51.0	0.1	0.2%
14.8%	50.9	51.0	0.1	0.3%
16.0%	50.8	50.9	0.1	0.2%
17.3%	50.8	50.9	0.1	0.2%
18.5%	50.8	50.9	0.1	0.2%
19.8%	50.8	50.9	0.1	0.3%
21.0%	50.7	50.9	0.2	0.4%
22.2%	50.6	50.9	0.3	0.5%
23.5%	50.6	50.9	0.3	0.5%
24.7%	50.6	50.8	0.2	0.4%
25.9%	50.5	50.8	0.2	0.4%
27.2%	50.3	50.6	0.3	0.5%
28.4%	50.3	50.6	0.3	0.6%
29.6%	50.3	50.6	0.3	0.5%
30.9%	50.2	50.5	0.2	0.5%
32.1%	50.2	50.3	0.1	0.2%
33.3%	50.2	50.2	0.0	0.0%
34.6%	50.2	50.1	-0.2	-0.3%
35.8%	50.2	50.1	-0.1	-0.3%
37.0%	50.0	50.0	0.0	0.0%
38.3%	49.9	50.0	0.1	0.2%
39.5%	49.9	49.9	0.0	0.1%
40.7%	49.6	49.8	0.2	0.3%
42.0%	49.4	49.5	0.0	0.0%
43.2%	49.4	49.4	0.0	0.0%
44.4%	49.3	49.3	0.0	0.0%
45.7%	49.2	49.1	-0.1	-0.2%
46.9%	49.2	49.1	-0.1	-0.2%
48.1%	49.2	49.1	-0.1	-0.1%
49.4%	49.1	49.0	-0.1	-0.3%
50.6%	49.0	49.0	0.0	-0.1%
51.9%	49.0	49.0	0.0	-0.1%
53.1%	48.9	48.9	0.0	0.0%
54.3%	48.9	48.9	0.0	0.0%
55.6%	48.9	48.8	0.0	-0.1%
56.8%	48.8	48.8	0.0	0.1%
58.0%	48.7	48.8	0.0	0.0%
59.3%	48.5	48.5	0.0	0.0%
60.5%	48.4	48.4	0.0	0.0%
61.7%	48.3	48.3	0.0	0.0%
63.0%	48.3	48.3	0.0	0.0%
64.2%	48.2	48.2	0.0	0.0%
65.4%	48.1	48.2	0.1	0.2%
66.7%	48.1	48.2	0.1	0.2%
67.9%	47.9	48.0	0.1	0.2%
69.1%	47.9	48.0	0.1	0.2%
70.4%	47.9	48.0	0.1	0.2%
71.6%	47.7	48.0	0.3	0.5%
72.8%	47.7	48.0	0.3	0.6%
74.1%	47.4	47.8	0.4	0.7%
75.3%	47.4	47.5	0.1	0.3%
76.5%	47.4	47.5	0.1	0.1%
77.8%	47.3	47.4	0.1	0.2%
79.0%	47.2	47.3	0.1	0.2%
80.2%	47.2	47.2	0.1	0.1%
81.5%	47.2	47.2	0.1	0.2%
82.7%	47.1	47.2	0.1	0.2%
84.0%	47.1	47.2	0.1	0.2%
85.2%	46.9	47.0	0.0	0.1%
86.4%	46.9	47.0	0.0	0.1%
87.7%	46.9	47.0	0.0	0.1%
88.9%	46.9	46.9	0.1	0.2%
90.1%	46.9	46.9	0.0	0.0%
91.4%	46.6	46.8	0.2	0.4%
92.6%	46.6	46.7	0.1	0.3%
93.8%	46.5	46.6	0.1	0.2%
95.1%	46.5	46.5	0.0	0.1%
96.3%	46.4	46.5	0.1	0.2%
97.5%	46.1	46.3	0.1	0.2%
98.8%	45.4	45.4	-0.1	-0.2%
100.0%	45.4	45.4	-0.1	-0.2%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.5	54.3	-0.2	-0.3%
1.2%	53.4	54.0	0.6	1.2%
2.5%	52.6	52.5	-0.1	-0.1%
3.7%	52.6	52.4	-0.2	-0.3%
4.9%	52.5	52.2	-0.3	-0.7%
6.2%	52.5	52.1	-0.4	-0.7%
7.4%	52.4	52.1	-0.3	-0.6%
8.6%	52.2	52.1	-0.1	-0.3%
9.9%	52.1	52.0	-0.1	-0.1%
11.1%	52.0	51.8	-0.2	-0.4%
12.3%	51.9	51.7	-0.2	-0.3%
13.6%	51.7	51.7	0.0	-0.1%
14.8%	51.6	51.7	0.1	0.2%
16.0%	51.5	51.6	0.1	0.2%
17.3%	51.5	51.5	0.1	0.1%
18.5%	51.5	51.5	0.0	0.1%
19.8%	51.3	51.4	0.1	0.2%
21.0%	51.3	51.4	0.1	0.2%
22.2%	51.3	51.3	0.0	0.1%
23.5%	51.2	51.2	0.0	0.1%
24.7%	51.0	51.2	0.2	0.4%
25.9%	51.0	51.2	0.2	0.4%
27.2%	50.9	51.2	0.2	0.4%
28.4%	50.9	51.1	0.2	0.4%
29.6%	50.9	51.1	0.2	0.4%
30.9%	50.8	51.1	0.3	0.7%
32.1%	50.8	51.1	0.3	0.6%
33.3%	50.7	51.0	0.3	0.6%
34.6%	50.7	50.9	0.2	0.4%
35.8%	50.6	50.9	0.3	0.5%
37.0%	50.6	50.9	0.3	0.6%
38.3%	50.6	50.8	0.3	0.5%
39.5%	50.5	50.8	0.3	0.5%
40.7%	50.5	50.8	0.3	0.5%
42.0%	50.5	50.8	0.3	0.5%
43.2%	50.5	50.7	0.3	0.5%
44.4%	50.4	50.6	0.2	0.4%
45.7%	50.4	50.6	0.2	0.4%
46.9%	50.4	50.6	0.2	0.5%
48.1%	50.3	50.5	0.2	0.4%
49.4%	50.3	50.5	0.2	0.4%
50.6%	50.3	50.5	0.2	0.4%
51.9%	50.2	50.4	0.2	0.3%
53.1%	50.2	50.3	0.2	0.3%
54.3%	50.1	50.3	0.2	0.4%
55.6%	50.1	50.2	0.1	0.2%
56.8%	50.1	50.2	0.1	0.1%
58.0%	50.1	50.0	-0.1	-0.1%
59.3%	49.9	50.0	0.1	0.2%
60.5%	49.8	50.0	0.2	0.3%
61.7%	49.8	49.9	0.1	0.3%
63.0%	49.8	49.9	0.2	0.3%
64.2%	49.7	49.9	0.2	0.5%
65.4%	49.7	49.8	0.1	0.2%
66.7%	49.6	49.7	0.1	0.1%
67.9%	49.6	49.7	0.1	0.1%
69.1%	49.6	49.7	0.1	0.2%
70.4%	49.5	49.6	0.1	0.2%
71.6%	49.5	49.6	0.1	0.1%
72.8%	49.5	49.6	0.1	0.2%
74.1%	49.4	49.5	0.0	0.0%
75.3%	49.3	49.4	0.1	0.1%
76.5%	49.3	49.4	0.1	0.1%
77.8%	49.3	49.3	0.0	0.1%
79.0%	49.2	49.3	0.1	0.1%
80.2%	49.2	49.3	0.1	0.2%
81.5%	49.1	49.2	0.1	0.2%
82.7%	48.9	49.1	0.2	0.4%
84.0%	48.9	49.0	0.1	0.3%
85.2%	48.8	48.9	0.2	0.3%
86.4%	48.8	48.9	0.1	0.3%
87.7%	48.7	48.9	0.2	0.3%
88.9%	48.5	48.8	0.3	0.7%
90.1%	48.5	48.8	0.3	0.6%
91.4%	48.3	48.7	0.3	0.7%
92.6%	48.2	48.5	0.3	0.6%
93.8%	47.8	47.9	0.1	0.3%
95.1%	47.7	47.9	0.2	0.4%
96.3%	47.7	47.6	0.0	0.0%
97.5%	47.6	47.6	0.0	0.0%
98.8%	47.5	47.6	0.1	0.2%
100.0%	47.5	47.6	0.1	0.2%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.3	56.3	0.0	0.0%
1.2%	56.0	56.1	0.1	0.2%
2.5%	55.8	55.7	-0.2	-0.3%
3.7%	55.7	55.0	-0.8	-1.4%
4.9%	54.1	54.6	0.5	0.9%
6.2%	53.9	54.2	0.4	0.7%
7.4%	53.5	53.6	0.0	0.1%
8.6%	53.2	53.6	0.3	0.6%
9.9%	53.2	53.4	0.2	0.4%
11.1%	53.2	53.4	0.2	0.3%
12.3%	53.0	53.3	0.3	0.6%
13.6%	53.0	52.9	0.0	-0.1%
14.8%	52.7	52.8	0.1	0.2%
16.0%	52.7	52.7	0.0	-0.1%
17.3%	52.7	52.7	0.0	-0.1%
18.5%	52.6	52.6	0.1	0.1%
19.8%	52.5	52.6	0.1	0.3%
21.0%	52.5	52.6	0.1	0.2%
22.2%	52.3	52.6	0.3	0.5%
23.5%	52.3	52.5	0.3	0.5%
24.7%	52.1	52.5	0.4	0.8%
25.9%	52.1	52.5	0.4	0.8%
27.2%	52.1	52.4	0.3	0.6%
28.4%	52.0	52.4	0.4	0.8%
29.6%	52.0	52.4	0.4	0.8%
30.9%	51.9	52.3	0.4	0.8%
32.1%	51.9	52.3	0.4	0.8%
33.3%	51.8	52.3	0.5	1.0%
34.6%	51.8	52.3	0.5	1.0%
35.8%	51.8	52.3	0.5	1.0%
37.0%	51.8	52.3	0.5	0.9%
38.3%	51.8	52.1	0.4	0.7%
39.5%	51.8	52.1	0.3	0.6%
40.7%	51.7	52.1	0.3	0.6%
42.0%	51.6	52.0	0.4	0.8%
43.2%	51.6	52.0	0.4	0.8%
44.4%	51.5	52.0	0.5	0.9%
45.7%	51.4	52.0	0.5	1.0%
46.9%	51.4	52.0	0.5	1.1%
48.1%	51.4	51.9	0.4	0.9%
49.4%	51.4	51.8	0.4	0.8%
50.6%	51.3	51.8	0.5	0.9%
51.9%	51.2	51.7	0.5	1.0%
53.1%	51.1	51.7	0.6	1.2%
54.3%	51.1	51.7	0.6	1.2%
55.6%	51.0	51.5	0.5	1.1%
56.8%	51.0	51.4	0.4	0.9%
58.0%	51.0	51.4	0.4	0.9%
59.3%	50.9	51.4	0.4	0.9%
60.5%	50.9	51.3	0.4	0.7%
61.7%	50.9	51.3	0.4	0.7%
63.0%	50.8	51.2	0.3	0.7%
64.2%	50.8	51.2	0.4	0.7%
65.4%	50.8	51.2	0.4	0.7%
66.7%	50.7	51.1	0.4	0.7%
67.9%	50.7	51.1	0.4	0.8%
69.1%	50.6	51.0	0.4	0.8%
70.4%	50.6	50.9	0.3	0.7%
71.6%	50.6	50.9	0.3	0.6%
72.8%	50.5	50.9	0.4	0.8%
74.1%	50.5	50.9	0.4	0.8%
75.3%	50.4	50.9	0.5	0.9%
76.5%	50.4	50.9	0.5	1.0%
77.8%	50.4	50.8	0.5	1.0%
79.0%	50.4	50.8	0.5	1.0%
80.2%	50.3	50.8	0.5	1.0%
81.5%	50.3	50.8	0.5	1.0%
82.7%	50.2	50.7	0.5	1.0%
84.0%	50.2	50.7	0.5	1.0%
85.2%	50.1	50.6	0.5	1.1%
86.4%	50.1	50.5	0.4	0.9%
87.7%	49.9	50.5	0.6	1.3%
88.9%	49.8	50.5	0.7	1.4%
90.1%	49.7	50.4	0.7	1.4%
91.4%	49.7	50.1	0.5	0.9%
92.6%	49.6	50.1	0.5	0.9%
93.8%	49.5	50.0	0.5	1.0%
95.1%	49.5	50.0	0.4	0.9%
96.3%	49.4	49.9	0.5	1.1%
97.5%	49.4	49.8	0.4	0.9%
98.8%	49.2	49.7	0.5	1.0%
100.0%	49.2	49.7	0.5	1.0%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.0	56.1	-0.9	-1.6%
1.2%	56.1	55.0	-1.1	-1.9%
2.5%	55.9	54.9	-1.0	-1.8%
3.7%	55.7	54.7	-0.9	-1.7%
4.9%	55.7	54.7	-0.9	-1.7%
6.2%	54.8	54.7	-0.1	-0.3%
7.4%	54.7	54.3	-0.4	-0.7%
8.6%	54.6	54.2	-0.4	-0.8%
9.9%	54.4	54.2	-0.2	-0.4%
11.1%	54.0	54.1	0.2	0.3%
12.3%	53.8	54.1	0.3	0.5%
13.6%	53.8	54.1	0.3	0.6%
14.8%	53.8	54.0	0.2	0.5%
16.0%	53.7	53.7	0.1	0.1%
17.3%	53.7	53.7	0.0	0.1%
18.5%	53.6	53.7	0.0	0.1%
19.8%	53.6	53.7	0.1	0.2%
21.0%	53.3	53.6	0.3	0.6%
22.2%	53.3	53.6	0.3	0.5%
23.5%	53.3	53.4	0.2	0.3%
24.7%	53.3	53.4	0.2	0.3%
25.9%	53.3	53.3	0.1	0.1%
27.2%	53.1	53.2	0.1	0.1%
28.4%	53.1	53.2	0.1	0.2%
29.6%	52.9	53.1	0.2	0.3%
30.9%	52.8	53.1	0.3	0.5%
32.1%	52.8	52.9	0.1	0.2%
33.3%	52.8	52.9	0.1	0.2%
34.6%	52.8	52.8	0.1	0.1%
35.8%	52.7	52.8	0.1	0.3%
37.0%	52.5	52.7	0.2	0.4%
38.3%	52.4	52.6	0.2	0.4%
39.5%	52.4	52.6	0.3	0.5%
40.7%	52.3	52.6	0.3	0.5%
42.0%	52.2	52.6	0.4	0.7%
43.2%	52.2	52.5	0.3	0.6%
44.4%	52.0	52.5	0.5	0.9%
45.7%	51.9	52.4	0.5	1.0%
46.9%	51.9	52.3	0.4	0.8%
48.1%	51.8	52.2	0.4	0.8%
49.4%	51.8	52.2	0.4	0.8%
50.6%	51.8	52.2	0.4	0.8%
51.9%	51.7	52.2	0.4	0.8%
53.1%	51.7	52.1	0.4	0.8%
54.3%	51.7	52.1	0.4	0.8%
55.6%	51.6	52.1	0.4	0.9%
56.8%	51.6	52.1	0.4	0.9%
58.0%	51.6	52.0	0.4	0.8%
59.3%	51.5	51.9	0.4	0.8%
60.5%	51.4	51.9	0.6	1.1%
61.7%	51.2	51.9	0.6	1.2%
63.0%	51.2	51.8	0.6	1.1%
64.2%	51.1	51.7	0.6	1.2%
65.4%	51.0	51.7	0.6	1.3%
66.7%	50.9	51.6	0.7	1.4%
67.9%	50.9	51.6	0.7	1.4%
69.1%	50.9	51.5	0.7	1.3%
70.4%	50.9	51.5	0.6	1.2%
71.6%	50.9	51.5	0.6	1.1%
72.8%	50.8	51.4	0.6	1.3%
74.1%	50.7	51.3	0.6	1.2%
75.3%	50.7	51.3	0.6	1.3%
76.5%	50.6	51.3	0.7	1.4%
77.8%	50.6	51.2	0.7	1.3%
79.0%	50.5	51.1	0.6	1.2%
80.2%	50.5	51.1	0.6	1.2%
81.5%	50.5	51.0	0.6	1.1%
82.7%	50.4	51.0	0.6	1.1%
84.0%	50.4	50.9	0.6	1.1%
85.2%	50.3	50.9	0.6	1.2%
86.4%	50.3	50.9	0.5	1.0%
87.7%	50.3	50.8	0.5	1.0%
88.9%	50.3	50.8	0.5	1.1%
90.1%	50.1	50.8	0.7	1.4%
91.4%	50.0	50.8	0.7	1.4%
92.6%	49.9	50.7	0.7	1.5%
93.8%	49.9	50.5	0.6	1.3%
95.1%	49.9	50.5	0.6	1.2%
96.3%	49.7	50.1	0.4	0.8%
97.5%	49.3	49.9	0.6	1.2%
98.8%	49.3	49.7	0.4	0.8%
100.0%	49.3	49.7	0.4	0.8%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.7	65.0	0.3	0.5%
1.2%	59.5	56.0	-3.5	-5.9%
2.5%	58.4	55.8	-2.6	-4.4%
3.7%	56.4	55.3	-1.1	-2.0%
4.9%	56.2	55.1	-1.1	-2.0%
6.2%	56.0	55.0	-1.0	-1.8%
7.4%	55.9	55.0	-0.9	-1.6%
8.6%	55.7	55.0	-0.7	-1.3%
9.9%	55.7	55.0	-0.7	-1.3%
11.1%	55.6	54.9	-0.7	-1.3%
12.3%	55.6	54.8	-0.8	-1.5%
13.6%	55.5	54.6	-0.9	-1.7%
14.8%	55.5	54.6	-0.9	-1.6%
16.0%	55.4	54.6	-0.8	-1.5%
17.3%	55.3	54.5	-0.8	-1.5%
18.5%	55.3	54.5	-0.8	-1.4%
19.8%	55.3	54.5	-0.8	-1.4%
21.0%	55.1	54.4	-0.7	-1.3%
22.2%	55.1	54.4	-0.7	-1.3%
23.5%	55.0	54.4	-0.6	-1.2%
24.7%	55.0	54.4	-0.6	-1.1%
25.9%	54.8	54.2	-0.6	-1.0%
27.2%	54.6	54.2	-0.4	-0.8%
28.4%	54.5	54.1	-0.5	-0.9%
29.6%	54.4	54.0	-0.4	-0.7%
30.9%	54.3	54.0	-0.3	-0.6%
32.1%	54.3	54.0	-0.3	-0.6%
33.3%	54.2	53.9	-0.2	-0.4%
34.6%	53.9	53.9	0.0	0.1%
35.8%	53.9	53.9	0.0	0.0%
37.0%	53.9	53.8	0.0	0.0%
38.3%	53.7	53.8	0.1	0.1%
39.5%	53.7	53.7	0.1	0.2%
40.7%	53.6	53.7	0.2	0.3%
42.0%	53.5	53.6	0.1	0.2%
43.2%	53.5	53.6	0.1	0.2%
44.4%	53.5	53.6	0.1	0.3%
45.7%	53.4	53.6	0.2	0.4%
46.9%	53.3	53.5	0.3	0.5%
48.1%	53.2	53.5	0.3	0.6%
49.4%	53.2	53.4	0.2	0.5%
50.6%	53.2	53.4	0.2	0.4%
51.9%	53.1	53.3	0.2	0.4%
53.1%	53.0	53.3	0.2	0.5%
54.3%	52.9	53.3	0.4	0.7%
55.6%	52.9	53.2	0.3	0.6%
56.8%	52.8	53.1	0.3	0.5%
58.0%	52.8	53.0	0.3	0.5%
59.3%	52.7	53.0	0.2	0.5%
60.5%	52.7	52.9	0.2	0.4%
61.7%	52.7	52.9	0.3	0.5%
63.0%	52.6	52.8	0.2	0.4%
64.2%	52.6	52.8	0.2	0.4%
65.4%	52.5	52.8	0.3	0.5%
66.7%	52.5	52.7	0.2	0.4%
67.9%	52.5	52.7	0.2	0.4%
69.1%	52.4	52.6	0.3	0.5%
70.4%	52.3	52.6	0.3	0.7%
71.6%	52.3	52.6	0.3	0.6%
72.8%	52.2	52.5	0.3	0.5%
74.1%	52.2	52.5	0.3	0.6%
75.3%	52.0	52.4	0.4	0.8%
76.5%	52.0	52.4	0.5	0.9%
77.8%	51.9	52.4	0.5	1.0%
79.0%	51.8	52.4	0.5	1.0%
80.2%	51.8	52.3	0.5	1.0%
81.5%	51.7	52.1	0.4	0.7%
82.7%	51.7	52.1	0.4	0.7%
84.0%	51.7	52.1	0.4	0.7%
85.2%	51.7	51.9	0.3	0.5%
86.4%	51.5	51.9	0.3	0.7%
87.7%	51.5	51.9	0.4	0.7%
88.9%	51.5	51.7	0.2	0.5%
90.1%	51.3	51.7	0.4	0.8%
91.4%	51.1	51.6	0.5	0.9%
92.6%	51.1	51.5	0.4	0.8%
93.8%	51.1	51.4	0.3	0.6%
95.1%	50.9	51.3	0.4	0.8%
96.3%	50.8	51.2	0.4	0.7%
97.5%	50.8	50.9	0.1	0.3%
98.8%	50.7	50.8	0.2	0.3%
100.0%	50.7	50.8	0.2	0.3%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.4	69.9	0.5	0.8%
1.2%	65.5	64.4	-1.1	-1.7%
2.5%	64.4	61.5	-2.8	-4.4%
3.7%	64.4	61.4	-2.9	-4.6%
4.9%	60.1	57.7	-2.4	-4.0%
6.2%	60.0	56.0	-4.0	-6.7%
7.4%	56.8	55.8	-1.0	-1.8%
8.6%	56.3	55.8	-0.5	-0.9%
9.9%	56.1	55.5	-0.6	-1.0%
11.1%	56.0	55.5	-0.6	-1.0%
12.3%	56.0	55.3	-0.7	-1.3%
13.6%	55.9	55.2	-0.7	-1.2%
14.8%	55.9	55.2	-0.7	-1.3%
16.0%	55.8	55.1	-0.7	-1.2%
17.3%	55.6	55.1	-0.5	-0.9%
18.5%	55.5	54.9	-0.6	-1.1%
19.8%	55.5	54.9	-0.6	-1.2%
21.0%	55.4	54.9	-0.5	-1.0%
22.2%	55.4	54.9	-0.5	-0.9%
23.5%	55.3	54.8	-0.5	-0.9%
24.7%	55.3	54.7	-0.6	-1.0%
25.9%	55.3	54.6	-0.6	-1.2%
27.2%	55.2	54.6	-0.6	-1.1%
28.4%	55.1	54.6	-0.5	-0.9%
29.6%	55.0	54.6	-0.4	-0.7%
30.9%	55.0	54.6	-0.4	-0.7%
32.1%	55.0	54.5	-0.4	-0.7%
33.3%	54.9	54.5	-0.3	-0.6%
34.6%	54.8	54.5	-0.3	-0.6%
35.8%	54.8	54.5	-0.3	-0.6%
37.0%	54.8	54.5	-0.4	-0.7%
38.3%	54.8	54.4	-0.4	-0.7%
39.5%	54.8	54.4	-0.4	-0.7%
40.7%	54.7	54.4	-0.3	-0.6%
42.0%	54.7	54.3	-0.3	-0.6%
43.2%	54.7	54.2	-0.4	-0.7%
44.4%	54.7	54.2	-0.4	-0.8%
45.7%	54.7	54.2	-0.4	-0.8%
46.9%	54.6	54.2	-0.4	-0.8%
48.1%	54.6	54.2	-0.4	-0.8%
49.4%	54.6	54.2	-0.4	-0.7%
50.6%	54.5	54.2	-0.4	-0.7%
51.9%	54.5	54.1	-0.4	-0.7%
53.1%	54.5	54.1	-0.4	-0.7%
54.3%	54.5	54.1	-0.4	-0.7%
55.6%	54.5	54.0	-0.4	-0.8%
56.8%	54.4	54.0	-0.4	-0.7%
58.0%	54.4	54.0	-0.3	-0.6%
59.3%	54.3	54.0	-0.3	-0.6%
60.5%	54.3	54.0	-0.3	-0.6%
61.7%	54.3	54.0	-0.3	-0.6%
63.0%	54.2	54.0	-0.3	-0.5%
64.2%	54.2	53.9	-0.3	-0.5%
65.4%	54.2	53.9	-0.2	-0.4%
66.7%	54.1	53.8	-0.3	-0.6%
67.9%	54.1	53.8	-0.3	-0.6%
69.1%	54.1	53.8	-0.3	-0.5%
70.4%	54.0	53.8	-0.2	-0.5%
71.6%	54.0	53.7	-0.3	-0.5%
72.8%	54.0	53.7	-0.3	-0.6%
74.1%	54.0	53.7	-0.3	-0.5%
75.3%	53.9	53.7	-0.2	-0.4%
76.5%	53.9	53.6	-0.2	-0.4%
77.8%	53.8	53.6	-0.2	-0.4%
79.0%	53.7	53.6	-0.1	-0.2%
80.2%	53.6	53.5	-0.1	-0.2%
81.5%	53.4	53.5	0.1	0.2%
82.7%	53.4	53.5	0.1	0.1%
84.0%	53.4	53.5	0.1	0.1%
85.2%	53.4	53.4	0.0	0.0%
86.4%	53.4	53.3	0.0	-0.1%
87.7%	53.4	53.1	-0.3	-0.5%
88.9%	53.2	52.8	-0.4	-0.7%
90.1%	53.2	52.8	-0.4	-0.7%
91.4%	53.1	52.7	-0.4	-0.7%
92.6%	52.9	52.3	-0.5	-1.0%
93.8%	52.6	52.0	-0.6	-1.1%
95.1%	52.5	52.0	-0.6	-1.1%
96.3%	52.0	51.6	-0.4	-0.8%
97.5%	52.0	51.5	-0.5	-0.9%
98.8%	51.9	50.9	-1.1	-2.1%
100.0%	51.9	50.9	-1.1	-2.1%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.1	69.3	-0.8	-1.1%
1.2%	69.6	67.4	-2.2	-3.2%
2.5%	68.4	66.5	-2.0	-2.9%
3.7%	68.1	65.9	-2.3	-3.3%
4.9%	66.5	62.1	-4.4	-6.6%
6.2%	65.6	62.0	-3.6	-5.5%
7.4%	64.4	61.0	-3.4	-5.3%
8.6%	63.0	59.4	-3.6	-5.7%
9.9%	62.0	58.7	-3.3	-5.3%
11.1%	61.9	58.6	-3.3	-5.3%
12.3%	60.3	58.4	-1.9	-3.2%
13.6%	59.0	57.4	-1.6	-2.8%
14.8%	58.6	57.4	-1.2	-2.1%
16.0%	58.5	57.3	-1.2	-2.1%
17.3%	58.1	56.7	-1.3	-2.3%
18.5%	58.0	56.7	-1.3	-2.3%
19.8%	57.4	56.4	-1.1	-1.9%
21.0%	57.3	55.8	-1.5	-2.7%
22.2%	57.0	55.7	-1.3	-2.3%
23.5%	56.6	55.7	-0.9	-1.6%
24.7%	56.6	55.5	-1.1	-2.0%
25.9%	56.3	55.4	-0.9	-1.6%
27.2%	56.2	55.3	-0.9	-1.6%
28.4%	56.1	55.2	-0.9	-1.6%
29.6%	56.1	55.2	-0.9	-1.6%
30.9%	55.8	55.1	-0.7	-1.2%
32.1%	55.6	55.0	-0.7	-1.2%
33.3%	55.6	54.8	-0.8	-1.4%
34.6%	55.5	54.7	-0.8	-1.4%
35.8%	55.3	54.6	-0.7	-1.2%
37.0%	55.2	54.6	-0.6	-1.1%
38.3%	55.2	54.6	-0.6	-1.1%
39.5%	55.2	54.6	-0.6	-1.1%
40.7%	55.2	54.6	-0.6	-1.1%
42.0%	55.1	54.5	-0.6	-1.0%
43.2%	55.0	54.3	-0.7	-1.3%
44.4%	55.0	54.3	-0.7	-1.3%
45.7%	55.0	54.1	-0.8	-1.5%
46.9%	54.8	54.1	-0.7	-1.3%
48.1%	54.7	54.1	-0.6	-1.1%
49.4%	54.7	54.1	-0.7	-1.2%
50.6%	54.7	54.0	-0.7	-1.2%
51.9%	54.7	54.0	-0.6	-1.2%
53.1%	54.6	54.0	-0.6	-1.1%
54.3%	54.6	54.0	-0.6	-1.1%
55.6%	54.5	54.0	-0.6	-1.1%
56.8%	54.5	54.0	-0.6	-1.0%
58.0%	54.4	53.8	-0.5	-1.0%
59.3%	54.3	53.8	-0.5	-0.9%
60.5%	54.2	53.7	-0.5	-0.9%
61.7%	54.0	53.7	-0.4	-0.7%
63.0%	53.7	53.6	-0.1	-0.2%
64.2%	53.5	53.6	0.1	0.1%
65.4%	53.5	53.6	0.1	0.2%
66.7%	53.5	53.5	0.0	0.1%
67.9%	53.4	53.5	0.1	0.2%
69.1%	53.1	53.5	0.3	0.6%
70.4%	53.1	53.4	0.3	0.6%
71.6%	53.1	53.4	0.3	0.6%
72.8%	52.9	53.4	0.5	1.0%
74.1%	52.8	53.2	0.4	0.8%
75.3%	52.6	53.0	0.4	0.8%
76.5%	52.5	52.7	0.2	0.4%
77.8%	52.3	52.7	0.4	0.7%
79.0%	52.2	52.6	0.4	0.7%
80.2%	52.2	52.5	0.4	0.7%
81.5%	52.2	52.5	0.4	0.7%
82.7%	52.1	52.2	0.1	0.1%
84.0%	52.1	52.2	0.0	0.1%
85.2%	52.0	51.9	-0.1	-0.2%
86.4%	51.9	51.7	-0.2	-0.4%
87.7%	51.9	51.6	-0.3	-0.6%
88.9%	51.9	51.6	-0.2	-0.5%
90.1%	51.8	51.6	-0.2	-0.4%
91.4%	51.7	51.5	-0.2	-0.5%
92.6%	51.7	51.5	-0.2	-0.4%
93.8%	51.4	51.4	0.0	0.0%
95.1%	51.4	51.4	0.0	0.0%
96.3%	51.4	51.3	0.0	-0.1%
97.5%	51.3	51.3	-0.1	-0.2%
98.8%	51.2	51.1	-0.2	-0.3%
100.0%	51.2	51.1	-0.2	-0.3%

Table SQ3-1b

Sacramento River at Bonnyview Bridge, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.4	64.4	0.0	0.0%
1.2%	62.3	60.8	-1.5	-2.4%
2.5%	62.2	59.9	-2.3	-3.7%
3.7%	60.9	59.1	-1.8	-3.0%
4.9%	60.0	56.8	-3.1	-5.2%
6.2%	58.4	56.8	-1.6	-2.8%
7.4%	57.7	56.3	-1.5	-2.5%
8.6%	57.6	55.6	-2.0	-3.5%
9.9%	57.1	55.5	-1.6	-2.8%
11.1%	56.6	55.5	-1.0	-1.8%
12.3%	56.0	55.4	-0.6	-1.0%
13.6%	56.0	55.4	-0.6	-1.0%
14.8%	55.8	55.3	-0.6	-1.0%
16.0%	55.8	55.3	-0.5	-1.0%
17.3%	55.8	55.0	-0.8	-1.5%
18.5%	55.6	54.9	-0.6	-1.2%
19.8%	55.3	54.9	-0.4	-0.6%
21.0%	55.2	54.9	-0.3	-0.5%
22.2%	55.1	54.7	-0.4	-0.8%
23.5%	55.1	54.7	-0.4	-0.8%
24.7%	55.0	54.7	-0.3	-0.6%
25.9%	54.9	54.6	-0.3	-0.6%
27.2%	54.7	54.5	-0.2	-0.4%
28.4%	54.6	54.4	-0.2	-0.4%
29.6%	54.5	54.3	-0.2	-0.4%
30.9%	54.5	54.3	-0.2	-0.4%
32.1%	54.4	54.2	-0.3	-0.5%
33.3%	54.3	53.9	-0.4	-0.7%
34.6%	54.1	53.9	-0.2	-0.3%
35.8%	54.0	53.9	-0.2	-0.3%
37.0%	53.9	53.8	-0.1	-0.2%
38.3%	53.9	53.7	-0.1	-0.2%
39.5%	53.8	53.7	-0.1	-0.2%
40.7%	53.7	53.6	-0.1	-0.2%
42.0%	53.7	53.6	-0.1	-0.2%
43.2%	53.7	53.6	-0.1	-0.1%
44.4%	53.7	53.6	0.0	-0.1%
45.7%	53.6	53.5	-0.1	-0.2%
46.9%	53.6	53.5	-0.1	-0.3%
48.1%	53.5	53.5	-0.1	-0.2%
49.4%	53.5	53.4	-0.1	-0.2%
50.6%	53.5	53.4	-0.1	-0.2%
51.9%	53.5	53.4	-0.1	-0.2%
53.1%	53.3	53.3	0.0	0.0%
54.3%	53.3	53.3	0.0	-0.1%
55.6%	53.3	53.2	0.0	-0.1%
56.8%	53.3	53.2	0.0	-0.1%
58.0%	53.2	53.2	0.0	-0.1%
59.3%	53.1	53.1	0.0	-0.1%
60.5%	53.1	53.1	0.0	0.0%
61.7%	53.1	53.1	0.0	0.0%
63.0%	53.1	53.0	0.0	-0.1%
64.2%	53.0	52.9	-0.1	-0.2%
65.4%	52.9	52.9	-0.1	-0.1%
66.7%	52.9	52.9	-0.1	-0.1%
67.9%	52.9	52.9	0.0	-0.1%
69.1%	52.8	52.8	0.0	-0.1%
70.4%	52.7	52.8	0.0	0.1%
71.6%	52.6	52.8	0.2	0.4%
72.8%	52.5	52.7	0.2	0.3%
74.1%	52.5	52.6	0.1	0.1%
75.3%	52.5	52.5	0.0	-0.1%
76.5%	52.5	52.4	-0.1	-0.2%
77.8%	52.4	52.4	0.0	-0.1%
79.0%	52.3	52.4	0.1	0.2%
80.2%	52.2	52.3	0.1	0.2%
81.5%	52.1	52.3	0.1	0.3%
82.7%	52.1	52.2	0.1	0.2%
84.0%	52.0	52.2	0.2	0.3%
85.2%	52.0	52.2	0.2	0.3%
86.4%	52.0	52.1	0.1	0.3%
87.7%	51.8	52.0	0.2	0.5%
88.9%	51.7	51.9	0.2	0.4%
90.1%	51.7	51.8	0.1	0.3%
91.4%	51.6	51.8	0.3	0.5%
92.6%	51.5	51.8	0.3	0.5%
93.8%	51.4	51.7	0.3	0.6%
95.1%	51.4	51.6	0.3	0.5%
96.3%	51.4	51.6	0.2	0.4%
97.5%	51.0	51.4	0.4	0.7%
98.8%	51.0	51.3	0.3	0.6%
100.0%	50.9	51.1	0.2	0.4%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.8	67.1	0.3	0.4%
1.2%	64.9	63.2	-1.6	-2.5%
2.5%	64.3	61.6	-2.7	-4.2%
3.7%	62.9	60.8	-2.1	-3.3%
4.9%	61.4	58.0	-3.4	-5.5%
6.2%	60.0	57.5	-2.5	-4.1%
7.4%	59.1	56.8	-2.3	-3.9%
8.6%	58.2	56.5	-1.8	-3.0%
9.9%	58.1	56.3	-1.7	-3.0%
11.1%	57.8	56.0	-1.8	-3.1%
12.3%	56.8	56.0	-0.7	-1.3%
13.6%	56.7	55.9	-0.8	-1.4%
14.8%	56.6	55.7	-0.9	-1.6%
16.0%	56.4	55.6	-0.8	-1.4%
17.3%	56.4	55.4	-1.0	-1.7%
18.5%	56.4	55.4	-1.0	-1.7%
19.8%	56.0	55.2	-0.8	-1.4%
21.0%	55.8	55.1	-0.7	-1.3%
22.2%	55.6	55.0	-0.6	-1.2%
23.5%	55.4	54.9	-0.5	-0.9%
24.7%	55.4	54.9	-0.5	-1.0%
25.9%	55.4	54.8	-0.5	-1.0%
27.2%	55.3	54.7	-0.6	-1.1%
28.4%	55.3	54.6	-0.6	-1.1%
29.6%	55.2	54.6	-0.6	-1.1%
30.9%	55.0	54.6	-0.4	-0.8%
32.1%	54.9	54.6	-0.3	-0.6%
33.3%	54.8	54.6	-0.3	-0.5%
34.6%	54.8	54.3	-0.5	-0.8%
35.8%	54.6	54.3	-0.4	-0.7%
37.0%	54.6	54.2	-0.4	-0.7%
38.3%	54.4	54.1	-0.3	-0.5%
39.5%	54.4	54.1	-0.3	-0.5%
40.7%	54.4	54.1	-0.3	-0.5%
42.0%	54.3	54.0	-0.3	-0.6%
43.2%	54.2	54.0	-0.3	-0.5%
44.4%	54.2	54.0	-0.3	-0.5%
45.7%	54.2	53.9	-0.3	-0.5%
46.9%	54.1	53.9	-0.2	-0.4%
48.1%	54.1	53.8	-0.3	-0.5%
49.4%	54.1	53.8	-0.3	-0.5%
50.6%	54.0	53.8	-0.2	-0.4%
51.9%	54.0	53.8	-0.2	-0.4%
53.1%	54.0	53.7	-0.2	-0.4%
54.3%	54.0	53.7	-0.2	-0.5%
55.6%	53.9	53.7	-0.2	-0.4%
56.8%	53.9	53.7	-0.2	-0.4%
58.0%	53.9	53.7	-0.2	-0.4%
59.3%	53.9	53.7	-0.2	-0.4%
60.5%	53.6	53.6	-0.1	-0.1%
61.7%	53.6	53.5	-0.1	-0.2%
63.0%	53.5	53.4	-0.1	-0.2%
64.2%	53.5	53.4	-0.1	-0.2%
65.4%	53.5	53.4	-0.1	-0.2%
66.7%	53.5	53.3	-0.1	-0.2%
67.9%	53.4	53.3	-0.1	-0.2%
69.1%	53.3	53.3	0.0	0.0%
70.4%	53.2	53.2	0.1	0.1%
71.6%	53.1	53.2	0.0	0.1%
72.8%	53.1	53.0	-0.1	-0.1%
74.1%	53.1	53.0	0.0	-0.1%
75.3%	53.1	53.0	-0.1	-0.2%
76.5%	53.1	52.9	-0.2	-0.3%
77.8%	53.0	52.8	-0.2	-0.5%
79.0%	52.9	52.7	-0.1	-0.3%
80.2%	52.8	52.7	-0.2	-0.3%
81.5%	52.7	52.5	-0.1	-0.3%
82.7%	52.6	52.5	-0.1	-0.2%
84.0%	52.6	52.5	-0.1	-0.1%
85.2%	52.5	52.5	-0.1	-0.1%
86.4%	52.3	52.5	0.2	0.3%
87.7%	52.2	52.4	0.3	0.5%
88.9%	52.1	52.3	0.1	0.2%
90.1%	52.0	52.2	0.1	0.3%
91.4%	52.0	52.0	0.1	0.1%
92.6%	52.0	52.0	0.0	0.1%
93.8%	51.9	51.9	0.0	0.0%
95.1%	51.9	51.9	0.0	0.0%
96.3%	51.7	51.8	0.1	0.1%
97.5%	51.5	51.7	0.2	0.4%
98.8%	51.4	51.7	0.3	0.5%
100.0%	51.4	51.7	0.3	0.5%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.9	68.2	0.3	0.4%
1.2%	67.5	66.8	-0.7	-1.0%
2.5%	67.2	64.5	-2.8	-4.1%
3.7%	66.4	63.6	-2.8	-4.2%
4.9%	64.1	59.9	-4.2	-6.6%
6.2%	62.2	58.7	-3.4	-5.5%
7.4%	60.8	57.9	-2.8	-4.7%
8.6%	59.6	57.7	-2.0	-3.3%
9.9%	59.4	57.2	-2.2	-3.7%
11.1%	58.9	56.9	-2.0	-3.4%
12.3%	57.5	56.8	-0.7	-1.2%
13.6%	57.4	56.6	-0.8	-1.5%
14.8%	57.1	56.3	-0.8	-1.3%
16.0%	57.0	56.1	-1.0	-1.7%
17.3%	57.0	55.9	-1.1	-1.9%
18.5%	56.8	55.6	-1.2	-2.1%
19.8%	56.2	55.6	-0.6	-1.0%
21.0%	56.1	55.5	-0.6	-1.1%
22.2%	56.1	55.1	-1.0	-1.8%
23.5%	55.9	55.1	-0.8	-1.4%
24.7%	55.9	55.1	-0.7	-1.3%
25.9%	55.7	55.1	-0.6	-1.1%
27.2%	55.7	54.9	-0.7	-1.3%
28.4%	55.5	54.9	-0.6	-1.1%
29.6%	55.5	54.9	-0.6	-1.1%
30.9%	55.3	54.8	-0.5	-0.8%
32.1%	55.1	54.7	-0.4	-0.7%
33.3%	55.0	54.6	-0.4	-0.8%
34.6%	55.0	54.6	-0.4	-0.8%
35.8%	55.0	54.6	-0.4	-0.8%
37.0%	55.0	54.5	-0.5	-0.9%
38.3%	54.9	54.4	-0.5	-0.8%
39.5%	54.8	54.4	-0.4	-0.8%
40.7%	54.8	54.4	-0.4	-0.8%
42.0%	54.8	54.4	-0.5	-0.8%
43.2%	54.8	54.3	-0.5	-0.8%
44.4%	54.8	54.3	-0.5	-0.8%
45.7%	54.7	54.2	-0.5	-0.9%
46.9%	54.7	54.2	-0.5	-1.0%
48.1%	54.6	54.1	-0.5	-0.9%
49.4%	54.6	54.1	-0.5	-0.9%
50.6%	54.5	54.1	-0.5	-0.8%
51.9%	54.5	54.0	-0.5	-0.9%
53.1%	54.5	54.0	-0.5	-0.9%
54.3%	54.5	53.9	-0.6	-1.1%
55.6%	54.5	53.9	-0.6	-1.1%
56.8%	54.4	53.8	-0.6	-1.1%
58.0%	54.4	53.8	-0.6	-1.1%
59.3%	54.4	53.8	-0.6	-1.1%
60.5%	54.3	53.8	-0.5	-1.0%
61.7%	54.1	53.7	-0.4	-0.8%
63.0%	53.9	53.7	-0.2	-0.4%
64.2%	53.8	53.7	-0.1	-0.3%
65.4%	53.8	53.7	-0.1	-0.3%
66.7%	53.8	53.7	-0.1	-0.3%
67.9%	53.8	53.6	-0.1	-0.3%
69.1%	53.7	53.6	-0.1	-0.2%
70.4%	53.5	53.6	0.0	0.1%
71.6%	53.5	53.5	0.0	0.0%
72.8%	53.5	53.3	-0.1	-0.3%
74.1%	53.5	53.3	-0.2	-0.4%
75.3%	53.5	53.2	-0.3	-0.5%
76.5%	53.5	53.1	-0.4	-0.7%
77.8%	53.4	53.0	-0.4	-0.7%
79.0%	53.2	52.8	-0.3	-0.7%
80.2%	53.1	52.8	-0.3	-0.5%
81.5%	53.1	52.8	-0.3	-0.5%
82.7%	53.0	52.8	-0.3	-0.5%
84.0%	52.9	52.7	-0.2	-0.4%
85.2%	52.7	52.6	-0.1	-0.1%
86.4%	52.7	52.5	-0.2	-0.4%
87.7%	52.7	52.4	-0.2	-0.4%
88.9%	52.6	52.4	-0.2	-0.4%
90.1%	52.4	52.4	0.0	0.0%
91.4%	52.3	52.3	0.0	0.0%
92.6%	52.3	52.3	0.0	0.0%
93.8%	52.2	52.2	0.0	0.1%
95.1%	52.1	52.1	0.0	-0.1%
96.3%	52.1	52.1	0.0	-0.1%
97.5%	52.1	51.8	-0.3	-0.5%
98.8%	51.7	51.7	-0.1	-0.2%
100.0%	51.7	51.6	-0.1	-0.1%

Figure SQ4-1b
Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

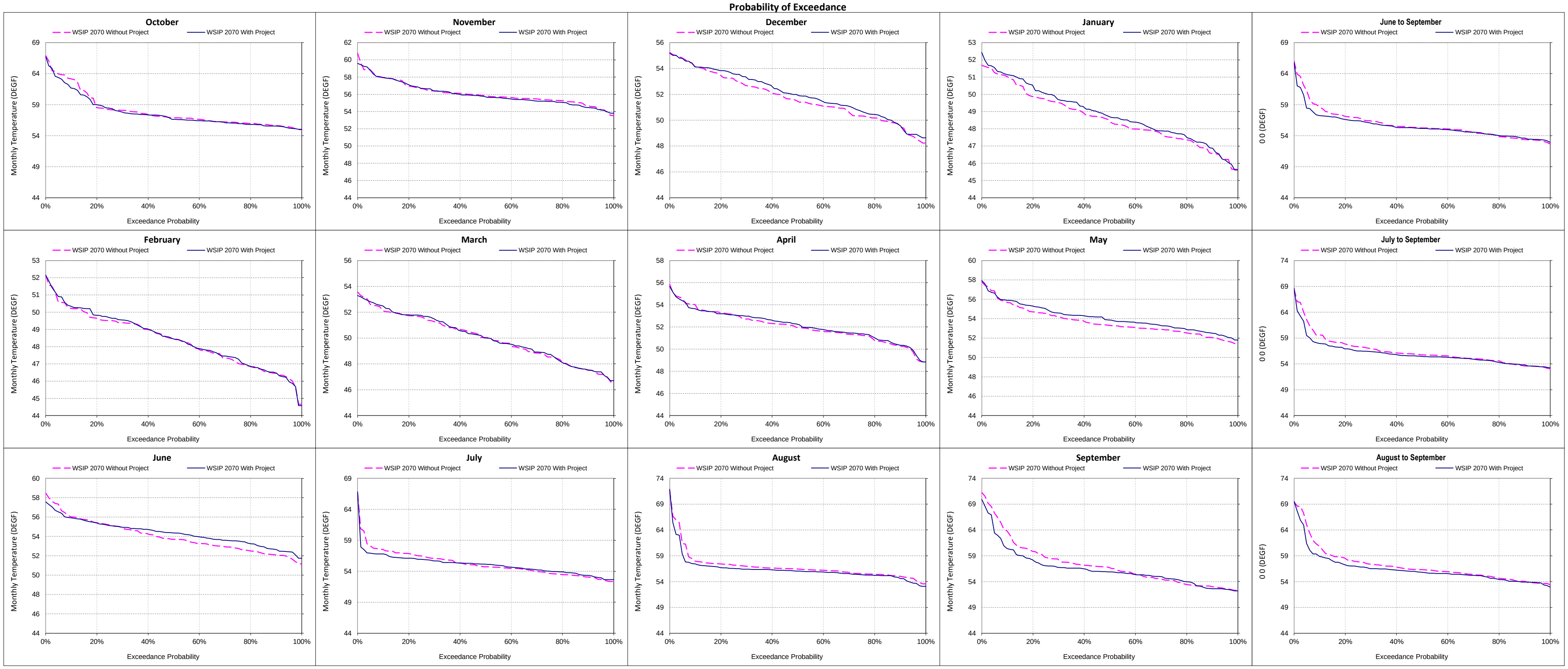


Table SQ4-1b
Sacramento River at Balls Ferry, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.9	66.8	-0.1	-0.1%
1.2%	66.0	65.3	-0.7	-1.1%
2.5%	64.5	64.9	0.4	0.6%
3.7%	64.4	63.6	-0.8	-1.2%
4.9%	64.0	63.4	-0.6	-0.9%
6.2%	63.8	63.1	-0.7	-1.1%
7.4%	63.8	62.5	-1.2	-2.0%
8.6%	63.3	62.3	-1.0	-1.6%
9.9%	63.2	61.7	-1.5	-2.3%
11.1%	63.0	61.6	-1.4	-2.3%
12.3%	62.7	61.3	-1.3	-2.1%
13.6%	61.4	60.6	-0.8	-1.2%
14.8%	61.3	60.6	-0.8	-1.3%
16.0%	60.9	60.3	-0.6	-1.0%
17.3%	60.1	59.9	-0.2	-0.4%
18.5%	60.1	59.0	-1.0	-1.7%
19.8%	58.6	59.0	0.4	0.7%
21.0%	58.5	58.9	0.5	0.8%
22.2%	58.4	58.8	0.4	0.6%
23.5%	58.2	58.5	0.3	0.5%
24.7%	58.2	58.5	0.2	0.4%
25.9%	58.2	58.3	0.2	0.3%
27.2%	58.2	58.1	-0.1	-0.1%
28.4%	58.1	58.0	-0.2	-0.3%
29.6%	58.1	57.8	-0.3	-0.5%
30.9%	58.1	57.6	-0.4	-0.7%
32.1%	58.1	57.6	-0.4	-0.8%
33.3%	57.9	57.6	-0.3	-0.6%
34.6%	57.9	57.5	-0.4	-0.6%
35.8%	57.8	57.5	-0.3	-0.6%
37.0%	57.6	57.4	-0.2	-0.3%
38.3%	57.6	57.4	-0.2	-0.3%
39.5%	57.5	57.4	-0.1	-0.2%
40.7%	57.3	57.3	0.0	0.1%
42.0%	57.2	57.3	0.1	0.1%
43.2%	57.1	57.3	0.2	0.3%
44.4%	57.1	57.3	0.2	0.3%
45.7%	57.1	57.2	0.1	0.2%
46.9%	57.0	57.1	0.1	0.1%
48.1%	56.9	56.9	0.0	-0.1%
49.4%	56.9	56.6	-0.3	-0.5%
50.6%	56.9	56.6	-0.3	-0.5%
51.9%	56.9	56.6	-0.3	-0.5%
53.1%	56.8	56.6	-0.3	-0.5%
54.3%	56.8	56.5	-0.3	-0.5%
55.6%	56.8	56.5	-0.3	-0.6%
56.8%	56.8	56.5	-0.3	-0.6%
58.0%	56.7	56.5	-0.2	-0.3%
59.3%	56.7	56.4	-0.2	-0.4%
60.5%	56.6	56.4	-0.2	-0.3%
61.7%	56.6	56.4	-0.2	-0.3%
63.0%	56.4	56.4	0.0	-0.1%
64.2%	56.4	56.4	0.0	-0.1%
65.4%	56.3	56.3	0.0	-0.1%
66.7%	56.3	56.2	0.0	0.0%
67.9%	56.2	56.2	0.0	0.0%
69.1%	56.2	56.2	0.0	-0.1%
70.4%	56.2	56.1	-0.1	-0.2%
71.6%	56.2	56.1	-0.1	-0.2%
72.8%	56.2	56.0	-0.1	-0.3%
74.1%	56.2	56.0	-0.1	-0.2%
75.3%	56.1	56.0	-0.1	-0.2%
76.5%	56.0	55.9	-0.1	-0.2%
77.8%	56.0	55.8	-0.2	-0.3%
79.0%	56.0	55.8	-0.2	-0.3%
80.2%	56.0	55.8	-0.1	-0.3%
81.5%	56.0	55.8	-0.2	-0.3%
82.7%	55.9	55.8	-0.1	-0.1%
84.0%	55.8	55.8	0.0	-0.1%
85.2%	55.8	55.6	-0.2	-0.4%
86.4%	55.8	55.6	-0.2	-0.4%
87.7%	55.7	55.6	-0.1	-0.2%
88.9%	55.7	55.6	-0.1	-0.2%
90.1%	55.6	55.5	-0.1	-0.2%
91.4%	55.6	55.5	-0.1	-0.2%
92.6%	55.5	55.5	0.0	0.0%
93.8%	55.4	55.4	-0.1	-0.1%
95.1%	55.4	55.2	-0.2	-0.4%
96.3%	55.3	55.2	-0.1	-0.2%
97.5%	55.1	55.1	0.0	0.0%
98.8%	55.0	55.1	0.1	0.1%
100.0%	55.0	55.1	0.0	0.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.8	59.6	-1.2	-1.9%
1.2%	59.7	59.5	-0.2	-0.4%
2.5%	58.9	59.2	0.4	0.6%
3.7%	58.8	59.2	0.3	0.6%
4.9%	58.8	58.8	0.0	-0.1%
6.2%	58.5	58.3	-0.1	-0.2%
7.4%	58.1	58.1	0.0	0.0%
8.6%	58.1	58.0	-0.1	-0.1%
9.9%	58.0	57.9	0.0	0.0%
11.1%	57.9	57.9	0.0	-0.1%
12.3%	57.8	57.8	0.0	0.0%
13.6%	57.8	57.8	0.0	0.0%
14.8%	57.7	57.7	0.0	0.0%
16.0%	57.7	57.5	-0.2	-0.3%
17.3%	57.6	57.4	-0.2	-0.3%
18.5%	57.1	57.3	0.2	0.3%
19.8%	56.9	57.2	0.2	0.4%
21.0%	56.9	57.0	0.0	0.1%
22.2%	56.8	56.9	0.1	0.2%
23.5%	56.8	56.9	0.1	0.2%
24.7%	56.7	56.7	0.0	0.0%
25.9%	56.6	56.7	0.1	0.1%
27.2%	56.5	56.6	0.2	0.3%
28.4%	56.4	56.6	0.2	0.4%
29.6%	56.4	56.4	0.0	0.0%
30.9%	56.4	56.4	0.0	0.0%
32.1%	56.3	56.4	0.0	0.1%
33.3%	56.2	56.4	0.1	0.2%
34.6%	56.2	56.3	0.1	0.3%
35.8%	56.2	56.3	0.1	0.2%
37.0%	56.1	56.1	-0.1	-0.1%
38.3%	56.1	56.1	-0.1	-0.1%
39.5%	56.1	56.0	-0.1	-0.2%
40.7%	56.1	55.9	-0.2	-0.3%
42.0%	56.0	55.9	-0.1	-0.2%
43.2%	56.0	55.9	-0.1	-0.2%
44.4%	56.0	55.9	-0.1	-0.2%
45.7%	56.0	55.9	-0.1	-0.3%
46.9%	55.9	55.9	-0.1	-0.1%
48.1%	55.9	55.8	-0.1	-0.1%
49.4%	55.9	55.8	-0.1	-0.2%
50.6%	55.8	55.7	-0.1	-0.3%
51.9%	55.7	55.6	-0.1	-0.2%
53.1%	55.7	55.6	-0.1	-0.2%
54.3%	55.7	55.6	-0.1	-0.2%
55.6%	55.7	55.6	-0.1	-0.2%
56.8%	55.7	55.5	-0.2	-0.3%
58.0%	55.7	55.5	-0.2	-0.3%
59.3%	55.7	55.5	-0.2	-0.3%
60.5%	55.6	55.4	-0.2	-0.3%
61.7%	55.5	55.4	-0.1	-0.3%
63.0%	55.5	55.4	-0.1	-0.3%
64.2%	55.5	55.4	-0.1	-0.3%
65.4%	55.5	55.4	-0.2	-0.3%
66.7%	55.5	55.3	-0.2	-0.3%
67.9%	55.5	55.3	-0.2	-0.4%
69.1%	55.5	55.3	-0.2	-0.4%
70.4%	55.5	55.2	-0.2	-0.4%
71.6%	55.4	55.2	-0.2	-0.4%
72.8%	55.4	55.2	-0.2	-0.3%
74.1%	55.4	55.2	-0.2	-0.3%
75.3%	55.3	55.2	-0.2	-0.3%
76.5%	55.3	55.2	-0.2	-0.3%
77.8%	55.3	55.1	-0.2	-0.4%
79.0%	55.3	55.1	-0.2	-0.4%
80.2%	55.3	55.1	-0.2	-0.4%
81.5%	55.2	55.0	-0.1	-0.3%
82.7%	55.1	54.9	-0.3	-0.5%
84.0%	55.1	54.8	-0.4	-0.6%
85.2%	55.1	54.8	-0.3	-0.6%
86.4%	55.0	54.7	-0.3	-0.5%
87.7%	55.0	54.6	-0.4	-0.7%
88.9%	54.7	54.5	-0.2	-0.4%
90.1%	54.7	54.5	-0.2	-0.4%
91.4%	54.6	54.4	-0.1	-0.3%
92.6%	54.6	54.4	-0.2	-0.3%
93.8%	54.4	54.3	-0.1	-0.3%
95.1%	54.2	54.2	0.0	0.0%
96.3%	54.2	54.1	0.0	-0.1%
97.5%	53.9	54.0	0.1	0.2%
98.8%	53.5	53.8	0.3	0.5%
100.0%	53.5	53.8	0.3	0.5%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.2	55.2	-0.1	-0.1%
1.2%	55.1	55.0	-0.1	-0.1%
2.5%	55.0	55.0	0.0	0.0%
3.7%	54.9	54.8	-0.1	-0.2%
4.9%	54.8	54.8	0.0	0.0%
6.2%	54.7	54.6	-0.1	-0.1%
7.4%	54.5	54.6	0.1	0.1%
8.6%	54.4	54.4	0.0	0.0%
9.9%	54.1	54.1	0.0	0.0%
11.1%	54.1	54.1	0.0	0.0%
12.3%	54.0	54.1	0.1	0.1%
13.6%	54.0	54.1	0.1	0.2%
14.8%	53.8	54.1	0.3	0.5%
16.0%	53.8	54.0	0.3	0.5%
17.3%	53.7	53.9	0.2	0.4%
18.5%	53.6	53.9	0.3	0.5%
19.8%	53.5	53.8	0.4	0.7%
21.0%	53.3	53.8	0.5	1.0%
22.2%	53.3	53.8	0.5	1.0%
23.5%	53.3	53.7	0.4	0.8%
24.7%	53.2	53.6	0.4	0.7%
25.9%	53.0	53.5	0.5	1.0%
27.2%	53.0	53.5	0.6	1.1%
28.4%	52.8	53.4	0.6	1.0%
29.6%	52.7	53.4	0.7	1.3%
30.9%	52.6	53.2	0.5	1.0%
32.1%	52.6	53.1	0.5	1.0%
33.3%	52.6	53.1	0.5	1.0%
34.6%	52.5	53.0	0.5	1.0%
35.8%	52.4	53.0	0.5	1.0%
37.0%	52.4	52.9	0.4	0.9%
38.3%	52.3	52.8	0.5	0.9%
39.5%	52.1	52.7	0.6	1.1%
40.7%	52.0	52.4	0.4	0.8%
42.0%	52.0	52.4	0.4	0.8%
43.2%	52.0	52.3	0.3	0.5%
44.4%	51.8	52.1	0.3	0.6%
45.7%	51.7	52.1	0.4	0.9%
46.9%	51.6	52.1	0.4	0.8%
48.1%	51.6	52.0	0.4	0.7%
49.4%	51.5	52.0	0.5	0.9%
50.6%	51.4	51.9	0.5	1.0%
51.9%	51.4	51.9	0.5	0.9%
53.1%	51.4	51.9	0.5	0.9%
54.3%	51.3	51.8	0.5	0.9%
55.6%	51.2	51.7	0.5	0.9%
56.8%	51.2	51.7	0.5	0.9%
58.0%	51.2	51.6	0.4	0.9%
59.3%	51.1	51.5	0.4	0.7%
60.5%	51.1	51.4	0.3	0.6%
61.7%	51.0	51.3	0.3	0.6%
63.0%	51.0	51.3	0.3	0.5%
64.2%	51.0	51.3	0.3	0.5%
65.4%	51.0	51.3	0.3	0.6%
66.7%	50.9	51.2	0.2	0.5%
67.9%	50.9	51.1	0.2	0.4%
69.1%	50.8	51.1	0.3	0.6%
70.4%	50.5	51.1	0.5	1.0%
71.6%	50.3	51.0	0.6	1.2%
72.8%	50.3	50.8	0.5	1.0%
74.1%	50.3	50.7	0.4	0.8%
75.3%	50.3	50.6	0.3	0.6%
76.5%	50.3	50.6	0.3	0.5%
77.8%	50.2	50.5	0.2	0.5%
79.0%	50.2	50.5	0.3	0.6%
80.2%	50.2	50.4	0.3	0.5%
81.5%	50.1	50.4	0.3	0.5%
82.7%	50.0	50.3	0.3	0.6%
84.0%	49.9	50.2	0.3	0.6%
85.2%	49.9	50.0	0.1	0.3%
86.4%	49.8	50.0	0.2	0.4%
87.7%	49.8	49.8	0.0	0.1%
88.9%	49.7	49.7	0.0	0.0%
90.1%	49.5	49.5	0.1	0.2%
91.4%	49.4	49.2	-0.2	-0.3%
92.6%	48.9	48.9	0.0	0.1%
93.8%	48.8	48.9	0.1	0.2%
95.1%	48.7	48.9	0.1	0.3%
96.3%	48.6	48.9	0.3	0.7%
97.5%	48.4	48.8	0.4	0.8%
98.8%	48.2	48.6	0.4	0.8%
100.0%	48.2	48.6	0.4	0.8%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.7	52.4	0.7	1.4%
1.2%	51.6	52.0	0.4	0.7%
2.5%	51.6	51.7	0.1	0.2%
3.7%	51.5	51.7	0.1	0.3%
4.9%	51.3	51.5	0.3	0.5%
6.2%	51.2	51.3	0.1	0.3%
7.4%	51.1	51.3	0.2	0.3%
8.6%	51.1	51.2	0.1	0.2%
9.9%	51.0	51.1	0.1	0.2%
11.1%	50.9	51.1	0.2	0.4%
12.3%	50.8	51.1	0.2	0.4%
13.6%	50.5	51.0	0.5	1.0%
14.8%	50.5	50.9	0.4	0.8%
16.0%	50.5	50.9	0.4	0.9%
17.3%	50.0	50.7	0.6	1.2%
18.5%	49.9	50.6	0.6	1.3%
19.8%	49.9	50.5	0.7	1.3%
21.0%	49.9	50.2	0.4	0.7%
22.2%	49.8	50.2	0.4	0.8%
23.5%	49.8	50.1	0.4	0.7%
24.7%	49.7	50.1	0.3	0.6%
25.9%	49.6	50.0	0.3	0.7%
27.2%	49.6	50.0	0.4	0.8%
28.4%	49.6	49.9	0.3	0.7%
29.6%	49.5	49.7	0.2	0.4%
30.9%	49.5	49.7	0.2	0.3%
32.1%	49.4	49.6	0.2	0.5%
33.3%	49.3	49.6	0.3	0.7%
34.6%	49.2	49.6	0.4	0.8%
35.8%	49.1	49.6	0.4	0.9%
37.0%	49.1	49.5	0.4	0.9%
38.3%	49.1	49.3	0.3	0.6%
39.5%	48.9	49.3	0.3	0.7%
40.7%	48.8	49.1	0.4	0.7%
42.0%	48.8	49.1	0.4	0.8%
43.2%	48.7	49.1	0.3	0.7%
44.4%	48.7	49.0	0.3	0.6%
45.7%	48.7	49.0	0.3	0.5%
46.9%	48.7	48.9	0.2	0.5%
48.1%	48.6	48.8	0.2	0.4%
49.4%	48.5	48.7	0.2	0.4%
50.6%	48.3	48.6	0.3	0.6%
51.9%	48.3	48.6	0.4	0.8%
53.1%	48.3	48.6	0.4	0.8%
54.3%	48.2	48.6	0.3	0.7%
55.6%	48.2	48.5	0.3	0.7%
56.8%	48.1	48.5	0.4	0.8%
58.0%	48.0	48.4	0.4	0.8%
59.3%	48.0	48.4	0.4	0.8%
60.5%	48.0	48.4	0.4	0.8%
61.7%	48.0	48.3	0.4	0.8%
63.0%	47.9	48.3	0.3	0.7%
64.2%	47.9	48.2	0.2	0.5%
65.4%	47.9	48.1	0.2	0.3%
66.7%	47.9	48.0	0.1	0.2%
67.9%	47.9	47.9	0.1	0.1%
69.1%	47.8	47.9	0.1	0.2%
70.4%	47.7	47.9	0.2	0.4%
71.6%	47.6	47.9	0.3	0.7%
72.8%	47.5	47.9	0.3	0.7%
74.1%	47.5	47.8	0.3	0.6%
75.3%	47.5	47.7	0.3	0.6%
76.5%	47.4	47.7	0.3	0.6%
77.8%	47.4	47.7	0.3	0.6%
79.0%	47.4	47.7	0.3	0.6%
80.2%	47.4	47.5	0.1	0.3%
81.5%	47.3	47.4	0.1	0.2%
82.7%	47.2	47.3	0.1	0.2%
84.0%	47.1	47.2	0.2	0.3%
85.2%	46.9	47.2	0.3	0.7%
86.4%	46.9	47.2	0.3	0.6%
87.7%	46.9	47.1	0.2	0.5%
88.9%	46.6	46.9	0.3	0.7%
90.1%	46.6	46.9	0.3	0.7%
91.4%	46.6	46.6	0.1	0.2%
92.6%	46.5	46.5	0.0	0.1%
93.8%	46.3	46.3	0.0	0.0%
95.1%	46.2	46.2	0.0	-0.1%
96.3%	46.2	46.0	-0.2	-0.4%
97.5%	45.7	45.9	0.3	0.6%
98.8%	45.6	45.6	0.0	-0.1%
100.0%	45.6	45.6	0.0	-0.1%

Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.2	52.2	0.0	0.0%
1.2%	51.6	51.8	0.2	0.5%
2.5%	51.5	51.4	-0.1	-0.1%
3.7%	51.2	51.2	0.0	0.0%
4.9%	50.6	50.9	0.3	0.6%
6.2%	50.6	50.9	0.3	0.6%
7.4%	50.5	50.6	0.0	0.1%
8.6%	50.3	50.4	0.1	0.3%
9.9%	50.2	50.3	0.1	0.2%
11.1%	50.2	50.3	0.1	0.1%
12.3%	50.2	50.3	0.1	0.1%
13.6%	50.2	50.2	0.1	0.1%
14.8%	50.0	50.2	0.2	0.4%
16.0%	50.0	50.2	0.2	0.5%
17.3%	49.7	50.2	0.5	1.0%
18.5%	49.7	49.8	0.2	0.3%
19.8%	49.7	49.8	0.2	0.3%
21.0%	49.6	49.8	0.2	0.5%
22.2%	49.5	49.8	0.2	0.5%
23.5%	49.5	49.8	0.2	0.5%
24.7%	49.5	49.7	0.2	0.4%
25.9%	49.5	49.6	0.1	0.3%
27.2%	49.5	49.6	0.2	0.3%
28.4%	49.4	49.6	0.2	0.4%
29.6%	49.4	49.6	0.2	0.3%
30.9%	49.4	49.5	0.2	0.3%
32.1%	49.4	49.5	0.2	0.3%
33.3%	49.4	49.4	0.1	0.2%
34.6%	49.3	49.4	0.0	0.1%
35.8%	49.3	49.3	0.0	-0.1%
37.0%	49.2	49.2	0.0	0.0%
38.3%	49.0	49.1	0.0	0.1%
39.5%	49.0	49.0	0.0	0.1%
40.7%	49.0	49.0	0.0	0.0%
42.0%	48.9	48.9	0.0	0.0%
43.2%	48.8	48.8	0.0	0.1%
44.4%	48.7	48.8	0.0	0.0%
45.7%	48.7	48.6	-0.1	-0.2%
46.9%	48.6	48.6	0.0	0.0%
48.1%	48.5	48.6	0.0	0.1%
49.4%	48.5	48.5	0.0	0.0%
50.6%	48.4	48.4	0.0	0.0%
51.9%	48.4	48.4	0.0	0.0%
53.1%	48.3	48.3	0.0	0.1%
54.3%	48.2	48.3	0.0	0.1%
55.6%	48.2	48.1	-0.1	-0.2%
56.8%	48.1	48.1	0.0	-0.1%
58.0%	47.9	48.0	0.1	0.2%
59.3%	47.9	47.9	0.0	0.0%
60.5%	47.8	47.9	0.1	0.2%
61.7%	47.8	47.8	0.1	0.1%
63.0%	47.8	47.8	0.0	0.1%
64.2%	47.7	47.8	0.1	0.2%
65.4%	47.6	47.7	0.1	0.2%
66.7%	47.6	47.6	0.0	0.1%
67.9%	47.6	47.5	-0.1	-0.2%
69.1%	47.4	47.5	0.1	0.2%
70.4%	47.3	47.5	0.1	0.2%
71.6%	47.3	47.4	0.1	0.2%
72.8%	47.2	47.4	0.1	0.3%
74.1%	47.1	47.4	0.2	0.5%
75.3%	47.0	47.3	0.3	0.6%
76.5%	47.0	47.1	0.1	0.2%
77.8%	47.0	47.0	0.0	0.1%
79.0%	46.9	46.9	0.0	0.1%
80.2%	46.8	46.8	0.0	0.0%
81.5%	46.8	46.8	0.0	-0.1%
82.7%	46.7	46.8	0.1	0.1%
84.0%	46.7	46.7	0.0	0.0%
85.2%	46.6	46.7	0.1	0.2%
86.4%	46.5	46.6	0.1	0.1%
87.7%	46.5	46.5	0.0	0.1%
88.9%	46.5	46.5	0.1	0.1%
90.1%	46.5	46.5	0.0	0.0%
91.4%	46.3	46.3	0.0	-0.1%
92.6%	46.3	46.3	-0.1	-0.2%
93.8%	46.3	46.2	0.0	-0.1%
95.1%	46.1	46.0	-0.2	-0.4%
96.3%	46.0	45.9	-0.1	-0.3%
97.5%	45.7	45.7	0.0	0.1%
98.8%	44.7	44.6	-0.1	-0.2%
100.0%	44.7	44.6	-0.1	-0.2%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.6	53.3	-0.3	-0.5%
1.2%	53.3	53.2	-0.1	-0.2%
2.5%	53.2	53.0	-0.1	-0.2%
3.7%	53.0	52.9	-0.1	-0.2%
4.9%	52.6	52.8	0.2	0.4%
6.2%	52.5	52.7	0.2	0.4%
7.4%	52.5	52.6	0.1	0.2%
8.6%	52.4	52.5	0.1	0.2%
9.9%	52.1	52.5	0.4	0.7%
11.1%	52.0	52.3	0.2	0.5%
12.3%	52.0	52.3	0.3	0.5%
13.6%	52.0	52.0	0.1	0.2%
14.8%	51.9	51.9	0.0	0.0%
16.0%	51.9	51.9	0.0	-0.1%
17.3%	51.8	51.8	0.0	0.0%
18.5%	51.8	51.8	0.0	0.0%
19.8%	51.7	51.8	0.1	0.1%
21.0%	51.7	51.8	0.1	0.1%
22.2%	51.7	51.8	0.1	0.1%
23.5%	51.7	51.8	0.1	0.2%
24.7%	51.6	51.8	0.1	0.2%
25.9%	51.5	51.7	0.1	0.3%
27.2%	51.4	51.7	0.3	0.6%
28.4%	51.4	51.6	0.2	0.5%
29.6%	51.3	51.5	0.2	0.4%
30.9%	51.2	51.4	0.2	0.4%
32.1%	51.2	51.3	0.1	0.2%
33.3%	51.0	51.3	0.3	0.6%
34.6%	50.9	51.1	0.2	0.4%
35.8%	50.8	50.9	0.1	0.2%
37.0%	50.8	50.8	0.0	0.0%
38.3%	50.7	50.8	0.1	0.2%
39.5%	50.7	50.6	-0.1	-0.2%
40.7%	50.6	50.5	-0.1	-0.2%
42.0%	50.6	50.5	-0.1	-0.2%
43.2%	50.5	50.4	-0.1	-0.3%
44.4%	50.4	50.3	-0.1	-0.2%
45.7%	50.4	50.3	-0.1	-0.2%
46.9%	50.3	50.3	-0.1	-0.1%
48.1%	50.0	50.2	0.2	0.3%
49.4%	50.0	50.0	0.0	-0.1%
50.6%	50.0	50.0	0.0	-0.1%
51.9%	50.0	50.0	0.0	0.0%
53.1%	49.8	49.8	0.0	0.0%
54.3%	49.8	49.8	0.0	-0.1%
55.6%	49.8	49.6	-0.2	-0.3%
56.8%	49.6	49.6	0.0	-0.1%
58.0%	49.6	49.6	0.0	-0.1%
59.3%	49.6	49.5	0.0	-0.1%
60.5%	49.3	49.5	0.2	0.3%
61.7%	49.3	49.4	0.1	0.2%
63.0%	49.2	49.4	0.1	0.3%
64.2%	49.2	49.3	0.1	0.3%
65.4%	49.1	49.3	0.1	0.3%
66.7%	49.0	49.2	0.2	0.5%
67.9%	48.9	49.2	0.2	0.5%
69.1%	48.8	48.9	0.1	0.1%
70.4%	48.8	48.9	0.1	0.1%
71.6%	48.8	48.9	0.1	0.2%
72.8%	48.7	48.9	0.1	0.3%
74.1%	48.5	48.8	0.2	0.4%
75.3%	48.5	48.7	0.2	0.4%
76.5%	48.5	48.6	0.0	0.1%
77.8%	48.4	48.4	-0.1	-0.1%
79.0%	48.3	48.2	-0.1	-0.2%
80.2%	48.1	48.1	0.0	0.0%
81.5%	48.0	48.0	-0.1	-0.1%
82.7%	47.9	47.9	0.0	0.0%
84.0%	47.7	47.8	0.1	0.1%
85.2%	47.7	47.7	0.0	0.0%
86.4%	47.7	47.7	0.0	0.0%
87.7%	47.6	47.6	0.0	0.0%
88.9%	47.6	47.6	0.0	0.1%
90.1%	47.5	47.5	0.0	0.1%
91.4%	47.5	47.5	0.0	0.0%
92.6%	47.4	47.4	0.0	0.0%
93.8%	47.2	47.4	0.2	0.4%
95.1%	47.2	47.4	0.2	0.4%
96.3%	47.2	47.1	-0.1	-0.2%
97.5%	47.0	46.9	0.0	-0.1%
98.8%	46.6	46.7	0.1	0.2%
100.0%	46.6	46.7	0.1	0.2%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.8	55.7	-0.2	-0.3%
1.2%	55.1	55.1	0.0	0.1%
2.5%	54.8	54.7	-0.1	-0.1%
3.7%	54.7	54.5	-0.2	-0.4%
4.9%	54.6	54.4	-0.2	-0.4%
6.2%	54.1	54.2	0.1	0.2%
7.4%	54.1	53.7	-0.4	-0.7%
8.6%	54.0	53.7	-0.4	-0.7%
9.9%	54.0	53.7	-0.4	-0.7%
11.1%	53.5	53.5	0.0	0.0%
12.3%	53.5	53.5	-0.1	-0.1%
13.6%	53.5	53.5	0.0	-0.1%
14.8%	53.4	53.4	0.0	0.0%
16.0%	53.4	53.4	0.0	0.0%
17.3%	53.4	53.4	0.0	0.0%
18.5%	53.4	53.2	-0.2	-0.3%
19.8%	53.3	53.2	-0.1	-0.2%
21.0%	53.3	53.2	-0.1	-0.1%
22.2%	53.2	53.1	-0.1	-0.1%
23.5%	53.2	53.1	-0.1	-0.1%
24.7%	53.2	53.1	-0.1	-0.1%
25.9%	53.0	53.1	0.0	0.0%
27.2%	53.0	53.0	0.1	0.1%
28.4%	52.7	53.0	0.3	0.5%
29.6%	52.7	53.0	0.3	0.5%
30.9%	52.7	53.0	0.3	0.5%
32.1%	52.6	52.9	0.3	0.5%
33.3%	52.6	52.8	0.2	0.4%
34.6%	52.6	52.8	0.3	0.5%
35.8%	52.5	52.8	0.3	0.6%
37.0%	52.4	52.8	0.4	0.7%
38.3%	52.4	52.7	0.3	0.6%
39.5%	52.3	52.6	0.3	0.6%
40.7%	52.3	52.5	0.2	0.5%
42.0%	52.3	52.5	0.3	0.5%
43.2%	52.3	52.5	0.2	0.4%
44.4%	52.3	52.4	0.2	0.3%
45.7%	52.2	52.4	0.2	0.4%
46.9%	52.2	52.4	0.2	0.4%
48.1%	52.1	52.3	0.2	0.3%
49.4%	52.0	52.3	0.3	0.6%
50.6%	52.0	52.2	0.3	0.5%
51.9%	51.9	52.0	0.1	0.2%
53.1%	51.9	52.0	0.1	0.2%
54.3%	51.8	52.0	0.1	0.2%
55.6%	51.7	51.9	0.2	0.4%
56.8%	51.7	51.9	0.2	0.4%
58.0%	51.7	51.8	0.2	0.3%
59.3%	51.6	51.8	0.2	0.3%
60.5%	51.6	51.7	0.2	0.3%
61.7%	51.6	51.7	0.1	0.2%
63.0%	51.6	51.7	0.1	0.2%
64.2%	51.5	51.6	0.1	0.2%
65.4%	51.5	51.6	0.1	0.1%
66.7%	51.5	51.5	0.1	0.1%
67.9%	51.5	51.5	0.0	0.1%
69.1%	51.4	51.5	0.1	0.2%
70.4%	51.3	51.5	0.1	0.3%
71.6%	51.3	51.5	0.2	0.3%
72.8%	51.3	51.4	0.1	0.3%
74.1%	51.3	51.4	0.1	0.2%
75.3%	51.2	51.4	0.1	0.3%
76.5%	51.2	51.3	0.1	0.2%
77.8%	51.2	51.3	0.1	0.2%
79.0%	51.0	51.1	0.2	0.3%
80.2%	50.7	51.0	0.2	0.5%
81.5%	50.7	50.8	0.1	0.2%
82.7%	50.7	50.8	0.1	0.2%
84.0%	50.6	50.8	0.2	0.3%
85.2%	50.5	50.8	0.2	0.5%
86.4%	50.5	50.6	0.1	0.3%
87.7%	50.4	50.5	0.1	0.2%
88.9%	50.4	50.4	0.1	0.1%
90.1%	50.3	50.3	0.1	0.2%
91.4%	50.2	50.3	0.1	0.2%
92.6%	50.1	50.3	0.1	0.3%
93.8%	50.1	50.1	0.1	0.1%
95.1%	49.7	49.9	0.2	0.3%
96.3%	49.1	49.4	0.3	0.6%
97.5%	48.9	49.0	0.1	0.2%
98.8%	48.9	48.8	0.0	0.0%
100.0%	48.9	48.8	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.8	57.9	0.1	0.2%
1.2%	57.4	57.6	0.1	0.3%
2.5%	57.3	56.9	-0.4	-0.7%
3.7%	56.9	56.7	-0.2	-0.3%
4.9%	56.9	56.6	-0.2	-0.4%
6.2%	56.1	56.2	0.1	0.2%
7.4%	55.9	56.0	0.1	0.1%
8.6%	55.8	56.0	0.2	0.3%
9.9%	55.7	55.9	0.2	0.4%
11.1%	55.6	55.9	0.3	0.5%
12.3%	55.4	55.8	0.4	0.7%
13.6%	55.4	55.8	0.4	0.8%
14.8%	55.1	55.5	0.4	0.7%
16.0%	55.1	55.5	0.4	0.7%
17.3%	55.0	55.4	0.4	0.7%
18.5%	54.8	55.4	0.6	1.1%
19.8%	54.7	55.3	0.6	1.1%
21.0%	54.7	55.2	0.6	1.0%
22.2%	54.6	55.2	0.6	1.1%
23.5%	54.6	55.1	0.5	1.0%
24.7%	54.5	55.0	0.5	0.9%
25.9%	54.5	54.9	0.4	0.7%
27.2%	54.3	54.7	0.4	0.7%
28.4%	54.3	54.6	0.3	0.5%
29.6%	54.2	54.6	0.4	0.8%
30.9%	54.1	54.5	0.4	0.8%
32.1%	54.0	54.4	0.4	0.8%
33.3%	54.0	54.4	0.4	0.8%
34.6%	53.9	54.4	0.4	0.8%
35.8%	53.9	54.3	0.5	0.9%
37.0%	53.9	54.3	0.5	0.9%
38.3%	53.8	54.3	0.5	0.9%
39.5%	53.8	54.3	0.5	0.9%
40.7%	53.6	54.3	0.6	1.2%
42.0%	53.6	54.2	0.6	1.2%
43.2%	53.4	54.2	0.7	1.4%
44.4%	53.4	54.2	0.7	1.4%
45.7%	53.4	54.2	0.8	1.4%
46.9%	53.4	54.2	0.8	1.5%
48.1%	53.4	53.9	0.5	1.0%
49.4%	53.3	53.9	0.5	1.0%
50.6%	53.3	53.8	0.6	1.0%
51.9%	53.3	53.8	0.5	0.9%
53.1%	53.2	53.7	0.5	0.9%
54.3%	53.2	53.7	0.5	1.0%
55.6%	53.2	53.7	0.5	1.0%
56.8%	53.2	53.7	0.5	1.0%
58.0%	53.1	53.6	0.5	1.0%
59.3%	53.1	53.6	0.5	1.0%
60.5%	53.1	53.6	0.5	1.0%
61.7%	53.0	53.6	0.5	1.0%
63.0%	53.0	53.5	0.5	1.0%
64.2%	53.0	53.5	0.5	1.0%
65.4%	53.0	53.4	0.5	0.9%
66.7%	52.9	53.4	0.5	0.9%
67.9%	52.9	53.4	0.5	0.9%
69.1%	52.9	53.3	0.4	0.8%
70.4%	52.9	53.3	0.4	0.7%
71.6%	52.8	53.3	0.4	0.8%
72.8%	52.8	53.2	0.4	0.7%
74.1%	52.7	53.1	0.4	0.8%
75.3%	52.7	53.0	0.3	0.6%
76.5%	52.7	53.0	0.3	0.6%
77.8%	52.7	53.0	0.3	0.6%
79.0%	52.6	53.0	0.4	0.8%
80.2%	52.5	52.8	0.3	0.6%
81.5%	52.5	52.8	0.4	0.7%
82.7%	52.4	52.8	0.4	0.8%
84.0%	52.4	52.8	0.4	0.7%
85.2%	52.4	52.7	0.3	0.6%
86.4%	52.2	52.6	0.5	0.9%
87.7%	52.1	52.6	0.5	0.9%
88.9%	52.1	52.5	0.5	0.9%
90.1%	52.1	52.5	0.4	0.9%
91.4%	52.0	52.5	0.4	0.8%
92.6%	51.9	52.3	0.4	0.8%
93.8%	51.8	52.3	0.5	0.9%
95.1%	51.7	52.2	0.5	1.0%
96.3%	51.6	52.1	0.4	0.8%
97.5%	51.6	52.0	0.4	0.9%
98.8%	51.4	51.8	0.4	0.7%
100.0%	51.4	51.8	0.4	0.7%

Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.5	57.6	-0.9	-1.5%
1.2%	58.0	57.3	-0.7	-1.2%
2.5%	57.6	57.1	-0.6	-1.0%
3.7%	57.4	56.7	-0.7	-1.2%
4.9%	57.3	56.5	-0.8	-1.4%
6.2%	56.6	56.4	-0.3	-0.5%
7.4%	56.5	56.0	-0.4	-0.8%
8.6%	56.2	55.9	-0.2	-0.4%
9.9%	56.0	55.9	-0.1	-0.2%
11.1%	56.0	55.9	-0.1	-0.2%
12.3%	56.0	55.8	-0.1	-0.3%
13.6%	55.8	55.8	0.0	0.0%
14.8%	55.8	55.7	-0.1	-0.1%
16.0%	55.7	55.6	-0.1	-0.2%
17.3%	55.7	55.5	-0.2	-0.3%
18.5%	55.5	55.5	0.0	0.0%
19.8%	55.4	55.4	0.0	0.0%
21.0%	55.4	55.3	-0.1	-0.2%
22.2%	55.3	55.3	-0.1	-0.1%
23.5%	55.3	55.2	-0.1	-0.1%
24.7%	55.2	55.1	-0.1	-0.1%
25.9%	55.1	55.1	0.0	0.0%
27.2%	55.1	55.0	0.0	-0.1%
28.4%	55.0	55.0	0.0	0.0%
29.6%	54.9	55.0	0.0	0.0%
30.9%	54.8	54.9	0.2	0.3%
32.1%	54.7	54.9	0.2	0.4%
33.3%	54.7	54.8	0.1	0.2%
34.6%	54.6	54.8	0.2	0.4%
35.8%	54.6	54.8	0.2	0.4%
37.0%	54.4	54.8	0.4	0.8%
38.3%	54.3	54.7	0.4	0.8%
39.5%	54.3	54.7	0.4	0.8%
40.7%	54.2	54.7	0.5	0.9%
42.0%	54.2	54.6	0.4	0.8%
43.2%	54.0	54.5	0.5	1.0%
44.4%	53.9	54.5	0.6	1.1%
45.7%	53.8	54.5	0.6	1.2%
46.9%	53.8	54.4	0.6	1.2%
48.1%	53.8	54.4	0.6	1.2%
49.4%	53.7	54.4	0.7	1.2%
50.6%	53.7	54.3	0.6	1.2%
51.9%	53.7	54.3	0.6	1.2%
53.1%	53.7	54.3	0.6	1.1%
54.3%	53.6	54.2	0.6	1.1%
55.6%	53.5	54.2	0.7	1.2%
56.8%	53.4	54.1	0.7	1.3%
58.0%	53.4	54.0	0.7	1.3%
59.3%	53.3	54.0	0.7	1.3%
60.5%	53.3	53.9	0.7	1.3%
61.7%	53.3	53.9	0.7	1.2%
63.0%	53.2	53.8	0.6	1.1%
64.2%	53.1	53.8	0.7	1.3%
65.4%	53.1	53.7	0.6	1.2%
66.7%	53.0	53.7	0.7	1.2%
67.9%	53.0	53.7	0.7	1.2%
69.1%	53.0	53.6	0.6	1.2%
70.4%	52.9	53.6	0.7	1.3%
71.6%	52.9	53.6	0.7	1.3%
72.8%	52.9	53.6	0.7	1.3%
74.1%	52.8	53.5	0.7	1.4%
75.3%	52.7	53.5	0.8	1.4%
76.5%	52.6	53.5	0.8	1.6%
77.8%	52.6	53.4	0.8	1.6%
79.0%	52.6	53.3	0.7	1.4%
80.2%	52.5	53.2	0.8	1.5%
81.5%	52.5	53.2	0.7	1.4%
82.7%	52.4	53.0	0.6	1.2%
84.0%	52.3	53.0	0.6	1.2%
85.2%	52.2	52.9	0.7	1.4%
86.4%	52.2	52.8	0.6	1.2%
87.7%	52.2	52.7	0.6	1.1%
88.9%	52.1	52.7	0.6	1.1%
90.1%	52.1	52.6	0.5	1.0%
91.4%	52.0	52.5	0.4	0.8%
92.6%	52.0	52.5	0.4	0.8%
93.8%	52.0	52.5	0.5	0.9%
95.1%	51.8	52.4	0.6	1.1%
96.3%	51.6	52.4	0.7	1.4%
97.5%	51.4	52.1	0.7	1.3%
98.8%	51.2	51.7	0.6	1.1%
100.0%	51.2	51.7	0.6	1.1%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.6	66.8	0.2	0.4%
1.2%	60.8	57.9	-2.9	-4.8%
2.5%	60.5	57.5	-3.0	-4.9%
3.7%	58.4	57.0	-1.4	-2.5%
4.9%	58.1	56.9	-1.2	-2.0%
6.2%	57.7	56.8	-0.9	-1.6%
7.4%	57.7	56.8	-0.9	-1.5%
8.6%	57.6	56.8	-0.8	-1.3%
9.9%	57.5	56.8	-0.7	-1.3%
11.1%	57.3	56.7	-0.6	-1.0%
12.3%	57.3	56.4	-0.8	-1.5%
13.6%	57.3	56.3	-1.0	-1.7%
14.8%	57.0	56.2	-0.7	-1.3%
16.0%	57.0	56.2	-0.8	-1.4%
17.3%	56.9	56.1	-0.7	-1.3%
18.5%	56.9	56.1	-0.8	-1.3%
19.8%	56.9	56.1	-0.8	-1.4%
21.0%	56.8	56.1	-0.7	-1.2%
22.2%	56.6	56.1	-0.6	-1.0%
23.5%	56.5	55.9	-0.6	-1.0%
24.7%	56.5	55.9	-0.6	-1.0%
25.9%	56.4	55.9	-0.5	-0.8%
27.2%	56.2	55.8	-0.4	-0.7%
28.4%	56.1	55.8	-0.3	-0.6%
29.6%	56.1	55.7	-0.4	-0.7%
30.9%	56.1	55.7	-0.4	-0.7%
32.1%	56.0	55.6	-0.4	-0.7%
33.3%	55.9	55.4	-0.5	-0.9%
34.6%	55.8	55.4	-0.4	-0.7%
35.8%	55.8	55.4	-0.4	-0.7%
37.0%	55.8	55.4	-0.4	-0.6%
38.3%	55.4	55.4	0.0	0.0%
39.5%	55.4	55.3	0.0	0.0%
40.7%	55.3	55.3	0.0	0.1%
42.0%	55.2	55.3	0.1	0.3%
43.2%	55.1	55.3	0.2	0.4%
44.4%	55.1	55.3	0.2	0.4%
45.7%	55.0	55.2	0.2	0.3%
46.9%	54.8	55.2	0.4	0.7%
48.1%	54.8	55.2	0.4	0.7%
49.4%	54.7	55.2	0.4	0.8%
50.6%	54.7	55.1	0.4	0.7%
51.9%	54.7	55.1	0.4	0.7%
53.1%	54.7	55.0	0.4	0.7%
54.3%	54.7	55.0	0.3	0.6%
55.6%	54.6	54.9	0.3	0.6%
56.8%	54.5	54.9	0.4	0.7%
58.0%	54.5	54.7	0.2	0.3%
59.3%	54.5	54.7	0.2	0.4%
60.5%	54.5	54.6	0.2	0.3%
61.7%	54.5	54.6	0.1	0.2%
63.0%	54.4	54.6	0.1	0.2%
64.2%	54.4	54.5	0.2	0.3%
65.4%	54.3	54.4	0.1	0.1%
66.7%	54.2	54.4	0.2	0.3%
67.9%	54.1	54.3	0.2	0.4%
69.1%	54.0	54.3	0.3	0.5%
70.4%	53.9	54.2	0.3	0.5%
71.6%	53.9	54.2	0.3	0.6%
72.8%	53.9	54.1	0.2	0.4%
74.1%	53.7	54.0	0.3	0.6%
75.3%	53.6	54.0	0.3	0.6%
76.5%	53.6	54.0	0.4	0.7%
77.8%	53.6	54.0	0.4	0.7%
79.0%	53.5	53.9	0.4	0.8%
80.2%	53.5	53.9	0.4	0.8%
81.5%	53.4	53.8	0.3	0.6%
82.7%	53.4	53.8	0.3	0.7%
84.0%	53.4	53.7	0.4	0.7%
85.2%	53.3	53.7	0.4	0.7%
86.4%	53.3	53.5	0.2	0.4%
87.7%	53.2	53.4	0.2	0.3%
88.9%	53.1	53.3	0.3	0.5%
90.1%	53.1	53.3	0.3	0.5%
91.4%	53.0	53.3	0.3	0.5%
92.6%	53.0	53.1	0.1	0.2%
93.8%	52.7	53.0	0.3	0.6%
95.1%	52.7	53.0	0.3	0.5%
96.3%	52.6	52.7	0.1	0.2%
97.5%	52.4	52.6	0.2	0.4%
98.8%	52.3	52.6	0.3	0.6%
100.0%	52.3	52.6	0.3	0.6%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.6	71.9	0.3	0.4%
1.2%	66.7	65.4	-1.3	-1.9%
2.5%	65.9	63.1	-2.8	-4.3%
3.7%	65.4	63.0	-2.5	-3.8%
4.9%	61.4	59.4	-2.0	-3.2%
6.2%	61.3	57.8	-3.5	-5.7%
7.4%	58.8	57.8	-1.1	-1.8%
8.6%	58.5	57.5	-1.0	-1.7%
9.9%	58.0	57.4	-0.5	-0.9%
11.1%	57.9	57.2	-0.6	-1.1%
12.3%	57.8	57.1	-0.7	-1.2%
13.6%	57.6	57.1	-0.5	-0.9%
14.8%	57.6	57.0	-0.6	-1.1%
16.0%	57.5	57.0	-0.6	-1.0%
17.3%	57.5	56.9	-0.6	-1.0%
18.5%	57.5	56.9	-0.6	-1.0%
19.8%	57.4	56.7	-0.7	-1.3%
21.0%	57.4	56.7	-0.7	-1.2%
22.2%	57.4	56.6	-0.7	-1.2%
23.5%	57.3	56.6	-0.8	-1.3%
24.7%	57.2	56.6	-0.6	-1.1%
25.9%	57.2	56.5	-0.7	-1.2%
27.2%	57.1	56.5	-0.6	-1.0%
28.4%	57.0	56.4	-0.6	-1.1%
29.6%	57.0	56.4	-0.6	-1.0%
30.9%	56.9	56.4	-0.6	-1.0%
32.1%	56.9	56.4	-0.5	-0.9%
33.3%	56.8	56.4	-0.5	-0.8%
34.6%	56.8	56.3	-0.5	-0.8%
35.8%	56.7	56.3	-0.4	-0.7%
37.0%	56.7	56.3	-0.3	-0.6%
38.3%	56.7	56.3	-0.3	-0.6%
39.5%	56.6	56.3	-0.3	-0.6%
40.7%	56.6	56.2	-0.4	-0.6%
42.0%	56.6	56.2	-0.4	-0.7%
43.2%	56.6	56.2	-0.4	-0.7%
44.4%	56.5	56.2	-0.4	-0.7%
45.7%	56.5	56.2	-0.4	-0.6%
46.9%	56.5	56.1	-0.4	-0.7%
48.1%	56.5	56.1	-0.4	-0.7%
49.4%	56.4	56.0	-0.4	-0.7%
50.6%	56.4	56.0	-0.4	-0.7%
51.9%	56.4	56.0	-0.3	-0.6%
53.1%	56.3	56.0	-0.4	-0.7%
54.3%	56.3	55.9	-0.4	-0.6%
55.6%	56.3	55.9	-0.3	-0.6%
56.8%	56.2	55.9	-0.3	-0.5%
58.0%	56.2	55.9	-0.3	-0.6%
59.3%	56.2	55.9	-0.3	-0.6%
60.5%	56.2	55.8	-0.3	-0.6%
61.7%	56.2	55.8	-0.4	-0.6%
63.0%	56.1	55.8	-0.3	-0.6%
64.2%	56.1	55.8	-0.3	-0.5%
65.4%	56.1	55.7	-0.3	-0.6%
66.7%	56.0	55.6	-0.4	-0.7%
67.9%	55.9	55.6	-0.3	-0.5%
69.1%	55.8	55.6	-0.3	-0.5%
70.4%	55.7	55.5	-0.2	-0.4%
71.6%	55.6	55.4	-0.2	-0.3%
72.8%	55.6	55.4	-0.2	-0.3%
74.1%	55.6	55.4	-0.2	-0.3%
75.3%	55.5	55.3	-0.2	-0.4%
76.5%	55.5	55.3	-0.2	-0.4%
77.8%	55.5	55.3	-0.2	-0.3%
79.0%	55.4	55.2	-0.2	-0.3%
80.2%	55.4	55.2	-0.2	-0.3%
81.5%	55.4	55.2	-0.2	-0.3%
82.7%	55.4	55.2	-0.2	-0.4%
84.0%	55.3	55.2	-0.2	-0.3%
85.2%	55.3	55.1	-0.2	-0.3%
86.4%	55.2	55.1	0.0	0.0%
87.7%	55.1	54.9	-0.3	-0.5%
88.9%	55.1	54.9	-0.2	-0.4%
90.1%	55.0	54.6	-0.4	-0.7%
91.4%	54.9	54.6	-0.3	-0.6%
92.6%	54.8	54.1	-0.7	-1.3%
93.8%	54.7	53.9	-0.8	-1.5%
95.1%	54.7	53.7	-0.9	-1.7%
96.3%	54.1	53.6	-0.5	-0.9%
97.5%	53.8	53.2	-0.6	-1.2%
98.8%	53.6	53.1	-0.5	-0.9%
100.0%	53.6	53.1	-0.5	-0.9%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.2	69.9	-1.3	-1.9%
1.2%	70.5	68.6	-1.9	-2.7%
2.5%	69.2	67.3	-1.9	-2.7%
3.7%	68.6	66.9	-1.7	-2.4%
4.9%	67.3	63.4	-3.9	-5.8%
6.2%	66.4	63.0	-3.5	-5.2%
7.4%	65.5	62.4	-3.1	-4.7%
8.6%	64.1	60.9	-3.2	-5.0%
9.9%	63.8	60.4	-3.4	-5.4%
11.1%	62.9	60.2	-2.7	-4.3%
12.3%	61.6	60.1	-1.5	-2.4%
13.6%	61.0	59.2	-1.8	-3.0%
14.8%	60.6	59.1	-1.6	-2.6%
16.0%	60.5	59.0	-1.5	-2.6%
17.3%	60.5	58.6	-1.9	-3.1%
18.5%	60.2	58.5	-1.7	-2.9%
19.8%	59.9	58.2	-1.6	-2.7%
21.0%	59.8	57.8	-2.0	-3.3%
22.2%	59.4	57.6	-1.8	-3.0%
23.5%	59.2	57.2	-2.0	-3.4%
24.7%	58.7	57.1	-1.6	-2.8%
25.9%	58.6	57.0	-1.5	-2.6%
27.2%	58.4	57.0	-1.4	-2.5%
28.4%	58.4	57.0	-1.4	-2.5%
29.6%	58.4	56.7	-1.6	-2.8%
30.9%	57.8	56.7	-1.1	-1.9%
32.1%	57.8	56.7	-1.1	-1.9%
33.3%	57.8	56.6	-1.1	-2.0%
34.6%	57.6	56.6	-1.0	-1.8%
35.8%	57.5	56.6	-0.9	-1.6%
37.0%	57.4	56.6	-0.7	-1.3%
38.3%	57.3	56.6	-0.7	-1.2%
39.5%	57.2	56.5	-0.7	-1.2%
40.7%	57.1	56.4	-0.8	-1.3%
42.0%	57.1	56.2	-0.9	-1.7%
43.2%	57.0	56.0	-1.0	-1.8%
44.4%	57.0	56.0	-1.0	-1.7%
45.7%	56.9	56.0	-0.9	-1.6%
46.9%	56.9	56.0	-0.9	-1.6%
48.1%	56.9	55.9	-1.0	-1.7%
49.4%	56.8	55.9	-0.9	-1.6%
50.6%	56.6	55.9	-0.7	-1.3%
51.9%	56.5	55.8	-0.7	-1.2%
53.1%	56.2	55.8	-0.4	-0.8%
54.3%	56.0	55.7	-0.3	-0.5%
55.6%	56.0	55.7	-0.3	-0.5%
56.8%	55.9	55.6	-0.3	-0.5%
58.0%	55.8	55.6	-0.3	-0.5%
59.3%	55.5	55.4	-0.1	-0.1%
60.5%	55.4	55.3	-0.1	-0.2%
61.7%	55.3	55.3	0.0	0.0%
63.0%	55.0	55.3	0.3	0.5%
64.2%	54.9	55.2	0.4	0.7%
65.4%	54.8	55.2	0.4	0.7%
66.7%	54.8	55.1	0.2	0.4%
67.9%	54.6	55.0	0.4	0.8%
69.1%	54.6	55.0	0.4	0.7%
70.4%	54.5	55.0	0.5	0.9%
71.6%	54.3	54.7	0.4	0.7%
72.8%	54.3	54.6	0.3	0.6%
74.1%	54.2	54.5	0.3	0.6%
75.3%	54.2	54.5	0.3	0.6%
76.5%	53.9	54.4	0.5	1.0%
77.8%	53.8	54.2	0.4	0.7%
79.0%	53.6	54.0	0.4	0.8%
80.2%	53.4	53.9	0.5	1.0%
81.5%	53.3	53.9	0.6	1.1%
82.7%	53.2	53.6	0.4	0.8%
84.0%	53.2	53.2	0.0	0.0%
85.2%	53.2	53.1	-0.1	-0.1%
86.4%	53.2	52.9	-0.2	-0.4%
87.7%	53.2	52.7	-0.4	-0.8%
88.9%	53.1	52.7	-0.5	-0.9%
90.1%	53.0	52.6	-0.4	-0.7%
91.4%	52.9	52.6	-0.3	-0.6%
92.6%	52.8	52.6	-0.2	-0.4%
93.8%	52.8	52.6	-0.2	-0.3%
95.1%	52.6	52.5	-0.1	-0.2%
96.3%	52.6	52.5	-0.1	-0.2%
97.5%	52.4	52.3	-0.1	-0.2%
98.8%	52.3	52.2	-0.1	-0.2%
100.0%	52.3	52.2	-0.1	-0.2%

Table SQ4-1b

Sacramento River at Balls Ferry, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.0	65.9	-0.1	-0.1%
1.2%	63.9	62.0	-1.9	-3.0%
2.5%	63.6	61.8	-1.8	-2.8%
3.7%	62.2	60.6	-1.6	-2.6%
4.9%	61.2	58.4	-2.8	-4.6%
6.2%	59.8	58.4	-1.4	-2.4%
7.4%	59.2	57.8	-1.3	-2.2%
8.6%	59.0	57.4	-1.6	-2.8%
9.9%	58.7	57.2	-1.4	-2.4%
11.1%	58.3	57.2	-1.2	-2.0%
12.3%	57.9	57.1	-0.8	-1.3%
13.6%	57.8	57.1	-0.7	-1.2%
14.8%	57.5	57.0	-0.5	-0.8%
16.0%	57.5	57.0	-0.5	-0.8%
17.3%	57.4	56.9	-0.5	-0.9%
18.5%	57.3	56.7	-0.6	-1.1%
19.8%	57.1	56.6	-0.5	-0.9%
21.0%	57.0	56.6	-0.5	-0.8%
22.2%	57.0	56.5	-0.5	-0.9%
23.5%	56.9	56.4	-0.5	-0.9%
24.7%	56.9	56.4	-0.5	-0.9%
25.9%	56.8	56.4	-0.4	-0.7%
27.2%	56.5	56.2	-0.3	-0.4%
28.4%	56.4	56.2	-0.2	-0.4%
29.6%	56.4	56.1	-0.3	-0.6%
30.9%	56.3	55.9	-0.4	-0.7%
32.1%	56.3	55.9	-0.4	-0.7%
33.3%	56.1	55.8	-0.4	-0.7%
34.6%	56.0	55.7	-0.4	-0.6%
35.8%	55.7	55.7	0.0	0.0%
37.0%	55.7	55.6	0.0	-0.1%
38.3%	55.6	55.5	-0.1	-0.2%
39.5%	55.5	55.4	-0.1	-0.3%
40.7%	55.5	55.3	-0.2	-0.4%
42.0%	55.5	55.3	-0.2	-0.4%
43.2%	55.5	55.3	-0.2	-0.4%
44.4%	55.4	55.3	-0.1	-0.1%
45.7%	55.4	55.3	-0.1	-0.1%
46.9%	55.3	55.3	-0.1	-0.2%
48.1%	55.3	55.2	-0.1	-0.2%
49.4%	55.3	55.2	-0.1	-0.1%
50.6%	55.2	55.2	-0.1	-0.1%
51.9%	55.2	55.2	-0.1	-0.1%
53.1%	55.2	55.1	-0.1	-0.2%
54.3%	55.2	55.1	-0.1	-0.1%
55.6%	55.1	55.1	-0.1	-0.1%
56.8%	55.1	55.1	-0.1	-0.1%
58.0%	55.1	55.0	-0.1	-0.2%
59.3%	55.1	55.0	-0.1	-0.2%
60.5%	55.1	55.0	-0.1	-0.2%
61.7%	55.1	54.9	-0.1	-0.3%
63.0%	55.0	54.8	-0.2	-0.3%
64.2%	54.9	54.8	-0.2	-0.3%
65.4%	54.9	54.8	-0.2	-0.4%
66.7%	54.8	54.6	-0.2	-0.3%
67.9%	54.7	54.6	-0.1	-0.1%
69.1%	54.6	54.6	0.0	-0.1%
70.4%	54.4	54.6	0.1	0.2%
71.6%	54.4	54.5	0.1	0.2%
72.8%	54.4	54.5	0.1	0.2%
74.1%	54.4	54.3	0.0	-0.1%
75.3%	54.3	54.3	0.0	0.0%
76.5%	54.2	54.2	0.0	-0.1%
77.8%	54.2	54.2	0.0	0.0%
79.0%	54.0	54.1	0.1	0.1%
80.2%	53.8	54.0	0.2	0.3%
81.5%	53.8	54.0	0.2	0.3%
82.7%	53.8	54.0	0.2	0.3%
84.0%	53.7	53.9	0.2	0.4%
85.2%	53.6	53.9	0.3	0.5%
86.4%	53.6	53.9	0.3	0.5%
87.7%	53.5	53.7	0.2	0.4%
88.9%	53.4	53.6	0.2	0.4%
90.1%	53.4	53.6	0.2	0.4%
91.4%	53.3	53.5	0.1	0.2%
92.6%	53.3	53.4	0.1	0.2%
93.8%	53.3	53.4	0.1	0.2%
95.1%	53.3	53.4	0.1	0.2%
96.3%	53.2	53.3	0.1	0.2%
97.5%	53.1	53.3	0.2	0.5%
98.8%	52.9	53.2	0.3	0.5%
100.0%	52.6	52.9	0.3	0.6%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.5	68.7	0.2	0.2%
1.2%	66.0	64.3	-1.7	-2.6%
2.5%	65.9	63.2	-2.7	-4.0%
3.7%	64.1	62.3	-1.8	-2.8%
4.9%	62.5	59.5	-3.0	-4.8%
6.2%	61.3	59.1	-2.3	-3.7%
7.4%	60.5	58.3	-2.2	-3.6%
8.6%	59.6	58.1	-1.5	-2.5%
9.9%	59.6	58.0	-1.6	-2.7%
11.1%	59.6	57.9	-1.7	-2.8%
12.3%	58.7	57.9	-0.9	-1.5%
13.6%	58.4	57.5	-0.9	-1.6%
14.8%	58.3	57.5	-0.8	-1.4%
16.0%	58.2	57.3	-0.9	-1.5%
17.3%	58.1	57.2	-0.9	-1.5%
18.5%	58.1	57.2	-0.9	-1.6%
19.8%	57.9	56.9	-0.9	-1.6%
21.0%	57.7	56.9	-0.8	-1.4%
22.2%	57.5	56.8	-0.7	-1.3%
23.5%	57.4	56.6	-0.8	-1.4%
24.7%	57.4	56.5	-0.8	-1.5%
25.9%	57.3	56.5	-0.8	-1.4%
27.2%	57.2	56.4	-0.8	-1.4%
28.4%	57.1	56.4	-0.7	-1.2%
29.6%	57.0	56.4	-0.6	-1.1%
30.9%	56.9	56.4	-0.5	-0.9%
32.1%	56.8	56.3	-0.5	-0.9%
33.3%	56.5	56.2	-0.2	-0.4%
34.6%	56.4	56.1	-0.3	-0.5%
35.8%	56.4	56.1	-0.3	-0.5%
37.0%	56.3	55.9	-0.4	-0.7%
38.3%	56.2	55.9	-0.3	-0.6%
39.5%	56.1	55.8	-0.3	-0.5%
40.7%	56.1	55.7	-0.4	-0.7%
42.0%	56.0	55.6	-0.4	-0.7%
43.2%	56.0	55.6	-0.4	-0.7%
44.4%	56.0	55.6	-0.4	-0.7%
45.7%	56.0	55.6	-0.4	-0.7%
46.9%	55.9	55.6	-0.3	-0.6%
48.1%	55.9	55.5	-0.4	-0.7%
49.4%	55.8	55.5	-0.3	-0.5%
50.6%	55.7	55.4	-0.3	-0.6%
51.9%	55.7	55.4	-0.3	-0.5%
53.1%	55.7	55.4	-0.3	-0.6%
54.3%	55.7	55.4	-0.3	-0.6%
55.6%	55.7	55.3	-0.3	-0.6%
56.8%	55.6	55.3	-0.3	-0.5%
58.0%	55.6	55.3	-0.2	-0.4%
59.3%	55.6	55.3	-0.3	-0.5%
60.5%	55.5	55.3	-0.2	-0.4%
61.7%	55.4	55.2	-0.2	-0.3%
63.0%	55.3	55.2	-0.1	-0.2%
64.2%	55.2	55.1	-0.1	-0.2%
65.4%	55.2	55.1	-0.1	-0.2%
66.7%	55.1	55.1	-0.1	-0.1%
67.9%	55.1	55.0	0.0	-0.1%
69.1%	55.1	54.9	-0.1	-0.2%
70.4%	55.0	54.9	-0.1	-0.2%
71.6%	55.0	54.8	-0.2	-0.4%
72.8%	54.9	54.8	-0.2	-0.3%
74.1%	54.9	54.7	-0.2	-0.3%
75.3%	54.8	54.7	-0.1	-0.2%
76.5%	54.7	54.6	-0.1	-0.1%
77.8%	54.7	54.6	-0.1	-0.2%
79.0%	54.6	54.4	-0.2	-0.4%
80.2%	54.6	54.3	-0.3	-0.5%
81.5%	54.2	54.2	-0.1	-0.1%
82.7%	54.1	54.1	-0.1	-0.2%
84.0%	54.1	54.0	0.0	-0.1%
85.2%	54.0	54.0	0.0	-0.1%
86.4%	53.8	54.0	0.1	0.3%
87.7%	53.8	53.9	0.1	0.2%
88.9%	53.7	53.8	0.1	0.2%
90.1%	53.6	53.8	0.2	0.4%
91.4%	53.6	53.6	0.0	0.0%
92.6%	53.6	53.6	0.0	0.0%
93.8%	53.6	53.5	0.0	-0.1%
95.1%	53.5	53.5	0.0	-0.1%
96.3%	53.5	53.5	-0.1	-0.1%
97.5%	53.4	53.4	0.1	0.1%
98.8%	53.2	53.3	0.2	0.3%
100.0%	53.1	53.2	0.2	0.3%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.5	69.6	0.1	0.2%
1.2%	68.6	67.7	-0.9	-1.4%
2.5%	68.6	65.9	-2.7	-3.9%
3.7%	67.3	64.9	-2.4	-3.5%
4.9%	65.0	61.4	-3.6	-5.5%
6.2%	63.4	60.1	-3.3	-5.1%
7.4%	62.0	59.4	-2.6	-4.2%
8.6%	61.3	59.3	-2.0	-3.2%
9.9%	60.9	58.9	-2.0	-3.3%
11.1%	60.1	58.7	-1.4	-2.3%
12.3%	59.4	58.6	-0.9	-1.4%
13.6%	59.3	58.5	-0.8	-1.4%
14.8%	59.0	58.0	-1.0	-1.7%
16.0%	58.8	57.8	-1.0	-1.8%
17.3%	58.8	57.8	-1.1	-1.8%
18.5%	58.7	57.5	-1.3	-2.1%
19.8%	58.6	57.3	-1.3	-2.2%
21.0%	58.2	57.1	-1.1	-1.8%
22.2%	58.1	57.0	-1.1	-1.9%
23.5%	57.9	57.0	-0.9	-1.6%
24.7%	57.9	56.9	-1.0	-1.6%
25.9%	57.8	56.8	-0.9	-1.6%
27.2%	57.7	56.8	-0.9	-1.6%
28.4%	57.5	56.7	-0.8	-1.3%
29.6%	57.4	56.5	-0.9	-1.5%
30.9%	57.3	56.5	-0.8	-1.4%
32.1%	57.3	56.5	-0.8	-1.4%
33.3%	57.2	56.5	-0.7	-1.3%
34.6%	57.1	56.5	-0.7	-1.1%
35.8%	57.0	56.4	-0.6	-1.0%
37.0%	57.0	56.4	-0.6	-1.1%
38.3%	57.0	56.3	-0.7	-1.2%
39.5%	56.8	56.3	-0.6	-1.0%
40.7%	56.7	56.2	-0.6	-1.0%
42.0%	56.6	56.1	-0.5	-0.9%
43.2%	56.5	56.1	-0.4	-0.8%
44.4%	56.4	56.0	-0.4	-0.7%
45.7%	56.4	56.0	-0.4	-0.7%
46.9%	56.4	56.0	-0.4	-0.7%
48.1%	56.3	55.9	-0.5	-0.9%
49.4%	56.3	55.8	-0.5	-0.9%
50.6%	56.3	55.8	-0.5	-1.0%
51.9%	56.2	55.7	-0.6	-1.0%
53.1%	56.2	55.6	-0.6	-1.1%
54.3%	56.2	55.6	-0.6	-1.0%
55.6%	56.0	55.6	-0.5	-0.8%
56.8%	56.0	55.6	-0.4	-0.8%
58.0%	56.0	55.6	-0.4	-0.7%
59.3%	55.9	55.6	-0.4	-0.7%
60.5%	55.9	55.5	-0.4	-0.6%
61.7%	55.8	55.4	-0.4	-0.7%
63.0%	55.8	55.4	-0.3	-0.6%
64.2%	55.7	55.4	-0.3	-0.6%
65.4%	55.6	55.4	-0.3	-0.5%
66.7%	55.5	55.3	-0.3	-0.5%
67.9%	55.4	55.3	-0.2	-0.3%
69.1%	55.4	55.2	-0.2	-0.4%
70.4%	55.3	55.2	-0.1	-0.3%
71.6%	55.3	55.2	-0.1	-0.2%
72.8%	55.3	55.1	-0.1	-0.2%
74.1%	55.1	55.0	-0.1	-0.3%
75.3%	55.1	54.9	-0.2	-0.3%
76.5%	55.0	54.6	-0.4	-0.7%
77.8%	54.9	54.6	-0.3	-0.5%
79.0%	54.8	54.5	-0.3	-0.6%
80.2%	54.6	54.4	-0.2	-0.4%
81.5%	54.6	54.4	-0.2	-0.4%
82.7%	54.5	54.3	-0.2	-0.4%
84.0%	54.5	54.1	-0.4	-0.7%
85.2%	54.4	54.1	-0.3	-0.6%
86.4%	54.2	54.0	-0.1	-0.2%
87.7%	54.1	54.0	-0.1	-0.1%
88.9%	54.1	53.9	-0.2	-0.3%
90.1%	54.0	53.9	-0.1	-0.3%
91.4%	53.8	53.9	0.1	0.1%
92.6%	53.8	53.8	0.1	0.1%
93.8%	53.8	53.8	0.1	0.2%
95.1%	53.7	53.8	0.1	0.2%
96.3%	53.7	53.7	0.1	0.1%
97.5%	53.6	53.4	-0.3	-0.5%
98.8%	53.6	53.2	-0.4	-0.8%
100.0%	53.4	52.9	-0.5	-0.9%

Figure SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

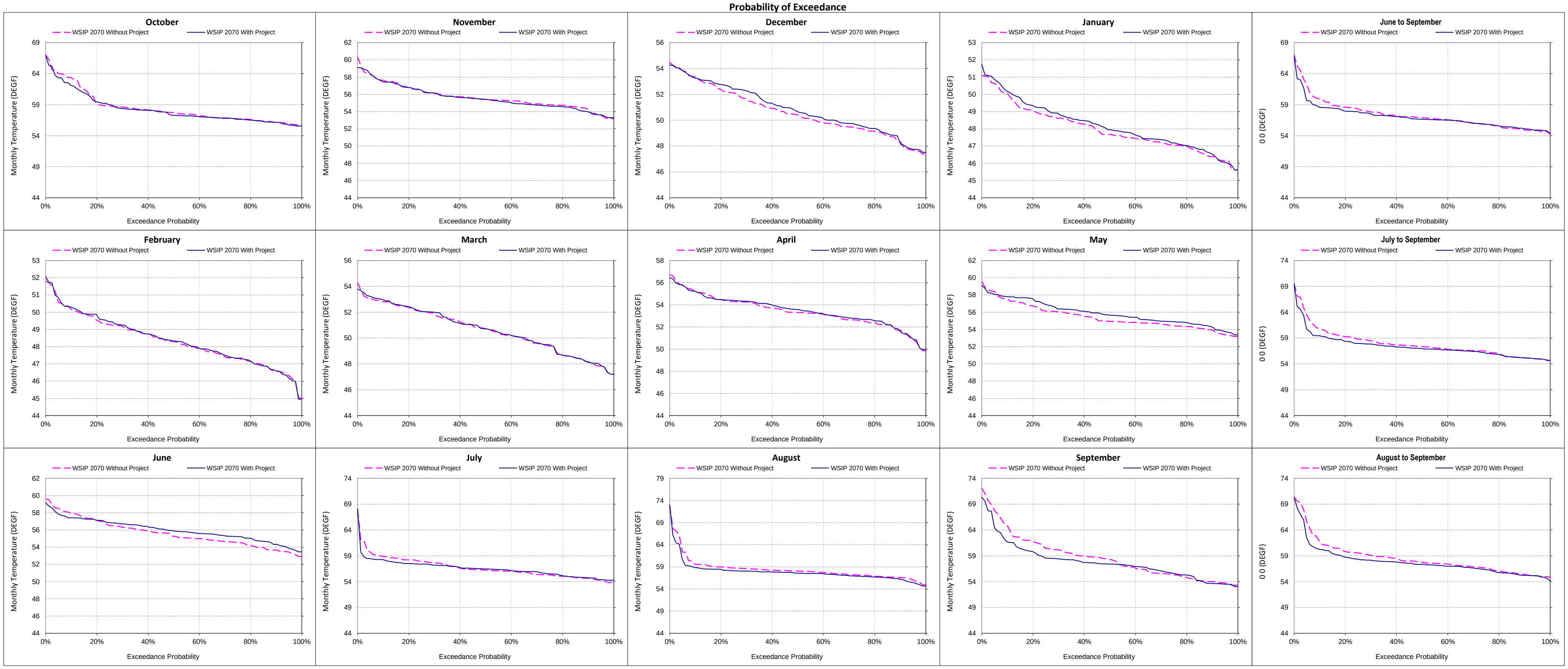


Table SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.1	66.9	-0.1	-0.2%
1.2%	66.2	65.4	-0.9	-1.3%
2.5%	64.6	65.2	0.6	0.9%
3.7%	64.5	63.7	-0.9	-1.3%
4.9%	64.0	63.3	-0.7	-1.1%
6.2%	63.9	63.3	-0.6	-0.9%
7.4%	63.9	62.6	-1.3	-2.1%
8.6%	63.4	62.5	-0.9	-1.3%
9.9%	63.4	62.1	-1.3	-2.0%
11.1%	63.0	62.0	-1.1	-1.7%
12.3%	62.9	61.5	-1.4	-2.2%
13.6%	61.7	61.2	-0.5	-0.9%
14.8%	61.5	60.9	-0.6	-0.9%
16.0%	61.2	60.7	-0.5	-0.8%
17.3%	60.5	60.3	-0.2	-0.3%
18.5%	60.3	59.7	-0.6	-1.0%
19.8%	59.1	59.5	0.4	0.6%
21.0%	59.0	59.4	0.4	0.6%
22.2%	58.9	59.2	0.4	0.7%
23.5%	58.9	59.2	0.4	0.6%
24.7%	58.8	59.0	0.2	0.3%
25.9%	58.7	58.9	0.2	0.3%
27.2%	58.7	58.6	-0.1	-0.1%
28.4%	58.7	58.5	-0.2	-0.4%
29.6%	58.6	58.4	-0.2	-0.3%
30.9%	58.6	58.4	-0.2	-0.4%
32.1%	58.5	58.3	-0.2	-0.4%
33.3%	58.4	58.3	-0.2	-0.3%
34.6%	58.4	58.2	-0.2	-0.3%
35.8%	58.3	58.2	-0.1	-0.2%
37.0%	58.2	58.2	-0.1	-0.1%
38.3%	58.2	58.1	-0.1	-0.2%
39.5%	58.2	58.1	-0.1	-0.1%
40.7%	58.1	58.1	-0.1	-0.1%
42.0%	58.0	58.0	0.0	0.1%
43.2%	57.9	58.0	0.0	0.1%
44.4%	57.8	58.0	0.1	0.2%
45.7%	57.8	57.9	0.0	0.1%
46.9%	57.8	57.8	0.0	0.0%
48.1%	57.8	57.4	-0.3	-0.6%
49.4%	57.7	57.3	-0.5	-0.8%
50.6%	57.7	57.3	-0.5	-0.8%
51.9%	57.6	57.2	-0.3	-0.6%
53.1%	57.5	57.2	-0.3	-0.4%
54.3%	57.5	57.2	-0.3	-0.5%
55.6%	57.5	57.2	-0.3	-0.5%
56.8%	57.5	57.2	-0.3	-0.5%
58.0%	57.4	57.2	-0.3	-0.5%
59.3%	57.2	57.1	-0.1	-0.2%
60.5%	57.2	57.0	-0.1	-0.2%
61.7%	57.2	57.0	-0.2	-0.3%
63.0%	57.0	57.0	-0.1	-0.1%
64.2%	57.0	57.0	0.0	0.0%
65.4%	56.9	56.9	0.0	0.0%
66.7%	56.9	56.9	0.0	-0.1%
67.9%	56.9	56.8	-0.1	-0.1%
69.1%	56.9	56.8	-0.1	-0.1%
70.4%	56.9	56.8	-0.1	-0.1%
71.6%	56.8	56.8	0.0	0.0%
72.8%	56.8	56.8	0.0	0.0%
74.1%	56.8	56.7	-0.1	-0.1%
75.3%	56.7	56.7	0.0	-0.1%
76.5%	56.7	56.7	0.0	-0.1%
77.8%	56.7	56.6	-0.1	-0.2%
79.0%	56.7	56.6	-0.1	-0.2%
80.2%	56.6	56.5	-0.1	-0.1%
81.5%	56.4	56.5	0.1	0.1%
82.7%	56.4	56.4	0.0	0.1%
84.0%	56.4	56.4	0.0	0.0%
85.2%	56.4	56.3	-0.1	-0.2%
86.4%	56.3	56.2	-0.1	-0.2%
87.7%	56.3	56.2	-0.1	-0.2%
88.9%	56.2	56.2	0.0	0.0%
90.1%	56.1	56.1	0.0	0.0%
91.4%	56.1	56.1	0.0	0.0%
92.6%	56.1	55.9	-0.2	-0.4%
93.8%	56.0	55.9	-0.1	-0.2%
95.1%	55.9	55.7	-0.2	-0.4%
96.3%	55.8	55.7	-0.1	-0.2%
97.5%	55.8	55.6	-0.2	-0.4%
98.8%	55.6	55.6	0.0	-0.1%
100.0%	55.6	55.6	0.0	-0.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.3	59.1	-1.2	-2.0%
1.2%	59.3	59.1	-0.3	-0.5%
2.5%	58.6	58.9	0.3	0.5%
3.7%	58.4	58.8	0.4	0.6%
4.9%	58.3	58.4	0.1	0.1%
6.2%	58.1	58.1	0.0	0.0%
7.4%	57.8	57.8	0.0	0.0%
8.6%	57.7	57.6	-0.1	-0.1%
9.9%	57.6	57.5	-0.2	-0.3%
11.1%	57.5	57.4	-0.1	-0.2%
12.3%	57.5	57.4	-0.1	-0.1%
13.6%	57.5	57.4	-0.1	-0.1%
14.8%	57.3	57.2	-0.1	-0.1%
16.0%	57.3	57.2	-0.2	-0.3%
17.3%	56.9	56.9	-0.1	-0.1%
18.5%	56.9	56.8	-0.1	-0.2%
19.8%	56.8	56.8	0.0	0.0%
21.0%	56.7	56.8	0.1	0.2%
22.2%	56.6	56.6	0.0	0.1%
23.5%	56.6	56.6	0.0	0.1%
24.7%	56.5	56.5	0.0	0.0%
25.9%	56.3	56.2	-0.1	-0.2%
27.2%	56.2	56.2	0.0	0.0%
28.4%	56.2	56.2	0.0	0.0%
29.6%	56.1	56.2	0.0	0.0%
30.9%	56.1	56.1	0.1	0.1%
32.1%	56.0	55.9	-0.1	-0.2%
33.3%	56.0	55.8	-0.1	-0.3%
34.6%	55.8	55.8	0.0	0.0%
35.8%	55.8	55.8	0.0	0.0%
37.0%	55.8	55.8	0.0	0.0%
38.3%	55.7	55.7	-0.1	-0.1%
39.5%	55.7	55.6	-0.1	-0.2%
40.7%	55.7	55.6	-0.1	-0.2%
42.0%	55.7	55.6	0.0	-0.1%
43.2%	55.7	55.6	-0.1	-0.1%
44.4%	55.5	55.6	0.1	0.1%
45.7%	55.5	55.5	0.0	0.1%
46.9%	55.5	55.5	0.0	0.0%
48.1%	55.5	55.4	0.0	0.0%
49.4%	55.4	55.4	0.0	0.0%
50.6%	55.4	55.4	0.0	0.0%
51.9%	55.4	55.3	-0.1	-0.1%
53.1%	55.3	55.3	-0.1	-0.1%
54.3%	55.3	55.3	-0.1	-0.2%
55.6%	55.3	55.2	-0.2	-0.3%
56.8%	55.3	55.1	-0.2	-0.3%
58.0%	55.3	55.1	-0.2	-0.3%
59.3%	55.3	55.1	-0.2	-0.3%
60.5%	55.3	55.0	-0.3	-0.5%
61.7%	55.2	54.9	-0.3	-0.5%
63.0%	55.2	54.9	-0.3	-0.6%
64.2%	55.1	54.9	-0.2	-0.3%
65.4%	55.1	54.9	-0.2	-0.4%
66.7%	55.0	54.8	-0.2	-0.3%
67.9%	54.9	54.8	-0.1	-0.3%
69.1%	54.9	54.8	-0.1	-0.2%
70.4%	54.9	54.8	-0.1	-0.3%
71.6%	54.9	54.7	-0.1	-0.2%
72.8%	54.8	54.7	-0.2	-0.3%
74.1%	54.8	54.6	-0.2	-0.3%
75.3%	54.8	54.6	-0.2	-0.3%
76.5%	54.8	54.6	-0.1	-0.2%
77.8%	54.7	54.6	-0.1	-0.2%
79.0%	54.7	54.6	-0.1	-0.3%
80.2%	54.7	54.5	-0.2	-0.3%
81.5%	54.7	54.5	-0.2	-0.3%
82.7%	54.6	54.5	-0.1	-0.2%
84.0%	54.6	54.4	-0.2	-0.3%
85.2%	54.6	54.3	-0.2	-0.4%
86.4%	54.5	54.2	-0.3	-0.5%
87.7%	54.4	54.1	-0.4	-0.7%
88.9%	54.4	54.0	-0.4	-0.7%
90.1%	54.2	54.0	-0.3	-0.5%
91.4%	53.7	53.8	0.1	0.1%
92.6%	53.7	53.8	0.1	0.2%
93.8%	53.6	53.6	0.0	0.0%
95.1%	53.6	53.6	0.0	0.1%
96.3%	53.3	53.5	0.2	0.3%
97.5%	53.2	53.3	0.1	0.2%
98.8%	53.2	53.3	0.1	0.2%
100.0%	53.2	53.3	0.1	0.2%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.5	54.3	-0.2	-0.3%
1.2%	54.3	54.2	0.0	-0.1%
2.5%	54.1	54.1	-0.1	-0.1%
3.7%	54.0	54.1	0.1	0.1%
4.9%	53.9	53.9	0.0	0.0%
6.2%	53.8	53.7	-0.1	-0.1%
7.4%	53.5	53.5	0.1	0.1%
8.6%	53.4	53.4	0.0	-0.1%
9.9%	53.4	53.3	-0.1	-0.2%
11.1%	53.2	53.2	0.1	0.1%
12.3%	53.0	53.1	0.1	0.1%
13.6%	52.9	53.1	0.2	0.4%
14.8%	52.9	53.1	0.2	0.4%
16.0%	52.8	53.1	0.2	0.4%
17.3%	52.8	52.9	0.1	0.3%
18.5%	52.5	52.8	0.4	0.7%
19.8%	52.4	52.8	0.4	0.7%
21.0%	52.2	52.7	0.5	0.9%
22.2%	52.2	52.7	0.5	0.9%
23.5%	52.1	52.6	0.5	0.9%
24.7%	52.1	52.4	0.3	0.6%
25.9%	52.1	52.4	0.3	0.6%
27.2%	51.8	52.4	0.5	1.0%
28.4%	51.7	52.4	0.6	1.3%
29.6%	51.7	52.3	0.6	1.2%
30.9%	51.5	52.2	0.7	1.3%
32.1%	51.4	52.1	0.7	1.3%
33.3%	51.3	52.1	0.8	1.6%
34.6%	51.2	51.9	0.6	1.2%
35.8%	51.2	51.6	0.4	0.7%
37.0%	51.0	51.5	0.4	0.8%
38.3%	51.0	51.3	0.4	0.7%
39.5%	50.9	51.3	0.4	0.8%
40.7%	50.9	51.2	0.3	0.6%
42.0%	50.8	51.1	0.3	0.6%
43.2%	50.7	51.1	0.4	0.8%
44.4%	50.7	51.0	0.3	0.6%
45.7%	50.5	51.0	0.5	0.9%
46.9%	50.5	51.0	0.5	0.9%
48.1%	50.5	50.9	0.4	0.8%
49.4%	50.4	50.7	0.3	0.5%
50.6%	50.4	50.6	0.2	0.5%
51.9%	50.2	50.6	0.4	0.7%
53.1%	50.1	50.5	0.4	0.8%
54.3%	50.1	50.3	0.2	0.4%
55.6%	50.0	50.3	0.3	0.6%
56.8%	50.0	50.3	0.3	0.6%
58.0%	49.9	50.3	0.4	0.8%
59.3%	49.8	50.2	0.4	0.8%
60.5%	49.8	50.0	0.3	0.5%
61.7%	49.8	50.0	0.3	0.5%
63.0%	49.7	50.0	0.3	0.6%
64.2%	49.7	50.0	0.3	0.6%
65.4%	49.7	49.9	0.3	0.6%
66.7%	49.5	49.8	0.3	0.5%
67.9%	49.5	49.8	0.3	0.5%
69.1%	49.5	49.8	0.2	0.5%
70.4%	49.5	49.7	0.3	0.6%
71.6%	49.5	49.7	0.3	0.6%
72.8%	49.4	49.7	0.2	0.5%
74.1%	49.3	49.6	0.3	0.5%
75.3%	49.3	49.5	0.2	0.3%
76.5%	49.2	49.5	0.3	0.5%
77.8%	49.2	49.4	0.2	0.4%
79.0%	49.2	49.4	0.2	0.4%
80.2%	49.1	49.4	0.2	0.5%
81.5%	49.1	49.3	0.2	0.3%
82.7%	49.0	49.1	0.0	0.1%
84.0%	48.9	49.0	0.1	0.3%
85.2%	48.8	49.0	0.2	0.4%
86.4%	48.7	48.8	0.1	0.2%
87.7%	48.7	48.8	0.1	0.3%
88.9%	48.4	48.8	0.4	0.8%
90.1%	48.3	48.1	-0.2	-0.4%
91.4%	47.9	48.1	0.2	0.4%
92.6%	47.8	47.9	0.1	0.3%
93.8%	47.7	47.8	0.1	0.2%
95.1%	47.7	47.8	0.1	0.2%
96.3%	47.7	47.8	0.1	0.2%
97.5%	47.6	47.7	0.1	0.3%
98.8%	47.4	47.5	0.1	0.3%
100.0%	47.4	47.5	0.1	0.3%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.1	51.8	0.7	1.3%
1.2%	51.1	51.1	0.1	0.1%
2.5%	51.0	51.1	0.1	0.1%
3.7%	50.7	51.1	0.4	0.7%
4.9%	50.6	50.9	0.2	0.5%
6.2%	50.5	50.8	0.2	0.5%
7.4%	50.2	50.6	0.4	0.8%
8.6%	50.1	50.3	0.2	0.5%
9.9%	50.1	50.2	0.1	0.2%
11.1%	49.8	50.1	0.3	0.5%
12.3%	49.7	50.0	0.3	0.6%
13.6%	49.4	49.9	0.5	0.9%
14.8%	49.2	49.8	0.6	1.2%
16.0%	49.2	49.6	0.4	0.7%
17.3%	49.1	49.4	0.3	0.6%
18.5%	49.1	49.4	0.3	0.6%
19.8%	49.1	49.4	0.3	0.5%
21.0%	49.0	49.3	0.3	0.6%
22.2%	48.9	49.2	0.3	0.7%
23.5%	48.8	49.2	0.4	0.8%
24.7%	48.8	49.2	0.4	0.7%
25.9%	48.7	49.0	0.3	0.6%
27.2%	48.7	48.9	0.2	0.5%
28.4%	48.7	48.9	0.2	0.5%
29.6%	48.6	48.9	0.3	0.6%
30.9%	48.6	48.8	0.2	0.4%
32.1%	48.6	48.7	0.1	0.3%
33.3%	48.6	48.7	0.1	0.2%
34.6%	48.5	48.6	0.2	0.4%
35.8%	48.4	48.6	0.1	0.3%
37.0%	48.4	48.5	0.2	0.4%
38.3%	48.3	48.5	0.2	0.4%
39.5%	48.3	48.5	0.2	0.4%
40.7%	48.2	48.4	0.2	0.4%
42.0%	48.2	48.4	0.3	0.5%
43.2%	48.2	48.3	0.1	0.3%
44.4%	48.0	48.3	0.3	0.7%
45.7%	47.9	48.2	0.4	0.8%
46.9%	47.7	48.1	0.5	0.9%
48.1%	47.7	48.1	0.4	0.8%
49.4%	47.7	47.9	0.3	0.6%
50.6%	47.7	47.9	0.3	0.6%
51.9%	47.6	47.9	0.3	0.6%
53.1%	47.6	47.9	0.3	0.5%
54.3%	47.6	47.8	0.2	0.5%
55.6%	47.5	47.8	0.3	0.6%
56.8%	47.5	47.8	0.3	0.7%
58.0%	47.5	47.8	0.3	0.6%
59.3%	47.4	47.7	0.2	0.5%
60.5%	47.4	47.6	0.2	0.4%
61.7%	47.4	47.6	0.2	0.3%
63.0%	47.4	47.4	0.0	0.0%
64.2%	47.3	47.4	0.1	0.2%
65.4%	47.3	47.4	0.1	0.2%
66.7%	47.3	47.4	0.2	0.3%
67.9%	47.2	47.4	0.2	0.3%
69.1%	47.2	47.4	0.1	0.3%
70.4%	47.2	47.4	0.2	0.4%
71.6%	47.2	47.3	0.2	0.4%
72.8%	47.1	47.3	0.2	0.4%
74.1%	47.1	47.2	0.1	0.2%
75.3%	47.0	47.2	0.1	0.3%
76.5%	47.0	47.1	0.1	0.2%
77.8%	47.0	47.1	0.1	0.1%
79.0%	47.0	47.0	0.1	0.1%
80.2%	47.0	47.0	0.1	0.1%
81.5%	46.9	47.0	0.1	0.2%
82.7%	46.8	46.9	0.1	0.3%
84.0%	46.7	46.9	0.1	0.3%
85.2%	46.6	46.8	0.2	0.4%
86.4%	46.6	46.8	0.3	0.6%
87.7%	46.5	46.7	0.2	0.4%
88.9%	46.4	46.6	0.2	0.5%
90.1%	46.4	46.5	0.1	0.3%
91.4%	46.4	46.4	0.0	0.0%
92.6%	46.2	46.2	0.0	-0.1%
93.8%	46.2	46.1	-0.1	-0.2%
95.1%	46.2	46.1	-0.1	-0.2%
96.3%	46.1	46.0	-0.2	-0.4%
97.5%	45.7	45.9	0.2	0.5%
98.8%	45.6	45.6	0.0	0.0%
100.0%	45.6	45.6	0.0	0.0%

Table SQ5-1b

Sacramento River at Jellys Ferry, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.8	52.1	0.3	0.6%
1.2%	51.7	51.7	0.0	0.0%
2.5%	51.5	51.7	0.2	0.4%
3.7%	51.2	51.0	-0.2	-0.4%
4.9%	50.6	50.8	0.3	0.5%
6.2%	50.5	50.5	0.0	0.0%
7.4%	50.4	50.3	0.0	0.0%
8.6%	50.4	50.3	0.0	0.0%
9.9%	50.2	50.3	0.1	0.2%
11.1%	50.1	50.2	0.2	0.3%
12.3%	50.0	50.1	0.1	0.2%
13.6%	50.0	50.0	0.1	0.2%
14.8%	49.9	49.9	0.0	0.0%
16.0%	49.8	49.9	0.1	0.1%
17.3%	49.8	49.9	0.1	0.2%
18.5%	49.8	49.9	0.1	0.2%
19.8%	49.5	49.9	0.3	0.7%
21.0%	49.5	49.6	0.1	0.3%
22.2%	49.3	49.6	0.2	0.5%
23.5%	49.3	49.5	0.2	0.5%
24.7%	49.3	49.4	0.2	0.3%
25.9%	49.3	49.4	0.2	0.4%
27.2%	49.2	49.3	0.1	0.2%
28.4%	49.2	49.3	0.1	0.1%
29.6%	49.2	49.3	0.1	0.1%
30.9%	49.1	49.2	0.2	0.3%
32.1%	49.0	49.1	0.1	0.2%
33.3%	49.0	49.0	0.1	0.1%
34.6%	49.0	49.0	0.0	0.0%
35.8%	49.0	48.9	-0.1	-0.2%
37.0%	48.8	48.9	0.1	0.1%
38.3%	48.8	48.8	0.0	0.0%
39.5%	48.7	48.7	0.0	0.0%
40.7%	48.7	48.7	0.0	0.0%
42.0%	48.6	48.7	0.1	0.2%
43.2%	48.6	48.6	0.1	0.1%
44.4%	48.5	48.5	0.0	-0.1%
45.7%	48.5	48.5	0.0	0.0%
46.9%	48.4	48.4	0.1	0.1%
48.1%	48.3	48.4	0.1	0.2%
49.4%	48.3	48.3	0.0	0.1%
50.6%	48.3	48.3	0.0	0.1%
51.9%	48.3	48.3	0.0	0.1%
53.1%	48.1	48.3	0.2	0.3%
54.3%	48.1	48.2	0.1	0.2%
55.6%	48.0	48.1	0.1	0.3%
56.8%	48.0	48.0	0.0	0.1%
58.0%	48.0	48.0	0.0	0.0%
59.3%	47.9	48.0	0.1	0.1%
60.5%	47.9	47.9	0.0	0.0%
61.7%	47.9	47.9	0.0	0.1%
63.0%	47.7	47.9	0.2	0.3%
64.2%	47.7	47.8	0.1	0.2%
65.4%	47.7	47.7	0.0	0.1%
66.7%	47.6	47.7	0.1	0.3%
67.9%	47.6	47.6	0.1	0.2%
69.1%	47.5	47.5	0.0	0.1%
70.4%	47.4	47.5	0.1	0.2%
71.6%	47.3	47.4	0.1	0.1%
72.8%	47.3	47.4	0.0	0.1%
74.1%	47.3	47.3	0.0	0.0%
75.3%	47.3	47.3	0.0	0.0%
76.5%	47.3	47.3	0.1	0.2%
77.8%	47.2	47.2	0.0	0.0%
79.0%	47.2	47.2	0.1	0.1%
80.2%	47.1	47.1	0.0	0.0%
81.5%	47.0	47.0	-0.1	-0.1%
82.7%	47.0	47.0	0.0	-0.1%
84.0%	47.0	46.9	-0.1	-0.2%
85.2%	46.9	46.9	0.0	0.0%
86.4%	46.9	46.9	0.0	0.0%
87.7%	46.7	46.7	0.0	0.0%
88.9%	46.6	46.7	0.1	0.2%
90.1%	46.6	46.6	0.0	0.0%
91.4%	46.6	46.6	0.0	0.0%
92.6%	46.5	46.4	-0.1	-0.3%
93.8%	46.4	46.3	-0.1	-0.1%
95.1%	46.3	46.2	-0.1	-0.3%
96.3%	46.1	46.0	-0.1	-0.2%
97.5%	46.0	46.0	0.0	0.1%
98.8%	45.0	44.9	-0.1	-0.1%
100.0%	45.0	44.9	-0.1	-0.1%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.3	53.8	-0.5	-0.9%
1.2%	53.7	53.7	-0.1	-0.1%
2.5%	53.3	53.5	0.2	0.4%
3.7%	53.1	53.3	0.2	0.3%
4.9%	53.1	53.2	0.2	0.3%
6.2%	53.0	53.1	0.1	0.3%
7.4%	52.9	53.1	0.1	0.3%
8.6%	52.9	53.0	0.2	0.3%
9.9%	52.8	53.0	0.1	0.3%
11.1%	52.8	52.9	0.1	0.1%
12.3%	52.8	52.9	0.1	0.1%
13.6%	52.8	52.6	-0.2	-0.3%
14.8%	52.5	52.6	0.1	0.1%
16.0%	52.5	52.6	0.1	0.2%
17.3%	52.5	52.5	0.1	0.1%
18.5%	52.5	52.5	0.0	0.0%
19.8%	52.4	52.4	0.1	0.1%
21.0%	52.3	52.4	0.1	0.1%
22.2%	52.2	52.2	0.1	0.2%
23.5%	52.1	52.1	0.0	0.1%
24.7%	52.1	52.1	0.0	0.0%
25.9%	52.0	52.0	0.0	0.0%
27.2%	52.0	52.0	0.0	0.0%
28.4%	51.9	52.0	0.1	0.1%
29.6%	51.9	52.0	0.1	0.2%
30.9%	51.7	52.0	0.3	0.5%
32.1%	51.6	51.9	0.3	0.6%
33.3%	51.5	51.7	0.1	0.2%
34.6%	51.5	51.6	0.1	0.2%
35.8%	51.5	51.4	0.0	0.0%
37.0%	51.5	51.3	-0.2	-0.3%
38.3%	51.4	51.2	-0.2	-0.4%
39.5%	51.3	51.2	-0.1	-0.2%
40.7%	51.2	51.1	-0.1	-0.1%
42.0%	51.1	51.0	0.0	-0.1%
43.2%	51.1	51.0	0.0	-0.1%
44.4%	51.0	51.0	0.0	0.0%
45.7%	50.8	51.0	0.2	0.3%
46.9%	50.8	51.0	0.1	0.2%
48.1%	50.8	50.7	-0.1	-0.1%
49.4%	50.7	50.7	0.0	-0.1%
50.6%	50.7	50.7	0.0	0.0%
51.9%	50.6	50.6	0.0	0.0%
53.1%	50.5	50.6	0.1	0.2%
54.3%	50.5	50.5	0.0	0.0%
55.6%	50.3	50.4	0.1	0.2%
56.8%	50.3	50.3	0.0	0.1%
58.0%	50.2	50.3	0.1	0.2%
59.3%	50.2	50.3	0.1	0.1%
60.5%	50.2	50.2	0.0	0.0%
61.7%	50.1	50.1	0.0	0.0%
63.0%	50.1	50.1	0.0	-0.1%
64.2%	50.0	50.1	0.1	0.1%
65.4%	49.9	50.0	0.2	0.3%
66.7%	49.8	49.8	0.0	0.0%
67.9%	49.6	49.8	0.2	0.4%
69.1%	49.6	49.6	0.0	0.1%
70.4%	49.6	49.6	0.0	0.1%
71.6%	49.5	49.6	0.0	0.1%
72.8%	49.5	49.5	0.0	0.1%
74.1%	49.4	49.5	0.1	0.2%
75.3%	49.4	49.5	0.1	0.2%
76.5%	49.3	49.3	0.0	0.0%
77.8%	48.8	48.8	-0.1	-0.2%
79.0%	48.7	48.7	0.0	0.0%
80.2%	48.7	48.6	0.0	-0.1%
81.5%	48.6	48.6	0.0	0.0%
82.7%	48.6	48.6	0.0	0.0%
84.0%	48.6	48.6	0.0	0.0%
85.2%	48.4	48.5	0.0	0.0%
86.4%	48.4	48.4	0.0	0.0%
87.7%	48.4	48.4	0.0	-0.1%
88.9%	48.2	48.2	0.0	-0.1%
90.1%	48.1	48.2	0.0	0.1%
91.4%	48.1	48.1	0.0	-0.1%
92.6%	47.9	48.1	0.1	0.3%
93.8%	47.8	48.0	0.2	0.4%
95.1%	47.8	47.9	0.0	0.1%
96.3%	47.7	47.8	0.0	0.0%
97.5%	47.4	47.3	0.0	0.0%
98.8%	47.2	47.2	0.0	0.0%
100.0%	47.2	47.2	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.7	56.5	-0.3	-0.4%
1.2%	56.6	56.3	-0.3	-0.5%
2.5%	56.2	55.9	-0.2	-0.4%
3.7%	55.9	55.8	0.0	-0.1%
4.9%	55.8	55.8	0.0	0.1%
6.2%	55.6	55.6	0.0	0.1%
7.4%	55.5	55.3	-0.2	-0.3%
8.6%	55.4	55.2	-0.1	-0.3%
9.9%	55.2	55.2	0.0	0.0%
11.1%	55.1	55.1	0.0	0.0%
12.3%	55.1	55.0	0.0	-0.1%
13.6%	55.1	54.8	-0.3	-0.5%
14.8%	54.9	54.6	-0.3	-0.5%
16.0%	54.8	54.6	-0.2	-0.4%
17.3%	54.6	54.5	-0.1	-0.1%
18.5%	54.5	54.5	0.0	0.0%
19.8%	54.5	54.5	0.0	0.0%
21.0%	54.4	54.5	0.0	0.1%
22.2%	54.4	54.4	0.0	0.1%
23.5%	54.3	54.4	0.1	0.2%
24.7%	54.3	54.4	0.1	0.2%
25.9%	54.3	54.4	0.1	0.2%
27.2%	54.3	54.4	0.1	0.2%
28.4%	54.3	54.3	0.1	0.1%
29.6%	54.3	54.3	0.1	0.1%
30.9%	54.2	54.3	0.1	0.1%
32.1%	54.2	54.3	0.1	0.2%
33.3%	54.1	54.2	0.1	0.2%
34.6%	53.9	54.1	0.2	0.4%
35.8%	53.9	54.1	0.2	0.4%
37.0%	53.8	54.1	0.3	0.6%
38.3%	53.7	54.1	0.3	0.6%
39.5%	53.7	54.0	0.3	0.5%
40.7%	53.7	53.9	0.2	0.4%
42.0%	53.6	53.9	0.2	0.4%
43.2%	53.6	53.8	0.2	0.3%
44.4%	53.5	53.7	0.3	0.5%
45.7%	53.3	53.7	0.3	0.6%
46.9%	53.3	53.6	0.3	0.6%
48.1%	53.3	53.6	0.3	0.5%
49.4%	53.3	53.6	0.3	0.5%
50.6%	53.3	53.6	0.3	0.5%
51.9%	53.3	53.5	0.2	0.3%
53.1%	53.3	53.4	0.1	0.3%
54.3%	53.3	53.4	0.2	0.3%
55.6%	53.2	53.4	0.1	0.2%
56.8%	53.2	53.3	0.1	0.2%
58.0%	53.2	53.2	0.0	0.1%
59.3%	53.2	53.2	0.1	0.1%
60.5%	53.1	53.2	0.1	0.1%
61.7%	53.1	53.1	0.0	0.0%
63.0%	53.0	53.1	0.0	0.0%
64.2%	53.0	53.0	0.0	0.1%
65.4%	52.9	53.0	0.0	0.1%
66.7%	52.8	52.9	0.2	0.3%
67.9%	52.7	52.9	0.2	0.3%
69.1%	52.7	52.8	0.2	0.4%
70.4%	52.6	52.8	0.2	0.3%
71.6%	52.6	52.8	0.1	0.3%
72.8%	52.6	52.8	0.1	0.3%
74.1%	52.6	52.7	0.1	0.3%
75.3%	52.5	52.7	0.2	0.3%
76.5%	52.5	52.7	0.2	0.4%
77.8%	52.4	52.7	0.3	0.6%
79.0%	52.4	52.6	0.3	0.5%
80.2%	52.4	52.5	0.2	0.3%
81.5%	52.2	52.5	0.3	0.6%
82.7%	52.2	52.5	0.3	0.5%
84.0%	52.2	52.3	0.1	0.2%
85.2%	52.2	52.2	0.0	0.0%
86.4%	52.2	52.2	0.0	0.0%
87.7%	51.8	51.9	0.1	0.2%
88.9%	51.7	51.9	0.1	0.3%
90.1%	51.7	51.5	-0.2	-0.4%
91.4%	51.4	51.4	0.0	0.0%
92.6%	51.3	51.4	0.1	0.2%
93.8%	51.0	51.1	0.1	0.2%
95.1%	50.8	50.9	0.1	0.2%
96.3%	50.7	50.8	0.2	0.3%
97.5%	50.1	50.1	0.0	-0.1%
98.8%	49.9	49.9	0.1	0.2%
100.0%	49.9	49.9	0.1	0.2%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.5	59.1	-0.4	-0.8%
1.2%	58.9	58.8	-0.1	-0.2%
2.5%	58.6	58.3	-0.3	-0.5%
3.7%	58.5	58.2	-0.3	-0.5%
4.9%	58.4	58.1	-0.3	-0.6%
6.2%	57.9	58.0	0.2	0.3%
7.4%	57.7	57.9	0.2	0.4%
8.6%	57.6	57.8	0.3	0.5%
9.9%	57.5	57.8	0.3	0.5%
11.1%	57.3	57.8	0.5	0.9%
12.3%	57.3	57.8	0.5	0.9%
13.6%	57.2	57.7	0.4	0.8%
14.8%	57.1	57.7	0.6	1.0%
16.0%	57.1	57.7	0.6	1.0%
17.3%	56.9	57.7	0.8	1.4%
18.5%	56.8	57.6	0.9	1.5%
19.8%	56.8	57.6	0.8	1.5%
21.0%	56.6	57.3	0.6	1.1%
22.2%	56.6	57.3	0.7	1.2%
23.5%	56.2	57.1	0.9	1.6%
24.7%	56.1	56.9	0.8	1.3%
25.9%	56.1	56.8	0.7	1.2%
27.2%	56.1	56.7	0.6	1.2%
28.4%	56.1	56.6	0.5	0.9%
29.6%	56.0	56.4	0.3	0.6%
30.9%	56.0	56.4	0.4	0.6%
32.1%	56.0	56.4	0.4	0.7%
33.3%	55.9	56.3	0.5	0.8%
34.6%	55.9	56.3	0.5	0.8%
35.8%	55.8	56.3	0.5	0.9%
37.0%	55.7	56.3	0.5	1.0%
38.3%	55.7	56.1	0.4	0.8%
39.5%	55.5	56.1	0.6	1.1%
40.7%	55.5	56.1	0.6	1.1%
42.0%	55.5	56.0	0.6	1.0%
43.2%	55.4	55.9	0.5	0.9%
44.4%	55.2	55.9	0.7	1.2%
45.7%	55.0	55.9	0.9	1.6%
46.9%	55.0	55.8	0.8	1.4%
48.1%	55.0	55.7	0.7	1.3%
49.4%	54.9	55.7	0.8	1.4%
50.6%	54.9	55.6	0.7	1.3%
51.9%	54.9	55.6	0.7	1.3%
53.1%	54.9	55.6	0.7	1.3%
54.3%	54.9	55.6	0.7	1.3%
55.6%	54.9	55.6	0.7	1.3%
56.8%	54.8	55.5	0.7	1.2%
58.0%	54.8	55.4	0.6	1.1%
59.3%	54.8	55.4	0.6	1.1%
60.5%	54.8	55.4	0.6	1.1%
61.7%	54.8	55.2	0.4	0.7%
63.0%	54.7	55.1	0.4	0.7%
64.2%	54.7	55.1	0.4	0.7%
65.4%	54.7	55.1	0.4	0.7%
66.7%	54.7	55.1	0.3	0.6%
67.9%	54.7	55.0	0.3	0.6%
69.1%	54.7	55.0	0.3	0.6%
70.4%	54.6	55.0	0.4	0.7%
71.6%	54.6	54.9	0.4	0.7%
72.8%	54.5	54.9	0.4	0.8%
74.1%	54.5	54.9	0.5	0.8%
75.3%	54.4	54.9	0.5	0.9%
76.5%	54.4	54.8	0.5	0.8%
77.8%	54.4	54.8	0.5	0.9%
79.0%	54.4	54.8	0.4	0.8%
80.2%	54.3	54.8	0.5	0.8%
81.5%	54.3	54.7	0.3	0.6%
82.7%	54.3	54.6	0.4	0.7%
84.0%	54.2	54.6	0.4	0.8%
85.2%	54.1	54.6	0.5	0.8%
86.4%	54.1	54.5	0.4	0.7%
87.7%	54.0	54.5	0.4	0.8%
88.9%	54.0	54.4	0.4	0.7%
90.1%	53.9	54.3	0.3	0.6%
91.4%	53.7	54.0	0.2	0.4%
92.6%	53.5	53.9	0.4	0.7%
93.8%	53.5	53.8	0.4	0.7%
95.1%	53.4	53.8	0.4	0.7%
96.3%	53.4	53.7	0.3	0.6%
97.5%	53.3	53.6	0.3	0.6%
98.8%	53.2	53.4	0.2	0.3%
100.0%	53.2	53.4	0.2	0.3%

Table SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.6	59.2	-0.4	-0.7%
1.2%	59.5	58.8	-0.7	-1.2%
2.5%	58.9	58.6	-0.3	-0.6%
3.7%	58.6	58.1	-0.4	-0.7%
4.9%	58.5	57.8	-0.7	-1.2%
6.2%	58.3	57.7	-0.6	-1.1%
7.4%	58.1	57.6	-0.5	-0.8%
8.6%	58.1	57.4	-0.7	-1.2%
9.9%	58.0	57.4	-0.5	-0.9%
11.1%	57.9	57.4	-0.5	-0.8%
12.3%	57.8	57.4	-0.4	-0.7%
13.6%	57.6	57.4	-0.3	-0.5%
14.8%	57.5	57.3	-0.2	-0.4%
16.0%	57.3	57.3	-0.1	-0.1%
17.3%	57.3	57.3	-0.1	-0.1%
18.5%	57.3	57.2	-0.1	-0.1%
19.8%	57.1	57.1	0.0	0.0%
21.0%	57.0	57.1	0.1	0.2%
22.2%	57.0	57.1	0.1	0.3%
23.5%	56.7	56.9	0.2	0.4%
24.7%	56.5	56.8	0.3	0.6%
25.9%	56.5	56.8	0.3	0.6%
27.2%	56.4	56.8	0.4	0.7%
28.4%	56.4	56.8	0.3	0.6%
29.6%	56.3	56.7	0.4	0.6%
30.9%	56.3	56.7	0.4	0.7%
32.1%	56.2	56.6	0.4	0.8%
33.3%	56.2	56.6	0.4	0.7%
34.6%	56.2	56.6	0.5	0.8%
35.8%	56.0	56.6	0.6	1.0%
37.0%	56.0	56.5	0.5	0.9%
38.3%	56.0	56.4	0.4	0.8%
39.5%	55.9	56.4	0.5	0.9%
40.7%	55.9	56.3	0.4	0.8%
42.0%	55.7	56.3	0.5	1.0%
43.2%	55.7	56.2	0.5	0.9%
44.4%	55.7	56.1	0.4	0.8%
45.7%	55.7	56.1	0.5	0.8%
46.9%	55.6	56.0	0.4	0.7%
48.1%	55.6	56.0	0.3	0.6%
49.4%	55.3	55.9	0.6	1.2%
50.6%	55.2	55.9	0.6	1.1%
51.9%	55.1	55.8	0.7	1.3%
53.1%	55.1	55.8	0.7	1.3%
54.3%	55.1	55.8	0.7	1.3%
55.6%	55.1	55.8	0.7	1.3%
56.8%	55.0	55.7	0.7	1.2%
58.0%	55.0	55.7	0.7	1.3%
59.3%	55.0	55.6	0.6	1.1%
60.5%	55.0	55.6	0.6	1.1%
61.7%	55.0	55.6	0.6	1.1%
63.0%	54.9	55.6	0.6	1.2%
64.2%	54.8	55.5	0.7	1.3%
65.4%	54.8	55.5	0.7	1.3%
66.7%	54.8	55.4	0.6	1.2%
67.9%	54.7	55.4	0.7	1.3%
69.1%	54.7	55.4	0.7	1.2%
70.4%	54.6	55.3	0.7	1.2%
71.6%	54.6	55.3	0.6	1.2%
72.8%	54.6	55.3	0.6	1.2%
74.1%	54.6	55.2	0.7	1.2%
75.3%	54.5	55.2	0.7	1.3%
76.5%	54.5	55.2	0.7	1.3%
77.8%	54.4	55.1	0.7	1.2%
79.0%	54.2	55.0	0.9	1.6%
80.2%	54.2	55.0	0.9	1.6%
81.5%	54.1	54.8	0.8	1.4%
82.7%	54.0	54.7	0.8	1.4%
84.0%	54.0	54.7	0.7	1.3%
85.2%	53.9	54.7	0.7	1.4%
86.4%	53.7	54.7	0.9	1.8%
87.7%	53.7	54.6	0.9	1.7%
88.9%	53.7	54.3	0.7	1.2%
90.1%	53.7	54.3	0.7	1.2%
91.4%	53.5	54.2	0.7	1.3%
92.6%	53.5	54.1	0.6	1.2%
93.8%	53.5	54.1	0.6	1.1%
95.1%	53.4	53.8	0.4	0.8%
96.3%	53.2	53.8	0.6	1.0%
97.5%	53.1	53.6	0.5	0.9%
98.8%	52.9	53.5	0.6	1.0%
100.0%	52.9	53.5	0.6	1.0%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.9	68.1	0.2	0.3%
1.2%	62.2	59.7	-2.5	-4.0%
2.5%	62.0	58.8	-3.2	-5.2%
3.7%	60.2	58.5	-1.7	-2.8%
4.9%	59.7	58.5	-1.2	-2.1%
6.2%	59.2	58.3	-0.9	-1.6%
7.4%	59.1	58.3	-0.8	-1.4%
8.6%	59.0	58.3	-0.7	-1.3%
9.9%	58.8	58.3	-0.6	-1.0%
11.1%	58.8	58.1	-0.8	-1.3%
12.3%	58.6	57.9	-0.7	-1.2%
13.6%	58.6	57.8	-0.8	-1.3%
14.8%	58.5	57.7	-0.8	-1.4%
16.0%	58.5	57.7	-0.8	-1.4%
17.3%	58.3	57.6	-0.7	-1.2%
18.5%	58.2	57.5	-0.7	-1.2%
19.8%	58.2	57.5	-0.7	-1.2%
21.0%	58.2	57.5	-0.7	-1.2%
22.2%	58.2	57.5	-0.7	-1.2%
23.5%	58.0	57.4	-0.6	-1.1%
24.7%	57.9	57.4	-0.5	-0.9%
25.9%	57.9	57.4	-0.5	-0.9%
27.2%	57.8	57.4	-0.4	-0.7%
28.4%	57.7	57.3	-0.4	-0.6%
29.6%	57.6	57.2	-0.4	-0.8%
30.9%	57.6	57.2	-0.4	-0.7%
32.1%	57.6	57.2	-0.4	-0.7%
33.3%	57.4	57.1	-0.2	-0.4%
34.6%	57.3	57.1	-0.1	-0.2%
35.8%	57.0	57.0	0.0	-0.1%
37.0%	57.0	56.9	-0.1	-0.1%
38.3%	56.9	56.9	0.0	0.0%
39.5%	56.6	56.8	0.2	0.3%
40.7%	56.5	56.6	0.1	0.2%
42.0%	56.4	56.6	0.2	0.3%
43.2%	56.4	56.6	0.2	0.4%
44.4%	56.4	56.6	0.2	0.3%
45.7%	56.3	56.5	0.2	0.3%
46.9%	56.3	56.5	0.2	0.3%
48.1%	56.3	56.5	0.2	0.3%
49.4%	56.2	56.5	0.2	0.4%
50.6%	56.2	56.4	0.2	0.4%
51.9%	56.1	56.4	0.3	0.5%
53.1%	56.1	56.4	0.3	0.5%
54.3%	56.1	56.4	0.2	0.4%
55.6%	56.1	56.3	0.2	0.4%
56.8%	56.0	56.3	0.2	0.4%
58.0%	56.0	56.3	0.2	0.4%
59.3%	56.0	56.2	0.2	0.3%
60.5%	56.0	56.1	0.1	0.1%
61.7%	55.9	56.0	0.1	0.1%
63.0%	55.8	56.0	0.2	0.3%
64.2%	55.8	56.0	0.2	0.3%
65.4%	55.8	55.9	0.2	0.3%
66.7%	55.8	55.9	0.1	0.2%
67.9%	55.5	55.9	0.4	0.7%
69.1%	55.5	55.9	0.4	0.8%
70.4%	55.4	55.9	0.5	1.0%
71.6%	55.4	55.7	0.3	0.6%
72.8%	55.3	55.6	0.3	0.5%
74.1%	55.3	55.5	0.2	0.3%
75.3%	55.3	55.5	0.2	0.4%
76.5%	55.2	55.5	0.3	0.5%
77.8%	55.1	55.4	0.3	0.5%
79.0%	55.0	55.3	0.2	0.4%
80.2%	55.0	55.1	0.1	0.1%
81.5%	55.0	55.1	0.1	0.1%
82.7%	55.0	54.9	0.0	-0.1%
84.0%	54.9	54.9	0.0	0.0%
85.2%	54.8	54.9	0.1	0.1%
86.4%	54.7	54.8	0.1	0.2%
87.7%	54.7	54.8	0.1	0.3%
88.9%	54.7	54.8	0.1	0.2%
90.1%	54.6	54.7	0.1	0.2%
91.4%	54.6	54.7	0.1	0.2%
92.6%	54.4	54.7	0.3	0.5%
93.8%	54.3	54.4	0.1	0.2%
95.1%	54.3	54.4	0.1	0.2%
96.3%	54.1	54.3	0.2	0.4%
97.5%	53.9	54.3	0.4	0.8%
98.8%	53.8	54.3	0.4	0.8%
100.0%	53.8	54.3	0.4	0.8%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.9	73.0	0.2	0.2%
1.2%	67.6	66.2	-1.4	-2.1%
2.5%	67.1	64.4	-2.7	-4.1%
3.7%	66.2	64.2	-2.1	-3.1%
4.9%	62.4	60.7	-1.7	-2.7%
6.2%	62.3	59.3	-2.9	-4.7%
7.4%	60.4	59.2	-1.1	-1.9%
8.6%	60.3	59.1	-1.3	-2.1%
9.9%	59.6	58.8	-0.8	-1.3%
11.1%	59.6	58.8	-0.8	-1.3%
12.3%	59.5	58.6	-0.9	-1.6%
13.6%	59.5	58.5	-1.0	-1.6%
14.8%	59.3	58.5	-0.8	-1.4%
16.0%	59.2	58.5	-0.7	-1.1%
17.3%	59.1	58.5	-0.6	-1.1%
18.5%	59.0	58.5	-0.5	-0.9%
19.8%	59.0	58.4	-0.5	-0.9%
21.0%	58.9	58.2	-0.7	-1.2%
22.2%	58.9	58.2	-0.7	-1.2%
23.5%	58.8	58.2	-0.6	-1.0%
24.7%	58.7	58.1	-0.6	-1.1%
25.9%	58.7	58.1	-0.6	-1.0%
27.2%	58.7	58.1	-0.6	-1.0%
28.4%	58.6	58.1	-0.6	-1.0%
29.6%	58.6	58.0	-0.6	-1.0%
30.9%	58.5	58.0	-0.5	-0.9%
32.1%	58.5	58.0	-0.6	-1.0%
33.3%	58.5	58.0	-0.5	-0.9%
34.6%	58.5	57.9	-0.6	-1.0%
35.8%	58.4	57.9	-0.5	-0.8%
37.0%	58.4	57.9	-0.5	-0.8%
38.3%	58.3	57.9	-0.4	-0.7%
39.5%	58.3	57.8	-0.4	-0.7%
40.7%	58.2	57.8	-0.4	-0.7%
42.0%	58.2	57.8	-0.4	-0.7%
43.2%	58.2	57.8	-0.4	-0.7%
44.4%	58.2	57.7	-0.4	-0.7%
45.7%	58.2	57.7	-0.4	-0.7%
46.9%	58.1	57.7	-0.4	-0.6%
48.1%	58.1	57.7	-0.4	-0.7%
49.4%	58.0	57.6	-0.5	-0.8%
50.6%	58.0	57.6	-0.5	-0.8%
51.9%	58.0	57.6	-0.4	-0.8%
53.1%	58.0	57.5	-0.4	-0.7%
54.3%	57.9	57.5	-0.4	-0.7%
55.6%	57.9	57.5	-0.4	-0.7%
56.8%	57.8	57.5	-0.3	-0.5%
58.0%	57.8	57.5	-0.3	-0.5%
59.3%	57.7	57.5	-0.3	-0.5%
60.5%	57.7	57.4	-0.3	-0.6%
61.7%	57.6	57.3	-0.3	-0.5%
63.0%	57.6	57.3	-0.3	-0.5%
64.2%	57.5	57.2	-0.3	-0.4%
65.4%	57.5	57.2	-0.3	-0.5%
66.7%	57.4	57.2	-0.3	-0.5%
67.9%	57.4	57.1	-0.3	-0.6%
69.1%	57.3	57.1	-0.2	-0.3%
70.4%	57.2	56.9	-0.3	-0.5%
71.6%	57.2	56.9	-0.3	-0.5%
72.8%	57.2	56.9	-0.3	-0.5%
74.1%	57.1	56.9	-0.3	-0.5%
75.3%	57.1	56.9	-0.3	-0.5%
76.5%	57.1	56.8	-0.3	-0.5%
77.8%	57.0	56.8	-0.2	-0.4%
79.0%	56.9	56.7	-0.2	-0.4%
80.2%	56.9	56.7	-0.2	-0.3%
81.5%	56.8	56.7	-0.2	-0.3%
82.7%	56.8	56.7	-0.1	-0.2%
84.0%	56.8	56.6	-0.2	-0.4%
85.2%	56.7	56.6	-0.1	-0.2%
86.4%	56.7	56.5	-0.2	-0.3%
87.7%	56.7	56.4	-0.3	-0.5%
88.9%	56.6	56.4	-0.2	-0.4%
90.1%	56.6	56.2	-0.4	-0.7%
91.4%	56.5	56.1	-0.5	-0.8%
92.6%	56.5	55.7	-0.8	-1.4%
93.8%	56.3	55.6	-0.7	-1.3%
95.1%	56.0	55.5	-0.5	-1.0%
96.3%	55.7	55.2	-0.5	-0.8%
97.5%	55.5	55.0	-0.5	-0.9%
98.8%	54.9	54.7	-0.3	-0.5%
100.0%	54.9	54.7	-0.3	-0.5%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.0	70.4	-1.7	-2.3%
1.2%	71.1	69.6	-1.5	-2.1%
2.5%	69.7	67.7	-2.0	-2.8%
3.7%	68.9	67.7	-1.2	-1.8%
4.9%	67.8	64.4	-3.4	-5.0%
6.2%	67.1	63.8	-3.3	-5.0%
7.4%	66.3	63.4	-2.8	-4.3%
8.6%	65.3	62.3	-3.0	-4.6%
9.9%	64.9	61.7	-3.2	-4.9%
11.1%	63.8	61.6	-2.2	-3.4%
12.3%	62.7	61.5	-1.2	-1.9%
13.6%	62.7	60.7	-1.9	-3.1%
14.8%	62.6	60.5	-2.1	-3.4%
16.0%	62.1	60.2	-1.8	-3.0%
17.3%	62.0	60.0	-2.0	-3.2%
18.5%	62.0	59.9	-2.1	-3.3%
19.8%	61.7	59.8	-1.9	-3.1%
21.0%	61.6	59.5	-2.1	-3.3%
22.2%	61.4	59.1	-2.2	-3.7%
23.5%	61.2	59.0	-2.3	-3.7%
24.7%	60.5	58.6	-1.9	-3.1%
25.9%	60.4	58.5	-1.9	-3.1%
27.2%	60.2	58.5	-1.7	-2.9%
28.4%	60.2	58.5	-1.7	-2.9%
29.6%	60.2	58.4	-1.8	-3.0%
30.9%	60.0	58.4	-1.7	-2.8%
32.1%	59.7	58.3	-1.5	-2.5%
33.3%	59.6	58.3	-1.4	-2.3%
34.6%	59.5	58.2	-1.3	-2.2%
35.8%	59.4	58.2	-1.1	-1.9%
37.0%	59.1	58.0	-1.0	-1.8%
38.3%	59.0	57.9	-1.0	-1.8%
39.5%	59.0	57.7	-1.2	-2.1%
40.7%	58.9	57.7	-1.2	-2.0%
42.0%	58.8	57.7	-1.1	-2.0%
43.2%	58.8	57.6	-1.2	-2.0%
44.4%	58.7	57.6	-1.1	-1.9%
45.7%	58.7	57.5	-1.2	-2.0%
46.9%	58.5	57.5	-1.1	-1.8%
48.1%	58.5	57.4	-1.0	-1.8%
49.4%	58.3	57.4	-0.9	-1.6%
50.6%	58.2	57.4	-0.8	-1.4%
51.9%	58.0	57.4	-0.7	-1.2%
53.1%	57.7	57.3	-0.4	-0.7%
54.3%	57.2	57.3	0.1	0.1%
55.6%	57.0	57.3	0.3	0.6%
56.8%	56.9	57.2	0.2	0.4%
58.0%	56.8	57.1	0.3	0.5%
59.3%	56.8	57.0	0.1	0.2%
60.5%	56.5	56.9	0.5	0.8%
61.7%	56.4	56.9	0.5	0.8%
63.0%	56.4	56.8	0.4	0.8%
64.2%	56.3	56.8	0.5	0.8%
65.4%	55.7	56.5	0.7	1.3%
66.7%	55.7	56.4	0.7	1.3%
67.9%	55.6	56.3	0.7	1.2%
69.1%	55.6	56.2	0.6	1.0%
70.4%	55.6	56.0	0.5	0.9%
71.6%	55.5	55.9	0.4	0.6%
72.8%	55.5	55.8	0.3	0.5%
74.1%	55.5	55.7	0.2	0.4%
75.3%	55.3	55.5	0.3	0.5%
76.5%	55.3	55.4	0.2	0.3%
77.8%	55.1	55.3	0.3	0.5%
79.0%	55.0	55.3	0.3	0.5%
80.2%	54.7	55.3	0.5	1.0%
81.5%	54.6	55.1	0.6	1.0%
82.7%	54.6	55.0	0.4	0.7%
84.0%	54.3	54.2	-0.1	-0.2%
85.2%	54.2	54.2	0.0	-0.1%
86.4%	54.1	54.0	-0.2	-0.3%
87.7%	54.0	53.7	-0.3	-0.6%
88.9%	54.0	53.7	-0.3	-0.6%
90.1%	54.0	53.7	-0.3	-0.6%
91.4%	54.0	53.6	-0.4	-0.7%
92.6%	53.8	53.6	-0.2	-0.4%
93.8%	53.8	53.5	-0.2	-0.4%
95.1%	53.7	53.5	-0.2	-0.5%
96.3%	53.6	53.5	-0.1	-0.2%
97.5%	53.3	53.5	0.2	0.3%
98.8%	53.3	53.0	-0.3	-0.5%
100.0%	53.3	53.0	-0.3	-0.5%

Table SQ5-1b
Sacramento River at Jellys Ferry, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.0	66.9	-0.1	-0.2%
1.2%	65.2	63.2	-2.0	-3.1%
2.5%	64.5	63.0	-1.5	-2.4%
3.7%	63.1	61.7	-1.4	-2.2%
4.9%	62.2	59.7	-2.6	-4.1%
6.2%	60.9	59.6	-1.3	-2.1%
7.4%	60.3	59.0	-1.3	-2.1%
8.6%	60.1	58.9	-1.2	-2.0%
9.9%	60.0	58.6	-1.4	-2.3%
11.1%	59.8	58.6	-1.2	-2.0%
12.3%	59.4	58.5	-0.9	-1.5%
13.6%	59.4	58.5	-0.9	-1.5%
14.8%	58.9	58.5	-0.4	-0.7%
16.0%	58.8	58.4	-0.4	-0.7%
17.3%	58.8	58.4	-0.4	-0.7%
18.5%	58.7	58.1	-0.6	-0.9%
19.8%	58.6	58.0	-0.6	-1.0%
21.0%	58.6	57.9	-0.6	-1.1%
22.2%	58.5	57.9	-0.6	-1.0%
23.5%	58.5	57.9	-0.6	-1.0%
24.7%	58.4	57.9	-0.5	-0.9%
25.9%	58.1	57.7	-0.4	-0.7%
27.2%	58.1	57.7	-0.4	-0.7%
28.4%	58.0	57.7	-0.3	-0.5%
29.6%	57.9	57.6	-0.3	-0.4%
30.9%	57.8	57.3	-0.5	-0.8%
32.1%	57.8	57.3	-0.5	-0.8%
33.3%	57.7	57.3	-0.5	-0.8%
34.6%	57.5	57.3	-0.2	-0.3%
35.8%	57.4	57.3	-0.1	-0.2%
37.0%	57.3	57.2	-0.1	-0.2%
38.3%	57.3	57.1	-0.2	-0.3%
39.5%	57.3	57.1	-0.2	-0.3%
40.7%	57.2	57.0	-0.1	-0.2%
42.0%	57.1	57.0	-0.1	-0.2%
43.2%	57.0	57.0	-0.1	-0.1%
44.4%	57.0	56.9	-0.1	-0.2%
45.7%	57.0	56.7	-0.3	-0.5%
46.9%	57.0	56.7	-0.3	-0.5%
48.1%	57.0	56.7	-0.3	-0.5%
49.4%	56.9	56.7	-0.2	-0.4%
50.6%	56.9	56.6	-0.2	-0.4%
51.9%	56.8	56.6	-0.2	-0.4%
53.1%	56.8	56.6	-0.2	-0.4%
54.3%	56.8	56.6	-0.2	-0.3%
55.6%	56.7	56.6	-0.1	-0.2%
56.8%	56.6	56.6	-0.1	-0.1%
58.0%	56.6	56.5	-0.1	-0.1%
59.3%	56.6	56.5	-0.1	-0.1%
60.5%	56.5	56.5	0.0	0.0%
61.7%	56.5	56.5	-0.1	-0.1%
63.0%	56.5	56.4	-0.1	-0.1%
64.2%	56.4	56.4	0.0	0.0%
65.4%	56.3	56.4	0.1	0.2%
66.7%	56.2	56.2	0.0	0.0%
67.9%	56.2	56.2	0.0	0.0%
69.1%	56.1	56.0	-0.1	-0.1%
70.4%	56.0	56.0	-0.1	-0.1%
71.6%	56.0	56.0	0.0	0.0%
72.8%	55.9	55.9	0.0	0.1%
74.1%	55.9	55.9	0.0	0.0%
75.3%	55.8	55.8	0.0	0.1%
76.5%	55.8	55.8	0.0	0.0%
77.8%	55.6	55.7	0.1	0.1%
79.0%	55.6	55.7	0.0	0.0%
80.2%	55.5	55.6	0.0	0.1%
81.5%	55.3	55.5	0.2	0.4%
82.7%	55.2	55.4	0.2	0.4%
84.0%	55.2	55.4	0.2	0.4%
85.2%	55.2	55.4	0.2	0.4%
86.4%	55.1	55.3	0.2	0.4%
87.7%	55.1	55.2	0.1	0.2%
88.9%	55.1	55.2	0.1	0.2%
90.1%	54.9	55.1	0.2	0.3%
91.4%	54.9	55.1	0.2	0.4%
92.6%	54.9	55.0	0.1	0.2%
93.8%	54.9	54.9	0.1	0.1%
95.1%	54.8	54.9	0.1	0.1%
96.3%	54.7	54.9	0.2	0.4%
97.5%	54.7	54.8	0.2	0.3%
98.8%	54.7	54.8	0.1	0.3%
100.0%	54.2	54.4	0.2	0.4%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.5	69.6	0.1	0.2%
1.2%	67.1	65.1	-2.0	-3.0%
2.5%	66.9	64.5	-2.3	-3.5%
3.7%	64.9	63.4	-1.5	-2.4%
4.9%	63.5	60.7	-2.7	-4.3%
6.2%	62.4	60.3	-2.1	-3.4%
7.4%	61.7	59.5	-2.2	-3.6%
8.6%	61.0	59.5	-1.5	-2.5%
9.9%	60.8	59.4	-1.4	-2.3%
11.1%	60.6	59.3	-1.3	-2.1%
12.3%	60.4	59.3	-1.1	-1.9%
13.6%	59.8	58.9	-0.9	-1.5%
14.8%	59.8	58.9	-1.0	-1.6%
16.0%	59.7	58.8	-0.9	-1.5%
17.3%	59.5	58.7	-0.9	-1.4%
18.5%	59.4	58.7	-0.7	-1.2%
19.8%	59.3	58.4	-0.9	-1.5%
21.0%	59.3	58.4	-0.9	-1.5%
22.2%	59.2	58.3	-0.9	-1.6%
23.5%	59.1	58.0	-1.1	-1.8%
24.7%	58.8	58.0	-0.8	-1.4%
25.9%	58.8	57.9	-0.9	-1.5%
27.2%	58.7	57.9	-0.8	-1.4%
28.4%	58.6	57.9	-0.8	-1.3%
29.6%	58.5	57.8	-0.7	-1.1%
30.9%	58.4	57.8	-0.6	-1.1%
32.1%	58.3	57.7	-0.6	-1.0%
33.3%	58.0	57.6	-0.4	-0.7%
34.6%	58.0	57.6	-0.4	-0.6%
35.8%	57.9	57.4	-0.5	-0.9%
37.0%	57.9	57.4	-0.4	-0.8%
38.3%	57.7	57.4	-0.3	-0.5%
39.5%	57.7	57.3	-0.4	-0.7%
40.7%	57.6	57.3	-0.4	-0.6%
42.0%	57.6	57.3	-0.4	-0.7%
43.2%	57.6	57.2	-0.4	-0.6%
44.4%	57.6	57.1	-0.4	-0.8%
45.7%	57.5	57.1	-0.5	-0.8%
46.9%	57.5	57.1	-0.4	-0.8%
48.1%	57.4	57.0	-0.3	-0.6%
49.4%	57.3	57.0	-0.4	-0.7%
50.6%	57.3	56.9	-0.4	-0.7%
51.9%	57.3	56.9	-0.4	-0.7%
53.1%	57.2	56.9	-0.4	-0.6%
54.3%	57.1	56.9	-0.3	-0.5%
55.6%	57.1	56.8	-0.3	-0.5%
56.8%	57.0	56.8	-0.2	-0.4%
58.0%	57.0	56.7	-0.3	-0.5%
59.3%	56.9	56.7	-0.2	-0.3%
60.5%	56.8	56.7	-0.1	-0.2%
61.7%	56.8	56.7	-0.1	-0.2%
63.0%	56.7	56.6	-0.1	-0.1%
64.2%	56.7	56.6	-0.1	-0.1%
65.4%	56.6	56.5	-0.1	-0.2%
66.7%	56.6	56.5	-0.1	-0.3%
67.9%	56.6	56.5	-0.1	-0.2%
69.1%	56.6	56.5	-0.1	-0.2%
70.4%	56.6	56.4	-0.1	-0.3%
71.6%	56.5	56.4	-0.2	-0.3%
72.8%	56.5	56.2	-0.3	-0.5%
74.1%	56.5	56.2	-0.3	-0.5%
75.3%	56.5	56.0	-0.4	-0.7%
76.5%	56.2	56.0	-0.2	-0.3%
77.8%	56.2	55.9	-0.2	-0.4%
79.0%	56.1	55.9	-0.2	-0.4%
80.2%	55.9	55.8	-0.2	-0.3%
81.5%	55.6	55.7	0.0	0.1%
82.7%	55.4	55.4	0.0	0.0%
84.0%	55.3	55.4	0.1	0.1%
85.2%	55.3	55.4	0.0	0.1%
86.4%	55.3	55.3	0.0	0.0%
87.7%	55.3	55.2	-0.1	-0.1%
88.9%	55.2	55.2	0.0	-0.1%
90.1%	55.2	55.2	0.0	0.0%
91.4%	55.1	55.1	0.0	0.0%
92.6%	55.1	55.1	0.0	-0.1%
93.8%	55.0	55.0	0.0	-0.1%
95.1%	55.0	55.0	0.0	-0.1%
96.3%	54.9	54.9	0.0	0.0%
97.5%	54.9	54.9	0.0	0.0%
98.8%	54.7	54.7	0.1	0.1%
100.0%	54.6	54.7	0.1	0.2%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.3	70.4	0.1	0.1%
1.2%	69.6	68.3	-1.3	-1.8%
2.5%	69.3	67.0	-2.3	-3.4%
3.7%	68.0	65.9	-2.0	-3.0%
4.9%	65.6	62.5	-3.1	-4.7%
6.2%	64.3	61.2	-3.1	-4.8%
7.4%	62.9	60.8	-2.1	-3.4%
8.6%	62.8	60.5	-2.4	-3.8%
9.9%	61.8	60.2	-1.6	-2.5%
11.1%	61.2	60.2	-1.0	-1.6%
12.3%	61.1	60.0	-1.1	-1.7%
13.6%	61.0	60.0	-1.0	-1.6%
14.8%	60.6	59.5	-1.1	-1.9%
16.0%	60.5	59.2	-1.2	-2.0%
17.3%	60.5	59.1	-1.3	-2.2%
18.5%	60.3	59.0	-1.3	-2.2%
19.8%	59.8	58.7	-1.1	-1.8%
21.0%	59.7	58.7	-1.0	-1.7%
22.2%	59.7	58.5	-1.1	-1.9%
23.5%	59.6	58.4	-1.2	-2.0%
24.7%	59.6	58.4	-1.2	-2.0%
25.9%	59.5	58.2	-1.2	-2.1%
27.2%	59.4	58.2	-1.1	-1.9%
28.4%	59.2	58.2	-1.1	-1.8%
29.6%	59.1	58.2	-1.0	-1.6%
30.9%	59.1	58.1	-1.0	-1.7%
32.1%	58.9	58.0	-0.9	-1.5%
33.3%	58.9	57.9	-0.9	-1.6%
34.6%	58.9	57.9	-0.9	-1.6%
35.8%	58.8	57.9	-1.0	-1.6%
37.0%	58.7	57.9	-0.8	-1.4%
38.3%	58.6	57.8	-0.7	-1.2%
39.5%	58.5	57.8	-0.7	-1.3%
40.7%	58.3	57.8	-0.6	-1.0%
42.0%	58.0	57.7	-0.4	-0.6%
43.2%	58.0	57.6	-0.4	-0.7%
44.4%	58.0	57.5	-0.5	-0.8%
45.7%	58.0	57.5	-0.5	-0.8%
46.9%	58.0	57.4	-0.6	-1.0%
48.1%	57.8	57.4	-0.5	-0.8%
49.4%	57.8	57.3	-0.5	-0.8%
50.6%	57.7	57.3	-0.4	-0.6%
51.9%	57.6	57.2	-0.4	-0.6%
53.1%	57.6	57.2	-0.4	-0.6%
54.3%	57.6	57.2	-0.3	-0.6%
55.6%	57.5	57.2	-0.4	-0.6%
56.8%	57.5	57.1	-0.4	-0.6%
58.0%	57.5	57.1	-0.4	-0.7%
59.3%	57.4	57.0	-0.4	-0.8%
60.5%	57.4	57.0	-0.4	-0.7%
61.7%	57.2	57.0	-0.3	-0.5%
63.0%	57.1	57.0	-0.2	-0.3%
64.2%	57.1	56.9	-0.2	-0.3%
65.4%	57.1	56.9	-0.2	-0.3%
66.7%	57.0	56.8	-0.3	-0.4%
67.9%	57.0	56.8	-0.2	-0.4%
69.1%	56.9	56.7	-0.3	-0.5%
70.4%	56.8	56.6	-0.2	-0.3%
71.6%	56.8	56.5	-0.3	-0.5%
72.8%	56.7	56.5	-0.3	-0.5%
74.1%	56.7	56.4	-0.3	-0.5%
75.3%	56.6	56.3	-0.3	-0.5%
76.5%	56.5	56.2	-0.3	-0.6%
77.8%	56.1	56.0	-0.1	-0.2%
79.0%	56.1	55.8	-0.3	-0.6%
80.2%	56.1	55.7	-0.4	-0.6%
81.5%	55.9	55.7	-0.2	-0.4%
82.7%	55.8	55.7	-0.2	-0.3%
84.0%	55.7	55.6	-0.1	-0.2%
85.2%	55.7	55.6	-0.1	-0.2%
86.4%	55.6	55.4	-0.2	-0.4%
87.7%	55.5	55.3	-0.2	-0.3%
88.9%	55.4	55.2	-0.2	-0.4%
90.1%	55.4	55.2	-0.2	-0.4%
91.4%	55.3	55.2	-0.1	-0.1%
92.6%	55.2	55.2	0.0	0.0%
93.8%	55.1	55.2	0.0	0.0%
95.1%	55.1	55.1	0.1	0.1%
96.3%	55.0	54.9	-0.1	-0.2%
97.5%	55.0	54.9	-0.1	-0.3%
98.8%	55.0	54.7	-0.3	-0.6%
100.0%	54.8	54.1	-0.7	-1.3%

Figure SQ6-1b
Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

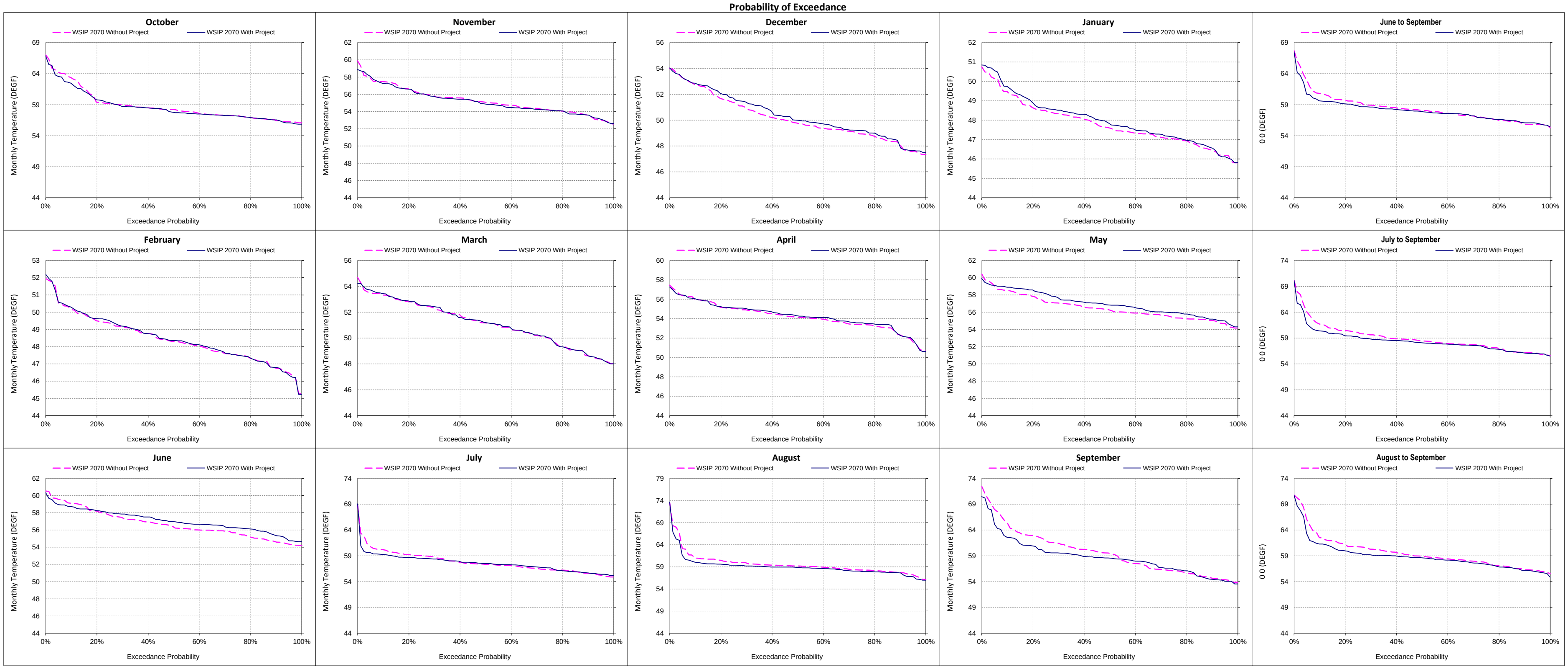


Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.0	66.9	-0.1	-0.2%
1.2%	66.3	65.5	-0.8	-1.2%
2.5%	64.9	65.3	0.4	0.7%
3.7%	64.6	63.8	-0.8	-1.2%
4.9%	64.2	63.5	-0.7	-1.1%
6.2%	64.0	63.5	-0.5	-0.9%
7.4%	64.0	62.7	-1.3	-2.0%
8.6%	63.6	62.6	-0.9	-1.5%
9.9%	63.4	62.5	-0.9	-1.4%
11.1%	63.0	62.0	-1.0	-1.6%
12.3%	62.9	61.6	-1.2	-1.9%
13.6%	62.0	61.6	-0.4	-0.7%
14.8%	61.6	61.2	-0.4	-0.7%
16.0%	61.3	61.0	-0.3	-0.5%
17.3%	60.7	60.6	-0.1	-0.2%
18.5%	60.6	60.2	-0.4	-0.6%
19.8%	59.4	59.8	0.4	0.6%
21.0%	59.3	59.7	0.4	0.7%
22.2%	59.3	59.7	0.4	0.6%
23.5%	59.2	59.5	0.3	0.4%
24.7%	59.1	59.4	0.2	0.4%
25.9%	59.1	59.2	0.1	0.1%
27.2%	59.1	59.0	0.0	-0.1%
28.4%	59.1	59.0	-0.1	-0.1%
29.6%	59.0	58.8	-0.2	-0.4%
30.9%	58.9	58.7	-0.2	-0.3%
32.1%	58.9	58.7	-0.2	-0.3%
33.3%	58.8	58.7	-0.1	-0.2%
34.6%	58.7	58.7	0.0	0.0%
35.8%	58.6	58.6	0.0	-0.1%
37.0%	58.6	58.6	0.0	-0.1%
38.3%	58.6	58.5	-0.1	-0.1%
39.5%	58.5	58.5	0.0	-0.1%
40.7%	58.5	58.4	0.0	0.0%
42.0%	58.4	58.4	0.0	-0.1%
43.2%	58.3	58.4	0.1	0.1%
44.4%	58.3	58.4	0.1	0.2%
45.7%	58.3	58.3	0.0	0.0%
46.9%	58.3	58.2	0.0	-0.1%
48.1%	58.2	57.9	-0.4	-0.6%
49.4%	58.2	57.8	-0.4	-0.7%
50.6%	58.2	57.7	-0.5	-0.8%
51.9%	58.0	57.7	-0.3	-0.6%
53.1%	58.0	57.7	-0.3	-0.5%
54.3%	57.9	57.7	-0.2	-0.4%
55.6%	57.9	57.6	-0.3	-0.6%
56.8%	57.9	57.6	-0.3	-0.5%
58.0%	57.8	57.5	-0.3	-0.4%
59.3%	57.7	57.5	-0.2	-0.3%
60.5%	57.5	57.5	0.0	-0.1%
61.7%	57.5	57.4	-0.1	-0.1%
63.0%	57.4	57.4	0.0	0.0%
64.2%	57.4	57.4	0.0	-0.1%
65.4%	57.4	57.4	0.0	0.0%
66.7%	57.4	57.3	0.0	-0.1%
67.9%	57.3	57.3	0.0	0.0%
69.1%	57.3	57.3	0.0	0.0%
70.4%	57.3	57.3	-0.1	-0.1%
71.6%	57.3	57.2	0.0	0.0%
72.8%	57.2	57.2	0.0	-0.1%
74.1%	57.2	57.2	0.0	-0.1%
75.3%	57.2	57.2	0.0	-0.1%
76.5%	57.1	57.1	0.0	0.1%
77.8%	57.0	57.0	0.0	0.0%
79.0%	57.0	57.0	0.0	0.0%
80.2%	56.9	56.9	0.0	0.0%
81.5%	56.8	56.9	0.1	0.1%
82.7%	56.8	56.8	0.0	0.1%
84.0%	56.7	56.8	0.1	0.1%
85.2%	56.7	56.8	0.1	0.1%
86.4%	56.7	56.7	0.0	0.0%
87.7%	56.6	56.6	0.0	-0.1%
88.9%	56.6	56.6	-0.1	-0.1%
90.1%	56.4	56.5	0.1	0.2%
91.4%	56.4	56.4	0.0	0.0%
92.6%	56.3	56.2	-0.1	-0.2%
93.8%	56.3	56.1	-0.2	-0.3%
95.1%	56.2	56.1	-0.2	-0.3%
96.3%	56.2	56.0	-0.2	-0.3%
97.5%	56.2	55.9	-0.3	-0.5%
98.8%	56.1	55.9	-0.2	-0.4%
100.0%	56.1	55.9	0.0	-0.4%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.9	58.9	-1.0	-1.7%
1.2%	59.3	58.7	-0.5	-0.9%
2.5%	58.2	58.6	0.5	0.8%
3.7%	58.1	58.3	0.2	0.4%
4.9%	57.9	58.1	0.2	0.4%
6.2%	57.5	57.7	0.2	0.4%
7.4%	57.5	57.6	0.1	0.2%
8.6%	57.5	57.4	-0.1	-0.2%
9.9%	57.5	57.3	-0.2	-0.4%
11.1%	57.4	57.2	-0.2	-0.4%
12.3%	57.4	57.2	-0.2	-0.3%
13.6%	57.3	57.1	-0.2	-0.4%
14.8%	57.2	56.8	-0.4	-0.7%
16.0%	56.9	56.7	-0.2	-0.3%
17.3%	56.7	56.7	0.0	0.0%
18.5%	56.7	56.7	0.0	0.0%
19.8%	56.6	56.6	0.0	-0.1%
21.0%	56.5	56.6	0.1	0.2%
22.2%	56.3	56.2	-0.1	-0.2%
23.5%	56.2	56.1	-0.1	-0.2%
24.7%	56.1	56.0	0.0	0.0%
25.9%	56.0	56.0	0.0	0.0%
27.2%	56.0	55.9	0.0	-0.1%
28.4%	55.9	55.8	-0.1	-0.2%
29.6%	55.9	55.8	-0.1	-0.2%
30.9%	55.7	55.7	0.0	0.0%
32.1%	55.7	55.6	-0.1	-0.2%
33.3%	55.6	55.5	-0.1	-0.2%
34.6%	55.6	55.5	-0.1	-0.2%
35.8%	55.6	55.5	-0.1	-0.2%
37.0%	55.6	55.5	-0.1	-0.2%
38.3%	55.6	55.5	-0.1	-0.2%
39.5%	55.6	55.4	-0.2	-0.3%
40.7%	55.6	55.4	-0.2	-0.3%
42.0%	55.5	55.4	-0.1	-0.2%
43.2%	55.4	55.4	0.0	0.1%
44.4%	55.3	55.3	0.0	0.0%
45.7%	55.2	55.2	0.0	0.0%
46.9%	55.2	55.1	-0.1	-0.1%
48.1%	55.1	54.9	-0.2	-0.4%
49.4%	55.1	54.9	-0.2	-0.4%
50.6%	55.1	54.9	-0.2	-0.4%
51.9%	55.0	54.8	-0.2	-0.3%
53.1%	55.0	54.8	-0.2	-0.3%
54.3%	55.0	54.7	-0.2	-0.4%
55.6%	54.8	54.7	-0.1	-0.2%
56.8%	54.8	54.7	-0.1	-0.3%
58.0%	54.8	54.5	-0.3	-0.5%
59.3%	54.7	54.5	-0.3	-0.5%
60.5%	54.7	54.5	-0.3	-0.5%
61.7%	54.7	54.4	-0.3	-0.5%
63.0%	54.5	54.4	-0.1	-0.2%
64.2%	54.5	54.4	-0.1	-0.2%
65.4%	54.5	54.3	-0.1	-0.2%
66.7%	54.4	54.3	-0.1	-0.2%
67.9%	54.4	54.3	-0.1	-0.1%
69.1%	54.4	54.3	-0.1	-0.2%
70.4%	54.4	54.2	-0.1	-0.2%
71.6%	54.3	54.2	-0.1	-0.1%
72.8%	54.3	54.2	0.0	-0.1%
74.1%	54.2	54.2	0.0	-0.1%
75.3%	54.1	54.1	0.0	0.0%
76.5%	54.1	54.1	0.0	0.0%
77.8%	54.1	54.1	0.0	-0.1%
79.0%	54.1	54.1	0.0	0.0%
80.2%	54.1	54.1	0.0	0.0%
81.5%	54.0	53.9	-0.1	-0.2%
82.7%	54.0	53.7	-0.2	-0.4%
84.0%	53.9	53.7	-0.2	-0.4%
85.2%	53.8	53.7	-0.1	-0.3%
86.4%	53.8	53.7	-0.1	-0.3%
87.7%	53.7	53.7	-0.1	-0.1%
88.9%	53.6	53.6	0.0	-0.1%
90.1%	53.5	53.6	0.0	0.1%
91.4%	53.4	53.4	0.1	0.1%
92.6%	53.1	53.3	0.2	0.3%
93.8%	53.0	53.2	0.2	0.4%
95.1%	53.0	53.1	0.1	0.1%
96.3%	52.9	53.0	0.0	0.1%
97.5%	52.8	52.8	-0.1	-0.2%
98.8%	52.6	52.6	0.1	0.1%
100.0%	52.6	52.6	0.1	0.1%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.0	54.0	0.0	0.0%
1.2%	53.9	53.8	-0.2	-0.3%
2.5%	53.7	53.6	-0.1	-0.1%
3.7%	53.5	53.5	0.0	0.1%
4.9%	53.3	53.3	0.0	0.0%
6.2%	53.1	53.1	0.0	0.0%
7.4%	53.0	53.1	0.1	0.1%
8.6%	52.9	52.9	0.0	0.0%
9.9%	52.7	52.9	0.1	0.2%
11.1%	52.7	52.7	0.1	0.1%
12.3%	52.6	52.7	0.1	0.2%
13.6%	52.6	52.7	0.1	0.1%
14.8%	52.4	52.6	0.2	0.4%
16.0%	52.3	52.5	0.2	0.4%
17.3%	51.9	52.4	0.5	0.9%
18.5%	51.8	52.3	0.4	0.8%
19.8%	51.7	52.1	0.4	0.8%
21.0%	51.6	52.0	0.4	0.7%
22.2%	51.6	52.0	0.4	0.7%
23.5%	51.5	51.8	0.3	0.6%
24.7%	51.4	51.7	0.3	0.6%
25.9%	51.3	51.5	0.2	0.4%
27.2%	51.1	51.5	0.4	0.8%
28.4%	51.1	51.5	0.4	0.7%
29.6%	51.0	51.4	0.4	0.8%
30.9%	50.8	51.3	0.5	0.9%
32.1%	50.8	51.2	0.5	0.9%
33.3%	50.7	51.1	0.5	0.9%
34.6%	50.5	51.1	0.6	1.2%
35.8%	50.4	51.1	0.7	1.3%
37.0%	50.4	50.9	0.6	1.1%
38.3%	50.3	50.9	0.6	1.1%
39.5%	50.2	50.7	0.5	1.0%
40.7%	50.2	50.4	0.2	0.4%
42.0%	50.1	50.4	0.3	0.5%
43.2%	50.1	50.4	0.3	0.6%
44.4%	50.0	50.3	0.3	0.5%
45.7%	50.0	50.3	0.3	0.6%
46.9%	49.9	50.3	0.3	0.6%
48.1%	49.8	50.0	0.2	0.4%
49.4%	49.8	50.0	0.2	0.4%
50.6%	49.7	50.0	0.3	0.5%
51.9%	49.7	49.9	0.2	0.5%
53.1%	49.6	49.9	0.3	0.7%
54.3%	49.6	49.9	0.2	0.5%
55.6%	49.6	49.8	0.3	0.6%
56.8%	49.5	49.8	0.3	0.6%
58.0%	49.4	49.8	0.4	0.8%
59.3%	49.4	49.7	0.3	0.7%
60.5%	49.4	49.7	0.3	0.7%
61.7%	49.3	49.7	0.4	0.7%
63.0%	49.3	49.6	0.3	0.6%
64.2%	49.3	49.5	0.2	0.4%
65.4%	49.3	49.5	0.2	0.4%
66.7%	49.3	49.4	0.2	0.3%
67.9%	49.2	49.3	0.1	0.2%
69.1%	49.2	49.3	0.1	0.2%
70.4%	49.1	49.2	0.1	0.2%
71.6%	49.1	49.2	0.1	0.2%
72.8%	49.1	49.2	0.2	0.3%
74.1%	48.9	49.2	0.3	0.5%
75.3%	48.9	49.2	0.3	0.5%
76.5%	48.9	49.2	0.3	0.5%
77.8%	48.9	49.0	0.1	0.3%
79.0%	48.8	49.0	0.2	0.4%
80.2%	48.7	49.0	0.3	0.5%
81.5%	48.6	48.8	0.2	0.4%
82.7%	48.6	48.8	0.2	0.4%
84.0%	48.5	48.8	0.3	0.6%
85.2%	48.4	48.6	0.2	0.4%
86.4%	48.4	48.6	0.2	0.4%
87.7%	48.3	48.5	0.2	0.3%
88.9%	48.3	48.4	0.1	0.3%
90.1%	48.0	47.8	-0.2	-0.4%
91.4%	47.7	47.7	0.0	0.0%
92.6%	47.7	47.7	0.0	0.1%
93.8%	47.6	47.7	0.1	0.1%
95.1%	47.6	47.7	0.1	0.2%
96.3%	47.6	47.6	0.1	0.2%
97.5%	47.4	47.6	0.2	0.4%
98.8%	47.3	47.5	0.2	0.4%
100.0%	47.3	47.5	0.2	0.4%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.8	50.8	0.1	0.2%
1.2%	50.5	50.8	0.3	0.7%
2.5%	50.5	50.7	0.2	0.4%
3.7%	50.2	50.7	0.5	0.9%
4.9%	50.1	50.6	0.4	0.8%
6.2%	50.1	50.5	0.3	0.7%
7.4%	49.7	50.1	0.4	0.9%
8.6%	49.5	49.8	0.3	0.6%
9.9%	49.5	49.7	0.3	0.5%
11.1%	49.3	49.6	0.3	0.6%
12.3%	49.3	49.5	0.2	0.4%
13.6%	49.3	49.4	0.1	0.2%
14.8%	49.1	49.3	0.3	0.5%
16.0%	48.8	49.2	0.4	0.9%
17.3%	48.8	49.1	0.4	0.8%
18.5%	48.8	49.1	0.3	0.6%
19.8%	48.7	48.9	0.3	0.5%
21.0%	48.6	48.7	0.2	0.4%
22.2%	48.5	48.7	0.1	0.2%
23.5%	48.5	48.6	0.1	0.3%
24.7%	48.5	48.6	0.1	0.3%
25.9%	48.4	48.6	0.2	0.3%
27.2%	48.4	48.6	0.2	0.3%
28.4%	48.4	48.5	0.2	0.4%
29.6%	48.3	48.5	0.2	0.4%
30.9%	48.3	48.5	0.2	0.4%
32.1%	48.3	48.4	0.2	0.4%
33.3%	48.3	48.4	0.2	0.3%
34.6%	48.2	48.4	0.2	0.4%
35.8%	48.2	48.4	0.2	0.4%
37.0%	48.2	48.3	0.2	0.3%
38.3%	48.1	48.3	0.2	0.4%
39.5%	48.1	48.3	0.2	0.5%
40.7%	48.0	48.3	0.3	0.6%
42.0%	48.0	48.2	0.2	0.5%
43.2%	47.9	48.2	0.3	0.6%
44.4%	47.8	48.0	0.2	0.4%
45.7%	47.7	48.0	0.3	0.6%
46.9%	47.7	48.0	0.3	0.6%
48.1%	47.6	48.0	0.3	0.7%
49.4%	47.6	47.9	0.2	0.5%
50.6%	47.6	47.8	0.2	0.4%
51.9%	47.5	47.7	0.3	0.6%
53.1%	47.4	47.7	0.3	0.6%
54.3%	47.4	47.7	0.2	0.5%
55.6%	47.4	47.7	0.3	0.6%
56.8%	47.4	47.7	0.3	0.6%
58.0%	47.4	47.6	0.2	0.4%
59.3%	47.3	47.5	0.2	0.4%
60.5%	47.3	47.5	0.1	0.3%
61.7%	47.3	47.5	0.2	0.3%
63.0%	47.3	47.5	0.2	0.3%
64.2%	47.3	47.4	0.2	0.3%
65.4%	47.3	47.3	0.0	0.1%
66.7%	47.3	47.3	0.0	0.1%
67.9%	47.1	47.3	0.1	0.3%
69.1%	47.1	47.3	0.1	0.3%
70.4%	47.1	47.3	0.2	0.4%
71.6%	47.1	47.2	0.1	0.2%
72.8%	47.1	47.2	0.1	0.2%
74.1%	47.1	47.1	0.1	0.2%
75.3%	47.0	47.1	0.1	0.2%
76.5%	47.0	47.1	0.1	0.1%
77.8%	47.0	47.1	0.1	0.2%
79.0%	46.9	47.0	0.1	0.1%
80.2%	46.9	46.9	0.0	0.0%
81.5%	46.8	46.9	0.1	0.3%
82.7%	46.8	46.9	0.1	0.2%
84.0%	46.7	46.8	0.1	0.1%
85.2%	46.6	46.8	0.2	0.3%
86.4%	46.6	46.7	0.2	0.4%
87.7%	46.5	46.7	0.1	0.3%
88.9%	46.5	46.6	0.1	0.3%
90.1%	46.4	46.6	0.1	0.2%
91.4%	46.4	46.4	0.1	0.1%
92.6%	46.2	46.2	0.0	0.0%
93.8%	46.2	46.1	-0.1	-0.2%
95.1%	46.2	46.1	-0.1	-0.2%
96.3%	46.2	46.0	-0.1	-0.3%
97.5%	45.9	46.0	0.1	0.3%
98.8%	45.8	45.8	0.0	0.0%
100.0%	45.8	45.8	0.0	0.0%

Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.0	52.2	0.3	0.5%
1.2%	51.8	52.0	0.1	0.2%
2.5%	51.8	51.8	0.0	0.1%
3.7%	51.5	51.3	-0.2	-0.5%
4.9%	50.5	50.6	0.0	0.1%
6.2%	50.5	50.5	0.1	0.1%
7.4%	50.4	50.4	0.1	0.2%
8.6%	50.4	50.4	0.0	0.0%
9.9%	50.2	50.3	0.2	0.3%
11.1%	50.1	50.2	0.0	0.1%
12.3%	49.9	50.1	0.1	0.3%
13.6%	49.9	50.0	0.1	0.2%
14.8%	49.9	49.9	0.0	0.0%
16.0%	49.8	49.9	0.1	0.2%
17.3%	49.7	49.7	0.0	-0.1%
18.5%	49.6	49.6	0.0	0.0%
19.8%	49.5	49.6	0.1	0.2%
21.0%	49.5	49.6	0.1	0.3%
22.2%	49.4	49.6	0.2	0.4%
23.5%	49.4	49.6	0.2	0.3%
24.7%	49.4	49.5	0.1	0.3%
25.9%	49.3	49.4	0.1	0.2%
27.2%	49.2	49.3	0.1	0.3%
28.4%	49.2	49.3	0.1	0.1%
29.6%	49.2	49.2	0.0	0.0%
30.9%	49.1	49.2	0.1	0.1%
32.1%	49.1	49.1	0.0	0.1%
33.3%	49.1	49.1	0.0	0.0%
34.6%	49.0	49.0	0.1	0.1%
35.8%	48.9	49.0	0.1	0.1%
37.0%	48.8	48.9	0.1	0.2%
38.3%	48.8	48.8	0.0	0.0%
39.5%	48.8	48.8	0.0	0.0%
40.7%	48.8	48.7	0.0	0.0%
42.0%	48.7	48.7	0.0	0.0%
43.2%	48.5	48.7	0.2	0.3%
44.4%	48.4	48.5	0.0	0.1%
45.7%	48.4	48.5	0.0	0.1%
46.9%	48.4	48.4	0.0	0.1%
48.1%	48.3	48.4	0.0	0.1%
49.4%	48.3	48.4	0.1	0.1%
50.6%	48.3	48.4	0.1	0.1%
51.9%	48.3	48.3	0.1	0.1%
53.1%	48.2	48.3	0.1	0.2%
54.3%	48.2	48.3	0.1	0.2%
55.6%	48.2	48.2	0.0	0.1%
56.8%	48.1	48.2	0.0	0.0%
58.0%	48.1	48.1	0.0	0.1%
59.3%	48.1	48.1	0.1	0.1%
60.5%	48.0	48.1	0.1	0.2%
61.7%	48.0	48.0	0.1	0.1%
63.0%	47.9	48.0	0.1	0.2%
64.2%	47.8	47.9	0.1	0.3%
65.4%	47.8	47.9	0.2	0.3%
66.7%	47.7	47.8	0.1	0.2%
67.9%	47.7	47.8	0.1	0.2%
69.1%	47.7	47.7	0.1	0.2%
70.4%	47.6	47.6	0.0	0.0%
71.6%	47.6	47.6	0.0	0.1%
72.8%	47.6	47.5	0.0	-0.1%
74.1%	47.5	47.5	0.0	0.0%
75.3%	47.5	47.5	0.0	0.0%
76.5%	47.5	47.5	0.0	0.0%
77.8%	47.5	47.4	0.0	-0.1%
79.0%	47.4	47.4	0.0	0.0%
80.2%	47.3	47.3	0.0	0.0%
81.5%	47.3	47.2	0.0	0.0%
82.7%	47.2	47.2	0.0	-0.1%
84.0%	47.2	47.1	0.0	0.0%
85.2%	47.1	47.1	0.0	0.0%
86.4%	47.1	47.0	-0.1	-0.2%
87.7%	46.8	46.8	0.0	0.0%
88.9%	46.8	46.8	0.0	0.0%
90.1%	46.7	46.8	0.0	0.1%
91.4%	46.7	46.8	0.0	0.1%
92.6%	46.7	46.5	-0.1	-0.2%
93.8%	46.5	46.5	0.0	-0.1%
95.1%	46.5	46.3	-0.1	-0.3%
96.3%	46.3	46.2	-0.1	-0.2%
97.5%	46.2	46.2	0.0	0.0%
98.8%	45.3	45.2	-0.1	-0.1%
100.0%	45.3	45.2	-0.1	-0.1%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.7	54.2	-0.4	-0.8%
1.2%	54.3	54.2	-0.1	-0.1%
2.5%	53.7	53.9	0.2	0.4%
3.7%	53.6	53.8	0.2	0.3%
4.9%	53.5	53.7	0.2	0.4%
6.2%	53.5	53.6	0.2	0.3%
7.4%	53.4	53.5	0.1	0.1%
8.6%	53.4	53.5	0.1	0.1%
9.9%	53.3	53.4	0.1	0.2%
11.1%	53.3	53.4	0.1	0.2%
12.3%	53.3	53.2	0.0	-0.1%
13.6%	53.2	53.2	0.0	0.0%
14.8%	53.0	53.1	0.0	0.1%
16.0%	53.0	53.0	0.1	0.1%
17.3%	52.9	52.9	0.0	0.0%
18.5%	52.9	52.9	0.0	0.1%
19.8%	52.8	52.9	0.1	0.1%
21.0%	52.8	52.8	0.0	0.0%
22.2%	52.8	52.8	0.0	0.1%
23.5%	52.5	52.6	0.1	0.2%
24.7%	52.5	52.5	0.0	0.0%
25.9%	52.5	52.5	0.0	0.0%
27.2%	52.5	52.5	0.0	0.1%
28.4%	52.4	52.5	0.1	0.1%
29.6%	52.3	52.4	0.1	0.2%
30.9%	52.2	52.4	0.2	0.4%
32.1%	52.2	52.4	0.2	0.4%
33.3%	52.0	52.0	0.0	0.0%
34.6%	51.9	52.0	0.1	0.1%
35.8%	51.9	52.0	0.1	0.1%
37.0%	51.9	51.8	-0.1	-0.2%
38.3%	51.9	51.8	-0.1	-0.2%
39.5%	51.9	51.6	-0.3	-0.5%
40.7%	51.6	51.6	-0.1	-0.1%
42.0%	51.6	51.4	-0.1	-0.3%
43.2%	51.5	51.4	-0.1	-0.1%
44.4%	51.4	51.4	0.0	0.0%
45.7%	51.4	51.4	0.0	0.1%
46.9%	51.3	51.4	0.0	0.1%
48.1%	51.2	51.3	0.1	0.2%
49.4%	51.2	51.2	0.0	0.1%
50.6%	51.2	51.2	0.0	0.0%
51.9%	51.1	51.1	0.0	0.0%
53.1%	51.1	51.1	0.0	0.0%
54.3%	51.0	51.1	0.0	0.0%
55.6%	50.9	51.0	0.2	0.4%
56.8%	50.8	50.9	0.0	0.1%
58.0%	50.8	50.9	0.1	0.1%
59.3%	50.8	50.9	0.0	0.1%
60.5%	50.6	50.6	0.0	0.0%
61.7%	50.6	50.6	0.0	0.0%
63.0%	50.6	50.6	0.0	0.1%
64.2%	50.5	50.6	0.1	0.2%
65.4%	50.5	50.4	0.0	0.0%
66.7%	50.4	50.4	0.0	0.0%
67.9%	50.3	50.4	0.1	0.2%
69.1%	50.2	50.2	0.0	0.1%
70.4%	50.2	50.2	0.1	0.1%
71.6%	50.1	50.2	0.0	0.1%
72.8%	50.1	50.2	0.1	0.1%
74.1%	50.0	50.0	0.0	0.0%
75.3%	50.0	50.0	0.0	0.1%
76.5%	49.7	49.7	0.0	0.0%
77.8%	49.5	49.4	-0.1	-0.2%
79.0%	49.3	49.3	0.0	0.0%
80.2%	49.3	49.3	0.0	0.0%
81.5%	49.3	49.2	-0.1	-0.1%
82.7%	49.1	49.2	0.1	0.2%
84.0%	49.1	49.1	0.0	0.1%
85.2%	49.1	49.1	0.0	0.0%
86.4%	49.1	49.0	0.0	-0.1%
87.7%	49.0	49.0	0.0	-0.1%
88.9%	48.7	48.8	0.2	0.4%
90.1%	48.6	48.6	0.0	0.0%
91.4%	48.5	48.6	0.0	0.1%
92.6%	48.5	48.5	0.0	0.1%
93.8%	48.4	48.4	0.0	0.1%
95.1%	48.4	48.4	0.0	0.0%
96.3%	48.2	48.2	0.0	0.0%
97.5%	48.2	48.1	0.0	-0.1%
98.8%	48.0	48.0	0.0	0.0%
100.0%	48.0	48.0	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.5	57.3	-0.2	-0.3%
1.2%	57.1	57.0	-0.2	-0.3%
2.5%	56.9	56.6	-0.3	-0.5%
3.7%	56.5	56.5	-0.1	-0.1%
4.9%	56.4	56.4	0.1	0.1%
6.2%	56.3	56.4	0.0	0.1%
7.4%	56.3	56.1	-0.2	-0.3%
8.6%	56.3	56.1	-0.2	-0.3%
9.9%	56.0	56.1	0.1	0.1%
11.1%	56.0	55.9	0.0	0.0%
12.3%	55.9	55.9	0.0	0.0%
13.6%	55.9	55.8	0.0	-0.1%
14.8%	55.9	55.8	0.0	-0.1%
16.0%	55.7	55.5	-0.3	-0.5%
17.3%	55.7	55.4	-0.3	-0.5%
18.5%	55.3	55.3	-0.1	-0.1%
19.8%	55.2	55.3	0.1	0.2%
21.0%	55.1	55.2	0.0	0.1%
22.2%	55.1	55.2	0.1	0.1%
23.5%	55.1	55.1	0.0	0.1%
24.7%	55.1	55.1	0.0	0.1%
25.9%	55.0	55.1	0.1	0.1%
27.2%	55.0	55.1	0.1	0.2%
28.4%	54.9	55.1	0.2	0.3%
29.6%	54.9	55.0	0.1	0.2%
30.9%	54.8	54.9	0.1	0.2%
32.1%	54.8	54.9	0.1	0.2%
33.3%	54.8	54.9	0.1	0.2%
34.6%	54.8	54.9	0.1	0.2%
35.8%	54.8	54.9	0.1	0.2%
37.0%	54.7	54.8	0.1	0.2%
38.3%	54.5	54.8	0.3	0.5%
39.5%	54.5	54.7	0.2	0.4%
40.7%	54.5	54.6	0.1	0.2%
42.0%	54.4	54.6	0.2	0.3%
43.2%	54.4	54.5	0.1	0.2%
44.4%	54.4	54.5	0.1	0.1%
45.7%	54.3	54.4	0.2	0.3%
46.9%	54.2	54.4	0.2	0.4%
48.1%	54.2	54.4	0.2	0.4%
49.4%	54.1	54.3	0.2	0.3%
50.6%	54.1	54.3	0.1	0.3%
51.9%	54.1	54.3	0.1	0.3%
53.1%	54.1	54.2	0.1	0.2%
54.3%	54.1	54.2	0.1	0.1%
55.6%	54.0	54.2	0.1	0.2%
56.8%	54.0	54.1	0.1	0.2%
58.0%	54.0	54.1	0.1	0.2%
59.3%	54.0	54.1	0.2	0.3%
60.5%	53.9	54.1	0.2	0.4%
61.7%	53.8	54.1	0.3	0.5%
63.0%	53.7	54.0	0.3	0.5%
64.2%	53.7	54.0	0.2	0.4%
65.4%	53.7	53.8	0.1	0.2%
66.7%	53.7	53.8	0.1	0.2%
67.9%	53.6	53.7	0.1	0.2%
69.1%	53.5	53.7	0.2	0.4%
70.4%	53.4	53.6	0.2	0.4%
71.6%	53.4	53.6	0.2	0.4%
72.8%	53.4	53.6	0.2	0.3%
74.1%	53.4	53.6	0.2	0.3%
75.3%	53.4	53.6	0.2	0.3%
76.5%	53.4	53.5	0.1	0.2%
77.8%	53.4	53.5	0.1	0.2%
79.0%	53.3	53.5	0.1	0.3%
80.2%	53.2	53.4	0.2	0.4%
81.5%	53.2	53.4	0.2	0.4%
82.7%	53.1	53.4	0.3	0.5%
84.0%	53.1	53.4	0.3	0.5%
85.2%	53.1	53.4	0.3	0.6%
86.4%	53.0	53.3	0.3	0.5%
87.7%	52.7	52.8	0.0	0.0%
88.9%	52.4	52.5	0.1	0.1%
90.1%	52.3	52.3	0.0	-0.1%
91.4%	52.1	52.1	0.0	0.0%
92.6%	52.0	52.1	0.1	0.1%
93.8%	52.0	52.1	0.1	0.2%
95.1%	51.6	51.8	0.2	0.4%
96.3%	51.3	51.3	0.0	0.0%
97.5%	50.9	50.7	-0.1	-0.3%
98.8%	50.7	50.6	-0.1	-0.1%
100.0%	50.7	50.6	-0.1	-0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.4	59.9	-0.5	-0.8%
1.2%	59.7	59.5	-0.3	-0.5%
2.5%	59.7	59.3	-0.4	-0.6%
3.7%	59.4	59.1	-0.3	-0.4%
4.9%	59.1	59.1	0.0	0.0%
6.2%	58.7	59.0	0.4	0.6%
7.4%	58.6	59.0	0.4	0.7%
8.6%	58.6	59.0	0.4	0.8%
9.9%	58.6	58.9	0.3	0.6%
11.1%	58.5	58.9	0.4	0.7%
12.3%	58.4	58.8	0.4	0.7%
13.6%	58.2	58.8	0.5	0.9%
14.8%	58.1	58.7	0.6	1.1%
16.0%	58.1	58.7	0.7	1.1%
17.3%	58.0	58.7	0.6	1.1%
18.5%	57.9	58.6	0.7	1.1%
19.8%	57.9	58.6	0.7	1.3%
21.0%	57.8	58.4	0.6	1.1%
22.2%	57.4	58.3	0.9	1.5%
23.5%	57.4	58.3	0.8	1.4%
24.7%	57.2	58.2	1.0	1.8%
25.9%	57.1	58.0	0.9	1.6%
27.2%	57.1	57.9	0.7	1.3%
28.4%	57.1	57.8	0.7	1.3%
29.6%	57.1	57.7	0.6	1.1%
30.9%	57.0	57.4	0.4	0.7%
32.1%	57.0	57.4	0.4	0.7%
33.3%	57.0	57.4	0.4	0.8%
34.6%	56.9	57.4	0.5	0.8%
35.8%	56.9	57.3	0.4	0.7%
37.0%	56.8	57.3	0.4	0.8%
38.3%	56.8	57.2	0.5	0.8%
39.5%	56.6	57.2	0.6	1.0%
40.7%	56.5	57.1	0.6	1.0%
42.0%	56.5	57.1	0.6	1.0%
43.2%	56.5	57.1	0.6	1.0%
44.4%	56.5	57.1	0.6	1.1%
45.7%	56.4	57.0	0.6	1.1%
46.9%	56.4	57.0	0.6	1.1%
48.1%	56.3	56.9	0.5	1.0%
49.4%	56.3	56.9	0.5	1.0%
50.6%	56.2	56.8	0.6	1.1%
51.9%	56.0	56.8	0.8	1.4%
53.1%	56.0	56.8	0.8	1.4%
54.3%	56.0	56.8	0.7	1.3%
55.6%	56.0	56.8	0.8	1.4%
56.8%	56.0	56.7	0.7	1.2%
58.0%	55.9	56.6	0.7	1.2%
59.3%	55.9	56.6	0.7	1.3%
60.5%	55.9	56.5	0.6	1.0%
61.7%	55.9	56.4	0.6	1.0%
63.0%	55.8	56.4	0.5	1.0%
64.2%	55.8	56.2	0.4	0.7%
65.4%	55.8	56.1	0.4	0.7%
66.7%	55.8	56.1	0.3	0.5%
67.9%	55.7	56.1	0.3	0.6%
69.1%	55.7	56.1	0.3	0.6%
70.4%	55.6	56.0	0.4	0.8%
71.6%	55.6	56.0	0.4	0.7%
72.8%	55.6	56.0	0.4	0.7%
74.1%	55.4	56.0	0.5	0.9%
75.3%	55.3	55.9	0.6	1.1%
76.5%	55.3	55.9	0.6	1.1%
77.8%	55.3	55.9	0.6	1.0%
79.0%	55.3	55.8	0.5	1.0%
80.2%	55.2	55.8	0.6	1.0%
81.5%	55.2	55.7	0.5	0.9%
82.7%	55.2	55.7	0.5	0.8%
84.0%	55.2	55.5	0.3	0.5%
85.2%	55.2	55.5	0.3	0.5%
86.4%	55.2	55.5	0.3	0.5%
87.7%	55.2	55.3	0.1	0.2%
88.9%	55.0	55.2	0.2	0.3%
90.1%	55.0	55.2	0.2	0.3%
91.4%	55.0	55.1	0.2	0.3%
92.6%	54.7	55.0	0.3	0.5%
93.8%	54.7	55.0	0.3	0.5%
95.1%	54.7	55.0	0.3	0.5%
96.3%	54.3	54.6	0.4	0.6%
97.5%	54.3	54.5	0.2	0.4%
98.8%	54.2	54.3	0.1	0.2%
100.0%	54.2	54.3	0.1	0.2%

Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.5	60.4	-0.1	-0.2%
1.2%	60.5	59.7	-0.8	-1.3%
2.5%	59.7	59.5	-0.2	-0.3%
3.7%	59.7	59.1	-0.6	-1.0%
4.9%	59.6	58.9	-0.6	-1.1%
6.2%	59.6	58.9	-0.6	-1.1%
7.4%	59.4	58.9	-0.5	-0.9%
8.6%	59.1	58.8	-0.4	-0.7%
9.9%	59.1	58.7	-0.4	-0.6%
11.1%	59.1	58.7	-0.4	-0.7%
12.3%	59.0	58.5	-0.6	-0.9%
13.6%	59.0	58.4	-0.5	-0.9%
14.8%	58.8	58.4	-0.4	-0.7%
16.0%	58.7	58.4	-0.2	-0.4%
17.3%	58.2	58.4	0.1	0.2%
18.5%	58.2	58.3	0.1	0.2%
19.8%	58.2	58.3	0.1	0.1%
21.0%	58.1	58.2	0.2	0.3%
22.2%	58.0	58.1	0.1	0.3%
23.5%	57.9	58.1	0.2	0.3%
24.7%	57.8	58.0	0.2	0.4%
25.9%	57.6	58.0	0.4	0.6%
27.2%	57.6	57.9	0.3	0.5%
28.4%	57.5	57.9	0.4	0.6%
29.6%	57.5	57.9	0.4	0.7%
30.9%	57.2	57.9	0.6	1.1%
32.1%	57.2	57.8	0.5	0.9%
33.3%	57.2	57.7	0.5	0.9%
34.6%	57.2	57.7	0.5	0.9%
35.8%	57.1	57.6	0.5	1.0%
37.0%	57.1	57.6	0.5	0.9%
38.3%	57.0	57.5	0.5	1.0%
39.5%	56.9	57.5	0.6	1.0%
40.7%	56.9	57.5	0.6	1.0%
42.0%	56.8	57.4	0.6	1.0%
43.2%	56.7	57.2	0.5	0.8%
44.4%	56.7	57.2	0.5	0.9%
45.7%	56.6	57.1	0.5	0.8%
46.9%	56.6	57.1	0.5	0.9%
48.1%	56.6	57.0	0.4	0.8%
49.4%	56.4	57.0	0.5	0.9%
50.6%	56.2	56.9	0.7	1.3%
51.9%	56.2	56.9	0.7	1.2%
53.1%	56.2	56.8	0.7	1.2%
54.3%	56.2	56.8	0.6	1.0%
55.6%	56.1	56.7	0.6	1.0%
56.8%	56.1	56.7	0.6	1.1%
58.0%	56.0	56.7	0.7	1.2%
59.3%	56.0	56.7	0.7	1.2%
60.5%	56.0	56.7	0.7	1.2%
61.7%	56.0	56.6	0.7	1.2%
63.0%	56.0	56.6	0.7	1.2%
64.2%	56.0	56.6	0.6	1.1%
65.4%	55.9	56.6	0.6	1.2%
66.7%	55.9	56.6	0.6	1.2%
67.9%	55.9	56.6	0.7	1.2%
69.1%	55.9	56.5	0.6	1.1%
70.4%	55.8	56.3	0.5	0.8%
71.6%	55.8	56.3	0.4	0.8%
72.8%	55.7	56.3	0.6	1.1%
74.1%	55.7	56.3	0.6	1.1%
75.3%	55.5	56.2	0.7	1.3%
76.5%	55.4	56.2	0.8	1.4%
77.8%	55.4	56.2	0.8	1.4%
79.0%	55.3	56.1	0.9	1.6%
80.2%	55.2	56.1	0.9	1.7%
81.5%	55.1	56.1	1.0	1.8%
82.7%	55.0	55.9	0.9	1.6%
84.0%	55.0	55.9	0.9	1.7%
85.2%	55.0	55.9	0.9	1.6%
86.4%	54.8	55.8	0.9	1.7%
87.7%	54.8	55.6	0.8	1.5%
88.9%	54.7	55.5	0.7	1.4%
90.1%	54.6	55.3	0.7	1.3%
91.4%	54.6	55.3	0.7	1.3%
92.6%	54.5	55.2	0.7	1.3%
93.8%	54.4	55.0	0.6	1.1%
95.1%	54.3	54.7	0.4	0.7%
96.3%	54.3	54.7	0.4	0.8%
97.5%	54.2	54.7	0.5	0.8%
98.8%	54.2	54.6	0.4	0.8%
100.0%	54.2	54.6	0.4	0.8%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	68.9	69.0	0.2	0.3%
1.2%	63.4	60.9	-2.5	-3.9%
2.5%	62.9	59.8	-3.1	-4.9%
3.7%	61.3	59.6	-1.7	-2.7%
4.9%	60.8	59.6	-1.2	-1.9%
6.2%	60.4	59.3	-1.1	-1.8%
7.4%	60.3	59.3	-1.0	-1.6%
8.6%	60.2	59.3	-0.9	-1.4%
9.9%	60.2	59.3	-0.9	-1.5%
11.1%	60.1	59.2	-0.9	-1.5%
12.3%	59.7	59.1	-0.7	-1.1%
13.6%	59.7	59.0	-0.7	-1.2%
14.8%	59.6	58.9	-0.7	-1.2%
16.0%	59.5	58.7	-0.8	-1.3%
17.3%	59.5	58.7	-0.8	-1.3%
18.5%	59.2	58.7	-0.5	-0.9%
19.8%	59.2	58.7	-0.5	-0.9%
21.0%	59.2	58.6	-0.5	-0.9%
22.2%	59.1	58.6	-0.5	-0.8%
23.5%	59.1	58.5	-0.5	-0.9%
24.7%	59.1	58.5	-0.5	-0.9%
25.9%	59.0	58.5	-0.5	-0.8%
27.2%	58.9	58.5	-0.5	-0.8%
28.4%	58.8	58.4	-0.4	-0.7%
29.6%	58.8	58.4	-0.4	-0.7%
30.9%	58.6	58.4	-0.2	-0.4%
32.1%	58.5	58.2	-0.3	-0.5%
33.3%	58.4	58.2	-0.2	-0.4%
34.6%	58.2	58.1	0.0	-0.1%
35.8%	58.0	58.0	0.0	0.0%
37.0%	58.0	58.0	0.0	0.1%
38.3%	58.0	58.0	0.0	0.1%
39.5%	57.7	58.0	0.2	0.4%
40.7%	57.7	57.8	0.1	0.1%
42.0%	57.5	57.8	0.2	0.4%
43.2%	57.5	57.7	0.2	0.4%
44.4%	57.5	57.7	0.2	0.3%
45.7%	57.5	57.7	0.2	0.4%
46.9%	57.4	57.6	0.2	0.3%
48.1%	57.4	57.5	0.1	0.2%
49.4%	57.4	57.5	0.1	0.3%
50.6%	57.3	57.5	0.2	0.4%
51.9%	57.3	57.5	0.2	0.4%
53.1%	57.3	57.4	0.1	0.2%
54.3%	57.2	57.4	0.1	0.2%
55.6%	57.2	57.3	0.2	0.3%
56.8%	57.1	57.3	0.2	0.3%
58.0%	57.1	57.3	0.2	0.3%
59.3%	57.1	57.3	0.1	0.2%
60.5%	57.1	57.2	0.1	0.3%
61.7%	57.0	57.2	0.2	0.3%
63.0%	56.9	57.2	0.3	0.5%
64.2%	56.8	57.1	0.2	0.4%
65.4%	56.7	57.0	0.3	0.6%
66.7%	56.7	56.9	0.3	0.5%
67.9%	56.6	56.9	0.3	0.5%
69.1%	56.6	56.9	0.3	0.5%
70.4%	56.5	56.8	0.3	0.5%
71.6%	56.4	56.8	0.4	0.6%
72.8%	56.4	56.7	0.3	0.6%
74.1%	56.4	56.7	0.3	0.5%
75.3%	56.3	56.7	0.4	0.7%
76.5%	56.3	56.4	0.1	0.3%
77.8%	56.3	56.2	-0.1	-0.1%
79.0%	56.2	56.2	-0.1	-0.1%
80.2%	56.2	56.1	-0.1	-0.2%
81.5%	56.2	56.1	-0.1	-0.2%
82.7%	56.1	55.9	-0.2	-0.3%
84.0%	56.1	55.9	-0.2	-0.3%
85.2%	56.0	55.9	-0.1	-0.1%
86.4%	55.8	55.9	0.1	0.1%
87.7%	55.7	55.8	0.1	0.1%
88.9%	55.6	55.7	0.1	0.2%
90.1%	55.6	55.7	0.1	0.1%
91.4%	55.6	55.6	0.0	0.0%
92.6%	55.5	55.6	0.1	0.1%
93.8%	55.3	55.5	0.2	0.3%
95.1%	55.2	55.4	0.2	0.3%
96.3%	55.1	55.4	0.3	0.6%
97.5%	55.0	55.4	0.4	0.7%
98.8%	54.9	55.2	0.3	0.5%
100.0%	54.9	55.2	0.3	0.5%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.5	73.7	0.1	0.2%
1.2%	68.3	66.9	-1.5	-2.1%
2.5%	68.0	65.3	-2.7	-3.9%
3.7%	66.8	65.0	-1.8	-2.7%
4.9%	63.1	61.6	-1.5	-2.3%
6.2%	63.0	60.7	-2.3	-3.7%
7.4%	61.7	60.5	-1.2	-1.9%
8.6%	61.7	60.3	-1.4	-2.3%
9.9%	61.0	60.0	-1.0	-1.6%
11.1%	60.9	60.0	-0.9	-1.5%
12.3%	60.8	59.9	-1.0	-1.6%
13.6%	60.8	59.7	-1.1	-1.8%
14.8%	60.8	59.7	-1.1	-1.8%
16.0%	60.7	59.7	-1.1	-1.8%
17.3%	60.7	59.7	-1.1	-1.8%
18.5%	60.5	59.6	-0.9	-1.5%
19.8%	60.5	59.6	-0.9	-1.4%
21.0%	60.3	59.5	-0.8	-1.3%
22.2%	60.2	59.5	-0.7	-1.1%
23.5%	60.2	59.4	-0.8	-1.3%
24.7%	60.0	59.4	-0.6	-1.0%
25.9%	60.0	59.4	-0.6	-1.0%
27.2%	60.0	59.3	-0.6	-1.1%
28.4%	60.0	59.3	-0.7	-1.1%
29.6%	59.9	59.2	-0.7	-1.2%
30.9%	59.7	59.2	-0.5	-0.8%
32.1%	59.7	59.2	-0.5	-0.8%
33.3%	59.6	59.2	-0.5	-0.8%
34.6%	59.6	59.2	-0.4	-0.7%
35.8%	59.5	59.2	-0.4	-0.6%
37.0%	59.4	59.1	-0.4	-0.6%
38.3%	59.4	59.0	-0.4	-0.7%
39.5%	59.4	59.0	-0.4	-0.7%
40.7%	59.4	59.0	-0.4	-0.7%
42.0%	59.3	59.0	-0.4	-0.7%
43.2%	59.3	59.0	-0.4	-0.6%
44.4%	59.3	59.0	-0.4	-0.6%
45.7%	59.3	59.0	-0.3	-0.5%
46.9%	59.2	58.9	-0.3	-0.5%
48.1%	59.2	58.9	-0.3	-0.5%
49.4%	59.2	58.9	-0.3	-0.5%
50.6%	59.2	58.8	-0.4	-0.6%
51.9%	59.2	58.8	-0.4	-0.6%
53.1%	59.1	58.8	-0.4	-0.6%
54.3%	59.1	58.8	-0.3	-0.6%
55.6%	59.1	58.7	-0.4	-0.6%
56.8%	59.1	58.7	-0.4	-0.6%
58.0%	59.0	58.7	-0.4	-0.6%
59.3%	59.0	58.6	-0.3	-0.6%
60.5%	58.9	58.6	-0.3	-0.5%
61.7%	58.8	58.6	-0.3	-0.5%
63.0%	58.8	58.5	-0.3	-0.5%
64.2%	58.8	58.5	-0.3	-0.4%
65.4%	58.6	58.4	-0.2	-0.4%
66.7%	58.6	58.4	-0.2	-0.4%
67.9%	58.6	58.2	-0.3	-0.6%
69.1%	58.5	58.2	-0.4	-0.7%
70.4%	58.4	58.1	-0.3	-0.5%
71.6%	58.3	58.1	-0.3	-0.5%
72.8%	58.3	58.1	-0.3	-0.5%
74.1%	58.3	58.0	-0.2	-0.4%
75.3%	58.3	57.9	-0.3	-0.6%
76.5%	58.3	57.9	-0.3	-0.6%
77.8%	58.3	57.9	-0.3	-0.6%
79.0%	58.2	57.9	-0.3	-0.5%
80.2%	58.1	57.9	-0.2	-0.4%
81.5%	58.1	57.9	-0.2	-0.4%
82.7%	58.0	57.8	-0.2	-0.4%
84.0%	57.9	57.8	-0.1	-0.2%
85.2%	57.9	57.8	-0.1	-0.2%
86.4%	57.9	57.8	-0.1	-0.2%
87.7%	57.8	57.8	-0.1	-0.1%
88.9%	57.8	57.7	-0.1	-0.2%
90.1%	57.7	57.6	0.0	-0.1%
91.4%	57.6	57.1	-0.5	-0.9%
92.6%	57.4	56.8	-0.6	-1.0%
93.8%	57.3	56.8	-0.5	-0.9%
95.1%	57.2	56.8	-0.4	-0.7%
96.3%	56.9	56.2	-0.6	-1.1%
97.5%	56.6	56.2	-0.4	-0.8%
98.8%	56.2	56.0	-0.2	-0.4%
100.0%	56.2	56.0	-0.2	-0.4%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.4	70.5	-2.0	-2.7%
1.2%	71.1	70.2	-0.9	-1.2%
2.5%	70.0	68.1	-1.8	-2.6%
3.7%	69.0	67.9	-1.1	-1.6%
4.9%	68.0	65.1	-2.9	-4.2%
6.2%	67.5	64.3	-3.2	-4.8%
7.4%	66.8	64.1	-2.7	-4.0%
8.6%	66.0	62.9	-3.0	-4.6%
9.9%	65.4	62.6	-2.9	-4.4%
11.1%	64.3	62.5	-1.8	-2.7%
12.3%	64.2	62.4	-1.8	-2.8%
13.6%	63.7	62.2	-1.5	-2.3%
14.8%	63.5	61.4	-2.1	-3.3%
16.0%	63.1	61.1	-2.0	-3.2%
17.3%	63.0	61.0	-2.0	-3.2%
18.5%	63.0	61.0	-2.0	-3.1%
19.8%	62.9	60.9	-2.1	-3.3%
21.0%	62.9	60.8	-2.0	-3.2%
22.2%	62.6	60.2	-2.4	-3.9%
23.5%	62.4	60.2	-2.2	-3.6%
24.7%	62.1	59.7	-2.4	-3.9%
25.9%	61.7	59.6	-2.0	-3.3%
27.2%	61.6	59.6	-2.0	-3.2%
28.4%	61.5	59.6	-2.0	-3.2%
29.6%	61.5	59.5	-1.9	-3.1%
30.9%	61.2	59.5	-1.7	-2.8%
32.1%	61.2	59.5	-1.6	-2.7%
33.3%	60.7	59.5	-1.3	-2.1%
34.6%	60.7	59.4	-1.3	-2.2%
35.8%	60.6	59.2	-1.3	-2.2%
37.0%	60.3	59.2	-1.1	-1.9%
38.3%	60.3	59.1	-1.2	-1.9%
39.5%	60.2	58.9	-1.3	-2.2%
40.7%	60.2	58.8	-1.4	-2.3%
42.0%	60.1	58.8	-1.3	-2.1%
43.2%	60.1	58.8	-1.3	-2.1%
44.4%	59.9	58.7	-1.2	-2.0%
45.7%	59.7	58.6	-1.1	-1.8%
46.9%	59.6	58.6	-1.0	-1.6%
48.1%	59.6	58.6	-1.0	-1.6%
49.4%	59.5	58.6	-1.0	-1.6%
50.6%	59.4	58.5	-0.8	-1.4%
51.9%	59.2	58.4	-0.8	-1.3%
53.1%	58.9	58.4	-0.5	-0.9%
54.3%	58.1	58.4	0.3	0.5%
55.6%	58.0	58.3	0.3	0.5%
56.8%	57.7	58.2	0.5	0.8%
58.0%	57.6	58.2	0.6	1.0%
59.3%	57.5	58.0	0.5	0.8%
60.5%	57.5	58.0	0.5	0.8%
61.7%	57.4	58.0	0.5	0.9%
63.0%	57.3	57.9	0.6	1.1%
64.2%	57.1	57.8	0.8	1.3%
65.4%	56.6	57.7	1.1	2.0%
66.7%	56.5	57.4	0.9	1.6%
67.9%	56.4	57.4	1.0	1.7%
69.1%	56.4	56.7	0.3	0.6%
70.4%	56.4	56.7	0.3	0.6%
71.6%	56.3	56.6	0.4	0.6%
72.8%	56.2	56.6	0.4	0.7%
74.1%	56.1	56.6	0.5	0.8%
75.3%	56.1	56.4	0.3	0.5%
76.5%	56.1	56.2	0.2	0.3%
77.8%	56.0	56.2	0.3	0.5%
79.0%	55.8	56.1	0.3	0.5%
80.2%	55.7	56.1	0.4	0.7%
81.5%	55.5	55.9	0.4	0.7%
82.7%	55.5	55.8	0.2	0.4%
84.0%	55.2	55.1	-0.1	-0.2%
85.2%	55.1	55.0	-0.1	-0.3%
86.4%	54.9	54.8	-0.1	-0.2%
87.7%	54.9	54.6	-0.3	-0.5%
88.9%	54.8	54.5	-0.3	-0.6%
90.1%	54.6	54.4	-0.2	-0.4%
91.4%	54.6	54.4	-0.2	-0.4%
92.6%	54.5	54.4	-0.2	-0.3%
93.8%	54.4	54.3	-0.1	-0.1%
95.1%	54.4	54.1	-0.3	-0.6%
96.3%	54.3	54.1	-0.2	-0.4%
97.5%	54.0	54.0	0.1	0.2%
98.8%	53.9	53.5	-0.3	-0.6%
100.0%	53.9	53.5	-0.3	-0.6%

Table SQ6-1b

Sacramento River at Bend Bridge, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.7	67.6	-0.1	-0.2%
1.2%	66.1	64.2	-1.9	-2.8%
2.5%	65.1	63.7	-1.5	-2.2%
3.7%	63.8	62.6	-1.3	-2.0%
4.9%	63.0	60.7	-2.3	-3.6%
6.2%	61.9	60.6	-1.3	-2.0%
7.4%	61.2	60.1	-1.1	-1.8%
8.6%	60.9	59.9	-1.0	-1.6%
9.9%	60.8	59.6	-1.2	-2.0%
11.1%	60.8	59.6	-1.2	-1.9%
12.3%	60.6	59.5	-1.0	-1.7%
13.6%	60.4	59.5	-0.9	-1.4%
14.8%	60.0	59.5	-0.5	-0.8%
16.0%	59.9	59.4	-0.4	-0.7%
17.3%	59.8	59.3	-0.6	-0.9%
18.5%	59.8	59.2	-0.6	-1.0%
19.8%	59.8	59.2	-0.6	-1.0%
21.0%	59.6	59.1	-0.5	-0.8%
22.2%	59.6	59.1	-0.5	-0.8%
23.5%	59.6	58.9	-0.6	-1.1%
24.7%	59.4	58.9	-0.6	-0.9%
25.9%	59.3	58.7	-0.7	-1.1%
27.2%	59.0	58.7	-0.3	-0.6%
28.4%	59.0	58.7	-0.3	-0.5%
29.6%	58.9	58.6	-0.3	-0.5%
30.9%	58.9	58.6	-0.3	-0.5%
32.1%	58.8	58.5	-0.2	-0.4%
33.3%	58.8	58.4	-0.4	-0.6%
34.6%	58.7	58.4	-0.4	-0.6%
35.8%	58.7	58.3	-0.4	-0.6%
37.0%	58.6	58.3	-0.2	-0.4%
38.3%	58.5	58.3	-0.2	-0.3%
39.5%	58.5	58.2	-0.3	-0.5%
40.7%	58.4	58.2	-0.2	-0.4%
42.0%	58.4	58.1	-0.3	-0.4%
43.2%	58.3	58.1	-0.2	-0.4%
44.4%	58.3	58.1	-0.2	-0.4%
45.7%	58.2	58.0	-0.2	-0.4%
46.9%	58.2	58.0	-0.2	-0.4%
48.1%	58.2	58.0	-0.2	-0.4%
49.4%	58.1	57.9	-0.2	-0.3%
50.6%	58.1	57.8	-0.2	-0.4%
51.9%	58.1	57.8	-0.3	-0.5%
53.1%	57.9	57.8	-0.2	-0.3%
54.3%	57.9	57.7	-0.3	-0.4%
55.6%	57.9	57.7	-0.3	-0.4%
56.8%	57.8	57.6	-0.2	-0.3%
58.0%	57.7	57.6	-0.1	-0.1%
59.3%	57.6	57.6	0.0	0.0%
60.5%	57.6	57.6	0.0	0.0%
61.7%	57.6	57.6	0.0	0.1%
63.0%	57.5	57.6	0.0	0.1%
64.2%	57.3	57.6	0.2	0.4%
65.4%	57.3	57.5	0.2	0.4%
66.7%	57.3	57.4	0.2	0.3%
67.9%	57.2	57.4	0.2	0.3%
69.1%	57.2	57.2	0.0	0.0%
70.4%	57.2	57.2	0.0	0.0%
71.6%	57.0	57.0	-0.1	-0.1%
72.8%	57.0	56.9	-0.1	-0.2%
74.1%	56.9	56.9	0.0	0.0%
75.3%	56.8	56.8	0.0	0.0%
76.5%	56.7	56.8	0.0	0.0%
77.8%	56.7	56.7	0.0	0.0%
79.0%	56.6	56.6	0.0	0.0%
80.2%	56.4	56.6	0.2	0.3%
81.5%	56.4	56.6	0.2	0.3%
82.7%	56.4	56.5	0.1	0.2%
84.0%	56.3	56.5	0.1	0.2%
85.2%	56.3	56.4	0.1	0.2%
86.4%	56.3	56.4	0.1	0.2%
87.7%	56.2	56.3	0.1	0.1%
88.9%	56.0	56.1	0.1	0.2%
90.1%	55.8	56.1	0.2	0.4%
91.4%	55.8	56.1	0.3	0.5%
92.6%	55.8	56.1	0.3	0.5%
93.8%	55.8	56.1	0.3	0.5%
95.1%	55.8	56.0	0.2	0.3%
96.3%	55.8	55.8	0.1	0.1%
97.5%	55.8	55.7	-0.1	-0.1%
98.8%	55.7	55.7	0.0	0.0%
100.0%	55.3	55.4	0.1	0.3%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.1	70.2	0.1	0.1%
1.2%	67.9	65.7	-2.2	-3.2%
2.5%	67.4	65.5	-2.0	-2.9%
3.7%	65.5	64.1	-1.4	-2.1%
4.9%	64.1	61.8	-2.3	-3.6%
6.2%	63.3	61.2	-2.1	-3.4%
7.4%	62.5	60.7	-1.8	-2.9%
8.6%	62.0	60.5	-1.5	-2.5%
9.9%	61.7	60.4	-1.3	-2.1%
11.1%	61.7	60.4	-1.3	-2.2%
12.3%	61.4	60.3	-1.1	-1.8%
13.6%	61.0	59.9	-1.0	-1.7%
14.8%	60.9	59.9	-1.0	-1.6%
16.0%	60.8	59.8	-1.0	-1.7%
17.3%	60.5	59.8	-0.7	-1.2%
18.5%	60.5	59.8	-0.7	-1.1%
19.8%	60.4	59.5	-1.0	-1.6%
21.0%	60.4	59.4	-1.0	-1.6%
22.2%	60.3	59.4	-0.9	-1.5%
23.5%	60.2	59.3	-0.9	-1.5%
24.7%	60.1	59.3	-0.8	-1.4%
25.9%	59.8	59.0	-0.9	-1.4%
27.2%	59.8	58.9	-0.9	-1.4%
28.4%	59.7	58.9	-0.8	-1.3%
29.6%	59.6	58.9	-0.8	-1.3%
30.9%	59.6	58.7	-0.9	-1.5%
32.1%	59.5	58.7	-0.8	-1.3%
33.3%	59.5	58.7	-0.8	-1.3%
34.6%	59.4	58.6	-0.7	-1.2%
35.8%	59.1	58.6	-0.4	-0.8%
37.0%	58.9	58.6	-0.4	-0.6%
38.3%	58.9	58.5	-0.4	-0.7%
39.5%	58.9	58.5	-0.3	-0.6%
40.7%	58.8	58.5	-0.3	-0.6%
42.0%	58.8	58.5	-0.3	-0.5%
43.2%	58.8	58.4	-0.4	-0.6%
44.4%	58.7	58.4	-0.3	-0.5%
45.7%	58.7	58.3	-0.4	-0.6%
46.9%	58.7	58.2	-0.5	-0.8%
48.1%	58.6	58.1	-0.4	-0.7%
49.4%	58.5	58.1	-0.4	-0.7%
50.6%	58.4	58.0	-0.4	-0.7%
51.9%	58.4	58.0	-0.4	-0.6%
53.1%	58.4	58.0	-0.4	-0.6%
54.3%	58.2	57.9	-0.2	-0.4%
55.6%	58.1	57.9	-0.2	-0.3%
56.8%	58.1	57.9	-0.2	-0.3%
58.0%	58.0	57.8	-0.2	-0.3%
59.3%	58.0	57.8	-0.2	-0.3%
60.5%	57.9	57.8	-0.1	-0.2%
61.7%	57.9	57.8	-0.1	-0.2%
63.0%	57.8	57.8	-0.1	-0.1%
64.2%	57.8	57.7	-0.1	-0.2%
65.4%	57.8	57.7	-0.2	-0.3%
66.7%	57.8	57.7	-0.1	-0.2%
67.9%	57.7	57.6	-0.1	-0.1%
69.1%	57.7	57.6	-0.1	-0.2%
70.4%	57.7	57.6	-0.2	-0.3%
71.6%	57.6	57.5	-0.1	-0.2%
72.8%	57.5	57.5	0.0	-0.1%
74.1%	57.5	57.3	-0.3	-0.5%
75.3%	57.2	57.1	-0.2	-0.3%
76.5%	57.2	56.9	-0.3	-0.5%
77.8%	57.2	56.9	-0.3	-0.4%
79.0%	57.1	56.9	-0.3	-0.5%
80.2%	57.0	56.8	-0.1	-0.3%
81.5%	56.9	56.7	-0.2	-0.4%
82.7%	56.4	56.5	0.1	0.1%
84.0%	56.4	56.4	0.1	0.1%
85.2%	56.3	56.4	0.1	0.2%
86.4%	56.3	56.3	0.0	0.1%
87.7%	56.3	56.2	-0.1	-0.1%
88.9%	56.3	56.2	-0.1	-0.1%
90.1%	56.2	56.1	-0.1	-0.2%
91.4%	56.2	56.0	-0.1	-0.2%
92.6%	56.2	56.0	-0.1	-0.2%
93.8%	56.1	56.0	-0.1	-0.1%
95.1%	56.1	56.0	-0.1	-0.2%
96.3%	55.8	55.9	0.1	0.2%
97.5%	55.8	55.9	0.2	0.3%
98.8%	55.7	55.7	-0.1	-0.1%
100.0%	55.6	55.5	-0.1	-0.1%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.8	70.8	0.0	0.0%
1.2%	70.2	68.7	-1.5	-2.2%
2.5%	69.7	67.7	-1.9	-2.8%
3.7%	68.4	66.6	-1.8	-2.7%
4.9%	66.1	63.4	-2.7	-4.1%
6.2%	64.9	62.0	-2.9	-4.5%
7.4%	63.8	61.7	-2.1	-3.3%
8.6%	63.6	61.4	-2.2	-3.4%
9.9%	62.5	61.3	-1.2	-1.9%
11.1%	62.4	61.3	-1.2	-1.9%
12.3%	62.1	61.2	-0.9	-1.4%
13.6%	61.9	61.0	-1.0	-1.6%
14.8%	61.9	60.7	-1.2	-2.0%
16.0%	61.9	60.3	-1.5	-2.5%
17.3%	61.5	60.1	-1.4	-2.3%
18.5%	61.4	60.0	-1.4	-2.2%
19.8%	61.3	60.0	-1.3	-2.1%
21.0%	60.8	59.9	-0.9	-1.5%
22.2%	60.8	59.6	-1.2	-1.9%
23.5%	60.8	59.6	-1.2	-2.0%
24.7%	60.8	59.5	-1.2	-2.0%
25.9%	60.7	59.5	-1.3	-2.1%
27.2%	60.7	59.2	-1.4	-2.4%
28.4%	60.5	59.2	-1.3	-2.2%
29.6%	60.3	59.2	-1.1	-1.8%
30.9%	60.3	59.1	-1.2	-1.9%
32.1%	60.2	59.1	-1.1	-1.8%
33.3%	60.2	59.1	-1.1	-1.8%
34.6%	60.0	59.1	-0.9	-1.6%
35.8%	59.9	59.0	-0.9	-1.4%
37.0%	59.9	59.0	-0.8	-1.4%
38.3%	59.7	59.0	-0.7	-1.2%
39.5%	59.7	59.0	-0.7	-1.2%
40.7%	59.5	58.9	-0.6	-1.0%
42.0%	59.5	58.8	-0.6	-1.1%
43.2%	59.3	58.8	-0.4	-0.8%
44.4%	59.2	58.8	-0.4	-0.7%
45.7%	59.1	58.7	-0.4	-0.7%
46.9%	59.0	58.7	-0.3	-0.5%
48.1%	59.0	58.7	-0.3	-0.5%
49.4%	58.9	58.6	-0.3	-0.5%
50.6%	58.9	58.6	-0.3	-0.6%
51.9%	58.8	58.5	-0.3	-0.4%
53.1%	58.7	58.4	-0.3	-0.5%
54.3%	58.7	58.4	-0.3	-0.4%
55.6%	58.6	58.2	-0.4	-0.7%
56.8%	58.6	58.2	-0.3	-0.6%
58.0%	58.5	58.2	-0.3	-0.5%
59.3%	58.4	58.2	-0.2	-0.4%
60.5%	58.4	58.2	-0.2	-0.4%
61.7%	58.3	58.1	-0.1	-0.2%
63.0%	58.3	58.1	-0.2	-0.3%
64.2%	58.2	58.0	-0.2	-0.3%
65.4%	58.2	57.9	-0.3	-0.5%
66.7%	58.1	57.9	-0.3	-0.5%
67.9%	58.0	57.8	-0.2	-0.4%
69.1%	58.0	57.7	-0.3	-0.5%
70.4%	58.0	57.6	-0.3	-0.6%
71.6%	57.8	57.6	-0.3	-0.5%
72.8%	57.8	57.5	-0.3	-0.6%
74.1%	57.8	57.5	-0.3	-0.6%
75.3%	57.6	57.3	-0.3	-0.5%
76.5%	57.4	57.2	-0.2	-0.3%
77.8%	57.1	57.2	0.0	0.0%
79.0%	57.1	57.0	-0.1	-0.2%
80.2%	57.0	56.8	-0.2	-0.4%
81.5%	57.0	56.8	-0.2	-0.4%
82.7%	57.0	56.8	-0.2	-0.3%
84.0%	56.9	56.7	-0.1	-0.2%
85.2%	56.6	56.7	0.0	0.1%
86.4%	56.6	56.5	-0.1	-0.1%
87.7%	56.6	56.5	-0.1	-0.2%
88.9%	56.5	56.2	-0.3	-0.5%
90.1%	56.3	56.2	-0.1	-0.2%
91.4%	56.3	56.2	-0.1	-0.2%
92.6%	56.3	56.1	-0.2	-0.3%
93.8%	56.2	56.0	-0.2	-0.4%
95.1%	56.2	55.9	-0.3	-0.5%
96.3%	56.0	55.8	-0.2	-0.3%
97.5%	56.0	55.7	-0.3	-0.5%
98.8%	55.8	55.6	-0.2	-0.3%
100.0%	55.6	54.8	-0.7	-1.3%

Figure SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

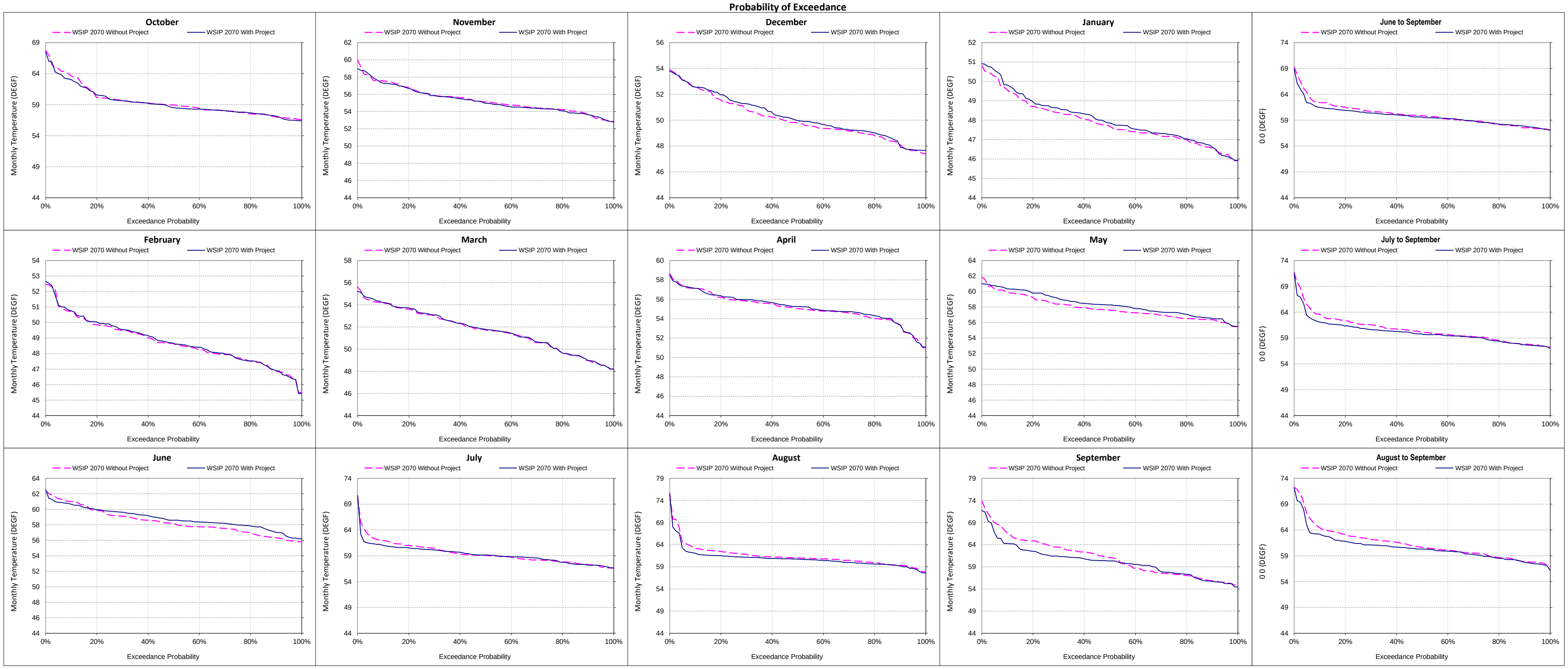


Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.7	67.6	-0.2	-0.2%
1.2%	67.0	66.0	-1.0	-1.5%
2.5%	65.4	65.9	0.4	0.7%
3.7%	64.9	64.3	-0.7	-1.0%
4.9%	64.8	64.0	-0.8	-1.3%
6.2%	64.3	63.8	-0.5	-0.8%
7.4%	64.3	63.3	-1.1	-1.7%
8.6%	64.1	63.2	-0.9	-1.4%
9.9%	63.6	63.1	-0.6	-0.9%
11.1%	63.4	62.7	-0.7	-1.2%
12.3%	63.4	62.6	-0.9	-1.4%
13.6%	62.7	62.0	-0.7	-1.2%
14.8%	62.0	61.8	-0.1	-0.2%
16.0%	61.8	61.7	-0.1	-0.2%
17.3%	61.4	61.3	-0.2	-0.3%
18.5%	61.1	61.1	0.0	0.0%
19.8%	60.2	60.6	0.4	0.6%
21.0%	60.1	60.5	0.4	0.6%
22.2%	60.1	60.5	0.4	0.6%
23.5%	60.0	60.3	0.3	0.5%
24.7%	60.0	59.9	-0.1	-0.2%
25.9%	60.0	59.8	-0.2	-0.3%
27.2%	59.8	59.8	-0.1	-0.1%
28.4%	59.8	59.7	-0.1	-0.1%
29.6%	59.7	59.7	0.0	-0.1%
30.9%	59.6	59.6	0.0	0.0%
32.1%	59.5	59.6	0.0	0.1%
33.3%	59.5	59.4	-0.1	-0.1%
34.6%	59.4	59.4	0.0	-0.1%
35.8%	59.4	59.4	0.0	0.0%
37.0%	59.3	59.4	0.0	0.0%
38.3%	59.3	59.3	0.0	0.0%
39.5%	59.3	59.3	0.0	0.0%
40.7%	59.2	59.1	-0.1	-0.2%
42.0%	59.1	59.1	0.0	0.0%
43.2%	59.1	59.1	0.0	0.0%
44.4%	59.1	59.0	-0.1	-0.1%
45.7%	59.1	59.0	-0.1	-0.1%
46.9%	59.0	58.9	0.0	-0.1%
48.1%	59.0	58.7	-0.3	-0.4%
49.4%	59.0	58.5	-0.4	-0.7%
50.6%	58.9	58.5	-0.4	-0.8%
51.9%	58.8	58.5	-0.3	-0.6%
53.1%	58.8	58.4	-0.4	-0.6%
54.3%	58.7	58.4	-0.4	-0.6%
55.6%	58.7	58.3	-0.4	-0.6%
56.8%	58.6	58.3	-0.3	-0.6%
58.0%	58.6	58.3	-0.3	-0.5%
59.3%	58.5	58.3	-0.2	-0.4%
60.5%	58.3	58.3	0.0	-0.1%
61.7%	58.2	58.3	0.1	0.2%
63.0%	58.2	58.2	0.0	0.1%
64.2%	58.1	58.2	0.1	0.1%
65.4%	58.1	58.1	0.0	0.0%
66.7%	58.1	58.1	0.0	0.0%
67.9%	58.1	58.1	0.0	0.0%
69.1%	58.0	58.1	0.1	0.1%
70.4%	58.0	58.0	0.0	0.0%
71.6%	58.0	58.0	0.0	0.1%
72.8%	57.9	57.9	-0.1	-0.1%
74.1%	57.9	57.9	-0.1	-0.1%
75.3%	57.8	57.8	0.1	0.1%
76.5%	57.8	57.8	0.0	0.1%
77.8%	57.7	57.8	0.1	0.1%
79.0%	57.6	57.7	0.1	0.2%
80.2%	57.5	57.7	0.1	0.3%
81.5%	57.5	57.6	0.1	0.2%
82.7%	57.5	57.5	0.1	0.1%
84.0%	57.5	57.5	0.0	0.1%
85.2%	57.4	57.5	0.0	0.1%
86.4%	57.4	57.4	0.0	0.0%
87.7%	57.2	57.3	0.1	0.2%
88.9%	57.1	57.2	0.1	0.2%
90.1%	57.0	57.2	0.2	0.3%
91.4%	56.9	57.0	0.0	0.0%
92.6%	56.9	56.7	-0.2	-0.3%
93.8%	56.8	56.6	-0.2	-0.4%
95.1%	56.8	56.5	-0.3	-0.5%
96.3%	56.8	56.5	-0.3	-0.5%
97.5%	56.7	56.5	-0.2	-0.4%
98.8%	56.6	56.4	-0.2	-0.3%
100.0%	56.6	56.4	0.0	-0.3%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.0	59.0	-1.0	-1.6%
1.2%	59.2	58.8	-0.5	-0.8%
2.5%	58.3	58.7	0.4	0.7%
3.7%	58.3	58.5	0.2	0.4%
4.9%	58.1	58.2	0.2	0.3%
6.2%	57.6	57.9	0.3	0.5%
7.4%	57.6	57.7	0.1	0.2%
8.6%	57.6	57.4	-0.1	-0.3%
9.9%	57.6	57.3	-0.3	-0.4%
11.1%	57.5	57.3	-0.2	-0.4%
12.3%	57.5	57.2	-0.3	-0.5%
13.6%	57.4	57.2	-0.2	-0.4%
14.8%	57.2	57.2	0.0	-0.1%
16.0%	57.2	57.0	-0.2	-0.4%
17.3%	56.9	56.9	0.0	0.0%
18.5%	56.9	56.8	-0.1	-0.1%
19.8%	56.8	56.7	-0.1	-0.2%
21.0%	56.6	56.6	0.0	0.1%
22.2%	56.5	56.4	-0.1	-0.2%
23.5%	56.4	56.3	-0.1	-0.1%
24.7%	56.2	56.2	0.0	0.0%
25.9%	56.1	56.1	0.0	0.1%
27.2%	56.1	56.1	0.0	0.0%
28.4%	56.0	55.9	-0.2	-0.3%
29.6%	55.9	55.9	0.0	-0.1%
30.9%	55.8	55.8	0.0	-0.1%
32.1%	55.8	55.7	0.0	-0.1%
33.3%	55.8	55.7	0.0	-0.1%
34.6%	55.7	55.7	-0.1	-0.1%
35.8%	55.7	55.7	-0.1	-0.1%
37.0%	55.7	55.6	-0.1	-0.2%
38.3%	55.7	55.6	-0.1	-0.2%
39.5%	55.6	55.5	-0.1	-0.2%
40.7%	55.6	55.5	-0.1	-0.2%
42.0%	55.6	55.4	-0.2	-0.4%
43.2%	55.4	55.4	-0.1	-0.1%
44.4%	55.4	55.4	0.0	0.0%
45.7%	55.2	55.2	0.0	0.0%
46.9%	55.2	55.2	0.0	0.0%
48.1%	55.2	55.2	0.0	0.0%
49.4%	55.1	55.0	-0.1	-0.2%
50.6%	55.1	55.0	-0.2	-0.3%
51.9%	55.1	54.9	-0.2	-0.3%
53.1%	55.0	54.8	-0.2	-0.3%
54.3%	55.0	54.8	-0.2	-0.3%
55.6%	54.9	54.8	-0.1	-0.2%
56.8%	54.9	54.7	-0.2	-0.3%
58.0%	54.8	54.6	-0.2	-0.4%
59.3%	54.8	54.6	-0.2	-0.4%
60.5%	54.8	54.5	-0.2	-0.4%
61.7%	54.7	54.5	-0.2	-0.4%
63.0%	54.7	54.5	-0.2	-0.4%
64.2%	54.7	54.5	-0.2	-0.4%
65.4%	54.5	54.5	-0.1	-0.2%
66.7%	54.5	54.4	-0.1	-0.2%
67.9%	54.5	54.4	-0.1	-0.1%
69.1%	54.5	54.4	-0.1	-0.2%
70.4%	54.4	54.4	0.0	-0.1%
71.6%	54.4	54.3	-0.1	-0.1%
72.8%	54.4	54.3	-0.1	-0.1%
74.1%	54.4	54.3	0.0	-0.1%
75.3%	54.3	54.3	0.0	0.0%
76.5%	54.3	54.3	0.0	0.0%
77.8%	54.3	54.3	0.0	-0.1%
79.0%	54.3	54.1	-0.1	-0.3%
80.2%	54.2	54.1	-0.1	-0.3%
81.5%	54.2	54.0	-0.2	-0.4%
82.7%	54.1	53.8	-0.2	-0.4%
84.0%	54.1	53.8	-0.2	-0.4%
85.2%	54.0	53.8	-0.2	-0.4%
86.4%	53.9	53.8	-0.2	-0.3%
87.7%	53.9	53.8	-0.1	-0.3%
88.9%	53.8	53.7	-0.1	-0.1%
90.1%	53.6	53.6	0.0	0.0%
91.4%	53.5	53.6	0.0	0.1%
92.6%	53.2	53.4	0.2	0.4%
93.8%	53.2	53.4	0.2	0.3%
95.1%	53.1	53.2	0.2	0.3%
96.3%	53.0	53.1	0.0	0.0%
97.5%	53.0	52.9	-0.1	-0.2%
98.8%	52.8	52.8	0.1	0.1%
100.0%	52.8	52.8	0.1	0.1%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.9	53.8	-0.1	-0.2%
1.2%	53.8	53.7	-0.1	-0.1%
2.5%	53.6	53.5	-0.1	-0.2%
3.7%	53.3	53.4	0.1	0.2%
4.9%	53.1	53.1	0.0	0.0%
6.2%	53.1	53.0	-0.1	-0.1%
7.4%	52.8	52.9	0.1	0.2%
8.6%	52.7	52.6	0.0	-0.1%
9.9%	52.5	52.6	0.0	0.1%
11.1%	52.5	52.5	0.0	0.1%
12.3%	52.4	52.5	0.2	0.4%
13.6%	52.3	52.5	0.2	0.4%
14.8%	52.3	52.3	0.1	0.1%
16.0%	52.2	52.3	0.1	0.2%
17.3%	51.8	52.2	0.4	0.8%
18.5%	51.7	52.2	0.5	0.9%
19.8%	51.6	52.0	0.4	0.7%
21.0%	51.4	51.9	0.5	1.0%
22.2%	51.4	51.8	0.4	0.8%
23.5%	51.3	51.6	0.3	0.5%
24.7%	51.3	51.5	0.2	0.4%
25.9%	51.2	51.4	0.2	0.3%
27.2%	51.1	51.3	0.2	0.4%
28.4%	51.1	51.3	0.2	0.3%
29.6%	50.9	51.3	0.4	0.8%
30.9%	50.7	51.2	0.5	1.1%
32.1%	50.7	51.2	0.5	1.0%
33.3%	50.6	51.1	0.5	1.0%
34.6%	50.5	51.1	0.5	1.1%
35.8%	50.4	51.0	0.6	1.2%
37.0%	50.3	51.0	0.6	1.3%
38.3%	50.3	50.7	0.4	0.8%
39.5%	50.3	50.7	0.4	0.8%
40.7%	50.2	50.4	0.2	0.4%
42.0%	50.1	50.4	0.2	0.4%
43.2%	50.1	50.3	0.2	0.4%
44.4%	50.0	50.2	0.2	0.5%
45.7%	49.9	50.2	0.3	0.6%
46.9%	49.8	50.2	0.3	0.7%
48.1%	49.8	50.1	0.3	0.5%
49.4%	49.8	50.0	0.2	0.4%
50.6%	49.7	49.9	0.2	0.4%
51.9%	49.7	49.9	0.2	0.4%
53.1%	49.6	49.9	0.3	0.7%
54.3%	49.6	49.9	0.3	0.7%
55.6%	49.5	49.8	0.3	0.6%
56.8%	49.5	49.8	0.3	0.6%
58.0%	49.4	49.8	0.4	0.8%
59.3%	49.4	49.7	0.3	0.7%
60.5%	49.4	49.6	0.3	0.6%
61.7%	49.4	49.6	0.2	0.4%
63.0%	49.3	49.6	0.2	0.5%
64.2%	49.3	49.4	0.1	0.2%
65.4%	49.3	49.4	0.1	0.2%
66.7%	49.3	49.4	0.1	0.2%
67.9%	49.2	49.3	0.1	0.2%
69.1%	49.2	49.3	0.1	0.2%
70.4%	49.2	49.2	0.1	0.1%
71.6%	49.2	49.2	0.1	0.2%
72.8%	49.1	49.2	0.1	0.1%
74.1%	49.0	49.2	0.2	0.3%
75.3%	49.0	49.2	0.2	0.4%
76.5%	48.9	49.1	0.2	0.5%
77.8%	48.9	49.1	0.2	0.4%
79.0%	48.9	49.1	0.2	0.3%
80.2%	48.8	49.0	0.2	0.5%
81.5%	48.7	48.9	0.2	0.4%
82.7%	48.7	48.8	0.1	0.3%
84.0%	48.5	48.8	0.3	0.6%
85.2%	48.4	48.7	0.3	0.6%
86.4%	48.4	48.6	0.2	0.5%
87.7%	48.4	48.5	0.1	0.3%
88.9%	48.3	48.4	0.1	0.2%
90.1%	48.1	47.9	-0.2	-0.4%
91.4%	47.8	47.8	0.0	0.0%
92.6%	47.7	47.7	0.0	0.0%
93.8%	47.7	47.7	0.1	0.2%
95.1%	47.7	47.7	0.0	0.1%
96.3%	47.6	47.7	0.0	0.1%
97.5%	47.6	47.7	0.1	0.2%
98.8%	47.4	47.7	0.3	0.5%
100.0%	47.4	47.7	0.3	0.5%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.8	50.9	0.1	0.2%
1.2%	50.5	50.9	0.4	0.7%
2.5%	50.5	50.8	0.3	0.6%
3.7%	50.4	50.7	0.3	0.7%
4.9%	50.3	50.6	0.3	0.6%
6.2%	50.3	50.5	0.2	0.4%
7.4%	49.7	50.4	0.6	1.3%
8.6%	49.7	49.8	0.1	0.2%
9.9%	49.6	49.8	0.2	0.5%
11.1%	49.4	49.7	0.3	0.6%
12.3%	49.4	49.6	0.2	0.5%
13.6%	49.3	49.4	0.1	0.3%
14.8%	49.1	49.4	0.3	0.5%
16.0%	49.0	49.4	0.3	0.7%
17.3%	49.0	49.1	0.1	0.3%
18.5%	48.7	49.1	0.4	0.7%
19.8%	48.7	49.0	0.2	0.5%
21.0%	48.7	48.8	0.2	0.3%
22.2%	48.6	48.8	0.2	0.4%
23.5%	48.6	48.8	0.1	0.3%
24.7%	48.6	48.8	0.2	0.4%
25.9%	48.5	48.7	0.2	0.5%
27.2%	48.5	48.7	0.2	0.4%
28.4%	48.4	48.6	0.2	0.5%
29.6%	48.4	48.6	0.2	0.5%
30.9%	48.4	48.5	0.2	0.4%
32.1%	48.3	48.5	0.2	0.5%
33.3%	48.3	48.5	0.2	0.5%
34.6%	48.3	48.4	0.1	0.3%
35.8%	48.3	48.4	0.1	0.3%
37.0%	48.2	48.4	0.2	0.3%
38.3%	48.1	48.4	0.3	0.5%
39.5%	48.1	48.3	0.3	0.5%
40.7%	48.0	48.3	0.3	0.6%
42.0%	48.0	48.3	0.3	0.6%
43.2%	47.9	48.2	0.3	0.6%
44.4%	47.9	48.1	0.2	0.4%
45.7%	47.8	48.0	0.2	0.4%
46.9%	47.8	48.0	0.2	0.5%
48.1%	47.8	47.9	0.2	0.3%
49.4%	47.7	47.9	0.1	0.3%
50.6%	47.6	47.8	0.2	0.4%
51.9%	47.5	47.8	0.2	0.5%
53.1%	47.5	47.7	0.2	0.5%
54.3%	47.5	47.7	0.2	0.5%
55.6%	47.5	47.7	0.2	0.5%
56.8%	47.5	47.7	0.3	0.5%
58.0%	47.4	47.6	0.2	0.4%
59.3%	47.4	47.5	0.1	0.3%
60.5%	47.4	47.5	0.1	0.3%
61.7%	47.3	47.5	0.1	0.3%
63.0%	47.3	47.5	0.1	0.3%
64.2%	47.3	47.5	0.1	0.3%
65.4%	47.3	47.4	0.1	0.2%
66.7%	47.3	47.3	0.0	0.0%
67.9%	47.3	47.3	0.1	0.2%
69.1%	47.2	47.3	0.1	0.2%
70.4%	47.2	47.3	0.1	0.3%
71.6%	47.2	47.3	0.1	0.3%
72.8%	47.2	47.3	0.1	0.2%
74.1%	47.2	47.3	0.1	0.2%
75.3%	47.1	47.2	0.1	0.2%
76.5%	47.1	47.2	0.1	0.3%
77.8%	47.1	47.1	0.1	0.2%
79.0%	47.0	47.1	0.0	0.0%
80.2%	47.0	47.0	0.0	0.1%
81.5%	46.8	47.0	0.1	0.3%
82.7%	46.8	47.0	0.1	0.3%
84.0%	46.8	46.9	0.1	0.1%
85.2%	46.7	46.8	0.1	0.3%
86.4%	46.7	46.8	0.1	0.2%
87.7%	46.6	46.7	0.1	0.3%
88.9%	46.6	46.7	0.1	0.2%
90.1%	46.5	46.6	0.1	0.1%
91.4%	46.4	46.5	0.1	0.1%
92.6%	46.3	46.3	-0.1	-0.1%
93.8%	46.3	46.2	-0.1	-0.2%
95.1%	46.2	46.2	-0.1	-0.2%
96.3%	46.2	46.1	-0.1	-0.3%
97.5%	46.0	46.0	0.1	0.1%
98.8%	45.9	45.9	0.0	0.0%
100.0%	45.9	45.9	0.0	0.0%

Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.5	52.7	0.2	0.4%
1.2%	52.4	52.5	0.1	0.2%
2.5%	52.3	52.4	0.1	0.2%
3.7%	52.2	51.8	-0.4	-0.8%
4.9%	51.1	51.1	0.1	0.1%
6.2%	50.9	51.0	0.1	0.2%
7.4%	50.8	51.0	0.2	0.3%
8.6%	50.7	50.8	0.1	0.1%
9.9%	50.7	50.8	0.1	0.1%
11.1%	50.6	50.7	0.1	0.1%
12.3%	50.4	50.4	0.1	0.2%
13.6%	50.3	50.4	0.1	0.2%
14.8%	50.3	50.4	0.1	0.3%
16.0%	50.1	50.1	0.0	0.0%
17.3%	50.1	50.1	0.0	0.0%
18.5%	49.9	50.1	0.2	0.4%
19.8%	49.9	50.1	0.2	0.4%
21.0%	49.8	49.9	0.1	0.2%
22.2%	49.8	49.9	0.1	0.3%
23.5%	49.8	49.9	0.1	0.2%
24.7%	49.7	49.9	0.2	0.3%
25.9%	49.7	49.8	0.1	0.1%
27.2%	49.6	49.8	0.2	0.4%
28.4%	49.5	49.6	0.1	0.2%
29.6%	49.5	49.5	0.1	0.1%
30.9%	49.5	49.5	0.0	0.1%
32.1%	49.5	49.5	0.0	0.1%
33.3%	49.4	49.5	0.1	0.2%
34.6%	49.3	49.4	0.1	0.1%
35.8%	49.3	49.4	0.1	0.1%
37.0%	49.2	49.3	0.1	0.2%
38.3%	49.2	49.2	0.0	0.0%
39.5%	49.0	49.2	0.1	0.3%
40.7%	49.0	49.1	0.1	0.2%
42.0%	48.9	49.1	0.2	0.3%
43.2%	48.7	48.9	0.2	0.3%
44.4%	48.7	48.8	0.1	0.2%
45.7%	48.7	48.8	0.1	0.2%
46.9%	48.7	48.7	0.1	0.1%
48.1%	48.7	48.7	0.0	0.1%
49.4%	48.7	48.7	0.0	0.1%
50.6%	48.6	48.6	0.0	0.0%
51.9%	48.6	48.6	0.0	0.1%
53.1%	48.5	48.6	0.1	0.2%
54.3%	48.5	48.6	0.1	0.2%
55.6%	48.4	48.5	0.1	0.1%
56.8%	48.4	48.5	0.1	0.2%
58.0%	48.4	48.4	0.0	0.1%
59.3%	48.3	48.4	0.1	0.3%
60.5%	48.2	48.4	0.2	0.3%
61.7%	48.2	48.3	0.1	0.2%
63.0%	48.1	48.3	0.2	0.4%
64.2%	48.0	48.1	0.1	0.1%
65.4%	48.0	48.1	0.1	0.1%
66.7%	48.0	48.1	0.1	0.1%
67.9%	48.0	48.0	0.1	0.2%
69.1%	48.0	48.0	0.1	0.1%
70.4%	47.9	48.0	0.0	0.0%
71.6%	47.9	47.9	0.0	0.0%
72.8%	47.9	47.9	0.0	-0.1%
74.1%	47.7	47.7	0.0	0.0%
75.3%	47.7	47.6	-0.1	-0.2%
76.5%	47.7	47.6	-0.1	-0.2%
77.8%	47.7	47.6	-0.1	-0.2%
79.0%	47.5	47.5	0.0	0.0%
80.2%	47.5	47.5	0.0	0.1%
81.5%	47.5	47.5	0.1	0.1%
82.7%	47.4	47.5	0.0	0.0%
84.0%	47.4	47.4	0.0	0.0%
85.2%	47.3	47.3	0.0	0.0%
86.4%	47.3	47.2	-0.1	-0.2%
87.7%	47.0	47.0	0.0	0.0%
88.9%	46.9	47.0	0.0	0.1%
90.1%	46.9	46.9	0.0	0.0%
91.4%	46.8	46.9	0.1	0.1%
92.6%	46.8	46.6	-0.2	-0.4%
93.8%	46.6	46.6	0.0	-0.1%
95.1%	46.6	46.5	-0.1	-0.3%
96.3%	46.4	46.4	0.0	-0.1%
97.5%	46.4	46.3	0.0	-0.1%
98.8%	45.5	45.4	-0.1	-0.1%
100.0%	45.5	45.4	-0.1	-0.1%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.6	55.2	-0.4	-0.7%
1.2%	55.3	55.1	-0.2	-0.3%
2.5%	54.6	54.8	0.2	0.3%
3.7%	54.5	54.7	0.2	0.3%
4.9%	54.4	54.6	0.2	0.4%
6.2%	54.3	54.5	0.3	0.5%
7.4%	54.3	54.4	0.1	0.2%
8.6%	54.2	54.3	0.1	0.2%
9.9%	54.2	54.2	0.0	0.0%
11.1%	54.1	54.2	0.1	0.1%
12.3%	54.1	54.1	0.0	0.0%
13.6%	54.0	53.9	-0.2	-0.3%
14.8%	53.8	53.8	0.1	0.1%
16.0%	53.7	53.8	0.0	0.1%
17.3%	53.7	53.7	0.0	0.0%
18.5%	53.6	53.7	0.1	0.2%
19.8%	53.6	53.7	0.1	0.2%
21.0%	53.6	53.7	0.1	0.2%
22.2%	53.5	53.6	0.1	0.1%
23.5%	53.2	53.3	0.1	0.2%
24.7%	53.2	53.3	0.1	0.1%
25.9%	53.2	53.2	0.1	0.2%
27.2%	53.1	53.2	0.1	0.2%
28.4%	53.1	53.1	0.0	0.1%
29.6%	53.0	53.1	0.1	0.2%
30.9%	53.0	53.1	0.1	0.2%
32.1%	52.7	53.0	0.3	0.5%
33.3%	52.7	52.7	0.0	0.0%
34.6%	52.7	52.6	-0.1	-0.1%
35.8%	52.6	52.6	0.0	0.0%
37.0%	52.5	52.5	0.0	0.1%
38.3%	52.4	52.4	0.0	0.0%
39.5%	52.4	52.3	-0.1	-0.1%
40.7%	52.3	52.3	0.0	0.1%
42.0%	52.1	52.3	0.2	0.4%
43.2%	52.0	52.1	0.1	0.2%
44.4%	52.0	52.0	0.0	0.0%
45.7%	51.8	52.0	0.1	0.3%
46.9%	51.8	51.9	0.1	0.2%
48.1%	51.8	51.8	0.0	0.1%
49.4%	51.8	51.8	0.1	0.1%
50.6%	51.7	51.7	0.1	0.1%
51.9%	51.7	51.7	0.1	0.2%
53.1%	51.7	51.7	0.0	0.1%
54.3%	51.6	51.6	0.0	0.0%
55.6%	51.6	51.6	0.0	0.0%
56.8%	51.6	51.6	0.0	0.0%
58.0%	51.5	51.6	0.1	0.1%
59.3%	51.4	51.5	0.0	0.1%
60.5%	51.3	51.4	0.1	0.2%
61.7%	51.3	51.3	0.0	0.0%
63.0%	51.3	51.1	-0.1	-0.3%
64.2%	51.1	51.1	0.0	0.0%
65.4%	51.0	51.1	0.0	0.1%
66.7%	51.0	51.1	0.1	0.1%
67.9%	50.8	50.9	0.1	0.3%
69.1%	50.6	50.7	0.1	0.2%
70.4%	50.6	50.6	0.0	0.1%
71.6%	50.6	50.6	0.0	0.1%
72.8%	50.5	50.6	0.0	0.1%
74.1%	50.5	50.6	0.0	0.1%
75.3%	50.2	50.3	0.1	0.1%
76.5%	50.1	50.1	-0.1	-0.1%
77.8%	50.1	50.1	0.0	0.0%
79.0%	49.8	49.8	0.0	0.0%
80.2%	49.7	49.6	0.0	-0.1%
81.5%	49.6	49.6	0.0	0.0%
82.7%	49.5	49.5	0.1	0.1%
84.0%	49.4	49.5	0.0	0.0%
85.2%	49.4	49.4	0.0	0.1%
86.4%	49.4	49.4	0.0	0.0%
87.7%	49.3	49.3	0.0	-0.1%
88.9%	49.0	49.1	0.1	0.3%
90.1%	49.0	49.0	0.0	0.0%
91.4%	48.8	49.0	0.1	0.2%
92.6%	48.8	48.9	0.1	0.2%
93.8%	48.7	48.7	0.0	-0.1%
95.1%	48.6	48.6	0.0	0.0%
96.3%	48.5	48.5	0.0	0.0%
97.5%	48.4	48.4	0.0	0.0%
98.8%	48.2	48.2	0.0	0.0%
100.0%	48.2	48.2	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.7	58.5	-0.1	-0.2%
1.2%	58.1	57.9	-0.2	-0.3%
2.5%	58.0	57.8	-0.3	-0.4%
3.7%	57.6	57.5	-0.1	-0.2%
4.9%	57.4	57.4	0.0	-0.1%
6.2%	57.2	57.3	0.1	0.2%
7.4%	57.2	57.3	0.1	0.1%
8.6%	57.1	57.2	0.1	0.1%
9.9%	57.1	57.1	0.0	0.0%
11.1%	57.1	57.1	0.0	0.0%
12.3%	57.1	56.9	-0.2	-0.3%
13.6%	57.0	56.7	-0.3	-0.5%
14.8%	56.9	56.6	-0.3	-0.5%
16.0%	56.7	56.5	-0.2	-0.4%
17.3%	56.4	56.5	0.1	0.2%
18.5%	56.2	56.4	0.2	0.3%
19.8%	56.2	56.4	0.2	0.3%
21.0%	56.1	56.3	0.1	0.2%
22.2%	56.1	56.3	0.2	0.3%
23.5%	56.0	56.2	0.3	0.5%
24.7%	55.9	56.2	0.3	0.5%
25.9%	55.9	56.0	0.1	0.2%
27.2%	55.9	56.0	0.1	0.2%
28.4%	55.9	56.0	0.1	0.2%
29.6%	55.8	55.9	0.1	0.2%
30.9%	55.8	55.9	0.2	0.3%
32.1%	55.8	55.9	0.2	0.3%
33.3%	55.7	55.9	0.2	0.3%
34.6%	55.6	55.8	0.2	0.4%
35.8%	55.6	55.8	0.2	0.4%
37.0%	55.6	55.8	0.2	0.3%
38.3%	55.6	55.7	0.2	0.3%
39.5%	55.5	55.7	0.1	0.2%
40.7%	55.5	55.6	0.1	0.2%
42.0%	55.3	55.5	0.2	0.4%
43.2%	55.3	55.5	0.2	0.3%
44.4%	55.3	55.4	0.2	0.3%
45.7%	55.2	55.4	0.2	0.3%
46.9%	55.2	55.3	0.1	0.3%
48.1%	55.1	55.3	0.1	0.2%
49.4%	55.0	55.3	0.2	0.4%
50.6%	55.0	55.2	0.2	0.4%
51.9%	55.0	55.2	0.2	0.4%
53.1%	55.0	55.2	0.2	0.5%
54.3%	54.9	55.2	0.3	0.5%
55.6%	54.9	55.0	0.1	0.2%
56.8%	54.8	55.0	0.1	0.3%
58.0%	54.8	54.9	0.1	0.2%
59.3%	54.8	54.9	0.1	0.2%
60.5%	54.8	54.8	0.1	0.1%
61.7%	54.8	54.8	0.1	0.1%
63.0%	54.8	54.8	0.0	0.1%
64.2%	54.7	54.8	0.1	0.1%
65.4%	54.7	54.8	0.0	0.1%
66.7%	54.7	54.8	0.0	0.1%
67.9%	54.7	54.7	0.1	0.1%
69.1%	54.6	54.7	0.1	0.2%
70.4%	54.5	54.7	0.2	0.4%
71.6%	54.5	54.7	0.2	0.3%
72.8%	54.5	54.6	0.1	0.3%
74.1%	54.4	54.6	0.2	0.4%
75.3%	54.2	54.5	0.3	0.5%
76.5%	54.2	54.4	0.2	0.3%
77.8%	54.1	54.4	0.3	0.5%
79.0%	54.0	54.4	0.4	0.7%
80.2%	54.0	54.3	0.3	0.5%
81.5%	54.0	54.3	0.3	0.5%
82.7%	53.9	54.1	0.1	0.2%
84.0%	53.9	54.0	0.1	0.2%
85.2%	53.9	54.0	0.1	0.2%
86.4%	53.9	54.0	0.1	0.3%
87.7%	53.6	53.6	0.0	0.0%
88.9%	53.5	53.5	-0.1	-0.1%
90.1%	53.3	53.3	0.0	0.0%
91.4%	52.6	52.7	0.1	0.2%
92.6%	52.6	52.6	0.0	0.0%
93.8%	52.4	52.5	0.1	0.2%
95.1%	52.0	52.2	0.2	0.4%
96.3%	51.9	51.6	-0.3	-0.7%
97.5%	51.6	51.5	-0.1	-0.2%
98.8%	51.0	51.1	0.1	0.1%
100.0%	51.0	51.1	0.1	0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.9	61.0	-0.9	-1.4%
1.2%	61.6	61.0	-0.6	-1.0%
2.5%	60.7	60.9	0.2	0.4%
3.7%	60.7	60.8	0.1	0.2%
4.9%	60.3	60.8	0.4	0.7%
6.2%	60.2	60.6	0.4	0.7%
7.4%	60.2	60.6	0.4	0.7%
8.6%	60.1	60.5	0.4	0.6%
9.9%	59.8	60.3	0.5	0.8%
11.1%	59.8	60.3	0.5	0.8%
12.3%	59.8	60.3	0.5	0.9%
13.6%	59.7	60.3	0.6	0.9%
14.8%	59.7	60.2	0.5	0.9%
16.0%	59.6	60.2	0.6	0.9%
17.3%	59.6	60.2	0.6	1.0%
18.5%	59.3	60.0	0.7	1.2%
19.8%	59.3	59.8	0.5	0.9%
21.0%	59.0	59.8	0.8	1.4%
22.2%	58.9	59.8	0.9	1.5%
23.5%	58.9	59.8	0.9	1.5%
24.7%	58.8	59.6	0.7	1.2%
25.9%	58.7	59.5	0.8	1.4%
27.2%	58.6	59.4	0.8	1.3%
28.4%	58.4	59.2	0.8	1.4%
29.6%	58.4	59.1	0.7	1.3%
30.9%	58.4	59.0	0.6	1.0%
32.1%	58.4	58.9	0.5	0.9%
33.3%	58.3	58.9	0.6	1.0%
34.6%	58.2	58.7	0.5	0.8%
35.8%	58.0	58.7	0.7	1.2%
37.0%	58.0	58.7	0.7	1.2%
38.3%	57.9	58.5	0.6	1.0%
39.5%	57.9	58.5	0.6	1.0%
40.7%	57.9	58.4	0.5	0.9%
42.0%	57.8	58.4	0.6	1.1%
43.2%	57.8	58.4	0.6	1.1%
44.4%	57.7	58.4	0.7	1.2%
45.7%	57.7	58.3	0.6	1.1%
46.9%	57.7	58.3	0.6	1.1%
48.1%	57.7	58.3	0.6	1.1%
49.4%	57.6	58.3	0.6	1.1%
50.6%	57.6	58.3	0.7	1.2%
51.9%	57.6	58.2	0.6	1.1%
53.1%	57.4	58.2	0.7	1.3%
54.3%	57.4	58.1	0.7	1.3%
55.6%	57.4	58.1	0.7	1.3%
56.8%	57.3	58.0	0.7	1.2%
58.0%	57.3	58.0	0.7	1.2%
59.3%	57.3	57.8	0.6	1.0%
60.5%	57.3	57.8	0.5	0.9%
61.7%	57.2	57.8	0.5	1.0%
63.0%	57.2	57.7	0.5	0.8%
64.2%	57.1	57.6	0.5	0.9%
65.4%	57.1	57.5	0.3	0.6%
66.7%	57.1	57.5	0.4	0.6%
67.9%	57.1	57.5	0.4	0.7%
69.1%	57.0	57.4	0.4	0.7%
70.4%	57.0	57.3	0.4	0.7%
71.6%	57.0	57.3	0.4	0.6%
72.8%	56.8	57.3	0.5	0.9%
74.1%	56.8	57.3	0.5	0.9%
75.3%	56.8	57.3	0.5	0.9%
76.5%	56.6	57.3	0.7	1.2%
77.8%	56.6	57.2	0.6	1.1%
79.0%	56.5	57.1	0.6	1.1%
80.2%	56.5	57.1	0.6	1.0%
81.5%	56.5	56.9	0.4	0.7%
82.7%	56.5	56.8	0.3	0.5%
84.0%	56.5	56.7	0.3	0.5%
85.2%	56.4	56.7	0.3	0.5%
86.4%	56.4	56.7	0.3	0.4%
87.7%	56.4	56.6	0.2	0.4%
88.9%	56.4	56.6	0.2	0.4%
90.1%	56.4	56.5	0.1	0.3%
91.4%	56.3	56.5	0.2	0.3%
92.6%	56.0	56.5	0.5	0.8%
93.8%	56.0	56.5	0.5	0.8%
95.1%	56.0	56.0	0.0	0.0%
96.3%	55.8	55.8	0.0	0.1%
97.5%	55.5	55.6	0.1	0.2%
98.8%	55.5	55.5	0.0	0.0%
100.0%	55.5	55.5	0.0	0.0%

Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.4	62.6	0.2	0.3%
1.2%	62.0	61.4	-0.6	-1.0%
2.5%	61.8	61.3	-0.5	-0.9%
3.7%	61.6	61.0	-0.6	-1.0%
4.9%	61.4	60.9	-0.4	-0.7%
6.2%	61.3	60.9	-0.4	-0.7%
7.4%	61.1	60.8	-0.3	-0.5%
8.6%	61.1	60.8	-0.3	-0.5%
9.9%	61.0	60.7	-0.3	-0.5%
11.1%	61.0	60.5	-0.4	-0.7%
12.3%	60.9	60.5	-0.4	-0.6%
13.6%	60.6	60.4	-0.2	-0.3%
14.8%	60.6	60.2	-0.3	-0.5%
16.0%	60.4	60.2	-0.2	-0.4%
17.3%	60.0	60.1	0.1	0.2%
18.5%	59.9	60.1	0.2	0.3%
19.8%	59.9	60.0	0.1	0.2%
21.0%	59.8	59.9	0.1	0.2%
22.2%	59.8	59.9	0.1	0.1%
23.5%	59.4	59.8	0.4	0.7%
24.7%	59.3	59.8	0.5	0.8%
25.9%	59.2	59.7	0.5	0.9%
27.2%	59.2	59.7	0.5	0.9%
28.4%	59.2	59.7	0.5	0.8%
29.6%	59.1	59.6	0.5	0.8%
30.9%	59.1	59.6	0.5	0.8%
32.1%	59.0	59.5	0.5	0.9%
33.3%	58.9	59.5	0.5	0.9%
34.6%	58.8	59.4	0.6	1.0%
35.8%	58.7	59.3	0.6	1.0%
37.0%	58.7	59.3	0.6	1.1%
38.3%	58.6	59.3	0.6	1.1%
39.5%	58.6	59.2	0.6	1.1%
40.7%	58.6	59.1	0.5	0.9%
42.0%	58.5	59.0	0.5	0.8%
43.2%	58.5	59.0	0.4	0.8%
44.4%	58.3	58.9	0.5	0.9%
45.7%	58.3	58.8	0.6	1.0%
46.9%	58.2	58.7	0.5	0.8%
48.1%	58.2	58.6	0.4	0.7%
49.4%	58.2	58.6	0.4	0.7%
50.6%	58.1	58.6	0.5	0.8%
51.9%	57.9	58.6	0.7	1.1%
53.1%	57.9	58.5	0.6	1.0%
54.3%	57.9	58.5	0.6	1.0%
55.6%	57.8	58.5	0.7	1.3%
56.8%	57.8	58.5	0.7	1.2%
58.0%	57.8	58.4	0.6	1.1%
59.3%	57.8	58.4	0.6	1.1%
60.5%	57.7	58.3	0.6	1.0%
61.7%	57.7	58.3	0.6	1.1%
63.0%	57.7	58.3	0.6	1.0%
64.2%	57.7	58.3	0.6	1.0%
65.4%	57.7	58.3	0.6	1.0%
66.7%	57.6	58.2	0.6	1.1%
67.9%	57.6	58.2	0.7	1.1%
69.1%	57.6	58.2	0.6	1.1%
70.4%	57.5	58.2	0.6	1.1%
71.6%	57.5	58.1	0.7	1.1%
72.8%	57.4	58.1	0.6	1.1%
74.1%	57.4	58.0	0.6	1.1%
75.3%	57.1	58.0	0.8	1.5%
76.5%	57.1	58.0	0.8	1.5%
77.8%	57.1	57.9	0.9	1.5%
79.0%	57.0	57.9	0.9	1.5%
80.2%	56.9	57.8	0.9	1.6%
81.5%	56.8	57.8	1.0	1.8%
82.7%	56.7	57.7	1.1	1.9%
84.0%	56.6	57.7	1.2	2.1%
85.2%	56.5	57.5	1.1	1.9%
86.4%	56.5	57.4	0.9	1.6%
87.7%	56.4	57.3	0.9	1.5%
88.9%	56.3	57.1	0.8	1.4%
90.1%	56.3	57.0	0.7	1.2%
91.4%	56.2	57.0	0.8	1.4%
92.6%	56.2	56.9	0.7	1.3%
93.8%	56.0	56.5	0.5	1.0%
95.1%	55.9	56.4	0.4	0.8%
96.3%	55.9	56.3	0.4	0.7%
97.5%	55.9	56.3	0.4	0.7%
98.8%	55.8	56.2	0.4	0.7%
100.0%	55.8	56.2	0.4	0.7%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.6	70.7	0.1	0.2%
1.2%	65.5	63.1	-2.3	-3.6%
2.5%	64.2	61.8	-2.5	-3.9%
3.7%	63.4	61.6	-1.8	-2.8%
4.9%	62.8	61.4	-1.4	-2.2%
6.2%	62.4	61.3	-1.1	-1.7%
7.4%	62.2	61.2	-0.9	-1.5%
8.6%	62.1	61.2	-0.8	-1.3%
9.9%	62.0	61.0	-1.0	-1.5%
11.1%	61.9	60.9	-1.0	-1.6%
12.3%	61.7	60.8	-0.9	-1.4%
13.6%	61.4	60.8	-0.6	-1.0%
14.8%	61.4	60.6	-0.7	-1.2%
16.0%	61.3	60.6	-0.7	-1.1%
17.3%	61.3	60.6	-0.7	-1.1%
18.5%	61.0	60.6	-0.4	-0.7%
19.8%	61.0	60.5	-0.5	-0.8%
21.0%	60.9	60.5	-0.5	-0.8%
22.2%	60.9	60.4	-0.5	-0.9%
23.5%	60.8	60.4	-0.5	-0.8%
24.7%	60.7	60.3	-0.4	-0.7%
25.9%	60.6	60.2	-0.4	-0.7%
27.2%	60.6	60.2	-0.4	-0.6%
28.4%	60.5	60.2	-0.3	-0.6%
29.6%	60.5	60.2	-0.3	-0.5%
30.9%	60.4	60.1	-0.3	-0.5%
32.1%	60.1	60.0	-0.1	-0.1%
33.3%	60.0	59.9	-0.1	-0.1%
34.6%	59.7	59.9	0.2	0.3%
35.8%	59.7	59.8	0.1	0.2%
37.0%	59.6	59.8	0.2	0.4%
38.3%	59.5	59.7	0.3	0.5%
39.5%	59.5	59.7	0.3	0.5%
40.7%	59.3	59.6	0.4	0.6%
42.0%	59.2	59.5	0.2	0.4%
43.2%	59.2	59.4	0.2	0.3%
44.4%	59.2	59.2	0.1	0.1%
45.7%	59.2	59.2	0.1	0.1%
46.9%	59.1	59.2	0.0	0.1%
48.1%	59.1	59.1	0.0	0.1%
49.4%	59.1	59.1	0.1	0.1%
50.6%	59.1	59.1	0.1	0.1%
51.9%	59.0	59.1	0.1	0.2%
53.1%	59.0	59.1	0.1	0.2%
54.3%	59.0	59.0	0.0	0.1%
55.6%	58.9	59.0	0.1	0.2%
56.8%	58.8	58.9	0.1	0.1%
58.0%	58.8	58.8	0.0	0.0%
59.3%	58.8	58.8	0.0	0.1%
60.5%	58.7	58.8	0.1	0.2%
61.7%	58.7	58.8	0.1	0.2%
63.0%	58.5	58.8	0.3	0.5%
64.2%	58.4	58.8	0.4	0.7%
65.4%	58.3	58.7	0.4	0.7%
66.7%	58.3	58.7	0.4	0.7%
67.9%	58.2	58.6	0.4	0.7%
69.1%	58.2	58.6	0.4	0.7%
70.4%	58.2	58.6	0.4	0.7%
71.6%	58.2	58.4	0.3	0.4%
72.8%	58.1	58.3	0.1	0.2%
74.1%	58.1	58.3	0.1	0.2%
75.3%	58.1	58.2	0.1	0.1%
76.5%	58.0	58.1	0.2	0.3%
77.8%	57.9	58.0	0.1	0.2%
79.0%	57.8	57.8	-0.1	-0.1%
80.2%	57.8	57.8	0.0	-0.1%
81.5%	57.8	57.7	-0.1	-0.2%
82.7%	57.8	57.5	-0.3	-0.5%
84.0%	57.7	57.4	-0.3	-0.5%
85.2%	57.6	57.4	-0.2	-0.4%
86.4%	57.4	57.3	-0.1	-0.2%
87.7%	57.4	57.3	-0.1	-0.1%
88.9%	57.3	57.3	0.0	-0.1%
90.1%	57.3	57.2	-0.1	-0.2%
91.4%	57.2	57.2	-0.1	-0.2%
92.6%	57.2	57.2	-0.1	-0.1%
93.8%	57.2	57.1	0.0	0.0%
95.1%	56.8	57.1	0.3	0.6%
96.3%	56.8	56.9	0.2	0.3%
97.5%	56.7	56.9	0.2	0.4%
98.8%	56.6	56.7	0.0	0.1%
100.0%	56.6	56.7	0.0	0.1%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	75.6	75.6	0.0	0.0%
1.2%	69.7	68.0	-1.8	-2.5%
2.5%	69.7	67.0	-2.6	-3.8%
3.7%	67.9	66.6	-1.3	-1.9%
4.9%	64.5	63.3	-1.1	-1.8%
6.2%	64.3	62.6	-1.7	-2.6%
7.4%	63.9	62.3	-1.6	-2.5%
8.6%	63.6	62.2	-1.4	-2.1%
9.9%	63.1	62.1	-1.0	-1.6%
11.1%	63.1	61.8	-1.3	-2.1%
12.3%	62.9	61.7	-1.2	-1.9%
13.6%	62.9	61.7	-1.2	-1.9%
14.8%	62.8	61.6	-1.2	-1.9%
16.0%	62.7	61.6	-1.1	-1.8%
17.3%	62.6	61.6	-1.0	-1.7%
18.5%	62.5	61.5	-1.0	-1.6%
19.8%	62.5	61.5	-1.0	-1.6%
21.0%	62.4	61.4	-0.9	-1.5%
22.2%	62.3	61.4	-0.9	-1.5%
23.5%	62.2	61.4	-0.8	-1.3%
24.7%	62.1	61.3	-0.7	-1.2%
25.9%	62.1	61.2	-0.8	-1.3%
27.2%	62.0	61.2	-0.8	-1.2%
28.4%	61.9	61.2	-0.7	-1.1%
29.6%	61.9	61.2	-0.6	-1.0%
30.9%	61.6	61.2	-0.5	-0.7%
32.1%	61.5	61.1	-0.4	-0.7%
33.3%	61.5	61.1	-0.4	-0.7%
34.6%	61.4	61.1	-0.3	-0.5%
35.8%	61.3	61.1	-0.3	-0.5%
37.0%	61.3	60.9	-0.4	-0.6%
38.3%	61.3	60.9	-0.4	-0.6%
39.5%	61.3	60.9	-0.4	-0.6%
40.7%	61.2	60.9	-0.4	-0.6%
42.0%	61.2	60.9	-0.3	-0.6%
43.2%	61.2	60.8	-0.3	-0.6%
44.4%	61.1	60.8	-0.3	-0.5%
45.7%	61.1	60.8	-0.3	-0.4%
46.9%	61.1	60.8	-0.3	-0.5%
48.1%	61.0	60.8	-0.3	-0.4%
49.4%	61.0	60.8	-0.2	-0.4%
50.6%	61.0	60.7	-0.3	-0.5%
51.9%	61.0	60.7	-0.3	-0.5%
53.1%	61.0	60.6	-0.3	-0.5%
54.3%	60.9	60.6	-0.3	-0.5%
55.6%	60.9	60.6	-0.3	-0.5%
56.8%	60.9	60.6	-0.3	-0.5%
58.0%	60.8	60.5	-0.3	-0.5%
59.3%	60.8	60.5	-0.3	-0.5%
60.5%	60.8	60.4	-0.4	-0.6%
61.7%	60.8	60.4	-0.4	-0.6%
63.0%	60.8	60.4	-0.4	-0.7%
64.2%	60.7	60.3	-0.4	-0.7%
65.4%	60.7	60.2	-0.5	-0.8%
66.7%	60.5	60.1	-0.4	-0.6%
67.9%	60.5	60.1	-0.4	-0.7%
69.1%	60.5	60.0	-0.5	-0.8%
70.4%	60.5	60.0	-0.5	-0.8%
71.6%	60.3	60.0	-0.4	-0.6%
72.8%	60.3	59.9	-0.4	-0.7%
74.1%	60.3	59.8	-0.4	-0.7%
75.3%	60.2	59.8	-0.4	-0.7%
76.5%	60.1	59.7	-0.4	-0.6%
77.8%	60.1	59.7	-0.4	-0.6%
79.0%	60.0	59.7	-0.3	-0.6%
80.2%	60.0	59.6	-0.3	-0.6%
81.5%	59.9	59.6	-0.2	-0.4%
82.7%	59.6	59.6	0.0	0.0%
84.0%	59.6	59.5	-0.1	-0.1%
85.2%	59.6	59.5	-0.1	-0.2%
86.4%	59.4	59.5	0.0	0.0%
87.7%	59.4	59.5	0.1	0.1%
88.9%	59.3	59.3	0.0	0.0%
90.1%	59.3	59.2	-0.1	-0.2%
91.4%	59.3	59.0	-0.3	-0.5%
92.6%	59.2	59.0	-0.2	-0.4%
93.8%	59.0	58.6	-0.4	-0.6%
95.1%	58.7	58.6	-0.1	-0.2%
96.3%	58.7	58.4	-0.3	-0.4%
97.5%	58.3	58.0	-0.4	-0.6%
98.8%	57.9	57.7	-0.3	-0.5%
100.0%	57.9	57.7	-0.3	-0.5%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.9	71.7	-2.2	-3.0%
1.2%	72.2	71.4	-0.8	-1.2%
2.5%	71.0	69.4	-1.7	-2.3%
3.7%	70.0	68.9	-1.1	-1.6%
4.9%	69.0	66.7	-2.3	-3.3%
6.2%	68.6	65.5	-3.1	-4.5%
7.4%	68.3	65.4	-2.8	-4.2%
8.6%	67.4	64.3	-3.1	-4.6%
9.9%	66.6	64.3	-2.4	-3.6%
11.1%	66.2	64.2	-2.0	-3.0%
12.3%	65.6	64.2	-1.4	-2.1%
13.6%	65.4	63.9	-1.5	-2.3%
14.8%	65.1	63.1	-2.0	-3.1%
16.0%	65.1	62.8	-2.3	-3.5%
17.3%	64.9	62.8	-2.2	-3.3%
18.5%	64.9	62.7	-2.2	-3.5%
19.8%	64.9	62.5	-2.3	-3.6%
21.0%	64.8	62.5	-2.4	-3.7%
22.2%	64.5	62.2	-2.4	-3.7%
23.5%	64.3	61.9	-2.4	-3.7%
24.7%	64.2	61.7	-2.4	-3.8%
25.9%	63.9	61.6	-2.2	-3.5%
27.2%	63.7	61.5	-2.2	-3.5%
28.4%	63.5	61.4	-2.0	-3.2%
29.6%	63.5	61.4	-2.0	-3.2%
30.9%	63.4	61.3	-2.1	-3.3%
32.1%	63.1	61.3	-1.8	-2.8%
33.3%	62.8	61.3	-1.5	-2.4%
34.6%	62.7	61.1	-1.6	-2.5%
35.8%	62.7	61.1	-1.5	-2.4%
37.0%	62.6	61.1	-1.5	-2.4%
38.3%	62.4	61.1	-1.3	-2.1%
39.5%	62.4	60.9	-1.5	-2.4%
40.7%	62.3	60.7	-1.6	-2.6%
42.0%	62.2	60.6	-1.6	-2.6%
43.2%	62.0	60.5	-1.5	-2.5%
44.4%	62.0	60.5	-1.5	-2.5%
45.7%	61.5	60.4	-1.1	-1.7%
46.9%	61.5	60.4	-1.1	-1.8%
48.1%	61.1	60.4	-0.8	-1.2%
49.4%	61.1	60.4	-0.7	-1.2%
50.6%	61.1	60.3	-0.8	-1.3%
51.9%	60.9	60.3	-0.6	-1.0%
53.1%	60.7	60.1	-0.6	-1.0%
54.3%	59.8	59.9	0.1	0.2%
55.6%	59.7	59.9	0.2	0.3%
56.8%	59.4	59.7	0.3	0.5%
58.0%	59.2	59.7	0.5	0.8%
59.3%	58.7	59.6	0.9	1.5%
60.5%	58.6	59.5	0.9	1.6%
61.7%	58.6	59.5	0.9	1.5%
63.0%	58.2	59.3	1.2	2.0%
64.2%	58.1	59.3	1.2	2.1%
65.4%	58.1	59.3	1.2	2.1%
66.7%	58.0	59.0	1.0	1.7%
67.9%	57.7	59.0	1.3	2.2%
69.1%	57.6	58.1	0.5	0.9%
70.4%	57.5	57.9	0.3	0.6%
71.6%	57.5	57.8	0.3	0.6%
72.8%	57.5	57.8	0.3	0.5%
74.1%	57.5	57.8	0.3	0.5%
75.3%	57.3	57.6	0.3	0.5%
76.5%	57.3	57.5	0.2	0.4%
77.8%	57.2	57.5	0.2	0.4%
79.0%	57.1	57.4	0.3	0.6%
80.2%	57.1	57.3	0.3	0.5%
81.5%	56.9	57.3	0.4	0.6%
82.7%	56.9	56.7	-0.2	-0.4%
84.0%	56.6	56.4	-0.2	-0.3%
85.2%	56.4	56.2	-0.2	-0.3%
86.4%	56.3	56.0	-0.3	-0.6%
87.7%	56.0	55.8	-0.2	-0.4%
88.9%	55.9	55.8	-0.1	-0.2%
90.1%	55.9	55.7	-0.2	-0.3%
91.4%	55.8	55.6	-0.1	-0.3%
92.6%	55.6	55.6	0.0	0.0%
93.8%	55.5	55.5	0.0	0.0%
95.1%	55.5	55.2	-0.3	-0.6%
96.3%	55.4	55.2	-0.2	-0.4%
97.5%	55.2	55.2	0.0	0.0%
98.8%	54.9	54.5	-0.4	-0.8%
100.0%	54.9	54.5	-0.4	-0.8%

Table SQ7-1b
Sacramento River at Red Bluff, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.3	69.1	-0.2	-0.3%
1.2%	67.9	66.1	-1.8	-2.6%
2.5%	66.5	65.0	-1.5	-2.2%
3.7%	65.2	64.1	-1.1	-1.6%
4.9%	64.5	62.4	-2.1	-3.2%
6.2%	63.3	62.3	-1.0	-1.6%
7.4%	62.7	62.0	-0.8	-1.2%
8.6%	62.4	61.6	-0.8	-1.3%
9.9%	62.4	61.5	-0.9	-1.4%
11.1%	62.4	61.4	-1.0	-1.6%
12.3%	62.4	61.3	-1.1	-1.7%
13.6%	62.3	61.2	-1.1	-1.7%
14.8%	61.9	61.2	-0.7	-1.1%
16.0%	61.7	61.1	-0.6	-1.0%
17.3%	61.7	61.0	-0.7	-1.1%
18.5%	61.6	61.0	-0.6	-1.0%
19.8%	61.5	60.9	-0.6	-1.0%
21.0%	61.4	60.9	-0.5	-0.8%
22.2%	61.3	60.8	-0.5	-0.8%
23.5%	61.3	60.8	-0.5	-0.8%
24.7%	61.2	60.6	-0.5	-0.9%
25.9%	61.0	60.5	-0.5	-0.8%
27.2%	60.9	60.5	-0.4	-0.6%
28.4%	60.8	60.4	-0.4	-0.7%
29.6%	60.7	60.4	-0.3	-0.5%
30.9%	60.7	60.4	-0.3	-0.5%
32.1%	60.6	60.4	-0.3	-0.5%
33.3%	60.6	60.2	-0.4	-0.6%
34.6%	60.5	60.2	-0.3	-0.5%
35.8%	60.5	60.1	-0.4	-0.6%
37.0%	60.4	60.1	-0.3	-0.6%
38.3%	60.3	60.1	-0.2	-0.4%
39.5%	60.3	60.0	-0.2	-0.4%
40.7%	60.2	60.0	-0.2	-0.4%
42.0%	60.1	60.0	-0.1	-0.2%
43.2%	60.1	59.9	-0.2	-0.3%
44.4%	60.0	59.9	-0.1	-0.2%
45.7%	60.0	59.7	-0.3	-0.5%
46.9%	60.0	59.6	-0.3	-0.6%
48.1%	59.9	59.6	-0.3	-0.5%
49.4%	59.9	59.6	-0.3	-0.5%
50.6%	59.9	59.5	-0.3	-0.5%
51.9%	59.8	59.5	-0.3	-0.5%
53.1%	59.7	59.5	-0.2	-0.4%
54.3%	59.7	59.5	-0.2	-0.3%
55.6%	59.7	59.4	-0.2	-0.4%
56.8%	59.5	59.4	-0.1	-0.1%
58.0%	59.3	59.4	0.1	0.1%
59.3%	59.3	59.4	0.1	0.2%
60.5%	59.2	59.3	0.1	0.2%
61.7%	59.1	59.3	0.1	0.2%
63.0%	59.1	59.3	0.2	0.3%
64.2%	59.1	59.1	0.0	0.1%
65.4%	59.0	59.1	0.1	0.2%
66.7%	58.9	59.0	0.1	0.1%
67.9%	58.9	58.9	0.1	0.1%
69.1%	58.9	58.9	0.0	0.0%
70.4%	58.9	58.8	0.0	0.0%
71.6%	58.8	58.6	-0.2	-0.3%
72.8%	58.8	58.6	-0.2	-0.4%
74.1%	58.7	58.5	-0.1	-0.2%
75.3%	58.6	58.5	-0.1	-0.2%
76.5%	58.5	58.4	0.0	0.0%
77.8%	58.3	58.4	0.1	0.2%
79.0%	58.2	58.3	0.0	0.1%
80.2%	58.1	58.2	0.1	0.1%
81.5%	58.1	58.2	0.0	0.1%
82.7%	58.1	58.1	0.1	0.1%
84.0%	58.0	58.1	0.1	0.2%
85.2%	57.9	58.1	0.1	0.2%
86.4%	57.9	58.0	0.0	0.1%
87.7%	57.8	57.9	0.1	0.2%
88.9%	57.5	57.9	0.4	0.7%
90.1%	57.5	57.8	0.3	0.5%
91.4%	57.5	57.7	0.2	0.3%
92.6%	57.4	57.7	0.2	0.4%
93.8%	57.4	57.6	0.2	0.3%
95.1%	57.4	57.5	0.1	0.3%
96.3%	57.4	57.4	0.1	0.1%
97.5%	57.3	57.2	-0.1	-0.2%
98.8%	57.2	57.2	0.0	-0.1%
100.0%	57.0	57.1	0.1	0.1%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.7	71.7	0.0	0.0%
1.2%	69.7	67.3	-2.4	-3.4%
2.5%	68.7	66.9	-1.8	-2.6%
3.7%	66.8	65.7	-1.1	-1.7%
4.9%	65.5	63.4	-2.1	-3.2%
6.2%	64.8	62.9	-1.9	-3.0%
7.4%	64.1	62.6	-1.5	-2.4%
8.6%	63.7	62.3	-1.4	-2.2%
9.9%	63.6	62.1	-1.6	-2.5%
11.1%	63.3	62.0	-1.3	-2.0%
12.3%	62.8	61.9	-0.9	-1.4%
13.6%	62.8	61.7	-1.0	-1.6%
14.8%	62.8	61.7	-1.1	-1.7%
16.0%	62.7	61.6	-1.1	-1.7%
17.3%	62.6	61.6	-1.0	-1.6%
18.5%	62.4	61.5	-0.9	-1.5%
19.8%	62.3	61.4	-1.0	-1.5%
21.0%	62.3	61.3	-1.0	-1.5%
22.2%	62.0	61.2	-0.8	-1.3%
23.5%	62.0	61.1	-0.8	-1.4%
24.7%	61.8	61.1	-0.6	-1.0%
25.9%	61.7	60.9	-0.8	-1.3%
27.2%	61.6	60.8	-0.8	-1.3%
28.4%	61.6	60.8	-0.8	-1.4%
29.6%	61.6	60.6	-1.0	-1.6%
30.9%	61.6	60.6	-0.9	-1.5%
32.1%	61.3	60.6	-0.7	-1.1%
33.3%	61.2	60.5	-0.7	-1.2%
34.6%	61.2	60.4	-0.7	-1.2%
35.8%	60.9	60.4	-0.5	-0.8%
37.0%	60.9	60.4	-0.5	-0.8%
38.3%	60.8	60.3	-0.4	-0.7%
39.5%	60.8	60.3	-0.5	-0.8%
40.7%	60.7	60.3	-0.5	-0.8%
42.0%	60.7	60.2	-0.5	-0.8%
43.2%	60.6	60.2	-0.5	-0.8%
44.4%	60.6	60.2	-0.4	-0.7%
45.7%	60.5	60.0	-0.5	-0.8%
46.9%	60.3	59.9	-0.5	-0.8%
48.1%	60.3	59.8	-0.5	-0.9%
49.4%	60.2	59.8	-0.4	-0.6%
50.6%	60.1	59.7	-0.4	-0.6%
51.9%	60.1	59.7	-0.4	-0.7%
53.1%	60.0	59.7	-0.3	-0.5%
54.3%	59.8	59.7	-0.2	-0.3%
55.6%	59.8	59.6	-0.2	-0.3%
56.8%	59.8	59.6	-0.2	-0.3%
58.0%	59.8	59.5	-0.2	-0.4%
59.3%	59.7	59.5	-0.2	-0.4%
60.5%	59.7	59.4	-0.2	-0.4%
61.7%	59.6	59.4	-0.1	-0.2%
63.0%	59.5	59.4	-0.1	-0.2%
64.2%	59.4	59.4	0.0	-0.1%
65.4%	59.4	59.3	-0.1	-0.2%
66.7%	59.4	59.3	-0.1	-0.1%
67.9%	59.4	59.3	-0.1	-0.2%
69.1%	59.3	59.2	-0.2	-0.3%
70.4%	59.3	59.1	-0.1	-0.2%
71.6%	59.2	59.1	-0.1	-0.1%
72.8%	59.2	59.1	-0.1	-0.1%
74.1%	59.2	58.9	-0.2	-0.4%
75.3%	59.0	58.7	-0.3	-0.6%
76.5%	59.0	58.6	-0.4	-0.6%
77.8%	58.7	58.5	-0.2	-0.3%
79.0%	58.6	58.4	-0.2	-0.3%
80.2%	58.5	58.4	-0.1	-0.2%
81.5%	58.4	58.2	-0.3	-0.4%
82.7%	58.3	58.2	-0.1	-0.2%
84.0%	58.1	58.0	0.0	0.0%
85.2%	58.0	58.0	0.0	0.0%
86.4%	58.0	58.0	0.0	0.0%
87.7%	57.9	58.0	0.1	0.1%
88.9%	57.8	57.7	-0.1	-0.2%
90.1%	57.8	57.7	-0.1	-0.2%
91.4%	57.8	57.7	-0.1	-0.2%
92.6%	57.7	57.6	-0.1	-0.3%
93.8%	57.7	57.5	-0.2	-0.3%
95.1%	57.7	57.5	-0.2	-0.3%
96.3%	57.4	57.5	0.1	0.1%
97.5%	57.4	57.4	0.1	0.1%
98.8%	57.3	57.3	0.1	0.1%
100.0%	57.3	57.0	-0.3	-0.4%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.3	72.2	-0.1	-0.1%
1.2%	71.8	69.7	-2.1	-2.9%
2.5%	71.0	69.4	-1.6	-2.3%
3.7%	69.5	68.0	-1.5	-2.1%
4.9%	67.2	65.0	-2.2	-3.3%
6.2%	66.3	63.5	-2.8	-4.2%
7.4%	65.5	63.3	-2.2	-3.4%
8.6%	64.9	63.2	-1.7	-2.6%
9.9%	64.5	63.2	-1.3	-2.0%
11.1%	64.1	62.9	-1.2	-1.8%
12.3%	64.0	62.8	-1.2	-1.9%
13.6%	63.8	62.7	-1.1	-1.7%
14.8%	63.7	62.4	-1.3	-2.0%
16.0%	63.6	62.0	-1.6	-2.5%
17.3%	63.5	62.0	-1.5	-2.4%
18.5%	63.2	61.9	-1.3	-2.1%
19.8%	63.2	61.8	-1.4	-2.2%
21.0%	62.9	61.7	-1.2	-2.0%
22.2%	62.8	61.6	-1.2	-1.8%
23.5%	62.8	61.4	-1.3	-2.1%
24.7%	62.6	61.4	-1.2	-1.9%
25.9%	62.5	61.4	-1.1	-1.8%
27.2%	62.5	61.1	-1.3	-2.1%
28.4%	62.3	61.1	-1.2	-1.9%
29.6%	62.2	61.1	-1.1	-1.8%
30.9%	62.1	61.1	-1.1	-1.7%
32.1%	62.1	61.1	-1.0	-1.6%
33.3%	62.0	61.0	-1.0	-1.6%
34.6%	61.9	61.0	-0.9	-1.4%
35.8%	61.9	61.0	-0.9	-1.4%
37.0%	61.8	60.9	-0.9	-1.5%
38.3%	61.7	60.7	-1.0	-1.7%
39.5%	61.7	60.7	-1.0	-1.6%
40.7%	61.6	60.6	-0.9	-1.5%
42.0%	61.4	60.6	-0.8	-1.3%
43.2%	61.3	60.6	-0.8	-1.2%
44.4%	61.1	60.5	-0.6	-1.0%
45.7%	61.0	60.5	-0.5	-0.9%
46.9%	60.8	60.4	-0.4	-0.6%
48.1%	60.8	60.3	-0.5	-0.7%
49.4%	60.7	60.3	-0.4	-0.7%
50.6%	60.6	60.3	-0.3	-0.5%
51.9%	60.5	60.3	-0.3	-0.5%
53.1%	60.4	60.2	-0.1	-0.2%
54.3%	60.4	60.2	-0.2	-0.3%
55.6%	60.3	60.0	-0.3	-0.5%
56.8%	60.2	60.0	-0.3	-0.4%
58.0%	60.1	59.9	-0.2	-0.4%
59.3%	60.1	59.9	-0.2	-0.3%
60.5%	60.0	59.9	-0.2	-0.3%
61.7%	60.0	59.9	-0.2	-0.3%
63.0%	59.9	59.8	-0.1	-0.2%
64.2%	59.8	59.8	0.0	0.0%
65.4%	59.6	59.7	0.1	0.1%
66.7%	59.6	59.4	-0.3	-0.4%
67.9%	59.6	59.3	-0.3	-0.5%
69.1%	59.6	59.3	-0.3	-0.5%
70.4%	59.5	59.2	-0.3	-0.4%
71.6%	59.5	59.1	-0.4	-0.6%
72.8%	59.4	59.1	-0.3	-0.5%
74.1%	59.4	58.9	-0.5	-0.8%
75.3%	59.1	58.9	-0.2	-0.4%
76.5%	58.9	58.8	-0.1	-0.1%
77.8%	58.8	58.7	-0.1	-0.1%
79.0%	58.7	58.6	-0.2	-0.3%
80.2%	58.6	58.5	-0.1	-0.2%
81.5%	58.6	58.5	-0.1	-0.2%
82.7%	58.6	58.3	-0.3	-0.5%
84.0%	58.5	58.3	-0.2	-0.4%
85.2%	58.4	58.3	-0.2	-0.3%
86.4%	58.1	58.2	0.1	0.1%
87.7%	58.1	58.0	0.0	-0.1%
88.9%	57.9	57.9	0.0	0.0%
90.1%	57.9	57.7	-0.2	-0.4%
91.4%	57.8	57.7	-0.1	-0.3%
92.6%	57.8	57.5	-0.3	-0.4%
93.8%	57.8	57.4	-0.3	-0.6%
95.1%	57.7	57.4	-0.3	-0.4%
96.3%	57.6	57.3	-0.3	-0.5%
97.5%	57.5	57.2	-0.3	-0.6%
98.8%	57.2	57.1	-0.1	-0.2%
100.0%	56.9	56.2	-0.7	-1.2%

Figure SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

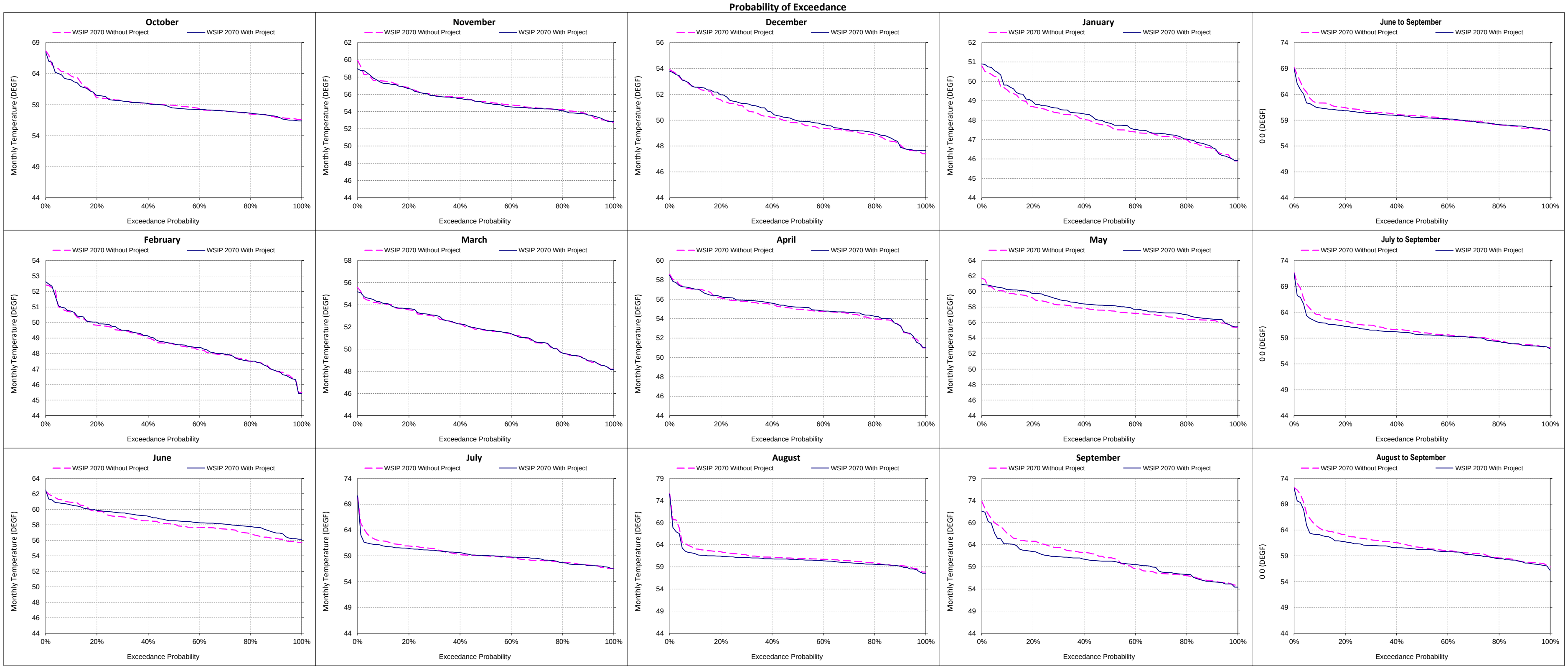


Table SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.7	67.5	-0.2	-0.2%
1.2%	66.9	66.0	-1.0	-1.4%
2.5%	65.4	65.8	0.4	0.7%
3.7%	64.9	64.2	-0.7	-1.0%
4.9%	64.8	64.0	-0.8	-1.3%
6.2%	64.3	63.8	-0.5	-0.8%
7.4%	64.3	63.2	-1.1	-1.7%
8.6%	64.0	63.1	-0.9	-1.5%
9.9%	63.6	63.0	-0.6	-0.9%
11.1%	63.4	62.7	-0.7	-1.2%
12.3%	63.4	62.5	-0.9	-1.4%
13.6%	62.7	62.0	-0.7	-1.1%
14.8%	61.9	61.8	-0.2	-0.3%
16.0%	61.8	61.7	-0.1	-0.2%
17.3%	61.4	61.2	-0.2	-0.3%
18.5%	61.0	61.0	0.0	0.0%
19.8%	60.1	60.5	0.4	0.6%
21.0%	60.1	60.5	0.4	0.6%
22.2%	60.0	60.4	0.4	0.6%
23.5%	60.0	60.3	0.3	0.5%
24.7%	60.0	59.8	-0.1	-0.2%
25.9%	59.9	59.8	-0.2	-0.3%
27.2%	59.8	59.7	0.0	-0.1%
28.4%	59.7	59.7	-0.1	-0.1%
29.6%	59.6	59.6	0.0	-0.1%
30.9%	59.5	59.5	0.0	0.0%
32.1%	59.5	59.5	0.0	0.0%
33.3%	59.4	59.4	-0.1	-0.1%
34.6%	59.4	59.3	0.0	-0.1%
35.8%	59.4	59.3	0.0	-0.1%
37.0%	59.3	59.3	0.0	0.0%
38.3%	59.3	59.3	0.0	0.0%
39.5%	59.3	59.2	0.0	0.0%
40.7%	59.2	59.1	-0.1	-0.1%
42.0%	59.1	59.1	0.0	0.0%
43.2%	59.1	59.0	0.0	-0.1%
44.4%	59.0	59.0	-0.1	-0.1%
45.7%	59.0	59.0	-0.1	-0.1%
46.9%	58.9	58.9	-0.1	-0.1%
48.1%	58.9	58.7	-0.3	-0.5%
49.4%	58.9	58.5	-0.4	-0.8%
50.6%	58.9	58.4	-0.4	-0.7%
51.9%	58.8	58.4	-0.3	-0.6%
53.1%	58.7	58.4	-0.4	-0.6%
54.3%	58.7	58.3	-0.4	-0.6%
55.6%	58.6	58.3	-0.4	-0.6%
56.8%	58.6	58.3	-0.3	-0.6%
58.0%	58.5	58.2	-0.3	-0.5%
59.3%	58.5	58.2	-0.2	-0.4%
60.5%	58.3	58.2	0.0	-0.1%
61.7%	58.1	58.2	0.1	0.2%
63.0%	58.1	58.1	0.0	0.1%
64.2%	58.1	58.1	0.0	0.1%
65.4%	58.1	58.1	0.0	0.0%
66.7%	58.1	58.1	0.0	0.0%
67.9%	58.1	58.0	0.0	-0.1%
69.1%	58.0	58.0	0.1	0.1%
70.4%	57.9	58.0	0.0	0.0%
71.6%	57.9	57.9	0.0	0.1%
72.8%	57.9	57.8	-0.1	-0.1%
74.1%	57.9	57.8	-0.1	-0.1%
75.3%	57.7	57.8	0.0	0.1%
76.5%	57.7	57.8	0.1	0.1%
77.8%	57.7	57.7	0.1	0.1%
79.0%	57.5	57.7	0.1	0.2%
80.2%	57.5	57.6	0.1	0.2%
81.5%	57.4	57.5	0.1	0.2%
82.7%	57.4	57.5	0.1	0.1%
84.0%	57.4	57.4	0.0	0.1%
85.2%	57.4	57.4	0.0	0.1%
86.4%	57.3	57.3	0.0	0.0%
87.7%	57.2	57.2	0.1	0.1%
88.9%	57.1	57.2	0.1	0.2%
90.1%	56.9	57.1	0.2	0.3%
91.4%	56.9	56.9	0.0	0.0%
92.6%	56.9	56.7	-0.2	-0.3%
93.8%	56.8	56.6	-0.2	-0.4%
95.1%	56.8	56.5	-0.3	-0.5%
96.3%	56.8	56.5	-0.3	-0.5%
97.5%	56.7	56.5	-0.2	-0.4%
98.8%	56.6	56.4	-0.2	-0.3%
100.0%	56.6	56.4	0.0	-0.3%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.9	59.0	-1.0	-1.7%
1.2%	59.2	58.8	-0.5	-0.8%
2.5%	58.3	58.7	0.4	0.8%
3.7%	58.3	58.5	0.2	0.4%
4.9%	58.1	58.2	0.2	0.3%
6.2%	57.6	57.9	0.3	0.5%
7.4%	57.6	57.7	0.1	0.2%
8.6%	57.6	57.4	-0.1	-0.3%
9.9%	57.5	57.3	-0.3	-0.5%
11.1%	57.5	57.3	-0.2	-0.4%
12.3%	57.5	57.2	-0.3	-0.5%
13.6%	57.4	57.1	-0.2	-0.4%
14.8%	57.2	57.1	-0.1	-0.1%
16.0%	57.2	57.0	-0.2	-0.4%
17.3%	56.9	56.9	0.0	0.0%
18.5%	56.9	56.8	-0.1	-0.1%
19.8%	56.8	56.7	-0.1	-0.2%
21.0%	56.5	56.6	0.1	0.1%
22.2%	56.5	56.4	-0.1	-0.3%
23.5%	56.3	56.3	-0.1	-0.1%
24.7%	56.2	56.2	0.0	0.0%
25.9%	56.1	56.1	0.0	0.0%
27.2%	56.1	56.1	0.0	0.0%
28.4%	56.0	55.9	-0.2	-0.3%
29.6%	55.9	55.9	0.0	-0.1%
30.9%	55.8	55.8	0.0	-0.1%
32.1%	55.8	55.7	0.0	-0.1%
33.3%	55.8	55.7	0.0	-0.1%
34.6%	55.7	55.7	-0.1	-0.1%
35.8%	55.7	55.7	-0.1	-0.1%
37.0%	55.7	55.6	-0.1	-0.2%
38.3%	55.7	55.6	-0.1	-0.2%
39.5%	55.6	55.5	-0.1	-0.2%
40.7%	55.6	55.5	-0.1	-0.2%
42.0%	55.6	55.4	-0.2	-0.4%
43.2%	55.4	55.4	-0.1	-0.1%
44.4%	55.4	55.4	0.0	0.0%
45.7%	55.2	55.2	0.0	0.0%
46.9%	55.2	55.2	0.0	0.0%
48.1%	55.2	55.1	0.0	0.0%
49.4%	55.1	55.0	-0.1	-0.3%
50.6%	55.1	55.0	-0.2	-0.3%
51.9%	55.1	54.9	-0.2	-0.3%
53.1%	55.0	54.8	-0.2	-0.3%
54.3%	55.0	54.8	-0.2	-0.3%
55.6%	54.9	54.8	-0.1	-0.2%
56.8%	54.9	54.7	-0.2	-0.3%
58.0%	54.8	54.6	-0.2	-0.4%
59.3%	54.8	54.6	-0.2	-0.4%
60.5%	54.8	54.5	-0.2	-0.4%
61.7%	54.7	54.5	-0.2	-0.4%
63.0%	54.7	54.5	-0.2	-0.4%
64.2%	54.7	54.5	-0.2	-0.4%
65.4%	54.5	54.5	-0.1	-0.1%
66.7%	54.5	54.4	-0.1	-0.2%
67.9%	54.5	54.4	-0.1	-0.1%
69.1%	54.5	54.4	-0.1	-0.2%
70.4%	54.4	54.4	0.0	-0.1%
71.6%	54.4	54.3	-0.1	-0.1%
72.8%	54.4	54.3	0.0	-0.1%
74.1%	54.3	54.3	0.0	-0.1%
75.3%	54.3	54.3	0.0	0.0%
76.5%	54.3	54.3	0.0	0.0%
77.8%	54.3	54.2	0.0	0.0%
79.0%	54.2	54.1	-0.1	-0.3%
80.2%	54.2	54.1	-0.1	-0.3%
81.5%	54.2	54.0	-0.2	-0.4%
82.7%	54.1	53.8	-0.2	-0.4%
84.0%	54.1	53.8	-0.2	-0.4%
85.2%	54.0	53.8	-0.2	-0.4%
86.4%	53.9	53.8	-0.2	-0.3%
87.7%	53.9	53.8	-0.1	-0.3%
88.9%	53.8	53.7	-0.1	-0.1%
90.1%	53.6	53.6	0.0	0.0%
91.4%	53.5	53.6	0.0	0.1%
92.6%	53.2	53.4	0.2	0.4%
93.8%	53.2	53.4	0.2	0.3%
95.1%	53.1	53.2	0.2	0.3%
96.3%	53.0	53.0	0.0	0.0%
97.5%	53.0	52.9	-0.1	-0.2%
98.8%	52.8	52.8	0.1	0.1%
100.0%	52.8	52.8	0.1	0.1%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.9	53.8	-0.1	-0.2%
1.2%	53.8	53.7	-0.1	-0.1%
2.5%	53.6	53.5	-0.1	-0.2%
3.7%	53.3	53.4	0.1	0.2%
4.9%	53.1	53.1	0.0	0.0%
6.2%	53.1	53.0	-0.1	-0.1%
7.4%	52.8	52.9	0.1	0.2%
8.6%	52.7	52.6	0.0	-0.1%
9.9%	52.5	52.6	0.0	0.1%
11.1%	52.5	52.5	0.0	0.1%
12.3%	52.3	52.5	0.2	0.4%
13.6%	52.3	52.5	0.2	0.4%
14.8%	52.3	52.3	0.1	0.1%
16.0%	52.2	52.3	0.1	0.2%
17.3%	51.8	52.2	0.4	0.8%
18.5%	51.7	52.2	0.5	1.0%
19.8%	51.6	52.0	0.4	0.7%
21.0%	51.4	51.9	0.5	1.0%
22.2%	51.4	51.8	0.4	0.8%
23.5%	51.3	51.5	0.2	0.5%
24.7%	51.3	51.5	0.2	0.4%
25.9%	51.2	51.4	0.2	0.4%
27.2%	51.1	51.3	0.2	0.4%
28.4%	51.1	51.3	0.2	0.3%
29.6%	50.9	51.3	0.4	0.8%
30.9%	50.7	51.2	0.5	1.1%
32.1%	50.7	51.1	0.5	1.0%
33.3%	50.6	51.1	0.5	1.0%
34.6%	50.5	51.1	0.5	1.1%
35.8%	50.4	51.0	0.6	1.2%
37.0%	50.3	51.0	0.6	1.3%
38.3%	50.3	50.7	0.4	0.8%
39.5%	50.2	50.7	0.4	0.8%
40.7%	50.2	50.4	0.2	0.4%
42.0%	50.1	50.3	0.2	0.4%
43.2%	50.1	50.3	0.2	0.4%
44.4%	50.0	50.2	0.2	0.5%
45.7%	49.9	50.2	0.3	0.6%
46.9%	49.8	50.2	0.3	0.7%
48.1%	49.8	50.1	0.3	0.5%
49.4%	49.8	50.0	0.2	0.4%
50.6%	49.7	49.9	0.2	0.4%
51.9%	49.7	49.9	0.2	0.4%
53.1%	49.6	49.9	0.3	0.7%
54.3%	49.6	49.9	0.3	0.6%
55.6%	49.5	49.8	0.3	0.6%
56.8%	49.5	49.8	0.3	0.6%
58.0%	49.4	49.8	0.4	0.8%
59.3%	49.4	49.7	0.3	0.7%
60.5%	49.4	49.6	0.3	0.6%
61.7%	49.3	49.6	0.2	0.5%
63.0%	49.3	49.6	0.3	0.5%
64.2%	49.3	49.4	0.1	0.2%
65.4%	49.3	49.4	0.1	0.2%
66.7%	49.3	49.4	0.1	0.2%
67.9%	49.2	49.3	0.1	0.2%
69.1%	49.2	49.3	0.1	0.2%
70.4%	49.2	49.2	0.1	0.1%
71.6%	49.1	49.2	0.1	0.2%
72.8%	49.1	49.2	0.1	0.2%
74.1%	49.0	49.2	0.2	0.4%
75.3%	49.0	49.2	0.2	0.4%
76.5%	48.9	49.1	0.2	0.5%
77.8%	48.9	49.1	0.2	0.4%
79.0%	48.9	49.0	0.1	0.3%
80.2%	48.8	49.0	0.2	0.5%
81.5%	48.7	48.9	0.2	0.4%
82.7%	48.7	48.8	0.1	0.3%
84.0%	48.5	48.8	0.3	0.6%
85.2%	48.4	48.7	0.3	0.6%
86.4%	48.4	48.6	0.2	0.5%
87.7%	48.3	48.5	0.1	0.3%
88.9%	48.3	48.4	0.1	0.2%
90.1%	48.1	47.9	-0.2	-0.4%
91.4%	47.8	47.8	0.0	0.0%
92.6%	47.7	47.7	0.0	0.0%
93.8%	47.7	47.7	0.1	0.2%
95.1%	47.6	47.7	0.0	0.1%
96.3%	47.6	47.7	0.0	0.1%
97.5%	47.6	47.7	0.1	0.2%
98.8%	47.4	47.6	0.2	0.5%
100.0%	47.4	47.6	0.2	0.5%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.8	50.9	0.1	0.2%
1.2%	50.5	50.9	0.4	0.7%
2.5%	50.5	50.8	0.3	0.6%
3.7%	50.4	50.7	0.4	0.7%
4.9%	50.3	50.6	0.3	0.6%
6.2%	50.2	50.5	0.2	0.5%
7.4%	49.7	50.3	0.6	1.2%
8.6%	49.7	49.8	0.1	0.2%
9.9%	49.6	49.8	0.2	0.5%
11.1%	49.4	49.7	0.3	0.6%
12.3%	49.4	49.6	0.2	0.5%
13.6%	49.3	49.4	0.1	0.2%
14.8%	49.1	49.4	0.3	0.5%
16.0%	49.0	49.3	0.3	0.7%
17.3%	49.0	49.1	0.1	0.2%
18.5%	48.7	49.1	0.4	0.7%
19.8%	48.7	49.0	0.3	0.5%
21.0%	48.7	48.8	0.2	0.3%
22.2%	48.6	48.8	0.2	0.4%
23.5%	48.6	48.7	0.1	0.3%
24.7%	48.6	48.7	0.2	0.4%
25.9%	48.5	48.7	0.2	0.5%
27.2%	48.5	48.7	0.2	0.4%
28.4%	48.4	48.6	0.2	0.5%
29.6%	48.4	48.6	0.2	0.5%
30.9%	48.4	48.5	0.2	0.4%
32.1%	48.3	48.5	0.2	0.5%
33.3%	48.3	48.5	0.2	0.5%
34.6%	48.3	48.4	0.1	0.3%
35.8%	48.2	48.4	0.1	0.3%
37.0%	48.2	48.4	0.2	0.3%
38.3%	48.1	48.4	0.3	0.5%
39.5%	48.1	48.3	0.3	0.5%
40.7%	48.0	48.3	0.3	0.6%
42.0%	48.0	48.3	0.3	0.6%
43.2%	47.9	48.2	0.3	0.6%
44.4%	47.8	48.0	0.2	0.4%
45.7%	47.8	48.0	0.2	0.4%
46.9%	47.8	48.0	0.2	0.5%
48.1%	47.7	47.9	0.2	0.3%
49.4%	47.7	47.9	0.1	0.3%
50.6%	47.6	47.8	0.2	0.4%
51.9%	47.5	47.7	0.2	0.5%
53.1%	47.5	47.7	0.2	0.5%
54.3%	47.5	47.7	0.2	0.5%
55.6%	47.5	47.7	0.2	0.5%
56.8%	47.5	47.7	0.3	0.5%
58.0%	47.4	47.6	0.2	0.4%
59.3%	47.4	47.5	0.1	0.3%
60.5%	47.4	47.5	0.1	0.3%
61.7%	47.3	47.5	0.1	0.3%
63.0%	47.3	47.5	0.1	0.3%
64.2%	47.3	47.5	0.1	0.3%
65.4%	47.3	47.4	0.1	0.1%
66.7%	47.3	47.3	0.0	0.0%
67.9%	47.2	47.3	0.1	0.2%
69.1%	47.2	47.3	0.1	0.2%
70.4%	47.2	47.3	0.1	0.3%
71.6%	47.2	47.3	0.1	0.3%
72.8%	47.2	47.3	0.1	0.2%
74.1%	47.1	47.2	0.1	0.2%
75.3%	47.1	47.2	0.1	0.2%
76.5%	47.1	47.2	0.1	0.3%
77.8%	47.1	47.1	0.1	0.1%
79.0%	47.0	47.0	0.0	0.0%
80.2%	47.0	47.0	0.0	0.1%
81.5%	46.8	47.0	0.1	0.3%
82.7%	46.8	46.9	0.1	0.3%
84.0%	46.8	46.9	0.1	0.1%
85.2%	46.7	46.8	0.1	0.3%
86.4%	46.7	46.8	0.1	0.2%
87.7%	46.6	46.7	0.1	0.3%
88.9%	46.6	46.7	0.1	0.2%
90.1%	46.5	46.6	0.1	0.1%
91.4%	46.4	46.5	0.1	0.1%
92.6%	46.3	46.3	-0.1	-0.1%
93.8%	46.3	46.2	-0.1	-0.2%
95.1%	46.2	46.2	-0.1	-0.2%
96.3%	46.2	46.1	-0.1	-0.3%
97.5%	46.0	46.0	0.1	0.2%
98.8%	45.9	45.9	0.0	0.0%
100.0%	45.9	45.9	0.0	0.0%

Table SQ8-1b

Sacramento River below Red Bluff, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.4	52.6	0.2	0.4%
1.2%	52.4	52.5	0.1	0.2%
2.5%	52.2	52.3	0.1	0.2%
3.7%	52.1	51.7	-0.4	-0.8%
4.9%	51.0	51.1	0.1	0.1%
6.2%	50.9	51.0	0.1	0.2%
7.4%	50.8	50.9	0.2	0.3%
8.6%	50.7	50.8	0.1	0.1%
9.9%	50.7	50.7	0.1	0.1%
11.1%	50.6	50.7	0.1	0.1%
12.3%	50.3	50.4	0.1	0.2%
13.6%	50.3	50.4	0.1	0.2%
14.8%	50.2	50.4	0.1	0.3%
16.0%	50.1	50.1	0.0	0.0%
17.3%	50.0	50.1	0.0	0.0%
18.5%	49.9	50.0	0.2	0.3%
19.8%	49.8	50.0	0.2	0.4%
21.0%	49.8	49.9	0.1	0.2%
22.2%	49.8	49.9	0.1	0.3%
23.5%	49.8	49.9	0.1	0.2%
24.7%	49.7	49.9	0.2	0.3%
25.9%	49.7	49.8	0.1	0.1%
27.2%	49.5	49.7	0.2	0.4%
28.4%	49.5	49.6	0.1	0.2%
29.6%	49.5	49.5	0.0	0.1%
30.9%	49.5	49.5	0.0	0.1%
32.1%	49.4	49.5	0.0	0.1%
33.3%	49.3	49.4	0.1	0.2%
34.6%	49.3	49.4	0.0	0.1%
35.8%	49.3	49.3	0.1	0.1%
37.0%	49.2	49.3	0.1	0.2%
38.3%	49.2	49.2	0.0	0.0%
39.5%	49.0	49.2	0.1	0.3%
40.7%	49.0	49.1	0.1	0.2%
42.0%	48.9	49.0	0.1	0.3%
43.2%	48.7	48.9	0.2	0.3%
44.4%	48.7	48.8	0.1	0.2%
45.7%	48.7	48.8	0.1	0.2%
46.9%	48.7	48.7	0.1	0.1%
48.1%	48.7	48.7	0.0	0.1%
49.4%	48.6	48.7	0.0	0.1%
50.6%	48.6	48.6	0.0	0.0%
51.9%	48.5	48.6	0.0	0.1%
53.1%	48.5	48.6	0.1	0.2%
54.3%	48.5	48.5	0.1	0.2%
55.6%	48.4	48.5	0.1	0.1%
56.8%	48.4	48.4	0.1	0.2%
58.0%	48.4	48.4	0.0	0.1%
59.3%	48.3	48.4	0.1	0.3%
60.5%	48.2	48.4	0.2	0.3%
61.7%	48.2	48.3	0.1	0.2%
63.0%	48.1	48.2	0.2	0.3%
64.2%	48.0	48.1	0.1	0.2%
65.4%	48.0	48.1	0.1	0.2%
66.7%	48.0	48.0	0.0	0.1%
67.9%	47.9	48.0	0.1	0.2%
69.1%	47.9	48.0	0.1	0.1%
70.4%	47.9	47.9	0.0	0.1%
71.6%	47.9	47.9	0.0	0.0%
72.8%	47.9	47.9	-0.1	-0.1%
74.1%	47.7	47.7	0.0	0.0%
75.3%	47.7	47.6	-0.1	-0.2%
76.5%	47.7	47.6	-0.1	-0.2%
77.8%	47.7	47.5	-0.1	-0.2%
79.0%	47.5	47.5	0.0	0.0%
80.2%	47.5	47.5	0.0	0.0%
81.5%	47.4	47.5	0.1	0.2%
82.7%	47.4	47.4	0.0	0.0%
84.0%	47.4	47.4	0.0	0.0%
85.2%	47.3	47.3	0.0	0.0%
86.4%	47.3	47.2	-0.1	-0.2%
87.7%	47.0	47.0	0.0	0.0%
88.9%	46.9	46.9	0.0	0.1%
90.1%	46.9	46.9	0.0	0.1%
91.4%	46.8	46.9	0.1	0.1%
92.6%	46.8	46.6	-0.2	-0.4%
93.8%	46.6	46.6	0.0	-0.1%
95.1%	46.6	46.5	-0.1	-0.3%
96.3%	46.4	46.4	-0.1	-0.1%
97.5%	46.3	46.3	0.0	0.0%
98.8%	45.5	45.4	-0.1	-0.1%
100.0%	45.5	45.4	-0.1	-0.1%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.6	55.2	-0.4	-0.7%
1.2%	55.2	55.1	-0.2	-0.3%
2.5%	54.6	54.7	0.2	0.3%
3.7%	54.4	54.6	0.2	0.3%
4.9%	54.4	54.6	0.2	0.4%
6.2%	54.2	54.5	0.3	0.5%
7.4%	54.2	54.3	0.1	0.2%
8.6%	54.1	54.3	0.1	0.2%
9.9%	54.1	54.1	0.0	0.0%
11.1%	54.1	54.1	0.1	0.1%
12.3%	54.1	54.1	0.0	0.0%
13.6%	54.0	53.8	-0.2	-0.3%
14.8%	53.7	53.8	0.1	0.1%
16.0%	53.7	53.7	0.0	0.1%
17.3%	53.7	53.7	0.0	0.1%
18.5%	53.6	53.7	0.1	0.1%
19.8%	53.6	53.7	0.1	0.2%
21.0%	53.5	53.6	0.1	0.2%
22.2%	53.5	53.6	0.1	0.1%
23.5%	53.2	53.3	0.1	0.2%
24.7%	53.2	53.2	0.1	0.1%
25.9%	53.1	53.2	0.1	0.1%
27.2%	53.1	53.2	0.1	0.2%
28.4%	53.0	53.1	0.0	0.1%
29.6%	53.0	53.1	0.1	0.2%
30.9%	52.9	53.0	0.1	0.2%
32.1%	52.7	52.9	0.2	0.5%
33.3%	52.7	52.7	0.0	0.0%
34.6%	52.6	52.6	-0.1	-0.1%
35.8%	52.5	52.5	0.0	0.0%
37.0%	52.4	52.5	0.0	0.1%
38.3%	52.4	52.3	0.0	-0.1%
39.5%	52.4	52.3	-0.1	-0.2%
40.7%	52.2	52.2	0.0	0.0%
42.0%	52.0	52.2	0.2	0.3%
43.2%	52.0	52.1	0.1	0.1%
44.4%	52.0	52.0	0.0	0.0%
45.7%	51.8	51.9	0.1	0.2%
46.9%	51.8	51.9	0.1	0.2%
48.1%	51.8	51.8	0.0	0.1%
49.4%	51.7	51.8	0.1	0.1%
50.6%	51.7	51.7	0.0	0.1%
51.9%	51.6	51.7	0.1	0.2%
53.1%	51.6	51.7	0.0	0.1%
54.3%	51.6	51.6	0.0	0.0%
55.6%	51.6	51.6	0.0	0.0%
56.8%	51.5	51.5	0.0	0.0%
58.0%	51.4	51.5	0.1	0.1%
59.3%	51.4	51.4	0.0	0.1%
60.5%	51.2	51.3	0.1	0.2%
61.7%	51.2	51.2	0.0	0.0%
63.0%	51.2	51.1	-0.1	-0.3%
64.2%	51.1	51.1	0.0	0.0%
65.4%	51.0	51.0	0.0	0.1%
66.7%	51.0	51.0	0.0	0.1%
67.9%	50.8	50.9	0.1	0.2%
69.1%	50.6	50.7	0.1	0.2%
70.4%	50.6	50.6	0.0	0.0%
71.6%	50.5	50.6	0.0	0.1%
72.8%	50.5	50.6	0.1	0.1%
74.1%	50.5	50.5	0.0	0.1%
75.3%	50.2	50.3	0.1	0.1%
76.5%	50.1	50.0	-0.1	-0.1%
77.8%	50.0	50.0	0.0	0.0%
79.0%	49.7	49.8	0.0	0.0%
80.2%	49.6	49.6	0.0	-0.1%
81.5%	49.6	49.6	0.0	0.0%
82.7%	49.5	49.5	0.1	0.1%
84.0%	49.4	49.4	0.0	0.0%
85.2%	49.4	49.4	0.0	0.1%
86.4%	49.4	49.4	0.0	0.0%
87.7%	49.3	49.2	0.0	-0.1%
88.9%	49.0	49.1	0.1	0.3%
90.1%	49.0	48.9	0.0	0.0%
91.4%	48.8	48.9	0.1	0.2%
92.6%	48.7	48.9	0.1	0.2%
93.8%	48.7	48.7	0.0	-0.1%
95.1%	48.5	48.6	0.0	0.0%
96.3%	48.5	48.5	0.0	-0.1%
97.5%	48.4	48.4	0.0	0.0%
98.8%	48.2	48.2	0.0	0.0%
100.0%	48.2	48.2	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.6	58.4	-0.1	-0.2%
1.2%	58.0	57.9	-0.2	-0.3%
2.5%	58.0	57.7	-0.3	-0.4%
3.7%	57.5	57.4	-0.1	-0.2%
4.9%	57.3	57.3	-0.1	-0.1%
6.2%	57.1	57.3	0.1	0.3%
7.4%	57.1	57.2	0.1	0.1%
8.6%	57.1	57.1	0.1	0.1%
9.9%	57.1	57.1	0.0	0.0%
11.1%	57.0	57.1	0.0	0.0%
12.3%	57.0	56.9	-0.2	-0.3%
13.6%	56.9	56.6	-0.3	-0.5%
14.8%	56.8	56.5	-0.3	-0.6%
16.0%	56.7	56.4	-0.3	-0.5%
17.3%	56.3	56.4	0.1	0.1%
18.5%	56.2	56.4	0.2	0.3%
19.8%	56.1	56.3	0.2	0.3%
21.0%	56.1	56.2	0.1	0.2%
22.2%	56.0	56.2	0.2	0.3%
23.5%	55.9	56.2	0.3	0.5%
24.7%	55.9	56.1	0.2	0.4%
25.9%	55.9	55.9	0.1	0.1%
27.2%	55.8	55.9	0.1	0.2%
28.4%	55.8	55.9	0.1	0.2%
29.6%	55.8	55.9	0.1	0.2%
30.9%	55.7	55.9	0.2	0.3%
32.1%	55.7	55.9	0.2	0.3%
33.3%	55.7	55.8	0.2	0.3%
34.6%	55.6	55.8	0.2	0.4%
35.8%	55.5	55.8	0.2	0.4%
37.0%	55.5	55.7	0.2	0.3%
38.3%	55.5	55.7	0.1	0.2%
39.5%	55.5	55.6	0.1	0.3%
40.7%	55.4	55.6	0.1	0.2%
42.0%	55.3	55.5	0.2	0.4%
43.2%	55.2	55.4	0.2	0.3%
44.4%	55.2	55.4	0.2	0.3%
45.7%	55.1	55.3	0.2	0.3%
46.9%	55.1	55.2	0.1	0.3%
48.1%	55.1	55.2	0.1	0.3%
49.4%	55.0	55.2	0.2	0.4%
50.6%	55.0	55.2	0.2	0.4%
51.9%	54.9	55.2	0.2	0.4%
53.1%	54.9	55.2	0.2	0.4%
54.3%	54.9	55.1	0.3	0.5%
55.6%	54.8	54.9	0.1	0.2%
56.8%	54.8	54.9	0.1	0.2%
58.0%	54.8	54.9	0.1	0.2%
59.3%	54.7	54.8	0.1	0.1%
60.5%	54.7	54.8	0.1	0.1%
61.7%	54.7	54.8	0.1	0.1%
63.0%	54.7	54.8	0.0	0.1%
64.2%	54.7	54.7	0.1	0.1%
65.4%	54.7	54.7	0.0	0.1%
66.7%	54.6	54.7	0.0	0.1%
67.9%	54.6	54.7	0.1	0.1%
69.1%	54.6	54.7	0.1	0.2%
70.4%	54.5	54.7	0.2	0.4%
71.6%	54.4	54.6	0.2	0.4%
72.8%	54.4	54.6	0.2	0.3%
74.1%	54.3	54.6	0.2	0.4%
75.3%	54.2	54.4	0.3	0.5%
76.5%	54.2	54.4	0.2	0.3%
77.8%	54.1	54.4	0.3	0.5%
79.0%	54.0	54.3	0.3	0.6%
80.2%	54.0	54.2	0.3	0.5%
81.5%	54.0	54.2	0.2	0.5%
82.7%	53.9	54.0	0.1	0.2%
84.0%	53.9	54.0	0.1	0.2%
85.2%	53.9	54.0	0.1	0.2%
86.4%	53.8	54.0	0.2	0.3%
87.7%	53.5	53.6	0.0	0.0%
88.9%	53.5	53.4	0.0	-0.1%
90.1%	53.2	53.2	0.0	0.0%
91.4%	52.6	52.7	0.1	0.2%
92.6%	52.5	52.5	0.0	0.0%
93.8%	52.4	52.5	0.1	0.2%
95.1%	52.0	52.2	0.2	0.4%
96.3%	51.9	51.6	-0.3	-0.6%
97.5%	51.6	51.4	-0.1	-0.3%
98.8%	51.0	51.1	0.1	0.1%
100.0%	51.0	51.1	0.1	0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.7	60.9	-0.8	-1.3%
1.2%	61.5	60.8	-0.7	-1.1%
2.5%	60.6	60.8	0.2	0.4%
3.7%	60.6	60.7	0.1	0.1%
4.9%	60.3	60.7	0.4	0.7%
6.2%	60.1	60.6	0.4	0.7%
7.4%	60.1	60.5	0.4	0.7%
8.6%	60.1	60.4	0.4	0.6%
9.9%	59.8	60.3	0.5	0.8%
11.1%	59.7	60.2	0.5	0.8%
12.3%	59.7	60.2	0.5	0.8%
13.6%	59.6	60.2	0.6	1.0%
14.8%	59.6	60.1	0.5	0.9%
16.0%	59.5	60.1	0.6	0.9%
17.3%	59.5	60.1	0.6	1.0%
18.5%	59.3	60.0	0.7	1.2%
19.8%	59.2	59.7	0.5	0.9%
21.0%	58.9	59.7	0.8	1.4%
22.2%	58.8	59.7	0.9	1.5%
23.5%	58.8	59.7	0.9	1.5%
24.7%	58.7	59.5	0.7	1.3%
25.9%	58.6	59.4	0.8	1.4%
27.2%	58.5	59.3	0.8	1.3%
28.4%	58.3	59.2	0.8	1.4%
29.6%	58.3	59.0	0.8	1.3%
30.9%	58.3	58.9	0.6	1.0%
32.1%	58.3	58.8	0.5	0.9%
33.3%	58.2	58.8	0.6	1.0%
34.6%	58.2	58.6	0.5	0.8%
35.8%	57.9	58.6	0.7	1.2%
37.0%	57.9	58.6	0.7	1.2%
38.3%	57.9	58.5	0.6	1.0%
39.5%	57.8	58.4	0.6	1.0%
40.7%	57.8	58.4	0.5	0.9%
42.0%	57.7	58.3	0.6	1.1%
43.2%	57.7	58.3	0.6	1.1%
44.4%	57.6	58.3	0.6	1.1%
45.7%	57.6	58.3	0.6	1.1%
46.9%	57.6	58.2	0.6	1.1%
48.1%	57.6	58.2	0.6	1.1%
49.4%	57.6	58.2	0.6	1.1%
50.6%	57.5	58.2	0.7	1.2%
51.9%	57.5	58.2	0.7	1.2%
53.1%	57.4	58.1	0.7	1.3%
54.3%	57.3	58.0	0.7	1.3%
55.6%	57.3	58.0	0.7	1.3%
56.8%	57.2	58.0	0.7	1.3%
58.0%	57.2	57.9	0.7	1.2%
59.3%	57.2	57.7	0.5	0.9%
60.5%	57.2	57.7	0.5	0.9%
61.7%	57.1	57.7	0.6	1.0%
63.0%	57.1	57.6	0.5	0.9%
64.2%	57.1	57.5	0.5	0.8%
65.4%	57.1	57.4	0.3	0.6%
66.7%	57.0	57.4	0.3	0.6%
67.9%	57.0	57.4	0.4	0.7%
69.1%	56.9	57.3	0.4	0.7%
70.4%	56.9	57.3	0.4	0.7%
71.6%	56.9	57.2	0.4	0.7%
72.8%	56.7	57.2	0.5	0.9%
74.1%	56.7	57.2	0.5	0.9%
75.3%	56.7	57.2	0.5	0.9%
76.5%	56.5	57.2	0.7	1.2%
77.8%	56.5	57.1	0.6	1.1%
79.0%	56.4	57.0	0.6	1.1%
80.2%	56.4	57.0	0.6	1.0%
81.5%	56.4	56.8	0.4	0.7%
82.7%	56.4	56.7	0.3	0.6%
84.0%	56.4	56.7	0.3	0.5%
85.2%	56.4	56.6	0.3	0.5%
86.4%	56.3	56.6	0.2	0.4%
87.7%	56.3	56.5	0.2	0.4%
88.9%	56.3	56.5	0.2	0.3%
90.1%	56.3	56.4	0.2	0.3%
91.4%	56.2	56.4	0.2	0.3%
92.6%	56.0	56.4	0.4	0.8%
93.8%	55.9	56.4	0.4	0.8%
95.1%	55.9	55.9	0.0	0.0%
96.3%	55.7	55.8	0.0	0.1%
97.5%	55.5	55.6	0.1	0.2%
98.8%	55.4	55.4	0.0	0.1%
100.0%	55.4	55.4	0.0	0.1%

Table SQ8-1b

Sacramento River below Red Bluff, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.3	62.5	0.2	0.3%
1.2%	62.0	61.3	-0.6	-1.0%
2.5%	61.7	61.2	-0.5	-0.8%
3.7%	61.5	60.9	-0.6	-1.0%
4.9%	61.3	60.8	-0.4	-0.7%
6.2%	61.2	60.8	-0.4	-0.7%
7.4%	61.0	60.7	-0.3	-0.5%
8.6%	61.0	60.7	-0.3	-0.5%
9.9%	60.9	60.6	-0.3	-0.6%
11.1%	60.9	60.5	-0.4	-0.7%
12.3%	60.8	60.4	-0.4	-0.6%
13.6%	60.5	60.3	-0.2	-0.3%
14.8%	60.5	60.2	-0.3	-0.6%
16.0%	60.4	60.1	-0.3	-0.4%
17.3%	59.9	60.0	0.1	0.2%
18.5%	59.8	60.0	0.2	0.3%
19.8%	59.8	59.9	0.1	0.2%
21.0%	59.7	59.9	0.1	0.2%
22.2%	59.7	59.8	0.0	0.1%
23.5%	59.3	59.7	0.4	0.7%
24.7%	59.2	59.7	0.5	0.8%
25.9%	59.1	59.7	0.5	0.9%
27.2%	59.1	59.6	0.5	0.8%
28.4%	59.1	59.6	0.5	0.8%
29.6%	59.0	59.5	0.5	0.9%
30.9%	59.0	59.5	0.5	0.9%
32.1%	58.9	59.4	0.5	0.9%
33.3%	58.9	59.4	0.5	0.9%
34.6%	58.7	59.3	0.6	1.0%
35.8%	58.7	59.2	0.6	1.0%
37.0%	58.6	59.2	0.6	1.1%
38.3%	58.5	59.2	0.7	1.1%
39.5%	58.5	59.1	0.6	1.1%
40.7%	58.5	59.0	0.5	0.9%
42.0%	58.5	58.9	0.4	0.8%
43.2%	58.5	58.9	0.4	0.8%
44.4%	58.3	58.8	0.5	0.9%
45.7%	58.2	58.7	0.6	1.0%
46.9%	58.2	58.6	0.5	0.8%
48.1%	58.1	58.5	0.4	0.7%
49.4%	58.1	58.5	0.4	0.7%
50.6%	58.1	58.5	0.5	0.8%
51.9%	57.8	58.5	0.7	1.1%
53.1%	57.8	58.5	0.6	1.1%
54.3%	57.8	58.4	0.6	1.0%
55.6%	57.7	58.4	0.7	1.3%
56.8%	57.7	58.4	0.7	1.2%
58.0%	57.7	58.3	0.6	1.1%
59.3%	57.7	58.3	0.6	1.1%
60.5%	57.7	58.3	0.6	1.0%
61.7%	57.6	58.3	0.6	1.1%
63.0%	57.6	58.2	0.6	1.0%
64.2%	57.6	58.2	0.6	1.0%
65.4%	57.6	58.2	0.6	1.0%
66.7%	57.5	58.2	0.6	1.1%
67.9%	57.5	58.2	0.7	1.1%
69.1%	57.5	58.1	0.6	1.1%
70.4%	57.5	58.1	0.6	1.1%
71.6%	57.4	58.0	0.7	1.2%
72.8%	57.4	58.0	0.6	1.1%
74.1%	57.3	57.9	0.6	1.1%
75.3%	57.1	57.9	0.8	1.5%
76.5%	57.0	57.9	0.8	1.5%
77.8%	57.0	57.8	0.9	1.5%
79.0%	56.9	57.8	0.9	1.5%
80.2%	56.8	57.8	0.9	1.6%
81.5%	56.7	57.7	1.0	1.8%
82.7%	56.6	57.7	1.1	1.9%
84.0%	56.5	57.6	1.2	2.1%
85.2%	56.4	57.5	1.1	1.9%
86.4%	56.4	57.3	0.9	1.6%
87.7%	56.3	57.2	0.9	1.5%
88.9%	56.3	57.0	0.8	1.4%
90.1%	56.3	56.9	0.7	1.2%
91.4%	56.1	56.9	0.8	1.4%
92.6%	56.1	56.8	0.7	1.3%
93.8%	55.9	56.5	0.5	1.0%
95.1%	55.9	56.3	0.4	0.8%
96.3%	55.8	56.2	0.4	0.7%
97.5%	55.8	56.2	0.4	0.7%
98.8%	55.7	56.1	0.4	0.7%
100.0%	55.7	56.1	0.4	0.7%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.5	70.6	0.1	0.2%
1.2%	65.4	63.0	-2.3	-3.6%
2.5%	64.2	61.7	-2.5	-3.9%
3.7%	63.3	61.5	-1.8	-2.8%
4.9%	62.7	61.3	-1.4	-2.2%
6.2%	62.3	61.2	-1.1	-1.7%
7.4%	62.1	61.2	-0.9	-1.5%
8.6%	62.0	61.1	-0.8	-1.3%
9.9%	61.9	60.9	-1.0	-1.5%
11.1%	61.8	60.8	-1.0	-1.6%
12.3%	61.6	60.7	-0.9	-1.4%
13.6%	61.3	60.7	-0.6	-1.1%
14.8%	61.3	60.6	-0.7	-1.2%
16.0%	61.2	60.5	-0.7	-1.1%
17.3%	61.2	60.5	-0.7	-1.1%
18.5%	60.9	60.5	-0.4	-0.7%
19.8%	60.9	60.4	-0.5	-0.8%
21.0%	60.8	60.4	-0.5	-0.8%
22.2%	60.8	60.3	-0.5	-0.9%
23.5%	60.8	60.3	-0.5	-0.8%
24.7%	60.6	60.2	-0.4	-0.7%
25.9%	60.5	60.1	-0.4	-0.7%
27.2%	60.5	60.1	-0.4	-0.6%
28.4%	60.4	60.1	-0.3	-0.6%
29.6%	60.4	60.1	-0.3	-0.5%
30.9%	60.3	60.0	-0.3	-0.5%
32.1%	60.0	59.9	-0.1	-0.1%
33.3%	59.9	59.8	-0.1	-0.2%
34.6%	59.7	59.8	0.2	0.3%
35.8%	59.6	59.7	0.1	0.2%
37.0%	59.5	59.7	0.2	0.4%
38.3%	59.4	59.6	0.3	0.5%
39.5%	59.4	59.6	0.3	0.4%
40.7%	59.2	59.6	0.4	0.7%
42.0%	59.2	59.4	0.2	0.4%
43.2%	59.1	59.3	0.2	0.3%
44.4%	59.1	59.2	0.1	0.1%
45.7%	59.1	59.1	0.1	0.1%
46.9%	59.0	59.1	0.0	0.1%
48.1%	59.0	59.1	0.1	0.1%
49.4%	59.0	59.1	0.1	0.1%
50.6%	59.0	59.0	0.1	0.1%
51.9%	58.9	59.0	0.1	0.2%
53.1%	58.9	59.0	0.1	0.2%
54.3%	58.9	58.9	0.0	0.1%
55.6%	58.8	58.9	0.1	0.1%
56.8%	58.8	58.8	0.1	0.1%
58.0%	58.7	58.8	0.0	0.0%
59.3%	58.7	58.8	0.0	0.1%
60.5%	58.6	58.7	0.1	0.2%
61.7%	58.6	58.7	0.1	0.2%
63.0%	58.4	58.7	0.3	0.5%
64.2%	58.3	58.7	0.4	0.6%
65.4%	58.2	58.6	0.4	0.7%
66.7%	58.2	58.6	0.4	0.7%
67.9%	58.1	58.5	0.4	0.7%
69.1%	58.1	58.5	0.4	0.7%
70.4%	58.1	58.5	0.4	0.7%
71.6%	58.1	58.4	0.3	0.4%
72.8%	58.0	58.2	0.1	0.2%
74.1%	58.0	58.2	0.1	0.2%
75.3%	58.0	58.1	0.1	0.2%
76.5%	57.9	58.1	0.2	0.3%
77.8%	57.9	58.0	0.1	0.2%
79.0%	57.8	57.7	-0.1	-0.1%
80.2%	57.7	57.7	0.0	-0.1%
81.5%	57.7	57.6	-0.1	-0.2%
82.7%	57.7	57.4	-0.3	-0.5%
84.0%	57.6	57.3	-0.3	-0.5%
85.2%	57.5	57.3	-0.2	-0.4%
86.4%	57.4	57.3	-0.1	-0.2%
87.7%	57.3	57.3	-0.1	-0.1%
88.9%	57.3	57.2	0.0	-0.1%
90.1%	57.2	57.1	-0.1	-0.2%
91.4%	57.2	57.1	-0.1	-0.1%
92.6%	57.1	57.1	-0.1	-0.1%
93.8%	57.1	57.0	0.0	0.0%
95.1%	56.7	57.0	0.3	0.6%
96.3%	56.7	56.9	0.2	0.3%
97.5%	56.6	56.8	0.2	0.4%
98.8%	56.5	56.6	0.1	0.1%
100.0%	56.5	56.6	0.1	0.1%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	75.5	75.5	0.0	0.0%
1.2%	69.7	67.9	-1.7	-2.5%
2.5%	69.6	67.0	-2.7	-3.8%
3.7%	67.9	66.5	-1.3	-2.0%
4.9%	64.4	63.2	-1.1	-1.8%
6.2%	64.2	62.5	-1.7	-2.7%
7.4%	63.8	62.2	-1.6	-2.5%
8.6%	63.5	62.1	-1.4	-2.1%
9.9%	63.0	62.0	-1.0	-1.6%
11.1%	63.0	61.7	-1.3	-2.1%
12.3%	62.8	61.6	-1.2	-1.9%
13.6%	62.8	61.6	-1.2	-1.9%
14.8%	62.7	61.5	-1.2	-1.9%
16.0%	62.6	61.5	-1.1	-1.8%
17.3%	62.5	61.5	-1.0	-1.7%
18.5%	62.5	61.4	-1.0	-1.6%
19.8%	62.4	61.4	-1.0	-1.6%
21.0%	62.3	61.3	-0.9	-1.5%
22.2%	62.2	61.3	-0.9	-1.5%
23.5%	62.1	61.3	-0.8	-1.3%
24.7%	62.0	61.2	-0.7	-1.2%
25.9%	62.0	61.1	-0.8	-1.3%
27.2%	61.9	61.1	-0.7	-1.2%
28.4%	61.8	61.1	-0.7	-1.1%
29.6%	61.8	61.1	-0.6	-1.0%
30.9%	61.5	61.1	-0.4	-0.7%
32.1%	61.4	61.0	-0.4	-0.7%
33.3%	61.4	61.0	-0.4	-0.7%
34.6%	61.3	61.0	-0.3	-0.5%
35.8%	61.3	61.0	-0.3	-0.4%
37.0%	61.2	60.8	-0.4	-0.6%
38.3%	61.2	60.8	-0.4	-0.6%
39.5%	61.2	60.8	-0.4	-0.6%
40.7%	61.1	60.8	-0.4	-0.6%
42.0%	61.1	60.8	-0.3	-0.6%
43.2%	61.1	60.8	-0.3	-0.6%
44.4%	61.0	60.7	-0.3	-0.5%
45.7%	61.0	60.7	-0.3	-0.4%
46.9%	61.0	60.7	-0.3	-0.5%
48.1%	61.0	60.7	-0.3	-0.4%
49.4%	61.0	60.7	-0.3	-0.4%
50.6%	60.9	60.6	-0.3	-0.5%
51.9%	60.9	60.6	-0.3	-0.5%
53.1%	60.9	60.6	-0.3	-0.5%
54.3%	60.9	60.5	-0.3	-0.5%
55.6%	60.8	60.5	-0.3	-0.5%
56.8%	60.8	60.5	-0.3	-0.5%
58.0%	60.8	60.4	-0.3	-0.5%
59.3%	60.7	60.4	-0.3	-0.5%
60.5%	60.7	60.3	-0.4	-0.6%
61.7%	60.7	60.3	-0.4	-0.6%
63.0%	60.7	60.3	-0.4	-0.6%
64.2%	60.6	60.2	-0.4	-0.7%
65.4%	60.6	60.1	-0.5	-0.8%
66.7%	60.4	60.1	-0.4	-0.6%
67.9%	60.4	60.0	-0.4	-0.7%
69.1%	60.4	59.9	-0.5	-0.8%
70.4%	60.4	59.9	-0.5	-0.8%
71.6%	60.3	59.9	-0.4	-0.6%
72.8%	60.2	59.8	-0.4	-0.7%
74.1%	60.2	59.8	-0.4	-0.7%
75.3%	60.2	59.7	-0.4	-0.7%
76.5%	60.0	59.6	-0.4	-0.6%
77.8%	60.0	59.6	-0.4	-0.6%
79.0%	59.9	59.6	-0.3	-0.6%
80.2%	59.9	59.6	-0.3	-0.6%
81.5%	59.8	59.6	-0.2	-0.4%
82.7%	59.6	59.6	0.0	0.0%
84.0%	59.5	59.5	-0.1	-0.1%
85.2%	59.5	59.4	-0.1	-0.2%
86.4%	59.4	59.4	0.0	0.0%
87.7%	59.3	59.4	0.1	0.1%
88.9%	59.3	59.3	0.0	0.0%
90.1%	59.2	59.1	-0.1	-0.2%
91.4%	59.2	58.9	-0.3	-0.5%
92.6%	59.1	58.9	-0.2	-0.4%
93.8%	58.9	58.5	-0.4	-0.6%
95.1%	58.7	58.5	-0.1	-0.2%
96.3%	58.6	58.3	-0.3	-0.5%
97.5%	58.2	57.9	-0.4	-0.6%
98.8%	57.8	57.6	-0.3	-0.4%
100.0%	57.8	57.6	-0.3	-0.4%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.8	71.6	-2.2	-3.0%
1.2%	72.2	71.4	-0.8	-1.1%
2.5%	71.0	69.3	-1.7	-2.4%
3.7%	69.9	68.8	-1.1	-1.6%
4.9%	68.9	66.6	-2.3	-3.4%
6.2%	68.5	65.4	-3.1	-4.5%
7.4%	68.2	65.4	-2.8	-4.2%
8.6%	67.4	64.2	-3.1	-4.7%
9.9%	66.6	64.2	-2.4	-3.6%
11.1%	66.1	64.1	-2.0	-3.0%
12.3%	65.5	64.1	-1.4	-2.1%
13.6%	65.3	63.8	-1.5	-2.4%
14.8%	65.0	63.0	-2.0	-3.1%
16.0%	65.0	62.7	-2.3	-3.5%
17.3%	64.8	62.7	-2.2	-3.3%
18.5%	64.8	62.6	-2.2	-3.4%
19.8%	64.8	62.5	-2.3	-3.6%
21.0%	64.8	62.4	-2.4	-3.7%
22.2%	64.4	62.1	-2.4	-3.7%
23.5%	64.2	61.8	-2.4	-3.7%
24.7%	64.1	61.6	-2.5	-3.8%
25.9%	63.8	61.6	-2.2	-3.5%
27.2%	63.6	61.4	-2.2	-3.5%
28.4%	63.4	61.4	-2.0	-3.2%
29.6%	63.4	61.3	-2.0	-3.2%
30.9%	63.3	61.3	-2.1	-3.3%
32.1%	63.0	61.2	-1.8	-2.8%
33.3%	62.7	61.2	-1.5	-2.4%
34.6%	62.6	61.1	-1.6	-2.5%
35.8%	62.6	61.0	-1.5	-2.5%
37.0%	62.5	61.0	-1.5	-2.3%
38.3%	62.3	61.0	-1.3	-2.1%
39.5%	62.3	60.8	-1.5	-2.4%
40.7%	62.2	60.6	-1.6	-2.5%
42.0%	62.1	60.5	-1.6	-2.6%
43.2%	61.9	60.4	-1.5	-2.5%
44.4%	61.9	60.4	-1.5	-2.5%
45.7%	61.4	60.4	-1.0	-1.7%
46.9%	61.4	60.3	-1.1	-1.8%
48.1%	61.1	60.3	-0.8	-1.2%
49.4%	61.0	60.3	-0.7	-1.2%
50.6%	61.0	60.3	-0.8	-1.3%
51.9%	60.8	60.2	-0.6	-1.0%
53.1%	60.6	60.0	-0.6	-1.0%
54.3%	59.7	59.8	0.1	0.1%
55.6%	59.6	59.8	0.2	0.3%
56.8%	59.3	59.7	0.3	0.5%
58.0%	59.2	59.6	0.5	0.8%
59.3%	58.6	59.5	0.9	1.5%
60.5%	58.6	59.5	0.9	1.6%
61.7%	58.5	59.4	0.9	1.5%
63.0%	58.1	59.3	1.2	2.0%
64.2%	58.0	59.2	1.2	2.0%
65.4%	58.0	59.2	1.2	2.0%
66.7%	58.0	58.9	1.0	1.7%
67.9%	57.6	58.9	1.3	2.2%
69.1%	57.5	58.1	0.5	0.9%
70.4%	57.5	57.8	0.3	0.6%
71.6%	57.4	57.8	0.3	0.6%
72.8%	57.4	57.7	0.3	0.5%
74.1%	57.4	57.7	0.3	0.5%
75.3%	57.2	57.5	0.3	0.5%
76.5%	57.2	57.5	0.2	0.4%
77.8%	57.2	57.4	0.2	0.4%
79.0%	57.0	57.3	0.3	0.5%
80.2%	57.0	57.3	0.3	0.5%
81.5%	56.9	57.2	0.4	0.7%
82.7%	56.8	56.6	-0.2	-0.4%
84.0%	56.5	56.3	-0.2	-0.3%
85.2%	56.3	56.1	-0.2	-0.3%
86.4%	56.2	55.9	-0.3	-0.6%
87.7%	56.0	55.8	-0.2	-0.4%
88.9%	55.8	55.7	-0.1	-0.2%
90.1%	55.8	55.6	-0.2	-0.3%
91.4%	55.7	55.6	-0.1	-0.3%
92.6%	55.6	55.5	0.0	0.0%
93.8%	55.5	55.5	0.0	0.0%
95.1%	55.5	55.1	-0.3	-0.6%
96.3%	55.3	55.1	-0.2	-0.4%
97.5%	55.1	55.1	0.0	0.0%
98.8%	54.9	54.4	-0.4	-0.8%
100.0%	54.9	54.4	-0.4	-0.8%

Table SQ8-1b
Sacramento River below Red Bluff, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	69.2	69.0	-0.2	-0.3%
1.2%	67.8	66.0	-1.8	-2.6%
2.5%	66.4	64.9	-1.5	-2.2%
3.7%	65.1	64.0	-1.1	-1.7%
4.9%	64.4	62.3	-2.1	-3.3%
6.2%	63.3	62.2	-1.0	-1.6%
7.4%	62.7	61.9	-0.8	-1.3%
8.6%	62.3	61.5	-0.8	-1.3%
9.9%	62.3	61.4	-0.9	-1.5%
11.1%	62.3	61.3	-1.0	-1.7%
12.3%	62.3	61.2	-1.1	-1.8%
13.6%	62.2	61.1	-1.1	-1.7%
14.8%	61.8	61.1	-0.7	-1.1%
16.0%	61.6	61.0	-0.6	-1.0%
17.3%	61.6	60.9	-0.7	-1.1%
18.5%	61.5	60.9	-0.6	-1.0%
19.8%	61.5	60.8	-0.6	-1.0%
21.0%	61.3	60.8	-0.5	-0.8%
22.2%	61.2	60.7	-0.5	-0.8%
23.5%	61.2	60.7	-0.5	-0.8%
24.7%	61.1	60.6	-0.5	-0.9%
25.9%	61.0	60.5	-0.5	-0.8%
27.2%	60.8	60.4	-0.4	-0.6%
28.4%	60.7	60.3	-0.4	-0.7%
29.6%	60.6	60.3	-0.3	-0.5%
30.9%	60.6	60.3	-0.3	-0.5%
32.1%	60.5	60.3	-0.3	-0.5%
33.3%	60.5	60.2	-0.4	-0.6%
34.6%	60.4	60.1	-0.3	-0.5%
35.8%	60.4	60.0	-0.4	-0.7%
37.0%	60.3	60.0	-0.3	-0.6%
38.3%	60.2	60.0	-0.2	-0.4%
39.5%	60.2	60.0	-0.2	-0.4%
40.7%	60.1	59.9	-0.2	-0.4%
42.0%	60.0	59.9	-0.1	-0.2%
43.2%	60.0	59.8	-0.2	-0.3%
44.4%	59.9	59.8	-0.1	-0.2%
45.7%	59.9	59.6	-0.3	-0.5%
46.9%	59.9	59.5	-0.3	-0.6%
48.1%	59.8	59.5	-0.3	-0.5%
49.4%	59.8	59.5	-0.3	-0.5%
50.6%	59.8	59.5	-0.3	-0.5%
51.9%	59.7	59.4	-0.3	-0.5%
53.1%	59.6	59.4	-0.2	-0.4%
54.3%	59.6	59.4	-0.2	-0.4%
55.6%	59.6	59.4	-0.2	-0.4%
56.8%	59.4	59.3	-0.1	-0.2%
58.0%	59.2	59.3	0.1	0.1%
59.3%	59.2	59.3	0.1	0.2%
60.5%	59.1	59.2	0.1	0.2%
61.7%	59.1	59.2	0.1	0.2%
63.0%	59.0	59.2	0.2	0.3%
64.2%	59.0	59.0	0.0	0.1%
65.4%	58.9	59.0	0.1	0.2%
66.7%	58.8	58.9	0.1	0.1%
67.9%	58.8	58.9	0.0	0.1%
69.1%	58.8	58.8	0.0	0.0%
70.4%	58.8	58.8	0.0	0.0%
71.6%	58.7	58.5	-0.2	-0.3%
72.8%	58.7	58.5	-0.2	-0.4%
74.1%	58.6	58.5	-0.1	-0.2%
75.3%	58.6	58.4	-0.1	-0.2%
76.5%	58.4	58.4	0.0	0.0%
77.8%	58.2	58.3	0.1	0.2%
79.0%	58.2	58.2	0.0	0.1%
80.2%	58.1	58.1	0.1	0.1%
81.5%	58.0	58.1	0.0	0.1%
82.7%	58.0	58.1	0.1	0.1%
84.0%	57.9	58.0	0.1	0.2%
85.2%	57.9	58.0	0.1	0.2%
86.4%	57.9	57.9	0.0	0.1%
87.7%	57.7	57.9	0.1	0.2%
88.9%	57.5	57.9	0.4	0.7%
90.1%	57.5	57.8	0.3	0.5%
91.4%	57.5	57.6	0.2	0.3%
92.6%	57.4	57.6	0.2	0.4%
93.8%	57.3	57.5	0.2	0.3%
95.1%	57.3	57.5	0.1	0.3%
96.3%	57.3	57.3	0.1	0.1%
97.5%	57.3	57.2	-0.1	-0.2%
98.8%	57.2	57.1	0.0	-0.1%
100.0%	56.9	57.0	0.1	0.1%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.6	71.6	0.0	0.0%
1.2%	69.6	67.2	-2.4	-3.5%
2.5%	68.7	66.9	-1.8	-2.6%
3.7%	66.7	65.6	-1.1	-1.7%
4.9%	65.5	63.4	-2.1	-3.2%
6.2%	64.7	62.8	-1.9	-3.0%
7.4%	64.0	62.5	-1.5	-2.4%
8.6%	63.6	62.2	-1.4	-2.2%
9.9%	63.5	62.0	-1.5	-2.4%
11.1%	63.2	61.9	-1.3	-2.0%
12.3%	62.8	61.9	-0.9	-1.4%
13.6%	62.7	61.7	-1.0	-1.6%
14.8%	62.7	61.6	-1.1	-1.7%
16.0%	62.6	61.6	-1.1	-1.7%
17.3%	62.5	61.5	-1.0	-1.6%
18.5%	62.4	61.4	-0.9	-1.5%
19.8%	62.2	61.3	-1.0	-1.5%
21.0%	62.2	61.3	-1.0	-1.5%
22.2%	61.9	61.1	-0.8	-1.3%
23.5%	61.9	61.1	-0.8	-1.4%
24.7%	61.7	61.0	-0.6	-1.0%
25.9%	61.6	60.8	-0.8	-1.3%
27.2%	61.5	60.7	-0.8	-1.3%
28.4%	61.5	60.7	-0.8	-1.4%
29.6%	61.5	60.5	-1.0	-1.6%
30.9%	61.5	60.5	-0.9	-1.5%
32.1%	61.2	60.5	-0.7	-1.1%
33.3%	61.1	60.4	-0.7	-1.2%
34.6%	61.1	60.3	-0.7	-1.2%
35.8%	60.8	60.3	-0.5	-0.8%
37.0%	60.8	60.3	-0.5	-0.8%
38.3%	60.7	60.3	-0.4	-0.7%
39.5%	60.7	60.2	-0.5	-0.8%
40.7%	60.6	60.2	-0.5	-0.7%
42.0%	60.6	60.1	-0.5	-0.8%
43.2%	60.5	60.1	-0.4	-0.7%
44.4%	60.5	60.1	-0.4	-0.7%
45.7%	60.4	60.0	-0.5	-0.8%
46.9%	60.3	59.8	-0.5	-0.8%
48.1%	60.2	59.7	-0.5	-0.8%
49.4%	60.1	59.7	-0.4	-0.6%
50.6%	60.0	59.6	-0.4	-0.7%
51.9%	60.0	59.6	-0.4	-0.7%
53.1%	59.9	59.6	-0.3	-0.5%
54.3%	59.8	59.6	-0.2	-0.3%
55.6%	59.7	59.6	-0.2	-0.3%
56.8%	59.7	59.6	-0.2	-0.3%
58.0%	59.7	59.5	-0.2	-0.4%
59.3%	59.6	59.4	-0.2	-0.4%
60.5%	59.6	59.4	-0.2	-0.4%
61.7%	59.5	59.3	-0.1	-0.2%
63.0%	59.5	59.3	-0.1	-0.2%
64.2%	59.3	59.3	0.0	-0.1%
65.4%	59.3	59.2	-0.1	-0.2%
66.7%	59.3	59.2	-0.1	-0.1%
67.9%	59.3	59.2	-0.1	-0.2%
69.1%	59.3	59.1	-0.2	-0.3%
70.4%	59.2	59.1	-0.1	-0.2%
71.6%	59.1	59.0	-0.1	-0.1%
72.8%	59.1	59.0	-0.1	-0.2%
74.1%	59.1	58.9	-0.2	-0.4%
75.3%	58.9	58.6	-0.3	-0.6%
76.5%	58.9	58.5	-0.4	-0.6%
77.8%	58.6	58.4	-0.2	-0.4%
79.0%	58.6	58.4	-0.2	-0.3%
80.2%	58.4	58.3	-0.1	-0.2%
81.5%	58.4	58.1	-0.3	-0.5%
82.7%	58.2	58.1	-0.1	-0.1%
84.0%	58.0	58.0	0.0	0.0%
85.2%	57.9	57.9	0.0	0.0%
86.4%	57.9	57.9	0.0	0.0%
87.7%	57.8	57.9	0.0	0.1%
88.9%	57.8	57.6	-0.1	-0.2%
90.1%	57.7	57.6	-0.1	-0.3%
91.4%	57.7	57.6	-0.1	-0.2%
92.6%	57.7	57.5	-0.1	-0.3%
93.8%	57.6	57.5	-0.2	-0.3%
95.1%	57.6	57.4	-0.2	-0.3%
96.3%	57.3	57.4	0.1	0.1%
97.5%	57.3	57.4	0.1	0.1%
98.8%	57.2	57.3	0.1	0.1%
100.0%	57.2	56.9	-0.3	-0.4%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.2	72.2	-0.1	-0.1%
1.2%	71.7	69.6	-2.1	-2.9%
2.5%	70.9	69.3	-1.6	-2.3%
3.7%	69.4	67.9	-1.5	-2.2%
4.9%	67.1	64.9	-2.2	-3.3%
6.2%	66.2	63.4	-2.8	-4.3%
7.4%	65.4	63.2	-2.2	-3.4%
8.6%	64.9	63.2	-1.7	-2.6%
9.9%	64.4	63.1	-1.3	-2.0%
11.1%	64.0	62.9	-1.1	-1.8%
12.3%	64.0	62.7	-1.2	-1.9%
13.6%	63.7	62.7	-1.1	-1.7%
14.8%	63.7	62.4	-1.3	-2.1%
16.0%	63.5	61.9	-1.6	-2.5%
17.3%	63.4	61.9	-1.5	-2.4%
18.5%	63.2	61.8	-1.4	-2.2%
19.8%	63.1	61.7	-1.4	-2.2%
21.0%	62.8	61.6	-1.2	-2.0%
22.2%	62.7	61.5	-1.2	-1.9%
23.5%	62.7	61.3	-1.3	-2.1%
24.7%	62.5	61.3	-1.2	-1.9%
25.9%	62.4	61.3	-1.1	-1.8%
27.2%	62.4	61.1	-1.3	-2.1%
28.4%	62.2	61.0	-1.2	-1.9%
29.6%	62.1	61.0	-1.1	-1.8%
30.9%	62.0	61.0	-1.1	-1.7%
32.1%	62.0	61.0	-1.0	-1.7%
33.3%	61.9	60.9	-1.0	-1.6%
34.6%	61.8	60.9	-0.9	-1.5%
35.8%	61.8	60.9	-0.9	-1.4%
37.0%	61.7	60.8	-0.9	-1.5%
38.3%	61.6	60.6	-1.0	-1.6%
39.5%	61.6	60.6	-1.0	-1.6%
40.7%	61.5	60.6	-0.9	-1.5%
42.0%	61.3	60.5	-0.8	-1.2%
43.2%	61.2	60.5	-0.7	-1.2%
44.4%	61.1	60.4	-0.6	-1.0%
45.7%	60.9	60.4	-0.5	-0.9%
46.9%	60.7	60.3	-0.4	-0.6%
48.1%	60.7	60.3	-0.5	-0.7%
49.4%	60.6	60.2	-0.4	-0.7%
50.6%	60.5	60.2	-0.3	-0.5%
51.9%	60.5	60.2	-0.3	-0.5%
53.1%	60.3	60.2	-0.1	-0.2%
54.3%	60.3	60.1	-0.2	-0.3%
55.6%	60.2	59.9	-0.3	-0.5%
56.8%	60.2	59.9	-0.3	-0.4%
58.0%	60.1	59.8	-0.2	-0.4%
59.3%	60.0	59.8	-0.2	-0.3%
60.5%	59.9	59.8	-0.2	-0.3%
61.7%	59.9	59.8	-0.2	-0.3%
63.0%	59.8	59.7	-0.1	-0.2%
64.2%	59.7	59.7	0.0	0.0%
65.4%	59.6	59.7	0.1	0.1%
66.7%	59.6	59.3	-0.3	-0.4%
67.9%	59.6	59.3	-0.3	-0.5%
69.1%	59.5	59.2	-0.3	-0.5%
70.4%	59.4	59.2	-0.3	-0.5%
71.6%	59.4	59.1	-0.4	-0.6%
72.8%	59.4	59.0	-0.3	-0.6%
74.1%	59.3	58.8	-0.5	-0.8%
75.3%	59.1	58.8	-0.2	-0.4%
76.5%	58.8	58.8	0.0	-0.1%
77.8%	58.7	58.6	-0.1	-0.2%
79.0%	58.6	58.5	-0.1	-0.2%
80.2%	58.6	58.4	-0.1	-0.2%
81.5%	58.5	58.4	-0.1	-0.2%
82.7%	58.5	58.2	-0.3	-0.5%
84.0%	58.4	58.2	-0.2	-0.4%
85.2%	58.3	58.2	-0.2	-0.3%
86.4%	58.1	58.1	0.1	0.1%
87.7%	58.0	58.0	-0.1	-0.1%
88.9%	57.9	57.8	0.0	0.0%
90.1%	57.8	57.6	-0.2	-0.4%
91.4%	57.7	57.6	-0.1	-0.2%
92.6%	57.7	57.5	-0.3	-0.4%
93.8%	57.7	57.4	-0.3	-0.5%
95.1%	57.6	57.4	-0.3	-0.4%
96.3%	57.6	57.3	-0.3	-0.5%
97.5%	57.5	57.1	-0.3	-0.6%
98.8%	57.1	57.0	-0.1	-0.2%
100.0%	56.8	56.1	-0.7	-1.2%

Figure SQ9-1b
American River below Nimbus Dam, Monthly Temperature
Probability of Exceedance

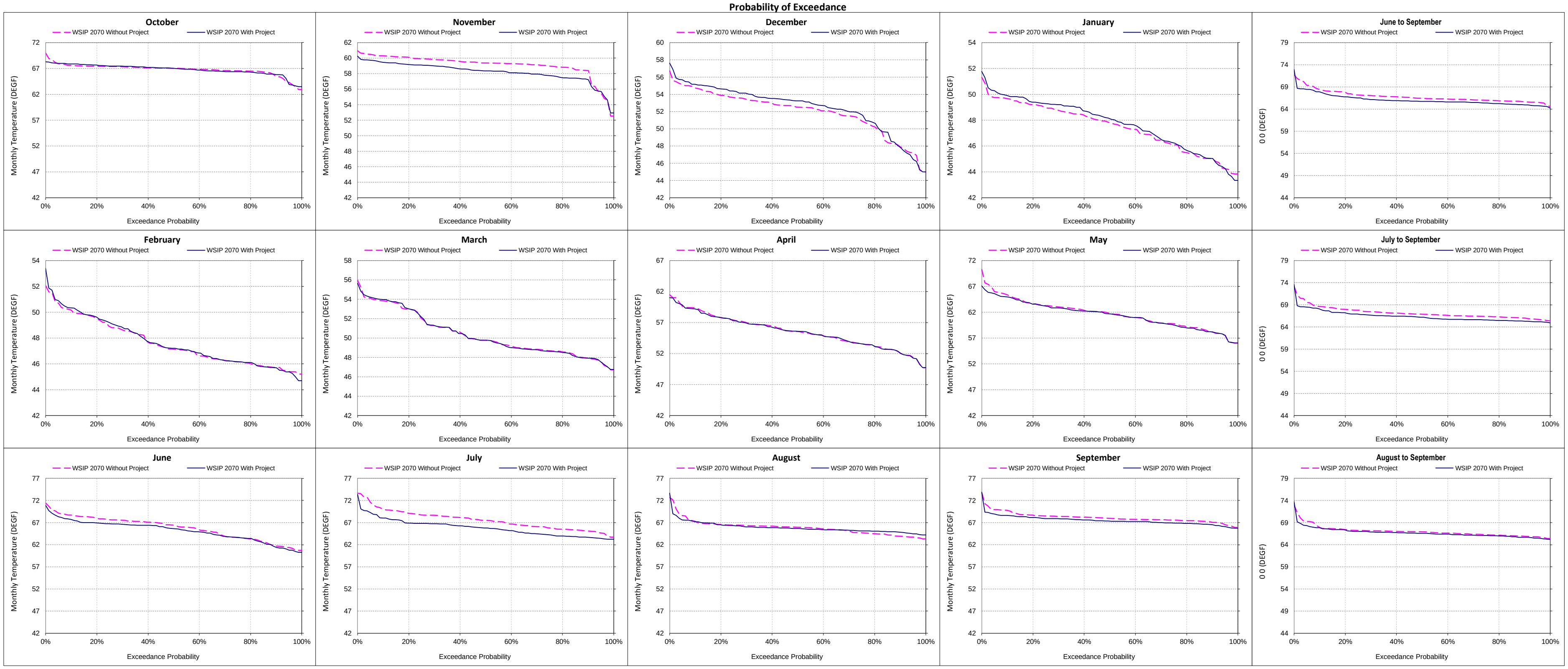


Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.0	68.3	-1.7	-2.4%
1.2%	68.9	68.2	-0.7	-1.0%
2.5%	68.7	68.1	-0.6	-0.9%
3.7%	68.2	68.0	-0.2	-0.2%
4.9%	67.9	68.0	0.1	0.1%
6.2%	67.9	68.0	0.1	0.2%
7.4%	67.8	68.0	0.2	0.2%
8.6%	67.6	67.9	0.3	0.4%
9.9%	67.6	67.9	0.3	0.4%
11.1%	67.5	67.9	0.3	0.5%
12.3%	67.5	67.9	0.3	0.5%
13.6%	67.5	67.8	0.3	0.4%
14.8%	67.5	67.8	0.3	0.4%
16.0%	67.5	67.7	0.3	0.4%
17.3%	67.5	67.7	0.3	0.4%
18.5%	67.4	67.7	0.3	0.4%
19.8%	67.4	67.7	0.2	0.4%
21.0%	67.4	67.6	0.1	0.2%
22.2%	67.4	67.6	0.1	0.2%
23.5%	67.4	67.5	0.1	0.1%
24.7%	67.4	67.5	0.1	0.1%
25.9%	67.4	67.5	0.1	0.1%
27.2%	67.4	67.5	0.1	0.1%
28.4%	67.4	67.4	0.1	0.1%
29.6%	67.4	67.4	0.1	0.1%
30.9%	67.3	67.4	0.1	0.1%
32.1%	67.3	67.4	0.1	0.2%
33.3%	67.3	67.4	0.1	0.2%
34.6%	67.2	67.4	0.1	0.2%
35.8%	67.2	67.3	0.1	0.2%
37.0%	67.2	67.3	0.1	0.2%
38.3%	67.1	67.3	0.2	0.3%
39.5%	67.1	67.2	0.1	0.2%
40.7%	67.1	67.2	0.1	0.2%
42.0%	67.1	67.2	0.1	0.2%
43.2%	67.1	67.1	0.0	0.1%
44.4%	67.1	67.1	0.0	0.1%
45.7%	67.1	67.1	0.0	0.1%
46.9%	67.1	67.1	0.0	0.0%
48.1%	67.1	67.1	0.0	0.0%
49.4%	67.1	67.1	0.0	0.0%
50.6%	67.0	67.0	-0.1	-0.1%
51.9%	67.0	66.9	-0.1	-0.2%
53.1%	67.0	66.9	-0.1	-0.2%
54.3%	67.0	66.9	-0.1	-0.2%
55.6%	66.9	66.9	-0.1	-0.1%
56.8%	66.9	66.8	-0.1	-0.1%
58.0%	66.9	66.8	-0.1	-0.2%
59.3%	66.8	66.7	-0.1	-0.2%
60.5%	66.8	66.7	-0.1	-0.2%
61.7%	66.8	66.6	-0.2	-0.3%
63.0%	66.8	66.6	-0.3	-0.4%
64.2%	66.8	66.5	-0.3	-0.4%
65.4%	66.8	66.5	-0.2	-0.4%
66.7%	66.7	66.5	-0.2	-0.3%
67.9%	66.7	66.5	-0.2	-0.3%
69.1%	66.6	66.4	-0.2	-0.2%
70.4%	66.6	66.4	-0.2	-0.3%
71.6%	66.6	66.4	-0.2	-0.3%
72.8%	66.6	66.4	-0.2	-0.3%
74.1%	66.6	66.4	-0.2	-0.3%
75.3%	66.5	66.4	-0.2	-0.3%
76.5%	66.5	66.4	-0.2	-0.3%
77.8%	66.5	66.3	-0.2	-0.3%
79.0%	66.5	66.3	-0.2	-0.2%
80.2%	66.5	66.3	-0.2	-0.3%
81.5%	66.5	66.2	-0.3	-0.4%
82.7%	66.5	66.1	-0.3	-0.5%
84.0%	66.4	66.1	-0.3	-0.4%
85.2%	66.3	66.1	-0.3	-0.4%
86.4%	66.2	65.9	-0.3	-0.4%
87.7%	66.2	65.9	-0.2	-0.4%
88.9%	65.9	65.9	0.0	0.0%
90.1%	65.4	65.8	0.4	0.7%
91.4%	65.4	65.8	0.4	0.6%
92.6%	65.1	65.8	0.7	1.0%
93.8%	64.5	65.1	0.6	0.9%
95.1%	64.3	63.9	-0.4	-0.6%
96.3%	63.9	63.8	-0.1	-0.2%
97.5%	63.5	63.6	0.2	0.3%
98.8%	62.9	63.5	0.5	0.8%
100.0%	62.9	63.5	0.0	0.8%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.9	60.3	-0.7	-1.1%
1.2%	60.6	59.8	-0.8	-1.3%
2.5%	60.6	59.8	-0.8	-1.4%
3.7%	60.5	59.8	-0.8	-1.3%
4.9%	60.5	59.7	-0.8	-1.3%
6.2%	60.4	59.7	-0.7	-1.2%
7.4%	60.3	59.6	-0.7	-1.1%
8.6%	60.3	59.5	-0.8	-1.3%
9.9%	60.3	59.5	-0.8	-1.4%
11.1%	60.3	59.4	-0.9	-1.4%
12.3%	60.2	59.4	-0.8	-1.4%
13.6%	60.2	59.4	-0.8	-1.4%
14.8%	60.2	59.4	-0.8	-1.3%
16.0%	60.2	59.3	-0.9	-1.5%
17.3%	60.2	59.3	-0.9	-1.5%
18.5%	60.1	59.2	-0.9	-1.6%
19.8%	60.1	59.2	-0.9	-1.6%
21.0%	60.1	59.1	-0.9	-1.5%
22.2%	60.0	59.1	-0.8	-1.4%
23.5%	60.0	59.1	-0.8	-1.4%
24.7%	59.9	59.1	-0.8	-1.3%
25.9%	59.9	59.1	-0.8	-1.4%
27.2%	59.9	59.1	-0.8	-1.4%
28.4%	59.9	59.0	-0.8	-1.4%
29.6%	59.8	59.0	-0.8	-1.4%
30.9%	59.8	59.0	-0.8	-1.4%
32.1%	59.8	58.9	-0.8	-1.4%
33.3%	59.8	58.9	-0.8	-1.4%
34.6%	59.7	58.9	-0.9	-1.4%
35.8%	59.7	58.8	-0.9	-1.5%
37.0%	59.7	58.8	-0.9	-1.5%
38.3%	59.6	58.7	-0.9	-1.6%
39.5%	59.6	58.6	-1.0	-1.6%
40.7%	59.5	58.6	-0.9	-1.6%
42.0%	59.5	58.6	-0.9	-1.5%
43.2%	59.5	58.6	-0.9	-1.6%
44.4%	59.5	58.5	-1.0	-1.7%
45.7%	59.5	58.4	-1.1	-1.8%
46.9%	59.4	58.4	-1.0	-1.7%
48.1%	59.4	58.4	-1.0	-1.7%
49.4%	59.4	58.4	-1.0	-1.7%
50.6%	59.4	58.4	-1.0	-1.7%
51.9%	59.4	58.4	-1.0	-1.7%
53.1%	59.4	58.3	-1.0	-1.7%
54.3%	59.3	58.3	-1.0	-1.7%
55.6%	59.3	58.3	-1.0	-1.7%
56.8%	59.3	58.3	-1.0	-1.7%
58.0%	59.3	58.2	-1.1	-1.8%
59.3%	59.3	58.1	-1.2	-2.0%
60.5%	59.3	58.1	-1.2	-2.0%
61.7%	59.3	58.1	-1.2	-2.0%
63.0%	59.3	58.1	-1.2	-2.0%
64.2%	59.2	58.1	-1.2	-2.0%
65.4%	59.2	58.1	-1.2	-2.0%
66.7%	59.2	58.0	-1.2	-2.0%
67.9%	59.2	57.9	-1.2	-2.0%
69.1%	59.1	57.9	-1.2	-2.1%
70.4%	59.1	57.9	-1.2	-2.0%
71.6%	59.1	57.9	-1.2	-2.0%
72.8%	59.1	57.8	-1.3	-2.1%
74.1%	59.0	57.8	-1.3	-2.1%
75.3%	59.0	57.7	-1.2	-2.1%
76.5%	58.9	57.7	-1.2	-2.1%
77.8%	58.9	57.6	-1.3	-2.1%
79.0%	58.8	57.5	-1.3	-2.3%
80.2%	58.8	57.5	-1.4	-2.3%
81.5%	58.8	57.5	-1.3	-2.3%
82.7%	58.8	57.4	-1.4	-2.3%
84.0%	58.7	57.4	-1.3	-2.2%
85.2%	58.5	57.4	-1.1	-1.9%
86.4%	58.5	57.4	-1.1	-1.9%
87.7%	58.4	57.3	-1.1	-1.9%
88.9%	58.4	57.3	-1.1	-1.9%
90.1%	58.4	57.2	-1.2	-2.0%
91.4%	56.4	56.3	-0.1	-0.2%
92.6%	56.4	55.9	-0.5	-0.9%
93.8%	55.8	55.8	0.0	0.0%
95.1%	55.5	55.7	0.2	0.4%
96.3%	54.8	55.0	0.2	0.4%
97.5%	54.6	54.6	0.0	0.1%
98.8%	52.5	52.9	0.4	0.8%
100.0%	52.5	52.9	0.4	0.8%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.7	57.6	0.9	1.6%
1.2%	55.6	56.9	1.3	2.3%
2.5%	55.5	55.9	0.4	0.8%
3.7%	55.3	55.7	0.4	0.8%
4.9%	55.1	55.7	0.6	1.0%
6.2%	55.0	55.5	0.5	0.8%
7.4%	55.0	55.5	0.4	0.8%
8.6%	54.9	55.2	0.2	0.5%
9.9%	54.7	55.2	0.4	0.8%
11.1%	54.7	55.1	0.4	0.7%
12.3%	54.6	55.1	0.5	0.9%
13.6%	54.3	55.0	0.7	1.2%
14.8%	54.3	55.0	0.6	1.2%
16.0%	54.3	54.9	0.6	1.2%
17.3%	54.0	54.9	0.8	1.5%
18.5%	54.0	54.7	0.7	1.3%
19.8%	53.9	54.6	0.8	1.4%
21.0%	53.9	54.6	0.7	1.4%
22.2%	53.8	54.6	0.7	1.4%
23.5%	53.7	54.4	0.7	1.3%
24.7%	53.6	54.4	0.7	1.4%
25.9%	53.6	54.3	0.7	1.4%
27.2%	53.6	54.2	0.6	1.1%
28.4%	53.6	54.1	0.6	1.1%
29.6%	53.4	54.1	0.7	1.3%
30.9%	53.3	54.0	0.7	1.3%
32.1%	53.3	54.0	0.7	1.3%
33.3%	53.3	53.8	0.5	1.0%
34.6%	53.2	53.7	0.5	0.9%
35.8%	53.2	53.6	0.5	0.9%
37.0%	53.1	53.6	0.5	1.0%
38.3%	53.1	53.5	0.4	0.8%
39.5%	53.0	53.5	0.5	0.9%
40.7%	52.8	53.5	0.7	1.3%
42.0%	52.8	53.5	0.7	1.4%
43.2%	52.7	53.5	0.7	1.4%
44.4%	52.7	53.4	0.7	1.3%
45.7%	52.7	53.4	0.7	1.2%
46.9%	52.7	53.3	0.7	1.2%
48.1%	52.7	53.3	0.6	1.1%
49.4%	52.5	53.2	0.7	1.3%
50.6%	52.5	53.2	0.7	1.4%
51.9%	52.5	53.2	0.7	1.4%
53.1%	52.5	53.1	0.6	1.2%
54.3%	52.5	53.1	0.6	1.2%
55.6%	52.4	52.9	0.5	0.9%
56.8%	52.3	52.9	0.6	1.1%
58.0%	52.2	52.7	0.5	1.0%
59.3%	52.1	52.7	0.6	1.2%
60.5%	52.1	52.7	0.6	1.1%
61.7%	52.1	52.5	0.4	0.7%
63.0%	52.0	52.4	0.3	0.7%
64.2%	51.9	52.3	0.4	0.8%
65.4%	51.9	52.3	0.4	0.8%
66.7%	51.6	52.3	0.7	1.3%
67.9%	51.5	52.2	0.6	1.3%
69.1%	51.5	52.1	0.6	1.1%
70.4%	51.5	52.0	0.5	0.9%
71.6%	51.4	52.0	0.5	1.0%
72.8%	51.4	52.0	0.6	1.1%
74.1%	51.1	51.8	0.7	1.3%
75.3%	50.9	51.6	0.7	1.4%
76.5%	50.7	50.9	0.2	0.5%
77.8%	50.5	50.9	0.4	0.7%
79.0%	50.3	50.8	0.5	0.9%
80.2%	50.2	50.6	0.4	0.9%
81.5%	49.9	50.1	0.2	0.4%
82.7%	49.8	49.7	-0.1	-0.2%
84.0%	48.7	49.6	1.0	2.0%
85.2%	48.4	49.6	1.2	2.5%
86.4%	48.3	48.5	0.2	0.5%
87.7%	48.3	48.5	0.2	0.4%
88.9%	48.2	48.1	-0.1	-0.2%
90.1%	47.9	47.8	-0.1	-0.2%
91.4%	47.7	47.5	-0.2	-0.5%
92.6%	47.4	47.2	-0.2	-0.5%
93.8%	47.3	47.0	-0.3	-0.6%
95.1%	47.2	46.4	-0.8	-1.7%
96.3%	46.9	46.2	-0.7	-1.5%
97.5%	45.2	45.3	0.0	0.1%
98.8%	45.0	45.0	0.0	0.0%
100.0%	45.0	45.0	0.0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.3	51.8	0.5	0.9%
1.2%	50.9	51.3	0.4	0.8%
2.5%	50.0	50.5	0.5	1.0%
3.7%	49.8	50.3	0.5	1.0%
4.9%	49.8	50.3	0.5	1.1%
6.2%	49.8	50.1	0.4	0.7%
7.4%	49.7	50.0	0.3	0.6%
8.6%	49.7	50.0	0.2	0.5%
9.9%	49.7	49.9	0.2	0.5%
11.1%	49.6	49.8	0.2	0.4%
12.3%	49.5	49.8	0.3	0.7%
13.6%	49.5	49.8	0.3	0.7%
14.8%	49.4	49.8	0.4	0.9%
16.0%	49.4	49.8	0.4	0.9%
17.3%	49.3	49.6	0.3	0.6%
18.5%	49.2	49.4	0.2	0.5%
19.8%	49.2	49.4	0.2	0.4%
21.0%	49.2	49.4	0.2	0.4%
22.2%	49.1	49.4	0.2	0.4%
23.5%	49.1	49.3	0.2	0.4%
24.7%	49.0	49.3	0.3	0.7%
25.9%	48.9	49.3	0.3	0.7%
27.2%	48.9	49.2	0.3	0.6%
28.4%	48.8	49.2	0.4	0.8%
29.6%	48.8	49.2	0.4	0.9%
30.9%	48.7	49.2	0.5	1.0%
32.1%	48.7	49.1	0.4	0.9%
33.3%	48.6	49.1	0.5	1.1%
34.6%	48.6	49.1	0.5	1.1%
35.8%	48.5	49.1	0.6	1.2%
37.0%	48.5	49.0	0.5	1.1%
38.3%	48.5	49.0	0.5	1.1%
39.5%	48.4	48.7	0.3	0.6%
40.7%	48.3	48.7	0.4	0.8%
42.0%	48.2	48.6	0.4	0.8%
43.2%	48.1	48.5	0.3	0.7%
44.4%	48.0	48.4	0.4	0.8%
45.7%	48.0	48.4	0.4	0.8%
46.9%	47.9	48.3	0.4	0.8%
48.1%	47.9	48.2	0.3	0.6%
49.4%	47.8	48.2	0.3	0.7%
50.6%	47.8	48.1	0.3	0.6%
51.9%	47.7	48.0	0.3	0.7%
53.1%	47.7	47.9	0.2	0.5%
54.3%	47.5	47.8	0.3	0.7%
55.6%	47.5	47.7	0.2	0.5%
56.8%	47.4	47.7	0.3	0.6%
58.0%	47.3	47.7	0.3	0.7%
59.3%	47.3	47.7	0.4	0.8%
60.5%	47.3	47.5	0.3	0.6%
61.7%	47.0	47.4	0.4	0.9%
63.0%	46.9	47.2	0.2	0.5%
64.2%	46.9	47.2	0.3	0.5%
65.4%	46.9	47.1	0.2	0.5%
66.7%	46.8	47.0	0.1	0.3%
67.9%	46.5	46.8	0.3	0.7%
69.1%	46.5	46.6	0.2	0.4%
70.4%	46.4	46.5	0.0	0.1%
71.6%	46.3	46.4	0.1	0.2%
72.8%	46.2	46.4	0.1	0.3%
74.1%	46.1	46.3	0.1	0.3%
75.3%	46.1	46.2	0.1	0.3%
76.5%	46.1	46.1	0.0	0.0%
77.8%	45.6	46.0	0.4	0.9%
79.0%	45.5	45.8	0.2	0.5%
80.2%	45.5	45.6	0.2	0.4%
81.5%	45.4	45.6	0.1	0.3%
82.7%	45.4	45.4	0.0	0.0%
84.0%	45.2	45.4	0.2	0.4%
85.2%	45.1	45.3	0.2	0.4%
86.4%	45.1	45.2	0.1	0.2%
87.7%	45.0	45.1	0.0	0.0%
88.9%	45.0	45.0	0.0	0.0%
90.1%	45.0	45.0	0.0	0.0%
91.4%	44.8	44.7	-0.1	-0.2%
92.6%	44.7	44.5	-0.2	-0.5%
93.8%	44.3	44.4	0.1	0.3%
95.1%	44.2	44.3	0.0	0.0%
96.3%	44.2	43.8	-0.4	-0.8%
97.5%	43.9	43.6	-0.2	-0.5%
98.8%	43.8	43.4	-0.5	-1.1%
100.0%	43.8	43.4	-0.5	-1.1%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.0	53.4	1.4	2.6%
1.2%	51.6	51.9	0.3	0.6%
2.5%	51.5	51.7	0.2	0.4%
3.7%	50.8	51.0	0.2	0.3%
4.9%	50.7	50.9	0.2	0.4%
6.2%	50.4	50.6	0.3	0.6%
7.4%	50.3	50.5	0.2	0.4%
8.6%	50.2	50.3	0.1	0.2%
9.9%	50.2	50.3	0.2	0.3%
11.1%	49.9	50.3	0.4	0.8%
12.3%	49.9	50.2	0.2	0.5%
13.6%	49.9	50.0	0.1	0.2%
14.8%	49.8	49.9	0.0	0.0%
16.0%	49.8	49.8	0.0	0.0%
17.3%	49.7	49.8	0.0	0.1%
18.5%	49.7	49.7	0.1	0.1%
19.8%	49.5	49.6	0.1	0.2%
21.0%	49.4	49.5	0.1	0.1%
22.2%	49.2	49.4	0.2	0.4%
23.5%	49.2	49.3	0.1	0.2%
24.7%	48.9	49.2	0.3	0.6%
25.9%	48.8	49.1	0.3	0.6%
27.2%	48.8	49.0	0.2	0.4%
28.4%	48.8	48.9	0.2	0.3%
29.6%	48.7	48.9	0.2	0.4%
30.9%	48.6	48.7	0.2	0.3%
32.1%	48.5	48.7	0.2	0.4%
33.3%	48.5	48.5	0.0	-0.1%
34.6%	48.4	48.4	0.0	0.0%
35.8%	48.3	48.3	0.0	0.1%
37.0%	48.3	48.1	-0.1	-0.2%
38.3%	48.2	48.0	-0.3	-0.5%
39.5%	47.7	47.8	0.0	0.1%
40.7%	47.6	47.6	0.0	0.1%
42.0%	47.6	47.6	0.0	0.0%
43.2%	47.5	47.6	0.1	0.2%
44.4%	47.4	47.5	0.1	0.2%
45.7%	47.3	47.3	0.0	0.0%
46.9%	47.3	47.2	0.0	-0.1%
48.1%	47.1	47.2	0.1	0.2%
49.4%	47.1	47.2	0.1	0.1%
50.6%	47.1	47.2	0.1	0.2%
51.9%	47.1	47.2	0.0	0.1%
53.1%	47.1	47.2	0.1	0.1%
54.3%	47.1	47.1	0.0	0.1%
55.6%	47.0	47.1	0.1	0.1%
56.8%	47.0	47.0	0.0	0.1%
58.0%	46.9	46.9	0.0	0.0%
59.3%	46.6	46.9	0.2	0.5%
60.5%	46.6	46.8	0.2	0.5%
61.7%	46.6	46.7	0.0	0.1%
63.0%	46.5	46.6	0.1	0.2%
64.2%	46.4	46.6	0.1	0.3%
65.4%	46.4	46.4	0.0	0.1%
66.7%	46.4	46.4	0.0	0.0%
67.9%	46.3	46.3	0.0	0.0%
69.1%	46.3	46.3	0.0	0.0%
70.4%	46.3	46.2	0.0	-0.1%
71.6%	46.2	46.2	0.0	0.0%
72.8%	46.2	46.2	0.0	0.0%
74.1%	46.2	46.2	0.0	0.0%
75.3%	46.2	46.2	0.0	0.0%
76.5%	46.2	46.2	0.0	0.0%
77.8%	46.1	46.1	0.0	0.1%
79.0%	46.1	46.1	0.0	0.1%
80.2%	46.0	46.1	0.1	0.2%
81.5%	45.9	46.0	0.1	0.2%
82.7%	45.9	45.8	0.0	-0.1%
84.0%	45.9	45.8	-0.1	-0.2%
85.2%	45.8	45.8	0.0	-0.1%
86.4%	45.8	45.8	0.0	-0.1%
87.7%	45.8	45.7	-0.1	-0.1%
88.9%	45.7	45.7	0.0	-0.1%
90.1%	45.7	45.7	0.0	-0.1%
91.4%	45.7	45.5	-0.2	-0.5%
92.6%	45.5	45.5	0.0	0.0%
93.8%	45.5	45.4	-0.1	-0.2%
95.1%	45.4	45.4	0.0	0.0%
96.3%	45.4	45.3	-0.1	-0.3%
97.5%	45.4	45.0	-0.4	-0.9%
98.8%	45.2	44.7	-0.5	-1.1%
100.0%	45.2	44.7	-0.5	-1.1%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.9	55.7	-0.3	-0.5%
1.2%	55.3	54.8	-0.5	-0.8%
2.5%	54.3	54.5	0.2	0.4%
3.7%	54.1	54.3	0.2	0.3%
4.9%	54.1	54.2	0.1	0.2%
6.2%	54.0	54.1	0.2	0.3%
7.4%	54.0	54.1	0.1	0.2%
8.6%	53.9	54.0	0.1	0.2%
9.9%	53.8	54.0	0.1	0.2%
11.1%	53.8	54.0	0.2	0.3%
12.3%	53.8	53.8	0.0	0.1%
13.6%	53.7	53.7	0.0	0.0%
14.8%	53.6	53.7	0.1	0.2%
16.0%	53.6	53.6	0.1	0.1%
17.3%	53.1	53.6	0.5	1.0%
18.5%	53.0	53.1	0.1	0.3%
19.8%	53.0	53.0	0.0	0.1%
21.0%	52.9	52.9	0.0	0.0%
22.2%	52.9	52.9	0.0	0.0%
23.5%	52.7	52.6	-0.1	-0.2%
24.7%	52.1	52.2	0.1	0.3%
25.9%	51.8	51.9	0.1	0.2%
27.2%	51.4	51.4	0.0	-0.1%
28.4%	51.3	51.3	0.0	0.1%
29.6%	51.3	51.3	0.0	0.0%
30.9%	51.2	51.2	0.0	0.0%
32.1%	51.1	51.2	0.1	0.1%
33.3%	51.1	51.1	0.0	0.1%
34.6%	51.1	51.1	0.0	0.0%
35.8%	51.1	51.1	0.1	0.1%
37.0%	50.7	50.7	0.0	0.0%
38.3%	50.7	50.7	0.0	0.0%
39.5%	50.7	50.5	-0.2	-0.4%
40.7%	50.5	50.5	0.0	0.0%
42.0%	50.2	50.3	0.1	0.1%
43.2%	49.9	50.0	0.0	0.1%
44.4%	49.9	50.0	0.0	0.0%
45.7%	49.9	49.9	0.0	0.0%
46.9%	49.8	49.8	0.0	0.1%
48.1%	49.8	49.8	0.0	0.0%
49.4%	49.8	49.8	0.0	0.0%
50.6%	49.8	49.8	0.0	0.0%
51.9%	49.7	49.7	0.0	0.0%
53.1%	49.7	49.6	-0.1	-0.2%
54.3%	49.6	49.5	-0.1	-0.2%
55.6%	49.4	49.5	0.0	0.1%
56.8%	49.3	49.3	0.0	0.0%
58.0%	49.3	49.1	-0.2	-0.3%
59.3%	49.2	49.0	-0.2	-0.4%
60.5%	49.1	49.0	-0.1	-0.3%
61.7%	49.0	49.0	-0.1	-0.1%
63.0%	49.0	49.0	0.0	-0.1%
64.2%	49.0	48.9	-0.1	-0.1%
65.4%	48.9	48.9	-0.1	-0.1%
66.7%	48.9	48.8	-0.1	-0.1%
67.9%	48.9	48.8	-0.1	-0.1%
69.1%	48.8	48.8	0.0	-0.1%
70.4%	48.8	48.8	-0.1	-0.1%
71.6%	48.8	48.7	-0.1	-0.2%
72.8%	48.8	48.7	-0.1	-0.2%
74.1%	48.7	48.6	-0.1	-0.1%
75.3%	48.7	48.6	-0.1	-0.2%
76.5%	48.7	48.6	-0.1	-0.1%
77.8%	48.7	48.6	-0.1	-0.2%
79.0%	48.6	48.6	-0.1	-0.1%
80.2%	48.6	48.5	-0.1	-0.1%
81.5%	48.6	48.5	-0.1	-0.1%
82.7%	48.5	48.4	-0.1	-0.1%
84.0%	48.4	48.2	-0.2	-0.4%
85.2%	48.1	48.1	-0.1	-0.1%
86.4%	48.0	48.0	0.0	-0.1%
87.7%	48.0	48.0	-0.1	-0.1%
88.9%	48.0	47.9	0.0	0.0%
90.1%	47.9	47.9	0.0	0.0%
91.4%	47.9	47.9	0.1	0.1%
92.6%	47.8	47.9	0.1	0.1%
93.8%	47.7	47.8	0.1	0.1%
95.1%	47.6	47.5	-0.1	-0.1%
96.3%	47.2	47.3	0.1	0.2%
97.5%	47.1	47.0	0.0	-0.1%
98.8%	46.7	46.8	0.0	0.1%
100.0%	46.7	46.8	0.0	0.1%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.5	61.0	-0.5	-0.8%
1.2%	61.0	61.0	0.0	-0.1%
2.5%	61.0	60.2	-0.8	-1.3%
3.7%	60.3	60.0	-0.2	-0.4%
4.9%	59.6	59.8	0.2	0.4%
6.2%	59.4	59.3	-0.1	-0.2%
7.4%	59.4	59.3	-0.1	-0.2%
8.6%	59.4	59.2	-0.2	-0.3%
9.9%	59.4	59.2	-0.2	-0.3%
11.1%	59.2	59.0	-0.2	-0.3%
12.3%	58.9	58.5	-0.4	-0.7%
13.6%	58.7	58.5	-0.2	-0.4%
14.8%	58.6	58.3	-0.3	-0.6%
16.0%	58.2	58.0	-0.2	-0.4%
17.3%	58.1	58.0	-0.1	-0.2%
18.5%	57.9	57.9	0.0	-0.1%
19.8%	57.8	57.8	0.0	0.0%
21.0%	57.7	57.7	0.0	0.0%
22.2%	57.7	57.7	0.0	0.0%
23.5%	57.5	57.6	0.1	0.2%
24.7%	57.4	57.3	-0.1	-0.2%
25.9%	57.3	57.3	0.0	-0.1%
27.2%	57.3	57.1	-0.2	-0.3%
28.4%	57.2	57.0	-0.1	-0.3%
29.6%	57.0	56.9	-0.1	-0.2%
30.9%	56.9	56.8	-0.1	-0.2%
32.1%	56.8	56.7	0.0	0.0%
33.3%	56.7	56.7	0.0	0.0%
34.6%	56.6	56.7	0.0	0.1%
35.8%	56.6	56.7	0.0	0.0%
37.0%	56.6	56.6	0.0	0.0%
38.3%	56.5	56.4	-0.2	-0.3%
39.5%	56.5	56.3	-0.2	-0.4%
40.7%	56.4	56.1	-0.3	-0.5%
42.0%	56.1	56.1	0.0	-0.1%
43.2%	56.1	55.9	-0.2	-0.3%
44.4%	55.7	55.8	0.1	0.1%
45.7%	55.7	55.7	0.0	0.1%
46.9%	55.6	55.7	0.0	0.1%
48.1%	55.6	55.6	0.0	0.1%
49.4%	55.6	55.6	0.0	0.1%
50.6%	55.5	55.6	0.0	0.1%
51.9%	55.4	55.6	0.2	0.3%
53.1%	55.3	55.5	0.2	0.4%
54.3%	55.3	55.4	0.1	0.1%
55.6%	55.1	55.2	0.1	0.2%
56.8%	55.1	55.1	0.0	0.0%
58.0%	55.1	55.0	-0.1	-0.1%
59.3%	55.0	55.0	-0.1	-0.1%
60.5%	54.8	54.8	0.0	0.0%
61.7%	54.7	54.7	0.0	0.0%
63.0%	54.7	54.7	0.0	0.0%
64.2%	54.6	54.7	0.0	0.1%
65.4%	54.4	54.6	0.2	0.4%
66.7%	54.2	54.4	0.3	0.5%
67.9%	54.1	54.2	0.2	0.3%
69.1%	54.0	54.1	0.1	0.1%
70.4%	53.9	53.9	0.0	0.0%
71.6%	53.8	53.7	-0.1	-0.2%
72.8%	53.7	53.7	0.0	0.0%
74.1%	53.6	53.6	0.0	0.0%
75.3%	53.6	53.6	0.0	0.0%
76.5%	53.5	53.5	0.0	0.0%
77.8%	53.4	53.4	0.0	0.1%
79.0%	53.4	53.4	0.0	0.1%
80.2%	53.1	53.1	0.0	0.0%
81.5%	53.1	53.0	-0.1	-0.1%
82.7%	53.0	52.7	-0.3	-0.5%
84.0%	52.8	52.7	-0.1	-0.2%
85.2%	52.7	52.7	0.0	0.0%
86.4%	52.7	52.7	0.0	0.0%
87.7%	52.6	52.6	0.0	-0.1%
88.9%	52.4	52.4	0.0	0.1%
90.1%	52.1	52.0	0.0	-0.1%
91.4%	51.8	51.8	0.0	0.1%
92.6%	51.7	51.7	0.0	0.0%
93.8%	51.7	51.6	-0.1	-0.1%
95.1%	51.4	51.3	-0.1	-0.2%
96.3%	51.1	51.2	0.0	0.1%
97.5%	50.3	50.3	-0.1	-0.1%
98.8%	49.7	49.7	0.0	0.1%
100.0%	49.7	49.7	0.0	0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	70.2	67.1	-3.2	-4.5%
1.2%	67.7	66.4	-1.3	-1.9%
2.5%	67.4	65.8	-1.6	-2.3%
3.7%	67.0	65.7	-1.2	-1.8%
4.9%	66.0	65.6	-0.4	-0.6%
6.2%	65.9	65.3	-0.5	-0.8%
7.4%	65.7	65.1	-0.6	-1.0%
8.6%	65.6	65.0	-0.6	-0.8%
9.9%	65.4	65.0	-0.4	-0.6%
11.1%	65.1	64.8	-0.3	-0.4%
12.3%	64.8	64.6	-0.2	-0.3%
13.6%	64.6	64.4	-0.3	-0.4%
14.8%	64.5	64.3	-0.2	-0.3%
16.0%	64.2	64.0	-0.3	-0.4%
17.3%	63.8	63.9	0.1	0.2%
18.5%	63.8	63.8	0.0	0.0%
19.8%	63.6	63.6	0.0	0.0%
21.0%	63.6	63.6	0.0	0.0%
22.2%	63.5	63.4	-0.1	-0.1%
23.5%	63.4	63.3	-0.1	-0.1%
24.7%	63.3	63.2	-0.1	-0.1%
25.9%	63.3	63.1	-0.2	-0.3%
27.2%	63.2	62.8	-0.3	-0.6%
28.4%	63.1	62.8	-0.3	-0.5%
29.6%	63.0	62.8	-0.2	-0.4%
30.9%	63.0	62.8	-0.2	-0.3%
32.1%	62.9	62.7	-0.2	-0.3%
33.3%	62.9	62.6	-0.3	-0.4%
34.6%	62.8	62.5	-0.3	-0.5%
35.8%	62.7	62.4	-0.4	-0.6%
37.0%	62.6	62.3	-0.3	-0.5%
38.3%	62.6	62.2	-0.3	-0.5%
39.5%	62.4	62.2	-0.2	-0.3%
40.7%	62.2	62.2	0.0	-0.1%
42.0%	62.2	62.2	0.0	0.0%
43.2%	62.1	62.2	0.0	0.0%
44.4%	62.1	62.1	0.0	0.0%
45.7%	62.1	62.1	-0.1	-0.1%
46.9%	62.1	62.0	-0.1	-0.1%
48.1%	62.0	61.7	-0.3	-0.4%
49.4%	61.9	61.7	-0.2	-0.3%
50.6%	61.7	61.6	0.0	-0.1%
51.9%	61.6	61.5	-0.1	-0.1%
53.1%	61.6	61.4	-0.2	-0.2%
54.3%	61.5	61.4	-0.2	-0.2%
55.6%	61.2	61.3	0.1	0.2%
56.8%	61.1	61.1	0.0	0.0%
58.0%	61.0	61.0	0.0	0.0%
59.3%	61.0	61.0	0.0	0.0%
60.5%	61.0	61.0	0.0	0.0%
61.7%	60.9	61.0	0.1	0.1%
63.0%	60.9	60.9	0.0	0.0%
64.2%	60.4	60.4	0.0	0.1%
65.4%	60.3	60.2	-0.2	-0.3%
66.7%	60.1	60.1	-0.1	-0.1%
67.9%	60.1	60.0	0.0	-0.1%
69.1%	60.0	59.9	-0.1	-0.1%
70.4%	59.9	59.9	0.0	0.0%
71.6%	59.8	59.8	-0.1	-0.1%
72.8%	59.8	59.7	-0.1	-0.2%
74.1%	59.8	59.6	-0.2	-0.3%
75.3%	59.8	59.5	-0.3	-0.5%
76.5%	59.6	59.3	-0.2	-0.4%
77.8%	59.4	59.1	-0.3	-0.4%
79.0%	59.3	59.1	-0.3	-0.5%
80.2%	59.1	59.0	-0.2	-0.3%
81.5%	59.1	58.9	-0.2	-0.3%
82.7%	59.0	58.9	-0.1	-0.2%
84.0%	59.0	58.6	-0.4	-0.6%
85.2%	58.9	58.5	-0.3	-0.5%
86.4%	58.7	58.5	-0.2	-0.3%
87.7%	58.5	58.2	-0.3	-0.5%
88.9%	58.2	58.2	0.0	0.0%
90.1%	58.2	58.2	0.0	0.0%
91.4%	57.9	58.0	0.1	0.2%
92.6%	57.9	57.9	0.0	0.0%
93.8%	57.8	57.8	0.0	0.0%
95.1%	57.5	57.5	0.0	0.0%
96.3%	56.2	56.3	0.0	0.1%
97.5%	56.1	56.1	0.0	0.0%
98.8%	56.0	56.1	0.0	0.0%
100.0%	56.0	56.1	0.0	0.0%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.4	70.9	-0.5	-0.6%
1.2%	70.7	69.7	-1.0	-1.4%
2.5%	69.8	69.1	-0.7	-1.0%
3.7%	69.7	68.7	-0.9	-1.3%
4.9%	69.1	68.3	-0.8	-1.2%
6.2%	69.0	68.2	-0.8	-1.2%
7.4%	68.9	67.9	-1.0	-1.4%
8.6%	68.7	67.8	-0.9	-1.3%
9.9%	68.7	67.7	-1.0	-1.4%
11.1%	68.6	67.5	-1.1	-1.6%
12.3%	68.5	67.4	-1.1	-1.7%
13.6%	68.4	67.1	-1.3	-1.9%
14.8%	68.4	67.0	-1.3	-1.9%
16.0%	68.3	67.0	-1.3	-1.9%
17.3%	68.3	67.0	-1.3	-1.9%
18.5%	68.2	67.0	-1.2	-1.8%
19.8%	68.0	66.9	-1.0	-1.5%
21.0%	67.9	66.9	-1.0	-1.4%
22.2%	67.9	66.8	-1.0	-1.5%
23.5%	67.8	66.7	-1.0	-1.5%
24.7%	67.6	66.7	-0.9	-1.4%
25.9%	67.6	66.7	-0.9	-1.3%
27.2%	67.6	66.7	-0.9	-1.4%
28.4%	67.6	66.7	-0.9	-1.3%
29.6%	67.5	66.6	-0.9	-1.4%
30.9%	67.5	66.6	-0.9	-1.4%
32.1%	67.4	66.5	-0.9	-1.3%
33.3%	67.4	66.5	-0.9	-1.3%
34.6%	67.3	66.4	-0.9	-1.3%
35.8%	67.3	66.4	-0.9	-1.3%
37.0%	67.3	66.4	-0.9	-1.3%
38.3%	67.2	66.4	-0.8	-1.2%
39.5%	67.1	66.4	-0.7	-1.1%
40.7%	67.1	66.4	-0.7	-1.1%
42.0%	67.0	66.3	-0.7	-1.0%
43.2%	67.0	66.3	-0.7	-1.0%
44.4%	66.9	66.1	-0.8	-1.2%
45.7%	66.8	66.1	-0.7	-1.1%
46.9%	66.5	65.9	-0.7	-1.0%
48.1%	66.5	65.7	-0.8	-1.2%
49.4%	66.4	65.6	-0.8	-1.2%
50.6%	66.4	65.6	-0.8	-1.3%
51.9%	66.1	65.5	-0.5	-0.8%
53.1%	66.0	65.4	-0.6	-1.0%
54.3%	66.0	65.3	-0.7	-1.0%
55.6%	65.9	65.1	-0.8	-1.2%
56.8%	65.9	65.1	-0.8	-1.2%
58.0%	65.8	65.0	-0.9	-1.3%
59.3%	65.6	64.9	-0.6	-1.0%
60.5%	65.3	64.9	-0.4	-0.6%
61.7%	65.2	64.8	-0.4	-0.7%
63.0%	65.1	64.6	-0.5	-0.7%
64.2%	65.0	64.6	-0.4	-0.7%
65.4%	64.9	64.4	-0.5	-0.8%
66.7%	64.8	64.2	-0.6	-1.0%
67.9%	64.3	64.1	-0.2	-0.2%
69.1%	64.1	63.9	-0.2	-0.2%
70.4%	63.8	63.8	0.0	0.0%
71.6%	63.7	63.8	0.0	0.0%
72.8%	63.7	63.8	0.0	0.1%
74.1%	63.7	63.6	-0.1	-0.1%
75.3%	63.6	63.6	-0.1	-0.1%
76.5%	63.6	63.5	-0.1	-0.2%
77.8%	63.4	63.5	0.0	0.1%
79.0%	63.4	63.4	0.0	0.1%
80.2%	63.3	63.4	0.1	0.2%
81.5%	63.3	63.1	-0.2	-0.3%
82.7%	63.1	62.8	-0.3	-0.4%
84.0%	62.8	62.6	-0.2	-0.2%
85.2%	62.6	62.4	-0.2	-0.3%
86.4%	62.4	62.1	-0.3	-0.5%
87.7%	62.1	62.1	0.0	0.0%
88.9%	61.9	61.7	-0.2	-0.4%
90.1%	61.7	61.4	-0.3	-0.5%
91.4%	61.6	61.3	-0.4	-0.6%
92.6%	61.6	61.2	-0.4	-0.6%
93.8%	61.4	61.0	-0.3	-0.6%
95.1%	61.4	60.8	-0.6	-1.0%
96.3%	61.2	60.8	-0.4	-0.7%
97.5%	60.8	60.5	-0.3	-0.5%
98.8%	60.7	60.3	-0.5	-0.8%
100.0%	60.7	60.3	-0.5	-0.8%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.7	73.4	-0.3	-0.4%
1.2%	73.5	70.1	-3.5	-4.7%
2.5%	72.8	69.7	-3.1	-4.2%
3.7%	72.8	69.7	-3.1	-4.3%
4.9%	71.6	69.3	-2.3	-3.2%
6.2%	71.0	68.8	-2.1	-3.0%
7.4%	70.6	68.8	-1.7	-2.5%
8.6%	70.4	68.1	-2.3	-3.3%
9.9%	70.0	68.0	-2.0	-2.8%
11.1%	69.9	68.0	-1.9	-2.7%
12.3%	69.8	67.8	-2.1	-3.0%
13.6%	69.8	67.7	-2.1	-3.0%
14.8%	69.8	67.6	-2.1	-3.0%
16.0%	69.6	67.6	-2.0	-2.9%
17.3%	69.5	67.4	-2.0	-2.9%
18.5%	69.4	66.9	-2.5	-3.6%
19.8%	69.1	66.9	-2.2	-3.2%
21.0%	69.1	66.9	-2.2	-3.2%
22.2%	69.0	66.8	-2.1	-3.1%
23.5%	68.9	66.8	-2.1	-3.0%
24.7%	68.7	66.8	-1.9	-2.8%
25.9%	68.7	66.8	-1.9	-2.7%
27.2%	68.7	66.8	-1.9	-2.7%
28.4%	68.7	66.8	-1.9	-2.8%
29.6%	68.7	66.7	-1.9	-2.8%
30.9%	68.6	66.7	-1.9	-2.8%
32.1%	68.6	66.7	-1.9	-2.7%
33.3%	68.4	66.7	-1.8	-2.6%
34.6%	68.4	66.7	-1.7	-2.6%
35.8%	68.3	66.5	-1.8	-2.7%
37.0%	68.2	66.4	-1.9	-2.7%
38.3%	68.2	66.3	-1.9	-2.8%
39.5%	68.2	66.3	-1.9	-2.8%
40.7%	68.1	66.3	-1.9	-2.7%
42.0%	68.1	66.1	-1.9	-2.9%
43.2%	68.0	66.1	-1.9	-2.8%
44.4%	67.8	66.0	-1.7	-2.6%
45.7%	67.7	65.9	-1.8	-2.6%
46.9%	67.7	65.9	-1.8	-2.6%
48.1%	67.5	65.8	-1.7	-2.6%
49.4%	67.5	65.8	-1.7	-2.5%
50.6%	67.5	65.8	-1.7	-2.5%
51.9%	67.5	65.6	-1.8	-2.7%
53.1%	67.3	65.6	-1.7	-2.5%
54.3%	67.2	65.6	-1.6	-2.4%
55.6%	67.2	65.5	-1.7	-2.5%
56.8%	67.2	65.4	-1.8	-2.7%
58.0%	66.9	65.3	-1.6	-2.4%
59.3%	66.7	65.2	-1.5	-2.3%
60.5%	66.7	65.2	-1.5	-2.3%
61.7%	66.6	65.0	-1.5	-2.3%
63.0%	66.5	64.8	-1.7	-2.5%
64.2%	66.4	64.8	-1.6	-2.4%
65.4%	66.3	64.6	-1.7	-2.6%
66.7%	66.3	64.6	-1.7	-2.6%
67.9%	66.2	64.5	-1.6	-2.5%
69.1%	66.1	64.5	-1.6	-2.4%
70.4%	66.1	64.5	-1.6	-2.4%
71.6%	66.1	64.4	-1.7	-2.6%
72.8%	66.1	64.3	-1.7	-2.6%
74.1%	65.8	64.3	-1.5	-2.3%
75.3%	65.8	64.2	-1.6	-2.4%
76.5%	65.7	64.1	-1.6	-2.5%
77.8%	65.5	64.0	-1.5	-2.3%
79.0%	65.5	64.0	-1.5	-2.3%
80.2%	65.5	64.0	-1.5	-2.3%
81.5%	65.5	63.9	-1.6	-2.4%
82.7%	65.4	63.9	-1.5	-2.3%
84.0%	65.4	63.9	-1.5	-2.3%
85.2%	65.4	63.9	-1.5	-2.3%
86.4%	65.3	63.7	-1.6	-2.4%
87.7%	65.2	63.7	-1.5	-2.3%
88.9%	65.1	63.7	-1.4	-2.2%
90.1%	65.1	63.7	-1.4	-2.2%
91.4%	65.0	63.6	-1.4	-2.2%
92.6%	65.0	63.5	-1.5	-2.3%
93.8%	64.8	63.5	-1.3	-2.0%
95.1%	64.6	63.4	-1.2	-1.9%
96.3%	64.6	63.3	-1.3	-1.9%
97.5%	63.9	63.3	-0.7	-1.0%
98.8%	63.7	63.2	-0.5	-0.8%
100.0%	63.7	63.2	-0.5	-0.8%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.6	73.6	1.0	1.4%
1.2%	72.2	69.0	-3.1	-4.4%
2.5%	70.1	68.6	-1.5	-2.1%
3.7%	68.9	68.0	-1.0	-1.4%
4.9%	68.6	67.6	-1.0	-1.5%
6.2%	68.5	67.6	-0.9	-1.4%
7.4%	67.6	67.5	-0.1	-0.1%
8.6%	67.5	67.3	-0.1	-0.2%
9.9%	67.3	67.2	-0.1	-0.2%
11.1%	66.9	67.2	0.2	0.3%
12.3%	66.8	67.0	0.2	0.2%
13.6%	66.8	66.9	0.1	0.2%
14.8%	66.8	66.9	0.1	0.2%
16.0%	66.7	66.9	0.2	0.3%
17.3%	66.7	66.8	0.1	0.2%
18.5%	66.6	66.5	-0.1	-0.1%
19.8%	66.6	66.5	-0.1	-0.1%
21.0%	66.6	66.4	-0.1	-0.2%
22.2%	66.5	66.4	-0.1	-0.1%
23.5%	66.5	66.3	-0.1	-0.2%
24.7%	66.4	66.3	-0.1	-0.2%
25.9%	66.4	66.3	-0.1	-0.2%
27.2%	66.4	66.3	-0.2	-0.3%
28.4%	66.4	66.1	-0.3	-0.4%
29.6%	66.4	66.1	-0.3	-0.5%
30.9%	66.3	66.0	-0.3	-0.4%
32.1%	66.3	66.0	-0.3	-0.4%
33.3%	66.3	66.0	-0.3	-0.5%
34.6%	66.2	65.9	-0.3	-0.5%
35.8%	66.2	65.9	-0.3	-0.5%
37.0%	66.2	65.9	-0.3	-0.5%
38.3%	66.2	65.9	-0.3	-0.5%
39.5%	66.2	65.9	-0.3	-0.5%
40.7%	66.2	65.9	-0.3	-0.5%
42.0%	66.1	65.8	-0.3	-0.4%
43.2%	66.1	65.8	-0.3	-0.4%
44.4%	66.1	65.8	-0.3	-0.4%
45.7%	66.0	65.8	-0.2	-0.4%
46.9%	66.0	65.7	-0.3	-0.5%
48.1%	66.0	65.6	-0.4	-0.5%
49.4%	66.0	65.6	-0.3	-0.5%
50.6%	65.9	65.6	-0.3	-0.5%
51.9%	65.9	65.6	-0.3	-0.5%
53.1%	65.9	65.6	-0.3	-0.5%
54.3%	65.9	65.5	-0.4	-0.6%
55.6%	65.8	65.5	-0.3	-0.5%
56.8%	65.8	65.5	-0.3	-0.5%
58.0%	65.7	65.5	-0.2	-0.3%
59.3%	65.6	65.5	-0.2	-0.2%
60.5%	65.6	65.4	-0.2	-0.3%
61.7%	65.5	65.4	-0.1	-0.2%
63.0%	65.5	65.4	-0.1	-0.2%
64.2%	65.4	65.3	-0.1	-0.2%
65.4%	65.4	65.3	-0.1	-0.1%
66.7%	65.4	65.3	-0.1	-0.1%
67.9%	65.3	65.3	0.0	0.0%
69.1%	65.2	65.3	0.0	0.1%
70.4%	65.1	65.2	0.2	0.3%
71.6%	64.8	65.2	0.4	0.7%
72.8%	64.7	65.2	0.4	0.7%
74.1%	64.7	65.1	0.4	0.6%
75.3%	64.7	65.1	0.4	0.7%
76.5%	64.6	65.1	0.5	0.7%
77.8%	64.6	65.1	0.5	0.8%
79.0%	64.5	65.1	0.6	0.9%
80.2%	64.5	65.1	0.6	0.9%
81.5%	64.4	65.0	0.6	0.9%
82.7%	64.4	65.0	0.6	0.9%
84.0%	64.4	65.0	0.6	0.9%
85.2%	64.2	65.0	0.8	1.2%
86.4%	64.2	64.9	0.8	1.2%
87.7%	64.0	64.9	0.9	1.5%
88.9%	63.9	64.9	0.9	1.4%
90.1%	63.9	64.8	0.9	1.4%
91.4%	63.9	64.7	0.8	1.3%
92.6%	63.8	64.6	0.8	1.3%
93.8%	63.7	64.6	0.8	1.3%
95.1%	63.7	64.5	0.7	1.2%
96.3%	63.6	64.4	0.9	1.3%
97.5%	63.5	64.3	0.7	1.2%
98.8%	63.3	64.2	0.9	1.3%
100.0%	63.3	64.2	0.9	1.3%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.8	73.9	0.1	0.2%
1.2%	71.2	69.4	-1.9	-2.6%
2.5%	70.7	69.3	-1.4	-2.0%
3.7%	70.0	69.0	-0.9	-1.3%
4.9%	69.9	68.9	-1.0	-1.4%
6.2%	69.9	68.8	-1.2	-1.7%
7.4%	69.8	68.7	-1.2	-1.7%
8.6%	69.8	68.6	-1.2	-1.7%
9.9%	69.8	68.6	-1.2	-1.7%
11.1%	69.6	68.6	-1.0	-1.5%
12.3%	69.2	68.5	-0.7	-1.0%
13.6%	69.1	68.4	-0.7	-1.0%
14.8%	68.8	68.3	-0.5	-0.7%
16.0%	68.8	68.3	-0.5	-0.7%
17.3%	68.8	68.3	-0.5	-0.7%
18.5%	68.7	68.2	-0.6	-0.8%
19.8%	68.7	68.1	-0.6	-0.8%
21.0%	68.6	68.1	-0.5	-0.7%
22.2%	68.6	68.1	-0.5	-0.7%
23.5%	68.5	68.0	-0.5	-0.8%
24.7%	68.5	67.9	-0.6	-0.8%
25.9%	68.5	67.9	-0.6	-0.8%
27.2%	68.5	67.9	-0.6	-0.9%
28.4%	68.5	67.9	-0.6	-0.8%
29.6%	68.4	67.9	-0.5	-0.8%
30.9%	68.4	67.9	-0.5	-0.8%
32.1%	68.4	67.8	-0.6	-0.8%
33.3%	68.4	67.8	-0.6	-0.8%
34.6%	68.3	67.8	-0.6	-0.8%
35.8%	68.3	67.7	-0.6	-0.8%
37.0%	68.3	67.7	-0.6	-0.9%
38.3%	68.3	67.6	-0.6	-0.9%
39.5%	68.2	67.6	-0.6	-0.9%
40.7%	68.2	67.6	-0.6	-0.9%
42.0%	68.2	67.6	-0.6	-0.9%
43.2%	68.2	67.6	-0.6	-0.9%
44.4%	68.1	67.4	-0.7	-1.0%
45.7%	68.1	67.4	-0.7	-1.0%
46.9%	68.1	67.4	-0.7	-1.0%
48.1%	68.0	67.4	-0.7	-1.0%
49.4%	68.0	67.4	-0.6	-0.9%
50.6%	68.0	67.3	-0.6	-0.9%
51.9%	67.9	67.3	-0.6	-0.9%
53.1%	67.9	67.3	-0.6	-0.8%
54.3%	67.8	67.3	-0.5	-0.7%
55.6%	67.8	67.3	-0.5	-0.7%
56.8%	67.8	67.3	-0.5	-0.7%
58.0%	67.7	67.3	-0.5	-0.7%
59.3%	67.7	67.3	-0.5	-0.7%
60.5%	67.7	67.2	-0.5	-0.7%
61.7%	67.7	67.2	-0.5	-0.7%
63.0%	67.7	67.2	-0.5	-0.7%
64.2%	67.7	67.2	-0.5	-0.7%
65.4%	67.7	67.2	-0.5	-0.8%
66.7%	67.7	67.1	-0.6	-0.9%
67.9%	67.7	67.1	-0.6	-0.9%
69.1%	67.7	67.0	-0.6	-0.9%
70.4%	67.6	67.0	-0.6	-0.9%
71.6%	67.6	67.0	-0.7	-1.0%
72.8%	67.6	66.9	-0.7	-1.0%
74.1%	67.6	66.9	-0.7	-1.0%
75.3%	67.6	66.9	-0.7	-1.0%
76.5%	67.5	66.9	-0.7	-1.0%
77.8%	67.5	66.8	-0.6	-0.9%
79.0%	67.5	66.8	-0.6	-0.9%
80.2%	67.5	66.8	-0.6	-0.9%
81.5%	67.4	66.8	-0.6	-1.0%
82.7%	67.4	66.8	-0.7	-1.0%
84.0%	67.4	66.7	-0.7	-1.0%
85.2%	67.3	66.7	-0.6	-0.9%
86.4%	67.3	66.7	-0.7	-1.0%
87.7%	67.3	66.6	-0.6	-1.0%
88.9%	67.2	66.6	-0.6	-0.9%
90.1%	67.1	66.5	-0.5	-0.8%
91.4%	67.0	66.4	-0.7	-1.0%
92.6%	67.0	66.3	-0.7	-1.0%
93.8%	66.9	66.1	-0.7	-1.1%
95.1%	66.5	66.1	-0.4	-0.7%
96.3%	66.3	65.9	-0.4	-0.6%
97.5%	66.2	65.8	-0.4	-0.6%
98.8%	65.9	65.7	-0.2	-0.3%
100.0%	65.9	65.7	-0.2	-0.3%

Table SQ9-1b

American River below Nimbus Dam, Monthly Temperature
Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.7	73.0	1.2	1.7%
1.2%	70.9	68.7	-2.2	-3.1%
2.5%	70.5	68.6	-1.9	-2.8%
3.7%	70.2	68.6	-1.6	-2.3%
4.9%	69.4	68.5	-0.9	-1.3%
6.2%	69.3	68.5	-0.9	-1.3%
7.4%	69.1	68.2	-0.9	-1.3%
8.6%	68.7	67.9	-0.8	-1.1%
9.9%	68.4	67.9	-0.6	-0.8%
11.1%	68.3	67.6	-0.6	-0.9%
12.3%	68.1	67.4	-0.7	-1.0%
13.6%	68.1	67.2	-0.8	-1.2%
14.8%	68.0	67.1	-0.9	-1.3%
16.0%	68.0	67.0	-1.0	-1.4%
17.3%	67.9	67.0	-1.0	-1.4%
18.5%	67.9	66.8	-1.1	-1.7%
19.8%	67.9	66.8	-1.1	-1.6%
21.0%	67.5	66.8	-0.7	-1.1%
22.2%	67.4	66.7	-0.8	-1.2%
23.5%	67.2	66.6	-0.6	-0.9%
24.7%	67.2	66.5	-0.7	-1.0%
25.9%	67.2	66.5	-0.7	-1.0%
27.2%	67.1	66.3	-0.9	-1.3%
28.4%	67.1	66.3	-0.9	-1.3%
29.6%	67.1	66.2	-0.9	-1.3%
30.9%	67.0	66.2	-0.8	-1.3%
32.1%	67.0	66.1	-0.9	-1.4%
33.3%	67.0	66.1	-0.9	-1.3%
34.6%	66.9	66.0	-0.8	-1.2%
35.8%	66.9	66.0	-0.9	-1.3%
37.0%	66.8	66.0	-0.8	-1.3%
38.3%	66.8	65.9	-0.9	-1.3%
39.5%	66.8	65.9	-0.9	-1.3%
40.7%	66.8	65.9	-0.9	-1.3%
42.0%	66.7	65.9	-0.9	-1.3%
43.2%	66.7	65.9	-0.8	-1.2%
44.4%	66.6	65.9	-0.8	-1.2%
45.7%	66.6	65.8	-0.8	-1.2%
46.9%	66.5	65.8	-0.7	-1.1%
48.1%	66.5	65.8	-0.7	-1.1%
49.4%	66.5	65.7	-0.7	-1.1%
50.6%	66.4	65.7	-0.7	-1.1%
51.9%	66.4	65.7	-0.6	-1.0%
53.1%	66.4	65.7	-0.6	-1.0%
54.3%	66.3	65.7	-0.6	-0.9%
55.6%	66.3	65.7	-0.6	-1.0%
56.8%	66.3	65.7	-0.6	-1.0%
58.0%	66.3	65.7	-0.7	-1.0%
59.3%	66.3	65.6	-0.7	-1.0%
60.5%	66.3	65.6	-0.6	-0.9%
61.7%	66.2	65.6	-0.6	-0.9%
63.0%	66.2	65.6	-0.6	-0.9%
64.2%	66.2	65.6	-0.6	-0.9%
65.4%	66.2	65.6	-0.6	-0.9%
66.7%	66.2	65.6	-0.6	-0.9%
67.9%	66.1	65.6	-0.6	-0.9%
69.1%	66.1	65.5	-0.6	-0.9%
70.4%	66.1	65.5	-0.6	-0.9%
71.6%	66.0	65.5	-0.6	-0.8%
72.8%	66.0	65.5	-0.6	-0.9%
74.1%	66.0	65.4	-0.6	-0.9%
75.3%	66.0	65.4	-0.6	-1.0%
76.5%	66.0	65.3	-0.7	-1.0%
77.8%	66.0	65.3	-0.7	-1.0%
79.0%	65.9	65.2	-0.7	-1.0%
80.2%	65.8	65.2	-0.6	-0.9%
81.5%	65.8	65.2	-0.7	-1.0%
82.7%	65.8	65.1	-0.7	-1.1%
84.0%	65.8	65.1	-0.7	-1.1%
85.2%	65.8	65.0	-0.8	-1.1%
86.4%	65.8	65.0	-0.7	-1.1%
87.7%	65.8	65.0	-0.8	-1.2%
88.9%	65.7	65.0	-0.7	-1.1%
90.1%	65.7	64.9	-0.7	-1.1%
91.4%	65.6	64.9	-0.7	-1.0%
92.6%	65.6	64.9	-0.7	-1.1%
93.8%	65.6	64.8	-0.8	-1.2%
95.1%	65.5	64.8	-0.8	-1.2%
96.3%	65.5	64.7	-0.7	-1.1%
97.5%	65.4	64.6	-0.7	-1.1%
98.8%	64.7	64.6	-0.1	-0.2%
100.0%	64.6	64.2	-0.4	-0.6%

July to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.2	73.6	0.5	0.7%
1.2%	71.2	68.8	-2.5	-3.4%
2.5%	70.5	68.6	-1.9	-2.7%
3.7%	70.4	68.5	-1.9	-2.6%
4.9%	69.5	68.5	-1.0	-1.5%
6.2%	69.5	68.4	-1.0	-1.5%
7.4%	68.9	68.3	-0.7	-1.0%
8.6%	68.7	68.2	-0.5	-0.7%
9.9%	68.6	68.1	-0.6	-0.8%
11.1%	68.6	67.8	-0.8	-1.2%
12.3%	68.5	67.6	-0.9	-1.3%
13.6%	68.4	67.6	-0.7	-1.1%
14.8%	68.4	67.3	-1.0	-1.5%
16.0%	68.2	67.3	-0.9	-1.4%
17.3%	68.1	67.3	-0.8	-1.2%
18.5%	68.0	67.2	-0.8	-1.1%
19.8%	68.0	67.2	-0.8	-1.1%
21.0%	67.9	67.0	-0.9	-1.3%
22.2%	67.9	66.9	-0.9	-1.3%
23.5%	67.8	66.9	-0.9	-1.3%
24.7%	67.8	66.9	-0.9	-1.3%
25.9%	67.8	66.8	-1.0	-1.4%
27.2%	67.5	66.8	-0.7	-1.1%
28.4%	67.5	66.7	-0.8	-1.1%
29.6%	67.5	66.7	-0.7	-1.1%
30.9%	67.4	66.6	-0.8	-1.2%
32.1%	67.4	66.5	-0.8	-1.3%
33.3%	67.4	66.5	-0.8	-1.2%
34.6%	67.2	66.5	-0.7	-1.1%
35.8%	67.2	66.5	-0.7	-1.1%
37.0%	67.2	66.5	-0.7	-1.1%
38.3%	67.1	66.4	-0.7	-1.0%
39.5%	67.1	66.4	-0.7	-1.0%
40.7%	67.1	66.4	-0.7	-1.0%
42.0%	67.1	66.4	-0.6	-1.0%
43.2%	67.0	66.4	-0.6	-0.9%
44.4%	67.0	66.4	-0.6	-0.9%
45.7%	67.0	66.4	-0.6	-0.9%
46.9%	66.9	66.3	-0.6	-0.9%
48.1%	66.9	66.3	-0.7	-1.0%
49.4%	66.9	66.2	-0.7	-1.0%
50.6%	66.9	66.2	-0.7	-1.0%
51.9%	66.8	66.1	-0.8	-1.2%
53.1%	66.8	65.9	-0.9	-1.3%
54.3%	66.8	65.9	-0.9	-1.4%
55.6%	66.8	65.9	-0.9	-1.4%
56.8%	66.7	65.8	-0.9	-1.3%
58.0%	66.7	65.8	-0.9	-1.4%
59.3%	66.7	65.7	-0.9	-1.4%
60.5%	66.6	65.7	-0.9	-1.3%
61.7%	66.6	65.7	-0.8	-1.2%
63.0%	66.5	65.7	-0.8	-1.2%
64.2%	66.5	65.7	-0.8	-1.2%
65.4%	66.5	65.7	-0.8	-1.2%
66.7%	66.5	65.7	-0.8	-1.3%
67.9%	66.5	65.7	-0.8	-1.2%
69.1%	66.5	65.6	-0.8	-1.2%
70.4%	66.5	65.6	-0.8	-1.2%
71.6%	66.4	65.6	-0.8	-1.2%
72.8%	66.4	65.6	-0.8	-1.2%
74.1%	66.4	65.6	-0.8	-1.2%
75.3%	66.4	65.6	-0.8	-1.2%
76.5%	66.4	65.6	-0.8	-1.2%
77.8%	66.3	65.5	-0.8	-1.2%
79.0%	66.3	65.5	-0.8	-1.2%
80.2%	66.3	65.5	-0.8	-1.2%
81.5%	66.2	65.5	-0.8	-1.1%
82.7%	66.2	65.5	-0.7	-1.1%
84.0%	66.1	65.4	-0.7	-1.1%
85.2%	66.1	65.4	-0.7	-1.1%
86.4%	66.1	65.3	-0.8	-1.2%
87.7%	66.1	65.3	-0.8	-1.1%
88.9%	66.0	65.3	-0.7	-1.1%
90.1%	66.0	65.3	-0.7	-1.1%
91.4%	65.9	65.3	-0.6	-0.9%
92.6%	65.8	65.2	-0.6	-0.9%
93.8%	65.8	65.2	-0.6	-0.9%
95.1%	65.7	65.2	-0.5	-0.8%
96.3%	65.7	65.2	-0.5	-0.8%
97.5%	65.6	65.1	-0.5	-0.8%
98.8%	65.5	65.1	-0.4	-0.6%
100.0%	65.4	65.0	-0.4	-0.6%

August to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	73.0	73.8	0.8	1.1%
1.2%	71.3	69.2	-2.1	-2.9%
2.5%	70.0	68.8	-1.2	-1.7%
3.7%	69.4	68.4	-0.9	-1.4%
4.9%	69.3	68.3	-0.9	-1.4%
6.2%	69.2	68.1	-1.1	-1.6%
7.4%	69.1	67.9	-1.1	-1.7%
8.6%	68.4	67.8	-0.5	-0.8%
9.9%	67.9	67.8	-0.1	-0.2%
11.1%	67.7	67.6	-0.1	-0.1%
12.3%	67.7	67.6	-0.1	-0.1%
13.6%	67.7	67.6	-0.1	-0.1%
14.8%	67.6	67.4	-0.2	-0.3%
16.0%	67.6	67.4	-0.2	-0.2%
17.3%	67.6	67.4	-0.2	-0.2%
18.5%	67.5	67.4	-0.1	-0.2%
19.8%	67.4	67.4	-0.1	-0.1%
21.0%	67.4	67.1	-0.3	-0.5%
22.2%	67.3	67.1	-0.2	-0.3%
23.5%	67.3	67.0	-0.3	-0.4%
24.7%	67.2	67.0	-0.2	-0.4%
25.9%	67.2	67.0	-0.2	-0.4%
27.2%	67.2	67.0	-0.2	-0.3%
28.4%	67.2	67.0	-0.2	-0.3%
29.6%	67.2	66.9	-0.3	-0.4%
30.9%	67.2	66.9	-0.3	-0.4%
32.1%	67.1	66.8	-0.3	-0.4%
33.3%	67.1	66.8	-0.3	-0.5%
34.6%	67.1	66.8	-0.3	-0.4%
35.8%	67.1	66.8	-0.3	-0.4%
37.0%	67.1	66.8	-0.3	-0.4%
38.3%	67.0	66.8	-0.3	-0.4%
39.5%	67.0	66.7	-0.3	-0.4%
40.7%	67.0	66.7	-0.3	-0.4%
42.0%	67.0	66.7	-0.3	-0.5%
43.2%	67.0	66.7	-0.3	-0.5%
44.4%	67.0	66.7	-0.3	-0.5%
45.7%	67.0	66.7	-0.3	-0.5%
46.9%	67.0	66.6	-0.3	-0.5%
48.1%	67.0	66.6	-0.4	-0.5%
49.4%	66.9	66.6	-0.4	-0.5%
50.6%	66.9	66.6	-0.4	-0.5%
51.9%	66.9	66.5	-0.3	-0.5%
53.1%	66.8	66.5	-0.3	-0.4%
54.3%	66.8	66.5	-0.3	-0.5%
55.6%	66.7	66.4	-0.3	-0.5%
56.8%	66.7	66.4	-0.3	-0.5%
58.0%	66.6	66.4	-0.3	-0.4%
59.3%	66.6	66.4	-0.3	-0.4%
60.5%	66.6	66.4	-0.3	-0.4%
61.7%	66.6	66.3	-0.3	-0.5%
63.0%	66.6	66.3	-0.3	-0.4%
64.2%	66.5	66.3	-0.2	-0.3%
65.4%	66.5	66.2	-0.2	-0.4%
66.7%	66.5	66.2	-0.3	-0.4%
67.9%	66.5	66.2	-0.3	-0.4%
69.1%	66.4	66.1	-0.2	-0.4%
70.4%	66.4	66.1	-0.2	-0.4%
71.6%	66.4	66.1	-0.3	-0.4%
72.8%	66.3	66.1	-0.2	-0.3%
74.1%	66.3	66.1	-0.2	-0.3%
75.3%	66.3	66.1	-0.2	-0.3%
76.5%	66.2	66.0	-0.2	-0.3%
77.8%	66.2	66.0	-0.2	-0.3%
79.0%	66.2	66.0	-0.2	-0.2%
80.2%	66.2	66.0	-0.2	-0.3%
81.5%	66.1	66.0	-0.1	-0.2%
82.7%	66.1	65.9	-0.2	-0.3%
84.0%	66.1	65.9	-0.2	-0.3%
85.2%	66.1	65.8	-0.3	-0.4%
86.4%	66.0	65.8	-0.2	-0.4%
87.7%	66.0	65.7	-0.3	-0.4%
88.9%	66.0	65.7	-0.3	-0.4%
90.1%	65.9	65.7	-0.2	-0.4%
91.4%	65.9	65.6	-0.2	-0.3%
92.6%	65.8	65.6	-0.2	-0.4%
93.8%	65.8	65.5	-0.3	-0.5%
95.1%	65.8	65.5	-0.3	-0.5%
96.3%	65.7	65.4	-0.2	-0.4%
97.5%	65.6	65.3	-0.3	-0.4%
98.8%	65.4	65.2	-0.2	-0.3%
100.0%	65.4	65.2	-0.2	-0.4%

Figure SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

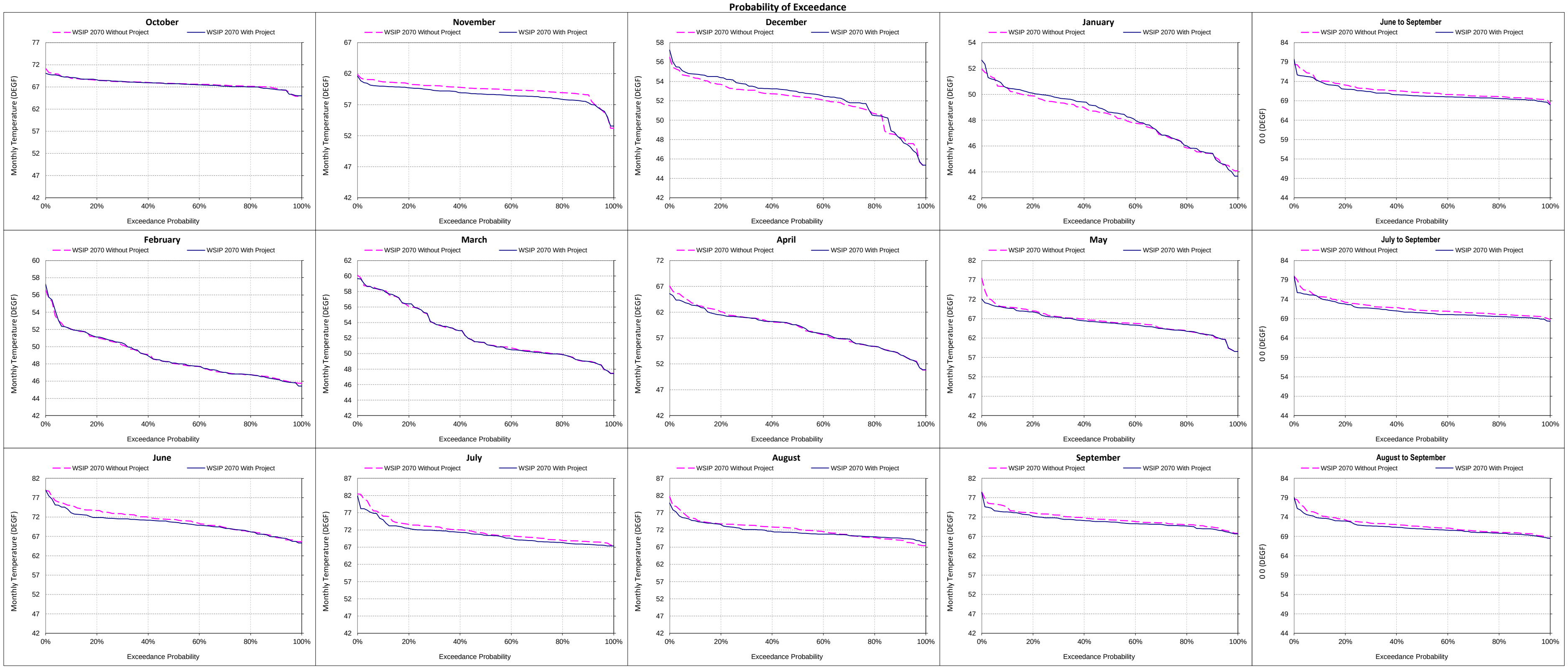


Table SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.2	70.1	-1.1	-1.5%
1.2%	70.3	69.8	-0.4	-0.6%
2.5%	70.1	69.7	-0.4	-0.5%
3.7%	70.0	69.7	-0.3	-0.4%
4.9%	69.9	69.6	-0.3	-0.4%
6.2%	69.4	69.3	0.0	-0.1%
7.4%	69.3	69.2	-0.1	-0.1%
8.6%	69.3	69.2	-0.1	-0.1%
9.9%	69.0	69.1	0.2	0.2%
11.1%	68.9	69.1	0.2	0.3%
12.3%	68.9	69.0	0.1	0.2%
13.6%	68.8	68.8	0.0	0.1%
14.8%	68.8	68.8	0.0	0.0%
16.0%	68.7	68.8	0.1	0.1%
17.3%	68.7	68.8	0.1	0.1%
18.5%	68.6	68.8	0.2	0.2%
19.8%	68.5	68.6	0.1	0.1%
21.0%	68.5	68.5	0.0	0.0%
22.2%	68.5	68.4	0.0	0.0%
23.5%	68.4	68.4	0.0	0.1%
24.7%	68.3	68.4	0.1	0.2%
25.9%	68.3	68.4	0.1	0.1%
27.2%	68.2	68.3	0.1	0.2%
28.4%	68.2	68.3	0.1	0.1%
29.6%	68.2	68.3	0.1	0.1%
30.9%	68.2	68.2	0.0	0.0%
32.1%	68.2	68.1	-0.1	-0.1%
33.3%	68.2	68.1	-0.1	-0.1%
34.6%	68.1	68.1	-0.1	-0.1%
35.8%	68.1	68.1	-0.1	-0.1%
37.0%	68.1	68.0	-0.1	-0.1%
38.3%	68.1	68.0	-0.1	-0.1%
39.5%	68.0	68.0	-0.1	-0.1%
40.7%	68.0	68.0	0.0	0.0%
42.0%	67.9	67.9	0.0	0.0%
43.2%	67.9	67.9	0.0	0.0%
44.4%	67.9	67.9	0.0	0.0%
45.7%	67.9	67.8	0.0	0.0%
46.9%	67.8	67.7	-0.1	-0.2%
48.1%	67.8	67.7	-0.1	-0.1%
49.4%	67.8	67.7	-0.1	-0.1%
50.6%	67.8	67.7	-0.1	-0.1%
51.9%	67.8	67.7	-0.1	-0.1%
53.1%	67.7	67.7	-0.1	-0.1%
54.3%	67.7	67.6	-0.1	-0.1%
55.6%	67.7	67.6	-0.1	-0.1%
56.8%	67.6	67.6	-0.1	-0.1%
58.0%	67.6	67.5	-0.1	-0.1%
59.3%	67.6	67.5	-0.1	-0.2%
60.5%	67.6	67.5	-0.1	-0.2%
61.7%	67.6	67.4	-0.2	-0.2%
63.0%	67.6	67.4	-0.2	-0.2%
64.2%	67.6	67.4	-0.2	-0.3%
65.4%	67.5	67.4	-0.2	-0.2%
66.7%	67.4	67.3	-0.1	-0.1%
67.9%	67.4	67.2	-0.2	-0.3%
69.1%	67.4	67.2	-0.2	-0.3%
70.4%	67.4	67.2	-0.2	-0.3%
71.6%	67.3	67.1	-0.2	-0.3%
72.8%	67.3	67.1	-0.2	-0.3%
74.1%	67.3	67.1	-0.2	-0.3%
75.3%	67.2	67.1	-0.2	-0.3%
76.5%	67.2	67.0	-0.2	-0.3%
77.8%	67.2	67.0	-0.2	-0.2%
79.0%	67.1	67.0	-0.1	-0.2%
80.2%	67.1	67.0	-0.1	-0.2%
81.5%	67.1	67.0	-0.1	-0.2%
82.7%	67.1	67.0	-0.1	-0.1%
84.0%	67.0	66.8	-0.3	-0.4%
85.2%	67.0	66.7	-0.3	-0.5%
86.4%	67.0	66.7	-0.3	-0.5%
87.7%	67.0	66.6	-0.4	-0.6%
88.9%	66.8	66.5	-0.3	-0.4%
90.1%	66.6	66.4	-0.3	-0.4%
91.4%	66.5	66.4	-0.1	-0.2%
92.6%	66.3	66.3	0.1	0.1%
93.8%	66.3	66.3	0.0	0.0%
95.1%	65.8	65.4	-0.5	-0.7%
96.3%	65.2	65.3	0.1	0.1%
97.5%	64.9	65.1	0.2	0.3%
98.8%	64.9	65.0	0.1	0.2%
100.0%	64.9	65.0	0.0	0.2%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.8	61.6	-0.3	-0.4%
1.2%	61.3	60.9	-0.4	-0.7%
2.5%	61.1	60.5	-0.6	-0.9%
3.7%	61.1	60.5	-0.6	-1.0%
4.9%	61.0	60.2	-0.9	-1.4%
6.2%	61.0	60.1	-1.0	-1.6%
7.4%	60.9	60.0	-0.8	-1.3%
8.6%	60.8	60.0	-0.8	-1.3%
9.9%	60.7	60.0	-0.7	-1.2%
11.1%	60.6	60.0	-0.7	-1.1%
12.3%	60.6	59.9	-0.7	-1.1%
13.6%	60.6	59.9	-0.7	-1.1%
14.8%	60.6	59.9	-0.7	-1.1%
16.0%	60.5	59.9	-0.7	-1.1%
17.3%	60.5	59.8	-0.7	-1.2%
18.5%	60.5	59.8	-0.7	-1.2%
19.8%	60.4	59.7	-0.6	-1.1%
21.0%	60.3	59.7	-0.6	-0.9%
22.2%	60.2	59.7	-0.6	-1.0%
23.5%	60.2	59.6	-0.6	-1.0%
24.7%	60.2	59.6	-0.6	-1.0%
25.9%	60.1	59.5	-0.6	-1.0%
27.2%	60.1	59.4	-0.6	-1.1%
28.4%	60.1	59.4	-0.7	-1.1%
29.6%	60.1	59.3	-0.8	-1.3%
30.9%	60.0	59.2	-0.8	-1.3%
32.1%	60.0	59.2	-0.8	-1.4%
33.3%	60.0	59.2	-0.8	-1.3%
34.6%	59.9	59.2	-0.7	-1.2%
35.8%	59.9	59.2	-0.7	-1.1%
37.0%	59.9	59.2	-0.7	-1.2%
38.3%	59.8	59.1	-0.7	-1.2%
39.5%	59.8	59.0	-0.8	-1.4%
40.7%	59.8	58.9	-0.9	-1.4%
42.0%	59.7	58.9	-0.8	-1.4%
43.2%	59.7	58.9	-0.8	-1.3%
44.4%	59.6	58.8	-0.8	-1.4%
45.7%	59.6	58.8	-0.8	-1.4%
46.9%	59.6	58.7	-0.9	-1.5%
48.1%	59.6	58.7	-0.9	-1.4%
49.4%	59.6	58.7	-0.9	-1.5%
50.6%	59.6	58.7	-0.9	-1.5%
51.9%	59.5	58.7	-0.9	-1.5%
53.1%	59.5	58.6	-0.9	-1.5%
54.3%	59.5	58.6	-0.9	-1.5%
55.6%	59.5	58.6	-0.9	-1.5%
56.8%	59.5	58.6	-0.9	-1.5%
58.0%	59.4	58.5	-0.9	-1.4%
59.3%	59.4	58.5	-0.9	-1.6%
60.5%	59.4	58.4	-0.9	-1.6%
61.7%	59.3	58.4	-0.9	-1.6%
63.0%	59.3	58.4	-0.9	-1.6%
64.2%	59.3	58.4	-0.9	-1.6%
65.4%	59.3	58.4	-0.9	-1.6%
66.7%	59.3	58.4	-0.9	-1.5%
67.9%	59.3	58.3	-0.9	-1.5%
69.1%	59.2	58.3	-0.9	-1.6%
70.4%	59.2	58.3	-0.9	-1.6%
71.6%	59.2	58.2	-1.0	-1.8%
72.8%	59.1	58.2	-1.0	-1.7%
74.1%	59.1	58.1	-1.0	-1.7%
75.3%	59.0	58.1	-0.9	-1.5%
76.5%	59.0	58.0	-1.0	-1.8%
77.8%	59.0	58.0	-1.0	-1.7%
79.0%	59.0	57.9	-1.0	-1.8%
80.2%	58.9	57.8	-1.1	-1.9%
81.5%	58.9	57.8	-1.1	-1.9%
82.7%	58.9	57.8	-1.1	-1.9%
84.0%	58.8	57.7	-1.1	-1.9%
85.2%	58.8	57.7	-1.1	-1.9%
86.4%	58.7	57.6	-1.1	-1.8%
87.7%	58.7	57.6	-1.1	-1.9%
88.9%	58.6	57.5	-1.1	-1.9%
90.1%	58.6	57.3	-1.3	-2.2%
91.4%	57.5	57.0	-0.5	-0.9%
92.6%	57.0	57.0	-0.1	-0.1%
93.8%	56.7	56.5	-0.2	-0.3%
95.1%	56.2	56.2	0.0	-0.1%
96.3%	55.7	55.9	0.2	0.4%
97.5%	55.0	55.1	0.1	0.1%
98.8%	53.2	53.6	0.4	0.7%
100.0%	53.2	53.6	0.4	0.7%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.5	57.2	0.8	1.3%
1.2%	55.4	56.0	0.6	1.0%
2.5%	55.3	55.5	0.2	0.4%
3.7%	55.1	55.5	0.3	0.6%
4.9%	54.7	55.1	0.4	0.8%
6.2%	54.6	55.0	0.3	0.6%
7.4%	54.6	54.8	0.3	0.5%
8.6%	54.5	54.8	0.3	0.5%
9.9%	54.3	54.8	0.4	0.8%
11.1%	54.3	54.7	0.4	0.8%
12.3%	54.2	54.7	0.5	0.9%
13.6%	54.1	54.6	0.6	1.0%
14.8%	54.0	54.5	0.5	0.9%
16.0%	53.8	54.5	0.7	1.2%
17.3%	53.8	54.5	0.7	1.3%
18.5%	53.7	54.5	0.8	1.4%
19.8%	53.7	54.4	0.7	1.3%
21.0%	53.6	54.4	0.7	1.4%
22.2%	53.4	54.2	0.8	1.4%
23.5%	53.3	54.2	0.9	1.7%
24.7%	53.3	54.2	0.9	1.7%
25.9%	53.2	53.9	0.7	1.3%
27.2%	53.2	53.8	0.7	1.2%
28.4%	53.1	53.8	0.6	1.2%
29.6%	53.1	53.7	0.6	1.2%
30.9%	53.1	53.5	0.4	0.8%
32.1%	53.1	53.5	0.4	0.8%
33.3%	53.1	53.4	0.3	0.6%
34.6%	52.9	53.3	0.4	0.7%
35.8%	52.8	53.3	0.5	0.9%
37.0%	52.8	53.3	0.5	1.0%
38.3%	52.8	53.3	0.5	1.0%
39.5%	52.7	53.2	0.5	1.0%
40.7%	52.7	53.2	0.5	1.0%
42.0%	52.7	53.2	0.5	1.0%
43.2%	52.7	53.2	0.5	1.0%
44.4%	52.6	53.2	0.5	1.0%
45.7%	52.6	53.1	0.6	1.1%
46.9%	52.5	53.0	0.5	1.0%
48.1%	52.5	53.0	0.5	1.0%
49.4%	52.5	53.0	0.5	1.0%
50.6%	52.4	52.9	0.4	0.8%
51.9%	52.4	52.8	0.4	0.8%
53.1%	52.4	52.8	0.4	0.8%
54.3%	52.3	52.7	0.4	0.8%
55.6%	52.3	52.7	0.4	0.8%
56.8%	52.2	52.7	0.5	0.9%
58.0%	52.2	52.6	0.4	0.9%
59.3%	52.1	52.6	0.4	0.8%
60.5%	52.0	52.4	0.4	0.8%
61.7%	52.0	52.4	0.4	0.8%
63.0%	51.9	52.4	0.5	0.9%
64.2%	51.9	52.4	0.5	1.0%
65.4%	51.9	52.3	0.4	0.8%
66.7%	51.8	52.3	0.5	0.9%
67.9%	51.6	52.1	0.5	1.0%
69.1%	51.6	51.9	0.3	0.6%
70.4%	51.5	51.8	0.3	0.6%
71.6%	51.4	51.8	0.4	0.8%
72.8%	51.4	51.8	0.4	0.8%
74.1%	51.3	51.8	0.5	1.0%
75.3%	51.2	51.7	0.5	1.0%
76.5%	51.1	51.7	0.6	1.2%
77.8%	51.0	51.1	0.1	0.1%
79.0%	50.7	50.5	-0.2	-0.4%
80.2%	50.7	50.5	-0.2	-0.4%
81.5%	50.6	50.4	-0.1	-0.2%
82.7%	50.5	50.4	-0.1	-0.2%
84.0%	48.9	50.3	1.4	2.9%
85.2%	48.6	50.2	1.6	3.3%
86.4%	48.6	48.9	0.3	0.7%
87.7%	48.5	48.8	0.2	0.4%
88.9%	48.4	48.4	-0.1	-0.2%
90.1%	48.2	48.1	-0.1	-0.3%
91.4%	48.1	47.7	-0.5	-1.0%
92.6%	47.6	47.5	-0.1	-0.2%
93.8%	47.6	47.3	-0.3	-0.7%
95.1%	47.6	46.8	-0.7	-1.5%
96.3%	47.2	46.6	-0.6	-1.2%
97.5%	45.7	45.7	0.0	0.1%
98.8%	45.4	45.4	0.0	0.0%
100.0%	45.4	45.4	0.0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.0	52.6	0.7	1.3%
1.2%	51.7	52.3	0.6	1.3%
2.5%	51.6	51.3	-0.3	-0.6%
3.7%	51.4	51.2	-0.2	-0.3%
4.9%	51.3	51.1	-0.1	-0.2%
6.2%	50.6	51.0	0.4	0.8%
7.4%	50.6	50.9	0.3	0.6%
8.6%	50.6	50.6	0.0	0.0%
9.9%	50.5	50.5	-0.1	-0.1%
11.1%	50.2	50.5	0.2	0.5%
12.3%	50.2	50.4	0.2	0.5%
13.6%	50.1	50.4	0.3	0.5%
14.8%	50.0	50.4	0.3	0.6%
16.0%	50.0	50.3	0.3	0.6%
17.3%	50.0	50.2	0.3	0.5%
18.5%	49.9	50.1	0.2	0.5%
19.8%	49.9	50.1	0.2	0.4%
21.0%	49.9	50.0	0.2	0.3%
22.2%	49.7	50.0	0.3	0.7%
23.5%	49.6	50.0	0.4	0.7%
24.7%	49.5	50.0	0.5	0.9%
25.9%	49.5	49.9	0.4	0.9%
27.2%	49.5	49.9	0.4	0.8%
28.4%	49.4	49.8	0.4	0.7%
29.6%	49.4	49.7	0.4	0.8%
30.9%	49.3	49.7	0.4	0.7%
32.1%	49.3	49.7	0.3	0.7%
33.3%	49.2	49.6	0.4	0.8%
34.6%	49.2	49.6	0.4	0.8%
35.8%	49.2	49.6	0.3	0.7%
37.0%	49.0	49.4	0.4	0.8%
38.3%	49.0	49.4	0.4	0.8%
39.5%	49.0	49.4	0.4	0.8%
40.7%	48.9	49.4	0.5	1.1%
42.0%	48.7	49.2	0.4	0.9%
43.2%	48.7	49.1	0.4	0.9%
44.4%	48.7	49.1	0.4	0.9%
45.7%	48.6	49.0	0.3	0.7%
46.9%	48.6	48.9	0.3	0.7%
48.1%	48.6	48.8	0.2	0.5%
49.4%	48.5	48.6	0.1	0.2%
50.6%	48.4	48.6	0.2	0.4%
51.9%	48.3	48.6	0.2	0.5%
53.1%	48.1	48.6	0.4	0.9%
54.3%	48.1	48.5	0.4	0.7%
55.6%	48.1	48.5	0.4	0.8%
56.8%	47.9	48.2	0.3	0.6%
58.0%	47.8	48.2	0.4	0.8%
59.3%	47.8	48.1	0.3	0.7%
60.5%	47.8	47.9	0.2	0.3%
61.7%	47.7	47.8	0.1	0.2%
63.0%	47.7	47.8	0.1	0.2%
64.2%	47.5	47.6	0.1	0.3%
65.4%	47.4	47.6	0.2	0.4%
66.7%	47.4	47.4	0.1	0.1%
67.9%	47.3	47.3	0.0	0.0%
69.1%	46.9	47.0	0.1	0.3%
70.4%	46.9	46.9	0.0	0.0%
71.6%	46.8	46.8	0.0	0.1%
72.8%	46.7	46.8	0.1	0.2%
74.1%	46.6	46.6	0.1	0.1%
75.3%	46.5	46.6	0.0	0.1%
76.5%	46.5	46.5	0.0	-0.1%
77.8%	46.3	46.4	0.0	0.0%
79.0%	45.9	46.1	0.2	0.3%
80.2%	45.8	46.0	0.1	0.3%
81.5%	45.8	45.8	0.0	0.0%
82.7%	45.7	45.8	0.1	0.2%
84.0%	45.6	45.8	0.3	0.6%
85.2%	45.5	45.6	0.1	0.1%
86.4%	45.5	45.6	0.1	0.2%
87.7%	45.4	45.5	0.0	0.1%
88.9%	45.4	45.5	0.0	0.0%
90.1%	45.4	45.4	0.0	0.1%
91.4%	45.1	45.0	-0.1	-0.3%
92.6%	45.0	44.8	-0.2	-0.4%
93.8%	44.6	44.6	0.1	0.2%
95.1%	44.5	44.6	0.0	0.0%
96.3%	44.5	44.2	-0.3	-0.7%
97.5%	44.2	44.0	-0.2	-0.4%
98.8%	44.1	43.7	-0.4	-0.9%
100.0%	44.1	43.7	-0.4	-0.9%

Table SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.6	57.3	0.7	1.2%
1.2%	55.7	55.7	0.1	0.2%
2.5%	55.2	55.4	0.2	0.4%
3.7%	53.6	54.2	0.6	1.2%
4.9%	53.0	53.1	0.0	0.1%
6.2%	52.7	52.4	-0.4	-0.7%
7.4%	52.2	52.3	0.1	0.1%
8.6%	52.2	52.2	0.0	0.0%
9.9%	52.0	52.0	0.0	0.0%
11.1%	51.9	51.9	0.0	0.0%
12.3%	51.9	51.9	0.0	0.0%
13.6%	51.8	51.8	0.1	0.1%
14.8%	51.8	51.8	0.0	0.0%
16.0%	51.7	51.6	-0.1	-0.2%
17.3%	51.2	51.4	0.2	0.3%
18.5%	51.2	51.2	0.0	0.1%
19.8%	51.0	51.1	0.1	0.2%
21.0%	51.0	51.1	0.1	0.3%
22.2%	50.9	51.0	0.1	0.3%
23.5%	50.8	50.9	0.1	0.2%
24.7%	50.7	50.8	0.1	0.2%
25.9%	50.6	50.7	0.1	0.2%
27.2%	50.5	50.6	0.1	0.1%
28.4%	50.5	50.5	0.0	0.1%
29.6%	50.2	50.5	0.2	0.5%
30.9%	50.1	50.3	0.2	0.4%
32.1%	49.9	50.0	0.1	0.2%
33.3%	49.7	49.9	0.2	0.4%
34.6%	49.7	49.7	0.0	-0.1%
35.8%	49.5	49.6	0.2	0.3%
37.0%	49.3	49.3	0.0	0.0%
38.3%	49.1	49.1	0.0	0.0%
39.5%	49.1	49.0	-0.1	-0.2%
40.7%	49.1	48.8	-0.3	-0.6%
42.0%	48.6	48.6	0.0	0.0%
43.2%	48.5	48.5	0.0	0.1%
44.4%	48.4	48.5	0.1	0.2%
45.7%	48.3	48.3	0.0	0.0%
46.9%	48.3	48.3	0.0	0.0%
48.1%	48.2	48.3	0.0	0.0%
49.4%	48.1	48.1	0.0	0.0%
50.6%	48.0	48.1	0.1	0.2%
51.9%	48.0	48.0	0.0	0.1%
53.1%	47.9	48.0	0.1	0.3%
54.3%	47.9	48.0	0.1	0.3%
55.6%	47.8	47.8	0.0	0.1%
56.8%	47.8	47.8	0.0	0.1%
58.0%	47.7	47.8	0.1	0.1%
59.3%	47.7	47.7	0.0	0.1%
60.5%	47.7	47.7	0.0	-0.1%
61.7%	47.4	47.5	0.0	0.1%
63.0%	47.4	47.4	0.0	0.1%
64.2%	47.3	47.3	0.1	0.1%
65.4%	47.2	47.3	0.1	0.2%
66.7%	47.1	47.3	0.2	0.4%
67.9%	47.1	47.1	0.1	0.1%
69.1%	47.0	47.0	0.0	0.0%
70.4%	47.0	47.0	0.0	0.0%
71.6%	46.9	46.8	-0.1	-0.2%
72.8%	46.9	46.8	0.0	0.0%
74.1%	46.8	46.8	0.0	0.0%
75.3%	46.8	46.8	0.0	0.0%
76.5%	46.8	46.8	0.0	0.0%
77.8%	46.8	46.8	0.0	0.1%
79.0%	46.8	46.8	0.0	0.0%
80.2%	46.7	46.7	0.0	0.0%
81.5%	46.7	46.7	0.0	0.0%
82.7%	46.6	46.6	0.0	0.0%
84.0%	46.6	46.5	-0.1	-0.2%
85.2%	46.6	46.5	-0.1	-0.1%
86.4%	46.6	46.4	-0.2	-0.4%
87.7%	46.4	46.3	-0.1	-0.2%
88.9%	46.4	46.3	-0.1	-0.3%
90.1%	46.3	46.2	-0.1	-0.2%
91.4%	46.2	46.2	-0.1	-0.2%
92.6%	46.1	46.0	-0.1	-0.2%
93.8%	46.0	45.9	-0.1	-0.2%
95.1%	45.9	45.9	0.0	-0.1%
96.3%	45.9	45.8	0.0	-0.1%
97.5%	45.8	45.8	0.0	-0.1%
98.8%	45.8	45.4	-0.3	-0.7%
100.0%	45.8	45.4	-0.3	-0.7%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.1	59.6	-0.4	-0.7%
1.2%	59.8	59.6	-0.1	-0.2%
2.5%	58.8	59.0	0.3	0.5%
3.7%	58.7	58.7	0.0	0.0%
4.9%	58.6	58.6	0.0	0.0%
6.2%	58.6	58.4	-0.2	-0.3%
7.4%	58.4	58.4	0.0	0.0%
8.6%	58.2	58.3	0.0	0.0%
9.9%	58.2	58.2	0.0	0.0%
11.1%	58.1	57.9	-0.2	-0.3%
12.3%	57.6	57.7	0.1	0.2%
13.6%	57.4	57.6	0.2	0.4%
14.8%	57.4	57.4	0.1	0.1%
16.0%	57.2	57.2	0.0	0.0%
17.3%	56.5	56.6	0.1	0.1%
18.5%	56.4	56.4	0.0	0.0%
19.8%	56.1	56.4	0.3	0.5%
21.0%	56.0	56.4	0.4	0.7%
22.2%	55.9	56.0	0.0	0.0%
23.5%	55.9	55.8	-0.1	-0.1%
24.7%	55.6	55.7	0.1	0.1%
25.9%	55.3	55.3	0.0	0.0%
27.2%	55.1	55.2	0.1	0.1%
28.4%	54.1	54.1	0.0	0.0%
29.6%	54.0	54.0	0.0	0.0%
30.9%	53.7	53.7	0.0	0.0%
32.1%	53.6	53.7	0.1	0.2%
33.3%	53.5	53.5	0.0	0.0%
34.6%	53.3	53.5	0.2	0.3%
35.8%	53.3	53.4	0.0	0.1%
37.0%	53.3	53.3	0.0	-0.1%
38.3%	53.0	53.0	0.0	0.0%
39.5%	53.0	53.0	0.0	0.0%
40.7%	53.0	52.9	0.0	0.0%
42.0%	52.3	52.3	0.1	0.1%
43.2%	52.0	52.0	0.0	0.0%
44.4%	51.8	51.8	0.0	0.0%
45.7%	51.5	51.5	0.0	0.0%
46.9%	51.5	51.5	0.0	0.1%
48.1%	51.4	51.5	0.0	0.0%
49.4%	51.4	51.4	0.0	0.0%
50.6%	51.1	51.1	0.0	0.0%
51.9%	51.1	51.0	0.0	-0.1%
53.1%	51.0	51.0	0.0	-0.1%
54.3%	50.9	50.9	-0.1	-0.1%
55.6%	50.9	50.8	-0.1	-0.1%
56.8%	50.8	50.8	0.0	0.0%
58.0%	50.8	50.6	-0.2	-0.5%
59.3%	50.8	50.6	-0.2	-0.5%
60.5%	50.7	50.5	-0.2	-0.4%
61.7%	50.6	50.5	-0.2	-0.3%
63.0%	50.4	50.4	0.0	0.0%
64.2%	50.4	50.4	0.0	-0.1%
65.4%	50.4	50.3	-0.1	-0.2%
66.7%	50.4	50.3	-0.1	-0.2%
67.9%	50.3	50.2	-0.1	-0.1%
69.1%	50.3	50.2	-0.1	-0.2%
70.4%	50.3	50.2	-0.1	-0.2%
71.6%	50.2	50.1	-0.1	-0.1%
72.8%	50.1	50.1	-0.1	-0.1%
74.1%	50.1	50.0	-0.1	-0.3%
75.3%	50.0	50.0	0.0	-0.1%
76.5%	50.0	50.0	0.0	0.0%
77.8%	50.0	49.9	0.0	0.0%
79.0%	49.9	49.9	0.0	0.0%
80.2%	49.9	49.9	0.0	0.0%
81.5%	49.7	49.7	0.0	0.1%
82.7%	49.6	49.6	0.0	0.1%
84.0%	49.5	49.5	-0.1	-0.1%
85.2%	49.2	49.2	0.0	0.1%
86.4%	49.1	49.2	0.1	0.1%
87.7%	49.0	49.0	0.0	0.0%
88.9%	49.0	49.0	0.0	0.0%
90.1%	49.0	49.0	0.0	-0.1%
91.4%	49.0	48.9	-0.1	-0.2%
92.6%	48.8	48.9	0.1	0.1%
93.8%	48.6	48.6	0.1	0.1%
95.1%	48.6	48.5	0.0	-0.1%
96.3%	47.9	48.0	0.1	0.2%
97.5%	47.8	47.8	0.0	-0.1%
98.8%	47.4	47.4	0.0	0.0%
100.0%	47.4	47.4	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.0	65.6	-1.5	-2.2%
1.2%	66.1	65.2	-0.8	-1.2%
2.5%	65.6	64.3	-1.3	-1.9%
3.7%	65.6	64.3	-1.3	-1.9%
4.9%	65.1	64.1	-1.0	-1.5%
6.2%	64.6	63.8	-0.8	-1.3%
7.4%	64.3	63.6	-0.6	-0.9%
8.6%	63.8	63.3	-0.4	-0.7%
9.9%	63.7	63.3	-0.4	-0.7%
11.1%	63.2	63.2	0.0	0.0%
12.3%	63.2	62.9	-0.3	-0.5%
13.6%	63.0	62.8	-0.2	-0.3%
14.8%	62.8	62.1	-0.7	-1.2%
16.0%	62.7	61.8	-0.9	-1.4%
17.3%	62.6	61.7	-0.9	-1.4%
18.5%	62.5	61.6	-0.9	-1.5%
19.8%	62.1	61.5	-0.6	-1.0%
21.0%	62.0	61.4	-0.6	-1.0%
22.2%	61.6	61.2	-0.3	-0.5%
23.5%	61.4	61.2	-0.2	-0.3%
24.7%	61.4	61.2	-0.2	-0.3%
25.9%	61.3	61.1	-0.1	-0.2%
27.2%	61.1	61.1	0.0	-0.1%
28.4%	61.1	61.0	0.0	-0.1%
29.6%	61.0	61.0	0.0	0.0%
30.9%	61.0	60.9	0.0	0.0%
32.1%	60.9	60.8	0.0	0.0%
33.3%	60.8	60.8	0.0	0.0%
34.6%	60.8	60.5	-0.2	-0.4%
35.8%	60.6	60.4	-0.2	-0.4%
37.0%	60.5	60.2	-0.2	-0.4%
38.3%	60.2	60.2	0.0	0.1%
39.5%	60.1	60.2	0.1	0.1%
40.7%	60.1	60.2	0.1	0.2%
42.0%	60.0	60.1	0.1	0.2%
43.2%	60.0	60.1	0.1	0.1%
44.4%	59.9	60.0	0.1	0.2%
45.7%	59.9	60.0	0.1	0.2%
46.9%	59.8	59.8	-0.1	-0.1%
48.1%	59.6	59.6	0.0	0.0%
49.4%	59.5	59.6	0.0	0.0%
50.6%	59.1	59.4	0.2	0.4%
51.9%	58.9	59.1	0.2	0.3%
53.1%	58.4	58.8	0.4	0.7%
54.3%	58.3	58.3	0.0	-0.1%
55.6%	58.3	58.1	-0.2	-0.3%
56.8%	58.0	58.1	0.1	0.1%
58.0%	57.9	58.0	0.1	0.2%
59.3%	57.7	57.9	0.2	0.3%
60.5%	57.6	57.7	0.1	0.1%
61.7%	57.4	57.7	0.2	0.4%
63.0%	57.1	57.4	0.3	0.6%
64.2%	56.9	57.1	0.1	0.2%
65.4%	56.9	56.9	0.0	0.1%
66.7%	56.9	56.9	0.0	0.0%
67.9%	56.8	56.9	0.1	0.1%
69.1%	56.8	56.8	0.0	0.1%
70.4%	56.3	56.8	0.5	0.9%
71.6%	56.2	56.2	0.0	0.0%
72.8%	55.9	55.9	0.0	0.0%
74.1%	55.8	55.9	0.1	0.1%
75.3%	55.7	55.8	0.1	0.1%
76.5%	55.6	55.6	0.0	0.0%
77.8%	55.5	55.5	0.0	0.0%
79.0%	55.4	55.5	0.1	0.1%
80.2%	55.4	55.4	0.0	0.0%
81.5%	55.3	55.3	0.0	0.0%
82.7%	55.0	55.0	0.0	0.0%
84.0%	54.7	54.8	0.0	0.0%
85.2%	54.6	54.6	-0.1	-0.1%
86.4%	54.5	54.5	0.0	0.0%
87.7%	54.4	54.4	0.0	0.0%
88.9%	54.1	54.2	0.0	0.1%
90.1%	53.8	53.7	0.0	-0.1%
91.4%	53.5	53.6	0.0	0.0%
92.6%	53.2	53.2	0.0	0.0%
93.8%	52.9	52.8	-0.1	-0.1%
95.1%	52.7	52.7	0.0	0.0%
96.3%	52.5	52.4	-0.1	-0.2%
97.5%	51.3	51.3	-0.1	-0.1%
98.8%	50.8	50.9	0.0	0.1%
100.0%	50.8	50.9	0.0	0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	77.4	72.1	-5.4	-6.9%
1.2%	74.2	71.1	-3.1	-4.2%
2.5%	72.2	70.9	-1.3	-1.8%
3.7%	71.9	70.5	-1.3	-1.8%
4.9%	71.1	70.2	-0.8	-1.2%
6.2%	70.5	70.1	-0.4	-0.5%
7.4%	70.1	70.1	0.0	-0.1%
8.6%	70.1	69.9	-0.2	-0.3%
9.9%	70.0	69.7	-0.2	-0.3%
11.1%	69.9	69.7	-0.3	-0.4%
12.3%	69.9	69.6	-0.2	-0.3%
13.6%	69.8	69.1	-0.6	-0.9%
14.8%	69.7	69.0	-0.7	-1.0%
16.0%	69.5	68.9	-0.6	-0.8%
17.3%	69.4	68.9	-0.5	-0.8%
18.5%	69.1	68.8	-0.3	-0.4%
19.8%	69.0	68.7	-0.3	-0.4%
21.0%	68.9	68.6	-0.3	-0.4%
22.2%	68.7	68.4	-0.2	-0.4%
23.5%	68.4	67.9	-0.5	-0.7%
24.7%	68.3	67.7	-0.6	-0.9%
25.9%	67.8	67.5	-0.4	-0.5%
27.2%	67.8	67.5	-0.3	-0.5%
28.4%	67.6	67.4	-0.2	-0.3%
29.6%	67.5	67.3	-0.2	-0.3%
30.9%	67.4	67.3	-0.2	-0.2%
32.1%	67.3	67.1	-0.2	-0.2%
33.3%	67.2	67.1	-0.1	-0.1%
34.6%	67.1	67.1	-0.1	-0.1%
35.8%	67.1	66.9	-0.3	-0.4%
37.0%	67.1	66.7	-0.4	-0.7%
38.3%	66.9	66.5	-0.4	-0.6%
39.5%	66.9	66.5	-0.4	-0.6%
40.7%	66.9	66.4	-0.5	-0.7%
42.0%	66.6	66.3	-0.4	-0.5%
43.2%	66.6	66.2	-0.4	-0.6%
44.4%	66.6	66.2	-0.4	-0.6%
45.7%	66.5	66.1	-0.3	-0.5%
46.9%	66.3	66.0	-0.3	-0.5%
48.1%	66.3	66.0	-0.3	-0.5%
49.4%	66.1	65.9	-0.2	-0.3%
50.6%	66.1	65.8	-0.2	-0.3%
51.9%	66.0	65.8	-0.2	-0.2%
53.1%	66.0	65.7	-0.2	-0.3%
54.3%	65.9	65.7	-0.2	-0.4%
55.6%	65.9	65.5	-0.4	-0.6%
56.8%	65.9	65.5	-0.4	-0.6%
58.0%	65.8	65.4	-0.4	-0.7%
59.3%	65.8	65.4	-0.4	-0.7%
60.5%	65.7	65.3	-0.4	-0.6%
61.7%	65.7	65.2	-0.5	-0.8%
63.0%	65.6	65.1	-0.5	-0.8%
64.2%	65.5	64.9	-0.6	-0.8%
65.4%	65.4	64.9	-0.5	-0.8%
66.7%	65.4	64.9	-0.5	-0.8%
67.9%	65.1	64.7	-0.4	-0.6%
69.1%	64.7	64.5	-0.2	-0.3%
70.4%	64.5	64.5	-0.1	-0.1%
71.6%	64.5	64.4	-0.1	-0.2%
72.8%	64.3	64.2	-0.1	-0.1%
74.1%	64.2	64.1	-0.1	-0.2%
75.3%	64.1	64.1	-0.1	-0.1%
76.5%	64.1	64.0	-0.1	-0.1%
77.8%	64.1	64.0	0.0	-0.1%
79.0%	64.0	63.9	-0.1	-0.2%
80.2%	63.7	63.7	0.0	0.0%
81.5%	63.7	63.7	0.1	0.1%
82.7%	63.5	63.6	0.1	0.2%
84.0%	63.4	63.4	0.0	0.0%
85.2%	63.1	63.1	0.0	0.0%
86.4%	63.1	63.0	-0.1	-0.2%
87.7%	62.8	63.0	0.2	0.3%
88.9%	62.7	62.8	0.1	0.1%
90.1%	62.7	62.7	0.0	0.1%
91.4%	62.0	62.2	0.3	0.4%
92.6%	62.0	62.0	0.0	0.0%
93.8%	61.7	61.7	0.0	0.0%
95.1%	61.6	61.6	0.0	0.0%
96.3%	59.4	59.4	0.0	0.0%
97.5%	59.0	59.0	0.0	0.0%
98.8%	58.6	58.6	0.0	0.0%
100.0%	58.6	58.6	0.0	0.0%

Table SQ10-1b
American River at Watt Avenue, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.9	79.0	0.1	0.2%
1.2%	78.7	77.5	-1.2	-1.6%
2.5%	77.3	76.6	-0.6	-0.8%
3.7%	76.3	75.1	-1.1	-1.5%
4.9%	75.9	75.1	-0.8	-1.1%
6.2%	75.7	74.6	-1.2	-1.6%
7.4%	75.4	74.5	-0.9	-1.1%
8.6%	75.1	74.0	-1.0	-1.4%
9.9%	75.0	73.1	-1.9	-2.5%
11.1%	74.8	72.8	-2.0	-2.7%
12.3%	74.3	72.7	-1.6	-2.2%
13.6%	74.2	72.6	-1.6	-2.1%
14.8%	73.9	72.6	-1.3	-1.8%
16.0%	73.8	72.5	-1.4	-1.8%
17.3%	73.8	72.1	-1.7	-2.3%
18.5%	73.7	71.9	-1.8	-2.5%
19.8%	73.7	71.9	-1.8	-2.4%
21.0%	73.7	71.9	-1.8	-2.4%
22.2%	73.3	71.9	-1.4	-1.9%
23.5%	73.3	71.8	-1.5	-2.1%
24.7%	73.2	71.7	-1.5	-2.1%
25.9%	73.0	71.6	-1.3	-1.8%
27.2%	72.9	71.6	-1.3	-1.8%
28.4%	72.9	71.6	-1.3	-1.8%
29.6%	72.9	71.6	-1.3	-1.8%
30.9%	72.7	71.5	-1.1	-1.6%
32.1%	72.6	71.5	-1.1	-1.5%
33.3%	72.6	71.4	-1.2	-1.7%
34.6%	72.6	71.4	-1.2	-1.7%
35.8%	72.2	71.3	-0.9	-1.3%
37.0%	72.1	71.3	-0.8	-1.1%
38.3%	72.1	71.2	-0.8	-1.1%
39.5%	72.0	71.2	-0.9	-1.2%
40.7%	71.8	71.2	-0.6	-0.9%
42.0%	71.7	71.1	-0.5	-0.7%
43.2%	71.6	71.0	-0.5	-0.8%
44.4%	71.5	71.0	-0.5	-0.7%
45.7%	71.5	71.0	-0.5	-0.7%
46.9%	71.5	71.0	-0.5	-0.7%
48.1%	71.4	70.8	-0.6	-0.9%
49.4%	71.4	70.7	-0.7	-1.0%
50.6%	71.4	70.6	-0.7	-1.0%
51.9%	71.2	70.6	-0.6	-0.9%
53.1%	71.0	70.4	-0.6	-0.9%
54.3%	71.0	70.3	-0.7	-1.0%
55.6%	71.0	70.2	-0.8	-1.1%
56.8%	70.9	70.2	-0.8	-1.1%
58.0%	70.5	70.0	-0.5	-0.7%
59.3%	70.5	69.9	-0.6	-0.9%
60.5%	70.2	69.9	-0.4	-0.5%
61.7%	70.2	69.8	-0.3	-0.5%
63.0%	69.9	69.7	-0.1	-0.2%
64.2%	69.8	69.7	-0.2	-0.2%
65.4%	69.8	69.5	-0.3	-0.5%
66.7%	69.8	69.4	-0.4	-0.5%
67.9%	69.7	69.4	-0.2	-0.3%
69.1%	69.4	69.3	-0.2	-0.2%
70.4%	69.3	69.1	-0.2	-0.3%
71.6%	69.0	69.0	0.0	0.0%
72.8%	68.9	68.9	0.0	0.1%
74.1%	68.7	68.7	0.0	0.0%
75.3%	68.6	68.7	0.1	0.1%
76.5%	68.5	68.6	0.1	0.2%
77.8%	68.5	68.6	0.1	0.1%
79.0%	68.2	68.3	0.1	0.1%
80.2%	68.2	68.1	0.0	-0.1%
81.5%	68.1	68.1	0.0	0.0%
82.7%	67.9	67.6	-0.3	-0.5%
84.0%	67.9	67.6	-0.4	-0.5%
85.2%	67.6	67.5	-0.1	-0.1%
86.4%	67.5	67.4	-0.1	-0.2%
87.7%	67.3	67.0	-0.4	-0.5%
88.9%	67.0	66.9	-0.1	-0.2%
90.1%	66.7	66.9	0.2	0.3%
91.4%	66.7	66.7	0.0	0.1%
92.6%	66.6	66.6	0.0	0.0%
93.8%	66.1	66.5	0.4	0.6%
95.1%	66.1	66.1	0.0	0.0%
96.3%	66.1	65.7	-0.4	-0.6%
97.5%	65.7	65.7	0.0	0.0%
98.8%	65.6	65.3	-0.4	-0.5%
100.0%	65.6	65.3	-0.4	-0.5%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	82.5	81.9	-0.6	-0.7%
1.2%	82.3	78.2	-4.1	-5.0%
2.5%	81.0	78.2	-2.8	-3.4%
3.7%	80.5	77.8	-2.7	-3.4%
4.9%	78.8	77.1	-1.7	-2.1%
6.2%	77.5	76.9	-0.7	-0.9%
7.4%	77.5	76.8	-0.7	-0.9%
8.6%	76.9	75.4	-1.5	-1.9%
9.9%	76.0	75.0	-1.0	-1.3%
11.1%	76.0	74.0	-2.0	-2.7%
12.3%	75.9	73.2	-2.7	-3.5%
13.6%	74.6	73.2	-1.4	-1.9%
14.8%	74.2	73.2	-1.0	-1.4%
16.0%	74.1	73.0	-1.1	-1.4%
17.3%	74.0	72.9	-1.1	-1.5%
18.5%	73.8	72.6	-1.2	-1.7%
19.8%	73.6	72.5	-1.1	-1.5%
21.0%	73.4	72.2	-1.2	-1.6%
22.2%	73.4	72.1	-1.3	-1.8%
23.5%	73.4	72.1	-1.4	-1.8%
24.7%	73.3	72.0	-1.2	-1.7%
25.9%	73.1	72.0	-1.1	-1.6%
27.2%	73.1	72.0	-1.1	-1.5%
28.4%	73.0	72.0	-1.0	-1.4%
29.6%	73.0	71.9	-1.1	-1.5%
30.9%	72.9	71.8	-1.1	-1.5%
32.1%	72.8	71.8	-1.0	-1.4%
33.3%	72.4	71.8	-0.6	-0.9%
34.6%	72.3	71.7	-0.6	-0.9%
35.8%	72.2	71.5	-0.7	-1.0%
37.0%	72.1	71.5	-0.6	-0.9%
38.3%	72.1	71.4	-0.7	-1.0%
39.5%	72.0	71.3	-0.7	-1.0%
40.7%	72.0	71.3	-0.8	-1.0%
42.0%	71.9	71.2	-0.7	-0.9%
43.2%	71.8	71.1	-0.7	-1.0%
44.4%	71.7	70.9	-0.8	-1.1%
45.7%	71.4	70.8	-0.6	-0.8%
46.9%	71.3	70.8	-0.4	-0.6%
48.1%	71.2	70.7	-0.5	-0.7%
49.4%	71.1	70.5	-0.6	-0.8%
50.6%	70.7	70.4	-0.3	-0.4%
51.9%	70.6	70.4	-0.2	-0.3%
53.1%	70.6	70.4	-0.2	-0.3%
54.3%	70.5	70.3	-0.1	-0.2%
55.6%	70.4	70.2	-0.2	-0.3%
56.8%	70.3	70.0	-0.3	-0.5%
58.0%	70.3	69.6	-0.7	-1.0%
59.3%	70.3	69.6	-0.7	-1.0%
60.5%	70.2	69.4	-0.8	-1.2%
61.7%	70.2	69.2	-1.0	-1.4%
63.0%	70.1	69.1	-1.0	-1.4%
64.2%	70.1	69.1	-1.0	-1.4%
65.4%	69.9	69.0	-1.0	-1.4%
66.7%	69.9	68.9	-1.0	-1.4%
67.9%	69.8	68.9	-0.9	-1.3%
69.1%	69.8	68.8	-0.9	-1.3%
70.4%	69.7	68.6	-1.1	-1.5%
71.6%	69.6	68.6	-1.0	-1.4%
72.8%	69.6	68.5	-1.0	-1.5%
74.1%	69.3	68.5	-0.7	-1.1%
75.3%	69.2	68.5	-0.7	-1.0%
76.5%	69.2	68.4	-0.7	-1.1%
77.8%	69.2	68.4	-0.8	-1.2%
79.0%	69.1	68.3	-0.7	-1.1%
80.2%	68.9	68.3	-0.6	-0.8%
81.5%	68.9	68.1	-0.7	-1.1%
82.7%	68.9	68.1	-0.8	-1.2%
84.0%	68.8	68.0	-0.8	-1.2%
85.2%	68.8	67.9	-0.9	-1.3%
86.4%	68.8	67.9	-0.9	-1.3%
87.7%	68.7	67.9	-0.8	-1.1%
88.9%	68.7	67.8	-0.9	-1.2%
90.1%	68.6	67.8	-0.8	-1.2%
91.4%	68.5	67.8	-0.7	-1.1%
92.6%	68.5	67.7	-0.8	-1.2%
93.8%	68.5	67.6	-0.9	-1.2%
95.1%	68.5	67.6	-0.8	-1.2%
96.3%	68.3	67.5	-0.8	-1.2%
97.5%	68.2	67.4	-0.8	-1.2%
98.8%	67.6	67.4	-0.2	-0.3%
100.0%	67.6	67.4	-0.2	-0.3%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	81.7	79.8	-1.8	-2.2%
1.2%	79.1	77.8	-1.2	-1.5%
2.5%	78.9	77.3	-1.6	-2.0%
3.7%	78.1	76.1	-2.0	-2.5%
4.9%	77.2	75.6	-1.6	-2.1%
6.2%	76.4	75.5	-0.9	-1.2%
7.4%	75.7	75.2	-0.4	-0.5%
8.6%	75.5	74.8	-0.7	-1.0%
9.9%	75.3	74.7	-0.6	-0.8%
11.1%	74.7	74.4	-0.3	-0.4%
12.3%	74.6	74.3	-0.4	-0.5%
13.6%	74.3	74.1	-0.2	-0.3%
14.8%	74.2	74.0	-0.2	-0.3%
16.0%	74.0	74.0	-0.1	-0.1%
17.3%	74.0	73.9	-0.1	-0.2%
18.5%	73.9	73.8	-0.1	-0.1%
19.8%	73.8	73.7	-0.1	-0.1%
21.0%	73.7	73.1	-0.6	-0.9%
22.2%	73.7	73.0	-0.7	-1.0%
23.5%	73.7	72.9	-0.8	-1.0%
24.7%	73.7	72.8	-0.9	-1.2%
25.9%	73.5	72.7	-0.8	-1.2%
27.2%	73.5	72.6	-0.9	-1.3%
28.4%	73.4	72.2	-1.2	-1.7%
29.6%	73.4	72.1	-1.3	-1.7%
30.9%	73.4	72.1	-1.2	-1.7%
32.1%	73.3	72.1	-1.2	-1.7%
33.3%	73.3	72.1	-1.2	-1.7%
34.6%	73.1	72.0	-1.1	-1.4%
35.8%	73.1	72.0	-1.0	-1.4%
37.0%	73.0	71.9	-1.1	-1.4%
38.3%	73.0	71.7	-1.3	-1.8%
39.5%	72.9	71.6	-1.3	-1.8%
40.7%	72.8	71.4	-1.4	-1.9%
42.0%	72.8	71.4	-1.4	-1.9%
43.2%	72.8	71.4	-1.4	-1.9%
44.4%	72.7	71.4	-1.4	-1.9%
45.7%	72.7	71.4	-1.3	-1.8%
46.9%	72.6	71.3	-1.3	-1.8%
48.1%	72.6	71.3	-1.3	-1.8%
49.4%	72.4	71.2	-1.2	-1.7%
50.6%	72.1	71.1	-1.0	-1.4%
51.9%	72.0	71.0	-1.0	-1.4%
53.1%	71.9	71.0	-0.9	-1.2%
54.3%	71.9	70.9	-1.0	-1.3%
55.6%	71.8	70.9	-0.9	-1.3%
56.8%	71.7	70.9	-0.9	-1.2%
58.0%	71.7	70.8	-0.8	-1.2%
59.3%	71.6	70.8	-0.8	-1.1%
60.5%	71.4	70.8	-0.7	-0.9%
61.7%	71.3	70.8	-0.5	-0.7%
63.0%	71.1	70.8	-0.4	-0.5%
64.2%	71.1	70.8	-0.4	-0.5%
65.4%	71.1	70.7	-0.4	-0.6%
66.7%	70.8	70.7	-0.1	-0.1%
67.9%	70.7	70.6	-0.1	-0.2%
69.1%	70.7	70.6	-0.1	-0.2%
70.4%	70.4	70.4	-0.1	-0.1%
71.6%	70.2	70.3	0.1	0.1%
72.8%	70.2	70.3	0.1	0.1%
74.1%	70.0	70.2	0.2	0.3%
75.3%	69.9	70.2	0.3	0.4%
76.5%	69.9	70.1	0.2	0.3%
77.8%	69.8	70.1	0.2	0.4%
79.0%	69.8	70.0	0.2	0.3%
80.2%	69.8	70.0	0.3	0.4%
81.5%	69.6	69.9	0.3	0.5%
82.7%	69.4	69.8	0.4	0.6%
84.0%	69.4	69.8	0.4	0.6%
85.2%	69.4	69.8	0.4	0.6%
86.4%	69.3	69.7	0.5	0.7%
87.7%	69.2	69.7	0.5	0.7%
88.9%	69.1	69.7	0.6	0.9%
90.1%	69.0	69.7	0.6	0.9%
91.4%	68.9	69.5	0.6	0.8%
92.6%	68.4	69.4	1.1	1.5%
93.8%	68.3	69.4	1.1	1.6%
95.1%	68.2	69.3	1.2	1.7%
96.3%	67.9	68.9	1.0	1.5%
97.5%	67.6	68.8	1.2	1.8%
98.8%	67.5	68.3	0.9	1.3%
100.0%	67.5	68.3	0.9	1.3%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.5	78.4	-0.1	-0.1%
1.2%	76.8	74.6	-2.2	-2.8%
2.5%	75.6	74.5	-1.0	-1.4%
3.7%	75.5	74.3	-1.2	-1.5%
4.9%	75.4	73.6	-1.8	-2.3%
6.2%	75.3	73.5	-1.7	-2.3%
7.4%	75.1	73.4	-1.7	-2.3%
8.6%	74.9	73.4	-1.6	-2.1%
9.9%	74.6	73.3	-1.3	-1.7%
11.1%	73.6	73.2	-0.4	-0.5%
12.3%	73.6	73.1	-0.5	-0.6%
13.6%	73.5	73.1	-0.4	-0.5%
14.8%	73.3	72.9	-0.3	-0.5%
16.0%	73.2	72.7	-0.5	-0.6%
17.3%	73.2	72.6	-0.5	-0.7%
18.5%	73.2	72.5	-0.6	-0.9%
19.8%	73.1	72.2	-0.9	-1.2%
21.0%	73.0	72.1	-0.9	-1.2%
22.2%	72.9	72.0	-0.8	-1.1%
23.5%	72.8	72.0	-0.8	-1.1%
24.7%	72.8	71.8	-1.0	-1.3%
25.9%	72.8	71.8	-1.0	-1.3%
27.2%	72.6	71.8	-0.8	-1.1%
28.4%	72.5	71.8	-0.7	-1.0%
29.6%	72.5	71.7	-0.8	-1.1%
30.9%	72.5	71.5	-0.9	-1.3%
32.1%	72.2	71.4	-0.8	-1.1%
33.3%	72.1	71.4	-0.7	-1.0%
34.6%	72.1	71.4	-0.7	-1.0%
35.8%	71.9	71.4	-0.6	-0.8%
37.0%	71.9	71.2	-0.7	-1.0%
38.3%	71.9	71.2	-0.7	-1.0%
39.5%	71.9	71.1	-0.8	-1.0%
40.7%	71.7	71.1	-0.6	-0.9%
42.0%	71.6	71.1	-0.6	-0.8%
43.2%	71.5	70.9	-0.7	-0.9%
44.4%	71.5	70.9	-0.6	-0.8%
45.7%	71.4	70.8	-0.6	-0.8%
46.9%	71.4	70.8	-0.6	-0.8%
48.1%	71.4	70.8	-0.6	-0.8%
49.4%	71.3	70.8	-0.5	-0.7%
50.6%	71.3	70.7	-0.5	-0.7%
51.9%	71.2	70.7	-0.6	-0.8%
53.1%	71.2	70.7	-0.6	-0.8%
54.3%	71.1	70.5	-0.6	-0.8%
55.6%	71.1	70.4	-0.7	-0.9%
56.8%	71.0	70.3	-0.7	-1.0%
58.0%	70.9	70.3	-0.6	-0.9%
59.3%	70.9	70.3	-0.6	-0.9%
60.5%	70.8	70.3	-0.5	-0.7%
61.7%	70.8	70.2	-0.6	-0.8%
63.0%	70.6	70.2	-0.4	-0.6%
64.2%	70.6	70.2	-0.4	-0.6%
65.4%	70.6	70.2	-0.4	-0.6%
66.7%	70.6	70.2	-0.4	-0.6%
67.9%	70.6	70.2	-0.4	-0.6%
69.1%	70.5	70.1	-0.4	-0.5%
70.4%	70.5	70.1	-0.4	-0.6%
71.6%	70.5	69.9	-0.6	-0.9%
72.8%	70.3	69.8	-0.4	-0.6%
74.1%	70.2	69.8	-0.4	-0.6%
75.3%	70.2	69.8	-0.4	-0.6%
76.5%	70.1	69.8	-0.3	-0.5%
77.8%	70.1	69.8	-0.3	-0.5%
79.0%	70.0	69.8	-0.3	-0.4%
80.2%	70.0	69.7	-0.4	-0.5%
81.5%	70.0	69.6	-0.5	-0.7%
82.7%	70.0	69.5	-0.4	-0.6%
84.0%	69.8	69.1	-0.7	-1.1%
85.2%	69.8	69.0	-0.8	-1.1%
86.4%	69.7	69.0	-0.7	-1.1%
87.7%	69.5	69.0	-0.6	-0.8%
88.9%	69.4	68.9	-0.5	-0.7%
90.1%	69.4	68.9	-0.5	-0.7%
91.4%	69.2	68.8	-0.4	-0.6%
92.6%	69.2	68.5	-0.7	-1.0%
93.8%	68.7	68.5	-0.3	-0.4%
95.1%	68.5	68.2	-0.4	-0.5%
96.3%	68.4	68.1	-0.3	-0.4%
97.5%	68.2	67.9	-0.3	-0.4%
98.8%	67.8	67.7	-0.1	-0.2%
100.0%	67.8	67.7	-0.1	-0.2%

Table SQ10-1b

American River at Watt Avenue, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.4	79.8	1.4	1.8%
1.2%	78.3	75.7	-2.6	-3.3%
2.5%	77.3	75.5	-1.8	-2.3%
3.7%	76.9	75.4	-1.5	-1.9%
4.9%	76.2	75.3	-0.9	-1.2%
6.2%	76.1	75.2	-0.9	-1.2%
7.4%	75.7	75.0	-0.8	-1.0%
8.6%	74.3	74.4	0.0	0.0%
9.9%	74.2	74.0	-0.2	-0.3%
11.1%	74.1	73.7	-0.5	-0.6%
12.3%	74.1	73.3	-0.8	-1.0%
13.6%	74.0	73.1	-0.9	-1.2%
14.8%	73.8	73.1	-0.8	-1.0%
16.0%	73.5	73.0	-0.5	-0.7%
17.3%	73.4	72.8	-0.6	-0.8%
18.5%	73.3	72.1	-1.2	-1.6%
19.8%	73.1	72.0	-1.1	-1.5%
21.0%	73.0	71.9	-1.0	-1.4%
22.2%	72.7	71.9	-0.8	-1.1%
23.5%	72.7	71.9	-0.8	-1.1%
24.7%	72.3	71.6	-0.7	-1.0%
25.9%	72.2	71.6	-0.6	-0.9%
27.2%	72.2	71.5	-0.7	-0.9%
28.4%	72.2	71.4	-0.8	-1.1%
29.6%	72.0	71.4	-0.6	-0.9%
30.9%	71.9	71.2	-0.7	-1.0%
32.1%	71.8	71.0	-0.8	-1.2%
33.3%	71.8	71.0	-0.8	-1.2%
34.6%	71.8	71.0	-0.8	-1.2%
35.8%	71.8	71.0	-0.8	-1.1%
37.0%	71.7	70.9	-0.8	-1.1%
38.3%	71.6	70.6	-1.0	-1.4%
39.5%	71.6	70.6	-1.0	-1.4%
40.7%	71.5	70.5	-1.0	-1.4%
42.0%	71.5	70.5	-1.0	-1.4%
43.2%	71.5	70.5	-1.0	-1.4%
44.4%	71.4	70.4	-0.9	-1.3%
45.7%	71.3	70.4	-0.9	-1.3%
46.9%	71.2	70.3	-0.9	-1.2%
48.1%	71.2	70.3	-0.9	-1.2%
49.4%	71.1	70.2	-0.9	-1.3%
50.6%	71.1	70.2	-0.9	-1.3%
51.9%	71.0	70.2	-0.8	-1.2%
53.1%	71.0	70.1	-0.9	-1.2%
54.3%	71.0	70.1	-0.8	-1.2%
55.6%	70.9	70.1	-0.8	-1.2%
56.8%	70.9	70.1	-0.8	-1.1%
58.0%	70.7	70.1	-0.6	-0.8%
59.3%	70.6	70.0	-0.6	-0.8%
60.5%	70.6	70.0	-0.6	-0.9%
61.7%	70.6	70.0	-0.6	-0.9%
63.0%	70.5	70.0	-0.6	-0.8%
64.2%	70.5	70.0	-0.6	-0.8%
65.4%	70.5	69.9	-0.6	-0.8%
66.7%	70.5	69.9	-0.6	-0.9%
67.9%	70.3	69.9	-0.5	-0.7%
69.1%	70.2	69.8	-0.4	-0.6%
70.4%	70.2	69.8	-0.4	-0.6%
71.6%	70.2	69.8	-0.4	-0.6%
72.8%	70.2	69.8	-0.4	-0.6%
74.1%	70.2	69.7	-0.4	-0.6%
75.3%	70.2	69.7	-0.4	-0.6%
76.5%	70.1	69.7	-0.4	-0.6%
77.8%	70.1	69.7	-0.4	-0.6%
79.0%	70.1	69.6	-0.5	-0.7%
80.2%	70.1	69.6	-0.5	-0.7%
81.5%	70.1	69.6	-0.5	-0.7%
82.7%	70.0	69.5	-0.4	-0.6%
84.0%	69.9	69.4	-0.4	-0.6%
85.2%	69.8	69.4	-0.4	-0.6%
86.4%	69.8	69.4	-0.4	-0.6%
87.7%	69.8	69.3	-0.4	-0.6%
88.9%	69.7	69.3	-0.4	-0.6%
90.1%	69.7	69.3	-0.4	-0.6%
91.4%	69.7	69.2	-0.4	-0.6%
92.6%	69.6	69.2	-0.4	-0.6%
93.8%	69.5	69.2	-0.4	-0.5%
95.1%	69.4	68.9	-0.5	-0.8%
96.3%	69.4	68.9	-0.5	-0.7%
97.5%	69.4	68.7	-0.7	-1.0%
98.8%	69.3	68.7	-0.6	-0.9%
100.0%	68.3	67.9	-0.3	-0.5%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	80.0	80.0	0.1	0.1%
1.2%	79.0	75.7	-3.3	-4.1%
2.5%	77.3	75.7	-1.6	-2.1%
3.7%	76.4	75.3	-1.1	-1.4%
4.9%	76.3	75.3	-1.0	-1.3%
6.2%	76.0	75.1	-0.9	-1.2%
7.4%	75.3	75.1	-0.2	-0.3%
8.6%	74.9	74.9	0.0	0.0%
9.9%	74.7	74.4	-0.2	-0.3%
11.1%	74.6	74.0	-0.6	-0.8%
12.3%	74.6	73.8	-0.8	-1.0%
13.6%	74.6	73.7	-0.8	-1.1%
14.8%	74.0	73.5	-0.5	-0.7%
16.0%	73.9	73.4	-0.6	-0.8%
17.3%	73.6	73.0	-0.6	-0.8%
18.5%	73.6	72.9	-0.7	-1.0%
19.8%	73.3	72.8	-0.5	-0.6%
21.0%	73.1	72.6	-0.5	-0.7%
22.2%	72.9	72.6	-0.3	-0.5%
23.5%	72.9	72.0	-0.9	-1.2%
24.7%	72.8	71.8	-1.0	-1.4%
25.9%	72.7	71.8	-0.9	-1.2%
27.2%	72.6	71.8	-0.8	-1.1%
28.4%	72.5	71.8	-0.7	-0.9%
29.6%	72.4	71.7	-0.7	-1.0%
30.9%	72.1	71.7	-0.4	-0.6%
32.1%	72.0	71.5	-0.5	-0.7%
33.3%	72.0	71.5	-0.5	-0.7%
34.6%	72.0	71.4	-0.6	-0.8%
35.8%	72.0	71.3	-0.6	-0.9%
37.0%	71.9	71.2	-0.8	-1.0%
38.3%	71.9	71.1	-0.8	-1.1%
39.5%	71.8	71.0	-0.8	-1.1%
40.7%	71.8	71.0	-0.8	-1.2%
42.0%	71.6	70.8	-0.9	-1.2%
43.2%	71.6	70.7	-0.9	-1.2%
44.4%	71.5	70.7	-0.8	-1.2%
45.7%	71.5	70.7	-0.9	-1.2%
46.9%	71.2	70.6	-0.6	-0.9%
48.1%	71.2	70.6	-0.6	-0.9%
49.4%	71.1	70.6	-0.6	-0.8%
50.6%	71.1	70.5	-0.7	-0.9%
51.9%	71.0	70.4	-0.6	-0.9%
53.1%	71.0	70.3	-0.7	-1.0%
54.3%	71.0	70.3	-0.7	-1.0%
55.6%	71.0	70.2	-0.8	-1.1%
56.8%	71.0	70.1	-0.9	-1.3%
58.0%	70.9	70.1	-0.9	-1.2%
59.3%	70.9	70.1	-0.9	-1.2%
60.5%	70.9	70.1	-0.8	-1.2%
61.7%	70.8	70.1	-0.7	-1.0%
63.0%	70.8	70.0	-0.7	-1.0%
64.2%	70.7	70.0	-0.7	-1.0%
65.4%	70.6	70.0	-0.6	-0.9%
66.7%	70.6	70.0	-0.6	-0.8%
67.9%	70.5	69.9	-0.6	-0.9%
69.1%	70.5	69.9	-0.6	-0.9%
70.4%	70.5	69.9	-0.6	-0.9%
71.6%	70.4	69.8	-0.7	-1.0%
72.8%	70.4	69.7	-0.7	-1.0%
74.1%	70.4	69.7	-0.7	-1.0%
75.3%	70.4	69.7	-0.7	-1.0%
76.5%	70.3	69.6	-0.6	-0.9%
77.8%	70.2	69.6	-0.6	-0.8%
79.0%	70.2	69.6	-0.6	-0.8%
80.2%	70.1	69.6	-0.5	-0.7%
81.5%	70.0	69.5	-0.5	-0.8%
82.7%	70.0	69.5	-0.5	-0.8%
84.0%	70.0	69.5	-0.5	-0.7%
85.2%	69.9	69.4	-0.5	-0.7%
86.4%	69.8	69.4	-0.5	-0.7%
87.7%	69.8	69.3	-0.5	-0.7%
88.9%	69.8	69.3	-0.5	-0.7%
90.1%	69.7	69.3	-0.5	-0.7%
91.4%	69.7	69.2	-0.5	-0.7%
92.6%	69.6	69.2	-0.4	-0.6%
93.8%	69.6	69.1	-0.5	-0.8%
95.1%	69.6	69.1	-0.5	-0.7%
96.3%	69.5	68.9	-0.6	-0.9%
97.5%	69.4	68.9	-0.5	-0.7%
98.8%	69.1	68.4	-0.7	-1.0%
100.0%	68.8	68.3	-0.5	-0.7%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	78.8	79.1	0.4	0.5%
1.2%	78.5	76.2	-2.2	-2.8%
2.5%	77.2	75.8	-1.4	-1.8%
3.7%	76.7	75.0	-1.7	-2.2%
4.9%	75.7	74.7	-1.0	-1.3%
6.2%	75.4	74.4	-1.0	-1.3%
7.4%	75.4	74.3	-1.1	-1.5%
8.6%	75.1	73.9	-1.2	-1.6%
9.9%	74.6	73.8	-0.9	-1.2%
11.1%	74.2	73.7	-0.5	-0.7%
12.3%	74.2	73.7	-0.5	-0.7%
13.6%	73.9	73.5	-0.4	-0.6%
14.8%	73.9	73.3	-0.6	-0.8%
16.0%	73.8	73.1	-0.8	-1.0%
17.3%	73.6	73.0	-0.5	-0.7%
18.5%	73.5	73.0	-0.5	-0.7%
19.8%	73.4	73.0	-0.4	-0.6%
21.0%	73.0	72.9	-0.1	-0.2%
22.2%	72.9	72.7	-0.2	-0.3%
23.5%	72.9	72.2	-0.6	-0.9%
24.7%	72.8	72.0	-0.8	-1.2%
25.9%	72.7	71.9	-0.8	-1.2%
27.2%	72.7	71.8	-0.9	-1.2%
28.4%	72.7	71.7	-0.9	-1.3%
29.6%	72.4	71.7	-0.7	-1.0%
30.9%	72.4	71.6	-0.7	-1.0%
32.1%	72.3	71.6	-0.7	-1.0%
33.3%	72.3	71.6	-0.7	-1.0%
34.6%	72.3	71.6	-0.7	-1.0%
35.8%	72.3	71.5	-0.8	-1.1%
37.0%	72.1	71.5	-0.6	-0.9%
38.3%	72.1	71.4	-0.7	-1.0%
39.5%	72.1	71.4	-0.7	-1.0%
40.7%	72.0	71.3	-0.7	-0.9%
42.0%	71.9	71.3	-0.6	-0.9%
43.2%	71.9	71.2	-0.7	-1.0%
44.4%	71.8	71.1	-0.7	-0.9%
45.7%	71.7	71.1	-0.6	-0.9%
46.9%	71.7	71.0	-0.6	-0.9%
48.1%	71.6	71.0	-0.7	-1.0%
49.4%	71.5	70.9	-0.6	-0.8%
50.6%	71.5	70.9	-0.6	-0.8%
51.9%	71.5	70.9	-0.6	-0.9%
53.1%	71.3	70.8	-0.5	-0.7%
54.3%	71.3	70.8	-0.5	-0.7%
55.6%	71.3	70.8	-0.5	-0.7%
56.8%	71.2	70.7	-0.5	-0.7%
58.0%	71.2	70.7	-0.5	-0.7%
59.3%	71.2	70.6	-0.6	-0.8%
60.5%	71.1	70.6	-0.6	-0.8%
61.7%	71.0	70.5	-0.5	-0.7%
63.0%	70.9	70.5	-0.4	-0.5%
64.2%	70.8	70.5	-0.3	-0.4%
65.4%	70.7	70.5	-0.2	-0.2%
66.7%	70.6	70.3	-0.4	-0.5%
67.9%	70.6	70.3	-0.3	-0.5%
69.1%	70.5	70.1	-0.4	-0.6%
70.4%	70.4	70.1	-0.4	-0.5%
71.6%	70.4	70.0	-0.4	-0.6%
72.8%	70.3	70.0	-0.3	-0.5%
74.1%	70.2	70.0	-0.3	-0.4%
75.3%	70.2	70.0	-0.2	-0.3%
76.5%	70.2	69.9	-0.3	-0.4%
77.8%	70.2	69.9	-0.3	-0.4%
79.0%	70.1	69.8	-0.3	-0.4%
80.2%	70.0	69.8	-0.2	-0.3%
81.5%	70.0	69.8	-0.2	-0.3%
82.7%	70.0	69.8	-0.2	-0.3%
84.0%	70.0	69.6	-0.4	-0.5%
85.2%	70.0	69.6	-0.4	-0.6%
86.4%	70.0	69.6	-0.4	-0.6%
87.7%	69.9	69.6	-0.4	-0.5%
88.9%	69.8	69.5	-0.2	-0.3%
90.1%	69.7	69.4	-0.4	-0.5%
91.4%	69.7	69.4	-0.3	-0.5%
92.6%	69.7	69.3	-0.4	-0.6%
93.8%	69.5	69.2	-0.3	-0.5%
95.1%	69.2	69.0	-0.1	-0.2%
96.3%	69.2	68.9	-0.3	-0.4%
97.5%	69.0	68.8	-0.2	-0.4%
98.8%	68.6	68.6	0.1	0.1%
100.0%	68.5	68.5	-0.1	-0.1%

Figure SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

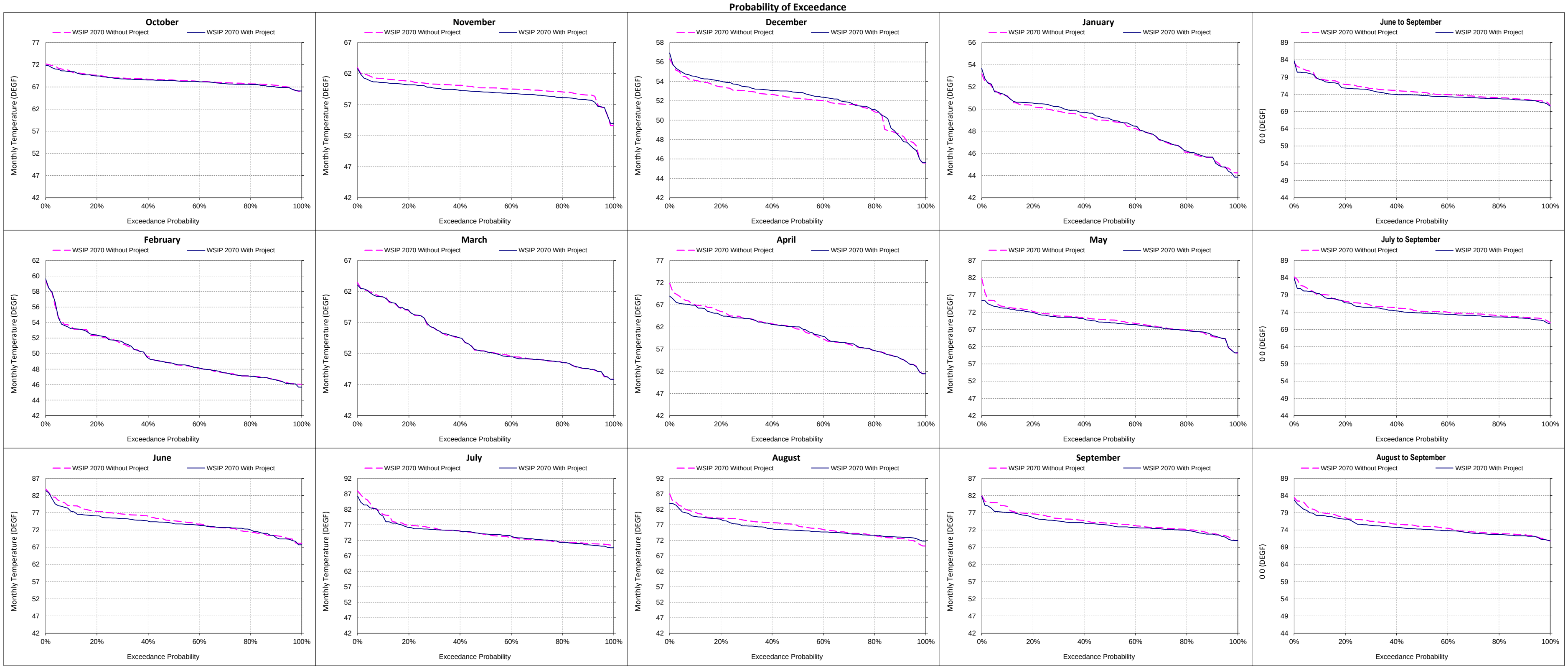


Table SQ11-1b

American River at the Mouth, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	72.2	71.9	-0.3	-0.4%
1.2%	72.0	71.8	-0.3	-0.4%
2.5%	71.8	71.4	-0.5	-0.7%
3.7%	71.7	71.1	-0.7	-0.9%
4.9%	71.2	71.0	-0.2	-0.3%
6.2%	71.1	70.6	-0.4	-0.6%
7.4%	70.9	70.6	-0.3	-0.4%
8.6%	70.8	70.5	-0.3	-0.5%
9.9%	70.5	70.5	0.0	0.0%
11.1%	70.1	70.4	0.3	0.4%
12.3%	70.1	70.1	0.0	-0.1%
13.6%	70.1	69.9	-0.2	-0.3%
14.8%	70.0	69.8	-0.2	-0.3%
16.0%	69.8	69.7	-0.1	-0.2%
17.3%	69.8	69.7	-0.1	-0.1%
18.5%	69.7	69.5	-0.1	-0.2%
19.8%	69.7	69.5	-0.1	-0.2%
21.0%	69.6	69.5	-0.1	-0.2%
22.2%	69.5	69.3	-0.2	-0.2%
23.5%	69.4	69.2	-0.1	-0.2%
24.7%	69.1	69.1	0.0	0.0%
25.9%	69.1	69.1	-0.1	-0.1%
27.2%	69.0	68.9	-0.1	-0.1%
28.4%	69.0	68.9	-0.2	-0.2%
29.6%	69.0	68.8	-0.2	-0.3%
30.9%	69.0	68.8	-0.1	-0.2%
32.1%	68.9	68.8	-0.2	-0.2%
33.3%	68.9	68.7	-0.2	-0.2%
34.6%	68.9	68.7	-0.2	-0.3%
35.8%	68.9	68.7	-0.2	-0.3%
37.0%	68.9	68.7	-0.2	-0.3%
38.3%	68.9	68.7	-0.2	-0.3%
39.5%	68.8	68.6	-0.2	-0.3%
40.7%	68.7	68.6	-0.1	-0.2%
42.0%	68.7	68.6	-0.1	-0.2%
43.2%	68.7	68.5	-0.1	-0.2%
44.4%	68.7	68.5	-0.2	-0.2%
45.7%	68.6	68.5	-0.1	-0.2%
46.9%	68.6	68.5	-0.1	-0.2%
48.1%	68.6	68.5	-0.1	-0.2%
49.4%	68.6	68.4	-0.2	-0.2%
50.6%	68.5	68.4	-0.1	-0.2%
51.9%	68.4	68.4	-0.1	-0.1%
53.1%	68.4	68.3	-0.1	-0.2%
54.3%	68.4	68.3	-0.1	-0.2%
55.6%	68.4	68.3	-0.1	-0.2%
56.8%	68.4	68.3	-0.1	-0.2%
58.0%	68.3	68.3	-0.1	-0.1%
59.3%	68.3	68.2	-0.1	-0.1%
60.5%	68.3	68.2	-0.1	-0.2%
61.7%	68.2	68.1	-0.1	-0.2%
63.0%	68.2	68.1	-0.1	-0.1%
64.2%	68.1	68.1	0.0	0.0%
65.4%	68.1	68.0	-0.1	-0.1%
66.7%	68.0	67.9	-0.1	-0.2%
67.9%	68.0	67.8	-0.2	-0.3%
69.1%	68.0	67.8	-0.2	-0.4%
70.4%	68.0	67.7	-0.2	-0.4%
71.6%	67.9	67.7	-0.2	-0.4%
72.8%	67.9	67.7	-0.2	-0.3%
74.1%	67.9	67.6	-0.3	-0.4%
75.3%	67.9	67.6	-0.2	-0.4%
76.5%	67.8	67.6	-0.2	-0.4%
77.8%	67.7	67.6	-0.1	-0.2%
79.0%	67.7	67.6	-0.1	-0.2%
80.2%	67.7	67.6	-0.1	-0.2%
81.5%	67.7	67.6	-0.1	-0.2%
82.7%	67.7	67.5	-0.1	-0.2%
84.0%	67.6	67.4	-0.3	-0.4%
85.2%	67.6	67.4	-0.2	-0.4%
86.4%	67.6	67.2	-0.4	-0.6%
87.7%	67.5	67.1	-0.4	-0.6%
88.9%	67.4	67.1	-0.3	-0.5%
90.1%	67.4	66.9	-0.4	-0.6%
91.4%	67.3	66.9	-0.4	-0.6%
92.6%	67.0	66.9	-0.1	-0.2%
93.8%	67.0	66.9	-0.2	-0.3%
95.1%	66.9	66.8	-0.1	-0.2%
96.3%	66.5	66.4	-0.1	-0.1%
97.5%	66.2	66.2	0.0	0.0%
98.8%	66.0	66.1	0.0	0.1%
100.0%	66.0	66.1	0.0	0.1%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.9	62.8	-0.2	-0.3%
1.2%	62.0	61.9	-0.2	-0.3%
2.5%	61.9	61.3	-0.7	-1.1%
3.7%	61.8	61.1	-0.7	-1.1%
4.9%	61.6	60.9	-0.7	-1.2%
6.2%	61.3	60.7	-0.6	-1.1%
7.4%	61.3	60.7	-0.6	-1.0%
8.6%	61.2	60.6	-0.6	-1.1%
9.9%	61.2	60.6	-0.6	-1.1%
11.1%	61.2	60.5	-0.6	-1.0%
12.3%	61.1	60.5	-0.6	-1.0%
13.6%	61.0	60.4	-0.6	-1.0%
14.8%	61.0	60.4	-0.6	-0.9%
16.0%	60.9	60.4	-0.5	-0.9%
17.3%	60.9	60.3	-0.6	-0.9%
18.5%	60.8	60.2	-0.6	-1.0%
19.8%	60.8	60.2	-0.6	-1.0%
21.0%	60.8	60.2	-0.6	-1.0%
22.2%	60.6	60.2	-0.4	-0.7%
23.5%	60.6	60.1	-0.5	-0.7%
24.7%	60.5	60.1	-0.4	-0.7%
25.9%	60.5	60.1	-0.4	-0.7%
27.2%	60.4	59.8	-0.6	-1.0%
28.4%	60.4	59.8	-0.6	-0.9%
29.6%	60.3	59.7	-0.6	-1.0%
30.9%	60.3	59.6	-0.7	-1.1%
32.1%	60.3	59.6	-0.7	-1.1%
33.3%	60.2	59.5	-0.8	-1.3%
34.6%	60.2	59.5	-0.8	-1.2%
35.8%	60.2	59.5	-0.8	-1.3%
37.0%	60.2	59.5	-0.7	-1.2%
38.3%	60.1	59.4	-0.7	-1.2%
39.5%	60.1	59.3	-0.8	-1.3%
40.7%	60.1	59.3	-0.9	-1.4%
42.0%	60.0	59.2	-0.8	-1.3%
43.2%	60.0	59.2	-0.8	-1.3%
44.4%	60.0	59.1	-0.8	-1.4%
45.7%	59.8	59.1	-0.7	-1.1%
46.9%	59.7	59.1	-0.6	-1.0%
48.1%	59.7	59.1	-0.6	-1.1%
49.4%	59.7	59.1	-0.7	-1.1%
50.6%	59.7	59.0	-0.7	-1.1%
51.9%	59.7	59.0	-0.7	-1.2%
53.1%	59.7	59.0	-0.7	-1.3%
54.3%	59.7	58.9	-0.8	-1.3%
55.6%	59.6	58.9	-0.7	-1.2%
56.8%	59.6	58.9	-0.7	-1.1%
58.0%	59.5	58.9	-0.7	-1.1%
59.3%	59.5	58.8	-0.7	-1.2%
60.5%	59.5	58.8	-0.7	-1.2%
61.7%	59.5	58.8	-0.7	-1.2%
63.0%	59.5	58.7	-0.8	-1.3%
64.2%	59.5	58.7	-0.8	-1.3%
65.4%	59.5	58.7	-0.8	-1.4%
66.7%	59.4	58.7	-0.8	-1.3%
67.9%	59.3	58.6	-0.7	-1.2%
69.1%	59.3	58.6	-0.7	-1.2%
70.4%	59.3	58.5	-0.8	-1.4%
71.6%	59.3	58.5	-0.8	-1.3%
72.8%	59.3	58.4	-0.8	-1.4%
74.1%	59.2	58.4	-0.8	-1.4%
75.3%	59.2	58.4	-0.8	-1.4%
76.5%	59.2	58.3	-0.8	-1.4%
77.8%	59.1	58.2	-1.0	-1.6%
79.0%	59.1	58.2	-1.0	-1.6%
80.2%	59.0	58.1	-0.9	-1.5%
81.5%	59.0	58.1	-0.9	-1.5%
82.7%	59.0	58.1	-0.9	-1.5%
84.0%	58.9	58.1	-0.8	-1.4%
85.2%	58.8	58.0	-0.8	-1.4%
86.4%	58.7	57.9	-0.8	-1.4%
87.7%	58.6	57.8	-0.8	-1.4%
88.9%	58.6	57.8	-0.7	-1.3%
90.1%	58.5	57.7	-0.8	-1.4%
91.4%	58.5	57.7	-0.9	-1.5%
92.6%	58.4	57.4	-0.9	-1.6%
93.8%	56.9	56.7	-0.2	-0.3%
95.1%	56.6	56.7	0.1	0.1%
96.3%	56.5	56.5	0.1	0.1%
97.5%	55.3	55.3	0.1	0.1%
98.8%	53.6	54.0	0.3	0.6%
100.0%	53.6	54.0	0.3	0.6%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.3	56.9	0.6	1.1%
1.2%	55.7	55.8	0.0	0.0%
2.5%	55.1	55.4	0.2	0.4%
3.7%	55.0	55.1	0.1	0.2%
4.9%	54.5	54.9	0.4	0.7%
6.2%	54.5	54.7	0.2	0.4%
7.4%	54.2	54.7	0.5	0.8%
8.6%	54.2	54.6	0.4	0.7%
9.9%	54.1	54.5	0.4	0.8%
11.1%	54.0	54.4	0.4	0.7%
12.3%	53.9	54.3	0.4	0.8%
13.6%	53.9	54.3	0.3	0.6%
14.8%	53.9	54.2	0.4	0.7%
16.0%	53.8	54.2	0.5	0.9%
17.3%	53.6	54.1	0.5	1.0%
18.5%	53.5	54.1	0.6	1.1%
19.8%	53.4	54.0	0.6	1.1%
21.0%	53.4	54.0	0.5	1.0%
22.2%	53.3	53.9	0.6	1.1%
23.5%	53.3	53.9	0.6	1.1%
24.7%	53.1	53.7	0.6	1.2%
25.9%	53.1	53.7	0.6	1.2%
27.2%	53.1	53.6	0.5	1.0%
28.4%	53.1	53.5	0.4	0.8%
29.6%	53.0	53.5	0.4	0.8%
30.9%	53.0	53.4	0.5	0.9%
32.1%	53.0	53.3	0.3	0.6%
33.3%	52.9	53.2	0.3	0.6%
34.6%	52.8	53.2	0.4	0.8%
35.8%	52.7	53.2	0.4	0.8%
37.0%	52.7	53.1	0.4	0.8%
38.3%	52.7	53.1	0.5	0.9%
39.5%	52.7	53.1	0.4	0.8%
40.7%	52.6	53.1	0.4	0.8%
42.0%	52.6	53.0	0.5	0.9%
43.2%	52.5	53.0	0.5	1.0%
44.4%	52.5	53.0	0.5	1.0%
45.7%	52.4	53.0	0.6	1.2%
46.9%	52.4	53.0	0.6	1.2%
48.1%	52.3	52.9	0.6	1.1%
49.4%	52.3	52.9	0.6	1.2%
50.6%	52.3	52.8	0.6	1.1%
51.9%	52.2	52.8	0.6	1.2%
53.1%	52.2	52.7	0.5	1.0%
54.3%	52.1	52.6	0.5	0.9%
55.6%	52.1	52.5	0.4	0.8%
56.8%	52.1	52.5	0.4	0.7%
58.0%	52.0	52.4	0.4	0.8%
59.3%	52.0	52.4	0.4	0.7%
60.5%	52.0	52.4	0.3	0.6%
61.7%	51.9	52.3	0.4	0.7%
63.0%	51.8	52.2	0.4	0.8%
64.2%	51.7	52.2	0.4	0.8%
65.4%	51.7	52.2	0.5	0.9%
66.7%	51.7	52.0	0.3	0.6%
67.9%	51.7	51.9	0.2	0.5%
69.1%	51.6	51.9	0.2	0.5%
70.4%	51.6	51.8	0.2	0.4%
71.6%	51.6	51.7	0.1	0.1%
72.8%	51.6	51.5	-0.1	-0.2%
74.1%	51.5	51.5	-0.1	-0.1%
75.3%	51.3	51.4	0.1	0.2%
76.5%	51.3	51.4	0.2	0.3%
77.8%	51.2	51.3	0.1	0.3%
79.0%	51.0	51.1	0.1	0.1%
80.2%	50.8	51.1	0.3	0.5%
81.5%	50.8	50.8	0.0	0.1%
82.7%	50.7	50.5	-0.2	-0.3%
84.0%	49.1	50.4	1.3	2.7%
85.2%	48.9	50.1	1.2	2.5%
86.4%	48.9	49.2	0.3	0.6%
87.7%	48.7	48.9	0.2	0.4%
88.9%	48.6	48.5	-0.1	-0.2%
90.1%	48.5	48.2	-0.3	-0.6%
91.4%	48.3	47.8	-0.5	-1.1%
92.6%	47.8	47.7	-0.1	-0.2%
93.8%	47.8	47.4	-0.4	-0.8%
95.1%	47.7	47.1	-0.6	-1.3%
96.3%	47.3	46.9	-0.5	-1.0%
97.5%	45.9	46.0	0.0	0.1%
98.8%	45.6	45.6	0.0	0.0%
100.0%	45.6	45.6	0.0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.2	53.7	0.5	0.9%
1.2%	52.5	52.8	0.3	0.5%
2.5%	52.4	52.3	-0.1	-0.2%
3.7%	52.1	52.3	0.2	0.3%
4.9%	51.7	51.6	-0.1	-0.2%
6.2%	51.5	51.6	0.0	0.1%
7.4%	51.3	51.4	0.1	0.3%
8.6%	51.2	51.3	0.1	0.2%
9.9%	51.2	51.2	0.0	-0.1%
11.1%	50.9	50.9	0.0	0.0%
12.3%	50.6	50.7	0.1	0.2%
13.6%	50.6	50.6	0.1	0.2%
14.8%	50.4	50.6	0.2	0.4%
16.0%	50.4	50.6	0.2	0.4%
17.3%	50.4	50.6	0.2	0.4%
18.5%	50.4	50.6	0.2	0.4%
19.8%	50.3	50.5	0.2	0.4%
21.0%	50.2	50.5	0.3	0.6%
22.2%	50.1	50.5	0.3	0.7%
23.5%	50.1	50.5	0.3	0.7%
24.7%	50.0	50.4	0.4	0.8%
25.9%	50.0	50.4	0.4	0.9%
27.2%	49.9	50.3	0.4	0.7%
28.4%	49.8	50.2	0.4	0.8%
29.6%	49.8	50.2	0.4	0.8%
30.9%	49.8	50.2	0.4	0.8%
32.1%	49.7	50.0	0.3	0.6%
33.3%	49.6	49.9	0.3	0.6%
34.6%	49.6	49.9	0.3	0.5%
35.8%	49.6	49.8	0.2	0.5%
37.0%	49.6	49.8	0.3	0.6%
38.3%	49.5	49.7	0.2	0.5%
39.5%	49.3	49.7	0.4	0.8%
40.7%	49.2	49.7	0.5	1.0%
42.0%	49.2	49.6	0.4	0.9%
43.2%	49.2	49.6	0.5	0.9%
44.4%	49.0	49.4	0.3	0.7%
45.7%	49.0	49.3	0.3	0.7%
46.9%	49.0	49.2	0.2	0.5%
48.1%	49.0	49.2	0.2	0.4%
49.4%	49.0	49.2	0.2	0.5%
50.6%	48.9	49.0	0.2	0.3%
51.9%	48.8	49.0	0.1	0.2%
53.1%	48.8	48.9	0.1	0.2%
54.3%	48.8	48.8	0.0	0.1%
55.6%	48.7	48.8	0.0	0.0%
56.8%	48.5	48.8	0.3	0.6%
58.0%	48.4	48.6	0.2	0.4%
59.3%	48.3	48.5	0.2	0.4%
60.5%	48.2	48.4	0.3	0.5%
61.7%	48.1	48.1	0.1	0.1%
63.0%	48.0	48.0	0.0	0.1%
64.2%	47.9	47.9	0.0	0.0%
65.4%	47.8	47.8	0.0	0.0%
66.7%	47.7	47.8	0.1	0.1%
67.9%	47.6	47.6	0.0	0.0%
69.1%	47.2	47.3	0.0	0.0%
70.4%	47.1	47.2	0.1	0.2%
71.6%	47.0	47.1	0.0	0.1%
72.8%	46.9	47.0	0.1	0.2%
74.1%	46.8	46.9	0.1	0.1%
75.3%	46.8	46.8	0.0	0.0%
76.5%	46.7	46.7	0.0	0.0%
77.8%	46.5	46.5	0.0	0.0%
79.0%	46.1	46.3	0.1	0.3%
80.2%	46.1	46.2	0.1	0.2%
81.5%	46.1	46.1	0.0	0.0%
82.7%	45.9	46.1	0.2	0.4%
84.0%	45.9	46.0	0.1	0.2%
85.2%	45.7	45.9	0.1	0.2%
86.4%	45.7	45.8	0.1	0.2%
87.7%	45.7	45.7	0.0	0.0%
88.9%	45.6	45.7	0.0	0.1%
90.1%	45.6	45.7	0.0	0.1%
91.4%	45.3	45.1	-0.2	-0.4%
92.6%	45.1	44.9	-0.2	-0.4%
93.8%	44.7	44.8	0.0	0.1%
95.1%	44.7	44.8	0.1	0.1%
96.3%	44.7	44.4	-0.3	-0.6%
97.5%	44.4	44.2	-0.2	-0.4%
98.8%	44.2	43.9	-0.4	-0.9%
100.0%	44.2	43.9	-0.4	-0.9%

Table SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.4	59.7	0.3	0.5%
1.2%	58.4	58.4	0.1	0.1%
2.5%	57.9	57.9	0.1	0.1%
3.7%	56.1	56.6	0.5	0.8%
4.9%	54.7	54.6	-0.1	-0.1%
6.2%	54.2	53.8	-0.4	-0.8%
7.4%	53.7	53.6	-0.1	-0.2%
8.6%	53.7	53.4	-0.3	-0.5%
9.9%	53.5	53.2	-0.3	-0.6%
11.1%	53.1	53.2	0.1	0.1%
12.3%	53.1	53.2	0.1	0.1%
13.6%	53.1	53.1	0.1	0.1%
14.8%	53.1	53.0	0.0	-0.1%
16.0%	53.1	52.9	-0.2	-0.4%
17.3%	52.3	52.5	0.2	0.4%
18.5%	52.3	52.4	0.1	0.3%
19.8%	52.3	52.4	0.1	0.2%
21.0%	52.3	52.3	0.0	0.1%
22.2%	52.1	52.2	0.1	0.3%
23.5%	52.0	52.2	0.1	0.3%
24.7%	52.0	51.8	-0.2	-0.4%
25.9%	51.9	51.7	-0.1	-0.2%
27.2%	51.7	51.7	0.0	0.1%
28.4%	51.5	51.6	0.2	0.3%
29.6%	51.2	51.6	0.4	0.7%
30.9%	51.2	51.3	0.2	0.3%
32.1%	50.9	51.2	0.2	0.4%
33.3%	50.8	51.0	0.2	0.3%
34.6%	50.5	50.5	0.0	0.0%
35.8%	50.5	50.4	0.0	-0.1%
37.0%	50.2	50.3	0.1	0.2%
38.3%	50.1	50.2	0.1	0.2%
39.5%	49.7	49.6	-0.1	-0.2%
40.7%	49.5	49.3	-0.2	-0.5%
42.0%	49.2	49.2	0.0	0.0%
43.2%	49.1	49.1	0.0	0.1%
44.4%	49.1	49.0	0.0	-0.1%
45.7%	49.0	49.0	0.0	0.0%
46.9%	48.9	48.9	0.0	0.0%
48.1%	48.8	48.8	0.0	0.0%
49.4%	48.8	48.8	0.0	0.0%
50.6%	48.5	48.6	0.1	0.2%
51.9%	48.5	48.5	0.0	0.0%
53.1%	48.5	48.5	0.1	0.1%
54.3%	48.5	48.5	0.1	0.1%
55.6%	48.4	48.5	0.0	0.1%
56.8%	48.3	48.4	0.0	0.1%
58.0%	48.3	48.2	-0.1	-0.2%
59.3%	48.1	48.2	0.1	0.1%
60.5%	48.1	48.1	0.0	0.0%
61.7%	48.0	48.0	0.0	0.0%
63.0%	47.9	48.0	0.0	0.1%
64.2%	47.9	47.9	0.0	0.0%
65.4%	47.8	47.8	0.1	0.2%
66.7%	47.6	47.8	0.2	0.3%
67.9%	47.6	47.7	0.1	0.2%
69.1%	47.5	47.5	0.0	0.0%
70.4%	47.5	47.5	0.0	0.0%
71.6%	47.5	47.4	0.0	0.0%
72.8%	47.5	47.3	-0.2	-0.4%
74.1%	47.3	47.3	0.0	0.0%
75.3%	47.2	47.2	0.0	0.0%
76.5%	47.1	47.1	0.0	0.0%
77.8%	47.1	47.1	0.0	0.0%
79.0%	47.1	47.1	0.0	0.1%
80.2%	47.1	47.1	0.0	-0.1%
81.5%	47.1	47.0	0.0	-0.1%
82.7%	47.1	46.9	-0.1	-0.2%
84.0%	47.0	46.9	-0.1	-0.1%
85.2%	46.9	46.9	0.0	-0.1%
86.4%	46.9	46.9	0.0	0.0%
87.7%	46.8	46.7	0.0	-0.1%
88.9%	46.7	46.7	-0.1	-0.1%
90.1%	46.6	46.6	0.0	0.0%
91.4%	46.5	46.5	0.0	0.0%
92.6%	46.4	46.4	0.0	0.0%
93.8%	46.3	46.2	-0.2	-0.3%
95.1%	46.2	46.1	0.0	-0.1%
96.3%	46.1	46.1	0.0	0.0%
97.5%	46.1	46.1	0.0	0.0%
98.8%	46.1	45.7	-0.4	-0.8%
100.0%	46.1	45.7	-0.4	-0.8%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.4	63.0	-0.4	-0.6%
1.2%	62.5	62.5	-0.1	-0.1%
2.5%	62.2	62.4	0.2	0.3%
3.7%	62.2	62.2	0.0	0.0%
4.9%	61.9	61.8	-0.2	-0.3%
6.2%	61.7	61.5	-0.3	-0.4%
7.4%	61.5	61.2	-0.2	-0.3%
8.6%	61.2	61.2	0.0	-0.1%
9.9%	61.1	61.2	0.0	0.0%
11.1%	61.0	60.9	-0.2	-0.3%
12.3%	60.3	60.4	0.1	0.2%
13.6%	60.1	60.2	0.1	0.2%
14.8%	59.9	60.1	0.2	0.3%
16.0%	59.5	59.5	0.0	0.0%
17.3%	59.1	59.4	0.3	0.5%
18.5%	59.1	59.2	0.1	0.2%
19.8%	59.0	59.1	0.1	0.2%
21.0%	58.5	58.5	0.0	0.1%
22.2%	58.2	58.2	0.1	0.1%
23.5%	58.1	58.2	0.1	0.1%
24.7%	58.1	58.1	0.0	0.0%
25.9%	57.9	57.8	-0.1	-0.1%
27.2%	56.6	56.8	0.2	0.4%
28.4%	56.3	56.3	0.0	0.0%
29.6%	56.2	56.2	0.0	0.0%
30.9%	55.8	55.8	0.0	0.0%
32.1%	55.5	55.5	0.1	0.1%
33.3%	55.2	55.2	0.0	0.0%
34.6%	55.0	55.2	0.2	0.4%
35.8%	54.9	55.0	0.1	0.3%
37.0%	54.8	54.8	0.0	0.0%
38.3%	54.6	54.7	0.1	0.2%
39.5%	54.6	54.6	0.0	0.0%
40.7%	54.4	54.5	0.0	0.0%
42.0%	53.8	53.8	0.1	0.1%
43.2%	53.6	53.6	0.0	0.0%
44.4%	53.2	53.2	0.0	0.0%
45.7%	52.6	52.6	0.1	0.1%
46.9%	52.5	52.6	0.0	0.0%
48.1%	52.5	52.4	0.0	0.0%
49.4%	52.4	52.4	0.0	0.0%
50.6%	52.3	52.2	0.0	0.0%
51.9%	52.2	52.1	-0.1	-0.2%
53.1%	52.1	52.1	-0.1	-0.1%
54.3%	52.0	51.9	-0.1	-0.1%
55.6%	51.9	51.8	-0.1	-0.2%
56.8%	51.8	51.6	-0.3	-0.5%
58.0%	51.8	51.6	-0.3	-0.5%
59.3%	51.6	51.5	-0.2	-0.3%
60.5%	51.6	51.5	-0.1	-0.2%
61.7%	51.5	51.3	-0.1	-0.3%
63.0%	51.4	51.2	-0.3	-0.5%
64.2%	51.3	51.2	-0.2	-0.3%
65.4%	51.3	51.2	-0.1	-0.3%
66.7%	51.1	51.2	0.0	0.1%
67.9%	51.1	51.1	0.0	0.1%
69.1%	51.1	51.1	0.0	-0.1%
70.4%	51.1	51.1	0.0	0.0%
71.6%	51.0	51.0	0.0	0.0%
72.8%	51.0	51.0	0.0	0.0%
74.1%	50.8	50.9	0.0	0.1%
75.3%	50.8	50.8	0.0	0.0%
76.5%	50.8	50.8	0.0	0.0%
77.8%	50.7	50.7	0.0	-0.1%
79.0%	50.7	50.7	0.0	-0.1%
80.2%	50.5	50.5	0.0	0.0%
81.5%	50.5	50.5	0.0	0.1%
82.7%	50.4	50.4	0.0	0.1%
84.0%	50.1	50.0	-0.1	-0.1%
85.2%	49.8	49.9	0.1	0.1%
86.4%	49.7	49.8	0.0	0.1%
87.7%	49.6	49.7	0.0	0.1%
88.9%	49.6	49.6	0.0	0.0%
90.1%	49.6	49.6	0.0	0.0%
91.4%	49.5	49.4	-0.1	-0.2%
92.6%	49.3	49.4	0.1	0.1%
93.8%	49.1	49.1	0.0	-0.1%
95.1%	49.0	49.1	0.0	0.1%
96.3%	48.3	48.4	0.1	0.2%
97.5%	48.3	48.2	0.0	0.0%
98.8%	47.9	47.9	0.0	0.0%
100.0%	47.9	47.9	0.0	0.0%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	71.9	69.0	-2.9	-4.0%
1.2%	69.9	68.3	-1.5	-2.2%
2.5%	69.4	67.6	-1.8	-2.6%
3.7%	69.0	67.4	-1.6	-2.4%
4.9%	68.4	67.2	-1.2	-1.7%
6.2%	68.0	67.2	-0.8	-1.2%
7.4%	67.9	67.1	-0.8	-1.2%
8.6%	67.2	66.9	-0.3	-0.5%
9.9%	67.0	66.9	-0.1	-0.1%
11.1%	66.8	66.3	-0.6	-0.9%
12.3%	66.8	66.2	-0.6	-0.9%
13.6%	66.8	66.2	-0.6	-1.0%
14.8%	66.4	65.5	-0.9	-1.4%
16.0%	66.4	65.3	-1.0	-1.6%
17.3%	66.3	65.1	-1.1	-1.7%
18.5%	65.8	65.1	-0.7	-1.0%
19.8%	65.5	64.8	-0.8	-1.2%
21.0%	65.4	64.4	-0.9	-1.4%
22.2%	65.0	64.4	-0.6	-0.9%
23.5%	64.5	64.3	-0.2	-0.3%
24.7%	64.5	64.1	-0.3	-0.5%
25.9%	64.4	64.1	-0.4	-0.5%
27.2%	64.4	64.0	-0.4	-0.6%
28.4%	64.0	64.0	0.0	0.0%
29.6%	63.9	63.9	0.0	0.0%
30.9%	63.9	63.9	0.0	0.0%
32.1%	63.8	63.7	-0.1	-0.1%
33.3%	63.4	63.6	0.2	0.2%
34.6%	63.3	63.1	-0.2	-0.4%
35.8%	63.2	63.1	-0.1	-0.1%
37.0%	63.0	62.9	-0.1	-0.1%
38.3%	62.9	62.8	0.0	0.0%
39.5%	62.8	62.6	-0.2	-0.4%
40.7%	62.6	62.5	-0.1	-0.1%
42.0%	62.6	62.4	-0.1	-0.2%
43.2%	62.5	62.4	-0.1	-0.2%
44.4%	62.3	62.3	0.0	0.0%
45.7%	62.3	62.2	-0.1	-0.2%
46.9%	62.0	62.1	0.0	0.1%
48.1%	61.9	62.1	0.1	0.2%
49.4%	61.6	62.0	0.5	0.7%
50.6%	61.5	62.0	0.5	0.8%
51.9%	61.4	61.5	0.1	0.2%
53.1%	60.8	61.3	0.6	0.9%
54.3%	60.5	60.9	0.3	0.5%
55.6%	60.5	60.8	0.3	0.5%
56.8%	60.2	60.3	0.1	0.2%
58.0%	59.8	60.2	0.4	0.7%
59.3%	59.5	60.0	0.5	0.8%
60.5%	59.1	59.8	0.6	1.1%
61.7%	58.8	59.1	0.3	0.6%
63.0%	58.8	58.8	0.0	0.0%
64.2%	58.7	58.7	0.1	0.2%
65.4%	58.5	58.6	0.1	0.2%
66.7%	58.5	58.5	0.0	0.1%
67.9%	58.4	58.5	0.1	0.1%
69.1%	58.2	58.4	0.2	0.4%
70.4%	58.1	58.2	0.1	0.2%
71.6%	57.8	58.2	0.4	0.7%
72.8%	57.6	57.8	0.2	0.3%
74.1%	57.3	57.4	0.0	0.0%
75.3%	57.3	57.3	0.0	0.0%
76.5%	57.2	57.2	0.0	0.0%
77.8%	57.2	57.2	0.0	0.0%
79.0%	56.8	56.8	0.1	0.1%
80.2%	56.6	56.6	0.0	0.0%
81.5%	56.4	56.4	0.0	0.0%
82.7%	56.3	56.3	0.0	0.0%
84.0%	56.1	56.0	-0.1	-0.2%
85.2%	55.7	55.8	0.0	0.0%
86.4%	55.7	55.6	0.0	0.0%
87.7%	55.4	55.4	0.0	0.0%
88.9%	55.2	55.3	0.0	0.1%
90.1%	54.9	54.8	0.0	0.0%
91.4%	54.6	54.6	0.0	0.0%
92.6%	54.1	54.1	0.0	0.0%
93.8%	53.6	53.6	0.0	-0.1%
95.1%	53.5	53.5	0.0	0.0%
96.3%	53.2	53.0	-0.1	-0.2%
97.5%	51.9	51.8	-0.1	-0.1%
98.8%	51.5	51.5	0.0	0.1%
100.0%	51.5	51.5	0.0	0.1%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	81.7	75.4	-6.3	-7.7%
1.2%	77.7	75.4	-2.3	-2.9%
2.5%	75.5	74.4	-1.0	-1.4%
3.7%	75.4	74.0	-1.4	-1.9%
4.9%	75.4	73.7	-1.7	-2.3%
6.2%	74.3	73.6	-0.7	-0.9%
7.4%	73.8	73.3	-0.5	-0.7%
8.6%	73.7	73.2	-0.5	-0.7%
9.9%	73.4	73.2	-0.2	-0.3%
11.1%	73.3	72.9	-0.4	-0.6%
12.3%	73.2	72.9	-0.3	-0.4%
13.6%	73.1	72.6	-0.5	-0.7%
14.8%	73.1	72.5	-0.5	-0.7%
16.0%	72.9	72.5	-0.4	-0.6%
17.3%	72.8	72.2	-0.6	-0.9%
18.5%	72.8	72.1	-0.7	-0.9%
19.8%	72.3	71.9	-0.4	-0.5%
21.0%	72.0	71.7	-0.3	-0.4%
22.2%	71.9	71.4	-0.5	-0.7%
23.5%	71.6	71.2	-0.4	-0.6%
24.7%	71.5	71.2	-0.4	-0.5%
25.9%	71.5	70.9	-0.6	-0.8%
27.2%	71.4	70.8	-0.6	-0.9%
28.4%	71.0	70.7	-0.3	-0.4%
29.6%	70.9	70.6	-0.3	-0.5%
30.9%	70.9	70.6	-0.3	-0.4%
32.1%	70.8	70.5	-0.3	-0.4%
33.3%	70.8	70.5	-0.3	-0.4%
34.6%	70.8	70.5	-0.3	-0.4%
35.8%	70.7	70.4	-0.3	-0.4%
37.0%	70.6	70.4	-0.2	-0.3%
38.3%	70.5	70.2	-0.3	-0.4%
39.5%	70.4	70.1	-0.3	-0.4%
40.7%	70.4	69.7	-0.7	-0.9%
42.0%	70.2	69.7	-0.5	-0.8%
43.2%	70.0	69.5	-0.5	-0.7%
44.4%	70.0	69.5	-0.5	-0.7%
45.7%	70.0	69.2	-0.8	-1.1%
46.9%	69.9	69.1	-0.8	-1.1%
48.1%	69.8	69.1	-0.7	-1.1%
49.4%	69.7	69.1	-0.7	-0.9%
50.6%	69.7	68.9	-0.8	-1.1%
51.9%	69.7	68.9	-0.8	-1.1%
53.1%	69.6	68.8	-0.8	-1.1%
54.3%	69.4	68.7	-0.7	-1.0%
55.6%	69.3	68.6	-0.7	-1.0%
56.8%	69.0	68.5	-0.4	-0.6%
58.0%	68.9	68.5	-0.5	-0.7%
59.3%	68.8	68.5	-0.4	-0.5%
60.5%	68.6	68.4	-0.3	-0.4%
61.7%	68.6	68.2	-0.4	-0.5%
63.0%	68.4	68.0	-0.3	-0.5%
64.2%	68.3	67.9	-0.3	-0.5%
65.4%	68.1	67.9	-0.2	-0.3%
66.7%	68.0	67.7	-0.3	-0.4%
67.9%	67.9	67.7	-0.2	-0.4%
69.1%	67.7	67.7	0.0	0.0%
70.4%	67.7	67.5	-0.2	-0.3%
71.6%	67.6	67.2	-0.4	-0.5%
72.8%	67.2	67.2	0.0	0.0%
74.1%	67.2	67.0	-0.1	-0.2%
75.3%	67.0	67.0	0.0	-0.1%
76.5%	67.0	66.9	-0.1	-0.1%
77.8%	66.9	66.8	-0.1	-0.1%
79.0%	66.9	66.8	-0.1	-0.1%
80.2%	66.8	66.7	-0.2	-0.3%
81.5%	66.7	66.5	-0.2	-0.3%
82.7%	66.5	66.4	-0.1	-0.1%
84.0%	66.4	66.4	0.0	0.0%
85.2%	66.3	66.3	0.0	0.0%
86.4%	66.1	66.3	0.2	0.3%
87.7%	65.6	66.1	0.5	0.8%
88.9%	65.3	65.8	0.5	0.7%
90.1%	64.9	65.2	0.3	0.4%
91.4%	64.8	65.1	0.3	0.4%
92.6%	64.7	64.7	0.0	0.0%
93.8%	64.4	64.4	0.0	0.0%
95.1%	64.3	64.3	0.0	0.0%
96.3%	61.7	61.7	0.0	0.0%
97.5%	61.0	61.0	0.0	0.0%
98.8%	60.2	60.2	0.0	0.0%
100.0%	60.2	60.2	0.0	0.0%

Table SQ11-1b
American River at the Mouth, Monthly Temperature
Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	83.9	83.4	-0.5	-0.6%
1.2%	82.8	82.8	-0.1	-0.1%
2.5%	81.6	81.2	-0.5	-0.6%
3.7%	81.5	79.6	-1.9	-2.3%
4.9%	80.6	79.1	-1.5	-1.9%
6.2%	80.2	78.9	-1.3	-1.6%
7.4%	79.9	78.6	-1.3	-1.6%
8.6%	79.1	78.3	-0.8	-1.0%
9.9%	79.1	77.4	-1.7	-2.1%
11.1%	79.0	77.3	-1.7	-2.2%
12.3%	79.0	76.6	-2.4	-3.1%
13.6%	78.5	76.5	-2.0	-2.5%
14.8%	78.1	76.4	-1.7	-2.2%
16.0%	77.9	76.3	-1.6	-2.0%
17.3%	77.7	76.2	-1.5	-1.9%
18.5%	77.5	76.1	-1.4	-1.8%
19.8%	77.4	76.1	-1.4	-1.8%
21.0%	77.4	76.1	-1.3	-1.7%
22.2%	77.3	75.6	-1.7	-2.2%
23.5%	77.1	75.6	-1.6	-2.0%
24.7%	77.0	75.6	-1.5	-1.9%
25.9%	77.0	75.5	-1.5	-2.0%
27.2%	76.8	75.4	-1.4	-1.8%
28.4%	76.8	75.4	-1.4	-1.8%
29.6%	76.6	75.3	-1.3	-1.7%
30.9%	76.6	75.3	-1.3	-1.7%
32.1%	76.5	75.2	-1.3	-1.7%
33.3%	76.4	75.1	-1.3	-1.7%
34.6%	76.4	74.9	-1.5	-1.9%
35.8%	76.3	74.9	-1.5	-1.9%
37.0%	76.3	74.8	-1.4	-1.9%
38.3%	76.2	74.7	-1.4	-1.9%
39.5%	76.1	74.7	-1.5	-1.9%
40.7%	75.7	74.4	-1.3	-1.7%
42.0%	75.7	74.4	-1.3	-1.7%
43.2%	75.4	74.4	-1.0	-1.3%
44.4%	75.3	74.3	-1.0	-1.4%
45.7%	75.3	74.3	-1.0	-1.3%
46.9%	74.9	74.2	-0.7	-0.9%
48.1%	74.8	74.1	-0.7	-0.9%
49.4%	74.7	74.0	-0.7	-1.0%
50.6%	74.6	73.8	-0.9	-1.2%
51.9%	74.5	73.8	-0.8	-1.0%
53.1%	74.4	73.8	-0.7	-0.9%
54.3%	74.3	73.7	-0.7	-0.9%
55.6%	74.2	73.6	-0.5	-0.7%
56.8%	74.1	73.6	-0.5	-0.7%
58.0%	74.0	73.5	-0.5	-0.7%
59.3%	73.7	73.4	-0.3	-0.4%
60.5%	73.7	73.3	-0.4	-0.6%
61.7%	73.6	73.2	-0.3	-0.4%
63.0%	73.3	73.1	-0.2	-0.3%
64.2%	72.9	73.0	0.1	0.2%
65.4%	72.9	73.0	0.1	0.2%
66.7%	72.8	72.8	0.0	0.0%
67.9%	72.7	72.8	0.1	0.1%
69.1%	72.7	72.8	0.1	0.1%
70.4%	72.6	72.8	0.1	0.1%
71.6%	72.5	72.7	0.2	0.3%
72.8%	72.5	72.6	0.1	0.2%
74.1%	72.3	72.6	0.2	0.3%
75.3%	71.8	72.5	0.8	1.1%
76.5%	71.7	72.5	0.8	1.1%
77.8%	71.5	72.3	0.8	1.0%
79.0%	71.5	72.3	0.8	1.1%
80.2%	71.3	71.9	0.6	0.9%
81.5%	71.3	71.5	0.3	0.4%
82.7%	71.1	71.5	0.5	0.7%
84.0%	71.0	71.2	0.2	0.3%
85.2%	70.9	71.0	0.1	0.1%
86.4%	70.5	71.0	0.6	0.8%
87.7%	70.4	70.5	0.0	0.1%
88.9%	70.4	70.4	0.0	0.0%
90.1%	70.3	69.7	-0.6	-0.8%
91.4%	70.2	69.4	-0.8	-1.1%
92.6%	70.1	69.4	-0.7	-0.9%
93.8%	69.7	69.4	-0.3	-0.5%
95.1%	69.4	69.3	-0.1	-0.2%
96.3%	69.4	68.9	-0.4	-0.6%
97.5%	68.2	68.7	0.5	0.7%
98.8%	68.1	67.7	-0.5	-0.7%
100.0%	68.1	67.7	-0.5	-0.7%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	88.0	86.3	-1.7	-1.9%
1.2%	86.7	84.3	-2.4	-2.8%
2.5%	85.6	83.4	-2.2	-2.6%
3.7%	85.1	83.4	-1.7	-2.0%
4.9%	83.9	82.4	-1.5	-1.8%
6.2%	82.3	82.3	0.0	0.1%
7.4%	82.1	82.1	0.1	0.1%
8.6%	81.3	80.5	-0.9	-1.1%
9.9%	80.3	79.8	-0.5	-0.6%
11.1%	80.1	78.0	-2.1	-2.6%
12.3%	80.0	77.9	-2.1	-2.6%
13.6%	78.0	77.6	-0.4	-0.6%
14.8%	77.9	77.5	-0.4	-0.5%
16.0%	77.7	77.2	-0.5	-0.7%
17.3%	77.6	77.0	-0.6	-0.8%
18.5%	77.0	76.5	-0.5	-0.6%
19.8%	76.9	76.2	-0.7	-0.9%
21.0%	76.8	76.1	-0.7	-1.0%
22.2%	76.7	75.7	-1.0	-1.3%
23.5%	76.6	75.7	-0.9	-1.2%
24.7%	76.5	75.7	-0.8	-1.0%
25.9%	76.5	75.7	-0.8	-1.1%
27.2%	76.2	75.6	-0.6	-0.8%
28.4%	76.1	75.6	-0.6	-0.7%
29.6%	76.0	75.5	-0.5	-0.6%
30.9%	75.8	75.4	-0.3	-0.5%
32.1%	75.3	75.3	0.0	0.0%
33.3%	75.3	75.3	0.0	0.1%
34.6%	75.2	75.3	0.0	0.1%
35.8%	75.2	75.3	0.0	0.1%
37.0%	75.2	75.3	0.0	0.0%
38.3%	75.1	75.1	0.0	0.0%
39.5%	75.1	75.0	-0.1	-0.1%
40.7%	74.8	74.9	0.1	0.2%
42.0%	74.7	74.8	0.1	0.2%
43.2%	74.7	74.8	0.1	0.2%
44.4%	74.6	74.7	0.1	0.1%
45.7%	74.4	74.4	0.0	0.0%
46.9%	74.3	74.4	0.1	0.1%
48.1%	74.1	74.1	0.0	0.0%
49.4%	73.9	74.0	0.1	0.2%
50.6%	73.7	74.0	0.3	0.4%
51.9%	73.7	73.9	0.3	0.3%
53.1%	73.5	73.9	0.4	0.5%
54.3%	73.4	73.8	0.4	0.6%
55.6%	73.4	73.8	0.4	0.6%
56.8%	73.3	73.6	0.3	0.4%
58.0%	73.2	73.5	0.3	0.4%
59.3%	72.9	73.5	0.6	0.8%
60.5%	72.9	73.1	0.2	0.3%
61.7%	72.8	72.8	0.0	0.0%
63.0%	72.4	72.8	0.4	0.5%
64.2%	72.4	72.8	0.4	0.5%
65.4%	72.4	72.6	0.2	0.3%
66.7%	72.4	72.6	0.2	0.3%
67.9%	72.3	72.5	0.2	0.3%
69.1%	72.1	72.4	0.2	0.3%
70.4%	72.1	72.3	0.1	0.2%
71.6%	72.1	72.2	0.1	0.1%
72.8%	72.0	72.1	0.0	0.1%
74.1%	71.8	72.1	0.2	0.3%
75.3%	71.8	72.0	0.2	0.3%
76.5%	71.6	71.8	0.2	0.3%
77.8%	71.5	71.7	0.2	0.2%
79.0%	71.4	71.3	-0.1	-0.1%
80.2%	71.4	71.3	-0.1	-0.1%
81.5%	71.4	71.3	-0.1	-0.1%
82.7%	71.3	71.2	-0.2	-0.2%
84.0%	71.3	71.0	-0.3	-0.4%
85.2%	71.2	71.0	-0.2	-0.3%
86.4%	71.2	70.9	-0.3	-0.4%
87.7%	71.2	70.9	-0.3	-0.4%
88.9%	71.0	70.6	-0.4	-0.6%
90.1%	71.0	70.5	-0.4	-0.6%
91.4%	70.9	70.5	-0.4	-0.6%
92.6%	70.9	70.3	-0.5	-0.8%
93.8%	70.8	70.3	-0.6	-0.8%
95.1%	70.8	70.1	-0.6	-0.9%
96.3%	70.8	70.1	-0.7	-1.0%
97.5%	70.6	69.7	-0.8	-1.2%
98.8%	70.5	69.6	-0.8	-1.2%
100.0%	70.5	69.6	-0.8	-1.2%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	87.0	83.9	-3.0	-3.5%
1.2%	84.4	83.8	-0.6	-0.7%
2.5%	84.3	83.3	-1.0	-1.2%
3.7%	83.2	82.2	-1.0	-1.2%
4.9%	82.9	81.2	-1.8	-2.2%
6.2%	81.9	80.9	-1.0	-1.2%
7.4%	81.7	80.6	-1.1	-1.3%
8.6%	81.3	79.9	-1.4	-1.7%
9.9%	81.1	79.7	-1.4	-1.8%
11.1%	80.6	79.6	-1.0	-1.3%
12.3%	80.5	79.5	-0.9	-1.2%
13.6%	79.6	79.3	-0.3	-0.4%
14.8%	79.4	79.2	-0.3	-0.3%
16.0%	79.4	79.1	-0.3	-0.4%
17.3%	79.4	79.0	-0.4	-0.5%
18.5%	79.2	78.9	-0.3	-0.4%
19.8%	79.1	78.8	-0.3	-0.4%
21.0%	79.1	78.3	-0.8	-1.0%
22.2%	79.1	78.2	-0.8	-1.1%
23.5%	79.1	77.7	-1.3	-1.7%
24.7%	79.0	77.3	-1.7	-2.1%
25.9%	79.0	77.3	-1.7	-2.2%
27.2%	78.8	77.2	-1.6	-2.0%
28.4%	78.6	76.7	-1.9	-2.4%
29.6%	78.4	76.7	-1.8	-2.2%
30.9%	78.3	76.6	-1.6	-2.1%
32.1%	78.2	76.6	-1.6	-2.0%
33.3%	78.0	76.5	-1.5	-1.9%
34.6%	77.9	76.3	-1.6	-2.0%
35.8%	77.9	76.3	-1.6	-2.0%
37.0%	77.8	76.2	-1.6	-2.0%
38.3%	77.8	75.8	-2.0	-2.5%
39.5%	77.8	75.8	-2.0	-2.6%
40.7%	77.7	75.6	-2.1	-2.7%
42.0%	77.6	75.5	-2.1	-2.7%
43.2%	77.5	75.5	-2.1	-2.6%
44.4%	77.4	75.4	-1.9	-2.5%
45.7%	77.3	75.4	-1.9	-2.5%
46.9%	77.3	75.3	-2.0	-2.5%
48.1%	77.2	75.3	-1.9	-2.5%
49.4%	77.0	75.2	-1.7	-2.3%
50.6%	76.4	75.2	-1.3	-1.6%
51.9%	76.3	75.1	-1.2	-1.6%
53.1%	76.2	75.0	-1.2	-1.6%
54.3%	76.1	75.0	-1.1	-1.4%
55.6%	75.9	74.9	-1.0	-1.4%
56.8%	75.9	74.8	-1.1	-1.4%
58.0%	75.8	74.8	-1.0	-1.4%
59.3%	75.6	74.7	-0.9	-1.2%
60.5%	75.4	74.7	-0.7	-0.9%
61.7%	75.3	74.6	-0.6	-0.8%
63.0%	75.1	74.5	-0.6	-0.8%
64.2%	75.1	74.5	-0.5	-0.7%
65.4%	74.8	74.5	-0.3	-0.4%
66.7%	74.8	74.4	-0.4	-0.5%
67.9%	74.7	74.4	-0.4	-0.5%
69.1%	74.5	74.2	-0.3	-0.4%
70.4%	74.2	74.1	-0.2	-0.2%
71.6%	74.2	74.0	-0.2	-0.3%
72.8%	74.2	74.0	-0.2	-0.3%
74.1%	74.2	74.0	-0.2	-0.3%
75.3%	74.1	73.7	-0.4	-0.5%
76.5%	74.0	73.7	-0.3	-0.5%
77.8%	73.8	73.7	-0.1	-0.2%
79.0%	73.5	73.7	0.1	0.2%
80.2%	73.5	73.6	0.1	0.2%
81.5%	73.2	73.6	0.4	0.5%
82.7%	73.1	73.4	0.3	0.5%
84.0%	72.9	73.3	0.3	0.4%
85.2%	72.8	73.2	0.4	0.6%
86.4%	72.8	73.2	0.4	0.5%
87.7%	72.8	73.1	0.3	0.5%
88.9%	72.6	73.1	0.5	0.6%
90.1%	72.5	73.0	0.5	0.7%
91.4%	72.5	73.0	0.5	0.6%
92.6%	72.2	72.9	0.8	1.1%
93.8%	72.0	72.9	0.9	1.3%
95.1%	71.9	72.8	0.9	1.2%
96.3%	71.2	72.5	1.3	1.8%
97.5%	70.7	72.1	1.4	2.0%
98.8%	70.2	71.7	1.6	2.2%
100.0%	70.2	71.7	1.6	2.2%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	81.9	81.8	-0.1	-0.1%
1.2%	80.3	79.2	-1.1	-1.4%
2.5%	80.2	78.9	-1.3	-1.6%
3.7%	80.0	78.3	-1.6	-2.0%
4.9%	79.9	77.4	-2.5	-3.2%
6.2%	79.9	77.4	-2.6	-3.2%
7.4%	79.1	77.3	-1.8	-2.3%
8.6%	79.1	77.2	-1.9	-2.4%
9.9%	78.9	77.1	-1.8	-2.2%
11.1%	77.6	77.1	-0.5	-0.6%
12.3%	77.4	77.0	-0.4	-0.5%
13.6%	77.0	76.7	-0.3	-0.4%
14.8%	77.0	76.5	-0.4	-0.6%
16.0%	76.9	76.3	-0.6	-0.8%
17.3%	76.8	76.2	-0.6	-0.8%
18.5%	76.8	76.0	-0.8	-1.0%
19.8%	76.7	75.7	-1.0	-1.3%
21.0%	76.6	75.4	-1.3	-1.6%
22.2%	76.4	75.1	-1.3	-1.7%
23.5%	76.4	75.1	-1.3	-1.7%
24.7%	76.2	75.0	-1.2	-1.6%
25.9%	75.9	74.8	-1.1	-1.4%
27.2%	75.9	74.8	-1.1	-1.4%
28.4%	75.4	74.7	-0.7	-0.9%
29.6%	75.4	74.6	-0.8	-1.1%
30.9%	75.3	74.5	-0.8	-1.0%
32.1%	75.2	74.4	-0.8	-1.1%
33.3%	75.2	74.2	-0.9	-1.2%
34.6%	75.2	74.2	-1.0	-1.3%
35.8%	75.1	74.1	-0.9	-1.2%
37.0%	75.0	74.1	-0.8	-1.1%
38.3%	74.9	74.1	-0.7	-1.0%
39.5%	74.8	74.1	-0.7	-1.0%
40.7%	74.6	73.8	-0.8	-1.0%
42.0%	74.4	73.8	-0.6	-0.7%
43.2%	74.2	73.8	-0.4	-0.5%
44.4%	74.2	73.8	-0.4	-0.6%
45.7%	74.1	73.7	-0.5	-0.6%
46.9%	74.1	73.6	-0.5	-0.7%
48.1%	74.0	73.5	-0.5	-0.7%
49.4%	73.9	73.5	-0.5	-0.6%
50.6%	73.9	73.3	-0.7	-0.9%
51.9%	73.9	73.1	-0.8	-1.1%
53.1%	73.7	72.9	-0.8	-1.1%
54.3%	73.7	72.9	-0.8	-1.0%
55.6%	73.6	72.9	-0.8	-1.0%
56.8%	73.6	72.9	-0.8	-1.0%
58.0%	73.4	72.8	-0.7	-0.9%
59.3%	73.3	72.6	-0.7	-0.9%
60.5%	73.2	72.6	-0.5	-0.7%
61.7%	73.1	72.6	-0.5	-0.7%
63.0%	73.0	72.6	-0.4	-0.5%
64.2%	72.9	72.6	-0.3	-0.4%
65.4%	72.8	72.6	-0.2	-0.3%
66.7%	72.8	72.4	-0.3	-0.4%
67.9%	72.7	72.4	-0.3	-0.4%
69.1%	72.7	72.4	-0.3	-0.4%
70.4%	72.6	72.3	-0.4	-0.5%
71.6%	72.5	72.2	-0.2	-0.3%
72.8%	72.5	72.2	-0.2	-0.3%
74.1%	72.4	72.2	-0.2	-0.3%
75.3%	72.4	72.0	-0.3	-0.4%
76.5%	72.3	72.0	-0.3	-0.4%
77.8%	72.3	72.0	-0.3	-0.4%
79.0%	72.2	71.9	-0.3	-0.4%
80.2%	72.1	71.9	-0.3	-0.4%
81.5%	72.0	71.7	-0.3	-0.4%
82.7%	72.0	71.6	-0.4	-0.6%
84.0%	71.8	71.3	-0.5	-0.7%
85.2%	71.7	71.1	-0.6	-0.8%
86.4%	71.6	71.0	-0.5	-0.7%
87.7%	71.3	70.8	-0.5	-0.7%
88.9%	70.9	70.8	-0.1	-0.1%
90.1%	70.9	70.8	-0.1	-0.2%
91.4%	70.9	70.6	-0.3	-0.4%
92.6%	70.5	70.5	0.0	0.0%
93.8%	70.5	70.1	-0.4	-0.6%
95.1%	70.3	69.9	-0.4	-0.6%
96.3%	70.0	69.3	-0.7	-1.0%
97.5%	69.4	69.0	-0.4	-0.6%
98.8%	68.9	68.9	0.0	0.0%
100.0%	68.9	68.9	0.0	0.0%

Table SQ11-1b

American River at the Mouth, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	83.2	83.8	0.6	0.7%
1.2%	82.1	80.4	-1.6	-2.0%
2.5%	81.7	80.4	-1.3	-1.6%
3.7%	81.3	80.3	-1.0	-1.3%
4.9%	80.9	80.2	-0.7	-0.9%
6.2%	80.7	80.0	-0.7	-0.9%
7.4%	80.6	79.8	-0.8	-1.0%
8.6%	78.6	78.9	0.3	0.3%
9.9%	78.5	78.3	-0.2	-0.2%
11.1%	78.4	78.1	-0.3	-0.4%
12.3%	78.1	77.6	-0.5	-0.7%
13.6%	78.0	77.5	-0.5	-0.7%
14.8%	78.0	77.4	-0.6	-0.8%
16.0%	77.9	77.3	-0.6	-0.8%
17.3%	77.5	77.1	-0.4	-0.5%
18.5%	77.1	75.9	-1.2	-1.5%
19.8%	76.9	75.8	-1.1	-1.4%
21.0%	76.8	75.8	-1.1	-1.4%
22.2%	76.7	75.7	-1.0	-1.3%
23.5%	76.7	75.6	-1.1	-1.4%
24.7%	76.3	75.6	-0.7	-1.0%
25.9%	76.2	75.5	-0.7	-0.9%
27.2%	76.0	75.5	-0.5	-0.7%
28.4%	75.9	75.5	-0.5	-0.6%
29.6%	75.7	75.2	-0.5	-0.6%
30.9%	75.7	75.0	-0.6	-0.9%
32.1%	75.6	74.8	-0.8	-1.1%
33.3%	75.4	74.6	-0.8	-1.0%
34.6%	75.3	74.5	-0.8	-1.1%
35.8%	75.3	74.2	-1.0	-1.4%
37.0%	75.3	74.1	-1.1	-1.5%
38.3%	75.2	74.1	-1.1	-1.5%
39.5%	75.2	74.0	-1.2	-1.6%
40.7%	75.0	73.9	-1.1	-1.5%
42.0%	75.0	73.9	-1.0	-1.4%
43.2%	74.9	73.9	-1.0	-1.3%
44.4%	74.9	73.9	-1.0	-1.3%
45.7%	74.8	73.9	-0.9	-1.2%
46.9%	74.7	73.8	-0.9	-1.2%
48.1%	74.6	73.8	-0.9	-1.1%
49.4%	74.6	73.7	-0.8	-1.1%
50.6%	74.5	73.7	-0.9	-1.2%
51.9%	74.4	73.6	-0.8	-1.1%
53.1%	74.2	73.5	-0.7	-0.9%
54.3%	74.1	73.4	-0.7	-0.9%
55.6%	74.0	73.4	-0.6	-0.9%
56.8%	74.0	73.4	-0.6	-0.9%
58.0%	74.0	73.3	-0.6	-0.8%
59.3%	73.9	73.3	-0.6	-0.8%
60.5%	73.9	73.3	-0.6	-0.8%
61.7%	73.9	73.3	-0.6	-0.8%
63.0%	73.8	73.2	-0.7	-0.9%
64.2%	73.7	73.2	-0.6	-0.8%
65.4%	73.7	73.2	-0.6	-0.8%
66.7%	73.6	73.1	-0.5	-0.7%
67.9%	73.6	73.1	-0.4	-0.6%
69.1%	73.5	73.0	-0.5	-0.7%
70.4%	73.5	73.0	-0.4	-0.6%
71.6%	73.3	73.0	-0.3	-0.4%
72.8%	73.3	72.9	-0.3	-0.5%
74.1%	73.2	72.9	-0.3	-0.4%
75.3%	73.2	72.8	-0.3	-0.5%
76.5%	73.1	72.8	-0.3	-0.5%
77.8%	73.1	72.8	-0.3	-0.4%
79.0%	73.0	72.7	-0.3	-0.4%
80.2%	73.0	72.7	-0.3	-0.4%
81.5%	73.0	72.6	-0.3	-0.5%
82.7%	73.0	72.6	-0.3	-0.5%
84.0%	72.9	72.6	-0.2	-0.3%
85.2%	72.8	72.5	-0.3	-0.4%
86.4%	72.7	72.4	-0.3	-0.4%
87.7%	72.6	72.4	-0.2	-0.3%
88.9%	72.6	72.3	-0.3	-0.4%
90.1%	72.5	72.3	-0.2	-0.2%
91.4%	72.5	72.3	-0.2	-0.3%
92.6%	72.3	72.2	-0.1	-0.1%
93.8%	72.2	72.2	0.0	0.0%
95.1%	72.2	72.0	-0.2	-0.3%
96.3%	72.2	71.6	-0.5	-0.7%
97.5%	72.0	71.6	-0.4	-0.5%
98.8%	71.8	71.2	-0.5	-0.7%
100.0%	70.8	70.5	-0.3	-0.4%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	84.2	84.0	-0.3	-0.3%
1.2%	83.5	81.0	-2.5	-3.0%
2.5%	81.8	80.8	-0.9	-1.1%
3.7%	81.6	80.2	-1.4	-1.7%
4.9%	81.1	80.1	-1.0	-1.2%
6.2%	80.4	80.0	-0.5	-0.6%
7.4%	80.0	79.9	-0.1	-0.1%
8.6%	79.3	79.5	0.3	0.3%
9.9%	79.3	79.4	0.1	0.2%
11.1%	79.1	78.7	-0.4	-0.5%
12.3%	79.1	78.1	-1.0	-1.2%
13.6%	79.0	78.0	-1.0	-1.2%
14.8%	78.1	77.9	-0.1	-0.2%
16.0%	77.8	77.9	0.1	0.1%
17.3%	77.6	77.5	-0.1	-0.1%
18.5%	77.5	77.4	-0.1	-0.1%
19.8%	77.1	76.7	-0.4	-0.6%
21.0%	77.1	76.7	-0.4	-0.5%
22.2%	76.8	76.6	-0.2	-0.3%
23.5%	76.7	75.9	-0.8	-1.1%
24.7%	76.7	75.6	-1.1	-1.4%
25.9%	76.6	75.6	-1.0	-1.3%
27.2%	76.5	75.4	-1.1	-1.4%
28.4%	76.4	75.4	-1.0	-1.3%
29.6%	76.1	75.4	-0.7	-0.9%
30.9%	75.7	75.2	-0.5	-0.7%
32.1%	75.7	75.2	-0.5	-0.6%
33.3%	75.6	75.2	-0.5	-0.6%
34.6%	75.6	74.9	-0.7	-0.9%
35.8%	75.5	74.9	-0.6	-0.8%
37.0%	75.5	74.6	-0.9	-1.2%
38.3%	75.4	74.6	-0.9	-1.1%
39.5%	75.4	74.4	-1.0	-1.3%
40.7%	75.2	74.3	-0.9	-1.1%
42.0%	75.1	74.2	-0.9	-1.2%
43.2%	75.1	74.0	-1.1	-1.4%
44.4%	74.9	74.0	-1.0	-1.3%
45.7%	74.9	73.9	-1.0	-1.3%
46.9%	74.4	73.8	-0.6	-0.8%
48.1%	74.4	73.8	-0.6	-0.8%
49.4%	74.3	73.8	-0.5	-0.7%
50.6%	74.3	73.7	-0.5	-0.7%
51.9%	74.2	73.7	-0.5	-0.7%
53.1%	74.2	73.7	-0.5	-0.7%
54.3%	74.2	73.6	-0.6	-0.8%
55.6%	74.2	73.6	-0.6	-0.8%
56.8%	74.1	73.5	-0.7	-0.9%
58.0%	74.1	73.4	-0.7	-0.9%
59.3%	74.1	73.4	-0.7	-0.9%
60.5%	73.9	73.4	-0.5	-0.7%
61.7%	73.8	73.4	-0.4	-0.5%
63.0%	73.7	73.3	-0.4	-0.5%
64.2%	73.7	73.2	-0.5	-0.7%
65.4%	73.7	73.1	-0.6	-0.8%
66.7%	73.5	73.1	-0.4	-0.6%
67.9%	73.5	73.1	-0.5	-0.6%
69.1%	73.5	73.1	-0.5	-0.6%
70.4%	73.5	73.0	-0.5	-0.6%
71.6%	73.5	72.9	-0.6	-0.8%
72.8%	73.5	72.9	-0.6	-0.8%
74.1%	73.4	72.7	-0.7	-0.9%
75.3%	73.3	72.7	-0.6	-0.8%
76.5%	73.2	72.7	-0.5	-0.7%
77.8%	73.2	72.6	-0.5	-0.8%
79.0%	73.1	72.6	-0.4	-0.6%
80.2%	73.0	72.6	-0.4	-0.6%
81.5%	72.9	72.6	-0.3	-0.4%
82.7%	72.9	72.6	-0.3	-0.4%
84.0%	72.8	72.5	-0.3	-0.4%
85.2%	72.7	72.5	-0.2	-0.3%
86.4%	72.7	72.5	-0.2	-0.3%
87.7%	72.6	72.3	-0.3	-0.5%
88.9%	72.6	72.3	-0.3	-0.5%
90.1%	72.5	72.2	-0.3	-0.4%
91.4%	72.4	72.2	-0.2	-0.3%
92.6%	72.4	72.0	-0.4	-0.5%
93.8%	72.3	71.8	-0.5	-0.6%
95.1%	72.3	71.7	-0.6	-0.8%
96.3%	72.2	71.7	-0.5	-0.7%
97.5%	72.0	71.5	-0.6	-0.8%
98.8%	71.5	70.9	-0.6	-0.9%
100.0%	71.0	70.6	-0.4	-0.6%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	83.5	82.8	-0.6	-0.8%
1.2%	82.4	81.6	-0.8	-1.0%
2.5%	82.4	80.8	-1.6	-1.9%
3.7%	82.1	80.0	-2.1	-2.5%
4.9%	81.1	79.7	-1.3	-1.7%
6.2%	80.1	79.0	-1.1	-1.4%
7.4%	80.1	78.9	-1.2	-1.5%
8.6%	79.6	78.3	-1.4	-1.7%
9.9%	79.0	78.3	-0.7	-0.9%
11.1%	79.0	78.2	-0.8	-1.0%
12.3%	78.8	78.1	-0.8	-1.0%
13.6%	78.7	77.9	-0.8	-1.1%
14.8%	78.7	77.8	-0.9	-1.1%
16.0%	78.4	77.5	-0.9	-1.1%
17.3%	78.0	77.4	-0.7	-0.9%
18.5%	77.9	77.2	-0.7	-0.9%
19.8%	77.7	77.1	-0.6	-0.7%
21.0%	77.2	77.1	-0.1	-0.1%
22.2%	77.2	76.8	-0.4	-0.5%
23.5%	77.1	76.2	-0.9	-1.1%
24.7%	77.0	75.7	-1.3	-1.7%
25.9%	77.0	75.7	-1.3	-1.7%
27.2%	76.9	75.5	-1.4	-1.8%
28.4%	76.8	75.5	-1.3	-1.7%
29.6%	76.5	75.3	-1.2	-1.6%
30.9%	76.5	75.3	-1.2	-1.6%
32.1%	76.3	75.2	-1.1	-1.5%
33.3%	76.3	75.2	-1.1	-1.5%
34.6%	76.1	75.0	-1.1	-1.4%
35.8%	76.1	75.0	-1.1	-1.4%
37.0%	76.1	74.9	-1.1	-1.5%
38.3%	75.8	74.8	-1.0	-1.3%
39.5%	75.7	74.7	-1.0	-1.3%
40.7%	75.7	74.7	-1.0	-1.3%
42.0%	75.6	74.7	-0.9	-1.2%
43.2%	75.5	74.5	-1.0	-1.3%
44.4%	75.5	74.4	-1.1	-1.4%
45.7%	75.5	74.4	-1.1	-1.4%
46.9%	75.3	74.4	-1.0	-1.3%
48.1%	75.1	74.3	-0.8	-1.1%
49.4%	75.1	74.3	-0.8	-1.1%
50.6%	75.0	74.2	-0.9	-1.2%
51.9%	75.0	74.1	-0.9	-1.1%
53.1%	75.0	74.1	-0.9	-1.2%
54.3%	74.9	74.0	-0.9	-1.2%
55.6%	74.9	74.0	-0.9	-1.2%
56.8%	74.8	74.0	-0.8	-1.1%
58.0%	74.5	73.8	-0.7	-1.0%
59.3%	74.5	73.8	-0.7	-1.0%
60.5%	74.5	73.8	-0.7	-0.9%
61.7%	74.2	73.7	-0.5	-0.6%
63.0%	74.1	73.7	-0.4	-0.5%
64.2%	73.7	73.6	-0.1	-0.1%
65.4%	73.7	73.5	-0.2	-0.2%
66.7%	73.6	73.3	-0.3	-0.4%
67.9%	73.6	73.3	-0.3	-0.4%
69.1%	73.5	73.1	-0.4	-0.5%
70.4%	73.4	73.0	-0.4	-0.5%
71.6%	73.3	73.0	-0.4	-0.5%
72.8%	73.3	72.9	-0.4	-0.6%
74.1%	73.2	72.9	-0.3	-0.4%
75.3%	73.1	72.8	-0.3	-0.4%
76.5%	73.1	72.7	-0.4	-0.5%
77.8%	73.0	72.7	-0.3	-0.5%
79.0%	73.0	72.7	-0.3	-0.4%
80.2%	72.9	72.7	-0.3	-0.4%
81.5%	72.9	72.6	-0.3	-0.4%
82.7%	72.9	72.6	-0.3	-0.4%
84.0%	72.8	72.5	-0.3	-0.5%
85.2%	72.8	72.5	-0.4	-0.5%
86.4%	72.7	72.3	-0.4	-0.5%
87.7%	72.6	72.3	-0.3	-0.5%
88.9%	72.6	72.3	-0.3	-0.5%
90.1%	72.6	72.3	-0.3	-0.5%
91.4%	72.4	72.2	-0.3	-0.4%
92.6%	72.4	72.2	-0.3	-0.3%
93.8%	72.0	72.1	0.1	0.2%
95.1%	71.9	71.9	0.0	-0.1%
96.3%	71.6	71.3	-0.3	-0.4%
97.5%	71.5	71.3	-0.3	-0.4%
98.8%	71.0	71.1	0.0	0.0%
100.0%	70.8	70.9	0.1	0.1%

Figure SQ12-1b
Trinity River below Lewiston Dam, Monthly Temperature
Probability of Exceedance

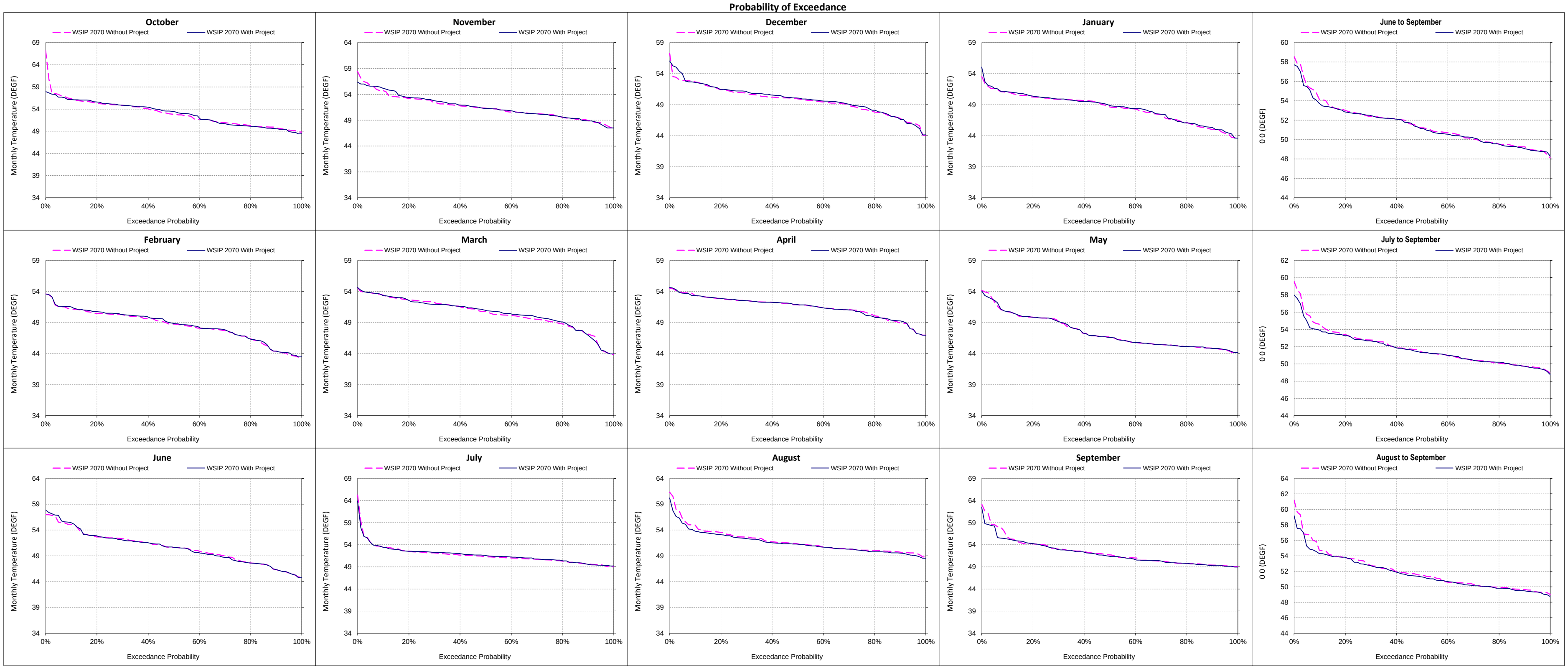


Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	67.2	58.0	-9.2	-13.7%
1.2%	60.8	57.7	-3.1	-5.1%
2.5%	57.5	57.4	-0.2	-0.3%
3.7%	57.5	57.3	-0.2	-0.4%
4.9%	57.3	56.7	-0.6	-1.0%
6.2%	57.0	56.7	-0.3	-0.5%
7.4%	56.8	56.6	-0.3	-0.5%
8.6%	56.5	56.1	-0.3	-0.6%
9.9%	56.4	56.1	-0.2	-0.4%
11.1%	56.0	56.1	0.1	0.2%
12.3%	55.9	56.1	0.2	0.3%
13.6%	55.8	56.1	0.2	0.4%
14.8%	55.8	56.0	0.3	0.5%
16.0%	55.8	56.0	0.3	0.5%
17.3%	55.6	56.0	0.3	0.6%
18.5%	55.5	55.7	0.2	0.4%
19.8%	55.3	55.6	0.3	0.5%
21.0%	55.2	55.6	0.3	0.6%
22.2%	55.2	55.3	0.2	0.3%
23.5%	55.1	55.3	0.2	0.3%
24.7%	55.1	55.2	0.1	0.3%
25.9%	55.0	55.1	0.1	0.2%
27.2%	55.0	55.1	0.1	0.3%
28.4%	55.0	54.9	0.0	-0.1%
29.6%	54.9	54.9	0.0	0.0%
30.9%	54.8	54.8	0.0	0.0%
32.1%	54.8	54.8	0.0	0.0%
33.3%	54.5	54.7	0.1	0.3%
34.6%	54.5	54.6	0.1	0.2%
35.8%	54.5	54.5	0.0	0.0%
37.0%	54.5	54.5	0.0	0.0%
38.3%	54.2	54.5	0.3	0.6%
39.5%	54.2	54.5	0.3	0.6%
40.7%	53.9	54.3	0.4	0.8%
42.0%	53.8	54.1	0.3	0.6%
43.2%	53.7	54.0	0.3	0.6%
44.4%	53.4	53.9	0.5	1.0%
45.7%	53.2	53.6	0.4	0.7%
46.9%	53.1	53.6	0.4	0.8%
48.1%	52.9	53.6	0.6	1.2%
49.4%	52.9	53.5	0.6	1.2%
50.6%	52.8	53.4	0.5	1.0%
51.9%	52.7	53.1	0.4	0.8%
53.1%	52.7	53.0	0.3	0.6%
54.3%	52.5	53.0	0.5	1.0%
55.6%	52.5	53.0	0.5	0.9%
56.8%	52.4	52.9	0.5	0.9%
58.0%	51.8	52.5	0.8	1.5%
59.3%	51.7	52.5	0.8	1.5%
60.5%	51.7	51.7	0.0	-0.1%
61.7%	51.7	51.6	0.0	-0.1%
63.0%	51.7	51.6	-0.1	-0.1%
64.2%	51.5	51.5	0.0	0.0%
65.4%	51.2	51.3	0.1	0.1%
66.7%	51.2	51.1	-0.1	-0.3%
67.9%	51.0	50.8	-0.2	-0.4%
69.1%	50.9	50.8	-0.1	-0.3%
70.4%	50.9	50.7	-0.3	-0.5%
71.6%	50.8	50.4	-0.4	-0.7%
72.8%	50.7	50.4	-0.3	-0.7%
74.1%	50.7	50.4	-0.3	-0.6%
75.3%	50.6	50.3	-0.3	-0.6%
76.5%	50.5	50.3	-0.2	-0.5%
77.8%	50.5	50.2	-0.2	-0.5%
79.0%	50.4	50.2	-0.2	-0.3%
80.2%	50.3	50.1	-0.2	-0.3%
81.5%	50.1	50.1	0.0	-0.1%
82.7%	50.1	50.0	-0.1	-0.1%
84.0%	50.0	49.9	-0.1	-0.2%
85.2%	50.0	49.9	-0.1	-0.3%
86.4%	50.0	49.7	-0.3	-0.5%
87.7%	50.0	49.7	-0.3	-0.5%
88.9%	49.9	49.6	-0.3	-0.6%
90.1%	49.7	49.5	-0.2	-0.3%
91.4%	49.6	49.5	-0.1	-0.3%
92.6%	49.5	49.5	-0.1	-0.1%
93.8%	49.3	49.4	0.2	0.4%
95.1%	49.3	48.9	-0.3	-0.7%
96.3%	49.2	48.8	-0.4	-0.8%
97.5%	49.1	48.7	-0.4	-0.8%
98.8%	48.8	48.4	-0.4	-0.8%
100.0%	48.8	48.4	0.0	-0.8%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.4	56.4	-2.0	-3.5%
1.2%	57.2	56.0	-1.2	-2.1%
2.5%	56.5	56.0	-0.5	-0.8%
3.7%	56.2	55.7	-0.5	-1.0%
4.9%	55.7	55.6	-0.1	-0.2%
6.2%	55.5	55.6	0.1	0.1%
7.4%	54.9	55.5	0.6	1.1%
8.6%	54.7	55.4	0.7	1.2%
9.9%	54.7	55.2	0.5	0.8%
11.1%	54.5	55.0	0.5	1.0%
12.3%	53.6	54.8	1.2	2.3%
13.6%	53.6	54.8	1.2	2.2%
14.8%	53.6	54.6	1.1	2.0%
16.0%	53.5	53.8	0.3	0.5%
17.3%	53.4	53.7	0.3	0.6%
18.5%	53.4	53.5	0.1	0.2%
19.8%	53.2	53.4	0.2	0.4%
21.0%	53.2	53.3	0.2	0.3%
22.2%	53.1	53.3	0.2	0.3%
23.5%	53.1	53.3	0.2	0.4%
24.7%	53.1	53.2	0.2	0.4%
25.9%	53.0	53.2	0.2	0.4%
27.2%	52.9	53.0	0.1	0.2%
28.4%	52.9	53.0	0.1	0.1%
29.6%	52.4	52.8	0.4	0.8%
30.9%	52.3	52.7	0.4	0.7%
32.1%	52.1	52.6	0.5	0.9%
33.3%	52.1	52.5	0.4	0.7%
34.6%	52.1	52.4	0.3	0.5%
35.8%	52.0	52.2	0.2	0.4%
37.0%	52.0	52.2	0.2	0.4%
38.3%	51.9	52.2	0.3	0.5%
39.5%	51.8	52.0	0.1	0.3%
40.7%	51.7	51.9	0.2	0.4%
42.0%	51.7	51.9	0.2	0.3%
43.2%	51.7	51.8	0.1	0.2%
44.4%	51.7	51.6	-0.1	-0.1%
45.7%	51.5	51.6	0.1	0.2%
46.9%	51.4	51.5	0.1	0.3%
48.1%	51.4	51.4	0.0	0.1%
49.4%	51.3	51.3	0.0	-0.1%
50.6%	51.3	51.3	0.0	0.0%
51.9%	51.3	51.2	-0.1	-0.1%
53.1%	51.2	51.2	0.0	-0.1%
54.3%	51.2	51.2	0.0	0.0%
55.6%	51.1	51.0	-0.1	-0.1%
56.8%	51.0	51.0	0.0	-0.1%
58.0%	50.7	50.9	0.3	0.5%
59.3%	50.6	50.9	0.3	0.5%
60.5%	50.6	50.8	0.2	0.4%
61.7%	50.6	50.6	0.0	0.0%
63.0%	50.5	50.6	0.1	0.1%
64.2%	50.5	50.5	0.0	0.1%
65.4%	50.5	50.3	-0.1	-0.2%
66.7%	50.3	50.3	0.0	0.0%
67.9%	50.3	50.3	0.0	0.0%
69.1%	50.3	50.2	0.0	-0.1%
70.4%	50.2	50.2	0.0	0.0%
71.6%	50.2	50.1	-0.1	-0.1%
72.8%	50.2	50.1	0.0	-0.1%
74.1%	50.1	50.1	0.0	0.0%
75.3%	50.1	49.9	-0.2	-0.3%
76.5%	50.0	49.9	-0.1	-0.3%
77.8%	49.7	49.8	0.2	0.3%
79.0%	49.7	49.7	0.0	0.0%
80.2%	49.5	49.6	0.0	0.1%
81.5%	49.4	49.5	0.1	0.1%
82.7%	49.4	49.4	0.0	0.1%
84.0%	49.4	49.3	0.0	0.0%
85.2%	49.2	49.3	0.1	0.2%
86.4%	49.2	49.3	0.1	0.3%
87.7%	49.2	48.9	-0.2	-0.4%
88.9%	49.1	48.9	-0.2	-0.5%
90.1%	48.9	48.9	-0.1	-0.1%
91.4%	48.9	48.8	0.0	-0.1%
92.6%	48.6	48.7	0.1	0.2%
93.8%	48.5	48.6	0.0	0.0%
95.1%	48.5	48.2	-0.3	-0.7%
96.3%	48.2	47.8	-0.4	-0.9%
97.5%	47.9	47.5	-0.4	-0.8%
98.8%	47.6	47.5	-0.1	-0.2%
100.0%	47.6	47.5	-0.1	-0.2%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.3	56.1	-1.2	-2.1%
1.2%	53.5	55.3	1.7	3.2%
2.5%	53.4	55.1	1.6	3.1%
3.7%	53.0	54.4	1.4	2.6%
4.9%	52.9	54.0	1.1	2.0%
6.2%	52.9	52.8	-0.1	-0.2%
7.4%	52.8	52.7	-0.2	-0.4%
8.6%	52.8	52.7	-0.2	-0.3%
9.9%	52.7	52.6	-0.1	-0.1%
11.1%	52.6	52.5	-0.1	-0.2%
12.3%	52.4	52.4	0.0	0.0%
13.6%	52.2	52.3	0.1	0.3%
14.8%	52.0	52.2	0.2	0.3%
16.0%	52.0	51.9	-0.1	-0.1%
17.3%	51.9	51.9	-0.1	-0.1%
18.5%	51.6	51.7	0.1	0.2%
19.8%	51.4	51.5	0.0	0.1%
21.0%	51.4	51.5	0.0	0.1%
22.2%	51.3	51.4	0.1	0.3%
23.5%	51.2	51.3	0.1	0.3%
24.7%	51.0	51.3	0.2	0.4%
25.9%	51.0	51.2	0.2	0.5%
27.2%	50.9	51.2	0.3	0.5%
28.4%	50.9	51.2	0.3	0.5%
29.6%	50.9	51.2	0.3	0.5%
30.9%	50.7	51.0	0.3	0.5%
32.1%	50.6	50.8	0.2	0.3%
33.3%	50.6	50.8	0.2	0.4%
34.6%	50.5	50.8	0.3	0.6%
35.8%	50.3	50.8	0.4	0.9%
37.0%	50.3	50.7	0.4	0.7%
38.3%	50.3	50.7	0.4	0.9%
39.5%	50.2	50.6	0.3	0.7%
40.7%	50.2	50.5	0.3	0.6%
42.0%	50.1	50.5	0.3	0.7%
43.2%	50.1	50.5	0.4	0.7%
44.4%	50.1	50.3	0.2	0.4%
45.7%	50.1	50.2	0.1	0.1%
46.9%	50.1	50.2	0.1	0.2%
48.1%	50.1	50.1	0.0	0.1%
49.4%	50.0	50.1	0.1	0.2%
50.6%	49.9	50.1	0.2	0.3%
51.9%	49.8	49.9	0.1	0.2%
53.1%	49.8	49.9	0.1	0.3%
54.3%	49.7	49.9	0.2	0.4%
55.6%	49.6	49.8	0.1	0.2%
56.8%	49.6	49.7	0.2	0.4%
58.0%	49.5	49.7	0.2	0.3%
59.3%	49.5	49.6	0.1	0.3%
60.5%	49.4	49.6	0.1	0.3%
61.7%	49.4	49.6	0.2	0.4%
63.0%	49.3	49.5	0.3	0.6%
64.2%	49.3	49.5	0.3	0.6%
65.4%	49.2	49.4	0.2	0.4%
66.7%	49.2	49.3	0.2	0.4%
67.9%	49.1	49.2	0.1	0.2%
69.1%	49.1	49.1	0.0	0.0%
70.4%	48.8	49.1	0.2	0.5%
71.6%	48.7	48.9	0.2	0.4%
72.8%	48.6	48.8	0.2	0.5%
74.1%	48.3	48.8	0.4	0.9%
75.3%	48.2	48.7	0.5	1.0%
76.5%	48.2	48.6	0.4	0.8%
77.8%	48.1	48.4	0.3	0.6%
79.0%	47.9	48.1	0.2	0.4%
80.2%	47.8	48.1	0.3	0.7%
81.5%	47.8	47.9	0.1	0.2%
82.7%	47.7	47.8	0.1	0.3%
84.0%	47.6	47.6	0.1	0.1%
85.2%	47.3	47.5	0.2	0.3%
86.4%	47.2	47.1	-0.1	-0.2%
87.7%	47.1	47.1	0.0	0.0%
88.9%	47.0	46.9	0.0	-0.1%
90.1%	46.8	46.6	-0.1	-0.3%
91.4%	46.4	46.6	0.2	0.3%
92.6%	46.2	46.0	-0.2	-0.4%
93.8%	46.1	46.0	-0.1	-0.2%
95.1%	46.0	45.9	-0.1	-0.3%
96.3%	45.9	45.5	-0.3	-0.8%
97.5%	45.6	45.1	-0.5	-1.0%
98.8%	44.1	44.1	0.0	0.1%
100.0%	44.1	44.1	0.0	0.1%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.5	55.1	1.5	2.9%
1.2%	52.4	52.7	0.3	0.6%
2.5%	52.0	52.1	0.1	0.2%
3.7%	51.6	52.0	0.4	0.8%
4.9%	51.6	51.6	0.1	0.1%
6.2%	51.4	51.6	0.1	0.2%
7.4%	51.1	51.2	0.1	0.2%
8.6%	51.1	51.2	0.1	0.2%
9.9%	51.0	51.1	0.1	0.2%
11.1%	50.9	51.0	0.1	0.2%
12.3%	50.7	50.9	0.2	0.4%
13.6%	50.6	50.9	0.2	0.5%
14.8%	50.5	50.8	0.3	0.5%
16.0%	50.5	50.8	0.3	0.5%
17.3%	50.5	50.6	0.2	0.3%
18.5%	50.3	50.5	0.2	0.3%
19.8%	50.2	50.4	0.1	0.3%
21.0%	50.2	50.3	0.1	0.1%
22.2%	50.2	50.3	0.1	0.1%
23.5%	50.2	50.2	0.0	-0.1%
24.7%	50.1	50.1	0.1	0.2%
25.9%	50.1	50.1	0.1	0.1%
27.2%	49.9	50.1	0.1	0.2%
28.4%	49.9	50.0	0.0	0.1%
29.6%	49.9	49.9	0.1	0.1%
30.9%	49.9	49.9	0.0	0.1%
32.1%	49.8	49.9	0.1	0.1%
33.3%	49.8	49.8	0.0	-0.1%
34.6%	49.8	49.8	0.0	-0.1%
35.8%	49.7	49.7	0.0	-0.1%
37.0%	49.7	49.6	-0.1	-0.2%
38.3%	49.7	49.5	-0.2	-0.3%
39.5%	49.7	49.5	-0.1	-0.3%
40.7%	49.7	49.5	-0.1	-0.3%
42.0%	49.6	49.5	-0.1	-0.2%
43.2%	49.6	49.4	-0.1	-0.3%
44.4%	49.5	49.4	0.0	-0.1%
45.7%	49.3	49.3	0.0	0.0%
46.9%	49.0	49.2	0.2	0.5%
48.1%	48.9	49.1	0.2	0.4%
49.4%	48.7	49.0	0.3	0.5%
50.6%	48.6	48.8	0.2	0.4%
51.9%	48.6	48.8	0.2	0.4%
53.1%	48.6	48.8	0.2	0.4%
54.3%	48.5	48.7	0.1	0.3%
55.6%	48.4	48.6	0.2	0.5%
56.8%	48.4	48.5	0.2	0.4%
58.0%	48.4	48.4	0.1	0.1%
59.3%	48.3	48.4	0.1	0.1%
60.5%	48.3	48.4	0.1	0.2%
61.7%	48.0	48.4	0.4	0.8%
63.0%	47.9	48.3	0.4	0.7%
64.2%	47.8	48.1	0.4	0.7%
65.4%	47.8	48.0	0.2	0.4%
66.7%	47.5	47.8	0.3	0.6%
67.9%	47.5	47.5	0.0	0.0%
69.1%	47.4	47.5	0.1	0.1%
70.4%	47.4	47.4	0.0	0.1%
71.6%	46.8	47.4	0.6	1.2%
72.8%	46.7	46.8	0.1	0.2%
74.1%	46.7	46.7	0.0	0.1%
75.3%	46.6	46.6	-0.1	-0.2%
76.5%	46.5	46.3	-0.2	-0.5%
77.8%	46.3	46.3	0.0	-0.1%
79.0%	46.1	46.1	0.0	-0.1%
80.2%	46.1	46.1	0.0	-0.1%
81.5%	45.9	46.0	0.1	0.2%
82.7%	45.8	46.0	0.2	0.4%
84.0%	45.6	45.8	0.3	0.6%
85.2%	45.4	45.6	0.2	0.4%
86.4%	45.3	45.6	0.2	0.5%
87.7%	45.2	45.4	0.3	0.6%
88.9%	45.1	45.4	0.3	0.6%
90.1%	45.0	45.3	0.3	0.7%
91.4%	45.0	45.0	0.0	0.0%
92.6%	44.9	45.0	0.0	0.1%
93.8%	44.6	44.9	0.4	0.8%
95.1%	44.4	44.6	0.2	0.5%
96.3%	44.3	44.4	0.1	0.3%
97.5%	43.7	44.3	0.6	1.3%
98.8%	43.7	43.6	0.0	-0.1%
100.0%	43.7	43.6	0.0	-0.1%

Table SQ12-1b
Trinity River below Lewiston Dam, Monthly Temperature
Probability of Exceedance

February				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.6	53.6	0.0	0.0%
1.2%	53.5	53.5	0.1	0.1%
2.5%	53.1	53.1	0.0	0.1%
3.7%	51.8	51.9	0.1	0.1%
4.9%	51.6	51.6	0.1	0.1%
6.2%	51.6	51.6	0.1	0.1%
7.4%	51.5	51.6	0.1	0.1%
8.6%	51.3	51.6	0.3	0.6%
9.9%	51.2	51.6	0.4	0.8%
11.1%	51.1	51.3	0.1	0.2%
12.3%	51.1	51.2	0.1	0.1%
13.6%	51.0	51.1	0.1	0.2%
14.8%	51.0	51.0	0.0	0.0%
16.0%	50.8	51.0	0.2	0.5%
17.3%	50.7	50.9	0.2	0.5%
18.5%	50.5	50.8	0.3	0.5%
19.8%	50.5	50.7	0.3	0.5%
21.0%	50.5	50.7	0.3	0.5%
22.2%	50.5	50.7	0.2	0.4%
23.5%	50.4	50.5	0.1	0.2%
24.7%	50.4	50.5	0.1	0.3%
25.9%	50.3	50.5	0.2	0.3%
27.2%	50.3	50.4	0.1	0.2%
28.4%	50.3	50.4	0.1	0.2%
29.6%	50.3	50.3	0.0	0.0%
30.9%	50.2	50.3	0.1	0.1%
32.1%	50.1	50.2	0.1	0.3%
33.3%	50.0	50.2	0.2	0.3%
34.6%	50.0	50.1	0.1	0.2%
35.8%	50.0	50.1	0.0	0.1%
37.0%	49.9	50.0	0.1	0.2%
38.3%	49.7	50.0	0.4	0.7%
39.5%	49.7	50.0	0.3	0.7%
40.7%	49.6	49.7	0.1	0.2%
42.0%	49.6	49.7	0.1	0.2%
43.2%	49.3	49.6	0.3	0.7%
44.4%	49.2	49.6	0.4	0.8%
45.7%	49.2	49.6	0.4	0.9%
46.9%	49.0	49.2	0.2	0.4%
48.1%	48.8	49.0	0.2	0.5%
49.4%	48.8	48.9	0.2	0.3%
50.6%	48.8	48.8	0.1	0.1%
51.9%	48.7	48.8	0.1	0.3%
53.1%	48.6	48.6	0.0	0.1%
54.3%	48.5	48.6	0.1	0.2%
55.6%	48.4	48.6	0.2	0.4%
56.8%	48.4	48.6	0.2	0.4%
58.0%	48.3	48.5	0.2	0.3%
59.3%	48.1	48.4	0.3	0.6%
60.5%	48.1	48.1	0.0	0.1%
61.7%	48.1	48.1	0.0	0.0%
63.0%	48.1	48.1	0.0	0.0%
64.2%	48.0	48.0	0.0	0.0%
65.4%	47.9	48.0	0.1	0.1%
66.7%	47.9	48.0	0.1	0.2%
67.9%	47.8	48.0	0.1	0.2%
69.1%	47.7	47.9	0.2	0.3%
70.4%	47.7	47.8	0.1	0.2%
71.6%	47.5	47.5	0.1	0.1%
72.8%	47.4	47.4	0.0	0.0%
74.1%	47.1	47.0	0.0	-0.1%
75.3%	46.9	46.9	0.0	0.0%
76.5%	46.8	46.8	0.0	0.0%
77.8%	46.8	46.8	0.0	0.0%
79.0%	46.6	46.5	-0.2	-0.3%
80.2%	46.3	46.3	0.0	-0.1%
81.5%	46.1	46.2	0.1	0.2%
82.7%	46.1	46.1	0.0	0.1%
84.0%	45.8	46.1	0.2	0.5%
85.2%	45.5	45.8	0.4	0.9%
86.4%	45.3	45.5	0.2	0.4%
87.7%	44.7	44.7	0.0	0.0%
88.9%	44.4	44.4	0.0	0.1%
90.1%	44.4	44.4	0.0	0.0%
91.4%	44.2	44.3	0.0	0.1%
92.6%	44.1	44.2	0.1	0.1%
93.8%	44.1	44.2	0.1	0.2%
95.1%	43.7	44.1	0.4	0.9%
96.3%	43.7	43.8	0.1	0.2%
97.5%	43.6	43.7	0.1	0.3%
98.8%	43.4	43.5	0.1	0.2%
100.0%	43.4	43.5	0.1	0.2%

March				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.6	54.7	0.0	0.1%
1.2%	54.0	54.2	0.2	0.4%
2.5%	53.9	54.0	0.0	0.1%
3.7%	53.9	53.9	0.0	0.0%
4.9%	53.8	53.8	0.0	0.0%
6.2%	53.7	53.7	0.0	0.0%
7.4%	53.6	53.7	0.1	0.2%
8.6%	53.6	53.6	0.0	0.0%
9.9%	53.4	53.4	-0.1	-0.1%
11.1%	53.2	53.3	0.1	0.2%
12.3%	53.1	53.2	0.2	0.3%
13.6%	53.1	53.1	0.1	0.1%
14.8%	52.9	53.0	0.1	0.2%
16.0%	52.9	53.0	0.1	0.2%
17.3%	52.8	53.0	0.2	0.3%
18.5%	52.7	52.9	0.2	0.3%
19.8%	52.7	52.6	-0.1	-0.2%
21.0%	52.6	52.3	-0.3	-0.5%
22.2%	52.6	52.3	-0.2	-0.5%
23.5%	52.6	52.3	-0.2	-0.4%
24.7%	52.4	52.2	-0.2	-0.4%
25.9%	52.4	52.1	-0.2	-0.5%
27.2%	52.4	52.0	-0.3	-0.7%
28.4%	52.3	52.0	-0.4	-0.7%
29.6%	52.3	51.9	-0.4	-0.8%
30.9%	52.0	51.9	-0.1	-0.2%
32.1%	52.0	51.9	-0.1	-0.2%
33.3%	52.0	51.9	-0.1	-0.2%
34.6%	51.9	51.9	-0.1	-0.1%
35.8%	51.8	51.8	0.0	0.0%
37.0%	51.7	51.7	0.0	0.0%
38.3%	51.6	51.7	0.0	0.0%
39.5%	51.6	51.6	0.0	0.0%
40.7%	51.4	51.6	0.2	0.3%
42.0%	51.4	51.5	0.1	0.3%
43.2%	51.3	51.4	0.1	0.2%
44.4%	51.2	51.4	0.2	0.4%
45.7%	51.2	51.3	0.1	0.2%
46.9%	50.9	51.2	0.3	0.5%
48.1%	50.8	51.1	0.3	0.7%
49.4%	50.8	51.0	0.2	0.5%
50.6%	50.8	50.9	0.1	0.2%
51.9%	50.5	50.8	0.4	0.7%
53.1%	50.3	50.8	0.5	1.0%
54.3%	50.3	50.8	0.5	1.0%
55.6%	50.3	50.7	0.5	0.9%
56.8%	50.2	50.5	0.3	0.6%
58.0%	50.2	50.4	0.3	0.5%
59.3%	50.2	50.4	0.3	0.6%
60.5%	50.1	50.3	0.2	0.5%
61.7%	50.1	50.3	0.3	0.5%
63.0%	50.0	50.3	0.3	0.6%
64.2%	49.9	50.2	0.4	0.7%
65.4%	49.8	50.2	0.4	0.8%
66.7%	49.7	50.2	0.5	0.9%
67.9%	49.6	50.1	0.5	1.0%
69.1%	49.6	50.0	0.4	0.9%
70.4%	49.5	49.9	0.4	0.7%
71.6%	49.5	49.8	0.3	0.7%
72.8%	49.4	49.7	0.3	0.6%
74.1%	49.2	49.6	0.4	0.8%
75.3%	49.1	49.5	0.4	0.8%
76.5%	49.1	49.4	0.3	0.6%
77.8%	49.0	49.3	0.3	0.6%
79.0%	48.8	49.1	0.3	0.6%
80.2%	48.8	49.1	0.3	0.6%
81.5%	48.6	48.8	0.3	0.6%
82.7%	48.4	48.5	0.2	0.4%
84.0%	48.2	48.4	0.1	0.2%
85.2%	47.9	47.8	-0.1	-0.3%
86.4%	47.8	47.7	0.0	-0.1%
87.7%	47.7	47.7	0.0	0.0%
88.9%	47.2	47.3	0.0	0.1%
90.1%	47.1	46.9	-0.2	-0.4%
91.4%	46.9	46.5	-0.4	-0.9%
92.6%	46.8	46.1	-0.7	-1.5%
93.8%	45.4	45.5	0.0	0.1%
95.1%	44.6	44.6	0.0	-0.1%
96.3%	44.3	44.4	0.1	0.2%
97.5%	44.1	44.1	0.0	-0.1%
98.8%	43.9	43.9	0.1	0.2%
100.0%	43.9	43.9	0.1	0.2%

April				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.5	54.6	0.1	0.1%
1.2%	54.4	54.5	0.1	0.2%
2.5%	54.2	54.3	0.2	0.3%
3.7%	54.0	53.8	-0.1	-0.3%
4.9%	53.8	53.7	-0.1	-0.2%
6.2%	53.8	53.7	-0.1	-0.2%
7.4%	53.7	53.6	-0.1	-0.2%
8.6%	53.7	53.4	-0.4	-0.7%
9.9%	53.4	53.3	0.0	-0.1%
11.1%	53.3	53.3	0.0	0.1%
12.3%	53.2	53.2	0.1	0.1%
13.6%	53.1	53.1	0.0	0.0%
14.8%	53.1	53.1	0.0	0.1%
16.0%	53.0	53.1	0.0	0.0%
17.3%	53.0	53.0	0.0	0.1%
18.5%	52.9	52.9	0.0	0.0%
19.8%	52.9	52.9	0.0	0.1%
21.0%	52.7	52.8	0.1	0.2%
22.2%	52.7	52.8	0.1	0.1%
23.5%	52.7	52.8	0.1	0.1%
24.7%	52.7	52.7	0.1	0.1%
25.9%	52.6	52.7	0.1	0.2%
27.2%	52.6	52.6	0.0	0.0%
28.4%	52.6	52.6	0.0	0.0%
29.6%	52.6	52.5	0.0	0.0%
30.9%	52.5	52.5	0.0	0.0%
32.1%	52.4	52.4	0.0	0.0%
33.3%	52.4	52.4	0.0	0.0%
34.6%	52.3	52.3	0.0	0.0%
35.8%	52.3	52.3	0.0	-0.1%
37.0%	52.3	52.3	0.0	-0.1%
38.3%	52.3	52.3	0.0	0.0%
39.5%	52.3	52.3	0.0	0.0%
40.7%	52.2	52.2	0.0	0.0%
42.0%	52.2	52.2	0.1	0.1%
43.2%	52.2	52.2	0.0	0.0%
44.4%	52.1	52.2	0.1	0.1%
45.7%	52.1	52.1	0.1	0.1%
46.9%	52.0	52.1	0.1	0.1%
48.1%	51.9	52.0	0.1	0.2%
49.4%	51.9	51.9	0.0	0.1%
50.6%	51.8	51.9	0.0	0.0%
51.9%	51.8	51.8	0.0	0.0%
53.1%	51.8	51.8	0.0	0.0%
54.3%	51.7	51.8	0.0	0.1%
55.6%	51.6	51.7	0.0	0.0%
56.8%	51.6	51.6	0.0	0.0%
58.0%	51.5	51.5	0.0	0.0%
59.3%	51.4	51.4	0.0	0.0%
60.5%	51.3	51.3	0.0	-0.1%
61.7%	51.3	51.3	0.0	0.0%
63.0%	51.3	51.2	0.0	-0.1%
64.2%	51.2	51.2	-0.1	-0.2%
65.4%	51.1	51.2	0.0	0.0%
66.7%	51.1	51.1	0.0	0.0%
67.9%	51.1	51.1	0.0	0.0%
69.1%	51.1	51.0	0.0	-0.1%
70.4%	51.1	51.0	0.0	-0.1%
71.6%	51.0	51.0	0.0	0.0%
72.8%	51.0	50.8	-0.2	-0.4%
74.1%	50.9	50.7	-0.1	-0.3%
75.3%	50.8	50.5	-0.2	-0.5%
76.5%	50.7	50.1	-0.5	-1.0%
77.8%	50.4	50.1	-0.3	-0.6%
79.0%	50.3	50.0	-0.2	-0.5%
80.2%	50.1	49.8	-0.2	-0.4%
81.5%	50.0	49.8	-0.2	-0.4%
82.7%	49.7	49.7	0.0	0.0%
84.0%	49.7	49.6	-0.1	-0.1%
85.2%	49.3	49.6	0.2	0.5%
86.4%	49.3	49.4	0.1	0.2%
87.7%	49.3	49.3	0.1	0.1%
88.9%	49.1	49.3	0.2	0.4%
90.1%	48.9	49.2	0.3	0.7%
91.4%	48.9	49.1	0.2	0.5%
92.6%	48.9	48.9	0.0	0.0%
93.8%	48.0	48.0	0.0	0.0%
95.1%	47.9	47.9	0.0	-0.1%
96.3%	47.2	47.2	0.0	0.0%
97.5%	47.1	47.1	0.0	0.0%
98.8%	47.0	46.9	0.0	0.0%
100.0%	47.0	46.9	0.0	0.0%

May				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	54.2	54.1	-0.1	-0.2%
1.2%	53.9	53.3	-0.6	-1.1%
2.5%	53.8	53.1	-0.7	-1.3%
3.7%	53.1	52.8	-0.3	-0.6%
4.9%	52.3	52.6	0.2	0.4%
6.2%	51.6	52.2	0.6	1.1%
7.4%	51.1	51.2	0.1	0.2%
8.6%	51.0	50.9	-0.1	-0.1%
9.9%	50.7	50.8	0.0	0.1%
11.1%	50.7	50.7	0.0	0.1%
12.3%	50.5	50.5	0.0	0.0%
13.6%	50.2	50.3	0.1	0.2%
14.8%	50.0	50.1	0.1	0.3%
16.0%	49.9	50.0	0.0	0.1%
17.3%	49.9	50.0	0.0	0.1%
18.5%	49.9	49.9	0.0	0.1%
19.8%	49.9	49.9	0.0	0.0%
21.0%	49.8	49.9	0.1	0.1%
22.2%	49.7	49.8	0.0	0.0%
23.5%	49.7	49.7	0.0	0.0%
24.7%	49.7	49.7	0.0	0.0%
25.9%	49.7	49.7	0.0	0.1%
27.2%	49.6	49.7	0.0	0.1%
28.4%	49.6	49.4	-0.2	-0.4%
29.6%	49.3	49.2	-0.1	-0.3%
30.9%	48.9	49.0	0.1	0.2%
32.1%	48.8	48.9	0.1	0.2%
33.3%	48.4	48.7	0.3	0.7%
34.6%	48.3	48.3	0.0	0.0%
35.8%	48.1	48.1	0.0	0.0%
37.0%	48.0	48.0	-0.1	-0.1%
38.3%	47.8	47.8	0.0	0.0%
39.5%	47.3	47.3	0.0	0.1%
40.7%	47.3	47.2	-0.1	-0.2%
42.0%	46.9	46.9	0.1	0.1%
43.2%	46.9	46.9	0.1	0.1%
44.4%	46.9	46.9	0.0	0.0%
45.7%	46.8	46.7	-0.1	-0.1%
46.9%	46.7	46.7	0.0	-0.1%
48.1%	46.7	46.7	0.0	-0.1%
49.4%	46.7	46.6	-0.1	-0.1%
50.6%	46.5	46.6	0.1	0.1%
51.9%	46.5	46.5	0.1	0.1%
53.1%	46.3	46.2	0.0	-0.1%
54.3%	46.2	46.1	-0.1	-0.1%
55.6%	46.1	46.1	0.1	0.1%
56.8%	46.0	46.0	0.0	0.0%
58.0%	45.9	45.9	0.0	0.0%
59.3%	45.8	45.8	0.0	0.1%
60.5%	45.8	45.8	0.0	0.0%
61.7%	45.7	45.7	0.0	0.1%
63.0%	45.7	45.7	0.0	0.0%
64.2%	45.6	45.7	0.0	0.0%
65.4%	45.6	45.6	0.0	-0.1%
66.7%	45.6	45.6	0.0	0.0%
67.9%	45.5	45.5	0.0	0.0%
69.1%	45.4	45.5	0.0	0.0%
70.4%	45.4	45.4	0.0	0.0%
71.6%	45.4	45.4	0.0	0.0%
72.8%	45.4	45.4	0.0	0.0%
74.1%	45.4	45.3	0.0	0.0%
75.3%	45.3	45.3	0.0	-0.1%
76.5%	45.3	45.3	0.0	0.0%
77.8%	45.2	45.2	0.0	-0.1%
79.0%	45.1	45.2	0.0	0.0%
80.2%	45.1	45.2	0.0	0.0%
81.5%	45.1	45.1	0.0	0.0%
82.7%	45.1	45.1	0.0	0.0%
84.0%	45.0	45.1	0.0	0.1%
85.2%	45.0	45.0	0.1	0.1%
86.4%	44.9	45.0	0.1	0.3%
87.7%	44.9	44.9	0.0	-0.1%
88.9%	44.9	44.9	0.0	0.0%
90.1%	44.9	44.8	-0.1	-0.1%
91.4%	44.8	44.8	0.0	-0.1%
92.6%	44.7	44.8	0.1	0.1%
93.8%	44.6	44.7	0.1	0.2%
95.1%	44.5	44.7	0.2	0.4%
96.3%	44.5	44.5	0.1	0.2%
97.5%	44.2	44.3	0.1	0.2%
98.8%	44.1	44.1	0.0	0.0%
100.0%	44.1	44.1	0.0	0.0%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (DEGF)	Relative Difference (%)
	Monthly Temperature (DEGF)	Monthly Temperature (DEGF)		
0.0%	57.0	57.9	0.9	1.6%
1.2%	56.9	57.4	0.5	0.8%
2.5%	56.8	57.1	0.3	0.5%
3.7%	56.7	56.9	0.1	0.2%
4.9%	55.5	56.8	1.3	2.3%
6.2%	55.4	55.8	0.4	0.7%
7.4%	55.4	55.6	0.2	0.4%
8.6%	55.1	55.5	0.4	0.8%
9.9%	55.1	55.4	0.3	0.6%
11.1%	55.1	55.1	0.0	0.1%
12.3%	54.5	54.5	0.1	0.1%
13.6%	53.7	54.2	0.5	0.9%
14.8%	53.2	53.2	-0.1	-0.1%
16.0%	53.1	53.1	0.0	0.0%
17.3%	52.9	52.9	0.0	0.0%
18.5%	52.9	52.9	0.0	0.1%
19.8%	52.7	52.9	0.2	0.4%
21.0%	52.7	52.7	0.0	0.1%
22.2%	52.6	52.6	0.0	0.0%
23.5%	52.6	52.5	-0.1	-0.2%
24.7%	52.5	52.4	-0.1	-0.1%
25.9%	52.5	52.4	-0.1	-0.1%
27.2%	52.4	52.4	-0.1	-0.1%
28.4%	52.4	52.1	-0.2	-0.4%
29.6%	52.3	52.1	-0.2	-0.4%
30.9%	52.2	52.0	-0.3	-0.5%
32.1%	52.1	51.9	-0.2	-0.4%
33.3%	51.9	51.9	-0.1	-0.1%
34.6%	51.9	51.8	-0.1	-0.2%
35.8%	51.8	51.7	-0.1	-0.1%
37.0%	51.7	51.6	-0.1	-0.2%
38.3%	51.6	51.6	0.0	0.0%
39.5%	51.5	51.6	0.0	0.1%
40.7%	51.5	51.4	0.0	0.0%
42.0%	51.2	51.3	0.2	0.3%
43.2%	51.2	51.3	0.1	0.2%
44.4%	51.1	51.3	0.1	0.3%
45.7%	51.0	50.9	-0.1	-0.1%
46.9%	50.7	50.7	0.0	0.0%
48.1%	50.6	50.7	0.1	0.1%
49.4%	50.6	50.7	0.1	0.1%
50.6%	50.6	50.6	0.0	0.0%
51.9%	50.6	50.5	0.0	-0.1%
53.1%	50.5	50.5	0.0	0.0%
54.3%	50.5	50.5	0.0	0.0%
55.6%	50.4	50.3	-0.1	-0.2%
56.8%	50.1	50.0	-0.1	-0.2%
58.0%	50.0	49.7	-0.3	-0.7%
59.3%	50.0	49.6	-0.4	-0.8%
60.5%	49.8	49.5	-0.3	-0.6%
61.7%	49.7	49.5	-0.2	-0.4%
63.0%	49.6	49.3	-0.3	-0.6%
64.2%	49.5	49.2	-0.2	-0.5%
65.4%	49.4	49.2	-0.3	-0.5%
66.7%	49.3	49.0	-0.3	-0.5%
67.9%	49.2	49.0	-0.2	-0.4%
69.1%	49.0	48.8	-0.3	-0.6%
70.4%	49.0	48.7	-0.3	-0.6%
71.6%	48.7	48.7	-0.1	-0.2%
72.8%	48.7	48.2	-0.5	-1.0%
74.1%	48.3	48.0	-0.2	-0.4%
75.3%	48.2	47.9	-0.3	-0.6%
76.5%	47.9	47.8	0.0	-0.1%
77.8%	47.8	47.8	-0.1	-0.1%
79.0%	47.7	47.6	0.0	0.0%
80.2%	47.6	47.6	0.0	0.0%
81.5%	47.6	47.5	0.0	-0.1%
82.7%	47.4	47.5	0.0	0.1%
84.0%	47.4	47.4	0.0	0.1%
85.2%	47.4	47.4	0.0	0.0%
86.4%	47.2	47.2	0.0	0.0%
87.7%	47.0	47.0	0.0	-0.1%
88.9%	46.4	46.5	0.0	0.1%
90.1%	46.3	46.3	0.0	0.0%
91.4%	46.1	46.1	0.0	0.0%
92.6%	46.0	46.0	0.0	0.0%
93.8%	45.9	46.0	0.1	0.1%
95.1%	45.6	45.7	0.0	0.1%
96.3%	45.5	45.4	-0.1	-0.2%
97.5%	45.2	45.2	0.0	0.1%
98.8%	44.9	44.8	-0.1	-0.3%
100.0%	44.9	44.8	-0.1	-0.3%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (DEGF)	Relative Difference (%)
	Monthly Temperature (DEGF)	Monthly Temperature (DEGF)		
0.0%	65.2	63.9	-1.3	-2.0%
1.2%	59.5	57.8	-1.6	-2.8%
2.5%	55.9	55.9	0.0	0.0%
3.7%	55.7	55.6	-0.1	-0.2%
4.9%	54.6	54.6	0.0	0.1%
6.2%	53.9	53.9	0.0	0.0%
7.4%	53.7	53.9	0.2	0.3%
8.6%	53.7	53.7	0.0	0.0%
9.9%	53.5	53.4	-0.1	-0.1%
11.1%	53.4	53.4	-0.1	-0.1%
12.3%	53.4	53.1	-0.3	-0.6%
13.6%	53.2	53.0	-0.2	-0.4%
14.8%	53.1	52.9	-0.1	-0.2%
16.0%	53.0	52.9	-0.1	-0.2%
17.3%	52.7	52.6	0.0	-0.1%
18.5%	52.7	52.6	-0.1	-0.1%
19.8%	52.5	52.5	0.0	0.0%
21.0%	52.4	52.5	0.1	0.2%
22.2%	52.4	52.5	0.1	0.2%
23.5%	52.4	52.5	0.1	0.2%
24.7%	52.3	52.4	0.1	0.2%
25.9%	52.3	52.4	0.2	0.3%
27.2%	52.2	52.4	0.2	0.4%
28.4%	52.2	52.4	0.2	0.4%
29.6%	52.2	52.3	0.1	0.2%
30.9%	52.1	52.3	0.2	0.3%
32.1%	52.0	52.2	0.2	0.3%
33.3%	52.0	52.2	0.2	0.4%
34.6%	51.9	52.2	0.3	0.5%
35.8%	51.8	52.1	0.3	0.6%
37.0%	51.8	52.1	0.3	0.6%
38.3%	51.8	52.0	0.3	0.5%
39.5%	51.7	52.0	0.4	0.7%
40.7%	51.6	51.9	0.3	0.6%
42.0%	51.6	51.8	0.2	0.5%
43.2%	51.6	51.8	0.2	0.4%
44.4%	51.5	51.7	0.2	0.4%
45.7%	51.5	51.7	0.2	0.3%
46.9%	51.5	51.7	0.2	0.4%
48.1%	51.4	51.7	0.2	0.5%
49.4%	51.3	51.6	0.3	0.5%
50.6%	51.3	51.5	0.3	0.5%
51.9%	51.2	51.5	0.2	0.4%
53.1%	51.2	51.4	0.2	0.4%
54.3%	51.2	51.4	0.2	0.4%
55.6%	51.2	51.4	0.2	0.4%
56.8%	51.1	51.3	0.2	0.4%
58.0%	51.0	51.3	0.2	0.5%
59.3%	51.0	51.2	0.2	0.4%
60.5%	51.0	51.2	0.2	0.4%
61.7%	51.0	51.2	0.2	0.4%
63.0%	51.0	51.1	0.1	0.3%
64.2%	50.9	51.1	0.2	0.4%
65.4%	50.8	51.0	0.2	0.4%
66.7%	50.8	51.0	0.2	0.4%
67.9%	50.8	51.0	0.2	0.4%
69.1%	50.8	50.8	0.0	0.1%
70.4%	50.7	50.8	0.1	0.2%
71.6%	50.6	50.7	0.1	0.2%
72.8%	50.6	50.7	0.1	0.1%
74.1%	50.6	50.6	0.1	0.1%
75.3%	50.6	50.6	0.1	0.2%
76.5%	50.5	50.6	0.1	0.2%
77.8%	50.4	50.5	0.1	0.3%
79.0%	50.4	50.5	0.1	0.2%
80.2%	50.3	50.4	0.1	0.2%
81.5%	50.2	50.4	0.2	0.4%
82.7%	50.0	50.0	0.0	0.0%
84.0%	50.0	50.0	0.0	0.0%
85.2%	50.0	49.9	0.0	-0.1%
86.4%	49.9	49.9	0.0	0.1%
87.7%	49.8	49.8	0.1	0.1%
88.9%	49.7	49.7	0.0	0.0%
90.1%	49.7	49.6	-0.1	-0.3%
91.4%	49.6	49.5	-0.1	-0.2%
92.6%	49.5	49.4	-0.1	-0.2%
93.8%	49.5	49.4	-0.1	-0.3%
95.1%	49.5	49.3	-0.1	-0.3%
96.3%	49.3	49.3	0.0	0.1%
97.5%	49.0	49.3	0.3	0.5%
98.8%	49.0	49.2	0.2	0.4%
100.0%	49.0	49.2	0.2	0.4%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (DEGF)	Relative Difference (%)
	Monthly Temperature (DEGF)	Monthly Temperature (DEGF)		
0.0%	61.3	60.2	-1.1	-1.8%
1.2%	60.5	57.8	-2.8	-4.6%
2.5%	58.0	56.6	-1.4	-2.4%
3.7%	57.7	56.3	-1.4	-2.5%
4.9%	56.2	55.3	-0.9	-1.7%
6.2%	55.6	55.1	-0.5	-0.8%
7.4%	55.0	54.2	-0.8	-1.5%
8.6%	55.0	54.1	-0.9	-1.6%
9.9%	55.0	53.8	-1.2	-2.2%
11.1%	54.1	53.6	-0.5	-0.9%
12.3%	54.1	53.5	-0.6	-1.1%
13.6%	53.8	53.5	-0.3	-0.5%
14.8%	53.7	53.4	-0.4	-0.7%
16.0%	53.7	53.3	-0.4	-0.7%
17.3%	53.7	53.3	-0.4	-0.8%
18.5%	53.6	53.1	-0.5	-0.9%
19.8%	53.5	53.1	-0.5	-0.9%
21.0%	53.5	53.1	-0.5	-0.9%
22.2%	53.2	52.9	-0.3	-0.6%
23.5%	53.1	52.9	-0.3	-0.5%
24.7%	52.8	52.6	-0.2	-0.5%
25.9%	52.8	52.5	-0.2	-0.4%
27.2%	52.7	52.5	-0.2	-0.4%
28.4%	52.6	52.4	-0.2	-0.4%
29.6%	52.6	52.3	-0.3	-0.5%
30.9%	52.6	52.3	-0.3	-0.7%
32.1%	52.4	52.2	-0.2	-0.5%
33.3%	52.4	52.2	-0.2	-0.5%
34.6%	52.4	52.1	-0.2	-0.4%
35.8%	52.3	52.0	-0.4	-0.7%
37.0%	52.0	51.7	-0.3	-0.5%
38.3%	51.7	51.6	-0.2	-0.4%
39.5%	51.7	51.5	-0.2	-0.4%
40.7%	51.7	51.5	-0.2	-0.4%
42.0%	51.6	51.4	-0.2	-0.4%
43.2%	51.6	51.4	-0.2	-0.4%
44.4%	51.6	51.3	-0.2	-0.4%
45.7%	51.5	51.3	-0.2	-0.4%
46.9%	51.5	51.3	-0.2	-0.3%
48.1%	51.4	51.3	-0.1	-0.3%
49.4%	51.4	51.3	-0.1	-0.2%
50.6%	51.2	51.2	0.0	0.0%
51.9%	51.2	51.2	0.0	0.1%
53.1%	51.2	51.0	-0.1	-0.3%
54.3%	51.1	51.0	-0.1	-0.2%
55.6%	51.0	50.9	-0.2	-0.3%
56.8%	51.0	50.9	-0.2	-0.3%
58.0%	51.0	50.8	-0.2	-0.4%
59.3%	50.8	50.7	-0.1	-0.1%
60.5%	50.7	50.6	0.0	-0.1%
61.7%	50.6	50.6	0.0	0.1%
63.0%	50.5	50.6	0.1	0.1%
64.2%	50.4	50.5	0.0	0.0%
65.4%	50.4	50.4	0.0	-0.1%
66.7%	50.4	50.3	-0.1	-0.2%
67.9%	50.4	50.3	-0.1	-0.1%
69.1%	50.3	50.3	0.0	0.0%
70.4%	50.3	50.3	0.0	0.0%
71.6%	50.2	50.3	0.0	0.1%
72.8%	50.2	50.1	-0.1	-0.1%
74.1%	50.1	50.1	0.0	0.0%
75.3%	50.1	50.0	-0.1	-0.2%
76.5%	50.1	50.0	-0.1	-0.2%
77.8%	50.1	49.8	-0.3	-0.5%
79.0%	50.1	49.8	-0.3	-0.6%
80.2%	50.1	49.8	-0.3	-0.6%
81.5%	50.0	49.8	-0.3	-0.5%
82.7%	50.0	49.7	-0.3	-0.5%
84.0%	49.9	49.7	-0.2	-0.3%
85.2%	49.9	49.7	-0.2	-0.3%
86.4%	49.9	49.6	-0.3	-0.6%
87.7%	49.8	49.5	-0.3	-0.5%
88.9%	49.8	49.5	-0.2	-0.5%
90.1%	49.7	49.5	-0.2	-0.4%
91.4%	49.6	49.5	-0.1	-0.3%
92.6%	49.6	49.3	-0.3	-0.6%
93.8%	49.6	49.1	-0.4	-0.9%
95.1%	49.6	49.1	-0.4	-0.9%
96.3%	49.4	49.0	-0.4	-0.9%
97.5%	49.2	48.8	-0.4	-0.9%
98.8%	48.8	48.5	-0.2	-0.5%
100.0%	48.8	48.5	-0.2	-0.5%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project	WSIP 2070 With Project	Absolute Difference (DEGF)	Relative Difference (%)
	Monthly Temperature (DEGF)	Monthly Temperature (DEGF)		
0.0%	63.1	62.4	-0.7	-1.1%
1.2%	61.5	58.7	-2.8	-4.6%
2.5%	61.1	58.6	-2.5	-4.1%
3.7%	58.6	58.3	-0.3	-0.5%
4.9%	58.6	58.2	-0.3	-0.6%
6.2%	58.1	55.6	-2.5	-4.2%
7.4%	58.0	55.5	-2.5	-4.3%
8.6%	57.1	55.4	-1.7	-3.0%
9.9%	55.8	55.3	-0.5	-0.9%
11.1%	55.3	55.2	-0.1	-0.2%
12.3%	55.3	55.0	-0.2	-0.4%
13.6%	54.8	54.9	0.1	0.3%
14.8%	54.5	54.8	0.3	0.5%
16.0%	54.3	54.8	0.5	0.8%
17.3%	54.3	54.4	0.2	0.3%
18.5%	54.2	54.4	0.1	0.3%
19.8%	54.2	54.3	0.1	0.1%
21.0%	54.1	54.2	0.0	0.0%
22.2%	54.1	54.1	0.0	0.0%
23.5%	54.0	53.9	-0.2	-0.3%
24.7%	54.0	53.7	-0.2	-0.5%
25.9%	53.7	53.5	-0.2	-0.4%
27.2%	53.2	53.3	0.1	0.2%
28.4%	53.2	53.2	0.0	0.1%
29.6%	53.0	52.9	-0.1	-0.2%
30.9%	53.0	52.8	-0.2	-0.3%
32.1%	52.9	52.8	-0.1	-0.2%
33.3%	52.8	52.8	0.0	0.0%
34.6%	52.7	52.8	0.0	0.1%
35.8%	52.6	52.6	0.0	0.0%
37.0%	52.6	52.4	-0.2	-0.3%
38.3%	52.6	52.4	-0.2	-0.3%
39.5%	52.5	52.4	-0.2	-0.3%
40.7%	52.3	52.1	-0.2	-0.4%
42.0%	52.2	52.1	-0.1	-0.2%
43.2%	52.1	52.0	-0.1	-0.2%
44.4%	52.0	51.9	-0.1	-0.2%
45.7%	52.0	51.7	-0.4	-0.7%
46.9%	52.0	51.6	-0.3	-0.6%
48.1%	51.8	51.5	-0.2	-0.4%
49.4%	51.7	51.4	-0.3	-0.5%
50.6%	51.7	51.3	-0.4	-0.7%
51.9%	51.5	51.3	-0.2	-0.4%
53.1%	51.2	51.3	0.1	0.3%
54.3%	51.1	51.2	0.1	0.1%
55.6%	51.1	51.1	-0.1	-0.1%
56.8%	51.1	51.0	-0.1	-0.3%
58.0%	51.1	51.0	-0.1	-0.3%
59.3%	51.0	50.8	-0.3	-0.5%
60.5%	51.0	50.5	-0.5	-0.9%
61.7%	50.5	50.5	0.0	0.0%
63.0%	50.5	50.5	0.0	0.0%
64.2%	50.5	50.5	0.0	0.0%
65.4%	50.4	50.4	0.0	0.1%
66.7%	50.4	50.4	0.0	0.1%
67.9%	50.4	50.4	0.1	0.1%
69.1%	50.3	50.4	0.1	0.2%
70.4%	50.3	50.3	0.0	0.1%
71.6%	50.2	50.0	-0.2	-0.3%
72.8%	50.1	50.0	-0.1	-0.2%
74.1%	49.9	49.9	0.0	0.0%
75.3%	49.9	49.9	0.0	0.0%
76.5%	49.8	49.9	0.0	0.1%
77.8%	49.8	49.9	0.0	0.1%
79.0%	49.7	49.8	0.0	0.1%
80.2%	49.7	49.8	0.0	0.1%
81.5%	49.7	49.7	0.0	0.0%
82.7%	49.7	49.7	0.0	0.0%
84.0%	49.7	49.6	-0.1	-0.2%
85.2%	49.7	49.6	-0.1	-0.2%
86.4%	49.5	49.5	-0.1	-0.1%
87.7%	49.4	49.4	0.0	0.0%
88.9%	49.4	49.3	-0.1	-0.2%
90.1%	49.4	49.3	-0.1	-0.2%
91.4%	49.4	49.2	-0.1	-0.3%
92.6%	49.4	49.2	-0.1	-0.3%
93.8%	49.3	49.2	0.0	-0.1%
95.1%	49.2	49.1	-0.1	-0.1%
96.3%	49.2	49.1	-0.1	-0.2%
97.5%	49.1	49.1	0.1	0.1%
98.8%	49.0	49.0	-0.1	-0.2%
100.0%	49.0	49.0	-0.1	-0.2%

Table SQ12-1b

Trinity River below Lewiston Dam, Monthly Temperature

Probability of Exceedance

June to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.6	57.7	-0.8	-1.5%
1.2%	57.9	57.5	-0.3	-0.5%
2.5%	57.8	57.0	-0.8	-1.4%
3.7%	56.5	55.6	-0.9	-1.7%
4.9%	55.6	55.5	-0.1	-0.2%
6.2%	55.3	55.1	-0.2	-0.4%
7.4%	55.2	54.3	-0.9	-1.6%
8.6%	54.8	54.1	-0.8	-1.4%
9.9%	54.2	53.7	-0.4	-0.8%
11.1%	54.1	53.5	-0.7	-1.2%
12.3%	54.0	53.4	-0.6	-1.1%
13.6%	53.5	53.4	-0.2	-0.3%
14.8%	53.4	53.3	-0.1	-0.2%
16.0%	53.2	53.2	0.0	0.1%
17.3%	53.2	53.1	0.0	-0.1%
18.5%	53.2	53.1	-0.1	-0.2%
19.8%	53.0	52.9	-0.2	-0.3%
21.0%	52.9	52.8	-0.1	-0.2%
22.2%	52.9	52.7	-0.1	-0.2%
23.5%	52.8	52.7	-0.1	-0.2%
24.7%	52.7	52.7	0.0	-0.1%
25.9%	52.6	52.7	0.0	0.1%
27.2%	52.5	52.6	0.1	0.2%
28.4%	52.5	52.5	0.1	0.1%
29.6%	52.4	52.5	0.1	0.3%
30.9%	52.4	52.4	0.0	0.1%
32.1%	52.4	52.3	-0.1	-0.1%
33.3%	52.3	52.3	0.0	0.0%
34.6%	52.2	52.2	0.0	0.0%
35.8%	52.2	52.2	0.0	0.0%
37.0%	52.2	52.2	0.0	0.0%
38.3%	52.2	52.2	0.0	0.0%
39.5%	52.2	52.1	-0.1	-0.1%
40.7%	52.1	52.1	0.0	0.0%
42.0%	52.0	52.0	0.0	0.0%
43.2%	52.0	51.8	-0.2	-0.4%
44.4%	51.6	51.8	0.1	0.2%
45.7%	51.6	51.7	0.1	0.2%
46.9%	51.5	51.4	-0.1	-0.3%
48.1%	51.4	51.3	-0.1	-0.1%
49.4%	51.2	51.1	-0.1	-0.1%
50.6%	51.2	51.1	-0.1	-0.1%
51.9%	51.1	51.0	-0.2	-0.3%
53.1%	51.0	50.9	-0.1	-0.2%
54.3%	50.9	50.7	-0.1	-0.3%
55.6%	50.8	50.7	-0.1	-0.3%
56.8%	50.8	50.6	-0.2	-0.3%
58.0%	50.8	50.6	-0.2	-0.3%
59.3%	50.7	50.6	-0.1	-0.3%
60.5%	50.7	50.5	-0.1	-0.3%
61.7%	50.7	50.4	-0.2	-0.5%
63.0%	50.6	50.4	-0.2	-0.4%
64.2%	50.5	50.4	-0.1	-0.2%
65.4%	50.4	50.3	-0.1	-0.1%
66.7%	50.2	50.3	0.1	0.2%
67.9%	50.2	50.3	0.1	0.2%
69.1%	50.1	50.2	0.1	0.3%
70.4%	50.0	50.2	0.1	0.2%
71.6%	50.0	50.1	0.1	0.2%
72.8%	49.9	49.8	0.0	-0.1%
74.1%	49.8	49.7	0.0	-0.1%
75.3%	49.7	49.7	0.0	-0.1%
76.5%	49.7	49.7	0.0	-0.1%
77.8%	49.7	49.6	-0.1	-0.2%
79.0%	49.6	49.6	-0.1	-0.2%
80.2%	49.5	49.5	0.0	0.0%
81.5%	49.5	49.4	-0.1	-0.2%
82.7%	49.5	49.3	-0.2	-0.3%
84.0%	49.5	49.3	-0.2	-0.3%
85.2%	49.4	49.3	-0.1	-0.2%
86.4%	49.3	49.3	0.0	0.0%
87.7%	49.3	49.2	-0.1	-0.2%
88.9%	49.3	49.2	-0.1	-0.2%
90.1%	49.3	49.0	-0.2	-0.4%
91.4%	49.0	49.0	0.0	0.0%
92.6%	49.0	48.9	-0.1	-0.2%
93.8%	48.9	48.8	-0.1	-0.1%
95.1%	48.9	48.8	-0.1	-0.2%
96.3%	48.9	48.8	-0.1	-0.2%
97.5%	48.8	48.8	0.0	0.0%
98.8%	48.5	48.7	0.3	0.5%
100.0%	48.1	48.3	0.2	0.4%

July to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	59.6	58.0	-1.6	-2.6%
1.2%	58.6	57.6	-1.0	-1.7%
2.5%	58.2	57.0	-1.2	-2.0%
3.7%	56.4	55.6	-0.8	-1.4%
4.9%	55.8	55.0	-0.7	-1.3%
6.2%	55.6	54.2	-1.4	-2.5%
7.4%	54.9	54.1	-0.8	-1.5%
8.6%	54.7	54.0	-0.7	-1.2%
9.9%	54.6	53.9	-0.7	-1.3%
11.1%	54.3	53.7	-0.6	-1.1%
12.3%	54.0	53.7	-0.3	-0.6%
13.6%	53.9	53.5	-0.3	-0.6%
14.8%	53.7	53.5	-0.2	-0.4%
16.0%	53.7	53.5	-0.2	-0.4%
17.3%	53.7	53.4	-0.2	-0.4%
18.5%	53.4	53.4	0.0	-0.1%
19.8%	53.4	53.3	-0.1	-0.3%
21.0%	53.3	53.3	-0.1	-0.1%
22.2%	53.2	53.1	0.0	-0.1%
23.5%	53.1	52.9	-0.2	-0.4%
24.7%	53.0	52.8	-0.1	-0.3%
25.9%	52.9	52.8	-0.1	-0.2%
27.2%	52.8	52.8	0.0	0.0%
28.4%	52.8	52.7	-0.1	-0.2%
29.6%	52.8	52.7	-0.1	-0.2%
30.9%	52.8	52.6	-0.1	-0.2%
32.1%	52.6	52.6	0.0	0.0%
33.3%	52.6	52.4	-0.1	-0.3%
34.6%	52.6	52.4	-0.2	-0.3%
35.8%	52.5	52.2	-0.3	-0.5%
37.0%	52.2	52.1	0.0	-0.1%
38.3%	52.0	52.1	0.0	0.1%
39.5%	51.9	51.9	0.0	0.0%
40.7%	51.9	51.8	0.0	-0.1%
42.0%	51.8	51.8	0.0	-0.1%
43.2%	51.8	51.7	-0.1	-0.1%
44.4%	51.8	51.7	-0.1	-0.2%
45.7%	51.7	51.6	-0.1	-0.2%
46.9%	51.7	51.5	-0.2	-0.3%
48.1%	51.6	51.4	-0.2	-0.4%
49.4%	51.4	51.3	-0.1	-0.2%
50.6%	51.3	51.3	0.0	0.1%
51.9%	51.3	51.3	0.0	0.1%
53.1%	51.2	51.2	0.0	0.0%
54.3%	51.2	51.2	0.0	0.0%
55.6%	51.2	51.2	0.0	0.1%
56.8%	51.1	51.2	0.1	0.1%
58.0%	51.1	51.1	0.1	0.1%
59.3%	51.1	51.0	0.0	-0.1%
60.5%	50.9	51.0	0.0	0.1%
61.7%	50.9	50.9	0.0	0.1%
63.0%	50.8	50.9	0.1	0.1%
64.2%	50.7	50.8	0.1	0.3%
65.4%	50.7	50.6	0.0	-0.1%
66.7%	50.6	50.6	0.0	0.0%
67.9%	50.6	50.5	0.0	0.0%
69.1%	50.4	50.5	0.1	0.1%
70.4%	50.4	50.4	0.0	-0.1%
71.6%	50.4	50.3	0.0	-0.1%
72.8%	50.4	50.3	-0.1	-0.1%
74.1%	50.3	50.3	-0.1	-0.2%
75.3%	50.3	50.2	0.0	-0.1%
76.5%	50.3	50.2	0.0	-0.1%
77.8%	50.1	50.2	0.1	0.2%
79.0%	50.1	50.2	0.1	0.2%
80.2%	50.1	50.2	0.1	0.2%
81.5%	50.0	50.2	0.1	0.3%
82.7%	50.0	50.0	0.0	0.1%
84.0%	49.9	50.0	0.1	0.2%
85.2%	49.9	49.9	0.0	0.0%
86.4%	49.9	49.9	0.0	0.0%
87.7%	49.8	49.9	0.0	0.1%
88.9%	49.8	49.8	0.0	0.0%
90.1%	49.7	49.7	0.0	0.0%
91.4%	49.7	49.6	-0.1	-0.1%
92.6%	49.7	49.6	-0.1	-0.2%
93.8%	49.6	49.5	-0.1	-0.2%
95.1%	49.6	49.5	-0.1	-0.1%
96.3%	49.5	49.4	-0.1	-0.2%
97.5%	49.4	49.3	-0.1	-0.1%
98.8%	49.2	49.1	-0.1	-0.1%
100.0%	48.9	48.8	-0.2	-0.4%

August to September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.2	59.2	-2.0	-3.3%
1.2%	59.6	57.5	-2.1	-3.6%
2.5%	59.3	57.5	-1.8	-3.1%
3.7%	56.8	56.9	0.1	0.2%
4.9%	56.8	55.3	-1.5	-2.6%
6.2%	56.7	54.9	-1.8	-3.2%
7.4%	56.0	54.7	-1.2	-2.2%
8.6%	55.9	54.5	-1.3	-2.4%
9.9%	54.7	54.3	-0.4	-0.8%
11.1%	54.7	54.3	-0.4	-0.7%
12.3%	54.6	54.2	-0.5	-0.9%
13.6%	54.2	54.1	-0.1	-0.2%
14.8%	54.1	53.9	-0.1	-0.3%
16.0%	53.9	53.9	-0.1	-0.1%
17.3%	53.9	53.9	0.0	0.0%
18.5%	53.9	53.8	0.0	-0.1%
19.8%	53.7	53.8	0.1	0.1%
21.0%	53.6	53.7	0.0	0.1%
22.2%	53.6	53.6	-0.1	-0.1%
23.5%	53.6	53.2	-0.4	-0.8%
24.7%	53.5	53.2	-0.3	-0.6%
25.9%	53.4	53.0	-0.4	-0.8%
27.2%	53.3	52.9	-0.4	-0.8%
28.4%	53.0	52.8	-0.2	-0.3%
29.6%	52.8	52.8	0.0	-0.1%
30.9%	52.7	52.6	-0.1	-0.2%
32.1%	52.7	52.5	-0.2	-0.3%
33.3%	52.5	52.5	0.0	0.1%
34.6%	52.4	52.5	0.1	0.2%
35.8%	52.3	52.4	0.0	0.1%
37.0%	52.3	52.2	-0.2	-0.3%
38.3%	52.3	52.1	-0.3	-0.5%
39.5%	52.0	51.9	-0.1	-0.2%
40.7%	51.9	51.8	-0.1	-0.2%
42.0%	51.9	51.7	-0.2	-0.4%
43.2%	51.8	51.6	-0.2	-0.4%
44.4%	51.7	51.5	-0.2	-0.5%
45.7%	51.7	51.4	-0.2	-0.5%
46.9%	51.7	51.4	-0.3	-0.5%
48.1%	51.6	51.4	-0.2	-0.4%
49.4%	51.5	51.3	-0.2	-0.4%
50.6%	51.5	51.2	-0.2	-0.5%
51.9%	51.3	51.1	-0.2	-0.4%
53.1%	51.3	51.0	-0.3	-0.6%
54.3%	51.3	51.0	-0.3	-0.6%
55.6%	51.1	50.9	-0.3	-0.5%
56.8%	51.1	50.8	-0.3	-0.5%
58.0%	50.7	50.8	0.1	0.2%
59.3%	50.6	50.7	0.1	0.1%
60.5%	50.6	50.6	0.1	0.1%
61.7%	50.5	50.6	0.0	0.1%
63.0%	50.5	50.5	0.0	0.0%
64.2%	50.5	50.4	-0.1	-0.2%
65.4%	50.5	50.4	-0.1	-0.2%
66.7%	50.5	50.3	-0.2	-0.4%
67.9%	50.4	50.2	-0.2	-0.4%
69.1%	50.4	50.2	-0.2	-0.4%
70.4%	50.3	50.1	-0.1	-0.2%
71.6%	50.2	50.1	-0.1	-0.2%
72.8%	50.1	50.1	0.0	0.0%
74.1%	50.1	50.1	0.0	0.0%
75.3%	50.0	50.0	0.1	0.1%
76.5%	50.0	50.0	0.0	0.0%
77.8%	50.0	49.9	-0.1	-0.1%
79.0%	50.0	49.8	-0.1	-0.3%
80.2%	49.9	49.8	-0.1	-0.3%
81.5%	49.9	49.8	-0.1	-0.2%
82.7%	49.9	49.8	-0.1	-0.2%
84.0%	49.8	49.8	0.0	0.0%
85.2%	49.7	49.6	-0.1	-0.2%
86.4%	49.7	49.6	-0.1	-0.3%
87.7%	49.7	49.5	-0.2	-0.3%
88.9%	49.7	49.5	-0.2	-0.3%
90.1%	49.6	49.5	-0.2	-0.4%
91.4%	49.6	49.4	-0.2	-0.3%
92.6%	49.6	49.4	-0.2	-0.4%
93.8%	49.4	49.3	-0.1	-0.1%
95.1%	49.3	49.3	0.0	0.0%
96.3%	49.3	49.2	-0.1	-0.1%
97.5%	49.3	49.0	-0.3	-0.5%
98.8%	49.2	49.0	-0.3	-0.5%
100.0%	49.0	48.7	-0.3	-0.5%

Figure SQ13-1b
Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

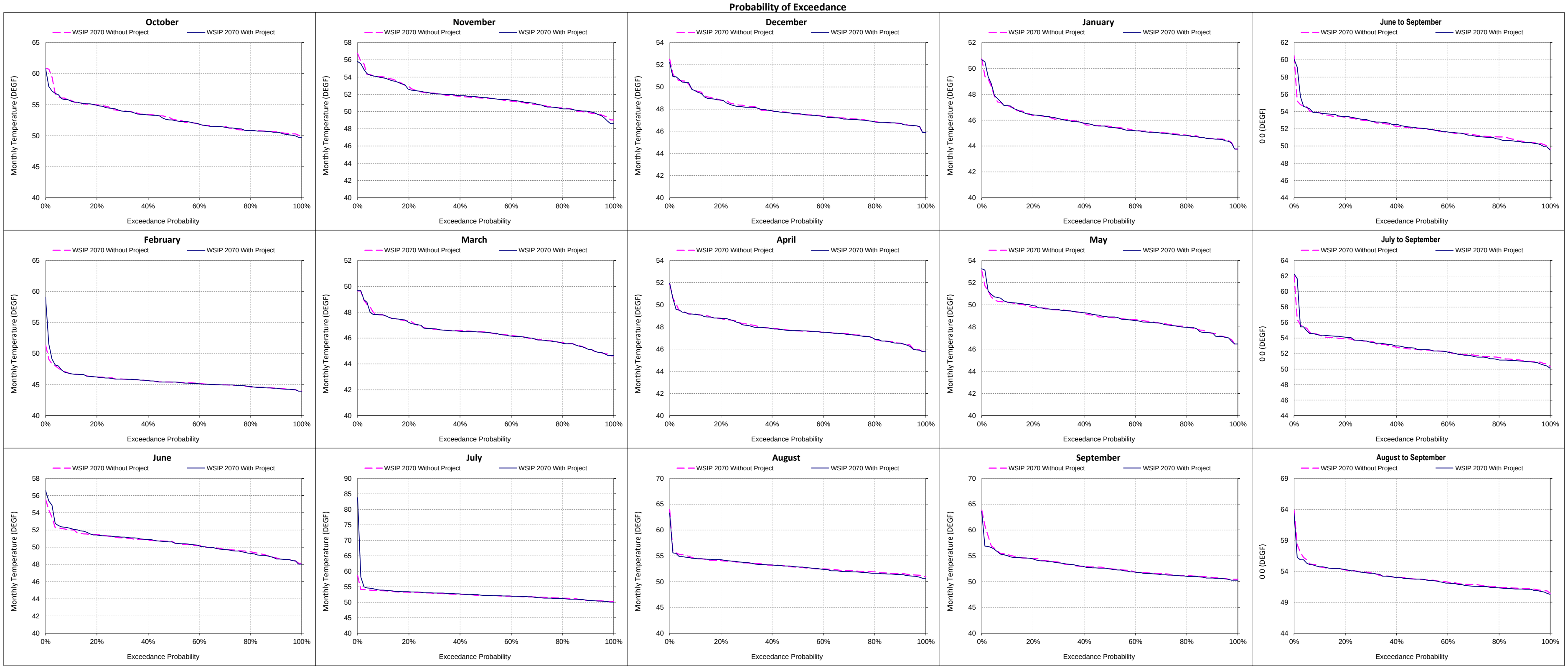


Table SQ13-1b

Clear Creek below Whiskeytown, Monthly Temperature

Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.9	60.9	0.0	0.0%
1.2%	60.7	58.0	-2.8	-4.6%
2.5%	59.4	57.2	-2.2	-3.7%
3.7%	56.8	56.8	0.0	0.1%
4.9%	56.2	56.6	0.4	0.7%
6.2%	56.1	56.0	-0.1	-0.2%
7.4%	56.1	55.8	-0.2	-0.4%
8.6%	55.8	55.8	0.0	0.0%
9.9%	55.7	55.5	-0.2	-0.3%
11.1%	55.4	55.4	0.0	0.1%
12.3%	55.3	55.4	0.1	0.1%
13.6%	55.3	55.3	0.0	0.0%
14.8%	55.1	55.2	0.1	0.1%
16.0%	55.1	55.2	0.1	0.1%
17.3%	55.1	55.1	0.1	0.1%
18.5%	55.0	55.1	0.1	0.1%
19.8%	55.0	54.9	-0.1	-0.1%
21.0%	54.9	54.8	-0.1	-0.3%
22.2%	54.8	54.8	-0.1	-0.1%
23.5%	54.7	54.5	-0.2	-0.4%
24.7%	54.6	54.5	-0.2	-0.3%
25.9%	54.2	54.4	0.2	0.4%
27.2%	54.2	54.3	0.2	0.3%
28.4%	54.0	54.1	0.1	0.2%
29.6%	54.0	54.0	-0.1	-0.1%
30.9%	54.0	53.9	0.0	-0.1%
32.1%	53.9	53.9	0.0	0.0%
33.3%	53.9	53.8	-0.1	-0.1%
34.6%	53.8	53.7	-0.2	-0.3%
35.8%	53.6	53.5	-0.1	-0.2%
37.0%	53.5	53.5	0.0	0.0%
38.3%	53.5	53.4	-0.1	-0.1%
39.5%	53.4	53.4	0.0	-0.1%
40.7%	53.4	53.3	0.0	-0.1%
42.0%	53.4	53.3	-0.1	-0.1%
43.2%	53.3	53.3	0.0	0.0%
44.4%	53.2	53.2	0.0	0.0%
45.7%	53.2	52.9	-0.3	-0.6%
46.9%	53.1	52.6	-0.5	-0.9%
48.1%	53.0	52.5	-0.4	-0.8%
49.4%	52.7	52.5	-0.2	-0.3%
50.6%	52.6	52.4	-0.2	-0.3%
51.9%	52.5	52.3	-0.1	-0.2%
53.1%	52.5	52.3	-0.1	-0.3%
54.3%	52.1	52.3	0.2	0.3%
55.6%	52.1	52.2	0.1	0.2%
56.8%	52.1	52.2	0.0	0.1%
58.0%	52.0	52.0	0.0	0.0%
59.3%	51.9	52.0	0.0	0.0%
60.5%	51.7	51.8	0.1	0.2%
61.7%	51.7	51.7	0.0	0.0%
63.0%	51.6	51.6	0.0	-0.1%
64.2%	51.6	51.5	-0.1	-0.2%
65.4%	51.5	51.5	0.0	0.0%
66.7%	51.5	51.5	0.0	0.0%
67.9%	51.5	51.5	0.0	0.0%
69.1%	51.5	51.4	0.0	-0.1%
70.4%	51.5	51.3	-0.1	-0.2%
71.6%	51.2	51.3	0.1	0.1%
72.8%	51.2	51.2	0.0	0.1%
74.1%	51.1	51.1	0.1	0.1%
75.3%	51.0	51.1	0.1	0.3%
76.5%	50.9	51.1	0.2	0.3%
77.8%	50.9	50.9	0.0	0.0%
79.0%	50.9	50.8	0.0	0.0%
80.2%	50.8	50.8	0.0	0.0%
81.5%	50.8	50.8	0.0	0.0%
82.7%	50.8	50.7	-0.1	-0.2%
84.0%	50.8	50.7	-0.1	-0.1%
85.2%	50.7	50.7	0.0	0.0%
86.4%	50.7	50.7	0.0	0.0%
87.7%	50.7	50.6	0.0	-0.1%
88.9%	50.6	50.6	-0.1	-0.1%
90.1%	50.6	50.5	-0.1	-0.1%
91.4%	50.5	50.5	0.0	0.0%
92.6%	50.5	50.3	-0.1	-0.3%
93.8%	50.4	50.2	-0.2	-0.3%
95.1%	50.4	50.1	-0.2	-0.5%
96.3%	50.3	50.1	-0.2	-0.4%
97.5%	50.3	50.0	-0.3	-0.7%
98.8%	50.1	49.7	-0.3	-0.7%
100.0%	50.1	49.7	0.0	-0.7%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	56.7	55.8	-0.9	-1.6%
1.2%	55.9	55.6	-0.3	-0.5%
2.5%	55.5	54.9	-0.7	-1.2%
3.7%	54.3	54.4	0.1	0.2%
4.9%	54.3	54.2	-0.1	-0.1%
6.2%	54.1	54.1	0.0	0.0%
7.4%	54.1	54.1	-0.1	-0.1%
8.6%	54.0	54.0	-0.1	-0.2%
9.9%	54.0	53.9	-0.1	-0.2%
11.1%	54.0	53.8	-0.1	-0.2%
12.3%	53.8	53.7	-0.1	-0.2%
13.6%	53.8	53.6	-0.2	-0.4%
14.8%	53.6	53.5	-0.1	-0.2%
16.0%	53.4	53.3	-0.1	-0.2%
17.3%	53.3	53.2	-0.1	-0.1%
18.5%	53.0	53.1	0.1	0.1%
19.8%	53.0	52.6	-0.4	-0.7%
21.0%	52.7	52.5	-0.2	-0.3%
22.2%	52.5	52.4	-0.1	-0.1%
23.5%	52.4	52.4	0.0	0.0%
24.7%	52.3	52.4	0.1	0.1%
25.9%	52.2	52.3	0.1	0.1%
27.2%	52.1	52.2	0.1	0.2%
28.4%	52.1	52.1	0.0	0.0%
29.6%	52.1	52.1	-0.1	-0.1%
30.9%	52.1	52.1	0.0	-0.1%
32.1%	52.1	52.1	0.0	0.0%
33.3%	52.0	52.0	0.0	0.1%
34.6%	51.9	52.0	0.1	0.2%
35.8%	51.9	52.0	0.1	0.2%
37.0%	51.9	52.0	0.1	0.2%
38.3%	51.8	51.9	0.1	0.1%
39.5%	51.8	51.9	0.1	0.2%
40.7%	51.8	51.8	0.1	0.1%
42.0%	51.7	51.8	0.1	0.3%
43.2%	51.7	51.8	0.1	0.2%
44.4%	51.7	51.8	0.1	0.2%
45.7%	51.6	51.7	0.1	0.2%
46.9%	51.6	51.7	0.1	0.2%
48.1%	51.6	51.6	0.1	0.1%
49.4%	51.6	51.6	0.1	0.1%
50.6%	51.6	51.6	0.1	0.1%
51.9%	51.5	51.5	0.0	-0.1%
53.1%	51.5	51.5	0.0	-0.1%
54.3%	51.5	51.5	0.0	0.0%
55.6%	51.4	51.4	0.0	0.0%
56.8%	51.3	51.4	0.1	0.1%
58.0%	51.2	51.4	0.1	0.3%
59.3%	51.2	51.4	0.1	0.2%
60.5%	51.2	51.3	0.1	0.2%
61.7%	51.2	51.3	0.1	0.2%
63.0%	51.1	51.2	0.1	0.3%
64.2%	51.1	51.2	0.1	0.2%
65.4%	51.0	51.1	0.1	0.1%
66.7%	50.9	51.0	0.1	0.2%
67.9%	50.9	51.0	0.1	0.2%
69.1%	50.8	51.0	0.2	0.3%
70.4%	50.8	50.8	0.0	0.0%
71.6%	50.8	50.8	0.0	0.0%
72.8%	50.7	50.6	-0.1	-0.2%
74.1%	50.6	50.5	-0.1	-0.1%
75.3%	50.6	50.5	-0.1	-0.1%
76.5%	50.5	50.5	0.0	-0.1%
77.8%	50.4	50.5	0.0	0.0%
79.0%	50.4	50.4	-0.1	-0.1%
80.2%	50.4	50.3	-0.1	-0.2%
81.5%	50.4	50.3	-0.1	-0.1%
82.7%	50.4	50.3	-0.1	-0.1%
84.0%	50.3	50.3	0.0	0.0%
85.2%	50.0	50.2	0.1	0.2%
86.4%	50.0	50.1	0.1	0.1%
87.7%	50.0	50.1	0.1	0.2%
88.9%	49.9	50.1	0.1	0.2%
90.1%	49.9	50.0	0.1	0.3%
91.4%	49.8	49.9	0.1	0.3%
92.6%	49.8	49.8	0.1	0.2%
93.8%	49.7	49.7	-0.1	-0.1%
95.1%	49.6	49.5	-0.1	-0.2%
96.3%	49.5	49.3	-0.2	-0.5%
97.5%	49.3	48.9	-0.4	-0.9%
98.8%	49.0	48.6	-0.4	-0.9%
100.0%	49.0	48.6	-0.4	-0.9%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.5	52.2	-0.3	-0.6%
1.2%	51.2	51.0	-0.2	-0.4%
2.5%	50.7	50.9	0.2	0.4%
3.7%	50.6	50.7	0.1	0.2%
4.9%	50.5	50.4	-0.1	-0.2%
6.2%	50.5	50.4	-0.1	-0.3%
7.4%	50.3	50.4	0.1	0.3%
8.6%	49.8	49.8	-0.1	-0.1%
9.9%	49.7	49.7	0.0	0.0%
11.1%	49.6	49.5	-0.1	-0.2%
12.3%	49.5	49.4	-0.1	-0.2%
13.6%	49.2	49.1	-0.1	-0.2%
14.8%	49.1	49.0	-0.1	-0.3%
16.0%	49.1	48.9	-0.1	-0.2%
17.3%	48.9	48.9	0.0	-0.1%
18.5%	48.9	48.8	-0.1	-0.2%
19.8%	48.8	48.8	0.0	0.1%
21.0%	48.8	48.8	0.0	0.0%
22.2%	48.8	48.6	-0.2	-0.4%
23.5%	48.6	48.4	-0.1	-0.3%
24.7%	48.5	48.3	-0.2	-0.3%
25.9%	48.4	48.3	-0.1	-0.3%
27.2%	48.4	48.2	-0.1	-0.2%
28.4%	48.4	48.2	-0.1	-0.3%
29.6%	48.3	48.2	-0.1	-0.2%
30.9%	48.2	48.2	-0.1	-0.1%
32.1%	48.2	48.2	-0.1	-0.2%
33.3%	48.2	48.1	-0.1	-0.1%
34.6%	48.0	48.1	0.0	0.1%
35.8%	47.9	48.0	0.1	0.2%
37.0%	47.9	48.0	0.1	0.1%
38.3%	47.9	47.9	0.0	0.0%
39.5%	47.9	47.9	0.0	0.0%
40.7%	47.8	47.8	0.0	0.0%
42.0%	47.8	47.8	0.0	0.0%
43.2%	47.8	47.7	0.0	-0.1%
44.4%	47.7	47.7	0.0	-0.1%
45.7%	47.7	47.7	0.0	-0.1%
46.9%	47.7	47.7	0.0	0.0%
48.1%	47.6	47.6	0.0	0.1%
49.4%	47.6	47.6	0.0	0.0%
50.6%	47.6	47.6	0.0	0.0%
51.9%	47.5	47.5	0.0	0.1%
53.1%	47.5	47.5	0.0	0.0%
54.3%	47.5	47.4	0.0	-0.1%
55.6%	47.5	47.4	0.0	0.0%
56.8%	47.5	47.4	0.0	-0.1%
58.0%	47.5	47.4	-0.1	-0.1%
59.3%	47.4	47.4	0.0	0.0%
60.5%	47.3	47.3	0.0	-0.1%
61.7%	47.3	47.2	-0.1	-0.1%
63.0%	47.3	47.2	-0.1	-0.1%
64.2%	47.3	47.2	0.0	-0.1%
65.4%	47.2	47.2	0.0	-0.1%
66.7%	47.2	47.2	0.0	-0.1%
67.9%	47.2	47.1	-0.1	-0.2%
69.1%	47.1	47.1	0.0	-0.1%
70.4%	47.1	47.1	0.0	-0.1%
71.6%	47.1	47.1	-0.1	-0.1%
72.8%	47.1	47.0	-0.1	-0.1%
74.1%	47.1	47.0	0.0	-0.1%
75.3%	47.1	47.0	-0.1	-0.2%
76.5%	47.0	47.0	0.0	0.0%
77.8%	47.0	46.9	-0.1	-0.1%
79.0%	46.9	46.9	0.0	0.0%
80.2%	46.9	46.8	0.0	-0.1%
81.5%	46.8	46.8	0.0	0.0%
82.7%	46.8	46.8	0.0	0.0%
84.0%	46.8	46.8	0.0	0.0%
85.2%	46.8	46.8	0.0	0.0%
86.4%	46.8	46.8	0.0	0.0%
87.7%	46.8	46.8	0.0	0.0%
88.9%	46.7	46.7	0.0	0.0%
90.1%	46.7	46.7	0.0	0.1%
91.4%	46.7	46.6	-0.1	-0.1%
92.6%	46.6	46.6	0.0	0.0%
93.8%	46.5	46.6	0.0	0.1%
95.1%	46.5	46.5	0.0	0.1%
96.3%	46.5	46.5	0.0	0.1%
97.5%	46.4	46.4	0.0	0.0%
98.8%	45.9	45.9	0.0	0.0%
100.0%	45.9	45.9	0.0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.8	50.7	-0.1	-0.1%
1.2%	49.4	50.5	1.1	2.3%
2.5%	49.2	49.4	0.2	0.4%
3.7%	48.6	48.8	0.2	0.4%
4.9%	47.9	47.9	0.0	0.0%
6.2%	47.4	47.7	0.3	0.6%
7.4%	47.4	47.4	0.1	0.2%
8.6%	47.2	47.1	-0.1	-0.1%
9.9%	47.2	47.1	0.0	-0.1%
11.1%	47.0	47.1	0.1	0.2%
12.3%	47.0	46.9	-0.1	-0.2%
13.6%	46.7	46.8	0.1	0.2%
14.8%	46.7	46.7	0.0	-0.1%
16.0%	46.7	46.6	-0.1	-0.2%
17.3%	46.5	46.5	0.0	0.0%
18.5%	46.5	46.5	0.0	-0.1%
19.8%	46.4	46.4	0.1	0.1%
21.0%	46.4	46.4	0.0	0.1%
22.2%	46.4	46.4	0.0	0.0%
23.5%	46.3	46.4	0.0	0.1%
24.7%	46.3	46.3	0.0	0.0%
25.9%	46.3	46.3	0.0	0.0%
27.2%	46.2	46.2	0.1	0.1%
28.4%	46.1	46.2	0.1	0.3%
29.6%	46.1	46.1	0.1	0.1%
30.9%	46.1	46.1	0.0	0.1%
32.1%	46.0	46.0	0.0	-0.1%
33.3%	46.0	46.0	-0.1	-0.2%
34.6%	46.0	45.9	0.0	-0.1%
35.8%	46.0	45.9	-0.1	-0.2%
37.0%	45.9	45.9	0.0	-0.1%
38.3%	45.9	45.9	0.0	0.0%
39.5%	45.8	45.8	0.0	0.0%
40.7%	45.6	45.8	0.1	0.3%
42.0%	45.6	45.7	0.1	0.2%
43.2%	45.6	45.6	0.0	0.1%
44.4%	45.6	45.6	0.0	-0.1%
45.7%	45.6	45.6	0.0	-0.1%
46.9%	45.6	45.5	0.0	-0.1%
48.1%	45.5	45.5	0.0	0.0%
49.4%	45.5	45.5	-0.1	-0.2%
50.6%	45.5	45.4	0.0	-0.1%
51.9%	45.4	45.4	0.0	0.0%
53.1%	45.4	45.4	-0.1	-0.1%
54.3%	45.4	45.3	-0.1	-0.1%
55.6%	45.4	45.3	-0.1	-0.2%
56.8%	45.3	45.2	-0.1	-0.2%
58.0%	45.3	45.2	-0.1	-0.1%
59.3%	45.2	45.2	0.0	0.0%
60.5%	45.2	45.2	0.0	-0.1%
61.7%	45.2	45.2	0.0	0.0%
63.0%	45.2	45.1	0.0	-0.1%
64.2%	45.2	45.1	-0.1	-0.1%
65.4%	45.1	45.1	0.0	-0.1%
66.7%	45.1	45.1	0.0	0.0%
67.9%	45.1	45.0	0.0	0.0%
69.1%	45.0	45.0	0.0	0.0%
70.4%	45.0	45.0	0.0	-0.1%
71.6%	45.0	45.0	0.0	0.0%
72.8%	45.0	45.0	-0.1	-0.1%
74.1%	45.0	44.9	-0.1	-0.2%
75.3%	44.9	44.9	-0.1	-0.1%
76.5%	44.9	44.9	-0.1	-0.1%
77.8%	44.9	44.8	0.0	-0.1%
79.0%	44.9	44.8	0.0	0.0%
80.2%	44.8	44.8	0.0	-0.1%
81.5%	44.8	44.8	0.0	-0.1%
82.7%	44.8	44.7	-0.1	-0.2%
84.0%	44.8	44.7	-0.1	-0.1%
85.2%	44.7	44.7	0.0	0.1%
86.4%	44.6	44.7	0.0	0.1%
87.7%	44.6	44.6	0.0	0.0%
88.9%	44.6	44.6	0.0	0.0%
90.1%	44.6	44.5	0.0	-0.1%
91.4%	44.6	44.5	0.0	-0.1%
92.6%	44.5	44.5	0.0	0.0%
93.8%	44.5	44.5	0.0	-0.1%
95.1%	44.5	44.4	-0.1	-0.2%
96.3%	44.4	44.4	0.0	-0.1%
97.5%	44.3	44.2	0.0	-0.1%
98.8%	43.8	43.8	0.0	0.0%
100.0%	43.8	43.8	0.0	0.0%

Table SQ13-1b

Clear Creek below Whiskeytown, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.3	59.1	7.7	15.1%
1.2%	49.1	51.6	2.5	5.2%
2.5%	48.3	49.1	0.8	1.6%
3.7%	48.0	48.2	0.1	0.3%
4.9%	47.6	48.0	0.4	0.8%
6.2%	47.3	47.4	0.0	0.1%
7.4%	47.1	47.0	-0.1	-0.2%
8.6%	46.9	46.9	0.0	0.0%
9.9%	46.7	46.8	0.0	0.1%
11.1%	46.7	46.7	0.0	-0.1%
12.3%	46.6	46.7	0.0	0.0%
13.6%	46.6	46.6	0.0	0.1%
14.8%	46.6	46.6	0.0	0.1%
16.0%	46.4	46.4	0.0	-0.1%
17.3%	46.3	46.3	0.0	0.0%
18.5%	46.3	46.3	0.0	0.1%
19.8%	46.2	46.2	0.0	0.0%
21.0%	46.2	46.1	-0.1	-0.2%
22.2%	46.2	46.1	-0.1	-0.2%
23.5%	46.1	46.1	-0.1	-0.1%
24.7%	46.1	46.1	0.0	-0.1%
25.9%	46.1	46.0	-0.1	-0.3%
27.2%	45.9	45.9	0.0	0.0%
28.4%	45.9	45.9	0.0	0.0%
29.6%	45.9	45.9	0.0	0.0%
30.9%	45.9	45.9	0.0	0.0%
32.1%	45.9	45.9	0.0	0.0%
33.3%	45.9	45.8	0.0	0.0%
34.6%	45.8	45.8	0.0	0.0%
35.8%	45.8	45.8	0.0	0.0%
37.0%	45.7	45.7	0.0	0.0%
38.3%	45.7	45.7	0.0	0.1%
39.5%	45.7	45.7	0.0	0.0%
40.7%	45.6	45.6	0.0	0.0%
42.0%	45.6	45.6	0.0	0.0%
43.2%	45.5	45.6	0.1	0.2%
44.4%	45.4	45.4	0.0	0.0%
45.7%	45.4	45.4	0.0	0.0%
46.9%	45.4	45.4	0.0	0.0%
48.1%	45.4	45.4	0.0	0.0%
49.4%	45.4	45.4	0.0	0.0%
50.6%	45.4	45.4	0.0	0.0%
51.9%	45.4	45.4	0.0	0.1%
53.1%	45.3	45.3	-0.1	-0.1%
54.3%	45.3	45.3	-0.1	-0.1%
55.6%	45.3	45.2	-0.1	-0.2%
56.8%	45.3	45.2	-0.1	-0.2%
58.0%	45.3	45.2	-0.1	-0.2%
59.3%	45.2	45.2	-0.1	-0.2%
60.5%	45.2	45.1	-0.1	-0.2%
61.7%	45.1	45.1	0.0	0.0%
63.0%	45.1	45.1	0.0	0.0%
64.2%	45.0	45.0	0.0	0.0%
65.4%	45.0	45.0	0.0	0.0%
66.7%	45.0	45.0	0.0	0.0%
67.9%	45.0	45.0	0.0	0.0%
69.1%	45.0	45.0	0.0	0.0%
70.4%	45.0	45.0	0.0	0.0%
71.6%	44.9	44.9	0.0	0.0%
72.8%	44.9	44.9	0.1	0.1%
74.1%	44.9	44.9	0.0	0.1%
75.3%	44.9	44.9	0.0	0.0%
76.5%	44.8	44.8	0.0	0.1%
77.8%	44.7	44.8	0.1	0.2%
79.0%	44.7	44.7	0.0	0.0%
80.2%	44.6	44.7	0.1	0.2%
81.5%	44.6	44.6	0.0	0.1%
82.7%	44.6	44.6	0.0	0.0%
84.0%	44.6	44.5	0.0	-0.1%
85.2%	44.6	44.5	-0.1	-0.2%
86.4%	44.5	44.5	0.0	0.0%
87.7%	44.5	44.5	0.0	0.0%
88.9%	44.4	44.4	0.0	-0.1%
90.1%	44.4	44.4	0.0	0.0%
91.4%	44.3	44.3	0.0	0.0%
92.6%	44.3	44.3	0.0	-0.1%
93.8%	44.3	44.2	0.0	-0.1%
95.1%	44.3	44.2	0.0	-0.1%
96.3%	44.2	44.2	0.0	0.1%
97.5%	44.2	44.2	0.0	0.0%
98.8%	44.0	43.9	0.0	0.0%
100.0%	44.0	43.9	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	49.6	49.7	0.0	0.0%
1.2%	49.6	49.7	0.0	0.0%
2.5%	48.9	49.0	0.0	0.1%
3.7%	48.6	48.8	0.2	0.4%
4.9%	48.4	48.0	-0.4	-0.8%
6.2%	48.0	47.8	-0.2	-0.3%
7.4%	47.8	47.8	0.0	0.0%
8.6%	47.8	47.8	0.0	0.0%
9.9%	47.8	47.8	0.0	0.0%
11.1%	47.7	47.7	0.0	0.1%
12.3%	47.6	47.6	0.0	0.0%
13.6%	47.5	47.5	0.0	0.0%
14.8%	47.5	47.5	0.0	0.0%
16.0%	47.4	47.5	0.0	0.1%
17.3%	47.4	47.4	0.0	0.1%
18.5%	47.3	47.4	0.1	0.1%
19.8%	47.3	47.2	-0.1	-0.2%
21.0%	47.3	47.1	-0.2	-0.4%
22.2%	47.1	47.1	0.0	-0.1%
23.5%	47.0	47.0	0.0	0.1%
24.7%	47.0	47.0	0.0	0.1%
25.9%	46.8	46.8	0.0	-0.1%
27.2%	46.8	46.7	0.0	0.0%
28.4%	46.7	46.7	0.0	0.0%
29.6%	46.7	46.7	0.0	0.1%
30.9%	46.7	46.7	0.0	0.1%
32.1%	46.6	46.6	0.0	0.0%
33.3%	46.6	46.6	0.0	0.0%
34.6%	46.6	46.6	0.0	0.0%
35.8%	46.6	46.6	0.0	-0.1%
37.0%	46.6	46.6	0.0	-0.1%
38.3%	46.6	46.6	0.0	-0.1%
39.5%	46.6	46.5	-0.1	-0.1%
40.7%	46.6	46.5	0.0	-0.1%
42.0%	46.5	46.5	0.0	-0.1%
43.2%	46.5	46.5	0.0	-0.1%
44.4%	46.5	46.5	0.0	-0.1%
45.7%	46.5	46.5	0.0	0.0%
46.9%	46.5	46.5	0.0	0.0%
48.1%	46.5	46.5	0.0	0.0%
49.4%	46.5	46.4	0.0	-0.1%
50.6%	46.4	46.4	0.0	0.0%
51.9%	46.4	46.4	0.0	0.0%
53.1%	46.3	46.4	0.0	0.1%
54.3%	46.3	46.4	0.0	0.1%
55.6%	46.3	46.3	0.0	-0.1%
56.8%	46.3	46.3	0.0	-0.1%
58.0%	46.2	46.2	0.0	0.0%
59.3%	46.2	46.2	-0.1	-0.1%
60.5%	46.2	46.1	-0.1	-0.1%
61.7%	46.2	46.1	0.0	-0.1%
63.0%	46.1	46.1	0.0	0.0%
64.2%	46.1	46.1	0.0	0.0%
65.4%	46.1	46.1	0.0	0.0%
66.7%	46.0	46.0	0.0	0.1%
67.9%	45.9	46.0	0.1	0.1%
69.1%	45.9	45.9	0.0	0.0%
70.4%	45.9	45.9	0.0	0.0%
71.6%	45.9	45.9	0.0	0.0%
72.8%	45.8	45.8	0.0	0.0%
74.1%	45.8	45.8	0.0	0.0%
75.3%	45.8	45.8	0.0	-0.1%
76.5%	45.8	45.7	-0.1	-0.1%
77.8%	45.7	45.7	0.0	0.0%
79.0%	45.7	45.7	0.0	0.0%
80.2%	45.6	45.6	-0.1	-0.1%
81.5%	45.6	45.6	0.0	0.0%
82.7%	45.6	45.6	0.0	0.0%
84.0%	45.6	45.6	0.0	0.0%
85.2%	45.5	45.5	0.0	0.0%
86.4%	45.4	45.4	0.0	-0.1%
87.7%	45.3	45.3	0.0	0.0%
88.9%	45.2	45.2	0.0	0.0%
90.1%	45.1	45.1	0.0	0.0%
91.4%	45.1	45.1	0.0	0.0%
92.6%	45.0	45.0	0.0	0.0%
93.8%	44.9	44.9	0.0	0.0%
95.1%	44.9	44.9	0.0	0.0%
96.3%	44.8	44.8	0.0	0.0%
97.5%	44.8	44.7	-0.1	-0.2%
98.8%	44.6	44.7	0.0	0.1%
100.0%	44.6	44.7	0.0	0.1%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.9	51.9	0.0	0.0%
1.2%	50.6	50.6	0.0	0.0%
2.5%	50.1	49.6	-0.5	-1.1%
3.7%	49.5	49.5	0.1	0.1%
4.9%	49.4	49.3	-0.1	-0.2%
6.2%	49.3	49.3	0.0	0.0%
7.4%	49.2	49.2	0.0	0.0%
8.6%	49.2	49.2	0.0	0.0%
9.9%	49.2	49.1	0.0	-0.1%
11.1%	49.1	49.1	0.0	0.0%
12.3%	49.1	49.1	0.0	0.0%
13.6%	49.0	48.9	-0.1	-0.2%
14.8%	49.0	48.9	-0.1	-0.2%
16.0%	48.9	48.9	0.0	0.0%
17.3%	48.9	48.8	0.0	-0.1%
18.5%	48.8	48.8	0.0	0.0%
19.8%	48.8	48.8	0.0	0.0%
21.0%	48.7	48.8	0.1	0.1%
22.2%	48.6	48.8	0.1	0.2%
23.5%	48.6	48.7	0.0	0.1%
24.7%	48.6	48.6	0.0	0.0%
25.9%	48.5	48.4	-0.1	-0.2%
27.2%	48.4	48.4	0.0	-0.1%
28.4%	48.3	48.2	-0.1	-0.2%
29.6%	48.3	48.1	-0.1	-0.3%
30.9%	48.2	48.1	-0.1	-0.2%
32.1%	48.2	48.0	-0.1	-0.3%
33.3%	48.1	48.0	-0.2	-0.3%
34.6%	48.0	48.0	-0.1	-0.1%
35.8%	48.0	48.0	0.0	0.0%
37.0%	47.9	47.9	0.0	0.0%
38.3%	47.9	47.9	0.0	0.0%
39.5%	47.9	47.9	-0.1	-0.1%
40.7%	47.9	47.8	0.0	-0.1%
42.0%	47.9	47.8	0.0	-0.1%
43.2%	47.8	47.8	0.0	0.0%
44.4%	47.8	47.8	0.0	-0.1%
45.7%	47.7	47.7	0.0	-0.1%
46.9%	47.7	47.7	0.0	-0.1%
48.1%	47.7	47.7	0.0	0.0%
49.4%	47.6	47.7	0.0	0.0%
50.6%	47.6	47.7	0.0	0.1%
51.9%	47.6	47.7	0.0	0.1%
53.1%	47.6	47.6	0.0	0.0%
54.3%	47.6	47.6	0.0	0.0%
55.6%	47.6	47.6	0.0	-0.1%
56.8%	47.6	47.6	0.0	-0.1%
58.0%	47.6	47.6	0.0	0.0%
59.3%	47.5	47.5	0.0	0.0%
60.5%	47.5	47.5	0.0	0.0%
61.7%	47.5	47.5	0.0	0.0%
63.0%	47.5	47.5	0.0	0.0%
64.2%	47.4	47.4	0.0	0.0%
65.4%	47.4	47.4	0.0	0.0%
66.7%	47.4	47.4	0.0	-0.1%
67.9%	47.4	47.4	0.0	-0.1%
69.1%	47.4	47.3	-0.1	-0.1%
70.4%	47.4	47.3	-0.1	-0.2%
71.6%	47.3	47.3	0.0	0.0%
72.8%	47.3	47.3	0.0	0.0%
74.1%	47.3	47.2	-0.1	-0.1%
75.3%	47.2	47.2	0.0	0.0%
76.5%	47.2	47.1	0.0	0.0%
77.8%	47.1	47.1	0.0	0.0%
79.0%	47.0	47.0	0.0	0.0%
80.2%	46.9	46.9	0.0	0.1%
81.5%	46.8	46.9	0.1	0.1%
82.7%	46.7	46.7	0.0	0.0%
84.0%	46.7	46.7	0.0	0.0%
85.2%	46.7	46.7	0.0	0.0%
86.4%	46.7	46.6	-0.1	-0.1%
87.7%	46.6	46.6	-0.1	-0.1%
88.9%	46.6	46.5	0.0	0.0%
90.1%	46.5	46.5	0.0	0.0%
91.4%	46.4	46.5	0.0	0.0%
92.6%	46.4	46.4	0.0	-0.1%
93.8%	46.4	46.2	-0.2	-0.3%
95.1%	46.0	46.0	-0.1	-0.1%
96.3%	46.0	45.9	0.0	-0.1%
97.5%	45.9	45.9	0.0	-0.1%
98.8%	45.8	45.8	0.0	0.0%
100.0%	45.8	45.8	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.1	53.3	0.2	0.3%
1.2%	51.7	53.1	1.4	2.8%
2.5%	51.2	51.3	0.0	0.0%
3.7%	50.7	50.9	0.2	0.4%
4.9%	50.5	50.7	0.3	0.5%
6.2%	50.3	50.7	0.3	0.7%
7.4%	50.3	50.6	0.3	0.6%
8.6%	50.3	50.4	0.1	0.2%
9.9%	50.2	50.3	0.0	0.1%
11.1%	50.2	50.2	0.0	0.0%
12.3%	50.2	50.2	0.0	0.1%
13.6%	50.1	50.2	0.1	0.2%
14.8%	50.1	50.1	0.1	0.1%
16.0%	50.0	50.1	0.1	0.1%
17.3%	49.9	50.0	0.1	0.2%
18.5%	49.9	50.0	0.1	0.3%
19.8%	49.8	49.9	0.2	0.3%
21.0%	49.7	49.9	0.2	0.3%
22.2%	49.7	49.7	0.0	0.0%
23.5%	49.7	49.7	0.0	0.0%
24.7%	49.7	49.6	-0.1	-0.1%
25.9%	49.7	49.6	0.0	-0.1%
27.2%	49.6	49.6	0.0	0.1%
28.4%	49.6	49.6	0.0	0.1%
29.6%	49.6	49.6	0.0	0.1%
30.9%	49.5	49.5	0.0	-0.1%
32.1%	49.5	49.5	0.0	-0.1%
33.3%	49.5	49.5	0.0	0.0%
34.6%	49.4	49.5	0.0	0.0%
35.8%	49.4	49.4	0.0	-0.1%
37.0%	49.3	49.4	0.0	0.0%
38.3%	49.3	49.3	0.0	0.0%
39.5%	49.3	49.3	0.0	0.0%
40.7%	49.2	49.3	0.1	0.2%
42.0%	49.1	49.2	0.1	0.3%
43.2%	49.1	49.2	0.1	0.2%
44.4%	49.1	49.1	0.1	0.1%
45.7%	48.9	49.1	0.2	0.3%
46.9%	48.9	49.0	0.1	0.2%
48.1%	48.9	49.0	0.1	0.2%
49.4%	48.9	48.9	0.0	0.1%
50.6%	48.8	48.9	0.1	0.1%
51.9%	48.8	48.9	0.1	0.1%
53.1%	48.8	48.9	0.0	0.1%
54.3%	48.8	48.7	0.0	-0.1%
55.6%	48.7	48.7	0.0	-0.1%
56.8%	48.7	48.7	0.0	-0.1%
58.0%	48.7	48.6	0.0	0.0%
59.3%	48.7	48.6	-0.1	-0.1%
60.5%	48.6	48.6	-0.1	-0.2%
61.7%	48.6	48.5	-0.1	-0.2%
63.0%	48.6	48.5	-0.1	-0.2%
64.2%	48.5	48.4	-0.1	-0.2%
65.4%	48.5	48.4	-0.1	-0.2%
66.7%	48.5	48.4	0.0	-0.1%
67.9%	48.4	48.4	0.0	-0.1%
69.1%	48.4	48.4	0.0	0.0%
70.4%	48.3	48.3	0.0	0.0%
71.6%	48.3	48.2	-0.1	-0.2%
72.8%	48.2	48.2	0.0	-0.1%
74.1%	48.2	48.1	-0.1	-0.2%
75.3%	48.1	48.1	0.0	0.0%
76.5%	48.1	48.1	0.0	0.0%
77.8%	48.1	48.0	-0.1	-0.1%
79.0%	48.1	48.0	-0.1	-0.2%
80.2%	48.0	48.0	0.0	-0.1%
81.5%	47.9	47.9	0.0	0.0%
82.7%	47.9	47.9	0.0	0.1%
84.0%	47.8	47.8	0.0	0.0%
85.2%	47.7	47.6	-0.1	-0.3%
86.4%	47.7	47.5	-0.2	-0.4%
87.7%	47.6	47.5	-0.1	-0.2%
88.9%	47.5	47.5	0.0	0.0%
90.1%	47.4	47.5	0.1	0.1%
91.4%	47.4	47.2	-0.2	-0.5%
92.6%	47.2	47.2	0.0	-0.1%
93.8%	47.2	47.1	0.0	-0.1%
95.1%	47.1	47.1	0.0	0.0%
96.3%	47.0	47.0	0.0	0.1%
97.5%	46.9	46.7	-0.1	-0.3%
98.8%	46.5	46.5	0.0	0.0%
100.0%	46.5	46.5	0.0	0.0%

Table SQ13-1b

Clear Creek below Whiskeytown, Monthly Temperature

Probability of Exceedance

June				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	55.5	56.6	1.1	1.9%
1.2%	54.3	55.4	1.1	2.0%
2.5%	53.5	54.9	1.4	2.7%
3.7%	52.3	52.8	0.5	1.0%
4.9%	52.3	52.5	0.3	0.5%
6.2%	52.2	52.3	0.2	0.3%
7.4%	52.1	52.3	0.2	0.4%
8.6%	52.0	52.3	0.2	0.5%
9.9%	52.0	52.2	0.2	0.3%
11.1%	52.0	52.1	0.1	0.1%
12.3%	51.6	52.0	0.4	0.7%
13.6%	51.6	51.9	0.3	0.5%
14.8%	51.5	51.9	0.3	0.6%
16.0%	51.5	51.7	0.2	0.4%
17.3%	51.5	51.6	0.1	0.2%
18.5%	51.5	51.4	0.0	-0.1%
19.8%	51.5	51.4	0.0	-0.1%
21.0%	51.4	51.4	-0.1	-0.1%
22.2%	51.4	51.3	0.0	-0.1%
23.5%	51.3	51.3	0.0	-0.1%
24.7%	51.3	51.3	0.0	0.1%
25.9%	51.3	51.3	0.0	0.0%
27.2%	51.2	51.2	0.1	0.1%
28.4%	51.1	51.2	0.1	0.2%
29.6%	51.1	51.2	0.1	0.2%
30.9%	51.1	51.2	0.1	0.2%
32.1%	51.0	51.1	0.1	0.2%
33.3%	51.0	51.1	0.1	0.1%
34.6%	50.9	51.1	0.1	0.3%
35.8%	50.9	51.1	0.1	0.3%
37.0%	50.9	51.0	0.1	0.1%
38.3%	50.9	50.9	0.0	0.1%
39.5%	50.9	50.9	0.1	0.1%
40.7%	50.8	50.9	0.1	0.2%
42.0%	50.8	50.8	0.0	0.1%
43.2%	50.7	50.7	0.0	0.0%
44.4%	50.7	50.7	0.0	0.0%
45.7%	50.7	50.7	-0.1	-0.1%
46.9%	50.7	50.7	0.0	-0.1%
48.1%	50.7	50.6	-0.1	-0.1%
49.4%	50.7	50.6	-0.1	-0.1%
50.6%	50.4	50.5	0.0	0.1%
51.9%	50.4	50.4	0.0	0.0%
53.1%	50.4	50.4	0.0	0.1%
54.3%	50.3	50.4	0.1	0.2%
55.6%	50.3	50.4	0.1	0.2%
56.8%	50.3	50.3	0.0	0.0%
58.0%	50.2	50.3	0.1	0.2%
59.3%	50.2	50.2	0.0	0.1%
60.5%	50.2	50.1	-0.1	-0.2%
61.7%	50.1	50.1	0.0	0.0%
63.0%	50.0	50.0	0.0	0.0%
64.2%	49.9	50.0	0.0	0.1%
65.4%	49.9	50.0	0.0	0.1%
66.7%	49.9	49.8	-0.1	-0.2%
67.9%	49.9	49.8	-0.1	-0.2%
69.1%	49.8	49.8	0.0	-0.1%
70.4%	49.7	49.7	0.0	0.0%
71.6%	49.7	49.7	0.0	0.0%
72.8%	49.7	49.6	-0.1	-0.2%
74.1%	49.7	49.6	-0.1	-0.2%
75.3%	49.6	49.5	0.0	-0.1%
76.5%	49.6	49.5	-0.1	-0.2%
77.8%	49.6	49.4	-0.2	-0.3%
79.0%	49.5	49.3	-0.2	-0.3%
80.2%	49.5	49.3	-0.2	-0.4%
81.5%	49.4	49.2	-0.1	-0.3%
82.7%	49.3	49.1	-0.2	-0.4%
84.0%	49.2	49.0	-0.2	-0.3%
85.2%	49.2	49.0	-0.1	-0.2%
86.4%	49.0	49.0	-0.1	-0.1%
87.7%	49.0	48.9	-0.1	-0.1%
88.9%	48.8	48.8	0.0	0.0%
90.1%	48.7	48.6	-0.1	-0.2%
91.4%	48.7	48.6	0.0	-0.1%
92.6%	48.6	48.6	0.0	0.0%
93.8%	48.6	48.6	0.0	0.0%
95.1%	48.6	48.6	0.0	0.0%
96.3%	48.4	48.4	0.0	0.0%
97.5%	48.4	48.4	0.0	0.0%
98.8%	48.1	48.0	-0.1	-0.2%
100.0%	48.1	48.0	-0.1	-0.2%

July				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.7	83.8	25.1	42.8%
1.2%	54.2	58.1	4.0	7.3%
2.5%	54.1	55.0	0.9	1.6%
3.7%	54.0	54.7	0.7	1.2%
4.9%	53.9	54.6	0.7	1.2%
6.2%	53.8	54.3	0.5	0.9%
7.4%	53.8	54.1	0.3	0.6%
8.6%	53.7	53.9	0.2	0.4%
9.9%	53.7	53.9	0.2	0.4%
11.1%	53.7	53.8	0.2	0.3%
12.3%	53.6	53.8	0.2	0.4%
13.6%	53.5	53.7	0.1	0.2%
14.8%	53.4	53.5	0.1	0.2%
16.0%	53.3	53.5	0.2	0.3%
17.3%	53.3	53.4	0.2	0.3%
18.5%	53.3	53.4	0.2	0.3%
19.8%	53.2	53.4	0.2	0.3%
21.0%	53.2	53.4	0.2	0.3%
22.2%	53.1	53.4	0.2	0.4%
23.5%	53.1	53.3	0.2	0.4%
24.7%	53.1	53.2	0.1	0.3%
25.9%	53.0	53.1	0.1	0.1%
27.2%	53.0	53.1	0.0	0.1%
28.4%	53.0	53.0	0.1	0.1%
29.6%	52.9	53.0	0.1	0.2%
30.9%	52.8	53.0	0.2	0.4%
32.1%	52.8	53.0	0.2	0.3%
33.3%	52.8	53.0	0.2	0.4%
34.6%	52.8	52.9	0.1	0.3%
35.8%	52.7	52.9	0.2	0.4%
37.0%	52.6	52.8	0.2	0.3%
38.3%	52.6	52.7	0.1	0.2%
39.5%	52.6	52.7	0.1	0.2%
40.7%	52.6	52.6	0.0	0.1%
42.0%	52.6	52.6	0.0	0.0%
43.2%	52.5	52.6	0.0	0.1%
44.4%	52.4	52.5	0.1	0.2%
45.7%	52.3	52.5	0.2	0.4%
46.9%	52.2	52.5	0.2	0.4%
48.1%	52.2	52.3	0.1	0.2%
49.4%	52.2	52.2	0.0	0.0%
50.6%	52.2	52.2	0.0	0.0%
51.9%	52.2	52.2	0.0	0.1%
53.1%	52.1	52.1	0.0	0.0%
54.3%	52.1	52.1	0.0	0.0%
55.6%	52.0	52.1	0.0	0.1%
56.8%	52.0	52.1	0.1	0.1%
58.0%	52.0	52.0	0.1	0.1%
59.3%	52.0	52.0	0.1	0.1%
60.5%	51.9	52.0	0.1	0.1%
61.7%	51.8	51.9	0.1	0.2%
63.0%	51.8	51.9	0.1	0.2%
64.2%	51.8	51.9	0.1	0.1%
65.4%	51.8	51.8	0.0	0.1%
66.7%	51.7	51.8	0.1	0.1%
67.9%	51.7	51.8	0.1	0.1%
69.1%	51.7	51.6	-0.2	-0.3%
70.4%	51.7	51.5	-0.1	-0.3%
71.6%	51.6	51.4	-0.3	-0.5%
72.8%	51.6	51.4	-0.3	-0.5%
74.1%	51.5	51.4	-0.2	-0.3%
75.3%	51.5	51.3	-0.1	-0.3%
76.5%	51.4	51.2	-0.2	-0.4%
77.8%	51.4	51.2	-0.2	-0.3%
79.0%	51.4	51.2	-0.2	-0.4%
80.2%	51.3	51.1	-0.2	-0.4%
81.5%	51.3	51.1	-0.2	-0.4%
82.7%	51.3	51.0	-0.3	-0.5%
84.0%	51.2	51.0	-0.2	-0.5%
85.2%	51.1	51.0	-0.2	-0.4%
86.4%	50.9	50.9	0.0	0.0%
87.7%	50.7	50.9	0.2	0.4%
88.9%	50.7	50.7	0.1	0.1%
90.1%	50.5	50.6	0.0	0.1%
91.4%	50.5	50.5	0.0	0.0%
92.6%	50.5	50.5	0.0	-0.1%
93.8%	50.5	50.4	-0.1	-0.1%
95.1%	50.4	50.4	-0.1	-0.1%
96.3%	50.4	50.3	-0.1	-0.2%
97.5%	50.2	50.2	0.0	-0.1%
98.8%	50.2	50.0	-0.2	-0.3%
100.0%	50.2	50.0	-0.2	-0.3%

August				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.9	63.3	-0.7	-1.1%
1.2%	55.8	55.6	-0.2	-0.4%
2.5%	55.6	55.5	-0.1	-0.2%
3.7%	55.3	54.9	-0.4	-0.8%
4.9%	55.2	54.8	-0.4	-0.7%
6.2%	55.1	54.7	-0.3	-0.6%
7.4%	54.9	54.7	-0.2	-0.4%
8.6%	54.7	54.5	-0.2	-0.3%
9.9%	54.5	54.5	0.0	0.1%
11.1%	54.4	54.4	0.0	0.0%
12.3%	54.4	54.4	0.0	0.0%
13.6%	54.4	54.4	0.0	0.0%
14.8%	54.2	54.3	0.1	0.3%
16.0%	54.2	54.3	0.2	0.3%
17.3%	54.1	54.3	0.1	0.3%
18.5%	54.1	54.3	0.2	0.3%
19.8%	54.1	54.3	0.2	0.4%
21.0%	54.0	54.2	0.2	0.3%
22.2%	54.0	54.1	0.1	0.2%
23.5%	53.9	54.0	0.1	0.2%
24.7%	53.9	54.0	0.1	0.2%
25.9%	53.8	53.9	0.1	0.2%
27.2%	53.8	53.8	0.0	0.1%
28.4%	53.6	53.8	0.1	0.3%
29.6%	53.6	53.7	0.1	0.2%
30.9%	53.6	53.6	0.0	0.0%
32.1%	53.5	53.5	0.0	0.0%
33.3%	53.5	53.4	-0.1	-0.2%
34.6%	53.5	53.4	-0.1	-0.3%
35.8%	53.4	53.4	-0.1	-0.1%
37.0%	53.3	53.3	-0.1	-0.1%
38.3%	53.2	53.3	0.0	0.1%
39.5%	53.2	53.3	0.1	0.1%
40.7%	53.2	53.2	0.0	0.0%
42.0%	53.2	53.1	-0.1	-0.1%
43.2%	53.1	53.1	0.0	0.0%
44.4%	53.1	53.0	0.0	-0.1%
45.7%	53.0	53.0	0.1	0.1%
46.9%	52.9	53.0	0.1	0.3%
48.1%	52.8	52.9	0.1	0.2%
49.4%	52.8	52.9	0.0	0.1%
50.6%	52.7	52.8	0.1	0.2%
51.9%	52.7	52.8	0.1	0.2%
53.1%	52.6	52.7	0.1	0.1%
54.3%	52.6	52.7	0.1	0.1%
55.6%	52.6	52.6	0.0	0.0%
56.8%	52.5	52.5	0.1	0.1%
58.0%	52.5	52.5	0.0	0.1%
59.3%	52.5	52.4	-0.1	-0.2%
60.5%	52.5	52.3	-0.1	-0.2%
61.7%	52.4	52.3	-0.1	-0.2%
63.0%	52.4	52.1	-0.3	-0.6%
64.2%	52.3	52.1	-0.2	-0.5%
65.4%	52.3	52.1	-0.2	-0.4%
66.7%	52.2	52.0	-0.2	-0.4%
67.9%	52.2	51.9	-0.2	-0.4%
69.1%	52.2	51.9	-0.2	-0.4%
70.4%	52.1	51.9	-0.2	-0.4%
71.6%	52.1	51.9	-0.2	-0.4%
72.8%	52.1	51.9	-0.2	-0.3%
74.1%	52.0	51.9	-0.1	-0.3%
75.3%	52.0	51.8	-0.2	-0.5%
76.5%	52.0	51.8	-0.2	-0.5%
77.8%	51.9	51.7	-0.3	-0.5%
79.0%	51.9	51.6	-0.3	-0.5%
80.2%	51.9	51.6	-0.3	-0.5%
81.5%	51.7	51.6	-0.1	-0.2%
82.7%	51.7	51.5	-0.2	-0.3%
84.0%	51.7	51.5	-0.2	-0.3%
85.2%	51.7	51.5	-0.2	-0.3%
86.4%	51.6	51.5	-0.1	-0.2%
87.7%	51.6	51.4	-0.2	-0.3%
88.9%	51.6	51.4	-0.2	-0.4%
90.1%	51.6	51.4	-0.2	-0.4%
91.4%	51.5	51.3	-0.3	-0.5%
92.6%	51.4	51.1	-0.3	-0.5%
93.8%	51.4	51.1	-0.2	-0.5%
95.1%	51.3	51.1	-0.2	-0.5%
96.3%	51.3	51.0	-0.3	-0.5%
97.5%	51.2	50.9	-0.4	-0.7%
98.8%	51.0	50.6	-0.4	-0.8%
100.0%	51.0	50.6	-0.4	-0.8%

September				
Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.8	63.6	-0.2	-0.4%
1.2%	60.8	56.9	-3.9	-6.4%
2.5%	58.8	56.8	-2.0	-3.4%
3.7%	56.9	56.6	-0.3	-0.5%
4.9%	56.5	56.2	-0.2	-0.4%
6.2%	55.9	55.8	-0.2	-0.3%
7.4%	55.4	55.3	-0.1	-0.2%
8.6%	55.4	55.2	-0.2	-0.4%
9.9%	55.2	55.0	-0.2	-0.4%
11.1%	55.1	54.8	-0.3	-0.5%
12.3%	54.9	54.7	-0.3	-0.5%
13.6%	54.7	54.7	0.0	0.0%
14.8%	54.6	54.6	0.0	0.0%
16.0%	54.6	54.6	0.0	0.0%
17.3%	54.5	54.6	0.1	0.1%
18.5%	54.5	54.5	0.0	0.0%
19.8%	54.5	54.4	0.0	0.0%
21.0%	54.5	54.2	-0.2	-0.4%
22.2%	54.4	54.1	-0.4	-0.7%
23.5%	54.1	54.0	-0.1	-0.2%
24.7%	54.1	54.0	-0.1	-0.1%
25.9%	54.0	53.8	-0.2	-0.3%
27.2%	54.0	53.8	-0.2	-0.3%
28.4%	53.9	53.8	-0.1	-0.2%
29.6%	53.8	53.7	-0.2	-0.3%
30.9%	53.7	53.6	-0.1	-0.1%
32.1%	53.4	53.5	0.1	0.2%
33.3%	53.3	53.4	0.0	0.1%
34.6%	53.3	53.3	0.0	0.0%
35.8%	53.2	53.3	0.1	0.3%
37.0%	53.0	53.1	0.1	0.2%
38.3%	53.0	53.0	0.0	0.1%
39.5%	52.9	53.0	0.0	0.1%
40.7%	52.9	52.8	-0.2	-0.3%
42.0%	52.9	52.8	-0.1	-0.2%
43.2%	52.8	52.7	-0.2	-0.3%
44.4%	52.8	52.7	-0.1	-0.3%
45.7%	52.8	52.6	-0.2	-0.4%
46.9%	52.8	52.6	-0.2	-0.3%
48.1%	52.6	52.6	0.0	0.0%
49.4%	52.5	52.5	0.0	-0.1%
50.6%	52.5	52.4	-0.1	-0.1%
51.9%	52.4	52.3	-0.1	-0.2%
53.1%	52.3	52.3	-0.1	-0.1%
54.3%	52.3	52.2	-0.1	-0.2%
55.6%	52.2	52.1	-0.2	-0.3%
56.8%	52.2	52.0	-0.2	-0.3%
58.0%	52.2	51.9	-0.3	-0.6%
59.3%	51.9	51.9	-0.1	-0.1%
60.5%	51.8	51.8	0.0	0.0%
61.7%	51.8	51.8	0.0	0.0%
63.0%	51.8	51.6	-0.2	-0.3%
64.2%	51.7	51.6	-0.1	-0.2%
65.4%	51.7	51.6	-0.1	-0.2%
66.7%	51.6	51.5	-0.1	-0.2%
67.9%	51.6	51.5	-0.2	-0.3%
69.1%	51.6	51.4	-0.2	-0.4%
70.4%	51.6	51.3	-0.2	-0.5%
71.6%	51.5	51.3	-0.2	-0.4%
72.8%	51.5	51.3	-0.2	-0.3%
74.1%	51.3	51.2	0.0	0.0%
75.3%	51.2	51.2	0.0	0.0%
76.5%	51.2	51.2	-0.1	-0.1%
77.8%	51.2	51.1	-0.1	-0.1%
79.0%	51.2	51.1	-0.1	-0.2%
80.2%	51.2	51.0	-0.1	-0.3%
81.5%	51.1	51.0	-0.1	-0.2%
82.7%	51.1	51.0	-0.1	-0.1%
84.0%	51.1	51.0	-0.1	-0.1%
85.2%	51.0	50.9	-0.1	-0.3%
86.4%	51.0	50.8	-0.2	-0.3%
87.7%	50.9	50.7	-0.2	-0.4%
88.9%	50.9	50.7	-0.2	-0.4%
90.1%	50.8	50.7	-0.1	-0.2%
91.4%	50.8	50.7	-0.1	-0.2%
92.6%	50.7	50.7	0.0	0.0%
93.8%	50.6	50.6	-0.1	-0.1%
95.1%	50.6	50.5	-0.1	-0.2%
96.3%	50.5	50.4	0.0	-0.1%
97.5%	50.5	50.3	-0.2	-0.3%
98.8%	50.5	50.3	-0.2	-0.3%
100.0%	50.5	50.3	-0.2	-0.3%

Table SQ13-1b

Clear Creek below Whiskeytown, Monthly Temperature

Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	60.5	60.1	-0.4	-0.7%
1.2%	55.2	59.1	3.9	7.1%
2.5%	54.8	55.7	0.9	1.7%
3.7%	54.6	54.6	0.0	-0.1%
4.9%	54.6	54.5	-0.1	-0.2%
6.2%	54.0	54.3	0.3	0.5%
7.4%	54.0	53.9	-0.1	-0.2%
8.6%	53.9	53.9	0.0	-0.1%
9.9%	53.9	53.9	0.0	0.0%
11.1%	53.7	53.8	0.1	0.2%
12.3%	53.6	53.8	0.1	0.3%
13.6%	53.6	53.7	0.1	0.3%
14.8%	53.5	53.7	0.2	0.4%
16.0%	53.4	53.7	0.2	0.4%
17.3%	53.4	53.5	0.1	0.2%
18.5%	53.4	53.4	0.0	0.1%
19.8%	53.3	53.4	0.1	0.2%
21.0%	53.3	53.4	0.1	0.2%
22.2%	53.2	53.3	0.1	0.2%
23.5%	53.2	53.3	0.1	0.2%
24.7%	53.1	53.2	0.1	0.2%
25.9%	53.0	53.1	0.1	0.2%
27.2%	53.0	53.1	0.1	0.2%
28.4%	53.0	53.1	0.1	0.2%
29.6%	52.9	52.9	0.0	0.1%
30.9%	52.9	52.8	0.0	0.0%
32.1%	52.7	52.8	0.1	0.2%
33.3%	52.7	52.8	0.1	0.2%
34.6%	52.6	52.8	0.1	0.3%
35.8%	52.6	52.7	0.2	0.3%
37.0%	52.6	52.7	0.1	0.2%
38.3%	52.4	52.5	0.1	0.2%
39.5%	52.3	52.5	0.2	0.4%
40.7%	52.3	52.5	0.2	0.4%
42.0%	52.2	52.4	0.1	0.3%
43.2%	52.2	52.3	0.1	0.3%
44.4%	52.1	52.2	0.1	0.2%
45.7%	52.1	52.2	0.1	0.2%
46.9%	52.0	52.2	0.1	0.2%
48.1%	52.0	52.1	0.1	0.1%
49.4%	52.0	52.1	0.0	0.1%
50.6%	52.0	52.0	0.1	0.1%
51.9%	52.0	52.0	0.0	0.0%
53.1%	51.9	51.9	0.0	0.0%
54.3%	51.9	51.9	0.0	0.0%
55.6%	51.8	51.8	0.0	-0.1%
56.8%	51.7	51.8	0.1	0.2%
58.0%	51.7	51.7	0.0	0.0%
59.3%	51.6	51.7	0.0	0.1%
60.5%	51.6	51.6	0.0	0.0%
61.7%	51.5	51.6	0.1	0.1%
63.0%	51.5	51.5	0.1	0.2%
64.2%	51.4	51.5	0.1	0.1%
65.4%	51.4	51.5	0.0	0.1%
66.7%	51.4	51.4	0.0	0.0%
67.9%	51.4	51.3	-0.1	-0.3%
69.1%	51.4	51.3	-0.1	-0.2%
70.4%	51.3	51.2	-0.1	-0.3%
71.6%	51.2	51.1	-0.2	-0.3%
72.8%	51.2	51.1	-0.1	-0.2%
74.1%	51.1	51.1	-0.1	-0.2%
75.3%	51.1	51.0	-0.1	-0.2%
76.5%	51.1	51.0	-0.1	-0.3%
77.8%	51.1	51.0	-0.1	-0.3%
79.0%	51.1	50.8	-0.2	-0.4%
80.2%	51.1	50.8	-0.3	-0.5%
81.5%	51.1	50.7	-0.4	-0.8%
82.7%	51.0	50.6	-0.4	-0.7%
84.0%	50.9	50.6	-0.3	-0.5%
85.2%	50.8	50.6	-0.2	-0.4%
86.4%	50.8	50.6	-0.2	-0.4%
87.7%	50.6	50.5	0.0	-0.1%
88.9%	50.6	50.4	-0.1	-0.3%
90.1%	50.5	50.4	0.0	0.0%
91.4%	50.4	50.4	0.0	-0.1%
92.6%	50.4	50.4	0.0	0.0%
93.8%	50.4	50.3	-0.1	-0.1%
95.1%	50.3	50.3	-0.1	-0.1%
96.3%	50.3	50.1	-0.2	-0.3%
97.5%	50.2	49.9	-0.2	-0.4%
98.8%	50.0	49.9	-0.1	-0.3%
100.0%	49.7	49.5	-0.2	-0.4%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.1	62.3	0.1	0.2%
1.2%	56.4	61.7	5.3	9.3%
2.5%	55.7	55.5	-0.3	-0.5%
3.7%	55.4	55.4	0.0	0.0%
4.9%	55.3	55.0	-0.3	-0.6%
6.2%	54.7	54.6	-0.1	-0.2%
7.4%	54.6	54.6	-0.1	-0.1%
8.6%	54.5	54.5	-0.1	-0.1%
9.9%	54.4	54.4	0.0	-0.1%
11.1%	54.2	54.4	0.1	0.3%
12.3%	54.1	54.3	0.2	0.4%
13.6%	54.1	54.3	0.2	0.4%
14.8%	54.1	54.3	0.2	0.4%
16.0%	54.1	54.2	0.2	0.3%
17.3%	54.0	54.2	0.2	0.5%
18.5%	53.9	54.2	0.2	0.4%
19.8%	53.9	54.1	0.2	0.4%
21.0%	53.9	54.1	0.2	0.3%
22.2%	53.9	54.1	0.2	0.4%
23.5%	53.7	53.8	0.0	0.1%
24.7%	53.7	53.7	0.0	0.0%
25.9%	53.7	53.7	0.0	0.0%
27.2%	53.6	53.6	0.0	0.1%
28.4%	53.6	53.6	0.0	0.0%
29.6%	53.6	53.5	-0.1	-0.3%
30.9%	53.5	53.4	-0.1	-0.1%
32.1%	53.2	53.3	0.1	0.2%
33.3%	53.2	53.3	0.1	0.2%
34.6%	53.2	53.3	0.1	0.3%
35.8%	53.2	53.2	0.1	0.1%
37.0%	53.0	53.2	0.1	0.3%
38.3%	52.9	53.1	0.2	0.5%
39.5%	52.9	53.0	0.1	0.2%
40.7%	52.8	53.0	0.2	0.4%
42.0%	52.7	52.9	0.2	0.4%
43.2%	52.7	52.8	0.1	0.3%
44.4%	52.6	52.8	0.2	0.3%
45.7%	52.6	52.7	0.2	0.3%
46.9%	52.6	52.7	0.1	0.3%
48.1%	52.5	52.5	0.0	0.0%
49.4%	52.5	52.5	0.0	0.1%
50.6%	52.5	52.5	0.1	0.1%
51.9%	52.5	52.5	0.0	0.1%
53.1%	52.4	52.5	0.0	0.1%
54.3%	52.4	52.3	0.0	0.0%
55.6%	52.3	52.3	0.0	0.0%
56.8%	52.3	52.3	0.0	0.0%
58.0%	52.3	52.3	0.0	0.0%
59.3%	52.3	52.3	0.0	0.0%
60.5%	52.2	52.1	-0.1	-0.2%
61.7%	52.0	52.1	0.1	0.1%
63.0%	52.0	52.0	0.0	0.0%
64.2%	52.0	51.9	-0.1	-0.3%
65.4%	51.9	51.9	0.0	0.0%
66.7%	51.9	51.8	-0.1	-0.1%
67.9%	51.9	51.8	-0.1	-0.1%
69.1%	51.8	51.7	-0.1	-0.3%
70.4%	51.8	51.6	-0.2	-0.4%
71.6%	51.8	51.5	-0.2	-0.4%
72.8%	51.7	51.5	-0.1	-0.2%
74.1%	51.6	51.5	-0.1	-0.2%
75.3%	51.6	51.5	-0.1	-0.3%
76.5%	51.6	51.3	-0.3	-0.5%
77.8%	51.6	51.3	-0.3	-0.5%
79.0%	51.5	51.3	-0.3	-0.5%
80.2%	51.5	51.2	-0.3	-0.6%
81.5%	51.4	51.2	-0.2	-0.4%
82.7%	51.3	51.2	-0.1	-0.3%
84.0%	51.3	51.1	-0.2	-0.3%
85.2%	51.3	51.1	-0.1	-0.3%
86.4%	51.2	51.1	-0.1	-0.2%
87.7%	51.2	51.0	-0.1	-0.3%
88.9%	51.1	51.0	-0.1	-0.2%
90.1%	51.0	51.0	0.0	0.0%
91.4%	51.0	50.9	-0.1	-0.1%
92.6%	51.0	50.9	0.0	-0.1%
93.8%	50.9	50.9	0.0	-0.1%
95.1%	50.9	50.8	-0.1	-0.2%
96.3%	50.9	50.6	-0.2	-0.5%
97.5%	50.7	50.5	-0.2	-0.4%
98.8%	50.7	50.4	-0.3	-0.5%
100.0%	50.3	50.1	-0.2	-0.5%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.9	63.4	-0.5	-0.7%
1.2%	58.3	56.2	-2.1	-3.5%
2.5%	57.1	55.8	-1.2	-2.1%
3.7%	56.2	55.8	-0.4	-0.7%
4.9%	55.9	55.3	-0.5	-0.9%
6.2%	55.2	55.1	-0.1	-0.2%
7.4%	55.1	55.0	-0.1	-0.1%
8.6%	55.1	54.8	-0.2	-0.4%
9.9%	54.7	54.7	0.0	0.0%
11.1%	54.7	54.7	0.1	0.1%
12.3%	54.5	54.7	0.1	0.2%
13.6%	54.5	54.5	0.0	0.0%
14.8%	54.5	54.5	0.0	0.0%
16.0%	54.5	54.5	0.0	0.0%
17.3%	54.5	54.5	0.0	0.0%
18.5%	54.3	54.4	0.1	0.1%
19.8%	54.3	54.3	0.0	0.1%
21.0%	54.1	54.2	0.1	0.2%
22.2%	54.1	54.1	0.0	0.0%
23.5%	54.1	54.1	0.0	0.0%
24.7%	54.0	53.9	-0.1	-0.1%
25.9%	53.9	53.9	0.0	0.0%
27.2%	53.9	53.8	0.0	-0.1%
28.4%	53.9	53.7	-0.1	-0.3%
29.6%	53.8	53.7	-0.1	-0.2%
30.9%	53.7	53.7	0.0	0.0%
32.1%	53.5	53.6	0.0	0.1%
33.3%	53.3	53.5	0.2	0.3%
34.6%	53.2	53.2	0.0	-0.1%
35.8%	53.2	53.2	0.0	-0.1%
37.0%	53.2	53.2	0.0	-0.1%
38.3%	53.1	53.1	0.1	0.1%
39.5%	53.1	53.0	0.0	-0.1%
40.7%	53.0	53.0	-0.1	-0.1%
42.0%	53.0	52.9	0.0	-0.1%
43.2%	53.0	52.8	-0.2	-0.3%
44.4%	52.8	52.8	0.0	0.0%
45.7%	52.8	52.8	0.0	0.0%
46.9%	52.8	52.8	0.0	0.0%
48.1%	52.7	52.7	0.0	0.0%
49.4%	52.7	52.7	0.0	0.1%
50.6%	52.7	52.7	0.0	0.0%
51.9%	52.6	52.6	0.0	-0.1%
53.1%	52.6	52.5	0.0	-0.1%
54.3%	52.6	52.5	-0.1	-0.2%
55.6%	52.5	52.4	0.0	0.0%
56.8%	52.4	52.3	-0.1	-0.2%
58.0%	52.4	52.2	-0.1	-0.3%
59.3%	52.3	52.1	-0.2	-0.4%
60.5%	52.2	52.1	-0.1	-0.2%
61.7%	52.2	52.0	-0.2	-0.4%
63.0%	52.1	52.0	-0.1	-0.3%
64.2%	52.0	51.9	-0.1	-0.2%
65.4%	51.9	51.9	-0.1	-0.2%
66.7%	51.9	51.7	-0.2	-0.4%
67.9%	51.9	51.7	-0.2	-0.4%
69.1%	51.9	51.6	-0.3	-0.5%
70.4%	51.9	51.6	-0.3	-0.5%
71.6%	51.8	51.6	-0.3	-0.5%
72.8%	51.7	51.5	-0.2	-0.4%
74.1%	51.6	51.5	-0.1	-0.2%
75.3%	51.6	51.5	-0.1	-0.2%
76.5%	51.6	51.4	-0.2	-0.3%
77.8%	51.6	51.4	-0.2	-0.4%
79.0%	51.6	51.4	-0.2	-0.4%
80.2%	51.4	51.3	-0.1	-0.1%
81.5%	51.4	51.3	-0.1	-0.2%
82.7%	51.4	51.2	-0.1	-0.2%
84.0%	51.4	51.2	-0.1	-0.3%
85.2%	51.3	51.2	-0.1	-0.2%
86.4%	51.3	51.1	-0.1	-0.3%
87.7%	51.3	51.1	-0.1	-0.2%
88.9%	51.2	51.1	-0.1	-0.2%
90.1%	51.2	51.1	-0.1	-0.3%
91.4%	51.2	51.1	-0.1	-0.2%
92.6%	51.2	51.1	-0.1	-0.1%
93.8%	51.1	50.9	-0.2	-0.5%
95.1%	51.0	50.9	-0.1	-0.3%
96.3%	50.9	50.8	-0.2	-0.3%
97.5%	50.9	50.7	-0.2	-0.4%
98.8%	50.8	50.5	-0.4	-0.7%
100.0%	50.5	50.3	-0.2	-0.4%

Figure SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

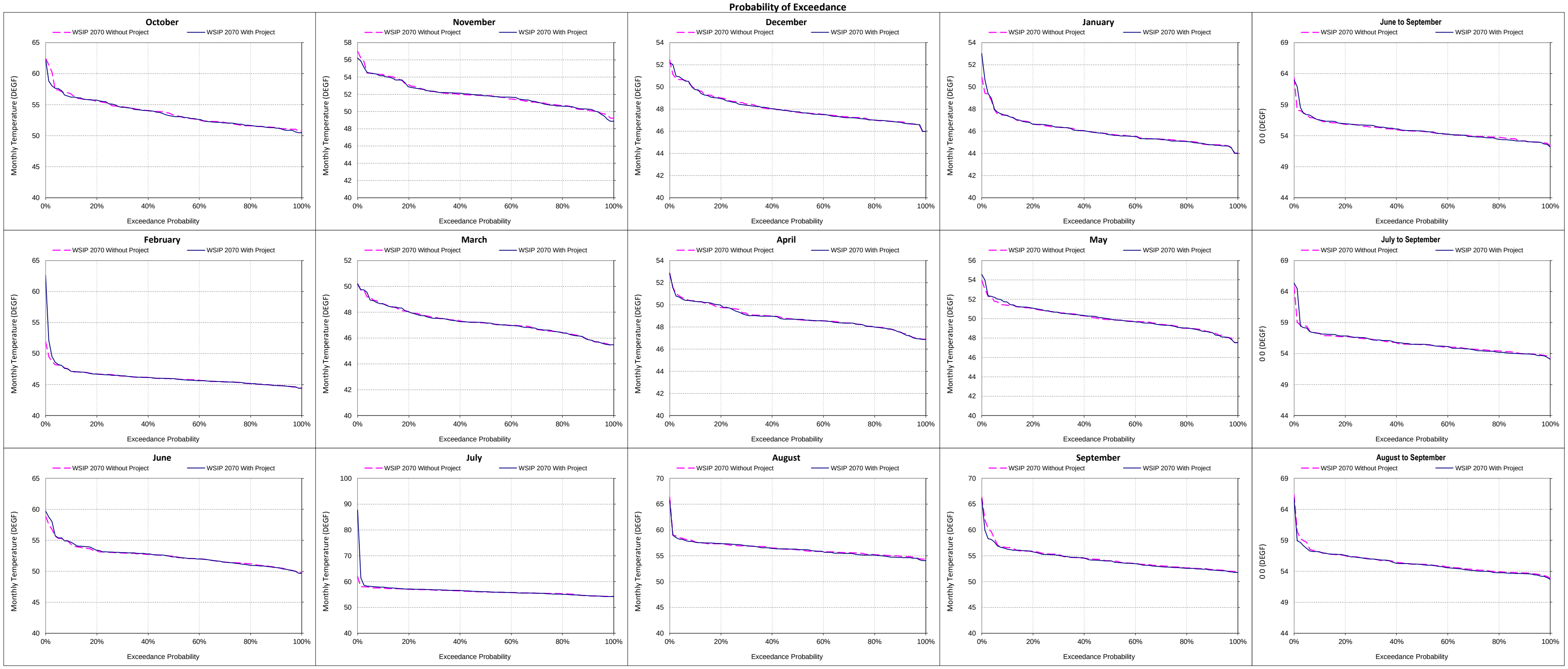


Table SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

October

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	62.4	62.4	0.0	0.0%
1.2%	61.4	58.8	-2.6	-4.2%
2.5%	60.2	58.0	-2.2	-3.7%
3.7%	57.4	57.7	0.2	0.4%
4.9%	57.4	57.6	0.2	0.4%
6.2%	57.1	57.2	0.1	0.2%
7.4%	57.0	56.6	-0.4	-0.7%
8.6%	56.9	56.4	-0.5	-0.9%
9.9%	56.7	56.2	-0.5	-0.9%
11.1%	56.4	56.2	-0.2	-0.3%
12.3%	56.0	56.1	0.1	0.2%
13.6%	56.0	56.1	0.1	0.2%
14.8%	55.9	55.9	0.0	-0.1%
16.0%	55.8	55.8	0.0	0.0%
17.3%	55.8	55.8	0.0	-0.1%
18.5%	55.7	55.7	0.0	0.0%
19.8%	55.6	55.7	0.2	0.3%
21.0%	55.5	55.6	0.1	0.2%
22.2%	55.4	55.5	0.1	0.3%
23.5%	55.3	55.5	0.2	0.3%
24.7%	55.2	55.1	-0.1	-0.1%
25.9%	54.8	55.1	0.2	0.5%
27.2%	54.8	55.0	0.2	0.3%
28.4%	54.7	54.7	0.0	0.0%
29.6%	54.7	54.6	-0.1	-0.2%
30.9%	54.6	54.6	0.0	-0.1%
32.1%	54.5	54.5	0.0	-0.1%
33.3%	54.5	54.5	0.0	0.0%
34.6%	54.4	54.2	-0.2	-0.3%
35.8%	54.2	54.2	0.0	-0.1%
37.0%	54.2	54.1	-0.1	-0.1%
38.3%	54.1	54.1	0.0	-0.1%
39.5%	54.1	54.1	0.0	0.0%
40.7%	54.0	54.0	0.0	-0.1%
42.0%	53.9	54.0	0.0	0.0%
43.2%	53.9	53.8	-0.1	-0.2%
44.4%	53.9	53.7	-0.1	-0.2%
45.7%	53.9	53.6	-0.3	-0.5%
46.9%	53.7	53.4	-0.4	-0.7%
48.1%	53.6	53.2	-0.4	-0.8%
49.4%	53.4	53.1	-0.3	-0.6%
50.6%	53.3	53.1	-0.2	-0.3%
51.9%	53.2	53.1	-0.1	-0.2%
53.1%	53.0	53.1	0.0	0.1%
54.3%	52.9	52.9	0.1	0.1%
55.6%	52.8	52.9	0.1	0.2%
56.8%	52.8	52.8	0.0	0.0%
58.0%	52.7	52.8	0.1	0.2%
59.3%	52.6	52.6	0.0	0.0%
60.5%	52.5	52.6	0.2	0.3%
61.7%	52.4	52.4	0.0	0.0%
63.0%	52.4	52.3	-0.1	-0.1%
64.2%	52.3	52.3	-0.1	-0.1%
65.4%	52.3	52.2	-0.1	-0.2%
66.7%	52.3	52.2	-0.1	-0.2%
67.9%	52.2	52.2	-0.1	-0.2%
69.1%	52.2	52.1	-0.1	-0.2%
70.4%	52.1	52.1	0.0	0.0%
71.6%	52.0	52.0	0.0	0.1%
72.8%	51.9	52.0	0.1	0.1%
74.1%	51.8	51.9	0.1	0.2%
75.3%	51.8	51.9	0.1	0.2%
76.5%	51.6	51.9	0.2	0.5%
77.8%	51.6	51.7	0.1	0.2%
79.0%	51.6	51.7	0.1	0.2%
80.2%	51.6	51.6	0.1	0.1%
81.5%	51.5	51.6	0.0	0.0%
82.7%	51.5	51.5	0.0	0.0%
84.0%	51.5	51.5	0.0	0.0%
85.2%	51.5	51.4	0.0	0.0%
86.4%	51.4	51.4	0.0	-0.1%
87.7%	51.4	51.3	-0.1	-0.2%
88.9%	51.3	51.3	0.0	-0.1%
90.1%	51.3	51.2	-0.1	-0.1%
91.4%	51.1	51.2	0.1	0.1%
92.6%	51.1	51.0	-0.2	-0.3%
93.8%	51.1	50.9	-0.2	-0.5%
95.1%	51.1	50.9	-0.2	-0.3%
96.3%	51.0	50.9	-0.2	-0.4%
97.5%	51.0	50.6	-0.4	-0.8%
98.8%	50.7	50.5	-0.3	-0.5%
100.0%	50.7	50.5	0.0	-0.5%

November

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	57.0	56.2	-0.8	-1.4%
1.2%	56.2	55.9	-0.4	-0.7%
2.5%	55.8	55.1	-0.7	-1.2%
3.7%	54.5	54.6	0.1	0.2%
4.9%	54.5	54.4	0.0	-0.1%
6.2%	54.4	54.4	0.0	0.0%
7.4%	54.3	54.3	0.0	0.0%
8.6%	54.3	54.2	-0.2	-0.3%
9.9%	54.3	54.2	-0.1	-0.3%
11.1%	54.1	54.0	-0.1	-0.1%
12.3%	54.1	54.0	-0.1	-0.2%
13.6%	54.1	53.9	-0.2	-0.3%
14.8%	53.9	53.7	-0.2	-0.4%
16.0%	53.8	53.7	-0.1	-0.2%
17.3%	53.6	53.7	0.0	0.1%
18.5%	53.2	53.4	0.1	0.2%
19.8%	53.2	52.9	-0.3	-0.5%
21.0%	53.0	52.8	-0.2	-0.3%
22.2%	52.9	52.7	-0.2	-0.3%
23.5%	52.7	52.7	0.0	0.0%
24.7%	52.7	52.6	-0.1	-0.1%
25.9%	52.6	52.6	0.0	0.1%
27.2%	52.4	52.4	0.1	0.1%
28.4%	52.4	52.4	0.0	0.0%
29.6%	52.3	52.4	0.0	0.1%
30.9%	52.3	52.3	0.0	0.0%
32.1%	52.3	52.2	0.0	-0.1%
33.3%	52.1	52.2	0.1	0.1%
34.6%	52.1	52.2	0.1	0.2%
35.8%	52.1	52.2	0.1	0.2%
37.0%	52.1	52.2	0.1	0.2%
38.3%	52.1	52.2	0.1	0.2%
39.5%	52.0	52.1	0.2	0.3%
40.7%	52.0	52.1	0.1	0.2%
42.0%	52.0	52.1	0.1	0.2%
43.2%	51.9	52.0	0.1	0.2%
44.4%	51.9	52.0	0.0	0.1%
45.7%	51.9	52.0	0.0	0.1%
46.9%	51.9	51.9	0.1	0.1%
48.1%	51.9	51.9	0.1	0.1%
49.4%	51.8	51.8	0.0	0.0%
50.6%	51.8	51.8	0.0	0.0%
51.9%	51.8	51.8	0.0	-0.1%
53.1%	51.8	51.7	0.0	-0.1%
54.3%	51.7	51.7	0.0	0.1%
55.6%	51.7	51.7	0.0	0.0%
56.8%	51.6	51.7	0.0	0.1%
58.0%	51.6	51.7	0.1	0.1%
59.3%	51.5	51.7	0.2	0.4%
60.5%	51.4	51.6	0.2	0.4%
61.7%	51.4	51.6	0.2	0.5%
63.0%	51.4	51.5	0.1	0.2%
64.2%	51.3	51.4	0.1	0.2%
65.4%	51.2	51.4	0.1	0.3%
66.7%	51.2	51.3	0.1	0.3%
67.9%	51.1	51.2	0.1	0.2%
69.1%	51.1	51.2	0.1	0.1%
70.4%	51.0	51.1	0.0	0.1%
71.6%	51.0	51.0	-0.1	-0.1%
72.8%	51.0	50.9	-0.1	-0.2%
74.1%	50.9	50.8	-0.1	-0.1%
75.3%	50.8	50.8	-0.1	-0.1%
76.5%	50.8	50.7	-0.1	-0.1%
77.8%	50.8	50.7	-0.1	-0.2%
79.0%	50.7	50.6	-0.1	-0.1%
80.2%	50.7	50.6	-0.1	-0.1%
81.5%	50.7	50.6	-0.1	-0.1%
82.7%	50.6	50.6	0.0	0.0%
84.0%	50.4	50.6	0.1	0.2%
85.2%	50.3	50.4	0.1	0.2%
86.4%	50.3	50.3	0.1	0.1%
87.7%	50.3	50.3	0.1	0.1%
88.9%	50.2	50.3	0.1	0.2%
90.1%	50.1	50.3	0.1	0.3%
91.4%	50.1	50.2	0.1	0.3%
92.6%	50.0	50.1	0.0	0.1%
93.8%	50.0	50.0	0.0	0.0%
95.1%	49.8	49.7	-0.1	-0.2%
96.3%	49.7	49.5	-0.3	-0.5%
97.5%	49.6	49.1	-0.5	-0.9%
98.8%	49.2	48.9	-0.4	-0.7%
100.0%	49.2	48.9	-0.4	-0.7%

December

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.5	52.2	-0.3	-0.6%
1.2%	51.1	52.0	0.9	1.8%
2.5%	50.8	51.0	0.2	0.4%
3.7%	50.7	50.9	0.3	0.5%
4.9%	50.7	50.7	0.1	0.1%
6.2%	50.6	50.5	-0.1	-0.1%
7.4%	50.4	50.5	0.1	0.3%
8.6%	50.1	50.0	-0.1	-0.1%
9.9%	49.8	49.8	0.0	-0.1%
11.1%	49.7	49.7	0.1	0.2%
12.3%	49.6	49.4	-0.2	-0.5%
13.6%	49.3	49.3	0.0	-0.1%
14.8%	49.3	49.2	0.0	-0.1%
16.0%	49.3	49.1	-0.2	-0.3%
17.3%	49.1	49.0	-0.1	-0.1%
18.5%	49.1	49.0	-0.1	-0.2%
19.8%	49.0	49.0	0.0	-0.1%
21.0%	49.0	48.9	-0.1	-0.2%
22.2%	48.9	48.8	-0.1	-0.3%
23.5%	48.7	48.7	-0.1	-0.1%
24.7%	48.7	48.6	-0.1	-0.2%
25.9%	48.7	48.6	-0.1	-0.2%
27.2%	48.6	48.4	-0.2	-0.3%
28.4%	48.6	48.4	-0.2	-0.4%
29.6%	48.5	48.4	-0.1	-0.2%
30.9%	48.4	48.3	-0.1	-0.2%
32.1%	48.4	48.3	-0.2	-0.3%
33.3%	48.3	48.3	-0.1	-0.2%
34.6%	48.2	48.3	0.1	0.2%
35.8%	48.1	48.2	0.0	0.1%
37.0%	48.1	48.2	0.1	0.2%
38.3%	48.0	48.1	0.1	0.2%
39.5%	48.0	48.0	0.0	0.0%
40.7%	48.0	48.0	0.0	0.0%
42.0%	48.0	48.0	0.0	0.0%
43.2%	47.9	47.9	0.0	0.0%
44.4%	47.9	47.9	0.0	-0.1%
45.7%	47.9	47.9	0.0	0.0%
46.9%	47.8	47.8	0.0	0.0%
48.1%	47.7	47.8	0.1	0.1%
49.4%	47.7	47.8	0.0	0.0%
50.6%	47.7	47.7	0.1	0.1%
51.9%	47.7	47.7	0.0	0.0%
53.1%	47.6	47.7	0.0	0.1%
54.3%	47.6	47.6	0.0	0.0%
55.6%	47.6	47.6	0.0	-0.1%
56.8%	47.6	47.5	0.0	-0.1%
58.0%	47.6	47.5	0.0	-0.1%
59.3%	47.5	47.5	0.0	-0.1%
60.5%	47.5	47.5	0.0	0.0%
61.7%	47.5	47.5	0.0	-0.1%
63.0%	47.4	47.4	-0.1	-0.1%
64.2%	47.4	47.3	-0.1	-0.2%
65.4%	47.4	47.3	-0.1	-0.1%
66.7%	47.3	47.3	0.0	-0.1%
67.9%	47.3	47.2	-0.1	-0.2%
69.1%	47.3	47.2	-0.1	-0.2%
70.4%	47.3	47.2	0.0	-0.1%
71.6%	47.2	47.2	0.0	0.0%
72.8%	47.2	47.2	0.0	-0.1%
74.1%	47.2	47.2	-0.1	-0.2%
75.3%	47.2	47.1	-0.1	-0.2%
76.5%	47.2	47.1	-0.1	-0.1%
77.8%	47.0	47.0	0.0	0.0%
79.0%	47.0	47.0	0.0	0.0%
80.2%	47.0	47.0	0.0	0.0%
81.5%	47.0	47.0	0.0	0.0%
82.7%	47.0	47.0	0.0	0.0%
84.0%	46.9	46.9	0.0	0.0%
85.2%	46.9	46.9	0.0	0.0%
86.4%	46.9	46.9	0.0	0.0%
87.7%	46.9	46.9	0.0	-0.1%
88.9%	46.9	46.8	0.0	0.0%
90.1%	46.8	46.8	0.0	-0.1%
91.4%	46.8	46.7	-0.1	-0.2%
92.6%	46.7	46.7	0.0	0.0%
93.8%	46.7	46.7	0.0	0.0%
95.1%	46.6	46.7	0.0	0.1%
96.3%	46.6	46.6	0.0	0.0%
97.5%	46.5	46.6	0.1	0.2%
98.8%	46.0	46.0	0.0	0.0%
100.0%	46.0	46.0	0.0	0.0%

January

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.9	53.0	2.2	4.2%
1.2%	49.4	50.6	1.2	2.5%
2.5%	49.4	49.4	0.1	0.1%
3.7%	48.8	49.0	0.2	0.4%
4.9%	47.9	48.0	0.0	0.0%
6.2%	47.5	47.7	0.2	0.4%
7.4%	47.5	47.6	0.1	0.2%
8.6%	47.4	47.5	0.0	0.1%
9.9%	47.4	47.4	0.0	0.0%
11.1%	47.3	47.3	0.0	0.0%
12.3%	47.2	47.2	0.0	-0.1%
13.6%	47.0	47.0	0.0	0.1%
14.8%	46.9	47.0	0.1	0.1%
16.0%	46.9	46.9	0.0	-0.1%
17.3%	46.9	46.8	-0.1	-0.2%
18.5%	46.8	46.8	0.0	-0.1%
19.8%	46.7	46.6	0.0	-0.1%
21.0%	46.6	46.6	0.0	0.0%
22.2%	46.6	46.6	0.0	0.0%
23.5%	46.6	46.6	0.0	0.1%
24.7%	46.5	46.6	0.1	0.2%
25.9%	46.5	46.5	0.1	0.1%
27.2%	46.4	46.5	0.1	0.2%
28.4%	46.4	46.4	0.0	0.0%
29.6%	46.4	46.4	0.0	0.0%
30.9%	46.3	46.4	0.0	0.1%
32.1%	46.3	46.3	0.0	0.0%
33.3%	46.3	46.3	0.0	0.0%
34.6%	46.3	46.3	0.0	0.0%
35.8%	46.3	46.1	-0.2	-0.3%
37.0%	46.1	46.1	0.0	0.1%
38.3%	46.1	46.1	0.0	0.0%
39.5%	46.1	46.1	0.0	0.0%
40.7%	46.0	46.0	0.0	0.0%
42.0%	46.0	46.0	0.0	0.0%
43.2%	45.9	45.9	0.0	0.0%
44.4%	45.9	45.9	0.0	0.0%
45.7%	45.9	45.9	0.0	0.0%
46.9%	45.8	45.8	0.0	0.0%
48.1%	45.8	45.8	0.0	0.0%
49.4%	45.8	45.7	-0.1	-0.2%
50.6%	45.7	45.7	-0.1	-0.1%
51.9%	45.7	45.6	-0.1	-0.1%
53.1%	45.6	45.6	0.0	0.0%
54.3%	45.6	45.6	-0.1	-0.1%
55.6%	45.6	45.6	-0.1	-0.1%
56.8%	45.6	45.6	0.0	0.0%
58.0%	45.6	45.5	0.0	0.0%
59.3%	45.6	45.5	0.0	0.0%
60.5%	45.5	45.5	0.0	-0.1%
61.7%	45.4	45.3	-0.1	-0.1%
63.0%	45.4	45.3	-0.1	-0.2%
64.2%	45.3	45.3	0.0	0.0%
65.4%	45.3	45.3	0.0	0.0%
66.7%	45.3	45.3	0.0	0.0%
67.9%	45.3	45.3	0.0	0.0%
69.1%	45.3	45.3	0.0	-0.1%
70.4%	45.3	45.2	0.0	-0.1%
71.6%	45.3	45.2	0.0	-0.1%
72.8%	45.3	45.2	-0.1	-0.2%
74.1%	45.2	45.1	-0.1	-0.2%
75.3%	45.2	45.1	-0.1	-0.2%
76.5%	45.2	45.1	0.0	-0.1%
77.8%	45.1	45.1	0.0	-0.1%
79.0%	45.1	45.1	0.0	0.0%
80.2%	45.1	45.1	0.0	0.0%
81.5%	45.1	45.0	0.0	-0.1%
82.7%	45.1	45.0	-0.1	-0.2%
84.0%	45.0	45.0	-0.1	-0.1%
85.2%	44.9	44.9	0.0	0.1%
86.4%	44.8	44.9	0.1	0.1%
87.7%	44.8	44.8	0.0	0.0%
88.9%	44.8	44.8	0.0	0.0%
90.1%	44.8	44.8	0.0	0.0%
91.4%	44.8	44.7	0.0	-0.1%
92.6%	44.8	44.7	0.0	-0.1%
93.8%	44.8	44.7	-0.1	-0.2%
95.1%	44.7	44.7	0.0	-0.1%
96.3%	44.7	44.7	0.0	0.0%
97.5%	44.5	44.5	0.0	-0.1%
98.8%	44.0	44.0	0.0	0.0%
100.0%	44.0	44.0	0.0	0.0%

Table SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

February

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	51.9	62.6	10.7	20.7%
1.2%	49.5	52.1	2.7	5.4%
2.5%	48.7	49.5	0.8	1.6%
3.7%	48.2	48.6	0.4	0.9%
4.9%	48.2	48.2	0.1	0.1%
6.2%	48.1	48.1	0.0	0.0%
7.4%	47.7	47.6	-0.1	-0.1%
8.6%	47.5	47.5	0.0	0.0%
9.9%	47.1	47.2	0.0	0.1%
11.1%	47.1	47.1	0.1	0.1%
12.3%	47.1	47.1	0.0	0.0%
13.6%	47.0	47.0	0.0	0.0%
14.8%	47.0	47.0	0.0	0.0%
16.0%	46.9	46.9	0.0	-0.1%
17.3%	46.8	46.8	0.0	-0.1%
18.5%	46.8	46.7	-0.1	-0.2%
19.8%	46.7	46.7	0.0	0.0%
21.0%	46.7	46.7	0.0	0.0%
22.2%	46.6	46.6	0.0	-0.1%
23.5%	46.6	46.6	-0.1	-0.1%
24.7%	46.6	46.6	0.0	-0.1%
25.9%	46.6	46.5	-0.1	-0.2%
27.2%	46.5	46.5	0.0	-0.1%
28.4%	46.4	46.5	0.0	0.1%
29.6%	46.4	46.4	0.0	0.1%
30.9%	46.4	46.4	0.0	0.1%
32.1%	46.3	46.3	0.0	-0.1%
33.3%	46.3	46.3	0.0	0.0%
34.6%	46.2	46.2	0.0	0.0%
35.8%	46.2	46.2	0.0	0.0%
37.0%	46.2	46.2	0.0	0.0%
38.3%	46.2	46.2	0.0	0.0%
39.5%	46.2	46.1	0.0	-0.1%
40.7%	46.1	46.1	0.0	0.1%
42.0%	46.1	46.1	0.0	0.0%
43.2%	46.0	46.0	0.0	0.0%
44.4%	46.0	46.0	0.0	0.0%
45.7%	46.0	46.0	0.0	0.0%
46.9%	46.0	46.0	0.0	0.0%
48.1%	46.0	46.0	0.0	0.0%
49.4%	45.9	46.0	0.1	0.1%
50.6%	45.9	45.9	0.0	0.1%
51.9%	45.9	45.8	0.0	-0.1%
53.1%	45.8	45.8	0.0	0.0%
54.3%	45.8	45.7	-0.1	-0.2%
55.6%	45.8	45.7	-0.1	-0.2%
56.8%	45.8	45.7	-0.1	-0.1%
58.0%	45.8	45.7	-0.1	-0.3%
59.3%	45.8	45.6	-0.1	-0.3%
60.5%	45.6	45.6	0.0	0.0%
61.7%	45.6	45.6	0.0	0.0%
63.0%	45.6	45.6	0.0	0.0%
64.2%	45.5	45.6	0.0	0.1%
65.4%	45.5	45.5	0.0	0.1%
66.7%	45.5	45.5	0.0	0.0%
67.9%	45.5	45.5	0.0	0.0%
69.1%	45.5	45.5	0.0	0.0%
70.4%	45.4	45.4	0.0	0.0%
71.6%	45.4	45.4	0.0	0.0%
72.8%	45.4	45.4	0.0	0.0%
74.1%	45.4	45.4	0.0	0.0%
75.3%	45.3	45.4	0.0	0.0%
76.5%	45.3	45.3	0.1	0.2%
77.8%	45.2	45.2	0.0	0.1%
79.0%	45.2	45.2	0.0	0.0%
80.2%	45.2	45.2	0.0	0.0%
81.5%	45.1	45.1	0.0	0.0%
82.7%	45.1	45.1	0.0	0.0%
84.0%	45.0	45.1	0.0	0.0%
85.2%	45.0	45.0	0.0	0.0%
86.4%	45.0	45.0	0.0	0.0%
87.7%	45.0	44.9	0.0	-0.1%
88.9%	44.9	44.9	0.0	0.0%
90.1%	44.9	44.9	0.0	0.0%
91.4%	44.8	44.8	0.0	-0.1%
92.6%	44.8	44.8	0.0	0.0%
93.8%	44.8	44.8	0.0	-0.1%
95.1%	44.7	44.7	-0.1	-0.2%
96.3%	44.6	44.7	0.0	0.1%
97.5%	44.6	44.6	0.0	0.0%
98.8%	44.4	44.4	0.0	0.0%
100.0%	44.4	44.4	0.0	0.0%

March

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	50.2	50.2	0.0	0.0%
1.2%	49.7	49.7	0.0	0.0%
2.5%	49.7	49.7	0.0	0.0%
3.7%	49.2	49.5	0.4	0.7%
4.9%	49.2	48.9	-0.2	-0.5%
6.2%	48.9	48.9	0.0	-0.1%
7.4%	48.9	48.7	-0.1	-0.3%
8.6%	48.7	48.7	0.0	0.0%
9.9%	48.7	48.7	0.0	0.0%
11.1%	48.6	48.6	0.0	0.0%
12.3%	48.4	48.4	0.0	0.0%
13.6%	48.4	48.4	0.0	-0.1%
14.8%	48.4	48.4	0.0	0.1%
16.0%	48.2	48.3	0.1	0.2%
17.3%	48.1	48.3	0.2	0.4%
18.5%	48.1	48.1	0.0	0.1%
19.8%	48.1	48.0	0.0	0.0%
21.0%	47.9	47.9	0.0	0.0%
22.2%	47.9	47.9	0.0	-0.1%
23.5%	47.9	47.8	-0.1	-0.2%
24.7%	47.8	47.7	-0.1	-0.1%
25.9%	47.7	47.7	0.0	0.0%
27.2%	47.7	47.6	-0.1	-0.2%
28.4%	47.7	47.6	-0.1	-0.2%
29.6%	47.6	47.5	-0.1	-0.1%
30.9%	47.6	47.5	-0.1	-0.1%
32.1%	47.5	47.5	0.0	0.0%
33.3%	47.5	47.5	0.0	0.0%
34.6%	47.5	47.5	0.0	0.0%
35.8%	47.4	47.4	0.0	0.0%
37.0%	47.4	47.4	0.0	-0.1%
38.3%	47.4	47.3	-0.1	-0.1%
39.5%	47.4	47.3	-0.1	-0.2%
40.7%	47.3	47.3	0.0	0.0%
42.0%	47.3	47.3	0.0	0.0%
43.2%	47.2	47.2	0.0	0.0%
44.4%	47.2	47.2	0.0	0.0%
45.7%	47.2	47.2	0.0	0.0%
46.9%	47.2	47.2	0.0	0.0%
48.1%	47.2	47.2	0.0	0.1%
49.4%	47.2	47.2	0.0	0.0%
50.6%	47.2	47.2	0.0	0.0%
51.9%	47.1	47.2	0.0	0.1%
53.1%	47.1	47.1	0.0	0.1%
54.3%	47.1	47.0	0.0	-0.1%
55.6%	47.0	47.0	0.0	0.0%
56.8%	47.0	47.0	0.0	-0.1%
58.0%	47.0	47.0	0.0	0.0%
59.3%	47.0	47.0	0.0	0.0%
60.5%	47.0	47.0	0.0	0.0%
61.7%	47.0	46.9	0.0	-0.1%
63.0%	47.0	46.9	0.0	0.0%
64.2%	46.9	46.9	-0.1	-0.1%
65.4%	46.9	46.8	-0.1	-0.2%
66.7%	46.9	46.8	-0.1	-0.2%
67.9%	46.8	46.8	0.0	-0.1%
69.1%	46.7	46.8	0.1	0.2%
70.4%	46.7	46.7	0.0	0.1%
71.6%	46.6	46.7	0.0	0.1%
72.8%	46.6	46.6	0.0	0.1%
74.1%	46.5	46.6	0.1	0.2%
75.3%	46.5	46.6	0.0	0.1%
76.5%	46.5	46.5	0.0	0.0%
77.8%	46.5	46.5	0.0	0.0%
79.0%	46.5	46.4	0.0	0.0%
80.2%	46.4	46.4	0.0	0.0%
81.5%	46.4	46.4	0.0	0.0%
82.7%	46.3	46.3	0.0	-0.1%
84.0%	46.3	46.2	-0.1	-0.1%
85.2%	46.2	46.2	0.0	-0.1%
86.4%	46.2	46.2	0.0	-0.1%
87.7%	46.1	46.1	0.0	0.0%
88.9%	46.0	46.0	0.0	0.0%
90.1%	45.9	45.9	0.0	0.0%
91.4%	45.8	45.8	0.0	0.0%
92.6%	45.7	45.7	0.0	0.0%
93.8%	45.7	45.7	0.0	0.0%
95.1%	45.6	45.6	0.0	0.0%
96.3%	45.6	45.5	-0.1	-0.1%
97.5%	45.5	45.5	-0.1	-0.1%
98.8%	45.4	45.5	0.0	0.1%
100.0%	45.4	45.5	0.0	0.1%

April

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	52.8	52.9	0.0	0.0%
1.2%	51.6	51.6	0.0	0.0%
2.5%	51.0	50.8	-0.2	-0.4%
3.7%	50.8	50.7	-0.1	-0.3%
4.9%	50.6	50.5	-0.1	-0.2%
6.2%	50.6	50.4	-0.2	-0.3%
7.4%	50.4	50.4	0.0	0.0%
8.6%	50.4	50.4	0.0	0.0%
9.9%	50.4	50.3	-0.1	-0.1%
11.1%	50.3	50.3	0.0	0.0%
12.3%	50.3	50.3	0.0	0.0%
13.6%	50.2	50.2	0.0	0.1%
14.8%	50.1	50.2	0.1	0.1%
16.0%	50.1	50.2	0.1	0.1%
17.3%	49.9	50.1	0.1	0.3%
18.5%	49.8	50.0	0.2	0.4%
19.8%	49.8	50.0	0.2	0.5%
21.0%	49.7	49.8	0.0	0.1%
22.2%	49.7	49.8	0.0	0.1%
23.5%	49.7	49.7	0.0	0.0%
24.7%	49.7	49.6	-0.1	-0.2%
25.9%	49.6	49.4	-0.2	-0.4%
27.2%	49.6	49.3	-0.2	-0.5%
28.4%	49.3	49.2	-0.1	-0.2%
29.6%	49.3	49.1	-0.2	-0.4%
30.9%	49.1	49.0	-0.1	-0.1%
32.1%	49.1	49.0	-0.1	-0.1%
33.3%	49.1	49.0	0.0	-0.1%
34.6%	49.1	49.0	-0.1	-0.1%
35.8%	49.0	49.0	-0.1	-0.1%
37.0%	49.0	49.0	-0.1	-0.1%
38.3%	49.0	49.0	0.0	-0.1%
39.5%	49.0	49.0	0.0	0.0%
40.7%	49.0	48.9	0.0	-0.1%
42.0%	49.0	48.9	0.0	-0.1%
43.2%	48.9	48.8	-0.1	-0.3%
44.4%	48.8	48.7	-0.1	-0.1%
45.7%	48.8	48.7	-0.1	-0.1%
46.9%	48.8	48.7	-0.1	-0.1%
48.1%	48.7	48.7	0.0	0.0%
49.4%	48.7	48.7	0.0	0.0%
50.6%	48.7	48.7	0.0	0.1%
51.9%	48.6	48.7	0.1	0.1%
53.1%	48.6	48.6	0.0	0.0%
54.3%	48.6	48.6	0.0	0.0%
55.6%	48.6	48.6	0.0	0.0%
56.8%	48.6	48.6	0.0	0.0%
58.0%	48.6	48.6	0.0	0.0%
59.3%	48.6	48.6	0.0	0.0%
60.5%	48.5	48.5	0.0	0.0%
61.7%	48.5	48.5	0.0	0.0%
63.0%	48.5	48.5	0.0	0.0%
64.2%	48.5	48.4	-0.1	-0.1%
65.4%	48.5	48.4	-0.1	-0.1%
66.7%	48.4	48.4	0.0	-0.1%
67.9%	48.4	48.3	0.0	-0.1%
69.1%	48.4	48.3	0.0	0.0%
70.4%	48.4	48.3	0.0	0.0%
71.6%	48.3	48.3	0.0	0.0%
72.8%	48.3	48.3	0.0	0.0%
74.1%	48.2	48.2	0.0	0.0%
75.3%	48.2	48.2	0.0	0.0%
76.5%	48.1	48.1	0.0	0.0%
77.8%	48.1	48.1	0.0	0.0%
79.0%	48.0	48.0	0.0	0.0%
80.2%	48.0	48.0	0.0	0.0%
81.5%	48.0	48.0	0.0	0.0%
82.7%	48.0	47.9	0.0	-0.1%
84.0%	47.9	47.9	0.0	0.0%
85.2%	47.8	47.8	0.0	0.0%
86.4%	47.8	47.8	0.0	0.0%
87.7%	47.7	47.7	0.0	0.0%
88.9%	47.6	47.6	0.0	0.0%
90.1%	47.5	47.5	0.0	0.0%
91.4%	47.4	47.4	0.0	0.0%
92.6%	47.4	47.2	-0.2	-0.3%
93.8%	47.2	47.2	0.0	0.0%
95.1%	47.1	47.0	0.0	-0.1%
96.3%	47.0	47.0	0.0	-0.1%
97.5%	47.0	46.9	0.0	-0.1%
98.8%	46.9	46.9	0.0	0.0%
100.0%	46.9	46.9	0.0	0.0%

May

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	53.9	54.6	0.6	1.2%
1.2%	53.0	54.0	0.9	1.8%
2.5%	52.3	52.4	0.1	0.1%
3.7%	52.3	52.3	0.0	0.1%
4.9%	51.8	52.2	0.4	0.8%
6.2%	51.7	52.0	0.3	0.6%
7.4%	51.4	52.0	0.5	1.0%
8.6%	51.4	51.7	0.3	0.6%
9.9%	51.4	51.7	0.3	0.7%
11.1%	51.4	51.4	0.1	0.1%
12.3%	51.4	51.4	0.0	0.1%
13.6%	51.2	51.2	0.0	0.0%
14.8%	51.2	51.2	0.0	0.0%
16.0%	51.2	51.2	0.0	0.1%
17.3%	51.1	51.2	0.1	0.1%
18.5%	51.1	51.2	0.0	0.1%
19.8%	51.0	51.1	0.1	0.1%
21.0%	51.0	51.0	0.0	0.1%
22.2%	50.9	51.0	0.1	0.1%
23.5%	50.9	50.9	0.1	0.1%
24.7%	50.8	50.8	0.0	-0.1%
25.9%	50.8	50.8	0.0	0.0%
27.2%	50.7	50.7	0.0	0.0%
28.4%	50.7	50.7	0.0	0.0%
29.6%	50.6	50.7	0.0	0.0%
30.9%	50.6	50.6	0.0	0.0%
32.1%	50.6	50.5	0.0	-0.1%
33.3%	50.5	50.5	0.0	0.0%
34.6%	50.5	50.5	0.0	0.0%
35.8%	50.5	50.4	-0.1	-0.1%
37.0%	50.4	50.4	0.0	0.0%
38.3%	50.3	50.4	0.1	0.1%
39.5%	50.3	50.3	0.0	0.1%
40.7%	50.3	50.3	0.0	0.1%
42.0%	50.2	50.3	0.1	0.1%
43.2%	50.1	50.3	0.1	0.3%
44.4%	50.1	50.2	0.1	0.3%
45.7%	50.0	50.1	0.1	0.3%
46.9%	50.0	50.1	0.1	0.3%
48.1%	49.9	50.0	0.1	0.2%
49.4%	49.9	50.0	0.1	0.2%
50.6%	49.9	49.9	0.0	0.1%
51.9%	49.9	49.9	0.0	0.0%
53.1%	49.9	49.9	0.0	0.0%
54.3%	49.8	49.8	0.0	0.0%
55.6%	49.8	49.8	0.0	0.0%
56.8%	49.8	49.7	0.0	0.0%
58.0%	49.8	49.7	0.0	-0.1%
59.3%	49.7	49.7	0.0	0.0%
60.5%	49.7	49.7	0.0	-0.1%
61.7%	49.7	49.6	0.0	-0.1%
63.0%	49.7	49.6	-0.1	-0.2%
64.2%	49.7	49.6	-0.1	-0.2%
65.4%	49.6	49.5	-0.1	-0.2%
66.7%	49.6	49.5	-0.1	-0.1%
67.9%	49.5	49.4	-0.1	-0.2%
69.1%	49.4	49.4	0.0	-0.1%
70.4%	49.4	49.4	0.0	-0.1%
71.6%	49.4	49.3	-0.1	-0.1%
72.8%	49.3	49.3	0.0	0.0%
74.1%	49.3	49.3	-0.1	-0.1%
75.3%	49.2	49.2	0.0	-0.1%
76.5%	49.2	49.1	-0.1	-0.2%
77.8%	49.0	49.1	0.0	0.1%
79.0%	49.0	49.0	0.0	0.1%
80.2%	49.0	49.0	0.0	0.0%
81.5%	49.0	49.0	0.0	-0.1%
82.7%	49.0	48.9	0.0	-0.1%
84.0%	48.9	48.9	-0.1	-0.1%
85.2%	48.9	48.8	-0.1	-0.2%
86.4%	48.8	48.7	-0.1	-0.3%
87.7%	48.7	48.7	0.0	0.0%
88.9%	48.6	48.6	0.0	-0.1%
90.1%	48.5	48.5	0.0	0.1%
91.4%	48.5	48.3	-0.2	-0.4%
92.6%	48.3	48.3	0.0	-0.1%
93.8%	48.3	48.1	-0.2	-0.4%
95.1%	48.1	48.1	0.0	0.1%
96.3%	48.1	48.0	0.0	0.0%
97.5%	48.0	47.9	-0.1	-0.3%
98.8%	47.5	47.5	0.0	0.0%
100.0%	47.5	47.5	0.0	0.0%

Table SQ14-1b

Clear Creek at Igo, Monthly Temperature

Probability of Exceedance

June

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	58.9	59.7	0.8	1.4%
1.2%	57.5	58.8	1.2	2.2%
2.5%	56.7	58.0	1.3	2.3%
3.7%	55.7	55.7	0.1	0.1%
4.9%	55.3	55.4	0.1	0.2%
6.2%	55.3	55.4	0.1	0.1%
7.4%	54.9	54.9	0.0	0.0%
8.6%	54.9	54.9	0.0	-0.1%
9.9%	54.3	54.7	0.4	0.7%
11.1%	54.1	54.4	0.3	0.6%
12.3%	53.9	54.1	0.1	0.2%
13.6%	53.9	54.1	0.2	0.4%
14.8%	53.7	54.0	0.3	0.5%
16.0%	53.7	54.0	0.3	0.5%
17.3%	53.6	53.9	0.3	0.5%
18.5%	53.4	53.7	0.3	0.5%
19.8%	53.3	53.4	0.1	0.2%
21.0%	53.1	53.4	0.2	0.4%
22.2%	53.1	53.1	0.0	0.0%
23.5%	53.1	53.1	0.0	0.0%
24.7%	53.1	53.1	0.0	0.0%
25.9%	53.0	53.1	0.0	0.1%
27.2%	53.0	53.0	0.1	0.1%
28.4%	53.0	53.0	0.1	0.1%
29.6%	53.0	53.0	0.1	0.1%
30.9%	52.9	53.0	0.1	0.2%
32.1%	52.9	53.0	0.1	0.1%
33.3%	52.9	53.0	0.1	0.1%
34.6%	52.9	53.0	0.1	0.1%
35.8%	52.8	52.9	0.1	0.2%
37.0%	52.8	52.9	0.1	0.1%
38.3%	52.8	52.9	0.1	0.2%
39.5%	52.7	52.8	0.1	0.2%
40.7%	52.7	52.8	0.1	0.2%
42.0%	52.7	52.7	0.0	-0.1%
43.2%	52.6	52.6	0.0	0.0%
44.4%	52.6	52.6	0.0	0.0%
45.7%	52.6	52.6	0.0	0.1%
46.9%	52.5	52.5	0.0	0.0%
48.1%	52.5	52.4	0.0	-0.1%
49.4%	52.5	52.3	-0.1	-0.2%
50.6%	52.4	52.3	-0.1	-0.2%
51.9%	52.3	52.2	-0.1	-0.1%
53.1%	52.2	52.2	0.0	0.0%
54.3%	52.1	52.2	0.1	0.2%
55.6%	52.1	52.1	0.0	0.0%
56.8%	52.1	52.1	0.0	0.0%
58.0%	52.0	52.0	0.0	0.0%
59.3%	52.0	52.0	0.0	0.0%
60.5%	52.0	52.0	0.0	0.0%
61.7%	52.0	51.9	0.0	-0.1%
63.0%	51.9	51.9	0.0	0.0%
64.2%	51.8	51.8	0.0	0.0%
65.4%	51.7	51.7	0.0	-0.1%
66.7%	51.7	51.7	0.0	0.0%
67.9%	51.5	51.6	0.1	0.1%
69.1%	51.5	51.5	0.0	0.0%
70.4%	51.5	51.5	0.0	0.0%
71.6%	51.4	51.4	0.0	0.0%
72.8%	51.4	51.4	0.0	0.0%
74.1%	51.4	51.3	-0.1	-0.2%
75.3%	51.4	51.2	-0.1	-0.2%
76.5%	51.3	51.1	-0.2	-0.4%
77.8%	51.3	51.1	-0.1	-0.3%
79.0%	51.2	51.0	-0.2	-0.5%
80.2%	51.2	51.0	-0.2	-0.5%
81.5%	51.1	50.9	-0.2	-0.4%
82.7%	51.0	50.9	-0.1	-0.1%
84.0%	50.9	50.9	-0.1	-0.1%
85.2%	50.9	50.9	0.0	-0.1%
86.4%	50.9	50.8	-0.1	-0.2%
87.7%	50.8	50.7	0.0	-0.1%
88.9%	50.7	50.6	-0.1	-0.2%
90.1%	50.6	50.6	0.0	0.0%
91.4%	50.5	50.6	0.1	0.1%
92.6%	50.5	50.4	-0.1	-0.2%
93.8%	50.3	50.3	0.0	0.0%
95.1%	50.2	50.2	0.0	0.0%
96.3%	50.1	50.1	0.0	0.0%
97.5%	50.0	50.0	0.0	0.0%
98.8%	49.8	49.7	-0.1	-0.2%
100.0%	49.8	49.7	-0.1	-0.2%

July

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	61.9	87.7	25.8	41.6%
1.2%	58.0	61.5	3.4	5.9%
2.5%	58.0	58.6	0.6	1.1%
3.7%	57.9	58.2	0.3	0.5%
4.9%	57.8	58.1	0.4	0.7%
6.2%	57.6	58.0	0.5	0.8%
7.4%	57.6	57.9	0.4	0.6%
8.6%	57.6	57.9	0.3	0.5%
9.9%	57.5	57.8	0.3	0.5%
11.1%	57.3	57.7	0.4	0.7%
12.3%	57.3	57.5	0.3	0.4%
13.6%	57.3	57.5	0.2	0.4%
14.8%	57.3	57.5	0.2	0.3%
16.0%	57.2	57.3	0.0	0.1%
17.3%	57.2	57.3	0.1	0.1%
18.5%	57.1	57.2	0.0	0.1%
19.8%	57.0	57.1	0.1	0.2%
21.0%	57.0	57.1	0.1	0.2%
22.2%	56.9	57.1	0.1	0.2%
23.5%	56.9	57.0	0.1	0.2%
24.7%	56.9	57.0	0.1	0.2%
25.9%	56.9	57.0	0.1	0.1%
27.2%	56.9	57.0	0.1	0.1%
28.4%	56.8	56.9	0.1	0.2%
29.6%	56.8	56.9	0.1	0.2%
30.9%	56.7	56.9	0.2	0.3%
32.1%	56.6	56.8	0.1	0.3%
33.3%	56.6	56.8	0.1	0.2%
34.6%	56.6	56.7	0.1	0.2%
35.8%	56.6	56.7	0.1	0.2%
37.0%	56.5	56.6	0.1	0.2%
38.3%	56.5	56.6	0.2	0.3%
39.5%	56.4	56.6	0.2	0.3%
40.7%	56.3	56.5	0.2	0.3%
42.0%	56.2	56.4	0.2	0.3%
43.2%	56.2	56.4	0.1	0.2%
44.4%	56.2	56.3	0.1	0.1%
45.7%	56.1	56.2	0.1	0.2%
46.9%	56.1	56.2	0.1	0.2%
48.1%	56.1	56.1	0.0	0.1%
49.4%	56.0	56.1	0.1	0.2%
50.6%	56.0	56.1	0.1	0.2%
51.9%	55.9	56.0	0.0	0.0%
53.1%	55.9	55.9	0.0	0.0%
54.3%	55.9	55.9	0.0	0.0%
55.6%	55.8	55.9	0.0	0.0%
56.8%	55.8	55.8	0.0	0.1%
58.0%	55.8	55.8	0.0	0.0%
59.3%	55.8	55.8	0.0	0.0%
60.5%	55.8	55.7	0.0	0.0%
61.7%	55.7	55.7	-0.1	-0.1%
63.0%	55.7	55.6	-0.1	-0.1%
64.2%	55.6	55.6	0.0	0.0%
65.4%	55.6	55.6	0.0	0.0%
66.7%	55.6	55.6	0.0	0.0%
67.9%	55.6	55.6	0.0	0.0%
69.1%	55.5	55.5	0.0	0.0%
70.4%	55.5	55.5	0.0	0.0%
71.6%	55.5	55.5	0.1	0.1%
72.8%	55.4	55.5	0.1	0.1%
74.1%	55.4	55.3	-0.1	-0.2%
75.3%	55.4	55.2	-0.2	-0.3%
76.5%	55.4	55.2	-0.2	-0.3%
77.8%	55.4	55.1	-0.2	-0.4%
79.0%	55.3	55.1	-0.2	-0.4%
80.2%	55.3	55.1	-0.2	-0.4%
81.5%	55.3	55.0	-0.3	-0.5%
82.7%	55.2	54.9	-0.3	-0.5%
84.0%	55.1	54.9	-0.3	-0.5%
85.2%	54.9	54.9	-0.1	-0.1%
86.4%	54.8	54.7	-0.1	-0.2%
87.7%	54.6	54.7	0.0	0.1%
88.9%	54.5	54.7	0.1	0.2%
90.1%	54.5	54.5	0.1	0.1%
91.4%	54.5	54.5	0.0	0.0%
92.6%	54.4	54.4	0.0	-0.1%
93.8%	54.4	54.4	0.0	0.1%
95.1%	54.4	54.3	-0.1	-0.1%
96.3%	54.3	54.2	-0.1	-0.2%
97.5%	54.3	54.2	0.0	-0.1%
98.8%	54.2	54.2	0.0	-0.1%
100.0%	54.2	54.2	0.0	-0.1%

August

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.4	65.7	-0.6	-0.9%
1.2%	59.0	59.0	0.0	0.0%
2.5%	58.8	58.5	-0.3	-0.5%
3.7%	58.5	58.2	-0.3	-0.5%
4.9%	58.4	58.2	-0.2	-0.3%
6.2%	58.2	57.9	-0.3	-0.4%
7.4%	58.2	57.8	-0.4	-0.6%
8.6%	58.0	57.8	-0.2	-0.3%
9.9%	57.7	57.6	0.0	-0.1%
11.1%	57.5	57.5	0.0	0.0%
12.3%	57.5	57.5	0.0	0.0%
13.6%	57.5	57.5	0.0	0.0%
14.8%	57.3	57.5	0.1	0.2%
16.0%	57.3	57.5	0.1	0.2%
17.3%	57.3	57.4	0.1	0.2%
18.5%	57.3	57.4	0.0	0.1%
19.8%	57.3	57.4	0.0	0.1%
21.0%	57.3	57.3	0.0	0.1%
22.2%	57.2	57.3	0.2	0.3%
23.5%	57.1	57.3	0.2	0.3%
24.7%	57.0	57.2	0.2	0.3%
25.9%	57.0	57.2	0.2	0.4%
27.2%	56.9	57.2	0.3	0.4%
28.4%	56.9	57.1	0.1	0.3%
29.6%	56.9	57.0	0.1	0.2%
30.9%	56.9	56.9	0.0	0.0%
32.1%	56.9	56.9	0.0	0.0%
33.3%	56.8	56.8	0.0	0.0%
34.6%	56.8	56.7	-0.1	-0.1%
35.8%	56.8	56.6	-0.2	-0.4%
37.0%	56.8	56.5	-0.3	-0.4%
38.3%	56.8	56.5	-0.2	-0.4%
39.5%	56.5	56.4	-0.1	-0.1%
40.7%	56.5	56.4	-0.1	-0.2%
42.0%	56.4	56.4	-0.1	-0.1%
43.2%	56.3	56.4	0.0	0.0%
44.4%	56.3	56.3	0.1	0.1%
45.7%	56.3	56.3	0.1	0.1%
46.9%	56.3	56.3	0.1	0.1%
48.1%	56.2	56.3	0.0	0.1%
49.4%	56.2	56.3	0.1	0.2%
50.6%	56.1	56.2	0.1	0.1%
51.9%	56.1	56.2	0.1	0.2%
53.1%	56.0	56.2	0.2	0.4%
54.3%	55.9	56.1	0.2	0.4%
55.6%	55.9	56.0	0.1	0.1%
56.8%	55.9	55.9	0.1	0.1%
58.0%	55.8	55.9	0.0	0.1%
59.3%	55.8	55.9	0.0	0.0%
60.5%	55.8	55.7	-0.1	-0.2%
61.7%	55.8	55.7	-0.1	-0.2%
63.0%	55.8	55.6	-0.1	-0.2%
64.2%	55.8	55.5	-0.2	-0.4%
65.4%	55.7	55.5	-0.2	-0.3%
66.7%	55.6	55.5	-0.1	-0.2%
67.9%	55.6	55.5	-0.1	-0.3%
69.1%	55.6	55.5	-0.2	-0.3%
70.4%	55.6	55.4	-0.2	-0.3%
71.6%	55.6	55.4	-0.2	-0.3%
72.8%	55.6	55.3	-0.3	-0.5%
74.1%	55.5	55.2	-0.3	-0.5%
75.3%	55.5	55.2	-0.3	-0.6%
76.5%	55.3	55.1	-0.1	-0.3%
77.8%	55.3	55.1	-0.1	-0.2%
79.0%	55.3	55.1	-0.1	-0.2%
80.2%	55.2	55.1	-0.1	-0.1%
81.5%	55.2	55.0	-0.1	-0.2%
82.7%	55.1	55.0	-0.1	-0.2%
84.0%	55.1	55.0	-0.1	-0.3%
85.2%	55.1	54.8	-0.2	-0.4%
86.4%	55.0	54.8	-0.3	-0.5%
87.7%	55.0	54.7	-0.3	-0.6%
88.9%	55.0	54.7	-0.3	-0.5%
90.1%	54.9	54.7	-0.3	-0.5%
91.4%	54.9	54.6	-0.2	-0.4%
92.6%	54.8	54.6	-0.2	-0.4%
93.8%	54.8	54.6	-0.2	-0.4%
95.1%	54.7	54.5	-0.2	-0.3%
96.3%	54.6	54.5	-0.1	-0.2%
97.5%	54.4	54.2	-0.2	-0.3%
98.8%	54.4	54.1	-0.3	-0.6%
100.0%	54.4	54.1	-0.3	-0.6%

September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.3	66.1	-0.2	-0.3%
1.2%	61.9	60.0	-1.9	-3.1%
2.5%	60.3	58.3	-1.9	-3.2%
3.7%	59.7	58.2	-1.5	-2.6%
4.9%	58.3	57.6	-0.7	-1.2%
6.2%	57.1	56.9	-0.2	-0.3%
7.4%	56.7	56.7	-0.1	-0.2%
8.6%	56.7	56.5	-0.2	-0.4%
9.9%	56.6	56.3	-0.3	-0.5%
11.1%	56.6	56.2	-0.4	-0.7%
12.3%	56.4	56.1	-0.3	-0.5%
13.6%	56.1	56.1	0.0	0.0%
14.8%	55.9	56.1	0.1	0.2%
16.0%	55.9	56.0	0.1	0.1%
17.3%	55.9	56.0	0.0	0.1%
18.5%	55.9	55.9	0.0	0.0%
19.8%	55.9	55.8	-0.1	-0.2%
21.0%	55.8	55.7	-0.1	-0.2%
22.2%	55.7	55.5	-0.2	-0.3%
23.5%	55.5	55.3	-0.2	-0.4%
24.7%	55.4	55.2	-0.2	-0.3%
25.9%	55.4	55.2	-0.1	-0.2%
27.2%	55.3	55.2	-0.1	-0.2%
28.4%	55.3	55.2	-0.1	-0.2%
29.6%	55.3	55.1	-0.1	-0.3%
30.9%	55.1	55.0	-0.1	-0.2%
32.1%	54.8	54.9	0.1	0.2%
33.3%	54.8	54.8	0.0	0.1%
34.6%	54.7	54.7	0.0	0.1%
35.8%	54.7	54.7	0.0	0.1%
37.0%	54.6	54.7	0.0	0.0%
38.3%	54.6	54.7	0.1	0.2%
39.5%	54.5	54.6	0.1	0.2%
40.7%	54.5	54.4	-0.1	-0.1%
42.0%	54.4	54.2	-0.2	-0.3%
43.2%	54.4	54.2	-0.2	-0.3%
44.4%	54.3	54.1	-0.2	-0.4%
45.7%	54.3	54.1	-0.2	-0.3%
46.9%	54.3	54.1	-0.2	-0.4%
48.1%	54.1	54.0	0.0	0.0%
49.4%	54.0	54.0	0.0	0.0%
50.6%	54.0	54.0	0.0	0.0%
51.9%	53.9	53.7	-0.2	-0.4%
53.1%	53.9	53.7	-0.3	-0.5%
54.3%	53.7	53.6	0.0	-0.1%
55.6%	53.7	53.6	-0.1	-0.2%
56.8%	53.6	53.5	-0.1	-0.1%
58.0%	53.6	53.5	-0.1	-0.1%
59.3%	53.5	53.5	-0.1	-0.1%
60.5%	53.5	53.4	-0.1	-0.2%
61.7%	53.4	53.4	0.0	0.0%
63.0%	53.3	53.2	-0.2	-0.3%
64.2%	53.3	53.2	-0.1	-0.3%
65.4%	53.3	53.1	-0.2	-0.3%
66.7%	53.2	53.0	-0.1	-0.2%
67.9%	53.2	53.0	-0.2	-0.3%
69.1%	53.1	52.9	-0.1	-0.3%
70.4%	53.0	52.9	-0.2	-0.4%
71.6%	53.0	52.8	-0.2	-0.4%
72.8%	53.0	52.8	-0.2	-0.4%
74.1%	52.8	52.7	-0.1	-0.2%
75.3%	52.8	52.7	-0.1	-0.2%
76.5%	52.8	52.7	-0.1	-0.2%
77.8%	52.8	52.7	-0.1	-0.2%
79.0%	52.7	52.6	-0.1	-0.1%
80.2%	52.6	52.6	-0.1	-0.1%
81.5%	52.6	52.6	-0.1	-0.2%
82.7%	52.6	52.6	0.0	0.0%
84.0%	52.6	52.4	-0.1	-0.2%
85.2%	52.5	52.4	-0.1	-0.1%
86.4%	52.5	52.4	-0.1	-0.2%
87.7%	52.5	52.4	-0.1	-0.2%
88.9%	52.4	52.2	-0.1	-0.2%
90.1%	52.3	52.2	-0.1	-0.2%
91.4%	52.3	52.2	-0.1	-0.2%
92.6%	52.3	52.1	-0.1	-0.2%
93.8%	52.2	52.1	-0.1	-0.2%
95.1%	52.1	52.1	0.0	-0.1%
96.3%	52.0	52.0	-0.1	-0.1%
97.5%	52.0	51.9	-0.1	-0.2%
98.8%	52.0	51.8	-0.2	-0.3%
100.0%	52.0	51.8	-0.2	-0.3%

Table SQ14-1b
Clear Creek at Igo, Monthly Temperature
Probability of Exceedance

June to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	63.4	63.0	-0.4	-0.6%
1.2%	58.1	61.9	3.8	6.5%
2.5%	58.0	58.5	0.5	0.9%
3.7%	57.7	57.6	-0.1	-0.2%
4.9%	57.4	57.4	0.0	0.0%
6.2%	56.9	57.3	0.4	0.7%
7.4%	56.9	57.0	0.1	0.2%
8.6%	56.6	56.7	0.1	0.1%
9.9%	56.6	56.5	-0.1	-0.2%
11.1%	56.3	56.5	0.2	0.3%
12.3%	56.3	56.3	0.1	0.2%
13.6%	56.1	56.3	0.2	0.4%
14.8%	56.1	56.3	0.3	0.4%
16.0%	56.1	56.3	0.2	0.3%
17.3%	56.1	56.0	0.0	-0.1%
18.5%	55.9	56.0	0.0	0.1%
19.8%	55.8	55.9	0.1	0.2%
21.0%	55.8	55.9	0.1	0.1%
22.2%	55.8	55.9	0.0	0.1%
23.5%	55.8	55.8	0.0	-0.1%
24.7%	55.7	55.7	0.0	0.0%
25.9%	55.7	55.7	0.0	0.1%
27.2%	55.5	55.7	0.2	0.4%
28.4%	55.5	55.7	0.2	0.4%
29.6%	55.4	55.7	0.3	0.5%
30.9%	55.4	55.6	0.3	0.5%
32.1%	55.4	55.5	0.1	0.2%
33.3%	55.3	55.4	0.1	0.1%
34.6%	55.3	55.4	0.1	0.1%
35.8%	55.1	55.3	0.2	0.3%
37.0%	55.1	55.2	0.1	0.2%
38.3%	55.1	55.2	0.1	0.2%
39.5%	55.0	55.1	0.1	0.2%
40.7%	54.9	55.1	0.1	0.3%
42.0%	54.9	54.9	0.1	0.1%
43.2%	54.8	54.8	0.0	0.1%
44.4%	54.8	54.8	0.1	0.1%
45.7%	54.8	54.8	0.1	0.1%
46.9%	54.8	54.8	0.1	0.1%
48.1%	54.7	54.8	0.0	0.1%
49.4%	54.7	54.8	0.1	0.1%
50.6%	54.7	54.7	0.1	0.1%
51.9%	54.6	54.6	0.0	0.0%
53.1%	54.6	54.6	0.0	0.0%
54.3%	54.5	54.6	0.1	0.3%
55.6%	54.4	54.4	-0.1	-0.1%
56.8%	54.3	54.4	0.1	0.1%
58.0%	54.3	54.4	0.1	0.2%
59.3%	54.2	54.2	0.0	0.0%
60.5%	54.2	54.2	0.0	-0.1%
61.7%	54.1	54.2	0.1	0.1%
63.0%	54.1	54.1	0.1	0.1%
64.2%	54.1	54.1	0.0	0.1%
65.4%	54.1	54.1	0.0	0.0%
66.7%	54.1	54.1	0.0	0.0%
67.9%	54.0	53.9	-0.2	-0.3%
69.1%	53.9	53.9	-0.1	-0.1%
70.4%	53.9	53.8	-0.1	-0.1%
71.6%	53.9	53.8	-0.1	-0.2%
72.8%	53.9	53.8	-0.1	-0.2%
74.1%	53.9	53.8	-0.1	-0.2%
75.3%	53.8	53.7	-0.2	-0.3%
76.5%	53.8	53.7	-0.1	-0.3%
77.8%	53.8	53.7	-0.1	-0.2%
79.0%	53.7	53.5	-0.3	-0.5%
80.2%	53.7	53.4	-0.3	-0.6%
81.5%	53.7	53.4	-0.3	-0.5%
82.7%	53.6	53.3	-0.3	-0.5%
84.0%	53.6	53.3	-0.2	-0.4%
85.2%	53.5	53.3	-0.2	-0.4%
86.4%	53.5	53.2	-0.3	-0.5%
87.7%	53.2	53.1	-0.1	-0.1%
88.9%	53.2	53.1	0.0	-0.1%
90.1%	53.2	53.1	0.0	-0.1%
91.4%	53.0	53.0	0.0	-0.1%
92.6%	53.0	53.0	0.0	0.0%
93.8%	53.0	53.0	0.0	0.0%
95.1%	53.0	52.9	0.0	0.0%
96.3%	52.9	52.9	0.0	0.0%
97.5%	52.8	52.7	-0.2	-0.3%
98.8%	52.8	52.6	-0.2	-0.3%
100.0%	52.4	52.2	-0.2	-0.4%

July to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	64.9	65.4	0.5	0.8%
1.2%	59.0	64.4	5.4	9.1%
2.5%	58.6	58.4	-0.2	-0.3%
3.7%	58.5	58.2	-0.3	-0.5%
4.9%	58.4	58.1	-0.3	-0.5%
6.2%	57.6	57.5	-0.1	-0.2%
7.4%	57.4	57.4	0.0	-0.1%
8.6%	57.3	57.3	0.0	0.0%
9.9%	57.3	57.2	0.0	0.0%
11.1%	56.9	57.1	0.2	0.4%
12.3%	56.9	57.1	0.2	0.4%
13.6%	56.9	57.1	0.2	0.4%
14.8%	56.9	57.1	0.2	0.4%
16.0%	56.8	57.0	0.3	0.5%
17.3%	56.7	56.9	0.1	0.2%
18.5%	56.7	56.9	0.1	0.2%
19.8%	56.7	56.8	0.1	0.2%
21.0%	56.7	56.8	0.1	0.2%
22.2%	56.7	56.7	0.0	0.0%
23.5%	56.6	56.6	0.0	0.1%
24.7%	56.5	56.6	0.1	0.1%
25.9%	56.5	56.6	0.1	0.2%
27.2%	56.4	56.6	0.2	0.3%
28.4%	56.4	56.5	0.1	0.2%
29.6%	56.3	56.3	0.0	-0.1%
30.9%	56.3	56.2	-0.1	-0.1%
32.1%	56.2	56.2	0.0	0.0%
33.3%	56.1	56.2	0.0	0.1%
34.6%	56.1	56.1	0.0	0.0%
35.8%	55.9	56.1	0.2	0.3%
37.0%	55.9	56.1	0.2	0.3%
38.3%	55.8	56.0	0.1	0.2%
39.5%	55.8	55.8	0.0	0.0%
40.7%	55.6	55.7	0.1	0.3%
42.0%	55.5	55.7	0.2	0.4%
43.2%	55.5	55.6	0.1	0.2%
44.4%	55.5	55.6	0.1	0.2%
45.7%	55.5	55.5	0.0	0.0%
46.9%	55.5	55.5	0.0	0.0%
48.1%	55.5	55.5	0.0	0.0%
49.4%	55.5	55.5	0.0	0.1%
50.6%	55.5	55.5	0.0	0.0%
51.9%	55.4	55.4	0.0	0.1%
53.1%	55.4	55.4	0.1	0.1%
54.3%	55.3	55.3	0.0	-0.1%
55.6%	55.2	55.2	0.0	0.0%
56.8%	55.2	55.2	0.0	0.0%
58.0%	55.1	55.2	0.1	0.2%
59.3%	55.1	55.2	0.1	0.2%
60.5%	55.0	55.1	0.1	0.1%
61.7%	55.0	54.9	-0.2	-0.3%
63.0%	55.0	54.9	-0.2	-0.3%
64.2%	54.9	54.9	-0.1	-0.2%
65.4%	54.9	54.8	-0.1	-0.1%
66.7%	54.8	54.8	-0.1	-0.2%
67.9%	54.8	54.8	0.0	0.0%
69.1%	54.7	54.7	0.0	-0.1%
70.4%	54.7	54.6	-0.1	-0.2%
71.6%	54.7	54.5	-0.2	-0.4%
72.8%	54.7	54.4	-0.2	-0.4%
74.1%	54.6	54.4	-0.2	-0.3%
75.3%	54.6	54.4	-0.2	-0.3%
76.5%	54.5	54.4	-0.1	-0.2%
77.8%	54.5	54.4	-0.1	-0.2%
79.0%	54.4	54.2	-0.2	-0.4%
80.2%	54.4	54.2	-0.2	-0.4%
81.5%	54.4	54.2	-0.2	-0.3%
82.7%	54.3	54.1	-0.2	-0.3%
84.0%	54.3	54.1	-0.2	-0.4%
85.2%	54.2	54.0	-0.2	-0.4%
86.4%	54.2	54.0	-0.2	-0.3%
87.7%	54.1	54.0	-0.1	-0.1%
88.9%	54.0	54.0	0.0	0.0%
90.1%	54.0	53.9	0.0	0.0%
91.4%	53.9	53.9	0.0	0.0%
92.6%	53.9	53.9	0.0	-0.1%
93.8%	53.9	53.8	-0.1	-0.1%
95.1%	53.9	53.7	-0.2	-0.4%
96.3%	53.8	53.7	-0.1	-0.2%
97.5%	53.7	53.7	0.0	-0.1%
98.8%	53.7	53.4	-0.2	-0.4%
100.0%	53.3	53.1	-0.2	-0.4%

August to September

Percent Exceedance Probability (%)	WSIP 2070 Without Project Monthly Temperature (DEGF)	WSIP 2070 With Project Monthly Temperature (DEGF)	Absolute Difference (DEGF)	Relative Difference (%)
0.0%	66.3	65.9	-0.4	-0.6%
1.2%	60.4	58.9	-1.5	-2.5%
2.5%	59.3	58.7	-0.7	-1.1%
3.7%	58.9	58.1	-0.8	-1.4%
4.9%	58.7	57.7	-0.9	-1.6%
6.2%	57.5	57.3	-0.3	-0.4%
7.4%	57.4	57.2	-0.2	-0.3%
8.6%	57.3	57.2	-0.1	-0.2%
9.9%	57.1	57.1	0.0	0.0%
11.1%	57.0	56.9	-0.1	-0.1%
12.3%	56.9	56.9	0.0	0.1%
13.6%	56.8	56.8	0.0	0.1%
14.8%	56.7	56.8	0.0	0.0%
16.0%	56.7	56.7	0.0	0.1%
17.3%	56.6	56.7	0.1	0.1%
18.5%	56.6	56.7	0.1	0.2%
19.8%	56.5	56.6	0.0	0.1%
21.0%	56.4	56.5	0.1	0.2%
22.2%	56.3	56.3	0.0	0.0%
23.5%	56.3	56.3	0.0	0.0%
24.7%	56.3	56.3	-0.1	-0.1%
25.9%	56.2	56.2	0.0	0.0%
27.2%	56.1	56.1	-0.1	-0.1%
28.4%	56.1	56.0	-0.1	-0.2%
29.6%	56.0	56.0	0.0	0.0%
30.9%	55.9	56.0	0.0	0.0%
32.1%	55.9	55.9	0.0	-0.1%
33.3%	55.8	55.8	0.1	0.1%
34.6%	55.7	55.8	0.1	0.2%
35.8%	55.7	55.8	0.1	0.1%
37.0%	55.7	55.7	0.0	0.0%
38.3%	55.7	55.5	-0.2	-0.3%
39.5%	55.4	55.3	-0.1	-0.2%
40.7%	55.4	55.2	-0.2	-0.3%
42.0%	55.4	55.2	-0.1	-0.2%
43.2%	55.3	55.2	0.0	0.0%
44.4%	55.2	55.2	0.0	0.1%
45.7%	55.2	55.2	0.0	0.0%
46.9%	55.2	55.2	0.0	0.0%
48.1%	55.1	55.2	0.0	0.0%
49.4%	55.1	55.1	0.0	-0.1%
50.6%	55.1	55.0	-0.1	-0.2%
51.9%	55.1	55.0	-0.1	-0.2%
53.1%	55.1	55.0	-0.1	-0.2%
54.3%	54.9	55.0	0.1	0.1%
55.6%	54.9	54.9	-0.1	-0.1%
56.8%	54.9	54.8	-0.1	-0.2%
58.0%	54.9	54.7	-0.2	-0.3%
59.3%	54.7	54.6	-0.1	-0.2%
60.5%	54.7	54.5	-0.2	-0.3%
61.7%	54.6	54.5	-0.1	-0.2%
63.0%	54.6	54.5	-0.1	-0.2%
64.2%	54.6	54.4	-0.1	-0.2%
65.4%	54.5	54.4	-0.1	-0.2%
66.7%	54.4	54.2	-0.2	-0.3%
67.9%	54.4	54.2	-0.1	-0.3%
69.1%	54.3	54.1	-0.2	-0.4%
70.4%	54.2	54.1	-0.1	-0.2%
71.6%	54.2	54.0	-0.2	-0.3%
72.8%	54.2	54.0	-0.2	-0.3%
74.1%	54.2	54.0	-0.2	-0.3%
75.3%	54.1	54.0	-0.1	-0.3%
76.5%	54.0	53.9	-0.1	-0.2%
77.8%	54.0	53.8	-0.2	-0.3%
79.0%	54.0	53.8	-0.2	-0.3%
80.2%	53.9	53.8	-0.1	-0.3%
81.5%	53.9	53.8	-0.1	-0.2%
82.7%	53.8	53.7	-0.1	-0.2%
84.0%	53.8	53.7	-0.1	-0.2%
85.2%	53.8	53.7	-0.1	-0.2%
86.4%	53.8	53.6	-0.1	-0.3%
87.7%	53.7	53.6	-0.1	-0.2%
88.9%	53.7	53.6	-0.1	-0.2%
90.1%	53.7	53.6	-0.1	-0.2%
91.4%	53.7	53.6	-0.1	-0.2%
92.6%	53.6	53.6	0.0	-0.1%
93.8%	53.6	53.4	-0.2	-0.3%
95.1%	53.5	53.4	-0.1	-0.3%
96.3%	53.4	53.2	-0.2	-0.4%
97.5%	53.3	53.2	-0.2	-0.3%
98.8%	53.2	53.0	-0.2	-0.3%
100.0%	52.9	52.7	-0.2	-0.3%

SUPPORT – Sites Project

Water Districts/Agencies/Retailers

Regional Water Authority
Mountain Counties Water Association
Southern California Water Committee*
Northern California Water Association
- Anderson-Cottonwood Irrigation District
- B&B Ranch
- Brophy Water District
- Browns Valley Irrigation District
- Butte County Board of Supervisors
- Crain Orchards, Inc.
- Danna & Danna Inc.
- Edwards Ranch
- Feather Water District
- G&K Farms, LLC.
- Garden Highway Mutual Water Company
- Garner, Garner & Stoy
- Hallwood Irrigation District
- Hershey Land Row Crop, LLC.
- J.A. Driver
- Joint Water Districts Board
- Biggs-West Gridley Water District
- Butte Water District
- Richvale Irrigation District
- Sutter Extension Water District
- Larry Pires Farms
- Lindauer River Ranch, Inc.
- Llano Seco Rancho
- M&T Ranch
- Maxwell Irrigation District
- Meridian Farms Water Company
- Natomas Mutual Water Co.
- North Yuba County Water District
- Oji Brothers Farms, Inc.
- Pacific Farms & Orchards
- Pelger Mutual Water Company
- Pleasant Grove-Verona Mutual Water Co.
- Plumas Mutual Water Co.
- Princeton-Codora-Glenn Irrigation Dist.
- Provident Irrigation District
- R. Gorrill Ranch Enterprises
- Ramirez Water District
- Reclamation District 1004
- Reclamation District 108
- Reclamation District 2035
- Richter Brothers, Inc.
- River Garden Farms
- Riverview Land & Equipment, Inc.
- Shasta County Board of Supervisors
- South Sutter Water District
- South Yuba Water District
- Sutter Bypass-Butte Slough WUA
- Sutter County Board of Supervisors
- Sutter Mutual Water Company
- Taylor Brothers Farms
- Tehama Angus Ranch, Inc.
- Tehama County Board of Supervisors
- Thermalito Irrigation District
- Tudor Mutual Water Company
- Tuttle Ranches
- Western Canal Water District
- William P. Locket
- Yolo County Flood Control & WCD
- Yuba County Water Agency

Agricultural Interests

California Rice Commission
Family Water Alliance
California Fresh Fruit Association*
California Farm Bureau Federation*
California Agricultural Aircraft Association*
Western Growers*
California Alfalfa & Forage Association*
California Agricultural Irrigation Association*
California Association of Wheat Growers*
California Bean Shippers Association*
California Warehouse Association*
California Cotton Ginners & Growers Association*

**Letter, resolution or support card included as part of this submittal*

SUPPORT – Sites Project

Western Agricultural Processors Association*
Yuba-Sutter Farm Bureau*
Passmore Ranch*
California Women for Agriculture*

Business Groups
California Business Properties Association*
California Building Industry Association*
California Chamber of Commerce*
San Gabriel Valley Economic Partnership*
East Bay Leadership Council*
Sacramento Metro Chamber of Commerce*

Labor
California Alliance for Jobs*
State Building & Construction Trades Council & Local Affiliates*

Local Government
City of Williams*
City of Willows*
Shasta County*
City of Roseville*
Sutter County*
City of Orland*
County of Tehama*
City of Colusa*
Sacramento Area Council of Governments

Local Associations/Businesses
Roseville Coalition of Neighborhood Associations*
PackageOne*
VCS Consulting*
J.V. Camp & Associates*

Elected Officials
Senator Feinstein*
Congresswoman Matsui*
California Congressional Delegation (42) *
Doug LaMalfa (CD 1)
John Garamendi (CD 3)
Kevin McCarthy (CD 23)
Jim Costa (CD 16)
Jeff Denham (CD 10)
Mike Thompson (CD 5)
Ken Calvert (CD 42)
Ami Bera (CD 7)
Devin Nunes (CD 22)
Grace Napolitano (CD 32)
Ed Royce (CD 39)
Zoe Lofgren (CD 19)
David Valadao (CD 21)
Adam Schiff (CD 28)
Tom McClintock (CD 4)
Anna Eshoo (CD 18)
Mimi Walters (CD 45)
Eric Swalwell (CD 15)
Paul Cook (CD 8)
Mark DeSaulnier (CD 11)
Darrell Issa (CD 49)
Jimmy Panetta (CD 20)
Steve Knight (CD 25)
Raul Ruiz (CD 36)
Dana Rohrabacher (CD 48)
Norma Torres (CD 35)
Duncan Hunter (CD 50)
Juan Vargas (CD 51)
Scott Peters (CD 52)
Mark Takano (CD 41)
Jerry McNerney (CD 9)
Alan Lowenthal (CD 47)
Ted Lieu (CD 33)
Judy Chu (CD 27)
Ro Khanna (CD 17)
Tony Cardenas (CD 29)
Linda Sanchez (CD 38)
Lou Correa (CD 46)
Salud Carbajal (CD 24)
Brad Sherman (CD 30)
Lucille Roybal-Allard (CD 40)

**Letter, resolution or support card included as part of this submittal*

SUPPORT – Sites Project

- Pete Aguilar (CD 31)

California State Senators (12) *

- Jim Nielsen (SD 4)
- Bill Dodd (SD 3)
- Tom BerryHill (SD 8)
- Jeff Stone (SD 28)
- Cathleen Galgiani (SD 5)
- Mike Morrell (SD 23)
- Steven Glazer (SD 7)
- Scott Wiener (SD 11)
- Steven Bradford (SD 35)
- Andy Vidak (SD 14)

California State Assemblymembers (17) *

- James Gallagher (AD 3)
- Vince Fong (AD 34)
- Chad Mayes (AD 42)
- Anna Caballero (AD 30)
- Raul Bocanegra (AD 35)
- Ken Cooley (AD 8)
- Blanca Rubio (AD 48)
- Brian Dahle (AD 1)
- Catherine Baker (AD 16)
- Health Flora (AD 12)
- Jay Obernolte (AD 33)
- Jim Cooper (AD 9)
- Marc Steinorth (AD 40)
- Kevin Kiley (AD 6)
- Kevin McCarty (AD 7)
- Timothy Grayson (AD 14)
- Frank Bigelow (AD 5)

**Letter, resolution or support card included as part of this submittal*

DIANNE FEINSTEIN
CALIFORNIA

COMMITTEE ON THE JUDICIARY - RANKING MEMBER
SELECT COMMITTEE ON INTELLIGENCE
COMMITTEE ON APPROPRIATIONS
COMMITTEE ON RULES AND ADMINISTRATION

United States Senate
WASHINGTON, DC 20510-0504
http://feinstein.senate.gov

August 4, 2017

Mr. Armando Quintero, Chair
California Water Commission
P.O. Box 942836
Sacramento, CA 94236-0001

RE: Support for Sites Reservoir Project Proposition 1 Application

Dear Chair Quintero:

I write in support of the Sites Reservoir Project in its application for Proposition 1 funding through the Water Supply Investment Program.

I deeply appreciate your work and the work of the California Water Commission to support storage projects that are vital for our water future. I have long worked to secure federal funding for feasibility studies on Sites and other CALFED storage projects, and I am grateful for the State's willingness to advance qualified projects through the Water Supply Investment Program.

Sites Reservoir offers a remarkable opportunity to reoperate California's longest and largest river, the Sacramento, to provide multiple benefits for fish, farms, and cities in an innovative manner. By partnering with the Sites Project Authority in the development of the Reservoir, the state would acquire water storage capacity and have management control over the resulting releases to ensure environmental benefits are achieved.

Sites is a 1,800,000 acre-foot off-stream reservoir that, if operating today, would increase water storage capacity in the Sacramento Valley by 15% and provide approximately 500,000 acre feet per year of additional water supply on average with approximately half for human use and half for the environment.

Sites Reservoir would allow reoperation of California's water infrastructure in numerous beneficial ways, including:

- Preserving more of Shasta's cold water pool for salmon by making early releases on behalf of Shasta to then enable Shasta to release an equal amount of cold water in summer and fall months;

- Coordinated operations with Folsom and Oroville Reservoirs could likewise offer both water supply and environmental benefits;

- Releases from Sites could increase flows through the Yolo Bypass and other side channels to the Sacramento-San Joaquin Delta that augment food supply for migrating salmon and delta smelt;

- Releases from Sites can provide Level 4 water for wildlife refuges; and

- For Central Valley farms and communities as well as for cities in the Bay Area and Southern California, improve water supply reliability and help to conserve local groundwater basins for use during prolonged droughts.

The past few years have starkly illustrated why California needs to store more water from the wet years for the dry years. As our climate changes, scientists expect the pattern of record-breaking drought and then floods to recur ever more often, elevating the importance of capturing more of the storm runoff that will increasingly dominate our water supply.

It has been a long time coming for major surface storage projects in California to be on the cusp of construction. I greatly appreciate your careful consideration of this important project as you disburse Proposition 1 funding. Please do not hesitate to contact me or John Watts of my staff with any questions.

Sincerely,

Dianne Feinstein

Dianne Feinstein
United States Senator

cc: California Water Commission members
Jim Watson, General Manager, Sites Project Authority

DF:jw

Congress of the United States
Washington, DC 20515

July 31, 2017

Armando Quintero
Chair, California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001

Dear Chairman Quintero,

We write today to convey our support for the Sites Reservoir Project's application for funding from the Proposition 1 Water Storage and Investment Program. The Sites project has the potential to provide multiple benefits to California's farms, cities and to the environment.

As you know, the Sites Project is a 1.8 million acre-foot, off-stream regulating reservoir that would divert and store excess Sacramento River flows. The diversion levels would be dependent upon hydrologic conditions and would be structured to ensure that water taken out of the Sacramento River is truly in excess of downstream needs.

The operational flexibility that the Sites project would provide to the State's entire water system is what makes this project so unique and worthy of funding. A few of the reservoir's many uses include, but are not limited to, a reliable water supply for California cities and agriculture, dedicated water for fishery and environmental flow purposes, increased habitat for migratory birds on the Pacific Flyway, and improved flexibility and drought resiliency for the Central Valley Project and the State Water Project.

Opportunities to apply lessons learned during the last five years of drought must not be wasted. The drought, and this year's record breaking rainfall, have shown us how critical it is to develop smart storage that allows us to store more water in wet years for future use in dry ones. Sites Reservoir is that smart storage.

Thank you for the work that you and the Water Commission are doing to increase water supply reliability across California. We look forward to your announcement of funding awards.

Sincerely,

Doug LaMalfa
Member of Congress

John Garamendi
Member of Congress

Kevin McCarthy
Member of Congress

Jim Costa
Member of Congress

Jeff Denham
Member of Congress

Mike Thompson
Member of Congress

Ken Calvert
Member of Congress

Ami Bera
Member of Congress

Devin Nunes
Member of Congress

Grace Napolitano
Member of Congress

Ed Royce
Member of Congress

Zoe Lofgren
Member of Congress

David G. Valadao
Member of Congress

Adam Schiff
Member of Congress

Tom McClintock
Member of Congress

Anna G. Eshoo
Member of Congress

Mimi Walters
Member of Congress

Eric Swalwell
Member of Congress

Paul Cook
Member of Congress

Mark DeSaulnier
Member of Congress

Darrell Issa
Member of Congress

Jimmy Panetta
Member of Congress

Steve Knight
Member of Congress

Raul Ruiz
Member of Congress

Dana Rohrabacher
Member of Congress

Duncan Hunter
Member of Congress

Scott Peters
Member of Congress

Jerry McNerney
Member of Congress

Ted Lieu
Member of Congress

Ro Khanna
Member of Congress

Norma Torres
Member of Congress

Juan Vargas
Member of Congress

Mark Takano
Member of Congress

Alan Lowenthal
Member of Congress

Judy Chu
Member of Congress

Tony Cardenas
Member of Congress

Linda T. Sanchez

Linda Sanchez
Member of Congress

J. Luis Correa

Lou Correa
Member of Congress

Salud Carbajal
Member of Congress

Brad Sherman

Brad Sherman
Member of Congress

Lucille Roybal-Allard

Lucille Roybal-Allard
Member of Congress

Pete Aguilar

Pete Aguilar
Member of Congress

DORIS O. MATSUI
6TH DISTRICT, CALIFORNIA
COMMITTEE ON ENERGY
AND COMMERCE

Congress of the United States
House of Representatives
Washington, DC 20515–0506

WASHINGTON OFFICE:
2311 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–0506
(202) 225–7163

DISTRICT OFFICE:
ROBERT T. MATSUI U.S. COURTHOUSE
501 I STREET, SUITE 12–600
SACRAMENTO, CA 95814
(916) 498–5600

http://matsui.house.gov

February 17, 2017

Joseph Byrne
Chair
California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001

Dear Chair Byrne

I write today in support of the Sites Reservoir Project's request for funding under Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act. The Sites project has the potential to provide multiple benefits to California's water resources equation including public and environmental benefits for communities and habitat in Northern California.

As you are aware, the $4.4 billion Sites Reservoir Project calls for pumping Sacramento River water into an off-stream reservoir in Colusa and Glenn Counties. Should Sites be built, the 1.81 million acre-foot reservoir has the potential, depending on the watery year, to add up to a maximum of 500,000 acre-feet of water to California's water system annually.

In particular, I support the public and environmental benefits that Sites could provide. As you know, we must constantly balance the fresh water supplies in the Sacramento-San Joaquin Delta. The potential for Sites' public benefit portion is substantial, whether these benefits preserve additional cold water in Shasta Reservoir or support tributaries to the Sacramento River, including the American River. The project also may benefit reservoirs on these tributaries, such as Folsom Reservoir, and help balance their water resources in the best way possible.

With all of the water supply and environmental benefits that Sites has the potential to provide, I look forward to seeing the final environmental documentation that will assure the Proposition 1 public benefit portion of the project is truly attainable.

Thank you for your consideration and your continued efforts to invest in our state's water infrastructure. Should you have any questions feel free to contact me or have your staff reach out to my office at (202) 225-7163.

Sincerely,

Doris Matsui

DORIS MATSUI
Member of Congress

CALIFORNIA LEGISLATURE

STATE CAPITOL
SACRAMENTO, CALIFORNIA
95814

July 10, 2017

Armando Quintero
Chair, California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001

Dear Chairman Quintero:

We write today to convey our support for the Sites Reservoir Project's application for funding from the Proposition 1 Water Storage and Investment Program. The Sites project has the proven potential to provide multiple benefits to California's farms, cities and to the environment.

As you know, the Sites Project is a 1.8 million acre-foot, off-stream reservoir that would divert and store excess Sacramento River flows. The diversion levels would be dependent upon hydrologic conditions and would be structured to ensure that water taken out of the Sacramento River is truly in excess of downstream needs.

The operational flexibility that the Sites project would provide to the State's entire water system is what makes this project so unique and worthy of funding. The reservoir's many beneficial uses include, but are not limited to, dedicated water for fishery and flow purposes, a reliable water supply for California agriculture, increased habitat for migratory birds on the Pacific Flyway, and greater water security for urban areas.

Opportunities to apply lessons learned during the last five years of drought must not be wasted. The drought and this year's record breaking rainfall have shown us how critical it is to develop smart storage that allows us to store more water in wet years for future use in dry ones. Sites Reservoir is the kind of smart, well-planned water storage project that will achieve a multitude of beneficial uses.

Thank you for the work that you and the Water Commission are doing to increase water supply reliability across California. We look forward to your announcement of funding awards.

Sincerely,

Jim Nielsen

Bill Dodd SD 03

Tom Berryhill

[illegible]

[illegible]

Jeff Stone

[illegible]

Cathleen Galgiani

Mike Morrell

Steven M. Glazer

[illegible]

[illegible]

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0115

California Legislature

July 21, 2017

Armando Quintero
Chair, California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001

Dear Chairman Quintero:

We write today to convey our support for the Site Reservoir Project's application for funding from the Proposition 1 Water Storage Investment Program (WSIP). The Sites project would provide valuable benefits to California's farms and cities, while providing much needed flexibility for water managers to adjust flows for the environment and for flood control.

As you know, the Sites Project is a 1.8 million acre-foot off-stream reservoir that would divert and store excess Sacramento River flows. The diversion levels would be dependent upon hydrologic conditions and would be structured to ensure that water taken out of the Sacramento River is truly in excess of downstream needs. If Sites Reservoir had been operational during the last wet season (October 2016-March 2017), 1.4 million acre-feet of water could have been diverted and stored.

The operational flexibility that the Sites project would provide to the State's entire water system is what makes this project so unique and worthy of funding. A few of the reservoir's many uses include, but are not limited to, dedicated water for fishery and flow purposes, a reliable water supply for California's agriculture, increased habitat for migratory birds on the Pacific Flyway, and greater water security for urban areas.

Opportunities to apply lessons learned during the last five years of drought must not be wasted. The drought and this year's record breaking rainfall have shown us how critical it is to develop smart storage that allows us to store more water in wet years for future use in dry ones. Sites Reservoir is that smart storage.

Thank you for the work that you and the Water Commission are doing to increase water supply reliability across California. We look forward to your announcement of funding awards. Please call us at (916)-319-2003 should you need any further information regarding our support for this vital project.

Sincerely,

James Gallagher
Assemblyman, 3rd District

AD-34

Vince Fong
Assemblymember, 34th District

AD42

Chad Mayes
Assemblymember, 42nd District

AD30

Anna Caballero
Assemblymember, 30th District

AD35

Raul Bocanegra
Assemblymember, 35th District

AD8

Ken Cooley
Assemblymember, 8th District

AD48

Blanca Rubio
Assemblymember, 48th District

AD2

Brian Dahle
Assemblymember, 1st District

AD16

Catherine Baker
Assemblymember, 16th District

AD12

Health Flora
Assemblymember, 12th District

AD33

Jay Obernolte
Assemblymember, 33rd District

AD9

Jim Cooper
Assemblymember, 9th District

AD40

Marc Steinorth
Assemblymember, 40th District

AD 06

Kevin Kiley
Assemblymember, 6th District

AD7

Kevin McCarty
Assemblymember, 7th District

Ken Cooley AD 8

Ken Cooley
Assemblymember, 8th District

Timothy Grayson AD 14

Timothy Grayson
Assemblymember, 14th District

Frank Bigelow AD-5

Frank Bigelow
Assemblymember, 5th District

California Agricultural Aircraft Association

661 6th Street
Lincoln, CA 95648
(916) 645-9747 Office
(916) 645-9749 Fax
terry.gage@caaa.net
www.caaa.net

July 14, 2017

Jim Watson
General Manager
Sites Project Authority
PO Box 517
Maxwell, CA 95955

Dear Jim,

The California Agricultural Aircraft Association is pleased to offer its support for the Sites Project. The California Agricultural Aircraft Association (CAAA) is a non-profit trade association representing the professional aerial application industry in California.

California will continue to face intense water challenges including limited supplies, a growing population, the effects of climate change, increased flow requirements for native fish, and water for wetlands used by migratory birds. Now more than ever, California's water system needs a more flexible, environmentally friendly and sustainable solution to capturing and storing water for use when it's needed most.

The Sites Project would add up to 1,800,000 acre-ft. of capacity to produce 500,000 acre-feet of critical supplies to California's water system on an annualized basis. With its ability to integrate operations with the state's water system, Sites is an innovative and modern approach that will help the state capture, store and move water where it needs to be, when it is needed most.

The Sites Project will help make California's water system more efficient and reliable. The project helps meet the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and the environment. Sites Project reflects California's innovative approach to meeting the needs of the environment, economic growth, and our quality of life.

Sites Project works for the ecosystem, and for families, farms, and businesses across the state. We encourage the California Water Commission to invest in the public benefits that the Sites Project would provide.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Terry Gage
President, CAAA

CALIFORNIA FARM BUREAU FEDERATION
GOVERNMENTAL AFFAIRS DIVISION
1127-11TH STREET, SUITE 626, SACRAMENTO, CA 95814 • PHONE (916) 446-4647

July 12, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

On behalf of more than 48,000 farm families and individual members, the California Farm Bureau Federation is pleased to offer our support for the Sites Project.

Farm Bureau's purposes are, among others, to work for the solution of the problems of the farm, the farm home and the rural community throughout California and to protect and advance the social, economic and educational interests of California farmers. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide safe, reliable, and healthful food and farm products through responsible stewardship of California's diverse natural resource base.

With a diminished Sierra snowpack, punctuated by above normal snow and rainfall like we experienced this year, ever-increasing environmental policy demands such as increased flow requirements for native fish, water for wetlands and a growing population, California will continue to face intense water challenges. Now more than ever, California's water system needs a more flexible, environmentally friendly and sustainable solution for diverting and storing water during periods of excess flows for human and environmental uses during dry periods.

The Sites Project would add up to 1,800,000 acre feet of capacity and produce an average 500,000 acre feet of critical supplies to California's water system a year. With the ability to integrate with the state's water system, Sites is strategically located and provides an innovative approach that will help to capture, store and move water where and when it is needed most. The project would provide significant new water for instream flows, recreation, groundwater recharge and assist with the long-term success of the Sustainable Groundwater Management Act.

Providing a substantial supply of high-quality water to support farms, the economy and the environment, the Sites Project meets the objectives of the California Water Action Plan, making California's water system more efficient, flexible and reliable.

Sites works for the ecosystem, and for families, farms, and businesses across the state. We encourage the California Water Commission to invest in the public benefits that the Sites Project would provide.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Danny Merkley
Director of Water Resources

Cc: Keith Dunn, Dunn Consulting

1521 I Street
Sacramento, CA 95814
P: (916) 441-0635
F: (916) 446-1063
www.calhay.org

California Alfalfa &
Forage Association

July 20, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The California Alfalfa & Forage Association, representing thousands of forage growers in the state, is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Jane Townsend

Jane Townsend
Executive Director

California Agricultural Irrigation Association

July 20, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The California Agricultural Irrigation Association (CAIA) is pleased to offer its support for the Sites Project. CAIA is a network of irrigation professionals throughout California whose goal is to promote common ideals, standards, and business practices. CAIA advocates for the development of efficient irrigation design and management practices that promote water and soil conservation while increasing yields and improving crop quality.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Jane Townsend

Jane Townsend
Executive Director

CALIFORNIA ASSOCIATION OF WHEAT GROWERS

1521 I Street · Sacramento, California 95814 · Phone (916)492-7066 · Fax (916)446-1063

July 20, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The California Association of Wheat Growers, representing the interests of California wheat growers on the state and federal levels, is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Nick Matteis
Executive Director

CALIFORNIA BEAN SHIPPERS ASSOCIATION

July 20, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The California Bean Shippers Association, representing dry bean warehouses, dealers, and exporters, is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Jane Townsend

Jane Townsend
Manager/Executive Secretary

"Beans Are Healthy Business for California"

1521 I Street, Sacramento, CA 95814 . (916)441-2514 . Fax (916)446-1063
www.calbeanshippers.org

CALIFORNIA
FRESH FRUIT
ASSOCIATION

TELEPHONE 559.226.6330
FAX 559.222.8326
EMAIL cffa@cafreshfruit.com

7647 N. Fresno Street, Suite 103
Fresno, CA 93720

July 11, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Mr. Watson,

On behalf of the California Fresh Fruit Association I write to express support for the Sites Reservoir Project. The California Fresh Fruit Association is a non-profit, agricultural trade association representing permanent crops (fresh fruit) grown and packed throughout California. For the past five years, many of our organization's family farming operations were severely impacted by drought and water management decisions that reduced the availability of critically needed surface water supplies. Having additional above-ground surface storage north of the Delta better enables flexible water management as the added supply would help to address Delta salinity levels while relieving overall stress on the state's water system. Moreover, we believe the added capacity would allow other reservoirs to carry water into the summer months, a time that is very critical for crop development. With new supply comes an enhanced opportunity for greater flexibility in water management decision making, whether it's making supplies available, or enhancing fulfillment of water contracts. We are encouraged by the project's potential to free up water for you use through an exchange for irrigation or to put to use to alleviate environmental needs.

It is our understanding the Sites Project would add up to 1,800,000 acre-ft. of capacity to produce 500,000 acre-feet of critical supplies to California's water system on an annualized basis. With its ability to integrate operations with the state's water system, Sites is an approach that will help the state capture, store and move water where it needs to be, when it is needed most. California will continue to face intense water challenges including limited supplies, a growing population, the effects of climate change, increased flow requirements for native fish, and water for wetlands. Now more than ever, California's water system needs a more flexible and sustainable solution to capturing and storing water for beneficial uses, including irrigation, when it is critically needed.

We encourage the California Water Commission to invest in the Sites Project and to look to fund qualifying above-ground surface storage projects, which should also include the Temperance Flat Project, to best ensure our limited financial resources are put towards securing California's water future; a future where agricultural irrigation benefits from reduced uncertainty because of the enhanced ability to manage water more effectively. To strengthen the California water picture, first we must expand our capacity to capture more water for a growing state.

We look forward to advancing important above-ground surface storage projects.

Sincerely,

George Radanovich

George Radanovich, President

Cc: Tim Johnson, President, California Rice Commission
Christopher Valadez, Director, Environmental & Regulatory Affairs, California Fresh Fruit Association

CITY OF COLUSA

425 WEBSTER STREET * COLUSA, CA 95932 * (530) 458-4740 * FAX (530) 458-7555

July 18th 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

My organization, the City of Colusa, is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

KIRK KELLEHER, MAYOR

CITY of WILLIAMS
810 E STREET
POST OFFICE BOX 310
WILLIAMS, CALIFORNIA 95987
PHONE: (530) 473-2955 • FAX: (530) 473-2445

July 10, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

My organization, City of Williams, is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Frank Kennedy, City Administrator

RESOLUTION 15-02

A Resolution of the City of Williams to Support Construction of the Sites Reservoir Project.

WHEREAS, the City of Williams's mission includes protecting and enhancing the reliability, availability, affordability, and quality of water resources; and

WHEREAS, the City of Williams is in the center of one of the most productive agricultural areas of California; and

WHEREAS, 2014 was the driest year on record in California and the fourth consecutive drought year; and

WHEREAS, water is the lifeblood of our agricultural community and farming is the foundation of our economic wellbeing; and

WHEREAS, as additional water storage is needed to sustain our water needs for the continued prosperity of our City; and

WHEREAS, the Sites Reservoir, technically called the North of the Delta Off stream Storage project, will increase our water supply for our farming community and residents in the future; and

WHEREAS, the Sites Reservoir will improve the Delta water quality and be capable of holding up to 1.9 million acre feet of water; and

WHEREAS, many water purveyors are implementing or considering actions under their water shortage contingency plans; and

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Williams encourage the construction of the Sites Reservoir.

MOVED, PASSED AND ADOPTED by the City Council of the City of Williams, California, this 21st day of January, 2015 by the following vote, to wit:

AYES: Council Member Troughton Jr., Sellers Jr., Bergson, Jauregui
NOES: Council Member Boes.
ABSTAIN: None.
ABSENT: None.

CITY OF WILLIAMS INCORPORATED MAY 17, 1920 CALIFORNIA

John J. Troughton Jr., Mayor

Alfred Sellers Jr., Mayor Pro-Tem

Kent Boes, Council Member

Charles Bergson, Council Member

Santos Jauregui, Council Member

ATTEST:

Mariana Pineda

Mariana Pineda, City Clerk

June 13, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The City Council of the City or Willows is pleased to offer its support for the Sites Project.

California will continue to face intense water challenges including limited supplies, a growing population, the effects of climate change, increased flow requirements for native fish, and water for wetlands used by migratory birds. Now more than ever, California's water system needs a more flexible, environmentally friendly and sustainable solution to capturing and storing water for use when it's needed most.

The Sites Project would add up to 1,800,000 acre-ft. of capacity to produce 500,000 acre-feet of critical supplies to California's water system on an annualized basis. With its ability to integrate operations with the state's water system, Sites is an innovative and modern approach that will help the state capture, store and move water where it needs to be, when it is needed most.

The Sites Project will help make California's water system more efficient and reliable. The project helps meet the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and the environment. Sites reflects California's innovative approach to meeting the needs of the environment, economic growth, and our quality of life.

Sites works for the ecosystem, and for families, farms, and businesses across the State. We encourage the California Water Commission to invest in the public benefits that the Sites Project would provide.

We look forward to working with the Sites Project Authority to advance this important project.

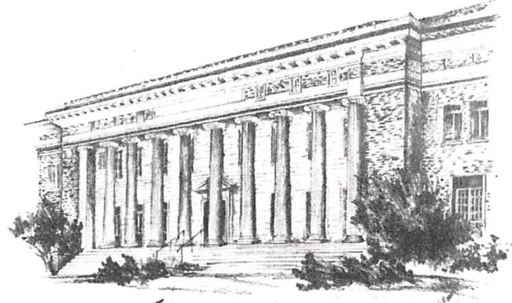
Sincerely,

Gary L. Hansen
Mayor

CITY OF WILLOWS
INCORPORATED
JAN. 16, 1886

Board of Supervisors

COUNTY OF TEHAMA



Tehama County Courthouse

July 11, 2017

Jim Watson, General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Mr. Watson:

The County of Tehama took formal action this date to support the Sites Reservoir Project and its application for Proposition 1 funding.

The Sites Project is a proposed above ground, off-stream water storage project located ten miles west of Maxwell, in Northern California. When complete, this project would add up to 500,000 acre-feet to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. This project would also improve water quality in the Sacramento-San Joaquin Delta and enhance environmental flows which would benefit the Delta's ecosystem.

Into the future California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, our water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Dennis Garton
Chairman
Tehama County Board of Supervisors

P.O. Box 250 • 727 Oak Street, Red Bluff, CA 96080 • (530) 527-4655 • FAX (530) 527-3764

CALIFORNIA WAREHOUSE ASSOCIATION

July 20, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim:

The California Warehouse Association, representing the state's rice warehousing industry, is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Ann Quinn
Executive Vice President

PACKAGEONE®
WE'RE THE ONE™

HEADQUARTERS

PackageOne, Inc.
4225 Pell Drive, Sacramento,
California 95838
tel : 916-858-1300
fax : 916-858-1311
www.packageone.com

July 27, 2017

Jim Watson, General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

My organization, PackageOne, Inc. is pleased to offer its support for the Sites Project.

PackageOne is an environmentally conscious company that recognizes the importance of preserving natural resources for the youth of tomorrow. As a corporate citizen, we're in the business of not only developing innovative packaging products but of improving lives. We are highly committed to the environment and believe in Green. Our mission is to enable commerce and save the planet, one box at a time.

California will continue to face intense water challenges including limited supplies, a growing population, the effects of climate change, increased flow requirements for native fish, and water for wetlands used by migratory birds. Now more than ever, California's water system needs a more flexible, environmentally friendly and sustainable solution to capturing and storing water for use when it's needed most.

The Sites Project will add up to 1,800,000 acre-ft. of capacity to produce 500,000 acre-feet of critical supplies to California's water system on an annualized basis. With its ability to integrate operations with the state's water system, Sites is an innovative and modern approach that will help the state capture, store and move water where it needs to be when it is needed most.

The Sites Project will help make California's water system more efficient and reliable. The project helps meet the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and the environment. Sites reflects California's innovative approach to meeting the needs of the environment, economic growth and our quality of life.

Sites works for the ecosystem, families, farms, and businesses across the state. We encourage the California Water Commission to invest in the public benefits that the Sites Project will provide.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Tom Kandris

Shasta County

BOARD OF SUPERVISORS

1450 Court Street, Suite 308B
Redding, California 96001-1673
(530) 225-5557
(800) 479-8009
(530) 225-5189 FAX
711 or 800-735-2922 California Relay Service

DAVID A. KEHOE, DISTRICT 1
LEONARD MOTY, DISTRICT 2
PAM GIACOMINI, DISTRICT 3
BILL SCHAPPELL, DISTRICT 4
LES BAUGH, DISTRICT 5

March 1, 2016

The Honorable Joseph Byrne, Chair
California Water Commission
1416 9th Street
Sacramento, CA 95814

Subject: Sites Reservoir Project-Support

Dear Chairman Byrne:

The Shasta County Board of Supervisors would like to express our strong support for the development of the Sites Reservoir Project.

Projects to protect and improve watersheds, wetlands, forests, and floodplains would provide clean, quality water into the Sacramento River system with supply and water quality benefits having a great effect on Northern and Southern California. Studying the feasibility of this project, among others, is a return on investment for both water supply reliability and the ecosystem, as well as encouraging these benefits to accrue sooner and in a cost-effective manner. The Shasta County Board of Supervisors supports the Sites Reservoir Project as a potential applicant under the voter-approved Water Storage Investment Program.

If you have any questions about our position, or wish to discuss the issue further, please contact Mr. Larry Lees, Shasta County Executive Officer, at (530) 225-5561.

Sincerely,

Pam Giacomini

Pam Giacomini, Chairman
Board of Supervisors
County of Shasta
State of California

CALIFORNIA ALLIANCE FOR JOBS

1415 L Street, Suite 1080
Sacramento, CA 95814
Office: (916) 446-2259
Fax: (916) 446-2253
www.rebuildca.org

August 1, 2017

Advocate for the Heavy Construction Industry

Armando Quintero
Chair, California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001

RE: Proposition 1 Water Storage Investment Project Funds

Dear Chairman Quintero:

The California Water Commission has an opportunity with Proposition 1 Water Storage Investment Project (WSIP) funds to upgrade our state's aging water infrastructure system while also helping put Californians to work.

The California Alliance for Jobs writes today in support of the Sites Reservoir Project's application for funding through WSIP. This potential reservoir project has the ability to provide multiple levels of benefits to California communities – rural and urban – as well as benefits to the environment around it. As a "north of the Delta" reservoir site, Sites would be able to provide California's current water systems with additional water security, storage capacity, and delivery flexibility.

Sites Reservoir would hold almost two million acre-feet of water through off-stream diversions. This capacity would allow the project to: provide reliable water supplies to current and future California cities and industries, dedicate water for environmental flows and fisheries, increase current and potential habitats for migratory birds, and improve the economy of currently disadvantaged communities across California.

Investing in the Sites Project also puts people to work. Thousands of family-supporting jobs are produced with every billion dollars invested in water infrastructure. Funding a project like Sites would provide decades worth of well-paying, middle class jobs for all Californians.

California's recent five-year drought and wet winter of 2017 showed the importance of smart and flexible water infrastructure to allow for storage during wet years and convey water during the dry ones. Sites Reservoir is necessary for California's continued economic growth and environmental sustainability.

Respectfully yours,

M. P. Quigley

Michael P. Quigley
Executive Director
California Alliance for Jobs

Sites

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

California Alliance for Jobs
Company or Organization Name

Michael Quigley	Executive Director
Name	Title/Occupation

1415 L Street, Suite 1080
Street Address

Sacramento	CA	95814
City	State	Zip

916-446-2259
Phone Number

mpquigley@rebuildca.org
Email Address

Thank you for your support!

Please Return Completed Form by email: **info@SitesProject.org**

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

California Alliance for Jobs
Company or Organization Name

Orville Thomas	Director of Government Affairs
Name	Title/Occupation

1415 L Street, Suite 1080
Street Address

Sacramento	CA	95814
City	State	Zip

916-446-2259
Phone Number

othomas@rebuildca.org
Email Address

Thank you for your support!

Please Return Completed Form by email: **info@SitesProject.org**

PASSMORE RANCH

July 31, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Mr. Watson,

Passmore Ranch is pleased to offer its support for the sites Project. My ranch's primary business is aquaculture and on top of that, I live here in California too. Water is precious to both me, my family, and my ranch.

California will continue to face intense water challenges including limited supplies, a growing population, the effects of climate change, increased flow requirements for native fish, and water for wetlands used by migratory birds. Now more than ever, California's water system needs a more flexible, environmentally friendly and sustainable solution to capturing and storing water for use when it's needed most.

The Sites Project will add up to 1,800,000 acre-ft. of capacity to produce 500,000 acre-feet of critical supplies to California's water system on an annualized basis. With its ability to integrate operations with the state's water system, Sites is an innovative and modern approach that will help the state capture, store and move water where it needs to be when it is needed most.

The Sites Project will help make California's water system more efficient and reliable. The project helps meet the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and the environment. Sites reflects California's innovative approach to meeting the needs of the environment, economic growth and our quality of life.

Sites works for the ecosystem, families, farms, and businesses across the state. We encourage the California Water Commission to invest in the public benefits that the Sites Project will provide.

I look forward to working with the Sites Project Authority to advance this important project.

Warm Regards,

Michael Passmore
Founder, CEO

7700 Dillard Road, Sloughhouse, CA 95683 · (916) 688-3900 · passmoreranch.com

YUBA-SUTTER
FARM BUREAU
Serving agriculture since 1919

July 28, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The Yuba-Sutter Farm Bureau, is pleased to offer its support for the Sites Project.

YSFB is a non-governmental, non-profit, voluntary membership California Corporation whose purpose is to protect and promote agricultural interests throughout Yuba and Sutter counties and to find solutions to problems of the farm, the farm home and the rural community. YSFB represents more than 1,200 agricultural, associate and collegiate members in Yuba and Sutter counties.

YSFB is deeply interested in protecting the long-term viability of agricultural areas and rural communities located in our region as the stability of the local agricultural industry plays an integral role not only within our rural communities and counties, but regionally, nationally and internationally.

California will continue to face intense water challenges including limited supplies, a growing population, the effects of climate change, increased flow requirements for native fish, and water for wetlands used by migratory birds. Now more than ever, California's water system needs a more flexible, environmentally friendly and sustainable solution to capturing and storing water for use when it's needed most.

The Sites Project will add up to 1,800,000 acre-ft. of capacity to produce 500,000 acre-feet of critical supplies to California's water system on an annualized basis, while allowing other reservoirs to hold water later into the summer months. The Sites Project will increase Northern California water storage by 23 percent, providing supplies of water for use in dry and critical years. Summed up, the Sites Project, with its ability to integrate operations with the state's water

475 N. Palora Avenue, Suite A, Yuba City, CA 95991 ♦ (530) 673-6550 ♦ Fax (530) 671-5836 ♦ Email: ysfb@ysfarmbureau.com

system, is an innovative and modern approach that will help the state capture, store and move water where it needs to be when it is needed most.

The Sites Project will help make California's water system more efficient and reliable. The project helps meet the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and the environment. Sites reflects California's innovative approach to meeting the needs of the environment, economic growth and our quality of life.

Sites works for the ecosystem, families, farms, and businesses across the state. We encourage the California Water Commission to invest in the public benefits that the Sites Project will provide.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

David J. Burroughs

David Burroughs
President, Yuba-Sutter Farm Bureau

475 N. Palora Avenue, Suite A, Yuba City, CA 95991 ♦ (530) 673-6550 ♦ Fax (530) 671-5836 ♦ Email: ysfb@ysfarmbureau.com

CITY COUNCIL
Dennis G. Hoffman, Mayor
Bruce T. Roundy, Vice Mayor
James Paschall, Sr.
Charles Gee
Salina Edwards

CITY OFFICIALS
Angela Crook
Assistant City Manager/City Clerk
Pamela Otterson
City Treasurer

CITY OF ORLAND

INCORPORATED 1909

815 Fourth Street
ORLAND, CALIFORNIA 95963
Telephone (530) 865-1600
Fax (530) 865-1632

CITY MANAGER
Peter R. Carr

July 17, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The City of Orland City Council is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Dennis G. Hoffman
Mayor

RCONA **Roseville Coalition of Neighborhood Associations**

1911 Douglas Blvd., Suite 85-370, Roseville, CA 95661 916-248-4878 www.rcona.org

July 15. 2017
Jim Watson General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

My organization, Roseville Coalition of Neighborhood Associations (RCONA) , is pleased to offer its support for the Sites Project. *RCONA is a 501c3 Public Benefit Corporation representing 16 active Neighborhood Associations all across the City of Roseville. Our mission is to improve the social, physical, and economic health of all neighborhoods across the Roseville community by sharing information, facilitating training and education, providing resources and encouraging communication between neighborhoods, government, educational institutions, and other community groups.*

California will continue to face intense water challenges including limited supplies, a growing population, the effects of climate change, increased flow requirements for native fish, and water for wetlands used by migratory birds. Now more than ever, California's water system needs a more flexible, environmentally friendly and sustainable solution to capturing and storing water for use when it's needed most.
The Sites Project would add up to 1,800,000 acre-ft. of capacity to produce 500,000 acre-feet of critical supplies to California's water system on an annualized basis. With its ability to integrate operations with the state's water system, Sites is an innovative and modern approach that will help the state capture, store and move water where it needs to be, when it is needed most. The Sites Project will help make California's water system more efficient and reliable. The project helps meet the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and the environment. Sites reflects California's innovative approach to meeting the needs of the environment, economic growth, and our quality of life.

Sites works for the ecosystem, and for families, farms, and businesses across the state. We encourage the California Water Commission to invest in the public benefits that the Sites Project would provide.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,
Werner Kuehn, President **RCONA**

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☐ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

Roseville Coalition of Neighborhood Associations
Company or Organization Name

Werner Kuehn , President
Name Title/Occupation

1911 Douglas Blvd , Suite 85-370
Street Address

Roseville, CA 95661
City State Zip

916-248-4878
Phone Number

president@rcona.org
Email Address

Thank you for your support!

Please Return Completed Form by email: info@SitesProject.org

California Cotton Ginners and Growers Associations

1785 N. Fine Avenue
Fresno, CA 93727
Telephone: 559 / 252-0684
Fax: 559 / 252-0551

July 21, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

Representing over 600 cotton growers and 27 operating gins in the State of California, the California Cotton Ginners and Growers Association wishes to express our support for the Sites Project. After the entire state was crippled by several years of drought, it is increasingly evident that innovative water storage projects are needed.

The Sites Project would create an additional 1.8 million acre-feet of storage which would produce up to 500,000 acre-feet of supplies to California's water system annually. This water would be extremely valuable in helping achieve a more efficient and reliable water supply system. Capturing and capitalizing on years of increased precipitation would not only help keep families and farms in business but it would also generate economic growth, produce jobs and help California achieve ecosystem benefits.

We have seen billions of gallons of precious water be lost to the ocean due to the lack of adequate infrastructure. The water challenges that California has encountered over the past several years will continue, however investing in opportunities such as the Sites Project will bring balance and sustainability to the most precious resource in the state.
We look forward to do anything we can to help advance the Sites project.

Sincerely,

Roger Isom
President/CEO

WAPA
WESTERN AGRICULTURAL PROCESSORS
ASSOCIATION

1785 N. Fine Avenue, Fresno, California 93727
559-455-9272
f: 559-251-4471
www.agprocessors.org

July 21, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

Representing over 128 tree nut hullers and processors of almonds, pecans, pistachios and walnuts in the State of California, the Western Agricultural Processors Association wishes to express our support for the Sites Project. After the entire state was crippled by several years of drought, it is increasingly evident that innovative water storage projects are needed.

The Sites Project would create an additional 1.8 million acre-feet of storage which would produce up to 500,000 acre-feet of supplies to California's water system annually. This water would be extremely valuable in helping achieve a more efficient and reliable water supply system. Capturing and capitalizing on years of increased precipitation would not only help keep families and farms in business but it would also generate economic growth, produce jobs and help California achieve ecosystem benefits.

We have seen billions of gallons of precious water be lost to the ocean due to the lack of adequate infrastructure. The water challenges that California has encountered over the past several years will continue, however investing in opportunities such as the Sites Project will bring balance and sustainability to the most precious resource in the state.

We look forward to do anything we can to help advance the Sites project.

Sincerely,

Roger Isom

Roger Isom
President/CEO

cc: Carol Baker, Vice-Chair, California Water Commission
Andrew Ball, Board Member, California Water Commission
Joseph Byrne, Board Member, California Water Commission
Daniel Curtin, Board Member, California Water Commission
Joe Del Bosque, Board Member, California Water Commission
Maria Herrera, Board Member, California Water Commission
Catherine Keig, Board Member, California Water Commission
David Orth, Board Member, California Water Commission
Joe Yun, Executive Officer, California Water Commission

Members, Senate Natural Resources & Water Committee
Members, Joint Legislative Budget Committee

Kim Craig, Deputy Cabinet Secretary, Office of Governor Jerry Brown
John Laird, Secretary, Natural Resources Agency
Cindy Messer, Acting Director, Department of Water Resources

Kip Lipper, Office of Senate President pro Tempore Kevin De Leon
Kevin Bassett, Office of Senator Pat Bates

Bill Craven, Senate Natural Resources & Water Committee
Joe Stephenshaw, Senate Budget & Fiscal Review Committee
Todd Moffitt, Senate Republican Policy Office
Rocel Bettencourt, Senate Republican Fiscal Office

Thad Bettner, Glenn-Colusa Irrigation District
Todd Manley, Northern California Water Association
Kathleen Cole, Metropolitan Water District of Southern California

BOARD OF SUPERVISORS
COUNTY OF SUTTER

1160 Civic Center Blvd.
Yuba City, CA 95993

(530) 822-7106
FAX: (530) 822-7103

June 27, 2017

Jim Watson
General Manager
Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

Dear Jim,

The Sutter County Board of Supervisors is pleased to offer its support for the Sites Project.

The Sites Project is a proposed above ground, off-stream water storage project located in Northern California and would add up to 500,000 acre-feet of critical supplies to California's water system annually. Sites is an innovative and modern approach that goes beyond water supply and flood protection by adding flexibility and generating a much-needed new water source for improved water quality, seasonal fish flows, climate change and drought relief.

The Sites Project creates an additional supply of reliable water that can be used for urban, agricultural, environmental, and industrial purposes. Sites would also improve water quality in the Sacramento-San Joaquin Delta (Delta) and enhance environmental flows to benefit the Delta's ecosystem.

California will continue to face severe water challenges including limited supplies, a growing population, the effects of climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites Project would provide an additional tool for water managers to effectively balance competing demands and provide safe and reliable water to support the current and future needs of California's environment and economy.

We look forward to working with the Sites Project Authority to advance this important project.

Sincerely,

Dan Flores
Vice-Chairman

WESTERN GROWERS®

July 19, 2017

Mr. Armando Quintero
Chair
California Water Commission
PO Box 942836
Sacramento, CA 94236-0001
Emailed to: CWC@water.ca.gov

RE: Support for Sites and Temperance Flat Projects

Dear Chairman Quintero:

Founded in 1926, Western Growers members are local and regional family farmers growing fresh produce in Arizona, California, Colorado and New Mexico. Our members and their workers provide half the nation's fresh fruits, vegetables and tree nuts, including half of America's fresh organic produce. It is on their behalf that we express our strong support for both the Sites Reservoir and Temperance Flat Reservoir projects in their applications for Proposition 1 public benefit funding.

One of the consequences of climate change is that California's historic precipitation and runoff patterns will change, resulting in greater unreliability of the Sierra snowpack. We must now contend with less snowpack along with faster, flashier and more chaotic runoff into our existing storage and conveyance infrastructure. Indeed, we may have already begun to experience such changes. This year's record-breaking rain and snow accumulations, coming on the heels of the worst recorded drought ever experienced, vividly demonstrates the need to adapt and enhance a system designed in a climatic era that no longer exists, and for a state population less than half of what it is today.

From October 1, 2016 through July 9, 2017 (nine months of the current water year), more than 50 million acre feet of water flowed into the Sacramento-San Joaquin Delta. After accounting for diversions for in-Delta use and exports by the State Water Project and Central Valley Project, more than 46 million acre feet flowed out to the ocean.

The Sites Project would add up to 1.8 million acre feet of capacity in an off-stream reservoir north of the Delta. State and federal water project operations in recent years have demonstrated the great need for this project as operators struggled with conflicting demands on the Sacramento River system. The Sites Project would provide critically needed flexibility for system operators by capturing high runoff flows on the Sacramento River and allowing later releases from Sites or upstream reservoirs for environmental and economic uses.

Temperance Flat Reservoir would be located on the San Joaquin River in the foothills northeast of Fresno and would create an additional 1.26 million acre-feet of water storage. Combined with the existing Millerton Lake, the complex would provide storage capacity of 1.78 million acre feet. The need is obvious: In 17 of the last 40 years, water has been released from Millerton Lake (Friant Dam) for flood control purposes, due to lack of storage capacity. This season alone Millerton will have released approximately 2.5 million acre feet to the ocean, lost for groundwater recharge or water supply.

Mailing Address: P.O. Box 57089 · Irvine, CA 92619-7089 • **Street Address:** 15525 Sand Canyon · Irvine, CA 92618
T: 949.863.1000 • **F:** 949.863.9028 • **Internet:** www.wga.com

The voters of California approved Proposition 1 by a margin of more than two-to-one, and they had a clear understanding, in the midst of a historic drought, that they were being asked whether California should invest in new water storage projects. Governor Brown and other signatories of the official ballot argument in support of Proposition 1 wrote in relevant part: "Proposition 1 invests in *new storage increasing the amount of water that can be stored during wet years* for the dry years that will continue to challenge California." (Emphasis added.)

As surface water storage projects, Sites and Temperance Flat provide the only means of capturing and storing heavy snowmelt and rain runoff – especially in wet years – that can be later utilized for groundwater recharge. Without this surface storage supply, groundwater recharge opportunities are lost as flood flows cannot be accommodated by saturated recharge lands. As the Sustainable Groundwater Management Act is implemented, the need for this capacity and flexibility is greater than ever.

Both projects would also provide needed additional flood protection for communities throughout the Central Valley.

These projects will help make California's water system more efficient and reliable. The projects help meet the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and the environment.

We respectfully urge the Commission to support both the Sites Reservoir Project and the Temperance Flat Reservoir Project to the fullest extent possible.

Sincerely,

Dave Puglia
Executive Vice President

C: Carol Baker, Member, California Water Commission
Andrew Ball, Member, California Water Commission
Joseph Byrne, Member, California Water Commission
Daniel Curtain, Member, California Water Commission
Joe Del Bosque, Member, California Water Commission
Maria Herrera, Member, California Water Commission
Catherine Keig, Member, California Water Commission
David Orth, Member, California Water Commission
Joe Yun, Executive Officer, California Water Commission
Jim Watson, General Manager, Sites Project Authority
Mario Santoyo, Executive Director, San Joaquin Valley Water Infrastructure Authority

August 7, 2017

Armando Quintero, Chair
California Water Commission
P.O. Box 942836
Sacramento, CA 94236

Re: Sites Reservoir Project – Support

Dear Chairman Quintero:

On behalf of the Southern California Water Committee, I am writing to express support for the Sites Reservoir Project, and upcoming consideration of the project's application for Proposition 1 funding.

California needs flexible and reliable solutions to address its water woes, especially in light of today's climate realities and our recurring drought cycles. After a crushing five-year drought, this past winter was the wettest in 122 years but California lost the opportunity to capture and store billions of gallons of surplus water due to restrictions on our delivery system and lack of storage options.

We must focus on ways to smooth out the boom or bust cycle, this means having the ability to move water during big storm events and the capacity to save it in reservoirs for drier times. California has had nine droughts since 1900, totaling 41 years. The likelihood that droughts will worsen in the future means we must invest now to improve our old and inefficient water infrastructure.

Californians have the right to expect a clean and reliable water supply not just for today but for generations to come, and the Sites Reservoir Project aligns with delivering on this expectation. For these reasons, we support the Sites Reservoir Project and appreciate your consideration of the project for Proposition 1 funding this fall.

Sincerely,

Charley Wilson
Executive Director
Southern California Water Committee

cc: Carol Baker, Vice-Chair, California Water Commission
carol.baker@cwc.ca.gov

Andrew Ball, Member, California Water Commission
andrew.ball@cwc.ca.gov

Joseph Byrne, Member, California Water Commission
joseph.byrne@cwc.ca.gov

Daniel Curtin, Member, California Water Commission
daniel.curtin@cwc.ca.gov

Joe Del Bosque, Member, California Water Commission
joe.delbosque@cwc.ca.gov

Cathy Keig, Member, California Water Commission
catherine.keig@cwc.ca.gov

Maria Herrera, Member, California Water Commission
maria.herrera@cwc.ca.gov

David Orth, Member, California Water Commission
david.orth@cwc.ca.gov

May 23, 2017

Mr. Armando Quintero, Chair
California Water Commission
P.O. Box 942836
Sacramento, CA 94236-0001

RE: Support for the Sites Reservoir Project Proposition 1 Application

Dear Chair Quintero:

As the representative organization for businesses in the East Bay, the East Bay Leadership Council (EBLC) has a vested interest in projects that will improve water supplies, resiliency and the environment – water is vital for the health of business, residents and the environment. The EBLC is writing to express support of the Water Supply Investment Program funding application submitted under Proposition 1 for the Sites Reservoir Project.

In 2014, California voters approved $2.7 billion in funding for water storage projects, signaling that residents understand the importance of water storage and want to invest in construction projects in exchange for receiving environmental benefits. The recent drought followed by the wettest year on record only further highlighted the state-wide need for more storage to prepare for drought and flood emergencies. The EBLC agrees that two of the storage proposals are superior to others in providing water supply and Delta ecosystem benefits; namely, Sites Reservoir and Los Vaqueros Reservoir. These off-stream reservoirs provide many environmental and water supply benefits that can be achieved through federal, state and local funding. This letter focuses on Sites Reservoir; a separate letter will be provided for Los Vaqueros.

A key component of the East Bay Leadership Council's water policy action plan includes advocating for new and expanded water storage to diversify and enhance regional water supplies. California's most recent drought provided a stark reminder of the importance of a reliable water supply portfolio capable of balancing the water demands across all users: residential, business, agricultural and environmental. Sites Reservoir would provide an additional tool for regional water managers to balance these competing needs. Additionally, public investment in Sites Reservoir would provide the state's environmental resource agencies with an amount of water they would prioritize and manage, on a real-time basis and in every water year type, to advance the long-term objectives of restoring the ecological health and improving water management for beneficial uses of the Delta. This "environmental water" would also create measurable ecosystem and water quality benefits in the Sacramento River and provide additional water for the national wildlife refuges in the Central Valley. Such a new and flexible tool will only increase in value as the state manages its limited water resources through an uncertain future that includes offsetting for the effects of climate change on people and the environment.

The EBLC appreciates the California Water Commission's consideration of this important project and encourages the Commission to approve the Proposition 1 funding application.

Thank you for your time and consideration. Please contact Josh Huber, EBLC's Policy Director, with any questions at 925-246-1880

Sincerely,

Kristin Connelly

Kristin Connelly
President & CEO

Cc: California Water Commission members

1615 Bonanza Street, Suite 324, Walnut Creek, CA 94596 | voice 925.246.1880
www.eastbayleadershipcouncil.com

State Building and Construction Trades Council
of California

ROBBIE HUNTER
PRESIDENT

J. TOM BACA
SECRETARY-TREASURER

Established 1901
Chartered by
BUILDING AND CONSTRUCTION TRADES
DEPARTMENT
AFL - CIO

August 4, 2017

Mr. Armando Quintero
Chair, California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001

RE: Sites Reservoir Project Application for Funding from the Proposition 1 Water and Storage Investment Program

Dear Chairman Quintero:

On behalf of the State Building and construction Trades Council, AFL-CIO I write today to convey our support of the Sites Reservoir Project's application for funding from the Proposition 1 Water Storage and Investment Program. The Sites project not only has the potential to provide multiple benefits to California's farms, cities, and environment, but will also create good paying construction jobs which will help the economy.

As you know, the Sites Project is a 1.8 million acre-foot, off-stream regulating reservoir that would divert and store excess Sacramento River flows. The diversion levels would be dependent upon hydrologic conditions and would be structured to ensure that water taken out of the Sacramento River is truly in excess of downstream needs.

The operational flexibility that the Sites project would provide to the State's entire water system is what makes this project so unique and worthy of funding. A few of the reservoir's many uses include, but are not limited to: dedicated water for fishery and environmental flow purposes, a reliable water supply for California cities and agriculture, increased habitat for migratory birds on the Pacific Flyway, and improved flexibility and drought resiliency for the Central Valley Project and the State Water Project.

Opportunities to apply lessons learned during the last five years of drought must not be wasted. The drought (exacerbated by climate change), and this year's record-breaking rainfall, have proven how critical it is to develop smart storage that allows us to store more water in wet years for future use in dry ones. Sites Reservoir is that smart storage.

Thank you for the work that you and the Water Commission are doing to increase water supply reliability across California. We look forward to your announcement of funding awards.

Sincerely,

CESAR DIAZ
Legislative Director

CD:bp
opeiu#29/afl-cio

CC: Members, California Water Commission

1521 I Street
Sacramento, CA 95814
(916) 441-2910
www.CAWomen4Ag.com

August 9, 2017

Mr. Joe Yun, Executive Director
California Water Commission
P.O. Box 942836
Sacramento, California 94236-0001

Re: Support for Sites Reservoir

Dear Mr. Yun,

On behalf of the California Women for Agriculture (CWA) membership I would like to express support for the Sites Reservoir Project and additional surface water storage in California. Our state's ongoing water crisis demands varied and comprehensive solutions, including ample new water storage and infrastructure south of the Delta, to help ensure the ongoing viability of agriculture in California, as well as the communities and families that rely on this great industry. The Sites Project is a critical component of such solutions.

CWA is an all-volunteer organization with over 1,000 members engaged public relations, education and legislative advocacy on behalf of California agriculture at the local, state and national level. Our membership includes farmers and ranchers, individuals involved in support industries such as insurance, banking and consulting, and interested consumers from throughout the state. As a group focused on actively promoting the importance of a healthy and vibrant agricultural industry, we have been consistently engaged in discussions around the California drought, water management, and ensuring available water supplies are maximized for the benefit of all Californians. The impacts of the drought were devastating for our industry and forced family farmers to make very difficult decisions. Groundwater wells are an option for some growers, but many are located in areas where groundwater is not available, quality is less than optimal, or costs associated with pumping from deep wells are not feasible for the return on the crop being grown. Growers throughout the state have been severely negatively impacted, and some permanently, by significantly reduced surface water allocations.

The need for surface storage has never been more apparent as it has been in recent years. Water is a scarce commodity and for this reason growers have implemented state of the art irrigation technology over the years. Without that, impacts of the drought would have been much more severe on agriculture. As agriculture continues to conserve and do more with less, the allocations of water directed to environmental purposes increase. An increase to water in the system will be the only solution to ensure all needs will be met. There is an immediate need for balance because a safe and affordable food supply is essential for California.

CWA has supported increased surface storage, including the Sites Reservoir Project, from the early discussions and negotiations for the Prop 1 Water Bond. We were particularly vocal about the need for continuous appropriations in an amount sufficient to incorporate both Sites and Temperance Flat in the scope of the proposition. That was the intention of the funding. The 1.8 million acre feet of additional water storage Sites would provide operational flexibility to the State's entire water system, making this project unique and worthy of funding.

Sites will provide benefits to California cities, agriculture and the environment, including dedicated water for fishery and environmental flow purposes, increased habitat for migratory birds on the Pacific Flyway, and improved flexibility and drought resiliency for the Central Valley Project and the State Water Project.

We ask that you consider the myriad of regional and state benefits that will be provided for by the construction of this project. There is strong local support for this project and we ask that you allocate sufficient funds from Section 8 of the Prop 1 Water Bond to the Sites Flat Project.

Respectfully,

Sara Reid Herman
State President Elect
California Women for Agriculture

cc: Armando Quintero
Carol Baker
Andrew Ball
Joseph Byrne
Daniel Curtin
Joe Del Bosque
Maria Herrera
Catherine Keig
David Orth

RESOLUTION NO. 17-19

SUPPORTING THE SITES RESERVOIR PROJECT ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, the State of California is in the midst of a multi-year drought that has severely strained the state and federal water systems; and

WHEREAS, the City of Roseville, which relies on the Central Valley Project's Folsom Reservoir for its water supply; and

WHEREAS, Folsom Reservoir saw a record low reservoir level in 2015 with the reservoir reaching 135,000 acre-feet; and

WHEREAS, Folsom Reservoir provides beneficial cold water in the American River and is relied upon by the Bureau of Reclamation as a first responder reservoir to send water to the Sacramento-San Joaquin Delta to repel salinity and meet water quality objectives; and

WHEREAS, Roseville values the development of surface water storage infrastructure that provides for more water system reliability north of the Sacramento-San Joaquin Delta; and

WHEREAS, the proposed North of Delta Offstream Storage Project (or Sites Reservoir Project) would add up to 1.8 million acre-feet of potential off-stream water supply storage to be operated for human consumptive uses, the production of food, and environmental benefits; and

WHEREAS, the proposed Sites Reservoir Project is an offstream regulating reservoir that does not impede fish passage and it can provide an environmental block of water that could be used for various purposes, including: improved reliability of flows to support migratory birds of the Pacific Flyway, increased cold water pools available for salmon north of the Sacramento-San Joaquin Delta, water quality and ecosystem improvements in the Delta and recreational value; and

WHEREAS, if Sites Reservoir is built, it could be operated in tandem to relieve pressure off of Folsom Reservoir in cold water and environmental releases of water; and

WHEREAS, if Sites Reservoir is built, could support the state's renewable energy goals; and

WHEREAS, the potential multiple benefits of Sites Reservoir could help Roseville's water supply reliability and ensure the city's future prosperity;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Roseville supports the construction and operation of Sites Reservoir; and directs the City Manager to allocate the appropriate advocacy, communications and technical resources to ensure that Sites

Reservoir is built and operated, to benefit the Roseville community and economy, through added water supply reliability, for generations to come.

PASSED AND ADOPTED by the Council of the City of Roseville this 18th day of January, 2017, by the following vote on roll call:

AYES COUNCILMEMBERS: Gore, Alvord, Herman, Allard, Rohan

NOES COUNCILMEMBERS: None

ABSENT COUNCILMEMBERS: None

Susan Rohan

MAYOR

ATTEST:

City Clerk

Sites

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

California Building Industry Association
Company or Organization Name

Robert E. Raymer, PE — Technical director
Name — Title/Occupation

1215 K Street, Suite 1200
Street Address

Sacramento — CA — 95814
City — State — Zip

(916) 340-3322
Phone Number

rraymer@cbia.org
Email Address

Thank you for your support!

Please Return Completed Form by email: keithdunn@me.com

Sites

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

San Gabriel Valley Economic Partnership
Company or Organization Name

Brad Jensen	Director of Public Policy
Name	Title/Occupation

4900 Rivergrade Rd. Suite B130
Street Address

Irwindale	CA	91706
City	State	Zip

626-856-3400
Phone Number

bjensen@sgvpartnership.org
Email Address

Thank you for your support!

Please Return Completed Form by email: keithdunn@me.com

Sites

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

CA Business Properties Association
Company or Organization Name

Rex Hime — President + CEO
Name — Title/Occupation

1121 L Street, Ste. 809
Street Address

Sacramento — CA — 95814
City — State — Zip

916-443-4676
Phone Number

RexHime@cbpa.com
Email Address

Thank you for your support!

Please Return Completed Form by email: keithdunn@me.com

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population compounded by climate change and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

VCS Consulting, LLC
Company or Organization Name

Alan Vail	Managing Partner
Name	Title/Occupation

4125 Temescal Street, Suite G
Street Address

Fair Oaks	CA	95628
City	State	Zip

916-716-5522
Phone Number

arvail@sbcglobal.net
Email Address

Thank you for your support!

Please Return Completed Form by email: **info@SitesProject.org**

Sites

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

California Chamber of Commerce
Company or Organization Name

Valerie Nera	Policy Advocate
Name	Title/Occupation

1215 K Street, Suite 1400
Street Address

Sacramento	CA	95814
City	State	Zip

916-930-1240
Phone Number

Valerie.Nera@calchamber.com
Email Address

Thank you for your support!

Please Return Completed Form by email: keithdunn@me.com

Sites

Sites Reservoir Supporters

California continues to face severe water challenges: limited supplies and a growing population, compounded by climate change, and increased flow requirements for native fish. Now more than ever, California's water system needs a more flexible, environmentally friendly solution to capturing and storing water for use when it's needed most. The Sites project is an innovative project and a 21st century solution to California's water crisis. Sites provides previously unachievable flexibility to the state's water system without impacting sensitive river channels and critical environmental flows that support endangered fish populations.

☑ **Yes,** I support the Sites Project. Please list me/my organization as a supporter of Sites.

Please provide the following information:

J.V. Camp & Associates, LLC
Company or Organization Name

James Camp
Name

Title/Occupation

P.O. Box 7501
Street Address

Newport Beach CA 92658
City State Zip

Phone Number

jcamp@jvcampassoc.com
Email Address

Thank you for your support!

Please Return Completed Form by email: keithdunn@me.com

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 7: Non-Monetized Benefits

If applicable, provide a summary of public benefits that cannot be monetized. Provide the following information for each non-monetized benefit.

- *Justification why benefit cannot be monetized,*
- *Qualitative description of importance of benefit (who is affected, how and how often),*
- *Evidence to show how the physical change is beneficial and important to Californians.*

WSIP Application Instructions, March 2017

Response

There are several benefits from the Sites Project that have not been monetized. These are described below.

Operational Flexibility: The addition of the Sites Project would provide increased operational flexibility for the SWP and CVP that would support both public and non-public benefits. It is difficult to find a suitable metric for this benefit without double counting the monetized benefits; nevertheless this is a real benefit. This flexibility is beneficial to the Sacramento River watershed, the Delta, and all beneficiaries served by the SWP and CVP. This is consistent with the Natural Resources Agency, California Water Action Plan (2016) which states:

> "Today, water storage is also needed to help provide widespread public and environmental benefits, such as seasonal fish flows, improved water quality, water cool enough to sustain salmon, and increased flexibility to meet multiple demands, especially in increasingly dry years. The financing of additional water storage in California must reflect not just specific local benefits, but also these broader public benefits."

Groundwater Sustainability: As indicated in the response to Q6 and Sites_A6C Groundwater Basins under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB, water from Sites Reservoir would be used by project participants to help prevent undesirable results. The details of how the specific participants will use water from Sites for direct or in lieu recharge have not yet been developed, but are expected to be incorporated into forthcoming sustainable groundwater management plans if this project is approved. At a minimum, Sites Reservoir would contribute to improved groundwater management practices for Glenn and Colusa.

Ecosystem Enhancement – Anadromous Fish - Other Species in Sacramento River: This application includes monetized benefits for Chinook salmon (all runs) downstream of the Sacramento River. Other species in the portion of the Sacramento River between Keswick Dam and Red Bluff would also benefit from improved temperature conditions. These include steelhead and green sturgeon which receive protection from the Federal Endangered Species Act and have recreational value as gamefish. These benefits were not monetized because models for these species are not available for this watershed.

Ecosystem Enhancement – Anadromous Fish – Lower American River: The Sites Project would also provide temperature benefits in the American River watershed below Folsom Dam. These benefits have not been monetized. These benefits were not monetized because models for are not available to estimate the improvement in returning spawners for this watershed.

Recreation – Benefits to Nearby Reservoirs: The addition of Sites Reservoir would improve water surface elevations in existing reservoirs, including Lake Oroville, Shasta Lake and Folsom Lake. Both of these reservoirs are popular for recreation that is dependent on maintaining an adequate surface water elevation. This benefit was not monetized.

Recreation – Benefits to Fishing: Sites Reservoir operations will provide additional coldwater and augment flows to support the migration of important game fish, including Chinook salmon and steelhead.

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 8: Total Project Cost and Basis of Estimate Report

Attach an estimate of the total project costs that includes construction cost, interest during construction, land acquisition, monitoring, environmental mitigation or compliance obligations, operations and maintenance, repair, and replacement costs during the planning horizon using methods described in TR section 6. If the project costs are located in another attachment, identify the location.

WSIP Application Instructions, March 2017

Response

The project cost estimate for the Sites Project is a Class 4 estimate as defined by the Association for the Advancement of Cost Estimating, International, and includes all of the components required for the WSIP Application. Provided in this attachment are the cost estimates, and the Basis of Estimate Report.

Joseph H. Barnes

Joseph H. Barnes, PE
Civil Engineer, License # 4105

7-28-2017

Date

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SITES RESERVOIR PROJECT

BASIS OF ESTIMATE REPORT
FOR
SITES AUTHORITY PROJECT ALTERNATIVE D

WORKING DRAFT
SUBJECT TO CHANGE

Prepared by
AECOM
for

Sites

122 West Old Highway 99
Maxwell, CA 95955
Sacramento, California

June 2017

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Table of Contents

Section	Page

EXECUTIVE SUMMARY E-1
1. INTRODUCTION 1
2. WATER SUPPLY AND DELIVERY, HYDROELECTRIC GENERATION 3
3. PROJECT DESCRIPTION 5
3.1. SITES RESERVOIR 5
3.1.1. Reservoir Parameters 5
3.1.2. Dams Forming Sites Reservoir 5
3.1.3. Reservoir Rim Grouting 6
3.1.4. Reservoir Spillway 6
3.1.5. Creek Diversion During Construction 7
3.2. SITES RESERVOIR INLET/OUTLET FACILITY 7
3.2.1. I/O Pressure Tunnel 8
3.2.2. Inlet/Outlet Tower 8
3.2.3. Emergency Release Facility 9
3.3. SITES PUMPING/GENERATING PLANT 9
3.3.1. Penstocks and Manifolds 9
3.3.2. Pumping/Generating Plant 10
3.3.3. Intake and Discharge Channel to Holthouse Reservoir 11
3.4. HOLTHOUSE RESERVOIR 11
3.4.1. Sizing 11
3.4.2. Holthouse Dam 12
3.4.3. Spillway and Low Level Release 12
3.5. TERMINAL REGULATING RESERVOIR AND PUMPING/GENERATING PLANT 12
3.5.1. Terminal Regulating Reservoir 13
3.5.2. TRR Pumping/Generating Plant 13
3.6. DELEVAN INTAKE AND PUMPING/GENERATING PLANT 14
3.6.1. Site Development 14
3.6.2. Pumping/Generating Plant 14
3.6.3. Fish Screen Structure 15
3.7. DELEVAN AND TERMINAL REGULATING RESERVOIR PIPELINES 15
3.8. RED BLUFF PUMP ADDITION 16
3.9. TRANSMISSION LINES 16
3.10. ROADS 17
3.10.1. Sites Lodoga Road Replacement with South Bridge 17
3.10.2. North Temporary Bypass Road. 17
3.10.3. Other Project Roads 17
3.11. RECREATION AREAS 18
3.12. OTHER ANCILLARY FACILITIES 19

4. ESTIMATING APPROACH 21
4.1. FORMAT 21
4.2. DEFINITIONS 21
4.3. ALLOWANCES AND CONTINGENCIES 22
4.3.1. Mobilization 22
4.3.2. Design Contingency 23
4.3.3. Construction Contingency 23
4.3.4. Non-Contract Costs 23
4.4. ESTIMATE BASE AND ESCALATION 24
4.5. QUANTITIES 24
4.6. LABOR RATES 24
4.7. CONSTRUCTION EQUIPMENT RATES 24
4.8. MECHANICAL AND ELECTRICAL EQUIPMENT COSTS 24
4.9. PIPELINE FABRICATION COSTS 25
4.10. MISCELLANEOUS COSTS 25
4.11. REFERENCES 25
5. BASIS OF ESTIMATE AND ESTIMATING ASSUMPTIONS 27
5.1. SITES RESERVOIR (PROPERTY CLASS 01) 27
5.1.1. Land and Rights 27
5.1.2. Public and Private Roads 27
5.1.3. South Bridge 27
5.1.4. Reservoir Clearing and Demolition 27
5.1.5. Signal spillway 28
5.2. CREEK DIVERSION DURING CONSTRUCTION 28
5.3. MAIN DAMS (PROPERTY CLASS 01) 28
5.3.1. Aggregate for Filter and Drain Zones 28
5.3.2. Sites Dam 29
5.3.3. Golden Gate Dam 29
5.4. SADDLE DAMS (PROPERTY CLASS 01) 30
5.5. HOLTHOUSE RESERVOIR (PROPERTY CLASS 01) 31
5.5.1. Relocations 31
5.5.2. T-C Canal Connection to Holthouse Reservoir 32
5.5.3. Funks Holthouse Connection 33
5.6. TRR RESERVOIR (PROPERTY CLASS 01) 33
5.7. PUMPING AND GENERATING PLANTS (PROPERTY CLASS 03) 33
5.7.1. I/O Pressure Tunnel 33
5.7.2. Sites Pumping/Generating Plant 33
5.7.3. TRR Pumping/Generating Plant 34
5.7.4. Sacramento River Pumping/Generating Plant 34
5.7.5. Fish Screen Structure 35
5.7.6. Red Bluff Pump Addition 35
5.8. CANALS AND CONDUITS (PROPERTY CLASS 05) 35
5.8.1. Holthouse Channel 35
5.8.2. Delevan Pipeline and TRR Pipeline 36

5.9. TRANSMISSION AND INTERCONNECTION (PROPERTY CLASS 13) 37
5.9.1. Sites Substation 37
5.9.2. TRR Pumping/Generating Plant 37
5.9.3. Sacramento River Pumping/Generating Plant Switchyard 37
5.9.4. Transmission Lines 37
5.10. GENERAL PROPERTY (PROPERTY CLASS 15) 38
5.10.1. Recreation Areas 38
5.10.2. Operations and Maintenance Facility 38
5.11. MITIGATION COSTS 38
5.12. INTEREST DURING CONSTRUCTION 39
5.13. OPERATION, MAINTENANCE, REPAIR, AND REPLACEMENT 39
5.14. FEASIBILITY-LEVEL COST ESTIMATE 40
6. COST ESTIMATE SUMMARY 42
7. CONSTRUCTION SCHEDULE 44
8. LIMITATIONS 46
9. REFERENCES 48

APPENDICES

Appendix A Feasibility-Level Cost Estimate
Appendix B Preliminary Construction Schedule

FIGURES

Figure E-1 Project Plan E-2
Figure 2-1 Project Plan 3
Figure 7-1 Project Roll Up Schedule

TABLES

Table E-1. Sites Reservoir Project Facilities - Alternative D 1
Table E-2. Capital Cost Summary 5
Table E-3. Total Project Cost Summary 6
Table 2-1 Maximum Planned Water Diversions and Releases 4
Table 3-1 Sites Reservoir Parameters 5
Table 3-2 Parameters for Main Dams and Saddle Dams 6
Table 3-3 Sites Reservoir Inlet/Outlet Tower 9
Table 3-4 Sites Pumping/Generating Plant Equipment 10
Table 3-5 TRR Pumping/Generating Plant Equipment 13
Table 3-7 Project Roadways and South Bridge 18
Table 4-1 Allowances and Contingencies 22
Table 4-2 Non-Contract Cost Allowances 24
Table 5-1 Summary of Major Quantities for Sites Dam 29
Table 5-2 Summary of Major Quantities for Golden Gate Dam 30
Table 5-3 Summary of Major Quantities for Saddle Dams 31

Table 5-4 Summary of Major Quantities for Holthouse Dam 31
Table 6-1 Capital Cost Summary 42
Table 6-2 Total Project Cost Summary 43

Abbreviations and Acronyms

AACE	Association for the Advancement of Cost Estimating, International
Authority	Sites Project Authority
AWWA	American Water Works Association
BOE	Basis of Estimate Report
cfs	cubic feet per second
DEC	Design, Estimate, and Construction
DC	direct current
DWR	California Department of Water Resources
GCID	Glenn-Colusa Irrigation District
ID	inside diameter
IDC	interest during construction
kV	kilovolt
KVA	kilovolt-ampere
MAF	million acre-foot
MCC	motor control center
MVA	megavolt-ampere
MVAR	megavolt-ampere reactive
MW	megawatt
OMRR	operation, maintenance, repair, replacement
NODOS	North-of-the-Delta Offstream Storage
PG&E	Pacific Gas and Electric Company
PGP	Pumping/Generating Plant
psi	pounds per square inch
Reclamation	United States Department of the Interior, Bureau of Reclamation
sf	square feet
SPGP	Sites Pumping/Generating Plant
SRPGP	Sacramento River Pumping/Generating Plant
T-C	Tehama-Colusa
TRR	Terminal Regulating Reservoir
UPS	uninterruptable power supply
VAR	volt-amp reactive
WAPA	Western Area Power Administration
WSIP	Water Storage Investment Program

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EXECUTIVE SUMMARY

E-1 INTRODUCTION

Project Alternative D is being developed by the Sites Project Authority (Authority) to reflect the Authority's preferences and those of the local stakeholders for the Sites Reservoir Project (Project). Alternative D is an addition to three other alternatives (Alternatives A, B, and C) developed by the United States Department of the Interior, Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR).

AECOM Technical Services, Inc. (AECOM) is assisting the Authority to develop and evaluate Alternative D by preparing conceptual plans, feasibility-level cost estimates, a preliminary construction schedule, and other information needed to prepare the Project Feasibility Report and the application for bond funding under the Water Storage Investment Program (WSIP).

This Basis of Estimate (BOE) Report for Alternative D provides brief descriptions for the major project components and supporting information for the Project cost estimate and preliminary construction schedule. Appendices included in this BOE contain the cost estimate and preliminary construction schedule. To support estimating and scheduling, AECOM developed a set of conceptual plans for the Project, which is provided separately.

E-2 Facilities Comprising Project Alternative D

The Authority developed Alternative D by modifying the facilities in Reclamation Alternative C to reflect the Authority's vision for the project. Table E-1 provides a list of the key project facilities that comprise Alternative D, which are briefly described in Section 2. More detailed facility descriptions can be found in the Feasibility Report (Reclamation, 2017). Figure E-1 shows facility locations.

Table E-1. Sites Reservoir Project Facilities - Alternative D

Sites Reservoir (Approximately 1.8 Million Acre-Foot [MAF] Maximum Storage)
Two Main Dams (Sites Dam and Golden Gate Dam)
Nine Saddle Dams (Numbered 1 Through 9)
Sites Reservoir Inlet/Outlet Facility, Including Inlet Tower and Tunnel
Sites Pumping/Generating Plant
Holthouse Reservoir
Holthouse Reservoir Inlet/Outlet Facility and Spillway
Terminal Regulating Reservoir (TRR) and TRR Pumping/Generating Plant
TRR and Delevan Pipelines
Delevan Intake and Pumping/Generating Plant on Sacramento River
Sites Lodoga Road Relocation and South Bridge
Other Temporary and Permanent Project Roads
Substation Interconnections to existing Western Area Power Administration (WAPA) and Pacific Gas and Electric (PG&E) Transmission Lines
Two Recreation Areas and Day-use Boat Ramp

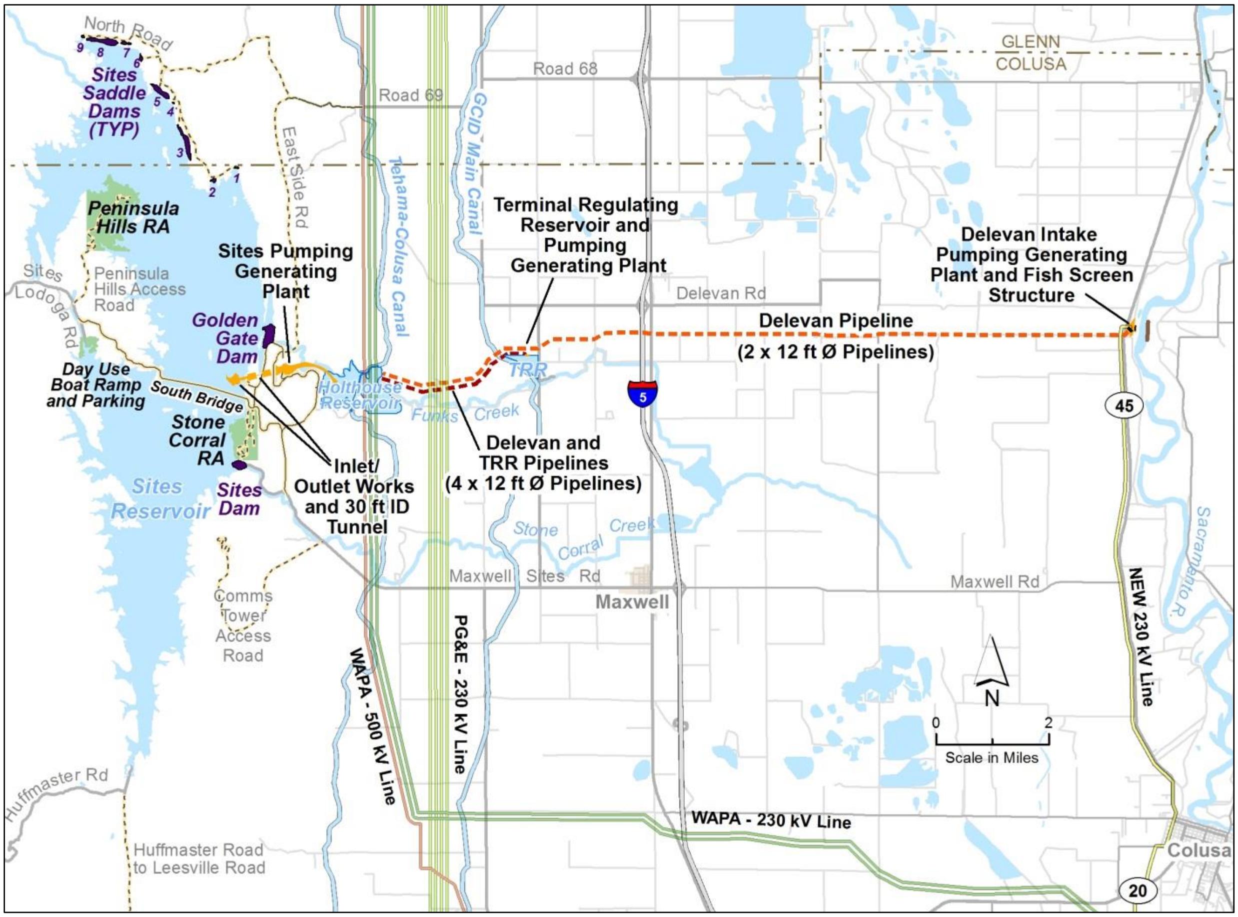

Figure E-1 Project Plan

The more significant modifications made to Reclamation Alternative C to develop Alternative D include the following:

- Delevan Intake and Pumping/Generating Plant site arrangements are modified to make better use of the site and improve constructability of Delevan Pipeline.
- The east-west cross country transmission line between the Terminal Regulating Reservoir (TRR) and the Delevan Intake on the Sacramento River in Alternative C is replaced by a north-south transmission line paralleling Highway 45 from the City of Colusa to the south. The north-south line would begin at a new substation connected to an existing WAPA line.
- The Delevan Pipeline alignment for Alternative D is shifted to the south to address local stakeholder concerns and to incorporate public and local irrigation district easements to reduce private land impacts.
- The TRR Reservoir is downsized from 2,000 acre-feet to approximately 1,200 acre-feet based on information provided by the Glen-Colusa Irrigation District (GCID) regarding the storage volume needed for GCID Canal regulation.

- One of the two generating units in the TRR Pumping/Generating Plant has been removed following consultation with GCID. The GCID system downstream of the TRR can only accommodate a return flow from Holthouse Reservoir of approximately 900 cfs.
- The configuration of Holthouse Reservoir has been adjusted based on additional engineering work that incorporated LiDAR topography. Configuration changes include relocating the concrete dam segment to the left abutment to reduce the risk of encountering poor foundation conditions. The pipeline inlet/outlet and flood control spillway structures are located in the concrete dam section.
- The proposed south bridge alignment across Sites Reservoir has been moved to avoid potential construction conflict with the Inlet/Outlet Structure for Sites Reservoir.
- The design of the south bridge has been modified based on additional design work to better reflect anticipated foundation conditions and take advantage of more cost effective construction methods for the superstructure.
- A new temporary public bypass road has been added across the north end of the reservoir to replace the section of Sites Lodoga Road that must be taken out of service to construct Sites Dam and the reservoir. This bypass facilitates an earlier construction start date and relieves schedule pressure for the completion of the south bridge.
- Only two recreation areas and a day-use boat launch ramp are being provided for Alternative D.

E-3 FEASIBILITY-LEVEL COST ESTIMATE

E-3.1 WSIP Requirements and Cost Estimate Class

The feasibility-level cost estimate presented in this BOE fully reflects the directions and recommendations on estimating project costs for economic analysis presented in Technical Reference Section 6 for the WSIP application (Water Commission, 2016).

As stated in the WSIP Technical Reference, the Project cost estimate must be a Class 4 estimate or better as defined by the Association for the Advancement of Cost Estimating (AACE), International. Overall, the Project cost estimate presented in this BOE represents a mid-range Class 4 estimate. The current level of design for the various project features varies. Some of the more costly facilities (like the dams and portions of the pipelines) are at a level of geotechnical investigation and design that would support a higher Class 3 estimate. The design for other facilities is less advanced, but still well enough defined to support preparing Class 4 estimates.

E-3.2 Estimate Development and Type

The cost estimate for Alternative D was prepared using the Reclamation estimating forms and following Reclamation's estimating guidelines to be consistent with other estimates prepared for Alternatives A, B, and C. Guidelines used include Reclamation's Cost Estimating Handbook (Reclamation, 1989), FAC-09-01 (Reclamation, 2007a), and FAC-09-02 (Reclamation, 2007b).

The Reclamation plant account numbering system was used and Reclamation's cost rounding guidelines were followed.

The cost estimate is characterized as a unit price estimate. Unit prices were developed using a combination of techniques, including detailed analyses of equipment, material, and manpower costs; vendor catalogs and quotes; recent bid results; and corporate experience on projects with similar facilities.

E-3.3 Project Cost Summary

E-3.3.1 Capital Cost Summary

Table E-2 summarizes the estimated feasibility-level capital cost summary for Alternative D in October 2015 dollars. Detailed cost estimate worksheets supporting Table E-2 are provided in Appendix A. The costs in Table E-2 reflect:

- All construction costs, including, but not limited to, mobilization and demobilization, labor, construction equipment, supply and installation of permanent materials and equipment with an expected useful life of 2 years or more, contractor indirect and overhead costs and profit, and bonds and insurance.
- Initial environmental mitigation or compliance obligations.
- Land acquisition, including legal, administrative, and relocation costs.
- Modifications to existing canal headworks structures to be able to reliably supply water to the Project.
- Contingencies for engineering (10 percent) and construction (15 percent), and a non-contract cost allowance (17 percent).

Incidental costs are covered by applying the non-contract cost allowance of 17 percent to the construction cost. Incidental costs directly related to construction or acquisitions, including planning, geotechnical site investigations, engineering and design, construction management, environmental mitigation and compliance, permitting, and other Authority costs directly related to project construction.

E-3.3.2 Total Project Cost Summary

Table E-3 summarizes the total project cost estimate for Alternative D in October 2015 dollars. Total project cost includes the capital cost; finance costs (interest during construction); operation, maintenance repairs, and replacements; and ongoing mitigation and water quality monitoring costs. The estimated annual operation and maintenance, repair and replacement costs, and the mitigation costs (totaling approximately $26.6 million) were applied over a 93-year operating period beginning in 2030. The net present value was then estimated in October 2015 dollars using the WSIP required discount rate (3.5 percent).

E-3.3.3 Other Potential Costs

The estimates presented in Table E-2 and Table E-3 may not be a complete tabulation of all potential Authority costs to implement the project. An example of other costs might include electric utility owner costs for system improvements to provide power to the project or accept power from project generation. Further PG&E and WAPA system connection studies and discussions with these utilities would be part of future Project design activities that would identify if such costs would be incurred.

Table E-2. Capital Cost Summary

Facility	Field Cost ($ Million)	Non-Contract Cost ($ Million)	Construction Cost ($ Million)
Develop Sites Reservoir	310	50	360
Main Dams	520	90	610
Saddle Dams	230	40	270
Holthouse Dam	160	30	190
Terminal Regulating Reservoir	33	6	39
Inlet/Outlet Structure and Tunnel	180	30	210
Sites Pumping/Generating Plant	680	120	800
Terminal Regulating Reservoir Pumping/Generating Plant	135	25	160
Sacramento River Pumping/Generating Plant	220	40	260
Sacramento River Fish Screen Structure	47	8	55
Red Bluff Addition	3	1	4
Sites Pumping/Generating Plant Conveyance Channel	42	7	49
Delevan Pipeline	560	100	660
Terminal Regulating Reservoir Pipeline	300	50	350
Utility Transmission Line Interconnections	160	30	190
General Property	26	4	30
Land Acquisition and Rights	100	10	110
Environmental Mitigation/Monitoring	340	10	350
Subtotals	4,046	651	4,697
Capital Cost	-	-	**4,697**

Note: All costs are October 2015 costs

Table E-3. Total Project Cost Summary

Item	Construction Cost[1] ($ Million)
Capital Cost	4,697
Interest During Construction	789
Operation, Maintenance, Repairs, Replacement (Note 2)	554
Ongoing Water Quality and Mitigation Monitoring Costs (Note 2)	175
Allowance for Utility Systems	50
Total Project Cost	6,265

Note: 1. All costs are October 2015 costs

2. Net present value of annual costs for assumed 100 year operating period beginning in 2030

E-4 PRELIMINARY CONSTRUCTION SCHEDULE

Appendix B provides a preliminary construction schedule for Alternative D developed by AECOM to support the feasibility-level cost estimate. The construction schedule presents a reasonable approach to construct the project that accounts for the logical sequencing of the work, procurement of equipment, and reasonable durations to complete construction activities. Durations reflect the estimated labor and equipment spreads needed to complete activities, including earthwork, balancing the movement of excavated soil and rock to placement sites, supplying and placing all materials, erecting structures, and installing major equipment. Labor and equipment costs are reflected in the cost estimate.

The schedule presents construction activities with an assumed construction start date in late March 2022. Completing the Delevan Intake on the Sacramento River and the Sites Pumping/Generating Plants in early 2030 are the final critical activities to achieve project construction completion and begin pumping operations. It may be possible to begin filling the reservoir using natural runoff from Stone Corral and Funks Creek beginning with the 2028 and 2029 wet season as the dams will have been completed by then.

Activities such as design, permitting, packaging the work, and bidding the construction packages are not included because of the uncertainty in scheduling these activities between now and 2022. With hydroelectric generation being a part of the project, the FERC permitting process may also affect the actual start date.

1. INTRODUCTION

The Sites Project Authority (Authority) is developing a locally preferred plan for the Sites Reservoir Project (Project) that incorporates the Authority's preferences and those of the local stakeholders. This plan, identified as Project Alternative D, is an addition to three other plans being evaluated by the U. S. Bureau of Reclamation (Reclamation), which are identified as Alternatives A, B, and C. AECOM Technical Services, Inc. (AECOM) is providing support to the Authority to develop the feasibility-level cost estimate and preliminary implementation schedule for Alternative D. This Basis of Estimate (BOE) Report for Alternative D contains a brief description of the major project components and provides supporting information for the feasibility-level cost estimate and preliminary construction schedule. The cost estimate worksheets and construction schedule are included herein in Appendices A and B.

The feasibility-level cost estimate and this Basis for Estimate (BOE) Report were prepared in accordance with Task 6, *Refine Engineering, Cost Estimate, and Schedule*, in the August 28, 2015 *Scope of Work Sites Reservoir Feasibility Study*. The estimating methodology is consistent with the requirements in Section 6 of the *Draft Technical Reference* (November 2016) published for the Water Storage Investment Program by the California Water Commission. Unit prices for labor, materials, land, and other inputs reflect an October 2015 pricing basis.

The feasibility-level cost estimate incorporates alignment refinements and additional design information for the south bridge and the Delevan and Terminal Regulating Reservoir (TRR) Pipelines to address stakeholder comments provided on Reclamation alternatives. The bridge and pipelines refinements were prepared in accordance with Task 7, *Roadway, Bridge, and Pipeline Alignment Modifications*. The engineering refinements for the bridge and pipelines, and for other facilities, are reflected in the set of Plans for Project Alternative D that accompanies the Basis of Estimate Report in a separate volume.

To support feasibility-level cost estimating, a preliminary construction schedule was developed for Alternative D in accordance with Task 6. The assumed schedule is based on a construction start day in spring or summer of 2022, and implementation of the project construction by the Authority. The schedule is discussed further in Section 5.

For consistency with previous estimates prepared for Reclamation Alternatives A, B, and C, the feasibility-level cost estimate for Alternative D also follows the Reclamation format and guidelines. This provides a common base for economic comparisons and facilitates incorporating all four estimates into the Federal Feasibility Report being prepared for the project.

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2. WATER SUPPLY AND DELIVERY, HYDROELECTRIC GENERATION

The water supply to fill Sites Reservoir will come from three conveyance facilities that draw water from the Sacramento River. Two of the conveyance facilities are existing canals; the Tehama Colusa (TC) Canal with its intake at Red Bluff and the Glen Colusa Irrigation District (GCID) Canal with its intake near Hamilton City. The third facility is the planned new Delevan Intake located on the Sacramento River. Figure 2-1shows the two existing canals and the new intake. Diversions to the reservoir from the three Sacramento River sources would occur during the winter and spring seasons governed by permit requirements and mitigation measures being developed for the Project.

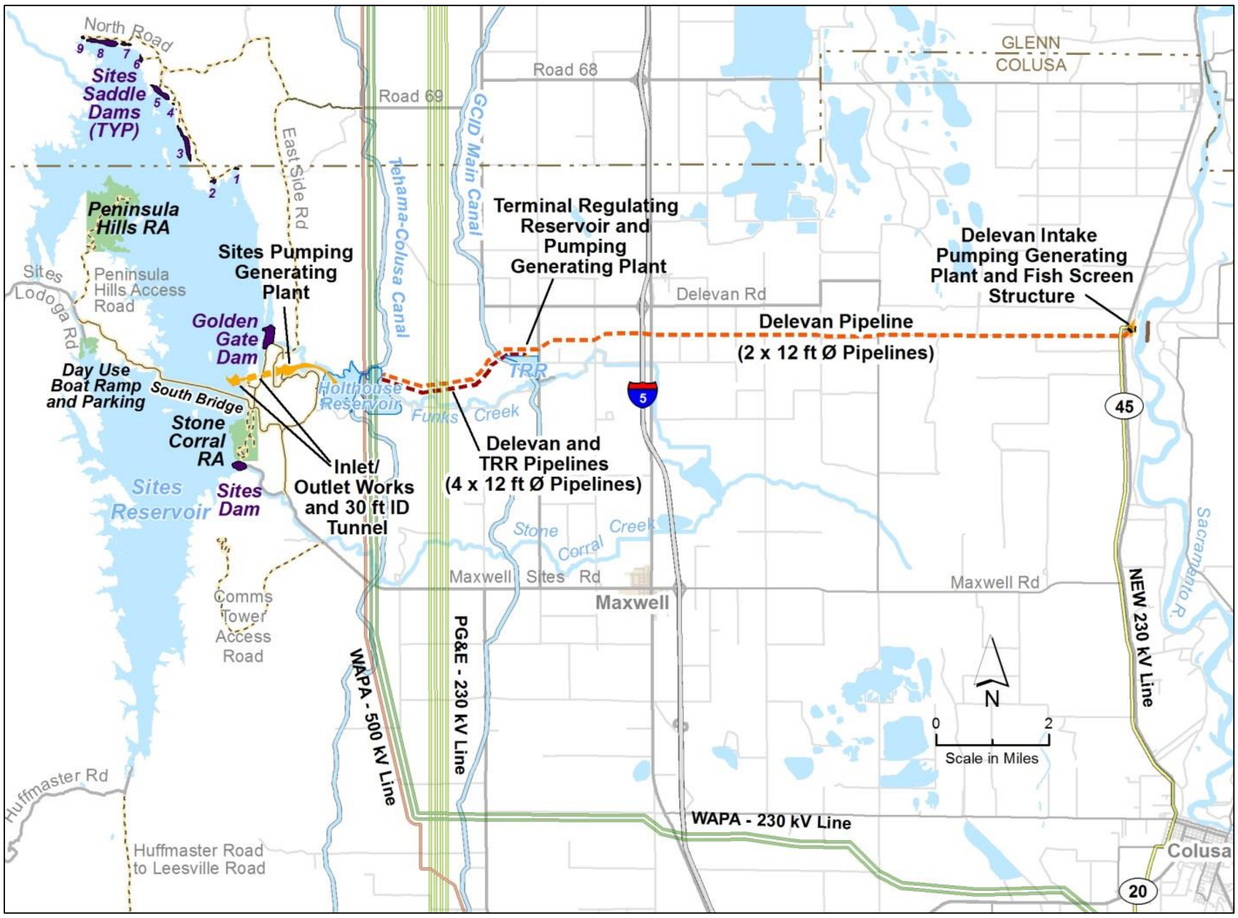

Figure 2-1 Project Plan

Water would be released from Sites Reservoir during the summer and fall back to the canals to meet irrigation demands and back to the Sacramento River to meet downstream demands and environmental commitments. Table 2-1 summarizes the maximum diversion and release flows planned for Alternative D.

Table 2-1 Maximum Planned Water Diversions and Releases

Conveyance	Diversions to Sites Reservoir	Release from Sites Reservoir
T-C Canal	2,100 cfs	2,000 cfs
GCID Canal	1,800 cfs	900 cfs
Sacramento River	2,000 cfs	1,500 cfs
Total	5,900 cfs	4,400 cfs

As shown on Figure 2-1, Holthouse Reservoir would be the collection and release point for all water moving into and out of Sites Reservoir through the Sites Pumping/Generating Plant. Because the TC Canal connects directly to Holthouse Reservoir, TC Canal water diversions and releases would be managed within Holthouse Reservoir. Diversions and releases for the GCID Canal would be managed in the Terminal Regulating Reservoir (TRR) using the TRR Pumping/Generating Plant connected to Holthouse Reservoir by the TRR Pipeline. Water diversions and releases for the Sacramento River would be managed at the Delevan Intake using the Sacramento River-Pumping/Generating Plant connected to Holthouse Reservoir by the Delevan Pipeline.

Releases to Holthouse Reservoir from Sites Reservoir would be used for hydroelectric power generation using pump-turbines located in the Sites Pumping/Generating Plant. Holthouse Reservoir is sized to allow the Sites Pumping/Generating Plant to operate as a pumped-storage facility to enhance renewable energy generation. Releases to the GCID Canal and the Sacramento River would also be used for power generation on release only (no pumped-storage) using dedicated turbines in the TRR and Sacramento River Pumping/Generating Plants.

Note that the planned 900 cfs release flow from Sites Reservoir to the GCID Canal shown in Table 2-1 is less than the 1,800 cfs used for other alternatives. The lower release was provided by GCID based on their canal and distribution system capacities downstream from the TRR. Currently, GCID has no plan to increase these capacities.

3. PROJECT DESCRIPTION

This section presents a brief overview of the main project features for Alternative D shown on Figure 2-1. Alternative D resembles Reclamation Alternative C, but reflects Authority and local stakeholder refinements and preferences.

3.1. Sites Reservoir

3.1.1. RESERVOIR PARAMETERS

Table 3-1 summarizes the reservoir parameters for Alternative D.

Table 3-1 Sites Reservoir Parameters

Approximate Total Storage Capacity (With Dead Storage)	1.81 MAF
Approximate Useable Active Storage	1.65 MAF
Maximum Operating Water Elevation	520.0 feet
Minimum Operating Water Elevation	340.0 feet
Top of Dead Pool Elevation	300.0 feet
Approximate Inundation Area (at elevation 520.0 feet)	14,200 acres

The reservoir area is characterized as open grazing lands with limited tree. Demolition of the small town of Sites, several ranches, and associated infrastructure located within the reservoir inundation area will be required. Fencing and asphalt concrete paving will be removed, abandoned gas wells within the reservoir will be checked for proper abandonment, and several small salt springs identified within the reservoir will be capped.

3.1.2. DAMS FORMING SITES RESERVOIR

The Sites Reservoir Dams and Saddle Dams for Project Alternative D are at the same locations and have similar design details as the corresponding dams used for other Project alternatives. Embankment locations are shown on Figure 2-1. To form Sites Reservoir, Golden Gate Dam would be constructed on Funks Creek and Sites Dam would be constructed on Stone Corral Creek. In addition, nine saddle dams of varying sizes would be constructed to close off topographic low point saddles around the eastern rim of the reservoir between Funks Creek and the north end of the reservoir.

The main dams and saddle dams would be zoned earth and rockfill embankments. This type of construction is suitable for the Project area considering the current understanding of geotechnical, geological, and seismologic conditions existing in the reservoir area. The earth and rockfill zoning also make best use of soils and rock materials from borrow areas within the reservoir area and from mandatory excavations required to construct other project facilities. Table 3-2 summarizes embankment parameters and earthwork volumes for each dam. Earthwork volumes were originally estimated by DWR and have been verified by AECOM using available topographic information at the dam sites.

Table 3-2 Parameters for Main Dams and Saddle Dams

Dam	Height Above Streambed (feet)	Crest Length (feet)	Embankment Volume (cubic yards)
Golden Gate Dam	310	2,250	10,590,000
Sites Dam	290	850	3,836,000
Saddle Dam 1	50	490	93,000
Saddle Dam 2	80	420	86,000
Saddle Dam 3	130	3,810	3,577,000
Saddle Dam 4	40	270	18,000
Saddle Dam 5	100	2,290	1,505,000
Saddle Dam 6	70	530	144,000
Saddle Dam 7	75	1,040	196,000
Saddle Dam 8	105	2,990	1,915,000
Saddle Dam 9	45	340	49,000
Total			**22,009,000**

3.1.3. RESERVOIR RIM GROUTING

Narrow reservoir rim areas between Golden Gate Dam and the northern most saddle dam could provide a potential for through seepage when the reservoir water level is high. For the current study, rim seepage is addressed by installing a grout curtain down into relatively tight rock. AECOM performed a preliminary evaluation of the rim grouting requirement and determined that approximately 6,000 feet of additional curtain measured along the ridge would be require (primary, secondary, and some tertiary grouting). The curtain would be an extension of the embankment foundation grout curtain for Golden Gate Dam and the saddle dams extending out into the adjacent narrow areas. This cost for additional single line rim grouting has been included in the estimate for Alternative D. The average depth of grout treatment would be approximately 60 feet, which represents the estimated distance from the design dam crest elevation (540.0 feet) down to competent rock. The section of drill holes from grade down to elevation 540.0 feet would be backfilled with cement after the lower portion of the hole is pressure grouted. Additional geotechnical investigations would be needed during future phases of the project to further evaluate the seepage risk and confirm the amount of grouting needed.

3.1.4. RESERVOIR SPILLWAY

Sites Reservoir is an off-stream reservoir with a small drainage area relative to reservoir storage. The freeboard provided for the main dams and saddle dams (20 feet above normal maximum pool) allows for the full storage of runoff from the probable maximum flood (PMF) while leaving approximately 15 feet of residual freeboard. Because the reservoir can fully store the PMF above the normal maximum water level with adequate remaining freeboard, there is no flood control spillway. However, a small signal spillway is provided at Saddle Dam 6 to alarm facility operators in the event the water level ever exceeds the PMF storage level due to over-pumping.

3.1.5. CREEK DIVERSION DURING CONSTRUCTION

Storm water runoff from Funks and Golden Corral creeks must be routed around construction sites. Funks Creek is of particular concern because this creek runs through the Golden Gate Dam site and potentially affects downstream work at the Sites Pumping/Generating Plant, the channel from the plant to Holthouse Reservoir, Funks Reservoir, Holthouse Dam Construction, and other activities, many of which fall on the critical path. Construction of these facilities will cover multiple years on the schedule and Funks Creek can produce significant creek flows during the winter seasons. To minimize impact to the large construction area downstream of Golden Gate Dam, AECOM has identified a construction diversion plan for the reservoir that would collect water from Funks Creek in the reservoir area and rechannel it south through a low ridge to Stone Corral Creek, which flows through the Sites Dam site. The volume of material that must be excavated to construct the channel connecting the two creek drainages would be stockpiled and reused in permanent construction for the dams and cofferdams. At the Sites Dam site, a diversion tunnel would be constructed through one abutment of the dam to pass all flood flows. The diversion tunnel would work in combination with upstream cofferdams at the two dam sites and channels in the reservoir to control and direct water.

The drainage area is approximately 84 square miles. Based on National Oceanic and Atmospheric Administration data for a 100-year storm event, the estimated design rainfall depth is 5.2 inches in 24 hours. The resulting design runoff flow routed through the tunnel would be approximately 4,500 cfs. The maximum upstream water level during flood routing would reach approximate Elevation 295.0, which is below the assumed top of cofferdam level at Elevation 300.0. For estimating, the tunnel is sized at 20 feet in diameter finished to 18 feet. It is estimated that this tunnel will have to be approximately 3,000 feet long to avoid conflict with the Sites Dam construction. Tunnel would be constructed using drill and blast methods and using steel sets, lagging, and rock bolts for support. The inside perimeter would be shotcrete lined. Heavy riprap will be used for energy dissipation at the discharge area in Stone Corral Creek.

The inlet to the diversion tunnel at Sites Dam will be plugged at the upstream end to begin initial filling of the reservoir. A 24-inch-diameter outlet pipe will run through the plug to the downstream end of the tunnel. A shutoff valve will be provided at the downstream end of the tunnel plug and an energy dissipation valve will be provided on the pipe at the downstream end of the tunnel. The pipe will be used to make environmental releases to Stone Corral Creek after construction of Sites Dam.

3.2. Sites Reservoir Inlet/Outlet facility

The Sites Reservoir Inlet/Outlet Facilities are shown on Figure 2-1 and include the following components:

- The 4,000-foot long pressure tunnel through the ridge
- The vertical Inlet/Outlet tower with control gates located in the reservoir, and
- The low level Inlet/Outlet structure on the bottom of the reservoir at the upstream end of the pressure tunnel.
- The emergency drawdown release facility.

The current design details and estimated cost for these facilities will be further evaluated in future phases of the project. Based on the current understanding of site seismicity, it is possible that the vertical intake tower described below would be converted to a sloping intake configuration firmly anchored to the reservoir slope. This reconfiguration would also eliminate the need for an access bridge to the tower and improve operation and maintenance flexibility.

3.2.1. I/O PRESSURE TUNNEL

The pressure tunnel is approximately 4,000 feet long. It would be constructed using drill and blast methods after the upstream and downstream portals are excavated and developed. The neat line excavated diameter would be approximately 36 feet and the internal diameter after lining would be 30 feet. The geology along the tunnel alignment consists of sandstones and mudstones of the Boxer and Cortina Formations and the alignment was selected to avoid faults and shears identified from currently available geological mapping. Rock bolting and steel sets and lagging should be adequate for tunnel support.

The tunnel would be reinforced concrete lined for the full length. At the lower end, a steel liner would be incorporated into the concrete lining where the depth-of-rock cover over the tunnel is inadequate to provide sufficient confinement for the internal design pressure.

The tunnel is sized to meet the Division of Safety of Dams (DSOD) emergency reservoir drawdown guidelines, which requires the outlet facilities have a flow capacity to reduce the maximum reservoir storage depth by 10 percent within 10 days. For Sites Reservoir, this correlates to drawing down the reservoir by 22 feet from maximum pool by releasing approximately 300,000 AF of water in 10 days. The average tunnel outflow over ten days would be approximately 15,100 cfs and the corresponding average tunnel velocity would be approximately 21.5 fps. This design case far exceeds the maximum normal operating case (5,900 cfs pumping flow and velocity of 8.3 fps).

3.2.2. INLET/OUTLET TOWER

The multi-level inlet/outlet tower provides the capability to move water in and out of Sites Reservoir. The tower extends up through the reservoir from its base connection to the pressure tunnel. Four ports with butterfly valves spaced around the tower at nine levels move water in and out of the reservoir. Valves on any tier can be operated independently or all valves can be operated together. Movable fish screens would be provided to cover operating ports when releases are being made. Table 3-3 provides a summary of key Inlet/Outlet Tower parameters.

Table 3-3 Sites Reservoir Inlet/Outlet Tower

Top Elevation	580.0 feet
Bottom Elevation (Top of Bench)	320.0 feet
Inside Diameter	32 feet
Outside Diameter	39 feet
Number of Ports	36 (4 each at 9 levels)
Functional Reservoir Release Elevations	520 feet to 340 feet

The intake tower would also house fixed wheel gates and associated operating equipment that would be used to isolate the tunnel from the tower intersection downstream for inspection and maintenance of the tower and tunnel. These gates also serve as an emergency shutoff device.

A multi-span bridge provides access to the Inlet/Outlet tower from the nearby access road. As mentioned above, the bridge may be eliminated if a sloping intake arrangement is adopted in future design phases of the project.

3.2.3. EMERGENCY RELEASE FACILITY

To control the emergency reservoir drawdown release described in Paragraph 3.2.1 above, four 102-inch diameter fixed-cone (Howell Bunger) dispersion valves would be located in a reinforced-concrete energy dissipation valve chamber located adjacent to the Sites Pumping/Generating Plant. Isolation valves would be located upstream of the energy dissipation valves. The valves would connect back to the pressure tunnel downstream portal through a dedicated buried penstock system branching off of the main buried penstock that connects the tunnel to the Sites Pumping/Generating Plant. The fixed-cone valve discharge would be conveyed downstream in the channel connecting the Sites Pumping/Generating Plant with Holthouse Reservoir.

3.3. Sites Pumping/Generating Plant

3.3.1. PENSTOCKS AND MANIFOLDS

A system of buried steel penstocks and manifolds would connect the pumping and pumping/generating units in the Sites Pumping/Generating Plant with the downstream tunnel portal. The manifold lines are sized for flow velocities of 10 fps or less. All buried penstocks and manifolds would be concrete-encased, with concrete anchor blocks to resist the thrust forces on bends, reduction bifurcations and branches. Penstocks steel thicknesses for cost estimating have been selected considering a pressure equivalent to the maximum pumping head at full reservoir elevation, plus surge allowance, plus an additional 10 percent.

3.3.2. PUMPING/GENERATING PLANT

The Sites Pumping/Generating Plant lifts water from Holthouse Reservoir into Sites Reservoir (refer to Figure 2-1). The SPGP is connected to Holthouse Reservoir by an unlined excavated approach channel. The channel is sized so that flow velocity under all conditions does not exceed approximately 2 fps.

Table 3-4 provides a summary of the SPGP equipment included with Alternative D.

Table 3-4 Sites Pumping/Generating Plant Equipment

Unit Type	Number of Units	Net Head (feet) (Pump/Gen)	Pumping Capacity Per Unit (cfs)	Generating Capacity Per Unit (cfs)	Motor Power Total (MW)[1]	Generating Power Total (MW)[1]
Pump Francis Vane Dual-Speed	2 and 1 Spare	330	870	None	58.9	None
		202	870	None	36.0	None
Pump Francis Vane Dual-Speed	2	330	435	None	29.5	None
		202	435	None	18.0	None
Pump/Turbine Reversible Francis, Dual-Speed	4 and 1 Spare	330/310	663	1,020	89.8	88.3
		202/182	663	1,020	55.0	51.9
Pump/Turbine Reversible Francis, Dual-Speed	2	330/310	332	510	22.5	22.0
		202/182	332	510	13.8	12.9
Totals	10 and 2 Spares	-	5,926 (Max Combined)	5,100 (Max Combined)	200.7 (Max)	110.3 (Max)

1. Motor power and generation based on 82.5% combined efficiency (unit and transformer), no power factor adjustment, higher efficiencies are likely.

The units selected would be dual-speed units to accommodate the wide variations in water levels that can be expected in Sites Reservoir. The head difference on the units between pumping and generating modes is within a range that permits some of the units to be pump-turbines to provide the needed generating capability when releases are being made. Generation water not needed to meet downstream needs would be stored in Holthouse Reservoir. The number of pumping units selected to operate on a daily basis would provide the capacity to pump all water delivered to Holthouse Reservoir up to Sites Reservoir during the off-peak pumping period. Water delivered to Holthouse Reservoir would include generation water plus inflows from the canals and the Sacramento River. The pumping plant would be a conventional, indoor-type pumping/generating plant with an in-line arrangement of vertical units. The SPGP would have a reinforced concrete substructure and a steel superstructure.

Adding variable frequency drive (VFD) capability to the pumping and generating units could help to maximize pumping and generating efficiencies, and improve the generation response to changes in the power grid demand. The benefits of adding VFD capability will be further evaluated in future design phases.

3.3.3. INTAKE AND DISCHARGE CHANNEL TO HOLTHOUSE RESERVOIR

An excavated intake and discharge channel connects the Sites Pumping/Generating Plant with Holthouse Reservoir (described in the next section). The channel would have a bottom width of 100 feet, 2-horizintal to 1-vertical side slopes, and would require excavating approximately 4.0 million cubic yards of soil and rock. Excavated material is assumed to be suitable for use in dam construction and for other site grading needs. Road benches would be provided in the excavation above the maximum water level for inspection and maintenance.

The channel is capable of providing pumping flows to the Sites Pumping/Generating Plant (up to 5,900 cfs) from Holthouse Reservoir when the water level in the Reservoir is at its planned minimum operating level (elevation 190.0 feet). Flow velocity in the channel under this condition would be approximately 2 feet per second. Under emergency release flows (approximately 15,000 cfs) with Holthouse Reservoir at approximate elevation 206.0 feet, the velocity would still be approximately 2 fps. No riprap or other lining is provided for the channel. Some of the accumulated sediment in the existing Funks Reservoir would need to be removed before excavating the channel. Excavated sediment can be disposed of in Holthouse Reservoir below the minimum operating level.

3.4. Holthouse Reservoir

3.4.1. SIZING

The required active storage in Holthouse Reservoir should be approximately 6,500 acre-feet to permit the Sites Pumping/Generating Plant to operate as a pumped-storage facility. This volume provides for storage of the generating flows (up to 5,900 cfs) during on-peak periods and storage of inflows to the reservoir that might be occurring in spring or fall from the TC and GCID Canals and Sacramento River. The collected volume of water would then be pumped up into Sites Reservoir during off-peak and partial-peak periods as necessary on a daily cycle. Diversion flows were estimated from available CalSIM modeling. Note that additional operational studies should be performed in future phases of the project to confirm optimal reservoir size for pumped-storage operation.

The current active storage capacity of Funks Reservoir is estimated to be approximately 2,100 acre-feet after removing sediment that has accumulated in the reservoir since it was commissioned. To provide 6,500 acre-feet of storage, the new Holthouse Dam would be constructed downstream of the existing Funks Dam to extend the reservoir limits. Holthouse dam would have the same crest elevation as the existing Funks Dam (El. 214.0). The required active storage would be located between elevation 206.0 feet and elevation 190.0 feet and would be the sum of the storage provided in the expanded reservoir, Funks Reservoir and the channel connecting the reservoir with the Sites Pumping/Generating Plant.

3.4.2. HOLTHOUSE DAM

Except at the left abutment, Holthouse dam would be a zoned embankment similar to Funks Dam with a maximum height of approximately 48 feet. The dam will be approximately 8,500 feet long. Because a deep soil layer could potentially exist along the dam alignment, the central core zone would extend down to suitable foundation in dense soils. To control seepage under the core section, a slurry cutoff wall would be constructed down through the dense soils to refusal in weathered rock. A grout curtain line would then be installed adjacent to the cutoff wall on both sides to fresh rock to treat remaining weathered rock below the refusal level for the cutoff wall.

On the left abutment, a concrete gravity dam section would be provided that will incorporate the inlet/outlet facilities for the four 12-foot diameter pipes that comprise the Delevan and TRR pipelines (two pipes each), and the emergency spillway for Holthouse Reservoir. The gravity structure has been located on the abutment to position it far enough into the hillside to minimize the risk of encountering unsuitable foundation conditions for the concrete structure. Foundation conditions would be further investigated in future phases of the project.

The inlet/outlet facility for the Delevan and TRR pipelines will incorporate formed concrete transitions for hydraulic efficiency, roller gates to shut off flow in each pipe for dewatering, stop log guides upstream of the roller gates, and a bar rack structure to prevent entry of large debris. The transition entrance for each pipe is sized to limit inlet and outlet flows to approximately 2 fps.

3.4.3. SPILLWAY AND LOW LEVEL RELEASE

The spillway located in the gravity structure will be similar to the existing Funks Dam spillway and will incorporate three motor driven cable operated radial gates with a total bypass capacity of approximately 15,200 cfs, which matches the emergency release requirement for Sites Reservoir discussed previously.

The gravity section would also include an outlet pipe with energy dissipating valve that would provide water to Funks Creek for stream maintenance and facilitate draining the reservoir to permit inspections of the inlet facilitates. The design capacity at maximum head would be approximately 500 cfs.

3.5. Terminal Regulating Reservoir and Pumping/Generating Plant

The TRR is the collection point for water being conveyed down the GCID Canal for ultimate delivery to Sites Reservoir. The TRR Pumping/Generating Plant located within TRR then moves the water to Holthouse Reservoir through the TRR Pipeline. The TRR Pipeline also returns irrigation releases back to the TRR from which the water is directed into the GCID Canal or other local irrigation canals. The return flows pass through a turbine generating unit located in the TRR Pumping/Generating Plant.

3.5.1. TERMINAL REGULATING RESERVOIR

In addition to receiving project water, the TRR provides operational storage for GCID to balance out flow variations in the canal, to distribute releases to their system downstream of the reservoir, and to support operation of the pumping plant. Operational storage in the reservoir is 1,200 acre-feet for Alternative D compared with 2,000 acre-feet assumed for other alternatives. GCID indicates the reduced size is adequate for canal regulation based on their operating experience.

The reservoir would be constructed partially above and below grade by a cut and fill operation. The levee portion around the reservoir perimeter would average approximately 6 feet high and the top elevation would match the existing levees for the GCID Canal at the tie-in point. The excavated portion would be limited to 6 to 10 feet below grade to minimize groundwater issues. The pond would be plastic lined to minimize seepage loss from the pond.

Regulation of flow into and out of the reservoir would be controlled by the existing control gate structure on the GCID Canal just upstream of Funks Creek and a new control gate structure parallel to the canal at the reservoir connection point. Other facilities associated with TRR are a spillway sized for approximately 500 cfs and a release pipe and control valve with a capacity of 100 cfs to 150 cfs to supply local irrigation canals. Spillway flows would be conveyed to the south to Funks Creek in an upgraded existing canal and pipe with the required capacity.

3.5.2. TRR PUMPING/GENERATING PLANT

The pumping and generating equipment provided in the plant is summarized in Table. The structural building for the TRR Pumping/Generating Plant would be similar to that described below for the Sacramento River Pumping/Generating Plant.

Table 3-5 TRR Pumping/Generating Plant Equipment

Unit Type	Number of Units	Net Head (feet) (Pump/Gen)	Pumping Capacity Per Unit (cfs)	Generating Capacity Per Unit (cfs)	Motor Power Total (MW)[1]	Generating Power Total (MW)[1]
Pump Francis	2 (+1 standby)	114	620	-	14.5	-
Pump Francis	2	98	325	-	6.5	-
Turbine Kaplan	1	84	-	750	-	4.4
Totals	5 and 1 Spares	-	945 (Max Combined)	750 (Max Combined)	21.0 (Max)	4.4

1. Motor power and generation based on 82.5% combined efficiency (unit and transformer), no power factor adjustment, higher efficiencies are likely.

In addition, the following equipment would also be included with the plant:

- 32-foot-diameter spherical air chambers to control surge pressures in the TRR pipeline.

- Bypass and shutoff valves, manifold piping, mechanical systems, electrical and control systems, switchyard facility.

The switchyard for the TRR Pumping/Generating Plant will be tied back to the main switchyard at the Sites Pumping/Generating Plant by overhead transmission line.

3.6. DELEVAN INTAKE AND PUMPING/GENERATING PLANT

3.6.1. SITE DEVELOPMENT

Site arrangements for Alternative D differ in some respects from the arrangements used for the other alternatives. The Pumping/Generating Plant orientation was rotated toward the south to provide more working room between the plant and Highway 45 to facilitate pipeline construction. The forebay pond was also modified for Project Alternative D to remove the levee earthwork and culverts connecting the fish screen structure afterbay with the pump station forebay. Based on a preliminary discussion with the U. S Army Corps of Engineers, the fill and culverts included with the other alternatives can be removed as long as the earthwork to construct the pumping plant grade is above the 100-year flood level, fill materials conform to the fill requirements for levee construction, and fill is integrally tied to the existing flood control levees along the Sacramento River. In addition, based on current understanding of seepage issues through and under the existing river levee system, it is likely that a suitable slurry cutoff wall (or other cutoff method) would be required under the pump station fill around the forebay pond area to control underseepage.

3.6.2. PUMPING/GENERATING PLANT

The SRPGP would be constructed with a pumping capacity of 2,000 cfs, an intake and fish screen structure at the Sacramento River, and the Delevan Pipeline from the SRPGP to the Holthouse Reservoir. The conveyance system would also be capable of releasing up to 1,500 cfs from Holthouse Reservoir back to the Sacramento River. The return flow would be used to generate hydroelectric energy.

The pumping/generating plant would involve the construction of (1) a pumping/generating plant, (2) forebay/afterbay pond, (3) four air chambers for surge control, (4) manifold piping to connect the pumping and generating units to the Delevan Pipeline (6) a control building, (7) an electrical switchyard, and (8) fish screening facilities on the Sacramento River.

Table 3-6 summarizes the pumping and generating equipment provided in the plant. The pumping/generating plant would also consist of pipelines, mechanical and electrical equipment, aboveground control and O&M buildings, and related equipment. The overall dimension of the plant building is approximately 300 feet long by 80 feet wide with multiple story structure to provide spaces for mechanical and electrical equipment. A gantry crane would be installed on the finish floor of the plant for moving pumps, generators, motors and turbines, valves, and electrical/mechanical equipment.

Table 3-6 Sacramento River Pumping/Generating Plant

Unit Type	Number of Units	Net Head (feet) (Pump/Gen)	Pumping Capacity Per Unit (cfs)	Generating Capacity Per Unit (cfs)	Motor Power Total (MW)[1]	Generating Power Total (MW)[1]
Pump Francis	4 (+1 standby)	282	600	-	14.5	-
Turbine Kaplan	2	94	-	750	-	4.4
Totals	6 (+1 Standby)	-	2,400 (Max Combined)	750 (Max Combined)	21.0 (Max)	4.4

1. Motor power and generation based on 82.5% combined efficiency (unit and transformer), no power factor adjustment, higher efficiencies are likely.

3.6.3. FISH SCREEN STRUCTURE

The fish screen facilities are located on the west side of the Sacramento River, slightly downstream of RM 158.5 and east side of Highway 45. The fish screen structure is designed for a flow of 2,000-cfs and includes thirty-two 13-foot by 15-foot flat plate screens, two blowout bays, two fish screen brush cleaners, a sediment removal system, and tuning baffles. Each item is necessary for the proper function of the proposed fish screen. Construction of the screening facility will require a temporary cofferdam in the river.

3.7. Delevan and Terminal Regulating Reservoir Pipelines

Except for the alignment, the Delevan and TRR Pipeline design arrangements for Project Alternative D are the same as used for the other alternatives. The alignments have been shifted to address stakeholder feedback on previous alignments and make better use of existing County and MID easements, particularly between the Sacramento River and the Colusa Basin Drain.

The Delevan Pipeline runs from the Sacramento River Pumping/Generating Plant to Holthouse Reservoir and includes two adjacent 12-foot-diameter pipelines. Delevan Pipeline is approximately 13.5-mile-long. The TRR Pipeline runs from the TRR Pumping/Generating Plant to Holthouse Reservoir and also includes two adjacent 12-foot diameter pipelines. TRR Pipeline is approximately 3.5-mile-long. There is no interconnection of the Delevan and TRR Pipelines.

The pipelines will be American Water Works Association (AWWA) C-300 Pipe with 12-foot inside diameter (ID). Pipe design will be in accordance with AWWA *Manual M9* (AWWA, 1995). Design internal pressure for the pipelines is taken to be the hydraulic grade line for pumping with a 40 percent additional allowance for surge pressures. All pipe will have Carnegie-style bell and spigot joints with O-ring gaskets. Controlled low-strength material will be used for pipe bedding. Note that trench and bedding details were reviewed by Hanson Pipe (Hanson) and Ameron Pipe (Ameron).

Typically, the Delevan and TRR Pipelines would be constructed in a cut and fill trench along the alignment. Between the TRR Reservoir and Holthouse Reservoir the four 12-foot diameter pipelines would be located in a common trench. Placing the pipelines in a common trench is considered the practical approach under the current design since the likelihood of having to re-excavate a pipe in the future is very low. Placing pipes in individual trenches would also increase real estate needs.

Approximately 10 feet of cover over the top of the pipe is planned to permit ongoing rice and row crop production. This cover also facilitates going under an extensive network of water supply and drainage channels without vertical alignment changes. To facilitate a return to agricultural production after pipeline construction, topsoil will be removed an stockpiled for reuse over backfilled pipe trenches

Dewatering of pipe trench excavations will be required along the pipeline alignments, particularly across the Colusa Basin Drain. The cost estimate includes a series of dewatering wells and associated water collection and sediment control facilities to manage water, which will be discharged to local channels along the alignment. The dewatering wells will be removed as the trench is backfilled and advanced to locations ahead of the excavation as the pipeline installation progresses.

To construct pipelines under major infrastructure facilities, bore/jack construction methods would be used at road crossings (I-5, I-99, and Highway 45); railroad crossings, the crossing under the Colusa Basin Drain, gas transmission line crossings, and the crossing under the GCID Canal.

Facilities associated with both the Delevan and TRR pipelines include:

- Blowoff structures
- Air and vacuum valve assembly structures, access manholes
- Cathodic protection systems

3.8. Red Bluff Pump Addition

The existing Red Bluff Diversion on the Sacramento River includes a fish screen facility and pumping station that supplies water to the T-C Canal. Two spare pump bays were provided in the facility at the time of construction. As part of the Sites reservoir Project, new pumps would be installed in the spare bays. The pumps would be 250 cfs capacity matching the larger pumps already installed and operating. For each pump, 84-inch diameter motor operated butterfly valve and discharge flap gates will be provided along with a pump flange coupling (similar to those installed on the operating units). Electrical connections and control connections to existing systems would also be provided along with start-up support from equipment manufacturers.

3.9. Transmission Lines

For Alternative D, the Sites and TRR Pumping/Generating Plants and other facilities west of TRR would be serviced from existing PG&E or WAPA transmissions located close by. A new substation and short section of new transmission line would be provided to make the necessary connection to the selected utility. To supply power to the Sacramento River Intake and Pumping/Generating Plant, a new transmission line would be added that runs north from an existing WAPA transmission line near Colusa along Highway 45 to the intake. WAPA was selected for service because PG&E does not have existing line capacity in the area. A new substation would be provided at the connection point near Colusa. The transmission line along Highway 45 included in Alternative D replaces the east-west line included in other alternatives, which addresses local stakeholder concerns regarding the impact of the cross country transmission line on farming operations and wildlife.

3.10. ROADS

3.10.1. SITES LODOGA ROAD REPLACEMENT WITH SOUTH BRIDGE

The Sites Lodoga Road realignment with the new South Bridge over the reservoir replaces the current Sites Lodoga road segment that will be inundated when the reservoir is filled. The road and bridge provide for single lane traffic in each direction. Road and bridge designs follow County rural road and CALTRANS standards. Additional engineering work has been performed to refine the selection of span lengths and further define foundation requirements to improve the accuracy of the cost estimate. The span lengths currently being considered permit deck construction using the balanced cantilever construction method with precast units, which was determined to be less costly than cast-in-place methods.

3.10.2. NORTH TEMPORARY BYPASS ROAD.

A new temporary bypass road at the north end of Sites Reservoir is provided to help expedite close of Sites Lodoga Road in the project area. The new bypass road would begin on the east where existing Road 69 intersects the TC Canal. From there, the planned access road would follow existing ranch roads and trails and connect back to Sites Lodoga Road on the west side of the proposed reservoir outside the inundation area. Access to Road 69 would be from Highway 5 at the Road 68 interchange, then west along Road 68 to Road D and Road 69. The bypass road would be paved for public use. No additional environmental impacts would be anticipated since the route follows existing County roads, roads already planned for the project, and new segment that is located within the reservoir footprint.

3.10.3. OTHER PROJECT ROADS

Table 3-7 provides a list of the significant public and private roads that will be constructed as part of the project. These new roads and road relocations are reflected in the cost estimate for the project.

Table 3-7 Project Roadways and South Bridge

Road or Segment Name	Gravel (miles)	Paved (miles)	Bridge (miles)	Total (miles)
Lurline Road				
Maxwell-Sites Road to Com Road	5.05			5.05
Lurline Rd. to Lurline Headwaters Recreation Area	0.21			0.21
Com Road	**2.95**			**2.95**
Eastside Road				
Field Office Maintenance Yard Access to Sites PGP Access		0.93		0.93
Golden Gate Dam/Electrical Switchyard Access Roads to Property North of Golden Gate Dam	1.52			1.52
Maxwell Sites Road to Stone Corral Road		1.12		1.12
Property North of Golden Gate Dam to North Road	3.63			3.63
Sites Pumping/Generating Plant Access to Golden Gate Dam/Electrical Switchyard Access Roads		0.95		0.95
Stone Corral Road to Field Office Maintenance Yard		1.09		1.09
North Road				
County Road 69 at T-C Canal to Saddle Dam Road	4.69			4.69
Saddle Dam Road to Saddle Dam 9	1.84			1.84
Peninsula Road				
Sites Lodoga Road to Peninsula Hills Recreation Area (East Segment)	0.53			0.53
Sites Lodoga Road to Peninsula Hills Recreation Area (West Segment)	0.94			0.94
North Road to Saddle Dam 1	3.17			3.17
South Bridge			**1.57**	**1.57**
South Bridge East Approach		**0.28**		**0.28**
South Bridge West Approach		**2.25**		**2.25**
Stone Corral Road				
Eastside Road to South Bridge East Approach		1.39		1.39
South Bridge East Approach to Stone Corral Recreation Area	0.26			0.26
Private Access				
Eastside Road to bottom of Golden Gate Dam		0.25		0.25
Eastside Road to Sites Pumping/Generating Plant Electrical Switchyard		0.12		0.12
Eastside Road to Field Office Maintenance Yard		0.04		0.04
Eastside Road to Sites Pumping/Generating Plant		0.18		0.18
North Road to Saddle Dam 6	0.28			0.28
Saddle Dam Road to Saddle Dam 1	3.17			3.17
Saddle Dam Road to Saddle Dam 2	0.03			0.03
Saddle Dam Road to Saddle Dam 3	0.16			0.16
Saddle Dam Road to Saddle Dam 5	0.11			0.11
South Bridge East Approach to Inlet/Outlet Tower		0.11		0.11
South Bridge East Approach to top of Golden Gate Dam		0.75		0.75
Leesville Connector Road	5.5			5.5

3.11. Recreation Areas

Alternative D includes two recreation areas, Stone Corral and Peninsula Hills. In addition, a day use boat ramp facility would be provided on the west side of the reservoir near where the existing Sites Lodoga Road leaves the inundation area. Fewer recreation facilities are provided in Alternative D compared with other alternatives because recent reevaluation of recreational needs, which included Colusa County, indicate a lower recreational demand than previously envisioned.

3.12. Other Ancillary Facilities

The cost estimate includes costs for an operation and maintenance complex to be located near the Sites Pumping/generating Plant. In addition to the control room, the facility would include offices, vehicle maintenance and fueling facilities, warehousing space, package water and sewage treatment facilities, emergency generator, and parking. Note that local operation of the Project is assumed via SCADA systems from the operation and maintenance facility. Discussions of project operation and integration between the Authority and Federal and State agencies will be ongoing as project development continues. Integration of the Project with other Federal and State facilities could change the criteria for the operation and maintenance complex.

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4. ESTIMATING APPROACH

4.1. Format

The estimate for Project Alternative D was prepared using the same Bureau *Estimate Summary and Estimate Worksheet* templates used to prepare costs for other alternatives. AECOM also followed the estimating instructions contained in Reclamation's *Cost Estimating Handbook* (Reclamation, 1989) and Reclamation's Manual, *Directives and Standards*, FAC 09-01, FAC 09-02, and FAC 09-03. Rounding of estimated costs at the facility summary level and above was performed following the guidelines in the *Cost Estimating Handbook*. Project features were identified in the estimate in accordance with the property classes and plant account codes identified in the *Cost Estimating Handbook*.

4.2. Definitions

The terminology used in this report and on the various estimating worksheets follows Reclamation and WSIP conventions wherever possible. The following terms are used:

Contract Cost (Reclamation): The contract cost is the cost to construct the project by the general contractor, including mobilization/demobilization, all subcontractors, direct and indirect costs, labor, equipment, bonds and insurance, profit and an allowance for potential design modifications unrelated to the contractor's activities. This contract cost would be equivalent to the bid price.

Field Cost (Reclamation): The field cost is the contract cost with an appropriate allowance for construction contingency. The field cost is the cost the Authority would plan for to cover the bid price and potential change orders or other modifications to the contract during construction.

Construction Cost (Reclamation): The construction cost is the field cost adjusted for non-contract costs. Non-contract costs are project-related expenses that the Authority must also plan for that are over and above the field cost, including Authority expenses, program management, site investigations, engineering and design, construction management, and the like. Non-contract costs are presented as a percentage of the construction cost. The non-contract cost allowance can also include real estate acquisition and environmental mitigation. However, these costs are not part of the non-contract cost allowance because they have been estimated and are included in the cost estimate on estimate worksheets.

Escalation (Reclamation): The construction cost is escalated from the base estimate date to the anticipated start of construction date. The base date for the cost estimate is October 2015. Start of construction is planned for the spring/summer of 2022. This represents approximately 7 years of escalation.

Capital Cost (WSIP): Capital costs are the costs of construction or acquisition of a tangible physical property with an expected useful life of 15 years or more. Capital costs include: 1) construction, initial environmental mitigation or compliance obligations, and land acquisition, 2) equipment with an expected useful life of 2 years or more, and 3) costs incidentally but directly related to construction or acquisition, including planning, engineering, construction management, architectural and other design work, environmental impact reports and assessments, environmental mitigation or compliance obligation expenses, permitting, appraisals, legal expenses, site acquisitions, and easements. Financing costs such as interest during construction are not included in capital costs.

Total Project Cost (WSIP): The total project cost includes the capital costs, interest during construction, environmental mitigation or compliance obligations after completion of construction, and O&M, repair, and replacement costs during the planning horizon.

The contract cost, field cost, construction cost and escalated construction cost are tabulated on separate lines on each estimate summary worksheet form for each facility. Capital Cost and Total Project Cost are tabulated separately from the estimate worksheets and presented in tables.

4.3. Allowances and Contingencies

Table 4-1 presents the allowances and contingency percentages that have been adopted and applied to the feasibility-level cost estimate for Project Alternatives D. Each is briefly discussed in the following paragraphs

Table 4-1 Allowances and Contingencies

Mobilization	5 percent
Design Contingency	10 percent
Construction Contingency	10 percent
Non-Contract Costs	17 percent

4.3.1. MOBILIZATION

As defined in the Public Contract Code, mobilization includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site, for the establishment of all offices, buildings and other facilities necessary for work on the project, and for all other work and operations which must be performed or costs incurred prior to beginning work on the various items on the project site. Mobilization is covered in the estimate by increasing the direct construction cost by approximately 5 percent for each facility.

4.3.2. DESIGN CONTINGENCY

Design contingencies are intended to account for uncertainties as the project progresses from the planning phase to the final design phase. These uncertainties include unlisted items, design and scope changes, and cost estimating refinements. Design contingencies are listed as a separate line item in the cost estimate summary work sheets. For the estimates provided in this BOE, 10 percent of the direct construction cost has been used for each facility.

4.3.3. CONSTRUCTION CONTINGENCY

Construction contingencies represent the dollar values of the uncertainties in the estimates to compensate for unforeseen or changed site conditions, minor changes in plans, quantity overruns, and other uncertainties. The percentage allowance used should be based on engineering judgment of the major pay items in the cost estimate, reliability of the data, adequacy of the projected quantities, and general knowledge of site conditions and level of uncertainty. The allowance amount for contingencies varies inversely with the certainty of the engineering and geological information and data. The level of data available to support cost estimating varies from facility to facility for the Project. Overall, the construction contingency has been set at 15 percent for the cost estimates provided in this BOE.

4.3.4. NON-CONTRACT COSTS

Non-contract costs are incidental but directly related to construction or acquisition, including planning, engineering, construction management, architectural and other design work, environmental impact reports and assessments, environmental mitigation or compliance obligation expenses, permitting, appraisals, legal expenses, site acquisitions, and easements, and the like. The cost estimates provided in this BOE include estimates developed for land acquisition and environmental mitigation that are normally covered in the non-contract cost allowance.

Since land development and mitigation are estimated separately, 17 percent has been used to cover the allowance for other non-contract costs in this BOE. The non-contract cost percentage reflects the assumption that the Project would be implemented by the Authority, not Reclamation or the State. It does, however, include an allowance for some costs for Reclamation involvement in the project because Reclamation owns the existing Funks Reservoir and the T-C Canal that will require some modification/upgrade. Future phases of the project will evaluate various alternative contracting strategies to implement the project, which could affect the non-contract costs. Table 4-2 presents the breakdown of cost allocations to non-contract costs.

Table 4-2 Non-Contract Cost Allowances

Authority Program Management and Administration	4.5 percent
Site Investigations, Surveys, Planning, Design, etc.	6.5 percent
Construction Management Services and Related Expenses	6.0 percent
Total	17 percent

4.4. Estimate Base and Escalation

Escalation of construction costs from October 2015 to an assumed notice to proceed date in mid-2022 has been included on the estimate worksheets for information. Escalation was evaluated using various sources, including USACE CPI and the Consumer Price Index. Results varied from 15.3 percent to 15.8 percent over the escalation period. For Project Alternative D, 15 percent has been applied. Escalation is assumed to follow projected inflation trends. Escalation does not represent material or equipment price increases above the normal inflation rate.

4.5. Quantities

Quantities used to prepare the cost estimate for Project Alternative D were taken from the previous estimate for Alternative C where facilitates were identical, or were developed from the plans for new or modified facilities.

4.6. Labor Rates

Wages and benefits for labor were determined from the *General Prevailing Wage Determinations for Colusa County, Northern California*, as provided by the State of California Department of Industrial Relations on their website.

4.7. Construction Equipment Rates

Construction equipment operating costs were developed from recent AECOM experience or using data published in the current State of California Department of Transportation publication titled *Labor Surcharge and Equipment Rental Rates*.

4.8. Mechanical and Electrical Equipment Costs

Mechanical and electrical equipment costs developed for Alternative C have been updated to for use in Alternative D. Updating included vendor contacts. These costs include the turbine, motor or generator, exciter units, and unit installation. Motor control centers were allocated with two per large unit and one per smaller unit. Two direct current (DC) systems and two uninterruptable power supply (UPS) systems were estimated for use at all three pumping/generating plants for redundancy and greater reliability.

4.9. Pipeline Fabrication Costs

Pipeline fabrication costs were obtained previously for Alternative C and have been verified with potential suppliers for the current estimating exercise.

4.10. Miscellaneous Costs

Costs for miscellaneous items were developed from recent AECOM experience, or by referencing estimating data books like *RS Means Heavy Construction Cost Data*.

4.11. References

Section 9 provides a list of important references that are applicable for the project.

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5. BASIS OF ESTIMATE AND ESTIMATING ASSUMPTIONS

5.1. Sites Reservoir (Property Class 01)

5.1.1. LAND AND RIGHTS

Appendix D, Real Estate, in the Feasibility Report for the North of the Delta Offstream Storage Project documents the evaluation of acquisition and administrative costs that would be incurred to acquire land in fee and for temporary/permanent easements to develop the project. These costs are included in the project cost estimate as land and rights costs.

5.1.2. PUBLIC AND PRIVATE ROADS

Construction of Site Reservoir and adjoining facilities will require replacement of public roads that will be inundated by the reservoir, temporary public bypass roads during construction, and the construction of new public and private roads to support project operation and access to recreation areas. These costs are included in the project cost estimate as part of the reservoir development costs.

5.1.3. SOUTH BRIDGE

The Project includes a major reservoir bridge crossing referred to as the South Bridge. Estimating assumptions for the bridge include the following:

- The estimate is based on precast concrete deck construction using the balanced cantilever method.
- Pier footings/caps are estimated at 64 feet square and 10 feet thick.
- Based on preliminary designs and assumed depths to fresh rock, bridge pier foundations will be founded on reinforced cast-in-place drilled hole (CIDH) piles socketed into fresh rock. Pile length is approximately 40 feet measured from the underside of the footing mat.
- Thirty six 3-foot diameter CIDH piles are provided under each footing.
- The bridge is broken into two spans by a small hill near mid-span. The short section of road between the two spans on the island is a short causeway formed using mechanically stabilized earth (MSE) walls.
- Bridge deck rails are assumed to be 3-foot-high concrete with a top pipe rail.

5.1.4. RESERVOIR CLEARING AND DEMOLITION

Based on a search of the California Division of Oil, Gas, and Geothermal Resources on-line database, there are many abandoned gas wells in the reservoir area and along the Delevan Pipeline alignment. The cost estimate assumes that some of these abandoned wells may require replugging if disturbed by excavation or other construction-related activities.

Estimating assumptions for clearing and demolition include the following:

- The land area for woodlands is estimated at 700 acres.
- Gas wells exist in the valley. Cost estimate includes an allowance for replugging approximately 20 percent of the existing wells in the reservoir area.
- In accordance with anticipated environmental requirements, demolition includes removal of all structures, metal fencing, barbed wire, fence posts, and asphalt concrete paving.
- Septic tanks and water wells will be abandoned in accordance with Colusa County standards.
- Septic tank waste, septic tanks, buried fuel/oil tanks, waste from building demolition, and other waste will be disposed of offsite in licensed dumps that can receive the material.
- No allowances are made in the estimate for salvage.

5.1.5. SIGNAL SPILLWAY

Saddle Dam 6 incorporates the signal spillway for Sites Reservoir (refer to Paragraph 3.1.4 for description).

5.2. Creek Diversion During Construction

Diversion of Funks Creek and Stone Corral Creek to construct Golden Gate and Sites Dams is described in Paragraph 3.1.5. Estimating assumptions for creek diversion during construction include the following:

- Funks Creek to be diverted south in excavated channel to Stone Corral Creek. Combined creek flows to be discharged through diversion tunnel around the Sites Dam construction site.
- The base of the diversion channel connecting Funks Creek and Stone Corral Creek will be 300 feet wide with 1:1 slopes on both sides and bottom at elevation 290.0 feet.
- Temporary cofferdams to elevation 300.0 feet at the upstream toes of Golden Gate Dam and Sites Dam will contain flood flows and prevent flooding of dam construction sites. The cofferdams will be surfaced with riprap on the waterside slope to prevent erosion.
- The diversion tunnel will be approximately 3,000 feet long, 20 feet in outside diameter, finished to inside diameter of 18 feet. Construction by drill and blast methods using steel sets, lagging, and rock bolts for support. The inside perimeter would be shotcrete lined.
- Riprap will be used for energy dissipation at the point of diversion of Stone Corral Creek downstream of Sites Dam.

5.3. Main Dams (Property Class 01)

5.3.1. AGGREGATE FOR FILTER AND DRAIN ZONES

Sand and aggregate for filter and drain zones in the dams (and for concrete aggregate) would come from alluvial deposits in borrow areas about 35 miles from the project site. On-site sandstone is not suitable for processing and use in filters and drains, or in structural concrete, because of marginal durability based on available testing. Future design phases of the project will further investigate if suitable sources can be found closer to the project site.

5.3.2. SITES DAM

Table 5-1 provides a summary of the major estimated quantities for Sites Dam.

Table 5-1 Summary of Major Quantities for Sites Dam

Item	Quantity
Strip Foundation Areas	30 acres
Foundation Excavation	793,500 cy
Core Zone	1,070,000 cy
Filter Drain and Transition Zones (35 Mile Haul)	852,400 ton
Rock Fill Zones (1 mile haul)	1,180,500 cy
Random Fill Zones (1 mile haul)	1,085,000 cy
Drill Curtain Grout Holes	84,805 lf

Estimating assumptions for Sites Dam include the following:

- Materials for dam construction (other than aggregates) will come from borrow areas identified by DWR within the reservoir and from sandstone rock quarries along the eastern ridge of the reservoir. Material will also come from mandatory excavations for other project facilities located within a reasonable distance from the dam.
- Sand and gravel for filter and drain zones will be processed and hauled from off-site borrow areas approximately 30 to 35 miles from the site.
- Suitable material from the in reservoir stream diversion, tunnels, and other mandatory excavations for construction can be used for dam construction.
- Construction of this dam will not start until the north bypass road is completed to replace Sites-Ladoga Road through construction areas.
- Suitable core material will be available within 1 mile of the project.
- Foundation grouting quantities are based on a grout take of approximately 0.75 sacks per foot for all holes.
- Estimated drilling and grouting quantities from grouting profiles were increased by 25 percent to cover stitch grouting at faults and other field contingencies.
- Excavated material not suitable for use in the dam will be deposited within the reservoir dead pool below elevation 300 feet.
- Instrumentation would include piezometers, settlement points, seepage weirs, and seismic monitors.

5.3.3. GOLDEN GATE DAM

Table 5-2 provides a summary of the major estimated quantities for Golden Gate Dam.

Table 5-2 Summary of Major Quantities for Golden Gate Dam

Item	Quantity
Strip Foundation Areas	50 acres
Foundation Excavation	2,910,000 cy
Core Zone	3,460,000 cy
Filter Drain and Transition Zones (35 Mile Haul)	2,494,000 ton
Rock Fill Zones (1 mile haul)	2,870,000 cy
Random Fill Zones (1 mile haul)	1,470,000 cy
Drill Curtain Grout Holes	185,600 lf

Estimating assumptions for Golden Dam are similar to those for Sites Dam and include the following:

- Materials for dam construction (other than aggregates) will come from borrow areas identified by DWR within the reservoir and from sandstone rock quarries along the eastern ridge of the reservoir. Material will also come from mandatory excavations for other project facilities located within a reasonable distance from the dam.
- Sand and gravel for filter and drain zones will be processed and hauled from off-site borrow areas approximately 30 to 35 miles from the site.
- Suitable material from the in reservoir stream diversion, tunnels, and other mandatory excavations for construction can be used for dam construction.
- Construction of this dam will not start until the north bypass road is completed to replace Sites-Ladoga Road through construction areas.
- Suitable core material will be available within 1 mile of the project.
- Foundation grouting quantities based on a grout take of approximately 0.75 sacks per foot for all holes.
- Estimated drilling and grouting quantities from grouting profiles increased by 25 percent to cover stitch grouting at faults and other field contingencies.
- Excavated material not suitable for use in the dam will be deposited within the reservoir dead pool below elevation 300 feet.
- Instrumentation would include piezometers, settlement points, seepage weirs, and seismic monitors.

5.4. Saddle Dams (Property Class 01)

Table 5-3 provides a summary of the major estimated quantities for Golden Gate Dam.

Estimating assumptions for saddle dams include the following:

- Materials for dam construction (other than aggregates) will come from borrow areas identified by DWR within the reservoir and from sandstone rock quarries along the eastern ridge of the reservoir. Material will also come from mandatory excavations for other project facilities located within a reasonable distance from the dam.

- Sand and gravel for filter and drain zones will be processed and hauled from off-site borrow areas approximately 30 to 35 miles from the site.
- Suitable core material will be available within 1 mile of the project.
- Excavated material that is not suitable for use in the dam will be deposited within the reservoir dead pool below elevation 300 feet.
- Instrumentation for the larger dams (numbers 3, 5, and 8) would include piezometers, settlement points, seepage weirs, and seismic monitors.

Table 5-3 Summary of Major Quantities for Saddle Dams

Item	Saddle Dam Number								
	1	2	3	4	5	6	7	8	9
Strip Foundation (cy)	2.0	2.0	40.0	1.0	20.0	3.0	5.0	30.0	2.0
Foundation Ex (cy)	26,000	26,300	512,000	7,100	270,000	40,200	67,000	373,000	19,000
Core Zone (cy)	27,600	25,300	832,000	7,700	378,000	39,000	60,500	542,000	16,600
Filter, Drain, Transition (ton)	44,300	39,200	1,532,000	6,700	557,000	50,000	41,000	706,000	20,500
Rock Fill Zones (cy)	7,000	10,000	1,014,000	900	445,000	13,100	61,000	504,000	3,500
Random Fill Zones (cy)	13,900	11,300	340,000	3,000	214,000		57,800	282,000	8,200
Drill Curtain Grout Holes (ft)	None	None	86,500	None	42,400	5,500	10,100	49,200	None
Slurry Cutoff Wall (cy)	None	2,000	2,300	None	2,300	None	None	None	None

5.5. Holthouse Reservoir (Property Class 01)

Table 5-4 provides a summary of the major estimated quantities for Holthouse Dam.

Table 5-4 Summary of Major Quantities for Holthouse Dam

Item	Quantity
Strip Foundation Areas	50 acres
Foundation Excavation	463,550 cy
Core Zone	883,500 cy
Filter Drain and Transition Zones (35 Mile Haul)	255,000 ton
Shell Zones (1 mile haul)	822,000 cy
Rock Fill Zones (1 mile haul)	109,500 cy
Gravity Section Concrete	42,500 cy
Drill Curtain Grout Holes	185,600 lf
Soil/Bentonite Slurry Cutoff Wall	265,500 sf
Spillway Chute, Stilling Basin, and Walls	3,500 cy
Pipeline Inlet/Outlet Structure Concrete	1,560 cy

5.5.1. RELOCATIONS

There are a number of relocations required to construct Holthouse Reservoir.

- The existing Western Area Power Authority (WAPA) transmission lines currently pass through the expanded Holthouse Reservoir area. A relocation of the segment in the reservoir area would be required to be able to span the new reservoir without a tower in the inundation area.

- A temporary bypass pipeline for the T-C Canal will be needed to maintain canal operation during construction. The current plan is to leave the bypass in place after construction. This bypass would be a backup conveyance to supply water to the canal downstream of Holthouse Reservoir if the level in Holthouse Reservoir is too low to supply the canal by gravity or if the reservoir is drained down for maintenance. For estimating, it is assumed that a bypass pipeline will be buried under the bottom of the new Holthouse Reservoir.

Estimating assumptions for Holthouse Dam include the following:

- Materials for dam construction (other than aggregates) will come from borrow areas within the expanded reservoir area, excavations for the concrete dam section on the left abutment, and surplus suitable material from Delevan and TRR pipeline trenches.
- Sand and gravel for filter and drain zones will be processed and hauled from off-site borrow areas approximately 30 to 35 miles from the site.
- Sandstone rock for rip rap would come from rock quarries developed for the main dams.
- The core section would extend down to dense soils. Below the core, a slurry cutoff wall would extend through remaining dense soils to refusal in weathered rock. The cutoff wall would be embedded into the core on top. Below the bottom of the cutoff wall, pressure grout holes would extend from weathered rock down into moderately fresh rock.
- Foundation grouting would be performed under the concrete dam section to control seepage. This grouting would be continuous with the grouting under the earth dam section.
- Construction of the dam would follow installation of the bypass pipeline for the TC Canal.
- Instrumentation would include piezometers, settlement points, seepage weirs, and seismic monitors.

5.5.2. T-C CANAL CONNECTION TO HOLTHOUSE RESERVOIR

Estimating assumptions for the TC Canal connection to Holthouse Reservoir include the following:

- The T-C Canal will enter the new Holthouse Reservoir at its current location in existing Funks Reservoir.
- A baffle block energy dissipating spillway structure would be provided at the discharge point to allow canal discharges to enter the reservoir in a controlled fashion over the full range of reservoir operation. The spillway would be sized for 2.000 cfs.

5.5.3. FUNKS HOLTHOUSE CONNECTION

Estimating assumptions for the Funks Reservoir – Holthouse Reservoir connection include the following:

- The existing Funks and the new Holthouse Reservoir pools would be connected by demolishing and removing the existing Funks three-gate spillway structure.
- If required to enlarge the gap for hydraulic reasons, a portion of the adjacent Funks Dam could also be removed.

5.6. TRR Reservoir (Property Class 01)

Refer to Section 3.5.1for a description of the facility. Estimating assumptions for the TRR Reservoir include the following:

- Soils for embankment construction would come from the excavated portion of the basin below grade. Soil could also come from surplus pipeline excavated material.
- The TRR liner is assumed to be 60 mil UV-resistant PVC or HDPE.
- A drain pipe and spillway would be provided. Flows would be routed to Funks Creek. Spillway would be sized to accommodate the return flow (up to 900 cfs).

5.7. Pumping and Generating Plants (Property Class 03)

5.7.1. I/O PRESSURE TUNNEL

Refer to Section 3.2.1 for a description of the facility. Estimating assumptions for the I/O Pressure Tunnel include the following:

- The I/O tunnel is a lined tunnel with finished inside diameter of 30 feet.
- For the last 1,000 feet of tunnel at the downstream end, the tunnel includes a 1-inch-thick steel liner with concrete backfill due to shallow rock cover conditions.
- Upstream of the liner, a reinforced concrete liner is used.
- Tunnel is sized for the California Division of Safety of Dams emergency reservoir drawdown criteria.
- Tunnel is constructed using drill and blast methods.
- Tunnel support using rock bolting, steel sets, and lagging.
- Tunnel seepage handled by sumping and pumping.
- No allowance for gassy tunnel conditions.

5.7.2. SITES PUMPING/GENERATING PLANT

Estimating assumptions for SRPGP include the following:

- One 2,500 kilovolt ampere (kVA) double-ended unit switchyard (fed from two 2,500 kVA transformers) will be required.

- Two DC systems and two UPS systems will be used for redundancy.
- Circuit breakers for the 38,280 horsepower pumps will be 2000 amperes (A).
- 250 kW standby generator is assumed for SPGP.
- Main transformers at the Sites Switchyard are rated 100 MVA.
- All 13.8 kV circuits are assumed to be connected via MV-105 shielded cable.
- Main 13.8 kV circuits are assumed to be in duct banks with average length of 2,000 feet.
- All 13.8 kV connections to machines are assumed to be in cable tray or exposed conduit.
- Machine connections at SPGP are assumed to average 600 feet long.
- One motor control center (MCC) is assumed per machine.
- Equipment labeled as standby is not included in the estimate.

5.7.3. TRR PUMPING/GENERATING PLANT

Estimating assumptions for TRR PGP include the following:

- One 2,000 kVA double ended unit switchyard (fed from two 2,000 kVA transformers) will be required.
- Two DC systems and two UPS systems will be used for redundancy.
- Main transformers at the TRR Switchyard match the one-line drawing requirements.
- All 13.8 kV circuits are assumed to be connected via MV-105 shielded cable.
- Main transformer 13.8 kV circuits are assumed to be in duct banks with average length of 500 feet.
- All 13.8 kV connections to machines are assumed to be in cable tray or exposed conduit.
- Machine connections at the TRR are assumed to average 200 feet long.
- One MCC is assumed per machine.
- Equipment labeled as standby is not included in the estimate.

5.7.4. SACRAMENTO RIVER PUMPING/GENERATING PLANT

Estimating assumptions for Sacramento River Pumping/Generating Plant include the following:

- One 2,500kVA double ended unit switchyard (fed from two 2,500 kVA transformers) will be required.
- Two DC systems and two UPS systems will be used for redundancy.
- Main transformers at the SRPGP Switchyard match the one-line drawing’s requirements.
- All 13.8 kV circuits are assumed to be connected via MV-105 shielded cable.
- Main transformer 13.8 kV circuits are assumed to be in duct banks with average length of 750 feet.
- All 13.8 kV connections to machines are assumed to be in cable tray or exposed conduit.
- Machine connections at the SRPGP are assumed to average 300 feet long.

- One MCC is assumed per machine.
- Equipment labeled as standby is not included in the estimate.

5.7.5. FISH SCREEN STRUCTURE

Refer to Section 3.6.3 for a description of the facility. Estimating assumptions for the I/O Pressure Tunnel include the following:

- Construction in the river within a steel sheet pile braced cofferdam.
- Foundation piles driven to required capacity after initial excavation within cofferdam in the wet.
- Tremie seal mat placed in bottom of cofferdam after pile driving. Cofferdam dewater after seal mat is placed, structure constructed.
- Fish screen and solid metal closure panels to be stainless steel.
- Screens cleaned using conventional brush cleaning mechanisms (assume two provided).
- Fish screen structure length is taken as 560 feet based on preliminary design.

5.7.6. RED BLUFF PUMP ADDITION

Refer to Section 3.8 for a description of the facility. Estimating assumptions for the pump additions include the following:

- Two pumps would be procured and installed. The pumps would be 250 cfs capacity matching the larger pumps already installed and operating.
- For each pump, 84-inch diameter motor operated butterfly valve and discharge flap gates will be provided along with a pump flange coupling (similar to those installed on the operating units).
- Estimate includes pump, electrical connections and control connections to existing systems.
- Cost is included for manufacturer’s representation assistance during installation and start-up of equipment.

5.8. Canals and Conduits (Property Class 05)

5.8.1. HOLTHOUSE CHANNEL

Refer to Section 3.3.3 for a description of the facility. Estimating assumptions for the channel include the following:

- Excavation would be performed using bull dozers with rippers and scrapers, with minimal blasting required.
- Dewatering will be accomplished by ditching, sumping, and pumping.

- Suitable material from this excavation may be used for Golden Gate Dam or Holthouse Dam construction, or to meet other site grading requirements.
- Unsuitable material and sediment removed from Funks Reservoir to build the channel would be deposited within the Sites Reservoir dead pool area below elevation 300 feet.
- The schedule allows adequate time for dewatering the sediment after Funks Reservoir is dewatered so that the material can be loaded and hauled without the need for dredging.
- No rip rap or concrete lining for the channel.

5.8.2. DELEVAN PIPELINE AND TRR PIPELINE

Refer to Section 3.7 for a description of the Pipelines. Since these pipelines represent a significant cost to the project, AECOM worked with Hanson, Sacramento, to prepare a detailed evaluation of pipe fabrication and installation costs and schedule. Hanson evaluated setting up and fabricating on-site fabrication versus fabrication at an existing plant with ground transportation to the site. On-site fabrication proved to the preferred alternative, but not by a significant margin. Hanson also prepared feasibility level designs for three pipe classes based on the hydraulic grade lines for the project (with surge allowances) and prepared cost estimates to set up fabrication facilities and fabricate the pipe on site. AECOM used these costs to price the pipeline supply. Hanson also confirmed the planned bedding details for the pipe shown on the drawings, and provided estimates of typical production and installation rates for similar pipe on other projects. The production and installation rates were factored into the required manpower and equipment spreads used in the estimates.

Estimating assumptions for the pipelines include the following:

- The estimate is based upon the pipeline plan and profile details developed for the project.
- Dewatering is based on preliminary construction dewatering estimate developed from available data.
- 144-inch AWWA C300 pipe material estimate is based on updated Hansen information.
- 22 access manholes with air/vacuum relief at 5,000-foot spacing and four blowoff valves for the Delevan Pipeline segment.
- 12 access manholes with air/vacuum relief at 5,000 spacing and four blowoff valves for the TRR Pipeline segment.
- Costs are based on an installation rate of approximately 128 feet of pipe per day (total sum of pipe installed daily all active headings).
- Primary installation is assumed to be cut-and-cover with the top of pipe approximately 10 feet below the surface.
- Pricing includes jacked sections under Highway 5, Highway 45, the railroad, the Colusa Basin Drain, and the GCID Canal.

5.9. Transmission and Interconnection (Property Class 13)

5.9.1. SITES SUBSTATION

The substation configuration assumes a connection to the existing WAPA 230 kV Keswick-O’Banion transmission line based upon a WAPA *System Impact Study* (WAPA, 2013). This substation would service the western facilities (SPGP and TRR). Note that the cross country transmission line running to the Sacramento River Pumping/Generating Plant has been eliminated for Project Alternative D. Rather the Sacramento River Pumping/Generating Plant would be supplied through a new transmission line from a new substation north of Colusa connected to the WAPA line. The transmission line would run north from the new substation roughly paralleling Highway 45.

In addition to the information provided above, estimating assumptions include the following:

- Estimates are based on the *System Impact Study* (WAPA, 2013), Option 1, dated February 2013.
- Substation general arrangement and ratings are based on the one-line diagrams prepared for the project.
- All 230 kV substation equipment is rated at 1,200 A and transformer ratings are as shown on the one line diagrams.
- Survey of substation sites and associated geotechnical investigation is included in engineering allowances and contingencies.
- Communication requirements for the substation sites are by others and are not included in the estimate.
- The *System Impact Study* (WAPA, 2013) mentions the needs for VAR support. This equipment is not shown on the one-line diagrams at this time. A 230 kV, 65 MVAR series capacitor bank has an estimated cost of $300,000 plus auxiliary equipment for a total estimated cost of $450,000. This cost has been included in the Sites Substation cost estimate.

5.9.2. TRR PUMPING/GENERATING PLANT

Switchyard costs developed from the single-line diagram details for the TRR Pumping/Generating Plant Switchyard.

5.9.3. SACRAMENTO RIVER PUMPING/GENERATING PLANT SWITCHYARD

Switchyard costs developed from the single-line diagram details for the Sacramento River Pumping/Generating Plant.

5.9.4. TRANSMISSION LINES

Estimating assumptions include the following:

- The transmission line estimate is based on a single 2156 Aluminum Conductor Steel-Reinforced Bluebird for each circuit, with line construction consisting of double-circuit lattice towers or single-circuit tubular poles (monopoles).
- The transmission line estimate is based on 700-foot ruling span.

5.10. General Property (Property Class 15)

5.10.1. RECREATION AREAS

Estimating assumptions include the following:

- Alternative D includes Stone Corral Creek and Peninsula Hills recreation areas and a boat launch facility located on the west side of the reservoir where the current Sites Lodoga Road exits the reservoir near elevation 520.0 feet. All camping and picnic area equipment is assumed to be anchored in concrete.
- Camping and picnic equipment listed on component cost page.
- All boat ramps are assumed to be 50 feet wide built with 6-inch reinforced concrete for durability.

5.10.2. OPERATIONS AND MAINTENANCE FACILITY

Estimating assumptions include the following:

- The field office is assumed to be 10,000 square feet, including 8,000 square feet of shop space.
- The entire site, including paving, is assumed to be 100,000 square feet.
- The entire site is to be fenced with 6-foot chain link.
- A pre-fabricated metal building shell is assumed.
- Tenant improvements are allowed for space development for offices and shops.
- Water well and septic system are provided.
- Vehicle fueling island is provided.

5.11. Mitigation Costs

AECOM has developed planning-level mitigation cost suitable for Sites Reservoir Alternative C for the Authority that is also applicable to Alternative D. AECOM held a series of mitigation workshops in May 2016 with the Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) Team comprised of DWR, Reclamation and CH2M HILL staff.

During the mitigation workshops, a total of 155 mitigation measures from the NODOS Preliminary Administrative Draft EIR were reviewed. Revised mitigation cost assumptions, schedule impacts associated with mitigation measures and modifications to mitigation that could potentially reduce project costs were discussed during the workshops. The 2013 mitigation cost estimate was also reviewed. Mitigation cost assumptions developed during the mitigation workshops were then used to update mitigation costs, as well as inform construction and operation and maintenance costs, where appropriate.

5.12. Interest During Construction

AECOM developed an estimate for interest during constriction (IDC) based on the construction schedule presented in Section 7. As shown in **Error! Reference source not found.**, project design, real estate procurement, and construction costs (in 2015 dollars) were distributed over the construction period and IDC (in 2015 dollars) was calculated using an interest rate of 3.5 percent.

Table 5-5 Annual Construction Spending and IDC (2020 - 2030)

No IDC Adjustment from Federal or WSIP Construction Funding

Year	Milestone	Construction		IDC	Total
		% Complete	Cost ($M)	-3.50%	
2020	Design	2.5%	$ 117.40	$ 2.00	$ 119.50
2021	Design	2.5%	$ 117.40	$ 6.20	$ 123.60
2022	Land Acquisition	0.3%	$ 133.20	$ 10.80	$ 144.00
2023	Construction	14.7%	$ 691.90	$ 25.60	$ 717.50
2024	Construction	17.4%	$ 819.10	$ 52.90	$ 872.00
2025	Construction	18.8%	$ 882.50	$ 84.50	$ 967.00
2026	Construction	16.9%	$ 794.20	$116.80	$ 911.00
2027	Construction	12.1%	$ 567.60	$144.80	$ 712.30
2028	Construction	6.2%	$ 291.00	$164.90	$ 455.90
2029	Construction	6.0%	$ 282.80	$180.70	$ 463.50
2030	Fully Operational	0.0%	$ -	$ -	$ -
	Total	100%	$ 4,697.2	$ 789.2	$ 5,486.4

Note: 50% IDC is attributed to spending in the year of construction based a mid-year average expenditure date.

5.13. Operation, Maintenance, Repair, and Replacement

AECOM developed estimates for the operation, maintenance, repair, and replacement (OMRR) costs for the Project. Annual costs developed included facility staffing, contract maintenance, tools and equipment, fixed and variable operation and maintenance costs (including expenses for power and water system operations), major repairs, periodic major equipment component refurbishment/replacement, power costs adjusted for power revenues, canal wheeling costs and the like. Costs for Costs for ongoing environmental mitigation and water quality monitoring were also considered. The annual costs for OMRR and mitigation and water quality monitoring were distributed over an assumed 93-year[1] period beginning in 2030 (start of operation). The NPV of the time series was then determined in October 2015 dollars using a discount rate of 3.5

[1] Based on a 100-year study period beginning at construction per WSIP guidance.

percent. The NPV costs for OMRR and mitigation and monitoring are included in the cost summary tables provided in Section 6.

5.14. Feasibility-Level Cost Estimate

The feasibility-level cost estimates are included in Appendix A.

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6. COST ESTIMATE SUMMARY

Table 6-1 summarizes the estimated feasibility-level capital cost summary for Alternative D in October 2015 dollars. Detailed cost estimate worksheets supporting the table are provided in Appendix A.

Table 6-1 Capital Cost Summary

Facility	Field Cost ($ Million)	Non-Contract Cost ($ Million)	Construction Cost ($ Million)
Develop Sites Reservoir	310	50	360
Main Dams	520	90	610
Saddle Dams	230	40	270
Holthouse Dam	160	30	190
Terminal Regulating Reservoir	33	6	39
Inlet/Outlet Structure and Tunnel	180	30	210
Sites Pumping/Generating Plant	680	120	800
Terminal Regulating Reservoir Pumping/Generating Plant	135	25	160
Sacramento River Pumping/Generating Plant	220	40	260
Sacramento River Fish Screen Structure	47	8	55
Red Bluff Addition	3	1	4
Sites Pumping/Generating Plant Conveyance Channel	42	7	49
Delevan Pipeline	560	100	660
Terminal Regulating Reservoir Pipeline	300	50	350
Utility Transmission Line Interconnections	160	30	190
General Property	26	4	30
Land Acquisition and Rights	100	10	110
Environmental Mitigation/Monitoring	340	10	350
Subtotals	4,046	651	4,697
Capital Cost	-	-	**4,697**

All costs are October 2015 costs

Table 6-2 summarizes the total project cost estimate for Alternative D in October 2015 dollars.

Table 6-2 Total Project Cost Summary

Item	Construction Cost[1] ($ Million)
Capital Cost	4,697
Interest During Construction	789
Operation, Maintenance, Repairs, Replacement (Note 2)	554
Ongoing Water Quality and Mitigation Monitoring Costs (Note 2)	175
Allowance for Utility Systems	50
Total Project Cost	6,265

Note: 1. All costs are October 2015 costs
2. Net present value of annual costs for assumed 93-year operating period beginning in 2030

The estimated annual operation and maintenance, repair and replacement costs, and the mitigation costs (totaling approximately $26.6 million annually) were applied over a 100-year operating period beginning in 2030. The net present value was then estimated in October 2015 dollars using the WSIP required discount rate (3.5 percent).

The estimates presented in Table 6-1 and Table 6-2 may not be a complete tabulation of all potential Authority costs to implement the project. An example of other costs might include electric utility owner costs for system improvements to provide power to the project or accept power from project generation. Further PG&E and WAPA system connection studies and discussions with these utilities would be part of future Project design activities that would identify if such costs would be incurred.

7. CONSTRUCTION SCHEDULE

AECOM has developed a preliminary project implementation schedule for Alternative D as part of developing the feasibility-level cost estimate. Figure 7-1 presents the roll-up schedule. Appendix B contains the full schedule that includes approximately 200 linked construction activities. The schedule presents a reasonable approach to construct the project that accounts for the logical sequencing of the work, procurement of equipment, and reasonable durations to complete construction activities. Durations reflect the estimated labor and equipment spreads needed to complete activities, including earthwork, balancing the movement of excavated soil and rock to placement sites, supplying and placing all materials, erecting structures, and installing major equipment. Labor and equipment costs are reflected in the cost estimate.

The schedule presents construction activities with an assumed construction start date in late March 2022. Predecessor activities like design, permitting, packaging the work, and bidding the construction packages are not included because of the uncertainty in scheduling these activities between now and 2022. With hydroelectric generation a part of the project, the FERC permitting process may also affect the actual start date.

As construction progresses, the critical path (or critical remaining work) moves between facilities. Completing the Sacramento River and Sites Pumping/Generating Plants in early 2030 are the final critical activities to achieve project construction completion and begin pumping operations.

Filling the reservoir is not reflected in the schedule due to the uncertainty in hydrological conditions at that time and the operating criteria that would be contained in the regulatory permits required for the project. It may be possible to begin filling the reservoir using natural runoff from Stone Corral and Funks Creek beginning with the 2028 and 2029 wet season. At this point the dams are completed. Adequate storage would be available to accommodate a major storm event (including the PMF) and release facilities would be available at Sites Dam if needed.

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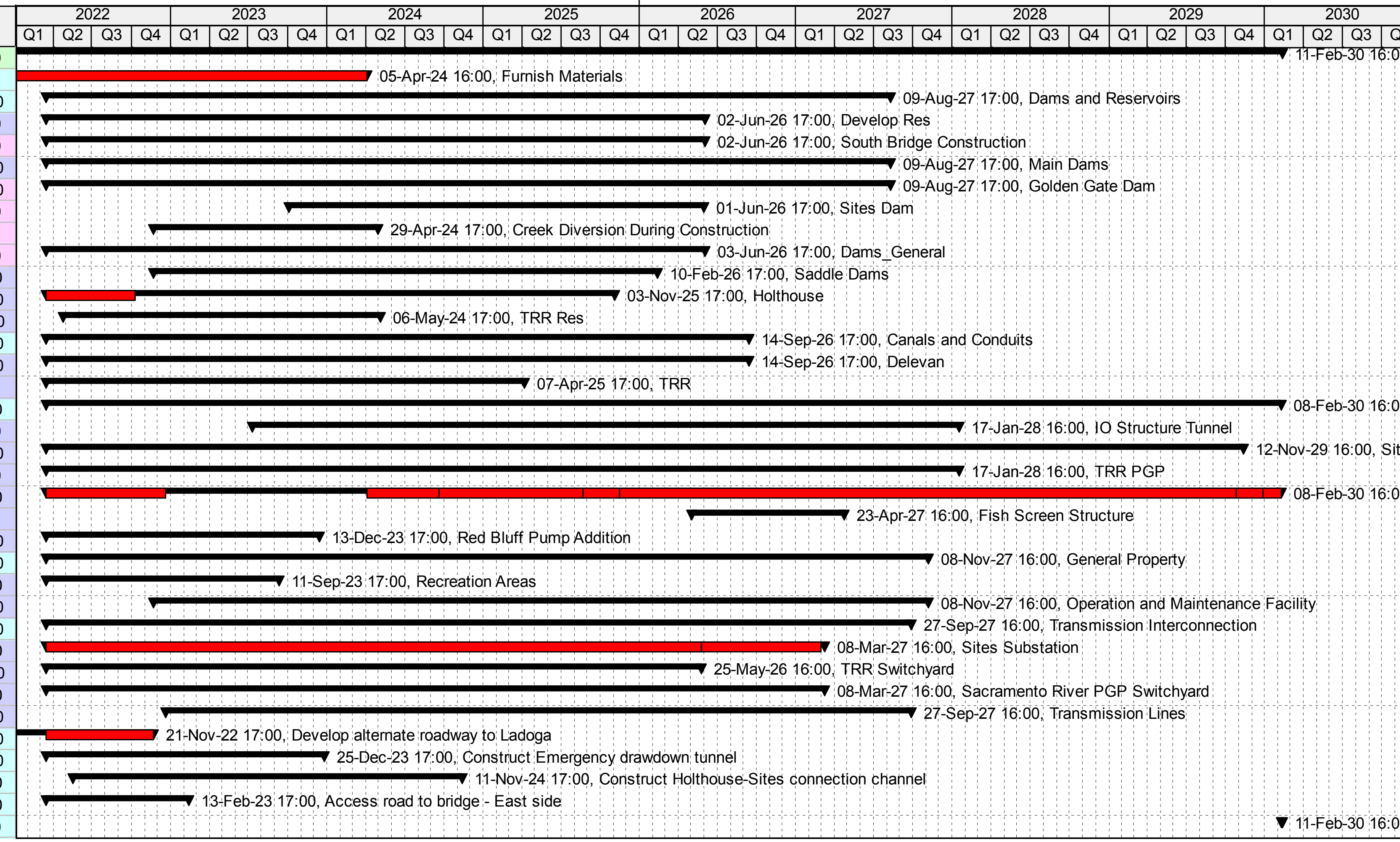
#	Activity ID	Activity Name	Original	Start	Finish
1		NODOS_Sites Reservoir_Ver2	3369	15-Mar-17 08:(	11-Feb-30 16:00
2		Furnish Materials	1095	27-Jan-20 08:(	05-Apr-24 16:00
3		Dams and Reservoirs	1410	15-Mar-22 08:(	09-Aug-27 17:00
4		Develop Res	1101	15-Mar-22 08:(	02-Jun-26 17:00
5		South Bridge Construction	1101	15-Mar-22 08:(	02-Jun-26 17:00
6		Main Dams	1410	15-Mar-22 08:(	09-Aug-27 17:00
7		Golden Gate Dam	1410	15-Mar-22 08:(	09-Aug-27 17:00
8		Sites Dam	695	03-Oct-23 08:00	01-Jun-26 17:00
9		Creek Diversion During Construction	375	22-Nov-22 08:(	29-Apr-24 17:00
10		Dams_General	1102	15-Mar-22 08:(	03-Jun-26 17:00
11		Saddle Dams	841	22-Nov-22 08:(	10-Feb-26 17:00
12		Holthouse	950	15-Mar-22 08:(	03-Nov-25 17:00
13		TRR Res	530	26-Apr-22 08:00	06-May-24 17:00
14		Canals and Conduits	1175	15-Mar-22 08:(	14-Sep-26 17:00
15		Delevan	1175	15-Mar-22 08:(	14-Sep-26 17:00
16		TRR	800	15-Mar-22 08:(	07-Apr-25 17:00
17		Pumping and Generating Plants	2064	15-Mar-22 08:(	08-Feb-30 16:00
18		IO Structure Tunnel	1180	11-Jul-23 08:00	17-Jan-28 16:00
19		Sites PGP	2000	15-Mar-22 08:(	12-Nov-29 16:00
20		TRR PGP	1525	15-Mar-22 08:(	17-Jan-28 16:00
21		Sac River PGP	2064	15-Mar-22 08:(	08-Feb-30 16:00
22		Fish Screen Structure	255	01-May-26 16:(	23-Apr-27 16:00
23		Red Bluff Pump Addition	457	15-Mar-22 08:(	13-Dec-23 17:00
24		General Property	1475	15-Mar-22 08:(	08-Nov-27 16:00
25		Recreation Areas	390	15-Mar-22 08:(	11-Sep-23 17:00
26		Operation and Maintenance Facility	1295	22-Nov-22 08:(	08-Nov-27 16:00
27		Transmission Interconnection	1445	15-Mar-22 08:(	27-Sep-27 16:00
28		Sites Substation	1300	15-Mar-22 08:(	08-Mar-27 16:00
29		TRR Switchyard	1095	15-Mar-22 08:(	25-May-26 16:00
30		Sacramento River PGP Switchyard	1300	15-Mar-22 08:(	08-Mar-27 16:00
31		Transmission Lines	1245	20-Dec-22 08:(	27-Sep-27 16:00
32		Develop alternate roadway to Ladoga	1484	15-Mar-17 08:(	21-Nov-22 17:00
33		Construct Emergency drawdown tunnel	465	15-Mar-22 08:(	25-Dec-23 17:00
34		Construct Holthouse-Sites connection channel	650	17-May-22 08:(	11-Nov-24 17:00
35		Access road to bridge - East side	240	15-Mar-22 08:(	13-Feb-23 17:00
36		Start Filling Sites Reservoir	1	08-Feb-30 16:(	11-Feb-30 16:00



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | ◆ Milestone | Neg Float Bar

TASK filter: All Activities

8. LIMITATIONS

The construction cost estimate presented in this BOE Report is a feasibility-level cost estimate that reflects a professional opinion of probable project construction costs, total project costs, and escalation to the assumed 2022 start of construction date based on conceptual-level design layouts developed using currently available information on the surface and subsurface site conditions.

Currently available subsurface information and topographic data relied upon by AECOM to prepare designs and cost estimates were developed by others. AECOM does no take responsibility for the accuracy or completeness of this information.

AECOM represents that its services were conducted in a manner consistent with the standard of care ordinarily applied as the state of practice in the profession, within the limits prescribed by our client. No other warranties, either expressed or implied, are included or intended in this technical memorandum.

AECOM assumes that the project will be implemented by the Authority. AECOM further assumes that the estimated cost for the project is based on a conventional design-bid-build approach to the work. Alternative bidding strategies, such as design build, can change the estimated cost.

This document is based on the measurement and pricing of quantities wherever information is provided and/or reasonable assumptions for other work not covered in the drawings. Unit rates have been obtained from historical records and/or discussion with contractors. Contractor costs include mark-ups covering the costs of field overhead, home office overhead and profit and range from 15% to 25% of the cost for a particular item of work.

Cost estimates are an assessment of fair market value for the construction of this project. It is not a prediction of low bid. The construction cost estimate presumes that work packages are established for advertising and bidding such that a minimum of four qualified responsible general contractors bid on the work, and their bids include a minimum of four bidders for subcontracted work. Experience indicates that fewer bidders may result in higher bids. The estimated construction cost is based on industry practice, professional experience and qualifications and represents AECOM's best judgment as a professional construction consultancy familiar with the construction industry.

AECOM does not guarantee that the proposals, bids, or the construction cost will not vary from the estimate prepared. Since AECOM has no control over the cost of labor, material, equipment, the contractor's method of determining prices, the competitive bidding or market conditions at the time of bid, or escalation, the statement of feasibility-level cost is based on industry practice, professional experience and qualifications.

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9. REFERENCES

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APPENDIX A

FEASIBILITY-LEVEL COST ESTIMATES

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PROJECT COST ESTIMATE

PROJECT North of the Delta Off Stream Storage Project (NODOS)	PREPARED BY AECOM
DIVISION	ESTIMATE DATE 30-Nov-2016
UNIT	ESTIMATE TYPE Feasibility
FEATURE Draft Cost Estimate for Project Alternative D	PRICE LEVEL October 2015

PROPERTY CLASS	IDENTIFIED PROPERTY	PLANT ACCOUNT	DESCRIPTION	CURRENT FIELD COST	TOTAL FIELD COST	NONCONTRACT COST	CONSTRUCTION COST	TOTAL CONSTRUCTION COST
			NODOS PROJECT COST - PROJECT ALTERNATIVE D		4,046,300,000	650,549,000	4,696,849,000	4,696,849,000
1			RESERVOIRS AND DAMS		1,353,000,000	226,000,000	1,579,000,000	1,579,000,000
	01		Develop Sites Reservoir Area		410,000,000	60,000,000	470,000,000	
		100	Land and Rights	100,000,000				
		110	Public Road Relocations	67,000,000				
		110	South Bridge	175,000,000				
		120	Reservoir Clearing and Demolition	9,200,000				
		140	Project Roads	56,000,000				
			Rounding	2,800,000				
	02		Construct Main Dams		520,000,000	90,000,000	610,000,000	
		100	Land and Rights					
		150	Creek Diversion During Construction	15,000,000				
		151	Construct Sites Dam	135,000,000				
		151	Construct Golden Gate Dam	370,000,000				
		152	Rim Grouting	3,300,000				
			Rounding	(3,300,000)				
	03		Construct Saddle Dams		230,000,000	40,000,000	270,000,000	
		151	Land and Rights					
		151	Construct Saddle Dam 1	2,400,000				
		151	Construct Saddle Dam 2	3,000,000				
		151	Construct Saddle Dam 3	93,000,000				
		151	Construct Saddle Dam 4	520,000				
		151	Construct Saddle Dam 5	50,000,000				
		151	Construct Saddle Dam 6	9,900,000				
		151	Construct Saddle Dam 7	9,800,000				
		151	Construct Saddle Dam 8	56,000,000				
		151	Construct Saddle Dam 9	1,400,000				
			Rounding	3,980,000				

PROPERTY CLASS	IDENTIFIED PROPERTY	PLANT ACCOUNT	DESCRIPTION	CURRENT FIELD COST	TOTAL FIELD COST	NONCONTRACT COST	CONSTRUCTION COST	TOTAL CONSTRUCTION COST
	04		Construct Holthouse Reservoir and Appurtenances		160,000,000	30,000,000	190,000,000	
		100	Land and Rights					
		110	Relocations	38,000,000				
		151	Construct Holthouse Dam	105,000,000				
		152	TCCA Canal Bypass Pipeline	8,500,000				
		153	Waterway Structures	4,000,000				
		160	Pumps and Prime Movers					
		170	Accessory Electrical Equipment	4,500,000				
			Rounding					
	05		Construct TRR Reservoir		33,000,000	6,000,000	39,000,000	
		100	Land and Rights					
		151	Construct TRR Reservoir	25,000,000				
		153	Canal Control Structures	6,900,000				
		170	Accessory Electrical Equipment	1,050,000				
			Rounding	50,000				
3			PUMPING AND GENERATING PLANTS		1,265,300,000	223,549,000	1,488,849,000	1,488,849,000
	01		Construct I/O Structure and 30' Diameter Tunnel		180,000,000	30,000,000	210,000,000	
		152	30' Diameter Tunnel	120,000,000				
		152	Low level Intake Structure	25,000,000				
		152	Gated Intake/Outlet Tower (Including Mechanic	18,000,000				
		152	Construct Gated Intake Tower, Mechanical	14,000,000				
		152	Construct Gated Intake Tower, Electrical	1,600,000				
			Rounding	1,400,000				
	02		Sites Pumping-Generating Plant		680,000,000	120,000,000	800,000,000	
		100	Land and Rights					
		130	Structures and Improvements	210,000,000				
		140	Roads and Road Structures					
		152	Waterways	115,000,000				
		153	Waterway Structures	43,000,000				
		160	Pumps and Prime Movers	74,000,000				
		165	Turbines and Generators	145,000,000				
		170	Accessory Electrical Equipment	99,000,000				
			Rounding	(6,000,000)				

PROPERTY CLASS	IDENTIFIED PROPERTY	PLANT ACCOUNT	DESCRIPTION	CURRENT FIELD COST	TOTAL FIELD COST	NONCONTRACT COST	CONSTRUCTION COST	TOTAL CONSTRUCTION COST
	03		TRR Pumping-Generating Plant		135,000,000	25,000,000	160,000,000	
		100	Land and Rights					
		130	Structures and Improvements	64,000,000				
		140	Roads and Road Structures	1,150,000				
		152	Waterways	12,000,000				
		154	Waterway Protective Works	10,000,000				
		160	Pumps and Prime Movers	19,500,000				
		165	Turbines and Generators	7,600,000				
		170	Accessory Electrical Equipment	20,000,000				
			Rounding	750,000				
	04		Sacramento River Pumping-Generating Plant		220,000,000	40,000,000	260,000,000	
		100	Land and Rights (Included with Reservoir)					
		130	Structures and Improvements	100,000,000				
		140	Roads and Road Structures (Included with Res	740,000				
		152	Discharge Piping					
		154	Waterways - Buried Penstock Piping and Bifur	3,000,000				
		160	Waterway Protective Structures	9,900,000				
		165	Pumps and Prime Movers	75,000,000				
		170	Turbines and Generators	10,500,000				
			Accessory Electrical Equipment	25,000,000				
			Rounding	(4,140,000)				
	05		Sacramento River Fish Screen Structure		47,000,000	8,000,000	55,000,000	
		100	Land and Rights (Included with Reservoir)					
		130	Structures and Improvements	47,000,000				
		140	Roads and Road Structures (Included with Res	165,000				
		170	Accessory Electrical Equipment	680,000				
			Rounding	(845,000)				
	06		Red Bluff Pump Addition		3,300,000	549,000	3,849,000	
		100	Land and Rights (Included with Reservoir)					
		130	Structures and Improvements	170,000				
		160	Pumps and Prime Movers	2,600,000				
		170	Accessory Electrical Equipment	500,000				
			Rounding	30,000				

PROPERTY CLASS	IDENTIFIED PROPERTY	PLANT ACCOUNT	DESCRIPTION	CURRENT FIELD COST	TOTAL FIELD COST	NONCONTRACT COST	CONSTRUCTION COST	TOTAL CONSTRUCTION COST
5			Canals and Conduits		902,000,000	157,000,000	1,059,000,000	1,059,000,000
	01		Construct Channel Sites to Holthouse		42,000,000	7,000,000	49,000,000	
		152	Conveyance Channel Sites to Holthouse	42,000,000				
			Rounding					
	02		Construct Delevan Pipeline		560,000,000	100,000,000	660,000,000	
		100	Land and Rights					
		120	Clearing and Demolition	390,000				
		152	Construct Delevan Pipeline	510,000,000				
		152	I-5 Crossing (Jacked)	39,000,000				
		152	Highway 45 Crossing (Jacked)	12,000,000				
			Rounding	(1,390,000)				
	03		Construct TRR Pipeline		300,000,000	50,000,000	350,000,000	
		100	Land and Rights					
		152	Construct TRR Pipeline	280,000,000				
		152	Holthouse Inlet Structure	8,200,000				
		152	Construct GCID Crossing	17,000,000				
			Rounding	(5,200,000)				
13			Transmission Lines, Switchyards and Substations		160,000,000	30,000,000	190,000,000	190,000,000
	01		Transmission and Interconnection		160,000,000	30,000,000	190,000,000	
		100	Land and Rights					
		175	Sites Substation	35,000,000				
		175	TRR Switchyard	10,000,000				
		175	Sacramento River PGP Switchyard	8,800,000				
		181	Transmission Lines	97,000,000				
		185	WAPA Substation	10,000,000				
			Rounding	(800,000)				
15			General Property		26,000,000	4,000,000	30,000,000	30,000,000
			General Property		26,000,000	4,000,000	30,000,000	
		195	Recreation Facilities	24,000,000				
		195	Operating and Maintenance Facility	2,500,000				
			Rounding	(500,000)				

PROPERTY CLASS	IDENTIFIED PROPERTY	PLANT ACCOUNT	DESCRIPTION	CURRENT FIELD COST	TOTAL FIELD COST	NONCONTRACT COST	CONSTRUCTION COST	TOTAL CONSTRUCTION COST
		Mitigation			340,000,000	10,000,000	350,000,000	350,000,000
		Mitigation			340,000,000	10,000,000	350,000,000	
			Surface Water Quality	1,800,000				
			Aquatic Resources	55,000,000				
			Botanical Resources	88,000,000				
			Wildlife Habitat	51,000,000				
			Wetlands Habitat	78,000,000				
			Cultural Resources	33,000,000				
			Land Use	30,000,000				
			Paleontology	1,400,000				
			Air Quality	175,000				
			Rounding	1,625,000				

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

SHEET 1 OF _ _

FEATURE: **NODOS Project** **Sites Reservoir - Develop Reservoir Area** ***(Includes land costs, clearing, demolition, public road relocations, and new project roads.)*** **Civil** **Summary Sheet**	**PROJECT:** **NODOS Alternative D** **WOID:** **ESTIMATE LEVEL:** **REGION:** **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Land & Rights

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights					$90,700,000
		Subtotal					**$90,700,000**
		Mobilization	0%	+/-			$0
		Subtotal with Mobilization					**$90,700,000**
		Contract Cost Allowances (Sum of):	10%	+/-			$9,300,000
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$100,000,000**
		Construction Contingencies	0%	+/-			$0
		FIELD COST					**$100,000,000**
		Non-Contract Costs	10%	+/-			$10,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$110,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$125,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY** Mike Egge	**CHECKED** 42650
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED** December 2016	**PEER REVIEW / DATE**

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
Sites Reservoir - Develop Reservoir Area	
Land and Rights	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
Civil	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Land & Rights

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Land and Rights**					
		Procure reservoir property and land					
		required for relocation of homes and					
		businesses outside reservoir					
	1	Sites Reservoir Project Lands		1	allow	$69,000,000.00	$69,000,000
	2	Easement Acquisition Costs		1	allow	$14,300,000.00	$14,300,000
	3	Parcel Acquisition & Admin Costs		1	allow	$6,900,000.00	$6,900,000
	4	Easement Acquisition & Admin Costs		1	allow	$1,100,000.00	$1,100,000
	5	Relocation Administrative Costs		1	allow	$2,120,000.00	$2,120,000
		Land costs extracted from the Real Estate					
		Plan included in Appendix D of the NODOS					
		Feasibility Study)					
		SUBTOTAL THIS SHEET					**$93,420,000**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY** Loren Murray	**CHECKED** 42662
DATE PREPARED	**PEER REVIEW / DATE** 10/07/16	**DATE PREPARED** October 2016	**PEER REVIEW / DATE**

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Sites Reservoir - Develop Reservoir Area	
(Includes land costs, clearing, demolition, public road relocations, and new project roads.)	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights					
110		Public Road Relocation - Sheet 1					$28,077,255
		Public Road Relocation - Sheet 2					$4,427,467
		Public Road Relocation - Sheet 3					$17,581,830
		Public Road Relocation - Sheet 4					
110		South Bridge					$132,438,798
120		Reservoir Clearing/Demolition					$6,959,096
140		Project Roads - Sheet 1					$13,679,599
		Project Roads - Sheet 2					$10,562,115
		Project Roads - Sheet 3					$6,264,221
		Project Roads - Sheet 4					$4,163,903
		Project Roads - Sheet 5					$7,491,897
		Subtotal					**$231,646,183**
		Mobilization	5%	+/-			$11,500,000
		Subtotal with Mobilization					**$243,146,183**
		Contract Cost Allowances (Sum of):	10%	+/-			$26,853,817
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$270,000,000**
		Construction Contingencies	15%	+/-			$40,000,000
		FIELD COST					**$310,000,000**
		Non-Contract Costs	17%	+/-			$50,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$360,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$410,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY** Mike Egge	**CHECKED** 42650
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED** December 2016	**PEER REVIEW / DATE**

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET**

FEATURE: **NODOS Project** **Sites Reservoir - Develop Reservoir Area** **Land and Rights** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Land and Rights**					
		Procure reservoir property and land					
		required for relocation of homes and					
		businesses outside reservoir					
		Land costs extracted from the Real Estate					
		Plan included in Appendix D of the NODOS					
		Feasibility Study)					
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY** Mike Egge	**CHECKED** 0
DATE PREPARED	**PEER REVIEW / DATE** 10/07/16	**DATE PREPARED** October 2016	**PEER REVIEW / DATE**

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET** SHEET 3 OF _ _

FEATURE: **NODOS Project** **Sites Reservoir - Develop Reservoir Area** **Public Road Relocation** *Sheet 1* **Civil**	**PROJECT:** **NODOS Alternative D** **WOID:** **ESTIMATE LEVEL:** **REGION:** **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA

PLANT ACCOUNT	PAY ITEM	DESCRIPTION				UNIT PRICE	AMOUNT
110		**Public Road Relocation**					
		Relocate in-reservoir public roads					
		around reservoir, construct road access to					
		new South Bridge.					
		PAVED -- S. Bridge Approaches - Including Stone Corral Rd. to E. Bridge Approach					
	1	Clearing and Grubbing		48	acre	$5,299.50	$254,376
	2	Earthwork - common cut		470,682	yd3	$9.01	$4,240,445
	3	Earthwork - rock cut		470,682	yd3	$22.26	$10,476,393
	4	Compacted embankment - fill		735,188	yd3	$10.60	$7,792,258
	5	Class 4 Aggregate subbase		15,920	ton	$12.72	$202,483
	6	Class 2 Aggregate base		34,500	ton	$21.20	$731,331
	7	Asphalt concrete (24' wide, 4" thick)		19,330	ton	$74.19	$1,434,151
	8	Culverts (6' dia. X 100' length)		1	Allow	$75,000.00	$75,000
	9	Guardrail		22,280	LF	$60.00	$1,336,800
	10	Striping, Signage, Misc.		1	Allow	$50,000.00	$50,000
		PAVED -- Eastside Road - Maxwell Sites Road to Stone Corral Rd.					
	1	Clearing and Grubbing		14	acre	$5,299.50	$74,193
	2	Earthwork - common cut		30,300	yd3	$9.01	$272,977
	3	Earthwork - rock cut		15,200	yd3	$22.26	$338,320
	4	Compacted embankment - fill		14,500	yd3	$10.60	$153,686
	5	Class 4 Aggregate subbase		7,400	ton	$12.72	$94,119
	6	Class 2 Aggregate base		7,400	ton	$21.20	$156,865
	7	Asphalt concrete (24' wide, 4" thick)		3,600	ton	$74.19	$267,095
	8	Fencing Right of Way		2	mi	$52,995.00	$116,589
	9	Striping, Signage, Misc.		8	acre	$1,271.88	$10,175
		SUBTOTAL THIS SHEET					**$28,077,255**

QUANTITIES		**PRICES**	
BY Dams	**CHECKED** David Hughes	**BY** Mike Egge	**CHECKED** 0
DATE PREPARED	**PEER REVIEW / DATE** 10/07/16	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** Joe Barnes

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Sites Reservoir - Develop Reservoir Area** **Public Road Relocation** *Sheet 2* **Civil**	**PROJECT:** **NODOS Alternative D** **WOID:** / **ESTIMATE LEVEL:** **REGION:** / **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
110		**Public Road Relocation - Continued**					
		PAVED -- Eastside Road - Stone Corral Rd to and Including Access Roads					
	1	Clearing and Grubbing		36	acre	$5,299.50	$190,782
	2	Earthwork - common cut		75,300	yd3	$9.01	$678,389
	3	Earthwork - rock cut		37,600	yd3	$22.26	$836,897
	4	Compacted embankment - fill		87,400	yd3	$10.60	$926,353
	5	Class 4 Aggregate subbase		19,600	ton	$12.72	$249,288
	6	Class 2 Aggregate base		19,600	ton	$21.20	$415,481
	7	Asphalt concrete (24' wide, 4" thick)		9,500	Ton	$74.19	$704,834
	8	Culverts (6' dia. X 100' length)		2	ea.	$42,396.00	$84,792
	9	Fencing Right of Way		6	mi	$52,995.00	$312,671
	10	Striping, Signage, Misc.		22	acre	$1,271.88	$27,981
		PAVED -- Sulphur Gap Road - Maxwell Sites Road to Lurline Road					
	1	Clearing and Grubbing			acre	$5,299.50	$0
	2	Earthwork - common cut			yd3	$9.01	$0
	3	Earthwork - rock cut			yd3	$22.26	$0
	4	Compacted embankment - fill			yd3	$10.60	$0
	5	Class 4 Aggregate subbase			ton	$12.72	$0
	6	Class 2 Aggregate base			ton	$21.20	$0
	7	Asphalt concrete (24' wide, 4" thick)			ton	$74.19	$0
	8	Culverts (6' dia. X 100' length)			ea.	$42,396.00	$0
	9	Fencing Right of Way			mi	$52,995.00	$0
	10	Striping, Signage, Misc.			acre	$1,271.88	$0
		SUBTOTAL THIS SHEET					**$4,427,467**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE:			**PROJECT:**				
NODOS Project			**NODOS Alternative D**				
Sites Reservoir - Develop Reservoir Area							
Public Road Relocation			**WOID:**		**ESTIMATE LEVEL:**		
Sheet 3			**REGION:**		**UNIT PRICE LEVEL:**		
Civil			**FILE:**	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams			

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
110		**Public Road Relocation - continued**					
		PAVED -- Lurline Road - Sulphur Gap Road to Lurline Headwaters Rec Area					
	1	Clearing and Grubbing			acre	$5,299.50	$0
	2	Earthwork - common cut			yd3	$9.01	$0
	3	Earthwork - rock cut			yd3	$22.26	$0
	4	Compacted embankment - fill			yd3	$10.60	$0
	5	Class 4 Aggregate subbase			ton	$12.72	$0
	6	Class 2 Aggregate base			ton	$21.20	$0
	7	Asphalt concrete (24' wide, 4" thick)			ton	$74.19	$0
	8	Culverts (6' dia. X 100' length)			ea.	$42,396.00	$0
	9	Fencing Right of Way			mi	$52,995.00	$0
	10	Striping, Signage, Misc.			acre	$1,271.88	$0
		PAVED -- Temporary North Road					
	1	Clearing and Grubbing		75	acre	$5,299.50	$397,463
	2	Excavation		482,081	CY	$9.01	$4,343,550
	3	Fill		317,072	CY	$10.60	$3,360,963
	4	Class 4 Aggregate subbase		80,850	ton	$12.72	$1,028,412
	5	Class 2 Aggregate base		91,620	ton	$21.20	$1,942,344
	6	Asphalt concrete (24' wide, 4" thick)		64,200	ton	$74.19	$4,762,998
	7	Guardrail		27,435	LF	$60.00	$1,646,100
	8	Striping, Signage, Misc.		1	Allow	$100,000.00	$100,000
		SUBTOTAL THIS SHEET					**$17,581,830**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
Sites Reservoir - Develop Reservoir Area
Public Road Relocation
Sheet 4

Civil

PROJECT: **NODOS Alternative D**

WOID: | **ESTIMATE LEVEL:**

REGION: | **UNIT PRICE LEVEL:**

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
110		**Public Road Relocation - continued**					
		GRAVEL - Huffmaster Road South 5.5 Miles					
	1	Clearing and Grubbing			acre	$5,299.50	$0
	2	Earthwork - Grade 20' Wide			SF	$0.40	$0
	3	Earthwork - rock cut			yd3	$22.26	$0
	4	Compacted embankment - fill			yd3	$10.60	$0
	5	Class 4 Aggregate subbase			ton	$12.72	$0
	6	Class 2 Aggregate base - 6"			ton	$21.20	$0
	7	Asphalt concrete (24' wide, 4" thick)			ton	$74.19	$0
	8	Culverts (6' dia. X 100' length)			Allow	$100,000.00	$0
	9	Fencing Right of Way			mi	$52,995.00	$0
	10	Striping, Signage, Misc.			Allow	$25,000.00	$0
		GRAVEL -- Huffmaster to Leesville Rd. South End of Reservoir					
							$0
	1	Clearing and Grubbing			acre	$5,299.50	$0
	2	Earthwork - common cut			yd3	$9.01	$0
	3	Earthwork - rock cut			yd3	$22.26	$0
	4	Compacted embankment - fill			yd3	$10.60	$0
	5	Class 4 Aggregate subbase			ton	$12.72	$0
	6	Class 2 Aggregate base			ton	$21.20	$0
	7	Culverts (6' dia. X 100' length)			ea.	$42,396.00	$0
	8	Fencing Right of Way			mi	$52,995.00	$0
	9	Striping, Signage, Misc.			acre	$1,271.88	$0
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Sites Reservoir - Develop Reservoir Area** **South Bridge Construction** **Structural**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
110		**South Bridge Construction**					
	1	Grade temporary access pathway		150,000	ft2	$0.37	$55,645
	2	Layout		15	Days	$3,750.00	$56,250
	3	Caissons - Drill and Concrete & Rebar 48"		34,560	lft	$525.00	$18,144,000
	4	Add for rock sockets		8,640	lft	$250.00	$2,160,000
	5	Caissons - mobilization, Testing & moves		1	allow	$420,000.00	$420,000
	6	Caisson Observation tubes		864	Piles	$5,000.00	$4,320,000
	7	Excavate for Footings		81,835	yd3	$3.47	$283,629
	8	Footing Concrete		43,157	yd3	$234.27	$10,110,468
	9	Footing Formwork		65,280	SF	$14.02	$915,226
	10	Footing Rebar at 1.5% by Weight		8,631,467	lb.	$1.35	$11,652,480
	11	Backfill Footings		38,677	yd3	$32.52	$1,257,952
	12	Bridge Section 1					
	13	Structural excavation at abutments		1	LS	$154,300.00	$154,300
	14	Structural backfill		1	LS	$116,800.00	$116,800
	15	Structural Concrete for Bridge 1		16,920	CY	$705.88	$11,943,549
	16	Abutment Foundations		196	Cy	$436.27	$85,509
	17	Structural approach slab		78	CY	$800.00	$62,400
	18	Seal Joint Assembly		350	lft	$185.00	$64,750
	19	Reinforcing Steel		5,082,800	Lb	$1.35	$6,861,780
	20	Abutment caisson - 24"		2,240	lft	$130.00	$291,200
	21	Concrete barrier - Type 736		8,220	lft	$175.00	$1,438,500
	22	Precast box girder		141,750	SF	$150.00	$21,262,500
	23	Lighting		1	Allow	$140,000.00	$140,000
	24	Signage		1	allow	$15,000.00	$15,000
		SUBTOTAL THIS SHEET					**$91,811,937**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Syed Kazmi	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
11/22/16	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET**

FEATURE: **NODOS Project** **Sites Reservoir - Develop Reservoir Area** **South Bridge Construction** **Structural**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
110		**South Bridge Construction**					
		Bridge Section 2					
	1	Structural excavation at abutments		1	LS	$154,300.00	$154,300
	2	Structural backfill		1	LS	$116,800.00	$116,800
	3	Structural Concrete for Bridge 1		15,495	CY	$705.88	$10,937,665
	4	Abutment Foundations		196	Cy	$436.27	$85,509
	5	Structural approach slab		78	CY	$800.00	$62,400
	6	Seal Joint Assembly		350	lft	$185.00	$64,750
	7	Reinforcing Steel		4,654,250	Lb	$1.35	$6,283,238
	8	Abutment caisson - 24"		2,240	lft	$130.00	$291,200
	9	Concrete barrier - Type 736		7,020	lft	$175.00	$1,228,500
	10	Precast box girder		141,750	SF	$150.00	$21,262,500
	11	Lighting		1	Allow	$125,000.00	$125,000
	12	Signage		1	allow	$15,000.00	$15,000
		SUBTOTAL THIS SHEET					**$40,626,861**

QUANTITIES		**PRICES**	
BY Syed Kazmi	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED 11/22/16	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Sites Reservoir - Develop Reservoir Area	
Reservoir Clearing/Demolition	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
120		**Reservoir Clearing/Demolition**					
		Reservoir clearing, including structure					
		demolition, fence removal, septic system					
		removal, water well plugging, gas well					
		plugging and the like.					
	1	Vegetation - Oak Woodland		700	acre	$5,300.00	$3,710,000
	2	Vegetation & Misc. - Occupied Areas		61	acre	$6,000.00	$366,000
	3	Demolish Houses		26	EA	$11,700.00	$304,200
	4	Remove Motor Homes		2	Ea.	$4,500.00	$9,000
	5	Demolish and clean Septic Systems		28	Ea.	$5,000.00	$140,000
	6	Plug Groundwater wells		38	EA	$12,500.00	$475,000
	7	Demolish Barns		31	EA	$13,500.00	$418,500
	8	Demolish Out-buildings - Sheds & Garages		37	EA	$2,700.00	$99,900
	9	Demolish silos & water towers		12	EA	$10,000.00	$120,000
	10	Gas Well Decommissioning		8,000	LB	$7.50	$60,000
	11	Underground Fuel Tanks		15	EA	$25,000.00	$375,000
	12	Remove Metal Fencing and Posts (No Salvage)		40	mile	$10,600.00	$424,000
	13	Remove Asphalt Paving (Two-Lane Roads)		57,547	yd2	$7.95	$457,496
		SUBTOTAL THIS SHEET					**$6,959,096**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **Reservoir and Dams**
NODOS Project
Sites Reservoir - Develop Reservoir Area
Project Roads
Sheet 1
(Additional project roads other than public roads or or public road relocations)
Civil

PROJECT: **NODOS Alternative D**

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:
FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
140		**Project Roads**					
		GRAVEL -- North Road - Road 69 @ TCC to Saddle Dam 9					
	1	**Clearing and Grubbing**		79	acre	$5,299.50	$418,661
	2	Earthwork - common cut		175,000	yd3	$9.01	$1,576,601
	3	Earthwork - rock cut		88,000	yd3	$22.26	$1,958,695
	4	Compacted embankment - fill		232,000	yd3	$10.60	$2,458,968
	5	Class 4 Aggregate subbase		43,000	ton	$12.72	$546,908
	6	Class 2 Aggregate base		43,000	ton	$21.20	$911,514
	7	Culverts (6' dia. X 100' length)		5	ea.	$42,396.00	$211,980
	8	Fencing Right of Way		13	mi	$52,995.00	$694,235
	9	Striping, Signage, Misc.		47	acre	$1,271.88	$59,778
		GRAVEL -- Peninsula Road - Sites Lodoga Road to Pen Hills Rec Area South Access					
	1	Clearing and Grubbing		18	acre	$5,299.50	$95,391
	2	Earthwork - common cut		160,000	yd3	$9.01	$1,441,464
	3	Earthwork - rock cut		80,000	yd3	$22.26	$1,780,632
	4	Compacted embankment - fill		97,000	yd3	$10.60	$1,028,103
	5	Class 4 Aggregate subbase		9,700	ton	$12.72	$123,372
	6	Class 2 Aggregate base		9,700	ton	$21.20	$205,621
	7	Fencing Right of Way		3	mi	$52,995.00	$153,686
	8	Striping, Signage, Misc.		11	acre	$1,271.88	$13,991
		SUBTOTAL THIS SHEET					**$13,679,599**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
Sites Reservoir - Develop Reservoir Area
Project Roads
Sheet 2

Civil

PROJECT: **NODOS Alternative D**

WOID: | **ESTIMATE LEVEL:**
REGION: | **UNIT PRICE LEVEL:**

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
140		**Project Roads - Continued**					
140		**GRAVEL -- Eastside Road - Golden Gate Dam Access Roads to N. Property**					
	1	Clearing and Grubbing		18	acre	$5,299.50	$95,391
	2	Earthwork - common cut		26,000	yd3	$9.01	$234,238
	3	Earthwork - rock cut		13,000	yd3	$22.26	$289,353
	4	Compacted embankment - fill		68,400	yd3	$10.60	$724,972
	5	Class 4 Aggregate subbase		10,000	ton	$12.72	$127,188
	6	Class 2 Aggregate base		10,000	ton	$21.20	$211,980
	7	Culverts (6' dia. X 100' length)		2	ea.	$42,396.00	$84,792
	8	Fencing Right of Way		3	mi	$52,995.00	$158,985
	9	Striping, Signage, Misc.		11	acre	$1,271.88	$13,991
140		**GRAVEL -- Eastside Road - North Property to North Road**					
	1	Clearing and Grubbing		44	acre	$5,299.50	$233,178
	2	Earthwork - common cut		119,200	yd3	$9.01	$1,073,891
	3	Earthwork - rock cut		59,600	yd3	$22.26	$1,326,571
	4	Compacted embankment - fill		436,500	yd3	$10.60	$4,626,464
	5	Class 4 Aggregate subbase		24,000	ton	$12.72	$305,251
	6	Class 2 Aggregate base		24,000	ton	$21.20	$508,752
	7	Culverts (6' dia. X 100' length)		3	ea.	$42,396.00	$127,188
	8	Fencing Right of Way		7	mi	$52,995.00	$386,864
	9	Striping, Signage, Misc.		26	acre	$1,271.88	$33,069
		SUBTOTAL THIS SHEET					**$10,562,115**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Sites Reservoir - Develop Reservoir Area	
Project Roads	**WOID:** / **ESTIMATE LEVEL:**
Sheet 3	**REGION:** / **UNIT PRICE LEVEL:**
Civil	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
140		**Project Roads - Continued**					
		GRAVEL -- Com Road - Lurline Rd. to Communication Tower					
	1	Clearing and Grubbing		36	acre	$5,299.50	$190,782
	2	Earthwork - common cut		73,000	yd3	$9.01	$657,668
	3	Earthwork - rock cut		36,500	yd3	$22.26	$812,413
	4	Compacted embankment - fill		335,900	yd3	$10.60	$3,560,204
	5	Class 4 Aggregate subbase		19,500	ton	$12.72	$248,017
	6	Class 2 Aggregate base		19,500	ton	$21.20	$413,361
	7	Culverts (6' dia. X 100' length)		1	ea.	$42,396.00	$42,396
	8	Fencing Right of Way		6	mi	$52,995.00	$312,671
	9	Striping, Signage, Misc.		21	acre	$1,271.88	$26,709
		SUBTOTAL THIS SHEET					**$6,264,221**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

SHEET 12 OF _ _

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
Sites Reservoir - Develop Reservoir Area	
Project Roads	WOID: / ESTIMATE LEVEL:
Sheet 4	REGION: / UNIT PRICE LEVEL:
Civil	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
140		**Project Roads - Continued**					
		GRAVEL -- Saddle Dam Road - North Road to Saddle Dam 1 - DELETE					
	1	Clearing and Grubbing		38	acre	$5,159.00	$196,042
	2	Earthwork - common cut		72,300	yd3	$8.77	$634,071
	3	Earthwork - rock cut		36,200	yd3	$21.67	$784,454
	4	Compacted embankment - fill		35,700	yd3	$10.32	$368,424
	5	Class 4 Aggregate subbase		21,000	ton	$12.38	$259,980
	6	Class 2 Aggregate base		21,000	ton	$20.64	$433,440
	7	Fencing Right of Way		6	mi	$51,590.00	$325,017
	8	Striping, Signage, Misc.		23	acre	$1,238.16	$28,478
		GRAVEL -- Stone Corral Road - Stone Corral Rd. to Stone Corral Rec Area					
	1	Clearing and Grubbing		3	acre	$5,159.00	$15,477
	2	Earthwork - common cut		51,800	yd3	$8.77	$454,286
	3	Earthwork - rock cut		25,900	yd3	$21.67	$561,253
	4	Compacted embankment - fill		1,800	yd3	$10.32	$18,576
	5	Class 4 Aggregate subbase		1,700	ton	$12.38	$21,046
	6	Class 2 Aggregate base		1,700	ton	$20.64	$35,088
	7	Fencing Right of Way		1	mi	$51,590.00	$25,795
	8	Striping, Signage, Misc.		2	acre	$1,238.16	$2,476
		SUBTOTAL THIS SHEET					**$4,163,903**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
Sites Reservoir - Develop Reservoir Area
Project Roads
Sheet 5

Civil

PROJECT:
NODOS Alternative D

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
140		**Project Roads - Continued**					
140		**PAVED -- GOLDEN GATE ACCESS ROADS (PRIVATE ACCESS)**					
	1	Clearing and Grubbing		18	acre	$5,159.00	$92,862
	2	Earthwork - common cut		139,000	yd3	$8.77	$1,219,030
	3	Earthwork - rock cut		69,500	yd3	$21.67	$1,506,065
	4	Compacted embankment - fill		114,000	yd3	$10.32	$1,176,480
	5	Class 4 Aggregate subbase		9,700	ton	$12.38	$120,086
	6	Class 2 Aggregate base		9,700	ton	$20.64	$200,208
	7	Asphalt concrete (24' wide, 4" thick)		4,700	ton	$72.23	$339,481
	8	Culverts (6' dia. X 100' length)		1	ea.	$41,272.00	$41,272
	9	Fencing Right of Way		3	mi	$51,590.00	$149,611
	10	Striping, Signage, Misc.		11	acre	$1,238.16	$13,620
		GRAVEL -- SADDLE DAM ACCESS ROADS (PRIVATE ACCESS)					
	1	Clearing and Grubbing		7	acre	$5,159.00	$36,113
	2	Earthwork - common cut		94,500	yd3	$8.77	$828,765
	3	Earthwork - rock cut		47,200	yd3	$21.67	$1,022,824
	4	Compacted embankment - fill		49,600	yd3	$10.32	$511,872
	5	Class 4 Aggregate subbase		3,800	ton	$12.38	$47,044
	6	Class 2 Aggregate base		3,800	ton	$20.64	$78,432
	7	Culverts (6' dia. X 100' length)		1	ea.	$41,272.00	$41,272
	8	Fencing Right of Way		1	mi	$51,590.00	$61,908
	9	Striping, Signage, Misc.		4	acre	$1,238.16	$4,953
		SUBTOTAL THIS SHEET					**$7,491,897**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Sites Reservoir - Main Dam Construction** **(Includes diversion of Funks and Stone Corral Creeks, and construction of Sites and Golden gate dams.)**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
150		Creek Diversion During Construction					$11,167,433
151		Construct Sites Dam					$99,986,705
151		Construct Golden Gate Dam					$278,294,259
151		Rim Grouting					$2,465,134
		Subtotal					**$391,913,532**
		Mobilization	5%	+/-			$19,500,000
		Subtotal with Mobilization					**$411,413,532**
		Contract Cost Allowances (Sum of):	10%	+/-			$38,586,468
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$450,000,000**
		Construction Contingencies	15%	+/-			$70,000,000
		FIELD COST					**$520,000,000**
		Non-Contract Costs	17%	+/-			$90,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$610,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$700,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Sites Reservoir - Main Dam Construction** **Creek Diversion During Construction** *(In-reservoir channel cut connecting Sites and Stone Corral Creeks, tunnel through Sites Dam abutment.)* **Civil**	**PROJECT:** **NODOS Alternative D** **WOID:** / **ESTIMATE LEVEL:** **REGION:** / **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
150		**Channel Excavation Joining Funks Creek and Stone Corral Creek**					
	1	Mass Excavation		650,000	yd3	$3.71	$2,411,273
	2	Containment embankment (cofferdams)		0	yd3	$5.30	$0
	3	Rip Rap Energy dissipation		3,000	yd3	$19.08	$57,235
		Creek Diversion Tunnel at Sites Dam					
	1	Tunnel Excavation		28,500	yd3	$23.48	$669,088
	2	Haul Excavated Material - 1 Mile		28,500	yd3	$26.53	$756,085
	3	Portal Slab		60	yd3	$390.73	$23,444
	4	Portal Walls & Ceiling		240	yd3	$577.25	$138,540
	5	Portal entrance walls		43	yd3	$577.25	$24,822
	6	Shotcrete		7,260	yd3	$567.05	$4,116,758
	7	Mesh		215,500	ft2	$1.17	$251,249
	8	Portal Entrance Wall Rebar 8%		13,760	lb	$1.35	$18,576
	9	Portal Wall & Ceiling Rebar 6%		57,600	lb	$1.35	$77,760
	10	Portal Slab Rebar 1 PSF		1,600	lb	$1.35	$2,160
	11	Steel stiffeners in shotcrete section		50,000	lb	$5.30	$264,975
	12	Steel Stiffeners as required in tunnel		120	ton	$7,419.30	$890,316
	13	Rock Bolts as required		800	ea	$418.66	$334,928
	14	Concrete Entrance Plug		25	yd3	$544.79	$13,620
	15	24" Low level release pipe		5,000	LF	$121.89	$609,443
	16	Ball Valve 24"		1	ea	$46,635.60	$46,636
	17	SCADA & Power		1	allow	$26,497.50	$26,498
	18	Rip Rap at Discharge End		600	yd3	$21.20	$12,719
	19	24" Pipe Dissipation structure		1	allow	$15,898.50	$15,899
	20	24" Pipe Saddle Supports at 10' Spacing		500	ea	$741.93	$370,965
	21	24"Energy Dissipating Valve		1	ea	$34,446.75	$34,447
		SUBTOTAL THIS SHEET					**$11,167,433**

QUANTITIES		PRICES	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:

NODOS Project

Sites Reservoir - Main Dam Construction

Construct Sites Dam

Civil

PROJECT:

NODOS Alternative D

WOID:

ESTIMATE LEVEL:

REGION:

UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Sites Dam**					
		(Clearing included with Sites Reservoir)					
	1	Develop borrow area and temporary haul roads		1	ls	$1,168,159.25	$1,168,159
	2	Strip foundation areas		30	acre	$2,167.00	$65,010
	3	Foundation Excavation		793,500	cy	$13.63	$10,815,654
	4	Foundation Grouting					
	5	Furnish/handle cement material (Cement Type III)		63,604	bag	$17.70	$1,125,812
	6	Construct grout cap		4,955	cy	$234.27	$1,160,808
	7	Drill setup for all holes		843	ea.	$753.80	$635,454
	8	Drill curtain grout holes		84,805	LF	$27.06	$2,294,759
	9	Hookup to grout holes and grout nipples		843	ea.	$203.66	$171,685
	10	Inject Portland cement grout		1,800	hr	$498.26	$896,866
	11	Perform hydraulic conductivity tests		500	ea.	$323.68	$161,839
	12	Embankment Construction					
	13	Core zone (1 mile haul)		1,070,000	cy	$11.01	$11,783,226
	14	Filter drain and transition zones (35 mile haul)		852,400	ton	$31.74	$27,058,590
	15	Rock fill Zone 3 (1 mile haul)		1,180,500	cy	$22.90	$27,038,690
	16	Random fill Zone 4 (1 mile haul)		1,085,000	cy	$6.01	$6,520,452
	17	Unlisted Items		10%			$9,089,700
		SUBTOTAL THIS SHEET					**$99,986,705**

QUANTITIES		PRICES	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Sites Reservoir - Main Dam Construction** **Construct Golden Gate Dam** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Golden Gate Dam**					
		(Clearing included with Sites Reservoir)					
	1	Develop borrow area and temporary haul roads		1	ls	$1,168,159.25	$1,168,159
	2	Clear and grub		50	acre	$2,167.00	$108,350
	3	Foundation Excavation		2,910,000	cy	$13.63	$39,664,214
	4	Foundation Grouting					
	5	Furnish/handle cement material (Cement Type III)		139,200	bag	$17.70	$2,463,886
	6	Construct grout cap		10,907	cy	$234.27	$2,555,183
	7	Drill setup for all holes		1,700	ea.	$753.80	$1,281,461
	8	Drill curtain grout holes		185,600	LF	$27.06	$5,022,196
	9	Hookup to grout holes and grout nipples		1,700	ea.	$203.66	$346,222
	10	Inject Portland cement grout		4,350	hr	$498.26	$2,167,427
	11	Perform hydraulic conductivity tests		1,160	ea.	$323.68	$375,466
	12	Embankment Construction					
	13	Core zone (1 mile haul)		3,460,000	cy	$11.01	$38,102,769
	14	Filter drain and transition zones (35 mile haul)		2,494,000	ton	$31.74	$79,169,548
	15	Rock fill Zone 3 (1 mile haul)		2,870,000	cy	$22.90	$65,735,740
	16	Random fill Zone 4 (1 mile haul)		1,470,000	cy	$6.01	$8,834,161
	17	Rim Grouting north of main dam		100,000	lft	$60.00	$6,000,000
	18	Unlisted Items		10%			$25,299,478
		SUBTOTAL THIS SHEET					**$278,294,259**

QUANTITIES		PRICES	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE: **NODOS Project** **Sites Reservoir - Main Dam Construction** **Construct Golden Gate Dam** **Civil**	**PROJECT:** **NODOS Alternative D** **WOID:** / **ESTIMATE LEVEL:** **REGION:** / **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Main Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Reservoir Rim Grouting**					
		(Clearing included with Sites Reservoir)					
	1						$0
	2	Clear and grub		2	acre	$2,167.00	$4,334
		Rim Grouting					
	3	Furnish/handle cement material (Cement Type III)		18,750	bag	$17.70	$331,881
	4	Construct grout cap		2,700	cy	$234.27	$632,529
	5	Drill setup for all holes		450	ea.	$753.80	$339,210
	6	Drill curtain grout holes		25,000	LF	$27.06	$676,481
	7	Hookup to grout holes and grout nipples		450	ea.	$203.66	$91,647
	8	Inject Portland cement grout		586	hr	$498.26	$291,949
	9	Perform hydraulic conductivity tests		300	ea.	$323.68	$97,103
		SUBTOTAL THIS SHEET					**$2,465,134**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE:			**PROJECT:**				
NODOS Project			**NODOS Alternative D**				
Sites Reservoir - Saddle Dam Construction							
Construct 9 Saddle Dams			**WOID:**		**ESTIMATE LEVEL:**		
			REGION:		**UNIT PRICE LEVEL:**		
Civil		**Summary Sheet**	**FILE:**	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Saddle Dams			

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		Construct Saddle Dam 1 - Sheet 1					$1,825,854
		Construct Saddle Dam 2 - Sheet 1					$2,282,885
		Construct Saddle Dam 3 - Sheet 2					$69,759,369
		Construct Saddle Dam 4 - Sheet 2					$394,534
		Construct Saddle Dam 5 - Sheet 3					$37,420,287
		Construct Saddle Dam 6 - Sheet 4					$7,489,381
		Construct Saddle Dam 7 - Sheet 5					$7,342,052
		Construct Saddle Dam 8 - Sheet 6					$42,050,649
		Construct Saddle Dam 9 - Sheet 6					$1,050,946
		(Note that the signal spillway cost is					
		included on Sheet 4 with Saddle Dam No. 6.)					
		Subtotal					**$169,615,957**
		Mobilization	5%	+/-			$8,500,000
		Subtotal with Mobilization					**$178,115,957**
		Contract Cost Allowances (Sum of):	10%	+/-			$16,884,043
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$195,000,000**
		Construction Contingencies	15%	+/-			$35,000,000
		FIELD COST					**$230,000,000**
		Non-Contract Costs	17%	+/-			$40,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$270,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$310,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE: **NODOS Project** **Sites Reservoir - Saddle Dam Construction** **Construct Saddle Dams** *Sheet 1* **Civil**	**PROJECT:** **NODOS Alternative D**		
	WOID:	**ESTIMATE LEVEL:**	
	REGION:	**UNIT PRICE LEVEL:**	
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Saddle Dams		

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Construct Saddle Dams (9 Required)**					
		(All land acquisition included with					
		Sites Reservoir)					
		Saddle Dam No. 1					
	1	Clear and grub		2	acre	$2,167.00	$4,334.00
	2	Foundation excavation		27,600	cy	$13.63	$376,196.67
		Embankment construction					
	3	Core (zone 1) 1 mi haul		27,600	cy	$14.82	$408,960.30
	4	Random (Zone 2) 1 mi haul		44,300	cy	$9.81	$434,790.06
	5	Rock fill (Zone 3) 3 mi haul		7,000	cy	$22.90	$160,331.07
	6	Filter and drain (Zone 4) 30 mi haul processed		13,900	ton	$31.74	$441,241.67
		Saddle Dam No. 2					
	1	Clear and grub		2	acre	$2,167.00	$4,334.00
	2	Foundation excavation		26,300	cy	$13.63	$358,477.26
		Embankment construction					
	3	Core (zone 1) 1 mi haul		25,300	cy	$14.82	$374,880.27
	4	Random (Zone 2) 1 mi haul		39,200	cy	$9.81	$384,735.22
	5	Rock fill (Zone 3) 3 mi haul		10,000	cy	$22.90	$229,044.39
	6	Filter and drain (Zone 4) 30 mi haul processed		11,300	ton	$31.74	$358,707.26
	7	Construct Slurry Wall					
	8	Slurry wall		2,000	cy	$286.35	$572,706.37
		SUBTOTAL THIS SHEET					**$4,108,739**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:

NODOS Project

Sites Reservoir - Saddle Dam Construction

Construct Saddle Dams

Sheet 2

Civil

PROJECT:

NODOS Alternative D

WOID:

ESTIMATE LEVEL:

REGION:

UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Saddle Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Construct Saddle Dams (9 Required) - Continued**					
		Saddle Dam No. 3					
	1	Clear and grub		40	acre	$2,167.00	$86,680
	2	Foundation excavation		512,000	cy	$12.98	$6,647,693
		Embankment construction				$0.00	$0
	3	Core (zone 1) 1 mi haul		832,000	cy	$11.01	$9,162,284
	4	Random (Zone 2) 1 mi haul		1,532,000	cy	$6.01	$9,206,758
	5	Rock fill (Zone 3) 3 mi haul		1,014,000	cy	$22.90	$23,225,101
	6	Filter and drain (Zone 4) 30 mi haul processed		340,000	ton	$31.74	$10,792,962
	7	Foundation Grouting					
	8	Furnish/handle cement material (Cement Type III)		17,300	bag	$17.70	$306,216
	9	Construct grout cap		8,500	cy	$242.99	$2,065,438
	10	Drill setup for all holes		3,100	ea	$753.80	$2,336,783
	11	Drill curtain grout holes		86,500	LF	$27.06	$2,340,625
	12	Hookup to grout holes and grout nipples		3,100	ea	$203.66	$631,345
	13	Inject Portland cement grout		2,600	hr	$498.26	$1,295,473
	14	Perform hydraulic conductivity tests		3,100	ea	$323.68	$1,003,399
	15	Construct Slurry Wall		2,300	cy	$286.35	$658,612
		Saddle Dam No. 4					
	1	Clear and grub		1	acre	$2,060.54	$2,061
	2	Foundation excavation		7,100	cy	$13.63	$96,775
		Embankment construction					
	3	Core (zone 1) 1 mi haul		7,700	cy	$14.82	$114,094
	4	Random (Zone 2) 1 mi haul		6,700	cy	$9.81	$65,758
	5	Rock fill (Zone 3) 3 mi haul		900	cy	$22.90	$20,614
	6	Filter and drain (Zone 4) 30 mi haul processed		3,000	ton	$31.74	$95,232
		SUBTOTAL THIS SHEET					**$70,153,903**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Sites Reservoir - Saddle Dam Construction	
Construct Saddle Dams	**WOID:** / **ESTIMATE LEVEL:**
Sheet 3	**REGION:** / **UNIT PRICE LEVEL:**
Civil	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Saddle Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Construct Saddle Dams (9 Required) - Continued**					
		Saddle Dam No. 5					
	1	Clear and grub		20	acre	$2,167.00	$43,340
	2	Foundation excavation		270,000	cy	$13.63	$3,680,185
		Embankment construction					
	3	Core (zone 1) 1 mi haul		378,000	cy	$14.82	$5,600,978
	4	Random (Zone 2) 1 mi haul		557,000	cy	$9.81	$5,466,773
	5	Rock fill (Zone 3) 3 mi haul		445,000	cy	$22.90	$10,192,475
	6	Filter and drain (Zone 4) 30 mi haul processed		214,200	ton	$31.74	$6,799,566
	7	Foundation Grouting					
	8	Furnish/handle cement material (Cement Type III)		8,500	bag	$17.70	$150,453
	9	Construct grout cap		5,100	cy	$242.99	$1,239,263
	10	Drill setup for all holes		1,400	ea	$753.80	$1,055,321
	11	Drill curtain grout holes		42,400	LF	$27.06	$1,147,312
	12	Hookup to grout holes and grout nipples		1,400	ea	$203.66	$285,124
	13	Inject Portland cement grout		1,300	hr	$498.26	$647,737
	14	Perform hydraulic conductivity tests		1,400	ea	$323.68	$453,148
	15	Slurry wall					
	16	Construct Slurry wall		2,300	cy	$286.35	$658,612
		SUBTOTAL THIS SHEET					**$37,420,287**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET**

FEATURE: **NODOS Project** **Sites Reservoir - Saddle Dam Construction** **Construct Saddle Dams** *Sheet 4* **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Saddle Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Construct Saddle Dams (9 Required) - Continued**					
		Saddle Dam No. 6					
		(Including signal spillway)					
	1	Clear and grub		3	acre	$2,167.00	$6,501
	2	Foundation excavation		36,000	cy	$13.63	$490,691
		Embankment construction					
	3	Core (zone 1) 1 mi haul		40,200	cy	$14.82	$595,660
	4	Random (Zone 2) 1 mi haul		39,000	cy	$9.81	$382,772
	5	Rock fill (Zone 3) 3 mi haul		50,000	cy	$22.90	$1,145,222
	6	Filter and drain (Zone 4) 30 mi haul processed		13,100	ton	$31.74	$415,846
	7	Foundation Grouting					
	8	Furnish/handle cement material (Cement Type III)		1,100	bag	$17.70	$19,470
	9	Construct grout cap		1,200	cy	$242.99	$291,591
	10	Drill setup for all holes		370	ea	$753.80	$278,906
	11	Drill curtain grout holes		5,500	LF	$27.06	$148,826
	12	Hookup to grout holes and grout nipples		370	ea	$203.66	$75,354
	13	Inject Portland cement grout		170	hr	$498.26	$84,704
	14	Perform hydraulic conductivity tests		370	ea	$323.68	$119,761
	15	Construct Signal Spillway					
	16	Signal Spillway		1	ls	$3,434,076.00	$3,434,076
		SUBTOTAL THIS SHEET					**$7,489,381**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Sites Reservoir - Saddle Dam Construction** **Construct Saddle Dams** *Sheet 5* **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: | **ESTIMATE LEVEL:**
	REGION: | **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Saddle Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Construct Saddle Dams (9 Required) - Continued**					
		Saddle Dam No. 7					
	1	Clear and grub		5	acre	$2,167.00	$10,835
	2	Foundation excavation		67,000	cy	$13.63	$913,231
		Embankment construction					
	3	Core (zone 1) 1 mi haul		60,500	cy	$14.82	$896,453
	4	Random (Zone 2) 1 mi haul		41,000	cy	$9.81	$402,402
	5	Rock fill (Zone 3) 3 mi haul		61,000	cy	$22.90	$1,397,171
	6	Filter and drain (Zone 4) 30 mi haul processed		57,800	ton	$31.74	$1,834,803
	7	Foundation Grouting					
	8	Furnish/handle cement material (Cement Type III)		2,100	bag	$17.70	$37,171
	9	Construct grout cap		2,300	cy	$242.99	$558,883
	10	Drill setup for all holes		670	ea	$753.80	$505,047
	11	Drill curtain grout holes		10,100	LF	$27.06	$273,298
	12	Hookup to grout holes and grout nipples		670	ea	$203.66	$136,452
	13	Inject Portland cement grout		320	hr	$498.26	$159,443
	14	Perform hydraulic conductivity tests		670	ea	$323.68	$216,864
		SUBTOTAL THIS SHEET					**$7,342,052**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET**

FEATURE: **NODOS Project** **Sites Reservoir - Saddle Dam Construction** **Construct Saddle Dams** *Sheet 6* **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: | **ESTIMATE LEVEL:**
	REGION: | **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Saddle Dams

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Construct Saddle Dams (9 Required) - Continued**					
		Saddle Dam No. 8					
	1	Clear and grub		30	acre	$2,167.00	$65,010
	2	Foundation excavation		373,000	cy	$13.63	$5,084,107
		Embankment construction					
	3	Core (zone 1) 1 mi haul		542,000	cy	$11.01	$5,968,700
	4	Random (Zone 2) 1 mi haul		706,000	cy	$6.01	$4,242,801
	5	Rock fill (Zone 3) 3 mi haul		504,000	cy	$22.90	$11,543,837
	6	Filter and drain (Zone 4) 30 mi haul processed		282,200	ton	$31.74	$8,958,158
	7	Foundation Grouting					
	8	Furnish/handle cement material (Cement Type III)		9,900	bag	$17.70	$175,233
	9	Construct grout cap		6,700	cy	$242.99	$1,628,051
	10	Drill setup for all holes		1,800	ea	$753.80	$1,356,842
	11	Drill curtain grout holes		49,200	LF	$27.06	$1,331,315
	12	Hookup to grout holes and grout nipples		1,800	ea	$203.66	$366,588
	13	Inject Portland cement grout		1,500	hr	$498.26	$747,388
	14	Perform hydraulic conductivity tests		1,800	ea	$323.68	$582,619
		Saddle Dam No. 9					
	1	Clear and grub		2	acre	$2,167.00	$4,334
	2	Foundation excavation		19,000	cy	$13.63	$258,976
		Embankment construction					
	3	Core (zone 1) 1 mi haul		16,600	cy	$14.82	$245,969
	4	Random (Zone 2) 1 mi haul		20,500	cy	$9.81	$201,201
	5	Rock fill (Zone 3) 3 mi haul		3,500	cy	$22.90	$80,166
	6	Filter and drain (Zone 4) 30 mi haul processed		8,200	ton	$31.74	$260,301
		SUBTOTAL THIS SHEET					**$43,101,595**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Holthouse Reservoir	
Construct Holthouse Reservoir	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil — **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Holthouse Dam

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights					$0
110		Relocations					$26,976,105
151		Construct Holthouse Dam					$77,628,972
152		Spillway Chute, Energy Dissipation Basin, I/O Structure					$6,149,727
153		T-C Canal Connections to Holthouse					$2,811,468
170		Accessory Electrical equipment					$3,024,818
		Subtotal					**$116,591,089**
		Mobilization	5%	+/-			$5,800,000
		Subtotal with Mobilization					**$122,391,089**
		Contract Cost Allowances (Sum of):	10%	+/-			$12,608,911
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$135,000,000**
		Construction Contingencies	15%	+/-			$25,000,000
		FIELD COST					**$160,000,000**
		Non-Contract Costs	17%	+/-			$30,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$190,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$220,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET** SHEET 26 OF _ _

FEATURE: **NODOS Project** **Holthouse Reservoir** **Land and Rights** **Civil**	**PROJECT:** **NODOS Alternative D**
WOID:	**ESTIMATE LEVEL:**
REGION:	**UNIT PRICE LEVEL:**
FILE:	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Holthouse Dam

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Land and Rights**					
		Included with Sites Reservoir					
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		PRICES	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE: **NODOS Project** **Holthouse Reservoir** **Facility Relocations** *(WAPPA Line and TCCA bypass pipeline through expanded Holthouse)* **Civil**			**PROJECT:** **NODOS Alternative D**				
			WOID:		**ESTIMATE LEVEL:**		
			REGION:		**UNIT PRICE LEVEL:**		
			FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Holthouse Dam				

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
110		**Relocate WAPA Transmission Line**					
	1	Remove Transmission Line - West Run		8,748	LF	$85.50	$747,954
	2	Remove Transmission Line - East Run		7,778	LF	$85.50	$665,019
	3	Install New Overhead Lines over Holdhouse		16,900	LF	$910.19	$15,382,282
110		**Provide TCCA Bypass Pipe through Reservoir**					
	1	Clearing & Grubbing		55	acre	$2,167.00	$119,185
	2	Cut, Demo, & Remove Concrete Apron @ Intake		667	ft2	$18.44	$12,301
	3	Mass Excavation - Pipeline Installation		22,295	yd3	$3.47	$77,272
	4	144" Pipeline Installation		2,624	lft	$2,822.51	$7,406,276
	5	Concrete Pour Back @ Apron - Excl Reinforcing		17	yd3	$390.73	$6,447
	6	Concrete Pour Back @ Apron - Reinforcing (1 lb./sf by weight)		16	yd3	$54.68	$897
	7	Pipe Bedding Transit		2,938	yd3	$23.96	$70,407
	8	Pipe Bedding Placement		2,938	yd3	$147.45	$433,218
	9	Backfill Hauling		28,003	yd3	$1.47	$41,256
	10	Spreading of Backfill for Compaction		25,457	yd3	$0.87	$22,125
	11	Compacted Fill - Pipe Zone		25,457	yd3	$0.55	$14,031
	12	Water & Optimization Treatment for Trench Backfill Material		25,457	yd3	$1.60	$40,743
	13	Misc Metals - Exclusion Screen @ Bypass Intake		865	lb	$5.50	$4,758
	14	SCADA @ Gates		1	allow	$52,995.00	$52,995
	15	Gate Structure @ Bypass Intake - Slab & Ftgs		600	yd3	$312.50	$187,500
	16	Gate Structure @ Bypass Intake - Walls		500	yd3	$605.29	$302,645
	17	Gates		3	ea	$370,965.00	$1,112,895
	18	Gates Structure, Misc Metals		1	allow	$52,995.00	$52,995
	19	Electrical @ Gate Structure		1	allow	$52,995.00	$52,995
	20	Hazard Comm Signage		1	allow	$1,500.00	$1,500
	21	Levee Road Replacement - Gravel - Subbase - (400')		500	ton	$12.72	$6,359
	22	Levee Road Replacement - Gravel - Class II AB - (400')		500	ton	$21.20	$10,599
	23	Levee Road - Gravel - Spreading/Grading		588	yd3	$1.92	$1,128
	24	Levee Road Compaction		588	yd3	$0.55	$324
	25	Improve Existing Weir Infrastructure as req.		1	allow	$150,000.00	$150,000
		SUBTOTAL THIS SHEET					**$26,976,105**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE:
NODOS Project
Holthouse Reservoir
Construct Holthouse Dam
(Earth Dam and RCC Dam Sections)
(Includes Spillway Components within Gravity Dam Limits)
Civil

PROJECT:
NODOS Alternative D

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:
FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Holthouse Dam

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
151		**Construct Holthouse Dam and Appurtenances**					
	1	Clear and grub		50	acre	$2,117.22	$105,861
	2	Remove Funk's Dam Gates		1	allow	$58,300.00	$58,300
	3	Pump Low Water From Funk's Reservoir		6	MO	$32,600.00	$195,600
	4	Remove Silt		300,000	yd3	$6.89	$2,066,805
	5	Foundation Excavation		463,550	yd3	$13.63	$6,318,332
	6	Furnish/handle cement material (Cement Type III)		20,400	bag	$17.70	$361,080
	7	Construct grout cap		11,160	cy	$234.27	$2,614,453
	8	Drill setup for all holes		1,860	ea.	$753.80	$1,402,068
	9	Drill curtain grout holes		96,600	LF	$27.06	$2,613,996
	10	Hookup to grout holes and grout nipples		1,860	ea.	$203.66	$378,808
	11	Inject Portland cement grout		638	hr	$498.26	$317,641
	12	Perform hydraulic conductivity tests		1,250	ea.	$323.68	$404,600
	13	Excavate Key Trench for soil/bentonite wall		20,833	CY	$8.00	$166,664
	14	Soil/Bentonite Wall		262,500	SF	$21.00	$5,512,500
	15	Backfill Key Trench		20,833	CY	$15.00	$312,495
	16	Core Zone preparation		83,300	SY	$3.60	$299,880
	17	Core zone (1 mile haul)		883,500	yd3	$11.01	$9,729,421
	18	Shell Zones		822,000	yd3	$7.76	$6,378,720
	19	Filter Zone		255,000	ton	$31.74	$8,094,721
	20	Rock fill Zone 3 (1 mile haul) Inc. Sand bedding		109,500	yd3	$22.90	$2,508,036
	21	Gravity Dam Concrete - Inc. Gate & Vent Shafts		31,400	yd3	$390.73	$12,268,922
	22	Reinforcing in Dam		31,400	yd3	$108.00	$3,391,200
	23	Spillway Top and Sides		6,900	yd3	$390.73	$2,696,037
	24	Spillway Base Slab		4,200	yd3	$390.73	$1,641,066
	25	Top and Side Rebar - 4%		1,104,000	lb	$1.35	$1,490,400
	26	Base Slab Rebar - 2%		336,000	lb	$1.35	$453,600
	27	Spillway Bridge		410	lft	$8,479.20	$3,476,472
	28	Dewatering Allowance		1	allow	$1,100,000.00	$1,100,000
	29	TC Canal Inlet Energy Dissipation Spillway		1,100	yd3	$516.44	$568,084
	30	Toe Drain 12" PVC		7,000	LF	$58.00	$406,000
	31	Crown Gravel		2,300	CY	$58.20	$133,860
	32	Hydroseed downstream slope		25	Acres	$6,534.00	$163,350
		SUBTOTAL THIS SHEET					**$77,628,972**

QUANTITIES		PRICES	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Holthouse Reservoir	
Spillway Chute, Energy Dissipation Basin	**WOID:** / **ESTIMATE LEVEL:**
Delevan/TRR Pipeline Inlet/Outlet Structure	**REGION:** / **UNIT PRICE LEVEL:**
Civil	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Holthouse Dam

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Spillway (Chute, Stilling Basin, and Walls)**					
	1	Excavation		37,000	CY	$13.63	$504,310
	2	Backfill		15,000	CY	$11.01	$165,150
	3	Haul & spread spoil		24,200	CY	$1.47	$35,574
	4	Concrete Slabs on Grade		1,100	CY	$390.73	$429,803
	5	Concrete Walls 18" thick		537	CY	$591.27	$317,512
	6	Concrete Walls - 24" Thick		415	CY	$577.25	$239,559
	7	Structural Slabs 12"		1,460	CY	$906.34	$1,323,256
	8	Spillway Bridge		1,800	SF	$500.00	$900,000
	9	Bride Guardrail		200	LF	$162.00	$32,400
	10	Chain Link Fencing		250	LF	$38.00	$9,500
	11	Channel cut to I/O Structure - Spread locally		81,000	CY	$5.24	$424,440
	12	Rebar for above 3% by Wt		421,440	LB	$1.35	$568,944
		I/O Structure for Delevan and TRR Pipelines					
	13	Slab on Grade		583	CY	$390.73	$227,796
	14	Formed and Shaped Walls		660	CY	$577.25	$380,985
	15	Fill Voids with soil		700	CY	$18.00	$12,600
	16	Roof Slab		320	CY	$487.15	$155,888
	17	Rebar for above 5% by Wt		312,600	LB	$1.35	$422,010
		SUBTOTAL THIS SHEET					**$6,149,727**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project Holthouse Reservoir T-C Canal Connections to Holthouse *(Inlet Spillway)* *(New Outlet Gate Structure)* Civil	NODOS Alternative D
	WOID:
	ESTIMATE LEVEL:
	REGION:
	UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Holthouse Dam

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
153		**Waterway Structures**					
		(At discharge to canal)					
	1	Energy dissipation structure at Canal		1	allow	$79,492.50	$79,493
	2	Gate structure at south canal - slab & ftgs		600	yd3	$312.50	$187,500
	3	Gate structure at south canal - Walls		500	yd3	$605.29	$302,645
	4	Gate Structure Bridge		800	ft2	$550.00	$440,000
	5	Gates		3	ea	$582,945.00	$1,748,835
	6	Gate Structure Misc. Metals		1	allow	$52,995.00	$52,995
		SUBTOTAL THIS SHEET					**$2,811,468**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Holthouse Reservoir** **T-C Canal Pump Station** *(Needed to supply water to T-C Canal when level in Holthouse is too low for gravity flow to canal. Flow is 700 cfs.)* **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Holthouse Dam

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
170		**Accessory Electrical Equipment**					
	1	Overhead power line to Gravity Dam Gates		14,000	lft	$185.48	$2,596,755
	2	Data/communication feed to gates		14,000	lft	$12.72	$178,063
	3	Convenience power and lighting		1	Allow	$100,000.00	$100,000
	4	SCADA		1	allow	$50,000.00	$50,000
	5	Gate Structure Power/Data/SCADA - Bypass		1	allow	$100,000.00	$100,000
		SUBTOTAL THIS SHEET					**$3,024,818**

QUANTITIES		PRICES	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE:			PROJECT:				
NODOS Project			NODOS Alternative D				
Pumping and Generating Plants							
I/O Structure and Tunnel			WOID:		ESTIMATE LEVEL:		
			REGION:		UNIT PRICE LEVEL:		
Civil		Summary Sheet	FILE:	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP			

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		Construct I/O Tunnel. 30' Diam. Sheet 1 and 2					$87,700,354
152		Construct Low Level Intake Structure					$18,918,868
152		Construct Gated Intake Tower, Civil Sheet 1 and 2					$13,466,583
152		Construct Gated Intake Tower, Mechanical					$10,613,831
152		Construct Gated Intake Tower, Electrical					$1,211,684
		Subtotal					**$131,911,318**
		Mobilization	5%	+/-			$6,600,000
		Subtotal with Mobilization					**$138,511,318**
		Contract Cost Allowances (Sum of):	10%	+/-			$11,488,682
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$150,000,000**
		Construction Contingencies	15%	+/-			$30,000,000
		FIELD COST					**$180,000,000**
		Non-Contract Costs	17%	+/-			$30,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$210,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$240,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Inlet/Outlet Structure and Tunnel** **Tunnel Construction** **Sheet 1** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct I/O Tunnel. 30' Diam.**					
	1	Engineered Ventilation for Tunnel		1	allow	$2,000,000.00	$2,000,000
	2	Drill & Blast Rock for Tunnel (include 10% break back)		178,518	yd3	$22.60	$4,034,002
	3	Load & Haul Blasted Rock (25 cy off hwy		178,518	yd3	$34.94	$6,236,535
		dump, 4 mi round trip, 50% production					
		inefficiency due to congested work space)					
	4	1" Steel - Installation		1,730	ton	$7,140.00	$12,354,613
	5	Misc Metals - Welded Steel Liner Stiffeners		72	ton	$10,200.00	$729,514
	6	1' Steel Tie Rods		9	ton	$2,754.00	$23,547
	7	Steel Ribs (W12x79)		340	ton	$7,140.00	$2,424,744
	8	Misc Metals - Steel Foot Plate @ Rib		13	ton	$8,500.00	$106,250
	9	Grouting between Concrete Fill & Steel Liner		43,556	ft3	$7.75	$337,646
	10	Timber Lagging @ Shoring		21,362	ft2	$8.28	$176,963
	11	Timber Blocking @ Shoring		600	ea	$63.98	$38,391
	12	Rock Bolt Drilling - Tunnel		2,000	ea	$402.89	$805,778
	13	Rock Bolt - Install - Tunnel (1" bolt, 10' deep)		2,000	ea	$247.94	$495,874
	14	Gunnite Fill - Excl Reinforcing		61,554	yd3	$545.70	$33,590,018
	15	Rebar Reinforcing @ Gunnite (6% by weight)		61,554	yd3	$330.47	$20,341,772
	16	Drill & Blast Rock for Portal (include 10% break back)		1,925	yd3	$22.60	$43,501
	17	Load & Haul Blasted Rock (25 cy off hwy		1,925	yd3	$25.53	$49,138
		dump, 2 mi round trip)					
	18	Rock Bolt Drilling - Portal		24	ea	$402.89	$9,669
	19	Rock Bolt - Install - Portal (4 bolts @ 10' centers;		24	ea	$247.94	$5,950
		1" bolt, 10' deep)					
	20	Gunnite Fill - Excl Reinforcing - Portal		1,210	yd3	$545.70	$660,297
	21	Rebar Reinforcing @ Gunnite - Portal (6% by weight)		1,210	yd3	$330.47	$399,869
		SUBTOTAL THIS SHEET					**$84,864,072**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
Pumping and Generating Plants	WOID: / ESTIMATE LEVEL:
Inlet/Outlet Structure and Tunnel	REGION: / UNIT PRICE LEVEL:
Tunnel Construction	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP
Sheet 2	
Civil	

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct I/O Tunnel. 30' Diam. - Continued**					
	22	Taper & Transition S.O.G.		1,020	yd3	$276.42	$281,948
	23	Taper & Transition Walls		1,370	yd3	$500.82	$686,123
	24	Taper & Transition Structural Slab		1,020	yd3	$316.20	$322,524
	25	Transition Slab Reinforcing (rebar 1% by wt.)		40,800	lb	$1.35	$55,080
	26	Transition Wall Reinforcing (3% by Weight)		164,400	lb	$1.35	$221,940
	27	Transition Structural Slab Reinforcing (Rebar 5%)		204,000	lb	$1.35	$275,400
	28	Onsite Welding, Mechanic, Misc		1,095	day	$775.72	$849,415
	29	Injection Grout		300	hole	$479.50	$143,851
		(Penstock piping downstream of tunnel					
		to the Sites PG Plant included with Sites PG					
		Plant.)					
							$0
							$0
		SUBTOTAL THIS SHEET					**$2,836,282**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Inlet/Outlet Structure and Tunnel** **Low Level Intake Structure** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct Low Level Intake Structure**					
	1	Initial portal and tower excavation		563,000	yd3	$4.59	$2,584,170
	2	Complete Intake Channel Excavation		840,000	yd3	$4.59	$3,855,600
	3	Backfill per IO-0502		14,800	yd3	$7.65	$113,220
	4	Rip Rap at Intake perimeter		650	yd3	$16.32	$10,608
	5	Pipe encasement tower concrete		25,500	yd3	$271.42	$6,921,210
	6	Pipe encasement Rebar 1% by wt.		1,020,000	lb	$1.35	$1,377,000
	7	Taper & transition Slab on Grade		1,020	yd3	$277.51	$283,060
	8	Taper & transition Walls		1,370	yd3	$340.81	$466,910
	9	Taper & transition Structural Slab		1,020	yd3	$424.29	$432,776
	10	Transition slab Rebar 1% by wt.		40,800	lb	$1.35	$55,080
	11	Transition Wall Rebar 3% by Weight		164,400	lb	$1.35	$221,940
	12	Transition Struct. Slab rebar 5%		204,000	lb	$1.35	$275,400
	13	Form Tower exterior		39,300	ft2	$14.02	$550,986
	14	Form interior radius section		30,400	ft2	$14.02	$426,208
	15	Trash screen support steel		210,800	lb	$2.75	$579,700
	16	Trash Screens@ 6 psf		34,000	ft2	$22.50	$765,000
		SUBTOTAL THIS SHEET					**$18,918,868**

QUANTITIES		PRICES	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Inlet/Outlet Structure and Tunnel** **Gated Intake Tower** **Sheet 1** **Structural**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct Gated Intake Tower**					
	1	General Slope excavation for Tower & Bridge		460,000	yd3	$4.59	$2,111,400
	2	Excavation to tunnel level for Tower		99,000	yd3	$5.10	$504,900
	3	Access Bridge footing excavation		3,000	yd3	$5.10	$15,300
	4	Backfill below el. 320		92,000	yd3	$6.63	$609,960
	5	Slab on grade - tunnel level		250	yd3	$271.09	$67,773
	6	Concrete walls - Tunnel Level 4' thick		400	yd3	$340.81	$136,324
	7	Wheel Gate Tracks - embeds		2,600	lft	$127.50	$331,500
	8	Square to Round vertical transition		510	yd3	$528.17	$269,367
	9	Tower Wall Concrete 3'-6" thick to level 540		4,100	yd3	$487.50	$1,998,750
	10	Tower Wall concrete 2'-0" level 540 to 575		300	yd3	$721.25	$216,375
	11	Tower Wall Forms (included with Concrete)		32,000	ft2		
	12	Level 320 concrete collar		260	yd3	$277.51	$72,153
	13	Interior deck slabs at 500 and 540'		110	yd3	$574.03	$63,143
	14	Top Deck Grating Support Steel 10PSF		8,000	ft2	$4.08	$32,640
	15	Top Deck Grating		800	ft2	$61.20	$48,960
	16	Trash Racks with fish screen		36	ea	$61,200.00	$2,203,200
	17	Stop Logs		82	ton	$4,400.00	$360,800
	18	Top Deck Railing		100	lft	$153.00	$15,300
	19	Ladders - Stainless Steel		150	lft	$734.40	$110,160
	20	Miscellaneous Metal & Steel Allowance		100	ton	$7,500.00	$750,000
	21	Allowance for support metal and embeds		1	allow	$50,000.00	$50,000
		SUBTOTAL THIS SHEET					**$9,968,004**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Inlet/Outlet Structure and Tunnel** **Gated Intake Tower** **Sheet 2** **Structural**	**PROJECT:** **NODOS Alternative D**			
	WOID:	**ESTIMATE LEVEL:**		
	REGION:	**UNIT PRICE LEVEL:**		
	FILE:	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP		

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct Gated Intake Tower (Continued)**					
	22	Caissons at Tower Bridge 36"		4,000	lft	$305.26	$1,221,040
	23	Footings at Tower Bridge		400	yd3	$234.27	$93,708
	24	Tower Bridge Piers		1,200	yd3	$785.81	$942,970
	25	Tower Access Bridge deck		600	yd3	$608.94	$365,363
	26	Tower Bridge Footing Rebar 1%		16,000	lb	$1.35	$21,600
	27	Tower Bridge Pier Rebar 6%		288,000	lb	$1.35	$388,800
	28	Tower Bridge Deck Rebar - 4% by weight		96,000	lb	$1.35	$129,600
	29	Tower Bridge PT 2 PSF		1,200	lb	$3.67	$4,406
	30	Rails for Tower access Bridge		1,100	lft	$153.00	$168,300
	31	Fencing at power enclosure		120	lft	$40.80	$4,896
	32	Access road to end of bridge		22,200	ft2	$6.63	$147,186
	33	Access road control gate		1	ea	$8,160.00	$8,160
	34	Signage		1	allow	$2,550.00	$2,550
		SUBTOTAL THIS SHEET					**$3,498,579**

QUANTITIES		**PRICES**	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project Pumping and Generating Plants Inlet/Outlet Structure and Tunnel Gated Intake Tower Sheet 3 Mechanical	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct Gated Intake Tower**					
	1	Thimbles 6' ID		36	ea	$48,102.35	$1,731,685
	2	Thimble butterfly Valves - 72"		36	ea	$204,916.02	$7,376,977
	3	Wheel Gates 9'X 35' (40,000 lb ea)		80,000	lb	$8.67	$693,600
	4	Bridge Crane - 20 Tons		1	ea	$171,569.00	$171,569
	5	Jib Crane - 6 Tons		1	ea	$40,000.00	$40,000
	6	Fish Screen Hoist allowance		1	ea	$600,000.00	$600,000
		SUBTOTAL THIS SHEET					**$10,613,831**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Inlet/Outlet Structure and Tunnel** **Gated Intake Tower** **Sheet 4** **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct Gated Intake Tower**					
	1	SCADA provisions		1	allow	$102,000.00	$102,000
	2	Convenience power		1	allow	$10,200.00	$10,200
	3	Power for cranes		450	lft	$35.70	$16,065
	4	Power for butterfly valves		36	ea	$1,224.00	$44,064
	5	Lighting at tower access bridge		6	ea	$1,224.00	$7,344
	6	Overhead power transmission line		5,000	ft	$177.86	$889,313
	7	Transformer/switchgear enclosure		400	ft2	$102.00	$40,800
	8	Transformer and switchgear		1	allow	$91,800.00	$91,800
	9	Lighting at 500 and 540		12	ea	$459.00	$5,508
	10	Top Level lighting		6	ea	$765.00	$4,590
		SUBTOTAL THIS SHEET					**$1,211,684**

QUANTITIES		PRICES	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **TRR Reservoir** **Construct TRR Reservoir**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR Reservoir

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights					$0
151		Construct TRR Reservoir					$18,590,872
153		Construct Canal Control Structures					$5,228,951
170		Accessory Electrical Equipment					$794,925
		Subtotal					**$24,614,748**
		Mobilization	5%	+/-			$1,250,000
		Subtotal with Mobilization					**$25,864,748**
		Contract Cost Allowances (Sum of):	10%	+/-			$2,135,252
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$28,000,000**
		Construction Contingencies	15%	+/-			$5,000,000
		FIELD COST					**$33,000,000**
		Non-Contract Costs	17%	+/-			$6,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$39,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$45,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **TRR Reservoir** **Construct TRR Reservoir** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR Reservoir

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Land and Rights**					
		Included with Sites Reservoir					
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **TRR Reservoir** **Construct TRR Reservoir** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR Reservoir

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Dams					
	1	Clear and grub		210	acre	$2,167.00	$455,070
	2	Mass excavation for Reservoir		930,000	yd3	$4.77	$4,435,682
	3	Demolish Canal for Dissipation bay		36,000	ft2	$1.85	$66,774
	4	Excavation for dissipation bay		16,700	yd3	$4.77	$79,651
	5	Dissipation bay embankment		2,040	yd3	$12.72	$25,946
	6	Concrete liner at dissipation bay		3,100	yd3	$516.44	$1,600,964
	7	Reinforcing Steel at liner 100 LB/CY		310,000	LB	$1.35	$418,500
	8	Excavation for inlet channel		10,500	yd3	$4.77	$50,080
	9	Embankment for inlet channel		5,330	yd3	$12.72	$67,791
	10	Reservoir perimeter embankment construction		166,000	yd3	$13.25	$2,199,293
	11	Dispose of excess excavation material - 5 mi.		981,000	CY	$4.73	$4,640,130
	12	Dissipation bay embankment		10,500	yd3	$4.77	$50,080
	13	Reinforcing Steel at liner 100 LB/CY		1,050,000	LB	$1.35	$1,417,500
	14	Inlet channel concrete liner		2,520	yd3	$516.44	$1,301,429
	15	Restore GCID Levee Road - Paved		4,800	ft2	$8.32	$39,937
	16	Levee bridge at TRR inlet		840	ft2	$550.00	$462,000
	17	TRR reservoir pond liner 60 mil		310,000	ft2	$1.43	$443,568
	18	Overflow structure		1	allow	$794,925.00	$794,925
	19	Embankment crown road - Class II on Class IV		31,500	SF	$1.32	$41,552
		SUBTOTAL THIS SHEET					**$18,590,872**

QUANTITIES		**PRICES**	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
TRR Reservoir
Construct Canal Control Structures

Civil

PROJECT:
NODOS Alternative D

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR Reservoir

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
153		**Construct Canal Control Structures**					
	1	GCID Inlet					
	2	Inlet Structure at canal - slab 8"		1,417	yd3	$509.05	$721,324
	3	Inlet Structure at canal - slab 12"		335	yd3	$488.52	$163,654
	4	Energy dissipation Block area		200	yd3	$309.84	$61,968
	5	Gate Structure Bridge		1,272	ft2	$550.00	$699,600
	6	Radial Gates		6	ea	$94,800.00	$568,800
	7	Cross Canal Bridge Rails at check structure		212	lft	$150.00	$31,800
	8	Gate Structure Misc. Metals		1	allow	$55,000.00	$55,000
	9	Misc Concrete at inlet walls etc		1	Allow	$75,000.00	$75,000
	10	Base Rock under Slabs		2,500	T	$21.20	$53,000
	11	Rip Rap		450	CY	$48.00	$21,600
		TRR Spillway and Outfall					
	12	Sluice Gates 6'W X 5' H automated		4	EA	$80,000.00	$320,000
	13	Flatwork 8"		215	yd3	$509.05	$109,446
	14	Base Rock under Slabs		210	CY	$21.20	$4,452
	15	Misc Concrete at spillway - walls etc		1,000	CY	$605.29	$605,290
	16	Spillway Bridge		912	ea	$550.00	$501,600
	17	Bridge Rails		152	lft	$150.00	$22,800
	18	Spillway Misc. Metals		1	allow	$50,000.00	$50,000
	19	Outfall Channel Lining - gunite		275	CY	$1,050.00	$288,750
	20	Misc Concrete at Outfall		200	CY	$682.79	$136,558
	21	Rebar for above & 150 #cy		516,300	LB	$1.43	$738,309
		SUBTOTAL THIS SHEET					**$5,228,951**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
David Hughes	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **TRR Reservoir** **Provide Power and Control for Gate Structures** **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR Reservoir

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
170		**Accessory Electrical Equipment**					
	1	Gate Structure Power/Data/SCADA		1	allow	$264,975.00	$264,975
	2	Gate Structure Power/Data/SCADA		2	allow	$264,975.00	$529,950
		SUBTOTAL THIS SHEET					**$794,925**

QUANTITIES		PRICES	
BY David Hughes	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Pumping and Generating Plants	
Sites Pumping Generating Plant	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights (Included with Reservoir)					$0
130		Structures and Improvements					$157,524,461
140		Roads and Road Structures (Included with Reservoir Project Roads)					
152		Waterways - Buried Penstock Piping and Bifurcations					$87,191,160
153		Waterway Structures					$32,183,901
160		Pumps and Prime Movers					$55,906,200
165		Turbines and Generators					$109,940,036
170		Accessory Electrical Equipment					$74,634,420
		Subtotal					**$517,380,178**
		Mobilization	5%	+/-			$26,000,000
		Subtotal with Mobilization					**$543,380,178**
		Contract Cost Allowances (Sum of):	10%	+/-			$56,619,822
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$600,000,000**
		Construction Contingencies	15%	+/-			$80,000,000
		FIELD COST					**$680,000,000**
		Non-Contract Costs	17%	+/-			$120,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$800,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$920,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
Pumping and Generating Plants	
Sites Pumping Generating Plant	WOID: / ESTIMATE LEVEL:
100 Land and Rights	REGION: / UNIT PRICE LEVEL:
130 Structures and Improvements	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP
Civil	

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Land and Rights**					
		(Included with Sites Reservoir)					
130		**Structures and Improvements**					
		Sites Pumping-Generating Plant					
	1	Buried Penstocks and plant area excavation		2,995,000	yd3	$6.38	$19,093,125
	2	Water stop, Joint Material and Sealer		1	allow	$612,000.00	$612,000
	3	Temporary Concrete bulkheads		1	allow	$127,500.00	$127,500
	4	Concrete Hatch Covers		1	allow	$163,200.00	$163,200
	5	Structural Concrete		102,000	yd3	$449.23	$45,821,460
	6	Backfill Concrete		5,400	yd3	$234.27	$1,265,058
	7	Pneumatic Mortar 3" Thick		40,000	yd2	$850.00	$34,000,000
	8	Cement		544,000	cwt	n/a	$0
	9	Rebar		20,400,000	lb	$1.35	$27,540,000
	10	Welded wire Fabric		280,800	ft2	$1.12	$315,058
	11	Structural Steel Building @ 20psf		640	ton	$3,800.00	$2,432,000
		Structural Steel for Bridge Crane 600plf		507	ton	$3,800.00	$1,926,600
	12	Steel Roof Decking		64,000	ft2	$8.50	$544,000
	13	Miscellaneous Metal - Stop log		375,000	lb	$3.50	$1,312,500
		Miscellaneous Metal - Screens		150,000	lb	$3.50	$525,000
		Miscellaneous Metal - Other		100,000	lb	$3.50	$350,000
	14	Architectural Features - Skin - Uninsulated		138,000	SF	$29.00	$4,002,000
		Architectural Features - Interior		80,000	SF	$24.00	$1,920,000
	15	100 Ton Bridge Crane		1	ea	$357,000.00	$357,000
	16	50 Ton Gantry Crane		1	ea	$739,500.00	$739,500
=	17	10 Ton Gantry Crane		1	ea	$208,620.00	$208,620
	18	Other Hoisting Provisions		1	allow	$100,000.00	$100,000
	19	Miscellaneous mechanical and plant features		1	allow	$12,668,400.00	$12,668,400
	20	Structural Backfill		196,000	yd3	$7.14	$1,399,440
	21	Impervious backfill and drainage		1	allow	$102,000.00	$102,000
		SUBTOTAL THIS SHEET					**$157,524,461**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
		October 2016	10/19/16

FEATURE:			**PROJECT:**			
NODOS Project			**NODOS Alternative D**			
Pumping and Generating Plants						
Sites Pumping Generating Plant			**WOID:**		**ESTIMATE LEVEL:**	
140 Roads and Road Structures			**REGION:**		**UNIT PRICE LEVEL:**	
152 Waterways - Buried Penstock Piping and Bifurcations			**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP			
Civil						

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
140		**Roads and Road Structures**					
		(Included with Sites Reservoir project Roads)					
152		**Waterways - Buried Penstock Piping and Bifurcations**					
		Buried penstock piping for Sites Pumping-					
		Generating Plant and Emergency Drawdown					
		Bypass Structure from I/O Tunnel					
		downstream portal to structures.					
	1	Earth Moving - Excavation for Piping -		1,581,463	yd3	$4.49	$7,094,541
		Manifold to Pump Station					
	2	Earth Moving - Excavation for Tunnel -		47,110	yd3	$4.49	$211,338
		Portal to First Manifold					
	3	Backfill Hauling - Portal to First Manifold		17,973	yd3	$1.46	$26,247
	4	Compacted Fill - Portal to First Manifold		16,339	yd3	$0.72	$11,844
	5	Spread Backfill for Compaction - Portal to Manifold		16,339	yd3	$1.90	$31,070
	6	Backfill Hauling - Manifold to Pump Station		909,455	yd3	$1.46	$1,328,108
	7	Compacted Fill - Manifold to Pump Station		826,777	yd3	$0.72	$599,342
	8	Spread Backfill for Compaction - Manifold to Station		826,777	yd3	$1.90	$1,572,188
	9	Water & Optimization Treatment for Backfill		559,748	yd3	$1.59	$887,988
	10	Loading & Hauling Leftover Excavated Material		754,686	yd3	$5.39	$4,067,439
		(15 c.y. Belly Dump, Ave Cycle 4 mi,					$0
		35 mph Ave, 15 min wait)					$0
	11	Spread Backfill for Compaction - Leftover Material		754,686	yd3	$1.90	$1,435,100
	12	Compaction - Leftover Material		754,686	yd3	$0.72	$547,082
	13	Surveying		30	day	$592.54	$17,776
							$0
							$0
		SUBTOTAL THIS SHEET					**$17,830,064**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sites Pumping Generating Plant** 152 Waterways - Buried Penstock Piping and Bifurcations (Continued) **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Waterways - Buried Penstock Piping and Bifurcations - Continued**					
		Subtotal from Previous Sheet					$17,830,064.2
		Buried Penstock Piping and Bifurcations					
		(1) Sites Pumping-Generating Plant					
	1	Steel Penstock Piping, Welded - 30'		575	ton	$10,200.00	$5,865,395.6
	2	Steel Penstock Piping, Welded - 26		763	ton	$10,200.00	$7,781,939.3
	3	Steel Penstock Piping, Welded - 22		763	ton	$10,200.00	$7,781,939.3
	4	Steel Penstock Piping, Welded - 18'		370	ton	$10,200.00	$3,778,549.6
	5	Steel Penstock Piping, Welded - 13'		318	ton	$10,200.00	$3,246,204.9
	6	Steel Penstock Piping, Welded - 12.5'		58	ton	$10,200.00	$589,540.9
	7	Steel Penstock Piping, Welded - 11.5'		40	ton	$10,200.00	$408,262.4
	8	Steel Penstock Piping, Welded - 10.5'		167	ton	$10,200.00	$1,701,736.5
	9	Steel Penstock Piping, Welded - 9'		264	ton	$10,200.00	$2,694,994.9
	10	Steel Penstock Piping, Welded - 7.5'		64	ton	$10,200.00	$655,998.2
	11	Steel Penstock Piping, Welded - 6.5'		48	ton	$10,200.00	$492,727.5
	12	Concrete Encasements		16,000	cy	$487.15	$7,794,400.0
	13	Welding (24" weld per hr.)		772	day	$798.99	$616,823.0
		(2) Emergency Drawdown Bypass					
	1	Steel Penstock Piping, Welded - 26'		1,925	ton	$8,250.00	$15,881,250.0
	2	Steel Penstock Piping, Welded - 18'		210	ton	$8,250.00	$1,732,500.0
	3	Steel Penstock Piping, Welded - 13'		225	ton	$8,250.00	$1,856,250.0
	4	Steel Penstock Piping, Welded - 9'		35	ton	$8,250.00	$288,750.0
	5	Concrete Encasements		10,000	cy	$487.15	$4,871,500.0
	6	Welding (24" weld per hr.)- longitude		536	day	$798.99	$428,260.5
	7	Welding (24" weld per hr.) - Butts		1,119	day	$798.99	$894,073.8
		SUBTOTAL THIS SHEET					**$87,191,160.4**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sites Pumping Generating Plant** 153 Waterway Structures Emergency Drawdown Bypass Structure **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
153		**Waterway Structures**					
		Emergency Drawdown Bypass Structure					
	1	Structural concrete (including cement)		6,530	cy	$539.08	$3,520,166
	2	Steel Reinforcement		800,000	lb	$1.35	$1,080,000
	3	Embedded steel liner plates		273,000	lb	$4.80	$1,310,400
		Valves					
	4	8' 6" Howell-Bunger Valves		4	ea	$682,890.00	$2,731,560
	5	156" Fixed Cone Valves		4	ea	$3,385,443.60	$13,541,774
	6	156" Guard Valve - Butterfly		4	ea	$2,500,000.00	$10,000,000
		SUBTOTAL THIS SHEET					**$32,183,901**

QUANTITIES		PRICES	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sites Pumping Generating Plant** 160 Pumps and Prime Movers **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
160		**Pumps and Prime Movers**					
	1	18,471 hp Francis Pump		2	ea.	$8,670,000.00	$17,340,000
	2	36,942 hp Francis Pump		2	ea.	$17,340,000.00	$34,680,000
	3	102" ANSI Butterfly Valves		2	ea.	$1,295,400.00	$2,590,800
	4	72" ANSI Butterfly Valves		2	ea.	$647,700.00	$1,295,400
		SUBTOTAL THIS SHEET					**$55,906,200**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project Pumping and Generating Plants Sites Pumping Generating Plant 165 Turbines and Generators Civil	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
165		**Turbines and Generators**					
	1	26,446 hp/24.6MW Francis Pump/Turbine		4	ea.	$20,817,000.00	$83,268,000
	2	13,243 hp/12.3MW Francis Pump/Turbine		2	ea.	$11,819,250.00	$23,638,500
	3	108" ANSI Butterfly Valves		4	ea.	$533,384.00	$2,133,536
	4	78" ANSI Butterfly Valves		2	ea.	$450,000.00	$900,000
		SUBTOTAL THIS SHEET					**$109,940,036**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

SHEET 53 OF _ _

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sites Pumping Generating Plant** 170 Accessory Electrical Equipment **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Sites PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
170		**Accessory Electrical Equipment**					
	1	Exposed and Embedded Conduit		1	lot	$5,202,000.00	$5,202,000
	2	Duct bank, MV Cable, & UG Vaults To Substation		1	lot	$18,360,000.00	$18,360,000
	3	Cable Trays		1	lot	$979,200.00	$979,200
	4	MV Circuits to Machines		1	lot	$1,785,000.00	$1,785,000
	5	LV, Inst, Comm, Control Cable		1	lot	$6,018,000.00	$6,018,000
	6	Station Service Unit Substations		2	ea	$714,000.00	$1,428,000
	7	Secondary Distribution Transformers		4	lot	$14,280.00	$57,120
	8	Panelboards		20	ea	$20,400.00	$408,000
	9	DC Power System		2	lot	$306,000.00	$612,000
	10	Standby Generator		1	lot	$255,000.00	$255,000
	11	Standby Switchgear		1	ea	$153,000.00	$153,000
	12	Automatic Transfer Switch		1	ea	$102,000.00	$102,000
	13	Motor Control Centers		30	ea	$81,600.00	$2,448,000
	14	UPS System		2	ea	$153,000.00	$306,000
	15	Lighting and Lighting Control		1	lot	$510,000.00	$510,000
	16	Convenience Power		1	lot	$81,600.00	$81,600
	17	Grounding		1	lot	$3,060,000.00	$3,060,000
	18	Lightning Protection		1	lot	$428,400.00	$428,400
	19	13.8kV switchgear		1	lot	$1,683,000.00	$1,683,000
	20	Protection and Control Panels		17	ea	$306,000.00	$5,202,000
	21	Plant Control System		1	lot	$4,080,000.00	$4,080,000
	22	Fire Detection System		1	lot	$1,428,000.00	$1,428,000
	23	Commissioning and Acceptance Testing		1	lot	$5,100,000.00	$5,100,000
	24	OH&P On Non-Unit Supply/Install		1	lot	$14,922,600.00	$14,922,600
	25	Electrical/SCADA @ Valves		1	allow	$25,500.00	$25,500
							$0
							$0
		SUBTOTAL THIS SHEET					**$74,634,420**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
Pumping and Generating Plants
TRR Pumping Generating Plant

Civil **Summary Sheet**

PROJECT: **NODOS Alternative D**

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:
FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights (Included with Reservoir)					$0
130		Structures and Improvements					$48,536,262
140		Roads and Road Structures (Included with Reservoir Project Roads)					$851,112
152		Waterways - Buried Penstock Piping and Bifurcations					$8,880,079
154		Waterway Protective Structures					$7,546,980
160		Pumps and Prime Movers					$14,598,576
165		Turbines and Generators					$5,721,204
170		Accessory Electrical Equipment					$15,034,800
		Subtotal					**$101,169,014**
		Mobilization	5%	+/-			$5,100,000
		Subtotal with Mobilization					**$106,300,000**
		Contract Cost Allowances (Sum of):	10%	+/-			$8,700,000
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$115,000,000**
		Construction Contingencies	15%	+/-			$20,000,000
		FIELD COST					**$135,000,000**
		Non-Contract Costs	17%	+/-			$25,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$160,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$185,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE: **NODOS Project** **Pumping and Generating Plants** **TRR Pumping Generating Plant** 100 Land and Rights 130 Structures and Improvements **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
100		**Land and Rights**					
		(Included with Sites Reservoir)					$0
							$0
130		**Structures and Improvements**					$0
	1	Clear and Grub		25	acre	$4,202.40	$105,060
	2	Excavation (Stockpile-1/2 mi, Haul-17 Mi.)		400,000	yd3	$6.83	$2,731,560
	3	Backfill Pump Station (from Stockpile)		200,000	yd4	$7.35	$1,470,840
	4	Sheet Steel Piling at After bay		12,000	ft2	$35.00	$420,000
	5	Concrete		30,000	yd3	$449.23	$13,476,900
	6	Rebar at 4% by Weight		4,800,000	lb	$1.35	$6,480,000
	7	Structural Steel Framing		125	ton	$3,800.00	$475,000
	8	Fencing and Gates		1	allow	$75,000.00	$75,000
	9	Seeding		2	acre	$6,534.00	$13,068
	10	Dewatering		1	allow	$26,265.00	$26,265
	11	Superstructure - Building		1	allow	$2,652,765.00	$2,652,765
	12	Control Building 100' X 150'		15,000	ft2	$157.59	$2,363,850
	13	Building Site Utilities		1	allow	$89,301.00	$89,301
	14	150 Ton Crane		1	ea	$816,652.80	$816,653
	15	Mechanical Auxiliary System		1	allow	$12,240,000.00	$12,240,000
	16	Furnish & Install Special Equipment		1	allow	$5,100,000.00	$5,100,000
		SUBTOTAL THIS SHEET					**$48,536,262**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **TRR Pumping Generating Plant** 140 Roads and Road Structures **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
140		**Roads and Road Structures**					$0
	1	Road to plant 4000 LF, 24 feet wide		96,000	ft2	$8.25	$791,732
	2	Parking Area		7,200	ft2	$8.25	$59,380
							$0
							$0
		SUBTOTAL THIS SHEET					**$851,112**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
Pumping and Generating Plants
TRR Pumping Generating Plant
152 Waterways

Civil

PROJECT:
NODOS Alternative D

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:
FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
152		**Waterways**					$0
	1	Steel Pipe and Manifolds		2,000,000	lb	$2.68	$5,358,060
	2	Mechanical Valve on Discharge Line		4	ea	$826,200.00	$3,304,800
	3	Sleeve Coupling		8	ea	$4,202.40	$33,619
	4	36" BFV for Refilling Pump		3	ea	$61,200.00	$183,600
							$0
							$0
		SUBTOTAL THIS SHEET					**$8,880,079**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET**

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
Pumping and Generating Plants	
TRR Pumping Generating Plant	WOID: / ESTIMATE LEVEL:
154 Waterway Protective Works	REGION: / UNIT PRICE LEVEL:
Civil	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
154		**Waterway Protective Works**					$0
	1	32" Diameter Air Chamber - Surge Control		2	ea	$1,733,490.00	$3,466,980
	2	Compressor		1	ea	$4,080,000.00	$4,080,000
							$0
							$0
		SUBTOTAL THIS SHEET					**$7,546,980**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project Pumping and Generating Plants TRR Pumping Generating Plant 160 Pumps and Prime Movers Civil	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
							$0
160		**Pumps and Prime Movers**					$0
	1	9,094hp Francis Pump		2	ea	$4,342,922.46	$8,685,845
	2	4,098hp Francis Pump		2	ea	$2,523,638.85	$5,047,278
	3	84" AWWA Butterfly Valves		2	ea	$259,420.82	$518,842
	4	60" AWWA Butterfly Valves		2	ea	$173,306.03	$346,612
							$0
							$0
		SUBTOTAL THIS SHEET					**$14,598,576**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **TRR Pumping Generating Plant** 165 Turbines and Generators **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
							$0
165		**Turbines and Generators**					$0
	1	4.9MW KaplanTurbine		1	ea	$5,428,653.08	$5,428,653
	2	92" AWWA Butterfly Valves		1	ea	$292,551.10	$292,551
							$0
							$0
		SUBTOTAL THIS SHEET					**$5,721,204**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project Pumping and Generating Plants TRR Pumping Generating Plant 170 Accessory Electrical Equipment Electrical	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]TRR PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
170		**Accessory Electrical Equipment**					$0
	1	Exposed and Embedded Conduit		1	lot	$918,000.00	$918,000
	2	Duct bank, MV Cable, & UG Vaults To Substation		1	lot	$520,200.00	$520,200
	3	Cable Trays		1	lot	$173,400.00	$173,400
	4	MV Circuits to Machines		1	lot	$91,800.00	$91,800
	5	LV, Inst, Comm, Control Cable		1	lot	$1,020,000.00	$1,020,000
	6	Station Service Unit Substation		1	ea	$612,000.00	$612,000
	7	Secondary Distribution Transformers		2	lot	$14,280.00	$28,560
	8	Panelboards		6	ea	$20,400.00	$122,400
	9	DC Power System		2	lot	$122,400.00	$244,800
	10	Standby Generator		1	lot	$153,000.00	$153,000
	11	Standby Switchgear		1	ea	$81,600.00	$81,600
	12	Automatic Transfer Switch		1	ea	$81,600.00	$81,600
	13	Motor Control Centers		9	ea	$81,600.00	$734,400
	14	UPS System		2	ea	$61,200.00	$122,400
	15	Lighting and Lighting Control		1	lot	$122,400.00	$122,400
	16	Convenience Power		1	lot	$12,240.00	$12,240
	17	Grounding		1	lot	$510,000.00	$510,000
	18	Lightning Protection		1	lot	$102,000.00	$102,000
	19	13.8kV switchgear		1	lot	$714,000.00	$714,000
	20	Protection and Control Panels		10	ea	$306,000.00	$3,060,000
	21	Plant Control System		1	lot	$1,530,000.00	$1,530,000
	22	Fire Detection System		1	lot	$357,000.00	$357,000
	23	Commissioning and Acceptance Testing		1	lot	$714,000.00	$714,000
	24	Additional Equipment Supply/Install		1	lot	$3,009,000.00	$3,009,000
							$0
							$0
		SUBTOTAL THIS SHEET					**$15,034,800**

QUANTITIES		PRICES	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Pumping and Generating Plants	
Sacramento River Pumping Generating Plant	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights (Included with Reservoir)					$0
130		Structures and Improvements					$74,985,872
140		Roads and Road Structures (Included with Reservoir Project Roads)					$556,595
152		Discharge Piping					inc below
152		Waterways - Buried Penstock Piping and Bifurcations					$2,278,077
154		Waterway Protective Structures					$7,446,000
160		Pumps and Prime Movers					$56,538,591
165		Turbines and Generators					$7,725,102
170		Accessory Electrical Equipment					$18,664,860
		Subtotal					**$168,195,098**
		Mobilization	5%	+/-			$8,400,000
		Subtotal with Mobilization					**$176,595,098**
		Contract Cost Allowances (Sum of):	10%	+/-			$18,404,902
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$195,000,000**
		Construction Contingencies	15%	+/-			$25,000,000
		FIELD COST					**$220,000,000**
		Non-Contract Costs	17%	+/-			$40,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$260,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$300,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
Pumping and Generating Plants
Sacramento River Pumping Generating Plant
100 Land and Rights
130 Structures and Improvements
Civil

PROJECT:
NODOS Alternative D

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:
FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
100		**Land and Rights**					
		(Included with Sites Reservoir)					$0
							$0
130		**Structures and Improvements**					$0
	1	Clear and Grub Pump Plant		110	acre	$4,202.40	$462,264
	2	Excavation (Stockpile-1/2 mi, Haul-17 Mi.)		250,000	yd3	$3.74	$935,034
	3	Backfill Pump Station (from Stockpile)		250,000	yd3	$6.83	$1,707,225
	4	Sheet Steel Piling at After bay		79,800	ft2	$35.00	$2,793,000
	5	Sheet Steel Piling at Fore bay		72,600	ft2	$35.00	$2,541,000
	6	Sheet piling at Roads		90,288	ft2	$35.00	$3,160,080
	7	Permanent Sheet Pile at fish screen		76,976	ft2	$35.00	$2,694,160
	8	Concrete		30,000	yd3	$449.23	$13,476,900
	9	Rebar @5% by Weight		6,000,000	lb	$1.35	$8,100,000
	10	Structural Steel Framing		125	ton	$3,800.00	$475,000
	11	Fencing and Gates at Switchyard		400	lft	$36.00	$14,400
	12	Fencing and Gates at Perimeter		3,000	lft	$36.00	$108,000
	13	Seeding		2	acre	$6,534.00	$13,068
	14	Dewatering		1	allow	$300,000.00	$300,000
	15	Stone Slope Protection (10 mi haul)		7,500	ton	$44.13	$330,939
	16	Superstructure - Building		1	ls	$2,626,500.00	$2,626,500
	17	Control Building 100' X 150'		15,000	ft2	$157.59	$2,363,850
	18	Building Site Utilities		1	allow	$525,300.00	$525,300
	19	150 Ton Crane		1	ea	$841,152.38	$841,152
	20	Mechanical Auxiliary System		1	allow	$26,265,000.00	$26,265,000
	21	Furnish & Install Special Equipment		1	ea	$5,253,000.00	$5,253,000
		SUBTOTAL THIS SHEET					**$74,985,872**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Pumping Generating Plant** 140 Roads and Road Structures **Civil**	**PROJECT:** **NODOS Alternative D** **WOID:** / **ESTIMATE LEVEL:** **REGION:** / **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
140		**Roads and Road Structures**					$0
	1	Approach and parking including grading		63,600	ft2	$8.75	$556,595
							$0
							$0
		SUBTOTAL THIS SHEET					**$556,595**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Pumping Generating Plant** 152 Waterways **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
							$0
152		**Discharge Piping to Delevan**					$0
	1	Clearing & Grubbing - Extra Light, Selective		1	acre	$1,201.32	$1,201
	2	Install Dewatering Wells		4	ea	$26,265.00	$105,060
	3	Earthwork - Mass Excavation for Pipeline		9,105	yd3	$3.43	$31,235
	4	96" Pipeline Installation		400	LF	$2,057.43	$822,974
	5	Pipe Bedding Transit		204	yd3	$23.76	$4,846
	6	Pipe Bedding Placement		204	yd3	$146.16	$29,817
	7	Backfill Hauling		8,635	yd3	$1.46	$12,580
	8	Spreading of Backfill in Trench Zone for Compaction		8,635	yd3	$0.86	$7,436
	9	Compacted Fill- Pipe Zone, Bottom of Trench		4,032	yd3	$0.54	$2,185
		to 3' above T.O.P.					$0
	10	Compacted Fill - Random Fill above Pipe Zone		3,818	yd3	$0.72	$2,757
	11	Water and Optimization Treatment for Trench Backfill Materia		7,850	yd3	$1.58	$12,418
	12	Hauling of Leftover Excavation Material for Grade Raising		1,156	yd3	$1.46	$1,688
	13	Spreading of Leftover Excavation Materials for Grade Raising		1,156	yd3	$1.90	$2,200
	14	Compacted Fill - Leftover Excavation Materials for Grade Rai		1,051	yd3	$0.72	$762
	15	Water and Optimization Treatment for Leftover		1,051	yd3	$1.58	$1,663
		Excavation Materials for Grade Raising					$0
		SUBTOTAL THIS SHEET					**$1,038,822**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Pumping Generating Plant** 152 Waterways (Continued) **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
		Subtotal from Previous Page					**$1,038,822**
							$0
152		**Discharge Piping to Delevan - Continued)**					$0
	16	Form & Concrete Placement - Deadman		148	yd3	$296.36	$43,861
		@ Butterfly Valves					$0
	17	Rebar Reinforcing - Deadman @ Butterfly		148	yd3	$343.20	$50,794
		Valves (6% by weight)					$0
	18	Concrete Transit Trucking @ Butterfly Valves		148	yd3	$23.76	$3,516
	19	Concrete Vault - Valve Box @ Butterfly Valves		4	ea	$8,175.77	$32,703
	20	30" Access Hole - Valve Vault @ Butterfly Valves		4	ea	$1,285.18	$5,141
	21	Misc Metals - Access Ladder @ Butterfly Valves		32	lft	$128.11	$4,099
	22	Misc Metals - Steel Vault Covers @ Butterfly Valves		8,000	lb	$5.45	$43,621
	23	Installation of Butterfly Valve Assemblies (x4)		4	ea	$210,120.00	$840,480
	24	Butterfly Valve Power/Data/SCADA		1	ls	$52,530.00	$52,530
	25	Onsite Welding, Mechanic, Misc		4	day	$798.99	$3,196
	26	Surveying		2	day	$592.54	$1,185
	27	Trucking - Access Road Gravel (20 mi cycle)		3,883	yd3	$9.70	$37,675
	28	Access Road- Gravel - Aggregate Subbase (0.5 mile)		3,300	ton	$12.61	$41,604
	29	Access Road - Gravel - Class II AB (0.5 mile)		3,300	ton	$21.01	$69,340
	30	Access Road, Spreading/Grading		3,883	yd3	$1.90	$7,389
	31	Compaction Access Road		3,883	yd3	$0.55	$2,121
							$0
							$0
		SUBTOTAL THIS SHEET					**$2,278,077**

QUANTITIES		PRICES	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Pumping Generating Plant** 154 Waterway Protective Works **Civil**	**PROJECT:** **NODOS Alternative D** **WOID:** / **ESTIMATE LEVEL:** **REGION:** / **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
154		**Waterway Protective Works**					$0
	1	32' Diameter Air Chamber - Surge Control		2	ea	$1,683,000.00	$3,366,000
	2	Compressor including power and foundation		1	allow	$4,080,000.00	$4,080,000
							$0
							$0
		SUBTOTAL THIS SHEET					**$7,446,000**

QUANTITIES		PRICES	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Pumping Generating Plant** 160 Pumps and Prime Movers **Civil**	**PROJECT:** **NODOS Alternative D** **WOID:** / **ESTIMATE LEVEL:** **REGION:** / **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
							$0
160		**Pumps and Prime Movers**					$0
	1	22,000hp Pump		4	ea	$13,875,227.02	$55,500,908
	2	84" AWWA Butterfly Valves		4	ea	$259,420.82	$1,037,683
							$0
							$0
		SUBTOTAL THIS SHEET					**$56,538,591**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
TL Peng	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Pumping Generating Plant** 165 Turbines and Generators **Civil**	**PROJECT:** **NODOS Alternative D**
WOID:	**ESTIMATE LEVEL:**
REGION:	**UNIT PRICE LEVEL:**
FILE:	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
							$0
165		**Turbines and Generators**					$0
	1	5.4MW Generator		2	ea	$3,570,000.00	$7,140,000
	2	92" AWWA Butterfly Valves		2	ea	$292,551.10	$585,102
							$0
							$0
		SUBTOTAL THIS SHEET					**$7,725,102**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

SHEET 70 OF _ _

FEATURE:
NODOS Project
Pumping and Generating Plants
Sacramento River Pumping Generating Plant
170 Accessory Electrical Equipment

Electrical

PROJECT:
NODOS Alternative D

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:
FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]SAC River PGP

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
170		**Accessory Electrical Equipment**		1	lot	$1,224,000.00	$1,224,000
	1	Exposed and Embedded Conduit		1	lot	$2,004,300.00	$2,004,300
	2	Duct bank, MV Cable, & UG Vaults To Substation		1	lot	$244,800.00	$244,800
	3	Cable Trays		1	lot	$280,500.00	$280,500
	4	MV Circuits to Machines		1	lot	$1,428,000.00	$1,428,000
	5	LV, Inst, Comm, Control Cable		1	ea	$714,000.00	$714,000
	6	Station Service Unit Substation		2	lot	$14,280.00	$28,560
	7	Secondary Distribution Transformers		8	ea	$20,400.00	$163,200
	8	Panelboards		2	lot	$122,400.00	$244,800
	9	DC Power System		1	lot	$153,000.00	$153,000
	10	Standby Generator		1	ea	$81,600.00	$81,600
	11	Standby Switchgear		1	ea	$81,600.00	$81,600
	12	Automatic Transfer Switch		10	ea	$81,600.00	$816,000
	13	Motor Control Centers		2	ea	$81,600.00	$163,200
	14	UPS System		1	lot	$178,500.00	$178,500
	15	Lighting and Lighting Control		1	lot	$20,400.00	$20,400
	16	Convenience Power		1	lot	$714,000.00	$714,000
	17	Grounding		1	lot	$153,000.00	$153,000
	18	Lightning Protection		1	lot	$714,000.00	$714,000
	19	13.8kV switchgear		10	ea	$306,000.00	$3,060,000
	20	Protection and Control Panels		1	lot	$1,530,000.00	$1,530,000
	21	Plant Control System		1	lot	$459,000.00	$459,000
	22	Fire Alarm and Sprinklers in Building		15,000	SF	$14.00	$210,000
	23	Commissioning and Acceptance Testing		1	lot	$3,998,400.00	$3,998,400
							$0
							$0
		SUBTOTAL THIS SHEET					**$18,664,860**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Pumping and Generating Plants	
Sacramento River Fish Screen Structure	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Fish Screen Structure

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights (Included with Reservoir)					$0
130		Structures and Improvements					$35,076,550
140		Roads and Road Structures (Included with Reservoir Project Roads)					$122,351
170		Accessory Electrical Equipment					$510,000
		Subtotal					**$35,708,901**
		Mobilization	5%	+/-			$1,800,000
		Subtotal with Mobilization					**$37,508,901**
		Contract Cost Allowances (Sum of):	10%	+/-			$3,491,099
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$41,000,000**
		Construction Contingencies	15%	+/-			$6,000,000
		FIELD COST					**$47,000,000**
		Non-Contract Costs	17%	+/-			$8,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$55,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$63,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Fish Screen Structure** 100 Land and Rights 130 Structures and Improvements **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Fish Screen Structure

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Land and Rights**					
		(Included with Sites Reservoir)					$0.00
							$0.00
130		**Structures and Improvements**					$0.00
		Clear and Grub Fish Screen		10	acre	$15,759.00	$157,590
		Site Surface Restoration		1	allow	$50,000.00	$50,000
							$0
		Site Preparation					$0
	1	Temporary Sheet Pile Cofferdam		108,000	ft2	$32.00	$3,456,000
	2	Fore bay Retaining Walls - Concrete footings		340	yd3	$271.42	$92,283
	3	Fore bay retaining walls - Walls		320	yd3	$779.35	$249,392
	4	Fore bay Retaining Wall Rebar at 5%		132,000	lb	$1.35	$178,200
	5	Fore bay Excavation		38,000	yd3	$4.73	$179,653
	6	Flood Gates at Fore bay		10	ea	$153,000.00	$1,530,000
							$0
		Fish Screen Structure					$0
	1	Fish Screen Piles		6,600	lft	$73.54	$485,377
	2	Fish Screen Tremie Slab		3,500	yd3	$430.42	$1,506,470
	3	Fish Screen Structural Slab		1,748	yd3	$584.58	$1,021,729
	4	Fish Screen Infill Slab		490	yd3	$457.62	$224,234
	5	Fish Screen Divider Walls		2,360	yd3	$692.70	$1,634,772
	6	Fish Screen Road Slab		5,090	yd3	$692.70	$3,525,843
	7	Fish Screen Road Rails - Concrete		140	yd3	$785.20	$109,928
	8	Fish Screen Rebar at 5% of total		2,700,000	lb	$1.35	$3,645,000
	9	Catwalk		2,860	ft2	$255.00	$729,300
	10	Bridge Railing - Metal Galvanized 36"		2,270	lft	$120.00	$272,400
	11	Miscellaneous Metal Allowance		100,000	lb	$4.75	$475,000
	12	Riprap and Placement		670	yd3	$54.63	$36,603
	13	Log Boom		592	lft	$374.54	$221,729
	14	Fore bay Access Bridge		1	allow	$160,000.00	$160,000
	15	Fish Screen		7,400	ft2	$55.00	$407,000
	16	Solid Panels		18,300	ft2	$175.00	$3,202,500
		SUBTOTAL THIS SHEET					**$23,551,002**

QUANTITIES		**PRICES**	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Fish Screen Structure** 130 Structures and Improvements (Continued) **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Fish Screen Structure

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
		Subtotal from Previous Sheet					**$23,551,002**
							$0
130		**Structures and Improvements (Continued)**					$0
	1	Trash Racks		8,800	ft2	$153.00	$1,346,400
	2	Tuning Baffles		34	ea	$45,900.00	$1,560,600
	3	Access doors		2	ea	$1,224.00	$2,448
	4	Sediment Removal Pumping & Platform		2	ea	$2,550,000.00	$5,100,000
	5	Fish Screen Cleaner & Platform		2	ea	$1,020,000.00	$2,040,000
		Maintenance Equipment					$0
	1	Hydraulic Beam Truck		1	allow	$400,000.00	$400,000
	2	Long Reach Excavator		1	allow	$459,000.00	$459,000
	3	Floating Work Platform		1	allow	$76,500.00	$76,500
	4	Floating Dredge		1	allow	$510,000.00	$510,000
	5	Portable High Pressure Washer		1	allow	$30,600.00	$30,600
		SUBTOTAL THIS SHEET					**$35,076,550**

QUANTITIES		PRICES	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE:	PROJECT:
NODOS Project Pumping and Generating Plants Sacramento River Fish Screen Structure 140 Roads and Road Structures Civil	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Fish Screen Structure

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
140		**Roads and Road Structures**					$0
	1	Road to Fish Screen		14,400	ft2	$8.50	$122,351
							$0
							$0
		SUBTOTAL THIS SHEET					**$122,351**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Sacramento River Fish Screen Structure** 170 Accessory Electrical Equipment **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID:
	ESTIMATE LEVEL:
	REGION:
	UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Fish Screen Structure

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
170		**Accessory Electrical Equipment**					$0
	1	Electrical For Fish Screen		1	allow	$510,000.00	$510,000
							$0
							$0
		SUBTOTAL THIS SHEET					**$510,000**

QUANTITIES		**PRICES**	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Red Bluff Diversion Pump Addition**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Civil **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Red Bluff Pump Addition

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights (Included with Reservoir)					$0
130		Structures and Improvements					$127,530
160		Pumps and Prime Movers					$2,186,902
170		Accessory Electrical Equipment					$357,590
		Subtotal					**$2,672,022**
		Mobilization	5%	+/-			$135,000
		Subtotal with Mobilization					**$2,810,000**
		Contract Cost Allowances (Sum of):	10%	+/-			$281,000
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$3,000,000**
		Construction Contingencies	15%	+/-			$450,000
		FIELD COST					**$3,300,000**
		Non-Contract Costs	17%	+/-			$561,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$3,900,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$4,500,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Pumping and Generating Plants** **Red Bluff Diversion Pump Addition** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Red Bluff Pump Addition

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
							$0
100		**Land and Rights**					
		(No cost to NODOS, Pump Bay Exists)					$0
							$0
130		**Structures and Improvements**					$0
	1	Allowance for Minor Revisions & Repairs		1	allow	$52,530.00	$52,530
	2	Project General Requirements		1	allow	$75,000.00	$75,000
160		**Pumps and Prime Movers**					$0
	1	262.5 CFS Vertical Axis Flow Pump		2	ea	$645,631.00	$1,291,262
	2	Induction Motor		2	ea	$325,000.00	$650,000
	3	84" Dia Motor Operated Butterfly Valve		2	ea	$76,880.00	$153,760
	4	84" Dia Flap Gate		2	ea	$38,440.00	$76,880
	5	Vendor installation support		1	allow	$15,000.00	$15,000
170		**Accessory Electrical Equipment**					$0
		Control Systems					$0
	1	Pump Control System Connection		1	allow	$52,530.00	$52,530
	2	Commissioning and Acceptance Testing		1	lot	$50,000.00	$50,000
		Electrical Systems					$0
	1	Electrical conduit and connections		1	allow	$105,060.00	$105,060
	2	Other Equipment Supply/Install		1	lot	$150,000.00	$150,000
		SUBTOTAL THIS SHEET					**$2,672,022**

QUANTITIES		**PRICES**	
BY TL Peng	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE:		**PROJECT:**	
NODOS Project		**NODOS Alternative D**	
Canals and Conduits			
Conveyance Channel Sites to Holthouse		**WOID:**	**ESTIMATE LEVEL:**
		REGION:	**UNIT PRICE LEVEL:**
Civil	**Summary Sheet**	**FILE:**	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		Conveyance Channel Sites to Holthouse					$31,932,366
		Subtotal					**$31,932,366**
		Mobilization	5%	+/-			$1,600,000
		Subtotal with Mobilization					**$33,532,366**
		Contract Cost Allowances (Sum of):	10%	+/-			$3,467,634
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$37,000,000**
		Construction Contingencies	15%	+/-			$5,000,000
		FIELD COST					**$42,000,000**
		Non-Contract Costs	17%	+/-			$7,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$49,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$56,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Canals and Conduits** **Conveyance Channel Sites to Holthouse** **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Conveyance Channel Sites to Holthouse**					
	1	Clear and grub		40	acre	$2,042.46	$81,698
	2	Excavation		3,600,000	yd3	$3.74	$13,464,490
	3	Haul material - 5 Mi. average round trip		3,600,000	yd3	$4.73	$17,019,720
	4	Spread Material		3,600,000	yd3	$0.38	$1,366,458
		SUBTOTAL THIS SHEET					**$31,932,366**

QUANTITIES		**PRICES**	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE: **NODOS Project** **Canals and Conduits** **Delevan Pipeline** **Two adjacent 12' pipelines from Sites PGP to TRR PGP vicinity.** **Civil** **Summary Sheet**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights					$0
120		Clearing and Demolition					$293,999
152		Construct Delevan Pipeline					$385,864,419
152		I-5 Undercrossing (Jacked)					$29,186,893
152		Highway 45 Undercrossing (Jacked)					$8,892,705
		Subtotal					**$424,238,017**
		Mobilization	5%	+/-			$21,000,000
		Subtotal with Mobilization					**$445,238,017**
		Contract Cost Allowances (Sum of):	10%	+/-			$44,761,983
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$490,000,000**
		Construction Contingencies	15%	+/-			$70,000,000
		FIELD COST					**$560,000,000**
		Non-Contract Costs	17%	+/-			$100,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$660,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$760,000,000.00**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY Melissa Wong	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Canals and Conduits** **Delevan Pipeline** Land and Rights **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Delevan Pipeline Land and Rights**					
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Melissa Wong	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Canals and Conduits** **Delevan Pipeline** Clearing and Demolition **Civil**	**PROJECT:** **NODOS Alternative D**
WOID:	**ESTIMATE LEVEL:**
REGION:	**UNIT PRICE LEVEL:**
FILE:	G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
120		**Pipeline Clearing and Demolition**					
	1	Gas Well Decommissioning		6,000	lft	$7.35	$44,125
	2	Clearing & Grubbing		208	acre	$1,201.32	$249,874
		SUBTOTAL THIS SHEET					**$293,999**

QUANTITIES		**PRICES**	
BY Melissa Wong	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Canals and Conduits** **Delevan Pipeline** Construct Pipeline **Civil**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Construct Delevan Pipeline**					
	1	Install Dewatering Wells - Incl Temp Piping		100	ea	$26,265.00	$2,626,500
	2	Earthwork - Mass Excavation for Pipeline		2,953,117	yd3	$6.32	$18,663,699
	3	144" Pipeline Installation		112,460	lft	$2,828.00	$318,036,880
	4	Pipe Bedding Transit		125,956	yd3	$23.76	$2,992,110
	5	Pipe Bedding Placement		125,956	yd3	$146.16	$18,409,981
	6	Backfill Hauling		2,420,927	yd3	$1.46	$3,526,993
	7	Spreading Backfill in Trench Zone for Compaction		2,200,843	yd3	$0.86	$1,895,238
	8	Compacted Fill - Pipe Zone		1,049,252	yd3	$0.54	$568,712
	9	Compacted Fill - Random Fill above Pipe Zone		1,151,591	yd3	$0.72	$831,465
	10	Water & Optimization Treatment for Trench Backfill Material		2,200,843	yd3	$1.58	$3,481,661
	11	Segregate & Spread Topsoil in Agricultural Areas (Top 1.5' of		295,520	yd3	$1.90	$562,359
	12	Compaction of Topsoil in Agricultural Areas		268,655	yd3	$0.72	$193,973
	13	Loading & Trucking of Leftover Excavation Materials		843,830	yd3	$9.70	$8,187,377
	14	Spreading of Leftover Excavation Materials		843,830	yd3	$1.90	$1,605,765
	15	Compacted Fill - Leftover Excavation Materials		767,118	yd3	$0.72	$553,870
	16	Form & Place Concrete @ MH-ARV & Blow off		1,452	yd3	$611.81	$888,343
	17	Rebar Reinforcing @ MH-ARV & Blow off (6% by weight)		1,452	yd3	$324.00	$470,448
	18	Concrete Transit Trucking @ MH-ARV & Blow off		1,452	yd3	$23.76	$34,493
	19	108" RCP Vault Riser at MH-ARV & Blow off		24	ea	$8,175.77	$196,218
	20	30" Access Hole @ MH-ARV & Blow off		24	ea	$1,285.18	$30,844
	21	Misc Metals - Access Ladder @ MH-ARV & Blow off		192	lft	$128.11	$24,596
	22	Misc Metals - Steel Vault Covers @ MH-ARV & Blow off		48,000	lb	$5.45	$261,773
	23	Installation of MH-ARV & Blow off Assemblies		24	ea	$35,720.40	$857,290
	24	Onsite Welding, Mechanic, Misc		880	day	$798.99	$703,114
	25	Surveying		440	day	$592.54	$260,717
	26	Dewatering contingency					
		SUBTOTAL THIS SHEET					**$385,864,419**

QUANTITIES		**PRICES**	
BY Melissa Wong	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

SHEET 84 OF _ _

FEATURE:
NODOS Project
Canals and Conduits
Delevan Pipeline
I-5 Undercrossing (Jacked)

Civil

PROJECT:
NODOS Alternative D

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**I-5 Undercrossing (Jacked)**					
	1	Earthwork - Mass Ex for Jacking & Receiving Pits		22,288	yd3	$6.32	$140,860
	2	Form & Place Concrete, Jacking Pit S.O.G (Excl Reinforcing)		46	yd3	$526.32	$24,369
	3	Reinforcing for Jacking Pit S.O.G.		46	yd3	$294.00	$13,612
	4	Concrete Transit Trucking		46	yd3	$23.06	$1,068
	5	Installation of TBM/Jacking Assembly		1	ls	$16,130.21	$16,130
	6	144" Pipe Installation w/ 192" ID Casing (incl mucking)		2,400	lft	$11,000.00	$26,400,000
	7	Liner Grouting, Exterior Annular Space, Casing		142,572	CF	$6.63	$945,252
	8	Liner Grouting, Annular Space, Pipe & Casing		112,683	CF	$6.63	$747,088
	9	Demolition/Disposal, Jacking Pit		25,000	SF	$17.75	$443,693
	10	Backfill Hauling, Jacking & Receiving Pits		24,515	yd3	$1.41	$34,675
	11	Spreading of Backfill Material		24,515	yd3	$0.84	$20,496
	12	Compacted Embankment - Fill		22,288	yd3	$0.70	$15,686
	13	Water & Optimization Treatment for Backfill		22,288	yd3	$1.54	$34,232
	14	Loading & Trucking of Leftover Excavation Material		24,881	yd3	$9.42	$234,498
	15	Spreading of Leftover Excavation Materials		24,881	yd3	$1.85	$45,968
	16	Compacted Fill - Leftover Excavation Materials		22,619	yd3	$0.70	$15,919
	17	Optimization Moisture for Leftover Excavation Materials		22,619	yd3	$1.54	$34,740
	18	Onsite Welding, Mechanic, Misc		24	day	$775.20	$18,605
		SUBTOTAL THIS SHEET					**$29,186,893**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
Melissa Wong	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project Canals and Conduits Delevan Pipeline Highway 45 Undercrossing (Jacked) Civil	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
152		**Highway 45 And Basin Undercrossing (Jacked)**					
	1	Earthwork - Mass Ex for Jacking & Receiving Pits		17,580	yd3	$6.32	$111,106
	2	Form & Place Concrete, Jacking Pit S.O.G (Excl Reinforcing)		92	yd3	$526.32	$48,421
	3	Reinforcing for Jacking Pit S.O.G. (1lb/sf)		92	yd3	$294.00	$27,048
	4	Concrete Transit Trucking		92	yd3	$23.06	$2,122
	5	Installation of TBM/Jacking Assembly		1	ls	$16,130.21	$16,130
	6	144" Pipe Jacking Installation		757	lft	$11,000.00	$8,327,000
	7	Liner Grouting, Exterior Annular Space, Pipeline		28,274	ft3	$6.63	$187,457
	8	Demolition/Disposal, Jacking Pit		5,000	ft2	$17.75	$88,739
	9	Backfill Hauling, Jacking & Receiving Pits		19,336	yd3	$1.41	$27,350
	10	Spreading of Backfill Material		19,336	yd3	$0.84	$16,166
	11	Compacted Embankment - Fill, Jacking & Receiving Pits		17,580	yd3	$0.70	$12,373
	12	Loading & Trucking of Leftover Excavation Material		4,914	yd3	$3.37	$16,571
	13	Spreading of Leftover Excavation Materials		4,914	yd3	$1.85	$9,079
	14	Compacted Fill - Leftover Excavation Materials		4,468	yd3	$0.70	$3,145
		SUBTOTAL THIS SHEET					**$8,892,705**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Melissa Wong	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
General Property	
General Property	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
Electrical NODOS F Summary Sheet	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		Recreation Areas - Sheet 1					$9,043,990
195		Recreation Areas - Sheet 2					$0
195		Recreation Areas - Sheet 3					$8,934,669
195		Operating and Maintenance Facility					$1,879,991
		Subtotal					**$19,858,649**
		Mobilization	5%	+/-			$990,000
		Subtotal with Mobilization					**$20,848,649**
		Contract Cost Allowances (Sum of):	10%	+/-			$2,151,351
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$23,000,000**
		Construction Contingencies	15%	+/-			$3,000,000
		FIELD COST					**$26,000,000**
		Non-Contract Costs	17%	+/-			$4,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$30,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$34,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
General Property	
Recreation Areas	**WOID:** / **ESTIMATE LEVEL:**
Sheet 1	**REGION:** / **UNIT PRICE LEVEL:**
Electrical	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Stone Corral**					
	1	Clear and grub Stone Corral 10% of total		24	acre	$2,042.46	$47,998
	2	AC Paved Roads		310,000	ft2	$8.25	$2,556,635
	3	Gravel Roads		50,000	ft2	$6.99	$349,325
	4	Walking Trails		26,400	ft2	$2.63	$69,340
	5	Parking Lots		168,000	ft2	$7.46	$1,253,156
	6	Boat Ramp - Concrete Slab 6"		50,000	ft2	$10.04	$502,187
	7	Camp Sites with parking		100	ea	$19,646.22	$1,964,622
	8	**Picnic Sites with parking**		3	ea	$9,770.58	$29,312
	9	Electrical power to site - Overhead		10,000	ft2	$183.86	$1,838,550
	10	Light Fixtures at Parking areas		20	ea	$4,727.70	$94,554
	11	Emergency Phone		1	allow	$10,506.00	$10,506
	12	Transformer and fenced enclosure		1	allow	$26,265.00	$26,265
	13	Water well, Pump house and distribution		1	allow	$157,590.00	$157,590
	14	Kiosk		1	ea	$15,759.00	$15,759
	15	Entry gate with Structure		1	ea	$60,409.50	$60,410
	16	Vault Toilets		10	ea	$5,253.00	$52,530
	17	Signage		1	allow	$5,253.00	$5,253
	18	Interpretive elements		1	allow	$10,000.00	$10,000
		SUBTOTAL THIS SHEET					**$9,043,990**

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
General Property	
Recreation Areas	**WOID:** / **ESTIMATE LEVEL:**
Sheet 2	**REGION:** / **UNIT PRICE LEVEL:**
Electrical	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Modified Lurline**					
	1	Clear and grub Lurline 10%			acre	$2,042.46	$0
	2	AC Paved Roads			ft2	$8.25	$0
	3	Gravel Roads			ft2	$6.99	$0
	4	Walking Trails			ft2	$2.63	$0
	5	Parking Lots			ft2	$7.46	$0
	7	Camp Sites with parking			ea	$19,646.22	$0
	8	Picnic Sites with parking			ea	$9,770.58	$0
	9	Electrical power to site - Overhead			lft	$183.86	$0
	10	Light Fixtures at Parking areas			ea	$4,727.70	$0
	11	Transformer and fenced enclosure			allow	$26,265.00	$0
	12	Water well, Pump house and distribution			allow	$157,590.00	$0
	13	Entry gate with Structure			ea	$60,409.50	$0
	14	Vault Toilets			ea	$5,253.00	$0
	15	Signage			allow	$5,253.00	$0
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
General Property	
Recreation Areas	WOID: / ESTIMATE LEVEL:
Sheet 2	REGION: / UNIT PRICE LEVEL:
Electrical	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Peninsula Hills**					
	1	Clear and grub Lurline 10%		51	acre	$2,042.46	$104,166
	2	AC Paved Roads		280,000	ft2	$8.25	$2,309,219
	3	Gravel Roads		32,000	ft2	$6.99	$223,568
	4	Walking Trails		17,000	ft2	$2.63	$44,651
	5	Parking Lots		144,000	ft2	$7.46	$1,074,133
	7	Camp Sites with parking		100	ea	$19,646.22	$1,964,622
	8	Picnic Sites with parking		10	ea	$9,770.58	$97,706
	9	Electrical power to site - Overhead		15,000	lft	$183.86	$2,757,825
	10	Light Fixtures at Parking areas		12	ea	$4,727.70	$56,732
	11	Transformer and fenced enclosure		1	allow	$26,265.00	$26,265
	12	Water well, Pump house and distribution		1	allow	$157,590.00	$157,590
	13	Entry gate with Structure		1	ea	$60,409.50	$60,410
	14	Vault Toilets		10	ea	$5,253.00	$52,530
	15	Signage		1	allow	$5,253.00	$5,253
		SUBTOTAL THIS SHEET					**$8,934,669**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **General Property** **Operating Facility** **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Operating and Maintenance Facility**					
	1	Grade Site		100,000	ft2	$3.15	$315,180
	2	Drainage		1	allow	$30,000.00	$30,000
	3	Septic structure		1	ea	$21,000.00	$21,000
	4	Well		1	ea	$31,518.00	$31,518
	5	OH Power & Data from PGP to Field Office		3,000	lft	$84.05	$252,144
	6	Site Lighting - Poles - LED		10	ea	$4,500.00	$45,000
	7	Vehicle Wash Area		1,000	ft2	$12.01	$12,010
	8	Fuel Storage & dispensing		1	allow	$50,000.00	$50,000
	9	Transformer & switchgear		1	allow	$75,000.00	$75,000
	10	Paving		80,000	ft2	$3.68	$294,168
	11	Fencing		1,300	lft	$36.00	$46,800
	12	Site signage		1	allow	$5,500.00	$5,500
	13	Metal Building		10,000	ft2	$24.00	$240,000
	14	Foundations		50	yd3	$271.42	$13,571
	15	SOG including grading, rock Vapor barrier rebar		10,000	ft2	$12.01	$120,100
	16	Office Area TI work		2,000	ft2	$45.00	$90,000
	17	Warehouse Area TI work		8,000	ft2	$16.00	$128,000
	18	Tools and Equipment (Lifts, Trolley Cranes,		1	allow	$110,000.00	$110,000
	19	Air Compressors, Etc.)					
		SUBTOTAL THIS SHEET					**$1,879,991**

QUANTITIES		PRICES	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Transmission and Interconnections	
Transmission and Interconnections	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Electrical **Summary Sheet**	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		Land and Rights					
175		Sites Substation					$26,245,000
175		TRR Switchyard					$7,662,113
175		Sacramento River PGP Switchyard					$6,607,900
181/183		Transmission Lines					$73,016,329
185		WAPA Substation					$7,597,119
		Estimate includes no costs associated with outside utility fees related to facility upgrades or power charges.					
		Subtotal					**$121,128,461**
		Mobilization	5%	+/-			$6,100,000
		Subtotal with Mobilization					**$127,228,461**
		Contract Cost Allowances (Sum of):	10%	+/-			$12,771,539
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$140,000,000**
		Construction Contingencies	15%	+/-			$20,000,000
		FIELD COST					**$160,000,000**
		Non-Contract Costs	17%	+/-			$30,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$190,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to December 2015)					**$220,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Transmission and Interconnections** **Transmission Line** Land and Rights **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID:
	ESTIMATE LEVEL:
	REGION:
	UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100		**Land and Rights**					
		(Included with Delevan Pipeline)					
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		PRICES	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE:	**PROJECT:**
NODOS Project	**NODOS Alternative D**
Transmission and Interconnections	
Sites Substation	**WOID:** / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
Electrical	**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
175		**Sites Substation**					
	1	Clear and grub		5.0	acre	$2,042.46	$10,212
	2	Power Transformer		2.0	ea	$1,920,380.00	$3,840,760
		75 MVA, 230-13.2 KV, 3 phase					
	3	Power Transformer		1.0	ea	$1,862,768.00	$1,862,768
		60 MVA, 230-13.2 KV, 3 phase					
	4	Power Transformer		1.0	ea	$1,838,764.00	$1,838,764
		55 MVA, 230-13.2 KV, 3 phase					
	5	230kV Circuit Breakers, 1200A		12.0	ea	$631,400.00	$7,576,800
		40kA, 3 phase, SF6					
	6	230kV Disconnect Switch, 1200A		24.0	ea	$38,955.00	$934,920
		3 phase					
	7	230kV Oil filled Potential Transformer		12.0	ea	$51,870.00	$622,440
		Meter accuracy					
	8	Substation Steel		1.0	lot	$687,766.00	$687,766
	9	Surface and Below Grade Package		1.0	lot	$115,500.00	$115,500
		Fence, Rock surfacing, Conduit, Grounding, etc.					
	10	Above Grade Package		1.0	lot	$141,680.00	$141,680
		Bus, Jumpers, Fittings, etc.					
	11	Control Building w/ ancillary equipment		1.0	ea	$907,290.00	$907,290
		Control panels, HVAC, AC/DC system, etc.					
	12	Engineering / Management		1.0	lot	$1,535,100.00	$1,535,100
		Construction					
	13	Below Grade		1.0	lot	$2,397,000.00	$2,397,000
	14	Above Grade		1.0	lot	$3,315,000.00	$3,315,000
	15	VAR Support		1.0	allow	$459,000.00	$459,000
		SUBTOTAL THIS SHEET					**$26,245,000**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

FEATURE:	PROJECT:	
NODOS Project	NODOS Alternative D	
Transmission and Interconnections		
TRR Switchyard	WOID:	ESTIMATE LEVEL:
	REGION:	UNIT PRICE LEVEL:
Electrical	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property	

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
175		**TRR Switchyard**					
	1	Clear and grub		5.0	acre	$2,042.46	$10,212
	2	Power Transformer		1.0	ea	$1,837,804.00	$1,837,804
		20 MVA, 230-13.2 KV, 3 phase					
	3	Power Transformer		1.0	ea	$1,837,804.00	$1,837,804
		10 MVA, 230-13.2 KV, 3 phase					
	4	230kV Circuit Breakers, 1200A		2.0	ea	$631,400.00	$1,262,800
		40kA, 3 phase, SF6					
	5	230kV Disconnect Switch, 1200A		4.0	ea	$28,567.00	$114,268
		3 phase					
	6	230kV Disconnect Switch, 1200A		1.0	ea	$76,755.00	$76,755
		Motor operated, 3 phase					
	7	230kV Oil filled Potential Transformer		3.0	ea	$51,870.00	$155,610
		Meter accuracy					
	8	Substation Steel		1.0	lot	$159,366.00	$159,366
	9	Surface and Below Grade Package		1.0	lot	$84,700.00	$84,700
		Fence, Rock surfacing, Conduit, Grounding, etc.					
	10	Above Grade Package		1.0	lot	$36,128.40	$36,128
		Bus, Jumpers, Fittings, etc.					
	11	Control Building w/ ancillary equipment		1.0	ea	$332,265.00	$332,265
		Control panels, HVAC, AC/DC system, etc.					
	12	Engineering / Management		1.0	lot	$402,900.00	$402,900
		Construction					
	13	Below Grade		1.0	lot	$561,000.00	$561,000
	14	Above Grade		1.0	lot	$790,500.00	$790,500
		SUBTOTAL THIS SHEET					**$7,662,113**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:
NODOS Project
Transmission and Interconnections
Sacramento River Switchyard

Electrical

PROJECT: **NODOS Alternative D**

WOID:

ESTIMATE LEVEL:

REGION:

UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
175		**Sacramento River PGP Switchyard**					
	1	Clear and grub		5.0	acre	$2,042.46	$10,212
	2	Power Transformer		1.0	ea	$1,544,561.00	$1,544,561
		50 MVA, 230-13.2 KV, 3 phase					
	3	Power Transformer		1.0	ea	$1,543,755.00	$1,543,755
		30 MVA, 230-13.2 KV, 3 phase					
	4	230kV Circuit Breakers, 1200A		2.0	ea	$423,038.00	$846,076
		40kA, 3 phase, SF6					
	5	230kV Disconnect Switch, 1200A		3.0	ea	$17,140.00	$51,420
		3 phase					
	6	230kV Disconnect Switch, 1200A		1.0	ea	$58,023.00	$58,023
		Motor operated, 3 phase					
	7	230kV Oil filled Potential Transformer		3.0	ea	$37,865.00	$113,595
		Meter accuracy					
	8	Substation Steel		1.0	lot	$142,835.00	$142,835
	9	Surface and Below Grade Package		1.0	lot	$84,700.00	$84,700
		Fence, Rock surfacing, Conduit, Grounding, etc.					
	10	Above Grade Package		1.0	lot	$40,378.00	$40,378
		Bus, Jumpers, Fittings, etc.					
	11	Control Building w/ ancillary equipment		1.0	ea	$332,265.00	$332,265
		Control panels, HVAC, AC/DC system, etc.					
	12	Engineering / Management		1.0	lot	$488,580.00	$488,580
		Construction					
	13	Below Grade		1.0	lot	$561,000.00	$561,000
	14	Above Grade		1.0	lot	$790,500.00	$790,500
		SUBTOTAL THIS SHEET					**$6,607,900**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project Transmission and Interconnections Transmission Lines Electrical	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
181/183		**Transmission Lines**					
	1	Clear and grub		20.0	acre	$2,042.46	$40,849
		PG&E Tap to Sites Substation					
	2	230kV, Double Circuit, Lattice Towers		2.3	mi	$5,293,500.00	$12,175,050
		Single 2156 ACSR "Bluebird" per Circuit					
	3	230kV, Single Circuit, Lattice Towers		2.3	mi	$4,345,500.00	$9,994,650
		Single 2156 ACSR "Bluebird" per Circuit					
	4	PG&E Tap 230kV, Single Circuit, Steel Dead end Structure		1.0	ea	$476,865.00	$476,865
	5	PG&E Tap230kV, Double Circuit, Steel Dead end Structure		1.0	ea	$476,865.00	$476,865
	6	Sites Switchyard to TRR Switchyard		3.5	mi	$7,477,500.00	$26,171,250
		230kV, Single Circuit, Mono-Pole					
		Single 2156 ACSR "Bluebird" per Circuit					
	7	New WAPA Substation to Delevan Switchyard		11.0	mi	$2,152,800.00	$23,680,800
		SUBTOTAL THIS SHEET					**$73,016,329**

QUANTITIES		PRICES	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Transmission and Interconnections** **WAPA Substation** **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: | **ESTIMATE LEVEL:**
	REGION: | **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]General Property

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
175		**WAPA Substation**					
	1	Clear and grub		5.0	acre	$2,042.46	$10,212
	2	Power Transformer		1.0	ea	$1,837,804.00	$1,837,804
		20 MVA, 230-115kV KV, 3 phase					
	3	230kV Circuit Breakers, 1200A		4.0	ea	$631,400.00	$2,525,600
		40kA, 3 phase, SF6					
	4	230kV Disconnect Switch, 1200A		4.0	ea	$28,567.00	$114,268
		3 phase					
	5	230kV Disconnect Switch, 1200A		2.0	ea	$76,755.00	$153,510
		Motor operated, 3 phase					
	6	230kV Oil filled Potential Transformer		3.0	ea	$51,870.00	$155,610
		Meter accuracy					
	7	115kV Circuit Breakers, 1200A		1.0	ea	$423,038.00	$423,038
		40kA, 3 phase, SF6					
	8	115kV Disconnect Switch, 1200A		1.0	ea	$17,140.00	$17,140
		3 phase					
	9	Substation Steel		1.0	lot	$145,691.70	$145,692
	10	Surface and Below Grade Package		1.0	lot	$86,394.00	$86,394
		Fence, Rock surfacing, Conduit, Grounding, etc.					
	11	Above Grade Package		1.0	lot	$41,185.56	$41,186
		Bus, Jumpers, Fittings, etc.					
	12	Control Building w/ ancillary equipment		1.0	ea	$332,265.00	$332,265
		Control panels, HVAC, AC/DC system, etc.					
	13	Engineering / Management		1.0	lot	$402,900.00	$402,900
		Construction					
	14	Below Grade		1.0	lot	$561,000.00	$561,000
	15	Above Grade		1.0	lot	$790,500.00	$790,500
		SUBTOTAL THIS SHEET					**$7,597,119**

QUANTITIES		PRICES	
BY Lou George	**CHECKED**	**BY** Lou George	**CHECKED**
DATE PREPARED 11/21/16	**PEER REVIEW / DATE**	**DATE PREPARED** 11/22/16	**PEER REVIEW / DATE**

FEATURE:			**PROJECT:**				
NODOS Project			**NODOS Alternative D**				
General Property							
General Property			**WOID:**		**ESTIMATE LEVEL:**		
			REGION:		**UNIT PRICE LEVEL:**		
Electrical NODOS F **Summary Sheet**			**FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation				

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		Recreation Areas - Sheet 1					$9,043,990
195		Recreation Areas - Sheet 2					$0
195		Recreation Areas - Sheet 3					$8,934,669
195		Operating and Maintenance Facility					$1,879,991
		Subtotal					**$19,858,649**
		Mobilization	5%	+/-			$990,000
		Subtotal with Mobilization					**$20,848,649**
		Contract Cost Allowances (Sum of):	10%	+/-			$2,151,351
		Design Contingencies, 10 % (+/-)					
		APS, 0 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$23,000,000**
		Construction Contingencies	15%	+/-			$3,000,000
		FIELD COST					**$26,000,000**
		Non-Contract Costs	17%	+/-			$4,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$30,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year for	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$34,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		**PRICES**	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION **ESTIMATE WORKSHEET**

FEATURE: **NODOS Project** **General Property** **Recreation Areas** Sheet 1 **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Stone Corral**					
	1	Clear and grub Stone Corral 10% of total		24	acre	$2,042.46	$47,998
	2	AC Paved Roads		310,000	ft2	$8.25	$2,556,635
	3	Gravel Roads		50,000	ft2	$6.99	$349,325
	4	Walking Trails		26,400	ft2	$2.63	$69,340
	5	Parking Lots		168,000	ft2	$7.46	$1,253,156
	6	Boat Ramp - Concrete Slab 6"		50,000	ft2	$10.04	$502,187
	7	Camp Sites with parking		100	ea	$19,646.22	$1,964,622
	8	**Picnic Sites with parking**		3	ea	$9,770.58	$29,312
	9	Electrical power to site - Overhead		10,000	ft2	$183.86	$1,838,550
	10	Light Fixtures at Parking areas		20	ea	$4,727.70	$94,554
	11	Emergency Phone		1	allow	$10,506.00	$10,506
	12	Transformer and fenced enclosure		1	allow	$26,265.00	$26,265
	13	Water well, Pump house and distribution		1	allow	$157,590.00	$157,590
	14	Kiosk		1	ea	$15,759.00	$15,759
	15	Entry gate with Structure		1	ea	$60,409.50	$60,410
	16	Vault Toilets		10	ea	$5,253.00	$52,530
	17	Signage		1	allow	$5,253.00	$5,253
	18	Interpretive elements		1	allow	$10,000.00	$10,000
		SUBTOTAL THIS SHEET					**$9,043,990**

QUANTITIES		**PRICES**	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

FEATURE: **NODOS Project** **General Property** **Recreation Areas** Sheet 2 **Electrical**	**PROJECT:** **NODOS Alternative D** **WOID:** / **ESTIMATE LEVEL:** **REGION:** / **UNIT PRICE LEVEL:** **FILE:** G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Modified Lurline**					
	1	Clear and grub Lurline 10%			acre	$2,042.46	$0
	2	AC Paved Roads			ft2	$8.25	$0
	3	Gravel Roads			ft2	$6.99	$0
	4	Walking Trails			ft2	$2.63	$0
	5	Parking Lots			ft2	$7.46	$0
	7	Camp Sites with parking			ea	$19,646.22	$0
	8	Picnic Sites with parking			ea	$9,770.58	$0
	9	Electrical power to site - Overhead			lft	$183.86	$0
	10	Light Fixtures at Parking areas			ea	$4,727.70	$0
	11	Transformer and fenced enclosure			allow	$26,265.00	$0
	12	Water well, Pump house and distribution			allow	$157,590.00	$0
	13	Entry gate with Structure			ea	$60,409.50	$0
	14	Vault Toilets			ea	$5,253.00	$0
	15	Signage			allow	$5,253.00	$0
		SUBTOTAL THIS SHEET					**$0**

QUANTITIES		**PRICES**	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
General Property	
Recreation Areas	WOID: / ESTIMATE LEVEL:
Sheet 2	REGION: / UNIT PRICE LEVEL:
Electrical	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Peninsula Hills**					
	1	Clear and grub Lurline 10%		51	acre	$2,042.46	$104,166
	2	AC Paved Roads		280,000	ft2	$8.25	$2,309,219
	3	Gravel Roads		32,000	ft2	$6.99	$223,568
	4	Walking Trails		17,000	ft2	$2.63	$44,651
	5	Parking Lots		144,000	ft2	$7.46	$1,074,133
	7	Camp Sites with parking		100	ea	$19,646.22	$1,964,622
	8	Picnic Sites with parking		10	ea	$9,770.58	$97,706
	9	Electrical power to site - Overhead		15,000	lft	$183.86	$2,757,825
	10	Light Fixtures at Parking areas		12	ea	$4,727.70	$56,732
	11	Transformer and fenced enclosure		1	allow	$26,265.00	$26,265
	12	Water well, Pump house and distribution		1	allow	$157,590.00	$157,590
	13	Entry gate with Structure		1	ea	$60,409.50	$60,410
	14	Vault Toilets		10	ea	$5,253.00	$52,530
	15	Signage		1	allow	$5,253.00	$5,253
		SUBTOTAL THIS SHEET					**$8,934,669**

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Anthony Quantrell	7-Oct	Mike Egge	Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
	Joe Barnes	October 2016	10/19/16

BUREAU OF RECLAMATION

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **General Property** **Operating Facility** **Electrical**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
195		**Operating and Maintenance Facility**					
	1	Grade Site		100,000	ft2	$3.15	$315,180
	2	Drainage		1	allow	$30,000.00	$30,000
	3	Septic structure		1	ea	$21,000.00	$21,000
	4	Well		1	ea	$31,518.00	$31,518
	5	OH Power & Data from PGP to Field Office		3,000	lft	$84.05	$252,144
	6	Site Lighting - Poles - LED		10	ea	$4,500.00	$45,000
	7	Vehicle Wash Area		1,000	ft2	$12.01	$12,010
	8	Fuel Storage & dispensing		1	allow	$50,000.00	$50,000
	9	Transformer & switchgear		1	allow	$75,000.00	$75,000
	10	Paving		80,000	ft2	$3.68	$294,168
	11	Fencing		1,300	lft	$36.00	$46,800
	12	Site signage		1	allow	$5,500.00	$5,500
	13	Metal Building		10,000	ft2	$24.00	$240,000
	14	Foundations		50	yd3	$271.42	$13,571
	15	SOG including grading, rock Vapor barrier rebar		10,000	ft2	$12.01	$120,100
	16	Office Area TI work		2,000	ft2	$45.00	$90,000
	17	Warehouse Area TI work		8,000	ft2	$16.00	$128,000
	18	Tools and Equipment (Lifts, Trolley Cranes,		1	allow	$110,000.00	$110,000
	19	Air Compressors, Etc.)					
		SUBTOTAL THIS SHEET					**$1,879,991**

QUANTITIES		PRICES	
BY Anthony Quantrell	**CHECKED** 7-Oct	**BY** Mike Egge	**CHECKED** Joe Barnes
DATE PREPARED	**PEER REVIEW / DATE** Joe Barnes	**DATE PREPARED** October 2016	**PEER REVIEW / DATE** 10/19/16

SITES RESERVOIR JOINT POWERS AUTHORITY	ESTIMATE WORKSHEET	101

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
Project Mitigation and Monitoring Plan	
Resource Category Cost Estimates	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
Summary Sheet	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Surface Water Quality					$1,510,108
		Aquatic Resources					$46,487,500
		Botanical Resources					$75,033,200
		Wildlife Habitat					$43,753,900
		Wetlands Habitat					$66,540,000
		Cultural Resources					$27,690,000
		Land Use					$25,789,375
		Paleontology					$1,210,000
		Air Quality					$150,000
		Subtotal					**$288,164,083**
		Mobilization	2%	+/-			$5,800,000
		Subtotal with Mobilization					**$293,964,083**
		Contract Cost Allowances (Sum of):	13%	+/-			$36,035,917
		Design Contingencies, 12 % (+/-)					
		APS, 1 % (+/-). Type of procurement: Full and open sealed bid competition					
		CONTRACT COST					**$330,000,000**
		Construction Contingencies	2%	+/-			$10,000,000
		FIELD COST					**$340,000,000**
		Non-Contract Costs	4%	+/-			$10,000,000
		CONSTRUCTION COST (Unit Price Level December 2015)					**$350,000,000**
		Escalation to Notice to Proceed (NTP) *(separate calculation not included here)*					
		at	2.0%	per year fo	7.00	years	
		CONSTRUCTION COST (with Escalation to NTP)					**$400,000,000**
		Ref.: For appropriate use and terminology, see Reclamation Manual, Directives and Standards FAC; 09-01, 09-02 and 09-03.					

QUANTITIES		PRICES	
BY	**CHECKED**	**BY**	**CHECKED**
Loren Murray	Anthony Quintrall	Loren Murray	Joseph Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
5/26/2016		December-16	01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY

ESTIMATE WORKSHEET

FEATURE: **NODOS Project** **Project Mitigation and Monitoring Plan** **Resource Category Cost Estimates** **Surface Water Quality**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Surface Water Quality					
	1	*SWQual-1a*	SWQ	1.0	ea	$1,500,000.00	$1,500,000
		SWQual-1b	SWQ				
	2	Clear & Grub		1.0	ea	$5,000.00	$5,000
	3	Earthwork - excavate around springs (est. 3 springs)		50.0	yd3	$3.27	$164
	4	Grout Injection (est. 3.33 yd3 per spring)		10.0	yd3	$100.00	$1,000
	5	Concrete Transit Trucking		60.0	yd3	$22.71	$1,363
	6	Backfill, Concrete site capping		50.0	yd3	$50.00	$2,500
	7	Spreading/compaction - excavated materials		100.0	yd3	$0.82	$82
		SUBTOTAL THIS SHEET					**$1,510,108**

QUANTITIES		**PRICES**	
BY 0 Loren Murray	**CHECKED** Anthony Quintrall	**BY** Loren Murray	**CHECKED** Joseph Barnes
DATE PREPARED 05/26/16	**PEER REVIEW / DATE** 01/00/00	**DATE PREPARED** Dec-16	**PEER REVIEW / DATE** 01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY **ESTIMATE WORKSHEET** 0

FEATURE:
NODOS Project
Project Mitigation and Monitoring Plan
Resource Category Cost Estimates
Aquatic Resources

PROJECT: **NODOS Alternative D**

WOID: **ESTIMATE LEVEL:**
REGION: **UNIT PRICE LEVEL:**

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Aquatic Resources					
		Fish-1e	AR				
	1	Land Acquisition - Fee Title	AR	681.0	acre	$2,500.00	$1,702,500
	2	Riparian Restoration	AR	681.0	acre	$65,000.00	$44,265,000
		Fish-1h					
	3	Fish salvage and rescue plan	AR	1.0	ea	$20,000.00	$20,000
	4	Fish salvage and rescue implementation	AR	1.0	ea.	$500,000.00	$500,000
		SUBTOTAL THIS SHEET					**$46,487,500**

QUANTITIES		**PRICES**	
BY 0	**CHECKED**	**BY**	**CHECKED**
Loren Murray	Anthony Quintrall	Loren Murray	Joseph Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
05/26/16	01/00/00	Dec-16	01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY	ESTIMATE WORKSHEET	0

FEATURE:

NODOS Project

Project Mitigation and Monitoring Plan

Resource Category Cost Estimates

Botanical Resources

PROJECT: NODOS Alternative D

WOID:	ESTIMATE LEVEL:
REGION:	UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Vegetation Communities					
		Bot-1[x]; Bot-2[x]; Bot-3[x]					
	1	Annual grasslands, permanent (2:1)		27,391.4	acre	$2,500.00	$68,478,500
	2	Blue oak woodlands, permanent (1:1)		478.6	acre	$3,000.00	$1,435,800
	3	Blue oak mixed chaparral, perm. (1:1)		33.40	acre	$3,000.00	$100,200
	4	Canal, permanent (1:1)		1.0	acre	$20,000.00	$20,000
	5	Valley oak woodland, permanent (3:1)		10.5	acre	$3,000.00	$31,500
	6	*Bot-1b*					
		Watershed Hydrological Studies (alkaline wetlands)		1.0	LS	$300,000.00	$300,000
		Bot-1d					
		Watershed Hydrological Studies (groundwater pressure)		1.0	LS	$300,000.00	$300,000
		Bot-2a					
		Sidalcea keckii and Amsinckia lunaris Surveys		2250.0	days	$1,600.00	$3,600,000
		Bot-2c					
		Rare Alkaline Wetland Species Surveys		7.0	days	$1,600.00	$11,200
		Bot-2d					
		Special-Status Plant Species Surveys		472.5	days	$1,600.00	$756,000
		SUBTOTAL THIS SHEET					**$75,033,200**

QUANTITIES		PRICES	
BY 0	**CHECKED**	**BY**	**CHECKED**
Loren Murray	Anthony Quintrall	Loren Murray	Joseph Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
05/26/16	01/00/00	Dec-16	01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY	ESTIMATE WORKSHEET	0

FEATURE: **NODOS Project** **Project Mitigation and Monitoring Plan** **Resource Category Cost Estimates** **Wildlife Habitat**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Wild-1[x]; Wild-2[x]					
	1	Blue oak woodland (GE; SH; WSF)(4:1)	Wild-2	3550.0	acre	$3,000.00	$10,650,000
	2	Deciduous orchard (GGS)	Wild-2c	46.2	acre	$4,500.00	$207,900
	3	Dryland grain and seed crops (SH)(0.5:1)	Wild-1a	166.6	acre	$2,000.00	$333,200
	4	Irrigated row and field crops (SH)(0.5:1)	Wild-1a	77.8	acre	$2,500.00	$194,500
	5	Pasture (GSC; FH; BO; WTK)(1:1)		72.7	acre	$4,500.00	$327,150
	6	Rice (GGS)(3:1 perm ac./ 1:1 temp ac.)	Wild-2c	1752.7	acre	$4,500.00	$7,887,150
	7	Valley foothill riparian (3:1) (GGS; VELB		334.6	acre	$3,000.00	$1,003,800
		CTS; BE; SH; WYBC; VRI; WPT; RT)					
	8	Blue Oak woodland/mixed (*Bot-[x]*)	Bot-2a	52.0	acre	$3,000.00	$156,000
	9	*Wild-1b* Implement bat exclusion measures	Wild-1b	18.0	days	$1,600.00	$28,800
	9	*Wild-2b* Bald eagle nest removal	Wild-2b	3.0	Nest	$11,960.00	$35,880
		Wild-2d					
	10	Golden eagle pre-/post-construction	Wild-2d	7.0	Years	$290,000.00	$2,030,000
		satellite telemetry studies					
	11	Golden Eagle Monitoring Plan	Wild-2d	1.0	LS	$150,000.00	$150,000
	12	Golden eagle Protection Plan	Wild-2d	1.0	LS	$150,000.00	$150,000
	13	Independent Expert (Pete Bloom)	Wild-2d	1.0	LS	$120,000.00	$120,000
	14	Helicopter survey - nesting population	Wild-2d	4.0	Survey	$10,800.00	$43,200
	15	Helicopter detraction actions	Wild-2d	3.0	Nest	$17,940.00	$53,820
		Wild-2g					
	16	Pre-constr survey western burrowing owls	Wild-2g	16500.0	acre	$200.00	$3,300,000
		Wild-2h					
	17	Pre-constr survey western pond turtle	Wild-2h	1712.5	acre	$200.00	$342,500
		Wild-4					
	18	Awareness training (human disturbance)	Wild-4	1.0	LS	$100,000.00	$100,000
	19	Pre-constr surveys /monitoring during	Wild-4	10.0	Year	$1,664,000.00	$16,640,000
		construction					
		SUBTOTAL THIS SHEET					**$43,753,900**

QUANTITIES		PRICES	
BY 0 Loren Murray	**CHECKED** Anthony Quintrall	**BY** Loren Murray	**CHECKED** Joseph Barnes
DATE PREPARED 05/26/16	**PEER REVIEW / DATE** 01/00/00	**DATE PREPARED** Dec-16	**PEER REVIEW / DATE** 01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY	ESTIMATE WORKSHEET	0

FEATURE:

NODOS Project

Project Mitigation and Monitoring Plan

Resource Category Cost Estimates

Wetlands Habitat

PROJECT:

NODOS Alternative D

WOID:	ESTIMATE LEVEL:
REGION:	UNIT PRICE LEVEL:

FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Wet-1[x]					
	1	Alkaline wetlands (2:1; onsite)		74.0	acre	$150,000.00	$11,100,000
	2	Emergent wetlands (3:1; offsite)		7.2	acre	$100,000.00	$720,000
	3	Seasonal wetlands (3:1)		547.2	acre	$100,000.00	$54,720,000
		SUBTOTAL THIS SHEET					**$66,540,000**

QUANTITIES		PRICES	
BY 0	**CHECKED**	**BY**	**CHECKED**
Loren Murray	Anthony Quintrall	Loren Murray	Joseph Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
05/26/16	01/00/00	Dec-16	01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY	ESTIMATE WORKSHEET	0

FEATURE: **NODOS Project** **Project Mitigation and Monitoring Plan** **Resource Category Cost Estimates** **Cultural Resources**	**PROJECT:** **NODOS Alternative D**
	WOID: / **ESTIMATE LEVEL:**
	REGION: / **UNIT PRICE LEVEL:**
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Cultural Resources					
		Cul-1a					
	1	Remaining surveys for avoidance	Cul-1a	1000.0	acre	$40.00	$40,000
		Complete desktop evaluations	Cul-1a	1.0	LS	$100,000.00	$100,000
		Cul-1b					
		Conduct Archeological Recovery	Cul-1b				
	2	Ethnographic Studies/Inventory	Cul-1b	1.0	LS	$250,000.00	$250,000
	3	Evaluation of NRHP/CRHR eligib	Cul-1b	10.0	sites	$250,000.00	$2,500,000
	4	Test Pitting, excavation and exam.	Cul-1b	1.0	LS	$100,000.00	$100,000
	5	Preparation and Curation	Cul-1b	1000.0	boxes	$5,000.00	$5,000,000
		Cul-1c					
	6	Resources discovery during Construction	Cul-1c	10.0	ea.	$400,000.00	$4,000,000
		Cul-1e					
	7	Future Operational Impacts Agreements	Cul-1e	1.0	LS	$200,000.00	$200,000
		Cul-2a					
	8	Properties/Resources Treatment	Cul-2a	1.0	LS	$1,000,000.00	$1,000,000
		Cul-2b					
	9	HABS/HAER Documentation	Cul-2b	1.0	LS	$1,000,000.00	$1,000,000
		Cul-3					
	10	Tribal Consultation for impacts to TCPs	Cul-3	4.0	Tribes	$500,000.00	$2,000,000
		Cul-4a					
	11	Relocations of known cemeteries	Cul-4a	250.0	Persons	$4,000.00	$1,000,000
	12	Midden grave site (unofficial cemetery)	Cul-4a	1.0	LS	$10,000,000.00	$10,000,000
		Cul-4b					
	13	Human remains discovery/treatment	Cul-4b	100.0	Persons	$5,000.00	$500,000
		SUBTOTAL THIS SHEET					**$27,690,000**

QUANTITIES		**PRICES**	
BY 0 Loren Murray	**CHECKED** Anthony Quintrall	**BY** Loren Murray	**CHECKED** Joseph Barnes
DATE PREPARED 05/26/16	**PEER REVIEW / DATE** 01/00/00	**DATE PREPARED** Dec-16	**PEER REVIEW / DATE** 01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY	ESTIMATE WORKSHEET	0

FEATURE:	PROJECT:
NODOS Project	NODOS Alternative D
Project Mitigation and Monitoring Plan	
Resource Category Cost Estimates	WOID: / ESTIMATE LEVEL:
Land and Agriculture	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Land and Agriculture					
		Land-2a					
	1	Glenn County Coordination		1.0	LS	$50,000.00	$50,000
		Land-2b					
	2	Wetlands easement cancellation and		21.0	acre	$150,000.00	$3,150,000
		compensatory mitigation (3:1)					
		Land-3b					
	3	Maxwell Irrigation District Agreements		1.0	LS	$50,000.00	$50,000
		Land-4a					
	4	Agricultural conservations easements		1.0	LS	$5,000,000.00	$5,000,000
		FMMP Mitigation (1:1)		2,500.0	acre	$5,000.00	$12,500,000
		(in Glenn and Colusa County)					
		Land-5c					
	5	Williamson Act contracts rescinded		16,126.0	acre	$312.50	$5,039,375
		(12.5% of value; value avg. at $2500/ac.)					$0
		SUBTOTAL THIS SHEET					**$25,789,375**

QUANTITIES		PRICES	
BY 0	**CHECKED**	**BY**	**CHECKED**
Loren Murray	Anthony Quintrall	Loren Murray	Joseph Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
05/26/16	01/00/00	Dec-16	01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY	ESTIMATE WORKSHEET	0

FEATURE:	PROJECT:
NODOS Project Project Mitigation and Monitoring Plan Resource Category Cost Estimates Paleontology	NODOS Alternative D
	WOID: / ESTIMATE LEVEL:
	REGION: / UNIT PRICE LEVEL:
	FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Paleontology					
		Paleo-1b					
	1	Paleontological Resource Specialist		1.0	LS	$350,000.00	$350,000
		pre-construction consultation					
		Paleo-1c					
	2	Implement Paleontological Resources		1.0	LS	$200,000.00	$200,000
		Monitoring/Mitigation Plan					
		Paleo-1d					
	3	Paleontological Resources Awareness		1.0	LS	$100,000.00	$100,000
		Training					
		Paleo-1e					
	4	Monitoring during Construction and		8.0	Year	$50,000.00	$400,000
		monthly reporting					
		Paleo-1f					
	5	Ensure Monitoring & Mitigation		8.0	Year	$20,000.00	$160,000
		implementation plan					
		SUBTOTAL THIS SHEET					**$1,210,000**

QUANTITIES		PRICES	
BY 0	**CHECKED**	**BY**	**CHECKED**
Loren Murray	Anthony Quintrall	Loren Murray	Joseph Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
05/26/16	01/00/00	Dec-16	01/00/00

SITES RESERVOIR JOINT POWERS AUTHORITY — **ESTIMATE WORKSHEET** — 0

FEATURE:
NODOS Project
Project Mitigation and Monitoring Plan
Air Quality

PROJECT: **NODOS Alternative D**

WOID:
ESTIMATE LEVEL:
REGION:
UNIT PRICE LEVEL:
FILE: G:\US Bureau of Rec\GSA NODOS\Project Files\WORKING\Cost Estimating 2016\20170216 BOE Final\Estimates\[Red Bluff Alt D Sites Reservoir 05052017.xlsx]Mitigation

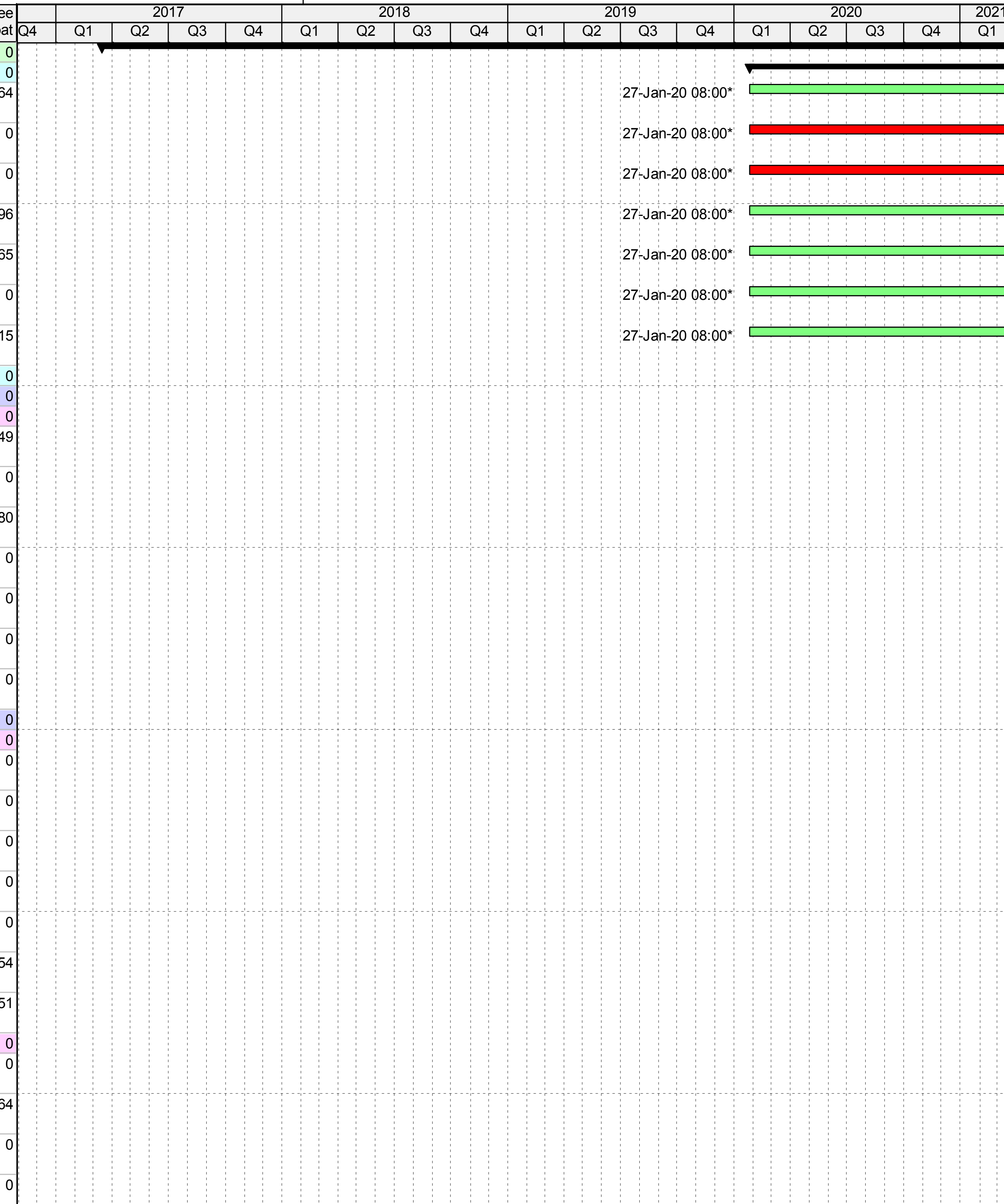
PLANT ACCOUNT	PAY ITEM	DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT
		Air Quality Impacts					
		Air Qual - 1a					
	1	Fugitive Dust Control Plan		1.0	LS	$100,000.00	$100,000
		Air Qual - 1b					
	2	Equipment/Vehicle Emissions Reduction		10.0	year	$5,000.00	$50,000
		SUBTOTAL THIS SHEET					**$150,000**

QUANTITIES		PRICES	
BY 0	**CHECKED**	**BY**	**CHECKED**
Loren Murray	Anthony Quintrall	Loren Murray	Joseph Barnes
DATE PREPARED	**PEER REVIEW / DATE**	**DATE PREPARED**	**PEER REVIEW / DATE**
05/26/16	01/00/00	Dec-16	01/00/00

APPENDIX B

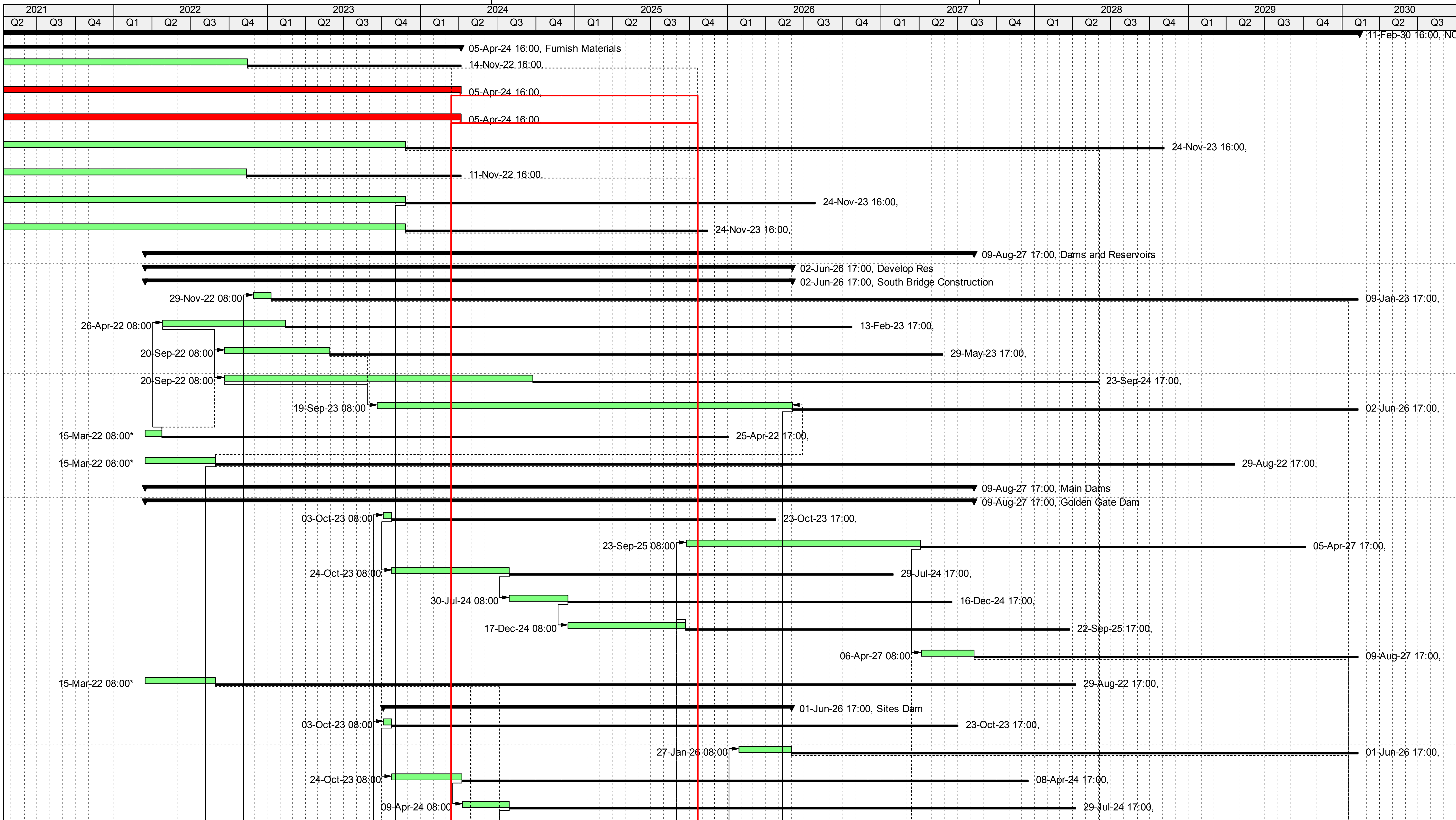
PRELIMINARY CONSTRUCTION SCHEDULE

#	Activity ID	Activity Name	Predeces	Successo	Original	Start	Finish	Total Float	Free Float
1	NODOS_Sites Reservoir_Ver2				3369	15-Mar-17 08:0	11-Feb-30 16:00	0	0
2	Furnish Materials				1095	27-Jan-20 08:0	05-Apr-24 16:00	1195	0
3	A390	Furnish Air Chambers		A1720, A1790	731	27-Jan-20 08:00*	14-Nov-22 16:00	364	364
4	A370	Furnish Ball Valves		A1720, A1790	1095	27-Jan-20 08:00*	05-Apr-24 16:00	0	0
5	A380	Furnish Butterfly Valves		A1720, A1790	1095	27-Jan-20 08:00*	05-Apr-24 16:00	0	0
6	A420	Furnish Kaplan Turbine/Generators		A1420	1000	27-Jan-20 08:00*	24-Nov-23 16:00	1290	1196
7	A360	Furnish Bridge Cranes		A1720, A1790	730	27-Jan-20 08:00*	11-Nov-22 16:00	365	365
8	A440	Furnish TRR Pumps & Motors		A1611	1000	27-Jan-20 08:00*	24-Nov-23 16:00	696	0
9	A430	Furnish Sac. River Pumps & Motors		A1790	1000	27-Jan-20 08:00*	24-Nov-23 16:00	515	515
10	Dams and Reservoirs				1410	15-Mar-22 08:0	09-Aug-27 17:00	655	0
11	Develop Res				1101	15-Mar-22 08:0	02-Jun-26 17:00	963	0
12	South Bridge Construction				1101	15-Mar-22 08:0	02-Jun-26 17:00	963	0
13	A1980	Demolition & clear & grub within reservoir	A1230	A2240	30	29-Nov-22 08:00	09-Jan-23 17:00	1849	1849
14	A1370	Construct Bridge Foundations	A1360	A1380, A2260	210	26-Apr-22 08:00	13-Feb-23 17:00	963	0
15	A2260	Construct Bridge Abutments	A1360, A1370	A1390	180	20-Sep-22 08:00	29-May-23 17:00	1043	80
16	A1380	Construct Bridge Piers	A1370	A1390	525	20-Sep-22 08:00	23-Sep-24 17:00	963	0
17	A1390	Construct Bridge Deck	A1380, A2260,	A2220	706	19-Sep-23 08:00	02-Jun-26 17:00	963	0
18	A1360	Construct access road to bridge piers & abutments		A2260, A1370	30	15-Mar-22 08:00*	25-Apr-22 17:00	963	0
19	A1820	Access road to bridge - West side		A2220, A1390,	120	15-Mar-22 08:00*	29-Aug-22 17:00	1734	0
20	Main Dams				1410	15-Mar-22 08:0	09-Aug-27 17:00	655	0
21	Golden Gate Dam				1410	15-Mar-22 08:0	09-Aug-27 17:00	654	0
22	A1880	Clear/Grub/remove overburden	A1250, A1330	A1890	15	03-Oct-23 08:00	23-Oct-23 17:00	654	0
23	A1910B	Golden Gate Dam Fill - Core and Shell above grade	A1560A, A1560D,	A1920	400	23-Sep-25 08:00	05-Apr-27 17:00	654	0
24	A1890	Excavate Golden Gate Key	A1880, A1560A	A1900	200	24-Oct-23 08:00	29-Jul-24 17:00	654	0
25	A1900	Grout Foundation at Golden Gate Dam	A1890	A1910A	100	30-Jul-24 08:00	16-Dec-24 17:00	654	0
26	A1910A	Golden Gate Dam Fill - Fill to grade	A1900	A1910B	200	17-Dec-24 08:00	22-Sep-25 17:00	654	0
27	A1920	Spillway at Golden Gate Dam	A1910B, A1840	A2240	90	06-Apr-27 08:00	09-Aug-27 17:00	654	654
28	A1990	Activate Stoney Creek quarry		A1870, A1960A	120	15-Mar-22 08:00*	29-Aug-22 17:00	1464	451
29	Sites Dam				695	03-Oct-23 08:00	01-Jun-26 17:00	964	0
30	A1930	Clear/Grub/remove overburden	A1050, A1240,	A1940	15	03-Oct-23 08:00	23-Oct-23 17:00	964	0
31	A1970	Spillway at Sites Dam	A1850, A1960B	A2240	90	27-Jan-26 08:00	01-Jun-26 17:00	964	964
32	A1940	Excavate Sites Dam key	A1930	A1950	120	24-Oct-23 08:00	08-Apr-24 17:00	964	0
33	A1950	Grout Foundation at Sites Dam	A1940	A1960A	80	09-Apr-24 08:00	29-Jul-24 17:00	964	0



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

TASK filter: All Activities



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

TASK filter: All Activities

#	Activity ID	Activity Name	Predecessors	Successors	Original	Start	Finish	Total Float	Free Float
34	A1960A	Sites Dam Fill - Fill to grade	A1950, A1990,	A1960B	140	30-Jul-24 08:00	10-Feb-25 17:00	964	0
35	A1960B	Sites Dam Fill - Core and Shell above grade	A1960A, A1030	A1970	250	11-Feb-25 08:00	26-Jan-26 17:00	964	0
36	Creek Diversion During Construction				375	22-Nov-22 08:(	29-Apr-24 17:00	1510	0
37	A1010	Excavate Channel	A1000	A1020, A1030,	180	13-Dec-22 08:00	21-Aug-23 17:00	674	0
38	A1020	Move topsoil to designated location	A1010		180	22-Aug-23 08:00	29-Apr-24 17:00	1510	1510
39	A1030	Move material to Sites Dam as stockpile	A1010	A1960B	180	22-Aug-23 08:00	29-Apr-24 17:00	1169	205
40	A1320	Block downstream flow of Funk's Creek	A1010, A2250,	A1330	5	19-Sep-23 08:00	25-Sep-23 17:00	654	0
41	A1230	Residents move from Valley	A1210	A2250, A1980,	5	22-Nov-22 08:00	28-Nov-22 17:00	654	0
42	A1060	Prepare two creek diversion intercept at tunnel top	A1230	A1320, A1350	40	29-Nov-22 08:00	23-Jan-23 17:00	824	110
43	A1000	Clear & Grub as required for Diversion	A1230	A1010	10	29-Nov-22 08:00*	12-Dec-22 17:00	674	0
44	A2250	Dig diversion tunnel at Sites	A1230, A1240	A1040, A1050,	150	29-Nov-22 08:00	26-Jun-23 17:00	654	0
45	A1330	Divert Funk's Creek flow into diversion channel	A1320	A1130, A1880,	5	26-Sep-23 08:00	02-Oct-23 17:00	654	0
46	A1350	Divert Antelope Creek flow to short channel & tunnel	A2250, A1060	A1930	5	27-Jun-23 08:00	03-Jul-23 17:00	1029	65
47	Dams_General				1102	15-Mar-22 08:(	03-Jun-26 17:00	963	0
48	A1240	Close Sites Road, All traffic diverted	A1220	A2250, A1050,	1	22-Nov-22 08:00	22-Nov-22 17:00	658	4
49	A2220	Route traffic to new bridge	A1390, A1820,		1	03-Jun-26 08:00	03-Jun-26 17:00	963	963
50	A540	Develop Quarry Sites		A1459	120	15-Mar-22 08:00*	29-Aug-22 16:00	1354	126
51	Saddle Dams				841	22-Nov-22 08:(	10-Feb-26 17:00	1043	0
52	A1855	New Saddle Dam Road off North Road	A1210	A1870	120	22-Nov-22 08:00*	08-May-23 17:00	1314	271
53	A1870	Construct Saddle Dams 1 - 9	A1990, A1560C,	A2240	450	22-May-24 08:00	10-Feb-26 17:00	1043	1043
54	Holthouse				950	15-Mar-22 08:(	03-Nov-25 17:00	1115	0
55	A1080	Move topsoil to designated location	A1070		20	05-Apr-22 08:00	02-May-22 17:00	2030	2030
56	A1090	Construct upper intercept for bypass	A1070	A1120	80	05-Apr-22 08:00	25-Jul-22 17:00	1348	124
57	A1100	Construct lower Canal dissipation & inflow structure	A1070	A1120	80	05-Apr-22 08:00	25-Jul-22 17:00	1348	124
58	A1460	Excavate Trench for Holthouse foundation	A1070, A1450	A1470	100	11-Oct-22 08:00	27-Feb-23 17:00	1114	0
59	A1110	Install bypass pipeline	A1070, A1458	A1120	129	19-Jul-22 08:00	13-Jan-23 17:00	1224	0
60	A1120	Divert TCC flow to bypass	A1090, A1100,	A1130	5	16-Jan-23 08:00	20-Jan-23 17:00	1224	181
61	A1130	Drain Funks Reservoir	A1120, A1330	A1140, A1170	60	03-Oct-23 08:00	25-Dec-23 17:00	1043	0
62	A1170	Allow drying and move sediment	A1130	A1180, A1550	90	26-Dec-23 08:00	29-Apr-24 17:00	1043	0
63	A1140	Remove Gates at Funk's Spillway	A1130	A1141	30	26-Dec-23 08:00	05-Feb-24 17:00	1459	0
64	A1141	Demolish Existing Funks Dam and move material to Holdhouse - as REQ	A1140	A1580	30	06-Feb-24 08:00	18-Mar-24 17:00	1459	345

Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
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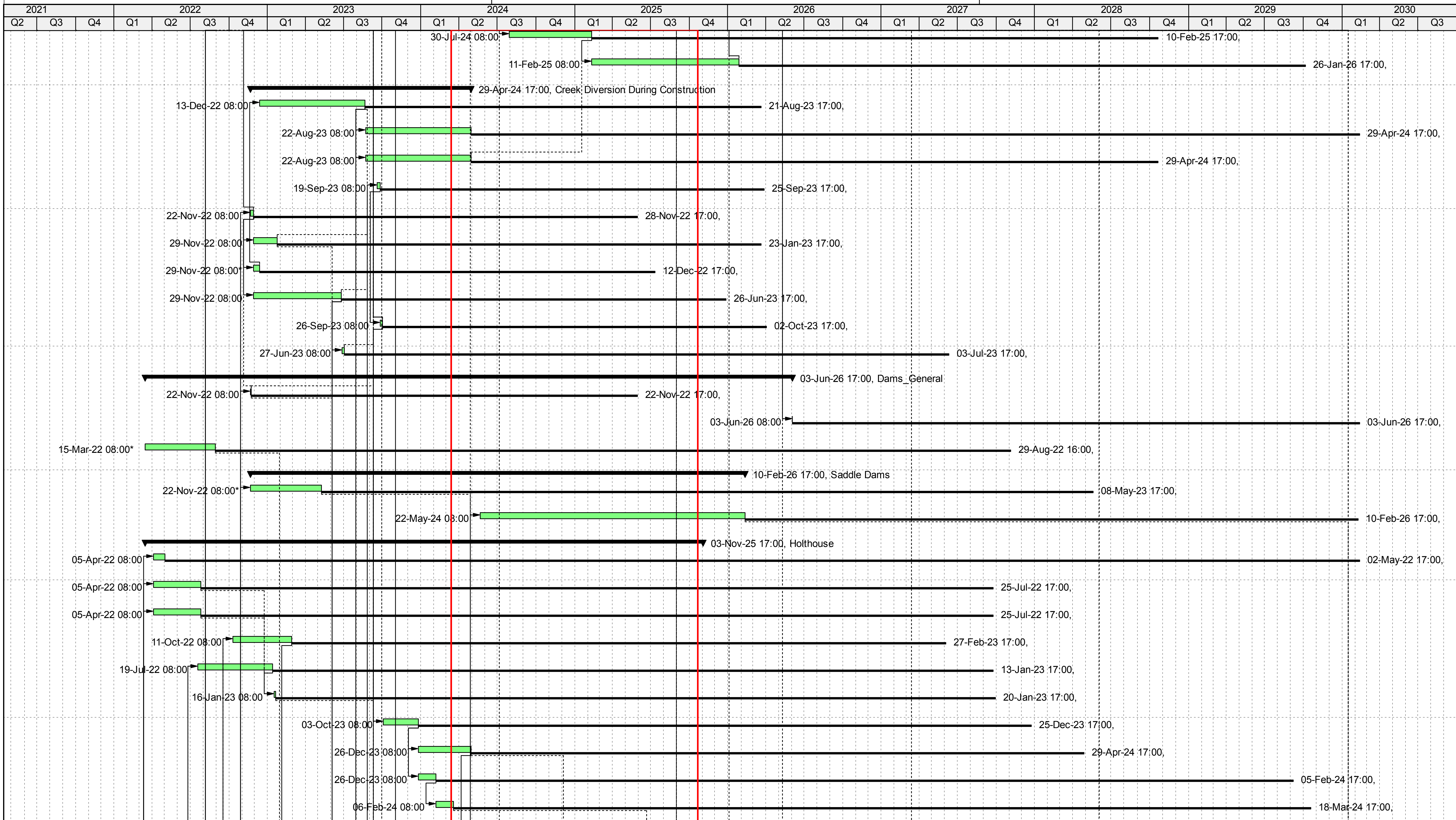
TASK filter: All Activities



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

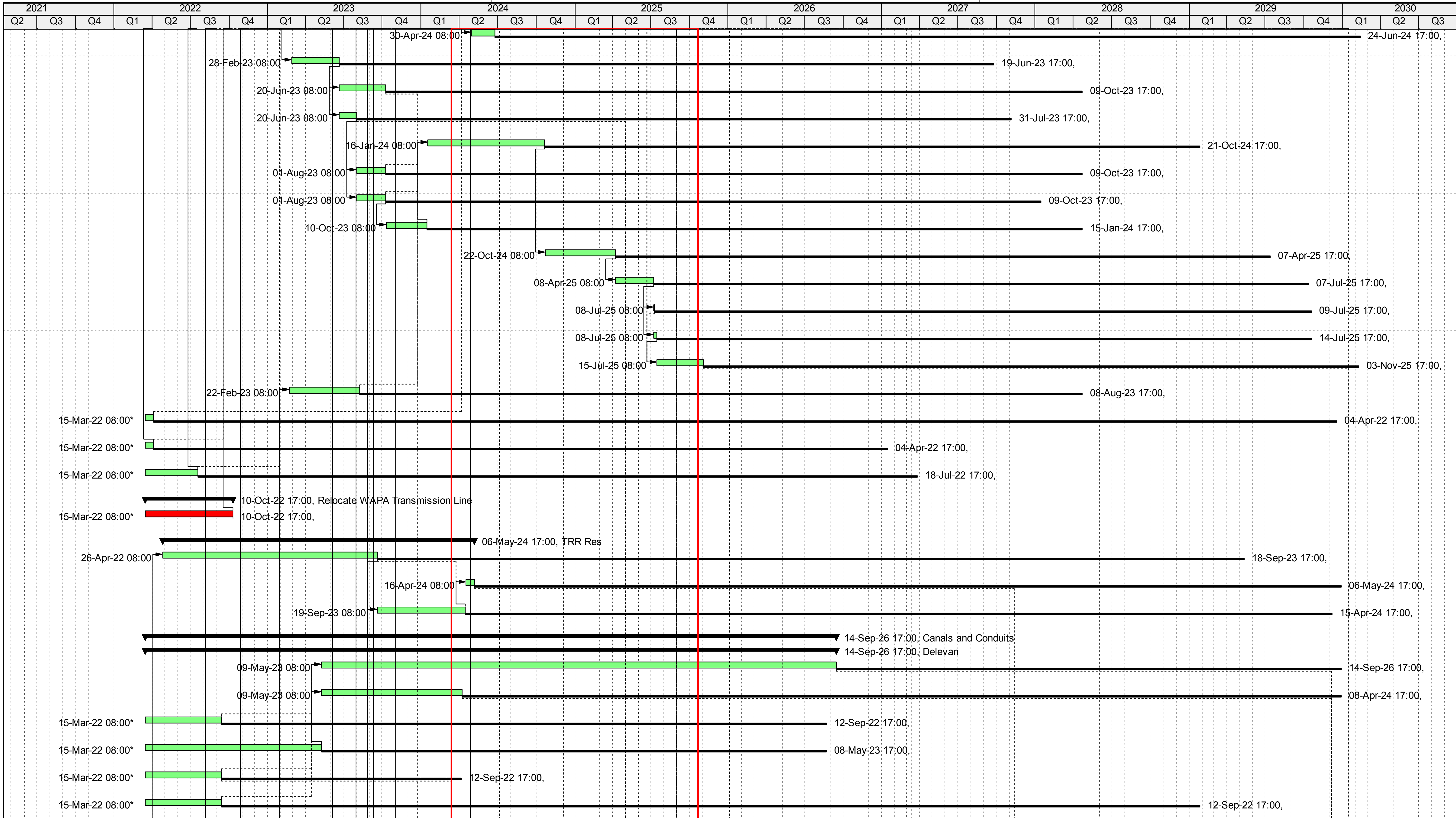
TASK filter: All Activities

#	Activity ID	Activity Name	Predecessors	Successors	Original	Start	Finish	Total Float	Free Float
65	A1180	Compact sediment in new location (to West)	A1160, A1170		40	30-Apr-24 08:00	24-Jun-24 17:00	1470	1470
66	A1470	Grout Rock at Holthouse foundation	A1460	A1480, A1490	80	28-Feb-23 08:00	19-Jun-23 17:00	1114	0
67	A1480	Build Houlthouse foundation to grade	A1470	A1530	80	20-Jun-23 08:00	09-Oct-23 17:00	1184	70
68	A1490	Lay pipelines under Holthouse dam shoulder	A1470	A1500, A1510,	30	20-Jun-23 08:00	31-Jul-23 17:00	1114	0
69	A1530	Earth fill above grade for Holthouse	A1480, A1500,	A1540	200	16-Jan-24 08:00	21-Oct-24 17:00	1114	0
70	A1500	Construct concrete I/O inside Holthouse	A1490	A1530	50	01-Aug-23 08:00	09-Oct-23 17:00	1184	70
71	A1510	Construct Gate base at Holthouse abutment	A1490	A1520, A1530	50	01-Aug-23 08:00	09-Oct-23 17:00	1114	0
72	A1520	Construct vertical gate control structure	A1510	A1530	70	10-Oct-23 08:00	15-Jan-24 17:00	1114	0
73	A1540	Construct Holthouse Spillway	A1530	A1541	120	22-Oct-24 08:00	07-Apr-25 17:00	1114	0
74	A1541	Install Holthouse Gates	A1540	A2280, A1121	65	08-Apr-25 08:00	07-Jul-25 17:00	1114	0
75	A1121	Restore TC Canal flow	A1541	A1580	2	08-Jul-25 08:00	09-Jul-25 17:00	1117	3
76	A2280	Open TC Canal Gates & close TC Canal bypass	A1541	A1580	5	08-Jul-25 08:00	14-Jul-25 17:00	1114	0
77	A1580	Fill Holdhouse Reservoir	A2280, A1141,	A2240	80	15-Jul-25 08:00	03-Nov-25 17:00	1114	1114
78	A1459	Stockpile Holthouse Dam Material	A540, A1458,	A1530	120	22-Feb-23 08:00	08-Aug-23 17:00	1228	114
79	A1160	Clear/Grade/Bench sediment disposal site		A1180	15	15-Mar-22 08:00*	04-Apr-22 17:00	2010	540
80	A1070	Clear & Grub for Bypass AND Holthouse footprint		A1080, A1090,	15	15-Mar-22 08:00*	04-Apr-22 17:00	1249	0
81	A1458	Develop/Improve road to Holthouse		A1459, A1110	90	15-Mar-22 08:00*	18-Jul-22 17:00	1224	0
82	Relocate WAPA Transmission Line				150	15-Mar-22 08:(	10-Oct-22 17:00	0	0
83	A1450	Relocate WAPA Lines at Holthouse Dam		A1460	150	15-Mar-22 08:00*	10-Oct-22 17:00	0	0
84	TRR Res				530	26-Apr-22 08:00	06-May-24 17:00	1474	0
85	A1600	Construct TRR Reservoir pond & embankment	A1590	A1620, A1630	365	26-Apr-22 08:00	18-Sep-23 17:00	1474	0
86	A1630	Break into GCC & Fill TRR	A1620, A1600	A2130	15	16-Apr-24 08:00	06-May-24 17:00	1474	935
87	A1620	Connection structure - TRR to GCC canal	A1680, A1600	A1630	150	19-Sep-23 08:00	15-Apr-24 17:00	1474	0
88	Canals and Conduits				1175	15-Mar-22 08:(	14-Sep-26 17:00	859	0
89	Delevan				1175	15-Mar-22 08:(	14-Sep-26 17:00	859	0
90	A1690	Pipeline Sacramento River to I-5	A1650, A1660,	A2140	875	09-May-23 08:00	14-Sep-26 17:00	859	859
91	A1700	Pipeline I-5 to TRR	A1650, A1670	A2140	240	09-May-23 08:00	08-Apr-24 17:00	1494	1494
92	A1640	Colusa Basin Drain Jack & Bore		A1690	130	15-Mar-22 08:00*	12-Sep-22 17:00	1029	170
93	A1650	Pipeline Jack & Bore at I-5 & 99		A1690, A1700	300	15-Mar-22 08:00*	08-May-23 17:00	859	0
94	A1660	Pipeline Jack & Bore at Hwy 45		A1690, A1720	130	15-Mar-22 08:00*	12-Sep-22 17:00	409	170
95	A1670	Pipeline Jack & Bore at PG&E gas line		A1700	130	15-Mar-22 08:00*	12-Sep-22 17:00	1664	170

2017 2018 2019 2020 2021
Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1

Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

TASK filter: All Activities



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | ◆ Milestone | Neg Float Bar

TASK filter: All Activities

#	Activity ID	Activity Name	Predecessors	Successors	Original	Start	Finish	Total Float	Free Float
96	TRR				800	15-Mar-22 08:(	07-Apr-25 17:00	1234	0
97	A1710	Pipeline GCC to Holthouse	A1680, A1490	A2130, A2140	600	20-Dec-22 08:00	07-Apr-25 17:00	1234	695
98	A1680	Pipeline Jack & Bore at GCC		A1710, A1620	200	15-Mar-22 08:00*	19-Dec-22 17:00	1234	0
99	Pumping and Generating Plants				2064	15-Mar-22 08:(	08-Feb-30 16:00	1	0
100	IO Structure Tunnel				1180	11-Jul-23 08:00	17-Jan-28 16:00	539	0
101	A1290	Excavate/construct horizontal tunnel	A1260, A1280	A1300	400	11-Jul-23 08:00	20-Jan-25 17:00	830	0
102	A1280	Excavate in reservoir basin for Inlet/Outlet structure and emergency drain structure	A1270	A1290, A1280A,	240	03-Oct-23 08:00	02-Sep-24 17:00	764	0
103	A1310	Build inlet-outlet tower base connect to tunnel	A1280	A1400A	75	03-Sep-24 08:00	16-Dec-24 17:00	764	0
104	A1280A	Move excess material to Sites Dam site	A1280	A1910B	240	04-Oct-23 08:00	03-Sep-24 17:00	928	274
105	A1300	Construct Vertical Gate shaft for tunnel	A1290	A1430	90	21-Jan-25 08:00	26-May-25 17:00	830	765
106	A1400A	Construct Sites inlet/outlet tower	A1310	A2150, A2160,	300	17-Dec-24 08:00	09-Feb-26 17:00	764	0
107	A2150	Construct Bridge to Inlet/Outlet tower	A1400A	A2160	200	10-Feb-26 08:00	16-Nov-26 17:00	764	225
108	A1400C	Tie Tower to Emergency Drain	A1400A, A1400B	A2240	40	10-Feb-26 08:00	06-Apr-26 17:00	1004	1004
109	A2160	Power connections for Inlet/Outlet structure	A1400A, A2070,	A2170	60	27-Sep-27 16:00	20-Dec-27 16:00	539	0
110	A2170	Functional Testing of Inlet/Outlet structure	A2160	A2240	20	20-Dec-27 16:00	17-Jan-28 16:00	539	539
111	Sites PGP				2000	15-Mar-22 08:(	12-Nov-29 16:00	65	0
112	A1410	Concrete work at West portal	A1260, A400,	A1420, A1430,	540	12-Jan-26 16:00	07-Feb-28 16:00	65	0
113	A1400B	Construct Emergency Drain Structure	A1280	A1400C	180	03-Sep-24 08:00	12-May-25 17:00	1199	195
114	A1430	Pipe manifold Tunnel to Sites PGP	A1300, A1410	A1435	500	08-Mar-27 16:00	05-Feb-29 16:00	65	0
115	A1411	Install Bridge Crane at Sites PGP	A1410	A1420, A1412	100	07-Feb-28 16:00	26-Jun-28 16:00	94	0
116	A1420	Pump turbine installation	A1410, A1411,	A1440	240	26-Jun-28 16:00	28-May-29 16:00	94	0
117	A1412	Sites PGP enclosure building	A1411	A1440	180	26-Jun-28 16:00	05-Mar-29 16:00	154	60
118	A1435	Fill at Pipe Manifold	A1430		200	05-Feb-29 16:00	12-Nov-29 16:00	65	65
119	A2120	Functional Testing - Sites Pump/Gen	A1440, A1860,	A2240	45	30-Jul-29 16:00	01-Oct-29 16:00	94	94
120	A2080	Power Lines to bridge & Inlet/Outlet Structure	A2050	A2160	120	01-Mar-27 16:00	16-Aug-27 16:00	569	30
121	A1440	Test & commission Sites Pump Station	A2100, A1412,	A2120	45	28-May-29 16:00	30-Jul-29 16:00	94	0
122	A1040	Move material to Sites Dam as stockpile	A2250	A1960A	5	27-Jun-23 08:00	03-Jul-23 17:00	1244	280
123	A1050	Construct Sites tunnel energy dissipation structure	A2250, A1240	A1320, A1930	60	27-Jun-23 08:00	18-Sep-23 17:00	654	0
124	A410	Furnish Sites PGP Pumps & Motors		A1410	1000	15-Mar-22 08:00*	12-Jan-26 16:00	65	0
125	A400	Furnish Sites PGP Pumps/Turbines		A1410	1000	15-Mar-22 08:00*	12-Jan-26 16:00	65	0
126	TRR PGP				1525	15-Mar-22 08:(	17-Jan-28 16:00	539	0

Gantt timescale: 2017, 2018, 2019, 2020, 2021 (Q4, Q1, Q2, Q3, Q4, ...)

Remaining Level of Effort | Remaining Work | Summary
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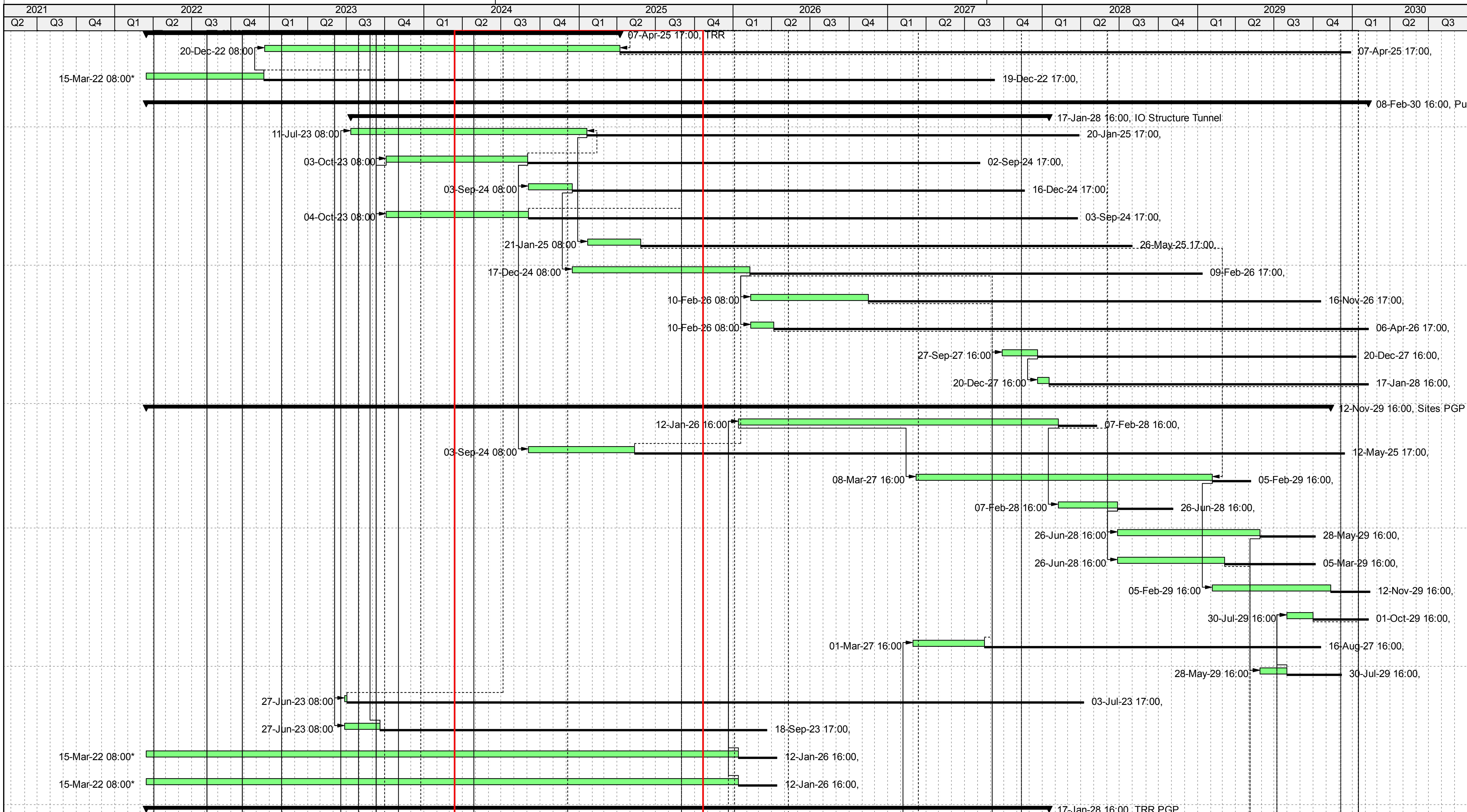
Actual Work | Milestone | Neg Float Bar

TASK filter: All Activities



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Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

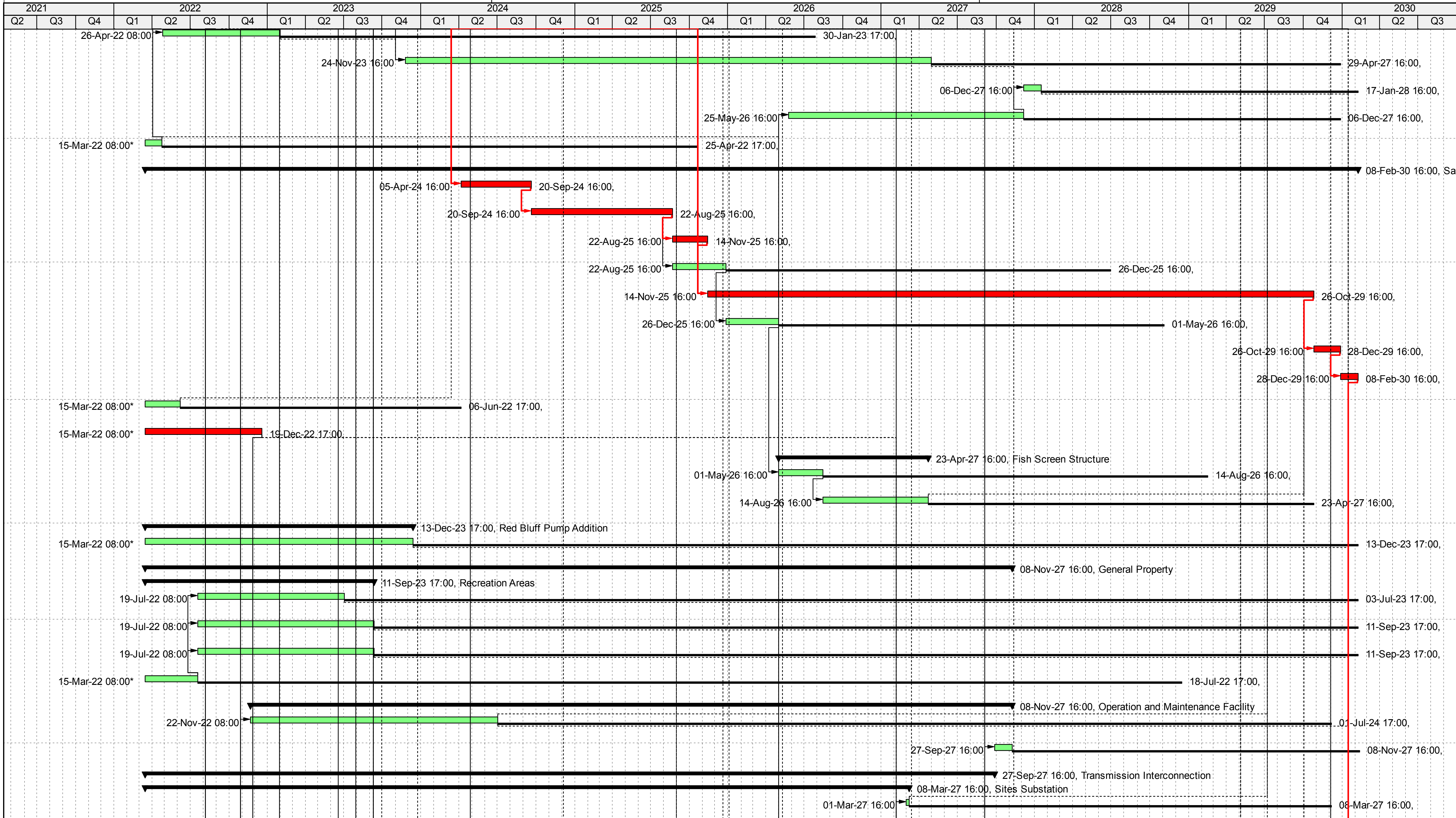
TASK filter: All Activities

#	Activity ID	Activity Name	Predeces	Successo	Original	Start	Finish	Total Float	Free Float
127	A1610	Build TRR Pump Station to Equipment Need	A1590	A1611	200	26-Apr-22 08:00	30-Jan-23 17:00	910	214
128	A1611	Complete TRR Pump Station with Equipment	A1610, A440	A2130	894	24-Nov-23 16:00	29-Apr-27 16:00	696	157
129	A2130	Functional Testing - TRR Pump Plant	A1630, A2060,	A2240	30	06-Dec-27 16:00	17-Jan-28 16:00	539	539
130	A1612	Construct TRR Substation	A480, A500,	A2130	400	25-May-26 16:00	06-Dec-27 16:00	539	0
131	A1590	Develop access to TRR		A1600, A1610,	30	15-Mar-22 08:00*	25-Apr-22 17:00	910	0
132	Sac River PGP				2064	15-Mar-22 08:(	08-Feb-30 16:00	0	0
133	A1720	Construct Sacramento River Pump Station temp levee	A1660, A360,	A1730	120	05-Apr-24 16:00	20-Sep-24 16:00	0	0
134	A1730	Concrete Structure for Sacramento River Pump Station	A1720	A1740, A1760	240	20-Sep-24 16:00	22-Aug-25 16:00	0	0
135	A1740	Fill to elevation 90 West of Sac River pump station	A1730	A1790	60	22-Aug-25 16:00	14-Nov-25 16:00	0	0
136	A1760	Excavate bay to -35	A1730	A1770	90	22-Aug-25 16:00	26-Dec-25 16:00	655	0
137	A1790	Install all Sacramento River Pump Station equipment	A1740, A360,	A1800	1030	14-Nov-25 16:00	26-Oct-29 16:00	0	0
138	A1770	Remove existing levee at bay	A1760	A1810	90	26-Dec-25 16:00	01-May-26 16:00	655	0
139	A1800	Test & Commission Sac River Pump Station	A1790, A1811,	A2140	45	26-Oct-29 16:00	28-Dec-29 16:00	0	0
140	A2140	Functional Testing - Sacramento River Pump Plant	A1800, A2020,	A2240	30	28-Dec-29 16:00	08-Feb-30 16:00	0	0
141	A1719	Highway 45 access to Sac. River Pump Plant		A1720	60	15-Mar-22 08:00*	06-Jun-22 17:00	479	479
142	A2040	Primary WAPA Substation		A2020, A2030,	200	15-Mar-22 08:00*	19-Dec-22 17:00	0	0
143	Fish Screen Structure				255	01-May-26 16:(	23-Apr-27 16:00	655	0
144	A1810	Sacramento River & Fish Screen excavation	A1770	A1811	75	01-May-26 16:00	14-Aug-26 16:00	655	0
145	A1811	Sheet Pile and Fish screen structure Sac River Pump Station	A1810	A1800	180	14-Aug-26 16:00	23-Apr-27 16:00	655	655
146	Red Bluff Pump Addition				457	15-Mar-22 08:(	13-Dec-23 17:00	1607	0
147	A2000	Pump work Red Bluff		A2240	457	15-Mar-22 08:00*	13-Dec-23 17:00	1607	1607
148	General Property				1475	15-Mar-22 08:(	08-Nov-27 16:00	590	0
149	Recreation Areas				390	15-Mar-22 08:(	11-Sep-23 17:00	1674	0
150	A2191	Construct Lurline Recreation Area	A2180	A2240	250	19-Jul-22 08:00	03-Jul-23 17:00	1724	1724
151	A2192	Construct East Recreation Areas	A2180	A2240	300	19-Jul-22 08:00	11-Sep-23 17:00	1674	1674
152	A2194	Construct Stone Corral Recreation Area	A2180	A2240	300	19-Jul-22 08:00	11-Sep-23 17:00	1674	1674
153	A2180	Roadwork for recreation areas		A2191, A2192,	90	15-Mar-22 08:00*	18-Jul-22 17:00	1674	0
154	Operation and Maintenance Facility				1295	22-Nov-22 08:(	08-Nov-27 16:00	590	0
155	A1860	Maintenance building, yard and field office	A1830	A2120, A2240	420	22-Nov-22 08:00	01-Jul-24 17:00	1419	1325
156	A2210	Powerline to Maintenance Facility	A2070		30	27-Sep-27 16:00	08-Nov-27 16:00	590	590
157	Transmission Interconnection				1445	15-Mar-22 08:(	27-Sep-27 16:00	589	0
158	Sites Substation				1300	15-Mar-22 08:(	08-Mar-27 16:00	719	0
159	A2060	Energize Sites Switchyard	A2040, A2050,	A2120, A2130	5	01-Mar-27 16:00	08-Mar-27 16:00	719	195

Gantt timescale: 2016 Q4; 2017 Q1–Q4; 2018 Q1–Q4; 2019 Q1–Q4; 2020 Q1–Q4; 2021 Q1

Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

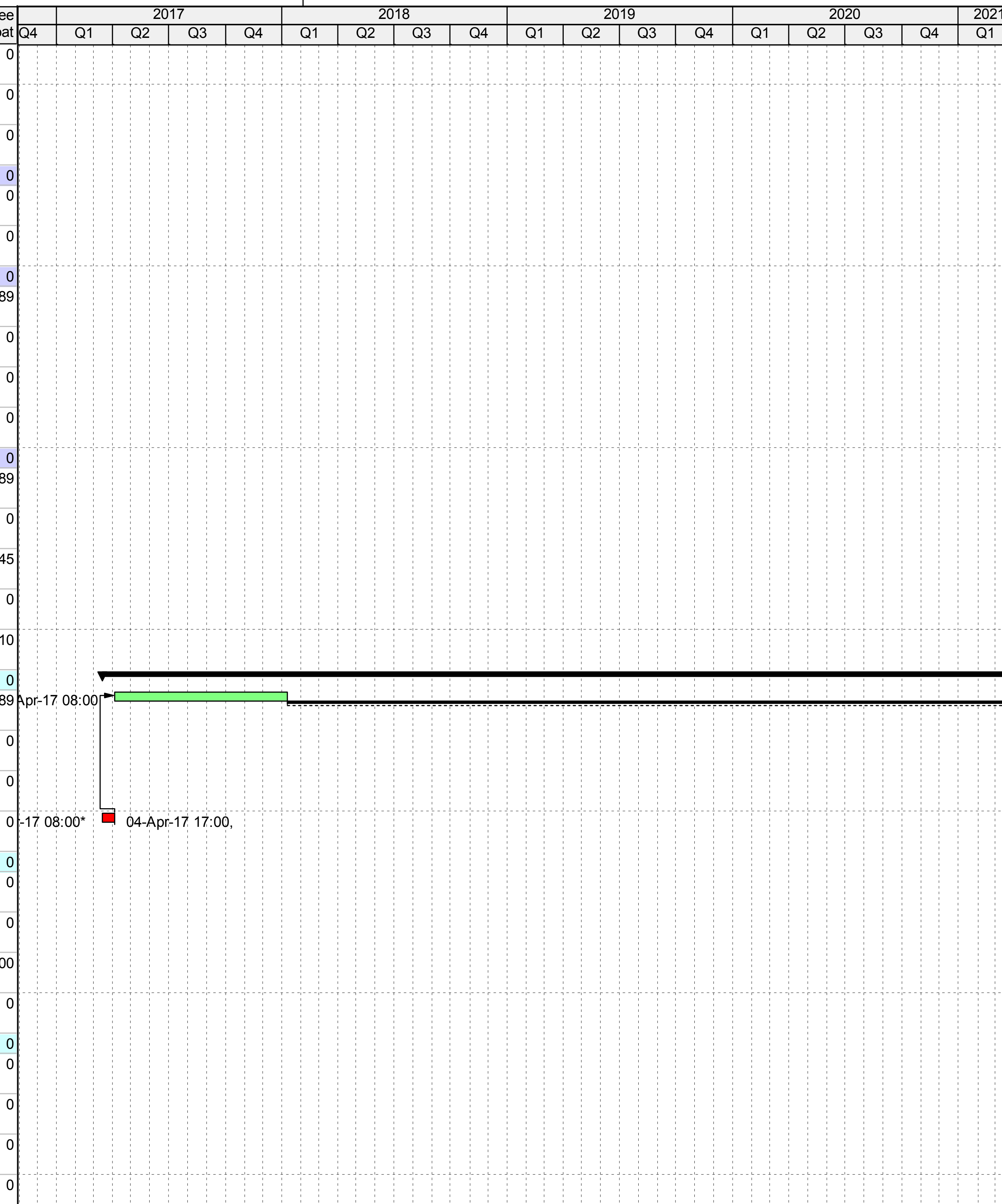
TASK filter: All Activities



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

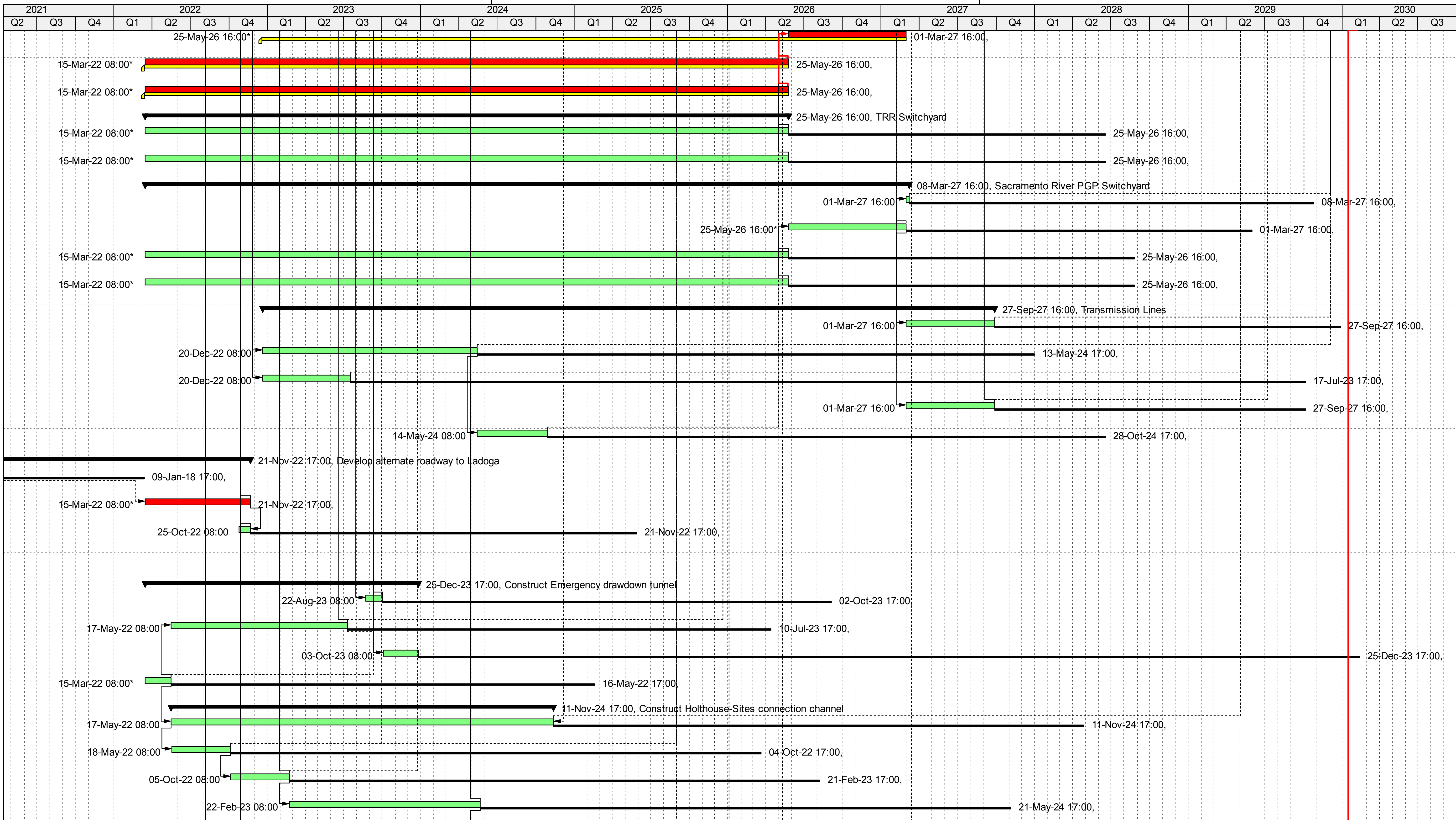
TASK filter: All Activities

#	Activity ID	Activity Name	Predeces	Successo	Original	Start	Finish	Total Float	Free Float
160	A2050	Build fenced Sites Switchyard	A530, A510	A2060, A2070,	200	25-May-26 16:00*	01-Mar-27 16:00	-1095	0
161	A510	Furnish Switchyard Equipment - Sites		A2050	1095	15-Mar-22 08:00*	25-May-26 16:00	-1095	0
162	A530	Furnish Transformer Equipment - Sites		A2050	1095	15-Mar-22 08:00*	25-May-26 16:00	-1095	0
163	TRR Switchyard				1095	15-Mar-22 08:(	25-May-26 16:00	539	0
164	A480	Furnish Switchyard Equipment - TRR		A1612	1095	15-Mar-22 08:00*	25-May-26 16:00	539	0
165	A500	Furnish Transformer Equipment - TRR		A1612	1095	15-Mar-22 08:00*	25-May-26 16:00	539	0
166	Sacramento River PGP Switchyard				1300	15-Mar-22 08:(	08-Mar-27 16:00	689	0
167	A2020	Energize Sacramento River Switchyard	A2010, A2040,	A2140, A1800	5	01-Mar-27 16:00	08-Mar-27 16:00	689	689
168	A2010	Build fenced Sacramento River Switchyard	A450, A470	A2020, A2030	200	25-May-26 16:00*	01-Mar-27 16:00	589	0
169	A450	Furnish Switchyard Equipment - Sac. River		A2010	1095	15-Mar-22 08:00*	25-May-26 16:00	589	0
170	A470	Furnish Transformer Equipment - Sac River		A2010	1095	15-Mar-22 08:00*	25-May-26 16:00	589	0
171	Transmission Lines				1245	20-Dec-22 08:(	27-Sep-27 16:00	589	0
172	A2030	Power lines to Sacramento River Pump Station	A2010, A2040,	A2140	150	01-Mar-27 16:00	27-Sep-27 16:00	589	589
173	A2090	Overhead lines from WAPA substation to Sacramento River Switchyard	A2040	A2020, A2030,	365	20-Dec-22 08:00	13-May-24 17:00	949	0
174	A2100	Overhead Power WAPA Substation to Site Switchyard	A2040	A1440, A2060	150	20-Dec-22 08:00	17-Jul-23 17:00	1624	945
175	A2070	Power lines to Sites Pump Station	A2050	A2120, A2160,	150	01-Mar-27 16:00	27-Sep-27 16:00	529	0
176	A2110	Overhead Power Sites switchyard to TRR Pump Station	A2090	A1612	120	14-May-24 08:00	28-Oct-24 17:00	949	410
177	Develop alternate roadway to Ladoga				1484	15-Mar-17 08:(	21-Nov-22 17:00	658	0
178	A1200	Complete design for temporary road - contract	A1190	A1210	200	05-Apr-17 08:00	09-Jan-18 17:00	1089	1089
179	A1210	Construct Temporary Road	A1200	A1220, A1230,	180	15-Mar-22 08:00*	21-Nov-22 17:00	0	0
180	A1220	Erect appropriate new road signage	A1210	A1240	20	25-Oct-22 08:00	21-Nov-22 17:00	658	0
181	A1190	Survey & develop temporary road alignment		A1200	15	15-Mar-17 08:00*	04-Apr-17 17:00	0	0
182	Construct Emergency drawdown tunnel				465	15-Mar-22 08:(	25-Dec-23 17:00	1600	0
183	A1270	Develop Access Road to inlet/outlet	A1010	A1280	30	22-Aug-23 08:00	02-Oct-23 17:00	764	0
184	A1260	Excavate West portal of emergency tunnel	A1250	A1290, A1410,	300	17-May-22 08:00	10-Jul-23 17:00	720	0
185	A1265	Move excess spoil to Golden Gate Dam material storage area	A1260, A1330		60	03-Oct-23 08:00	25-Dec-23 17:00	1600	1600
186	A1250	Develop access road to Tunnel site & Golden Gate Dam		A1260, A1880,	45	15-Mar-22 08:00*	16-May-22 17:00	720	0
187	Construct Holthouse-Sites connection channel				650	17-May-22 08:(	11-Nov-24 17:00	903	0
188	A1550	Excavate Channel	A1170, A1250	A1560A, A1440	650	17-May-22 08:00	11-Nov-24 17:00	903	0
189	A1560A	Haul to Golden Gate Dam	A1550	A1560B, A1890,	100	18-May-22 08:00	04-Oct-22 17:00	903	0
190	A1560B	Haul to Holdhouse stockpile	A1560A	A1560C, A1530,	100	05-Oct-22 08:00	21-Feb-23 17:00	903	0
191	A1560C	Haul to Saddle Dams	A1560B	A1560D, A1870	325	22-Feb-23 08:00	21-May-24 17:00	903	0



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

TASK filter: All Activities



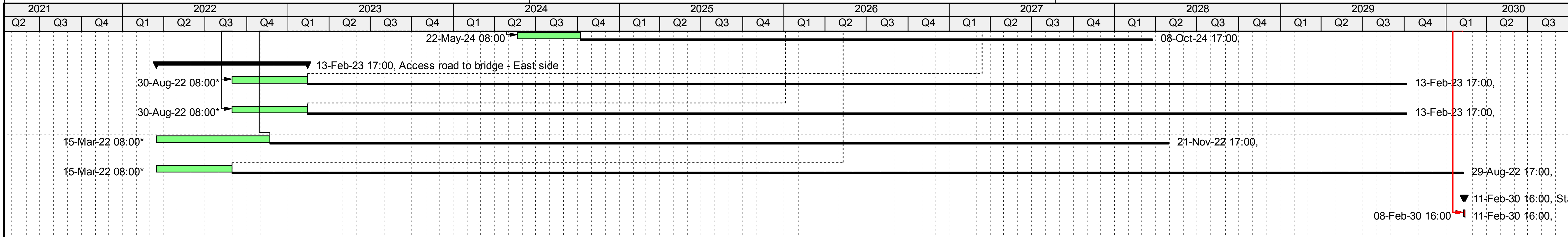
Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | ◆ Milestone | Neg Float Bar

TASK filter: All Activities

#	Activity ID	Activity Name	Predecessors	Successors	Original	Start	Finish	Total Float	Free Float
192	A1560D	Haul to Golden Gate Dam East side	A1560C	A1910B	100	22-May-24 08:00	08-Oct-24 17:00	903	249
193	Access road to bridge - East side				240	15-Mar-22 08:(	13-Feb-23 17:00	1824	0
194	A1840	Construct Road to Golden Gate Dam top	A1820	A1920	120	30-Aug-22 08:00*	13-Feb-23 17:00	1734	1080
195	A1850	Construct Access Rd to Sites Crown	A1820	A1970	120	30-Aug-22 08:00*	13-Feb-23 17:00	1734	770
196	A1830	Construct Road to maintenance & Site Pump plant		A1860	180	15-Mar-22 08:00*	21-Nov-22 17:00	1419	0
197	A2270	Access road to bridge - East Side		A2220	120	15-Mar-22 08:00*	29-Aug-22 17:00	1944	981
198	Start Filling Sites Reservoir				1	08-Feb-30 16:(	11-Feb-30 16:00	0	0
199	A2240	Start Filling Sites Reservoir	A1870, A1920,		1	08-Feb-30 16:00	11-Feb-30 16:00	0	0

Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work | Float Bar
Actual Work | Milestone | Neg Float Bar

TASK filter: All Activities


2021 2022 2023 2024 2025 2026 2027 2028 2029 2030
22-May-24 08:00
08-Oct-24 17:00,
13-Feb-23 17:00, Access road to bridge - East side
30-Aug-22 08:00*
13-Feb-23 17:00,
30-Aug-22 08:00*
13-Feb-23 17:00,
15-Mar-22 08:00*
21-Nov-22 17:00,
15-Mar-22 08:00*
29-Aug-22 17:00,
11-Feb-30 16:00, Start
08-Feb-30 16:00
11-Feb-30 16:00,

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 9: Benefit Cost Analysis

Attach the benefit and cost analysis for the proposed project. If the analysis is located in another document, identify the location. See regulations section 6004(a)(6).

WSIP Application Instructions, CWC, March 2017

Table of Contents

Attachment A9: Benefit Cost Analysis 1
Findings 4
Approach 4
Benefit-Cost Ratio 4
Net Present Valuation 4
Public Benefit Ratio 4
Benefits 5
Costs 6
Benefit-Cost Analysis Results 7
Public Benefit Ratio Results 7

Tables

Table A9-1. Annual Benefits Summary (2015$, $Millions/year) 5
Table A9-2. Annual and Total Capital Cost Summary (2015$; $Millions/year) 6
Table A9-3. Benefit-Cost Analysis Results (2015$, $Millions/year) 7
Table A9-4. Public Benefit Ratio Results (2015$, $Millions/year) 7
Table A9-5. Public Benefit Ratio Results: No Federal Participation (2015$, $Millions/year) 8

Acronyms and Abbreviations

B/C	benefit cost
BCA	benefit-cost analysis
IDC	interest during construction
NODOS	North-of-the-Delta Offstream Storage
NPV	net present value
OM&R	operations, maintenance, and replacement
PBR	public benefit ratio
project	Sites Reservoir Project
WSIP	Water Storage Investment Program

Findings

The benefit-cost analysis (BCA) determined that the Sites Reservoir Project (project) would result in total public benefits with a present value of $3,506 million in 2015 dollars. If it receives its requested $1,662 million in Water Storage Investment Program (WSIP) funding and the entire $730 million of its potential Federal funding**, the Sites Reservoir project would have a public benefit ratio (PBR) of 2.11 and an overall benefit-cost (B/C) ratio of 1.52**. This does not account for the significant non-monetized benefits.

The project's high PBR indicates that WSIP funding of the project would be a highly cost-effective investment. Similarly, the project's B/C ratio indicates that the project is economically feasible and will result in major net benefits from the total expenditures necessary for its construction and future operations.

As discussed extensively in Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB and summarized below, the PBR and B/C ratio results are considered highly conservative based on the selected monetization approaches and the assumptions used by the benefit valuation analysis. The project's B/C ratio would increase to more than 2.2 and its PBR to over 3.6 if the alternative cost approach for the project's ecosystem improvements and agricultural supply benefits. Use of WSIP Unit Fish values for the project's anadromous fish benefits are estimated to further increase the project's PBR to over 4.5.

Approach

BCA is a widely used analysis tool for evaluating a project's expected future economic performance. Two key metrics are commonly used to represent and evaluate BCA results: the B/C ratio and the net present value (NPV).

Benefit-Cost Ratio

The B/C ratio is the present (or annualized) value of all project benefits divided by the corresponding value of all costs. The ratio measures the factor by which benefits exceed (or are below) costs. A project with a ratio value greater than 1.0 is considered economically feasible. The B/C ratio is a useful way to compare the relative benefits of projects that may differ in time and/or scale. The overall B/C ratio of a proposed project (considering all costs, benefits, and impacts) is the measure of the project's economic feasibility.

Net Present Valuation

NPV is the present value of all costs subtracted from the present value of all benefits. Projects with values greater than $0.00 are considered economically beneficial. The NPV is a useful way to determine the overall dollar value of a project's expected future net benefits.

Public Benefit Ratio

The WSIP Application requires calculation of a project's PBR. The PBR is the present value of the net monetized public benefits divided by the total requested WSIP cost share.

The BCA data, calculations, and results for Sites Reservoir are provided below. In accordance with WSIP Technical Memorandum guidance, benefits and costs were annualized using a 3.5 percent discount rate applied to the project's operations over the remaining 93 years of the study period (i.e., 2030 to 2122).

Benefits

Table A9-1 shows Sites Reservoir's estimated benefits on an average annual basis for the 93-year study period. As discussed above, the average annual benefits are based on the NPV of the project's future benefits using the WSIP-required 3.5 percent discount rate.

Table A9-1. Annual Benefits Summary (2015$, $Millions/year)

Beneficiary	Benefit Value	Benefit Value Adjusted [a]
WSIP Public Benefits	**$122.0**	**$123.6**
Ecosystem improvement	$110.9	$112.0
Anadromous fish & other aquatic	$57.0	$57.7
Incremental Level 4 refuge	$23.8	$23.8
Oroville coldwater pool	$21.0	$21.0
Yolo Bypass	$9.1	$9.5
Recreation	$6.8	$6.8
Flood control	$4.4	$4.9
Non-Proposition 1 Eligible Benefits	**$194.9**	**$194.9**
Water supply	$175.4	$175.4
M&I water supply	$114.1	$114.1
Agricultural water supply	$50.2	$50.2
Recaptured water supply	$11.1	$11.1
Hydropower (system)	$19.5	$19.5
Total Benefits	**$316.9**	**$318.5**

[a] Adjusted to incorporate the additional $44.7 million (present value) of project benefits obtained during project construction (2026-29).

Overall, Sites Reservoir is estimated to result in $316.9 million in total annual benefits. However, when adjusted for the $44.7 million in ecosystem improvement and flood reduction benefits between 2026 and 2029, Sites Reservoir is estimated to result in $318.5 million in total annual benefits. The project's WSIP public benefits are expected to total $123.6 million (adjusted), which is equivalent to 38.8 percent of the project's $318.5 million in total benefits.

The WSIP Technical Report guidelines require that each benefit category reporting the present value of its expected net monetized benefits over the planning horizon, in 2015 dollars, be discounted to the start of project operations using the required 3.5 percent discount rate. Net monetized benefits are benefits minus any impacts caused by the proposed project or other costs (other than project costs) that are required to realize the benefit. Table A6-1 in Sites_A6 Annual Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB provides the complete benefit estimates on a yearly basis over the full study period.

The Sites Reservoir analysis's use of CALSIM II modeling and its conservative approach in its physical benefit quantification and benefit monetization approach ensure that all necessary costs or impacts were previously incorporated and consequently were "netted out" so that the benefit valuation results (discussed in detail in Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB) represent the project's net monetized benefit and do not require any additional adjustment to subtract for any project impacts or other costs.

Costs

Two sets of development costs are shown, and each is used to derive its corresponding BCA results. The first is an unadjusted capital cost that includes the full interest during construction (IDC) that could be expected for the project's 8-year construction schedule. As such, it results in a higher (and therefore financially more conservative) total development cost for the project than if the adjusted (but arguably more realistic) estimate of the development cost discussed below is used.

The adjusted capital cost approach incorporates the IDC reduction that would be gained from expected WSIP and Federal project construction funding. As discussed in Allocation of Total Costs (file name: Sites_A10 Allocation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB), consistent with the Draft North-of-the-Delta Offstream Storage (NODOS) Feasibility Study, Sites Reservoir could potentially obtain up to $730 million in Federal funding. For the WSIP analysis, WSIP funding of $1,662 million is requested. Assuming that both WSIP and Federal funding would be disbursed as construction expenses are incurred, the project would gain a significant reduction in its IDC because it would carry a much lower amount of capital debt over its 8-year construction period. As such, it results in a lower and arguably more realistic estimate of the project's total development cost than the unadjusted capital cost estimate.

Table A9-2 shows Sites Reservoir's estimated capital cost on an average annual basis for the 93-year study period. As discussed above, the average annual benefits are based on the NPV of the project's future benefits using the WSIP-required 3.5 percent discount rate.

Both the unadjusted (i.e., without WSIP or Federal funding) and the adjusted capital cost (i.e., with WSIP and Federal funding) are shown.

Table A9-2. Annual and Total Capital Cost Summary
(2015$; $Millions/year)

Cost Item	Project (Unadjusted IDC)	Project (with IDC saving)
Construction	$4,747	$4,747
Interest during construction (IDC)	$798	$429 [a]
Total Capital Cost	**$5,545**	**$5,176**
Capital amortization (3.5%; 93 years)	$195.5	$182.5
Operations, maintenance, and replacement	$26.6	$26.6
Total Annual Cost	**$222.1**	**$209.1**

[a] Adjusted for $369 million in expected IDC savings from WSIP and Federal funding during project construction.

The total development cost of Sites Reservoir is estimated to be $5.5 billion without any IDC savings. This cost corresponds to an annualized capital cost of $195.5 million. As a result, the total annual cost is estimated to be $222.1 million when the projected $26.6 million annual operations, maintenance, and replacement (OM&R) cost is added.

If the project's Federal funding and requested WSIP amounts are obtained, its IDC cost is estimated to decrease from $797.6 million to $429.0 million. This decrease would result in $368.5 million in IDC savings, which would be equivalent to a $13.0 million reduction in the project's future annualized cost. As a result, the total development cost for the project with WSIP and Federal construction funding is $5,176 million and its annualized cost would total $209.1 million.

Benefit-Cost Analysis Results

Table A9-3 shows the BCA results for the project both with and without the expected IDC savings that would be obtained from future WSIP and Federal construction funding.

Table A9-3. Benefit-Cost Analysis Results (2015$, $Millions/year)

Results	Project (Unadjusted IDC)	Project (with IDC saving)
Benefit-cost ratio	1.43	1.52
Net benefit (annual)	$96.4	$109.4
Total net benefit (net present value)	$2,735	$3,104

Sites Reservoir is projected have at least a B/C ratio of 1.43 and result in total net benefits with an NPV of $2,735 million, which would be equivalent to annual net benefits of $96.4 million.

If Sites Reservoir receives its requested $1,662 million in WSIP funding and the full $730 million of its potential Federal funding, the project would have a B/C ratio of 1.52 and result in total net benefits with a net present value of $3,104 million, which would be equivalent to annual net benefits of $109.4 million.

Public Benefit Ratio Results

Sites Reservoir is projected to result in total public benefits with a present value in 2015 dollars of $3,506 million over the 100-year study period. These benefits are equivalent to an annualized average of $123.7 million. Ecosystem improvements account for over 90 percent of the project public benefits and far surpass the 50 percent WSIP funding requirement.

As shown in Table A9-4, based on the project's requested WSIP funding amount of $1,662 million, the PBR for the Sites Reservoir project is 2.11.

Table A9-4. Public Benefit Ratio Results (2015$, $Millions/year)

Results	Project (with IDC Saving)
Total public benefits (annual)	$123.6
Total ecosystem Improvement benefits (annual)	$112.0
Ecosystem improvement as % of public benefit	90.6%
Total public benefits (NPV)	$3,506
WSIP funding request	$1,662
PBR	**2.11**

This value indicates that WSIP funding for the project would be a highly cost-effective investment. As discussed in Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, this result presumes that WSIP funding for the project would encourage Federal funding participation of up to $730 million. The Federal contribution significantly reduces the WSIP funding request necessary to achieve the currently proposed public benefit levels.

As shown in Table A9-5, in the absence of any Federal funding for the project, WSIP funding of $2,392 million would otherwise be necessary to similarly fully fund the project's currently planned public benefits. Under these circumstances, the PBR for the Sites Reservoir project would be reduced to 1.47.

Table A9-5. Public Benefit Ratio Results: No Federal Participation
(2015$, $Millions/year)

Results	Project (with IDC saving)
Total public benefits (annual)	$123.6
Total ecosystem Improvement benefits (annual)	$112.0
Ecosystem improvement as % of public benefit	90.6%
Total public benefits (NPV)	$3,506
WSIP funding request	$2,392
PBR	**1.47**

Evaluation of Results

As discussed extensively in Sites_A3 Physical Monetized under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, the Sites Reservoir benefit valuation analysis was very conservative in its benefit monetization. This was due to the selected monetization approaches and the assumptions generally applied in the analysis of the project's future ecosystem improvement and agricultural water supply benefits.

Except for the anadromous fish benefits, WSIP unit water values were used to determine the future economic benefits for the other ecosystem improvements and agricultural water supplies. The WSIP unit values were only adjusted to include the estimated conveyance energy costs for the deliveries. It is arguable that other non-energy conveyance costs and carriage water losses might both also be added to further increase the unit values. In any case, no such escalation of the WSIP unit benefit values has been applied by the Sites Reservoir economic benefit analysis.

As shown in Sites_A3 Physical Monetized under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, the WSIP unit water benefit values were substantially lower than the estimated alternative cost benefits values based on Shasta Lake Expansion. It is arguable that use of the alternative cost valuation is more representative of the project's future benefit since Sites Reservoir would provide new and permanent additional water supplies and net new benefits that otherwise could not be obtain from water transfer from other current water users (as the WSIP unit water values implicitly presume). Furthermore, it is highly unlikely that the water transfers implicit in the WSIP unit water values could actually occur—or be achieved—in a manner that would result in comparable water quantities and reliability as that provided by the project. The significantly higher value reflects the lack of other options for generating a similar large and permanent quantity of benefits.

Third party effects are another important factor contributing to WSIP unit values' under-representation of the benefits for a very large water storage project (such as Sites Reservoir). There are likely major third-party effects (e.g., externalities or related adverse effects on employees and other businesses in related economic sectors) that are not incorporated or represented in the WSIP unit water values, which focus on the compensation to water sellers.

Even the higher benefit values obtained from the alternative cost estimates for Shasta Lake Dam raise are also considered likely to be conservative and under-represent Sites Reservoir's actual benefit values. As discussed in Sites_A3 Physical Monetized under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, the development cost estimates used from recent USBR feasibility analysis likely do not factor in either the full costs that would be necessary for project development or the schedule delays necessary for it to be completed. Both factors would contribute to higher alternative cost benefit values for Sites due to their increased costs and/or reduced present values of its benefits. It was projected that Sites Reservoir would provide limited anadromous fish beginning in 2026 and its full benefits in 2030. A later completion date for raising Shasta will result in greater fish population and habitat declines during the interim period that would in turn reduced the comparative value of its subsequent ecosystem improvements. Finally, there are also reasons to believe that the 2030 Shasta Lake storage conditions assumed by WSIP in its baseline are overly optimistic and therefore when compared to the project operations, the project's quantified benefits are underestimated.

As a result of the conservative nature of the Sites Reservoir benefit valuations, the PBR and B/C ratio results shown in Tables A9-4 and A9-5 should therefore be recognized as very conservative. The project's B/C ratio would increase to more than 2.2 and its PBR to over 3.6 if the alternative cost approach for the project's ecosystem improvements and agricultural supply benefits is used to monetize those benefits. Use of WSIP Unit Fish values for the project's anadromous fish benefits were estimated to further increase the project's PBR to over 4.5.

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 10: Allocation of Total Costs

Provide a proposed allocation of total project costs to all project beneficiaries, including the Program, and an explanation of how the allocation was calculated consistent with TR section 8 and section 6004(a)(7) of the regulations. If this information is included in another attachment, identify the location.

WSIP Application Instructions, March 2017

Table of Contents

Attachment 10: Allocation of Total Costs 1
Analytic Methods 4
Separable Cost-Remaining Benefits Method 4
Data and Assumptions 5
Calculations 5
Results 5

Tables

Table A10-1. Cost Allocation Summary: WSIP (w/ IDC Savings) and Federal Funding (w/ IDC Savings) (Annualized Values: 2015$; $millions) 7
Table A10-2. Total Cost Assignment: Present Value (2015$; $millions) 8
Table A10-3. Capital Cost Assignment: Present Value (2015$; $millions) 9
Table A10-4. Total Cost Assignment: Annual (2015$; $millions) 10

Figures

Figure A-1. Eligible Benefits Graph 11

Acronyms and Abbreviations

IDC	interest during construction
JPA	Joint Powers Authority
NODOS	North-of-the-Delta Offstream Storage
OM&R	operations, maintenance, and replacement
SCRB	Separable Cost-Remaining Benefits
TR	Technical Report
WSIP	Water Storage Investment Program

A cost allocation was performed to determine the costs to be allocated to the project purposes. Based on its results, a subsequent cost assignment was performed, including beneficiaries and funding sources (accounting for funding sources), to determine the costs to be assigned to the project beneficiaries. The cost assignment also incorporated the requested Water Storage Investment Program (WSIP) grant and potential Federal funding participation (consistent with the Draft North-of-the-Delta Offstream Storage [NODOS] Feasibility Study analysis) to determine the total costs (capital and operations, maintenance, and replacement [OM&R]) that each beneficiary would need to contribute.

The Sites Reservoir Joint Powers Authority (JPA) considers future Federal participation in the project to be likely given both the Federal government's extensive development of the Feasibility Report, other studies, and its current interest in securing incremental Level 4 refuge and anadromous fish benefits from the project. As a result, consistent with Draft NODOS Feasibility Study, Federal funding of up to $730 million was incorporated into the WSIP economic analyses and factored in to determine the $1,662 million in requested WSIP funding.

In addition to securing funding for the project's public benefits, the Federal and WSIP funding would also benefit the project by lowering the cost of development. Assuming that funding would be disbursed as construction expenses are incurred, the project's interest during construction (IDC) expenses would be significantly reduced because it would carry a much less capital debt over the estimated construction period. The future IDC reduction has been included in the total cost used for the cost allocation and assignments.

However, given that Federal participation is not assured, the WSIP economic analyses also performed an alternate cost allocation and assignment to the project beneficiaries without Federal participation.

Analytic Methods

Separable Cost-Remaining Benefits Method

The Federal government's Separable Cost-Remaining Benefits (SCRB) method was used to perform the cost allocation for Sites Reservoir. This approach is recognized as an acceptable cost allocation by the WSIP Technical Reference (TR) guidance (Section 8.2, Tools and Methods).

The SCRB method is based on the justified investment for each project purpose. The maximum justified investment for a purpose is the lesser of either (1) its benefits or (2) the cost of the single purpose project alternative to achieve the same benefits. Quantification of the justifiable expenditures is a means for allocating joint cost in proportion to benefits.

Under SCRB, the project's separable and joint costs are estimated and used as the basis for determining each purpose's designated share of the project's total cost. Separable costs are costs that have be added to the project specifically to serve a given function. Joint costs are the costs for joint use facilities that serve multiple purposes. Each purpose's separable costs are subtracted from its justifiable expense to determine its remaining justifiable expenses.

The project's total joint costs are then allocated proportionally between the purposes based on their remaining justifiable expense. The sum of each purpose's allocated joint cost and its separable costs then determines the total cost allocated to each purpose. The allocated joint costs for the project's OM&R, construction, and IDC expenses were also performed to determine corresponding cost allocation for each cost category.

The SCRB cost allocation for each project purpose was used for cost assignment between beneficiaries and expected future Federal and/or WSIP funding amounts (when applicable). The cost assignment between the ecosystem improvement beneficiaries was based on their benefits because no separable costs were identified for that purpose.

Data and Assumptions

If the project's Federal funding and requested WSIP amounts are obtained, its IDC cost is estimated to decrease from $797.6 million to $429.0 million. This decrease would result in $368.5 million in IDC savings, which would be equivalent to a $13 million reduction in the project's future annualized cost. As a result, the total development cost for the project with WSIP and Federal construction funding is $5,176 million, and its annualized total cost would total $209.1 million. The project's cost allocation was based on this estimated development cost. In addition, an alternate cost allocation using the same SRCB method was also performed for Sites Reservoir assuming no Federal funding contribution for its construction. Single purpose and separable cost estimates for the project purposes were developed based on evaluation of each purpose's physical benefits and modified reservoir designs to meet those results.

It was also assumed that consistent with the Draft NODOS Feasibility Study, Federal funding for the project's OM&R costs would be limited to 50 percent and only applicable for incremental Level 4 refuge water.

Calculations

Table A10-1 shows the estimated annualized total costs allocated to each project purpose. The cost allocation also reports individually each purpose's share of the project's construction, IDC, and OM&R costs. The corresponding nominal amount of each purpose's portion of the project's $5,176 million capital cost is also shown. This includes $429 million of interest during construction, $350 million of future environmental mitigation or compliance and $4,397 million of capital costs.

For all purposes except water supply, the benefits determined their maximum justifiable expense. Separable costs were identified only for Sites Reservoir's hydropower and recreation purposes.

As shown in Table A10-1, water supply was allocated $92.9 million in total annual costs, which represents 44.4 percent of the project's estimated total $209.1 million annual cost. Ecosystem improvement was also allocated a major share (42.3 percent and $88.5 million) of total costs. The annual cost allocations for the other public purposes were $5.4 million (2.6 percent) for recreation and $3.9 million (1.8 percent) for flood protection. In all cases, per WSIP TR requirements, the cost shares for all purposes are less than their monetized benefits (TR, Section 8.2).

The total cost share allocated to the project's public benefit purposes was $97.8 million, which represents nearly half (46.8 percent) of the project's annual total cost. The public benefit purposes' cost share potential eligible for WSIP funding is limited to its capital cost, which is estimated to be $84.3 million per year. This amount would account for $2.4 billion (46.2 percent) of the project's total capital cost of $5.2 billion.

Results

A cost assignment analysis was also performed to determine both the ecosystem beneficiaries' specific cost share and also the WSIP and Federal funding for each public benefit purpose or beneficiary. As required by the application guidelines, Table A10-2 shows the estimated total costs allocated to each project purpose and assigned to the beneficiaries. It also shows the assignment between project purposes and beneficiaries of the requested WSIP funding.

The present value of the project's total cost is estimated to be $5,931 million, of which $755 million would be for future OM&R expenses over the 93-year analysis period. Of the $755 million, $44 million would be replacement costs with the remaining $711 million operations, maintenance and replacement.

Table A10-3 provides the cost assignment for the project's $5,176 million total capital cost (i.e., construction and IDC). Federal non-reimbursable construction funding of $730 million would be provided as funding for anadromous fish ($488 million), Level 4 refuge ($201 million), and flood reduction ($41 million). The Federal government would also provide $1.3 million per year as its 50 percent cost share for the incremental Level 4 refuge's allocated $2.6 million annual OM&R cost (see Table A10-1).

Table A10-3 also shows the distribution of the requested $1,662 million in WSIP funding between the public purposes and the beneficiaries. If granted, the WSIP funding would provide sufficient matching funds to fully cover the capital cost for all the project's public benefit categories. WSIP would provide 100 percent funding for the capital cost assignments for the Oroville coldwater pool, Yolo Bypass, and recreation. WSIP would also provide the necessary 56 percent remaining capital needed for the other public benefits receiving Federal funding (i.e., Level 4 refuge, anadromous fish, and flood reduction).

Table A10-4 also shows the total cost assignment on an equivalent annualized basis. However, it should be noted that successful WSIP and Federal funding would instead disburse their contributions during the project's construction phase. As a result, their annualized capital cost share would then be eliminated. WSIP provides no OM&R funding and would ensure that the entire capital costs for all the public benefits were fully funded (either solely by WSIP or with Federal assistance). Consequently, the annual costs shown in Table A10-4 for the public benefit categories under the non-Federal partners are the annual OM&R costs that would need to be paid in the future with non-WSIP funding. The results are summarized in Figure A-1.

As discussed in Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB, the Sites JPA intends to use future sales of its allocation of recaptured water to cover the OM&R costs assigned for those project public benefit purposes that do not have adequate alternate revenue sources. It is expected that the project would receive Federal funding for 50 percent of the incremental Level 4 refuge supply's annual OM&R. It is also expected that public use fees from the reservoir's recreational visitors would be used to fully fund the $0.9 million in annual OM&R costs that would be assigned to recreation.

Table A10-1. Cost Allocation Summary: WSIP (w/ IDC Savings) and Federal Funding (w/ IDC Savings) (Annualized Values: 2015$; $millions)

Category	WSIP Public Benefits			Non-Prop 1. Eligible Benefits		Total
	Ecosystem Improvement	**Recreation**	**Flood Control**	**Water Supply**	**Hydropower (System)**	
Allocated Total Cost						
Total Project Costs						$209.1
Benefits by Purpose	$112.0	$6.8	$4.9	$175.4	$19.5	$318.5
Single Purpose Cost	$116.7	$168.0	$167.5	$117.5	$182.5	-
Justifiable Expenditures	$112.0	$6.8	$4.9	$117.5	$19.5	$260.6
Separable Costs	$0	$0.3	$0	$0	$14.6	$14.9
Remaining Benefits (Justifiable Expenditures Less Separable Costs)	$112.0	$6.4	$4.9	$117.5	$4.9	$245.7
Percent (Distribution of Remaining Benefits)	45.6%	2.6%	2.0%	47.8%	2.0%	100%
Allocated Joint Costs	$88.5	$5.1	$3.9	$92.9	$3.8	$194.2
Total Allocated Costs (Separable Plus Allocated Joint Costs)	$88.5	$5.4	$3.9	$92.9	$18.5	$209.1
Percent Total Cost Allocation	42.3%	2.6%	1.8%	44.4%	8.8%	100%
Allocated OM&R Annual Costs						
Separable OM&R Cost	$0	$0.2	$0	$0	$0	$0.2
Allocated Joint OM&R Cost	$12.05	$0.7	$0.52	$12.64	$0.5	$26.4
Total Allocated OM&R Cost	$12.0	$0.9	$0.5	$12.6	$0.5	$26.6
Percent OM&R Cost Allocation	45.3%	3.3%	2.0%	47.5%	2.0%	100%
Allocated Capital Costs (Annualized)						
Separable Capital Cost	$0	$0.2	$0	$0	$14.6	$14.8
Allocated Capital Cost	$76.5	$4.4	$3.3	$80.2	$3.3	$167.7
Total Allocated Annual Capital Cost	$76.5	$4.5	$3.3	$80.2	$17.9	$182.5
Percent Capital Cost Allocation	41.9%	2.5%	1.8%	44.0%	9.8%	100%
Allocated Construction Costs (Annualized)						
Separable Construction	$0.0	$0.1	$0.0	$0.0	$13.4	$13.5
Allocated Construction	$70.1	$4.0	$3.1	$73.6	$3.0	$153.8
Total Allocated Construction Cost	$70.1	$4.2	$3.1	$73.6	$16.5	$167.4
Percent Construction Cost Allocation	41.9%	2.5%	1.82%	44.0%	9.8%	100%
Allocated IDC Costs (Annualized)						
Separable IDC	$0	$0	$0	$0	$1.2	$1.2
Allocated IDC	$6.3	$0.4	$0.3	$6.6	$0.3	$13.9
Total Allocated IDC	$6.3	$0.4	$0.3	$6.6	$1.5	$15.1
Percent IDC Cost Allocation	41.9%	2.5%	1.8%	44.0%	9.8%	100 %
Allocated Capital Costs (Nominal)						
Allocated IDC	$180	$11	$8	$189	$42	$429
Construction Cost	$1,989	$118.1	$86.6	$2,087	$467	$4,747
Allocated Total Capital Cost	$2,169	$128.8	$94.4	$2,276	$509	$5,176

Table A10-2. Total Cost Assignment: Present Value (2015$; $millions)

Purpose/Action	Total		Total Cost (Capital and OM&R) - Present Value					
			Federal Non-Reimbursable		WSIP		Authority	
	Percent	Cost ($M)	Percent	Cost ($M)	Percent	Cost ($M)	Percent	Cost ($M)
Cost Assignment: WSIP (w/ IDC Savings), Federal Funding (w/ IDC Savings)								
WSIP Public Benefits	**47%**	**$2,773**	**28%**	**$766**	**60%**	**$1,662**	**12%**	**$345**
Ecosystem Improvement	42%	$2,510	29%	$725	59%	$1,480	12%	$305
Anadromous Fish	52%	$1,294	38%	$488	49%	$630	14%	$86
Level 4 Refuge	21%	$534	44%	$238	49%	$260	7%	$36
Oroville Coldwater Pool	19%	$470	0%	$0	86%	$406	14%	$55
Yolo Bypass	8%	$212	0%	$0	86%	$183	14%	$25
Recreation	3%	$153	0%	$0	84%	$129	16%	$25
Flood Control	2%	$109	38%	$41	49%	$53	14%	$15
Non-Prop.1 Eligible Benefits	**53%**	**$3,158**	**0%**	**$0**	**0%**	**$0**	**100%**	**$3,158**
Water Supply	44%	$2,634	0%	$0	0%	$0	100%	$2,634
M&I Water Supply	65%	$1,714	0%	$0	0%	$0	100%	$1,714
Ag Water Supply	29%	$754	0%	$0	0%	$0	100%	$754
Recaptured Water Supply	6%	$167	0%	$0	0%	$0	100%	$167
Hydropower (System)	9%	$524	0%	$0	0%	$0	100%	$524
Total	**100%**	**$5,931**	**13%**	**$766**	**28%**	**$1,662**	**59%**	**$3,503**

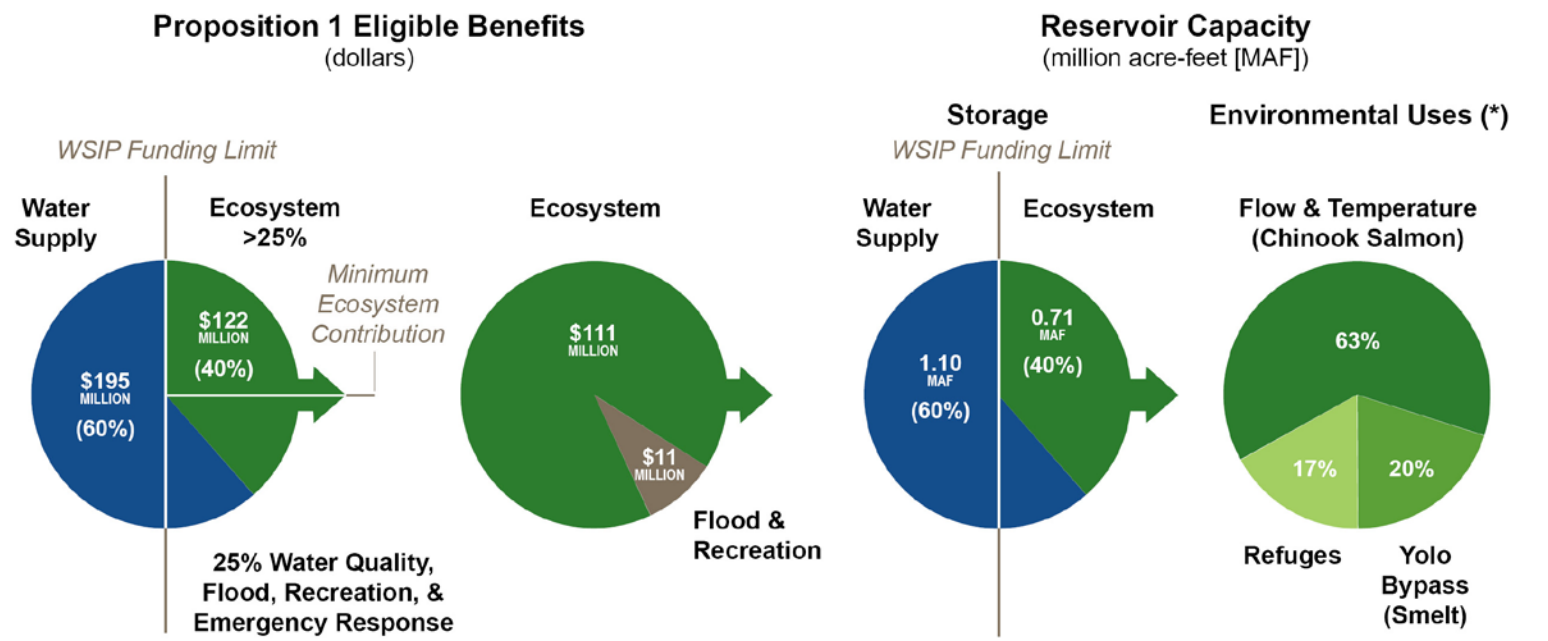
Table A10-3. Capital Cost Assignment: Present Value (2015$; $millions)

Purpose/Action	Total		Total Cost (Capital and IDC) - Annual					
			Federal Non-Reimbursable		WSIP		Authority	
	Percent	Cost ($M)	Percent	Cost ($M)	Percent	Cost ($M)	Percent	Cost ($M)
Cost Assignment: WSIP (w/ IDC Savings), Federal Funding (w/ IDC Savings)								
WSIP Public Benefits	**46%**	**$2,392**	**31%**	**$730**	**69%**	**$1,662**	**0%**	**$0**
Ecosystem Improvement	42%	$2,169	32%	$689	68%	$1,480	0%	$0
Anadromous Fish	52%	$1,118	44%	$488	56%	$630	0%	$0
Level 4 Refuge	21%	$461	44%	$201	56%	$260	0%	$0
Oroville Coldwater Pool	19%	$406	0%	$0	100%	$406	0%	$0
Yolo Bypass	8%	$183	0%	$0	100%	$183	0%	$0
Recreation	2%	$129	0%	$0	100%	$129	0%	$0
Flood Control	2%	$94	44%	$41	56%	$53	0%	$0
Non-Prop.1 Eligible Benefits	**54%**	**$2,784**	**0%**	**$0**	**0%**	**$0**	**100%**	**$2,784**
Water Supply	44%	$2,276	0%	$0	0%	$0	100%	$2,276
M&I Water	65%	$1,480	0%	$0	0%	$0	100%	$1,480
Agricultural Water	29%	$651	0%	$0	0%	$0	100%	$651
Recaptured Water	6%	$144	0%	$0	0%	$0	100%	$144
Hydropower (System)	10%	$509	0%	$0	0%	$0	100%	$509
Total	**100%**	**$5,176**	**14%**	**$730**	**32%**	**$1,662**	**54%**	**$2,784**

Table A10-4. Total Cost Assignment: Annual (2015$; $millions)

Purpose/Action	Total		Total Cost (Capital and OM&R) – Annual					
			Federal Non-Reimbursable		WSIP		Authority	
	Percent	Cost ($M)	Percent	Cost ($M)	Percent	Cost ($M)	Percent	Cost ($M)
Cost Assignment: WSIP (w/ IDC Savings), Federal Funding (w/ IDC Savings)								
WSIP Public Benefits	**47%**	**$97.8**	**28%**	**$27.0**	**60%**	**$58.6**	**12%**	**$12.2**
Ecosystem Improvement	42%	$88.5	29%	$25.6	59%	$52.2	12%	$10.8
Anadromous Fish	52%	$45.6	38%	$17.2	49%	$22.2	14%	$6.2
Level 4 Refuge	21%	$18.8	44%	$8.4	49%	$9.2	7%	$1.3
Oroville Coldwater Pool	19%	$16.6	0%	$0	86%	$14.3	14%	$2.3
Yolo Bypass	8%	$7.5	0%	$0	86%	$6.5	14%	$1.0
Recreation	3%	$5.4	0%	$0	84%	$4.5	16%	$0.9
Flood Control	2%	$3.9	38%	$1.5	49%	$1.9	14%	$0.5
Non-Prop. 1 Eligible Benefits	**53%**	**$111.3**	**0%**	**$0**	**0%**	**$0**	**100%**	**$111.3**
Water Supply	44%	$92.9	0%	$0	0%	$0	100%	$93
M&I Water	65%	$60.4	0%	$0	0%	$0	100%	$60.4
Ag Water	29%	$26.6	0%	$0	0%	$0	100%	$26.6
Recaptured Water	6%	$5.9	0%	$0	0%	$0	100%	$5.9
Hydropower (System)	9%	$18.5	0%	$0	0%	$0	100%	$18.5
Total	**100%**	**$209.1**	**13%**	**$27.0**	**28%**	**$58.6**	**59%**	**$123.5**

Figure A-1. Eligible Benefits Graph



Prop 1 specified that the State may invest in up to 50% of the project cost for public benefits. Up to half of those benefits could be for non-ecosystem benefits. Based on the values provided by the State, the Sites Project can provide 40% of the annual benefits for Prop 1 categories, 90% of those benefits for the ecosystem.

To accomplish the Prop 1 benefits, the State could acquire the rights to 40% of the storage capacity in Sites Reservoir for the identified benefits. Approximately 63% of those benefits have been allocated to improve habitat for chinook salmon, 20% for food chain improvements for Delta smelt, and 17% for wildlife refuges.

(*) Based on WSIP requirements applied to maximize the State's return on investment. Operations to achieve other benefits will produce different results.

This file was submitted to the California Water Commission as a Microsoft Excel file. It has been converted to a PDF format for ease of access on our website.
A copy of the Excel file can be obtained by submitting a request to CWC@water.ca.gov.

Physical and Economic Benefits Summary

August 2017

Part 1. Physical and Economic Benefits. Repeat this block for each category of public or non-public benefit quantified							
Ecosystem							
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Anadromous Fish & Other Aquatic				Notes:			
2. Physical Benefit Measurement Units: Habitat Units/Yr				Notes:			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-5	45,484	44,945	539	41,253	39,431	1822
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-6	na	na	$25.6	na	na	$86.6
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	na	na	$62.35	na	na	$145.5

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit
[2] Net of any non-mitigated physical effects

Part 1. Physical and Economic Benefits. Repeat this block for each category of public or non-public benefit quantified							
Ecosystem							
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Incremental Level 4 Refuge				Notes:			
2. Physical Benefit Measurement Units: TAF/Yr				Notes:			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-7	35	0	35	31	0	31
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-7	$16.1	$0	$16.1	$24.6	$0	$24.6
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	na	na	$62.4	na	na	$145.5

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit
[2] Net of any non-mitigated physical effects

Enter Benefit Category here [1]							
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Oroville Coldwater Pool				Notes:			
2. Physical Benefit Measurement Units: TAF/Yr				Notes:			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-8	2,786	2,760	26	2,651	2,620	31
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-9	na	na	$11.8	na	na	$25.0
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	na	na	$62.4	na	na	$145.5

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit

[2] Net of any non-mitigated physical effects

Part 1. Physical and Economic Benefits. Repeat this block for each category of public or non-public benefit quantified							
Ecosystem	Ecosystem						
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Yolo Bypass				Notes:			
2. Physical Benefit Measurement Units: TAF/Yr				Notes:			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-10	56	17	39	57	18	39
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-10	na	na	$8.9	na	na	$9.2
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	na	na	$62.4	na	na	$145.5

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit

[2] Net of any non-mitigated physical effects

Recreation							
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Recreation				Notes:			
2. Physical Benefit Measurement Units: Increased Visitor Days				Notes:			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-11	186,829	46,707	140,122	186,829	46,707	140,122
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-12	$9.3	$2.3	$7.0	$9.3	$2.3	$7.0
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	$9.3	$2.3	$7.0	$9.3	$2.3	$7.0

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit

[2] Net of any non-mitigated physical effects

Flood Control							
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Flood Control				Notes:			
2. Physical Benefit Measurement Units: Acres				Notes: Area of reduced flood risk - 100 Year Flood Event			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-12	9,570	0	9,570	9,570	0	9,570
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-13	$4.4	$0	$4.4	$4.4	$0	$4.4
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	$4.4	$0	$4.4	$4.4	$0	$4.4

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit

[2] Net of any non-mitigated physical effects

Part 1. Physical and Economic Benefits. Repeat this block for each category of public or non-public benefit quantified							
Non-public benefit							
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Water Supply				Notes: Includes M&I, Agricultural and Recaptured Supplies			
2. Physical Benefit Measurement Units: TAF/Yr				Notes:			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-13	7,113	6,859	254	6,607	6,312	295
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-14	na	na	$89.0	na	na	$251.5
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	na	na	$108.5	na	na	$271.0

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit

[2] Net of any non-mitigated physical effects

Non-public benefit	Non-public benefit						
Repeat Rows 1 through 4 for every quantified physical benefit in this benefit category							
1. Physical Benefit Name: Hydropower (System)				Notes:			
2. Physical Benefit Measurement Units: MWh/Yr				Notes: Average Annual Hydropower Generation			
		2030			2070		
	Enter Page Number from Application	With Project	Without Project	Difference	With Project	Without Project	Difference
3. Net Physical Benefit Measurement[2]	A3-14	215,542	0	215,542	215,542	0	215,542
4. Annual Economic Benefit, 2015 $ Million/Yr	A3-15	$19.5	$0	$19.5	$19.5	$0	$19.5
5. Total Annual Monetized Benefit for the Category (sum of all row 4s.)	A3-3	na	na	$108.5	na	na	$271.0

[1] Enter one of these benefits: Ecosystem, Water Quality, Flood Control, Emergency Response, Recreation, or Non-public benefit

[2] Net of any non-mitigated physical effects

Part 2. Total Economic Net Benefits and Allocated Cost by Benefit Category in 2015 $ Million

Sum of annual economic net benefits by type	Enter Page Number from Application	Ecosystem	Water Quality	Flood Control	Emergency Response	Recreation	Total Public Benefits	Non-Public Benefits	Total public and non-public benefits[1]
Sum of 2030 benefits from Part 1, Row 5	A3-3	$62.35	$0	$4.4	$0	$7.0	$73.73	$108.52	
Sum of 2070 benefits from Part 1, Row 5	A3-3	$145.5	$0	$4.4	$0	$7.0	$156.83	$271.0	
Present Value of Benefits over Planning Horizon using 3.5% Discount Rate	A6-2	$3,176	$0	$138	$0	$192	$3,506	$5,528	$9,035
Present Value of Total Project Costs Allocated to each Benefit Category	A10-5	$2,510	$0	$109	$0	$153	$2,773	$3,158	$5,931
Capital Costs Allocated to Each Benefit Category	A10-6	$2,169	$0	$94	$0	$129	$2,392	$2,785	$5,176
Total Requested Program Cost Share	A10-5	$1,480	$0	$53	$0	$129	$1,662		

[1] Present value of total public and non-public benefits, total project costs, and total Program funding request must match numbers in Part 3

Part 3. Present Value of Project Costs, Cost-Effectiveness Measure, and Public Benefit Ratio, Million 2015 $ Present Value

	Enter Page Number of Application	2015 $ Million Present Value
Project Costs		
Capital costs as defined in Program regulations	A10-2	$4,397
Interest during construction	A10-2	$429
Replacement costs	A10-3	$44
Future environmental mitigation or compliance obligation costs	A10-2	$350
Operations, maintenance and repair (OM&R) costs	A10-3	$711
Other costs (describe)	na	$0
Present Value of Total Project Costs[1]	A10-5	$5,931
Present Value of Cost of Least-Cost Alternative that Provides the Same Total Physical Benefits	A2-2	$6,926
Present Value of All Public and Non-public Benefits[1]	A6-2	$9,035
Ratio of Present Value of Total Monetized Net Benefits to the Total Project Costs	A9-3	1.52
Present Value of Public Benefits[1]	A9-4	$3,506
Total Requested Program Cost Share[1]	A9-4	$1,662
Public Benefit Ratio: Ratio of Present Value of Monetized Net Public Benefits to the Total Requested Program Cost Share	A9-4	2.11

[1] Must match numbers in Part 2

Benefit Calculation, Monetization, and Resiliency Tab

Attachment 12: Uncertainty Analysis

A.12 Attach the uncertainty analysis. See regulations section 6004(a)(8).

WSIP Application Instructions, March 2017

Response

This attachment describes the analysis of sources of uncertainty for Sites Reservoir. Such sources include climate change, future projects and water management actions, water supply projects, and drought performance.

Sites Reservoir Project Sources of Uncertainty Analysis

August 9, 2017

Table of Contents

Introduction 5
Climate Change 6
Operational Flexibility 6
Future Projects and Water Management Actions 8
Multi-region Projects and Actions 8
Water Supply Projects 13
Ecosystem Improvement Projects and Actions 14

Tables

Table 1. Sites Reservoir Project Performance During Drought 16

Acronyms and Abbreviations

Authority	Sites Project Authority
CALFED	CALFED Bay-Delta Program
cfs	cubic feet per second
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWC	California Water Commission
Delta	Sacramento-San Joaquin River Delta
DEW	Drier/Extreme Warming
DWR	California Department of Water Resources
GCID	Glen Colusa Irrigation District
M&I	municipal and industrial
MAF	million acre-foot (feet)
Operations Plan	Sites Reservoir Project Operations Plan
Reclamation	Bureau of Reclamation
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
T-C Canal	Tehama-Colusa Canal
TCCA	Tehama-Colusa Canal Authority
TRR	Terminal Regulating Reservoir
WMW	Wetter/Moderate Warming
WSIP	Water Storage Investment Program

Introduction

Sites Reservoir is able to provide operational flexibility to sustain both public and non Proposition 1 benefits under a range of future uncertain conditions including climate change, potential future projects and water management actions, and severe extended droughts. As an off-stream reservoir located in the Sacramento Valley north of the Sacramento-San Joaquin River Delta, Sites Reservoir provides a unique opportunity to provide public physical benefits and improve the operation and resiliency of the Central Valley water system.

The with-project conditions include a 1.81-million-acre-foot (MAF) reservoir, which would be located in the Sacramento Valley west of the town of Maxwell, and associated conveyance facilities including use of existing Tehama-Colusa Canal (T-C Canal) and Glenn-Colusa Irrigation District (GCID) Main Canal diversion and conveyance facilities, plus a proposed new diversion and discharge pipeline. The proposed reservoir would be filled by diversion of excess Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam. These flows are “excess” to those needed to meet current regulatory requirements or other water demands.

Operation of the proposed reservoir would be in cooperation with the operations of existing Central Valley Project (CVP) and State Water Project (SWP) system facilities to facilitate and maximize the potential for a wide range of benefits.

The operation of Sites Reservoir Project would allow for the development and administration of an ecosystem enhancement storage account (EESA) that could be managed by the State to provide water for ecosystem and water quality purposes. Such an account would provide a pool of dedicated storage to manage in cooperation with existing operations to improve coldwater conservation storage, stabilize river flows during critical fisheries periods, increase flows through certain watercourses and/or facilities (such as, Yolo Bypass), improve water quality, and/or enhance habitat restoration.

Sites Reservoir Project would be operated in cooperation with CVP and SWP operations to coordinate releases from Shasta Lake, Lake Oroville, and Folsom Lake. Releases from Sites Reservoir would allow reduced releases from other reservoirs while still meeting requirements for minimum instream flow objectives, Sacramento River temperature requirements, and Delta salinity control assigned to CVP and SWP. Through this reduction in releases, storage could be conserved in Shasta Lake, Lake Oroville, and Folsom Lake to significantly increase operational flexibility to improve river water temperatures for fish survival, Delta water quality, flood control, and recreation.

Sites Reservoir Project EESA operations would achieve multiple public benefits over a wide range of hydrologic conditions. These public benefit objectives include the following actions:

- Increase coldwater pool conservation in Trinity Lake, Shasta Lake, Lake Oroville, and Folsom Lake
- Help regulate Sacramento River summer flows for best use of cold water for control of temperature conditions adverse to anadromous fish
- Provide (via upstream actions) incidental Delta water quality improvements in the summer and fall
- Stabilize Sacramento River fall flows for improving spawning and rearing success of anadromous fish
- Provide water to the Yolo Bypass to support salmon migration and summer food production for delta smelt
- Provide water to increase the quantity and frequency of deliveries to Level 4 refuge deliveries per CVPIA

In dry and critically dry years Sites Reservoir operations as proposed would prioritize improving Shasta Lake storage to preserve coldwater and improve water temperatures in the Sacramento River to protect Chinook salmon.

The following sections describe how the expected public physical benefits would be provided and sustained under the following sources of uncertainty:

- Climate Change
- Future Project and Water Management Actions
- Drought
- Other Sources of Uncertainty

Climate Change

The California Water Commission (CWC) provided three CalSim II models that represent a range of climate scenarios under year 2070 conditions. The primary WSIP 2070 model is required to be used as the basis for the analysis of project operations as part of the WSIP application. The two other models provided by the CWC represent alternative extreme climate scenarios. One is characterized by Wetter/Moderate Warming (WMW) conditions and other by Drier/Extreme Warming (DEW) conditions. Both climate conditions demonstrate more extreme hydrologic scenarios resulting in increased winter precipitation and reduced winter and spring snowpack, which causes higher winter runoff and reduced spring snow melt and decreased inflows to Central Valley rim reservoirs. In the WMW scenario there is increased precipitation and higher reservoir inflows and storage levels, and fewer dry years. In the DEW scenario, there are longer more severe dry periods and decreased reservoir inflows. These scenarios provide a range of uncertainty to allow evaluation of how the benefits of the project can be sustained under potential future extreme climate conditions.

Investigatory level analyses were performed for both the WMW and DEW scenarios with the inclusion of the Sites Reservoir project. These model runs were conducted as a sensitivity analysis and are not refined to a level where their numerical results can be used directly, but the results provide a strong indication of how the project will perform under these extreme future climate conditions.

The public benefits provided by Sites Reservoir are largely dependent on the capability to divert Sacramento River water into the reservoir when all other regulatory and water right requirements are met. In both the WMW and DEW climate scenarios, the average annual diversion to Sites Reservoir illustrates the resiliency of the project, as diversions are only reduced by six percent and three percent, respectively, when compared to the base WSIP 2070 model results. The results of the investigatory model runs for the 2070 WMW and DEW climate scenarios demonstrate that Sites Reservoir operations can be adapted to future conditions and provide sustained public benefits as described below.

Operational Flexibility

Sites Reservoir has the operational flexibility to deliver water to provide public benefits where and when it is needed most, based on changing conditions and ecosystem priorities. In the 2070 WMW climate scenario, less water is needed to preserve the coldwater pool in Shasta Lake, Lake Oroville, and Folsom Lake due to wetter hydrologic conditions, so more water can be prioritized for other public benefits such as late summer deliveries to the Yolo Bypass and increasing the quantity and frequency of deliveries to wildlife refuges.

In the 2070 DEW climate scenario, more public benefit water is needed to increase storage in Shasta Lake and other Central Valley reservoirs to preserve coldwater pools and enhance water temperature management for salmonids. Therefore, EESA operations may be adapted to emphasize coldwater pool management and less public benefit water could be allocated to other purposes.

EESA in Sacramento Valley Reservoirs

Increased water storage in Shasta Lake, Lake Oroville, and Folsom Lake would benefit salmonids through the conservation of coldwater pool in each reservoir and improved temperature management downstream. The additional water storage also provides the flexibility to release more water when needed to maintain stable flows for salmon habitat to provide better spawning and rearing conditions.

In the 2070 WMW climate scenario, increased inflows to Sacramento Valley reservoirs lead to higher storage levels. In this scenario, less public benefit water is needed to increase Shasta Lake and Lake Oroville storage since the reservoirs have sufficient water to provide flow stabilization and temperature management. Average annual September storage in Shasta Lake and Lake Oroville is increased slightly compared to the base WSIP 2070 condition. The primary benefit is a significant increase of 12 percent in average annual Folsom Lake storage in September to provide improved coldwater pool and flow management in the American River. This demonstrates the operational flexibility of the Sites Reservoir project to provide water for public benefits in responses to future climate change.

In the 2070 DEW climate scenario, public benefit water from Sites Reservoir can be used to significantly increase storage in central valley reservoirs year-round. During dry periods, there is sufficient EESA water in Sites Reservoir to support increased storage in Shasta Lake, Lake Oroville, and Folsom Lake compared to the without project WSIP 2070 condition. During critical drought periods, the average September storage in Shasta Lake is increased by 19 percent, Lake Oroville is increased by 14 percent, and Folsom Lake is increased by 10 percent, respectively. These storage increases help preserve and maintain coldwater in these reservoirs which provides operational flexibility to improve temperature management and downstream habitat for salmonids.

Yolo Bypass

In both the 2070 WMW and DEW climate scenarios, Sites Reservoir has adequate water stored in the EESA to sustain public benefit flows to the Yolo Bypass in the late summer and early fall through the Colusa Basin Drain and Knights Landing Ridge Cut. In the 2070 WMW scenario, water deliveries to the Yolo Bypass occur in over 90 percent of the years, as compared to 70 percent in the base WSIP 2070 condition.

In the 2070 DEW climate scenario, water is delivered to the Yolo Bypass in over 50 percent of the years, as compared to 70 percent in the base WSIP 2070 condition. In this scenario, Shasta Lake and other reservoir storage levels are lower so more EESA water from Sites Reservoir is dedicated to preserving storage and coldwater in Shasta Lake, Lake Oroville, and Folsom Lake. Therefore, slightly less EESA is delivered to the Yolo Bypass.

Refuge Deliveries

In both the 2070 WMW and DEW climate scenarios, Sites Reservoir has adequate water stored in the EESA to sustain public benefit deliveries to wildlife refuges in the Central Valley to meet CVPIA Level 4 targets. In the 2070 WMW scenario, Level 4 refuge deliveries increase due to more available water in storage. In the 2070 DEW scenario, refuge deliveries would possible decrease as EESA operations shift to support the conservation of coldwater in Shasta Lake, Lake Oroville, and Folsom Lake for dry and critical year temperature management.

Non-Proposition-1 Water Supply Benefits

Water deliveries to project participants would be sustained under potential future extreme climate conditions as diversions of excess Sacramento River flow to storage only decrease slightly as noted previously. CVP and SWP project water deliveries are reduced under these two extreme conditions, as compared to the without project WSIP 2070 condition. Therefore, water deliveries from Sites Reservoir in the 2070 WMW and DEW climate scenarios to supplement existing water sources provides additional water supply reliability under these future extreme climate conditions.

Future Projects and Water Management Actions

This uncertainty analysis of future projects and water management actions is consistent with the list of projects evaluated in the Draft EIR/EIS cumulative impact assessment

The projects and actions identified are organized in the following groups:

- Multi-regional water resources projects and actions
- Water supply projects
- Ecosystem improvement projects and actions

Qualitative descriptions of the potential effects to public physical benefits, as well as potential improvements are provided below. Some of the descriptions are based on rough investigatory analyses or post-processing of WISP 2070 results to attempt to characterize the operational flexibility to sustain public benefits under these potential future conditions.

Multi-region Projects and Actions

The multi-region projects and actions considered in this discussion that may affect the potential public benefits are:

- Bay-Delta Water Quality Control Plan Update
- Bay Delta Conservation Plan/California WaterFix
- Sustainable Groundwater Management Act (SGMA)
- Reclamation and DWR Request for Reinitiation of Section 7 Consultation Addressing the Long-term Operation of the CVP and SWP (also referred to as Reconsultation)
- NMFS Public Draft Recovery Plan for Sacramento River Winter run Chinook Salmon, Central Valley Spring-run Chinook Salmon, and Central Valley Steelhead
- U.S. Fish and Wildlife Service (USFWS) Recovery Plan for the Sacramento-San Joaquin Delta Native Fishes

Bay-Delta Water Quality Control Plan Update

The State Water Board is in the process of developing and implementing updates to 2006 WQCP that protect beneficial uses in the Bay-Delta watershed. This update is broken into four phases, some of which are proceeding concurrently. Phase 1 of this work, currently in progress, involves updating San Joaquin River flow and southern Delta water quality requirements for inclusion in the WQCP. Phase 2 will involve comprehensive changes to the WQCP to protect beneficial uses not addressed in Phase 1, focusing on Sacramento River driven standards. Phase 3 will involve implementation of Phases 1 and 2 through changes to water rights and other measures; this phase requires a hearing to determine the appropriate allocation of responsibility between water rights holders within the scope of the Phase 1 and Phase 2 plans. Phase 4 will involve developing and implementing flow objectives for priority Delta tributaries upstream of the Delta.

There is considerable uncertainty associated with the future development and implementation of flow criteria in the Sacramento River watershed to address tributary-specific public trust needs and other beneficial uses. Water stored in the EESA in Sites Reservoir could be used to enhance public benefit objectives in addition to public trust needs over a wide range of potential future regulatory and operational conditions. The EESA provides the operational flexibility to manage the water associated with the Sites Project to the highest priority needs on an adaptive management basis. Implementation of actions to provide public benefits will be adaptively managed on a continuing basis in response to changing system characteristics (such as reservoir storage), ecological needs, forecasts of future hydrologic conditions, and system operations.

Total average annual diversions of excess Sacramento River flow to Sites Reservoir, based on CalSim II model results, for future 2070 conditions are 588 TAF. The volume of excess flow available for diversion in between December and March allows the seasonal timing of diversions during storm events to be adapted to potential future regulatory requirements. Examples of potential adaption measures include shifting the timing of primary diversion periods (including day-night operations to avoid salmon movements that occur predominantly during dark hours), shifting facility operations and maintenance periods, and shifting diversions between the three intake locations. Therefore, the project has the operational flexibility to adapt diversion, storage, and release operations to provide public physical benefits such as coldwater pool management, refuge deliveries, and Yolo Bypass flow enhancement under a range potential future regulatory regimes.

Bay Delta Conservation Plan/California WaterFix

California Bay Delta Conservation Plan and the California WaterFix are being developed by federal and State agencies and other stakeholders to achieve the dual goals of a reliable water supply for California and a healthy California Bay-Delta ecosystem that supports the State's economy. The program would construct a new diversion and conveyance facility, modify operation of existing CVP and SWP Delta facilities, and reduce ecological stressors that impair the function or the use of the Delta by aquatic and terrestrial resources. The preferred project would convey water under the existing water rights held by DWR and Reclamation; however, DWR and Reclamation have requested changes in the points of diversion for these water rights. The existing 2008 USFWS and 2009 NMFS biological opinions will continue to be implemented until construction of the WaterFix is complete and Reclamation has submitted additional information or a request for reconsultation by the end of construction of the preferred project.

Investigatory level analyses were conducted to assess the interaction between the Sites Reservoir and the proposed WaterFix operations. These investigatory analyses were only developed for sensitivity evaluation purposes, but they do provide an indication of the potential performance of Sites Reservoir in coordination with WaterFix. The results indicate that there is sufficient excess Sacramento River flow available downstream of the Delevan Intake to avoid conflicts between the two projects. The spring outflow criterion for March through May proposed as part of the WaterFix operations would have minimal impacts on diversions to Sites Reservoir as the majority of Sites diversions occur between December and February. The seasonal timing of Sites Project diversions could be shifted to reduce or avoid diversions in March by changing Tehama Colusa Canal Authority (TCCA), Glen Colusa Irrigation District (GCID), and Sites Project facility operations and maintenance periods. Sites Project operations are designed to store water during wet periods and then release water later during periods of critical public benefit need. The investigatory analyses indicate the project has the operational flexibility to shift the timing of diversions, reservoir storage, and release operations to maintain and potential enhance public physical benefits such as coldwater pool management, refuge deliveries, and Yolo Bypass flow enhancement in cooperation with WaterFix facility operations.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act of 2014 (SGMA) provides a framework for long-term sustainable groundwater management across California. Under the legislation, local and regional authorities in medium and high priority groundwater basins will form Groundwater Sustainability Agencies (GSAs) that oversee the preparation and implementation of a local Groundwater Sustainability Plan (GSP). Local stakeholders have until 2017 to organize themselves in Groundwater Sustainability Agencies. Groundwater Sustainability Plans will have to be in place and implementation begun sometime between 2020 and 2022. GSAs will have until 2040 to achieve groundwater sustainability.

No groundwater benefits have been monetized; however, the Sites Reservoir project would potentially beneficially affect groundwater basins within service areas of project participants, particularly those within the Sacramento River Hydrologic Region. Some of the participants are designated as a GSA for affected groundwater basins, including but not limited to Colusa County, Colusa County Water District, Santa Clara Valley Water District, and Zone 7 Water Agency. Many other agencies participating in the Sites Project also participate in Groundwater Sustainability Agencies. These member agencies will be involved in the future integration of the Sites Project into their respective Groundwater Sustainability Plans (GSPs)**.** Coachella Valley Water District, Desert Water Agency, Santa Clara Valley Water District, and Zone 7 Water Agency have each submitted prescribed Alternatives to a GSP, consisting of groundwater management plans or an analysis of basin conditions. The Sites Reservoir Project could be incorporated into future updates of these Alternatives.

In addition, Sites participants: Desert Water Agency, California Water Service, San Bernardino Valley Municipal Water District, Metropolitan Water District of Southern California and San Gorgonio Pass Water Agency are affiliated with adjudicated groundwater basins. Antelope Valley - East Kern Water Agency is affiliated with a groundwater basin that is pending adjudication. Water deliveries from the Sites Reservoir Project could be incorporated into the management strategy for these basins. The associated operations by participating agencies with adjudicated basins would be included in annual monitoring and reporting activities. Additional analysis is provided under the ELIGIBILITY TAB in attachment Sites_A6C Groundwater Basins.

Reclamation and DWR Request for Reinitiation of Section 7 Consultation Addressing the Long-term Operation of the CVP and SWP (Reconsultation)

On August 2, 2016, Reclamation and DWR requested the USFWS and NMFS to reinitiate consultation under Section 7 of the Endangered Species Act of the Long-term Coordinated Operation of the CVP and SWP to review the Reasonable and Prudent Alternative presented in the 2008 USFWS Biological Opinion and 2009 NMFS Biological Opinion, respectively. This request for reconsultation was based upon new information collected and analyzed during multiple years of drought, additional data that indicated continued low Delta smelt populations, and new information being developed during ongoing collaborative science processes (e.g., Collaborative Science and Adaptive Management Team and Collaborative Adaptive Management Team processes). Reclamation and DWR also requested that the California Department of Fish and Wildlife participate in this ongoing program.

There is considerable uncertainty associated with the potential outcome of reinitiation of Section 7 consultation for the long-term operations of the CVP and SWP. Water stored in the EESA in Sites

Reservoir could be used in cooperation with CVP/SWP operations to enhance public benefits over a wide range of conditions. The EESA provides the operational flexibility to manage the water associated with the Sites Project to the highest priority needs on an adaptive management basis. Implementation of actions to provide public benefits would be evaluated on a continuing basis in response to changing system parameters, ecological needs, forecasts of future hydrologic conditions, and system operations. For example, as described in the operations plan, water stored the EESA in Sites Reservoir could be exchanged for water normally delivered from other Sacramento Watershed reservoirs and by that exchange Sites EESA water would be “backed” into Lake Shasta, Oroville, or Folsom to increase water storage and thereby help preserve the coldwater pool to enhance fisheries benefit operations.

It is not anticipated that the outcome of the reconsultation will change the ability of the Sites Project to divert excess Sacramento River flows into reservoir storage during major storm events. Results of the CALSIM II future WSIP 2070 condition simulation show an average annual diversion of 588 TAF of excess Sacramento River flow to Sites Reservoir. With an average annual volume of about 2 million acre-feet (MAF) of excess flow available, the seasonal timing of diversions during storm events could be adapted to accommodate potential changes in future CVP/SWP operational and regulatory requirements.

Examples of potential adaption measures include shifting the timing of primary diversion periods, shifting facility operations and maintenance periods, and shifting diversions between the three intake locations. Therefore, the project has the operational flexibility to adapt diversion, storage, and release operations to provide public physical benefits such as coldwater pool management, refuge deliveries, and Yolo Bypass flow enhancement under a range potential future operations and regulatory regimes.

NMFS Public Draft Recovery Plan for Sacramento River Winter-run Chinook Salmon, Central Valley Spring-run Chinook Salmon, and Central Valley Steelhead

The NMFS Draft Recovery Plan provides a roadmap that describes the steps, strategy, and actions that should be taken to return winter-run Chinook salmon, spring-run Chinook salmon, and steelhead to viable status in the Central Valley, California, thereby ensuring their long-term persistence and evolutionary potential.

Excess Sacramento River flow diversions to Sites Reservoir would only take place when flow monitoring indicates that bypass flows are present in the river due to storm event flows. Several existing and additional proposed bypass flow criteria are designed to make certain only excess water would be diverted into Sites Reservoir to maintain and protect existing downstream water uses. As a mitigation measure to more fully avoid and minimize entrainment and impingement of juvenile salmonids and other poor-swimming aquatic species, diversions to Sites Reservoir would also be restricted to protect fish migration during naturally occurring, storm-induced, pulse flow events in the Sacramento River. The proposed pulse protection period would extend from October through May to address outmigration of juvenile winter-, spring-, fall- and late-fall-run Chinook salmon, as well as steelhead.

Due to the combination of operational flexibility and mitigation measures to protect fish during outmigration, it is not anticipated that the NMFS Recovery Plan will change the ability of the Sites Project to provide identified public physical benefits. Water stored in the EESA in Sites Reservoir could be used in cooperation with CVP/SWP operations to enhance public benefits to support chinook salmon, steelhead and sturgeon. The EESA provides the operational flexibility to manage the water associated with the Sites Project to the highest priority needs on an adaptive management basis. As described above, water in stored the EESA in Sites Reservoir could be exchanged and “backed” into Lake Shasta, Oroville, or Folsom to increase water storage and thereby help preserve the coldwater pool to enhance fisheries temperature and flow management operations.

There are number of options being evaluated by the Yolo Bypass-Salmonid Habitat Restoration and Fish Passage Project to modify Fremont Weir to pass a range of flows between 3,000 and 12,000 cfs to provide fish passage and extend periods of inundation. Investigatory level analyses were conducted to provide an indication of the performance of Sites Reservoir operations in coordination with the fish passage project. The results indicate that there is sufficient excess Sacramento River flow available downstream of the Delevan Intake to avoid conflicts with potential future Fremont Weir modifications and operations. Sites Reservoir water could also be released to the Sacramento River or through the Colusa Basin Drain and Knights Landing Ridge Cut to supplement flows into the Yolo Bypass to increase flow levels to promote activation of the flood plain and extend periods of inundation. This concept could also be applied to other isolated floodplains and future weir modifications.

The investigatory analyses indicate the Sites Project has the operational flexibility to shift the timing of diversions, reservoir storage, and release operations to maintain and potentially enhance public physical benefits such as coldwater pool management, refuge deliveries, and Yolo Bypass flow enhancement in cooperation with actions included in the NMFS Public Draft Recovery Plan.

USFWS Recovery Plan for the Sacramento-San Joaquin Delta Native Fishes

The USFWS Recovery Plan addresses the recovery needs for several fish species that occupy the Delta, including delta smelt, Sacramento splittail, longfin smelt, green sturgeon, Chinook salmon (spring-run, late fall-run, and San Joaquin fall-run), and Sacramento perch (believed to be extirpated). The objective of the plan is to establish self-sustaining populations of these species that will persist indefinitely. This would be accomplished by managing the estuary to provide better habitat for aquatic life in general and for the fish addressed by the plan. Recovery actions include tasks such as increasing freshwater flows; reducing entrainment losses to water diversions; reducing the effects of dredging, contaminants, and harvest; developing additional shallow-water habitat, riparian vegetation zones, and tidal marsh; reducing effects of toxic substances from urban non-point sources; reducing the effects of introduced species; and conducting research and monitoring.

Excess Sacramento River flow diversions to Sites Reservoir would only take place when flow monitoring indicates that bypass flows are present in the river due to storm event flows. Several existing and additional proposed bypass flow criteria are designed to make certain only excess water would be diverted into Sites Reservoir to maintain and protect existing downstream water uses. As a mitigation measure to more fully avoid and minimize entrainment and impingement of juvenile salmonids and other poor-swimming aquatic species, diversions to Sites Reservoir would also be restricted to protect fish migration during naturally occurring, storm-induced, pulse flow events in the Sacramento River. The proposed pulse protection period would extend from October through May to address outmigration of juvenile winter-, spring-, fall- and late-fall-run Chinook salmon, as well as steelhead and other anadromous fish.

It is not anticipated that the USFWS Recovery Plan will change the ability of the Sites Project to provide identified public physical benefits. Water stored in the EESA in Sites Reservoir could be used in cooperation with CVP/SWP operations to enhance public benefits to support fish species in the Delta. The EESA provides the operational flexibility to manage the water in Sites Reservoir storage for the highest priority needs on an adaptive management basis. Water stored the EESA in Sites Reservoir could be released through the Colusa Basin Drain and Knights Landing Ridge Cut during summer and fall months (i.e., August through October) to help increase productivity in the Yolo Bypass in the lower Cache Slough and lower Sacramento River areas to increase desirable food sources for Delta smelt and other key fish species.

Water Supply Projects

The water supply projects considered that may affect potential public benefits include:

- Shasta Lake Water Resources Investigation
- North Bay Aqueduct Alternative Intake
- Los Vaqueros Reservoir Expansion Phase II

Shasta Lake Water Resources Investigation

The Shasta Lake Water Resources Investigation is currently being conducted by Reclamation to determine the type and extent of federal interest in a multiple purpose plan to modify Shasta Dam and Reservoir to increase the survival of anadromous fish populations in the upper Sacramento River and increase water supplies and water supply reliability for agricultural, municipal, industrial, and environmental purposes. To the extent possible through meeting these objectives, alternatives include features to benefit other identified water and related resource needs including ecosystem conservation and enhancement, improved hydropower generation capability, flood damage reduction, increased recreation opportunities, and improved water quality conditions in the Sacramento River and the Delta. Anticipated alternatives for expansion of Shasta Lake include, among other features, raising the dam from 6.5 to 18.5 feet above current elevation, which would result in additional storage capacity of 256,000 to 634,000 acre-feet, respectively. The increased capacity is expected to improve water supply reliability and increase the coldwater pool, which would provide improved water temperature conditions for anadromous fish in the Sacramento River downstream of the dam. The final EIS and Feasibility Study for the project were completed in July/August 2015.

Investigatory level analyses were conducted to assess the interaction between Sites Project operations and the proposed increase to Shasta Lake storage capacity. These investigatory analyses provide an indication of potential performance of Sites Project in coordination with an increase in storage in Shasta Lake. Sites Reservoir would be filled through the diversion of excess Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam. Less than 1 percent of diversions to Sites Reservoir are assumed to be provided by flood releases or spills that flow through Shasta Lake. Therefore, there is sufficient excess Sacramento River flow available downstream of Keswick Dam so there is no conflict between the two facility operations.

As proposed, the increase in Shasta Lake storage will not change the ability of the Sites Project to provide identified public physical benefits. Water stored in the EESA in Sites Reservoir could be used in cooperation with CVP/SWP operations to enhance public benefits to support chinook salmon and steelhead. The EESA provides the operational flexibility to manage the water in Sites Reservoir storage to the highest priority needs on an adaptive management basis. As described above, water stored in the EESA in Sites Reservoir could be exchanged and “backed” into Shasta Lake to increase water storage and thereby help preserve the coldwater pool to enhance fisheries temperature and flow management. Increased storage capacity in Shasta Lake could provide additional opportunity to exchange water into storage in Shasta Lake and preserve coldwater resources during critical periods.

North Bay Aqueduct Alternative Intake

DWR issued a Notice of Preparation on December 2, 2009 to construct and operate an alternative intake on the Sacramento River, generally upstream of the Sacramento Regional Wastewater Treatment Plant, and connect it to the existing North Bay Aqueduct system by a new segment of pipe. The proposed alternative intake would be operated in conjunction with the existing North Bay Aqueduct intake at Barker Slough. The project would be designed to improve water quality and to provide reliable deliveries of SWP supplies to its contractors, the Solano County Water Agency, and the Napa County Flood Control and Water Conservation District (DWR, 2011).

Based on a review of potential operations, it is not anticipated that the alternative intake project will affect the ability of the Sites Project to provide identified public physical benefits.

Los Vaqueros Reservoir Expansion Phase II

Los Vaqueros Reservoir is an off-stream reservoir in the Kellogg Creek watershed to the west of the Delta. The Los Vaqueros Reservoir initial construction was completed in 1997 as a 100,000 acre-foot off-stream storage reservoir owned and operated by Contra Costa Water District (CCWD) to improve delivered water quality and emergency storage reliability for CCWD's customers. In 2012, the Los Vaqueros Reservoir was expanded to a total storage capacity of 160,000 acre-feet (Phase 1) to provide additional water quality and supply reliability benefits, and to adjust the timing of its Delta water diversions to accommodate the life cycles of Delta aquatic species, thus reducing species impact and providing a net benefit to the Delta environment. An additional expansion up to 275,000 acre-feet (Phase 2) is being evaluated by CCWD.

Preliminary investigatory level analyses conducted to assess the interaction between the Sites Project and the proposed Los Vaqueros expansion indicate that there is sufficient excess Sacramento River flow available downstream of the Delevan Intake to avoid conflicts between the two operations. Los Vaqueros Reservoir is located in the Delta which is the lowest point in the watershed, therefore it is the location with the greatest amount of surplus. The seasonal timing of Sites diversions between December and May could be coordinated with Los Vaqueros operations to maximize public benefits of both projects.

Ecosystem Improvement Projects and Actions

The ecosystem improvement projects and actions considered in the cumulative impact assessment that may affect or be enhanced by potential public benefits include:

- Yolo County HCP/Natural Community Conservation Plan (NCCP)
- Yolo Bypass Wildlife Area Land Management Plan
- Cache Slough Complex Restoration

Yolo County Habitat/Natural Community Conservation Plan

The Yolo County Habitat Joint Powers Authority, consisting of five local public agencies, launched the Yolo Natural Heritage Program in March 2007. This effort includes the continuing preparation of a joint HCP/NCCP. Member agencies include Yolo County and the Cities of Davis, Woodland, West Sacramento, and Winters. The HCP/NCCP describes the measures that local agencies will implement in order to conserve biological resources, obtain permits for urban growth and public infrastructure projects, and continue to maintain the agricultural heritage and productivity of Yolo County.

The Sites Reservoir Project has the ability to enhance public physical benefits in the Yolo bypass through the release water through the Colusa Basin Drain and Knights Landing Ridge Cut during summer and fall months (i.e., generally August through October when adequate capacity of the Colusa Basin Drain is available) to help increase fish productivity in the Yolo Bypass in the lower Cache Slough and lower Sacramento River areas. Building on what was learned in the 2016 pilot project, these enhancement flows will increase desirable food sources for Delta smelt and other key fish species in the late summer and early fall. In addition, releases of Sites EESA water into the bypass could be timed to provide water flows, depths, and durations to benefit other aquatic and terrestrial wildlife.

Other Sites Project water release patterns to augment other environmental programs would be reasonable to consider in cooperation with future unrelated actions (e.g.; the new operational notching of the Fremont weir to support riparian and wetland habitat restoration in the Yolo Bypass) associated with the HCP/NCCP measures or the Central Valley Flood Protection Program.

Yolo Bypass Wildlife Area Land Management Plan

The Yolo Bypass Wildlife Area consists of approximately 16,770 acres of managed wildlife habitat and agricultural land within the Yolo Bypass. The bypass conveys seasonal high flows from the Sacramento River to help control river stage and protect the cities of Sacramento, West Sacramento, and Davis, as well as other local communities, farms, and lands from flooding. Substantial environmental, social, and economic benefits are provided by the Yolo Bypass, benefiting the people of the State of California.

As noted previously, releases of Sites EESA water into the Yolo Bypass could provide water flows, depths, and durations to benefit aquatic species and terrestrial wildlife.

Cache Slough Complex Restoration

The Cache Slough Complex is located in the northern Delta where Cache Slough and the southern Yolo Bypass meet. It currently includes Liberty Island, Little Holland Tract, Prospect Island, Little Egbert Tract and the surrounding waterways. Levee height on these tracts is restricted and designed to allow overtopping in large flow events to convey water from the upper Yolo Bypass. Since 1983 and 1998 respectively, Little Holland Tract and Liberty Island have remained breached. Restoration is occurring naturally on the islands. Restoration in the Cache Slough Complex was identified as an Interim Delta Action by Governor Schwarzenegger in July 2007.

As noted previously, releases of Sites EESA water into the Yolo Bypass could provide water flows, depths, and durations to benefit aquatic species and terrestrial wildlife.

Drought Performance

To evaluate project performance during a five-year drought period, the results of the WSIP 2070 with Sites Reservoir simulation were compared to the base without project WSIP 2070 results for the period 1930 through 1934. During extended drought periods, the public benefit operations of Sites Reservoir prioritize increasing storage in Shasta Lake, Lake Oroville, and Folsom Lake to help preserve the coldwater pools and provide releases to maintain appropriate river water temperatures downstream. Public benefit water would also be used for other high priority needs on an adaptive management basis. Implementation of actions to provide public benefits would be evaluated on a continuing basis in response to changing system parameters (such as reservoir storage), ecological needs, forecasts of future hydrologic conditions, and system operations.

Table 1 presents the volume of water in system storage and in the Sites Reservoir EESA that could be used for public benefit over the course of the 5-year drought period. System reservoir storage is typically highest in May and lowest in September after releases have been made over the summer and before the first fall storm events. Sites Reservoir operations increase system storage for public benefits creating operational flexibility to provide manage cold water storage and temperature flows to benefit salmonids. As shown in Table 1, total system storage that could be used for public benefits in the first year of the drought (May of 1930) is 900 TAF declining to 300 TAF in end of the fourth consecutive year of drought (September of 1934).

Table 1. Sites Reservoir Project Performance During Drought

Increase in Reservoir System Storage with Sites Reservoir over the 5-Year Drought Period From 1930 to 1934						
Year	System Storage for Public Benefits (TAF) (Shasta, Oroville, and Folsom)		Sites EESA for Public Benefits (TAF)		Total Public Storage Benefit (TAF)	
	May	Sep	May	Sep	May	Sep
1930	489	182	416	398	905	581
1931	668	623	253	0	921	623
1932	562	201	165	128	727	329
1933	507	475	103	0	611	475
1934	454	302	172	0	626	302

Other Sources of Uncertainty

The preceding sections adequately cover the range of potential uncertain future conditions that may affect the public physical benefits identified. As discussed previously, the operation of Sites Reservoir Project would allow for the development and administration of an ecosystem enhancement storage account (EESA) that could be managed by the State to provide water for ecosystem and water quality purposes. The EESA provides the operational flexibility for the State's resource managers delegated the responsibility to manage the water stored in Sites Reservoir to sustain public benefits to meet future needs on an adaptive management basis.

The volume of excess flow in the Sacramento River available for diversion primarily between December and March allows the seasonal timing of diversions during storm events to be adapted to potential future uncertain conditions. Examples of potential adaption measures include shifting the timing of primary diversion periods, shifting facility operations and maintenance periods, and shifting diversions between the three intake locations. Therefore, the project has the operational flexibility to adapt diversion, storage, and release operations to provide public benefits such as coldwater pool management, refuge deliveries, and Yolo Bypass flow enhancement over a range potential uncertain future conditions.

Proposal Full View

Print

APPLICANT INFORMATION

Sites Project Authority *	Sites Project
Tax ID	900635251
Point Of Contact *	**Division/Address List:** General Manager **Address1:** 122 Old Highway 99 West · **Address2:** P. O. Box 517 **City:** Maxwell · **State:** CA **Zip:** 95955 **First Name:** Jim · **Last Name:** Watson **Email:** jwatson@sitesproject.org · **Phone (Direct):** 5304108250
Point Of Contact Position Title *	General Manager, Sites Project Authority
Proposal Name *	Sites Project
Proposal Objective*	This application is submitted by the Sites Project Authority to secure investment funding as authorized under voter approved Proposition 1 in exchange for providing the State of California with eligible public benefits. The Sites Project will be an offstream reservoir independently owned, constructed, governed, and operated by the Authority under its own water rights and other regulatory requirements; but in cooperation with the U.S. Bureau of Reclamation and California Department of Water Resources in their operation of the Central Valley Project (CVP) and State Water Project (SWP), respectively. The summary objective of the Sites Project is to make California's water system more efficient, flexible, and reliable, which will provide local, statewide, and national benefits. The project helps to achieve the objectives of the California Water Action Plan by providing a substantial supply of high-quality water to support the economy and enhance the environment, particularly in the face of climate change. The public benefits for the Sites Project are to improve the survival of anadromous fish and other aquatic species, provide incremental Level 4 refuge water supply, provide opportunities for recreation, and reduce flood damage reduction. Non-Proposition 1 eligible benefits include water supply and hydropower generation. The Authority offers the State of California the first right of refusal for 710,000 AF (40% capacity) for public benefits provided by

	the project. If the State accepts full responsibility for the public benefits, this would provide a long-term average of 195 TAF of water for public benefits. The submittals in this application assume the State would instead prefer federal participation with shared investment in public benefits at a level that reduces capital costs for the Water Storage Investment Program (WSIP) program. This anticipates future federal funding under the Water Infrastructure for Improvements to the Nation (WIIN) Act.

BUDGET

Other Contribution	0
Local Contribution	2720000000
Federal Contribution	730000000
Inkind Contribution	64000000
Amount Requested *	1662000000
Total Proposal Cost *	5176000000

GEOGRAPHIC INFORMATION

Latitude *	**DD (+/-):**	39	**MM:**	18	**SS:**	31
Longitude *	**DD (+/-):**	122	**MM:**	20	**SS:**	17
Longitude/Latitude Clarification	The latitude and longitude correspond to the intersection of Sites and Huffmaster Roads, the current point of access to Antelope Valley. Sites Reservoir is a large project with a main reservoir of over 14,000 acres and approx. 13 miles of pipelines.		**Location**	New reservoir in Colusa and Glenn Counties. New pipeline to the Sacramento River.		
County*	Colusa,Glenn					
Ground Water Basin	Sacramento Valley-Colusa					
Hydrologic Region	Sacramento River					
Watershed	Colusa Basin (80)					

LEGISLATIVE INFORMATION

Assembly District*	3rd Assembly District
Senate District*	4th Senate District
US Congressional District*	District 3 (CA)

Project Information

PROJECT NAME: SITES PROJECT

SITES PROJECT

Implementing Organization	Sites Project Authority
Secondary Implementing Organization	
Proposed Start Date	1/1/0001
Proposed End Date	1/1/0001
Scope Of Work	
Project Description	
Project Objective	

PROJECT BENEFITS INFORMATION

No records found.

BUDGET

Other Contribution	0
Local Contribution	2720000000
Federal Contribution	730000000
Inkind Contribution	64000000
Amount Requested*	1662000000
Total Project Cost*	5176000000

GEOGRAPHIC INFORMATION

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Ground Water Basin	Sacramento Valley-Colusa		
Hydrologic Region	Sacramento River		
Watershed	Colusa Basin (80)		

LEGISLATIVE INFORMATION

Assembly District*	3rd Assembly District
Senate District*	4th Senate District
US Congressional District*	District 3 (CA)

Section : ELIGIBILITY AND GENERAL PROJECT INFORMATION

ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB

Q.1 Applicant Type:

Specify which of the following describes the applicant:

Joint powers authority

Q.2 Project Type:

Please identify the appropriate project type for the application:

Surface Storage Projects Identified in the CALFED

Q.3 Public Benefits:

Please identify the public benefit categories for which Program funding is requested:

a) ☑ Ecosystem Improvements (must be included)
b) ☑ Water Quality Improvements
c) ☑ Flood Control Benefit
d) ☑ Emergency Response
e) ☑ Recreational Purposes

Q.4:

Explain why the proposed project does not adversely affect any river afforded protection pursuant to the California or Federal Wild and Scenic Rivers Act. See section 6003(a)(1)(I) of the regulations.

The dams for Sites Reservoir would be constructed on Funks and Stone Corral Creeks. Neither watercourse is protected by the California or Federal Wild and Scenic Rivers Act. No protected rivers would be impacted. See Chapter 6 (Section 6.3) in the Draft EIR/S (http://sitesproject.org/information/DraftEIR-EIS)for a detailed analysis of impacts to surface water.

Q.5:

Is the applicant an agricultural or urban water supplier as defined in section 6001 of the Program regulations? If not, enter "Not Applicable"; if so, has the applicant submitted complete Agricultural or Urban Water Management Plans to DWR? Have those plans been verified as complete by DWR? If not, explain how the applicant is working towards compliance with the requirements of Water Code section 10608.56. See section 6003(a)(1)(J) of the regulations.

The Sites Project Authority is composed of representatives of the potentially affected counties, and water management agencies within the Sacramento River watershed. The Sites Project Reservoir Committee participants include both urban and agricultural water suppliers. All participants that are required to submit plans have submitted plans to DWR. Some of the Urban Water Management Plans have already been approved. The remaining plans are currently under review by DWR. All applicants will work with DWR to resolve any future comments on their plans. The status for the plans of each individual agency participating in Sites Reservoir is provided in the Water Management Plan Summary in Attachment Sites_A6B WMPs.xls of this tab.

Q.6:

Does the proposed project affect groundwater basins, as defined by Water Code section 10722 *et seq*.? If not, enter "Not Applicable"; if so, identify the affected groundwater basins and describe how the project would be integrated with future GSP(s). Explain how the project would reduce, eliminate, or have an effect on undesirable results (as defined in regulations section 6001(a)(85)) within the affected groundwater basin(s). Describe how the applicant would work with GSA(s) or adjudicated participants of the basin. See regulations section 6003(a)(1)(K).

Sites Reservoir would help alleviate undesirable conditions in the Colusa Groundwater Basin. Desert Water Agency and the Coachella Valley Water Agency would use water from Sites for groundwater replenishment to address undesirable results in their basins. An attachment on Groundwater Management is provided in Attachment Sites_A6C Groundwater Basins of this tab.

A.1 Executive Summary:

Attach the executive summary (max 20 pages). See regulation section 6003(a)(1)(A).

Last Uploaded Attachments: Sites_A1 ExecSum.pdf

A.2 Resolution:

Attach the Resolution, as required by regulations section 6003(a)(1)(C). See Program website for an example resolution.

Last Uploaded Attachments: Sites_A2 Resolution.pdf

A.3 Project Description:

Project Description. Attach a description of the project that meets the requirements of section 3.3 of the TR. If a full project description is included in another attachment, identify the attachment name and beginning page number in this attachment.

Last Uploaded Attachments: Sites_A3 Project Description.pdf

A.4 Project Description Support:

Attach maps, schematics and engineering design drawings that support the project description, if not already available in other attached documents. See section 6003(a)(1)(B) of the regulations.

Last Uploaded Attachments: Sites_A4 Drawings.pdf

A.5 Attestation:

Attach a statement, under penalty of perjury pursuant to the laws of the State of California, attesting that the information provided in the full application is true and correct to the best of the applicant's knowledge. Scanned uploaded documents containing a scanned signature are sufficient. See section 6003(a)(1)(Y) of the regulations.

Last Uploaded Attachments: Sites_A2 Resolution.pdf

A.6 Other Application Information:

OPTIONAL: Attach any other information that would support the application which does not fit easily in another category: for example, other studies or an index of the submitted application documents.

Last Uploaded Attachments: Sites_A6A Application Index.xlsx,Sites_A6B WMPs.docx,Sites_A6C Groundwater Basins.docx,Sites_A6D Modeling Results Compendium.pdf,Sites_A6E Letters.pdf

Section : PHYSICAL PUBLIC BENEFITS

PHYSICAL PUBLIC BENEFITS

A.1 Ecosystem Benefits:

Attach completed Ecosystem Priorities worksheets. Be sure to include the general information worksheet as well as worksheets for each priority being claimed for which funds are being requested. Identify at least one Program ecosystem priority for any ecosystem public benefit quantified. See section 6003(a)(1)(Q) of the regulations.

Last Uploaded Attachments: Sites_A1 Ecosystem Priorities.docx

A.2 Ecosystem Benefits:

Attach supporting documentation requested in Ecosystem Priorities worksheets such as maps or other information not already provided elsewhere in the application.

Last Uploaded Attachments: Sites_A2 Ecosystem Documentation.docx

A.1 Water Quality Benefits:

Attach completed Water Quality Priorities table(s). If the project is claiming water quality benefits that meet the water quality priorities, be sure to include the general application questions table as well as tables for each priority being claimed for which funds are being requested. Identify at least one Program water quality priority for any water quality public benefit quantified See section 6003(a)(1)(Q) of the regulations.

Last Uploaded Attachments: Sites_A1 WQ General Questions.docx,Sites_A1 WQ Priority 1.docx,Sites_A1 WQ Priority 6.docx,Sites_A1 WQ Priority 7.docx,Sites_A1 WQ Priority 9.docx

A.2 Water Quality Benefits:

Attach supporting documentation requested in Water Quality Priorities tables such as maps or other information not already provided elsewhere in the application.

Last Uploaded Attachments: Sites_A2 WQ Maps.docx,Sites_A2 Documentation WQ Priority 1.docx,Sites_A2 Documentation WQ Priority 6.docx,Sites_A2 Documentation WQ Priority 9.docx

Q.1 Flood Control Benefits: If the proposed project is not claiming flood control benefits, leave the following questions blank.

If applicable, how will the project provide flood control benefits? If some project operations will be for flood control purposes, explain. Are the flood control benefits realized locally and/or throughout the larger flood control system? (TR section 4.9.2.1) Describe any negative impacts of providing the flood control benefit. (TR section 4.9.2.4)

The proposed project is located in the Colusa Basin watershed in Colusa and Glenn counties. It consists of constructing two main dams, Golden State Dam on Funks Creek and Sites Dam on Stone Corral Creek, and nine saddle dams on the northern end of the reservoir between the Funks Creek and Hunter Creek watersheds along the Glenn-Colusa county line. The existing Funks Dam is located on Funks Creek would be replaced with a new, larger Holthouse Reservoir. As an offstream reservoir, Sites Reservoir does not have a large, upstream watershed. Sites Reservoir can, nevertheless, be operated to provide local flood control benefits by capturing and attenuating flood flows associated with Stone Corral and Funks Creeks and the other local ephemeral watersheds. By capturing flows from extreme storm events, the project will reduce flood damages, such as the February 18, 2017 event that flooded the community of Maxwell and temporarily closed Interstate 5.

Q.2 Flood Control Benefits: If the proposed project is not claiming flood control benefits, leave the following questions blank.

What methods were used to calculate flood damage reduction? Identify which of the following methods was used to quantify physical flood control benefits:

1. Modeling provided with feasibility study
2. New modeling using historical flood events or historical hydrology
3. New modeling using the climate change hydrology data set provided

If 1 or 2 is used, explain how benefits might be different under the provided future climate and sea levels projections. Provide justification for any methods not identified in section 5.4.3 of the TR. See also regulations section 6004(a)(1)(F).

New modeling using historical flood events or historical hydrology was used to determine physical flood damage reduction benefits. Flooding in the watershed currently occurs between October and April due to rainfall-runoff. If rainfall run-off timing and duration are affected by climate change, it is anticipated that the project will provide additional flood damage reduction benefits. Additional information is provided in Attachment A1 (Sites_A1 Flood Control under the PHYSICAL PUBLIC BENEFITS TAB).

A.1 Flood Control Benefits: If the proposed project is not claiming flood control benefits, leave the following questions blank.

Attach any relevant flood damage reduction supporting documentation, such as hydraulic and hydrologic modeling studies, and property flood damage analysis (TR section 4.9.4). If information to support this question is located in another attachment, provide the location.

Last Uploaded Attachments: Sites_A1 Flood Control.docx

Q.1 Emergency Response Benefits: If the proposed project is not claiming emergency response benefits, leave the following questions blank.

If applicable, how will the project be operated to provide emergency response benefits? Identify the types of emergency benefits the proposed project could provide. (TR section 4.11.1). If additional information to support this question is located in another attachment, provide the location.

The Authority is committed to working with the state and federal water managers and emergency personnel to provide water to support emergency events such as, but not limited to, firefighting, drought relief, and Delta levee failures. Instead of dedicating a volume of water that may not be called upon by the state until at least a one-in-ten year event (or longer) occurs, the Authority proposes that should water from Sites Reservoir be used to aid in responding to or recovery from an emergency, that repayment would occur through a mutually-acceptable exchange or transfer of water. As such, this benefit was not monetized and the Authority is not requesting Proposition 1 funding for this purpose. Should the Water Commission be interested in acquiring water to reserve storage for a qualifying Proposition-1 emergency event, the Sites Project Authority will work with the Water Commission to evaluate the concept and, if appropriate, prepare an amendment to this application for the Water Commission?s consideration.

A.1 Emergency Response Benefits: If the proposed project is not claiming emergency response benefits, leave the following questions blank.

Attach a description of the amount or share of stored water to be provided for the emergency benefits and define the conditions under which water would be made available. Describe how the applicant can commit to the conditions under which the emergency benefits would be made available. (TR section 4.11.2)

Q.1 Recreation Benefits: If the proposed project is not claiming recreation benefits, leave the following questions blank.

If applicable, how will the project be operated to provide recreation benefits? If additional information to support this question is located in another attachment, provide the location.

Sites Reservoir will provide new opportunities for surface-water recreation, such as boating, fishing, and swimming. New shoreline facilities at the reservoir will be constructed to support camping, hiking, horseback riding, mountain biking, picnicking, and sightseeing. The project includes two new recreation areas, Stone Corral and Peninsula Hills. Two boat ramps would provide access to the reservoir. Day-use and overnight camping facilities would be constructed on the shore. Sites Reservoir operations would also support the maintenance of higher water levels at Shasta and Folsom Lakes. Beneficial effects were noted in some instances where additional storage in existing facilities resulting from the operation of Sites Reservoir would provide more frequent access to boat ramps at these facilities. Additional recreational benefits will be provided for fishermen in the Sacramento and American River watersheds as a result of increased populations of Chinook salmon and steelhead. Additional information is provided in Sites_A2 Recreation under the PHYSICAL PUBLIC BENEFITS TAB.

Q.2 Recreation Benefits: If the proposed project is not claiming recreation benefits, leave the following questions blank.

By providing new recreation benefits, does the proposed project negatively affect any existing recreation activities either at the proposed project site, at another facility, or nearby recreation area? (TR section 4.10.1.1)

Recreational impacts are evaluated in Chapter 21 of the Draft EIR/EIS (Posted at http://sitesproject.org/information/DraftEIR-EIS). No potentially significant impacts were identified. There are no existing recreational activities in the project footprint. Beneficial effects were noted in some instances where additional storage at nearby recreation areas (e.g., Shasta Lake) will result from the operation of Sites Reservoir, providing more frequent access to boat ramps at these facilities.

Q.3 Recreation Benefits: If the proposed project is not claiming recreation benefits, leave the following questions blank.

Describe the proposed recreation physical benefits including the size of the facility, recreation activities allowed, recreation facilities associated with these activities, and their capacities and seasonal closures and conditions in which facilities are not usable or activities cannot occur. Any supporting analysis should be attached in A.1 below. (TR section 4.10.1.2)

Sites_A2 Recreation under the PHYSICAL PUBLIC BENEFITS TAB contains a description of the proposed recreation facilities.

A.1 Recreation Benefits: If the proposed project is not claiming recreation benefits, leave the following questions blank.

Attach recreation visitation estimates including documentation of estimation methodology.

Last Uploaded Attachments: Sites_A1 Recreation Visitation.docx

A.2 Recreation Benefits: If the proposed project is not claiming recreation benefits, leave the following questions blank.

Attach or provide links to any relevant recreation studies associated with the proposed project.

Last Uploaded Attachments: Sites_A2 Recreation.docx

Section : FEASIBILITY & IMPLEMENTATION RISK

FEASIBILITY & IMPLEMENTATION RISK

A.1 Feasibility Documentation:

Attach feasibility studies or documentation that demonstrates the proposed project's technical, environmental, economic, and financial feasibility as described in TR section 3.5. See also regulations section 6003(a)(1)(O).

Last Uploaded Attachments: Sites_A1 Feasibility.docx

A.2 Permit List:

Provide a listing and status of all local, state, and federal permits, certifications, and other approval necessary for the construction and operation of the project. See section 6003(a)(1)(W) of the regulations.

Last Uploaded Attachments: Sites_A2 Permits.docx

A.3 Schedule:

Attach an estimated schedule for the proposed project until the first year of operation. If the schedule is included in another attachment, identify the location. See section 6003(a)(1)(G) of the regulations.

Last Uploaded Attachments: Sites_A3 Schedule.pdf

A.4 Environmental Document:

Attach the most recent publicly available environmental document for the proposed project. If the document is available on a website, provide a link to the document(s). See section 6003(a)(1)(S) of the regulations.

Last Uploaded Attachments: Sites_A4 Environmental.pdf

A.5 Impacts and Consultation:

Summarize the project's impacts on environmental or cultural resources and how the project will mitigate or minimize impacts to those resources, or identify where in the CEQA document this information can be found. If any environmental or cultural impacts will not be fully mitigated, explain. See regulations section 6003(a)(1)(T).

If applicable, identify whether Tribal consultation has been initiated for the project. If it has, provide supporting documentation, or identify the location in the CEQA document. If consultation has not been initiated, state whether consultation is expected and when consultation is expected to be initiated. See regulations section 6003(a)(1)(U).

Last Uploaded Attachments: Sites_A5 Impacts and Tribal.docx

Section : BENEFIT CALCULATION, MONETIZATION, and RESILIENCY

BENEFIT CALCULATION, MONETIZATION, and RESILIENCY

Q.1:

Did the applicant use the model products and assumptions described in section 6004(a)(1) of the regulations? See regulations section 6003(a)(1)(CC). If no, provide a description of the models and assumptions used to determine the without-project future conditions for years 2030 and 2070.

The analyses conducted for the Sites Reservoir Project utilized the model products and assumptions described in section 6004(a)(1). This includes the 2030 and 2070 future conditions CalSim II and DSM2 models provided by the California Water Commission on November 2, 2016. The models provided by the commission were modified to include the facilities and operation of the Sites Project as described in the Project Description and Assumptions section. The with- and without-project current conditions analyses were based on the DWR State Water Project Delivery Capability Report 2015 (DCR 2015) - CalSim II base scenario. The DCR 2015 base scenario, provided by DWR, was modified to include the facilities and operation of the Sites Project. The project description and assumptions for the with-project current condition are the same as for the 2030 and 2070 with-project conditions. The analyses also included the use of other analytical tools that were updated for future 2030 and 2070 conditions. These tools include: - USRDOM - Upper Sacramento River Daily Operations Model - Sacramento River HEC5Q model - SALMOD - American River CE-QUAL-W2 Model - CWEST - SWAP - LTGEN - SWP Power - NODOS Power

A.1 Project Conditions:

Attach description and assumptions of with-project conditions for years 2030 and 2070, as defined in section 6004(a)(2) of the regulations, as well as a description of the with- and without-project current conditions. See also regulations section 6003(a)(1)(BB).

Last Uploaded Attachments: Sites_A1 Modeling.docx

A.2 Preliminary Operations Plan:

Attach the preliminary operations plan for the proposed project. See regulations section 6003(a)(1)(H) for details. If the preliminary operations plan is located in another attachment, identify the attachment and provide the location.

Last Uploaded Attachments: Sites_A2 Operations.docx

A.3 Monetized Benefits Analysis:

Attach the analysis of all public and non-public monetized benefits. Identify at least one Program ecosystem or water quality priority for any ecosystem or water quality public benefit quantified. For each public and non-public benefit, describe the methods used to derive the physical and economic benefits and impacts at a level of detail that allows reviewers to verify your analysis.

Description must include:

- The physical changes that are being monetized, consistent with information requested in the Physical Public Benefits Tab, and describing linkages between physical benefits and monetized benefits. See regulations sections 6004(a)(3) and 6004(a)(4); and
- The monetization method and sources for data used. See regulations section 6004(a)(4).

Last Uploaded Attachments: Sites_A3 Physical Monetized.docx

A.4 Mitigation and Compliance Obligation:

For each net public benefit claimed, where applicable, identify any existing environmental mitigation or compliance obligations that are accounted for in each net public benefit as of the date of the CalSim-II model product in section 6004 (a)(1).

- Applicants that use the CalSim-II and DSM2 models to analyze their projects can indicate "within models" for any existing environmental mitigation and compliance obligations contained in those models.
- If applicable to their claimed net public benefit such projects shall also list and account for the non-flow related mitigation and compliance obligations of the State Water Project and Central Valley Project.

Last Uploaded Attachments: Sites_A4 Mitigation.docx

A.5 Quantification Support:

Provide additional information that supports the physical and monetary quantification of the public and non-public benefits and impacts of the project as required by subsection 6004(a)(4) of the regulations. This includes data, assumptions, analytical methods and modeling results, calculations and relevant sources of information. For reference documents or studies relied upon, applicants may provide links to an existing website in lieu of attaching those documents to the application.

Last Uploaded Attachments: Sites_A5 Documentation.docx

A.6 Monetization Table:

Attach a table displaying each future economic benefit in 2015 dollars for each year of the planning horizon as required by section 6004(a)(4)(A) of the regulations.

Last Uploaded Attachments: Sites_A6 Annual Benefits Table.docx

A.7 Non-Monetized Benefits:

If applicable, provide a summary of public benefits that cannot be monetized. Provide the following information for each non-monetized benefit.

- Justification why benefit cannot be monetized,
- Qualitative description of importance of benefit (who is affected, how and how often),
- Evidence to show how the physical change is beneficial and important to Californians.

Last Uploaded Attachments: Sites_A7 Non_Monetized.docx

A.8 Total Project Cost Estimate:

Attach an estimate of the total project costs that includes construction cost, interest during construction, land acquisition, monitoring, environmental mitigation or compliance obligations, operations and maintenance, repair, and replacement costs during the planning horizon using methods described in TR section 6. If the project costs are located in another attachment, identify the location.

The project cost estimates must be reviewed, approved and signed by an engineer licensed by the California Board for Professional Engineers, Land Surveyors, and Geologists.

Last Uploaded Attachments: Sites_A8 Estimate.pdf

A.9 Benefit and Cost Analysis:

Attach the benefit and cost analysis for the proposed project. If the analysis is located in another document, identify the location. See regulations section 6004(a)(6).

Last Uploaded Attachments: Sites_A9 BCA Results.docx

A.10 Cost Allocation:

Provide a proposed allocation of total project costs to all project beneficiaries, including the Program, and an explanation of how the allocation was calculated, consistent with TR section 8 and section 6004(a)(7) of the regulations. If this information is included in another attachment, identify the location.

Last Uploaded Attachments: Sites_A10 Allocation.docx

A.11 Physical and Economic Summary Table:

Attach the Physical and Economic Benefits Summary tables. These tables can be downloaded from the Commission website and uploaded with the application. See regulations section 6003(a)(1)(N).

Last Uploaded Attachments: Sites_A11 Physical and Economic Benefits Summary Tables.xlsx

A.12 Uncertainty Analysis:

Attach the uncertainty analysis. See regulations section 6004(a)(8).

Last Uploaded Attachments: Sites_A12 Uncertainty.docx

Section : PROGRAM REQUIREMENTS

PROGRAM REQUIREMENTS

Q.1:

Describe how the project improves the operation of the state water system. See regulations section 6003(a)(1)(M).

Sites Reservoir would improve operational flexibility and reliability of the state water system, especially within the service areas of both the SWP and CVP, in addition to allowing California resource agencies to purposely allocate water for the benefit of environmental uses. CALSIM modeling results indicate that average long-term end of May storage in Lake Oroville would increase by 26 TAF in 2030 and further increase by an additional 31 TAF in 2070 through exchanges with Sites Reservoir. This demonstrates the resiliency of the improvement in the SWP. Likewise, long-term average storage in CVP reservoirs would also increase. End-of-May storage in Shasta Lake would increase by 59 TAF in 2030 and then increase by an additional 80 TAF in 2070. Storage in existing reservoirs that are cooperatively managed with the Sites Project would increase in all year types. This additional storage would provide the state water system greater flexibility in operating the overall system without negative impacts to water supplies and providing California resource agencies with a water supply dedicated to the environment. Sites Reservoir would be operated collaboratively with the SWP and CVP. The SWP and CVP would make their annual allocations and deliveries as normal. Exchanges with water stored in Sites Reservoir would help to maintain supplies in the existing reservoirs and produce the public benefits described for the project. Sites Reservoir would provide supplemental water that is much needed when allocations are low. Sites Reservoir Project would augment deliveries for both water supply and public benefits, especially during drought years. Sites Reservoir is beneficially located where it can support the operations of existing reservoirs north of the Delta, provide water to the Yolo Bypass for ecosystem restoration, deliver water to be picked up at the North Bay Aqueduct, and export water to the San Joaquin Valley and Southern California. In addition to preserving water in existing SWP and CVP reservoirs through exchange, Sites Reservoir would facilitate water transfers, one of the initiatives in the California Water Action Plan. Water from Sites could be moved south of the Delta to fill Diamond Valley Reservoir or provided for groundwater recharge to Coachella Valley Water District and Desert Water Agency. This topic is further discussed in the Executive Summary (Sites_A1 ExecSum under the ELIGIBILITY AND GENERAL PROJECT INFORMATION TAB).

Q.2:

Describe how the project provides a net improvement in ecosystem and water quality conditions required by Water Code section 79750.

Sites Reservoir would deliver an average of 125 TAF/yr from 2030 to 2070 for improving ecosystem and water quality conditions. This is an unprecedented amount of water that the State resources agencies will be able to directly manage for environmental benefit. Furthermore, cooperatively managing the operation of Sites Reservoir with State and Federal facilities will preserve higher water levels in the existing reservoirs and thereby protect the coldwater pools, improve temperature conditions downstream for existing reservoirs, and provide flows to support the migration of aquatic species in a variety of life stages. The potential benefits of the project for fish were modeled using SALMOD. Modeling results predict net improvements in fish populations for Chinook salmon (including endangered winter-run) under 2015, 2030, and 2070 conditions. By providing releases to the Yolo Bypass, Sites Reservoir Project can also benefit Delta smelt, however, there are insufficient studies to characterize the magnitude of this benefit at this time. Sites Reservoir Project would excel in providing opportunities for in lieu use of surface water, thereby reducing the chronic lowering of groundwater levels, an undesirable result under SGMA. Sites Reservoir will also support the delivery of water for basic human needs to disadvantaged communities. See Sites_A4 Mitigation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB and Sites_A5 Documentation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB for further analysis.

Q.3:

If applicable, summarize how the applicant is coordinating with the owners and operators of water system facilities not owned or operated by the applicant or project partners that may be affected by the project. See regulations section 6003 (a)(1)(P).

The Authority is coordinating the development of operations with the Department of Water Resources and the U.S. Bureau of Reclamation. This coordination includes the future development of Principles of Agreement governing operations. See Sites_A6 Annual Benefits Table under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB. A list of project partners is provided in Sites_A1 Feasibility under the FEASIBILITY AND IMPLEMENTATION RISK TAB.

Q.4:

Describe how the project advances the long-term objectives of restoring the ecological health and improving water management for beneficial uses of the Delta. See regulations section 6003(a)(1)(R).

The operations proposed for Sites Reservoir Project were developed with the intent of contributing to the attainment of the co-equal goals for the Delta of ecological health and improving water management for beneficial use. As a result, the annual yield from the Sites Project is divided between environmental and water supply purposes. The Sites Project would provide a unique opportunity to allocate reservoir storage and establish the first firm asset Ecosystem Enhancement Account in California. Based on the operations assumptions included in this application, the allocated storage would deliver approximately 125 TAF/yr (in 2030 through 2070 (with deliveries of up to 200 TAF/yr in critically dry years) that would be managed by the State (CDFW, SWRCB, and DWR) and Federal government to perform restoration actions beyond existing regulatory requirements. Conceptually, this account would use Sites Reservoir project assets to support modified operations that facilitate habitat enhancement actions. A Sites Reservoir Ecosystem Enhancement Governance Board would be created to manage the water account. The water account would be managed to adaptively support operational actions and respond to changing future conditions throughout the Sacramento River watershed and Delta. Sites Reservoir would also provide water for beneficial uses throughout the State, including water for agriculture and M&I purposes, and State and Federal wildlife refuges. Project participants include agencies in the Sacramento River Valley, Bay Area, San Joaquin Valley, Southern Desert, and South Coast regions of California.

Q.5:

Describe how the applicant will ensure that the proposed project will comply with and be consistent with all applicable local, state, and federal laws and regulations, including existing environmental mitigation or compliance obligation requirements. See regulations section 6003(a)(1)(V).

The Authority has initiated pre-applications discussions with several of the critical resource management and regulatory agencies in order to expedite compliance with all required laws and regulations. This early and diligent effort to understand the evolving concerns for regulatory compliance will reduce the overall compliance schedule and help ensure compliance with all applicable local, state, and federal laws in the planning, construction, and operation of Sites Reservoir, including mitigation requirements. The EIR/EIS (attached at http://sitesproject.org/information/DraftEIR-EIS) describes the impacts and mitigation measures that when implemented would reduce or avoid impacts and support compliance with all applicable laws, regulations, and statutes. This includes all applicable regulations regarding water operations on the Sacramento River. Regulations are identified in Sites_A2 Permits under the FEASIBILITY AND IMPLEMENTATION RISK TAB. The Authority's commitment to mitigation is further described under Sites_A4 Mitigation under the BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY TAB.

A.1 Delta or Tributary Measurable Improvement:

What measurable improvements to the Delta ecosystem or tributary to the Delta does the project provide? Where is the location of the improvement? If the project is not within the watershed of the Delta, what specific water rights or water contracts would be created or amended to ensure public benefits to the Delta ecosystem? Provide supporting documentation of the willingness of these water right or water contract holders to enter into such contracts or amendments. Explain how these changes would assure measurable improvements to the Delta ecosystem. See regulations section 6003(a)(1)(L).

Last Uploaded Attachments: Sites_A1 Measureable Benefits.docx

A.2 Cost Effectiveness:

Provide documentation indicating the proposed project is cost-effective. If there is at least one feasible alternative means of providing the same amount or more of the total public and non-public physical benefits as provided by the proposed project, calculate, display and document the least-cost of these alternative means and justify the proposed project by comparison.

Last Uploaded Attachments: Sites_A2 Cost Effectiveness.docx

Section : EARLY FUNDING REQUEST

EARLY FUNDING REQUEST

Q.1:

Is early funding for completing environmental documentation and/or permits requested? If yes, answer the following question and provide the requested information. See regulations section 6003(a)(1)(X).

Yes.

Q.2:

What is the requested amount?

Requesting 50% of $91,851,000 or $45,925,500.

A.1 Early Funding Scope, Schedule, Budget:

Attach a schedule, scope of work, and budget.

- Keep in mind that the applicant must provide a 50 percent cost share and reimbursable costs can only go back to November 4, 2014.
- Scope of work must include an explanation of why early funding is critical to the project, the viability of the project in the absence of this funding and how the project will proceed once early funding is expended.
- The scope of work cannot include work performed prior to submittal of the application.
- The tasks in the schedule, scope of work and budget should match.

Last Uploaded Attachments: Sites_A1 Scope.docx